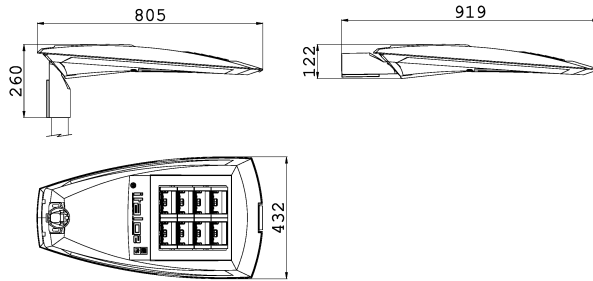


מכרז מספר 19/2020  
עבודות גשר מעל נחל סכר

נספח א'1  
מפרט גוף תאורה



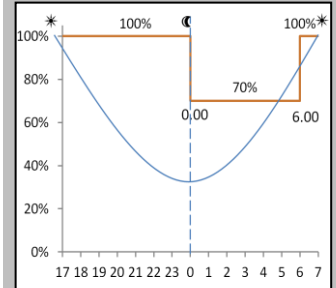


## ITALO 2

### MAIN CHARACTERISTICS

<b>Applications</b>	Street lighting.
<b>Optic</b>	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: Asymmetrical optic for narrow urban streets or highway entrance/exit turns. OP-DX/SX: Asymmetrical optic for crosswalks lighting. S05: Asymmetrical optic for urban and street lighting. STA/STA1: Asymmetrical optic for V and P categories. Colour temperature: 4000K (optional 3000K, 5700K)   CRI ≥ 70 LOR= 100%, DLOR= 100%, ULOR= 0% Photobiological safety class: EXEMPT GROUP LED source efficiency: 168 lm/W @ 525mA, Tj=85°C, 4000K
<b>Insulation class</b>	II, I
<b>Protection degree</b>	IP66   IK09 total
<b>LED Modules</b>	Removable / Replaceable
<b>Tilt Angle</b>	Post-top: 0°, +5°, +10°, +15°, +20° Bracket: 0°, -5°, -10°, -15°, -20° Bracket: +5°, 0°, -5°, -10°, -15°, -20° (only Ø33mm ÷ Ø60mm)
<b>Dimensions&amp;weight</b>	See the drawing – max. 12,5 kg
<b>Exposed surface</b>	Side: 0.08m <sup>2</sup> – Top: 0.3m <sup>2</sup>   SCx:0.06m <sup>2</sup>
<b>Mounting</b>	Bracket or Post-top Ø60mm Ø33mm ÷ Ø60mm (optional)   Ø60mm ÷ Ø76mm (optional)
<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

### DA Profile

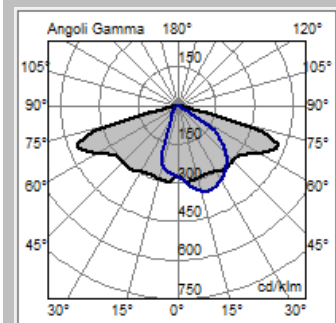


### ELECTRICAL CHARACTERISTICS

<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>	SPD integrated 10kV-10kA, type II, with LED signal and thermo fuse to disconnect load at the end of life. Pulse withstand: 10kV / 10kV CM/DM
<b>Control system (options)</b>	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).
<b>Optical unit lifetime (Tq=25°C, 700mA)</b>	>100.000hr L90B10 >100.000hr L90, TM-21

### 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. Alluminum 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



STU-M Optic

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



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 2 0F2H1 4.5-4M	S05 STU-M STU-S SV	7150	57	125	8736	52
ITALO 2 0F2H1 4.5-5M		9430	72	130	10920	65
ITALO 2 0F2H1 4.5-6M		11110	85	130	13104	78
ITALO 2 0F2H1 4.5-7M		12920	99	130	15288	91
ITALO 2 0F2H1 4.5-8M		14750	113	130	17472	104
ITALO 2 0F2H1 4.7-4M	S05 STU-M STU-S SV	8990	76	118	11060	72
ITALO 2 0F2H1 4.7-5M		11890	95	125	13825	90
ITALO 2 0F2H1 4.7-6M		14070	114	123	16590	108
ITALO 2 0F2H1 4.7-7M		16290	132	123	19355	126
ITALO 2 0F2H1 4.7-8M		18580	151	123	22120	144
ITALO 2 0F3 4.5-4M	STE-M STE-S STW	9950	76	130	11800	68
ITALO 2 0F3 4.5-5M		12720	95	133	14750	90
ITALO 2 0F3 4.5-6M		15170	112	135	17700	108
ITALO 2 0F3 4.5-7M		17590	131	134	20650	126
ITALO 2 0F3 4.5-8M		20030	150	133	23600	144
ITALO 2 0F3 4.7-4M	STE-M STE-S STW	12550	102	123	14940	96
ITALO 2 0F3 4.7-5M		15950	127	125	18675	120
ITALO 2 0F3 4.7-6M		19040	150	126	22410	144
ITALO 2 0F3 4.7-7M		22130	175	126	26145	168
ITALO 2 0F3 4.7-8M		25180	201	125	29880	192

