

**TX-2828SW100C22F12-03H952770****PRODUCT SPECIFICATION****Features:**

- ◆Excellent transiting heat from LED chip operating under 3200mA.
- ◆Provide uniform cross distribution of positive white and warm white dual color scheme, mixed pure.
- ◆High luminous output.
- ◆No UV.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

**Chip Material:**

- ◆GaInN

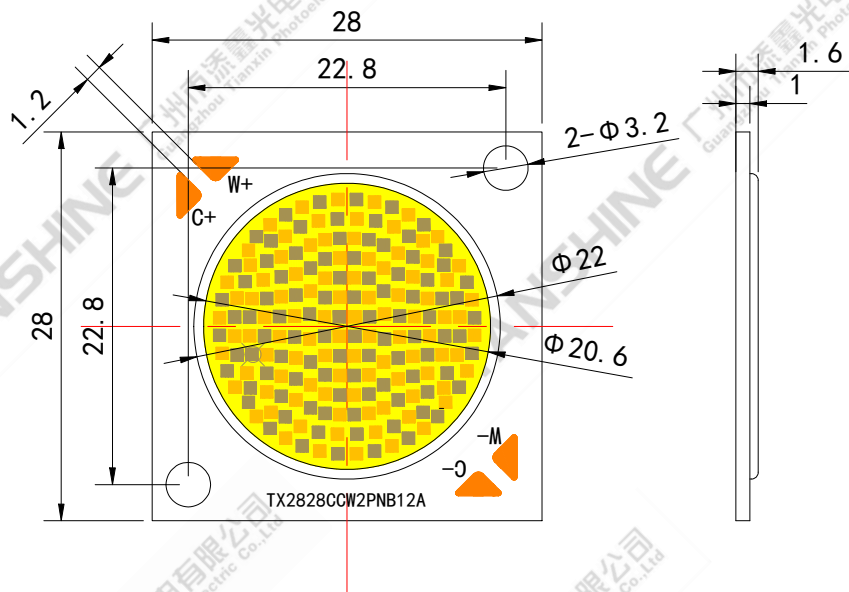
**Emitting Color:**

- ◆White
- ◆Warm white

**Applications:**

- ◆Commercial lighting
- ◆General Lighting

Package Dimensions:



W: Warm White; C: White

Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are ±0.25mm .

Code Formats:

TX-2828SW100C22F12-03H952770

| TX        | — | 2828   | SW          | 100      | C       | 22  | F         | 12                  | — | 03  | H95 | 2770 |
|-----------|---|--------|-------------|----------|---------|-----|-----------|---------------------|---|-----|-----|------|
| TYANSHINE | — | series | performance | watt typ | texture | LES | chip code | die count in series | — | BOM | Ra  | CCT  |

## Absolute Maximum Ratings

| Parameter                               | Symbol           | Ratings                            | Unit |
|-----------------------------------------|------------------|------------------------------------|------|
| Forward Current                         | IF               | 3200                               | mA   |
| Reverse Voltage                         | V <sub>R</sub>   | Not designed for reverse operation | V    |
| Power Dissipation                       | P <sub>D</sub>   | W                                  | W    |
|                                         |                  | C                                  |      |
|                                         |                  | W+C                                |      |
| Junction Temperature                    | T <sub>j</sub>   | W                                  | ℃    |
|                                         |                  | C                                  |      |
| Case Temperature (C)                    | T <sub>c</sub>   | 85                                 | ℃    |
| Electrostatic Discharge Threshold (ESD) | ESD              | 2000                               | V    |
| Storage Temperature                     | T <sub>stg</sub> | -30~+100                           | ℃    |
| Operation Temperature                   | T <sub>opr</sub> | -30~+85                            |      |

