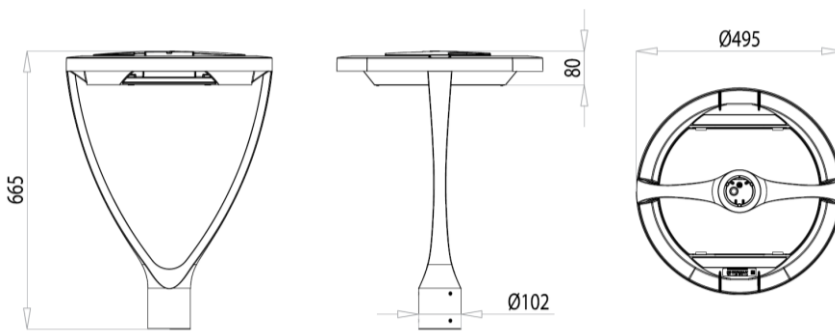




ECO•RAYS

ECO•RAYS TP TW

MAIN CHARACTERISTICS

Applications	Street and urban lighting.
Optic	STE-M/S: Asymmetrical optic for suburban street lighting. STU-M/S: Asymmetrical optic for street, urban and cycle-path lighting. STW: Asymmetrical optic for wide urban and suburban road lighting, specific for wet asphalts. SV: Asymmetrical optic for very narrow urban streets or highway entrance/exit turns. STA/STA1: Asymmetrical optic for wide urban road and cycle-path lighting. S-W: Symmetrical optic for urban lighting and green areas. Colour temperature adjustable: DF: 3000K ÷ 2200K, DE: 2700K ÷ 2200K, EG: 4000K ÷ 2700K (others on request) CRI≥70 LOR= 100%, DLOR= 100%, ULOR= 0% Photobiological safety class: EXEMPT GROUP
Insulation class	II, I
Protection degree	IP66 IK08 total
Dimensions	See the drawing
Weight	max. 8.5 kg
Exposed surface	Side: 0.07m ² – Top: 0.17m ² SCx: 0.068 m ²
Mounting	Post-top Ø60-Ø76mm
Tilt angle	0°
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, PD EPRS 003 / EN 62722-2-1 2016 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. 12mm
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)	TWC1: Tunable White constant flux profile with 1 color change. TWS1: Tunable White with reduction of luminous flux with 1 color change step. TWS2: Tunable White with reduction of luminous flux with 2 color change steps. 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

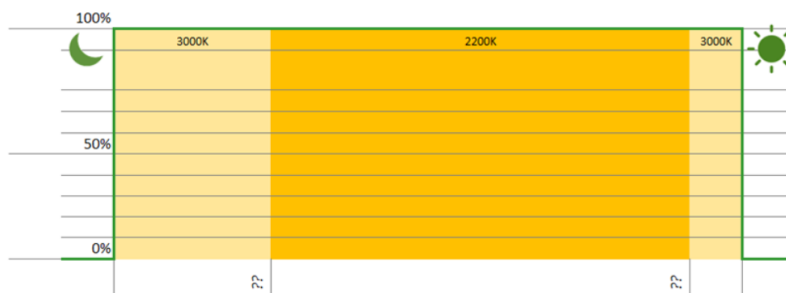
MATERIALS

Fixing	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, 5mm thickness, high transparency.
Gable gland	Plastic M20x1.5 - IP68
Gasket	Polyurethane
Colour	Graphite - Cod. 01

GREENLIGHT

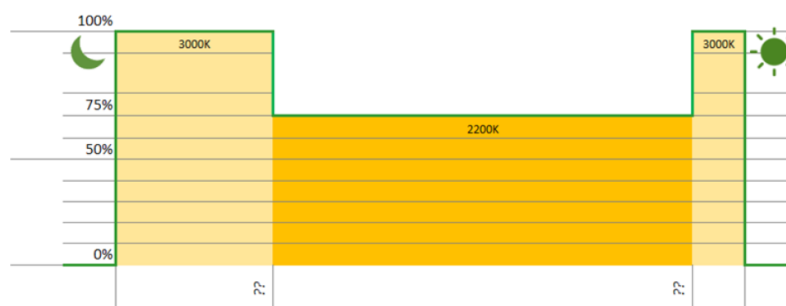
COLOR ADJUSTMENT PROFILES

TWC1

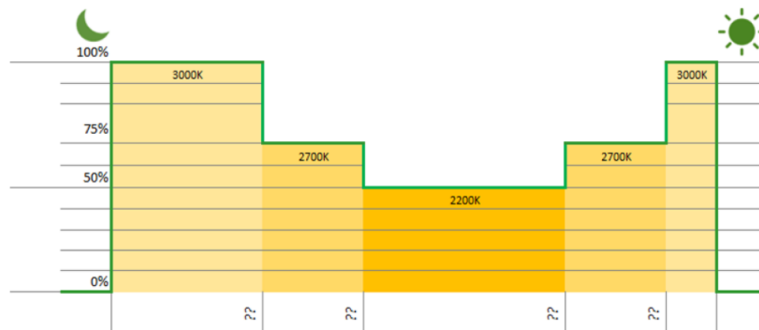


The TWC1 profile (Constant luminous flux profile with 1 color change) allows the use of Tunable White technology in contexts where it is necessary to guarantee the same level of luminous intensity throughout the night, but a change in color temperature is required at night.

TWS1



TWS2



The TWS1 and TWS2 profiles (Profiles with flow reduction at 1 or 2 color change steps) allow color change and reduction of luminous flux, allowing energy savings to be achieved. The flow reduction occurs at the same time as the color change. The reduction steps have been set so as to have exactly 75% and 50% of the initial flow of the luminaire and therefore allow a correct reduction of the flow depending on the lighting categories of the environment to be illuminated.

ECO RAYS TP 5P5 DE

MAX LUMINOUS FLUX AND POWER

LUMINAIRE	OPTIC	LED CURRENT (mA)	LUMINAIRE FLUX* (2700K, lm)	LUMINAIRE FLUX* (2400K, lm)	LUMINAIRE FLUX* (2200K, lm)	LUMINAIRE POWER* (W)	LUMINAIRE EFFICACY (2700K, lm/W)
ECO RAYS TP 5P5 70DE.090-2M	STA	90	2220	2090	2000	19.1	116.2
ECO RAYS TP 5P5 70DE.100-2M		100	2460	2320	2210	21.2	116.0
ECO RAYS TP 5P5 70DE.120-2M		120	2930	2770	2640	24.5	119.5
ECO RAYS TP 5P5 70DE.140-2M		140	3390	3200	3050	28.7	118.1
ECO RAYS TP 5P5 70DE.160-2M		160	3830	3620	3450	31.7	120.8
ECO RAYS TP 5P5 70DE.180-2M	STE-M	180	4240	4000	3810	35.8	118.4
ECO RAYS TP 5P5 70DE.090-2M		90	2250	2130	2030	19.1	117.8
ECO RAYS TP 5P5 70DE.100-2M		100	2490	2350	2240	21.2	117.4
ECO RAYS TP 5P5 70DE.120-2M		120	2970	2800	2670	24.5	121.2
ECO RAYS TP 5P5 70DE.140-2M		140	3430	3240	3090	28.7	119.5
ECO RAYS TP 5P5 70DE.160-2M	STU-M	160	3870	3650	3480	31.7	122.0
ECO RAYS TP 5P5 70DE.180-2M		180	4280	4040	3850	35.8	119.5
ECO RAYS TP 5P5 70DE.090-2M		90	2190	2070	1970	19.1	114.6
ECO RAYS TP 5P5 70DE.100-2M		100	2430	2300	2190	21.2	114.6
ECO RAYS TP 5P5 70DE.120-2M		120	2900	2740	2610	24.5	118.3
ECO RAYS TP 5P5 70DE.140-2M	SV	140	3350	3160	3010	28.7	116.7
ECO RAYS TP 5P5 70DE.160-2M		160	3780	3570	3400	31.7	119.2
ECO RAYS TP 5P5 70DE.180-2M		180	4180	3950	3760	35.8	116.7
ECO RAYS TP 5P5 70DE.060-4M		60	2300	2170	2070	24.4	94.2
ECO RAYS TP 5P5 70DE.070-4M		70	2660	2520	2400	28.2	94.3
ECO RAYS TP 5P5 70DE.080-4M	S-W	80	3030	2860	2720	31.9	94.9
ECO RAYS TP 5P5 70DE.090-4M		90	3390	3200	3050	35.8	94.6
ECO RAYS TP 5P5 70DE.100-4M		100	3750	3540	3380	39.6	94.6
ECO RAYS TP 5P5 70DE.120-4M		120	4470	4220	4020	47	95.1
ECO RAYS TP 5P5 70DE.140-4M		140	5160	4870	4640	54.9	93.9
ECO RAYS TP 5P5 70DE.160-4M		160	5810	5490	5230	61.7	94.1
ECO RAYS TP 5P5 70DE.180-4M		180	6430	6070	5780	69.7	92.2

