

2019 CATALOG



ABOUT COMPANY





NORTHCLIFFE LIGHTING is a customer focused, innovative solutions-driven company, which manufactures industrial lighting fixtures as well as provides lighting design and technical consulting services to customers worldwide. The company was established in 1993 with the business units in the UK, Ireland, Lithuania, Russia and Ukraine and since then it has become one of the largest independent lighting manufacturer in Central and Eastern Europe. Rapid growth has been achieved over the last 25 years with the current production capacity reaching 3.5 million lighting fixtures annually.









We constantly expand our distribution network and have business partners in more than 40 countries from all over the world.



Our mission is to make life brighter with the lighting solutions that are easy to install, and which are innovative, reliable and affordable with unsurpassed customer service. Present product range exceeds 5200 kinds of lighting fixtures for office, education and retail facilities, as well as for medical, industrial and outdoor environments. Our knowledge about lighting combined with a wide range of latest technology, energy-efficient and environmentally friendly solutions makes us the reliable partner for any project.



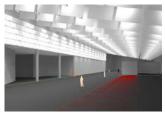


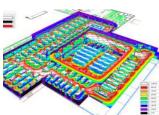




R&D plays an important role in our innovation process. As a result, we can cope with the most specific requirements and even create customised products. Working closely with customers there is a strong commitment to invest in technology, training and R&D activities to develop better products, services and more efficient lighting solutions.

One of our other advantages is the highest level of technical support. Our technical team is always ready to assist with the process of selecting the most suitable product for a specific application, as well as with designing, calculating and visualising lighting scenes for single rooms, whole floors or buildings and outdoor areas. Photometric data for NORTHCLIFFE LIGHTING fixtures can be downloaded from our website. These files enable lighting designers to create appropriate lighting layouts and scenes to meet their customers' preferences and regulatory requirements.











All our products are made using high quality components from reputable European suppliers. NORTHCLIFFE LIGHTING uses the most advanced technologies, some of them are unique and patented, to produce efficient products for easy installation, as well as for effective storage and transportation. 100% of our products are individually tested before leaving our factories and comply with provisions of EC Directives, harmonized standards, RoHS, technical regulation TR CU of the EurAsEC Customs Union and UkrSEPRO requirements.











TRIDONIC





NOTHCLIFFE LIGHTING is improving customer service and product quality using Quality Management System which is a management strategy aimed at awareness of quality in all organisational processes. QMS has been widely used in manufacturing, quality control, R&D department, education programs and customer service.

Quality Management System provides an umbrella under which everyone within the organization can strive and create customer satisfaction at constantly lower real costs. It is recognized that customer satisfaction can only be obtained by providing a high-quality product. Continuous improvement of the quality of the product is seen as the only way to maintain a high level of customer satisfaction.



ISO 9001

NORTHCLIFFE LIGHTING has accreditation for **ISO 9001** Quality Assurance Standards - a comprehensive evaluation that is concerned not just with quality, but with every aspect of company operations. It is a key feature of our constant effort to maintain exceptional standards of quality and service.



ISO 14001

NORTHCLIFFE LIGHTING cares about nature and is always looking for environmentally friendly solutions. **ISO 14001** is an environmental management system that exists to help organizations minimize how their operations affect the environment and comply with applicable laws, regulations, and other environmentally oriented requirements.

MANAGEMENT SYSTEM CERTIFICATE WAS MOTIFICIATE WAS MOTIFICATE WAS MOTIFICATED WAS MOTIFI

OHSAS 18001

The most crucial part of **NORTHCLIFFE LIGHTING** is our human resources. **OHSAS 18001** is a British Standard for occupational health and safety management systems. It exists to help all kinds of organizations put in place demonstrably sound occupational health and safety performance.



To make it easier for our potential customers to make the best informed choices we present our most popular products, which are offered at very competitive prices. We believe that this catalogue will help you to identify the best solutions and to make NORTHCLIFFE your reliable business partner for the future.

For further and most up-to-date information please visit www.northcliffe.org or send us an email to info@northcliffe.org

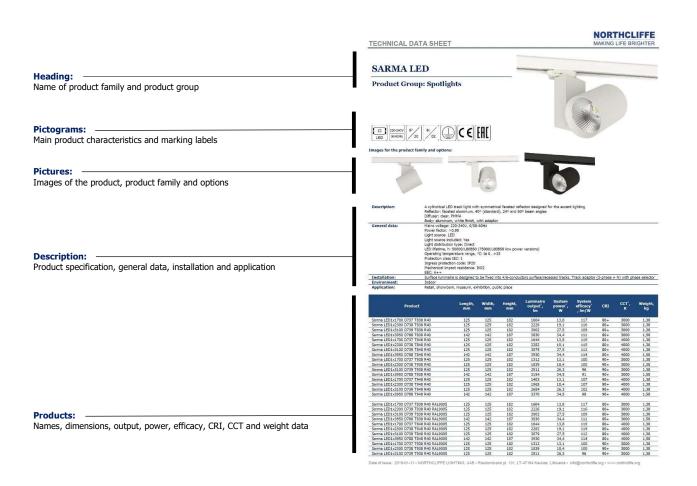
RAL9005



HOW TO USE THIS CATALOG?

Black colour body and adaptor

Sarma LED 1x 3100 D739 T930 R40 DALI RAL9005 Family name: Sarma LED Quantity of modules: Luminaire light output: 3100lm Note: rounded luminaire output divided by number of modules, if quantity of modules higher than one Factory code: D739 Light source: T930- Colour temperature 3000K, CRI 90+ Options: R40 Reflector with 40° light beam angle DALI Driver with DALI interface





Options:

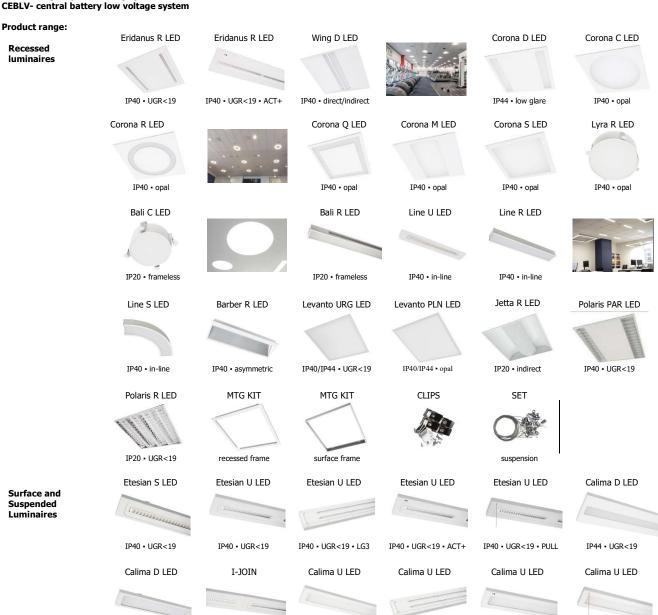
Accessories:





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IP40 • low glare

IP40 • low glare • LG3

IP40 • UGR<19 • ACT+

IP40 • UGR < 19 • PULL

IP44 • low glare



CAP1 CAP2 CAP3 CAP4 SUSY SET Lodos S LED Surface and Suspended Luminaires IP40 • opal suspension Tucana PAR LED SUSL SET Barber S LED Bootes LED IP40 • UGR<19 IP40 • asymmetric IP40 • opal suspension Serpens S LED Serpens LED OP Serpens LED PRZ Serpens P LED Serpens P LED **Aluminium Profile** Luminaires IP40 • slim IP40 • middle IP40 • middle IP40 • UGR<19 IP40 • UGR<19 • ACT+ Serpens D LED Decor S LED OP Decor LED OP Decor LED PRZ Decor L LED IP40 • wide IP40 • slim IP40 • middle IP40 • middle IP40 • LG3 Decor P LED Decor P LED Decor P LED SUSI SET I-JOIN IP40 • UGR<19 IP40 • UGR<19 • ACT+ IP40 • UGR<19 • PULL suspension L-JOIN T-JOIN X-JOIN Bracket DOWN Bracket UP CAP1 CAP2 CAP3 SUSY SET CAP4 Decor LP LED Decor LP LED Decor LP LED Decor D LED IP40 • UGR<19 • LG3 • ACT+ IP40 • UGR<19 • LG3 • PULL IP40 • UGR<19 • LG3 Quadro LED

IP40 • opal



X-JOIN

HOLDER

TECHNICAL DATA SHEET L-JOIN T-JOIN Shop LSW LED I-JOIN **Continuous line and** batten luminaires IP23 • white Blade LSZ LED Blade LSW LED Blade LSW GRID Atria LED IP23 • zinc-plated IP20 • in-line IP20 • in-line • grid IP40 • asymmetric Pavo P LED Pupis P LED Cetus P LED $\mathsf{M}\mathsf{W}$ **Diffuser and Wall** Luminaires

Anti-vandal **luminaires**



Caelum R LED

Caelum S ANGLE

IP65 • IK10+



IP65 • IK10+

Caelum A LED

Caelum W LED



Mars LED



Mars LED

IP65 • IK10+

Corridor R LED

Emergency Lighting



IP65 • IK10+

EMS

monitoring system Corridor S LED



central battery Apollo HIGH LED



conversion kit

Norther LED



Ara R LED



IP20/IP65 • optic Apollo LED

IP65 • IK08

Zonda LED



Ara S LED

IP42/IP65 • optic



IP20 • optic





IP65 • IK08



Nashi S LED





IP44 • recessed IP44 • surface







IP41 • optic

Capella LED

IP65 • high IP66 • outdoor

Helm LED



IP44 • IK08





IP65 • test button

Libra LED



Lepus S LED



IP65 • IK08

Helm LED

IP40 • side

Hydra LED



IP65 • IK08

Leporis C LED

IP40 - ceiling



IP40 • suspended



IP41 • four-sided

Spotlights



IP65 • test button Pegasus H LED

IP20 • adjustable

IP40 • wall

Gemini LED



IP65 • test button Pegasus H LED



IP20 • adjustable

Capheus A LED





IP20 • adjustable



IP20 • adjustable



Antlia T LED

IP20 • opal



IP20 • adjustable

IP20 • adjustable Spica LED



IP20 • adjustable

Spica LED AS



IP20 • adjustable

Capheus A LED

IP20 • adjustable

Sharqi LED



Capheus LED

IP20 • adjustable



Kali LED

Aquarius LED



IP40 • adjustable



IP40 • adjustable



IP20 • optic



IP20 • optic

IP20 • adjustable

Spotlights



Corvus LED

IP40 • adjustable

Crater



IP40 • adjustable Crater ANGLE



IP20 • narrow trim

Lamp



suspended



Downlights



IP20 • GU10



IP20 • GU10



GU10 Andromeda P LED



IP44 • adjustable



IP44 • low glare



IP44 • low glare



IP44 • opal



IP44 • micro-prismatic



IP44 • budget



IP40 • budget



Round LED



Antlia LED

IP20 • UGR<16

Antlia C LED





IP65 • low glare Prizma LED



IP44 • budget

Highbays



IP20 • aluminium





IP23 • prismatic





IP65 • IK08 • optic Sky A LED SPORT



IP65 • IK08 • optic • grid



surface





IP65 • IK08 • PC • sensor



IP65 • IK08 • PC







IP65 • IK08 • glass



Moon LED





IP65 • IK08 • optic







IP65 • budget



IP65 • budget



IP65 • IK08 • optic





IP65 • budget

Boreas E LED

Beidas LED



IP65 • budget



Floodlights



IP65 • IK08



IP65 • IK08



Outdoor Accent Lighting



Information
Light terminology
Degrees of IP protection
Degrees of IK protection
Chemical resistance of Proof LED series
Notes
Contacts

Park and Street

DISCLAIMER: All the information given in this leaflet is the result of our research work experience. It is given in good faith and with every belief in its accuracy but cannot be considered as a formal warranty. In accordance with NORTHCLIFFE LIGHTING policy of product development this information is subject to change without notice.



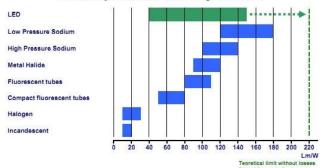
LED IS THE TECHNOLOGY OF THE FUTURE

LED technology

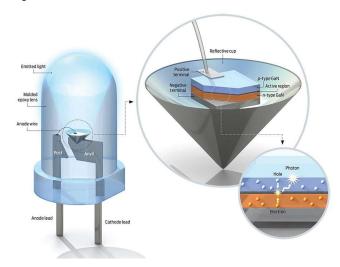
LED (Light-emitting diode) technology is becoming more and more important in the world market of illumination, thanks to the numerous features which make it superior to other traditional light sources allowing savings of up to 80% of electricity for the same amount of emitted light.

The luminous efficiency of LEDs continues to reach higher values and already theoretical border of 300 Lumens per Watt is reached in laboratory conditions. LED are semi-conductor diodes which, when electricity passes through them, emit a monochromatic light. The Colour of the light depends on the type of impurity purposely inserted into the chip.

Efficiency table of different light sources



Long life time



A fundamental feature of LED is their long life as they can work above 100'000 hours as long as two fundamental requisites are respected: work temperature and voltage.

LED technology also offers other advantages:

- high mechanical resistance to stress and vibrations
- working in safe low voltage
- very high brightness efficiency and ongoing development
- extremely versatile in design and making of illuminating bodies
- no UV and IR emissions

Energy saving

Using LED technology substantial savings in electrical energy can be made keeping same illuminance level.

Test results in laboratory proves savings in energy consumptions switching from traditional lighting sources to LED technology



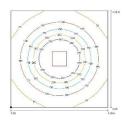


T8 luminaire 4x18W with magnetic ballasts consumes **88.2W**

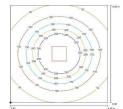
LED luminaire 28,8W

Note: up to 16,2 EUR can be saved every year, if used 9 hours per day (based on 0,12 EUR/kW)









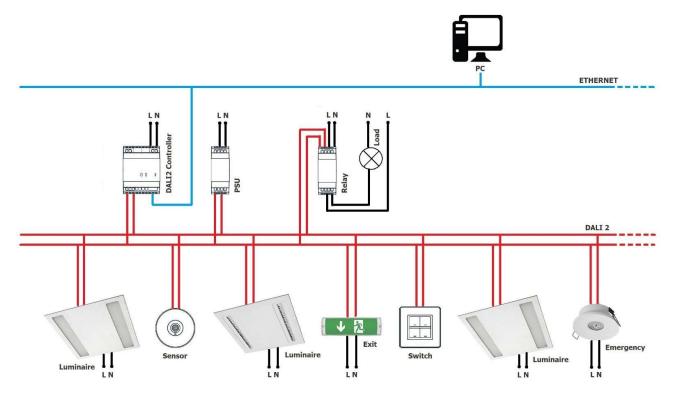


ILLUMINATION CONTROL SYSTEMS

Light plays a huge role in today's world and it goes far beyond the limits of simple illumination. However, it seems rather difficult to control such miracles as multifunctional illumination or light atmosphere changes in accordance with the situation. This problem could be solved by implementation of an illumination control system. Northcliffe offers illumination control systems, designed and developed by the leading European companies.

Illumination control system unites all the light sources in the building and gives an opportunity to control each of them individually from any location. Such system allows controlling illumination as much as possible, starting from illumination control in one room and extending to its control in as many premises as necessary, even having difficult configurations.

Illumination control system could be integrated into the general control scheme of other components, such as an alarm system, media etc., in such way improving the efficiency of service.



The cost-effectiveness and possibility of illumination sources self-adjustments seems to be one more obvious benefit of the system.

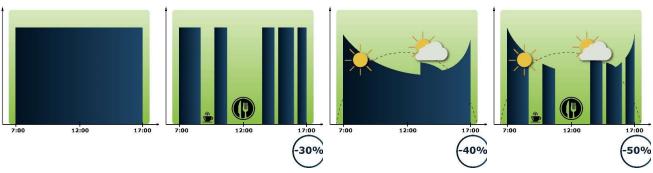
The range of illumination control systems is quite wide. The simplest one is a standard combination of several light scenarios, preprogrammed in the central control unit. This option is the best solution for small premises, such as cafes, separate rooms in the apartments, cottages, offices, director's rooms, presentation rooms, bars, saunas, restaurants, cinemas, boutiques etc.

Upon the requests of a client, the system could be adjusted to a more sophisticated one. In such case, a special illumination design is drawn. Such individual complex designs are realized through the adoption of multiple control units corresponding between each other. The more difficult project is, the easier solution with the help of illumination control system can be provided.

Energy savings with illumination control systems



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions

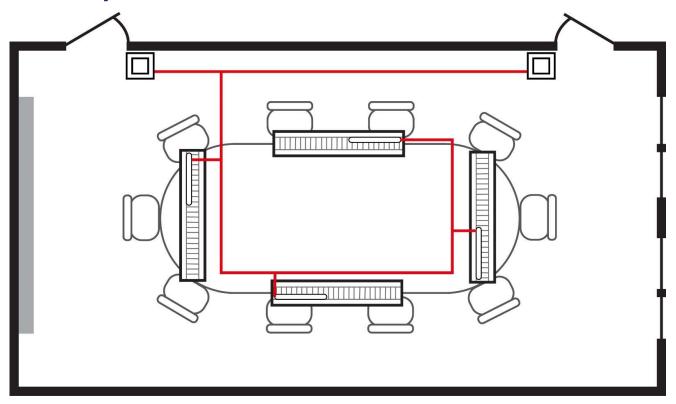




SDIM SOLUTION

SDIM, also known as a touch control with a push button, is a system that enables the simple and economic dimming of luminous flux. It uses the mains voltage as a control signal, applying it with a standard push button on a control line, without any need for specific controllers. SDIM enables you to perform the basic functions of a regulation system with a power-free pushbutton. It is possible to switch the luminaires on or off or dim them, depending on how long the button is pressed. Switching the light on or off is done by short, sharp pressing or "click". If the button is pressed for a longer time it is possible to dim the luminous flux between the maximum and minimum levels alternately.

Cost effective meeting room





INDEPENDENT DETECTORS

RECESSED PIR VERSIONS



RPIR3m is a compact PIR detector for flush ceiling mounting. Having a detection field of 7m at a mounting height of 2.8m, this sensor is ideal where automatic turning on when a room is occupied, and off when the room is vacated. Lux level and timer can be simply set up via push button operation (P).

Key features:

- Lux level sensing
- Presence detection switching
- Adjustable timer
- Maintained illuminance (daylight harvesting) system (D variants only)

General data:

Mains voltage: 230V+/-10%, 50Hz

Switching load: 3A

Operating temperature range, °C: ta -10...+35

Protection class IEC: II

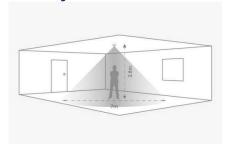
Ingress protection code: IP40 or IP54

Dimensions: 76x76x65 Mounting hole: Ø64mm Weight: 0.15kg

Products:

RPIR3m Integrated presence and lux level sensing sensor (PIR) with on-off control
RPIR3mP Integrated premium presence and lux level sensing sensor (PIR) with on-off control
RPIR3mD Integrated premium presence and lux level sensing sensor (PIR) with DALI control
RPIR3mIP Integrated IP54 premium presence and lux level sensing sensor (PIR) with on-off control
RPIR3mIPD Integrated IP54 premium presence and lux level sensing sensor (PIR) with DALI control

Detection diagram

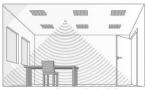


Height Detection range 2.8m 7x7m

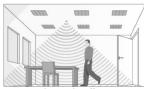
Sensor functionality

Lux level switching

The RPIR3m has a built-in adjustable lux sensor which will keep the lighting switched off if there is sufficient natural light. The Lux level is set using the Lux Button on the front of the sensor.



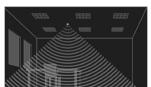
No presence detected, daylight, lights off



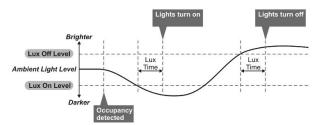
Presence detected, sufficient daylight, lights off



Presence detected, insufficient daylight, all lights on



No presence detected, lights off



Switch Level On/Off-P and D variants only

Occupancy detection can be made dependant on the ambient light level using the Lux On Level and Lux Off Level parameters.



Explanation of presence and absence

The Detection Mode can be set to behave in Presence or Absence mode:

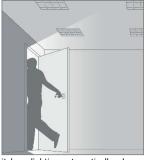
-Presence When movement is detected the load will automatically turn on. When the area is no longer occupied the load will automatically switch off after an adjustable time period.

-Absence The load is manually switched on. When the area is no longer occupied the load will automatically switch off after the adjustable time period has elapsed. In either case, sensitivity to movement of the PIR sensor can be adjusted using the Sensitivity parameter.

Note: To assist in setting the Sensitivity, turn on the Walk Test LED which will flash red when movement is detected.

The choice between presence and absence detection for different spaces can make a big difference in user-friendliness and the amount of energy saved.





Presence Detection: Detectors will switch on lighting automatically when a person enters the room and switch off lighting automatically when no movement is detected.





Absence Detection: Upon entering the room the person switches on the light as normal, when no movement is detected the detector switches off the lighting automatically. Lights can also be switched off manually.

Maintained Illuminance (daylight harvesting) - D and IPD variants only



The detector measures the overall light level in the detection area and calculates the correct output for the luminaires, to achieve a pre-set lux level (maintained illuminance or daylight harvesting)

Basic programming - RPIR3mP and RPIR3mD variants





The functionality of the RPIR3mP, RPIR3mD are controlled by a number of parameters which can be changed or programmed by any of the following devices: infrared PIR handset or infrared PIR handset with LCD. For most basic programming operations the infrared HBPIR handset can be used and the following procedures are based on using this device. Point the handset at the Sensor and send the required programming commands to the unit.

Note

For optimum operation of the lux sensor, the lens must shielded as much as possible from the light source. Avoid direct sunlight entering the sensor. Do not site within I mo forced air heating or ventilation.

Do not fix to a vibrating surface





SURFACE PIR VERSIONS



SPIR3m is a surface mounted presence detector with easy push button set up, that provides auto on/auto off switching. Having a detection field of 7m at a mounting height of 2.8m, this sensor detects movement using PIR sensor and turns the load on. When an area is no longer occupied the load will switch off after an adjustable time out period. An adjustable internal light sensor provides additional energy saving in lighting applications. When an area is occupied, lighting is only switched on when the level of natural light falls below a pre-set level.

Key features:

- Lux level sensing
 Presence detection switching
- Adjustable timer
- Maintained illuminance (daylight harvesting) system (D variants only)

General data:

Mains voltage: 230V+/-10%, 50Hz

Switching load: 3A

Operating temperature range, °C: ta -10...+35

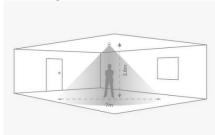
Protection class IEC: II Ingress protection code: IP54 Dimensions: 96.5x96.5x50

Weight: 0.15kg

Products:

Integrated presence and lux level sensing sensor (PIR) with on-off control SPIR3m SPIR3mP Integrated premium presence and lux level sensing sensor (PIR) with on-off control SPIR3mD Integrated premium presence and lux level sensing sensor (PIR) with DALI control

Detection diagram



Detection range Height 2.8m 7x7m

Sensor functionality

Lux level switching

The GESM has a built-in adjustable lux sensor which will keep the lighting switched off if there is sufficient natural light. The Lux level is set using the Lux Button on the front of the sensor.



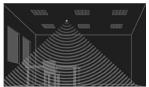
No presence detected, daylight, lights off



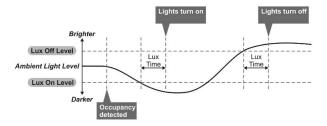
Presence detected, sufficient daylight, lights off



Presence detected, insufficient daylight, all lights on



No presence detected, lights off



Switch Level On/Off-P and D variants only

Occupancy detection can be made dependant on the ambient light level using the Lux On Level and Lux Off Level parameters.



Explanation of presence and absence

The Detection Mode can be set to behave in Presence or Absence mode:

-Presence When movement is detected the load will automatically turn on. When the area is no longer occupied the load will automatically switch off after an adjustable time period.

-Absence The load is manually switched on. When the area is no longer occupied the load will automatically switch off after the adjustable time period has elapsed. In either case, sensitivity to movement of the PIR sensor can be adjusted using the Sensitivity parameter.

Note: To assist in setting the Sensitivity, turn on the Walk Test LED which will flash red when movement is detected.

The choice between presence and absence detection for different spaces can make a big difference in user-friendliness and the amount of energy saved.





Presence Detection: Detectors will switch on lighting automatically when a person enters the room and switch off lighting automatically when no movement is detected.





Absence Detection: Upon entering the room the person switches on the light as normal, when no movement is detected the detector switches off the lighting automatically. Lights can also be switched off manually.

Maintained Illuminance (daylight harvesting) - D and IPD variants only



The detector measures the overall light level in the detection area and calculates the correct output for the luminaires, to achieve a pre-set lux level (maintained illuminance or daylight harvesting)

Basic programming - SPIR3mP and SPIR3mD variants





The functionality of the SPIR3mP, SPIR3mD are controlled by a number of parameters which can be changed or programmed by any of the following devices: infrared PIR handset or infrared PIR handset with LCD. For most basic programming operations the infrared HBPIR handset can be used and the following procedures are based on using this device. Point the handset at the Sensor and send the required programming commands to the unit.

Note

For optimum operation of the lux sensor, the lens must shielded as much as possible from the light source. Avoid direct sunlight entering the sensor. Do not site within I mo forced air heating or ventilation.

Do not fix to a vibrating surface





BUILD-IN MW SENSOR



The motion detector can turn on the light based on movement. With this detector built in, light is automatically on when needed and off when not.

Key settings:

- Sensitivity
- Hold-time
- Daylight sensor

General data:

Mains voltage: 220-240V, 50/60Hz

Switching load: 3A

Operating temperature range, °C: ta -20...+60 Protection class IEC: II

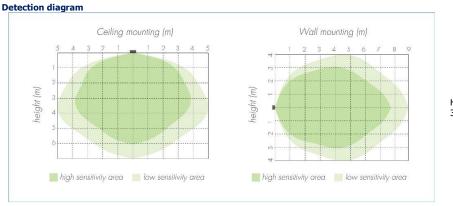
Protection class IEC: II Ingress protection code: IP20 Dimensions: 80.4x36.5x23.5mm

Weight: 0.15kg

Products:

MW Integrated m

Integrated microwave (MW) motion sensor with on-off control

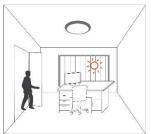


Height Detection range 3m 10x10m

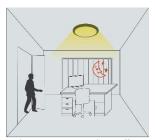
Sensor functionality

Lux level switching

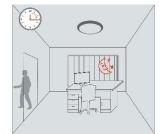
The motion detector can turn on the light based on movement. With this detector built in, light is automatically on when needed and off when not.



The light keeps off during daytime even when movement is detected. (Ambient lux level is above pre-set daylight threshold)



With movement and insufficient ambient lux level, the light is triggered on by the detector



If there is no more movement, the light turns off automatically after hold-time pre-set











BUILD-IN MW SENSOR WITH INTERGRATED RF COMUNICATION



This is a combination of motion sensor and RF radio wave wireless transmission. The motion detected by 1 sensor (the master unit) can pass onto other pre-defined individuals (the slave units) though RF transmission. Thanks to fixed address code technology, it's easy to set up transmission groups. By using the rotary coding switch, up to 16 different groups can be created. With both 1-10V output signal and 220-240V signal, it can switch on/off and dim the luminaire in different applications. Digital receiving and transmitting method, high anti-interference capability.

Kev featuress:

- 24-hour daylight monitoring dawn/dusk sensor
- Tri-level dimming control based upon occupancy (also known as corridor function)
- 1-10V dimming control method
- Fast and simple commissioning/grouping of wireless sensor by the rotary switch

General data:

Mains voltage: 220-240V, 50/60Hz

Switching load: 5A

Operating temperature range, °C: ta -35...+70 RF transmission distance: 30m indoor, 50m outdoor

Protection class IEC: II Ingress protection code: IP20 Dimensions: 102x54x28mm

Weight: 0.15kg

Products:

MWRFM+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both master and slave.

Functions: Staircase, Corridor, dimming control

MWRFM+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both master and slave.

Functions: Staircase, Corridor, (no dimming control)

MWRFM Integrated microwave (MW) motion sensor with integrated RF (radio wave) transmitter. Sensor can serve as master.

Functions: Staircase, Corridor, dimming control

MWRFS+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor, dimming control

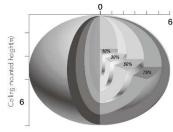
MWRFS+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor (no dimming control)

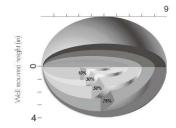
MWRFS Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor, (no dimming control)

Detection diagram



Ceiling mounted detection pattern (m)



Wall mounted detection pattern (m)

Height Detection range

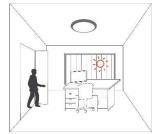
Function and Options

This is a combination of motion sensor and RF wireless transmission, which is the perfect solution for retrofit projects, easy installation and free of wiring. The transmission can reach 30 meters indoor and 50 meters in the open area. Up to 16 different groups can be easily created by the rotary coding switch. Once there is motion detected, the master can trigger unlimited number of slaves as long as they are within the transmission range. The slave unit can respond to one or two group(s) of master(s) respectively.

Sensor functionality

Lux level switching

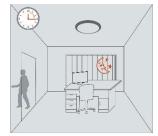
The motion detector can turn on the light based on movement. With this detector built in, light is automatically on when needed and off when not.



The light keeps off during daytime even when movement is detected. (Ambient lux level is above pre-set daylight threshold)



With movement and insufficient ambient lux level, the light is triggered on by the detector



If there is no more movement, the light turns off automatically after hold-time pre-set



24h Daylight Monitoring Function (for master only)

The innovative software enables sensor's antenna with built-in daylight sensor to provide a "smart photocell" function. This function is activated when stand-by period is set to " $+\infty$ ".

Settings on this demonstration: Hold-time: 10min Daylight threshold: 50lux Stand-by dimming level: 10% Stand-by period: +∞



The light switches on at 100% when there is movement detected

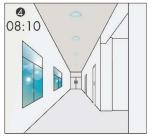


The light dims to stand-by level after the hold-time



The light remains in dimming level at night



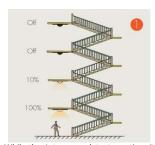


The light turns off completely when natural light lux exceeds daylight threshold pre-set



The light automatically turns on at 10% when natural light is insufficient (no motion)

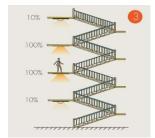
Staircase application (MWRFM+ serves as both master and slave)



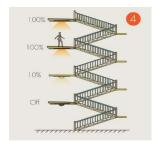
While the 1st sensor detects motion, it switches on 100%, and the 2nd one goes to stand-by brightness.



The person walks to the 2nd floor, the 2nd sensor at 100% and the 3rd sensor goes to stand-by brightness.



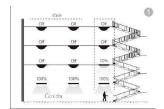
The person walks to the 3rd floor, the 3rd sensor switch on 100% and the 4th goes to stand-by brightness. At the same time, the 1st sensor dims to stand-by brightness after hold time.



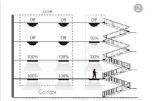
The person walks to the 4th floor, the 4th sensor is 100% on and the next goes to stand-by brightness. At the same time, the 1st sensor goes off after stand-by period and the 2nd sensor dims to stand-by brightness.

Note: By selecting the brightness DIP switch, the slave can either be 100% on or go to stand-by dimming level upon receiving the RF signal from the master.

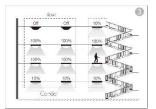
Staircase and corridor application (MWRFM+ as both master and slave, MWRFS+ as slave)



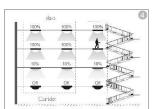
While the 1st sensor detects motion on the 1st floor, it switches the light on 100% and sends signal to all slave units. All MWRFS+ on the 1st floor turn on 100% and the MWRFM+ on the 2nd floor goes to stand-by level



The person walks to the 2nd floor, the 2nd MWRFM+ switches the light on 100%. All MWRFS+ on the 2nd floor turn the light on 100% and the MWRFM+ on the 3rd floor goes to stand-by level



When walks to the 3rd floor, the 3rd MWRFM+ switches the light on 100%. All MWRFS+ on the 3rd floor turn the light on 100% and the MWRFM+ on the 4th floor goes to stand-by level. Meanwhile, the lights on the 1st floor are dimmed to stand-by level after held time.

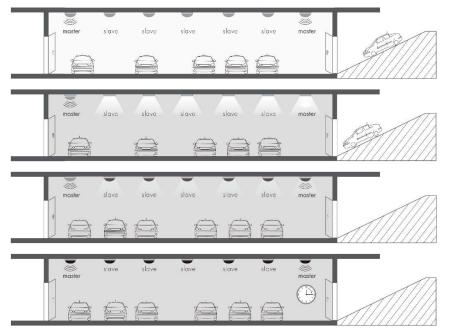


The person walks to the 4th floor, the 4th MWRFM+ switches the light on 100%. All MWRFS+ on the 4th floor turn the ligh on 100% and the next MWRFM+ goes to stand-by level. Meanwhile, all sensors on the 1st floor turn the light off after stand-by period, and all lights on the 2nd floor dim to stand-by level after hold-time

Note: the lights in the corridor go off directly after hold-time if controlled by MWRFS+off



Carpark application (MWRFM as master and MWRFS+ as slave)



With sufficient natural light, the sensor is not triggered by motion

With insufficient natural light, the sensor is triggered by motion, the master switches on the light and send RF signal to all salves

After the hold-time, the whole group of lamps dim to pre-defined dimming level when no movement detected

Note: the lights go off directly after hold-time when controlled by MWRFS+off

The whole group of lamps switch off automatically after the stand-by period











EAIR SENSOR WITH WIRELESS COMMUNICATION AND GROUPING POSSIBILITIES



EAIR is the ideal solution for per-luminaire control of new luminaires. It combines occupancy sensing, daylight harvesting and task tuning in a single, compact package for easy luminaire assembly. An intuitive app makes configuration and commissioning during and after installation fast and easy. EAIR with advanced grouping functionality enables addition of qualified wireless switches. Up to 40 sensors can be grouped to a switch using Apps. In addition to easily adding user control to a space, the grouping feature facilitates auto-off/manual-on use cases. Furthermore, advanced grouping allows scene setting (e.g., presentation mode for a conference room) as well as occupancy sharing (i.e., luminaires within a group can be programmed to remain at prescribed light levels so long as occupancy is detected anywhere in the group)

General data:

Operating temperature range, °C: ta 0...+55 Protection class IEC: II Ingress protection code: IP20 Dimensions: 50x19x24 Mounting hole: 43.5x16mm

Weight: 0.02kg

Products:

EAIR Integrated smart sensor and driver with wireless communication and grouping possibilities for lighting control

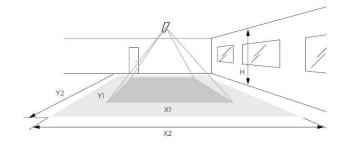
Detection diagram

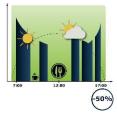
The detection area for the movement sensor can be roughly divided into two parts:

- -Minor movement (person moving ≤ 0.9 m/s)
- -Major movement (person moving ≥ 0.9 m/s)

Height	Minor Movement		Major Movement	
h	Y1	X1	Y2	X2
2.4 m	2.9 m	2.7 m	4.5 m	2.9 m
3 m	3.6 m	3.4 m	5.4 m	3.6 m

Note: Longer dimension of detection area (Y1, Y2) is parallel to longer dimension of EAIR



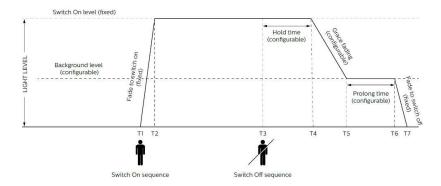


The switch from conventional to LED lighting already brings considerable energy savings. Incorporating EAIR wireless sensors into luminaires takes the potential savings to an even higher level. Sensors enable presence detection and sunlight harvesting, which when used in combination, can generate savings of up to 50%. By providing presence and daylight sensing in a single unit, EAIR are perfect for connected lighting. Offices, meeting rooms, corridors and open-plan spaces can benefit from the energy-saving and enhanced operational efficiency of connected lighting

Sensor functionality

All parameters are stored in the sensor, and most of the parameters can be configured through NFC or IR.

- <u>Fade to switch-on/off time</u>. Fade to switch-on time is the time (T1 to T2) from the point at which occupancy is detected until the lights dim up to the max light output. This timer is set to 0.7 sec and is not configurable.
- <u>Hold time</u>. Hold time is the time (T3 to T4) from the point at which the last movement has been detected (e.g., occupant left the room) until grace time starts. This timer is set to 15 minutes by default and can be configured from to 1 120 minutes.
- <u>Grace fading time</u>. Grace fading time is the time from T4 to T5 during which the lights are being dimmed down from the current light level to the background level. By default, grace fading time is 10 sec and can be configured to 0 25 seconds.
- <u>Prolong time</u>. Prolong time is the time from T5 to T6 at which the background level is maintained at a fixed level. Default prolong time is 15 minutes and can be configured from 0 infinity.
- Fade to switch-off time: Fade to switch-off time is the time (T6 to T7) for the lights to fade from background level to off after prolong time is expired. This timer is set to 0.7 sec and is not configurable.
- Field task level: Field task level is used to configure the required light level on the task plane. Setting this to 100% enables the installed maximum light level. A lower percentage level can be configured to set the new maximum light level of the luminaire through the app.
- <u>Background level</u>: Background level is a light level significantly lower than 100%, used to save energy when space is not occupied.
- Occupancy mode selection: Occupancy mode selection can be configured to meet energy code and maximize control flexibility with adding wireless switches. The mode options are auto-on/auto-off, manual-on/manual-off and manual-on/auto-off.
- <u>Eco-on level</u>: Eco-on level is a configurable switch-on light level. This parameter also enables partial-on occupancy based control to meet energy code. Eco-on level should be a percentage level between the field task level and background light level.
- <u>Group occupancy sharing</u>: Group occupancy sharing is a configurable feature to allow EasySense to share its local occupancy detection status and control lights accordingly. As long as presence is detected within the group, the luminaires stay on at the background light level/field task light level (configurable) in non-occupied areas.
- <u>Group light behavior</u>: Group light behavior is a configurable light level for the luminiares in non-occupied areas while there is occupancy detected elsewhere in the group.



Group occupancy sharing

EAIR includes a unique feature that enhances energy savings while maintaining aesthetics of the space. Through use of group occupancy sharing, luminaires provide full light output at occupied workstations and lower background light level at unoccupied workstations. The sensors in a defined group know if there is occupancy elsewhere in the group and will not turn off until the entire group is unoccupied.

The group occupancy sharing feature can be enabled (default)/disabled through the EAIR field apps. The group lighting behavior can also be configured to background light level or task light level. With the group occupancy sharing disabled, the luminaire does not share its occupancy status with other luminaires or respond to the occupancy detection from the rest of the group. After installation, a group of up to 40 luminaires can be created easily and quickly using the EAIR field apps.

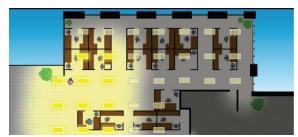
*Note: During the group occupancy sharing, daylight harvesting still occurs automatically if enabled.

An open office application

Here is an example of the group occupancy sharing behavior in an open office application.



1. Empty office. Light are off.



3. As additional people enter, lights in their area dim up to "task level."



5. When the space is fully occupied, all lights are on "task level."



2. As people enter, lighting in their area dims up to "task level." Others in the group dim up to "background level."



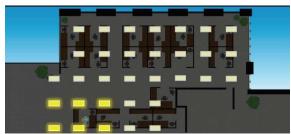
4. As more workers enter, the lights dim up accordingly.



6. As people go to lunch or meetings, lights gently dim down to a configured "background level."



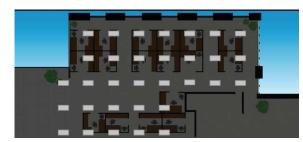
7. As people begin leaving for the day, additional lights dim down.



9. After the last worker leaves, lights turn off after a configured "prolong time."



8. As the space empties, more lights dim down to to the background.



10. Lights turn off after a configured "prolong time."

Scene setting

Light settings for meeting and conference rooms need to be flexible to fulfill a variety situational requirements. For example, audiovisual presentations may require lower light levels near the screen versus a regular meeting requiring uniform lighting on the task level. EAIR together with wireless switches and the EAIR field apps enables easy lighting configuration remotely for two scenes after the installation.

The wireless switch comes with four buttons:

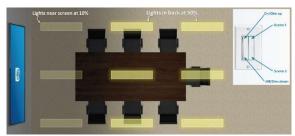
- -Top left button: On/Dim-up -Bottom left button: Off/Dim-down -Top right button: Scene 1

-Bottom right button: Scene 2
Once a scene button is pressed, the group of lights goes to the preset light level and does not respond to daylight variation any longer.

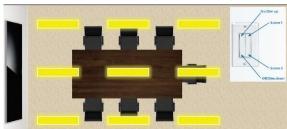
A conference room for presentations



1. Empty conference room. Lights are off.



3. Pressing "Scene 1" takes lighting to pre-defined "presentation level."



2. Pressing "On" brings lights to "task level."



EAIR supported app

EAIR sensors can be easily configured using app via IR dongle or NFC (Near Field Communication):

- Configuration of parameters;
- Energy reporting:
- Total consumed energy;
- Accumulated consumption reported by the driver connected to the sensor through the entire lifetime of the driver;
- Average power consumption: Total consumed energy / System on time;
- Percentage time the light has been on: (Luminaire on time / System on time) * 100;
- System on time: Time the driver was powered on through the entire lifetime
 of the driver;
- Lamp on time: Time the LED strip connected to the driver was on (any dim level other than off) through the entire lifetime of the driver.
- **-Grouping options**: Multiple luminaires can be added in the groups. For proper grouping it is recommended to limit the number of luminaires (sensors) in a group to 40;
- **-Configuration of scenes**: It is possible to store scenes on a 4-button wireless switch. A scene is a light level setting of the luminaires that can be saved on the switch;
- **-Maintenance of the system:** Installer test, reset of network settings, reset of the parameters, change of luminaire channel.







The IR dongle must be plugged in the headphones jack of the smartphone for easier commissioning of luminaires Maximum mounting height: 16m Ambient temperature range: $-30...50^{\circ}$











ACT + SELF-LEARNING SOLUTION FOR LED LIGHTING



ACT+ is an out-of-the-box standalone solution consisting of an LED driver and small sensor, already built into the luminaire. Luminaires fitted with ACT+ solution are ideal for refurbishment projects, as well as for new offices, corridors, open plan areas and storage areas. Allows to renew office lighting by using existing wires and switches, to make it more energy efficient without any programming. As a standalone solution, ACT+ has no need in physical or electrical connection to any other external lighting components such as control panels, dimmers or common sensors.

- Stand-alone, inbuilt lighting control solution for LED luminaires
- Fully automatic setup through smart learning function
- Optimized occupancy detection for different situations
- Light level compensation over entire life cycle (CLO)
- Automatic daylight harvesting
- No programming, configuration or external control wiring

General data:

Operating temperature range, °C: ta -20...+50

Control range: 5...5000lux Protection class IEC: III Ingress protection code: IP30 Dimensions: 32.4x1.5x14.5mm

Weight: 0.02kg

Note: The temperature difference between the detection target and the background must be at least 4 $^{\circ}\mathrm{C}$

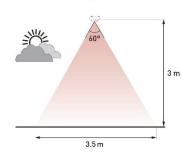
Products:

ACT+ Integrated self-learning sensor and driver for lighting control

Detection diagram

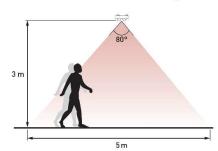
Light sensor viewing angle: 60° Presence sensor viewing angle: 80°

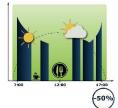
Height Detection range 3.0m 5x5m



Constant Light Coverage

Presence Detection Coverage





If the area becomes vacant, human presence isn't detected and the lighting isn't needed in the environment the ACT+ sensor send signals to the luminaire to go into energy saving mode. It dims the light smoothly so the change of lighting level doesn't disturb other people sitting or working nearby. In areas with windows energy additionally is saved by daylight harvesting. The ACT+ functionality also prevents daylight sensors in luminaires in close proximity to each other from interacting and starting to malfunction (so called waving effect). Constant lumen output (CLO) functionality reduces initial over-illumination, and ensures that the light output level can be guaranteed during the whole life time of the LED module. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals.

Energy saving

ACT+ sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%.

Constant light output

Energy saving is achieved when the daylight harvesting and the occupancy detection are activated. The initial light level is set at approximately 85-90 % to avoid overillumination of new luminaires (CLO). This is close to the designed luminaire light level, which will be maintained over the entire life cycle generating further energy saving. The sensor fade down time is made slow enough (3.5 min) to make reduction in light level invisible for the eye.

Self-learning

Utilising 60-100 hours of automatic learning, ACT+ learns about the surrounding environment and detects changes in lighting conditions from other luminaires and light sources. Or ACT+ Mobile app, can be used to set desired parameters for each single fitting by the end user, Android supported mobile device which has a flashlight, would do the work.



Advantages of Active+

Simple installation: Luminaire fitted with ACT+ is as easy to install as a simple switched luminaire. No control wiring, programming or configuration is needed. Self-learning: ACT+ sensor uses 60-100 hours to learn about its environment - external daylight conditions, and other luminaires around it.

OR

Via-flashlight: parameters transfered to system using Adroid phone flashlight.

Smart energy savings: Compared to a simple switched luminaire, ACT+ brings added features - presence detection, daylight harvesting and seamless and comfortable dimming.

Note: If there is a need to restart the learning process, i.e. during a layout change of an office, the luminaires can be reset to start the learning period. You can reset either a single luminaire or an entire electrical circuitry with multiple luminaires.





DAYLIGHT SENSOR DLIGHT FOR SIMPLE SETTING OF CONSTANT LIGHT LEVEL



DLIGHT is a very small light sensor that enables simple, automatic constant light control. Significant energy savings can be achieved in various applications such as offices, schools, factories, airports and shopping centres.

Key features:

- Very small profile
- Simple setting of the constant light level
- Start up at full level
- Smooth dimming operation, 1.5 minutes settling time

General data:

Control voltage: 1-10VDC

Operating temperature range, °C: ta 5...+55

Control range: 200...600lux +/-50lux

Protection class IEC: III Ingress protection code: IP20 Dimensions: 23x23x19 Mounting hole: Ø24x22mm

Weight: 0.01kg

Products:

DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light level

Detection diagram

Position DLIGHT sensor so that it sees both natural and artificial light, but neither should be dominant. Do not position DLIGHT where a direct light source (lamp, sun, reflection etc.) is within the DLIGHT viewing angle 45°. Viewing angle: 45° average, 42-52° depending on aperture Mounting height: max. 5m

DLIGHT will monitor both natural and artificial light, adjust the rotary top shell to set the desired constant overall light level.

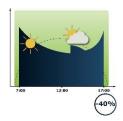
Control Range: 200...600lux +/- 50lux





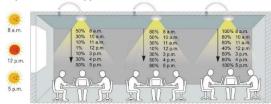






Keeps constant light level combining daylight and artificial light. Using DLIGHT sensor and 1-10V controllable drivers, fittings could be arranged in groups or act as individual units depending on illumination requirements. Substantial savings could be achieved.

Simple classroom application









HUMAN CENTRIC LIGHTING



Human Centric Lighting (HCL), which can also be called human factors in lighting, biophilia or other terms, is becoming the next big step in lighting. It may become more significant than Edison creating the light bulb, because not only can HCL provide good visual lighting quality, energy efficiency and sustainability at a reasonable cost, it can also improve circadian rhythms, short- and long-term alertness, sleep, mood, visual acuity, perception and performance–productivity. HCL provides both visual acuity and biologic benefits.

In addition to daylight, specialized fixed spectral content and tunable (dimming and Kelvin or Colour changing) LED products with advanced controls are already available and cost effective and should become standard for business, education, hospital, residential and most other applications much sooner than most people think. Within five years, and maybe as little as three, people will probably look back and wonder how they lived with that old lighting. Remember how it was before you had a smart phone!

that old lighting. Remember how it was before you had a smart phone!

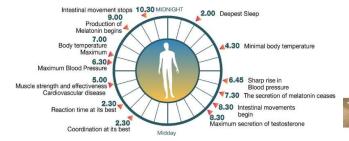
The wellbeing and performance–productivity benefits, which may be called 'soft' savings, usually dwarf the typical 'hard' savings of lower electrical bills and reduced maintenance costs. What is very important is that HCL provides both 'hard' and 'soft' savings. HCL shows the real value of lighting and makes lighting much more than a commodity, which is how most people have been considering it for decades. So now is a perfect time for HCL, and it can be considered a wasted opportunity not to.

Products:

TW Integrated light source and driver for Tuneable white control 2700-6500 K

Harmony with the Earth's natural lighting cycle

Claiming that better lighting can improve health is a big supposition. That said, it is not outlandish to state that carefully designed lighting can aid, even correct, circadian rhythms in human beings. Over time, people have evolved in harmony with the Earth's natural lighting cycle, which has low light levels and low correlated Colour temperatures (CCT) in the early morning, high light levels and high CCTs at mid-day, low light levels and low CCTs during evening, and extremely low light levels and a medium CCT under moonlight. These varying light levels are at the heart of a human being's 24-hour internal clock, otherwise defined as circadian rhythm Until 200 years ago, 90% of our waking time was spent outside. Now most of us spend 90% of our time indoors with electric lighting. While we're at work, our lighting is usually set at one light level with a constant CCT—this is not consistent with circadian rhythms. Without regular and direct exposure to such dynamic lighting, the circadian rhythm can be disrupted, which could lead to health issues. Specifically, light and darkness control hormone production. During the day, with a natural circadian rhythm, appropriate amounts of dopamine are secreted for pleasure, alertness and muscle coordination; serotonin for impulse control and carbohydrate cravings; and cortisol for stress response. During the night, melatonin allows for sleep, and refreshes our body. Recent research, specifically, the discovery of intrinsically photosensitive retinal ganglion cells (ipRGC) in our bodies, has been found to be very important in setting one's internal clock, so to speak. They are especially responsive to light that is rich in blue content, the mid-day sky, for example, which can be up to 10,000K. This is particularly notable in that blue light content suppresses melatonin and encourages dopamine, serotonin, and cortisol production, meaning greater exposure to it during the day can lead people to be more alert and productive at work, or even during night shifts. At the same tim





CCT change using LED light sources can be obtained, mixing warm and cool light by adjusting opposite sides intensity. It also can be obtained mixing some specific colours LED's, getting better results, but at much higher costs.

Benefits and merit of HCL

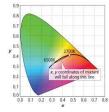
- Individual, human centered illumination
- Natural light simulation
- Better comfort, health, productivity and sleep
- Supports circadian circle
- HCL can be implemented as standalone, as well as bigger systems solution

Human Centric Lighting control options

There are two simple ways to control dimming and Kelvin or Colour changing:

- Using a smart device like smartphone or a tablet;
- Using a push button (switch dimming)

Two-Colour temperature (2700K or 6500K) light source possible coordinate change of range and deviation from Planckian curve





WIRELESS CONTROL OF LUMINAIRES



BLT is a wireless control unit for LED luminaires DALI dimming interface and acts both as a controller and as a power supply making it possible to connect directly with DALI interface without the need for an external DALI power supply. This so-called Standalone DALI makes it possible to implement multi-channel lighting systems with adjustable color (RGB) or color temperature, while keeping the wiring and number of components at their minimum.

BLT is controlled wirelessly with BLT smartphone and tablet applications using Bluetooth 4.0 protocol. Devices form automatically a secure wireless mesh network so that a large number of fixtures can be controlled from any point. No external gateway module is needed. BLT can be controlled also from a standard on/o wall switch.

Key features:

- Wirelessly controllable
- No need for an external gateway device
- Forms automatically a fast-wireless mesh network
- Digital output: Standalone DALI
- Easily implemented RGB and color temperature controls
- Controllable switched mains output
- Dimming from standard on/off wall switches
- Device firmware can be updated over-the-air
- BLT cloud service enhances user experience

General data:

Mains voltage: 220-240V, 50Hz

Switching load: 0.6A

Operating temperature range, °C: ta -20...+40/50 Transmission distance: 30m indoor, 50m outdoor

Protection class IEC: II Ingress protection code: IP20 Dimensions: 56.5x35.8x22.3mm

Weight: 0.05kg

Products:

BLT BLT TW Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth)

Integrated light source, wireless control unit and driver for Tuneable white control 2700-6500 K via mobile device (via Bluetooth)

Funcionality

The BLT lighting control solution provides for all the control options that are expected from a full featured professional lighting control solution:

- Grouping: Grouping luminaires in the BLT app is very easy. Grouping works
 with the same gestures as grouping apps in your smart device. After grouping,
 all the luminaires in the group can be controlled all together or the group can
 be opened for individual control
- <u>Scenes</u>: Different lighting situations for different occasions can be created. It is possible to control multiple luminaires with one tap to create the perfect ambience for different occasions and needs. One luminaire can be used in several scenes.
- <u>Animations</u>: Animations are dynamic scenes, where it is possible for the lighting to fade from one scene to another scene. Animations can be recalled to cycle through different lighting situations once or they can be set on repeat. The duration of each scene and the fade times between scenes can be set
- Gallery: BLT's unique gallery feature makes control more intuitive than ever.
 Users simply take photos of a space, or upload a floor plan to the app, and mark the positions of the luminaires. The images then appear in a gallery in the app, with luminaires shown, and users simply tap the one they want to control.
- <u>Light colour</u>: BLT offers a comprehensive colour controlling possibility. A luminaire manufacturer can define the limits of the BLT Ready luminaire's colour range beforehand. A user can change the colour in a simple manner from the app and also save his/her favorite colours in a colour palette
- <u>Colour temperature</u>: BLT offers a comprehensive colour temperature control. A luminaire manufacturer can define the limits of the BLT ready Tunable White luminaire beforehand so it appears with the correct levels in the BLT App. A user can change in a simple manner the colour temperature for the luminaire just by sliding the finger on top of a luminaire icon
- Stagering Scores Asianushas Colory

 | Color |
- <u>Daylight sensor:</u> The control solution allows dimming of artificial lighting when daylight is available for achieving maximum lighting quality and reduced energy consumption. Daylight sensors measure the illuminance and report the lux values to the network. Sensors may be standalone or integrated into luminaires
- Occupancy sensors: The BLT lighting control system supports movement sensors, also overlapping movement sensor information. Motion sensors can be used to save energy and only to have lighting on when it is actually needed
- <u>Control hierarchy</u>: The BLT "Control hierarchy" allows a co-operation between manual lighting controls (the app, switches and push buttons) and automated lighting controls (sensors and timers) allowing different kinds of overrides and modifying the lighting control solution to fit all needed control logics
- <u>Calendar & Timer</u>: With the calendar and timer functionality scenes and animations can be turned on and off based on a convenient time, date or certain weekdays to fit users' needs, seasons and different activities. All the BLT units keeps track of time
- <u>Sunset & Sunrise</u>: BLT units are able to calculate the local sunrise and sunset times, provided that the network's time zone and location are set. When the location is requested the application is temporarily using GPS to retrieve the current location of the mobile device
- <u>Gateway</u>: With the gateway functionality a BLT network can be accessed remotely. It is possible to control BLT enabled luminaires remotely as well as change network settings (requires administrator rights). To enable the remote access functionality an iOS or an Android device needs to be working in the BLT network as a gateway <u>Scalability</u>: The BLT system is scalable and is suited equally well for small one room solutions as for big building complexes. The BLT solution is based on networks and
- <u>Scalability</u>: The BLT system is scalable and is suited equally well for small one room solutions as for big building complexes. The BLT solution is based on networks an an unlimited number of networks can be created. BLT also offers possibilities to turn on and off several networks at the same time or scenes that combines luminaires across networks
- <u>Synchronization</u>: The BLT devices are smart on their own. All the intelligence is replicated in each node leaving no single point of failure. The system itself is self-organizing and in constant synchronization. In this kind of fully distributed and symmetric architecture any unit can go offline and catch up from others when they return back online



Solution

Lighting as experience

It is more than just a light switch. With a tap on your smartphone you can set the ambience for study, watching a movie, or a romantic dinner Practical daily use

You can still use your existing wall switches. They will have a new life: use them as dimmers and control many lamps with one switch Easy to install

You don't need any new wiring, switches, devices or networks. Plug in the lighting fixture and pair it with your phone or tablet. No other configurations needed Delightful to use

You can control your lights with an intuitive and visual user interface on your smartphone or tablet

Bluetooth Low Energy:

The BLT solution is based on Bluetooth Low Energy, the state-of-the-art wireless technology and the only low power wireless technology in all modern smartphones, tablets and even smart watches, making it the only mainstream and future proof low power radio technology in the world

Wireless Mesh Network:

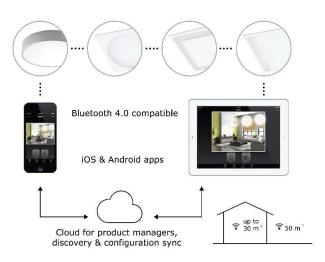
On top of Bluetooth Low Energy, the BLT technology provides a mesh network where all the intelligence of the system is replicated in every node and, in such a way, creates a system with no single points of failure. Such self-organizing wireless mesh network can control a large number of fixtures from any point. It also allows for firmware updates over the network, allowing any kind of changes to be made over-the-air. In this kind of fully distributed and symmetric architecture, any unit can go offline and catch up from others when they return back online. The BLT devices are smart on their own and only connected when needed. An Internet connection is not necessary for normal operation, it is just needed for user interface configurations to be sent or recalled from the cloud service

App:

The BLT app works as one of the user interfaces in a BLT lighting control solution, as the commissioning tool and as well as a remote gateway. The BLT app works with iOS as well as Android devices, like smartphones, tablets and smartvatches. The app is free to download by any end user.

The BLT app is made by user interface experts and in a way, that anyoneregardless of technical proficiency- can use it. Therefore, the BLT app is equally well suitable for the professional lighting market as well as the residential field.

Solution Architecture



User Interfaces:

BLT offers a big variety of possibilities for a user to interact with the lighting depending on the user's individual requirements. The app for smartphones, tablets and smartwatches is the most elaborated user interface. Besides the app, traditional wall switches, push buttons, BLT's own scene controllers and many other control points can be used.

Luminaires

BLT technology works with number of Northcliffe luminaires, creating an optimal solution in terms of ease of installation and functionality with minimal additional hardware and deployment costs. See list of available options in end of description





HIGHBAY HBPIR7m SENSOR



The HBPIR7m series of miniature PIR (passive infrared) presence detectors provide automatic control of lighting loads with optional manual control using an infrared handset. It is specifically designed for mounting onto a batten or waterproof style luminaire. Two models are available: on/off and DALI all of which will switch incandescent, fluorescent, compact fluorescent and LED lighting.

The unit detects movement using a PIR sensor and turns the load on. When an area is no longer occupied the load will switch off after an adjustable time out period. The units are IP65 rated as standard and are therefore suitable for outdoor use as well as wet and wash-down areas. A selection of fixing washers are supplied to aid fixing to a variety of luminaires. All functionality is fully programmable using an IR handset.

General data:

Mains voltage: 230V+/-10%, 50Hz

Switching load: 2A

Operating temperature range, °C: ta -10...+35 (tmin-30C version with ta -30...+35 optional)

Protection class IEC: II Ingress protection code: IP65 Dimensions: 123x33x28 Mounting hole: Ø20x17mm

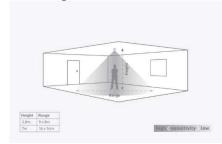
Weight: 0.10kg

Products:

HBPIR7m Integrated PIR sensor for high ceiling (up to 7 meters) with on-off control Integrated PIR sensor for high ceiling (up to 7 meters) with DALI control HBPIR7mD

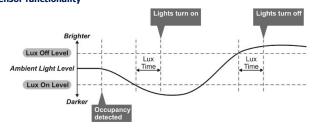
HBPIR7mtmin-30C Integrated PIR sensor for high ceiling (up to 7 meters) with on-off control suitable for low ambient temperatures up to -30°C HBPIR7mDtmin-30C Integrated PIR sensor for high ceiling (up to 7 meters) with DALI control suitable for low ambient temperatures up to -30°C

Detection diagram



Height Detection range 2.8m 9x9m 16x16m

Sensor functionality



Detection mode

Presence. When movement is detected the load will automatically turn on. When the area is no longer occupied the load will automatically switch off after an adjustable time period.

Sensitivity to movement of the PIR sensor can be adjusted using the Sensitivity parameter.

Note: To assist in setting the Sensitivity, turn on the Walk Test LED which will flash red when movement is detected.

Switch Level On/Off

Occupancy detection can be made dependant on the ambient light level using the Lux On Level and Lux Off Level parameters.

Maintained Illuminance (daylight harvesting) - DD and AD variants only

The detector measures the overall light level in the detection area and calculates the correct output for the luminaires, to achieve a preset lux level (maintained illuminance or daylight harvesting).

Basic programming - HBPIR7m and HBPIR7mD variants





The functionality of the HBPIR7m, HBPIR7mD are controlled by a number of parameters which can be changed or programmed by any of the following devices: infrared HBPIR handset or infrared HBPIR handset with LCD. For most basic programming operations the infrared HBPIR handset can be used and the following procedures are based on using this device. Point the handset at the Sensor and send the required programming commands to the unit.

Note:

For optimum operation of the lux sensor, the lens must shielded as much as possible from the light source.

Avoid direct sunlight entering the sensor. Do not site within 1m of forced air heating or ventilation.

Do not fix to a vibrating surface

Special order versions that can be used down to -30°C (tmin-30C)



HIGHBAY HBPIR12m SENSOR



The HBPIR12m high-bay occupancy sensor is specifically designed for high mounted areas such as warehouses, manufacturing and other high ceiling applications. It is a self-contained sensor and relay that turns individual light fixtures on/off based on occupancy in the detection zone. It comes with three interchangeable lenses for use in either a 360° high-bay or 360° low-bay general area or an aisle way. The HBPIR12m provides reliable coverage up to 12,2m mounting heights.

- Fast, easy time delay setting: can be set at any time without requiring power to the sensor; time delay is variable from 30s-30m
- -Auto temperature calibration: automatically adjusts the PIR sensitivity as ambient temperature rises to increase detection of heat movement through the field-of-view
- -Return to last state: for safety and energy savings, the sensor contains a latching relay so that in the event power is lost to the device, the device will return to the last known state of the relay

General data:

Mains voltage: 230V+/-10%, 50/60Hz

Switching load: 4A

Operating temperature range, °C: ta -10...+65

Protection class IEC: II Ingress protection code: IP65 Dimensions: 89x89x32

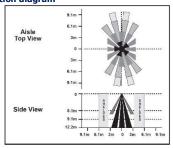
Mounting hole: 22x19mm (rounded corners)

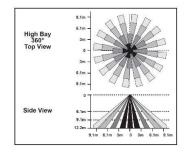
Weight: 0.15kg

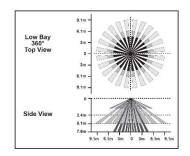
Products:

HBPIR12m Integrated PIR sensor for high ceiling (up to 12 meters) with on-off control SHBPIR12m Surface-mounted PIR sensor for high ceiling (up to 12 meters) with on-off control

Detection diagram







 Height
 Aisle range
 High-bay range
 Lowbay range

 3m
 4x8m
 8x8m
 12x12m

 6m
 6x12m
 12x12m
 20x20m

9m 6x16m 16x16m 12m 6x20m 20x20m

Definition



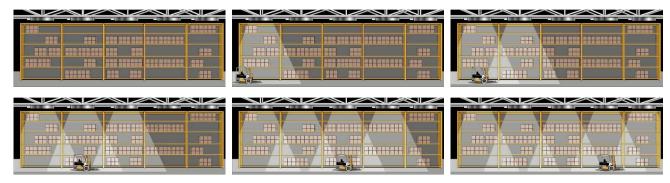


Passive Infrared (PIR): A line of sight beam that reacts to heated motion across a field of view. It is a type of sensor technology, where no energy is emitted from the sensor.

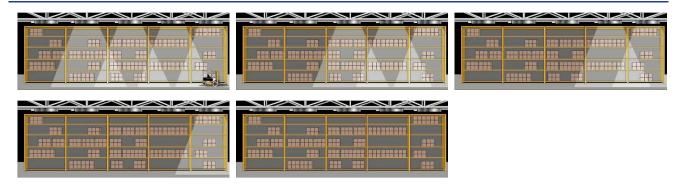
Microwave (MW): It is a type of sensor technology, which sends out microwave pulses (active) and measures the reflection off a moving object. Similar to a police radar gun.

A warehouse aisle application

Here is an example of the luminaires with HBPIR12m sensor behavior in a warehouse application, when each fitting is swithed on/off individually.





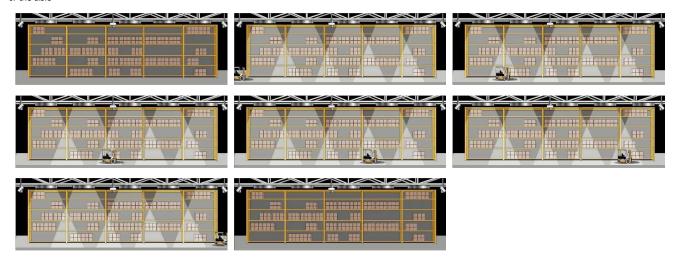




Surface Mount SHBPIR12m Occupancy Sensor is designed simply to automatically turn lights on/off. The sensor utilizes Passive Infrared Technology (PIR) combined with lenses to determine when an area is occupied. This is determined when a heat source is detected and moves from one facet in the lens to another. The sensor recognizes this as a motion and provides power to the light fixture. Simultaneously a timer is started and restarts with each motion, once expired, the lights will turn OFF. The SHBPIR12m sensor maximizes energy savings, incorporating false detection algorithms to eliminate false ONs by nuisance tripping or background environmental conditions. The sensor also optimizes energy savings and safety concerns during power loss scenarios by assuming a return to last known state of operation.

A warehouse aisle application

Here is an example of the luminaires behavior in a warehouse application, when group is power by one of three SHBPIR12m sensor located in begginig, middle and end of the aisle





HIGHBAY HBPIR15m SENSOR



The HBPIR15m PIR (passive infrared) presence detector provides automatic control of lighting loads with optional manual control. The HBPIR15m is a high sensitivity PIR detector suitable for high bay applications, such as warehouses and factories, and where high detection sensitivity is needed. It is specifically designed for mounting onto a high-bay style luminaire. Two models are available: on/off and DALI. The unit detects movement using a PIR sensor and turns the load on. When an area is no longer occupied the load will switch off after an adjustable time out period. The units are IP65 rated as standard and are therefore suitable for outdoor use as well as wet and wash-down areas. All functionality is fully programmable using an IR handset.

General data:

Mains voltage: 230V+/-10%, 50Hz

Switching load: 2A

Operating temperature range, °C: ta -10...+35 (tmin-30C version with ta -30...+35 optional)

Protection class IEC: II Ingress protection code: IP65 Dimensions: 151x80x74 Mounting hole: Ø20x17mm

Weight: 0.15kg

Products:

HBPIR15m Integrated PIR sensor for high ceiling (up to 15 meters) with on-off control HBPIR15mD Integrated PIR sensor for high ceiling (up to 15 meters) with DALI control

HBPIR15mtmin-30C Integrated PIR sensor for high ceiling (up to 15 meters) with on-off control suitable for low ambient temperatures up to -30°C HBPIR15mDtmin-30C Integrated PIR sensor for high ceiling (up to 15 meters) with DALI control suitable for low ambient temperatures up to -30°C

Detection diagram

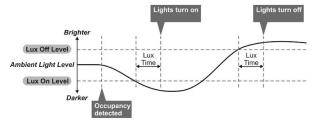


Note: maximum mounting height 20m

Height Detection range 3m 9x9m 6m 16x16m 10m 26x26m 15m 40x40m

The HBPIR15m includes two clip-on masking shields to allow for precise masking of the detection shape. The masks can be easily shaped to produce detection patterns suitable for applications such as aisles and corners and for narrowing the detection diameter.

Sensor functionality



Detection mode

Presence. When movement is detected the load will automatically turn on. When the area is no longer occupied the load will automatically switch off after an adjustable time period.

Sensitivity to movement of the PIR sensor can be adjusted using the Sensitivity parameter.

Note: To assist in setting the Sensitivity, turn on the Walk Test LED which will flash red when movement is detected.

Switch Level On/Off

Occupancy detection can be made dependant on the ambient light level using the Lux On Level and Lux Off Level parameters.

Maintained Illuminance (daylight harvesting) - DD and AD variants only

The detector measures the overall light level in the detection area and calculates the correct output for the luminaires, to achieve a preset lux level (maintained illuminance or daylight harvesting).



Basic programming - HBPIR7m and HBPIR7mD variants





The functionality of the HBPIR7m, HBPIR7mD are controlled by a number of parameters which can be changed or programmed by any of the following devices: infrared HBPIR handset or infrared HBPIR handset with LCD. For most basic programming operations the infrared HBPIR handset can be used and the following procedures are based on using this device. Point the handset at the Sensor and send the required programming commands to the unit.

Note:

For optimum operation of the lux sensor, the lens must shielded as much as possible from the light source. Avoid direct sunlight entering the sensor.

Do not site within 1m of forced air heating or ventilation.

Do not fix to a vibrating surface

Special order versions that can be used down to -30°C (tmin-30C)



HIGHBAY HBEAIR SENSOR WITH WIRELESS COMMUNICATION AND GROUPING POSSIBILITIES



Fixture mounted HBEAIR sensors ensure lighting is only on when and where it is needed. The sensors in combination with can bring huge benefits in terms of energy management as they provide occupancy detection and daylight sensing for heights up to 16 meters. Energy saving - typically between 30% and 50%. HBEAIR can be easily programmed via an Android smartphone, that offers immense flexibility to commission luminaires into groups and further divided in zones wirelessly.

HBEAIR includes advanced grouping functionality which enables occupancy sharing and zoning capability. Up to

40 sensors can be operated together in a single group, and the group can then be divided into a maximum of 6

zones. With this advanced functionality, the group can be programmed such that a zone comes up to full light level upon motion detection while other zones dim up to a lower background light level. This enhances energy savings while still providing lighting in adjacent areas. Application: warehouses, assembly areas, cold rooms.

General data:

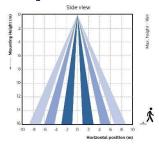
Mains voltage: 220-240V, 50/60Hz Operating temperature range, °C: ta -30...+65

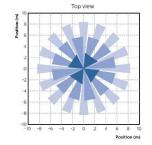
Protection class IEC: II Ingress protection code: IP65 Dimensions: 121x115x43 Mounting hole: Ø20mm Weight: 0.15kg

Products:

HBEAIR Integrated smart sensor for high ceiling (up to 16m) and driver with wireless communication and grouping possibilities for lighting control

Detection diagram





 Height
 Detection range

 4m
 3x3m

 8m
 8x8m

 12m
 12x12m

 16m
 16x16m

Group occupancy sharing

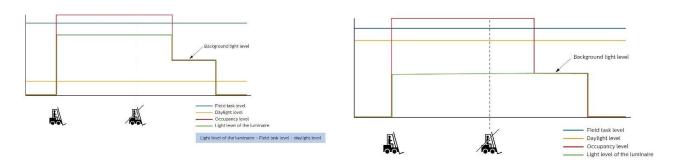
The traditional approach to energy savings is wattage reduction, which often results in light levels below recommended practice. Moreover, luminaires with standalone lighting controls create so-called checker board look on the ceiling. HBEAIR overcomes these problems with smart luminaires through grouping and zoning features; provide full light output at occupied aisles and lower background light levels at unoccupied aisles. The aesthetics of the space is maintained with a background light level that won't turn off luminaires until the entire group is unoccupied. The group occupancy sharing feature can be enabled (default)/disabled through the HBEAIR Field Apps. The group lighting behavior can also be configured to background light level or field task light level. With the group occupancy sharing disabled, the luminaire does not share its occupancy status with other luminaires or respond to the occupancy detection from the rest of the group.

After installation, a large lighting group of up to 40 luminaires can be created easily and quickly using the HBEAIR Field Apps. With default settings, as long as occupancy is detected by any luminaire in the group, the luminaires are turned on at task light level while the rest of luminaires in non-occupied areas of the group stay on at the background light level.

Note: During the group occupancy sharing, daylight harvesting occurs automatically

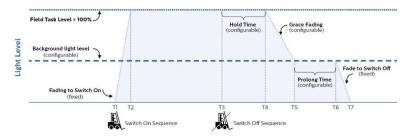
Daylight harvesting

The daylight-based control is disabled by default in the HEAIR. When daylight control is enabled, the light sensor auto-calibrates when power to the driver is cycled. It takes at least 5 auto-calibration cycles (i.e. 5 power cycles) for the new calibration setpoint value to be effectuated. The light level of the luminaire is bound by the field task level (maximum light level) and the background level (minimum light level). If the background light level is set to be 20%, the light will only dim to 20% during daylight harvesting. When daylight-based control is disabled, the auto-calibration sequence will not occur. Daylight-based control is not active after the hold time of the occupancy sensor expires. Figures show examples of lighting control using both daylight and occupancy. When the daylight level is low and an occupant is present, the luminaire light level is inversely proportional to the daylight level. Assuming the incoming daylight level is constant, the luminaire light level remains the same until the hold time expires, after which the luminaire light level fades to the background light level, staying at that level for prolong time. When the daylight level is high, the luminaire light level is proportional to the daylight level. However, when there is an abundance of daylight, the luminaire light level does not dim lower than the background light level.



Sensor functionality

Full-On Sequence (Default) Eco-On Level = Task Level



Parameters for lighting control

All the lighting control parameters are stored in the sensor, and it is possible to configure most of these parameters through NFC or IR. Figure shows a pictorial representation of the occupancy based lighting control.

-<u>Fade to switch on/off time</u>: Fade to switch-on time is the time (T1 to T2) from the point at which occupancy is detected until the lights dim up to the max light output. This timer is set to 0.7 sec and is not configurable.

-Hold time: Hold time is the time (T3 to T4) from the point at which the last movement has been detected (e.g. occupant left the room) until grace time starts. This timer is set to 15 minutes by default and can be configured from to 1 - 120 minutes.

-Grace fading time: Grace fading is the time from T4 to T5 during which the lights are being dimmed down from the current light level to the background level. By default, grace fading time is 10 sec and can be configured to 0 - 25 seconds.

-<u>Prolong time</u>: Prolong time is the time from T5 to T6 at which the background level is maintained at a fixed level. Default prolong time is 15 minutes and can be configured from 0 – infinity (This would ensure that the lights never switch off).

-Fade to switch-off time: Fade to switch-off time is the time (T6 to T7) for the lights to fade from background level to off after prolong time is expired. This timer is set to 0.7 sec and is not configurable.

-Field task tuning level: Field task tuning level is used to configure the required light level on the task plane. Setting this to 100% enables the installed maximum light level. A lower percentage level can be configured to set the new maximum light level of the luminaire through the app.

-Background level: Background level is a light level significantly lower than 100%, used to save energy when space is not occupied.

-Group occupancy sharing: Group occupancy sharing is a configurable feature to allow HBEAIR to share its local occupancy detection status and control lights accordingly. As long as presence is detected within the group, the luminaires stay on at the background light level in non-occupied areas.

-Group light behavior: Group Light Behavior is a configurable feature that allows to choose how the other luminaires in the group respond to occupancy detected by a luminaire in the group. The options are background light level and field task level.

-Occupancy mode: Occupancy mode is a configurable light level for the luminaires in non-occupied areas while there is occupancy detected elsewhere in the group, there are 3 options to choose from:

Auto-on/off mode: Lights are switched on and off automatically based on occupancy detection and time delay settings.

Manual-on/auto-off: Lights are turned on manually through a wireless switch and turned off automatically, as a vacancy sensor.

Manual-on/off: Lights are turned on and off manually through a wireless switch. This mode simply does not make use of the occupancy sensing functionality.

-Daylight based control: When daylight based control is enabled and if occupancy is detected, the luminaire(s) remains always switched on at the calibrated light level based on daylight harvesting as discussed above. In case enough daylight is available, this situation leads to higher energy costs.

-Daylight dependent switching: When daylight based control is enabled and as long as the occupancy is detected, the luminaire never switches off the light. Even at the brightest daylight levels, the luminaire dims down to background light level; this situation leads to higher energy costs. With Daylight dependent switching (DDS) functionality, if there is enough daylight the sensor switches off the luminaire leading to lower energy costs. The sensor switches off the light when:

the luminaire is already switched on and

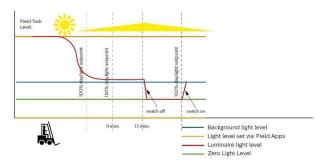
an "Auto On/Off" occupancy mode has been configured and

the measured light level on the local sensor is above the threshold value (150% of the daylight regulation setpoint) for more than 15 minutes. The 15 minutes is reset as soon as one of the above conditions is not met. The fade time for turning off the light is \sim 30 seconds.

The sensor switches on the luminaire(s) when:

the light level on the local sensor is below the daylight regulation setpoint and

there is presence, either local or elsewhere, detected in the room A "Manual On" request overrules DDS, the luminaire(s) switch on and the time period of 15 minutes is reset. This is because the user expects light control when pressing a button manually.

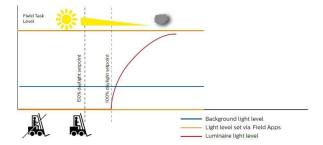


-<u>Daylight dependent override</u>: With Daylight dependent override (DDO) functionality, in the presence of sufficient daylight along with occupancy detection, the luminaire(s) will not switch on until the daylight levels become insufficient i.e. below the daylight regulation setpoint. From that moment, the output light levels are switched on and adjusted to compensate the lack of daylight. In this way, energy costs are reduced. In other words, when DDO is enabled, the sensor keeps the lights switched off while maintaining enough light in the room for the end user when:

the lights were initially switched off due to a vacant room and presence, either local or elsewhere in the group, was detected and

an "Auto On/Off" occupancy mode has been configured and

the measured light level is higher than 150% of the daylight regulation setpoint. When the measured light level drops below the daylight regulation setpoint, the lights switch on again.



Grouping and Zoning

Grouping allows multiple luminaires to connect with each other using a Zigbee network and broadcast occupancy status. The grouped luminaires can be configured for desired behavior for presence detection based on installer settings, e.g. the light behavior of the rest of the luminaires can be configured for maximum brightness (called as 'field task level' in further documentation) or background light level.

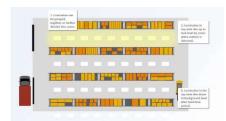
Zoning allows sub-grouping of luminaires. In an industrial setup such as warehouses, it would be beneficial to have an aisle turn on to field task level while adjacent aisles switch on and go to background light level on presence detection. In another scenario, if a forklift truck enters a very long aisle, it would be beneficial to only bring the first 5 luminaires, for example, to maximum brightness/field task level and the rest of the luminaires in the aisle to background light level. This avoids the tunnel effect, driving or walking into a dark tunnel or lighting up the whole aisle unnecessarily.

A warehouse aisle application

Here is an example of the group occupancy sharing and zoning behavior in a warehouse application.



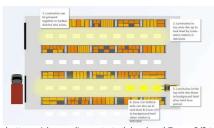
 ${\bf 1.}$ Luminaires can be grouped together or further divided into zones



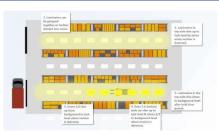
3. Luminaires in the top aisle dim down to background level after hold time period $% \left(1\right) =\left(1\right) \left(1\right$



2. Luminaires in top aisle \dim up to task level by zones when motion is detected



4. Zone 1 in bottom aisle can dim up to task level and Zones 2/3 to background level when motion is detected $\,$



5. Zones 2/3 dim up from background to task level when motion is detected

6. Luminaires in top aisle turn off after prolong period expires

Note: Place heat radiating devices outside of the monitoring cone Avoid drafts (e.g. from ventilators or heating systems)



CORRIDOR FUNCTION

Luminaires with built in corridor function are a very simple and highly efficient way of reducing energy consumption. Wherever light has to be provided 24-hours a day for statutory reasons, the corridor function helps provide the right light, combined with energy-efficient and cost-effective operation. Automatic switching is based on presence/motion with the time delay set on site to suit the customers' requirements, where no presence is detected the light level will fade from 100% down to 10% saving up to 60% of the energy usage. The corridor function does not abruptly switch off the lighting but dims it to a 10% level. Depending on the profile selected the device remains at this light level ("never off" profile) or switches off completely after the appropriate delay ("Switch off" profile).

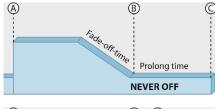
This economical form of 24-hour lighting is ideal for pedestrian underpasses, underground train stations, stairwells, ATM booths, telephone kiosks, hotels, public buildings and hospitals.

Product

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)
MW Integrated microwave (MW) motion sensor with on-off control

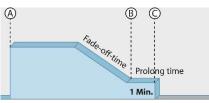
Functionality



COR option:

Standard profile "Never OFF" (A...100 %, B...10 %, Fade time 32 s, never OFF).

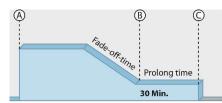
If presence/motion is not detected, from this time onwards the ballast dims until the absence light value is reached. This corresponds to the default parameters.



COR1min option:

Profile 2 "Switch off" (A...100 %, B...10 %, Fade time 32 s, switch off after 1 minute).

If presence/motion is not detected, from this time onwards the ballast dims until the absence light value is reached and if presence is not detected in the next minute the ballast switches off completely.



COR30min option:

Profile 3 "Switch off" (A...100 %, B...10 %, Fade time 32 s, switch off after 30 minutes).

If presence/motion is not detected, from this time onwards the ballast dims until the absence light value is reached and if presence is not detected in the next 30 minutes the ballast switches off completely.

Corridor application



The luminaires stay at 10% light output



When movement is detected by the inbuilt micro sensor, the luminaire increases its output to 100%



After a period of time when the micro sensor does not detect any further movement, the luminaire will revert to 10% light output as standard



The luminaires remain at 10% light output



Or go off, if switch off time was preprogrammed



EMERGENCY LIGHTING SOLUTIONS

The majority of Northcliffe Lighting luminaires can be equipped with various emergency kits for different markets and different applications.

Products

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface
EM3LER Emergency version 3 hours, lens for escape route
EM3LOA Emergency version 3 hours, lens for open areas

Emergency kit options

EM3 (NOVA LED): The emergency converter Nova LED is universal design for use with the majority of LED luminaires that work with constant power drivers. It is an emergency battery pack that uses electronic circuitry to convert energy stored in the battery into the DC voltage and currect necessary to drive the LED load. The unit can be installed as maintained or non-maintained unit and it allows the same LED fixture to be used for both normal and emergency operation. Each unit includes the battery pack, LED charge indicator, a test switch and the emergency power module.

EM3B: The emergency converter using the best available technology in the market, designed for use with the majority of LED luminaires. Each unit includes the battery pack, LED charge indicator and the emergency power module. A test switch can be installed optional.

EM3A: The emergency converter with self-test function which is universal for use with the majority of LED luminaires. Luminaires with autonomous testing system includes automatic self-diagnostic at regular intervals. Every seven days the correct performance of the module, the light and the battery is tested. Once per year the capacity of the batteries is tested simulaiting a mains failure and making a performance test. Two-colour status display LED indicator signalizes mains power supply and battery charge. The luminaire with autonomous testing system also has a deep discharge protection.

EM3D: The emergency converter with DALI interface and automatic test function which is universal for use with most LED luminaires and compatible with all dimmable and non-dimmable systems. All emergency units are individually addressable. Individual programming option makes it possible to use functions which transcend the DALI standard. Once per year the capacity of the batteries is tested simulating a mains failure and making a performance test. Two-colour status display LED indicator signalizes mains power supply and battery charge. The luminaire with autonomous testing system also has a deep discharge protection.

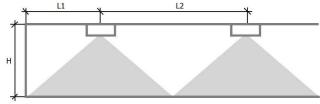


Series of EM3LOA and EM3LER emergency kits is the newest line of options that combines highly efficient LED light sources and the latest optics, designed to illuminate open areas or escape routes. A high specification LED emergency version provides high performance emergency lighting in commercial buildings where aesthetics is of prime importance, such as offices, retail or hospitality and leisure facilities. Whereas typical escape route emergency luminaires need to be spaced at every 3 to 7 metres to achieve the required illumination level, EM3LOA and EM3LER optimised optics can provide spacing up to 17 metres along the escape routes and up to 9 metres in the open areas, depending on ceiling height, that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and subsequent maintenance.

<u>EM3LOA</u>: The emergency converter with additional source of light. This unit will provide 2W maximum output power at emergency mode. It is designed to be highly efficient and highly reliable. There are four functions on this unit: overcharge; over discharge; over temperature and reverse battery protection. This emergency kit works as a non-maintained, provides emergency lighting for open areas. When the mains fail, the spotlight will provide illumination for 3 hours. The emergency spotlight is simply installed in the body of the luminaire.

<u>EM3LER</u>: The emergency converter with additional source of light. This unit will provide 2W maximum output power at emergency mode. It is designed to be highly efficient and highly reliable. There are four functions on this unit: overcharge; over discharge; over temperature and reverse battery protection. This emergency kit works as a non-maintained, provides emergency lighting for escape route illumination. When the mains fail, the spotlight will provide illumination for 3 hours. The emergency spotlight is simply installed in the body of the luminaire.

Photometry of EM3LOA/EM3LER



L1- distance from the wall to the first fixture

L2- distance between fixtures

H- height of the ceiling

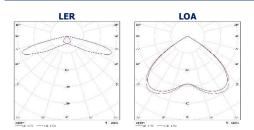
LER optic for corridor route illumination:

LLK optic ioi	corridor route	mumauom.
EM3LEF	R- 2W/184lm	min. 1lx
H, m	L1, m	L2, m
2,50	7,5	17
3,00	8	18,5
3,50	8	20
4,00	8	20
4,50	7	20
5,00	5	20
6.00	3.5	15

LOA optic for open area illumination:

LOA OPLIC IOI	open area ma	iiiiiaaaaaii.
EM3LOA	- 2W/118lm m	in. 0,5lx
H, m	L1, m	L2, m
2,5	3,5	8
3	4	9
3,5	4,5	10
4	4.5	11
4,5	5	11,5
5	5	12
6	5	13









NIGHT SWITCHES

WALL_MOUNTED NIGHT SWITCH



Night switch is a device with a built-in photo-sensor which measures ambient brightness and automatically switches on connected lighting fixtures when darkness falls and switches off again at the dawn. Other OFF settings are available like 2, 4, 6 or 8 hours after dusk. Switch-On Level can be set from 3 to 1000 lx. Application: outdoor.

General data:

Mains voltage: 220-240V, 50Hz

Switching load: 5A

Operating temperature range, °C: ta -20...+50

Protection class IEC: II Switching delay, s: 15-30 Response brightness: 3 – 1 000 lx

Additional Features: variable switching level "Delay Off" - 2, 4, 6, 8 Hours

Colour: white

Ingress protection code: IP55 Dimensions: 105x79x36mm

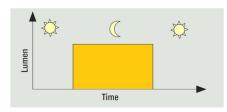
Weight: 0.15kg

Products:

NIGHTSWITCH

IP55, photo-sensor measures ambient brightness and switches ON/OFF, white

Functionality:



Nightswitch measures ambient brightness and automatically switches on connected lighting fixtures when darkness falls and switches off again at the dawn.

Note: Make sure that the NIGHTSWITCH is not affected by light from light fixtures to whice it is connected (by light shining).

Note: Make sure that the NIGHTSWITCH is not affected by light from light fixtures to whice it is connected (by light shining directly on the sensor)

BUILT-IN NIGHT SWITCH



Mini-night switch PCA switches lighting fixture ON or OFF, at the same time it can be mounted into IP protected light fitting serving as standalone solution. The built-in photo-sensor records the brightness of the surroundings and switches the connected lighting fixture on at dusk and off again at dawn. Application: outdoor, buit-in solutions

General data:

Mains voltage: 220-240V, 50/60Hz

Switching load: 5A

Operating temperature range, °C: ta -20...+75

Protection class IEC: II Switching delay, s: 15-30 Response brightness: 35 lx Colour: transparent

Ingress protection code installed: IP66 Dimensions: 53.5x31.5x44mm

Weight: 0.06kg

Products:

PCA Photocell 20mm miniature type, IP65, 35 lux; 1:05 ratio

Functionality:



The product is made up of a special lens arrangement developed to maximise acceptance angle, improving accuracy and consistency of switching. Additionally, the range uses superior quality components throughout and includes a predictive load transfer switching algorithm to minimise switching stresses









DIMMING OF LED STREET LIGHTING



LED street lighting dimming feature helps to flexibly adapt street and outdoor lighting to the varied nightlife of cities and municipalities and enables big energy savings. It offers three different control and dimming functions in one electronic control gear:

DALI – digital interface for bi-directional communication CDIM – dimming with the help of a control line

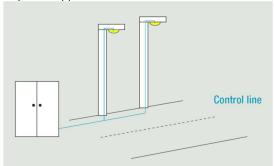
ADIM - autonomous two-level dimming

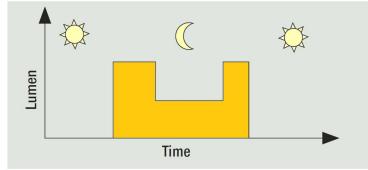
Products:

DALI Driver with DALI interface

CDIM Driver dimming with the help of a control line ADIM Driver with autonomous two-level dimming

CDIM - midnight step-down switch is used in installations where a control line (switched phase) is available in addition to the power line. The switched phase is connected to the terminal board of street lighting fixture and an external actuator is used to start and end dimming. The dimming parameters (e.g. dim levels and fade times) are factory pre-set.

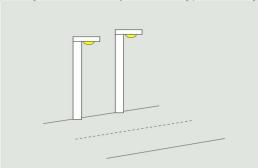


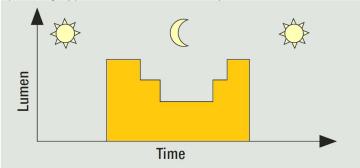


Installation with external control line for CDIM operation

CDIM operation - light output over time: one dim level.

ADIM – autonomous dimming is designed for dimming without any external control wiring and helps to save energy and reduce light pollution, even if only a power line is available. In ADIM operation, the street lighting fixtures executes a pre-set dimming profile, which can be factory programmed. The autonomous dimming is regulated by an integrated timer, which adjusts the dimming profile according to the previous night (operation from switch-on to switch-off).





Installation without external control line for ADIM operation

ADIM operation- light output over time: with one or two dim levels

Example: at 19 o'clock street lights are turned ON and at 6 o'clock turned OFF. In this case we have total of 11 hours long operation, middle point in this case is 5.5 hours which makes "natural midnight" at 00:30, so power goes down to 50% operation at 22:30 (00:30 – 2h), returns to 100% operation at 04:30 (00:30 + 4h). Power switch always takes average of last 4 operating times to calculate reference point. Energy savings about 70 percent. Higher energy savings can be achieved setting lower/longer operation level during night time or more power reduction steps. Please add this information by placing order.

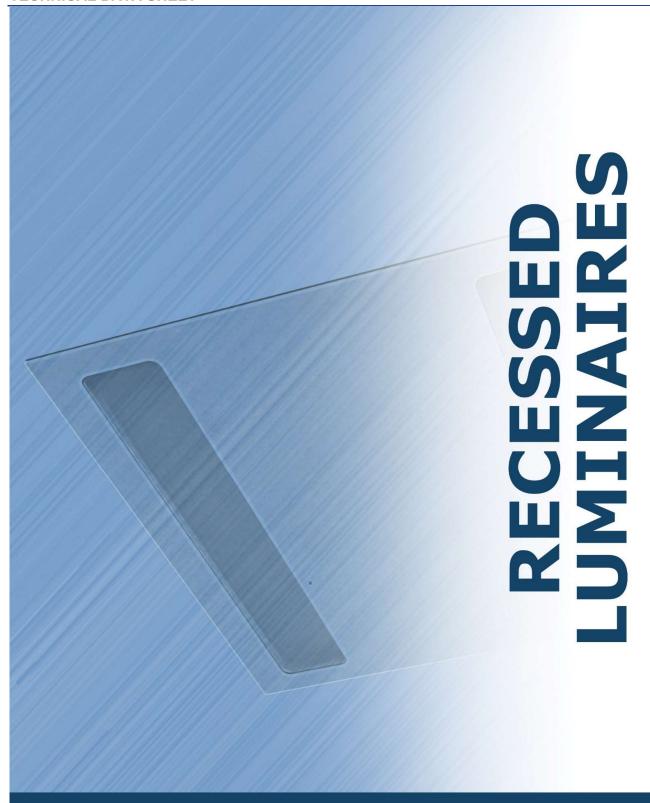












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ERIDANUS R LED

Product Group: Recessed Luminaires



















Images for the product family and options:





Description: A recessed LED luminaire with double parabolic reflector for a glare-free lighting effect

Louvre: double parabolic, UGR<19 glare protection

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK05

EEC: A+-

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

recessed mounting kit S620x620 or S320x1220 (to be ordered separately). Cable, 0.3m, 2x0.75mm2

Environment: Indoor

Application: Office, education, corridor, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions











Series of EM3LOA and EM3LER emergency kits is the newest line of options that combines highly efficient LED light sources and the latest optics, designed to illuminate open areas or escape routes. A high specification LED emergency version provides high performance emergency lighting in commercial buildings where aesthetics is of prime importance, such as offices, retail or hospitality and leisure facilities. Whereas typical escape route emergency luminaires need to be spaced at every 3 to 7 metres to achieve the required illumination level, EM3LOA and EM3LER optimised optics can provide spacing up to 17 metres along the escape routes and up to 9 metres in the open areas, depending on ceiling height, that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and subsequent maintenance







Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Eridanus R LED1x1800 D767 T830	595	295	40	1721	14,0	123	80+	3000	1,70
Eridanus R LED2x1300 D771 T830	595	595	40	2465	19,6	126	80+	3000	3,00
Eridanus R LED2x1850 D768 T830	595	595	40	3549	28,9	123	80+	3000	3,00
Eridanus R LED3x1650 D769 T830	595	595	40	4732	38,6	123	80+	3000	3,10
Eridanus R LED3x1850 D781 T830	595	595	40	5239	42,7	123	80+	3000	3,10
Eridanus R LED1x2600 D782 T830	1195	295	40	2465	19,1	129	80+	3000	3,00
Eridanus R LED1x3700 D770 T830	1195	295	40	3549	28,9	123	80+	3000	3,00
Eridanus R LED2x3700 D772 T830	1195	595	40	7098	57,8	123	80+	3000	6,20
Eridanus R LED3x3700 D773 T830	1195	595	40	10646	86,7	123	80+	3000	6,50
Eridanus R LED1x1800 D767 T840	595	295	40	1774	14,0	127	80+	4000	1,70
Eridanus R LED2x1300 D771 T840	595	595	40	2541	19,6	130	80+	4000	3,00
Eridanus R LED2x1850 D768 T840	595	595	40	3658	28,9	127	80+	4000	3,00
Eridanus R LED3x1650 D769 T840	595	595	40	4878	38,6	127	80+	4000	3,10
Eridanus R LED3x1850 D781 T840	595	595	40	5401	42,7	127	80+	4000	3,10
Eridanus R LED1x2600 D782 T840	1195	295	40	2541	19,1	133	80+	4000	3,00
Eridanus R LED1x3700 D770 T840	1195	295	40	3658	28,9	127	80+	4000	3,00
Eridanus R LED2x3700 D772 T840	1195	595	40	7317	57,8	127	80+	4000	6,20
Eridanus R LED3x3700 D773 T840	1195	595	40	10975	86,7	127	80+	4000	6,50
Eridanus R LED2x1300 E822 T830 W625	622	622	40	2465	19,6	126	80+	3000	3,00
Eridanus R LED2x1850 E823 T830 W625	622	622	40	3549	28,9	123	80+	3000	3,00
Eridanus R LED1x2600 E824 T830 W625	1246	310	40	2465	19,1	129	80+	3000	3,00
Eridanus R LED1x3700 E825 T830 W625	1246	310	40	3549	28,9	123	80+	3000	3,00
Eridanus R LED2x1300 E822 T840 W625	622	622	40	2541	19,6	130	80+	4000	3,00
Eridanus R LED2x1850 E823 T840 W625	622	622	40	3658	28,9	127	80+	4000	3,00
Eridanus R LED1x2600 E824 T840 W625	1246	310	40	2541	19,1	133	80+	4000	3,00
Eridanus R LED1x3700 E825 T840 W625	1246	310	40	3658	28,9	127	80+	4000	3,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping possibilities (applicable for models: D768, D770, E823, E825)

ACT+ Integrated self-learning sensor and driver for lighting control (not applicable for models: D781, 772, D773)

BLT Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth)

DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light level (not applicable for models: D781, 772, D773)

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface
EM3LER Emergency version 3 hours, lens - escape route
EM3LOA Emergency version 3 hours, lens - open areas

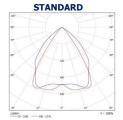
WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable

W625 Designed for the German market to fit 625x625 suspended ceiling WID Wide beam reflector

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





Available accessories:



Product: Recessed MTG FRAME S620x620 RAL9003

Description: Frame for LED luminaire 595x595mm installation into plasterboard ceiling (1pcs), white steel



Product: Recessed MTG FRAME S320x1220 RAL9003

Short description: Frame for LED luminaire 1195x295mm installation into plasterboard ceiling (1pcs), white steel







WING D LED

Product Group: Recessed Luminaires

















A recessed LED luminaire with direct and reflected light distribution to create comfortable lighting effect **Description:**

Diffuser: translucent micro-prismatic PMMA, UV stable

Body: steel sheet, white finish General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct/Indirect LED lifetime, h: 100000/L80B50 Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05

EEC: A+/A++

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

recessed mounting kit S620x620 (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI*	ССТ*, К	Weight, kg
Wing D LED2x1700 D079 T830 MPRZ LT92	595	595	96	3088	29,2	106	80+	3000	3,50
Wing D LED2x2400 D080 T830 MPRZ LT92	595	595	96	4554	39,4	116	80+	3000	3,50
Wing D LED2x1700 D079 T840 MPRZ LT92 1G	595	595	96	3226	29,2	111	80+	4000	3,50
Wing D LED2x2400 D080 T840 MPRZ LT92	595	595	96	4758	39,4	121	+08	4000	3,50
Wing D LED2x1700 E880 T830 MPRZ LT92 W625	622	622	96	3088	29,2	106	+08	3000	3,50
Wing D LED2x2400 E881 T830 MPRZ LT92 W625	622	622	96	4554	39,4	116	80+	3000	3,50
Wing D LED2x1700 D880 T840 MPRZ LT92 W625	622	622	96	3226	29,2	111	80+	4000	3,50
Wing D LED2x2400 E881 T840 MPRZ LT92 W625	622	622	96	4758	39,4	121	80+	4000	3,50

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

BLT Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth)

TW Integrated light source and driver for Tunable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tunable white control 2700-6500 K via mobile device

(via Bluetooth)

Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

Strain relief for power supply cable 1G

WIE3 3-pole "Wieland - gesis classic" type or compatible connector WIE5D 5-pole DALI "Wieland - gesis classic" type or compatible connector

Shuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable Shuko-3.0m

RAL

MPRZ LT92 Translucent micro-prismatic diffuser with high light transmittance W625 Designed for the German market to fit 625x625 suspended ceiling

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





Available accessories:



Product: Recessed MTG FRAME S620x620 classic RAL9003 Description: Frame for classic luminaire 595x595mm installation into plasterboard ceiling (1pcs), white steel







CORONA D LED

Product Group: Recessed Luminaires

















Images for the product family and options:







Description: A recessed LED luminaire with opal micro-prismatic diffuser for most commercial lighting applications

Diffuser: translucent micro-prismatic, PMMA, UV stable, low glare

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP44 Mechanical impact resistance: IK05

EEC: A+-

Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use Installation:

recessed mounting kit S620x620 or S320x1220 (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, corridor, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable.

Energy saving - typically between 30% and 50%.

Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals

For more information see the option list and energy saving solutions.



Series of EM3LOA and EM3LER emergency kits is the newest line of options that combines highly efficient LED light sources and the latest optics, designed to illuminate open areas or escape routes. A high specification LED emergency version provides high performance emergency lighting in commercial buildings where aesthetics is of prime importance, such as offices, retail or hospitality and leisure facilities. Whereas typical escape route emergency luminaires need to be spaced at every 3 to 7 metres to achieve the required illumination level, EM3LOA and EM3LER optimised optics can provide more than:

up to 17m along the escape routes

up to 9m in the open areas

metre spacing, depending on ceiling height, that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and subsequent maintenance.

EM3LOA







High flexibility to meet specific project requirements, as luminaires can be painted to all RAL code colour on request. For more information see the option list



Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI*	ССТ*, К	Weight, kg
Corona D LED1x1350 E801 T830 MPRZ LT92	595	295	40	1255	11,1	113	80+	3000	2,00
Corona D LED1x1800 E802 T830 MPRZ LT92	595	295	40	1702	15,4	110	80+	3000	2,00
Corona D LED1x2650 E803 T830 MPRZ LT92	595	295	40	2510	20,1	125	80+	3000	2,00
Corona D LED2x1350 E804 T830 MPRZ LT92	595	595	40	2510	20,1	125	80+	3000	3,50
Corona D LED2x1850 E805 T830 MPRZ LT92	595	595	40	3540	30,8	115	80+	3000	3,50
Corona D LED2x2650 E806 T830 MPRZ LT92	595	595	40	5021	38,9	129	80+	3000	3,50
Corona D LED3x1350 E807 T830 MPRZ LT92	595	595	40	3766	29,5	128	80+	3000	3,50
Corona D LED3x1800 E808 T830 MPRZ LT92	595	595	40	5107	43,3	118	80+	3000	3,50
Corona D LED3x2650 E809 T830 MPRZ LT92	595	595	40	7531	57,8	130	80+	3000	3,50
Corona D LED1x2600 E810 T830 MPRZ LT92	1195	295	40	2460	18,6	132	80+	3000	3,50
Corona D LED1x3500 E811 T830 MPRZ LT92	1195	295	40	3347	26,3	128	80+	3000	3,50
Corona D LED1x5250 E812 T830 MPRZ LT92	1195	295	40	5021	38,9	129	80+	3000	3,50
Corona D LED2x2600 E813 T830 MPRZ LT92	1195	595	40	4919	36,0	137	80+	3000	6,50
Corona D LED2x3500 E814 T830 MPRZ LT92	1195	595	40	6695	51,4	130	80+	3000	6,50
Corona D LED2x5250 E815 T830 MPRZ LT92	1195	595	40	10042	77,0	130	80+	3000	6,50
Corona D LED1x1350 E801 T840 MPRZ LT92	595	295	40	1311	11,1	118	80+	4000	2,00
Corona D LED1x1800 E802 T840 MPRZ LT92	595	295	40	1779	15,4	115	80+	4000	2,00
Corona D LED1x2650 E803 T840 MPRZ LT92	595	295	40	2623	20,1	130	80+	4000	2,00
Corona D LED2x1350 E804 T840 MPRZ LT92	595	595	40	2623	20,1	130	80+	4000	3,50
Corona D LED2x1850 E805 T840 MPRZ LT92	595	595	40	3698	30,8	120	80+	4000	3,50
Corona D LED2x2650 E806 T840 MPRZ LT92	595	595	40	5246	38,9	135	80+	4000	3,50
Corona D LED3x1350 E807 T840 MPRZ LT92	595	595	40	3934	29,5	133	80+	4000	3,50
Corona D LED3x1800 E808 T840 MPRZ LT92	595	595	40	5336	43,3	123	80+	4000	3,50
Corona D LED3x2650 E809 T840 MPRZ LT92	595	595	40	7869	57,8	136	80+	4000	3,50
Corona D LED1x2600 E810 T840 MPRZ LT92	1195	295	40	2570	18,6	138	80+	4000	3,50
Corona D LED1x3500 E811 T840 MPRZ LT92	1195	295	40	3497	26,3	133	80+	4000	3,50
Corona D LED1x5250 E812 T840 MPRZ LT92	1195	295	40	5246	38,9	135	80+	4000	3,50
Corona D LED2x2600 E813 T840 MPRZ LT92	1195	595	40	5140	36,0	143	80+	4000	6,50
Corona D LED2x3500 E814 T840 MPRZ LT92	1195	595	40	6994	51,4	136	80+	4000	6,50
Corona D LED2x5250 E815 T840 MPRZ LT92	1195	595	40	10492	77,0	136	80+	4000	6,50
Corona D LED2x1350 E816 T830 MPRZ LT92 W625	622	622	40	2623	20,1	130	80+	3000	3,50
Corona D LED2x1850 E817 T830 MPRZ LT92 W625	622	622	40	3698	30,8	120	80+	3000	3,50
Corona D LED2x2650 E818 T830 MPRZ LT92 W625	622	622	40	5246	38,9	135	80+	3000	3,50
Corona D LED1x2600 E819 T830 MPRZ LT92 W625	1246	310	40	2570	18,6	138	80+	3000	3,50
Corona D LED1x3500 E820 T830 MPRZ LT92 W625	1246	310	40	3497	26,3	133	80+	3000	3,50
Corona D LED1x5250 E821 T830 MPRZ LT92 W625	1246	310	40	5246	38,9	135	80+	3000	3,50
Corona D LED2x1350 E816 T840 MPRZ LT92 W625	622	622	40	2623	20,1	130	80+	4000	3,50
Corona D LED2x1850 E817 T840 MPRZ LT92 W625	622	622	40	3698	30,8	120	80+	4000	3,50
Corona D LED2x2650 E818 T840 MPRZ LT92 W625	622	622	40	5246	38,9	135	80+	4000	3,50
Corona D LED1x2600 E819 T840 MPRZ LT92 W625	1246	310	40	2570	18,6	138	80+	4000	3,50
Corona D LED1x3500 E820 T840 MPRZ LT92 W625	1246	310	40	3497	26,3	133	80+	4000	3,50
Corona D LED1x5250 E821 T840 MPRZ LT92 W625	1246	310	40	5246	38,9	135	80+	4000	3,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping possibilities (not applicable for models: E801, E802, E803)

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth)

TW Integrated light source and driver for Tunable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tunable white control 2700-6500 K via mobile device (via Bluetooth)

DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light level

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface
EM3LER Emergency version 3 hours, lens - escape route
EM3LOA Emergency version 3 hours, lens - open areas

1G Strain relief for power supply cable

WIE3 3-pole "Wieland - gesis classic" type or compatible connector
WIE5D 5-pole DALI "Wieland - gesis classic" type or compatible connector

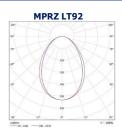
Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable

W625 Designed for the German market to fit 625x625 suspended ceiling

RAL RAL colour

MPRZ LT92 Translucent micro-prismatic diffuser with high light transmittance

DPRZ De-glaring micro-prismatic diffuser
T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+





Available accessories:



Product: Recessed MTG FRAME S620x620 RAL9003

Description: Frame for LED luminaire 595x595mm installation into plasterboard ceiling (1pcs), white steel

Product: Recessed MTG FRAME S320x1220 RAL9003

Short description: Frame for LED luminaire 1195x295mm installation into plasterboard ceiling (1pcs), white steel









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CORONA C LED

Product Group: Recessed Luminaires















A decorative recessed LED luminaire with a circular opal diffuser for an outstanding working environment Diffuser: high transmission opal, PMMA, UV stable Body: steel sheet, white finish **Description:**

Mains voltage: 220-240V, 50-60Hz General data:

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use recessed mounting kit S620x620 (to be ordered separately). Push-in terminal, 2x1.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI*	ССТ*, К	Weight, kg
Corona C LED1x3100 D067 T830 OP LT80	595	595	70	2869	28,7	100	80+	3000	3,10
Corona C LED1x4300 D068 T830 OP LT80	595	595	70	4035	39,3	103	+08	3000	3,10
Corona C LED1x5900 D069 T830 OP LT80	595	595	70	5593	56,7	99	80+	3000	3,10
Corona C LED1x3100 D067 T840 OP LT80	595	595	70	3006	28,7	105	80+	4000	3,10
Corona C LED1x4300 D068 T840 OP LT80	595	595	70	4227	39,3	107	80+	4000	3,10
Corona C LED1x5900 D069 T840 OP LT80	595	595	70	5859	56,7	103	80+	4000	3,10
Corona C LED1x3100 E907 T830 OP LT80 W625	622	622	70	2869	28,7	100	+08	3000	3,30
Corona C LED1x4300 E908 T830 OP LT80 W625	622	622	70	4035	39,3	103	+08	3000	3,30
Corona C LED1x5900 E909 T830 OP LT80 W625	622	622	70	5593	56,7	99	80+	3000	3,30
Corona C LED1x3100 E907 T840 OP LT80 W625	622	622	70	3006	28,7	105	80+	4000	3,30
Corona C LED1x4300 E908 T840 OP LT80 W625	622	622	70	4227	39,3	107	80+	4000	3,30
Corona C LED1x5900 E909 T840 OP LT80 W625	622	622	70	5859	56,7	103	80+	4000	3,30

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)

TW Integrated light source and driver for Tunable white control 2700-6500 K
BLT TW Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface
EM3LER Emergency version 3 hours, lens - escape route
EM3LOA Emergency version 3 hours, lens - open areas

1G Strain relief for power supply cable

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable

IP44 IP44 protection degree

W625 Designed for the German market to fit 625x625 suspended ceiling (subject to

minimum quantity)

RAL RAL colour

OP LT80 Opal diffuser with high light transmittance
DPRZ De-glaring micro-prismatic diffuser
T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+

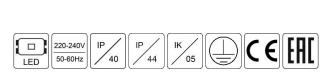






CORONA R LED

Product Group: Recessed Luminaires





A decorative recessed LED luminaire with a round opal diffuser for an exceptional working environment Diffuser: high transmission opal, PMMA, UV stable Body: steel sheet, white finish **Description:**

Mains voltage: 220-240V, 50-60Hz General data:

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

recessed mounting kit S620x620 (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	ССТ, К	Weigh t, kg
Corona R LED1x3100 D070 T830 OP LT80	595	595	70	2869	28,7	100	80+	3000	4,50
Corona R LED1x4300 D071 T830 OP LT80	595	595	70	4035	39,3	103	+08	3000	4,50
Corona R LED1x5900 D072 T830 OP LT80	595	595	70	5593	56,7	99	+08	3000	4,50
Corona R LED1x3100 D070 T840 OP LT80	595	595	70	3006	28,7	105	80+	4000	4,50
Corona R LED1x4300 D071 T840 OP LT80	595	595	70	4227	39,3	107	80+	4000	4,50
Corona R LED1x5900 D072 T840 OP LT80	595	595	70	5859	56,7	103	80+	4000	4,50
Corona R LED1x3100 E910 T830 OP LT80 W625	622	622	70	2869	28,7	100	80+	3000	4,70
Corona R LED1x4300 E911 T830 OP LT80 W625	622	622	70	4035	39,3	103	+08	3000	4,70
Corona R LED1x5900 E912 T830 OP LT80 W625	622	622	70	5593	56,7	99	80+	3000	4,70
Corona R LED1x3100 E910 T840 OP LT80 W625	622	622	70	3006	28,7	105	80+	4000	4,70
Corona R LED1x4300 E911 T840 OP LT80 W625	622	622	70	4227	39,3	107	80+	4000	4,70
Corona R LED1x5900 E912 T840 OP LT80 W625	622	622	70	5859	56,7	103	80+	4000	4,70

^{*} tolerance range for optical and electrical data: ±10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)

Integrated light source and driver for Tunable white control 2700-6500 K TW

BLT TW Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)

Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface Emergency version 3 hours, lens - escape route Emergency version 3 hours, lens - open areas EM3LER EM3LOA

Strain relief for power supply cable 1G

3-pole "Wieland - gesis classic" type or compatible connector 5-pole DALI "Wieland - gesis classic" type or compatible connector WIE3 WIE5D

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable Schuko-3.0m

IP44 IP44 protection degree

W625 Designed for the German market to fit 625x625 suspended ceiling (subject to

minimum quantity)

RAL RAL colour

Opal diffuser with high light transmittance De-glaring micro-prismatic diffuser OP LT80 DPRZ T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+







TECHNICAL DATA SHEET







CORONA Q LED

Product Group: Recessed Luminaires

















A decorative recessed LED luminaire with a square opal diffuser for an especial working environment **Description:**

Diffuser: high transmission opal, PMMA, UV stable

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

recessed mounting kit S620x620 (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	сст, К	Weigh t, kg
Corona Q LED1x3200 E394 T830 OP LT80	595	595	70	3010	30,7	98	80+	3000	5,00
Corona Q LED1x4500 E395 T830 OP LT80	595	595	70	4214	44,9	94	+08	3000	5,00
Corona Q LED1x6400 E396 T830 OP LT80	595	595	70	6023	60,9	99	+08	3000	5,00
Corona Q LED1x3200 E394 T840 OP LT80	595	595	70	3144	30,7	103	+08	4000	5,00
Corona Q LED1x4500 E395 T840 OP LT80	595	595	70	4416	44,9	98	80+	4000	5,00
Corona Q LED1x6400 E396 T840 OP LT80	595	595	70	6311	60,9	104	+08	4000	5,00

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface **EAIR**

Integrated smart sensor and driver with wireless communication and grouping

possibilities

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)

Integrated light source and driver for Tunable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface EM3LER Emergency version 3 hours, lens - escape route **EM3LOA** Emergency version 3 hours, lens - open areas

Strain relief for power supply cable

WIE3 3-pole "Wieland - gesis classic" type or compatible connector WIE5D 5-pole DALI "Wieland - gesis classic" type or compatible connector

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm2 3.0m cable IP44

W625 Designed for the German market to fit 625x625 suspended ceiling (subject to

minimum quantity)

OP LT80 Opal diffuser with high light transmittance DPRZ De-glaring micro-prismatic diffuser Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+







CORONA M LED

Product Group: Recessed Luminaires

















A recessed LED luminaire with a rectangular opal diffuser for most commercial lighting applications **Description:**

Diffuser: high transmission opal, PMMA, UV stable

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50 Operating temperature range, °C: ta 0...+35

Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

recessed mounting kit S620x620 (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	сст, К	Weigh t, kg
Corona M LED1x4000 D075 T830 OP LT80	595	595	75	3827	40,0	96	80+	3000	3,00
Corona M LED1x4000 D075 T840 OP LT80	595	595	75	3996	40,0	100	80+	4000	3,00

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities

ACT+ Integrated self-learning sensor and driver for lighting control

Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)

Integrated light source and driver for Tunable white control 2700-6500 K **BLT TW** Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)

Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

ЕМ3 Emergency version 3 hours

ЕМЗВ Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface EM3LER Emergency version 3 hours, lens - escape route EM3LOA Emergency version 3 hours, lens - open areas 1G Strain relief for power supply cable

WIE3 3-pole "Wieland - gesis classic" type or compatible connector WIE5D 5-pole DALI "Wieland - gesis classic" type or compatible connector

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable

IP44 IP44 protection degree

W625 Designed for the German market to fit 625x625 suspended ceiling (subject to

minimum quantity)

RAL RAL colour

OP LT80 Opal diffuser with high light transmittance DPRZ De-glaring micro-prismatic diffuser Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840







CORONA S LED

Product Group: Recessed Luminaires

















A recessed LED luminaire with an opal diffuser for most commercial lighting applications **Description:**

Diffuser: high transmission opal, PMMA, UV stable

Body: steel sheet, white finish General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

recessed mounting kit S620x620 (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power*	System efficacy , lm/W	CRI (Ra)	сст, К	Weigh t, kg
Corona S LED1x3800 D076 T830 OP LT80	595	595	75	3589	33,3	108	80+	3000	3,00
Corona S LED1x4400 D077 T830 OP LT80	595	595	75	4145	40,0	104	+08	3000	3,00
Corona S LED1x6000 D078 T830 OP LT80	595	595	75	5741	60,0	96	+08	3000	3,00
Corona S LED1x3800 D076 T840 OP LT80	595	595	75	3758	33,3	113	+08	4000	3,00
Corona S LED1x4400 D077 T840 OP LT80	595	595	75	4341	40,0	109	80+	4000	3,00
Corona S LED1x6000 D078 T840 OP LT80	595	595	75	5994	60,0	100	+08	4000	3,00

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)

TW Integrated light source and driver for Tunable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

Strain relief for power supply cable

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm2 3.0m cable

IP44 IP44 protection degree

W625 Designed for the German market to fit 625x625 suspended ceiling (subject to

minimum quantity)

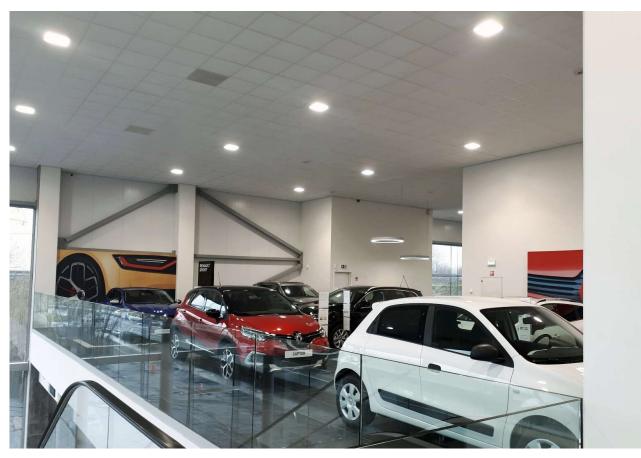
RAL colour

OP LT80 Opal diffuser with high light transmittance DPRZ De-glaring micro-prismatic diffuser Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840











LYRA R LED

Product Group: Recessed Luminaires





















Description: A decorative recessed LED luminaire in four sizes to fit wide range of applications

Diffuser: high transmission opal, PMMA, UV stable

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I

Ingress protection code: IP20 EEC: A+

Suitable for plasterboard or similar type of ceiling, requires a cut-out. Push-in terminal, 3x2x2.5mm2Installation: **Environment:** Indoor

Application: Office, education, corridor, retail, public place



High flexibility to meet specific project requirements, as luminaires can be painted to all RAL code colour on request. For more information see the option list

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	сст, К	Weigh t, kg
Lyra R LED1x1800 D083 T830 OP LT80	320	320	180	1708	18,8	91	+08	3000	4,00
Lyra R LED1x2600 D084 T830 OP LT80	320	320	180	2399	27,3	88	+08	3000	4,00
Lyra R LED1x3300 D085 T830 OP LT80	470	470	180	2697	26,1	103	+08	3000	6,80
Lyra R LED1x4500 D086 T830 OP LT80	470	470	180	3643	37,2	98	+08	3000	6,80
Lyra R LED1x5900 D087 T830 OP LT80	620	620	190	5889	56,9	104	80+	3000	10,00
Lyra R LED1x7000 D088 T830 OP LT80	620	620	190	7613	82,0	93	80+	3000	10,00
Lyra R LED1x8400 D089 T830 OP LT80	920	920	210	7915	80,0	99	80+	3000	14,00
Lyra R LED1x10200 D090 T830 OP LT80	920	920	210	9611	100,0	96	80+	3000	14,00
Lyra R LED1x1800 D083 T840 OP LT80	320	320	180	1798	18,8	95	80+	4000	4,00
Lyra R LED1x2600 D084 T840 OP LT80	320	320	180	2526	27,3	93	80+	4000	4,00
Lyra R LED1x3300 D085 T840 OP LT80	470	470	180	2839	26,1	109	80+	4000	6,80
Lyra R LED1x4500 D086 T840 OP LT80	470	470	180	3835	37,2	103	80+	4000	6,80
Lyra R LED1x5900 D087 T840 OP LT80	620	620	190	6199	56,9	109	80+	4000	10,00
Lyra R LED1x7000 D088 T840 OP LT80	620	620	190	8014	82,0	98	80+	4000	10,00
Lyra R LED1x8400 D089 T840 OP LT80	920	920	210	8332	80,0	104	80+	4000	14,00
Lyra R LED1x10200 D090 T840 OP LT80	920	920	210	10116	100,0	101	80+	4000	14,00

^{*} tolerance range for optical and electrical data: ±10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)

TW Integrated light source and driver for Tunable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)

MW Integrated microwave (MW) motion sensor with on-off control

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

1G Strain relief for power supply cable

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable

RAL RAL colour

OP LT80 Opal diffuser with high light transmittance
DPRZ De-glaring micro-prismatic diffuser
T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+











BALI C LED

Product Group: Recessed Luminaires













Description:

A frameless recessed LED luminaire with circular design for installation into plasterboard ceiling Diffuser: high transmission opal, PMMA, UV stable, mounted into frameless body

Body: steel sheet, white finish

Mains voltage: 220-240V, 0/50-60Hz General data:

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 EEC: A+

Installation: Suitable for plasterboard or similar type of ceiling, requires a cut-out. Push-in terminal, 3x2x2.5mm2

Indoor **Environment**:

Office, education, corridor, retail, public place Application:

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power*	System efficacy , lm/W	CRI (Ra)	сст, К	Weigh t, kg
BALI C LED1x1800 D103 T840 OP LT80	300	300	125	1798	18,8	95	80+	4000	2,50
BALI C LED1x2600 D104 T840 OP LT80	300	300	125	2526	27,3	93	80+	4000	2,50
BALI C LED1x3300 D105 T840 OP LT80	450	450	125	2839	26,1	109	+08	4000	4,80
BALI C LED1x4500 D106 T840 OP LT80	450	450	125	3835	37,2	103	80+	4000	4,80
BALI C LED1x5900 D107 T840 OP LT80	600	600	135	6199	56,9	109	+08	4000	7,50
BALI C LED1x7000 D108 T840 OP LT80	600	600	135	8014	82,0	98	+08	4000	7,50
BALI C LED1x8400 D109 T840 OP LT80	900	900	150	8332	80,0	104	+08	4000	10,50
BALI C LED1x10200 D110 T840 OP LT80	900	900	150	10116	100,0	101	80+	4000	10,50

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming

DALI Driver with DALI interface

BLT Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)

Integrated light source and driver for Tunable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)

Integrated microwave (MW) motion sensor with on-off control

ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

Strain relief for power supply cable 1G

3-pole "Wieland - gesis classic" type or compatible connector 5-pole DALI "Wieland - gesis classic" type or compatible connector WIE3 WIE5D

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable Schuko-3.0m

OP LT80 Opal diffuser with high light transmittance DPRZ De-glaring micro-prismatic diffuser T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T840











BALI R LED

Product Group: Recessed Luminaires













Description:

A frameless recessed LED luminaire with linear design for installation into plasterboard ceiling Diffuser: translucent micro-prismatic, PMMA, UV stable, mounted into frameless body Body: steel sheet, white finish

General data:

Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,90 Light source: LED

Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 EEC: A++

Installation:

Suitable for plasterboard or similar type of ceiling, requires a cut-out. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	сст, к	Weigh t, kg
Bali R LED1x1100 D720 T830 MPRZ LT92	220	220	85	1038	10,7	97	80+	3000	1,80
Bali R LED1x1550 D721 T830 MPRZ LT92	220	220	85	1450	14,7	99	80+	3000	1,80
Bali R LED1x1150 D722 T830 MPRZ LT92	595	85	65	1073	10,2	105	+08	3000	1,80
Bali R LED1x1550 D723 T830 MPRZ LT92	595	85	65	1460	13,9	105	+08	3000	1,80
Bali R LED1x1700 D724 T830 MPRZ LT92	875	85	65	1609	14,5	111	80+	3000	2,10
Bali R LED1x2300 D725 T830 MPRZ LT92	875	85	65	2189	20,8	105	80+	3000	2,10
Bali R LED1x2250 D726 T830 MPRZ LT92	1155	85	65	2145	19,3	111	80+	3000	2,40
Bali R LED1x3100 D727 T830 MPRZ LT92	1155	85	65	2919	26,3	111	80+	3000	2,40
Bali R LED1x2850 D728 T830 MPRZ LT92	1435	85	65	2681	24,1	111	80+	3000	2,80
Bali R LED1x3850 D990 T830 MPRZ LT92	1435	85	65	3649	32,8	111	80+	3000	2,80
Bali R LED1x1100 D720 T840 MPRZ LT92	220	220	85	1094	10,7	102	80+	4000	1,80
Bali R LED1x1550 D721 T840 MPRZ LT92	220	220	85	1529	14,7	104	+08	4000	1,80
Bali R LED1x1150 D722 T840 MPRZ LT92	595	85	65	1121	10,2	109	80+	4000	1,80
Bali R LED1x1550 D723 T840 MPRZ LT92	595	85	65	1525	13,9	110	80+	4000	1,80
Bali R LED1x1700 D724 T840 MPRZ LT92	875	85	65	1681	14,5	116	80+	4000	2,10
Bali R LED1x2300 D725 T840 MPRZ LT92	875	85	65	2287	20,8	110	80+	4000	2,10
Bali R LED1x2250 D726 T840 MPRZ LT92	1155	85	65	2241	19,3	116	+08	4000	2,40
Bali R LED1x3100 D727 T840 MPRZ LT92	1155	85	65	3050	26,3	116	80+	4000	2,40
Bali R LED1x2850 D728 T840 MPRZ LT92	1435	85	65	2801	24,1	116	80+	4000	2,80
Bali R LED1x3850 D990 T840 MPRZ LT92	1435	85	65	3812	32,8	116	80+	4000	2,80

^{*} tolerance range for optical and electrical data: ±10 %. Values apply to an ambient temperature of 25°C

Available options: SDIM DALI Driver with switch-control dimming Driver with DALI interface 1G OP LT80 Strain relief for power supply cable
Opal diffuser with high light transmittance De-glaring micro-prismatic diffuser Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ DPRZ T830 T840

MPRZ LT92









LINE U LED

Product Group: Recessed Luminaires

















Images for the product family and options:



Description: A linear recessed LED luminaire with double parabolic reflector and in–line connection possibility in T-Bar ceiling

Louvre: double parabolic, UGR<19 glare protection

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK05

Installation: Fits 24mm exposed T-Bar ceiling 600x600mm. Cable, 0.3m, 2x0.75mm2

Environment: Indoor

Application: Office, education, corridor, retail, public place

EEC: A++

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power*	System efficacy , lm/W	CRI (Ra)	ССТ, К	Weigh t, kg
Line U LED1x1800 D813 T830	595	95	40	1721	14.0	123	80+	3000	1.30
Line U LED1x3700 D814 T830	1195	95	40	3549	28.9	123	80+	3000	2.50
Line U LED1x1800 D813 T840	595	95	40	1774	14.0	127	80+	4000	1.30
Line U LED1x3700 D814 T840	1195	95	40	3658	28.9	127	+08	4000	2.50
Line U LED1x1800 E888 T830 W625	622	95	40	1721	14,0	123	80+	3000	1,30
Line U LED1x3700 E889 T830 W625	1246	95	40	3549	28,9	123	80+	3000	2,50
Line U LED1x1800 E888 T840 W625	622	95	40	1774	14,0	127	80+	4000	1,30
Line U LED1x3700 E889 T840 W625	1246	95	40	3658	28,9	127	80+	4000	2,50

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

WID Wide beam reflector

W625- Designed for the German market to fit 625x625 suspended ceiling

T830 Colour temperature 3000K, CRI 80+

T840 Colour temperature 4000K, CRI 80+







LINE R LED

Product Group: Recessed Luminaires















Images for the product family and options:

Description: A linear recessed LED luminaire with translucent micro-prismatic diffuser and in-line connection possibility in T-Bar ceiling

Diffuser: translucent micro-prismatic PMMA, UV stable

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35 Protection class IEC: II

Ingress protection code: IP40 Mechanical impact resistance: IK05

EEC: A++ Installation:

Fits 24mm exposed T-Bar ceiling 600x600mm. Cable, 0.3m, 2x 1.5mm2

Environment:

Application: Office, education, corridor, retail, public place

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power*	System efficacy , lm/W	CRI (Ra)	ССТ, К	Weigh t, kg
Line R LED1x1600 D980 T830 MPRZ LT92 LO1	595	95	62	1518	13,9	109	80+	3000	1,80
Line R LED1x2200 D981 T830 MPRZ LT92 LO2	595	95	62	2059	19,4	106	80+	3000	1,80
Line R LED1x3200 D982 T830 MPRZ LT92 LO1	1195	95	62	3036	25,7	118	80+	3000	2,40
Line R LED1x4350 D983 T830 MPRZ LT92 LO2	1195	95	62	4117	38,0	108	+08	3000	2,40
Line R LED1x1600 D980 T840 MPRZ LT92 LO1	595	95	62	1586	13,9	114	80+	4000	1,80
Line R LED1x2200 D981 T840 MPRZ LT92 LO2	595	95	62	2151	19,4	111	+08	4000	1,80
Line R LED1x3200 D982 T840 MPRZ LT92 LO1	1195	95	62	3172	25,7	124	+08	4000	2,40
Line R LED1x4350 D983 T840 MPRZ LT92 LO2	1195	95	62	4302	38,0	113	+08	4000	2,40
Line R LED1x1600 E882 T830 MPRZ LT92 LO1 W625	622	95	62	1518	13,9	109	+08	3000	1,80
Line R LED1x2200 E883 T830 MPRZ LT92 LO2 W625	622	95	62	2059	19,4	106	+08	3000	1,80
Line R LED1x3200 E884 T830 MPRZ LT92 LO1 W625	1246	95	62	3036	25,7	118	+08	3000	2,40
Line R LED1x4350 E885 T830 MPRZ LT92 LO2 W625	1246	95	62	4117	38,0	108	+08	3000	2,40
Line R LED1x1600 E882 T840 MPRZ LT92 LO1 W625	622	95	62	1586	13,9	114	+08	4000	1,80
Line R LED1x2200 E883 T840 MPRZ LT92 LO2 W625	622	95	62	2151	19,4	111	+08	4000	1,80
Line R LED1x3200 E884 T840 MPRZ LT92 LO1 W625	1246	95	62	3172	25,7	124	+08	4000	2,40
Line R LED1x4350 E885 T840 MPRZ LT92 LO2 W625	1246	95	62	4302	38,0	113	+08	4000	2,40

^{*} tolerance range for optical and electrical data: ±10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

TW Integrated light source and driver for Tunable white control 2700-6

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable
Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable
MPRZ LT92 Opal - micro pismatic diffuser with high light transmittance

DPRZ De-glaring micro-prismatic diffuser

W625- Designed for the German market to fit 625x625 suspended ceiling

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+









LINE S LED

Product Group: Recessed Luminaires



















Description: A curved recessed LED luminaire with translucent micro-prismatic diffuser and in–line connection possibility in T-Bar ceiling

Diffuser: translucent micro-prismatic PMMA, UV stable

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80850

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK05

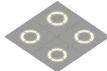
EEC: A++

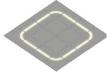
Installation: Fits 24mm exposed T-Bar ceiling 600x600mm. Cable, 0.3m, 2x 1.5mm2

Environment: Indoor

Application: Office, education, corridor, retail, public place

Combination of Line R LED and Line S LED luminaires enables to create different patterns and animate working environment:













Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power*	System efficacy , lm/W	CRI (Ra)	сст, К	Weigh t, kg
Line S LED1x1200 D988 T830 MPRZ LT92 LO1	336	336	62	1139	10,5	109	80+	3000	2,20
Line S LED1x1650 D989 T830 MPRZ LT92 LO2	336	336	62	1544	14,6	106	+08	3000	2,20
Line S LED1x1200 D988 T840 MPRZ LT92 LO1	336	336	62	1190	10,5	114	+08	4000	2,20
Line S LED1x1650 D989 T840 MPRZ LT92 LO2	336	336	62	1613	14,6	110	80+	4000	2,20
Line S LED1x1200 E886 T830 MPRZ LT92 LO1 W625	350	350	62	1139	10,5	109	+08	3000	2,20
Line S LED1x1650 E887 T830 MPRZ LT92 LO2 W625	350	350	62	1544	14,6	106	+08	3000	2,20
Line S LED1x1200 E886 T840 MPRZ LT92 LO1 W625	350	350	62	1190	10,5	114	80+	4000	2,20
Line S LED1x1650 E887 T840 MPRZ LT92 LO2 W625	350	350	62	1613	14,6	110	+08	4000	2,20

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

TW Integrated light source and driver for Tunable white control 2700-6

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours EM3D Emergency version 3 hours with DALI interface

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable
Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable
MPRZ LT92 Opal - micro pismatic diffuser with high light transmittance

DPRZ De-glaring micro-prismatic diffuser

W625- Designed for the German market to fit 625x625 suspended ceiling

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+









BARBER R LED

Product Group: Recessed Luminaires





General data:















Description: A recessed LED luminaire with asymmetric light distribution for uniform illumination of walls, shelves and panels

Reflector: matt aluminum, asymmetric Diffuser: opal, PMMA, UV stable Body: steel sheet, white finish Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95
Light source: LED
Light source included: Yes

Light source: LED
Light source included: Yes
Light distribution type: Direct
LED lifetime, h: 100000/L80B50
Operating temperature range, °C: ta 0...+35
Protection class IEC: I

Ingress protection code: IP40
Mechanical impact resistance: IK02

EEC: A+

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, retail, showroom, public place

Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	ССТ, К	Weigh t, kg
595	185	60	1445	15,4	94	80+	3000	1,90
595	185	60	2131	20,8	102	80+	3000	1,90
1195	185	60	3051	30,8	99	80+	3000	3,60
1195	185	60	4499	41,6	108	80+	3000	3,60
595	185	60	1510	15,4	98	80+	4000	1,90
595	185	60	2226	20,8	107	+08	4000	1,90
1195	185	60	3187	30,8	104	80+	4000	3,60
1195	185	60	4700	41,6	113	80+	4000	3,60
	595 595 1195 1195 595 595 1195 1195	mm mm 595 185 595 185 1195 185 1195 185 595 185 595 185 1195 185 1195 185 1195 185 1195 185	mm mm , mm 595 185 60 595 185 60 1195 185 60 1195 185 60 595 185 60 595 185 60 1195 185 60 1195 185 60	mm mm , mm output*, lm 595 185 60 1445 595 185 60 2131 1195 185 60 3051 1195 185 60 4499 595 185 60 1510 595 185 60 2226 1195 185 60 3187 1195 185 60 4700	Length, mm Width, mm Height output*, lm Luminaire output*, lm power*, W 595 185 60 1445 15,4 595 185 60 2131 20,8 1195 185 60 3051 30,8 1195 185 60 4499 41,6 595 185 60 1510 15,4 595 185 60 2226 20,8 1195 185 60 3187 30,8 1195 185 60 4700 41,6	Length, mm Width, mm Height output*, lm Luminaire output*, lm power*, W efficacy , lm/W 595 185 60 1445 15,4 94 595 185 60 2131 20,8 102 1195 185 60 3051 30,8 99 1195 185 60 4499 41,6 108 595 185 60 1510 15,4 98 595 185 60 2226 20,8 107 1195 185 60 3187 30,8 104 1195 185 60 4700 41,6 113	Length, mm Width, mm Height output*, lm power* v, w efficacy (lm/w) (Ra) 595 185 60 1445 15,4 94 80+ 595 185 60 2131 20,8 102 80+ 1195 185 60 3051 30,8 99 80+ 1195 185 60 4499 41,6 108 80+ 595 185 60 1510 15,4 98 80+ 595 185 60 2226 20,8 107 80+ 1195 185 60 3187 30,8 104 80+ 1195 185 60 4700 41,6 113 80+	Length, mm Width, mm Height output*, lm Luminaire output*, lm power*, W efficacy , lm/W (Ra) CCI, K 595 185 60 1445 15,4 94 80+ 3000 595 185 60 2131 20,8 102 80+ 3000 1195 185 60 3051 30,8 99 80+ 3000 595 185 60 4499 41,6 108 80+ 3000 595 185 60 1510 15,4 98 80+ 4000 595 185 60 2226 20,8 107 80+ 4000 1195 185 60 3187 30,8 104 80+ 4000 1195 185 60 4700 41,6 113 80+ 4000

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

1G Strain relief for power supply cable

WIE3-0.5m 3-pole "Wieland- gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland- gesis classic" type or compatible connector with 0.5m cable
Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable
Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable
Support brackets for installation into a plasterboard ceiling

OP LT80 Opal diffuser with high light transmittance
T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+

Available accessories:

Product: Recessed MTG brackets Barber R LED (185mm width)
Description: Support brackets for installation into a plasterboard ceiling. Barber R LED (185mm width), 2pcs

Description: Support brackets for installation into a plasterboard ceiling. Barber R LED (185mm width), 2pcs

Date of issue: 2019-01-21 * NORTHCLIFFE LIGHTING, UAB * Raudondvario pl. 101, LT-47184 Kaunas, Lithuania * info@northcliffe.org * www.northcliffe.org





LEVANTO UGR LED

Product Group: Recessed Luminaires











Images for the product family and options:



Description: A slim recessed LED panel with a micro-prismatic diffuser for glare-free light distribution

Diffuser: de-glaring micro-prismatic, UGR<19, edge lit

Body: aluminum profile, white finish General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 40000/L70B50

Operating temperature range, °C: ta 0...+35 Protection class IEC: II

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK02

EEC: A+

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets (SB) or recessed mounting kit (to be ordered separately). Screw terminal, 2x1.5mm2

Environment: Indoor

Office, education, corridor, retail, public place Application:



Surface mounting box for Levanto PLN/UGR LED available on request. For more information check the accessories list

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	сст, К	Weigh t, kg
Levanto UGR LED1x3700 D527 T830 MPRZ	596	596	11	3560	36,0	99	80+	3000	2,80
Levanto UGR LED1x3700 D551 T830 MPRZ	1195	295	11	3480	36,0	97	+08	3000	3,40
Levanto UGR LED1x3700 D527 T840 MPRZ	596	596	11	3750	36,0	104	+08	4000	2,80
Levanto UGR LED1x3700 D551 T840 MPRZ	1195	295	11	3680	36,0	102	+08	4000	3,40
Levanto UGR LED1x3700 D527 T830 MPRZ DALI	596	596	11	3560	36,0	99	+08	3000	2,80
Levanto UGR LED1x3700 D551 T830 MPRZ DALI	1195	295	11	3480	36,0	97	+08	3000	3,40
Levanto UGR LED1x3700 D527 T840 MPRZ DALI	596	596	11	3750	36,0	104	80+	4000	2,80
Levanto UGR LED1x3700 D551 T840 MPRZ DALI	1195	295	11	3680	36,0	102	80+	4000	3,40

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

NORTHCLIFFE MAKING LIFE BRIGHTER

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable

IP44 protection degree

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Surface MTG KIT S600x600 Levanto PLN/UGR LED

Description: Surface mounting LED panel kit (4pcs), white aluminium frame

Product: Surface MTG KIT S300x1200 Levanto PLN/UGR LED

Description: Surface mounting LED panel kit (4pcs), white aluminium frame



Product: Recessed MTG KIT Levanto PLN/UGR LED

Description: Spring clips for LED panel (4pcs), chrome plated steel



Product: Suspension MTG KIT Levanto PLN/UGR LED

Description: Suspension kit for LED panel (4 steel wires + 4 hook kits)



Product: Suspension MTG plates Levanto PLN/UGR LED

Description: Suspension plates for LED panel (4 plates with screws)



Product: Recessed MTG FRAME S620x620 RAL9003G2

Description: Frame for LED luminaire 595x595mm installation into plasterboard ceiling (1pcs), white steel



Product: Recessed MTG FRAME S320x1220 RALH9003G2

Description: Frame for LED luminaire 1195x295mm installation into plasterboard ceiling (1pcs), white steel

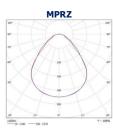


Product: Surface MTG BOX S605x605 Levanto PLN/UGR LED RAL9003

Description: Surface mounting box for LED panel 595x595mm (1pcs), white steel



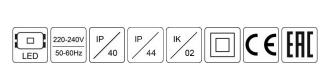






LEVANTO PLN LED

Product Group: Recessed Luminaires







Description: A slim recessed LED panel with an opal diffuser and very homogenous light distribution

Diffuser: opal, edge-lit

Body: aluminum profile, white finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95
Light source: LED
Light source included: Yes
Light distribution type: Direct
LED lifetime, h: 40000/L70B50

Operating temperature range, °C: ta 0...+35 Protection class IEC: II Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: ÎK02 EEC: A+

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use support brackets (SB) or recessed mounting kit (to be ordered separately). Screw terminal, 2x1.5mm2

Environment: Indoor

Application: Office, education, corridor, retail, public place



Surface mounting box for Levanto PLN/UGR LED available on request. For more information check the accessories list

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	ССТ, К	Weigh t, kg
Levanto PLN LED1x3600 D550 T830 OP	596	596	11	3480	36,0	97	80+	3000	3,20
Levanto PLN LED1x3600 D539 T830 OP	1195	295	11	3480	36,0	97	80+	3000	3,40
Levanto PLN LED1x3600 D550 T840 OP	596	596	11	3680	36,0	102	+08	4000	3,20
Levanto PLN LED1x3600 D539 T840 OP	1195	295	11	3680	36,0	102	+08	4000	3,40
Levanto PLN LED1x3600 D550 T830 OP DALI	596	596	11	3480	36,0	97	80+	3000	3,20
Levanto PLN LED1x3600 D539 T830 OP DALI	1195	295	11	3480	36,0	97	80+	3000	3,40
Levanto PLN LED1x3600 D550 T840 OP DALI	596	596	11	3680	36,0	102	80+	4000	3,20
Levanto PLN LED1x3600 D539 T840 OP DALI	1195	295	11	3680	36,0	102	80+	4000	3,40

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

NORTHCLIFFE MAKING LIFE BRIGHTER

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version 3 nours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable

IP44 protection degree

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Surface MTG KIT S600x600 Levanto PLN/UGR LED

Description: Surface mounting LED panel kit (4pcs), white aluminium frame

Product: Surface MTG KIT S300x1200 Levanto PLN/UGR LED

Description: Surface mounting LED panel kit (4pcs), white aluminium frame



Product: Recessed MTG KIT Levanto PLN/UGR LED

Description: Spring clips for LED panel (4pcs), chrome plated steel



Product: Suspension MTG KIT Levanto PLN/UGR LED

Description: Suspension kit for LED panel (4 steel wires + 4 hook kits)



Product: Suspension MTG plates Levanto PLN/UGR LED

Description: Suspension plates for LED panel (4 plates with screws)



Product: Recessed MTG FRAME S620x620 RAL9003G2

Description: Frame for LED luminaire 595x595mm installation into plasterboard ceiling (1pcs), white steel



Product: Recessed MTG FRAME S320x1220 RALH9003G2

Description: Frame for LED luminaire 1195x295mm installation into plasterboard ceiling (1pcs), white steel

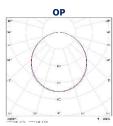


Product: Surface MTG BOX S605x605 Levanto PLN/UGR LED RAL9003

Description: Surface mounting box for LED panel 595x595mm (1pcs), white steel









JETTA R LED

Product Group: Recessed Luminaires

















General data:

A recessed LED luminaire with an indirect light distribution to create glare-free lighting effect

Louver: perforated aluminum, white, soft light distribution Diffuser: opal PC film, UV stable

Body: steel sheet, white finish Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Indirect LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Office, education, corridor, retail, public place **Application:**

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	ССТ, К	Weigh t, kg
Jetta R LED1x3000 D947 T840	595	595	125	2982	35,0	85	80+	4000	4,00
Jetta R LED1x3400 D945 T840	595	595	125	3354	40,5	83	+08	4000	4,00
Jetta R LED1x4050 D946 T840	595	595	125	4044	51,8	78	80+	4000	4,00

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25 $^{\circ}$ C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface EM3 Emergency version 3 hours

Emergency version 3 hours (best available technology) ЕМ3В

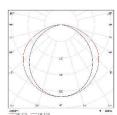
Emergency version equipped with an autonomous testing system, 3 hours ЕМЗА

Emergency version 3 hours with DALI interface EM3D

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable Colour temperature 3000K, CRI 80+ Schuko-1.5m Schuko-3.0m

T830 Colour temperature 4000K, CRI 80+ T840









POLARIS PAR LED

Product Group: Recessed Luminaires

















Images for the product family and options:



Description: A recessed LED luminaire with matt double parabolic reflector for a better glare control

Louver: matt aluminum, double parabolic, matt aluminum, UGR<19, with four spring locks for maximum stability

Diffuser: high transmission opal, PMMA, UV stable

Body: steel sheet, white

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Indirect LED lifetime, h: 50000/L80B50 Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A+

Installation: Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

support brackets (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, corridor, retail, public place

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power*	System efficacy , lm/W	CRI (Ra)	ССТ, К	Weigh t, kg
Polaris PAR LED2x1800 E397 T830 MAT	595	595	85	3430	39,1	88	80+	3000	3,90
Polaris PAR LED2x2600 E398 T830 MAT	595	595	85	4799	57,3	84	80+	3000	3,90
Polaris PAR LED2x1900 D487 T830 MAT	1195	143	85	3620	41,3	88	80+	3000	2,70
Polaris PAR LED2x2700 D488 T830 MAT	1195	143	85	5065	60,7	83	80+	3000	2,70
Polaris PAR LED2x1800 E397 T840 MAT	595	595	85	3581	39,1	92	80+	4000	3,90
Polaris PAR LED2x2600 E398 T840 MAT	595	595	85	5027	57,3	88	80+	4000	3,90
Polaris PAR LED2x1900 D487 T840 MAT	1195	143	85	3780	41,3	91	80+	4000	2,70
Polaris PAR LED2x2700 D488 T840 MAT	1195	143	85	5306	60,7	87	80+	4000	2,70
Polaris PAR LED2x1900 D489 T840 MAT	1195	295	85	3780	41,3	91	80+	4000	3,90
Polaris PAR LED2x2700 D490 T840 MAT	1195	295	85	5306	60,7	87	80+	4000	3,90

 $^{^*}$ tolerance range for optical and electrical data: ± 10 %. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

Integrated smart sensor and driver with wireless communication and grouping possibilities **EAIR**

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

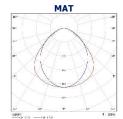
WIE3 3-pole "Wieland - gesis classic" type or compatible connector WIE5D 5-pole DALI "Wieland - gesis classic" type or compatible connector

Schuko-1.5m 3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm2 3.0m cable

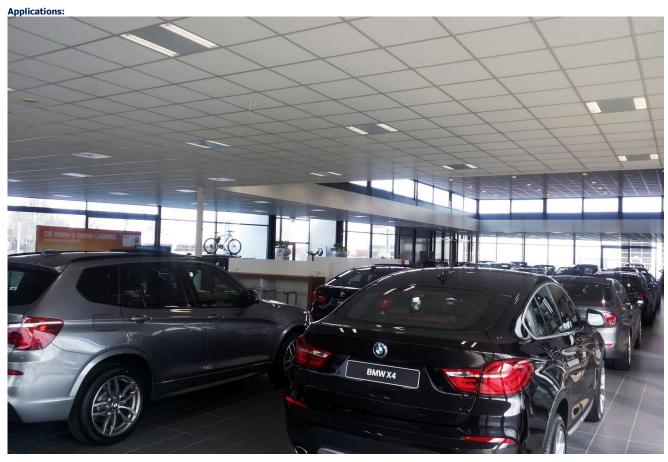
MAT Matted reflector SB

Supports brackets (4 pcs) Colour temperature 3000K, CRI 80+ T830

Colour temperature 4000K, CRI 80+











POLARIS R LED

Product Group: Recessed Luminaires

















A recessed LED luminaire with glossy double parabolic reflector for a glare free light distribution Louvre: glossy aluminum, double parabolic, UGR<19, with four spring locks for maximum stability Diffuser: opal PP film

Body: steel sheet, white finish

General data:

Description:

Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,95

Light source: LED Light source included: Yes Light distribution type: Indirect LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK02

Installation:

Fits 15-24mm exposed T-Bar ceiling 600x600mm. When the luminaire is fitted into a plasterboard ceiling, it is recommended to use

support brackets (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, corridor, retail, public place

Product	Length, mm	Width, mm	Height , mm	Luminaire output*, lm	System power* , W	System efficacy , lm/W	CRI (Ra)	CCT, K	Weigh t, kg
Polaris R LED2x1000 D268 T830	595	295	57	1881	20,7	91	80+	3000	1,20
Polaris R LED4x1000 D269 T830	595	595	57	3762	39,1	96	80+	3000	2,00
Polaris R LED1x2100 D270 T830	1195	143	57	1985	21,9	91	80+	3000	2,00
Polaris R LED2x2100 D271 T830	1195	295	57	3970	41,3	96	80+	3000	2,20
Polaris R LED4x2100 D272 T830	1195	595	57	7940	82,7	96	80+	3000	4,50
Polaris R LED2x1000 D268 T840	595	295	57	1964	20,7	95	80+	4000	1,20
Polaris R LED4x1000 D269 T840	595	595	57	3928	39,1	100	80+	4000	2,00
Polaris R LED1x2100 D270 T840	1195	143	57	2073	21,9	95	80+	4000	2,00
Polaris R LED2x2100 D271 T840	1195	295	57	4145	41,3	100	80+	4000	2,20
Polaris R LED4x2100 D272 T840	1195	595	57	8291	82,7	100	80+	4000	4,50

^{*} tolerance range for optical and electrical data: ±10 %. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming SDIM DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

ЕМЗВ

Emergency version 3 hours (best available technology)
Emergency version adjusted with an autonomous testing system, 3 hours
Emergency version 3 hours with DALI interface ЕМЗА

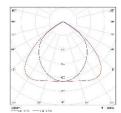
EM3D

5TB

5-pole terminal block in middle of luminaire for easy through wiring
3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable WIE3-0.5m WIE5D-0.5m

3-pole "Schuko" type plug with 3x1.0mm² 1.5m cable 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable Schuko-1.5m Schuko-3.0m

Matted reflector MAT WHT White perforated inserts Supports brackets (4 pcs) SB Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840





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ETESIAN S LED

Product Group: Surface and Suspended Luminaires















Images for the product family and options:









Description: A surface LED luminaire with double parabolic reflector for a glare-free lighting effect

Louvre: double parabolic, UGR<19 glare protection

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05

EEC: A++

Installation: Surface luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 5x2x2.5mm2

Environment: Indoo

Application: Office, education, corridor, retail, public place



Luminaires fitted with ACT+ solution are ideal for refurbishment projects, as well as for new offices, corridors, open plan areas and storage areas. Simple installation: luminaire fitted with ACT+ is as easy to install as a simply switched luminaire. No control wiring, programming or configuration is needed. Self-learning: ACT+ uses 60-100 hours to learn about its environment - external daylight conditions and other luminaires around it. Smart energy savings: compared to a simple switched luminaire, ACT+ brings added features - presence detection, daylight harvesting, seamless and comfortable dimming.



HBEAIR sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions



Series of EM3LOA and EM3LER emergency kits is the newest line of options that combines highly efficient LED light sources and the latest optics, designed to illuminate open areas or escape routes. A high specification LED emergency version provides high performance emergency lighting in commercial buildings where aesthetics is of prime importance, such as offices, retail or hospitality and leisure facilities. Whereas typical escape route emergency luminaires need to be spaced at every 3 to 7 metres to achieve the required illumination level, EM3LOA and EM3LER optimised optics can provide spacing up to 17 metres along the escape routes and up to 9 metres in the open areas, depending on ceiling height, that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and subsequent maintenance







Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Etesian S LED1x1800 D790 T830	595	175	40	1721	14,0	123	80+	3000	2,00
Etesian S LED1x2600 D791 T830	1215	175	40	2465	19,6	126	80+	3000	4,00
Etesian S LED1x3700 D792 T830	1215	175	40	3549	28,9	123	80+	3000	4,00
Etesian S LED1x4900 D793 T830	1555	175	40	4732	38,6	123	80+	3000	4,70
Etesian S LED1x5450 D794 T830	1555	175	40	5239	42,7	123	80+	3000	4,70
Etesian S LED2x1300 D795 T830	595	295	40	2465	19,6	126	80+	3000	3,50
Etesian S LED2x1850 D796 T830	595	295	40	3549	28,9	123	80+	3000	3,50
Etesian S LED2x3700 D797 T830	1215	295	40	7098	57,8	123	80+	3000	5,70
Etesian S LED2x4900 D798 T830	1555	295	40	9463	77,1	123	80+	3000	6,90
Etesian S LED2x5450 D799 T830	1555	295	40	10478	85,4	123	80+	3000	6,90
Etesian S LED2x1850 D800 T830	595	595	40	3549	28,9	123	80+	3000	5,20
Etesian S LED3x1650 D801 T830	595	595	40	4732	38,6	123	80+	3000	5,30
Etesian S LED3x1850 D802 T830	595	595	40	5239	42,7	123	80+	3000	5,30
Etesian S LED1x1800 D790 T840	595	175	40	1774	14,0	127	80+	4000	2,00
Etesian S LED1x2600 D791 T840	1215	175	40	2541	19,6	130	80+	4000	4,00
Etesian S LED1x3700 D792 T840 1G	1215	175	40	3658	28,9	127	80+	4000	4,00
Etesian S LED1x4900 D793 T840	1555	175	40	4878	38,6	127	80+	4000	4,70
Etesian S LED1x5450 D794 T840 1G	1555	175	40	5401	42,7	127	80+	4000	4,70
Etesian S LED2x1300 D795 T840	595	295	40	2541	19,6	130	80+	4000	3,50
Etesian S LED2x1850 D796 T840 1G	595	295	40	3658	28,9	127	80+	4000	3,50
Etesian S LED2x3700 D797 T840	1215	295	40	7317	57,8	127	80+	4000	5,70
Etesian S LED2x4900 D798 T840	1555	295	40	9755	77,1	127	80+	4000	6,90
Etesian S LED2x5450 D799 T840	1555	295	40	10802	85,4	127	80+	4000	6,90
Etesian S LED2x1850 D800 T840	595	595	40	3658	28,9	127	80+	4000	5,20
Etesian S LED3x1650 D801 T840	595	595	40	4878	38,6	127	80+	4000	5,30
Etesian S LED3x1850 D802 T840	595	595	40	5401	42,7	127	80+	4000	5,30

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping possibilities for lighting control (applicable for models: D796,

D800)

ACT+ Integrated self-learning sensor and driver for lighting control (applicable for models: D793, D795, D796, D800, D801)

BLT Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth) (not applicable for models: D797, D798, D799)
DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light level (not applicable for models: D794, D797, D798, D799,

DLIGHT D802)

OR Driver with Corridor function (never off) (not applicable for models: D797, D798, D799)

COR1min Driver with Corridor function 1min (switch off after 1 min) (not applicable for models: D797, D798, D799)

COR30min Driver with Corridor function 30min (switch off after 30 min) (not applicable for models: D797, D798, D799)

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface
EM3LER Emergency version 3 hours, lens - escape route
EM3LOA Emergency version 3 hours, lens - open areas

1G Strain relief for power supply cable

WID Wide beam reflector

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+







ETESIAN U LED

Product Group: Surface and Suspended Luminaires

















Images for the product family and options:



Description: A suspended LED luminaire with double parabolic reflector for a glare-free lighting effect

Louvre: double parabolic, UGR<19 glare protection

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes

Light distribution type: Direct (Direct/Indirect LG3 versions)

LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP40
Mechanical impact resistance: IK05

EEC: A++

Installation: Surface luminaire designed to be suspended. Wire suspension set and plastic cap with cable are available on request. Luminaire with an option LL and accessory I-JOIN MTG KIT Calima U LED/Etesian U LED RAL9003 is designed for in-line connection. Push-in terminal,

an option LL and accessory 1-JOIN MTG K11 Calima O LED/Etesian O LED RAL9003 is designed 3x2x2.5mm2

Environment: Indoor

Application: Office, education, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions



Series of EM3LOA and EM3LER emergency kits is the newest line of options that combines highly efficient LED light sources and the latest optics, designed to illuminate open areas or escape routes. A high specification LED emergency version provides high performance emergency lighting in commercial buildings where aesthetics is of prime importance, such as offices, retail or hospitality and leisure facilities. Whereas typical escape route emergency luminaires need to be spaced at every 3 to 7 metres to achieve the required illumination level, EM3LOA and EM3LER optimised optics can provide spacing up to 17 metres along the escape routes and up to 9 metres in the open areas, depending on ceiling height, that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and subsequent maintenance



Pull switch version (to switch on/off) available on request. For more information see the option list



LG3 – Luminaire fits to LG3 requirements with 30-40% light distribution to the ceiling and 70-60% to the floor. For more information see the option list





Fitting for in-line connection can be ordered on request. Please add I-JOIN MTG KIT Calima U LED/Etesian U LED RAL9003 accessory and select L or LL options depending on luminaire's location in the line (first/ end/ intermediate). For more information see the option and accessories list

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI *	ССТ*, К	Weight, kg
Etesian U LED1x2550 D803 T830	1215	175	40	2465	19,6	126	80+	3000	3,70
Etesian U LED1x3700 D804 T830	1215	175	40	3549	28,9	123	80+	3000	3,70
Etesian U LED1x3850 D805 T830	1555	175	40	3698	28,7	129	80+	3000	5,80
Etesian U LED1x4900 D806 T830	1555	175	40	4732	38,6	123	80+	3000	5,80
Etesian U LED1x5450 D807 T830	1555	175	40	5239	42,7	123	80+	3000	5,80
Etesian U LED1x2550 D803 T840	1215	175	40	2541	19,6	130	80+	4000	3,70
Etesian U LED1x3700 D804 T840	1215	175	40	3658	28,9	127	+08	4000	3,70
Etesian U LED1x3850 D805 T840	1555	175	40	3811	28,7	133	80+	4000	5,80
Etesian U LED1x4900 D806 T840	1555	175	40	4878	38,6	127	80+	4000	5,80
Etesian U LED1x5450 D807 T840	1555	175	40	5401	42,7	127	+08	4000	5,80
Etesian U LED1x2550/1550 D808 T830 LG3	1215	175	40	3947	31,1	127	+08	3000	4,10
Etesian U LED1x3700/1550 D809 T830 LG3	1215	175	40	5010	40,4	124	80+	3000	4,10
Etesian U LED1x3850/2500 D810 T830 LG3	1555	175	40	6052	47,3	128	+08	3000	5,50
Etesian U LED1x4900/2500 D811 T830 LG3	1555	175	40	7062	57,2	124	80+	3000	5,50
Etesian U LED1x5450/2500 D812 T830 LG3	1555	175	40	7593	61,3	124	+08	3000	5,50
Etesian U LED1x2550/1550 D808 T840 LG3	1215	175	40	4084	31,1	131	80+	4000	4,10
Etesian U LED1x3700/1550 D809 T840 LG3	1215	175	40	5201	40,4	129	80+	4000	4,10
Etesian U LED1x3850/2500 D810 T840 LG3	1555	175	40	6263	47,3	132	80+	4000	5,50
Etesian U LED1x4900/2500 D811 T840 LG3	1555	175	40	7330	57,2	129	80+	4000	5,50
Etesian U LED1x5450/2500 D812 T840 LG3	1555	175	40	7853	61,3	128	80+	4000	5,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

LG3 Luminaire fits to LG3 requirements (with direct/indirect light distribution)
Lsep Option that enables to control (on/off) Down and up lights separately

ACT+ Integrated self-learning sensor and driver for lighting control (not applicable for models: D803, D807)
BLT Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth)

DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light level (not applicable for models: D806, D807)

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)
PUII Pull switch device, on/off

PULL Pull switch device, on/off EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface
EM3LER Emergency version 3 hours, lens - escape route
EM3LOA Emergency version 3 hours, lens - open areas
1G Strain relief for power supply cable

L Luminaire designed to in-line connection with join element - end/first luminaire (join kit not included)
LL Luminaire designed to in-line connection with join element - intermediate luminaire (join kit not included)

*note - for L and LL models 3LIN option included, 5TB option for lengths up to 800mm

CBF3-2.0m spiral white

CBF3-2.0m white

CBF3-2.0m white

CBF3-2.0m clear

Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white

Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white

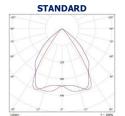
Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent

*note - for suspended luminaires it is recommended to use one of CBF3 option for easier mounting

WID Wide beam reflector

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+









Available accessories:



Product: I-JOIN MTG KIT Calima U LED/Etesian U LED RAL9003 Description: "I" type join kit for connecting luminaires in-line



Product: Suspension MTG KIT SUSY

Description: Suspension wire set "Y" type, 1.5m adjustable, 1pcs *note - 2pcs MTG KIT SUSY for 1 luminaire required



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceilings, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceilings, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear



Product: CAP spiral cable 3x0.75 2.0m white Description: Spiral cable 3x0.75 mwhite Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm



CALIMA D LED

Product Group: Surface and Suspended Luminaires

















Images for the product family and options:









Description: A surface LED luminaire with translucent micro-prismatic diffuser and wide range of dimensions

Diffuser: translucent micro-prismatic, PMMA

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP44 Mechanical impact resistance: IK05

EEC: A++

Installation: Surface luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 5x2x2.5mm2

Environment:

Application: Office, education, corridor, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions



Series of EM3LOA and EM3LER emergency kits is the newest line of options that combines highly efficient LED light sources and the latest optics, designed to illuminate open areas or escape routes. A high specification LED emergency version provides high performance emergency lighting in commercial buildings where aesthetics is of prime importance, such as offices, retail or hospitality and leisure facilities. Whereas typical escape route emergency luminaires need to be spaced at every 3 to 7 metres to achieve the required illumination level, EM3LOA and EM3LER optimised optics can provide spacing up to 17 metres along the escape routes and up to 9 metres in the open areas, depending on ceiling height, that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and subsequent maintenance









High flexibility to meet specific project requirements, as luminaires can be painted to all RAL code colour on request. For more information see the option list



Product	Length , mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Calima D LED1x1350 D962 T830 MPRZ LT92	595	175	40	1255	11,1	113	80+	3000	2,00
Calima D LED1x1800 D963 T830 MPRZ LT92	595	175	40	1702	15,4	110	80+	3000	2,00
Calima D LED1x2650 D970 T830 MPRZ LT92	595	175	40	2510	20,8	120	+08	3000	2,00
Calima D LED1x2600 D964 T830 MPRZ LT92	1215	175	40	2460	18,2	135	80+	3000	3,80
Calima D LED1x3500 D965 T830 MPRZ LT92	1215	175	40	3347	26,3	128	+08	3000	3,80
Calima D LED1x4750 D966 T830 MPRZ LT92	1215	175	40	4540	38,9	117	80+	3000	3,80
Calima D LED1x5250 D976 T830 MPRZ LT92	1215	175	40	5021	39,4	128	80+	3000	3,80
Calima D LED1x7150 D977 T830 MPRZ LT92	1215	175	40	6809	57,1	119	80+	3000	3,80
Calima D LED1x3250 D967 T830 MPRZ LT92	1495	175	40	3075	22,7	135	80+	3000	4,60
Calima D LED1x4400 D968 T830 MPRZ LT92	1495	175	40	4184	32,8	128	80+	3000	4,60
Calima D LED1x5950 D969 T830 MPRZ LT92	1495	175	40	5674	48,6	117	80+	3000	4,60
Calima D LED1x6600 D678 T830 MPRZ LT92	1495	175	40	6276	49,2	128	80+	3000	4,60
Calima D LED1x8900 D979 T830 MPRZ LT92	1495	175	40	8512	71,3	119	80+	3000	4,60
Calima D LED2x1350 D996 T830 MPRZ LT92	595	295	40	2510	20,8	120	80+	3000	3,80
Calima D LED2x1800 D997 T830 MPRZ LT92	595	295	40	3405	29,2	117	80+	3000	3,80
Calima D LED2x2650 D998 T830 MPRZ LT92	595	295	40	5021	39,4	128	80+	3000	3,80
Calima D LED2x1350 D971 T830 MPRZ LT92	595	595	40	2510	20,8	120	+08	3000	5,20
Calima D LED2x1800 D972 T830 MPRZ LT92	595	595	40	3405	29,2	117	80+	3000	5,20
Calima D LED2x2650 D973 T830 MPRZ LT92	595	595	40	5021	39,4	128	80+	3000	5,20
Calima D LED3x1300 D974 T830 MPRZ LT92	595	595	40	3766	29,5	128	80+	3000	5,40
Calima D LED3x1800 D975 T830 MPRZ LT92	595	595	40	5107	43,7	117	80+	3000	5,40
Calima D LED1x1350 D962 T840 MPRZ LT92	595	175	40	1311	11,1	118	80+	4000	2,00
Calima D LED1x1800 D963 T840 MPRZ LT92	595	175	40	1779	15,4	115	80+	4000	2,00
Calima D LED1x2650 D970 T840 MPRZ LT92	595	175	40	2623	20,8	126	+08	4000	2,00
Calima D LED1x2600 D964 T840 MPRZ LT92	1215	175	40	2570	18,2	141	80+	4000	3,80
Calima D LED1x3500 D965 T840 MPRZ LT92 1G	1215	175	40	3497	26,3	133	+08	4000	3,80
Calima D LED1x4750 D966 T840 MPRZ LT92	1215	175	40	4743	38,9	122	80+	4000	3,80
Calima D LED1x5250 D976 T840 MPRZ LT92 1G	1215	175	40	5246	39,4	133	+08	4000	3,80
Calima D LED1x7150 D977 T840 MPRZ LT92	1215	175	40	7114	57,1	125	80+	4000	3,80
Calima D LED1x3250 D967 T840 MPRZ LT92	1495	175	40	3212	22,7	141	+08	4000	4,60
Calima D LED1x4400 D968 T840 MPRZ LT92	1495	175	40	4371	32,8	133	80+	4000	4,60
Calima D LED1x5950 D969 T840 MPRZ LT92	1495	175	40	5928	48,6	122	+08	4000	4,60
Calima D LED1x6600 D978 T840 MPRZ LT92 1G	1495	175	40	6557	49,2	133	80+	4000	4,60
Calima D LED1x8900 D979 T840 MPRZ LT92	1495	175	40	8893	71,3	125	+08	4000	4,60
Calima D LED2x1350 D996 T840 MPRZ LT92	595	295	40	2623	20,8	126	80+	4000	3,80
Calima D LED2x1800 D997 T840 MPRZ LT92 1G	595	295	40	3557	29,2	122	80+	4000	3,80
Calima D LED2x2650 D998 T840 MPRZ LT92 1G	595	295	40	5246	39,4	133	80+	4000	3,80
Calima D LED2x1350 D971 T840 MPRZ LT92	595	595	40	2623	20,8	126	80+	4000	5,20
Calima D LED2x1800 D972 T840 MPRZ LT92	595	595	40	3557	29,2	122	80+	4000	5,20
Calima D LED2x2650 D973 T840 MPRZ LT92	595	595	40	5246	39,4	133	80+	4000	5,20
Calima D LED3x1300 D974 T840 MPRZ LT92	595	595	40	3934	29,5	133	80+	4000	5,40
Calima D LED3x1800 D975 T840 MPRZ LT92	595	595	40	5336	43,7	122	80+	4000	5,40

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities for lighting control (not applicable for models: D962, D963, D970)

ACT+ Integrated self-learning sensor and driver for lighting control (not applicable for

models: D962, D963, D970)

BLT Integrated wireless control unit and driver for lighting control via mobile device (via

Bluetooth)
TW Integrated light source and driver for Tunable white control 2700-6500 K
BLT TW Integrated light source, wireless control unit and driver for Tunable white control

2700-6500 K via mobile device (via Bluetooth)
DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light

level

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface
EM3LER Emergency version 3 hours, lens - escape route
EM3LOA Emergency version 3 hours, lens - open areas

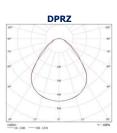
1G Strain relief for power supply cable
MPRZ LT92 Translucent micro-prismatic diffuser with high light transmittance

DPRZ De-glaring micro-prismatic diffuser

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+











CALIMA U LED

Product Group: Surface and Suspended Luminaires



















Description: A suspended LED luminaire with translucent micro-prismatic diffuser and wide choice of options

Diffuser: translucent micro-prismatic, PMMA

Body: steel sheet, white finish
Mains voltage: 220-240V, 0/50-60Hz

General data: Mains voltage: 220-240V, 0/50
Power factor: >0,95
Light source: LED

Light source included: Yes

Light distribution type: Direct (Direct/Indirect LG3 versions)

LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP40 Mechanical impact resistance: IK05

EEC: A++

Installation: Surface luminaire designed to be suspended. Wire suspension set and plastic cap with cable are available on request. Luminaire with an option LL and accessory I-JOIN MTG KIT Calima U LED/Etesian U LED RAL9003 is designed for in-line connection. Push-in terminal,

3x2x2.5mm2

Environment: Indoor

Application: Office, education, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions



Series of EM3LOA and EM3LER emergency kits is the newest line of options that combines highly efficient LED light sources and the latest optics, designed to illuminate open areas or escape routes. A high specification LED emergency version provides high performance emergency lighting in commercial buildings where aesthetics is of prime importance, such as offices, retail or hospitality and leisure facilities. Whereas typical escape route emergency luminaires need to be spaced at every 3 to 7 metres to achieve the required illumination level, EM3LOA and EM3LER optimised optics can provide spacing up to 17 metres along the escape routes and up to 9 metres in the open areas, depending on ceiling height, that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and subsequent maintenance



Pull switch version (to switch on/off) available on request. For more information see the option list



LG3 – Luminaire fits to LG3 requirements with 30-40% light distribution to the ceiling and 70-60% to the floor. For more information see the option list





Fitting for in-line connection can be ordered on request. Please add I-JOIN MTG KIT Calima U LED/Etesian U LED RAL9003 accessory and select L or LL options depending on luminaire's location in the line (first/ end/ intermediate). For more information see the option and accessories list



High flexibility to meet specific project requirements, as luminaires can be painted to all RAL code colour on request. For more information see the option list

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Calima U LED1x2600 D815 T830 MPRZ LT92	1215	175	40	2467	18,2	136	+08	3000	4,10
Calima U LED1x3500 D816 T830 MPRZ LT92	1215	175	40	3359	25,7	131	+08	3000	4,10
Calima U LED1x4800 D817 T830 MPRZ LT92	1215	175	40	4554	38,0	120	+08	3000	4,10
Calima U LED1x3250 D818 T830 MPRZ LT92	1495	175	40	3084	22,7	136	+08	3000	5,10
Calima U LED1x4400 D819 T830 MPRZ LT92	1495	175	40	4197	32,1	131	+08	3000	5,10
Calima U LED1x6000 D820 T830 MPRZ LT92	1495	175	40	5692	47,6	120	80+	3000	5,10
Calima U LED1x2600 D815 T840 MPRZ LT92	1215	175	40	2570	18,2	141	80+	4000	4,10
Calima U LED1x3500 D816 T840 MPRZ LT92	1215	175	40	3498	25,7	136	80+	4000	4,10
Calima U LED1x4800 D817 T840 MPRZ LT92	1215	175	40	4743	38,0	125	80+	4000	4,10
Calima U LED1x3250 D818 T840 MPRZ LT92	1495	175	40	3212	22,7	141	80+	4000	5,10
Calima U LED1x4400 D819 T840 MPRZ LT92	1495	175	40	4371	32,1	136	80+	4000	5,10
Calima U LED1x6000 D820 T840 MPRZ LT92	1495	175	40	5929	47,6	125	80+	4000	5,10
Calima U LED1x2600/1550 D821 T830 MPRZ LT92 LG3	1215	175	40	3949	29,7	134	80+	3000	4,60
Calima U LED1x3500/1550 D822 T830 MPRZ LT92 LG3	1215	175	40	4841	37,2	130	+08	3000	4,60
Calima U LED1x4800/1550 D823 T830 MPRZ LT92 LG3	1215	175	40	6036	49,5	121	80+	3000	4,60
Calima U LED1x3250/2500 D824 T830 MPRZ LT92 LG3	1495	175	40	5438	41,3	132	+08	3000	5,60
Calima U LED1x4400/2500 D825 T830 MPRZ LT92 LG3	1495	175	40	6551	50,7	129	80+	3000	5,60
Calima U LED1x6000/2500 D826 T830 MPRZ LT92 LG3	1495	175	40	8046	66,2	121	80+	3000	5,60
Calima U LED1x2600/1550 D821 T840 MPRZ LT92 LG3	1215	175	40	4113	29,7	139	80+	4000	4,60
Calima U LED1x3500/1550 D822 T840 MPRZ LT92 LG3	1215	175	40	5041	37,2	136	80+	4000	4,60
Calima U LED1x4800/1550 D823 T840 MPRZ LT92 LG3	1215	175	40	6286	49,5	126	80+	4000	4,60
Calima U LED1x3250/2500 D824 T840 MPRZ LT92 LG3	1495	175	40	5664	41,3	137	80+	4000	5,60
Calima U LED1x4400/2500 D825 T840 MPRZ LT92 LG3	1495	175	40	6823	50,7	134	80+	4000	5,60
Calima U LED1x6000/2500 D826 T840 MPRZ LT92 LG3	1495	175	40	8381	66,2	126	80+	4000	5,60

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Translucent micro-prismatic diffuser with high light transmittance MPRZ LT92

SDIM Driver with switch-control dimming DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping possibilities for lighting control

Integrated self-learning sensor and driver for lighting control ACT+

Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth) BLT

TW Integrated light source and driver for Tunable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tunable white control 2700-6500 K via mobile device (via Bluetooth)

DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light level

Pull switch device, on/off PULL ЕМ3

Emergency version 3 hours
Emergency version 3 hours (best available technology) ЕМ3В

Emergency version a quipped with an autonomous testing system, 3 hours Emergency version 3 hours with DALI interface ЕМЗА

EM3D Emergency version 3 hours, lens - escape route Emergency version 3 hours, lens - open areas EM3LER EM3LOA 1G

Strain relief for power supply cable

Luminaire designed to in-line connection with join element - end/first luminaire (join kit not included) L LL Luminaire designed to in-line connection with join element - intermediate luminaire (join kit not included)
*note - for L and LL models 3LIN option included, 5TB option for lengths up to 800mm

CBF3-2.0m spiral white- Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m clear Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent *note - for suspended luminaires it is recommended to use one of CBF3 option for easier mounting

Translucent micro-prismatic diffuser with high light transmittance MPRZ LT92

DPRZ De-glaring micro-prismatic diffuser RΔI RAL colour

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840









Available accessories:



Product: I-JOIN MTG KIT Calima U LED/Etesian U LED RAL9003 Description: "I" type join kit for connecting luminaires in-line



Product: Suspension MTG KIT SUSY

Description: Suspension wire set "Y" type, 1.5m adjustable, 1pcs *note - 2pcs MTG KIT SUSY for 1 luminaire required



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceilings, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceilings, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable $3x0.75 \text{mm}^2$ for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm



LODOS S LED

Product Group: Surface and Suspended Luminaires



220-240V 50-60Hz











Images for the product family and options:







Description: A decorative and modern LED luminaire in four sizes to fit wide range of applications

Diffuser: opal diffuser, PMMA, high light transmittance, UV stable

Body: steel sheet, white finish, with quick lock system

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A+

Installation: Surface luminaire is designed to be fixed to ceiling of any type or suspended. Wire suspension set is ordered separately. Push-in terminal,

3x2x2.5mm2

Environment: Indoor

Application: Office, education, retail, public place



High flexibility to meet specific project requirements, as luminaires can be painted to all RAL code colour on request. For more information see the option list



Wire suspension set "Suspension MTG KIT Lodos S LED" is available on request. For more information see the option list

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI*	ССТ*, К	Weight, kg
Lodos S LED1x1800 D361 T830 OP LT80	300	300	125	1816	18,5	98	80+	3000	2,50
Lodos S LED1x2600 D362 T830 OP LT80	300	300	125	2463	27,4	90	80+	3000	2,50
Lodos S LED1x3300 D363 T830 OP LT80	450	450	125	2753	25,0	110	80+	3000	4,80
Lodos S LED1x4500 D364 T830 OP LT80	450	450	125	3746	36,1	104	+08	3000	4,80
Lodos S LED1x5900 D365 T830 OP LT80	600	600	135	6006	54,6	110	80+	3000	7,50
Lodos S LED1x7000 D366 T830 OP LT80	600	600	135	8174	78,8	104	80+	3000	7,50
Lodos S LED1x8400 D367 T830 OP LT80	900	900	150	8413	78,7	107	80+	3000	10,50
Lodos S LED1x10200 D368 T830 OP LT80	900	900	150	10382	100,1	104	80+	3000	10,50



Lodos S LED1x1800 D361 T840 OP LT80	300	300	125	1898	18,5	102	80+	4000	2,50
Lodos S LED1x2600 D362 T840 OP LT80 1G	300	300	125	2574	27,4	94	80+	4000	2,50
Lodos S LED1x3300 D363 T840 OP LT80 1G	450	450	125	2876	25,0	115	80+	4000	4,80
Lodos S LED1x4500 D364 T840 OP LT80	450	450	125	3914	36,1	108	80+	4000	4,80
Lodos S LED1x5900 D365 T840 OP LT80 1G	600	600	135	6275	54,6	115	80+	4000	7,50
Lodos S LED1x7000 D366 T840 OP LT80	600	600	135	8540	78,8	108	80+	4000	7,50
Lodos S LED1x8400 D367 T840 OP LT80	900	900	150	8790	78,7	112	80+	4000	10,50
Lodos S LED1x10200 D368 T840 OP LT80	900	900	150	10847	100,1	108	80+	4000	10,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming

DALI Driver with DALI interface

BLT Integrated wireless control unit and driver for lighting control via mobile device

(Bluetooth)

ÌW Integrated light source and driver for Tuneable white control 2700-6500 K

BLT TW Integrated light source, wireless control unit and driver for Tuneable white control

2700-6500 K via mobile device (Bluetooth)

Integrated microwave (MW) motion sensor with on-off control MW

Emergency version 3 hours ЕМ3

ЕМЗВ Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

1G Strain relief for power supply cable RAL RAL colour

Opal diffuser with high light transmittance OP LT80 DPRZ De-glaring micro-prismatic diffuser Colour temperature 3000K, CRI 80+ T830

Colour temperature 4000K, CRI 80+ T840

Available accessories:



Product: Suspension MTG KIT Lodos S LED

Description: Suspension wire set witch cap 3x"I" type, 1.5m adjustable, 1pcs



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm













TUCANA PAR LED

Product Group: Surface and Suspended Luminaires















A surface or suspended mounted LED luminaire with double parabolic reflector for good efficiency and quality of light **Description:**

Reflector: matt aluminium, double parabolic, with six spring locks for maximum stability Diffuser: opal diffuser, PMMA, high light transmittance, UV stable

Body: steel sheet, white finish, with thermoplastic end caps

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A+ Installation: Surface luminaire is designed to be fixed to ceiling of any type or suspended. Push-in terminal, 5x2x2.5mm2

Environment: Indoor Application: Office, education, retail, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI*	ССТ*, К	Weight, kg
Tucana PAR LED2x1900 D369 MAT T840	1254	175	75	3780	41,3	91	80+	4000	4,50
Tucana PAR LED2x2700 D370 MAT T840	1254	175	75	5306	60,7	87	80+	4000	4,50
Tucana PAR LED2x2400 D371 MAT T840	1556	175	75	4774	52,2	91	80+	4000	5,60
Tucana PAR LED2x3400 D372 MAT T840	1556	175	75	6702	76,7	87	80+	4000	5,60

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

Integrated smart sensor and driver with wireless communication and grouping possibilities for lighting control **EAIR**

ACT+ Integrated self-learning sensor and driver for lighting control

BLT Integrated wireless control unit and driver for lighting control via mobile device (via Bluetooth)

DLIGHT Integrated daylight sensor and dimming driver for simple setting of constant light level

PULL Pull switch device, on/off

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

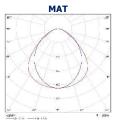
EM3D Emergency version 3 hours with DALI interface EM3LER Emergency version 3 hours, lens - escape route EM3LOA Emergency version 3 hours, lens - open areas

Strain relief for power supply cable CBF3-2.0m spiral white- Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white

CBF3-2.0m white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m clear Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent *note - for suspended luminaires it is recommended to use one of CBF3 option for easier mounting

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T840













BARBER S LED

Product Group: Surface and Suspended Luminaires















Images for the product family and options:





Description: A surface LED luminaire with asymmetric light distribution for uniform illumination of walls, shelves and panels

Reflector: matt aluminium, asymmetrical

Diffuser: opal diffuser, PMMA, UV stable, with high light transmittance

Body: steel sheet, white finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A+

Installation: Surface luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, retail, public place

efficacy* , lm/W	CRI*	CCT*, K	Weight, kg
93	80+	3000	2,00
97	80+	3000	2,00
98	80+	3000	3,80
103	80+	3000	3,80
98	80+	4000	2,00
102	80+	4000	2,00
103	80+	4000	3,80
108	80+	4000	3,80
	efficacy*, lm/W 93 97 98 103 98 102 103	93 80+ 97 80+ 98 80+ 103 80+ 98 80+ 102 80+ 103 80+	efficacy* CRI * CCI , K 93 80+ 3000 97 80+ 3000 98 80+ 3000 103 80+ 3000 98 80+ 4000 102 80+ 4000 103 80+ 4000

^{*} tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface 1G Strain relief for power supply cable OP LT80 Opal diffuser with high light transmittance

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+











BOOTES LED

Product Group: Surface and Suspended Luminaires















Images for the product family and options:







Description: A decorative surface LED luminaire with a modern shape body and opal diffuser

Diffuser: opal diffuser, PMMA, UV stable, with high light transmittance

Body: steel sheet, light grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A+

Installation: Surface luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, staircase, bathroom, retail, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI*	CCT*, K	Weight, kg
Bootes LED1x800 E756 T840 OP LT80	382	382	75	779	9,0	89	80+	4000	1,90
Bootes LED1x1100 E757 T840 OP LT80	382	382	75	1063	12,0	88	80+	4000	1,90
Bootes LED1x1500 E758 T840 OP LT80	382	382	75	1441	17,0	83	+08	4000	1,90
Bootes LED1x3600 D379 T840 OP LT80	1132	382	75	3508	33,0	105	80+	4000	4,40
Bootes LED1x4100 D380 T840 OP LT80	1132	382	75	4052	40,0	101	+08	4000	4,40
Bootes LED1x5600 D381 T840 OP LT80	1132	382	75	5594	60,0	93	80+	4000	4,40
Bootes LED1x3600 D382 T840 OP LT80	632	632	75	3508	33,0	105	80+	4000	4,50
Bootes LED1x4100 D383 T840 OP LT80	632	632	75	4052	40,0	101	80+	4000	4,50
Bootes LED1x5600 D384 T840 OP LT80	632	632	75	5594	60,0	93	80+	4000	4,50
Bootes LED1x7100 E765 T840 OP LT80	882	882	75	7011	70,0	100	80+	4000	5,50
Bootes LED1x9600 E766 T840 OP LT80	882	882	75	9563	102,0	94	80+	4000	5,70
Bootes LED1x13000 E767 T840 OP LT80	882	882	75	12972	147,0	88	80+	4000	5,70

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

1G Strain relief for power supply cable
OP LT80 Opal diffuser with high light transmittance

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





www.northcliffe.org



SERPENS S LED

Product Group: Aluminum Profile Luminaires

















A recessed LED luminaire with opal difuser and ultra slim design for in-line connection without gaps

Diffuser: opal polycarbonate, UV stabilized

Body: extruded aluminium profile, white (RAL 9010) finish with sandpaper texture

General data:

Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/ L90B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05 Glow wire test, °C: 650

Installation:

Suitable for plasterboard or similar types of ceiling, requires a cut-out. Supplied with supports brackets (SB). Luminaire with an option

L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, retail, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Serpens S LED1x800 D860 T830 OP LT80 LO1 SB	595	55	75	763	6,8	112	80+	3000	1,50
Serpens S LED1x1100 D861 T830 OP LT80 LO2 SB	595	55	75	1038	9,8	105	80+	3000	1,50
Serpens S LED1x1500 D862 T830 OP LT80 LO3 SB	595	55	75	1408	13,7	103	80+	3000	1,50
Serpens S LED1x1200 D863 T830 OP LT80 LO1 SB	875	55	75	1144	10,2	112	80+	3000	2,00
Serpens S LED1x1650 D864 T830 OP LT80 LO2 SB	875	55	75	1557	13,9	112	80+	3000	2,00
Serpens S LED1x2250 D865 T830 OP LT80 LO3 SB	875	55	75	2111	20,6	103	+08	3000	2,00
Serpens S LED1x1600 D866 T830 OP LT80 LO1 SB	1155	55	75	1525	12,8	119	80+	3000	2,70
Serpens S LED1x2200 D867 T830 OP LT80 LO2 SB	1155	55	75	2076	18,5	112	80+	3000	2,70
Serpens S LED1x3000 D868 T830 OP LT80 LO3 SB	1155	55	75	2815	26,8	105	80+	3000	2,70
Serpens S LED1x2000 D869 T830 OP LT80 LO1 SB	1435	55	75	1907	16,1	119	80+	3000	3,20
Serpens S LED1x2750 D870 T830 OP LT80 LO2 SB	1435	55	75	2595	23,2	112	80+	3000	3,20
Serpens S LED1x3700 D871 T830 OP LT80 LO3 SB	1435	55	75	3519	32,4	109	80+	3000	3,20
Serpens S LED1x2400 D872 T830 OP LT80 LO1 SB	1715	55	75	2288	19,3	119	80+	3000	3,70
Serpens S LED1x3300 D873 T830 OP LT80 LO2 SB	1715	55	75	3114	27,2	115	80+	3000	3,70
Serpens S LED1x4450 D874 T830 OP LT80 LO3 SB	1715	55	75	4223	38,9	109	80+	3000	3,70
Serpens S LED1x2800 D875 T830 OP LT80 LO1 SB	1995	55	75	2669	22,5	119	80+	3000	4,40
Serpens S LED1x3800 D876 T830 OP LT80 LO2 SB	1995	55	75	3633	30,6	119	80+	3000	4,40
Serpens S LED1x5150 D877 T830 OP LT80 LO3 SB	1995	55	75	4927	45,3	109	80+	3000	4,40
Serpens S LED1x800 D860 T840 OP LT80 LO1 SB	595	55	75	797	6,8	117	+08	4000	1,50
Serpens S LED1x1100 D861 T840 OP LT80 LO2 SB	595	55	75	1084	9,8	110	80+	4000	1,50
Serpens S LED1x1500 D862 T840 OP LT80 LO3 SB	595	55	75	1470	13,7	107	+08	4000	1,50
Serpens S LED1x1200 D863 T840 OP LT80 LO1 SB	875	55	75	1195	10,2	117	80+	4000	2,00
Serpens S LED1x1650 D864 T840 OP LT80 LO2 SB	875	55	75	1627	13,9	117	+08	4000	2,00
Serpens S LED1x2250 D865 T840 OP LT80 LO3 SB	875	55	75	2205	20,6	107	80+	4000	2,00
Serpens S LED1x1600 D866 T840 OP LT80 LO1 SB	1155	55	75	1594	12,8	124	+08	4000	2,70
Serpens S LED1x2200 D867 T840 OP LT80 LO2 SB	1155	55	75	2169	18,5	117	80+	4000	2,70
Serpens S LED1x3000 D868 T840 OP LT80 LO3 SB	1155	55	75	2940	26,8	110	80+	4000	2,70
Serpens S LED1x2000 D869 T840 OP LT80 LO1 SB	1435	55	75	1992	16,1	124	80+	4000	3,20
Serpens S LED1x2750 D870 T840 OP LT80 LO2 SB	1435	55	75	2711	23,2	117	80+	4000	3,20
Serpens S LED1x3700 D871 T840 OP LT80 LO3 SB	1435	55	75	3675	32,4	113	80+	4000	3,20
Serpens S LED1x2400 D872 T840 OP LT80 LO1 SB	1715	55	75	2390	19,3	124	80+	4000	3,70
Serpens S LED1x3300 D873 T840 OP LT80 LO2 SB	1715	55	75	3253	27,2	120	80+	4000	3,70
Serpens S LED1x4450 D874 T840 OP LT80 LO3 SB	1715	55	75	4410	38,9	113	80+	4000	3,70
Serpens S LED1x2800 D875 T840 OP LT80 LO1 SB	1995	55	75	2789	22,5	124	80+	4000	4,40
Serpens S LED1x3800 D876 T840 OP LT80 LO2 SB	1995	55	75	3795	30,6	124	+08	4000	4,40
Serpens S LED1x5150 D877 T840 OP LT80 LO3 SB * tolerance range for optical and electrical data: ±10%. Values	1995	55	75	5146	45,3	113	80+	4000	4,40

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

ЕМЗВ Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

*note - EM options applicable for models longer than 1000mm 5TB 5-pole terminal block in middle of luminaire for easy through wiring ILIN Through wiring 3x1.5 mm² with two push-in terminal blocks

3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks

*note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

1G Strain relief for power supply cable

2G

Strain relief for power supply cable, 2pcs
Support brackets for installation into a plasterboard ceiling SB

*note SB option included

for in-line connection end/first luminaire (lengths: 577/ 857/1137/ 1417/1697/ 1977mm) for in-line connection intermediate luminaire (lengths: 561/ 841/ 1121/ 1401/ 1681/ 1961mm) LL

tor in-line connection intermediate luminaire (lengths: 561/ 841/ 1841/ 1840 - for L and LL models joint kit and 1LIN option included (5TB option for lengths up to 800mm)

OP LT80 Opal diffuser with high light transmittance

LO1 Light output level 1

LO2 Light output level 2

LO3 Light output level 3

RAL RAL colour per 1 meter

Colour temperature 3000K CPI 80+

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840





SERPENS LED

Product Group: Aluminum Profile Luminaires



















Description: A recessed LED luminaire with opal or micro-linear prismatic difuser for in-line connection without gaps

Diffuser: opal (OP LT80) or micro-linear prismatic (PRZ) polycarbonate, UV stabilized

Body: extruded aluminium profile, white (RAL 9010) finish with sandpaper texture

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/ L90B50

Operating temperature range, °C: ta -15...+35 Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05 Glow wire test, °C: 650

EEC: A++ Installation:

Suitable for plasterboard or similar types of ceiling, requires a cut-out. Supplied with supports brackets (SB). Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, retail, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Serpens LED1x950 D631 T830 OP LT80 LO1 SB	619	77	68	906	8,5	106	80+	3000	1,50
Serpens LED1x1300 D632 T830 OP LT80 LO2 SB	619	77	68	1233	12,3	100	80+	3000	1,50
Serpens LED1x1750 D633 T830 OP LT80 LO3 SB	619	77	68	1672	17,1	97	80+	3000	1,50
Serpens LED1x1450 D634 T830 OP LT80 LO1 SB	912	77	68	1359	12,0	113	80+	3000	2,00
Serpens LED1x1950 D635 T830 OP LT80 LO2 SB	912	77	68	1849	17,4	106	80+	3000	2,00
Serpens LED1x2650 D636 T830 OP LT80 LO3 SB	912	77	68	2507	25,7	97	80+	3000	2,00
Serpens LED1x1900 D637 T830 OP LT80 LO1 SB	1204	77	68	1811	16,1	113	80+	3000	2,50
Serpens LED1x2600 D638 T830 OP LT80 LO2 SB	1204	77	68	2465	23,2	106	80+	3000	2,50
Serpens LED1x3500 D639 T830 OP LT80 LO3 SB	1204	77	68	3343	32,4	103	80+	3000	2,50
Serpens LED1x2300 D640 T830 OP LT80 LO1 SB	1438	77	68	2174	19,3	113	80+	3000	2,90
Serpens LED1x3100 D641 T830 OP LT80 LO2 SB	1438	77	68	2958	27,8	106	80+	3000	2,90
Serpens LED1x4200 D642 T830 OP LT80 LO3 SB	1438	77	68	4012	38,9	103	80+	3000	2,90
Serpens LED1x2650 D643 T830 OP LT80 LO1 SB	1672	77	68	2536	22,5	113	80+	3000	3,40
Serpens LED1x3650 D644 T830 OP LT80 LO2 SB	1672	77	68	3451	32,4	106	+08	3000	3,40
Serpens LED1x4900 D645 T830 OP LT80 LO3 SB	1672	77	68	4680	45,4	103	80+	3000	3,40
Serpens LED1x2850 D646 T830 OP LT80 LO1 SB	1789	77	68	2717	22,7	119	+08	3000	3,80
Serpens LED1x3900 D647 T830 OP LT80 LO2 SB	1789	77	68	3698	32,8	113	80+	3000	3,80
Serpens LED1x5250 D648 T830 OP LT80 LO3 SB	1789	77	68	5015	48,6	103	+08	3000	3,80
Serpens LED1x2950 D853 T830 OP LT80 LO1 SB	1965	77	68	2798	23,2	121	+08	3000	4,00
Serpens LED1x4250 D854 T830 OP LT80 LO2 SB	1965	77	68	4067	36,1	113	+08	3000	4,00
Serpens LED1x5800 D855 T830 OP LT80 LO3 SB	1965	77	68	5516	53,5	103	+08	3000	4,00
Serpens LED1x3200 D649 T830 OP LT80 LO1 SB	2140	77	68	3052	25,3	121	+08	3000	4,30
Serpens LED1x4650 D650 T830 OP LT80 LO2 SB	2140	77	68	4437	39,4	113	+08	3000	4,30
Serpens LED1x6300 D651 T830 OP LT80 LO3 SB	2140	77	68	6017	58,3	103	80+	3000	4,30
Serpens LED1x3750 D652 T830 OP LT80 LO1 SB	2491	77	68	3561	29,5	121	+08	3000	4,90
Serpens LED1x5450 D653 T830 OP LT80 LO2 SB	2491	77	68	5177	45,9	113	+08	3000	4,90
Serpens LED1x7350 D654 T830 OP LT80 LO3 SB	2491	77	68	7020	68,1	103	+08	3000	4,90
Serpens LED1x4000 D655 T830 OP LT80 LO1 SB	2667	77	68	3815	31,6	121	80+	3000	5,40

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LECUNICAL DATA SHEET						IVIA	KING L	ILE DKI	GHIEK
Serpens LED1x5800 D656 T830 OP LT80 LO2 SB	2667	77	68	5546	49,2	113	80+	3000	5,40
Serpens LED1x7900 D657 T830 OP LT80 LO3 SB	2667	77	68	7522	72,9	103	80+	3000	5,40
Serpens LED1x4300 D658 T830 OP LT80 LO1 SB	2842	77	68	4070	33,7	121	80+	3000	5,80
Serpens LED1x6200 D659 T830 OP LT80 LO2 SB	2842	77	68	5916	52,5	113	80+	3000	5,80
Serpens LED1x8400 D660 T830 OP LT80 LO3 SB	2842	77	68	8023	77,8	103	80+	3000	5,80
Serpens LED1x950 D631 T840 OP LT80 LO1 SB	619	77	68	946	8,5	111	80+	4000	1,50
Serpens LED1x1300 D632 T840 OP LT80 LO2 SB	619	77	68	1288	12,3	105	80+	4000	1,50
Serpens LED1x1750 D633 T840 OP LT80 LO3 SB	619	77	68	1746	17,1	102	80+	4000	1,50
Serpens LED1x1750 D634 T840 OF LT60 LG3 3B Serpens LED1x1450 D634 T840 OP LT80 LO1 SB	912	77	68	1419	12,0	118	80+	4000	2,00
Serpens LED1x1430 D034 1840 OP LT80 LO1 3B Serpens LED1x1950 D635 T840 OP LT80 LO2 SB	912	77	68	1931	17,4	111	80+	4000	2,00
		77							•
Serpens LED1x2650 D636 T840 OP LT80 LO3 SB	912		68	2619	25,7	102	80+	4000	2,00
Serpens LED1x1900 D637 T840 OP LT80 LO1 SB	1204	77	68	1892	16,1	118	80+	4000	2,50
Serpens LED1x2600 D638 T840 OP LT80 LO2 SB	1204	77	68	2575	23,2	111	80+	4000	2,50
Serpens LED1x3500 D639 T840 OP LT80 LO3 SB	1204	77	68	3493	32,4	108	80+	4000	2,50
Serpens LED1x2300 D640 T840 OP LT80 LO1 SB	1438	77	68	2270	19,3	118	+08	4000	2,90
Serpens LED1x3100 D641 T840 OP LT80 LO2 SB	1438	77	68	3090	27,8	111	+08	4000	2,90
Serpens LED1x4200 D642 T840 OP LT80 LO3 SB	1438	77	68	4191	38,9	108	+08	4000	2,90
Serpens LED1x2650 D643 T840 OP LT80 LO1 SB	1672	77	68	2648	22,5	118	80+	4000	3,40
Serpens LED1x3650 D644 T840 OP LT80 LO2 SB	1672	77	68	3605	32,4	111	+08	4000	3,40
Serpens LED1x4900 D645 T840 OP LT80 LO3 SB	1672	77	68	4890	45,4	108	80+	4000	3,40
Serpens LED1x2850 D646 T840 OP LT80 LO1 SB	1789	77	68	2838	22,7	125	80+	4000	3,80
Serpens LED1x3900 D647 T840 OP LT80 LO2 SB	1789	77	68	3863	32,8	118	80+	4000	3,80
Serpens LED1x5250 D648 T840 OP LT80 LO3 SB	1789	77	68	5239	48,6	108	80+	4000	3,80
Serpens LED1x2950 D853 T840 OP LT80 LO1 SB	1965	77	68	2923	23,2	126	80+	4000	4,00
Serpens LED1x4250 D854 T840 OP LT80 LO2 SB	1965	77	68	4249	36,1	118	80+	4000	4,00
Serpens LED1x5800 D855 T840 OP LT80 LO3 SB	1965	77	68	5763	53,5	108	80+	4000	4,00
Serpens LED1x3200 D649 T840 OP LT80 LO1 SB	2140	77	68	3189	25,3	126	80+	4000	4,30
Serpens LED1x4650 D650 T840 OP LT80 LO2 SB	2140	77	68	4636	39,4	118	80+	4000	4,30
Serpens LED1x4030 D030 1040 OF LT00 LO2 3B Serpens LED1x6300 D651 T840 OP LT80 LO3 SB	2140	77	68	6287	58,3	108	80+	4000	4,30
Serpens LED1x3750 D652 T840 OP LT80 LO3 3B	2491	77	68	3720	29,5	126	80+	4000	4,90
Serpens LED1x3750 D652 1840 OP L180 LO1 SB Serpens LED1x5450 D653 T840 OP LT80 LO2 SB	2491	77	68	5408	45,9	118	80+	4000	4,90
Serpens LED1x7350 D653 1840 OP L180 LO2 SB Serpens LED1x7350 D654 T840 OP LT80 LO3 SB	2491	77	68		· · · · · · · · · · · · · · · · · · ·	108			4,90
				7335	68,1		80+	4000	
Serpens LED1x4000 D655 T840 OP LT80 LO1 SB	2667	77	68	3986	31,6	126	80+	4000	5,40
Serpens LED1x5800 D656 T840 OP LT80 LO2 SB	2667	77	68	5794	49,2	118	80+	4000	5,40
Serpens LED1x7900 D657 T840 OP LT80 LO3 SB	2667	77	68	7859	72,9	108	80+	4000	5,40
Serpens LED1x4300 D658 T840 OP LT80 LO1 SB	2842	77	68	4252	33,7	126	80+	4000	5,80
Serpens LED1x6200 D659 T840 OP LT80 LO2 SB	2842	77	68	6181	52,5	118	+08	4000	5,80
Serpens LED1x8400 D660 T840 OP LT80 LO3 SB	2842	77	68	8383	77,8	108	80+	4000	5,80
Serpens LED1x950 D631 T830 PRZ LO1 SB	619	77	68	965	8,5	113	80+	3000	1,50
Serpens LED1x1300 D632 T830 PRZ LO2 SB	619	77	68	1314	12,3	107	+08	3000	1,50
Serpens LED1x1750 D633 T830 PRZ LO3 SB	619	77	68	1781	17,1	104	80+	3000	1,50
Serpens LED1x1450 D634 T830 PRZ LO1 SB	912	77	68	1448	12,0	120	80+	3000	2,00
Serpens LED1x1950 D635 T830 PRZ LO2 SB	912	77	68	1970	17,4	113	80+	3000	2,00
Serpens LED1x2650 D636 T830 PRZ LO3 SB	912	77	68	2672	25,7	104	80+	3000	2,00
Serpens LED1x1900 D637 T830 PRZ LO1 SB	1204	77	68	1931	16,1	120	80+	3000	2,50
Serpens LED1x2600 D638 T830 PRZ LO2 SB	1204	77	68	2627	23,2	113	80+	3000	2,50
Serpens LED1x3500 D639 T830 PRZ LO3 SB	1204	77	68	3563	32,4	110	80+	3000	2,50
Serpens LED1x2300 D640 T830 PRZ LO1 SB	1438	77	68	2317	19,3	120	80+	3000	2,90
Serpens LED1x3100 D641 T830 PRZ LO2 SB	1438	77	68	3153	27,8	113	80+	3000	2,90
Serpens LED1x4200 D642 T830 PRZ LO3 SB	1438	77	68	4276	38,9	110	80+	3000	2,90
Serpens LED1x2650 D643 T830 PRZ LO1 SB	1672	77	68	2703	22,5	120	80+	3000	3,40
		77							
Serpens LED1x3650 D644 T830 PRZ LO2 SB Serpens LED1x4900 D645 T830 PRZ LO3 SB	1672 1672	77	68 68	3678 4988	32,4 45,4	113 110	80+ 80+	3000	3,40 3,40
Serpens LED1x4900 D043 1630 PRZ LO3 3B Serpens LED1x2850 D646 T830 PRZ LO1 SB	1789	77	68	2896	22,7	127	80+	3000	
									3,80
Serpens LED1x3900 D647 T830 PRZ LO2 SB	1789	77	68	3941	32,8	120	80+	3000	3,80
Serpens LED1x5250 D648 T830 PRZ LO3 SB	1789	77	68	5344	48,6	110	80+	3000	3,80
Serpens LED1x2950 D853 T830 PRZ LO1 SB	1965	77	68	2982	23,2	129	80+	3000	4,00
Serpens LED1x4250 D854 T830 PRZ LO2 SB	1965	77	68	4335	36,1	120	80+	3000	4,00
Serpens LED1x5800 D855 T830 PRZ LO3 SB	1965	77	68	5879	53,5	110	80+	3000	4,00
Serpens LED1x3200 D649 T830 PRZ LO1 SB	2140	77	68	3253	25,3	129	80+	3000	4,30
Serpens LED1x4650 D650 T830 PRZ LO2 SB	2140	77	68	4729	39,4	120	80+	3000	4,30
Serpens LED1x6300 D651 T830 PRZ LO3 SB	2140	77	68	6413	58,3	110	80+	3000	4,30
Serpens LED1x3750 D652 T830 PRZ LO1 SB	2491	77	68	3795	29,5	129	+08	3000	4,90
Serpens LED1x5450 D653 T830 PRZ LO2 SB	2491	77	68	5517	45,9	120	80+	3000	4,90
Serpens LED1x7350 D654 T830 PRZ LO3 SB	2491	77	68	7482	68,1	110	+08	3000	4,90
Serpens LED1x4000 D655 T830 PRZ LO1 SB	2667	77	68	4066	31,6	129	80+	3000	5,40
Serpens LED1x5800 D656 T830 PRZ LO2 SB	2667	77	68	5911	49,2	120	80+	3000	5,40
Serpens LED1x7900 D657 T830 PRZ LO3 SB	2667	77	68	8017	72,9	110	80+	3000	5,40
Serpens LED1x4300 D658 T830 PRZ LO1 SB	2842	77	68	4337	33,7	129	80+	3000	5,80
Serpens LED1x6200 D659 T830 PRZ LO2 SB	2842	77	68	6305	52,5	120	80+	3000	5,80
Serpens LED1x8400 D660 T830 PRZ LO3 SB	2842	77	68	8551	77,8	110	80+	3000	5,80
Serpens LED1x950 D631 T840 PRZ LO1 SB	619	77	68	1008	8,5	118	80+	4000	1,50
Serpens LED1x1300 D632 T840 PRZ LO2 SB	619	77	68	1372	12,3	112	80+	4000	1,50
Serpens LED1x1300 D032 1840 PRZ LO2 3B Serpens LED1x1750 D633 T840 PRZ LO3 SB	619	77	68	1861	17,1	109	80+	4000	1,50
Serpens LED1x1730 D033 1840 PRZ LO3 3B Serpens LED1x1450 D634 T840 PRZ LO1 SB	912	77	68	1512	12,0	126	80+	4000	2,00
Serpens LED1x1450 D634 1840 PRZ LO1 SB Serpens LED1x1950 D635 T840 PRZ LO2 SB	912	77	68	2059	17,4	118	80+	4000	2,00
Serpens LED1x2650 D636 T840 PRZ LO3 SB	912	77	68	2791	25,7	109	80+	4000	2,00
Serpens LED1x1900 D637 T840 PRZ LO1 SB	1204	77	68	2016	16,1	126	80+	4000	2,50
Serpens LED1x2600 D638 T840 PRZ LO2 SB	1204	77	68	2745	23,2	118	80+	4000	2,50
Serpens LED1x3500 D639 T840 PRZ LO3 SB	1204	77	68	3723	32,4	115	80+	4000	2,50
Serpens LED1x2300 D640 T840 PRZ LO1 SB	1438	77	68	2419	19,3	126	80+	4000	2,90
Serpens LED1x3100 D641 T840 PRZ LO2 SB	1438	77	68	3294	27,8	118	+08	4000	2,90

