

**vizulo**



Lapwing  
SIDE ENTRY

# Lapwing side entry



RAL7035



RAL9006

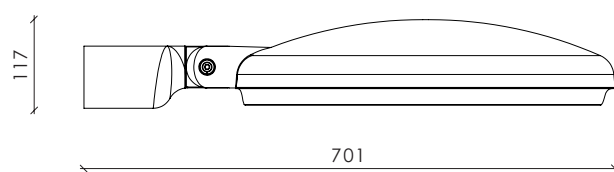
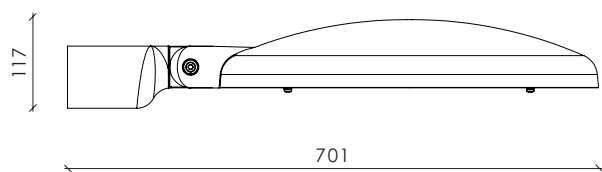


DB703

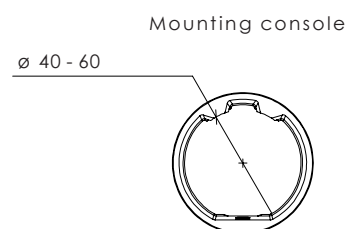
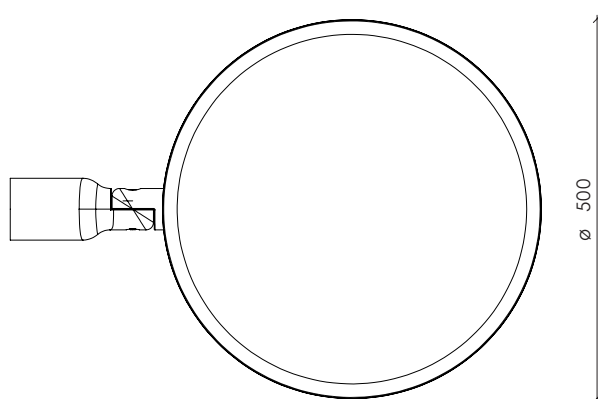


RAL9005

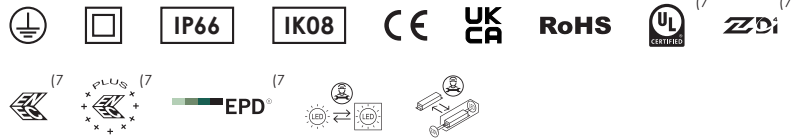
Other colors  
available on request



Dimensions with Halo



## Technical information



<b>V</b>	198 - 264 / 110 - 277 <sup>(1)</sup>
<b>Hz</b>	50 - 60
<b>W</b>	5 - 130
<b>lm</b>	Up to 18850 <sup>(2)</sup>
<b>lm/W</b>	Up to 160
<b>K</b>	2700 / 3000 / 4000 / TW 2700 - 6500 <sup>(3)</sup>
<b>°C</b>	-40 to +50   5 - 100 W -40 to +35   100 - 130 W
<b>CRI</b>	>70 / >80 / >90 <sup>(3)</sup>

<b>Body:</b>	Die-cast aluminium
<b>Dimming:</b>	DALI / 1 - 10 V / Midnight dimming / Step dimming / Mains dimming
<b>Initial chromaticity:</b>	MacAdam 5
<b>Lifetime:</b>	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*
<b>Warranty:</b>	5 years
<b>Installation:</b>	Tool-less / Pre-wired cable 30 cm <sup>(4)</sup>
<b>Mounting:</b>	32 - 40 mm <sup>(5)</sup> / 40 - 60 mm / 76 mm <sup>(5)</sup>
<b>Socket:</b>	NEMA / Top and Bottom Zhaga
<b>Intelligent Control:</b>	Stand-alone / Group / CMS
<b>Sensor:</b>	Motion / Motion + Daylight / Daylight
<b>Surge protection:</b>	4 / 6 / 10 kV <sup>(6)</sup>
<b>Nature friendly:</b>	PC Amber / Red / 1800 K
<b>Corrosion protection:</b>	Up to C5
<b>Neto weight:</b>	Up to 9.5 kg

