



Up-shine[®] Lighting



Technical Application Guide for UP-SHINE LED Downlight

UP-DL97-3-10W-P3



Introduction



Slide switch for color selection



Up-shine SMD LED Down light adopts high lumen SMD LED, PC diffuser with even light output. White, silver, chrome surface treatment are available for customer's preference.

Triac dimmable, 0-10V dimmable and DALI dimmable version share great popularity by excellent dimming effect.

- Up to 70% energy saving compared to standard CFL
- Long lifetime of 50,000 hours
- Dimmable when using triac dimmer
- 90° wide beam angle
- Ø90-95mm cutout
- CCT: 3000K-4000K-5700K
- No UV/IR light
- Environment friendly, without Mercury or any other hazardous substances

Application notes

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

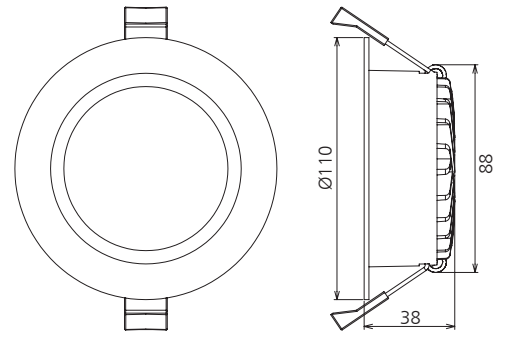
Application Areas

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



Product Information



Technical Specifications

Model	Voltage	Power	Power Factor	Lumen (±5%)	Beam angle	CCT	Lifespan	CRI	Dimmable	Dimension
UP-DL97-3-10W-C3	AC230V	10W	≥0.9	810	90°	3000K	50000h	≥80	No	Ø110*38mm cutout 90-95mm
UP-DL97-3-10W-C3	AC230V	10W	≥0.9	960	90°	4000K	50000h	≥80	No	Ø110*38mm cutout 90-95mm
UP-DL97-3-10W-C3	AC230V	10W	≥0.9	860	90°	5700K	50000h	≥80	No	Ø110*38mm cutout 90-95mm
UP-DL97-3-10W-P3	AC230V	10W	≥0.9	800	90°	3000K	50000h	≥80	Yes	Ø110*38mm cutout 90-95mm
UP-DL97-3-10W-P3	AC230V	10W	≥0.9	950	90°	4000K	50000h	≥80	Yes	Ø110*38mm cutout 90-95mm
UP-DL97-3-10W-P3	AC230V	10W	≥0.9	850	90°	5700K	50000h	≥80	Yes	Ø110*38mm cutout 90-95mm

