

SPORTOVNÍ HALA LYSÁ NAD LABEM

S001.D.1.4.d.7.3 - Kniha svítidel

TENTO VÝKRES JE CHRÁNĚN AUTORSKÝMI PRÁVY.

± 0,000 = 196,300 m.n.m.

PROJEKT / PROJECT:
SPORTOVNÍ HALA LYSÁ NAD LABEM
LYSÁ NAD LABEM, KATASTRÁLNÍ ÚZEMÍ LYSÁ NAD LABEM

INVESTOR / CLIENT:
MĚŠTO LYSÁ NAD LABEM
Husovo náměstí 23, 289 22 Lysá nad Labem, IČO: 00239402, DIČ: CZ00239402

ZPRACOVATEL ČÁSTI / SUBCONTRACTOR:

Dlouhá 101, Hradec Králové 500 03; T: 773 550 371; E: info@jika-cz.cz; W: www.jika-cz.cz

AUTORIZAČNÍ RAZÍTKO / AUTHORIZATION:

PARÉ / SET:

ZODPOVĚDNÝ PROJEKTANT / RESPONSIBLE DESIGNER:
Ing. Jiří Slánský

ZPRACOVAL / DRAWN BY:
Tomáš Jindra

KONTROLOVAL / CHECKED BY:
Tomáš Jindra

FÁZE / PHASE:
DPS - Dokumentace pro provedení stavby

OBJEKT/BUILDING:
SPORTOVNÍ HALA LYSÁ NAD LABEM

MĚŘÍTKO / SCALE:

ČÍSLO PROJEKTU / PROJECT NUMBER
J201908015

NÁZEV VÝKRESU / TITLE:
Kniha svítidel

ČÍSLO VÝKRESU / DRAWING No.:
S001.D.1.4.d.7.3

DATUM / DATE:
05/2020

REVIZE:
X

Svítilidlo je možné vyrobit k montáži do všech typů podhledů M600 a M625 a pro montáž do sádkartonu. Svítidla pro modul M625 a svítidla do sádkartonu nutno specifikovat v objednávce. Svítidlo je osazeno elektronikou a diodami renomovaných výrobců.

Optická část: podélná i příčná lamela - ocelový bíle lakovaný plech vyztužený ocelovou tyčí (4 ks) s opálovým difuzorem pro snížení oslnění. Mřížka je speciálně upevněna k tělesu svítidla, odolná vůči nárazu.



ELEKTRICKÉ VLASTNOSTI

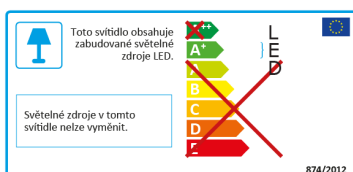
Příkon	112 W
Napájecí napětí	198 - 264 VAC / 190 - 280 VDC
Účinnost	0.98
Harmonické zkreslení	<10
Třída izolace	I
Energetická třída	A+
Stmívání	-
Počet na jistič C 16A	15 ks
Doba životnosti LED driveru	90 000 hod. @ $t_c=45^\circ$

OPTICKÉ VLASTNOSTI

Světelný tok svítidla	10680 lm
Světelná účinnost	95 lm/W
Teplota chromatičnosti	3K / 4K / 5K
Index podání barev	80+
Tolerance barev	3 step MacAdam
Vyzařovací úhel	-
Činitel oslnění	18.7/20.1
Jas @65° < 3000 cd/m²	-
Doba životnosti LED	L80B20 = 110 000 hod.

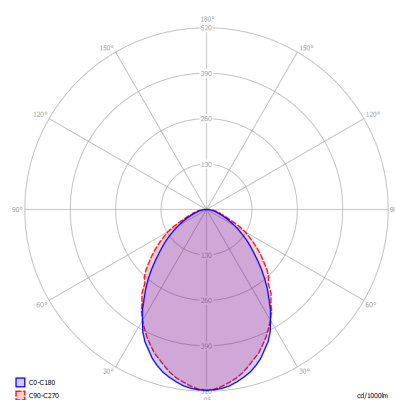
MECHANICKÉ VLASTNOSTI

Rozměry	1195 x 595 x 90 mm
Hmotnost	8.2 kg
Provozní teplota	- 25 ~ + 25 °C
Stupeň krytí	IP 40
Materiál tělesa	lakovaný Fe plech
Materiál reflektoru	Fe
Materiál difuzoru	PMMA
Způsob montáže	vestavná



Tolerance uvedených údajů ± 7,5 %

POLÁRNÍ DIAGRAM



NA OBJEDNÁVKU

CCT 2700K, 3500K, 5700K, 6500K

CRI > 90Ra

Jiný příkon

Přívodní kabel

Konektory Gesis GST, RST

Sada pro SDK

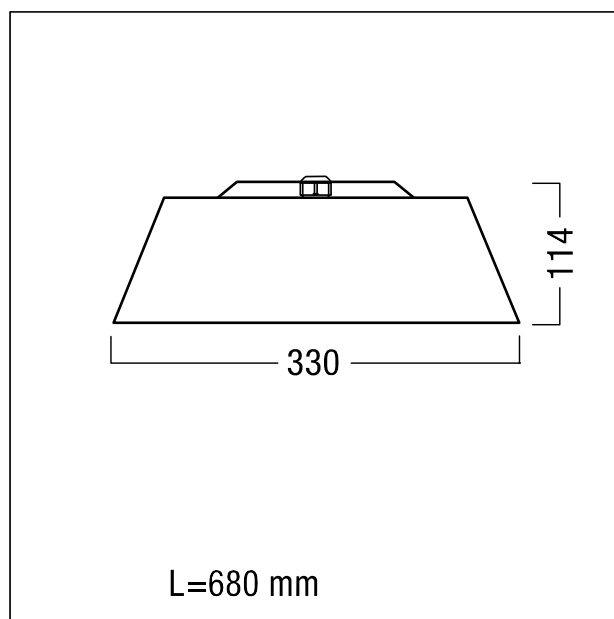
Libovolná barva RAL

Nouzový zdroj 1 h/3 h

Tiskové chyby, změny v konstrukci i světelné technických parametrech jsou vyhrazeny.

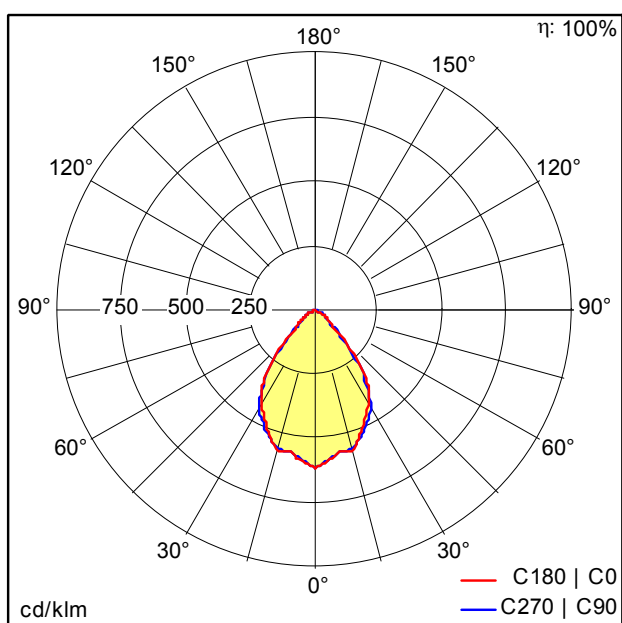
LED high-bay luminaire

LED high-bay luminaire Luminaire input power: 174.6 W, includes DALI- and emergency supply-compatible LED converter, die-cast aluminium housing in matt, white. Powder-coated cooling ribs for optimum thermal management and minimal dust accumulation. Cover of transparent polycarbonate. Suitable for use in sports halls (BWS certificate). The following mounting accessories are suitable for this: Chain suspension with ceiling bracket. The wire suspension and TECTON mounting are not suitable for use in sports halls. Slave luminaire for DALI control (DALI only) with LED converter. LED service life lasts 50000 h before luminous flux is reduced to 85% of the initial value over the entire ambient temperature range. Chromaticity tolerance (initial MacAdam): 3. Luminaire luminous flux: 25200 lm, Luminaire efficacy: 144 lm/W. Colour rendering Ra > 80, colour temperature 4000 K. Sealed, high-efficiency optical lens system, Luminaire with symmetric wide light distribution (wide beam), UGR <22. Pre-assembled 5 x 1mm² connecting cable, length 2m, with free ends, included in scope of supply (suspension with at least 100 mm distance to ceiling); Luminaire wired with halogen-free and silicone-free leads. Note: please contact your consultant if you are planning to use in ambient atmospheres with chemical load, high or condensing air humidity, large temperature fluctuations or projects with the necessary absence of silicone. Class of protection: SC1; degree of protection: IP65; ambient temperature: -40°C to +55°C; Dimensions: 680 x 330 x 114 mm. Weight: 10 kg



Light Distribution

STD - standard



- Light Source: LED
- Luminaire luminous flux*: 25200 lm
- Luminaire efficacy*: 144 lm/W
- Colour Rendering Index min.: 80
- Ballast: 2 x 28002053 DRV TR LCI 150W 1.05A 300V D #04A PRE sl
- Correlated colour temperature*: 4000 Kelvin
- Chromaticity tolerance (initial MacAdam)*: 3
- Rated median useful life*:
50000h L85 at -40°C
50000h L85 at 55°C
- Luminaire input power*: 174.6 W Power factor = 0.95
- Standby Power*: 1.06 W
- Dimming: LDO dimmable to 10% over DALI
- Maintenance category: E - Dust-proof IP5X

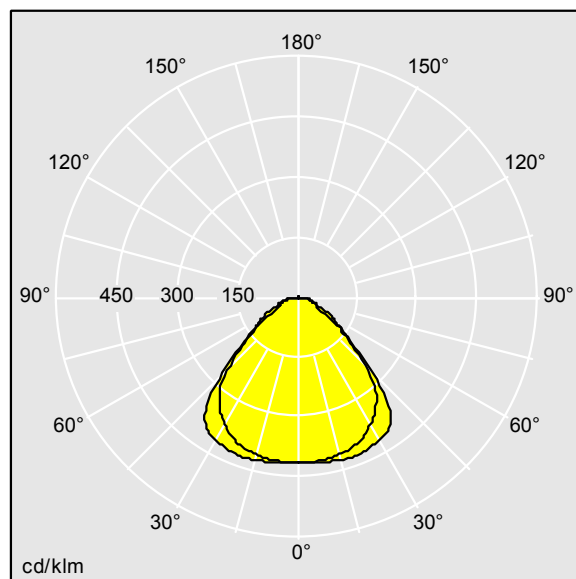
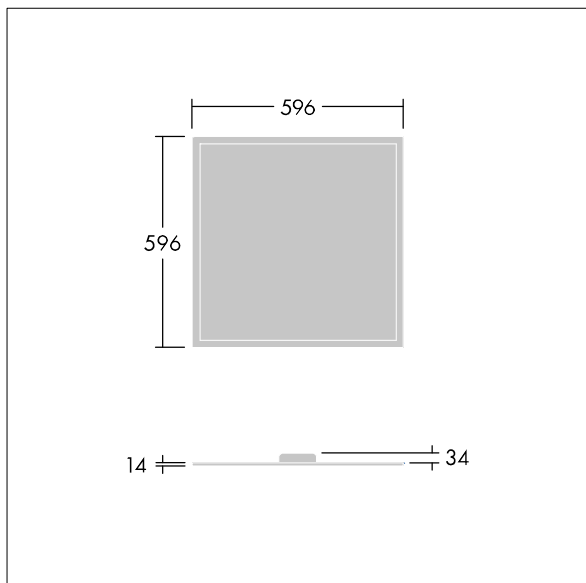
Please also consult the additional information on the next page

LED 33W BET2_QH4		IK06		750°C	T _a +10 +40	
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A square ceiling recessed LED luminaire with a 14mm profile. Fixed output LED driver. Class II electrical, IP54_IP20, IK06. Body: sheet steel, white. Diffuser: micro prisms. Complete with 4000K LED.

UGR < 19 and L65 < 3000 cd/m² as per EN 12464:2011

Dimensions: 596 x 596 x 14 mm
 Luminaire input power: 33 W
 Luminaire luminous flux: 3800 lm
 Luminaire efficacy: 115 lm/W
 Weight: 4 kg



Lamp position: STD - standard
 Light Source: LED
 Luminaire luminous flux*: 3800 lm
 Luminaire efficacy*: 115 lm/W
 Lamp efficacy: 115 lm/W
 Colour Rendering Index min.: 80
 LOR: 1,00 ULOR: 0,00 DLOR: 1,00

Correlated colour temperature*: 4000 Kelvin
 Chromaticity tolerance (initial MacAdam)*: 3
 Rated median useful life*:
 50000h L80 at 25°C
 Ballast: 1x LED_DRV Tridonic LC
 Luminaire input power*: 33 W Power factor = 0.95
 Dimming: FIX

All values marked with an * are rated values. Thorn uses tried and tested components from leading suppliers, however there may be isolated instances of technology-related failures of individual LEDs during the rated product lifetime. International standards set the tolerance in initial flux and connected load at $\pm 10\%$. Colour temperature is subject to a tolerance of up to ± 150 Kelvin from the nominal value. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

In most products the failure of one LED point causes no functional impairment to the lighting performance of the luminaire and is therefore no reason for complaint. Unless otherwise stated all Thorn LED products are suitable for unrestricted use (rated RG0 or RG1) with regard photobiological blue light safety (IEC/EN60598-1).

