



# Technical Application Guide for UP-SHINE LED Panel Light

UP-PL2X2-40W

UP-PL2X2-40WD

# Introduction



Up-shine LED troffer adopts LM-80 SMD led chip, with UL&cUL, DLC approved for North America market. 1X4, 2X2, 2X4 sizes are available for various demand. Branded led driver with top quality component ensures long life time. 0-10V dimmable and non-dimmable version both provided.

The ultra slim profile fits seamlessly into any workplace. It is available in the following installation ways: embedded into ceiling, suspended with hanging wires.

- Up to 80% energy saving compared to standard CFL
- Long lifetime of 50,000 hours
- 0-10V dimmable
- 120° wide beam angle
- CCT: 2700K 3000K  
4000K 5000K
- No UV/IR light
- Environment friendly, without Mercury or any other hazardous substances

## Application notes

- IP40 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

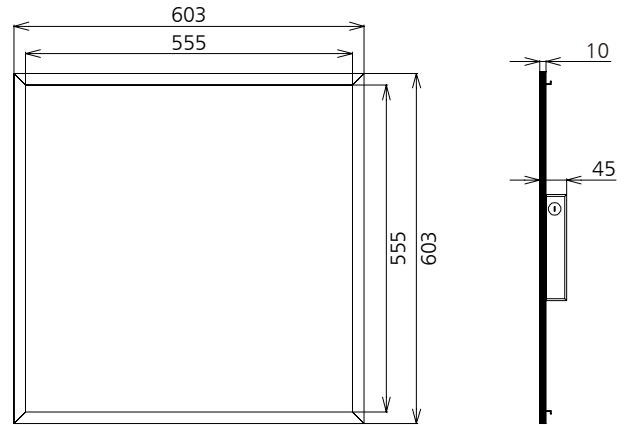
## Application Areas

Widely used for various commercial lighting and residential lighting applications, such as offices, shopping mall, hotel, restaurant, hospital, home lighting etc.

## Certificates



# Product Information



## Technical Specifications

| Model         | Voltage    | Power | Power Factor | Lumen (±5%) | Beam angle | CCT   | Lifespan | CRI | Dimmable | Dimension    |
|---------------|------------|-------|--------------|-------------|------------|-------|----------|-----|----------|--------------|
| UP-PL2X2-40W  | AC100-277V | 40W   | ≥0.9         | 3400        | 120°       | 2700K | 50000h   | ≥80 | No       | 603*603*10mm |
| UP-PL2X2-40W  | AC100-277V | 40W   | ≥0.9         | 3440        | 120°       | 3000K | 50000h   | ≥80 | No       | 603*603*10mm |
| UP-PL2X2-40W  | AC100-277V | 40W   | ≥0.9         | 3480        | 120°       | 4000K | 50000h   | ≥80 | No       | 603*603*10mm |
| UP-PL2X2-40W  | AC100-277V | 40W   | ≥0.9         | 3520        | 120°       | 5000K | 50000h   | ≥80 | No       | 603*603*10mm |
| UP-PL2X2-40WD | AC100-277V | 40W   | ≥0.9         | 3480        | 120°       | 2700K | 50000h   | ≥80 | Yes      | 603*603*10mm |
| UP-PL2X2-40WD | AC100-277V | 40W   | ≥0.9         | 3520        | 120°       | 3000K | 50000h   | ≥80 | Yes      | 603*603*10mm |
| UP-PL2X2-40WD | AC100-277V | 40W   | ≥0.9         | 3560        | 120°       | 4000K | 50000h   | ≥80 | Yes      | 603*603*10mm |
| UP-PL2X2-40WD | AC100-277V | 40W   | ≥0.9         | 3600        | 120°       | 5000K | 50000h   | ≥80 | Yes      | 603*603*10mm |

