VIZULO



Owl

Sports Lighting

Airport Infrastructure



Ventilation cable gland
Pressure equalisation. 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

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

LED module
High quality LED's with optimal thermal resistance and energy consumption characteristic, for high lumen output and long expected life time.
Available color temperature: 2700 K, 3000 K, 4000 K
(1800 K, 2200 K, 3500 K, 5000 K, 5700 K, 6500 K available on customer request)

Sockets
Zhaga and NEMA sockets compatible

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)

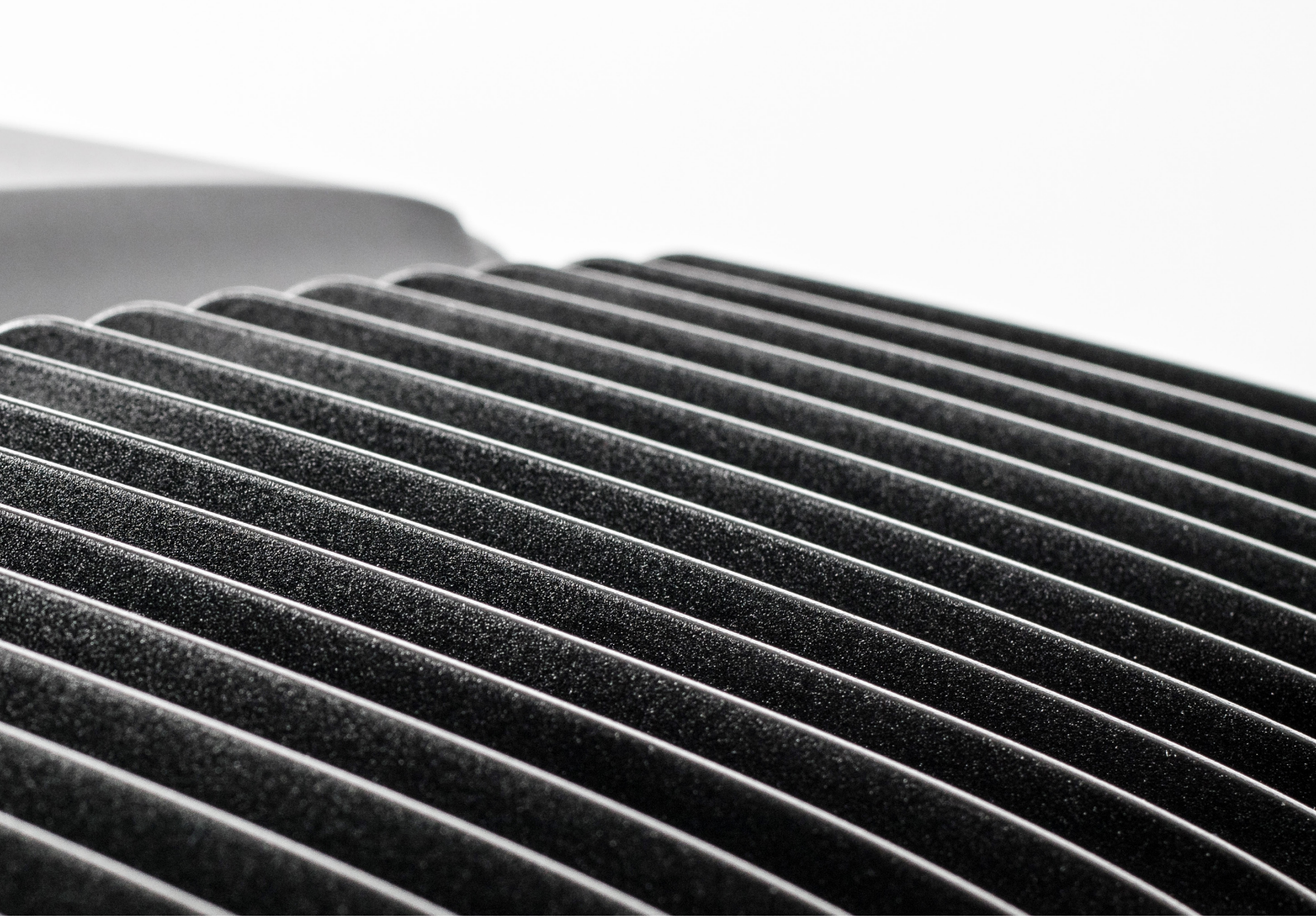
Body
Die-cast aluminium

Lighting protection
Built-in surge protection starting from 6 kV till 10 kV

Light regulation
OWL drivers offer integrated midnight dimming and network-controlled 1-10 V and DALI protocols

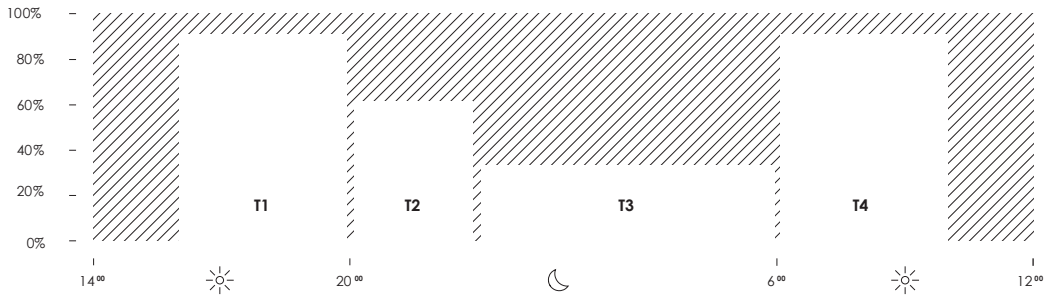
Protection
Up to IP66 for the complete luminaire

Impact resistance
IK08 (Vandal protected) for the complete luminaire



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.



