



ECO•RAYS

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MAIN CHARACTERISTICS

Applications	Street and urban lighting.
Optic	TS: Symmetrical optic for centre road lighting. Colour temperature: 4000K, 3000K (others in option) CRI ≥ 70 LOR= 100%, DLOR= 100%, ULOR= 0% Photobiological safety class: EXEMPT GROUP LED source efficiency: 185 lm/W @ 140mA, Tj=85°C, 4000K
Insulation class	II, I
Protection degree	IP66 IK08 total
Dimensions	See the drawing
Weight	max. 7 kg
Exposed surface	Side: 0.04m ² – Top: 0.17m ²
Mounting	Suspended installation on cable Ø5-12mm.
Tilt angle	Inclination on horizontal plane: ±15°. Rotation: 360° on vertical axis.
LED modules	Removable
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
Power factor	>0,9 (at full load)
Mains connection	Cable H07RN-F nx1.5mm ² Optional: connector M/F IP66/68 for cables max. 2.5mm ² , Ø max. 14mm
Surge protection	Up to 12kV With SPD: CL.II: 10kV / 10kV CM/DM CL.I: 12kV / 10kV CM/DM Without SPD: CL.II: 10kV / 6kV CM/DM CL.I: 10kV / 6kV CM/DM
SPD (optional)	12kV-10kA, type 2+3, with LED signal and thermo fuse to disconnect load at the end of life.
Control system (options)	F: Fixed power not dimmable. DA: Automatic dimming (virtual midnight) with default profile. DAC: Custom DA profile. FLC: Constant light flux. 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)	>100.000hr L90B10 >100.000hr L90, TM-21

MATERIALS

Fixing	Stainless steel AISI 316L
Body	Die-cast aluminium UNI EN1706 powder painted.
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, 5mm thickness, high transparency.
Gable gland	Metallic M20x1.5 - IP68
Gasket	Polyurethane
Colour	Graphite - Cod. 01

GREENLIGHT

LUMINAIRE	OPTIC	LED CURRENT (mA)	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 5P5 7040.060-1M	TS	60	1660	11.9	139.4	1847	9.4
ECO RAYS TS 5P5 7040.060-2M			3340	23	145.2	3694	18.8
ECO RAYS TS 5P5 7040.100-1M		100	2720	19.1	142.4	3023	16
ECO RAYS TS 5P5 7040.100-2M			5440	37.4	145.4	6046	31.9
ECO RAYS TS 5P5 7040.140-1M		140	3750	26.8	139.9	4150	22.7
ECO RAYS TS 5P5 7040.140-2M			7450	52.3	142.4	8299	45.4

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

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

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±7%.

Power tolerance with ZHAGA version or power supply D4i/SR: ±10%.

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

LUMINAIRE	OPTIC	LED CURRENT (mA)	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 5P5 7030.060-1M	TS	60	1560	11.9	131	1736	9.4
ECO RAYS TS 5P5 7030.060-2M			3140	23	136.5	3472	18.8
ECO RAYS TS 5P5 7030.100-1M		100	2560	19.1	134	2842	16
ECO RAYS TS 5P5 7030.100-2M			5110	37.4	136.6	5683	31.9
ECO RAYS TS 5P5 7030.140-1M		140	3530	26.8	131.7	3901	22.7
ECO RAYS TS 5P5 7030.140-2M			7000	52.3	133.8	7801	45.4

*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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Power tolerance with ZHAGA version or power supply D4i/SR: ±10%.

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