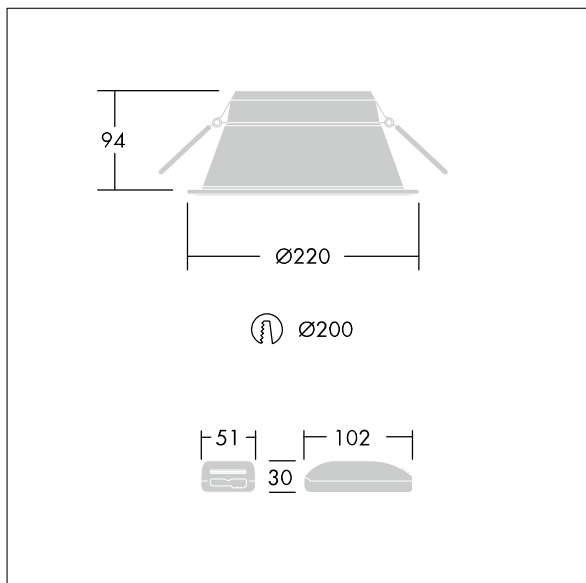


A recessed LED downlight. Remote fixed output control gear. IP54 (IP20 from above), Class II electrical. Body: aluminium, painted white (RAL 9016). Reflector: satinbrite. Suitable for mounting in ceiling thicknesses of 1-40mm in a Ø200mm cut-out. Complete with 4000K LED.

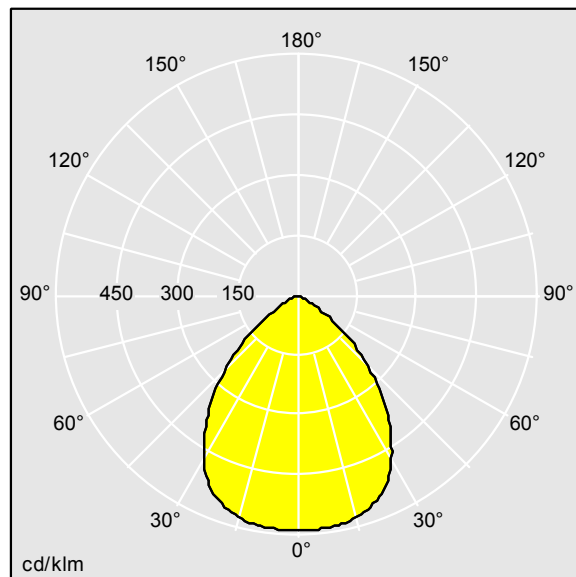
Dimensions: Ø220 x 94 mm
 Luminaire input power: 17.2 W
 Luminaire luminous flux: 2090 lm
 Luminaire efficacy: 122 lm/W
 Weight: 0.91 kg



TLG_CHLC_F_PDB.jpg



TLG_CHLC_M_200MB.wmf



TLG_SP_0042145.ltd

Lamp position: STD - standard
 Light Source: LED
 Luminaire luminous flux*: 2090 lm
 Luminaire efficacy*: 122 lm/W
 Lamp efficacy: 121 lm/W
 Colour Rendering Index min.: 80
 Correlated colour temperature*: 4000 Kelvin

Chromaticity tolerance (initial MacAdam)*: 3
 Rated median useful life*:
 50000h L80 at 25°C
 Ballast: 1x HF_FP LC
 Luminaire input power*: 17.2 W Power factor = 0.95
 Dimming: FO
 Maintenance category: C - Closed Top Reflector
 LOR: 1,00 ULOR: 0,00 DLOR: 1,00

All values marked with an * are rated values. Thorn uses tried and tested components from leading suppliers, however there may be isolated instances of technology-related failures of individual LEDs during the rated product lifetime. International standards set the tolerance in initial flux and connected load at $\pm 10\%$. Colour temperature is subject to a tolerance of up to ± 150 Kelvin from the nominal value. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

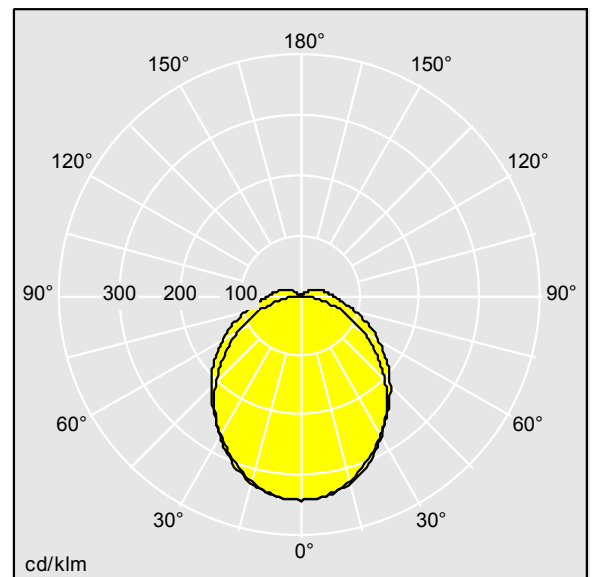
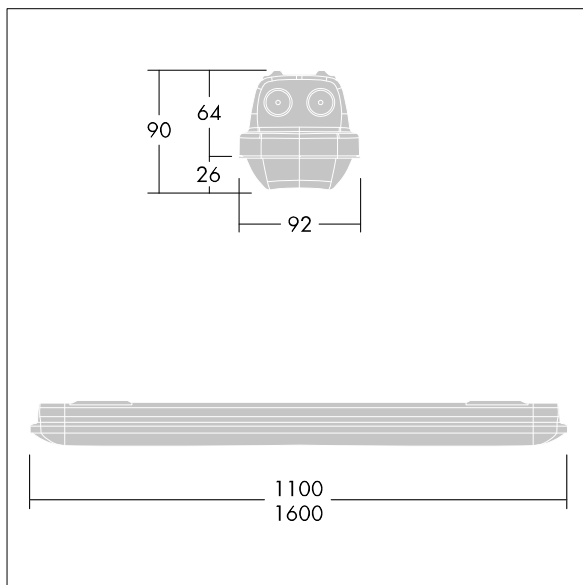
In most products the failure of one LED point causes no functional impairment to the lighting performance of the luminaire and is therefore no reason for complaint. Unless otherwise stated all Thorn LED products are suitable for unrestricted use (rated RG0 or RG1) with regard photobiological blue light safety (IEC/EN60598-1).



An IP66, dust and moisture resistant LED luminaire. LED driver. With medium beam distribution. Class I electrical. Canopy: light grey polycarbonate. Diffuser: high transmission opal polycarbonate with refraction prisms. Patented snap-on mechanism EasyClick for clipless mounting of diffuser. For surface or suspended mounting. Quick-fix brackets supplied for surface mounting. Suitable for ceiling or wall (both vertically and horizontally). Mounting kits for conduit, chain suspension and catenary suspension are available as accessories. Suitable for through wiring with H05VV or NYM cable (rated 10A). Integral presence detector for on/off control. ambient temperature: -20°C to +35°C. Complete with 4000K LED..

Note: please contact your consultant if you are planning to use the luminaire in environments with chemical pollutants, high or condensing humidity and major variations in temperature.

Dimensions: 1600 x 92 x 90 mm
 Luminaire input power: 50.5 W
 Luminaire luminous flux: 6400 lm
 Luminaire efficacy: 127 lm/W
 Weight: 2.14 kg



Lamp position: STD - standard
 Light Source: LED
 Luminaire luminous flux*: 6400 lm
 Luminaire efficacy*: 127 lm/W
 Lamp efficacy: 126 lm/W
 Colour Rendering Index min.: 80

Correlated colour temperature*: 4000 Kelvin
 Chromaticity tolerance (initial MacAdam)*: 3
 Rated median useful life*:
 50000h L80 at 25°C
 Ballast: 1x LED_DRV LC
 Luminaire input power*: 50.5 W Power factor = 0.96
 LOR: 1,00 ULOR: 0,07 DLOR: 0,93

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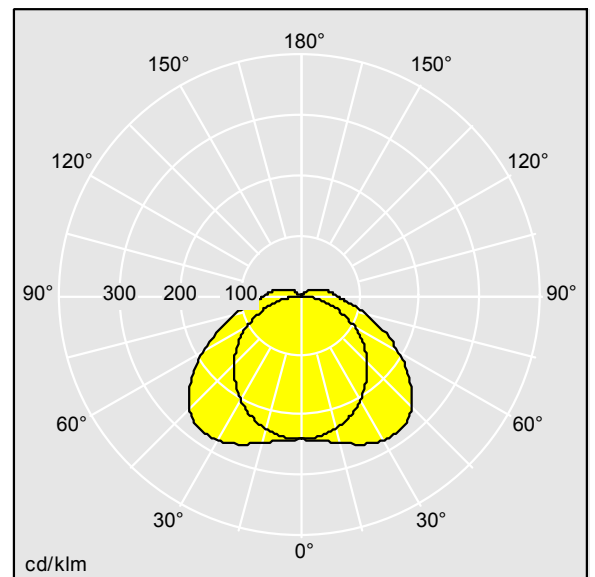
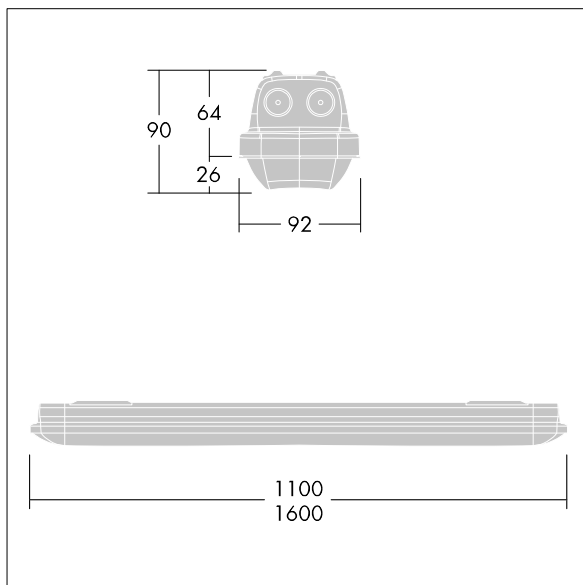
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An IP66, dust and moisture resistant LED luminaire. LED driver. With wide beam distribution. Class I electrical. Canopy: light grey polycarbonate. Diffuser: high transmission opal polycarbonate with refraction prisms. Patented snap-on mechanism EasyClick for clipless mounting of diffuser. For surface or suspended mounting. Quick-fix brackets supplied for surface mounting. Suitable for ceiling or wall (both vertically and horizontally). Mounting kits for conduit, chain suspension and catenary suspension are available as accessories. Suitable for through wiring with H05VV or NYM cable (rated 10A). Integral presence detector for on/off control. ambient temperature: -20°C to +45°C. Complete with 4000K LED..

Note: please contact your consultant if you are planning to use the luminaire in environments with chemical pollutants, high or condensing humidity and major variations in temperature.

Dimensions: 1600 x 92 x 90 mm
 Luminaire input power: 33.5 W
 Luminaire luminous flux: 4330 lm
 Luminaire efficacy: 129 lm/W
 Weight: 2.14 kg



Lamp position: STD - standard
 Light Source: LED
 Luminaire luminous flux*: 4330 lm
 Luminaire efficacy*: 129 lm/W
 Lamp efficacy: 129 lm/W
 Colour Rendering Index min.: 80

Correlated colour temperature*: 4000 Kelvin
 Chromaticity tolerance (initial MacAdam)*: 3
 Rated median useful life*:
 50000h L80 at 25°C
 Ballast: 1x LED_DRV LC
 Luminaire input power*: 33.5 W Power factor = 0.96
 LOR: 1,00 ULOR: 0,07 DLOR: 0,93

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Těleso svítidla je vyrobeno z ocelového, práškově lakovaného plechu RAL 9003. Mřížka svítidla je speciálně upevněna a je odolná proti nárazu. Svítidlo je osazeno elektronikou a diodami renomovaných výrobců.

Optická část: podélná i příčná lamela - ocelový bíle lakovaný plech vyztužený ocelovou tyčí (4 ks) s opálovým difuzorem pro snížení oslnění.



