

TX-1512SW11A-2860V36-10H90

PRODUCT SPECIFICATION

Features:

- Excellent transiting heat from LED chip operating under 500mA.
- 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:

GaNN

Emitting Color:

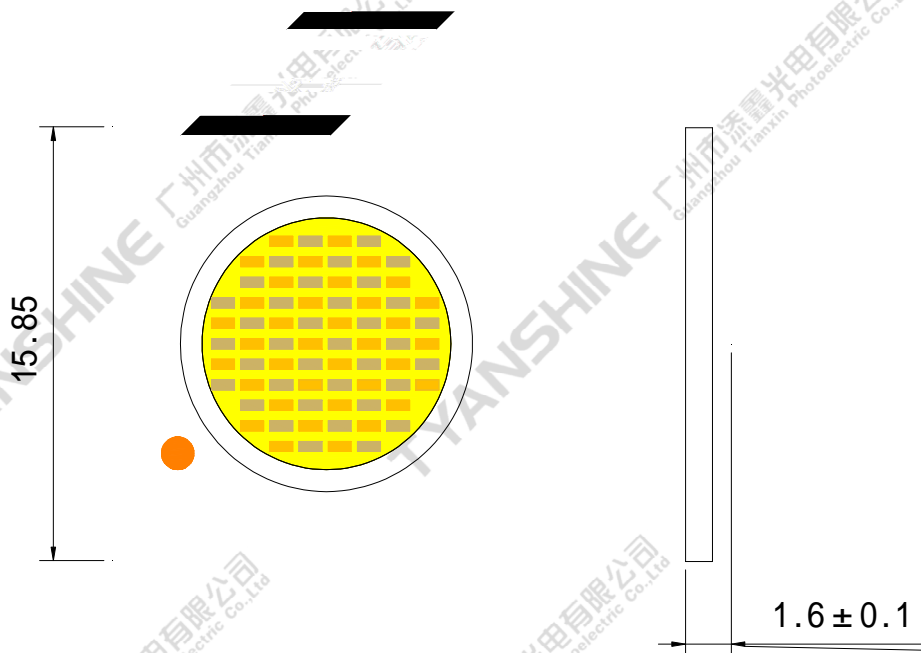
White
Warm white

Applications:

Commercial lighting
General Lighting

| | | | | | |
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Package Dimensions:



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Absolute Maximum Ratings

| Parameter | Symbol | Ratings | Unit |
|---|------------------|------------------------------------|------|
| Forward Current | IF | 500 | mA |
| Reverse Voltage | V _R | Not designed for reverse operation | V |
| Power Dissipation | P _D | S | 18 |
| | | W | 18 |
| | | S+W | 18 |
| Junction Temperature | T _j | S | 135 |
| | | W | 135 |
| Case Temperature (C) | T _c | 85 | |
| Electrostatic Discharge Threshold (ESD) | ESD | 2000 | V |
| Storage Temperature | T _{stg} | -30~+100 | |
| Operation Temperature | T _{opr} | -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=350mA | S | — | 1070 | — | lm |
| | | | W | — | 1300 | — | |
| Forward Voltage | V_f | | S | 33 | 35 | 37 | V |
| | | | W | 33 | 35 | 37 | |
| 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 | — | 1.9 | — | K/W |
| | | W | — | 1.9 | — | | |
| Temperature Coefficient of Voltage | V F/T | S | — | -13.6 | — | mV/ | |
| | | W | — | -13.6 | — | | |
| Color Rendering Index | Ra | S | — | 90 | — | — | |
| | | W | — | 90 | — | | |