 Serpens LED1x3100 D641 T840 PRZ LO2 SB
 1438
 77
 68
 3294
 27,8
 118
 80+
 4000
 2,90

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Serpens LED1x4200 D642 T840 PRZ LO3 SB	1438	77	68	4467	38,9	115	80+	4000	2,90
Serpens LED1x2650 D643 T840 PRZ LO1 SB	1672	77	68	2823	22,5	126	80+	4000	3,40
Serpens LED1x3650 D644 T840 PRZ LO2 SB	1672	77	68	3843	32,4	118	+08	4000	3,40
Serpens LED1x4900 D645 T840 PRZ LO3 SB	1672	77	68	5212	45,4	115	80+	4000	3,40
Serpens LED1x2850 D646 T840 PRZ LO1 SB	1789	77	68	3024	22,7	133	80+	4000	3,80
Serpens LED1x3900 D647 T840 PRZ LO2 SB	1789	77	68	4117	32,8	125	80+	4000	3,80
Serpens LED1x5250 D648 T840 PRZ LO3 SB	1789	77	68	5584	48,6	115	80+	4000	3,80
Serpens LED1x2950 D853 T840 PRZ LO1 SB	1965	77	68	3115	23,2	134	80+	4000	4,00
Serpens LED1x4250 D854 T840 PRZ LO2 SB	1965	77	68	4529	36,1	125	80+	4000	4,00
Serpens LED1x5800 D855 T840 PRZ LO3 SB	1965	77	68	6142	53,5	115	80+	4000	4,00
Serpens LED1x3200 D649 T840 PRZ LO1 SB	2140	77	68	3398	25,3	134	80+	4000	4,30
Serpens LED1x4650 D650 T840 PRZ LO2 SB	2140	77	68	4941	39,4	125	80+	4000	4,30
Serpens LED1x6300 D651 T840 PRZ LO3 SB	2140	77	68	6701	58,3	115	80+	4000	4,30
Serpens LED1x3750 D652 T840 PRZ LO1 SB	2491	77	68	3965	29,5	134	80+	4000	4,90
Serpens LED1x5450 D653 T840 PRZ LO2 SB	2491	77	68	5764	45,9	125	80+	4000	4,90
Serpens LED1x7350 D654 T840 PRZ LO3 SB	2491	77	68	7817	68,1	115	80+	4000	4,90
Serpens LED1x4000 D655 T840 PRZ LO1 SB	2667	77	68	4248	31,6	134	80+	4000	5,40
Serpens LED1x5800 D656 T840 PRZ LO2 SB	2667	77	68	6176	49,2	125	80+	4000	5,40
Serpens LED1x7900 D657 T840 PRZ LO3 SB	2667	77	68	8376	72,9	115	80+	4000	5,40
Serpens LED1x4300 D658 T840 PRZ LO1 SB	2842	77	68	4531	33,7	134	80+	4000	5,80
Serpens LED1x6200 D659 T840 PRZ LO2 SB	2842	77	68	6587	52,5	125	80+	4000	5,80
Serpens LED1x8400 D660 T840 PRZ LO3 SB	2842	77	68	8934	77,8	115	80+	4000	5,80
* tolerance range for optical and electrical data: ±10%. Values ap	ply to an ambient	t temperature	of 25℃						

ENEC - Available options:

Driver with switch-control dimming SDIM DALI Driver with DALI interface

TECHNICAL DATA SHEET

5TB 5-pole terminal block in middle of luminaire for easy through wiring

Through wiring $3x1.5 \text{ mm}^2$ with two push-in terminal blocks (for luminaire up to 1700mm) Through wiring $5x1.5 \text{ mm}^2$ with two push-in terminal blocks (for luminaire up to 1700mm) 1LIN 3LIN Through wiring 3x1.5 mm² with two push-in terminal blocks (for luminaire lengths 1701-3000mm) 11 TN 3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks (for luminaire lengths 1701-3000mm)

*note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

G Strain relief for power supply cable

*note - 1G option included for models marked with ENEC

for in-line connection end/first luminaire (lengths: 602/895/1187/1421/1655mm) LL for in-line connection intermediate luminaire (lengths: 585/ 878/ 1170/ 1404/ 1638mm) for in-line connection end/first luminaire (lengths: 1772/ 1945/ 2123/ 2474/ 2650/ 2825mm) LL for in-line connection intermediate luminaire (lengths: 1755/ 1931/ 2106/ 2457/ 2633/ 2808mm)

*note - for L and LL models joint kit and 1LIN option included (5TB option for lengths up to 800mm)

Opal diffuser with high light transmittance OP LT80

PR7 Micro-linear prismatic diffuser I O1 Light output level 1 102 Light output level 2

103 Light output level 3

SB Support brackets for installation into a plasterboard ceiling

*note - SB option included

RAL RAL colour

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840

Available options:

EAIR Integrated smart sensor and driver with wireless communication and grouping possibilities for lighting control

ACT+ Integrated self-learning sensor and driver for lighting control

TW Integrated light source and driver for Tunable white control 2700-6500 K Integrated light source and driver for Tunable white control 2700-6500 K *note - Please ask for special models with options EAIR, ACT+ and TW

*note - For options EAİR and ACT+ luminaire housing is 65mm longer EM3 Emergency version 3 hours

ЕМ3

ЕМ3В Emergency version 3 hours (best available technology)

EM3A Emergency version a quipped with an autonomous testing system, 3 hours EM3D Emergency version 3 hours with DALI interface
*note - EM options applicable for models longer than 1000mm ЕМЗА

EM3D

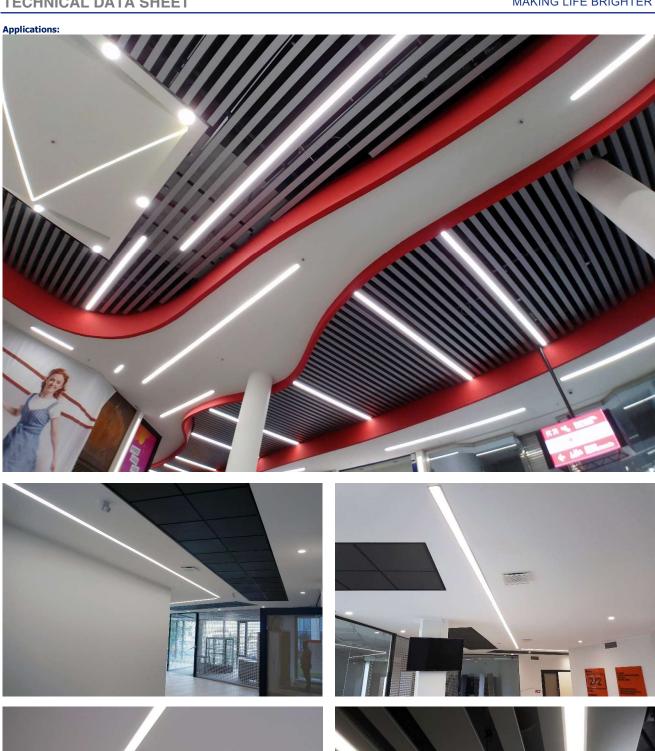
1G Strain relief for power supply cable Strain relief for power supply cable, 2pcs 2G

IP44 protection degree (not applicable for L and LL type luminaires)

*note - IP44 option not applicable for L and LL models













SERPENS P LED

Product Group: Aluminum Profile Luminaires

















A recessed LED luminaire with double parabolic reflector for a glare-free lighting effect

Louvre: double parabolic, UGR<19 glare protection Diffuser: translucent polycarbonate film, UV stabilized

Body: extruded aluminium profile, white (RAL 9010) finish with sandpaper texture

General data:

Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/ L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05

Installation:

Suitable for plasterboard or similar types of ceiling, requires a cut-out. Supplied with supports brackets (SB). Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application:

Office, education, hotel, corridor, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Serpens P LED1x2550 D936 T830 LO1 SB	1155	77	68	2465	19,6	126	80+	3000	2,50
Serpens P LED1x3700 D937 T830 LO3 SB	1155	77	68	3549	28,9	123	80+	3000	2,50
Serpens P LED1x3850 D938 T830 LO1 SB	1686	77	68	3698	28,7	129	80+	3000	3,60
Serpens P LED1x4900 D939 T830 LO2 SB	1686	77	68	4732	38,6	123	80+	3000	3,70
Serpens P LED1x5450 D940 T830 LO3 SB	1686	77	68	5239	42,7	123	80+	3000	3,70
Serpens P LED1x2550 D936 T840 LO1 SB	1155	77	68	2541	19,6	130	80+	4000	2,50
Serpens P LED1x3700 D937 T840 LO3 SB	1155	77	68	3658	28,9	127	80+	4000	2,50
Serpens P LED1x3850 D938 T840 LO1 SB	1686	77	68	3811	28,7	133	80+	4000	3,60
Serpens P LED1x4900 D939 T840 LO2 SB	1686	77	68	4878	38,6	127	80+	4000	3,70
Serpens P LED1x5450 D940 T840 LO3 SB	1686	77	68	5401	42,7	127	+08	4000	3,70

* tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities for lighting control

Integrated self-learning sensor and driver for lighting control Please ask for special models with options EAIR, ACT+

*note EM3

Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5-pole terminal block in middle of luminaire for easy through wiring 5TB 1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks (for luminaire up

to 1700mm)

Through wiring $5x1.5\ mm^2$ with two push-in terminal blocks (for luminaire up 3LIN to 1700mm)

Strain relief for power supply cable 1G Strain relief for power supply cable, 2pcs 2G

SB Support brackets for installation into a plasterboard ceiling

*note - SB option included

L for in-line connection end/first luminaire (lengths: 1141/ 1672mm)

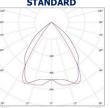
LL for in-line connection intermediate luminaire (lengths: 1127/ 1658mm)

*note - for L and LL models joint kit and 1LIN option included (5TB option for lengths up to 800mm) LL

LO1 Light output level 1 LO2 Light output level 2 LO3 Light output level 3 WID Wide beam reflector RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

STANDARD







SERPENS D LED

Product Group: Aluminum Profile Luminaires

















Description: A recessed LED luminaire with opal or micro-linear prismatic difuser for in-line connection without gaps

Diffuser: opal (OP LT80) or micro-linear prismatic (PRZ) polycarbonate, UV stabilized

Body: extruded aluminium profile, white (RAL 9010) finish with sandpaper texture

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 750000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05 Glow wire test, °C: 650 EEC: A+

Suitable for plasterboard or similar types of ceiling, requires a cut-out. Supplied with supports brackets (SB). Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2 Installation:

Environment: Indoor

Application: Office, education, hotel, corridor, retail, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Serpens D LED2x1100 D461 T840 OP LT80 SB	619	126	68	2148	22,1	97	80+	4000	1,60
Serpens D LED2x1600 D462 T840 OP LT80 SB	619	126	68	3019	30,2	100	+08	4000	1,60
Serpens D LED2x1700 D463 T840 OP LT80 SB	912	126	68	3221	31,3	103	80+	4000	2,10
Serpens D LED2x2300 D464 T840 OP LT80 SB	912	126	68	4528	45,3	100	+08	4000	2,10
Serpens D LED2x2200 E157 T840 OP LT80 SB	1204	126	68	4295	41,8	103	+08	4000	2,60
Serpens D LED2x3100 E158 T840 OP LT80 SB	1204	126	68	6037	60,4	100	+08	4000	2,60
Serpens D LED2x2700 E159 T840 OP LT80 SB	1497	126	68	5369	52,2	103	+08	4000	3,00
Serpens D LED2x3800 E160 T840 OP LT80 SB	1497	126	68	7547	75,6	100	80+	4000	3,00
Serpens D LED2x4300 E161 T840 OP LT80 SB	2374	126	68	8590	83,6	103	+08	4000	5,20
Serpens D LED2x6100 E162 T840 OP LT80 SB	2374	126	68	12074	120,9	100	80+	4000	5,20
Serpens D LED2x5400 E163 T840 OP LT80 SB	2959	126	68	10738	104,4	103	80+	4000	6,00
Serpens D LED2x7600 E164 T840 OP LT80 SB	2959	126	68	15093	151,1	100	80+	4000	6,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

ЕМЗВ Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5TB 5-pole terminal block in middle of luminaire for easy through wiring Through wiring 3x1.5 mm² with two push-in terminal blocks
Through wiring 5x1.5 mm² with two push-in terminal blocks 1LIN 3LIN *note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

Strain relief for power supply cable 1G

for in-line connection end/first luminaire (lengths: 602/894,5/1187/1479,5/

2357/ 2942mm)

for in-line connection intermediate luminaire (lengths: 585/ 877,5/ 1170/ LL

1462,5/ 2340/ 2925mm)

Opal diffuser with high light transmittance Micro-linear prismatic diffuser OP LT80

PRZ

Support brackets for installation into a plasterboard ceiling SB

*note - SB option included

IP44 protection degree (not applicable for L and LL type luminaires) - IP44 option not applicable for L and LL models IP44

*note

RAL RAL colour

Colour temperature 3000K, CRI 80+ T830 T840 Colour temperature 4000K, CRI 80+







DECOR S LED

Product Group: Aluminum Profile Luminaires

















Description:

A surface or suspended LED luminaire with opal difuser and ultra slim design for in-line connection without gaps

Diffuser: opal polycarbonate, UV stabilized Body: extruded aluminium profile, light grey (RAL 9006) finish with sandpaper texture

General data:

Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 50000/L90B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05 Glow wire test, °C: 650

EEC: A++

Installation:

Surface luminaire designed to be fixed to ceiling of any type or suspended. Wire suspension set and plastic cap are available on request.

Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, retail, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Decor S LED1x800 D878 T830 OP LT80 LO1	576	40	75	763	6,8	112	80+	3000	1,30
Decor S LED1x1100 D879 T830 OP LT80 LO2	576	40	75	1038	9,8	105	80+	3000	1,30
Decor S LED1x1500 D880 T830 OP LT80 LO3	576	40	75	1408	13,7	103	80+	3000	1,30
Decor S LED1x1200 D881 T830 OP LT80 LO1	856	40	75	1144	10,2	112	80+	3000	1,80
Decor S LED1x1650 D882 T830 OP LT80 LO2	856	40	75	1557	13,9	112	80+	3000	1,80
Decor S LED1x2250 D883 T830 OP LT80 LO3	856	40	75	2111	20,6	103	80+	3000	1,80
Decor S LED1x1600 D884 T830 OP LT80 LO1	1136	40	75	1525	12,8	119	80+	3000	2,40
Decor S LED1x2200 D885 T830 OP LT80 LO2	1136	40	75	2076	18,5	112	80+	3000	2,40
Decor S LED1x3000 D886 T830 OP LT80 LO3	1136	40	75	2815	26,8	105	80+	3000	2,40
Decor S LED1x2000 D887 T830 OP LT80 LO1	1416	40	75	1907	16,1	119	80+	3000	2,90
Decor S LED1x2750 D888 T830 OP LT80 LO2	1416	40	75	2595	23,2	112	80+	3000	2,90
Decor S LED1x3700 D889 T830 OP LT80 LO3	1416	40	75	3519	32,4	109	80+	3000	2,90
Decor S LED1x2400 D890 T830 OP LT80 LO1	1696	40	75	2288	19,3	119	80+	3000	3,40
Decor S LED1x3300 D891 T830 OP LT80 LO2	1696	40	75	3114	27,2	115	80+	3000	3,40
Decor S LED1x4450 D892 T830 OP LT80 LO3	1696	40	75	4223	38,9	109	80+	3000	3,40
Decor S LED1x2800 D893 T830 OP LT80 LO1	1976	40	75	2669	22,5	119	80+	3000	4,00
Decor S LED1x3800 D894 T830 OP LT80 LO2	1976	40	75	3633	30,6	119	80+	3000	4,00
Decor S LED1x5150 D895 T830 OP LT80 LO3	1976	40	75	4927	45,3	109	80+	3000	4,00
Decor S LED1x800 D878 T840 OP LT80 LO1	576	40	75	797	6,8	117	80+	4000	1,30
Decor S LED1x1100 D879 T840 OP LT80 LO2	576	40	75	1084	9,8	110	80+	4000	1,30
Decor S LED1x1500 D880 T840 OP LT80 LO3	576	40	75	1470	13,7	107	80+	4000	1,30
Decor S LED1x1200 D881 T840 OP LT80 LO1	856	40	75	1195	10,2	117	80+	4000	1,80
Decor S LED1x1650 D882 T840 OP LT80 LO2	856	40	75	1627	13,9	117	80+	4000	1,80
Decor S LED1x2250 D883 T840 OP LT80 LO3	856	40	75	2205	20,6	107	80+	4000	1,80
Decor S LED1x1600 D884 T840 OP LT80 LO1	1136	40	75	1594	12,8	124	80+	4000	2,40
Decor S LED1x2200 D885 T840 OP LT80 LO2	1136	40	75	2169	18,5	117	80+	4000	2,40
Decor S LED1x3000 D886 T840 OP LT80 LO3	1136	40	75	2940	26,8	110	80+	4000	2,40
Decor S LED1x2000 D887 T840 OP LT80 LO1	1416	40	75	1992	16,1	124	80+	4000	2,90
Decor S LED1x2750 D888 T840 OP LT80 LO2	1416	40	75	2711	23,2	117	80+	4000	2,90
Decor S LED1x3700 D889 T840 OP LT80 LO3	1416	40	75	3675	32,4	113	80+	4000	2,90
Decor S LED1x2400 D890 T840 OP LT80 LO1	1696	40	75	2390	19,3	124	80+	4000	3,40
Decor S LED1x3300 D891 T840 OP LT80 LO2	1696	40	75	3253	27,2	120	80+	4000	3,40
Decor S LED1x4450 D892 T840 OP LT80 LO3	1696	40	75	4410	38,9	113	80+	4000	3,40
Decor S LED1x2800 D893 T840 OP LT80 LO1	1976	40	75	2789	22,5	124	80+	4000	4,00
Decor S LED1x3800 D894 T840 OP LT80 LO2	1976	40	75	3795	30,6	124	80+	4000	4,00
Decor S LED1x5150 D895 T840 OP LT80 LO3	1976	40	75	5146	45,3	113	80+	4000	4,00
* tolerance range for optical and electrical data: ±10%. Values	apply to an ar	mbient tempei	rature of 25°C	•					

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface Pull switch device, on/off **PULL** *note For PULL option luminaire housing is 50mm longer FM3 Emergency version 3 hours

FM3B Emergency version 3 hours (best available technology)

FM3A Emergency version equipped with an autonomous testing system, 3 hours

FM3D Emergency version 3 hours with DALI interface

*note - EM options applicable for models longer than 1000mm

5TB 5-pole terminal block in middle of luminaire for easy through wiring 1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks Through wiring 5x1.5 mm² with two push-in terminal blocks 3LIN *note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

Strain relief for power supply cable Strain relief for power supply cable, 2pcs

CBF3-2.0m spiral Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent CBF3-2.0m clear

Suspended version SUS

Suspended luminaires it is recommended to use one of CBF3 option for easier mounting

L for in-line connection end/first luminaire (lengths: 568/ 848/1128/ 1408/1688/ 1968mm)

LL for in-line connection intermediate luminaire (lengths: 561/ 841/ 1121/ 1401/ 1681/ 1961mm) 1 LL

*note - for L and LL models 3LIN option included, 5TB option for lengths up to 800mm

RAL RAL colour

OP LT80 Opal diffuser with high light transmittance

LO1 Light output level 1 LO2 Light output level 2 Light output level 3 LO3

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs *note - 2pcs MTG SUSI KIT for length up to 2000mm



Product: Suspension rope 0.001x5m Description: Suspension rope 0.001x5m, 1pcs



Product: WALL MTG KIT - Decor S LED RAL9006S

Description: Support bracket for Decor S LED luminaire installation onto wall, 1pcs

*note - 2pcs WALL MTG KIT for length up to 2000mm



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6.3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm





DECOR LED

Product Group: Aluminum Profile Luminaires

















Images for the product family and options:



Description: A surface or suspended LED luminaire with opal or micro-linear prismatic difuser for in-line connection without gaps

Diffuser: opal (OP LT80) or micro-linear prismatic (PRZ) polycarbonate, UV stabilized Body: extruded aluminium profile, light grey (RAL 9006) finish with sandpaper texture

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/ L90B50

Operating temperature range, °C: ta -15...+35 Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: İK05

Glow wire test, °C: 650 EEC: A++

Installation: Surfa

Surface luminaire designed to be fixed to ceiling of any type or suspended. Wire suspension set and plastic cap are available on request.

Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoo

Application: Office, education, household, hotel, corridor, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions















High flexibility to meet specific project requirements, as luminaire is available in three standard colours: light grey RAL 9006, white RAL 9010 and black RAL 9005, or can be painted to any other RAL code colour on request. For more information see the option list



Pull switch version (to switch on/off) available on request. For more information see the option list





Fitting can be produced with closed profile from one or both ends according to meet specific customer design. For more information see the option list







Brackets WALL MTG KIT- Decor LED RAL9006S for DECOR LED series mounting directly to the wall with up or down lighting

Decor LED fittings have been designed for connection in modern lighting systems with a wide choice of join accessories. Thanks to interesting design and wide choice of optics, they comply with the highest lighting standards and act as an interesting element of interior design









I-JOIN MTG KIT Decor LED RAL9006S

L-JOIN MTG KIT Decor LED RAL9006S

T-JOIN MTG KIT Decor LED RAL9006S

X-JOIN MTG KIT Decor LED RAL9006S

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Decor LED1x950 D601 T830 OP LT80 LO1	599	58	68	906	8,5	106	80+	3000	1,30
Decor LED1x1300 D602 T830 OP LT80 LO2	599	58	68	1233	12,3	100	80+	3000	1,30
Decor LED1x1750 D603 T830 OP LT80 LO3	599	58	68	1672	17,1	97	80+	3000	1,30
Decor LED1x1450 D604 T830 OP LT80 LO1	892	58	68	1359	12,0	113	+08	3000	1,80
Decor LED1x1950 D605 T830 OP LT80 LO2	892	58	68	1849	17,4	106	80+	3000	1,80
Decor LED1x2650 D606 T830 OP LT80 LO3	892	58	68	2507	25,7	97	80+	3000	1,80
Decor LED1x1900 D607 T830 OP LT80 LO1	1184	58	68	1811	16,1	113	80+	3000	2,30
Decor LED1x2600 D608 T830 OP LT80 LO2	1184	58	68	2465	23,2	106	+08	3000	2,30
Decor LED1x3500 D609 T830 OP LT80 LO3	1184	58	68	3343	32,4	103	+08	3000	2,30
Decor LED1x2300 D610 T830 OP LT80 LO1	1418	58	68	2174	19,3	113	80+	3000	2,60
Decor LED1x3100 D611 T830 OP LT80 LO2	1418	58	68	2958	27,8	106	+08	3000	2,60
Decor LED1x4200 D612 T830 OP LT80 LO3	1418	58	68	4012	38,9	103	80+	3000	2,60
Decor LED1x2650 D613 T830 OP LT80 LO1	1652	58	68	2536	22,5	113	+08	3000	3,10
Decor LED1x3650 D614 T830 OP LT80 LO2	1652	58	68	3451	32,4	106	80+	3000	3,10
Decor LED1x4900 D615 T830 OP LT80 LO3	1652	58	68	4680	45,4	103	+08	3000	3,10
Decor LED1x2850 D616 T830 OP LT80 LO1	1769	58	68	2717	22,7	119	80+	3000	3,40
Decor LED1x3900 D617 T830 OP LT80 LO2	1769	58	68	3698	32,8	113	+08	3000	3,40
Decor LED1x5250 D618 T830 OP LT80 LO3	1769	58	68	5015	48,6	103	80+	3000	3,40
Decor LED1x2950 D850 T830 OP LT80 LO1	1945	58	68	2798	23,2	121	80+	3000	3,70
Decor LED1x4250 D851 T830 OP LT80 LO2	1945	58	68	4067	36,1	113	80+	3000	3,70
Decor LED1x5800 D852 T830 OP LT80 LO3	1945	58	68	5516	53,5	103	80+	3000	3,70
Decor LED1x3200 D619 T830 OP LT80 LO1	2120	58	68	3052	25,3	121	80+	3000	4,00
Decor LED1x4650 D620 T830 OP LT80 LO2	2120	58	68	4437	39,4	113	80+	3000	4,00
Decor LED1x6300 D621 T830 OP LT80 LO3	2120	58	68	6017	58,3	103	80+	3000	4,00
Decor LED1x3750 D622 T830 OP LT80 LO1	2471	58	68	3561	29,5	121	80+	3000	4,60
Decor LED1x5450 D623 T830 OP LT80 LO2	2471	58	68	5177	45,9	113	80+	3000	4,60
Decor LED1x7350 D624 T830 OP LT80 LO3	2471	58	68	7020	68,1	103	80+	3000	4,60
Decor LED1x4000 D625 T830 OP LT80 LO1	2647	58	68	3815	31,6	121	80+	3000	5,00
Decor LED1x5800 D626 T830 OP LT80 LO2	2647	58	68	5546	49,2	113	80+	3000	5,00
Decor LED1x7900 D627 T830 OP LT80 LO3	2647	58	68	7522	72,9	103	80+	3000	5,00
Decor LED1x4300 D628 T830 OP LT80 LO1	2822	58	68	4070	33,7	121	80+	3000	5,30
Decor LED1x6200 D629 T830 OP LT80 LO2	2822	58	68	5916	52,5	113	80+	3000	5,30
Decor LED1x8400 D630 T830 OP LT80 LO3	2822	58	68	8023	77,8	103	+08	3000	5,30
Decor LED1x950 D601 T840 OP LT80 LO1	599	58	68	946	8,5	111	80+	4000	1,30
Decor LED1x1300 D602 T840 OP LT80 LO2	599	58	68	1288	12,3	105	80+	4000	1,30
Decor LED1x1750 D603 T840 OP LT80 LO3	599	58	68	1746	17,1	102	80+	4000	1,30
Decor LED1x1450 D604 T840 OP LT80 LO1	892	58	68	1419	12,0	118	80+	4000	1,80
Decor LED1x1950 D605 T840 OP LT80 LO2	892	58	68	1931	17,4	111	80+	4000	1,80
Decor LED1x2650 D606 T840 OP LT80 LO3	892	58	68	2619	25,7	102	80+	4000	1,80

NORTHCLIFFE

MAKING LIFE BRIGHTER

TECHNICAL DATA SHEET

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Decor LED1x1900 D607 T840 OP LT80 LO1	1184	58	68	1892	16,1	118	80+	4000	2,30
Decor LED1x2600 D608 T840 OP LT80 LO2	1184	58	68	2575	23,2	111	80+	4000	2,30
Decor LED1x3500 D609 T840 OP LT80 LO3	1184	58	68	3493	32,4	108	80+	4000	2,30
Decor LED1x2300 D610 T840 OP LT80 LO1	1418	58	68	2270	19,3	118	80+	4000	2,60
Decor LED1x3100 D611 T840 OP LT80 LO2	1418	58	68	3090	27,8	111	80+	4000	2,60
Decor LED1x4200 D612 T840 OP LT80 LO3	1418	58	68	4191	38,9	108	80+	4000	2,60
Decor LED1x2650 D613 T840 OP LT80 LO1	1652	58	68	2648	22,5	118	80+	4000	3,10
Decor LED1x2636 D613 1646 OF L166 L61 Decor LED1x3650 D614 T840 OP LT80 LO2			68	3605					
	1652	58			32,4	111	80+	4000	3,10
Decor LED1x4900 D615 T840 OP LT80 LO3	1652	58	68	4890	45,4	108	+08	4000	3,10
Decor LED1x2850 D616 T840 OP LT80 LO1	1769	58	68	2838	22,7	125	80+	4000	3,40
Decor LED1x3900 D617 T840 OP LT80 LO2	1769	58	68	3863	32,8	118	80+	4000	3,40
Decor LED1x5250 D618 T840 OP LT80 LO3	1769	58	68	5239	48,6	108	80+	4000	3,40
Decor LED1x2950 D850 T840 OP LT80 LO1	1945	58	68	2923	23,2	126	80+	4000	3,70
Decor LED1x4250 D851 T840 OP LT80 LO2	1945	58	68	4249	36,1	118	80+	4000	3,70
Decor LED1x5800 D852 T840 OP LT80 LO3	1945	58	68	5763	53,5	108	80+	4000	3,70
Decor LED1x3200 D619 T840 OP LT80 LO1	2120	58	68	3189	25,3	126	80+	4000	4,00
Decor LED1x4650 D620 T840 OP LT80 LO2	2120	58	68	4636	39,4	118	80+	4000	4,00
Decor LED1x6300 D621 T840 OP LT80 LO3	2120	58	68	6287	58,3	108	80+	4000	4,00
	2471	58	68			126	80+	4000	
Decor LED1x3750 D622 T840 OP LT80 LO1				3720	29,5				4,60
Decor LED1x5450 D623 T840 OP LT80 LO2	2471	58	68	5408	45,9	118	+08	4000	4,60
Decor LED1x7350 D624 T840 OP LT80 LO3	2471	58	68	7335	68,1	108	80+	4000	4,60
Decor LED1x4000 D625 T840 OP LT80 LO1	2647	58	68	3986	31,6	126	80+	4000	5,00
Decor LED1x5800 D626 T840 OP LT80 LO2	2647	58	68	5794	49,2	118	80+	4000	5,00
Decor LED1x7900 D627 T840 OP LT80 LO3	2647	58	68	7859	72,9	108	80+	4000	5,00
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Decor LED1x4300 D628 T840 OP LT80 LO1	2822	58	68	4252	33,7	126	+08	4000	5,30
Decor LED1x6200 D629 T840 OP LT80 LO2	2822	58	68	6181	52,5	118	+08	4000	5,30
Decor LED1x8400 D630 T840 OP LT80 LO3	2822	58	68	8383	77,8	108	80+	4000	5,30
					,-				-,
Decor LED1x950 D601 T830 PRZ LO1	599	58	68	965	8,5	113	80+	3000	1,30
Decor LED1x1300 D602 T830 PRZ LO2	599	58	68	1314	12,3	107	+08	3000	1,30
Decor LED1x1750 D603 T830 PRZ LO3	599	58	68	1781	17,1	104	+08	3000	1,30
Decor LED1x1450 D604 T830 PRZ LO1	892	58	68	1448	12,0	120	80+	3000	1,80
Decor LED1x1950 D605 T830 PRZ LO2	892	58	68	1970	17,4	113	80+	3000	1,80
Decor LED1x2650 D606 T830 PRZ LO3	892	58	68		25,7	104	80+	3000	1,80
				2672					
Decor LED1x1900 D607 T830 PRZ LO1	1184	58	68	1931	16,1	120	+08	3000	2,30
Decor LED1x2600 D608 T830 PRZ LO2	1184	58	68	2627	23,2	113	80+	3000	2,30
Decor LED1x3500 D609 T830 PRZ LO3	1184	58	68	3563	32,4	110	80+	3000	2,30
Decor LED1x2300 D610 T830 PRZ LO1	1418	58	68	2317	19,3	120	80+	3000	2,60
									<u> </u>
Decor LED1x3100 D611 T830 PRZ LO2	1418	58	68	3153	27,8	113	80+	3000	2,60
Decor LED1x4200 D612 T830 PRZ LO3	1418	58	68	4276	38,9	110	+08	3000	2,60
Decor LED1x2650 D613 T830 PRZ LO1	1652	58	68	2703	22,5	120	+08	3000	3,10
Decor LED1x3650 D614 T830 PRZ LO2	1652	58	68	3678	32,4	113	80+	3000	3,10
Decor LED1x4900 D615 T830 PRZ LO3	1652	58	68	4988	45,4	110	80+	3000	3,10
Decor LED1x2850 D616 T830 PRZ LO1	1769	58	68	2896	· · · · · · · · · · · · · · · · · · ·	127	80+	3000	3,40
					22,7				
Decor LED1x3900 D617 T830 PRZ LO2	1769	58	68	3941	32,8	120	+08	3000	3,40
Decor LED1x5250 D618 T830 PRZ LO3	1769	58	68	5344	48,6	110	80+	3000	3,40
Decor LED1x2950 D850 T830 PRZ LO1	1945	58	68	2982	23,2	129	80+	3000	3,70
Decor LED1x4250 D851 T830 PRZ LO2	1945	58	68	4335	36,1	120	80+	3000	3,70
Decor LED1x5800 D852 T830 PRZ LO3	1945	58	68	5879	53,5	110	80+	3000	3,70
Decor LED1x3200 D619 T830 PRZ LO1	2120	58	68	3253	25,3	129	80+	3000	4,00
Decor LED1x4650 D620 T830 PRZ LO2	2120	58	68	4729	39,4	120	80+	3000	4,00
Decor LED1x6300 D621 T830 PRZ LO3	2120	58	68	6413	58,3	110	+08	3000	4,00
Decor LED1x3750 D622 T830 PRZ LO1	2471	58	68	3795	29,5	129	80+	3000	4,60
Decor LED1x5450 D623 T830 PRZ LO2	2471	58	68	5517	45,9	120	80+	3000	4,60
					· · · · · · · · · · · · · · · · · · ·				
Decor LED1x7350 D624 T830 PRZ LO3	2471	58	68	7482	68,1	110	80+	3000	4,60
Decor LED1x4000 D625 T830 PRZ LO1	2647	58	68	4066	31,6	129	+08	3000	5,00
Decor LED1x5800 D626 T830 PRZ LO2	2647	58	68	5911	49,2	120	+08	3000	5,00
Decor LED1x7900 D627 T830 PRZ LO3	2647	58	68	8017	72,9	110	80+	3000	5,00
Decor LED1x4300 D628 T830 PRZ LO1	2822	58	68	4337	33,7	129	80+	3000	5,30
Decor LED1x6200 D629 T830 PRZ LO2	2822	58	68	6305	52,5	120	80+	3000	5,30
Decor LED1x8400 D630 T830 PRZ LO3	2822	58	68	8551	77,8	110	80+	3000	5,30
Decor LED1x950 D601 T840 PRZ LO1	599	58	68	1008	8,5	118	+08	4000	1,30
Decor LED1x1300 D602 T840 PRZ LO2	599	58	68	1372	12,3	112	80+	4000	1,30
Decor LED1x1750 D603 T840 PRZ LO3	599	58	68	1861	17,1	109	80+	4000	1,30
Decor LED1x1450 D604 T840 PRZ LO1	892	58	68	1512	12,0	126	80+	4000	1,80
Decor LED1x1950 D605 T840 PRZ LO2	892	58	68	2059	17,4	118	80+	4000	1,80
					· · · · · · · · · · · · · · · · · · ·				
Decor LED1x2650 D606 T840 PRZ LO3	892	58	68	2791	25,7	109	80+	4000	1,80
Decor LED1x1900 D607 T840 PRZ LO1	1184	58	68	2016	16,1	126	+08	4000	2,30
Decor LED1x2600 D608 T840 PRZ LO2	1184	58	68	2745	23,2	118	80+	4000	2,30
Decor LED1x3500 D609 T840 PRZ LO3	1184	58	68	3723	32,4	115	80+	4000	2,30
Decor LED1x3300 D610 T840 PRZ LO1	1418	58	68	2419	19,3	126	80+	4000	2,60
Decor LED1x3100 D611 T840 PRZ LO2	1418	58	68	3294	27,8	118	80+	4000	2,60
Decor LED1x4200 D612 T840 PRZ LO3	1418	58	68	4467	38,9	115	+08	4000	2,60
Decor LED1x2650 D613 T840 PRZ LO1	1652	58	68	2823	22,5	126	80+	4000	3,10
Decor LED1x3650 D614 T840 PRZ LO2	1652	58	68	3843	32,4	118	80+	4000	3,10
Decor LED1x4900 D615 T840 PRZ LO3	1652	58	68	5212	45,4	115	80+	4000	3,10
Decor LED1x2850 D616 T840 PRZ LO1	1769	58	68	3024	22,7	133	80+	4000	3,40
Decor LED1x3900 D617 T840 PRZ LO2	1769	58	68	4117	32,8	125	80+	4000	3,40
Decor LED1x5250 D618 T840 PRZ LO3	1769	58	68	5584	48,6	115	80+	4000	3,40
Decor LED1x2950 D850 T840 PRZ LO1	1945	58	68	3115	23,2	134	80+	4000	3,70
Decor LED1x4250 D851 T840 PRZ LO2	1945	58	68	4529	36,1	125	80+	4000	3,70
					· · · · · · · · · · · · · · · · · · ·				
Decor LED1x5800 D852 T840 PRZ LO3	1945	58	68	6142	53,5	115	80+	4000	3,70
Decor LED1x3200 D619 T840 PRZ LO1	2120	58	68	3398	25,3	134	80+	4000	4,00
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NORTHCLIFFE

MAKING LIFE BRIGHTER

Decor LED1x4650 D620 T840 PRZ LO2 2120 58 68 4941 39,4 125 80+ 4000 Decor LED1x6300 D621 T840 PRZ LO3 2120 58 68 6701 58,3 115 80+ 4000 4.00 Decor LED1x3750 D622 T840 PR7 LO1 2471 58 68 3965 29.5 134 80+ 4000 4,60 Decor LED1x5450 D623 T840 PRZ LO2 2471 58 68 5764 45,9 125 80+ 4000 4,60 Decor LED1x7350 D624 T840 PRZ LO3 58 7817 2471 68 68,1 115 80+ 4000 4,60 Decor LED1x4000 D625 T840 PRZ LO1 2647 58 4248 31,6 134 80+ 4000 5,00 68 Decor LED1x5800 D626 T840 PRZ LO2 2647 58 6176 80+ 4000 5,00 68 49.2 125 Decor LED1x7900 D627 T840 PRZ LO3 58 2647 68 8376 72.9 115 80+ 4000 5,00 Decor LED1x4300 D628 T840 PRZ LO1 2822 58 68 4531 33,7 134 80+ 4000 5,30 Decor LED1x6200 D629 T840 PRZ LO2 2822 58 68 6587 52,5 125 80+ 4000 5,30 Decor LED1x8400 D630 T840 PRZ LO3 2822 58 68 8934 77,8 115 80+ 4000 5,30

tolerance range for optical and electrical data: ±10%. Values apply to an ambient te

ENEC - Available options:

Driver with switch-control dimming **SDIM** DALI Driver with DALI interface

TECHNICAL DATA SHEET

5-pole terminal block in middle of luminaire for easy through wiring 5TB Through wiring $3x1.5\ mm^2$ with two push-in terminal blocks Through wiring $5x1.5\ mm^2$ with two push-in terminal blocks 1LIN 31 IN *note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

for in-line connection end/first luminaire (lengths: 592/ 885/ 1177/ 1411/ 1645/ 1762/ 1938/ 2113/ 2464/ 2640/ 2815mm) for in-line connection intermediate luminaire (lengths: 585/ 878/ 1170/ 1404/ 1638/ 1755/ 1931/ 2106/ 2457/ 2633/ 2808mm) LL

*note - for L and LL models joint kit and 1LIN option included (5TB option for lengths up to 800mm)

I-ioin L Luminaire designed to in-line connection with join element - end/first luminaire (joint element not included) Luminaire designed to in-line connection with join element - intermediate luminaire (joint element not included) I-join LL

*note - for I-join L and I-join LL models joint kit not included, 1LIN option included (5TB option for lengths up to 800mm) 1G Strain relief for power supply cable

1G *note - 1G option included for models marked with ENEC

OP LT80 Opal diffuser with high light transmittance

Micro-linear prismatic diffuser PRZ Light output level 1 LO₁ LO2 Light output level 2 LO3 Light output level 3 Suspended version SUS RAL9003S RAL 9003S colour RAL 9005S colour RAL9005S

RAL colour Colour temperature 3000K, CRI 80+ T830

Available options:

T840

EAIR Integrated smart sensor and driver with wireless communication and grouping possibilities for lighting control

Integrated self-learning sensor and driver for lighting control ACT+

Colour temperature 4000K, CRI 80+

EAIR and ACT+ luminaire housing is 65mm longer

Integrated light source and driver for Tunable white control 2700-6500 K Please ask for special models with options EAIR, ACT+ and TW TW

*note

Pull switch device, on/off **PULL** For PULL option luminaire housing is 50mm longer *note ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

Emergency version 3 hours with DALI interface EM3D

*note - EM options applicable for models longer than 1000mm 1G Strain relief for power supply cable Strain relief for power supply cable, 2pcs

CBF3-2.0m spiral Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent CBF3-2.0m clear

SUS Suspended version

- for suspended luminaires it is recommended to use one of CBF3 option for easier mounting *note

IP44 IP44 protection degree (not applicable for L and LL type luminaires)

- IP44 option not applicable for L and LL mode

Available accessories:



Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs

*note - 2pcs MTG SUSI KIT for length up to 2000mm, 3pcs MTG SUSI KIT for lengths 2000 - 3000mm



Product: Suspension rope 0.001x5m Description: Suspension rope 0.001x5m, 1pcs



Product: WALL MTG KIT - Decor LED RAL9006S

Description: Support bracket for luminaire installation onto wall. Decor LED, 1pcs *note - 2pcs WALL MTG KIT for length up to 2000mm, 3pcs WALL MTG KIT for length 2000 - 3000mm



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white









Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable $3x0.75mm^2$ for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm



Product: I-JOIN MTG KIT Decor LED RAL9006S

Description: "I" type join kit for connecting luminaires in-line *note - check RAL colour to match luminaire



Product: L-JOIN MTG KIT Decor LED RAL9006S

Description: "L" type join kit for connecting luminaires in-line *note - check RAL colour to match luminaire



Product: T-JOIN MTG KIT Decor LED RAL9006S Description: "T" type join kit for connecting luminaires in-line *note - check RAL colour to match luminaire



Product: X-JOIN MTG KIT Decor LED RAL9006S

Description: "X" type join kit for connecting luminaires in-line

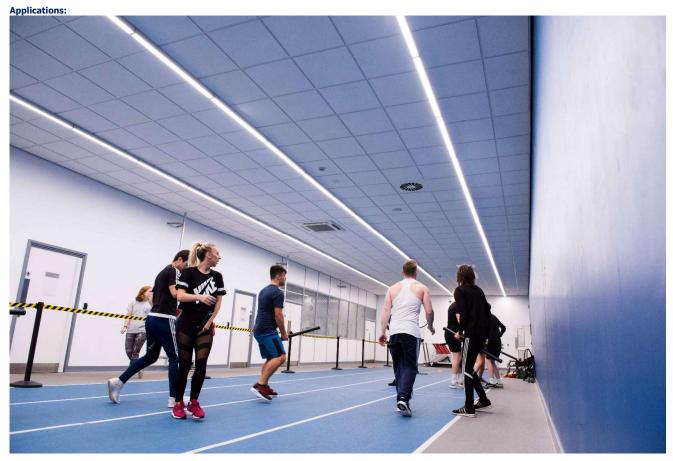
*note - check RAL colour to match luminaire



Product: BLANK Decor LED L1000mm RAL9006S

Description: Blank DECOR LED kit for connecting luminaires in-line 1000mm long, 1pcs

*note – indicate needed lenght, location and RAL colour placing order













DECOR L LED

Product Group: Aluminum Profile Luminaires

















Description:

A suspended LED luminaire with opal or micro-linear prismatic difuser and direct/indirect lighting distribution Diffuser: opal (OP LT80) or micro-linear prismatic (PRZ) polycarbonate, UV stabilized Body: extruded aluminium profile, light grey (RAL 9006) finish with sandpaper texture

General data:

Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes

Light distribution type: Direct/indirect, LG3 LED lifetime, h: 50000/ L90B50 Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP40 Mechanical impact resistance: IK05 Glow wire test, °C: 650

EEC: A++

Installation:

Surface luminaire designed to be fixed to ceiling of any type or suspended. Wire suspension set and plastic cap are available on request.

Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application:

Office, education, household, hotel, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions



LG3 - Luminaire fits to LG3 requirements with 30-40% light distribution to the ceiling and 70-60% to the floor. For more information see the option list

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	Syste m efficac y*, Im/W	CRI *	ССТ* , К	Weigh t, kg
Decor L LED1x1550/1150 D586 T830 OP LT80 LG3 LO1 SUS	1135	58	75	2536	22,0	115	+08	3000	2,70
Decor L LED1x2100/1550 D587 T830 OP LT80 LG3 LO2 SUS	1135	58	75	3451	31,7	109	+08	3000	2,70
Decor L LED1x2800/2100 D593 T830 OP LT80 LG3 LO3 SUS	1135	58	75	4680	46,9	100	+08	3000	2,70
Decor L LED1x1900/1550 D588 T830 OP LT80 LG3 LO1 SUS	1415	58	75	3260	28,3	115	+08	3000	3,20
Decor L LED1x2600/2100 D589 T830 OP LT80 LG3 LO2 SUS	1415	58	75	4437	40,7	109	+08	3000	3,20
Decor L LED1x3500/2800 D594 T830 OP LT80 LG3 LO3 SUS	1415	58	75	6017	60,3	100	+08	3000	3,20
Decor L LED1x1550/1150 D586 T840 OP LT80 LG3 LO1 SUS	1135	58	75	2649	22,0	121	+08	4000	2,70
Decor L LED1x2100/1550 D587 T840 OP LT80 LG3 LO2 SUS	1135	58	75	3605	31,7	114	+08	4000	2,70
Decor L LED1x2800/2100 D593 T840 OP LT80 LG3 LO3 SUS	1135	58	75	4890	46,9	104	+08	4000	2,70
Decor L LED1x1900/1550 D588 T840 OP LT80 LG3 LO1 SUS	1415	58	75	3406	28,3	121	+08	4000	3,20
Decor L LED1x2600/2100 D589 T840 OP LT80 LG3 LO2 SUS	1415	58	75	4635	40,7	114	+08	4000	3,20
Decor L LED1x3500/2800 D594 T840 OP LT80 LG3 LO3 SUS	1415	58	75	6287	60,3	104	+08	4000	3,20
Decor L LED1x1550/1150 D586 T830 PRZ LG3 LO1 SUS	1135	58	75	2631	22,0	120	+08	3000	2,70
Decor L LED1x2100/1550 D587 T830 PRZ LG3 LO2 SUS	1135	58	75	3581	31,7	113	+08	3000	2,70
Decor L LED1x2800/2100 D593 T830 PRZ LG3 LO3 SUS	1135	58	75	4856	46,9	104	+08	3000	2,70
Decor L LED1x1900/1550 D588 T830 PRZ LG3 LO1 SUS	1415	58	75	3379	28,3	120	+08	3000	3,20
Decor L LED1x2600/2100 D589 T830 PRZ LG3 LO2 SUS	1415	58	75	4599	40,7	113	+08	3000	3,20
Decor L LED1x3500/2800 D594 T830 PRZ LG3 LO3 SUS	1415	58	75	6237	60,3	104	+08	3000	3,20
Decor L LED1x1550/1150 D586 T840 PRZ LG3 LO1 SUS	1135	58	75	2749	22,0	125	80+	4000	2,70
Decor L LED1x2100/1550 D587 T840 PRZ LG3 LO2 SUS	1135	58	75	3741	31,7	118	+08	4000	2,70
Decor L LED1x2800/2100 D593 T840 PRZ LG3 LO3 SUS	1135	58	75	5074	46,9	108	+08	4000	2,70
Decor L LED1x1900/1550 D588 T840 PRZ LG3 LO1 SUS	1415	58	75	3531	28,3	125	+08	4000	3,20

Decor L LED1x2600/2100 D589 T840 PRZ LG3 LO2 SUS	1415	58	75	4805	40,7	118	80+	4000	3,20
Decor L LED1x3500/2800 D594 T840 PRZ LG3 LO3 SUS	1415	58	75	6517	60,3	108	+08	4000	3,20

* tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

EAIR Integrated smart sensor and driver with wireless communication and grouping

possibilities for lighting control

ACT+ Integrated self-learning sensor and driver for lighting control (applicable for

models: D593, D589)

TW Integrated light source and driver for Tunable white control 2700-6500 K

*note - For options EAIR, ACT+ luminaire housing is 65mm longer PULL Pull switch device, on/off

*note - For PULL option luminaire housing is 50mm longer EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5TB 5-pole terminal block in middle of luminaire for easy through wiring 1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks 3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks

1G Strain relief for power supply cable 2G Strain relief for power supply cable, 2pcs

CBF3-2.0m spiral Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m CBF3-2.0m clear Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent

SUS Suspended version
*note - for suspended luminaires it is recommended to use one of CBF3 option for easier mounting

L for in-line connection end/first luminaire (lengths: 1128/ 1408mm)

LL for in-line connection intermediate luminaire (lengths: 1121/ 1401mm)

*note - for Land II models in the tit and II IV notion included (5TB notion for lengths up to 800mm)

*note - for L and LL models joint kit and 1LTN option included (5TB option for lengths up to 800mm)

LG3 Luminaire fits to LG3 requirements (with direct/indirect light distribution)

OP LT80 Opal diffuser with high light transmittance

PRZ Micro-linear prismatic diffuser LO1 Light output level 1 LO2 Light output level 2 LO3 Light output level 3 RAL RAL colour per 1 meter

T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs

*note - 2pcs MTG SUSI KIT for length up to 2000mm



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable $3x0.75 \text{mm}^2$ for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm







DECOR P LED

Product Group: Aluminum Profile Luminaires





















Description: A surface or suspended LED luminaire with with double parabolic reflector for glare-free lighting effect

Louver: double parabolic, UGR<19 glare protection Diffuser: translucent polycarbonate film, UV stabilized

Body: extruded aluminium profile, light grey (RAL 9006) finish with sandpaper texture

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05

EEC: A++

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Wire suspension set and plastic cap are available on request.

Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions











Pull switch version (to switch on/off) available on request. For more information see the option list



High flexibility to meet specific project requirements, as luminaire can be painted to any RAL code colour on request. For more information see the option list





Fitting can be produced with closed profile from one or both ends according to meet specific customer design. For more information see the option list

Decor LED fittings have been designed for connection in modern lighting systems with a wide choice of join accessories. Thanks to interesting design and wide choice of optics, they comply with the highest lighting standards and act as an interesting element of interior design









I-JOIN MTG KIT Decor LED RAL9006S







Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Decor P LED1x2550 D896 T830 LO1	1135	58	68	2465	19,6	126	80+	3000	2,40
Decor P LED1x3700 D897 T830 LO3	1135	58	68	3549	28,9	123	80+	3000	2,40
Decor P LED1x3850 D898 T830 LO1	1666	58	68	3698	28,7	129	80+	3000	3,50
Decor P LED1x4900 D899 T830 LO2	1666	58	68	4732	38,6	123	80+	3000	3,60
Decor P LED1x5450 D900 T830 LO3	1666	58	68	5239	42,7	123	80+	3000	3,60
Decor P LED1x2550 D896 T840 LO1	1135	58	68	2541	19,6	130	80+	4000	2,40
Decor P LED1x3700 D897 T840 LO3	1135	58	68	3658	28,9	127	80+	4000	2,40
Decor P LED1x3850 D898 T840 LO1	1666	58	68	3811	28,7	133	80+	4000	3,50
Decor P LED1x4900 D899 T840 LO2	1666	58	68	4878	38,6	127	80+	4000	3,60
Decor P LED1x5450 D900 T840 LO3	1666	58	68	5401	42.7	127	80+	4000	3.60

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

Driver with switch-control dimming DALI Driver with DALI interface

ACT+ Integrated self-learning sensor and driver for lighting control (applicable for

models: D897, D898, D899)

PULL Pull switch device, on/off ЕМ3 Emergency version 3 hours

ЕМЗВ Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5TB 5-pole terminal block in middle of luminaire for easy through wiring 1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks 3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks Strain relief for power supply cable

1G Strain relief for power supply cable, 2pcs 2G

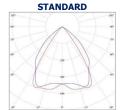
CBF3-2.0m spiral Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent CBF3-2.0m clear

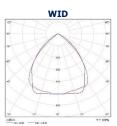
SUS Suspended version

for suspended luminaires it is recommended to use one of CBF3 option for easier mounting for in-line connection end/first luminaire (lengths: 1131/ 1662mm) LL for in-line connection intermediate luminaire (lengths: 1127/ 1658mm)
*note - for L and LL models joint kit and 1LIN option included (5TB option for lengths up to 800mm) LL

Light output level 1 LO1 Light output level 2 LO2 LO3 Light output level 3 WID Wide beam reflector RAL colour RAL

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840





Available accessories:



Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs *note - 2pcs MTG SUSI KIT for length up to 2000mm



Product: Suspension rope 0.001x5m Description: Suspension rope 0.001x5m, 1pcs



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable $3x0.75 \text{mm}^2$ for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm



Product: I-JOIN MTG KIT Decor LED RAL9006S

Description: "I" type join kit for connecting luminaires in-line *note - check RAL colour to match luminaire



Product: L-JOIN MTG KIT Decor LED RAL9006S

Description: "L" type join kit for connecting luminaires in-line *note - check RAL colour to match luminaire



Product: T-JOIN MTG KIT Decor LED RAL9006S

Description: "T" type join kit for connecting luminaires in-line

*note - check RAL colour to match luminaire



Product: X-JOIN MTG KIT Decor LED RAL9006S

Description: "X" type join kit for connecting luminaires in-line *note - check RAL colour to match luminaire



Product: BLANK Decor P LED L1000mm RAL9006S

Description: Blank DECOR P LED kit for connecting luminaires in-line 1000mm long, 1pcs

*note - indicate needed lenght, location and RAL colour placing order



DECOR LP LED

Product Group: Aluminum Profile Luminaires







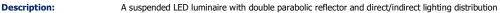












Louver: double parabolic, UGR<19 glare protection Diffuser: translucent polycarbonate film, UV stabilized

Body: extruded aluminium profile, light grey (RAL 9006) finish with sandpaper texture

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes

Light distribution type: Direct/indirect, LG3 LED lifetime, h: 75000/L80B50 Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05

EEC: A++

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Wire suspension set and plastic cap are available on request. Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, retail, public place



Sensors ensure lighting is only on when and where it is needed. The sensors can bring huge benefits in terms of energy management as they enable sunlight harvesting, automatic dimming, and sensing the presence of people. The lighting is only on when actually required so cost savings are considerable. Energy saving - typically between 30% and 50%. Application: are ideal for all office areas including work spaces, conference rooms, corridors, break-out rooms, administrative areas, stairwells and similar applications in schools and hospitals. For more information see the option list and energy saving solutions



Pull switch version (to switch on/off) available on request. For more information see the option list



LG3 – Luminaire fits to LG3 requirements with 30-40% light distribution to the ceiling and 70-60% to the floor. For more information see the option list

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	Syste m efficac y*, Im/W	CRI *	ССТ* , К	Weigh t, kg
Decor LP LED1x2550/1550 D901 T840 LG3 SUS	1135	58	75	4086	33,2	123	+08	4000	2,90
Decor LP LED1x3700/1550 D902 T840 LG3 SUS	1135	58	75	5203	42,9	122	+08	4000	2,90
Decor LP LED1x3850/2600 D903 T840 LG3 SUS	1666	58	75	6386	51,3	124	80+	4000	4,10
Decor LP LED1x4900/2600 D904 T840 LG3 SUS	1666	58	75	7453	61,2	122	80+	4000	4,20
Decor LP LED1x5450/2600 D905 T840 LG3 SUS	1666	58	75	7976	65,3	122	+08	4000	4,20

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface (Up and Down light, 2 DALI address)

PULL Pull switch device, on/off EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5TB 5-pole terminal block in middle of luminaire for easy through wiring 1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks 3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks

1G Strain relief for power supply cable
2G Strain relief for power supply cable, 2pcs

CBF3-2.0m spiral Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m CBF3-2.0m clear Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent

US Suspended version

*note - for suspended luminaires it is recommended to use one of CBF3 option for easier mounting
L for in-line connection end/first luminaire (lengths: 1131/ 1662mm)
L for in-line connection intermediate luminaire (lengths: 1127/ 1658mm)
*note - for L and LL models joint kit and 1LIN option included (5TB option for lengths up to 800mm)
LG3 Luminaire fits to LG3 requirements (with direct/indirect light distribution)

LO1 Light output level 1
LO2 Light output level 2
LO3 Light output level 3
WID Wide beam reflector

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs

*note - 2pcs MTG SUSI KIT for length up to 2000mm



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable $3x0.75 \text{mm}^2$ for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75 2.011 clear
Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm



DECOR D LED

Product Group: Aluminum Profile Luminaires







Description: A surface or suspended LED luminaire with opal or micro-linear prismatic difuser for in-line connection without gaps

Diffuser: opal (OP LT80) or micro-linear prismatic (PRZ) polycarbonate, UV stabilized

Body: extruded aluminium profile, light grey (RAL 9006) finish with sandpaper texture

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 750000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I

Ingress protection code: IP40 (IP44 optional)

Mechanical impact resistance: IK05 Glow wire test, °C: 650 EEC: A+

Installation:

Surface luminaire designed to be fixed to ceiling of any type or suspended. Wire suspension set and plastic cap are available on request. Luminaire with an option L or LL is designed for in-line connection. Push-in terminal, 5x2x2.5mm2

Environment:

Application: Office, education, hotel, corridor, retail, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Decor D LED2x1100 D469 T840 OP LT80	601	107	68	2148	22,1	97	+08	4000	1,60
Decor D LED2x1600 D470 T840 OP LT80	601	107	68	3019	30,2	100	+08	4000	1,60
Decor D LED2x1700 D471 T840 OP LT80	894	107	68	3221	31,3	103	+08	4000	2,10
Decor D LED2x2300 D472 T840 OP LT80	894	107	68	4528	45,3	100	80+	4000	2,10
Decor D LED2x2200 E200 T840 OP LT80	1186	107	68	4295	41,8	103	+08	4000	2,60
Decor D LED2x3100 E201 T840 OP LT80	1186	107	68	6037	60,4	100	80+	4000	2,60
Decor D LED2x2700 E202 T840 OP LT80	1479	107	68	5369	52,2	103	+08	4000	3,00
Decor D LED2x3800 E213 T840 OP LT80	1479	107	68	7547	75,6	100	80+	4000	3,00
Decor D LED2x4300 E214 T840 OP LT80	2356	107	68	8590	83,6	103	80+	4000	5,20
Decor D LED2x6100 E215 T840 OP LT80	2356	107	68	12074	120,9	100	80+	4000	5,20
Decor D LED2x5400 E216 T840 OP LT80	2941	107	68	10738	104,4	103	80+	4000	6,00
Decor D LED2x7600 E217 T840 OP LT80	2941	107	68	15093	151,1	100	80+	4000	6,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface PULL Pull switch device, on/off ЕМ3 Emergency version 3 hours

ЕМ3В

Emergency version 3 hours (best available technology) ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5-pole terminal block in middle of luminaire for easy through wiring 5TB Through wiring 3x1.5 mm² with two push-in terminal blocks 1LIN Through wiring 5x1.5 mm² with two push-in terminal blocks 3LIN *note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

1G Strain relief for power supply cable 2G Strain relief for power supply cable, 2pcs

CBF3-2.0m spiral Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white CBF3-2.0m clear Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent

SUS Suspended version

for in-line connection end/first luminaire (lengths: 593/885,5/1178/1470,5/

2348/ 2933mm)

LL for in-line connection intermediate luminaire (lengths: 585/877,5/1170/

1462,5/ 2340/ 2925mm)

OP LT80 Opal diffuser with high light transmittance

PRZ Micro-linear prismatic diffuser

*note - SB option included

IP44 IP44 protection degree (not applicable for L and LL type luminaires)

IP44 option not applicable for L and LL models

*note

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Suspension MTG KIT SUST

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs

*note - 2pcs MTG SUSI KIT for length up to 2000mm, 3pcs MTG SUSI KIT for lengths 2000 - 3000mm



Product: Suspension rope 0.001x5m Description: Suspension rope 0.001x5m, 1pcs



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



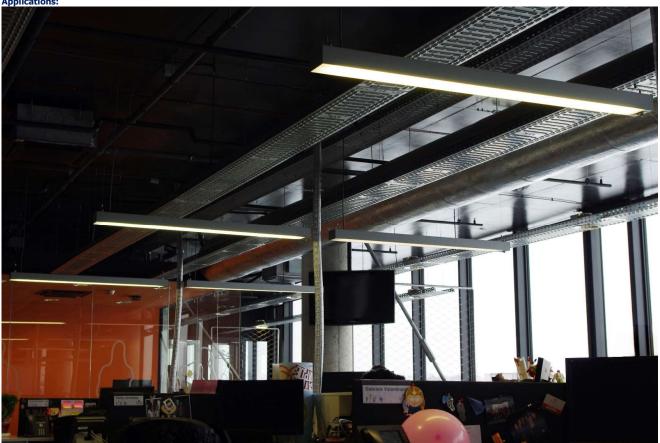
Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm





Applications:











QUADRO LED

Product Group: Aluminum Profile Luminaires

















A suspended LED luminaire with opal diffuser and rectangular design **Description:**

Diffuser: opal (OP LT80) or micro-linear prismatic (PRZ) polycarbonate, UV stabilized Body: extruded aluminium profile, light grey (RAL 9006) finish with sandpaper texture

Mains voltage: 220-240V, 0/50-60Hz General data:

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 750000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05 Glow wire test, °C: 650

Installation: Surface luminaire designed to be suspended. Wire suspension set and plastic cap are available on request. CAP cable 3x0.75 2.0m, white

Environment: Indoor

Office, education, hotel, retail, public place Application:

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI *	ССТ* , К	Weight, kg
Quadro LED1x4550 D906 T840 OP LT80	900	900	68	4542	36,4	125	80+	4000	6,60
Quadro LED1x6200 D907 T840 OP LT80	900	900	68	6181	52,5	118	80+	4000	6,60
Quadro LED1x8400 D908 T840 OP LT80	900	900	68	8383	77,8	108	80+	4000	6,60
Quadro LED1x6100 D909 T840 OP LT80	1180	1180	68	6056	48,5	125	80+	4000	8,80
Quadro LED1x8250 D910 T840 OP LT80	1180	1180	68	8241	70,0	118	80+	4000	8,80
Quadro LED1x11200 D911 T840 OP LT80	1180	1180	68	11177	103,7	108	80+	4000	8,80

 $[^]st$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

*note - DALI option in models D909, D D910, D911 use 2 DALI addresses CBF3-2.0m spiral

Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent CBF3-2.0m clear CBF3-2.0m Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white *note - CBF3-2.0m included, for clear or spiral cable please use option name CBF3-2.0m

RAL colour

T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+

OP LT80

Available accessories:



Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs

*note - 4pcs MTG SUSI KIT for 1 luminaire required



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white



Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceiling, white





Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceiling, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable $3x0.75\ 2.0m$ white Description: Cable $3x0.75mm^2$ for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6.3mm SET clear Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6.3mm and wire diameter 1mm











www.northcliffe.org



SHOP LSW LED

Product Group: Continuous Line and Batten Luminaire

05















Images for the product family and options:



Description: A continuous line LED luminaire with various optics, quick and tool-free mounting to cut installation cost to the minimum

Optics: 30x90°, 60x100°, 90x100°, asymmetric and double asymmetric light beam

Body and end caps: steel sheet, white finish

Luminaire with an option L or LL is designed for in-line connection

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 75000/L80B50 (low power versions 100000/L80B50)

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK05

EEC: A++

Installation: Suspended (suspension brackets are included). Through wired, 5x1.5mm2, two connectors, 5-pole plug(1601/VC) and socket(1602/VC),

STUCHHI

Environment: Indoor

Application: Retail, hall, public place



Shop LSW LED fittings have been designed for connection in modern lighting systems with a wide choice of join accessories. Thanks to interesting design and wide choice of optics, they comply with the highest lighting standards and act as an interesting element of interior design



SHOP LSW I-JOIN- "I" join element with LED light source



SHOP LSW T-JOIN- "T" join element with LED light source



SHOP LSW L-JOIN- "L" join element with LED light source



SHOP LSW X-JOIN- "X" join element with LED light source







Through wired 5x1.5mm2 with 5-pole plug(1601/VC) and socket(1602/VC) on both sides. Quick installation features save project time and money. For more information check the option list



		W. Jr.	Hataba	Luminaire	System	System		*	Wataba
Product	Lengt h, mm	Width, mm	Height , mm	output*, lm	power*, W	efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Shop LSW LED1x3150 D673 T830 LS90x100 L1 LO1	1155	67	66	3004	20,1	149	80+	3000	2,50
Shop LSW LED1x3900 D674 T830 LS90x100 L1 LO2	1155	67	66	3707	24,5	151	80+	3000	2,50
Shop LSW LED1x5250 D675 T830 LS90x100 L1 LO3	1155	67	66	5007	34,1	147	80+	3000	2,50
Shop LSW LED1x5850 D676 T830 LS90x100 L1 LO4	1155	67	66	5588	39,3	142	80+	3000	2,50
Shop LSW LED1x6450 D677 T830 LS90x100 L1 LO5 Shop LSW LED1x3950 D678 T830 LS90x100 L1 LO1	1155 1442	67 67	66 66	6131 3755	44,7 24,1	137 156	80+ 80+	3000 3000	2,50 3,20
Shop LSW LED1x3930 D078 1830 LS90x100 L1 LO1 Shop LSW LED1x4850 D679 T830 LS90x100 L1 LO2	1442	67	66	4634	30,6	151	80+	3000	3,20
Shop LSW LED1x16550 D680 T830 LS90x100 L1 LO3	1442	67	66	6258	42,6	147	80+	3000	3,20
Shop LSW LED1x7300 D681 T830 LS90x100 L1 LO4	1442	67	66	6985	49,2	142	80+	3000	3,20
Shop LSW LED1x8050 D682 T830 LS90x100 L1 LO5	1442	67	66	7664	55,2	139	80+	3000	3,20
Shop LSW LED1x7850 D683 T830 LS90x100 L1 LO1	2875	67	66	7510	46,6	161	+08	3000	6,30
Shop LSW LED1x9700 D684 T830 LS90x100 L1 LO2	2875	67	66	9267	58,6	158	80+	3000	6,30
Shop LSW LED1x13100 D685 T830 LS90x100 L1 LO3	2875	67	66	12517	84,3	148	80+	3000	6,30
Shop LSW LED1x14600 D686 T830 LS90x100 L1 LO4	2875	67	66	13971	97,3	144	80+	3000	6,30
Shop LSW LED1x16050 D687 T830 LS90x100 L1									
LO5	2875	67	66	15329	110,4	139	80+	3000	6,30
Shop LSW LED1x3150 D673 T840 LS90x100 L1 L01	1155	67	66	3138	20,1	156	80+	4000	2,50
Shop LSW LED1x3900 D674 T840 LS90x100 L1 LO2 Shop LSW LED1x5250 D675 T840 LS90x100 L1 LO3	1155 1155	67 67	66 66	3871 5231	24,5 34,1	158 153	80+ 80+	4000 4000	2,50 2,50
Shop LSW LED1x5250 D675 T840 LS90x100 L1 LO3 Shop LSW LED1x5850 D676 T840 LS90x100 L1 LO4	1155	67	66	5837	39,3	148	80+	4000	2,50
Shop LSW LED1x56350 D676 T646 LS90x100 L1 LO5	1155	67	66	6406	44,7	143	80+	4000	2,50
Shop LSW LED1x3950 D678 T840 LS90x100 L1 LO1	1442	67	66	3923	24,1	163	80+	4000	3,20
Shop LSW LED1x4850 D679 T840 LS90x100 L1 LO2	1442	67	66	4839	30,6	158	80+	4000	3,20
Shop LSW LED1x6550 D680 T840 LS90x100 L1 LO3	1442	67	66	6538	42,6	153	80+	4000	3,20
Shop LSW LED1x7300 D681 T840 LS90x100 L1 LO4	1442	67	66	7297	49,2	148	+08	4000	3,20
Shop LSW LED1x8050 D682 T840 LS90x100 L1 LO5	1442	67	66	8008	55,2	145	80+	4000	3,20
Shop LSW LED1x7850 D683 T840 LS90x100 L1 LO1	2875	67	66	7845	46,6	168	80+	4000	6,30
Shop LSW LED1x9700 D684 T840 LS90x100 L1 LO2 Shop LSW LED1x13100 D685 T840 LS90x100 L1	2875	67	66	9679	58,6	165	80+	4000	6,30
LO3 Shop LSW LED1x14600 D686 T840 LS90x100 L1	2875	67	66	13076	84,3	155	80+	4000	6,30
LO4 Shop LSW LED1x16050 D687 T840 LS90x100 L1	2875	67	66	14593	97,3	150	+08	4000	6,30
LO5	2875	67	66	16015	110,4	145	80+	4000	6,30
Shop LSW LED1x3150 D673 T840 LS60x100 L1 LO1	1155	67	66	3138	20,1	156	80+	4000	2,50
Shop LSW LED1x3900 D674 T840 LS60x100 L1 LO2	1155	67	66	3871	24,5	158	+08	4000	2,50
Shop LSW LED1x5250 D675 T840 LS60x100 L1 LO3	1155	67	66	5231	34,1	153	80+	4000	2,50
Shop LSW LED1x5850 D676 T840 LS60x100 L1 LO4	1155	67	66	5837	39,3	148	80+	4000	2,50
Shop LSW LED1x6450 D677 T840 LS60x100 L1 LO5 Shop LSW LED1x3950 D678 T840 LS60x100 L1 LO1	1155 1442	67 67	66 66	6406 3923	44,7 24,1	143 163	80+ 80+	4000 4000	2,50 3,20
Shop LSW LED1x3930 D078 1840 LS60x100 L1 LO1 Shop LSW LED1x4850 D679 T840 LS60x100 L1 LO2	1442	67	66	4839	30,6	158	80+	4000	3,20
Shop LSW LED1x6550 D680 T840 LS60x100 L1 LO3	1442	67	66	6538	42,6	153	80+	4000	3,20
Shop LSW LED1x7300 D681 T840 LS60x100 L1 LO4	1442	67	66	7297	49,2	148	80+	4000	3,20
Shop LSW LED1x8050 D682 T840 LS60x100 L1 LO5	1442	67	66	8008	55,2	145	80+	4000	3,20
Shop LSW LED1x7850 D683 T840 LS60x100 L1 LO1	2875	67	66	7845	46,6	168	80+	4000	6,30
Shop LSW LED1x9700 D684 T840 LS60x100 L1 LO2 Shop LSW LED1x13100 D685 T840 LS60x100 L1	2875	67	66	9679	58,6	165	80+	4000	6,30
LO3 Shop LSW LED1x14600 D686 T840 LS60x100 L1	2875	67	66	13076	84,3	155	80+	4000	6,30
LO4 Shop LSW LED1x16050 D687 T840 LS60x100 L1	2875	67	66	14593	97,3	150	80+	4000	6,30
LO5	2875	67	66	16015	110,4	145	80+	4000	6,30
Shop LSW LED1x3150 D673 T840 LS30x90 L1 LO1	1155	67	66	3138	20,1	156	80+	4000	2,50
Shop LSW LED1x3900 D674 T840 LS30x90 L1 LO2	1155	67	66	3871	24,5	158	80+	4000	2,50
Shop LSW LED1x5250 D675 T840 LS30x90 L1 LO3	1155	67	66	5231	34,1	153	80+	4000	2,50
Shop LSW LED1x5850 D676 T840 LS30x90 L1 LO4	1155	67	66	5837	39,3	148	80+	4000	2,50
Shop LSW LED1x6450 D677 T840 LS30x90 L1 LO5	1155	67	66	6406	44,7	143	80+	4000	2,50
Shop LSW LED1x3950 D678 T840 LS30x90 L1 LO1	1442	67	66	3923	24,1	163	80+	4000	3,20
Shop LSW LED1x4850 D679 T840 LS30x90 L1 LO2	1442	67	66	4839	30,6 42,6	158 153	80+ 80+	4000	3,20
Shop LSW LED1x6550 D680 T840 LS30x90 L1 LO3 Shop LSW LED1x7300 D681 T840 LS30x90 L1 LO4	1442 1442	67 67	66 66	6538 7297	42,6 49,2	153	80+ 80+	4000 4000	3,20 3,20
Shop LSW LED1x/300 D681 1640 LS30x90 L1 LO4 Shop LSW LED1x8050 D682 T840 LS30x90 L1 LO5	1442	67	66	8008	55,2	145	80+	4000	3,20
Shop LSW LED1x7850 D683 T840 LS30x90 L1 LO1	2875	67	66	7845	46,6	168	80+	4000	6,30
Shop LSW LED1x9700 D684 T840 LS30x90 L1 LO2	2875	67	66	9679	58,6	165	80+	4000	6,30
Shop LSW LED1x13100 D685 T840 LS30x90 L1 LO3	2875	67	66	13076	84,3	155	80+	4000	6,30
Shop LSW LED1x14600 D686 T840 LS30x90 L1 LO4	2875	67	66	14593	97,3	150	80+	4000	6,30
Shop LSW LED1x16050 D687 T840 LS30x90 L1 LO5	2875	67	66	16015	110,4	145	80+	4000	6,30
Shop LSW LED1x3150 D673 T840 LS2A40 L1 LO1	1155	67	66	3039	20,1	151	80+	4000	2,50
Shop LSW LED1x3900 D674 T840 LS2A40 L1 LO2	1155	67	66	3749	24,5	153	80+	4000	2,50
Shop LSW LED1x5250 D675 T840 LS2A40 L1 LO3	1155	67	66	5065	34,1	149	80+	4000	2,50
Shop LSW LED1x5850 D676 T840 LS2A40 L1 LO4	1155	67	66	5653	39,3	144	80+	4000	2,50
Shop LSW LED1x3050 D677 T840 LS2A40 L1 LO5	1155 1442	67 67	66 66	6204	44,7	139 158	80+ 80+	4000 4000	2,50
Shop LSW LED1x3950 D678 T840 LS2A40 L1 LO1 Date of issue: 2019-01-21 • NORTHCLIFFE LIGHTING				3799 -47184 Kaunas	24,1				3,20

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Shop LSW LED1x4850 D679 T840 LS2A40 L1 LO2	1442	67	66	4687	30,6	153	80+	4000	3,20
Shop LSW LED1x6550 D680 T840 LS2A40 L1 LO3	1442	67	66	6332	42,6	149	80+	4000	3,20
Shop LSW LED1x7300 D681 T840 LS2A40 L1 LO4	1442	67	66	7066	49,2	144	80+	4000	3,20
Shop LSW LED1x8050 D682 T840 LS2A40 L1 LO5	1442	67	66	7755	55,2	140	80+	4000	3,20
Shop LSW LED1x7850 D683 T840 LS2A40 L1 LO1	2875	67	66	7597	46,6	163	80+	4000	6,30
Shop LSW LED1x9700 D684 T840 LS2A40 L1 LO2	2875	67	66	9373	58,6	160	80+	4000	6,30
Shop LSW LED1x13100 D685 T840 LS2A40 L1 LO3	2875	67	66	12663	84,3	150	80+	4000	6,30
Shop LSW LED1x14600 D686 T840 LS2A40 L1 LO4	2875	67	66	14133	97,3	145	80+	4000	6,30
Shop LSW LED1x16050 D687 T840 LS2A40 L1 LO5	2875	67	66	15509	110,4	140	80+	4000	6,30
Shop LSW LED1x3150 D673 T840 LS1A18 L1 LO1	1155	67	66	2973	20,1	148	80+	4000	2,50
Shop LSW LED1x3900 D674 T840 LS1A18 L1 LO2	1155	67	66	3668	24,5	150	80+	4000	2,50
Shop LSW LED1x5250 D675 T840 LS1A18 L1 LO3	1155	67	66	4955	34,1	145	80+	4000	2,50
Shop LSW LED1x5850 D676 T840 LS1A18 L1 LO4	1155	67	66	5530	39,3	141	80+	4000	2,50
Shop LSW LED1x6450 D677 T840 LS1A18 L1 LO5	1155	67	66	6069	44,7	136	80+	4000	2,50
Shop LSW LED1x3950 D678 T840 LS1A18 L1 LO1	1442	67	66	3716	24,1	154	80+	4000	3,20
Shop LSW LED1x4850 D679 T840 LS1A18 L1 LO2	1442	67	66	4585	30,6	150	80+	4000	3,20
Shop LSW LED1x6550 D680 T840 LS1A18 L1 LO3	1442	67	66	6194	42,6	145	80+	4000	3,20
Shop LSW LED1x7300 D681 T840 LS1A18 L1 LO4	1442	67	66	6913	49,2	141	80+	4000	3,20
Shop LSW LED1x8050 D682 T840 LS1A18 L1 LO5	1442	67	66	7586	55,2	137	80+	4000	3,20
Shop LSW LED1x7850 D683 T840 LS1A18 L1 LO1	2875	67	66	7432	46,6	160	80+	4000	6,30
Shop LSW LED1x9700 D684 T840 LS1A18 L1 LO2	2875	67	66	9169	58,6	156	80+	4000	6,30
Shop LSW LED1x13100 D685 T840 LS1A18 L1 LO3	2875	67	66	12388	84,3	147	80+	4000	6,30
Shop LSW LED1x14600 D686 T840 LS1A18 L1 LO4	2875	67	66	13825	97,3	142	80+	4000	6,30
Shop LSW LED1x16050 D687 T840 LS1A18 L1 LO5	2875	67	66	15172	110,4	137	80+	4000	6,30

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Shop LSW LED1x3350 G001 T830 LS90x100 L1 LO1	1155	67	66	3183	20,3	157	80+	3000	2,50
Shop LSW LED1x4100 G002 T830 LS90x100 L1 LO2	1155	67	66	3928	24,5	160	80+	3000	2,50
Shop LSW LED1x5550 G003 T830 LS90x100 L1 LO3	1155	67	66	5306	33,9	157	80+	3000	2,50
Shop LSW LED1x6250 G004 T830 LS90x100 L1 LO4	1155	67	66	5922	39,0	152	80+	3000	2,50
Shop LSW LED1x6900 G005 T830 LS90x100 L1 LO5	1155	67	66	6498	44,2	147	80+	3000	2,50
Shop LSW LED1x9450 G016 T830 LS90x100 L1 LO6	1155	67	66	8934	60,8	147	80+	3000	2,50
Shop LSW LED1x4150 G006 T830 LS90x100 L1 LO1	1442	67	66	3979	24,2	164	80+	3000	3,20
Shop LSW LED1x5150 G007 T830 LS90x100 L1 LO2	1442	67	66	4910	30,6	160	80+	3000	3,20
Shop LSW LED1x6950 G008 T830 LS90x100 L1 LO3	1442	67	66	6632	42,3	157	80+	3000	3,20
Shop LSW LED1x7800 G009 T830 LS90x100 L1 LO4	1442	67	66	7403	48,7	152	80+	3000	3,20
Shop LSW LED1x8600 G010 T830 LS90x100 L1 LO5	1442	67	66	8122	54,7	149	80+	3000	3,20
Shop LSW LED1x11800 G017 T830 LS90x100 L1	1112	07	00	0122	31,7	110	001	3000	5,20
LO6	1442	67	66	11168	75,2	149	80+	3000	3,20
Shop LSW LED1x8300 G011 T830 LS90x100 L1 LO1	2875	67	66	7958	46,8	170	80+	3000	6,30
Shop LSW LED1x0300 G011 1830 LS90x100 L1 L01	2073	07	00	7930	70,0	170	00+	3000	0,30
LO2	2875	67	66	9821	58,6	168	80+	3000	6,30
Shop LSW LED1x13900 G013 T830 LS90x100 L1	2073	07	00	3021	30,0	100	001	3000	0,50
LO3	2875	67	66	13264	83,8	158	80+	3000	6,30
Shop LSW LED1x15550 G014 T830 LS90x100 L1	2073	07	00	13207	03,0	130	00+	3000	0,30
LO4	2875	67	66	14805	96,5	153	80+	3000	6,30
Shop LSW LED1x17150 G015 T830 LS90x100 L1	20/5	07	00	14005	90,5	155	0U+	3000	0,30
LO5	2875	67	66	16244	110,4	147	80+	3000	6.20
	20/5	07	00	10244	110,4	147	0U+	3000	6,30
Shop LSW LED1x23600 G018 T830 LS90x100 L1 LO6	2075	67	66	22225	151.0	1.47	80+	3000	6.20
	2875	67		22335	151,8	147	80+		6,30
Shop LSW LED1x3350 G001 T840 LS90x100 L1 LO1	1155		66	3315	20,3	164		4000	2,50
Shop LSW LED1x4100 G002 T840 LS90x100 L1 LO2	1155	67	66	4088	24,5	167	80+	4000	2,50
Shop LSW LED1x5550 G003 T840 LS90x100 L1 LO3	1155	67	66	5542	33,9	164	80+	4000	2,50
Shop LSW LED1x6250 G004 T840 LS90x100 L1 LO4	1155	67	66	6209	39,0	159	80+	4000	2,50
Shop LSW LED1x6900 G005 T840 LS90x100 L1 LO5	1155	67	66	6853	44,2	155	80+	4000	2,50
Shop LSW LED1x9450 G016 T840 LS90x100 L1 LO6	1155	67	66	9422	60,8	155	80+	4000	2,50
Shop LSW LED1x4150 G006 T840 LS90x100 L1 LO1	1442	67	66	4144	24,2	171	80+	4000	3,20
Shop LSW LED1x5150 G007 T840 LS90x100 L1 LO2	1442	67	66	5110	30,6	167	80+	4000	3,20
Shop LSW LED1x6950 G008 T840 LS90x100 L1 LO3	1442	67	66	6927	42,3	164	80+	4000	3,20
Shop LSW LED1x7800 G009 T840 LS90x100 L1 LO4	1442	67	66	7761	48,7	159	80+	4000	3,20
Shop LSW LED1x8600 G010 T840 LS90x100 L1 LO5	1442	67	66	8566	54,7	157	80+	4000	3,20
Shop LSW LED1x11800 G017 T840 LS90x100 L1									
LO6	1442	67	66	11778	75,2	157	+08	4000	3,20
Shop LSW LED1x8300 G011 T840 LS90x100 L1 LO1	2875	67	66	8288	46,8	177	80+	4000	6,30
Shop LSW LED1x10250 G012 T840 LS90x100 L1									
LO2	2875	67	66	10220	58,6	174	80+	4000	6,30
Shop LSW LED1x13900 G013 T840 LS90x100 L1									
LO3	2875	67	66	13855	83,8	165	80+	4000	6,30
Shop LSW LED1x15550 G014 T840 LS90x100 L1					,				
LO4	2875	67	66	15523	96,5	161	80+	4000	6,30
Shop LSW LED1x17150 G015 T840 LS90x100 L1									
LO5	2875	67	66	17132	109,3	157	80+	4000	6,30
Shop LSW LED1x23600 G018 T840 LS90x100 L1					,				-
L06	2875	67	66	23556	150,3	157	80+	4000	6,30
					,-				
Shop LSW LED1x3350 G001 T840 LS60x100 L1 LO1	1155	67	66	3315	20,3	164	80+	4000	2,50

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Shop LSW LED1x5550 G003 T840 LS60x100 L1 LO3	1155	67	66	5542	33,9	164	80+	4000	2,50
Shop LSW LED1x6250 G004 T840 LS60x100 L1 LO4	1155	67	66	6209	39,0	159	80+	4000	2,50
Shop LSW LED1x6900 G005 T840 LS60x100 L1 LO5	1155	67	66	6853	44,2	155	80+	4000	2,50
Shop LSW LED1x9450 G016 T840 LS60x100 L1 LO6	1155	67	66	9422	60,8	155	80+	4000	2,50
			66						
Shop LSW LED1x4150 G006 T840 LS60x100 L1 LO1	1442	67		4144	24,2	171	80+	4000	3,20
Shop LSW LED1x5150 G007 T840 LS60x100 L1 LO2	1442	67	66	5110	30,6	167	80+	4000	3,20
Shop LSW LED1x6950 G008 T840 LS60x100 L1 LO3	1442	67	66	6927	42,3	164	80+	4000	3,20
Shop LSW LED1x7800 G009 T840 LS60x100 L1 LO4	1442	67	66	7761	48,7	159	80+	4000	3,20
Shop LSW LED1x8600 G010 T840 LS60x100 L1 LO5	1442	67	66	8566	54,7	157	80+	4000	3,20
Shop LSW LED1x11800 G017 T840 LS60x100 L1									
LO6	1442	67	66	11778	75,2	157	+08	4000	3,20
Shop LSW LED1x8300 G011 T840 LS60x100 L1 LO1	2875	67	66	8288	46,8	177	80+	4000	6,30
Shop LSW LED1x10250 G012 T840 LS60x100 L1					-				-
LO2	2875	67	66	10220	58,6	174	80+	4000	6,30
Shop LSW LED1x13900 G013 T840 LS60x100 L1									-,
LO3	2875	67	66	13855	83,8	165	80+	4000	6,30
Shop LSW LED1x15550 G014 T840 LS60x100 L1					/-				-/
LO4	2875	67	66	15523	96,5	161	80+	4000	6,30
Shop LSW LED1x17150 G015 T840 LS60x100 L1	2070	- 0,		10020	30/3	101			0,50
LO5	2875	67	66	17132	109,3	157	80+	4000	6,30
Shop LSW LED1x23600 G018 T840 LS60x100 L1	2075	07	00	17132	100/0	137	001	1000	0,50
LO6	2875	67	66	23556	150,3	157	80+	4000	6,30
LUO	20/3	07	00	23330	150,5	157	0U+	4000	0,30
Shop LSW LED1x3350 G001 T840 LS30x90 L1 LO1	1155	67	66	3315	20,3	164	80+	4000	2,50
Shop LSW LED1x4100 G002 T840 LS30x90 L1 LO2	1155	67	66	4088	24,5	167	80+	4000	2,50
Shop LSW LED1x5550 G003 T840 LS30x90 L1 LO3	1155	67	66	5542	33,9	164	80+	4000	2,50
Shop LSW LED1x6250 G004 T840 LS30x90 L1 LO4	1155	67	66	6209	39,0	159	80+	4000	2,50
Shop LSW LED1x6900 G005 T840 LS30x90 L1 LO5	1155	67	66	6853	44,2	155	80+	4000	2,50
Shop LSW LED1x9450 G016 T840 LS30x90 L1 LO6	1155	67	66	9422	60,8	155	80+	4000	2,50
Shop LSW LED1x4150 G006 T840 LS30x90 L1 LO1	1442	67	66	4144	24,2	171	80+	4000	3,20
Shop LSW LED1x5150 G007 T840 LS30x90 L1 LO2	1442	67	66	5110	30,6	167	80+	4000	3,20
Shop LSW LED1x6950 G008 T840 LS30x90 L1 LO3	1442	67	66	6927	42,3	164	80+	4000	3,20
Shop LSW LED1x7800 G009 T840 LS30x90 L1 LO4	1442	67	66	7761	48,7	159	80+	4000	3,20
Shop LSW LED1x8600 G010 T840 LS30x90 L1 LO5	1442	67	66	8566	54,7	157	80+	4000	3,20
Shop LSW LED1x11800 G017 T840 LS30x90 L1 LO6	1442	67	66	11778	75,2	157	80+	4000	3,20
Shop LSW LED1x8300 G011 T840 LS30x90 L1 LO1	2875	67	66	8288	46,8	177	80+	4000	6,30
Shop LSW LED1x10250 G012 T840 LS30x90 L1 LO2	2875	67	66	10220	58,6	174	80+	4000	6,30
Shop LSW LED1x13900 G013 T840 LS30x90 L1 LO3	2875	67	66	13855	83,8	165	80+	4000	6,30
Shop LSW LED1x15550 G014 T840 LS30x90 L1 LO4	2875	67	66	15523	96,5	161	80+	4000	6,30
Shop LSW LED1x17150 G015 T840 LS30x90 L1 LO5	2875	67	66	17132	109,3	157	80+	4000	6,30
Shop LSW LED1x23600 G018 T840 LS30x90 L1 LO6	2875	67	66	23556	150,3	157	80+	4000	6,30
Shop ESW EED1x25000 G010 1040 E550x50 E1 E00	2075	07	00	23330	130,3	137	001	4000	0,50
Chara LCW LED1: 2250 C001 T040 LC2440 L1 L01	1155	67		2210	20.2	1.50	00.	4000	2.50
Shop LSW LED1x3350 G001 T840 LS2A40 L1 LO1	1155	67	66	3210	20,3	158	80+	4000	2,50
Shop LSW LED1x4100 G002 T840 LS2A40 L1 LO2	1155	67	66	3959	24,5	162	80+	4000	2,50
Shop LSW LED1x5550 G003 T840 LS2A40 L1 LO3	1155	67	66	5367	33,9	158	80+	4000	2,50
Shop LSW LED1x6250 G004 T840 LS2A40 L1 LO4	1155	67	66	6013	39,0	154	80+	4000	2,50
Shop LSW LED1x6900 G005 T840 LS2A40 L1 LO5	1155	67	66	6636	44,2	150	80+	4000	2,50
Shop LSW LED1x9450 G016 T840 LS2A40 L1 LO6	1155	67	66	9125	60,8	150	80+	4000	2,50
Shop LSW LED1x4150 G006 T840 LS2A40 L1 LO1	1442	67	66	4013	24,2	166	80+	4000	3,20
Shop LSW LED1x5150 G007 T840 LS2A40 L1 LO2	1442	67	66	4949	30,6	162	80+	4000	3,20
Shop LSW LED1x6950 G008 T840 LS2A40 L1 LO3	1442	67	66	6709	42,3	158	80+	4000	3,20
Shop LSW LED1x7800 G009 T840 LS2A40 L1 LO3	1442	67	66	7516	48,7	154	80+	4000	3,20
Shop LSW LED1x8600 G010 T840 LS2A40 L1 LO5	1442	67	66	8295	54,7	152	80+	4000	3,20
Shop LSW LED1x11800 G017 T840 LS2A40 L1 LO6	1442	67	66	11406	75,2	152	80+	4000	3,20
Shop LSW LED1x8300 G011 T840 LS2A40 L1 LO1	2875	67	66	8026	46,8	171	80+	4000	6,30
Shop LSW LED1x10250 G012 T840 LS2A40 L1 LO2	2875	67	66	9898	58,6	169	80+	4000	6,30
Shop LSW LED1x13900 G013 T840 LS2A40 L1 LO3	2875	67	66	13417	83,8	160	80+	4000	6,30
Shop LSW LED1x15550 G014 T840 LS2A40 L1 LO4	2875	67	66	15033	96,5	156	80+	4000	6,30
Shop LSW LED1x17150 G015 T840 LS2A40 L1 LO5	2875	67	66	16591	109,3	152	80+	4000	6,30
Shop LSW LED1x23600 G018 T840 LS2A40 L1 L06	2875	67	66	22812	150,3	152	80+	4000	6,30
50p 20.17 EEDIAE3000 0010 1010 EDZA10 EI E00	20/3		00		100,0	172	001	1000	0,50
Shon SW ED1v3350 C001 T040 C1410 1 O1	1155	67	66	21/11	20.2	155	80+	4000	2 50
Shop LSW LED1x3350 G001 T840 LS1A18 L1 L01	1155			3141	20,3				2,50
Shop LSW LED1x4100 G002 T840 LS1A18 L1 LO2	1155	67	66	3873	24,5	158	80+	4000	2,50
Shop LSW LED1x5550 G003 T840 LS1A18 L1 LO3	1155	67	66	5250	33,9	155	80+	4000	2,50
Shop LSW LED1x6250 G004 T840 LS1A18 L1 LO4	1155	67	66	5882	39,0	151	80+	4000	2,50
Shop LSW LED1x6900 G005 T840 LS1A18 L1 LO5	1155	67	66	6492	44,2	147	80+	4000	2,50
Shop LSW LED1x9450 G016 T840 LS1A18 L1 LO6	1155	67	66	8926	60,8	147	80+	4000	2,50
Shop LSW LED1x4150 G006 T840 LS1A18 L1 LO1	1442	67	66	3926	24,2	162	80+	4000	3,20
Shop LSW LED1x5150 G007 T840 LS1A18 L1 LO2	1442	67	66	4841	30,6	158	80+	4000	3,20
Shop LSW LED1x6950 G008 T840 LS1A18 L1 LO3	1442	67	66	6563	42,3	155	80+	4000	3,20
Shop LSW LED1x7800 G009 T840 LS1A18 L1 LO4	1442	67	66	7353	48,7	151	80+	4000	3,20
Shop LSW LED1x8600 G010 T840 LS1A18 L1 LO5	1442	67	66	8115	54,7	148	80+	4000	3,20
	1442	67	66	11158	75,2	148	80+	4000	3,20
	20	67	66	7851	46,8	168	80+	4000	6,30
Shop LSW LED1x8300 G011 T840 LS1A18 L1 LO1	2875	67							
Shop LSW LED1x11800 G017 T840 LS1A18 L1 L06 Shop LSW LED1x8300 G011 T840 LS1A18 L1 L01 Shop LSW LED1x10250 G012 T840 LS1A18 L1 L02	2875 2875	67	66	9682	58,6	165	80+	4000	6,30
Shop LSW LED1x8300 G011 T840 LS1A18 L1 LO1						165 157	80+ 80+	4000 4000	6,30 6,30
Shop LSW LED1x8300 G011 T840 LS1A18 L1 LO1 Shop LSW LED1x10250 G012 T840 LS1A18 L1 LO2 Shop LSW LED1x13900 G013 T840 LS1A18 L1 LO3	2875 2875	67 67	66 66	9682 13126	58,6 83,8	157	80+	4000	6,30
Shop LSW LED1x8300 G011 T840 LS1A18 L1 LO1 Shop LSW LED1x10250 G012 T840 LS1A18 L1 LO2 Shop LSW LED1x13900 G013 T840 LS1A18 L1 LO3 Shop LSW LED1x15550 G014 T840 LS1A18 L1 LO4	2875 2875 2875	67 67 67	66 66 66	9682 13126 14706	58,6 83,8 96,5	157 152	80+ 80+	4000 4000	6,30 6,30
Shop LSW LED1x8300 G011 T840 LS1A18 L1 LO1 Shop LSW LED1x10250 G012 T840 LS1A18 L1 LO2 Shop LSW LED1x13900 G013 T840 LS1A18 L1 LO3	2875 2875	67 67	66 66	9682 13126	58,6 83,8	157	80+	4000	6,30

* tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options: LS30x90 Optics with 30x90° beam angle





LS60x100 Optics with 60x100° beam angle LS90x100 Optics with 90x100° beam angle

Optics with asymmetric beam, light direction - left
Optics with asymmetric beam, light direction - right LS1A18-L LS1A18-R

*note - please, for LSA18 optics specify direction LS2A40 Optics with double asymmetric beam LS2A40

LO1 Light output level 1 LO₂ Light output level 2 Light output level 3 103

Driver with switch-control dimming SDIM DALI Driver with DALI interface FM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

FM3A Emergency version equipped with an autonomous testing system, 3 hours EM3D Emergency version 3 hours with DALI interface

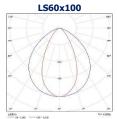
L1 Driver connected to L1 line L2 Driver connected to L2 line L3 Driver connected to L3 line

** note - please always specify one of 11, 12, 13 options before placing an order

for in-line connection end/first luminaire (lengths: 1153/ 1440/ 2873mm) for in-line connection intermediate luminaire (lengths: 1151/ 1438/ 2871mm) LL

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840











Available accessories:



Product: Power supply socket 1602/VCB-M-5 5x1.5-2.5mm2 Description: 5-pole socket (Stucchi - 1602/VCB-M-5) for power supply, 1pcs *note - please use power supply socket for first in-line luminaire connection to power source



