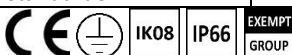


## T-LED4 PT DALI CL.I

### MAIN CHARACTERISTICS

<b>Applications</b>	Tunnel lighting. Suitable for entrance/boost lighting.
<b>Optic</b>	<p><i>Suitable for central/offset mounting :</i></p> <p>AS-xx: Asymmetrical optics for reinforcement lighting of road tunnels.                  TS-xx: Symmetrical optics for reinforcement and permanent lighting of road tunnels.</p> <p><i>Suitable for side mounting :</i></p> <p>SV: Asymmetrical optic - extra narrow beam.                  STE-S / STU-S: Asymmetrical optics – narrow beam.                  STE-M / STU-M: Asymmetrical optics – medium beam.                  STW / STA / STA1: Asymmetrical optics – wide beam.                  S05 / S07: Asymmetrical optics - extra-wide beam.</p> <p>Colour temperature: 4000K (others in option)   CRI ≥ 70                  Photobiological safety class: EXEMPT GROUP                  LED source efficiency: 185 lm/W @ 140mA, Tj=85°C, 4000K</p>
<b>Insulation class</b>	I
<b>Protection degree</b>	IP66   IK08
<b>Dimensions</b>	See drawing below
<b>Weight</b>	See table below
<b>Luminaire</b>	Luminaire with integrated LED modules, optics and power supply. Integrated mounting brackets. Integrated power cable. Screen removable by clip with the use of tools.
<b>Heatsink</b>	ED: External for 20M - 16M - 10M versions. ID: Internal for 8M - 4M – 2M versions.
<b>Junction box</b>	Separate box with integrated SPD, MCB and terminal blocks. Integrated mounting flanges. Tool-free opening.
<b>Operating temp.</b>	-40°C / +30°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>	Mains connection (pass-through): 380+415V 50/60Hz. 3-phase + neutral. Luminaire feeding: 220+240V 50/60Hz. Single-phase.
<b>Power factor</b>	>0,9 (at full load)
<b>Mains connection</b>	Pass through (PT) via junction box. Three-phase
<b>Luminaire connection</b>	Luminaire connected to the junction Box. Cables between luminaire and junction box: IFSI 0.6/1kV L=0.6 m DALI: 5x1,5mm <sup>2</sup> (CL.I) In option: Connector M/F IP68 (see table cable/connectors details).
<b>Surge protection</b>	SPD integrated 12kV-10kA, type 2+3, with LED signal and thermo fuse to disconnect load at the end of life. Pulse withstand: 12kV/10kV CM/DM
<b>MCB Type</b>	MCB 2P C6 6kA
<b>Control system</b>	DALI: Digital dimming interface DALI
<b>Optical unit lifetime (Tq=25°C)</b>	>100.000hr L90B10 >100.000hr L90 TM-21


### MATERIALS

<b>Fixing</b>	Stainless steel AISI 316L.
<b>Optical Unit</b>	
<b>Junction box</b>	
<b>Heatsink</b>	Extruded anodized aluminium.
<b>Fixing clip</b>	Stainless steel.
<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 high transparency.
<b>Cable glands</b>	Polyamide
<b>Gasket</b>	Polyurethane without junction point.


**Mains/Dimming connection details**

	Cable Gland	Max cable diameter	Number of terminal blocks	Max cross-wire section with stranded wire	Max cross-wire section with ferrule
<b>Mains</b>	M32L	14 – 25 mm	CL. I: 5 (L1, L2, L3, N, PE)	16 mm <sup>2</sup>	10 mm <sup>2</sup>
<b>Dimming Control</b>	M20	9 – 13 mm	DALI: 2 (DALI, DALI)	10 mm <sup>2</sup>	6 mm <sup>2</sup>
					

