



Up-shine[®] Lighting

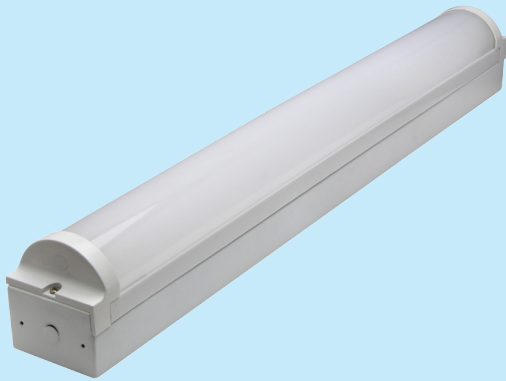


Technical Application Guide for UP-SHINE LED Linear

UP-DB09-600-12W-S

UP-DB09-600-12W-E

Introduction



DB09 LED Linear is mainly designed for Oceania and European market, 2835 high lumen SMD LED chip been used to achieve 105lm/W efficiency. IP54 waterproof structural design, ideal replacement for damp location. Elegant design with 3 types of installation: suspended, surface mounted and recessed, suitable for meeting room, office, school, hospital etc commercial lighting applications.

Microwave sensor provided, adjustable hold-on time and sensitivity, maximally promote communications between human and environment. Emergency version available with more than 3 hours duration. This is our most practical item with extremely high performance.

- Aluminum components generate a rust-free product for less maintenance
- PC Diffuser
- Up to 70% energy saving compared to standard CFL
- Environment friendly, without Mercury or any other hazardous substances

Application notes

- IP54 for indoor use only
- The lamp must be installed by professional electrician
- Ensure the power supply is switched off before fitting this product
- Do not touch the lamp when in use
- Keep away from hot steam and corrosive gas

Application Areas

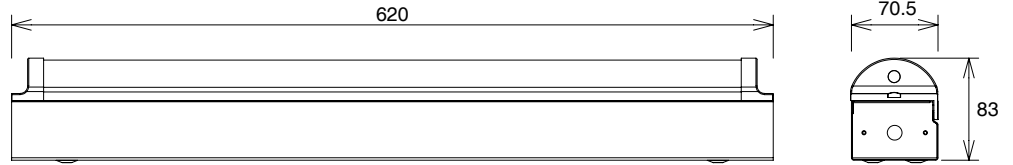
Widely used in office, meeting room, hotel, school etc.

Certificate

RoHS



Product Information



Emergency Specifications

Model	Voltage	Power	Power Factor	Lumen (±5%)	Beam angle	CCT	Lifespan	CRI	Dimmable	Dimension
UP-DB09-600-12W-E	AC230V	12W	≥0.9	1200	120°	3000K	40000h	≥80	No	L620*W70.5*H83mm
UP-DB09-600-12W-E	AC230V	12W	≥0.9	1260	120°	4000K	40000h	≥80	No	L620*W70.5*H83mm
UP-DB09-600-12W-E	AC230V	12W	≥0.9	1240	120°	5000K	40000h	≥80	No	L620*W70.5*H83mm
UP-DB09-600-12W-E	AC230V	12W	≥0.9	1220	120°	5700K	40000h	≥80	No	L620*W70.5*H83mm

Sensor Specifications

Model	Voltage	Power	Power Factor	Lumen (±5%)	Beam angle	CCT	Lifespan	CRI	Dimmable	Dimension
UP-DB09-600-12W-S	AC230V	12W	≥0.9	1200	120°	3000K	40000h	≥80	No	L620*W70.5*H83mm
UP-DB09-600-12W-S	AC230V	12W	≥0.9	1260	120°	4000K	40000h	≥80	No	L620*W70.5*H83mm
UP-DB09-600-12W-S	AC230V	12W	≥0.9	1240	120°	5000K	40000h	≥80	No	L620*W70.5*H83mm
UP-DB09-600-12W-S	AC230V	12W	≥0.9	1220	120°	5700K	40000h	≥80	No	L620*W70.5*H83mm