Product: I-JOIN PLATE Shop LSW LED

Description: I-Join element for connecting luminaires in-line, 1pcs (extra)



Product: BLANK Shop LSW LED L1151mm

Description: Blank part kit for connecting luminaires in-line 1151mm long, 1pcs



Product: BLANK Shop LSW LED L1438mm

Description: Blank part kit for connecting luminaires in-line 1438mm long, 1pcs



Product: END CAP Shop LSW LED

Description: End cap kit for Shop LSW LED luminaires, 1pcs (extra)

Applications:

TECHNICAL DATA SHEET











BLADE LSZ LED

Product Group: Continuous Line and Batten Luminaire















Images for the product family and options:







Description: An industrial LED luminaire, IP23 rated, with corrosion resistant galvanized steel body and various optics for precise light control

Optics: 30x90°, 60x100°, 90x100°, asymmetric and double asymmetric light beam

Body and endcaps: galvanized steel sheet, corrosion-proof, light grey colour

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes

Light distribution type: Direct/Indirect

LED lifetime, h: 75000/L80B50 (low power versions 100000/L80B50)

Operating temperature range, °C: ta 0...+40 Protection class IEC: I

Ingress protection code: IP23
Mechanical impact resistance: IK07

EEC: A++

Installation: Surface luminaire is designed to be fixed to ceiling of any type or suspended. Two cable entries are accessible from the rear though Ø19mm holes located in the middle of the body or by side entries via Ø19mm holes at either end. Push-in terminal, 5x2x2.5mm2 (for

in and out going cable)

Environment: Indoo

Application: Retail, industry, warehouse, hall, public place







Supplied with a hinged reflector unit, which can be opened for easy installation and access to terminal block. Just open reflector by removing lock screw, connect cable to the terminal block and close it

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Blade LSZ LED1x3800 D700 T830 LS90x100	1240	96	73	3623	24,3	149	80+	3000	3,40
Blade LSZ LED1x5150 D701 T830 LS90x100	1240	96	73	4930	33,9	146	80+	3000	3,40
Blade LSZ LED1x7050 D702 T830 LS90x100	1240	96	73	6686	50,5	132	+08	3000	3,40
Blade LSZ LED1x8850 D703 T830 LS90x100	1240	96	73	8431	61,4	137	80+	3000	3,40
Blade LSZ LED1x4750 D704 T830 LS90x100	1530	96	73	4528	30,3	149	80+	3000	4,00
Blade LSZ LED1x6450 D705 T830 LS90x100	1530	96	73	6163	42,3	146	80+	3000	4,00
Blade LSZ LED1x8800 D706 T830 LS90x100	1530	96	73	8358	63,2	132	80+	3000	4,00
Blade LSZ LED1x11050 D707 T830 LS90x100	1530	96	73	10539	75,9	139	80+	3000	4,00
Blade LSZ LED1x3800 D700 T840 LS90x100	1240	96	73	3785	24,3	156	80+	4000	3,40
Blade LSZ LED1x5150 D701 T840 LS90x100	1240	96	73	5148	33,9	152	80+	4000	3,40
Blade LSZ LED1x7050 D702 T840 LS90x100	1240	96	73	7020	50,5	139	80+	4000	3,40
Blade LSZ LED1x8850 D703 T840 LS90x100 2G	1240	96	73	8808	61,4	143	80+	4000	3,40
Blade LSZ LED1x4750 D704 T840 LS90x100	1530	96	73	4731	30,3	156	80+	4000	4,00
Blade LSZ LED1x6450 D705 T840 LS90x100	1530	96	73	6435	42,3	152	80+	4000	4,00
Blade LSZ LED1x8800 D706 T840 LS90x100	1530	96	73	8775	63,2	139	80+	4000	4,00
Blade LSZ LED1x11050 D707 T840 LS90x100 2G	1530	96	73	11010	75,9	145	+08	4000	4,00
Blade LSZ LED1x3800 D700 T840 LS60x100	1240	96	73	3785	24,3	156	80+	4000	3,40
Blade LSZ LED1x5150 D701 T840 LS60x100	1240	96	73	5148	33,9	152	80+	4000	3,40
Blade LSZ LED1x7050 D702 T840 LS60x100	1240	96	73	7020	50,5	139	80+	4000	3,40

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TECHNICAL DATA SHEET

Blade LSZ LED1x8850 D703 T840 LS60x100	1240	96	73	8808	61,4	143	80+	4000	3,40
Blade LSZ LED1x4750 D704 T840 LS60x100	1530	96	73	4731	30,3	156	80+	4000	4,00
Blade LSZ LED1x6450 D705 T840 LS60x100	1530	96	73	6435	42,3	152	80+	4000	4,00
Blade LSZ LED1x8800 D706 T840 LS60x100	1530	96	73	8775	63,2	139	+08	4000	4,00
Blade LSZ LED1x11050 D707 T840 LS60x100	1530	96	73	11010	75,9	145	80+	4000	4,00
Blade LSZ LED1x3800 D700 T840 LS30x90	1240	96	73	3785	24,3	156	80+	4000	3,40
Blade LSZ LED1x5150 D701 T840 LS30x90	1240	96	73	5148	33,9	152	80+	4000	3,40
Blade LSZ LED1x7050 D702 T840 LS30x90	1240	96	73	7020	50,5	139	80+	4000	3,40
Blade LSZ LED1x8850 D703 T840 LS30x90	1240	96	73	8808	61,4	143	80+	4000	3,40
Blade LSZ LED1x4750 D704 T840 LS30x90	1530	96	73	4731	30,3	156	80+	4000	4,00
Blade LSZ LED1x6450 D705 T840 LS30x90	1530	96	73	6435	42,3	152	80+	4000	4,00
Blade LSZ LED1x8800 D706 T840 LS30x90	1530	96	73	8775	63,2	139	+08	4000	4,00
Blade LSZ LED1x11050 D707 T840 LS30x90	1530	96	73	11010	75,9	145	80+	4000	4,00
Blade LSZ LED1x3800 D700 T840 LS2A40	1240	96	73	3665	24,3	151	80+	4000	3,40
Blade LSZ LED1x5150 D701 T840 LS2A40	1240	96	73	4986	33,9	147	80+	4000	3,40
Blade LSZ LED1x7050 D702 T840 LS2A40	1240	96	73	6799	50,5	135	80+	4000	3,40
Blade LSZ LED1x8850 D703 T840 LS2A40	1240	96	73	8530	61,4	139	80+	4000	3,40
Blade LSZ LED1x4750 D704 T840 LS2A40	1530	96	73	4582	30,3	151	80+	4000	4,00
Blade LSZ LED1x6450 D705 T840 LS2A40	1530	96	73	6232	42,3	147	80+	4000	4,00
Blade LSZ LED1x8800 D706 T840 LS2A40	1530	96	73	8498	63,2	135	80+	4000	4,00
Blade LSZ LED1x11050 D707 T840 LS2A40	1530	96	73	10663	75,9	140	80+	4000	4,00
Blade LSZ LED1x3800 D700 T840 LS1A18	1240	96	73	3586	24,3	148	80+	4000	3,40
Blade LSZ LED1x5150 D701 T840 LS1A18	1240	96	73	4877	33,9	144	80+	4000	3,40
Blade LSZ LED1x7050 D702 T840 LS1A18	1240	96	73	6651	50,5	132	80+	4000	3,40
Blade LSZ LED1x8850 D703 T840 LS1A18	1240	96	73	8345	61,4	136	80+	4000	3,40
Blade LSZ LED1x4750 D704 T840 LS1A18	1530	96	73	4482	30,3	148	80+	4000	4,00
Blade LSZ LED1x6450 D705 T840 LS1A18	1530	96	73	6097	42,3	144	80+	4000	4,00
Blade LSZ LED1x8800 D706 T840 LS1A18	1530	96	73	8313	63,2	132	80+	4000	4,00
Blade LSZ LED1x11050 D707 T840 LS1A18	1530	96	73	10431	75,9	137	80+	4000	4,00
* tolerance range for ontical and electrical data: +10% Values:	annly to an am	hiant tamna	rature of 25%	•					

 $^{^*}$ tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25 $^{\circ}$

PREMIUM RANGE AVAILABLE ON REOUEST (SUBJECT TO MINIMUM ORDER OUANTITY)

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Blade LSZ LED1x4050 G041 T830 LS90x100	1240	96	73	3839	24,3	158	80+	3000	3,40
Blade LSZ LED1x5450 G042 T830 LS90x100	1240	96	73	5224	33,9	154	+08	3000	3,40
Blade LSZ LED1x7400 G043 T830 LS90x100	1240	96	73	7085	50,2	141	+08	3000	3,40
Blade LSZ LED1x9350 G044 T830 LS90x100	1240	96	73	8934	61,4	146	+08	3000	3,40
Blade LSZ LED1x5050 G045 T830 LS90x100	1530	96	73	4799	30,3	158	+08	3000	3,40
Blade LSZ LED1x6850 G046 T830 LS90x100	1530	96	73	6531	42,3	154	+08	3000	4,00
Blade LSZ LED1x9250 G047 T830 LS90x100	1530	96	73	8857	62,7	141	80+	3000	4,00
Blade LSZ LED1x11650 G048 T830 LS90x100	1530	96	73	11168	75,9	147	+08	3000	4,00
Blade LSZ LED1x4050 G041 T840 LS90x100	1240	96	73	4001	24,3	165	+08	4000	3,40
Blade LSZ LED1x5450 G042 T840 LS90x100	1240	96	73	5445	33,9	161	80+	4000	3,40
Blade LSZ LED1x7400 G043 T840 LS90x100	1240	96	73	7384	50,2	147	80+	4000	3,40
Blade LSZ LED1x9350 G044 T840 LS90x100	1240	96	73	9312	61,4	152	80+	4000	3,40
Blade LSZ LED1x5050 G045 T840 LS90x100	1530	96	73	5001	30,3	165	80+	4000	3,40
Blade LSZ LED1x6850 G046 T840 LS90x100	1530	96	73	6806	42,3	161	80+	4000	4,00
Blade LSZ LED1x9250 G047 T840 LS90x100	1530	96	73	9231	62,7	147	80+	4000	4,00
Blade LSZ LED1x11650 G048 T840 LS90x100	1530	96	73	11640	75,9	153	80+	4000	4,00
Blade LSZ LED1x4050 G041 T840 LS60x100	1240	96	73	4001	24,3	165	80+	4000	3,40
Blade LSZ LED1x5450 G042 T840 LS60x100	1240	96	73	5445	33,9	161	+08	4000	3,40
Blade LSZ LED1x7400 G043 T840 LS60x100	1240	96	73	7384	50,2	147	+08	4000	3,40
Blade LSZ LED1x9350 G044 T840 LS60x100	1240	96	73	9312	61,4	152	+08	4000	3,40
Blade LSZ LED1x5050 G045 T840 LS60x100	1530	96	73	5001	30,3	165	+08	4000	3,40
Blade LSZ LED1x6850 G046 T840 LS60x100	1530	96	73	6806	42,3	161	+08	4000	4,00
Blade LSZ LED1x9250 G047 T840 LS60x100	1530	96	73	9231	62,7	147	+08	4000	4,00
Blade LSZ LED1x11650 G048 T840 LS60x100	1530	96	73	11640	75,9	153	+08	4000	4,00
Blade LSZ LED1x4050 G041 T840 LS30x90	1240	96	73	4001	24,3	165	80+	4000	3,40
Blade LSZ LED1x5450 G042 T840 LS30x90	1240	96	73	5445	33,9	161	80+	4000	3,40
Blade LSZ LED1x7400 G043 T840 LS30x90	1240	96	73	7384	50,2	147	+08	4000	3,40
Blade LSZ LED1x9350 G044 T840 LS30x90	1240	96	73	9312	61,4	152	+08	4000	3,40
Blade LSZ LED1x5050 G045 T840 LS30x90	1530	96	73	5001	30,3	165	+08	4000	3,40
Blade LSZ LED1x6850 G046 T840 LS30x90	1530	96	73	6806	42,3	161	80+	4000	4,00
Blade LSZ LED1x9250 G047 T840 LS30x90	1530	96	73	9231	62,7	147	+08	4000	4,00
Blade LSZ LED1x11650 G048 T840 LS30x90	1530	96	73	11640	75,9	153	+08	4000	4,00
Blade LSZ LED1x4050 G041 T840 LS2A40	1240	96	73	3875	24,3	160	80+	4000	3,40
Blade LSZ LED1x5450 G042 T840 LS2A40	1240	96	73	5273	33,9	156	+08	4000	3,40
Blade LSZ LED1x7400 G043 T840 LS2A40	1240	96	73	7151	50,2	143	+08	4000	3,40
Blade LSZ LED1x9350 G044 T840 LS2A40	1240	96	73	9018	61,4	147	80+	4000	3,40
Blade LSZ LED1x5050 G045 T840 LS2A40	1530	96	73	4843	30,3	160	+08	4000	3,40
Blade LSZ LED1x6850 G046 T840 LS2A40	1530	96	73	6591	42,3	156	+08	4000	4,00
Blade LSZ LED1x9250 G047 T840 LS2A40	1530	96	73	8939	62,7	143	+08	4000	4,00
Blade LSZ LED1x11650 G048 T840 LS2A40	1530	96	73	11272	75,9	148	+08	4000	4,00

Date of issue: 2019-01-21 • NORTHCLIFFE LIGHTING, UAB • Raudondvario pl. 101, LT-47184 Kaunas, Lithuania • info@northcliffe.org • www.northcliffe.org



Blade LSZ LED1x4050 G041 T840 LS1A18	1240	96	73	3791	24,3	156	80+	4000	3,40
Blade LSZ LED1x5450 G042 T840 LS1A18	1240	96	73	5158	33,9	152	80+	4000	3,40
Blade LSZ LED1x7400 G043 T840 LS1A18	1240	96	73	6996	50,2	139	80+	4000	3,40
Blade LSZ LED1x9350 G044 T840 LS1A18	1240	96	73	8822	61,4	144	80+	4000	3,40
Blade LSZ LED1x5050 G045 T840 LS1A18	1530	96	73	4738	30,3	156	80+	4000	3,40
Blade LSZ LED1x6850 G046 T840 LS1A18	1530	96	73	6448	42,3	152	80+	4000	4,00
Blade LSZ LED1x9250 G047 T840 LS1A18	1530	96	73	8745	62,7	139	80+	4000	4,00
Blade LSZ LED1x11650 G048 T840 LS1A18	1530	96	73	11027	75,9	145	80+	4000	4,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Optics with 30x90° beam angle LS30x90 Optics with 60x100° beam angle LS60x100 Optics with 90x100° beam angle LS90x100 Optics with asymmetric beam LS1A18 LS2A40 Optics with double asymmetric beam SDIM Driver with switch-control dimmina

DALT Driver with DALI interface

HBEAIR Integrated smart sensor for high ceiling (up to 16m) and driver with wireless communication and grouping possibilities for lighting control

COR

Driver with Corridor function (never off)
Driver with Corridor function 1min (switch off after 1 min) COR1min COR30min Driver with Corridor function 30min (switch off after 30 min)

HBPIR7m Integrated PIR sensor for high ceiling (up to 7 meters) with on-off control HBPIR12m Integrated PIR sensor for high ceiling (up to 12 meters) with on-off control HBPIR15m Integrated PIR sensor for high ceiling (up to 15 meters) with on-off control

FMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

FM3B Emergency version 3 hours (best available technology)

Emergency version equipped with an autonomous testing system, 3 hours Emergency version 3 hours with DALI interface ЕМЗА

FM3D

5TB 5-pole terminal block in middle of luminaire for easy through wiring * note - 5TB option is included as standard

L1 Driver connected to L1 line L2 Driver connected to L2 line L3 Driver connected to L3 line Strain relief for power supply cable 1G Strain relief for power supply cable, 2pcs
3-pole "Wieland - gesis classic" type or compatible connector 2G

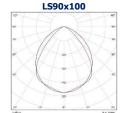
WIE3 5-pole "Wieland - gesis classic" type or compatible connector 5-pole DALI "Wieland - gesis classic" type or compatible connector WIE5 WIE5D

Two 3-pole "Wieland - gesis classic" type or compatible connectors. Through wired, 3x1.5mm2.
Two 5-pole "Wieland - gesis classic" type or compatible connectors. Through wired, 5x1.5mm2
Two 5-pole DALI "Wieland - gesis classic" type or compatible connectors. Through wired, 5x1.5mm2
Two 5-pole DALI "Wieland - gesis classic" type or compatible connectors. Through wired, 3x1.5mm2 + 2x0.5mm2 (DALI). 2WIE3 2WIE5

2WIE5D

* note - please specify one of L1, L2, L3 option for WIE5 and 2WIE5 options T830 Colour temperature 3000K, CRI 80+

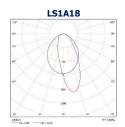
T840 Colour temperature 4000K, CRI 80+



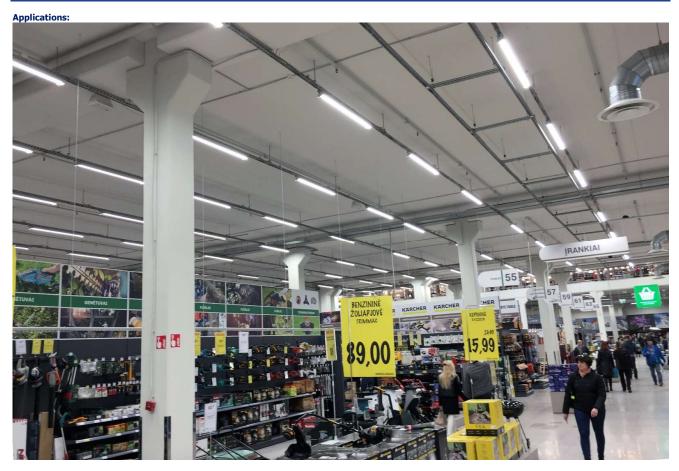
LS60x100

















BLADE LSW LED

Product Group: Continuous Line and Batten Luminaire



















Description: An industrial LED luminaire, IP23 rated, with white powder coated steel body and various optics for precise light control

Optics: 30x90°, 60x100°, 90x100°, asymmetric and double asymmetric light beam

Body and endcaps: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,95

Light source: LED Light source included: Yes Light distribution type: Direct/Indirect

LED lifetime, h: 75000/L80B50 (low power versions 100000/L80B50) Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP23 Mechanical impact resistance: IK07

EEC: A++

Surface luminaire is designed to be fixed to ceiling of any type or suspended. Two cable entries are accessible from the rear though Ø19mm holes located in the middle of the body or by side entries via Ø19mm holes at either end. Push-in terminal, 5x2x2.5mm2 (for Installation:

in and out going cable)

Environment: Indoor

Application: Retail, industry, warehouse, hall, public place







Supplied with a hinged reflector unit, which can be opened for easy installation and access to terminal block. Just open reflector by removing lock screw, connect cable to the terminal block and close it



White painted steel cross blades for a better glare protection. For more information check option list

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Blade LSW LED1x3800 D690 T830 LS90x100	1240	96	73	3623	24,3	149	80+	3000	3,40
Blade LSW LED1x5150 D691 T830 LS90x100	1240	96	73	4930	33,9	146	80+	3000	3,40
Blade LSW LED1x7050 D692 T830 LS90x100	1240	96	73	6686	50,5	132	+08	3000	3,40
Blade LSW LED1x8850 D693 T830 LS90x100	1240	96	73	8431	61,4	137	80+	3000	3,40
Blade LSW LED1x4750 D694 T830 LS90x100	1530	96	73	4528	30,3	149	80+	3000	3,40
Blade LSW LED1x6450 D695 T830 LS90x100	1530	96	73	6163	42,3	146	+08	3000	4,00
Blade LSW LED1x8800 D696 T830 LS90x100	1530	96	73	8358	63,2	132	80+	3000	4,00
Blade LSW LED1x11050 D697 T830 LS90x100	1530	96	73	10539	75,9	139	+08	3000	4,00
Blade LSW LED1x3800 D690 T840 LS90x100	1240	96	73	3785	24,3	156	80+	4000	3,40
Blade LSW LED1x5150 D691 T840 LS90x100	1240	96	73	5148	33,9	152	80+	4000	3,40
Blade LSW LED1x7050 D692 T840 LS90x100	1240	96	73	7020	50,5	139	80+	4000	3,40
Blade LSW LED1x8850 D693 T840 LS90x100	1240	96	73	8808	61,4	143	+08	4000	3,40
Blade LSW LED1x4750 D694 T840 LS90x100	1530	96	73	4731	30,3	156	80+	4000	3,40
Blade LSW LED1x6450 D695 T840 LS90x100	1530	96	73	6435	42,3	152	80+	4000	4,00

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TECHNICAL DATA SHEET

I LOIMOAL DATA OHLLI									
Blade LSW LED1x8800 D696 T840 LS90x100	1530	96	73	8775	63,2	139	80+	4000	4,00
Blade LSW LED1x11050 D697 T840 LS90x100	1530	96	73	11010	75,9	145	80+	4000	4,00
Blade LSW LED1x3800 D690 T840 LS60x100	1240	96	73	3785	24,3	156	80+	4000	3,40
Blade LSW LED1x5150 D691 T840 LS60x100	1240	96	73	5148	33,9	152	80+	4000	3,40
Blade LSW LED1x7050 D692 T840 LS60x100	1240	96	73	7020	50,5	139	80+	4000	3,40
Blade LSW LED1x8850 D693 T840 LS60x100	1240	96	73	8808	61,4	143	80+	4000	3,40
Blade LSW LED1x4750 D694 T840 LS60x100	1530	96	73	4731	30,3	156	80+	4000	3,40
Blade LSW LED1x6450 D695 T840 LS60x100	1530	96	73	6435	42,3	152	80+	4000	4,00
Blade LSW LED1x8800 D696 T840 LS60x100	1530	96	73	8775	63,2	139	80+	4000	4,00
Blade LSW LED1x11050 D697 T840 LS60x100	1530	96	73	11010	75,9	145	80+	4000	4,00
Blade LSW LED1x3800 D690 T840 LS30x90	1240	96	73	3785	24,3	156	80+	4000	3,40
Blade LSW LED1x5150 D691 T840 LS30x90	1240	96	73	5148	33,9	152	80+	4000	3,40
Blade LSW LED1x7050 D692 T840 LS30x90	1240	96	73	7020	50,5	139	80+	4000	3,40
Blade LSW LED1x8850 D693 T840 LS30x90	1240	96	73	8808	61,4	143	80+	4000	3,40
Blade LSW LED1x4750 D694 T840 LS30x90	1530	96	73	4731	30,3	156	80+	4000	3,40
Blade LSW LED1x6450 D695 T840 LS30x90	1530	96	73	6435	42,3	152	80+	4000	4,00
Blade LSW LED1x8800 D696 T840 LS30x90	1530	96	73	8775	63,2	139	80+	4000	4,00
Blade LSW LED1x11050 D697 T840 LS30x90	1530	96	73	11010	75,9	145	80+	4000	4,00
Blade LSW LED1x3800 D690 T840 LS2A40	1240	96	73	3665	24,3	151	80+	4000	3,40
Blade LSW LED1x5150 D691 T840 LS2A40	1240	96	73	4986	33,9	147	80+	4000	3,40
Blade LSW LED1x7050 D692 T840 LS2A40	1240	96	73	6799	50,5	135	80+	4000	3,40
Blade LSW LED1x8850 D693 T840 LS2A40	1240	96	73	8530	61,4	139	80+	4000	3,40
Blade LSW LED1x4750 D694 T840 LS2A40	1530	96	73	4582	30,3	151	80+	4000	3,40
Blade LSW LED1x6450 D695 T840 LS2A40	1530	96	73	6232	42,3	147	80+	4000	4,00
Blade LSW LED1x8800 D696 T840 LS2A40	1530	96	73	8498	63,2	135	80+	4000	4,00
Blade LSW LED1x11050 D697 T840 LS2A40	1530	96	73	10663	75,9	140	80+	4000	4,00
Blade LSW LED1x3800 D690 T840 LS1A18	1240	96	73	3586	24,3	148	80+	4000	3,40
Blade LSW LED1x53600 D690 1640 LS1A16	1240	96	73	4877	33,9	144	80+	4000	3,40
Blade LSW LED1x3130 D691 1640 LS1A16 Blade LSW LED1x7050 D692 T840 LS1A18	1240	96	73	6651	50,5	132	80+	4000	3,40
Blade LSW LED1x8850 D693 T840 LS1A18	1240	96	73	8345	61,4	136	80+	4000	3,40
Blade LSW LED1x4750 D694 T840 LS1A18	1530	96	73	4482	30,3	148	80+	4000	3,40
Blade LSW LED1x6450 D695 T840 LS1A18	1530	96	73	6097	42,3	144	80+	4000	4,00
Blade LSW LED1x8800 D696 T840 LS1A18	1530	96	73	8313	63,2	132	80+	4000	4,00
Blade LSW LED1x11050 D697 T840 LS1A18	1530	96	73	10431	75,9	137	80+	4000	4,00
									·
Blade LSW LED1x3800 D690 T840 LS90x100 WRF	1240	96	73	3506	24,3	144	80+	4000	3,40
Blade LSW LED1x5150 D691 T840 LS90x100 WRF	1240	96	73	4769	33,9	141	80+	4000	3,40
Blade LSW LED1x7050 D692 T840 LS90x100 WRF	1240	96	73	6503	50,5	129	+08	4000	3,40
Blade LSW LED1x8850 D693 T840 LS90x100 WRF	1240	96	73	8159	61,4	133	80+	4000	3,40
Blade LSW LED1x4750 D694 T840 LS90x100 WRF	1530	96	73	4382	30,3	144	80+	4000	3,40
Blade LSW LED1x6450 D695 T840 LS90x100 WRF	1530	96	73	5961	42,3	141	80+	4000	4,00
Blade LSW LED1x8800 D696 T840 LS90x100 WRF	1530	96	73	8129	63,2	129	80+	4000	4,00
Blade LSW LED1x11050 D697 T840 LS90x100 WRF	1530	96	73	10199	75,9	134	80+	4000	4,00

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

PREMIUM RANGE AVAILABLE ON REQUEST (SUBJECT TO MINIMUM ORDER QUANTITY)

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Blade LSW LED1x4050 G033 T830 LS90x100	1240	96	73	3839	24,3	158	80+	3000	3,40
Blade LSW LED1x5450 G034 T830 LS90x100	1240	96	73	5224	33,9	154	80+	3000	3,40
Blade LSW LED1x7400 G035 T830 LS90x100	1240	96	73	7085	50,2	141	80+	3000	3,40
Blade LSW LED1x9350 G036 T830 LS90x100	1240	96	73	8934	61,4	146	80+	3000	3,40
Blade LSW LED1x5050 G037 T830 LS90x100	1530	96	73	4799	30,3	158	80+	3000	3,40
Blade LSW LED1x6850 G038 T830 LS90x100	1530	96	73	6531	42,3	154	80+	3000	4,00
Blade LSW LED1x9250 G039 T830 LS90x100	1530	96	73	8857	62,7	141	80+	3000	4,00
Blade LSW LED1x11650 G040 T830 LS90x100	1530	96	73	11168	75,9	147	80+	3000	4,00
Blade LSW LED1x4050 G033 T840 LS90x100	1240	96	73	4001	24,3	165	80+	4000	3,40
Blade LSW LED1x5450 G034 T840 LS90x100	1240	96	73	5445	33,9	161	80+	4000	3,40
Blade LSW LED1x7400 G035 T840 LS90x100	1240	96	73	7384	50,2	147	80+	4000	3,40
Blade LSW LED1x9350 G036 T840 LS90x100	1240	96	73	9312	61,4	152	80+	4000	3,40
Blade LSW LED1x5050 G037 T840 LS90x100	1530	96	73	5001	30,3	165	80+	4000	3,40
Blade LSW LED1x6850 G038 T840 LS90x100	1530	96	73	6806	42,3	161	80+	4000	4,00
Blade LSW LED1x9250 G039 T840 LS90x100	1530	96	73	9231	62,7	147	80+	4000	4,00
Blade LSW LED1x11650 G040 T840 LS90x100	1530	96	73	11640	75,9	153	80+	4000	4,00
Blade LSW LED1x4050 G033 T840 LS60x100	1240	96	73	4001	24,3	165	80+	4000	3,40
Blade LSW LED1x5450 G034 T840 LS60x100	1240	96	73	5445	33,9	161	80+	4000	3,40
Blade LSW LED1x7400 G035 T840 LS60x100	1240	96	73	7384	50,2	147	80+	4000	3,40
Blade LSW LED1x9350 G036 T840 LS60x100	1240	96	73	9312	61,4	152	80+	4000	3,40
Blade LSW LED1x5050 G037 T840 LS60x100	1530	96	73	5001	30,3	165	80+	4000	3,40
Blade LSW LED1x6850 G038 T840 LS60x100	1530	96	73	6806	42,3	161	80+	4000	4,00
Blade LSW LED1x9250 G039 T840 LS60x100	1530	96	73	9231	62,7	147	80+	4000	4,00
Blade LSW LED1x11650 G040 T840 LS60x100	1530	96	73	11640	75,9	153	80+	4000	4,00
Blade LSW LED1x4050 G033 T840 LS30x90	1240	96	73	4001	24,3	165	80+	4000	3,40
Blade LSW LED1x5450 G034 T840 LS30x90	1240	96	73	5445	33,9	161	80+	4000	3,40

NORTHCLIFFE

MAKING LIFE BRIGHTER

TECHNICAL DATA SHEET

Blade LSW LED1x7400 G035 T840 LS30x90	1240	96	73	7384	50,2	147	80+	4000	3,40
Blade LSW LED1x9350 G036 T840 LS30x90	1240	96	73	9312	61,4	152	80+	4000	3,40
Blade LSW LED1x5050 G037 T840 LS30x90	1530	96	73	5001	30,3	165	80+	4000	3,40
Blade LSW LED1x6850 G038 T840 LS30x90	1530	96	73	6806	42,3	161	80+	4000	4,00
Blade LSW LED1x9250 G039 T840 LS30x90	1530	96	73	9231	62,7	147	80+	4000	4,00
Blade LSW LED1x11650 G040 T840 LS30x90	1530	96	73	11640	75,9	153	80+	4000	4,00
Blade LSW LED1x4050 G033 T840 LS2A40	1240	96	73	3875	24,3	160	80+	4000	3,40
Blade LSW LED1x5450 G034 T840 LS2A40	1240	96	73	5273	33,9	156	80+	4000	3,40
Blade LSW LED1x7400 G035 T840 LS2A40	1240	96	73	7151	50,2	143	80+	4000	3,40
Blade LSW LED1x9350 G036 T840 LS2A40	1240	96	73	9018	61,4	147	80+	4000	3,40
Blade LSW LED1x5050 G037 T840 LS2A40	1530	96	73	4843	30,3	160	80+	4000	3,40
Blade LSW LED1x6850 G038 T840 LS2A40	1530	96	73	6591	42,3	156	80+	4000	4,00
Blade LSW LED1x9250 G039 T840 LS2A40	1530	96	73	8939	62,7	143	80+	4000	4,00
Blade LSW LED1x11650 G040 T840 LS2A40	1530	96	73	11272	75,9	148	80+	4000	4,00
Blade LSW LED1x4050 G033 T840 LS1A18	1240	96	73	3791	24,3	156	80+	4000	3,40
Blade LSW LED1x5450 G034 T840 LS1A18	1240	96	73	5158	33,9	152	80+	4000	3,40
Blade LSW LED1x7400 G035 T840 LS1A18	1240	96	73	6996	50,2	139	80+	4000	3,40
Blade LSW LED1x9350 G036 T840 LS1A18	1240	96	73	8822	61,4	144	80+	4000	3,40
Blade LSW LED1x5050 G037 T840 LS1A18	1530	96	73	4738	30,3	156	80+	4000	3,40
Blade LSW LED1x6850 G038 T840 LS1A18	1530	96	73	6448	42,3	152	80+	4000	4,00
Blade LSW LED1x9250 G039 T840 LS1A18	1530	96	73	8745	62,7	139	80+	4000	4,00
Blade LSW LED1x11650 G040 T840 LS1A18	1530	96	73	11027	75,9	145	80+	4000	4,00
Blade LSW LED1x4050 G033 T840 LS90x100 WRF	1240	96	73	3706	24,3	153	+08	4000	3,40
Blade LSW LED1x5450 G034 T840 LS90x100 WRF	1240	96	73	5044	33,9	149	80+	4000	3,40
Blade LSW LED1x7400 G035 T840 LS90x100 WRF	1240	96	73	6840	50,2	136	80+	4000	3,40
Blade LSW LED1x9350 G036 T840 LS90x100 WRF	1240	96	73	8626	61,4	140	80+	4000	3,40
Blade LSW LED1x5050 G037 T840 LS90x100 WRF	1530	96	73	4633	30,3	153	80+	4000	3,40
Blade LSW LED1x6850 G038 T840 LS90x100 WRF	1530	96	73	6305	42,3	149	80+	4000	4,00
Blade LSW LED1x9250 G039 T840 LS90x100 WRF	1530	96	73	8550	62,7	136	80+	4000	4,00
Blade LSW LED1x11650 G040 T840 LS90x100 WRF	1530	96	73	10782	75,9	142	+08	4000	4,00
* tolerance range for optical and electrical data: +10% Values a	annly to an am	hient temne	rature of 25%	-					

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

LS30x90 Optics with 30x90° beam angle LS60x100 Optics with 60x100° beam angle Optics with 90x100° beam angle LS90x100 LS1A18 Optics with asymmetric beam LS2A40 Optics with double asymmetric beam

WRF Reflector with white steel cross blades for a better glare protection

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

HBEAIR Integrated smart sensor for high ceiling (up to 16m) and driver with wireless communication and grouping possibilities for lighting control

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

HBPIR7m Integrated PIR sensor for high ceiling (up to 7 meters) with on-off control HBPIR12m Integrated PIR sensor for high ceiling (up to 12 meters) with on-off control HBPIR15m Integrated PIR sensor for high ceiling (up to 15 meters) with on-off control

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5TB 5-pole terminal block in middle of luminaire for easy through wiring

* note - 5TB option is included as standard

Driver connected to L1 line 11 L2 Driver connected to L2 line L3 Driver connected to L3 line 1G Strain relief for power supply cable 2G Strain relief for power supply cable, 2pcs

WIF3 3-pole "Wieland - gesis classic" type or compatible connector 5-pole "Wieland - gesis classic" type or compatible connector WIE5 WIF5D 5-pole DALI "Wieland - gesis classic" type or compatible connector

2WIE3 Two 3-pole "Wieland - gesis classic" type or compatible connectors. Through wired, 3x1.5mm2. 2WIE5 Two 5-pole "Wieland - gesis classic" type or compatible connectors. Through wired, 5x1.5mm2

2WIE5D Two 5-pole DALI "Wieland - gesis classic" type or compatible connectors. Through wired, 3x1.5mm2 + 2x0.5mm2 (DALI).

* note - please specify one of L1, L2, L3 option for WIE5 and 2WIE5 options T830 Colour temperature 3000K, CRI 80+ T830

Colour temperature 4000K, CRI 80+ T840





Available accessories:

THUMIN

Product: WRF GRID KIT Blade LSW LED 1.2m RAL9003S

Description: Reflector with white steel cross blades for a better glare protection

Product: WRF GRID KIT Blade LSW LED 1.5m RAL9003S

Short description: Reflector with white steel cross blades for a better glare protection *note - check RAL colour to match luminaire











ATRIA LED

Product Group: Continuous Line and Batten Luminaire















Images for the product family and options:



Description: A wall or suspended-mounted LED batten luminaire with asymmetric optic for blackboard or display illumination

Optics: asymmetric light beam

Body and end caps: steel sheet, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP40 Mechanical impact resistance: IK05 EEC: A++

Suspended (suspension brackets are included). Through wired, 5x1.5mm2, two connectors, 5-pole plug(1601/VC) and socket(1602/VC), Installation:

STUCHHI **Environment:** Indoor Application: Education

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Atria LED1x3000 D570 T830 LS1A18	1170	73	80	2781	20,1	138	80+	3000	2,50
Atria LED1x3700 D571 T830 LS1A18	1170	73	80	3432	24,5	140	80+	3000	2,50
Atria LED1x3750 D572 T830 LS1A18	1457	73	80	3476	24,1	144	+08	3000	3,20
Atria LED1x4600 D573 T830 LS1A18	1457	73	80	4290	30,6	140	+08	3000	3,20
Atria LED1x3000 D570 T840 LS1A18	1170	73	80	2973	20,1	148	80+	4000	2,50
Atria LED1x3700 D571 T840 LS1A18	1170	73	80	3668	24,5	150	80+	4000	2,50
Atria LED1x3750 D572 T840 LS1A18	1457	73	80	3716	24,1	154	80+	4000	3,20
Atria LED1x4600 D573 T840 LS1A18	1457	73	80	4585	30,6	150	80+	4000	3,20

tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

Optics with asymmetric beam LS1A18 SDIM Driver with switch-control dimming DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

Emergency version 3 hours (best available technology) ЕМ3В Emergency version equipped with an autonomous testing system, 3 hours Emergency version 3 hours with DALI interface ЕМ3А

EM3D

RAL RAL colour

Colour temperature 3000K, CRI 80+ T830 T840 Colour temperature 4000K, CRI 80+



Available accessories:



Product: Suspension MTG KIT SUSI Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs *note - 2pcs MTG SUSI KIT for 1 luminaire required



Product: Suspension rope 0.001x5m Description: Suspension rope 0.001x5m, 1pcs



Product: WALL MTG KIT - Atria LED

Description: Support bracket for luminaire installation onto wall. Atria LED, 2pcs



Product: I-JOIN MTG KIT - Atria LED

Description: "I" type join kit for connecting luminaires in-line, 1pcs



Description: Plastic cap for hiding cable inlet into ceilings, white

Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear

Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceilings, white

Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



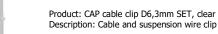
Product: CAP cable 3x0.75 2.0m white

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm

*note - please always choose right mounting accessories before placing an order

Applications:





FUSER AND LUMINAIRES WALL

www.northcliffe.org



PUPIS P LED

Product Group: Diffuser and wall luminaires



















Description: A surface-mounted LED luminaire with oval profile and high impact resistance

Diffuser: opal polycarbonate, high impact resistance

Body: white polycarbonate

General data: Mains voltage: 220-240V, 0/50-60Hz
Power factor: >0,55

EEC: A+

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 40000/L70B50

Operating temperature range, °C: ta -15...+35

Protection class IEC: II Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Screw terminal, 2x1.5mm2

Environment: Indoor

Application: Office, education, household, corridor, staircase, healthcare, bathroom, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Pupis P LED1x500 D541 T730 OP	171	71	45	500	5,0	100	70+	3000	0,18

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

OP Opal diffuser

T730 Colour temperature 3000K, CRI 70+





CETUS P LED

Product Group: Diffuser and wall luminaires















General data:

A surface-mounted LED luminaire with rounded profile and high impact resistance **Description:**

Diffuser: opal polycarbonate, high impact resistance

Body: white polycarbonate Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,55 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 40000/L70B50

Operating temperature range, °C: ta -15...+35

Protection class IEC: II Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A+

Installation:

Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Screw terminal, 2x1.5mm2

Environment: Indoor

Application:

Office, education, household, corridor, staircase, healthcare, bathroom, public place

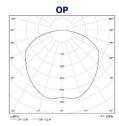
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Cetus P LED1x1200 D671 T830 OP	160	160	63	1080	12,0	90	80+	3000	0,19

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Opal diffuser

T730 Colour temperature 3000K, CRI 70+





PAVO P LED

Product Group: Diffuser and wall luminaires



















Description: A surface IP44 LED luminaire with opal diffuser and rounded profile

Diffuser: opal PMMA, UV stable, with quick fix lock

Body: steel sheet, white

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 40000/L80B50

Operating temperature range, °C: ta -15...+35 (from 0 °C with EM3)

Protection class IEC: I Ingress protection code: IP44 Mechanical impact resistance: IK02

Installation:

Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Screw terminal, 3x1.5mm2 **Environment:**

Application: Office, education, household, hotel, corridor, staircase, healthcare, bathroom, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Pavo P LED1x1100 D515 T830	280	280	90	1020	12,0	85	80+	3000	0,46
Pavo P LED1x1600 D516 T830	360	360	105	1620	18,0	90	80+	3000	0,69
Pavo P LED1x2000 D517 T830	410	410	115	2090	22,0	95	80+	3000	0,90
Pavo P LED1x3000 D518 T830	410	410	115	3040	32,0	95	80+	3000	0,90
Pavo P LED1x4200 D995 T830	500	500	140	3850	40,0	96	80+	3000	1,50
Pavo P LED1x1100 D515 T840	280	280	90	1080	12,0	90	80+	4000	0,46
Pavo P LED1x1600 D516 T840	360	360	105	1700	18,0	94	80+	4000	0,69
Pavo P LED1x2000 D517 T840	410	410	115	2200	22,0	100	80+	4000	0,90
Pavo P LED1x3000 D518 T840	410	410	115	3200	32,0	100	80+	4000	0,90
Pavo P LED1x4200 D995 T840	500	500	140	4164	40,0	104	80+	4000	1,50

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Integrated microwave (MW) motion sensor with on-off control MW

MWRFM+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

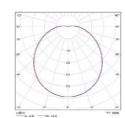
master and slave. Functions: Staircase, Corridor, (no dimming control).

Emergency version 3 hours EM3

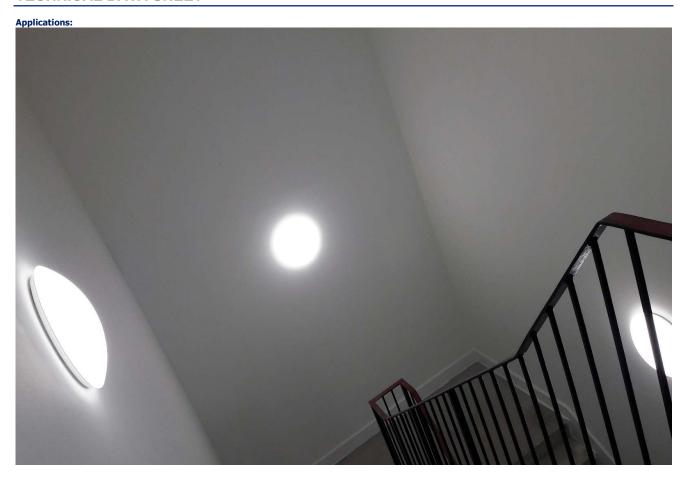
Emergency version 3 hours (best available technology) ЕМ3В

Emergency version equipped with an autonomous testing system, 3 hours ЕМ3А

Strain relief for power supply cable 1G Colour temperature 3000K, CRI 80+ T830 T840 Colour temperature 4000K, CRI 80+









INDUS P LED

Product Group: Diffuser and wall luminaires























Description: A surface LED luminaire with rounded profile, good dust and weather resistance

Diffuser: opal thermoplastic, UV stable, with sealing gasket and screws fixing

Body: white thermoplastic, UV stable, high impact resistance

Gear tray: steel sheet, white

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -15...+35 (from 0 °C with EM3)

Protection class IEC: II Ingress protection code: IP65

Mechanical impact resistance: IK08 (IK10 optional)

EEC: A++

Installation: Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Push-in terminal, 3x2x2.5mm2 (screw terminal,

2x1.5mm2 for E27 version)

Environment: Indoor/Outdoor

Application: Office, education, household, hotel, corridor, staircase, healthcare, bathroom, public place, parking area





Luminaire is available in UV stable dark grey thermoplastic body (DGREY). For more information see the option list

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Indus P 1E27 T80	295	295	100						1,00
Indus P LED1x1200 D501 T830	295	295	100	1046	9,3	112	80+	3000	1,10
Indus P LED1x1650 D502 T830	295	295	100	1460	13,5	108	80+	3000	1,10
Indus P LED1x1200 D501 T840 1G	295	295	100	1102	9,3	119	80+	4000	1,10
Indus P LED1x1650 D502 T840 1G	295	295	100	1539	13,5	114	80+	4000	1,10
Indus P 1E27 T80 LOUVER	295	295	100						1,00
Indus P LED1x1200 D501 T830 LOUVER	295	295	100	541	9,3	58	80+	3000	1,10
Indus P LED1x1650 D502 T830 LOUVER	295	295	100	756	13,5	56	80+	3000	1,10
Indus P LED1x1200 D501 T840 LOUVER	295	295	100	570	9,3	61	80+	4000	1,10
Indus P LED1x1650 D502 T840 LOUVER	295	295	100	797	13,5	59	80+	4000	1,10

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C



Options available on request:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

DIM Driver with 1-10V dimming MW

Integrated microwave (MW) motion sensor with on-off control

MWRFM+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both master and slave. Functions: Staircase, Corridor, dimming control.

MWRFM+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

master and slave. Functions: Staircase, Corridor, (no dimming control).

MWRFM Integrated microwave (MW) motion sensor with integrated RF (radio wave) transmitter. Sensor can serve as

master. Functions: Staircase, Corridor, dimming control. Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

MWRFS+ Functions: Staircase, Corridor, dimming control.

MWRFS+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor (no dimming control).

Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave. **MWRFS**

Functions: Staircase, Corridor, (no dimming control). Emergency version 3 hours

Emergency version 3 hours (best available technology) ЕМ3В

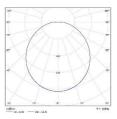
ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

Strain relief for power supply cable 1G PC Opal PC diffuser for IK10 impact resistance

LOUVER Decorative louver

Dark grey thermoplastic body **DGREY** Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840





HEZE P LED

Product Group: Diffuser and wall luminaires



Images for the product family and options:









Description: A surface LED luminaire with rectangular profile, good dust and weather resistance

Diffuser: opal thermoplastic, UV stable, with sealing gasket and screws fixing

Body: white thermoplastic, UV stable, high impact resistance

Gear tray: steel sheet, white

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -15...+35 (from 0 °C with EM3)

Protection class IEC: II
Ingress protection code: IP65
Mechanical impact resistance: IK08
EEC: A++

EEC: A++

Installation: Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Push-in terminal, 3x2x2.5mm2 (screw terminal,

2x1.5mm2 for E27 version)

Environment: Indoor/Outdo

Application:

Office, education, household, hotel, corridor, staircase, healthcare, bathroom, public place, parking area



Luminaire is available in UV stable dark grey thermoplastic body (DGREY). For more information see the option list

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Heze P 1E27 Z70	295	295	90						1,40
Heze P 2E27 Z71	295	295	90						1,40
Heze P LED1x1200 D960 T830	295	295	90	1107	10,1	110	80+	3000	1,50
Heze P LED1x1650 D961 T830	295	295	90	1547	14,7	105	80+	3000	1,50
Heze P LED1x1200 D960 T840 1G	295	295	90	1167	10,1	115	80+	4000	1,50
Heze P LED1x1650 D961 T840 1G	295	295	90	1631	14,7	111	80+	4000	1,50
Heze P 1E27 Z70 LOUVER	295	295	90						1,40
Heze P 2E27 Z71 LOUVER	295	295	90						1,40
Heze P LED1x1200 D960 T830 LOUVER	295	295	90	678	10,1	67	80+	3000	1,50
Heze P LED1x1650 D961 T830 LOUVER	295	295	90	947	14,7	64	80+	3000	1,50
Heze P LED1x1200 D960 T840 LOUVER	295	295	90	715	10,1	71	+08	4000	1,50
Heze P LED1x1650 D961 T840 LOUVER	295	295	90	999	14,7	68	80+	4000	1,50

tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

SDIM Driver with switch-control dimming DALI Driver with DALI interface

DIM Driver with 1-10V dimming MW

Integrated microwave (MW) motion sensor with on-off control

MWRFM+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

master and slave. Functions: Staircase, Corridor, dimming control.

MWRFM+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both master and slave. Functions: Staircase, Corridor, (no dimming control).

MWRFM Integrated microwave (MW) motion sensor with integrated RF (radio wave) transmitter. Sensor can serve as

master. Functions: Staircase, Corridor, dimming control. Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

MWRFS+ Functions: Staircase, Corridor, dimming control.

MWRFS+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor (no dimming control).

Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave. **MWRFS**

Functions: Staircase, Corridor, (no dimming control). Emergency version 3 hours

Emergency version 3 hours (best available technology) ЕМ3В

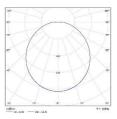
ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

Strain relief for power supply cable 1G PC Opal PC diffuser for IK10 impact resistance

LOUVER Decorative louver

Dark grey thermoplastic body **DGREY** Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840





CARINA P LED

Product Group: Diffuser and wall luminaires























Description: A surface IP44 LED luminaire with translucent micro-linear diffuser and screwed end caps for increased security

Diffuser: translucent micro-linear polycarbonate, UV stabilized, impact-resistant

Body: steel sheet, white

End caps: white thermoplastic with security screws

General data: Mains voltage: 220-240V, 0/50-60Hz
Power factor: >0,95

Light source: LED
Light source included: Yes
Light distribution type: Direct

LED lifetime, h: 75000/L80B50 (100000/L80B50 low power versions) Operating temperature range, °C: ta -15...+35 (from 0 °C with EM3) Protection class IEC: I (II optional)

Protection class IEC: I (II optional) Ingress protection code: IP54 Mechanical impact resistance: IK05 Protection symbol: D Glow wire test, °C: 850

EEC: A++

Installation: Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, staircase, healthcare, bathroom, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Carina P LED1x1300 E774 T830 MPRZ	615	97	72	1221	10,3	119	80+	3000	1,50
Carina P LED1x1950 E775 T830 MPRZ	615	97	72	1830	14,5	126	80+	3000	1,50
Carina P LED1x2600 E776 T830 MPRZ	615	97	72	2489	20,8	120	80+	3000	1,50
Carina P LED1x3250 E777 T830 MPRZ	615	97	72	2944	26,1	113	80+	3000	1,50
Carina P LED1x3050 D827 T830 MPRZ	1175	97	72	2961	21,6	137	80+	3000	2,30
Carina P LED1x3750 D828 T830 MPRZ	1175	97	72	3659	26,7	137	80+	3000	2,30
Carina P LED1x5100 D829 T830 MPRZ	1175	97	72	4978	38,1	131	+08	3000	2,30
Carina P LED1x6300 D830 T830 MPRZ	1175	97	72	6192	50,2	123	+08	3000	2,30
Carina P LED1x3800 D831 T830 MPRZ	1455	97	72	3702	26,4	140	+08	3000	2,80
Carina P LED1x4700 D832 T830 MPRZ	1455	97	72	4574	33,4	137	+08	3000	2,80
Carina P LED1x6350 D833 T830 MPRZ	1455	97	72	6222	47,6	131	+08	3000	2,80
Carina P LED1x7900 D834 T830 MPRZ	1455	97	72	7740	62,8	123	+08	3000	2,80
Carina P LED1x1300 E774 T840 MPRZ	615	97	72	1271	10,3	124	+08	4000	1,50
Carina P LED1x1950 E775 T840 MPRZ	615	97	72	1906	14,5	132	+08	4000	1,50
Carina P LED1x2600 E776 T840 MPRZ 1G 2Gr	615	97	72	2593	20,8	124	+08	4000	1,50
Carina P LED1x3250 E777 T840 MPRZ	615	97	72	3225	26,1	124	+08	4000	1,50
Carina P LED1x3050 D827 T840 MPRZ	1175	97	72	3085	21,6	143	+08	4000	2,30
Carina P LED1x3750 D828 T840 MPRZ 1G 2Gr	1175	97	72	3811	26,7	143	+08	4000	2,30
Carina P LED1x5100 D829 T840 MPRZ	1175	97	72	5185	38,1	136	+08	4000	2,30
Carina P LED1x6300 D830 T840 MPRZ 1G 2Gr	1175	97	72	6450	50,2	128	+08	4000	2,30
Carina P LED1x3800 D831 T840 MPRZ	1455	97	72	3856	26,4	146	80+	4000	2,80
Carina P LED1x4700 D832 T840 MPRZ	1455	97	72	4764	33,4	143	+08	4000	2,80
Carina P LED1x6350 D833 T840 MPRZ 1G 2Gr	1455	97	72	6481	47,6	136	80+	4000	2,80
Carina P LED1x7900 D834 T840 MPRZ	1455	97	72	8062	62,8	128	+08	4000	2,80

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

SDIM Driver with switch-control dimming DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)
MW Integrated microwave (MW) motion sensor with on-off control

MWRFM+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

master and slave. Functions: Staircase, Corridor, dimming control.

MWRFM+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

master and slave. Functions: Staircase, Corridor, (no dimming control).

MWRFM Integrated microwave (MW) motion sensor with integrated RF (radio wave) transmitter. Sensor can serve as master. Functions: Staircase, Corridor, dimming control.

MWRFS+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor, dimming control.

MWRFS+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor (no dimming control).

MWRFS Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor, (no dimming control). EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

*note - EM options not applicable for models: E777

5-pole terminal block in middle of luminaire for easy through wiring

1G Strain relief for power supply cable II Electric shock protection class II

2Gr 2pcs extra sealing grommets for cable entry through end caps included into luminaire set

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs

*note - 2pcs MTG SUSI KIT for 1 luminaire required



Product: CAP1 WHITE

Description: Plastic cap for hiding cable inlet into ceilings, white



Product: CAP1 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear



Product: CAP2 WHITE

Description: Plastic cap for hiding cable inlet into ceilings, white



Product: CAP2 CLEAR

Description: Plastic cap for hiding cable inlet into ceilings, clear



Product: CAP spiral cable 3x0.75 2.0m white

Description: Spiral cable 3x0.75mm² for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m white

Description: Cable $3x0.75 \text{mm}^2$ for suspended luminaire up to 2.0 meters, white



Product: CAP cable 3x0.75 2.0m clear

Description: Cable 3x0.75mm² for suspended luminaire up to 2.0 meters, transparent



Product: CAP cable clip D6,3mm SET, clear

Description: Cable and suspension wire clip set, 4pcs. For cable diameter up to 6,3mm and wire diameter 1mm





CARINA LED

Product Group: Diffuser and wall luminaires



















Description: A surface LED luminaire with translucent micro-linear diffuser and low modern profile

Diffuser: translucent micro-linear polycarbonate, UV stabilized

Body: steel sheet, white End caps: white thermoplastic

General data: Mains voltage: 220-240V, 50-60Hz Power factor: >0,90

Fower factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP40 (IP44 optional) Mechanical impact resistance: IK04

EEC: A++

Installation: Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, corridor, staircase, public place



End cap can be fixed with screw-lock for maximum protection (SCREW). For more information see the option list

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Carina LED1x1200 E237 T840 OP LT70	595	90	85	1227	11,0	112	80+	4000	1,20
Carina LED1x1700 E238 T840 OP LT70	595	90	85	1723	15,2	114	80+	4000	1,20
Carina LED2x1200 E240 T840 OP LT70	595	150	60	2455	20,7	119	80+	4000	1,80
Carina LED2x1700 E241 T840 OP LT70	595	150	60	3446	28,7	120	80+	4000	1,80
Carina LED1x2500 E243 T840 OP LT70	1195	90	85	2591	21,9	118	+08	4000	2,00
Carina LED1x3500 E244 T840 OP LT70	1195	90	85	3637	30,3	120	80+	4000	2,00
Carina LED2x2500 E246 T840 OP LT70	1195	150	60	5182	41,3	125	80+	4000	2,80
Carina LED2x3500 E247 T840 OP LT70	1195	150	60	7274	60,7	120	80+	4000	2,80
Carina LED1x3100 E249 T840 OP LT70	1495	90	85	3273	27,6	118	+08	4000	2,60
Carina LED1x4400 E250 T840 OP LT70	1495	90	85	4594	38,3	120	80+	4000	2,60
Carina LED2x3100 E252 T840 OP LT70	1495	150	60	6545	52,2	125	80+	4000	3,60
Carina LED2x4400 E253 T840 OP LT70	1495	150	60	9189	76,7	120	80+	4000	3,60

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

MW Integrated microwave (MW) motion sensor with on-off control

ЕМ3 Emergency version 3 hour

Emergency version 3 hours (best available technology) Colour temperature 3000K, CRI 80+ ЕМ3В

T830 T840 Colour temperature 4000K, CRI 80+

SCREW End cap with screw-lock for maximum protection

5TB 5-pole terminal block in middle of luminaire for easy through wiring

1G Strain relief for power supply cable

IP44 IP44 protection degree

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840

Applications:







DOCTOR P LED

Product Group: Diffuser and wall luminaires

















A surface LED luminaire with modern profile, for use in humid locations, where industrial solutions are aesthetically not acceptable

Diffuser: opal polycarbonate, UV stabilized, impact resistant

Body: white polycarbonate, impact resistant

General data:

Mains voltage: 220-240V, 50-60Hz Power factor: >0,90 Light source: LED

Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -15...+35

Protection class IEC: I Ingress protection code: IP54 Mechanical impact resistance: IK08

EEC: A++

Installation: Environment:

Environment: Indoor

Application: Office, education, corridor, staircase, healthcare, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Doctor P LED1x2500 D408 T840 OP LT80	1160	110	85	2499	21,9	114	80+	4000	1,90
Doctor P LED1x3600 D409 T840 OP LT80	1160	110	85	3509	30,3	116	+08	4000	1,90
Doctor P LED2x2500 D200 T840 OP LT80	1160	160	85	4999	41,3	121	80+	4000	2,60
Doctor P LED2x3600 D201 T840 OP LT80	1160	160	85	7018	60,7	116	+08	4000	2,60

Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Push-in terminal, 3x2x2.5mm2

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

DALI Driver with DALI interface
MW Integrated microwave (MW) motion sensor with on-off control

EM3 Emergency version 3 hour

EM3B Emergency version 3 hours (best available technology)
T830 Colour temperature 3000K, CRI 80+

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

SCREW End cap with screw-lock for maximum protection

5TB 5-pole terminal block in middle of luminaire for easy through wiring

T830 Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 80+



^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C



CABINET LED

Product Group: Diffuser and wall luminaires









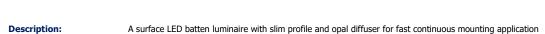












Diffuser: opal polycarbonate, UV stabilized Body: white polycarbonate, with switch button

General data:

Mains voltage: 220-240V, 50-60Hz
Power factor: >0,55
Light source: LED
Light source included: Yes

Light source included: Yes
Light distribution type: Direct
LED lifetime, h: 30000/L70B50
Operating temperature range, °C: ta 0...+35
Protection class IEC: II

Ingress protection code: IP40
Mechanical impact resistance: IK04
EEC: A+

Installation: Surface luminaire designed to be fixed to ceiling and walls of any type. Effective solution for interconnecting a number of battens, including start and link lead. Through wired, 2x0.75mm2, build-in connectors, 2-pole plug and socket

Environment: Indoor
Application: Household, retail



Luminaires can be connected into one continuous line without gaps and light shadows



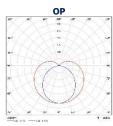


Supplied with 10 cm start lead, interconnecting part and wall/ceiling mounting kit for easy installation. Switch on/off button mounted on the side of the body. Optional: 15 cm flexible connector and 70 cm power cable with plug available on request

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Cabinet LED1x640 B838 T830 OP	573	22	30	640	8,0	80	+08	3000	0,27
Cabinet LED1x800 B839 T830 OP	873	22	30	800	10,0	80	80+	3000	0,42
Cabinet LED1x1120 B840 T830 OP	1173	22	30	1120	14,0	80	80+	3000	0,51

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

T830 Colour temperature 3000K, CRI 80+



Available accessories:



Product: Cabinet LED flexible connector 15cm Description: Flexible connector 15cm, white



Product: Cabinet LED power cable 70cm with plug Description: Power cable 70cm with plug, white



MIRA LED

Product Group: Diffuser and wall luminaires























Description: A surface LED front mirror luminaire with opal diffuser for use in bath and dressing rooms Diffuser: opal polycarbonate, UV stabilized

Body: extruded aluminium body, with white thermoplastic endcaps and switch button

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,55 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta 0...+35 Protection class IEC: II (I with build-in socket) Ingress protection code: IP44

Mechanical impact resistance: IK04 EEC: A+

Surface luminaire designed to be fixed to walls of any type. Cable entry is accessible from the rear though a waterproof cover located in the centre of the body. Screw terminal, 2x1.5mm2 (3x1.5mm2 with build-in socket) Installation:

Environment:

Application: Household, hotel, bathroom, healthcare





A build-in Schuko type socket outlet with hinged IP44 cover is available as an option (SOCS44). For more information see the option list





Supplied with a wall mounting kit for easy installation. A switch on/off button is installed at the end of

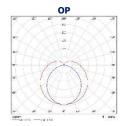
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Mira LED1x1400 D552 T830 OP	600	53	65	1400	15,0	93	80+	3000	0,54
Mira LED1v1400 D553 T830 OP SOCS44	682	53	65	1400	15.0	93	80+	3000	0.71

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

CS44 Built-in schuko socket outlet with hinged cover (IP44)

Colour temperature 3000K, CRI 80+





LUPI LED

Product Group: Diffuser and wall luminaires

















Description: A wall mounted LED luminaire with opal diffuser and direct/indirect lighting effect

Diffuser: opal polycarbonate, UV stabilized Body: extruded aluminium body, light grey (RAL 9006) finish

General data: Mains voltage: 220-240V, 50-60Hz

General data: Mains voltage: 220-240V, 50-60I Power factor: >0,95

Light source: LED
Light source included: Yes
Light distribution type: Direct/indirect
LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta -15...+35

Protection class IEC: I Ingress protection code: IP44 Mechanical impact resistance: IK05

EEC: A+/A++

Installation: Surface luminaire designed to be fixed to walls of any type. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Household, hotel, bathroom

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Lupi LED1x800/800 D847 T840 OP LG3	580	85	75	1594	13,6	117	80+	4000	2,00
Lupi LED1x1100/1100 D848 T840 OP LG3	580	85	75	2168	19,6	110	80+	4000	2,00
Lupi LED1x1500/1500 D849 T840 OP LG3	580	85	75	2940	29.2	101	80+	4000	2.00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
1G Strain relief for power supply cable
OP- Opal diffuser with high light transmittance

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





WATERPROOF ND CLEANROOM LUMINAIRES

www.northcliffe.org



BARAT LED

Product Group: Waterproof and Cleanroom Luminaires



















Description: A waterproof IP66 LED luminaire with opal diffuser and high impact resistance

Diffuser: opal polycarbonate (PC), UV stabilized, high impact resistance Body: light grey polycarbonate, UV stabilized, high impact resistance

Gear tray: sheet steel, white finish

Diffuser retaining clips and sealing washers from the end of the body for easy maintenance

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

Light distribution type: Direct LED lifetime, h: 75000/L80B50 (100000/L80B50 low power versions)

Operating temperature range, °C: ta -20...+35

Protection class IEC: I (II optional) Ingress protection code: IP66 Mechanical impact resistance: IK10 Protection symbol: D

Glow wire test, °C: 850 EEC: A++

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Push-in terminal, 5x2x2.5mm2

Environment: Indoor/outdoor with roof

Application: Industry, warehouse, hall, sports, public place, parking area, transport terminal, parking area





Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain or wire suspension





Diffuser retaining clips made of stainless steel available on request. For more information see the option list: IC- Stainless steel clips



Suspension mounting kit for Barat, Proof and Nord LED luminaires with two 1.5 or 3.0 meter rope is available on request. For more information see the accessories list.



Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Barat LED1x2050 D556 T830 PC/PC OP LT80	662	96	111	1931	14,6	132	80+	3000	1,30
Barat LED1x2750 D557 T830 PC/PC OP LT80	662	96	111	2627	21,1	125	80+	3000	1,30
Barat LED2x1250 D558 T830 PC/PC OP LT80	662	146	111	2376	16,5	144	80+	3000	1,80
Barat LED2x2050 D559 T830 PC/PC OP LT80	662	146	111	3861	27,3	141	80+	3000	1,80
Barat LED1x3300 D560 T830 PC/PC OP LT80	1272	96	111	3129	21,6	145	80+	3000	2,10
Barat LED1x4050 D561 T830 PC/PC OP LT80	1272	96	111	3861	27,3	141	80+	3000	2,10
Barat LED1x5500 D562 T830 PC/PC OP LT80	1272	96	111	5255	38,1	138	80+	3000	2,10
Barat LED1x6850 D563 T830 PC/PC OP LT80	1272	96	111	6535	50,2	130	80+	3000	2,10
Barat LED2x4800 D564 T830 PC/PC OP LT80	1272	146	111	9141	64,5	142	80+	3000	2,80
Barat LED1x4100 D565 T830 PC/PC OP LT80	1572	96	111	3911	27,0	145	80+	3000	2,60
Barat LED1x5050 D566 T830 PC/PC OP LT80	1572	96	111	4826	34,1	141	80+	3000	2,60
Barat LED1x6900 D567 T830 PC/PC OP LT80	1572	96	111	6568	47,6	138	80+	3000	2,60
Barat LED1x8550 D568 T830 PC/PC OP LT80	1572	96	111	8169	62,8	130	80+	3000	2,60
Barat LED2x6000 D569 T830 PC/PC OP LT80	1572	146	111	11426	80,6	142	80+	3000	3,30
Barat LED1x2050 D556 T840 PC/PC OP LT80	662	96	111	2017	14,6	138	80+	4000	1,30
Barat LED1x2750 D557 T840 PC/PC OP LT80	662	96	111	2745	21,1	130	80+	4000	1,30
Barat LED2x1250 D558 T840 PC/PC OP LT80	662	146	111	2475	17,4	142	80+	4000	1,80
Barat LED2x2050 D559 T840 PC/PC OP LT80 1G	662	146	111	4034	27,3	148	80+	4000	1,80
Barat LED1x3300 D560 T840 PC/PC OP LT80 1G	1272	96	111	3266	21,6	152	80+	4000	2,10
Barat LED1x4050 D561 T840 PC/PC OP LT80 1G	1272	96	111	4036	27,3	148	80+	4000	2,10
Barat LED1x5500 D562 T840 PC/PC OP LT80	1272	96	111	5490	38,1	144	80+	4000	2,10
Barat LED1x6850 D563 T840 PC/PC OP LT80 1G	1272	96	111	6829	50,2	136	80+	4000	2,10
Barat LED2x4800 D564 T840 PC/PC OP LT80 1G	1272	146	111	9547	64,5	148	80+	4000	2,80
Barat LED1x4100 D565 T840 PC/PC OP LT80	1572	96	111	4082	27,0	151	80+	4000	2,60
Barat LED1x5050 D566 T840 PC/PC OP LT80	1572	96	111	5045	34,1	148	80+	4000	2,60
Barat LED1x6900 D567 T840 PC/PC OP LT80 1G	1572	96	111	6863	47,6	144	80+	4000	2,60
Barat LED1x8550 D568 T840 PC/PC OP LT80 1G	1572	96	111	8537	62,8	136	80+	4000	2,60
Barat LED2x6000 D569 T840 PC/PC OP LT80 1G	1572	146	111	11934	80,6	148	80+	4000	3,30

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

PREMIUM RANGE AVAILABLE ON REQUEST (SUBJECT TO MINIMUM ORDER QUANTITY)

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Barat LED1x2150 G019 T830 PC/PC OP LT80	662	96	111	2046	14,6	140	80+	3000	1,30
Barat LED1x2950 G020 T830 PC/PC OP LT80	662	96	111	2784	21,1	132	80+	3000	1,30
Barat LED2x1350 G021 T830 PC/PC OP LT80	662	146	111	2518	16,5	153	80+	3000	1,80
Barat LED2x2150 G022 T830 PC/PC OP LT80	662	146	111	4092	27,3	150	80+	3000	1,80
Barat LED1x3500 G023 T830 PC/PC OP LT80	1272	96	111	3316	21,5	155	80+	3000	2,10
Barat LED1x4300 G024 T830 PC/PC OP LT80	1272	96	111	4092	27,3	150	80+	3000	2,10
Barat LED1x5850 G025 T830 PC/PC OP LT80	1272	96	111	5568	38,1	146	80+	3000	2,10
Barat LED1x7250 G026 T830 PC/PC OP LT80	1272	96	111	6925	50,2	138	80+	3000	2,10
Barat LED2x5050 G027 T830 PC/PC OP LT80	1272	146	111	9687	64,4	150	80+	3000	2,80
Barat LED1x4350 G028 T830 PC/PC OP LT80	1572	96	111	4144	26,8	155	80+	3000	2,60
Barat LED1x5350 G029 T830 PC/PC OP LT80	1572	96	111	5115	34,1	150	80+	3000	2,60
Barat LED1x7300 G030 T830 PC/PC OP LT80	1572	96	111	6960	47,6	146	80+	3000	2,60
Barat LED1x9050 G031 T830 PC/PC OP LT80	1572	96	111	8656	62,8	138	80+	3000	2,60
Barat LED2x6350 G032 T830 PC/PC OP LT80	1572	146	111	12109	80,5	150	80+	3000	3,30
Barat LED1x2150 G019 T840 PC/PC OP LT80	662	96	111	2132	14,6	146	80+	4000	1,30
Barat LED1x2950 G020 T840 PC/PC OP LT80	662	96	111	2902	21,1	138	80+	4000	1,30
Barat LED2x1350 G021 T840 PC/PC OP LT80	662	146	111	2625	16,5	159	80+	4000	1,80
Barat LED2x2150 G022 T840 PC/PC OP LT80	662	146	111	4264	27,3	156	80+	4000	1,80
Barat LED1x3500 G023 T840 PC/PC OP LT80	1272	96	111	3456	21,5	161	80+	4000	2,10
Barat LED1x4300 G024 T840 PC/PC OP LT80	1272	96	111	4264	27,3	156	80+	4000	2,10
Barat LED1x5850 G025 T840 PC/PC OP LT80	1272	96	111	5803	38,1	152	80+	4000	2,10
Barat LED1x7250 G026 T840 PC/PC OP LT80	1272	96	111	7218	50,2	144	80+	4000	2,10
Barat LED2x5050 G027 T840 PC/PC OP LT80	1272	146	111	10096	64,4	157	80+	4000	2,80
Barat LED1x4350 G028 T840 PC/PC OP LT80	1572	96	111	4320	26,8	161	80+	4000	2,60
Barat LED1x5350 G029 T840 PC/PC OP LT80	1572	96	111	5331	34,1	156	80+	4000	2,60
Barat LED1x7300 G030 T840 PC/PC OP LT80	1572	96	111	7254	47,6	152	80+	4000	2,60
Barat LED1x9050 G031 T840 PC/PC OP LT80	1572	96	111	9022	62,8	144	80+	4000	2,60
Barat LED2x6350 G032 T840 PC/PC OP LT80	1572	146	111	12620	80,5	157	80+	4000	3,30

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

SDIM Driver with switch-control dimming DALI Driver with DALI interface

Driver with Corridor function (never off) COR

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min) MW Integrated microwave (MW) motion sensor with on-off control

MWRFM+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

Functions: Staircase, Corridor, dimming control. master and slave.

MWRFM+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

master and slave. Functions: Staircase, Corridor, (no dimming control).

MWRFM Integrated microwave (MW) motion sensor with integrated RF (radio wave) transmitter. Sensor can serve as master. Functions: Staircase, Corridor, dimming control.

MWRFS+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor, dimming control. Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

MWRFS+off

Functions: Staircase, Corridor (no dimming control). Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

MWRFS

Functions: Staircase, Corridor, (no dimming control). Integrated PIR sensor for high ceiling (up to 7 meters) with on-off control HBPIR7m

*note - Luminaire with integrated HBPIR7m sensor protection degree is IP65

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

Emergency version equipped with an autonomous testing system, 3 hours ЕМ3А

EM3D Emergency version 3 hours with DALI interface

EM options not applicable for models: D557, G020 *note

5TB 5-pole terminal block in middle of luminaire for easy through wiring

*note - 5TB terminal block included as standard

1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks Through wiring 5x1.5 mm² with two push-in terminal blocks 3LIN Through wiring 3x2.5 mm² with two push-in terminal blocks 1LIN2.5 Through wiring 5x2.5 mm² with two push-in terminal blocks 3LIN2.5

*note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

Strain relief for power supply cable 1G Strain relief for power supply cable, 2pcs 2G

Electric shock protection class II Π

IC Stainless steel clips

OP LT80 Opal diffuser with high light transmittance Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840

Available accessories:



Product: Suspension MTG KIT - Barat/Proof/Nord LED 1.5m

Description: Suspension kit for Barat/Proof/Nord LED luminaires, 1.5 meter, 2pcs



Product: Suspension MTG KIT - Barat/Proof/Nord LED 3.0m

Description: Suspension kit for Barat/Proof/Nord LED luminaires, 3.0 meter, 2pcs





















NORD LED

Product Group: Waterproof and Cleanroom Luminaires















Images for the product family and options:



Description: A waterproof IP66 LED luminaire for use in extreme temperatures -40 to +50°C environments

Diffuser: opal polycarbonate, UV stabilized, high impact resistance

Body: light grey polycarbonate, UV stabilized, high impact resistance, with stainless steel clips

Gear tray: sheet steel, white finish

Diffuser retaining clips and sealing washers from the end of the body for easy maintenance

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,97 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 100000/L80B50 (75000/L80B50 E780, E784 and E785 models)

Operating temperature range, °C: ta -40...+50

Protection class IEC: I Ingress protection code: IP66 Mechanical impact resistance: IK10 Protection symbol: D Glow wire test, °C: 850

EEC: A++
Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Push-in terminal, 5x2x2.5mm2

Environment: Indoor/outdoor with roof

Application: Industry, cold store, bakery, heating plant, glass factory





Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain or wire suspension

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Nord LED1x5500 E778 T830 OP LT80 IC ta-40+50C	1272	96	111	5255	38,1	138	+08	3000	2,10
Nord LED1x6200 E779 T830 OP LT80 IC ta-40+50C	1272	96	111	5910	44,1	134	+08	3000	2,10
Nord LED2x4050 E780 T830 OP LT80 IC ta-40+50C	1272	146	111	7722	52,8	146	+08	3000	2,80
Nord LED1x4100 E781 T830 OP LT80 IC ta-40+50C	1572	96	111	3911	26,8	146	+08	3000	2,60
Nord LED1x5050 E782 T830 OP LT80 IC ta-40+50C	1572	96	111	4826	34,1	141	+08	3000	2,60
Nord LED1x6900 E783 T830 OP LT80 IC ta-40+50C	1572	96	111	6568	47,6	138	80+	3000	2,60
Nord LED1x7750 E784 T830 OP LT80 IC ta-40+50C	1572	96	111	7388	55,1	134	80+	3000	2,60
Nord LED2x5050 E785 T830 OP LT80 IC ta-40+50C	1572	146	111	9653	66,0	146	80+	3000	3,30
Nord LED1x5500 E778 T840 OP LT80 IC ta-40+50C	1272	96	111	5490	38,1	144	80+	4000	2,10
Nord LED1x6200 E779 T840 OP LT80 IC ta-40+50C	1272	96	111	6175	44,1	140	80+	4000	2,10
Nord LED2x4050 E780 T840 OP LT80 IC ta-40+50C	1272	146	111	8068	52,8	153	80+	4000	2,80
Nord LED1x4100 E781 T840 OP LT80 IC ta-40+50C	1572	96	111	4086	26,8	152	80+	4000	2,60
Nord LED1x5050 E782 T840 OP LT80 IC ta-40+50C	1572	96	111	5045	34,1	148	80+	4000	2,60
Nord LED1x6900 E783 T840 OP LT80 IC ta-40+50C	1572	96	111	6863	47,6	144	80+	4000	2,60
Nord LED1x7750 E784 T840 OP LT80 IC ta-40+50C	1572	96	111	7719	55,1	140	80+	4000	2,60
Nord LED2x5050 E785 T840 OP LT80 IC ta-40+50C	1572	146	111	10085	66,0	153	80+	4000	3,30

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min) 5TB 5-pole terminal block in middle of luminaire for easy through wiring

note - 5TB terminal block included as standard

1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks

3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks

1LIN2.5 Through wiring 3x2.5 mm² with two push-in terminal blocks

3LIN2.5 Through wiring 5x2.5 mm² with two push-in terminal blocks

3LIN2.5 Through wiring 5x2.5 mm² with two push-in terminal blocks

Strain relief for power supply cable Strain relief for power supply cable, 2pcs 1G 2G Π Electric shock protection class II

IC Stainless steel clips

OP LT80 Opal diffuser with high light transmittance T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T840

Available accessories:



Product: Suspension MTG KIT - Barat/Proof/Nord LED 1.5m

Description: Suspension kit for Barat/Proof/Nord LED luminaires, 1.5 meter, 2pcs



Product: Suspension MTG KIT - Barat/Proof/Nord LED 3.0m

Description: Suspension kit for Barat/Proof/Nord LED luminaires, 3.0 meter, 2pcs







PROOF LED

Product Group: Waterproof and Cleanroom Luminaires



















Description: A waterproof IP66 LED luminaire with acrylic opal diffuser for use in food industry and aggressive environments where specialized

cleaning agents are used

Diffuser: opal acrylic, UV stabilized, for exposure to severe atmospheric conditions

Body: light grey thermoplastic, UV stabilized, with stainless steel clips and good chemical resistance

Gear tray: sheet steel, white finish

Diffuser retaining clips and sealing washers from the end of the body for easy maintenance

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 100000/L80B50 (75000/L80B50 E787, E789, E793, E794, E798 and E799 models)
Operating temperature range, °C: ta -20...+35

Operating temperature range, °C: ta -20...+35 Protection class IEC: I (II optional)

Ingress protection code: IP66
Mechanical impact resistance: IK06
Protection symbol: D
Glow wire test, °C: 650

EEC: A++

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Push-in terminal, 5x2x2.5mm2

Environment: Indoor

Application: Industry, food processing area, warehouse, hall, agriculture. Suits well in aggressive atmospheres with cleaning agents, salts, acids

and mineral oils





Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain or wire suspension

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Proof LED1x2050 E786 T830 OP LT80 IC	662	96	111	1931	14,6	132	80+	3000	1,30
Proof LED1x2750 E787 T830 OP LT80 IC	662	96	111	2627	21,1	125	80+	3000	1,30
Proof LED2x1250 E788 T830 OP LT80 IC	662	146	111	2376	16,5	144	+08	3000	1,80
Proof LED2x2050 E789 T830 OP LT80 IC	662	146	111	3861	27,3	141	80+	3000	1,80
Proof LED1x3300 E790 T830 OP LT80 IC	1272	96	111	3129	21,5	146	80+	3000	2,10
Proof LED1x4050 E791 T830 OP LT80 IC	1272	96	111	3861	27,3	141	80+	3000	2,10
Proof LED1x5500 E792 T830 OP LT80 IC	1272	96	111	5255	38,1	138	+08	3000	2,10
Proof LED1x6850 E793 T830 OP LT80 IC	1272	96	111	6535	50,2	130	80+	3000	2,10
Proof LED2x4800 E794 T830 OP LT80 IC	1272	146	111	9141	64,4	142	+08	3000	2,80
Proof LED1x4100 E795 T830 OP LT80 IC	1572	96	111	3911	26,8	146	+08	3000	2,60
Proof LED1x5050 E796 T830 OP LT80 IC	1572	96	111	4826	34,1	141	+08	3000	2,60
Proof LED1x6900 E797 T830 OP LT80 IC	1572	96	111	6568	47,6	138	+08	3000	2,60
Proof LED1x8550 E798 T830 OP LT80 IC	1572	96	111	8169	62,8	130	80+	3000	2,60
Proof LED2x6000 E799 T830 OP LT80 IC	1572	146	111	11426	80,5	142	80+	3000	3,30
Proof LED1x2050 E786 T840 OP LT80 IC	662	96	111	2017	14,6	138	80+	4000	1,30
Proof LED1x2750 E787 T840 OP LT80 IC	662	96	111	2745	21,1	130	80+	4000	1,30
Proof LED2x1250 E788 T840 OP LT80 IC	662	146	111	2475	17,4	142	80+	4000	1,80



TECHNICAL DATA SHEET

Proof LED2x2050 E789 T840 OP LT80 IC	662	146	111	4034	27,3	148	80+	4000	1,80
Proof LED1x3300 E790 T840 OP LT80 IC	1272	96	111	3266	21,6	152	80+	4000	2,10
Proof LED1x4050 E791 T840 OP LT80 IC	1272	96	111	4036	27,3	148	80+	4000	2,10
Proof LED1x5500 E792 T840 OP LT80 IC	1272	96	111	5490	38,1	144	80+	4000	2,10
Proof LED1x6850 E793 T840 OP LT80 IC	1272	96	111	6829	50,2	136	80+	4000	2,10
Proof LED2x4800 E794 T840 OP LT80 IC	1272	146	111	9547	64,5	148	+08	4000	2,80
Proof LED1x4100 E795 T840 OP LT80 IC	1572	96	111	4082	27,0	151	80+	4000	2,60
Proof LED1x5050 E796 T840 OP LT80 IC	1572	96	111	5045	34,1	148	+08	4000	2,60
Proof LED1x6900 E797 T840 OP LT80 IC	1572	96	111	6863	47,6	144	80+	4000	2,60
Proof LED1x8550 E798 T840 OP LT80 IC	1572	96	111	8537	62,8	136	80+	4000	2,60
Proof LED2x6000 E799 T840 OP LT80 IC	1572	146	111	11934	80,6	148	80+	4000	3,30

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min) MW Integrated microwave (MW) motion sensor with on-off control

MWRFM+ Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

master and slave. Functions: Staircase, Corridor, dimming control

MWRFM+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) transceiver. Sensor can serve as both

master and slave. Functions: Staircase, Corridor, (no dimming control) **MWRFM**

Integrated microwave (MW) motion sensor with integrated RF (radio wave) transmitter. Sensor can serve as

master. Functions: Staircase, Corridor, dimming control

Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave. MWRFS+

Functions: Staircase, Corridor, dimming control

MWRFS+off Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave.

Functions: Staircase, Corridor (no dimming control)

Integrated microwave (MW) motion sensor with integrated RF (radio wave) receiver. Sensor can serve as slave. **MWRFS**

Functions: Staircase, Corridor, (no dimming control) EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА

Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

*note - EM options not applicable for models: D557, G020

5TB 5-pole terminal block in middle of luminaire for easy through wiring

- 5TB terminal block included as standard *note

Through wiring 3x1.5 mm² with two push-in terminal blocks 1LIN 3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks 1LIN2.5 Through wiring 3x2.5 mm² with two push-in terminal blocks 3LIN2.5 Through wiring 5x2.5 mm² with two push-in terminal blocks *note - LIN options applicable for models longer than 800mm, for shorter models 5TB option

1G Strain relief for power supply cable

2G Strain relief for power supply cable, 2pcs

II Electric shock protection class II

Stainless steel clips OP LT80 Opal diffuser with high light transmittance T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+

Available accessories:



Product: Suspension MTG KIT - Barat/Proof/Nord LED 1.5m

Description: Suspension kit for Barat/Proof/Nord LED luminaires, 1.5 meter, 2pcs



Product: Suspension MTG KIT - Barat/Proof/Nord LED 3.0m

Description: Suspension kit for Barat/Proof/Nord LED luminaires, 3.0 meter, 2pcs









Chemical resistance table of Proof LED series: Proof LED body resistance **Proof LED diffuser resistance Environment** Max. concentration partially partially no yes no Aceton (ketones) Aniline 5% Ammonia Benzene and Benzaldehyde Diethylether(ethers) Potassium nitrate 50% Ethanol(alcohols) Ethylacetate(esters) Ethyl alcohol Phenol Glycerine Heptane 25% Ammonium hydroxide Sodium hydroxide-base 60% Sodium chloride-salt solution 15% Sulphur chloride and calcium chloride Carbon tetrachloride and Chloric ether Iron dichloride Arsenic acid and Oleic acid 20% Citric acid Nitric acid 20% Nitric acid 50% 5% Hydrochloride acid Hydrochloride acid 35% Chromic acid 40% Formic acid 30% Acetic acid 10% Sulphuric acid 30% Methanol Fuel oil Mineral oil Vegetable oil Rape oil Lamp oil 30% Hydrogen peroxide Ammonium sulphate 15% Toluene Turpentine oil Trichlorethylene Sodium carbonate 20% Aliphatic hydrocarbons Aromatic hydrocarbons Alkali



HERCULES LED

Product Group: Waterproof and Cleanroom Luminaires





220-240V 50-60Hz











Description:

A waterproof IP66 LED luminaire with aluminium body and tempered glass diffuser. Suits well in aggressive atmospheres with cleaning

agents, salts, acids and mineral oils

Diffuser: tempered safety glass, impact resistant, with stainless steel clips and safety clips Optics: 30x90°, 60x100°, 90x100°, asymmetric and double asymmetric light beam

Body: extruded aluminium, light grey finish

Brass cable gland and polyurethane sealing to provide reliable IP protection

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 100000/L80B50 (75000/L80B50 D921 and D924, 50000/L80B50 D922 and D925 models)

Operating temperature range, °C: ta -25...+35/40

Protection class IEC: I Ingress protection code: IP66 Mechanical impact resistance: IK10 Protection symbol: D Glow wire test, °C: 850

EEC: A++

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Push-in terminal, 3x2x2.5mm2

Environment: Indoor/outdoor with roof Industry, food processing area, warehouse, hall, agriculture Application:

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Hercules LED1x3400 D920 T830 LS90x100	1224	105	75	3098	24,3	128	80+	3000	4,60
Hercules LED1x4650 D921 T830 LS90x100	1224	105	75	4214	33,9	124	+08	3000	4,60
Hercules LED1x6300 D922 T830 LS90x100	1224	105	75	5746	50,5	114	80+	3000	4,60
Hercules LED1x4250 D923 T830 LS90x100	1524	105	75	3872	30,3	128	80+	3000	5,50
Hercules LED1x5800 D924 T830 LS90x100	1524	105	75	5268	42,3	124	80+	3000	5,50
Hercules LED1x7900 D925 T830 LS90x100	1524	105	75	7183	63,2	114	80+	3000	5,50
Hercules LED1x3400 D920 T840 LS90x100	1224	105	75	3227	24,3	133	80+	4000	4,60
Hercules LED1x4650 D921 T840 LS90x100	1224	105	75	4390	33,9	130	80+	4000	4,60
Hercules LED1x6300 D922 T840 LS90x100	1224	105	75	5986	50,5	118	80+	4000	4,60
Hercules LED1x4250 D923 T840 LS90x100	1524	105	75	4034	30,3	133	80+	4000	5,50
Hercules LED1x5800 D924 T840 LS90x100	1524	105	75	5487	42,3	130	80+	4000	5,50
Hercules LED1x7900 D925 T840 LS90x100	1524	105	75	7482	63,2	118	80+	4000	5,50
* tolorance range for entiral and electrical data: +10% Values apply t	n an amhiant t	amparatura a	£ 250C						

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5TB 5-pole terminal block in middle of luminaire for easy through wiring 1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks 3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks 1LIN2.5 Through wiring 3x2.5 mm² with two push-in terminal blocks 3LIN2.5 Through wiring 5x2.5 mm² with two push-in terminal blocks

Strain relief for power supply cable Strain relief for power supply cable, 2pcs 2G LS30x90 Optics with 30x90° beam angle LS60x100 Optics with 60x100° beam angle LS90x100 Optics with 90x100° beam angle Optics with asymmetric beam

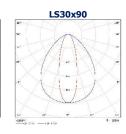
TECHNICAL DATA SHEET



LS2A40 Optics with double asymmetric beam T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+













TUNEL LED

Product Group: Waterproof and Cleanroom Luminaires

















Description:

A waterproof IP66 LED luminaire with stainless steel body and tempered glass diffuser. Suits well in chemically aggressive

atmospheres with cleaning agents, salts, acids and mineral oils $% \left(1\right) =\left(1\right) \left(

Diffuser: tempered safety glass, impact resistant, with stainless steel clips and safety wire Optics: 30x90°, 60x100°, 90x100°, asymmetric and double asymmetric light beam

Body: stainless steel, impact and chemically resistant

Brass cable gland and silicone sealing gasket to provide reliable IP protection

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 50000/75000/100000/L80B50
Operating temperature range, °C: ta -25...+35/40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK10 Protection symbol: D Glow wire test, °C: 850

EEC: A++

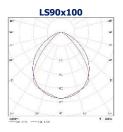
Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Push-in terminal, 3x2x2.5mm2

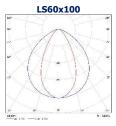
Environment: Indoor/outdoor with roof

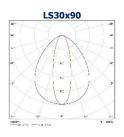
Application: Industry, food processing area, warehouse, hall, agriculture

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Tunel LED1x3250 E890 T830 LS90x100	1310	140	100	3098	24,3	128	80+	3000	5,20
Tunel LED1x4400 E891 T830 LS90x100	1310	140	100	4214	33,9	124	+08	3000	5,20
Tunel LED1x6000 E892 T830 LS90x100	1310	140	100	5746	50,5	114	80 +	3000	5,20
Tunel LED1x4050 E893 T830 LS90x100	1610	140	100	3872	30,3	128	+08	3000	6,60
Tunel LED1x5500 E894 T830 LS90x100	1610	140	100	5268	42,3	124	80 +	3000	6,60
Tunel LED1x7500 E895 T830 LS90x100	1610	140	100	7183	63,2	114	80+	3000	6,60
Tunel LED1x3250 E890 T840 LS90x100	1310	140	100	3227	24,3	133	80+	4000	5,20
Tunel LED1x4400 E891 T840 LS90x100	1310	140	100	4390	33,9	130	80+	4000	5,20
Tunel LED1x6000 E892 T840 LS90x100	1310	140	100	5986	50,5	118	80+	4000	5,20
Tunel LED1x4050 E893 T840 LS90x100	1610	140	100	4034	30,3	133	80+	4000	6,60
Tunel LED1x5500 E894 T840 LS90x100	1610	140	100	5487	42,3	130	80+	4000	6,60
Tunel LED1x7500 E895 T840 LS90x100	1610	140	100	7482	63,2	118	80+	4000	6,60

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C











TECHNICAL DATA SHEET



Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min)
COR30min Driver with Corridor function 30min (switch off after 30 min)

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

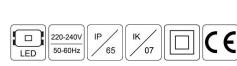
5TB 5-pole terminal block in middle of luminaire for easy through wiring 1LIN Through wiring 3x1.5 mm² with two push-in terminal blocks 3LIN Through wiring 5x1.5 mm² with two push-in terminal blocks 1LIN2.5 Through wiring 3x2.5 mm² with two push-in terminal blocks 3LIN2.5 Through wiring 5x2.5 mm² with two push-in terminal blocks

Strain relief for power supply cable 1G Strain relief for power supply cable, 2pcs Optics with 30x90° beam angle 2G LS30x90 Optics with 60x100° beam angle Optics with 90x100° beam angle LS60x100 LS90x100 LS1A18 Optics with asymmetric beam LS2A40 Optics with double asymmetric beam Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840



CUJAM LED

Product Group: Waterproof and Cleanroom Luminaires





Description: A budget waterproof IP65 LED luminaire with opal polycarbonate diffuser and high impact resistance Diffuser: opal polycarbonate, high impact resistance

Body: white polycarbonate Mains voltage: 220-240V, 50-60Hz Power factor: >0,90

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -20...+40

Protection class IEC: II Ingress protection code: IP65 Mechanical impact resistance: IK07 EEC: A+

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Cable, 0.25m, 2x0.75mm2

Environment: Indoor

Application: Industry, warehouse, public place, parking area

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Cujam LED1x3600 D595 T740 OP	1200	60	35	3600	36,0	100	70+	4000	0,40
Cuiam LED1x4800 D596 T740 OP	1500	60	35	4800	48.0	100	70+	4000	0.50

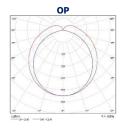
 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

General data:

Opal diffuser

T740 Colour temperature 4000K, CRI 70+





ARCTIC R LED

Product Group: Waterproof and Cleanroom Luminaires

















Description:

A recessed IP65 LED cleanroom luminaire with double parabolic reflector provides an ideal solution for pharmaceutical, medical or

other sterile areas

Louver: double parabolic, UGR<19 glare protection Diffuser: clear acrylic, UV stable, chemically resistant

Body: steel sheet, white finish

The frame is fitted into the body with four stainless steel screws to provide reliable IP protection

General data:

Mains voltage: 220-240V, 50-60Hz Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta -10...+35 (0...+35°C emergency version)

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK05

Installation:

Fits 15-24mm exposed T-Bar and/or plasterboard ceiling. When the luminaire is fitted into a plasterboard ceiling, it is recommended to

use support brackets (to be ordered separately). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Healthcare, laboratory, industry Application:

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Arctic R LED2x1750 D835 T830	595	595	60	3327	28,9	115	80+	3000	4,00
Arctic R LED3x1550 D836 T830	595	595	60	4436	38,6	115	80+	3000	4,10
Arctic R LED3x1650 D837 T830	595	595	60	4912	42,7	115	80+	3000	4,10
Arctic R LED1x2400 D838 T830	1195	295	60	2311	19,1	121	80+	3000	4,00
Arctic R LED1x3450 D839 T830	1195	295	60	3327	28,9	115	80+	3000	4,00
Arctic R LED2x1750 D835 T840	595	595	60	3430	28,9	119	80+	4000	4,00
Arctic R LED3x1550 D836 T840	595	595	60	4573	38,6	119	80+	4000	4,10
Arctic R LED3x1650 D837 T840	595	595	60	4912	42,7	115	80+	4000	4,10
Arctic R LED1x2400 D838 T840	1195	295	60	2382	19,1	125	80+	3000	4,00
Arctic R LED1x3450 D839 T840	1195	295	60	3430	28.9	119	80+	4000	4,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming DALI Driver with DALI interface EM3 Emergency version 3 hours ЕМ3В Emergency version 3 hours (best available technology) ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

FM3D Emergency version 3 hours with DALI interface

5TB

5-pole terminal block in middle of luminaire for easy through wiring 1G

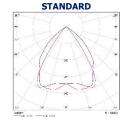
Strain relief for power supply cable SB

Support brackets for installation into a plasterboard ceiling W625 Designed for the German market to fit 625x625 suspended ceiling (subject to

minimum quantity)

WID Wide beam reflector

Colour temperature 3000K, CRI 80+ T830 T840 Colour temperature 4000K, CRI 80+







ARCTIC S LED

Product Group: Waterproof and Cleanroom Luminaires

















Description:

A surface IP65 LED cleanroom luminaire with double parabolic reflector provides an ideal solution for pharmaceutical, medical or other

sterile areas

Louver: double parabolic, UGR<19 glare protection Diffuser: clear acrylic, UV stable, chemically resistant

Body: steel sheet, white finish

The frame is fitted into the body with four stainless steel screws to provide reliable IP protection

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta -10...+35 (0...+35°C emergency version)

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK05

Installation: Luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Healthcare, laboratory, industry

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Arctic S LED2x1750 D840 T830	605	605	60	3327	28,9	115	80+	3000	4,00
Arctic S LED3x1550 D841 T830	605	605	60	4436	38,6	115	80+	3000	4,10
Arctic S LED3x1650 D842 T830	605	605	60	4912	42,7	115	+08	3000	4,10
Arctic S LED1x2400 D843 T830	1203	180	60	2311	19,1	121	80+	3000	4,00
Arctic S LED1x3450 D844 T830	1203	180	60	3327	28,9	115	80+	3000	4,00
Arctic S LED1x4600 D845 T830	1665	180	60	4436	38,6	115	+08	3000	5,00
Arctic S LED1x5100 D846 T830	1665	180	60	4912	42,7	115	80+	3000	5,00
Arctic S LED2x1750 D840 T840	605	605	60	3430	28,9	119	80+	4000	4,00
Arctic S LED3x1550 D841 T840	605	605	60	4573	38,6	119	+08	4000	4,10
Arctic S LED3x1650 D842 T840	605	605	60	4912	42,7	115	80+	4000	4,10
Arctic S LED1x2400 D843 T840	1203	180	60	2382	19,1	125	80+	3000	4,00
Arctic S LED1x3450 D844 T840	1203	180	60	3430	28,9	119	80+	4000	4,00
Arctic S LED1x4600 D845 T840	1665	180	60	4573	38,6	119	80+	4000	5,00
Arctic S LED1x5100 D846 T840	1665	180	60	5063	42,7	119	80+	4000	5,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming SDIM Driver with DALI interface DALI ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

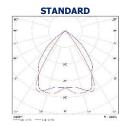
ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

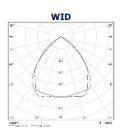
EM3D

Emergency version 3 hours with DALI interface 5-pole terminal block in middle of luminaire for easy through wiring 5TB

Strain relief for power supply cable 1G WID Wide beam reflector

T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T840







HERMETIC R LED

Product Group: Waterproof and Cleanroom Luminaires















Description:

A recessed IP65 LED cleanroom luminaire with opal acrylic diffuser provides an ideal solution for pharmaceutical, medical or other

sterile areas

Diffuser: opal acrylic, UV stable, chemically resistant

Body: steel sheet, white finish

The frame is fitted into the body with four stainless steel screws to provide reliable IP protection

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -10...+35 (0...+35°C emergency version)

Protection class IEC: I Ingress protection code: IP65

Mechanical impact resistance: IK05

Installation: Fits 15-24mm exposed T-Bar and/or plasterboard ceiling. When the luminaire is fitted into a plasterboard ceiling, it is recommended to

use support brackets (available on request). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Healthcare, laboratory, industry

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Hermetic R LED3x1100 D149 T830 OP LT80	595	595	85	3065	29,5	104	80+	3000	4,50
Hermetic R LED3x1500 D150 T830 OP LT80	595	595	85	4157	43,7	95	80+	3000	4,50
Hermetic R LED4x1100 D151 T830 OP LT80	595	595	85	4087	39,4	104	80+	3000	4,50
Hermetic R LED4x1500 D152 T830 OP LT80	595	595	85	5542	58,3	95	80+	3000	4,50
Hermetic R LED1x3800 D163 T830 OP LT80	595	595	75	3886	32,5	120	80+	3000	4,40
Hermetic R LED1x4400 D164 T830 OP LT80	595	595	75	4490	38,4	117	80+	3000	4,40
Hermetic R LED1x6000 D165 T830 OP LT80	595	595	75	6207	56,6	110	80+	3000	4,40
Hermetic R LED2x2200 D153 T830 OP LT80	1195	295	85	4314	41,6	104	80+	3000	4,50
Hermetic R LED2x3000 D154 T830 OP LT80	1195	295	85	5850	61,6	95	80+	3000	4,50
Hermetic R LED2x4300 D155 T830 OP LT80	1195	295	85	8628	83,1	104	80+	3000	4,50
Hermetic R LED3x2200 D156 T830 OP LT80	1195	595	85	6471	62,4	104	80+	3000	9,00
Hermetic R LED3x3000 D157 T830 OP LT80	1195	595	85	8775	92,4	95	80+	3000	9,00
Hermetic R LED4x2200 D158 T830 OP LT80	1195	595	85	8628	83,1	104	80+	3000	9,00
Hermetic R LED4x3000 D159 T830 OP LT80	1195	595	85	11701	123,1	95	80+	3000	9,00
Hermetic R LED2x2700 D160 T830 OP LT80	1495	295	85	5449	52,5	104	80+	3000	6,00
Hermetic R LED2x3800 D161 T830 OP LT80	1495	295	85	7390	77,8	95	80+	3000	6,00
Hermetic R LED2x5500 D162 T830 OP LT80	1495	295	85	10898	105,0	104	+08	3000	6,00
Hermetic R LED3x1100 D149 T840 OP LT80	595	595	85	3202	29,5	108	80+	4000	4,50
Hermetic R LED3x1500 D150 T840 OP LT80	595	595	85	4343	43,7	99	80+	4000	4,50
Hermetic R LED4x1100 D151 T840 OP LT80	595	595	85	4270	39,4	108	+08	4000	4,50
Hermetic R LED4x1500 D152 T840 OP LT80	595	595	85	5791	58,3	99	80+	4000	4,50
Hermetic R LED1x3800 D163 T840 OP LT80	595	595	75	4060	32,5	125	80+	4000	4,40
Hermetic R LED1x4400 D164 T840 OP LT80	595	595	75	4691	38,4	122	80+	4000	4,40
Hermetic R LED1x6000 D165 T840 OP LT80	595	595	75	6485	56,6	115	80+	4000	4,40
Hermetic R LED2x2200 D153 T840 OP LT80	1195	295	85	4507	41,6	108	80+	4000	4,50
Hermetic R LED2x3000 D154 T840 OP LT80	1195	295	85	6112	61,6	99	+08	4000	4,50
Hermetic R LED2x4300 D155 T840 OP LT80	1195	295	85	9014	83,1	108	80+	4000	4,50
Hermetic R LED3x2200 D156 T840 OP LT80	1195	595	85	6761	62,4	108	80+	4000	9,00
Hermetic R LED3x3000 D157 T840 OP LT80	1195	595	85	9168	92,4	99	80+	4000	9,00
Hermetic R LED4x2200 D158 T840 OP LT80	1195	595	85	9014	83,1	108	80+	4000	9,00
Hermetic R LED4x3000 D159 T840 OP LT80	1195	595	85	12225	123,1	99	80+	4000	9,00
Hermetic R LED2x2700 D160 T840 OP LT80	1495	295	85	5693	52,5	108	80+	4000	6,00
Hermetic R LED2x3800 D161 T840 OP LT80	1495	295	85	7721	77,8	99	80+	4000	6,00
Hermetic R LED2x5500 D162 T840 OP LT80	1495	295	85	11386	105,0	108	+08	4000	6,00