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH CONSTANT FLUX PROFILE (TWC1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 100% of flux)			FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 100% of flux)		
ECO RAYS TP 5P5 70DE.090-2M	STA	2000lm	17.3W	81mA (90%)	2000lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70DE.100-2M		2220lm	19.1W	90mA (90%)	2210lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70DE.120-2M		2650lm	22.1W	108mA (90%)	2640lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70DE.140-2M		3050lm	25.5W	125mA (89%)	3050lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70DE.160-2M		3460lm	28.2W	143mA (89%)	3450lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70DE.180-2M	STE-M	3810lm	31.5W	159mA (88%)	3810lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70DE.090-2M		2030lm	17.3W	81mA (90%)	2030lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70DE.100-2M		2250lm	19.1W	90mA (90%)	2240lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70DE.120-2M		2680lm	22.1W	108mA (90%)	2670lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70DE.140-2M		3090lm	25.5W	125mA (89%)	3090lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70DE.160-2M	STU-M	3500lm	28.2W	143mA (89%)	3480lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70DE.180-2M		3850lm	31.5W	159mA (88%)	3850lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70DE.090-2M		1980lm	17.3W	81mA (90%)	1970lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70DE.100-2M		2190lm	19.1W	90mA (90%)	2190lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70DE.120-2M		2620lm	22.1W	108mA (90%)	2610lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70DE.140-2M	SV	3010lm	25.5W	125mA (89%)	3010lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70DE.160-2M		3410lm	28.2W	143mA (89%)	3400lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70DE.180-2M		3760lm	31.5W	159mA (88%)	3760lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70DE.060-4M		2080lm	22.1W	54mA (90%)	2070lm	24.4W	60mA (100%)
ECO RAYS TP 5P5 70DE.070-4M		2410lm	25.5W	63mA (90%)	2400lm	28.2W	70mA (100%)
ECO RAYS TP 5P5 70DE.080-4M	S-W	2740lm	28.9W	72mA (90%)	2720lm	31.9W	80mA (100%)
ECO RAYS TP 5P5 70DE.090-4M		3060lm	32.3W	81mA (90%)	3050lm	35.8W	90mA (100%)
ECO RAYS TP 5P5 70DE.100-4M		3390lm	35.8W	90mA (90%)	3380lm	39.6W	100mA (100%)
ECO RAYS TP 5P5 70DE.120-4M		4040lm	42.4W	108mA (90%)	4020lm	47W	120mA (100%)
ECO RAYS TP 5P5 70DE.140-4M		4640lm	49W	125mA (89%)	4640lm	54.9W	140mA (100%)
ECO RAYS TP 5P5 70DE.160-4M		5260lm	55W	143mA (89%)	5230lm	61.7W	160mA (100%)
ECO RAYS TP 5P5 70DE.180-4M		5780lm	61.3W	159mA (88%)	5780lm	69.7W	180mA (100%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH ONE STEP REDUCTION PROFILE (TWS1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT*			FLUX LUMINAIRE POWER LED CURRENT*		
		(Tq=25°C, 2700K, 100% of flux)			(Tq=25°C, 2200K, 75% of flux)		
ECO RAYS TP 5P5 70DE.090-2M	STA	2220lm	19.1W	90mA (100%)	1670lm	16.1W	75mA (83%)
ECO RAYS TP 5P5 70DE.100-2M		2460lm	21.2W	100mA (100%)	1870lm	17.9W	84mA (84%)
ECO RAYS TP 5P5 70DE.120-2M		2930lm	24.5W	120mA (100%)	2210lm	21.2W	100mA (83%)
ECO RAYS TP 5P5 70DE.140-2M		3390lm	28.7W	140mA (100%)	2550lm	23.7W	116mA (82%)
ECO RAYS TP 5P5 70DE.160-2M		3830lm	31.7W	160mA (100%)	2890lm	27W	132mA (82%)
ECO RAYS TP 5P5 70DE.180-2M	STE-M	4240lm	35.8W	180mA (100%)	3190lm	29W	147mA (81%)
ECO RAYS TP 5P5 70DE.090-2M		2250lm	19.1W	90mA (100%)	1700lm	16.1W	75mA (83%)
ECO RAYS TP 5P5 70DE.100-2M		2490lm	21.2W	100mA (100%)	1870lm	17.7W	83mA (83%)
ECO RAYS TP 5P5 70DE.120-2M		2970lm	24.5W	120mA (100%)	2240lm	21.2W	100mA (83%)
ECO RAYS TP 5P5 70DE.140-2M		3430lm	28.7W	140mA (100%)	2590lm	23.7W	116mA (82%)
ECO RAYS TP 5P5 70DE.160-2M	STU-M	3870lm	31.7W	160mA (100%)	2920lm	27W	132mA (82%)
ECO RAYS TP 5P5 70DE.180-2M		4280lm	35.8W	180mA (100%)	3210lm	28.8W	146mA (81%)
ECO RAYS TP 5P5 70DE.090-2M		2190lm	19.1W	90mA (100%)	1660lm	16.1W	75mA (83%)
ECO RAYS TP 5P5 70DE.100-2M		2430lm	21.2W	100mA (100%)	1830lm	17.7W	83mA (83%)
ECO RAYS TP 5P5 70DE.120-2M		2900lm	24.5W	120mA (100%)	2190lm	21.2W	100mA (83%)
ECO RAYS TP 5P5 70DE.140-2M	SV	3350lm	28.7W	140mA (100%)	2520lm	23.7W	116mA (82%)
ECO RAYS TP 5P5 70DE.160-2M		3780lm	31.7W	160mA (100%)	2850lm	27W	132mA (82%)
ECO RAYS TP 5P5 70DE.180-2M		4180lm	35.8W	180mA (100%)	3150lm	29W	147mA (81%)
ECO RAYS TP 5P5 70DE.060-4M		2300lm	24.4W	60mA (100%)	1750lm	20.7W	50mA (83%)
ECO RAYS TP 5P5 70DE.070-4M		2660lm	28.2W	70mA (100%)	2010lm	23.6W	58mA (82%)
ECO RAYS TP 5P5 70DE.080-4M	S-W	3030lm	31.9W	80mA (100%)	2300lm	27W	67mA (83%)
ECO RAYS TP 5P5 70DE.090-4M		3390lm	35.8W	90mA (100%)	2560lm	30W	75mA (83%)
ECO RAYS TP 5P5 70DE.100-4M		3750lm	39.6W	100mA (100%)	2820lm	33.1W	83mA (83%)
ECO RAYS TP 5P5 70DE.120-4M		4470lm	47W	120mA (100%)	3380lm	39.6W	100mA (83%)
ECO RAYS TP 5P5 70DE.140-4M		5160lm	54.9W	140mA (100%)	3890lm	45.5W	116mA (82%)
ECO RAYS TP 5P5 70DE.160-4M		5810lm	61.7W	160mA (100%)	4360lm	51.3W	131mA (81%)
ECO RAYS TP 5P5 70DE.180-4M		6430lm	69.7W	180mA (100%)	4850lm	56.6W	147mA (81%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

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

LUMINOUS FLUX AND POWER WITH TWO-STEP REDUCTION PROFILE (TWS2)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT*			FLUX LUMINAIRE POWER*			FLUX LUMINAIRE POWER LED CURRENT*		
		(Tq=25°C, 2700K, 100% of flux)			(Tq=25°C, 2400K, 75% of flux)			(Tq=25°C, 2200K, 50% of flux)		
ECO RAYS TP 5P5 70DE.090-2M	STA	2220lm	19.1W	90mA (100%)	1690lm	15.5W		1120lm	11.1W	49mA (54%)
ECO RAYS TP 5P5 70DE.100-2M		2460lm	21.2W	100mA (100%)	1870lm	17.1W		1240lm	12.2W	55mA (55%)
ECO RAYS TP 5P5 70DE.120-2M		2930lm	24.5W	120mA (100%)	2210lm	20.2W		1480lm	14.3W	66mA (55%)
ECO RAYS TP 5P5 70DE.140-2M		3390lm	28.7W	140mA (100%)	2550lm	22.5W		1710lm	16.5W	77mA (55%)
ECO RAYS TP 5P5 70DE.160-2M		3830lm	31.7W	160mA (100%)	2880lm	25.5W		1930lm	18.5W	87mA (54%)
ECO RAYS TP 5P5 70DE.180-2M	STE-M	4240lm	35.8W	180mA (100%)	3180lm	28.5W		2120lm	20.4W	96mA (53%)
ECO RAYS TP 5P5 70DE.090-2M		2250lm	19.1W	90mA (100%)	1690lm	15.3W		1130lm	11.1W	49mA (54%)
ECO RAYS TP 5P5 70DE.100-2M		2490lm	21.2W	100mA (100%)	1870lm	16.9W		1260lm	12.2W	55mA (55%)
ECO RAYS TP 5P5 70DE.120-2M		2970lm	24.5W	120mA (100%)	2240lm	20.2W		1500lm	14.3W	66mA (55%)
ECO RAYS TP 5P5 70DE.140-2M		3430lm	28.7W	140mA (100%)	2580lm	22.5W		1720lm	16.3W	76mA (54%)
ECO RAYS TP 5P5 70DE.160-2M	STU-M	3870lm	31.7W	160mA (100%)	2910lm	25.5W		1940lm	18.3W	86mA (53%)
ECO RAYS TP 5P5 70DE.180-2M		4280lm	35.8W	180mA (100%)	3220lm	28.5W		2140lm	20.2W	95mA (52%)
ECO RAYS TP 5P5 70DE.090-2M		2190lm	19.1W	90mA (100%)	1650lm	15.3W		1110lm	11.1W	49mA (54%)
ECO RAYS TP 5P5 70DE.100-2M		2430lm	21.2W	100mA (100%)	1830lm	16.9W		1230lm	12.2W	55mA (55%)
ECO RAYS TP 5P5 70DE.120-2M		2900lm	24.5W	120mA (100%)	2180lm	20.2W		1470lm	14.3W	66mA (55%)
ECO RAYS TP 5P5 70DE.140-2M	SV	3350lm	28.7W	140mA (100%)	2520lm	22.5W		1680lm	16.3W	76mA (54%)
ECO RAYS TP 5P5 70DE.160-2M		3780lm	31.7W	160mA (100%)	2840lm	25.5W		1890lm	18.3W	86mA (53%)
ECO RAYS TP 5P5 70DE.180-2M		4180lm	35.8W	180mA (100%)	3140lm	28.5W		2100lm	20.4W	96mA (53%)
ECO RAYS TP 5P5 70DE.060-4M		2300lm	24.4W	60mA (100%)	1730lm	19.5W		1170lm	14W	32mA (53%)
ECO RAYS TP 5P5 70DE.070-4M		2660lm	28.2W	70mA (100%)	2000lm	22.5W		1360lm	16.2W	38mA (54%)
ECO RAYS TP 5P5 70DE.080-4M	S-W	3030lm	31.9W	80mA (100%)	2280lm	25.5W		1520lm	18.1W	43mA (53%)
ECO RAYS TP 5P5 70DE.090-4M		3390lm	35.8W	90mA (100%)	2550lm	28.5W		1710lm	20.3W	49mA (54%)
ECO RAYS TP 5P5 70DE.100-4M		3750lm	39.6W	100mA (100%)	2830lm	31.6W		1880lm	22.1W	54mA (54%)
ECO RAYS TP 5P5 70DE.120-4M		4470lm	47W	120mA (100%)	3370lm	37.7W		2270lm	26.6W	66mA (55%)
ECO RAYS TP 5P5 70DE.140-4M		5160lm	54.9W	140mA (100%)	3880lm	43.1W		2590lm	30.4W	76mA (54%)
ECO RAYS TP 5P5 70DE.160-4M		5810lm	61.7W	160mA (100%)	4380lm	49W		2920lm	34.2W	86mA (53%)
ECO RAYS TP 5P5 70DE.180-4M		6430lm	69.7W	180mA (100%)	4840lm	54.5W		3220lm	37.7W	95mA (52%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

