# SPECIFICATION

# Popular Series COB LED Strip

# Model No.: UTFS-PSCOB420-2410

| UT | FS | PS | COB | 420 | 24 | 10 |
|---|---|---|---|---|---|---|
| Unitop | Flexible Strips | Product Series | LED Type | LED Qty/M | Voltage | PCB Width |
| | | Popular Series | COB LEDs | 420 LEDs | DC24V | 10mm PCB |

# 5M COB LED Strip-Popular Series

420pcs chips/M, DC24V, Constant Voltage, IP20, 10mm Width PCB.

## ✅ Product Features:

- Big beam angle, no dark area, flexible line source with good heat dissipation.

- Most popular type.

- Cutting length: 50mm.

- Inverted COB gold-free technology

- Ra>90, cuttable and re-connectable.

- IP Rate：IP20, IP65, IP66, IP67.

- CE/ROHS certification.

- Warranty: 3 Years

## Applications:

Widely used in hotels, shopping malls, furniture, cabinets, and shelves as decoration and direct

or indirect lighting.

## Installation:

3M Adhesive tape, mounting clips, aluminum profiles.

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## ☀ Optical & Electrical：

| Unitop Model No. | Color | CCT | CRI | View Angle | Lumen LM/M | Efficacy LM/W | Working Voltage | Current (mA/M) | Power |
|---|---|---|---|---|---|---|---|---|---|
| UTFS-PSCOB420-2410WW | Warm White | 2700K | ≥90Ra | 180° | 948 | 79 | 24VDC | 500 | 12W/M |
| UTFS-PSCOB420-2410WW | Warm White | 3000K | ≥90Ra | 180° | 1036.8 | 86.4 | 24VDC | 500 | 12W/M |
| UTFS-PSCOB420-2410NW | Natural White | 4000K | ≥90Ra | 180° | 1125.6 | 93.8 | 24VDC | 500 | 12W/M |
| UTFS-PSCOB420-2410CW | Cool White | 6500K | ≥90Ra | 180° | 1142.4 | 95.2 | 24VDC | 500 | 12W/M |

## ★ Other Features：

| Unitop Model No. | IP Rate | Working Environment | Storage Environment | Length | Max Connection | LED Qty (Pcs/M) | N.W/Roll |
|---|---|---|---|---|---|---|---|
| UTFS-PSCOB420-2410 | IP20 | −25~+45℃ | −30~+80℃ | 5m | 5m | 420 | 92g |

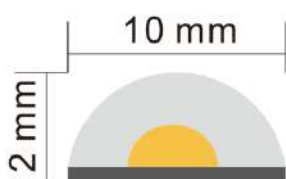# 5M COB LED Strip-Popular Series

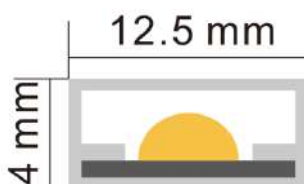420pcs chips/M, DC24V, Constant Voltage, IP20, 10mm Width PCB.
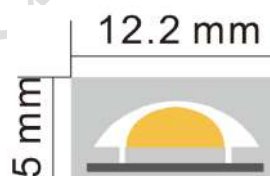
## Dimension：



