ALIU

Luminaire

# INNOVA UP

Flat environmental luminaire with an innovative design ideal for urban residential areas (roads, squares, green spaces...). Ball joint mounting system. Power from 20W up to 100W thanks to its high dissipation capacity. Ready for any intelligent lighting control solutions.

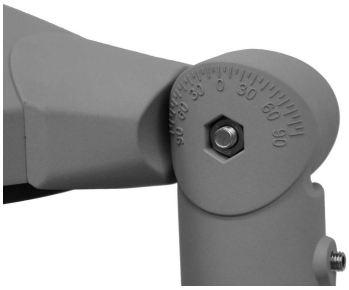
## MAIN FEATURES:

- High efficacy. Up to 145 lm/W net
- Adaptable by means of a joint ball system, bracket or suspended
- Double compartment: driver and LED module
- Tool-less opening
- 18 light distribution curves
- Zhaga Standard (Book 15)
- Ready 4IoT. Ready for any intelligent lighting control solution

## APPLICATIONS:

- Residential areas
- Squares and green spaces
- Cycle lanes and ≤30km/h areas

## DETAILS:



Project sheet | CAD | Catalogue | Mounting instructions | HD image

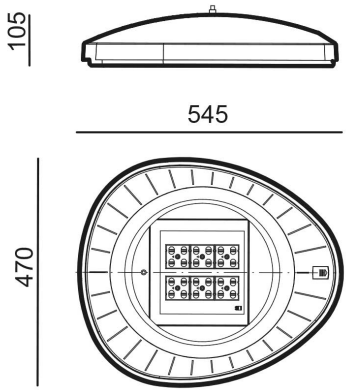
BENITO

info@benito.com
tel. 93 852 1000

# SPECIFICATIONS :

| | |
|---|---|
| Housing material: | High pressure die-cast aluminium EN AC-43000, EN AC-43100, EN AC-43400, EN AC-44100, EN AC-47100 according to the UNE EN 1706 standard |
| Diffuser (optic system enclosure): | 5mm tempered safety glass. UV filter |
| Fixing elements: | Stainless steel 18/8 - AISI 304 |
| Housing: | Double compartment: driver / LED module |
| Sealing gaskets: | Silicone foam |
| IP rating (luminaire): | IP66 |
| IP rating (optic system): | IP66 |
| IK rating (impact resistance): | IK09 |
| LEDs thermal dissipation: | Thermal dissipation through finless luminaire body, without conductive fluids. Passive convection dissipation ensuring thermal contact with the LED modules through a high-conductivity thermal transfer material |
| Anti-condensation valve: | Pressure-balancing valve to ensure moisture release, avoid condensation and maintain the luminaire IP tightness |
| Paint and finishes: | Polyester powder paint coating, electrostatically sprayed and sublimated in the oven. Resistant to corrosion |
| Colour: | RAL 9022 and 7043. Optional: other colours |
| Mounting: | Post - Top Ø60mm |
| Tilt range: | From -90º to +90º |
| Maintenance: | Easy, tool-less opening. Modular concept for easy component replacement: LEDs, drivers, SPD |
| Recommended mounting height: | 4 - 8 m |
| Driver: | Constant current adjustable and programmable driver. Embedded in the luminaire, pre-wired on a galvanised steel plate |
| Flow Reduction: | Dimmable driver 0-10V. Programmable on 5 levels. Optional: DALI 2. Includes the characteristics of Wireless, AOC, MTP, DTL |
| Ready4IOT - Connectivity: | - Autonomous multiple-level dimming or virtual midnight<br>- Ready4IoT<br>- Dimming by main voltage<br>- Line switch |
| Surge protection device (SPD): | Type 2, 10kV and 20kA transient surge protector. Series connection with thermofuse disconnector for a more effective protection at the end of its service life |

