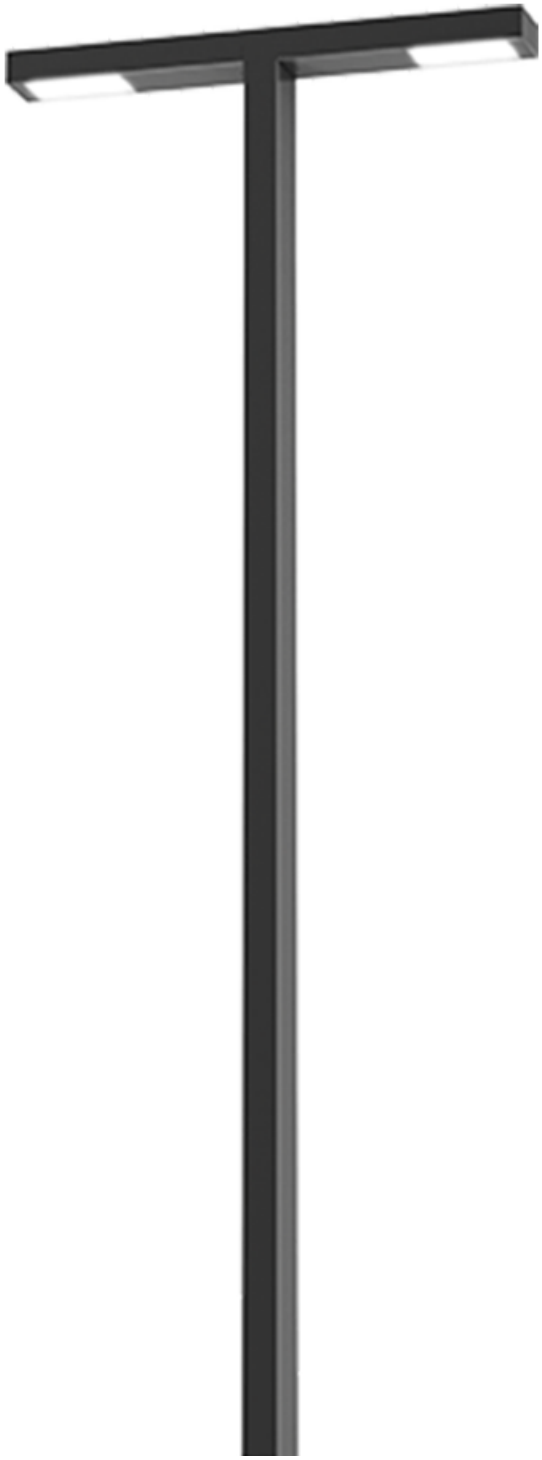
BENITO
–Street Lighting

Light point

Tomsk T

ACTMT+ALTM



Pole made of laminated steel tube with a 200mm x 100 mm rectangular profile. Height from 4m to 7m. Can include one or two brackets (same or different height). High resistance and durability. Refined and modern style ideal for any urban environment. Includes a BENITO-NOVATILU LEDs module with ligh distributions from 20W to 120W to cover all applications.

Ref	H (Altura)	Sección	Pernos	Plantilla
ACTMT4	4m	200x100mm	M22x500	300x300mm
ACTMT6	6m	200x100mm	M22x500	300x300mm
ACTMT8	8m	200x100mm	M22x500	300x300mm

Project sheet | CAD | Mounting instructions | HD image

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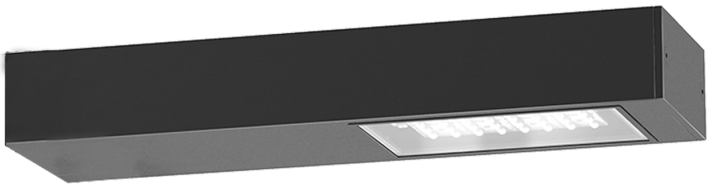
ALTM

luminaire

TOMSK



Wall bracket made of laminated steel tube (S235-JR) with a 200mm x 100 mm rectangular profile. High resistance and durability. Refined and modern style ideal for any urban environment. Includes one or two BENITO LEDs module with ligh distributions from 20W to 150W to cover all applications.

