# Urbalite M

## KEY BENEFITS

- Up to 3 fixations.
- Durability and sturdiness: IP66 + IK09.
- Die Cast aluminium (Cu<0.1%).
- Energy Efficient:
  GEN 1 150 lm/W.
  GEN A 158 lm/W.
- Up to 9 optical distributions.
- Smart Ready: Designed to house both indoor and outdoor communications nodes.
- Future Proof: Zhaga-compliant
- Life span L90B10 100,000h (Ta 25ºC)
- Night Friendly: ULR Arrêté du 27 décembre 2018
- 5 years warranty

IP66 IK09 CI CII RAL 9006 Smooth Gloss

Marine finish (RAL M9006B)

## DESCRIPTION

The Urbalite M series is designed with simple, modern lines so it adapts perfectly to urban spaces such as residential streets, urban streets, bike lanes or main avenues.

Thanks to the latest generation LED technology and variety of optical distributions it provides even and efficient light making it a quality solution for a wide range of urban lighting uses.

Amber CRI>60 | 2,200K CRI>70 | 2,700K CRI>70 | 3,000K CRI>70 | 4,000K CRI>70

GEN 1:
3,635lm - 16,565lm
GEN A:
12,291lm - 16,644lm

6 Kg

GEN 1 150 lm/W.
GEN A 158 lm/W.
Luminaire

0.146 m²

-40ºC - +50ºC

0.00%-0.08%
FHL/ULR

220 - 240V / 100V - 277V
50-60Hz
L90B10 100,000 h
Ta 25 ºC

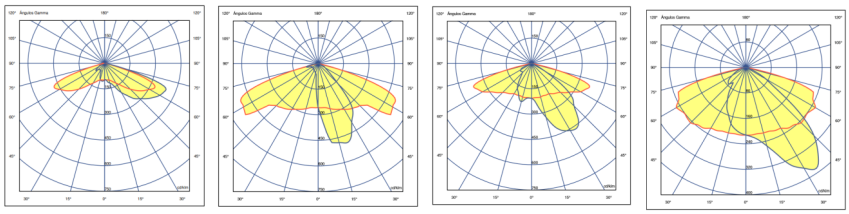
## STANDARDS / CERTIFICATES

- CE
- RoHS
- UNE-EN 60598-1
- UNE-EN 60598-2-3 or 60598-2-5
- UNE-EN 62471:2009
- UNE-EN 60598
- UNE-EN 61000-3-2
- UNE-EN 61000-3-3
- UNE-EN 55015
- UNE-EN 61547
- UNE-EN 62031
- UNE-EN 61347-2-13
- UNE-EN 62384
- UNE-EN 13032-4
- UNE-EN ISO 9227 NSS: 2017 (1,000 h)

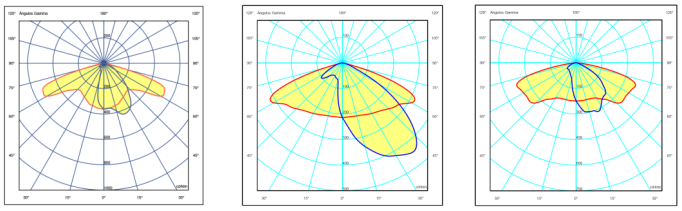
Distributor: EPK elektro s.r.o.
info@carandini.cz - www.carandini.cz

## PHOTOMETRIC DISTRIBUTIONS

It has the 9 photometric distributions used for the environments in which this type of luminaire is installed, allows it to adapt to all needs:



