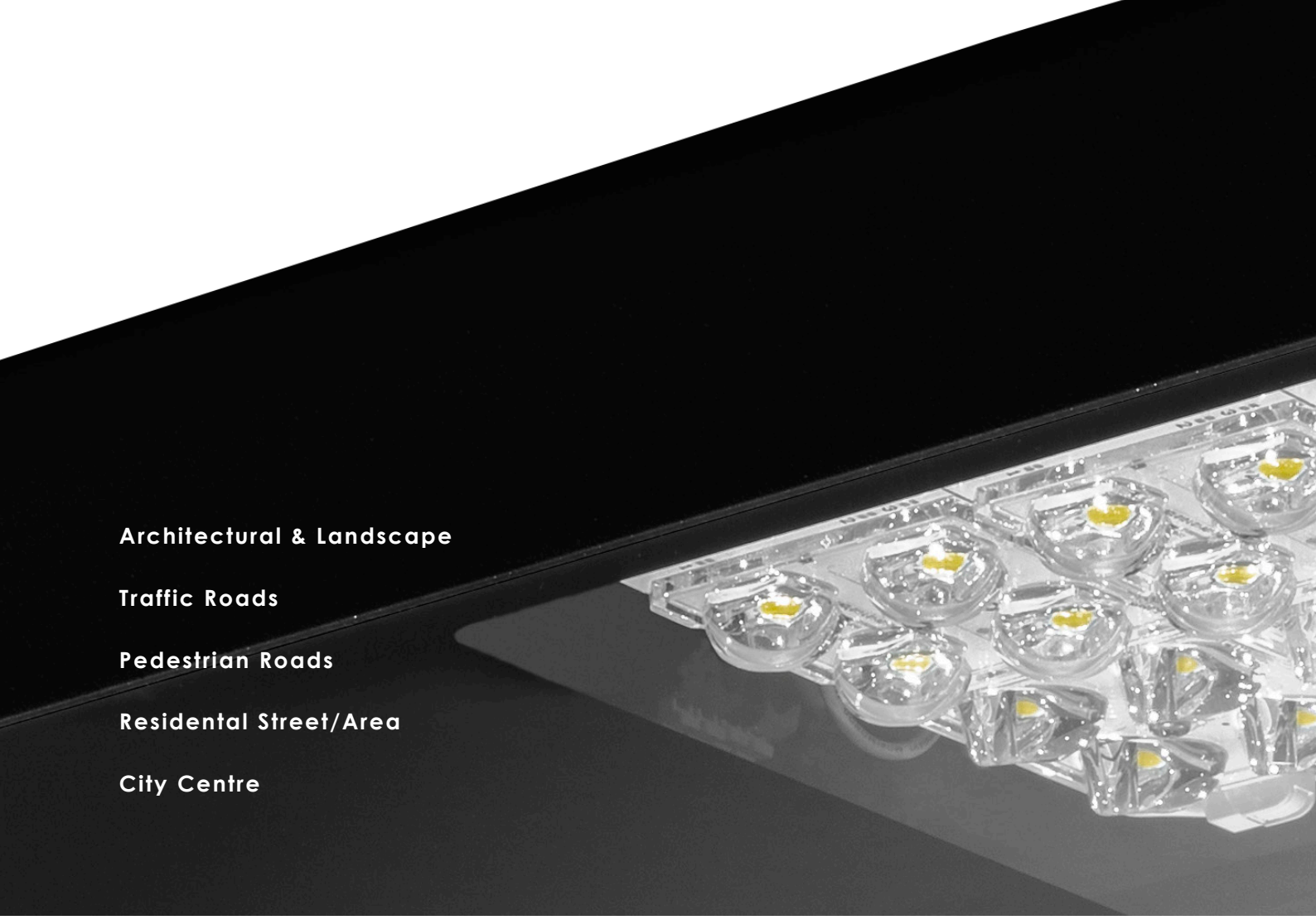
VIZULO



Colibri

MIDI | FLOODLIGHT



Architectural & Landscape

Traffic Roads

Pedestrian Roads

Residental Street/Area

City Centre

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.
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

Protection
IP66 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

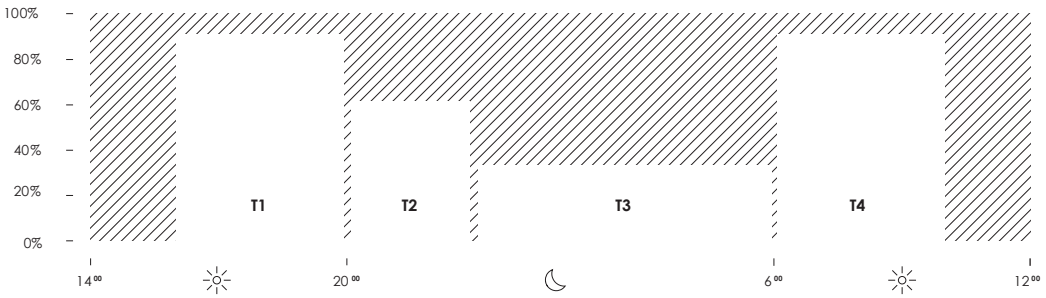
Light regulation
COLIBRI MIDI drivers offer integrated midnight dimming and network-controlled 1-10 V and DALI protocols

Impact resistance
IK09 (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.