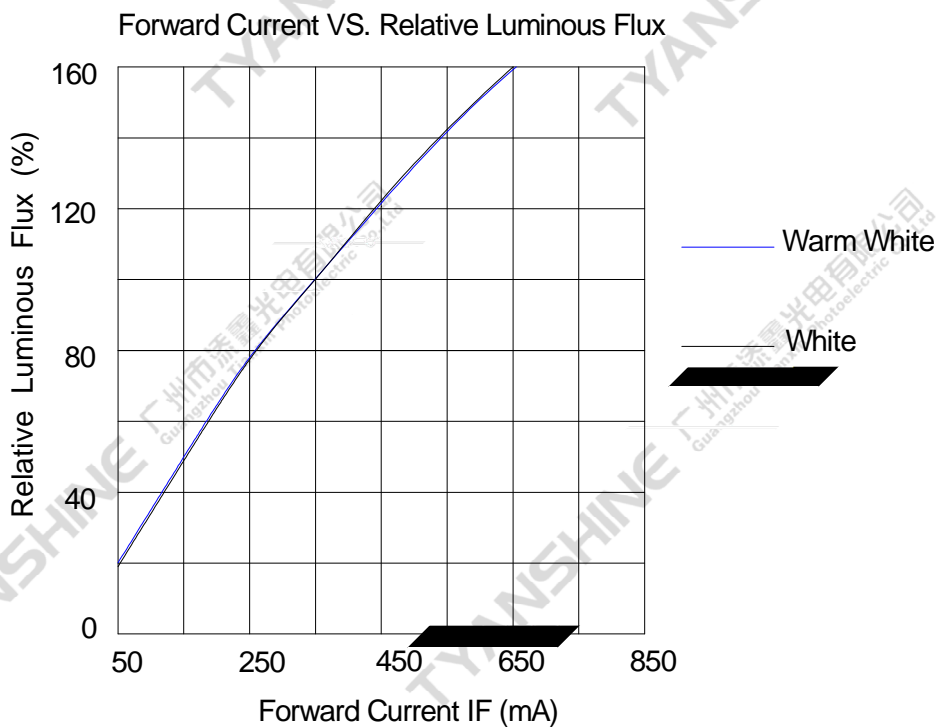
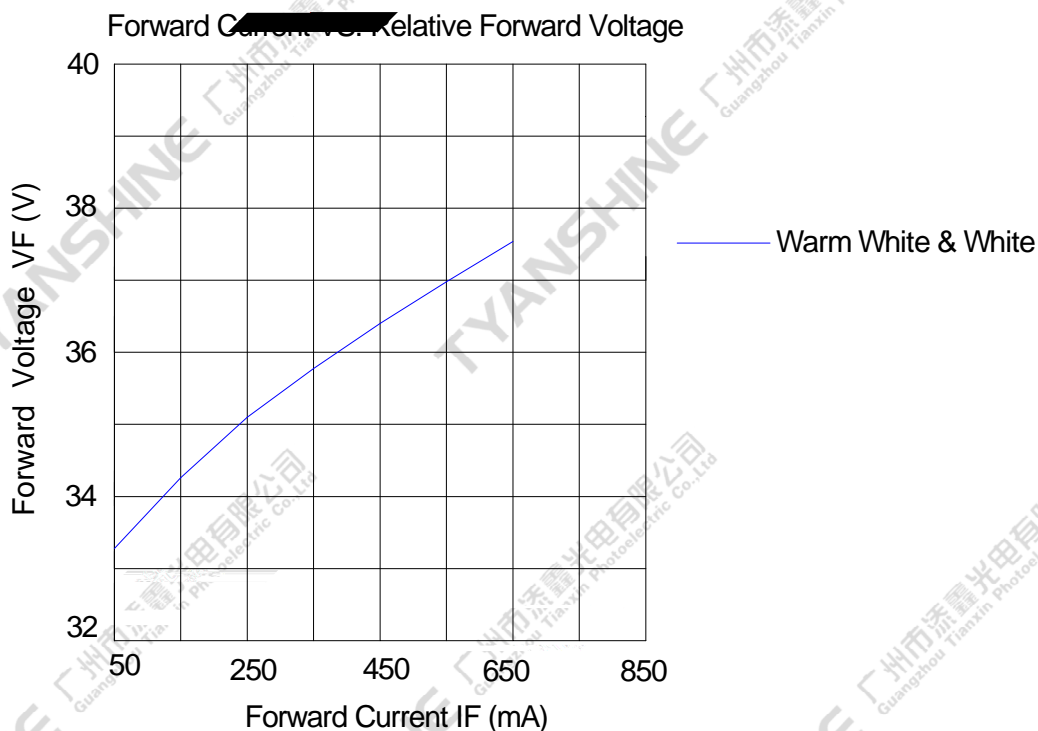
Notes:

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

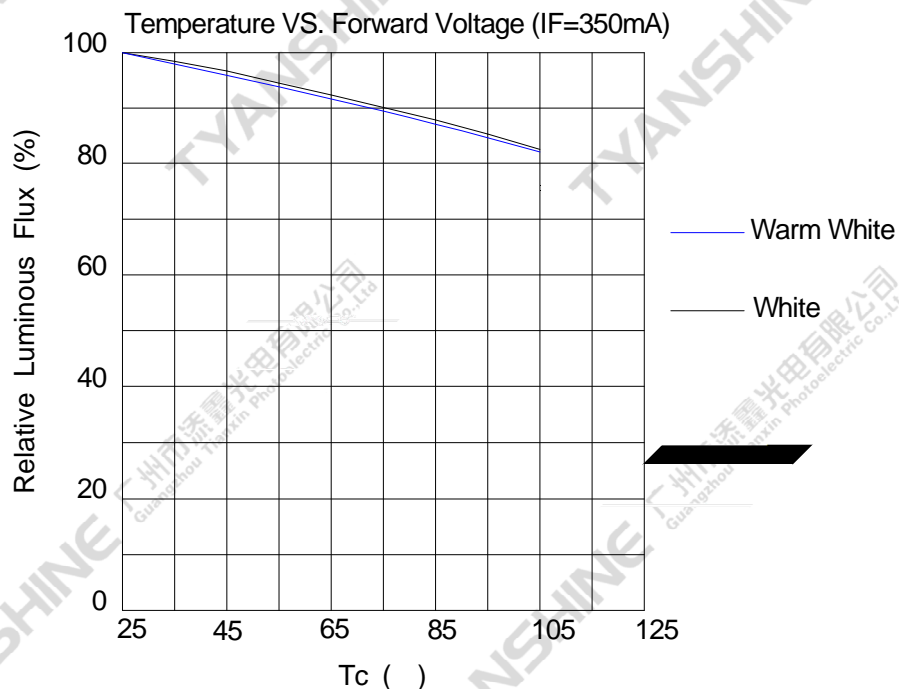
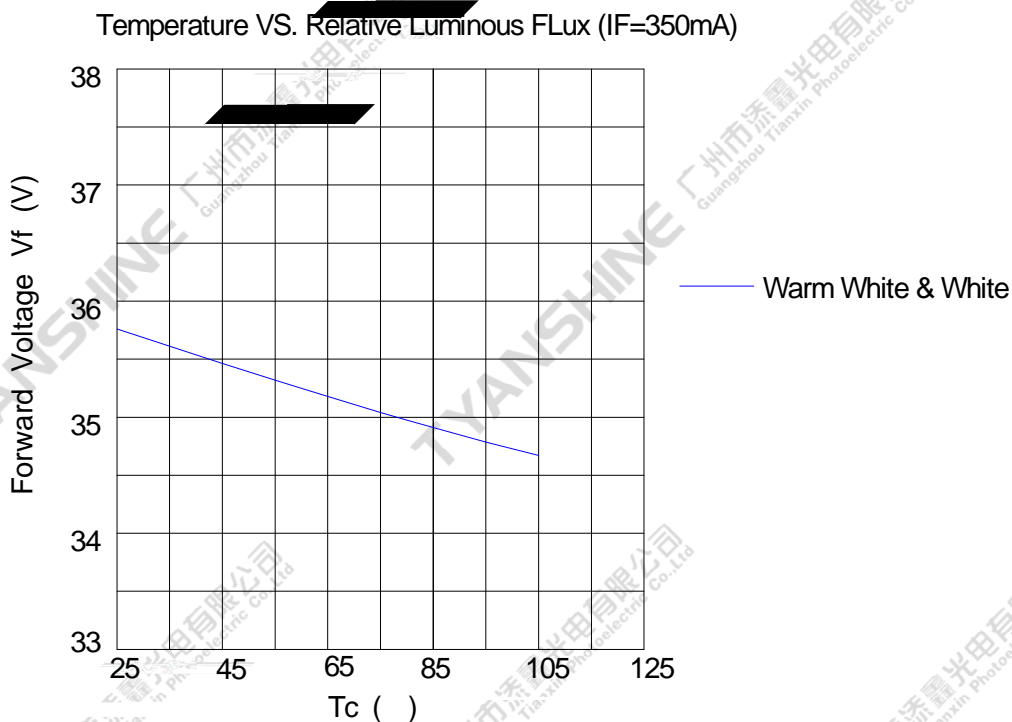
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Typical Electrical/Optical Characteristics Curves