AMA1* AME1 AME2 AMM2

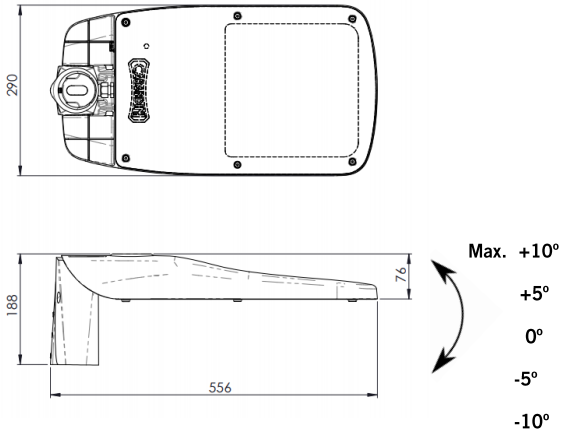


AMM4 AMM1 AMM3

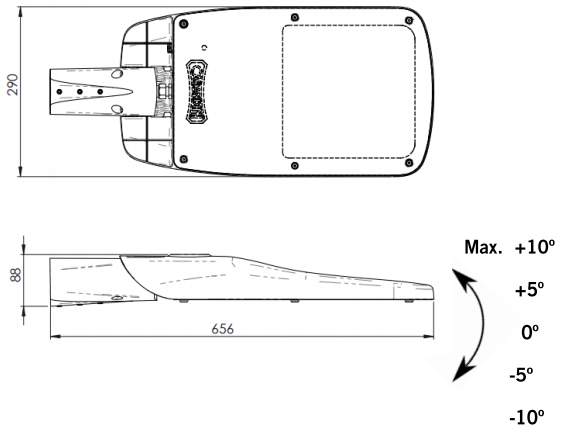
*AMA1 not available in GEN A.

## DIMENSIONS (mm)

Vertical fixation (PT2)




Lateral fixation (SE2)




## APPLICATIONS

Residential streets, shopping areas, walkways, bike lanes and urban streets.

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# URBALITE M CHARACTERISTICS

## GENERAL INFORMATION

| | |
|---|---|
| Sustainability | Valorisation: 99.02%<br>Maximum carbon footprint per use: 0,030044 Kg Kw/h CO2 |
| CE marking | Yes |
| ENEC Certificate | Yes |
| RoHS compliance | Yes |
| Testing Standards | LM 79-80 (all measurements at certificado según ISO17025) |

## GENERAL CHARACTERISTICS

| | |
|---|---|
| Armor and couplings | Die cast aluminum EN AC-44100 with low copper content <0.1%. |
| Closure | Tempered glass 5mm |
| Nuts outer and bolts | Stainless steel (AISI304). |
| Watertightness | IP66 (EN 60598-1 and EN 60598-2-3) |
| Impact protection grade | IK09 (EN 62262) |
| Operating temperature | Ta -40ºC to +50ºC<br>According to luminaire configuration. |
| Lifetime | L90B10 100,000h at Ta of 25°C.<br>Light maintenance assessments to TM-21 based on LM-80 data. |
| Cables | Class: I/I<br>Cable: from 4 to 12 metres<br>Cross-section: 2x1,5; 3x1,5; 4x1,5; 5x1,5; 2x2,5, 3x2,5 |

## ELECTRICAL CHARACTERISTICS

| | |
|---|---|
| Electrical class | Class I o Class II |
| Voltage / Frequency | 220V - 240V / 50Hz - 60Hz<br>Optional 120V - 277V |
| Power factor | > 0,9 |
| Harmonic distortion | < 15% |
| Surge protector | Surge protection (1.2 / 50) 10 kV.<br>Maximum current (8/20) 10kA.<br>Maximum voltage (L-N) 320 V.<br>Maximum voltage (L / N-GND) 400 V.<br>Optional overvoltage protection: 20kA, 20kV |

## LIGHTING CHARACTERISTICS

| | |
|---|---|
| Package real light | GEN 1<br>4.400lm -16.000lm (30 - 116W).<br>150 lm/W.<br><br>GEN A<br>11.978lm -16.644lm (79 - 113W).<br>158 lm/W. |
| LED colour temperature | 4,000K (Neutral White, nw).*<br>3,000K (Warm White, ww).*<br>2,700K (Warm White, ww).<br>2,200K (Warm White, ww).<br>Optionally amber color temperature.<br>*Configurable with GEN A. |
| Index of reproduction chromatic (CRI) | CRI>70. CRI80, on request. |
| LEDs | Incorporate from 8, 12, 24 and 36 LED. |
| ULR | <0.25% |
| Optics | PMMA polymethylmethacrylate. |
| Photometric distributions | AMA1=> throw 70º spread 65º (Type IV)<br>AME1=> throw 55º spread 20º (Type I)<br>AME2=> throw 70º spread 35º (Type III)<br>ACM4=> throw 70º spread 30º/50º (Type III)<br>AMM2=> throw 60º spread 35º (Type II)<br>AMM4=> throw 65º spread 20º(Type II)<br>AMM5=> throw 75º spread 5º/40º (Type II)<br>*AMA1 not available in GEN A. |
| LED thermal control | Heat dissipation by conduction through the specific design for this luminaire, since it has been specifically designed for LED technology. (Heatsink). |

