TX-4566RGBW150FC120-NUVENG-01

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under 1500mA.
◆High luminous output.
◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

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

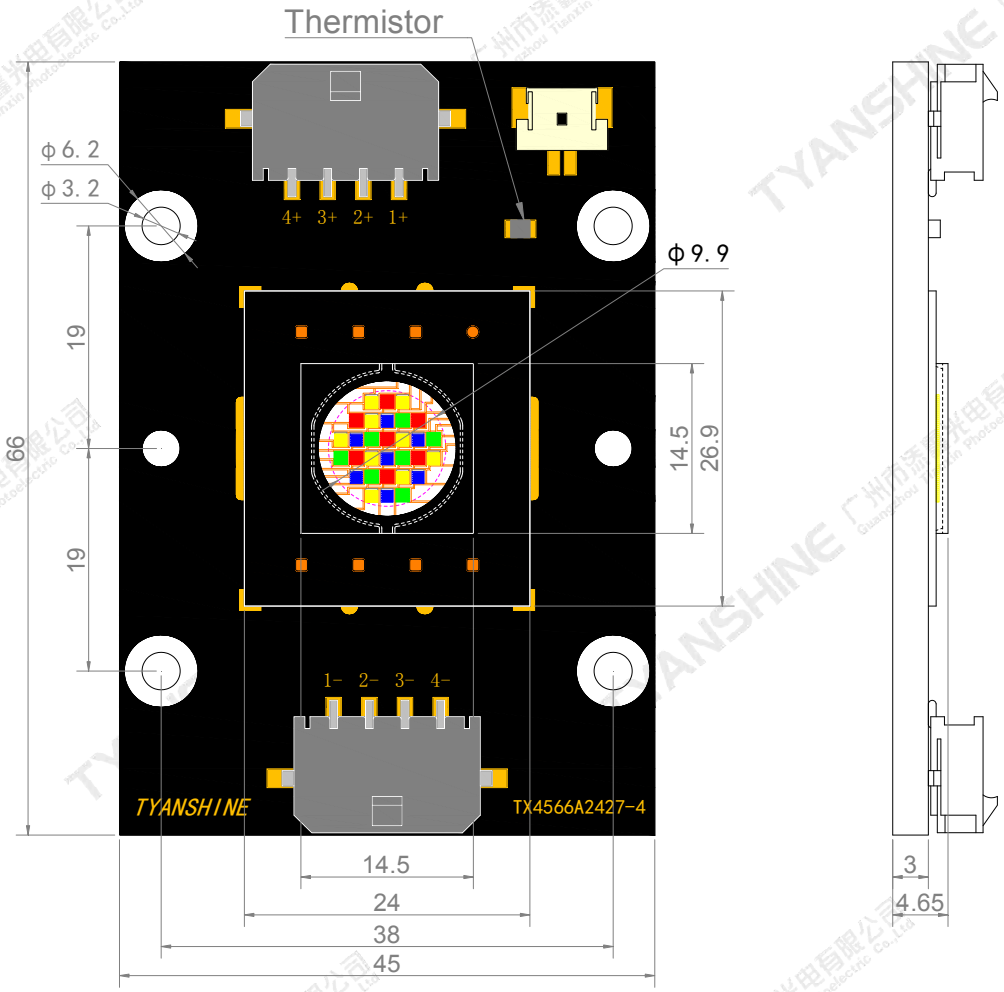
Emitting Color:

◆Red
◆Green
◆Blue
◆White

Applications:

◆Stage lighting
◆Landscape Lighting
◆Entertainment lighting

Package Dimensions:



1-Red；2-Green；3-White；4-Blue

Notes:

1.All dimensions are in millimeters .

2.Tolerances unless otherwise mentioned are ±0.1mm .

