



EROSIA

Optical unit IP67

IK09



eSMART

STELARIA



RoHS

KEY ADVANTAGES

- Classic street lamp made from die-cast aluminium.
- ELT components, designed and manufactured in Spain.
- Hinged top compartment to access the optical unit and auxiliary components.
- Versatile solution suited to every application.
- Optical unit with high ingress protection IP67 & IK10.
- Mains surge protection 10kV/10kA.

EROSIA is a classical 19th Century Fernandina-style street lamp equipped with LED technology which balances heritage conservation with technological efficiency.

The luminaire housing is made of die-cast aluminium with a polyester paint finish for high corrosion resistance. The hinged top compartment makes installation easy and provides access to the optical unit and auxiliary equipment.

EROSIA comes with the eLED RKIT - an IP67, IK10, high output 24 LED module with an optical lens mounted on an aluminium heat sink. It delivers high luminous efficacy and energy efficiency, and is powered by an ELT eSMART fully programmable driver which can be programmed to offer a wide range of dimming modes and control features.

EROSIA lighting fixture offers the possibility of working at project stage, with connectivity systems fully designed by ELT that aim to provide each installation with the maximum added value possible.

GENERAL INFORMATION



1- Luminaire housing: Made of die-cast aluminium with a polyester paint finish for high corrosion resistance. In RAL 9011 color graphite matt black.

2. Optics: Lenses from a renowned manufacturer with high ingress protection rating and luminous efficacy.

3. Opening & closing: Hinged top compartment to access the optical unit and auxiliary equipment.

4. Fixing: Vertical mounting on posts with a 3/4" brass stud and nut (not included) or for Ø60mm poles with attachment (not included).

5. Recommended installation height: 3.5 to 5m.

6. Adjustment: Fixed angle of incline.

7. Ingress protection: IP67 for the optical unit.

8. Impact protection rating: IK10 for the optical unit and IK09 for the luminaire.

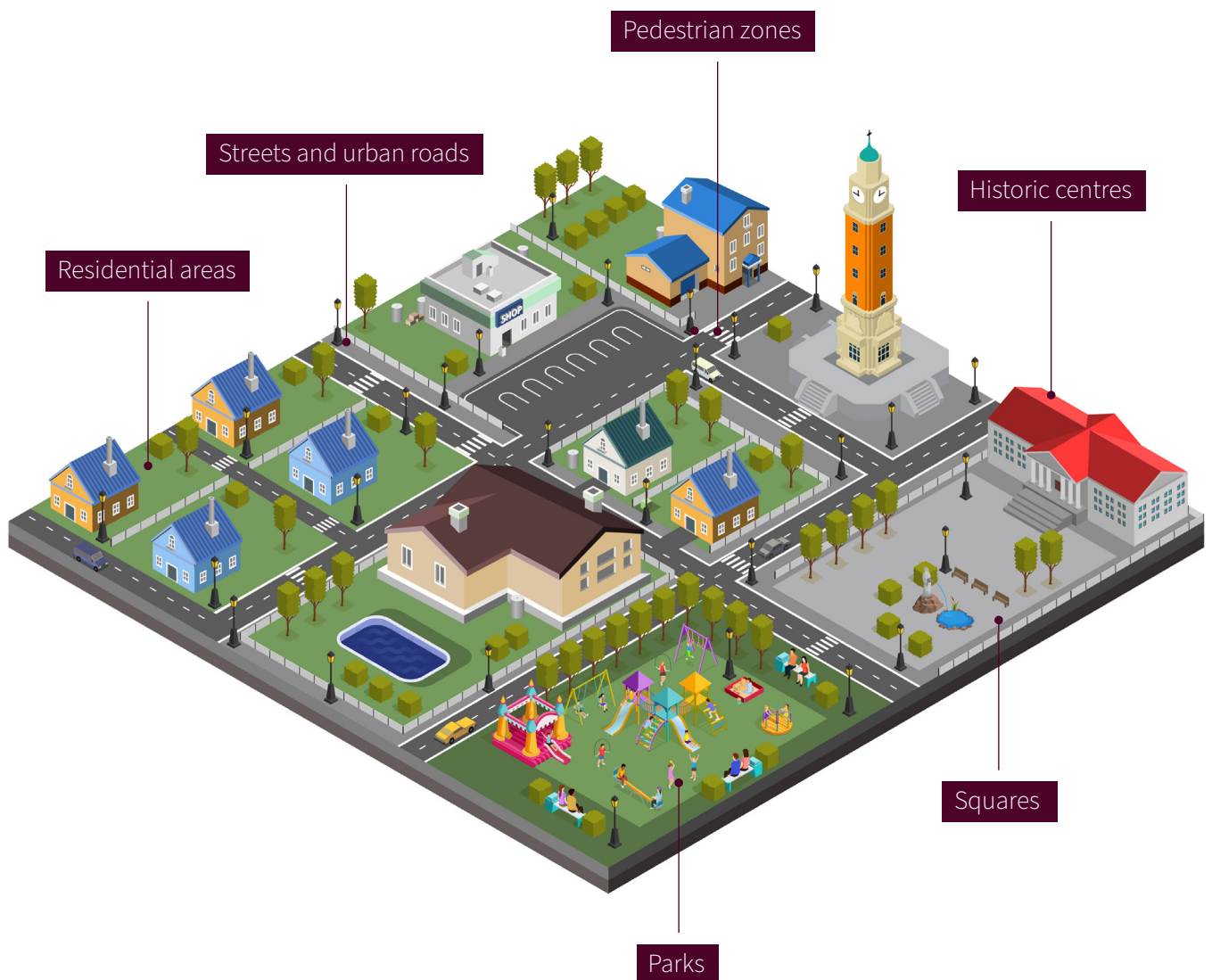
9. Protection: Against mains surges and lightning strikes 10kV / 10kA.