(25 Ambient Temperature Unless Otherwise Noted)



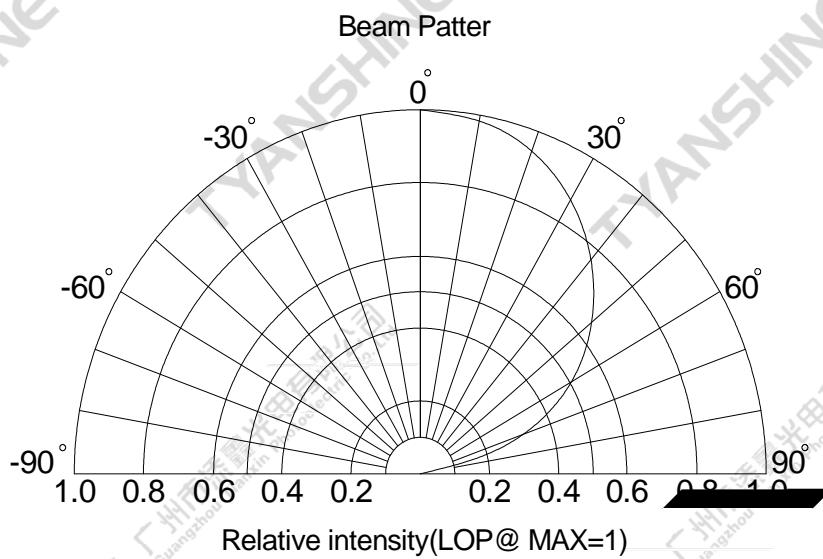
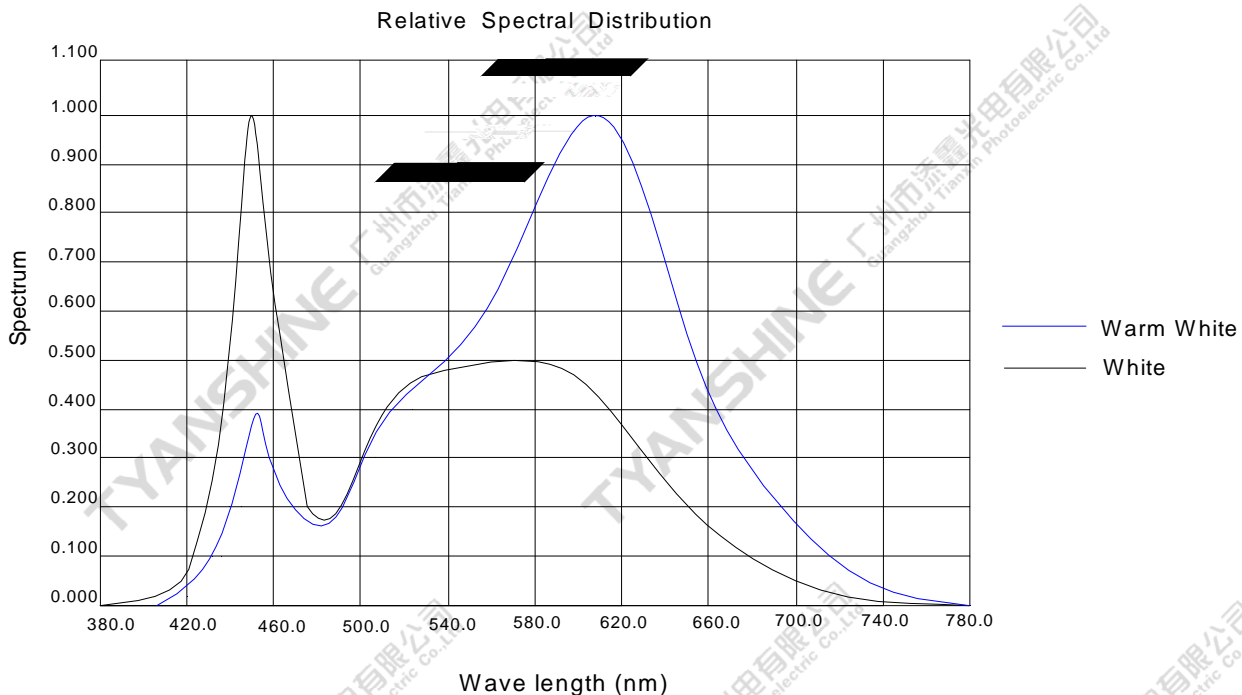
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Guangzhou Tianyan Photoelectric Co., Ltd.

