

1. Introduction of LED PL-L Lamp



LED PL-L lamps are assembled by using the highest grade SMD LEDs and components to ensure reliability and efficient heat management to ensure optimal levels of light. Integrated constant current LED driver generates less heat and lengthens the life of the lamp. Designed to replace conventional PL-L lamps, PL-L will easily outperform its predecessor, offering up to 36,000hrs lamp life, high lumen output, low power consumption and better quality light. And it can be a direct replacement for lamps that you use at this moment in time. Extremely bright, high Ra-color rendering index, it's the latest indoor illumination product. No need to use ballast and starter, and no flicker.

INTRODUCTION OF PL-L LAMP

1.1 Physical Dimension:

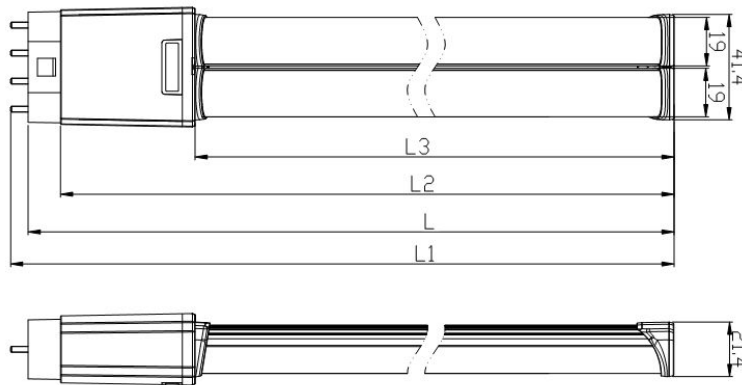


Figure1.1.1 Physical Dimension

Product	8W PL-L Lamp	12W PL-L Lamp	16W PL-L Lamp	20W PL-L Lamp	25W PL-L Lamp
D	41.4mm	41.4mm	41.4mm	41.4mm	41.4mm
L	210.1mm	310.1mm	404.1mm	526.1mm	526.1mm
L1	217mm	317mm	411mm	533mm	533mm
L2	197.4mm	297.4mm	391.4mm	513.4mm	513.4mm
L3	144.4mm	244.4mm	338.4mm	460.4mm	460.4mm

1.2 Two Beam Angle for Selection:

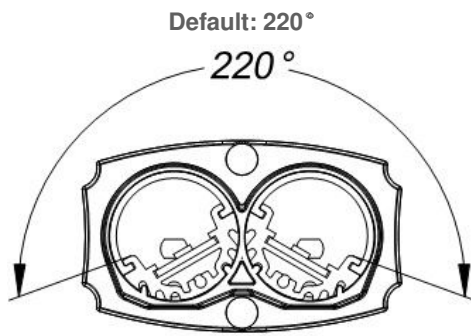


Figure 1.2.1 220° Beam Angle

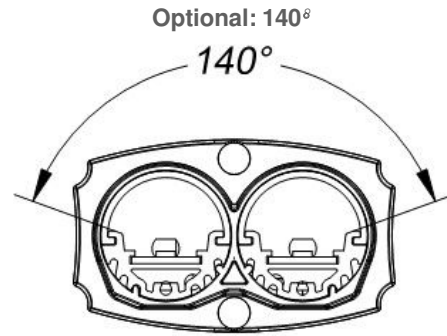


Figure 1.2.2 140° Beam Angle

2. PL-L Lamp Features

High Luminous Efficiency

We used top-brand LED chip package for this PL-L Lamp. In structural design, a unique optical mixed astigmatism technology ensures non-point source and soft light.

Quality of light

adopts constant-current output power to fully guarantee the long life span and stable performance of the products. By using the excellent leds with wonderful color rendering index ,high lumen maintain rate,no-flicker trait.

Fantastic Design

This PL-L lamp was designed with 2 beam angle: 140° and 220° , more flexible for you to choose the idea illuminant.

Low lumen depreciation

The white light is adopting new technology, less than 3% light decay in 3000 hours, about 10% to 15% in 20,000 hours and 30% in 36,000 hours.

