

# TX-2828W200D180CUY-B01H95

## PRODUCT SPECIFICATION (R&D version)

### Features:

- ◆ Excellent transiting heat from LED chip operating under 6.0A.
- ◆ High luminous output.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ GaN

### Emitting Color:

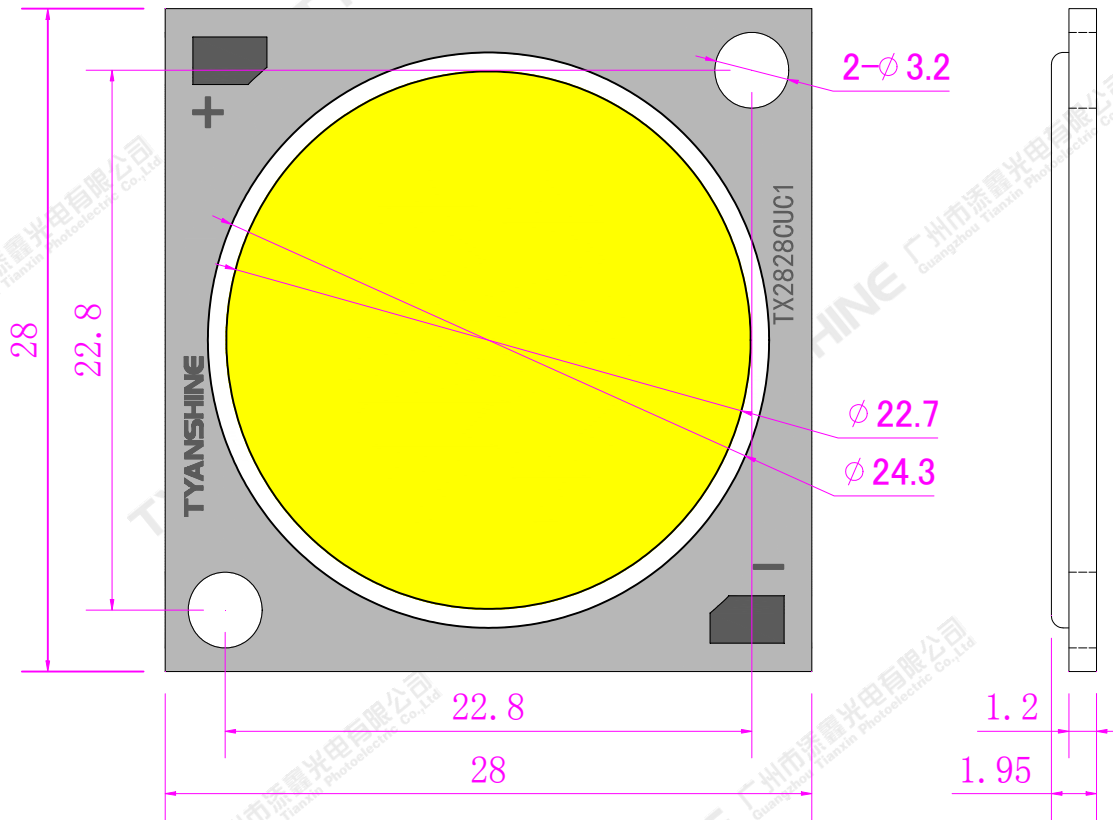
- ◆ White

### Applications:

- ◆ Stage lighting
- ◆ Architectural lighting
- ◆ Projection lighting
- ◆ Medical lighting

|          |                           |          |               |      |        |
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**Package Dimensions:**



**Notes:**

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are  $\pm 0.1$ mm .

