

TX-4566RGBLA500FC120-NUVENG-01

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
- ◆Lime: GaN
- ◆PC Amber: GaN

Emitting Color:

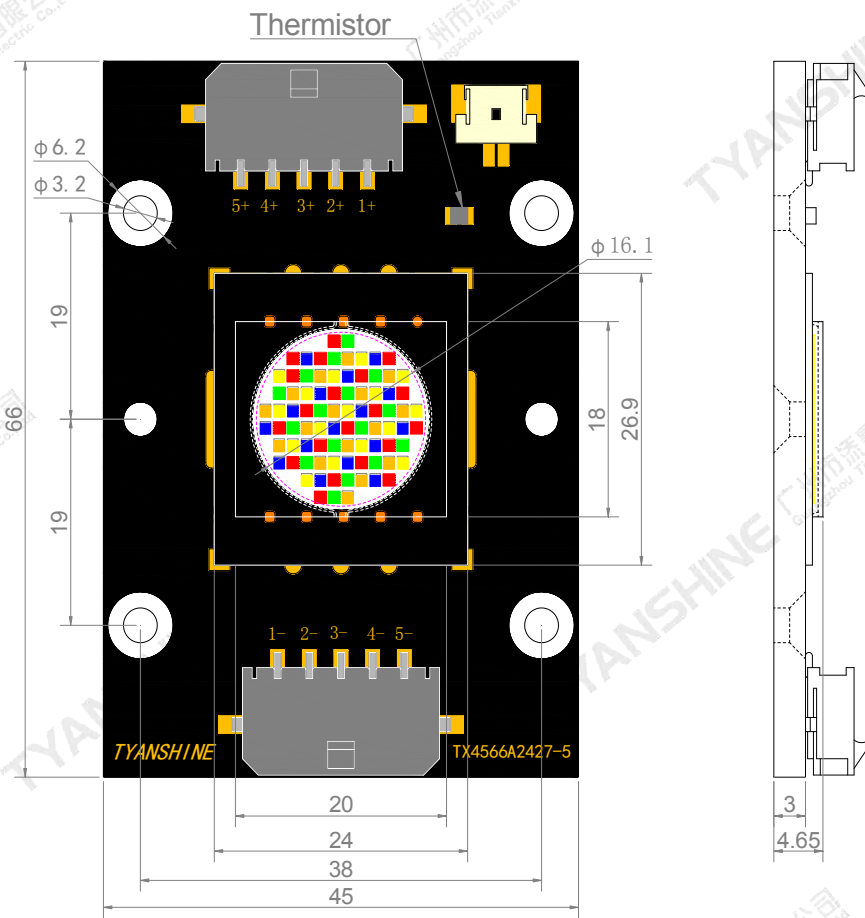
- ◆Red
- ◆Green
- ◆Blue
- ◆Lime
- ◆PC Amber

Applications:

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

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Package Dimensions:



1-Red (R) ; 2-PC Amber (A) ; 3-Blue (B) ; 4-Lemon light (L) ; 5-Green (G) ;

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	
		L	2.2	
		A	1.8	
	IF (Tc=85℃)	R	1.5	
		G	1.5	
		B	2.0	
		L	1.8	
		A	1.5	
Reverse Voltage	VR	—	Not designed for reverse operation	V
Power Dissipation	PD (Tc=25℃)	R	87.3	W
		G	95.4	
		B	115.2	
		L	105.6	
		A	86.4	
	PD (Tc=85℃)	R	71.25	
		G	72.75	
		B	93	
		L	83.7	
		A	69.75	
Junction Temperature	Tj	R	115	℃
		G	150	
		B	150	
		L	150	
		A	150	
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	Tstg		-40~70	℃
Operation Temperature	Topr		-30~100	

