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DOKUMENTACE PRO PROVEDENÍ STAVBY

DPS

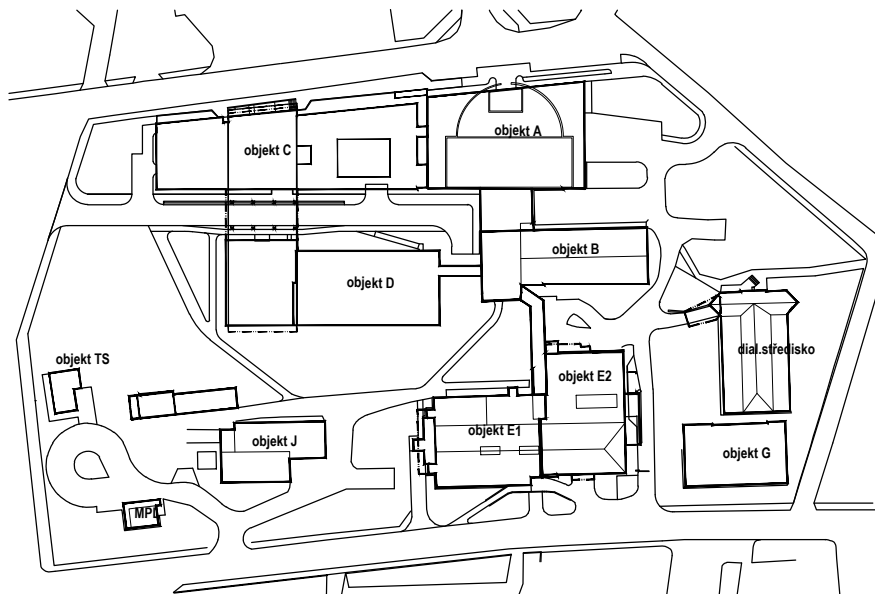
OBJEKT (SO, PS) | BUILDING

080 SILNOPROUDÉ ROZVODY

ENA

KNIHA SVÍTIDEL

D1 ... **080**



LEGENDA OSVĚTLENÍ:

B		B	VESTAVNÉ ČTVERCOVÉ LED SVÍTIDLO S DALI, 42W, 4800lm , 4000K, CRI 80, UGR<19, IP20
B1		B1	VESTAVNÉ LINEÁRNÍ LED SVÍTIDLO S DALI, l=1198mm, 28W, 3560lm, 4000K, CRI 80, UGR<19, IP20
B2		B2	VESTAVNÉ ČTVERCOVÉ CELOSPEKTRÁLNÍ LED SVÍTIDLO S DALI, 42W, 4800lm , 2700–6500K, UGR<19, IP20
C		C	VESTAVNÉ ČTVERCOVÉ LED SVÍTIDLO S DALI, 38W, 5000lm, 4000K, CRI 90, IP20,
C1		C1	VESTAVNÉ OBDELNIKOVÉ LED SVÍTIDLO S DALI, 38,3W, 4990lm, 4000K, CRI 90, IP20,
D		D	ZÁVĚSNÉ TRUBICOVÉ LED SVÍTIDLO, Ø=52mm/l=620mm, 13W, 1520lm, 4000K, CRI 80, IP68
D1		D1	ZÁVĚSNÉ TRUBICOVÉ LED SVÍTIDLO, Ø=52mm/l=900mm, 18W, 2280lm, 4000K, CRI 80, IP68
X1a		X1a	NÁSTĚNNÉ LED SVÍTIDLO, l=450mm, 11W, CRI 80, IP44, 770lm (viz. architektonický manuál)
X1b		X1b	NÁSTĚNNÉ LED SVÍTIDLO, l=450mm, 11W, CRI 80, IP44, 770lm (viz. architektonický manuál)
X2		X2	NÁSTĚNNÉ LED SVÍTIDLO, l=600mm, 13,8W, CRI 80, IP44, 966lm (viz. architektonický manuál)
E		E	VESTAVNÉ KRUHOVÉ LED SVÍTIDLO S DALI, Ø200mm, 19W, 2552lm, 3000K, CRI 80, IP44
E2		E2	VESTAVNÉ KRUHOVÉ CELOSPEKTRÁLNÍ LED SVÍTIDLO S DALI, Ø200mm, 19W, 2500lm, 2700–6500K, IP44
F		F	Nástěnné čtvercové LED svítidlo, 1W, 70lm, 3000K, CRI 80, IP20
G		G	VESTAVNÉ ČTVERCOVÉ LED SVÍTIDLO S DALI, 65,9W, 6690lm, 4000K, CRI 90, IP65
H		H	ZÁVĚSNÉ LINEÁRNÍ LED SVÍTIDLO, l=1600mm, 40W, 6260lm, 4000K, CRI 80, IP66,
I		I	ZÁVĚSNÉ LINEÁRNÍ LED SVÍTIDLO, l=1474, 57,5W, 5910lm, 4000K, CRI 80, UGR<16
I2		I2	ZÁVĚSNÉ LINEÁRNÍ CELOSPEKTRÁLNÍ LED SVÍTIDLO, l=1474, 57,5W, 5910lm, 2700–6500K, UGR<16
J		J	ZÁVĚSNÉ LINEÁRNÍ LED SVÍTIDLO, l=1250mm, 17W, 2060lm, 4000K, CRI 80, IP20,
K		K	VESTAVNÉ KRUHOVÉ LED SVÍTIDLO S DALI, Ø218mm, 14,1W, 1990lm, 4000K, CRI 80, IP54
L		L	PŘISAZENÉ OBDELNIKOVÉ LED SVÍTIDLO S DALI, l=1520mm, 35,7W, 4590lm, 4000K, CRI 80, IP54
N01		N01	VESTAVNÉ NOUZOVÉ LED SVÍTIDLO, 4W, 332lm, 3000K, CRI 70, IP20, optika coridor, adresný monitoring, driver integrovaný ve svítidle, napájeno CBS
N02		N02	VESTAVNÉ NOUZOVÉ LED SVÍTIDLO, 4W, 307lm, 3000K, CRI 70, IP20, optika area, adresný monitoring, driver integrovaný ve svítidle, napájeno CBS
N03		N03	PŘISAZENÉ NOUZOVÉ LED SVÍTIDLO, 3,4W, 408lm, 6500K CRI 70, IP20, optika area, adresný monitoring, driver integrovaný ve svítidle, napájeno CBS
N04		N04	Přisazené nouzové osvětlení s piktogramem, napájeno CBS
N05		N05	Vestavné stropní nouzové osvětlení s piktogramem, napájeno CBS
NO-V		NO-V	PŘISAZENÉ NOUZOVÉ LED SVÍTIDLO, 3,9W, 332lm, 5700K, CRI 70, IP65, PROTIPANIKOVÉ adresný monitoring, driver integrovaný ve svítidle, napájeno CBS, osvětlení evakuačních dveří ve venkovním prostoru
NO-H		NO-H	VESTAVNÉ NOUZOVÉ LED SVÍTIDLO, 2W, IP20, spot, adresný monitoring, driver integrovaný ve svítidle, napájeno CBS, pro osvětlení důležitých míst.
V1		V1	Zapuštěné liniové LED svítidlo, IP54, 3000K, CRI80, 1650lm/m
V2		V2	Nástěnné venkovní LED svítidlo, 20W, IP65, vxšxd 170x120x320mm, 1800lm

Přiložené technické listy definují technické a designové vlastnosti svítidel, nikoliv konkrétní typ svítidla.

B

Datový list výrobku

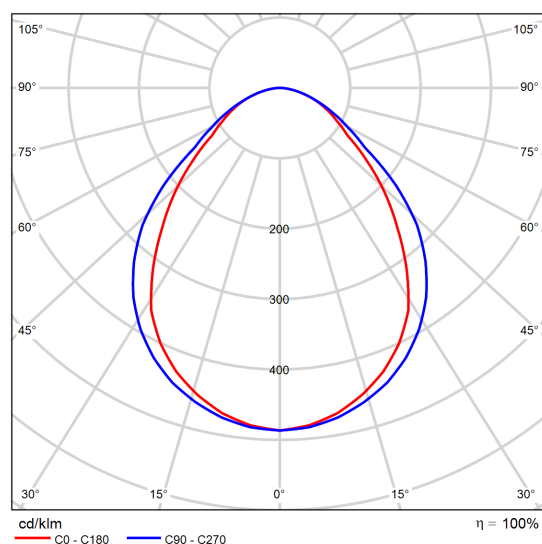
LED4800-840 M600Q LDO KA WH [STD]



C. výrobku	42184757
P	42.0 W
Φ _{Žárovka}	4800 lm
Φ _{Svitidlo}	4801 lm
η	100.01 %
Světelný výtežek	114.3 lm/W
CCT	4000 K
CRI	80
Index	B

LED recessed ceiling luminaire with digitally dimmable, DC voltage-compliant LED converter for DALI control with one DALI address for simultaneously controlling central and side area; Luminaire input power: 41.6 W. LED service life lasts 80000 h before luminous flux is reduced to 80% of the initial value. Luminaire luminous flux: 4800 lm, Luminaire efficacy: 115 lm/W. Colour rendering Ra > 80, colour temperature 4000 K. Despite maximum quality control, recognisable colour differences between luminaires with the predefined binning may occur with cluster applications. To achieve a uniform appearance, we recommend consulting a lighting consultant with intended cluster or continuous row installations. Diffuse side areas for pleasant ambient lighting and high quality lens optic (Advanced Crystal Optic) for central area for glare-free lighting with UGR < 19 and L65 < 3000 cd/m² and rich-contrast appearance, internal 5-pole plug-in terminal block (can be connected from inside or outside); can be installed as a single luminaire or in a cluster; designed to fit in ceiling apertures cut with a saw and in modular ceilings with concealed or visible joist system; fixing set and strain relief must be ordered separately; Luminaire with external electrical connection. Luminaire wired with

halogen-free leads; Dimensions: 598 x 598 x 77 mm, weight: 5.7 kg



Polární LDC

Vyhodnocení oslnění dle UGR												
p Strop		70	70	50	50	30	70	70	50	50	30	30
p Stěny		50	30	50	30	30	50	30	50	30	30	30
p Podlaha		20	20	20	20	20	20	20	20	20	20	20
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	15.8	17.0	16.1	17.2	17.4	16.9	18.1	17.2	18.3	18.5	
	3H	16.8	17.9	17.1	18.2	18.4	17.7	18.8	18.0	19.1	19.3	
	4H	17.3	18.3	17.6	18.6	18.8	18.1	19.1	18.4	19.4	19.6	
	6H	17.6	18.5	17.9	18.8	19.1	18.3	19.2	18.6	19.5	19.8	
	8H	17.7	18.6	18.0	18.9	19.2	18.4	19.3	18.7	19.6	19.9	
	12H	17.7	18.6	18.1	18.9	19.2	18.4	19.3	18.7	19.6	19.9	
4H	2H	16.2	17.3	16.6	17.5	17.8	17.1	18.2	17.5	18.4	18.7	
	3H	17.5	18.4	17.9	18.7	19.0	18.2	19.1	18.6	19.4	19.7	
	4H	18.1	18.9	18.5	19.2	19.6	18.7	19.5	19.1	19.8	20.2	
	6H	18.5	19.2	18.9	19.6	19.9	19.0	19.7	19.4	20.1	20.5	
	8H	18.6	19.3	19.1	19.7	20.1	19.1	19.8	19.6	20.2	20.6	
	12H	18.7	19.3	19.1	19.7	20.1	19.2	19.8	19.6	20.2	20.6	
8H	4H	18.3	18.9	18.7	19.3	19.7	18.9	19.5	19.3	19.9	20.3	
	6H	18.9	19.4	19.3	19.8	20.3	19.3	19.8	19.8	20.3	20.7	
	8H	19.1	19.5	19.5	20.0	20.4	19.5	20.0	20.0	20.4	20.9	
	12H	19.2	19.6	19.7	20.0	20.5	19.6	20.0	20.1	20.5	21.0	
	4H	18.3	18.9	18.8	19.3	19.7	18.9	19.4	19.3	19.9	20.3	
	6H	18.9	19.4	19.4	19.8	20.3	19.4	19.8	19.8	20.3	20.7	
12H	8H	19.1	19.5	19.6	20.0	20.5	19.6	20.0	20.1	20.4	20.9	
	9H	19.1	19.5	19.6	20.0	20.5	19.6	20.0	20.1	20.4	20.9	
Variace polohy pozorovatele pro vzdálenosti svítidel S												
S = 1.0H		+0.3 / -0.4					+0.3 / -0.4					
S = 1.5H		+0.5 / -0.7					+0.5 / -0.8					
S = 2.0H		+0.9 / -1.1					+1.3 / -1.3					
Standardní tabulka		BK04					BK04					
Korekturní sčítanec		1.2					2.0					
Korigované osňovací indície, vztažené na 4800lm Celkový světelný tok												

UGR diagram (SHR: 0.25)

B1

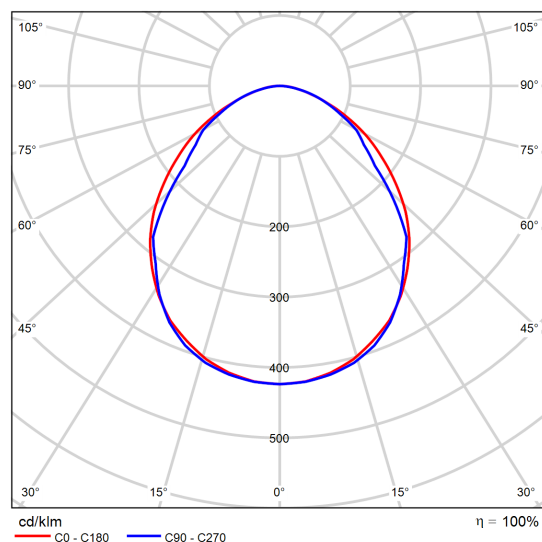
Datový list výrobku

LED3600-840 M600L12 LDO KA WH [STD]



C. výrobku	42184760
P	29.0 W
Φ _{Žárovka}	3560 lm
Φ _{Svitidlo}	3561 lm
η	100.02 %
Světelný výtežek	122.8 lm/W
CCT	4000 K
CRI	80
Index	B1

LED recessed ceiling luminaire with digitally dimmable, DC voltage-compliant LED converter for DALI control with one DALI address for simultaneously controlling central and side area; Luminaire input power: 28 W. LED service life lasts 100000 h before luminous flux is reduced to 85% of the initial value. Luminaire luminous flux: 3560 lm, Luminaire efficacy: 127 lm/W. Colour rendering Ra > 80, colour temperature 4000 K. Despite maximum quality control, recognisable colour differences between luminaires with the predefined binning may occur with cluster applications. To achieve a uniform appearance, we recommend consulting a lighting consultant with intended cluster or continuous row installations. Diffuse side areas for pleasant ambient lighting and high quality lenticular structure for central area for glare-free lighting with UGR < 19 and L65 < 3000 cd/m² and homogeneous appearance, internal 5-pole plug-in terminal block (can be connected from inside or outside); can be installed as a single luminaire or in a cluster; designed to fit in ceiling apertures cut with a saw and in modular ceilings with concealed or visible joist system; fixing set and strain relief must be ordered separately; Luminaire with external electrical connection. Luminaire wired with halogen-free leads; Dimensions: 1198 x 298 x 82 mm, weight: 6 kg



