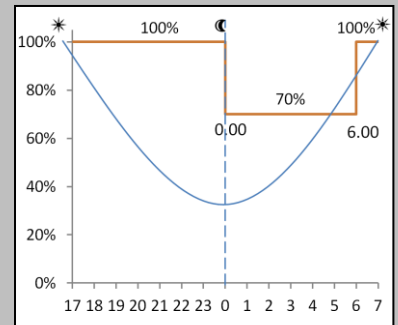
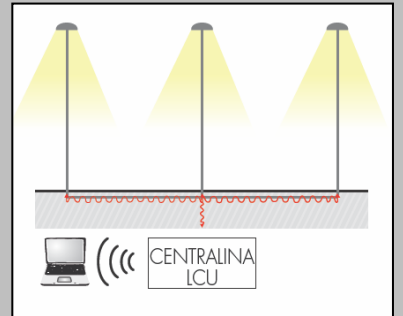


DA Profile



PLM



ITALO 2	
MAIN CHARACTERISTICS	
Applications	Street lighting
Optic	STU-M/S: Asymmetrical optic for street lighting (urban). (0F2H1) STE-M/S: Asymmetrical optic for street lighting (suburban). (0F3) 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, T _j =85°C – 4000K
Insulation class	EU:II (I optional) – 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&weight	See the drawing – 12 kg
Exposed surface	Side: 0.08m ² – Top: 0.3m ² SCx:0.06m ²
Mounting	Bracket or Post-top Ø60mm Ø33mm ÷ Ø60mm (optional) Ø60mm ÷ Ø76mm (optional)
Gear tray	Removable plate.
Operating temp.	-40°C / +50°C (525mA) -40°C / +40°C (700mA)
Storage temp.	-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

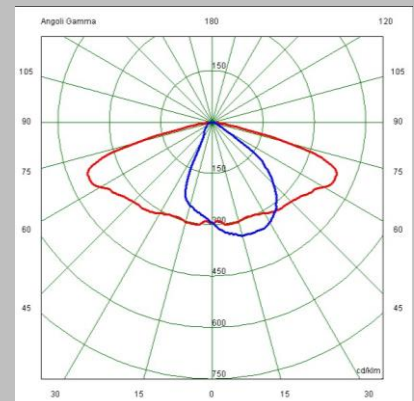
Rated voltage	220÷240V 50/60Hz (Standard tolerance +/-10%, other voltages and tolerances upon request)
LED current	525mA 700mA
Power factor	>0,9 (at full load)
On-load switch	Included, with integrated cable clamp
Mains connection	For cables max section 4mm ²

Control system	F: Fixed output 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, TM21	>50.000hr B20L80 (including critical fail) >70.000hr L80, TM21
	525mA (Ta=50°C)	700mA (Ta=40°C)
	>50.000hr B20L80 (including critical fail) >60.000hr L80, TM21	>50.000hr B20L80 (including critical fail) >60.000hr L80, TM21

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, 5mm 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	
4	8990	11170
5	11340	13970
6	13330	16460
7	15250	-
8	17500	-
MODULES	STU-M / STU-S / SV Optic	
4	6560	8310
5	8090	10320
6	9750	12300
7	11520	14460
8	13140	16450

RATED LED FLUX ² (Tj=85°C, 4000K, lm)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
4	10224	12936
5	12780	16170
6	15336	19404
7	17892	-
8	20448	-
MODULES	STU-M / STU-S / SV Optic	
4	7620	9644
5	9525	12055
6	11430	14466
7	13335	16877
8	15240	19288

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	
4	78	103
5	99	128
6	116	150
7	133	-
8	152	-
MODULES	STU-M / STU-S / SV Optic	
4	60	80
5	75	100
6	90	118
7	105	137
8	117	154

RATED LED POWER ² (Tj=85°C, W)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
4	70	94
5	87	118
6	105	141
7	122	-
8	139	-
MODULES	STU-M / STU-S / SV Optic	
4	52	71
5	65	88
6	78	106
7	92	123
8	105	141

LUMINAIRE EFFICIENCY (Ta=25°C, lm/W)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
4	115	108
5	115	109
6	115	110
7	115	-
8	115	-
MODULES	STU-M / STU-S / SV Optic	
4	109	104
5	108	103
6	108	104
7	110	106
8	112	107

SURGE PROTECTION Diff. mode / Common Mode	
Class II	Class I / 1
10/6 kV	10/10 kV
10/6 kV	10/10 kV
10/6 kV	10/10 kV
10/6 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 LED MODULES, 525mA STE-M Optic
Flux: 8990 x 0,96 = 8630,4
Power: 78 x 0,99 = 77,2
Efficiency: 8630,4 / 77,2 = 112 lm/W