Colibri midi

floodlight



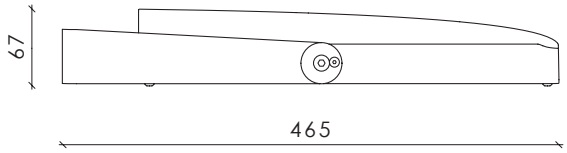


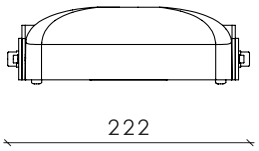


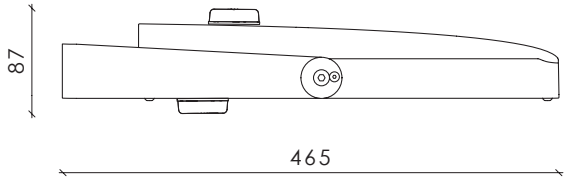
Note! Glass with black print on request!
(standard - gray print glass)

RAL7035 RAL9006 DB703 RAL9005

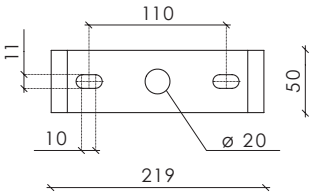
Other colors
available on request



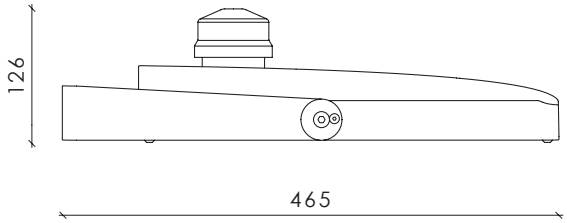




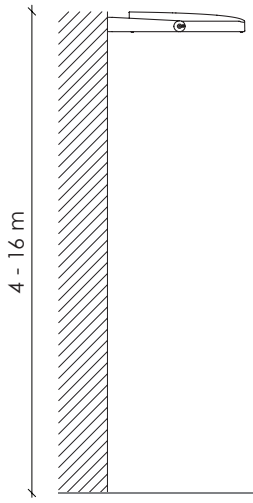
Dimensions with **2 Zhaga connectors**



Mounting console

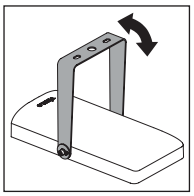


Dimensions with **NEMA socket**



Note!

Only those models with fixed mounting position (0° relative to the ground) are DarkSky approved!



-90° ... +90°

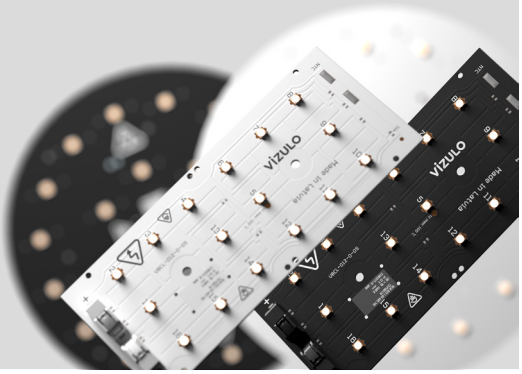
Features

↘ WHITE OR BLACK PCB - PERFORMANCE MEETS AESTHETICS

Choose **white PCB** for brighter illumination,
or the **black PCB** for a sleek, modern look.

While white PCB offer **~11%** more lumens, black PCB deliver just **2.5%** less light on the road - an impressive result given their design appeal.

Note! Black PCB available on request



Technical information

V	220 - 240
Hz	50 - 60
W	5 - 87 [1]
lm	446 - 13 100 [2]
lm/W	90 - 164
K	2700 / 3000 / 4000 [3]
°C	-40 to +50 [4]
CRI	>70 / >80 / >90 [3]

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:	Pre-wired cable 30 cm [5]
Mounting:	On bracket / wall / ceiling
Socket:	NEMA Top / Zhaga Top and Bottom
Intelligent Control:	Stand-alone / Group / CMS
Sensor:	Motion / Motion + Daylight / Daylight
Surge protection:	4 / 6 / 10 kV [6]
Corrosion protection:	Up to C5
Neto weight:	Up to 4.6 kg
Max. wind load area, SCd:	0.031 m^2

1) Colibri Midi with Zhaga max power 85 W

2) Lumen output indicated at CRI > 70

3) 1800 / 2200 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT

Note! *Only fixtures with CCT of 3000 K or lower are DarkSky approved!*

4) Operating temperature differs depending on chosen output wattage

5) Other lengths available on request

6) 10 kV (L-N; L/N-PE) surge protection device available on request

7) Coming soon

8) EPD registration number: S-P-05886 (link to page)

* 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			12			16			24	
Nominal current, mA	140	540	700	280	500	660	280	500	760	260	470	700
Power, W	5	15	19	12	20	26	15	25	39	20	35	52
Luminous Flux, lm	520	1840	2300	1530	2590	3300	2160	3560	5300	3060	5240	7400
Efficacy, lm/W	104	123	121	128	130	127	144	142	136	153	150	142
Power factor, PF		Up to 0.94			Up to 0.97			Up to 0.98			Up to 0.97	

Luminaire efficacy	2700 K	5 - 52 W	446 - 6350 lm	90 - 131 lm/W
	3000 K	5 - 52 W	490 - 7000 lm	98 - 144 lm/W
	5000 K	5 - 52 W	520 - 7400 lm	104 - 153 lm/W
	5700 K	5 - 52 W	520 - 7400 lm	104 - 153 lm/W

High density modules

* Data for V01 optic.

Check VIZULO members section for additional information

4000 K | CRI 70

Number of LED's		16			32			48	
Nominal current, mA	280	480	770	270	510	700	270	350	600
Power, W	15	25	39	27	50	68	39	50	87
Luminous Flux, lm	2010	3310	4920	4000	7111	9280	6400	8035	13100
Efficacy, lm/W	134	132	126	148	142	136	164	161	151
Power factor, PF		Up to 0.98			Up to 0.97			Up to 0.98	

Luminaire efficacy	2700 K	15 - 87 W	1730 - 11210 lm	108 - 140 lm/W
	3000 K	15 - 87 W	1900 - 12320 lm	119 - 155 lm/W
	5000 K	15 - 87 W	2010 - 13100 lm	126 - 164 lm/W
	5700 K	15 - 87 W	2010 - 13100 lm	126 - 164 lm/W

Eco modules

* Data for L01 optic.