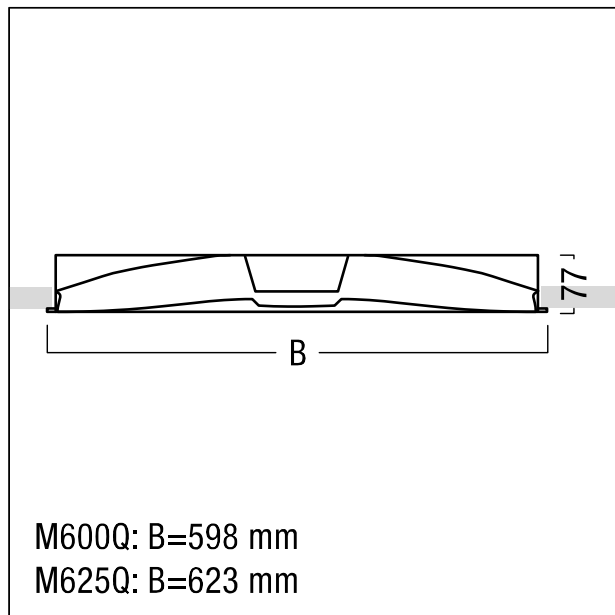
Polární LDC

Vyhodnocení oslnění dle UGR												
p Strop		70	70	50	50	30	70	70	50	50	30	
p Stěny		50	30	50	30	30	50	30	50	30	30	
p Podlaha		20	20	20	20	20	20	20	20	20	20	
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	16.5	17.7	16.8	18.0	18.2	15.9	17.2	16.2	17.5	17.7	
	3H	17.6	18.8	17.9	19.0	19.3	17.1	18.3	17.5	18.5	18.8	
	4H	18.0	19.1	18.3	19.4	19.6	17.6	18.7	17.9	19.0	19.3	
	6H	18.2	19.3	18.6	19.6	19.9	17.9	18.9	18.3	19.2	19.5	
	8H	18.3	19.3	18.7	19.6	19.9	18.0	19.0	18.4	19.3	19.6	
4H	12H	18.4	19.3	18.8	19.6	20.0	18.0	19.0	18.4	19.3	19.6	
	2H	16.9	18.0	17.3	18.3	18.6	16.5	17.6	16.9	17.9	18.2	
	3H	18.3	19.2	18.6	19.5	19.8	17.9	18.8	18.3	19.1	19.5	
	4H	18.8	19.6	19.2	19.9	20.3	18.5	19.3	18.9	19.7	20.0	
	6H	19.1	19.8	19.5	20.2	20.6	18.9	19.6	19.3	20.0	20.4	
8H	8H	19.2	19.9	19.7	20.3	20.7	19.0	19.7	19.4	20.1	20.5	
	12H	19.3	20.0	19.8	20.4	20.8	19.1	19.7	19.5	20.1	20.5	
	4H	18.9	19.6	19.4	20.0	20.4	18.7	19.4	19.1	19.8	20.2	
	6H	19.4	20.0	19.9	20.4	20.8	19.2	19.8	19.7	20.2	20.7	
	8H	19.6	20.1	20.1	20.5	21.0	19.4	19.9	19.9	20.3	20.8	
12H	12H	19.8	20.2	20.3	20.6	21.2	19.5	19.9	20.0	20.4	20.9	
	4H	18.9	19.6	19.4	20.0	20.4	18.7	19.3	19.1	19.7	20.2	
	6H	19.4	19.9	19.9	20.4	20.8	19.3	19.7	19.7	20.2	20.7	
	8H	19.7	20.1	20.2	20.5	21.0	19.5	19.9	20.0	20.4	20.9	
	Variace polohy pozorovatele pro vzdálenosti svítidel S											
S = 1.0H		+0.1 / -0.2					+0.2 / -0.3					
S = 1.5H		+0.3 / -0.5					+0.3 / -0.5					
S = 2.0H		+0.7 / -0.9					+0.6 / -0.9					
Standardní tabulka		BK04					BK05					
Korekturní sčítanec		2.0					2.1					
Korigované osňovací indície, vztažené na 3560lm Celkový světelný tok												

UGR diagram (SHR: 0.25)

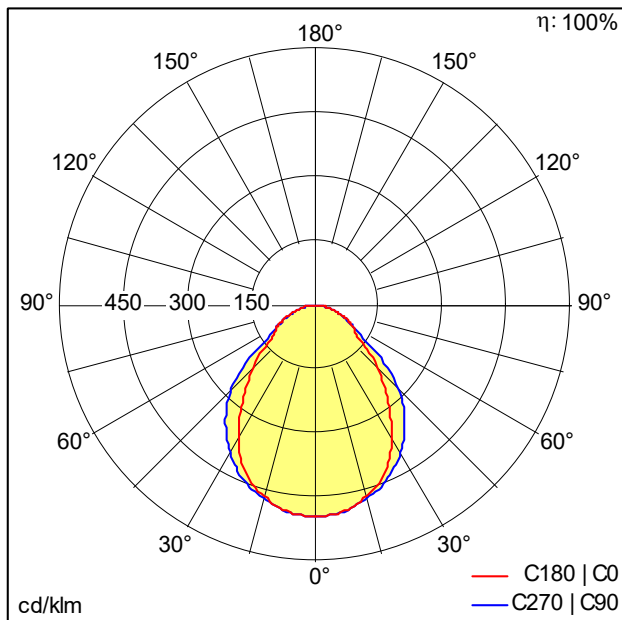
B2

LED ceiling recessed luminaire with digitally dimmable, DC voltage-compliant LED converter for DALI control (DALI DT8 2010) with one DALI address for simultaneously controlling central and side area; Luminaire input power: 57.9 W. LED service life lasts 100000 h before luminous flux is reduced to 80% of the initial value. Luminaire luminous flux: 4270 lm, Luminaire efficacy: 74 lm/W. Colour rendering Ra > 90, colour temperature (tunable) 2700-6500 K. Use in clusters with uniform appearance is possible due to factory calibration with Tunable White. Diffuse side areas for pleasant ambient lighting and high quality lens optic (Advanced Crystal Optic) for central area for glare-free lighting with UGR < 19 and L65 < 3000 cd/m² and rich-contrast appearance, internal 5-pole plug-in terminal block (can be connected from inside or outside); can be installed as a single luminaire or in a cluster; designed to fit in ceiling apertures cut with a saw and in modular ceilings with concealed or visible joist system; fixing set and strain relief must be ordered separately; Luminaire with external electrical connection. Luminaire wired with halogen-free leads; Dimensions: 598 x 598 x 77 mm, weight: 5.7 kg



Křivka svítivosti

STD – standard



- Světelný zdroj: LED
- Světelný tok*: 4270 lm
- Světelný výkon svítidel*: 74 lm/W
- Index podání barev - CRI min.: 90
- Předřadník: 1 x 28003268 TWK TR 4 S 927-965 6000 55.2W
- Teplota chromatičnosti*: 2700 Kelvin
- Barevná tolerance v místě (MacAdam): 3
- Střední dimenzovaná životnost*:
L80 100000 h při/u 25 °C
L85 75000 h při/u 25 °C
L90 50000 h při/u 25 °C
- Příkon svítidla*: 57,9 W Výkonový faktor = 0,97
- Příkon v pohotovostním režimu*: 0,2 W
- Řízení: LDO stmívatelné do 10% přes DALI
- Kategorie údržby CIE 97: D - Uzavřené IP2X
- Total harmonic distortion (THD): 11,00 %

Tento výrobek obsahuje světelný zdroj s třídou energetické účinnosti E.

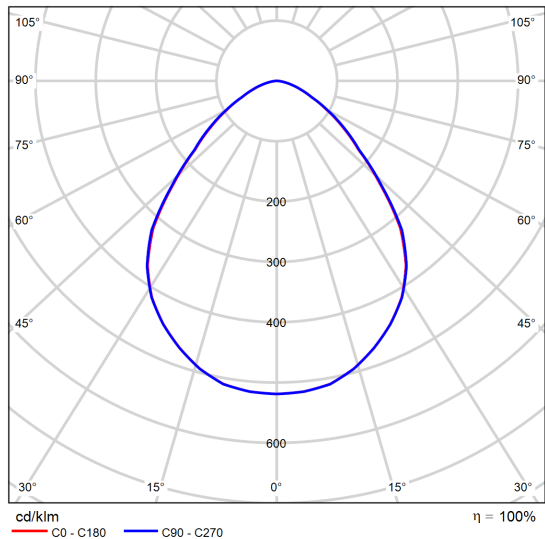
Hodnoty označené * představují stanovené rozměrové hodnoty. Výkon a světelný tok podléháji zpočátku toleranci až do +/- 10 %, nejpodobnější teplota chromatičnosti podléhá zpočátku toleranci +/- 150K. Pokud není uvedeno jinak, platí hodnoty pro okolní teplotu 25°C.
Fotometrická data se vztahují ke 3 000 K.

C



C. výrobku	42186925
P	38.3 W
ΦŽárovka	4990 lm
ΦSvitidlo	4990 lm
η	100.00 %
Světelný výtěžek	130.3 lm/W
CCT	4000 K
CRI	90
Index	C

Recessed ceiling luminaire with frameless look, 100% uniform illumination, laser-welded MPO+ micropyramidal optic with light accent. Luminaire input power: 38.3 W, DALI controllable luminaire with LED converter; LED service life lasts 50000 h before luminous flux is reduced to 90 % of the initial value. Chromaticity tolerance (initial MacAdam): 3. Luminaire luminous flux: 4990 lm, Luminaire efficacy: 130 lm/W. Colour rendering Ra > 90, colour temperature 4000 K. Light guided via backlit multilayer MPO+ micropyramidal optic with seamless look and defined light emission for glare-free light distribution with UGR < 19 and L65 < 3000 cd/m² as per EN 12464; reduced luminance at steep angles specifically designed to cut glare on tilted displays and allow maximum flexibility; evenly spaced LED light points; laser-welded light chamber ensures touch protection and prevents entry of insects and dirt particles; simple cleaning due to smooth outer cover of high grade polymethylmethacrylate; flat luminaire housing made of sheet steel with all-round optic frame made of plastic, white; Luminaire with external electrical connection; Installation as single luminaire or as cluster, designed to fit in cut ceiling apertures and in modular ceilings with concealed or visible joist system; please order fixing kit separately; Luminaire wired with halogen-free leads; Modul: 600; Dimensions: 598 x 598 x 90 mm, weight: 6.6 kg.



Polární LDC

Vyhodnocení oslnění dle UGR												
p Strop	70	70	50	50	30	70	70	50	50	30	30	
p Stěny	50	30	50	30	30	50	30	50	30	30	30	
p Podlaha	20	20	20	20	20	20	20	20	20	20	20	
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	15.8	16.9	16.1	17.1	17.3	15.8	17.0	16.1	17.2	17.4	
	3H	16.4	17.4	16.7	17.6	17.9	16.4	17.5	16.8	17.7	18.0	
	4H	16.6	17.5	16.9	17.8	18.1	16.6	17.6	17.0	17.9	18.1	
	6H	16.7	17.5	17.0	17.8	18.1	16.7	17.6	17.1	17.9	18.2	
	8H	16.7	17.5	17.0	17.8	18.1	16.8	17.6	17.1	17.9	18.2	
4H	12H	16.7	17.5	17.0	17.8	18.1	16.7	17.6	17.1	17.9	18.2	
	2H	15.9	16.8	16.2	17.1	17.4	15.9	16.9	16.3	17.1	17.4	
	3H	16.6	17.4	16.9	17.7	18.0	16.6	17.5	17.0	17.8	18.1	
	4H	16.8	17.6	17.2	17.9	18.3	16.9	17.6	17.3	18.0	18.4	
	6H	17.0	17.6	17.4	18.0	18.4	17.1	17.7	17.5	18.1	18.5	
8H	8H	17.1	17.6	17.5	18.0	18.4	17.1	17.7	17.6	18.1	18.5	
	12H	17.1	17.6	17.5	18.0	18.4	17.2	17.7	17.6	18.1	18.5	
	4H	16.8	17.4	17.3	17.8	18.2	16.9	17.5	17.4	17.9	18.3	
	6H	17.1	17.5	17.5	18.0	18.4	17.2	17.6	17.6	18.1	18.5	
	8H	17.1	17.6	17.6	18.0	18.5	17.2	17.6	17.7	18.1	18.6	
12H	12H	17.2	17.5	17.7	18.0	18.5	17.3	17.6	17.7	18.1	18.6	
	4H	16.8	17.4	17.3	17.8	18.2	16.9	17.4	17.3	17.8	18.3	
	6H	17.1	17.5	17.5	17.9	18.4	17.1	17.6	17.6	18.0	18.5	
	8H	17.1	17.5	17.6	18.0	18.5	17.2	17.6	17.7	18.0	18.5	
Variance polohy pozorovatele pro vzdálenosti svítidel S												
S = 1.0H	+0.6 / -0.8					+0.6 / -0.8						
S = 1.5H	+1.2 / -1.4					+1.2 / -1.4						
S = 2.0H	+2.4 / -2.3					+2.4 / -2.2						
Standardní tabulka	BK02					BK02						
Korekturní sčítanec	-0.8					-0.7						
Korigované osňovací indície, vztažené na 4990lm Celkový světelný tok												

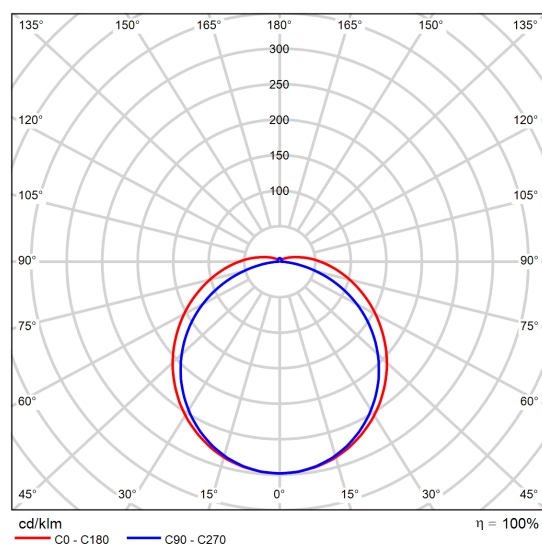
UGR diagram (SHR: 0.25)