Owl

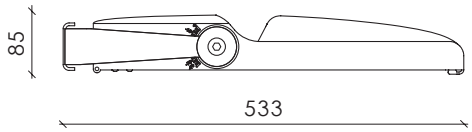
with floodlight console

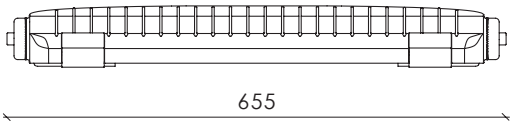


Note! Glass with gray print is standard
(black print glass on request!)

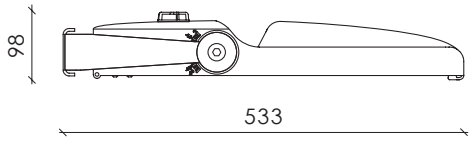
RAL7035 RAL9006 DB703 RAL9005

Other colors
available on request

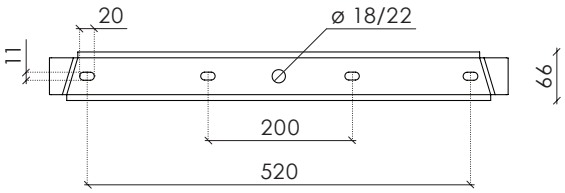


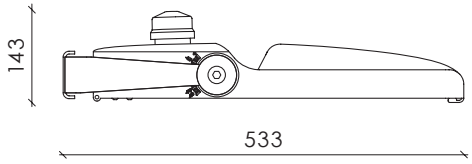


Mounting bracket



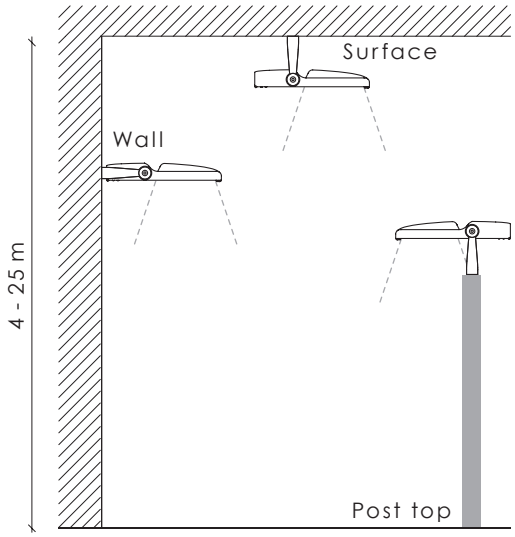
Dimensions with Zhaga connector

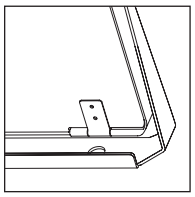




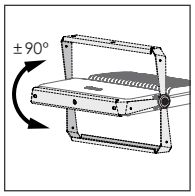
Dimensions with NEMA socket

Mounting options





Strenghtened bracket



Possible regulation angles

Owl

with standard console



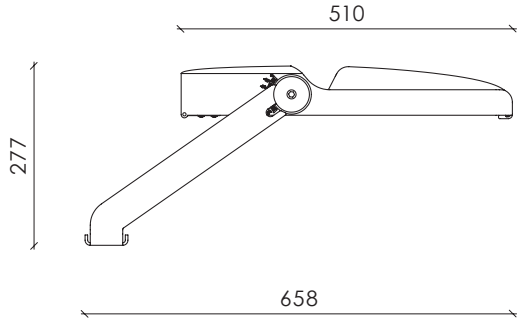


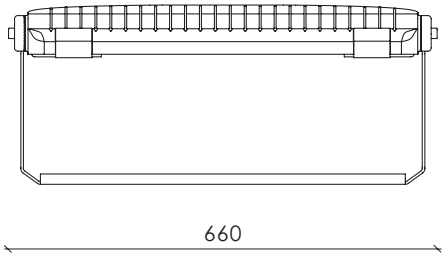


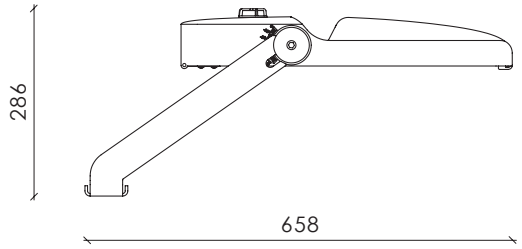
Note! Glass with gray print is standard
(black print glass on request!)