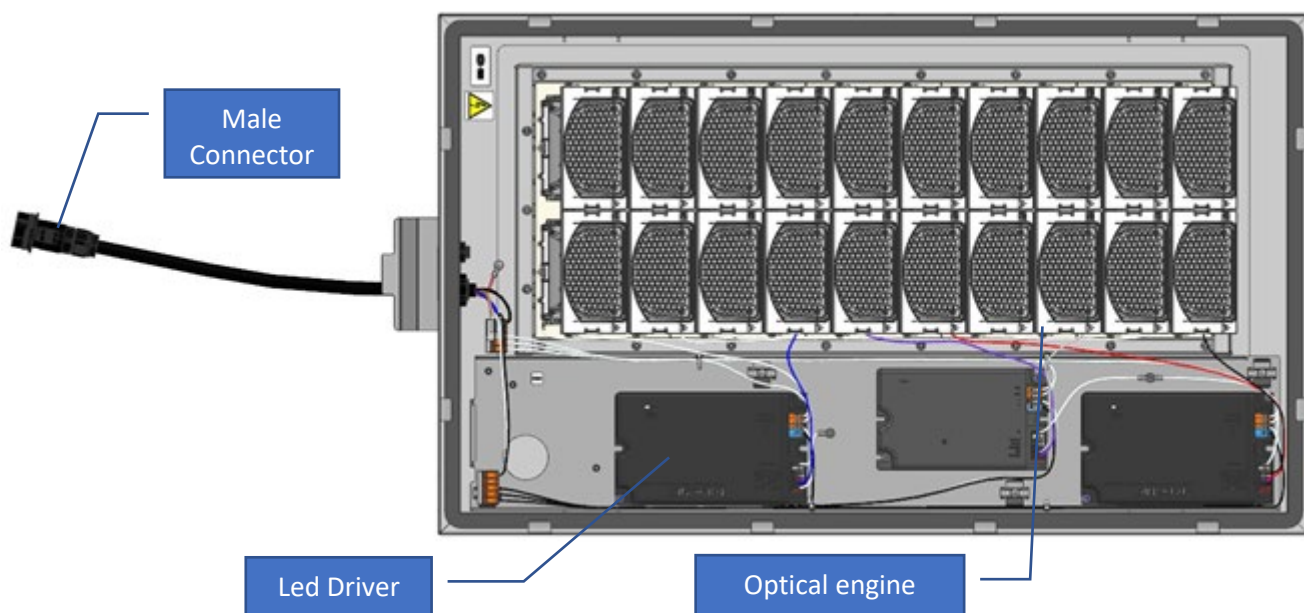
**External Cable Details**  
(Between junction box and luminaire)

ELECTRICAL CHARACTERISTICS		SAMPLE PICTURE
Type	IFSI-EMC	
Rated voltage U0/U	0,6/1kV	
Operating temperature range	Up to 90°C	
External Diameter	12.5 mm ±0,8 mm	
Bending Radius	8xD	
Sheath Colour	Black	
Smoke Emission	LS0H (Low-Smoke Zero Halogen)	
CPR classification	Cca-s1, d1, a1	

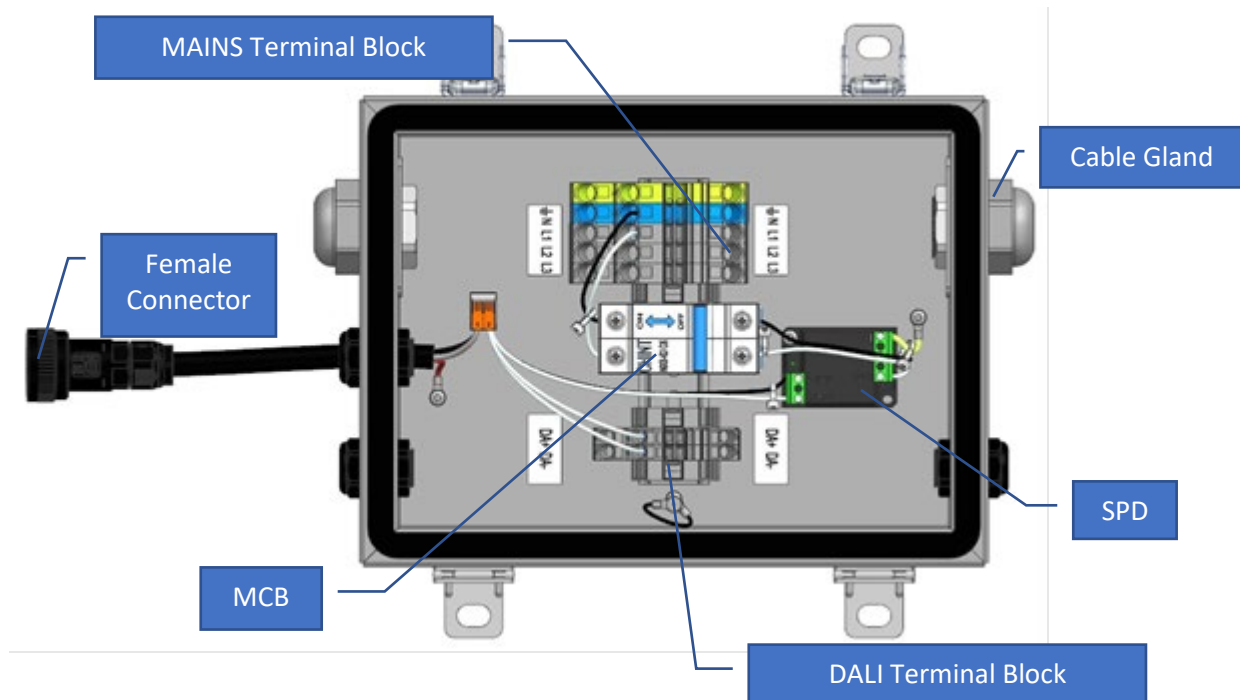
**External Connectors Details**  
(Between luminaire and junction box)