<sup>1)</sup> Maximum operating voltage, ENEC certificate voltage 220 - 240 V, UL certificate voltage 110 - 277 V

<sup>2)</sup> Lumen output indicated at CRI > 70

<sup>3)</sup> Available on request along with other not listed CRI and CCT

<sup>4)</sup> Other lengths available on request

<sup>5)</sup> Achievable with an adapter for 40 - 60 mm spigot

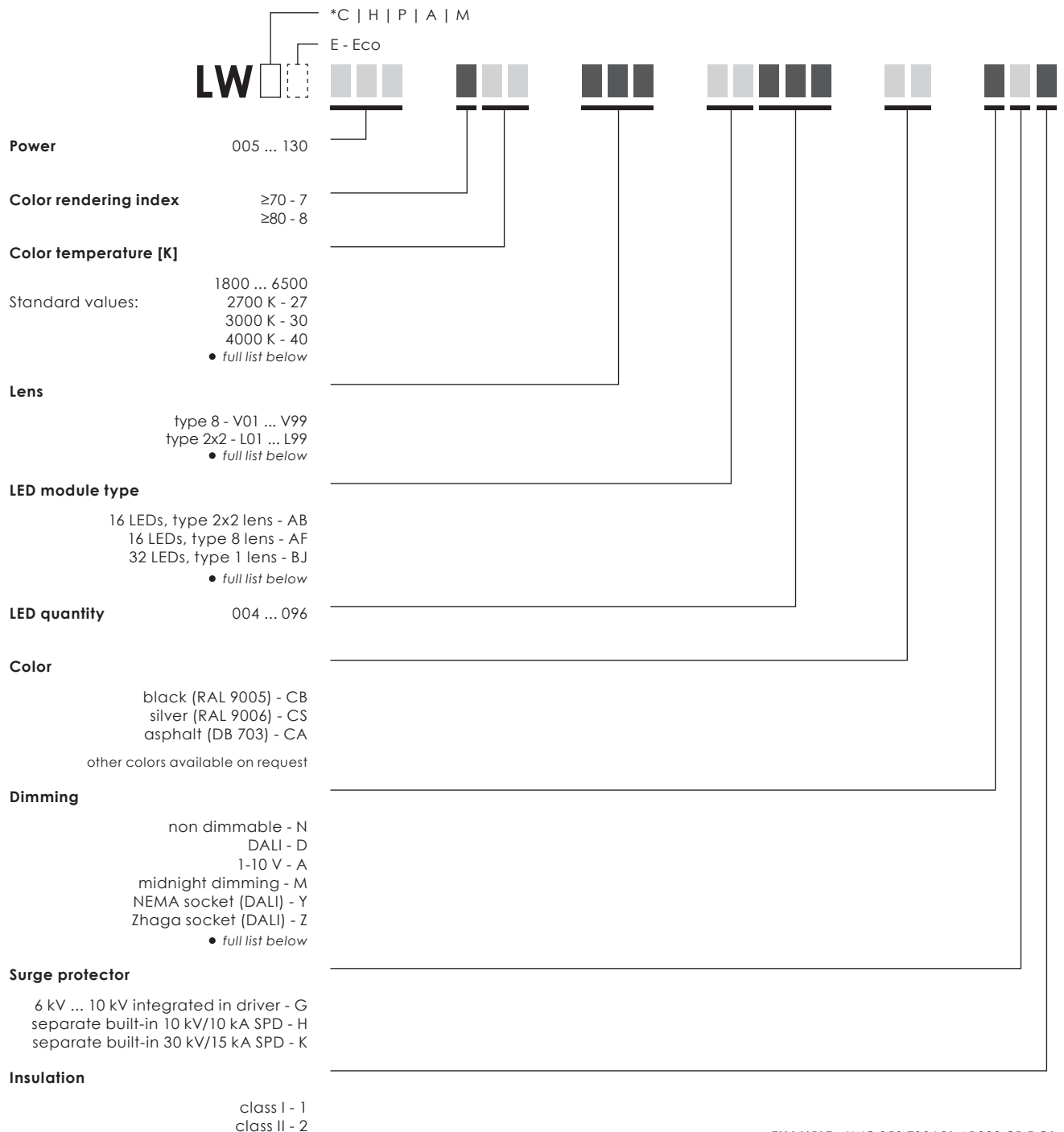
<sup>6)</sup> 10 kV (L-N; L/N-PE) surge protection device available on request

