# LED H⏺ME
supplier of linear lights since 2009

# Product Specification

## COB LED Flexible Strip

### FLCOB-CV24480-10mm
### SIngles color

| Made by | Checked by | Date | Product |
|---------|-----------|------|---------|
| Ada | Rongwei Li | 2020.06.22 | Led strip |

# LED HME
## supplier of linear lights since 2009

**COB LED strip is designed for spots-free led linear lighting, suitable with any kinds of led profile and silicon tube.**

## Feature

1. dots-free with uniform lighting

2. Efficacy Lumen upto 120lm/watt

3. Cuttable and soderless connection with crystal connector

SAMSUNG  CREE
EPISTAR  OSRAM

Blue    Blue    Blue    Blue

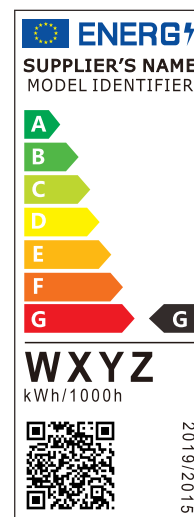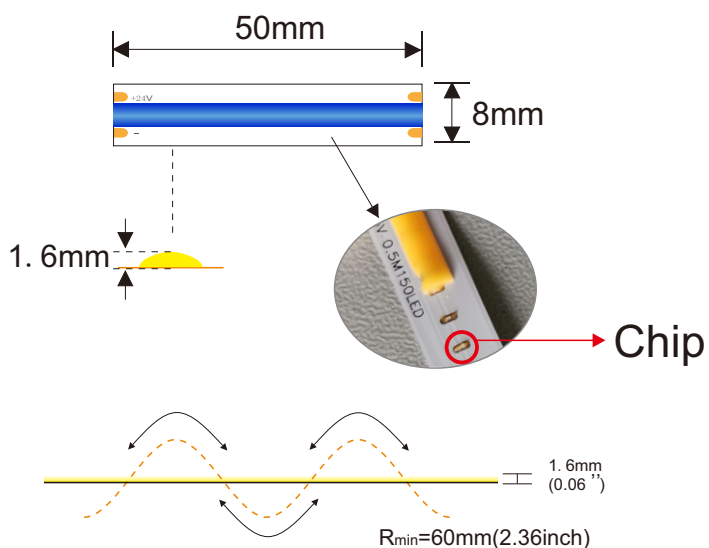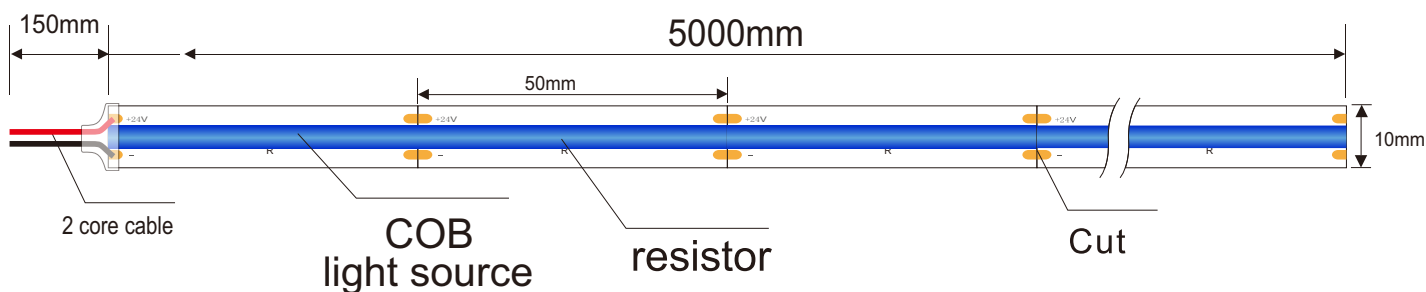180°    PWM    IP20/IP65/IP67    3 Step MacAdam