Environmentally responsible

This environmentally responsible LED system complies with RoHS standards, CE. Shine Lighting contains no lead, mercury or glass, so handling and disposal are less of a concern. What is more, it is higher as efficient as our previous cabinet light, effectively delivering more lumens per watt.

2.1. Absolute Maximum Ratings

Item	Unit	Minimum	Standard	Maximum
Voltage	V	AC 90V	AC 100V/240V	AC 264V
Operating Humidity	%DH	10%		80%
Storage Humidity	%DH	10%		80%
Operating Temperature	°C	-20°C	-20°C-60°C	60°C
Storage Temperature	°C	-40°C		85°C

2.2. Color Parameters:

1> Day Light :

X=0.32 Y=0.34

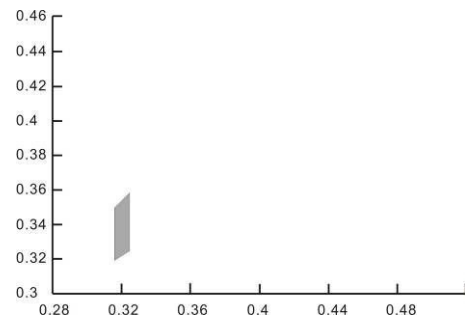
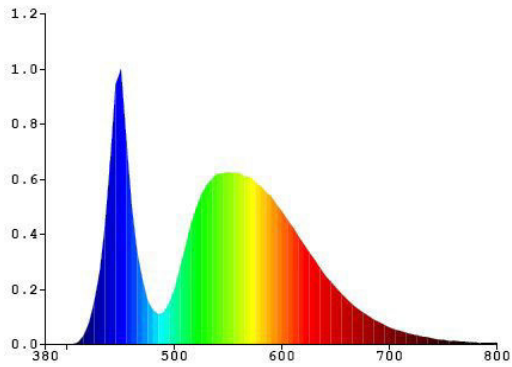
Tc=5600K-6300K

Dominant WL: =543nm Purity=5% Centroid WL:549nm

Ratio:R=13.7% G=83.3% B=3%

Peak WL:Lp=450nm HWL:23.5nm

Render Index:Ra=80



DAY LIGHT COLOR PARAMETER

2> Warm white :

X1=0.44 Y1=0.42

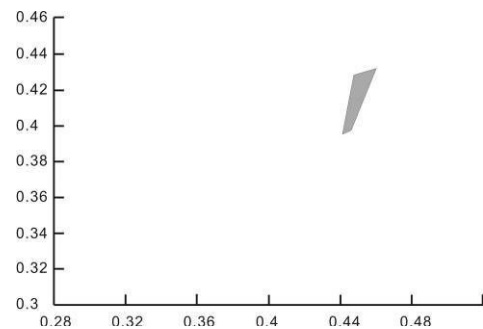
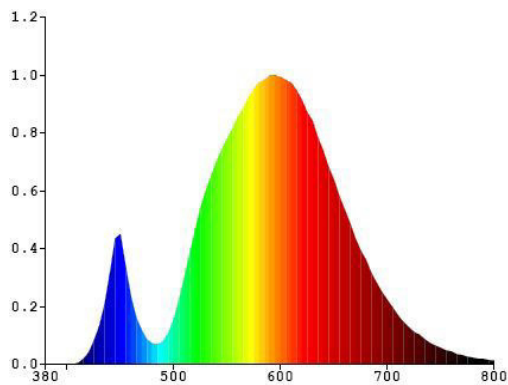
Tc=2900K-3250K

Dominant WL: =580.5nm Purity=61.5% Centroid WL: 592nm

Ratio: R=22.6% G=76.3% B=1.1%

Peak WL: Lp=590nm HWL: 141.7nm

Render Index: Ra=80



WARM WHITE COLOR PARAMETER

2.3. Parameters:

Model	8W	12W	16W	20W	25W
Led Type	SMD 2835	SMD 2835	SMD 2835	SMD 2835	SMD 2835
Led Qty	40	60	80	96	120
Lumen	675	1050	1380	1700	2120
CRI	80Ra	80Ra	80Ra	80Ra	80Ra
Power Factor	>0.92	>0.92	>0.92	>0.92	>0.92

