



UPSHINE®

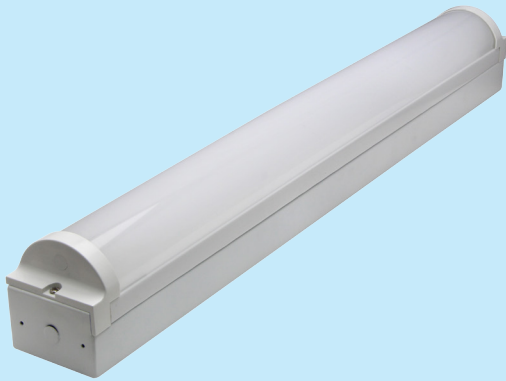


Technical Application Guide for UP-SHINE LED Linear

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

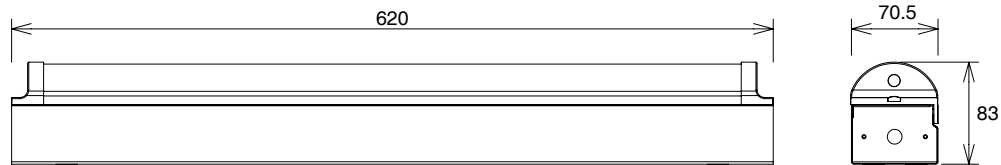
Widely used in office, meeting room, hotel, school etc.

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 |
|-------------------|---------|-------|--------------|-------------|------------|-------|----------|-----|----------|------------------|
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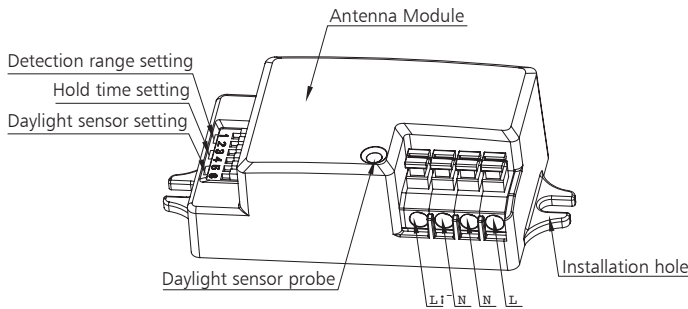
Driver data Sheet

| 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

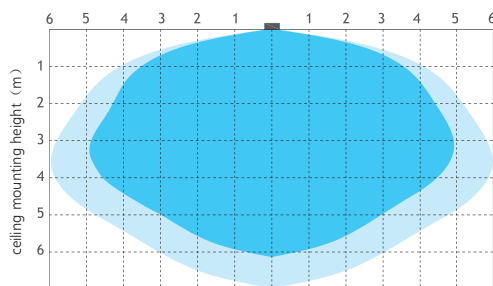
The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold.

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.

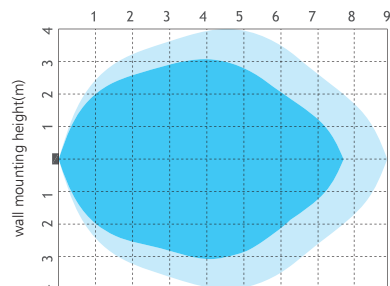
Detection Pattern

Ceiling Mounting pattern (Unit: m)



