APMS

Floodlight

MILAN S

IK 10 | IP 66 | IP 66 | (earth symbol) | (class II symbol) | 20kA

CE | e+ | RoHS | RAEE | FHS <1% | ENEC 18

power LED | CB Scheme | IAC | QCERT | RETILAP | ENAC
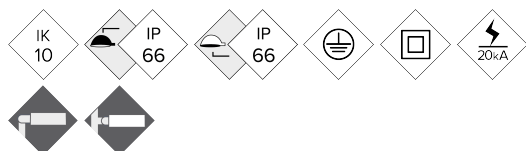
Flat floodlight with low wind resistance. Comprehensive range available in four sizes with extensive optical and light distributions from 40W up to 460W to cover all applications. Can be tilted in all directions thanks to its fixing bracket. Ready for any intelligent lighting control solutions.

MAIN FEATURES:

High efficiency. Up to 140 lm/W net
4 different sizes. From 40W to 460W
Double compartment: driver and LED module
18 light distribution curves
Zhaga Standard (Book 15)
Ready 4IoT. Ready for any intelligent lighting control solution
High resistance to 5G vibrations

APPLICATIONS:

Tunnels and Underpasses
Squares
Car Parks
Architectural; Buildings and Monuments
Accent Lighting; Trees and Sculptures
Sports Facilities; Sports Halls, Sports Courts, Tennis, Padel
Industrial Warehouses

DETAILS:

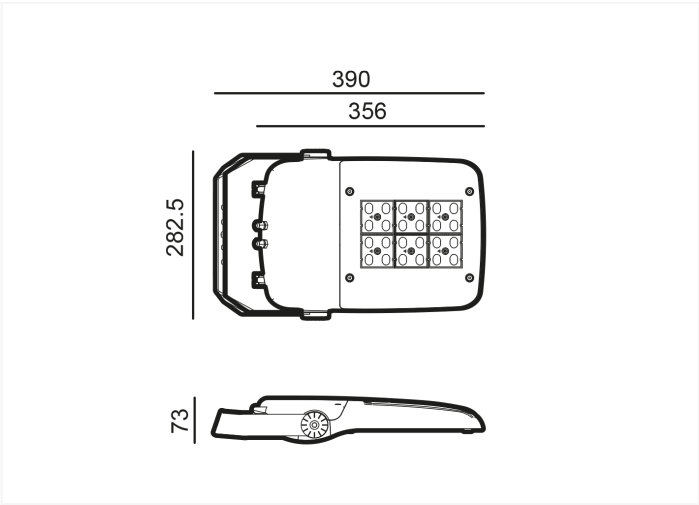Project sheet | CAD | Catalogue | Mounting instructions | HD image

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SPECIFICATIONS :