RAL7035 RAL9006 DB703 RAL9005

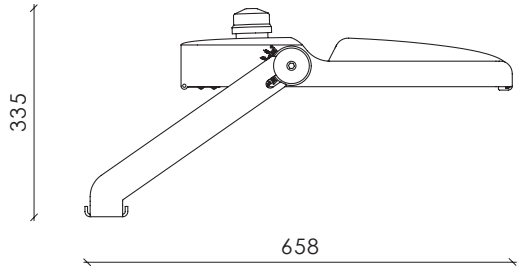
Other colors
available on request





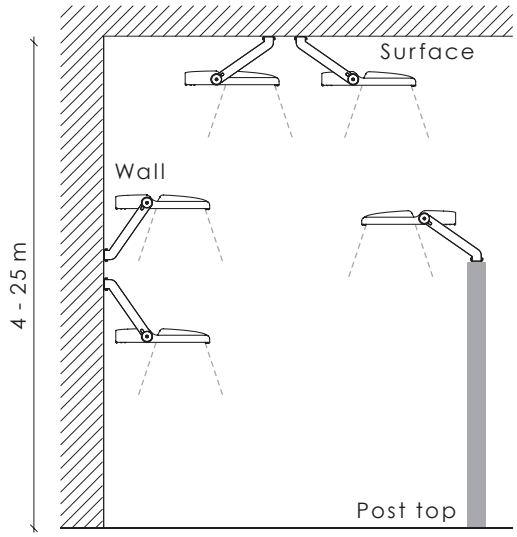


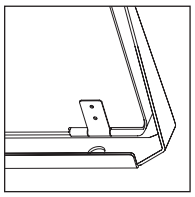
Dimensions with Zhaga connector



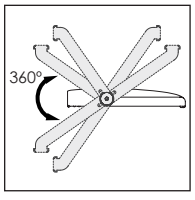
Dimensions with NEMA socket

Mounting options





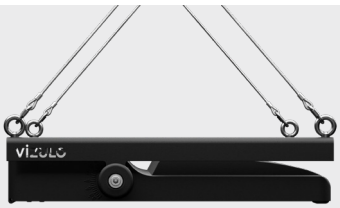
Strenghtened bracket



Possible regulation angles

Owl

with high-bay







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

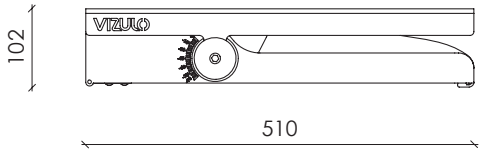

RAL7035

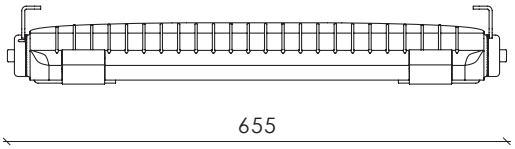

RAL9006

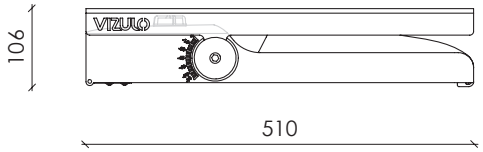

DB703


RAL9005

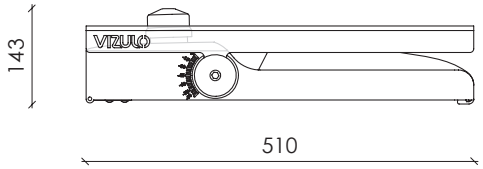
Other colors
available on request





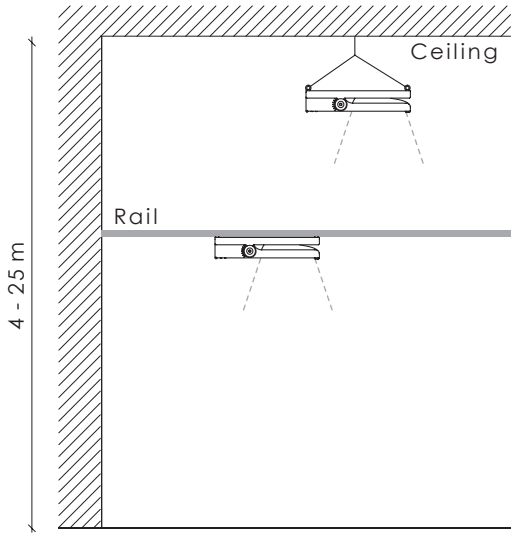


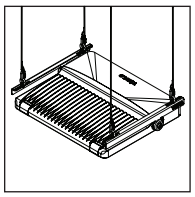
Dimensions with Zhaga connector



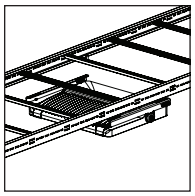
Dimensions with NEMA socket

Mounting options





Ceiling mount option



Rail mount option

Technical information

V	198 - 264
Hz	50 - 60
W	85 - 380
lm	11 640 - 57 660 [1]
lm/W	112 - 172
K	2700 / 3000 / 4000 [2]
°C	-40 up to +50 [3]
CRI	>70 / >80 / >90 [2]

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:	On bracket / wall / ceiling
Socket:	NEMA Top / Zhaga Top
Intelligent Control:	Stand-alone / Group / CMS
Sensor:	Daylight
Surge protection:	10 kV
Corrosion protection:	Up to C5
Neto weight:	Up to 19 kg

1) Lumen output indicated at CRI > 70

2) 1800 / 2200 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT

3) Operating temperature differs depending on chosen output wattage. These luminaires are suitable for outdoor use as well as indoor use.