10. Control gear: ELT fully programmable eSMART driver.

11. Optical unit: LED module designed for optimal thermal management and high luminous efficacy.

APPLICATIONS

- Residential areas
- Streets and urban roads
- Historic centres
- Narrow roadways
- Squares
- Parks
- Pedestrian zones



APPLICABLE STANDARDS

CE marking	✓
RoHS compliant	✓
Certificates issued by an accredited ENAC body	✓
Compliance with IDAE and CEI technical requirements	✓

SAFETY	UNE-EN 60598-1:	Essential requirements for luminaires
	UNE-EN 60598-2-3:	Particular requirements for road and street lighting luminaires
	UNE-EN 62471:	Photobiological safety

ELECTROMAGNETIC COMPATIBILITY	UNE-EN 61000-3-2:	Harmonics
	UNE-EN 61000-3-3:	Fluctuations and flicker
	UNE-EN 55015:	Radio disturbance
	UNE-EN 61547:	Immunity requirements (EMC)

AUXILIARY EQUIPMENT	UNE-EN 61347-1:	Lamp control gear. General and safety requirements
	UNE-EN 61347-2-13:	Lamp control gear. Particular requirements
	UNE-EN 62031:	LED modules for general lighting
	UNE-EN 62384:	Operational requirements

OTHER STANDARDS Test regulation: light and lighting, measurement and presentation of photometric data.	UNE-EN 13032-1:	Measurement and file format
	UNE-EN 13032-4:	LED lamps, modules and luminaires
	LM79:	Electrical and photometric measurements
	LM80:	Lumen depreciation
	TM21:	Projected lumen degradation

SPECIFICATIONS

Models	4 different models: 26W, 38W, 54W, 83W
Nominal voltage	180...277 Vac
Permitted input voltage range	162...305 Vac
Mains frequency	50...60 Hz
Power factor	≥ 0.96
Total harmonic distortion	THD @230V, 54W < 10%
Mains surge protection	10 kV / 10kA
Electrical insulation	Class I
Power supply, driver	ELT eSMART fully programmable driver offering a wide range of dimming modes
Control	Multiple control methods Please refer to CONTROL section on page 8
Wireless street lighting solutions	Optional Please refer to CONNECTIVITY SOLUTIONS on page 10
Net luminaire weight (Kg)	9.6