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**Absolute Maximum Ratings**

| Parameter                               | Symbol           | Max Ratings                        | Unit |
|---|------------------|------------------------------------|------|
| Forward Current                         | IF               | 6.0                                | A    |
| Reverse Voltage                         | V <sub>R</sub>   | Not designed for reverse operation | V    |
| Power Dissipation                       | P <sub>D</sub>   | 234                                | W    |
| Junction Temperature                    | T <sub>j</sub>   | 150                                | °C   |
| Electrostatic Discharge Threshold (ESD) | ESD              | 2000                               | V    |
| Storage Temperature                     | T <sub>stg</sub> | -40~70                             | °C   |
| Operation Temperature                   | T <sub>opr</sub> | -30~100                            |      |

**Notes:**

- Specifications are subject to change without notice.
- The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
- Precautions for ESD:  
STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

**Electrical Optical Characteristics**

| Parameter                           | Symbol           | Condition            | Min.  | Typ.  | Max. | Units      |
|-------------------------------------|------------------|----------------------|-------|-------|------|------------|
| Luminous Flux                       | $\phi_v$         | If=5.5A<br>(Tc=25°C) | 15500 | 17000 | —    | lm         |
|                                     |                  | If=5.5A<br>(Tc=85°C) | 13300 | 14600 | —    |            |
| Correlated Colour Temperature       | CCT              | If=5.5A<br>(Tc=25°C) | 5400  | 5600  | 5800 | K          |
|                                     |                  | If=5.5A<br>(Tc=85°C) | 5600  | 5800  | 6100 |            |
| Forward Voltage                     | Vf               | If=5.5A<br>(Tc=25°C) | 33    | 34.5  | 36   | V          |
|                                     |                  | If=5.5A<br>(Tc=85°C) | 32.5  | 34    | 35.5 |            |
| Reverse Current                     | IR               | —                    | —     | —     | —    | $\mu$ A    |
| Viewing Angle at 50% IV             | 2 $\theta_{1/2}$ | —                    | —     | 115   | —    | Deg        |
| Thermal Resistance Junction to Case | R $\theta_{J-C}$ | —                    | —     | 0.08  | —    | K/W        |
| Temperature Coefficient of Voltage  | V $\Delta$ F/T   | If=5.5A              | —     | -12.4 | —    | mV/°C      |
| Color Rendering Index               | Ra               | If=5.5A<br>(Tc=85°C) | 95    | 97    | —    | —          |
| Thermistor(NTC)                     | Rt25             | —                    | —     | 10    | —    | K $\Omega$ |

