



VIZULO

STORK

LITTLE BROTHER FLOOD

Architectural & Landscape

Outdoor Industrial Area

Decorative & Urban Area

Residential Street/Area

Ventilation cable gland

Combines pressure equalization and cable gland in a single unit. It ensures high air flow rates as well as high water protection capacity

Glass

Flat glass. Glass is fixed to die-cast aluminium frame with metal clips and can easily be replaced

LED module

High quality LED's with optimal thermal resistance and energy consumption characteristic, for high lumen output and long expected life time. Color temperature available: 2700 K, 3000 K, 4000 K

(1800 K, 2200 K, 3500 K, 5000 K, 5700 K, 6500 K available on customer request)

Intelligent light control system

Power line or radio frequency

Protection

IP66 for the complete luminaire

Impact resistance

IK10 (Vandal protected)
for the complete luminaire

Module temperature control

The LED driver will start reducing the light output when the LED's approach critical temperature. The temperature is measured via a sensor placed on the PCB

(function available on customer request)

Body

Die-cast aluminium

Lighting protection

Built-in surge protection starting from 3 kV till 10 kV

Light regulation

STORK LITTLE BROTHER drivers offer integrated midnight dimming and network-controlled 1 - 10 V and DALI protocols

Opening

Die-cast aluminium clip for tool-less opening or closing, fixed to the frame with stainless steel spring for easy maintenance

Safety switch

Safety switch disconnects power on opening



Traffic Roads

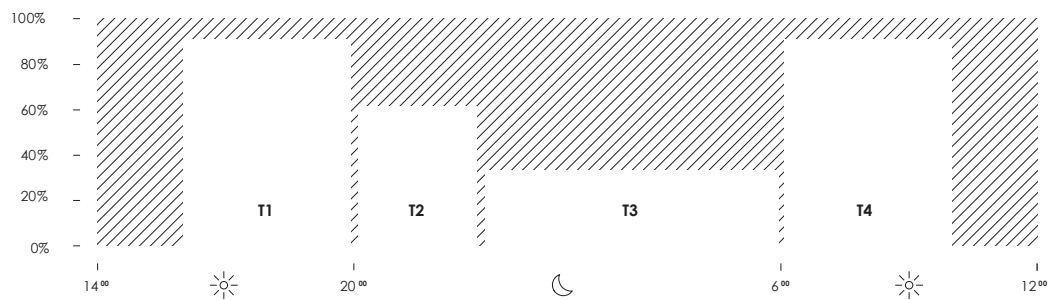
Pedestrian Roads

City Centre

Parks, Urban and Decorative Areas

Midnight dimming

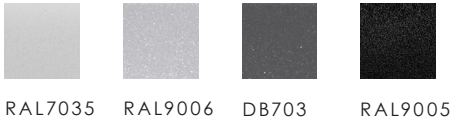
Midnight dimming provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times.



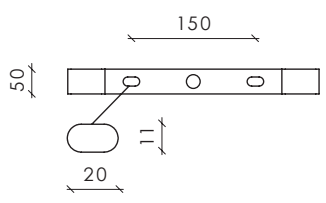
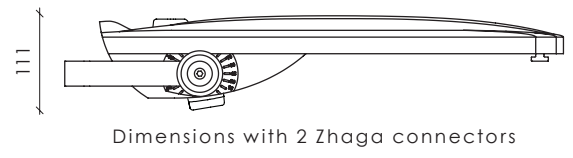
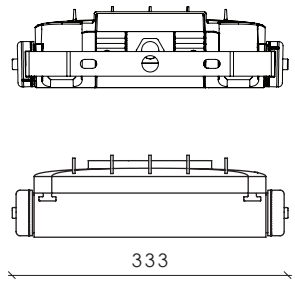
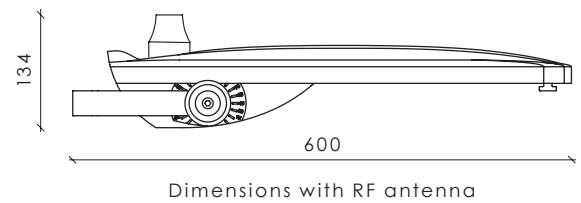
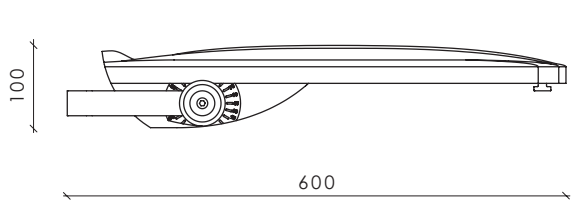
Stork little brother floodlight



