

TX-4566RGBW300FC120-NUVENG-02

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 1300mA.
- ◆High luminous output.
- ◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆Red: AlInGaP
- ◆Green: GaInN
- ◆Blue: GaN
- ◆White: GaN

Emitting Color:

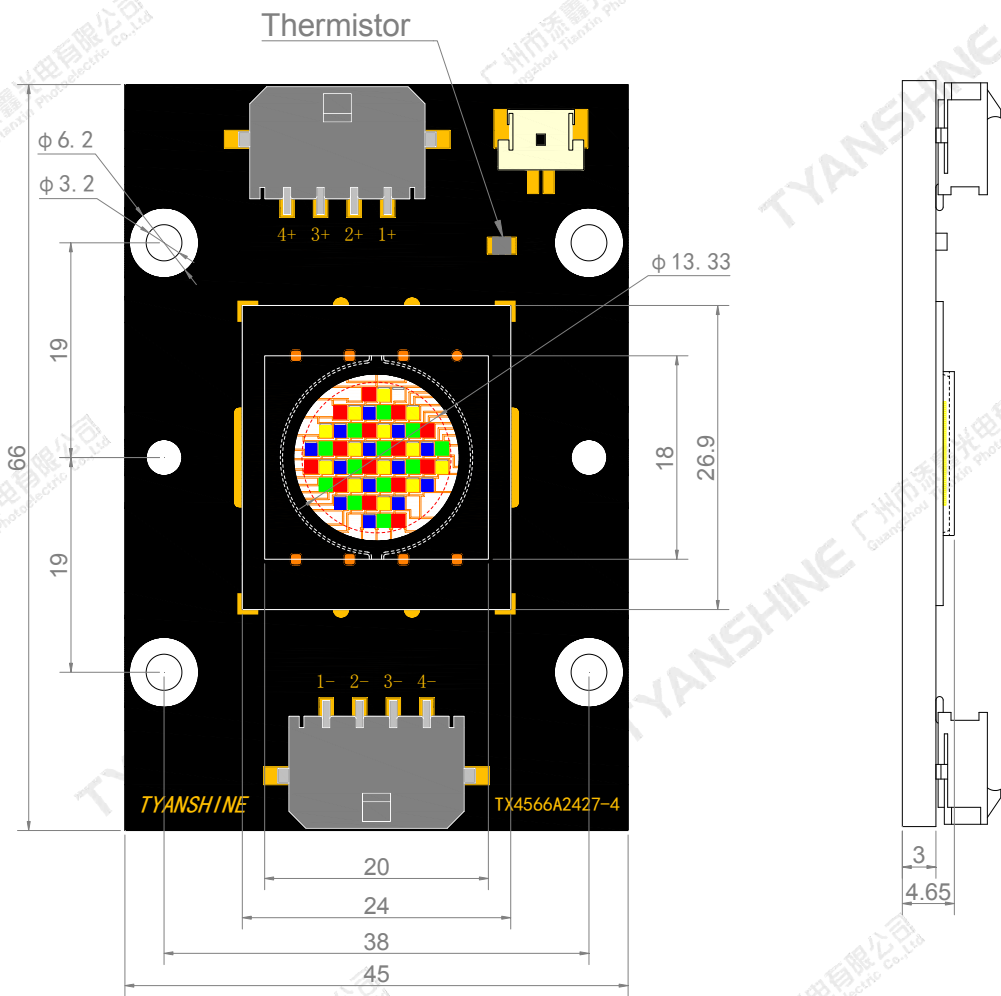
- ◆Red
- ◆Green
- ◆Blue
- ◆White

Applications:

- ◆Stage lighting
- ◆Landscape Lighting
- ◆Entertainment lighting

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Package Dimensions:



1-Red (R) ; 2-Green (G) ; 3-White (W) ; 4-Blue (B)

Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are $\pm 0.1\text{mm}$.

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Absolute Maximum Ratings

Parameter	Symbol		Max Ratings	Unit
Forward Current	IF (Tc=25℃)	R	1.8	A
		G	1.8	
		B	2.4	
		W	2.4	
	IF (Tc=85℃)	R	1.5	
		G	1.5	
		B	2.0	
		W	2.0	
Reverse Voltage	VR	—	Not designed for reverse operation	V
Power Dissipation	PD (Tc=25℃)	R	61.2	W
		G	72	
		B	96	
		W	96	
	PD (Tc=85℃)	R	49.5	
		G	56.25	
		B	77	
		W	77	
Junction Temperature	Tj	R	115	℃
		G	150	
		B	150	
		W	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	Tstg		-40~70	℃
Operation Temperature	Topr		-40~100	

Notes:

1.Specifications are subject to change without notice.