MAIN FEATURES:

High efficiency. Up to 145 lm/W net
2 different sizes. From 20W to 150W
18 light distribution curves
Zhaga Standard (Book 15)
Tempered 4mm glass with sealing joint to obtain an IP66 rating

APPLICATIONS:

Historical Centres
Residential Streets (Zones 30)
Pedestrian Zones
Commercial and Tourist Streets
Squares
Green Areas; Parks and Gardens

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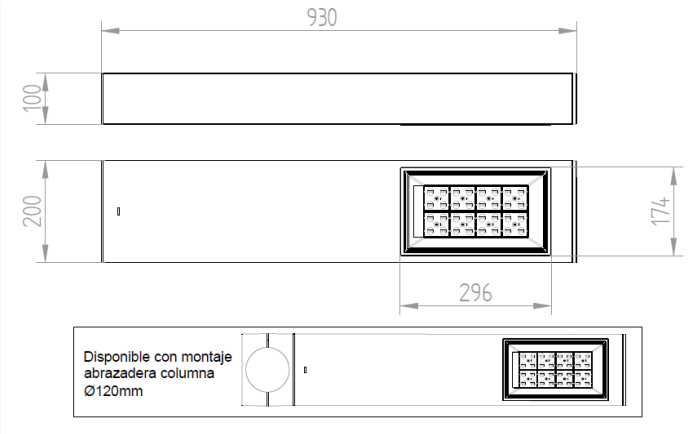
SPECIFICATIONS :

Housing material:	Aluminum extrusion with a 200mm x 100mm rectangular profile
Diffuser (optic system enclosure):	4mm tempered safety glass. UV filter
Fixing elements:	Stainless steel 18/8 - AISI 304
Housing:	Built in one piece with a compartment for the BENITO-NOVATILU module
Sealing gaskets:	Silicone
IP rating (luminaire):	
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:	Pressure-balancing valve to ensure moisture release, avoid condensation and maintain the luminaire IP tightness
Paint and finishes:	Galvanised and with a polyester powder paint coating, electrostatically sprayed and sublimated in the oven. Resistant to corrosion
Colour:	Microtextured black and other colours on request.
Mounting:	Rectangular Column 100x200 / Cylindrical 120mm / Wall fixing
Tilt range:	
Maintenance:	Modular concept for easy component replacement: LEDs, drivers, SPD
Recommended mounting height:	4 - 10 m
Driver:	Adjustable and programmable constant current driver at different levels. Embedded into the luminaire, pre-wired on galvanized steel plate.
Flow Reduction:	2 level command line, different timed levels or virtual midnight, Dimmed controlled.
Ready4IOT - Connectivity:	- Zhaga Socket (Book 18) - D4i. (Optional) - Nema Socket (optional) - Presence Sensor below with Zhaga Socket (Book 18) - D4i. (Optional)
Surge protection device (SPD):	Type 2 + Type 3, 10kV and 20kA transient surge protector. Series connection with thermofuse disconnector for a more effective protection at the end of its service life

DRAWING:



INSTALLATION:

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AMBAR 2200K 2700K 3000K 4000K 5000K

lm/€ CRI >70% TRIPLE PROTECTION

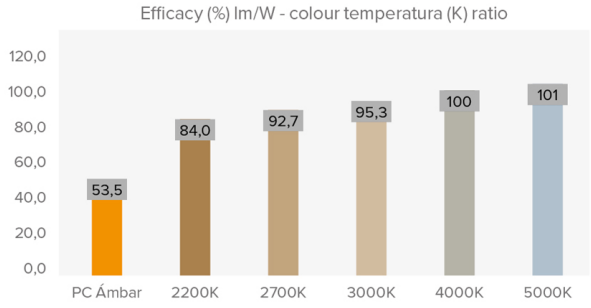
TECHNICAL DATA:

	REF.	Nº LEDs	Power W	I Driver mA	Real luminous flux (T) =85ºC) Flux lm	Real luminous flux (T) =85ºC) Efficacy lm/W	Initial luminous flux (T) =25ºC) Flux lm	Initial luminous flux (T) =25ºC) Efficacy lm/W
		16	20	375	2842	142	3240	162
		16	30	563	4260	142	4856	162
		16	40	750	5642	141	6432	161
Tomsk Luminaire	ALTM	32	60	563	8460	141	9644	161
		32	80	750	11360	142	12950	162
		64	100	470	14100	141	22701	161
		64	150	700	21000	140	24000	160