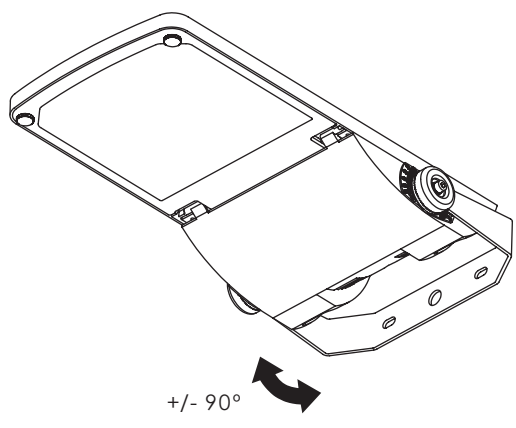
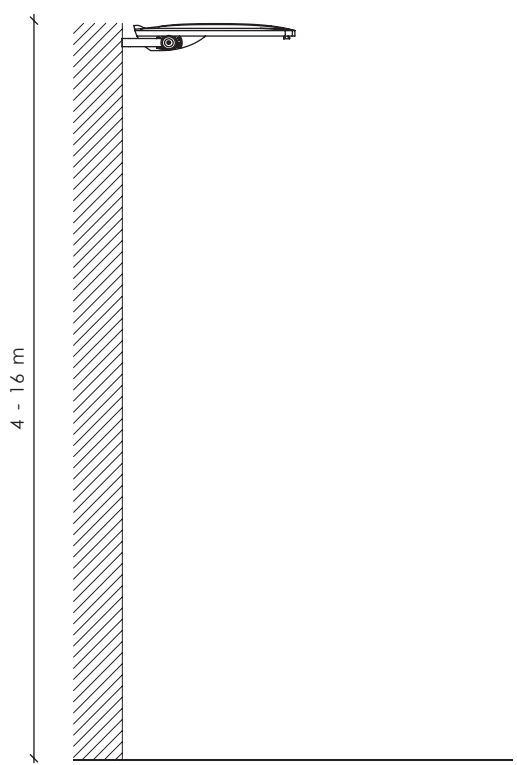
Note! Glass with black print on request!
(standard - gray print glass)



Other colors available on request



Mounting console



Technical information



V	198 - 264 / 110 - 277 ¹⁾
Hz	50 - 60
W	5 - 200 ²⁾
lm	487 - 26000 ³⁾
lm/W	98 - 161
K	2700 / 3000 / 4000 / TW 2700 - 6500 ⁴⁾
°C	-40 to +50
CRI	>70 / >80 / >90 ⁴⁾

Body:	Die-cast aluminium
Dimming:	DALI / 1 - 10 V / Midnight dimming / Step dimming / Mains dimming
Initial chromaticity:	MacAdam 5
Lifetime:	Eco 100 000 h (L90B10) at Ta = 25 °C* / Standard 100 000 h (L98B10) at Ta = 25 °C* / High density 100 000 h (L98B10) at Ta = 25 °C*
Warranty:	5 years
Installation:	Tool-less
Mounting:	On bracket / wall / ceiling
Socket:	NEMA / Top and Bottom Zhaga
Intelligent Control:	Stand-alone / Group / CMS
Sensor:	Motion / Motion + Daylight / Daylight
Surge protection:	4 / 6 / 10 kV ⁵⁾
Nature friendly:	PC Amber / Red / 1800 K
Corrosion protection:	Up to C5
Neto weight:	Up to 7 kg
Max. wind load area, SCd, m²:	0.04

¹⁾ Maximum operating voltage, ENEC certificate voltage 200 - 240 V, UL certificate voltage 110 - 277 V

²⁾ 5 - 178 W with standard fins and 178 - 200 W with additional fins

³⁾ Lumen output indicated at CRI > 70

⁴⁾ 1800 / 2200 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT

⁵⁾ 10 kV (L-N; L/N-PE) surge protection device available on request

⁶⁾ Check SundaHus web page for product assessment results

*This value is only informative and may change according to selected article. LED Lifetime is strongly depending from LEDs current and junction temperature – increase in LED current and luminaire power lead to increase of junction temperature and as consequence lifetime decrease. Thus, luminaire models with lower power, lower current (and lower junction temperature) will have higher lifetime than standard models. And high power and high current luminaire models may have negative lifetime deviation comparing to standard models. To receive precise value please contact VIZULO export representatives.

Technical parameters for final product can differ from typical data by 7% due to special conditions of LED manufacturing processes.

Standard modules

* Data for L01 optic.

Check VIZULO members section for additional information

4000 K | CRI 70

Number of LED's	8			16			32		
Nominal current, mA	140	500	700	280	500	760	280	500	750
Power, W	5	14	19	15	26	39	28	50	75
Luminous Flux, lm	570	1900	2540	2180	3600	5300	4500	7550	10650
Efficacy, lm/W	114	136	134	145	138	136	161	151	142
Power factor, PF	Up to 0.94			Up to 0.98			Up to 0.97		

Number of LED's	48			64		
Nominal current, mA	270	500	690	250	500	700
Power, W	40	75	102	50	98	137
Luminous Flux, lm	6360	11000	14800	8000	15000	19800
Efficacy, lm/W	159	147	145	160	153	145
Power factor, PF	Up to 0.96			Up to 0.98		

Luminaire efficacy	2700 K	5 - 137 W	487 - 17000 lm	98 - 140 lm/W
	3000 K	5 - 137 W	540 - 18500 lm	108 - 152 lm/W
	5000 K	5 - 137 W	570 - 19800 lm	114 - 161 lm/W
	5700 K	5 - 137 W	570 - 19800 lm	114 - 161 lm/W

High density modules

* Data for V01 optic.