# DRAWING:

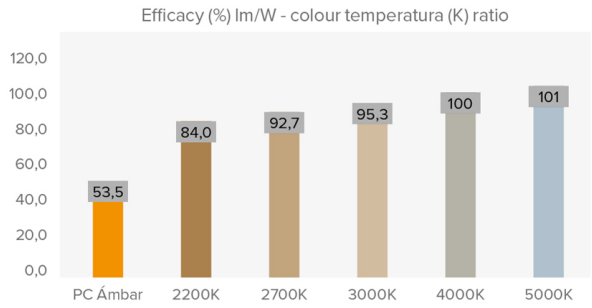


ÁMBAR 2200K 2700K 3000K 4000K 5000K

## TECHNICAL DATA:

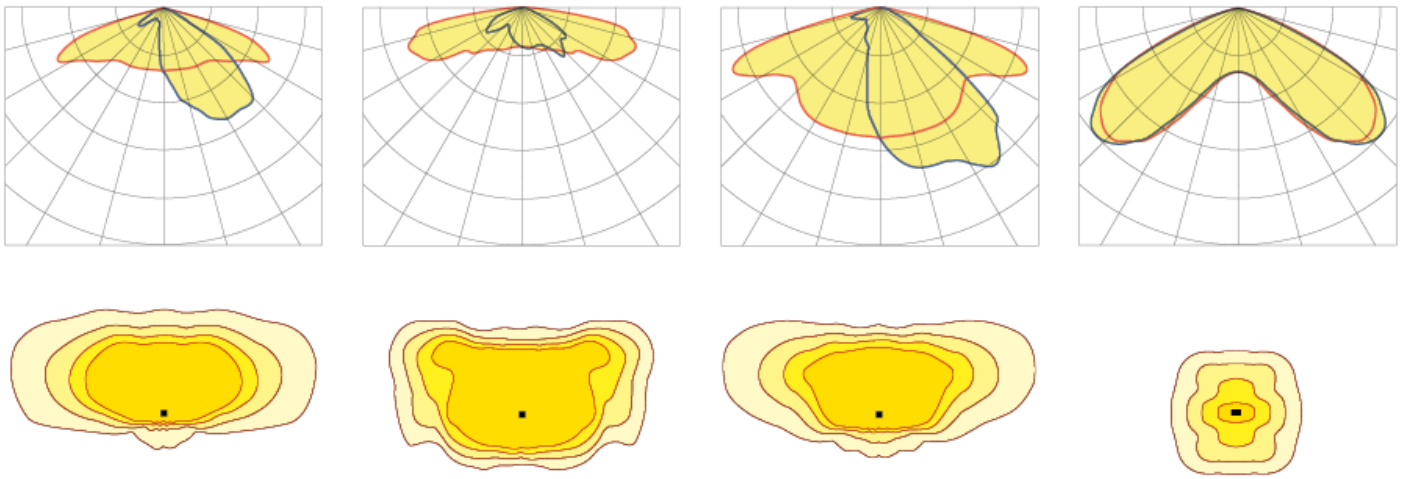
| | REF. | Nº LEDs | Power W | I Driver mA | Real luminous flux (T) =85ºC) Flux lm | Real luminous flux (T) =85ºC) Efficacy lm/W | Initial luminous flux (T) =25ºC) Flux lm | Initial luminous flux (T) =25ºC) Efficacy lm/W |
|---|---|---|---|---|---|---|---|---|
| | | 24 | 20 | 250 | 2842 | 142 | 3240 | 162 |
| | | 24 | 40 | 500 | 5642 | 141 | 6432 | 161 |
| INNOVA UP | ALIU | 24 | 60 | 750 | 8443 | 141 | 9625 | 160 |
| | | 36 | 80 | 667 | 11193 | 140 | 12760 | 160 |
| | | 36 | 100 | 833 | 14066 | 141 | 16035 | 160 |

Luminous flux and efficiency at 4000ºK and CRI>70.
Luminous flux tolerance < +/-3%.
Values may be subject to changes due to LED binning.




## PHOTOMETRY:

Super-Extensive Asymmetric (AE) | Extensive Asymmetric (A3) | Extensive Asymmetric (AM) | Super-Extensive Circular Symmetric (SE)



*Show 4 recommended lighting distributions. Refer to the 18 typologies.

