



ARLC16

MODULE 16



Retrofit module with 16 LEDs. High-efficiency sink made of anodised extruded aluminium. Power from 20W to 120W without affecting the LEDs lifetime. Essential for the technological update of the discharge luminaire. Adapts to any luminaire if combined with a mounting plate.

MAIN FEATURES:

- High efficacy. Up to 142 lm/W net
- 2 different sizes. From 20W to 120W
- 18 light distribution curves
- Zhaga Standard (Book 15)
- Tempered 4mm glass with sealing joint to obtain an IP66 rating

APPLICATIONS:

- Retrofit for classic and discharge luminaire
- Accessory for the luminaires Tomsik, Gas, Vialia, Camprodon, Neovilla, Realia and Isabelina

[Catalogue](#) | [HD image](#)

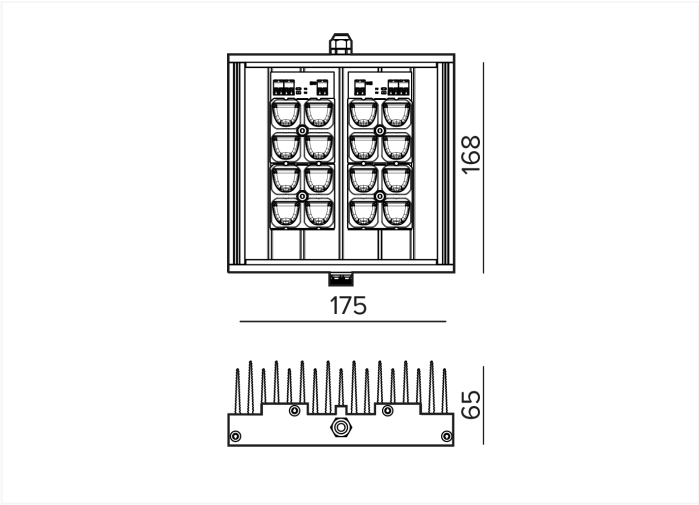
BENITO

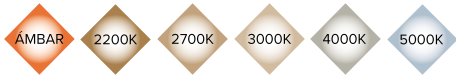
info@benito.com
tel. 93 852 1000

SPECIFICATIONS :

Housing material:	Housing made of high-purity extruded aluminium, side covers made of 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):	4mm tempered safety glass. UV filter
Fixing elements:	Stainless steel 18/8 - AISI 304
Housing:	Optional: mounting plate made of aluminium to complete the retrofits
Sealing gaskets:	Silicone
IP rating (luminaire):	
IP rating (optic system):	20-66
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 material
Anti-condensation valve:	Pressure-balancing valve to ensure moisture release, avoid condensation and maintain the luminaire IP tightness
Paint and finishes:	Black anodised housing or sink. Polyester powder paint coating on side covers, electrostatically sprayed and sublimated in the oven. Resistant to corrosion
Colour:	Matte black. Option: other colours
Mounting:	Front mounting by means of self-tapping screws
Tilt range:	Depends on the luminaire
Maintenance:	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 disconnecter for a more effective protection at the end of its service life

DRAWING:

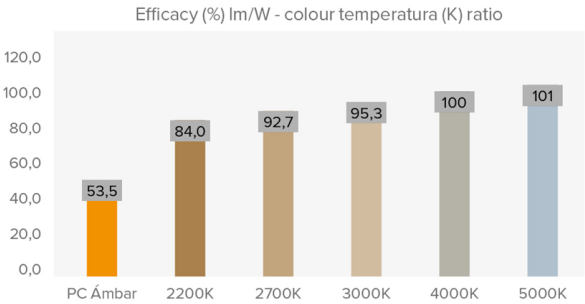




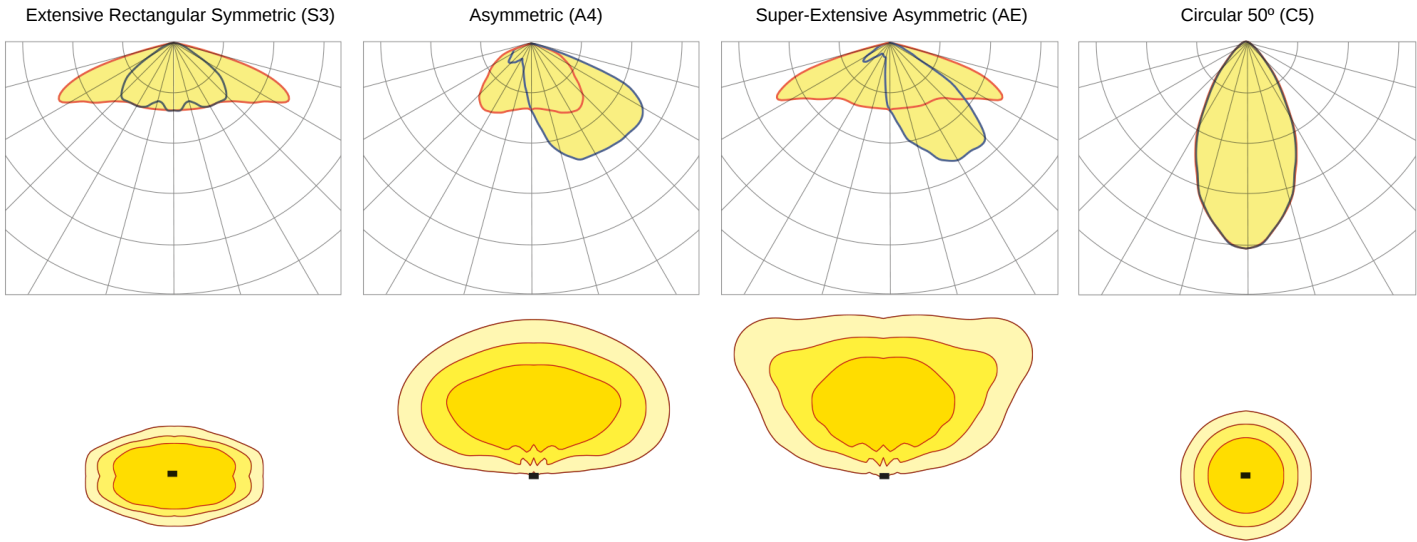
TECHNICAL DATA:

	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
Módulo Benito Novatilu	ARLC16	16	20	375	2842	142	3240	162
		16	30	563	4260	142	4856	162
		16	40	750	5642	141	6432	161
		16	60	1125	8460	141	9644	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.

V. 2023-10-24 | 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.

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:	16		
PCBs format:	2 Zhaga (Book 15) 2x4		
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 n°3:	>95%		
Photobiological safety:	RG0 (exempt of risk)		
Initial luminous flux Tj=25°C (up to):	lm	9644	
Initial luminaire efficacy Tj=25°C (up to):	lm/W	162	
Real luminous flux Tj=85°C (UNE EN 13032-4) (up to):	lm	8460	
Real luminaire efficacy Tj=85°C (UNE EN 13032-4) (up to):	lm/W	142	

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):	W	54
Maximum power consumed (luminaire):	W	60
Power range:	W	20 - 60 W
Maximum current of LED:	mA	<500 (<50% I _{max})
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 disconnecter for a more effective protection at the end of its service life	
Common and differential mode protection (SPD) U _{dc} :	kV	10 and optional NTC
Max current (8/20) (SPD):	kA	20
Thermal phase disconnection (SPD):	Yes	
Input voltage:	V _{ac}	220-240
Input voltage (max rate):	V _{ac}	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:	W	<0.4
Energy class:	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):			
Ambient temperature (Ta):	°C	From -35°C to +50°C	
Aerodynamic resistance (CxS):	m2		
Vibration test (15Hz 3 axis):			
Guarantee:	years	5 years (extensible up to 10 years)	

PACKAGING DIMENSIONS:

Net weight	kg	1.1
Gross weight	kg	
Luminaire dimensions (LxWxH)	mm	168x175x65
Packaging dimensions (LxWxH)	mm	
Pieces per box		1
Quantity per container 20ft		
Quantity per container 40ft		

CERTIFICATES:

Security certificates:	EN 62031 / EN 62493 / EN 62471 / IEC 62778 / EN 61247-2-13
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

info@benito.com
tel. 93 852 1000