Check VIZULO members section for additional information

4000 K | CRI 70

Number of LED's	24			32			48			64		
Nominal current, mA	270	500	780	280	500	750	270	500	690	250	500	700
Power, W	21	38	59	28	50	75	40	75	102	50	98	137
Luminous Flux, lm	3100	5500	8000	4300	7400	10110	6300	11200	14500	7600	14000	18850
Efficacy, lm/W	148	145	136	154	148	135	158	149	142	152	143	138
Power factor, PF	Up to 0.98			Up to 0.97			Up to 0.96			Up to 0.98		

Number of LED's	80			96			128		
Nominal current, mA	270	500	710	270	500	740	270	370	480
Power, W	64	120	170	76	120	178	102	140	178
Luminous Flux, lm	10000	17800	24000	12000	17700	25000	16000	21000	26000
Efficacy, lm/W	156	148	141	158	148	140	157	150	146
Power factor, PF	Up to 0.98			Up to 0.98			Up to 0.98		

Luminaire efficacy	2700 K	21 - 178 W	2700 - 10000 lm	119 - 138 lm/W
	3000 K	21 - 178 W	2970 - 11000 lm	129 - 152 lm/W
	5000 K	21 - 178 W	3100 - 26000 lm	135 - 158 lm/W
	5700 K	21 - 178 W	3100 - 26000 lm	135 - 158 lm/W

Check VIZULO members section for additional information

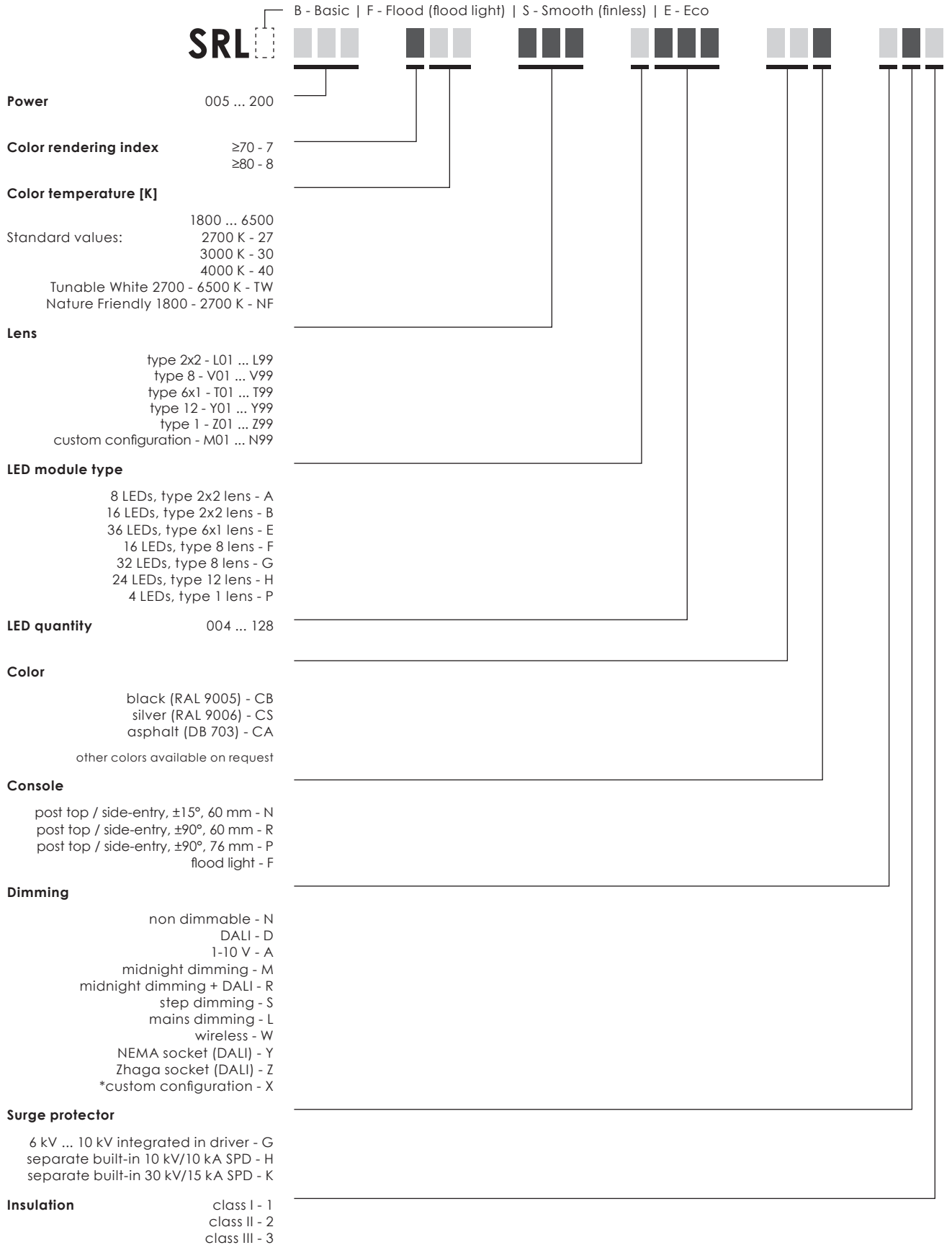
4000 K | CRI 70

Number of LED's	8			16			24			32		
Nominal current, mA	280	490	700	280	490	700	270	500	700	250	500	700
Power, W	15	26	38	28	50	74	40	75	110	50	100	144
Luminous Flux, lm	2100	3400	4730	4100	6700	9100	6000	9700	13500	7500	13300	17500
Efficacy, lm/W	140	131	124	146	134	123	150	129	123	150	133	122
Power factor, PF	Up to 0.98			Up to 0.97			Up to 0.97			Up to 0.98		