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

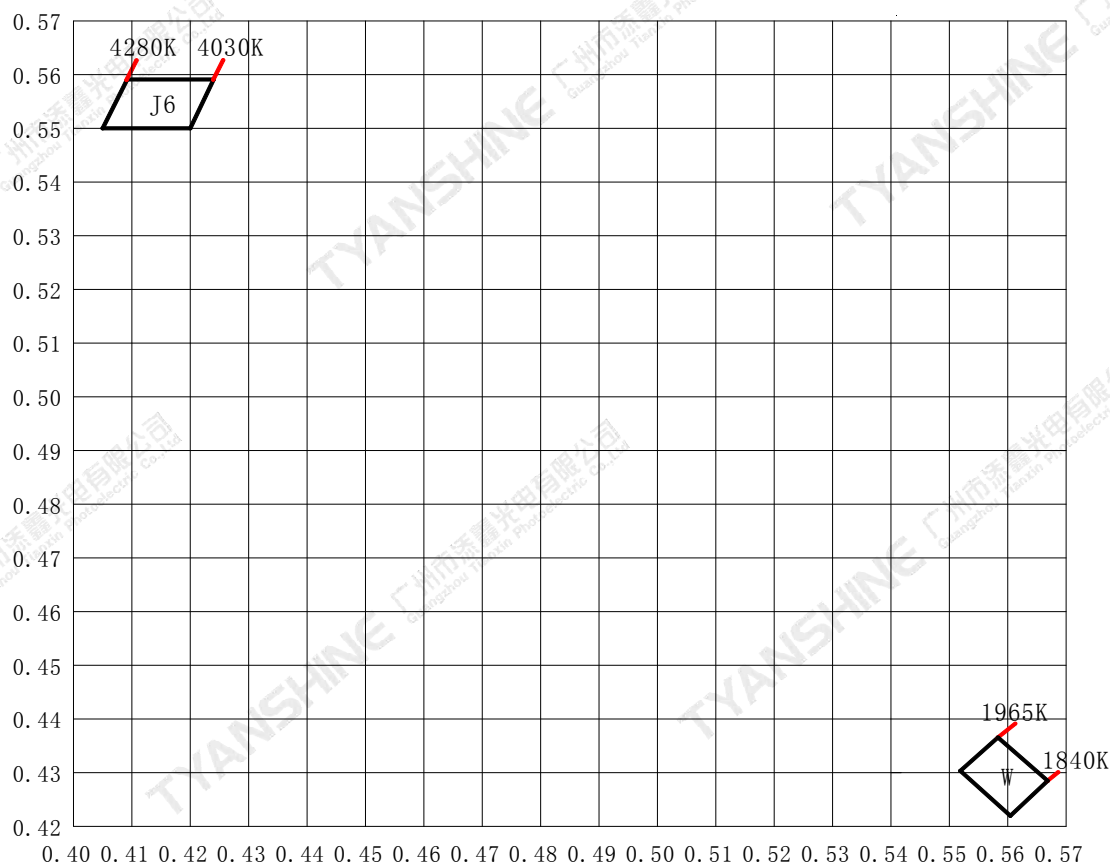
Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	If=1300mA (Tc=25℃)	R	2000	2300	2650	lm
			G	3800	4200	4600	
			B	800	890	980	
			L	4700	5000	5300	
			A	2700	2900	3100	
		If=1300mA (Tc=85℃)	R	1050	1210	1390	
			G	3360	3710	4065	
			B	820	910	1003	
			L	3995	4250	4500	
			A	2080	2230	2390	
Dominant Wavelength	λ_d	If=1300mA (Tc=25℃)	R	618	623	628	nm
			G	520	525	532	
			B	450	455	460	
			L	565	567	569	
		If=1300mA (Tc=85℃)	R	620	625	630	
			G	521	526	534	
			B	452	457	462	
			L	565.5	567.5	569.5	
Correlated Colour Temperature	CCT	If=1300mA (Tc=25℃)	L	4030	—	4280	K
			A	1840	—	1965	
		If=1300mA (Tc=85℃)	L	3950	—	4200	
			A	1850	—	1975	
Peak-emission Wavelength	λ_p	If=1300mA (Tc=25℃)	R	630	635	640	nm
			G	515	520	525	
			B	444	449	454	
			L	545	547	550	
		If=1300mA (Tc=85℃)	R	639	644	649	
			G	520	525	530	
			B	448	454	458	
			L	550	552.5	555	
Spectral Line Half-Width	$\Delta\lambda$	If=1300mA (Tc=25℃)	R	13	18	23	nm
			G	28	33	38	
			B	16	21	26	
			L	103	108	113	
			A	80	85	90	

		If=1300mA (Tc=85℃)	R	16	21	26	
			G	31	36	41	
			B	18	23	28	
			L	101	106	111	
			A	82	87	92	
Forward Voltage	V _f	If=1300mA (Tc=25℃)	R	46	48.5	51	V
			G	50	53	56	
			B	46	48	50	
			L	46	48	50	
			A	46	48	50	
		If=1300mA (Tc=85℃)	R	45	47.5	50	
			G	46	48.5	51.5	
			B	44.5	46.5	48.5	
			L	44.5	46.5	48.5	
			A	44.5	46.5	48.5	
Reverse Current	I _R	—	—	—	—	—	μA
Viewing Angle at 50 % IV	2θ _{1/2}	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	Rθ _{J-C}	—	R	—	0.15	—	K/W
			G	—	0.18	—	
			B	—	0.15	—	
			L	—	0.15	—	
			A	—	0.15	—	
			Total thermal resistance	—	0.09	—	
Temperature Coefficient of Voltage	VΔF/T	If=1300mA	R	—	-16.7	—	mV/℃
			G	—	-75	—	
			B	—	-25	—	
			L	—	-25	—	
			A	—	-25	—	
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.θ_{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.