## Light Source

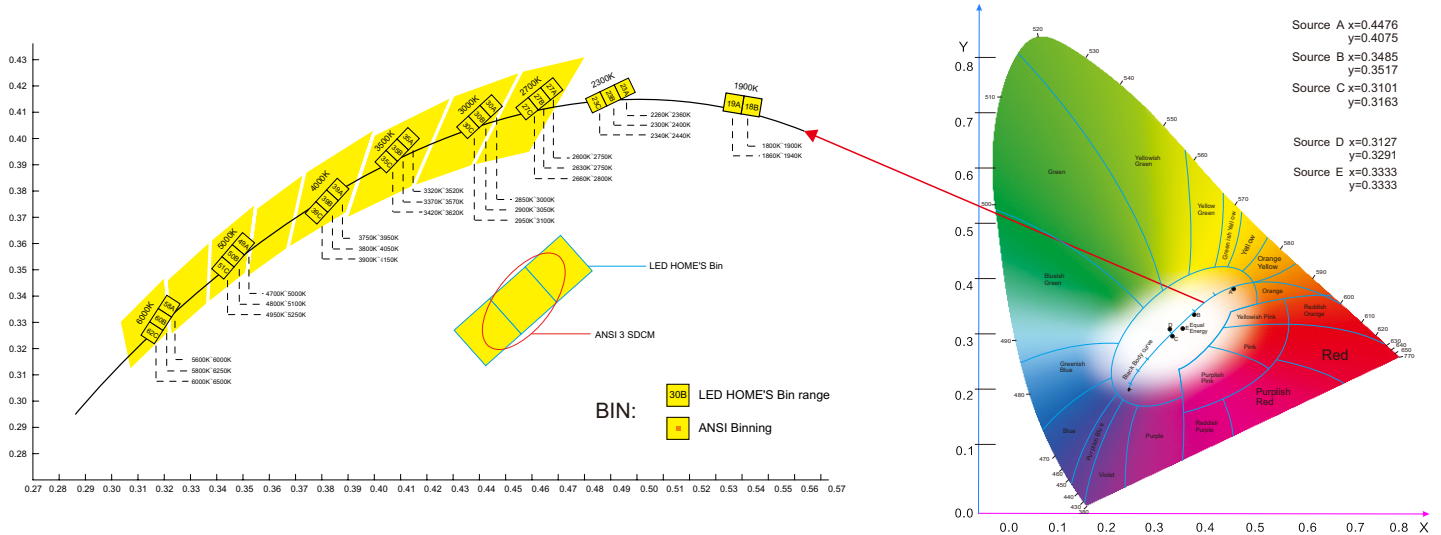| | |
|---|---|
| wire inside chips | 99.99% purity golden  (1.0um or above diament) |
| chip size | big size chip with high output lumen |
| phosphor powder | Mitsubishi or Intermatix phosphor powder |
| chip brand | Epistar or brand chip |
| LED lead frame | 100% purity copper LED lead frame |
| PCB | 35U cooper  PCB/ double side PCB/ back side of PCB is protection layer |
| Bin code | one order, one small BIN Code only, and ledhome can promise you sereral orders from same one Bin |
| 3M tape | 300P genuine 3M tape /3M VHB tape |
| age testing | ledhome strip take at least 8hours aging-test |
| QC Checking | 3 times QC checking(SMT + PCB jointing+ after aging testing) before packing |

## Dimension:



150mm | 5000mm | 50mm | 10mm
2 core cable
COB light source
resistor
Cut



50mm | 8mm
1.6mm

V 0.5M/50LED

→ Chip

1.6mm
(0.06'')

R$_{min}$=60mm(2.36inch)

## Basic Parameter:

| P/N | LED QTY (PCS/M) | Votage | Power W/m | Color | PCB size (mm) | Lumen lm/w | Lumen CRI>80 | Energy efficiency class (IP20) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Ra>80 | Ra>90 |
| FLCOB-CV24480-10mm | 480 | CV24V | 12W | Blue Red Green yellow | 10 | / | / | G | G |

All above parameters were given based on naked strip without additional heat sink.