## Other IP Options:



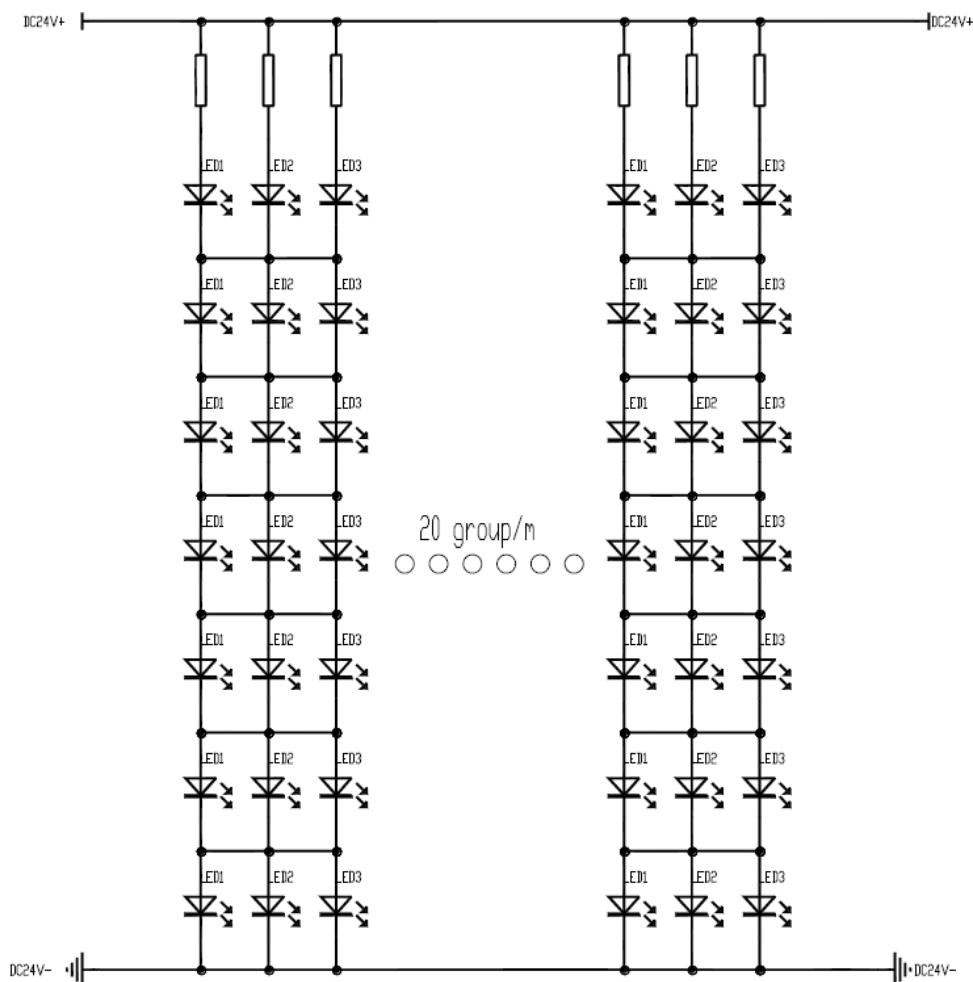IP65 Silicone Glue



IP66 Silicone Tube



IP67 Extrusion Molding

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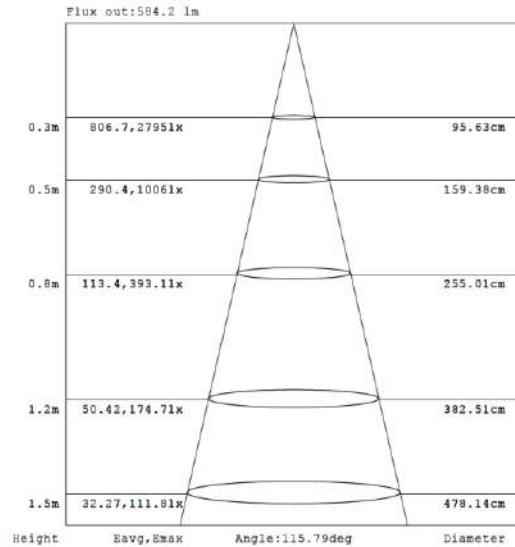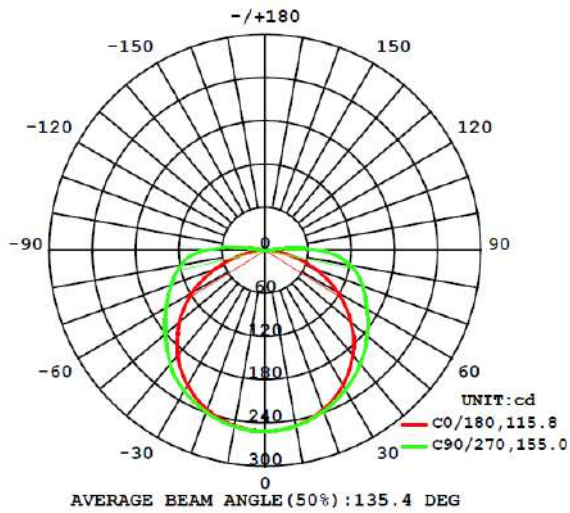
# ⚡ Electrical Principle