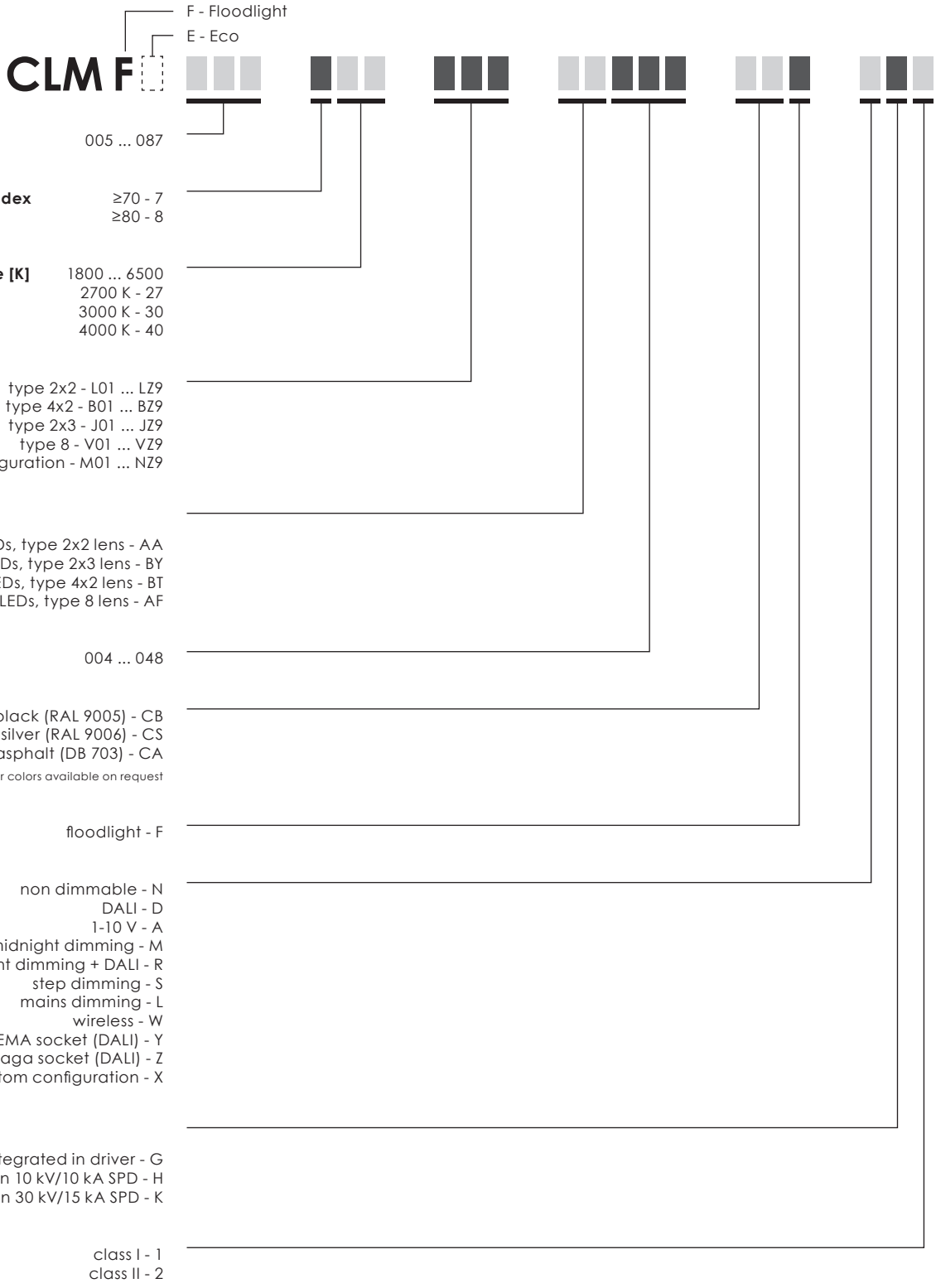
Check VIZULO members section for additional information

4000 K | CRI 70

Number of LED's		8			12			16	
Nominal current, mA	280	470	700	280	450	700	280	490	710
Power, W	15	25	38	22	35	55	28	50	74
Luminous Flux, lm	1960	3120	4340	2980	4470	6300	4100	6460	8810
Efficacy, lm/W	131	125	114	135	128	115	146	129	119
Power factor, PF		Up to 0.98			Up to 0.98			Up to 0.97	

Luminaire efficacy	2700 K	5 - 74 W	1833 - 8255 lm	107 - 137 lm/W
	3000 K	5 - 74 W	1960 - 8600 lm	114 - 142 lm/W
	5000 K	5 - 74 W	1960 - 8810 lm	114 - 147 lm/W
	5700 K	5 - 74 W	1960 - 8810 lm	114 - 147 lm/W

Model name principles



Power [W] 005 ... 087

Color rendering index
≥70 - 7
≥80 - 8

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

Lens
type 2x2 - L01 ... LZ9
type 4x2 - B01 ... BZ9
type 2x3 - J01 ... JZ9
type 8 - V01 ... VZ9
custom configuration - M01 ... NZ9

LED module type
8 LEDs, type 2x2 lens - AA
12 LEDs, type 2x3 lens - BY
16 LEDs, type 4x2 lens - BT
16 LEDs, type 8 lens - AF

LED quantity 004 ... 048

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

Console floodlight - F

Dimming
non dimmable - N
DALI - D
1-10 V - A
midnight dimming - M
midnight dimming + DALI - R
step dimming - S
mains dimming - L
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

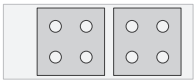
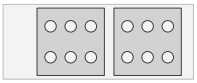
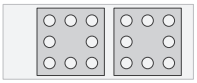
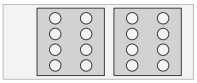
Insulation
class I - 1
class II - 2

EXAMPLE CLMF 020 730 L17 A008 CAF NG1

*** 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
AA	3	4	8	24	2	Standard Eco	type 2x2 L01…LZ9	
BY	3	6	12	36	6	Eco	type 2x3 J01…JZ9	
AF	3	8	16	48	2	Standard	type 8 V01…VZ9	
BT	3	8	16	48	8	Standard Eco	type 4x2 B01…BZ9	