# Product Parameters

## Spectroscopic standard

Ensure customers to get the same bin for different orders by using CIE(X,Y) coordinate spectrometer
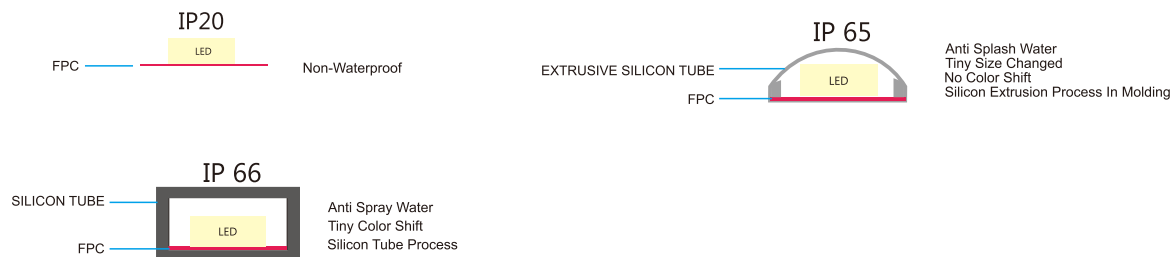


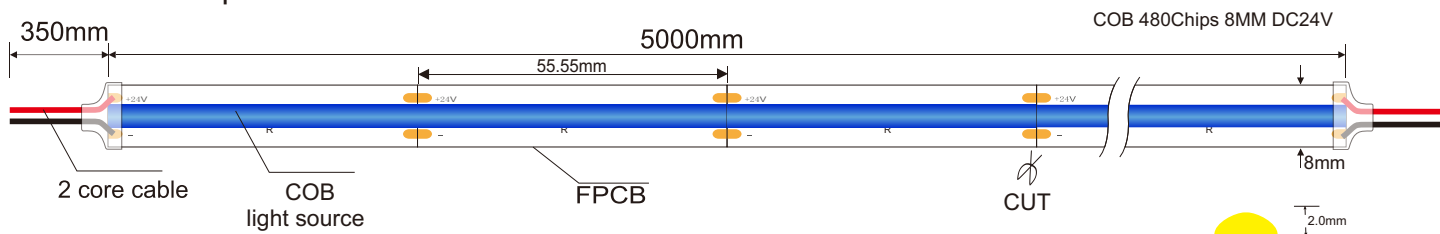| | | |
|---|---|---|
| Source A | x=0.4476 | y=0.4075 |
| Source B | x=0.3485 | y=0.3517 |
| Source C | x=0.3101 | y=0.3163 |
| Source D | x=0.3127 | y=0.3291 |
| Source E | x=0.3333 | y=0.3333 |

