

TX-1825SW14A-2860V36-10H80

PRODUCT SPECIFICATION

Features:

- ◆ Excellent transiting heat from LED chip operating under 1000mA.
- ◆ 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:

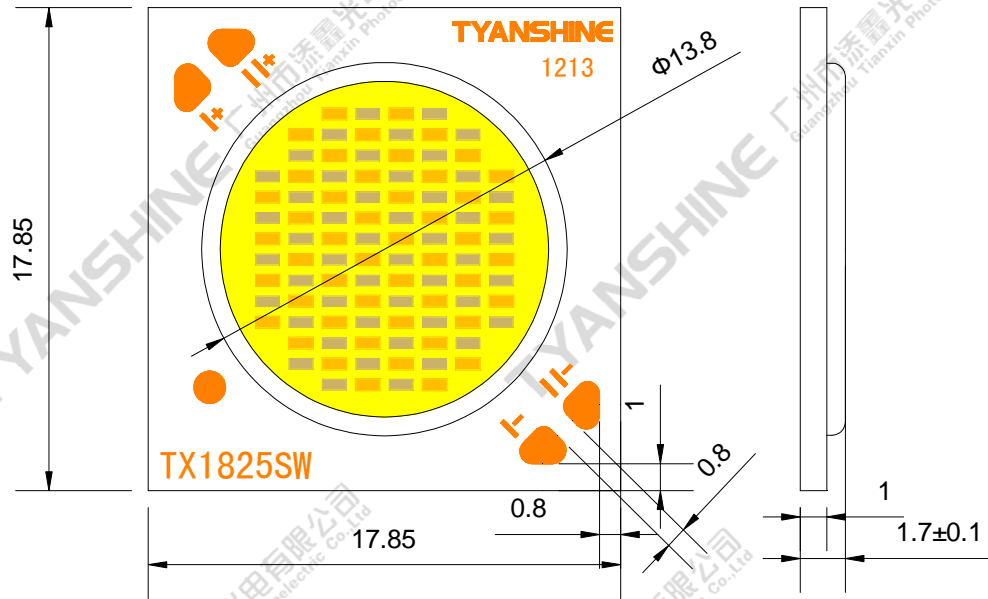
- ◆ White
- ◆ Warm white

Applications:

- ◆ Commercial lighting
- ◆ General Lighting

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Package Dimensions:



I: Warm white ; II: White

Notes:

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

Code Formats:

TX-1825SW14A-2860V36-10H80

| | | | | | | | | | | | | |
|-----------|---|--------|----------|-------------|-----|---------|---|------|-------|---|-----|-----|
| TX | — | 18 | 25 | SW | 14 | A | — | 2860 | V36 | — | 10 | H80 |
| TYANSHINE | — | series | watt typ | performance | LES | texture | — | CCT | VOLTs | — | BOM | Ra |

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Absolute Maximum Ratings

| Parameter | Symbol | Ratings | Unit | |
|---|--------|------------------------------------|------|----|
| Forward Current | IF | 1000 | mA | |
| Reverse Voltage | VR | Not designed for reverse operation | V | |
| Power Dissipation | PD | W | 36 | W |
| | | S | 36 | |
| Junction Temperature | Tj | W | 135 | °C |
| | | S | 135 | |
| Case Temperature (C) | Tc | 85 | °C | |
| Electrostatic Discharge Threshold (ESD) | ESD | 2000 | V | |
| Storage Temperature | Tstg | -30~+100 | °C | |
| Operation Temperature | Topr | -30~+80 | | |

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.

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Electrical Optical Characteristics (Tc=25°C)