# 5M COB LED Strip-Popular Series

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## ☼ Light Distribution Curve:



```
            -/+180
    -150              150

-120                      120


-90                          90
              0
             60

            120

-60         180              60
            240
    -30     300      30
              0
AVERAGE BEAM ANGLE(50%):135.4 DEG
```

UNIT:cd
— C0/180,115.8
— C90/270,155.0



```
Flux out:584.2 lm

0.3m   806.7,27951x              95.63cm

0.5m   290.4,10061x              159.38cm

0.8m   113.4,393.11x             255.01cm

1.2m   50.42,174.71x             382.51cm

1.5m   32.27,111.81x             478.14cm

Height   Eavg,Emax    Angle:115.79deg    Diameter
```
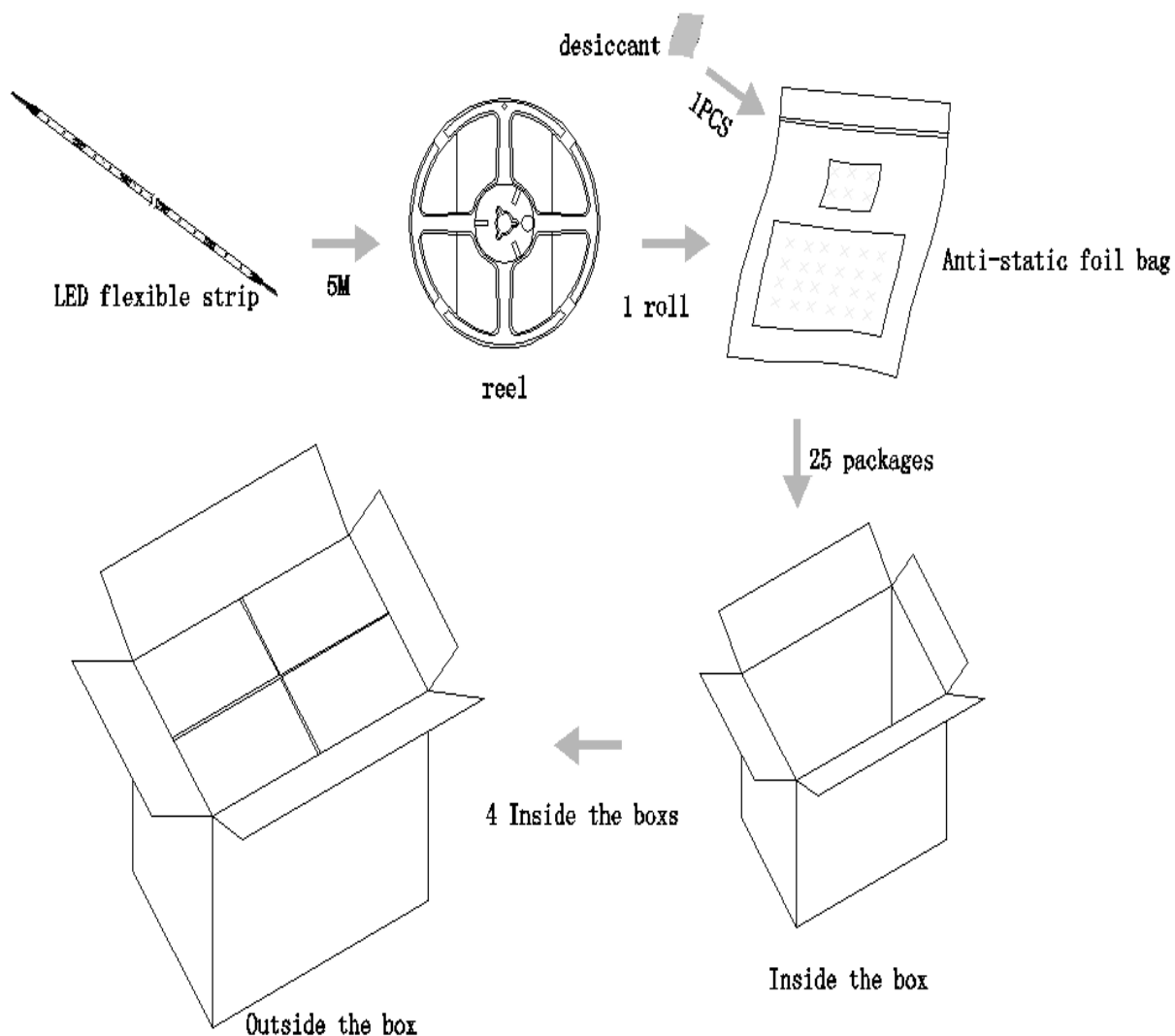
# 5M COB LED Strip-Popular Series

