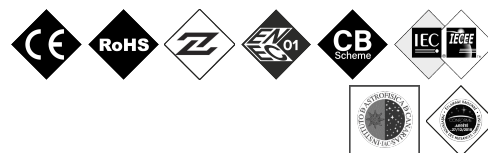
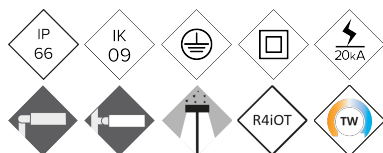


ILDH

Luminaire

HORIZON



Belongs to the Essentials range, a set of luminaires of different types and styles that share a common aesthetic. Elegant and contemporary design ideal for all kind of applications, especially road and residential ones. Can be installed on 4m to 8 m poles. Optical design optimised for a perfect glare control and cut-off suitable for pedestrians without emission to the upper hemisphere.

MAIN FEATURES:

High efficiency. Up to 142 lm/W net
Essentials range. From 20W to 120W
Finless passive dissipation
Tool-less opening
18 light distribution curves
Zhaga Standard (Book 15)
Ready 4IoT. Ready for any intelligent lighting control solution

APPLICATIONS:

Urban Roads and Streets
Residential Streets (Zones 30)
Bicycle Lanes and Narrow Roads
Rural Roads
Car Parks

[Project sheet](#) | [CAD](#) | [Catalogue](#) | [Mounting instructions](#) | [BIM](#) | [HD image](#)

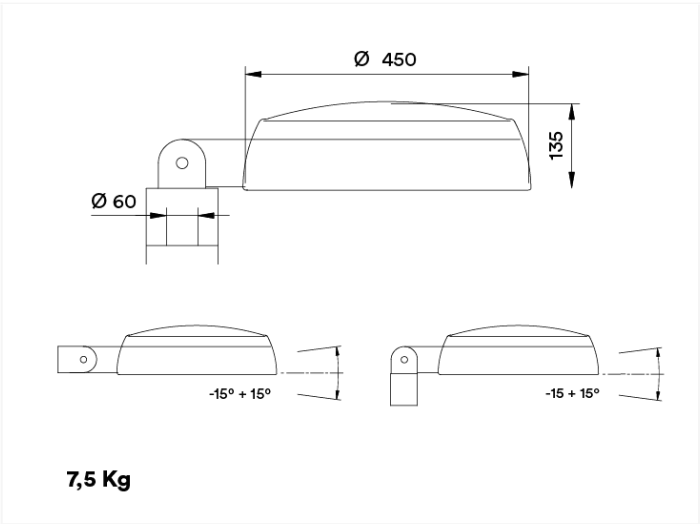
BENITO

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, 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:	
Paint and finishes:	Polyester powder paint coating, electrostatically sprayed and sublimated in the oven. Resistant to corrosion
Colour:	Matte black RAL 9005. Optional: other colours
Mounting:	Post-Top or Lateral Ø60mm
Tilt range:	From -15° to +15°
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 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:



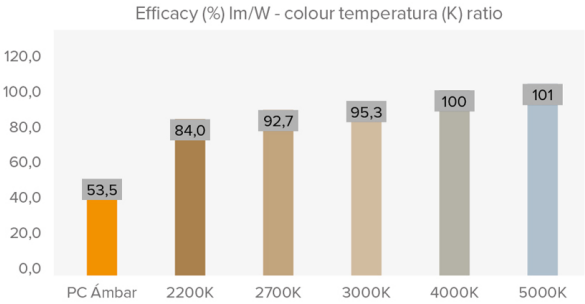
V. 2024-02-23 | The constant improvement and evolution of our products may result in some modifications of the technical specifications and characteristics of the products without prior notice.