## URBALITE M CHARACTERISTICS

### MAINTENANCE AND ASSEMBLY

| | |
|---|---|
| Installation and maintenance | Quick, easy installation with an external IP68 connect and no need for opening the luminaire. |
| Fixation | PT2: Vertical fixation Ø60mm<br>SE2: Lateral fixation Ø60mm<br>SE3: Lateral fixation Ø34/42mm |
| Mechanical regulation | Brackets allow for -10º, -5º, 0, +5º; +10º adjustment |
| Weight with equipment | 6 Kg |
| Wind Surf. | 0.146 m² |
| Pressure compensation valve | The integration of the valve extends the projected life of the joints and internal parts by reducing the pressure that is exerted on them and prevents moisture from entering the interior that can cause condensation. |

## FINISHES

### PREDEFINED COLOUR OF THE LUMINAIRE

| | |
|---|---|
| RAL 9006 | Grey polyester powder coat paint RAL 9006 Smooth Gloss (906B). |

### Corrosion protection

| | |
|---|---|
| SEA SIDE SUITABLE | Marine finish (1.000h). |

## LOGISTICAL INFORMATION

### UBL M

Dimensions box: 680 x 310 x 110 mm

Number of boxes: 42 units

American base: 1200 x 800 mm

Number of levels: 14 levels

Superficie utilizada: 65.9%

Volume used: 63.4%

Total gross weight: 252 kg.

### MANAGEMENT AND CONTROL

| | |
|---|---|
| Equipment | **1N:** 1 Level<br>**RC:** Controller dimmed<br>**RD:** DALI<br>**AF:** 1 - 10 V<br>**RL:** Pulse adjustable LED<br>**2N:** 2 Level |
| Autonomous regulation | Regulations programmed from the factory:<br>**56**: 50% of the 24: 00h at 6: 00h.<br>**66**: 60% of the 24: 00h at 6: 00h.<br>**76**: 70% of the 24: 00h at 6: 00h. |
| CLO regulation | Flow rate during the life of the product:<br>**7**: 70% luminous flux throughout the life of the luminaire.<br>**8**: 80% luminous flux throughout the life of the luminaire. |
| Socket connection | **3-U**: NEMA 3 pin socket with/without IP66 cover<br>**5-V:** NEMA 5 pin socket with/without IP66 cover<br>**7-W:** NEMA 7 pin socket with/without IP66 cover |
| Sensor | **1:** Photocell for NEMA 3, 5 and 7 pin socket (20 lux)<br>**2:** Photocell for larger Zhaga socket (20 lux) |
| Node | **BS:** Controlux Basic IMCU |

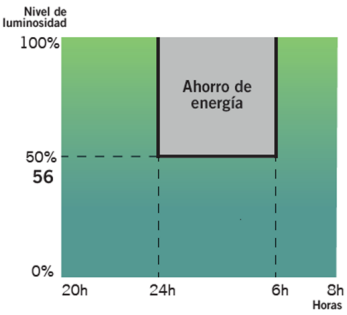
## LUMINAIRE DIMMING

### By programming the driver

Smart luminaires drivers can be programmed in the fac-tory without needing a control system, additional wiring or maintenance costs. A schedule is pre-programmed for light flow to be automatically reduced at quieter times of the night while respecting light levels and uniformity.

Programming profile 56

From 00:00 to 06:00 the luminaire reduces its initial intensity by 50%.





**NOTE: Programming the Dynadimmer using the multione scheduling tool is done for wintertime. In summer everything is delayed by an hour.**

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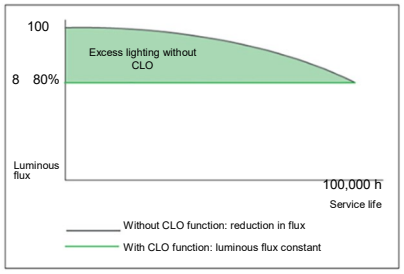
### Using the CLO function

While taking lumen depreciation over the years into account, the driver is programmed so that it starts at a reduced level and gradually increases power over the lifespan of the luminaire. This saves energy and increases the lifespan of the system. Furthermore, the light level in the area where the luminaire is installed remains constant over time.

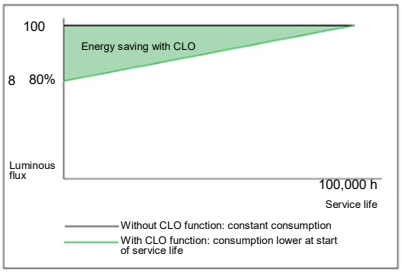
#### Constant luminous flux 8

luminous flux from the luminaire at 80% to maintain light levels throughout its lifespan.