LED load	Module with 24 high output and high luminous efficacy LEDs
Luminous efficacy	Up to 124 lm/W
Available colour temperatures (K)	PC AMBER, 2.200K, 2.700K, 3.000K, 4.000K, 5.000K
Colour Rendering Index	> 70 (except PC AMBER)
ULOR	0%
Optics	2x6 IP lenses
Material	PC
Optical unit ingress protection	IP67
Optical unit impact protection rating	IK10
Available photometric distribution	* See PHOTOMETRIC DISTRIBUTIONS section on page 7

Useful life at 25°	100,000hrs - L90B10
Operating temperature range	-20°C a + 40°C

PRODUCT SPECIFICATION

Model	LED current (mA)	System power (W) ⁽¹⁾	Colour temperature (K)	Typical luminous flux at tamb 25° (lm) ⁽²⁾	Luminaire efficacy (lm/W)
EROSIA 26W	350	26	PC AMBER	2.445	94
			2 200	2.842	109
			2 700	3.240	125
			3 000	3.356	129
			4 000	3.537	136
			5 000	3.607	139
EROSIA 38W	500	38	PC AMBER	3.531	93
			2 200	4.029	106
			2 700	4.626	122
			3 000	4.746	125
			4 000	5.086	134
			5 000	5.188	137
EROSIA 54W	700	54	PC AMBER	4.614	85
			2 200	5.363	99
			2 700	6.113	113
			3 000	6.331	117
			4 000	6.673	124
			5 000	6.807	126
EROSIA 83W	1050	83	PC AMBER	6.202	75
			2 200	7.229	87
			2 700	8.698	105
			3 000	8.798	106
			4 000	9.401	113
			5 000	9.589	116

Electrical and optical data tolerance +10%.

Reference light values. For more information, see photometry files.

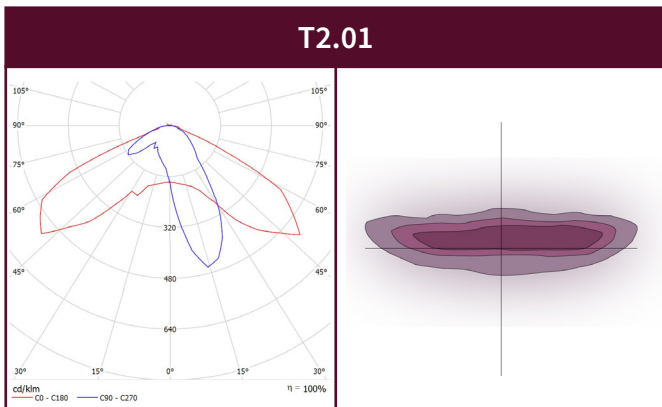
(1) Typical power (W) includes losses occurring in the driver.

(2) Light distribution curves based on RKIT. Please contact the sales team for exact information.

