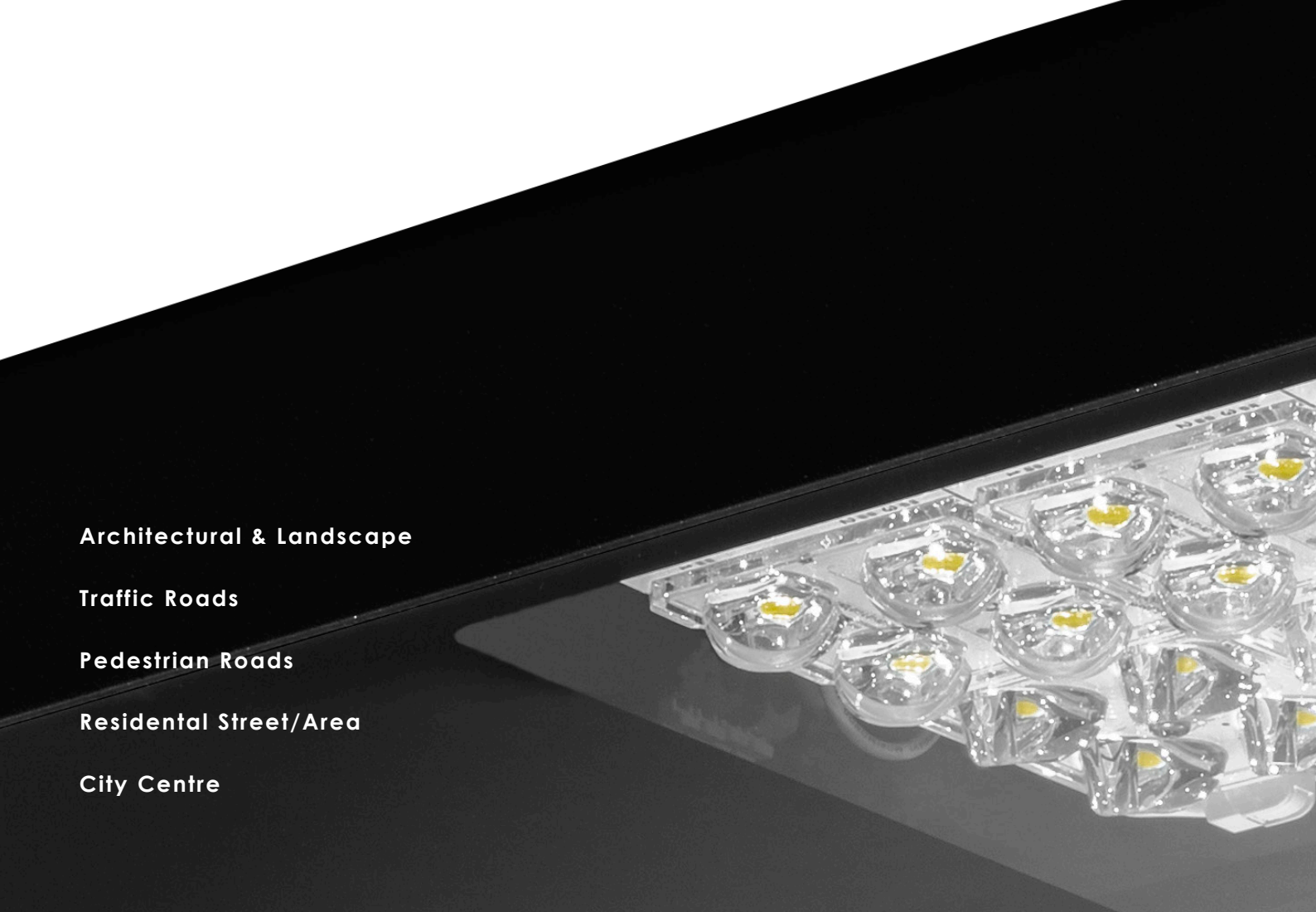


vizULO



Colibri

MIDI | FLOODLIGHT



Architectural & Landscape

Traffic Roads

Pedestrian Roads

Residential 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. Color temperature available: 2700 K, 3000 K, 4000 K