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

TECHNICAL DATA SHEET



Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours Emergency version 3 hours with DALI interface 5-pole terminal block in middle of luminaire for easy through wiring EM3D

5TB

1G

Strain relief for power supply cable
Support brackets for installation into a plasterboard ceiling
Designed for the German market to fit 625x625 suspended ceiling (subject to minimum quantity) W625

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





HERMETIC S LED

Product Group: Waterproof and Cleanroom Luminaires















Description:

A surface IP65 LED cleanroom luminaire with opal acrylic diffuser provides an ideal solution for pharmaceutical, medical or other

sterile areas

Diffuser: opal acrylic, UV stable, chemically resistant

Body: steel sheet, white finish

The frame is fitted into the body with four stainless steel screws to provide reliable IP protection

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -10...+35 (0...+35°C emergency version)

Protection class IEC: I

Ingress protection code: IP65 Mechanical impact resistance: IK05 EEC: A++

Installation: Luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Healthcare, laboratory, industry

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Hermetic S LED3x1100 D166 T830 OP LT80	602	602	85	3065	29,5	104	80+	3000	5,00
Hermetic S LED3x1500 D167 T830 OP LT80	602	602	85	4157	43,7	95	+08	3000	5,00
Hermetic S LED4x1100 D168 T830 OP LT80	602	602	85	4087	39,4	104	+08	3000	5,00
Hermetic S LED4x1500 D169 T830 OP LT80	602	602	85	5542	58,3	95	+08	3000	5,00
Hermetic S LED1x3800 D173 T830 OP LT80	602	602	85	3886	32,5	120	+08	3000	5,00
Hermetic S LED1x4400 D174 T830 OP LT80	602	602	85	4490	38,4	117	+08	3000	5,00
Hermetic S LED1x6000 D175 T830 OP LT80	602	602	85	6207	56,6	110	+08	3000	5,00
Hermetic S LED2x2200 D170 T830 OP LT80	1203	302	85	4314	41,6	104	+08	3000	5,00
Hermetic S LED2x3000 D171 T830 OP LT80	1203	302	85	5850	61,6	95	80+	3000	5,00
Hermetic S LED2x4300 D172 T830 OP LT80	1203	302	85	8628	83,1	104	+08	3000	5,00
Hermetic S LED3x1100 D166 T840 OP LT80	602	602	85	3202	29,5	108	80+	4000	5,00
Hermetic S LED3x1500 D167 T840 OP LT80	602	602	85	4343	43,7	99	+08	4000	5,00
Hermetic S LED4x1100 D168 T840 OP LT80	602	602	85	4270	39,4	108	+08	4000	5,00
Hermetic S LED4x1500 D169 T840 OP LT80	602	602	85	5791	58,3	99	+08	4000	5,00
Hermetic S LED1x3800 D173 T840 OP LT80	602	602	85	4060	32,5	125	+08	4000	5,00
Hermetic S LED1x4400 D174 T840 OP LT80	602	602	85	4691	38,4	122	+08	4000	5,00
Hermetic S LED1x6000 D175 T840 OP LT80	602	602	85	6485	56,6	115	+08	4000	5,00
Hermetic S LED2x2200 D170 T840 OP LT80	1203	302	85	4507	41,6	108	+08	4000	5,00
Hermetic S LED2x3000 D171 T840 OP LT80	1203	302	85	6112	61,6	99	+08	4000	5,00
Hermetic S LED2x4300 D172 T840 OP LT80	1203	302	85	9014	83,1	108	+08	4000	5,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming SDIM DALI Driver with DALI interface EM3 Emergency version 3 hours

FM3B Emergency version 3 hours (best available technology) ЕМ3А

Emergency version equipped with an autonomous testing system, 3 hours Emergency version 3 hours with DALI interface 5-pole terminal block in middle of luminaire for easy through wiring

EM3D

5TB

1G Strain relief for power supply cable T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T840





HERMETIC RD LED

Product Group: Waterproof and Cleanroom Luminaires















Description:

A recessed IP65 LED cleanroom luminaire with opal acrylic diffuser provides an ideal solution for pharmaceutical, medical or other

sterile areas

Diffuser: opal acrylic, UV stable, chemically resistant

Body: steel sheet, white finish

The frame is fitted into the body with four stainless steel screws to provide reliable IP protection

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -10...+35 (0...+35°C emergency version)

Protection class IEC: I

Ingress protection code: IP65 Mechanical impact resistance: IK05

Installation: Fits 15-24mm exposed T-Bar and/or plasterboard ceiling. When the luminaire is fitted into a plasterboard ceiling, it is recommended to

use support brackets (available on request). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Healthcare, laboratory, industry, food processing area

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Hermetic RD LED1x1100 D358 T830 OP LT80	595	295	60	1095	11,1	99	80+	3000	3,00
Hermetic RD LED1x1600 D359 T830 OP LT80	595	295	60	1485	15,4	96	80+	3000	3,00
Hermetic RD LED1x2200 D360 T830 OP LT80	595	295	60	2189	20,8	105	80+	3000	3,00
Hermetic RD LED2x1100 D176 T830 OP LT80	595	595	60	2189	20,8	105	80+	3000	4,50
Hermetic RD LED2x1600 D177 T830 OP LT80	595	595	60	2969	29,2	102	80+	3000	4,50
Hermetic RD LED2x2200 D178 T830 OP LT80	595	595	60	4379	39,4	111	80+	3000	4,50
Hermetic RD LED3x1100 D179 T830 OP LT80	595	595	60	3284	29,5	111	80+	3000	4,50
Hermetic RD LED3x1600 D180 T830 OP LT80	595	595	60	4454	43,7	102	80+	3000	4,50
Hermetic RD LED3x2200 D181 T830 OP LT80	595	595	60	6568	59,1	111	80+	3000	4,50
Hermetic RD LED1x2300 D182 T830 OP LT80	1195	295	60	2311	22,0	105	80+	3000	4,50
Hermetic RD LED1x3300 D183 T830 OP LT80	1195	295	60	3134	30,8	102	80+	3000	4,50
Hermetic RD LED1x4600 D184 T830 OP LT80	1195	295	60	4622	41,6	111	80+	3000	4,50
Hermetic RD LED1x2900 D185 T830 OP LT80	1495	295	60	2919	27,8	105	80+	3000	6,00
Hermetic RD LED1x4100 D186 T830 OP LT80	1495	295	60	3959	38,9	102	80+	3000	6,00
Hermetic RD LED1x5800 D187 T830 OP LT80	1495	295	60	5838	52,5	111	+08	3000	6,00
Hermetic RD LED1x1100 D358 T840 OP LT80	595	295	60	1144	11,1	103	80+	4000	3,00
Hermetic RD LED1x1600 D359 T840 OP LT80	595	295	60	1551	15,4	100	+08	4000	3,00
Hermetic RD LED1x2200 D360 T840 OP LT80	595	295	60	2287	20,8	110	+08	4000	3,00
Hermetic RD LED2x1100 D176 T840 OP LT80	595	595	60	2287	20,8	110	80+	4000	4,50
Hermetic RD LED2x1600 D177 T840 OP LT80	595	595	60	3102	29,2	106	80+	4000	4,50
Hermetic RD LED2x2200 D178 T840 OP LT80	595	595	60	4575	39,4	116	80+	4000	4,50
Hermetic RD LED3x1100 D179 T840 OP LT80	595	595	60	3431	29,5	116	+08	4000	4,50
Hermetic RD LED3x1600 D180 T840 OP LT80	595	595	60	4653	43,7	106	80+	4000	4,50
Hermetic RD LED3x2200 D181 T840 OP LT80	595	595	60	6862	59,1	116	80+	4000	4,50
Hermetic RD LED1x2300 D182 T840 OP LT80	1195	295	60	2414	22,0	110	80+	4000	4,50
Hermetic RD LED1x3300 D183 T840 OP LT80	1195	295	60	3274	30,8	106	+08	4000	4,50
Hermetic RD LED1x4600 D184 T840 OP LT80	1195	295	60	4829	41,6	116	80+	4000	4,50
Hermetic RD LED1x2900 D185 T840 OP LT80	1495	295	60	3050	27,8	110	80+	4000	6,00
Hermetic RD LED1x4100 D186 T840 OP LT80	1495	295	60	4136	38,9	106	80+	4000	6,00
Hermetic RD LED1x5800 D187 T840 OP LT80	1495	295	60	6100	52,5	116	80+	4000	6,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

TECHNICAL DATA SHEET



Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМЗА Emergency version equipped with an autonomous testing system, 3 hours

EM3D

Emergency version 3 hours with DALI interface 5-pole terminal block in middle of luminaire for easy through wiring 5TB

1G

Strain relief for power supply cable
Support brackets for installation into a plasterboard ceiling
Designed for the German market to fit 625x625 suspended ceiling (subject to minimum quantity) W625

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





HERMETIC SD LED

Product Group: Waterproof and Cleanroom Luminaires















Description:

A surface IP65 LED cleanroom luminaire with opal acrylic diffuser provides an ideal solution for pharmaceutical, medical or other

sterile areas

Diffuser: opal acrylic, UV stable, chemically resistant

Body: steel sheet, white finish

The frame is fitted into the body with four stainless steel screws to provide reliable IP protection

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -10...+35 (0...+35°C emergency version)

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK05

Installation: Luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 3x2x2.5mm2 **Environment:** Indoor

Application: Healthcare, laboratory, industry

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ* , К	Weight, kg
Hermetic SD LED2x1100 D188 T830 OP LT80	602	602	65	2189	20,8	105	+08	3000	4,50
Hermetic SD LED2x1600 D189 T830 OP LT80	602	602	65	2969	29,2	102	+08	3000	4,50
Hermetic SD LED2x2200 D190 T830 OP LT80	602	602	65	4379	39,4	111	+08	3000	4,50
Hermetic SD LED3x1100 D191 T830 OP LT80	602	602	65	3284	29,5	111	80+	3000	4,50
Hermetic SD LED3x1600 D192 T830 OP LT80	602	602	65	4454	43,7	102	+08	3000	4,50
Hermetic SD LED3x2200 D193 T830 OP LT80	602	602	65	6568	59,1	111	80+	3000	4,50
Hermetic SD LED1x2300 D194 T830 OP LT80	1203	180	65	2311	22,0	105	+08	3000	4,00
Hermetic SD LED1x3300 D195 T830 OP LT80	1203	180	65	3134	30,8	102	80+	3000	4,00
Hermetic SD LED1x4600 D196 T830 OP LT80	1203	180	65	4622	41,6	111	80+	3000	4,00
Hermetic SD LED1x2900 D197 T830 OP LT80	1503	180	65	2919	27,8	105	80+	3000	5,00
Hermetic SD LED1x4100 D198 T830 OP LT80	1503	180	65	3959	38,9	102	80+	3000	5,00
Hermetic SD LED1x5800 D199 T830 OP LT80	1503	180	65	5838	52,5	111	80+	3000	5,00
Hermetic SD LED2x1100 D188 T840 OP LT80	602	602	65	2287	20,8	110	+08	4000	4,50
Hermetic SD LED2x1600 D189 T840 OP LT80	602	602	65	3102	29,2	106	80+	4000	4,50
Hermetic SD LED2x2200 D190 T840 OP LT80	602	602	65	4575	39,4	116	80+	4000	4,50
Hermetic SD LED3x1100 D191 T840 OP LT80	602	602	65	3431	29,5	116	+08	4000	4,50
Hermetic SD LED3x1600 D192 T840 OP LT80	602	602	65	4653	43,7	106	80+	4000	4,50
Hermetic SD LED3x2200 D193 T840 OP LT80	602	602	65	6862	59,1	116	+08	4000	4,50
Hermetic SD LED1x2300 D194 T840 OP LT80	1203	180	65	2414	22,0	110	80+	4000	4,00
Hermetic SD LED1x3300 D195 T840 OP LT80	1203	180	65	3274	30,8	106	80+	4000	4,00
Hermetic SD LED1x4600 D196 T840 OP LT80	1203	180	65	4829	41,6	116	80+	4000	4,00
Hermetic SD LED1x2900 D197 T840 OP LT80	1503	180	65	3050	27,8	110	80+	4000	5,00
Hermetic SD LED1x4100 D198 T840 OP LT80	1503	180	65	4136	38,9	106	80+	4000	5,00
Hermetic SD LED1x5800 D199 T840 OP LT80	1503	180	65	6100	52,5	116	80+	4000	5,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming SDIM DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

Emergency version a quipped with an autonomous testing system, 3 hours Emergency version 3 hours with DALI interface ЕМЗА

EM3D

5-pole terminal block in middle of luminaire for easy through wiring 5TB

Strain relief for power supply cable 1G T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T840





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BARAT LED Ex

Product Group: Explosion-Proof Luminaires



















Description: An explosion proof IP66 LED luminaire designed for illumination of hazardous areas where an explosive atmosphere persists for a

short period. Hazardous zones: 2, 22. Suitable for industrial areas and facilities with a danger of flammable gas, dust and vapour

explosion. Marking of explosion-protection: II 3G Ex nA IIC T6 Gc; II 3D Ex tD IIIC T85°C IP66 Dc Diffuser: opal polycarbonate (PC), UV stabilized, high impact resistance

Body: light grey polycarbonate, UV stabilized, high impact resistance. Stainless steel diffuser retaining clips

Gear tray: sheet steel, white finish

Explosion group: Gas: IIC, IIB, IIA Dust: IIIC, IIIB, IIIA

ATEX cable gland: 2xM20, 1xblanking plug

Cable diameter: Ø7-13mm

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 75000/L80B50 (100000/L80B50 low power versions)

Operating temperature range, °C: ta -25...+40 (ta +5...+40 with EM3)

Protection class IEC: I Ingress protection code: IP66 Mechanical impact resistance: IK08

EEC: A++

Installation: Surface luminaire is designed to be fixed to ceiling of any type or suspended. Supplied with two fixing brackets for easy installation,

sealing washer and accessories for chain and wire suspension. Installed luminaires have to be protected from mechanical damage. Push-

in terminal, 3x2x2.5mm2

Environment: Indoor **Application:** Industry

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Barat LED1x1300 C101 T840 PC/PC OP IC Ex	662	96	111	1389	11,6	120	80+	4000	1,30
Barat LED1x1900 C102 T840 PC/PC OP IC Ex	662	96	111	1884	17,2	110	80+	4000	1,30
Barat LED2x1300 C104 T840 PC/PC OP IC Ex	662	146	111	2779	23,2	120	80+	4000	1,80
Barat LED2x1900 C105 T840 PC/PC OP IC Ex	662	146	111	3768	32,4	116	80+	4000	1,80
Barat LED1x2600 C107 T840 PC/PC OP IC Ex	1272	96	111	2779	23,2	120	80+	4000	2,10
Barat LED1x3800 C108 T840 PC/PC OP IC Ex	1272	96	111	3768	32,4	116	80+	4000	2,10
Barat LED2x2600 C110 T840 PC/PC OP IC Ex	1272	146	111	5558	43,8	127	80+	4000	2,80
Barat LED2x3800 C111 T840 PC/PC OP IC Ex	1272	146	111	7537	64,8	116	80+	4000	2,80
Barat LED1x3200 C113 T840 PC/PC OP IC Ex	1572	96	111	3473	27,3	127	80+	4000	2,60
Barat LED1x4700 C114 T840 PC/PC OP IC Ex	1572	96	111	4711	40,5	116	80+	4000	2,60
Barat LED2x3200 C116 T840 PC/PC OP IC Ex	1572	146	111	6947	54,7	127	80+	4000	3,30
Barat LED2x4700 C117 T840 PC/PC OP IC Ex	1572	146	111	9421	81,0	116	80+	4000	3,30
* talaranca range for entiral and electrical data: ±100/. 1/	duac apply to a	ambiant tam	nombura of 250	<u></u>					

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

ЕМ3В Emergency version 3 hours (best available technology)

5TB 5-pole terminal block in middle of luminaire for easy through wiring Through wiring 3x2.5 mm² with two push-in terminal blocks Through wiring 5x2.5 mm² with two push-in terminal blocks 1LIN2.5 3LIN2.5

Stainless steel clips IC

OP Opal polycarbonate diffuser

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840





BARAT Ex

Product Group: Explosion-Proof Luminaires

















Description:

Installation:

An explosion proof IP66 T8 luminaire designed for illumination of hazardous areas where an explosive atmosphere persists for a short period. Hazardous zones: 2, 22. Suitable for industrial areas and facilities with a danger of flammable gas, dust and vapour explosion.

Marking of explosion-protection: II 3G Ex nA IIC T6 Gc; II 3D Ex tD IIIC T85°C IP66 Dc

Diffuser: opal polycarbonate (PC), UV stabilized, high impact resistance

Body: light grey polycarbonate, UV stabilized, high impact resistance. Stainless steel diffuser retaining clips

Gear tray: sheet steel, white finish

Explosion group: Gas: IIC, IIB, IIA Dust: IIIC, IIIB, IIIA

ATEX cable gland: 2xM20, 1xblanking plug

Cable diameter: Ø7-13mm

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: 2xT8 (G13) Light source included: No Light distribution type: Direct

Operating temperature range, °C: ta -25...+40 (ta +5...+40 with EM3)

Protection class IEC: I Ingress protection code: IP66 Mechanical impact resistance: IK08

EEC: A

Surface luminaire is designed to be fixed to ceiling of any type or suspended. Supplied with two fixing brackets for easy installation, sealing washer and accessories for chain and wire suspension. Installed luminaires have to be protected from mechanical damage. Push-

in terminal, 3x2x2.5mm2

Environment: Indoor **Application:** Industry

Product	Length, mm	Width, mm	Height, mm	Light source (W) and socket	System power*, W	Weight, kg
Barat 118 Z19 PC/PC HF IC Ex	662	96	111	1x18 (G13)	19	1,20
Barat 218 Z20 PC/PC HF IC Ex	662	146	111	2x18 (G13)	37	1,60
Barat 136 Z21 PC/PC HF IC Ex	1272	96	111	1x36 (G13)	36	1,90
Barat 236 Z22 PC/PC HF IC Ex	1272	146	111	2x36 (G13)	71	2,50
Barat 158 Z23 PC/PC HF IC Ex	1572	96	111	1x58 (G13)	55	2,30
Barat 258 Z24 PC/PC HF IC Ex	1572	146	111	2x58 (G13)	108	2,90
Barat 136 Z21 PC/PC HF EM3 IC Ex	1272	96	111	1x36 (G13)	36	1,90
Barat 236 Z22 PC/PC HF EM3 IC Ex	1272	146	111	2x36 (G13)	71	2,50
Barat 158 Z23 PC/PC HF EM3 IC Ex	1572	96	111	1x58 (G13)	55	2,30
Barat 258 Z24 PC/PC HF EM3 IC Ex	1572	146	111	2x58 (G13)	108	2,90

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

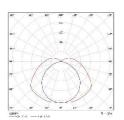
Available options:

HF High Frequency control gear

EM3B Emergency version 3 hours (best available technology)

5TB 5-pole terminal block in middle of luminaire for easy through wiring 1LIN2.5 Through wiring 3x2.5 mm² with two push-in terminal blocks 3LIN2.5 Through wiring 5x2.5 mm² with two push-in terminal blocks

IC Stainless steel clips





ANTI-VANDAL LUMINAIRES

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CAELUM R LED

Product Group: Anti-vandal Luminaires















Description:
General data:

A recessed IP65 LED luminaire designed to withstand extreme vandalism in public areas

Diffuser: opal polycarbonate, 4mm, UV stabilized, vandal resistant

Body: zinc-plated sheet steel, white polyester powder finish, vandal resistant The frame is fitted into the body with stainless steel security screws

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED

Light source included: Yes Light distribution type: Direct

LED lifetime, h: 100000/L80B50 (75000/L80B50 E853 and E856 models)

Operating temperature range, °C: ta -20...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK10+

Protection symbol: D Glow wire test, °C: 850 EEC: A+/A++

Installation:

Recessed luminaire designed to be fixed into ceiling or wall, requires a cut-out. Push-in terminal, 3x2x2.5mm2

Environment: Indoor/outdoor

Application: Public place, tunnel, transport terminal, parking area, metro, prison, psychiatric hospital

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Caelum R LED1x1150 E846 T830 OP	410	180	65	1095	11,1	99	80+	3000	4,00
Caelum R LED1x1700 E847 T830 OP	690	180	65	1609	14,5	111	80+	3000	4,50
Caelum R LED1x2850 E848 T830 OP	690	180	65	2723	26,0	105	80+	3000	4,50
Caelum R LED1x2550 E849 T830 OP	970	180	65	2413	21,7	111	80+	3000	6,50
Caelum R LED1x4300 E850 T830 OP	970	180	65	4084	38,9	105	80+	3000	6,50
Caelum R LED1x3400 E851 T830 OP	1250	180	65	3218	27,3	118	80+	3000	8,40
Caelum R LED1x4600 E852 T830 OP	1250	180	65	4379	38,9	112	80+	3000	8,40
Caelum R LED1x5700 E853 T830 OP	1250	180	65	5446	50,8	107	+08	3000	8,40
Caelum R LED1x4250 E854 T830 OP	1530	180	65	4022	33,7	119	80+	3000	10,20
Caelum R LED1x5750 E855 T830 OP	1530	180	65	5473	48,7	112	+08	3000	10,20
Caelum R LED1x7150 E856 T830 OP	1530	180	65	6807	63,5	107	80+	3000	10,20
Caelum R LED1x1150 E846 T840 OP	410	180	65	1144	11,1	103	+08	4000	4,00
Caelum R LED1x1700 E847 T840 OP	690	180	65	1681	14,5	116	80+	4000	4,50
Caelum R LED1x2850 E848 T840 OP	690	180	65	2845	26,0	110	+08	4000	4,50
Caelum R LED1x2550 E849 T840 OP	970	180	65	2521	21,7	116	80+	4000	6,50
Caelum R LED1x4300 E850 T840 OP	970	180	65	4267	38,9	110	+08	4000	6,50
Caelum R LED1x3400 E851 T840 OP	1250	180	65	3362	27,3	123	80+	4000	8,40
Caelum R LED1x4600 E852 T840 OP	1250	180	65	4575	38,9	117	80+	4000	8,40
Caelum R LED1x5700 E853 T840 OP	1250	180	65	5690	50,8	112	80+	4000	8,40
Caelum R LED1x4250 E854 T840 OP	1530	180	65	4202	33,7	125	80+	4000	10,20
Caelum R LED1x5750 E855 T840 OP	1530	180	65	5719	48,7	117	80+	4000	10,20
Caelum R LED1x7150 E856 T840 OP	1530	180	65	7112	63,5	112	+08	4000	10,20

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C



Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min) MW Integrated microwave (MW) motion sensor with on-off control

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

*note - EM options applicable for models from 600mm and longer

5TB 5-pole terminal block in middle of luminaire for easy through wiring

1G Strain relief for power supply cable

RAL RAL colour

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840

Available accessories:



Product: Security bit ART9109 SP10

Description: Security screw drill bit for 2-hole security fixings





CAELUM S LED

Product Group: Anti-vandal Luminaires















General data:

Description:

A surface IP65 LED luminaire designed to withstand extreme vandalism in public areas

Diffuser: opal polycarbonate, 4mm, UV stabilized, vandal resistant Body: zinc-plated sheet steel, white polyester powder finish, vandal resistant The frame is fitted into the body with stainless steel security screws

Mains voltage: 220-240V, 50-60Hz Power factor: >0,95

Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 100000/L80B50 (75000/L80B50 E864 and E867 models)

Operating temperature range, °C: ta -20...+40

Protection class IEC: I Ingress protection code: IP65

Mechanical impact resistance: IK10+

Protection symbol: D Glow wire test, °C: 850 EEC: A+/A++

Installation:

Surface luminaire designed to be fixed to ceiling of any type. Push-in terminal, 3x2x2.5mm2

Indoor/outdoor **Environment:**

Application: Public place, tunnel, transport terminal, parking area, metro, prison, psychiatric hospital

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Caelum S LED1x1150 E857 T830 OP	380	150	65	1095	11,1	99	80+	3000	3,00
Caelum S LED1x1700 E858 T830 OP	660	150	65	1609	14,5	111	80+	3000	3,50
Caelum S LED1x2850 E859 T830 OP	660	150	65	2723	26,0	105	80+	3000	3,50
Caelum S LED1x2550 E860 T830 OP	940	150	65	2413	21,7	111	80+	3000	5,50
Caelum S LED1x4300 E861 T830 OP	940	150	65	4084	38,9	105	80+	3000	5,50
Caelum S LED1x3400 E862 T830 OP	1220	150	65	3218	27,3	118	+08	3000	7,40
Caelum S LED1x4600 E863 T830 OP	1220	150	65	4379	38,9	112	+08	3000	7,40
Caelum S LED1x5700 E864 T830 OP	1220	150	65	5446	50,8	107	+08	3000	7,40
Caelum S LED1x4250 E865 T830 OP	1500	150	65	4022	33,7	119	+08	3000	9,20
Caelum S LED1x5750 E866 T830 OP	1500	150	65	5473	48,7	112	+08	3000	9,20
Caelum S LED1x7150 E867 T830 OP	1500	150	65	6807	63,5	107	+08	3000	9,20
Caelum S LED1x1150 E857 T840 OP	380	150	65	1144	11,1	103	+08	4000	3,00
Caelum S LED1x1700 E858 T840 OP	660	150	65	1681	14,5	116	+08	4000	3,50
Caelum S LED1x2850 E859 T840 OP	660	150	65	2845	26,0	110	+08	4000	3,50
Caelum S LED1x2550 E860 T840 OP	940	150	65	2521	21,7	116	80+	4000	5,50
Caelum S LED1x4300 E861 T840 OP	940	150	65	4267	38,9	110	80+	4000	5,50
Caelum S LED1x3400 E862 T840 OP	1220	150	65	3362	27,3	123	80+	4000	7,40
Caelum S LED1x4600 E863 T840 OP	1220	150	65	4575	38,9	117	+08	4000	7,40
Caelum S LED1x5700 E864 T840 OP	1220	150	65	5690	50,8	112	80+	4000	7,40
Caelum S LED1x4250 E865 T840 OP	1500	150	65	4202	33,7	125	+08	4000	9,20
Caelum S LED1x5750 E866 T840 OP	1500	150	65	5719	48,7	117	80+	4000	9,20
Caelum S LED1x7150 E867 T840 OP	1500	150	65	7112	63,5	112	+08	4000	9,20

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C



Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min) MW Integrated microwave (MW) motion sensor with on-off control

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

*note - EM options applicable for models from 600mm and longer

5TB 5-pole terminal block in middle of luminaire for easy through wiring

1G Strain relief for power supply cable

RAL RAL colour

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840

Available accessories:



Product: Security bit ART9109 SP10

Description: Security screw drill bit for 2-hole security fixings





CAELUM A LED

Product Group: Anti-vandal Luminaires

















Description:

A surface corner-mounted IP65 LED luminaire designed to withstand extreme vandalism in public areas

Diffuser: opal polycarbonate, 4mm, UV stabilized, vandal resistant

Body: zinc-plated sheet steel, white polyester powder finish, vandal resistant The frame is fitted into the body with stainless steel security screws

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes

Light distribution type: Direct

LED lifetime, h: 100000/L80B50 (75000/L80B50 E875 and E878 models)

Operating temperature range, °C: ta -20...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK10+

Protection symbol: D Glow wire test, °C: 850

Installation:

EEC: A+/A++ Corner-mounted luminaire. Push-in terminal, 3x2x2.5mm2

Environment: Indoor/outdoor

Application:

Public place, tunnel, transport terminal, parking area, metro, prison, psychiatric hospital

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Caelum A LED1x1150 E868 T830 OP	380	135	135	1095	11,1	99	80+	3000	3,00
Caelum A LED1x1700 E869 T830 OP	660	135	135	1609	14,5	111	80+	3000	3,50
Caelum A LED1x2850 E870 T830 OP	660	135	135	2723	26,0	105	80+	3000	3,50
Caelum A LED1x2550 E871 T830 OP	940	135	135	2413	21,7	111	80+	3000	5,50
Caelum A LED1x4300 E872 T830 OP	940	135	135	4084	38,9	105	80+	3000	5,50
Caelum A LED1x3400 E873 T830 OP	1220	135	135	3218	27,3	118	80+	3000	7,40
Caelum A LED1x4600 E874 T830 OP	1220	135	135	4379	38,9	112	80+	3000	7,40
Caelum A LED1x5700 E875 T830 OP	1220	135	135	5446	50,8	107	80+	3000	7,40
Caelum A LED1x4250 E876 T830 OP	1500	135	135	4022	33,7	119	80+	3000	9,20
Caelum A LED1x5750 E877 T830 OP	1500	135	135	5473	48,7	112	80+	3000	9,20
Caelum A LED1x7150 E878 T830 OP	1500	135	135	6807	63,5	107	80+	3000	9,20
Caelum A LED1x1150 E868 T840 OP	380	135	135	1144	11,1	103	80+	4000	3,00
Caelum A LED1x1700 E869 T840 OP	660	135	135	1681	14,5	116	80+	4000	3,50
Caelum A LED1x2850 E870 T840 OP	660	135	135	2845	26,0	110	80+	4000	3,50
Caelum A LED1x2550 E871 T840 OP	940	135	135	2521	21,7	116	+08	4000	5,50
Caelum A LED1x4300 E872 T840 OP	940	135	135	4267	38,9	110	80+	4000	5,50
Caelum A LED1x3400 E873 T840 OP	1220	135	135	3362	27,3	123	+08	4000	7,40
Caelum A LED1x4600 E874 T840 OP	1220	135	135	4575	38,9	117	80+	4000	7,40
Caelum A LED1x5700 E875 T840 OP	1220	135	135	5690	50,8	112	80+	4000	7,40
Caelum A LED1x4250 E876 T840 OP	1500	135	135	4202	33,7	125	80+	4000	9,20
Caelum A LED1x5750 E877 T840 OP	1500	135	135	5719	48,7	117	80+	4000	9,20
Caelum A LED1x7150 E878 T840 OP	1500	135	135	7112	63,5	112	+08	4000	9,20

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C



Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min) MW Integrated microwave (MW) motion sensor with on-off control

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

*note - EM options applicable for models from 600mm and longer

5TB 5-pole terminal block in middle of luminaire for easy through wiring

1G Strain relief for power supply cable

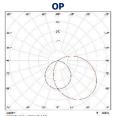
RAL RAL colour

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840

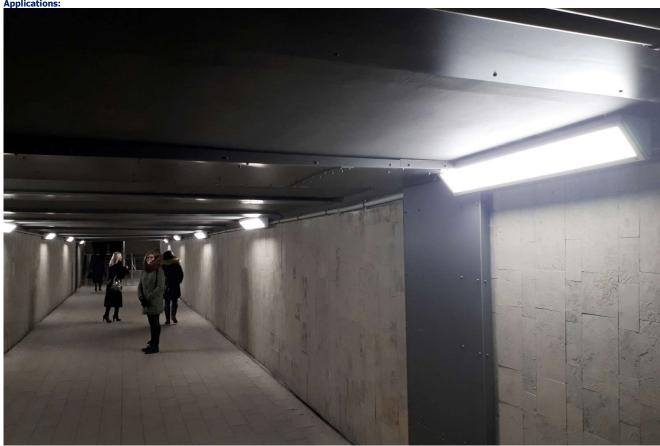
Available accessories:



Product: Security bit ART9109 SP10 Description: Security screw drill bit for 2-hole security fixings









CAELUM W LED

Product Group: Anti-vandal Luminaires













Images for the product family and options:





Description: A surface wall-mounted IP65 LED luminaire designed to withstand extreme vandalism in public areas

Diffuser: opal polycarbonate, 4mm, UV stabilized, vandal resistant

Body: zinc-plated sheet steel, white polyester powder finish, vandal resistant The frame is fitted into the body with stainless steel security screws

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,8 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L80B50

Operating temperature range, °C: ta -20...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK10+ Protection symbol: D

Glow wire test, °C: 850

EEC: A+

Installation: Wall-mounted luminaire. Push-in terminal, 3x2x2.5mm2

Environment: Indoor/outdoor

Application: Public place, tunnel, transport terminal, parking area, metro, prison, psychiatric hospital

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Caelum W LED1x1150 E879 T830 OP LT70	390	110	150	1095	11,1	99	80+	3000	3,00
Caelum W LED1x1150 E879 T840 OP LT70	390	110	150	1144	11.1	103	80+	4000	3,00

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

Driver with switch-control dimming SDIM

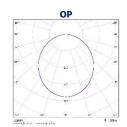
DALI Driver with DALI interface MW

Integrated microwave (MW) motion sensor with on-off control ASW Integrated anti-vandal switch

Strain relief for power supply cable 1G

RAI RAL colour

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840



Available accessories:



Product: Security bit ART9109 SP10

Description: Security screw drill bit for 2-hole security fixings



MARS LED

Product Group: Anti-vandal Luminaires















Images for the product family and options:









Description: A surface IP65 LED luminaire with opal diffuser and designed to withstand vandalism in public areas

Diffuser: opal polycarbonate, UV stabilized, vandal resistant

Body: die-cast aluminium, raw or dark grey polyester powder finish, vandal resistant

The frame is fitted into the body with stainless steel screws

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,85 Light source: E27/LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK10+

Protection symbol: D Glow wire test, °C: 850

EEC: A

Installation: Designed to be fixed onto ceiling or walls of any type, including flammable surfaces. Security screws are available on request. Push-in

terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Public place, facade illumination, tunnel, transport terminal, parking area, metro, public space

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
MARS 1E27 D537 RAW	270	270	110						1,25
MARS 1E27 D537 LOUVER RAW	270	270	120						1,25
MARS LED1x1200 D538 T830 RAW	270	270	110	1118	13,6	82	80+	3000	1,60
MARS LED1x1200 D538 T830 LOUVER RAW	270	270	120	860	13,6	63	+08	3000	1,60
MARS LED1x1200 D538 T840 RAW	270	270	110	1173	13,6	86	80+	4000	1,60
MARS LED1x1200 D538 T840 LOUVER RAW	270	270	120	902	13,6	66	80+	4000	1,60
MARS 1E27 D537 RAL7043	270	270	110						1,25
MARS 1E27 D537 LOUVER RAL7043	270	270	120						1,25
MARS LED1x1200 D538 T830 RAL7043	270	270	110	1118	13,6	82	+08	3000	1,60
MARS LED1x1200 D538 T830 LOUVER RAL7043	270	270	120	860	13,6	63	+08	3000	1,60
MARS LED1x1200 D538 T840 RAL7043	270	270	110	1173	13,6	86	80+	4000	1,60
MARS LED1x1200 D538 T840 LOUVER RAL7043	270	270	120	902	13,6	66	+08	4000	1,60

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^{\circ}$ C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

MW Integrated microwave (MW) motion sensor with on-off control

EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

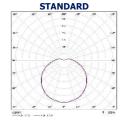
EM3A Emergency version equipped with an autonomous testing system, 3 hours

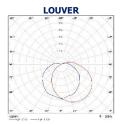
EM3D Emergency version 3 hours with DALI interface

1G Strain relief for power supply cable

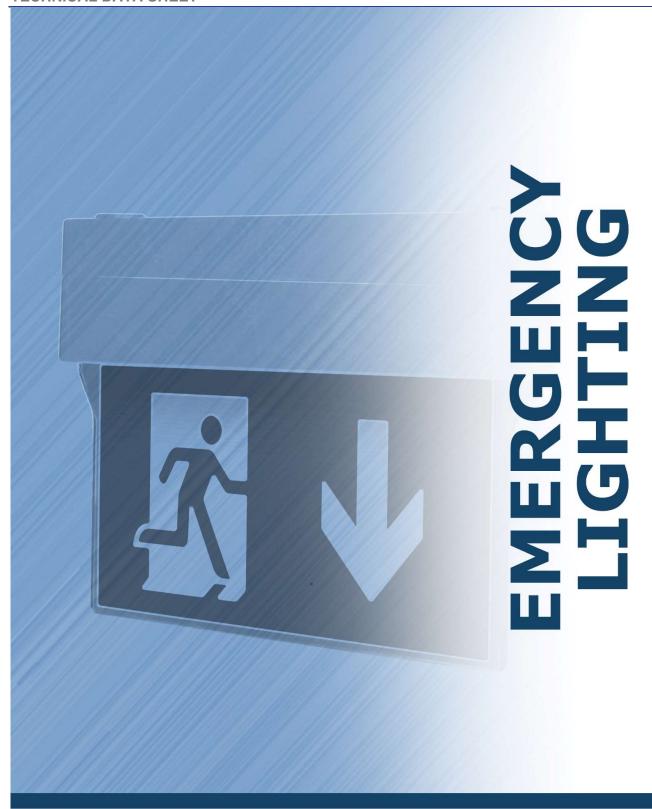
RAL RAL colour

SSCREW Luminaire equipped with security screws
T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+









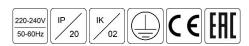
www.northcliffe.org



EMS MINI- EMERGENCY MONITORING SYSTEM

Product Group: Emergency Lighting





Description:

The EMS MINI system is a modern, compact solution designed for the monitoring of emergency luminaires with unique addresses installed in small-size buildings and facilities. The system offers the possibility to supervise up to 500 emergency luminaires equipped with EMS-type power supply sources.

The main advantages of the EMS MINI control unit are its compact size and the possibility to mount it on a DIN-3 standard rail (TH35). The system is simplified but not deprived of the most important functionalities from the user's point of view. Each control unit is equipped with an RS485 connection for the communication bus, an RJ45 connector, four LEDs indicating the current status of the system, three function keys which can be programmed in the control unit, a reset button and a service pin to assign a unique IP address to the unit. Additionally, the control unit has two potential-free input contacts and two outputs. Communication with EMS emergency luminaires is provided by means of an RS485 standard communication bus. A single bus may not exceed 1200 m when linear topology is used. The communication with luminaires is continuous.

Features:

- Monitoring of up to 500 emergency luminaires
- Maximum length of each single bus line 1200m
- System status indicators
- TH35 (DIN-3) rail mounted
- Three programmable function keys
- Two potential-free inputs (current loops)
- Two outputs (to control external relays)
- Internal memory to store emergency lighting system reports, compliant with EN 50172
- Mains mode, configured from the control unit
- Testing of individual luminaires or groups of luminaires
- Internal battery for uninterruptible operation
- RJ45 connector for direct communication with any computer via Ethernet
- Individually programmable IP address
- System status preview using any web browser
- Continuous communication with luminaires installed in the system
- System management and visualization by using dedicated EMS smart software

*for safety reasons, the control unit communicates with luminaires continuously and has a built-in powers supply source. All EMS systems are manufactured in compliance with applicable European standards

Lighting fittings working under the system have unique addresses and are connected to Emergency system control unit with a communication cable. The fittings communicate with the central unit reporting any abnormalities which are signaled on the central unit display with LED diodes placed on the central unit panel. Each fitting connected to the system may have an individual description in the control unit. When abnormalities, related to the operation of a fitting, occur, information about the type of abnormality and the location of the fitting appears on the display of the control unit. The system allows manual testing of a single fitting. Central unit's software allows dividing the fittings into groups which enables one to run tests only chosen groups of fittings. Apart from manual tests, the following auto-tests are carried out:

TEST A – a short test, recommended every 30 days (LST-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for 5 minutes
- Control of battery power discharge
- Control of minimum voltage of battery

TEST B – a long test recommended every 360 days (LST-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for the time programmed for each fitting (1, 2, 3 h)
- Control of battery power discharge
- Control of minimum voltage of battery
- Control of the condition of battery

The frequency of running tests A and B may be programmed according to the needs of the user. There is a possibility of programming the tests with exact dates, when they should be carried out. Long tests B should be run when the premises are not used within 24 hours after finishing the test. This time is needed for the recharging of the batteries discharged during the long test. Test results are stored in the memory of the central unit.

System components:



EMS address module

Features:

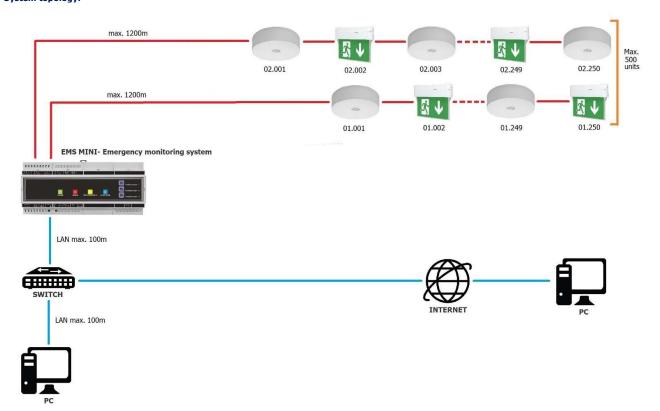
- Compatible with LED light sources
- Switching to emergency mode
- LiFePO₄ battery
- Battery charge indicator
- Luminaire status indicator

EMS smart platform Features:

- System status monitoring
- System programming
- Event log viewing
- Test function
- Possibility to upload floor plans of the building/facility



System topology:





EMS- EMERGENCY MONITORING SYSTEM

Product Group: Emergency Lighting















The EMS system is the latest and the most advanced monitoring system designed to control independent luminaires of emergency and escape route lighting systems. It is designed to be used in medium-to-large facilities and buildings. Each control unit can handle up to 4,000 luminaires using MP-250 power submodules. The submodules communicate with the EMS control unit via LAN. The use of LAN also enables communication between individual submodules. The EMS system is equipped with a touch panel and an intuitive graphic menu to enable quick and easy system configuration without the need for using EMS smart platform. Thanks to introduced technical solutions polarity does not need to be observed any more while connecting a communication bus to the following system components:

- EMS control unit
- MP-250 power submodules
- EMS address modules

Each EMS address module is assigned an individual number/address. The addresses are factory-assigned, so an addressing unit is not required for installation, setting up or maintenance work. Communication with EMS emergency luminaires is provided by means of an RS485 standard communication bus. A single bus may not exceed 1200 m when linear topology is used. The communication with luminaires is continuous.

Features:

- Touch screen control unit
- Unique addresses of luminaires
- Factory-assigned module addresses
- No need for an addressing unit
- Intuitive graphical user interface
- No need to keep the polarity of communication cables connection
- Inbuilt four potential-free inputs and outputs
- Remote access via web browser
- Monitoring of up to 750 luminaires per control unit (3 logical buses: 01, 02 and 03 each one with 2 physical channels)
- Possibility to expand the control system up to 4,000 luminaires by using additional external submodules
- System status indication
- Compatibility LED light sources
- Internal battery for uninterruptible operation
- Automatic performance of tests
- Event log
- Possibility to divide the luminaires for logic groups
- Mains mode for selected luminaires/groups
- System management and visualization using of dedicated EMS smart software
- BACnet standard, enabling compatibility of the EMS with Building Management Systems (BMS)

*for safety reasons, the control unit communicates with luminaires continuously and has a built-in powers supply source. All EMS systems are manufactured in compliance with applicable European standards

Lighting fittings working under the system have unique addresses and are connected to Emergency system control unit with a communication cable. The fittings communicate with the central unit reporting any abnormalities which are signaled on the central unit display with LED diodes placed on the central unit panel. Each fitting connected to the system may have an individual description in the control unit. When abnormalities, related to the operation of a fitting, occur, information about the type of abnormality and the location of the fitting appears on the display of the control unit. The system allows manual testing of a single fitting. Central unit's software allows dividing the fittings into groups which enables one to run tests only chosen groups of fittings. Apart from manual tests, the following auto-tests are carried out:

TEST A – a short test, recommended every 30 days (LST-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for 5 minutes
- Control of battery power discharge
- Control of minimum voltage of battery

TEST B – a long test recommended every 360 days (LST-EN 50172) – checks the following parameters:

- Enforcing emergency operation of the fitting for the time programmed for each fitting (1, 2, 3h)
- Control of battery power discharge
- Control of minimum voltage of battery
- Control of the condition of battery

The frequency of running tests A and B may be programmed according to the needs of the user. There is a possibility of programming the tests with exact dates, when they should be carried out. Long tests B should be run when the premises are not used within 24 hours after finishing the test. This time is needed for the recharging of the batteries discharged during the long test. Test results are stored in the memory of the central unit.

System components:



MP-250 Power module

Features:

- Submodules mounted on a DIN-3 rail (TH35)
- Monitoring of up to 250 luminaires
- Ethernet connection for LAN communication
- Service pin and Reset button
- Freely programmable IP address
- Built-in uninterruptible power supply unit
- LED indicator of battery charging





EMS address module

Features:

- Compatible with LED light sources
- Switching to emergency mode
- LiFePO₄ battery
- Battery charge indicator
- Luminaire status indicator

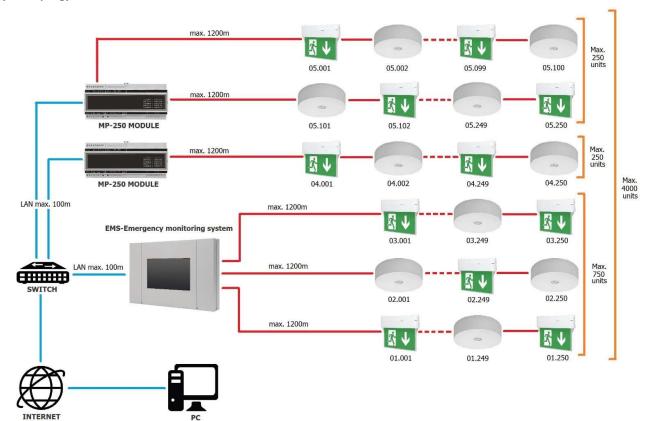


EMS smart platform

Features:

- System status monitoring
- System programming
- Event log viewing
- Test function
- Possibility to upload floor plans of the building/facility

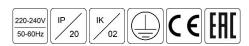
System topology:





CEBLV- CENTRAL BATTERY LOW VOTAGE SYSTEM

Product Group: Emergency Lighting





Description:

Central battery system CEBLV is a high-tech device created to power and monitor emergency lighting in buildings of small and medium size and in closed fire zones. The system can work with up to 80 LED luminaires supplied by SELV 24V (Safety Extra-Low Voltage) and was designed in Smart technology.

Voltage) and was designed in Smart technology.

The application of the SELV voltage ensures high level of safety of servicing of the system and its elements compliant with the currently valid regulations. Small dimensions of the central unit enable the installation of the system in places where one cannot fit a large-size central battery system. The CEBLV central unit is equipped with a big touch panel enabling both the current reading of the status of the system, circuits and fittings and the introduction of all settings and parameters of the system with the use of the user interface. Statuses are displayed in both graphic and text form. Using the central unit one can assign a name to the fitting that will clearly help to identify the fittings installed in the system. Using the central unit one can program and freely configure the emergency fittings in constant, non-constant, switching and switching-dimming modes as well as night work mode. The system has its own IP address and RJ45 slot which is used for direct connection to Ethernet. With a built-in WEB module, you can directly access the system from any computer and print the event log by using any web browser. Additionally, the system has an input and an SD card that allows to record and upload system settings (back-up) and the record reports of the Event Log in accordance with EN 50172.

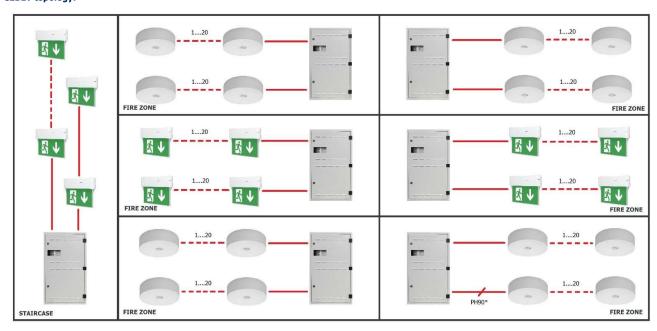
Features:

- Power supply and monitoring up to 80 individual LED fittings in CEBLV smart technology
- Safe supply SELV 24V
- Smart technology any mode of a fitting
- Easy to read, big LCD touch screen
- Easy and intuitive menu with simple icons
- Automatic or manual activation of short or long tests of the whole system
- Automatic detection and adding of the fittings to the system
- Built-in WEB module
- Built-in clock and calendar with DST adjustment and synchronization with a time server
- Programming and configuration of the fittings directly from the system
- Assigning names to luminaires
- Assigning design addresses to luminaires
- Communication with luminaires through the power supply cable
- SD slot and SD card for recording, transmission and printing emergency lighting reports from any PC, in accordance with EN 50172
- Possibility to store the system settings (back up) on SD card
- Contained security light mode (night operation)
- Possibility to control fittings and some functions of the system via terminals 24V and 230V
- Testing of each fitting separately as well as group of fittings
- Internal rechargeable battery with a designed life of 10 years
- RJ45 slot for direct connection to Ethernet
- Individual IP address
- Preview of the system via any web browser
- Works with any BMS (Building Management System) by using the module of potential-free contacts or a CAN-bus
- Unlimited grouping of systems and joint supervision by smart touch screen controller
- Control menu with language selection
- Management and visualization of the system using a dedicated CEBLV smart platform

*for safety reasons, the control unit communicates with luminaires continuously and has a built-in powers supply source. All EMS systems are manufactured in compliance with applicable European standards

An CEBLV unit can be supplied from a 230V AC or a 216V DC power source. As a result, the unit can be connected to a central battery system as a substation without installing internal batteries. This functionality enables the system to be used in facilities where a central battery system is required, but a safe voltage must also be ensured in areas where there is a risk of electric shock.

CEBLV topology:



*national regulations apply

Decentralized system:

Main station failure Cable failure: main station – substation

Damaged insulation of the branch circuit

No central system

Each system is independent; the failure is limited to one fire zone Negligible fire hazard (SELV)

SMART- switching method and revision technology

A conventional installation requires that the operating mode of each circuit is specified at the design stage. Subsequent modifications or errors may cause extra costs. In order to eliminate such drawbacks, NORTHCLIFFE has introduced a new technology with automatic monitoring and individual control of each luminaire in a system.

Switching

Method

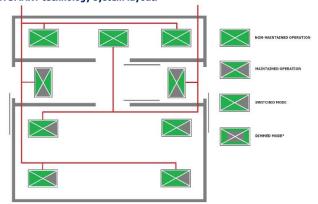
And

Revision

Technology

or SMART for short. This technology enables installation of luminaires- in a common circuit- operating in four modes: continuous, intermittent, switched and dimmed. Programming and monitoring of the luminaires are provided via power supply cables. The applied technology does not require the use of special communication cables. It can be implemented if appropriate address modules are installed in the luminaires. The modules are fitted as standard in all luminaires designed to work within an CEBLV central battery system. Each address module is assigned a unique address which enables its accurate identification in the system.

A SMART technology system layout:



* CEBLV systems only

SMART advantages:

- Luminaires operating in different modes can be installed within a single circuit
- Less cable is required
- Smaller number of circuits
- Lower installation costs
- Operating modes of the luminaires can be changed at any time

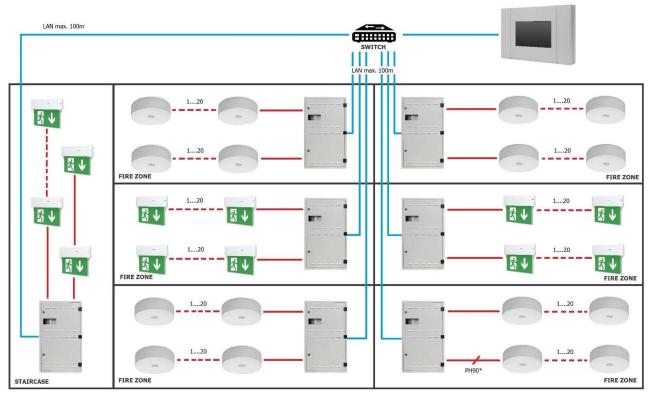


SMART touch controller

The SMART touch controller enables remote control and monitoring of any number of units from a single location. The controller provides remote monitoring, configuration and reading of events for each connected CEBLV unit.

- Functional test/Battery test activation for each device
- Global system locking/unlocking Password-protected access to the controller
- Checking the status of individual systems
- Full remote configuration of all systems
- Active list of systems enabling quick status checks
- Four globally configured inputs and outputs
- Standard fitted Ethernet interface to enable remote control and visualization of the system via a web browser

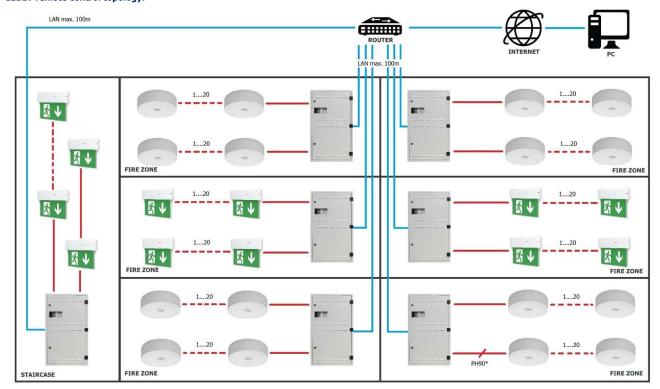
CEBLV with **SMART** touch controller topology:



The CEBLV system is equipped with an Ethernet port as standard. The connection enables remote checking of the status and setting up of the system via FIRE ZONE a dedicated website. This solution provides the user with the ability to control and monitor the system from a computer with a web browser installed. To check the system status using a computer, the user only needs to log in to the structural network of the facility or building where the CEBLV is installed. Each unit, circuit and luminaire can be monitored via the Internet. The access to the dedicated website is password protected.



CEBLV remote control topology:



List of cabinets:

Technical specifications	FZLV – 12 Ah	FZLV – 24 Ah	FZLV MAX – 33 Ah	FZLV MAX – 52 Ah
5	_			g
Protection class: I				
Ingress protection: IP20 DC				
Voltage: 24 V ± 30%	1			
Operating temperature range: -5°C to 30°C	•	•	•	•
-5*C 10 30*C	I			
Supply voltage:	AC: 1-phase 230V	AC: 1-phase 230V	AC: 1-phase 230V	AC: 1-phase 230V
,	± 10%, 50/60Hz	± 10%, 50/60Hz	± 10%, 50/60Hz	± 10%, 50/60Hz
	or	or	or	or
	DC: $216V \pm 20\%$	DC: 216V ± 20%	DC: 216V ± 20%	DC: $216V \pm 20\%$
Battery capacity:	12Ah	24Ah	33Ah	52Ah
Max. power output: 1h	123W	219W	304W	304W
2h	70W	142W	195W	301W
3h	49W	102W	140W	219W
8h	21W	47W	66W	106W
Number of circuits:	4	4	4	4
Maximum circuit load:	76W	76W	76W	76W
Cable connection- max. wire size, mm ² :				
Power supply:	2,5	2,5	2,5	2,5
Circuit:	2,5	2,5	2,5	2,5
RS485 bus:	2,5	2,5	2,5	2,5
24V power out:	2,5	2,5	2,5	2,5
Switch monitoring:	2,5	2,5	2,5	2,5
Potential free input:	2,5	2,5	2,5	2,5
Signal out:	2,5	2,5	2,5	2,5
Cable glands:	9 x M20	9 x M20	1 x M25	1 x M25
	6 x M16	6 x M16	9 x M20	9 x M20
			6 x M16	6 x M16
Weight, kg:	15,5 kg	24,3 kg	39,2 kg	48,3 kg
Dimensions, mm:	472x266x140	639x266x140	800x400x170	800x400x170

Maximum power of the circuit, W	Cross-section, mm ²	Length, m
24 W	1,5	142
	2,5	236
48 W	1,5	71
	2,5	118
72 W	1,5	48
	2,5	79



ARA R LED

Product Group: Emergency Lighting

65













Images for the product family and options:



Description: A recessed LED emergency escape luminaire with latest optics designed to illuminate escape routes or open areas

Optics: LER- escape route, LOA- open areas

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT) Battery: NiCd (LiFePO₄ optional: AUT)

Electronic gear and battery package installed in a separate box

Deep discharge protection

The extremely effective optics reflected in the very large mounting distances between the luminaires:

up to 38m along the escape routes;

up to 26m in the open areas;

that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and

subsequent maintenance

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40Protection class IEC: II Ingress protection code: IP20 or IP65/20

Mechanical impact resistance: IK08

Installation: Suitable for plasterboard or similar type of ceiling, requires a cut-out Ø83mm and under-ceiling height >150mm. Push-in terminal,

3x2x2.5mm2 **Environment:** Indoor

Application: Emergency lighting

Product	Length, mm	Width, mm	Height, mm	Illumination mode	Emergency operating time, h	Power in emergency mode, W*	CRI*	ССТ, К*	Weight, kg
Ara R 1HLED C364 LER	100	100	37	NM	1	1	+08	6500	0,60
Ara R 3HLED C365 LER	100	100	37	NM	3	1	80+	6500	0,65
Ara R 1PLED C366 LER	100	100	37	M/NM	1	1	+08	6500	0,60
Ara R 3PLED C367 LER	100	100	37	M/NM	3	1	80+	6500	0,65
Ara R 1HLED C364 LER AUT	100	100	37	NM	1	1	80+	6500	0,60
Ara R 3HLED C365 LER AUT	100	100	37	NM	3	1	80+	6500	0,65
Ara R 1PLED C366 LER AUT	100	100	37	M/NM	1	1	80+	6500	0,60
Ara R 3PLED C367 LER AUT	100	100	37	M/NM	3	1	80+	6500	0,65
Ara R CEBLED C368 LER	100	100	37	CEB	Х	1	80+	6500	0,60
Ara R 1HLED C364 LOA	100	100	37	NM	1	1	80+	6500	0,60
Ara R 3HLED C365 LOA	100	100	37	NM	3	1	80+	6500	0,65
Ara R 1PLED C366 LOA	100	100	37	M/NM	1	1	80+	6500	0,60
Ara R 3PLED C367 LOA	100	100	37	M/NM	3	1	80+	6500	0,65
Ara R 1HLED C364 LOA AUT	100	100	37	NM	1	1	80+	6500	0,60
Ara R 3HLED C365 LOA AUT	100	100	37	NM	3	1	80+	6500	0,65
Ara R 1PLED C366 LOA AUT	100	100	37	M/NM	1	1	80+	6500	0,60
Ara R 3PLED C367 LOA AUT	100	100	37	M/NM	3	1	80+	6500	0,65
Ara R CEBLED C368 LOA	100	100	37	CEB	х	1	80+	6500	0,60



Ara R 1HLED C364 LER IP65 Ara R 3HLED C365 LER IP65 Ara R 1PLED C366 LER IP65 Ara R 3PLED C367 LER IP65 Ara R 1HLED C364 LER IP65 AUT Ara R 3HLED C365 LER IP65 AUT Ara R 1PLED C366 LER IP65 AUT Ara R 3PLED C366 LER IP65 AUT Ara R CEBLED C367 LER IP65 AUT Ara R CEBLED C368 LER IP65 AUT Ara R 1HLED C364 LOA IP65 Ara R 1HLED C365 LOA IP65 Ara R 3PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65 Ara R 3PLED C367 LOA IP65 Ara R 1HLED C364 LOA IP65 Ara R 1HLED C364 LOA IP65 Ara R 1HLED C364 LOA IP65	100 100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100 100	37 37 37 37 37 37 37 37 37	NM NM M/NM M/NM NM NM NM M/NM M/NM M/NM	1 3 1 3 1 3 1 3 1 3 x	1 1 1 1 1 1 1 1 1	80+ 80+ 80+ 80+ 80+ 80+ 80+ 80+ 80+	6500 6500 6500 6500 6500 6500 6500	0,60 0,65 0,60 0,65 0,60 0,65 0,60 0,65
Ara R 3HLED C365 LER IP65 Ara R 1PLED C366 LER IP65 Ara R 3PLED C367 LER IP65 Ara R 1HLED C364 LER IP65 AUT Ara R 3HLED C365 LER IP65 AUT Ara R 1PLED C366 LER IP65 AUT Ara R 3PLED C367 LER IP65 AUT Ara R 3PLED C367 LER IP65 AUT Ara R CEBLED C368 LER IP65 Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100 100 100 100 100 100 100 100	100 100 100 100 100 100 100 100 100	37 37 37 37 37 37 37 37	NM M/NM M/NM NM NM NM M/NM M/NM	3 1 3 1 3 1 3	1 1 1 1 1 1 1	80+ 80+ 80+ 80+ 80+ 80+	6500 6500 6500 6500 6500 6500	0,65 0,60 0,65 0,60 0,65 0,60 0,65
Ara R 3PLED C367 LER IP65 Ara R 1HLED C364 LER IP65 AUT Ara R 3HLED C365 LER IP65 AUT Ara R 1PLED C366 LER IP65 AUT Ara R 3PLED C367 LER IP65 AUT Ara R CEBLED C368 LER IP65 Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100 100 100 100 100 100	100 100 100 100 100 100	37 37 37 37 37 37	M/NM NM NM M/NM M/NM	3 1 3 1 3	1 1 1 1 1	80+ 80+ 80+ 80+ 80+	6500 6500 6500 6500 6500	0,60 0,65 0,60 0,65 0,60 0,65
Ara R 1HLED C364 LER IP65 AUT Ara R 3HLED C365 LER IP65 AUT Ara R 1PLED C366 LER IP65 AUT Ara R 3PLED C367 LER IP65 AUT Ara R CEBLED C368 LER IP65 Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100 100 100 100 100	100 100 100 100 100	37 37 37 37 37	NM NM M/NM M/NM	1 3 1 3	1 1 1 1	80+ 80+ 80+ 80+	6500 6500 6500 6500	0,60 0,65 0,60 0,65
Ara R 3HLED C365 LER IP65 AUT Ara R 1PLED C366 LER IP65 AUT Ara R 3PLED C367 LER IP65 AUT Ara R CEBLED C368 LER IP65 Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100 100 100 100	100 100 100 100 100	37 37 37 37	NM M/NM M/NM	3 1 3	1 1 1	80+ 80+ 80+	6500 6500 6500	0,60 0,65 0,60 0,65
Ara R 1PLED C366 LER IP65 AUT Ara R 3PLED C367 LER IP65 AUT Ara R CEBLED C368 LER IP65 Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100 100 100	100 100 100	37 37 37	M/NM M/NM	1 3	1 1	80+ 80+	6500 6500	0,60 0,65
Ara R 3PLED C367 LER IP65 AUT Ara R CEBLED C368 LER IP65 Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100 100 100	100 100	37 37	M/NM	3	1	80+	6500	0,65
Ara R CEBLED C368 LER IP65 Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100 100	100	37						
Ara R 1HLED C364 LOA IP65 Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100 100	100		CEB	X	1	80+	CEOO	
Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100						001	6500	0,60
Ara R 3HLED C365 LOA IP65 Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65	100		37	NM	1	1	80+	6500	0,60
Ara R 1PLED C366 LOA IP65 Ara R 3PLED C367 LOA IP65		100	37	NM	3	1	80+	6500	0,65
Ara R 3PLED C367 LOA IP65		100	37	M/NM	1	1	80+	6500	0,60
	100	100	37	M/NM	3	1	80+	6500	0,65
	100	100	37	NM	1	1	80+	6500	0,60
Ara R 3HLED C365 LOA IP65 AUT	100	100	37	NM	3	1	80+	6500	0,65
Ara R 1PLED C366 LOA IP65 AUT	100	100	37	M/NM	1	1	80+	6500	0,60
Ara R 3PLED C367 LOA IP65 AUT	100	100	37	M/NM	3	1	80+	6500	0,65
Ara R CEBLED C368 LOA IP65	100	100	37	CEB	х	1	80+	6500	0,60
A D 4111 ED 6260 LED	100	100		N.N.4			00:		0.65
Ara R 1HLED C369 LER	100	100	37	NM	1	3	80+	6500	0,65
Ara R 3HLED C370 LER	100	100	37	NM	3	3	80+	6500	0,65
Ara R 1PLED C371 LER	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C372 LER Ara R 1HLED C369 LER AUT	100 100	100 100	37 37	M/NM NM	3 1	3	80+ 80+	6500 6500	0,65 0,65
Ara R 3HLED C370 LER AUT	100	100	37	NM	3	3	80+	6500	0,65
Ara R 1PLED C371 LER AUT	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C371 LER AUT	100	100	37	M/NM	3	3	80+	6500	0,65
Ara R CEBLED C372 LER A01	100	100	37	CEB	X	3	80+	6500	0,60
THE R CEDEED COTO EER				CLD			001		
Ara R 1HLED C369 LOA	100	100	37	NM	1	3	80+	6500	0,65
Ara R 3HLED C370 LOA	100	100	37	NM	3	3	+08	6500	0,65
Ara R 1PLED C371 LOA	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C372 LOA	100	100	37	M/NM	3	3	+08	6500	0,65
Ara R 1HLED C369 LOA AUT	100	100	37	NM	1	3	80+	6500	0,65
Ara R 3HLED C370 LOA AUT	100	100	37	NM	3	3	80+	6500	0,65
Ara R 1PLED C371 LOA AUT	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C372 LOA AUT	100	100	37	M/NM	3	3	80+	6500	0,65
Ara R CEBLED C373 LOA	100	100	37	CEB	Х	3	80+	6500	0,60
Ara R 1HLED C369 LER IP65	100	100	37	NM	1	3	80+	6500	0,65
Ara R 3HLED C370 LER IP65	100	100	37	NM	3	3	80+	6500	0,65
Ara R 1PLED C371 LER IP65	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C372 LER IP65	100	100	37	M/NM	3	3	80+	6500	0,65
Ara R 1HLED C369 LER IP65 AUT	100	100	37	NM	1	3	80+	6500	0,65
Ara R 3HLED C370 LER IP65 AUT	100	100	37	NM	3	3	80+	6500	0,65
Ara R 1PLED C371 LER IP65 AUT	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C372 LER IP65 AUT	100	100	37	M/NM	3	3	80+	6500	0,65
Ara R CEBLED C373 LER IP65	100	100	37	CEB	X	3	+08	6500	0,60
Ara R 1HLED C369 LOA IP65	100	100	37	NM	1	3	80+	6500	0,65
Ara R 3HLED C370 LOA IP65	100	100	37	NM	3	3	80+	6500	0,65
Ara R 1PLED C370 LOA 1P65	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C372 LOA IP65	100	100	37	M/NM	3	3	80+	6500	0,65
Ara R 1HLED C369 LOA IP65 AUT	100	100	37	NM	1	3	80+	6500	0,65
Ara R 3HLED C370 LOA IP65 AUT	100	100	37	NM	3	3	80+	6500	0,65
Ara R 1PLED C371 LOA IP65 AUT	100	100	37	M/NM	1	3	80+	6500	0,65
Ara R 3PLED C372 LOA IP65 AUT	100	100	37	M/NM	3	3	80+	6500	0,65
Ara R CEBLED C373 LOA IP65	100	100	37	CEB	Х	3	80+	6500	0,60
Ara R 1HLED C374 LOA	100	100	37	NM	1	6	80+	6500	0,75
Ara R 3HLED C375 LOA	100	100	37	NM	3	6	80+	6500	1,10
Ara R 1PLED C376 LOA	100	100	37	M/NM	1	6	80+	6500	0,75
Ara R 3PLED C377 LOA	100	100	37	M/NM	3	6	80+	6500	1,10
Ara R 1HLED C374 LOA AUT	100	100	37	NM	1	6	80+	6500	0,75
	100	100	37	NM M/NM	3	6	80+	6500	1,10
Ara R 3HLED C375 LOA AUT	100	100	37 37	M/NM M/NM	3	6 6	80+	6500	0,75
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT	100	100		M/NM	3		80+	6500 6500	1,10
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT	100	100		ĆFR	~	6			() /5
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT		100 100	37	CEB	X	6	80+	0300	0,75
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT	100			CEB	1	6	80+	6500	0,75
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT Ara R CEBLED C378 LOA	100 100	100	37						·
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT Ara R CEBLED C378 LOA Ara R 1HLED C374 LOA IP65	100 100	100	37 37	NM	1	6	80+	6500	0,75
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT Ara R CEBLED C378 LOA Ara R 1HLED C374 LOA IP65 Ara R 3HLED C375 LOA IP65	100 100 100 100	100 100 100	37 37 37	NM NM	1 3	6 6	80+ 80+	6500 6500	0,75 1,10
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT Ara R CEBLED C378 LOA Ara R 1HLED C374 LOA IP65 Ara R 3HLED C375 LOA IP65 Ara R 1PLED C376 LOA IP65	100 100 100 100 100	100 100 100 100	37 37 37 37	NM NM M/NM	1 3 1	6 6 6	80+ 80+ 80+	6500 6500 6500	0,75 1,10 0,75
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT Ara R CEBLED C378 LOA Ara R 1HLED C374 LOA IP65 Ara R 3HLED C375 LOA IP65 Ara R 1PLED C376 LOA IP65 Ara R 3PLED C377 LOA IP65 Ara R 3PLED C377 LOA IP65	100 100 100 100 100 100	100 100 100 100 100	37 37 37 37 37	NM NM M/NM M/NM	1 3 1 3	6 6 6	80+ 80+ 80+ 80+	6500 6500 6500 6500	0,75 1,10 0,75 1,10
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT Ara R CEBLED C378 LOA Ara R 1HLED C374 LOA IP65 Ara R 3HLED C375 LOA IP65 Ara R 1PLED C376 LOA IP65 Ara R 3PLED C377 LOA IP65 Ara R 3PLED C374 LOA IP65 Ara R 1HLED C374 LOA IP65	100 100 100 100 100 100 100 100 100	100 100 100 100 100 100	37 37 37 37 37 37 37 37	NM NM M/NM M/NM NM	1 3 1 3 1 3 1	6 6 6 6 6 6	80+ 80+ 80+ 80+	6500 6500 6500 6500	0,75 1,10 0,75 1,10 0,75
Ara R 3HLED C375 LOA AUT Ara R 1PLED C376 LOA AUT Ara R 3PLED C377 LOA AUT Ara R CEBLED C378 LOA Ara R 1HLED C374 LOA IP65 Ara R 3HLED C375 LOA IP65 Ara R 1PLED C376 LOA IP65 Ara R 3PLED C377 LOA IP65 Ara R 1HLED C374 LOA IP65 Ara R 1HLED C374 LOA IP65 Ara R 1HLED C375 LOA IP65 Ara R 1HLED C375 LOA IP65 AUT Ara R 3HLED C375 LOA IP65 AUT	100 100 100 100 100 100 100 100	100 100 100 100 100 100 100	37 37 37 37 37 37 37	NM NM M/NM M/NM NM	1 3 1 3 1 3	6 6 6 6 6	80+ 80+ 80+ 80+ 80+	6500 6500 6500 6500 6500	0,75 1,10 0,75 1,10 0,75 1,10

Note: M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

LOA

LER

Available options:

TEST Manual test button Autonomous testing system
Fitting to central battery system AUT CEB

CLV Fitting to low voltage central battery system CEBLV

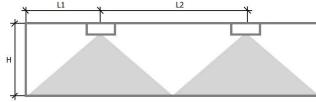
EMS Fitting to emergency monitoring system IP65 IP65/20 ingress protection for recessed version

LGREY Light grey thermoplastic body **BLACK** Black thermoplastic body LER Optic for escape route LOA Optic for open areas

LOU Optic for mixed areas/universal Optic with asymmetric beam

LOS

Photometry of LOA/LER



L1- distance from the wall to the first fixture

L2- distance between fixtures H- height of the ceiling

LER optic for corridor route illumination:

LER- IW/ IOUIII IIIII. IIX						
H, m	L1, m	L2, m				
2,50	5,5	15,0				
3,00	5,5	16,0				
3,50	6,0	16,5				
4,00	6,5	17,0				
4,50	6,0	16,5				
5,00	6,0	16,5				
6,00	5,5	14,0				

LER- 3W/370lm min. 1lx					
H, m	L1, m	L2, m			
2,50	8,0	19,0			
3,00	8,0	20,5			
3,50	8,5	21,5			
4,00	9,0	23,0			
4,50	9,5	24,0			
5,00	10,0	25,0			
6,00	10,5	26,5			
7,00	10,5	28,0			
8,00	10,0	27,5			

LER- 6W/600lm min. 1lx						
H, m	L1, m	L2, m				
2,50	10,0	23,0				
3,00	10,5	25,5				
3,50	11,0	27,0				
4,00	11,5	29,0				
4,50	12,0	30,0				
5,00	12,0	31,0				
6,00	12,5	32,0				
7,00	13,5	35,0				
8,00	14,0	36,0				
9,00	14,5	37,0				
10,00	14,5	38,0				

LOA- 1W/145IM MIN. 0,5IX					
H, m	L1, m	L2, m			
2,50	2,5	13,5			
3,00	2,0	13,5			
3,50	2,0	13,5			
4,00	2,0	13,0			
4,50	1,5	12,5			
5,00	1,5	12,5			

1,5

12,0

6,00

LOA optic for open area illumination:

LOA- 3W/375lm min. 0,5lx					
H, m	L1, m	L2, m			
2,50	6,5	17,0			
3,00	6,5	18,0			
3,50	6,5	20,0			
4,00	5,5	21,5			
4,50	5,0	22,5			
5,00	4,0	23,0			
6,00	4,0	22,5			
7,00	4,0	22,0			
8,00	3,0	21,0			

LOA- 6W/615lm min. 0,5lx					
H, m	L1, m	L2, m			
2,50	6,0	19,5			
3,00	6,0	20,0			
3,50	6,5	22,0			
4,00	6,0	23,0			
4,50	5,5	24,0			
5,00	5,0	25,0			
6,00	4,0	26,0			
7,00	4,0	26,5			
8,00	4,0	26,5			
9,00	4,0	26,5			
10,00	2,5	26,0			



ARAS LED

Product Group: Emergency Lighting















Images for the product family and options:



Description: A surface LED emergency escape luminaire with latest optics designed to illuminate escape routes or open areas. An additional option

is to adapt the fitting to work in the low temperatures: up to -25°C

Optics: LER- escape route, LOA- open areas

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO4 optional: AUT)

Deep discharge protection

The extremely effective optics reflected in the very large mounting distances between the luminaires:

up to 37m along the escape routes;

up to 26,5m in the open areas;

that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and

subsequent maintenance

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED

Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40 (ta -25...+40 optional)

Protection class IEC: II

Ingress protection code: IP42 or IP65

Mechanical impact resistance: IK08

Installation: Designed to be fixed onto ceiling or walls of any type. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting

Product	Length, mm	Width, mm	Height, mm	Illumination mode	Emergency operating time, h	Power in emergency mode, W*	CRI*	ССТ, К*	Weight, kg
Ara S 1HLED C379 LER	202	202	58	NM	1	1	80+	6500	1,35
Ara S 3HLED C380 LER	202	202	58	NM	3	1	80+	6500	1,40
Ara S 1PLED C381 LER	202	202	58	M/NM	1	1	80+	6500	1,35
Ara S 3PLED C382 LER	202	202	58	M/NM	3	1	80+	6500	1,40
Ara S 1HLED C379 LER AUT	202	202	58	NM	1	1	80+	6500	1,35
Ara S 3HLED C380 LER AUT	202	202	58	NM	3	1	80+	6500	1,40
Ara S 1PLED C381 LER AUT	202	202	58	M/NM	1	1	80+	6500	1,35
Ara S 3PLED C382 LER AUT	202	202	58	M/NM	3	1	+08	6500	1,40
Ara S CEBLED C383 LER	202	202	58	CEB	Х	1	80+	6500	1,35
Ara S 1HLED C379 LOA	202	202	58	NM	1	1	+08	6500	1,35
Ara S 3HLED C380 LOA	202	202	58	NM	3	1	80+	6500	1,40
Ara S 1PLED C381 LOA	202	202	58	M/NM	1	1	+08	6500	1,35
Ara S 3PLED C382 LOA	202	202	58	M/NM	3	1	80 +	6500	1,40
Ara S 1HLED C379 LOA AUT	202	202	58	NM	1	1	80 +	6500	1,35
Ara S 3HLED C380 LOA AUT	202	202	58	NM	3	1	80+	6500	1,40
Ara S 1PLED C381 LOA AUT	202	202	58	M/NM	1	1	80+	6500	1,35
Ara S 3PLED C382 LOA AUT	202	202	58	M/NM	3	1	80+	6500	1,40
Ara S CEBLED C383 LOA	202	202	58	CEB	х	1	80+	6500	1,35



COMMONE DATA SHEET	l					1717	WINTO E	II L DIX	OIIIL
Ara S 1HLED C379 LER IP65	202	202	58	NM NM	3	1	80+	6500	1,35
Ara S 3HLED C380 LER IP65	202		58			1	80+	6500	1,40
Ara S 1PLED C381 LER IP65	202	202	58	M/NM	1	1	80+	6500	1,35
Ara S 3PLED C382 LER IP65	202	202	58	M/NM	3	1	80+	6500	1,40
Ara S 1HLED C379 LER IP65 AUT	202	202	58	NM	1	1	80+	6500	1,35
Ara S 3HLED C380 LER IP65 AUT	202	202	58	NM	3	1	80+	6500	1,40
Ara S 1PLED C381 LER IP65 AUT	202	202	58	M/NM	1	1	80+	6500	1,35
Ara S 3PLED C382 LER IP65 AUT	202	202	58	M/NM	3	1	+08	6500	1,40
Ara S CBLED C383 LER IP65	202	202	58	CEB	X	1	+08	6500	1,35
Ara S 1HLED C379 LOA IP65	202	202	58	NM	1	1	80+	6500	1,35
Ara S 3HLED C379 LOA I 103	202	202	58	NM	3	1	80+	6500	1,40
Ara S 1PLED C381 LOA IP65	202	202	58	M/NM	1	1	80+	6500	1,35
Ara S 3PLED C382 LOA IP65	202	202	58	M/NM	3	1	80+	6500	1,40
Ara S 1HLED C379 LOA IP65 AUT	202	202	58	NM	1	1	80+	6500	1,35
Ara S 3HLED C380 LOA IP65 AUT	202	202	58	NM	3	1	80+	6500	1,40
Ara S 1PLED C381 LOA IP65 AUT	202	202	58	M/NM	1	1	80+	6500	1,35
Ara S 3PLED C382 LOA IP65 AUT	202	202	58	M/NM	3	1	80+	6500	1,40
Ara S CBLED C383 LOA IP65	202	202	58	CEB	X	1	80+	6500	1,35
				-					
Ara S 1HLED C384 LER	202	202	58	NM	1	3	+08	6500	1,35
Ara S 3HLED C385 LER	202	202	58	NM	3	3	80+	6500	1,50
Ara S 1PLED C386 LER	202	202	58	M/NM	1	3	80+	6500	1,35
Ara S 3PLED C387 LER	202	202	58	M/NM	3	3	+08	6500	1,50
Ara S 1HLED C384 LER AUT	202	202	58	NM	1	3	80+	6500	1,35
Ara S 3HLED C385 LER AUT	202	202	58	NM	3	3	80+	6500	1,50
Ara S 1PLED C386 LER AUT	202	202	58	M/NM	1	3	80+	6500	1,35
Ara S 3PLED C387 LER AUT	202	202	58	M/NM	3	3	80+	6500	1,50
Ara S CEBLED C388 LER	202	202	58	CEB	Х	3	80+	6500	1,35
Ara S 1HLED C384 LOA	202 202	202	58 58	NM NM	1 3	3	80+ 80+	6500	1,35
Ara S 3HLED C385 LOA								6500	1,50
Ara S 1PLED C386 LOA	202	202	58	M/NM	1	3	80+	6500	1,35
Ara S 3PLED C387 LOA	202	202	58	M/NM	3	3	80+	6500	1,50
Ara S 1HLED C384 LOA AUT	202	202	58	NM	1	3	80+	6500	1,35
Ara S 3HLED C385 LOA AUT	202	202	58	NM	3	3	80+	6500	1,50
Ara S 1PLED C386 LOA AUT	202	202	58	M/NM	1	3	+08	6500	1,35
Ara S 3PLED C387 LOA AUT	202	202	58	M/NM	3	3	80+	6500	1,50
Ara S CEBLED C388 LOA	202	202	58	CEB	X	3	+08	6500	1,35
Ara S 1HLED C384 LER IP65	202	202	58	NM	1	3	80+	6500	1,35
Ara S 3HLED C385 LER IP65	202	202	58	NM	3	3	80+	6500	1,50
Ara S 1PLED C386 LER IP65	202	202	58	M/NM	1	3	80+	6500	1,35
Ara S 3PLED C387 LER IP65	202	202	58	M/NM	3	3	80+	6500	1,50
Ara S 1HLED C384 LER IP65 AUT	202	202	58	NM	1	3	80+	6500	1,35
Ara S 3HLED C385 LER IP65 AUT	202	202	58	NM	3	3	80+	6500	1,50
Ara S 1PLED C386 LER IP65 AUT	202	202	58	M/NM	1	3	80+	6500	1,35
Ara S 3PLED C387 LER IP65 AUT	202	202	58	M/NM	3	3	80+	6500	1,50
Ara S CEBLED C388 LER IP65	202	202	58	CEB	X	3	80+	6500	1,35
AIR S CEDEED COOL EEK II OS	202	202	30	CLD	^		001	0300	1,55
Ara S 1HLED C384 LOA IP65	202	202	58	NM	1	3	80+	6500	1,35
Ara S 3HLED C385 LOA IP65	202	202	58	NM	3	3	80+	6500	1,50
Ara S 1PLED C386 LOA IP65	202	202	58	M/NM	1	3	80+	6500	1,35
Ara S 3PLED C387 LOA IP65	202	202	58	M/NM	3	3	80+	6500	1,50
Ara S 1HLED C384 LOA IP65 AUT	202	202	58	NM	1	3	80+	6500	1,35
Ara S 3HLED C385 LOA IP65 AUT	202	202	58	NM	3	3	80+	6500	1,50
Ara S 1PLED C386 LOA IP65 AUT	202	202	58	M/NM	1	3	80+	6500	1,35
ara S 3PLED C387 LOA IP65 AUT	202	202	58	M/NM	3	3	80+	6500	1,50
ara S CEBLED C388 LOA IP65	202	202	58	ĆEB	X	3	80+	6500	1,35
ara S 1HLED C389 LOA	202	202	58	NM	1	6	80+	6500	1,50
ara S 3HLED C390 LOA	202	202	58	NM	3	6	80+	6500	1,75
ra S 1PLED C391 LOA	202	202	58	M/NM	1	6	80+	6500	1,50
ra S 3PLED C392 LOA	202	202	58	M/NM	3	6	80+	6500	1,75
ra S 1HLED C389 LOA AUT	202	202	58	NM	1	6	80+	6500	1,50
ra S 3HLED C390 LOA AUT	202	202	58	NM	3	6	+08	6500	1,75
ra S 1PLED C391 LOA AUT	202	202	58	M/NM	1	6	80+	6500	1,50
ra S 3PLED C392 LOA AUT	202	202	58	M/NM	3	6	80+	6500	1,75
ra S CEBLED C393 LOA	202	202	58	CEB	X	6	80+	6500	1,50
ara S 1HLED C389 LOA IP65	202	202	58	NM	1	6	80+	6500	1,50
ra S 3HLED C390 LOA IP65	202	202	58	NM	3	6	80+	6500	1,75
Ara S 1PLED C391 LOA 1P65	202	202	58	M/NM	1	6	80+	6500	1,50
ra S 3PLED C391 LOA 1P65	202	202	58	M/NM M/NM	3	6	80+	6500	1,75
Ara S 1HLED C389 LOA IP65 AUT Ara S 3HLED C390 LOA IP65 AUT	202	202	58	NM NM	1 2	6	80+	6500	1,50
NA 3 301 CH L 3901 H IA 1965 AHI	202	202	58	NM	3	6	80+	6500	1,75 1,50
	202	202	E0						1 50
Ara S 1PLED C391 LOA IP65 AUT	202	202	58	M/NM M/NM	1 2	6	80+	6500	
Ara S SPLED C390 LOA IP65 AUT Ara S 1PLED C391 LOA IP65 AUT Ara S 3PLED C392 LOA IP65 AUT Ara S CEBLED C393 LOA IP65	202 202 202	202 202 202	58 58 58	M/NM M/NM CEB	3 x	6	80+ 80+	6500 6500	1,75 1,50

Note: M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button
AUT Autonomous testing system
CEB Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV

EMS Fitting to emergency monitoring system

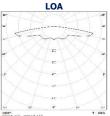
IP65 IP65 ingress protection for surface version

tmin-25 Suitable for low temperatures with ta -25...+40°C

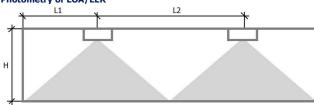
LGREY Light grey thermoplastic body

LGREY Light grey thermoplastic body
BLACK Black thermoplastic body
LER Optic for escape route
LOA Optic for open areas
LOU Optic for mixed areas/universal
LOS Optic with asymmetric beam





Photometry of LOA/LER



L1- distance from the wall to the first fixture

L2- distance between fixtures

H- height of the ceiling

LER optic for corridor route illumination:

LER- 1W/150Im min. 1lx						
H, m	L1, m	L2, m				
2,50	5,5	15,0				
3,00	5,5	16,0				
3,50	6,0	16,0				
4,00	6,0	16,5				
4,50	5,5	16,0				
5,00	5,0	16,0				
6,00	5,0	13,0				

LER- 3W/360lm min. 1lx					
H, m	L1, m	L2, m			
2,50	8,0	19,0			
3,00	8,0	20,0			
3,50	8,5	21,0			
4,00	9,0	22,5			
4,50	9,5	24,0			
5,00	10,0	25,0			
6,00	10,5	26,0			
7,00	10,0	27,0			
8,00	9,5	27,0			
9,00	9,0	21,0			
10,00	8,5	17,0			

LER- 6W/600lm min. 1lx					
H, m	L1, m	L2, m			
2,50	10,0	23,0			
3,00	10,5	25,0			
3,50	11,0	27,0			
4,00	11,0	28,5			
4,50	11,5	29,5			
5,00	12,0	30,5			
6,00	12,5	32,0			
7,00	12,5	34,0			
8,00	13,0	35,0			
9,00	13,0	36,0			
10,00	12,5	37,0			

LOA- 1W/145lm min. 0,5lx							
H, m	L1, m	L2, m					
2,50	2,5	14,0					
3,00	2,0	13,5					
3,50	2,0	13,5					
4,00	2,0	13,0					
4,50	1,5	12,5					
5,00	1,5	12,5					

1,5 1,5

12,0

6,00

LOA optic for open area illumination:

LOA- 3W/350lm min. 0,5lx								
H, m	L1, m	L2, m						
2,50	5,0	17,5						
3,00	4,5	17,5						
3,50	4,0	19,0						
4,00	3,5	19,0						
4,50	3,0	20,0						
5,00	3,0	20,0						
6,00	2,0	20,0						
7,00	2,0	20,0						
8,00	2,0	19,0						

LOA- 6W/615lm min. 0,5lx								
H, m	L1, m	L2, m						
2,50	6,0	19,5						
3,00	6,0	20,0						
3,50	6,5	22,0						
4,00	6,0	23,0						
4,50	5,5	24,0						
5,00	5,0	25,0						
6,00	4,0	26,0						
7,00	4,0	26,5						
8,00	4,0	26,5						
9,00	4,0	26,5						
10,00	2,5	26,0						



CORRIDOR R LED

Product Group: Emergency Lighting

















Description: A recessed LED emergency escape luminaire with latest optics designed to illuminate escape routes or open areas

Optics: LER- escape route, LOA- open areas

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT)

Electronic gear and battery package installed in a separate box

Deep discharge protection

The extremely effective optics reflected in the very large assembling distances between the luminaires:

up to 28m along the escape routes;

up to 19,5m in the open areas;

that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and

subsequent maintenance

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP20 Mechanical impact resistance: IK08

Installation: Suitable for plasterboard or similar type of ceiling, requires a cut-out Ø83mm and under-ceiling height >150mm. Push-in terminal,

3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting

Product	Length, mm	Width, mm	Height, mm	Illumination mode	Emergency operating time, h	Power in emergency mode, W*	CRI*	ССТ, К*	Weight, kg
Corridor R 1HLED U22 LER	95	95	48	NM	1	1	+08	6500	0,60
Corridor R 3HLED U24 LER	95	95	48	NM	3	1	+08	6500	0,65
Corridor R 1PLED U25 LER	95	95	48	M/NM	1	1	80+	6500	0,60
Corridor R 3PLED U27 LER	95	95	48	M/NM	3	1	80+	6500	0,65
Corridor R 1HLED U22 LER AUT	95	95	48	NM	1	1	+08	6500	0,60
Corridor R 3HLED U24 LER AUT	95	95	48	NM	3	1	80+	6500	0,65
Corridor R 1PLED U25 LER AUT	95	95	48	M/NM	1	1	+08	6500	0,60
Corridor R 3PLED U27 LER AUT	95	95	48	M/NM	3	1	80 +	6500	0,65
Corridor R CBLED C319 LER	95	95	48	CEB	set	1	+08	6500	0,60
Corridor R 1HLED U22 LOA	95	95	48	NM	1	1	80+	6500	0,60
Corridor R 3HLED U24 LOA	95	95	48	NM	3	1	80+	6500	0,65
Corridor R 1PLED U25 LOA	95	95	48	M/NM	1	1	80+	6500	0,60
Corridor R 3PLED U27 LOA	95	95	48	M/NM	3	1	80+	6500	0,65
Corridor R 1HLED U22 LOA AUT	95	95	48	NM	1	1	80+	6500	0,60
Corridor R 3HLED U24 LOA AUT	95	95	48	NM	3	1	80 +	6500	0,65
Corridor R 1PLED U25 LOA AUT	95	95	48	M/NM	1	1	80+	6500	0,60
Corridor R 3PLED U27 LOA AUT	95	95	48	M/NM	3	1	80+	6500	0,65
Corridor R CBLED C319 LOA	95	95	48	CEB	set	1	80+	6500	0,60

MAKING LIFE BRIGHTER

Corridor R 1HLED J07 LER	95	95	48	NM	1	3	80+	6500	0,65
Corridor R 3HLED J09 LER	95	95	48	NM	3	3	80+	6500	0,70
Corridor R 1PLED J10 LER	95	95	48	M/NM	1	3	+08	6500	0,65
Corridor R 3PLED J12 LER	95	95	48	M/NM	3	3	80+	6500	0,70
Corridor R 1HLED J07 LER AUT	95	95	48	NM	1	3	+08	6500	0,65
Corridor R 3HLED J09 LER AUT	95	95	48	NM	3	3	80+	6500	0,70
Corridor R 1PLED J10 LER AUT	95	95	48	M/NM	1	3	80+	6500	0,65
Corridor R 3PLED J12 LER AUT	95	95	48	M/NM	3	3	80+	6500	0,70
Corridor R CBLED C320 LER	95	95	48	CEB	set	3	80+	6500	0,65
Corridor R 1HLED J07 LOA	95	95	48	NM	1	3	80+	6500	0,65
Corridor R 3HLED J09 LOA	95	95	48	NM	3	3	80+	6500	0,70
Corridor R 1PLED J10 LOA	95	95	48	M/NM	1	3	80+	6500	0,65
Corridor R 3PLED J12 LOA	95	95	48	M/NM	3	3	80+	6500	0,70
Corridor R 1HLED J07 LOA AUT	95	95	48	NM	1	3	+08	6500	0,65
Corridor R 3HLED J09 LOA AUT	95	95	48	NM	3	3	80+	6500	0,70
Corridor R 1PLED J10 LOA AUT	95	95	48	M/NM	1	3	80+	6500	0,65
Corridor R 3PLED J12 LOA AUT	95	95	48	M/NM	3	3	80+	6500	0,70
Corridor R CBLED C320 LOA	95	95	48	CEB	set	3	80+	6500	0,65
*-M-maintained (with an option of connecting as not	n maintained) NM	non maintain	and nowar and	output indicator data	in amarganay mada	toloranco ran	an for antical	and alactrics	J data, +100/

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

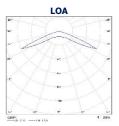
TEST Manual test button
AUT Autonomous testing system
CEB Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV EMS Fitting to emergency monitoring system

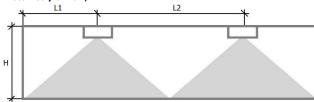
LGREY Light grey thermoplastic body
BLACK Black thermoplastic body
LER Optic for escape route
LOA Optic for open areas

LOU Optic for mixed areas/universal LOS Optic with asymmetric beam

LER W F Company to the second seco



Photometry of LOA/LER



L1- distance from the wall to the first fixture

L2- distance between fixtures

H- height of the ceiling

LER optic for corridor route illumination:

LER- 1W/150lm min. 1lx								
H, m	L1, m	L2, m						
2,50	6,0	14,5						
3,00	6,5	16,0						
3,50	6,5	17,0						
4,00	7,0	17,5						
4,50	7,0	18,0						
5,00	7,0	17,5						
6,00	6,5	15,0						

LER- 3W/350lm min. 1lx								
Н, т	L1, m	L2, m						
2,50	7,0	16,0						
3,00	8,0	18,5						
3,50	9,0	21,0						
4,00	9,5	22,5						
4,50	10,0	25,0						
5,00	10,5	26,5						
6,00	11,0	27,0						
7,00	11,5	28,0						
8,00	11,0	28,0						

LOA optic for open area illumination:

LOA optic for open area mannation.								
LOA- 1W/140lm min. 0,5lx								
H, m	L1, m	L2, m						
2,50	4,0	10,5						
3,00	4,5	11,5						
3,50	5,0	13,0						
4,00	2,5	12,0						
4,50	2,0	11,5						
5,00	2,5	11,0						
6.00	2.0	10.0						

LOA- 3W/360lm min. 0,5lx								
H, m	L1, m	L2, m						
2,50	5,0	12,0						
3,00	5,5	13,0						
3,50	6,5	15,5						
4,00	7,0	16,5						
4,50	7,5	18,0						
5,00	8,0	19,5						
6,00	4,0	18,0						
7,00	2,5	18,0						
8,00	2,5	17,5						



CORRIDOR S LED

Product Group: Emergency Lighting













Images for the product family and options:



Description: A surface LED emergency escape luminaire with latest optics designed to illuminate escape routes or open areas

Optics: LER- escape route, LOA- open areas

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT)

Deep discharge protection

The extremely effective optics reflected in the very large assembling distances between the luminaires:

up to 29m along the escape routes; up to 20m in the open areas;

that effects significantly on reduction of the number of needed emergency luminaires and, consequently, the costs of installation and

subsequent maintenance

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP41 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto ceiling or walls of any type. Screw terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting

Product	Length, mm	Width, mm	Height, mm	Illumination mode	Emergency operating time, h	Power in emergency mode, W*	CRI*	ССТ, К*	Weight, kg
Corridor S 1HLED C321 LER	132	132	54	NM	1	1	80+	6500	0,45
Corridor S 3HLED C322 LER	132	132	54	NM	3	1	80+	6500	0,50
Corridor S 1PLED C323 LER	132	132	54	M/NM	1	1	80+	6500	0,45
Corridor S 3PLED C324 LER	132	132	54	M/NM	3	1	+08	6500	0,50
Corridor S 1HLED C321 LER AUT	132	132	54	NM	1	1	80+	6500	0,45
Corridor S 3HLED C322 LER AUT	132	132	54	NM	3	1	+08	6500	0,50
Corridor S 1PLED C323 LER AUT	132	132	54	M/NM	1	1	80+	6500	0,45
Corridor S 3PLED C324 LER AUT	132	132	54	M/NM	3	1	80+	6500	0,50
Corridor S CBLED C325 LER	132	132	54	CEB	X	1	+08	6500	0,45
Corridor S 1HLED C321 LOA	132	132	54	NM	1	1	+08	6500	0,45
Corridor S 3HLED C322 LOA	132	132	54	NM	3	1	+08	6500	0,50
Corridor S 1PLED C323 LOA	132	132	54	M/NM	1	1	+08	6500	0,45
Corridor S 3PLED C324 LOA	132	132	54	M/NM	3	1	+08	6500	0,50
Corridor S 1HLED C321 LOA AUT	132	132	54	NM	1	1	80+	6500	0,45
Corridor S 3HLED C322 LOA AUT	132	132	54	NM	3	1	80+	6500	0,50
Corridor S 1PLED C323 LOA AUT	132	132	54	M/NM	1	1	80+	6500	0,45
Corridor S 3PLED C324 LOA AUT	132	132	54	M/NM	3	1	80+	6500	0,50
Corridor S CBLED C325 LOA	132	132	54	CEB	X	1	80+	6500	0,45

MAKING LIFE BRIGHTER

Corridor S 1HLED C326 LER	132	132	74	NM	1	3	80+	6500	0,65
Corridor S 3HLED C327 LER	132	132	74	NM	3	3	80+	6500	0,70
Corridor S 1PLED C328 LER	132	132	74	M/NM	1	3	80+	6500	0,65
Corridor S 3PLED C329 LER	132	132	74	M/NM	3	3	80+	6500	0,70
Corridor S 1HLED C326 LER AUT	132	132	74	NM	1	3	80+	6500	0,65
Corridor S 3HLED C327 LER AUT	132	132	74	NM	3	3	80+	6500	0,70
Corridor S 1PLED C328 LER AUT	132	132	74	M/NM	1	3	80+	6500	0,65
Corridor S 3PLED C329 LER AUT	132	132	74	M/NM	3	3	80+	6500	0,70
Corridor S CBLED C330 LER	132	132	74	CEB	Х	3	80+	6500	0,65
Corridor S 1HLED C326 LOA	132	132	74	NM	1	3	80+	6500	0,65
Corridor S 3HLED C327 LOA	132	132	74	NM	3	3	80+	6500	0,70
Corridor S 1PLED C328 LOA	132	132	74	M/NM	1	3	80+	6500	0,65
Corridor S 3PLED C329 LOA	132	132	74	M/NM	3	3	80+	6500	0,70
Corridor S 1HLED C326 LOA AUT	132	132	74	NM	1	3	80+	6500	0,65
Corridor S 3HLED C327 LOA AUT	132	132	74	NM	3	3	80+	6500	0,70
Corridor S 1PLED C328 LOA AUT	132	132	74	M/NM	1	3	80+	6500	0,65
Corridor S 3PLED C329 LOA AUT	132	132	74	M/NM	3	3	80+	6500	0,70
Corridor S CBLED C330 LOA	132	132	74	CEB	Х	3	80+	6500	0,65

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

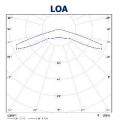
Available options:

TEST Manual test button
AUT Autonomous testing system
CEB Fitting to central battery system

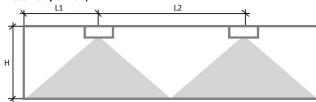
CLV Fitting to low voltage central battery system CEBLV EMS Fitting to emergency monitoring system Light grey thermoplastic body

LGREY Light grey thermoplastic BLACK Black thermoplastic body LER Optic for escape route LOA Optic for open areas

LOU Optic for mixed areas/universal LOS Optic with asymmetric beam



Photometry of LOA/LER



L1- distance from the wall to the first fixture

L2- distance between fixtures

H- height of the ceiling

LER	optic	for	corrid	lor r	oute	illumi	nation:

LER-	LER- 1W/150lm min. 1lx							
H, m	L1, m	L2, m						
2,50	5,5	15,0						
3,00	5,5	16,0						
3,50	5,0	16,0						
4,00	5,0	16,5						
4,50	5,0	16,5						
5,00	4,5	16,5						
6,00								

LER-	LER- 3W/360lm min. 1lx							
H, m	L1, m	L2, m						
2,50	7,5	19,0						
3,00	8,0	20,5						
3,50	8,5	21,0						
4,00	9,0	23,0						
4,50	9,0	24,0						
5,00	9,5	25,0						
6,00	10,0	26,0						
7,00	10,0	28,0						
8,00	9,5	29,0						

LOA optic for open area illumination:

20A Optic for Open area manimation								
LOA- 1W/140lm min. 0,5lx								
H, m	n L1, m L2, m							
2,50	3,0	11,0						
3,00	2,5	11,5						
3,50	2,5	13,0						
4,00	2,5	12,5						
4,50	2,5	12,5						
5,00	2,0	11,0						
6.00	1.5	10.5						

LOA- 3	LOA- 3W/390lm min. 0,5lx								
H, m	L1, m	L2, m							
2,50	5,0	18,0							
3,00	5,0	18,0							
3,50	4,5	18,0							
4,00	4,5	18,5							
4,50	4,0	20,0							
5,00	3,5	20,0							
6,00	3,5	19,5							
7,00	4,0	18,5							
8,00	4,0	18,0							



APOLLO HIGH LED

Product Group: Emergency Lighting













A surface LED emergency escape luminaire with IP65 degree of protection and extremely robust housing for high mounting **Description:**

applications. An additional option is to adapt the fitting to work in the low temperatures: up to -25°C

Diffuser: clear polycarbonate, impact resistant

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT) Battery: NiCd (LiFePO₄ optional: AUT)

Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40 (ta -25...+40 optional)

Protection class IEC: II Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto ceiling of any type. Suggested mounting height from 8 to 14 meters. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Apollo HIGH 1HLED R38	356	136	79	NM	1	3	80+	6500	1,20
Apollo HIGH 3HLED R40	356	136	79	NM	3	3	80+	6500	1,40
Apollo HIGH 1PLED R41	356	136	79	M/NM	1	3	+08	6500	1,20
Apollo HIGH 3PLED R43	356	136	79	M/NM	3	3	80+	6500	1,40
Apollo HIGH 1HLED R38 AUT	356	136	79	NM	1	3	+08	6500	1,20
Apollo HIGH 3HLED R40 AUT	356	136	79	NM	3	3	80+	6500	1,40
Apollo HIGH 1PLED R41 AUT	356	136	79	M/NM	1	3	80+	6500	1,20
Apollo HIGH 3PLED R43 AUT	356	136	79	M/NM	3	3	+08	6500	1,40
Apollo HIGH CEBLED C331	356	136	79	CEB	X	3	+08	6500	1,20

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

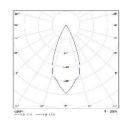
TEST Manual test button

AUT Autonomous testing system CEB Fitting to central battery system

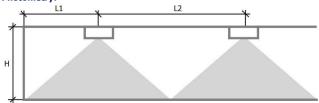
CLV Fitting to low voltage central battery system CEBLV

EMS Fitting to emergency monitoring system

tmin-25 Suitable for low temperatures with ta -25...+40°C



Photometry:



L1- distance from the wall to the first fixture L2- distance between fixtures H- height of the ceiling

Apollo HIGH LED optic for escape route and open area illumination:

Apollo HizoH	EED OPGC TOT C	ocape roate a
Escape rou	ite 3x1W/370	lm min. 1lx
H, m	L1, m	L2, m
8,00	5,00	9,00
8,50	5,50	10,00
9,00	6,00	10,00
9,50	6,00	10,00
10,00	6,00	10,50
10,50	6,00	11,00
11,00	6,00	11,00
11,50	6,00	11,50
12,00	6,00	12,00
13,00	6,00	12,00
14,00	6,00	11,00

mannacioni		
Open area	3x1W/370lm	min. 0,5lx
H, m	L1, m	L2, m
8,00	5,00	9,00
8,50	5,00	9,00
9,00	5,00	9,00
9,50	6,00	9,50
10,00	6,00	10,00
10,50	6,00	10,50
11,00	6,00	10,50
11,50	7,00	11,00
12,00	7,00	11,00
13,00	7,00	12,00
14,00	7,00	12,00



NORTHER LED

Product Group: Emergency Lighting













Description:

A wall mounted LED emergency escape luminaire for outdoor applications. An additional option is to adapt the fitting to work in the

low temperatures: up to -25°C

Diffuser: tempered glass, impact resistant

Body: stainless steel, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT)

Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED
Light source included: Yes
Light distribution type: Direct

LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40 (ta -25...+40 optional)

Protection class IEC: I Ingress protection code: IP66 Mechanical impact resistance: IK10

Mechanical impact resistance: IK10

Installation: Designed to be fixed onto walls of any type. Suggested mounting height from 2 to 3,6 meters. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Emergency lighting

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	CCT, K*	Weight, kg
Norther 1HLED C332	227	222	77	NM	1	3	80+	6500	1,50
Norther 3HLED C333	227	222	77	NM	3	3	+08	6500	1,65
Norther 1PLED C334	227	222	77	M/NM	1	3	80+	6500	1,50
Norther 1PLED C335	227	222	77	M/NM	3	3	80+	6500	1,65
Norther 1HLED C332 TEST	227	222	77	NM	1	3	80+	6500	1,50
Norther 3HLED C333 TEST	227	222	77	NM	3	3	80+	6500	1,65
Norther 1PLED C334 TEST	227	222	77	M/NM	1	3	80+	6500	1,50
Norther 1PLED C335 TEST	227	222	77	M/NM	3	3	80+	6500	1,65
Norther 1HLED C332 AUT	227	222	77	NM	1	3	80+	6500	1,50
Norther 3HLED C333 AUT	227	222	77	NM	3	3	80+	6500	1,65
Norther 1PLED C334 AUT	227	222	77	M/NM	1	3	80+	6500	1,50
Norther 1PLED C335 AUT	227	222	77	M/NM	3	3	80+	6500	1,65
Norther CEBLED C336	227	222	77	CEB	set	3	80+	6500	1,50

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

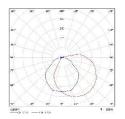
TEST Manual test button
AUT Autonomous testing system
CEB Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV

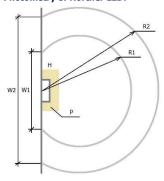
EMS Fitting to emergency monitoring system

tmin-25 Suitable for low temperatures with ta -25...+40°C

LGREY Light grey stainless steel body
BLACK Black stainless steel body



Photometry of Norther LED:



R1- radius of the average illumination >5lx W1- distance from the wall with illumination >5lx R2- radius of the average illumination >1lx W2- distance from the wall with illumination >1lx P- light intensity under the luminaire H- mounting height of the luminaire

Norther LED 3x1W/360lm min. 5lx and min. 1lx										
H, m	P, m	W1 >5lx,	R1>5lx, m	W2 >1lx,	R2 >1lx					
		m		m	m					
2,0	30	4,2	3,0	6,9	5,5					
2,2	25	4,4	3,0	7,1	5,7					
2,4	21	4,4	3,1	7,4	5,8					
2,6	18	4,4	3,1	7,6	6,0					
2,8	15	4,3	3,1	7,8	6,1					
3,0	13	4,1	3,0	8,0	6,2					
3,2	11	4,0	3,0	8,4	6,3					
3,4	10	3,7	2,9	8,6	6,4					
3,6	9	3,4	2,8	8,9	6,5					



APOLLO LED

Product Group: Emergency Lighting

















Description: A surface LED emergency exit sign with IP65 degree of protection and extremely robust housing, ensures long life even under the

toughest conditions. An additional option is to adapt the fitting to work in the low temperatures: up to -25°C

Diffuser: clear or opal polycarbonate, impact resistant Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT) Battery: NiCd (LiFePO4 optional: AUT)

Recognition distance: 25 meters
Deep discharge protection
Mains voltage: 220-240V, 50-60Hz

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40 (ta -25...+40 optional)

Protection class IEC: II Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto walls of any type. Supplied with legend kit ("Exit", "Left" and "Right"). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	сст, к*	Weight, kg
Apollo 1HLED G27	356	136	79	NM	1	1	80+	6500	1,15
Apollo 3HLED G29	356	136	79	NM	3	1	+08	6500	1,20
Apollo 1PLED G30	356	136	79	M/NM	1	1	+08	6500	1,10
Apollo 3PLED G32	356	136	79	M/NM	3	1	+08	6500	1,20
Apollo 1HLED G27 OP	356	136	79	NM	1	1	80+	6500	1,15
Apollo 3HLED G29 OP	356	136	79	NM	3	1	+08	6500	1,20
Apollo 1PLED G30 OP	356	136	79	M/NM	1	1	80+	6500	1,10
Apollo 3PLED G32 OP	356	136	, 79	M/NM	3	1	80+	6500	1,20

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button
AUT Autonomous testing system
CEB Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV EMS Fitting to emergency monitoring system tmin-25 Suitable for low temperatures with ta -25...+40°C

OP Opal polycarbonate diffuser



SCORPIUS LED

Product Group: Emergency Lighting













Description:

A surface double-sided LED emergency exit sign with IP65 degree of protection and extremely robust housing, ensures long life even

under the toughest conditions. An additional option is to adapt the fitting to work in the low temperatures: up to -25° C

Diffuser: opal polycarbonate, impact resistant

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT) Battery: NiCd (LiFePO₄ optional: AUT)

Recognition distance: 25 meters Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes

Light distribution type: Omnidirectional

LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40 (ta -25...+40 optional)

Protection class IEC: II Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto ceiling of any type or suspended. Suspension kit is not included. Supplied with legend kit ("Exit", "Left" and

"Right"). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	сст, к*	Weight, kg
Scorpius 1HLED G39 OP	356	136	219	NM	1	1	80+	6500	1,40
Scorpius 3HLED G41 OP	356	136	219	NM	3	1	80+	6500	1,50
Scorpius 1PLED G42 OP	356	136	219	M/NM	1	1	80+	6500	1,40
Scorpius 3PLED G44 OP	356	136	219	M/NM	3	1	+08	6500	1,65

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

Manual test button TEST AUT Autonomous testing system CEB Fitting to central battery system

Fitting to low voltage central battery system CEBLV CLV **FMS**

Fitting to emergency monitoring system

Suitable for low temperatures with ta -25...+40°C tmin-25

Opal polycarbonate diffuser OP



TAURUS LED

Product Group: Emergency Lighting















Description:

A surface double-sided LED emergency exit sign with aluminium body for both mains and emergency operations

Diffuser: clear PMMA

Body: extruded aluminium, light grey finish, with LED status indicator

Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT) Recognition distance: 30 meters Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED

Light source included: Yes

Light distribution type: Omnidirectional LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP41 Mechanical impact resistance: IK02

Installation: Designed to be fixed onto ceiling or wall of any type, including flammable surfaces, or suspended. Suspension kit is not included.