2.The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.

3.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

Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	If=1300mA (Tc=25℃)	R	1450	1600	1750	lm
			G	3000	3300	3600	
			B	600	650	700	
			W	4200	4600	5000	
		If=1300mA (Tc=85℃)	R	720	800	900	
			G	2750	3050	3350	
			B	615	670	720	
			W	3600	3900	4300	
Dominant Wavelength	λ_d	If=1300mA (Tc=25℃)	R	618	621	625	nm
			G	518	525	536	
			B	450	454	458	
		If=1300mA (Tc=85℃)	R	620	623	626	
			G	520	525	530	
			B	452	456	460	
Correlated Colour Temperature	CCT	If=1300mA (Tc=25℃)	W	6250	—	6750	K
		If=1300mA (Tc=85℃)	W	6210	—	6790	
Peak-emission Wavelength	λ_p	If=1300mA (Tc=25℃)	R	628	632	635	nm
			G	514	517	520	
			B	448	450	455	
		If=1300mA (Tc=85℃)	R	635	640	645	
			G	515	520	525	
			B	448	452	455	
Spectral Line Half-Width	$\Delta\lambda$	If=1300mA (Tc=25℃)	R	13	18	23	nm
			G	30	35	40	
			B	16	21	26	
			W	20	25	30	
		If=1300mA (Tc=85℃)	R	16	21	26	
			G	32	37	42	
			B	18	23	28	
			W	25	30	35	
Forward Voltage	V_f	If=1300mA (Tc=25℃)	R	32	34	37	V
			G	38	40	46	
			B	38	40	45	
			W	38	40	45	
		If=1300mA (Tc=85℃)	R	31	33	35	
			G	35.5	37.5	43.5	
			B	36.5	38.5	43.5	

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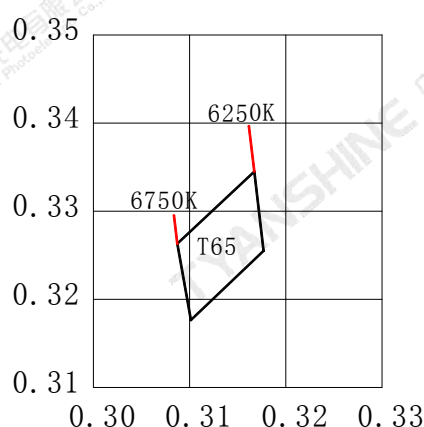
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			W	36.5	38.5	43.5	
Reverse Current	I_R	—	—	—	—	—	μA
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R_{\theta J-C}$	—	R	—	0.19	—	K/W
			G	—	0.21	—	
			B	—	0.17	—	
			W	—	0.17	—	
			Total thermal resistance	—	0.06	—	
Temperature Coefficient of Voltage	$V_{\Delta F/T}$	$I_f=1300mA$	R	—	-15	—	mV/°C
			G	—	-43	—	
			B	—	-22.4	—	
			W	—	-24.1	—	
Thermistor(NTC)	Rt25	—	—	—	10	—	K Ω

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.The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4.Luminous flux measurement tolerance:±15%.
- 5.Forward voltage measurement tolerance:±0.15V.

White light Color coordinate filing ($T_c=25^\circ C$)



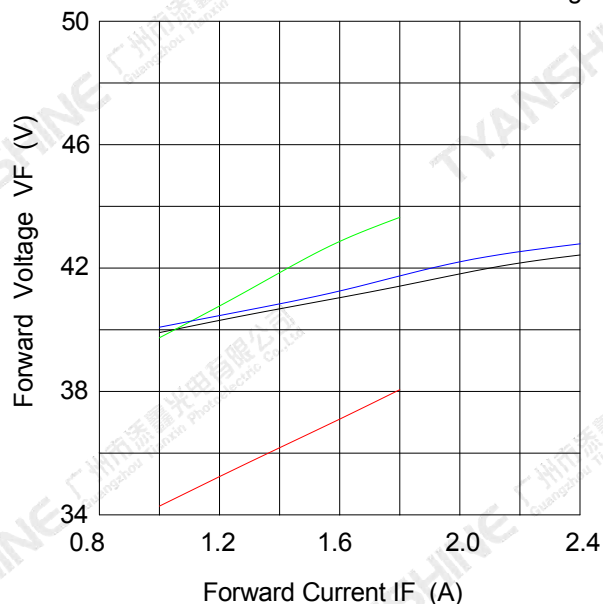
Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
T65	6250-6750K	0.3167	0.3345	0.3177	0.3255	0.3101	0.3177	0.3087	0.3263