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

Sockets

Zhaga or NEMA

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

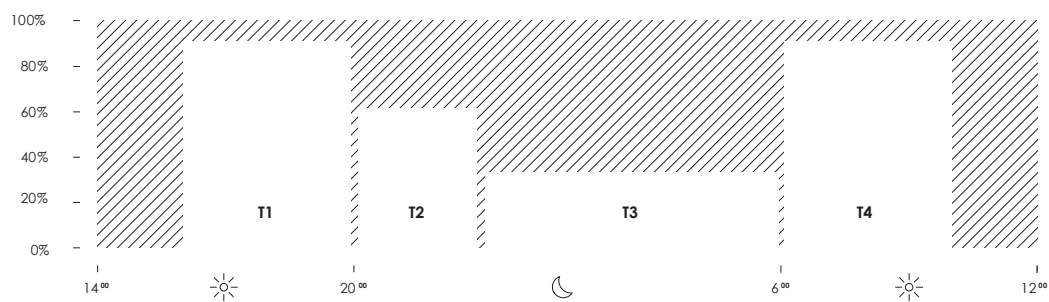
Impact resistance

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

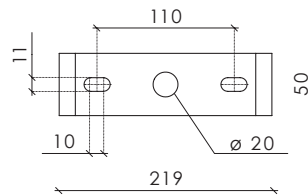
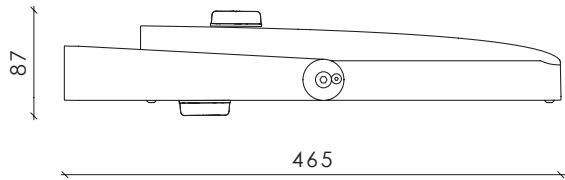
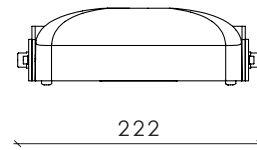
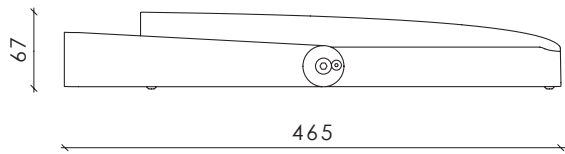


DB703



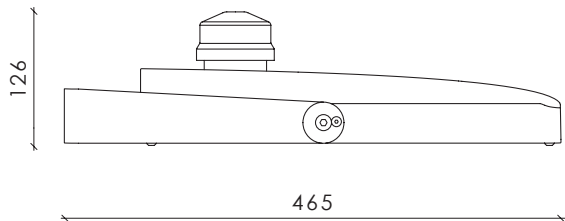
RAL9005

Other colors
available on request

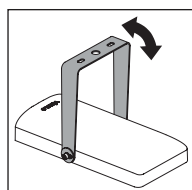
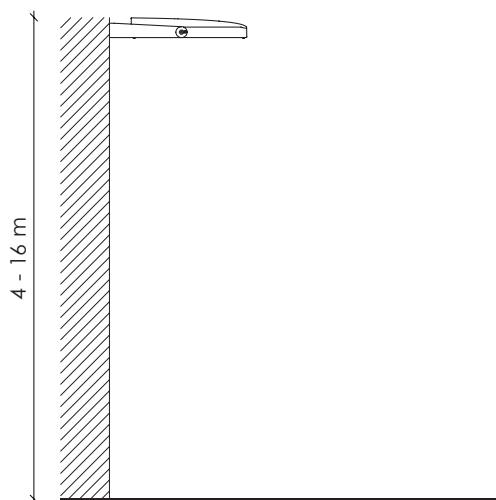


Dimensions with 2 Zhaga connectors

Mounting console



Dimensions with NEMA



Note!

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

-90° ... +90°

Technical information



| | |
|-------------|---|
| V | 220 - 240 / 110 - 277 ⁽¹⁾ |
| Hz | 50 - 60 |
| W | 5 - 87 ⁽²⁾ |
| lm | 446 - 13100 ⁽³⁾ |
| lm/W | 90 - 164 |
| K | 2700 / 3000 / 4000 ⁽⁴⁾ |
| °C | -40 to +50 5 - 70 W -40 to +35 70 - 87 W |
| CRI | >70 / >80 / >90 ⁽⁴⁾ |

| | |
|----------------------------------|---|
| Body: | Die-cast aluminium |
| Dimming: | DALI / 1 - 10 V / Midnight dimming / Step dimming / Mains dimming |
| Initial chromaticity: | MacAdam 5 |
| Lifetime: | Eco 100 000 h (L90B10) at Ta = 25 °C* Standard 100 000 h (L98B10) at Ta = 25 °C* High density 100 000 h (L98B10) at Ta = 25 °C* |
| Warranty: | 5 years |
| Installation: | 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⁾ Maximum operating voltage, ENEC certificate voltage 220 - 240 V, UL certificate voltage 110 - 277 V

²⁾ Colibri Midi with Zhaga max power 85 W

³⁾ Lumen output indicated at CRI > 70

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

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

⁵⁾ Other lengths available on request

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

⁷⁾ Coming soon

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

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

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

* Data for L01 optic.

