

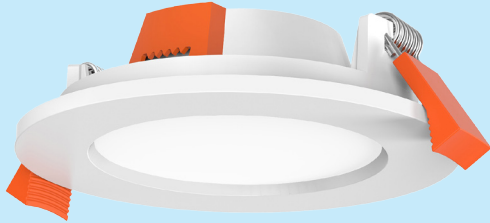


Up-shine<sup>®</sup> Lighting



Technical Application  
Guide for UP SHINE  
LED Downlight  
UP-DL94-3-7W

# Introduction



Up-shine ultra thin LED downlight DL94 model adopts side-emitting design, high lumen SMD LED, PC diffuser with even light output. Equipped with aluminum heating sink, 94-V0 fire rated PC housing and internal driver. Dimmable version available, it shares great popularity by the excellent dimming effect. Up-shine ultra thin LED downlight is suitable for various applications perfectly even narrow and low ceiling.

- Up to 70% energy saving compared to standard CFL
- Long lifetime of 40,000 hours
- Triac dim
- 120° wide beam angle
- 90-95mm cutout
- CCT: 3000K 4000K  
5000K 5700K
- No UV/IR light
- Environment friendly, without Mercury or any other hazardous substances

## Application notes

- IP40 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.

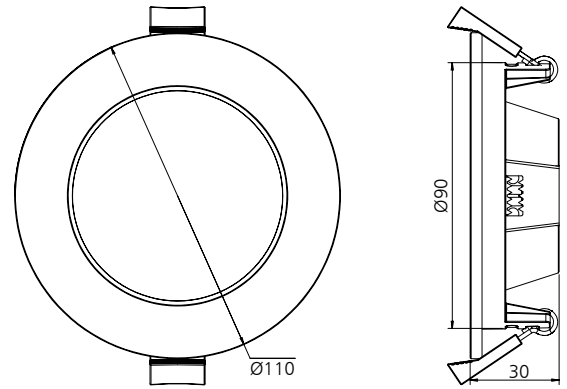
## Certificate



**RoHS**



# Product Information



## Technical Specifications

| Model          | Voltage  | Power | Power Factor | Lumen (±5%) | Beam angle | CCT   | Lifespan | CRI | Dimmable | Dimension                |
|----------------|----------|-------|--------------|-------------|------------|-------|----------|-----|----------|--------------------------|
| UP-DL94-3-7W   | 100-240V | 7W    | ≥0.9         | 510         | 120°       | 3000K | 40000h   | ≥80 | No       | Ø110*30mm cutout 90-95mm |
| UP-DL94-3-7W   | 100-240V | 7W    | ≥0.9         | 530         | 120°       | 4000K | 40000h   | ≥80 | No       | Ø110*30mm cutout 90-95mm |
| UP-DL94-3-7W   | 100-240V | 7W    | ≥0.9         | 530         | 120°       | 5000K | 40000h   | ≥80 | No       | Ø110*30mm cutout 90-95mm |
| UP-DL94-3-7W   | 100-240V | 7W    | ≥0.9         | 580         | 120°       | 5700K | 40000h   | ≥80 | No       | Ø110*30mm cutout 90-95mm |
| UP-DL94-3-7W-D | 230V     | 7W    | ≥0.9         | 490         | 120°       | 3000K | 40000h   | ≥80 | Yes      | Ø110*30mm cutout 90-95mm |
| UP-DL94-3-7W-D | 230V     | 7W    | ≥0.9         | 500         | 120°       | 4000K | 40000h   | ≥80 | Yes      | Ø110*30mm cutout 90-95mm |
| UP-DL94-3-7W-D | 230V     | 7W    | ≥0.9         | 500         | 120°       | 5000K | 40000h   | ≥80 | Yes      | Ø110*30mm cutout 90-95mm |
| UP-DL94-3-7W-D | 230V     | 7W    | ≥0.9         | 560         | 120°       | 5700K | 40000h   | ≥80 | Yes      | Ø110*30mm cutout 90-95mm |