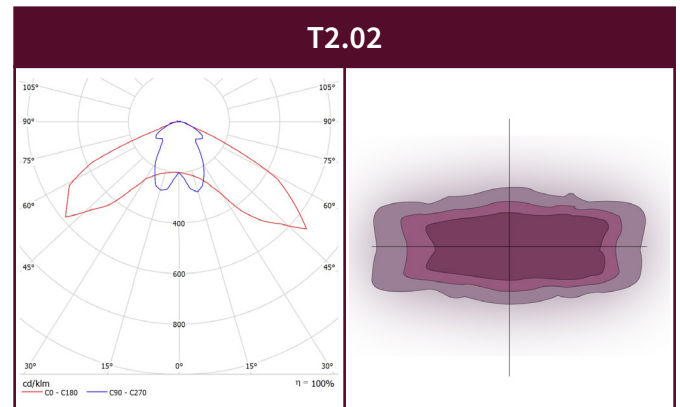


Dimensions in mm

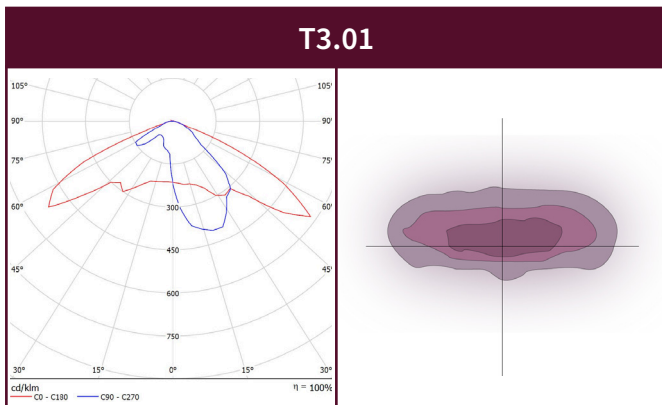
PHOTOMETRIC DISTRIBUTIONS



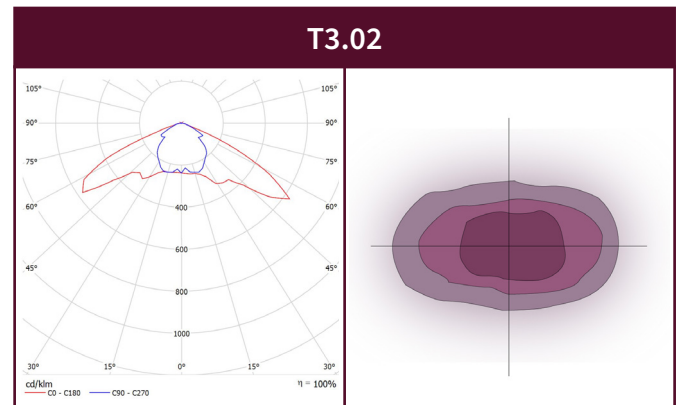
IESNA Type II Long Asymmetrical distribution is used for lighting the European standard for Class P pedestrian walkways and Class M roadways.



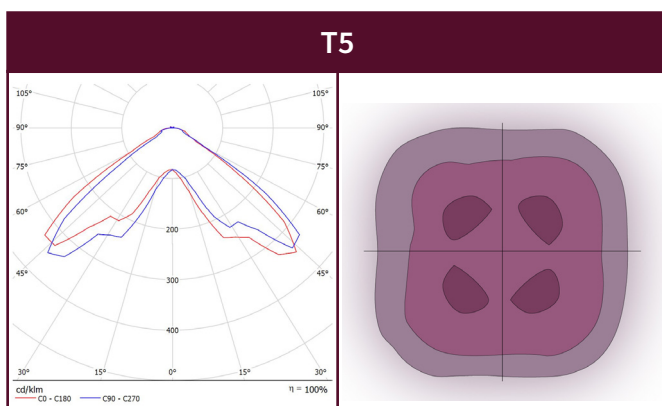
Long Symmetrical distribution is used for lighting roadways and pedestrian walkways.



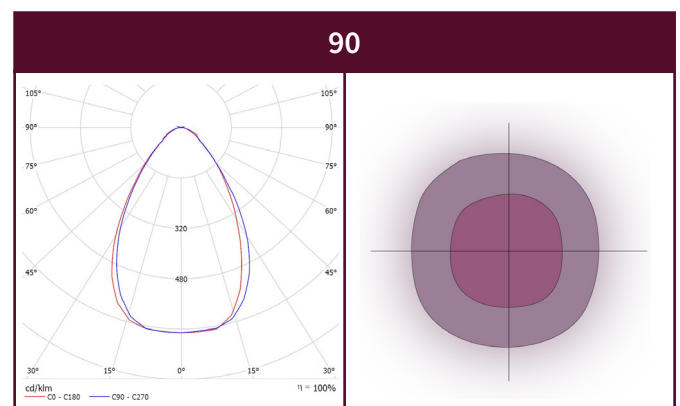
IESNA Type III Wide Asymmetrical distribution is used for lighting roadways whose width is the same or more than the mounting height.



Wide Symmetrical distribution is used for lighting roadways and pedestrian walkways.



IESNA Type V Circular Symmetrical distribution is used for large areas such as parks and car parks.



90° Symmetrical distribution is used for floodlighting.

Light distribution curves based on RKIT. Please contact the sales team for exact information.

CONTROL



CONTROL GEAR WITH eSMART TECHNOLOGY

Control gear equipped with eSMART technology offers total flexibility in the design of the lighting system, thanks to all the control features and programmable dimming methods it incorporates.

These drivers are the perfect lighting solution for today and tomorrow, to optimise the performance of each light point, obtain the best operating features as well as an optimal energy saving, which will help reduce both economic costs and CO² emissions throughout the entire service life of the lighting system.