Supplied with legend kit ("Exit", "Left" and "Right"). Screw terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Taurus 1HLED G05 Deluxe	315	48	243	NM	1	1	80+	6500	1,25
Taurus 3HLED G07 Deluxe	315	48	243	NM	3	1	80+	6500	1,30
Taurus 1PLED G08 Deluxe	315	48	243	M/NM	1	1	80+	6500	1,20
Taurus 3PLED G10 Deluxe	315	48	243	M/NM	3	1	80+	6500	1,25
Taurus 1HLED G05 Deluxe TEST	315	48	243	NM	1	1	80+	6500	1,25
Taurus 3HLED G07 Deluxe TEST	315	48	243	NM	3	1	80+	6500	1,30
Taurus 1PLED G08 Deluxe TEST	315	48	243	M/NM	1	1	80+	6500	1,20
Taurus 3PLED G10 Deluxe TEST	315	48	243	M/NM	3	1	80+	6500	1,25
Taurus 1HLED G05 Deluxe AUT	315	48	243	NM	1	1	80+	6500	1,25
Taurus 3HLED G07 Deluxe AUT	315	48	243	NM	3	1	80+	6500	1,30
Taurus 1PLED G08 Deluxe AUT	315	48	243	M/NM	1	1	80+	6500	1,20
Taurus 3PLED G10 Deluxe AUT	315	48	243	M/NM	3	1	80+	6500	1,25
Taurus CEBLED C339 Deluxe	315	48	243	CEB		1	80+	6500	1,25

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button
AUT Autonomous testing system
CEB Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV

EMS Fitting to emergency monitoring system

BLACK Black aluminium body



CAPELLA LED

Product Group: Emergency Lighting















Description:

A recessed double-sided LED emergency exit sign with steel body for both mains and emergency operations

Diffuser: clear PMMA

Body: steel sheet, light grey finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT) Recognition distance: 30 meters Deep discharge protection

General data:

Mains voltage: 220-240V, 50-60Hz

Light source: LED

Light source included: Yes

Light distribution type: Omnidirectional LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK02

Installation:

Suitable for plasterboard or similar types of ceiling, requires a cut-out: 330x65mm and under-ceiling height >110mm. Supplied with

legend kit ("Exit", "Left" and "Right"). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Capella 1HLED G17	355	110	210	NM	1	1	+08	6500	1,60
Capella 3HLED C24	355	110	210	NM	3	1	+08	6500	1,65
Capella 1PLED G19	355	110	210	M/NM	1	1	+08	6500	1,60
Capella 3PLED C25	355	110	210	M/NM	3	1	+08	6500	1,65
Capella 1HLED G17 TEST	355	110	210	NM	1	1	+08	6500	1,60
Capella 3HLED C24 TEST	355	110	210	NM	3	1	+08	6500	1,65
Capella 1PLED G19 TEST	355	110	210	M/NM	1	1	+08	6500	1,60
Capella 3PLED C25 TEST	355	110	210	M/NM	3	1	+08	6500	1,65
Capella 1HLED G17 AUT	355	110	210	NM	1	1	80+	6500	1,60
Capella 3HLED C24 AUT	355	110	210	NM	3	1	80+	6500	1,65
Capella 1PLED G19 AUT	355	110	210	M/NM	1	1	80+	6500	1,60
Capella 3PLED C25 AUT	355	110	210	M/NM	3	1	80+	6500	1,65
Capella CEBLED C340	355	110	210	CEB	Х	1	80+	6500	1,60

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button AUT Autonomous testing system Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV

Fitting to emergency monitoring system

WHITE White steel body



HELM LED

Product Group: Emergency Lighting





General data:









Images for the product family and options:







Description: A surface LED emergency exit sign with IP65 degree of protection and extremely robust housing, ensures long life even under the

toughest conditions. An additional option is to adapt the fitting to work in the low temperatures: up to -25°C

Diffuser: clear polycarbonate, impact resistant

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT) Recognition distance: 25 meters Deep discharge protection Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40 (ta -25...+40 optional)

Protection class IEC: II Ingress protection code: IP65 Mechanical impact resistance: IK08

Designed to be fixed onto ceiling or walls of any type. Accessory for two-sided emergency exit sign and for recessed mounting available on request, requires a cut-out: 260x125mm (208x107mm HELM S LED). Supplied with legend kit ("Exit", "Left" and "Right"). Push-in Installation:

terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Helm 1HLED C356	276	143	44	NM	1	1	80+	6500	0,50
Helm 3HLED C357	276	143	44	NM	3	1	80+	6500	0,55
Helm 1PLED C358	276	143	44	M/NM	1	1	80+	6500	0,50
Helm 3PLED C359	276	143	44	M/NM	3	1	+08	6500	0,55
Helm 1PLED C360	276	143	44	M/NM	1	3	80+	6500	0,60
Helm 3PLED C361	276	143	44	M/NM	3	3	+08	6500	0,65
Helm 1PLED C358 AUT	276	143	44	M/NM	1	1	+08	6500	0,50
Helm 3PLED C359 AUT	276	143	44	M/NM	3	1	80+	6500	0,55
Helm 1PLED C360 AUT	276	143	44	M/NM	1	3	+08	6500	0,50
Helm 3PLED C361 AUT	276	143	44	M/NM	3	3	80+	6500	0,55
Helm CEBLED C362	276	143	44	CEB	Х	1	80+	6500	0,50
Helm CEBLED C363	276	143	44	CEB	Х	3	80+	6500	0,60
Helm S 3HLED D539	226	125	42	NM	3	1	80+	6500	0,45
Helm S 3PLED D540	226	125	, 42	M/NM	3	1	80+	6500	0,55

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C



Available options:

TEST Manual test button

Autonomous testing system
Fitting to central battery system AUT CEB

CLV Fitting to low voltage central battery system CEBLV **EMS**

Fitting to emergency monitoring system tmin-25 Suitable for low temperatures with ta -25...+40°C

Light grey thermoplastic body Black thermoplastic body **LGREY** BLACK

Available accessories:



Product: Helm LED Exit blade Description: PMMA exit blade with mounting springs



Product: Helm LED Recessed MTG kit

Description: Recessed mounting kit for Helm LED series



Product: Helm S LED Exit blade

Description: PMMA exit blade with mounting springs



Product: Helm S LED Recessed MTG kit

Description: Recessed mounting kit for Helm LED series



ZONDA LED

Product Group: Emergency Lighting

















Description: A surface double-sided LED emergency exit sign with slim design for both mains and emergency operations

Diffuser: opal or clear polycarbonate (optional double optics system with additional illumination of the surface under the luminaire:

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT) Recognition distance: 30 meters Deep discharge protection

Mains voltage: 220-240V, 50-60Hz General data:

Light source: LED

Light source included: Yes

Light distribution type: Omnidirectional

LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40 Protection class IEC: II

Ingress protection code: IP44 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto ceiling or wall of any type, including flammable surfaces. Supplied with legend kit ("Exit", "Left" and "Right").

Screw terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Zonda 1HLED C348 OP	325	41	250	NM	1	1	+08	6500	1,00
Zonda 3HLED C349 OP	325	41	250	NM	3	1	80+	6500	1,20
Zonda 1PLED C350 OP	325	41	250	M/NM	1	1	80+	6500	1,15
Zonda 3PLED C351 OP	325	41	250	M/NM	3	1	80+	6500	1,15
Zonda CEBLED C352 OP	325	41	250	CEB	Х	1	80+	6500	1,00
Zonda 1PLED C353 2CLR AUT	325	41	250	M/NM	1	3	80+	6500	1,15
Zonda 3PLED C354 2CLR AUT	325	41	250	M/NM	3	3	80+	6500	1,20
Zonda CBLED C355 2CLR AUT	325	41	250	CEB	X	3	80+	6500	1,05

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button AUT Autonomous testing system Fitting to central battery system CEB

Fitting to low voltage central battery system CEBLV CLV

EMS

Fitting to emergency monitoring system Double optics system with additional illumination of the surface under the luminaire 2CLR

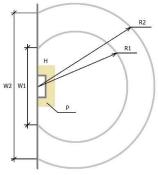


Available accessories:



Product: Zonda LED Wall MTG kit Description: Wall mounting kit for Zonda LED series

Photometry of Zonda LED...2CLR:



R1- radius of the average illumination >5lx W1- distance from the wall with illumination >5lx R2- radius of the average illumination >1lx

W2- distance from the wall with illumination >1 lx

P- light intensity under the luminaire H- mounting height of the luminaire

	Zonda LEI	DCLR 2W/12	Olm min. 5lx a	nd min. 1lx	
H, m	P, m	W1 >5lx,	R1>5lx, m	W2 >1lx,	R2 >1lx,
		m		m	m
2,0	62	2,9	0,8	5,2	2,0
2,2	50	3,0	0,9	5,4	2,0
2,4	41	3,1	0,9	5,5	2,0
2,6	34	3,2	0,9	5,6	1,9
2,8	29	3,2	0,9	5,6	1,9
3,0	25	3,2	0,9	5,8	1,8
3,2	22	3,3	0,9	6,0	1,8
3,4	20	3,3	0,9	6,0	1,8
3,6	18	3,3	0,9	6,0	1,8



NASHIS LED

Product Group: Emergency Lighting













Description:

A surface double-sided LED emergency exit sign with IP44 degree of protection for both mains and emergency operations

Diffuser: acrylic glass, clear

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT) Battery: NiCd (LiFePO₄ optional: AUT)

Recognition distance: 25 meters Deep discharge protection

General data:

Mains voltage: 220-240V, 50-60Hz

Light source: LED

Light source included: Yes

Light distribution type: Omnidirectional LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK02

Installation: Designed to be fixed onto ceiling or wall of any type, including flammable surfaces, or suspended. Suspension kit is not included.

Supplied with legend kit ("Exit", "Left" and "Right"). Screw terminal, 3x2x2.5mm2

Indoor

Environment:

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	сст, к*	Weight, kg
Nashi S 1HLED C431	299	43	206	NM	1	1	80+	6500	1,00
Nashi S 3HLED C432	299	43	206	NM	3	1	80+	6500	1,20
Nashi S 1PLED C433	299	43	206	M/NM	1	1	+08	6500	1,15
Nashi S 3PLED C434	299	43	206	M/NM	3	1	80+	6500	1,20
Nashi S 3PLED C434 TEST	299	43	206	M/NM	3	1	80+	6500	1,20
Nashi S CEBLED C435	299	43	206	CEB	set	1	+08	6500	1,00

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button AUT Autonomous testing system CEB Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV

EMS Fitting to emergency monitoring system

LGREY Light grey thermoplastic body **BLACK** Black thermoplastic body







NASHI R LED

Product Group: Emergency Lighting













Description:

A recessed double-sided LED emergency exit sign with IP44 degree of protection for both mains and emergency operations

Diffuser: acrylic glass, clear

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT) Time of operation in emergency mode: 1 or 3 hours

Battery: high-temperature nickel-cadmium (lithium iron phosphate optional: AUT)

Recognition distance: 25 meters Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes

Light distribution type: Omnidirectional LED lifetime, h: 50000/L80B50 Operating temperature range, °C: ta 0...+40 Protection class IEC: II

Ingress protection code: IP44 Mechanical impact resistance: IK02

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: 328x62x206(300x45). Supplied with legend kit ("Exit", "Left"

and "Right"). Screw terminal, 3x2x2.5mm2

Environment: Indoor

Emergency lighting Application:







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Nashi R 1HLED C436	328	62	206	NM	1	1	80+	6500	1,00
Nashi R 3HLED C437	328	62	206	NM	3	1	80+	6500	1,20
Nashi R 1PLED C438	328	62	206	M/NM	1	1	+08	6500	1,15
Nashi R 3PLED C439	328	62	206	M/NM	3	1	80+	6500	1,20
Nashi R CEBLED C440	328	62	206	CEB	set	1	+08	6500	1,00

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST AUT Manual test button Autonomous testing system CEB Fitting to central battery system

Fitting to low voltage central battery system CEBLV CLV

FMS Fitting to emergency monitoring system

LGREY Light grey thermoplastic body BI ACK Black thermoplastic body







LEPUS S LED

Product Group: Emergency Lighting



















Description: A surface LED emergency exit sign with modern design for both mains and emergency operations

Diffuser: clear PMMA

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT) Recognition distance: 30 meters Deep discharge protection

Mains voltage: 220-240V, 50-60Hz Light source: LED General data:

Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK05

Designed to be fixed onto walls of any type. Supplied with legend kit ("Exit", "Left" and "Right"). Push-in terminal, 3x2x2.5mm2 Installation:

Environment: Indoor

Application: Emergency lighting

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	сст, к*	Weight, kg
Lepus S 1HLED G059	337	57	189	NM	1	1	80+	6500	1,20
Lepus S 3HLED G060	337	57	189	NM	3	1	80+	6500	1,25
Lepus S 1PLED G061	337	57	189	M/NM	1	1	80+	6500	1,15
Lepus S 3PLED G062	337	57	189	M/NM	3	1	80+	6500	1,20
Lepus S 1HLED G059 TEST	337	57	189	NM	1	1	80+	6500	1,20
Lepus S 3HLED G060 TEST	337	57	189	NM	3	1	80+	6500	1,25
Lepus S 1PLED G061 TEST	337	57	189	M/NM	1	1	+08	6500	1,15
Lepus S 3PLED G062 TEST	337	57	189	M/NM	3	1	80+	6500	1,20
Lepus S 1HLED G059 AUT	337	57	189	NM	1	1	80+	6500	1,20
Lepus S 3HLED G060 AUT	337	57	189	NM	3	1	80+	6500	1,25
Lepus S 1PLED G061 AUT	337	57	189	M/NM	1	1	+08	6500	1,15
Lepus S 3PLED G062 AUT	337	57	189	M/NM	3	1	+08	6500	1,20
Lepus S CEBLED G063	337	57	189	CEB	X	1	+08	6500	1,10

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

Manual test button **TFST** Autonomous testing system AUT CEB Fitting to central battery system

CLV Fitting to low voltage central battery system CEBLV

Fitting to emergency monitoring system Light grey thermoplastic body **EMS**

LGREY Black thermoplastic body **BLACK**



LEPUS W LED

Product Group: Emergency Lighting



















Description: A wall mounted double-sided LED emergency exit sign with modern design for both mains and emergency operations

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT) Recognition distance: 30 meters Deep discharge protection

Mains voltage: 220-240V, 50-60Hz Light source: LED General data:

Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK05

Designed to be fixed onto walls of any type. Supplied with legend kit ("Exit", "Left" and "Right"). Push-in terminal, 3x2x2.5mm2 Installation:

Environment: Indoor

Application: Emergency lighting

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	сст, к*	Weight, kg
Lepus W 1HLED G064	377	72	232	NM	1	1	80+	6500	1,40
Lepus W 3HLED G065	377	72	232	NM	3	1	80+	6500	1,50
Lepus W 1PLED G066	377	72	232	M/NM	1	1	80+	6500	1,35
Lepus W 3PLED G067	377	72	232	M/NM	3	1	+08	6500	1,40
Lepus W 1HLED G064 TEST	377	72	232	NM	1	1	+08	6500	1,40
Lepus W 3HLED G065 TEST	377	72	232	NM	3	1	+08	6500	1,50
Lepus W 1PLED G066 TEST	377	72	232	M/NM	1	1	+08	6500	1,35
Lepus W 3PLED G067 TEST	377	72	232	M/NM	3	1	+08	6500	1,40
Lepus W 1HLED G064 AUT	377	72	232	NM	1	1	+08	6500	1,40
Lepus W 3HLED G065 AUT	377	72	232	NM	3	1	+08	6500	1,50
Lepus W 1PLED G066 AUT	377	72	232	M/NM	1	1	+08	6500	1,35
Lepus W 3PLED G067 AUT	377	72	232	M/NM	3	1	+08	6500	1,40
Lepus W CEBLED G068	377	72	232	CEB	X	1	+08	6500	1,40

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

Manual test button **TFST** Autonomous testing system AUT Fitting to central battery system CEB

CLV

Fitting to low voltage central battery system CEBLV Fitting to emergency monitoring system Light grey thermoplastic body **EMS I GRFY**

Black thermoplastic body **BLACK**



LEPORIS C LED

Product Group: Emergency Lighting



















Description: A ceiling mounted double-sided LED emergency exit sign with modern design for both mains and emergency operations

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LiFePO₄ optional: AUT) Recognition distance: 30 meters Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK05

Designed to be fixed onto ceilings of any type. Supplied with legend kit ("Exit", "Left" and "Right"). Push-in terminal, 3x2x2.5mm2 Installation:

Environment: Indoor Application: Emergency lighting

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Leporis C 1HLED G069	337	72	224	NM	1	1	80+	6500	1,40
Leporis C 3HLED G070	337	72	224	NM	3	1	80+	6500	1,50
Leporis C 1PLED G071	337	72	224	M/NM	1	1	+08	6500	1,35
Leporis C 3PLED G072	337	72	224	M/NM	3	1	80+	6500	1,40
Leporis C 1HLED G069 TEST	337	72	224	NM	1	1	+08	6500	1,40
Leporis C 3HLED G070 TEST	337	72	224	NM	3	1	+08	6500	1,50
Leporis C 1PLED G071 TEST	337	72	224	M/NM	1	1	80+	6500	1,35
Leporis C 3PLED G072 TEST	337	72	224	M/NM	3	1	+08	6500	1,40
Leporis C 1HLED G069 AUT	337	72	224	NM	1	1	80+	6500	1,40
Leporis C 3HLED G070 AUT	337	72	224	NM	3	1	+08	6500	1,50
Leporis C 1PLED G071 AUT	337	72	224	M/NM	1	1	80+	6500	1,35
Leporis C 3PLED G072 AUT	337	72	224	M/NM	3	1	80+	6500	1,40
Leporis C CEBLED G073	337	72	224	CEB	Х	1	80+	6500	1,40
Leporis C 3PLED G072 AUT	337 337	72 72	224 224	M/NM CEB	x	1 1 1 le tolerance range	80+ 80+	6500 6500	1,40 1,40

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

Manual test button TEST Autonomous testing system AUT CEB

Fitting to central battery system
Fitting to low voltage central battery system CEBLV CLV

Fitting to low voltage central battery 3ys
Fitting to emergency monitoring system
Light grey thermoplastic body EMS

LGREY Black thermoplastic body **BLACK**



LEPORIS U LED

Product Group: Emergency Lighting













Images for the product family and options:



Description: A suspended double-sided LED emergency exit sign with modern design for both mains and emergency operations

Diffuser: clear PMMA

Body: polycarbonate, white finish, with LED status indicator Battery charging time: 24 hours (12 hours optional: AUT)

Battery: NiCd (LIFePO₄ optional: AUT) Recognition distance: 30 meters Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK02

Installation: Designed to be fixed onto ceilings of any type. Suspension rope length can be adjusted from 0 to 1000mm. Supplied with legend kit

("Exit", "Left" and "Right"). Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Leporis U 1HLED G074	337	72	224	NM	1	1	80+	6500	1,35
Leporis U 3HLED G075	337	72	224	NM	3	1	+08	6500	1,40
Leporis U 1PLED G076	337	72	224	M/NM	1	1	80+	6500	1,35
Leporis U 3PLED G077	337	72	224	M/NM	3	1	80+	6500	1,40
Leporis U 1HLED G074 TEST	337	72	224	NM	1	1	+08	6500	1,35
Leporis U 3HLED G075 TEST	337	72	224	NM	3	1	80+	6500	1,40
Leporis U 1PLED G076 TEST	337	72	224	M/NM	1	1	+08	6500	1,35
Leporis U 3PLED G077 TEST	337	72	224	M/NM	3	1	80+	6500	1,40
Leporis U 1HLED G074 AUT	337	72	224	NM	1	1	80+	6500	1,35
Leporis U 3HLED G075 AUT	337	72	224	NM	3	1	80+	6500	1,40
Leporis U 1PLED G076 AUT	337	72	224	M/NM	1	1	80+	6500	1,35
Leporis U 3PLED G077 AUT	337	72	224	M/NM	3	1	80+	6500	1,40
Leporis U CEBLED G078	337	72	224	CEB	Х	1	80+	6500	1,45

^{*-}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button
AUT Autonomous testing system
CEB Fitting to central battery system

CEB Fitting to central battery system
CLV Fitting to low voltage central battery system CEBLV

EMS Fitting to emergency monitoring system

LGREY Light grey thermoplastic body BLACK Black thermoplastic body



SEASON LED

Product Group: Emergency Lighting















A surface four-sided LED emergency exit sign for both mains and emergency operations Body: opal PMMA, with LED status indicator **Description:**

Battery charging time: 24 hours (12 hours optional: AUT)
Battery: NiCd (LiFePO₄ optional: AUT)

Recognition distance: 48 meters Deep discharge protection

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: II Ingress protection code: IP41 Mechanical impact resistance: IK05

Installation: Designed to be fixed onto ceilings of any type. Pictograms have to be chosen and ordered as a separate item. Push-in terminal,

3x2x2.5mm2 Environment: Indoor

Emergency lighting Application:

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	сст, к*	Weight, kg
Season 1HLED C341 OP	240	240	240	NM	1	3	80+	6500	1,65
Season 3HLED C342 OP	240	240	240	NM	3	3	80+	6500	1,75
Season 1PLED C343 OP	240	240	240	M/NM	1	3	80+	6500	1,95
Season 3PLED C344 OP	240	240	240	M/NM	3	3	80+	6500	2,15
Season 1HLED C341 OP TEST	240	240	240	NM	1	3	80+	6500	1,65
Season 3HLED C342 OP TEST	240	240	240	NM	3	3	80+	6500	1,75
Season 1PLED C343 OP TEST	240	240	240	M/NM	1	3	80+	6500	1,95
Season 3PLED C344 OP TEST	240	240	240	M/NM	3	3	80+	6500	2,15
Season 1HLED C341 OP AUT	240	240	240	NM	1	3	80+	6500	1,65
Season 3HLED C342 OP AUT	240	240	240	NM	3	3	80+	6500	1,75
Season 1PLED C343 OP AUT	240	240	240	M/NM	1	3	80+	6500	1,95
Season 3PLED C344 OP AUT	240	240	240	M/NM	3	3	80+	6500	2,15
Season CEBLED C345 OP	240	240	240	CEB	Х	3	80+	6500	1,65

^{*}M-maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button AUT Autonomous testing system CEB Fitting to central battery system

Fitting to low voltage central battery system CEBLV

EMS Fitting to emergency monitoring system



LIBRA LED

Product Group: Emergency Lighting























Description: A surface LED emergency exit sign with IP65 degree of protection and extremely robust housing for both mains and emergency

operations in escape routes and open areas

Diffuser: opal or clear polycarbonate, impact resistant

Body: polycarbonate, white finish, with LED status indicator and test button

Battery charging time: 24 hours

Battery: NiCd

Recognition distance: 20 meters

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto walls of any type, including flammable surfaces. Supplied with legend kit ("Exit", "Left" and "Right"). Push-in

terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Libra 3PLED B234 OP TEST	350	110	60	M/NM	3	1	70+	6500	1,35
Libra 3PLED B234 CLR TEST	350	110	60	M/NM	3	1	70+	6500	1,35

^{*-}M -maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button
OP Opal polycarbonate diffuser
CLR Clear polycarbonate diffuser

SPORT Luminaire equipped with white protective grid

Available accessories:



Product: Libra PRG SPORT

Description: White protection grid for LIBRA



GEMINI LED

Product Group: Emergency Lighting

























Description: A surface LED emergency exit sign with IP65 degree of protection and compact housing for both mains and emergency operations

Diffuser: clear polycarbonate, impact resistant

Body: polycarbonate, white finish, with LED status indicator and test button

Battery charging time: 24 hours

Battery: NiCd

Recognition distance: 16 meters

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED
Light source included: Yes
Light distribution type: Direct
LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto walls of any type, including flammable surfaces. Supplied with legend kit ("Exit", "Left" and "Right"). Push-in

terminal, 3x2x2.5mm2

Environment: Indoor

Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Gemini 3PLED D549 CLR TEST	276	110	60	M/NM	3	1	70+	6500	0,50

^{*-}M -maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

TEST Manual test button
CLR Clear polycarbonate diffuser



HYDRA LED

Product Group: Emergency Lighting















Images for the product family and options:







Description: A surface double-sided LED emergency exit sign with IP65 degree of protection and extremely robust housing for both mains and

emergency operations in escape routes and open areas

Diffuser: opal polycarbonate, impact resistant

Body: polycarbonate, white finish, with LED status indicator and test button

Battery charging time: 24 hours

Battery: NiCd

Recognition distance: 20 meters

General data: Mains voltage: 220-240V, 50-60Hz

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Designed to be fixed onto ceiling of any type, including flammable surfaces, or suspended. Supplied with legend kit ("Exit", "Left" and

"Right"). Push-in terminal, 3x2x2.5mm2

Environment:

Indoor Application: Emergency lighting







Supplied with legend kit ("Exit", "Left" and "Right")

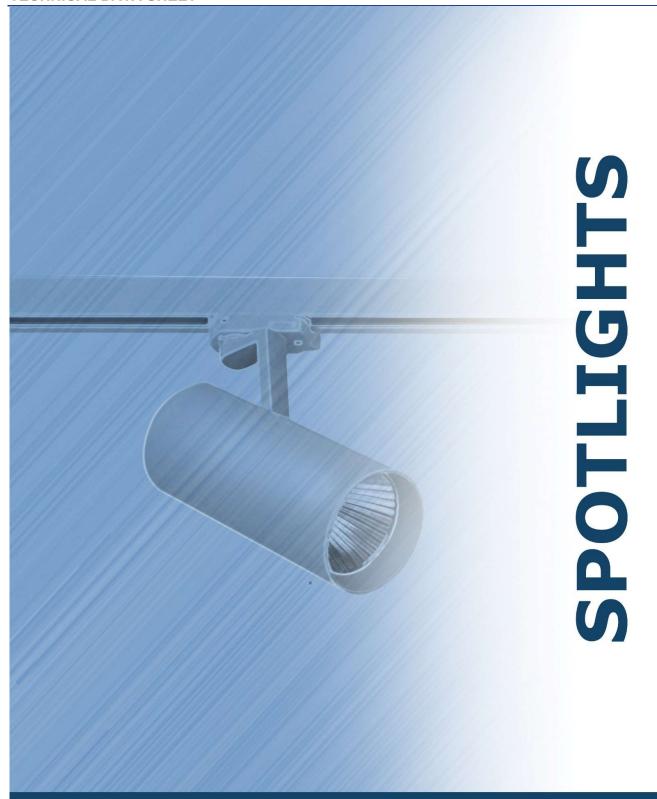
Product	Lengt h, mm	Width, mm	Height , mm	Illumination mode	Emergency operating time, h	Power in emergenc y mode, W*	CRI *	ССТ, К*	Weight, kg
Hydra 3PLED B240 TEST	350	110	220	M/NM	3	1	70+	6500	1,65

^{*-}M -maintained (with an option of connecting as non-maintained), NM- non-maintained, power and output indicates data in emergency mode, tolerance range for optical and electrical data: ±10%, values apply to an ambient temperature of 25°C

Available options:

Manual test button TEST OP Opal polycarbonate diffuser





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PEGASUS H LED

Product Group: Spotlights















Images for the product family and options:







Description: A recessed LED spot light adjustable in all directions, providing unique interior design solutions. Ideal for areas requiring good colour

rendering and high lighting levels

Reflector: faceted aluminum, 40° (standard), 24° beam angles, tilting ±30°, rotatable 355°

Diffuser: clear, PMMA

Body: die-cast aluminium, white finish General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP20 Mechanical impact resistance: IK02 EEC: A++

Suitable for plasterboard or similar types of ceiling, requires a cut-out (165x165 or 340x165mm). Push-in terminal, 2x1.5mm2 **Environment:** Retail, showroom, museum, exhibition, public place



Installation:



A spotlight ensures flexibility by adjusting luminaire according to your requirements

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Pegasus H LED1x1650 E828 T830 R40	175	175	119	1604	13,8	117	80+	3000	1,40
Pegasus H LED1x2300 E829 T830 R40	175	175	119	2226	19,1	116	80+	3000	1,40
Pegasus H LED1x3100 E830 T830 R40	175	175	119	3002	27,5	109	80+	3000	1,40
Pegasus H LED1x1650 E828 T840 R40	175	175	119	1644	13,8	119	80+	4000	1,40
Pegasus H LED1x2300 E829 T840 R40	175	175	119	2282	19,1	119	80+	4000	1,40
Pegasus H LED1x3100 E830 T840 R40	175	175	119	3079	27,5	112	80+	4000	1,40
Pegasus H LED1x1650 E828 T930 R40	175	175	119	1312	13,3	99	90+	3000	1,40
Pegasus H LED1x2300 E829 T930 R40	175	175	119	1839	18,4	100	90+	3000	1,40
Pegasus H LED1x3100 E830 T930 R40	175	175	119	2511	26,3	96	90+	3000	1,40
Pegasus H LED1x1650 E828 T940 R40	175	175	119	1403	13,3	106	90+	4000	1,40
Pegasus H LED1x2300 E829 T940 R40	175	175	119	1965	18,4	107	90+	4000	1,40
Pegasus H LED1x3100 E830 T940 R40	175	175	119	2684	26,3	102	90+	4000	1,40
Pegasus H LED2x1650 E831 T830 R40	350	175	119	3208	27,5	117	80+	3000	2,40
Pegasus H LED2x2300 E832 T830 R40	350	175	119	4451	38,2	116	80+	3000	2,40
Pegasus H LED2x3100 E833 T830 R40	350	175	119	6005	54,9	109	80+	3000	2,40
Pegasus H LED2x1650 E831 T840 R40	350	175	119	3289	27,5	119	80+	4000	2,40
Pegasus H LED2x2300 E832 T840 R40	350	175	119	4565	38,2	119	80+	4000	2,40
Pegasus H LED2x3100 E833 T840 R40	350	175	119	6158	54,9	112	80+	4000	2,40
Pegasus H LED2x1650 E831 T930 R40	350	175	119	2625	26,6	99	90+	3000	2,40



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Pegasus H LED2x2300 E832 T930 R40	350	175	119	3677	36,9	100	90+	3000	2,40
Pegasus H LED2x3100 E833 T930 R40	350	175	119	5022	52,5	96	90+	3000	2,40
Pegasus H LED2x1650 E831 T940 R40	350	175	119	2805	26,6	106	90+	4000	2,40
Pegasus H LED2x2300 E832 T940 R40	350	175	119	3930	36,9	107	90+	4000	2,40
Pegasus H LED2x3100 E833 T940 R40	350	175	119	5368	52.5	102	90+	4000	2.40

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM DALI

Driver with switch-control dimming
Driver with DALI interface
3-pole "Wieland- Gesis classic" type or compatible connector with 0.5m cable
5-pole DALI "Wieland- Gesis classic" type or compatible connector with 0.5m WIE3-0.5m WIE5D-0.5m

cable

Europlug-1.5m Europlug-3.0m

R24

R40

2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable Reflector with 24° light beam angle (standard) Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ Colour temperature 3000K, CRI 90+ Colour temperature 4000K, CRI 90+ Colour temperature 4000K, CRI 90+ T830 T840 T930 T940 Colour temperature 4000K, CRI 90+







CURSA LED

Product Group: Spotlights















Images for the product family and options:







Description: A recessed LED spot light adjustable in all directions, providing unique interior design solutions

Reflector: faceted aluminum, 40° (standard), 24° beam angles, tilting ±30°, rotatable 355°

Diffuser: clear, PMMA

Body: die-cast aluminium, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Dire

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (d170mm). Push-in terminal, 2x1.5mm2

Environment: Indoor

Application: Retail, showroom, museum, exhibition, public place





A spotlight ensures flexibility by adjusting luminaire according to your requirements

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Cursa LED1x1650 E834 T830 R40	180	180	125	1641	13,8	119	+08	3000	1,40
Cursa LED1x2300 E835 T830 R40	180	180	125	2277	19,1	119	+08	3000	1,40
Cursa LED1x3100 E836 T830 R40	180	180	125	3072	27,5	112	+08	3000	1,40
Cursa LED1x4550 E837 T830 R40	180	180	125	4494	40,9	110	80+	3000	1,50
Cursa LED1x1650 E834 T840 R40	180	180	125	1683	13,8	122	+08	4000	1,40
Cursa LED1x2300 E835 T840 R40	180	180	125	2336	19,1	122	80+	4000	1,40
Cursa LED1x3100 E836 T840 R40	180	180	125	3150	27,5	115	80+	4000	1,40
Cursa LED1x4550 E837 T840 R40	180	180	125	4611	40,9	113	80+	4000	1,50
Cursa LED1x1650 E834 T930 R40	180	180	125	1343	13,3	101	90+	3000	1,40
Cursa LED1x2300 E835 T930 R40	180	180	125	1881	18,4	102	90+	3000	1,40
Cursa LED1x3100 E836 T930 R40	180	180	125	2570	26,3	98	90+	3000	1,40
Cursa LED1x4550 E837 T930 R40	180	180	125	3700	41,0	90	90+	3000	1,50
Cursa LED1x1650 E834 T940 R40	180	180	125	1435	13,3	108	90+	4000	1,40
Cursa LED1x2300 E835 T940 R40	180	180	125	2011	18,4	109	90+	4000	1,40
Cursa LED1x3100 E836 T940 R40	180	180	125	2746	26,3	105	90+	4000	1,40
Cursa LED1x4550 E837 T940 R40	180	180	125	3954	41,0	96	90+	4000	1,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

WIE3-0.5m 3-pole "Wieland- Gesis classic" type or compatible connector with 0.5m cable WIE5D-0.5m 5-pole DALI "Wieland- Gesis classic" type or compatible connector with 0.5m

cable Europlug-1.5m

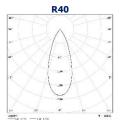
Europlug-3.0m

R24

R40

2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable Reflector with 24° light beam angle Reflector with 40° light beam angle (standard) Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840 Colour temperature 3000K, CRI 90+ Colour temperature 4000K, CRI 90+ T930 T940







SANTA LED

Product Group: Spotlights















Images for the product family and options:



Description: A cylindrical LED track light with symmetrical faceted reflector designed for the accent lighting

Reflector: faceted aluminum, 36º (standard), 24º and 15º beam angles

Diffuser: clear, PMMA

Body: aluminum, white finish, with adaptor

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Surface luminaire is designed to be fixed into 4/6-conductors surface/recessed tracks. Track adaptor (3-phase + N) with phase selector

Environment: Indoor

Application: Retail, showroom, museum, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Santa LED1x1700 D742 T830 R36	91	74	230	1604	13,8	117	80+	3000	1,10
Santa LED1x2300 D743 T830 R36	91	74	230	2226	19,1	116	80+	3000	1,10
Santa LED1x3150 D783 T830 R36	91	74	230	3050	26,2	117	80+	3000	1,20
Santa LED1x1700 D742 T840 R36	91	74	230	1644	13,8	119	80+	4000	1,10
Santa LED1x2300 D743 T840 R36	91	74	230	2282	19,1	119	80+	4000	1,10
Santa LED1x3150 D783 T840 R36	91	74	230	3130	26,2	120	80+	4000	1,20
Santa LED1x1700 D742 T930 R36	91	74	230	1312	13,1	100	90+	3000	1,10
Santa LED1x2300 D743 T930 R36	91	74	230	1839	18,4	100	90+	3000	1,10
Santa LED1x3150 D783 T930 R36	91	74	230	2511	26,3	96	90+	3000	1,20
Santa LED1x1700 D742 T940 R36	91	74	230	1403	13,1	107	90+	4000	1,10
Santa LED1x2300 D743 T940 R36	91	74	230	1965	18,4	107	90+	4000	1,10
Santa LED1x3150 D783 T940 R36	91	74	230	2684	26,3	102	90+	4000	1,20
Santa LED1x1700 D742 T830 R36 RAL9005	91	74	230	1604	13,8	117	+08	3000	1,10
Santa LED1x2300 D743 T830 R36 RAL9005	91	74	230	2226	19,1	116	+08	3000	1,10
Santa LED1x3150 D783 T830 R36 RAL9005	91	74	230	3050	26,2	117	+08	3000	1,20
Santa LED1x1700 D742 T840 R36 RAL9005	91	74	230	1644	13,8	119	+08	4000	1,10
Santa LED1x2300 D743 T840 R36 RAL9005	91	74	230	2282	19,1	119	80+	4000	1,10
Santa LED1x3150 D783 T840 R36 RAL9005	91	74	230	3130	26,2	120	80+	4000	1,20
Santa LED1x1700 D742 T930 R36 RAL9005	91	74	230	1312	13,1	100	90+	3000	1,10
Santa LED1x2300 D743 T930 R36 RAL9005	91	74	230	1839	18,4	100	90+	3000	1,10
Santa LED1x3150 D783 T930 R36 RAL9005	91	74	230	2511	26,3	96	90+	3000	1,20
Santa LED1x1700 D742 T940 R36 RAL9005	91	74	230	1403	13,1	107	90+	4000	1,10
Santa LED1x2300 D743 T940 R36 RAL9005	91	74	230	1965	18,4	107	90+	4000	1,10
Santa LED1x3150 D783 T940 R36 RAL9005	91	74	230	2684	26,3	102	90+	4000	1,20

 $[^]st$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

Driver with DALI interface
Reflector with 15º light beam angle
Reflector with 24º light beam angle
Reflector with 36º light beam angle
Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 90+
Colour temperature 2400K, CRI 97+
Colour temperature Light Pink, CRI 65+
Special spectrum for meat
Special spectrum for bread DALI R15 R24 R36 T830 T840 T930 T924 T6LP

MEAT **BREAD** Special spectrum for bread RAL9005 Black colour body and adaptor







SARMA LED

Product Group: Spotlights

















Images for the product family and options:







Description: A cylindrical LED track light with symmetrical faceted reflector designed for the accent lighting

Reflector: faceted aluminum, 40° (standard), 24° and 60° beam angles

Diffuser: clear, PMMA

Body: aluminum, white finish, with adaptor

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Dire

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Surface luminaire is designed to be fixed into 4/6-conductors surface/recessed tracks. Track adaptor (3-phase + N) with phase selector

Environment: Indoor

Application: Retail, showroom, museum, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Sarma LED1x1700 D737 T830 R40	125	125	182	1604	13,8	117	80+	3000	1,30
Sarma LED1x2300 D738 T830 R40	125	125	182	2226	19,1	116	80+	3000	1,30
Sarma LED1x3100 D739 T830 R40	125	125	182	3002	27,5	109	80+	3000	1,30
Sarma LED1x3950 D788 T830 R40	142	142	187	3830	34,4	111	80+	3000	1,50
Sarma LED1x1700 D737 T840 R40	125	125	182	1644	13,8	119	80+	4000	1,30
Sarma LED1x2300 D738 T840 R40	125	125	182	2282	19,1	119	80+	4000	1,30
Sarma LED1x3100 D739 T840 R40	125	125	182	3079	27,5	112	80+	4000	1,30
Sarma LED1x3950 D788 T840 R40	142	142	187	3930	34,4	114	80+	4000	1,50
Sarma LED1x1700 D737 T930 R40	125	125	182	1312	13,1	100	90+	3000	1,30
Sarma LED1x2300 D738 T930 R40	125	125	182	1839	18,4	100	90+	3000	1,30
Sarma LED1x3100 D739 T930 R40	125	125	182	2511	26,3	96	90+	3000	1,30
Sarma LED1x3950 D788 T930 R40	142	142	187	3154	34,5	91	90+	3000	1,50
Sarma LED1x1700 D737 T940 R40	125	125	182	1403	13,1	107	90+	4000	1,30
Sarma LED1x2300 D738 T940 R40	125	125	182	1965	18,4	107	90+	4000	1,30
Sarma LED1x3100 D739 T940 R40	125	125	182	2684	26,3	102	90+	4000	1,30
Sarma LED1x3950 D788 T940 R40	142	142	187	3370	34,5	98	90+	4000	1,50
Sarma LED1x1700 D737 T830 R40 RAL9005	125	125	182	1604	13,8	117	80+	3000	1,30
Sarma LED1x2300 D738 T830 R40 RAL9005	125	125	182	2226	19,1	116	80+	3000	1,30
Sarma LED1x3100 D739 T830 R40 RAL9005	125	125	182	3002	27,5	109	80+	3000	1,30
Sarma LED1x3950 D788 T830 R40 RAL9005	142	142	187	3830	34,4	111	80+	3000	1,50
Sarma LED1x1700 D737 T840 R40 RAL9005	125	125	182	1644	13,8	119	80+	4000	1,30
Sarma LED1x2300 D738 T840 R40 RAL9005	125	125	182	2282	19,1	119	80+	4000	1,30
Sarma LED1x3100 D739 T840 R40 RAL9005	125	125	182	3079	27,5	112	80+	4000	1,30
Sarma LED1x3950 D788 T840 R40 RAL9005	142	142	187	3930	34,4	114	80+	4000	1,50
Sarma LED1x1700 D737 T930 R40 RAL9005	125	125	182	1312	13,1	100	90+	3000	1,30
Sarma LED1x2300 D738 T930 R40 RAL9005	125	125	182	1839	18,4	100	90+	3000	1,30
Sarma LED1x3100 D739 T930 R40 RAL9005	125	125	182	2511	26,3	96	90+	3000	1,30

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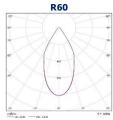
Sarma LED1x3950 D788 T930 R40 RAL9005	142	142	187	3154	34,5	91	90+	3000	1,50
Sarma LED1x1700 D737 T940 R40 RAL9005	125	125	182	1403	13,1	107	90+	4000	1,30
Sarma LED1x2300 D738 T940 R40 RAL9005	125	125	182	1965	18,4	107	90+	4000	1,30
Sarma LED1x3100 D739 T940 R40 RAL9005	125	125	182	2684	26,3	102	90+	4000	1,30
Sarma LED1x3950 D788 T940 R40 RAI 9005	142	142	187	3370	34 5	98	90+	4000	1 50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options: DALI R24 R40 Driver with DALI interface
Reflector with 24º light beam angle
Reflector with 40º light beam angle (standard)
Reflector with 60º light beam angle
Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 80+
Colour temperature 2400K, CRI 97+
Colour temperature Light Pink, CRI 65+
Special spectrum for meat
Special spectrum for bread R60 T830 T840 T930 T924 T6LP MEAT BREAD RAL9005 Special spectrum for bread Black colour body and adaptor







Applications:









CAPHEUS A LED

Product Group: Spotlights















Images for the product family and options:



Description: A cylindrical LED track light with symmetrical faceted reflector designed for the accent lighting

Reflector: faceted aluminum, 40° (standard), 24° and 60° beam angles

Diffuser: clear, PMMA

Body: aluminum, white finish, with adaptor

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Surface luminaire is designed to be fixed into 4/6-conductors surface/recessed tracks. Track adaptor (3-phase + N) with phase selector

Environment: Indoor

Application: Retail, showroom, museum, exhibition, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Capheus A LED1x1650 E842 T830 R40	206	82	154	1604	13,8	117	80+	3000	1,30
Capheus A LED1x2300 E843 T830 R40	206	82	154	2226	19,1	116	80+	3000	1,30
Capheus A LED1x3100 E844 T830 R40	206	82	154	3002	27,5	109	80+	3000	1,30
Capheus A LED1x3950 E845 T830 R40	195	99	198	3830	34,4	111	80+	3000	1,50
Capheus A LED1x1650 E842 T840 R40	206	82	154	1644	13,8	119	80+	4000	1,30
Capheus A LED1x2300 E843 T840 R40	206	82	154	2282	19,1	119	80+	4000	1,30
Capheus A LED1x3100 E844 T840 R40	206	82	154	3079	27,5	112	80+	4000	1,30
Capheus A LED1x3950 E845 T840 R40	195	99	198	3930	34,4	114	80+	4000	1,50
Capheus A LED1x1650 E842 T930 R40	206	82	154	1312	13,3	99	90+	3000	1,30
Capheus A LED1x2300 E843 T930 R40	206	82	154	1839	18,4	100	90+	3000	1,30
Capheus A LED1x3100 E844 T930 R40	206	82	154	2511	26,3	96	90+	3000	1,30
Capheus A LED1x3950 E845 T930 R40	195	99	198	3154	34,5	91	90+	3000	1,50
Capheus A LED1x1650 E842 T940 R40	206	82	154	1403	13,3	106	90+	4000	1,30
Capheus A LED1x2300 E843 T940 R40	206	82	154	1965	18,4	107	90+	4000	1,30
Capheus A LED1x3100 E844 T940 R40	206	82	154	2684	26,3	102	90+	4000	1,30
Capheus A LED1x3950 E845 T940 R40	195	99	198	3370	34,5	98	90+	4000	1,50
Capheus A LED1x1650 E842 T830 R40 RAL9005	206	82	154	1604	13,8	117	80+	3000	1,30
Capheus A LED1x2300 E843 T830 R40 RAL9005	206	82	154	2226	19,1	116	80+	3000	1,30
Capheus A LED1x3100 E844 T830 R40 RAL9005	206	82	154	3002	27,5	109	80+	3000	1,30
Capheus A LED1x3950 E845 T830 R40 RAL9005	195	99	198	3830	34,4	111	80+	3000	1,50
Capheus A LED1x1650 E842 T840 R40 RAL9005	206	82	154	1644	13,8	119	+08	4000	1,30
Capheus A LED1x2300 E843 T840 R40 RAL9005	206	82	154	2282	19,1	119	80+	4000	1,30
Capheus A LED1x3100 E844 T840 R40 RAL9005	206	82	154	3079	27,5	112	+08	4000	1,30
Capheus A LED1x3950 E845 T840 R40 RAL9005	195	99	198	3930	34,4	114	80+	4000	1,50
Capheus A LED1x1650 E842 T930 R40 RAL9005	206	82	154	1312	13,3	99	90+	3000	1,30
Capheus A LED1x2300 E843 T930 R40 RAL9005	206	82	154	1839	18,4	100	90+	3000	1,30
Capheus A LED1x3100 E844 T930 R40 RAL9005	206	82	154	2511	26,3	96	90+	3000	1,30



TECHNICAL DATA SHEET

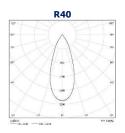
MAKING LIFE BRIGHTER

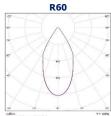
Capheus A LED1x3950 E845 T930 R40 RAL9005	195	99	198	3154	34,5	91	90+	3000	1,50
Capheus A LED1x1650 E842 T940 R40 RAL9005	206	82	154	1403	13,3	106	90+	4000	1,30
Capheus A LED1x2300 E843 T940 R40 RAL9005	206	82	154	1965	18,4	107	90+	4000	1,30
Capheus A LED1x3100 E844 T940 R40 RAL9005	206	82	154	2684	26,3	102	90+	4000	1,30
Capheus A LED1x3950 E845 T940 R40 RAL9005	195	99	198	3370	34.5	98	90+	4000	1.50

* tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options: R24 R40 Reflector with 24° light beam angle Reflector with 40° light beam angle Reflector with 60° light beam angle Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ Colour temperature 3000K, CRI 90+ Colour temperature 2400K, CRI 97+ Colour temperature Light Pink, CRI 65+ Special spectrum for meat Special spectrum for bread Black colour body and adaptor R60 T830 T840 T930 T924 T6LP MEAT BREAD RAL9005









CAPHEUS LED

Product Group: Spotlights















Images for the product family and options:



Description: A decorative LED track light with symmetrical faceted reflector designed for the accent lighting

Reflector: faceted aluminum, 24° (standard), 15°, 40° and 60° beam angles

Diffuser: clear glass

Body: aluminum, white finish, with adaptor Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,95

General data:

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Surface luminaire is designed to be fixed into 4/6-conductors surface/recessed tracks. Track adaptor (3-phase + N) with phase selector

Environment:

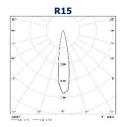
Application: Retail, showroom, museum, exhibition, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Capheus AS LED1x2400 E047 T830	190	110	180	2255	20,7	109	80+	3000	1,40
Capheus AS LED1x3200 E048 T830	190	110	180	3042	28,4	107	80+	3000	1,40
Capheus AM LED1x4600 E049 T830	190	130	210	4449	42,3	105	+08	3000	1,50
Capheus AS LED1x2400 E047 T840	190	110	180	2324	20,7	112	80+	4000	1,40
Capheus AS LED1x3200 E048 T840	190	110	180	3136	28,4	110	+08	4000	1,40
Capheus AM LED1x4600 E049 T840	190	130	210	4586	42,3	108	80+	4000	1,50
Capheus AS LED1x2400 E047 T930	190	110	180	1729	21,0	82	90+	3000	1,40
Capheus AS LED1x3200 E048 T930	190	110	180	2333	29,0	80	90+	3000	1,40
Capheus AM LED1x4600 E049 T930	190	130	210	3413	42,0	81	90+	3000	1,50

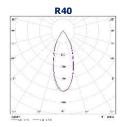
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

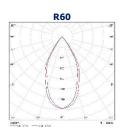
Available options:

Reflector with 15° light beam angle Reflector with 40° light beam angle R15 R40 R60 Reflector with 60° light beam angle T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+ Colour temperature 3000K, CRI 90+ T930 Colour temperature 4000K, CRI 90+ T940











KALI LED

Product Group: Spotlights

















Images for the product family and options:









Description: A rectangular LED track light with symmetrical faceted reflector designed for the accent lighting

Reflector: faceted aluminum, 60° beam angle

Diffuser: clear, tempered glass

Body: die-cast aluminum, white finish, adjustable direction, with adaptor

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Dire

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Surface luminaire is designed to be fixed into 4/6-conductors surface/recessed tracks. Track adaptor (3-phase + N) with phase selector

Environment: Indoor

Application: Retail, showroom, exhibition, public place







A spotlight ensures flexibility by adjusting luminaire according to your requirements

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Kali LED1x1700 D749 T830 R40	226	107	248	1623	13,0	125	80+	3000	2,60
Kali LED1x2300 D750 T830 R60	226	107	248	2252	19,1	118	80+	3000	2,60
Kali LED1x3100 D751 T830 R60	226	107	248	3037	27,5	111	80+	3000	2,60
Kali LED1x4550 D789 T830 R60	226	107	248	4443	40,9	109	80+	3000	2,60
Kali LED1x5250 D748 T830 R60	226	107	248	5139	47,7	108	+08	3000	2,60
Kali LED1x1700 D749 T840 R60	226	107	248	1663	13,8	121	80+	4000	2,60
Kali LED1x2300 D750 T840 R60	226	107	248	2309	19,1	121	80+	4000	2,60
Kali LED1x3100 D751 T840 R60	226	107	248	3115	27,5	113	80+	4000	2,60
Kali LED1x4550 D789 T840 R60	226	107	248	4559	40,9	112	80+	4000	2,60
Kali LED1x5250 D748 T840 R60	226	107	248	5238	47,7	110	80+	4000	2,60
Kali LED1x1700 D749 T930 R60	226	107	248	1328	13,3	100	90+	3000	2,60
Kali LED1x2300 D750 T930 R60	226	107	248	1860	18,4	101	90+	3000	2,60
Kali LED1x3100 D751 T930 R60	226	107	248	2540	26,3	97	90+	3000	2,60
Kali LED1x4550 D789 T930 R60	226	107	248	3657	41,0	89	90+	3000	2,60
Kali LED1x5250 D748 T930 R60	226	107	248	4110	47,6	86	90+	3000	2,60
Kali LED1x1700 D749 T940 R60	226	107	248	1419	13,3	107	90+	4000	2,60
Kali LED1x2300 D750 T940 R60	226	107	248	1988	18,4	108	90+	4000	2,60
Kali LED1x3100 D751 T940 R60	226	107	248	2715	26,3	103	90+	4000	2,60
Kali LED1x4550 D789 T940 R60	226	107	248	3909	41,0	95	90+	4000	2,60
Kali LED1x5250 D748 T940 R60	226	107	248	4393	47,6	92	90+	4000	2,60

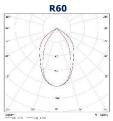
TECHNICAL DATA SHEET



Available options:

Driver with DALI interface
Reflector with 60° light beam angle
Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 80+
Colour temperature 3000K, CRI 90+
Colour temperature 4000K, CRI 90+
Colour temperature 2400K, CRI 97+
Colour temperature Light Pink, CRI 65+
Special spectrum for meat
Special spectrum for bread DALI R60 T830 T840 T930 T940 T924 T6LP

MEAT BREAD Special spectrum for bread





ANTLIA T LED

Product Group: Spotlights















Images for the product family and options:





Description: A LED track light with deepened opal symmetrical faceted reflector designed for the general lighting

Diffuser: opal polycarbonate, UV stable, with white coated ring

Body: aluminum, white finish, with adaptor

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Surface luminaire is designed to be fixed into 4/6-conductors surface/recessed tracks. Track adaptor (3-phase + N) with phase selector

Environment: Indoor

Application: Retail, showroom, exhibition, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Antlia T LED1x1450 D948 T830 OP	200	200	150	1382	11,7	118	80+	3000	1,00
Antlia T LED1x2000 D949 T830 OP	200	200	150	1936	16,2	120	+08	3000	1,00
Antlia T LED1x2700 D950 T830 OP	200	200	150	2635	23,0	114	+08	3000	1,00
Antlia T LED1x1450 D948 T840 OP	200	200	150	1443	11,7	123	80+	4000	1,00
Antlia T LED1x2000 D949 T840 OP	200	200	150	2023	16,2	125	80+	4000	1,00
Antlia T LED1x2700 D950 T840 OP	200	200	150	2753	23,0	120	+08	4000	1,00

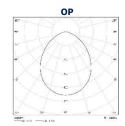
^{*} tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





SPICA LED

Product Group: Spotlights

















Description:A linear LED track light with various optics designed for the general lighting

Optics: $30x90^{\circ}$, $60x100^{\circ}$, $90x100^{\circ}$, asymmetric and double asymmetric light beam

Body: steel sheet, white finish, with adaptor

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

Light distribution type: Direct LED lifetime, h: 75000/L80B50 (100000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Surface luminaire is designed to be fixed into 4/6-conductors surface/recessed tracks. Track adaptor (3-phase + N) with phase selector

Environment: Indoor

Application: Retail, showroom, exhibition, public place

Product	Length , mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Spica LED1x1900 D951 T830 LS90x100	583	80	70	1792	12,8	140	80+	3000	1,70
Spica LED1x2550 D952 T830 LS90x100	583	80	70	2439	17,9	136	80+	3000	1,70
Spica LED1x3500 D953 T830 LS90x100	583	80	70	3308	25,9	128	80+	3000	1,70
Spica LED1x2850 D954 T830 LS90x100	870	80	70	2688	18,2	148	80+	3000	2,60
Spica LED1x3850 D955 T830 LS90x100	870	80	70	3659	26,3	139	80+	3000	2,60
Spica LED1x5200 D956 T830 LS90x100	870	80	70	4962	38,0	130	80+	3000	2,60
Spica LED1x3750 D957 T830 LS90x100	1155	80	70	3585	24,3	148	80+	3000	3,40
Spica LED1x5100 D958 T830 LS90x100	1155	80	70	4878	35,0	139	80+	3000	3,40
Spica LED1x6950 D959 T830 LS90x100	1155	80	70	6616	51,1	130	80+	3000	3,40
Spica LED1x1900 D951 T840 LS90x100	583	80	70	1873	12,8	146	80+	4000	1,70
Spica LED1x2550 D952 T840 LS90x100	583	80	70	2548	17,9	142	80+	4000	1,70
Spica LED1x3500 D953 T840 LS90x100	583	80	70	3456	25,9	133	80+	4000	1,70
Spica LED1x2850 D954 T840 LS90x100	870	80	70	2809	18,2	154	80+	4000	2,60
Spica LED1x3850 D955 T840 LS90x100	870	80	70	3823	26,3	146	80+	4000	2,60
Spica LED1x5200 D956 T840 LS90x100	870	80	70	5184	38,0	136	80+	4000	2,60
Spica LED1x3750 D957 T840 LS90x100	1155	80	70	3745	24,3	154	80+	4000	3,40
Spica LED1x5100 D958 T840 LS90x100	1155	80	70	5094	35,0	146	80+	4000	3,40
Spica LED1x6950 D959 T840 LS90x100	1155	80	70	6946	51,1	136	+08	4000	3,40
Spica LED1x1900 D951 T830 LS2A40	583	80	70	1735	12,8	135	80+	3000	1,70
Spica LED1x2550 D952 T830 LS2A40	583	80	70	2361	17.9	132	80+	3000	1,70
Spica LED1x3500 D953 T830 LS2A40	583	80	70	3202	25,9	124	80+	3000	1,70
Spica LED1x2850 D954 T830 LS2A40	870	80	70	2603	18.2	143	80+	3000	2,60
Spica LED1x3850 D955 T830 LS2A40	870	80	70	3542	26,3	135	80+	3000	2,60
Spica LED1x5200 D956 T830 LS2A40	870	80	70	4803	38,0	126	80+	3000	2,60
Spica LED1x3750 D957 T830 LS2A40	1155	80	70	3470	24,3	143	80+	3000	3,40
Spica LED1x5100 D958 T830 LS2A40	1155	80	70	4723	35,0	135	80+	3000	3,40
Spica LED1x6950 D959 T830 LS2A40	1155	80	70	6405	51,1	125	80+	3000	3,40
Spica LED1x1900 D951 T840 LS2A40	583	80	70	1813	12,8	141	80+	4000	1,70

NORTHCLIFFE

MAKING LIFE BRIGHTER

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Spica LED1x2550 D952 T840 LS2A40	583	80	70	2467	17,9	138	80+	4000	1,70
Spica LED1x3500 D953 T840 LS2A40	583	80	70	3346	25,9	129	80+	4000	1,70
Spica LED1x2850 D954 T840 LS2A40	870	80	70	2719	18,2	149	80+	4000	2,60
Spica LED1x3850 D955 T840 LS2A40	870	80	70	3701	26,3	141	80 +	4000	2,60
Spica LED1x5200 D956 T840 LS2A40	870	80	70	5019	38,0	132	80+	4000	2,60
Spica LED1x3750 D957 T840 LS2A40	1155	80	70	3625	24,3	149	80 +	4000	3,40
Spica LED1x5100 D958 T840 LS2A40	1155	80	70	4932	35,0	141	80+	4000	3,40
Spica LED1x6950 D959 T840 LS2A40	1155	80	70	6725	51,1	132	80+	4000	3,40
Spica LED1x1900 D951 T830 LS1A18	583	80	70	1697	12,8	132	80+	3000	1,70
Spica LED1x2550 D952 T830 LS1A18	583	80	70	2309	17,9	129	80+	3000	1,70
Spica LED1x3500 D953 T830 LS1A18	583	80	70	3132	25,9	121	80+	3000	1,70
Spica LED1x2850 D954 T830 LS1A18	870	80	70	2545	18,2	140	80+	3000	2,60
Spica LED1x3850 D955 T830 LS1A18	870	80	70	3464	26,3	132	80+	3000	2,60
Spica LED1x5200 D956 T830 LS1A18	870	80	70	4698	38,0	123	80+	3000	2,60
Spica LED1x3750 D957 T830 LS1A18	1155	80	70	3394	24,3	140	80+	3000	3,40
Spica LED1x5100 D958 T830 LS1A18	1155	80	70	4619	35,0	132	80+	3000	3,40
Spica LED1x6950 D959 T830 LS1A18	1155	80	70	6264	51,1	123	80+	3000	3,40
Spica LED1x1900 D951 T840 LS1A18	583	80	70	1773	12,8	138	80+	4000	1,70
Spica LED1x2550 D952 T840 LS1A18	583	80	70	2413	17,9	135	80+	4000	1,70
Spica LED1x3500 D953 T840 LS1A18	583	80	70	3272	25,9	126	80+	4000	1,70
Spica LED1x2850 D954 T840 LS1A18	870	80	70	2659	18,2	146	80+	4000	2,60
Spica LED1x3850 D955 T840 LS1A18	870	80	70	3619	26,3	138	80+	4000	2,60
Spica LED1x5200 D956 T840 LS1A18	870	80	70	4908	38,0	129	80+	4000	2,60
Spica LED1x3750 D957 T840 LS1A18	1155	80	70	3546	24,3	146	+08	4000	3,40
Spica LED1x5100 D958 T840 LS1A18	1155	80	70	4823	35,0	138	80+	4000	3,40
Spica LED1x6950 D959 T840 LS1A18	1155	80	70	6577	51,1	129	80 +	4000	3,40

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:
DALI
LS30x90
LS60x100
LS90x100
LS1A18-L
LS1A18-R
LS2A40 Driver with DALI interface
Optics with 30x90° beam angle
Optics with 60x100° beam angle
Optics with 90x100° beam angle
Optics with 90x100° beam angle
Optics with asymmetric beam, light direction - left
Optics with asymmetric beam, light direction - right
Optics with double asymmetric beam
RAL colour
Colour temperature 3000K CRI 80+

TECHNICAL DATA SHEET

LS2A40

RAL

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840









SHARQI LED

Product Group: Spotlights















Images for the product family and options:





Description: A recessed LED spot light with symmetrical faceted reflector designed for the accent lighting

Reflector: faceted aluminum, 40° (standard), 24° and 60° beam angles

Diffuser: clear, PMMA

Body: aluminium, white finish, adjustable direction

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35 Protection class IEC: II

Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (91x91mm). Push-in terminal, 2x1.5mm2

Environment: Indoor

Application: Retail, showroom, museum, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Sharqi LED1x1700 D734 T830 R40	130	100	132	1623	13,8	118	+08	3000	1,10
Sharqi LED1x2300 D735 T830 R40	130	100	132	2252	19,1	118	+08	3000	1,10
Sharqi LED1x3100 D736 T830 R40	130	100	132	3037	27,5	111	80+	3000	1,10
Sharqi LED1x1700 D734 T840 R40	130	100	132	1663	13,8	121	80+	4000	1,10
Sharqi LED1x2300 D735 T840 R40	130	100	132	2309	19,1	121	80+	4000	1,10
Sharqi LED1x3100 D736 T840 R40	130	100	132	3115	27,5	113	80+	4000	1,10
Sharqi LED1x1700 D734 T930 R40	130	100	132	1328	13,3	100	90+	3000	1,10
Sharqi LED1x2300 D735 T930 R40	130	100	132	1860	18,4	101	90+	3000	1,10
Sharqi LED1x3100 D736 T930 R40	130	100	132	2540	26,3	97	90+	3000	1,10
Sharqi LED1x1700 D734 T940 R40	130	100	132	1419	13,3	107	90+	4000	1,10
Sharqi LED1x2300 D735 T940 R40	130	100	132	1988	18,4	108	90+	4000	1,10
Sharqi LED1x3100 D736 T940 R40	130	100	132	2715	26,3	103	90+	4000	1,10

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^{\circ}$ C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

R24 Reflector with 24° light beam angle

R40 Reflector with 40° light beam angle (standard)

R60 Reflector with 60° light beam angle

WIE3-0.5m 3-pole "Wieland- Gesis classic" type or compatible

connector with 0.5m cable

WIE5D-0.5m 5-pole DALI "Wieland- Gesis classic" type or

compatible connector with 0.5m cable

Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable

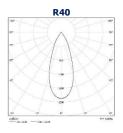
Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m

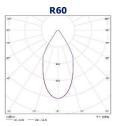
cable

T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ Colour temperature 3000K, CRI 90+ T840 T930 T940 Colour temperature 4000K, CRI 90+ Colour temperature 2400K, CRI 97+ Colour temperature Light Pink, CRI 65+ T924 T6LP

MEAT Special spectrum for meat **BREAD** Special spectrum for bread









AQUARIUS A LED

Product Group: Spotlights















Images for the product family and options:





Description: An adjustable LED spot light with facetted reflector for the accent lighting

Reflector: faceted aluminum, 60° beam angle

Diffuser: clear, tempered glass

Body: die-cast aluminium, white finish, adjustable direction

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (d170mm). Push-in terminal, 2x1.5mm2

Environment: Indoor

Application: Retail, showroom, exhibition, public place





A spotlight ensures flexibility by adjusting luminaire according to your requirements

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Aquarius A LED1x1700 E826 T830 R60	180	180	147	1567	13,8	114	80+	3000	2,50
Aquarius A LED1x2300 E827 T830 R60	180	180	147	2174	19,1	114	+08	3000	2,50
Aquarius A LED1x3150 D784 T830 R60	180	180	147	3017	27,7	109	80+	3000	2,50
Aquarius A LED1x4650 D785 T830 R60	180	180	147	4416	41,1	107	80+	3000	2,50
Aquarius A LED1x5200 D786 T830 R60	180	180	147	4962	47,7	104	80+	3000	2,50
Aguarius A LED1x1700 E826 T840 R60	180	180	147	1606	13,8	117	80+	4000	2,50
Aquarius A LED1x2300 E827 T840 R60	180	180	147	2229	19,1	117	80+	4000	2,50
Aquarius A LED1x3150 D784 T840 R60	180	180	147	3075	27,7	111	80+	4000	2,50
Aquarius A LED1x4650 D785 T840 R60	180	180	147	4501	41,1	110	80+	4000	2,50
Aquarius A LED1x5200 D786 T840 R60	180	180	147	5058	47,7	106	80+	4000	2,50
Aquarius A LED1x1700 E826 T930 R60	180	180	147	1282	13,3	96	90+	3000	2,50
Aquarius A LED1x2300 E827 T930 R60	180	180	147	1796	18,4	97	90+	3000	2,50
Aquarius A LED1x3150 D784 T930 R60	180	180	147	2453	26,3	93	90+	3000	2,50
Aquarius A LED1x4650 D785 T930 R60	180	180	147	3531	41,0	86	90+	3000	2,50
Aquarius A LED1x5200 D786 T930 R60	180	180	147	3968	47,6	83	90+	3000	2,50
Aquarius A LED1x1700 E826 T940 R60	180	180	147	1370	13,3	103	90+	4000	2,50
Aquarius A LED1x2300 E827 T940 R60	180	180	147	1919	18,4	104	90+	4000	2,50
Aquarius A LED1x3150 D784 T940 R60	180	180	147	2622	26,3	100	90+	4000	2,50
Aquarius A LED1x4650 D785 T940 R60	180	180	147	3774	41,0	92	90+	4000	2,50
Aquarius A LED1x5200 D786 T940 R60	180	180	147	4241	47,6	89	90+	4000	2,50
* tolerance range for optical and electrical data: ±10%	Values apply to an	amhient temi	nerature of 25%	<u></u>					

tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

TECHNICAL DATA SHEET



Available options:

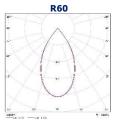
SDIM Driver with switch-control dimming

DALI Driver with DALI interface

Driver with DALI interface
3-pole "Wieland- Gesis classic" type or compatible connector with 0.5m cable
5-pole DALI "Wieland- Gesis classic" type or compatible connector with 0.5m cable
2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable
2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable
Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 80+
Colour temperature 3000K, CRI 90+
Colour temperature 4000K, CRI 90+
Colour temperature 4000K, CRI 90+ WIE3-0.5m WIE5D-0.5m

Europlug-1.5m Europlug-3.0m

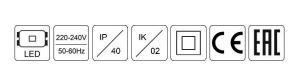
T840 T930 T940 Colour temperature 4000K, CRI 90+





CORVUS LED

Product Group: Spotlights





Images for the product family and options:



Description: An adjustable LED spot light with facetted reflector for the accent lighting

Reflector: faceted aluminum, 60° beam angle

Diffuser: clear, tempered glass

Body: die-cast aluminium, white finish, adjustable direction

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (138x138mm). Push-in terminal, 2x1.5mm2

Environment: Indoor

Application: Retail, showroom, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Corvus LED1x1600 D326 T830 CLR	145	145	115	1549	14,1	110	+08	3000	2,00
Corvus LED1x2300 D327 T830 CLR	145	145	115	2150	20,7	104	+08	3000	2,00
Corvus LED1x3000 D328 T830 CLR	145	145	115	2900	28,4	102	+08	3000	2,00
Corvus LED1x1600 D326 T840 CLR	145	145	115	1597	14,1	113	+08	4000	2,00
Corvus LED1x2300 D327 T840 CLR	145	145	115	2216	20,7	107	+08	4000	2,00
Corvus LED1x3000 D328 T840 CLR	145	145	115	2990	28,4	105	+08	4000	2,00

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface

WIE3-0.5m 3-pole "Wieland- Gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland- Gesis classic" type or compatible connector with 0.5m cable

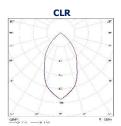
Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable
Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable
T830 Colour temperature 3000K, CRI 80+

 T830
 Colour temperature 3000K, CRI 80+

 T840
 Colour temperature 4000K, CRI 80+

 T930
 Colour temperature 3000K, CRI 90+

 T940
 Colour temperature 4000K, CRI 90+





DELPHINUS LED

Product Group: Spotlights















Images for the product family and options:





Description: An adjustable rectangular LED spot light with facetted reflector for the accent lighting

Reflector: faceted aluminum, 60° beam angle

Diffuser: clear, tempered glass

Body: die-cast aluminum, white finish, adjustable direction

General data:

Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,95 Light source: LED Light source included: Yes

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35 Protection class IEC: II

Ingress protection code: IP40 Mechanical impact resistance: IK02

EEC: A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (223x133mm). Push-in terminal, 2x1.5mm2

Environment: Indoor

Application: Retail, showroom, exhibition, public place







A spotlight ensures flexibility by adjusting luminaire according to your requirements

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Delphinus LED1x1700 D744 T830 R60	236	146	107	1623	13,8	118	80+	3000	2,50
Delphinus LED1x2300 D745 T830 R60	236	146	107	2252	19,1	118	+08	3000	2,50
Delphinus LED1x3100 D746 T830 R60	236	146	107	3037	27,5	111	80+	3000	2,50
Delphinus LED1x4550 D787 T830 R60	236	146	107	4443	40,9	109	80+	3000	2,50
Delphinus LED1x5250 D747 T830 R60	236	146	107	5139	47,7	108	+08	3000	2,50
Delphinus LED1x1700 D744 T840 R60	236	146	107	1663	13,8	121	80+	4000	2,50
Delphinus LED1x2300 D745 T840 R60	236	146	107	2309	19,1	121	80+	4000	2,50
Delphinus LED1x3100 D746 T840 R60	236	146	107	3115	27,5	113	80+	4000	2,50
Delphinus LED1x4550 D787 T840 R60	236	146	107	4559	40,9	112	80+	4000	2,50
Delphinus LED1x5250 D747 T840 R60	236	146	107	5238	47,7	110	80+	4000	2,50
Delphinus LED1x1700 D744 T930 R60	236	146	107	1328	13,3	100	90+	3000	2,50
Delphinus LED1x2300 D745 T930 R60	236	146	107	1860	18,4	101	90+	3000	2,50
Delphinus LED1x3100 D746 T930 R60	236	146	107	2540	26,3	97	90+	3000	2,50
Delphinus LED1x4550 D787 T930 R60	236	146	107	3657	41,0	89	90+	3000	2,50
Delphinus LED1x5250 D747 T930 R60	236	146	107	4110	47,6	86	90+	3000	2,50
Delphinus LED1x1700 D744 T940 R60	236	146	107	1419	13,3	107	90+	4000	2,50
Delphinus LED1x2300 D745 T940 R60	236	146	107	1988	18,4	108	90+	4000	2,50
Delphinus LED1x3100 D746 T940 R60	236	146	107	2715	26,3	103	90+	4000	2,50
Delphinus LED1x4550 D787 T940 R60	236	146	107	3909	41,0	95	90+	4000	2,50
Delphinus LED1x5250 D747 T940 R60	236	146	107	4393	47,6	92	90+	4000	2,50
* tolerance range for optical and electrical data: ±10%.	Values apply to ar	n ambient temi	perature of 25%	S					

TECHNICAL DATA SHEET



Available options:

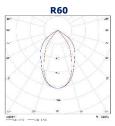
SDIM Driver with switch-control dimming

DALI Driver with DALI interface

Driver with DALI interface
3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable
2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable
2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable
Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 80+
Colour temperature 3000K, CRI 90+
Colour temperature 4000K, CRI 90+ WIE3-0.5m WIE5D-0.5m

Europlug-1.5m Europlug-3.0m

T840 T930 T940 Colour temperature 4000K, CRI 90+





HEKA LED

Product Group: Spotlights















Images for the product family and options:





Description: A recessed LED spot light with facetted reflector, providing unique interior design solutions

Reflector: faceted aluminum, 40° (standard), 24° beam angles

Diffuser: clear, PMMA

Body: die-cast aluminium, white finish

General data:

Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,90 Light source: LED Light source included: Yes

Light distribution type: Direct LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35 Protection class IEC: II

Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (d130mm). Push-in terminal, 2x1.5mm2

Environment: Indoor

Application: Retail, showroom, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Heka LED1x1650 E838 T830 R40	139	139	117	1641	13,8	119	80+	3000	1,40
Heka LED1x2300 E839 T830 R40	139	139	117	2277	19,1	119	80+	3000	1,40
Heka LED1x3100 E840 T830 R40	139	139	117	3072	27,5	112	80+	3000	1,40
Heka LED1x4550 E841 T830 R40	139	139	117	4494	40,9	110	80+	3000	1,50
Heka LED1x1650 E838 T840 R40	139	139	117	1683	13,8	122	80+	4000	1,40
Heka LED1x2300 E839 T840 R40	139	139	117	2336	19,1	122	80+	4000	1,40
Heka LED1x3100 E840 T840 R40	139	139	117	3150	27,5	115	80+	4000	1,40
Heka LED1x4550 E841 T840 R40	139	139	117	4611	40,9	113	80+	4000	1,50
Heka LED1x1650 E838 T930 R40	139	139	117	1343	13,3	101	90+	3000	1,40
Heka LED1x2300 E839 T930 R40	139	139	117	1881	18,4	102	90+	3000	1,40
Heka LED1x3100 E840 T930 R40	139	139	117	2570	26,3	98	90+	3000	1,40
Heka LED1x4550 E841 T930 R40	139	139	117	3700	41,0	90	90+	3000	1,50
Heka LED1x1650 E838 T940 R40	139	139	117	1435	13,3	108	90+	4000	1,40
Heka LED1x2300 E839 T940 R40	139	139	117	2011	18,4	109	90+	4000	1,40
Heka LED1x3100 E840 T940 R40	139	139	117	2746	26,3	105	90+	4000	1,40
Heka LED1x4550 E841 T940 R40	139	139	117	3954	41,0	96	90+	4000	1,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

WIE3-0.5m 3-pole "Wieland- Gesis classic" type or compatible connector with 0.5m cable WIE5D-0.5m 5-pole DALI "Wieland- Gesis classic" type or compatible connector with 0.5m

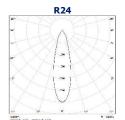
cable Europlug-1.5m

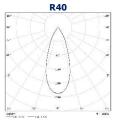
2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable Reflector with 24° light beam angle Reflector with 40° light beam angle (standard) Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ Europlug-3.0m

R24

R40

T830 T840 Colour temperature 3000K, CRI 90+ Colour temperature 4000K, CRI 90+ T930 T940







VILLY U LED

Product Group: Spotlights















Images for the product family and options:







A suspended LED spot light with facetted reflector, providing unique interior design solutions Reflector: faceted aluminum, 40° (standard), 24° beam angles **Description:**

Body: extruded aluminium, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK02

EEC: A++

Installation: Suspended. Supplied with suspension kit for easy mounting. Cable, 1.5m, 3x0.75mm2

Environment: Indoor

Application: Hotel, retail, showroom, public place

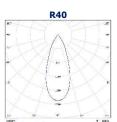
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Villy U LED1x1550 E896 T830 R40	77	77	245	1455	13,3	109	80+	3000	0,80
Villy U LED1x2150 E897 T830 R40	77	77	245	2019	19,1	106	80+	3000	0,80
Villy U LED1x1550 E896 T840 R40	77	77	245	1491	13,3	112	80+	4000	0,80
Villy U LED1x2150 E897 T840 R40	77	77	245	2070	19,1	108	80+	4000	0,80
Villy U LED1x1550 E896 T930 R40	77	77	245	1190	12,8	93	90+	3000	0,80
Villy U LED1x2150 E897 T930 R40	77	77	245	1668	18,4	90	90+	3000	0,80
Villy U LED1x1550 E896 T940 R40	77	77	245	1272	12,8	99	90+	4000	0,80
Villy U LED1x2150 E897 T940 R40	77	77	245	1782	18,4	97	90+	4000	0,80

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

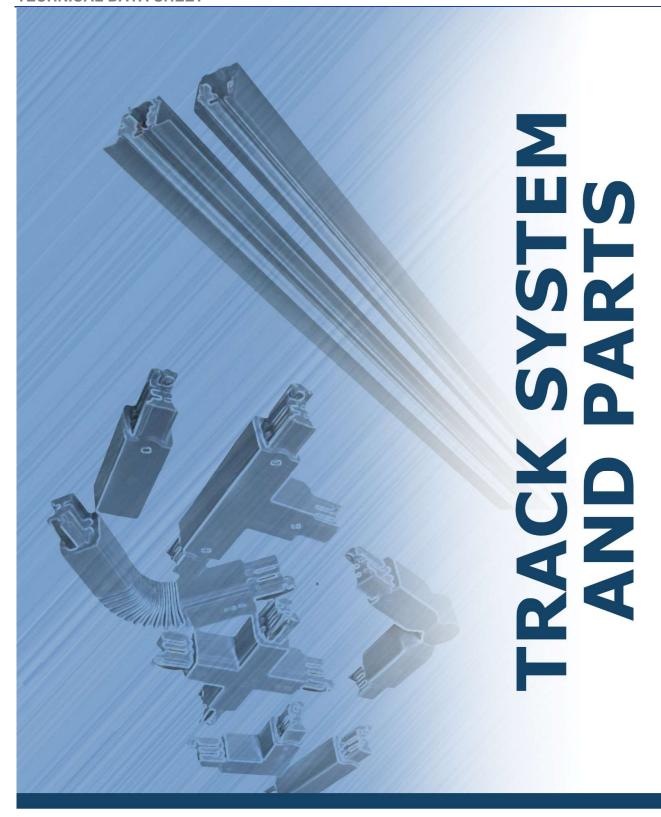
Available options:

Available options	•
SDIM	Driver with switch-control dimming
DALI	Driver with DALI interface
R15	Reflector with 15° light beam angle
R24	Reflector with 24° light beam angle
R40	Reflector with 40° light beam angle (standard)
T830	Colour temperature 3000K, CRI 80+
T840	Colour temperature 4000K, CRI 80+
T930	Colour temperature 3000K, CRI 90+
T940	Colour temperature 4000K, CRI 90+









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ONETRACK

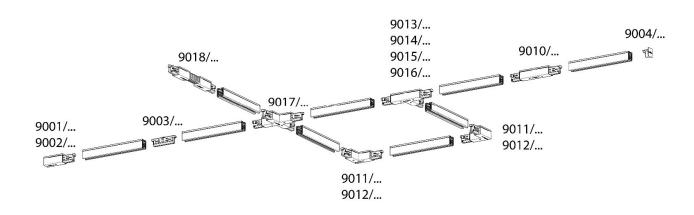
Product Group: Track System and Parts

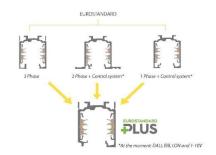


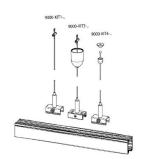


Onetrack® is the new product range for track lighting based on EUROSTANDARD PLUS® platform. This new state-of-the art platform is for use in lighting projects employing controllable and fixed output systems. As the platform makes upgrading possible at any moment, non-controllable installations are future proof. The system flexible communication lines ensure its use in future Human Centric Lighting systems.

The Eurostandard plus® 6 conductors track connection diagram:









Onetrack® features:

- universal system based on EUROSTANDARD PLUS® platform
- compatibility with all the existing systems
- easy to mount and change position
- circuits can be controlled individually
- modular solution, easy to extend/adapt suitable for department stores and shops
- recessed version also available

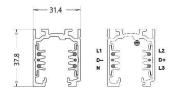
Mechanical keys:



There is a mechanical key on the outline of the track to guarantee the right connection of the multiple pieces of the track. Also end-feeds and connection joints have a mechanical key (screw presence as per picture below) that must be taken into account in order to choose the right component. In the catalogue sketches of this articles the position of the key is highlighted with a red line

With the choice of colours and its minimal and elegant design, ONETRACK® system becomes almost invisible in lighting installation, leaving the focus on what is being illuminated. ONETRACK® tracks can be provided with a curved shape (minimum radius is 1.5m)

Surface track: three-circuit surface track with two additional conductors intended to manage a general data signal (DALI, DMX, LON, EIB and others)



Body: Extruded aluminium

Colour: white (W) RAL 9010, black (B) RAL 9005 Conductor: cooper, isolated in PVC profile

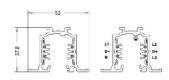
Technical data:

Rated current and voltage: L1/L2/L3/N/ground 16A/440V + D+/D- 2x1A/50V FELV AC (DALI)

Frequency: 0/50-60Hz

Phase/phases power: 3,6kVA/ 10,8kVA Lengths: 1000, 2000, 3000, 4000mm

Recessed track: three-circuit recessed track with two additional conductors intended to manage a general data signal (DALI, DMX, LON, EIB and others)



Body: Extruded aluminium

Colour: white (W) RAL 9010 or black (B) RAL 9005 Conductor: cooper, isolated in PVC profile

Technical data:

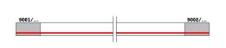
Rated current and voltage: L1/L2/L3/N/ground 16A/440V + D+/D- 2x1A/50V FELV AC (DALI)

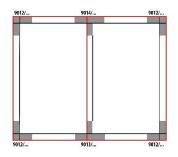
Frequency: 0/50-60Hz Phase/phases power: 3,6kVA/ 10,8kVA Lengths: 1000, 2000, 3000, 4000mm

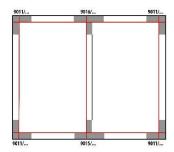
Product	Colour	Length, mm	Width, mm	Height, mm	Weight, kg
Track surface 9000-1/W-ST (XTS 4100-3)	White	1000	31,4	37,8	1,06
Track surface 9000-2/W-ST (XTS 4200-3)	White	2000	31,4	37,8	2,12
Track surface 9000-3/W-ST (XTS 4300-3)	White	3000	31,4	37,8	3,18
Track surface 9000-4/W-ST (XTS 4400-3)	White	4000	31,4	37,8	4,24
Track surface 9000-1/B-ST (XTS 4100-2)	Black	1000	31,4	37,8	1,06
Track surface 9000-2/B-ST (XTS 4200-2)	Black	2000	31,4	37,8	2,12
Track surface 9000-3/B-ST (XTS 4300-2)	Black	3000	31,4	37,8	3,18
Track surface 9000-4/B-ST (XTS 4400-2)	Black	4000	31,4	37,8	4,24
Track recessed 9000-1/W-R (XTSF 4100-3)	White	1000	52	37,8	1,14
Track recessed 9000-2/W-R (XTSF 4200-3)	White	2000	52	37,8	2,27
Track recessed 9000-3/W-R (XTSF 4300-3)	White	3000	52	37,8	3,41
Track recessed 9000-4/W-R (XTSF 4400-3)	White	4000	52	37,8	4,55
Track recessed 9000-1/B-R (XTSF 4100-2)	Black	1000	52 52	37,8	1,14
Track recessed 9000-2/B-R (XTSF 4200-2)	Black	2000		37,8	2,27
Track recessed 9000-3/B-R (XTSF 4300-2)	Black	3000	52	37,8	3,41
Track recessed 9000-4/B-R (XTSF 4400-2)	Black	4000	52	37,8	4,55

Use of L- and T- accessories

Red line indicates polarity ridge

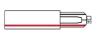






End-feed 9001/... (XTS 11-...)/9002/... (XTS 12-...): End-feed is used to feed track from the end and could have 2 different polarity ridges 9001/... (XTS 11-...)





Polarity right



9002/... (XTS 12-...)

Polarity left

End-feed 9001/W (XTS 11-3) End-feed 9001/B (XTS 11-2) End-feed 9002/W (XTS 12-3) End-feed 9002/B (XTS 12-2) Body: polycarbonate

Colour: white (W) RAL 9010, black (B) RAL9005. Polarity: right, left Screw terminal, 5/7x1.5-2.5mm2

L-feed 9011/... (XTS 34-...)/9012/... (XTS 35-...): L-feed is used to make track turn and could have 2 different polarity ridges









Article:

L-feed 9011/W (XTS 34-3) L-feed 9011/B (XTS 34-2) L-feed 9012/W (XTS 35-3) L-feed 9012/B (XTS 35-2) Body: polycarbonate Colour: white (W) RAL 9010, black (B) RAL9005

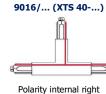
Polarity: internal, external

T-feed 9014/... (XTS 36-...)/9015/... (XTS 37-...)/9013/... (XTS 39-...)/9016/... (XTS 40-...): T-feed is used to connect 3 branches and could have 4 different polarity ridges





9013/... (XTS 39-...) 9014/... (XTS 36-...) Polarity external left Polarity external right 9015/... (XTS 37-...)



Article:

T-feed 9014/W (XTS 36-3) T-feed 9014/B (XTS 36-2) T-feed 9015/W (XTS 37-3) T-feed 9015/B (XTS 37-3) T-feed 9013/W (XTS 39-3) T-feed 9013/B (XTS 39-2) T-feed 9016/W (XTS 40-3) T-feed 9016/B (XTS 40-2) Body: polycarbonate Colour: white (**W**) RAL 9010, black (**B**) RAL9005 Polarity: external left, external right, internal left, internal right

Middle-feed 9010/... (XTS 14-...): Middle-feed is used to feed track from the chosen point and has 1 polarity ridge

9010/... (XTS 14-...)

Polarity internal left







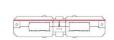
Article:

Middle-feed 9010/W (XTS 14-3) Middle-feed 9010/B (XTS 14-2) Body: polycarbonate Colour: white (W) RAL 9010, black (B) RAL9005

Jointing connector 9003/... (XTS 21-...): Joining connector allows connecting tracks together and has 1 polarity ridge 9003/... (XTS 21-...)







Article:

Jointing connector 9003/W (XTS 21-3) Jointing connector 9003/B (XTS 21-2) Body: polycarbonate Colour: white (W) RAL 9010, black (B) RAL9005

Adjustable corner 9018/... (XTS 23-...): Adjustable corner is used to obtain needed angle and has 1 polarity ridge

9018/... (XTS 23-...)





Article:

Adjustable corner 9018/W (XTS 23-3) Adjustable corner 9018/B (XTS 23-2) Body: polycarbonate Colour: white (W) RAL 9010, black (B) RAL9005

X-feed 9017/... (XTS 38-...): X-feed allows to connect 4 branches and has 1 polarity ridge





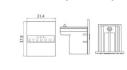


Article:

X-feed 9017/W (XTS 38-3) X-feed 9017/B (XTS 38-2) Body: polycarbonate Colour: white (W) RAL 9010, black (B) RAL9005

End cap 9004/... (XTS 41-...): End cap is used to secure live ends of track 9004/... (XTS 41-...)