1> 12W PL-L Lamp Illuminance and Distribution Curve

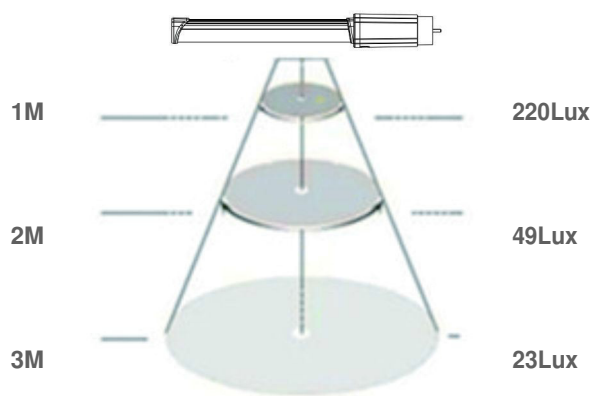


Figure 2.3.1.1 12W day light PL-L lamp illuminance

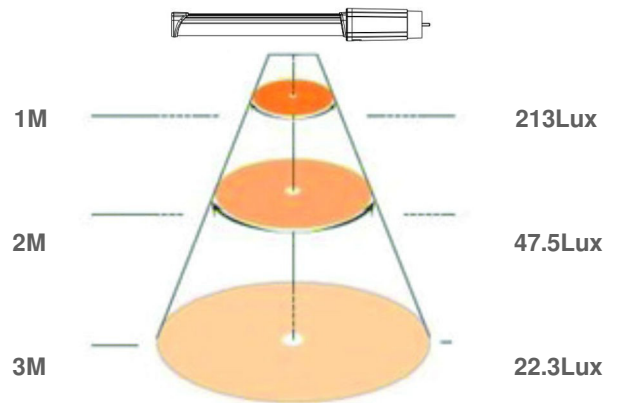


Figure 2.3.1.2 12W warm light PL-L lamp illuminance

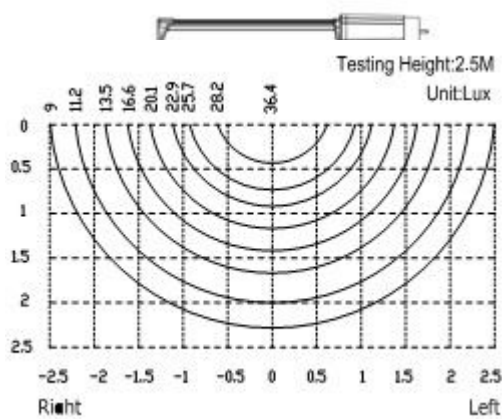


Figure 2.3.1.3 12W daylight PL-L lamp isolux curve at the height of 2.5m

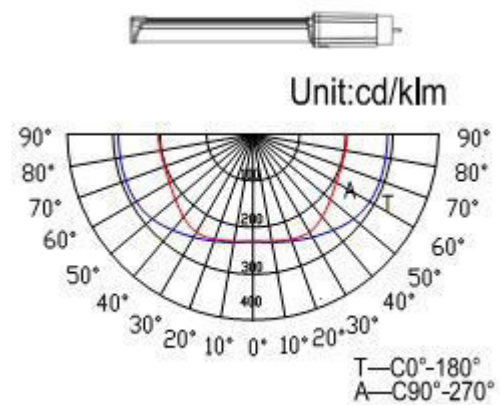


Figure 2.3.1.4 12W daylight PL-L lamp distribution curve

2> 16W PL-L Lamp Illuminance and Distribution Curve

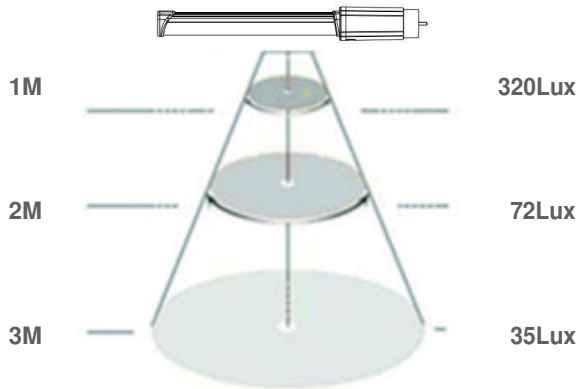


Figure 2.3.2.1 16W day light PL-L lamp illuminance

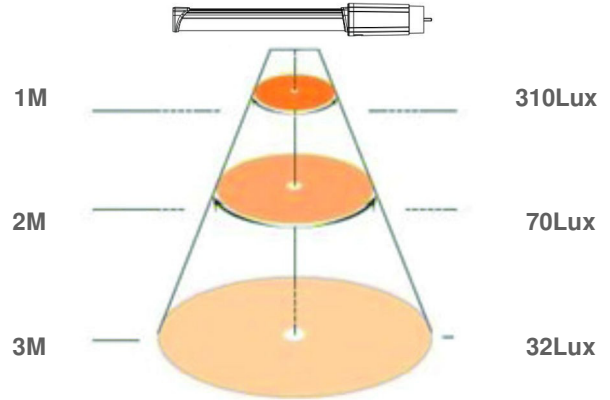


Figure 2.3.2.2 16W warm light PL-L lamp illuminance

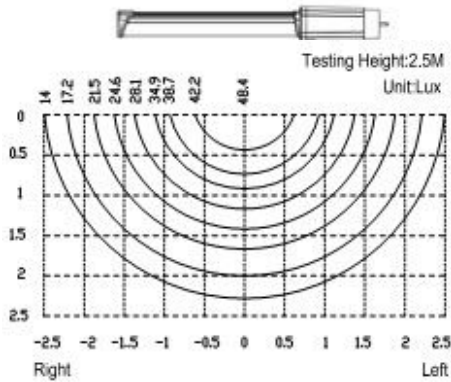


Figure 2.3.2.3 16W daylight PL-L lamp Isolux curve at the height of 2.5m

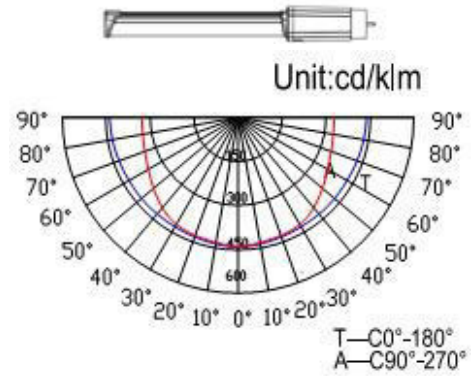


Figure 2.3.2.4 16W daylight PL-L lamp distribution curve

3> 20W PL-L Lamp Illuminance and Distribution Curve

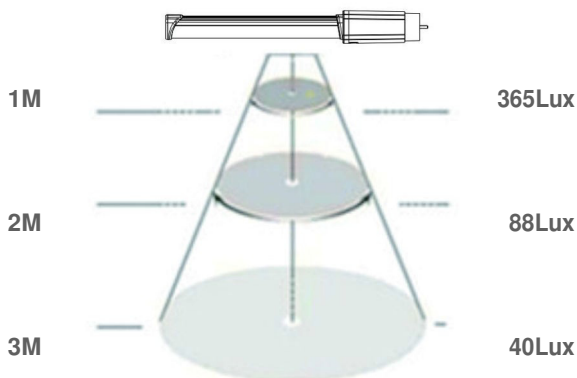