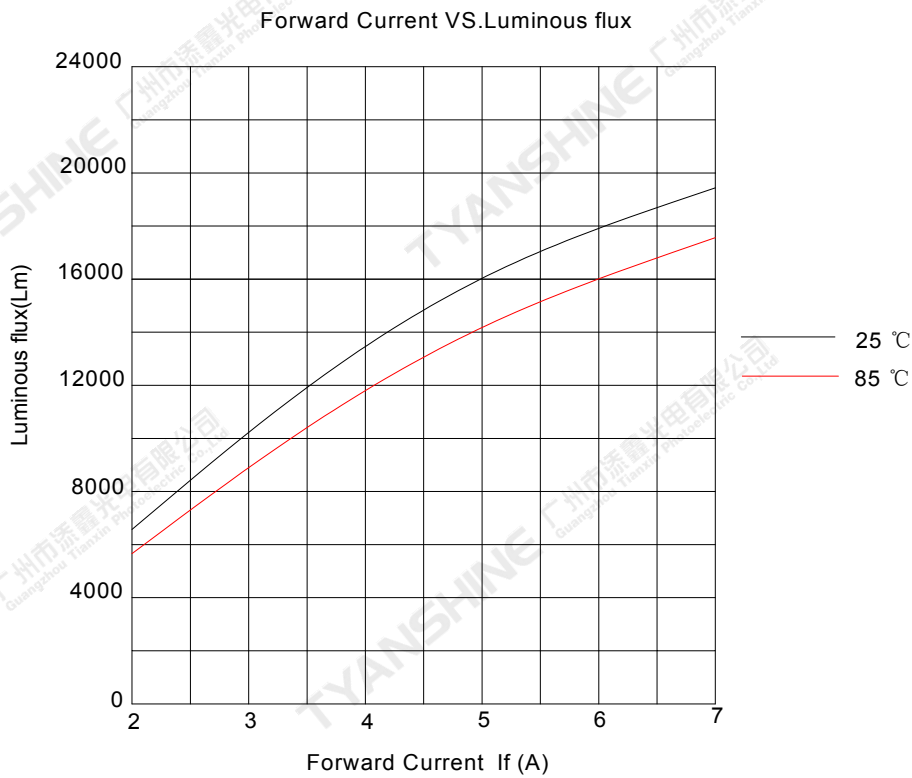
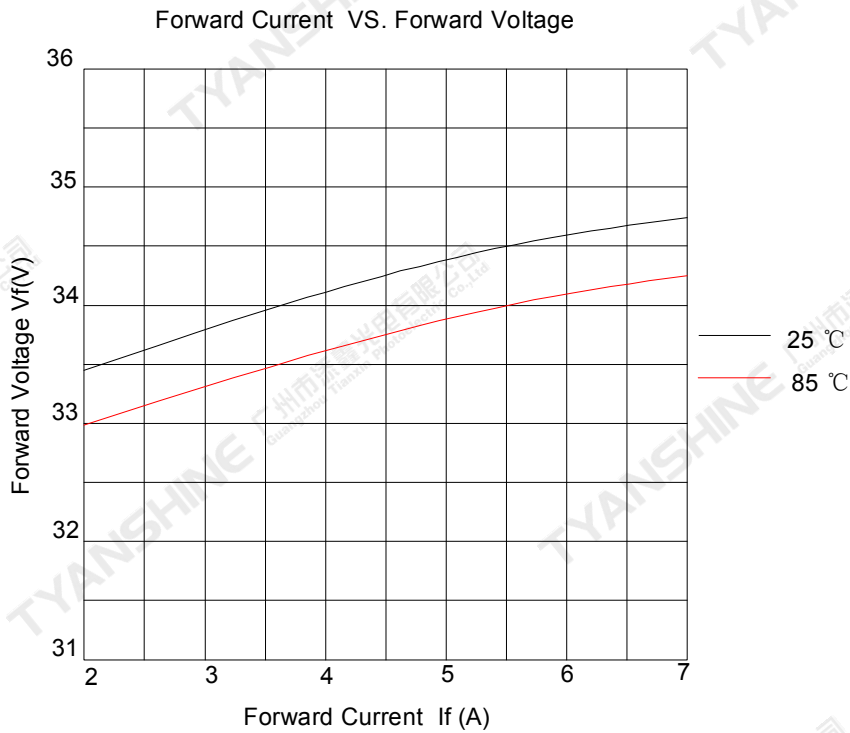
**Notes:**