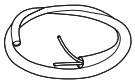
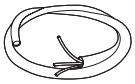
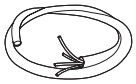
Cable core count

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

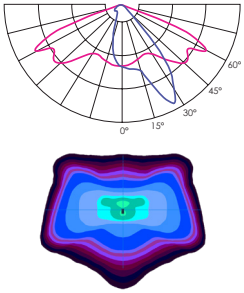





Cable length [m]	2 x 1.5 mm²	3 x 1.5 mm²	4 x 1.5 mm²	5 x 1.5 mm²
0.5	*Art. 70100184*	*Art. 70100179*	*Art. 70100402*	*Art. 70100409*
1	*Art. 70100156*	*Art. 70100193*	*Art. 70000527*	*Art. 70100220*
1.5	*Art. 70100391*	*Art. 70100258*	*Art. 70100403*	*Art. 70100410*
2	*Art. 70100202*	*Art. 70100177*	*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*

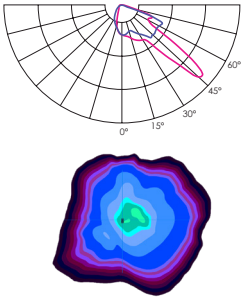
Optics

Type I

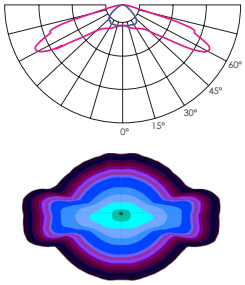
L06



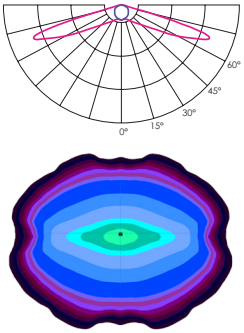
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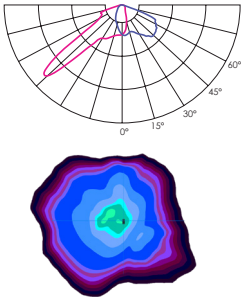
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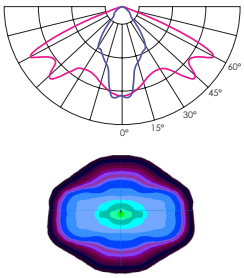
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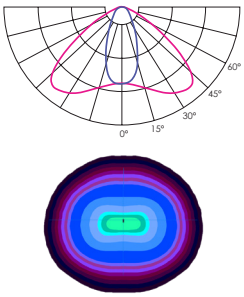
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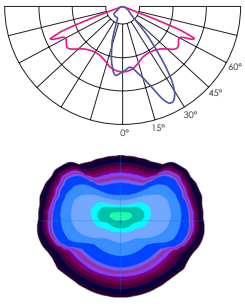
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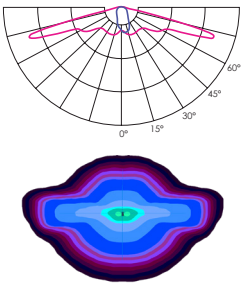
L61



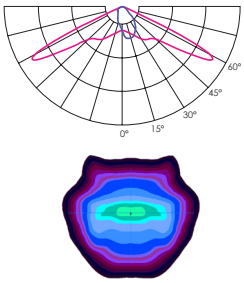
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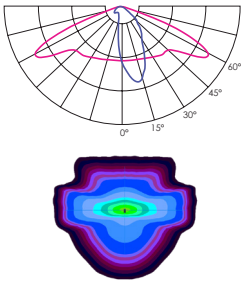
L94