Note! 10 °C shall be deducted from the maximum marked ambient temperature when this product is used indoors.

This temperature shall not overshoot.

4) Depending on configuration

5) Ball proof: tested according to DIN 57710-13

6) EPD registration number: S-P-05891 (link to page)

7) Coming soon

* 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.

Wind load

$SCx = 0.33\ m^2$

Maximal wind load depending on the angle relative to the ground

	0°	5°	15°	30°	45°	60°	75°	90°
SCx, m²	0.06	0.08	0.13	0.20	0.26	0.30	0.32	0.33

Standard modules

* Data for L01 optic.
Check VIZULO members section for additional information

4000 K | CRI 70

Number of LED's		80			96			112	
Nominal current, mA	350	540	780	300	520	720	250	500	700
Power, W	85	130	190	85	150	211	90	180	242
Luminous Flux, lm	12800	18630	25500	14600	24225	32250	14650	27550	34800
Efficacy, lm/W	151	143	134	172	162	153	163	153	144
Power factor, PF		Up to 0.98			Up to 0.99			Up to 0.98	

Number of LED's		128			144			160	
Nominal current, mA	270	520	740	260	510	780	270	580	790
Power, W	104	200	288	116	220	340	127	280	380
Luminous Flux, lm	15430	28100	38200	18675	33510	48050	21180	42920	55190
Efficacy, lm/W	148	141	133	161	152	141	167	153	145
Power factor, PF		Up to 0.98			Up to 0.98			Up to 0.98	

Luminaire efficacy				
	2700 K	85 - 380 W	11640 - 47280 lm	112 - 147 lm/W
	3000 K	85 - 380 W	11640 - 52030 lm	124 - 162 lm/W
	5000 K	85 - 380 W	12800 - 55190 lm	131 - 172 lm/W
	5700 K	85 - 380 W	12800 - 55190 lm	131 - 172 lm/W

