

TUBE LIGHTS | TL2F Spectral Enhanced Series



OVERVIEW

Ellipz TL2F Series LED tube offers 600mm, 1200mm and 1500mm length with an exceptionally good efficacy of >105 lm/W and are available in 3500K, 4000K, 5000K and 6500K CCT.

Ellipz TL2F Series LED tubes are a perfect energy saving solution for new lighting points, and as a superb substitute for conventional T8 fluorescent lamps.



KEY PRODUCT BENEFITS

- CRI>90
- High S/P ratio up to 2.2
- Extremely energy efficient at >105 lm/W
- Low heat generation
- Guarantee of min. 50,000 lifetime hours / L85B15



KEY FINANCIAL BENEFITS

- ROI is less than 1 year for 24/7 applications
- Leasing program where you can get free product in exchange for sharing your savings.
- Lower net expenses



ENVIRONMENTAL SENSIBILITY

- Energy savings over 70%
- Contains no hazardous substances
- Ultraviolet Free
- Recycling program for replaced bulbs

INNOVATION

We are an innovation company first, and a lighting company second. Since 2005, we have been perfecting LED technology, manufacturing, and successfully installing our products worldwide, first as Lemnis Lighting and now as Ellipz Lighting.

ELLIPZ LUMINAIRES

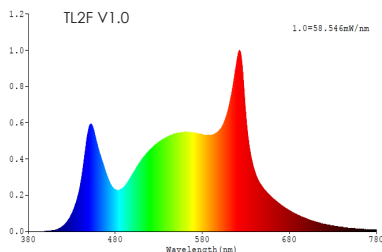
We combine knowledge of visual perception with the newest LED and lighting technologies. The light sources in Ellipz luminaires are red, green and blue LEDs. With this RGB concept, an optimal light spectrum is developed so that excellent vision is obtained with little energy. The basic principle is that a high S/P ratio for maximum energy savings results in lighting with high Enhanced Visual Efficiency (EVE).

BETTER VISIBILITY WITH LESS ENERGY

Ellipz Lighting has developed a pioneering concept in LED lighting for the illumination of parking areas, outdoor areas and public spaces. Based on our patented technology we create light that perfectly matches the sensitivity of the human eye for optimal functioning while indoor and during nighttime conditions.

PRODUCT SPECS | TL2F Spectral Enhanced Series

* Equivalent Visual Efficiency (EVE) is based on IES TM 24-13 recommendation which is calculated as follows: $EVE = \text{Photopic lumen} \times (\text{S/P Ratio})^{0.8}$



TL2F | 600 mm
3500K (23J3KE80)
4000K (23J4KE80)
5000K (23J2KE80)
6000K (23J1CE80)

TL2F | 1200 mm
3500K (23P3ME80)
4000K (23P4ME80)
5000K (23P2ME8)
6500K (23P1CE80)

TL2F | 1500 mm
3500K (23T3NE80)
4000K (23T4NE80)
5000K (23T2NE80)

Electrical	600 mm	1200 mm	1500 mm
Rated Power (W)	9W	18W	22.5W
Rated voltage (Vac)	100-120	100-120	100-120
Voltage range (Vac)	90-132	90~132	90~132
Rated Current (mA, @230Vac/50Hz)	43	82	103
Power Consumption (W, @230Vac)	9	18	22.5
Frequency (Hz)	50 / 60	50 / 60	50 / 60
THD (% , @230Vac/50Hz)	<15%	<15%	<15%
Power Factor	0.90	0.95	0.95
Protection against over voltage	YES (by fuse)	YES (by fuse)	YES (by fuse)
Optical			
Lumen output (lm)	910/970/1025/1025	1820/1930/2050/2050	2330/2450/2550
Color Rendering Index (CRI, @5000K CCT)	94	94	94
Efficacy (lm/W, @5000K CCT)	>105	>105	>105
Beam Angle (°)	160°	160°	160°
S/P Ratio	1.8/1.9/2.0/2.2	1.8/1.9/2.0/2.2	1.8/1.9/2.0
EVE = lm*(SP) ^{0.80} (according to TM24-13)	1455/1620/1785/1925	2910/3225/3570/3850	3730/4095/4440
Dimmable	NO	NO	NO
Environmental			
Operating Temperature [°C]	-20°C to 40°C	-20°C to 40°C	-20°C to 40°C
Storage Temperature [°C]	-30°C to 55°C	-30°C to 55°C	-30°C to 55°C
Operating Humidity [%]	10 % to 80 %	10 % to 80 %	10 % to 80 %
Life Span (h) L85B15	50,000	50,000	50,000
Mechanical			
Housing + heatsink material	PC + aluminium	PC + aluminium	PC + aluminium
IP Rating	IP20	IP20	IP20
Length (mm), length limit per IEC standard	600	1,200	1,500
Diameter (mm)	26	26	26
Weight (Kg)	0.20	0.39	0.47
Lamp Base	G13	G13	G13
Compliance			
Certification	UL OOLV2.E472737	UL OOLV2.E472737	UL OOLV2.E472737
RoHS	Yes	Yes	Yes

LOGISTICS DATA | TL2F Spectral Enhanced Series

600mm	Single Box	Outer Box	Pallet A	Pallet B	20ft Container	40ft Container
Quantity	9	36	1152	-	13824	32256
Dimensions (mm)	670x107x107	730x270x25	540x1142x112	-	5898x2352x2393	12032x2352x2340
Gross Weight (Kg)	2.2	9.6	350	-	4205	9812

1200mm	Single Box	Outer Box	Pallet A	Pallet B	20ft Container	40ft Container
Quantity	-	25	375	500	7000	14000
Dimensions (mm)	-	1290x223x277	370x1142x956	1370x1142x956	5898x2352x2393	12032x2352x2340
Gross Weight (Kg)	-	13.3	242	308	4402	8805

1500mm	Single Box	Outer Box	Pallet A	Pallet B	20ft Container	40ft Container
Quantity	-	25	375	500	5250	12250
Dimensions (mm)	-	1600x223x277	370x1142x956	1680x1142x1233	5898x2352x2393	12032x2352x2340
Gross Weight (Kg)	-	15	275	350	3744	8736

*Pallet A size has to be loaded at upper stack in case pallet stacking is needed.

*For non-palletised shipment, especially via courier service delivery, please use crate packing (not included) for additional protection on tube products.