

# 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:**

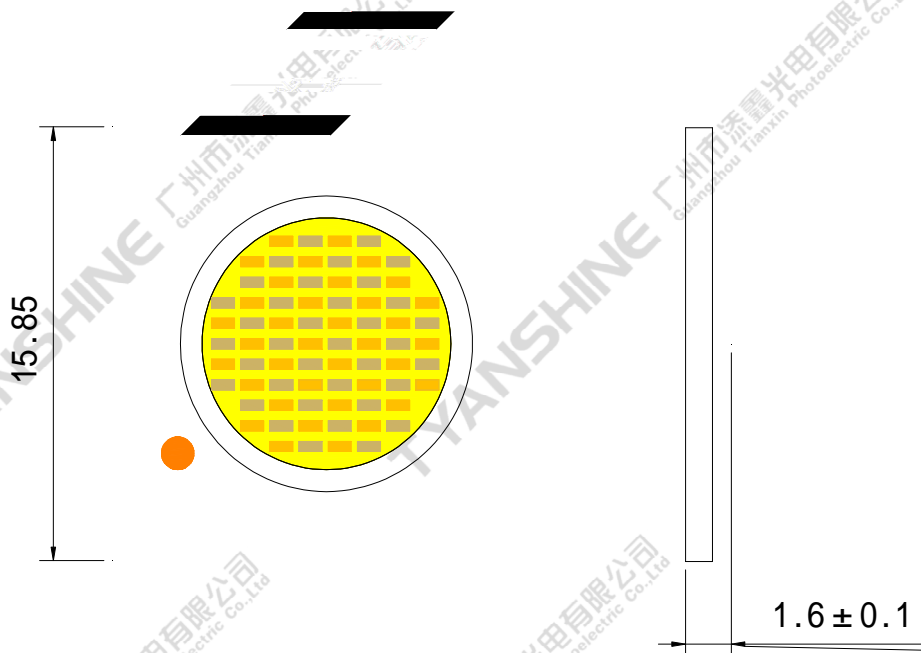
White  
Warm white

**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 <sub>R</sub>	Not designed for reverse operation	V
Power Dissipation	P <sub>D</sub>	S	18
		W	18
		S+W	18
Junction Temperature	T <sub>j</sub>	S	135
		W	135
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~+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	$\phi_v$	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	$I_R$		—	—	—	—	$\mu A$
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	—		

