

# Specification

| Prepared | Checked | Approved | Accepted | Confirmed | Approved |
|----------|---------|----------|----------|-----------|----------|
|          |         |          |          |           |          |

|           |           |      |                    |                      |                            |                  |                 |                   |
|-----------|-----------|------|--------------------|----------------------|----------------------------|------------------|-----------------|-------------------|
| <b>UL</b> | <b>CE</b> | RoHS | <b>2835</b><br>SMD | <b>128</b><br>LEDS/M | <b>LED</b><br><b>Strip</b> | DC<br><b>24V</b> | IP<br><b>20</b> | <b>5</b><br>years |
|-----------|-----------|------|--------------------|----------------------|----------------------------|------------------|-----------------|-------------------|

**Model:** RD00C8TC-A

5000\*10, 640pcs 2835 SMD LED, bare board series with high luminous efficacy, 24Vdc, constant voltage, LED flex strip

**Figure:**



**Features:**

- ⊙ Luminous efficacy 132lm/W, high efficiency and saving energy;
- ⊙ Spectroscopic standard ERP, one BIN only, good color uniformity;
- ⊙ 3oz pure copper PCB, low attenuation ;
- ⊙ Strong oxidation resistance by silver;
- ⊙ Silver-Tin pad design, easy soldering;
- ⊙ CE, ROHS, UL compliant
- ⊙ The product with "-T" needs to use with aluminum profile because of the high power;

**Applications:**

- ⊙ Suitable for hotel, shopping mall, home, cabinet, show frame, etc. as main lighting, indirect lighting, cove lighting, contour lighting, decorative lighting, etc.

**Warranty:**

- ⊙ 5 years or 22,000 hours, whichever comes first.

**Optical and Electrical Parameters:**

| P/N        | LED Color | CT (K) WL (nm) | Ra  | SDCM | Beam Angle (°) | Luminous Flux (lm/m) | Luminous Efficacy (lm/W) | Working voltage (VDC) | Working current (mA) |               | Power (W/piece) |               |
|------------|-----------|----------------|-----|------|----------------|----------------------|--------------------------|-----------------------|----------------------|---------------|-----------------|---------------|
|            |           |                |     |      |                |                      |                          |                       | 1m[3 9.37in]         | 5m[1 16.41in] | 1m[3 9.37in]    | 5m[1 16.41in] |
| RD00C8TC-A | White     | 1800           | ≥90 | ≤5   | ≥115           | 972                  | 81                       | 24                    | 500                  | 2100          | 12              | 50.5          |
| RD00C8TC-A | White     | 2200           | ≥90 | ≤5   | ≥115           | 1207                 | 101                      | 24                    | 500                  | 2100          | 12              | 50.5          |
| RD00C8TC-A | White     | 2400           | ≥90 | ≤5   | ≥115           | 1292                 | 108                      | 24                    | 500                  | 2100          | 12              | 50.5          |
| RD00C8TC-A | White     | 2700           | ≥90 | ≤5   | ≥115           | 1356                 | 113                      | 24                    | 500                  | 2100          | 12              | 50.5          |
| RD00C8TC-A | White     | 3000           | ≥90 | ≤5   | ≥115           | 1434                 | 120                      | 24                    | 500                  | 2100          | 12              | 50.5          |
| RD00C8TC-A | White     | 4000           | ≥90 | ≤5   | ≥115           | 1578                 | 132                      | 24                    | 500                  | 2100          | 12              | 50.5          |
| RD00C8TC-A | White     | 5000           | ≥90 | ≤5   | ≥115           | 1582                 | 132                      | 24                    | 500                  | 2100          | 12              | 50.5          |
| RD00C8TC-A | White     | 6500           | ≥90 | ≤5   | ≥115           | 1549                 | 129                      | 24                    | 500                  | 2100          | 12              | 50.5          |

Others:

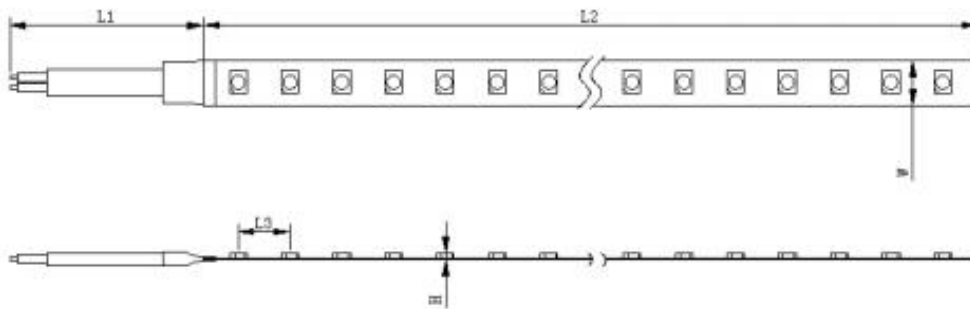
| P/N        | IP Grade | Operating Temp |              | Storage Temp |              | Standard length |        | Max. cascading length |        | LED Qty (pcs) | Weight    |            |
|------------|----------|----------------|--------------|--------------|--------------|-----------------|--------|-----------------------|--------|---------------|-----------|------------|
|            |          | (°C)           | (°F)         | (°C)         | (°F)         | (m)             | (inch) | (m)                   | (inch) |               | (g/piece) | (lb/piece) |
| RD00C8TC-A | IP20     | -25~<br>+60    | -13~<br>+140 | -25~<br>+70  | -13~<br>+158 | 5               | 196.8  | 5                     | 196.8  | 128           | 17        | 0.037      |

Notes:

- (1) Testing environment temperature: 25±2°C [77±3.6°F];
- (2) The actual data of each single product may differ from above typical data which are subject to change without prior notice;
- (3) The above “-” means the parameters are not required temporarily
- (4) Considering the product with “-T” is of high power and will produce a certain amount of heat during work, stick it to the auxiliary material with good heat dissipation and ensure the operating environment of TC≤50°C.

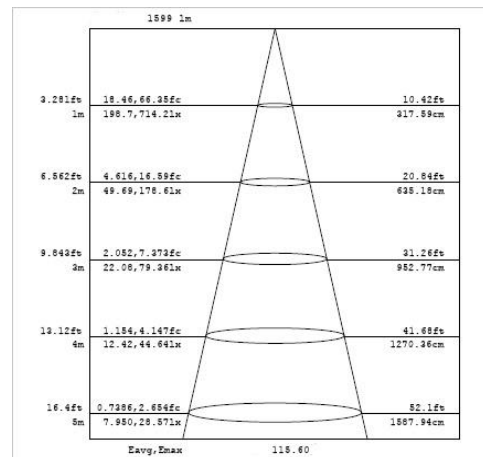
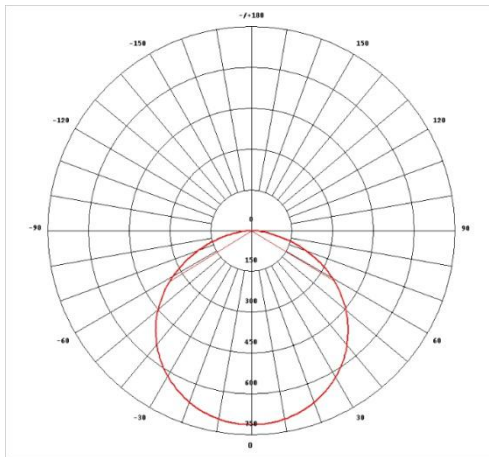
Profile Drawings:

Unit: mm[inch]



| Model      | L1        | L2           | L3        | W        | H         |
|------------|-----------|--------------|-----------|----------|-----------|
| RD00C8TC-A | 200[7.87] | 5000[196.85] | 7.8[0.31] | 10[0.39] | 1.4[0.05] |

Light Distribution/Iso-illuminance Diagram:

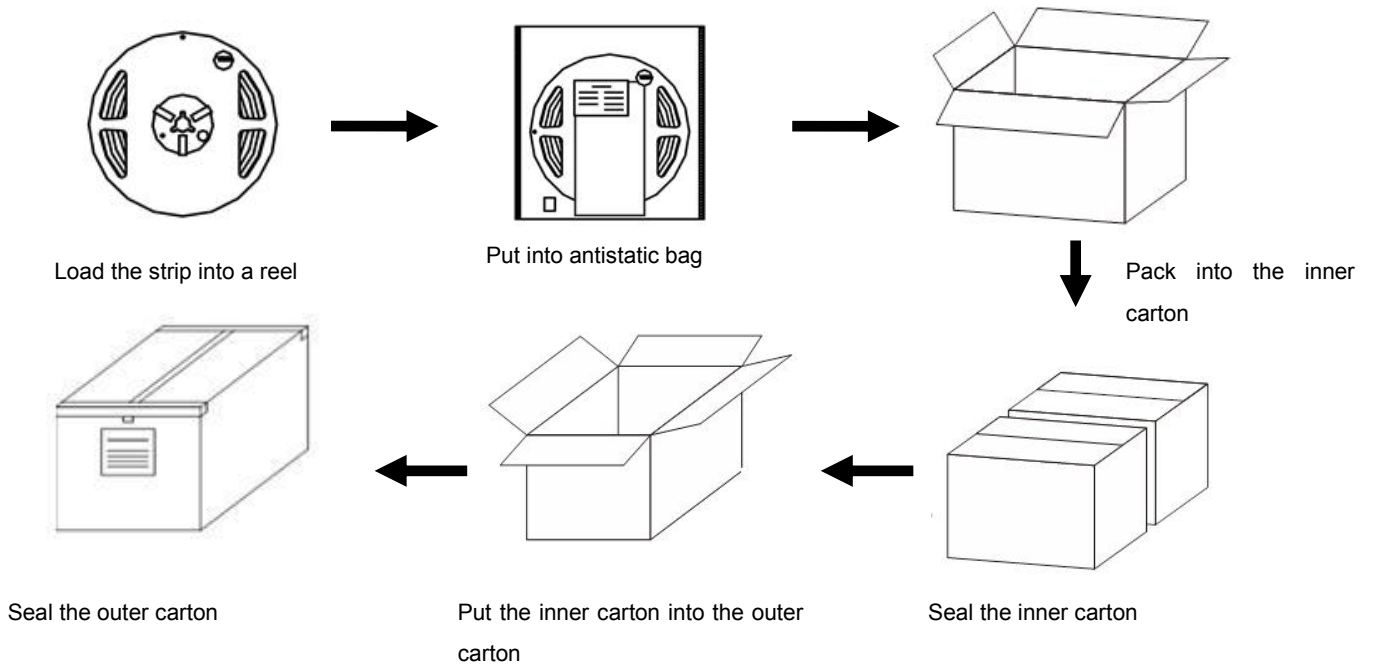


RD00C8TC-A

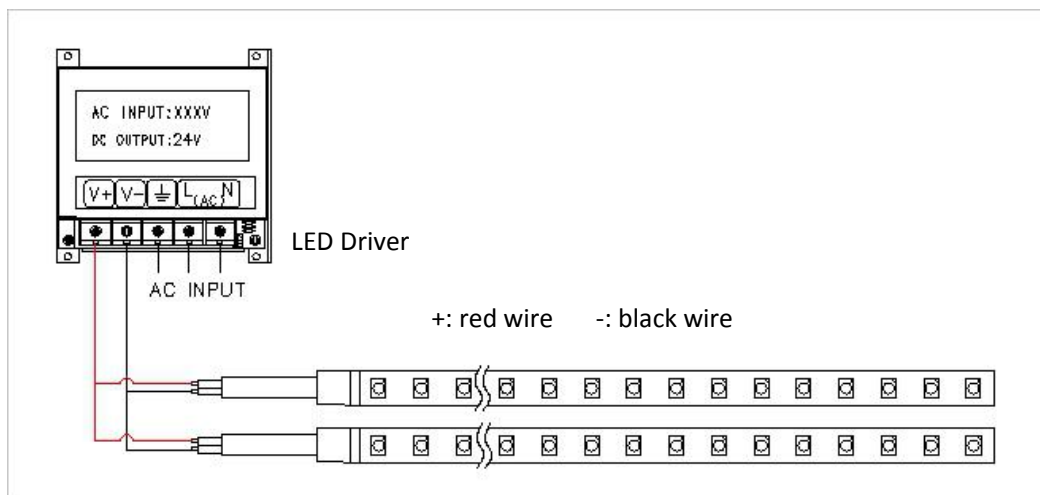
**Packaging Information:**

| P/N        | Qty<br>(PCS/bag) | Qty<br>(bag/carton) | Total<br>Qty<br>(PCS) | Total weight |      | Outer carton |        |       |        |        |        |
|------------|------------------|---------------------|-----------------------|--------------|------|--------------|--------|-------|--------|--------|--------|
|            |                  |                     |                       | (Kg)         | (lb) | length       |        | width |        | height |        |
|            |                  |                     |                       |              |      | (mm)         | (inch) | (mm)  | (inch) | (mm)   | (inch) |
| RD00C8TC-A | 5                | 75                  | 150                   | 4.1          | 9.02 | 398          | 15.66  | 256   | 10.07  | 238    | 9.37   |

