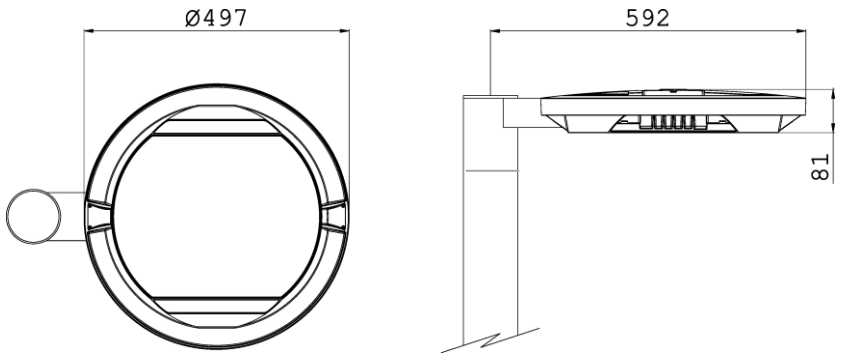
Product sheet



ECO·RAYS

MAIN CHARACTERISTICS	
Applications	Urban and street lighting
Optiv	STU-M / S: Asymmetrical optic for street lighting (urban). S: Symmetrical optic for urban and street lighting. Colour temperature: 4000K (3000K, 5700K optional) CRI ≥ 70 Photobiological safety class: EXEMPT GROUP Photometrical classification: cut-off. LED source efficiency: 138 lm/W @ 700mA, Tj=85°C, 4000K
Insulation class	II, I
Protection degree	IP66
Impact protection	IK08
LED modules	Removable
Tilt angle	0°
Dimensions	Ø497x81mm
Weight	7 kg
Exposed surface	Side: 0.03m^2 – Top: 0.17m^2
Mounting	Post-top Ø60-Ø76mm
Gear tray	Removable plate
Operating temp.	-40°C / +50°C (350mA, 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
CE IK08 IP66 EXEMPT GROUP	
ELECTRICAL CHARACTERISTICS	
Rated voltage	220÷240V 50/60Hz
LED current	350 mA 525 mA 700 mA
Power factor	>0,9 (at full load)
Mains connection	External connector for cables max. 4mm^2
Surge protection	Pulse withstand CL.1: 10 / 10kV common mode / differential mode Pulse withstand CL. 2: 6 / 10kV common mode / differential mode
Control system	F: Fixed output (Base version) DA: Automatic dimming with default profile. DAC Custom DA profile. PLM: Single point communication module.
Optical unit lifetime (Ta=25°C)	**525mA**
	>70.000hr B20L80 (including critical failures) >100.000hr L80, TM-21
	700mA
	>60.000hr B20L80 (including critical failures) >100.000hr L80, TM-21
MATERIALS	
Fixing	Die-cast aluminium UNI EN1706 powder painted.
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, high transparency.
Gable gland	Plastic M20x1.5 - IP68
Gasket	Polyurethane
Colour	Grafite Cod. 01

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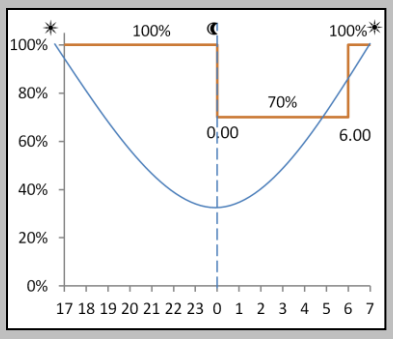
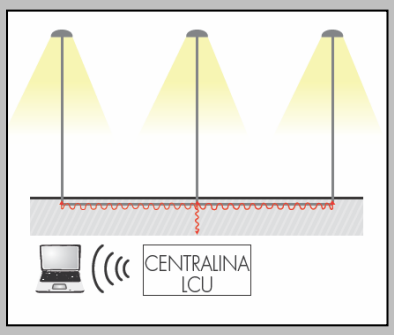
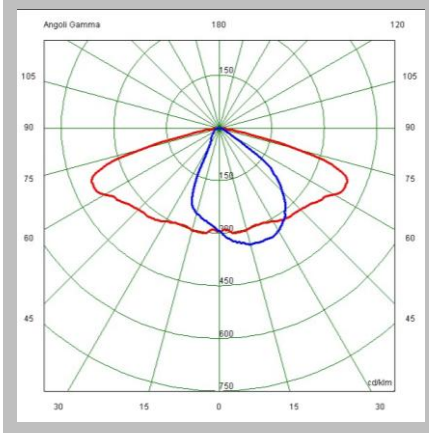
DA Profile



PLM





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

Product sheet

ECO•RAYS

The tables below 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.

LUMINAIRE FLUX[1] (Ta=25°C, 4000K, lm)			
LED MODULES	**350mA**	**525mA**	**700mA**
	STU-M / STU-S Optic		
1	-	1540	2030
2	-	3210	4060
LED MODULES	**S Optic**		
2	2380	3210	4060

RATED LED FLUX[2] (Tj=85°C, 4000K, lm)		
350mA	**525mA**	**700mA**
STU-M / STU-S Optic		
-	1905	2411
-	3810	4822
S Optic		
2775	3810	4822

RATED LUMINAIRE POWER[1] (Ta=25°C, Vin=230Vac, W)			
LED MODULES	**350mA**	**525mA**	**700mA**
	STU-M / STU-S Optic		
1	-	15.5	21
2	-	32.5	42.5
LED MODULES	**S Optic**		
2	21.5	32.5	42.5

RATED LED POWER[2] (Tj=85°C, W)		
350mA	**525mA**	**700mA**
STU-M / STU-S Optic		
-	13	18
-	26	35
S Optic		
18	26	35

LUMINAIRE EFFICIENCY (Ta=25°C, lm/W)			
LED MODULES	**350mA**	**525mA**	**700mA**
	STU-M / STU-S Optic		
1	-	99	97
2	-	99	95
LED MODULES	**S Optic**		
2	111	99	95

Note: The characteristics of the product listed above are subjected to change.
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%.
Data listed above are subject to change without notice.

1:Rated data obtained in laboratory
2:Rated data extrapolated from LED manufacturer datasheet.

*Multiplier to obtain the **flux** as a function of Ta and Tk.*

Ta(°C)	Multiplier
50	0,94
40	0,96
25	1,00
15	1,02
5	1,04
0	1,05
Tk(K)	**Multiplier**
3000	0.90
4000	1.00
5700	1.02

*Multiplier to obtain the **power** as a function of Ta.*

Ta (°C)	Multiplier
50	0,99
25	1.00
0	1,01

Legend:

Ta =Ambient temperature.

Tk = Colour temperature