



Up-shine[®] Lighting



Technical Application
Guide for UP-SHINE
LED Downlight

UP-CL88-90-10W

Introduction



↻ 25°

CL88 downlight is developed for Oceania and European market. The advantage is choosing ADC12 Aluminum as lamp fitting, spraying paint process to make lamp smooth and noncorrosive with excellent thermal conductivity. Cutout size both 70mm and 90mm are available. Besides, the horizontal rotation is around 25 degree, creating diversified lighting effects. PMMA diffuser with high reflective paper creates even light output, it is an ideal replacement for customers who have strictly requirements of environmental protection.

- Up to 70% energy saving compared to standard CFL
- Long lifetime of 40,000 hours
- Dimmable when using triac dimmer
- 90° wide beam angle
- Ø90mm cutout
- CCT: 3000K 4000K
5000K 5700K
- No UV/IR light
- Environment friendly, without Mercury or any other hazardous substances

Application notes

- IP20 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.

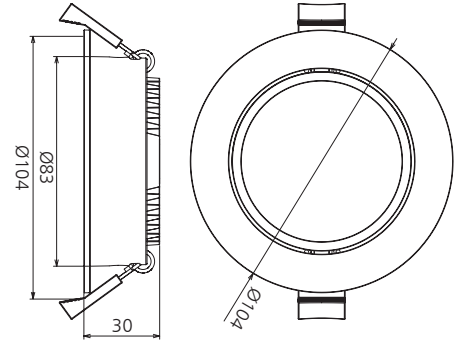
Certificate



RoHS



Product Information



Technical Specifications

Model	Voltage	Power	Power Factor	Lumen (±5%)	Beam angle	CCT	Lifespan	CRI	Dimmable	Dimension
UP-CL88-90-10W	AC230V	10W	≥0.9	730	90°	3000K	40000h	≥80	No	Ø104*30mm cutout 90mm
UP-CL88-90-10W	AC230V	10W	≥0.9	760	90°	4000K	40000h	≥80	No	Ø104*30mm cutout 90mm
UP-CL88-90-10W	AC230V	10W	≥0.9	780	90°	5000K	40000h	≥80	No	Ø104*30mm cutout 90mm
UP-CL88-90-10W	AC230V	10W	≥0.9	800	90°	5700K	40000h	≥80	No	Ø104*30mm cutout 90mm
UP-CL88-90-10W-D	AC230V	10W	≥0.9	700	90°	3000K	40000h	≥80	Yes	Ø104*30mm cutout 90mm
UP-CL88-90-10W-D	AC230V	10W	≥0.9	730	90°	4000K	40000h	≥80	Yes	Ø104*30mm cutout 90mm
UP-CL88-90-10W-D	AC230V	10W	≥0.9	750	90°	5000K	40000h	≥80	Yes	Ø104*30mm cutout 90mm
UP-CL88-90-10W-D	AC230V	10W	≥0.9	760	90°	5700K	40000h	≥80	Yes	Ø104*30mm cutout 90mm