Datový list výrobku

1500-840 O SL S EVG [STD]



C. výrobku	42187722
P	13.0 W
Φ _{žárovka}	1520 lm
Φ _{svítidlo}	1520 lm
η	100.00 %
Světelný výtěžek	116.9 lm/W
CCT	4000 K
CRI	80
Index	D



Polární LDC

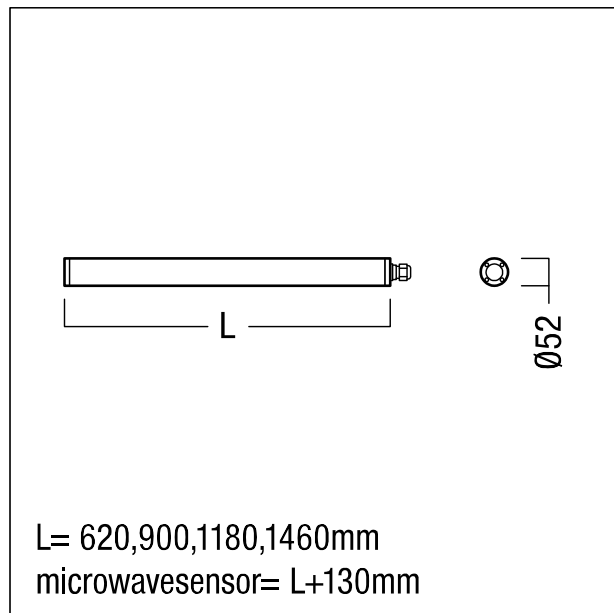
Tube Luminaire with $\varnothing$ 50 mm, Luminaire luminous flux: 1520 lm, Luminaire efficacy: 117 lm/W. Colour rendering $R_a > 80$, colour temperature 4000 K. Luminaire input power: 13 W, electronic ballast with LED converter; LED service life lasts 80000 h before luminous flux is reduced to 90% of the initial value. Chromaticity tolerance (initial MacAdam): 3. Suitable for wall surface-mounting and ceiling mounting. Approved for indoor use and in protected outdoor areas. ambient temperature: -20°C to $+30^{\circ}\text{C}$. Impact resistant housing (IK10). Housing made of opal polycarbonate, with transparent end caps made of polycarbonate. Cable glands made of polycarbonate, grey, age-resistant. Polyurethane foam seals. Gear tray made of aluminium, powder-coated in matt white. Supplied with 2 stainless steel fixing clips (22171601). Luminaire wired with halogen-free leads. The luminaire is supplied with a 1.5m H07RN-F ($2 \times 1.5 \text{ mm}^2$) cable. protection rating: IP68. SC2. Dimensions: $\varnothing 52 \times 620 \text{ mm}$ weight: 1.2 kg.

D1

2200-840 O SL M EVG

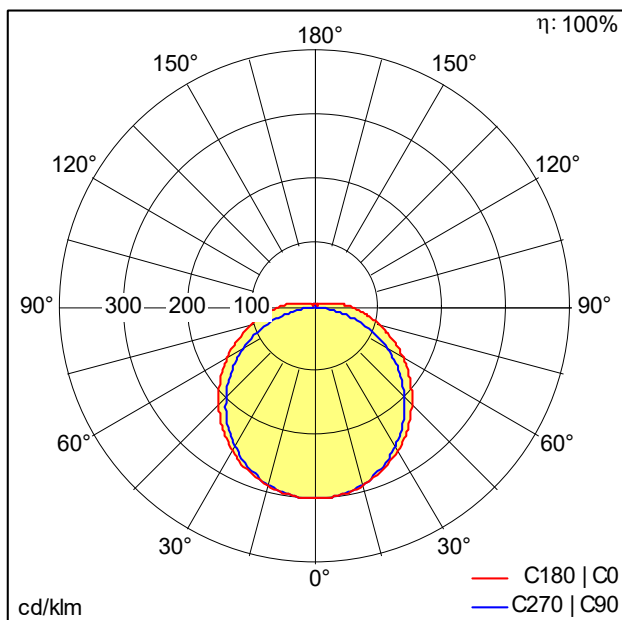
Tube Luminaire

Tube Luminaire with $\varnothing$ 50 mm, Luminaire luminous flux: 2359 lm, Luminaire efficacy: 139 lm/W. Colour rendering Ra > 80, colour temperature 4000 K. Luminaire input power: 17 W, electronic ballast with LED converter; LED service life lasts 80000 h before luminous flux is reduced to 90% of the initial value. Chromaticity tolerance (initial MacAdam): 3. Suitable for wall surface-mounting and ceiling mounting. Approved for indoor use and in protected outdoor areas. ambient temperature: -20°C to +30°C. Impact resistant housing (IK10). Housing made of opal polycarbonate, with transparent end caps made of polycarbonate. Cable glands made of polycarbonate, grey, age-resistant. Polyurethane foam seals. Gear tray made of aluminium, powder-coated in matt white. Supplied with 2 stainless steel fixing clips (22171601). Luminaire wired with halogen-free leads. The luminaire is supplied with a 1.5m H07RN-F (2 x 1.5 mm²) cable. protection rating: IP68. SC2. Dimensions: $\varnothing$ 52 x 900 mm weight: 1.4 kg.



Light Distribution

STD - standard



- Light Source: LED
- Luminaire luminous flux*: 2359 lm
- Luminaire efficacy*: 139 lm/W
- Colour Rendering Index min.: 80
- Correlated colour temperature*: 4000 Kelvin
- Chromaticity tolerance (initial MacAdam): 3
- Rated median useful life*:
L90 80000 h at 25 °C
- Ballast: 1x LED_Con Driver HELVAR LL35HE-CC-120-450
- Luminaire input power*: 17 W
- Dimming: EVG
- Maintenance category CIE 97: E - Dust-proof IP5X
- Total harmonic distortion (THD): 0.06 %

This product contains a light source of energy efficiency class B.

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

Datový list výrobku

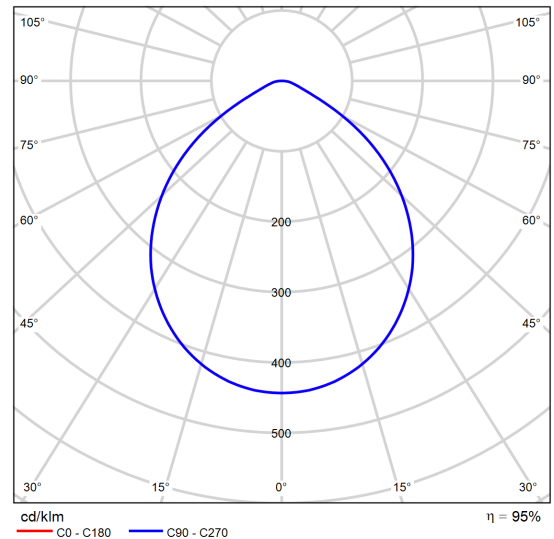
R200L 19W 830 LDO WH WH [STD]



C. výrobku	60816061
P	19.0 W
ΦŽárovka	2700 lm
ΦSvitidlo	2552 lm
η	94.51 %
Světelný výtěžek	134.3 lm/W
CCT	3000 K
CRI	80
Index	E

LED ceiling-recessed luminaire (pre-assembled luminaire); designed for use where space is limited in ceiling: recess depth <100mm; "stableWhite" LED luminaire, with symmetric wide-beam light distribution with maximum luminaire efficiency and optimum photometric properties; lamp(s): 19 W LED830; Colour rendering Ra > 80, colour temperature 3000 K (warm white); Chromaticity tolerance (initial MacAdam): 3; Luminaire luminous flux: 2552 lm, Luminaire efficacy: 134 lm/W; service life: 50000h for luminous flux at 85%; includes separate control unit Slave luminaire for DALI control (DALI only); high-quality reflector unit fixed to modular LED lighting chamber by twist-and-lock mechanism; high-efficiency LED lighting chamber is integrated in optimised, passive thermal management system made of diecast aluminium; housing colour: white; reflector: smooth, white painted finish; reflector/trim made of high-quality, UV-resistant polycarbonate; cover ring white; mounting surround made of Glass fibre-reinforced polycarbonate (PC), grey; luminaire unit can be fitted quickly without tools using twist-and-lock mechanism; IP44_IP20; luminaire wired with halogen-free leads; electrical connection: 5-pole connector terminal, ; ; Through-wiring possible; mains voltage: 220-240V / 0/50/60Hz, for use with 220V DC central battery; installation: tool-free quick installation using antislip spring clips in ceilings of thickness 1-40mm; ceiling cutout: 200mm, recess depth: 89mm; weight: 1.29 kg;

Note: to achieve EN12464 compliance in office applications (UGR<19, aluminized reflector type), please order an additional antiglare ring



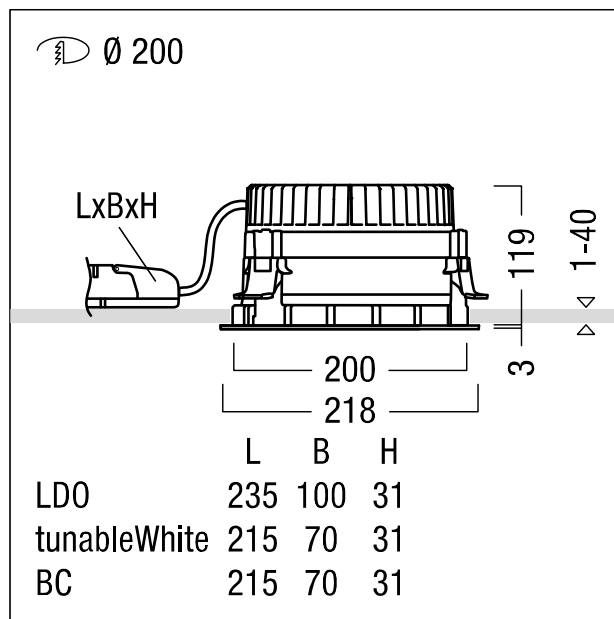
Polární LDC

Vyhodnocení oslnění dle UGR												
p	Strop	70	70	50	50	30	70	70	50	50	30	30
p	Stěny	50	30	50	30	30	50	30	50	30	30	30
p	Podlaha	20	20	20	20	20	20	20	20	20	20	20
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	23.4	24.6	23.7	24.8	25.0	23.4	24.6	23.7	24.8	25.0	
	3H	23.6	24.7	23.9	24.9	25.2	23.6	24.7	23.9	24.9	25.2	
	4H	23.7	24.7	24.0	24.9	25.2	23.7	24.7	24.0	24.9	25.2	
	6H	23.7	24.6	24.1	24.9	25.2	23.7	24.6	24.1	24.9	25.2	
	8H	23.7	24.6	24.1	24.9	25.3	23.7	24.6	24.1	24.9	25.3	
	12H	23.8	24.6	24.1	24.9	25.3	23.8	24.6	24.1	24.9	25.3	
4H	2H	23.6	24.6	23.9	24.9	25.1	23.6	24.6	23.9	24.9	25.1	
	3H	23.9	24.7	24.2	25.0	25.4	23.9	24.7	24.2	25.0	25.4	
	4H	24.0	24.7	24.4	25.1	25.4	24.0	24.7	24.4	25.1	25.4	
	6H	24.1	24.8	24.5	25.2	25.5	24.1	24.8	24.5	25.2	25.5	
	8H	24.2	24.8	24.6	25.2	25.6	24.2	24.8	24.6	25.2	25.6	
	12H	24.2	24.8	24.7	25.2	25.6	24.2	24.8	24.7	25.2	25.6	
8H	4H	24.0	24.6	24.4	25.0	25.4	24.0	24.6	24.4	25.0	25.4	
	6H	24.2	24.7	24.7	25.1	25.5	24.2	24.7	24.7	25.1	25.5	
	8H	24.3	24.8	24.8	25.2	25.7	24.3	24.8	24.8	25.2	25.7	
	12H	24.4	24.8	24.9	25.3	25.8	24.4	24.8	24.9	25.3	25.8	
	4H	24.0	24.5	24.4	24.9	25.4	24.0	24.5	24.4	24.9	25.4	
	6H	24.2	24.6	24.7	25.1	25.6	24.2	24.6	24.7	25.1	25.6	
8H	24.3	24.7	24.8	25.2	25.7	24.3	24.7	24.8	25.2	25.7		
Variance polohy pozorovatele pro vzdálenosti svítidel S												
S = 1.0H		+0.3 / -0.5					+0.3 / -0.5					
S = 1.5H		+1.0 / -1.9					+1.0 / -1.9					
S = 2.0H		+2.0 / -3.4					+2.0 / -3.4					
Standardní tabulka		BK02					BK02					
Korekturní sčítanec		6.3					6.3					
Korigované oslňovací indície, vztažené na 2700lm Celkový světelný tok												

UGR diagram (SHR: 0.25)

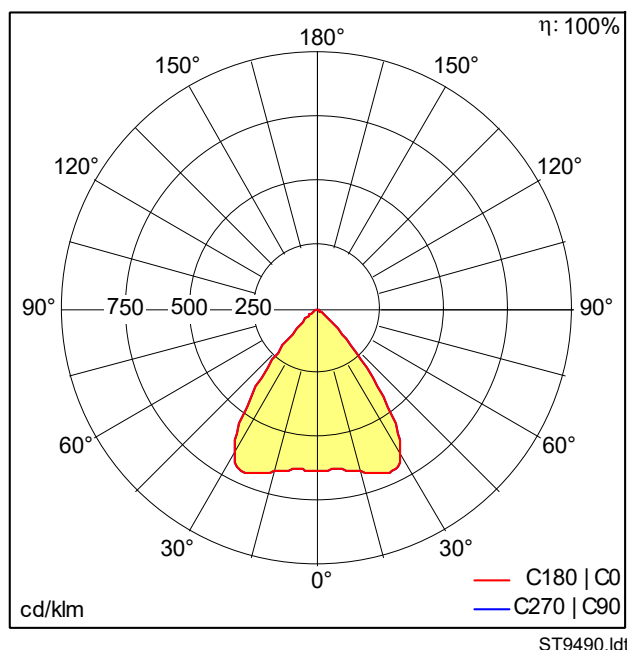
Stropní vestavné LED svítidlo

LED ceiling-recessed luminaire (pre-assembled luminaire); "tunableWhite" LED luminaire, dynamic variation of colour temperature with constant luminaire luminous flux can be controlled via DALI signal (DT8 Standard); symmetric wide-beam light distribution with maximum luminaire efficiency and optimum photometric properties; lamp(s): LED2500-927-65; Colour rendering Ra > 90, colour temperature (tunable) 2700-6500 K (warm white-neutral white-daylight white); Chromaticity tolerance (initial MacAdam): 3; Luminaire input power: 29 W; Luminaire luminous flux: 2400 lm, Luminaire efficacy: 83 lm/W; service life: 50000 h for luminous flux at 80% of initial value; with separate ballast unit Slave luminaire for DALI control (DALI only); dimming range: 1-100%, includes "Fade-to Zero"; high-quality reflector unit fixed to modular LED lighting chamber by twist-and-lock mechanism; high-efficiency LED lighting chamber is integrated in optimised, passive thermal management system of die-cast aluminium; reflector: smooth, highly reflective aluminized finish, iridescence-free; reflector/trim made of high-quality, UV-resistant polycarbonate; cover ring white; mounting ring of Glass fibre-reinforced polycarbonate (PC), grey; luminaire unit can be fitted quickly without tools using twist-and-lock mechanism; IP20; luminaire wired with halogen-free leads; power connection: 5-pole connector terminal, Through-wiring possible; mains voltage: 220-240 V / 0/50/60 Hz, for use with 220V DC central battery ; installation: tool-free quick installation using antislip spring clips in ceilings of thickness 1-40mm; ceiling cutout: 200mm, recess depth: 129mm; weight: 1.29 kg
Note: UGR<19 (aluminized reflector type) for office applications in compliance with EN12464



Křivka svítivosti

STD – standard



- Světelný zdroj: LED
- Světelný tok*: 2400 lm
- Světelný výkon svítidel*: 83 lm/W
- Index podání barev - CRI min.: 90
- Předřadník: 1 x 89603256 TWK TR 1 R 927-965 3000 29.2W
- Teplota chromatičnosti*: 2700 Kelvin
- Barevná tolerance v místě (MacAdam): 3
- Střední dimenzovaná životnost*: L80 50000 h při/u 25 °C
- Příkon svítidla*: 29 W Výkonový faktor = 0,96
- Příkon v pohotovostním režimu*: 0,25 W
- Řízení: LDO stmívatelné do 1% přes DALI
- Kategorie údržby CIE 97: C - Reflektor nahoře uzavřený

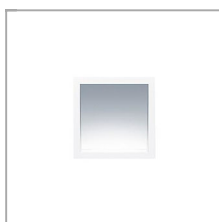
Tento výrobek obsahuje světelný zdroj s třídou energetické účinnosti F.