ELECTRICAL CHARACTERISTICS		PICTURE
Type	Plug & Socket – Straight Type	
Materials	Body : PA66 GF UL94 V0 GWT 960°C Halogen Free Closure Ring : Nickel-Brass	
Operating temperature range	-40°C / +125°C	
Protection Degree	IP68	
Terminals connection	Fast Connection	
Dimension	PLUG : 70 x Ø37mm   SOCKET 74 x Ø26mm	

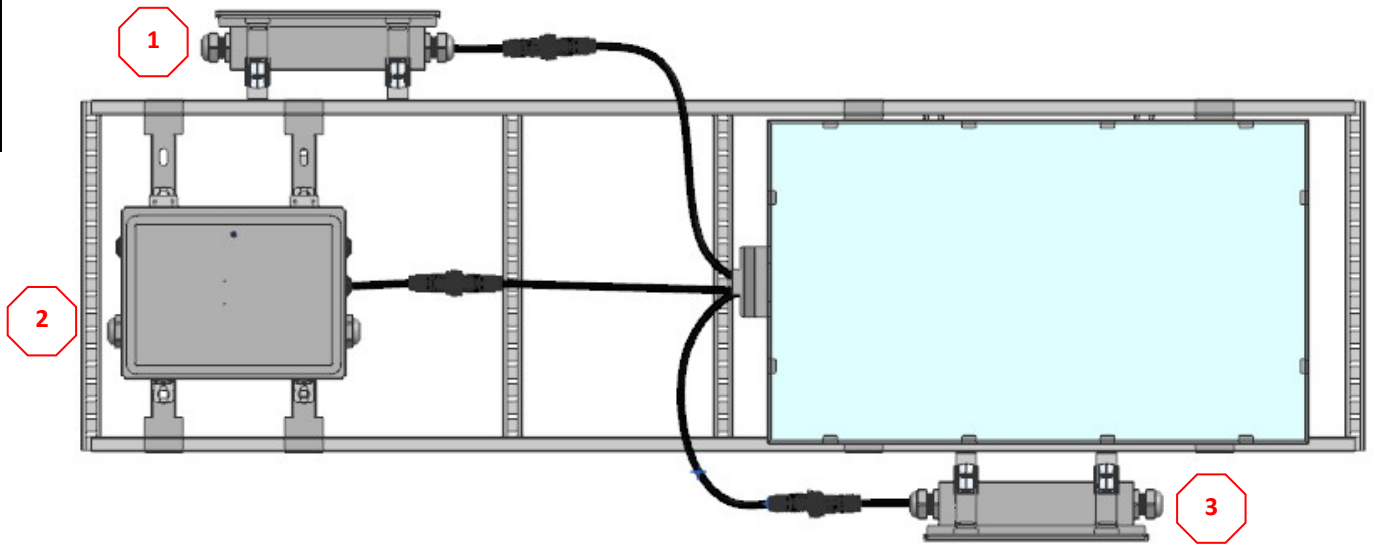
### Luminaire Internal View



### Junction Box Internal View



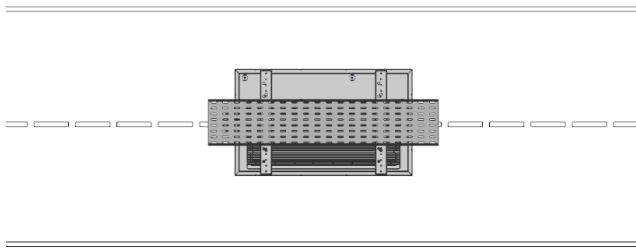
**Typical Junction Box Connection**



**Note**

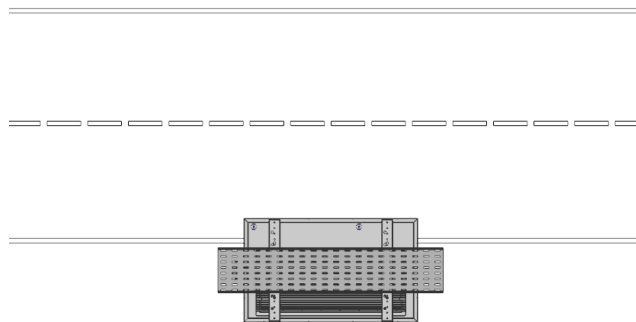
The above indicated positions require additional fixing brackets (position 2) or plate (position 1 and 3)

**Examples Of Installation**



**Assembly**  
Central cable ladder/tray.

**Typical Optics used**  
AS-xxx C0  
TS-xxx C0  
TS-xxx C90



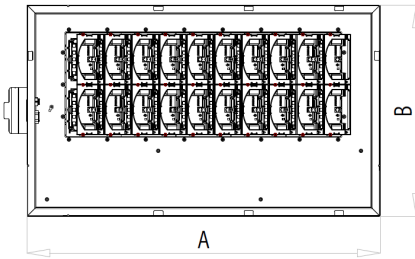
**Assembly**  
Side cable ladder/tray.

**Typical Optics used**  
ST-xxx C90

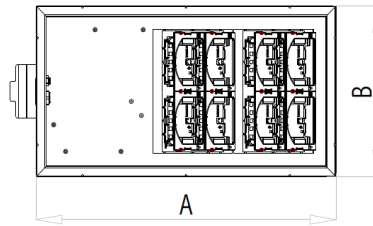


**Dimensional Drawings Luminaire**

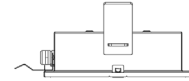
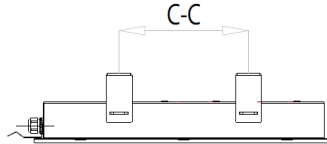
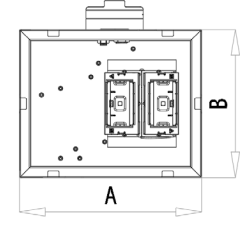
**ED Version 20-16-10M**