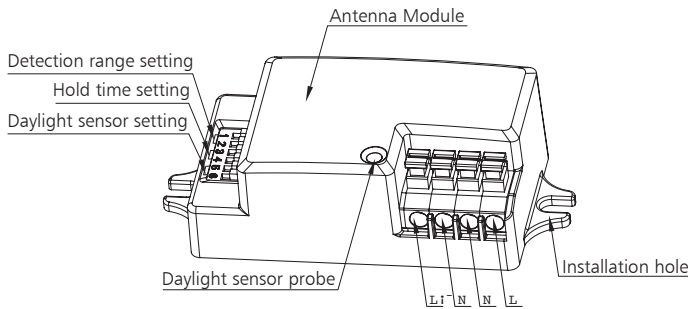
Driver data Sheet

Driver data	Emergency	Main Power	Sensor
Input rated Voltage	AC230V	AC230V	AC230V
Frequency	50Hz	50Hz	50Hz
Input Voltage	AC200-240V	AC200-240V	AC200-240V
Efficiency	≥80%	≥85%	—
Total load Wattage	4W	12W±1W	≤0.5W(standby)
Power Factor	—	≥0.9	—
Rated input current	≤0.04A	≤0.16A	—
Full load output Voltage	DC15-80V	60-75V	—
Rated output current	100-170mA	150mA	—
Output current range	—	150mA±5%	—
Power tolerance	4W±0.5W	±5%	—
Current output tolerance	—	±5%	—
Battery	7.2V 2600mAh	—	—
Lifetime	30000hrs(battery changeable)	—	—
Battery duration	≥ 3hrs	—	—
Charge time	≥ 24hrs	—	—
Emergency switching time	≅ 1S	—	—
Short circuit protection	—	PASS	—
Over voltage protection	—	PASS	—
Over temperature protection	PASS	PASS	—
THD	—	<25% AC230V	—
Withstand voltage	AC1500V	AC1500V	—

Fixture Compatibility

Rated Wattage	Electrical Classification	Ingress Protection	Operating Temp	Operating Humidity	Storage Temp
12W	I	IP54	-20°C~45°C	0~90%	-20°C~65°C

Sensor Setting



UC01

Operating voltage	220~240Vac, 50Hz
Rated load	400W(inductive), 800W(resistive)
HF system	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.2mW
Power consumption	≤0.5W(standby)
Detection zone	Max.(D×H): 10m×6m
Detection sensitivity	10% / 50% / 75% / 100%
Hold time	5s / 90s / 5min / 15min
Daylight sensor	2lux / 10lux / 50lux / Disable
Mounting height	6m Max.
Motion detection	0.5~3m/s
Detection angle	30°-150°
Operating temperature	-20 ~60
IP rating	IP20

By selecting the combination on the DIP switch, sensor data can be precisely set for each specific application.

	1	2	
I	●	●	100%
II	●	○	75%
III	○	●	50%
IV	○	○	10%

Detection area

Detection area can be set by selecting the combination on the switches to fit precisely each application.

	3	4	
I	●	●	5s
II	●	○	90s
III	○	●	5min
IV	○	○	15min

Hold time

Refers to the time period the lamp remains at 100% illumination after no motion detected.
5S for testing purpose only please do not choose 5S for daily use.

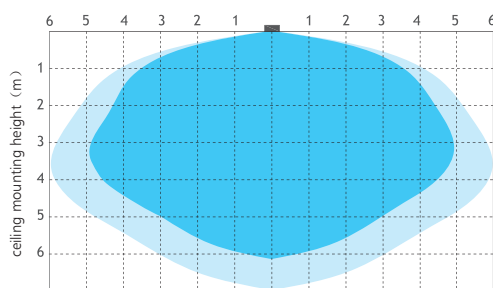
	5	6	
I	●	●	Disable
II	●	○	50Lux
III	○	●	10Lux
IV	○	○	2Lux

Daylight sensor

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.
When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.
50lux: twilight operation, 10lux, 2lux: darkness operation only.