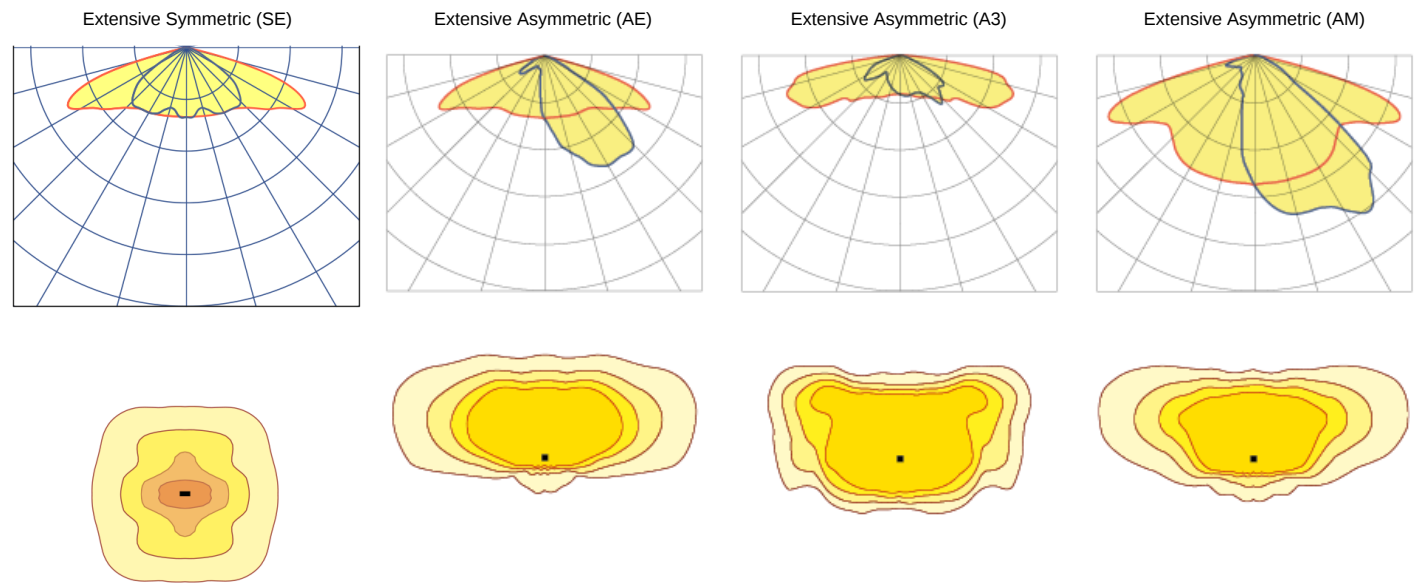
TECHNICAL DATA:

	REF.	Nº LEDs	Power W	I Driver mA	Real luminous flux (T) =85°C		Initial luminous flux (T) =25°C	
					Flux lm	Efficacy lm/W	Flux lm	Efficacy lm/W
DECO HORIZON	ILDH	16	20	375	2842	142	3240	162
		16	30	563	4242	141	4836	161
		16	40	750	5642	141	6432	161
		32	50	470	7050	142	8055	162
		32	60	563	8460	141	9644	161
		32	80	750	11280	141	12859	161
		48	100	625	14100	141	16074	161
		48	120	750	16920	141	19289	161

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:



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

LEDs MODULE:

LEDs module:	BENITO Zhaga standard for 16 LEDs. Check colour temperature, CRI and light distributions (Optional NTC temperature probe).		
Replaceable module:	Yes		
LED:	5050		
Number of LEDs:	16-32-48		
PCBs format:	1, 2 or 3 Zhaga (Book 15) 2x8		
LED nominal efficacy:	172 lm/W		
Colour temperature:	PC Amber - 1K8, 2K2, 2K7, 3K, 4K, 5K		
Colour rendering index CRI:	>70 (optional >80)		
Average LED useful time L90B10:	L90B10 >100.000 horas		

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 n°3:	>95% (See 18 Light Distributions).		
Photobiological safety:	RG0 (exempt of risk)		
Initial luminous flux Tj=25°C (up to):	lm	19289	
Initial luminaire efficacy Tj=25°C (up to):	lm/W	162	
Real luminous flux Tj=85°C (UNE EN 13032-4) (up to):	lm	16920	
Real luminaire efficacy Tj=85°C (UNE EN 13032-4) (up to):	lm/W	142 (Rendimiento = 82.6 % lm/W (Real 85°C) ÷ lm/W (Nominal Led))	

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	108
Maximum power consumed (luminaire):	W	120
Power range:	W	20 - 120W
Maximum current of LED:	mA	<470 (LED Current = 50% Driver Current)
Power supply protection classes IEC:	Class I and II	
Surge protection device (SPD):	Type 2 and Type 3, 10kV and 20kA transient surge protector. Series connection with thermal fuse disconnecter for a more effective protection at the end of its service life.	
Common and differential mode protection (SPD) Udc:	kV	10
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 frequency:	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:	<0,4	
Energy class:	C (According to EU Regulation 2019/2015 EPREL) - A++ IPEA>1,15	

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		
Ambient temperature (Ta):	°C	de -35°C a +50°C	
Aerodynamic resistance (CxS):	m2	0,070	
Vibration test (15Hz 3 axis):			
Guarantee:	years	5 (extensible up to 10 years)	

PACKAGING DIMENSIONS:

Net weight	kg	7,5
Gross weight	kg	9
Luminaire dimensions (LxWxH)	mm	450x450x135
Packaging dimensions (LxWxH)	mm	520x520x170
Pieces per box		1
Quantity per container 20ft		
Quantity per container 40ft		

CERTIFICATES:

Security certificates:	EN 60598-1 / EN 60598-2-3 / 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 / EN62031 / EN 16474 / ISO 9227 / EN 60068-2-11 / ISO 10289 / EN 61643-11

Company Certifications



BENITO

info@benito.com
tel. 93 852 1000