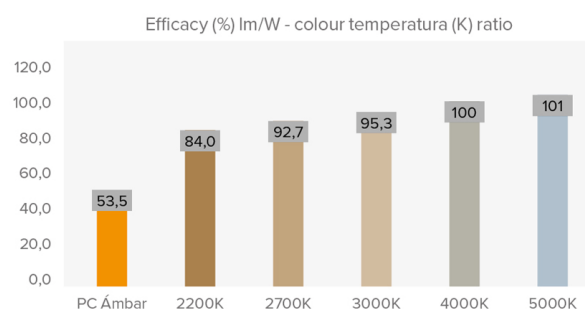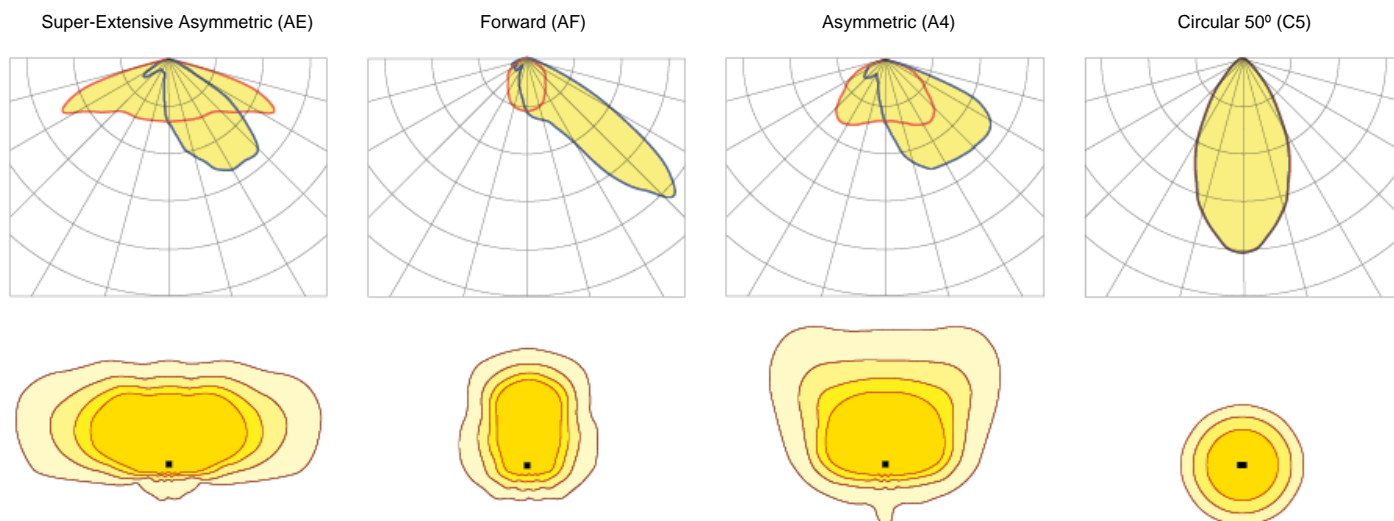|	
Housing material:	High pressure die-cast aluminium EN AC-43000, EN AC-43100, EN AC-43400, EN AC-44100, EN AC-47100 according to the UNE EN 1706 standard
Diffuser (optic system enclosure):	5mm tempered safety glass. UV filter
Fixing elements:	Stainless steel 18/8 - AISI 304
Housing:	Double compartment: driver / LED module
Sealing gaskets:	Silicone foam
IP rating (luminaire):	IP66
IP rating (optic system):	IP66
IK rating (impact resistance):	IK10
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 materia
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 corrosionant.
Colour:	RAL 9022. Optional: other colours
Mounting:	Fixing bracket
Tilt range:	From -120º to +120º
Maintenance:	Top opening. Modular concept for easy component replacement: LEDs, drivers, SPD
Recommended mounting height:	4 - 6m
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 - Ready4IoT - Dimming by main voltage - 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:

390
356
282.5
73

INSTALLATION:

TELECONTROL SYSTEM

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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
		24	40	500	5600	140	6384	160
P Milan S	APMS80	24	60	750	8220	137	9371	156
		36	80	667	10800	135	12312	154

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

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

PHOTOMETRY:

Super-Extensive Asymmetric (AE)

Forward (AF)

Asymmetric (A4)

Circular 50º (C5)

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

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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 Zhaga (Book 15) 2x6
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	12312
Initial luminaire efficacy Tj=25ºC (up to):	lm/W	160
Real luminous flux Tj=85ºC (UNE EN 13032-4) (up to):	lm	10800
Real luminaire efficacy Tj=85ºC (UNE EN 13032-4) (up to):	lm/W	140

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	72
Maximum power consumed (luminaire):	W	80
Power range:	W	40W - 80W
Maximum current of LED:	mA	<400 (<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:	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	From -35°C to +50°C
Aerodynamic resistance (CxS):	m2	0.028
Vibration test (15Hz 3 axis):		
Guarantee:	years	5 years (extensible up to 10 years)

PACKAGING DIMENSIONS:

Net weight	kg	4.2
Gross weight	kg	4.6
Luminaire dimensions (LxWxH)	mm	390x282.5x73
Packaging dimensions (LxWxH)	mm	400x295x106
Pieces per box		1
Quantity per container 20ft		2420
Quantity per container 40ft		5038

CERTIFICATES:

Security certificates:	EN 60598-1 / EN 60598-2-5 / 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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