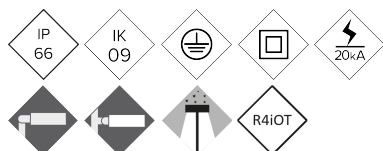ILLI1

Luminaire

ELIUM MINI

| IP 66 | IK 09 | ⏚ | ▣ | ⚡ 20kA |
| R4IOT |

Extra flat luminaire with an excellent relation between efficiency and cost. Available in three sizes with extensive optical and light distributions to cover all applications. Ideal to be installed on 4m to 12m lighting poles.

MAIN FEATURES:

High efficacy. Up to 142 lm/W net
3 different sizes. From 20W to 150W
Double compartment: driver and LED module
Easy opening with a screwdriver
18 light distribution curves
Zhaga Standard (Book 15)
Ready 4IoT. Ready for any intelligent lighting control solution

APPLICATIONS:

Urban Roads and Streets
Bicycle Lanes and Narrow Roads
Rural Roads
Car Parks

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

SPECIFICATIONS :

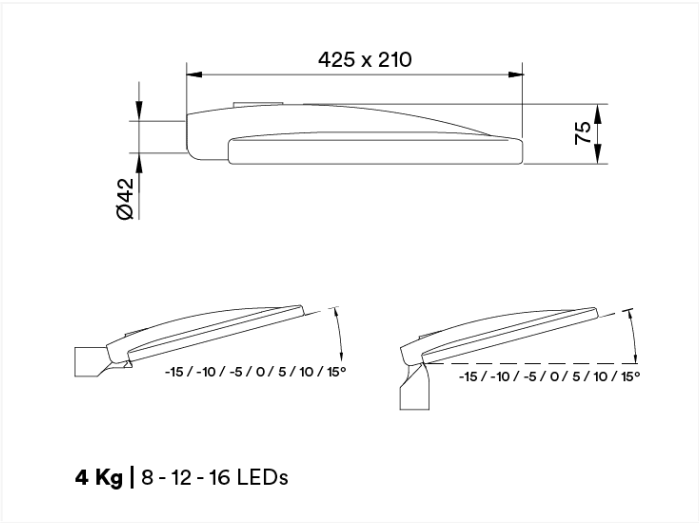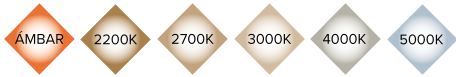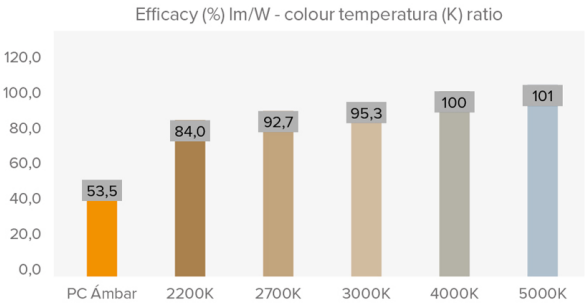|	
Housing material:	High pressure die-cast aluminium EN AC-43000, EN AC-43100, EN AC-43400, EN AC-44100, EN AC-47100 according to the UNE EN 1706 standard
Diffuser (optic system enclosure):	5mm tempered safety glass. UV filter
Fixing elements:	Stainless steel 18/8 - AISI 304
Housing:	One compartment: driver / LED module
Sealing gaskets:	Silicone foam
IP rating (luminaire):	66
IP rating (optic system):	66
IK rating (impact resistance):	09
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:	RAL 9006. Optional: other colours
Mounting:	Post-Top Fixing Ø60 mm (Optionally Ø42 mm without Tilt Bracket).
Tilt range:	Optional: from -15º to +15º only by means of a joint ball system
Maintenance:	Easy opening with a screwdriver. Modular concept for easy component replacement: LEDs, drivers, SPD
Recommended mounting height:	4 - 7 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:

425 x 210
Ø42
75
-15 / -10 / -5 / 0 / 5 / 10 / 15°   -15 / -10 / -5 / 0 / 5 / 10 / 15°

4 Kg | 8 - 12 - 16 LEDs

INSTALLATION:

BENITO

info@**benito**.com
tel. **93 852 1000**
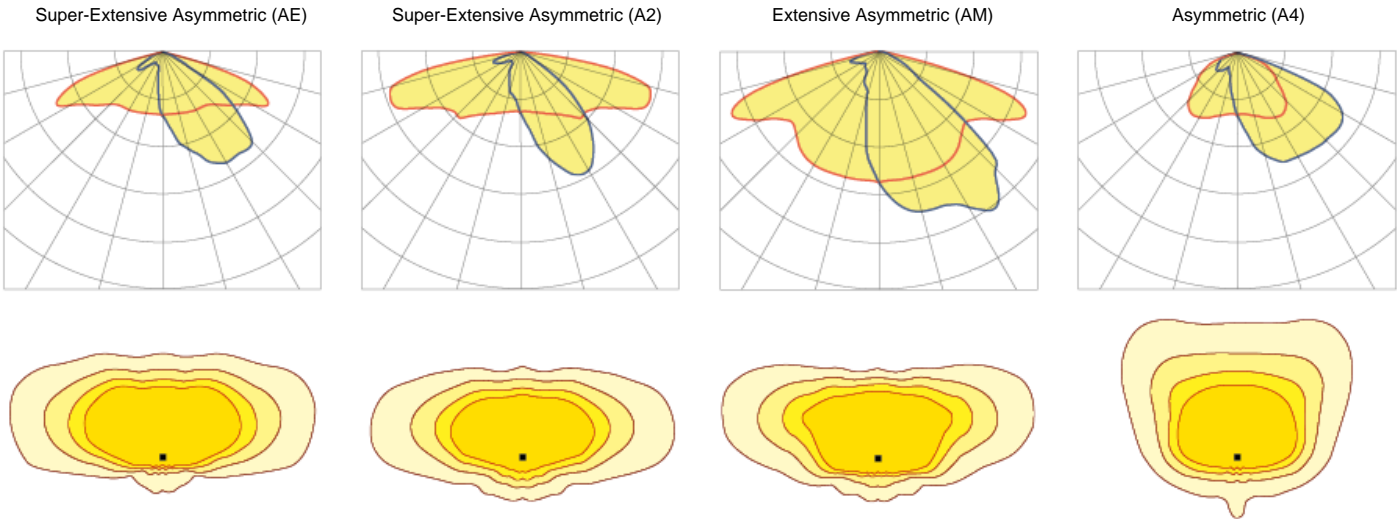
lm/€

TRIPLE
PROTECTION

TECHNICAL DATA:

	REF.	Nº LEDs	Power W	I Driver mA	Real luminous flux (T) =85ºC)		Initial luminous flux (T) =25ºC)	
					Flux lm	Efficacy lm/W	Flux lm	Efficacy lm/W
ELIUM MINI	ILLI140	8	20	750	2820	141	3215	161
		16	20	375	2842	142	3240	162
		16	30	563	4242	141	4836	161
		16	40	750	5642	141	6432	161

Luminous flux and efficiency at 4000ºK and CRI>70.

Luminous flux tolerance < +/-3%.

Values may be subject to changes due to LED binning.

Efficacy (%) lm/W - colour temperatura (K) ratio

53,5	84,0	92,7	95,3	100	101
PC Ámbar	2200K	2700K	3000K	4000K	5000K

PHOTOMETRY:

Super-Extensive Asymmetric (AE)   Super-Extensive Asymmetric (A2)   Extensive Asymmetric (AM)   Asymmetric (A4)

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

BENITO

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LEDs MODULE:

LEDs module:	BENITO Zhaga standard with 8 LEDs. Check colour temperatures, CRI and Luminous distributions (Optional NTC temperature probe).
Replaceable module:	Yes
LED:	5050
Number of LEDs:	8 - 16
PCBs format:	1 or 2 Zhaga (Book 15) 2x8
LED nominal efficacy:	172 lm/W
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% (See 18 Light Distributions).
Photobiological safety:		RG0 (exempt of risk)
Initial luminous flux Tj=25ºC (up to):	lm	6432
Initial luminaire efficacy Tj=25ºC (up to):	lm/W	162
Real luminous flux Tj=85ºC (UNE EN 13032-4) (up to):	lm	5642
Real luminaire efficacy Tj=85ºC (UNE EN 13032-4) (up to):	lm/W	142

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	36
Maximum power consumed (luminaire):	W	40
Power range:	W	20 - 40W
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 disconnector 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 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:		C (According to EU Regulation 2019/2015 EPREL) - A++ IPEA>1,15

OPERATING CONDITIONS:

Average LED useful time L90B10:	hours	>100.000
Average driver useful life to Tp <70ºC:	hours	100.000
Average luminaire useful life L90B10 (TM-21):	hours	72.167
Ambient temperature (Ta):	ºC	de -35°C a +50°C
Aerodynamic resistance (CxS):	m2	0,039
Vibration test (15Hz 3 axis):		
Guarantee:	years	5 (extensible up to 10 years)

PACKAGING DIMENSIONS:

Net weight	kg	4
Gross weight	kg	5
Luminaire dimensions (LxWxH)	mm	425x210x75
Packaging dimensions (LxWxH)	mm	440x225x105
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 EN62031 / EN 16474 / ISO 9227 / EN 60068-2-11 / ISO 10289 / EN 61643-11

Company Certifications

ISO 9001   ISO 50001   ISO 14001   ISO 45001

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