

vizULO



Lapwing
HANGING

Lapwing hanging



RAL7035



RAL9006

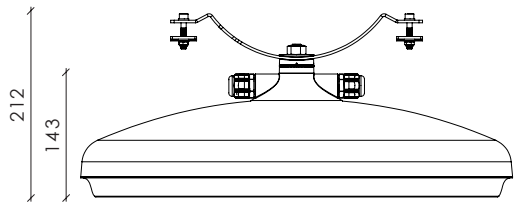


DB703

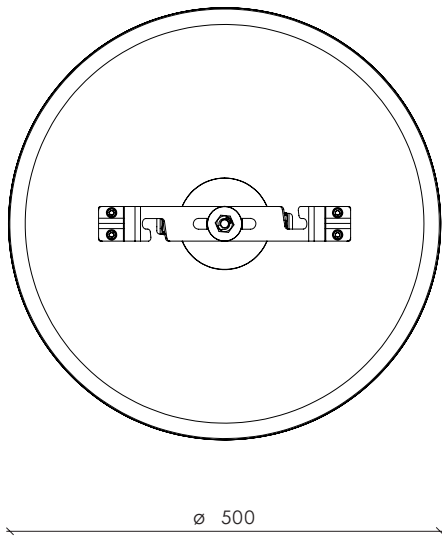
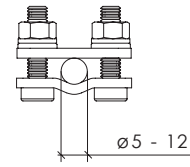


RAL9005

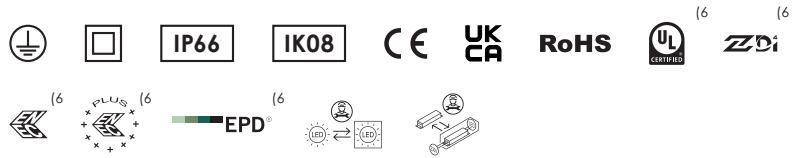
Other colors
available on request



Wire mounting bracket



Technical information



V	198 - 264 / 110 - 277 ¹⁾
Hz	50 - 60
W	5 - 130
lm	Up to 18850 ²⁾
lm/W	Up to 160
K	2700 / 3000 / 4000 / TW 2700 - 6500 ³⁾
°C	-40 to +50 5 - 100 W -40 to +35 100 - 130 W
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:	Tool-less / Pre-wired cable 30 cm ⁴⁾
Mounting:	On wire ø 5 - 12 mm
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 9.5 kg

¹⁾ Maximum operating voltage, ENEC certificate voltage 220 - 240 V, UL certificate voltage 110 - 277 V