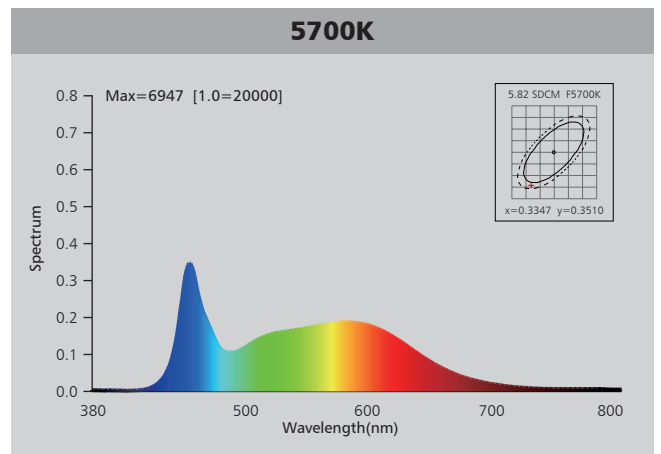
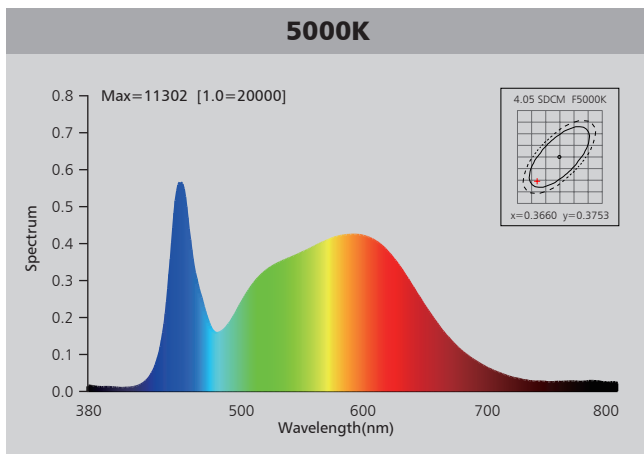
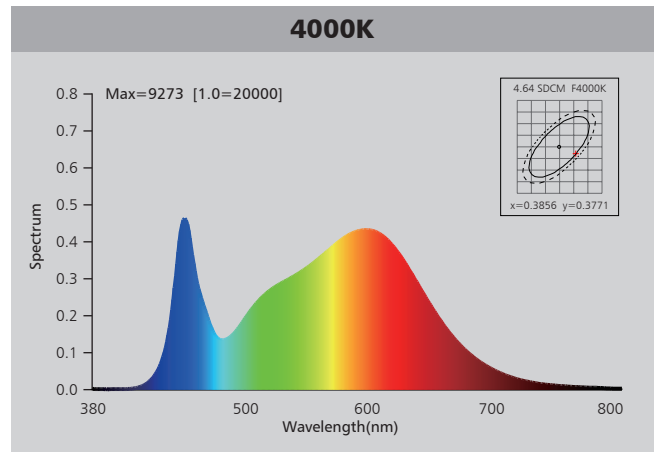
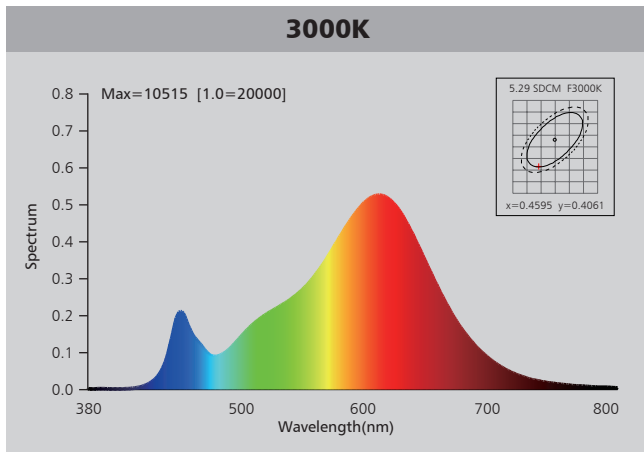
## Driver data Sheet