Article:

End cap 9004/W (XTS 41-3) End cap 9004/B (XTS 41-2) End cap recessed 9004-R/W End cap recessed 9004-R/B Body: polycarbonate Colour: white (**W**) RAL 9010, black (**B**)

RAL9005

Fix point 9000/BP-D-...: FIX point is a base for ceiling fixing of the DALI and non-DALI adapter without using the track





Article:

Fix point 9000/BP-D-W Fix point 9000/BP-D-B Body: polycarbonate Colour: white (W) RAL 9010, black (B) RAL9005

Max. load: 50N

Cover recessed S-9001-R/6-.../ S-9010-R/6-.../ S-9011-R/6-.../ S-9013-R/6-.../ S-9017-R/6-...: Recessed covers for end/middle/L-/T-/X- feeds





Article:

Cover recessed S-9001-R/6-W for End-feed Cover recessed S-9001-R/6-B for End-feed Cover recessed S-9010-R/6-W for Middle-feed Cover recessed S-9010-R/6-B for Middle-feed Cover recessed S-9011-R/6-W for L-feed Cover recessed S-9011-R/6-B for L-feed Cover recessed S-9013-R/6-W for T-feed Cover recessed S-9013-R/6-B for T-feed Cover recessed S-9017-R/6-W for X-feed Cover recessed S-9017-R/6-B for X-feed Body: polycarbonate Colour: white (W) RAL 9010, black (B) RAL9005

Suspension hook S-9000/H-...: Suspension hook for fixing on the track





Article:

Suspension hook S-9000/H-W Suspension hook S-9000/H-B Body: polyamide Zinc plated steel hook Colour: white (**W**) RAL 9010, black (**B**) **RAI 9005**

Max. load: 50N

Cutting tool S-9000/T-...: Cutting tool for track conductors





Article:

Cutting tool S-9000/T Body: steel



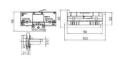
TRACK ADAPTERS

OneTrack® adapters phase selector allows to maintain the selected phase even though the adapter is attached/detached or re-attached to the track. This gives also the possibility to select the phase before the installation making it easier. Available colours for adapters: white (W) RAL 9010, black (B) RAL 9005

Track adapter 9009-4/...: Symmetric 4 conductors track adapter (3 phase + N) with phase selector







Article:

Track adapter 9009-4/W Track adapter 9009-4/B Body: polycarbonate

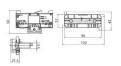
Colour: white (**W**) RAL 9010, black (**B**)

RAL9005 Max. load: 100N

Track adapter 9009/...: Symmetric 6 conductors track adapter (3 phase + N + control system) with phase selector







Article:

Track adapter 9009/W Track adapter 9009/B Body: polycarbonate

Colour: white (W) RAL 9010, black (B)

RAL9005 Max. load: 100N

Nipple S-9009/M10-SC: Nipple without collar for fixing adapters





Article:

Nipple S-9009/M10-SC

Body: polycarbonate
Colour: white (**W**) RAL 9010, black (**B**)
RAL9005

Max. load: 100N

Product	Description	Length, mm	Width, mm	Height, mm	Weight, kg
End-feed 9001/W (XTS 11-3)	End-feed, polarity right, white PC body	95	31	38	0,10
End-feed 9001/B (XTS 11-2)	End-feed, polarity right, black PC body	95	31	38	0,10
End-feed 9002/W (XTS 12-3)	End-feed, polarity left, white PC body	95	31	38	0,10
End-feed 9002/B (XTS 12-2)	End-feed, polarity left, black PC body	95	31	38	0,10
Jointing connector 9003/W (XTS 21-3)	Jointing connector, white PC body	115	25	33	0,05
Jointing connector 9003/B (XTS 21-2)	Jointing connector, black PC body	115	25	33	0,05
Middle-feed 9010/W (XTS 14-3)	Middle-feed, white PC body	148	31	38	0,19
Middle-feed 9010/B (XTS 14-2)	Middle-feed, black PC body	148	31	38	0,19
L-feed 9011/W (XTS 34-3)	L-feed, polarity internal, white PC body	90	90	38	0,19
L-feed 9011/B (XTS 34-2)	L-feed, polarity internal, black PC body	90	90	38	0,19
L-feed 9012/W (XTS 35-3)	L-feed, polarity external, white PC body	90	90	38	0,19
L-feed 9012/B (XTS 35-2)	L-feed, polarity external, white PC body	90	90	38	0,19
T-feed 9013/W (XTS 39-3)	T-feed, polarity external left, white PC body	148	90	38	0,29
T-feed 9013/B (XTS 39-2)	T-feed, polarity external left, black PC body	148	90	38	0,29
T-feed 9013/B (XTS 36-3)	T-feed, polarity external right, white PC body	148	90	38	0,29
T-feed 9014/B (XTS 36-2)	T-feed, polarity external right, white PC body T-feed, polarity external right, black PC body	148	90	38	0,29
T-feed 9014/B (XTS 30-2)	T-feed, polarity external light, white PC body	148	90	38	0,29
	T-feed, polarity internal left, white PC body	148	90	38	0,29
T-feed 9015/B (XTS 37-3)			90		
T-feed 9016/W (XTS 40-3)	T-feed, polarity internal right, white PC body	148 148	90	38 38	0,29
T-feed 9016/B (XTS 40-2)	T-feed, polarity internal right, black PC body				
X-feed 9017/W (XTS 38-3)	X-feed, white PC body	148	90	38	0,38
X-feed 9017/B (XTS 38-2)	X-feed, black PC body	148	90	38	0,38
Adjustable corner 9018/W (XTS 23-3)	Adjustable corner, white PC body	265	31	38	0,24
Adjustable corner 9018/B (XTS 23-2)	Adjustable corner, black PC body	265	31	38	0,24
End cap 9004/W (XTS 41-3)	End cap for track with locking screw, white PC body	2	31	38	0,01
End cap 9004/B (XTS 41-2)	End cap for track with locking screw, black PC body	2	31	38	0,01
End cap recessed 9004-R/W	End cap for recessed track with locking screw, white PC body	2	52	38	0,01
End cap recessed 9004-R/B	End cap for recessed track with locking screw, black PC body	2	52	38	0,01
Fix point 9000/BP-D-W	Base for fixing of the Dali/non-Dali adapter, white PC body	104	104	35	0,11
Fix point 9000/BP-D-B	Base for fixing of the Dali/non-Dali adapter, black PC body	104	104	35	0,11
Cover recessed S-9001-R/6-W	Recessed cover for end feed, white PC body	95	52	34	0,03
Cover recessed S-9001-R/6-B	Recessed cover for end feed, black PC body	95	52	34	0,03
Cover recessed S-9010-R/6-W	Recessed cover for middle feed, white PC body	148	52	34	0,04
Cover recessed S-9010-R/6-B	Recessed cover for middle feed, black PC body	148	52	34	0,04
Cover recessed S-9011-R/6-W	Recessed cover for L-feed, white PC body	100	100	34	0,04
Cover recessed S-9011-R/6-B	Recessed cover for L-feed, black PC body	100	100	34	0,04
Cover recessed S-9013-R/6-W	Recessed cover for T-feed, white PC body	148	100	34	0,05
Cover recessed S-9013-R/6-B	Recessed cover for T-feed, black PC body	148	100	34	0,05
Cover recessed S-9017-R/6-W	Recessed cover for X-feed, white PC body	148	148	34	0,06
Cover recessed S-9017-R/6-B	Recessed cover for X-feed, black PC body	148	148	34	0,06
Frack adapter 9009-4/W	Symmetric 4 conductors adapter with phase selector, white	103	32	49	0,05
Track adapter 9009-4/B	Symmetric 4 conductors adapter with phase selector, black	103	32	49	0,05

NORTHCLIFFE

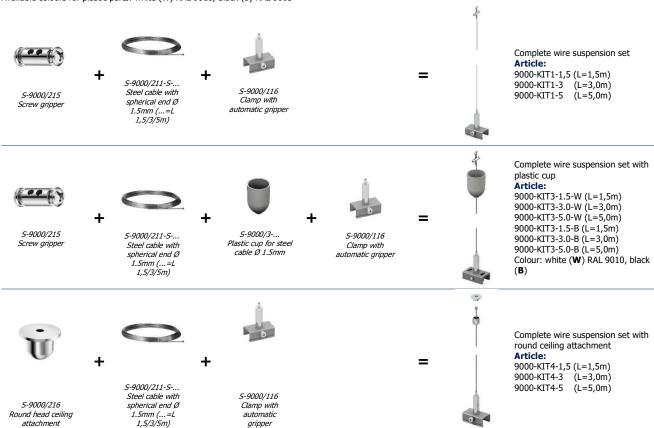
TECHNICAL DATA SHEET

MAKING LIFE BRIGHTER

Track adapter 9009/W	Symmetric 6 conductors adapter with phase selector, white	102	32	56	0,06
Track adapter 9009/B	Symmetric 6 conductors adapter with phase selector, black	102	32	56	0,06
Nipple S-9009/M10-SC	Nipple without collar for fixing adapter	25	25	17	0,01
Suspension hook S-9000/H-W	Suspension hook, white	28	26	48	0,01
Suspension hook S-9000/H-B	Suspension hook, black	28	26	48	0,01
Cutting tool S-9000/T	Cutting tool for track conductors				0.10

THE SUSPENSION APPLICATIONS FOR TRACK SYSTEM

Available colours for plastic parts: white (W) RAL 9010, black (B) RAL 9005

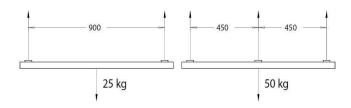




S-9000/111 Ceiling clamp

Load scheme

Maximum load for ceiling fixing clamp and wire suspension sets.



Article:

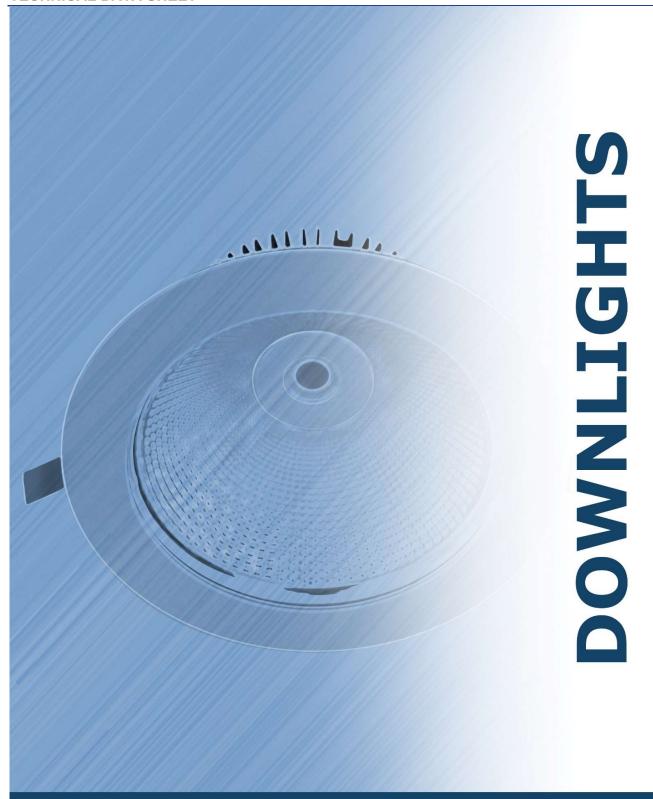
Ceiling clamp S-9000/111 (SKB 10)

- fast mounting
- zinc plated steel



Product	Description	Length, mm	Width, mm	Height, mm	Weight, kg
Suspension set 9000-KIT1-1.5	Wire suspension set 1,5m with screw gripper and clamp	10	6	1500	0,06
Suspension set 9000-KIT1-3.0	Wire suspension set 3,0m with screw gripper and clamp	10	6	3000	0,07
Suspension set 9000-KIT1-5.0	Wire suspension set 5,0m with screw gripper and clamp	10	6	5000	0,09
Suspension set 9000-KIT3-1.5-W	Wire suspension set 1,5m with white plastic cap and clamp	32	32	1500	0,06
Suspension set 9000-KIT3-3.0-W	Wire suspension set 3,0m with white plastic cap and clamp	32	32	3000	0,08
Suspension set 9000-KIT3-5.0-W	Wire suspension set 5,0m with white plastic cap and clamp	32	32	5000	0,09
Suspension set 9000-KIT3-1.5-B	Wire suspension set 1,5m with black plastic cap and clamp	32	32	1500	0,06
Suspension set 9000-KIT3-3.0-B	Wire suspension set 3,0m with black plastic cap and clamp	32	32	3000	0,08
Suspension set 9000-KIT3-5.0-B	Wire suspension set 5,0m with black plastic cap and clamp	32	32	5000	0,09
Suspension set 9000-KIT4-1.5	Wire suspension set 1,5m with ceiling attachement and clamp	18	18	1500	0,07
Suspension set 9000-KIT4-3.0	Wire suspension set 3,0m with ceiling attachement and clamp	18	18	3000	0,08
Suspension set 9000-KIT4-5.0	Wire suspension set 5,0m with ceiling attachement and clamp	18	18	5000	0,10
Ceiling clamp S-9000/111 (SKB 10)	Ceiling clamp, fast mounting, zinc plated steel	40	22	16	0,02





www.northcliffe.org



CRATER

Product Group: Downlights













Images for the product family and options:









Description: A square recessed LED spotlight with symmetric or asymmetric light distribution

Reflector: symmetric or asymmetric Body: die-cast aluminium, white finish Mains voltage: 220-240V, 50-60Hz

General data: Mains voltage: 220-240V, 50-6
Light source: GU10
Light source included: No
Light distribution type: Direct

Operating temperature range, °C: ta 0...+35 Protection class IEC: I

Ingress protection code: IP20 Mechanical impact resistance: IK04

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (75x75mm).

Environment: Indoor



Application:

Suitable for use with GU10 LED bulbs. Bulbs are ordered separately.

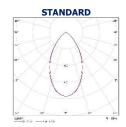
Office, education, household, hotel, corridor, showroom, exhibition, public place

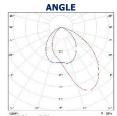
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Crater 1GU10 U01	83	83	110						0,13
Crater 1GU10 U01 ANGLE	83	83	110						0,13
Lamp 1GU10 LED1x400 T830 L90	50	50	58	350	5,0	70	80+	3000	0,05
Lamp 1GU10 LED1x400 T830 L30	50	50	58	350	5,0	70	80+	3000	0,05
Lamp 1GU10 LED1x400 T840 L90	50	50	58	350	5,0	70	80+	4000	0,05
Lamp 1GU10 LED1x400 T840 L30	50	50	58	350	5,0	70	80+	4000	0,05

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

L30 Optics with 30° beam angle
L90 Optics with 90° beam angle
T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+







AIN LED

Product Group: Downlights





















Description: A budget recessed LED spotlight with adjustable tilt angle and middle beam optics

Optics: 40° light beam, tilting angle ±30°

Body: white polycarbonate

General data: Mains voltage: 220-240V, 50-60Hz Power factor: >0,50

Power factor: >0,50 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -20...+40

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK05 EEC: A+

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out (Ø68mm). Push-in terminal, 2x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, bathroom, showroom, exhibition, public place



A luminaire is supplied with an electrical junction enclosure and push-in terminal 2x2x2.5 mm2 (for in and out going cable), also known as "quick connector". It offers installers a quick, easy tool free installation- simply strip the cable, plug it directly into the push-in terminal and close the junction enclosure to secure the cables. The remote junction enclose gives an easy access to a push-in terminal and fast connection

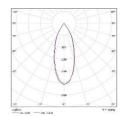
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Ain LED1x550 D944 T830	85	85	44	550	6,5	85	80+	3000	0,13
Ain LED1x550 D944 T830 TDIM	85	85	44	550	6.5	85	80+	3000	0.13

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25%

Available options:

TDIM Driver with trailing-edge and leading-edge dimming

T830 Colour temperature 3000K, CRI 80+





AURIGA LED

Product Group: Downlights



















Description: A traditional recessed LED downlight with clear diffuser and faceted reflector for a better glare control

Reflector: faceted aluminum, 60° light beam, UGR<19

Body: die-cast aluminum, white finish, tool free spring clip installation, with remote driver

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK05

EEC: A+/A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: Ø195(165). Push-in terminal, 2x1.5mm2

Environment: Indoor Office, education, household, hotel, corridor, bathroom, retail, showroom, exhibition, public place

Application:

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Auriga LED1x1600 D329 T830 CLR	195,0	195,0	100,0	1606	14,1	114	80+	3000	0,80
Auriga LED1x2300 D330 T830 CLR	195,0	195,0	100,0	2229	19,6	114	+08	3000	0,80
Auriga LED1x3000 D331 T830 CLR	195,0	195,0	100,0	3006	28,1	107	80+	3000	0,80
Auriga LED1x1600 D329 T840 CLR	195,0	195,0	100,0	1656	14,1	117	80+	4000	0,80
Auriga LED1x2300 D330 T840 CLR	195,0	195,0	100,0	2297	19,6	117	80+	4000	0,80
Auriga LED1x3000 D331 T840 CLR	195,0	195,0	100,0	3099	28,1	110	80+	4000	0,80
Auriga LED1x1600 D329 T830 OP LT80	195,0	195,0	100,0	1455	14,1	103	80+	3000	0,80
Auriga LED1x2300 D330 T830 OP LT80	195,0	195,0	100,0	2019	19,6	103	80+	3000	0,80
Auriga LED1x3000 D331 T830 OP LT80	195,0	195,0	100,0	2723	28,1	97	80+	3000	0,80
Auriga LED1x1600 D329 T840 OP LT80	195,0	195,0	100,0	1500	14,1	106	80+	4000	0,80
Auriga LED1x2300 D330 T840 OP LT80	195,0	195,0	100,0	2081	19,6	106	80+	4000	0,80
Auriga LED1x3000 D331 T840 OP LT80	195,0	195,0	100,0	2807	28,1	100	80+	4000	0,80
Auriga LED1x1600 D329 T830 MPRZ LT92	195,0	195,0	100,0	1492	14,1	106	+08	3000	0,80
Auriga LED1x2300 D330 T830 MPRZ LT92	195,0	195,0	100,0	2071	19,6	106	80+	3000	0,80
Auriga LED1x3000 D331 T830 MPRZ LT92	195,0	195,0	100,0	2794	28,1	99	+08	3000	0,80
Auriga LED1x1600 D329 T840 MPRZ LT92	195,0	195,0	100,0	1539	14,1	109	80+	4000	0,80
Auriga LED1x2300 D330 T840 MPRZ LT92	195,0	195,0	100,0	2135	19,6	109	80+	4000	0,80
Auriga LED1x3000 D331 T840 MPRZ LT92	195,0	195,0	100,0	2880	28,1	102	80+	4000	0,80
* tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C									



Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface ЕМ3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology) ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable 0-pole "Europlug" type plug with 2x1.0mm² 3.0m cable 0-pole diffuser with high light transmittance WIE3-0.5m WIE5D-0.5m

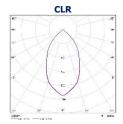
Europlug-1.5m Europlug-3.0m

OP LT80

MPRZ LT92 Translucent micro-prismatic diffuser with high light transmittance

RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+









AURIGA C LED

Product Group: Downlights

















Description:

A traditional recessed LED downlight with clear diffuser and deepened faceted reflector for a better glare control

Diffuser: clear glass

Reflector: faceted aluminum, 60° light beam, UGR<19

Body: die-cast aluminum, white finish, tool free spring clip installation, with remote driver

General data:

Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK05

EEC: A+/A++

Installation:

Suitable for plasterboard or similar types of ceiling, requires a cut-out: Ø195(176). Push-in terminal, 2x1.5mm2

Environment: Indoor

Application:

Office, education, household, hotel, corridor, bathroom, retail, showroom, exhibition, public place

	Vidth, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
195	195	140	1549	14,1	110	80+	3000	0,80
195	195	140	2150	19,6	110	80+	3000	0,80
195	195	140	2900	28,1	103	80+	3000	0,80
195	195	140	1597	14,1	113	80+	4000	0,80
195	195	140	2216	19,6	113	80+	4000	0,80
195	195	140	2990	28,1	106	80+	4000	0,80
195	195	140	1417	14,1	100	80+	3000	0,80
195	195	140	1967	19,6	101	80+	3000	0,80
195	195	140	2653	28,1	94	80+	3000	0,80
195	195	140	1461	14,1	103	80+	4000	0,80
195	195	140	2027	19,6	104	80+	4000	0,80
195	195	140	2735	28,1	97	80+	4000	0,80
195	195	140	1398	14,1	99	80+	3000	0,80
195	195	140	1940	19,6	99	80+	3000	0,80
195	195	140	2617	28,1	93	80+	3000	0,80
195	195	140	1442	14,1	102	80+	4000	0,80
195	195	140	1999	19,6	102	80+	4000	0,80
195	195	140	2698	28,1	96	80+	4000	0,80
	195 195 195 195 195 195 195 195 195 195	195 195	mm mm mm 195 195 140	Ingth, mm Width, mm Height, lm output*, lm 195 195 140 1549 195 195 140 2150 195 195 140 2900 195 195 140 1597 195 195 140 2216 195 195 140 2990 195 195 140 1967 195 195 140 1967 195 195 140 2653 195 195 140 1461 195 195 140 2027 195 195 140 2735 195 195 140 2735 195 195 140 1940 195 195 140 1940 195 195 140 2617 195 195 140 2617 195 195 140 2617 195	Ingth, mm Woldth, mm Height, mm output*, lm power*, w 195 195 140 1549 14,1 195 195 140 2150 19,6 195 195 140 2900 28,1 195 195 140 1597 14,1 195 195 140 2216 19,6 195 195 140 2990 28,1 195 195 140 2990 28,1 195 195 140 1967 19,6 195 195 140 1967 19,6 195 195 140 2653 28,1 195 195 140 1461 14,1 195 195 140 2027 19,6 195 195 140 2027 19,6 195 195 140 1398 14,1 195 195 140 1940 19,6 </td <td>Ingth, mm Woldth, mm Height, mm output*, lm power*, lm/w efficacy*, lm/w 195 195 140 1549 14,1 110 195 195 140 2150 19,6 110 195 195 140 2900 28,1 103 195 195 140 1597 14,1 113 195 195 140 2216 19,6 113 195 195 140 2290 28,1 106 195 195 140 2990 28,1 106 195 195 140 1417 14,1 100 195 195 140 1967 19,6 101 195 195 140 2653 28,1 94 195 195 140 1461 14,1 103 195 195 140 2027 19,6 104 195 195 140 202</td> <td>Ingth, mm Woldth, mm Height, mm output*, lm power*, efficacy* / lm/W CRI 195 195 140 1549 14,1 110 80+ 195 195 140 2150 19,6 110 80+ 195 195 140 2900 28,1 103 80+ 195 195 140 1597 14,1 113 80+ 195 195 140 2216 19,6 113 80+ 195 195 140 2216 19,6 113 80+ 195 195 140 2990 28,1 106 80+ 195 195 140 2990 28,1 106 80+ 195 195 140 1967 19,6 113 80+ 195 195 140 1967 19,6 101 80+ 195 195 140 2653 28,1 94 80+</td> <td>Ingth, mm Width, mm Height, lm output*, w power*, efficacy*, lm/W CRI CCI K 195 195 140 1549 14,1 110 80+ 3000 195 195 140 2150 19,6 110 80+ 3000 195 195 140 2900 28,1 103 80+ 3000 195 195 140 1597 14,1 113 80+ 4000 195 195 140 2216 19,6 113 80+ 4000 195 195 140 2290 28,1 106 80+ 4000 195 195 140 2990 28,1 106 80+ 4000 195 195 140 1967 19,6 101 80+ 3000 195 195 140 1967 19,6 101 80+ 3000 195 195 140 2653 <</td>	Ingth, mm Woldth, mm Height, mm output*, lm power*, lm/w efficacy*, lm/w 195 195 140 1549 14,1 110 195 195 140 2150 19,6 110 195 195 140 2900 28,1 103 195 195 140 1597 14,1 113 195 195 140 2216 19,6 113 195 195 140 2290 28,1 106 195 195 140 2990 28,1 106 195 195 140 1417 14,1 100 195 195 140 1967 19,6 101 195 195 140 2653 28,1 94 195 195 140 1461 14,1 103 195 195 140 2027 19,6 104 195 195 140 202	Ingth, mm Woldth, mm Height, mm output*, lm power*, efficacy* / lm/W CRI 195 195 140 1549 14,1 110 80+ 195 195 140 2150 19,6 110 80+ 195 195 140 2900 28,1 103 80+ 195 195 140 1597 14,1 113 80+ 195 195 140 2216 19,6 113 80+ 195 195 140 2216 19,6 113 80+ 195 195 140 2990 28,1 106 80+ 195 195 140 2990 28,1 106 80+ 195 195 140 1967 19,6 113 80+ 195 195 140 1967 19,6 101 80+ 195 195 140 2653 28,1 94 80+	Ingth, mm Width, mm Height, lm output*, w power*, efficacy*, lm/W CRI CCI K 195 195 140 1549 14,1 110 80+ 3000 195 195 140 2150 19,6 110 80+ 3000 195 195 140 2900 28,1 103 80+ 3000 195 195 140 1597 14,1 113 80+ 4000 195 195 140 2216 19,6 113 80+ 4000 195 195 140 2290 28,1 106 80+ 4000 195 195 140 2990 28,1 106 80+ 4000 195 195 140 1967 19,6 101 80+ 3000 195 195 140 1967 19,6 101 80+ 3000 195 195 140 2653 <

 $[^]st$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Europlug-1.5m 2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable Europlug-3.0m 2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable

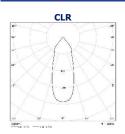
OP LT80 Opal diffuser with high light transmittance

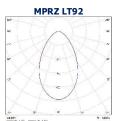
MPRZ LT92 Translucent micro-prismatic diffuser with high light transmittance

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+











CRUX LED

Product Group: Downlights















Description:

A recessed LED downlight with deepened opal diffuser and attractive look

Diffuser: opal polycarbonate, UV stable, with white coated ring Body: aluminium, white finish, tool free spring clip installation

Mains voltage: 220-240V, 0/50-60Hz

General data: Mains v

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK04

EEC: A+/A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: Ø200(185), Ø235(220). Screw terminal, 2x1.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, bathroom, retail, showroom, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Crux LED1x1100 E307 T830 OP	200	200	90	1006	9,5	106	80+	3000	0,80
Crux LED1x1500 E308 T830 OP	200	200	90	1412	13,1	108	80+	3000	0,80
Crux LED1x2100 E309 T830 OP	200	200	90	1942	18,7	104	80+	3000	0,80
Crux LED1x1400 E310 T830 OP	235	235	90	1261	11,8	107	80+	3000	0,90
Crux LED1x1900 E311 T830 OP	235	235	90	1774	16,0	111	80+	3000	0,90
Crux LED1x2600 E312 T830 OP	235	235	90	2458	23,1	107	80+	3000	0,90
Crux LED1x1100 E307 T840 OP	200	200	90	1053	9,5	111	80+	4000	0,80
Crux LED1x1500 E308 T840 OP	200	200	90	1479	13,1	113	80+	4000	0,80
Crux LED1x2100 E309 T840 OP	200	200	90	2035	18,7	109	80+	4000	0,80
Crux LED1x1400 E310 T840 OP	235	235	90	1321	11,8	112	80+	4000	0,90
Crux LED1x1900 E311 T840 OP	235	235	90	1858	16,0	116	80+	4000	0,90
Crux LED1x2600 E312 T840 OP	235	235	90	2575	23,1	112	80+	4000	0,90

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
EM3 Emergency version 3 hours

EM3B Emergency version 3 hours (best available technology)

EM3A Emergency version equipped with an autonomous testing system, 3 hours

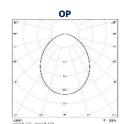
EM3D Emergency version 3 hours with DALI interface

WIE3-0.5m 3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
WIE5D-0.5m 5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable

Europlug-1.5m
2-pole "Europlug" type plug with 2x1.0mm² 1.5m cable
Europlug-3.0m
2-pole "Europlug" type plug with 2x1.0mm² 3.0m cable

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





TETRA A LED

Product Group: Downlights













Description:

A square LED downlight with translucent micro-prismatic diffuser and attractive look

Diffuser: translucent micro-prismatic PMMA, UV stable Body: steel sheet, white finish, tool free spring clip installation

General data:

Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK05

EEC: A+/A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: 260x260(245x240). Screw terminal, 2x1.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, bathroom, retail, showroom, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Tetra A LED1x1100 D984 T830 MPRZ LT92	260	260	65	1107	10,7	103	+08	3000	1,50
Tetra A LED1x1550 D985 T830 MPRZ LT92	260	260	65	1547	14,7	105	+08	3000	1,50
Tetra A LED1x2100 D986 T830 MPRZ LT92	260	260	65	2084	20,1	104	80+	3000	1,50
Tetra A LED1x2550 D987 T830 MPRZ LT92	260	260	65	2550	26,1	98	80+	3000	1,50
Tetra A LED1x1100 D984 T840 MPRZ LT92	260	260	65	1167	10,7	109	+08	4000	1,50
Tetra A LED1x1550 D985 T840 MPRZ LT92	260	260	65	1631	14,7	111	80+	4000	1,50
Tetra A LED1x2100 D986 T840 MPRZ LT92	260	260	65	2197	20,1	109	80+	4000	1,50
Tetra A LED1x2550 D987 T840 MPRZ LT92	260	260	65	2688	26,1	103	80+	4000	1,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming Driver with DALI interface Emergency version 3 hours DALI EM3

ЕМ3В

Emergency version 3 hours (best available technology)
Emergency version equipped with an autonomous testing system, 3 hours ЕМ3А

EM3D

Emergency version equipped with an autonomous testing system, 3 hours Emergency version 3 hours with DALI interface
3-pole "Wieland - gesis classic" type or compatible connector with 0.5m cable
5-pole DALI "Wieland - gesis classic" type or compatible connector with 0.5m cable
3-pole "Schuko" type plug with 3x1.0mm 1.5m cable
3-pole "Schuko" type plug with 3x1.0mm 2.2.0 miles and 1.5m cable WIE3-0.5m WIE5D-0.5m

Schuko-1.5m Schuko-3.0m 3-pole "Schuko" type plug with 3x1.0mm² 3.0m cable

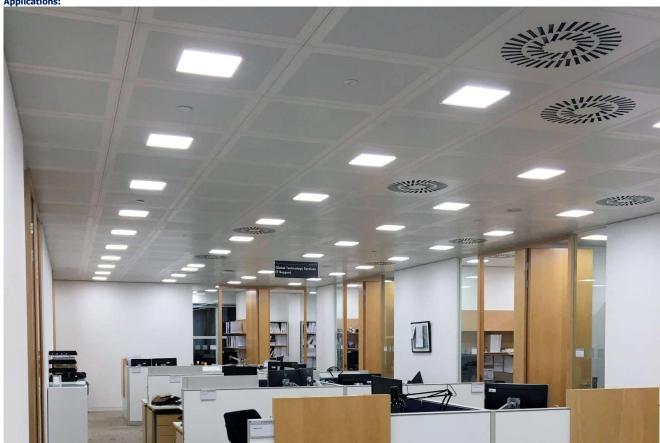
RAL colour RAI

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840

MPRZ LT92



Applications:







ANDROMEDA P LED

Product Group: Downlights















Images for the product family and options:



Description: A budget recessed LED downlight with deepened opal diffuser and attractive look

Diffuser: opal, UV stable

Body: white polycarbonate, tool free spring clip installation

General data:

EEC: A+

Mains voltage: 220-240V, 50-60Hz Power factor: >0,60 (>0,80 14-20W versions)

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 40000/L70B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK04

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: Ø92(75), Ø113(95), Ø174(150), Ø244(200). Screw terminal,

2x1.5mm2 **Environment:** Indoor

Application: Office, education, household, hotel, corridor, bathroom, retail, showroom, public place

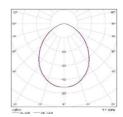
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Andromeda P LED1x700 D522 T830 OP	92	92	64	660	7,0	94	80+	3000	0,11
Andromeda P LED1x1000 D523 T830 OP	113	113	73	930	10,0	93	80+	3000	0,16
Andromeda P LED1x1400 D524 T830 OP	174	174	79	1330	14,0	95	80+	3000	0,28
Andromeda P LED1x2100 D525 T830 OP	244	244	95	1960	20,0	98	80+	3000	0,53
Andromeda P LED1x700 D522 T840 OP	92	92	64	700	7,0	100	80+	4000	0,11
Andromeda P LED1x1000 D523 T840 OP	113	113	73	980	10,0	98	80+	4000	0,16
Andromeda P LED1x1400 D524 T840 OP	174	174	79	1400	14,0	100	80+	4000	0,28
Andromeda P LED1x2100 D525 T840 OP	244	244	95	2060	20,0	103	80+	4000	0,53
* tolerance representational electrical data: \(100\)					_3,0	-33		.500	0,00

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

OP Opal diffuser

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





ANDROMEDA LED

Product Group: Downlights















Description: A budget recessed LED downlight with deepened opal diffuser for direct replacement for traditional compact fluorescent downlights

Diffuser: opal polycarbonate, UV stable Body: aluminium, white finish, tool free spring clip installation

Mains voltage: 220-240V, 50-60Hz General data:

Power factor: >0,60/0,80 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 36000/L70B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP40 Mechanical impact resistance: IK02

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: Ø125(100), Ø150(125), Ø181(165), Ø227(210). Screw terminal,

2x1.5mm2

Environment: Indoor

Office, education, household, hotel, corridor, retail, showroom, public place Application:

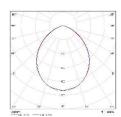
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Andromeda LED1x800 B876 T840 OP	125	125	66	800	10,0	80	80+	4000	0,15
Andromeda LED1x1040 B877 T840 OP	150	150	72	1040	12,1	86	+08	4000	0,17
Andromeda LED1x1280 B878 T840 OP	181	181	82	1280	16,2	79	80+	4000	0,22
Andromeda LED1x1680 B879 T840 OP	227	227	97	1680	20.2	83	80+	4000	0.26

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Opal diffuser

T840 Colour temperature 4000K, CRI 80+





ROUND LED

Product Group: Downlights















Description: A low height LED downlight with opal diffuser to allow installation into low and restricted ceiling voids

Diffuser: opal, UV stable

Body: die-cast aluminum, white finish, free spring clip installation

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,60 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 36000/L70B50

Operating temperature range, °C: ta 0...+35

Protection class IEC: II Ingress protection code: IP44 Mechanical impact resistance: IK04

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: Ø120(110), Ø150(135), Ø170(160), Ø190(180), Ø225(210),

Ø240(225). Cable, 0.3m, 2x0.75mm2

Environment: Indoor

Office, education, household, hotel, corridor, bathroom, retail, showroom, public place **Application:**

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Round LED1x450 C218 T830 OP IP44	120,0	120,0	12,0	427	6,0	71	+08	3000	0,28
Round LED1x700 C219 T830 OP IP44	150,0	150,0	12,0	649	9,0	72	+08	3000	0,30
Round LED1x900 C220 T830 OP IP44	170,0	170,0	12,0	901	12,0	75	80+	3000	0,32
Round LED1x1150 C221 T830 OP IP44	190,0	190,0	12,0	1071	15,0	71	+08	3000	0,46
Round LED1x1350 C222 T830 OP IP44	225,0	225,0	12,0	1324	18,0	74	+08	3000	0,54
Round LED1x1800 C223 T830 OP IP44	240,0	240,0	12,0	1714	24,0	71	80+	3000	0,60
Round LED1x450 C218 T840 OP IP44	120,0	120,0	12,0	450	6,0	75	+08	4000	0,28
Round LED1x700 C219 T840 OP IP44	150,0	150,0	12,0	676	9,0	75	80+	4000	0,30
Round LED1x900 C220 T840 OP IP44	170,0	170,0	12,0	917	12,0	76	80+	4000	0,32
Round LED1x1150 C221 T840 OP IP44	190,0	190,0	12,0	1125	15,0	75	80+	4000	0,46
Round LED1x1350 C222 T840 OP IP44	225,0	225,0	12,0	1351	18,0	75	80+	4000	0,54
Round LED1x1800 C223 T840 OP IP44	240,0	240,0	12,0	1800	24,0	75	80+	4000	0,60

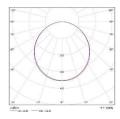
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface FM3B

Emergency version 3 hours (best available technology) Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840



Applications:





ANTLIA LED

Product Group: Downlights















Images for the product family and options:





Description: A surface LED downlight with deepened faceted reflector and cylindrical shape and attractive look

Reflector: faceted aluminum, 40° light beam, UGR<16

Body: die-cast aluminum, white finish Body: aluminum, white finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90
Light source: LED
Light source included: Yes
Light distribution type: Direct
LED lifetime, h: 50000/75000/L80B50
Operating temperature range, °C: ta 0...+35
Protection class IEC: I
Degrees protection code: IP20

Ingress protection code: IP20 Mechanical impact resistance: IK02 EEC: A+/A++

Installation: Suitable for surface mounting on ceiling. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, hotel, retail, showroom, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Antlia LED1x1600 D342 T830	168	168	172	1549	14,1	110	80+	3000	1,00
Antlia LED1x2300 D343 T830	168	168	172	2150	20,7	104	80+	3000	1,00
Antlia LED1x3000 D344 T830	168	168	172	2900	28,4	102	+08	3000	1,00
Antlia LED1x1600 D342 T840	168	168	172	1597	14,1	113	+08	4000	1,00
Antlia LED1x2300 D343 T840	168	168	172	2216	20,7	107	+08	4000	1,00
Antlia LED1x3000 D344 T840	168	168	172	2990	28,4	105	80+	4000	1,00

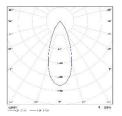
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming DALI Driver with DALI interface 1G Strain relief for power supply cable SUS Suspended version

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+



Available accessories:

Product: Suspension MTG KIT SUSI

Description: Suspension wire set "I" type, 1.5m adjustable, 1pcs

*note - 1pcs MTG KIT SUSI for one fitting required



ANTLIA C LED

Product Group: Downlights















Description: A surface LED downlight with deepened opal diffuser and cylindrical shape

Diffuser: opal, UV stable Body: aluminum, white finish

Mains voltage: 220-240V, 50-60Hz General data:

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 50000/L80B50 (75000/L80B50 low power versions)

Operating temperature range, °C: ta 0...+35

Protection class IEC: I Ingress protection code: IP44 Mechanical impact resistance: IK04

EEC: A++

Installation: Suitable for surface mounting on ceiling. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Office, education, household, hotel, corridor, bathroom, retail, showroom, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Antlia C LED1x1400 D345 T830 OP	200,0	200,0	130,0	1261	11,8	107	80+	3000	1,00
Antlia C LED1x1900 D346 T830 OP	200,0	200,0	130,0	1774	16,0	111	80+	3000	1,00
Antlia C LED1x2600 D347 T830 OP	200,0	200,0	130,0	2458	23,1	107	80+	3000	1,00
Antlia C LED1x1400 D345 T840 OP	200,0	200,0	130,0	1321	11,8	112	80+	4000	1,00
Antlia C LED1x1900 D346 T840 OP	200,0	200,0	130,0	1858	16,0	116	80+	4000	1,00
Antlia C LED1x2600 D347 T840 OP 1G	200,0	200,0	130,0	2575	23,1	112	80+	4000	1,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

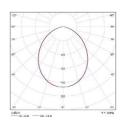
Emergency version 3 hours (best available technology)

*note - EM options not applicable for models: D347

1G Strain relief for power supply cable

RAL RAL colour

Colour temperature 3000K, CRI 80+ T830 T840 Colour temperature 4000K, CRI 80+





PERSEUS C LED

Product Group: Downlights













Images for the product family and options:





Description: A recessed LED downlight with faceted reflector ideal for environments subject to humidity and excessive dust

Diffuser: tempered glass, silicon gasket

Reflector: faceted aluminum, 50° light beam, UGR<19

Body: die-cast aluminum, white finish, tool free spring clip installation, with remote IP65 driver

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/75000/L80B50 Operating temperature range, °C: ta 0...+35 Protection class IEC: II

Ingress protection code: IP65 Mechanical impact resistance: IK05

EEC: A+/A++

Installation: Suitable for plasterboard or similar types of ceiling, requires a cut-out: Ø225(205). Cable, 0.3m, 2x0.75mm2

Environment: Indoor/outdoor with roof

Application: Office, hotel, bathroom, retail, showroom, exhibition, public place

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Perseus C LED1x2300 E956 T830 CLR	225	225	90	2183	19,9	110	80+	3000	1,20
Perseus C LED1x3100 E957 T830 CLR	225	225	90	2982	28,0	106	80+	3000	1,20
Perseus C LED1x4400 E958 T830 CLR	225	225	90	4294	42,3	101	+08	3000	1,20
Perseus C LED1x2300 E956 T840 CLR	225	225	90	2251	19,9	113	80+	4000	1,20
Perseus C LED1x3100 E957 T840 CLR	225	225	90	3074	28,0	110	+08	4000	1,20
Perseus C LED1x4400 E958 T840 CLR	225	225	90	4426	42,3	105	80+	4000	1,20

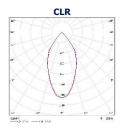
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

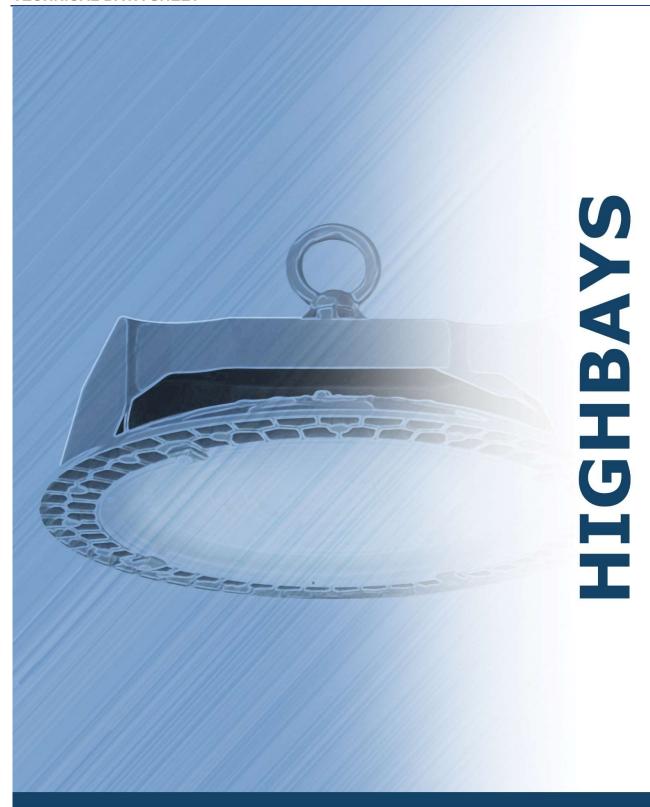
SDIM Driver with switch-control dimming DALI Driver with DALI interface

CLR Clear glass RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+







www.northcliffe.org



MONTBLANC LED

Product Group: High-bays



General data:













Description: A suspended LED low-bay luminaire with industrial design for high mounting applications

Reflector: aluminium, silver finish Diffuser: tempered glass, frosted Body: aluminium, silver finish Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP20 Mechanical impact resistance: IK04 EEC: A+

Installation: Suspended. Supplied with suspension kit and out-going cable for easy mounting. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Retail, showroom, hall, exhibition, public place



A lighting fixture is supplied with suspension chain, decorative cap and out-going cable for easy installation

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Montblanc LED1x2800 D016 T830	330	330	350	2695	28,4	95	80+	3000	4,60
Montblanc LED1x4000 D017 T830	330	330	350	3880	42,3	92	+08	3000	4,60
Montblanc LED1x5200 D018 T830	330	330	350	4976	58,4	85	80+	3000	4,60
Montblanc LED1x2800 D016 T840	330	330	350	2778	28,4	98	80+	4000	4,60
Montblanc LED1x4000 D017 T840	330	330	350	4000	42,3	94	80+	4000	4,60
Montblanc LED1x5200 D018 T840	330	330	350	5130	58,4	88	+08	4000	4,60

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

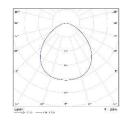
Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





PRIZMA LED

Product Group: High-bays



















Description: A suspended LED low-bay luminaire with transparent prismatic reflector for high mounting applications

Reflector: transparent polycarbonate, prismatic, UV stable

Body: die-cast aluminium, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta 0...+40

Protection class IEC: I Ingress protection code: IP23

Mechanical impact resistance: IK02 EEC: A++

Installation: Suspended. Supplied with suspension hook for easy mounting. Screw terminal, 3x2.5mm2

Environment: Indoor

Application: Retail, showroom, hall, exhibition, public place



Protective cover for glare control available on request. For more information see the option list

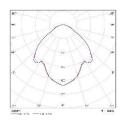
Length, mm	Width, mm	Height, mm	Luminaire output*,	System power*,	System efficacy*	CRI	CCT*,	Weight, kg
410	410	425				90.1	3000	2.50
								3,50 3,50
								5,80
510	510	540	10694	98,3	109	80+	3000	5,80
410	410	425	4012	31,3	128	80+	4000	3,50
410	410	425	5911	48,3	122	+08	4000	3,50
510	510	540	8943	77,1	116	+08	4000	5,80
510	510	540	10971	98,3	112	+08	4000	5,80
	410 410 510 510 410 410 510	mm mm 410 410 410 410 510 510 510 510 410 410 410 410 510 510 510 510 510 510	mm mm mm 410 410 425 410 410 425 510 510 540 510 510 540 410 410 425 410 410 425 510 510 540 510 510 540 510 510 540	Length, mm Width, mm Height, mm output*, lm 410 410 425 3911 410 410 425 5763 510 510 540 8718 510 510 540 10694 410 410 425 4012 410 410 425 5911 510 510 540 8943 510 510 540 10971	Length, mm Width, mm Height, mm output*, w power*, w 410 410 425 3911 31,3 410 410 425 5763 48,3 510 510 540 8718 77,1 510 510 540 10694 98,3 410 410 425 4012 31,3 410 410 425 5911 48,3 510 510 540 8943 77,1 510 510 540 10971 98,3	Length, mm Width, mm Height, mm output*, lm power*, w efficacy*, lm/W 410 410 425 3911 31,3 125 410 410 425 5763 48,3 119 510 510 540 8718 77,1 113 510 510 540 10694 98,3 109 410 410 425 4012 31,3 128 410 410 425 5911 48,3 122 510 510 540 8943 77,1 116 510 510 540 10971 98,3 112	Length, mm Width, mm Height, lm output*, lm power*, w efficacy*, lm/W CRI 410 410 425 3911 31,3 125 80+ 410 410 425 5763 48,3 119 80+ 510 510 540 8718 77,1 113 80+ 510 510 540 10694 98,3 109 80+ 410 410 425 4012 31,3 128 80+ 410 410 425 5911 48,3 122 80+ 510 510 540 8943 77,1 116 80+ 510 510 540 10971 98,3 112 80+	Length, mm Width, mm Height, mm output*, lm power*, w efficacy*, lm/W CRI CCT, K 410 410 425 3911 31,3 125 80+ 3000 410 410 425 5763 48,3 119 80+ 3000 510 510 540 8718 77,1 113 80+ 3000 510 510 540 10694 98,3 109 80+ 3000 410 410 425 4012 31,3 128 80+ 4000 410 410 425 5911 48,3 122 80+ 4000 510 510 540 8943 77,1 116 80+ 4000 510 510 540 10971 98,3 112 80+ 4000

tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C and $\pm 10\%$.

Available options:

SDIM Driver with switch-control dimming
DALI Driver with DALI interface
COVER Protective polycarbonate cover
RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+ T850 Colour temperature 5000K, CRI 80+









NORTE L LED

Product Group: High-bays









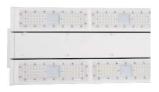














Description: An industrial LED high-bay luminaire with a modern construction and high impact resistance

Optics: 40°, 60°, 90°, 30x70° light beam, silicone rubber sealing, impact resistance

Body: aluminium, white finish

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct

LED lifetime, h: 75000/L80B50 (100000/L80B50 low power versions) Operating temperature range, °C: ta -20...+35 (ta 0...+35 with EM3 option)

Protection class IEC: I

Ingress protection code: IP65

Mechanical impact resistance: IK08 (IK10 with protection grid)

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Industry, warehouse, hall, sports, transport terminal



A white protection grid accessory GRID MTG KIT Norte L LED can be used to increase impact resistance of the luminaire to IK10. This version is designed for sports halls, gyms and other spaces where light fittings are in danger of being hit by a ball. For more information see the accessory list

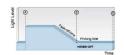


Fixture mounted HBPIR sensors provide fast installation and immediate energy savings by automatically activating lighting only during periods of occupancy. Reliable passive infrared (PIR) technology detects occupancy, and the variable time delay - up to 30 minutes is user accessible without power, tools or disassembly, and allows the ideal setting based on application needs. Included with the sensor are lenses for high-bay, low-bay and aisle mounting, allowing one unit to cover a variety of applications. The innovative Autocal feature performs an automatic daylight level calibration. Once calibrated, the sensor requires no further adjustment and immediately enters daylight harvesting mode, actively switching the connected fixture load ON and OFF in response to occupancy and available natural light maximizing energy savings through efficient light harvesting.



Fixture mounted HBEAIR sensors ensure lighting is only on when and where it is needed. The sensors in combination with can bring huge benefits in terms of energy management as they provide occupancy detection and daylight sensing for heights up to 16 meters. Energy saving - typically between 30% and 50%. HBEAIR can be easily programmed via a smartphone, that offers immense flexibility to commission luminaires into groups and further divided in zones wirelessly.

The HBEAIR offers intelligent wireless lighting control, for warehouse (and similar) applications. Advatages: 5m-16m mounting height, simple grouping via NFC and IR with the Apps, zoning and occupancy sharing (zone with motion goes to full task level while sub-zones are maintained at background light level).



Corridor option automatic switching is based on presence/motion with the time delay set on site to suit the customer's requirements, where no presence is detected the light level will fade from 100% down to 10% saving up to 60% of the energy usage. The COR function does not abruptly switch off the lighting but dims it to a 10% level. Depending on the profile selected the device remains at this light level ("never off" profile) or switches off completely after the appropriate delay ("Switch off" profile). This arrangement provides efficient energy savings in 24-hour applications where light is needed round the clock for safety reasons, for example in stairwells and corridors in public buildings, and in large apartment complexes, car parks, pedestrian underpasses, warehouses and underground railway stations.



Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficac y*, Im/W	CRI	сст*, к	Weight, kg
Norte L LED1x6650 D574 T830 ALU L90	468	340	80	6277	41,6	151	80+	3000	2,80
Norte L LED1x7550 D575 T830 ALU L90	468	340	80	7123	48,0	148	80+	3000	2,80
Norte L LED1x9300 D576 T830 ALU L90	468	340	80	8783	60,9	144	80+	3000	2,80
Norte L LED1x11000 D577 T830 ALU L90	468	340	80	10405	72,5	144	80+	3000	2,80
Norte L LED1x12700 D578 T830 ALU L90	468	340	80	11996	85,4	141	80+	3000	2,80
Norte L LED1x15100 D579 T830 ALU L90 Norte L LED1x18600 D580 T830 ALU L90	675 675	340 340	80 80	14246 17566	93,9 119,3	152 147	80+ 80+	3000 3000	4,30
Norte L LED1x18600 D580 1830 ALU L90 Norte L LED1x22000 D581 T830 ALU L90	675	340	80	20810	145,0	144	80+	3000	4,30 4,30
Norte L LED1x25400 D581 T630 ALG L90	675	340	80	23992	170,7	141	80+	3000	4,30
Norte L LED1x27900 D583 T830 ALU L90	975	340	80	26349	178,9	147	80+	3000	6,50
Norte L LED1x33000 D584 T830 ALU L90	975	340	80	31215	217,5	144	80+	3000	6,50
Norte L LED1x38050 D585 T830 ALU L90	975	340	80	35987	256,1	141	80+	3000	6,50
Norte L LED1x6650 D574 T840 ALU L90	468	340	80	6636	41,6	159	80+	4000	2,80
Norte L LED1x7550 D575 T840 ALU L90	468	340	80	7530	48,0	157	80+	4000	2,80
Norte L LED1x9300 D576 T840 ALU L90	468	340	80	9285	60,9	152	80+	4000	2,80
Norte L LED1x11000 D577 T840 ALU L90	468	340	80	11000	72,5	152	80+	4000	2,80
Norte L LED1x12700 D578 T840 ALU L90 Norte L LED1x15100 D579 T840 ALU L90	468 675	340 340	80 80	12681 15061	85,4 93,9	149 160	80+ 80+	4000 4000	2,80 4,30
Norte L LED1x13100 D379 1840 ALU L90	675	340	80	18570	119,3	156	80+	4000	4,30
Norte L LED1x22000 D581 T840 ALU L90	675	340	80	21999	145,0	152	80+	4000	4,30
Norte L LED1x25400 D582 T840 ALU L90	675	340	80	25363	170,7	149	80+	4000	4,30
Norte L LED1x27900 D583 T840 ALU L90	975	340	80	27854	178,9	156	80+	4000	6,50
Norte L LED1x33000 D584 T840 ALU L90	975	340	80	32999	217,5	152	80+	4000	6,50
Norte L LED1x38050 D585 T840 ALU L90	975	340	80	38044	256,1	149	80+	4000	6,50
Norte L LED1x6650 D574 T830 ALU L30x70	468	340	80	6349	41,6	153	80+	3000	2,80
Norte L LED1x7550 D575 T830 ALU L30x70	468	340	80	7204	48,0	150	80+	3000	2,80
Norte L LED1x9300 D576 T830 ALU L30x70	468	340	80	8883	60,9	146	80+	3000	2,80
Norte L LED1x11000 D577 T830 ALU L30x70	468	340	80	10523	72,5	145	80+	3000	2,80
Norte L LED1x12700 D578 T830 ALU L30x70	468	340	80	12132	85,4	142	+08	3000	2,80
Norte L LED1x15100 D579 T830 ALU L30x70	675	340	80	14408	93,9	153	80+	3000	4,30
Norte L LED1x18600 D580 T830 ALU L30x70	675	340	80	17766	119,3	149	80+	3000	4,30 4,30
Norte L LED1x22000 D581 T830 ALU L30x70 Norte L LED1x25400 D582 T830 ALU L30x70	675 675	340 340	80 80	21047 24264	145,0 170,7	145 142	80+ 80+	3000 3000	4,30
Norte L LED1x27900 D582 T830 ALU L30x70	975	340	80	26648	178,9	149	80+	3000	6,50
Norte L LED1x33000 D584 T830 ALU L30x70	975	340	80	31570	217,5	145	80+	3000	6,50
Norte L LED1x38050 D585 T830 ALU L30x70	975	340	80	36396	256,1	142	80+	3000	6,50
Norte L LED1x6650 D574 T840 ALU L30x70	468	340	80	6711	41,6	161	80+	4000	2,80
Norte L LED1x7550 D575 T840 ALU L30x70	468	340	80	7616	48,0	159	80+	4000	2,80
Norte L LED1x9300 D576 T840 ALU L30x70	468	340	80	9390	60,9	154	+08	4000	2,80
Norte L LED1x11000 D577 T840 ALU L30x70	468	340	80	11125	72,5	153	80+	4000	2,80
Norte L LED1x12700 D578 T840 ALU L30x70	468	340	80	12825	85,4	150	80+	4000	2,80
Norte L LED1x15100 D579 T840 ALU L30x70 Norte L LED1x18600 D580 T840 ALU L30x70	675 675	340 340	80 80	15232	93,9	162 157	80+ 80+	4000 4000	4,30
Norte L LED1x18600 D580 1840 ALU L30x70 Norte L LED1x22000 D581 T840 ALU L30x70	675	340	80	18781 22249	119,3 145,0	153	80+	4000	4,30 4,30
Norte L LED1x25400 D581 T840 ALU L30x70	675	340	80	25651	170,7	150	80+	4000	4,30
Norte L LED1x27900 D583 T840 ALU L30x70	975	340	80	28171	178,9	157	80+	4000	6,50
Norte L LED1x33000 D584 T840 ALU L30x70	975	340	80	33374	217,5	153	80+	4000	6,50
Norte L LED1x38050 D585 T840 ALU L30x70	975	340	80	38476	256,1	150	80+	4000	6,50
Norte L LED1x6650 D574 T830 ALU L120	435	343	78	6705	39,6	169	80+	3000	2,80
Norte L LED1x7550 D575 T830 ALU L120	435	343	78	7609	45,7	167	80+	3000	2,80
Norte L LED1x9300 D576 T830 ALU L120	435	343	78	9382	58,0	162	80+	3000	2,80
Norte L LED1x11000 D577 T830 ALU L120	435	343	78	11114	69,1	161	80+	3000	2,80
Norte L LED1x12700 D578 T830 ALU L120	435	343	78	12814	81,3	158	80+	3000	2,80
Norte L LED1x15100 D579 T830 ALU L120	645	343	78	15218	89,5	170	80+	3000	4,30
Norte L LED1x18600 D580 T830 ALU L120	645	343	78	18764	113,6	165	80+	3000	4,30
Norte L LED1x22000 D581 T830 ALU L120	645	343	78	22229	138,1	161	80+	3000	4,30
Norte L LED1x25400 D582 T830 ALU L120 Norte L LED1x27900 D583 T830 ALU L120	645 945	343 343	78 78	25627 28145	162,6 170,4	158 165	80+ 80+	3000 3000	4,30 6,50
Norte L LED1x37900 D363 1830 ALU L120	945	343	78	33343	207,2	161	80+	3000	6,50
Norte L LED1x38050 D585 T830 ALU L120	945	343	78	38441	244,0	158	80+	3000	6,50
Norte L LED1x6650 D574 T840 ALU L120	435	343	78	7088	39,6	179	80+	4000	2,80
Norte L LED1x7550 D575 T840 ALU L120	435	343	78	8044	45,7	176	80+	4000	2,80
Norte L LED1x9300 D576 T840 ALU L120	435	343	78	9918	58,0	171	80+	4000	2,80
Norte L LED1x11000 D577 T840 ALU L120	435	343	78	11750	69,1	170	80+	4000	2,80
Norte L LED1x12700 D578 T840 ALU L120	435	343	78	13546	81,3	167	80+	4000	2,80
Norte L LED1x15100 D579 T840 ALU L120	645	343	78	16087	89,5	180	80+	4000	4,30
Norte L LED1x18600 D580 T840 ALU L120	645	343	78	19836	113,6	175	80+	4000	4,30
Norte L LED1x22000 D581 T840 ALU L120	645	343	78	23499	138,1	170	80+	4000	4,30
Norte L LED1x25400 D582 T840 ALU L120	645	343	78	27092	162,6	167	80+	4000	4,30
Norte L LED1x27900 D583 T840 ALU L120	945	343 343	78 78	29754	170,4	175	80+	4000	6,50
Norte L LED1x33000 D584 T840 ALU L120 Norte L LED1x38050 D585 T840 ALU L120	945 945	343		35249 40638	207,2 244,0	170 167	80+ 80+	4000 4000	6,50 6,50
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Norte L LED1x6650 D574 T830 ALU L60	468	340	80	6634	41,6	159	80+	3000	2,80
Norte L LED1x7550 D575 T830 ALU L60	468	340	80	7528	48,0	157	80+	3000	2,80
Norte L LED1x9300 D576 T830 ALU L60	468	340	80	9282	60,9	152	80+	3000	2,80
Norte L LED1x11000 D577 T830 ALU L60	468	340	80	10996	72,5	152	80+	3000	2,80
Norte L LED1x12700 D578 T830 ALU L60	468	340	80	12677	85,4	149	80+	3000	2,80
Norte L LED1x15100 D579 T830 ALU L60	675	340	80	15056	93,9	160	80+	3000	4,30
Norte L LED1x18600 D580 T830 ALU L60	675	340	80	18564	119,3	156	80+	3000	4,30
Norte L LED1x22000 D581 T830 ALU L60	675	340	80	21992	145,0	152	80+	3000	4,30
Norte L LED1x25400 D582 T830 ALU L60	675	340	80	25355	170,7	149	80+	3000	4,30
Norte L LED1x27900 D583 T830 ALU L60	975	340	80	27846	178,9	156	80+	3000	6,50
Norte L LED1x33000 D584 T830 ALU L60	975	340	80	32989	217.5	152	80+	3000	6,50
Norte L LED1x38050 D585 T830 ALU L60	975	340	80	38032	256,1	149	80+	3000	6,50
Norte L LED1x56650 D574 T840 ALU L60	468	340	80	7013	41,6	169	80+	4000	2,80
Norte L LED1x7550 D575 T840 ALU L60	468	340	80	7958	48,0	166	80+	4000	2,80
Norte L LED1x7330 D575 T646 ALU L60	468	340	80	9812	60,9	161	80+	4000	2,80
Norte L LED1x11000 D577 T840 ALU L60	468	340	80	11625	72,5	160	80+	4000	2,80
Norte L LED1x11000 D577 1840 ALU L60	468	340	80	13402	85,4	157	80+	4000	2,80
		340	80		93,9		80+	4000	4,30
Norte L LED1x15100 D579 T840 ALU L60	675	340		15916 19625		169	80+	4000	
Norte L LED1x18600 D580 T840 ALU L60	675		80		119,3	165			4,30
Norte L LED1x22000 D581 T840 ALU L60	675	340	80 80	23249	145,0	160	80+ 80+	4000	4,30
Norte L LED1x25400 D582 T840 ALU L60	675	340		26804	170,7	157		4000	4,30
Norte L LED1x27900 D583 T840 ALU L60	975	340	80	29437	178,9	165	80+	4000	6,50
Norte L LED1x33000 D584 T840 ALU L60	975	340	80	34874	217,5	160	80+	4000	6,50
Norte L LED1x38050 D585 T840 ALU L60	975	340	80	40205	256,1	157	80+	4000	6,50
Norte L LED1x6650 D574 T830 ALU L40	468	340	80	6491	41,6	156	80+	3000	2,80
Norte L LED1x7550 D575 T830 ALU L40	468	340	80	7366	48,0	154	80+	3000	2,80
Norte L LED1x9300 D576 T830 ALU L40	468	340	80	9082	60,9	149	80+	3000	2,80
Norte L LED1x11000 D577 T830 ALU L40	468	340	80	10760	72,5	148	80+	3000	2,80
Norte L LED1x12700 D578 T830 ALU L40	468	340	80	12405	85,4	145	80+	3000	2,80
Norte L LED1x15100 D579 T830 ALU L40	675	340	80	14732	93,9	157	80+	3000	4,30
Norte L LED1x18600 D580 T830 ALU L40	675	340	80	18165	119,3	152	80+	3000	4,30
Norte L LED1x22000 D581 T830 ALU L40	675	340	80	21519	145,0	148	80+	3000	4,30
Norte L LED1x25400 D582 T830 ALU L40	675	340	80	24809	170,7	145	80+	3000	4,30
Norte L LED1x27900 D583 T830 ALU L40	975	340	80	27247	178,9	152	80+	3000	6,50
Norte L LED1x33000 D584 T830 ALU L40	975	340	80	32279	217,5	148	80+	3000	6,50
Norte L LED1x38050 D585 T830 ALU L40	975	340	80	37214	256,1	145	80+	3000	6,50
Norte L LED1x6650 D574 T840 ALU L40	468	340	80	6862	41,6	165	80+	4000	2,80
Norte L LED1x7550 D575 T840 ALU L40	468	340	80	7787	48,0	162	80+	4000	2,80
Norte L LED1x9300 D576 T840 ALU L40	468	340	80	9601	60,9	158	80+	4000	2,80
Norte L LED1x11000 D577 T840 ALU L40	468	340	80	11375	72,5	157	80+	4000	2,80
Norte L LED1x11000 D577 T040 ALG L40	468	340	80	13114	85,4	154	80+	4000	2,80
Norte L LED1x12700 D578 1840 ALU L40	675	340	80	15574	93,9	166	80+	4000	4,30
Norte L LED1x15100 D579 1840 ALU L40 Norte L LED1x18600 D580 T840 ALU L40	675	340	80	19203	119,3	161	80+	4000	4,30
Norte L LED1x18600 D580 1840 ALU L40 Norte L LED1x22000 D581 T840 ALU L40	675	340	80	22749	145,0	157	80+	4000	4,30
Norte L LED1x25400 D581 1840 ALU L40 Norte L LED1x25400 D582 T840 ALU L40	675	340	80	26227	170,7	154	80+	4000	4,30
Norte L LED1x25400 D582 1840 ALU L40 Norte L LED1x27900 D583 T840 ALU L40	975	340	80	28804	170,7	161	80+	4000	6,50
Norte L LED1x27900 D583 1840 ALU L40 Norte L LED1x33000 D584 T840 ALU L40	975	340	80	34124	217.5	157	80+	4000	6,50
INDITE F FEDTYSSOUD DOOF 1940 VED FAD	9/0	J + U	οU	24174	Z1/,5	13/	0U+	4000	0,50
Norte L LED1x38050 D585 T840 ALU L40	975	340	80	39341	256,1	154	80+	4000	6,50

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with switch-control dimming SDIM DALI

Driver with DALI interface

HBEAIR Integrated smart sensor for high ceiling (up to 16m) and driver with wireless communication and grouping possibilities for lighting control

COR Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min.) COR30min Driver with Corridor function 30min (switch off after 30 min.)

HBPIR7m Integrated PIR sensor for high ceiling (up to 7 meters) with on-off control HBPIR12m Integrated PIR sensor for high ceiling (up to 12 meters) with on-off control

***rote - Luminaire with integrated HBPIR12m sensor protection degree is IP54

HBPIR15m Integrated PIR sensor for high ceiling (up to 15 meters) with on-off control

EMG

Emergency version 1 hour Emergency version 1 hour (best available technology) EMGB

FM3

EM3B

FM3A

EM3D

Emergency version 1 hour (best available technology)
Emergency version 3 hours
Emergency version 3 hours (best available technology)
Emergency version equipped with an autonomous testing system, 3 hours
Emergency version 3 hours with DALI interface
Strain relief for power supply cable
Optics with 30x70° beam angle
Optics with 40x40° beam angle
Optics with 40x40° beam angle
Optics with 90x90° beam angle
Optics with 90x90° beam angle
Optics with 120x120° beam angle
Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 80+ 1G L30x70 L40 L60 L90 L120 T830 T840 Colour temperature 4000K, CRI 80+



Available accessories:



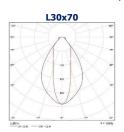
Product: GRID MTG KIT Norte L LED - 468x340mm RAL9003
Description: Protective gride for Norte L LED luminaires up to size 468x340, white

Product: GRID MTG KIT Norte L LED - 675x340mm RAL9003

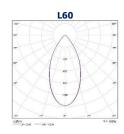
Description: Protective gride for Norte L LED luminaires up to size 675x340, white

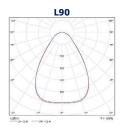
Product: GRID MTG KIT Norte L LED - 975x340mm RAL9003

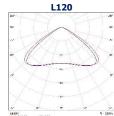
Description: Protective gride for Norte L LED luminaires up to size 975x340, white

















SKY A LED

Product Group: High-bays























Description: An industrial LED high-bay luminaire for high mounting applications in open areas and between shelves

Reflector: specular aluminum, MIRO®, optional narrow (NAR) or middle (MID) beam pattern Diffuser: frosted polycarbonate (PC), de-glaring performance, impact resistance

Body: steel sheet, white finish. Protective grid (SPORT) available on request

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,97 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta -20...+40 (ta 0...+35 with EM3 option)

Protection class IEC: I Ingress protection code: IP65

Mechanical impact resistance: IK08 (IK10 with protection grid)

EEC: A++

Installation: Surface luminaire designed to be fixed to ceiling of any type or suspended. Push-in terminal, 3x2x2.5mm2

Environment: Indoor

Application: Industry, warehouse, hall, sports



Surface mounted SHBPIR Occupancy Sensor is designed simply to automatically turn lights ON or OFF. The sensor utilizes Passive Infrared Technology (PIR) combined with lenses to determine when an area is occupied. This is determined when a heat source is detected and moves from one facet in the lens to another. The sensor recognizes this as a motion and provides power to the light fixture. Simultaneously a timer is started and restarts with each motion, once expired, the lights will turn OFF. The SHBPIR sensor maximizes energy savings, incorporating false detection algorithms to eliminate false ONs by nuisance tripping or background environmental conditions. The sensor also optimizes energy savings and safety concerns during power loss scenarios by assuming a return to last known state of operation.





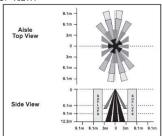
DEFINITIONS:

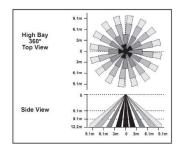
- Passive Infrared (PIR): A line of sight beam that reacts to heated motion across a field of view. It is a type of sensor technology, where no energy is emitted from the sensor.
- · Microwave (MW): It is a type of sensor technology, which sends out microwave pulses (active) and measures the reflection of a moving object. Similar to a police radar gun.

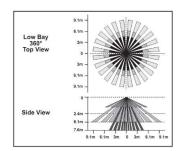


Fixture mounted HBPIR and HBPIR&LIGHT sensors provide fast installation and immediate energy savings by automatically activating lighting only during periods of occupancy. Reliable passive infrared (PIR) technology detects occupancy, and the variable time delay - up to 30 minutes - is user accessible without power, tools or disassembly, and allows the ideal setting based on application needs. Included with the sensor are lenses for high-bay, low-bay and aisle mounting, allowing one unit to cover a variety of applications. The innovative Autocal feature performs an automatic daylight level calibration. Once calibrated, the sensor requires no further adjustment and immediately enters daylight harvesting mode, actively switching the connected fixture load ON and OFF in response to occupancy and available natural light maximizing energy savings through efficient light harvesting.

FIELD OF VIEW:







FAST AND SIMPLE SETTING: The HBPIR does not require power to set the time delay saving valuable time during installation.

FAST AND SIMPLE TESTING: The HBPIR will "instant on" within 5 seconds. Upon initial power, relay is closed enabling labor savings testing in seconds. POWER INTERRUPTION STATE: For energy savings and safety, if power is lost to device, device will return to last known state.

RANGE AND COVERAGE:

The 360° high-bay PIR lens provides a 2:1 spacing to mounting height coverage under 7,6 meters mounting and a 1.5:1 for heights up to 12,2 meters mounting.

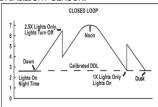
The 360° low-bay lens provides 2:1 spacing to mounting height coverage for 2,4 to 6,1 meters mounting.

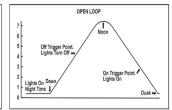
The aisle lens is designed to provide detection of 18,2 meters long by 6 meters wide for heights up to 12,2 meters mounting.

LED: Super bright green LED indicates occupancy detection and can be seen at 12,2 meters.

FALSE DETECTION PROTECTION: Energy saving technology is designed into the HBPIR to assure your lights are ON only when needed.

HBPIR&LIGHT SENSOR:





ROTATING LIGHT SENSOR: Optimal for the best performance in locating light measurements (up, down and side lighting).

AUTO CALIBRATION: Set to auto-calibration, light sensor measures lowest light level of facility with all lights ON for 24 hours to determine the Daylighting Set Point.

MANUAL CALIBRATION: Optimize energy savings and operation by manually configuring the Daylighting Set Point.

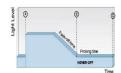
PERFORMANCE DAYLIGHTING: Enhanced design algorithms to assure lights will not cycle during cloud cover, or varying light levels. (No more daylight = load turn OFF in +/- 5 minutes, Daylight returns = load will turn ON in +/- 1 minute).

CORRIDOR OPTION:

Automatic switching is based on presence/motion with the time delay set on site to suit the customer's requirements, where no presence is detected the light level will fade from 100% down to 10% saving up to 60% of the energy usage.

The COR function does not abruptly switch off the lighting but dims it to a 10% level. Depending on the profile selected the device remains at this light level ("never off" profile) or switches off completely after the appropriate delay ("Switch off" profile).

This arrangement provides efficient energy savings in 24-hour applications where light is needed round the clock for safety reasons, for example in stainwells and corridors in public buildings, and in large apartment complexes, car parks, pedestrian underpasses, warehouses and underground railway stations.

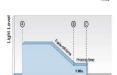


COR option:

Standard profile "Never OFF" (A...100 %, B...10 %, Fade time 32 s, never OFF).

If presence/motion is not detected, from this time onwards the ballast dims until the absence light value is reached.

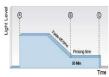
This corresponds to the default parameters.



COR1min option:

Profile 2 "Switch off" (A...100 %, B...10 %, Fade time 32 s, switch off after 1 minute).

If presence/motion is not detected, from this time onwards the ballast dims until the absence light value is reached and if presence is not detected in the next minute the ballast switches off completely.



COR30min option:

Profile 3 "Switch off" (A...100 %, B...10 %, Fade time 32 s, switch off after 30 minutes).

If presence/motion is not detected, from this time onwards the ballast dims until the absence light value is reached and if presence is not detected in the next 30 minutes the ballast switches off completely.



Fixture mounted HBEAIR sensors ensure lighting is only on when and where it is needed. The sensors in combination with can bring huge benefits in terms of energy management as they provide occupancy detection and daylight sensing for heights up to 16 meters. Energy saving - typically between 30% and 50%. HBEAIR can be easily programmed via a smartphone, that offers immense flexibility to commission luminaires into groups and further divided in zones wirelessly.

The HBEAIR offers intelligent wireless lighting control, for warehouse (and similar) applications. Advatages: 5m-16m mounting height, simple grouping via NFC and IR with the Apps, zoning and occupancy sharing (zone with motion goes to full task level while sub-zones are maintained at background light level).



A white protection grid (SPORT version) can be used to increase impact resistance of the luminaire to IK10. This version is designed for sports halls, gyms and other spaces where light fittings are in danger of being hit by a ball. For more information see the product list



Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficac y*, Im/W	CRI	ССТ*, К	Weight, kg
Sky A LED2x5750 D926 T830 FROST MID	1400	293	60	10994	80,5	137	80+	3000	7,00
Sky A LED3x5400 D927 T830 FROST MID	1400	293	60	15429	111,3	139	80+	3000	8,50
Sky A LED4x5750 D928 T830 FROST MID	1400	380	60	21988	160,9	137	80+	3000	9,00
Sky A LED5x5750 D929 T830 FROST MID	1400	600	60	27486	201,1	137	80+	3000	14,00
Sky A LED6x5750 D930 T830 FROST MID	1400	600	60	32983	241,4	137	80+	3000	14,50
Sky A LED2x5750 D926 T840 FROST MID	1400	293	60	11486	80,4	143	80+	4000	7,00
Sky A LED3x5400 D927 T840 FROST MID 1G	1400	293	60	16119	111,3	145	80+	4000	8,50
Sky A LED4x5750 D928 T840 FROST MID 1G	1400	380	60	22972	160,9	143	80+	4000	9,00
Sky A LED5x5750 D929 T840 FROST MID	1400	600	60	28715	201,1	143	80+	4000	14,00
Sky A LED6x5750 D930 T840 FROST MID	1400	600	60	34458	241,3	143	+08	4000	14,50
Sky A LED2x5750 D931 T830 FROST NAR	1400	293	65	10994	80,5	137	80+	3000	7,00
Sky A LED3x5400 D932 T830 FROST NAR	1400	380	65	15429	111,3	139	80+	3000	8,50
Sky A LED4x5750 D933 T830 FROST NAR	1400	485	65	21988	160,9	137	80+	3000	9,00
Sky A LED5x5750 D934 T830 FROST NAR	1400	600	65	27486	201,1	137	80+	3000	14,00
Sky A LED6x5750 D935 T830 FROST NAR	1400	740	65	32983	241,4	137	80+	3000	14,50
Sky A LED2x5750 D931 T840 FROST NAR	1400	293	65	11486	80,4	143	80+	4000	7,00
Sky A LED3x5400 D932 T840 FROST NAR 1G	1400	380	65	16119	111,3	145	80+	4000	8,50
Sky A LED4x5750 D933 T840 FROST NAR 1G	1400	485	65	22972	160,9	143	+08	4000	9,00
Sky A LED5x5750 D934 T840 FROST NAR	1400	600	65	28715	201,1	143	80+	4000	14,00
Sky A LED6x5750 D935 T840 FROST NAR	1400	740	65	34458	241,3	143	+08	4000	14,50
Sky A LED2x5750 D926 T830 FROST MID SPORT	1400	293	65	9737	80,5	121	80+	3000	7,00
Sky A LED3x5400 D927 T830 FROST MID SPORT	1400	293	65	13664	111,3	123	80+	3000	8,50
Sky A LED4x5750 D928 T830 FROST MID SPORT	1400	380	65	19474	160,9	121	80+	3000	9,00
Sky A LED5x5750 D929 T830 FROST MID SPORT	1400	600	65	24343	201,1	121	80+	3000	14,00
Sky A LED6x5750 D930 T830 FROST MID SPORT	1400	600	65	29211	241,4	121	80+	3000	14,50
Sky A LED2x5750 D926 T840 FROST MID SPORT	1400	293	65	10173	80,4	126	80+	4000	7,00
Sky A LED3x5400 D927 T840 FROST MID SPORT	1400	293	65	14276	111,3	128	80+	4000	8,50
Sky A LED4x5750 D928 T840 FROST MID SPORT	1400	380	65	20345	160,9	126	80+	4000	9,00
Sky A LED5x5750 D929 T840 FROST MID SPORT	1400	600	65	25431	201,1	126	80+	4000	14,00
Sky A LED6x5750 D930 T840 FROST MID SPORT	1400	600	65	30518	241,3	126	80+	4000	14,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

PREMIUM RANGE AVAILABLE ON REQUEST (SUBJECT TO MINIMUM ORDER QUANTITY)

Product	Lengt h, mm	Width, mm	Height , mm	Luminaire output*, Im	System power*, W	System efficac y*, Im/W	CRI	сст*, к	Weight, kg
Sky A LED2x6100 G049 T830 MID FROST	1400	293	60	11651	80,5	145	80+	3000	7,00
Sky A LED3x5700 G050 T830 MID FROST	1400	293	60	16350	111,3	147	80+	3000	8,50
Sky A LED4x6100 G051 T830 MID FROST	1400	380	60	23301	160,9	145	80+	3000	9,00
Sky A LED5x6100 G052 T830 MID FROST	1400	600	60	29127	201,1	145	80+	3000	14,00
Sky A LED6x6100 G053 T830 MID FROST	1400	600	60	34952	241,4	145	80+	3000	14,50
Sky A LED2x6100 G049 T840 MID FROST	1400	293	60	12142	80,4	151	80+	4000	7,00
Sky A LED3x5700 G050 T840 MID FROST	1400	293	60	17041	111,3	153	80+	4000	8,50
Sky A LED4x6100 G051 T840 MID FROST	1400	380	60	24285	160,9	151	80+	4000	9,00
Sky A LED5x6100 G052 T840 MID FROST	1400	600	60	30356	201,1	151	80+	4000	14,00
Sky A LED6x6100 G053 T840 MID FROST	1400	600	60	36427	241,3	151	+08	4000	14,50
Sky A LED2x6100 G054 T830 NAR FROST	1400	293	65	11651	80,5	145	80+	3000	7,00
Sky A LED3x5700 G055 T830 NAR FROST	1400	380	65	16350	111,3	147	80+	3000	8,50
Sky A LED4x6100 G056 T830 NAR FROST	1400	485	65	23301	160,9	145	80+	3000	9,00
Sky A LED5x6100 G057 T830 NAR FROST	1400	600	65	29127	201,1	145	80+	3000	14,00
Sky A LED6x6100 G057 T830 NAR FROST	1400	740	65	34952	241,4	145	80+	3000	14,50
Sky A LED2x6100 G054 T840 NAR FROST	1400	293	65	12142	80,4	151	80+	4000	7,00
Sky A LED3x5700 G055 T840 NAR FROST	1400	380	65	17041	111,3	153	80+	4000	8,50
Sky A LED4x6100 G056 T840 NAR FROST	1400	485	65	24285	160,9	151	80+	4000	9,00
Sky A LED5x6100 G057 T840 NAR FROST	1400	600	65	30356	201,1	151	80+	4000	14,00
Sky A LED6x6100 G058 T840 NAR FROST	1400	740	65	36427	241,3	151	+08	4000	14,50
Sky A LED2x6100 G049 T830 MID SPORT FROST	1400	293	65	10318	80,5	128	80+	3000	7,00
Sky A LED3x5700 G050 T830 MID SPORT FROST	1400	293	65	14480	111,3	130	80+	3000	8,50
Sky A LED4x6100 G051 T830 MID SPORT FROST	1400	380	65	20637	160,9	128	80+	3000	9,00
Sky A LED5x6100 G052 T830 MID SPORT FROST	1400	600	65	25796	201,1	128	80+	3000	14,00
Sky A LED6x6100 G053 T830 MID SPORT FROST	1400	600	65	30955	241,4	128	80+	3000	14,50
Sky A LED2x6100 G049 T840 MID SPORT FROST	1400	293	65	10754	80,4	134	80+	4000	7,00
Sky A LED3x5700 G050 T840 MID SPORT FROST	1400	293	65	15092	111,3	136	80+	4000	8,50
Sky A LED4x6100 G051 T840 MID SPORT FROST	1400	380	65	21508	160,9	134	80+	4000	9,00
Sky A LED5x6100 G052 T840 MID SPORT FROST	1400	600	65	26885	201,1	134	80+	4000	14,00
Sky A LED6x6100 G053 T840 MID SPORT FROST	1400	600	65	32261	241,3	134	80+	4000	14,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

HBEAIR Integrated smart sensor for high ceiling (up to 16m) and driver with wireless communication and grouping possibilities for lighting control COR

Driver with Corridor function (never off)

COR1min Driver with Corridor function 1min (switch off after 1 min) COR30min Driver with Corridor function 30min (switch off after 30 min)

HBPIR7m Integrated PIR sensor for high ceiling (up to 7 meters) with on-off control Integrated PIR sensor for high ceiling (up to 12 meters) with on-off control integrated HBPIR12m sensor protection degree is IP54 HBPIR12m

HBPIR15m Integrated PIR sensor for high ceiling (up to 15 meters) with on-off control

EMG Emergency version 1 hour

EMGB Emergency version 1 hour (best available technology)

EM3 Emergency version 3 hours

ЕМ3В Emergency version 3 hours (best available technology)

ЕМ3А Emergency version equipped with an autonomous testing system, 3 hours

EM3D Emergency version 3 hours with DALI interface

5 way terminal block with two holes (for in and out going cable) 5TB

1G Strain relief for power supply cable

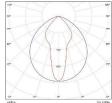
MID Middle beam reflector NAR Narrow beam reflector

SPORT-White powder coated protective grid (IK10) Frosted polycarbonate diffuser FROST-

Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80 T830 T840

NAR FROST

MID FROST



Applications:











BRUBU M LED

Product Group: High-bays















Description:

A recessed LED low-bay luminaire with precise light control for use in petrol stations Optics: 60°, 90°, 120° and asymmetric light beam

Diffuser: tempered glass, impact resistant, silicone rubber sealing

Body: sheet steel, white finish

General data:

Mains voltage: 220-240V, 0/50-60Hz Power factor: >0,97

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -20...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A++

Installation: Recessed luminaire is designed to be fixed to ceiling of any type. Push-in terminal, 3x2x2.5mm2

Indoor/outdoor with roof **Environment:**

Application:

Fuel station



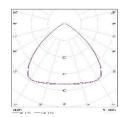
Surface installation box available on request. For more information see the accessory list.

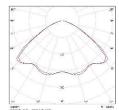
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Brubu M LED1x9200 D024 T740 LS60	435	435	95	8846	79,3	112	70+	4000	8,00
Brubu M LED1x12300 D025 T740 LS60	435	435	95	11795	105,8	112	70+	4000	8,00
Brubu M LED1x15300 D026 T740 LS60	435	435	95	14743	132,2	112	70+	4000	8,00
Brubu M LED1x9200 D024 T740 LS90	435	435	95	9158	79,3	115	70+	4000	8,00
Brubu M LED1x12300 D025 T740 LS90	435	435	95	12211	105,8	115	70+	4000	8,00
Brubu M LED1x15300 D026 T740 LS90	435	435	95	15264	132,2	115	70+	4000	8,00
Brubu M LED1x9200 D024 T740 LS120	435	435	95	9158	79,3	115	70+	4000	8,00
Brubu M LED1x12300 D025 T740 LS120	435	435	95	12211	105,8	115	70+	4000	8,00
Brubu M LED1x15300 D026 T740 LS120	435	435	95	15264	132,2	115	70+	4000	8,00
Brubu M LED1x9200 D024 T740 LSA1	435	435	95	9158	79,3	115	70+	4000	8,00
Brubu M LED1x12300 D025 T740 LSA1	435	435	95	12211	105,8	115	70+	4000	8,00
Brubu M LED1x15300 D026 T740 LSA1	435	435	95	15264	132,2	115	70+	4000	8,00

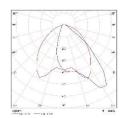
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI	Driver with DALI interface
LS60	Optics with 60x60° beam angle
LS90	Optics with 90x90° beam angle
LS120	Optics with 120x120° beam angle
LSA1	Optics with asymmetric beam SA1
T730	Colour temperature 3000K, CRI 70+
T740	Colour temperature 4000K, CRI 70+









Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2
Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



Product: Power supply socket - IP66/IP68, 5x1.5mm2
Description: Quick and easy to connect power supply cable socket - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs



Product: Power supply plug - IP66/IP68, 5x1.5mm2
Description: Quick and easy to connect power supply cable plug - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs



Product: Surface MTG BOX Brubu M LED white Description: Surface mounting box for Brubu M LED (1pcs), white steel







SATURN LED

Product Group: High-bays















Images for the product family and options:





Description: A high-efficacy LED high-bay luminaire with 90° degrees optic for high mounting applications

Optics: 90° light beam, silicone rubber sealing, impact resistance

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 0/50-60Hz
Power factor: >0,97

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 75000/L80B50

Operating temperature range, °C: ta -30...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A++

Installation: Suspended. Supplied with suspension hook and out-going cable for easy mounting. Cable, 0.3m, 3x0.75mm2

Environment: Indoor/outdoor with roof

Application: Industry, warehouse, hall, sports, transport terminal



Waterproof cable in-line connector is recommended to use when installing our LED high-bays and floodlights. Push-in terminal 3x1.5mm2, 400V/16A. IP66/IP68- dust and waterproof. For more information see the accessory list.

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Saturn LED1x12000 D941 T840	300	300	200	11915	77,7	153	+08	4000	2,70
Saturn LED1x19550 D942 T840	335	335	200	19524	125,0	156	+08	4000	3,90
Saturn LED1x26100 D943 T840	380	380	200	26076	166,1	157	80+	4000	4,30

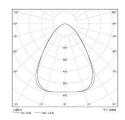
 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



Product: Power supply socket - IP66/IP68, 5x1.5mm2

Description: Quick and easy to connect power supply cable socket - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs



Product: Power supply plug - IP66/IP68, 5x1.5mm2

Description: Quick and easy to connect power supply cable plug - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs



Product: Suspension MTG KIT - Saturn LED 1.5m

Description: Suspension kit for Saturn LED high-bay, 1.5 meter Product: Suspension MTG KIT - Saturn LED 3.0m Description: Suspension kit for Saturn LED high-bay, 3.0 meter Product: Suspension MTG KIT - Saturn LED 5.0m Description: Suspension kit for Saturn LED high-bay, 5.0 meter



EVEREST LED

Product Group: High-bays













Images for the product family and options:







Description: A suspended LED high-bay luminaire for high mounting applications and one-for-one replacement of 150W, 250W and 400W HID

luminaires. With exceptional rated lifetimes, zero restrike time and significantly reduced lamp change maintenance cost

Reflector: anodized aluminium, glossy Diffusor: tempered glass, low glare surface Body: die-cast aluminium, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80850

Operating temperature range, °C: ta -20...+40 Protection class IEC: I

Ingress protection code: IP65
Mechanical impact resistance: IK06
EEC: A+/A++

Installation: Suspended. Supplied with suspension hook for easy mounting. Screw terminal, 3x2.5mm2

Environment: Indoor

Application: Retail, showroom, industry, warehouse, hall, exhibition, public place



High flexibility to meet specific project requirements, as luminaires can be painted to all RAL code colour on request. For more information see the option list

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Everest AS LED1x4400 E064 T840 DGL WID	358	358	231	4187	34,3	122	80+	4000	3,30
Everest AS LED1x6200 E065 T840 DGL WID	358	358	231	5857	51,3	114	+08	4000	3,30
Everest AM LED1x9600 E066 T840 DGL WID	459	459	301	9132	83,6	109	80+	4000	5,80
Everest AM LED1x11700 E067 T840 DGL WID	459	459	301	11116	107,1	104	80+	4000	5,80
Everest AM LED1x13700 E068 T840 DGL WID	459	459	301	13002	131,3	99	80+	4000	5,90
Everest AB LED1x18500 E069 T840 DGL WID	561	561	361	17572	154,0	114	80+	4000	10,70
Everest AB LED1x21000 E070 T840 DGL WID	561	561	361	19963	180,3	111	80+	4000	11,30

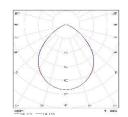
 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

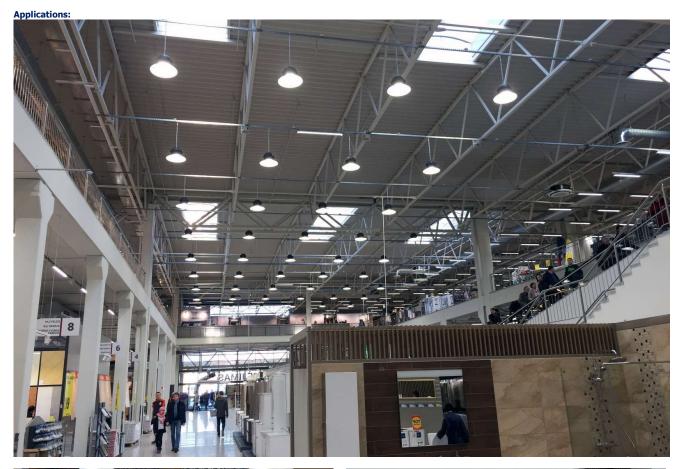
SDIM Driver with switch-control dimming

DALI Driver with DALI interface
WID Wide beam reflector
DGL De-glare glass cover
RAL RAL colour

T830 Colour temperature 3000K, CRI 80+
T840 Colour temperature 4000K, CRI 80+
T850 Colour temperature 5000K, CRI 80+

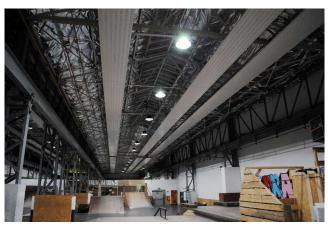














MOON LED

Product Group: High-bays



















Description: A budget LED high-bay luminaire with symmetric reflector for high mounting applications

Reflector: anodized aluminum, symmetric Diffuser: tempered glass, clear

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,97 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -30...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK06

EEC: A+

Installation: Suspended. Supplied with suspension hook and out-going cable for easy mounting. Cable, 0.2m, 3x0.75mm2

Environment: Indoor

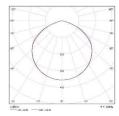
Application: Industry, warehouse, hall

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Moon LED1x10000 D764 T740	435	435	190	10000	100,0	100	70+	4000	2,06
Moon LED1x20000 D765 T740	565	565	240	20000	200,0	100	70+	4000	4,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Colour temperature 4000K, CRI 70+ T740



Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



Product: Suspension MTG KIT - Saturn LED 1.5m Description: Suspension kit for Saturn LED high-bay, 1.5 meter Product: Suspension MTG KIT - Saturn LED 3.0m

Description: Suspension kit for Saturn LED high-bay, 3.0 meter Product: Suspension MTG KIT - Saturn LED 5.0m

Description: Suspension kit for Saturn LED high-bay, 5.0 meter



DISC LED

Product Group: High-bays















Description:

A budget LED high-bay luminaire with lens optic for high mounting applications

Optics: 90° light beam, polycarbonate, impact resistance Body: die-cast aluminum, black finish

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A++

Installation: Suspended. Supplied with suspension hook and out-going cable for easy mounting. Cable, 0.3m, 3x1.0mm2

Environment: Indoor

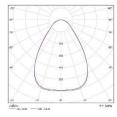
Application: Industry, warehouse, hall

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Disc LED1x14000 E927 T840	290	290	118	14000	100,0	140	80+	4000	2,35
Disc LED1x21000 E928 T840	336	336	127	21000	150,0	140	80+	4000	2,40
Disc LED1x28000 E929 T840	376	376	131	28000	200,0	140	80+	4000	3,70

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

T840 Colour temperature 4000K, CRI 80+



Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



Product: Suspension MTG KIT - Saturn LED 1.5m Description: Suspension kit for Saturn LED high-bay, 1.5 meter Product: Suspension MTG KIT - Saturn LED 3.0m Description: Suspension kit for Saturn LED high-bay, 3.0 meter Product: Suspension MTG KIT - Saturn LED 5.0m Description: Suspension kit for Saturn LED high-bay, 5.0 meter

Date of issue: 2019-01-21 • NORTHCLIFFE LIGHTING, UAB • Raudondvario pl. 101, LT-47184 Kaunas, Lithuania • info@northcliffe.org • www.northcliffe.org



www.northcliffe.org



BOREAS M LED

Product Group: Floodlights













Images for the product family and options:







Description: An architectural LED floodlight with choice of optics and IP65 water and dust protection for use in adverse conditions

Optics: 12°, 30°, 45°, 60°, 90°, asymmetric and street light beam

Diffuser: tempered glass, clear, impact resistant Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, °C: ta -30...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08 EEC: A++

Installation: Suitable for any horizontal and/or vertical surfaces. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Industry, sports, facade illumination, parking area, park, public space, street Application:



Waterproof cable in-line connector is recommended to use when installing our LED high-bays and floodlights. Push-in terminal 3x1.5mm2, 400V/16A. IP66/IP68- dust and waterproof. For more information see the accessory list.