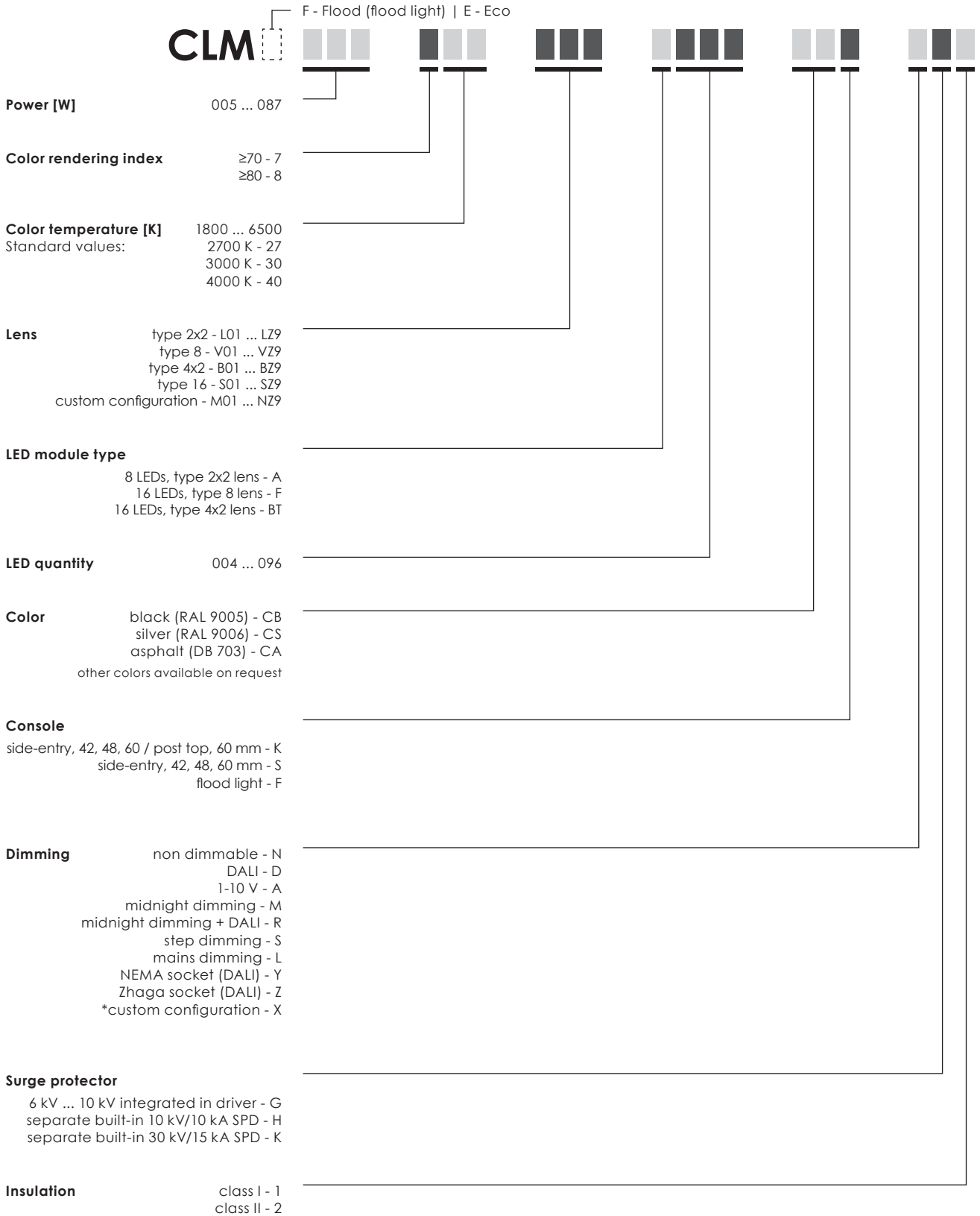
Check VIZULO members section for additional information