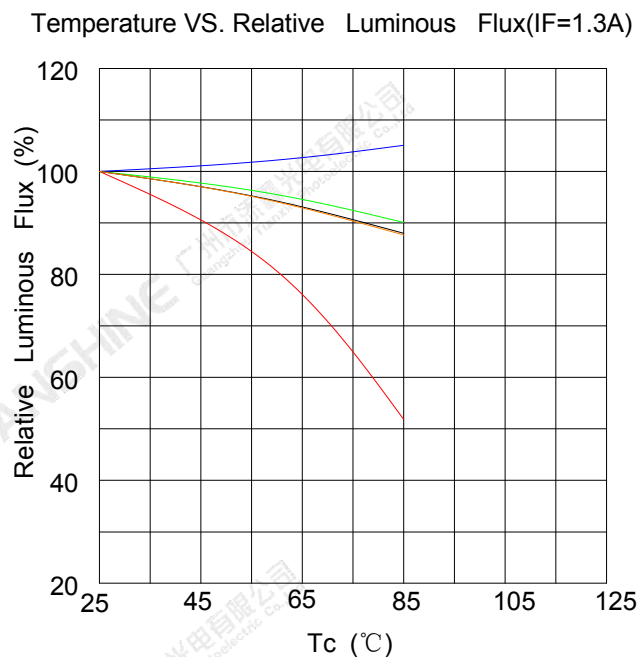
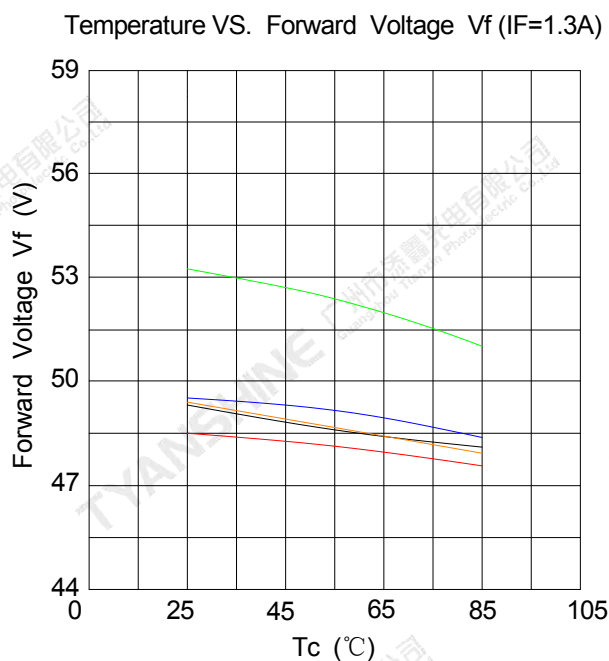
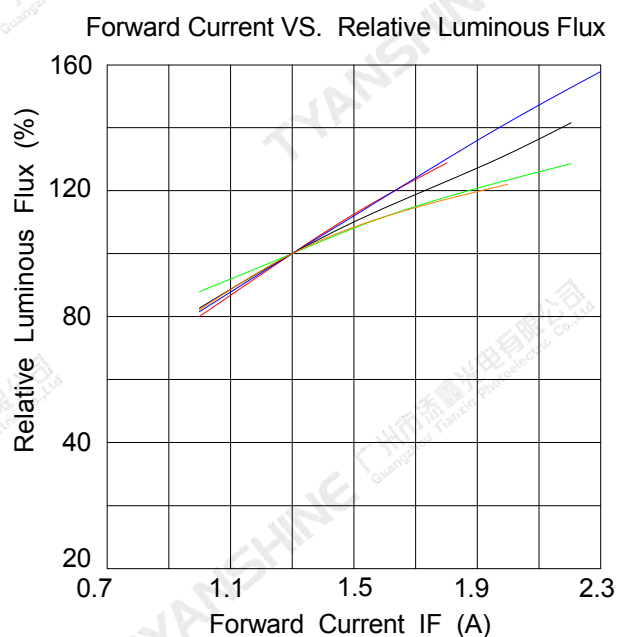
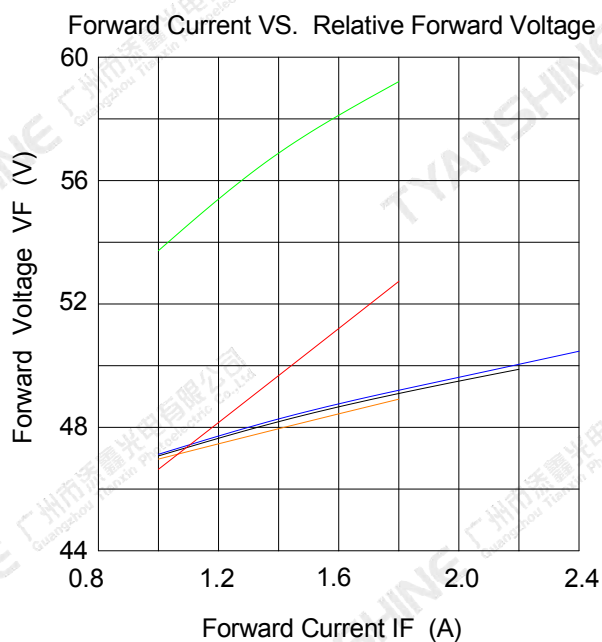
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White light Color coordinate filing ($T_c=25^{\circ}\text{C}$)

