

ITALO 1

MAIN CHARACTERISTICS

Applications	Street lighting.
Optic	<p>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 narrow urban streets or highway entrance/exit turns. OP-DX/SX OPA-DX/SX: Asymmetrical optic for crosswalks lighting. S05: Asymmetrical optic for street, urban and green areas lighting. STA/STA1: Asymmetrical optic for V and P categories. Colour temperature: 4000K (3000K optional) CRI ≥ 70 LOR= 100%, DLOR= 100%, ULOR= 0% Photobiological safety class: EXEMPT GROUP LED source efficiency: 168 lm/W @ 525mA, Tj=85°C, 4000K</p>
Insulation class	II, I
Protection degree	IP66 IK09 total
LED Modules	Removable / Replaceable.
Tilt Angle	Post-top: 0°, +5°, +10°, +15°, +20° Bracket: 0°, -5°, -10°, -15°, -20° Bracket: +5°, 0°, -5°, -10°, -15°, -20° (only Ø33mm ÷ Ø60mm)
Dimensions	See the drawing
Weight	max 7 kg
Exposed surface	Side: 0.06m ² – Top: 0.18m ² SCx:0.04m ²
Mounting	Bracket or Post-top Ø60mm Ø33mm ÷ Ø60mm (optional) Ø60mm ÷ Ø76mm (optional)
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



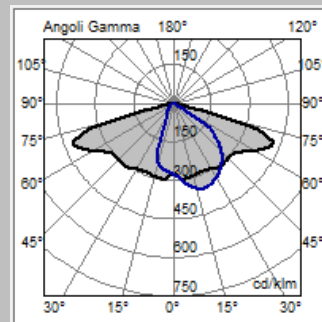
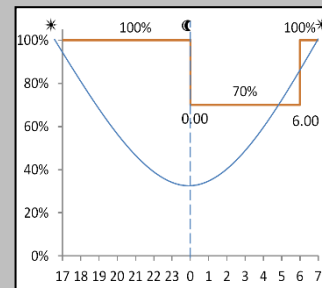
ELECTRICAL CHARACTERISTICS

Rated voltage	220÷240V 50/60Hz (Standard tolerance +/-10%, other voltages and tolerances upon request)
Power factor	>0,95 (at full load - F, DA, DAC)
On-load switch	Included, with integrated cable clamp.
Mains connection	For cables max section 4mm ²
Surge protection	Up to 10kV With SPD (optional) 10kV / 10kV CM/DM
SPD (optional)	10kV-10kA, type II, 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. 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 aluminum UNI EN1706 powder painted.
Heat-sink	
Lower frame	
Upper canopy	
Closure hook	Extruded aluminium with stainless steel spring.
Optic	99.85% aluminum 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.
Cable gland	Plastic M20x1.5 - IP68
Gasket	Polyurethane
Colour	Semi-gloss satin grey - Cod. 2B

DA Profile



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)
ITALO 1 0F2H1 4.3-1M	S05 STU-M STU-S SV	1300	11	118	1510	8.5
ITALO 1 0F2H1 4.3-2M		2580	21	122	3021	17
ITALO 1 0F2H1 4.3-3M		3870	30	129	4531	26
ITALO 1 0F2H1 4.3-4M		5040	38.5	130	6042	34.5
ITALO 1 0F2H1 4.5-1M	S05 STU-M STU-S SV	1880	16	117	2174	13
ITALO 1 0F2H1 4.5-2M		3690	30.5	120	4348	26.5
ITALO 1 0F2H1 4.5-3M		5530	44	125	6522	39.5
ITALO 1 0F2H1 4.5-4M		7150	57	125	8696	52.5
ITALO 1 0F2H1 4.7-1M	S05 STU-M STU-S SV	2420	21.5	112	2809	18
ITALO 1 0F2H1 4.7-2M		4720	40	118	5619	35.5
ITALO 1 0F2H1 4.7-3M		7030	58	121	8428	53.5
ITALO 1 0F2H1 4.7-4M		8990	76	118	11237	71
ITALO 1 0F2H1 4.100-1M	S05 STU-M STU-S SV	3180	30	106	3833	26
ITALO 1 0F2H1 4.100-2M		6100	57	107	7666	52
ITALO 1 0F2H1 4.100-3M		9150	85	107	11499	78
ITALO 1 0F2H1 4.100-4M		11610	111	104	15331	104
ITALO 1 0F3 4.3-1M	STE-M STE-S STW	1830	15.5	118	2015	11.5
ITALO 1 0F3 4.3-2M		3620	27	134	4030	23
ITALO 1 0F3 4.3-3M		5290	39	135	6045	34.5
ITALO 1 0F3 4.3-4M		7020	51.5	136	8061	46