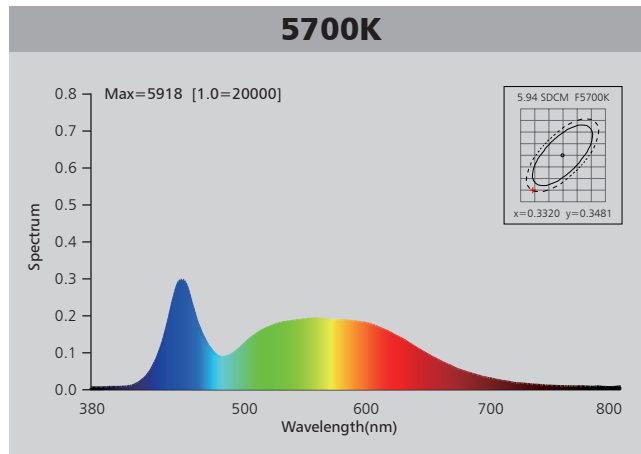
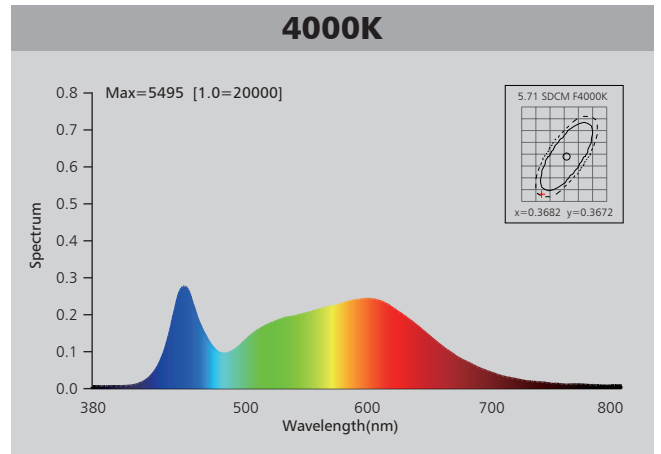
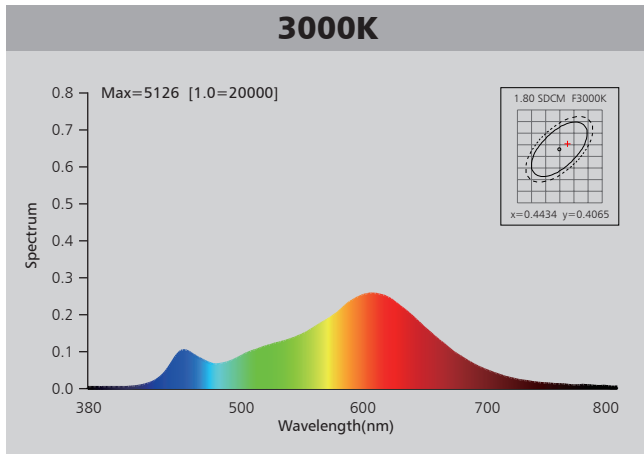
Driver data Sheet

Driver data	DIM	Non dim
Input rated Voltage	AC230V	AC230V
Frequency	50Hz	50/60Hz
Input Voltage	AC200-240V	AC200-240V
Efficiency	≥80%	≥84%
Total load Wattage	10W±1W	10W±1W
Power Factor	≥0.9	≥0.9
Rated input current	≤0.06A	≤0.06A
Full load output Voltage	DC23-40V	DC25-42V
Rated output current	230mA	230mA
Output current range	230mA±5%	230mA±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	≤18%	≤18%
Withstand voltage	AC3750V	AC3750V

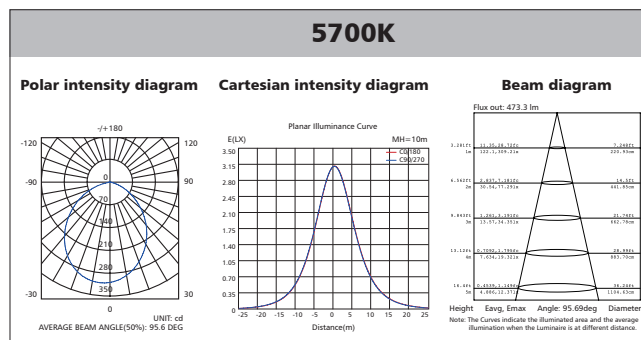
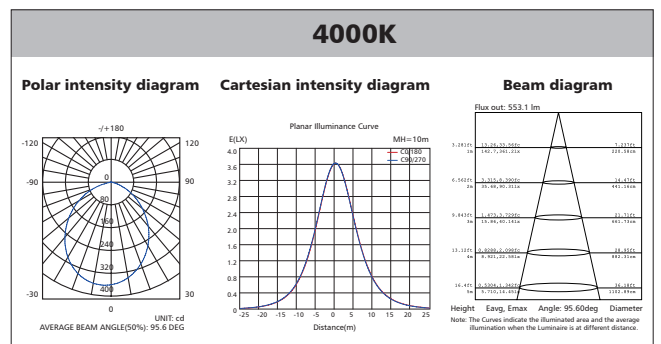
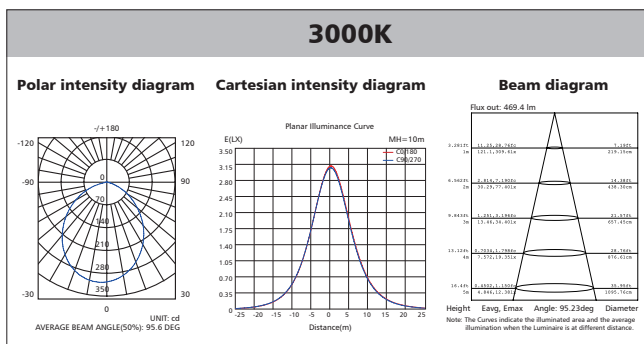
Fixture Compatibility

