

# TX-H1825SW14A-3050V36-02AH90

## PRODUCT SPECIFICATION

### Features:

- ◆Excellent transiting heat from LED chip operating under 1100mA.
- ◆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:

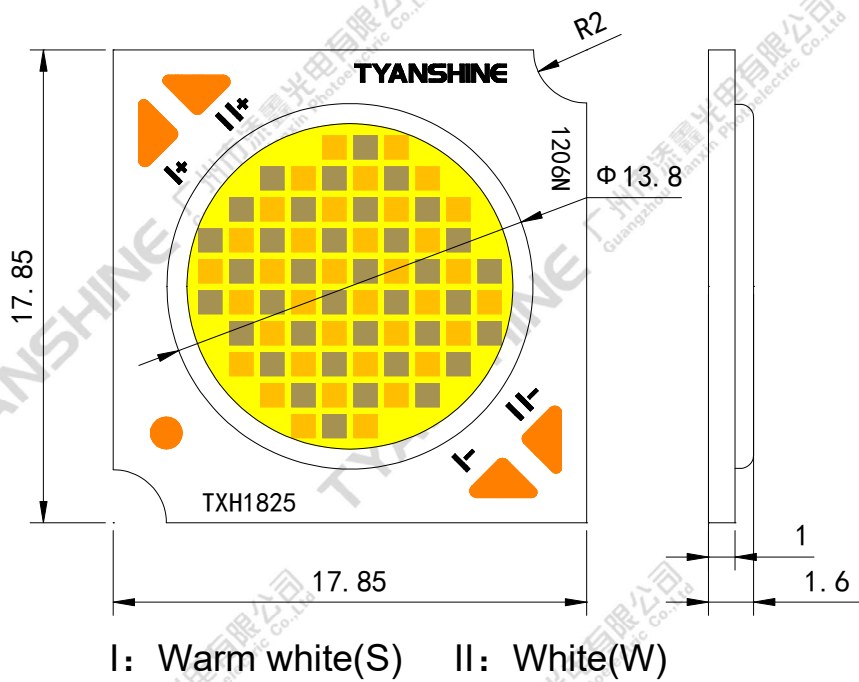
- ◆White
- ◆Warm white

### Applications:

- ◆Commercial lighting
- ◆General Lighting

|          |                              |          |            |      |        |
|----------|------------------------------|----------|------------|------|--------|
| Part No. | TX-H1825SW14A-3050V36-02AH90 | Spec No. | WKF-DA0056 | Page | 1 of 9 |
|----------|------------------------------|----------|------------|------|--------|

Package Dimensions:



Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are  $\pm 0.25\text{mm}$  .

Code Formats:

TX-H1825SW14A-3050V36-02AH90

| TX        | — | H            | 18     | 25       | SW          | 14  | A       | — | 3050 | V36   | — | 02A | H90 |
|-----------|---|--------------|--------|----------|-------------|-----|---------|---|------|-------|---|-----|-----|
| TYANSHINE | — | high density | series | watt typ | performance | LES | texture | — | CCT  | VOLTs | — | BOM | Ra  |

|          |                              |          |            |      |        |
|----------|------------------------------|----------|------------|------|--------|
| Part No. | TX-H1825SW14A-3050V36-02AH90 | Spec No. | WKF-DA0056 | Page | 2 of 9 |
|----------|------------------------------|----------|------------|------|--------|

## Absolute Maximum Ratings

| Parameter                               | Symbol |     | Ratings                            | Unit |
|-----------------------------------------|--------|-----|------------------------------------|------|
| Forward Current                         | IF     |     | 1100                               | mA   |
| Reverse Voltage                         | VR     |     | Not designed for reverse operation | V    |
| Power Dissipation                       | PD     | S   | 39                                 | W    |
|                                         |        | W   | 39                                 |      |
|                                         |        | S+W | 39                                 |      |
| Junction Temperature                    | Tj     | S   | 150                                | ℃    |
|                                         |        | W   | 150                                |      |
| Case Temperature (C)                    | Tc     |     | 85                                 | ℃    |
| Electrostatic Discharge Threshold (ESD) | ESD    |     | 2000                               | V    |
| Storage Temperature                     | Tstg   |     | -30~+80                            | ℃    |
| Operation Temperature                   | Topr   |     | -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)