Number of LED's	36			48			64		
Nominal current, mA	270	500	700	270	500	680	270	390	460
Power, W	60	110	160	78	150	178	107	150	178
Luminous Flux, lm	9500	15500	20000	11000	19500	22000	16500	21600	25000
Efficacy, lm/W	158	141	125	141	130	124	154	144	140
Power factor, PF	Up to 0.98			Up to 0.99			Up to 0.98		

Luminaire efficacy	2700 K	15 - 178 W	1960 - 23100 lm	115 - 148 lm/W
	3000 K	15 - 178 W	2040 - 24600 lm	121 - 154 lm/W
	5000 K	15 - 178 W	2100 - 25000 lm	123 - 158 lm/W
	5700 K	15 - 178 W	2100 - 25000 lm	123 - 158 lm/W

Model name principles

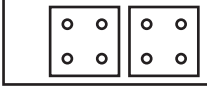
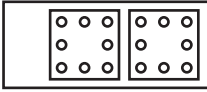
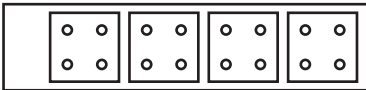
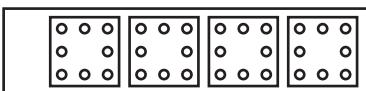


EXAMPLE SRLF 150 740 V35 G080 CSF DG1

* CUSTOM CONFIGURATION EXAMPLE

NEMA socket + Zhaga socket; NEMA socket + Zhaga socket + midnight dimming; etc.
Custom configuration information is available in order confirmation.

LED modules

Type	Max module quantity	Min LED quantity per module	Max LED quantity per module	Max LED quantity per luminaire	LED step	LED type	Lens type	Layout
A	4	4	8	32	2	Standard Eco	type 2x2 L01...LZ9	 <p>A008</p>
F	4	4	16	64	4	Standard	type 8 V01...VZ9	 <p>F016</p>
B	4	8	16	64	2	Standard Eco	type 2x2 L01...LZ9	 <p>B016</p>
G	4	16	32	128	4	Standard	type 8 V01...VZ9	 <p>G032</p>

Cable core count

Socket	Dimming	Model number abbreviation	Input cable core count - Class I	Input cable core count - Class II
None	None	N	3	2
None	DALI	D	5	4
None	Midnight dimming	M	3	2
None	Midnight dimming + DALI	R	5	4
None	Step dimming	S	5 ⁽¹⁾	4 ⁽¹⁾
None	Mains dimming	L	3	2
Zhaga	DALI	Z	3 ⁽²⁾	2 ⁽²⁾
Zhaga	Midnight dimming	X	3	2
Zhaga	Mains dimming	X	3	2
NEMA	DALI	Y	3 / 5 ⁽³⁾	2 / 4 ⁽³⁾
NEMA	Midnight dimming	X	3	2
NEMA	Step dimming	X	5 ⁽¹⁾	4 ⁽¹⁾
NEMA	Mains dimming	X	3	2