²⁾ Lumen output indicated at CRI > 70

³⁾ Available on request along with other not listed CRI and CCT

⁴⁾ Other lengths available on request

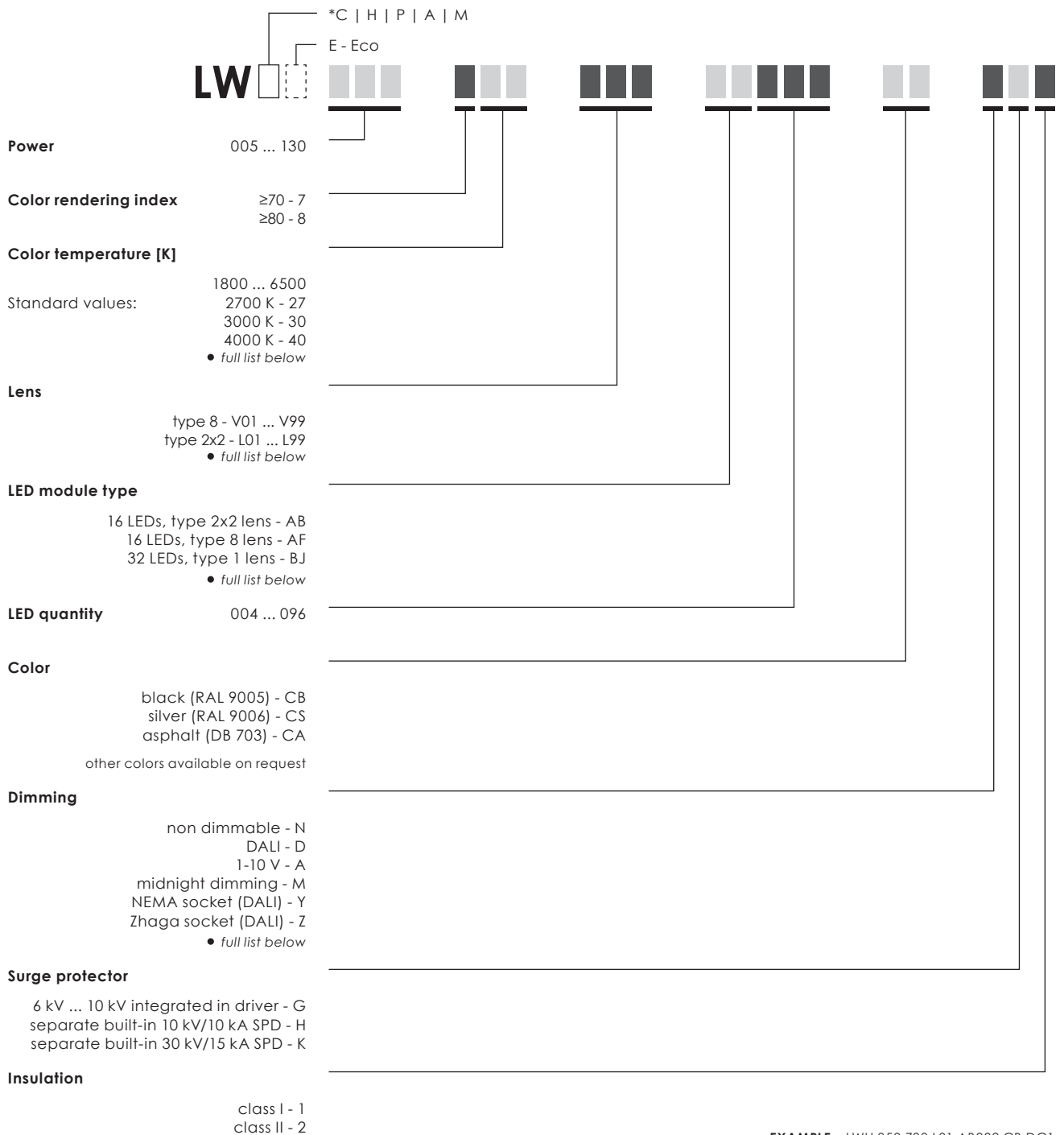
⁵⁾ 10 kV (L-N; L/N-PE) surge protection device available on request

⁶⁾ 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.

Model name principles



EXAMPLE LWH 050 730 L01 AB032 CB DG1

• Full list of options

Color temperature [K]

1800 ... 6500
2700 K - 27
3000 K - 30
4000 K - 40
Tunable White 2700-6500 - TW
Nature Friendly Red - NR
Nature Friendly Amber - NA
Nature Friendly 1800 K - NK

Lens

type 8 - V01 ... V99
type 2x2 - L01 ... L99
type 6x1 - T01 ... T99
type 12 - Y01 ... Y99
type 1 - Z01 ... Z99
custom configuration - M01 ... N99

LED module type

8 LEDs, type 2x2 lens - AA
16 LEDs, type 2x2 lens - AB
16 LEDs, type 8 lens - AF
32 LEDs, type 8 lens - AG
48 LEDs, type 2x2 lens - BE
96 LEDs, type 8 lens - BF
8 LEDs, type 8 lens - BH
24 LEDs, type 1 lens - BJ
24 LEDs, type 2x2 lens - BL
48 LEDs, type 8 lens - BM
48 LEDs, type 1 lens - BN
80 LEDs, type 1 lens - BP

