**ALIB** 

# Luminaire

# **INNOVA B**







Flat environmental luminaire with an elipsoidal design ideal for urban residential areas (roads, squares, green spaces...). Narrow profile, column mounting by means of top strap. Power from 10W up to 100W thanks to its high dissipation capacity. Ready for any intelligent lighting control solutions.

## MAIN FEATURES:

High efficiency. 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:**

Historical Centres

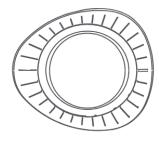
Residential Streets (Zones 30)

Pedestrian Zones

Squares

Green Areas; Parks and Gardens

### **DETAILS:**







Design by Benito Research Center.

Bracket with sinuous curved design.

Opening without tools.

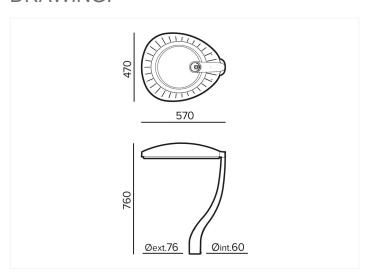
Project sheet | CAD | Catalogue | Mounting instructions | BIM | HD image



# **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, filters UV. Optionally in polycarbonate.				
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 on request)				
Mounting:	Post - Top Ø60mm				
Tilt range:	Non-directional luminaire				
Maintenance:	Easy, tool-less opening. Modular concept for easy component replacement: LEDs, drivers, SPD				
Recommended mounting height:	4 - 6 m				
Driver:	Constant current adjustable and programmable driver on different levels (0-10V, 1-10V, DALI2, NFC). Embedded in the luminaire, pre-wired on a galvanised steel plate.				
Flow Reduction:	Double level with control line, autonomous multi-level dimming or virtual midnight, flow reduction at the head-end.				
Ready4IOT - Connectivity:	Zhaga Base (Book 18) - D4i. (Optional).  NEMA 5,7 Pins Base (Optional).  Bottom side Presence Sensor on Zhaga Base (Book 18) - D4i. (Optional).				
Surge protection device (SPD):	Type T2+T3, 10kV and 20kA transient surge protector. Series connection with thermofuse, disconnection for a more effective protection at the end of the SPD service life. (Optional SPD Full Permanent Surge Protector >264Vac to <170VAc).				

# DRAWING:



# **INSTALLATION:**

















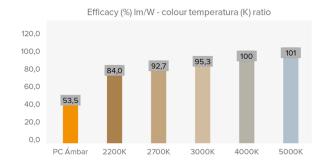
## **TECHNICAL DATA:**

					Real luminous flux (T) =85°C)		Initial luminous flux (T) =25°C)	
	REF.	Nº LEDs	Power W	I Driver mA	Flux Im	Efficacy Im/W	Flux Im	Efficacy Im/W
INNOVA B AL		12	10	250	1420	142	1620	162
		12	20	500	2820	141	3220	161
		12	30	750	4200	140	4800	160
	ALIB	24	40	500	5642	141	6432	161
		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 4000°K and CRI>70.

Luminous flux tolerance < +/-3%.

Values may be subject to changes due to LED binning.



# PHOTOMETRY:

Frontal Extensive Asymmetric (A1) Symmetric Extensive (SE) Extensive Asymmetric (AE) Super-Extensive Asymmetric (A3)

<sup>\*</sup>Show 4 recommended lighting distributions. Refer to the 18 typologies.



LEDs MODULE: BENITO Zhaga standard with 12 LEDs. Check colour temperatures, CRI and Luminous distributions (Optional NTC LEDs module:

temperature probe). Replaceable module: Yes

5050 LED Number of LEDs: 12 - 24 - 36

PCBs format: 2 or 3 Zhaga (Book 15) 2x4

LED nominal efficacy: 172

Colour temperature: PC Amber - 1K8, 2K2, 2K7, 3K, 4K, TW - Tunable White

Colour rendering index CRI: >70 (optional >80) Average LED useful time L90B10: L90B10 >100,000 hours

#### **OPTIC SPECIFICATIONS:**

PMMA lenses 2x2 Optic system: 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) Between G\*4 and G\*6 (depending on the light distribution) Luminous intensity category:

Luminous flux CIE nº3: >95% (See 18 Light Distributions).

Photobiological safety: RG0 (exempt of risk)

Initial luminous flux Tj=25°C (up to): lm 16035 Initial luminaire efficacy Tj=25°C (up to): Im/W 160 Real luminous flux Tj=85°C (UNE EN 13032-4) lm 14066 (up to):

Real luminaire efficacy Tj=85°C (UNE EN Im/W 141 13032-4) (up to):

#### **ELECTRIC SPECIFICATIONS:**

Nominal maximum power (LEDs): 90 Maximum power consumed (luminaire): W 100 Power range: W 10-100

<470 (LED Current = 50% Driver Current) Maximum current of LED: mΑ

Power supply protection classes IEC: Class I and II

Type 2 and Type 3, 10kV and 20kA transient surge protector. Series connection with thermal fuse Surge protection device (SPD): disconnector for a more effective protection at the end of its service life.

Common and differential mode protection (SPD) k\/ 10 Udc: Max current (8/20) (SPD): kΑ 20 Thermal phase disconnection (SPD): Yes Input voltage: Vac 220-240 Input voltage (max rate): 198-264 Vac Input frecquency: Hz 47-63 Starting current: Α <65 Duration of the starting voltage peak: ms < 0.3 >90% Driver efficacy:

Power factor 100% consumption: >0.98 Power factor 50% consumption: >0.95 Total harmonic distortion (THD): <10

Power consumption on standby mode: < 0.4

C (According to EU Regulation 2019/2015 EPREL) - A++ IPEA>1,15 Energy class:

#### **OPERATING CONDITIONS:**

Average LED useful time L90B10: >100.000 Average driver useful life to Tp <70°C: 100.000 Average luminaire useful life L90B10 (TM-21): >100,000 ٥С From -35°C to +50°C Ambient temperature (Ta): Aerodynamic resistance (CxS): m2 0.111 Vibration test (15Hz 3 axis):

5 (extensible up to 10 Guarantee: vears

vears)

### PACKAGING DIMENSIONS:

10.2 Net weight kg Gross weight kg Luminaire dimensions (LxWxH) 570x470x760 Packaging dimensions (LxWxH) 570x510x155 Pieces per box 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