| Parameter | Symbol | Condition | Emitting color | Min. | Typ. | Max. | Units |
|-------------------------------------|-----------------|-----------|----------------|-------|------|-------|---------|
| Luminous Flux | ϕ_v | If=700mA | S | — | 2500 | — | lm |
| | | | W | — | 3000 | — | |
| Forward Voltage | V_f | | S | 34 | 36 | 38 | V |
| | | | W | 34 | 36 | 38 | |
| Correlated Colour Temperature | CCT | | S | — | 2800 | — | K |
| | | | W | — | 6000 | — | |
| Viewing Angle at 50% IV | $2\theta_{1/2}$ | | S | — | 115 | — | Deg |
| | | | W | — | 115 | — | |
| Reverse Current | I_R | | — | — | — | — | μA |
| Thermal Resistance Junction to Case | $R\theta_{J-C}$ | | S | — | 0.53 | — | K/W |
| | | W | — | 0.53 | — | | |
| Temperature Coefficient of Voltage | $V\Delta F/T$ | S | — | -16.5 | — | mV/°C | |
| | | W | — | -16.5 | — | | |
| Color Rendering Index | Ra | S | — | 80 | — | — | |
| | | W | — | 80 | — | | |

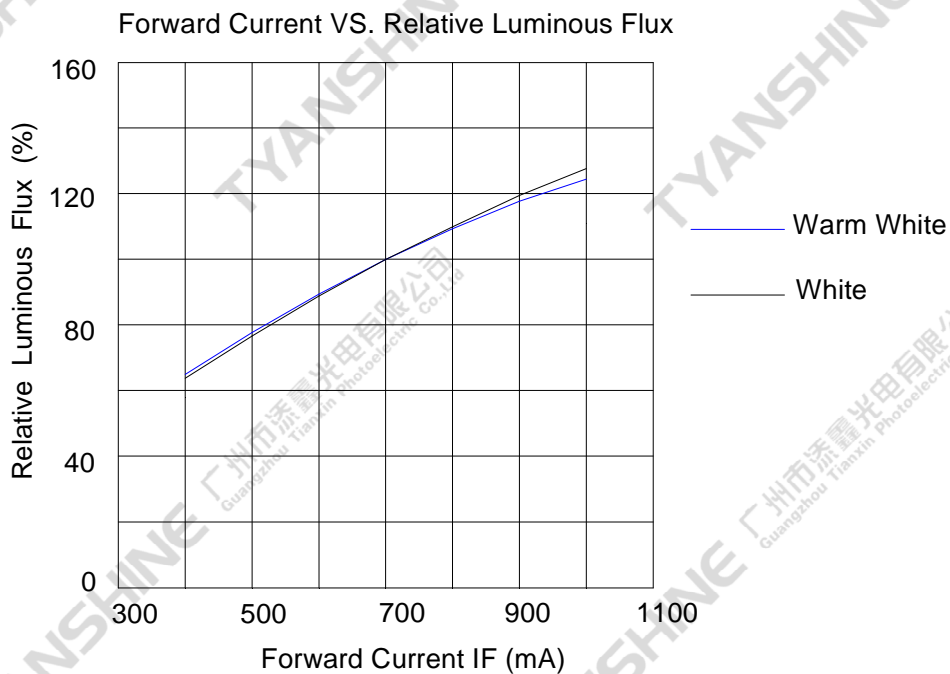
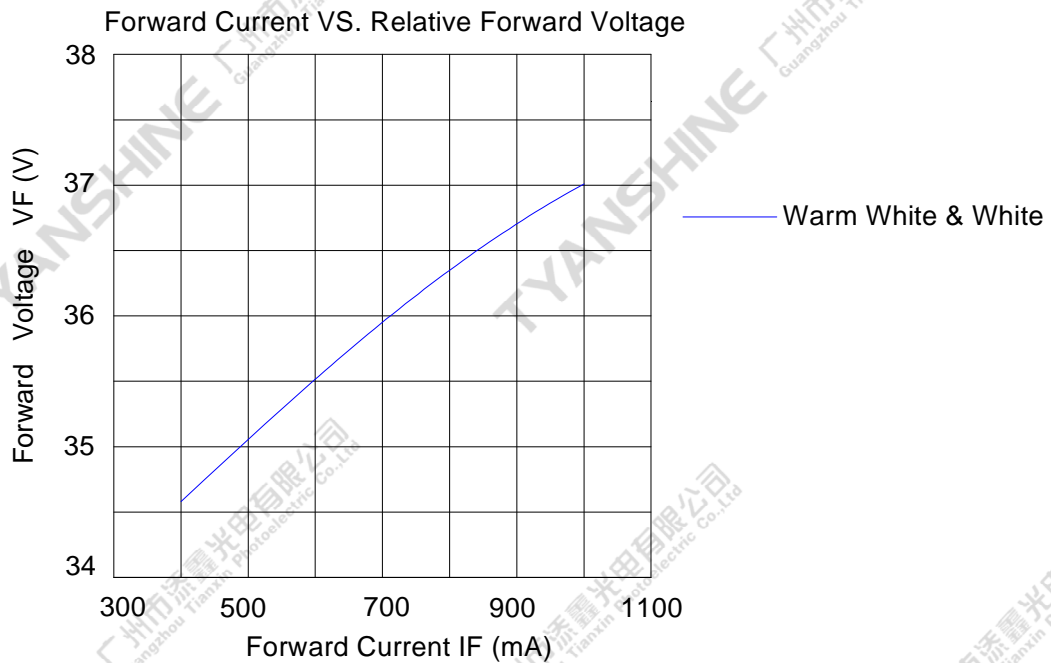
Notes:

- 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:±15%.
- 4.Forward voltage measurement tolerance:±0.15V.

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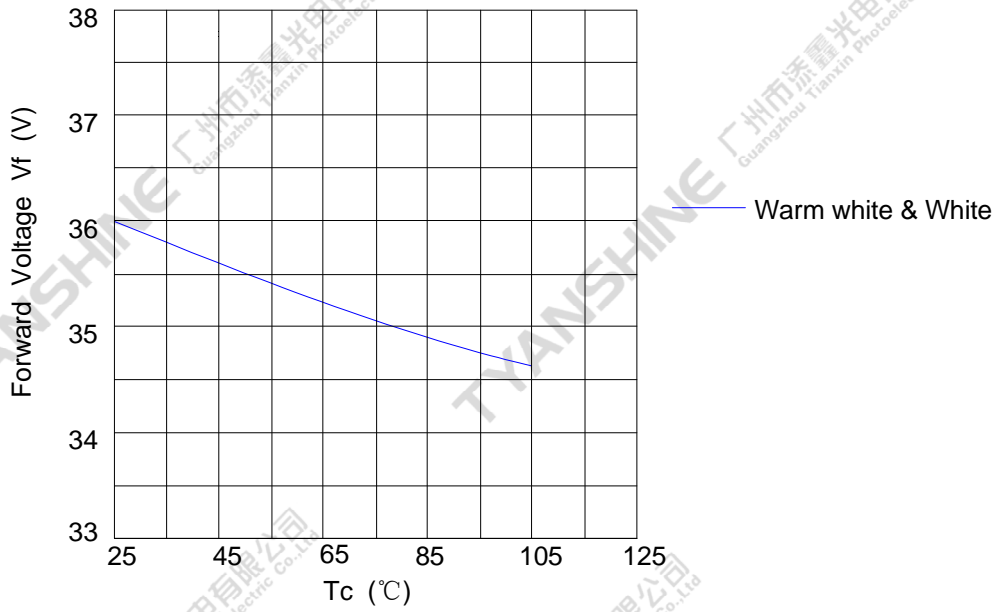
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