**Packaging Diagram:**



**Connection Instruction:**



Note: Please connect the '+' and '-' of strips to those of driver output correctly.

**Parts & Tools:**

◎ **Product Spare Parts**

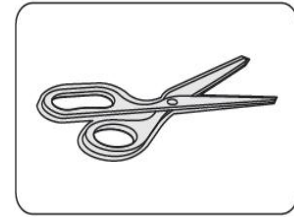


LED Strip

◎ **Self-provided Tools**

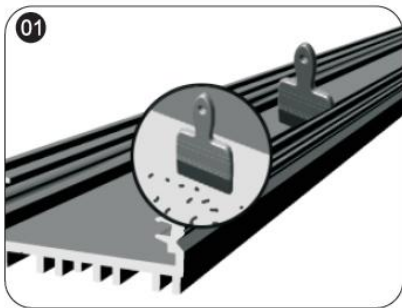


Electrical Drill & Drilling bit

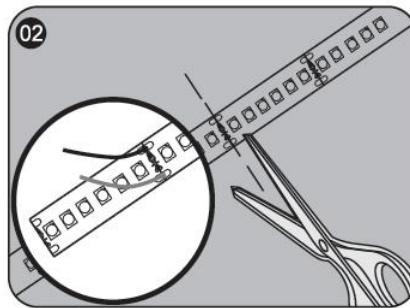


Scissors

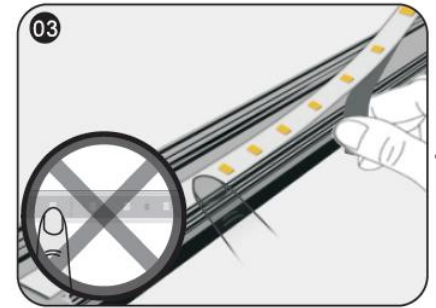
**Installation Steps & Cautions:**



- ◎ Make sure the mounting surface is clean before installation;



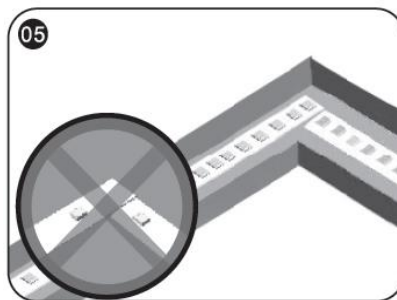
- ◎ Calculate the needed length and cut off the extra length along cutting mark if necessary; if need to add wires, please weld them at the next location with printed mark



- ◎ While sticking strips, peel off the release paper of the tape step by step. Don't peel off all release paper at a time to avoid getting your strip in a mess.  
△Notes: No pressing the bead!