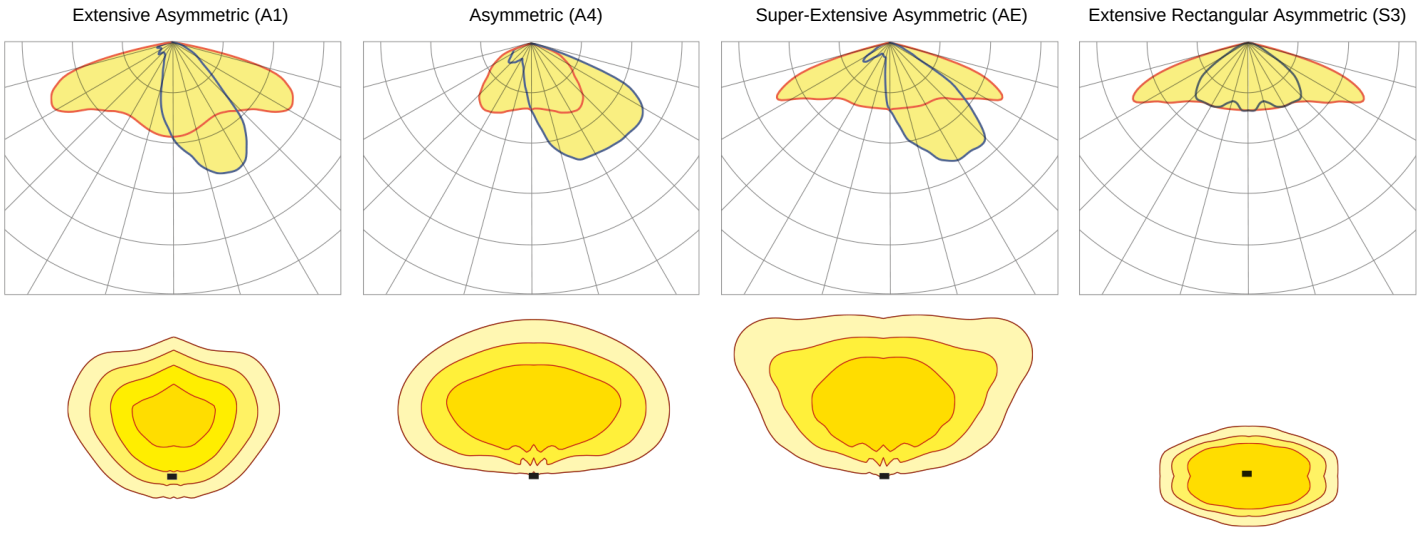
Luminous flux and efficiency at 4000ºK and CRI>70.

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.

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LEDs MODULE:

LEDs module:	Benito Zhaga format 8, 12, and 16 LED. Check other color temperatures, CRI and light distributions. (Optional NTC temperature sensor).
Replaceable module:	Yes
LED:	5050
Number of LEDs:	16 - 32 - 64
PCBs format:	2 Zhaga (Book 15) 2x4 or 2 Zhaga (Book 15) 2x8 or 2 modules 2 Zhaga (Book 15) 2x8
LED nominal efficacy:	172
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 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:		Check 18 light distribution curves
Photobiological safety:		RG0 (exempt of risk)
Initial luminous flux Tj=25ºC (up to):	lm	24000
Initial luminaire efficacy Tj=25ºC (up to):	lm/W	162
Real luminous flux Tj=85ºC (UNE EN 13032-4) (up to):	lm	21000
Real luminaire efficacy Tj=85ºC (UNE EN 13032-4) (up to):	lm/W	142

ELECTRIC SPECIFICATIONS:

Nominal maximum power (LEDs):		135
Maximum power consumed (luminaire):	W	150
Power range:	W	20 - 150W
Maximum current of LED:	mA	<500 (<50% Imax)
Power supply protection classes IEC:		Class I and II
Surge protection device (SPD):		Type 2 + 3, 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
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 UE 2019/2015 EPREL)

OPERATING CONDITIONS:

Average LED useful time L90B10:		>100,000
Average driver useful life to Tp <70ºC:		100,000
Average luminaire useful life L90B10 (TM-21):		
Ambient temperature (Ta):	ºC	From -35°C to +50°C
Aerodynamic resistance (CxS):	m2	
Vibration test (15Hz 3 axis):		
Guarantee:	years	5 years

PACKAGING DIMENSIONS:

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

CERTIFICATES:

Security certificates:	EN 40 / 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

ISO 9001 ISO 50001 ISO 14001 ISO 45001

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