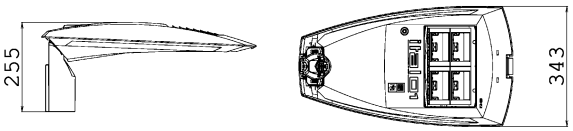
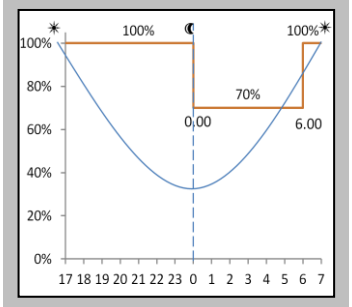
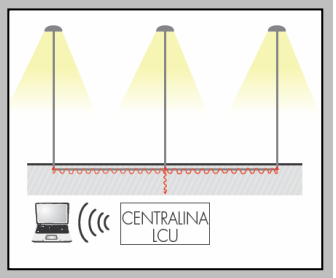
Product Sheet



DA Profile



PLM



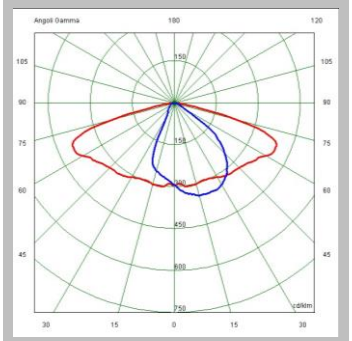
ITALO 1

MAIN CHARACTERISTICS	
Applications	Street lighting
Optic	STE-M/S: Asymmetrical optic for street lighting (suburban). (0F3) STU-M/S: Asymmetrical optic for street lighting (urban). (0F2H1) STW: Asymmetrical optic for wide roads and wet asphalts lighting. (0F3) SV: Asymmetrical optic for narrow urban streets or highway entrance/exit turns. (0F2H1) OP-DX / SX: Asymmetrical optic for crosswalks lighting. S05: Asymmetrical optic for urban and street lighting. (0F2H1) STA / STA1: Asymmetrical optic for V and P categories. (0F2) Colour temperature: 4000K, (optional 3000K, 5700K) | CRI ≥ 70 Photobiological safety class: EXEMPT GROUP CIE Photometrical classification: Semi cut-off IES Photometrical classification: Full cut-off LED source efficiency: 151 lm/W @ 525mA, Tj=85°C – 4000K
Insulation class	EU: II, I - US: 1
Protection degree	IP66 | IK 09 total
LED Modules	Removable / Replaceable
Tilt Angle	Post-top: 0°, +5°, +10°, +15°, +20° | Bracket: 0°, -5°, -10°, -15°, -20°
Dimensions	See the drawing
Weight	6.8 kg max
Exposed surface	Side: 0.05m² – Top: 0.18m² | SCx:0.04m²
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

IK09 IP66 EXEMPT GROUP HIGH PERFORMANCE OPTIC AEC THERMO FLOW c UL us LISTED

ELECTRICAL CHARACTERISTICS		
Rated voltage	220÷240V 50/60Hz *(Standard tolerance +/-10%, other voltages and tolerances upon request)*	
LED current	525mA | 700mA	
Power factor	>0,9 (at full load - PLM) >0,95 (at full load - F, DA, DAC)	
On-load switch	Included, with integrated cable clamp.	
Mains connection	For cables max section 4mm²	
Surge protection	SPD integrated 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. (Base version) DA: Automatic dimming (virtual midnight) with default profile. DAC: Custom DA profile. PLM: Power Line single point communication system. WL: Wireless single point communication system.	
Optical unit lifetime	**525mA (Tq=25°C)**	**700mA (Tq=25°C)**
	≥100.000hr L80B10 (including critical failures) >100.000hr L80, TM-21	≥60.000hr L80B10 (including critical failures) >100.000hr L80, TM-21
	525mA (Tq=50°C)	**700mA (Tq=50°C)**
	>60.000hr L80B10 (including critical fail.) >100.000hr L80, TM-21	>50.000hr L80B10 (including critical fail.) >100.000hr L80, TM-21

MATERIALS	
Fixing **Heat-sink** **Lower frame** **Upper canopy**	Die-cast aluminum UNI EN1706 powder painted.
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



STU-M Optic

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

Product sheet

LUMINAIRE	LED Current (mA)	OPTICS	RATED LUMINAIRE FLUX[1] (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER[1] (Tq=25°C, Vin=230Vac, F / DA / DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX[2] (Tj=85°C, 4000K, lm)	RATED LED POWER[2] (Tj=85°C, W)
ITALO 1 0F2H1 4.5-1M	525	STU-S STU-M SV S05	1520	15,5	98	1841	12
ITALO 1 0F2H1 4.5-2M			3290	31	106	3879	26
ITALO 1 0F2H1 4.5-3M			4930	44,5	111	5818	39
ITALO 1 0F2H1 4.5-4M			6510	57	114	7758	52
ITALO 1 0F2H1 4.7-1M	700	STU-S STU-M SV S05	2090	22	95	2455	17
ITALO 1 0F2H1 4.7-2M			4160	40,5	103	4910	35
ITALO 1 0F2H1 4.7-3M			6210	58	107	7365	52
ITALO 1 0F2H1 4.7-4M			8210	76	108	9820	70
ITALO 1 0F3 4.5-1M	525	STE-S STE-M STW	2010	20	101	2475	16
ITALO 1 0F3 4.5-2M			4570	39,5	116	5214	34
ITALO 1 0F3 4.5-3M			6790	58	117	7821	52
ITALO 1 0F3 4.5-4M			9030	75	120	10428	69
ITALO 1 0F3 4.7-1M	700	STE-S STE-M STW	2800	28	100	3300	23
ITALO 1 0F3 4.7-2M			5730	52	110	6600	47
ITALO 1 0F3 4.7-3M			8490	76	112	9900	70
ITALO 1 0F3 4.7-4M			11270	102	110	13200	93
ITALO 1 0F6 4.5-1M	525	OP-DX OP-SX	4570	39,5	116	4950	33
ITALO 1 0F6 4.5-2M			9030	75	120	10428	69
ITALO 1 0F6 4.7-1M	700	OP-DX OP-SX	5730	52	110	6600	47
ITALO 1 0F6 4.7-2M			11270	102	110	13200	93