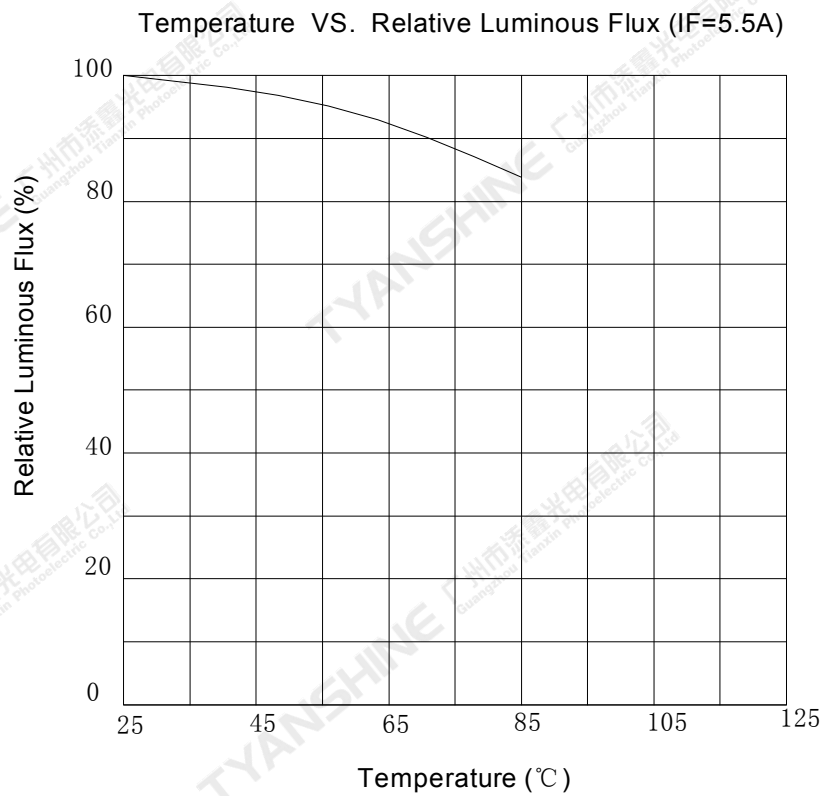
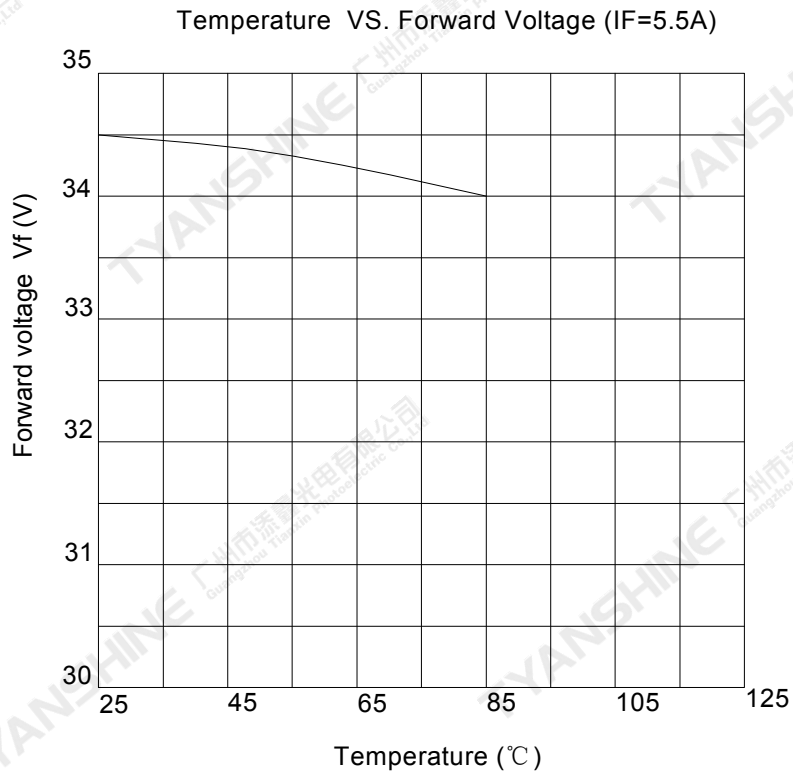
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4.Luminous flux measurement tolerance:±15%.
- 5.Forward voltage measurement tolerance:±0.15V.