<sup>7)</sup> 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** LWC 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

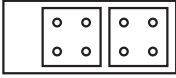
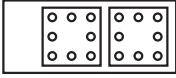
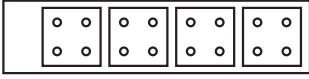
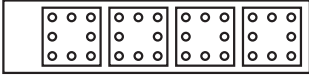
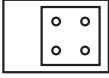
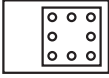
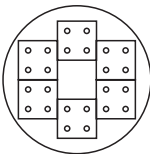
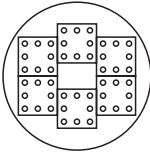
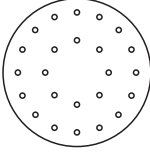
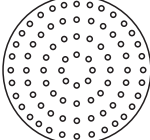
non dimmable - N  
DALI - D  
1-10 V - A  
midnight dimming - M  
midnight dimming + DALI - R  
step dimming - S  
mains dimming - L  
wireless - W  
NEMA socket (DALI) - Y  
Zhaga socket (DALI) - Z  
\*\*custom configuration - X

\* 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 <sup>(1)</sup>	4 <sup>(1)</sup>
None	Mains dimming	L	3	2
Zhaga	DALI	Z	3 <sup>(2)</sup>	2 <sup>(2)</sup>
Zhaga	Midnight dimming	X	3	2
Zhaga	Mains dimming	X	3	2
NEMA	DALI	Y	3 / 5 <sup>(3)</sup>	2 / 4 <sup>(3)</sup>
NEMA	Midnight dimming	X	3	2
NEMA	Step dimming	X	5 <sup>(1)</sup>	4 <sup>(1)</sup>
NEMA	Mains dimming	X	3	2

<sup>(1)</sup> 1 core unused

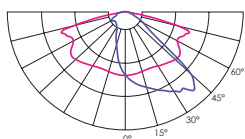
<sup>(2)</sup> DALI wires used only for internal connection between driver and Zhaga socket(s)