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 2 0F6 4.5-2M	OP-DX OP-SX	9950	76	130	11802	70
ITALO 2 0F6 4.5-3M		15170	112	135	17703	105
ITALO 2 0F6 4.5-4M		20030	150	133	23604	140
ITALO 2 0F6 4.7-2M	OP-DX OP-SX	12550	102	123	14940	94
ITALO 2 0F6 4.7-3M		19040	150	126	22410	141
ITALO 2 0F2 4.5-4M	STA STA1	6140	51	120	7868	48
ITALO 2 0F2 4.5-5M		8280	64	129	9835	60
ITALO 2 0F2 4.5-6M		9730	76	128	11802	72
ITALO 2 0F2 4.5-7M		11310	88	128	13769	84
ITALO 2 0F2 4.5-8M		12930	100	129	15736	96
ITALO 2 0F2 4.7-4M	STA STA1	7720	67	114	9960	64
ITALO 2 0F2 4.7-5M		10440	85	122	12450	80
ITALO 2 0F2 4.7-6M		12330	101	122	14940	96
ITALO 2 0F2 4.7-7M		14270	117	121	17430	112
ITALO 2 0F2 4.7-8M		16280	134	121	19920	128

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

The characteristics of the product listed above are subjected to change without notice.

Values indicated in this technical sheet are to be considered rated values subject to a tolerance of +/-5%.



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 2 0F2H1 3.5-4M	S05 STU-M STU-S SV	6650	57	117	8124	52
ITALO 2 0F2H1 3.5-5M		8770	72	122	10156	65
ITALO 2 0F2H1 3.5-6M		10330	85	122	12187	78
ITALO 2 0F2H1 3.5-7M		12020	99	121	14218	91
ITALO 2 0F2H1 3.5-8M		13720	113	121	16249	104
ITALO 2 0F2H1 3.7-4M	S05 STU-M STU-S SV	8360	76	110	10286	72
ITALO 2 0F2H1 3.7-5M		11060	95	116	12857	90
ITALO 2 0F2H1 3.7-6M		13090	114	115	15429	108
ITALO 2 0F2H1 3.7-7M		15150	132	115	18000	126
ITALO 2 0F2H1 3.7-8M		17280	151	114	20572	144
ITALO 2 0F3 3.5-4M	STE-M STE-S STW	9250	76	122	10974	72
ITALO 2 0F3 3.5-5M		11830	95	125	13718	90
ITALO 2 0F3 3.5-6M		14110	112	126	16461	108
ITALO 2 0F3 3.5-7M		16360	131	125	19205	126
ITALO 2 0F3 3.5-8M		18630	150	124	21948	144
ITALO 2 0F3 3.7-4M	STE-M STE-S STW	11670	102	114	13894	96
ITALO 2 0F3 3.7-5M		14830	127	117	17368	120
ITALO 2 0F3 3.7-6M		17710	150	118	20841	144
ITALO 2 0F3 3.7-7M		20580	175	118	24315	168
ITALO 2 0F3 3.7-8M		23420	201	117	27788	192

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 2 0F6 3.5-2M	OP-DX OP-SX	9250	76	122	9698	70
ITALO 2 0F6 3.5-3M		14110	112	126	14547	105
ITALO 2 0F6 3.5-4M		18630	150	124	19396	140
ITALO 2 0F6 3.7-2M	OP-DX OP-SX	11670	102	114	12276	94
ITALO 2 0F6 3.7-3M		17710	150	118	18414	141
ITALO 2 0F2 3.5-4M	STA STA1	5600	51	110	7317	48
ITALO 2 0F2 3.5-5M		7550	64	118	9147	60
ITALO 2 0F2 3.5-6M		8870	76	117	10976	72
ITALO 2 0F2 3.5-7M		10310	88	117	12805	84
ITALO 2 0F2 3.5-8M		11790	100	118	14634	96
ITALO 2 0F2 3.7-4M	STA STA1	7040	68	104	9263	64
ITALO 2 0F2 3.7-5M		9520	85	112	11579	80
ITALO 2 0F2 3.7-6M		11240	101	111	13894	96
ITALO 2 0F2 3.7-7M		13010	117	111	16210	112
ITALO 2 0F2 3.7-8M		14840	134	111	18526	128

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet.

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