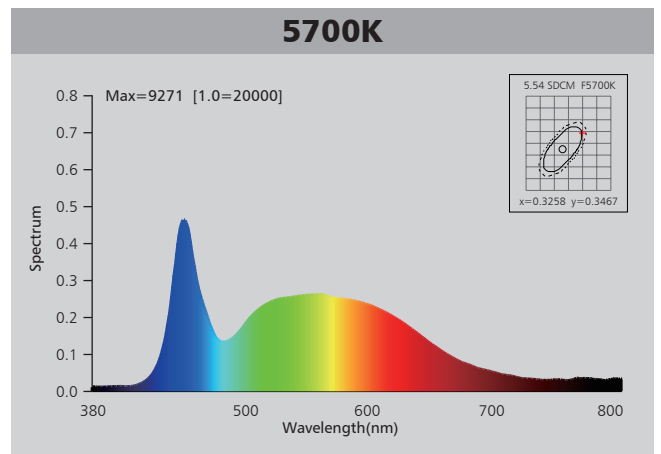
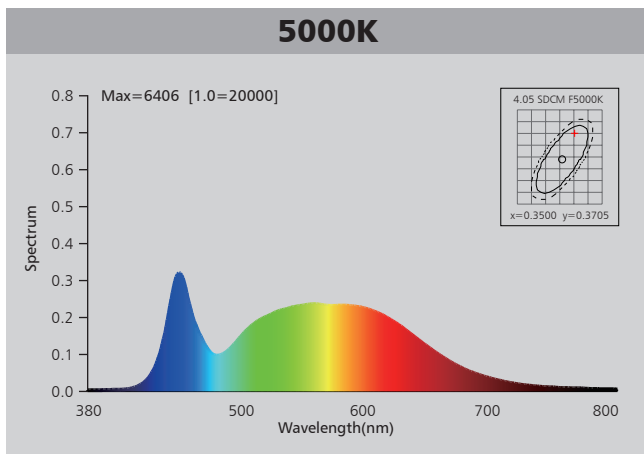
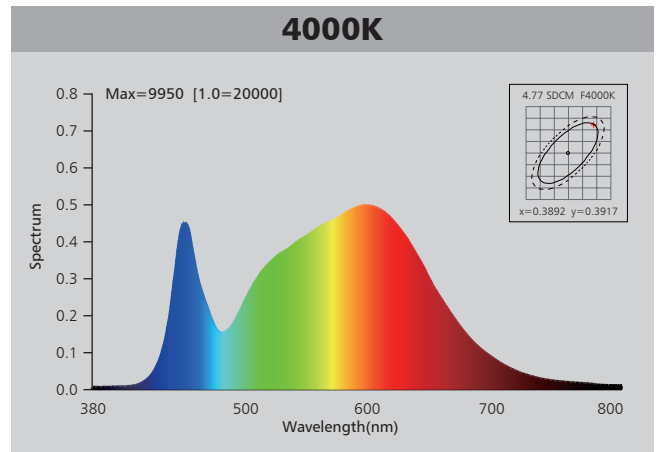
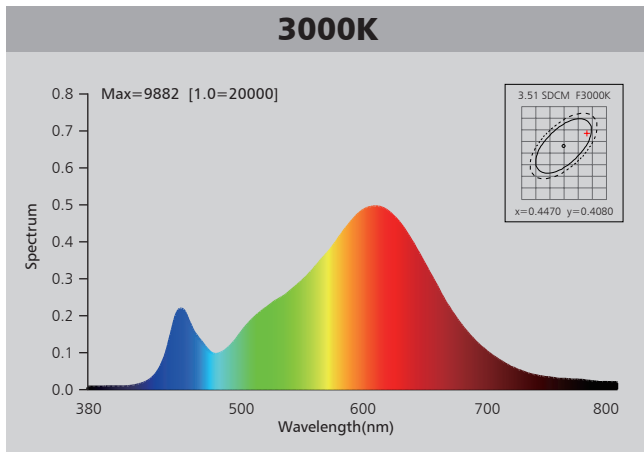
■ High detection area ■ Low detection area

Wall Mounting pattern (Unit: m)