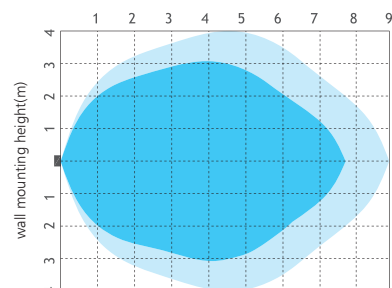
Detection Pattern

Ceiling Mounting pattern (Unit: m)



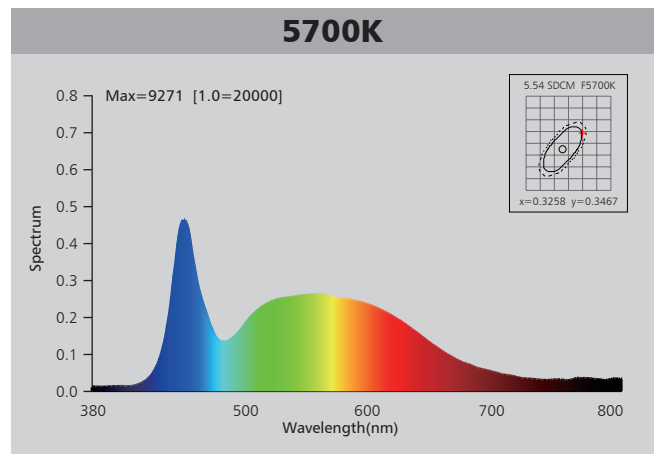
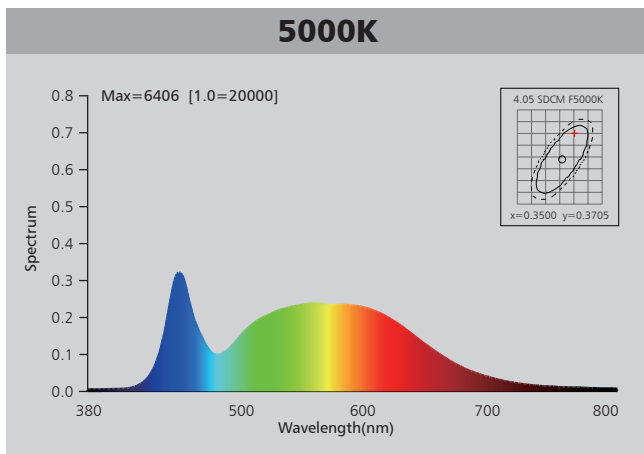
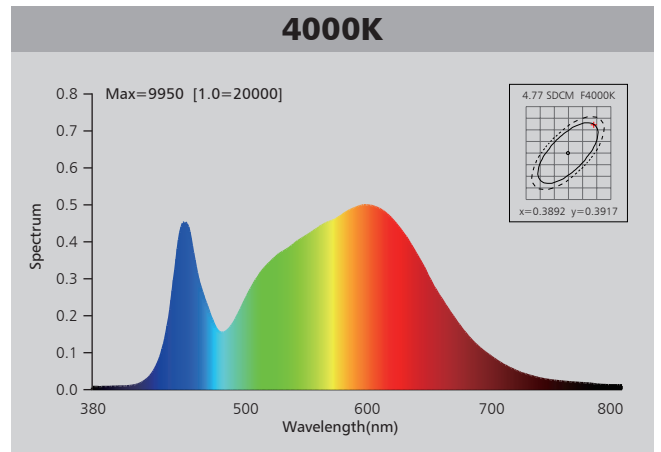
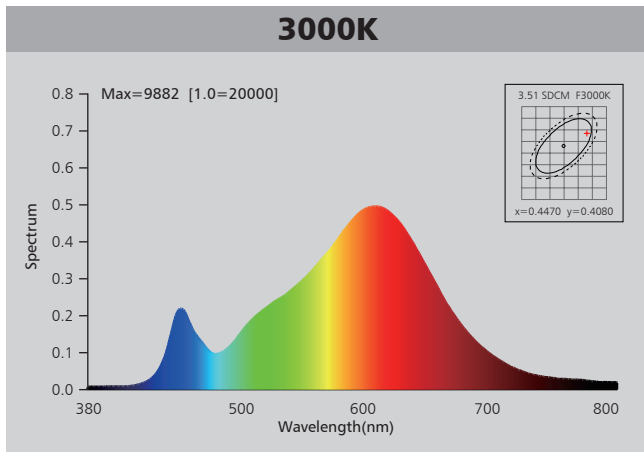
■ High detection area ■ Low detection area

