



Up-shine[®] Lighting



Technical Application
Guide for UP SHINE
LED Downlight
UP-DL90-2.5-5W

Introduction



DL90 Downlight is structural designed with integration of heatsink and surface cover, aims at increasing the heat dissipation area. IP54 waterproof for indoor use, especially for damp locations. UL94-V0 Fire-rated PC diffuser provides high light transmittance and even light output. It is an ideal replacement for residential and commercial lighting.

- Up to 70% energy saving compared to standard CFL
- Long lifetime of 40,000 hours
- Triac dim
- 90° wide beam angle
- 70mm cutout
- CCT: 3000K 4000K
5000K 5700K
- No UV/IR light
- Environment friendly, without Mercury or any other hazardous substances

Application notes

- IP54 for indoor use only
- Professional electrician for installation only
- Switch off before installation
- Do not touch when in use
- Keep away from hot steam and corrosive gas

Application Areas

It is designed for general lighting applications in office, supermarket, shop, school, hotel, etc. It is also widely used for public areas, such as stairway, lobby, reception, corridors etc.

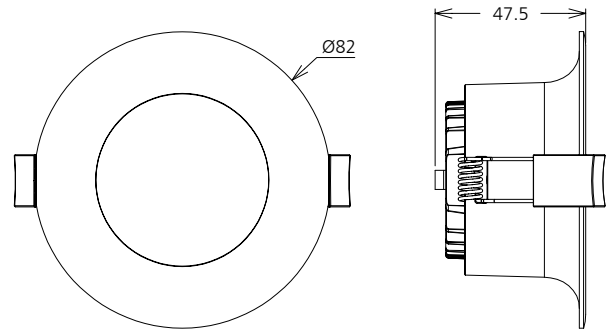
Certificate



RoHS



Product Information



Technical Specifications

Model	Voltage	Power	Power Factor	Lumen (±5%)	Beam angle	CCT	Lifespan	CRI	Dimmable	Dimension