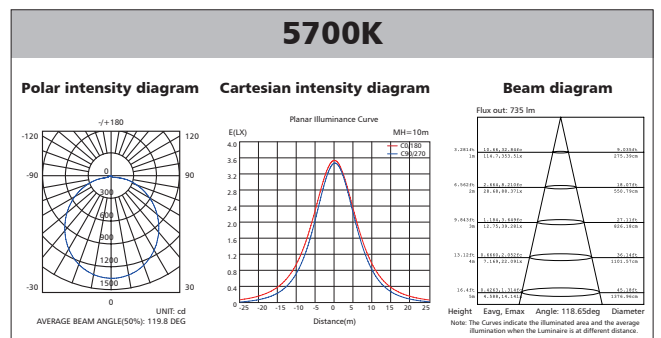
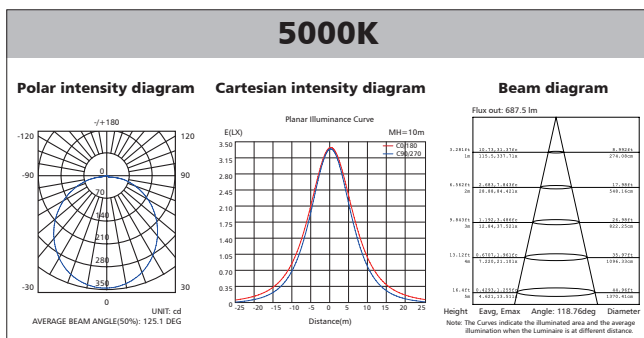
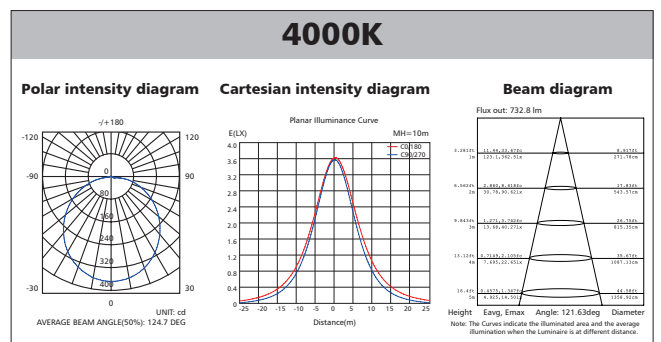
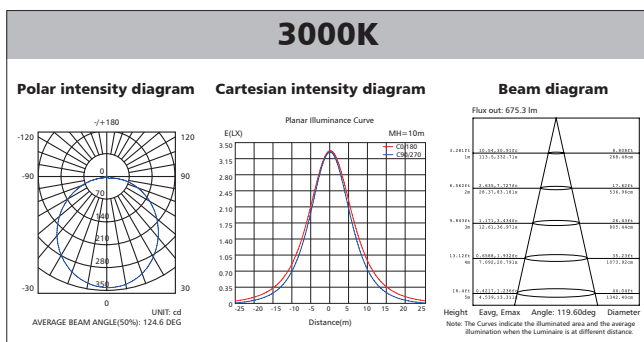