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

ECO RAYS TP 4P4 DE

MAX LUMINOUS FLUX AND POWER

LUMINAIRE	OPTIC	LED CURRENT (mA)	LUMINAIRE FLUX* (2700K, lm)	LUMINAIRE FLUX* (2400K, lm)	LUMINAIRE FLUX* (2200K, lm)	LUMINAIRE POWER* (W)	LUMINAIRE EFFICACY (2700K, lm/W)
ECO RAYS TP 4P4 70DE.120-2M	STE-M STU-M	120	2370	2240	2140	19.6	120.9
ECO RAYS TP 4P4 70DE.140-2M		140	2750	2590	2470	23	119.5
ECO RAYS TP 4P4 70DE.160-2M		160	3100	2930	2790	25.4	122.0
ECO RAYS TP 4P4 70DE.180-2M		180	3420	3230	3080	28.7	119.1
ECO RAYS TP 4P4 70DE.120-2M	STA STA1 STE-S STU-S SV	120	2350	2220	2110	19.6	119.8
ECO RAYS TP 4P4 70DE.140-2M		140	2710	2560	2440	23	117.8
ECO RAYS TP 4P4 70DE.160-2M		160	3050	2880	2750	25.4	120.0
ECO RAYS TP 4P4 70DE.180-2M		180	3380	3190	3040	28.7	117.7
ECO RAYS TP 4P4 70DE.120-2M	STW	120	2400	2270	2160	19.6	122.4
ECO RAYS TP 4P4 70DE.140-2M		140	2770	2620	2490	23	120.4
ECO RAYS TP 4P4 70DE.160-2M		160	3130	2950	2810	25.4	123.2
ECO RAYS TP 4P4 70DE.180-2M		180	3460	3270	3110	28.7	120.5

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
 Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
 Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
 The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH CONSTANT FLUX PROFILE (TWC1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 100% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 100% of flux)
ECO RAYS TP 4P4 70DE.120-2M	STE-M STU-M	2140lm 17.7W 108mA (90%)	2140lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70DE.140-2M		2470lm 20.5W 125mA (89%)	2470lm 23W 140mA (100%)
ECO RAYS TP 4P4 70DE.160-2M		2800lm 22.6W 143mA (89%)	2790lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70DE.180-2M		3080lm 25.3W 159mA (88%)	3080lm 28.7W 180mA (100%)
ECO RAYS TP 4P4 70DE.120-2M	STA STA1 STE-S STU-S SV	2120lm 17.7W 108mA (90%)	2110lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70DE.140-2M		2440lm 20.5W 125mA (89%)	2440lm 23W 140mA (100%)
ECO RAYS TP 4P4 70DE.160-2M		2760lm 22.6W 143mA (89%)	2750lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70DE.180-2M		3040lm 25.3W 159mA (88%)	3040lm 28.7W 180mA (100%)
ECO RAYS TP 4P4 70DE.120-2M	STW	2170lm 17.7W 108mA (90%)	2160lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70DE.140-2M		2490lm 20.5W 125mA (89%)	2490lm 23W 140mA (100%)
ECO RAYS TP 4P4 70DE.160-2M		2810lm 22.5W 142mA (88%)	2810lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70DE.180-2M		3110lm 25.3W 159mA (88%)	3110lm 28.7W 180mA (100%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
 Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
 Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
 The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH ONE STEP REDUCTION PROFILE (TWS1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 100% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 75% of flux)
ECO RAYS TP 4P4 70DE.120-2M	STE-M STU-M	2370lm 19.6W 120mA (100%)	1790lm 17W 100mA (83%)
ECO RAYS TP 4P4 70DE.140-2M		2750lm 23W 140mA (100%)	2070lm 19W 116mA (82%)
ECO RAYS TP 4P4 70DE.160-2M		3100lm 25.4W 160mA (100%)	2340lm 21.7W 132mA (82%)
ECO RAYS TP 4P4 70DE.180-2M		3420lm 28.7W 180mA (100%)	2570lm 23.1W 146mA (81%)
ECO RAYS TP 4P4 70DE.120-2M	STA STA1 STE-S STU-S SV	2350lm 19.6W 120mA (100%)	1770lm 17W 100mA (83%)
ECO RAYS TP 4P4 70DE.140-2M		2710lm 23W 140mA (100%)	2040lm 19W 116mA (82%)
ECO RAYS TP 4P4 70DE.160-2M		3050lm 25.4W 160mA (100%)	2290lm 21.5W 131mA (81%)
ECO RAYS TP 4P4 70DE.180-2M		3380lm 28.7W 180mA (100%)	2550lm 23.3W 147mA (81%)
ECO RAYS TP 4P4 70DE.120-2M	STW	2400lm 19.6W 120mA (100%)	1800lm 16.8W 99mA (82%)
ECO RAYS TP 4P4 70DE.140-2M		2770lm 23W 140mA (100%)	2090lm 19W 116mA (82%)
ECO RAYS TP 4P4 70DE.160-2M		3130lm 25.4W 160mA (100%)	2350lm 21.5W 131mA (81%)
ECO RAYS TP 4P4 70DE.180-2M		3460lm 28.7W 180mA (100%)	2610lm 23.3W 147mA (81%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH TWO-STEP REDUCTION PROFILE (TWS2)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 100% of flux)	FLUX LUMINAIRE POWER* (Tq=25°C, 2400K, 75% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 50% of flux)
ECO RAYS TP 4P4 70DE.120-2M	STE-M STU-M	2370lm 19.6W 120mA (100%)	1790lm 16.2W	1200lm 11.6W 66mA (55%)
ECO RAYS TP 4P4 70DE.140-2M		2750lm 23W 140mA (100%)	2080lm 18.2W	1390lm 13.3W 77mA (55%)
ECO RAYS TP 4P4 70DE.160-2M		3100lm 25.4W 160mA (100%)	2330lm 20.5W	1550lm 14.7W 86mA (53%)
ECO RAYS TP 4P4 70DE.180-2M		3420lm 28.7W 180mA (100%)	2580lm 22.8W	1720lm 16.3W 96mA (53%)
ECO RAYS TP 4P4 70DE.120-2M	STA STA1 STE-S STU-S SV	2350lm 19.6W 120mA (100%)	1770lm 16.2W	1190lm 11.6W 66mA (55%)
ECO RAYS TP 4P4 70DE.140-2M		2710lm 23W 140mA (100%)	2040lm 18W	1360lm 13.1W 76mA (54%)
ECO RAYS TP 4P4 70DE.160-2M		3050lm 25.4W 160mA (100%)	2290lm 20.3W	1530lm 14.7W 86mA (53%)
ECO RAYS TP 4P4 70DE.180-2M		3380lm 28.7W 180mA (100%)	2540lm 22.8W	1690lm 16.2W 95mA (52%)
ECO RAYS TP 4P4 70DE.120-2M	STW	2400lm 19.6W 120mA (100%)	1810lm 16.2W	1200lm 11.4W 65mA (54%)
ECO RAYS TP 4P4 70DE.140-2M		2770lm 23W 140mA (100%)	2090lm 18W	1390lm 13.1W 76mA (54%)
ECO RAYS TP 4P4 70DE.160-2M		3130lm 25.4W 160mA (100%)	2360lm 20.5W	1570lm 14.7W 86mA (53%)
ECO RAYS TP 4P4 70DE.180-2M		3460lm 28.7W 180mA (100%)	2600lm 22.8W	1730lm 16.2W 95mA (52%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