UP-DL90-2.5-5W	230V	5W	≥0.9	340	90°	3000K	40000h	≥80	No	Ø82*47.5mm cutout 70mm
UP-DL90-2.5-5W	230V	5W	≥0.9	390	90°	4000K	40000h	≥80	No	Ø82*47.5mm cutout 70mm
UP-DL90-2.5-5W	230V	5W	≥0.9	375	90°	5000K	40000h	≥80	No	Ø82*47.5mm cutout 70mm
UP-DL90-2.5-5W	230V	5W	≥0.9	385	90°	5700K	40000h	≥80	No	Ø82*47.5mm cutout 70mm
UP-DL90-2.5-5W-D	230V	5W	≥0.9	340	90°	3000K	40000h	≥80	Yes	Ø82*47.5mm cutout 70mm
UP-DL90-2.5-5W-D	230V	5W	≥0.9	390	90°	4000K	40000h	≥80	Yes	Ø82*47.5mm cutout 70mm
UP-DL90-2.5-5W-D	230V	5W	≥0.9	375	90°	5000K	40000h	≥80	Yes	Ø82*47.5mm cutout 70mm
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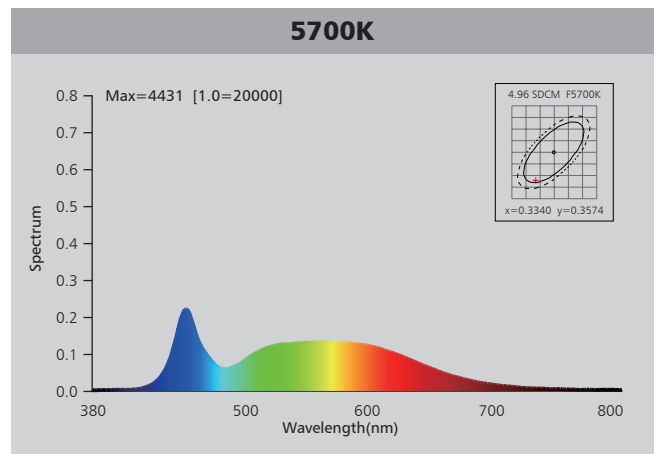
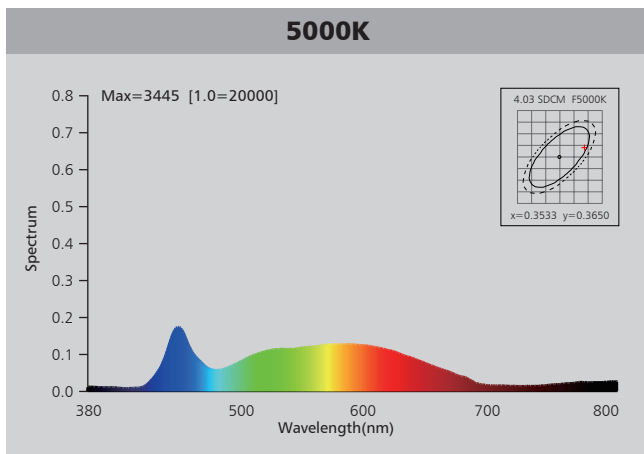
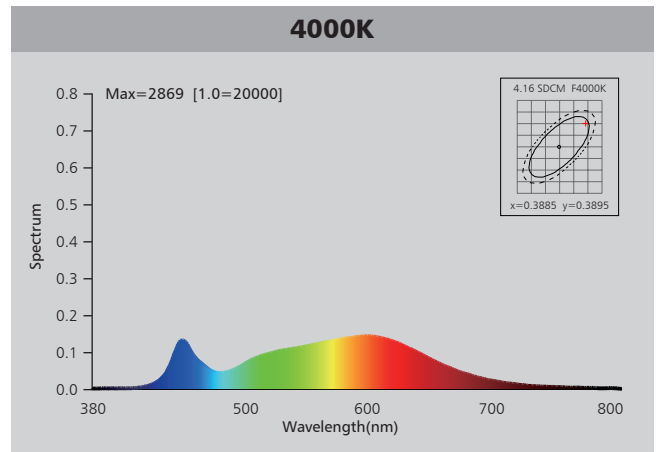
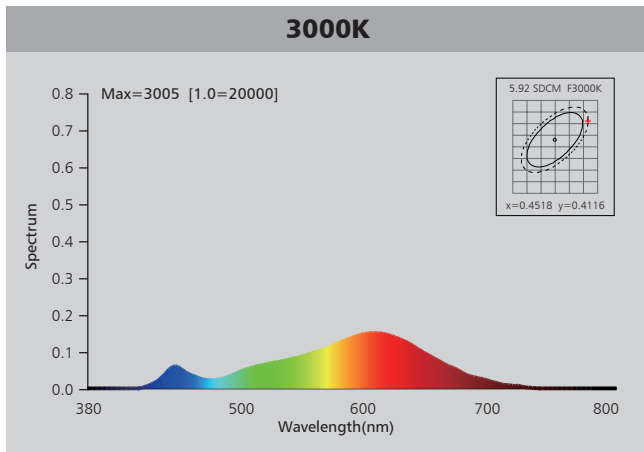
Driver data Sheet

Driver data	DIM	Non dim
Input rated Voltage	AC230V	AC230V
Frequency	50Hz	50Hz
Input Voltage	AC200-240V	AC200-240V
Efficiency	≥78%	≥78%
Total load Wattage	5W±0.5W	5W±0.5W
Power Factor	≥0.9	≥0.9
Rated input current	≤0.028A	≤0.028A
Full load output Voltage	DC28-38V	DC25-42V
Rated output current	130mA	130mA
Output current range	130mA±5%	130mA±5%
Power tolerance	±5%	±5%
Current output tolerance	±5%	±5%
Dimming range	8%-100%	—
Dimmer	Triac dimmers	—
Short circuit protection	PASS	PASS
Over voltage protection	PASS	PASS
Over temperature protection	PASS	PASS
THD	≤20%	≤20%
Withstand voltage	AC3750V	AC3750V