Dimming

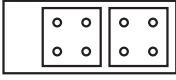
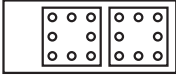
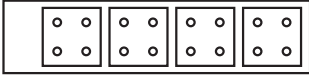
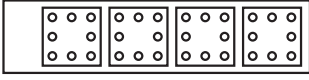
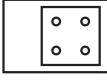
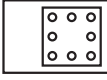
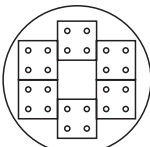
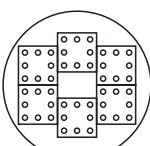
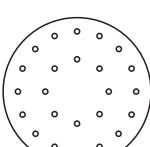
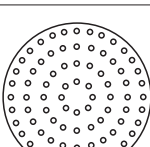
non dimmable - N
DALI - D
1-10 V - A
midnight dimming - M
midnight dimming + DALI - R
step dimming - S
mains dimming - L
wireless - W
NEMA socket (DALI) - Y
Zhaga socket (DALI) - Z
**custom configuration - X

* C - Street (side-entry) | H - Hanging | P - Post-top | A - Top-entry | M - Mushroom (42 - 60 mm)

** 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
AA	4	4	8	32	2	Standard Eco	type 2x2 L01...LZ9	 A008
AF	4	4	16	64	4	Standard	type 8 V01...VZ9	 F016
AB	2	8	16	32	2	Standard Eco	type 2x2 L01...LZ9	 B016
AG	2	16	32	64	4	Standard	type 8 V01...VZ9	 G032
BG	8	4	4	32	2	Standard Eco	type 2x2 L01...LZ9	
BH	8	4	8	64	4	Standard	type 8 V01...VZ9	
BL	1	24	24	24	-	Standard Eco	type 2x2 L01...LZ9	
BM	1	24	48	48	-	Standard	type 8 V01...VZ9	
BJ	1	8	24	24	2	Standard Eco	type 1 Z01...ZZ9	
BP	1	80	80	80	-	Standard	type 1 Z01...ZZ9	

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

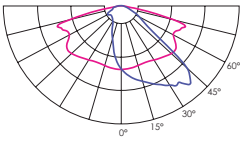
⁽²⁾ DALI wires used only for internal connection between driver and Zhaga socket(s)