V45

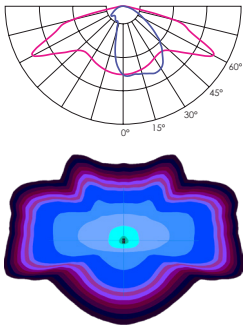


V57

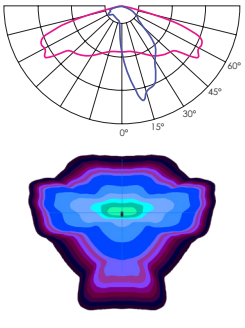


Type II

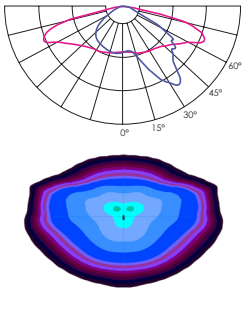
L02



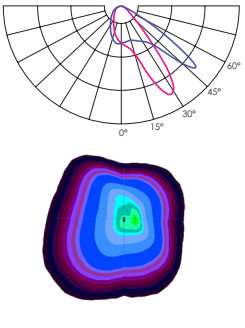
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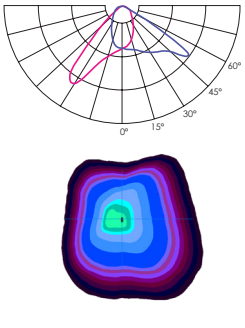
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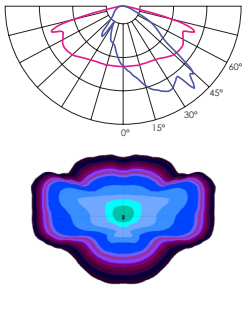
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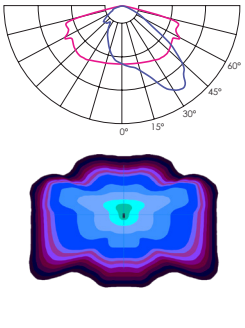
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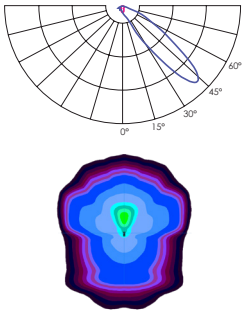
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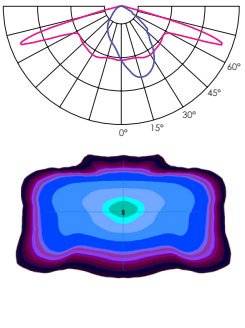
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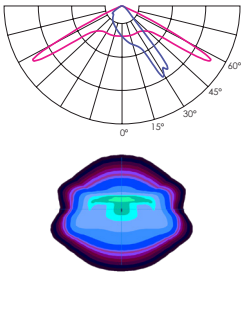
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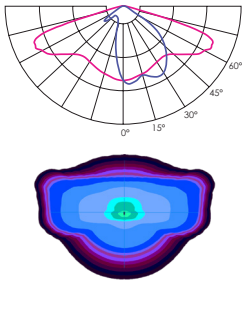
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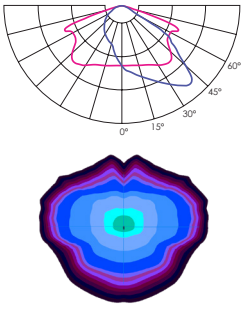
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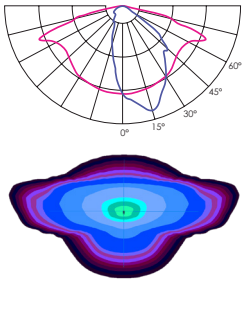
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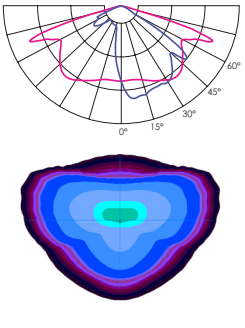
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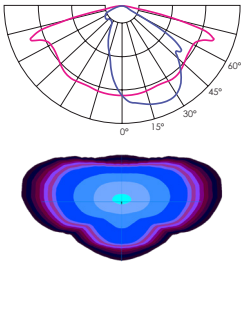
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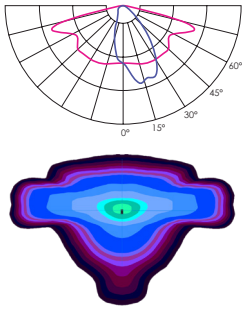
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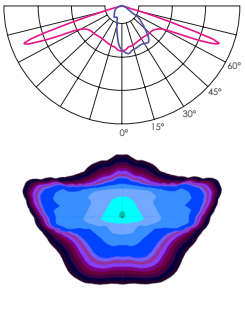
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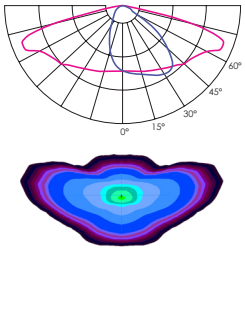
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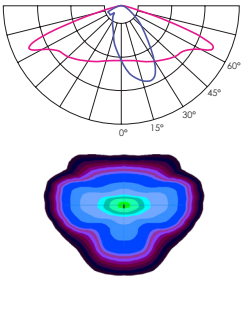
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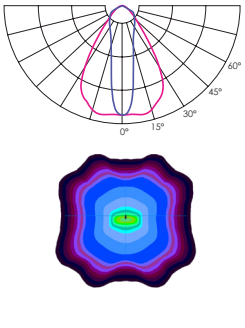
LC5



V04

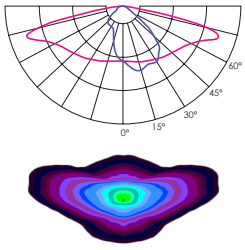


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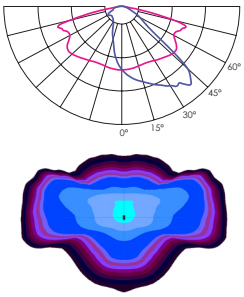


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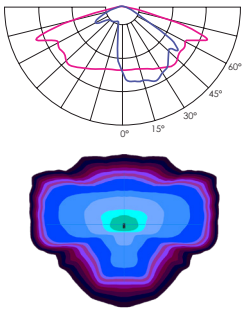
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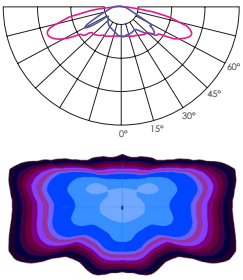
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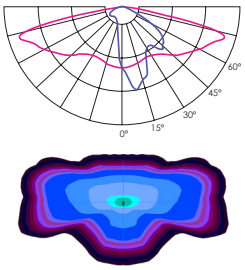
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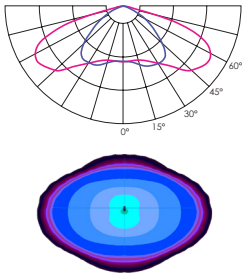
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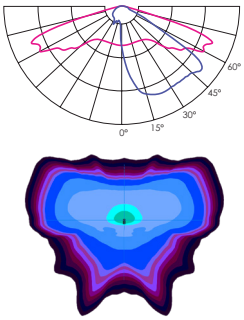
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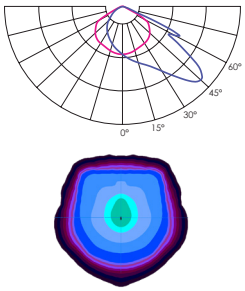
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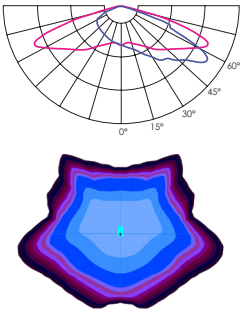
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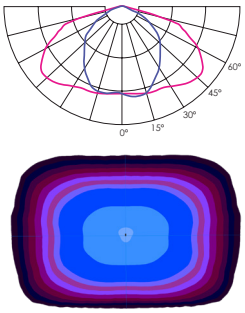
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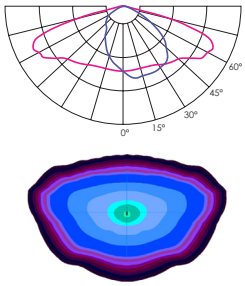
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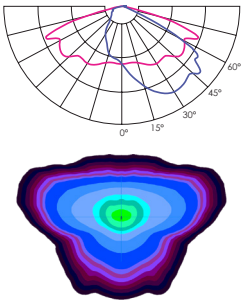
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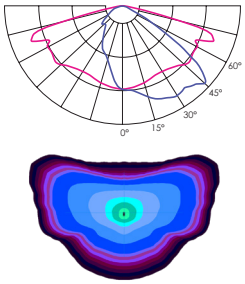
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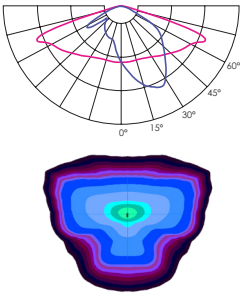
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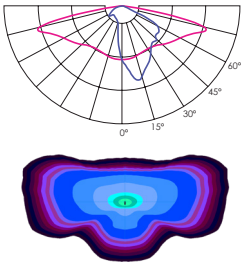
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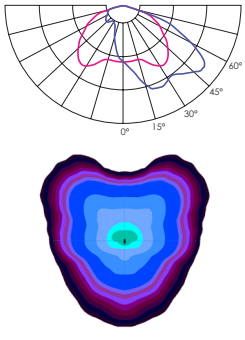