ECO RAYS TP 5P5 DF

MAX LUMINOUS FLUX AND POWER

LUMINAIRE	OPTIC	LED CURRENT (mA)	LUMINAIRE FLUX* (3000K, lm)	LUMINAIRE FLUX* (2700K, lm)	LUMINAIRE FLUX* (2200K, lm)	LUMINAIRE POWER* (W)	LUMINAIRE EFFICACY (3000K, lm/W)
ECO RAYS TP 5P5 70DF.090-2M	STA	90	2320	2220	2000	19.1	121.4
ECO RAYS TP 5P5 70DF.100-2M		100	2570	2460	2210	21.2	121.2
ECO RAYS TP 5P5 70DF.120-2M		120	3060	2930	2640	24.5	124.8
ECO RAYS TP 5P5 70DF.140-2M		140	3540	3390	3050	28.7	123.3
ECO RAYS TP 5P5 70DF.160-2M		160	4000	3830	3450	31.7	126.1
ECO RAYS TP 5P5 70DF.180-2M	STE-M	180	4420	4240	3810	35.8	123.4
ECO RAYS TP 5P5 70DF.090-2M		90	2350	2250	2030	19.1	123.0
ECO RAYS TP 5P5 70DF.100-2M		100	2600	2490	2240	21.2	122.6
ECO RAYS TP 5P5 70DF.120-2M		120	3100	2970	2670	24.5	126.5
ECO RAYS TP 5P5 70DF.140-2M		140	3580	3430	3090	28.7	124.7
ECO RAYS TP 5P5 70DF.160-2M	STU-M	160	4040	3870	3480	31.7	127.4
ECO RAYS TP 5P5 70DF.180-2M		180	4470	4280	3850	35.8	124.8
ECO RAYS TP 5P5 70DF.090-2M		90	2290	2190	1970	19.1	119.8
ECO RAYS TP 5P5 70DF.100-2M		100	2540	2430	2190	21.2	119.8
ECO RAYS TP 5P5 70DF.120-2M		120	3020	2900	2610	24.5	123.2
ECO RAYS TP 5P5 70DF.140-2M	SV	140	3500	3350	3010	28.7	121.9
ECO RAYS TP 5P5 70DF.160-2M		160	3950	3780	3400	31.7	124.6
ECO RAYS TP 5P5 70DF.180-2M		180	4370	4180	3760	35.8	122.0
ECO RAYS TP 5P5 70DF.060-4M		60	2400	2300	2070	24.4	98.3
ECO RAYS TP 5P5 70DF.070-4M		70	2780	2660	2400	28.2	98.5
ECO RAYS TP 5P5 70DF.080-4M	S-W	80	3160	3030	2720	31.9	99.0
ECO RAYS TP 5P5 70DF.090-4M		90	3540	3390	3050	35.8	98.8
ECO RAYS TP 5P5 70DF.100-4M		100	3920	3750	3380	39.6	98.9
ECO RAYS TP 5P5 70DF.120-4M		120	4660	4470	4020	47	99.1
ECO RAYS TP 5P5 70DF.140-4M		140	5390	5160	4640	54.9	98.1
ECO RAYS TP 5P5 70DF.160-4M		160	6070	5810	5230	61.7	98.3
ECO RAYS TP 5P5 70DF.180-4M		180	6710	6430	5780	69.7	96.2

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH CONSTANT FLUX PROFILE (TWC1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 3000K, 100% of flux)			FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 100% of flux)		
ECO RAYS TP 5P5 70DF.090-2M	STA	2010lm	16.7W	78mA (86%)	2000lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70DF.100-2M		2210lm	18.3W	86mA (86%)	2210lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70DF.120-2M		2640lm	21W	103mA (85%)	2640lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70DF.140-2M		3060lm	24.5W	120mA (85%)	3050lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70DF.160-2M		3450lm	27.8W	136mA (85%)	3450lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70DF.180-2M	STE-M	3820lm	30W	152mA (84%)	3810lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70DF.090-2M		2050lm	16.7W	78mA (86%)	2030lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70DF.100-2M		2250lm	18.3W	86mA (86%)	2240lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70DF.120-2M		2680lm	21W	103mA (85%)	2670lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70DF.140-2M		3100lm	24.5W	120mA (85%)	3090lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70DF.160-2M	STU-M	3490lm	27.8W	136mA (85%)	3480lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70DF.180-2M		3860lm	30W	152mA (84%)	3850lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70DF.090-2M		1970lm	16.5W	77mA (85%)	1970lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70DF.100-2M		2190lm	18.3W	86mA (86%)	2190lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70DF.120-2M		2610lm	21W	103mA (85%)	2610lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70DF.140-2M	SV	3020lm	24.5W	120mA (85%)	3010lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70DF.160-2M		3400lm	27.8W	136mA (85%)	3400lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70DF.180-2M		3770lm	30W	152mA (84%)	3760lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70DF.060-4M		2100lm	21.4W	52mA (86%)	2070lm	24.4W	60mA (100%)
ECO RAYS TP 5P5 70DF.070-4M		2400lm	24.4W	60mA (85%)	2400lm	28.2W	70mA (100%)
ECO RAYS TP 5P5 70DF.080-4M	S-W	2740lm	27.8W	69mA (86%)	2720lm	31.9W	80mA (100%)
ECO RAYS TP 5P5 70DF.090-4M		3050lm	30.8W	77mA (85%)	3050lm	35.8W	90mA (100%)
ECO RAYS TP 5P5 70DF.100-4M		3390lm	34.2W	86mA (86%)	3380lm	39.6W	100mA (100%)
ECO RAYS TP 5P5 70DF.120-4M		4030lm	40.4W	103mA (85%)	4020lm	47W	120mA (100%)
ECO RAYS TP 5P5 70DF.140-4M		4660lm	47W	120mA (85%)	4640lm	54.9W	140mA (100%)
ECO RAYS TP 5P5 70DF.160-4M		5240lm	53.3W	136mA (85%)	5230lm	61.7W	160mA (100%)
ECO RAYS TP 5P5 70DF.180-4M		5800lm	58.6W	152mA (84%)	5780lm	69.7W	180mA (100%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH ONE STEP REDUCTION PROFILE (TWS1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT*			FLUX LUMINAIRE POWER LED CURRENT*		
		(Tq=25°C, 3000K, 100% of flux)			(Tq=25°C, 2200K, 75% of flux)		
ECO RAYS TP 5P5 70DF.090-2M	STA	2320lm	19.1W	90mA (100%)	1740lm	16.7W	78mA (86%)
ECO RAYS TP 5P5 70DF.100-2M		2570lm	21.2W	100mA (100%)	1930lm	18.5W	87mA (87%)
ECO RAYS TP 5P5 70DF.120-2M		3060lm	24.5W	120mA (100%)	2300lm	21.2W	104mA (86%)
ECO RAYS TP 5P5 70DF.140-2M		3540lm	28.7W	140mA (100%)	2660lm	24.7W	121mA (86%)
ECO RAYS TP 5P5 70DF.160-2M		4000lm	31.7W	160mA (100%)	3010lm	28.3W	138mA (86%)
ECO RAYS TP 5P5 70DF.180-2M	STE-M	4420lm	35.8W	180mA (100%)	3330lm	30.5W	154mA (85%)
ECO RAYS TP 5P5 70DF.090-2M		2350lm	19.1W	90mA (100%)	1790lm	16.9W	79mA (87%)
ECO RAYS TP 5P5 70DF.100-2M		2600lm	21.2W	100mA (100%)	1960lm	18.5W	87mA (87%)
ECO RAYS TP 5P5 70DF.120-2M		3100lm	24.5W	120mA (100%)	2330lm	21.2W	104mA (86%)
ECO RAYS TP 5P5 70DF.140-2M		3580lm	28.7W	140mA (100%)	2690lm	24.7W	121mA (86%)
ECO RAYS TP 5P5 70DF.160-2M	STU-M	4040lm	31.7W	160mA (100%)	3030lm	28W	137mA (85%)
ECO RAYS TP 5P5 70DF.180-2M		4470lm	35.8W	180mA (100%)	3360lm	30.5W	154mA (85%)
ECO RAYS TP 5P5 70DF.090-2M	SV	2290lm	19.1W	90mA (100%)	1720lm	16.7W	78mA (86%)
ECO RAYS TP 5P5 70DF.100-2M		2540lm	21.2W	100mA (100%)	1910lm	18.5W	87mA (87%)
ECO RAYS TP 5P5 70DF.120-2M		3020lm	24.5W	120mA (100%)	2270lm	21.2W	104mA (86%)
ECO RAYS TP 5P5 70DF.140-2M		3500lm	28.7W	140mA (100%)	2630lm	24.7W	121mA (86%)
ECO RAYS TP 5P5 70DF.160-2M		3950lm	31.7W	160mA (100%)	2970lm	28.3W	138mA (86%)
ECO RAYS TP 5P5 70DF.180-2M	S-W	4370lm	35.8W	180mA (100%)	3290lm	30.5W	154mA (85%)
ECO RAYS TP 5P5 70DF.060-4M		2400lm	24.4W	60mA (100%)	1810lm	21.4W	52mA (86%)
ECO RAYS TP 5P5 70DF.070-4M		2780lm	28.2W	70mA (100%)	2100lm	24.8W	61mA (87%)
ECO RAYS TP 5P5 70DF.080-4M		3160lm	31.9W	80mA (100%)	2400lm	28.2W	70mA (87%)
ECO RAYS TP 5P5 70DF.090-4M		3540lm	35.8W	90mA (100%)	2660lm	31.2W	78mA (86%)
ECO RAYS TP 5P5 70DF.100-4M	S-W	3920lm	39.6W	100mA (100%)	2950lm	34.6W	87mA (87%)
ECO RAYS TP 5P5 70DF.120-4M		4660lm	47W	120mA (100%)	3510lm	40.8W	104mA (86%)
ECO RAYS TP 5P5 70DF.140-4M		5390lm	54.9W	140mA (100%)	4050lm	47.4W	121mA (86%)
ECO RAYS TP 5P5 70DF.160-4M		6070lm	61.7W	160mA (100%)	4580lm	54.1W	138mA (86%)
ECO RAYS TP 5P5 70DF.180-4M		6710lm	69.7W	180mA (100%)	5060lm	59.4W	154mA (85%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