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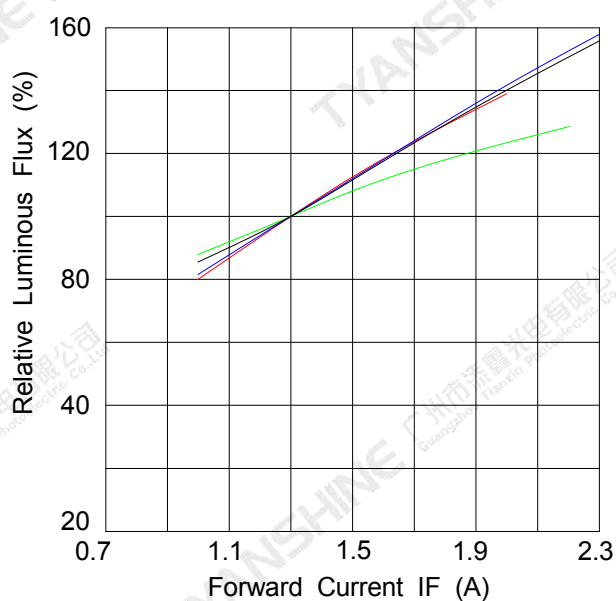
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

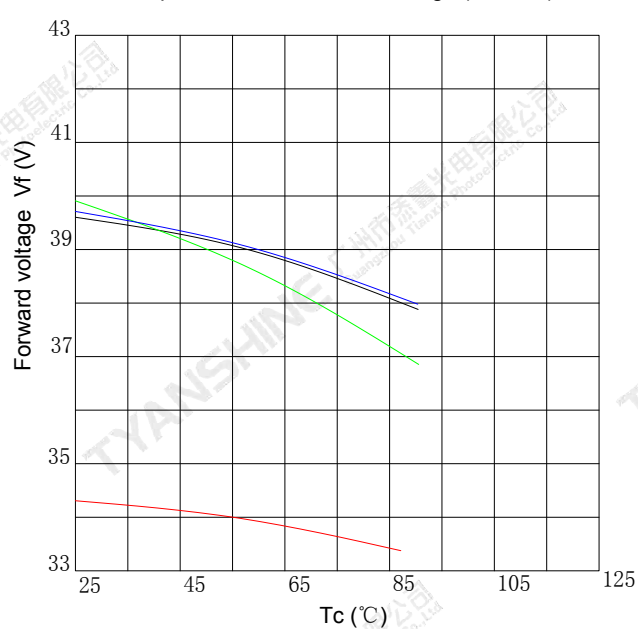
Forward Current VS. Relative Forward Voltage



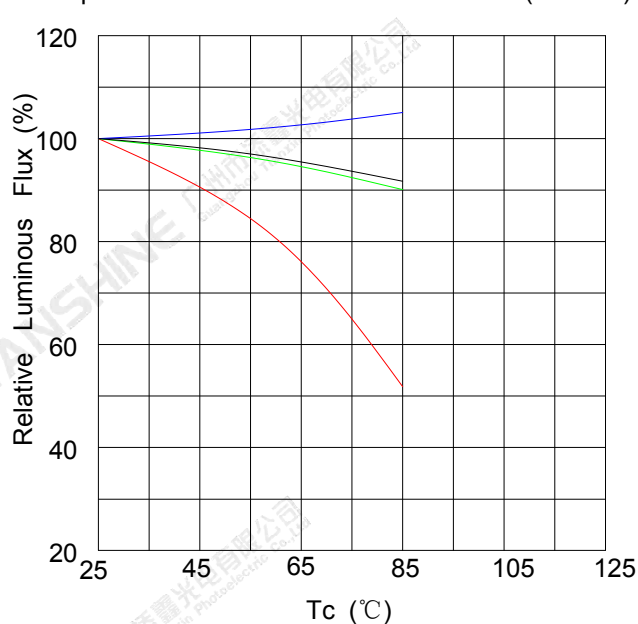
Forward Current VS. Relative Luminous Flux



