



## ITALO 3

### MAIN CHARACTERISTICS

<b>Applications</b>	Street lighting.
<b>Optic</b>	<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/SV2: Asymmetrical optic for narrow urban streets or highway entrance/exit turns.                  S05: Asymmetrical optic for urban and street 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>
<b>Insulation class</b>	II, I
<b>Protection degree</b>	IP66   IK09 total
<b>Dimensions &amp; weight</b>	See the drawing – 20kg
<b>Exposed surface</b>	Side: 0.10m <sup>2</sup> – Top: 0.40m <sup>2</sup>   SCx: 0.07m <sup>2</sup>
<b>Mounting</b>	Bracket or Post-top Ø60mm ÷ Ø76mm
<b>Tilt Angle</b>	Post-top: 0°, +5°, +10°, +15°, +20°   Bracket: 0°, -5°, -10°, -15°, -20°
<b>LED Modules</b>	Removable / Replaceable.
<b>Gear tray</b>	Removable plate.
<b>Operating temp.</b>	-40°C / +50°C
<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>Power factor</b>	>0,95 (at full load - F, DA, DAC)
<b>On-load switch</b>	Included, with integrated cable clamp.
<b>Mains connection</b>	For cables max section 4mm <sup>2</sup>
<b>Surge protection</b>	Up to 10kV   With SPD (optional) 10kV / 10kV CM/DM
<b>SPD (optional)</b>	10kV-10kA, type 2+3, with LED signal and thermo fuse to disconnect load at the end of life.
<b>Control system (options)</b>	<p>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).</p>
<b>Optical unit lifetime (Tq=25°C, 700mA)</b>	<p>&gt;100.000hr L90B10                  &gt;100.000hr L90, TM-21</p>

### MATERIALS

<b>Fixing</b>	Die-cast aluminium UNI EN1706 powder painted.
<b>Heat-sink</b>	
<b>Lower frame</b>	
<b>Upper canopy</b>	
<b>Closure hook</b>	Extruded aluminium with stainless steel spring.
<b>Optic</b>	99.85% aluminium with a surface finish in 99.95% with vacuum-sealed deposition. Aluminum grade 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 satin grey - Cod. 2B



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 3 0F2H1 4.5-9M	S05 STU-M STU-S SV SV2	16900	128	132	19656	117
ITALO 3 0F2H1 4.5-10M		18650	143	130	21840	130
ITALO 3 0F2H1 4.5-11M		20470	157	130	24024	143
ITALO 3 0F2H1 4.5-12M		22320	172	129	26208	156
ITALO 3 0F2H1 4.5-13M		24180	187	129	28392	169
ITALO 3 0F2H1 4.5-14M		26040	200	130	30576	182
ITALO 3 0F2H1 4.5-15M		27860	213	130	32760	195
ITALO 3 0F2H1 4.7-9M	S05 STU-M STU-S SV SV2	21440	172	124	24885	162
ITALO 3 0F2H1 4.7-10M		23730	191	124	27650	180
ITALO 3 0F2H1 4.7-11M		26070	210	124	30415	198
ITALO 3 0F2H1 4.7-12M		28420	230	123	33180	216
ITALO 3 0F2H1 4.7-13M		30750	249	123	35945	234
ITALO 3 0F2H1 4.7-14M		33010	268	123	38710	252
ITALO 3 0F2H1 4.7-15M		35170	286	122	41475	270
ITALO 3 0F3 4.5-9M	STE-M STE-S STW	22720	169	134	26550	153
ITALO 3 0F3 4.5-10M		25190	188	133	29500	170
ITALO 3 0F3 4.5-11M		27740	207	134	32450	187
ITALO 3 0F3 4.5-12M		30310	227	133	35400	204
ITALO 3 0F3 4.5-13M		32840	247	132	38350	221
ITALO 3 0F3 4.5-14M		35250	266	132	41300	238
ITALO 3 0F3 4.5-15M		37500	284	132	44250	255



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 3 0F3 4.7-7M	STE-M STE-S STW	22130	175	126	26145	168
ITALO 3 0F3 4.7-8M		25180	201	125	29880	192
ITALO 3 0F3 4.7-9M		28680	228	125	33615	216
ITALO 3 0F3 4.7-10M		31710	253	125	37350	240
ITALO 3 0F3 4.7-11M		35040	278	126	41085	264
ITALO 3 0F3 4.7-12M		38480	304	126	44820	288
ITALO 3 0F3 4.5-9M	S05	21810	169	129	26550	153
ITALO 3 0F3 4.5-10M		24180	188	128	29500	170
ITALO 3 0F3 4.5-11M		26630	207	128	32450	187
ITALO 3 0F3 4.5-12M		29100	227	128	35400	204
ITALO 3 0F3 4.5-13M		31530	247	127	38350	221
ITALO 3 0F3 4.5-14M		33840	266	127	41300	238
ITALO 3 0F3 4.5-15M	36000	284	126	44250	255	
ITALO 3 0F3 4.7-7M	S05	21240	175	121	26145	168
ITALO 3 0F3 4.7-8M		24170	201	120	29880	192
ITALO 3 0F3 4.7-9M		27530	228	120	33615	216
ITALO 3 0F3 4.7-10M		30440	253	120	37350	240
ITALO 3 0F3 4.7-11M		33640	278	121	41085	264
ITALO 3 0F3 4.7-12M		36940	304	121	44820	288