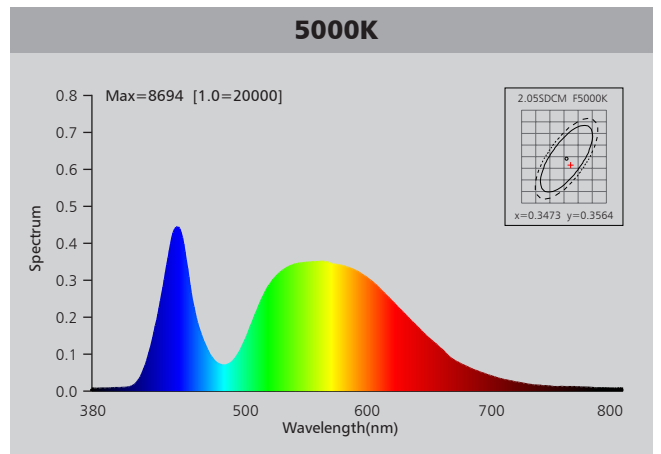
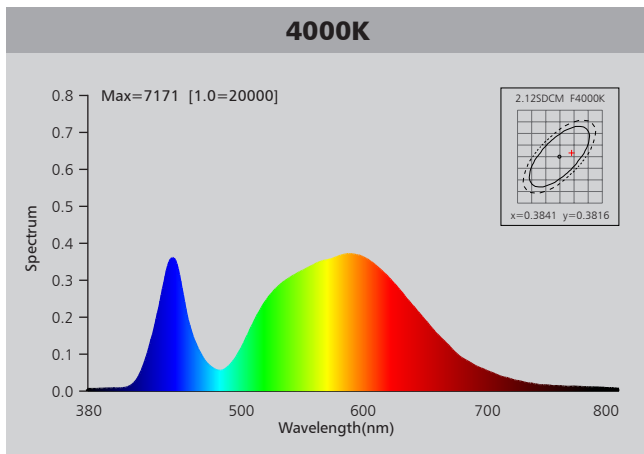
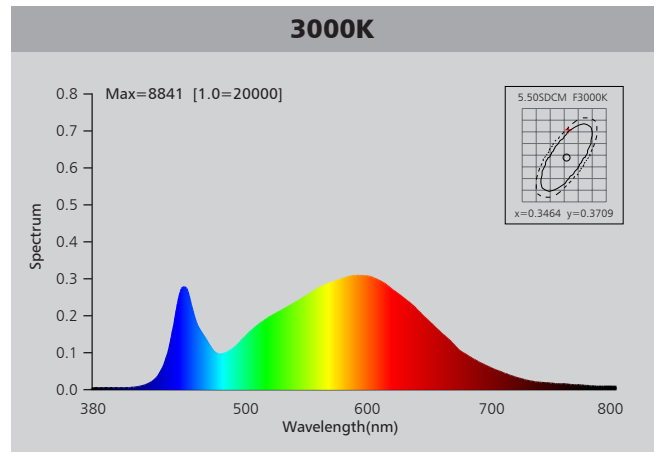
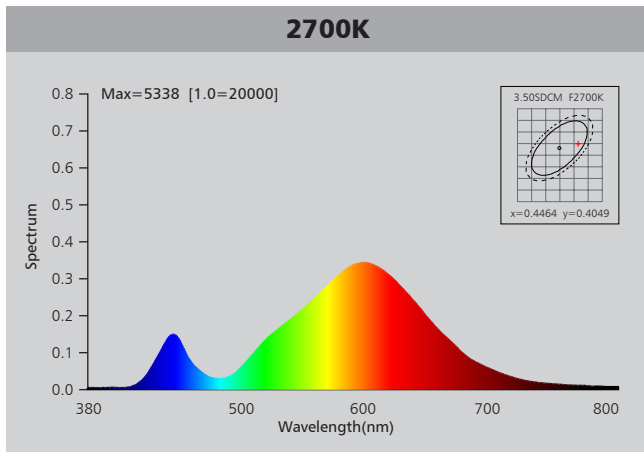
## Driver data Sheet

| Driver data                 | DIM           | Non-dim    |
|-----------------------------|---------------|------------|
| Input rated Voltage         | AC100-277V    | AC100-277V |
| Frequency                   | 50/60Hz       | 50/60Hz    |
| Input Voltage               | AC90-305V     | AC90-305V  |
| Efficiency                  | ≥85%          | ≥85%       |
| Total load Wattage          | 40W±5%        | 40W±5%     |
| Power Factor                | ≥0.9          | ≥0.9       |
| Rated input current         | ≤0.5A         | ≤0.5A      |
| Full load output Voltage    | DC35-38V      | DC35-38V   |
| Rated output current        | 950mA         | 950mA      |
| Output current range        | 950mA±5%      | 950mA±5%   |
| Power tolerance             | ±5%           | ±5%        |
| Current output tolerance    | ±5%           | ±5%        |
| Dimming range               | 1%-100%       | —          |
| Dimmer                      | 0V-10V dimmer | —          |
| Short circuit protection    | PASS          | PASS       |
| Over voltage protection     | PASS          | PASS       |
| Over temperature protection | PASS          | PASS       |
| Withstand voltage           | AC3750V       | AC3750V    |

