



**RL Europe**

Your partner in LED



# Technical Application Guide for RL EUROPE LED Cylinder

UP-PD02D-18W

# Introduction



PD02 whole lamp adopts straightforward design with stylish appearance, easy to install, simple and generous, paying more attention to leisure and comfort. It gives space a clear and lively feelings. Different color of surface ring is optional, which could create diversified light atmosphere according to different environment.

The lamp adopts high quality reflector which has good reflective rate and light output > 86%. AL6063 Aluminum radiator in sand blast oxidation treatment provides excellent heat dissipation and corrosion resistance. High lumen COB chip with CRI>80. PF>0.9, THD<20%, passed EMC test with strong anti-jamming capability. Besides, it possesses short-circuit protection and overvoltage protection function, showing high safety performance.

- Up to 70% energy saving compared to standard CFL
- Long lifetime of 50,000 hours
- 15°/24°/36° beam angle
- CCT: 2700K 3000K  
4000K 5000K
- No UV/IR light
- Environment friendly, without Mercury or any other hazardous substances
- Internal Driver
- CREE COB

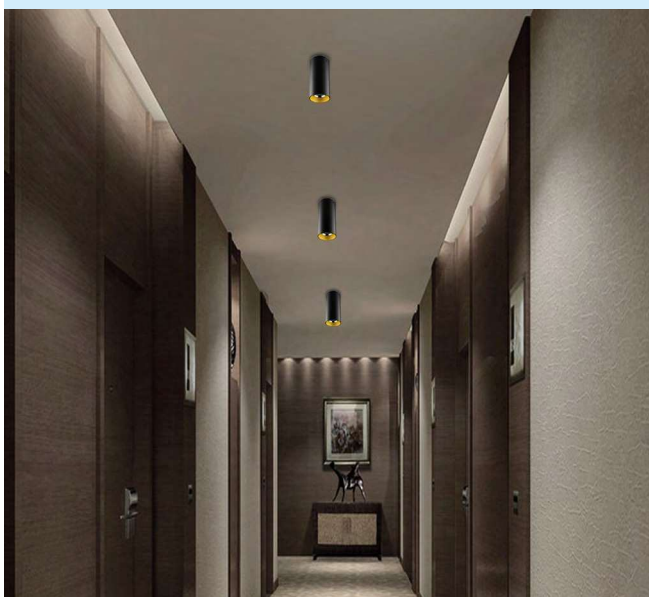
## Application notes

- 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

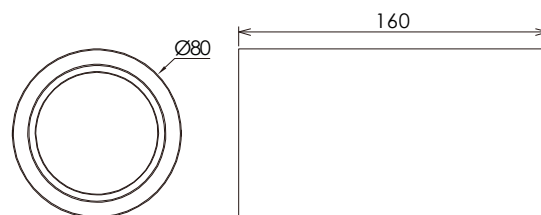
## Application Areas

Applicable for residential lighting in bedroom, living room, corridor etc, also suitable for commercial lighting in office, hotel, restaurant etc.

## Certificate



# Product Information



## Technical Specifications

Model	Voltage	Power	Power Factor	Lumen ( $\pm 5\%$ )	CCT	Beam angle	Lifespan	CRI	Dimmable	Dimension
UP-PD02D-18W	AC200-240V	18W	$\geq 0.9$	1660	2700K	15°/24°/36°	50,000h	$\geq 80$	No	$\varnothing 80 \times 160\text{mm}$
				1800	3000K					
				1920	4000K					
				1970	5000K					
UP-PD02D-18W-D	AC200-240V	18W	$\geq 0.9$	1590	2700K	15°/24°/36°	50,000h	$\geq 80$	Yes	$\varnothing 80 \times 160\text{mm}$
				1710	3000K					
				1820	4000K					
				1870	5000K					

