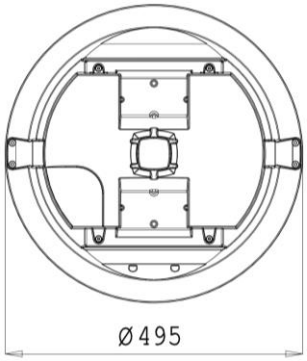
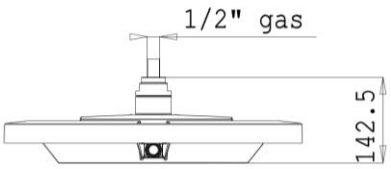
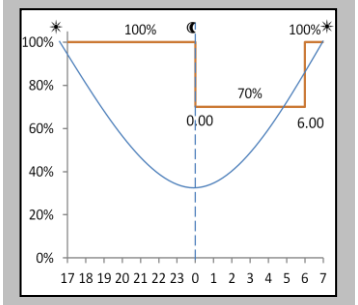
Product sheet



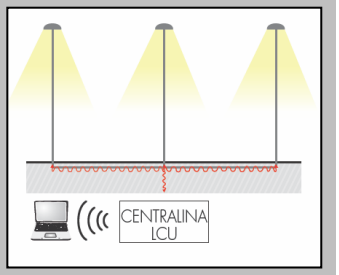


ECO•RAYS

DA Profile

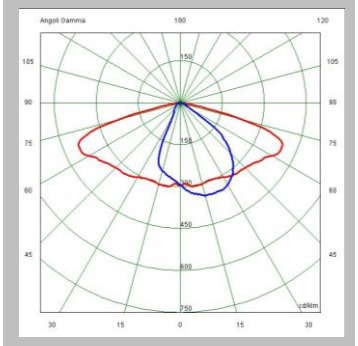


PLM



ECO•RAYS S

MAIN CHARACTERISTICS	
Applications	Urban and street lighting.
Optic	STU-M / S: Asymmetrical optic for street lighting (urban). S05: Symmetrical optic for urban and street lighting. SV: Asymmetrical optic for narrow urban streets or highway entrance/exit turns. S: Symmetrical optic for urban and street lighting. Colour temperature: 4000K (3000K optional) | CRI ≥ 70 Photobiological safety class: EXEMPT GROUP LED source efficiency: 158 lm/W @ 525mA, Tj=85°C, 4000K
Insulation class	II, I
Protection degree	IP66
Impact protection	IK08
LED modules	Removable.
Tilt angle	0°
Dimensions	See the drawing
Weight	7 kg
Exposed surface	Side: 0.03m^2 – Top: 0.17m^2
Mounting	Suspended on brackets ½'' GAS
Gear tray	Removable plate.
Operating temp.	-40°C / +50°C (525mA, 700mA)
Storage temperature	-40°C / +80°C
Main reference standards	EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3
IK08 IP66 EXEMPT GROUP	
ELECTRICAL CHARACTERISTICS	
Rated voltage	220÷240V 50/60Hz
LED current	525mA , 700mA
Power factor	>0,9 (at full load)
Mains connection	External connector for cables max. 2.5mm^2
Surge protection	SPD integrated 10kV-10kA, type II, with LED signal and thermo fuse to disconnect load at the end of life.
Control system	F: Fixed power not dimmable. (Base version) DA: Automatic dimming (virtual midnight) with default profile. DAC: Custom DA profile. FLC: Constant light flux. PLM: Power Line single point communication system. WL: Wireless single point communication system. DALI: Digital dimming interface DALI. NEMA: Socket 7 pin (ANSI C136.41).
Optical unit lifetime (Tq=25°C)	≥100.000hr L90B10 ≥100.000hr L90, TM-21
MATERIALS	
Fixing	Stainless steel screw.
Body	Die-cast aluminium UNI EN1706 powder painted.
Optic	99.85% aluminium with a surface finish in 99.95% with vacuum-sealed deposition. Alluminum grade class A+ (DIN EN 16268)
Screen	Flat tempered glass, 4mm thickness.
Gable gland	Plastic M20x1.5 - IP68
Gasket	Polyurethane
Colour	Graphite Cod. 01