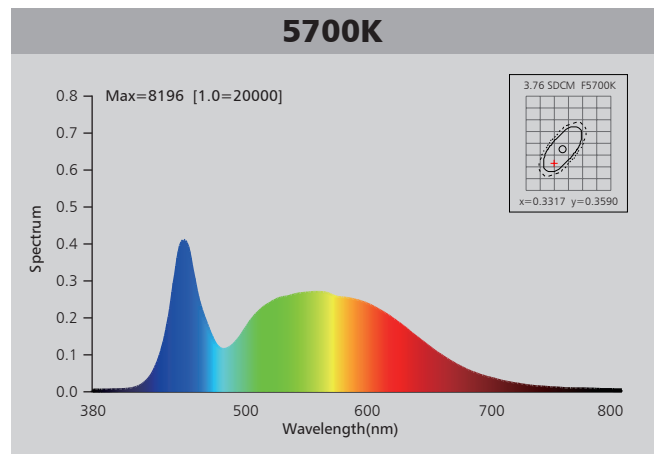
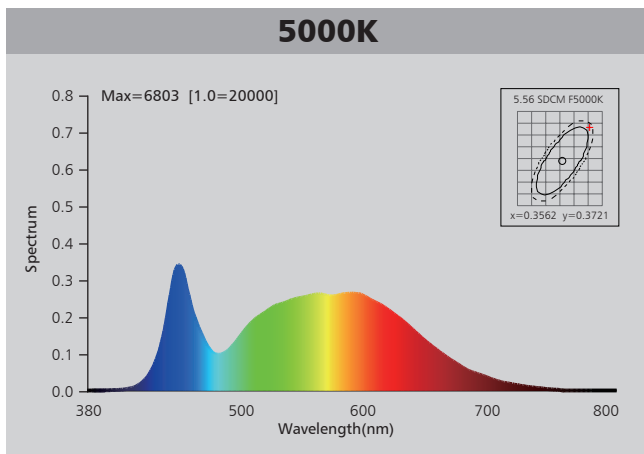
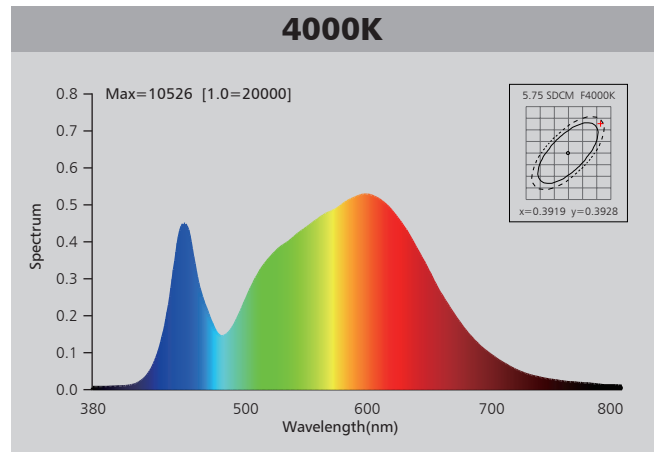
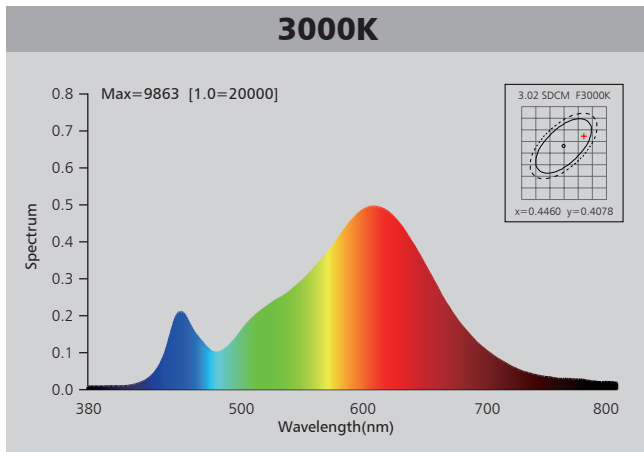
Driver data Sheet

Driver data	DIM	Non dim
Input rated Voltage	AC230V	AC230V
Frequency	50HZ	50HZ
Input Voltage	AC200-240V	AC200-240V
Efficiency	≥78%	≥80%
Total load Wattage	10W±0.5W	10W±0.5W
Power Factor	≥0.9	≥0.9
Rated input current	≤0.055A	≤0.055A
Full load output Voltage	DC28-40V	DC28-40V
Rated output current	270mA	280mA
Output current range	270mA±5%	280mA±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	≤40%	≤20%
Withstand voltage	AC3750V	AC3750V