ELEKTRICKÉ VLASTNOSTI

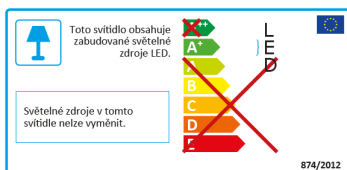
Příkon	57 W
Napájecí napětí	198 - 264 VAC / 190 - 280 VDC
Účinník	0.98
Harmonické zkreslení	<10
Třída izolace	I
Energetická třída	A+
Stmívání	DALI
Počet na jistič C 16A	30 ks
Doba životnosti LED driveru	100 000 hod. @ $t_c=65^\circ$

OPTICKÉ VLASTNOSTI

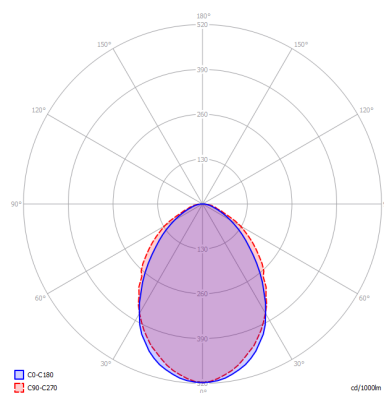
Světelný tok svítidla	5340 lm
Světelná účinnost	94 lm/W
Teplota chromatičnosti	3K / 4K / 5K
Index podání barev	80+
Tolerance barev	3 step MacAdam
Vyzařovací úhel	-
Činitel oslnění	19.1/20.4
Jas @ $65^\circ < 3000 \text{ cd/m}^2$	-
Doba životnosti LED	L80B20 = 110 000 hod.

MECHANICKÉ VLASTNOSTI

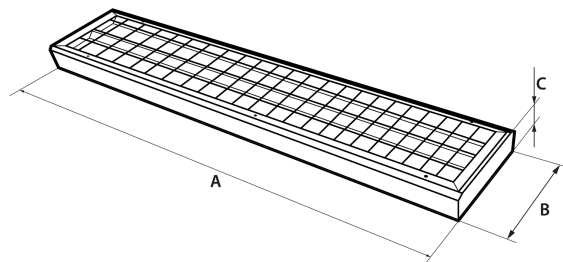
Rozměry	1262 x 200 x 65 mm
Hmotnost	5.5 kg
Provozní teplota	- 25 ~ + 25 °C
Stupeň krytí	IP 40
Materiál tělesa	lakovaný Fe plech
Materiál reflektoru	Fe
Materiál difuzoru	PMMA
Způsob montáže	přisazená nebo závěsná



POLÁRNÍ DIAGRAM



ROZMĚRY



NA OBJEDNÁVKU

CCT 2700K, 3500K, 5700K, 6500K

CRI > 90Ra

Jiný příkon

Přívodní kabel

Konektory Gesis GST, RST

Sada lankových závěsů (Y typ)

Libovolná barva RAL

Nouzový zdroj 1 h/3 h

Těleso svítidla je vyrobeno z ocelového, práškově lakovaného plechu RAL 9003. Mřížka svítidla je speciálně upevněna a je odolná proti nárazu. Svítidlo je osazeno elektronikou a diodami renomovaných výrobců.

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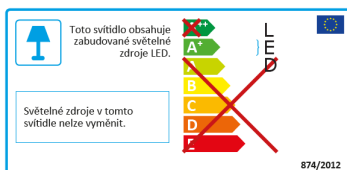
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Účinník	0.98
Harmonické zkreslení	<10
Třída izolace	I
Energetická třída	A+
Stmívání	-
Počet na jistič C 16A	30 ks
Doba životnosti LED driveru	100 000 hod. @ $t_c=65^\circ$

OPTICKÉ VLASTNOSTI

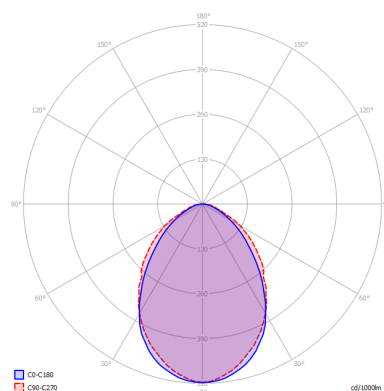
Světelný tok svítidla	5340 lm
Světelná účinnost	94 lm/W
Teplota chromatičnosti	3K / 4K / 5K
Index podání barev	80+
Tolerance barev	3 step MacAdam
Vyzařovací úhel	-
Činitel oslnění	19.1/20.4
Jas @ $65^\circ < 3000 \text{ cd/m}^2$	-
Doba životnosti LED	L80B20 = 110 000 hod.

MECHANICKÉ VLASTNOSTI

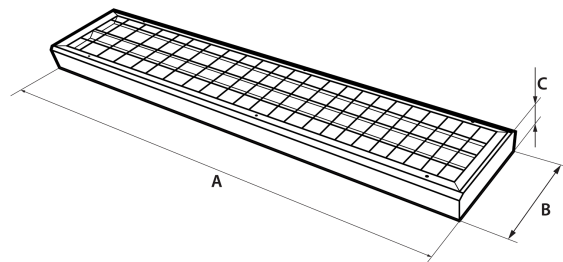
Rozměry	1262 x 200 x 65 mm
Hmotnost	5.5 kg
Provozní teplota	- 25 ~ + 25 °C
Stupeň krytí	IP 40
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Materiál difuzoru	PMMA
Způsob montáže	přisazená nebo závěsná



POLÁRNÍ DIAGRAM



ROZMĚRY



NA OBJEDNÁVKU

CCT 2700K, 3500K, 5700K, 6500K

CRI > 90Ra

Jiný příkon

Přívodní kabel

Konektory Gesis GST, RST

Sada lankových závěsů (Y typ)

Libovolná barva RAL

Nouzový zdroj 1 h/3 h

Project · Reference number

Date

Product data sheet

Application

Pendant luminaire · indoor luminaire with hand-blown opal glass and metal housing for non-glare light deflected downwards.

Product description

LED pendant luminaire »STUDIO LINE«
 Aluminium luminaire housing,
 velvet black enamel finish,
 inside hue matt copper
 Hand-blown opal glass, with screw neck
 Black flex suspension $2 \times 0,5$ □
 with 1 steel messenger wire
 Overall length of luminaire ~3000 mm
 Connecting terminals 1,5 □
 Earth conductor terminal
 2-pole connecting terminal for digital control
 LED power supply unit inside canopy
 220-240 V ~ 0/50-60 Hz
 DALI controllable
 A basic isolation exists between power cable and control line
 Safety class I
 – Safety mark
 – Conformity mark
 Weight: 2.4 kg

Inrush current

Inrush current: 21 A / 18.2 μs
 Maximum number of luminaires of this type per miniature circuit breaker:
 B10A: 50 luminaires
 B16A: 50 luminaires
 C10A: 50 luminaires
 C16A: 50 luminaires

Lamp

Module connected wattage	17.7 W
Luminaire connected wattage	21.6 W
Rated temperature	$t_a = 25^\circ\text{C}$
Ambient temperature	$t_{a\text{ max}} = 45^\circ\text{C}$

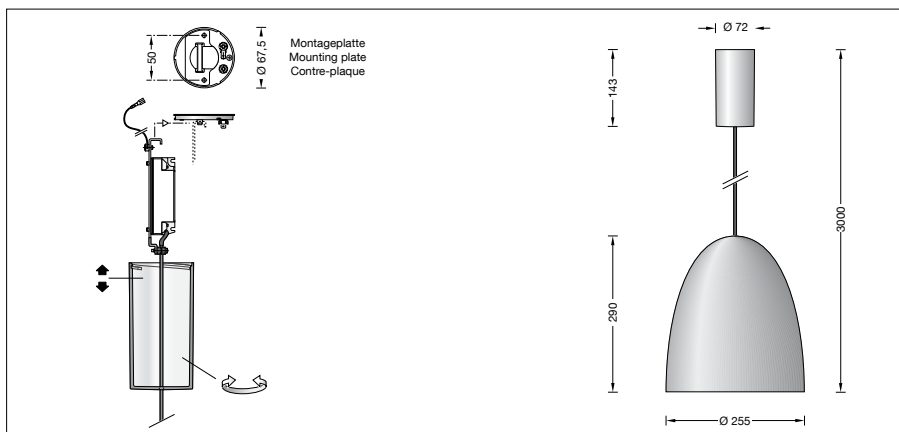
Module designation	LED-0327/930
Colour temperature	3000 K
Colour rendering index	$R_a > 90$
Module luminous flux	2745 lm
Luminaire luminous flux	770 lm
Luminaire luminous efficiency	35,6 lm/W

Lifetime of the LED

Ambient temperature $t_a = 15^\circ\text{C}$
 – at 50,000h: L90B10
 – at > 500,000h: L70B50

Ambient temperature $t_a = 25^\circ\text{C}$
 – at 50,000h: L90B10
 – at > 500,000h: L70B50

max. ambient temperature $t_a = 45^\circ\text{C}$
 – at 50,000h: L90B10
 – at 300,000h: L70B50

**Light technique**

Luminaire data for the light planning program DIALux for outdoor lighting, street lighting and indoor lighting as well as luminaire data in EULUMDAT- and IES-format you will find on the BEGA web page www.bega.com.

Interior colour options

- matt aluminium
- matt brass
- matt copper

Code number **.2**
 Code number **.4**
 Code number **.6**

Application

LPS/CPS system with integral test apparatus for supplying and monitoring emergency and escape sign luminaires for 230V AC / 216V DC.

The ONLITE central eBox MS1200 is a central power supply designed to EN 50171 and therefore provides an emergency power source for emergency lighting installations to EN 50172. It can be used as a central battery supply (CPS) or as a group battery supply (LPS). When used as a LPS in 1h emergency operation, the total power must be less than 1500W, and in 3h emergency operation it must be less than 500W.

The system is designed to charge eighteen 12V monobloc batteries.

There are three empty slots available for ONLITE central eBox OCM's (output circuit modules).

The system can be equipped with four optional circuit outputs (ONLITE central eBox SCM) to external sub-distribution stations (emergency power sub-distribution stations). A system bus networks together the sub-stations and also external devices such as phase monitors, 230V switching-input modules and remote display.

An ONLITE central eBox system can be expanded to up to 30 final circuits each containing 20 emergency or escape sign luminaires. Up to 100 independent eBox systems can be networked together via Ethernet (TCP/IP) for Web-browser based monitoring and visualization without the need for additional software.

To reduce the fire loading and final-circuit cabling costs, sub-distribution stations can optionally be used in each fire compartment, available as E00/IP20, E00/IP65 models or E60 circuit-integrity maintenance model.

Design notes

If the general lighting fails, battery-backed central power supplies, as long as they are receiving power from the general mains, must switch on all the emergency and escape sign luminaires which are in non-maintained mode or which are "off" in continuous lighting mode, and power these luminaires also from the mains. The power supply is only switched to DC operation (battery operation) if there is a total black-out of the mains supply or if the mains voltage is too low, and when in test mode. To ensure this happens, phase monitoring is used in the sub-distribution circuits of the general power supply. The general lighting circuits must be monitored by providing the miniature circuit breakers with auxiliary contacts. The auxiliary contact loop can be taken e.g. to the Alarm input on an ONLITE central eBox BPD (Bus Phase Detector).

The rear Z-rail mounting allows cables to be inserted from above or below. Integral viewing window; housing closure along three edges; designed like a vehicle hood or bonnet allowing wide access for wiring.

18 monobloc OGIv type batteries with a 7Ah or 12Ah capacity can be housed according to the overall layout in the battery compartments provided in the bottom section of the control cabinet. The cable connection sets required are placed in the cabinet.

Sealed, rechargeable OGIv High Performance VRLA batteries with extremely low gas emission and the latest design (lead/calcium in absorbent glass mat technology) are used and have a useful service life of 10 years at 20 degrees Celcius, equivalent to EUROBAT class: High Performance.

The relevant battery sets are not included so must be ordered separately.

Rated operating period: 0.5h / 1h / 2h / 3h / 5h / 8h



Functional description

The main settings are entered using a wizard at a graphics compatible 4.3" colour touch display. Circuit links and addresses for individual luminaires can be set using Notebook and the P2P interface (RJ45 socket) on the front panel. The WEB user interface provided information such as the system diagram, the predicted life time of the battery or the test logbook. Alarms can be forwarded via the integral e-mail function.

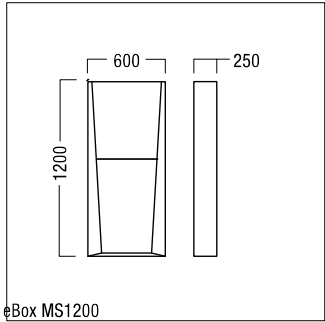
The following functions are available for the final circuits (ONLITE central eBox OCM):

- Individual addressing and monitoring by DALI (ONLITE central eBox OCM NDA): status and name display per luminaire in conjunction with standard DALI electronic ballasts or DALI LED power supplies by means of 2-wire communication. Adjustable emergency lighting level for the respective DALI circuit or even for each individual luminaire. Combination of maintained and non-maintained modes. DALI "in" function for integrating an external lighting management system. Switching of individual luminaires by means of optional component in the DALI circuit.