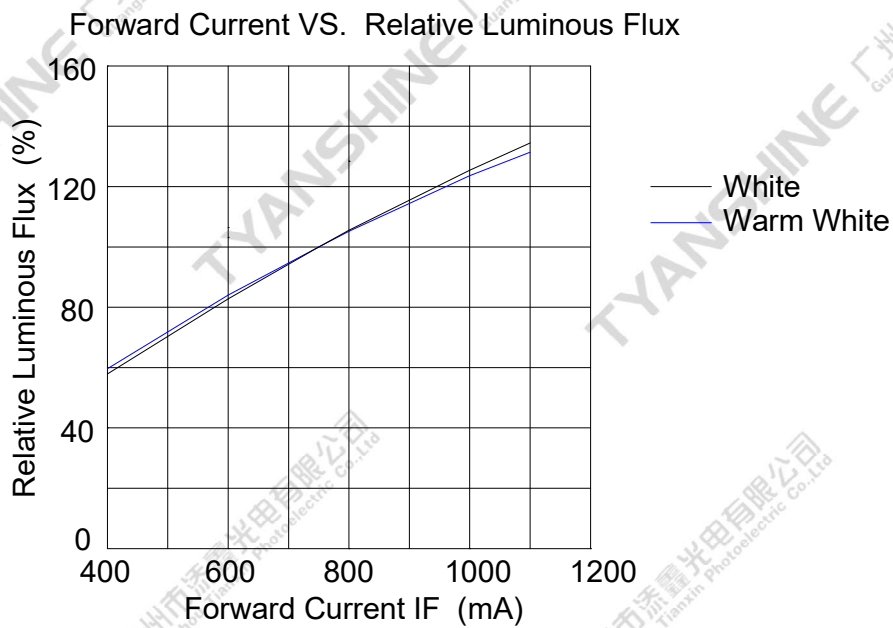
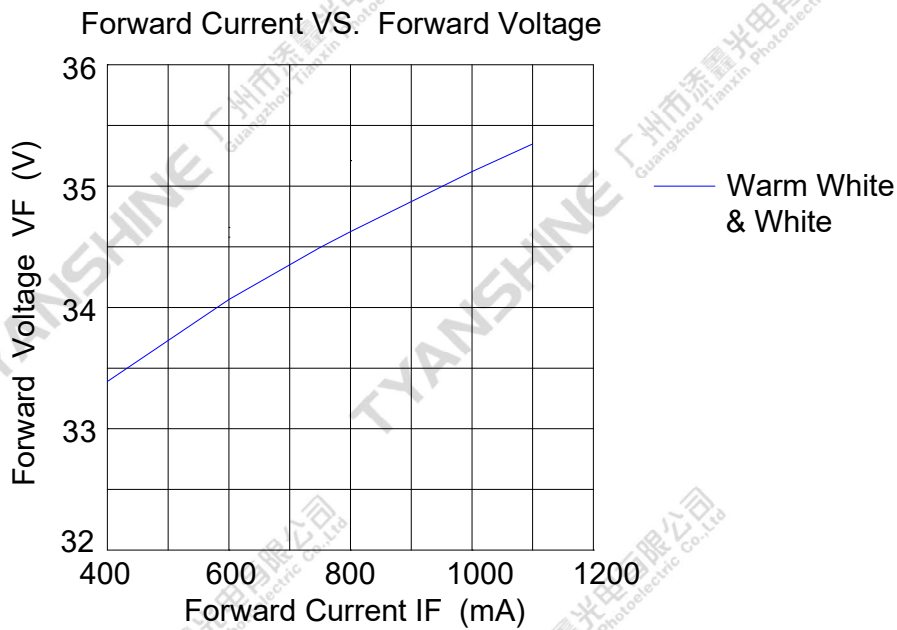
| Parameter                           | Symbol          | Condition | Emitting color | Min. | Typ. | Max. | Units   |     |
|-------------------------------------|-----------------|-----------|----------------|------|------|------|---------|-----|
| Luminous Flux                       | $\phi_v$        | If=750mA  | S              | 2250 | 2500 | 2850 | lm      |     |
|                                     |                 |           | W              | 2650 | 3000 | 3350 |         |     |
| Forward Voltage                     | $V_f$           |           | S              | 32   | 34   | 36   | V       |     |
|                                     |                 |           | W              | 32   | 34   | 36   |         |     |
| Correlated Colour Temperature       | CCT             |           | S              | 2920 | 3020 | 3150 | K       |     |
|                                     |                 |           | W              | 4800 | 5000 | 5250 |         |     |
| Viewing Angle at 50 % IV            | $2\theta_{1/2}$ |           | S              | —    | 115  | —    | Deg     |     |
|                                     |                 |           | W              | —    | 115  | —    |         |     |
| Reverse Current                     | $I_R$           |           | —              | —    | —    | —    | $\mu A$ |     |
| Thermal Resistance Junction to Case | $R\theta_{J-C}$ |           | If=750mA       | —    | —    | 1.34 | —       | K/W |
| Color Rendering Index               | Ra              |           |                | S    | 90   | —    | —       | —   |
|                                     |                 |           |                | W    | 90   | —    | —       |     |