**ID Version 8M**

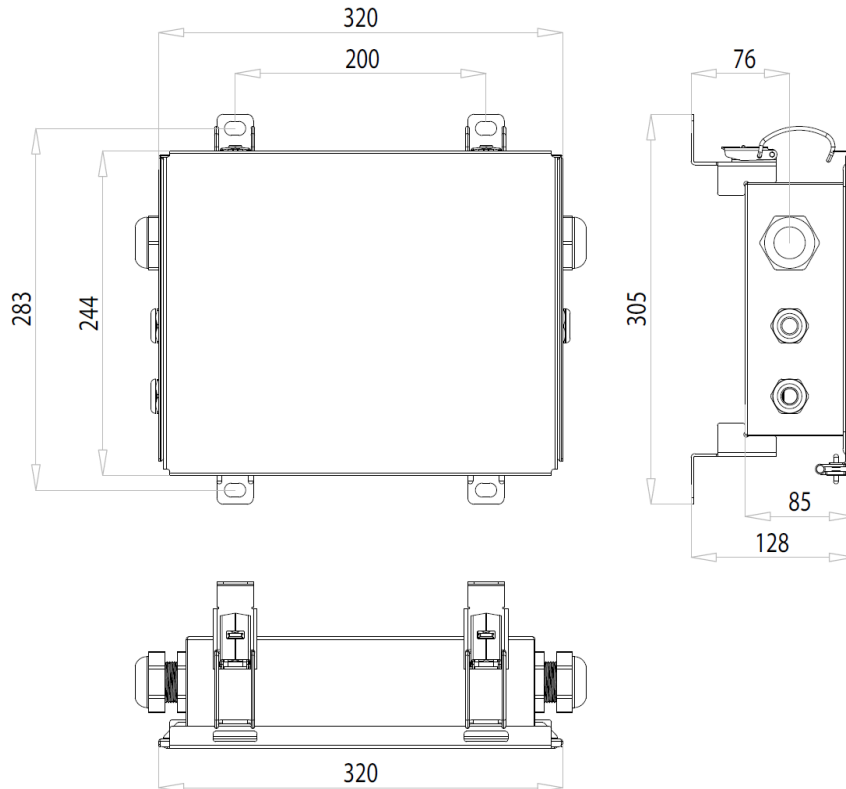


**ID Version 4-2M**



<b>Dimensions</b>	<b>20M:</b> 772(A) x 462(B) x 130mm – C-C = 500mm <b>16M:</b> 652(A) x 462(B) x 130mm – C-C = 500mm <b>10M:</b> 577(A) x 462(B) x 130mm – C-C = 250mm <b>8M:</b> 580(A) x 320(B) x 130mm – C-C = 250mm <b>4M:</b> 332(A) x 320(B) x 130mm - (Single fixing bracket) <b>2M:</b> 260(A) x 320(B) x 130mm - (Single fixing bracket)
<b>Exposed Surface</b>	<b>20M:</b> Side: 0.069m <sup>2</sup> – Top: 0.361 m <sup>2</sup> <b>16M:</b> Side: 0.058m <sup>2</sup> – Top: 0.306 m <sup>2</sup> <b>10M:</b> Side: 0.051m <sup>2</sup> – Top: 0.271 m <sup>2</sup> <b>8M:</b> Side: 0.047m <sup>2</sup> – Top: 0.190 m <sup>2</sup> <b>4M:</b> Side: 0.027m <sup>2</sup> – Top: 0.110 m <sup>2</sup> <b>2M:</b> Side: 0.020m <sup>2</sup> – Top: 0.087 m <sup>2</sup>
<b>Weight</b>	<b>20M:</b> 20.5kg <b>16M:</b> 16.9kg <b>10M:</b> 14.8kg <b>8M:</b> 9.7kg <b>4M:</b> 5.6kg <b>2M:</b> 3.7kg