LUMINAIRE	LED Current (mA)	OPTICS	RATED LUMINAIRE FLUX[1] (Tq=25°C, 4000K, lm)	RATED LUMINAIRE POWER[1] (Tq=25°C, Vin=230Vac, F / DA / DAC, W)	LUMINAIRE EFFICACY (Tq=25°C, lm/W)	RATED LED FLUX[2] (Tj=85°C, 4000K, lm)	RATED LED POWER[2] (Tj=85°C, W)
ITALO 1 0F2 4.5-1M	525	STA STA1	1290	14	92	1738	11
ITALO 1 0F2 4.5-2M			2790	27,5	101	3476	23
ITALO 1 0F2 4.5-3M			4180	40,5	103	5214	34
ITALO 1 0F2 4.5-4M			5520	51	108	6952	46
ITALO 1 0F2 4.7-1M	700	STA STA1	1770	20	89	2200	16
ITALO 1 0F2 4.7-2M			3530	35,5	99	4400	31
ITALO 1 0F2 4.7-3M			5270	53,5	99	6600	47
ITALO 1 0F2 4.7-4M			6970	67	104	8800	62

The tables above describe the flux and output power of the available versions. These parameters are necessary in order to guarantee a correct comparison of the luminaire performance.
In particular, the luminaire efficiency (expressed in lm/W) must be calculated as the ratio between the output luminous flux of the luminaire and the power absorbed by the input power supply unit.
For the sake of completeness the tables also show the data of the nominal flux and power of the used LED.

Note: 1:Rated data obtained in laboratory | 2:Rated data extrapolated from LED manufacturer datasheet.

Multiplier to obtain flux and power in function of Tq		
Tq (°C)	Flux multiplier	Power multiplier
50	0,94	0,99
40	0,96	-
25	1	1
15	1,02	-
5	1,05	-
0	1,05	1,01

Multiplier to obtain flux and power in function of Tk		
Tk (K)	Flux multiplier	Power multiplier
3000	0,93	1,01
4000	1	1
5700	1	1,01

The characteristics of the product listed above are subjected to change without notice.
They will have to be confirmed in case of order.
Values indicated in this technical sheet are to be considered rated values subject to a tolerance of +/-5%.

Product sheet

LUMINAIRE	LED Current (mA)	OPTICS	INRUSH CURRENT Duration 50%pk (µs)	INRUSH CURRENT Peak (A)	MCB B-Type 10A / 16A / 25A	SURGE PROTECTION CL.I (CM / DM, kV)	SURGE PROTECTION CL.II (CM / DM, kV)
ITALO 1 0F2H1 4.5-1M	525	STU-S STU-M SV S05	150	27	20 / 32 / 40	10 / 10	7 / 10
ITALO 1 0F2H1 4.5-2M			180	45	10 / 20 / 30	10 / 10	9 / 10
ITALO 1 0F2H1 4.5-3M			200	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F2H1 4.5-4M			200	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F2H1 4.7-1M	700	STU-S STU-M SV S05	150	27	20 / 32 / 40	10 / 10	7 / 10
ITALO 1 0F2H1 4.7-2M			180	45	10 / 20 / 30	10 / 10	9 / 10
ITALO 1 0F2H1 4.7-3M			200	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F2H1 4.7-4M			210	57	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F3 4.5-1M	525	STE-S STE-M STW	150	27	20 / 32 / 40	10 / 10	7 / 10
ITALO 1 0F3 4.5-2M			200	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F3 4.5-3M			200	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F3 4.5-4M			330	40	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F3 4.7-1M	700	STE-S STE-M STW	150	27	20 / 32 / 40	10 / 10	7 /10
ITALO 1 0F3 4.7-2M			200	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F3 4.7-3M			210	57	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F3 4.7-4M			360	58	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F6 4.5-1M	525	OP-DX OP-SX	4570	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F6 4.5-2M			9030	40	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F6 4.7-1M	700	OP-DX OP-SX	5730	53	7 / 12 / 21	10 / 10	9 / 10
ITALO 1 0F6 4.7-2M			11270	58	7 / 12 / 21	10 / 10	9 / 10

NOTE 1: The number of luminaires under a three-phase MCB is calculated multiplying by 3 the number in the table. These values are based on data declared by power supply manufacturer and tested on worst case MCB model. An inrush current limiter (i.e. Finder SSR 77.11.x.xxx.8250 (15A) or 77.31.x.xxx.8050 model (30A)) can improve the max.number of luminaire under the MCB
NOTE 2: Power supply manufacturer never did any considerations about 50A or 63A MCB. So we can't declare anything about using of MCB higher than 25A.