## LEDs MODULE:

| | |
|---|---|
| LEDs module: | BENITO-NOVATILU Zhaga standard for 8, 12 and 16 LEDs. Check colour temperature, CRI and light distributions |
| Replaceable module: | Yes |
| LED: | 5050 |
| Number of LEDs: | 24-36 |
| PCBs format: | 2 or 3 Zhaga (Book 15) 2x4 |
| LED nominal efficacy: | 172 |
| Colour temperature: | PC Amber, 2K2, 2K7, 3K, 4K, 5K |
| Colour rendering index CRI: | >70 (optional >80) |
| Average LED useful time L90B10: | L90B10 >100,000 hours |

## OPTIC SPECIFICATIONS:

| | | |
|---|---|---|
| Optic system: | | PMMA lenses 2x2 |
| Light distributions: | | 18 light distribution curves |
| Upward light output ratio ULOR: | | 0% |
| Downward light output ratio DLOR: | | 100% |
| Glare index: | | Between D5 and D6 (depending on the light distribution) |
| Luminous intensity category: | | Between G*4 and G*6 (depending on the light distribution) |
| Luminous flux CIE nº3: | | >95% |
| Photobiological safety: | | RG0 (exempt of risk) |
| Initial luminous flux Tj=25ºC (up to): | lm | 16035 |
| Initial luminaire efficacy Tj=25ºC (up to): | lm/W | 160 |
| Real luminous flux Tj=85ºC (UNE EN 13032-4) (up to): | lm | 14066 |
| Real luminaire efficacy Tj=85ºC (UNE EN 13032-4) (up to): | lm/W | 141 |

## ELECTRIC SPECIFICATIONS:

| | | |
|---|---|---|
| Nominal maximum power (LEDs): | | 90 |
| Maximum power consumed (luminaire): | W | 100 |
| Power range: | W | 20-100W |
| Maximum current of LED: | mA | <450 (<50% Imax) |
| Power supply protection classes IEC: | | Class I and II |
| Surge protection device (SPD): | | Type 2, 10kV and 20kA transient surge protector. Series connection with thermofuse disconnector for a more effective protection at the end of its service life |
| Common and differential mode protection (SPD) Udc: | kV | 10 and optional NTC |
| Max current (8/20) (SPD): | kA | 20 |
| Thermal phase disconnection (SPD): | | Yes |
| Input voltage: | Vac | 220-240 |
| Input voltage (max rate): | Vac | 198-264 |
| Input frecquency: | Hz | 47-63 |
| Starting current: | A | <65 |
| Duration of the starting voltage peak: | ms | <0.3 |
| Driver efficacy: | | >90% |
| Power factor 100% consumption: | | >0.98 |
| Power factor 50% consumption: | | >0.95 |
| Total harmonic distortion (THD): | | <10 |
| Power consumption on standby mode: | W | <0.4 |
| Energy class: | | A++ IPEA>1.15 |

## OPERATING CONDITIONS:

| | | |
|---|---|---|
| Average LED useful time L90B10: | | >100,000 |
| Average driver useful life to Tp <70ºC: | | 100,000 |
| Average luminaire useful life L90B10 (TM-21): | | |
| Ambient temperature (Ta): | ºC | From -35°C to +50°C |
| Aerodynamic resistance (CxS): | m2 | 0.076 |
| Vibration test (15Hz 3 axis): | | |
| Guarantee: | years | 5 years (extensible up to 10 years) |

## PACKAGING DIMENSIONS:

| | | |
|---|---|---|
| Net weight | kg | 7 |
| Gross weight | kg | 8.5 |
| Luminaire dimensions (LxWxH) | mm | 728x470x105 |
| Packaging dimensions (LxWxH) | mm | 570x510x155 |
| Pieces per box | | 1 |
| Quantity per container 20ft | | |
| Quantity per container 40ft | | |

## CERTIFICATES:

| | |
|---|---|
| Security certificates: | EN 60598-1 / EN 60598-2-3 EN 62493 / IEC 62471 |
| EMC certificates: | EN 55015 / EN 61547 / EN 61000-3-2 / EN 61000-3-3 EN 61347-2-13 / EN 61347-1 / EN 62384 |
| Other certifications: | IEC 62262 / EN 13032-4 / EN 62717 / EN 6272-1 EN 6272-2-1 / EN 61643-11 |

Company Certifications

ISO 9001 ISO 50001 ISO 14001 ISO 45001



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info@benito.com
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