- Individual addressing and monitoring by Powerline (ONLITE central eBox OCM NSI): Status and name display per luminaire in conjunction with ONLITE central PLC DALI, ONLITE central PLC relay or an ONLITE central PLC LED driver; bidirectional communication with the emergency and escape sign luminaires is performed using Powerline via the mains input line in the final circuit. Adjustable emergency lighting level for the final circuit concerned or even for each individual luminaire. Combination of maintained and non-maintained modes possible. DALI "in" function for integrating an external lighting management system. Switching of individual luminaires by means of a switching input (L' / N') directly at the luminaire.

- Circuit monitoring (ONLITE central eBox OCM NPS): Each final circuit containing all the emergency and escape sign luminaires can be calibrated by a sensor on the module, which enables power monitoring. Maintained or non-maintained modes are available for each output circuit. Optional modules can be used to integrate external switching inputs for switching the entire final circuit.

Dimension



Technical data

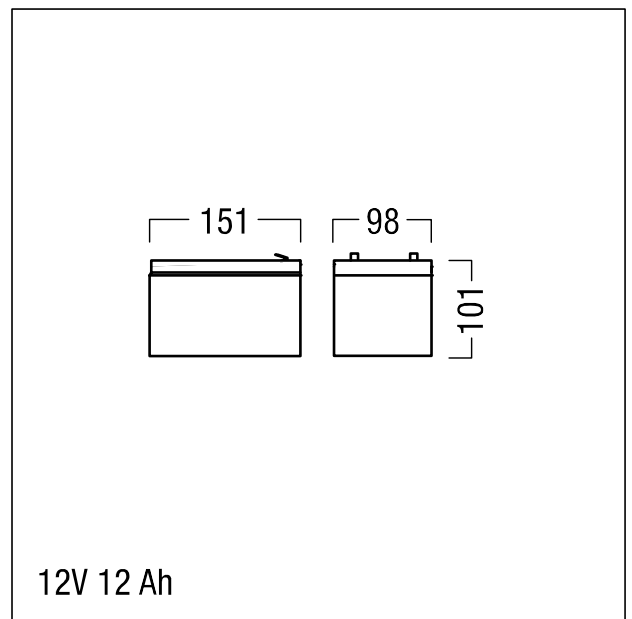
Nominal voltage	230 V AC $\pm 10\%$, 50 Hz
Power	5.5 kVA (fully populated, load-dependent)
Power loss	50 W (full load)
Miscellaneous	Testing: TÜV Rheinland / CE / EN 50171 for EN 50172 compliant installations
Housing material	sheet steel, powder coated
Dimensions	1200 x 600 x 250 mm
Installation	Wall-mounted cabinet
Case colour	light grey (RAL 7035)
Protection type	IP20
Miscellaneous	Slots: for 3 ONLITE central eBox OCMs
Permitted ambient temperature	0 °C ... +40 °C Ta ideal 20 °C=> max. service life
Miscellaneous	Slots: for 4 ONLITE central eBox SCMs
Protection class	Class I
Weight	Approx. 47.5 kg

battery set

Features of the ONLITE central eBox ACCU SET

- OGiV high-rate grid plates (lead/calcium)
- equivalent to the EUROBAT high performance class
- 10 year useful service life @ 20°C ambient temperature
- ABS resin housing and cap
- poles with MP6.3 flat spade connection
- extremely low gas emission
- low self-discharge
- no transportation restrictions
- 100% recyclable
- maintenance-free over the entire useful service life
- rated voltage 18x12 V / 216 V DC
- complies with DIN EN 60896
- ventilation to EN 50272-2

The battery set must not be stored for longer than 2 months after delivery without being charged. The battery set must be connected to the installation within 2 months at the latest. Any liability under warranty will not be accepted unless these instructions are followed



12V 12 Ah

Application

The ONLITE central eBox OCM-NDA is an output circuit module for supplying and monitoring 20 emergency and escape sign luminaires per circuit for 230V AC / 216 V DC with full bidirectional DALI communication.

All connected NDA or LDE type luminaires can be switched and monitored as part of the complete circuit or as individual luminaires. Mixed operation of maintained and non-maintained modes or switched continuous lighting can be configured using the Web user interface of the ONLITE central eBox MS 1200/1700. If individual-luminaire addressing is not needed, then calibration for the circuit monitoring can be activated manually by service PIN or via the display of the ONLITE central ebox.

For theatre/cinema applications, an external lighting management control can be imported via the DI/DI terminals ("true DALI in") and assigned to the two output circuits.

Design notes

Up to three output circuit modules can be fitted in each ONLITE central eBox MS 1200/1700, or in the ONLITE central eBox SUBxx distribution stations by plugging them into the multipole male edge connector whilst the power is off, and then screwing them in place.

The output circuit modules are each fitted with fuses rated 3.15 AT, which can be loaded to 60% of this level according to the standard. The power available for each output circuit is 420 VA and 200 W for DC operation.

5-pole wiring is used for the luminaires in the final circuits (L/N/PE/DA/DA).



Functional description

External lighting management control can be input via the DI terminal (DALI in) as a single-luminaire address or even as a broadcast command and applied to the luminaires via the two final circuits. The "true DALI" function ensures that there is an active DALI representative permanently available for lighting management. In addition, after any eBox event such as a functional test or service life test, the last light-management lighting scene is resumed without any additional handshaking.

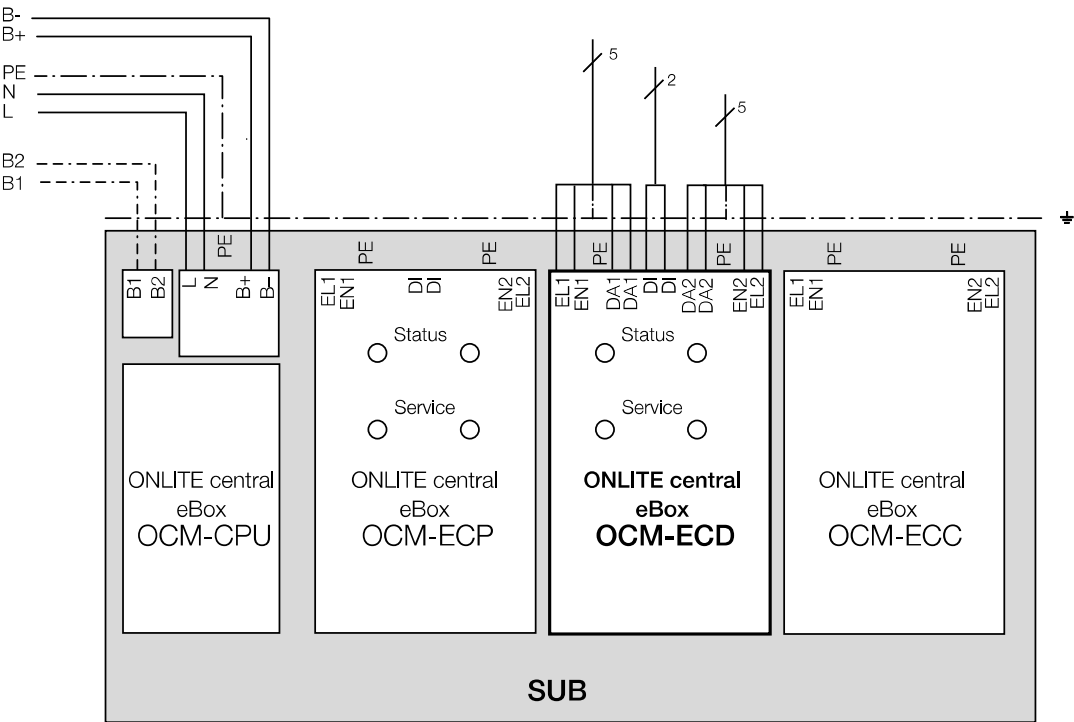
Status LED

green, flickering occasionally operating correctly
green, switching on/off regularly every 2 seconds system has frozen
orange. emergency operation
orange, switching on/off regularly every 0.5 seconds . . . Test mode (functional test or service life test) or calibration of output circuits
red failure of CPU or EEPROM
red, flickering Fault in output circuit
red, switching on/off regularly every 4 seconds system bus failure
green-red: 4 secs green, flickering occasionally – 0.5 secs red lamp fault

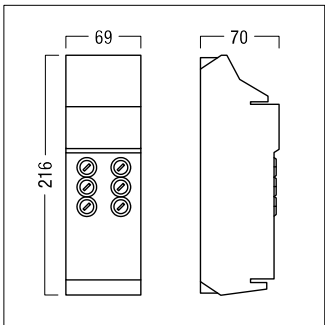
Wiring scheme

zum Hauptverteiler
to main distribution unit
vers le répartiteur principal
al ripartitore principale
al distribuidor principal
naar hoofdverdeler

Systembus
system bus
bus système
bus di sistema
bus de sistema
systeembus



Dimension



Technical data

Output voltage	230 V 50 Hz / 216 V DC (189 - 249 V DC)
Power	AC: 420 VA per circuit DC: 200 W per circuit
DALI control wiring	NYM 3 x 1.5 mm ² (H05VV-U 3 x 1.5), max. 300m NYM 3 x 2.5 mm ² (H05VV-U 3 x 2.5), max. 500m
Miscellaneous	Testing: TÜV Rheinland / CE / EN 50171 for EN 50172 compliant installations
Dimensions	216 x 69 x 70 mm
Housing material	polycarbonate
Installation	Torx TX20 screw fastening
Miscellaneous	Edge connector: 96 way male connector
Case colour	grey (RAL 7012)
Protection type	IP20
Protection class	Class II (double-insulated)
Permitted ambient temperature	Ta 0–50 °C
Interface	Systembus (B1, B2)
Miscellaneous	output terminals: 1.5 - 2.5 mm ² (solid wire or stranded) input terminals: 0.75 - 2.5 mm ² (solid wire or stranded)
Weight	Approx. 0.4 kg
Miscellaneous	Fuses: 6 x 3.15 AT microfuse 6 x 32 mm

Application

Bus-phase monitor with 2 additional alarm inputs. Monitors 3-phase supplies for low voltage and phase failure, and also detects if the neutral line goes open-circuit.

Additional standard phase-monitors, auxiliary contacts in general-lighting circuit breakers or even e.g. contacts in a fire alarm system can be integrated via two separate alarm loops.

Design notes

If the general lighting fails, battery-backed central power supplies, as long as they are receiving power from the general mains, must switch on all the emergency and escape sign luminaires which are in non-maintained mode or which are "off" in continuous lighting mode, and power these luminaires also from the mains. The power supply is only switched to DC operation (battery operation) if there is a total black-out of the mains supply or if the mains voltage is too low, and when in test mode.

To ensure this happens, phase monitoring is used in the sub-distribution circuits of the general power supply; the general lighting circuits must likewise be monitored by providing the miniature circuit breakers with auxiliary contacts. The auxiliary contact loop can be taken e.g. to the Alarm input on an ONLITE central eBox BPD (Bus Phase Detector).



Functional description

The bus-phase monitor is powered from two different sources: from the mains supply that requires general monitoring and from the system bus of the ONLITE central eBox MS 1200/1700. In addition, it is reliably integrated in the system by "heart beat" communication which ensures any line break or device failure is detected and the emergency lighting is activated. This dispenses with the need to lay the system bus lines in accordance with functional safety requirements. Additional monitoring loops can be included by removing the respective wire link across the two additional alarm inputs. If a monitoring loop connected to the alarm input goes open-circuit, then the preselected interaction is triggered via the system bus.

There can be up to 9 bus-phase monitors in one eBox system, which can be assigned individually or in groups to the entire system or to a sub-distribution unit.

If the test button is pressed for 1 second, the unit simulates a phase failure and sends an error message to the assigned sub-distribution units.