Eco modules

* Data for L01 optic.
Check VIZULO members section for additional information

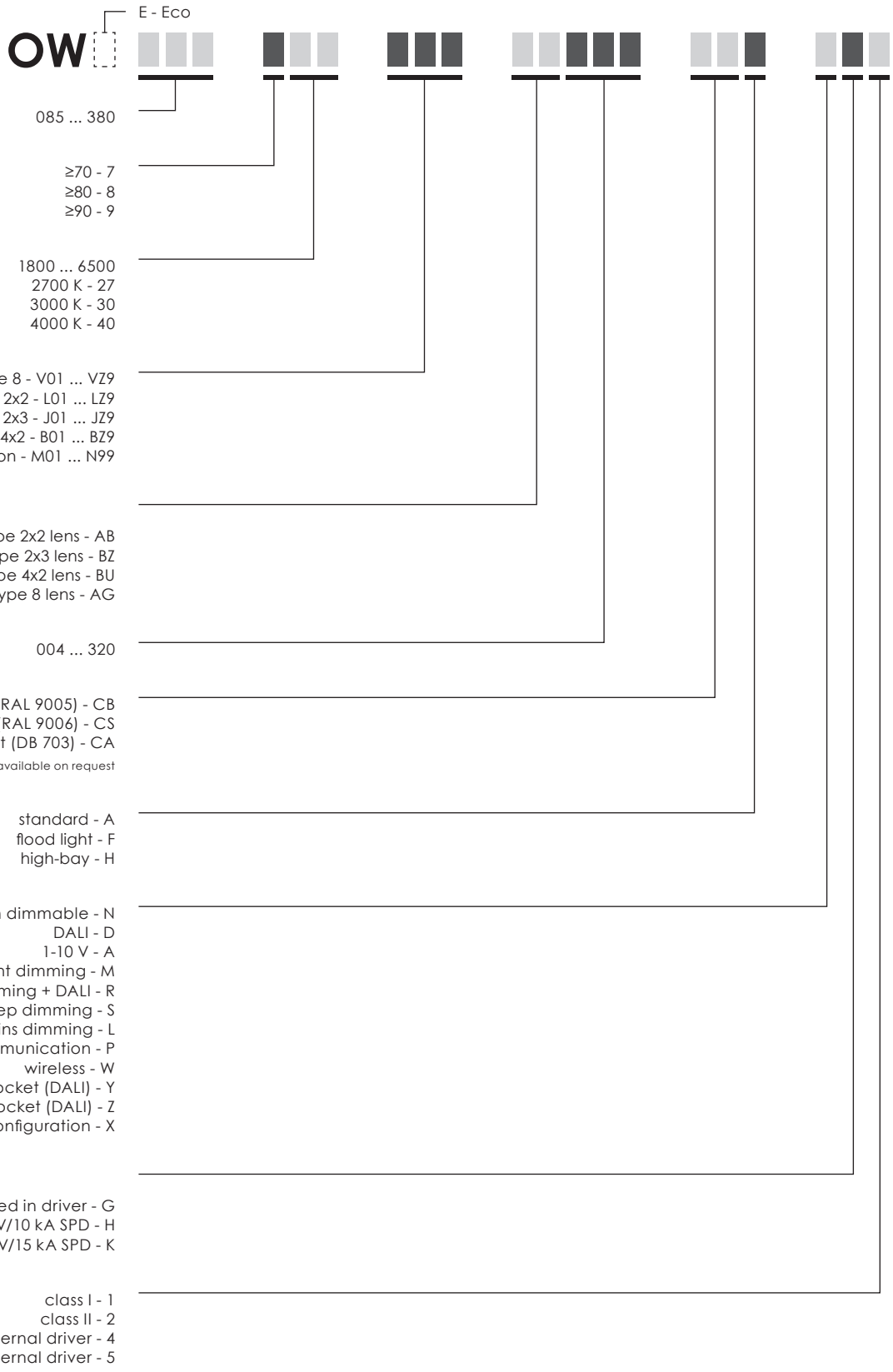
4000 K | CRI 70

Number of LED's		48			64			80			96	
Nominal current, mA	300	500	690	280	500	680	280	460	670	270	430	630
Power, W	85	150	211	107	200	280	130	230	340	156	250	380
Luminous Flux, lm	12805	20275	26200	17545	28655	36500	21440	33440	44355	24950	36500	50015
Efficacy, lm/W	151	135	124	164	143	130	165	145	130	160	146	132
Power factor, PF		Up to 0.99			Up to 0.98			Up to 0.98			Up to 0.98	

Number of LED's		112			128			144			160	
Nominal current, mA	350	490	540	350	440	490	350	400	440	340	360	395
Power, W	240	340	380	270	340	380	300	340	380	320	340	380
Luminous Flux, lm	35900	47150	51280	40420	48240	52335	44240	49000	53530	48490	50915	55455
Efficacy, lm/W	150	139	135	150	142	138	147	144	141	152	150	146
Power factor, PF		Up to 0.97			Up to 0.98			Up to 0.98			Up to 0.98	

Luminaire efficacy				
	2700 K	85 - 380 W	12000 - 51950 lm	116 - 155 lm/W
	3000 K	85 - 380 W	12500 - 55455 lm	121 - 161 lm/W
	5000 K	85 - 380 W	12805 - 55455 lm	124 - 165 lm/W
	5700 K	85 - 380 W	12805 - 55455 lm	124 - 165 lm/W

Model name principles



Power [W] 085 ... 380

Color rendering index
≥70 - 7
≥80 - 8
≥90 - 9

Color temperature [K] 1800 ... 6500
Standard values:
2700 K - 27
3000 K - 30
4000 K - 40

Lens
type 8 - V01 ... VZ9
type 2x2 - L01 ... LZ9
type 2x3 - J01 ... JZ9
type 4x2 - B01 ... BZ9
custom configuration - M01 ... N99

LED module type
16 LEDs, type 2x2 lens - AB
24 LEDs, type 2x3 lens - BZ
32 LEDs, type 4x2 lens - BU
32 LEDs, type 8 lens - AG

LED quantity 004 ... 320

Color
black (RAL 9005) - CB
silver (RAL 9006) - CS
asphalt (DB 703) - CA
other colors available on request

Mounting
standard - A
flood light - F
high-bay - H

Dimming
non dimmable - N
DALI - D
1-10 V - A
midnight dimming - M
midnight dimming + DALI - R
step dimming - S
mains dimming - L
power line communication - P
wireless - W
NEMA socket (DALI) - Y
Zhaga socket (DALI) - Z
*custom configuration - X

Surge protector
6 kV ... 10 kV integrated in driver - G
separate built-in 10 kV/10 kA SPD - H
separate built-in 30 kV/15 kA SPD - K

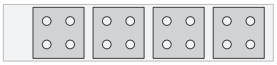
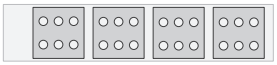
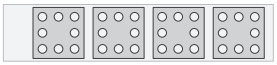
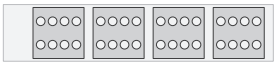
Insulation
class I - 1
class II - 2
class I with external driver - 4
class II with external driver - 5

EXAMPLE OWE 380 740 L88 AB160 CBF RH2

*** 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 QTY	Min LED QTY per module	Max LED QTY per module	Max LED QTY per luminaire	LED step	LED type	Lens type	LED module
AB	10	8	16	160	2	Standard Eco	type 2x2 L01…LZ9	
BZ	10	18	24	240	6	Eco	type 2x3 J01…JZ9	
AG	10	16	32	320	2	Standard	type 8 V01…VZ9	
BU	10	16	32	320	8	Standard Eco	type 4x2 B01…BZ9	

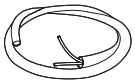
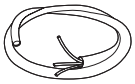
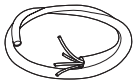
Cable core count