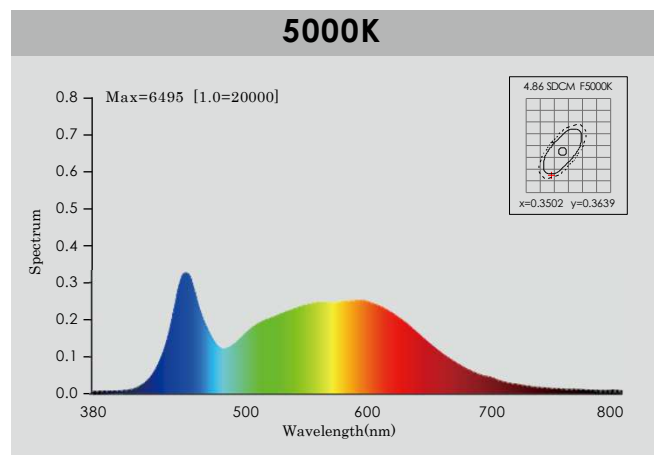
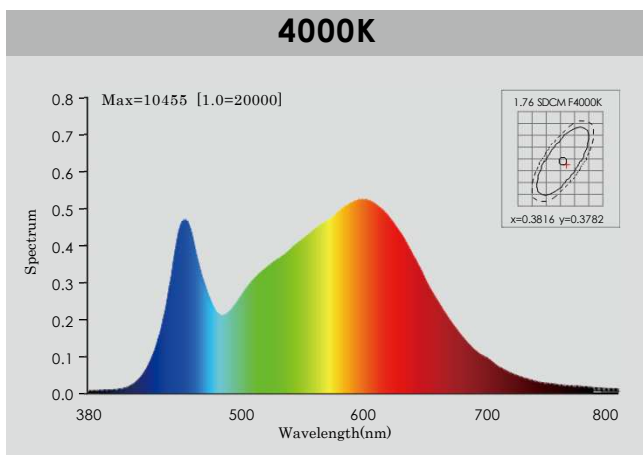
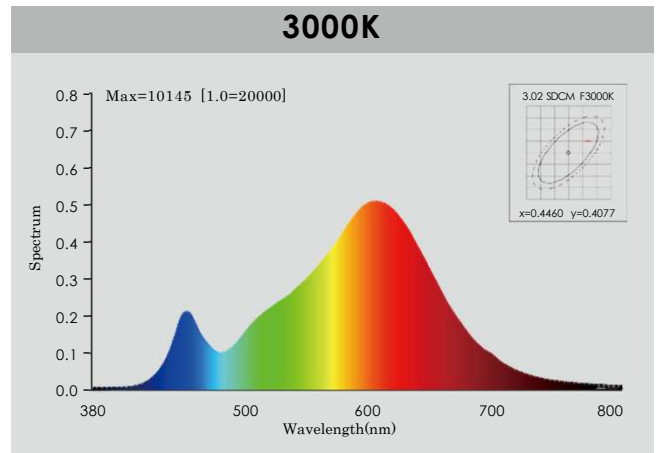
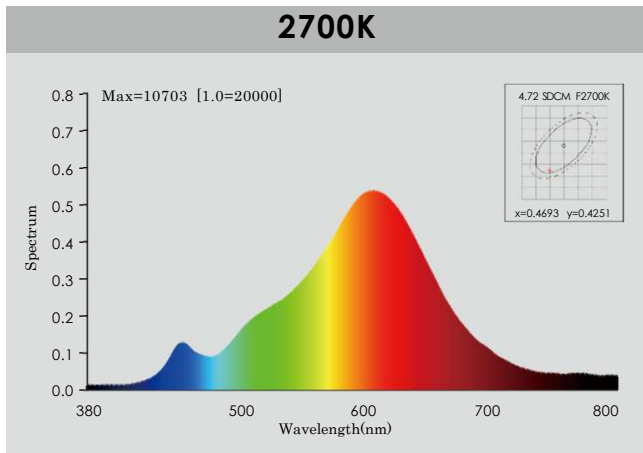
## Driver data Sheet

Driver data	DIM	Non dim
Input rated Voltage	AC200-240V	AC200-240V
Frequency	50Hz	50/60Hz
Input Voltage	AC200-240V	AC200-240V
Efficiency	$\geq 84\%$	$\geq 85\%$
Total load Wattage	18W $\pm$ 1W	18W $\pm$ 1W
Power Factor	$\geq 0.9$	$\geq 0.9$
Rated input current	$\leq 0.1\text{A}$	$\leq 0.1\text{A}$
Full load output Voltage	DC30-40V	DC30-40V
Rated output current	450mA	450mA
Output current range	450mA $\pm$ 5%	450mA $\pm$ 5%
Power tolerance	$\pm 5\%$	$\pm 5\%$
Current output tolerance	$\pm 5\%$	$\pm 5\%$
Dimming range	8%-100%	—
Dimmer	Triac dimmers	—
Short circuit protection	PASS	PASS
Over voltage protection	PASS	PASS
Over temperature protection	PASS	PASS
THD	$\leq 20\%$	$\leq 20\%$
Withstand voltage	—	—