Monitoring parameters and events

Control gear equipped with eSMART technology records numerous events in its non-volatile internal memory along with the maximum and minimum values of different parameters and operating times in different modes, relating to the control gear itself as well as to the LED modules its drives.

Real time data recorded and the parameters can be monitored by the user via the iSOFT configuration software and by means of the STELARIA™ remote street lighting management system.

DIMMING MODES	ON/OFF: Non-dimmable
	DALI
	0 - 10V
	1 - 10V
	ActiDIM: Stand-alone dimming system that simulates astronomical behaviour with reference to an average virtual night (up to 9 steps)
	Parking mode: Dimming through the installation of a presence detection sensor
	ActiDIM + Parking: Combines stand-alone dimming with presence detection sensors
	LineSwitch: Control line dimming
	MainsDIM: Mains voltage dimming

ACTIDIM MULTI-STEP DIMMING	Time intervals	Module power
	Power on	100 %
	2 hours before the middle of the night	70 %
	1 hour before the middle of the night	50 %
	4 hours after the middle of the night	80 %
	5 hours after the middle of the night	100 %

PROGRAMMABLE FEATURES	AOC: Adjustable output current
	MTP: Module thermal protection
	CLO: Constant lumen output
	EOL: End of life
	PST: Programmable start-up time

PROTECTIONS	Against short circuit, overload and open circuit
	Thermal protection
	Mains surge protections <ul style="list-style-type: none"> Differential mode: 6kV / 3kA (L-N) Standard mode: 8kV (L/N - Earth)

AUXILIARY PROTECTION



Auxiliary equipment to help protect the luminaire from mains surges and lightning strikes which transfer the potentially harmful energy safely to earth.

Open circuit voltage	10kV
Nominal transient current	5kA
Maximum transient current	10kA
MC / MD protection level	1.5kV

LED MODULE KIT

eLED[®] rkit MODULES



eLED RKIT high luminous efficacy 24 LED module mounted on an aluminum heat sink that guarantees optimal thermal management. It incorporates a combination of 2x6 lenses in a variety of different light distributions that guarantee a high degree of IP67 and IK10 protection.

LED	High performance and high power LED
Format	Compact design to adapt to any type of luminaire
Ingress protection	IP67
Impact protection rating	IK10
Colour temperature (K)	PC AMBER, 2200K, 2700K, 3000K, 4000K, 5000K
Colour Rendering Index	> 70 (except PC AMBER)
Colour tolerance	3 MacAdam ellipses - 3SDCM

CONNECTIVITY SOLUTIONS

EROSIA lighting fixture offers the possibility of working at project stage, with connectivity systems fully designed by ELT that aim to provide each installation with the maximum added value possible.

iMonitor CONTROL TOOL

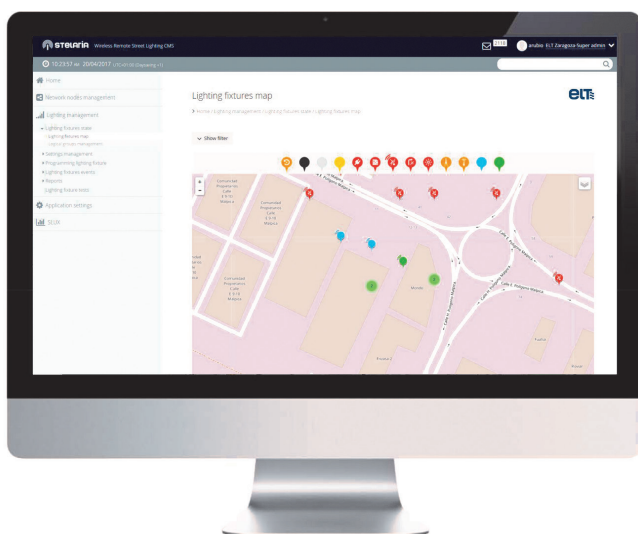
iMonitor is a tool based on Bluetooth technology that allows the wireless control and configuration of each light point by means of a mobile app, thereby simplifying maintenance and management tasks for street lighting installations.

iMonitor can adjust the light flow, programme dimming profiles and monitor every parameter associated with energy efficiency, including, among many others, consumption, device performance and power grid voltage.