Rated Wattage	Electrical Classification	Ingress Protection	Operating Temp	Operating Humidity	Storage Temp
10W	II	IP54	-20°C~45°C	0~90%	-20°C~65°C

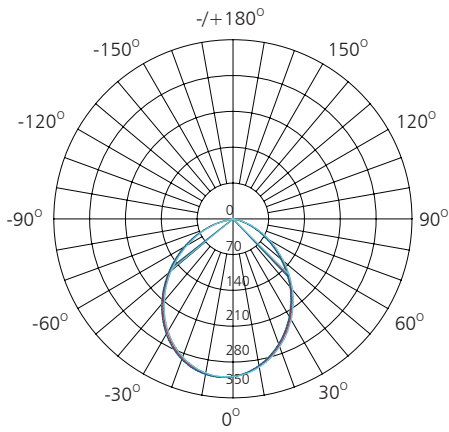
Spectral Distribution



Photometric Diagram



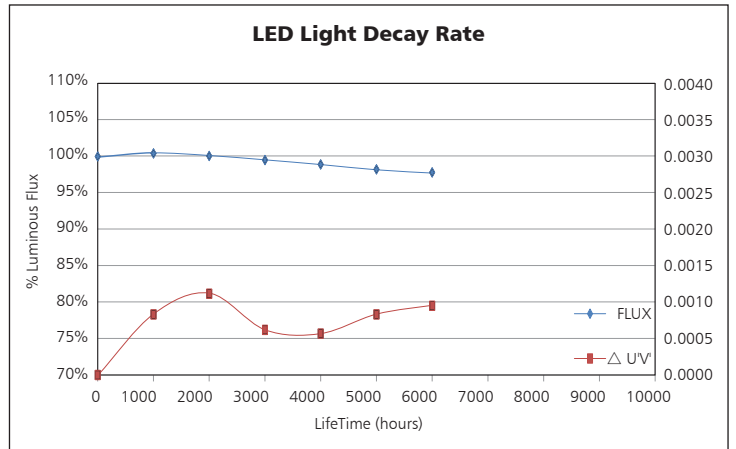
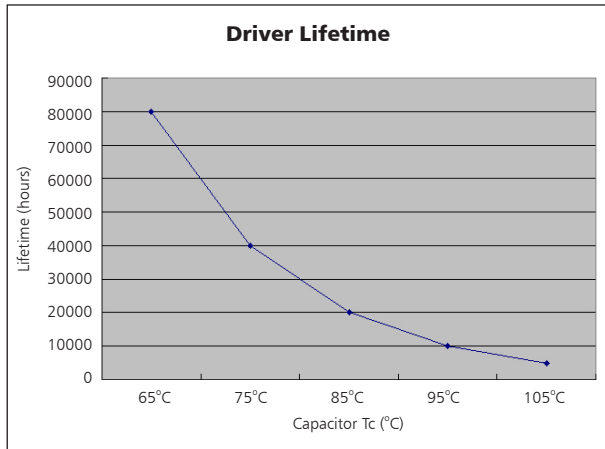
Polar Diagram Comparison