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	V_R	—	Not designed for reverse operation	V
Power Dissipation	P_D (Tc=25℃)	R	32.4	W
		G	44.1	
		B	54	
		W	67.2	
	P_D (Tc=85℃)	R	26.25	
		G	33.75	
		B	44	
		W	54	
Junction Temperature	Tj	R	115	℃
		G	150	
		B	150	
		W	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	T_{stg}		-40~70	℃
Operation Temperature	T_{opr}		-30~100	

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=1500mA (Tc=25℃)	R	800	860	920	lm
			G	1800	2000	2200	
			B	350	420	470	
			W	3100	3400	3600	
		If=1500mA (Tc=85℃)	R	440	470	510	
			G	1500	1800	2000	
			B	360	430	480	
			W	2850	3130	3300	
Dominant Wavelength	λd	If=1500mA (Tc=25℃)	R	618	623	628	nm
			G	520	525	532	
			B	450	455	460	
		If=1500mA (Tc=85℃)	R	620	625	630	
			G	521	526	534	
			B	452	457	462	
Correlated Colour Temperature	CCT	If=1500mA (Tc=25℃)	W	6500	—	6800	K
		If=1500mA (Tc=85℃)	W	6650	—	6950	
Peak-emission Wavelength	λp	If=1500mA (Tc=25℃)	R	630	635	640	nm
			G	515	520	525	
			B	444	449	454	
		If=1500mA (Tc=85℃)	R	639	644	649	
			G	520	525	530	
			B	448	454	458	
Spectral Line Half-Width	△λ	If=1500mA (Tc=25℃)	R	13	18	23	nm
			G	30	35	40	
			B	16	21	26	
			W	20	25	30	
		If=1500mA (Tc=85℃)	R	16	21	26	
			G	32	37	42	
			B	18	23	28	
			W	24	29	34	
Forward Voltage	V_f	If=1500mA (Tc=25℃)	R	16	18	20	V
			G	22	24.5	27	
			B	20	22.5	25	
			W	26	28	30	
		If=1500mA (Tc=85℃)	R	15.5	17.5	19.5	
			G	20	22.5	25	
			B	19.5	22	24.5	

			W	25	27	29	
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	—	0.32	—	K/W
			G	—	0.4	—	
			B	—	0.33	—	
			W	—	0.33	—	
			Total thermal resistance	—	0.11	—	
Temperature Coefficient of Voltage	V△F/T	If=1500mA	R	—	-8.3	—	mV/℃
			G	—	-33.3	—	
			B	—	-8.3	—	
			W	—	-16.7	—	
Thermistor(NTC)	Rt25	—	—	—	10	—	KΩ

Notes:

1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

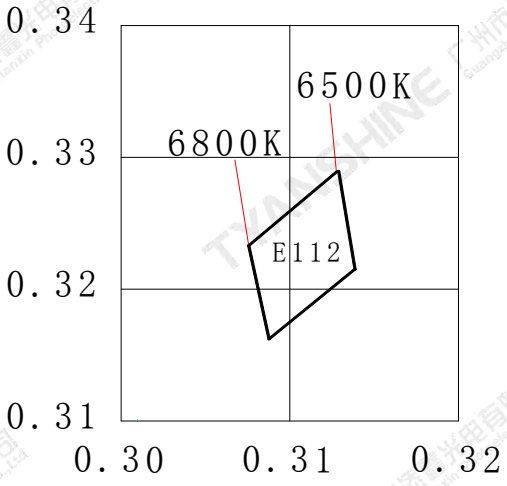
2.$\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

3.The dominant wavelength (λd) 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 (Tc=25℃)