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

Cable order information*

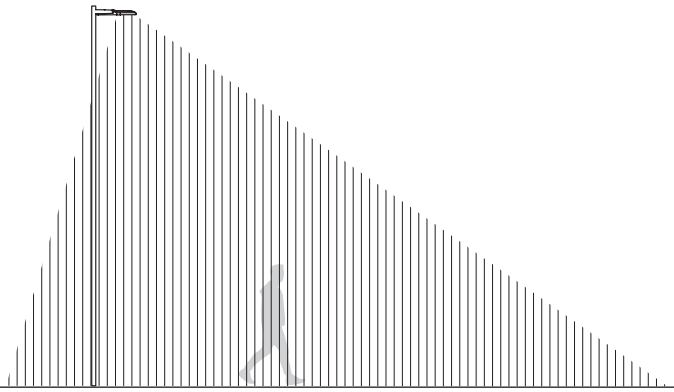
* Custom cable lengths available on request

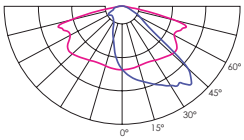

Cable length [m]	2 x 1.5 mm²	3 x 1.5 mm²	4 x 1.5 mm²	5 x 1.5 mm²
0.5	*Art. 70100184*	*Art. 70100179*	*Art. 70100402*	*Art. 70100409*
1	*Art. 70100156*	*Art. 70100193*	*Art. 70000527*	*Art. 70100220*
1.5	*Art. 70100391*	*Art. 70100258*	*Art. 70100403*	*Art. 70100410*
2	*Art. 70100202*	*Art. 70100177*	*Art. 70000515*	*Art. 70100262*
2.5	*Art. 70100392*	*Art. 70100213*	*Art. 70100404*	*Art. 70100411*
3	*Art. 70100166*	*Art. 70100178*	*Art. 70000529*	*Art. 70100217*
4	*Art. 70100172*	*Art. 70100144*	*Art. 70000530*	*Art. 70100189*
5	*Art. 70100173*	*Art. 70100146*	*Art. 70000531*	*Art. 70100185*
6	*Art. 70100099*	*Art. 70000512*	*Art. 70000532*	*Art. 70000370*
7	*Art. 70100174*	*Art. 70100182*	*Art. 70000533*	*Art. 70100201*
8	*Art. 70100152*	*Art. 70000630*	*Art. 70000534*	*Art. 70100212*
9	*Art. 70100176*	*Art. 70000381*	*Art. 70000535*	*Art. 70100192*
10	*Art. 70100153*	*Art. 70000631*	*Art. 70000536*	*Art. 70000387*
11	*Art. 70100191*	*Art. 70100143*	*Art. 70000537*	*Art. 70000388*
12	*Art. 70100167*	*Art. 70100147*	*Art. 70000538*	*Art. 70100200*
13	*Art. 70100186*	*Art. 70100187*	*Art. 70000539*	*Art. 70100412*
14	*Art. 70100204*	*Art. 70100164*	*Art. 70000540*	*Art. 70100165*
15	*Art. 70100380*	*Art. 70100030*	*Art. 70000541*	*Art. 70100183*
20	*Art. 70100393*	*Art. 70100397*	*Art. 70100405*	*Art. 70100413*
25	*Art. 70100276*	*Art. 70100398*	*Art. 70100406*	*Art. 70100414*