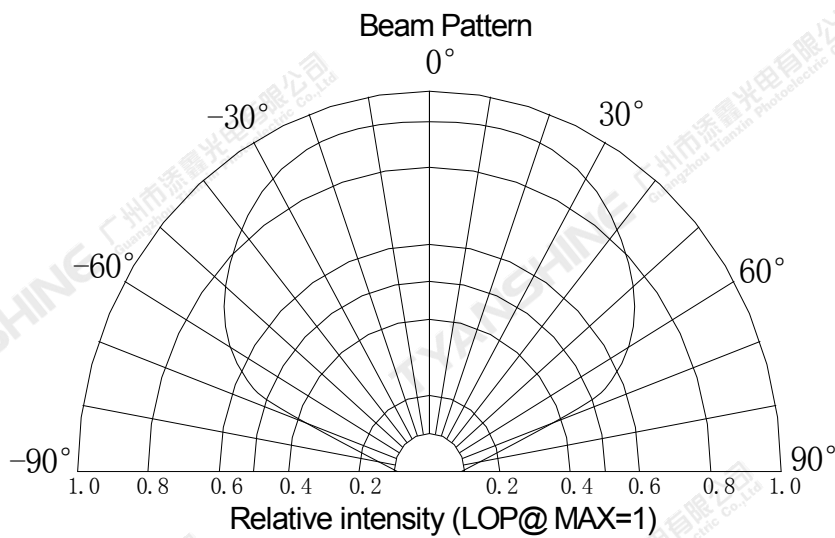
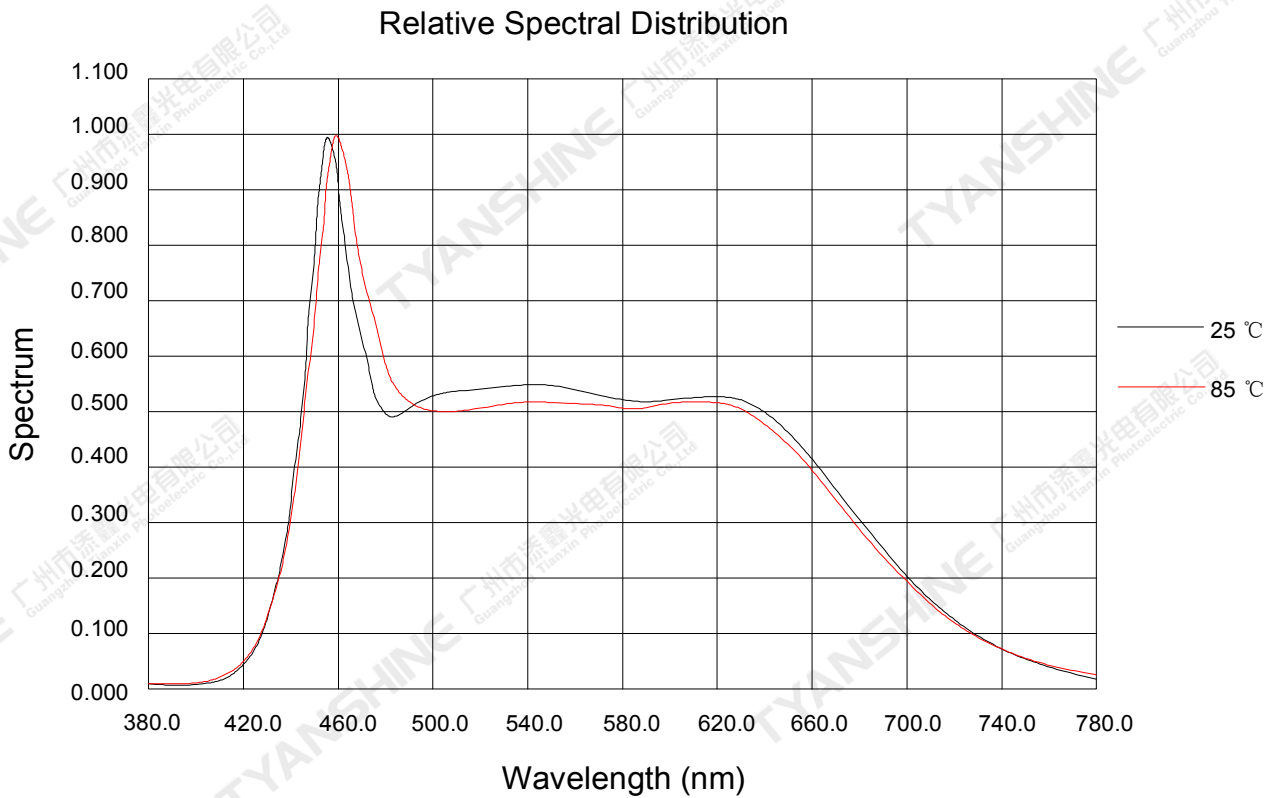
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## Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)