Wall Mounting pattern (Unit: m)

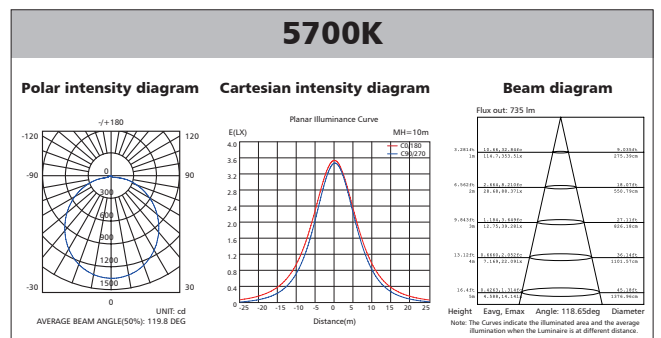
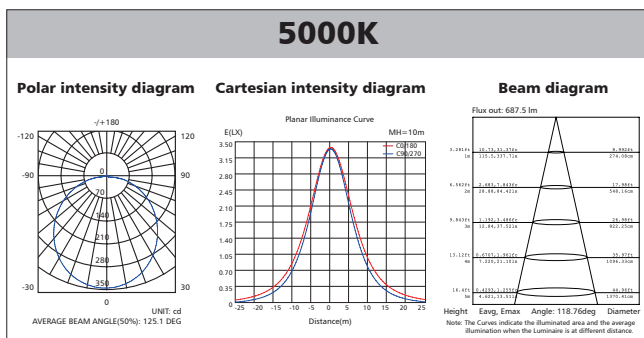
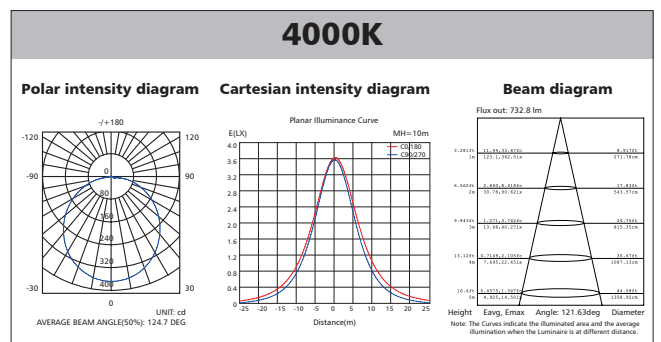
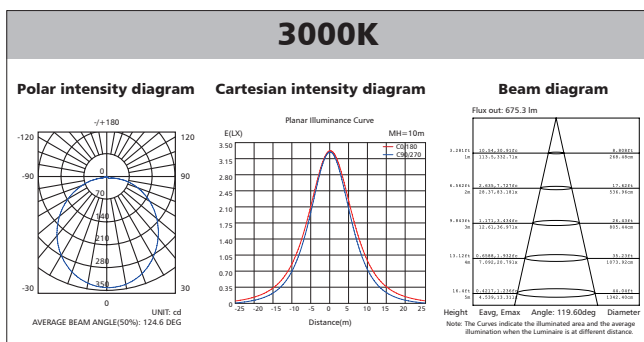


