

ECO•RAYS

ECO-RAYS TP

MAIN CHARACTERISTICS

Applications	Urban and street lighting.
Optic	STU-M / S: Asymmetrical optic for street, urban and cycle-path lighting. SV: Asymmetrical optic for narrow urban streets or highway entrance/exit turns. S05: Asymmetrical optic for street, urban and green areas lighting. S: Roto-symmetric optic for urban lighting and green areas. 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
Insulation class	II, I
Protection degree	IP66
Impact protection	IK08
LED modules	Removable
Tilt angle	0°
Dimensions	Ø497x665x81mm
Weight	7 kg
Exposed surface	Side: 0.07m ² – Top: 0.17m ²
Mounting	Post-top Ø60-Ø76mm
Gear tray	Removable plate
Operating temp.	-40°C / +50°C
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



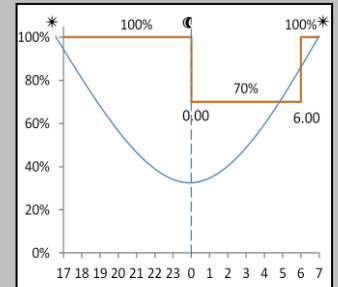
ELECTRICAL CHARACTERISTICS

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. Pulse withstand: 10kV / 10kV CM/DM
Control system (options)	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).
Optical unit lifetime (Tq=25°C, 700mA)	≥100.000hr L90B10 ≥100.000hr L90, TM-21

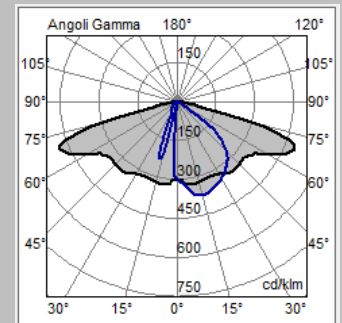
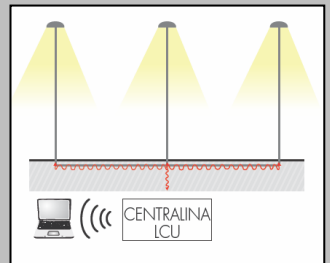
MATERIALS

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

DA Profile



PLM



STU-M 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 TP 0R2C1 S 4.5-2M	S	3500	31.5	111	4118	26
ECO RAYS TP 0R2C1 S 4.7-2M	S	4420	42	105	5274	36
ECO RAYS TP 0R2C1 S05 4.5-2M	S05	3470	31.5	110	4118	26
ECO RAYS TP 0R2C1 S05 4.50-1M	S05	1730	16	108	1954	12
ECO RAYS TP 0R2C1 S05 4.7-1M	S05	2280	22.5	101	2637	18
ECO RAYS TP 0R2C1 S05 4.7-2M	S05	4380	42	104	5274	36
ECO RAYS TP 0R2C1 STU-M 4.5-2M	STU-M	3220	31.5	102	4118	26
ECO RAYS TP 0R2C1 STU-M 4.50-1M	STU-M	1660	16	103	1954	12
ECO RAYS TP 0R2C1 STU-M 4.7-1M	STU-M	2210	22.5	98	2637	18
ECO RAYS TP 0R2C1 STU-M 4.7-2M	STU-M	4060	42	96	5274	36
ECO RAYS TP 0R2C1 STU-S 4.5-2M	STU-S	3220	31.5	102	4118	26
ECO RAYS TP 0R2C1 STU-S 4.50-1M	STU-S	1660	16	103	1954	12
ECO RAYS TP 0R2C1 STU-S 4.7-1M	STU-S	2210	22.5	98	2637	18
ECO RAYS TP 0R2C1 STU-S 4.7-2M	STU-S	4060	42	96	5274	36
ECO RAYS TP 0R2C1 SV 4.5-2M	SV	3400	31.5	107	4118	26
ECO RAYS TP 0R2C1 SV 4.50-1M	SV	1550	16	96	1954	12
ECO RAYS TP 0R2C1 SV 4.7-1M	SV	2040	22.5	90	2637	18
ECO RAYS TP 0R2C1 SV 4.7-2M	SV	4280	42	101	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 TP 0F2H1 S 3.5-2M	S	3330	30.5	109	4020	26
ECO RAYS TP 0F2H1 S 3.7-2M	S	4260	40	106	5116	36
ECO RAYS TP 0F2H1 S05 3.5-2M	S05	3330	30.5	109	4020	26
ECO RAYS TP 0F2H1 S05 3.50-1M	S05	1630	16	101	1909	12
ECO RAYS TP 0F2H1 S05 3.7-1M	S05	2190	21.5	101	2558	18
ECO RAYS TP 0F2H1 S05 3.7-2M	S05	4260	40	106	5116	36
ECO RAYS TP 0F2H1 STU-M 3.5-2M	STU-M	3260	30.5	106	4020	26
ECO RAYS TP 0F2H1 STU-M 3.50-1M	STU-M	1590	16	99	1909	12
ECO RAYS TP 0F2H1 STU-M 3.7-1M	STU-M	2140	21.5	99	2558	18
ECO RAYS TP 0F2H1 STU-M 3.7-2M	STU-M	4170	40	104	5116	36
ECO RAYS TP 0F2H1 STU-S 3.5-2M	STU-S	3260	30.5	106	4020	26
ECO RAYS TP 0F2H1 STU-S 3.50-1M	STU-S	1590	16	99	1909	12
ECO RAYS TP 0F2H1 STU-S 3.7-1M	STU-S	2140	21.5	99	2558	18
ECO RAYS TP 0F2H1 STU-S 3.7-2M	STU-S	4170	40	104	5116	36
ECO RAYS TP 0F2H1 SV 3.5-2M	SV	3090	30.5	101	4020	26
ECO RAYS TP 0F2H1 SV 3.50-1M	SV	1510	16	94	1909	12
ECO RAYS TP 0F2H1 SV 3.7-1M	SV	2030	21.5	94	2558	18
ECO RAYS TP 0F2H1 SV 3.7-2M	SV	3950	40	98	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.

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%.