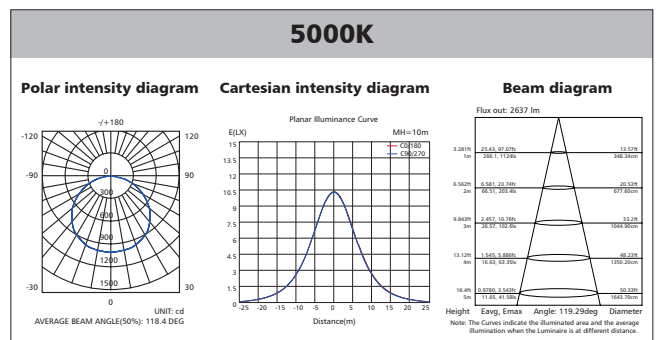
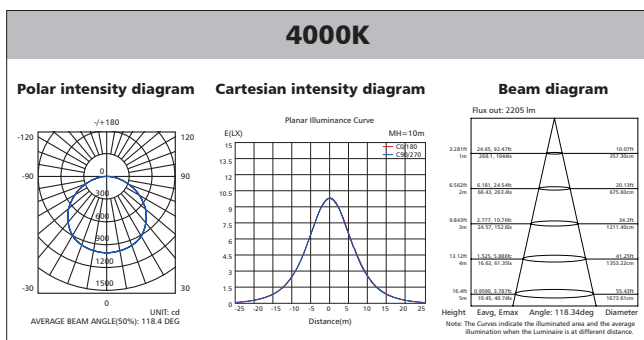
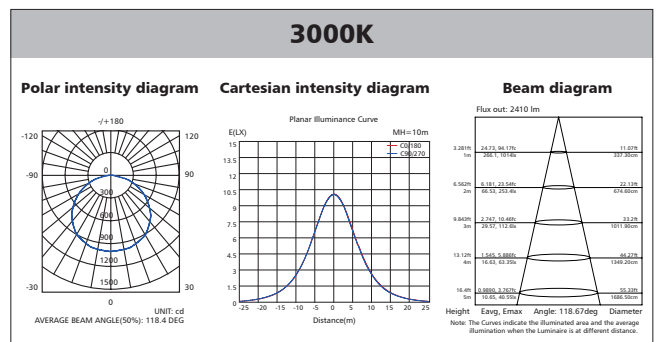
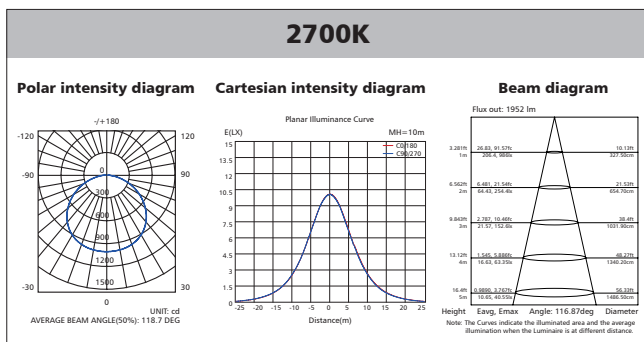
## Fixture Compatibility

| Rated Wattage | Electrical Classification | Ingress Protection | Operating Temp | Operating Humidity | Storage Temp |
|---------------|---------------------------|--------------------|----------------|--------------------|--------------|
| 40W           | II                        | IP40               | -20°C~45°C     | 0~90%              | -20°C~65°C   |

