

**ECO•RAYS**

**ECO-RAYS TS**

**MAIN CHARACTERISTICS**

<b>Applications</b>	Urban and street lighting.
<b>Optic</b>	TS: Asymmetrical optic for urban and street lighting. Colour temperature: 4000K (3000K optional)   CRI ≥ 70 LOR= 100%, DLOR= 100%, ULOR= 0% Photobiological safety class: EXEMPT GROUP LED source efficiency: 158 lm/W @ 525mA, Tj=85°C, 4000K
<b>Insulation class</b>	II, I
<b>Protection degree</b>	IP66
<b>Impact protection</b>	IK08
<b>LED modules</b>	Removable
<b>Dimensions</b>	Ø495x81mm
<b>Weight</b>	7 kg
<b>Exposed surface</b>	Side: 0.04m <sup>2</sup> – Top: 0.17m <sup>2</sup>
<b>Mounting</b>	Suspended installation on cable ø5-ø12mm. Inclination on horizontal plane: ±15°. Rotation: 360° on vertical axis.
<b>Gear tray</b>	Removable plate
<b>Operating temp.</b>	-40°C / +50°C
<b>Storage temperature</b>	-40°C / +80°C
<b>Main reference standards</b>	EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3



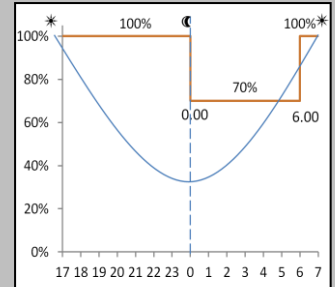
**ELECTRICAL CHARACTERISTICS**

<b>Rated voltage</b>	220-240V 50/60Hz
<b>LED current</b>	525mA, 700mA
<b>Power factor</b>	>0,9 (at full load)
<b>Mains connection</b>	External connector for cables max. 2.5mm <sup>2</sup>
<b>Surge protection</b>	SPD integrated 10kV-10kA, type II, with LED signal and thermo fuse to disconnect load at the end of life. Pulse withstand: 10kV / 10kV CM/DM
<b>Control system (options)</b>	F: Fixed power not dimmable. 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). ZHAGA: Socket 4 pin (ZHAGA book 18).
<b>Optical unit lifetime (Tq=25°C, 700mA)</b>	>100.000hr L90B10 >100.000hr L90, TM-21

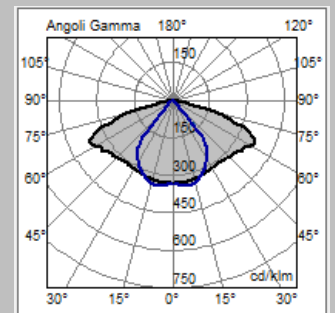
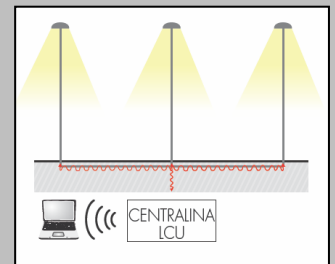
**MATERIALS**

<b>Fixing</b>	Stainless steel AISI 316L
<b>Body</b>	Die-cast aluminium UNI EN1706 powder painted.
<b>Optic</b>	99.85% aluminium with a surface finish in 99.95% with vacuum-sealed deposition. Aluminum grade class A+ (DIN EN 16268)
<b>Screen</b>	Flat tempered glass, 4mm thickness.
<b>Gable gland</b>	Metallic M20x1.5 - IP68
<b>Gasket</b>	Polyurethane
<b>Colour</b>	Graphite Cod. 01

**DA Profile**



**PLM**



TS Optic

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





LUMINAIRE	OPTIC	RATED LUMINAIRE FLUX* (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 4000K, lm)	RATED LED POWER* (Tj=85°C, W)
ECO RAYS TS 0R2C1 TS 4.5-2M	TS	3580	31.5	113	4118	26
ECO RAYS TS 0R2C1 TS 4.50-1M	TS	1750	16	109	1954	12
ECO RAYS TS 0R2C1 TS 4.7-1M	TS	2320	22.5	103	2637	18
ECO RAYS TS 0R2C1 TS 4.7-2M	TS	4510	42	107	5274	36

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

The characteristics of the product listed above are subjected to change without notice.

Values indicated in this technical sheet are to be considered rated values subject to a tolerance of +/-5%.



LUMINAIRE	OPTIC	RATED LUMINAIRE FLUX* (Tq=25°C, 3000K, lm)	RATED LUMINAIRE POWER* (Tq=25°C, Vin=230Vac, F/DA/DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX* (Tj=85°C, 3000K, lm)	RATED LED POWER* (Tj=85°C, W)
ECO RAYS TS 0F2H1 TS 3.5-2M	TS	3430	30.5	112	4020	26
ECO RAYS TS 0F2H1 TS 3.50-1M	TS	1670	16	104	1909	12
ECO RAYS TS 0F2H1 TS 3.7-1M	TS	2250	21.5	104	2558	18
ECO RAYS TS 0F2H1 TS 3.7-2M	TS	4390	40	109	5116	36

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

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