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

LUMINOUS FLUX AND POWER WITH TWO-STEP REDUCTION PROFILE (TWS2)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT*			FLUX LUMINAIRE POWER*			FLUX LUMINAIRE POWER LED CURRENT*		
		(Tq=25°C, 3000K, 100% of flux)			(Tq=25°C, 2700K, 75% of flux)			(Tq=25°C, 2200K, 50% of flux)		
ECO RAYS TP 5P5 70DF.090-2M	STA	2320lm	19.1W	90mA (100%)	1740lm	15.1W		1160lm	11.5W	51mA (56%)
ECO RAYS TP 5P5 70DF.100-2M		2570lm	21.2W	100mA (100%)	1930lm	16.7W		1290lm	12.6W	57mA (56%)
ECO RAYS TP 5P5 70DF.120-2M		3060lm	24.5W	120mA (100%)	2310lm	20W		1540lm	14.9W	69mA (57%)
ECO RAYS TP 5P5 70DF.140-2M		3540lm	28.7W	140mA (100%)	2670lm	22.3W		1780lm	17.1W	80mA (57%)
ECO RAYS TP 5P5 70DF.160-2M		4000lm	31.7W	160mA (100%)	3000lm	25.1W		2000lm	19.1W	90mA (56%)
ECO RAYS TP 5P5 70DF.180-2M	STE-M	4420lm	35.8W	180mA (100%)	3330lm	28W		2210lm	21.2W	100mA (55%)
ECO RAYS TP 5P5 70DF.090-2M		2350lm	19.1W	90mA (100%)	1770lm	15.1W		1180lm	11.5W	51mA (56%)
ECO RAYS TP 5P5 70DF.100-2M		2600lm	21.2W	100mA (100%)	1960lm	16.7W		1310lm	12.6W	57mA (56%)
ECO RAYS TP 5P5 70DF.120-2M		3100lm	24.5W	120mA (100%)	2350lm	20W		1550lm	14.7W	68mA (56%)
ECO RAYS TP 5P5 70DF.140-2M		3580lm	28.7W	140mA (100%)	2710lm	22.3W		1790lm	16.9W	79mA (56%)
ECO RAYS TP 5P5 70DF.160-2M	STU-M	4040lm	31.7W	160mA (100%)	3040lm	25.1W		2030lm	19.1W	90mA (56%)
ECO RAYS TP 5P5 70DF.180-2M		4470lm	35.8W	180mA (100%)	3360lm	28W		2240lm	21.2W	100mA (55%)
ECO RAYS TP 5P5 70DF.090-2M	SV	2290lm	19.1W	90mA (100%)	1720lm	15.1W		1150lm	11.5W	51mA (56%)
ECO RAYS TP 5P5 70DF.100-2M		2540lm	21.2W	100mA (100%)	1910lm	16.7W		1280lm	12.6W	57mA (56%)
ECO RAYS TP 5P5 70DF.120-2M		3020lm	24.5W	120mA (100%)	2270lm	19.8W		1510lm	14.7W	68mA (56%)
ECO RAYS TP 5P5 70DF.140-2M		3500lm	28.7W	140mA (100%)	2640lm	22.3W		1760lm	17.1W	80mA (57%)
ECO RAYS TP 5P5 70DF.160-2M		3950lm	31.7W	160mA (100%)	2990lm	25.3W		2000lm	19.3W	91mA (56%)
ECO RAYS TP 5P5 70DF.180-2M	S-W	4370lm	35.8W	180mA (100%)	3280lm	28W		2190lm	21.2W	100mA (55%)
ECO RAYS TP 5P5 70DF.060-4M		2400lm	24.4W	60mA (100%)	1800lm	19.2W		1240lm	14.7W	34mA (56%)
ECO RAYS TP 5P5 70DF.070-4M		2780lm	28.2W	70mA (100%)	2120lm	22.5W		1430lm	17W	40mA (57%)
ECO RAYS TP 5P5 70DF.080-4M		3160lm	31.9W	80mA (100%)	2370lm	25.1W		1590lm	18.8W	45mA (56%)
ECO RAYS TP 5P5 70DF.090-4M		3540lm	35.8W	90mA (100%)	2660lm	28.2W		1780lm	21W	51mA (56%)
ECO RAYS TP 5P5 70DF.100-4M	S-W	3920lm	39.6W	100mA (100%)	2950lm	31.2W		1970lm	23.3W	57mA (56%)
ECO RAYS TP 5P5 70DF.120-4M		4660lm	47W	120mA (100%)	3500lm	36.9W		2330lm	27.4W	68mA (56%)
ECO RAYS TP 5P5 70DF.140-4M		5390lm	54.9W	140mA (100%)	4080lm	42.7W		2720lm	31.9W	80mA (57%)
ECO RAYS TP 5P5 70DF.160-4M		6070lm	61.7W	160mA (100%)	4570lm	48.2W		3050lm	35.8W	90mA (56%)
ECO RAYS TP 5P5 70DF.180-4M		6710lm	69.7W	180mA (100%)	5060lm	53.7W		3380lm	39.6W	100mA (55%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

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

ECO RAYS TP 4P4 DF

MAX LUMINOUS FLUX AND POWER

LUMINAIRE	OPTIC	LED CURRENT (mA)	LUMINAIRE FLUX* (3000K, lm)	LUMINAIRE FLUX* (2700K, lm)	LUMINAIRE FLUX* (2200K, lm)	LUMINAIRE POWER* (W)	LUMINAIRE EFFICACY (3000K, lm/W)
ECO RAYS TP 4P4 70DF.120-2M	STE-M STU-M	120	2480	2370	2140	19.6	126.5
ECO RAYS TP 4P4 70DF.140-2M		140	2870	2750	2470	23	124.7
ECO RAYS TP 4P4 70DF.160-2M		160	3240	3100	2790	25.4	127.5
ECO RAYS TP 4P4 70DF.180-2M		180	3580	3420	3080	28.7	124.7
ECO RAYS TP 4P4 70DF.120-2M	STA STA1 STE-S STU-S SV	120	2450	2350	2110	19.6	124.9
ECO RAYS TP 4P4 70DF.140-2M		140	2830	2710	2440	23	123.0
ECO RAYS TP 4P4 70DF.160-2M		160	3190	3050	2750	25.4	125.5
ECO RAYS TP 4P4 70DF.180-2M		180	3530	3380	3040	28.7	122.9
ECO RAYS TP 4P4 70DF.120-2M	STW	120	2510	2400	2160	19.6	128.0
ECO RAYS TP 4P4 70DF.140-2M		140	2900	2770	2490	23	126.0
ECO RAYS TP 4P4 70DF.160-2M		160	3270	3130	2810	25.4	128.7
ECO RAYS TP 4P4 70DF.180-2M		180	3610	3460	3110	28.7	125.7