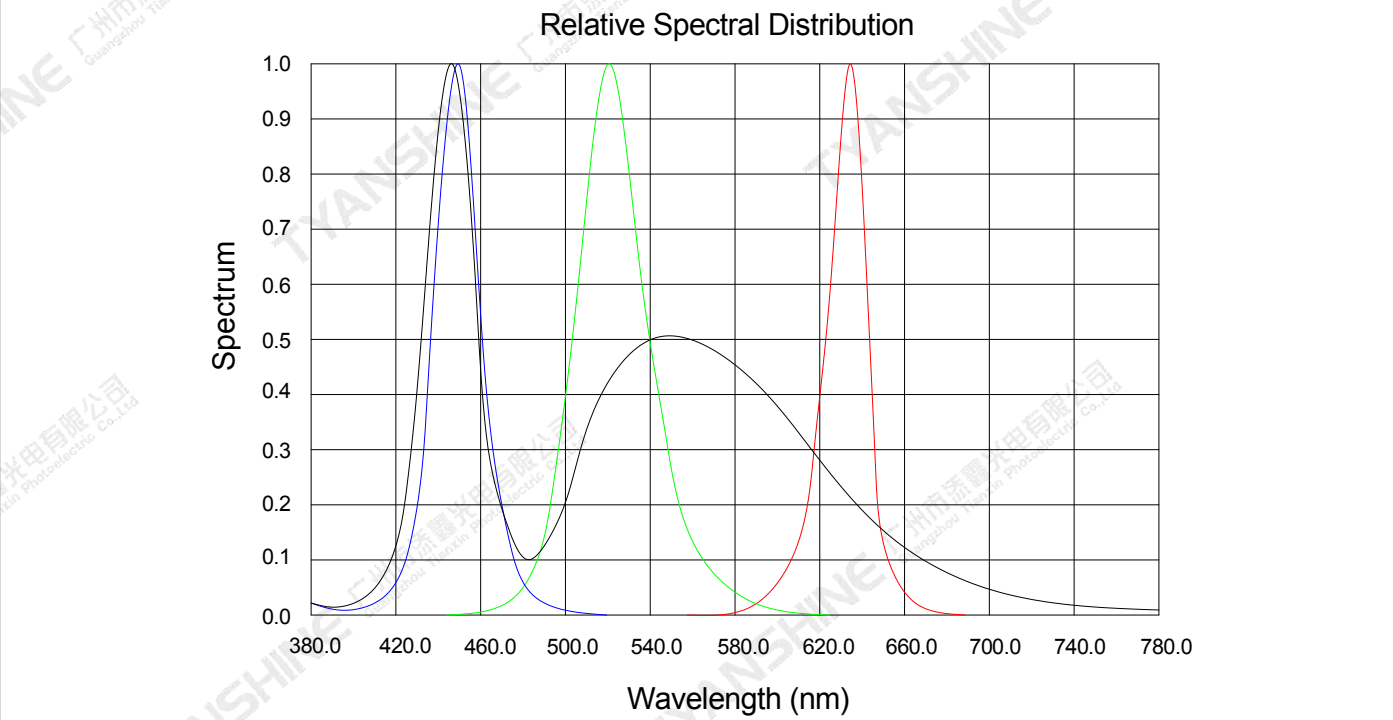
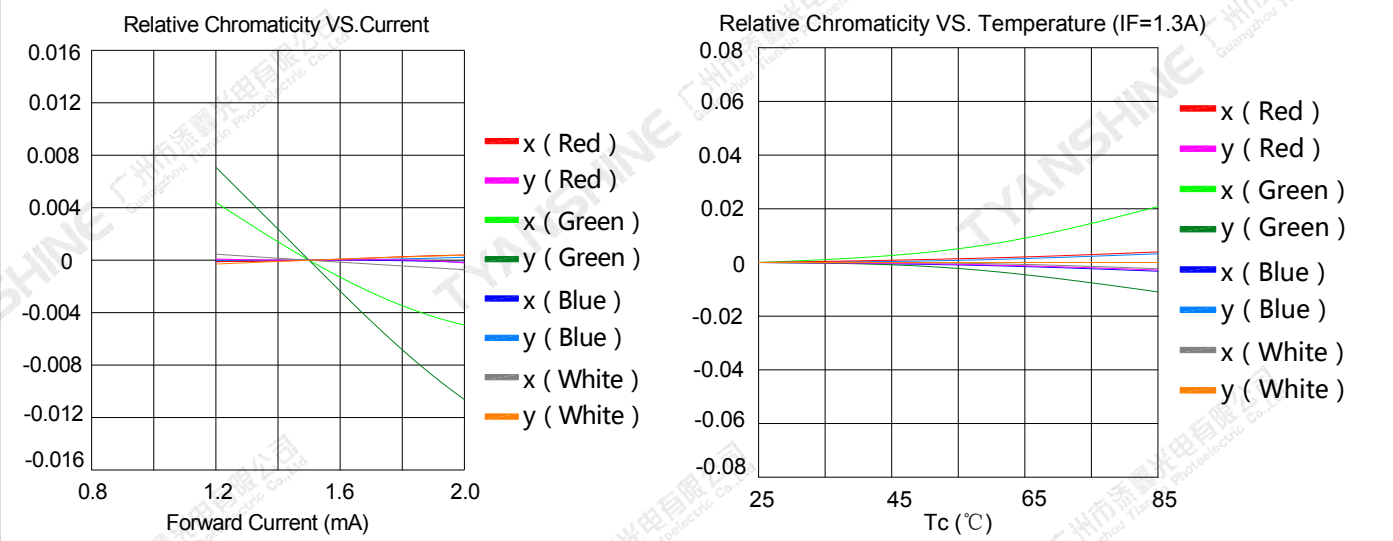
Temperature VS. Forward Voltage (IF=1.3A)