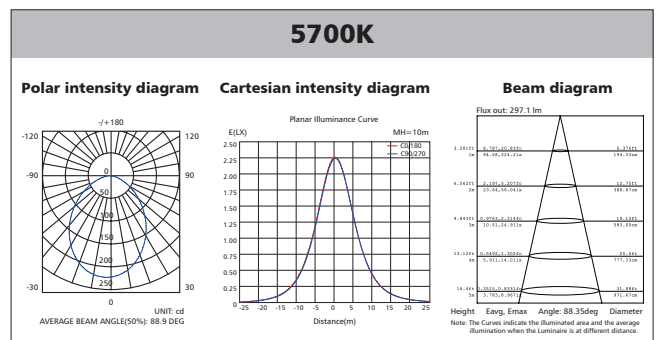
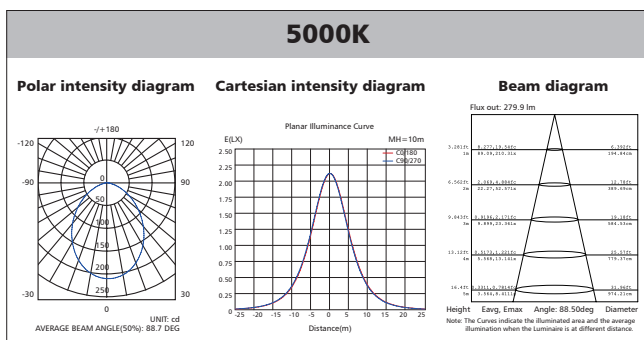
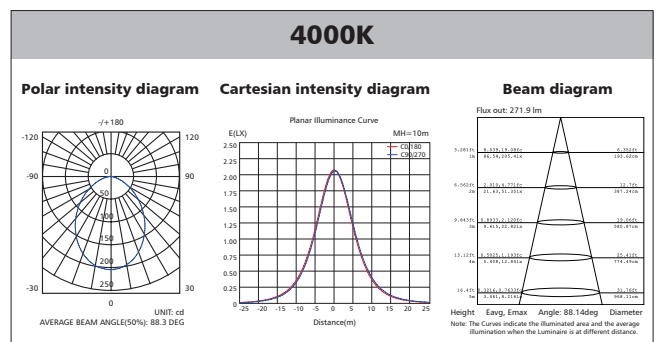
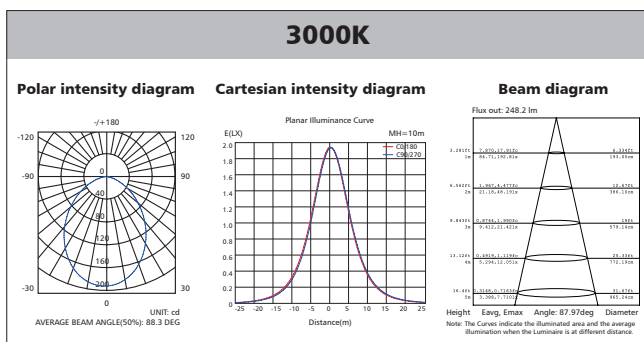
Fixture Compatibility

Rated Wattage	Electrical Classification	Ingress Protection	Operating Temp	Operating Humidity	Storage Temp
5W	II	IP54	-20°C~45°C	0~90%	-20°C~65°C