Viz také doplňkové informace na následující straně

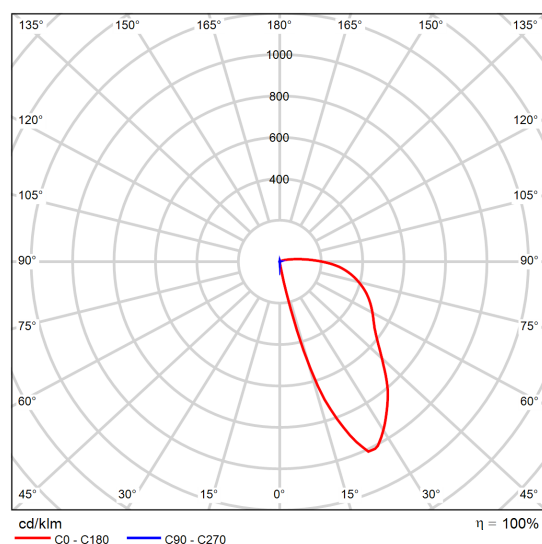
F

Datový list výrobku

Q110 LED70-830 24V SRE WH [STD]



C. výrobku	60817059
P	1.0 W
Φ _{žárovka}	70 lm
Φ _{svítidlo}	70 lm
η	99.93 %
Světelný výtěžek	70.0 lm/W
CCT	3000 K
CRI	80



Polární LDC

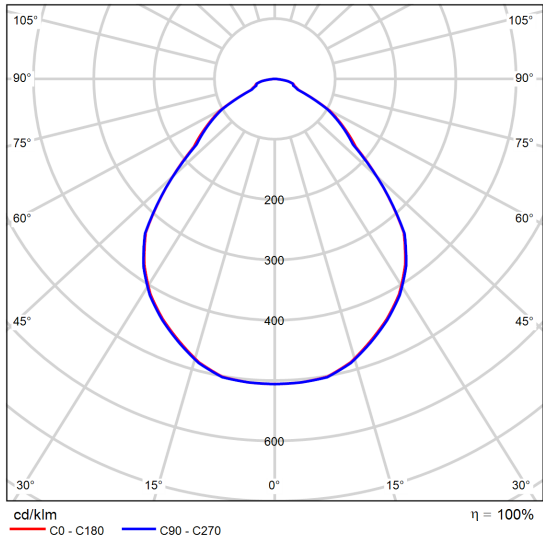
LED recessed wall luminaire stableWhite; lamp(s): 1/1W LED70-830, asymmetric light distribution; Colour rendering Ra > 80, colour temperature 3000 K (warm white); Chromaticity tolerance (initial MacAdam): 3; Luminaire luminous flux: 70 lm, Luminaire efficacy: 70 lm/W; service life: 50000 h for luminous flux at 90%; LED board-unit voltage: 24 V DC; long service life and zero maintenance; Luminaire input power: 1 W; housing and reflector of aluminium, anodised, frame colour white powder coated; tool-free rapid mounting in cavity walls and concrete casting surrounds with snap-on clips on luminaire housing; luminaire with connection cable and rapid connector, self-cutting connector included; luminaire wired with halogen-free leads; class of protection III; dimensions: 122x127x49 mm; wall cutout: 110x110mm; weight: 0.08 kg

Note: Please order power supply unit (switchable) separately; IP20 degree of protection (dust protection) with glass cover only achieved using concrete casting surround (please order separately); Only install in normal indoor rooms.

G



C. výrobku	42936949 (STD - Standard)
P	65.9 W
ΦŽárovka	6690 lm
ΦSvítidlo	6690 lm
η	100.01 %
Světelný výtěžek	101.5 lm/W
CCT	4000 K
CRI	90
Index	G



Polární LDC

Vyhodnocení oslnění dle UGR												
		70	70	50	50	30	70	70	50	50	30	30
p Strop		70	70	50	50	30	70	70	50	50	30	30
p Stěny		50	30	50	30	30	50	30	50	30	30	30
p Podlaha		20	20	20	20	20	20	20	20	20	20	20
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	17.9	19.0	18.2	19.2	19.5	17.8	18.9	18.1	19.1	19.4	
	3H	18.3	19.4	18.6	19.6	19.9	18.2	19.2	18.5	19.5	19.8	
	4H	18.6	19.6	18.9	19.8	20.1	18.5	19.4	18.8	19.7	20.0	
	6H	18.9	19.8	19.2	20.1	20.4	18.8	19.6	19.1	19.9	20.2	
	8H	18.9	19.8	19.3	20.1	20.4	18.8	19.7	19.2	20.0	20.3	
	12H	19.0	19.8	19.3	20.1	20.4	18.8	19.7	19.2	20.0	20.3	
4H	2H	17.9	18.9	18.2	19.1	19.4	17.8	18.8	18.2	19.1	19.3	
	3H	18.5	19.3	18.9	19.6	20.0	18.4	19.2	18.8	19.5	19.8	
	4H	18.9	19.6	19.3	19.9	20.3	18.8	19.5	19.2	19.8	20.2	
	6H	19.2	19.9	19.7	20.3	20.6	19.2	19.8	19.6	20.2	20.5	
	8H	19.4	20.0	19.8	20.3	20.6	19.3	19.9	19.7	20.3	20.7	
	12H	19.4	19.9	19.8	20.3	20.8	19.3	19.8	19.7	20.2	20.7	
8H	4H	18.9	19.5	19.3	19.8	20.3	18.8	19.4	19.2	19.7	20.2	
	6H	19.3	19.8	19.8	20.2	20.7	19.2	19.7	19.7	20.1	20.6	
	8H	19.5	19.9	19.9	20.3	20.8	19.4	19.8	19.9	20.2	20.7	
	12H	19.5	19.9	20.0	20.3	20.8	19.4	19.8	19.9	20.3	20.8	
12H	4H	18.9	19.4	19.3	19.8	20.2	18.7	19.3	19.2	19.7	20.1	
	6H	19.3	19.7	19.8	20.2	20.6	19.2	19.6	19.7	20.1	20.5	
	8H	19.5	19.8	20.0	20.3	20.8	19.4	19.7	19.9	20.2	20.7	
Variace polohy pozorovatele pro vzdálenosti svítidel S												
S = 1.0H		+0.7 / -0.7					+0.7 / -0.8					
S = 1.5H		+1.2 / -1.4					+1.3 / -1.4					
S = 2.0H		+2.5 / -2.5					+2.6 / -2.6					
Standardní tabulka		BK02					BK02					
Korekturní sčítanec		1.3					1.2					
Korigované osňovací indicie, vztaženy na 6690lm Celkový světelný tok												

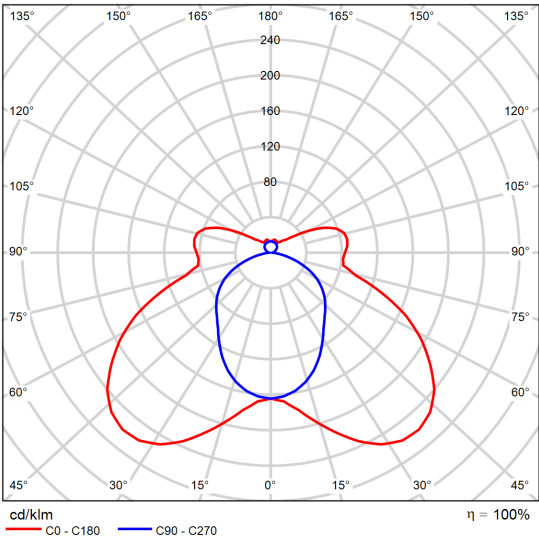
UGR diagram (SHR: 0.25)

H



C. výrobku	42186394
P	40.0 W
ΦŽárovka	6260 lm
ΦSvitidlo	6260 lm
η	100.00 %
Světelný výtěžek	156.5 lm/W
CCT	4000 K
CRI	80
Index	H

LED Moisture-proof diffuser luminaire with IP66 protection rating and drip-edge effect for minimizing dirt and collection of dust for maximum hygienic requirements. Luminaire input power: 39.9 W, electronic ballast with LED converter; patented InvisiClick for clipless mounting and opening of the cover. Cover and basic diffuser made of impact-resistant polycarbonate, temperature- and UV-resistant, made as a single injection-molded piece. LED service life lasts 100000 h before luminous flux is reduced to 95% of the initial value. Chromaticity tolerance (initial MacAdam): 3. Luminaire luminous flux: 6260 lm, Luminaire efficacy: 157 lm/W. Colour rendering Ra > 80, colour temperature 4000 K. Luminaire with symmetric wide light distribution (wide beam). High quality direct/indirect lighting concept for optimum lighting solutions in parking garages and industrial applications. Mounting via V2A standard spring clips to ceilings, walls or trunking. 5-pole connector terminal. Suitable for through-wiring with H05VV or NYM cable (10A). ambient temperature: -25°C to +34° C. Approved for indoor use with vertical or horizontal wall mounting (see installation instructions). 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. Complies with International Food Standard specifications. Designed for BESA box. Permissible for use in environments where the deposition of conductive dust on the luminaire can be expected (EN 60598-2-24). Protection class: SC1, 850 °C glow-wire tested. Luminaire wired with halogen-free leads, silicone-free, Impact strength: IK08, Dimensions: 1600 x 92 x 90 mm; weight: 2.37 kg.



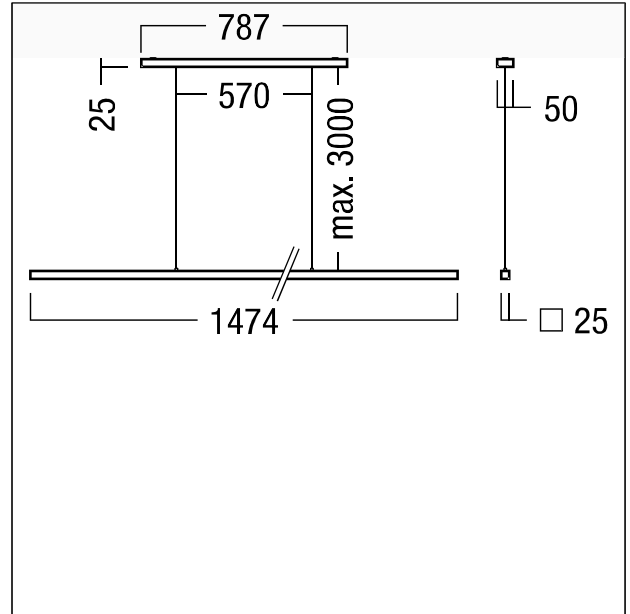
Polární LDC

Vyhodnocení osvětlení dle UGR												
ρ Strop	70	70	50	50	30	70	70	50	50	30	30	
ρ Stěny	50	30	50	30	30	50	30	50	30	30	30	
ρ Podlaha	20	20	20	20	20	20	20	20	20	20	20	
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	19.3	20.6	19.9	21.1	21.7	16.5	17.7	17.0	18.3	18.9	
	3H	20.7	21.9	21.3	22.4	23.1	17.6	18.7	18.1	19.3	19.9	
	4H	21.2	22.3	21.8	22.9	23.5	17.9	18.9	18.5	19.5	20.2	
	6H	21.7	22.6	22.3	23.2	23.9	18.0	19.0	18.6	19.6	20.3	
	8H	21.9	22.8	22.5	23.5	24.1	18.0	19.0	18.6	19.6	20.3	
	12H	22.2	23.1	22.8	23.7	24.4	18.0	18.9	18.6	19.5	20.3	
4H	2H	19.8	20.9	20.4	21.5	22.1	17.8	18.9	18.4	19.5	20.1	
	3H	21.4	22.3	22.0	22.9	23.6	19.1	20.0	19.8	20.7	21.4	
	4H	22.0	22.8	22.6	23.4	24.2	19.5	20.4	20.2	21.0	21.7	
	6H	22.6	23.3	23.2	23.9	24.7	19.7	20.5	20.4	21.1	21.9	
	8H	22.9	23.5	23.6	24.2	25.0	19.8	20.4	20.4	21.1	21.9	
	12H	23.2	23.8	23.9	24.5	25.3	19.8	20.4	20.5	21.1	21.9	
8H	4H	22.1	22.8	22.8	23.5	24.2	20.0	20.6	20.6	21.3	22.1	
	6H	22.8	23.4	23.5	24.1	24.9	20.3	20.9	21.0	21.6	22.4	
	8H	23.3	23.8	24.0	24.5	25.3	20.4	20.9	21.1	21.6	22.5	
	12H	23.8	24.2	24.5	25.0	25.8	20.5	20.9	21.2	21.6	22.5	
	4H	22.1	22.7	22.8	23.4	24.2	20.0	20.6	20.7	21.3	22.1	
	6H	22.9	23.3	23.6	24.1	24.9	20.4	20.9	21.1	21.6	22.5	
8H	23.3	23.8	24.1	24.5	25.4	20.6	21.0	21.3	21.7	22.6		
Variace polohy pozorovatele pro vzdálenosti svítidel S												
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1					
S = 1.5H		+0.3 / -0.3					+0.5 / -0.5					
S = 2.0H		+0.5 / -0.7					+1.1 / -1.2					
Standardní tabulka		BK06					BK05					
Korekturní sčítanec		6.9					3.5					
Korigované osňovací indície, vztažené na 6260lm Celkový světelný tok												