<sup>(3)</sup> +2 cores for external DALI connection

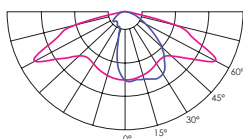
# Optics

## Standard modules

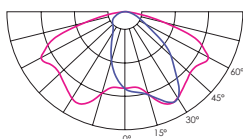
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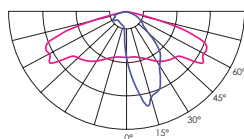
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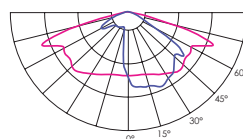
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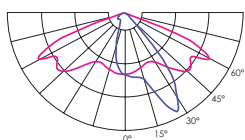
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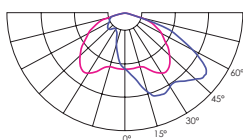
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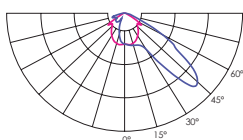
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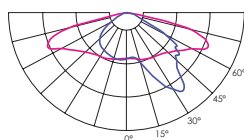
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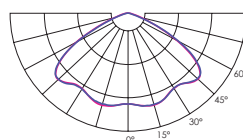
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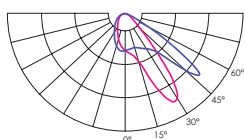
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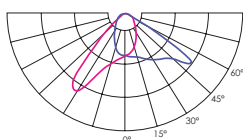
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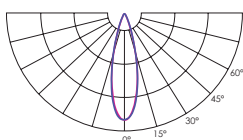
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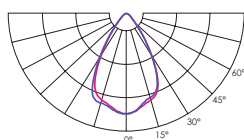
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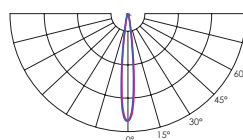
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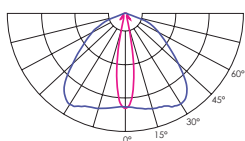
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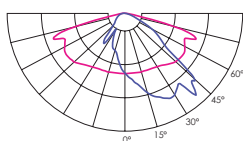
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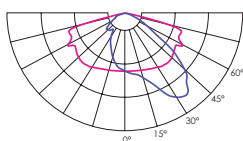
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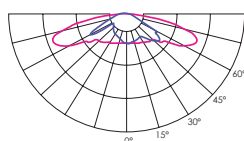
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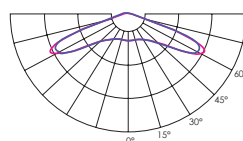
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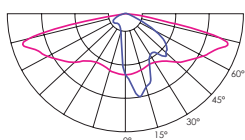
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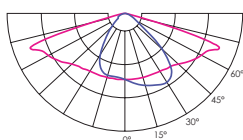
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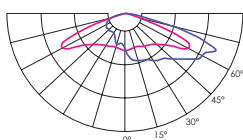
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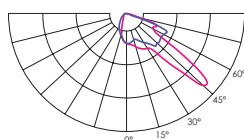
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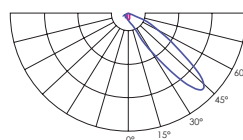
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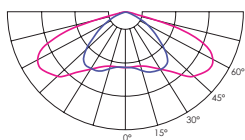
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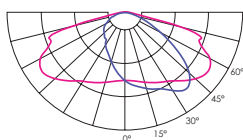
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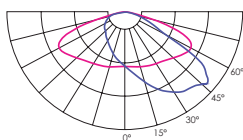
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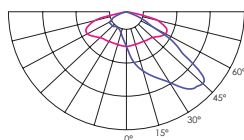
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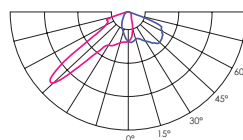
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L42

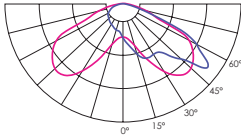


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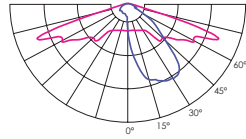




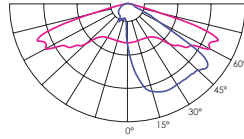
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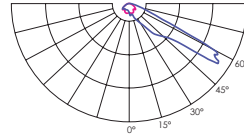
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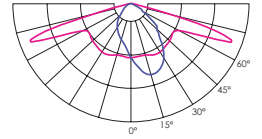
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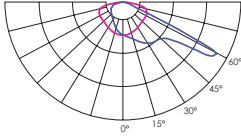
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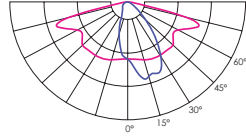
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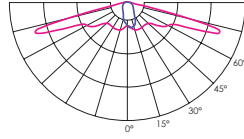
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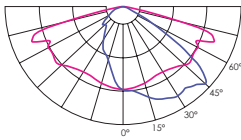


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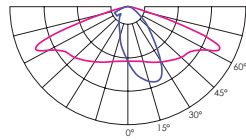