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

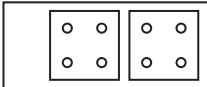
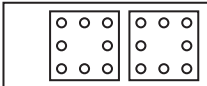
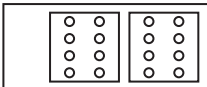


EXAMPLE CLMF 020 730 L17 A008 CAF NG1

* 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 quantity | Min LED quantity per module | Max LED quantity per module | Max LED quantity per luminaire | LED step | LED type | Lens type | Layout |
|------|---------------------|-----------------------------|-----------------------------|--------------------------------|----------|--------------|--------------------|---|
| A | 3 | 4 | 8 | 24 | 2 | Standard Eco | type 2x2 L01...LZ9 |  |
| F | 3 | 4 | 16 | 48 | 4 | Standard | type 8 V01...VZ9 |  |
| BT | 3 | 4 | 16 | 48 | 4 | Standard | 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

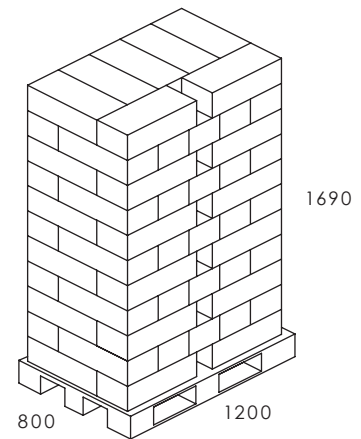
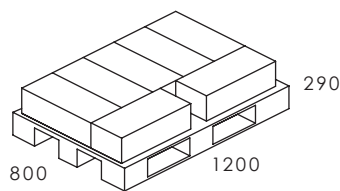
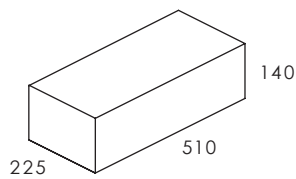
²⁾ DALI wires used only for internal connection between driver and Zhaga socket(s)

³⁾ +2 cores for external DALI connection

Logistic information

| Carton size/cm L*W*H | Quantity per carton /pcs | Pallet quantity in 20' sea container | Pallet quantity in 40' sea container | QTY per pallet /pcs | Full palette size/cm L*W*H | Number of luminaires per row | Number of rows |
|----------------------|--------------------------|--------------------------------------|--------------------------------------|---------------------|----------------------------|------------------------------|----------------|
| 51 x 22,5 x 14 | 1 | 20 | 25 | 77 | 120 x 80 x 169 | 7 | 11 |

| | NETO WEIGHT/KG | | BRUTO WEIGHT/KG | |
|--|----------------|------------|-----------------|------------|
| | Per 1 pcs | Per pallet | Per 1 pcs | Per pallet |
| COLIBRI MIDI Flood 1 module luminaires | 4,49 | 345,73 | 4,77 | 367,52 |
| COLIBRI MIDI Flood 2 module luminaires | 4,54 | 349,58 | 4,82 | 371,37 |
| COLIBRI MIDI Flood 3 module luminaires | 4,59 | 353,43 | 4,87 | 375,22 |





Pedestrian crossing optics



| | | | |
|-------------|--|----------------------------------|---|
| V | 220 - 240 / 110 - 277 ⁽¹⁾ | Body: | Die-cast aluminium |
| Hz | 50 - 60 | Dimming: | DALI / 1 - 10 V / Midnight dimming / Step dimming / Mains dimming |
| W | 5 - 52 ⁽²⁾ 5 - 74 ⁽³⁾ | Initial chromaticity: | MacAdam 5 |
| lm | Up to 7400 ⁽²⁾ Up to 8810 ⁽³⁾ | Lifetime: | Eco 100 000 h (L90B10) at Ta = 25 °C* Standard 100 000 h (L98B10) at Ta = 25 °C* |
| lm/W | 90 - 153 ⁽²⁾ 107 - 147 ⁽³⁾ | Warranty: | 5 years |
| K | 2700 / 3000 / 4000 ⁽⁴⁾ | Installation: | Pre-wired cable 30 cm ⁽⁵⁾ |
| °C | -40 to +50 5 - 70 W -40 to +35 70 - 87 W | Mounting: | On bracket / wall / ceiling |
| CRI | >70 / >80 / >90 ⁽⁴⁾ | 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⁾ Maximum operating voltage, ENEC certificate voltage 220 - 240 V, UL certificate voltage 110 - 277 V