UGR diagram (SHR: 0.25)

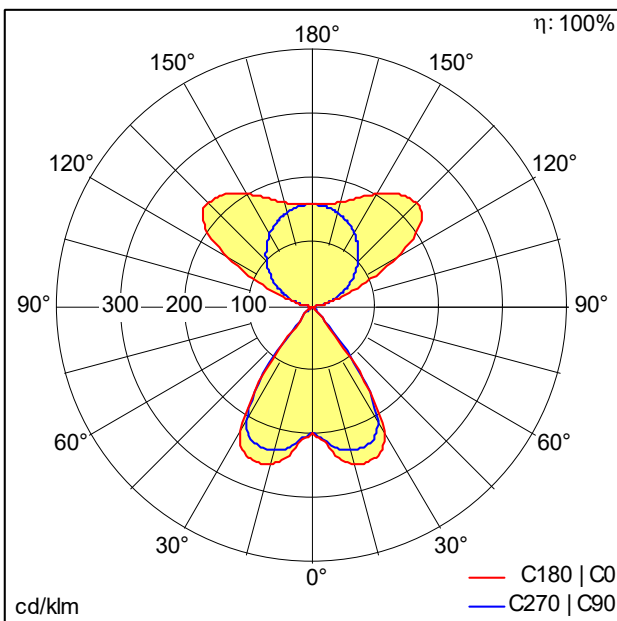
I

Minimalist direct / indirect LED pendant luminaire with ultra-slim design and micro-reflector optic. Separate control of direct/indirect light. Innovative electrical solution for feed-in and light control via suspension cords. Luminaire input power: 57.5 W LED, Slave luminaire for DALI control (DALI only) with LED converter. LED service life lasts 50000 h before luminous flux is reduced to 95% of the initial value. Chromaticity tolerance (initial MacAdam): 3. Luminaire luminous flux: 5910 lm, Luminaire efficacy: 103 lm/W. Colour rendering $R_a > 80$, colour temperature 4000 K. Indirect/direct beam pattern in 65:35 ratio. Glare control to EN 12464-2011 with $L_{65} < 2000 \text{ cd/m}^2$ and $UGR < 16$ for DSE workstations. Control of light via micro-reflector optic made of high-quality composite material. Indirect light control via special optic with wide, uniform light distribution. Reflector with faceted surface evenly vacuum-coated with highly reflective ultra-pure aluminium. Reflector frame in silver, glossy. Luminaire housing made of square-edge extruded aluminium section powder-coated in white with a cross-section of 25 x 25 mm, invisibly screw-fitted die-cast aluminium end pieces painted in luminaire colour in white. Luminaire dimensions: 1474 x 25 x 25 mm. Cord suspension pre-assembled with length 3000 mm, can be cut to length. Gearbox ceiling surface-mounted, white. External converter box for ceiling recessed mounting (modul ceiling) in Dimension 235 x 100 x 31 mm. Luminaire wired with halogen-free leads. Weight: 5 kg.



Light Distribution

IND/DIR - indirect/direct



- Light Source: LED
- Luminaire luminous flux*: 5910 lm
- Luminaire efficacy*: 103 lm/W
- Colour Rendering Index min.: 80
- Ballast 1: 1 x 28000815 LCU 48V 75W DC-STR DIM Ip
- Ballast 2: 2 x 28001585 LMI G2 48V 350-700mA 20-42V DIM Slim
- Correlated colour temperature*: 4000 Kelvin
- Chromaticity tolerance (initial MacAdam): 3
- Rated median useful life*: L95 50000 h at 25 °C
- Luminaire input power*: 57.5 W Power factor = 0.97
- Dimming: LDO dimmable to 1% over DALI
- Maintenance category CIE 97: F - Indirect Uplight

This product contains light sources of energy efficiency class D.

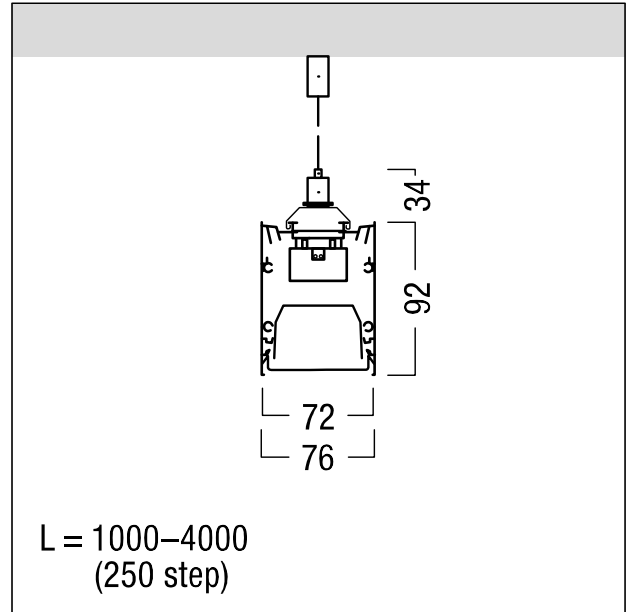
All values marked with an * are rated values. Connected electrical load and luminous flux are subject to an initial tolerance of +/- 10%, the most similar colour temperature is subject to an initial tolerance of +/- 150K. Unless stated otherwise, the values apply to an ambient temperature of 25°C.

I2

Light line pendant (indirect/Direct)

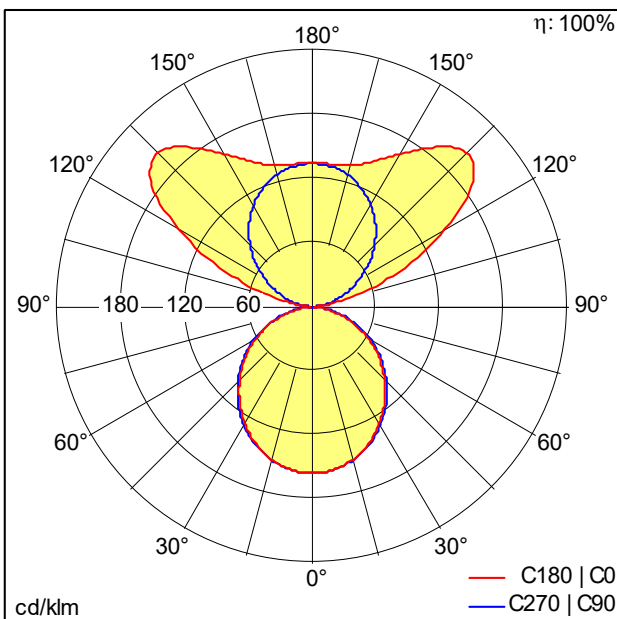
Light line pendant (indirect/Direct) in I shape, length A 1524 mm, with light colour direct 2700-6500 Kelvin and colour rendering $Ra > 90$, with DALI controllable LED converter. Office (PCO) optic up to 20 m from one piece with glare control foil for $UGR < 16$ (HE, 1600lm) and for $UGR < 19$ (HO, 2500lm; VHO, 3500lm). Total luminous flux of the configuration 0 lm conforms 0 lm/m *. LED service life lasts 100.000h before luminous flux is reduced to 90% of the initial value. Chromaticity tolerance (initial MacAdam): 3, Luminaire Efficiency: 0 lm/W *. Dimming level for DC mode preset to 15%. Luminaire made of , in white (RAL9016) Luminaire with 100% uniform appearance due to polycarbonate (PC) cover with impact resistance IK07. Luminaire consisting of housing, LED batten with internal wiring and optic made of polycarbonate (PC) Incl. cord suspension 2000 mm in white with canopy. No ultraviolet or infrared radiation. Luminaire wired with halogen-free leads, with cover TP(a)-classified compliant to the norm. Degree of protection: IP20. Total weight of the configuration: 8.1 kg. Total installed load for the configuration: 0.0 W *.

* specifications and values refer to the entire configuration.



Light Distribution

940 PC - 4000 K - diffuse



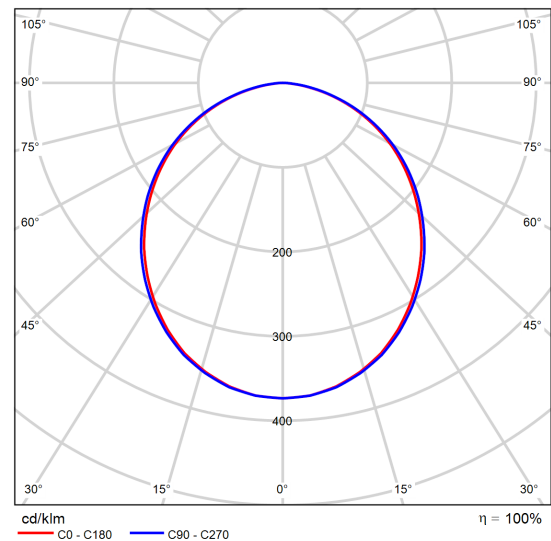
- Light Source: LED
- Total luminous flux of the config.*: 5865 lm
- Luminous efficacy of the config.*: 95 lm/W
- Colour Rendering Index min.: 90
- Correlated colour temperature*: 2700-6500 Kelvin
- Chromaticity tolerance (initial MacAdam): 3
- Rated median useful life*: L95 100000 h at 25 °C
- Ballast: LDE dimmable LED Ballast
- Total wattage of the config.*: 61.5 W
- Dimming: LDE dimmable to 1%
over DALI, DSI and switchDIM
DC level is adjustable

J



C. výrobku	42945892
P	17.0 W
ΦŽárovka	2060 lm
ΦSvitidlo	2060 lm
η	100.01 %
Světelný výtěžek	121.2 lm/W
CCT	4000 K
CRI	80

Batten for LED light line for Opal (PC), Office (PCO) or DropDiffuser (DD) cover. with LED converter, electronic ballast, LED service life lasts 100000 h before luminous flux is reduced to 95% of the initial value. Chromaticity tolerance (initial MacAdam): 3. Luminaire luminous flux: 2060 lm, Luminaire efficacy: 123 lm/W. Colour rendering Ra > 80, colour temperature 4000 K. Batten of aluminium, white, powder coated. Luminaire wired with halogen-free and silicone-free leads. Dimensions: 1250 x 76 x 92 mm weight: 1.87 kg. Degree of protection: IP20. SlotlightInfinity II consists of a channel and LED batten, optic and accessories, which must be configured and ordered separately. This product is one part of the complete configuration.



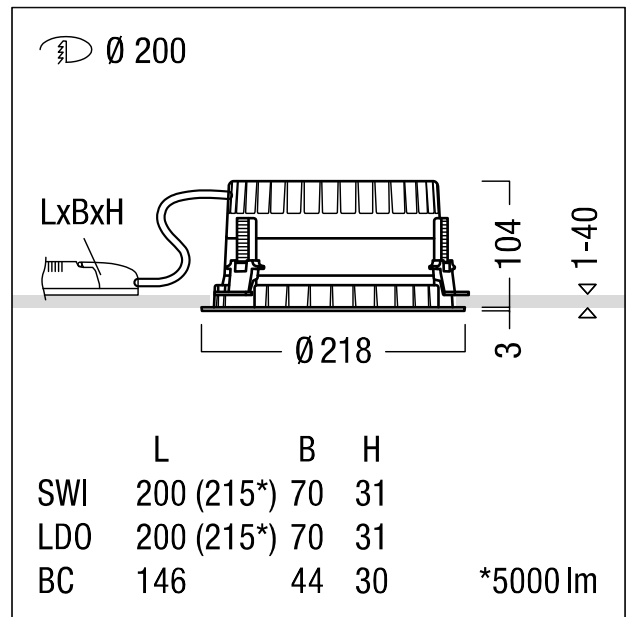
Polární LDC

Vyhodnocení oslnění dle UGR												
ρ Strop	70	70	50	50	30	70	70	50	50	30	30	
ρ Stěny	50	30	50	30	30	50	30	50	30	30	30	
ρ Podlaha	20	20	20	20	20	20	20	20	20	20	20	
Velikost místnosti X Y	Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy						
2H	2H	19.3	20.7	19.6	20.9	21.2	19.5	20.8	19.8	21.1	21.3	
	3H	20.8	22.0	21.2	22.3	22.6	21.0	22.2	21.3	22.5	22.8	
	4H	21.4	22.5	21.7	22.8	23.1	21.6	22.7	21.9	23.0	23.3	
	6H	21.8	22.8	22.1	23.1	23.4	22.0	23.1	22.3	23.4	23.7	
	8H	21.8	22.9	22.2	23.2	23.5	22.1	23.1	22.5	23.4	23.8	
	12H	21.9	22.9	22.2	23.2	23.5	22.1	23.1	22.5	23.5	23.8	
4H	2H	20.0	21.2	20.4	21.4	21.7	20.1	21.3	20.5	21.6	21.9	
	3H	21.7	22.7	22.1	23.0	23.3	21.9	22.8	22.2	23.2	23.5	
	4H	22.4	23.3	22.8	23.6	24.0	22.6	23.4	23.0	23.8	24.2	
	6H	22.8	23.6	23.3	24.0	24.4	23.1	23.8	23.5	24.2	24.6	
	8H	23.0	23.7	23.4	24.1	24.5	23.2	23.9	23.7	24.3	24.7	
	12H	23.0	23.7	23.5	24.1	24.5	23.3	24.0	23.7	24.4	24.8	
8H	4H	22.7	23.4	23.1	23.8	24.2	22.8	23.5	23.3	23.9	24.4	
	6H	23.3	23.8	23.7	24.3	24.7	23.5	24.0	23.9	24.5	24.9	
	8H	23.4	23.9	23.9	24.4	24.9	23.7	24.2	24.2	24.6	25.1	
	12H	23.5	24.0	24.0	24.4	24.9	23.8	24.2	24.3	24.7	25.2	
12H	4H	22.7	23.3	23.1	23.8	24.2	22.8	23.5	23.3	23.9	24.3	
	6H	23.3	23.8	23.8	24.3	24.7	23.5	24.0	24.0	24.5	24.9	
	8H	23.5	24.0	24.0	24.4	24.9	23.7	24.2	24.2	24.7	25.2	
Variace polohy pozorovatele pro vzdálenosti svítidel S												
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1					
S = 1.5H		+0.2 / -0.4					+0.2 / -0.4					
S = 2.0H		+0.4 / -0.7					+0.4 / -0.7					
Standardní tabulka		BK05					BK05					
Korekturní sčítanec		5.9					6.1					
Korigované osňovací indicie, vztaženy na 2060lm Celkový světelný tok												