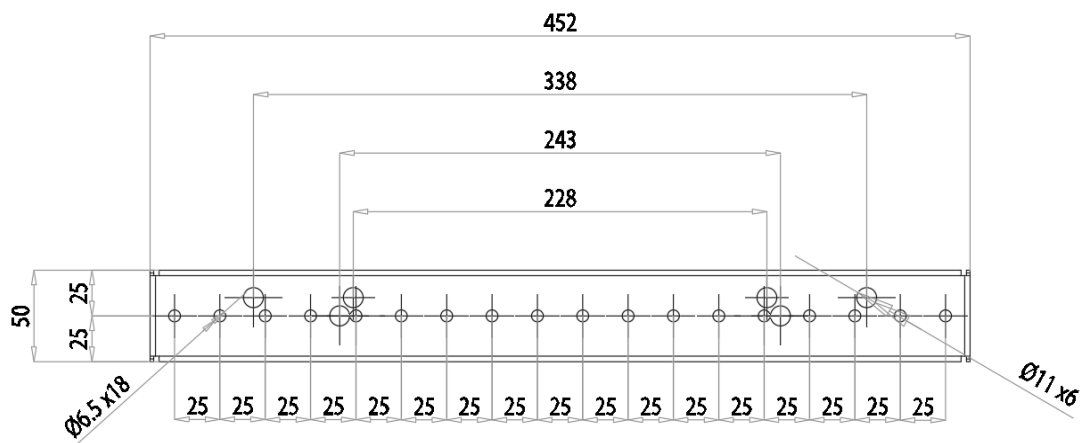
**Dimensional Drawings Junction Box**



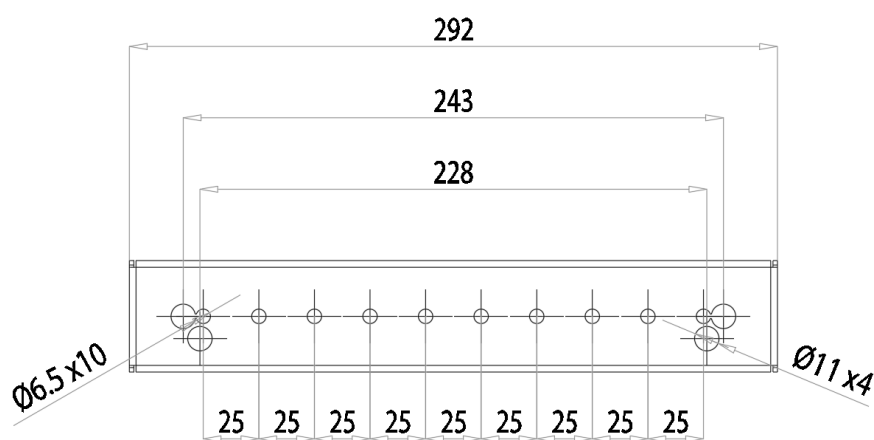
<b>Dimensions</b>	320 x 244 x 128mm
<b>Surface exposée</b>	Side: 0.027m <sup>2</sup> – Top: 0.086 m <sup>2</sup>
<b>Weight</b>	4kg