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)
ITALO 1 0F3 4.5-1M		2610	21.5	121	2899	17.5
ITALO 1 0F3 4.5-2M	STE-M	5160	39	132	5799	35
ITALO 1 0F3 4.5-3M	STE-S	7490	57	131	8698	52.5
ITALO 1 0F3 4.5-4M	STW	9950	76	130	11597	70
ITALO 1 0F3 4.7-1M		3270	28	116	3747	23.5
ITALO 1 0F3 4.7-2M	STE-M	6530	52	125	7493	47.5
ITALO 1 0F3 4.7-3M	STE-S	9420	76	123	11240	71
ITALO 1 0F3 4.7-4M	STW	12550	102	123	14987	95
ITALO 1 0F3 4.100-1M		4180	41	101	5114	34.5
ITALO 1 0F3 4.100-2M	STE-M	8290	74	112	10228	69.5
ITALO 1 0F3 4.100-3M	STE-S	12170	111	109	15342	104
ITALO 1 0F3 4.100-4M	STW	16100	146	110	20456	138.5
ITALO 1 0F6 4.3-1M	OP-DX	3620	27	134	4030	23
ITALO 1 0F6 4.3-2M	OP-SX	7020	51.5	136	8061	46
ITALO 1 0F6 4.5-1M	OP-DX	5160	39	132	5799	35
ITALO 1 0F6 4.5-2M	OP-SX	9950	76	130	11597	70
ITALO 1 0F6 4.7-1M	OP-DX	6530	52	125	7493	47.5
ITALO 1 0F6 4.7-2M	OP-SX	12550	102	123	14987	95
ITALO 1 0F6 4.100-1M	OP-DX	8290	74	112	10228	69.5
ITALO 1 0F6 4.100-2M	OP-SX	16100	146	110	20456	138.5



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)
ITALO 1 0F2 4.3-1M	STA STA1	1140	9.5	120	1343	7.5
ITALO 1 0F2 4.3-2M		2260	18.5	122	2687	15.5
ITALO 1 0F2 4.3-3M		3390	26.5	127	4030	23
ITALO 1 0F2 4.3-4M		4330	34.5	125	5374	30.5
ITALO 1 0F2 4.5-1M	STA STA1	1650	14	117	1933	11.5
ITALO 1 0F2 4.5-2M		3230	27	119	3866	23.5
ITALO 1 0F2 4.5-3M		4850	39	124	5799	35
ITALO 1 0F2 4.5-4M		6140	51	120	7731	46.5
ITALO 1 0F2 4.7-1M	STA STA1	2120	19.5	108	2498	16
ITALO 1 0F2 4.7-2M		4130	36	114	4996	31.5
ITALO 1 0F2 4.7-3M		6160	51.5	119	7493	47.5
ITALO 1 0F2 4.7-4M		7720	67.5	114	9991	63
ITALO 1 0F2 4.100-1M	STA STA1	2780	27	102	3409	23
ITALO 1 0F2 4.100-2M		5340	50.5	105	6819	46
ITALO 1 0F2 4.100-3M		8020	75.5	106	10228	69.5
ITALO 1 0F2 4.100-4M		9970	99	100	13637	92.5

*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: ±5%.

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	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)
ITALO 1 0F4 4.3-1M	OPA-DX OPA-SX	2410	18.5	130	2687	15.5
ITALO 1 0F4 4.3-2M	OPA-DX OPA-SX	4630	34.5	134	5374	30.5
ITALO 1 0F4 4.5-1M	OPA-DX OPA-SX	3450	27	127	3866	23.5
ITALO 1 0F4 4.5-2M	OPA-DX OPA-SX	6560	51	128	7731	46.5
ITALO 1 0F4 4.7-1M	OPA-DX OPA-SX	4410	36	122	4996	31.5
ITALO 1 0F4 4.7-2M	OPA-DX OPA-SX	8250	67.5	122	9991	63
ITALO 1 0F4 4.100-1M	OPA-DX OPA-SX	5710	50.5	113	6819	46
ITALO 1 0F4 4.100-2M	OPA-DX OPA-SX	10650	99	107	13637	92.5

*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: $\pm 10\%$.

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



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)
ITALO 1 0F2H1 3.3-1M	S05 STU-M STU-S SV	1210	11	110	1404	8.5
ITALO 1 0F2H1 3.3-2M		2400	21	114	2810	17
ITALO 1 0F2H1 3.3-3M		3600	30	120	4214	26
ITALO 1 0F2H1 3.3-4M		4690	38.5	121	5619	34.5
ITALO 1 0F2H1 3.5-1M	S05 STU-M STU-S SV	1750	16	109	2022	13
ITALO 1 0F2H1 3.5-2M		3430	30.5	112	4044	26.5
ITALO 1 0F2H1 3.5-3M		5140	44	116	6065	39.5
ITALO 1 0F2H1 3.5-4M		6650	57	116	8087	52.5
ITALO 1 0F2H1 3.7-1M	S05 STU-M STU-S SV	2250	21.5	104	2612	18
ITALO 1 0F2H1 3.7-2M		4390	40	109	5226	35.5
ITALO 1 0F2H1 3.7-3M		6540	58	112	7838	53.5
ITALO 1 0F2H1 3.7-4M		8360	76	110	10450	71
ITALO 1 0F2H1 3.100-1M	S05 STU-M STU-S SV	2960	30	98	3565	26
ITALO 1 0F2H1 3.100-2M		5670	57	99	7129	52
ITALO 1 0F2H1 3.100-3M		8510	85	100	10694	78
ITALO 1 0F2H1 3.100-4M		10800	111	97	14258	104
ITALO 1 0F3 3.3-1M	STE-M STE-S STW	1700	15.5	109	1874	11.5
ITALO 1 0F3 3.3-2M		3370	27	124	3748	23
ITALO 1 0F3 3.3-3M		4920	39	126	5622	34.5
ITALO 1 0F3 3.3-4M		6530	51.5	126	7497	46