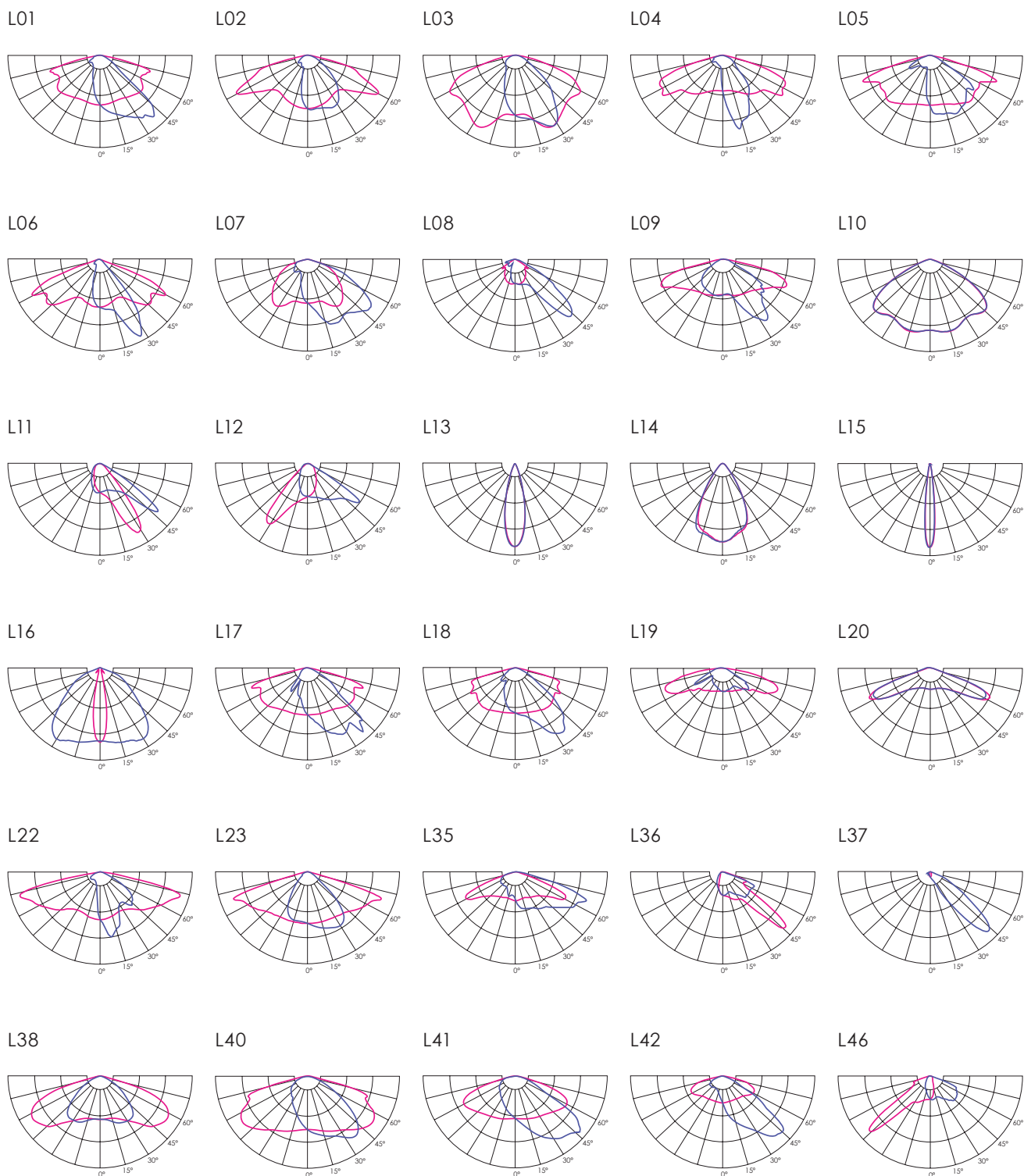
⁽¹⁾ 1 core unused

⁽²⁾ DALI wires used only for internal connection between driver and Zhaga socket(s)

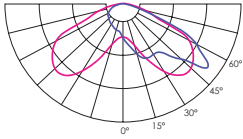
⁽³⁾ +2 cores for external DALI connection

Optics

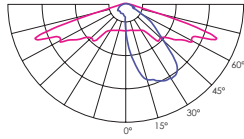
Standard modules



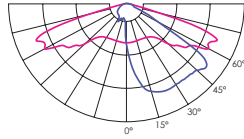
L55



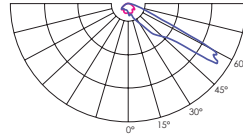
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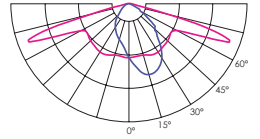
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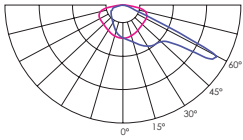
L60



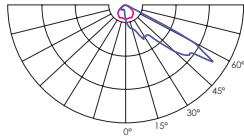
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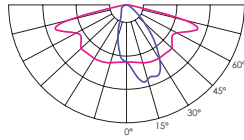
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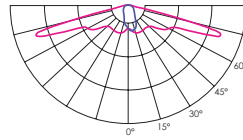
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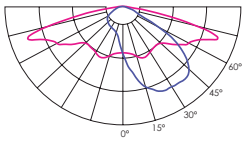
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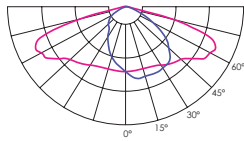
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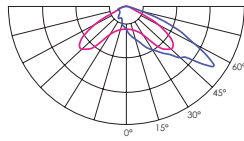
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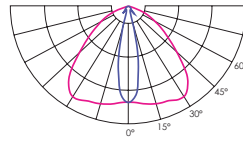
LB3



LC1

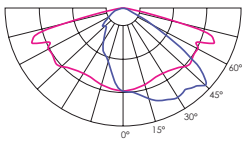


M20

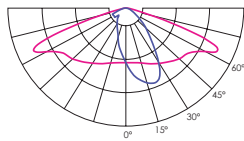


High density modules

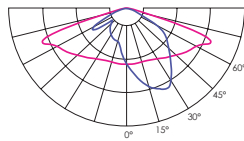
V01



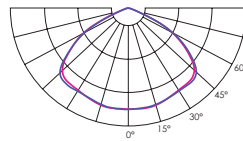
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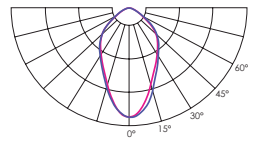
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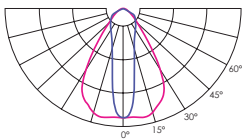
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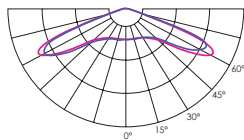
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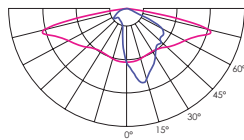
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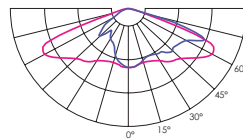
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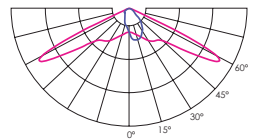
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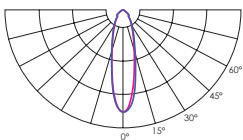
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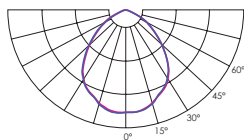
V45



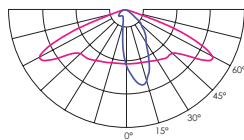
V52



V53



V57





Pedestrian crossing optics



V	198 - 264 / 110 - 277 ¹⁾
Hz	50 - 60
W	5 - 137 ²⁾ 15 - 178 ³⁾
lm	Up to 19800 ²⁾ Up to 25000 ³⁾
lm/W	98 - 161 ²⁾ 115 - 158 ³⁾
K	2700 / 3000 / 4000 / TW 2700 - 6500 ⁴⁾
°C	-40 to +50
CRI	>70 / >80 / >90 ⁴⁾