Figure 2.3.3.1 20W day light PL-L lamp illuminance

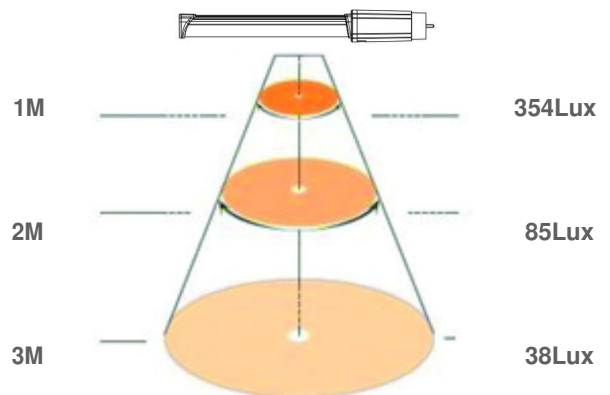


Figure 2.3.3.2 20W warm light PL-L lamp illuminance

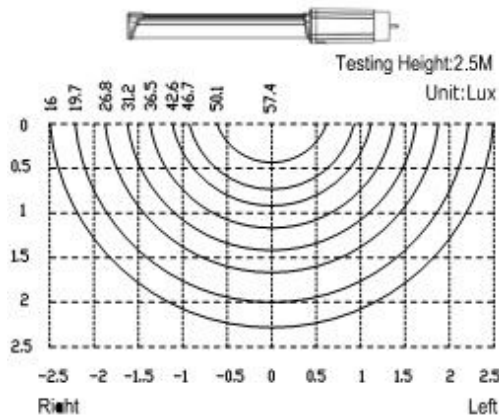


Figure 2.3.3.3 20W daylight PL-L lamp Isolux curve at the height of 2.5m

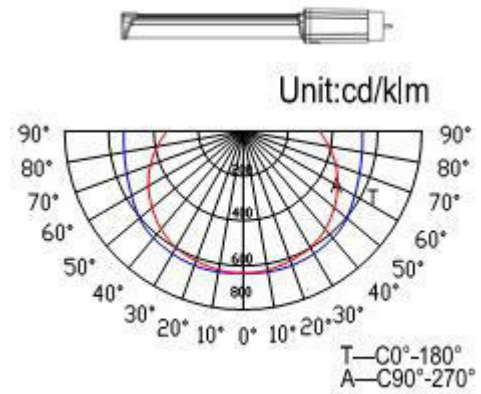


Figure 2.3.3.4 20W daylight PL-L lamp distribution curve

3. Wiring Diagram

Remove the traditional ballast (for both electronic & magnetic ballast) before install the PL-L lamp. Connecting wires as below:

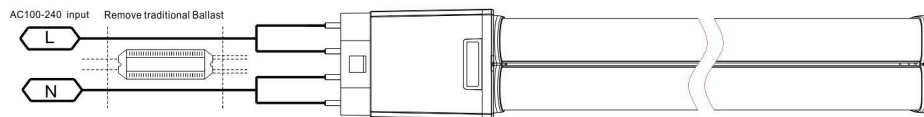


Figure 3.1.1 Wiring Diagram

4. Application

Applications: LED PL-L lamps are extensively applied in situations where traditional fluorescent lamps would normally be used. It can be used in almost all kinds of circumstances that need light, such as factories, hotels, stores, offices, and so on.

5. Attention

1. Please maintain normal voltage required
2. The outside temperature, when it is working, should be maintained between -20°C and 60°C
3. Storage temperature should be maintained at -40 to +85°C
4. Please do not use in the moist or corrosive environment.
5. Please use it according to the instruction and avoid electric shock. Laypeople do not mount or take down.
6. LED PL-L lamp and all of its components must not be subjected to mechanical stress.
7. The complete installation must be done by an electrical expert who is familiar with the valid directives.
8. If any doubt about the installation or use of this product, consult a competent electrician
9. Don't use it if aluminum of the PL-L lamp has any damage or distortion. Otherwise the product or the installation might not be sufficiently safe!
10. Switch off power of the mains supply or respectively of the connection lead before doing any works.
11. Assembly must not damage or destroy conducting paths.
12. Make sure that the product is mounted on a stable, even and tilt-fixed background
13. Keep away from direct sunshine and high temperature
14. Indoor use only