UGR diagram (SHR: 0.25)

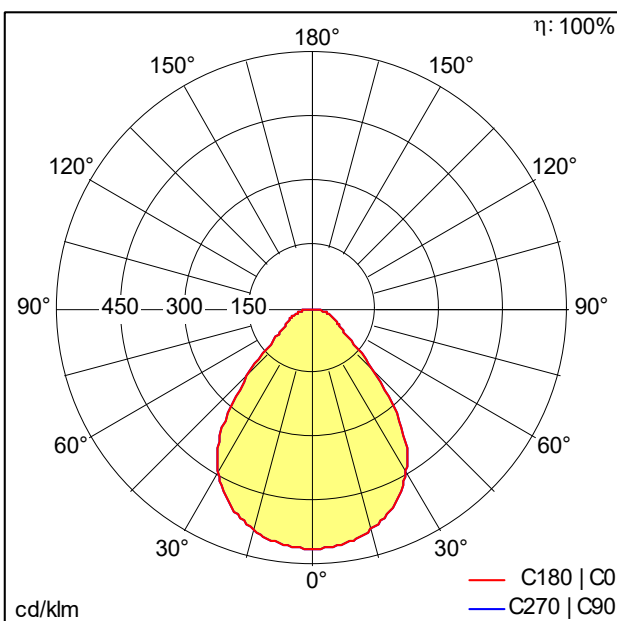
K

LED ceiling-recessed luminaire (pre-assembled luminaire) R200, with symmetric wide beam light distribution (81 °), maximum luminaire efficiency and optimum downlight technology; high sustainability due to consistent, maximum modular design and interchangeable components. Replaceable LED module, symmetric wide beam light distribution, Colour rendering Ra > 80, colour temperature 4000 K; Chromaticity tolerance (initial MacAdam): 2; Luminaire input power: 14.1 W; Luminaire luminous flux: 1990 lm; Luminaire efficacy: 141 lm/W; Rated median useful life: L80 100000 h at 25 °C + L90 50000 h at 25 °C, with separate plug-in LED converter, Slave luminaire for DALI control (DALI only) with DC functionality, emergency power level preset to 15%, adjustable 1-100 %, NFC configurable, SwitchDIM compatible; high-quality reflector unit fixed to modular LED lighting chamber by twist-and-lock mechanism; high-efficiency LED lighting chamber integrated in optimised, passive thermal management made of high-quality heat-dissipating polycarbonate reflector/trim made of high-quality, UV-resistant polycarbonate; reflector: white painted finish; trim: white; mounting surround made of polycarbonate; white; protection rating: IP54_IP20; luminaire wired with halogen-free leads; electrical connection: 5-pole connector terminal; Through-wiring possible; mains voltage: 220-240 V / 0/50/60 Hz, for use with central battery 220-240V DC; ; Installation: tool-free quick installation using antislip spring clips in ceilings of thickness 1-40 mm (depending on the luminaire variant) due to interchangeable retaining bars; luminaire unit can be fitted quickly without tools using twist-and-lock mechanism; ceiling cut-out: 200 mm, recess depth: 120 mm; weight: 0.77 kg;
For office applications in accordance with EN12464 (UGR<19 reflector type sputtered aluminium)



Light Distribution

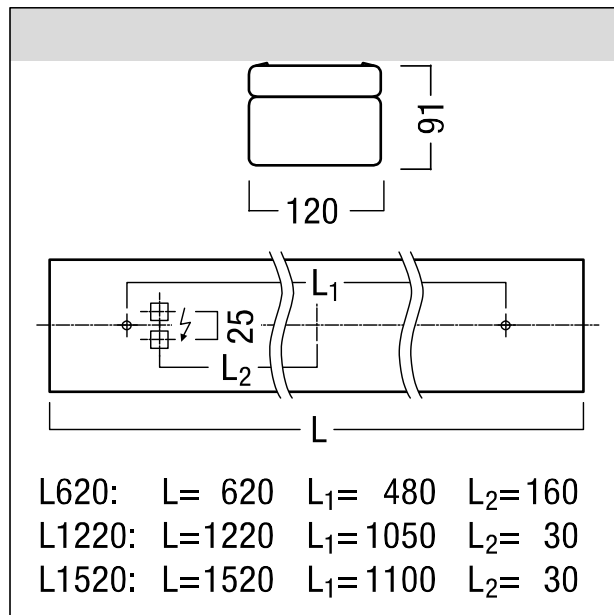
STD - standard



- Light Source: LED
- Luminaire luminous flux*: 1990 lm
- Luminaire efficacy*: 141 lm/W
- Colour Rendering Index min.: 80
- Ballast: 1 x 28005382 LC 17/100-350/50 o4a NF SR EXC3 Z
- Correlated colour temperature*: 4000 Kelvin
- Chromaticity tolerance (initial MacAdam): 2
- Rated median useful life*:
L80 100000 h at 25 °C
L90 50000 h at 25 °C
- Luminaire input power*: 14.1 W Power factor = 0.91
- Standby Power*: 0.4 W
- Dimming: LDO dimmable to 1% over DALI
- Total harmonic distortion (THD): 13.80 %

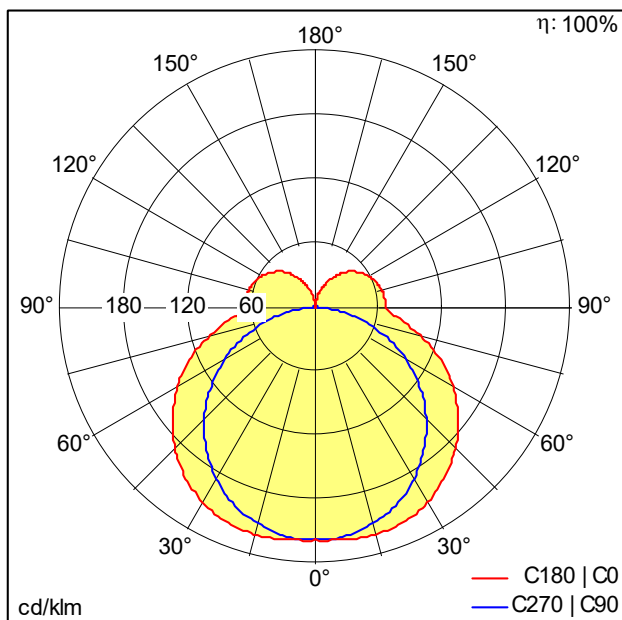
L

LED surface-mount luminaire with IP50 with opal diffuser. Luminaire input power: 35.7 W, DALI controllable luminaire with LED converter. LED service life lasts 100000 h before luminous flux is reduced to 90% of the initial value. Chromaticity tolerance (initial MacAdam): 3. Luminaire luminous flux: 4590 lm, Luminaire efficacy: 129 lm/W. Colour rendering Ra > 80, colour temperature 4000 K. Integrated ESD protection of the LED module. Housing made of pre-painted, roll-formed sheet steel, white, with injection-moulded diffuser made of opal polymethylmethacrylate. Edges sealed by high-quality foamed, water-repellent polyurethane seal; installed using slotted washers and spacer supplied with product. Approved ambient temperature: -20°C to +25°C. Luminaire wired with halogen-free leads. Please note: please talk to your adviser if you are planning to use the luminaire in environments containing chemical pollutants or with outdoor use. Dimensions: 1520 x 120 x 91 mm; weight: 4.1 kg.



Light Distribution

STD - standard



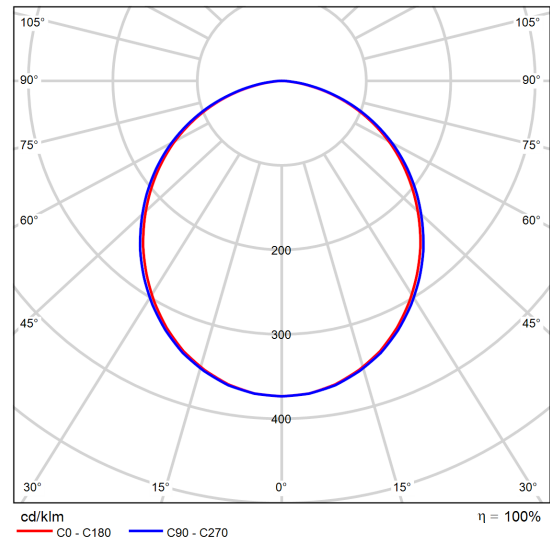
- Light Source: LED
- Luminaire luminous flux*: 4590 lm
- Luminaire efficacy*: 129 lm/W
- Colour Rendering Index min.: 80
- Ballast: 1 x 28000655 LCA 50W 100-400mA one4all Ip PRE
- Correlated colour temperature*: 4000 Kelvin
- Chromaticity tolerance (initial MacAdam): 3
- Rated median useful life*:
 - L90 100000 h at 25 °C
 - L95 75000 h at 25 °C
 - L95 50000 h at 25 °C
- Luminaire input power*: 35.7 W Power factor = 0.98
- Standby Power*: 0.2 W
- Dimming: LDE dimmable to 1%
 - over DALI, DSI and switchDIM
 - DC level is adjustable
- Maintenance category CIE 97: E - Dust-proof IP5X
- Total harmonic distortion (THD): 10.00 %

This product contains a light source of energy efficiency class C.

All values marked with an * are rated values. Connected electrical load and luminous flux are subject to an initial tolerance of +/- 10%, the most similar colour temperature is subject to an initial tolerance of +/- 150K. Unless stated otherwise, the values apply to an ambient temperature of 25°C. The level of luminous flux reduces over the life cycle due to technological reasons. The failure of up to 1 LED points causes no functional impairment and is therefore no reason for complaint.



C. výrobku	S3010561 (840 PC - 4000 K - diffuse)
P	13.5 W
ΦŽárovka	1650 lm
Φsvítidlo	1650 lm
η	100.01 %
Světelný výtěžek	122.2 lm/W
CCT	3000 K
CRI	80



Polární LDC

Hodnocení oslnění podle RUG												
p Strop	70	70	50	50	30	70	70	50	50	30	30	
p Stěny	50	30	50	30	30	50	30	50	30	30	30	
p Podlaha	20	20	20	20	20	20	20	20	20	20	20	
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	19.3	20.7	19.6	20.9	21.2	19.5	20.8	19.8	21.1	21.3	
	3H	20.8	22.1	21.2	22.3	22.6	21.0	22.2	21.3	22.5	22.8	
	4H	21.4	22.6	21.7	22.8	23.1	21.6	22.8	21.9	23.0	23.3	
	6H	21.8	22.8	22.1	23.1	23.4	22.0	23.1	22.3	23.4	23.7	
	8H	21.8	22.9	22.2	23.2	23.5	22.1	23.1	22.5	23.4	23.8	
	12H	21.9	22.9	22.2	23.2	23.5	22.1	23.1	22.5	23.5	23.8	
4H	2H	20.0	21.2	20.4	21.5	21.7	20.1	21.3	20.5	21.6	21.9	
	3H	21.7	22.7	22.1	23.0	23.4	21.9	22.8	22.2	23.2	23.5	
	4H	22.4	23.3	22.8	23.6	24.0	22.6	23.5	23.0	23.8	24.2	
	6H	22.9	23.6	23.3	24.0	24.4	23.1	23.8	23.5	24.2	24.6	
	8H	23.0	23.7	23.4	24.1	24.5	23.2	23.9	23.7	24.3	24.8	
	12H	23.0	23.7	23.5	24.1	24.5	23.3	24.0	23.7	24.4	24.8	
8H	4H	22.7	23.4	23.1	23.8	24.2	22.8	23.6	23.3	23.9	24.4	
	6H	23.3	23.8	23.7	24.3	24.7	23.5	24.1	23.9	24.5	24.9	
	8H	23.4	24.0	23.9	24.4	24.9	23.7	24.2	24.2	24.6	25.1	
	12H	23.5	24.0	24.0	24.4	24.9	23.8	24.2	24.3	24.7	25.2	
12H	4H	22.7	23.3	23.1	23.8	24.2	22.8	23.5	23.3	23.9	24.3	
	6H	23.3	23.8	23.8	24.3	24.7	23.5	24.0	24.0	24.5	24.9	
	8H	23.5	24.0	24.0	24.4	24.9	23.7	24.2	24.2	24.7	25.2	
Variace polohy pozorovatele pro vzdálenosti svítidel S												
S = 1.0H		+0.1 / -0.1					+0.1 / -0.1					
S = 1.5H		+0.2 / -0.4					+0.2 / -0.4					
S = 2.0H		+0.4 / -0.7					+0.4 / -0.7					
Standardní tabulka		BK05					BK05					
Korekturní sčítanec		5.9					6.1					
Korigované osňovací indicie, vztaženy na 1650lm Celkový světelný tok												

Schéma RUG (SHR: 0.25)

V2

TECHNICKÁ SPECIFIKACE:

Výška: 170 mm

Šířka: 120 mm

Délka: 320mm

Stupeň krytí (IP): IP65

Vstupní napětí: 220-240V, 50Hz

Teplota chromatičnosti (CCT): 4000K

Příkon: 20W

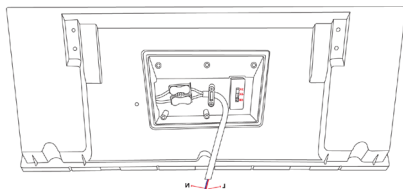
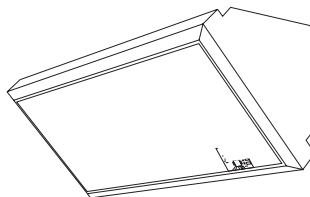
Světelný tok: 1800lm



MONTÁŽNÍ MANUÁL

Elektroinstalační práce smí provádět jen kvalifikovaný pracovník dle ČSN. Pokud jste se ujistili, že je elektřina bezpečně vypnuta, můžete se pustit do samotné instalace svítidla.

Při montáži postupujte dle přiloženého originálního návodu od výrobce.