Body:	Die-cast aluminium
Dimming:	DALI / 1 - 10 V / Midnight dimming / Step dimming / Mains dimming
Initial chromaticity:	MacAdam 5
Lifetime:	Eco 100 000 h (L90B10) at Ta = 25 °C* / Standard 100 000 h (L98B10) at Ta = 25 °C*
Warranty:	5 years
Installation:	Tool-less
Mounting:	On bracket / wall / ceiling
Socket:	NEMA / Top and Bottom Zhaga
Intelligent Control:	Stand-alone / Group / CMS
Sensor:	Motion / Motion + Daylight / Daylight
Surge protection:	4 / 6 / 10 kV ⁵⁾
Nature friendly:	PC Amber / Red / 1800 K
Corrosion protection:	Up to C5
Neto weight:	Up to 7 kg
Max. wind load area, SCd, m²:	0.04

¹⁾ Maximum operating voltage, ENEC certificate voltage 200 - 240 V, UL certificate voltage 110 - 277 V

²⁾ Standard modules, lumen output indicated at CRI > 70

³⁾ ECO modules, lumen output indicated at CRI > 70

⁴⁾ 1800 / 2200 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT

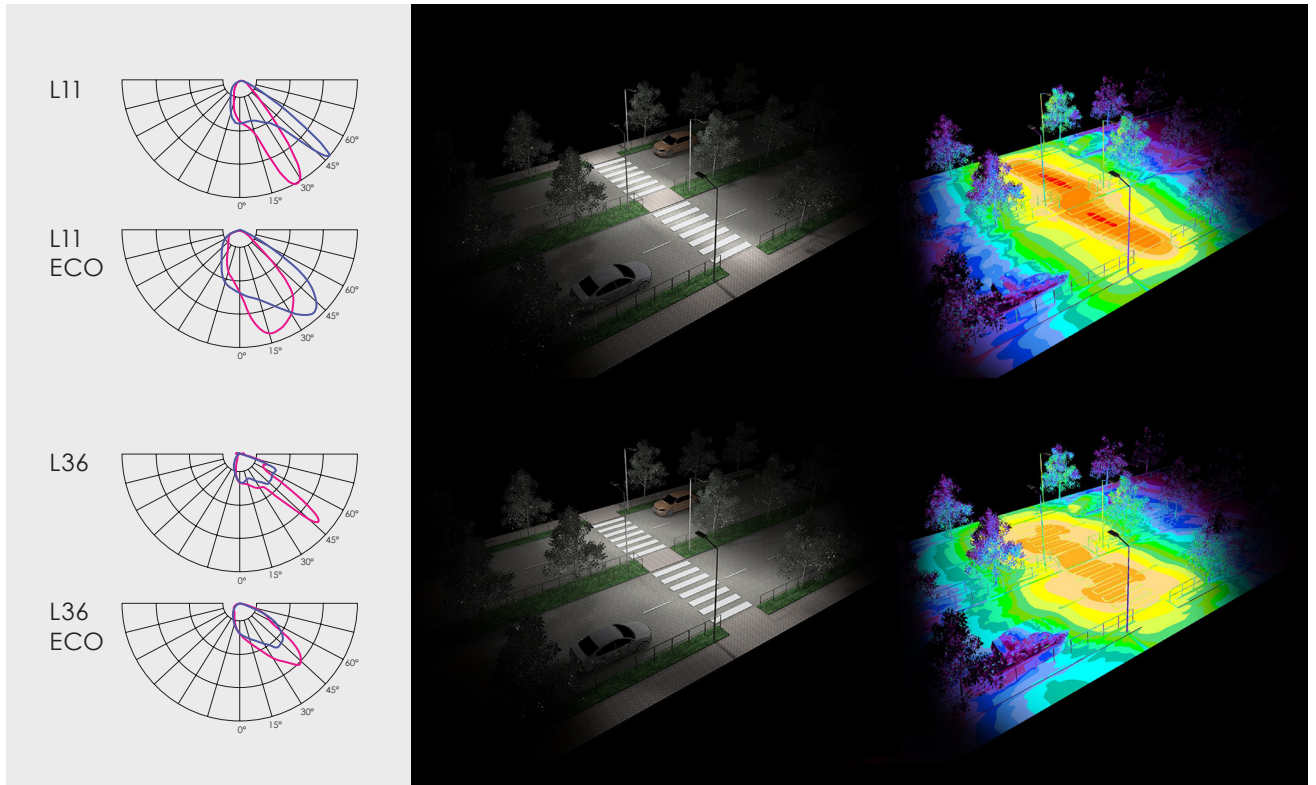
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⁶⁾ Check SundaHus web page for product assessment results