■ High detection area ■ Low detection area

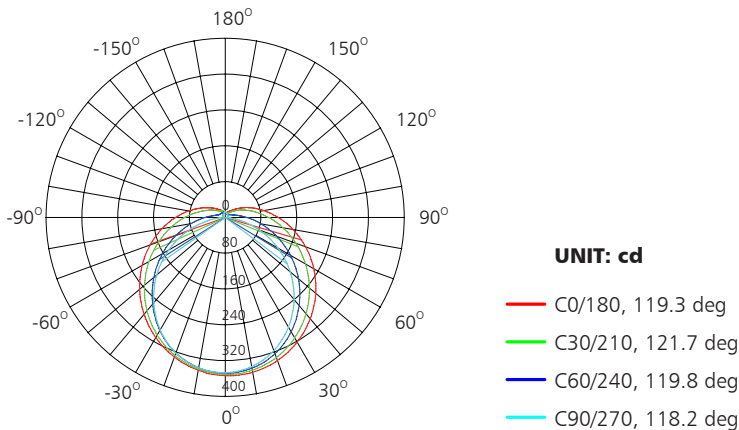
Spectral Distribution



Photometric Diagram

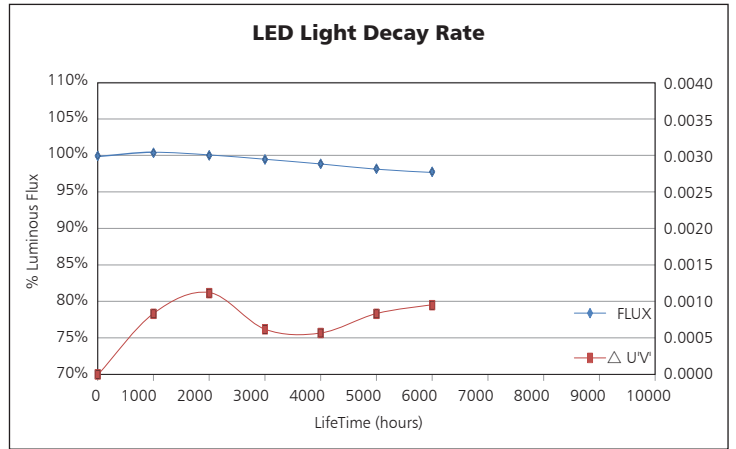
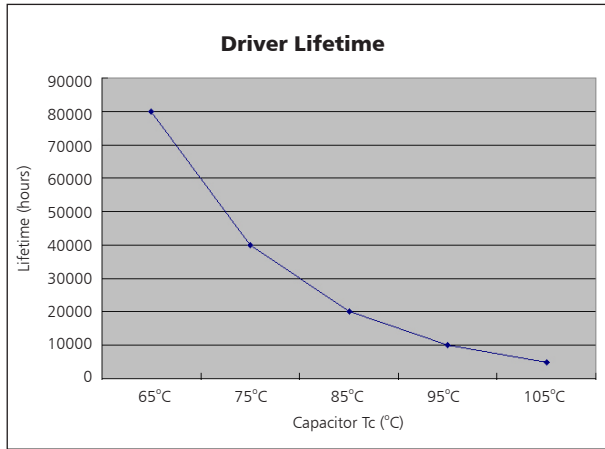