■ High detection area ■ Low detection area

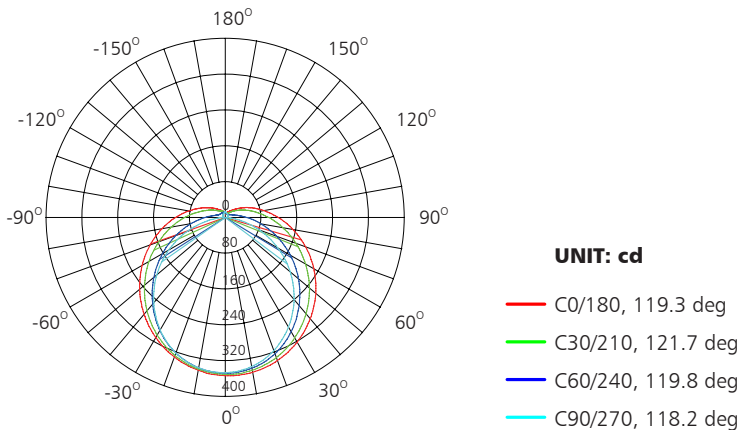
Spectral Distribution



Photometric Diagram

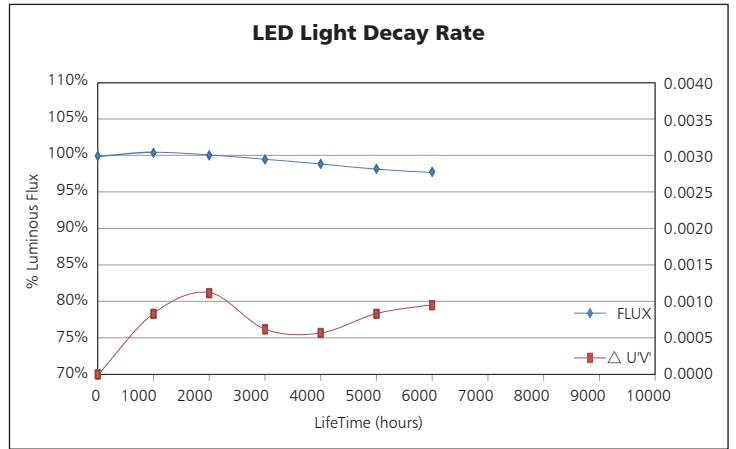
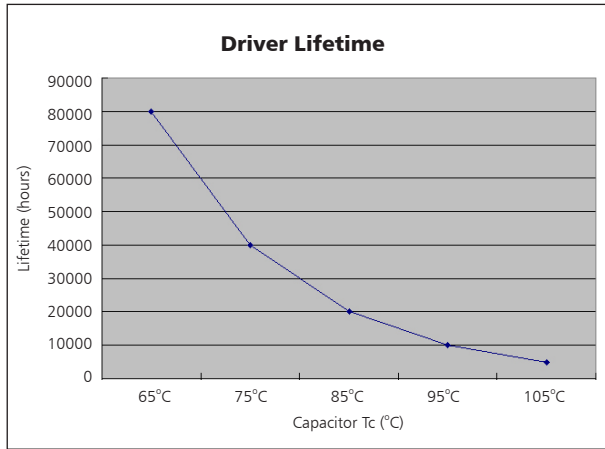