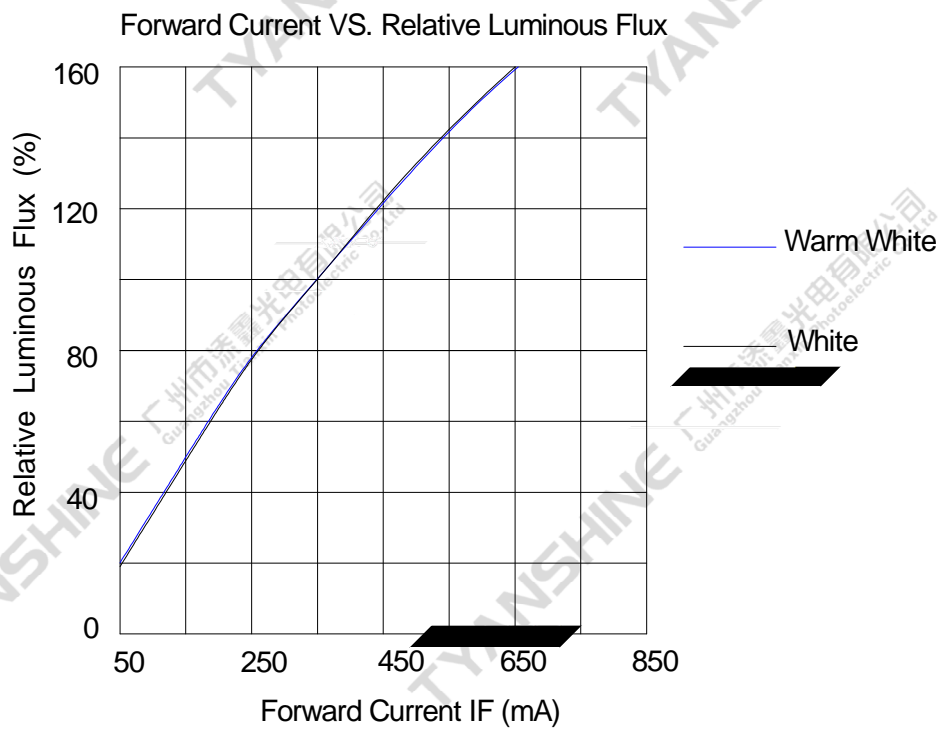
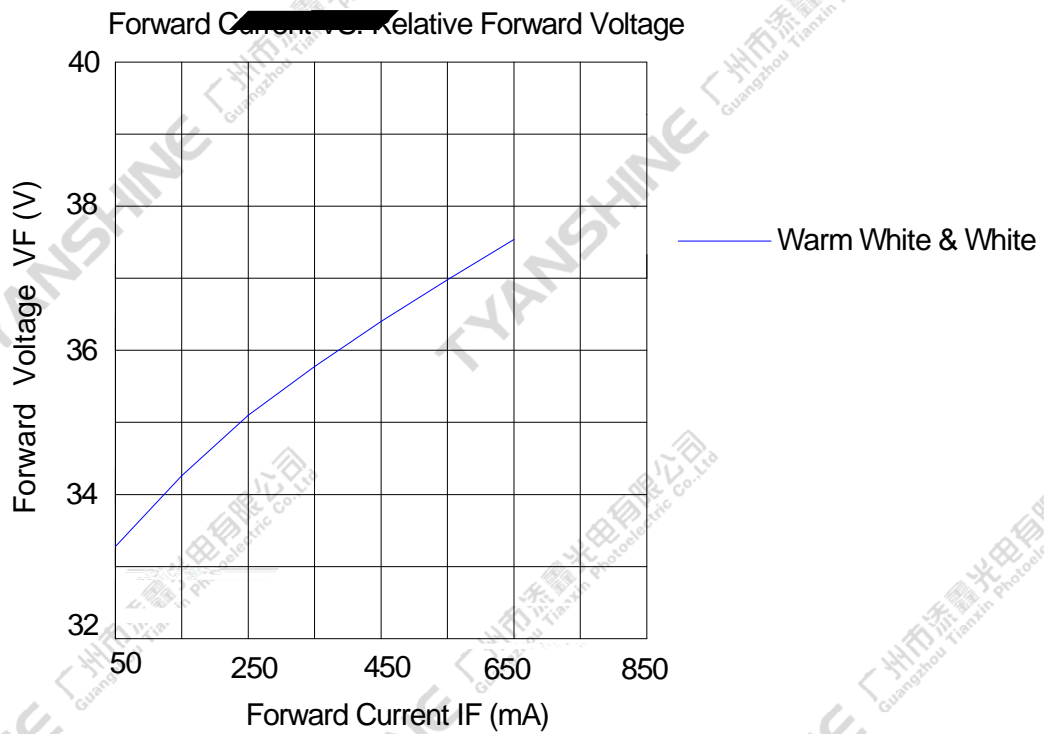
**Notes:**

- 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.