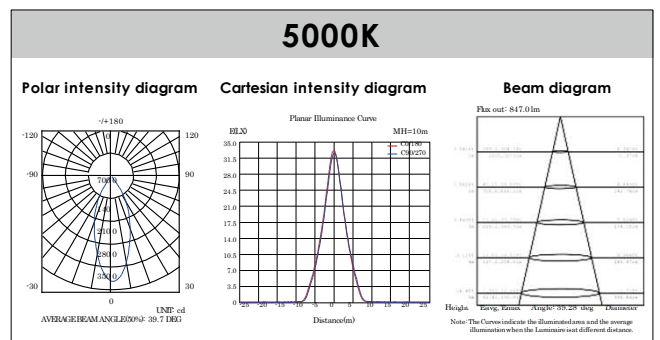
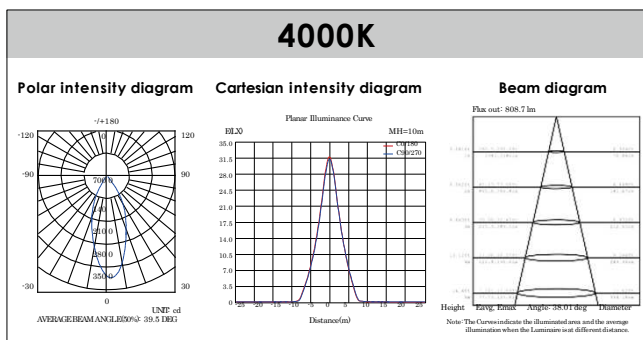
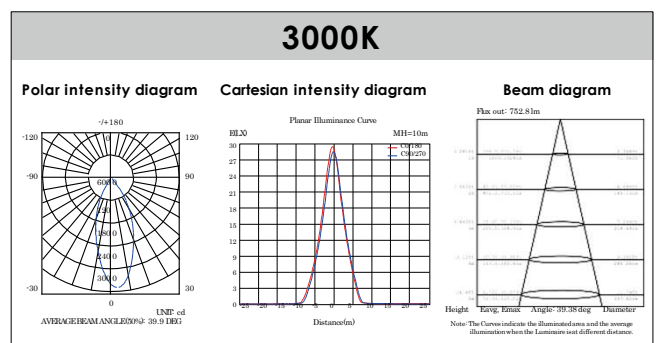
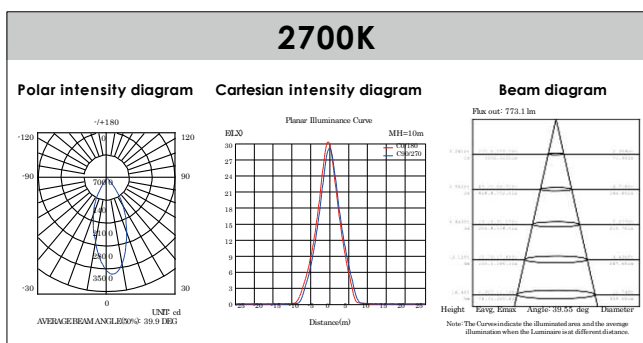
## Fixture Compatibility

Rated Wattage	Electrical Classification	Ingress Protection	Operating Temp	Operating Humidity	Storage Temp
18W	I	IP20	-20°C~45°C	0~90%	-20°C~65°C