## 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 (Tc=25°C)

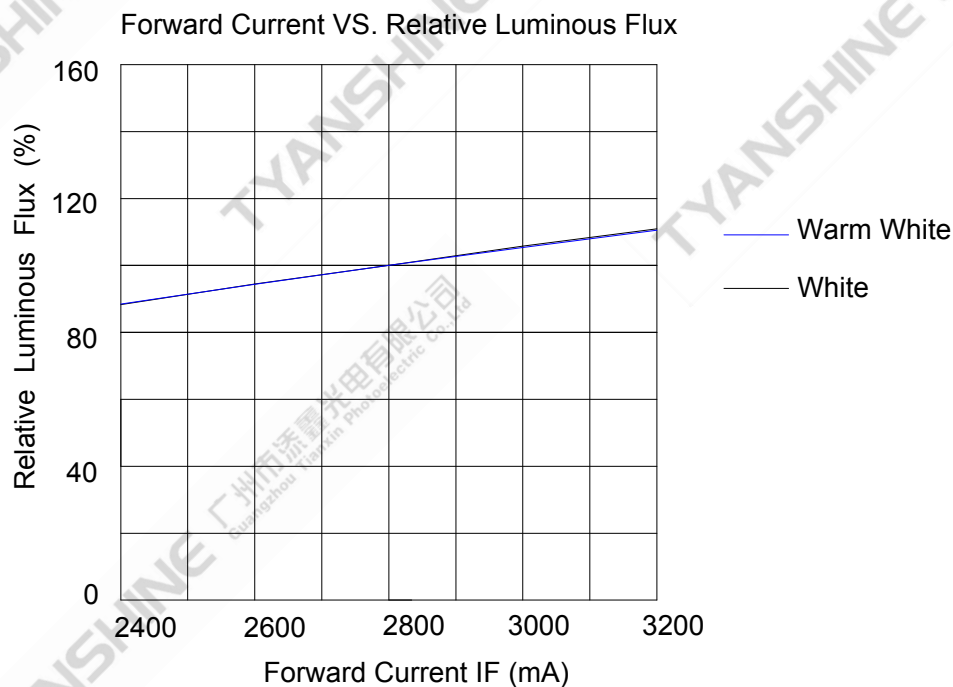
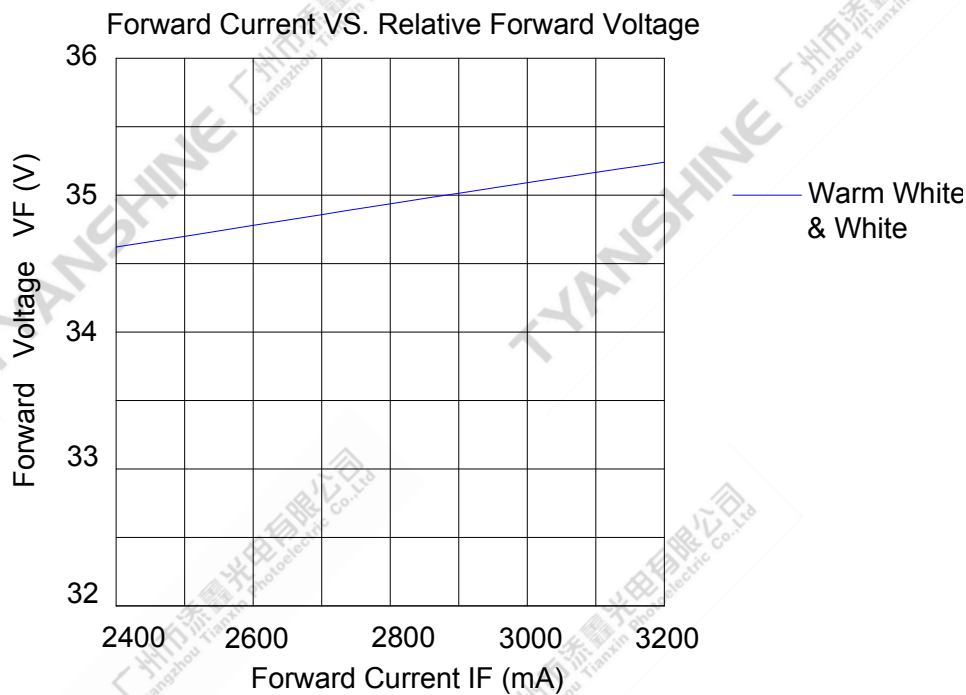
| Parameter                           | Symbol          | Condition | Emitting color | Min. | Typ.  | Max.  | Units   |
|-------------------------------------|-----------------|-----------|----------------|------|-------|-------|---------|
| Luminous Flux                       | $\varphi_v$     | If=2800mA | W              | 6800 | 7700  | 8600  | lm      |
|                                     |                 |           | C              | 9000 | 10300 | 11700 |         |
| Forward Voltage                     | $V_f$           |           | W              | 33   | 35    | 37    | V       |
|                                     |                 |           | C              | 33   | 35    | 37    |         |
| Correlated Colour Temperature       | CCT             |           | W              | 2600 | 2670  | 2740  | K       |
|                                     |                 |           | C              | 6600 | 6900  | 7200  |         |
| Viewing Angle at 50 % IV            | $2\theta_{1/2}$ |           | W              | —    | 115   | —     | Deg     |
|                                     |                 |           | C              | —    | 115   | —     |         |
| Reverse Current                     | $I_R$           | —         | —              | —    | —     | —     | $\mu A$ |
| Thermal Resistance Junction to Case | $R\theta_{J-C}$ | If=2800mA | W              | —    | 0.18  | —     | K/W     |
|                                     |                 |           | C              | —    | 0.18  | —     |         |
| Color Rendering Index               | Ra              |           |                | —    | 95    | —     | —       |