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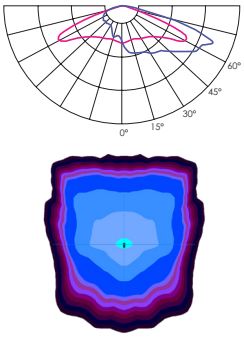


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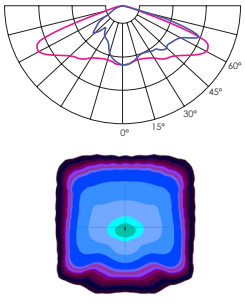
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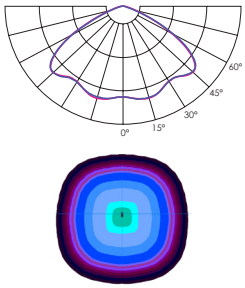


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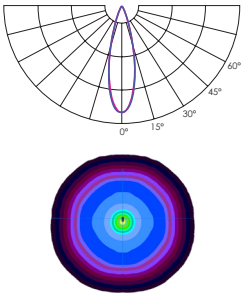


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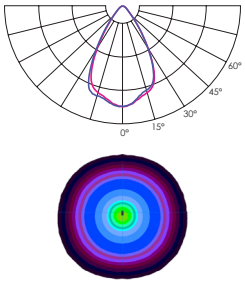
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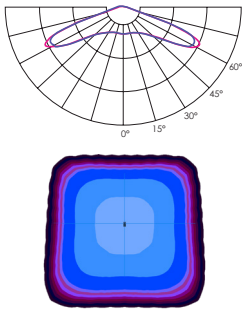
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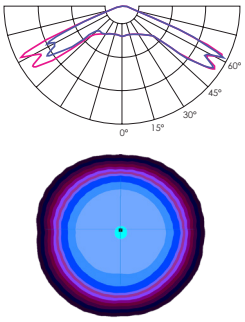
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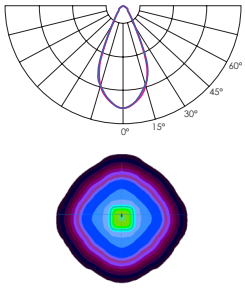
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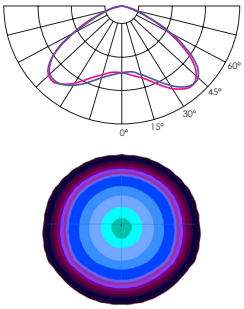
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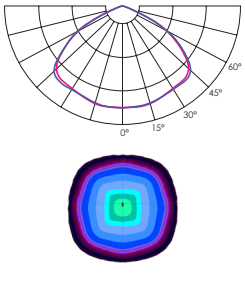
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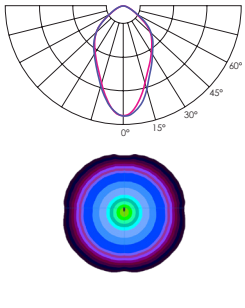
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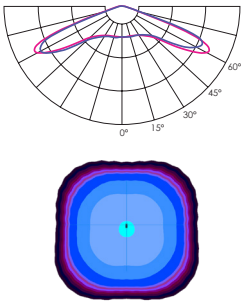
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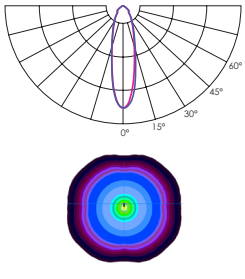
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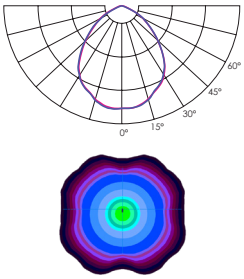
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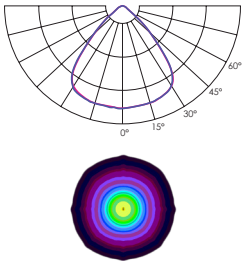
V52



V53



V75





Pedestrian crossing optics

IP66 IK09 RoHS PLUS [7] EPD [8]

V	220 - 240
Hz	50 - 60
W	5 - 52 [1] 5 - 74 [2]
lm	Up to 7 400 [1] Up to 8 810 [2]
lm/W	90 - 153 [1] 107 - 147 [2]
K	2700 / 3000 / 4000 [3]
°C	-40 up to +50 [4]
CRI	>70 / >80 / >90 [3]