Temperature VS. Relative Luminous Flux (IF=1.3A)



Notes: — Red; — Green; — Blue; — White.



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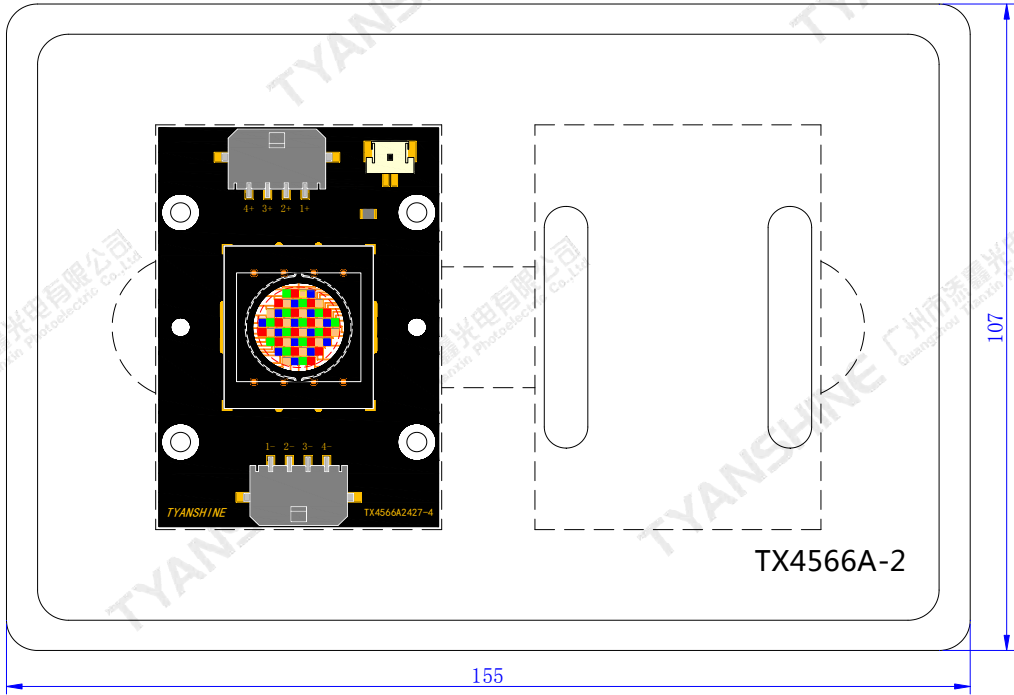
Notes:

- 1. 2θ 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 ± 5°.

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Dimensions For Cannulation And Packaging

Quantity: 2PCS



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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