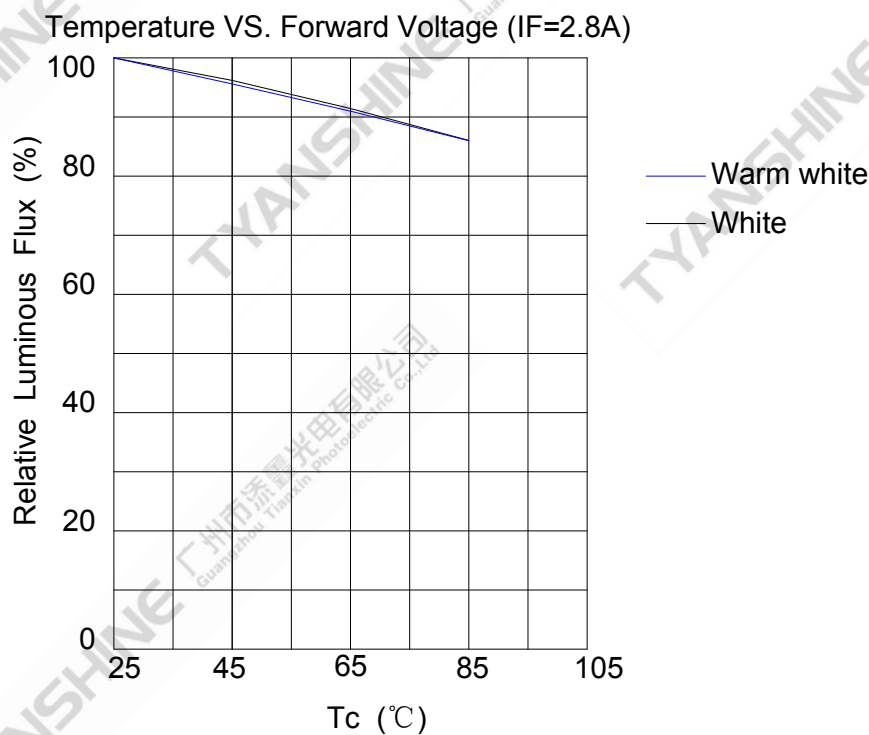
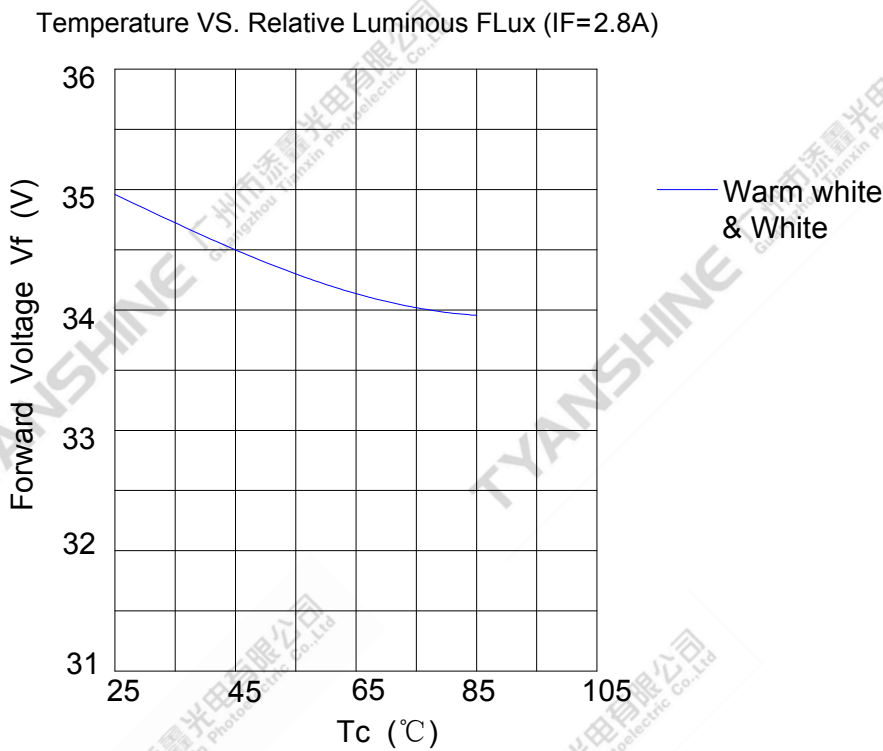
## Notes:

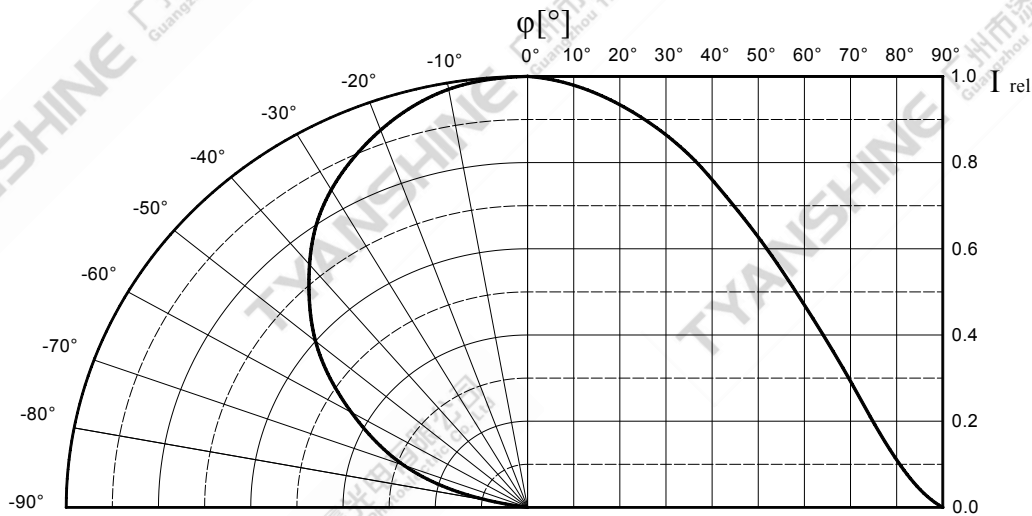
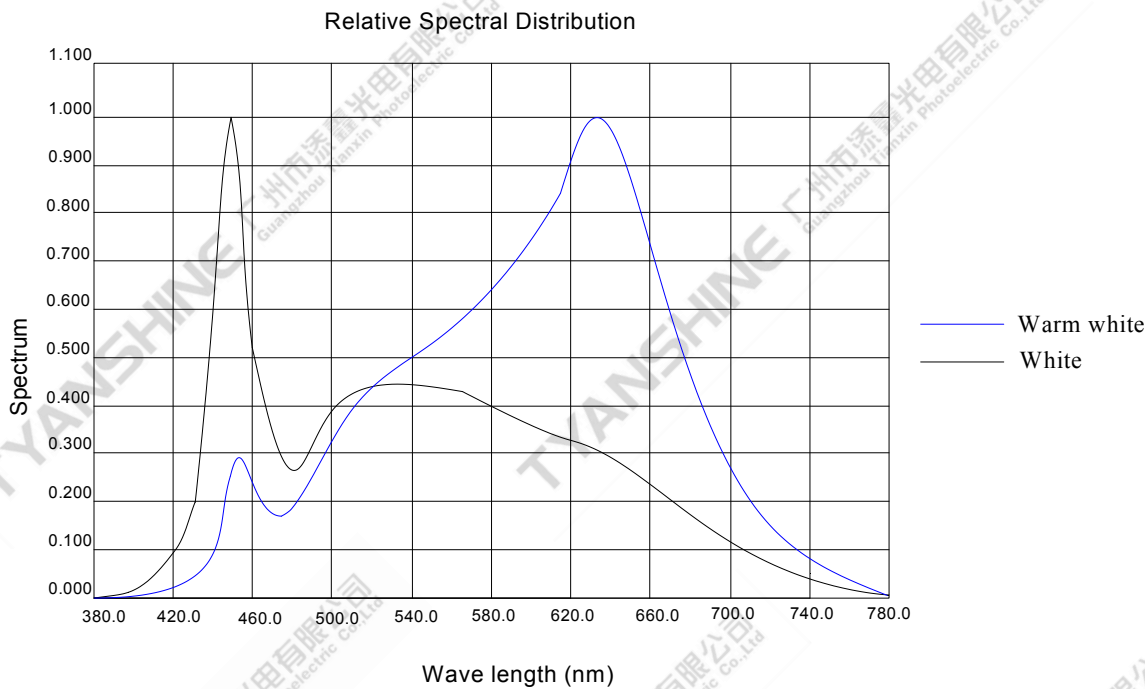
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance:  $\pm 15\%$ .
- 4.Forward voltage measurement tolerance:  $\pm 3\%$ .
- 5.Ra measurement tolerance:  $\pm 2$ .
- 6.R15 measurement tolerance: -1.
- 7.RF measurement tolerance: -1

Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)



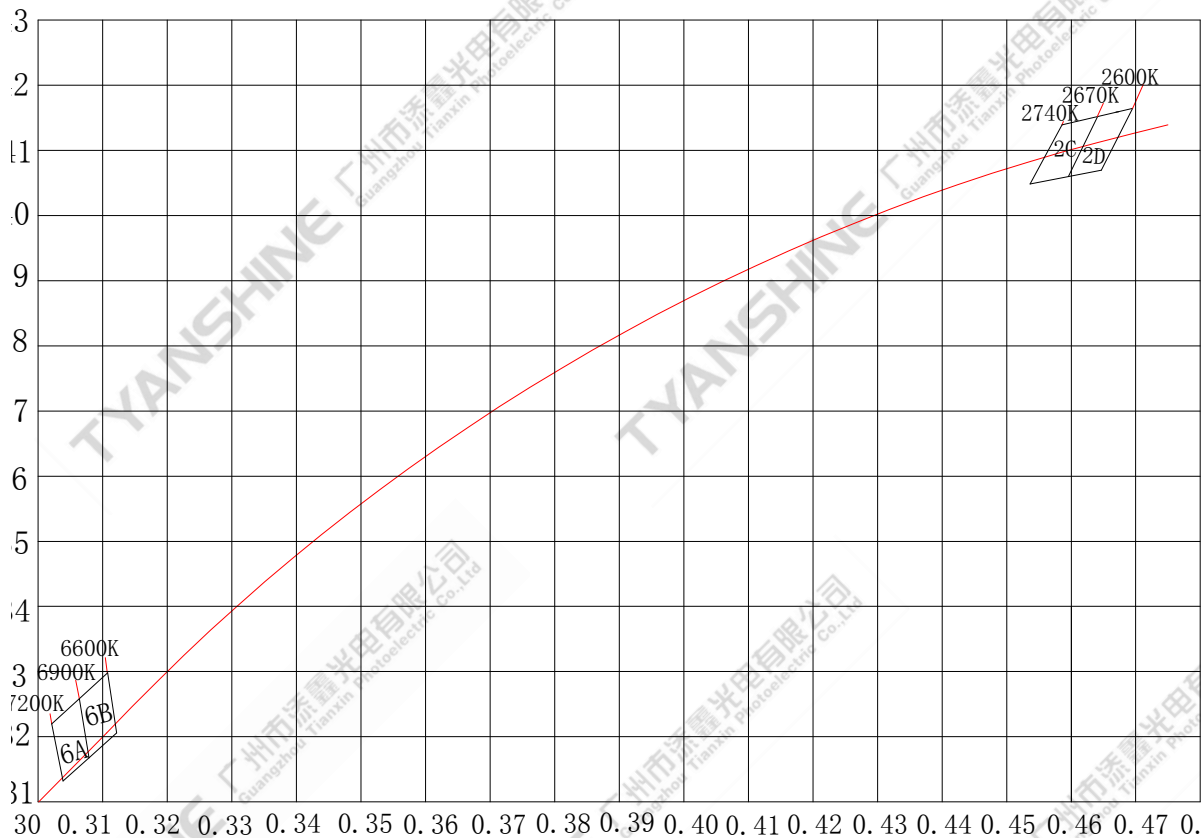




Notes:

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  $\pm 5^\circ$ .