**Graph: Luminous flux**




**Graph: Consumption**

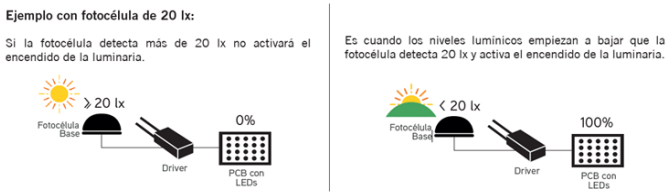



### By incorporating an additional device

#### Photocell

A photocell enables the luminaire to be switched on or off based on the solar light intensity detected.

This is extremely useful so the luminaires are not switched on during the day when there is still sufficient natural light.



## INNOVATIVE AND UPDATABLE OVER TIME (Zhaga/ ZD4i)

"All luminaires incorporating Nema Sockets or Zhaga Sockets, where the control system is not the responsibility of Carandini, must always incorporate IP 66 covers in order to ensure the correct safety and operation of the product.

The sale of luminaires with Nema or Zhaga Sockets without the IP 66 cover will only be permitted upon receipt of a written assurance from the customer that the control system using NEMA or ZHAGA Nodes will be installed by the customer at the same time as the luminaires".

### Zhaga - Future Proof

Zhaga is an industry-wide consortium that aims to standardise specifications for interfaces between LED luminaires and light sources. The aim is to achieve interchangeability between products made by different manufacturers. Zhaga defines test procedures for luminaire and LED light sources so that the luminaire can receive the LED source.

### Zhaga D4i - Sensor Ready

The Zhaga consortium joined up with DiiA to create a unique Zhaga-D4i certification that combines Zhaga's Book 18 version 2 outdoor connectivity specifications with Dii4's D4i specifications for intra-luminaire DALI.

### BOOKS PER APPLICATION. A COST-EFFECTIVE SOLUTION.

Book 1-25
Overview by application

| | Office & Industry | Retail & Hospitality | Outdoor |
|---|---|---|---|
| Integrated LED light engines | 14 2,8 | 17 16 | |
| LED modules (non-integrated) | 7 21 14 | 12 9 5 3,10 | 4 15 19 |
| Drivers | 13 | LED set 22,23 | 24,25 |
| Sensor and communication modules | 20 | | 18 |

The specifications that mark a component as Zhaga-compliant are contained in a series of books, available only to consortium members, that allow you to design to the marked standard. The benefits for society are evident since, apart from reducing the consumption of materials, it favours the reuse of luminaires, aiming towards a circular economy.

### CERTIFICATION PROGRAMME

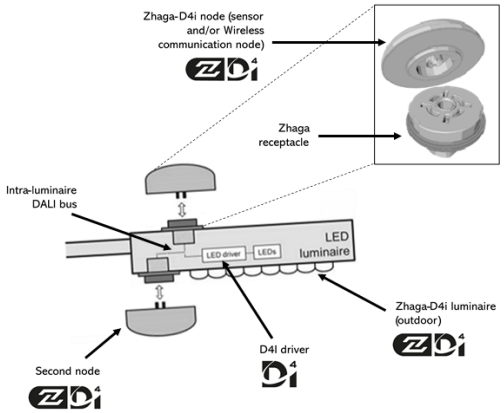
Zhaga-D4i certification covers all the essential characteristics, including automatic adjustment, digital communication, data reporting and power requirements in any single luminaire, ensuring plug-and-play interoperability for luminaires (drivers) and peripherals, such as connectivity nodes.

### STANDARDISATION AS A MEANS TO ACHIEVE SUSTAINABILITY

The Urbalite M luminaire has been designed to function with the latest available market-proven technology based on standards. This also enables it to meet the CARANDINI sustainability requirements and become a product ready for maintenance in the future under better guarantees while respecting the environment and society.

The luminaires marked as Zhaga are a “Future Proof” design, meaning it is based on and designed around standard Zhaga components. These components are mainly the LED modules and the drivers. The electric compartment and dissipation area for LED modules has space and additional mountings to include any driver compliant with Zhaga “Book 13” based on market driver dimensions, or any LED module compliant with Zhaga “Book 15” based on LED controller interface specifications.

This makes it possible to have a sustainable product that can be updated over time.




### CONNECTIVITY

D4i specifications take the best of the standard DALI2 protocol and adapt it to an interconnected lighting environment, but with certain limitations. Only the control devices installed in the luminaires can be combined with a Zhaga-D4i luminaire. According to the specifications, the control devices are respectively limited to an average power consumption of 2W and 1W.

### SMART CITY

Luminaires marked ZD4i are a "Smart Ready" design, which means they are designed to house both indoor and outdoor communication nodes through connection bases compliant with the Zhaga “Book 18” & Zhaga-D4i standard on sensor and communication node interoperability.