Polar Diagram Comparison



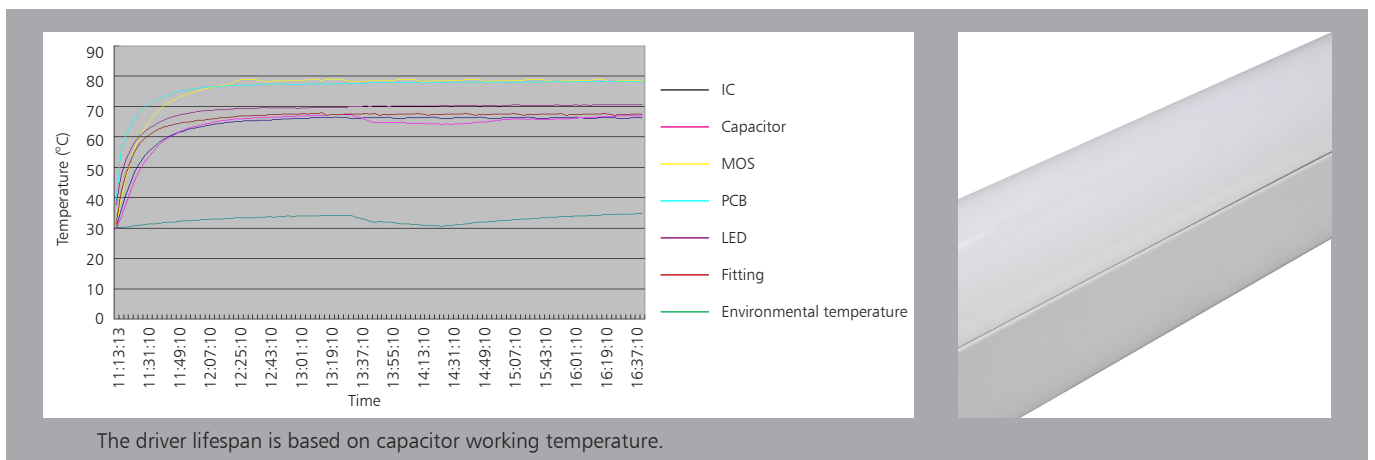
AVERAGE BEAM ANGLE (50%): 122.5DEG

Driver lifetime & LED light decay rate

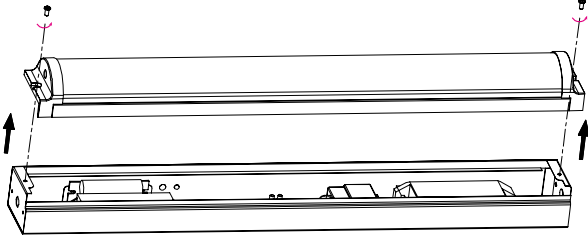
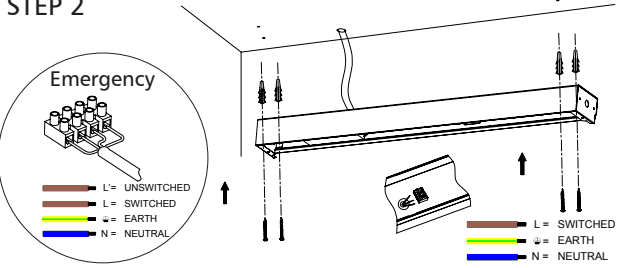
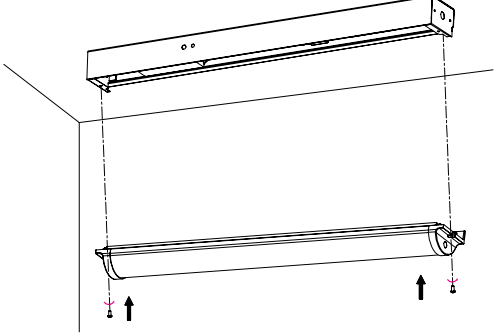
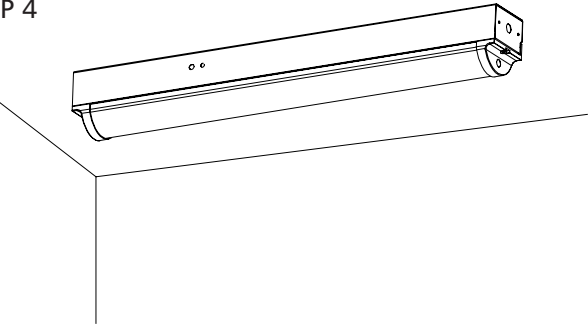