High density  
modules

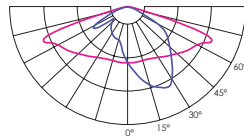
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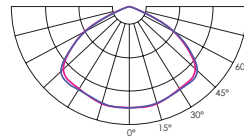
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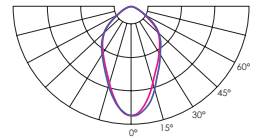
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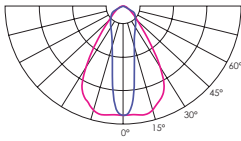
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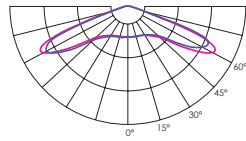
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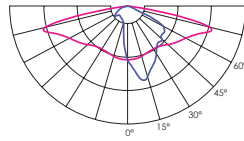
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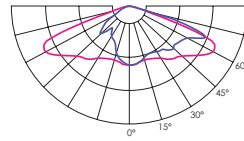
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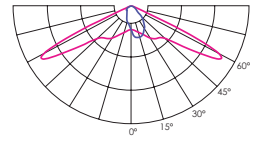
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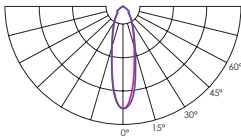
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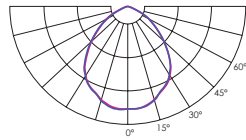
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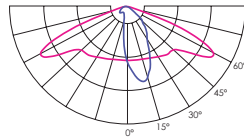
V52



V53



V57





# Pedestrian crossing optics



<b>V</b>	198 - 264 / 110 - 277 <sup>1)</sup>
<b>Hz</b>	50 - 60
<b>W</b>	5 - 130
<b>lm</b>	Up to 18850 <sup>2)</sup>
<b>lm/W</b>	Up to 160
<b>K</b>	2700 / 3000 / 4000 / TW 2700 - 6500 <sup>3)</sup>
<b>°C</b>	-40 to +50   5 - 100 W -40 to +35   100 - 130 W
<b>CRI</b>	>70 / >80 / >90 <sup>3)</sup>

<b>Body:</b>	Die-cast aluminium
<b>Dimming:</b>	DALI / 1 - 10 V / Midnight dimming / Step dimming / Mains dimming
<b>Initial chromaticity:</b>	MacAdam 5
<b>Lifetime:</b>	Eco 100 000 h (L90B10) at Ta = 25 °C* Standard 100 000 h (L98B10) at Ta = 25 °C*
<b>Warranty:</b>	5 years
<b>Installation:</b>	Tool-less / Pre-wired cable 30 cm <sup>4)</sup>
<b>Mounting:</b>	32 - 40 mm <sup>5)</sup> / 40 - 60 mm / 76 mm <sup>5)</sup>
<b>Socket:</b>	NEMA / Top and Bottom Zhaga
<b>Intelligent Control:</b>	Stand-alone / Group / CMS
<b>Sensor:</b>	Motion / Motion + Daylight / Daylight
<b>Surge protection:</b>	4 / 6 / 10 kV <sup>6)</sup>
<b>Nature friendly:</b>	PC Amber / Red / 1800 K
<b>Corrosion protection:</b>	Up to C5
<b>Neto weight:</b>	Up to 9.5 kg

<sup>1)</sup> Maximum operating voltage, ENEC certificate voltage 220 - 240 V, UL certificate voltage 110 - 277 V