### Fixing Bracket Detail

#### Version 20-16-10M



#### Version 8-4-2M



## T-LED4 4000K

LUMINAIRE	OPTIC	RATED LUMINAIRE FLUX* (4000K, lm)	RATED LUMINAIRE POWER* (W)*	LUMINAIRE EFFICACY (lm/W)	RATED LED FLUX* (4000K, lm)	RATED LED POWER* (W)
T-LED4 ID 5P5 CO 7040.070-2M		3960	26,6	148	4291	22
T-LED4 ID 5P5 CO 7040.100-2M		5570	37,4	148	6046	31,9
T-LED4 ID 5P5 CO 7040.140-2M		7640	52,3	146	8299	45,4
T-LED4 ID 5P5 CO 7040.100-4M		11120	72	154	12092	63,8
T-LED4 ID 5P5 CO 7040.140-4M	AS-45M	15030	102	147	16598	90,7
T-LED4 ID 5P5 CO 7040.090-8M	AS-45N	20220	128	157	21869	114
T-LED4 ID 5P5 CO 7040.120-8M	AS-45W	26030	171	152	28740	154
T-LED4 ED 5P5 CO 7040.120-10M		32970	216	152	35925	193
T-LED4 ED 5P5 CO 7040.170-10M		44570	312	142	49619	278
T-LED4 ED 5P5 CO 7040.140-16M		58750	408	143	66393	363
T-LED4 ED 5P5 CO 7040.160-20M		82040	587	139	93885	522
T-LED4 ID 5P5 CO 7040.070-2M		3900	26,6	146	4291	22
T-LED4 ID 5P5 CO 7040.100-2M		5500	37,4	147	6046	31,9
T-LED4 ID 5P5 CO 7040.140-2M		7560	52,3	144	8299	45,4
T-LED4 ID 5P5 CO 7040.100-4M		11000	72	152	12092	63,8
T-LED4 ID 5P5 CO 7040.140-4M	AS-55M	14860	102	145	16598	90,7
T-LED4 ID 5P5 CO 7040.090-8M	AS-55N	19990	128	156	21869	114
T-LED4 ID 5P5 CO 7040.120-8M	AS-55W	25730	171	150	28740	154
T-LED4 ED 5P5 CO 7040.120-10M		32590	216	150	35925	193
T-LED4 ED 5P5 CO 7040.170-10M		44060	312	141	49619	278
T-LED4 ED 5P5 CO 7040.140-16M		58090	408	142	66393	363
T-LED4 ED 5P5 CO 7040.160-20M		81110	587	138	93885	522
T-LED4 ID 5P5 CO 7040.070-2M		3770	26,6	141	4291	22
T-LED4 ID 5P5 CO 7040.100-2M		5310	37,4	141	6046	31,9
T-LED4 ID 5P5 CO 7040.140-2M		7300	52,3	139	8299	45,4
T-LED4 ID 5P5 CO 7040.100-4M		10620	72	147	12092	63,8
T-LED4 ID 5P5 CO 7040.140-4M	AS-65M	14350	102	140	16598	90,7
T-LED4 ID 5P5 CO 7040.090-8M	AS-65N	19300	128	150	21869	114
T-LED4 ID 5P5 CO 7040.120-8M	AS-65W	24850	171	145	28740	154
T-LED4 ED 5P5 CO 7040.120-10M		31470	216	145	35925	193
T-LED4 ED 5P5 CO 7040.170-10M		42550	312	136	49619	278