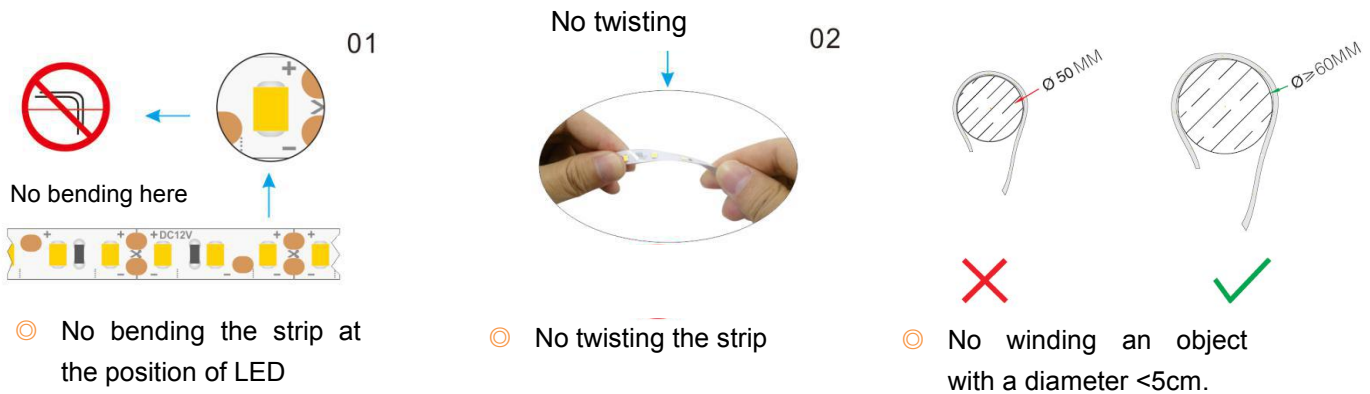
- ◎ Stick Mylar tape to isolate the cutting position from the bottom of profile inner slot to avoid short-circuit;



- ◎ The installation at the corner is shown as the above figure.  
△ Notes: No bending it into right angle; No twisting it to stick on the mounting surface.



- ◎ Connect strip wires to the output terminal of power supply, and dispose with waterproof, insulation, short-circuit and anti-corrosion protection at both the wire joints and the cut section of your strip (if any).



⦿ No bending the strip at the position of LED

⦿ No twisting the strip

⦿ No winding an object with a diameter <math>< 5\text{cm}</math>

### Troubleshooting:

| Malfunctions                         | Possible Causes   | Solutions  |
|--------------------------------------|---|--|
| All LEDs don't work                  | 1. The power supply did not connect to power grid.  | Power on   |
|                                      | 2. No electricity due to short-circuit of external power supply.                                      | Remove the malfunction caused by short-circuit, power on again.  |
|                                      | 3. The wires of strips connect to power supply output reversely.                                      | Check the connecting and ensure the wires are connected correctly.   |
| Part of LEDs don't work              | 1. Part of power supplies do not have output.   | Check the power supply system.   |
|                                      | 2. Part of wires of strips have malfunction.  |  |
|                                      | 3. Particular modules connected reversely.  | Correct connection   |
| Brightness of LEDs is weak or uneven | 1. Overloaded power supply;   | Replace it with higher power supply  |
|                                      | 2. The power loss of power circuit is huge or the power loss of each circuit existing big difference. | Ensure working voltage of strips is within $\pm 5\%V$ of rated voltage.<br>1. Shorten the length of wires between the first strip and power supply or replaced with wires with bigger diameter;<br>2. Ensure the cascading qty of string is less than or equal to the allowed maximum cascading qty, and each strip cascading qty is well-balanced.) |
|                                      | 3. Exceed in qty of strips in series  | Lessen the cascading qty for strip and ensure the qty for each electrical circuit is within the maximum cascading qty.   |
| LEDs are blinking                    | 1. Poor contacted in the joints.  | Find out and tackle malfunction immediately.   |
|                                      | 2. Failures in power supply.  | Power on   |

**Declaration:**

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- ⊙ If the external flexible cable of light box is damaged, please replace it by its manufacturer or its service agent or qualified person to avoid a hazard.
- ⊙ The specific installation and cautions please refer to the user manual.
- ⊙ The given data in this specification is based on our standard product. There may be existed slight difference compared with actual products.
- ⊙ All Illustrations in this specification are for reference only.
- ⊙ This product is subject to change or modify without prior notice.
- ⊙ RISHANG OPTOELECTRONICS CO., LTD reserves the right of final explanation for this specification.

<End>

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