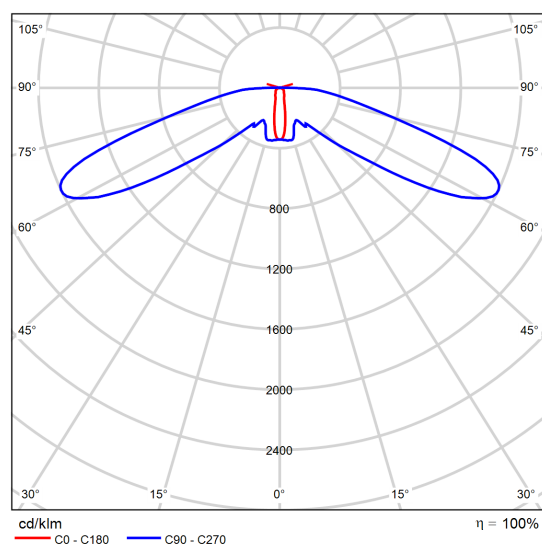


ECO
friendly

N01



C. výrobku	42185649
P	0.0 W
P _{Nouzové osvětlení}	4.0 W
Φ _{Žárovka}	0 lm
Φ _{Svítidlo}	0 lm
Φ _{Nouzové osvětlení}	332 lm
η	–
Světelný výtěžek	–
CCT	3000 K
CRI	70
ELF	100 %
Index	NO1



Polární LDC

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 recessed luminaire for 68 mm ceiling cut-out and ceiling thickness from 1 - 25 mm; tool-free rapid luminaire installation through specially shaped retaining springs; tool-free replacement of control unit; Cover ring diecast aluminium, powder-coated; housing colour white (close to RAL9016); Polypropylene (PP) gearbox for installation in ceiling recess; Luminaire for central emergency light supply, for single luminaire monitoring via DALI (DALI-2 certified), 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-

N01

addressing; Maintained and non-maintained mode: -40°C to +45°C;
 power supply: 220-240 V AC (+/- 10%) 50-60 Hz; 176-280 V DC;
 Luminaire input power: 3.9 W (in maintained mode); Power in non-maintained mode: 0,3 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
 ; IP20; SC1; Luminaire wired with halogen-free and silicone-free leads. Suitable for installing in concrete casting surround (separately ordered); Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: IK04; Dimensions: Ø85 x 4 mm; weight: 0.21 kg; ;

γ	C0°	C90°	C0°- C360°
0°-180°	113.78	531.37	531.37
60°-90°	9.50	531.37	531.37

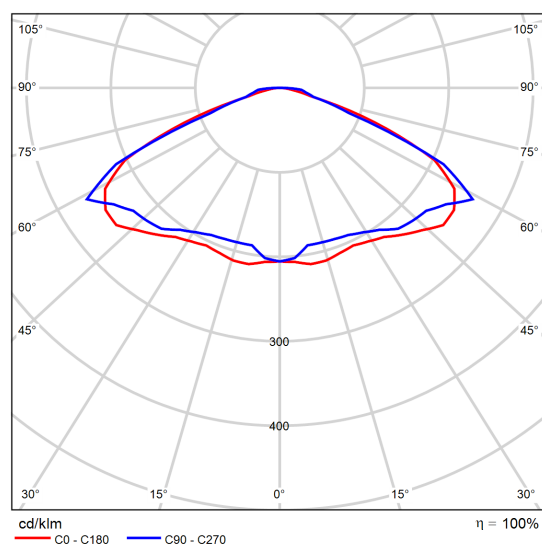
Tabulka hodnocení oslnění [cd]

N02



C. výrobku	42185648
P	0.0 W
P _{Nouzové osvětlení}	4.0 W
Φ _{Žárovka}	0 lm
Φ _{Svitidlo}	0 lm
Φ _{Nouzové osvětlení}	307 lm
η	-
Světelný výtěžek	-
CCT	3000 K
CRI	70
ELF	100 %
Index	N02

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 recessed luminaire for 68 mm ceiling cut-out and ceiling thickness from 1 - 25 mm; tool-free rapid luminaire installation through specially shaped retaining springs; tool-free replacement of control unit; Cover ring diecast aluminium, powder-coated; housing colour white (close to RAL9016); Polypropylene (PP) gearbox for installation in ceiling recess; Luminaire for central emergency light supply, for single luminaire monitoring via DALI (DALI-2 certified), 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-



Polární LDC

Vyhodnocení oslnění dle UGR												
p Strop		70	70	50	50	30	70	70	50	50	30	
p Stěny		50	30	50	30	30	50	30	50	30	30	
p Podlaha		20	20	20	20	20	20	20	20	20	20	
Velikost místnosti X Y		Směr pohledu napříč k ose lampy					Podélný směr pohledu k ose lampy					
2H	2H	32.6	34.2	33.0	34.4	34.7	31.4	33.0	31.7	33.2	33.5	
	3H	34.3	35.7	34.6	36.0	36.3	32.5	33.9	32.8	34.2	34.4	
	4H	34.5	35.8	34.8	36.1	36.4	32.6	33.9	32.9	34.2	34.5	
	6H	34.4	35.7	34.8	36.0	36.3	32.6	33.9	33.0	34.2	34.5	
	8H	34.4	35.6	34.8	35.9	36.3	32.7	33.9	33.0	34.2	34.5	
	12H	34.4	35.5	34.8	35.8	36.2	32.7	33.8	33.1	34.2	34.5	
4H	2H	33.7	35.0	34.0	35.3	35.6	32.7	34.0	33.1	34.3	34.6	
	3H	35.6	36.7	36.0	37.0	37.4	33.8	34.9	34.2	35.3	35.6	
	4H	35.9	36.9	36.3	37.2	37.6	34.0	35.0	34.4	35.4	35.7	
	6H	35.9	36.8	36.3	37.2	37.6	34.1	35.0	34.5	35.4	35.8	
	8H	35.9	36.7	36.3	37.1	37.5	34.2	35.0	34.6	35.4	35.8	
	12H	35.8	36.6	36.3	37.0	37.5	34.2	35.0	34.7	35.4	35.8	
8H	4H	36.0	36.9	36.5	37.3	37.7	34.4	35.2	34.8	35.6	36.0	
	6H	36.1	36.8	36.6	37.2	37.7	34.6	35.2	35.0	35.7	36.1	
	8H	36.1	36.7	36.6	37.2	37.6	34.7	35.2	35.1	35.7	36.2	
	12H	36.1	36.6	36.6	37.1	37.6	34.8	35.3	35.3	35.8	36.3	
	4H	36.0	36.8	36.5	37.2	37.6	34.4	35.1	34.8	35.5	36.0	
	6H	36.1	36.7	36.6	37.1	37.6	34.6	35.1	35.0	35.6	36.1	
12H	8H	36.1	36.6	36.6	37.1	37.6	34.7	35.2	35.2	35.6	36.1	
Variance polohy pozorovatele pro vzdálenosti svítidel S												
S = 1,0H		+0.1 / -0.0					+0.3 / -0.2					
S = 1,5H		+0.5 / -0.4					+0.5 / -0.6					
S = 2,0H		+1.1 / -1.6					+1.2 / -1.4					
Standardní tabulka		BK04					BK04					
Korekturní sčítanec		18.7					17.2					
Korigované oslňovací indície, vztažené na 307lm Celkový světelný tok												

UGR diagram (SHR: 0.25)

N02

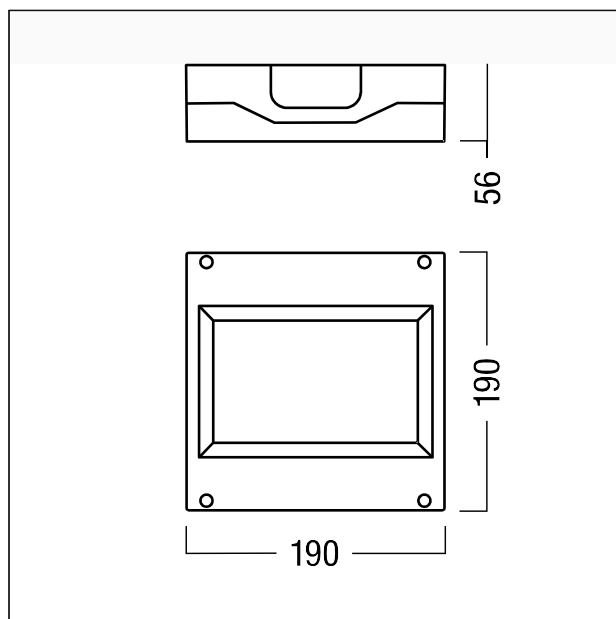
addressing; Maintained and non-maintained mode: -40°C to +45°C;
 power supply: 220-240 V AC (+/- 10%) 50-60 Hz; 176-280 V DC;
 Luminaire input power: 3.9 W (in maintained mode); Power in non-maintained mode: 0,3 W; Non-maintained and maintained mode settable via the central battery system; boost start function for faster orientation in emergencies thanks to higher illuminance levels at the start of emergency operation
 ; IP20; SC1; Luminaire wired with halogen-free and silicone-free leads. Suitable for installing in concrete casting surround (separately ordered); Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: IK04; Dimensions: Ø85 x 4 mm; weight: 0.21 kg; ;

γ	C0°	C90°	C0°- C360°
0°-180°	77.55	80.93	94.16
60°-90°	73.25	80.93	88.78

Tabulka hodnocení oslnění [cd]

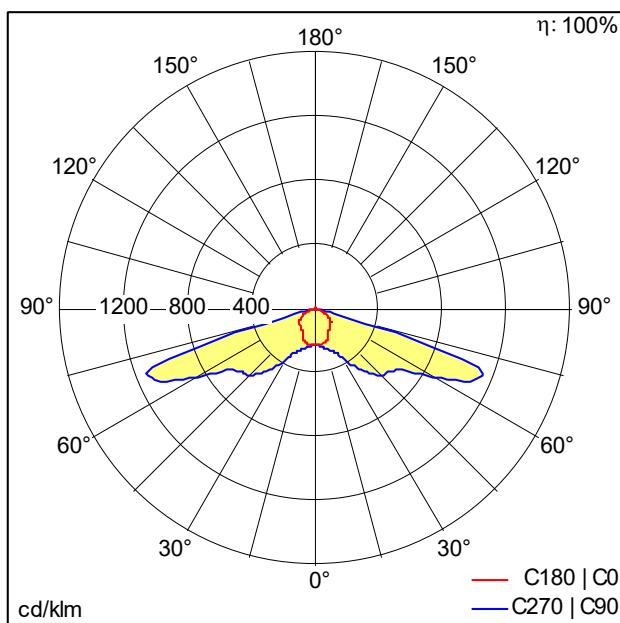
N03

LED emergency luminaire for escape route lighting with min. 1 lux compliant to EN 1838; 2 x 3 W LEDs, daylight white 6,500 K; lenses of polymethylmethacrylate; Ceiling 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; suitable for the unprotected outdoor area (no rain cover necessary); Luminaire for central emergency light supply, for single luminaire monitoring via DALI (DALI-2 certified), 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: -35 °C to +30 °C, non-maintained mode: -35 °C to +35 °C; power supply: 220-240 V AC (+/- 10 %) 50-60 Hz; 176-280 V DC; Luminaire input power: 3.4 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: IK08; Room height 2.5 to 11 m; Dimensions: 190 x 190 x 56 mm; weight: 2 kg; ball-proof; IFS (International Food Standard)-certified; holder (ordered separately) for lateral cable entry (article code: 59010606)



Křivka svítivosti

STD – standard



- Světelný zdroj: LED
- Světelný tok*: 408 lm
- Celkový nouzový světelný tok: 408 lm
- Světelný výkon svítidel*: 120 lm/W
- Index podání barev - CRI min.: 70
- Předřadník: 1 x 89800571 EM powerLED NDA DIM 5W ZUM
- Teplota chromatičnosti*: 6500 Kelvin
- Barevná tolerance v místě (MacAdam): 5
- Střední dimenzovaná životnost*: L90 50000 h při/u 25 °C
- Příkon svítidla*: 3,4 W Výkonový faktor = 0,76
- Příkon v pohotovostním režimu*: 0,5 W
- Řízení: Dali stmívatelné do 10%
- Kategorie údržby CIE 97: C - Reflektor nahoře uzavřený

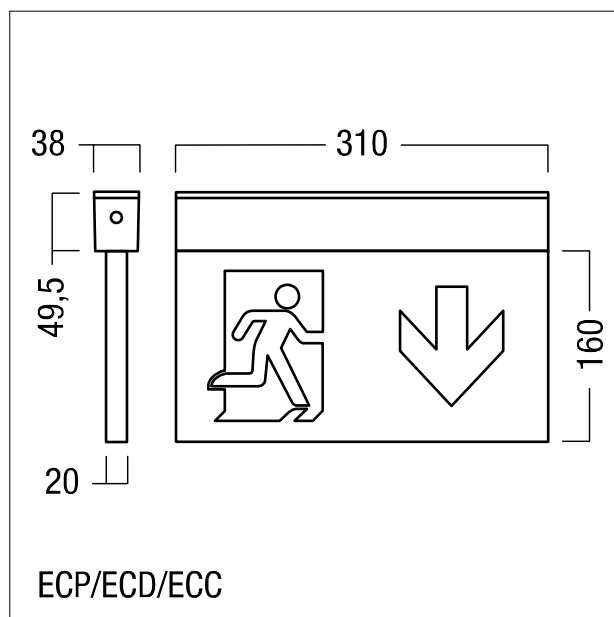
Hodnoty označené * představují stanovené rozměrové hodnoty. Výkon a světelný tok podléhají zpočátku toleranci až do +/- 10 %, nejpodobnější teplota chromatičnosti podléhá zpočátku toleranci +/- 150K. Pokud není uvedeno jinak, platí hodnoty pro okolní teplotu 25°C.

NO4,NO4A

LED Escape sign luminaire; Luminaire for central emergency light supply, for single luminaire monitoring via DALI (DALI-2 certified), settable emergency light level; surface mounted; housing made of die-cast aluminium, silver (similar to RAL 7035), powder coated; 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; luminaire easy to install. Zero maintenance thanks to LED technology; plug-in terminals 2.5 mm², through-wiring possible for 1.5 mm²; Luminaire input power: 4.7 W, protection class: IP42, class of protection: SC1; Impact strength: IK03; non-maintained and maintained mode possible, Maintained and non-maintained mode: -20 °C to +40 °C; power supply: 220-240 V AC (+/- 10 %) 50-60 Hz; 176-280 V DC, ; dimensions of luminaire including escape sign: 310 x 38 x 50 mm; weight: 0.75 kg; Luminaire wired with halogen-free leads; Luminaire with D symbol (for use in environments in which no unusual accumulation of dust is expected)

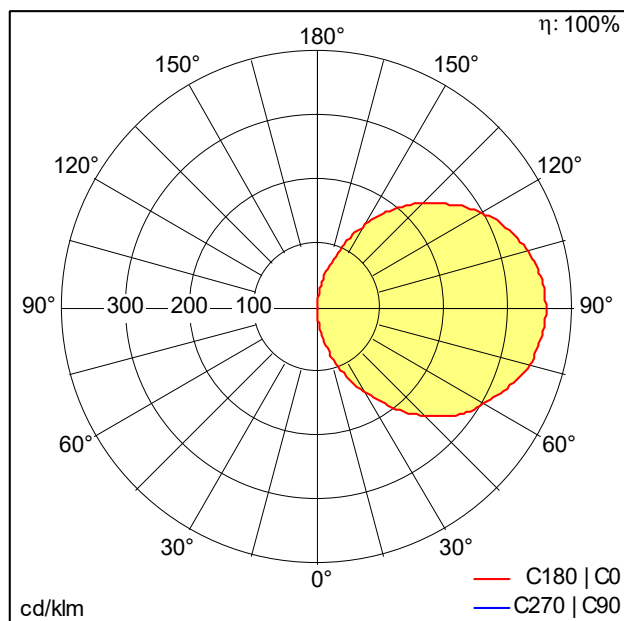
Attachment: SP1-E002-D SR

Escape sign with silver (similar to RAL 7035) aluminium surround, designed to fit easily onto the housing; uniform backlighting of pictogram; luminance > 500 cd/m² in the white region, pictogram digitally printed on the PC (polycarbonate) panel; escape sign according to ISO 7010: 1-sided; symbol: Emergency exit. Direction arrow down; Recognition distance according to EN 1838: 30 m; dimensions: 310 x 20 x 160 mm, weight: 0.73 kg.