## Notes:

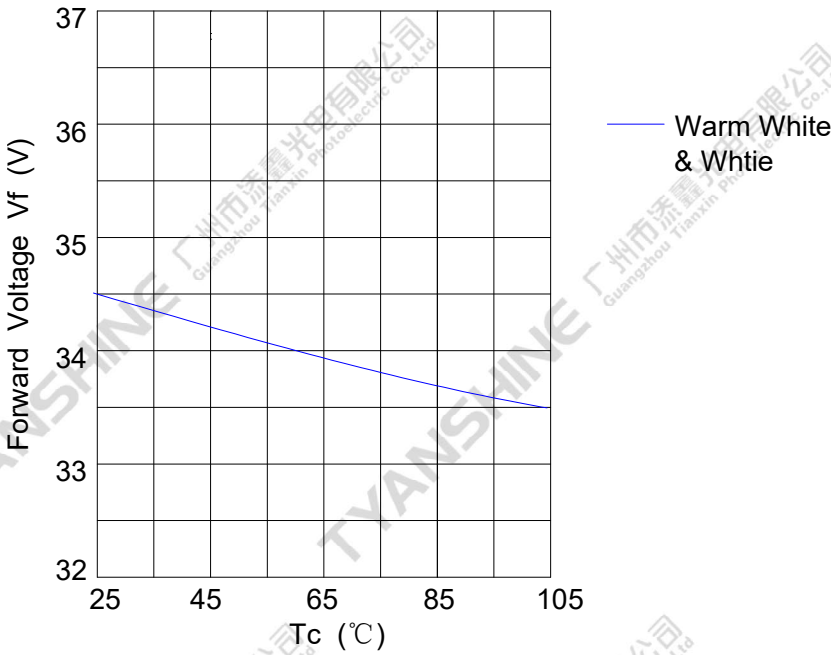
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.Luminous flux measurement tolerance:  $\pm 15\%$ .
- 4.Forward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

Typical Electrical/Optical Characteristics Curves

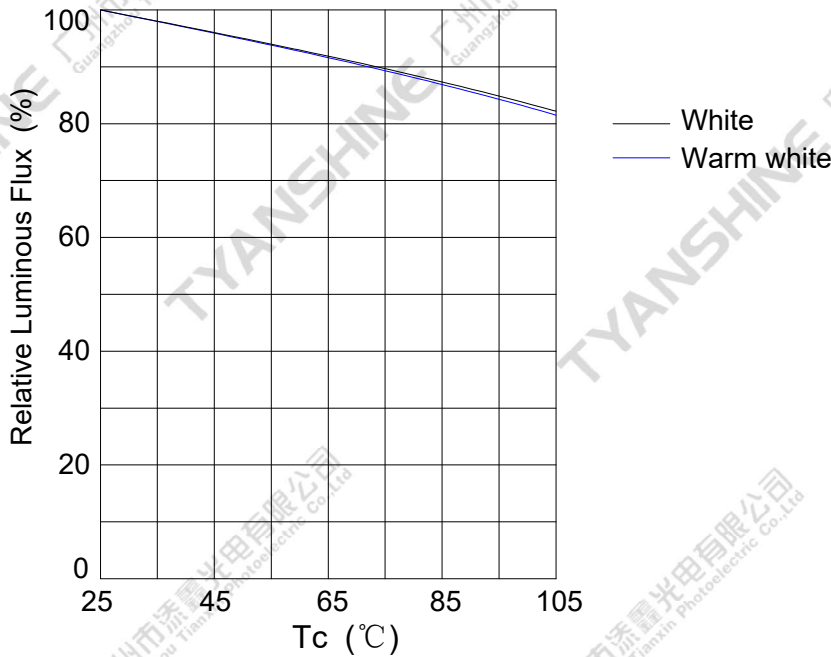
(25°C Ambient Temperature Unless Otherwise Noted)