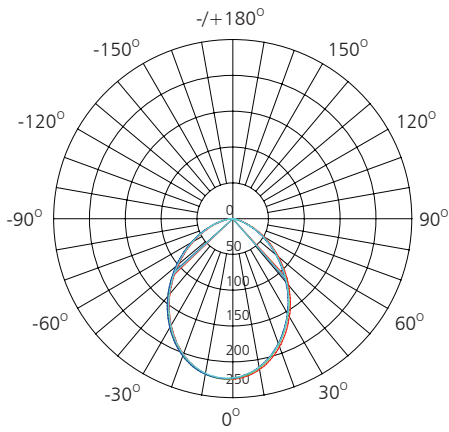
Spectral Distribution



Photometric Diagram



Polar Diagram Comparison



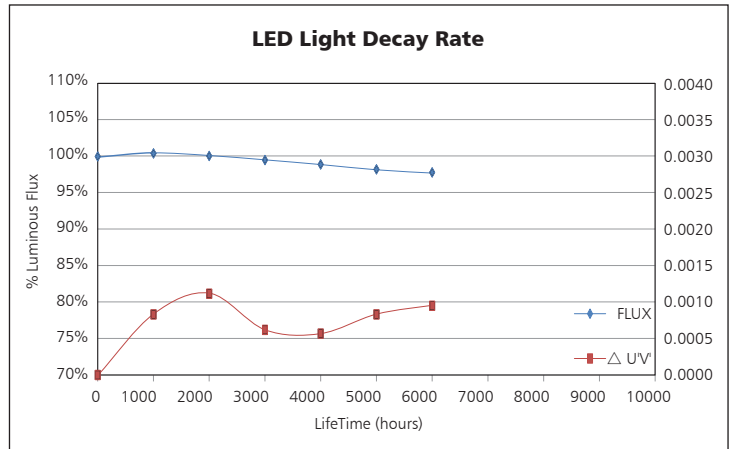
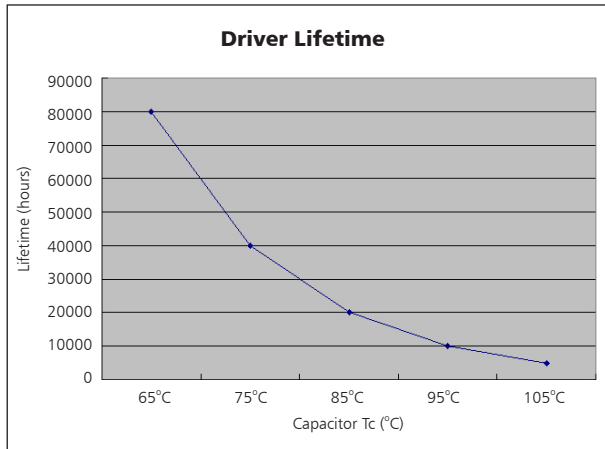
UNIT: cd

- C0/180, 88.9 deg
- C30/210, 89.1 deg
- C60/240, 89.0 deg
- C90/270, 88.6 deg

AVERAGE BEAM ANGLE (50%): 88.9 DEG

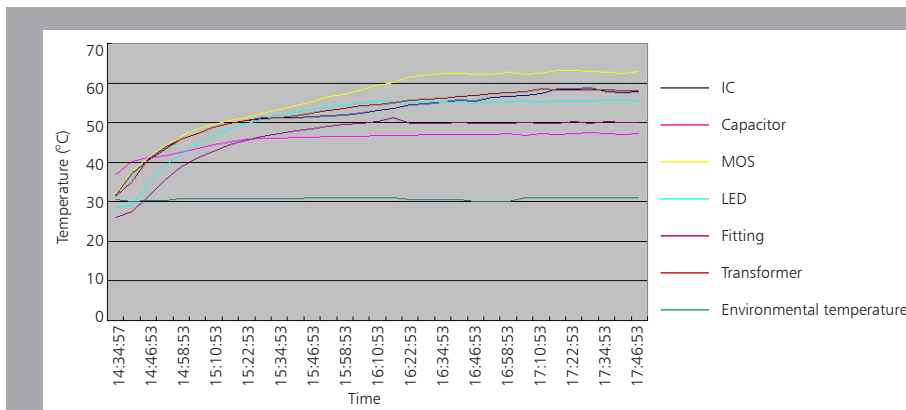


Driver lifetime & LED light decay rate



Temperature

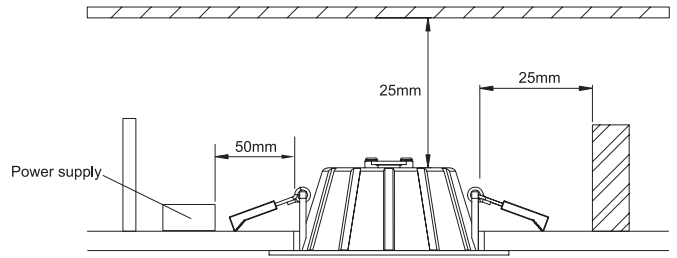
- The testing is operated at 25°C
- The lifetime of capacitor, minimum of 5,000 hours if operated at 105°C, will be doubled whenever the temperature drops 10°C
- The highest withstand temperature of IC, MOS could be 120°C
- The highest withstand temperature of LED junction temperature is 150°C



The driver lifespan is based on capacitor working temperature.

Installation

Install requirements	
A-gap above the fitting	25mm
B-gap to the building material	25mm
C-gap to the thermal insulation	25mm



1. Open a hole according to the cutout size of led downlight.

2. Use screw-driver to open the driver terminal cover, feed the main AC wire L. N. in terminal block respectively, then fix the cover back.

3. Connect the downlight with driver, hold back the spring clip then push the downlight into the hole.

4. Make sure the downlight fixed tightly in ceiling, turn on the power (Fig 1).

Packaging Information

	SIZE(CM)	N.W/pc (KGS)	G.W.(KGS)	QTY(PCS)
Carton	43.5*33*29	0.23	9.3	36

	CTNS	QTY(PCS)	VOLUME(CBM)
20" standard container	656	23616	28
40" standard container	1312	47232	56