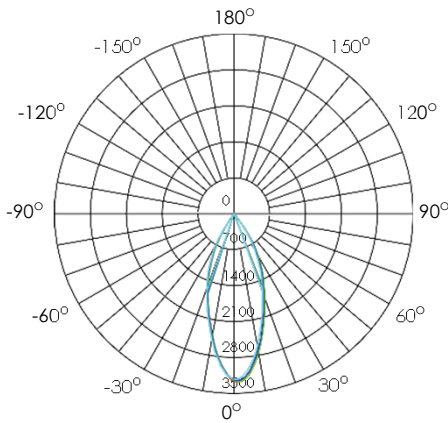
# Spectral Distribution



# Photometric Diagram



## Polar Diagram Comparison



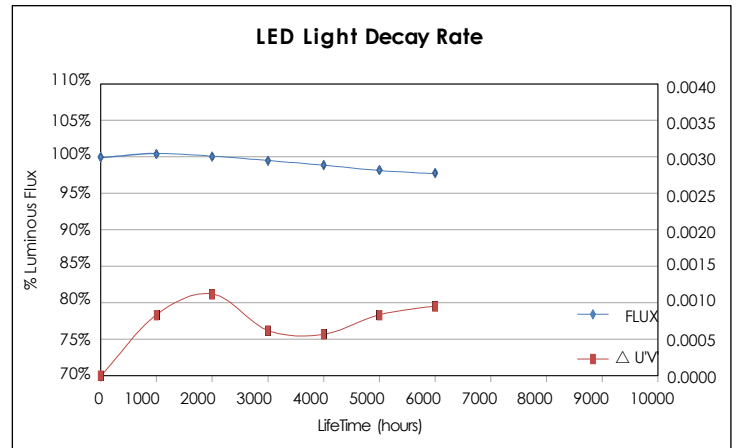
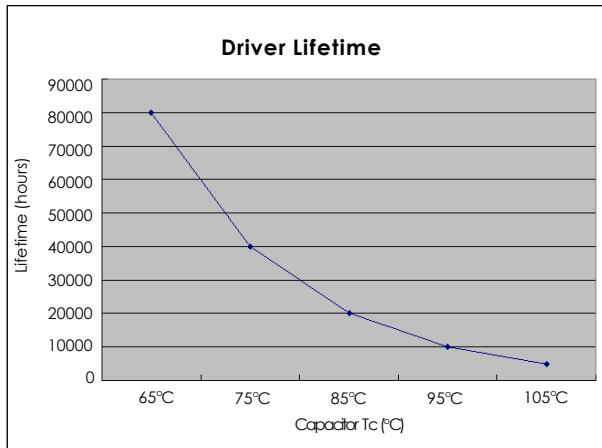
UNIT: cd