Polar Diagram Comparison



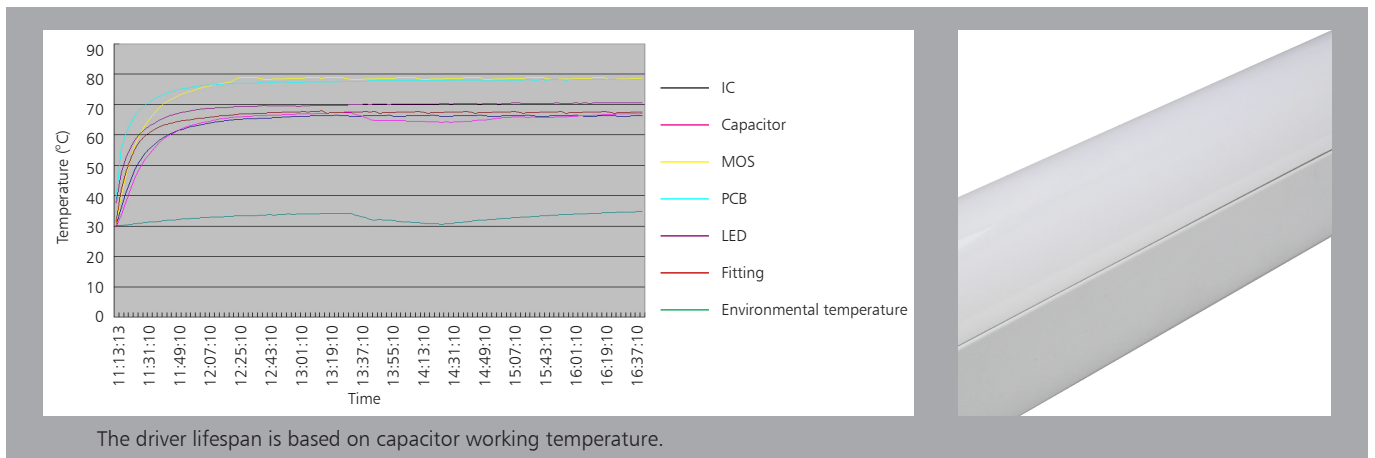
AVERAGE BEAM ANGLE (50%): 122.5DEG

Driver lifetime & LED light decay rate

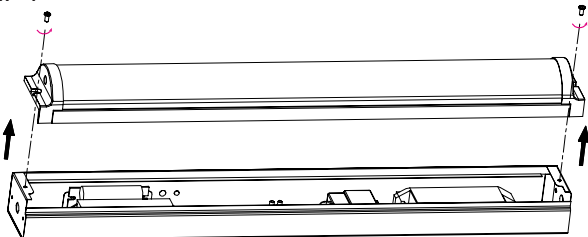
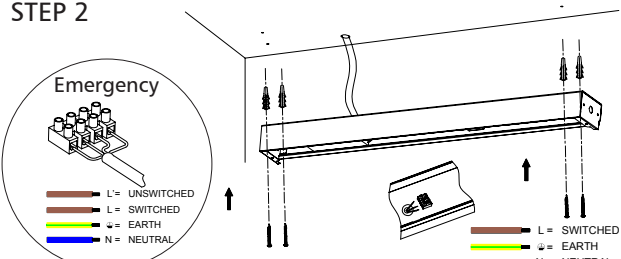
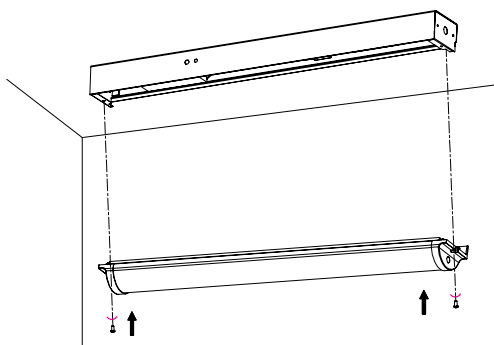
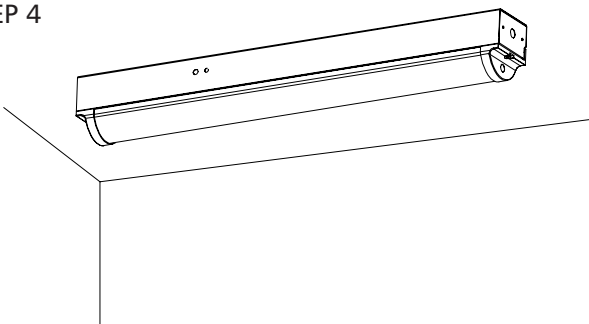


Temperature


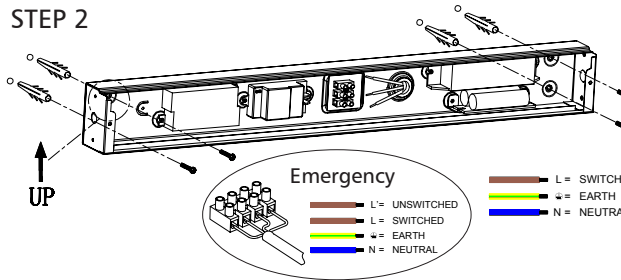
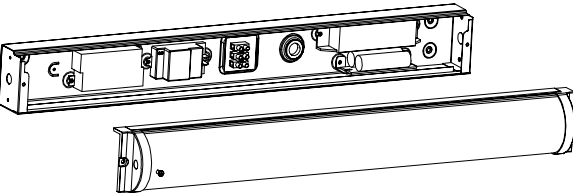
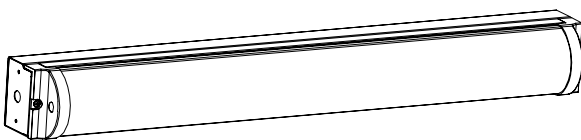
- The testing is operated at 25°C
- The lifetime of capacitor, minimum of 5,000 hours if operated at 105°C, will be doubled whenever the temperature drops 10°C
- The highest withstand temperature of IC, MOS could be 120°C
- The highest withstand temperature of LED junction temperature is 150°C