| Driver data                 | DIM           | Non dim     |
|-----------------------------|---------------|-------------|
| Input rated Voltage         | AC230V        | AC100-240V  |
| Frequency                   | 50Hz          | 50/60Hz     |
| Input Voltage               | AC200-240V    | AC85-265V   |
| Efficiency                  | ≥80%          | ≥85%        |
| Total load Wattage          | 7W±0.5W       | 7W±0.5W     |
| Power Factor                | ≥0.9          | ≥0.9        |
| Rated input current         | ≤0.04A        | ≤0.08A      |
| Full load output Voltage    | DC55-65V      | DC55-78V    |
| Rated output current        | 100mA         | 110mA       |
| Output current range        | 100mA±5%      | 110mA±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% @ 230V |

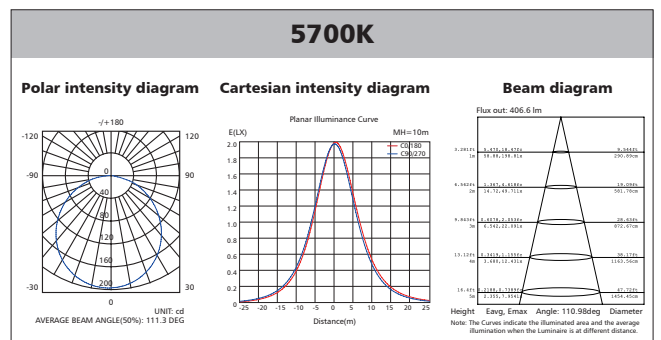
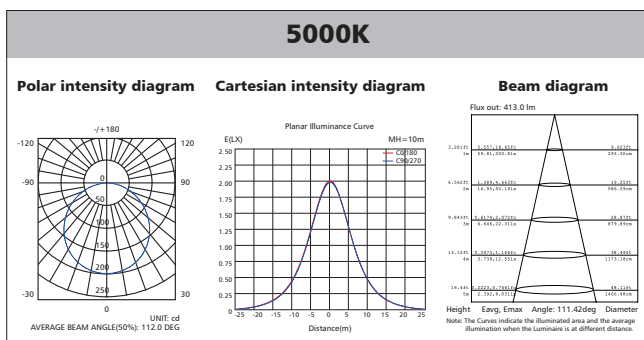
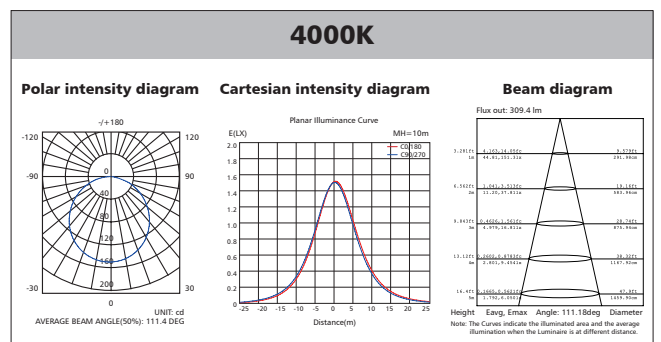
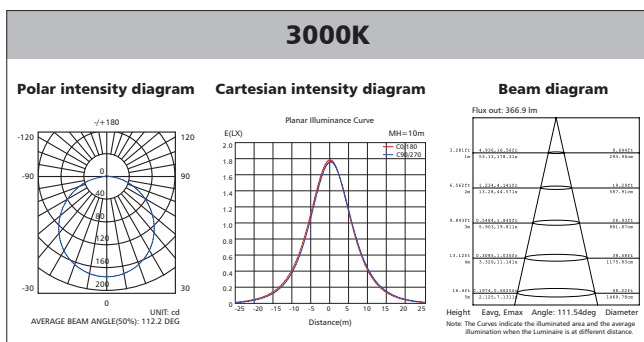
## Fixture Compatibility

| Rated Wattage | Electrical Classification | Ingress Protection | Operating Temp | Operating Humidity | Storage Temp |
|---------------|---------------------------|--------------------|----------------|--------------------|--------------|
| 7W            | II                        | IP40               | -20°C~45°C     | 0~90%              | -20°C~65°C   |