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH CONSTANT FLUX PROFILE (TWC1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 3000K, 100% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 100% of flux)
ECO RAYS TP 4P4 70DF.120-2M	STE-M STU-M	2140lm 16.9W 103mA (85%)	2140lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70DF.140-2M		2480lm 19.6W 120mA (85%)	2470lm 23W 140mA (100%)
ECO RAYS TP 4P4 70DF.160-2M		2790lm 22.3W 136mA (85%)	2790lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70DF.180-2M		3090lm 24.1W 152mA (84%)	3080lm 28.7W 180mA (100%)
ECO RAYS TP 4P4 70DF.120-2M	STA STA1 STE-S STU-S SV	2120lm 16.9W 103mA (85%)	2110lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70DF.140-2M		2450lm 19.6W 120mA (85%)	2440lm 23W 140mA (100%)
ECO RAYS TP 4P4 70DF.160-2M		2750lm 22.3W 136mA (85%)	2750lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70DF.180-2M		3050lm 24.1W 152mA (84%)	3040lm 28.7W 180mA (100%)
ECO RAYS TP 4P4 70DF.120-2M	STW	2170lm 16.9W 103mA (85%)	2160lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70DF.140-2M		2490lm 19.5W 119mA (85%)	2490lm 23W 140mA (100%)
ECO RAYS TP 4P4 70DF.160-2M		2820lm 22.3W 136mA (85%)	2810lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70DF.180-2M		3120lm 24.1W 152mA (84%)	3110lm 28.7W 180mA (100%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH ONE STEP REDUCTION PROFILE (TWS1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 3000K, 100% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 75% of flux)
ECO RAYS TP 4P4 70DF.120-2M	STE-M STU-M	2480lm 19.6W 120mA (100%)	1860lm 17W 104mA (86%)
ECO RAYS TP 4P4 70DF.140-2M		2870lm 23W 140mA (100%)	2170lm 20W 122mA (87%)
ECO RAYS TP 4P4 70DF.160-2M		3240lm 25.4W 160mA (100%)	2440lm 22.7W 138mA (86%)
ECO RAYS TP 4P4 70DF.180-2M		3580lm 28.7W 180mA (100%)	2690lm 24.4W 154mA (85%)
ECO RAYS TP 4P4 70DF.120-2M	STA STA1 STE-S STU-S SV	2450lm 19.6W 120mA (100%)	1840lm 17W 104mA (86%)
ECO RAYS TP 4P4 70DF.140-2M		2830lm 23W 140mA (100%)	2130lm 19.8W 121mA (86%)
ECO RAYS TP 4P4 70DF.160-2M		3190lm 25.4W 160mA (100%)	2410lm 22.7W 138mA (86%)
ECO RAYS TP 4P4 70DF.180-2M		3530lm 28.7W 180mA (100%)	2660lm 24.4W 154mA (85%)
ECO RAYS TP 4P4 70DF.120-2M	STW	2510lm 19.6W 120mA (100%)	1900lm 17.2W 105mA (87%)
ECO RAYS TP 4P4 70DF.140-2M		2900lm 23W 140mA (100%)	2180lm 19.8W 121mA (86%)
ECO RAYS TP 4P4 70DF.160-2M		3270lm 25.4W 160mA (100%)	2460lm 22.7W 138mA (86%)
ECO RAYS TP 4P4 70DF.180-2M		3610lm 28.7W 180mA (100%)	2720lm 24.4W 154mA (85%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH TWO-STEP REDUCTION PROFILE (TWS2)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 3000K, 100% of flux)	FLUX LUMINAIRE POWER* (Tq=25°C, 2700K, 75% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2200K, 50% of flux)
ECO RAYS TP 4P4 70DF.120-2M	STE-M STU-M	2480lm 19.6W 120mA (100%)	1870lm 16W	1250lm 12W 69mA (57%)
ECO RAYS TP 4P4 70DF.140-2M		2870lm 23W 140mA (100%)	2160lm 17.8W	1440lm 13.7W 80mA (57%)
ECO RAYS TP 4P4 70DF.160-2M		3240lm 25.4W 160mA (100%)	2430lm 20.1W	1620lm 15.3W 90mA (56%)
ECO RAYS TP 4P4 70DF.180-2M		3580lm 28.7W 180mA (100%)	2690lm 22.5W	1790lm 17W 100mA (55%)
ECO RAYS TP 4P4 70DF.120-2M	STA STA1 STE-S STU-S SV	2450lm 19.6W 120mA (100%)	1840lm 15.8W	1240lm 12W 69mA (57%)
ECO RAYS TP 4P4 70DF.140-2M		2830lm 23W 140mA (100%)	2140lm 17.8W	1430lm 13.7W 80mA (57%)
ECO RAYS TP 4P4 70DF.160-2M		3190lm 25.4W 160mA (100%)	2400lm 20.1W	1600lm 15.3W 90mA (56%)
ECO RAYS TP 4P4 70DF.180-2M		3530lm 28.7W 180mA (100%)	2660lm 22.5W	1770lm 17W 100mA (55%)
ECO RAYS TP 4P4 70DF.120-2M	STW	2510lm 19.6W 120mA (100%)	1900lm 16W	1270lm 12W 69mA (57%)
ECO RAYS TP 4P4 70DF.140-2M		2900lm 23W 140mA (100%)	2190lm 17.8W	1450lm 13.6W 79mA (56%)
ECO RAYS TP 4P4 70DF.160-2M		3270lm 25.4W 160mA (100%)	2460lm 20.1W	1640lm 15.3W 90mA (56%)
ECO RAYS TP 4P4 70DF.180-2M		3610lm 28.7W 180mA (100%)	2720lm 22.5W	1810lm 17W 100mA (55%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

ECO RAYS TP 5P5 EG

MAX LUMINOUS FLUX AND POWER

LUMINAIRE	OPTIC	LED CURRENT (mA)	LUMINAIRE FLUX* (4000K, lm)	LUMINAIRE FLUX* (3000K, lm)	LUMINAIRE FLUX* (2700K, lm)	LUMINAIRE POWER* (W)	LUMINAIRE EFFICACY (4000K, lm/W)
ECO RAYS TP 5P5 70EG.090-2M	STA STA1	90	2460	2320	2220	19.1	128.7
ECO RAYS TP 5P5 70EG.100-2M		100	2730	2570	2460	21.2	128.7
ECO RAYS TP 5P5 70EG.120-2M		120	3260	3060	2930	24.5	133.0
ECO RAYS TP 5P5 70EG.140-2M		140	3770	3540	3390	28.7	131.3
ECO RAYS TP 5P5 70EG.160-2M		160	4260	4000	3830	31.7	134.3
ECO RAYS TP 5P5 70EG.180-2M		180	4710	4420	4240	35.8	131.5
ECO RAYS TP 5P5 70EG.090-2M	STE-M STE-S STU-M STU-S STW	90	2500	2350	2250	19.1	130.8
ECO RAYS TP 5P5 70EG.100-2M		100	2770	2600	2490	21.2	130.6
ECO RAYS TP 5P5 70EG.120-2M		120	3300	3100	2970	24.5	134.6
ECO RAYS TP 5P5 70EG.140-2M		140	3810	3580	3430	28.7	132.7
ECO RAYS TP 5P5 70EG.160-2M		160	4300	4040	3870	31.7	135.6
ECO RAYS TP 5P5 70EG.180-2M		180	4750	4470	4280	35.8	132.6
ECO RAYS TP 5P5 70EG.090-2M	SV	90	2440	2290	2190	19.1	127.7
ECO RAYS TP 5P5 70EG.100-2M		100	2700	2540	2430	21.2	127.3
ECO RAYS TP 5P5 70EG.120-2M		120	3220	3020	2900	24.5	131.4
ECO RAYS TP 5P5 70EG.140-2M		140	3720	3500	3350	28.7	129.6
ECO RAYS TP 5P5 70EG.160-2M		160	4200	3950	3780	31.7	132.4
ECO RAYS TP 5P5 70EG.180-2M		180	4640	4370	4180	35.8	129.6
ECO RAYS TP 5P5 70EG.060-4M	S-W	60	2560	2400	2300	24.4	104.9
ECO RAYS TP 5P5 70EG.070-4M		70	2960	2780	2660	28.2	104.9
ECO RAYS TP 5P5 70EG.080-4M		80	3360	3160	3030	31.9	105.3
ECO RAYS TP 5P5 70EG.090-4M		90	3770	3540	3390	35.8	105.3
ECO RAYS TP 5P5 70EG.100-4M		100	4170	3920	3750	39.6	105.3
ECO RAYS TP 5P5 70EG.120-4M		120	4960	4660	4470	47	105.5
ECO RAYS TP 5P5 70EG.140-4M		140	5730	5390	5160	54.9	104.3
ECO RAYS TP 5P5 70EG.160-4M		160	6460	6070	5810	61.7	104.7
ECO RAYS TP 5P5 70EG.180-4M		180	7140	6710	6430	69.7	102.4