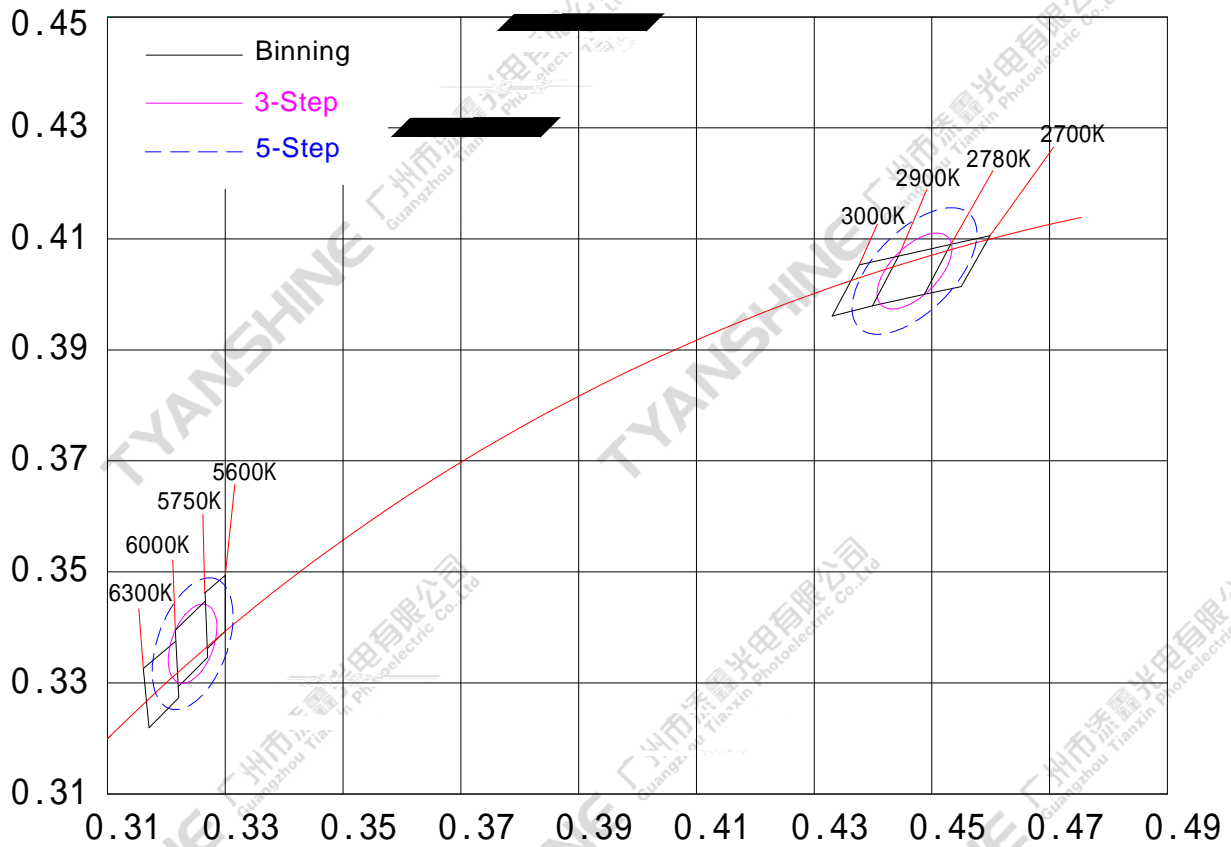
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Chromaticity Coordinates (Condition IF=350mA Tc=25)



Notes:

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

Reliability Test

| Test Item | Test Condition |
|-------------------------------|--|
| Continuous Operation Test | IF=350mA 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 |

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