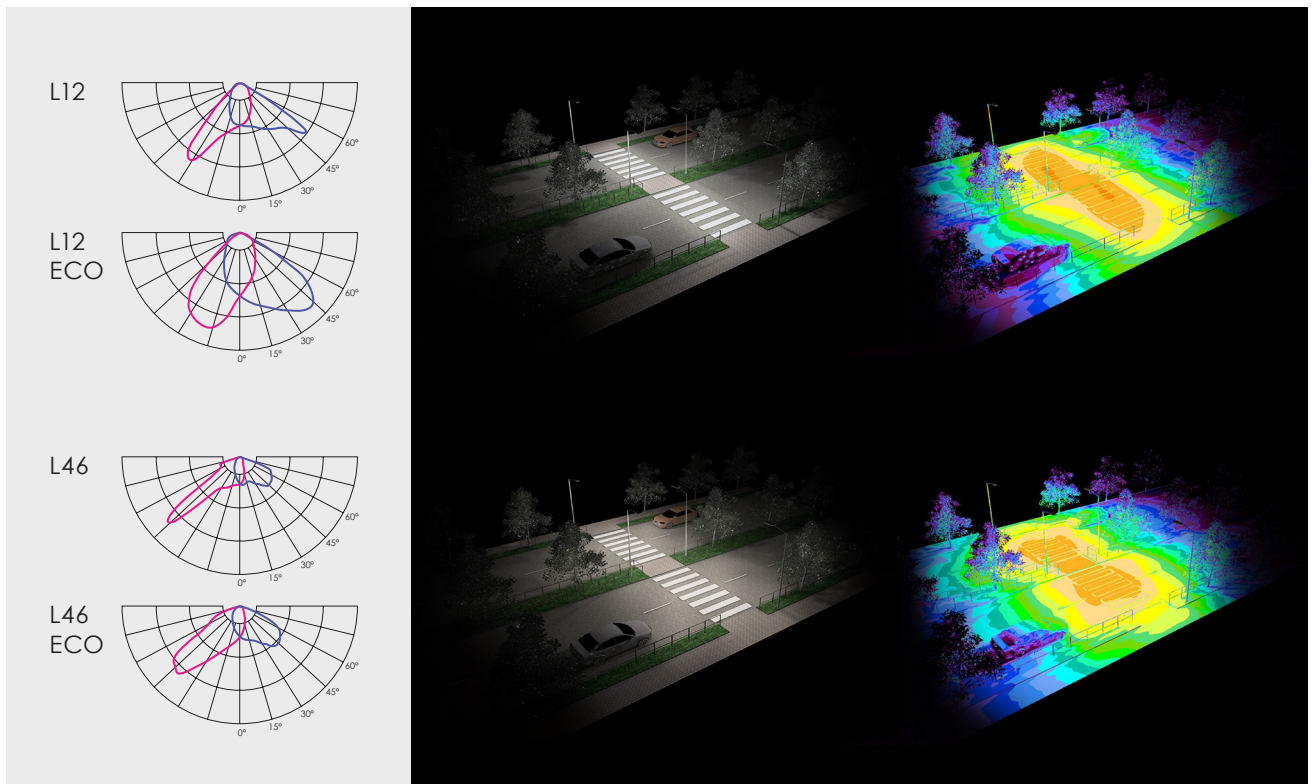
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Technical parameters for final product can differ from typical data by 7% due to special conditions of LED manufacturing processes.

Right side traffic



Left side traffic



Backlight cutter

Backlight cutter | black

Art. 70000661



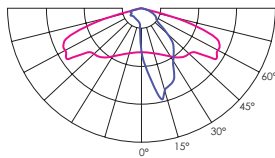
Backlight cutter | white

Art. 70000662

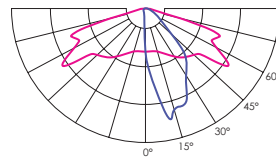


Optical losses from 10% to 31% depending from used optic.

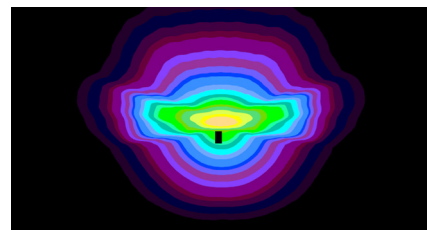
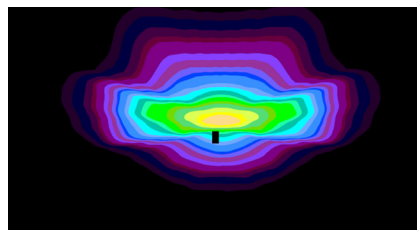
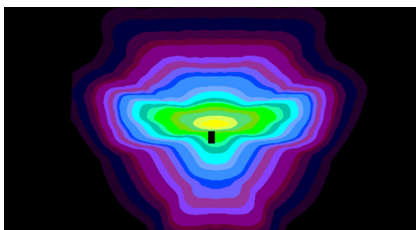
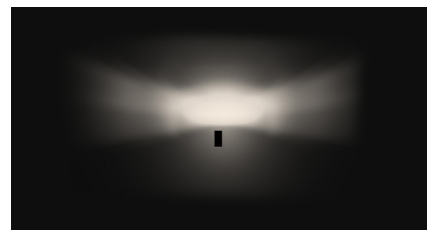
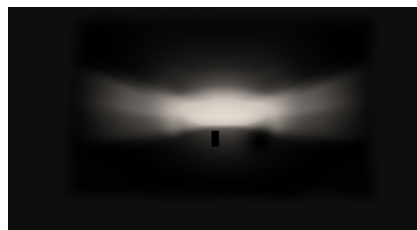
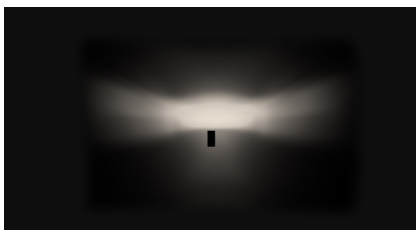
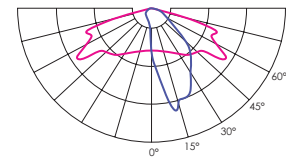
Without backlight cutter