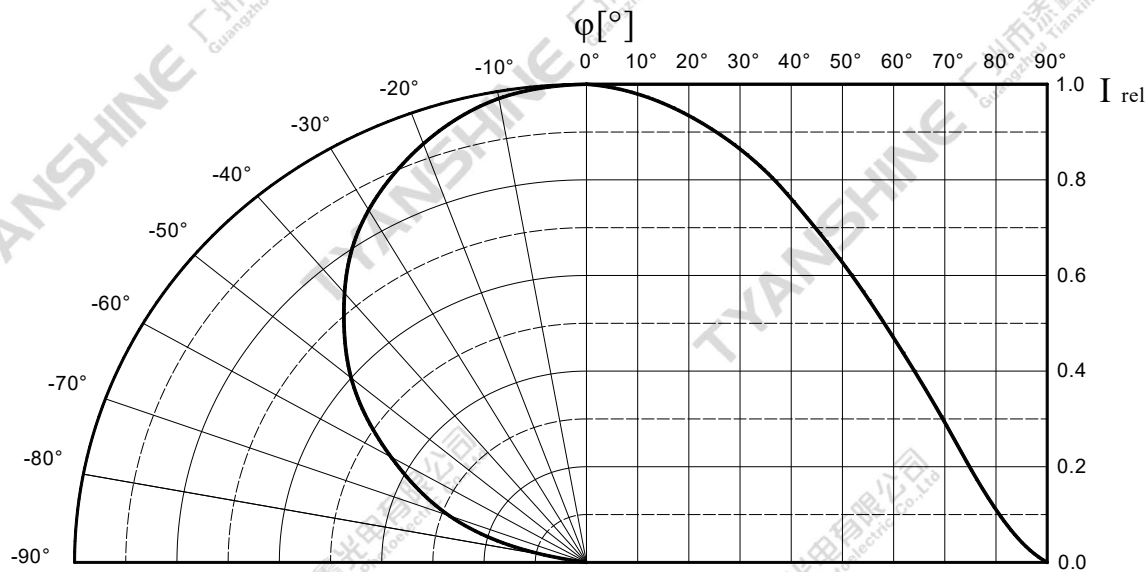
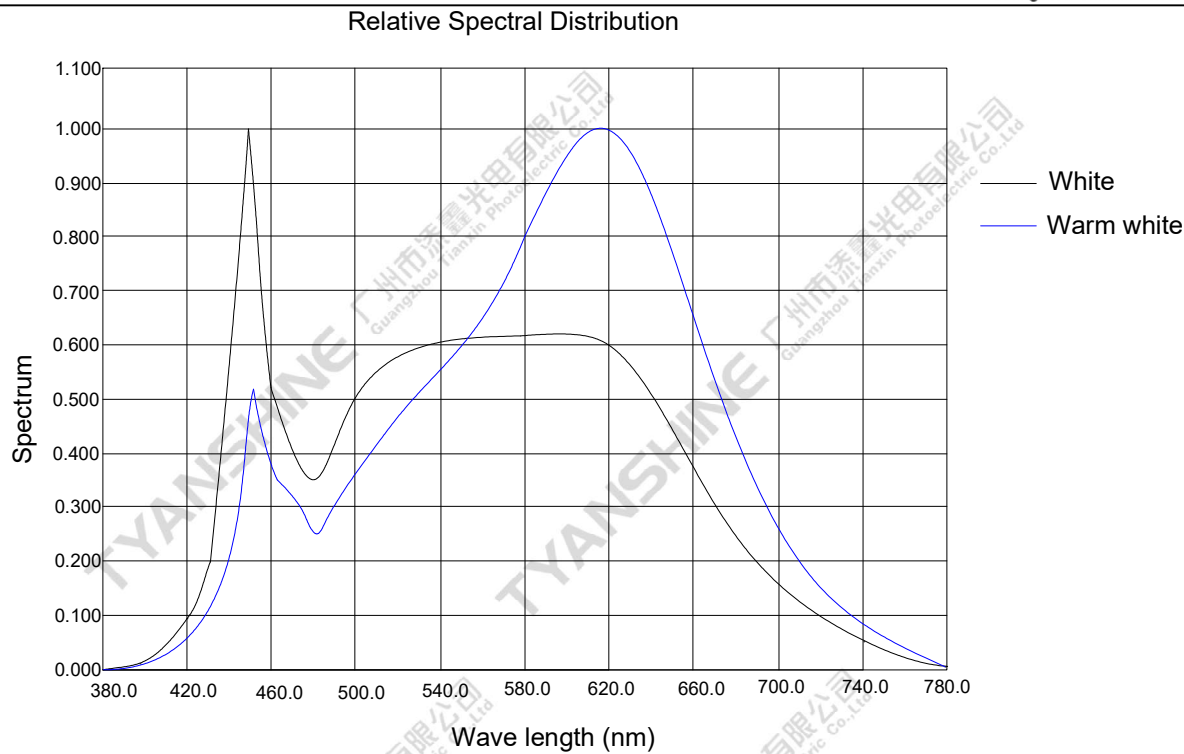