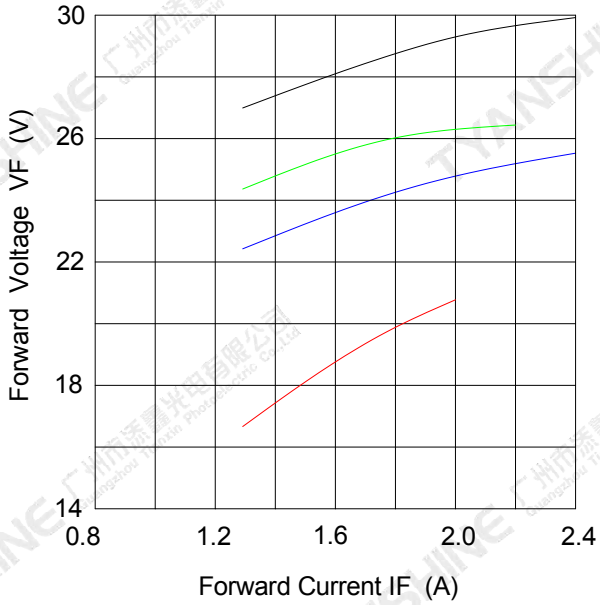


Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
E112	6500-6800K	0.3129	0.329	0.3139	0.3215	0.3088	0.3162	0.3076	0.3233

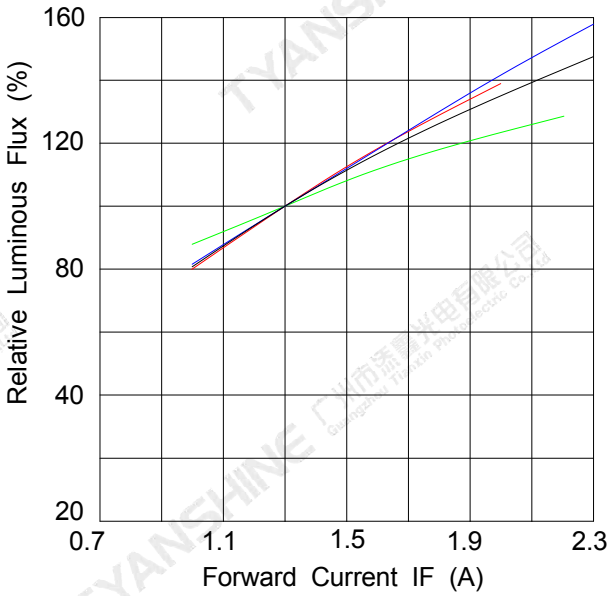
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

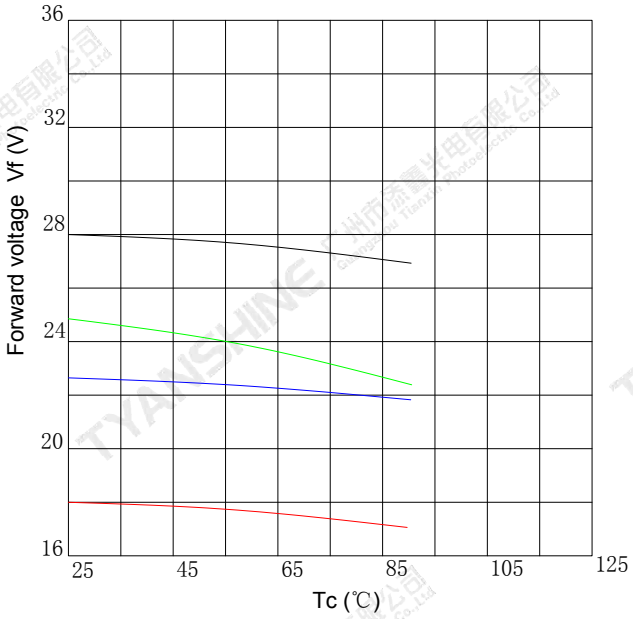
Forward Current VS. Relative Forward Voltage



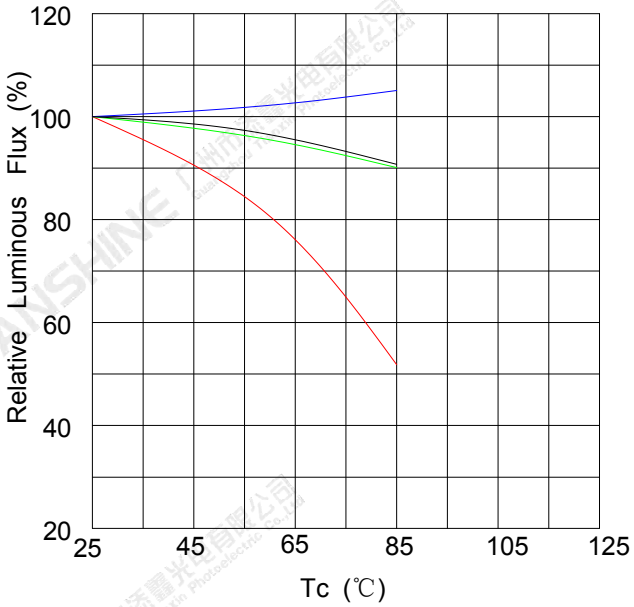
Forward Current VS. Relative Luminous Flux