Chromaticity Coordinates (Condition : IF=2800mA , Tc=25℃ )



Notes:

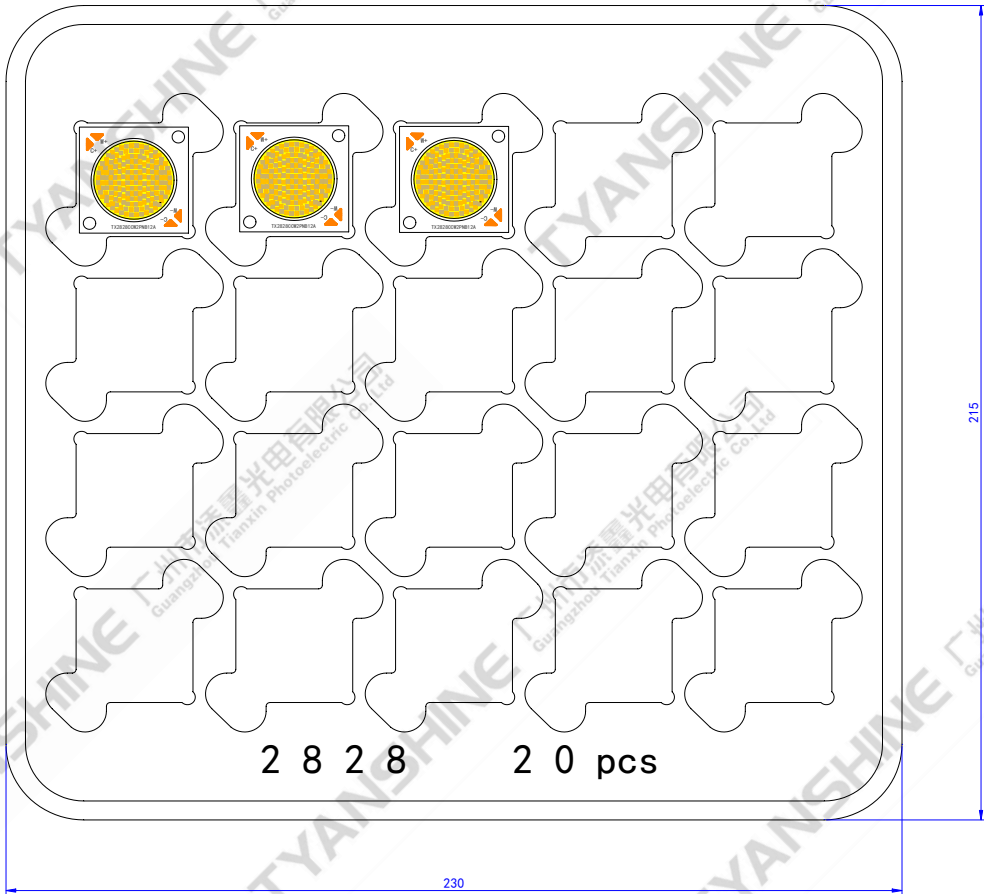
1. chromaticity (x, y) measurements tolerance: ±0.005.

Reliability Test

| Test Item                     | Test Condition                                     |
|-------------------------------|----------------------------------------------------|
| Continuous Operation Test     | IF=2800mA Ta=25℃ ×1000hrs                          |
| Low Temperature Storage Test  | -30℃ × 1000 hours                                  |
| High Temperature Storage Test | 100 ℃ × 1000 hours                                 |
| Moisture-proof Test           | 85 ℃, 85 %RH for 500 hours                         |
| Thermal Shock Test            | -30 ℃ × 30 minutes – 100 ℃ × 30 minutes, 100 cycle |

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.