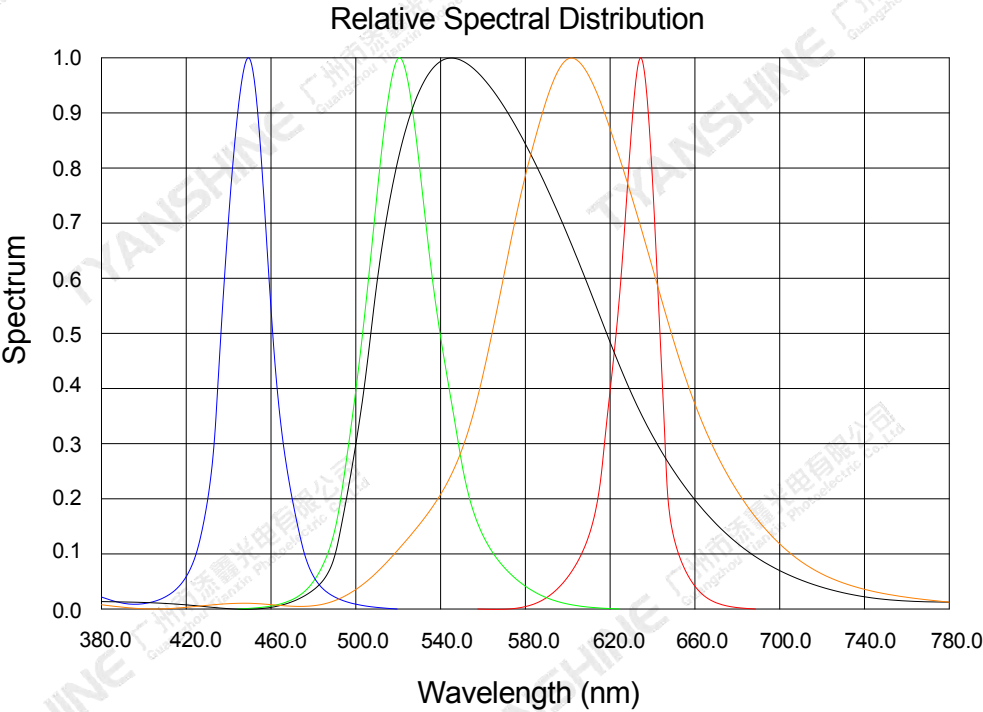
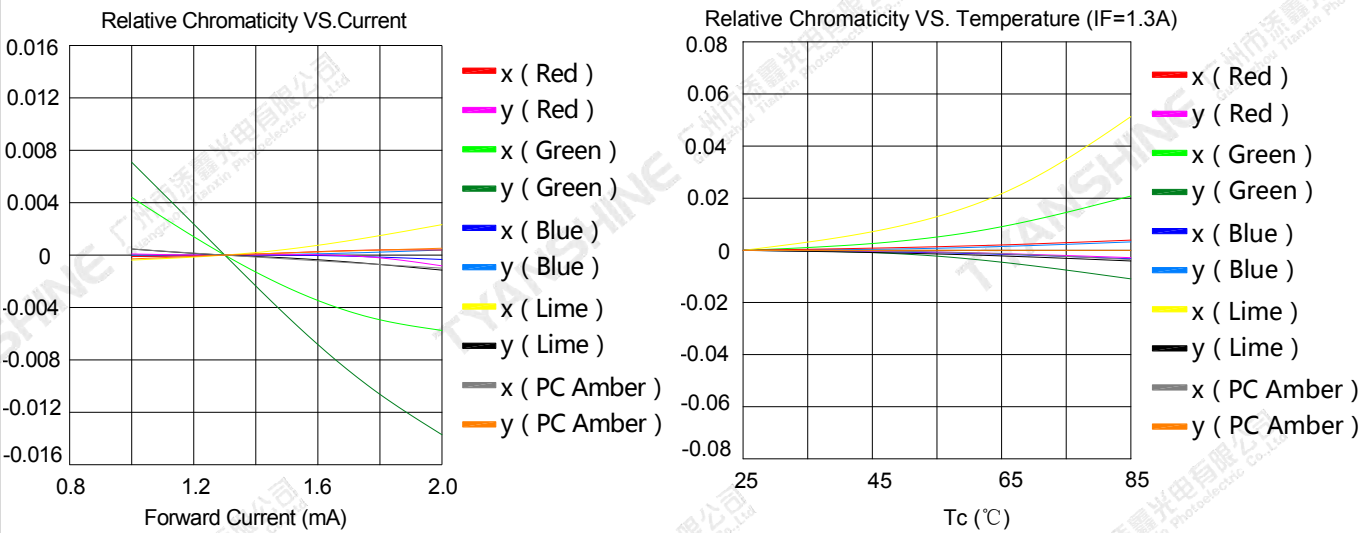
Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
J6	4030-4280K	0.4092	0.5591	0.424	0.5591	0.42	0.55	0.405	0.55
W	1840-1965K	0.5612	0.4212	0.5495	0.4326	0.5556	0.4392	0.5680	0.4274