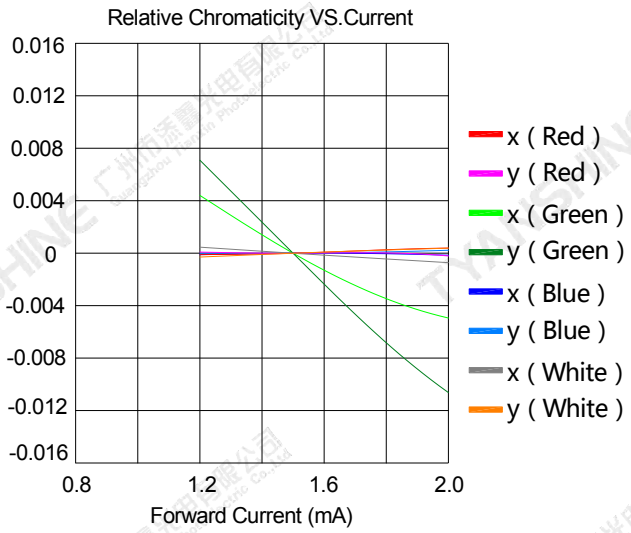
Temperature VS. Forward Voltage (IF=1.5A)

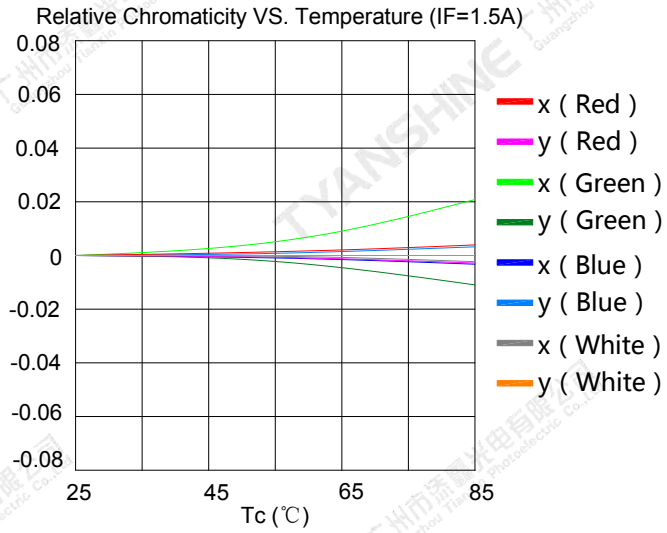


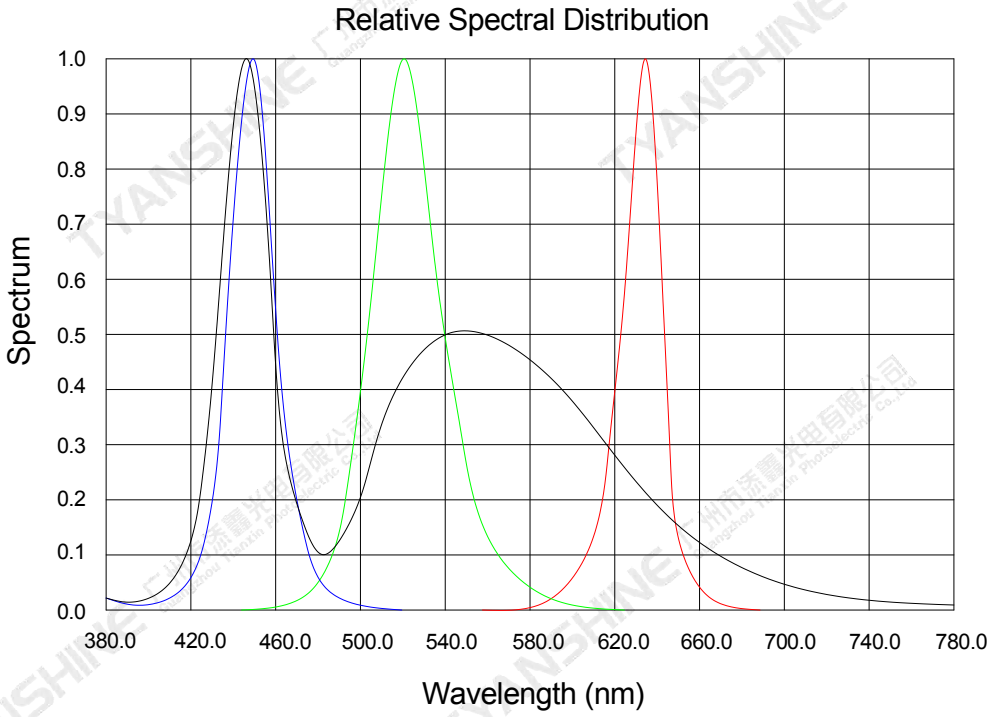
Temperature VS. Relative Luminous Flux(IF=1.5A)