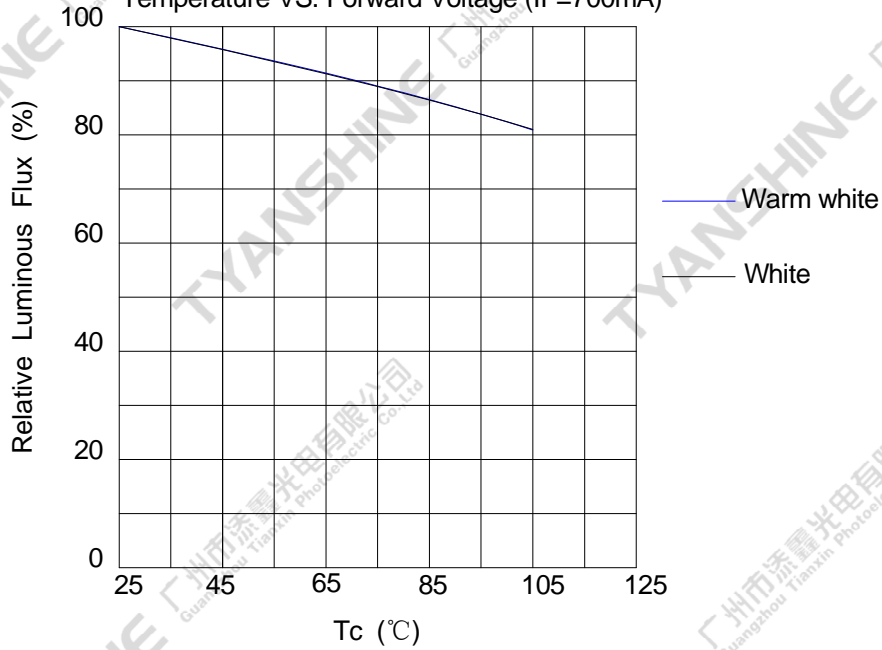


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Temperature VS. Relative Luminous FLux (IF=700mA)

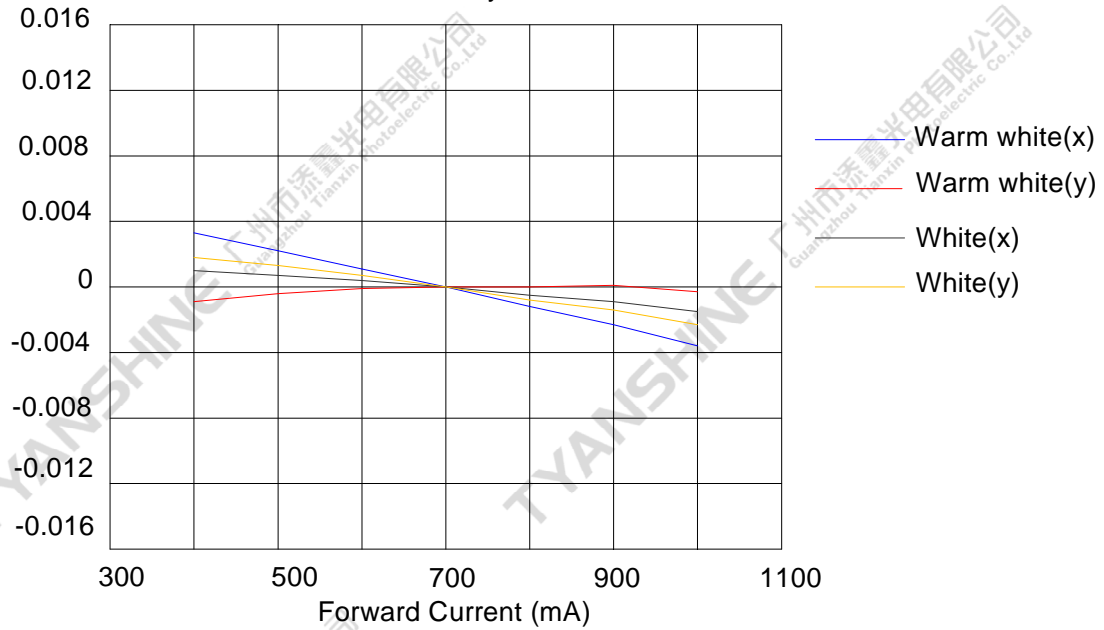


Temperature VS. Forward Voltage (IF=700mA)