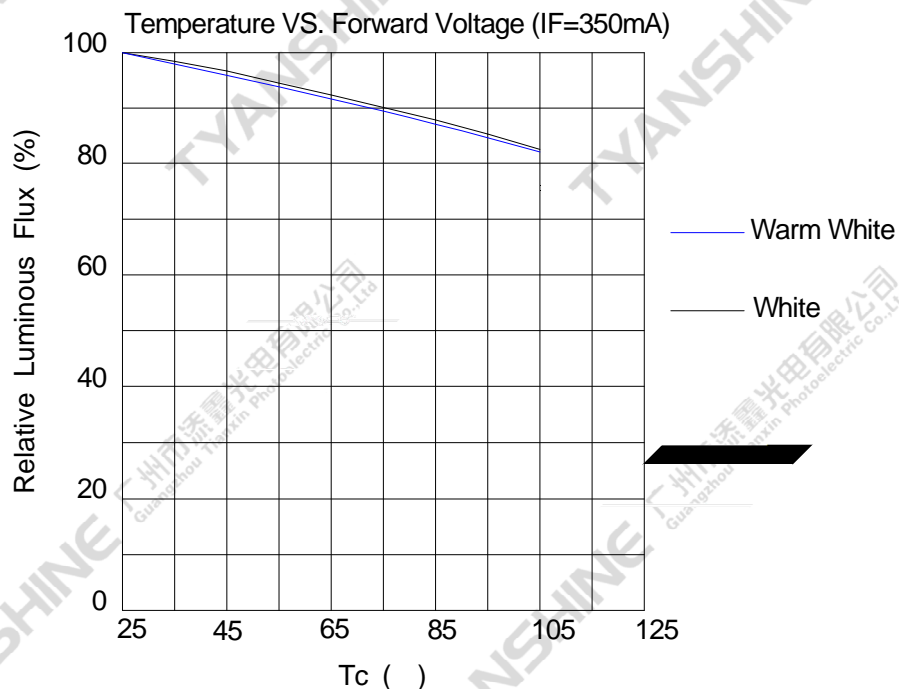
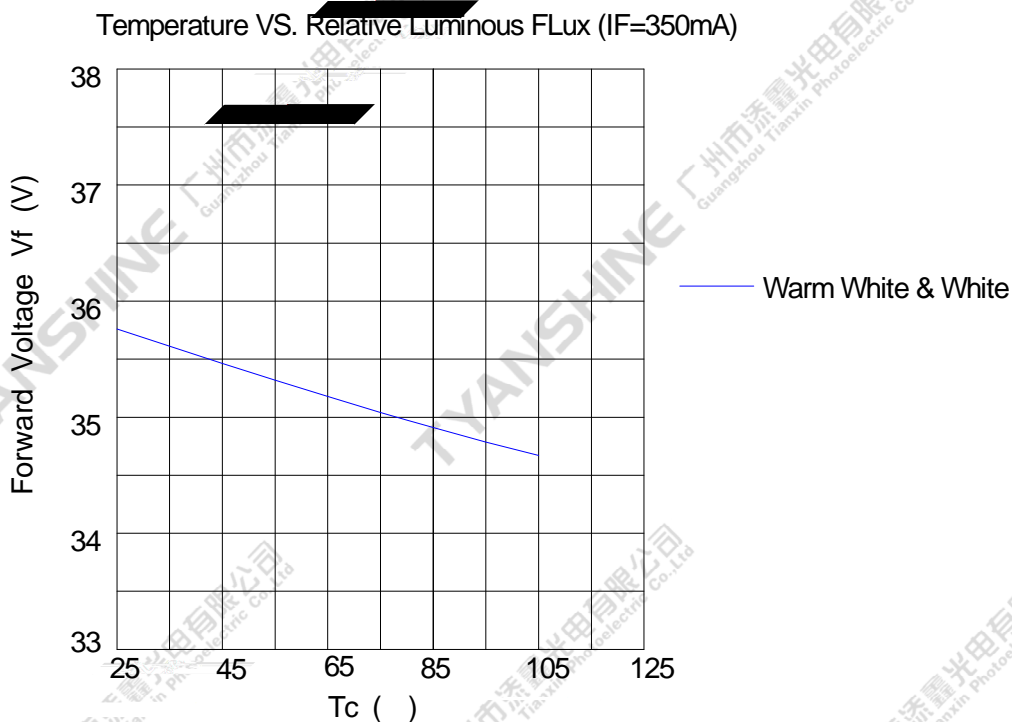
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## Typical Electrical/Optical Characteristics Curves