T-LED4 ED 5P5 CO 7040.140-16M		56080	408	137	66393	363
T-LED4 ED 5P5 CO 7040.160-20M		78310	587	133	93885	522
T-LED4 ID 5P5 CO 7040.070-2M		3960	26,6	148	4291	22
T-LED4 ID 5P5 CO 7040.100-2M		5570	37,4	148	6046	31,9
T-LED4 ID 5P5 CO 7040.140-2M		7640	52,3	146	8299	45,4
T-LED4 ID 5P5 CO 7040.100-4M		11120	72	154	12092	63,8
T-LED4 ID 5P5 CO 7040.140-4M	TS-45M	15030	102	147	16598	90,7
T-LED4 ID 5P5 CO 7040.090-8M	TS-45N	20220	128	157	21869	114
T-LED4 ID 5P5 CO 7040.120-8M	TS-45W	26030	171	152	28740	154
T-LED4 ED 5P5 CO 7040.120-10M		32970	216	152	35925	193
T-LED4 ED 5P5 CO 7040.170-10M		44570	312	142	49619	278
T-LED4 ED 5P5 CO 7040.140-16M		58750	408	143	66393	363
T-LED4 ED 5P5 CO 7040.160-20M		82040	587	139	93885	522
T-LED4 ID 5P5 CO 7040.070-2M		3900	26,6	146	4291	22
T-LED4 ID 5P5 CO 7040.100-2M		5500	37,4	147	6046	31,9
T-LED4 ID 5P5 CO 7040.140-2M		7560	52,3	144	8299	45,4
T-LED4 ID 5P5 CO 7040.100-4M		11000	72	152	12092	63,8
T-LED4 ID 5P5 CO 7040.140-4M	TS-55M	14860	102	145	16598	90,7
T-LED4 ID 5P5 CO 7040.090-8M	TS-55N	19990	128	156	21869	114
T-LED4 ID 5P5 CO 7040.120-8M	TS-55W	25730	171	150	28740	154
T-LED4 ED 5P5 CO 7040.120-10M		32590	216	150	35925	193
T-LED4 ED 5P5 CO 7040.170-10M		44060	312	141	49619	278
T-LED4 ED 5P5 CO 7040.140-16M		58090	408	142	66393	363
T-LED4 ED 5P5 CO 7040.160-20M		81110	587	138	93885	522
T-LED4 ID 5P5 CO 7040.070-2M		3770	26,6	141	4291	22
T-LED4 ID 5P5 CO 7040.100-2M		5310	37,4	141	6046	31,9
T-LED4 ID 5P5 CO 7040.140-2M		7300	52,3	139	8299	45,4
T-LED4 ID 5P5 CO 7040.100-4M		10620	72	147	12092	63,8
T-LED4 ID 5P5 CO 7040.140-4M	TS-65M	14350	102	140	16598	90,7
T-LED4 ID 5P5 CO 7040.090-8M	TS-65N	19300	128	150	21869	114
T-LED4 ID 5P5 CO 7040.120-8M	TS-65W	24850	171	145	28740	154
T-LED4 ED 5P5 CO 7040.120-10M		31470	216	145	35925	193
T-LED4 ED 5P5 CO 7040.170-10M		42550	312	136	49619	278
T-LED4 ED 5P5 CO 7040.140-16M		56080	408	137	66393	363
T-LED4 ED 5P5 CO 7040.160-20M		78310	587	133	93885	522