Status LED

green, flickering occasionally . . . operating correctly
off no voltage on system bus
red failure of CPU or EEPROM
red, flickering phase failure

Alarm LED

green alarm contact closed, operating correctly
red alarm contact open, fault

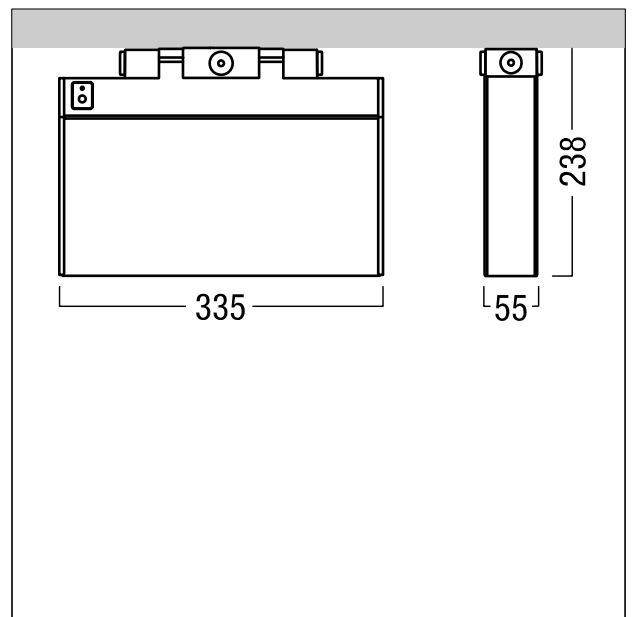
The diagram illustrates the electrical connections for the CNLITE central eBox BPD. At the top, a 230/240 V AC supply (50/60 Hz) is connected to three phase lines (L1, L2, L3) and a neutral line (N). These lines pass through three sets of switches (L1, L2, L3) before reaching the main supply bus. The main supply bus is connected to the BPD unit. The BPD unit has terminals for B1, B2, AL1, and AL2. The B1 and B2 terminals are connected to the system bus (labeled 'System bus' and 'Bus di sistema'). The AL1 and AL2 terminals are connected to the fire alarm control panel (F1). The F1 panel has terminals for L1, L2, L3, and N. The BPD unit also has a 'Status Test' button and an 'Address' dial. The diagram shows the BPD unit connected to the system bus and the fire alarm control panel (F1) via the B1, B2, AL1, and AL2 terminals. The BPD unit is labeled 'CNLITE central eBox BPD' and 'B1 B2'. The fire alarm control panel (F1) is labeled 'F1'.

Nominal voltage	230/240 V AC, 50 Hz
Current consumption	max. 25 mA
Bus loads	max. 6
Addressing	1 address per device
Miscellaneous	Testing: TÜV Rheinland / CE / EN 50171 for EN 50172 compliant installations
Dimensions	4 units at 17,5 mm 58 x 70 x 90 mm
Installation	For installing in control cabinet On 35 mm top-hat rail according to EN 50022
Housing material	polycarbonate
Case colour	grey (RAL 7012)
Protection type	IP20
Protection class	Class II (double-insulated)
Terminals	0,75 ... 2,5 mm ²
Interface	Systembus (B1, B2)
Outputs	2 alarm contacts (AL1/AL2) 15 V loop resistance 100 Ohm max.
Permitted ambient temperature	Ta 0–50 °C
Weight	Approx. 0.2 kg

Escape sign luminaire

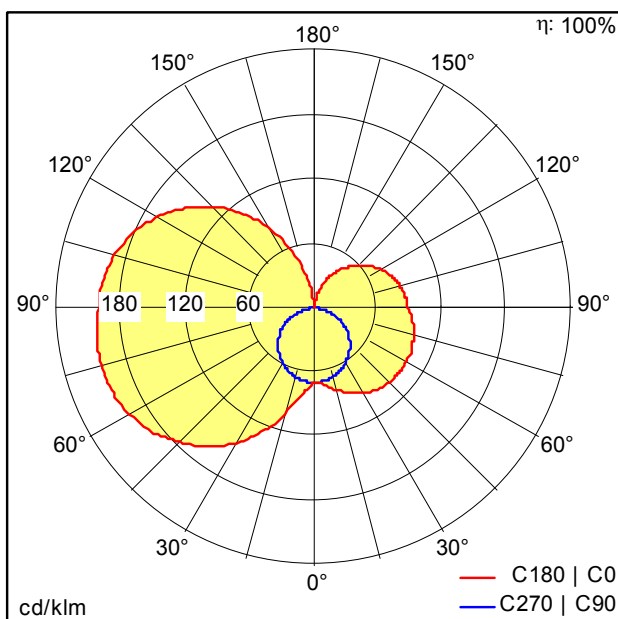
LED Escape sign luminaire Luminaire for central emergency light supply, for single luminaire monitoring via DALI, settable emergency light level; addressing also alternatively possible visually or via EZ-addressing; surface mounted; control unit with NFC interface for addressing, configuration and maintenance via PROset Pen (article no.: 22170290) or PROset app; addressing also alternatively possible visually or via EZ-addressing; non-maintained and maintained mode possible; Non-maintained mode: -20°C to +35°C, Maintained mode: -20°C to +30°C; white polycarbonate base unit with metal clips at sides. Basic version can be fitted to ceiling without tools; plug-in terminals for through-wiring up to 2.5 mm²; no tools required to fit frameless pictogram; service life of 50000 h at constant luminous flux; Voltage supply: 220 - 240 V AC 50/60 Hz; 220-240 V DC; Luminaire input power: 4.7 W; 10 % dimming value in emergency mode; protection rating: IP65, class of protection: SC1; Impact strength: IK03; dimensions of luminaire including escape sign: 335 x 55 x 238 mm; weight: 0.44 kg, Luminaire wired with halogen-free leads; max. line length from emergency power source to last luminaire: 300 m.; Luminaire with D symbol (for use in environments in which the accumulation of conductive dust on the luminaire can be expected)

Escape sign. Diffuser made of opal polycarbonate with additional downward light outlet and internal longitudinal prisms to help to illuminate the escape route. Escape sign printed using digital print technology. Fits onto base unit without tools. Arrow direction 1x downwards, 1x white. Recognition distance: EN-32 m. Dimensions: 335 x 55 x 165 mm, weight: 0.65 kg



Light Distribution

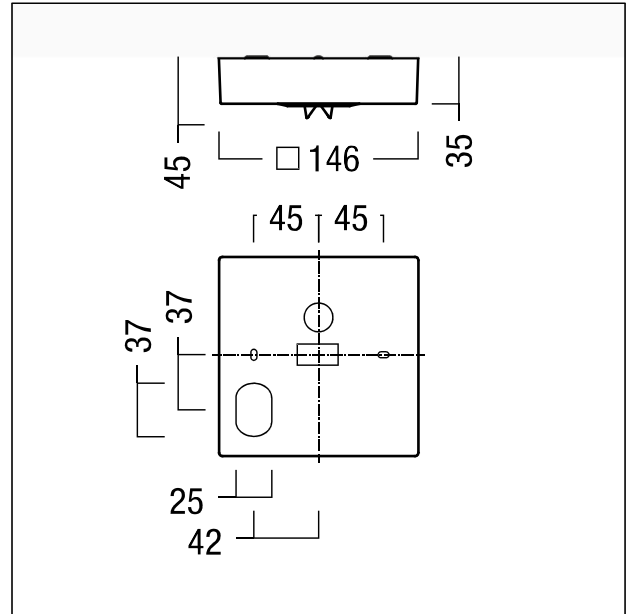
STD - standard



- Light Source: LED
- Luminaire luminous flux*: 190 lm
- Total emergency luminous flux: 17 lm
- Luminaire efficacy*: 40 lm/W
- Colour Rendering Index min.: 70
- Ballast: 1 x 89800571 EM TR EM PowerLED NDA 100 DIM 5W ZUM
- Chromaticity tolerance (initial MacAdam)*: 4
- Rated median useful life*: 50000h L80 at 25°C
- Luminaire input power*: 4.7 W Power factor = 0.72
- Standby Power*: 1.3 W
- Dimming: Dali dimmable to 10%

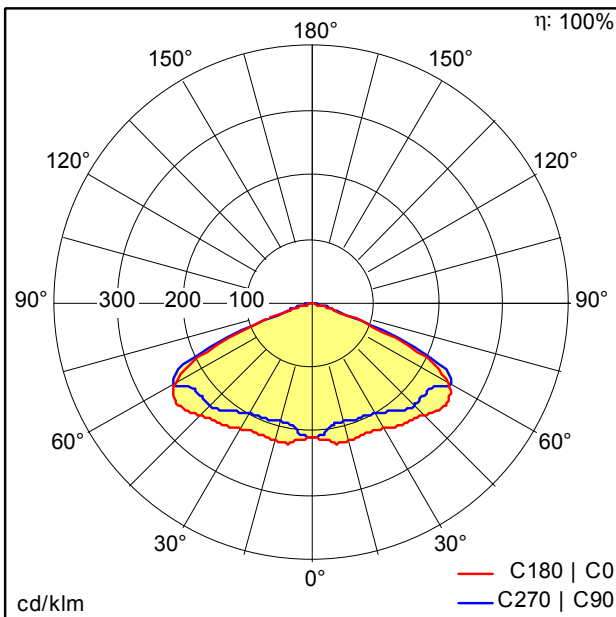
Safety luminaire

LED emergency luminaire for antipanic lighting with min. 0,5 lux acc. to EN 1838; Room height 2.2 to 10 m; high performance (HP) version enables wider luminaire spacing and applications with higher illuminances (e.g. 2 lux); 2 high power LEDs, neutral white 4,000 K; lens of polycarbonate; optimum thermal management via heat sink; Ceiling surface-mounted luminaire; Screw mounting of the gear tray, tool-free quick mounting of the cover; Cover ring made of diecast aluminium, powder-coated; housing colour white (close to RAL9016); Galvanized sheet steel gear tray; Luminaire for central emergency light supply, for single luminaire monitoring via DALI, settable emergency light level; NFC interface for addressing, configuration and maintenance via PROset Pen (article no.: 22170290) or PROset app; addressing also alternatively possible visually or via EZ-addressing; Maintained and non-maintained mode: -30°C to +35°C; power supply: 220 - 240 V AC, 50 / 60 Hz / 220 - 240 V DC; Luminaire input power: 7.2 W; Non-maintained and maintained mode settable via the central battery system; IP40; SC1; Luminaire wired with halogen-free and silicone-free leads; Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: IK07; Dimensions: 146 x 146 x 35 mm; weight: 0.88 kg; Luminaire with D symbol (for use in environments in which no unusual accumulation of dust is expected)



Light Distribution

STD - standard

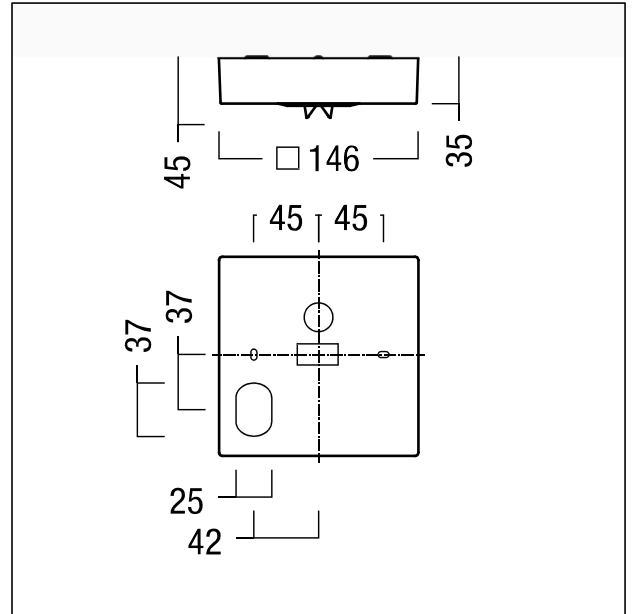


- Light Source: LED
- Luminaire luminous flux*: 428 lm
- Total emergency luminous flux: 428 lm
- Luminaire efficacy*: 60 lm/W
- Ballast: 1 x 89800571 EM TR EM PowerLED NDA 100 DIM 5W ZUM
- Rated median useful life*: 50000h at 25°C
- Luminaire input power*: 7.2 W Power factor = 0.81
- Standby Power*: 0.3 W
- Dimming: Dali dimmable to 10%

All values marked with an * are rated values. Luminous flux and connected electrical load are subject to an initial tolerance of +/- 10%. Tolerance of colour temperature: +/- 150 K. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