(25 Ambient Temperature Unless Otherwise Noted)



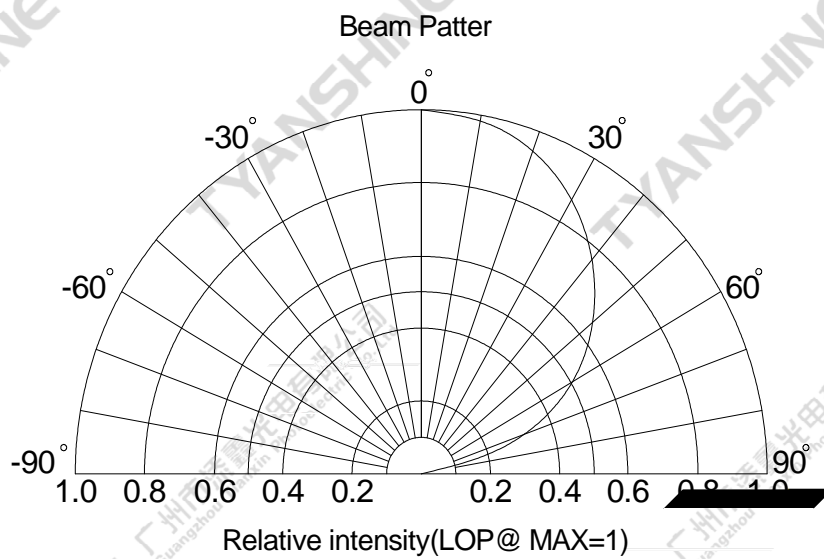
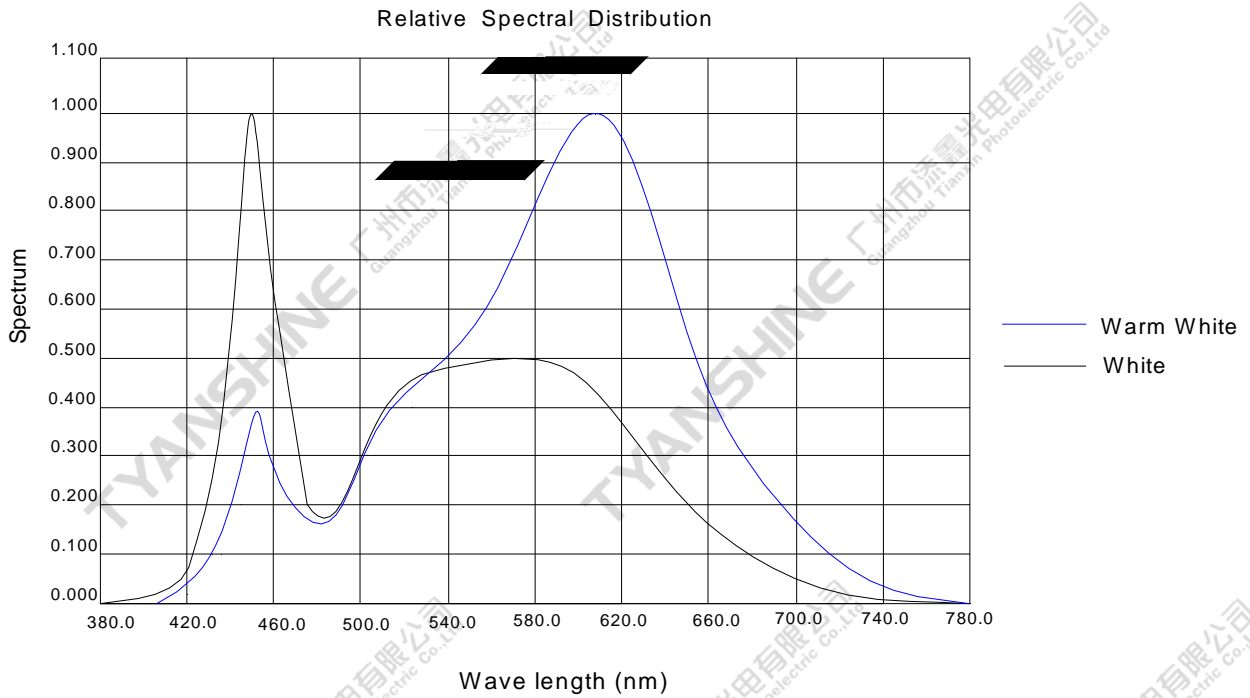
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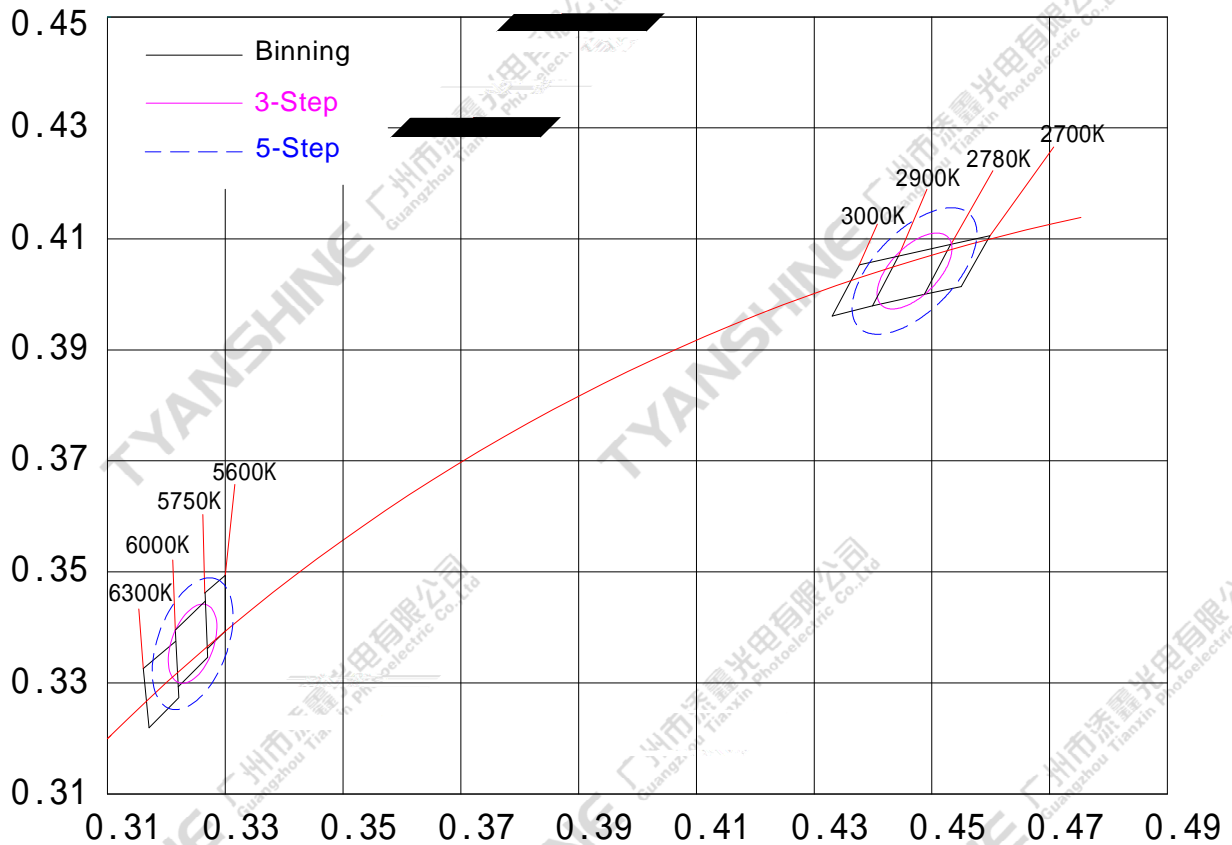




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**Chromaticity Coordinates (Condition IF=350mA Tc=25)**



**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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