⁽³⁾ +2 cores for external DALI connection

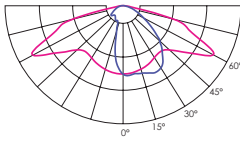
Optics

Standard modules

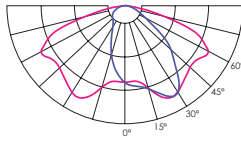
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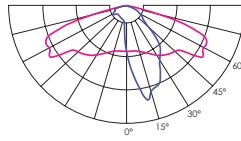
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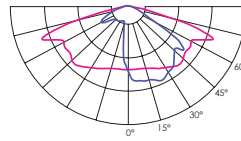
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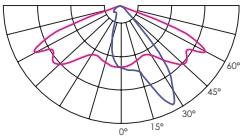
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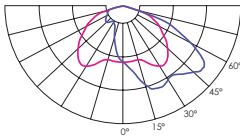
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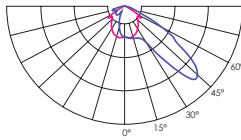
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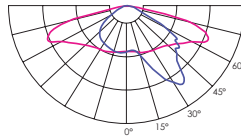
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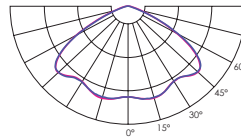
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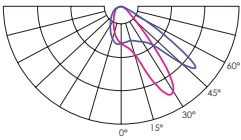
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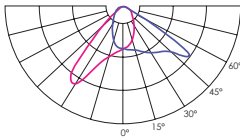
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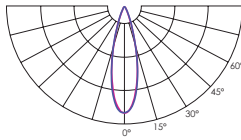
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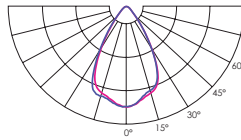
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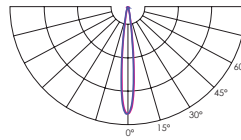
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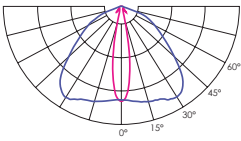
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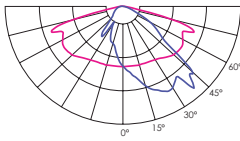
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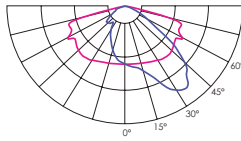
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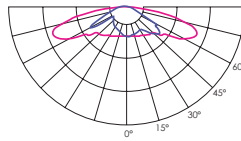
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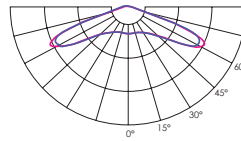
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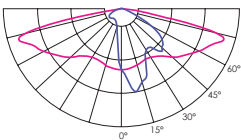
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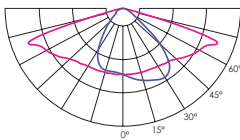
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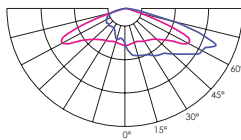
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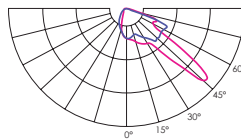
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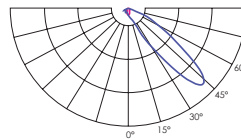
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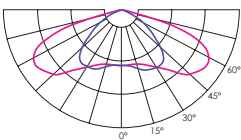
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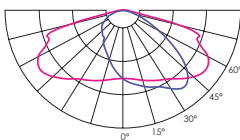
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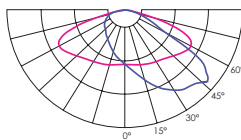
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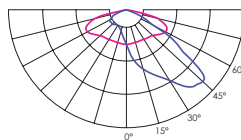
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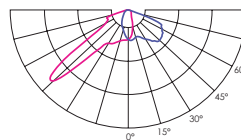
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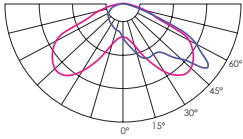
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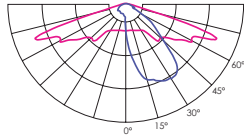
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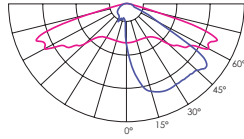
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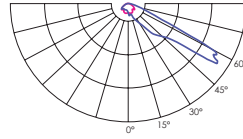
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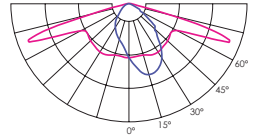
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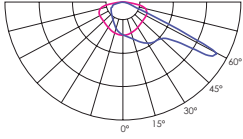
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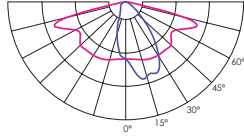
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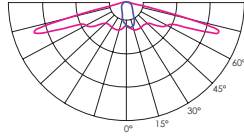
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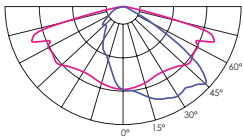


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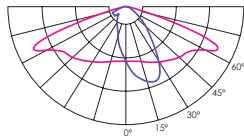


High density modules

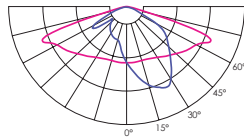
V01



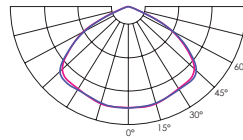
V04



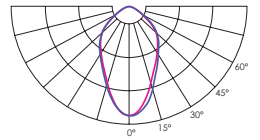
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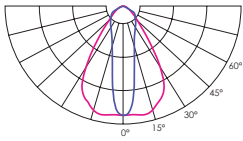
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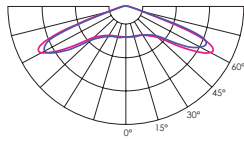
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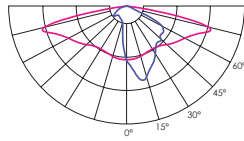
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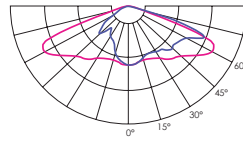
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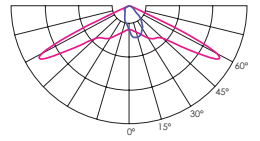
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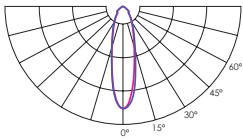
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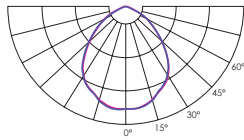
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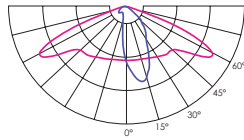
V52



