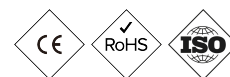
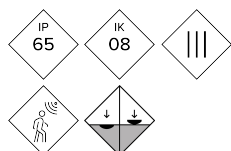


ABRA3

Beacon

# RAY SOLAR



Beacon Solar , a cylindrical design with indirect light via a diffuser, is ideal for signaling applications. The integrated Solar panel, battery, and control system are housed in a single unit for easy installation. Control is provided by a PIR presence sensor, offering intelligent light management. Its compact and elegant design allows for the transformation of outdoor spaces with minimal visual impact and maximum lighting comfort.

## MAIN FEATURES:

- Compact aerodynamic all-in-one design
- Battery with LiFePO4 technology
- MPTT Charge Controller – PIR Sensor
- Comfortable indirect lighting
- Easy installation without wiring

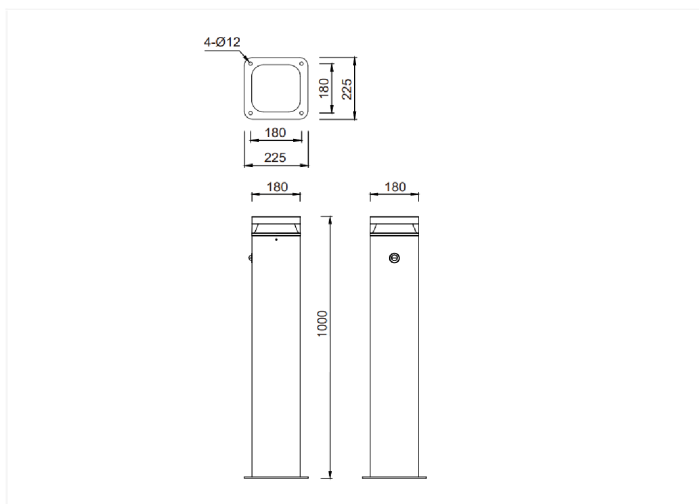
## APPLICATIONS:

- Cycle Lane and Narrow Tracks
- Pedestrian Zones
- Rural Roads
- Squares
- Green Areas; Parks and Gardens

## SPECIFICATIONS :

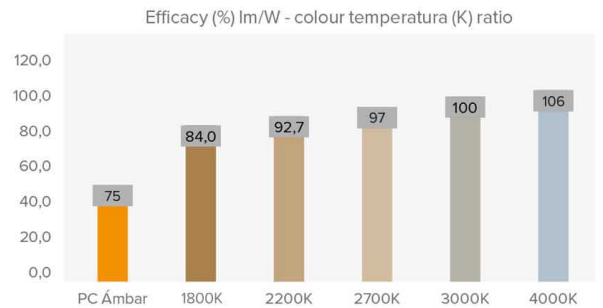
Housing material:	Die-cast aluminum casting of type EN AC-43000, EN AC-43100, EN AC-43400, EN AC-44100, EN AC-47100 according to standard UNE EN 1706.
Diffuser (optic system enclosure):	High transparency polycarbonate, filters UV rays.
Fixing elements:	18/8 Stainless Steel - AISI 304
Housing:	It consists of two pieces: The upper body where the Solar panel, battery and BENITO LED module are housed, the control electronics and the fixing support.
Sealing gaskets:	Silicone Foam
IP rating (luminaire):	IP65
IP rating (optic system):	IP65
IK rating (impact resistance):	IK08
LEDs thermal dissipation:	Heat dissipation is achieved through the Beacon 's body, without external fins or conductive fluids. Passive convection heat dissipation is achieved by ensuring thermal contact between the LED modules through a high-conductivity heat transfer material.
Anti-condensation valve:	Pressure compensation valve that ensures the evacuation of moisture, preventing condensation, maintaining the IP rating of the luminaire.
Paint and finishes:	Polyester powder coating, electrostatically sprayed and oven-cured. Corrosion resistant.
Colour:	Micro-textured black.
Mounting:	Floor using 4 screws (not supplied).
Tilt range:	No.
Maintenance:	Replaceable modules: LEDs and Drivers.
Recommended mounting height:	Ground.
Driver:	MPPT charge controller.
Flow Reduction:	PIR presence sensor 8 m detection.
Ready4IOT - Connectivity:	LiFePo4. 21 Wh / 3.2 Vdc / 6 Ah. BMS protection.
Surge protection device (SPD):	DarkSky Approved