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 3 0F2 4.5-9M	STA STA1	14800	114	129	17703	108
ITALO 3 0F2 4.5-10M		16340	127	128	19670	120
ITALO 3 0F2 4.5-11M		17930	140	128	21637	132
ITALO 3 0F2 4.5-12M		19550	153	127	23604	144
ITALO 3 0F2 4.5-13M		21190	166	127	25571	156
ITALO 3 0F2 4.5-14M		22810	178	128	27538	168
ITALO 3 0F2 4.5-15M		24410	189	129	29505	180
ITALO 3 0F2 4.7-9M	STA STA1	18790	152	123	22410	144
ITALO 3 0F2 4.7-10M		20790	169	123	24900	160
ITALO 3 0F2 4.7-11M		22840	187	122	27390	176
ITALO 3 0F2 4.7-12M		24900	204	122	29880	192
ITALO 3 0F2 4.7-13M		26940	221	121	32370	208
ITALO 3 0F2 4.7-14M		28920	238	121	34860	224
ITALO 3 0F2 4.7-15M		30810	254	121	37350	240

\*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:  $\pm 7\%$ . Power tolerance:  $\pm 5\%$ .

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 3 0F2H1 3.5-9M	S05 STU-M STU-S SV SV2	15720	128	122	17910	117
ITALO 3 0F2H1 3.5-10M		17340	143	121	19900	130
ITALO 3 0F2H1 3.5-11M		19040	157	121	21890	143
ITALO 3 0F2H1 3.5-12M		20760	172	120	23880	156
ITALO 3 0F2H1 3.5-13M		22490	187	120	25870	169
ITALO 3 0F2H1 3.5-14M		24220	200	121	27860	182
ITALO 3 0F2H1 3.5-15M		25910	213	121	29850	195
ITALO 3 0F2H1 3.7-9M	S05 STU-M STU-S SV SV2	19940	172	115	22680	162
ITALO 3 0F2H1 3.7-10M		22070	191	115	25200	180
ITALO 3 0F2H1 3.7-11M		24250	210	115	27720	198
ITALO 3 0F2H1 3.7-12M		26430	230	114	30240	216
ITALO 3 0F2H1 3.7-13M		28600	249	114	32760	234
ITALO 3 0F2H1 3.7-14M		30700	268	114	35280	252
ITALO 3 0F2H1 3.7-15M		32710	286	114	37800	270
ITALO 3 0F3 3.5-9M	STE-M STE-S STW	21130	169	125	24309	153
ITALO 3 0F3 3.5-10M		23430	188	124	27010	170
ITALO 3 0F3 3.5-11M		25800	207	124	29711	187
ITALO 3 0F3 3.5-12M		28190	227	124	32412	204
ITALO 3 0F3 3.5-13M		30540	247	123	35113	221
ITALO 3 0F3 3.5-14M		32780	266	123	37814	238
ITALO 3 0F3 3.5-15M		34880	284	122	40515	255

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 3 0F3 3.7-7M	STE-M STE-S STW	20580	175	117	23940	168
ITALO 3 0F3 3.7-8M		23420	201	116	27360	192
ITALO 3 0F3 3.7-9M		26670	228	116	30780	216
ITALO 3 0F3 3.7-10M		29490	253	116	34200	240
ITALO 3 0F3 3.7-11M		32590	278	117	37620	264
ITALO 3 0F3 3.7-12M		35790	304	117	41040	288
ITALO 3 0F3 3.5-9M	S05	20280	169	120	24309	153
ITALO 3 0F3 3.5-10M		22490	188	119	27010	170
ITALO 3 0F3 3.5-11M		24770	207	119	29711	187
ITALO 3 0F3 3.5-12M		27060	227	119	32412	204
ITALO 3 0F3 3.5-13M		29320	247	118	35113	221
ITALO 3 0F3 3.5-14M		31470	266	118	37814	238
ITALO 3 0F3 3.5-15M	33480	284	117	40515	255	
ITALO 3 0F3 3.7-7M	S05	19750	175	112	23940	168
ITALO 3 0F3 3.7-8M		22480	201	111	27360	192
ITALO 3 0F3 3.7-9M		25600	228	112	30780	216
ITALO 3 0F3 3.7-10M		28310	253	111	34200	240
ITALO 3 0F3 3.7-11M		31290	278	112	37620	264
ITALO 3 0F3 3.7-12M		34350	304	112	41040	288

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 3 0F2 3.5-9M	STA STA1	13760	114	120	16209	108
ITALO 3 0F2 3.5-10M		15200	127	119	18010	120
ITALO 3 0F2 3.5-11M		16670	140	119	19811	132
ITALO 3 0F2 3.5-12M		18180	153	118	21612	144
ITALO 3 0F2 3.5-13M		19710	166	118	23413	156
ITALO 3 0F2 3.5-14M		21210	178	119	25214	168
ITALO 3 0F2 3.5-15M		22700	189	120	27015	180
ITALO 3 0F2 3.7-9M	STA STA1	17470	152	114	20520	144
ITALO 3 0F2 3.7-10M		19330	169	114	22800	160
ITALO 3 0F2 3.7-11M		21240	187	113	25080	176
ITALO 3 0F2 3.7-12M		23160	204	113	27360	192
ITALO 3 0F2 3.7-13M		25050	221	113	29640	208
ITALO 3 0F2 3.7-14M		26900	238	113	31920	224
ITALO 3 0F2 3.7-15M		28650	254	112	34200	240

\*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.