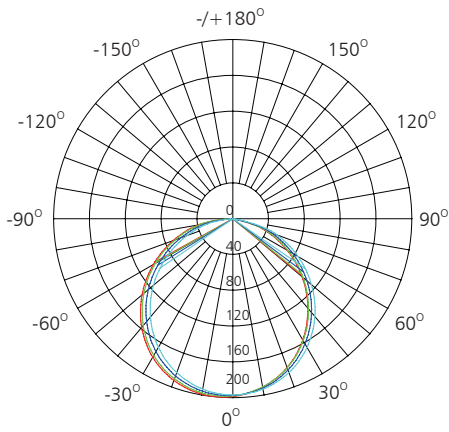
# Spectral Distribution



# Photometric Diagram



# Polar Diagram Comparison



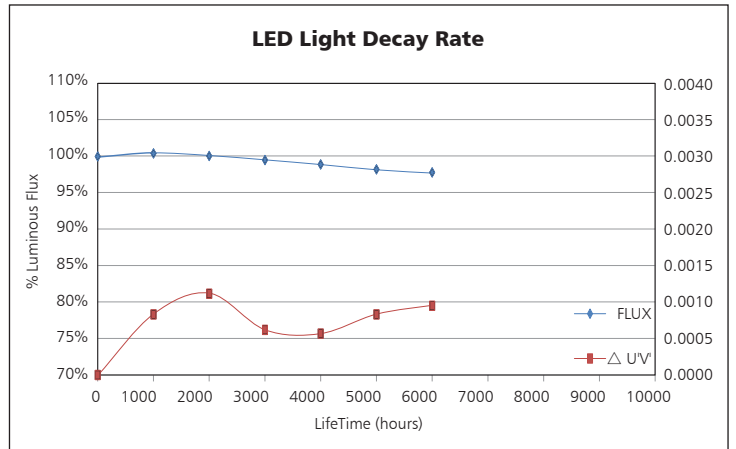
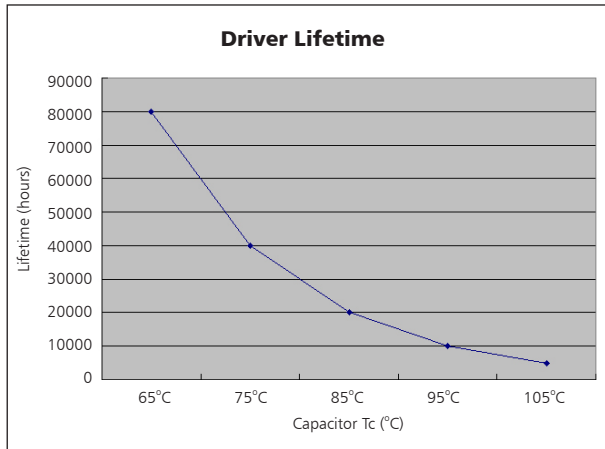
UNIT: cd

- C0/180, 111.4 deg
- C30/210, 111.4 deg
- C60/240, 111.3 deg
- C90/270, 111.3 deg