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

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

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

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

⁵⁾ Other lengths available on request

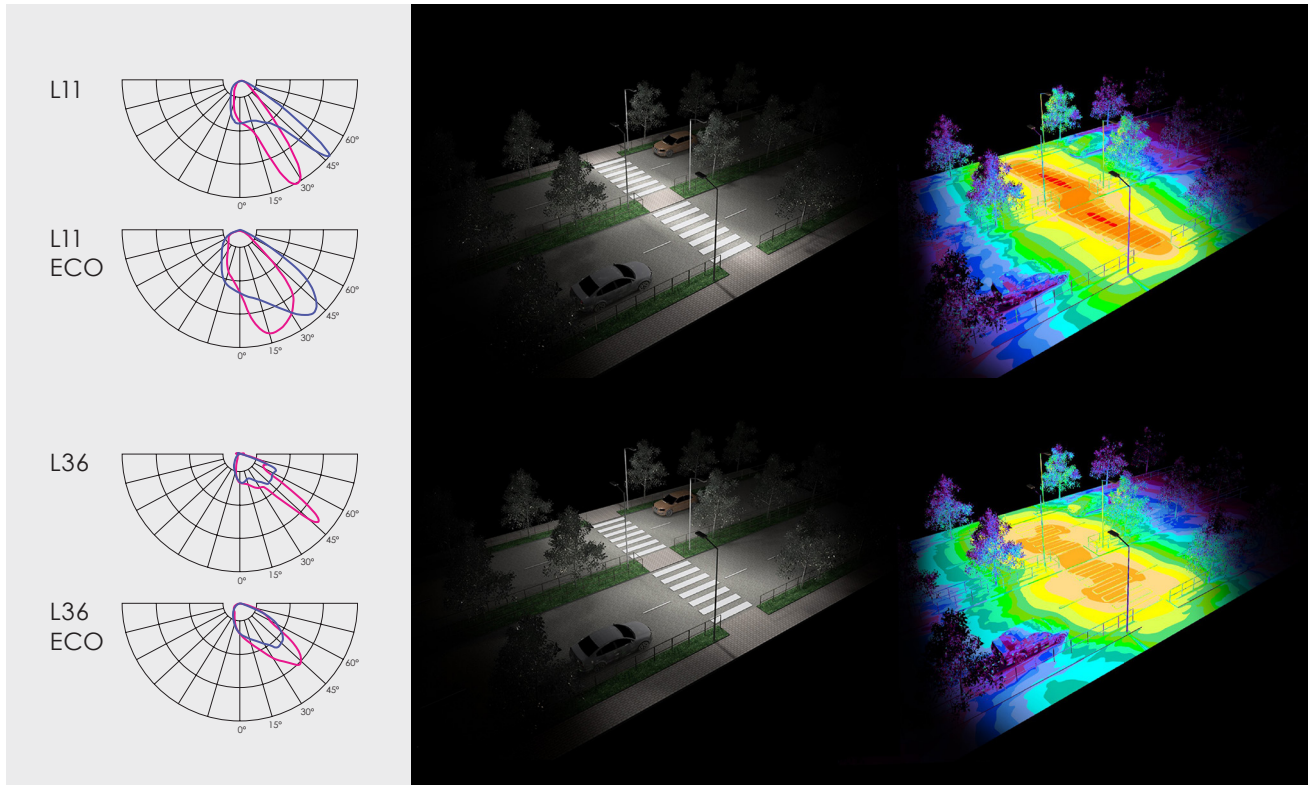
⁶⁾ 10 kV (L-N; L/N-PE) surge protection device available on request