STELARIA MANAGEMENT SYSTEM

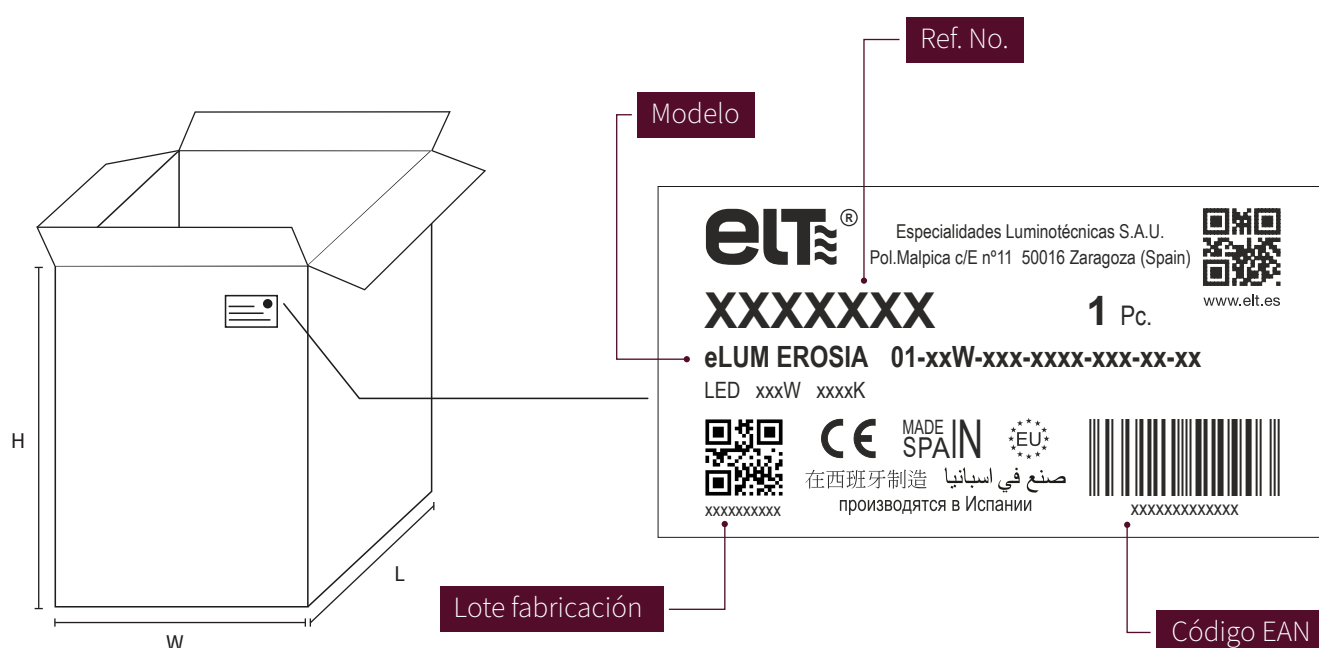
STELARIA is a remote wireless street lighting management system that can control and monitor street lighting installations via a simple Web application. Compatible with LED lighting fixtures and other lighting technologies, such as HID, the STELARIA system is really easy to install as it uses a standard connection, thereby making it a plug & play solution.



STELARIA automatically generates reports relating to energy consumption, the sending of alerts and failure detection, inventory control and programming light schedules, which reduce the costs associated with both installation maintenance and response times. This management system is based on standard technologies, which makes it the perfect ally for a fully interoperable solution. It also offers a module that interacts with other management systems and platforms, not only for street lighting, but also for other services that are becoming more digitalised, such as water or waste management.

PACKAGING AND LABELLING

Units per package	1 unit
Package dimensions (mm): (Width [W] x length [L] x height [H])	EROSIA: 520 x 520 x 870
Net luminaire weight (Kg)	EROSIA: 10.6



The data in this document is subject to change without prior notice. Please ensure that you have the latest version which is available from www.elt.es/en



EROSIA



Pol. Ind. Malpica - calle E nº11
50016 Zaragoza (Spain)
Tel: +34 976 573 660
Fax: + 34 976 574 960
E-mail: elt@elt.es

www.elt.es