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)
ITALO 1 0F3 3.5-1M		2430	21.5	113	2696	17.5
ITALO 1 0F3 3.5-2M	STE-M STE-S STW	4800	39	123	5393	35
ITALO 1 0F3 3.5-3M		6970	57	122	8089	52.5
ITALO 1 0F3 3.5-4M		9250	76	121	10785	70
ITALO 1 0F3 3.7-1M		STE-M STE-S STW	3040	28	108	3485
ITALO 1 0F3 3.7-2M	6070		52	116	6968	47.5
ITALO 1 0F3 3.7-3M	8760		76	115	10453	71
ITALO 1 0F3 3.7-4M	11670		102	114	13938	95
ITALO 1 0F3 3.100-1M	STE-M STE-S STW	3890	41	94	4756	34.5
ITALO 1 0F3 3.100-2M		7710	74	104	9512	69.5
ITALO 1 0F3 3.100-3M		11320	111	101	14268	104
ITALO 1 0F3 3.100-4M		14970	146	102	19024	138.5
ITALO 1 0F6 3.3-1M	OP-DX OP-SX	3370	27	124	3748	23
ITALO 1 0F6 3.3-2M		6530	51.5	126	7497	46
ITALO 1 0F6 3.5-1M	OP-DX OP-SX	4800	39	123	5393	35
ITALO 1 0F6 3.5-2M		9250	76	121	10785	70
ITALO 1 0F6 3.7-1M	OP-DX OP-SX	6070	52	116	6968	47.5
ITALO 1 0F6 3.7-2M		11670	102	114	13938	95
ITALO 1 0F6 3.100-1M	OP-DX OP-SX	7710	74	104	9512	69.5
ITALO 1 0F6 3.100-2M		14970	146	102	19024	138.5



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)
ITALO 1 0F2 3.3-1M	STA STA1	1060	9.5	111	1249	7.5
ITALO 1 0F2 3.3-2M		2100	18.5	113	2499	15.5
ITALO 1 0F2 3.3-3M		3150	26.5	118	3748	23
ITALO 1 0F2 3.3-4M		4030	34.5	116	4998	30.5
ITALO 1 0F2 3.5-1M	STA STA1	1530	14	109	1798	11.5
ITALO 1 0F2 3.5-2M		3000	27	111	3595	23.5
ITALO 1 0F2 3.5-3M		4510	39	115	5393	35
ITALO 1 0F2 3.5-4M		5710	51	111	7190	46.5
ITALO 1 0F2 3.7-1M	STA STA1	1970	19.5	101	2323	16
ITALO 1 0F2 3.7-2M		3840	36	106	4646	31.5
ITALO 1 0F2 3.7-3M		5730	51.5	111	6968	47.5
ITALO 1 0F2 3.7-4M		7180	67.5	106	9292	63
ITALO 1 0F2 3.100-1M	STA STA1	2590	27	95	3170	23
ITALO 1 0F2 3.100-2M		4970	50.5	98	6342	46
ITALO 1 0F2 3.100-3M		7460	75.5	98	9512	69.5
ITALO 1 0F2 3.100-4M		9270	99	93	12682	92.5

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*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: $\pm 10\%$.

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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)
ITALO 1 0F4 3.3-1M	OPA-DX OPA-SX	2240	18.5	121	2499	15.5
ITALO 1 0F4 3.3-2M	OPA-DX OPA-SX	4310	34.5	124	4998	30.5
ITALO 1 0F4 3.5-1M	OPA-DX OPA-SX	3210	27	118	3595	23.5
ITALO 1 0F4 3.5-2M	OPA-DX OPA-SX	6100	51	119	7190	46.5
ITALO 1 0F4 3.7-1M	OPA-DX OPA-SX	4100	36	113	4646	31.5
ITALO 1 0F4 3.7-2M	OPA-DX OPA-SX	7670	67.5	113	9292	63
ITALO 1 0F4 3.100-1M	OPA-DX OPA-SX	5310	50.5	105	6342	46
ITALO 1 0F4 3.100-2M	OPA-DX OPA-SX	9900	99	100	12682	92.5

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

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

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