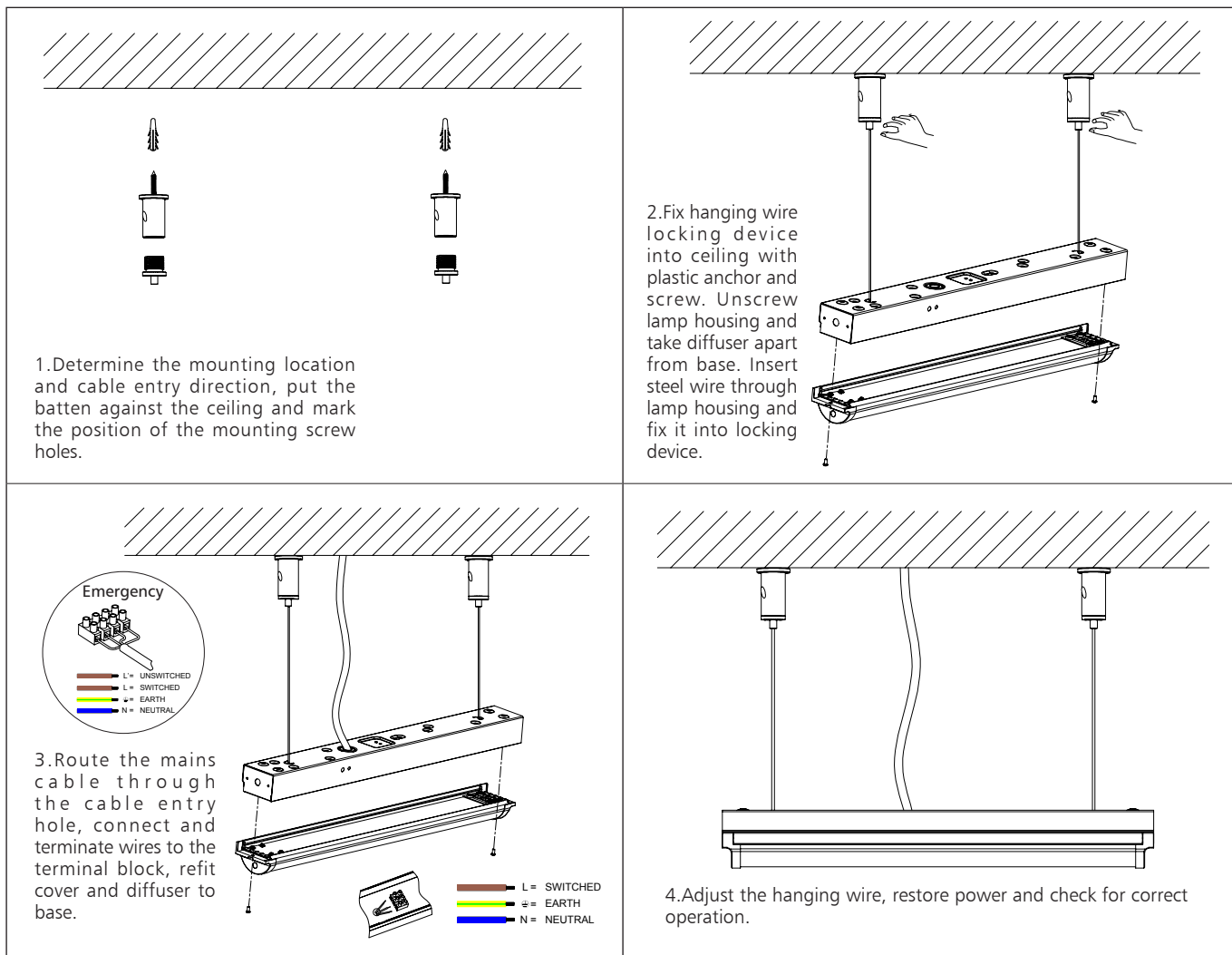
Surface mount

| | |
|--|--|
| <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



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 |