⁷⁾ Coming soon

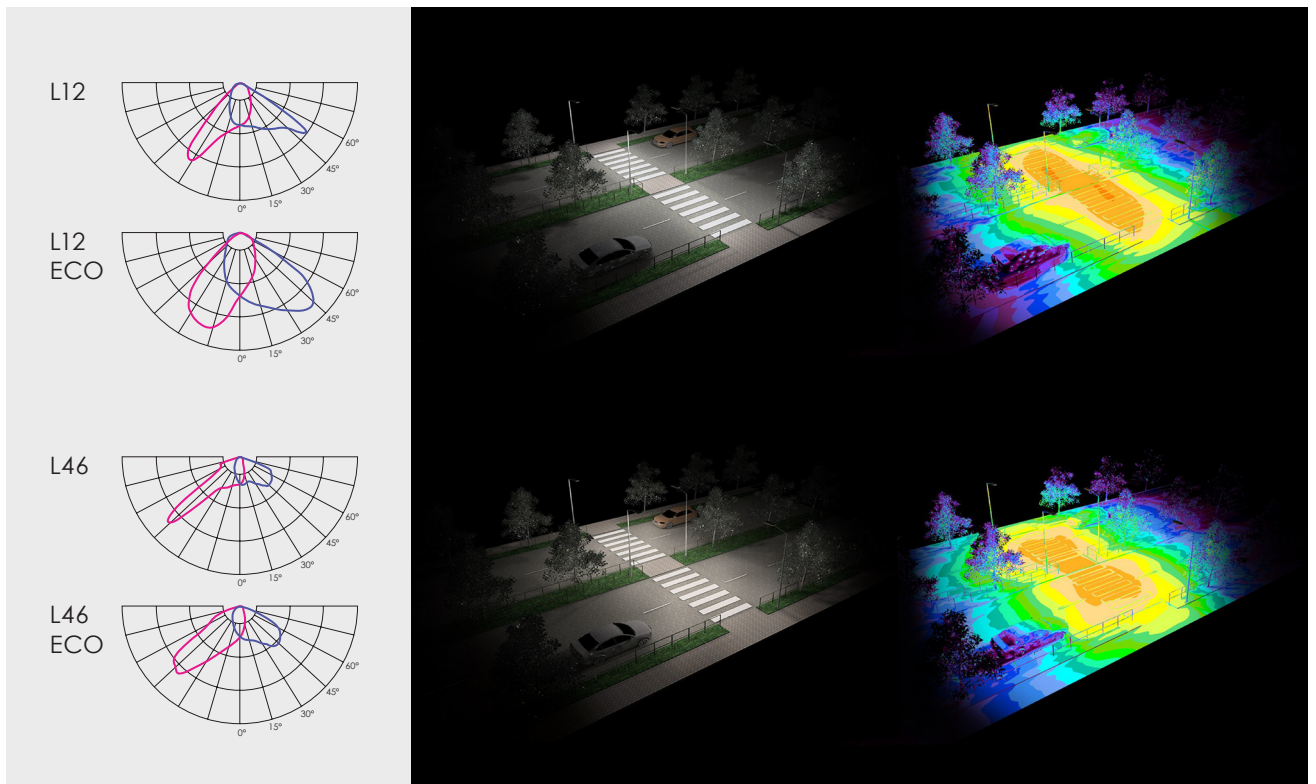
*This value is only informative and may change according to selected article. LED Lifetime is strongly depending from LEDs current and junction temperature – increase in LED current and luminaire power lead to increase of junction temperature and as consequence lifetime decrease. Thus, luminaire models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

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

Right side traffic



Left side traffic



Backlight cutter

Backlight cutter | black

Art. 70000661



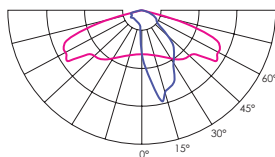
Backlight cutter | white

Art. 70000662

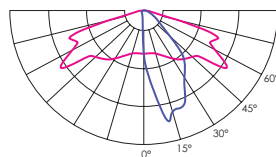


Optical losses from 10% to 31% depending from used optic.