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Notes: — Red; — Green; — Blue; — Lime; — PC Amber;

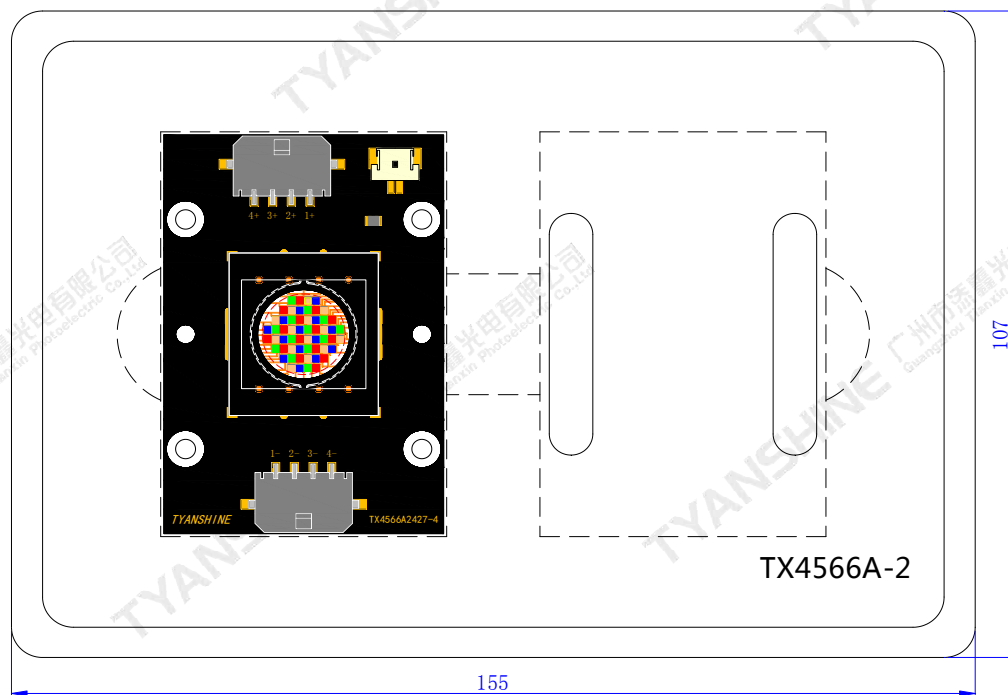


Notes: — Red: — Green: — Blue: — Lime: — PC Amber:

- Notes:**
- 2θ 1/2 is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
 - 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.