BIN:
- 30B LED HOME'S Bin range
- ANSI Binning

# Product Specification

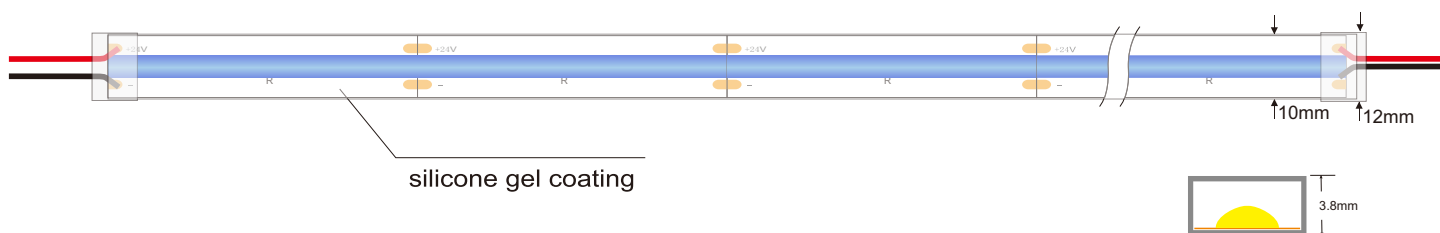| Item: | COB led strip | Driver: | External led driver |
|---|---|---|---|
| Qty Chips: | 480chips/m | Mains voltage (V): | DC 24V |
| Color: | Blue/Red/Green/yellow | Control gear type: | CONSTANT VOLTAGE DRIVER |
| PCB width: | 10mm | Ref: | MEANWELL |
| Light controller type: | 0-10V/1-10V/DMX/DALI/Triac | Emergency availability: | / |
| Light Decay: | 2% @ 6000Hours | Chip: | Epistar or other brand chips |
| Operating Temperature: | −25~45 degree | Light emission: | 180° |
| Lifetime: | (Lm80) 50000 HRS @45degree | Deviation (SDCM): | 3step MacAdam ellipse |
| Mounting: | 3M adhesive tape | BIN: | ONE BIN Only |
| Max running length: | 10meter (two side feed) | Warranty: | 5 years |
| Luminaire in: | CLASS II/III | | |

## IP Rate Drawing:

### IP20

FPC ——————————— LED ——————————— Non-Waterproof

### IP 65

EXTRUSIVE SILICON TUBE ————————— LED

FPC —————————

Anti Splash Water
Tiny Size Changed
No Color Shift
Silicon Extrusion Process In Molding

### IP 66

SILICON TUBE —————————— LED

FPC ——————————

Anti Spray Water
Tiny Color Shift
Silicon Tube Process

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## COB 480Chips 8MM DC24V IP20

COB 480Chips 8MM DC24V

350mm

5000mm

55.55mm

+24V

2 core cable

COB
light source

FPCB

CUT

8mm

2.0mm

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## COB 480Chips 8MM DC24V IP65/IP66

silicone gel coating

10mm  12mm

3.8mm

# Installation Diagram:

## 1. Regular connection



AC110-230V

Power Supp
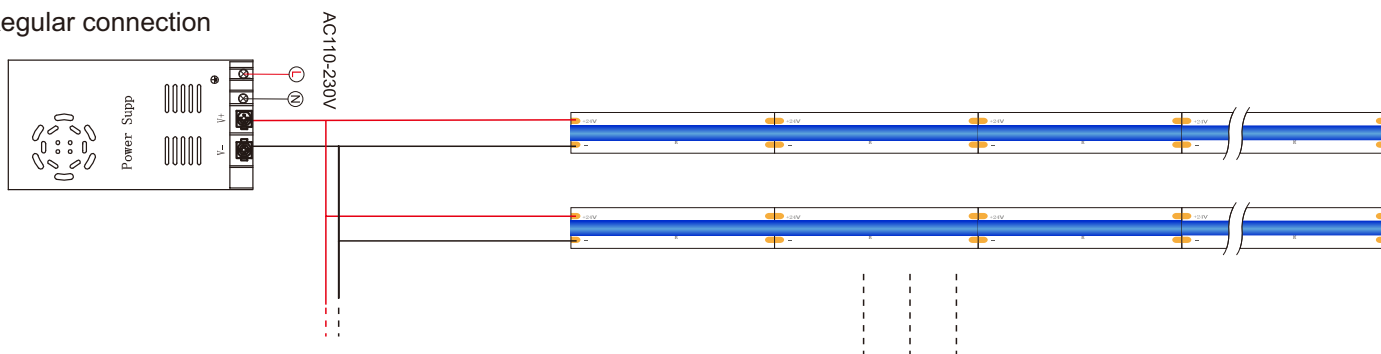
## 2. connection with dimmer



Push Switch
(optional)