<sup>2)</sup> Lumen output indicated at CRI > 70

<sup>3)</sup> Available on request along with other not listed CRI and CCT

<sup>4)</sup> Other lengths available on request

<sup>5)</sup> Achievable with an adapter for 40 - 60 mm spigot

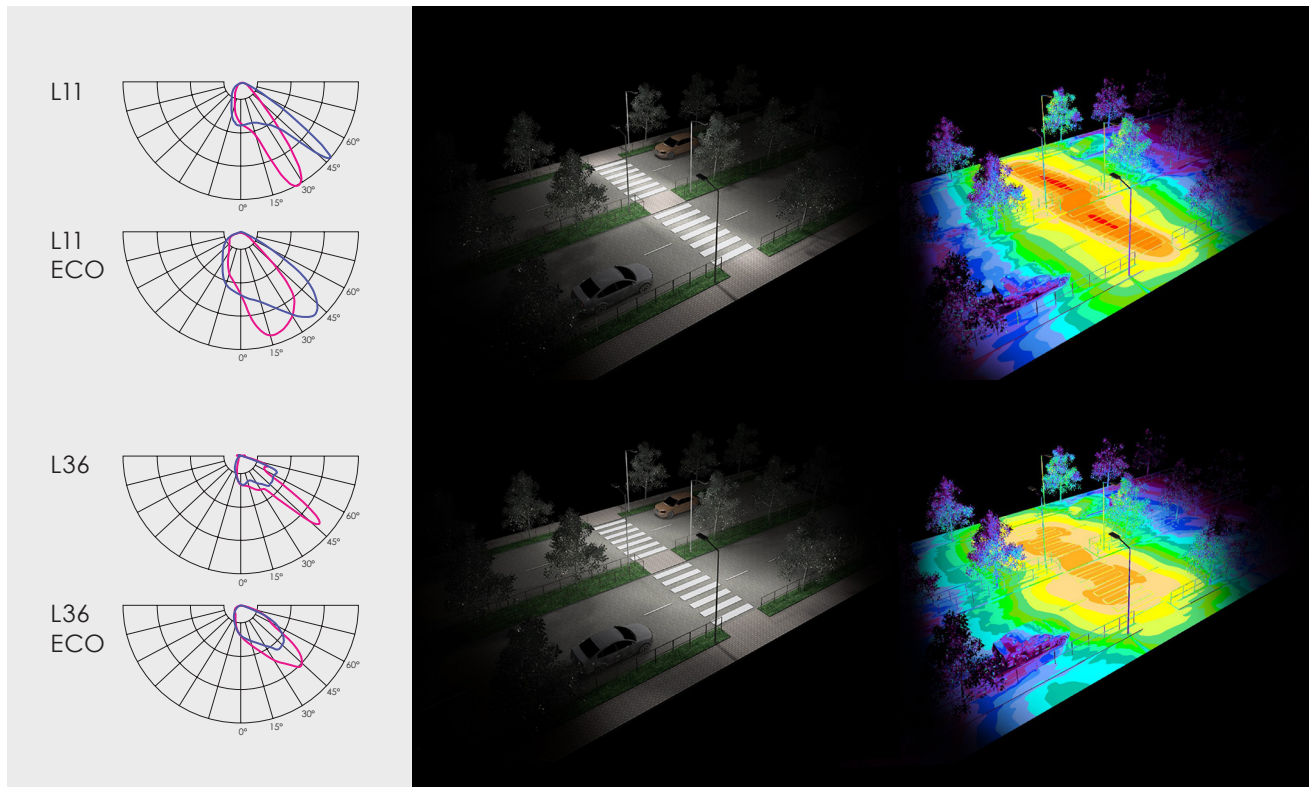
<sup>6)</sup> 10 kV (L-N; L/N-PE) surge protection device available on request