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Boreas MS LED1x4400 D349 T740 LS12	338	280	60	4319	34,4	125	70+	4000	2,80
Boreas MS LED1x6100 D350 T740 LS12	338	280	60	6036	52,9	114	70+	4000	2,80
Boreas MM LED1x8800 D351 T740 LS12	444	353	66	8712	68,9	126	70+	4000	5,00
Boreas MM LED1x12100 D352 T740 LS12	444	353	66	12072	105,8	114	70+	4000	5,00
Boreas MB LED1x15100 D353 T740 LS12	515	420	87	15090	132,2	114	70+	4000	7,60
Boreas MB LED1x18200 D354 T740 LS12	515	420	87	18108	158,7	114	70+	4000	7,60
Boreas MB LED1x24200 D355 T740 LS12	515	420	87	24144	211,6	114	70+	4000	7,60
Boreas MS LED1x4400 D349 T740 LS30	338	280	60	4170	34,4	121	70+	4000	2,80
Boreas MS LED1x6100 D350 T740 LS30	338	280	60	5828	52,9	110	70+	4000	2,80
Boreas MM LED1x8800 D351 T740 LS30	444	353	66	8412	68,9	122	70+	4000	5,00
Boreas MM LED1x12100 D352 T740 LS30	444	353	66	11656	105,8	110	70+	4000	5,00
Boreas MB LED1x15100 D353 T740 LS30	515	420	87	14570	132,2	110	70+	4000	7,60
Boreas MB LED1x18200 D354 T740 LS30	515	420	87	17484	158,7	110	70+	4000	7,60
Boreas MB LED1x24200 D355 T740 LS30	515	420	87	23312	211,6	110	70+	4000	7,60



Roreas MS LED1x4400 D349 T740 LS45	338	280	60	4120	34,4	120	70+	4000	2,80
Soreas MS LED1x6100 D350 T740 LS45	338	280	60	5759	52,9	109	70+	4000	2,80
Soreas MM LED1x8800 D351 T740 LS45	444	353	66	8312	68,9	121	70+	4000	5,00
Soreas MM LED1x12100 D352 T740 LS45	444	353	66	11517	105,8	109	70+	4000	5,00
oreas MB LED1x15100 D353 T740 LS45	515	420	87	14396	132,2	109	70+	4000	7,60
oreas MB LED1x18200 D354 T740 LS45	515	420	87	17276	158,7	109	70+	4000	7,60
oreas MB LED1x24200 D355 T740 LS45	515	420	87	23034	211,6	109	70+	4000	7,60
oreas MS LED1x4400 D349 T740 LS60	338	280	60	4170	34,4	121	70+	4000	2,80
oreas MS LED1x6100 D350 T740 LS60	338	280	60	5828	52,9	110	70+	4000	2,80
oreas MM LED1x8800 D351 T740 LS60	444	353	66	8412	68,9	122	70+	4000	5,00
oreas MM LED1x12100 D352 T740 LS60	444	353	66	11656	105,8	110	70+	4000	5,00
oreas MB LED1x15100 D353 T740 LS60	515	420	87	14570	132,2	110	70+	4000	7,60
oreas MB LED1x18200 D354 T740 LS60 oreas MB LED1x24200 D355 T740 LS60	515 515	420 420	87 87	17484 23312	158,7 211,6	110 110	70+ 70+	4000 4000	7,60 7,60
0.000 + 10 225 1/12 1200 5555 + 7 10 2500	515		<i></i>	20012			70,		,,,,,
oreas MS LED1x4400 D349 T730 LS90	338	280	60	4103	34,4	119	70+	3000	2,80
oreas MS LED1x6100 D350 T730 LS90	338	280	60	5734	52,9	108	70+	3000	2,80
oreas MM LED1x8800 D351 T730 LS90	444	353	66	8277	68,9	120	70+	3000	5,00
oreas MM LED1x12100 D352 T730 LS90	444	353	66	11469	105,8	108	70+	3000	5,00
oreas MB LED1x15100 D353 T730 LS90	515	420	87	14336	132,2	108	70+	3000	7,60
oreas MB LED1x18200 D354 T730 LS90	515	420	87	17203	158,7	108	70+	3000	7,60
oreas MB LED1x24200 D355 T730 LS90	515	420	87	22937	211,6	108	70+	3000	7,60
oreas MS LED1x4400 D349 T740 LS90	338	280	60	4319	34,4	125	70+	4000	2,80
oreas MS LED1x6100 D350 T740 LS90	338	280	60	6036	52,9	114	70+	4000	2,80
preas MM LED1x8800 D351 T740 LS90	444	353	66	8712	68,9	126	70+	4000	5,00
oreas MM LED1x12100 D351 T740 LS90	444	353	66	12072	105,8	114	70+	4000	5,00
oreas MB LED1x15100 D353 T740 LS90	515	420	87	15090	132,2	114	70+	4000	7,60
oreas MB LED1x18200 D354 T740 LS90	515	420	87	18108	158,7	114	70+	4000	7,60
oreas MB LED1x24200 D355 T740 LS90	515	420	87	24144	211,6	114	70+	4000	7,60
oreas MS LED1x4400 D349 T730 LSA1	338	280	60	4103	34,4	119	70+	3000	2,80
oreas MS LED1x6100 D350 T730 LSA1	338	280	60	5734	52,9	108	70+	3000	2,80
oreas MM LED1x8800 D351 T730 LSA1	444	353	66	8277	68,9	120	70+	3000	5,00
oreas MM LED1x12100 D352 T730 LSA1	444	353	66	11469	105,8	108	70+	3000	5,00
oreas MB LED1x15100 D353 T730 LSA1	515	420	87	14336	132,2	108	70+	3000	7,60
oreas MB LED1x18200 D354 T730 LSA1	515	420	87	17203	158,7	108	70+	3000	7,60
oreas MB LED1x24200 D355 T730 LSA1	515	420	87	22937	211,6	108	70+	3000	7,60
oreas MS LED1x4400 D349 T740 LSA1	338	280	60	4319	34,4	125	70+	4000	2,80
oreas MS LED1x6100 D350 T740 LSA1	338	280	60	6036	52,9	114	70+	4000	2,80
oreas MM LED1x8800 D351 T740 LSA1	444	353	66	8712	68,9	126	70+	4000	5,00
oreas MM LED1x12100 D352 T740 LSA1	444	353	66	12072	105,8	114	70+	4000	5,00
oreas MB LED1x15100 D353 T740 LSA1	515	420	87	15090	132,2	114	70+	4000	7,60
oreas MB LED1x18200 D354 T740 LSA1	515	420	87	18108	158,7	114	70+	4000	7,60
oreas MB LED1x24200 D355 T740 LSA1	515	420	87	24144	211,6	114	70+	4000	7,60
oreas MS LED1x4400 D349 T730 LSA2	338	280	60	4103	34,4	119	70+	3000	2,80
oreas MS LED1x4400 D349 1730 LSA2	338	280	60	5734	52,9	108	70+	3000	
									2,80
oreas MM LED1x8800 D351 T730 LSA2	444	353	66	8277	68,9	120	70+	3000	5,00
oreas MM LED1x12100 D352 T730 LSA2	444	353	66	11469	105,8	108	70+	3000	5,00
oreas MB LED1x15100 D353 T730 LSA2	515	420	87	14336	132,2	108	70+	3000	7,6
oreas MB LED1x18200 D354 T730 LSA2	515	420	87	17203	158,7	108	70+	3000	7,60
oreas MB LED1x24200 D355 T730 LSA2	515	420	87	22937	211,6	108	70+	3000	7,60
reas MS LED1x4400 D349 T740 LSA2	338	280	60	4319	34,4	125	70+	4000	2,80
reas MS LED1x6100 D350 T740 LSA2	338	280	60	6036	52,9	114	70+	4000	2,8
oreas MM LED1x8800 D351 T740 LSA2	444	353	66	8712	68,9	126	70+	4000	5,00
oreas MM LED1x12100 D352 T740 LSA2	444	353	66	12072	105,8	114	70+	4000	5,0
oreas MB LED1x12100 D352 1740 LSA2	515	420	87	15090	132,2	114	70+	4000	7,6
oreas MB LED1x18200 D354 T740 LSA2 oreas MB LED1x24200 D355 T740 LSA2	515 515	420 420	87 87	18108 24144	158,7 211,6	114 114	70+ 70+	4000 4000	7,60 7,60
	515								,,,,,
oreas MS LED1x4400 D349 T730 LSM1	338	280	60	4056	34,4	118	70+	3000	2,80
oreas MS LED1x6100 D350 T730 LSM1	338	280	60	5668	52,9	107	70+	3000	2,80
reas MM LED1x8800 D351 T730 LSM1	444	353	66	8181	68,9	119	70+	3000	5,00
reas MM LED1x12100 D352 T730 LSM1	444	353	66	11337	105,8	107	70+	3000	5,00
reas MB LED1x15100 D353 T730 LSM1	515	420	87	14171	132,2	107	70+	3000	7,60
oreas MB LED1x18200 D354 T730 LSM1	515	420	87	17005	158,7	107	70+	3000	7,60
oreas MB LED1x24200 D355 T730 LSM1	515	420	87	22673	211,6	107	70+	3000	7,6
oreas MS LED1x4400 D349 T740 LSM1	338	280	60	4269	34,4	124	70+	4000	2,80
oreas MS LED1x4400 D349 1740 LSM1	338	280	60	5967	52,9	113	70+	4000	2,80
oreas MM LED1x8800 D351 T740 LSM1	444	353	66	8612	68,9	125	70+	4000	5,00
oreas MM LED1x12100 D352 T740 LSM1	444	353	66	11933	105,8	113	70+	4000	5,00
oreas MB LED1x15100 D353 T740 LSM1	515	420	87	14917	132,2	113	70+	4000	7,60
oreas MB LED1x18200 D354 T740 LSM1	515	420	87	17900	158,7	113	70+	4000	7,60
oreas MB LED1x10200 D354 1740 LSM1	515	420	87	23867	211,6	113	70+	4000	7,60

tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C



Available options:

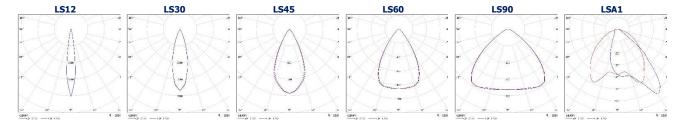
DALI Driver with DALI interface

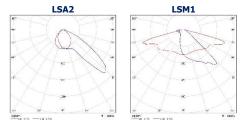
CDIM Driver dimming with the help of a control line
ADIM Driver with autonomous two-level dimming
*note - for power above 160W use two DALI, CDIM, ADIM option price

LS12 Optics with 12x12° beam angle LS30 Optics with 30x30° beam angle LS45 Optics with 45x45° beam angle LS60 Optics with 60x60° beam angle Optics with 90x90° beam angle LS90 LSA1 Optic with asymmetric beam LSA1 LSA2 Optic with asymmetric beam LSA2 LSM1 Optic with asymmetric beam LSM1

RAL RAL colour

T730 Colour temperature 3000K, CRI 70+
T740 Colour temperature 4000K, CRI 70+
T750 Colour temperature 5000K, CRI 70+





Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



Product: Power supply socket - IP66/IP68, 5x1.5mm2

Description: Quick and easy to connect power supply cable socket - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs

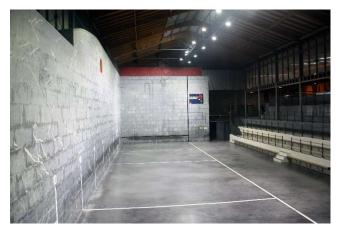


Product: Power supply plug - IP66/IP68, 5x1.5mm2

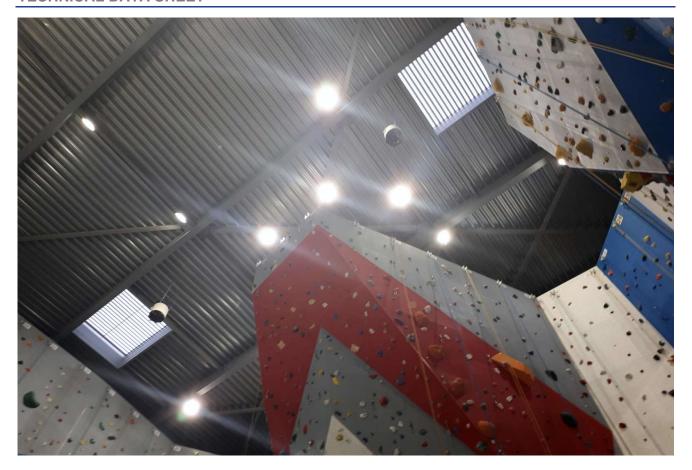
Description: Quick and easy to connect power supply cable plug - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs













BOREAS C LED

Product Group: Floodlights















Images for the product family and options:







Description: An architectural LED floodlight with high output and IP65 water and dust protection to use in adverse conditions

Reflector: anodized aluminium, symmetric

Diffuser: tempered glass, clear, impact resistant Body: die-cast aluminum, dark grey finish, with aluminium clips

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08 EEC: A++

Installation: Suitable for any horizontal and/or vertical surfaces. Tool-free design for easy instalation and maintenance. Push-in terminal, 3x2x2.5mm2

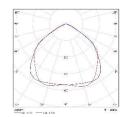
Environment: Outdoor Application: Facade illumination, parking area, park, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Boreas CM LED1x7400 E056 T830	386	285	133	7155	60,9	118	80+	3000	4,60
Boreas CM LED1x9600 E057 T830	386	285	133	9280	83,6	111	80+	3000	4,60
Boreas CM LED1x11100 E058 T830	386	285	133	10730	100,2	107	80+	3000	4,60
Boreas CB LED1x19200 E059 T830	430	438	150	18559	167,1	111	80+	3000	9,30
Boreas CB LED1x22200 E060 T830	430	438	150	21460	200,4	107	80+	3000	9,30
Boreas CM LED1x7400 E056 T840	386	285	133	7376	60,9	121	80+	4000	4,60
Boreas CM LED1x9600 E057 T840	386	285	133	9567	83,6	115	80+	4000	4,60
Boreas CM LED1x11100 E058 T840	386	285	133	11062	100,2	110	80+	4000	4,60
Boreas CB LED1x19200 E059 T840	430	438	150	19135	167,1	115	80+	4000	9,30
Boreas CB LED1x22200 E060 T840	430	438	150	22123	200,4	110	80+	4000	9,30
* talarance range for entiral and electrical data: ±100%	Values apply to a	ambiant tam	paratura of 250	c					

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with DALI interface T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+ T850 Colour temperature 5000K, CRI 80+





BOREAS S LED

Product Group: Floodlights



















Description: A modern LED floodlight with compact design and IP65 water and dust protection to use in adverse conditions

Reflector: anodized aluminium, symmetric

Diffuser: tempered glass, clear, impact resistant Body: die-cast aluminum, dark grey finish, with aluminium clips

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A++

Installation: Suitable for any horizontal and/or vertical surfaces. Tool-free design for easy instalation and maintenance. Push-in terminal,

3x2x2.5mm2

Environment: Outdoor

Application: Facade illumination, parking area, park, public space

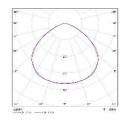
Tool-free design for easy instalation and maintenance

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Boreas SS LED1x2200 C061 T830	220	182	57	2054	19,3	106	80+	3000	1,40
Boreas SM LED1x4000 C062 T830	296	246	75	3773	33,8	112	80+	3000	2,60
Boreas SM LED1x5400 C063 T830	296	246	75	5110	48,3	106	+08	3000	2,60
Boreas SS LED1x2200 C061 T840	220	182	57	2122	19,3	110	80+	4000	1,40
Boreas SM LED1x4000 C062 T840	296	246	75	3898	33,8	115	80+	4000	2,60
Boreas SM LED1x5400 C063 T840	296	246	75	5279	48,3	109	+08	4000	2,60

tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI	Driver with DALI interface
T830	Colour temperature 3000K, CRI 80+
T840	Colour temperature 4000K, CRI 80+
T850	Colour temperature 5000K, CRI 80+





BOREAS E LED

Product Group: Floodlights















Images for the product family and options:



Description: A budget LED floodlights with symmetric reflector and IP65 water and dust protection to use in adverse conditions

Reflector: white thermoplastic, symmetric Diffuser: tempered glass, clear, impact resistant Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08 EEC: A+

Installation: Suitable for any horizontal and/or vertical surfaces. Supplied with out-going cable for easy mounting. Cable, 0.3m, 3x0.75mm2

Environment: Outdoor

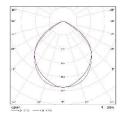
Application: Facade illumination, parking area, park, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Boreas ES LED1x800 B870 T750	184	118	35	800	10,0	80	70+	5000	0,50
Boreas EM LED1x1600 B871 T750	228	149	42	1600	20,0	80	70+	5000	0,80
Boreas EB LED1x2400 B872 T750	331	217	45	2400	30,0	80	70+	5000	1,80
Boreas EB LED1x3200 B873 T750	331	217	45	3200	40,0	80	70+	5000	1,80
Boreas EB LED1x4000 B874 T750	331	217	45	4000	50,0	80	70+	5000	1,90

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Colour temperature 5000K, CRI 70+



Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2 Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



BEIDAS LED

Product Group: Floodlights













Images for the product family and options:





Description: A budget LED floodlights with symmetric reflector and IP65 water and dust protection to use in adverse conditions

Reflector: white thermoplastic, symmetric Diffuser: tempered glass, clear, impact resistant Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -30...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08 EEC: A+

Installation: Suitable for any horizontal and/or vertical surfaces. Supplied with out-going cable for easy mounting. Cable, 0.3m, 3x0.75mm2

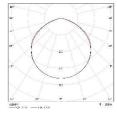
Environment: Outdoor
Application: Facade illumination, parking area, park, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Beidas LED1x3000 D760 T740	176	176	38	3000	30,0	100	70+	4000	0,86
Beidas LED1x5000 D761 T740	208	208	45	5000	50,0	100	70+	4000	1,12
Beidas LED1x10000 D762 T740	322	322	52	10000	100,0	100	70+	4000	2,79
Beidas LED1x20000 D763 T740	410	410	62	20000	200,0	100	70+	4000	4,75

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

740 Colour temperature 4000K, CRI 70+



Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



BETA LED

Product Group: Floodlights















Images for the product family and options:



Description: A budget LED floodlights with symmetric reflector and IP65 water and dust protection to use in adverse conditions

Reflector: white thermoplastic, symmetric

Diffuser: tempered glass, clear

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 25000/L70B50

Operating temperature range, °C: ta -20...+40 Protection class IEC: I

Ingress protection code: IP65 Mechanical impact resistance: IK04

EEC: A+

Installation: Suitable for any horizontal and/or vertical surfaces. Supplied with out-going cable for easy mounting. Cable, 0.2m, 3x1.00mm2

Environment: Outdoor

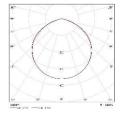
Application: Facade illumination, parking area, park, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Beta LED1x2700 E923 T740	157	126	25	2700	30,0	90	70+	4000	0,40
Beta LED1x4500 E924 T740	208	170	36	4500	50,0	90	70+	4000	0,83
Beta LED1x9000 E925 T740	320	250	42	9000	100,0	90	70+	4000	1,83
Beta LED1x18000 E926 T740	418	334	43	18000	200,0	90	70+	4000	3,65

^{*} tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25%

Available options:

T740 Colour temperature 4000K, CRI 70+



Available accessories:



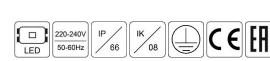
Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



TAKU LED

Product Group: Floodlights





Images for the product family and options:



Description: A high-power LED floodlight with choice of symmetric or asymmetric optics for sport and high mast area lighting

Reflector: symmetric 10°, 25°, 40° and asymmetric A1 light beams

Diffuser: tempered glass, extra-clear, impact resistant

Body: die-cast aluminum, dark grey finish with special anticorrosive and anti-ultraviolet powder, with protractor scale for precise

aiming of the floodlight

General data:

Mains voltage: 220-240V, 50-60Hz Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, °C: ta -35...+40

Protection class IEC: I Ingress protection code: IP66
Mechanical impact resistance: IK08 EEC: A++

Installation: Suitable for any horizontal and/or vertical surfaces. Push-in terminal, 3x2x2.5mm2

Environment:

Application: Sports, transport terminal, parking area, airport



Waterproof cable in-line connector is recommended to use when installing our LED high-bays and floodlights. Push-in terminal 3x1.5mm2, 400V/16A. IP66/IP68- dust and waterproof. For more information see the accessory list.

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Taku LED1x55200 E950 T740 R10	760	327	105	55123	404,6	136	70+	4000	18,00
Taku LED1x67850 E951 T740 R10	760	327	105	67802	522,0	130	70+	4000	18,00
Taku LED1x77200 E952 T740 R10	760	327	105	77172	615,1	125	70+	4000	18,00
Taku LED1x110250 E953 T740 R10	825	615	105	110246	818,1	135	70+	4000	28,00
Taku LED1x135650 E954 T740 R10	825	615	105	135603	1055,3	128	70+	4000	28,00
Taku LED1x154350 E955 T740 R10	825	615	105	154345	1243,5	124	70+	4000	28,00
Taku LED1x55200 E950 T740 R25	760	327	105	55123	404,6	136	70+	4000	18,00
Taku LED1x67850 E951 T740 R25	760	327	105	67802	522,0	130	70+	4000	18,00
Taku LED1x77200 E952 T740 R25	760	327	105	77172	615,1	125	70+	4000	18,00
Taku LED1x110250 E953 T740 R25	825	615	105	110246	818,1	135	70+	4000	28,00
Taku LED1x135650 E954 T740 R25	825	615	105	135603	1055,3	128	70+	4000	28,00
Taku LED1x154350 E955 T740 R25	825	615	105	154345	1243,5	124	70+	4000	28,00



Taku LED1x55200 E950 T740 R40	760	327	105	55123	404,6	136	70+	4000	18,00
Taku LED1x67850 E951 T740 R40	760	327	105	67802	522,0	130	70+	4000	18,00
Taku LED1x77200 E952 T740 R40	760	327	105	77172	615,1	125	70+	4000	18,00
Taku LED1x110250 E953 T740 R40	825	615	105	110246	818,1	135	70+	4000	28,00
Taku LED1x135650 E954 T740 R40	825	615	105	135603	1055,3	128	70+	4000	28,00
Taku I FD1x154350 F955 T740 R40	825	615	105	154345	1243.5	124	70+	4000	28.00

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25%

Available options:

DALI SP10kV T740 T757 T840 T857

Driver with DALI interface

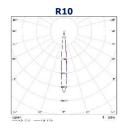
Surge protection device 10kV (L/N-PE)

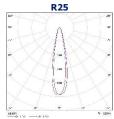
Colour temperature 4000K, CRI 70+

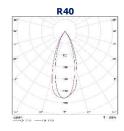
Colour temperature 5700K, CRI 70+

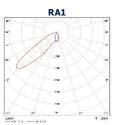
Colour temperature 4000K, CRI 80+ (subject to minimum order quantity)

Colour temperature 5700K, CRI 80+ (subject to minimum order quantity)









Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



Product: Power supply socket - IP66/IP68, 5x1.5mm2

Description: Quick and easy to connect power supply cable socket - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs



Product: Power supply plug - IP66/IP68, 5x1.5mm2
Description: Quick and easy to connect power supply cable plug - IP66/IP68, 5x1.5mm2, 400V/16A, 1pcs



OUTDOOR ACCENT LIGHTING

www.northcliffe.org



GRUS S LED

Product Group: Outdoor accent lighting













Images for the product family and options:





Description: A compact LED floodlight with aesthetic design and narrow beam optics

Diffuser: tempered glass, impact resistant, with stainless steel screws

Body: die-cast aluminum, dark grey finish, silicone rubber sealing provides reliable protection

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,60 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A+

Suitable for any horizontal and/or vertical surfaces. Cable, 0.3m, 3x0.75mm2 Installation:

Environment: Outdoor

Application: Facade illumination, public space

	Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Ī	Grus S LED1x800 C313 T740 L30	120	120	90	802	7,8	103	70+	4000	0,90
	Grus S LED1x1100 C314 T740 L30	120	120	90	1087	11,3	96	70+	4000	0,90

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

L30

Optics with 30x30° beam angle Colour temperature 3000K, CRI 70+ (subject to minimum order quantity) T730

Colour temperature 4000K, CRI 70+ T740





GRUS M&B LED

Product Group: Outdoor accent lighting















Images for the product family and options:







Description: A compact LED floodlight with aesthetic design and narrow beam optics

Diffuser: tempered glass, impact resistant, with stainless steel screws

Body: die-cast aluminum, dark grey finish, silicone rubber sealing provides reliable protection

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08 EEC: A+

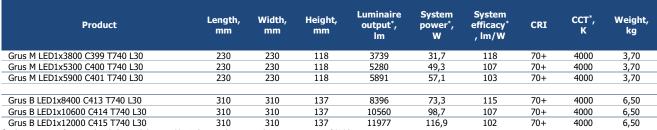
Facade illumination, public space

Suitable for any horizontal and/or vertical surfaces. Push-in terminal, 3x2x2.5mm2 **Environment:** Outdoor

Installation:

Application:





^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

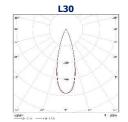
Available options:

DALI Driver with DALI interface ADIM Power reduction device with automatic reduction and middle night detection

L30 Optics with 30x30° beam angle

T730 Colour temperature 3000K, CRI 70+ (subject to minimum order quantity)

T740 Colour temperature 4000K, CRI 70+





Available accessories:

O

Product: Grus M LED Louver D230 Description: Grus M LED louver for better glare control



Product: Grus B LED Louver D310 Description: Grus B LED louver for better glare control

Applications:







CAVER LED

Product Group: Outdoor accent lighting















Images for the product family and options:





Description: A dust and moisture proof LED floodlight for outdoor lighting applications

Optics: symmetric 30°, 45°, 60°, 90° and asymmetric LSA1, LSA2, LSM1 light beam

Diffuser: clear polycarbonate, UV resistant, impact resistant

Body: extruded aluminum, light grey finish, silicone rubber sealing and brass cable gland provides reliable protection

General data:

Mains voltage: 220-240V, 50-60Hz Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, °C: ta -25...+40 Protection class IEC: I

Ingress protection code: IP66 Mechanical impact resistance: IK09

EEC: A++

Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Cable, 1.0m, 3x0.75mm2

Environment: Outdoor

Application: Facade illumination, parking area, public space

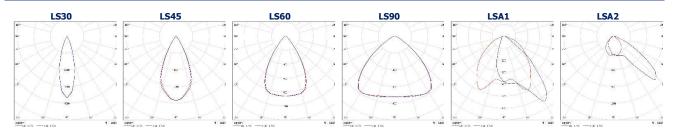
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Caver LED1x2900 D774 T740 LS30	380	80	170	2819	24,7	114	70+	4000	4,00
Caver LED1x2900 D774 T740 LS45	380	80	170	2819	24,7	114	70+	4000	4,00
Caver LED1x2900 D774 T740 LS60	380	80	170	2819	24,7	114	70+	4000	4,00
Caver LED1x2900 D774 T740 LS90	380	80	170	2819	24,7	114	70+	4000	4,00
Caver LED1x2900 D774 T740 LSA1	380	80	170	2819	24,7	114	70+	4000	4,00
Caver LED1x2900 D774 T740 LSA2	380	80	170	2819	24,7	114	70+	4000	4,00
Caver LED1x2900 D774 T740 LSM1	380	80	170	2819	24,7	114	70+	4000	4,00
	380	80	170	2819					

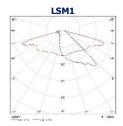
tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI	Driver with DALI interface
LS30	Optics with 30x30° beam angle
LS45	Optics with 45x45° beam angle
LS60	Optics with 60x60° beam angle
LS90	Optics with 90x90° beam angle
LSA1	Optics with asymmetric beam SA1
LSA2	Optics with asymmetric beam SA2
LSM1	Optics with asymmetric beam SM1
T730	Colour temperature 3000K, CRI 70+
T740	Colour temperature 4000K, CRI 70+
T750	Colour temperature 5000K, CRI 70+







Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2

Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs





CYGNI LED

Product Group: Outdoor accent lighting

















Images for the product family and options:





Description: An architectural LED wall washer with symmetrical light distribution used for indoor and outdoor accent lighting applications

Optics: 30° light beam

Diffuser: tempered glass, impact resistant

Body: extruded aluminum, light grey finish, silicone rubber sealing and brass cable gland provides reliable protection

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP66 Mechanical impact resistance: IK09

EEC: A++

Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Cable, 1.0m, 3x0.75mm2

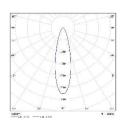
Environment: Outdoor **Application:** Facade illumination

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Cygni LED1x1900 D775 T740 L30	705	82	164	1897	15,8	120	+08	4000	3,00
Cygni LED1x2400 D776 T740 L30	705	82	164	2370	22,6	105	80+	4000	3,00
Cygni LED1x3200 D777 T740 L30	705	82	164	3162	29,9	106	+08	4000	3,00
Cygni LED1x3800 D778 T740 L30	1265	82	164	3794	29,9	127	80+	4000	6,00
Cygni LED1x4800 D779 T740 L30	1265	82	164	4740	42,7	111	+08	4000	6,00
Cygni LED1x6400 D780 T740 L30	1265	82	164	6324	59,7	106	80+	4000	6,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface
L30 Optics with 30x30° beam angle
T730 Colour temperature 3000K, CRI 70+
T740 Colour temperature 4000K, CRI 70+



Available accessories:



Product: Power supply connector - IP66/IP68, 3x1.5mm2
Description: Quick and easy to connect power supply and luminaire cables connector - IP66/IP68, 3x1.5mm2, 400V/16A, 1pcs



AUSTRU LED

Product Group: Outdoor accent lighting















Images for the product family and options:





Description: A non-corrosive architectural LED wall washer with double optics providing outdoor and indoor wall light effects

Optics: 2x60° light beam

Diffuser: tempered glass, impact resistant Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz Power factor: >0,95

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 40000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I

Ingress protection code: IP54 Mechanical impact resistance: IK08

EEC: A

Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Screw terminal, 3x1.5mm2

Environment: Outdoor

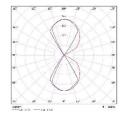
Application: Facade illumination

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Austru D LED1x600 C406 T840	125	90	80	510	6,7	77	+08	4000	0,55

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Colour temperature 4000K, CRI 70+





Applications:







TUBE M LED

Product Group: Outdoor accent lighting

























Description: An architectural LED wall washer with up and down light distribution. IP65 water and dust protection for use in adverse conditions

Optics: 1x30°, 1x45°, 1x60°, 2x30°, 2x45°, 2x60° light beam

Diffuser: tempered glass, impact resistant Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A+/A++

Installation: Surface mounted luminaire is designed to be fixed to walls or ceilings of any type. Screw terminal, 3x1.5mm2

Environment: Outdoor
Application: Facade illumination

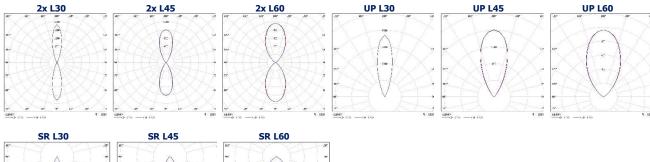
Product	Length,	Width,	Height,	Luminaire output*,	System power*,	System efficacy*	CRI	ССТ*, К	Weight, kg
				lm	W	, lm/W			9
Wall-mounted luminaires with up and do	wn light distrib	ution							
Tube M LED2x1100 D042 T830 L30	155	155	464	2063	19,3	107	80+	3000	3,20
Tube M LED2x1500 D043 T830 L30	155	155	464	2829	26,0	109	80+	3000	3,20
Tube M LED2x2000 D044 T830 L30	155	155	464	3927	38,4	102	80+	3000	3,20
Tube M LED2x1100 D042 T840 L30	155	155	464	2115	19,3	110	80+	4000	3,20
Tube M LED2x1500 D043 T840 L30	155	155	464	2901	26,0	112	80+	4000	3,20
Tube M LED2x2000 D044 T840 L30	155	155	464	4026	38,4	105	80+	4000	3,20
Tube M LED2x1100 D042 T830 L45	155	155	464	2063	19,3	107	80+	3000	3,20
Tube M LED2x1500 D043 T830 L45	155	155	464	2829	26,0	109	80+	3000	3,20
Tube M LED2x2000 D044 T830 L45	155	155	464	3927	38,4	102	80+	3000	3,20
Tube M LED2x1100 D042 T840 L45	155	155	464	2115	19,3	110	80+	4000	3,20
Tube M LED2x1500 D043 T840 L45	155	155	464	2901	26,0	112	80+	4000	3,20
Tube M LED2x2000 D044 T840 L45	155	155	464	4026	38,4	105	80+	4000	3,20
Tube M LED2x1100 D042 T830 L60	155	155	464	2118	19,3	110	80+	3000	3,20
Tube M LED2x1500 D043 T830 L60	155	155	464	2904	26,0	112	80+	3000	3,20
Tube M LED2x2000 D044 T830 L60	155	155	464	4032	38,4	105	80+	3000	3,20
Tube M LED2x1100 D042 T840 L60	155	155	464	2171	19,3	113	80+	4000	3,20
Tube M LED2x1500 D043 T840 L60	155	155	464	2978	26,0	115	80+	4000	3,20
Tube M LED2x2000 D044 T840 L60	155	155	464	4133	38,4	108	80+	4000	3,20

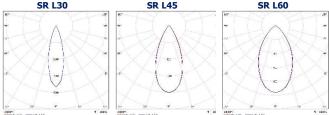


Vall-mounted luminaires with up (or dow	n) light distrit		250	1021	0.6	107	00.1	2000	2 20
Tube M UP LED1x1100 D045 T830 L30		155	250	1031	9,6	107	80+	3000	2,20
Tube M UP LED1x1500 D046 T830 L30	155	155	250	1415	13,1	108	80+	3000	2,20
Tube M UP LED1x2000 D047 T830 L30	155	155	250	1964	19,4	101	80+	3000	2,20
Tube M UP LED1x1100 D045 T840 L30	155	155	250	1058	9,6	110	80+	4000	2,20
Tube M UP LED1x1500 D046 T840 L30	155	155	250	1451	13,1	110	80+	4000	2,20
Tube M UP LED1x2000 D047 T840 L30	155	155	250	2013	19,4	104	80+	4000	2,20
Tube M UP LED1x1100 D045 T830 L45	155	155	250	1031	9,6	107	80+	3000	2,20
Tube M UP LED1x1500 D046 T830 L45	155	155	250	1415	13,1	108	80+	3000	2,20
Tube M UP LED1x2000 D047 T830 L45	155	155	250	1964	19,4	101	80+	3000	2,20
Tube M UP LED1x1100 D045 T840 L45	155	155	250	1058	9,6	110	80+	4000	2,20
Tube M UP LED1x1500 D046 T840 L45	155	155	250	1451	13,1	110	80+	4000	2,20
Tube M UP LED1x2000 D047 T840 L45	155	155	250	2013	19,4	104	80+	4000	2,20
Tube M UP LED1x1100 D045 T830 L60	155	155	250	1059	9,6	110	+08	3000	2,20
Tube M UP LED1x1500 D046 T830 L60	155	155	250	1452	13,1	110	+08	3000	2,20
Tube M UP LED1x2000 D047 T830 L60	155	155	250	2016	19,4	104	80+	3000	2,20
Tube M UP LED1x1100 D045 T840 L60	155	155	250	1086	9,6	113	80+	4000	2,20
Tube M UP LED1x1500 D046 T840 L60	155	155	250	1489	13,1	113	80+	4000	2,20
Tube M UP LED1x2000 D047 T840 L60	155	155	250	2067	19,4	106	80+	4000	2,20
Ceiling-mouunted luminaires with down li Tube M SR LED1x1100 D048 T830 L30	155	155	250	1031	9,6	107	80+	3000	2,20
Tube M SR LED1x1500 D049 T830 L30	155	155	250	1415	13,1	108	80+	3000	2,20
Tube M SR LED1x2000 D050 T830 L30	155	155	250	1964	19,4	101	80+	3000	2,20
Tube M SR LED1x1100 D048 T840 L30	155	155	250	1058	9,6	110	80+	4000	2,20
Tube M SR LED1x1500 D049 T840 L30	155	155	250	1451	13,1	110	80+	4000	2,20
Tube M SR LED1x2000 D050 T840 L30	155	155	250	2013	19,4	104	80+	4000	2,20
Tube M SR LED1x1100 D048 T830 L45	155	155	250	1031	9,6	107	80+	3000	2,20
Tube M SR LED1x1500 D049 T830 L45	155	155	250	1415	13,1	108	80+	3000	2,20
Tube M SR LED1x2000 D050 T830 L45	155	155	250	1964	19,4	101	80+	3000	2,20
Tube M SR LED1x1100 D048 T840 L45	155	155	250	1058	9,6	110	+08	4000	2,20
Tube M SR LED1x1500 D049 T840 L45	155	155	250	1451	13,1	110	80+	4000	2,20
Tube M SR LED1x2000 D050 T840 L45	155	155	250	2013	19,4	104	80+	4000	2,20
TUDE IT SK LLD1X2000 D030 T070 L73					9,6	110	80+	2000	
Tube M SR LED1x1100 D048 T830 L60	155	155	250	1059	9,0	110	00+	3000	2,20
	155 155	155 155	250 250	1059 1452	13,1	110	80+	3000	2,20 2,20
Tube M SR LED1x1100 D048 T830 L60									
Tube M SR LED1x1100 D048 T830 L60 Tube M SR LED1x1500 D049 T830 L60	155	155	250	1452	13,1	110	80+	3000	2,20
Tube M SR LED1x1100 D048 T830 L60 Tube M SR LED1x1500 D049 T830 L60 Tube M SR LED1x2000 D050 T830 L60	155 155	155 155	250 250	1452 2016	13,1 19,4	110 104	80+ 80+	3000 3000	2,20 2,20

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options: DALI L30 Driver with DALI interface
Optics with 30x30° beam angle
Optics with 45x45° beam angle
Optics with 60x60° beam angle
RAL colour
Colour temperature 3000K, CRI 80+
Colour temperature 4000K, CRI 80+
Colour temperature 5000K, CRI 80+ L45 L60 RAL T830 T840 T850







TUBE S LED

Product Group: Outdoor accent lighting















An architectural LED wall-mounted luminaire with pleasing up and down light distribution Optics: 30°, 90° light beam **Description:**

Diffuser: tempered glass, impact resistant Body: die-cast aluminum, dark grey finish Mains voltage: 220-240V, 50-60Hz

General data: Power factor: -/>0,50

Light source: 1xGU10/2xGU10/LED Light source included: No/Yes Light distribution type: Direct/indirect LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP54 Mechanical impact resistance: IK08

EEC: A

Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Screw terminal, 3x1.5mm2

Environment: Outdoor

Application: Facade illumination

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Tube S 2GU10 O13	90	90	300						1,40
Tube S 1GU10 O14 UP	90	90	158						1,30
Tube S 1GU10 O15 DOWN	90	90	158						1,30
Tube S LED2x400 B194 T840 L90	90	90	300	700	10,0	70	80+	4000	1,50
Tube S LED2x400 B194 T840 L30	90	90	300	700	10,0	70	+08	4000	1,50
Tube S UP LED1x400 B195 T840 L90	90	90	158	350	5,0	70	80+	4000	1,40
Tube S UP LED1x400 B195 T840 L30	90	90	158	350	5,0	70	80+	4000	1,40

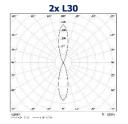
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

With up light source only With downlight source only DOWN LED bulb with 30° beam angle L30 LED tube with 90° beam angle L90

RAL colour RAL

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840







ARCTURUS LED

Product Group: Outdoor accent lighting















Description:

A vandal resistant LED bulkhead for outdoor wall applications. Designed to spread light sideways and sealed to IP65

Diffuser: opal polycarbonate, impact resistant Body: die-cast aluminum, black finish

General data:

Mains voltage: 220-240V, 50-60Hz Power factor: >0,95

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A+

Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Push-in terminal, 3x2x2.5mm2 Outdoor

Environment:

Application: Facade illumination, transport terminal, parking area, fuel station, public space

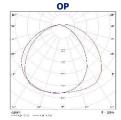
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Arcturus LED1x2800 E054 T830 OP	308	264	182	2639	27,1	97	80+	3000	2,40
Arcturus LED1x4000 E055 T830 OP	308	264	182	3845	40,7	95	+08	3000	2,40
Arcturus LED1x2800 E054 T840 OP	308	264	182	2720	27,1	100	80+	4000	2,40
Arcturus LED1x4000 E055 T840 OP	308	264	182	3964	40,7	97	80+	4000	2,40
Arcturus LED1x2800 E054 T850 OP	308	264	182	2759	27,1	102	80+	5000	2,40
Arcturus LED1x4000 E055 T850 OP	308	264	182	4020	40,7	99	80+	5000	2,40

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface MW

OP Opal polycarbonate diffuser T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+ T850 Colour temperature 5000K, CRI 80+





OVAL LED

Product Group: Outdoor accent lighting















Images for the product family and options:





Description: A surface IP54 LED luminaire with opal diffuser and high impact resistance to withstand vandalism in public areas

Diffuser: opal polycarbonate, UV stable, impact resistant

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,50/0,80 Light source: 1xE27/LED Light source included: No/Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP54

Mechanical impact resistance: IK08 EEC: A/A+

Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Facade illumination, parking area, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Oval S 1E27 C428	220	135	70						1,00
Oval S LED1x500 D473 T830	220	135	70	416	5,3	79	80+	3000	1,10
Oval S LED1x500 D473 T840	220	135	70	436	5,3	83	80+	4000	1,10
Oval S 1E27 C428 LOUVER	220	135	70						1,10
Oval S LED1x500 D473 T830 LOUVER	220	135	70	256	5,3	49	80+	3000	1,20
Oval S LED1x500 D473 T840 LOUVER	220	135	70	268	5,3	51	+08	4000	1,20
O I. D. I. E. D. I 700 D. D. F. I. T. 200	200	105	0.5	F77	7.0	02	00.	2000	1.50
Oval B LED1x700 D054 T830	280	185	95	577	7,0	82	80+	3000	1,50
Oval B LED1x900 D055 T830	280	185	95	798	10,0	80	80+	4000	1,50
Oval B LED1x700 D054 T840	280	185	95	603	7,0	86	80+	3000	1,50
Oval B LED1x900 D055 T840	280	185	95	835	10,0	83	80+	4000	1,50
Oval B LED1x500 D056 T830 LOUVER	280	185	95	430	7,3	59	80+	3000	1,60
Oval B LED1x500 D056 T840 LOUVER	280	185	95	451	7,3	62	+08	4000	1,60

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^\circ$ C

Available options:

LOUVER Decorative louver

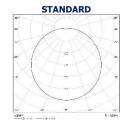
GRID Decorative grid (only Oval B LED series)

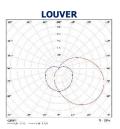
Water and dust protection IP65

IP65 Water and dust protection IP65

RAL RAL colou

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+







ETA LED

Product Group: Outdoor accent lighting



















Description: A surface IP65 LED luminaire with opal diffuser and high impact resistance to withstand vandalism in public areas

Diffuser: opal polycarbonate, UV stable, impact resistant

Body: die-cast aluminum, dark grey finish

Mains voltage: 220-240V, 50-60Hz Power factor: >0,80/0,90 General data:

Light source: 1xE27/LED Light source included: No/Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I

Ingress protection code: IP65
Mechanical impact resistance: IK08 EEC: A/A+

Installation:

Surface mounted luminaire is designed to be fixed to walls or ceiling of any type. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Facade illumination, parking area, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Eta M 1E27 C404	265	265	90						1,60
Eta M LED1x1200 D036 T830	265	265	90	1118	13,6	82	80+	3000	1,70
Eta M LED1x1200 D036 T840	265	265	90	1173	13,6	86	80+	4000	1,70
Eta M 1E27 C404 LOUVER	265	265	100						1,90
Eta M LED1x700 D037 T830 LOUVER	265	265	100	645	10,9	59	+08	3000	2,00
Eta M LED1x700 D037 T840 LOUVER	265	265	100	677	10,9	62	80+	4000	2,00
Ft- D FD1::1200 D0F7 T020	260	260	120	1107	14.1	05	00.	2000	2.50
Eta B LED1x1300 D057 T830	360	360	130	1197	14,1	85	80+	3000	2,50
Eta B LED1x1800 D038 T830	360	360	130	1677	20,5	82	80+	3000	2,50
Eta B LED1x900 C418 T840 ECO	360	360	130	845	16,0	53	+08	4000	2,50
Eta B LED1x1300 D057 T840	360	360	130	1252	14,1	89	80+	4000	2,50
Eta B LED1x1800 D038 T840	360	360	130	1759	20,5	86	80+	4000	2,50
Eta B LED1x700 D051 T830 LOUVER	360	360	145	614	10,0	61	+08	3000	2,60
Eta B LED1x1000 D039 T830 LOUVER	360	360	145	860	13,6	63	80+	3000	2,60
Eta B LED1x700 C419 T840 LOUVER ECO	360	360	145	650	16,0	41	80+	4000	2,60
Eta B LED1x700 D051 T840 LOUVER	360	360	145	642	10,0	64	80+	4000	2,60
Eta B LED1x1000 D039 T840 LOUVER	360	360	145	902	13,6	66	80+	4000	2,60

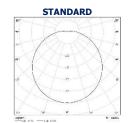
 st tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

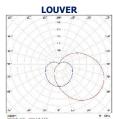
Available options:

DALI Driver with DALI interface

MW sensor LOUVER Decorative louver RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+







LEO LED

Product Group: Outdoor accent lighting















Images for the product family and options:









Description: A surface IP54 LED luminaire with opal diffuser and decorative indirect wall light effects

Diffuser: opal polycarbonate, UV stable, impact resistant

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,80 Light source: 1xE27/LED Light source included: No/yes Light distribution type: Direct/indirect LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP54 Mechanical impact resistance: IK08

EEC: A/A+

Installation: Surface mounted luminaire is designed to be fixed to walls or ceiling of any type. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Facade illumination, parking area, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Leo 1E27 C402	265	265	90						1,60
Leo LED1x1200 D034 T830	265	265	90	1118	13,6	82	80+	3000	1,70
Leo LED1x1200 D034 T840	265	265	90	1173	13,6	86	80+	4000	1,70
Leo 1E27 C402 LOUVER	265	265	100						1,90
Leo LED1x1200 D034 T830 LOUVER	265	265	100	688	13,6	50	80+	3000	2,00
Leo LED1x1200 D034 T840 LOUVER	265	265	100	722	13,6	53	+08	4000	2,00

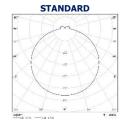
 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface MW MW sensor

LOUVER Decorative louver
RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





DUBHE LED

Product Group: Outdoor accent lighting













Images for the product family and options:



Description: A surface IP54 LED luminaire with opal diffuser for outdoor wall applications

Diffuser: opal polycarbonate, UV stable, impact resistant

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,50/0,80 Light source: 1xE27/LED Light source included: No/yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I

Ingress protection code: IP54 Mechanical impact resistance: IK08

EEC: A/A+

Installation: Surface mounted luminaire is designed to be fixed to walls or ceiling of any type. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

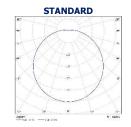
Application: Facade illumination, parking area, public space

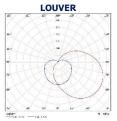
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Dubhe S 1E27 C420	190	190	60						1,10
Dubhe S LED1x300 C421 T830	190	190	60	215	4,0	54	80+	3000	1,20
Dubhe S 1E27 C420 LOUVER	190	190	65						1,20
Dubhe S LED1x300 C421 T830 LOUVER	190	190	65	132	4,0	33	80+	3000	1,30
Dubhe M 1E27 C423	270	270	80						1,30
Dubhe M LED1x900 D052 T830	270	270	80	798	10,0	80	+08	3000	1,40
Dubhe M LED1x900 D052 T840	270	270	80	835	10,0	83	80+	4000	1,40
Dubhe M 1E27 C423 LOUVER	270	270	85						1,50
Dubhe M LED1x500 D053 T830 LOUVER	270	270	85	430	7,3	59	80+	3000	1,60
Dubhe M LED1x500 D053 T840 LOUVER * tolerance range for optical and electrical data: ±10%.	270 Values apply to an	270 ambient tem	85 perature of 25%	451 C	7,3	62	80+	4000	1,60

Available options:

DALI Driver with DALI interface MW MW sensor LOUVER Decorative louver RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+







PYXIS

Product Group: Outdoor accent lighting













Images for the product family and options:







Description: A surface IP54 LED luminaire frosted glass diffuser and decorative wall light effect

Diffuser: tempered glass, frosted, impact resistant

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz Light source: 1xE27

Light source included: No

Light distribution type: Direct/indirect

Operating temperature range, °C: ta -25...+40 Protection class IEC: I

Ingress protection code: IP54
Mechanical impact resistance: IK08

EEC: A/A+

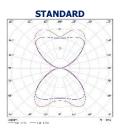
Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Screw terminal, 3x1.5mm2

Environment: Outdoor

Application: Facade illumination, parking area, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Pyxis 1E27 Q90	220	90	125						1,5

^{*} tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25%





THETA LED

Product Group: Outdoor accent lighting



















Description: A recessed wall-mounted LED luminaire with IP54 water and dust protection for outdoor and indoor applications

Diffuser: tempered glass, frosted, impact resistant

Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,50 Light source: 1xE27/LED Light source included: No/yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP54

Mechanical impact resistance: IK08

Installation: Suitable for recessed mounting into the walls. Supplied with thermoplastic recessed installation housing. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Facade illumination, tunnel, park, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Theta 1E27 Q75	255	80	70						1
Theta LED1x300 D058 T830	255	80	70	222	3,6	62	80+	3000	1,20
Theta LED1x300 D058 T840	255	80	70	232	3,6	64	+08	4000	1,20
Theta 1E27 Q75 GRID	255	80	70						1
Theta LED1x300 D058 T830 GRID	255	80	70	111	3,6	31	80+	3000	1,20
Theta LED1x300 D058 T840 GRID	255	80	70	116	3,6	32	80+	4000	1,20

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

GRID Protective grid RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





ATLAS M LED

Product Group: Outdoor accent lighting













Images for the product family and options:







Description: A ground recessed LED floodlight with a choice of round or square stainless-steel frame. IP67 - water and dust protection for use in

adverse conditions

Diffuser: tempered glass, clear, impact resistant

Ring: Stainless-steel, grade 316

Body: die-cast aluminum, dark grey finish, with anti-ageing silicone gasket

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40 Protection class IEC: I

Protection class IEC: I Ingress protection code: IP67 Mechanical impact resistance: IK10

EEC: A+/A++

Installation: Suitable for recessed mounting in any horizontal surface. Gravel must be used to ensure efficient drainage, 300 mm in depth and

around. Supplied with thermoplastic recessed installation housing. Cable, 1.0m, 3x1.5mm2

Environment: Outdoor

Application: Facade illumination, public space

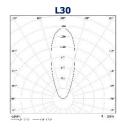
Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Atlas M LED1x1100 D454 T830 L30	200	200	235	1031	9,6	107	80+	3000	4,50
Atlas M LED1x1500 D455 T830 L30	200	200	235	1415	13,1	108	+08	3000	4,50
Atlas M LED1x2000 D456 T830 L30	200	200	235	1964	19,4	101	80+	3000	4,50
Atlas M LED1x1100 D454 T840 L30	200	200	235	1058	9,6	110	80+	4000	4,50
Atlas M LED1x1500 D455 T840 L30	200	200	235	1451	13,1	110	80+	4000	4,50
Atlas M LED1x2000 D456 T840 L30	200	200	235	2013	19,4	104	80+	4000	4,50
Atlas M LED1x1100 D454 T830 L45	200	200	235	1031	9,6	107	80+	3000	4,50
Atlas M LED1x1500 D455 T830 L45	200	200	235	1415	13,1	108	80+	3000	4,50
Atlas M LED1x2000 D456 T830 L45	200	200	235	1964	19,4	101	+08	3000	4,50
Atlas M LED1x1100 D454 T840 L45	200	200	235	1058	9,6	110	80+	4000	4,50
Atlas M LED1x1500 D455 T840 L45	200	200	235	1451	13,1	110	80+	4000	4,50
Atlas M LED1x2000 D456 T840 L45	200	200	235	2013	19,4	104	80+	4000	4,50
Atlas M LED1x1100 D454 T830 L60	200	200	235	1059	9,6	110	80+	3000	4,50
Atlas M LED1x1500 D455 T830 L60	200	200	235	1452	13,1	110	80+	3000	4,50
Atlas M LED1x2000 D456 T830 L60	200	200	235	2016	19,4	104	+08	3000	4,50
Atlas M LED1x1100 D454 T840 L60	200	200	235	1086	9,6	113	+08	4000	4,50
Atlas M LED1x1500 D455 T840 L60	200	200	235	1489	13,1	113	80+	4000	4,50
Atlas M LED1x2000 D456 T840 L60	200	200	235	2067	19,4	106	+08	4000	4,50
Atlas M LED1x1100 D454 T830 LA1	200	200	235	1059	9,6	110	80+	3000	4,50
Atlas M LED1x1500 D455 T830 LA1	200	200	235	1452	13,1	110	80+	3000	4,50
Atlas M LED1x2000 D456 T830 LA1	200	200	235	2016	19,4	104	80+	3000	4,50
Atlas M LED1x1100 D454 T840 LA1	200	200	235	1086	9,6	113	80+	4000	4,50
Atlas M LED1x1500 D455 T840 LA1	200	200	235	1489	13,1	113	+08	4000	4,50
Atlas M LED1x2000 D456 T840 LA1	200	200	235	2067	19,4	106	80+	4000	4,50



Atlas M LED1x1100 D454 T830 L30	200	200	235	1031	9,6	107	80+	3000	4,50
Atlas M LED1x1500 D455 T830 L30	200	200	235	1415	13,1	108	80+	3000	4,50
Atlas M LED1x2000 D456 T830 L30	200	200	235	1964	19,4	101	80+	3000	4,50
Atlas M LED1x1100 D454 T840 L30	200	200	235	1058	9,6	110	80+	4000	4,50
Atlas M LED1x1500 D455 T840 L30	200	200	235	1451	13,1	110	80+	4000	4,50
Atlas M LED1x2000 D456 T840 L30	200	200	235	2013	19,4	104	80+	4000	4,50
Atlas M LED1x1100 D454 T830 L45	200	200	235	1031	9,6	107	80+	3000	4,50
Atlas M LED1x1500 D455 T830 L45	200	200	235	1415	13,1	108	80+	3000	4,50
Atlas M LED1x2000 D456 T830 L45	200	200	235	1964	19,4	101	80+	3000	4,50
Atlas M LED1x1100 D454 T840 L45	200	200	235	1058	9,6	110	80+	4000	4,50
Atlas M LED1x1500 D455 T840 L45	200	200	235	1451	13,1	110	80+	4000	4,50
Atlas M LED1x2000 D456 T840 L45	200	200	235	2013	19,4	104	80+	4000	4,50
Atlas M LED1x1100 D454 T830 L60	200	200	235	1059	9,6	110	80+	3000	4,50
Atlas M LED1x1500 D455 T830 L60	200	200	235	1452	13,1	110	80+	3000	4,50
Atlas M LED1x2000 D456 T830 L60	200	200	235	2016	19,4	104	80+	3000	4,50
Atlas M LED1x1100 D454 T840 L60	200	200	235	1086	9,6	113	80+	4000	4,50
Atlas M LED1x1500 D455 T840 L60	200	200	235	1489	13,1	113	80+	4000	4,50
Atlas M LED1x2000 D456 T840 L60	200	200	235	2067	19,4	106	80+	4000	4,50
Atlas M LED1x1100 D454 T830 LA1	200	200	235	1059	9,6	110	80+	3000	4,50
Atlas M LED1x1500 D455 T830 LA1	200	200	235	1452	13,1	110	80+	3000	4,50
Atlas M LED1x2000 D456 T830 LA1	200	200	235	2016	19,4	104	80+	3000	4,50
Atlas M LED1x1100 D454 T840 LA1	200	200	235	1086	9,6	113	80+	4000	4,50
Atlas M LED1x1500 D455 T840 LA1	200	200	235	1489	13,1	113	80+	4000	4,50
Atlas M LED1x2000 D456 T840 LA1	200	200	235	2067	19,4	106	+08	4000	4,50

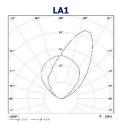
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options: DALI Driver with DALI interface SQUARE L30 Square stainless steel frame Optics with 30x30° beam angle Optics with 45x45° beam angle Optics with 60x60° beam angle Optics with asymmetric beam SA1 L45 L60 LA1 T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+







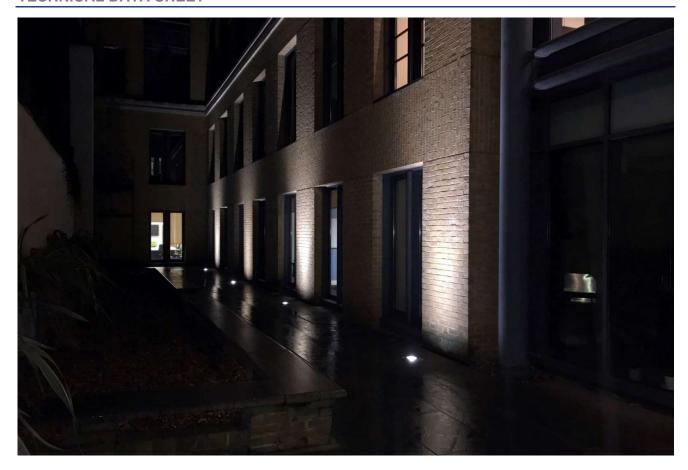


Applications:











ATLAS S LED

Product Group: Outdoor accent lighting













Images for the product family and options:









Description: A ground recessed LED floodlight with a choice of round or square stainless-steel frame. IP67 - water and dust protection for use in

Diffuser: tempered glass, clear, impact resistant

Ring: Stainless-steel, grade 316/304

Body: die-cast aluminum, dark grey finish, with anti-ageing silicone gasket

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,50 Light source: 1xGU10/LED Light source included: No/yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP67 Mechanical impact resistance: IK10

EEC: A

Installation: Suitable for recessed mounting in any horizontal surface. Gravel must be used to ensure efficient drainage, 200 mm in depth and

around. Supplied with thermoplastic recessed installation housing. Cable, 0.3m, 3x0.75mm2

Environment: Outdoor

Application: Facade illumination, park, public space



Recessed housing is used for easy access and service of floodlight during all life time









Series with single, twin and twelve window covers are available on request. They are supplied with special glass to increase light efficiency and to prevent collection of the dirt. See the option list for more information



Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Atlas S 1GU10 Q72	105	105	165						1
Atlas S 1GU10 Q72 GLASS COVER1	105	105	165						1
Atlas S 1GU10 Q72 GLASS COVER2	105	105	165						1
Atlas S 1GU10 Q72 GLASS COVER12	105	105	165						1
Atlas S LED1x400 B677 T840 L90	105	105	165	350	5,0	70	80+	4000	1,40
Atlas S LED1x400 B677 T840 L30	105	105	165	350	5,0	70	80+	4000	1,40
Atlas S LED1x400 B677 T840 GLASS COVER1	105	105	165	21	5,0	4	80+	4000	1,40
Atlas S LED1x400 B677 T840 GLASS COVER2	105	105	165	42	5,0	8	80+	4000	1,40
Atlas S LED1x400 B677 T840 GLASS COVER12	105	105	165	35	5,0	7	80+	4000	1,40
Atlas S 1GU10 Q72 SS304	105	105	165						
Atlas S 1GU10 Q72 SS304 SQUARE	105	105	165						
Atlas S LED1x400 B677 T840 SS304 L90	105	105	165	350	5,0	70	80+	4000	1,40
Atlas S LED1x400 B677 T840 SS304 L30	105	105	165	350	5,0	70	80+	4000	1,40
Atlas S LED1x400 B677 T840 SS304 L90 SQUARE	105	105	165	350	5,0	70	80+	4000	1,40
Atlas S LED1x400 B677 T840 SS304 L30 SQUARE	105	105	165	350	5,0	70	80+	4000	1,40

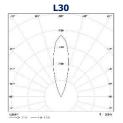
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

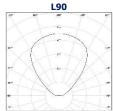
Available options:

SQUARE GLASS Square stainless steel frame

Special glass to increase light efficiency

COVER1 Dome with single window COVER2 Dome with double window COVER12 Dome with twelve window \$\$304 Stainless-steel ring, grade 304
*Note: standard version ring is made from stainless-steel grade 316
L30 LED bulb with 30° beam angle SS304 L30 LED bulb with 90° beam angle L90 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T830 T840







KAPPA LED

Product Group: Outdoor accent lighting



















Description: A wall-mounted LED floodlight with IP65 water and dust protection for lighting of building exteriors

Diffuser: tempered glass, clear, impact resistant Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,50 Light source: 1xGU10/LED Light source included: No/yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A Installation: Surface mounted luminaire is designed to be fixed to walls of any type. Cable, 0.3m, 3x0.75mm2

Environment: Outdoor

Application: Facade illumination

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Kappa 1GU10 Q87	70	150	210						0,7
Kappa 1GU10 Q88 LONG	70	150	605						1,2
Kappa LED1x400 B678 T840 L90	70	150	210	350	5,0	70	+08	4000	1,40
Kappa LED1x400 B678 T840 L30	70	150	210	350	5,0	70	+08	4000	1,40
Kappa LED1x400 B679 T840 LONG L90	70	150	605	350	5,0	70	80+	4000	1,40
Kappa LED1x400 B679 T840 LONG L30	70	150	605	350	5,0	70	80+	4000	1,40

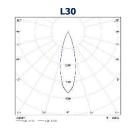
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

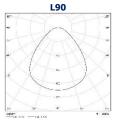
Available options:

LED bulb with 30° beam angle LED bulb with 90° beam angle L30 L90

RAL colour RAL

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840







APUS LED

Product Group: Outdoor accent lighting















Images for the product family and options:





Description: A wall-or ground-mounted LED floodlight with IP65 water and dust protection for lighting of architectural details, sculptures and trees

Diffuser: tempered glass, clear, impact resistant Body: die-cast aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,50 Light source: 1xGU10/LED Light source included: No/yes Light distribution type: Direct LED lifetime, h: 30000/L70B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I

Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A

Surface mounted luminaire is designed to be fixed to walls of any type or ground-mounted. Ground spike or holder for wall mounting are supplied depending on version. Cable, 0.3m, 3x0.75mm2 Installation:

Environment: Outdoor

Application: Facade illumination, park, public space

Product	Lengt h, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Apus 1GU10 O11 HOL	98	98	98						0,5
Apus 1GU10 O12 GRO	98	98	98						0,5
Apus LED1x400 B192 T840 HOL L90	98	98	98	350	5,0	70	80+	4000	1,40
Apus LED1x400 B192 T840 HOL L30	98	98	98	350	5,0	70	+08	4000	1,40
Apus LED1x400 B193 T840 GRO L90	98	98	98	350	5,0	70	80+	4000	1,40
Apus LED1x400 B193 T840 GRO L30	98	98	98	350	5,0	70	80+	4000	1,40

 $^{^*}$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25 $^{\circ}$ C

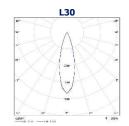
Available options:

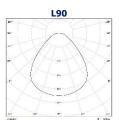
Holder for wall-mounted version HOI Ground spike for ground-mounted version LED bulb with 30° beam angle GRO L30

LED bulb with 90° beam angle L90

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+ T840







PARK AND LUMINA

www.northcliffe.org



NIGEA LED

Product Group: Park and Street Luminaires















Description: A circular LED bollard emphasizing simple design and high vandal resistance

Diffuser: clear polycarbonate, impact resistance Reflector: matt aluminum, de-glaring performance Body: extruded aluminum, dark grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L80B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I Ingress protection code: IP54 Mechanical impact resistance: IK08

EEC: A++

Installation: Flange mounting plate. Screw terminal, 3x1.5mm2

Environment: Outdoor

Application: Household, park, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Nigea LED1x1650 E800 T830	165	165	800	1542	14,3	108	80+	3000	3,50
Nigea LED1x1650 E800 T840	165	165	800	1627	14,3	113	80+	4000	3,50

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

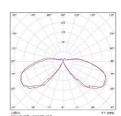
Available options:

SDIM Driver with switch-control dimming

DALI Driver with DALI interface

RAL RAL colour

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+





SIGNUS LED

Product Group: Park and Street Luminaires



















A decorative LED park light with frosted diffuser and round canopy Diffuser: frosted polycarbonate, UV stabilized, good impact resistance Body: die-cast aluminum, dark grey finish **Description:**

Mains voltage: 220-240V, 50-60Hz General data:

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L90B50

Operating temperature range, °C: ta -25...+40

Protection class IEC: I (II optional) Ingress protection code: IP65 Mechanical impact resistance: IK08

Installation: Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3 to 5 meters. Cable, 3.0m, 3x0.75mm2

Environment: Outdoor

Application: Household, park, public space



Photocell PCA switches lighting fixtures ON or OFF, at the same time it can be mounted into IP protected light fitting serving as a standalone solution. The built-in photo-sensor records the brightness of the surroundings and switches the connected lighting fixtures on at dusk and of again at dawn. Technical data: IP65- dust and waterproof, 35 lux, 1:05 ratio. For more information see the option

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Signus LED1x2600 D856 T830	420	420	420	2488	18,2	137	80+	3000	4,90
Signus LED1x3550 D857 T830	420	420	420	3386	26,3	129	80+	3000	4,90
Signus LED1x4400 D858 T830	420	420	420	4211	34,6	122	80+	3000	4,90
Signus LED1x5000 D859 T830	420	420	420	4774	41,1	116	80+	3000	4,90
Signus LED1x2600 D856 T840	420	420	420	2600	18,2	143	80+	4000	4,90
Signus LED1x3550 D857 T840	420	420	420	3538	26,3	135	80+	4000	4,90
Signus LED1x4400 D858 T840	420	420	420	4400	34,6	127	80+	4000	4,90
Signus LED1x5000 D859 T840	420	420	420	4988	41,1	121	80+	4000	4,90

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

SDIM Driver with switch-control dimming

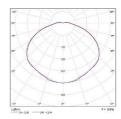
DALI Driver with DALI interface

PCA Photocell 20mm miniature type, IP65, 35 lux; 1:05 ratio

Electric Shock protection class II

RAL

T830 Colour temperature 3000K, CRI 80+ T840 Colour temperature 4000K, CRI 80+









SPHERE LED

Product Group: Park and Street Luminaires















Description:

A non-corrosive sphere-shaped LED park light with opal polycarbonate diffuser Diffuser: opal polycarbonate, UV stabilized, good impact resistance

Body: polycarbonate, black finish, with quick lock system

General data:

Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta -20...+40

Protection class IEC: I (II optional) Ingress protection code: IP54 Mechanical impact resistance: IK08

Installation:

Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3 to 5 meters. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Parking area, park, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Sphere LED1x3000 D061 T830 OP PC	500	500	555	2795	32,0	87	80+	3000	4,90
Sphere LED1x4200 D062 T830 OP PC	500	500	555	3994	43,6	92	+08	3000	4,90
Sphere LED1x5900 D063 T830 OP PC	500	500	555	5590	64,0	87	80+	3000	4,90
Sphere LED1x3000 D061 T840 OP PC	500	500	555	2928	32,0	91	80+	4000	4,90
Sphere LED1x4200 D062 T840 OP PC	500	500	555	4170	43,6	96	+08	4000	4,90
Sphere LED1x5900 D063 T840 OP PC	500	500	555	5855	64,0	91	80+	4000	4,90

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface

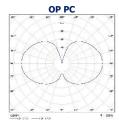
CDIM Driver dimming with the help of a control line ADIM Driver with autonomous two-level dimming

Electric Shock protection class II

tmin-35C Suitable for low ambient temperatures up to -35°C

OP Opal diffuser IP65 IP65 protection

T830 Colour temperature 3000K, CRI 80+ Colour temperature 4000K, CRI 80+



Applications:















VELA LED

Product Group: Park and Street Luminaires

















Description: A decorative LED park light with frosted polycarbonate diffuser and large canopy

Diffuser: frosted polycarbonate, UV stabilized, good impact resistance

Canopy: aluminium, light grey finish (optional: ROOF) Body: polycarbonate, black finish, with quick lock system

General data: Mains voltage: 220-240V, 0/50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 50000/L70B50

Operating temperature range, °C: ta -20...+40 Protection class IEC: I (II optional)

Ingress protection code: IP54 Mechanical impact resistance: IK08 EEC: A+

Installation: Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3 to 5 meters. Push-in terminal, 3x2x2.5mm2

Environment: Outdoor

Application: Parking area, park, public space, street

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Vela LED1x3200 D474 T830 FROST	400	400	510	3010	32,0	94	+08	3000	4,3
Vela LED1x4500 D475 T830 FROST	400	400	510	4301	43,6	99	+08	3000	4,3
Vela LED1x6400 D476 T830 FROST	400	400	510	6020	64,0	94	+08	3000	4,3
Vela LED1x3200 D474 T840 FROST	400	400	510	3153	32,0	99	80+	4000	4,3
Vela LED1x4500 D475 T840 FROST	400	400	510	4491	43,6	103	80+	4000	4,3
Vela LED1x3200 D474 T830 FROST ROOF	500	500	540	2795	32,0	87	80+	3000	5,30
Vela LED1x4500 D475 T830 FROST ROOF	500	500	540	3994	43,6	92	80+	3000	5,30
Vela LED1x6400 D476 T830 FROST ROOF	500	500	540	5590	64,0	87	80+	3000	5,30
Vela LED1x3200 D474 T840 FROST ROOF	500	500	540	2928	32,0	91	80+	4000	5,30
Vela LED1x4500 D475 T840 FROST ROOF	500	500	540	4170	43,6	96	80+	4000	5,30

 $[^]st$ tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

Driver with DALI interface DALI CDIM

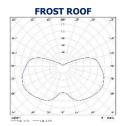
Driver dimming with the help of a control line Driver with autonomous two-level dimming ADIM Electric Shock protection class II

Suitable for low ambient temperatures up to -35°C tmin-35C

FROST Mat coated

Colour temperature 3000K, CRI 80+ T830 Colour temperature 4000K, CRI 80+ T840







SEGIN LED

Product Group: Park and Street Luminaires















Description: A traditional four-sided LED park light for lighting historical environments, traditional towns and villages

Optics: 140x140° and asymmetric light beam

Diffuser: tempered glass, extra clear, impact resistant Body: die-cast aluminum, black finish, super resistance to corrosion

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95

Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, °C: ta -25...+40

Protection class IEC: I (II optional) Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A++

Post top installation with three screws on poles Ø60mm. Suggested mounting height from 3 to 6 meters. Push-in terminal, 3x2x2.5mm2 Installation:

Environment: Outdoor

Application: Parking area, park, public space, street



Photocell PCA switches lighting fixtures ON or OFF, at the same time it can be mounted into IP protected light fitting serving as a standalone solution. The built-in photo-sensor records the brightness of the surroundings and switches the connected lighting fixtures on at dusk and of again at dawn. Technical data: IP65- dust and waterproof, 35 lux, 1:05 ratio. For more information see the option

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Segin LED1x4350 E941 T730 LS140	425	425	816	4156	34,1	122	70+	3000	8,20
Segin LED1x5350 E942 T730 LS140	425	425	816	5112	44,0	116	70+	3000	8,20
Segin LED1x6500 E943 T730 LS140	425	425	816	6235	51,1	122	70+	3000	8,20
Segin LED1x8000 E944 T730 LS140	425	425	816	7669	66,0	116	70+	3000	8,20
Segin LED1x8700 E945 T730 LS140	425	425	816	8313	68,2	122	70+	3000	8,20
Segin LED1x4350 E941 T740 LS140	425	425	816	4330	34,1	127	70+	4000	8,20
Segin LED1x5350 E942 T740 LS140	425	425	816	5325	44,0	121	70+	4000	8,20
Segin LED1x6500 E943 T740 LS140	425	425	816	6494	51,1	127	70+	4000	8,20
Segin LED1x8000 E944 T740 LS140	425	425	816	7988	66,0	121	70+	4000	8,20
Segin LED1x8700 E945 T740 LS140	425	425	816	8659	68,2	127	70+	4000	8,20

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

ΙΙ

Driver with DALI interface DALT

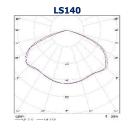
CDIM Driver dimming with the help of a control line ADIM Driver with autonomous two-level dimming Photocell 20mm miniature type, IP65, 35 lux; 1:05 ratio PCA

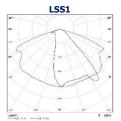
Electric Shock protection class II Suitable for low ambient temperatures up to -35°C Optics with 140x140° beam angle tmin-35C

L140 Optics with asymmetric beam SS1 LSS1

RAL RAL colour

Colour temperature 3000K, CRI 70+ T730 T740 Colour temperature 4000K, CRI 70+ T750 Colour temperature 5000K, CRI 70+







SQUALL LED

Product Group: Park and Street Luminaires













Description: A modern heritage LED park light combinates gently curved design while meeting today's urban environment

Optics: 140x140° and asymmetric light beam

Diffuser: tempered glass, extra clear, impact resistant
Body: die-cast aluminum, black finish, super resistance to corrosion

Mains voltage: 220-240V, 50-60Hz General data:

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, °C: ta -25...+40

Protection class IEC: I (II optional) Ingress protection code: IP66 Mechanical impact resistance: IK08

EEC: A++

Installation: Post top installation with four screws on poles Ø60mm. Suggested mounting height from 3 to 6 meters. Push-in terminal, 3x2x2.5mm2 **Environment:**

Application: Parking area, park, public space, street



Photocell PCA switches lighting fixtures ON or OFF, at the same time it can be mounted into IP protected light fitting serving as a standalone solution. The built-in photo-sensor records the brightness of the surroundings and switches the connected lighting fixtures on at dusk and of again at dawn. Technical data: IP65- dust and waterproof, 35 lux, 1:05 ratio. For more information see the option

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Squall LED1x5350 E946 T730 LS140	475	475	535	5325	44,0	121	70+	3000	12,00
Squall LED1x6250 E947 T730 LS140	475	475	535	5967	47,4	126	70+	3000	12,00
Squall LED1x8700 E948 T730 LS140	475	475	535	8313	68,2	122	70+	3000	12,00
Squall LED1x10700 E949 T730 LS140	475	475	535	10225	87,9	116	70+	3000	12,00
Squall LED1x5350 E946 T740 LS140	475	475	535	5325	44,0	121	70+	4000	12,00
Squall LED1x6250 E947 T740 LS140	475	475	535	6216	47,4	131	70+	4000	12,00
Squall LED1x8700 E948 T740 LS140	475	475	535	8659	68,2	127	70+	4000	12,00
Squall LED1x10700 E949 T740 LS140	475	475	535	10651	87,9	121	70+	4000	12,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

Driver with DALI interface DALI

CDIM Driver dimming with the help of a control line ADIM Driver with autonomous two-level dimming PCA Photocell 20mm miniature type, IP65, 35 lux; 1:05 ratio

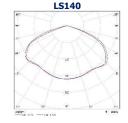
ΤT Electric Shock protection class II

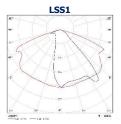
tmin-35C Suitable for low ambient temperatures up to -35°C

LS140 Optics with 140x140° beam angle LSS1 Optics with asymmetric beam SS1

RAL RAL colour

Colour temperature 3000K, CRI 70+ T730 T740 Colour temperature 4000K, CRI 70+ T750 Colour temperature 5000K, CRI 70+







ALGOL M LED

Product Group: Park and Street Luminaires















Description: A high efficiency LED street lighting luminaire with excellent heat dissipation and low maintenance cost

Optics: LSM1, LSPR, LSPL, for streets and pedestrian-crossing

Diffuser: tempered glass, with stainless steel clips, silicone rubber sealing

Body: die-cast aluminum, light grey finish

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, °C: ta -25/-30...+40

Protection class IEC: I, II optional Ingress protection code: IP66 Mechanical impact resistance: IK08

EEC: A++

Installation: Side entry or post top installation with two screws on poles Ø60mm. Suggested mounting height from 6 to 12 meters. Screw terminal, 3x1.5mm2

Environment: Outdoor

Application: Parking area, public space, street



Photocell PCA switches lighting fixtures ON or OFF, at the same time it can be mounted into IP protected light fitting serving as a standalone solution. The built-in photo-sensor records the brightness of the surroundings and switches the connected lighting fixtures on at dusk and of again at dawn. Technical data: IP65- dust and waterproof, 35 lux, 1:05 ratio. For more information see the option

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Algol MS LED1x3000 D004 T730 LSM1	522	216	137	2867	26,7	107	70+	3000	3,20
Algol MS LED1x5300 D005 T730 LSM1	522	216	137	5070	43,9	115	70+	3000	3,20
Algol MM LED1x8900 D006 T730 LSM1	629	268	148	8601	77,6	111	70+	3000	4,60
Algol MM LED1x11800 D007 T730 LSM1	629	268	148	11469	102,8	112	70+	3000	4,60
Algol MB LED1x14800 D008 T730 LSM1	752	310	178	14336	128,0	112	70+	3000	7,20
Algol MB LED1x17700 D009 T730 LSM1	752	310	178	17203	153,5	112	70+	3000	7,20
Algol MX LED1x19900 D010 T730 LSM1	863	359	199	19312	170,1	114	70+	3000	12,00
Algol MX LED1x23600 D111 T730 LSM1	863	359	199	22937	204,7	112	70+	3000	12,00
Algol MS LED1x3000 D004 T740 LSM1	522	216	137	3018	26,7	113	70+	4000	3,20
Algol MS LED1x5300 D005 T740 LSM1	522	216	137	5337	43,9	122	70+	4000	3,20
Algol MM LED1x8900 D006 T740 LSM1	629	268	148	9054	77,6	117	70+	4000	4,60
Algol MM LED1x11800 D007 T740 LSM1	629	268	148	12072	102,8	117	70+	4000	4,60
Algol MB LED1x14800 D008 T740 LSM1	752	310	178	15090	128,0	118	70+	4000	7,20
Algol MB LED1x17700 D009 T740 LSM1	752	310	178	18108	153,5	118	70+	4000	7,20
Algol MX LED1x19900 D010 T740 LSM1	863	359	199	20328	170,1	120	70+	4000	12,00
Algol MX LED1x23600 D111 T740 LSM1	863	359	199	24144	204,7	118	70+	4000	12,00
Algol MS LED1x3000 D004 T740 LSPR	522	216	137	3087	26,7	115	70+	4000	3,20
Algol MS LED1x5300 D005 T740 LSPR	522	216	137	5459	43,9	124	70+	4000	3,20
Algol MM LED1x8900 D006 T740 LSPR	629	268	148	9262	77,6	119	70+	4000	4,60
Algol MM LED1x11800 D007 T740 LSPR	629	268	148	12350	102,8	120	70+	4000	4,60
Algol MB LED1x14800 D008 T740 LSPR	752	310	178	15437	128,0	121	70+	4000	7,20
Algol MB LED1x17700 D009 T740 LSPR	752	310	178	18524	153,5	121	70+	4000	7,20
Algol MX LED1x19900 D010 T740 LSPR	863	359	199	20796	170,1	122	70+	4000	12,00
Algol MX LED1x23600 D111 T740 LSPR	863	359	199	24699	204,7	121	70+	4000	12,00



Algol MS LED1x3000 D004 T740 LSPL	522	216	137	3087	26,7	115	70+	4000	3,20
Algol MS LED1x5300 D005 T740 LSPL	522	216	137	5459	43,9	124	70+	4000	3,20
Algol MM LED1x8900 D006 T740 LSPL	629	268	148	9262	77,6	119	70+	4000	4,60
Algol MM LED1x11800 D007 T740 LSPL	629	268	148	12350	102,8	120	70+	4000	4,60
Algol MB LED1x14800 D008 T740 LSPL	752	310	178	15437	128,0	121	70+	4000	7,20
Algol MB LED1x17700 D009 T740 LSPL	752	310	178	18524	153,5	121	70+	4000	7,20
Algol MX LED1x19900 D010 T740 LSPL	863	359	199	20796	170,1	122	70+	4000	12,00
Algol MX LED1x23600 D111 T740 LSPL	863	359	199	24699	204,7	121	70+	4000	12,00

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface

Driver with DALI interface

Driver dimming with the help of a control line
Driver with autonomous two-level dimming

for power above 180W use two DALI, CDIM, ADIM option price
Photocell 20mm miniature type, IP65, 35 lux; 1:05 ratio CDIM ADIM

*note PCA Π Electric Shock protection class II

tmin-35C Suitable for low ambient temperatures up to -35°C

LSM1 Optics with asymmetric beam SM1 LSM2 Optics with asymmetric beam SM2 LSS1 Optics with asymmetric beam SS1 LSS2 Optics with asymmetric beam SS2

Optics with asymmetric beam LSPR for pedestrian-crossing "right" LSPR Optics with asymmetric beam LSPL for pedestrian-crossing "left" LSPL

RAL RAL colour

Colour temperature 3000K, CRI 70+ T730 T740 Colour temperature 4000K, CRI 70+ T750 Colour temperature 5000K, CRI 70+





ALGOL L LED

Product Group: Park and Street Luminaires























Description: A vandal and vibration proof LED street light designed to match the highest required standards for outdoor lighting

Optics: LSM1, LSPR, LSPL, for streets and pedestrian-crossing

Diffuser: tempered glass, extra-clear, impact resistant, with stainless steel screws and silicone rubber sealing

Body: die-cast aluminum, dark grey finish

Easy clean design including flat glass optical cover and optimally sized smooth heat dissipation cover

General data: Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, 'C: ta -25...+40 (ta -35...+40 optional)
Protection class IEC: I (II optional)

Ingress protection code: IP66 Mechanical impact resistance: IK09

EEC: A++

Installation: Side entry or post top installation with two screws on poles Ø60mm. Suggested mounting height from 6 to 12 meters. Adjustable

installation angles: for side entry: 0, 10, 15 degrees and for post entry 0, 5, 15 degrees. Push-in terminal, 3x2x2.5mm2

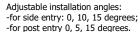
Environment: Outdoor

Application: Parking area, public space, street















Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*,	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Algol LS LED1x3000 D112 T740 LSM1	484	240	146	3018	26,7	113	70+	4000	5,00
Algol LS LED1x5900 D113 T740 LSM1	484	240	146	6036	51,7	117	70+	4000	5,00
Algol LM LED1x8900 D114 T740 LSM1	640	242	146	9054	77,6	117	70+	4000	7,00
Algol LM LED1x11800 D115 T740 LSM1	640	242	146	12072	102,4	118	70+	4000	7,00
Algol LB LED1x17700 D116 T740 LSM1	720	360	195	18108	153,5	118	70+	4000	12,00
Algol LS LED1x3000 D112 T740 LSPR	484	240	146	3087	26,7	115	70+	4000	5,00
Algol LS LED1x5900 D113 T740 LSPR	484	240	146	6175	51,7	119	70+	4000	5,00
Algol LM LED1x8900 D114 T740 LSPR	640	242	146	9262	77,6	119	70+	4000	7,00
Algol LM LED1x11800 D115 T740 LSPR	640	242	146	12350	102,4	121	70+	4000	7,00
Algol LB LED1x17700 D116 T740 LSPR	720	360	195	18524	153,5	121	70+	4000	12,00



Algol LS LED1x3000 D112 T740 LSPL	484	240	146	3087	26,7	115	70+	4000	5,00
Algol LS LED1x5900 D113 T740 LSPL	484	240	146	6175	51,7	119	70+	4000	5,00
Algol LM LED1x8900 D114 T740 LSPL	640	242	146	9262	77,6	119	70+	4000	7,00
Algol LM LED1x11800 D115 T740 LSPL	640	242	146	12350	102,4	121	70+	4000	7,00
Algol LB LED1x17700 D116 T740 LSPL	720	360	195	18524	153.5	121	70+	4000	12.00

^{*} tolerance range for optical and electrical data: $\pm 10\%$. Values apply to an ambient temperature of 25°C

Available options:

Driver with DALI interface
Driver dimming with the help of a control line
Driver with autonomous two-level dimming DALI CDIM ADIM

ΙΙ Electric Shock protection class II

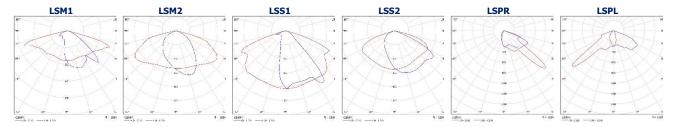
tmin-35C Suitable for low ambient temperatures up to -35°C Optics with asymmetric beam SM1

LSM1 LSM2 Optics with asymmetric beam SM2 LSS1 Optics with asymmetric beam SS1 Optics with asymmetric beam SS2 LSS2

Optics with asymmetric beam LSPR for pedestrian-crossing "right" Optics with asymmetric beam LSPL for pedestrian-crossing "left" LSPR LSPL

RAL RAL colour

T730 Colour temperature 3000K, CRI 70+ Colour temperature 4000K, CRI 70+ T740 Colour temperature 5000K, CRI 70+ T750





AUVA LED

Product Group: Park and Street Luminaires





220-240V 50-60Hz











Description:

A high-performance LED street lighting luminaire brings comfort and safety to any road or street

Optics: LSM1, LSPR, LSPL, for streets and pedestrian-crossing

Diffuser: tempered glass, extra-clear, impact resistant, with stainless steel screws and silicone rubber sealing Body: die-cast aluminum, light grey finish, tool-less top opening for easy and safe maintenance operations Easy clean design including flat glass optical cover and optimally sized smooth heat dissipation cover

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,95 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 100000/L90B10

Operating temperature range, °C: ta -25...+40 (ta -35...+40 optional)

Protection class IEC: I (II optional) Ingress protection code: IP66 Mechanical impact resistance: IK09

Installation:

Side entry or post top installation with two screws on poles Ø60mm. Suggested mounting height from 6 to 12 meters. Adjustable

installation angles: for side entry: +/-15 degrees and for post entry +/-15 degrees. Screw terminal, 3x2.5mm2

Environment: Outdoor

Parking area, public space, street **Application:**



Photocell PCA switches lighting fixtures ON or OFF, at the same time it can be mounted into IP protected light fitting serving as a standalone solution. The built-in photo-sensor records the brightness of the surroundings and switches the connected lighting fixtures on at dusk and of again at dawn. Technical data: IP65- dust and waterproof, 35 lux, 1:05 ratio. For more information see the option

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	CCT*, K	Weight, kg
Auva LED 1x3250 E921 T730 LSM1	525	250	102	3087	26,5	117	70+	3000	4,90
Auva LED 1x3450 E922 T730 LSM1	525	250	102	3307	25,6	129	70+	3000	5,00
Auva LED 1x4250 E923 T730 LSM1	525	250	102	4068	33,0	123	70+	3000	5,00
Auva LED 1x4850 E924 T730 LSM1	525	250	102	4630	38,9	119	70+	3000	5,00
Auva LED 1x4600 E925 T730 LSM1	525	250	102	4410	34,1	129	70+	3000	5,00
Auva LED 1x5650 E926 T730 LSM1	525	250	102	5424	44,0	123	70+	3000	5,00
Auva LED 1x6450 E927 T730 LSM1	525	250	102	6174	51,8	119	70+	3000	5,00
Auva LED 1x6900 E928 T730 LSM1	525	250	102	6615	51,1	129	70+	3000	5,00
Auva LED 1x8500 E929 T730 LSM1	525	250	102	8136	66,0	123	70+	3000	5,00
Auva LED 1x9650 E930 T730 LSM1	625	288	102	9261	77,7	119	70+	3000	7,20
Auva LED 1x9200 E931 T730 LSM1	625	288	102	8820	68,2	129	70+	3000	7,30
Auva LED 1x11300 E932 T730 LSM1	625	288	102	10848	87,9	123	70+	3000	7,30
Auva LED 1x10350 E933 T730 LSM1	625	288	102	9922	76,7	129	70+	3000	7,30
Auva LED 1x12750 E934 T730 LSM1	625	288	102	12204	97,9	125	70+	3000	7,30
Auva LED 1x13800 E935 T730 LSM1	625	288	102	13230	101,2	131	70+	3000	7,30
Auva LED 1x13800 E936 T730 LSM1	776	320	102	13230	101,2	131	70+	3000	9,40
Auva LED 1x16950 E937 T730 LSM1	776	320	102	16272	130,5	125	70+	3000	9,40
Auva LED 1x19300 E938 T730 LSM1	776	320	102	18521	153,8	120	70+	3000	9,40
Auva LED 1x18400 E939 T730 LSM1	776	320	102	17639	134,9	131	70+	3000	9,50
Auva LED 1x22650 E940 T730 LSM1	776	320	102	21696	174,0	125	70+	3000	9,50
Auva LED 1x3250 E921 T740 LSM1	525	250	102	3216	26,5	121	70+	4000	4,90
Auva LED 1x3450 E922 T740 LSM1	525	250	102	3445	25,6	135	70+	4000	5,00
Auva LED 1x4250 E923 T740 LSM1	525	250	102	4238	33,0	128	70+	4000	5,00
Auva LED 1x4850 E924 T740 LSM1	525	250	102	4823	38,9	124	70+	4000	5,00
Auva LED 1x4600 E925 T740 LSM1	525	250	102	4594	34,1	135	70+	4000	5,00
Auva LED 1x5650 E926 T740 LSM1	525	250	102	5650	44,0	128	70+	4000	5,00
Auva LED 1x6450 E927 T740 LSM1	525	250	102	6431	51,8	124	70+	4000	5,00
Auva LED 1x6900 E928 T740 LSM1	525	250	102	6890	51,1	135	70+	4000	5,00
Auva LED 1x8500 E929 T740 LSM1	525	250	102	8475	66,0	128	70+	4000	5,00



MAKING LIFE BRIGHTER

TECHNICAL DATA SHEET

Auva LED 1x9650 E930 T740 LSM1	625	288	102	9647	77,7	124	70+	4000	7,20
Auva LED 1x9200 E931 T740 LSM1	625	288	102	9187	68,2	135	70+	4000	7,30
Auva LED 1x11300 E932 T740 LSM1	625	288	102	11300	87,9	128	70+	4000	7,30
Auva LED 1x10350 E933 T740 LSM1	625	288	102	10336	76,7	135	70+	4000	7,30
Auva LED 1x12750 E934 T740 LSM1	625	288	102	12713	97,9	130	70+	4000	7,30
Auva LED 1x13800 E935 T740 LSM1	625	288	102	13781	101,2	136	70+	4000	7,30
Auva LED 1x13800 E936 T740 LSM1	776	320	102	13781	101,2	136	70+	4000	9,40
Auva LED 1x16950 E937 T740 LSM1	776	320	102	16950	130,5	130	70+	4000	9,40
Auva LED 1x19300 E938 T740 LSM1	776	320	102	19293	153,8	125	70+	4000	9,40
Auva LED 1x18400 E939 T740 LSM1	776	320	102	18374	134,9	136	70+	4000	9,50
Auva LED 1x22650 E940 T740 LSM1	776	320	102	22601	174,0	130	70+	4000	9,50
*									

^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

DALI Driver with DALI interface

CDIM Driver dimming with the help of a control line ADIM Driver with autonomous two-level dimming

PCA Photocell 20mm miniature type, IP65, 35 lux; 1:05 ratio II Electric Shock protection class II

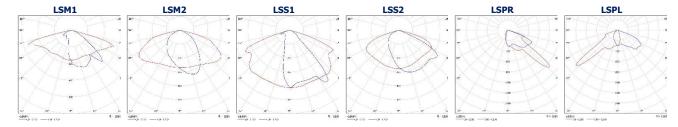
tmin-35C Suitable for low ambient temperatures up to -35°C LSM1 Optics with asymmetric beam SM1

LSM1 Optics with asymmetric beam SM1
LSM2 Optics with asymmetric beam SM2
LSS1 Optics with asymmetric beam SS1
LSS2 Optics with asymmetric beam SS2

LSPR Optics with asymmetric beam LSPR for pedestrian-crossing "right" LSPL Optics with asymmetric beam LSPL for pedestrian-crossing "left"

RAL RAL colour

T730 Colour temperature 3000K, CRI 70+
T740 Colour temperature 4000K, CRI 70+
T750 Colour temperature 5000K, CRI 70+





STAR LED

Product Group: Park and Street Luminaires

















A budget LED street lighting luminaire with good heat dissipation and low maintenance cost

Diffuser: frosted polycarbonate, impact resistant

Body: die-cast aluminum, dark grey finish

General data:

Mains voltage: 220-240V, 50-60Hz

Power factor: >0,90 Light source: LED Light source included: Yes Light distribution type: Direct LED lifetime, h: 35000/L70B50

Operating temperature range, °C: ta -20...+40

Protection class IEC: I Ingress protection code: IP65 Mechanical impact resistance: IK08

EEC: A

Outdoor

Installation: Side entry installation with two screws on poles Ø 60mm (50-100W) and Ø42 30W versions. Supplied with out-going cable for easy

mounting. Cable, 0.3m, 3x1.00mm2

Environment:

Application: Parking area, public space

Product	Length, mm	Width, mm	Height, mm	Luminaire output*, Im	System power*, W	System efficacy* , lm/W	CRI	ССТ*, К	Weight, kg
Star LED1x3000 E917 T740	302	130	66	3000	30	100	70+	4000	0,70
Star LED1x5000 E918 T740	396	170	88	5000	50	100	70+	4000	1,25
Star LED1x7000 E919 T740	396	170	88	7000	70	100	70+	4000	1,30
Star LED1x10000 E920 T740	460	220	88	10000	100	100	70+	4000	2.10

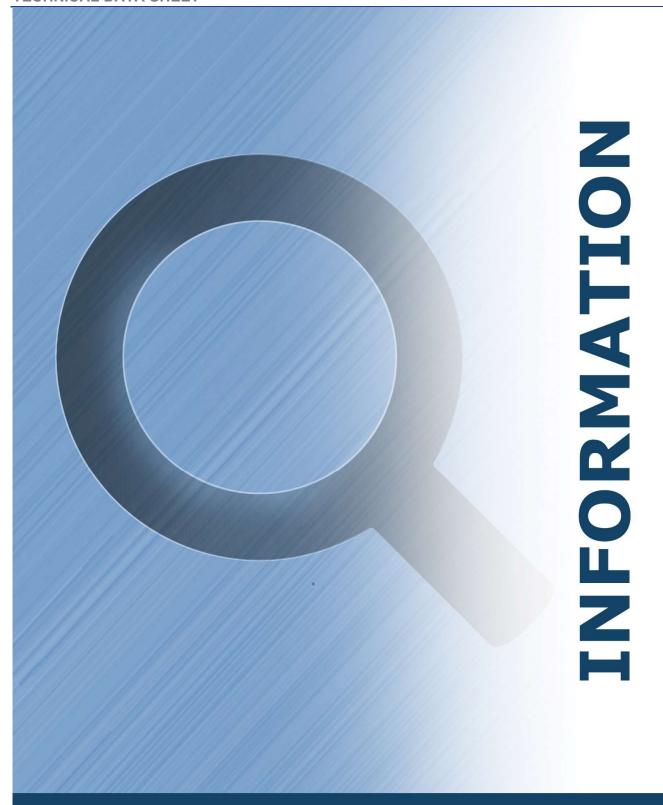
^{*} tolerance range for optical and electrical data: ±10%. Values apply to an ambient temperature of 25°C

Available options:

T740 Colour temperature 4000K, CRI 70+







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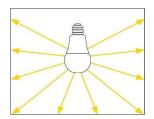


LIGHT TERMINOLOGY

Luminous flux Φ (lm)

The luminous flux describes the quantity of light emitted by a LED light source or luminaire.

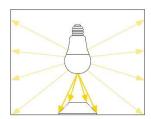
The luminous efficiency is the ratio of the luminous flux to the electrical power consumed (lm/W). It is a measure of a LED light source's economic efficacy.



where: Φ- luminous flux lm- Lumen

Illuminance L (lx)

Illuminance describes the amount of luminous flux falling on a surface. Relevant standards specify the required illuminance according to location and activity (EN 12464-1 "Lighting of indoor workplaces", EN 12464-2 "Lighting of outdoor workplaces", EN 12193 "Sports facility lighting")



 $E = \Phi/A$ lx=lm/m2

where: E- illuminance Φ- luminous flux A- area, m2

Typical recommended levels of maintained illuminance

Location/Task	Typical recommended level of maintained illuminance, lx	UGR	Uo	Ra
Offices				
Writing, typing, reading, data processing	500	19	0.6	80
Computer work stations	500	19	0.6	80
Technical drawing	750	16	0.7	80
Conference and meeting rooms	500	19	0.6	80
Reception desks	300	22	0.6	80
Filing, copying, etc.	300	19	0.4	80
Archives	200	25	0.4	80
Educational buildings				
Classrooms, tutorial rooms	300	19	0.6	80
Classrooms for evening classes and adults education	500	19	0.6	80
Black, green wallboards and whiteboards	500	19	0.6	80
Entrance halls	200	22	0.4	80
Stairs	150	25	0.4	80
Circulation areas, corridors	100	25	0.4	80
Sports halls, gymnasiums, swimming pools (general use)	300	22	0.6	80
Store rooms, frozen food stores:				
Store and stockrooms	100	25	0.4	60
Dispatch packing handling areas	300	25	0.6	60
Storage rack areas:				
Gangways: unmanned	20	-	0.4	40
Gangways: manned	150	22	0.4	60
Control stations	150	22	0.6	80
Front of (high-bay) racks	200	-	0.4	60
Factory assembly areas:				
Rough work	300	25	0.6	80
Medium work	500	22	0.6	80
Fine work	750	19	0.7	80
Very fine work:				
Instrument assembly	1,000	19	0.7	80
Jewellery assembly/repairs	1,500	16	0.7	90
Hospital autopsy tables and dissecting tables	5,000	-	-	90
Sports facilities:				
Aerobics, athletics, dancing, gymnastics, swimming	<i>500</i>	-	-	60
Basketball, football, handball, table tennis, tennis, volleyball, weight lifting	<i>750</i>	-	-	60
School sports	<i>750</i>	-	-	60
the area.				

where:

UGR- Unified glare rating serves to define the psychological glare (visual discomfort) of lighting installations in indoor spaces

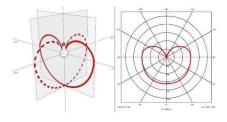
Uo- Uniformity is the ratio of minimum illuminance to average illuminance on a surface

Ra- Colour rendering index



Luminous intensity I (cd)

The luminous intensity describes the quantity of light emitted in a particular direction per unit solid angle. This is a useful measurement for directive lighting elements such as reflectors. It is represented by the luminous intensity distribution curve.



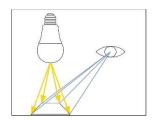
I = Φ/Ω cd=lm/sr

where:

- I- luminous intensity
- Φ- luminous flux, Im
- Ω solid angle into which luminous flux is emitted, sr
- cd- Candela
- sr- Steradian

Luminance (cd/m2)

The intensity and brilliance of light emitted from an item in a given direction. Luminance is often used to characterize emission or reflection from flat, diffuse surfaces. The luminance indicates how much luminous power will be detected by an eye looking at the surface from a particular angle of view. Luminance is thus an indicator of how bright the surface will appear.



 $L=I/(A*cos\epsilon)$ $L=(E*\rho)/\pi$

whore

Ω- solid angle into which luminous flux is emitted, sr

A- area hit by luminous flux, m2

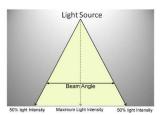
A*cosε- visible area from direction ε

p- reflectance of area (for diffuse surface areas)

п- 3.14

Beam angle (degree, °)

The Beam Angle is the angle between the two directions opposed to each other over the beam axis for which the luminous intensity is half that of the maximum luminous intensity.



Power consumption (W)

The electrical power used by a luminaire or light source. Usually expressed in watt-hours (power consumed per hour).

Energy efficacy (Im/W)

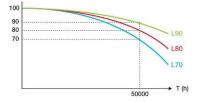
The figure gained by dividing the total luminous flux by the power consumed. Used to express the luminous flux (amount of light) gained per watt, the higher the figure the more efficient is the luminaire.

LED lifetime (h)

The lifetime of a LED luminaire illustrates the target life expectancy (for example 50 000 hour life expectancy) which is a combination of light output degradation (L80 when the light output has reduced to 80% of its initial level) and source performance expectation (B10 when 10% of the LEDs lumen outputs falls below 80% of the nominal initial value) under specific conditions.

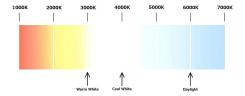
L- Lumen maintenance. L value tells that how many percent of luminous output is still left from the original.

B- Failure fraction. The value B10 means that minimum 90 % of the LED modules will meet the declared L-value and only 10% will have a lower flux level.



Colour temperature (K)

Used to numerically express the colour of light sources, the redder the colour the lower the number and the bluer the colour the higher the number where: K- Kelvin



2700K- extra warm white 3000K- warm white 4000K- natural white 5000K- cool white 6500K- day light

Colour rendering index (CRI)

Colour rendering describes how a light source makes the colour of an object appear to human eyes and how well subtle variations in colour shades are revealed. The Colour Rendering Index (CRI) is a scale from 0 to 100 percent indicating how accurate a "given" light source is at rendering colour when compared to a "reference" light source. A minimum of 80 CRI is recommended for working areas.



Light sources are divided up into colour rendering levels:

CRI > 90 very good colour rendering

CRI > 80 good colour rendering

Unified Glare Rating (UGR)

UGR is a method of calculating glare from luminaires. The UGR value is calculated using a complex equation that includes the luminance value of the luminaire, the value of background luminance, the solid angle of the luminaire as seen by the viewer and several other values. Within an office setting, for the luminaire to be classified as "low glare" it must have a UGR below 19 at desk level. Anything above this may cause discomfort – this further enforces the need for high quality interior lighting that is rated UGR<19.



UGR = 8
$$\log \left[\frac{0.25}{L_b} \sum_{\alpha} \left(\frac{L^2 \omega}{p^2} \right) \right]$$

UGR limits (UGRL) that must not be exceeded:

≤ 16 Technical drawing

≤ 19 Reading, writing, training, meetings, computer-based work

≤ 22 Craft and light industries

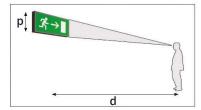
≤ 25 Heavy industry

≤ 28 Railway platforms, foyers

Recognition distance (m)

Signs placed at all emergency exits along escape routes should be so illuminated as to indicate the direction to a place of safety in an unambiguous manner (EN1838 Lighting applications. Emergency lighting). Exit and direction signs should be clearly visible from anywhere along the escape route. All signs indicating emergency exits and escape routes should be in the same colour and format, whereas their minimum illuminance should be 2 cd/m2.

As people in the building may not be familiar with its layout, internally illuminated, permanently powered safety signs are recommended. Note that internally illuminated safety signs are visible from a greater distance than the same size signs illuminated from the outside.



d=s*p

where:

d- viewing distance (maximum distance at which a sign is visible and recognizable), m

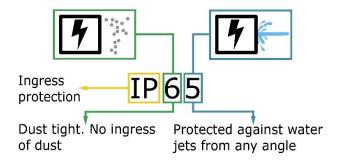
p- height of sign, m

s- constant value: 100 for externally illuminated signs and 200 for internally illuminated signs



DEGREES OF IP PROTECTION

IP is an acronym "Ingress Protection". It is a measurement of the protection an item will have against solid objects (dust, sand, dirt, etc.) and liquids. An IP rating is comprised of 2 numbers. The first number refers to the protection against solid objects (dust, etc.) and the second number refers to protection against liquids.



What is an IP Rating?

Each IP rating has two numbers, both of which give you information about the protection level. A higher number means greater protection against solids and liquids.

- The first number (0-6) refers to the level of protection against solid objects and moving parts, such as dust, debris, or other solid matter.
- The second number (0-8) references the level of liquid and moisture protection.

Take a look at the chart below to better understand the protection offered with each number.

IP rating chart

IP ratings are represented by combining the first and second digits of the following columns.

1 st DIGIT - S Degree of p	SOLID rotection against so	olid objects	2 nd DIGIT- V Degree of p	VATER rotection aga
0		No protection	0	
1	9 50 mm	Protected against a solid object greater than 50mm, such as a hand	1	4
2	12.5 mm	Protected against a solid object greater than 12.5mm, such as a finger	2	137
3	2.5 mm	Protected against a solid object greater than 2.5mm, such as a small tool	3	
4	1 mm	Protected against a solid object greater than 1.0mm, such as a wire	4	0)
5	7	Dust protected. Prevents ingress of dust sufficient to cause harm	5	4
6	7	Dust tight. No ingress of dust	6	4
			7	4

2 nd DIGIT- \ Degree of p	NATER rotection against w	ater
0		No protection
1	7	Protected against water drops
2	137	Protected against water drops at a 15- degree angle
3		Protected against water spray at a 60-degree angle
4	07-	Protected against water splashing from any angle
5	7	Protected against water jets from any angle
6	7	Protected against powerful jets from and temporary flooding
7	4	Protected against the effects of temporary submersion in water (30 minutes at 0.15 to 1 meter)
8	4	Protected against the effects of permanent submersion in water (up to 3 meters). Depth specified by manufacturer



DEGREES OF IK PROTECTION

The IK rating is an international code which measures the degree of protection against mechanical wear and tear as well as the amount of impact a specific fixture can take. Essentially it is a measure of a fixtures robustness and durability.

So why is a fixtures IK rating important and when do they become relevant when choosing a fixture?

If you are choosing a fixture which will be fitted within a high traffic area such as street, highway or other commercial environments, then it's important to choose a fixture with an appropriate IK rating.

If a fixture was to become damaged, it could result in the fixture failing to work efficiently, or worse still, failing completely.

You don't need a fixture which is highly resistant if there is little or no risk of impact. So, analyzing your risk of impact is the first step in deciding if you need a fixture with a high IK rating. It's not just high traffic areas which need IK rated fixtures, but if the area is prone to vandalism it's a good idea too.

For areas of low risk an IK rating of IK07 and below is ideal. IK08 is great for areas which provide a reasonable risk of impact, whereas for maximum protection in places such as parks, schools, prisons and subways IK10 is essential.

IK rating chart

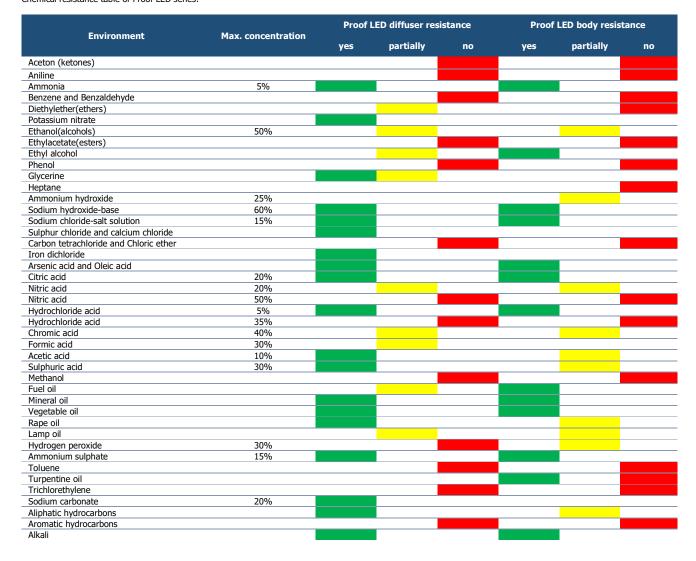
The degree of mechanical protection is identified by a code that consists of the letters IK followed by two digits:

IK number	Energy		Equivalent impact
00	Non-protected		No protection
01	Protected against 0.14 joules impact	0,25 kg	Equivalent to impact of 0.25 kg mass dropped from 56 mm above impacted surface
02	Protected against 0.2 joules impact	0,25 kg	Equivalent to impact of 0.25 kg mass dropped from 80 mm above impacted surface
03	Protected against 0.35 joules impact	0,25 kg	Equivalent to impact of 0.25 kg mass dropped from 140 mm above impacted surface
04	Protected against 0.5 joules impact	0,25 kg	Equivalent to impact of 0.25 kg mass dropped from 200 mm above impacted surface
05	Protected against 0.7 joules impact	0,25 kg	Equivalent to impact of 0.25 kg mass dropped from 280 mm above impacted surface
06	Protected against 1 joules impact	0,25 kg	Equivalent to impact of 0.25 kg mass dropped from 400 mm above impacted surface
07	Protected against 2 joules impact	0,5 kg	Equivalent to impact of 0.5 kg mass dropped from 400 mm above impacted surface
08	Protected against 5 joules impact	1,7 kg	Equivalent to impact of 1.7 kg mass dropped from 300 mm above impacted surface
09	Protected against 10 joules impact	5 kg	Equivalent to impact of 5 kg mass dropped from 200 mm above impacted surface
10	Protected against 20 joules impact	5 kg	Equivalent to impact of 5 kg mass dropped from 400 mm above impacted surface



CHEMICAL RESISTANCE OF PROOF LED

Chemical resistance table of Proof LED series:





NOTES



CONTACTS



For countries not listed, please contact: info@northcliffe.org

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