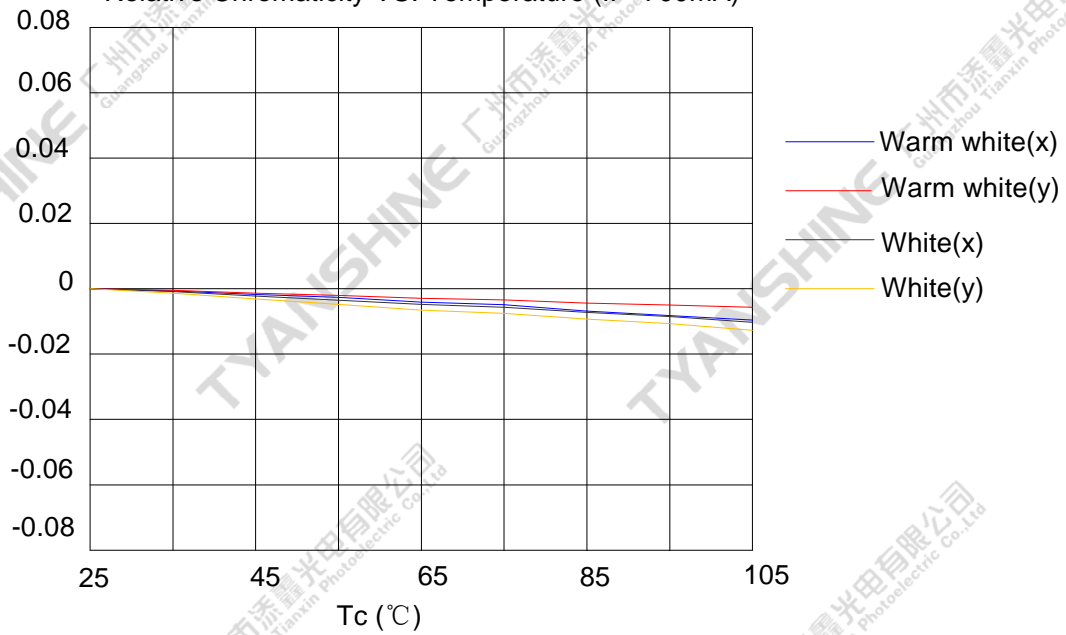


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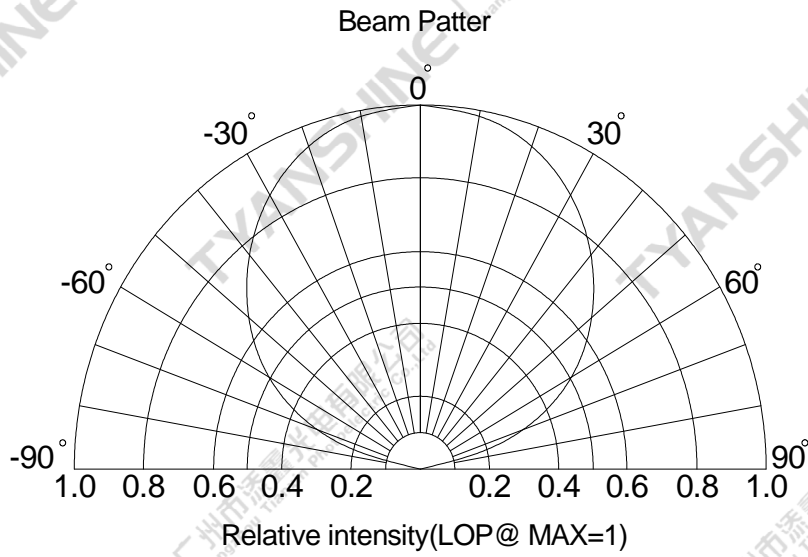
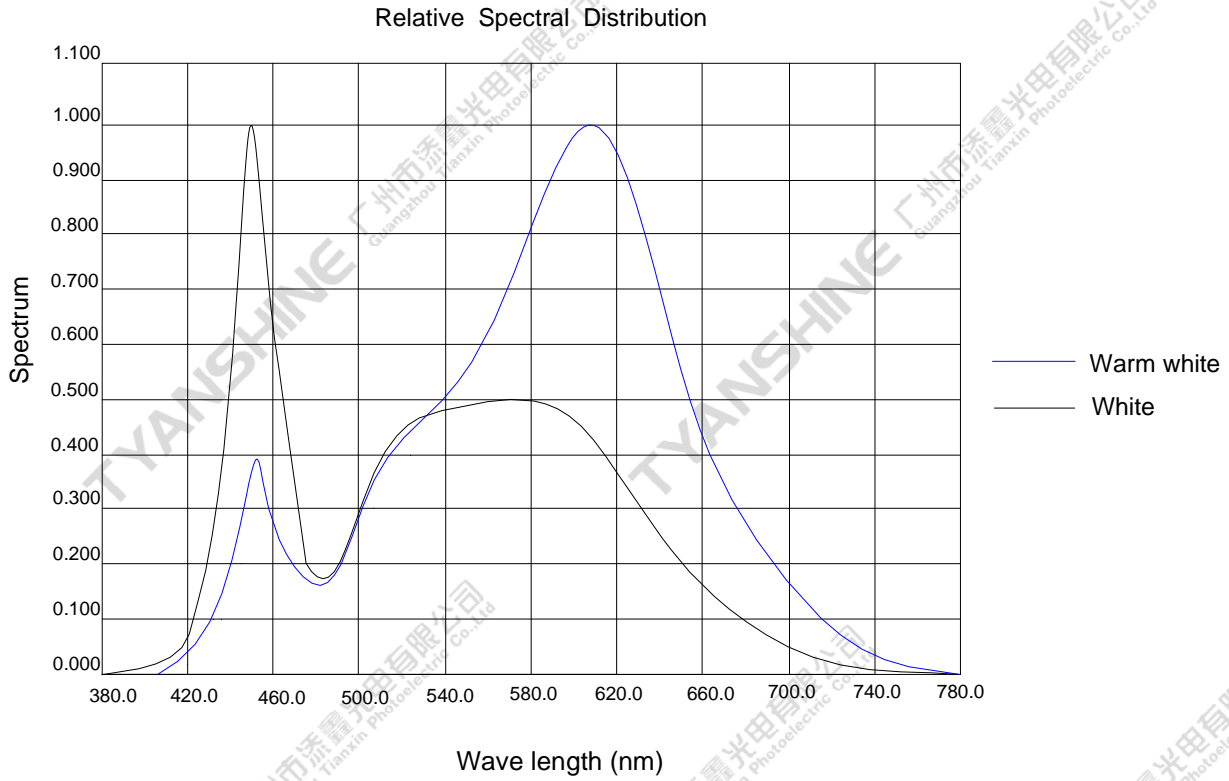
Relative Chromaticity VS. Current