Light Distribution

STD - standard



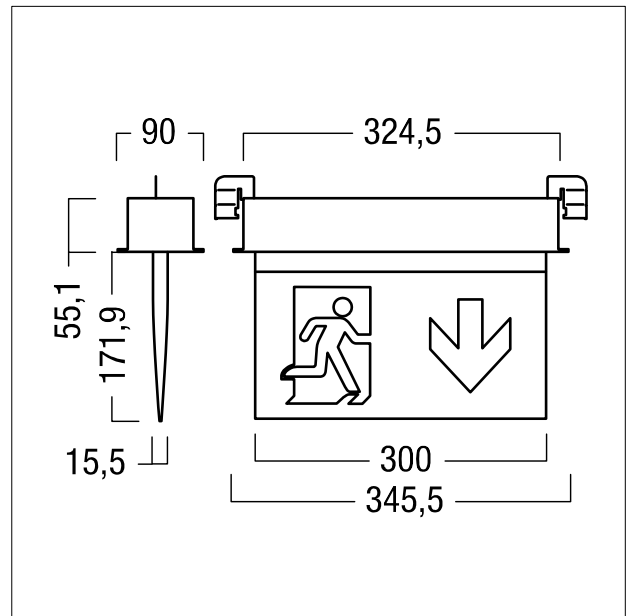
- Light Source: LED
- Luminaire luminous flux*: 60 lm
- Total emergency luminous flux: 5 lm
- Luminaire efficacy*: 13 lm/W
- Ballast: 1 x 89800571 EM powerLED NDA DIM 5W ZUM
- Rated median useful life*: L90 50000 h at 25 °C
- Luminaire input power*: 4.7 W Power factor = 0.72
- Dimming: Dali dimmable to 10%
- Maintenance category CIE 97: A - Barelamp Batten

NO5,NO5A

LED Escape sign luminaire; Luminaire for central emergency light supply, for single luminaire monitoring via DALI (DALI-2 certified), settable emergency light level; ceiling recessed; housing made of sheet steel, silver (similar to RAL 7035), powder coated; 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; luminaire easy to install. Zero maintenance thanks to LED technology; plug-in terminals 2.5 mm², through-wiring possible for 1.5 mm²; Luminaire input power: 4.7 W, protection class: IP40, class of protection: SC1; Impact strength: IK03; non-maintained and maintained mode possible, Maintained and non-maintained mode: -20 °C to +40 °C; power supply: 220-240 V AC (+/- 10 %) 50-60 Hz; 176-280 V DC, ; dimensions of luminaire including escape sign: 346 x 90 x 78 mm; weight: 1.13 kg; Luminaire wired with halogen-free leads;

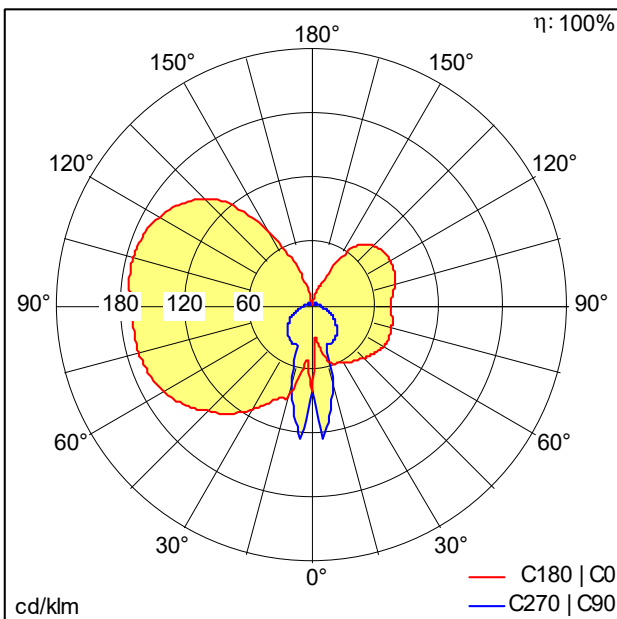
Attachment: SP1-E001-L

Escape sign designed to fit easily onto the housing; uniform backlighting of pictogram; luminance > 500 cd/m² in the white region; pictogram digitally printed on the PMMA panel; escape sign according to ISO 7010: 1-sided; symbol: Emergency exit. Direction arrow sideways; Recognition distance according to EN 1838: 30 m, dimensions: 300 x 16 x 188 mm; weight: 0.76 kg.



Light Distribution

STD - standard

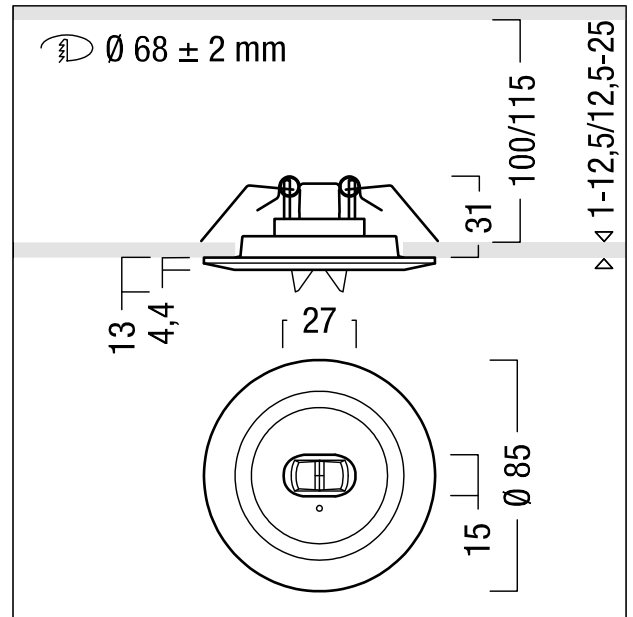


- Light Source: LED
- Luminaire luminous flux*: 225 lm
- Total emergency luminous flux: 21 lm
- Luminaire efficacy*: 48 lm/W
- Ballast: 1 x 89800571 EM powerLED NDA DIM 5W ZUM
- Rated median useful life*: L90 50000 h at 25 °C
- Luminaire input power*: 4.7 W Power factor = 0.72
- Dimming: Dali dimmable to 10%
- Maintenance category CIE 97: D - Enclosed IP2X

Please also consult the additional information on the next page

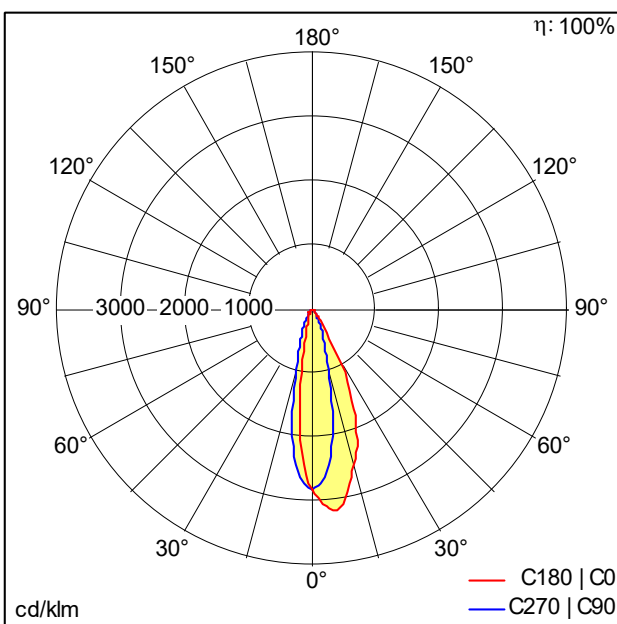
NO-H

LED emergency luminaire for illuminating fire-fighting and first-aid equipment and danger spots with min. 5 lux in the vertical compliant to EN 1838; Room height 2.2 to 4 m; 2 high power LEDs, neutral white 4,000 K; lens made of polycarbonate; optimum thermal management via heat sink; Ceiling recessed luminaire for 68 mm ceiling cut-out and ceiling thickness from 1 - 25 mm; tool-free rapid luminaire installation through specially shaped retaining springs; tool-free replacement of control unit; Cover ring diecast aluminium, powder-coated; housing colour white (close to RAL9016); Polypropylene (PP) gearbox for installation in ceiling recess; Luminaire for central emergency light supply, for single luminaire monitoring via DALI (DALI-2 certified), 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: -40 °C to +45 °C; power supply: 220-240 V AC (+/- 10 %) 50-60 Hz; 176-280 V DC; Luminaire input power: 3.9 W (in maintained mode); Power in non-maintained mode: 0,3 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. Suitable for installing in concrete casting surround (separately ordered); Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: IK04; Dimensions: Ø85 x 4 mm; weight: 0.21 kg



Light Distribution

STD - standard



- Light Source: LED
- Luminaire luminous flux*: 332 lm
- Total emergency luminous flux: 332 lm
- Luminaire efficacy*: 85 lm/W
- Colour Rendering Index min.: 70
- Ballast: 1 x 89800571 EM powerLED NDA DIM 5W ZUM
- Chromaticity tolerance (initial MacAdam): 5
- Rated median useful life*: L95 100000 h at 25 °C
- Luminaire input power*: 3.9 W Power factor = 0.66
- Standby Power*: 0.33 W
- Dimming: Dali dimmable to 10%
- Maintenance category CIE 97: D - Enclosed IP2X

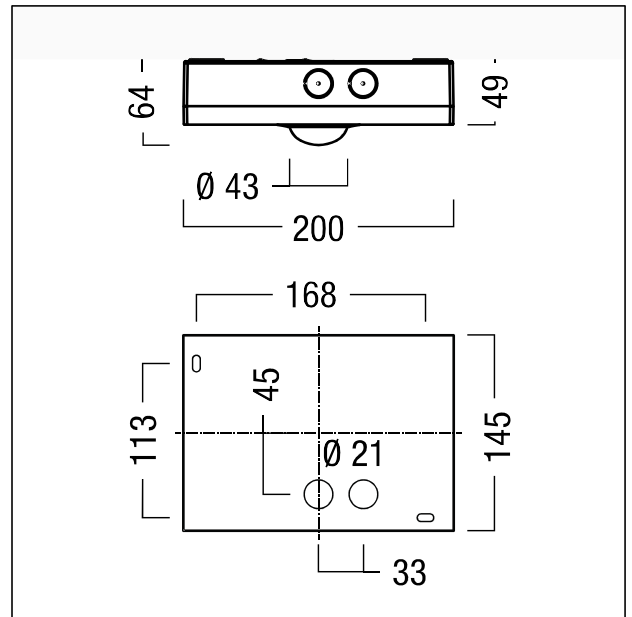
This product contains a light source of energy efficiency class D.

Please also consult the additional information on the next page

NO-V

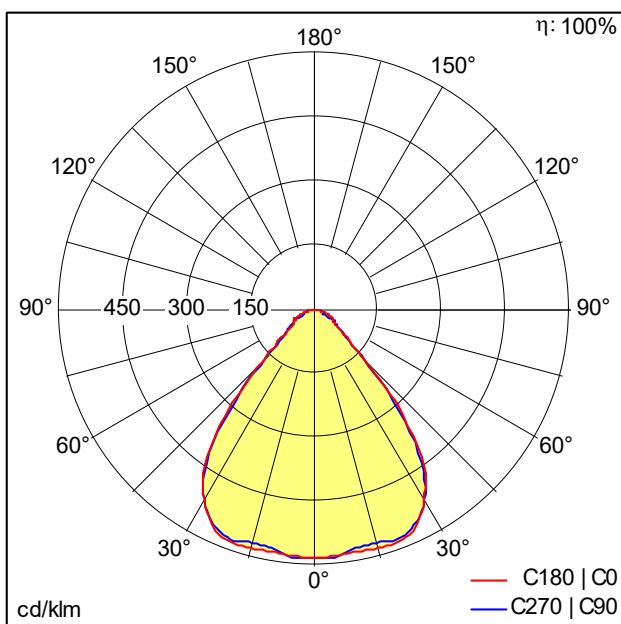
LED emergency luminaire for antipanic lighting with min. 0,5 lux acc. to EN 1838; high ceilings (HC) variant for high ceiling heights > 7 metres; 2 high power LEDs, neutral white 4,000 K; lens made of polycarbonate; optimum thermal management via heat sink; Ceiling surface-mounted luminaire; Screw mounting of the gear tray and IP65 cover; Luminaire housing made of diecast aluminium, powder-coated; housing colour white (close to RAL9016); White fibre-glass reinforced PC cover with transparent PC light outlet; Luminaire for central emergency light supply, for single luminaire monitoring via DALI (DALI-2 certified), 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: -40 °C to +45 °C; power supply: 220-240 V AC (+/- 10 %) 50-60 Hz; 176-280 V DC; Luminaire input power: 4.5 W (in maintained mode): Power in non-maintained mode: 0,3 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

• IP65; SC1; Luminaire wired with halogen-free leads. Supply line not halogen-free, ballproof; Plug-in terminals for through-wiring up to 2.5 mm²; Impact strength: IK04; Dimensions: 200 x 145 x 64 mm; weight: 0.84 kg; Luminaire with D symbol (for use in environments in which the accumulation of conductive dust on the luminaire can be expected)



Light Distribution

STD - standard



- Light Source: LED
- Luminaire luminous flux*: 307 lm
- Total emergency luminous flux: 307 lm
- Luminaire efficacy*: 68 lm/W
- Colour Rendering Index min.: 70
- Ballast: 1 x 89800571 EM powerLED NDA DIM 5W ZUM
- Chromaticity tolerance (initial MacAdam): 5
- Rated median useful life*:
L95 100000 h at 25 °C
- Luminaire input power*: 4.5 W Power factor = 0.7
- Standby Power*: 0.34 W
- Dimming: Dali dimmable to 10%
- Maintenance category CIE 97: D - Enclosed IP2X

This product contains a light source of energy efficiency class D.

Please also consult the additional information on the next page