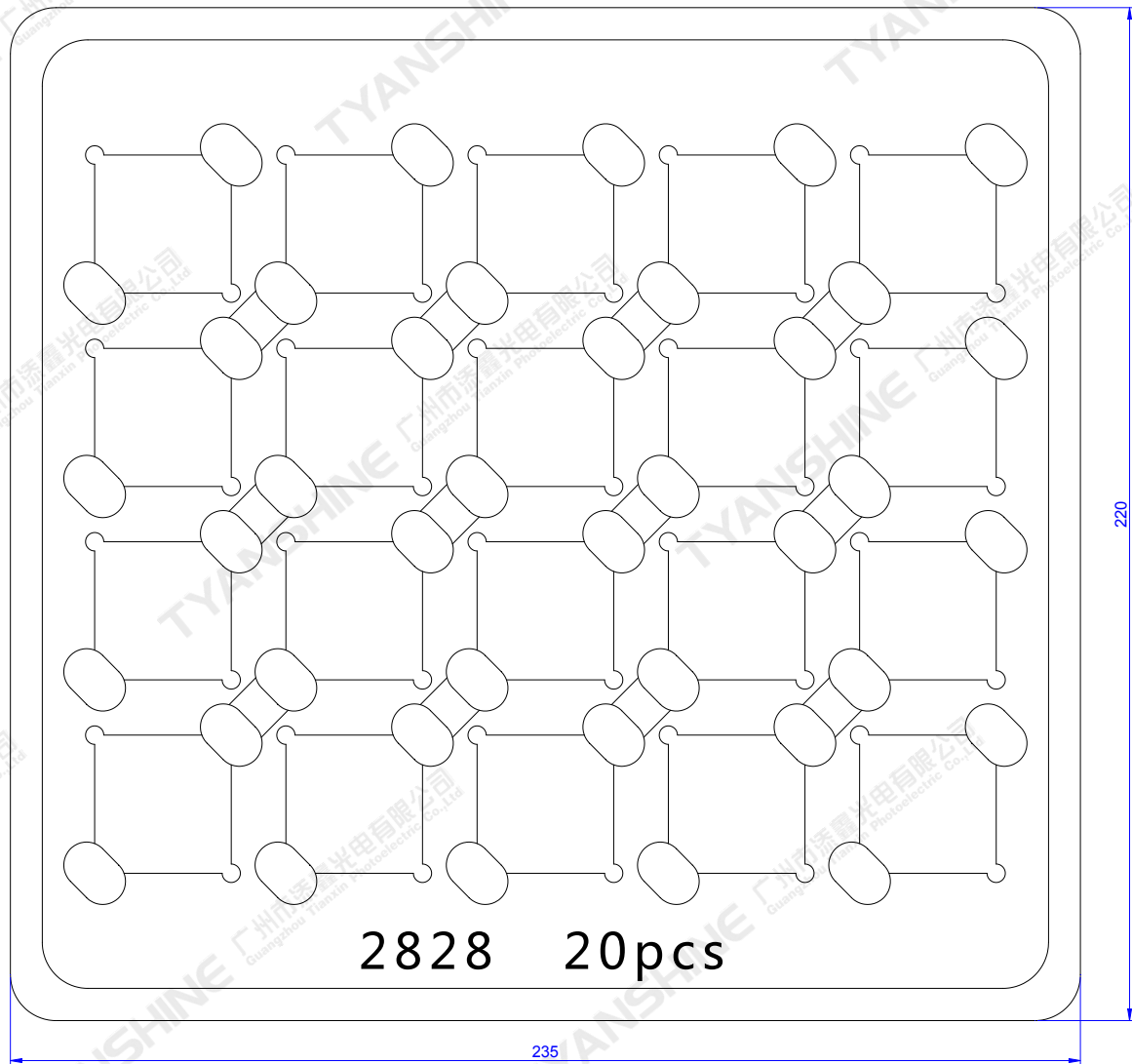
**Notes:**

1.  $2\theta_{1/2}$  is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is  $\pm 5^\circ$ .

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**Dimensions For Cannulation And Packaging**

**Quantity: 20 PCS**



**Notes:**

1. All dimensions are in millimeters.
2. Tolerances are  $\pm 2.0$  mm unless otherwise noted.
3. The products are packaged together with silica gel, Transport, not to the weight of welding LED light-emitting area, As a result of the weight of LED light-emitting zone in the quality of, Irresponsible of the Company.

|          |                           |          |               |      |        |
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