AVERAGE BEAM ANGLE (50%): 95.6DEG



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

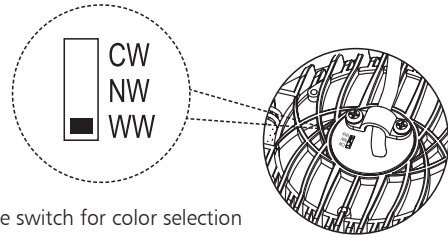
Time	IC (°C)	Capacitor (°C)	MOS (°C)	PCB (°C)	LED (°C)	Fitting (°C)	Environmental (°C)
18:37:46	35	60	70	70	60	60	25
19:07:44	35	60	70	70	60	60	25
19:37:44	35	60	70	70	60	60	25
20:07:44	35	60	70	70	60	60	25
20:37:44	35	60	70	70	60	60	25
21:07:44	35	60	70	70	60	60	25
21:37:44	35	60	70	70	60	60	25
22:07:44	35	60	70	70	60	60	25
22:37:44	35	60	70	70	60	60	25
23:07:44	35	60	70	70	60	60	25
23:37:44	35	60	70	70	60	60	25
0:07:44	35	60	70	70	60	60	25
0:37:44	35	60	70	70	60	60	25
1:07:44	35	60	70	70	60	60	25
1:37:44	35	60	70	70	60	60	25
2:07:44	35	60	70	70	60	60	25
2:37:44	35	60	70	70	60	60	25
3:07:44	35	60	70	70	60	60	25
3:37:44	35	60	70	70	60	60	25
4:07:44	35	60	70	70	60	60	25
4:37:44	35	60	70	70	60	60	25
5:07:44	35	60	70	70	60	60	25
5:37:44	35	60	70	70	60	60	25
6:07:44	35	60	70	70	60	60	25
6:37:44	35	60	70	70	60	60	25
7:07:44	35	60	70	70	60	60	25
7:37:44	35	60	70	70	60	60	25
8:07:44	35	60	70	70	60	60	25
8:37:44	35	60	70	70	60	60	25
9:07:44	35	60	70	70	60	60	25

The driver lifespan is based on capacitor working temperature.

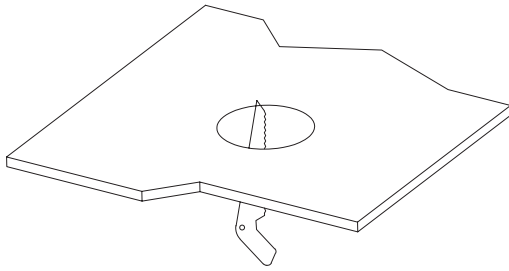
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Installation

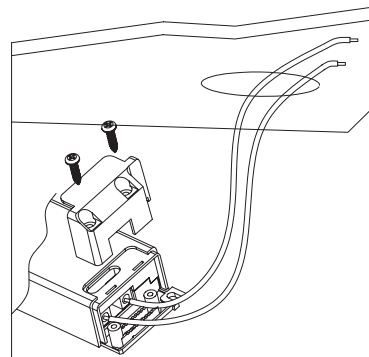
For the product with Slide Switch of Color Selection, please select the light color (CW/NW/WW) before installation.



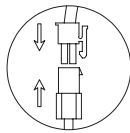
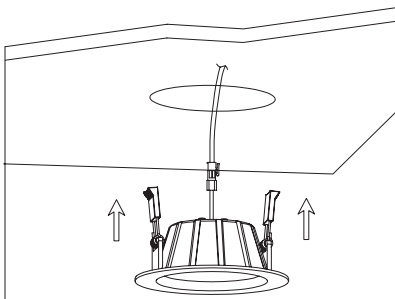
Slide switch for color selection



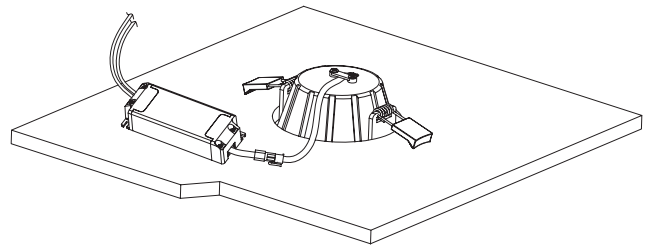
1. Open a hole according to the cutout size of led downlight.



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)	Q'TY(PCs)
Carton	48.5*37*29.5	0.3	13.4	36

	CTNS	Q'TY(PCs)	VOLUME(CBM)
20" standard container	519	18684	28
40" standard container	1038	37368	56