420pcs chips/M, DC24V, Constant Voltage, IP20, 10mm Width PCB.

# Packing Information:



**Inner Box:**

Qty: 25reels totally 125m strips. G.W.: 2.90kgs. Size: L303*W230*H260mm
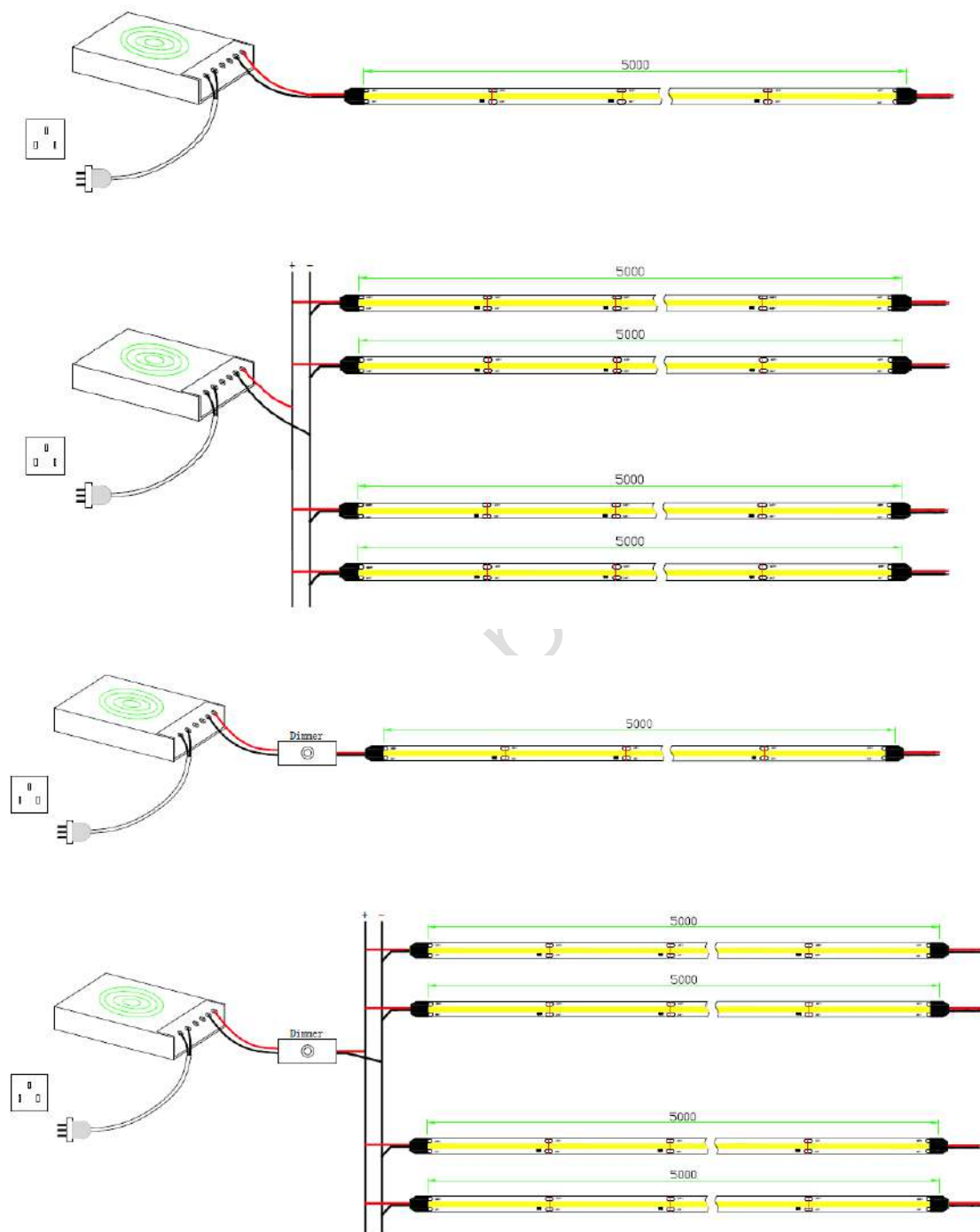
**Outer Carton:**

