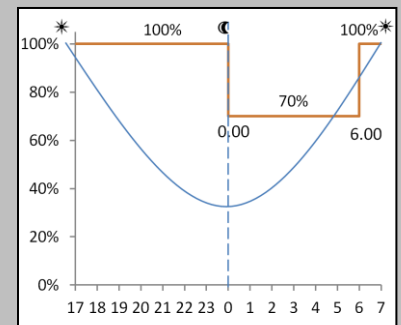
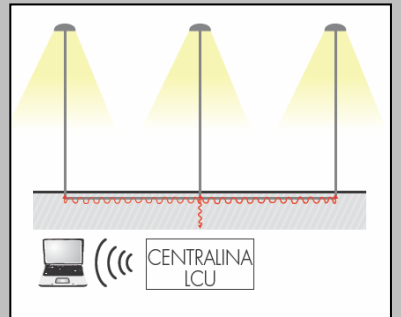


DA Profile

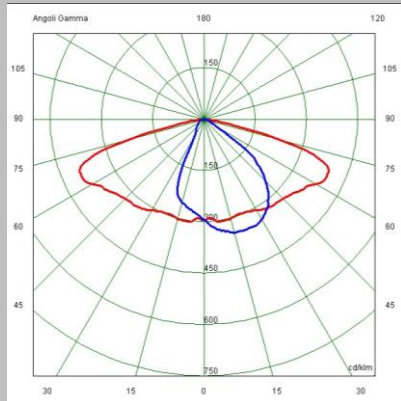


PLM



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) 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: 138 lm/W @ 700mA, Tj=85°C – 4000K	
Insulation class	EU: II, I - US: 1	
Protection degree	IP66 with membrane exchange pressure valve	
Impact protection	IK09	
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: 0.05m 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 (525mA, 700mA)	
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)	
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 4mm ²	
Control system	F: Fixed output (Base version) DA: Automatic dimming with default profile. DAC Custom DA profile. PLM: Single point communication module.	
Optical unit lifetime	525mA (Ta=25°C)	700mA (Ta=25°C)
	>70.000hr B20L80 (including critical fail) >100.000hr L80, TM-21	>60.000hr B20L80 (including critical fail) >100.000hr L80, TM-21
	525mA (Ta=50°C)	700mA (Ta=50°C)
	>60.000hr B20L80 (including critical fail) >100.000hr L80, TM-21	>50.000hr B20L80 (including critical fail) >100.000hr L80, TM-21
MATERIALS		
Fixing	Die-cast aluminium UNI EN1706 powder painted.	
Heat-sink	Die-cast aluminium UNI EN1706 powder painted.	
Lower frame	Die-cast aluminium UNI EN1706 powder painted.	
Upper canopy	Die-cast aluminium UNI EN1706 powder painted.	
Closure hook	Extruded aluminium with stainless steel spring.	
Optic	Aluminium 99.85% with special finish made by vacuum sealed deposition 99.95%. Aluminium class A+ (DIN EN 16268).	
Screen	Flat tempered glass, 4mm thickness.	
Cable gland	Plastic M20x1.5 - IP68	
Gasket	Polyurethane	
Colour	Semi-gloss satiny grey. Code 2B.	

Optical unit lifetime could be different for each size of the luminaire>Data listed above are subject to change without notice.



STU-M Optic

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



The tables below 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.

LUMINAIRE FLUX ¹ (Ta=25°C, 4000K, lm)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
1	2040	2720
2	4440	5570
3	6590	8240
4	8770	10940
MODULES	STU-M / STU-S / SV Optic	
1	1540	2030
2	3210	4060
3	4870	6130
4	6450	8140

RATED LED FLUX ² (Tj=85°C, 4000K, lm)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
1	2556	3234
2	5112	6468
3	7668	9702
4	10224	12936
MODULES	STU-M / STU-S / SV Optic	
1	1905	2411
2	3810	4822
3	5715	7233
4	7620	9644

RATED LUMINAIRE POWER ¹ (Ta=25°C, Vin=230Vac, W) F and DA version at full load		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
1	20	27,5
2	41,5	54,5
3	61	80
4	78	103
MODULES	STU-M / STU-S / SV Optic	
1	15,5	21
2	32,5	42,5
3	47	61
4	60	80

RATED LED POWER ² (Tj=85°C, W)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
1	17	24
2	35	47
3	52	71
4	70	94
MODULES	STU-M / STU-S / SV Optic	
1	13	18
2	26	35
3	39	53
4	52	71

LUMINAIRE EFFICIENCY (Ta=25°C, lm/W)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
1	102	99
2	107	102
3	108	103
4	112	106
MODULES	STU-M / STU-S / SV Optic	
1	99	97
2	99	96
3	104	100
4	108	102

SURGE PROTECTION Diff. mode / Common Mode	
Class II	Class I / 1
10/7 kV	10/10 kV
10/10 kV	10/10 kV
10/10 kV	10/10 kV
10/6 kV	10/10 kV

Note: The characteristics of the product listed above are subjected to change. 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%. Data listed above are subject to change without notice.

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

Multiplier to obtain the **flux** as a function of Ta and Tk.

Ta(°C)	Multiplier
50	0,94
40	0,96
25	1,00
15	1,02
5	1,04
0	1,05
Tk(K)	Multiplier
3000	0,90
4000	1,00
5700	1,02

Multiplier to obtain the **power** as a function of Ta.

*Ta (°C)	Multiplier
50	0,99
25	1,00
0	1,01

*Note : Valid only for allowed versions (see limits under Operating Temperatures)

Legend:

Ta =Ambient temperature.
Tk = Colour temperature.

Example of luminaire data calculation

Ta=40°C
Tk=4000K
4 MODULI LED, 525mA STE-M Optic
Flux: 8770 x 0,96 = 8419,2
Power: 78 x 0,99 = 77,2
Efficiency: 8419,2 / 77,2 = 109 lm/W