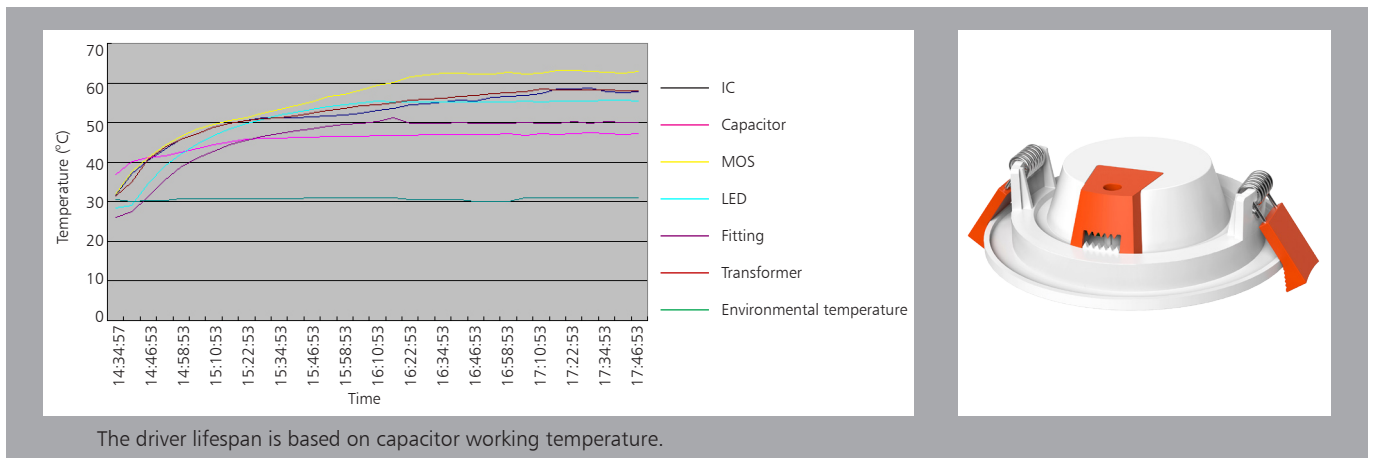
AVERAGE BEAM ANGLE (50%): 111.3 DEG

# Driver lifetime & LED light decay rate



# Temperature

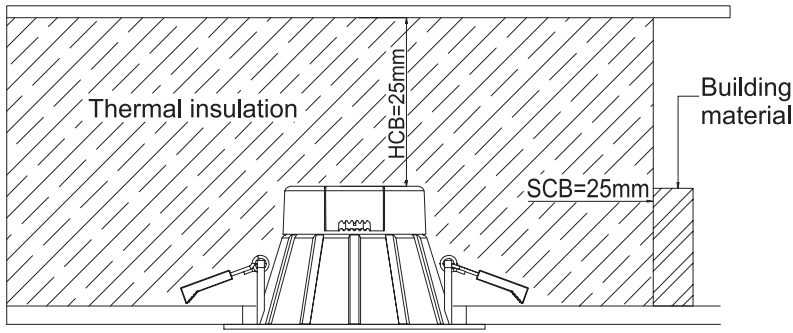
- The testing is operated at 25°C
- The lifetime of capacitor, minimum of 5,000 hours if operated at 105°C, will be doubled whenever the temperature drops 10°C
- The highest withstand temperature of IC, MOS could be 120°C
- The highest withstand temperature of LED junction temperature is 150°C



The driver lifespan is based on capacitor working temperature.



# Installation



|  |   |
|--|---|
| <p>1. Open a hole according to the cutout size of led downlight.</p>       | <p>2. Use screw-driver to open the driver terminal cover on the back of downlight, feed the main AC wire L, N. in terminal block respectively, then fix the cover back.</p> |
| <p>3. Hold back the spring clip then push the downlight into the hole.</p> | <p>4. Make sure the downlight fixed tightly in ceiling, turn on the power (Fig 1).</p>  |

# Packaging Information

|        | SIZE(CM) | N.W/pc (KGS) | G.W.(KGS) | QTY(PCS) |
|--------|----------|--------------|-----------|----------|
| Carton | 50*26*29 | 0.15         | 8.0       | 48       |

|                        | CTNS | QTY(PCS) | VOLUME(CBM) |
|------------------------|------|----------|-------------|
| 20" standard container | 722  | 34656    | 28          |
| 40" standard container | 1444 | 69312    | 56          |