V53



V57





Pedestrian crossing optics



V	198 - 264 / 110 - 277 ¹⁾
Hz	50 - 60
W	5 - 130
lm	Up to 18850 ²⁾
lm/W	Up to 160
K	2700 / 3000 / 4000 / TW 2700 - 6500 ³⁾
°C	-40 to +50 5 - 100 W -40 to +35 100 - 130 W
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:	Tool-less / Pre-wired cable 30 cm ⁴⁾
Mounting:	On wire ø 5 - 12 mm
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 9.5 kg

¹⁾ Maximum operating voltage, ENEC certificate voltage 220 - 240 V, UL certificate voltage 110 - 277 V

²⁾ Lumen output indicated at CRI > 70

³⁾ Available on request along with other not listed CRI and CCT

⁴⁾ Other lengths available on request

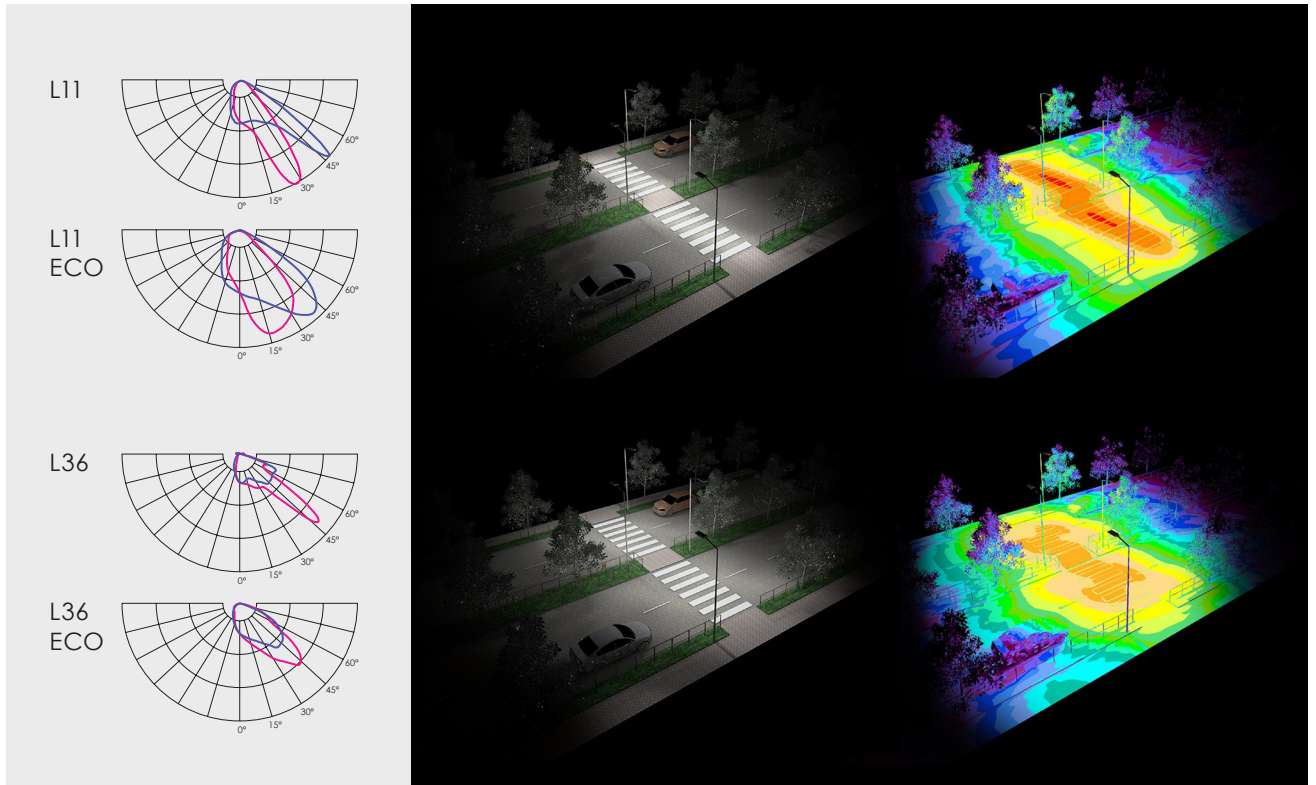
⁵⁾ 10 kV (L-N; L/N-PE) surge protection device available on request