R6

**V1**
LED Dimmer
Uin=5-36VDC
Iin=8.5A
Uout=5-36VDC
Iout=8A
Pout=40-288W
Temp Range:-30℃~+55℃
RoHS

AC110-230V

Power Supply
5-36VDC
Constant Voltage

**EV1**
POWER REPEATER
Uin=5-36VDC
Iin=8.5A
Uout=5-36VDC
Iout=8A
Pout=40-288W
Temp Range:-30℃~+55℃
RoHS

AC110-230V

Power Supply
5-36VDC
Constant Voltage
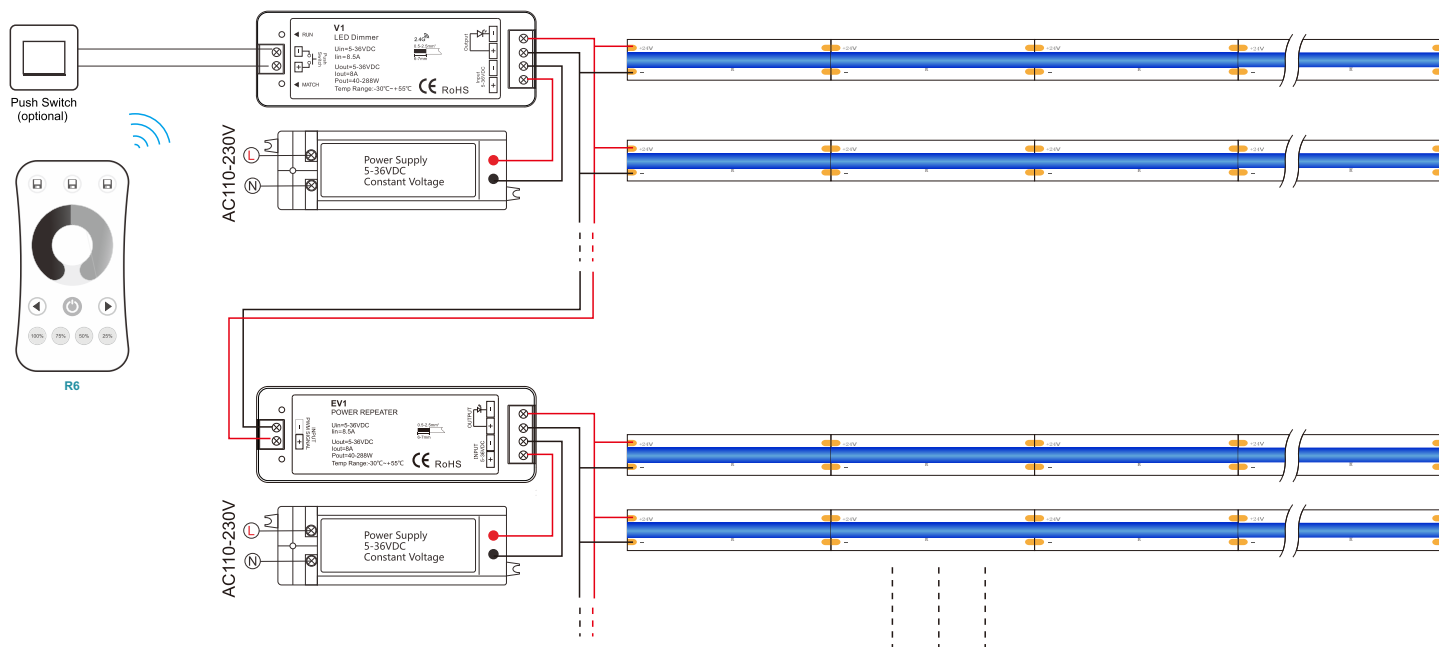
## Installation:
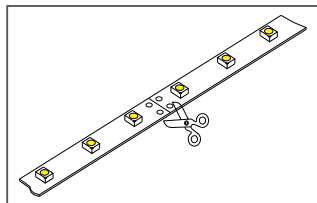