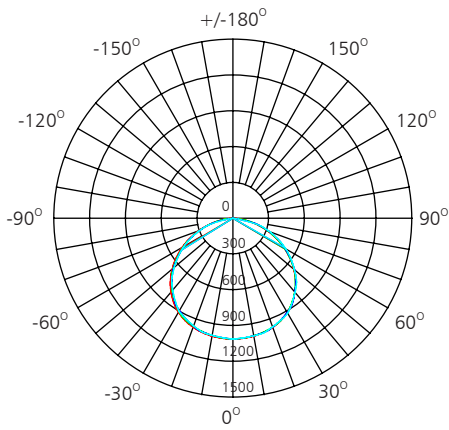
# Spectral Distribution



# Photometric Diagram



# Polar Diagram Comparison



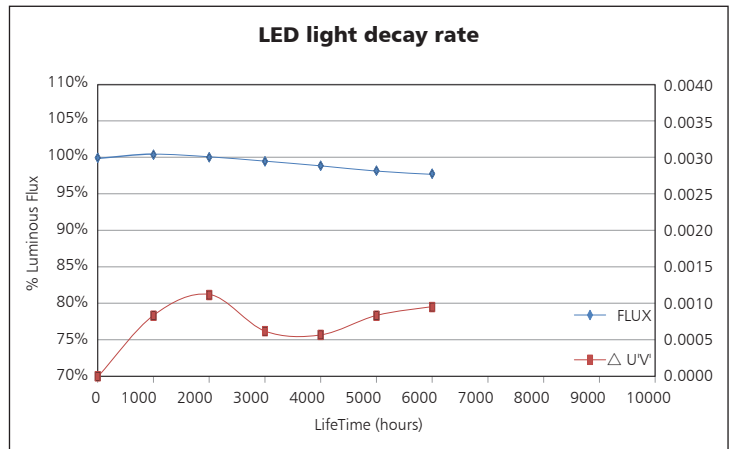
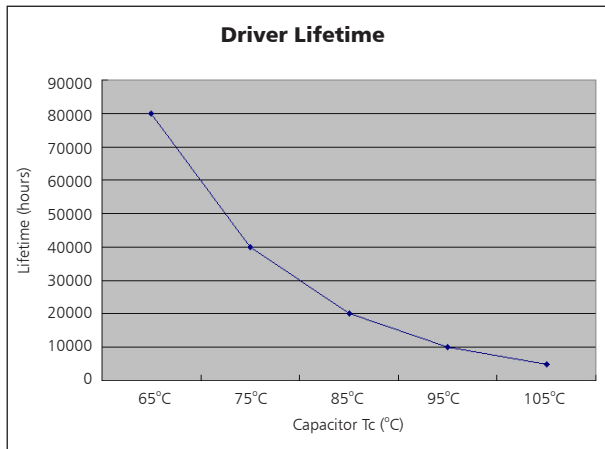
UNIT: cd

- C0/180, 118.7 deg
- C30/210, 118.0 deg
- C60/240, 118.1 deg
- C90/270, 118.6 deg