Temperature

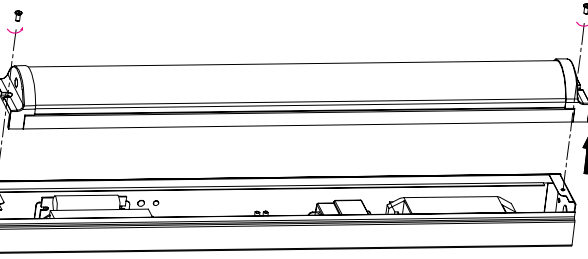
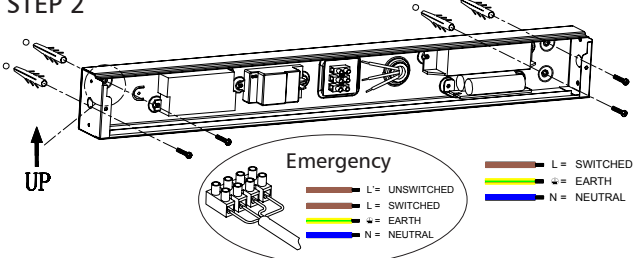
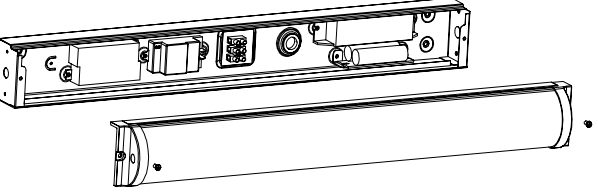
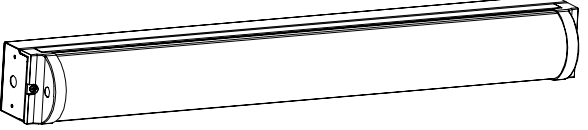
- The testing is operated at 25°C
- The lifetime of capacitor, minimum of 5,000 hours if operated at 105°C, will be doubled whenever the temperature drops 10°C
- The highest withstand temperature of IC, MOS could be 120°C
- The highest withstand temperature of LED junction temperature is 150°C



Surface mount

<p>STEP 1</p>  <p>1.Remove the diffuser and cover as show in figure 1.</p>	<p>STEP 2</p>  <p>2.Determine the mounting location and cable entry direction, put the batten against the ceiling and mark the position of the mounting screw holes. Fix lamp base into ceiling with plastic anchor and screw as shown in figure 2.Route the mains cable through the cable entry hole, connect and terminate wires to the terminal block.</p>
<p>STEP 3</p>  <p>3.Refit the cover and diffuser to base.</p>	<p>STEP 4</p>  <p>4.Restore power and check for correct operation.</p>

wall mount

<p>STEP 1</p>  <p>1.Remove the diffuser and cover as show in figure 1.</p>	<p>STEP 2</p>  <p>2.Determine the mounting location and cable entry direction, put the batten against the ceiling and mark the position of the mounting screw holes. Secure the batten to the ceiling with screw. Route the mains cable through the cable entry hole, connect and terminate wires to the terminal block.</p>
<p>STEP 3</p>  <p>3.Refit the cover and diffuser to base.</p>	<p>STEP 4</p>  <p>4.Restore power and check for correct operation.</p>

Suspend install

1. Determine the mounting location and cable entry direction, put the batten against the ceiling and mark the position of the mounting screw holes.

2. Fix hanging wire locking device into ceiling with plastic anchor and screw. Unscrew lamp housing and take diffuser apart from base. Insert steel wire through lamp housing and fix it into locking device.

3. Route the mains cable through the cable entry hole, connect and terminate wires to the terminal block, refit cover and diffuser to base.

4. Adjust the hanging wire, restore power and check for correct operation.

Emergency

- L = UNSWITCHED
- L = SWITCHED
- = EARTH
- N = NEUTRAL

- L = SWITCHED
- = EARTH
- N = NEUTRAL

Packaging Information

	SIZE(CM)	N.W/pc (KGS)	G.W.(KGS)	Q'TY(PCS)
Carton	65*36.5*33	1.5	20	12

	CTNS	Q'TY(PCS)	VOLUME(CBM)
20" standard container	352	4224	28
40" standard container	704	8448	56