1.Cut in specific location
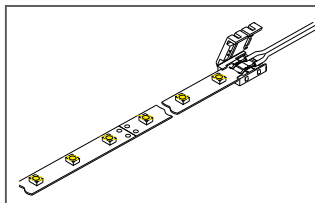


2.Put the PCB in the space between clip and connector,make the clips exactly aim at welding point
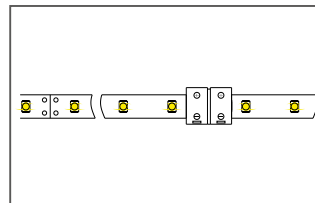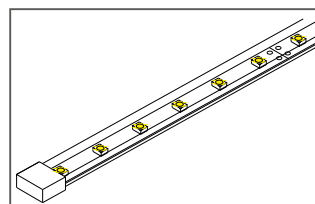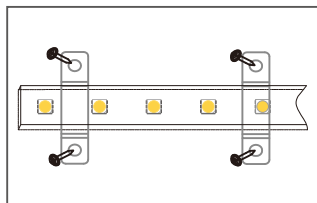


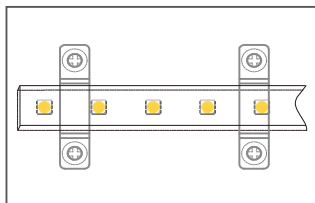3.Close the cover of connector
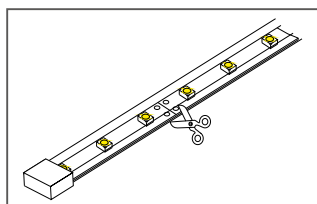


1.Cut in specific location
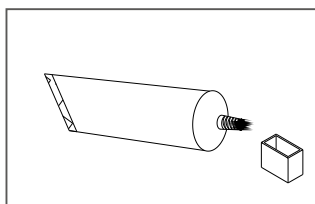


2. Infuse the gel in the end cap



3.connect the end cap and wait for air drying
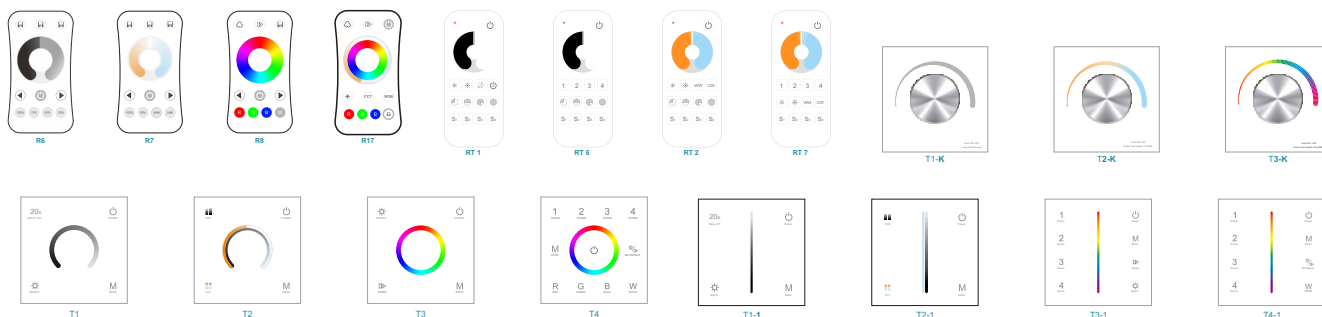