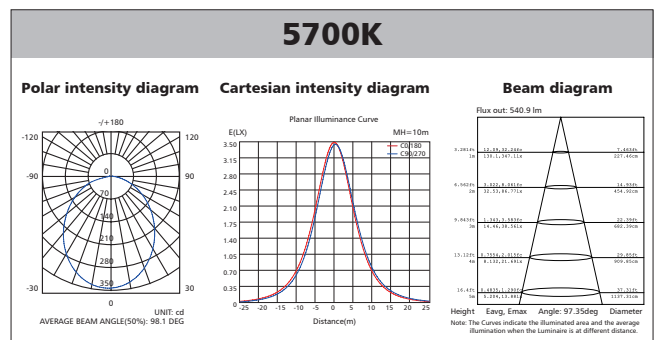
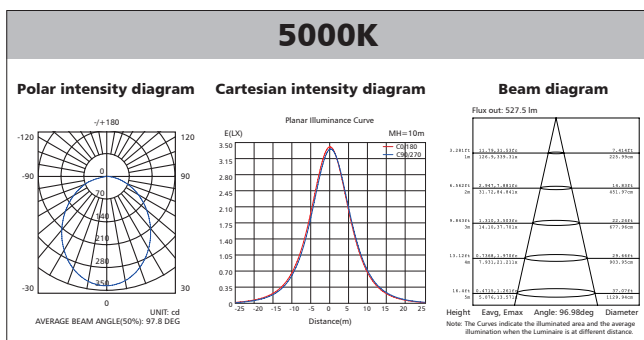
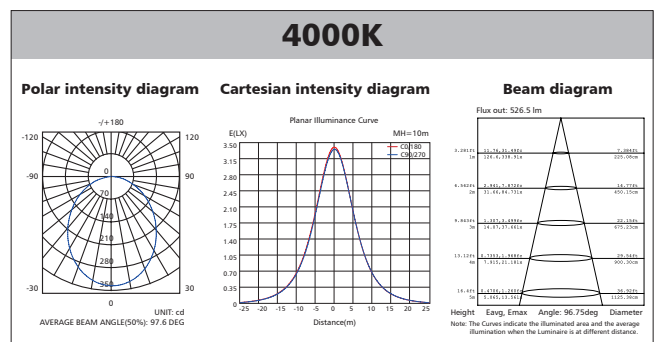
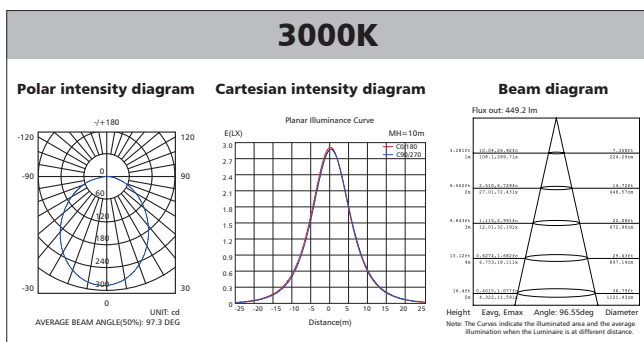
Fixture Compatibility

Rated Wattage	Electrical Classification	Ingress Protection	Operating Temp	Operating Humidity	Storage Temp
10W	II	IP20	-20°C~45°C	0~90%	-20°C~65°C