- C0/180, 39.8 deg
- C30/210, 39.7 deg
- C60/240, 39.7 deg
- C90/270, 39.8 deg



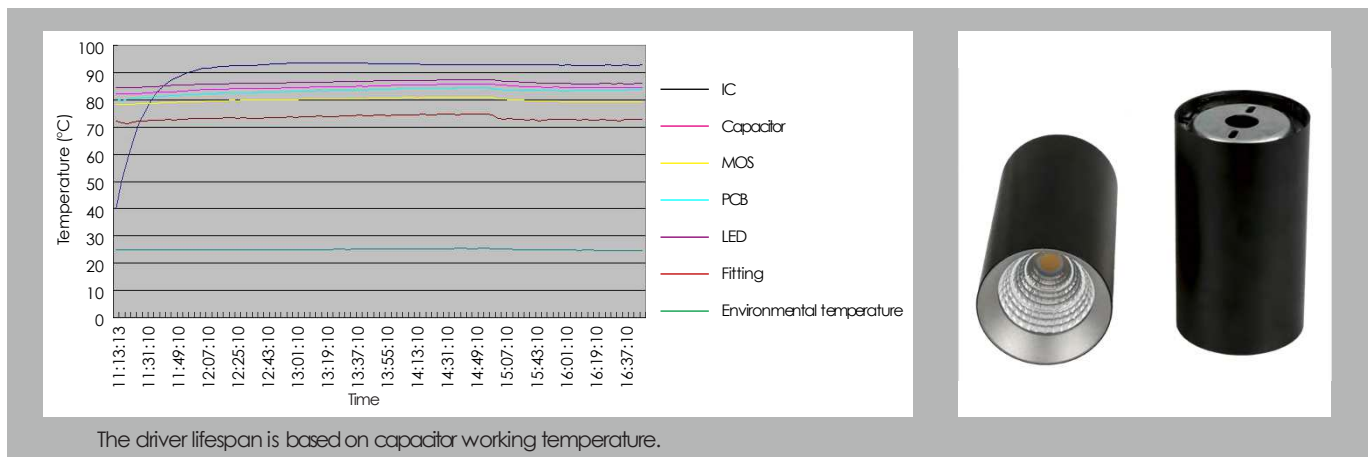
AVERAGE BEAM ANGLE (50%): 39.7DEG

## 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

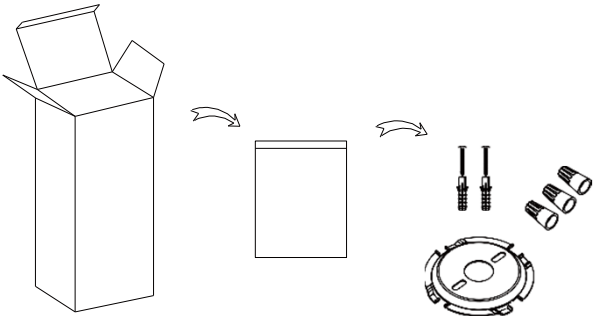


The driver lifespan is based on capacitor working temperature.



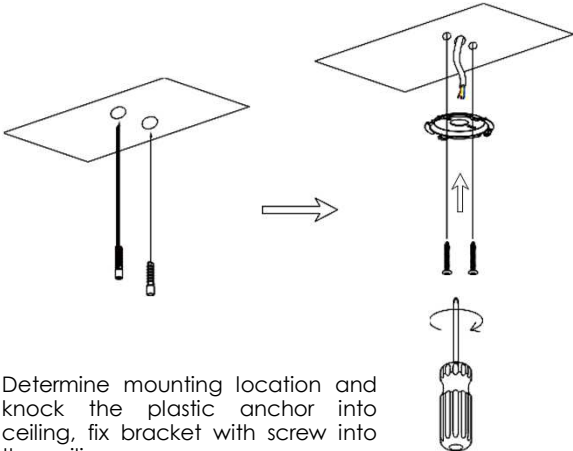
# Installation

1



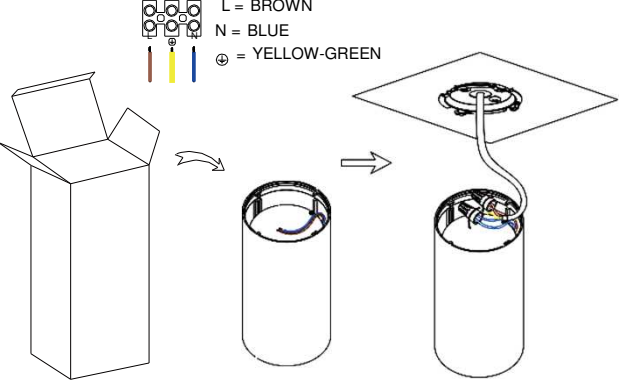
Take out the accessories from accessory box.

2



Determine mounting location and knock the plastic anchor into ceiling, fix bracket with screw into the ceiling.

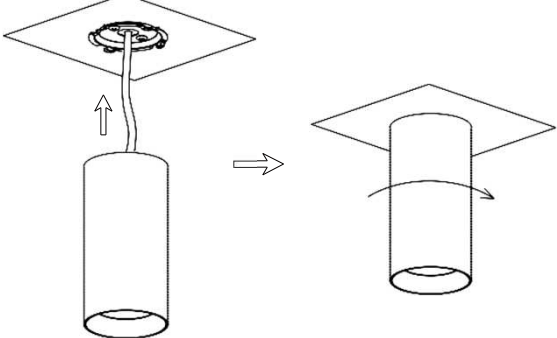
3



Connect the corresponding polarities between the wire on the ceiling and input wire by screw terminal.

L = BROWN  
 N = BLUE  
 ⊕ = YELLOW-GREEN

4



After proper alignment and adjustment between lamp and mounting plate, then rotate the lamp clockwise until it is stuck firmly by mounting plate.

## Packaging Information

	SIZE(CM)	NW/pc (KGS)	G.W.(KGS)	Q'TY(PCS)
Carton	36.5*28*36	0.56	13.5	24

	CTNS	Q'TY(PCS)	VOLUME(CBM)
20" standard container	740	17760	28
40" standard container	1480	35520	56

