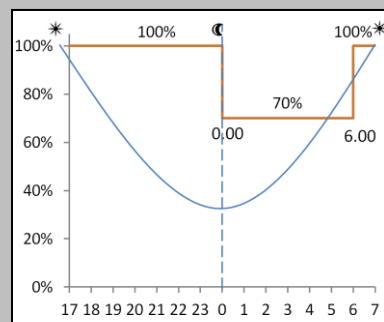
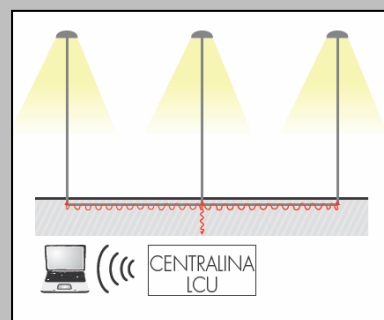


DA Profile



PLM



ITALO 3	
MAIN CHARACTERISTICS	
<b>Applications</b>	Street lighting
<b>Optic</b>	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, Tj=85°C – 4000K
<b>Insulation class</b>	EU: II (I optional) – US:1
<b>Protection degree</b>	IP66 with membrane exchange pressure valve
<b>Impact protection</b>	IK09
<b>LED Modules</b>	Removable / Replaceable
<b>Tilt Angle</b>	Post-top: 0°, +5°, +10°, +15°, +20°   Bracket: 0°, -5°, -10°, -15°, -20°
<b>Dimensions&amp;weight</b>	See the drawing – 19Kg
<b>Exposed surface</b>	Side: 0.1m <sup>2</sup> – Top: 0.4m <sup>2</sup>
<b>Mounting</b>	Bracket or Post-top Ø60mm ÷ Ø76mm
<b>Gear tray</b>	Removable plate.
<b>Operating temp.</b>	-40°C / +50°C (525mA)   -40°C / +40°C (700mA)
<b>Storage temp.</b>	-40°C / + 80°C
<b>Main reference standards</b>	EN 60598-1, EN 60598-2-3, EN 62471, EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3



ELECTRICAL CHARACTERISTICS

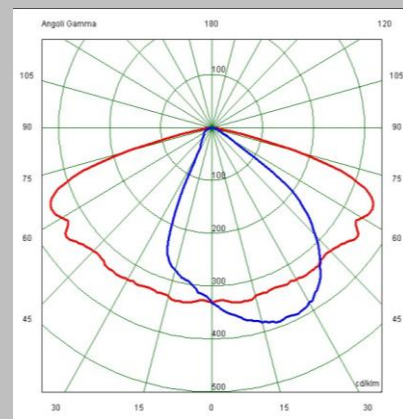
<b>Rated voltage</b>	220÷240V 50/60Hz (Standard tolerance +/-10%, other voltages and tolerances upon request)	
<b>LED current</b>	525mA   700mA	
<b>Power factor</b>	>0,9 (at full load)	
<b>On-load switch</b>	Included, with integrated cable clamp	
<b>Mains connection</b>	For cables max section 4mm <sup>2</sup>	
<b>Control system</b>	F: Fixed output DA: Automatic dimming with default profile. DAC Custom DA profile. PLM: Single point communication module.	
<b>Integrated surge protection</b>	Pulse withstand class I / 1: up to 10kV Pulse withstand class II: from 6kV to 9kV	

<b>Optical unit lifetime</b>	<b>525mA (Ta=25°C)</b>	<b>700mA (Ta=25°C)</b>
	>70.000hr B20L80 (including critical fail.) >100.000hr L80, TM21	>50.000hr B20L80 ( including critical fail.) >70.000hr L80, TM21
	<b>525mA (Ta=50°C)</b>	<b>700mA (Ta=40°C)</b>
	>50.000hr B20L80 (including critical fail.) >50.000hr L80, TM21	>50.000hr B20L80 ( including critical fail.) >50.000hr L80, TM21

MATERIALS

<b>Fixing</b>	Die-cast aluminium UNI EN1706 powder painted.
<b>Heat-sink</b>	Die-cast aluminium UNI EN1706 powder painted.
<b>Lower frame</b>	Die-cast aluminium UNI EN1706 powder painted.
<b>Upper canopy</b>	Die-cast aluminium UNI EN1706 powder painted.
<b>Closure hook</b>	Extruded aluminium with stainless steel spring.
<b>Optic</b>	Aluminium 99.85% with special finish made by vacuum sealed deposition 99.95%. Aluminium class A+ (DIN EN 16268).
<b>Screen</b>	Flat tempered glass, 5mm thickness.
<b>Cable gland</b>	Plastic M20x1.5 – IP68
<b>Gasket</b>	Polyurethane
<b>Colour</b>	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.



STE-M Optic

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

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

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 <sup>1</sup> (Ta=25°C, 4000K, lm)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
7	15250	18470
8	17500	21110
9	18980	23750
10	21220	26210
11	23310	28690
12	25440	31220
13	27540	-
14	29490	-
15	31560	-
MODULES	SV Optic	
9	14080	17620
10	15790	19680
11	17250	21510
12	18740	23560
13	20350	25430
14	21940	27160
15	23540	29160

RATED LED FLUX <sup>2</sup> (Tj=85°C, 4000K, lm)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
7	17892	22638
8	20448	25872
9	23004	29106
10	25560	32340
11	28116	35574
12	30672	38808
13	33228	-
14	35784	-
15	38340	-
MODULES	SV Optic	
9	17145	21699
10	19050	24110
11	20955	26521
12	22860	28932
13	24765	31343
14	26670	33754
15	28575	36165

RATED LUMINAIRE POWER <sup>1</sup> ( Ta=25°C, Vin=230Vac, W) F and DA version at full load		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
7	133	185
8	152	210
9	175	233
10	193	256
11	211	281
12	230	306
13	248	-
14	266	-
15	285	-
MODULES	SV Optic	
9	132	177
10	144	196
11	158	215
12	175	234
13	190	252
14	203	270
15	217	289

RATED LED POWER <sup>2</sup> (Tj=85°C, W)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
7	122	165
8	139	188
9	157	212
10	174	235
11	192	259
12	209	282
13	227	-
14	244	-
15	262	-
MODULES	SV Optic	
9	118	159
10	131	176
11	144	194
12	157	212
13	170	229
14	183	247
15	196	265

LUMINAIRE EFFICIENCY ( Ta=25°C, lm/W)		
MODULES	525mA	700mA
	STE-M / STE-S / STW Optic	
7	115	100
8	115	101
9	108	102
10	110	102
11	110	102
12	111	102
13	111	-
14	111	-
15	111	-
MODULES	SV Optic	
9	107	100
10	110	100
11	109	100
12	107	101
13	107	101
14	108	101
15	108	101

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  
**9 LED MODULES, 525mA STE-M Optic**  
**Flux:** 18980 x 0,96 = 18220,8  
**Power:** 175 x 0,99 = 173,3  
**Efficiency:** 18220,8 / 173,3 = 105 lm/W