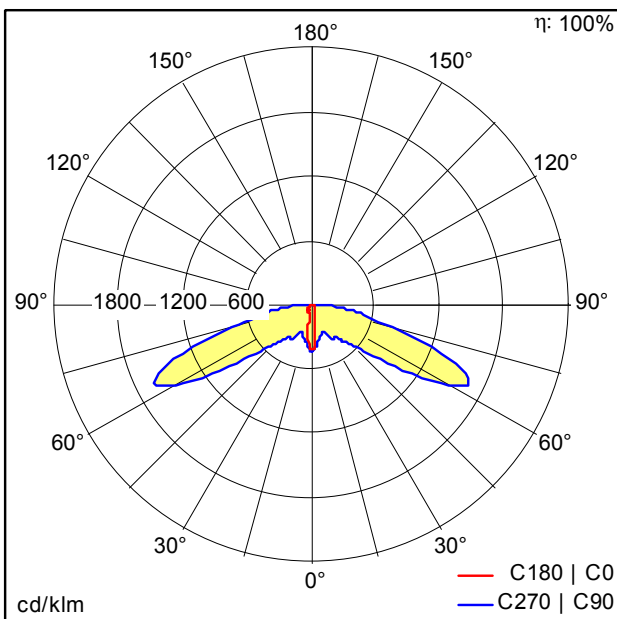
Safety luminaire

LED emergency luminaire for escape route lighting with min. 1 lux compliant to EN 1838; Room height 2.2 to 7 m; 2 high power LEDs, neutral white 4,000 K; lens of polycarbonate; optimum thermal management via heat sink; Ceiling surface-mounted luminaire; Screw mounting of the gear tray, tool-free quick mounting of the cover; Cover ring made of diecast aluminium, powder-coated; housing colour white (close to RAL9016); Galvanized sheet steel gear tray; Luminaire for central emergency light supply, for single luminaire monitoring via DALI, settable emergency light level; NFC interface for addressing, configuration and maintenance via PROset Pen (article no.: 22170290) or PROset app; addressing also alternatively possible visually or via EZ-addressing; Maintained and non-maintained mode: -30°C to +40°C; power supply: 220 - 240 V AC, 50 / 60 Hz / 220 - 240 V DC; Luminaire input power: 3.9 W; Non-maintained and maintained mode settable via the central battery system; boost start function for faster orientation in emergencies thanks to higher illuminance levels at the start of emergency operation; IP40; SC1; Luminaire wired with halogen-free and silicone-free leads; Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: IK05; Dimensions: 146 x 146 x 35 mm; weight: 0.5 kg; Luminaire with D symbol (for use in environments in which no unusual accumulation of dust is expected)



Light Distribution

STD - standard

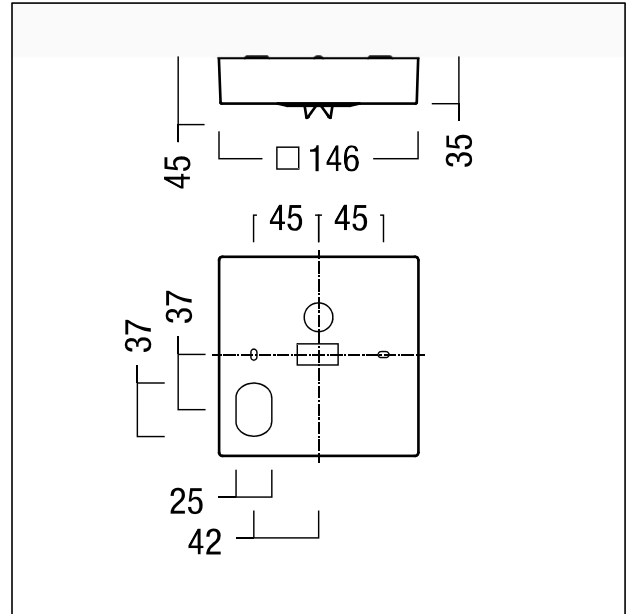


- Light Source: LED
- Luminaire luminous flux*: 269 lm
- Total emergency luminous flux: 269 lm
- Luminaire efficacy*: 69 lm/W
- Ballast: 1 x 89800571 EM TR EM PowerLED NDA 100 DIM 5W ZUM
- Rated median useful life*: 50000h at 25°C
- Luminaire input power*: 3.9 W Power factor = 0.66
- Standby Power*: 0.33 W
- Dimming: Dali dimmable to 10%

All values marked with an * are rated values. Luminous flux and connected electrical load are subject to an initial tolerance of +/- 10%. Tolerance of colour temperature: +/- 150 K. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

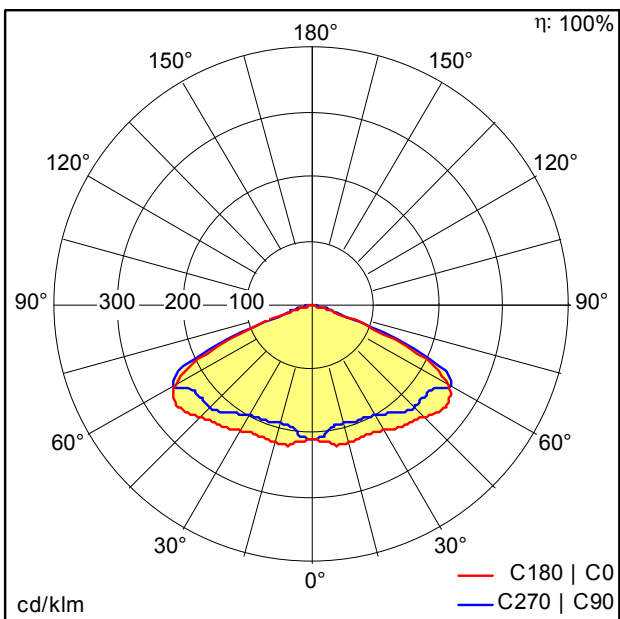
Safety luminaire

LED emergency luminaire for antipanic lighting with min. 0,5 lux acc. to EN 1838; Room height 2.2 to 7 m; 2 high power LEDs, neutral white 4,000 K; lens of polycarbonate; optimum thermal management via heat sink; Ceiling surface-mounted luminaire; Screw mounting of the gear tray, tool-free quick mounting of the cover; Cover ring made of diecast aluminium, powder-coated; housing colour white (close to RAL9016); Galvanized sheet steel gear tray; Luminaire for central emergency light supply, for single luminaire monitoring via DALI, settable emergency light level; NFC interface for addressing, configuration and maintenance via PROset Pen (article no.: 22170290) or PROset app; addressing also alternatively possible visually or via EZ-addressing; Maintained and non-maintained mode: -30°C to +40°C; power supply: 220 - 240 V AC, 50 / 60 Hz / 220 - 240 V DC; Luminaire input power: 3.9 W; Non-maintained and maintained mode settable via the central battery system; boost start function for faster orientation in emergencies thanks to higher illuminance levels at the start of emergency operation
; IP40; SC1; Luminaire wired with halogen-free and silicone-free leads; Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: IK07; Dimensions: 146 x 146 x 35 mm; weight: 0.48 kg; Luminaire with D symbol (for use in environments in which no unusual accumulation of dust is expected)



Light Distribution

STD - standard



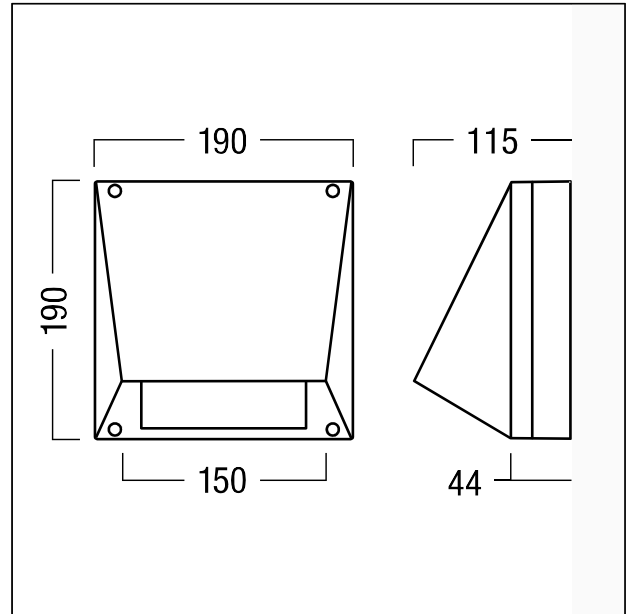
D39163AA_RESCLITE_PRO_MSC_ANT_ECD_WH.Idt

- Light Source: LED
- Luminaire luminous flux*: 251 lm
- Total emergency luminous flux: 251 lm
- Luminaire efficacy*: 64 lm/W
- Ballast: 1 x 89800571 EM TR EM PowerLED NDA 100 DIM 5W ZUM
- Rated median useful life*: 50000h at 25°C
- Luminaire input power*: 3.9 W Power factor = 0.66
- Standby Power*: 0.33 W
- Dimming: Dali dimmable to 10%

All values marked with an * are rated values. Luminous flux and connected electrical load are subject to an initial tolerance of +/- 10%. Tolerance of colour temperature: +/- 150 K. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

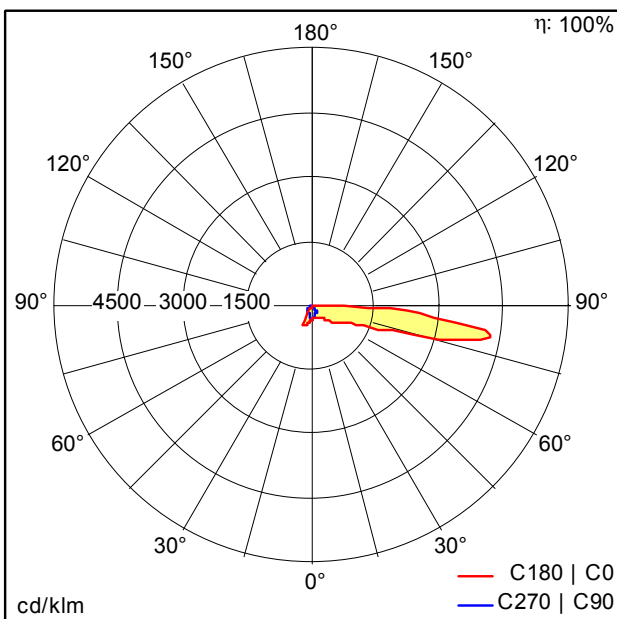
Safety luminaire

LED emergency luminaire for escape route lighting from the escape door to the safe collecting point with min. 1 lux compliant to EN 1838; 2 x 3 W LEDs, daylight white 6,500 K; lenses of polymethylmethacrylate; wall surface-mounted luminaire; Screw mounting of the gear tray and IP65 cover; white (RAL 9016); weather-resistant diecast aluminium housing, powder-coated, with safety glass panel, sealed with silicone; Luminaire for central emergency light supply, for single luminaire monitoring via DALI, settable emergency light level; NFC interface for addressing, configuration and maintenance via PROset Pen (article no.: 22170290) or PROset app; addressing also alternatively possible visually or via EZ-addressing; Maintained mode: -30°C to +30°C, non-maintained mode: -30°C to +35°C; power supply: 220 - 240 V AC, 50 / 60 Hz / 220 - 240 V DC; Luminaire input power: 5.5 W; Non-maintained and maintained mode settable via the central battery system; SC1; Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: ; Room height 2 to 4 m; Dimensions: 190 x 190 x 115 mm; weight: 2.2 kg; holder (ordered separately) for lateral cable entry (article code: 59010606



Light Distribution

STD - standard



- Light Source: LED
- Luminaire luminous flux*: 332 lm
- Total emergency luminous flux: 332 lm
- Luminaire efficacy*: 60 lm/W
- Ballast: 1 x 89800571 EM TR EM PowerLED NDA 100 DIM 5W ZUM
- Correlated colour temperature*: 6500 Kelvin
- Rated median useful life*: 50000h at 25°C
- Luminaire input power*: 5.5 W Power factor = 0.76
- Standby Power*: 0.5 W
- Dimming: Dali dimmable to 10%

All values marked with an * are rated values. Luminous flux and connected electrical load are subject to an initial tolerance of +/- 10%. Tolerance of colour temperature: +/- 150 K. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

Application

The DALI-CCW 1/2/3 Circle control point is a wall-mounted control unit in standard switch size, and is used for commissioning the complete DALI installation. It enables easy and convenient addressing of all DALI outputs in the room. Recurring lighting situations for different activities in the various rooms can be configured as scenes and actuated at the press of a button when required. In addition, the user can manually adjust the active scene using two group rocker switches for controlling the light level of two lighting groups.

Its contemporary design and clear layout make it extremely easy to use and mistakes are unlikely: each key is assigned to just one function. The DALI-CCW 1/2/3 DALI Circle control point is made of plastic in a white satin-matt finish. The DALI-CCW 1/2/3 is printed with the neutral scene icons "1", "2" and "3" for general-purpose use, and the rocker-switches are printed with the "Light level" icons.

Design notes

- Several DALI-CCW 1/2/3 control points, each having the same function, can be used in one installation.