⁶⁾ Coming soon

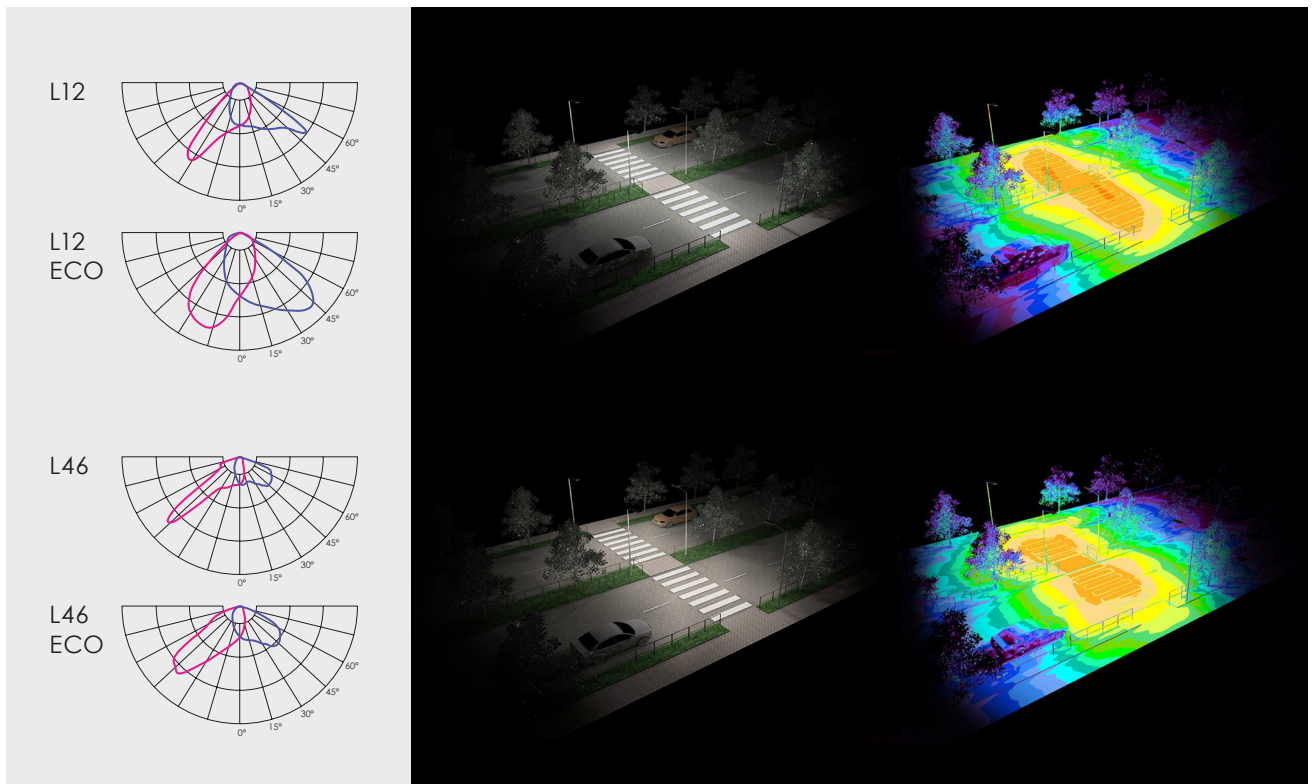
*This value is only informative and may change according to selected article. LED Lifetime is strongly depending from LEDs current and junction temperature – increase in LED current and luminaire power lead to increase of junction temperature and as consequence lifetime decrease. Thus, luminaire models 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.

Right side traffic



Left side traffic



Backlight cutter

Backlight cutter | black

Art. 70000661



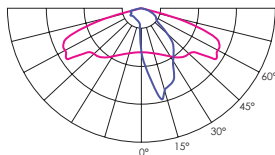
Backlight cutter | white

Art. 70000662

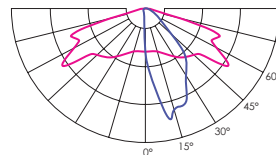


Optical losses from 10% to 31% depending from used optic.