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:	Pre-wired cable 30 cm [5]
Mounting:	On bracket / wall / ceiling
Socket:	NEMA Top / Zhaga Top and Bottom
Intelligent Control:	Stand-alone / Group / CMS
Sensor:	Motion / Motion + Daylight / Daylight
Surge protection:	4 / 6 / 10 kV [6]
Corrosion protection:	Up to C5
Neto weight:	Up to 4.6 kg
Max. wind load area, SCd:	0.031 m^2

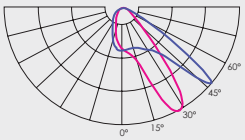
1) Standard modules, lumen output indicated at CRI > 70
2) Eco modules, lumen output indicated at CRI > 70
3) 1800 / 2200 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT
   Note! *Only fixtures with CCT of 3000 K or lower are DarkSky approved!*
4) Operating temperature differs depending on chosen output wattage
5) Other lengths available on request
6) 10 kV (L-N; L/N-PE) surge protection device available on request
7) Coming soon
8) EPD registration number: S-P-05886 (link to page)

* 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.

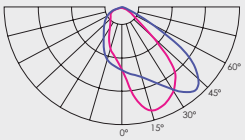
Technical parameters for final product can differ from typical data by 7% due to special conditions of LED manufacturing processes.