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH CONSTANT FLUX PROFILE (TWC1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 4000K, 100% of flux)			FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 100% of flux)		
ECO RAYS TP 5P5 70EG.090-2M	STA STA1	2220lm	17.3W	81mA (90%)	2220lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70EG.100-2M		2460lm	19.1W	90mA (90%)	2460lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70EG.120-2M		2940lm	22.1W	108mA (90%)	2930lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70EG.140-2M		3390lm	25.5W	125mA (89%)	3390lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70EG.160-2M		3840lm	28.2W	143mA (89%)	3830lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70EG.180-2M		4260lm	31.7W	160mA (88%)	4240lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70EG.090-2M	STE-M STE-S STU-M STU-S STW	2260lm	17.3W	81mA (90%)	2250lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70EG.100-2M		2500lm	19.1W	90mA (90%)	2490lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70EG.120-2M		2980lm	22.1W	108mA (90%)	2970lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70EG.140-2M		3430lm	25.5W	125mA (89%)	3430lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70EG.160-2M		3880lm	28.2W	143mA (89%)	3870lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70EG.180-2M		4300lm	31.7W	160mA (88%)	4280lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70EG.090-2M	SV	2200lm	17.3W	81mA (90%)	2190lm	19.1W	90mA (100%)
ECO RAYS TP 5P5 70EG.100-2M		2440lm	19.1W	90mA (90%)	2430lm	21.2W	100mA (100%)
ECO RAYS TP 5P5 70EG.120-2M		2910lm	22.1W	108mA (90%)	2900lm	24.5W	120mA (100%)
ECO RAYS TP 5P5 70EG.140-2M		3350lm	25.5W	125mA (89%)	3350lm	28.7W	140mA (100%)
ECO RAYS TP 5P5 70EG.160-2M		3790lm	28.2W	143mA (89%)	3780lm	31.7W	160mA (100%)
ECO RAYS TP 5P5 70EG.180-2M		4180lm	31.5W	159mA (88%)	4180lm	35.8W	180mA (100%)
ECO RAYS TP 5P5 70EG.060-4M	S-W	2320lm	22.1W	54mA (90%)	2300lm	24.4W	60mA (100%)
ECO RAYS TP 5P5 70EG.070-4M		2680lm	25.5W	63mA (90%)	2660lm	28.2W	70mA (100%)
ECO RAYS TP 5P5 70EG.080-4M		3040lm	28.9W	72mA (90%)	3030lm	31.9W	80mA (100%)
ECO RAYS TP 5P5 70EG.090-4M		3400lm	32.3W	81mA (90%)	3390lm	35.8W	90mA (100%)
ECO RAYS TP 5P5 70EG.100-4M		3770lm	35.8W	90mA (90%)	3750lm	39.6W	100mA (100%)
ECO RAYS TP 5P5 70EG.120-4M		4490lm	42.4W	108mA (90%)	4470lm	47W	120mA (100%)
ECO RAYS TP 5P5 70EG.140-4M		5160lm	49W	125mA (89%)	5160lm	54.9W	140mA (100%)
ECO RAYS TP 5P5 70EG.160-4M		5840lm	55W	143mA (89%)	5810lm	61.7W	160mA (100%)
ECO RAYS TP 5P5 70EG.180-4M		6460lm	61.7W	160mA (88%)	6430lm	69.7W	180mA (100%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH ONE STEP REDUCTION PROFILE (TWS1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT*			FLUX LUMINAIRE POWER LED CURRENT*		
		(Tq=25°C, 4000K, 100% of flux)			(Tq=25°C, 2700K, 75% of flux)		
ECO RAYS TP 5P5 70EG.090-2M	STA	2460lm	19.1W	90mA (100%)	1860lm	16.1W	75mA (83%)
ECO RAYS TP 5P5 70EG.100-2M		2730lm	21.2W	100mA (100%)	2050lm	17.7W	83mA (83%)
ECO RAYS TP 5P5 70EG.120-2M		3260lm	24.5W	120mA (100%)	2460lm	21.2W	100mA (83%)
ECO RAYS TP 5P5 70EG.140-2M		3770lm	28.7W	140mA (100%)	2840lm	23.7W	116mA (82%)
ECO RAYS TP 5P5 70EG.160-2M		4260lm	31.7W	160mA (100%)	3210lm	27W	132mA (82%)
ECO RAYS TP 5P5 70EG.180-2M	STE-M	4710lm	35.8W	180mA (100%)	3550lm	29W	147mA (81%)
ECO RAYS TP 5P5 70EG.090-2M		2500lm	19.1W	90mA (100%)	1890lm	16.1W	75mA (83%)
ECO RAYS TP 5P5 70EG.100-2M		2770lm	21.2W	100mA (100%)	2080lm	17.7W	83mA (83%)
ECO RAYS TP 5P5 70EG.120-2M		3300lm	24.5W	120mA (100%)	2490lm	21.2W	100mA (83%)
ECO RAYS TP 5P5 70EG.140-2M		3810lm	28.7W	140mA (100%)	2870lm	23.7W	116mA (82%)
ECO RAYS TP 5P5 70EG.160-2M	STU-M	4300lm	31.7W	160mA (100%)	3250lm	27W	132mA (82%)
ECO RAYS TP 5P5 70EG.180-2M		4750lm	35.8W	180mA (100%)	3590lm	29W	147mA (81%)
ECO RAYS TP 5P5 70EG.090-2M		2440lm	19.1W	90mA (100%)	1840lm	16.1W	75mA (83%)
ECO RAYS TP 5P5 70EG.100-2M		2700lm	21.2W	100mA (100%)	2030lm	17.7W	83mA (83%)
ECO RAYS TP 5P5 70EG.120-2M		3220lm	24.5W	120mA (100%)	2430lm	21.2W	100mA (83%)
ECO RAYS TP 5P5 70EG.140-2M	SV	3720lm	28.7W	140mA (100%)	2800lm	23.7W	116mA (82%)
ECO RAYS TP 5P5 70EG.160-2M		4200lm	31.7W	160mA (100%)	3150lm	26.8W	131mA (81%)
ECO RAYS TP 5P5 70EG.180-2M		4640lm	35.8W	180mA (100%)	3480lm	28.8W	146mA (81%)
ECO RAYS TP 5P5 70EG.060-4M		2560lm	24.4W	60mA (100%)	1940lm	20.7W	50mA (83%)
ECO RAYS TP 5P5 70EG.070-4M		2960lm	28.2W	70mA (100%)	2230lm	23.6W	58mA (82%)
ECO RAYS TP 5P5 70EG.080-4M	S-W	3360lm	31.9W	80mA (100%)	2520lm	26.6W	66mA (82%)
ECO RAYS TP 5P5 70EG.090-4M		3770lm	35.8W	90mA (100%)	2850lm	30W	75mA (83%)
ECO RAYS TP 5P5 70EG.100-4M		4170lm	39.6W	100mA (100%)	3140lm	33.1W	83mA (83%)
ECO RAYS TP 5P5 70EG.120-4M		4960lm	47W	120mA (100%)	3720lm	39.3W	99mA (82%)
ECO RAYS TP 5P5 70EG.140-4M		5730lm	54.9W	140mA (100%)	4330lm	45.5W	116mA (82%)
ECO RAYS TP 5P5 70EG.160-4M		6460lm	61.7W	160mA (100%)	4850lm	51.3W	131mA (81%)
ECO RAYS TP 5P5 70EG.180-4M		7140lm	69.7W	180mA (100%)	5360lm	56.2W	146mA (81%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

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

LUMINOUS FLUX AND POWER WITH TWO-STEP REDUCTION PROFILE (TWS2)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT*			FLUX LUMINAIRE POWER*			FLUX LUMINAIRE POWER LED CURRENT*		
		(Tq=25°C, 4000K, 100% of flux)			(Tq=25°C, 3000K, 75% of flux)			(Tq=25°C, 2700K, 50% of flux)		
ECO RAYS TP 5P5 70EG.090-2M	STA	2460lm	19.1W	90mA (100%)	1860lm	15.5W		1240lm	11.1W	49mA (54%)
ECO RAYS TP 5P5 70EG.100-2M		2730lm	21.2W	100mA (100%)	2060lm	17.1W		1380lm	12.2W	55mA (55%)
ECO RAYS TP 5P5 70EG.120-2M		3260lm	24.5W	120mA (100%)	2470lm	20.4W		1640lm	14.3W	66mA (55%)
ECO RAYS TP 5P5 70EG.140-2M		3770lm	28.7W	140mA (100%)	2840lm	22.7W		1900lm	16.5W	77mA (55%)
ECO RAYS TP 5P5 70EG.160-2M		4260lm	31.7W	160mA (100%)	3210lm	25.7W		2140lm	18.5W	87mA (54%)
ECO RAYS TP 5P5 70EG.180-2M	STE-M	4710lm	35.8W	180mA (100%)	3540lm	28.7W		2360lm	20.4W	96mA (53%)
ECO RAYS TP 5P5 70EG.090-2M		2500lm	19.1W	90mA (100%)	1900lm	15.5W		1260lm	11.1W	49mA (54%)
ECO RAYS TP 5P5 70EG.100-2M		2770lm	21.2W	100mA (100%)	2100lm	17.1W		1400lm	12.2W	55mA (55%)
ECO RAYS TP 5P5 70EG.120-2M		3300lm	24.5W	120mA (100%)	2480lm	20.2W		1650lm	14.1W	65mA (54%)
ECO RAYS TP 5P5 70EG.140-2M		3810lm	28.7W	140mA (100%)	2880lm	22.7W		1910lm	16.3W	76mA (54%)
ECO RAYS TP 5P5 70EG.160-2M	STU-M	4300lm	31.7W	160mA (100%)	3250lm	25.7W		2150lm	18.3W	86mA (53%)
ECO RAYS TP 5P5 70EG.180-2M		4750lm	35.8W	180mA (100%)	3580lm	28.7W		2400lm	20.4W	96mA (53%)
ECO RAYS TP 5P5 70EG.090-2M		2440lm	19.1W	90mA (100%)	1850lm	15.5W		1230lm	11.1W	49mA (54%)
ECO RAYS TP 5P5 70EG.100-2M		2700lm	21.2W	100mA (100%)	2040lm	17.1W		1350lm	12W	54mA (54%)
ECO RAYS TP 5P5 70EG.120-2M		3220lm	24.5W	120mA (100%)	2420lm	20.2W		1630lm	14.3W	66mA (55%)
ECO RAYS TP 5P5 70EG.140-2M	SV	3720lm	28.7W	140mA (100%)	2810lm	22.7W		1890lm	16.5W	77mA (55%)
ECO RAYS TP 5P5 70EG.160-2M		4200lm	31.7W	160mA (100%)	3170lm	25.7W		2100lm	18.3W	86mA (53%)
ECO RAYS TP 5P5 70EG.180-2M		4640lm	35.8W	180mA (100%)	3500lm	28.7W		2340lm	20.4W	96mA (53%)
ECO RAYS TP 5P5 70EG.060-4M		2560lm	24.4W	60mA (100%)	1950lm	19.9W		1300lm	14W	32mA (53%)
ECO RAYS TP 5P5 70EG.070-4M		2960lm	28.2W	70mA (100%)	2250lm	22.9W		1510lm	16.2W	38mA (54%)
ECO RAYS TP 5P5 70EG.080-4M	S-W	3360lm	31.9W	80mA (100%)	2520lm	25.9W		1690lm	18.1W	43mA (53%)
ECO RAYS TP 5P5 70EG.090-4M		3770lm	35.8W	90mA (100%)	2860lm	28.9W		1900lm	20.3W	49mA (54%)
ECO RAYS TP 5P5 70EG.100-4M		4170lm	39.6W	100mA (100%)	3160lm	31.9W		2120lm	22.5W	55mA (55%)
ECO RAYS TP 5P5 70EG.120-4M		4960lm	47W	120mA (100%)	3730lm	37.7W		2480lm	26.3W	65mA (54%)
ECO RAYS TP 5P5 70EG.140-4M		5730lm	54.9W	140mA (100%)	4330lm	43.5W		2880lm	30.4W	76mA (54%)
ECO RAYS TP 5P5 70EG.160-4M		6460lm	61.7W	160mA (100%)	4850lm	49W		3250lm	34.2W	86mA (53%)
ECO RAYS TP 5P5 70EG.180-4M		7140lm	69.7W	180mA (100%)	5390lm	54.9W		3610lm	38.1W	96mA (53%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.

Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.

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

ECO RAYS TP 4P4 EG

MAX LUMINOUS FLUX AND POWER

LUMINAIRE	OPTIC	LED CURRENT (mA)	LUMINAIRE FLUX* (4000K, lm)	LUMINAIRE FLUX* (3000K, lm)	LUMINAIRE FLUX* (2700K, lm)	LUMINAIRE POWER* (W)	LUMINAIRE EFFICACY (4000K, lm/W)
ECO RAYS TP 4P4 70EG.120-2M	STE-M STU-M	120	2640	2480	2370	19.6	134.6
ECO RAYS TP 4P4 70EG.140-2M		140	3050	2870	2750	23	132.6
ECO RAYS TP 4P4 70EG.160-2M		160	3440	3240	3100	25.4	135.4
ECO RAYS TP 4P4 70EG.180-2M		180	3800	3580	3420	28.7	132.4
ECO RAYS TP 4P4 70EG.120-2M	STA STA1 STE-S STU-S SV	120	2610	2450	2350	19.6	133.1
ECO RAYS TP 4P4 70EG.140-2M		140	3010	2830	2710	23	130.8
ECO RAYS TP 4P4 70EG.160-2M		160	3390	3190	3050	25.4	133.4
ECO RAYS TP 4P4 70EG.180-2M		180	3750	3530	3380	28.7	130.6
ECO RAYS TP 4P4 70EG.120-2M	STW	120	2670	2510	2400	19.6	136.2
ECO RAYS TP 4P4 70EG.140-2M		140	3080	2900	2770	23	133.9
ECO RAYS TP 4P4 70EG.160-2M		160	3470	3270	3130	25.4	136.6
ECO RAYS TP 4P4 70EG.180-2M		180	3840	3610	3460	28.7	133.7

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH CONSTANT FLUX PROFILE (TWC1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 4000K, 100% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 100% of flux)
ECO RAYS TP 4P4 70EG.120-2M	STE-M STU-M	2380lm 17.7W 108mA (90%)	2370lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70EG.140-2M		2760lm 20.6W 126mA (90%)	2750lm 23W 140mA (100%)
ECO RAYS TP 4P4 70EG.160-2M		3110lm 22.6W 143mA (89%)	3100lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70EG.180-2M		3440lm 25.4W 160mA (88%)	3420lm 28.7W 180mA (100%)
ECO RAYS TP 4P4 70EG.120-2M	STA STA1 STE-S STU-S SV	2360lm 17.7W 108mA (90%)	2350lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70EG.140-2M		2710lm 20.5W 125mA (89%)	2710lm 23W 140mA (100%)
ECO RAYS TP 4P4 70EG.160-2M		3050lm 22.5W 142mA (88%)	3050lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70EG.180-2M		3380lm 25.3W 159mA (88%)	3380lm 28.7W 180mA (100%)
ECO RAYS TP 4P4 70EG.120-2M	STW	2410lm 17.7W 108mA (90%)	2400lm 19.6W 120mA (100%)
ECO RAYS TP 4P4 70EG.140-2M		2770lm 20.5W 125mA (89%)	2770lm 23W 140mA (100%)
ECO RAYS TP 4P4 70EG.160-2M		3140lm 22.6W 143mA (89%)	3130lm 25.4W 160mA (100%)
ECO RAYS TP 4P4 70EG.180-2M		3470lm 25.4W 160mA (88%)	3460lm 28.7W 180mA (100%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH ONE STEP REDUCTION PROFILE (TWS1)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 4000K, 100% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 75% of flux)
ECO RAYS TP 4P4 70EG.120-2M	STE-M STU-M	2640lm 19.6W 120mA (100%)	1990lm 17W 100mA (83%)
ECO RAYS TP 4P4 70EG.140-2M		3050lm 23W 140mA (100%)	2300lm 19W 116mA (82%)
ECO RAYS TP 4P4 70EG.160-2M		3440lm 25.4W 160mA (100%)	2580lm 21.5W 131mA (81%)
ECO RAYS TP 4P4 70EG.180-2M		3800lm 28.7W 180mA (100%)	2850lm 23.1W 146mA (81%)
ECO RAYS TP 4P4 70EG.120-2M	STA STA1 STE-S STU-S SV	2610lm 19.6W 120mA (100%)	1970lm 17W 100mA (83%)
ECO RAYS TP 4P4 70EG.140-2M		3010lm 23W 140mA (100%)	2270lm 19W 116mA (82%)
ECO RAYS TP 4P4 70EG.160-2M		3390lm 25.4W 160mA (100%)	2550lm 21.5W 131mA (81%)
ECO RAYS TP 4P4 70EG.180-2M		3750lm 28.7W 180mA (100%)	2830lm 23.3W 147mA (81%)
ECO RAYS TP 4P4 70EG.120-2M	STW	2670lm 19.6W 120mA (100%)	2020lm 17W 100mA (83%)
ECO RAYS TP 4P4 70EG.140-2M		3080lm 23W 140mA (100%)	2320lm 19W 116mA (82%)
ECO RAYS TP 4P4 70EG.160-2M		3470lm 25.4W 160mA (100%)	2610lm 21.5W 131mA (81%)
ECO RAYS TP 4P4 70EG.180-2M		3840lm 28.7W 180mA (100%)	2880lm 23.1W 146mA (81%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.

LUMINOUS FLUX AND POWER WITH TWO-STEP REDUCTION PROFILE (TWS2)

LUMINAIRE	OPTIC	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 4000K, 100% of flux)	FLUX LUMINAIRE POWER* (Tq=25°C, 3000K, 75% of flux)	FLUX LUMINAIRE POWER LED CURRENT* (Tq=25°C, 2700K, 50% of flux)
ECO RAYS TP 4P4 70EG.120-2M	STE-M STU-M	2640lm 19.6W 120mA (100%)	1980lm 16.2W	1330lm 11.6W 66mA (55%)
ECO RAYS TP 4P4 70EG.140-2M		3050lm 23W 140mA (100%)	2300lm 18.2W	1540lm 13.3W 77mA (55%)
ECO RAYS TP 4P4 70EG.160-2M		3440lm 25.4W 160mA (100%)	2580lm 20.5W	1720lm 14.7W 86mA (53%)
ECO RAYS TP 4P4 70EG.180-2M		3800lm 28.7W 180mA (100%)	2850lm 22.8W	1910lm 16.3W 96mA (53%)
ECO RAYS TP 4P4 70EG.120-2M	STA STA1 STE-S STU-S SV	2610lm 19.6W 120mA (100%)	1960lm 16.2W	1320lm 11.6W 66mA (55%)
ECO RAYS TP 4P4 70EG.140-2M		3010lm 23W 140mA (100%)	2260lm 18W	1510lm 13.1W 76mA (54%)
ECO RAYS TP 4P4 70EG.160-2M		3390lm 25.4W 160mA (100%)	2550lm 20.5W	1700lm 14.7W 86mA (53%)
ECO RAYS TP 4P4 70EG.180-2M		3750lm 28.7W 180mA (100%)	2830lm 23W	1880lm 16.2W 95mA (52%)
ECO RAYS TP 4P4 70EG.120-2M	STW	2670lm 19.6W 120mA (100%)	2020lm 16.3W	1350lm 11.6W 66mA (55%)
ECO RAYS TP 4P4 70EG.140-2M		3080lm 23W 140mA (100%)	2310lm 18W	1550lm 13.1W 76mA (54%)
ECO RAYS TP 4P4 70EG.160-2M		3470lm 25.4W 160mA (100%)	2610lm 20.5W	1740lm 14.7W 86mA (53%)
ECO RAYS TP 4P4 70EG.180-2M		3840lm 28.7W 180mA (100%)	2880lm 22.8W	1920lm 16.2W 95mA (52%)

*LUMINAIRE FLUX / LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac.
Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±10%.
Meets Dark Sky requirements when equipped with LEDs with a colour temperature of 3000K or less.
The characteristics of the product listed above are subjected to change without notice.