Optics

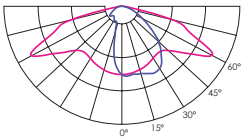
Asymmetric optics



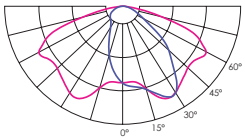
L01



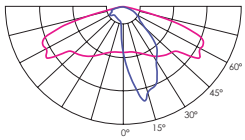
L02



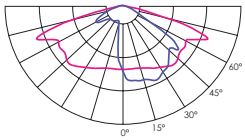
L03



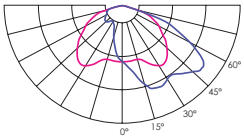
L04



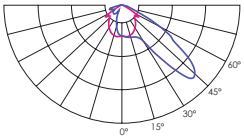
L05



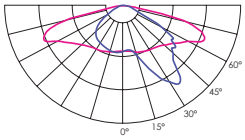
L07



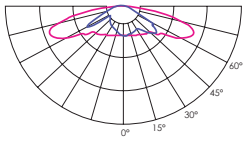
L08



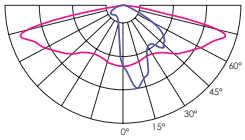
L09



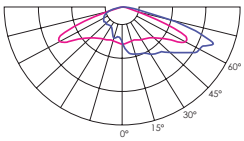
L19



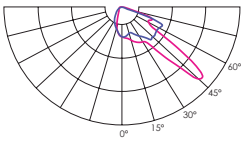
L22



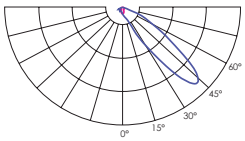
L35



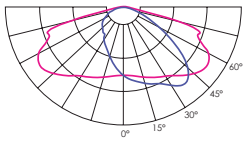
L36



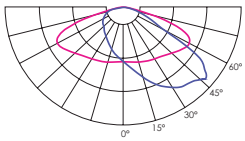
L37



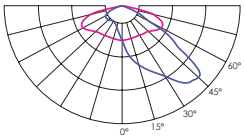
L40



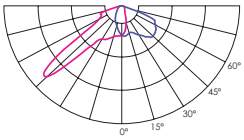
L41



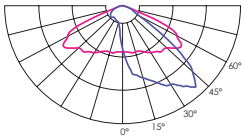
L42



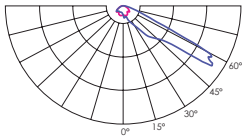
L46



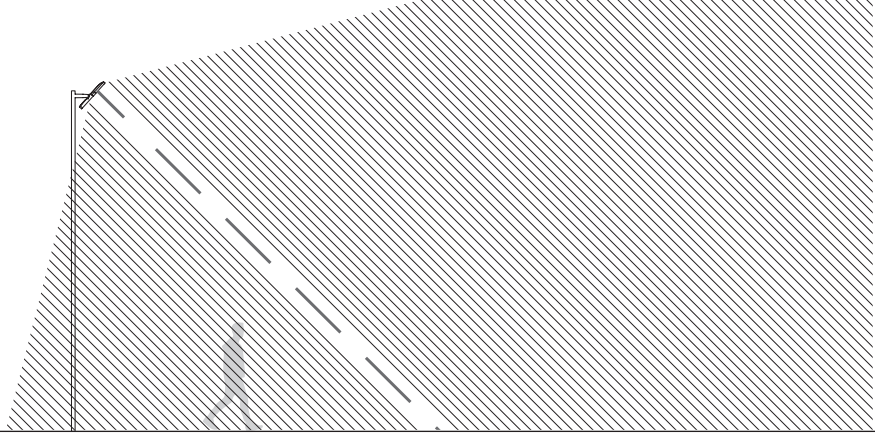
L49



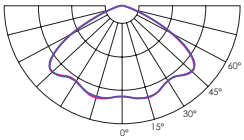
L60



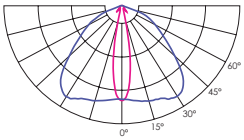
Symmetric optics



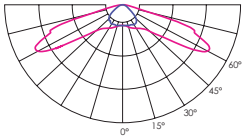
L10



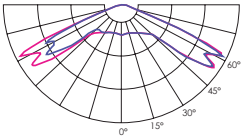
L16



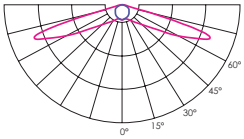
L43



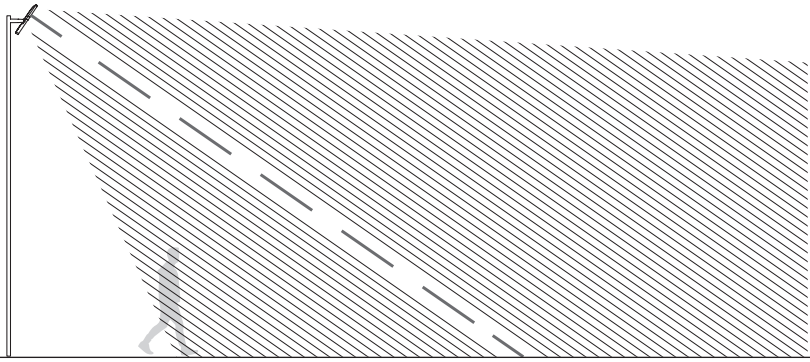
L44



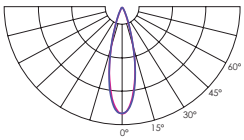
L45



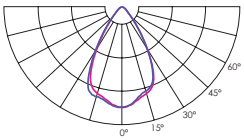
Rotosymmetric optics



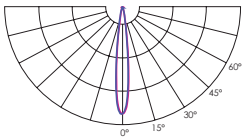
L13



L14

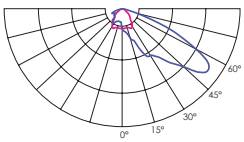


L15

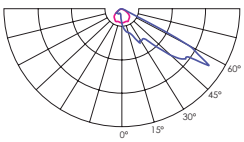


Sports optics

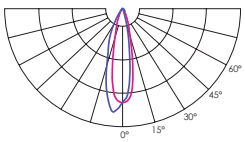
L87



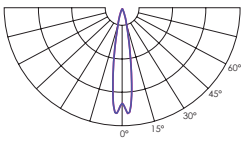
L88



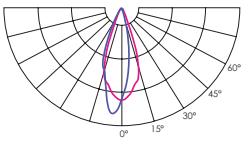
L89



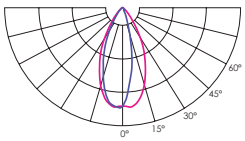
LB6



LB8



LB9

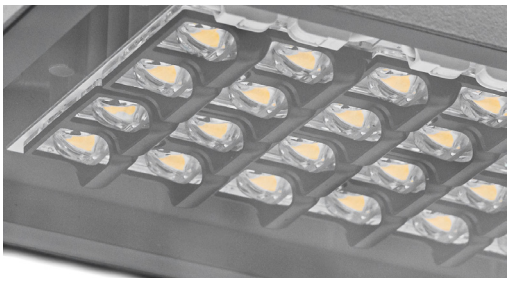


Backlight cutter

Backlight cutter | black

Art. 70000661

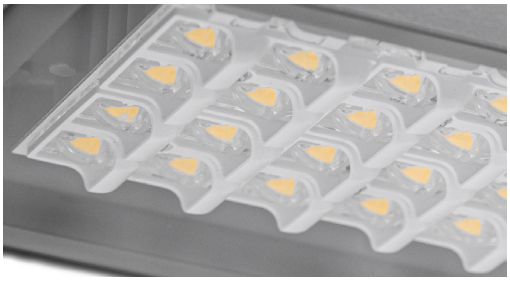




Backlight cutter | white

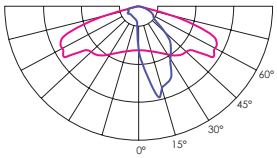
Art. 70000662

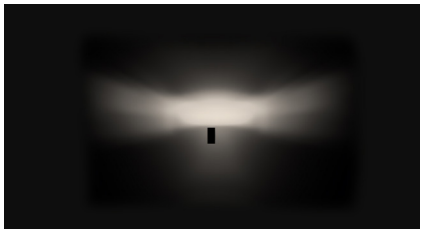


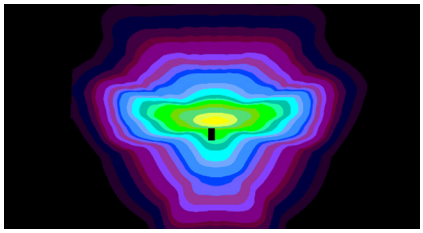


Optical loses from 10% to 31% depending from used optic.

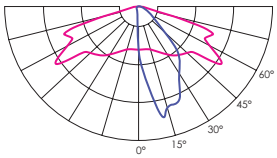
Without backlight cutter

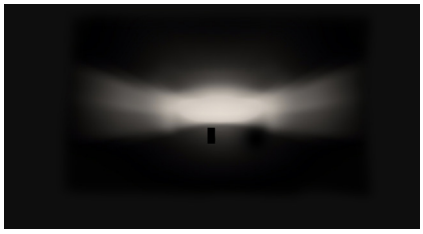


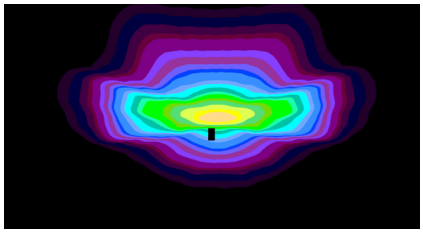




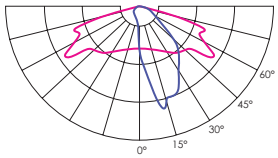