<sup>7)</sup> Coming soon

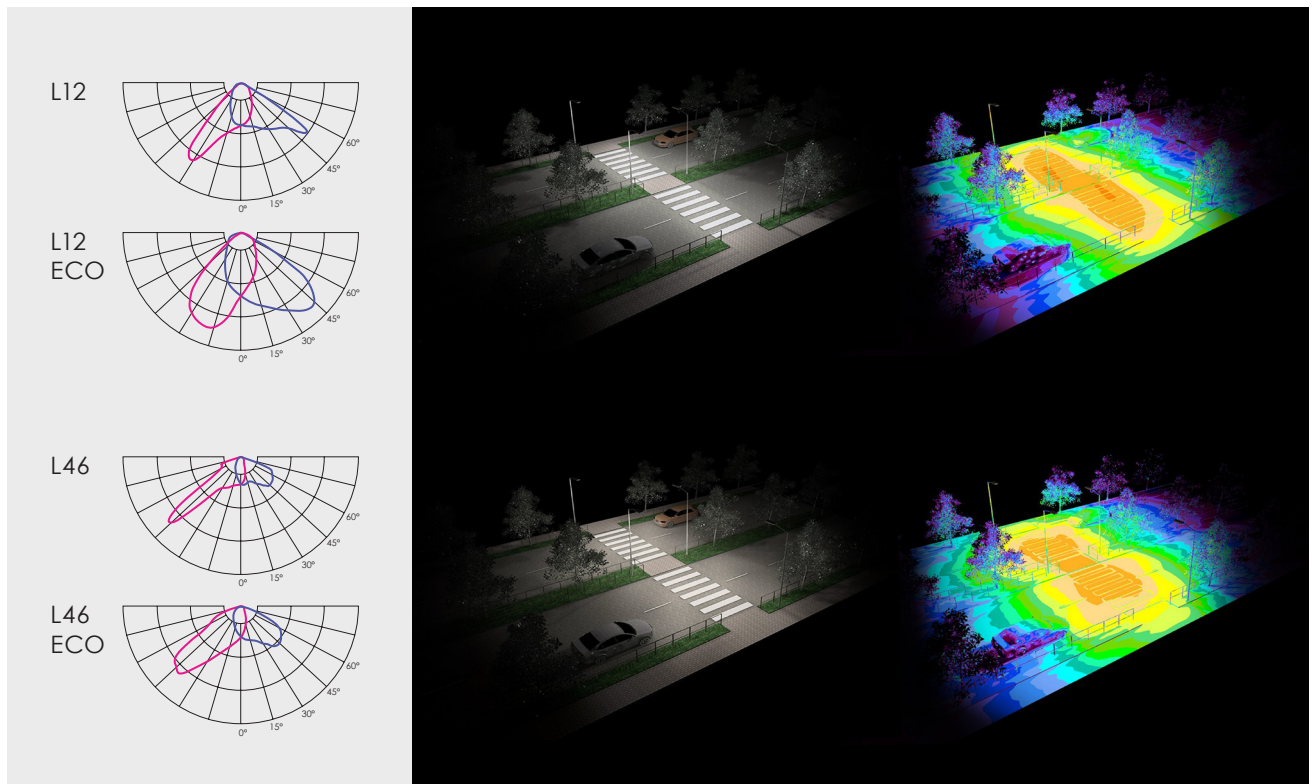
\*This value is only informative and may change according to selected article. LED Lifetime is strongly depending from LEDs current and junction temperature – increase in LED current and luminaire power lead to increase of junction temperature and as consequence lifetime decrease. Thus, luminaire models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

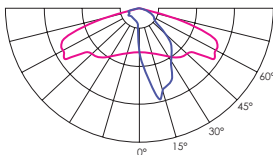


Backlight cutter | white  
Art. 70000662

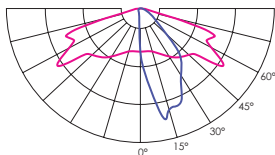


Optical loses from 10% to 31% depending from used optic.

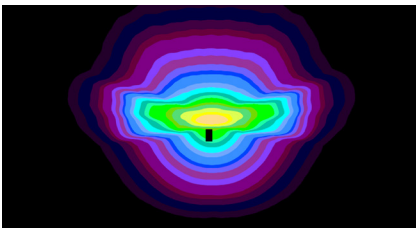
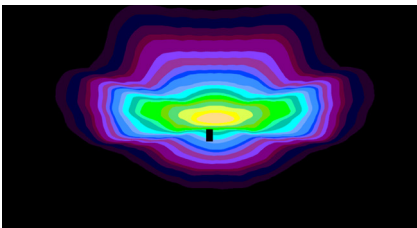
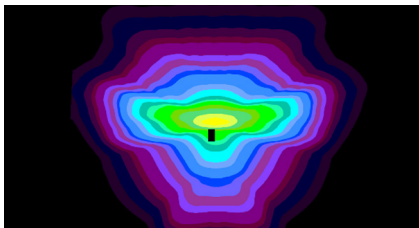
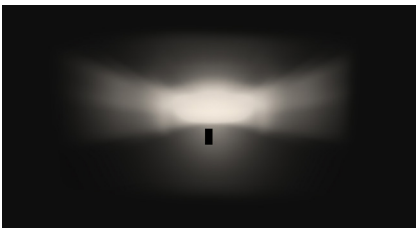
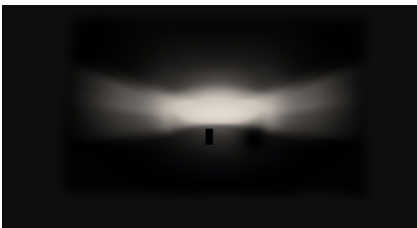
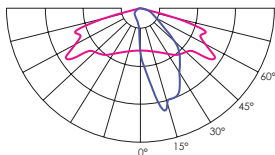
Without backlight cutter