1.Install with clips
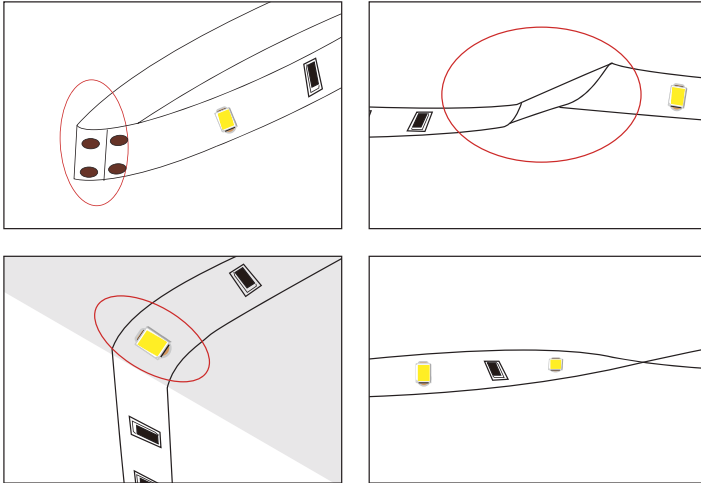


2.Fix with screws

## Accessories:



R6  R7  R8  R17  RT 1  RT 6  RT 2  RT 7  T1-K  T2-K  T3-K

T1  T2  T3  T4  T1-1  T2-1  T3-1  T4-1

## Cautions ⚠

When install the led strip,please note the installation technique.The led strip can be bent,but not distorted,as shown below.



R ≥ 50mm

Bend(Right)

Distortion(Wrong)

LED strips are low votage products,you must use the power supply(transformer).Please don,t connect the led strip directly to the AC 110v or AC 220v,otherwise it will burn out the LED strips.
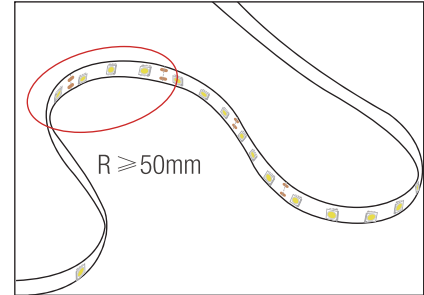
Clean up the installation surface,it will ensure the reliability of the adhesive,The electrical connection process must be operated by a professional person.

## Packing：

LED Strip

Anti-static bag

CAUTION
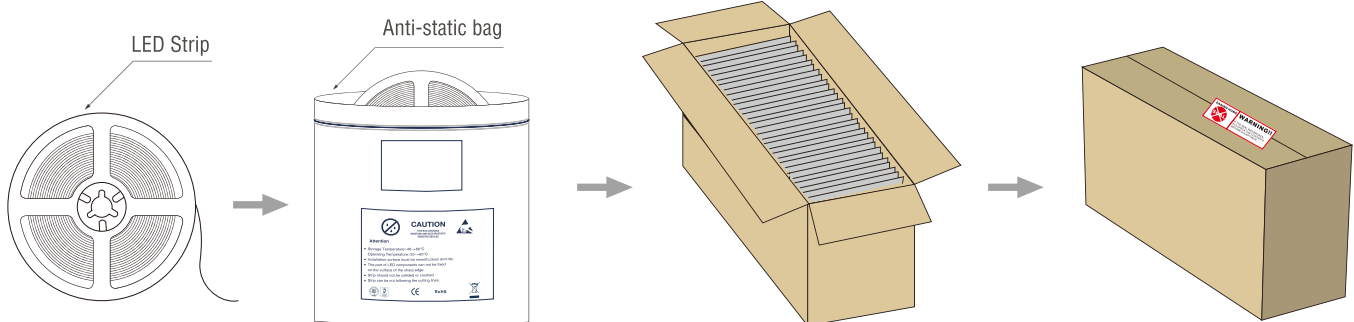


## Notice:

1、 Please apply different IP rate products according to different environment conditions;

2、 Adopt suitable power supply to match the LED strips. Power is 20% bigger than max power of LED strips to ensure  long time performance of power supply;

3、 Do not install it when power is on. Before powering on, please make sure the wiring is correct;

4、 Avoid privately  changing or damaging the circuit or other component on the strip;

5、 Avoid scrape or bending during installation, it might be damaged with non repairable status;

6、 Strip linked in over long length would lead to problem of overload or uneven brightness;

7、 To protect your eyes, do not stare at the light for a long time while it's illuminated;

8、 Only professional personnel can install, dismantle and repair;

9、 Choose different connectors and controllers according to your different strip.