Functional description

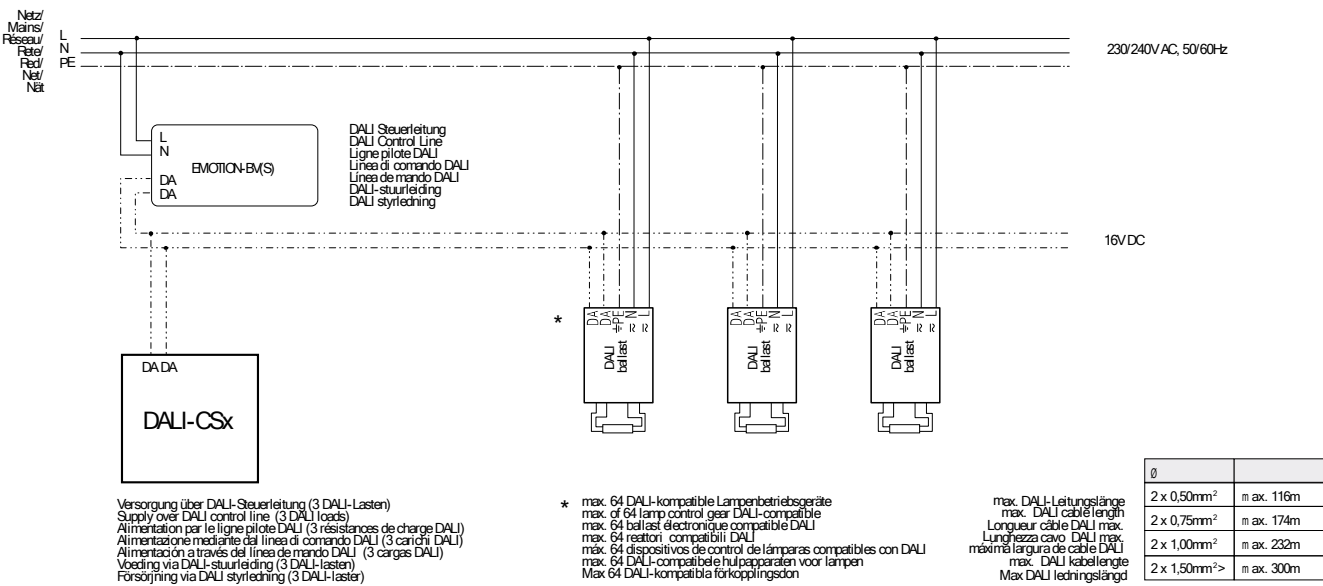
The DALI-CCW 1/2/3 DALI Circle control point can be used to recall three scenes for different room uses and activities via its 3 scene keys arranged in a circular layout. A green illuminated circle segment indicates the active scene. The central Enter/Leave button is used when entering or leaving the room. This button is illuminated by a surrounding red ring when the room is unoccupied, helping orientation on entering the room. The user can intervene in the active scene at any time. The group rocker-switches can be used for dimming the assigned luminaire group.

Additional facilities:

3 scenes per room:

- Configure
- Save: Use dimming buttons to set the required lighting situation, then press the required scene key "1", "2" or "3" to program it.
Press and hold the scene key "1", "2" or "3" for 7 secs and then release during the subsequent 2-sec window when the green LED is flashing DALI-output addressing:
- Re-initialize (clear and address): Press and hold ON/OFF button for 30 secs and then release in the 2-sec window when the LED is flashing
- System expansion (addressing only): Press and hold ON/OFF button for 15 secs and then release in the 2-sec window when the LED is flashing.
- Clear single actuators: Press and hold ON/OFF button for 7 secs and then release in the 2-sec window when the LED is flashing.

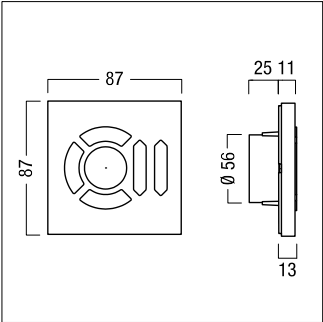
Wiring scheme



Mounting and installation instructions

- The control point is powered solely via the DALI control line and must not be connected to the mains supply.
 - We recommend using standard installation parts (2 x 0.75mm² - 2 x 1.5mm²).
 - The two DALI control lines are interchangeable
 - Use a damp cloth or antistatic wipe to clean the control point

Dimension



Technical data

Nominal voltage	DALI voltage (approx. 16 V DC)
Permitted input voltage	12...22.5V DC
Power supply	via DALI control line (16V DC)
Current consumption	3 DALI loads (6mA)
Power loss	< 0.1 W
Operation	Come/Go key, 3 scene keys, 2 light rocker keys
Terminals	0,5-1,5 mm²
Protection type	IP20
Housing material	plastic, halogen-free
Case colour	white (equivalent to RAL 9010)
Installation	in Euro box, single, dimensions according to DIN 0606 (diameter 60 mm, depth 42 mm), or UK metal back box
Dimensions	87 x 87 x 13 mm (upper section only)
Permitted ambient temperature	0 °C ... +50 °C
Weight	Approx. 0.15 kg

- switching, switch/dim and switch-changeover input with 4 independent inputs for running scenes and dimming conventional momentary action switches
 - Momentary action switch input for opening and closing windows using conventional (dual) momentary-action switches
 - Momentary action switch input for raising and lowering blinds or screens using conventional (dual) momentary-action switches

Application

The ED-SxED input modules can be used to integrate the following applications in the LUXMATE installation:

- As a switching input for running scenes using standard momentary-action light switches
- As a switch-dim input for running scenes and for dimming using standard momentary-action dimming switches
- As a window switch for opening and closing windows using standard dual momentary-action switches
- As a blinds/screen input for raising and lowering blinds and screens using standard momentary-action switches for blinds or standard dual momentary-action switches
- As a switch-changeover input for integrating switches, momentary-action switches, time switches or motion detectors with isolated contacts using the switch/changeover input

The relevant operating mode can be preselected using the rotary selector switch on the unit at the time of commissioning.

The configuration software is used to set the relevant operating mode for controlling blinds and windows.

Design notes

The unit is only intended for use in DIMLITE, LITECOM and LITECOM infinity, as well as on the netlink CCD.

It is compatible with the former EMOTION and LM-3DALIS devices.

Connect the input module directly to the DALI or Control-IN control line.

Switching contacts fitted with integral indicator lamp (not powered from external supply), RC-element and switching thyristors are not positively identified by the ED-SDED2 and must not be used.

The T1, T2, T3, T4 and COM lines for switch connection must not be mixed up.

The connection terminals can take leads with a cross-section of 0.5 to 1.5 mm².

The length of the connecting lines must not exceed 30cm. The connecting lines are not supplied with the product.

The bus input can withstand an external voltage of 230/240 V.

Power is supplied via the bus line.

The configuration software is used to set the relevant operating mode for controlling blinds and windows.

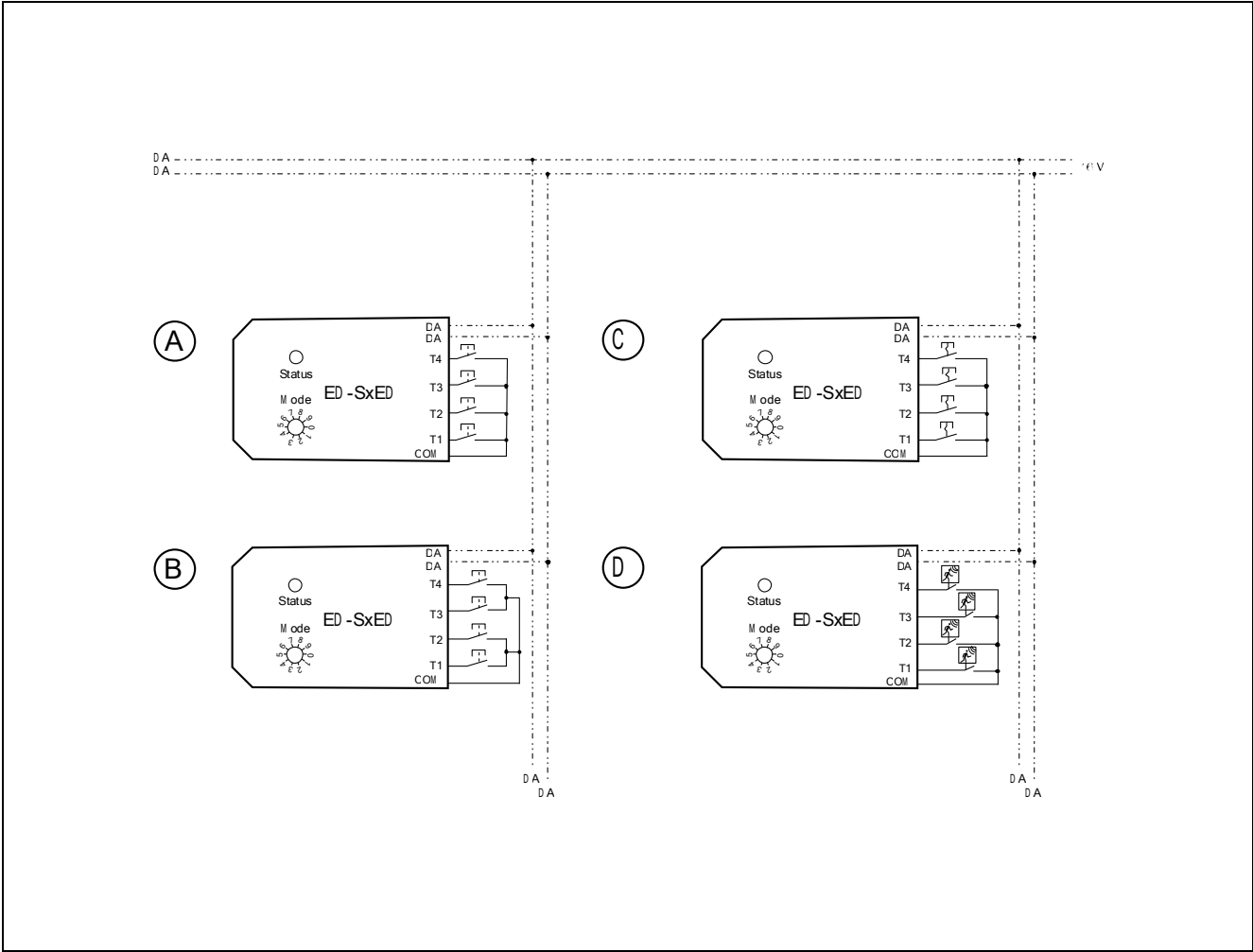
Current consumption 4 mA (2 DALI loads)

Functional description

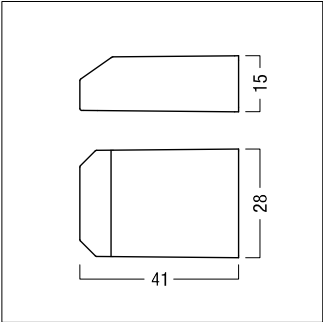
Depending on the addressing of an input, users can operate all the outputs in a room, or one output group in the room.

- Switching input:
scene change
- Switching-dimming input:
scene change and dimming in room
- Window input:
opening and closing the windows in a room
- Blinds and screen input:
raising/lowering the drapes/blinds in a room
- Switching-changeover input:
scene change by opening/closing

Wiring scheme



Dimension



Technical data

Power supply	via DALI control line (16V DC)
Current consumption	max. 4 mA
Bus loads	max. 2
Inputs	4 inputs (T1–T4)
Interface	DALI control line (DA, DA)
Terminals	0.5–1.5 mm² (single or stranded wire)
Protection type	IP20
Housing material	flame-resistant polycarbonate; halogen-free
Installation	in flush socket: 60 x 61 (Ø x T, in mm)
Dimensions	48 x 28 x 15 mm
Permitted ambient temperature	0–60 °C
Relative humidity	20–90 %, non-capacitive
Weight	Approx. 0.012 kg

Central automation controller with Ethernet connection (TCP/IP). Individual, direct control of up to 3 x 64 DALI-compatible control units as well as sensors and control points, with supplementary LM bus interface

Application

Maximum elegance and intuition: the LITECOM CCD central automation controller represents the core of a LITECOM system. Typical applications are trade companies, office areas, law offices, modern medical practices, boutiques, sales spaces and exclusive residential buildings. Commissioning, configuration and operation of the LITECOM system is via a browser-capable device such as a touch panel or laptop. The clear user interface guides the user through the different, well-organised levels. A context-based help supports with detailed information. Commissioning is made simpler and quicker with the use of mobile devices.

The LITECOM CCD is a central control unit for installation in a control cabinet with an Ethernet connection (TCP/IP). This enables the control of DALI-compatible control gear, LM bus devices and special sensors and operating devices (ED devices). Connected control gear can be individually addressed and grouped.

In addition, special sensors such as ED-Sens or ED-Eye, and special input units or control units such as ED-SxED or ED-Cxx can be connected to the DALI control line.

Design notes

A LITECOM system can be commissioned with any browser-compliant device. Google Chrome must be used as the browser.

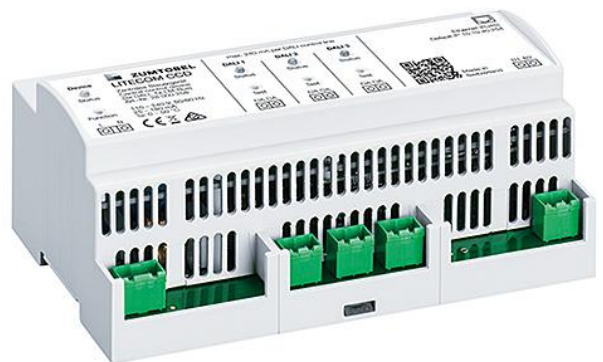
Various display devices (touch panels, tablets etc.) can be used for operating a LITECOM system.