Notes: Red; Green; Blue; White.







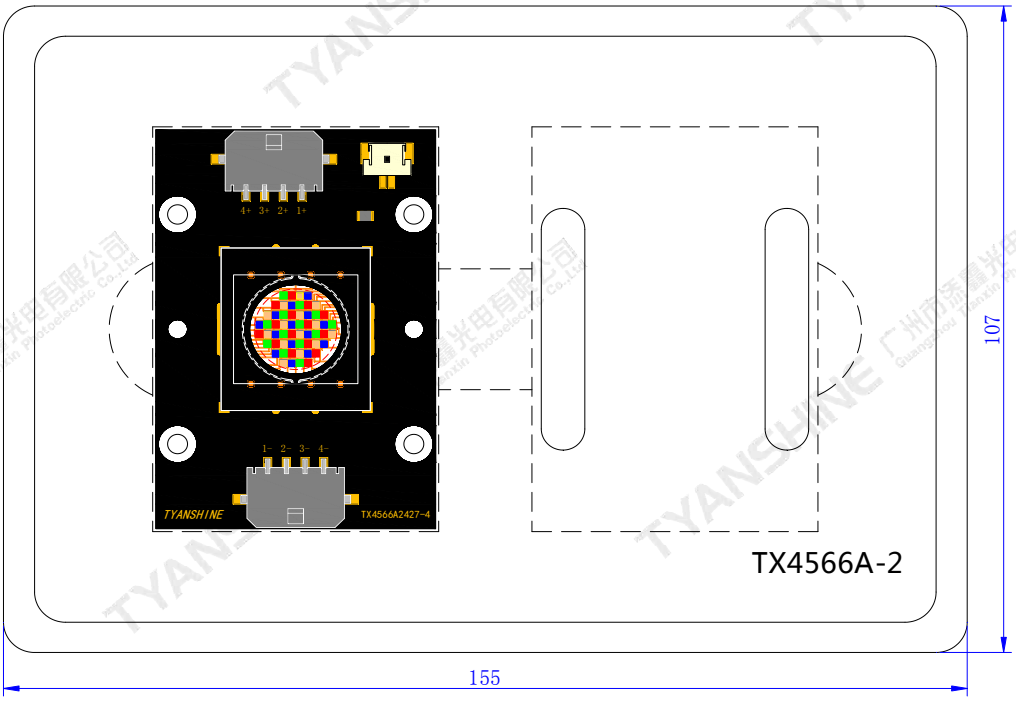
Notes: Red; Green; Blue; White.

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°.

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.