Backlight cutter | black



Backlight cutter | white

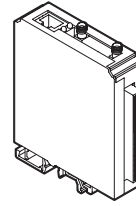


# Accessories

## Citintelly Segment controller

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

Art. 70010004

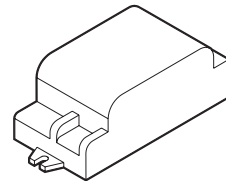


## Citintelly Luminaire controller

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

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



## Citintelly Surge Protection device

Surge Protection device offers protection against lighting surges;

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

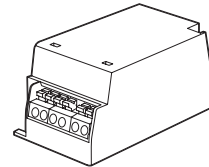
Voltage Protection level up (L/N-PE)  $\leq 2,0$  kV

$U_{oc} = 10$  kV

$I_{max} = 10$  kA

$I_{nom} = 5$  kA

Art. 70020001



## Radio Frequency Antenna

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

Art. 70000108



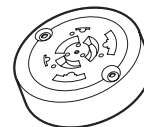
## NEMA Socket

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



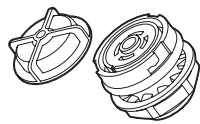
## Zhaga socket no cap

Art. 70000612



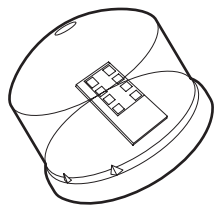
**Zhaga socket with cap**

Art. 70000613



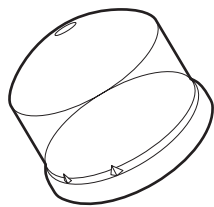
**MSLC205RG Luminaire controller + radar, Zhaga, 80 mm**

Art. 70010027



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

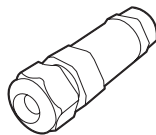
Art. 70010029



**Connector**

Art. 70000313

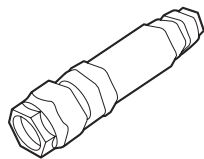
IP66 rated connector offers easy installation of the street luminaires.  
3 wire cable connector



**Connector**

Art. 70000304

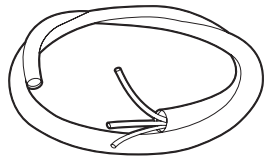
IP66 rated connector offers easy installation of the street luminaires.  
5 wire cable connector



**Pre-installed cable sets**

For internal power supply:

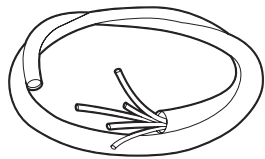
3 x 1,5 mm - 0,5 m long cable.....	Art. 70000319
3 x 1,5 mm - 5 m long cable.....	Art. 70000320
3 x 1,5 mm - 6 m long cable.....	Art. 70000321
3 x 1,5 mm - 8 m long cable.....	Art. 70000322
3 x 1,5 mm - 10 m long cable.....	Art. 70000323
3 x 1,5 mm - 12 m long cable.....	Art. 70000324
3 x 1,5 mm - 18 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.

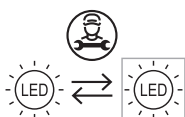


**EPD**<sup>®</sup>

**\* Coming soon**

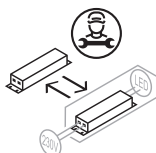
**International EPD System** – Environmental Product Declaration available

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.





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