## DRAWING:



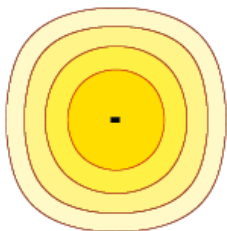
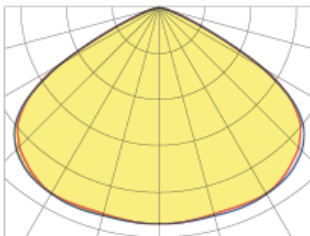
## TECHNICAL DATA:

	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
Bollard RAY	ABRA3	80	4	-	460	115	552	138



## PHOTOMETRY:

Circular 120° (C12)



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

## LEDs MODULE:

LEDs module:	BENITO 80 LED Format. Consult Color Temperatures, CRI and Light Distributions (Optional NTC temperature probe).	
Replaceable module:	Yeah	
LED:	3030	
Number of LEDs:	80	
PCBs format:	-	
LED nominal efficacy:	115 lm/W	
Colour temperature:	3000K	
Colour rendering index CRI:	>70	
Average LED useful time L90B10:	L90B10 >75,000 hours	

## OPTIC SPECIFICATIONS:

Optic system:	Indirect light using a diffuser	
Light distributions:	Available lighting distribution 360° (optionally 180° lighting distribution ABRA43).	
Upward light output ratio ULOR:	<5%	
Downward light output ratio DLOR:	>95%	
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%	
Photobiological safety:	RG0 (risk-free)	
Initial luminous flux Tj=25°C (up to):	lm	460
Initial luminaire efficacy Tj=25°C (up to):	lm/W	115
Real luminous flux Tj=85°C (UNE EN 13032-4) (up to):	lm	552
Real luminaire efficacy Tj=85°C (UNE EN 13032-4) (up to):	lm/W	138

## ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	4
Power range:	W	4
Power range:	W	4
Maximum current of LED:	mA	-
Power supply protection classes IEC:	Class III	
Battery:	LiFePo4 - 21 Wh / 3,2 Vdc / 6 Ah	
Depth of discharge:	kV	>80%
Battery Recharge Time:	h	3 - 4
Photovoltaic Panel:	Polycrystalline - 5 Wp / 6 Vdc.	
Charge controller:	MPPT	
Double discharge protection:	BMS protector in battery and minimum level controller	
Flow reduction:	By means of presence detector	
Remote control:	-	
Autonomy without prevention sensor:	Up to 2 nights	
Driver efficacy:	>90% (MPPT)	
Energy class:	C (According to EU Regulation 2019/2015 EPREL) - A++ IPEA>1.15	

## OPERATING CONDITIONS:

Average LED useful time L90B10:	hours	>75.000
Average driver useful life to Tp <70°C:	hours	-
Average luminaire useful life L90B10 (TM-21):	hours	>50.000
Ambient temperature (Ta):	°C	de -35°C a +50°C
Aerodynamic resistance (CxS):	m2	0,039
Vibration test (15Hz 3 axis):		
Guarantee:	years	2

## PACKAGING DIMENSIONS:

Net weight	kg	8,5
Gross weight	kg	-
Luminaire dimensions (LxWxH)	mm	180x1000mm
Packaging dimensions (LxWxH)	mm	1030x235x240mm
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



# BENITO

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