AVERAGE BEAM ANGLE (50%): 118.4DEG

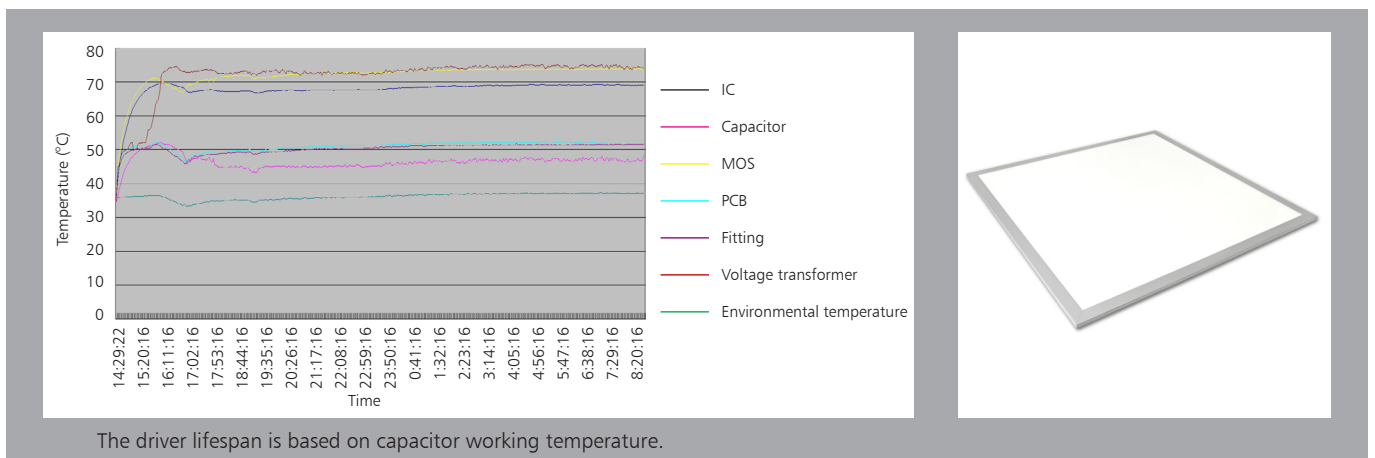


# Driver lifetime & LED light decay rate



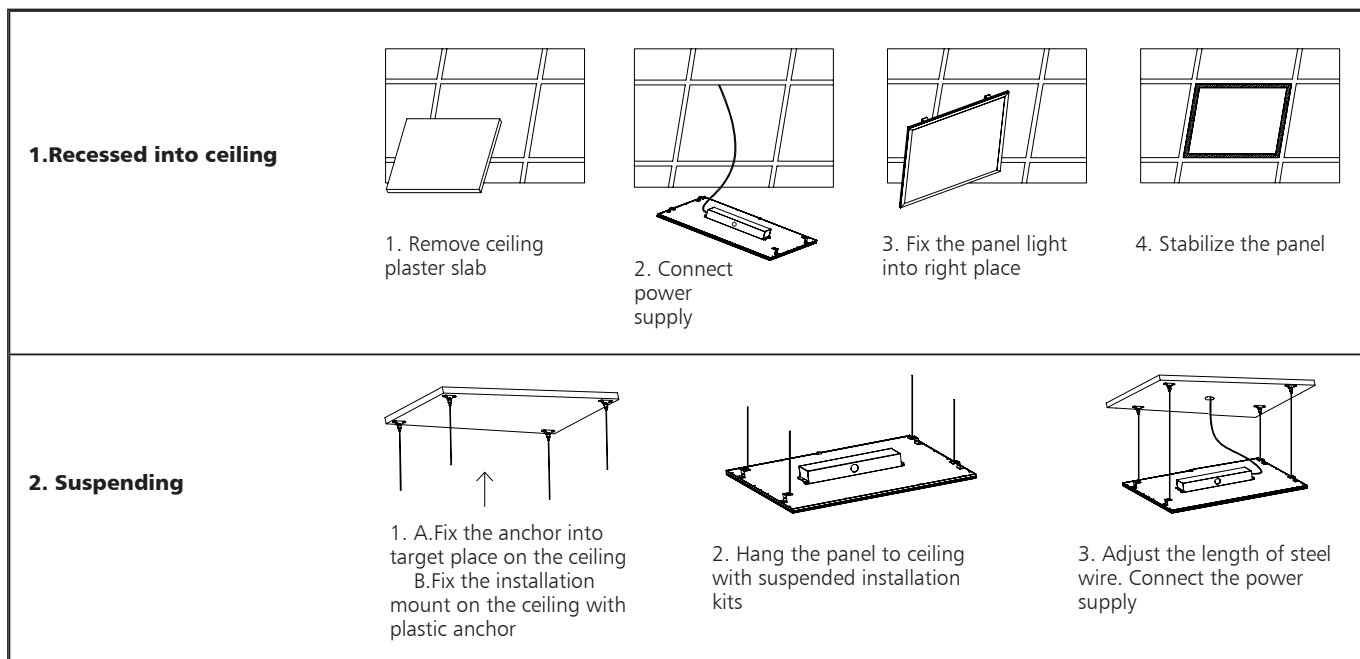
# Temperature

- 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



# Packaging Information

|        | SIZE(CM)   | N.W/pc (KGS) | G.W.(KGS) | Q'TY(PCS) |
|--------|------------|--------------|-----------|-----------|
| Carton | 67*31*67.5 | 4.8          | 25.5      | 4         |

|                        | CTNS | Q'TY(PCS) | VOLUME(CBM) |
|------------------------|------|-----------|-------------|
| 20" standard container | 195  | 780       | 28          |
| 40" standard container | 390  | 1560      | 56          |