STU-M Optic

All the published photometrical data has been obtained according to EN 13032-1

GREENLIGHT

Product sheet

4000K

LUMINAIRE	OPTICS	LED Current (mA)	RATED LUMINAIRE FLUX[1] (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER[1] (Tq=25°C, Vin=230Vac, F / DA / DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX[2] (Tj=85°C, 4000K, lm)	RATED LED POWER[2] (Tj=85°C, W)
ECO RAYS S 0R2C1 4.50-1M	S05 STU-M STU-S SV	525	1750	16	109	1954	12
ECO RAYS S 0R2C1 4.5-2M	S05 STU-M STU-S SV S	525	3580	31,5	114	4120	26
ECO RAYS S 0R2C1 4.7-1M	S05 STU-M STU-S SV	700	2320	22,5	103	2637	18
ECO RAYS S 0R2C1 4.7-2M	S05 STU-M STU-S SV S	700	4510	42	107	5274	35

3000K

LUMINAIRE	OPTICS	LED Current (mA)	RATED LUMINAIRE FLUX[1] (Tq=25°C, 3000K, lm)	RATED LUMINAIRE POWER[1] (Tq=25°C, Vin=230Vac, F / DA / DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX[2] (Tj=85°C, 3000K, lm)	RATED LED POWER[2] (Tj=85°C, W)
ECO RAYS S 0F2H1 3.50-1M	S05 STU-M STU-S SV	525	1580	15	105	1966	13
ECO RAYS S 0F2H1 3.5-2M	S05 STU-M STU-S SV S	525	3250	30,5	107	3932	26
ECO RAYS S 0F2H1 3.7-1M	S05 STU-M STU-S SV	700	2130	21,5	99	2489	18
ECO RAYS S 0F2H1 3.7-2M	S05 STU-M STU-S SV S	700	4150	40	104	4977	36

The tables above describe the flux and output power of the available versions. These parameters are necessary in order to guarantee a correct comparison of the luminaire performance. In particular, the luminaire efficiency (expressed in lm/W) must be calculated as the ratio between the output luminous flux of the luminaire and the power absorbed by the input power supply unit.
For the sake of completeness the tables also show the data of the nominal flux and power of the used LED.
Note: 1:Rated data obtained in laboratory | 2:Rated data extrapolated from LED manufacturer datasheet.

The characteristics of the product listed above are subjected to change without notice.
They will have to be confirmed in case of order.
Values indicated in this technical sheet are to be considered rated values subject to a tolerance of +/-5%.

LUMINAIRE	OPTICS	LED Current (mA)	INRUSH CURRENT Duration 50%pk (µs)	INRUSH CURRENT Peak (A)	MCB B-Type 10A / 16A / 25A	MCB C-Type 10A / 16A / 25A	SURGE PROTECTION CL.I (CM / DM, kV)	SURGE PROTECTION CL.II (CM / DM, kV)
ECO RAYS S 0R2C1 4.50-1M	S05 STU-M STU-S SV	525	360	15	14 / 23 / 35	23 / 39 / 59	10 / 10	9 / 10
ECO RAYS S 0R2C1 4.5-2M	S05 STU-M STU-S SV S	525	250	30	10 / 17 / 28	17 / 28 / 45	10 / 10	9 / 10
ECO RAYS S 0R2C1 4.7-1M	S05 STU-M STU-S SV	700	360	15	14 / 23 / 35	23 / 39 / 59	10 / 10	9 / 10
ECO RAYS S 0R2C1 4.7-2M	S05 STU-M STU-S SV S	700	250	30	10 / 17 / 28	17 / 28 / 45	10 / 10	9 / 10

NOTE 1: The number of luminaires under a three-phase MCB is calculated multiplying by 3 the number in the table. These values are based on data declared by power supply manufacturer and tested on worst case MCB model. An inrush current limiter (i.e. Finder SSR 77.11.x.xxx.8250 (15A) or 77.31.x.xxx.8050 model (30A)) can improve the max.number of luminaire under the MCB
NOTE 2: Power supply manufacturer never did any considerations about 50A or 63A MCB. So we can't declare anything about using of MCB higher than 25A.