Relative Chromaticity VS. Temperature (IF=700mA)



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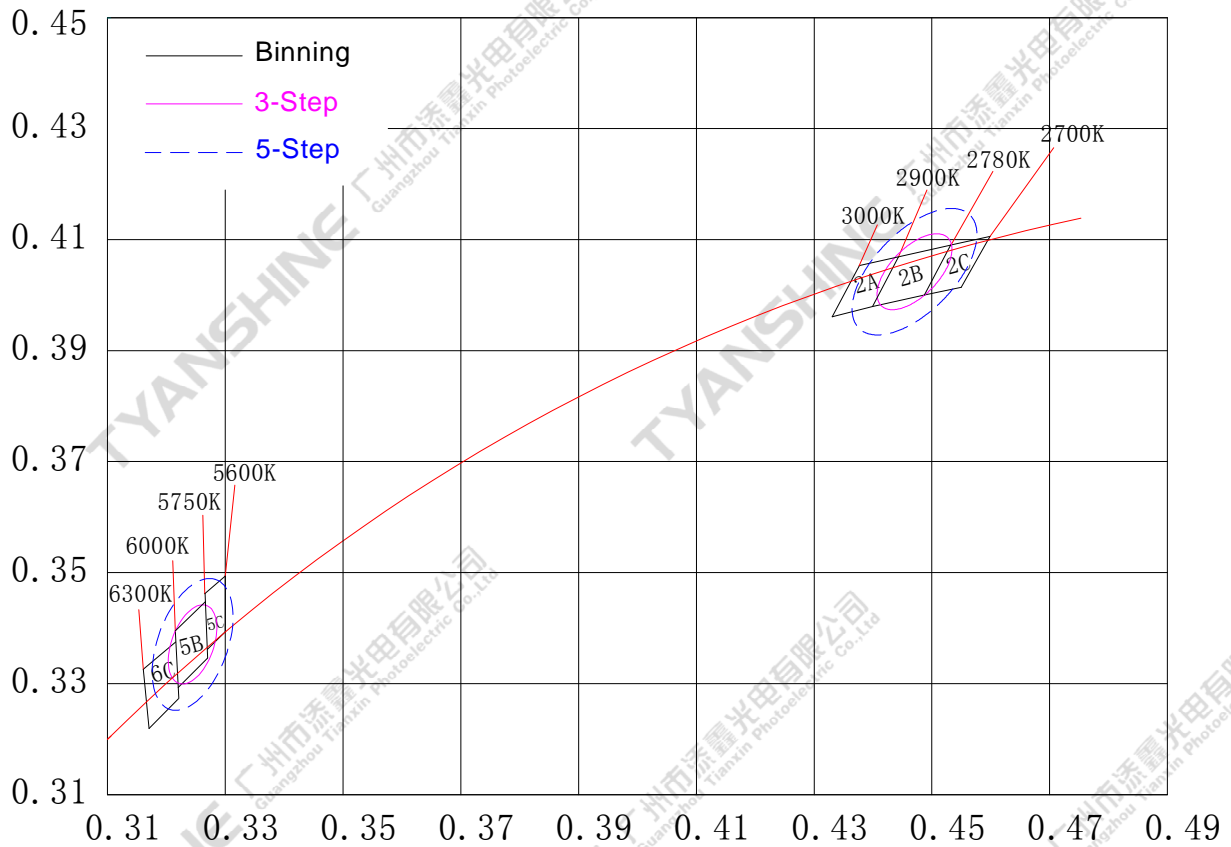