Right side traffic

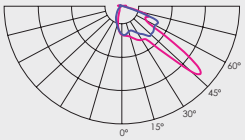
L11



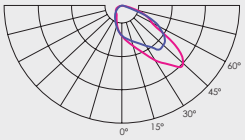
L11 ECO

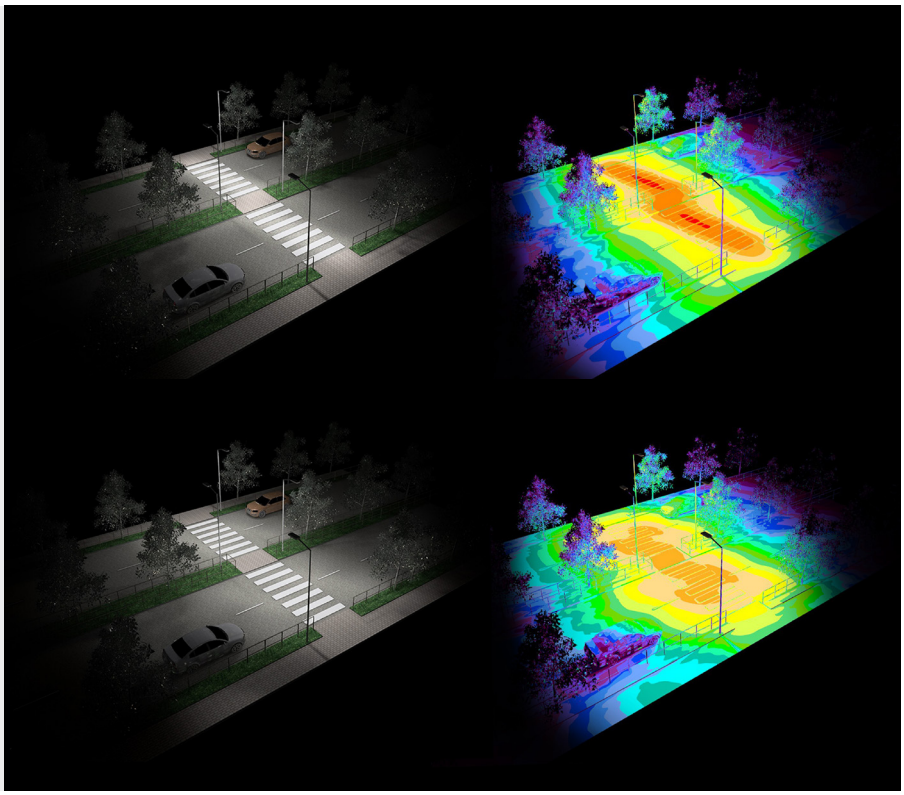


L36



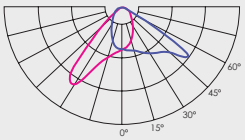
L36 ECO



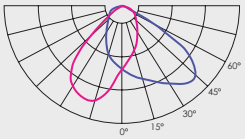


Left side traffic

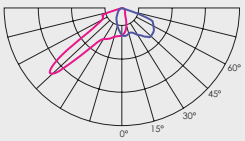
L12



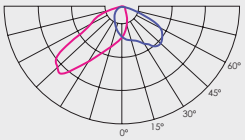
L12 ECO

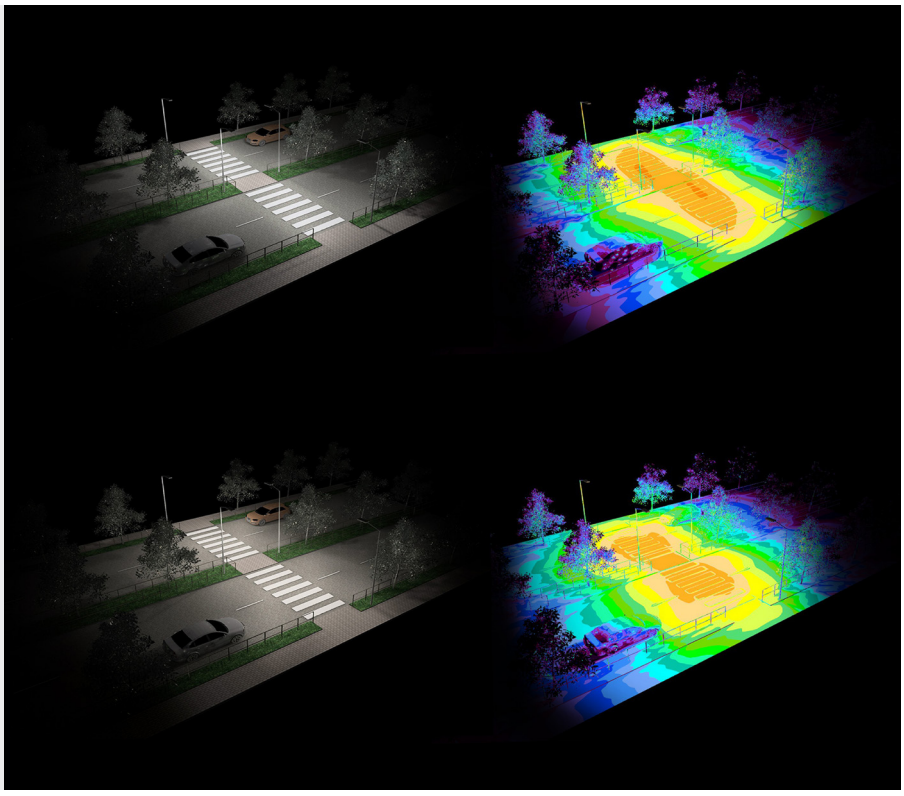


L46



L46 ECO



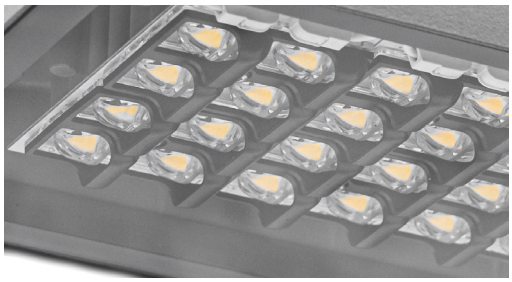


Backlight cutter

Backlight cutter | black

Art. 70000661

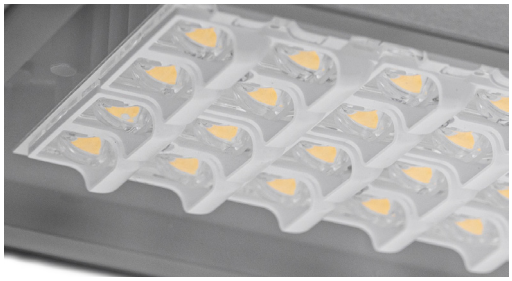




Backlight cutter | white

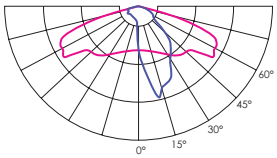
Art. 70000662

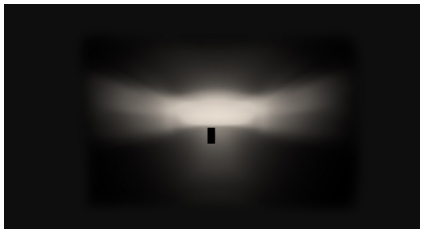


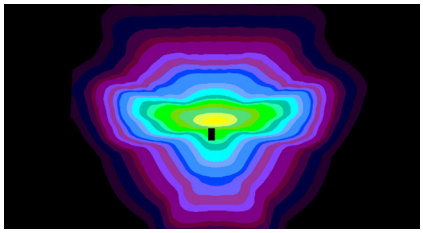


Optical loses from 10% to 31% depending from used optic.

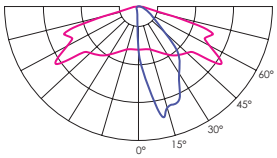
Without backlight cutter

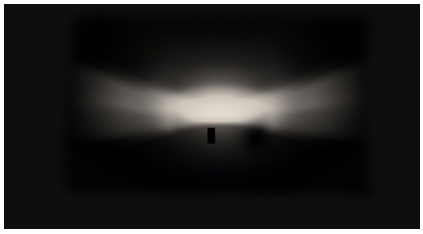


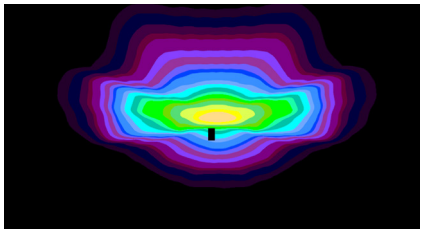




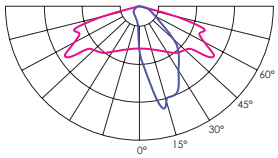
Backlight cutter | black

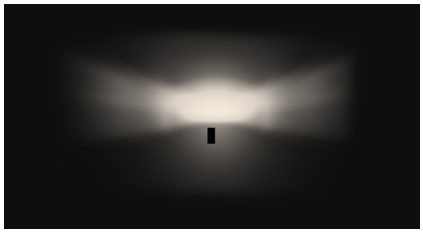


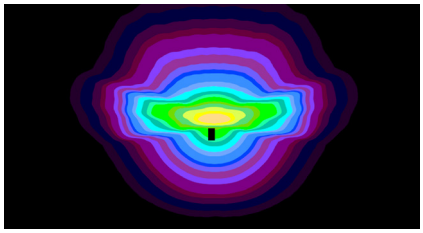




Backlight cutter | white







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*

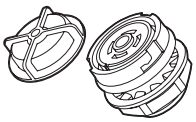


Dummy Link for NEMA Socket ..... *Art. 70000113*



Zhaga Socket

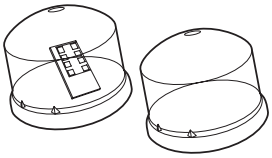
with cap ..... *Art. 70000613*
without cap ..... *Art. 70000612*



Luminaire controller for Zhaga-standard connectors

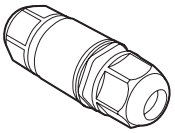
ø 80 mm

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.

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.

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 **[Coming soon]**

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.

DarkSky Approved - a DarkSky program seal of approval

DarkSky Approved certification is granted to outdoor lighting fixtures meeting the criteria outlined by DarkSky, an organization that aims to reduce light pollution, enabling clearer night skies and mitigating the impact on wildlife and human health. DarkSky Approved luminaires are shielded to cut off uplight, utilize energy-efficient light sources, and employ measures to limit glare. This certification reflects a dedication to responsible outdoor lighting, valued by communities, businesses, and individuals striving to protect nocturnal environments.

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.

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.



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