Temperature VS. RelativeForward Voltage (IF=750mA)



Temperature VS. Relative Luminous Flux (IF=750mA)

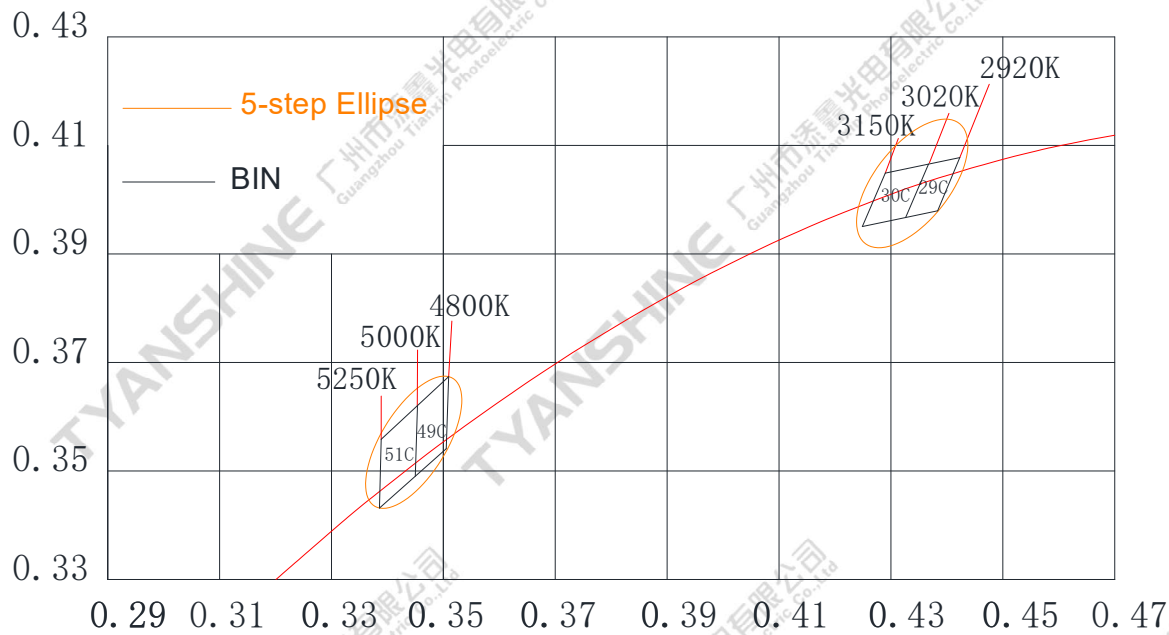




Notes:

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=750mA, Tc=25℃)



| 5-step Ellipse |              |        |            |            |                       |
|----------------|--------------|--------|------------|------------|-----------------------|
| CCT            | Center Point |        | Major Axis | Minor Axis | Rotation Angle<br>(°) |
|                | x            | y      | a          | b          |                       |
| 3000K          | 0.4338       | 0.403  | 0.0139     | 0.0068     | 53.2                  |
| 5000K          | 0.3447       | 0.3553 | 0.0137     | 0.0059     | 59.6                  |

Notes:

1.chromaticity (x, y) measurements tolerance:±0.003.