Using a touch panel for operation is not mandatory. A maximum of 250 actuators can be integrated.

The LITECOM CCD is a central control unit for installation in a control cabinet with an Ethernet connection (TCP/IP).

The DALI lines are supplied and supply power for up to 120 bus loads (240mA) on each line.

The Luxmate bus is not supplied and requires its own bus supply (20975247 LM-BV or 22115026 LM-BV35) for use.



Functional description

With LITECOM CCD, the lighting, blinds, screens and windows of a building or project can be controlled. Up to 250 actuators can be driven on one controller.

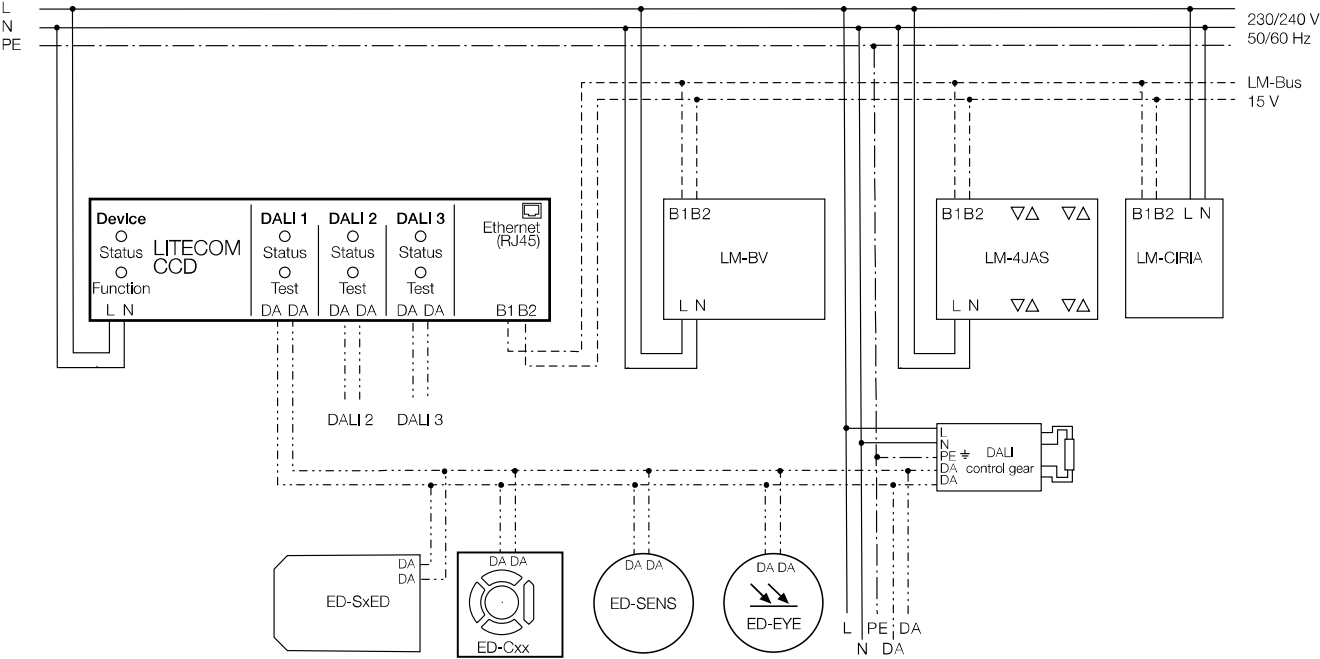
Basic functions:

- Switching and dimming, calling scenes, activating motor actuators (curtains, screens, windows)
- Calling of preset light scenes
- Defining and saving own light scenes
- Configuration of functions at room or group level
- Access to the system via web browser
- Guided commissioning using a wizard
- Facade protection, wind, rain and temperature alarms via relay contacts
- Fault monitoring in real-time

Supplementary functions are variously available as an APP:

- Daylight-dependent adjustment of artificial light
- Time management (working hours, weekends, holidays and simple event control) via the calendar that can be configured in LITECOM.
- Control according to presence or absence
- Dynamic scenes (Shows, Motivation Cycle)
- Creation of special luminaires (e.g. from 3 actuators; red, green, blue, defining a colour luminaire)
- Monitoring and launching of functional test and service life test for emergency lighting (self-contained emergency luminaires)

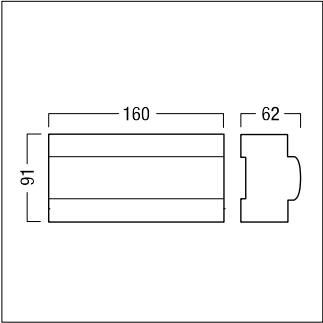
Wiring scheme



Mounting and installation instructions

- Installation: only in dry and clean surroundings, access only possible with tools; only in solid control cabinet or solid, closed distribution unit complying with standards for fire and touch protection
- Mains cable: must not be interrupted by control points
- Ethernet cable: at least CAT 5 cable, shielded
- Bus line and DALI control line: use standard installation material for low voltage systems (< 1 000 V); only tree, line and star formation cabling permitted
- Bus lines: can be interchanged
- DALI line:
cable cross section with maximum DALI cable length:
2 x 0.50 mm² - 100 m
2 x 0.75 mm² - 150 m
2 x 1.50 mm² - 300 m

Dimension



Technical data

Nominal voltage	110–240 V, 50–60 Hz
Permitted input voltage	100–260 V, 50–60 Hz
Power loss	max. 20 W
Outputs	3 DALI-compatible outputs (DALI 1–3)
Connections	LM bus (B1, B2) (LM system limits depend on LM bus supply used) Total of max. 250 actuators 1 ethernet connection (ethernet): RJ45 plug Data transmission speed: 10/100 MBit/s
DALI addresses and bus loads per DALI line	max. 64 DALI-compliant control units (ballasts) max. 64 eD devices (operating units/sensors) maximum 240 mA or maximum 120 DALI loads
Terminals	0.5–2.5 mm ² (single-wire or fine wire)
Protection type	IP20
Protection class	SC2 (safety isolated) only with correctly installed terminal cover
Housing material	flame-resistant polycarbonate; halogen-free
Installation	On 35 mm top-hat rail according to EN 50022
Dimensions	160 x 91 x 62 (W x H x D, in mm) 9 units at 17,5 mm
Permitted ambient temperature	0–50 °C, on horizontally mounted DIN rail, (e.g. in control cabinet) 0–40 °C, on horizontally mounted DIN rail
Relative humidity	20–90 %, non-capacitive
Weight	Approx. 0.6 kg

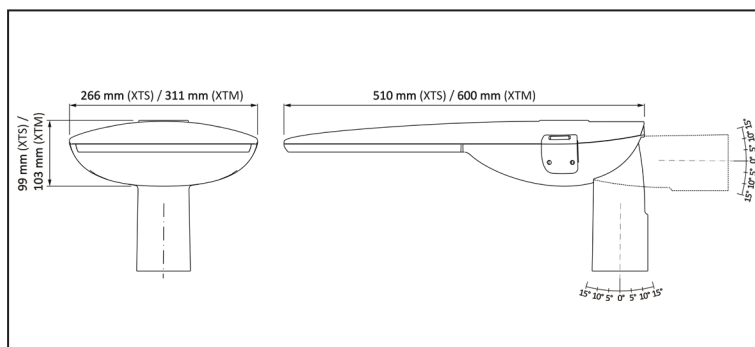
VO1

129-162 lm/W	-40°C 45°C	CE	IP 66	IK 09	L80 100 000h
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Variabilní venkovní moderní LED svítidlo s vysokou účinností určené pro komunikace všech typů (silnice, dálnice, atd.), cyklostezky, parkoviště, parky a areálové osvětlení. Svítidlo bylo navrženo pro použití v systémech Smart Cities. Přístup do svítidla bez použití nářadí.

STANDARDNÍ PROVEDENÍ

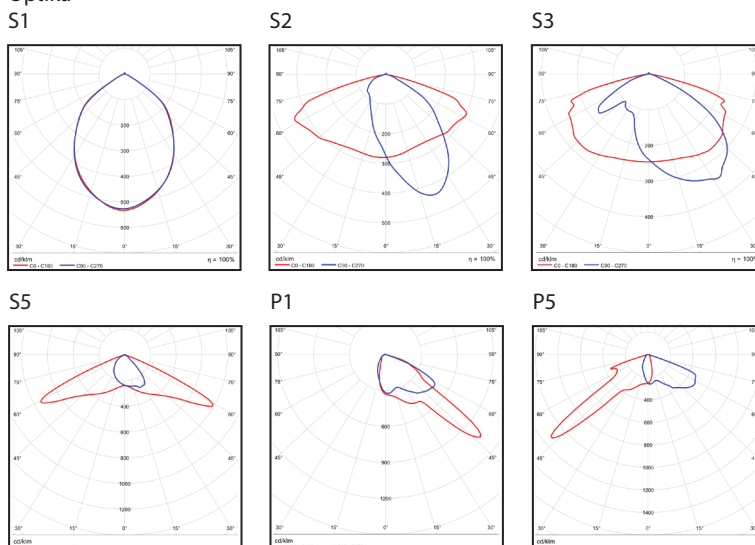
Teplota chromatičnosti	5 000K
	4 000K
	3 000K
Index podání barev	Ra > 80
Stupeň krytí	IP 66
Mechanická odolnost	IK 09
Účinník	≥0,97
Ta	-40°C až 45°C
Životnost LED	L80 = 100 000 hodin
Korpus	Celohliníkový
Povrchová úprava korpusu	Práškové lakování
Barva	šedá RAL
ULOR	0%
Ochrana proti přepětí	10 kV
Třída ochrany	I.
Bezpečnost	Odpojení elektrické části při otevření svítidla
Hmotnost	5-7,5 kg
Uchycení	Polohovatelný držák na výložník/sloup ±15° (ø48-60 mm)



MOŽNOSTI MODIFIKACE

Teplota chromatičnosti	2 700K
Přechodová optika	Levostranný přechod
	Pravostranný přechod
Ta	Prizpůsobení extrémním teplotám, od -55°C do 55°C
Třída ochrany	II.
Řízení a regulace	Plovoucí noc
	CLO
	DALI
	1-10 V
Mechanická odolnost	IK 10
Barva	Dle vzorníku RAL
QR kód	Možnost aplikace QR kódu s technickými parametry o svítle

Optika



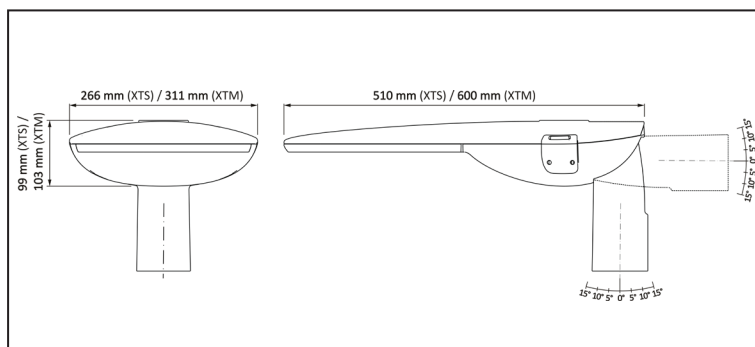
Příkon W	Světelný tok lm*	Účinnost lm/W*	Teplota chromatičnosti K
10	1478	148	3000

129-162 lm/W	-40°C 45°C	CE	IP 66	IK 09	L80 100 000h
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STANDARDNÍ PROVEDENÍ

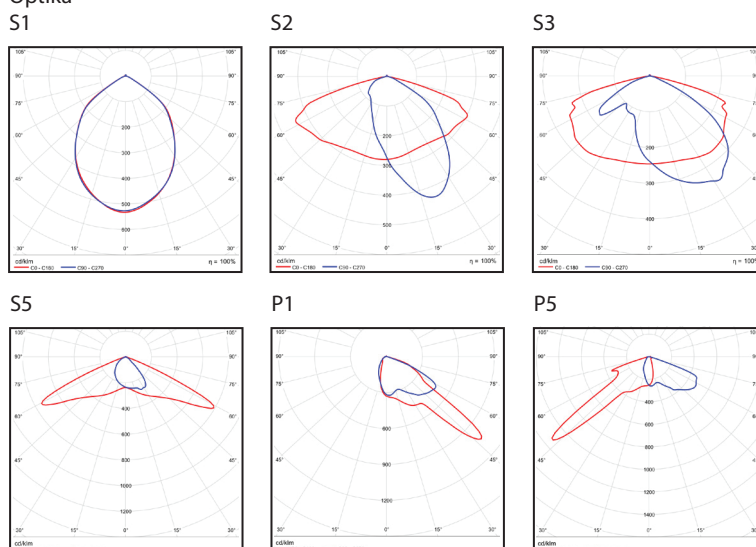
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Optika



Příkon W	Světelný tok lm*	Účinnost lm/W*	Teplota chromatičnosti K
35	5023	144	3000