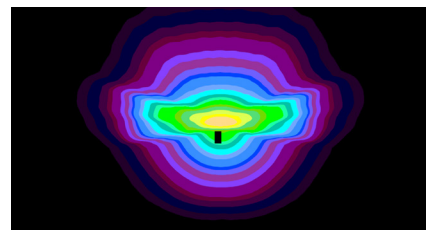
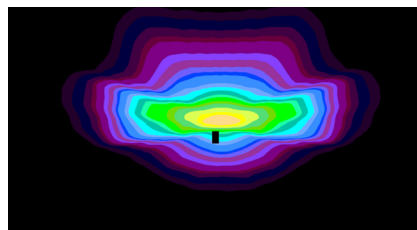
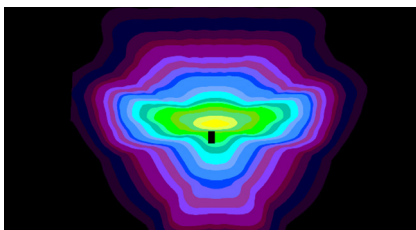
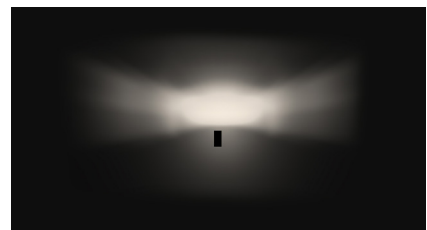
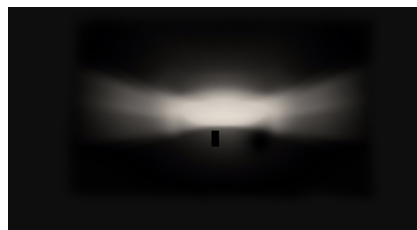
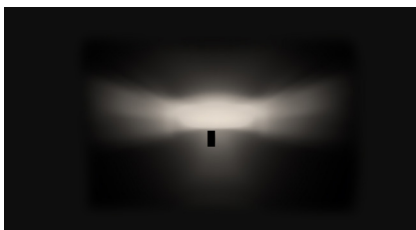
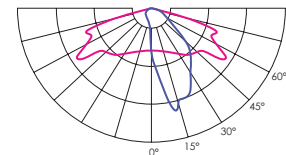
Without backlight cutter



Backlight cutter | black



Backlight cutter | white

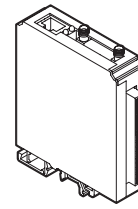


Accessories

Citintelly Segment controller

Art. 70010004

Segment Controller receives commands from Citintelly server via GSM and transmits tasks to Luminaire Controller via radio frequency communication.

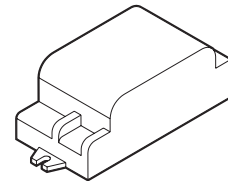


Citintelly Luminaire controller

Art. 70010001 /
LC2M-23-05-R Luminaire
Controller - 2 relays

Luminaire Controller is wireless mesh-networking device that uses 868 MHz for communication with Segment Controller and other Luminaire Controllers. It is delivered in various configurations to meet the needs of your applications.

Art. 70010002 /
LC2M-12-05-R Luminaire
Controller - 1 relay



Citintelly Surge Protection device

Art. 70020001

Surge Protection device offers protection against lighting surges;

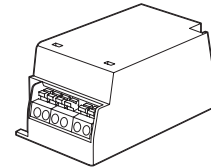
Voltage Protection level up (L-N) $\leq 1,5$ kV

Voltage Protection level up (L/N-PE) $\leq 2,0$ kV

$U_{oc} = 10$ kV

$I_{max} = 10$ kA

$I_{nom} = 5$ kA



Radio Frequency Antenna

Art. 70000108

Heavy duty IP67 enclosure
Mounted in cabinet or luminaire body
with 14 mm screw
SMA connector



NEMA Socket

2213362-3, 5 pin NEMA socket 105°C wires

Art. 70000362

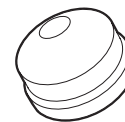
2213362-4, 7 pin NEMA socket 105°C wires