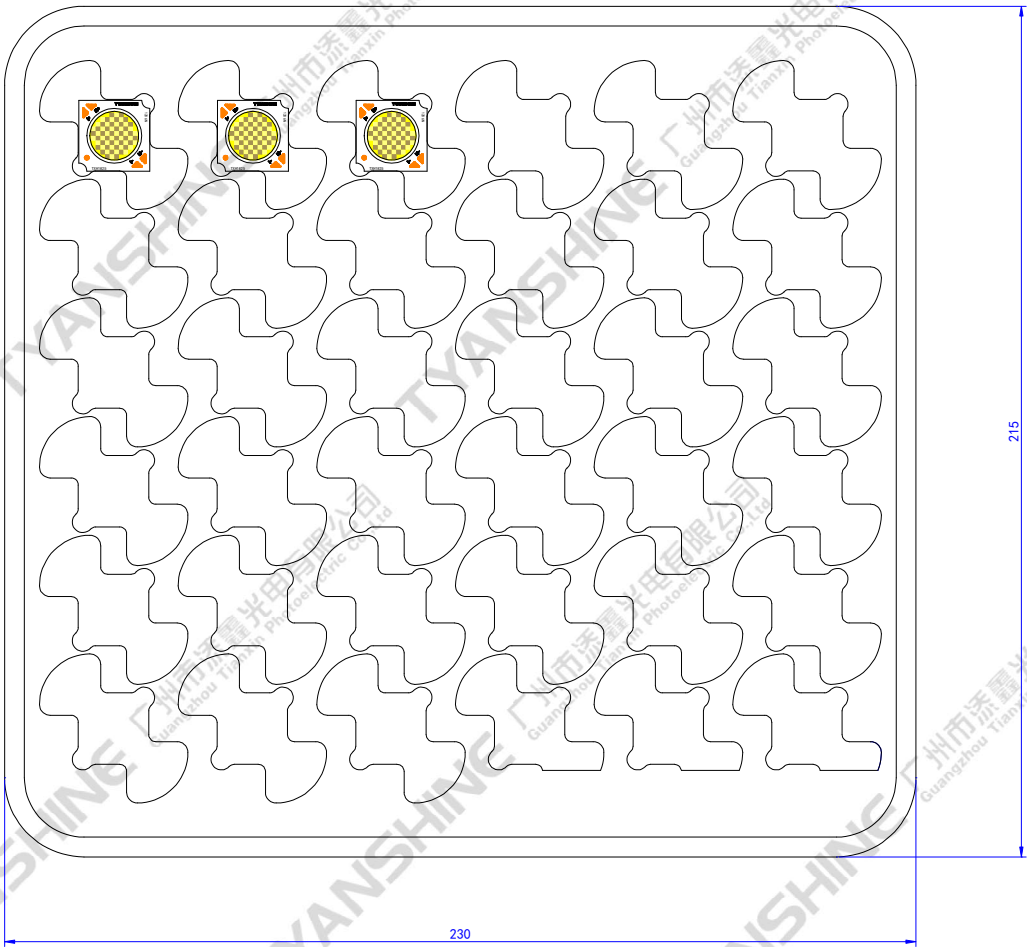
Reliability Test

| Test Item                     | Test Condition                                     |
|-------------------------------|----------------------------------------------------|
| Continuous Operation Test     | IF=750mA 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            | -40 ℃ × 15 minutes – 125 ℃ × 15 minutes, 100 cycle |



Dimensions For Cannulation And Packaging

Quantity: 36PCS



Notes:

- 1. All dimensions are in millimeters.
- 2. Tolerances are ±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.