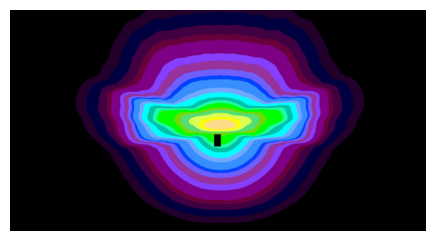
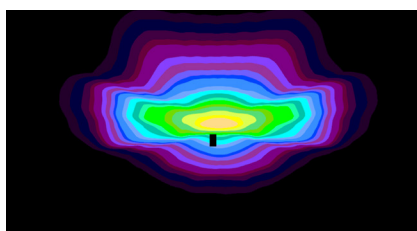
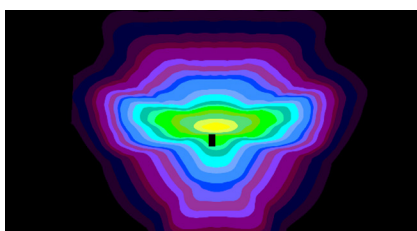
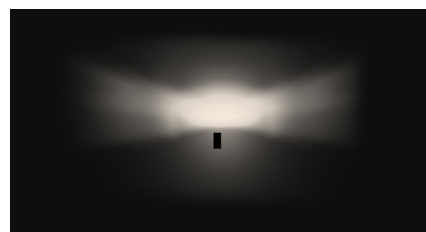
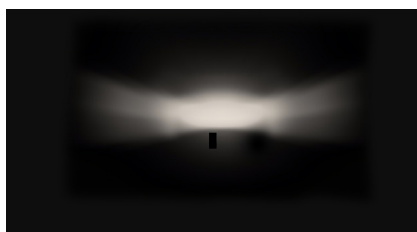
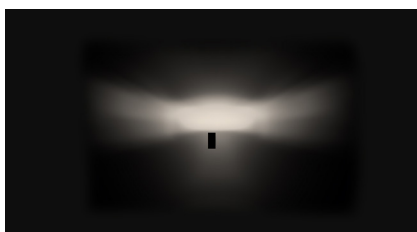
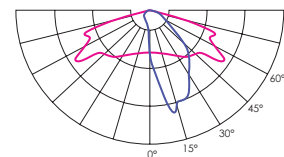
Without backlight cutter



Backlight cutter | black



Backlight cutter | white



Accessories

Separate 10 kV SPD (available on request)

Surge Protection device offers protection against lightning surges:

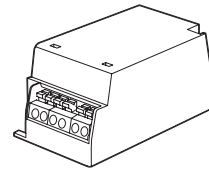
Voltage Protection level up (L-N) $\leq 1,5$ kV

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

$U_{oc} = 10$ kV

$I_{max} = 10$ kA

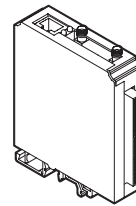
$I_{nom} = 5$ kA



MAUGLO Segment controller

Art. 70010004

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



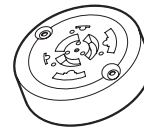
NEMA Socket

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

Art. 70000362

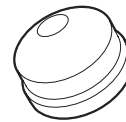
2213362-4, 7 pin NEMA socket 105°C wires

Art. 70000333



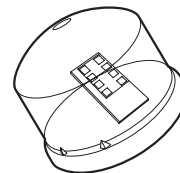
Dummy Link for NEMA Socket

Art. 70000113



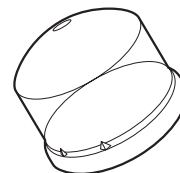
MSLC205RG Luminaire controller + radar, Zhaga, 80 mm

Art. 70010027



MSLC205RGL Luminaire controller, Zhaga, 80 mm

Art. 70010029



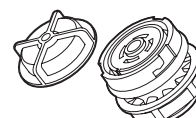
Zhaga socket no cap

Art. 70000612



Zhaga socket with cap

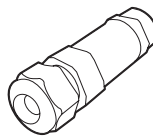
Art. 70000613



Connector

Art. 70000313

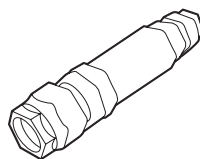
IP66 rated connector offers easy installation of the street luminaires.
3 wire cable connector



Connector

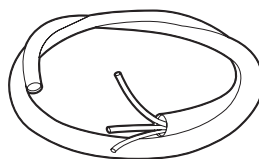
Art. 70000304

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

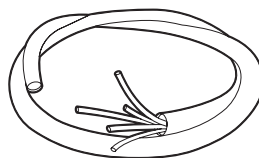


**Pre-installed cable sets
For internal power supply**

- 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



- 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



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.



UL - compliance with UL standards for LED lighting **[Coming soon]**

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.



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.

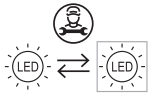


DarkSky Approved - a DarkSky program seal of approval

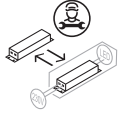
DarkSky Approved certification is granted to outdoor lighting fixtures meeting the criteria outlined by DarkSky, an organization that aims to reduce light pollution, enabling clearer night skies and mitigating the impact on wildlife and human health. DarkSky Approved luminaires are shielded to cut off 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 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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