Notes:

1. $\theta_{1/2}$ 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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Chromaticity Coordinates (Condition : IF=700mA , Tc=25°C)



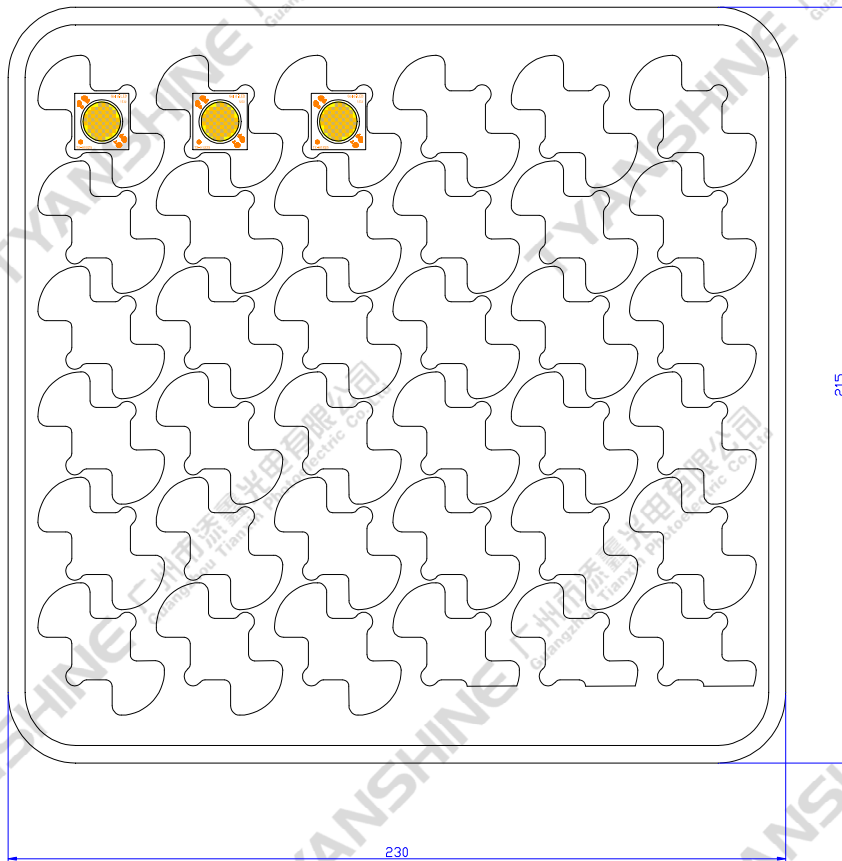
Reliability Test

| Test Item | Test Condition |
|-------------------------------|--|
| Continuous Operation Test | IF=700mA Ta=25°C ×1000hrs |
| Low Temperature Storage Test | -30°C × 1000 hours |
| High Temperature Storage Test | 100 °C × 1000 hours |
| Moisture-proof Test | 85 °C, 85 %RH for 500 hours |
| Thermal Shock Test | -30 °C × 30 minutes – 100 °C × 30 minutes, 100 cycle |

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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.

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