Art. 70000333



Dummy Link for NEMA Socket

Art. 70000113



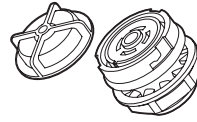
Zhaga socket no cap

Art. 70000612



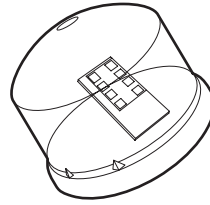
Zhaga socket with cap

Art. 70000613



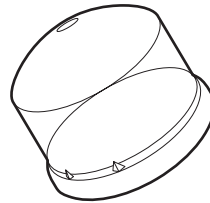
MSLC205RG Luminaire controller + radar, Zhaga, 80 mm

Art. 70010027



MSLC205RGL Luminaire controller, Zhaga, 80 mm

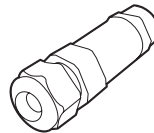
Art. 70010029



Connector

Art. 70000313

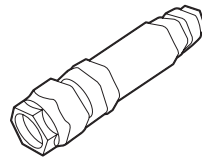
IP66 rated connector offers easy installation of the street luminaires.
3 wire cable connector



Connector

Art. 70000304

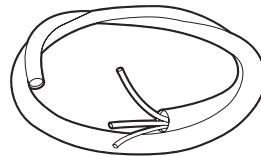
IP66 rated connector offers easy installation of the street luminaires.
5 wire cable connector



Pre-installed cable sets

For internal power supply:

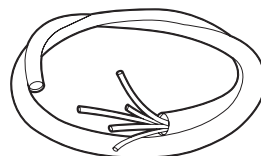
3 x 1,5 mm - 0,5 m long cable.....	Art. 70000319
3 x 1,5 mm - 5 m long cable.....	Art. 70000320
3 x 1,5 mm - 6 m long cable.....	Art. 70000321
3 x 1,5 mm - 8 m long cable.....	Art. 70000322
3 x 1,5 mm - 10 m long cable.....	Art. 70000323
3 x 1,5 mm - 12 m long cable.....	Art. 70000324
3 x 1,5 mm - 18 m long cable.....	Art. 70000325
3 x 1,5 mm - 20 m long cable.....	Art. 70000425
3 x 1,5 mm - 22 m long cable.....	Art. 70000426
3 x 1,5 mm - 25 m long cable.....	Art. 70000427
3 x 1,5 mm - 32 m long cable.....	Art. 70000430
3 x 1,5 mm - 42 m long cable.....	Art. 70000431
3 x 1,5 mm - 50 m long cable.....	Art. 70000432



Pre-installed cable sets

For internal power supply:

5 x 1,5 mm - 0,5 m long cable.....	Art. 70000305
5 x 1,5 mm - 5 m long cable.....	Art. 70000316
5 x 1,5 mm - 6 m long cable.....	Art. 70000317
5 x 1,5 mm - 8 m long cable.....	Art. 70000318
5 x 1,5 mm - 10 m long cable.....	Art. 70000306
5 x 1,5 mm - 12 m long cable.....	Art. 70000307
5 x 1,5 mm - 18 m long cable.....	Art. 70000308
5 x 1,5 mm - 20 m long cable.....	Art. 70000428
5 x 1,5 mm - 22 m long cable.....	Art. 70000429
5 x 1,5 mm - 25 m long cable.....	Art. 70000429
5 x 1,5 mm - 32 m long cable.....	Art. 70000433
5 x 1,5 mm - 42 m long cable.....	Art. 70000434
5 x 1,5 mm - 50 m long cable.....	Art. 70000435



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

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.



*** Coming soon**

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.



*** Coming soon**

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.



*** Coming soon**

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.



*** Coming soon**

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

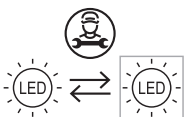
The ENEC+ Mark is the high quality European Mark for LED – based electronic products. It demonstrates the product's compliance with the IEC standards for performance of LED modules and LED based luminaires. The ENEC+ Mark can only be granted to a product that has already acquired the ENEC Mark.



*** Coming soon**

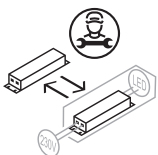
International EPD System – Environmental Product Declaration available

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 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.



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