Backlight cutter | black

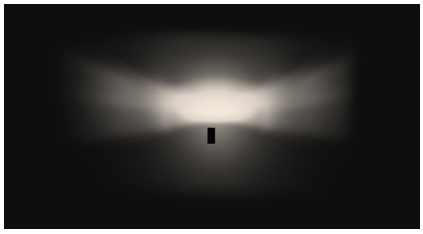


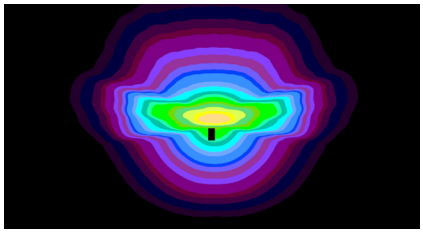




Backlight cutter | white







Accessories

NEMA Socket

operating temperature up to 105 °C

2213362-3, 5 pin NEMA socket ..... *Art. 70000362*
2213362-4, 7 pin NEMA socket ..... *Art. 70000333*

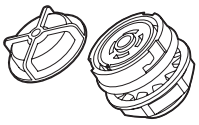


Dummy Link for NEMA Socket ..... *Art. 70000113*



Zhaga Socket

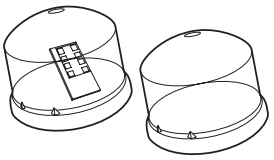
with cap ..... *Art. 70000613*
without cap ..... *Art. 70000612*



Luminaire controller for Zhaga-standard connectors

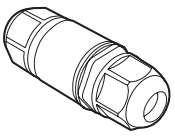
ø 80 mm

MSLC205RG controller with radar ..... *Art. 70010027*
MSLC205RGL controller ..... *Art. 70010029*



IP68 rated wire cable connector

2 wire cable connector ..... *Art. 70000676*
3 wire cable connector ..... *Art. 70000677*
4 wire cable connector ..... *Art. 70000725*
5 wire cable connector ..... *Art. 70000678*



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.

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.

Ball-proof – compliance with the requirements of the DIN 57710-13 testing standard

The ball-proof test is described in the standard DIN 57710-13 (Luminaires with operating voltages below 1000 V; luminaires safety to ball throwing). The standard defines the requirements set for impact resistance of luminaires meant for use in indoor sports facilities. It states that a luminaire struck by a ball must withstand any damage that could cause parts of the luminaire to fall to the ground.

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.

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.

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 Synergid requirements for LED lighting **[Coming soon]**

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.

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 folowing the introdution 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 folowing the introdution of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.

References



↘
Courchevel,
France



↘
Vestmannaeyjum,
Iceland

VIZULO

Bukultu street 11
Riga, LV – 1005, Latvia

Sales: + 371 67 383 023
Production: + 371 67 383 024

sales@vizulo.com
www.vizulo.com

VIZULO

VIZULOSOLUTIONS