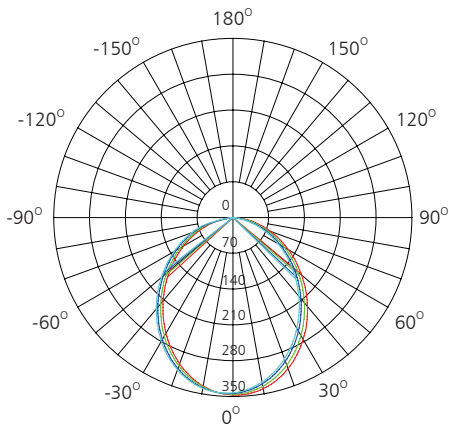
Spectral Distribution



Photometric Diagram



Polar Diagram Comparison



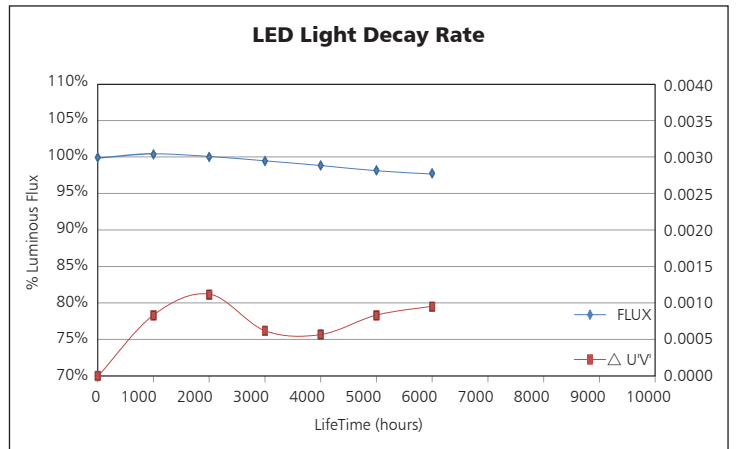
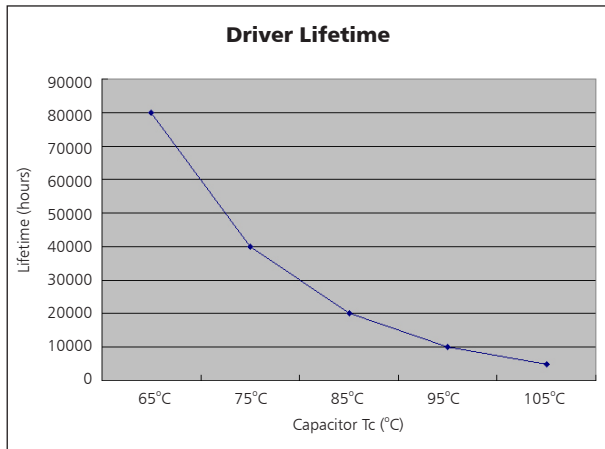
UNIT: cd

- C0/180, 98.1 deg
- C30/210, 98.1 deg
- C60/240, 98.1 deg
- C90/270, 98.0 deg

AVERAGE BEAM ANGLE (50%): 98.1DEG

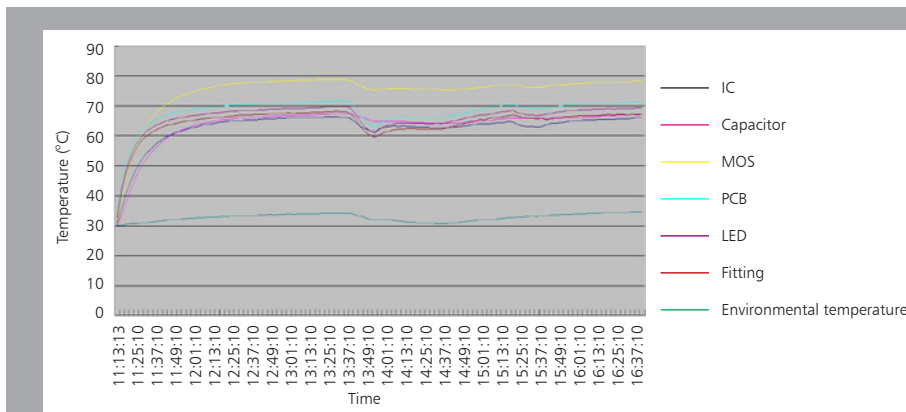


Driver lifetime & LED light decay rate



Temperature

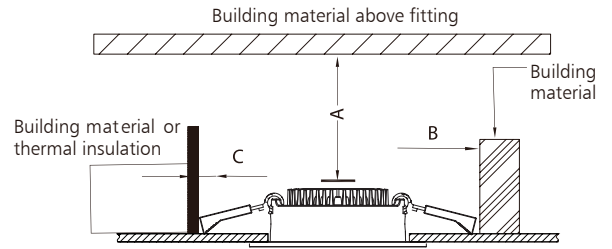
- The testing is operated at 25°C
- The lifetime of capacitor, minimum of 5,000 hours if operated at 105°C, will be doubled whenever the temperature drops 10°C
- The highest withstand temperature of IC, MOS could be 120°C
- The highest withstand temperature of LED junction temperature is 150°C



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



<p>Ceiling Opening</p>	<p>Connect Power supply</p>
<p>A. Hold back spring clips</p> <p>B. Push downlight into position</p>	<p>Spring Clips</p> <p>Ceiling</p>

Packaging Information

	SIZE(CM)	N.W/pc (KGS)	G.W.(KGS)	Q'TY(PCS)
Carton	48.5*37*20	0.28	9.5	24

	CTNS	Q'TY(PCS)	VOLUME(CBM)
20" standard container	758	18192	28
40" standard container	1516	36384	56