LUMINAIRE	OPTIC	RATED LUMINAIRE FLUX* (4000K, lm)	RATED LUMINAIRE POWER* (W)*	LUMINAIRE EFFICACY (lm/W)	RATED LED FLUX* (4000K, lm)	RATED LED POWER* (W)
T-LED4 ID 5P5 C90 7040.040-2M	STE-M STU-M STW SV	2400	16	150	2480	12,4
T-LED4 ID 5P5 C90 7040.060-2M		3490	23	151	3694	18,8
T-LED4 ID 5P5 C90 7040.100-2M		5690	37,4	152	6046	31,9
T-LED4 ID 5P5 C90 7040.140-2M		7820	52,3	149	8299	45,4
T-LED4 ID 5P5 C90 7040.080-4M		9260	57,4	161	9765	50,6
T-LED4 ID 5P5 C90 7040.100-4M		11370	72	157	12092	63,8
T-LED4 ID 5P5 C90 7040.120-4M		13410	86,9	154	14370	77,2
T-LED4 ID 5P5 C90 7040.140-4M		15370	102	150	16598	90,7
T-LED4 ID 5P5 C90 7040.080-8M		18590	114	163	19529	101
T-LED4 ID 5P5C90 7040.100-8M		22720	142	160	24184	128
T-LED4 ID 5P5 C90 7040.120-8M		26620	171	155	28740	154
T-LED4 ID 5P5 C90 7040.040-2M		2340	16	146	2480	12,4
T-LED4 ID 5P5 C90 7040.060-2M	3420	23	148	3694	18,8	
T-LED4 ID 5P5 C90 7040.100-2M	5570	37,4	148	6046	31,9	
T-LED4 ID 5P5 C90 7040.140-2M	7640	52,3	146	8299	45,4	
T-LED4 ID 5P5 C90 7040.080-4M	S05 S07	9050	57,4	157	9765	50,6
T-LED4 ID 5P5 C90 7040.100-4M	STA	11120	72	154	12092	63,8
T-LED4 ID 5P5 C90 7040.120-4M	STE-S	13110	86,9	150	14370	77,2
T-LED4 ID 5P5 C90 7040.140-4M	STU-S	15030	102	147	16598	90,7
T-LED4 ID 5P5 C90 7040.080-8M		18170	114	159	19529	101
T-LED4 ID 5P5C90 7040.100-8M		22210	142	156	24184	128
T-LED4 ID 5P5 C90 7040.120-8M		26030	171	152	28740	154
T-LED4 ID 5P5 C90 7040.040-2M	TS-EM TS-UM TS-W TS-V	2400	16	150	2480	12,4
T-LED4 ID 5P5 C90 7040.060-2M		3490	23	151	3694	18,8
T-LED4 ID 5P5 C90 7040.100-2M		5690	37,4	152	6046	31,9
T-LED4 ID 5P5 C90 7040.140-2M		7820	52,3	149	8299	45,4
T-LED4 ID 5P5 C90 7040.080-4M		9260	57,4	161	9765	50,6
T-LED4 ID 5P5 C90 7040.100-4M		11370	72	157	12092	63,8
T-LED4 ID 5P5 C90 7040.120-4M		13410	86,9	154	14370	77,2
T-LED4 ID 5P5 C90 7040.140-4M		15370	102	150	16598	90,7
T-LED4 ID 5P5 C90 7040.080-8M		18590	114	163	19529	101
T-LED4 ID 5P5C90 7040.100-8M		22720	142	160	24184	128
T-LED4 ID 5P5 C90 7040.120-8M		26620	171	155	28740	154
T-LED4 ID 5P5 C90 7040.040-2M		2340	16	146	2480	12,4
T-LED4 ID 5P5 C90 7040.060-2M	3420	23	148	3694	18,8	
T-LED4 ID 5P5 C90 7040.100-2M	5570	37,4	148	6046	31,9	
T-LED4 ID 5P5 C90 7040.140-2M	7640	52,3	146	8299	45,4	
T-LED4 ID 5P5 C90 7040.080-4M	TS-05 TS-07	9050	57,4	157	9765	50,6
T-LED4 ID 5P5 C90 7040.100-4M	TS-A	11120	72	154	12092	63,8
T-LED4 ID 5P5 C90 7040.120-4M	TS-ES	13110	86,9	150	14370	77,2
T-LED4 ID 5P5 C90 7040.140-4M	TS-US	15030	102	147	16598	90,7
T-LED4 ID 5P5 C90 7040.080-8M		18170	114	159	19529	101
T-LED4 ID 5P5 C90 7040.100-8M		22210	142	156	24184	128
T-LED4 ID 5P5 C90 7040.120-8M		26030	171	152	28740	154

\*RATED LUMINAIRE FLUX / RATED LUMINAIRE POWER: Rated data obtained in laboratory. Tq=25°C, Vin=230Vac, F/DA/DAC.

\*RATED LED FLUX / RATED LED POWER: Rated data extrapolated from LED manufacturer datasheet. Tj=85°C.

Values indicated in this technical sheet are to be considered rated values. Flux tolerance: ±7%. Power tolerance: ±7%.

Power tolerance with ZHAGA version or power supply D4i/SR: ±10%.

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