Qty: 4 inner boxes totally 500m strips. G.W.: 12.12kgs. Size: L620*W472*H280mm

# 5M COB LED Strip-Popular Series

420pcs chips/M, DC24V, Constant Voltage, IP20, 10mm Width PCB.

## Schematic:

# 5M COB LED Strip-Popular Series

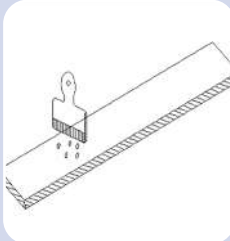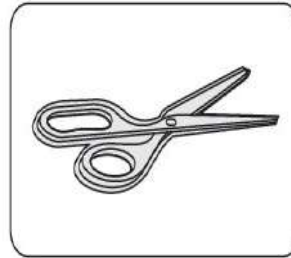420pcs chips/M, DC24V, Constant Voltage, IP20, 10mm Width PCB.
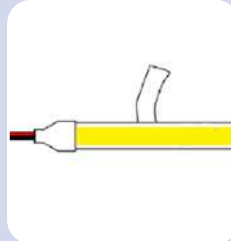
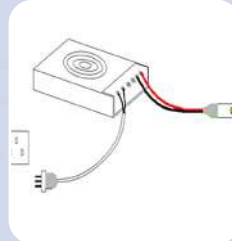# ⚙ Installation Procedure:

**LED Strip**

**Scissor**

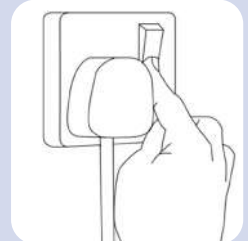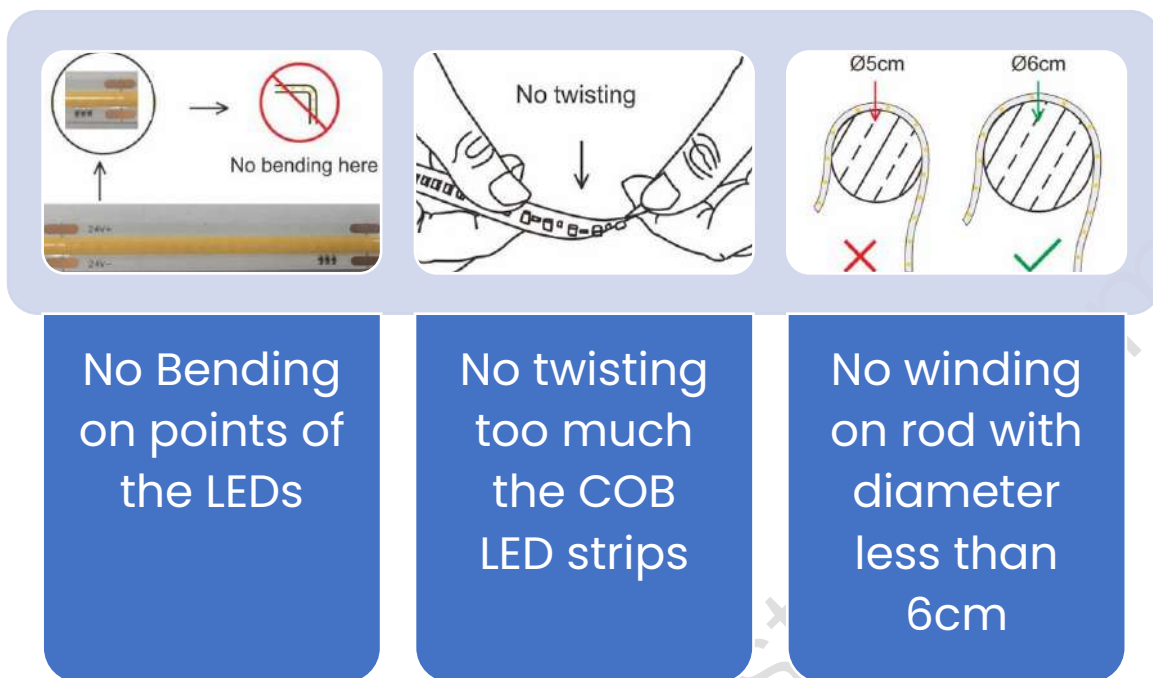| Clean the installation surface. | Measure the length you need to install, cut at the nearest cutting mark. For the remaining strip, weld at the next scissor mark to connect with other connection wire. | Do not pull the whole strip from the back release paper at one time. Do not hard press the LEDs. | Connect strip wire to the driver output side (Positive to positive, negative to negative.) Connect the driver plug to wall socket. | Switch on and enjoy. |

# 5M COB LED Strip-Popular Series

420pcs chips/M, DC24V, Constant Voltage, IP20, 10mm Width PCB.



**No Bending on points of the LEDs**

**No twisting too much the COB LED strips**

**No winding on rod with diameter less than 6cm**

# 5M COB LED Strip-Popular Series

420pcs chips/M, DC24V, Constant Voltage, IP20, 10mm Width PCB.

# ⚙ Common Problems and Solutions:

| Problem | Possible Reasons | Solutions |
|---|---|---|
| Whole COB strips do not light on | Not connected to LED driver. | Connect to suitable LED driver and power on. |
| | LED driver switched off due to self-protection while open circuit or short circuit. | Trouble shoot and fix or change the LED driver. |
| | Wrong connection between strips and driver. | Make sure to connect positive to positive, negative to negative. |
| Partial COB strips do not light on | Some LED drivers failed. | Troubleshoot LED driver and fix. |
| | Partial wire connection wrong. Some strips are connected with wrong polarity. | Make sure to connect positive to positive, negative to negative. |
| Inconsistent or not enough brightness | Wrong LED driver with not enough power. | Calculate the strip length and choose suitable wattage LED driver. |
| | Too much circuit loss on LED driver, or big loss difference between each circuit. | 1. Make sure strip's working voltage is within +5% of the rated voltage. 2. Shorten connection wires or change to thicker wires. 3. Make sure the strip length less than the maximum allowed connection length. Keep similar length for all series strips. |
| | Too many series connection for LED strips | Adjust the connected LED strip length and qty, make sure each circuit is within the maximum connection requirements |
| LEDs flash | Poor soldering connection point. | Check and connection and fix them. |
| | LED driver breaks down | Find the faulty driver and change. |

# 5M COB LED Strip-Popular Series

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# 📢 Statements:

- Suggested the installation of COB LED strips to be made by the manufacturer, agent, or other qualified people.

- Please study the above specification before installation.

- The above data is based on our standard product. Please subject to your actual product data if there is a slight difference.

- The above schematic diagrams are from our standard product. Please subject to your existing product if there is a slight difference.

- The LED driver wattage must be at least 1.2 times the overall wattage of the LED strips used for the power supply.

- For safety, do not connect the strips directly to the AC.

- Any acidic or alkaline substance is forbidden.

- No prior notice in case this product or specification is updated.

- Unitop reserves the final right of explanation of the above specification.