Backlight cutter | black



Backlight cutter | white



Accessories

Zhaga socket no cap

Art. 70000612



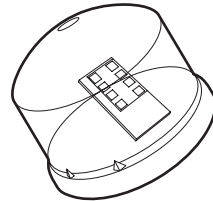
Zhaga socket with cap

Art. 70000613



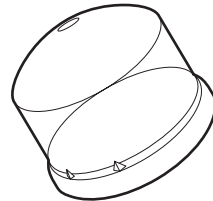
**MSLC205RG Luminaire controller +
radar, Zhaga, 80 mm**

Art. 70010027



**MSLC205RGL Luminaire controller,
Zhaga, 80 mm**

Art. 70010029



Certification



CE – conformity with European Union's health, safety and environmental protection standards

The CE mark is placed on products to state conformity with the relevant EU health, safety and environmental protection standards. In case of electronic products, the standards are, for example, the Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive, Waste Electrical and Electronic Equipment (WEEE) directive, the Electromagnetic Compatibility (EMC) directive etc. The mark ensures that the product can be sold anywhere in the European Economic Area (EEA).



UKCA - conformity with the relevant essential requirements of Great Britain

UKCA is a product mark intended to demonstrate compliance with the directives set by Great Britain (England, Scotland and Wales). It is analogous to the European Union's CE marking, meaning that depending on the type of product the applicable regulations are different. In case of LED lighting, the relevant requirements are compliance with the Electromagnetic Compatibility Regulations, the Electrical Equipment (Safety) Regulations, the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations and the Ecodesign for Energy-Related Products and Energy Information (Lighting Products) Regulations.



EAC - compliance with the regulations of the Eurasian Customs Union

The EAC Mark demonstrates conformity with all technical regulations defined by the Eurasian Customs Union. The conformity is assessed by an accredited independent testing laboratory. The EAC marking is a requirement in order to place a product on the market of Russia and the Eurasian Economic Union.



ENEC - compliance with European standards for electrical equipment

The ENEC Mark is the high quality European Mark for electrical equipment. It is governed by the European Testing Inspection Certification System which ensures that the testing of products is conducted at ENEC – accredited laboratories, following additional requirements regarding the testing procedures. The ENEC Mark means that the testing procedure was followed scrupulously and that the consumer can be certain of the product's safety and quality.



ENEC+ - compliance with European standards for LED – based electronic products

The ENEC+ Mark is the high quality European Mark for LED – based electronic products. It demonstrates the product's compliance with the IEC standards for performance of LED modules and LED based luminaires. The ENEC+ Mark can only be granted to a product that has already acquired the ENEC Mark.



Zhaga-D4i - compliance with the requirements of Zhaga Book 18 or 20 and DALI standard

The Zhaga-D4i Mark represents the fact that a product is certified following the Zhaga-D4i joint certification program – a program established by Zhaga and the DALI Alliance (DiiA). The Zhaga part of the Mark represents that a product meets the requirements of Zhaga Book 18 or 20 – Zhaga standards that describe a smart interface between outdoor luminaires and sensing/ communication nodes. The DALI Alliance part of the Mark signifies that the product conforms with the DALI standard for intelligent, IoT-ready luminaires.



UL - compliance with UL standards for LED lighting

UL stands for Underwriter Laboratories, a third-party certification company that's been around for over a century. UL sets industry-wide standards for products and performs testing according to these standards to ensure that the products marked with the UL mark are safe and high quality.

RoHS

RoHS – compliance with European Union's RoHS directive

The RoHS (Restriction of Hazardous Substances in Electrical and Electronic Equipment) directive restricts (with exceptions) the use of ten hazardous materials in the manufacture of various types of electronic and electrical equipment. The aim of the directive is to prevent the risks posed to human health and the environment related to the management of electronic and electrical waste.



International EPD System – Environmental Product Declaration available

An Environmental Product Declaration (EPD) is a declaration of the materials, energy, transportation and other resources involved in the production, use and end-of life of a specific product. It is based on a Life Cycle Assessment (LCA) study that complies with standards EN ISO 14040 and EN ISO 14044. A product's EPD can help evaluate its impact on the environment and make sustainable choices.



Synergrid approved - compliance with Synergrid requirements for LED lighting

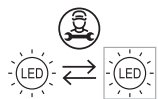
Synergrid is a federation of electricity and natural gas network operators in Belgium. The Synergrid approval mark means that the product is compliant with the design, safety and performance requirements set by Synergrid. The approval can be confirmed by checking the official list of Synergrid approved luminaires on the Synergrid website.

SundaHus

SundaHus – product material data assessment

SundaHus i Linköping AB (publ) is a consulting company for the improvement of indoor environmental quality. The company conducts health and environmental assessments of building materials and assigns each product a letter evaluation:

- A** products that provide minimal health risks
- B** products that do not qualify for A, but do not match the criteria for C+, C- or D
- C+** products that risk exposure to substances of very high concern
- C-** products that risk exposure to toxic or volatile substances, as well as negatively impact the environment
- D** products that cannot be assessed due to insufficient data



LED module replaceable by a professional

This pictogram shows that the LED modules included in the luminaire are only replaceable by a professional. This labeling is a requirement following the introduction of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.



LED driver replaceable by a professional

This pictogram shows that the LED driver included in the luminaire is only replaceable by a professional. This labeling is a requirement following the introduction of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.

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