

TX-4566RGBLA150FC120-NUVENG-01

PRODUCT SPECIFICATION

Features:

- ◆Excellent transiting heat from LED chip operating under 1.5A.
- ◆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:

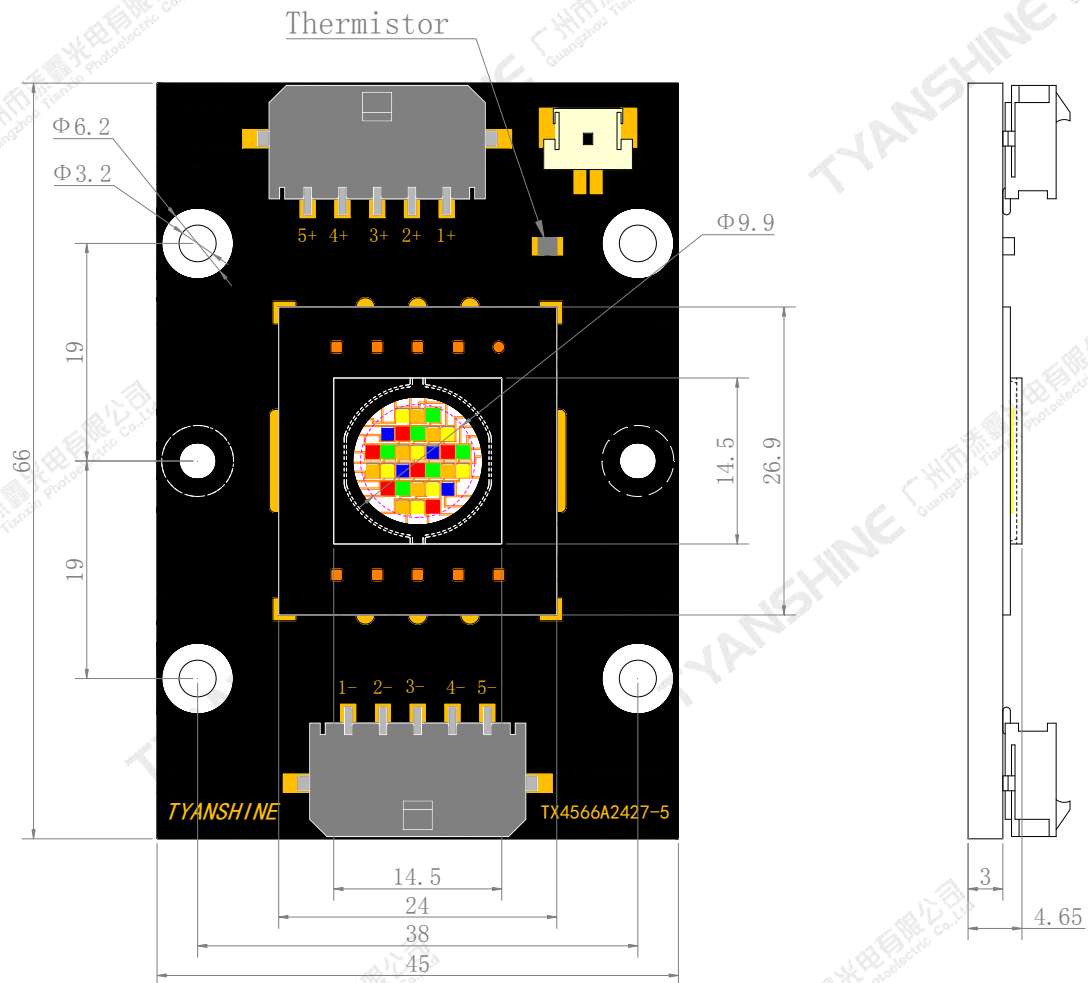
- ◆Red
- ◆Green
- ◆Blue
- ◆Lime
- ◆PC Amber

Applications:

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

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Package Dimensions:



1-Red (R) ; 2-Lime (L) ; 3-PC Amber (A) ; 4-Blue (B) ; 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	27.9	W
		G	37.8	
		B	30	
		L	47.3	
		A	38.7	
	PD (Tc=85℃)	R	22.5	
		G	28.5	
		B	24	
		L	36.9	
		A	30.75	
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		-40~100	

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=1500mA (Tc=25℃)	R	750	820	900	lm
			G	1500	1650	1750	
			B	180	220	260	
			L	2000	2200	2400	
			A	1250	1400	1550	
		If=1500mA (Tc=85℃)	R	380	420	500	
			G	1300	1450	1550	
			B	185	225	265	
			L	1700	1870	2050	
			A	960	1070	1200	
Dominant Wavelength	λ_d	If=1500mA (Tc=25℃)	R	618	623	628	nm
			G	520	525	532	
			B	450	455	460	
			L	565	567	569	
		If=1500mA (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=1500mA (Tc=25℃)	L	4030	—	4280	K
			A	1840	—	1965	
		If=1500mA (Tc=85℃)	L	3950	—	4200	
			A	1850	—	1975	
Peak-emission Wavelength	λ_p	If=1500mA (Tc=25℃)	R	630	635	640	nm
			G	515	520	525	
			B	444	449	454	
			L	545	547	550	
		If=1500mA (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=1500mA (Tc=25℃)	R	13	18	23	nm
			G	28	33	38	
			B	16	21	26	
			L	103	108	113	
			A	80	85	90	

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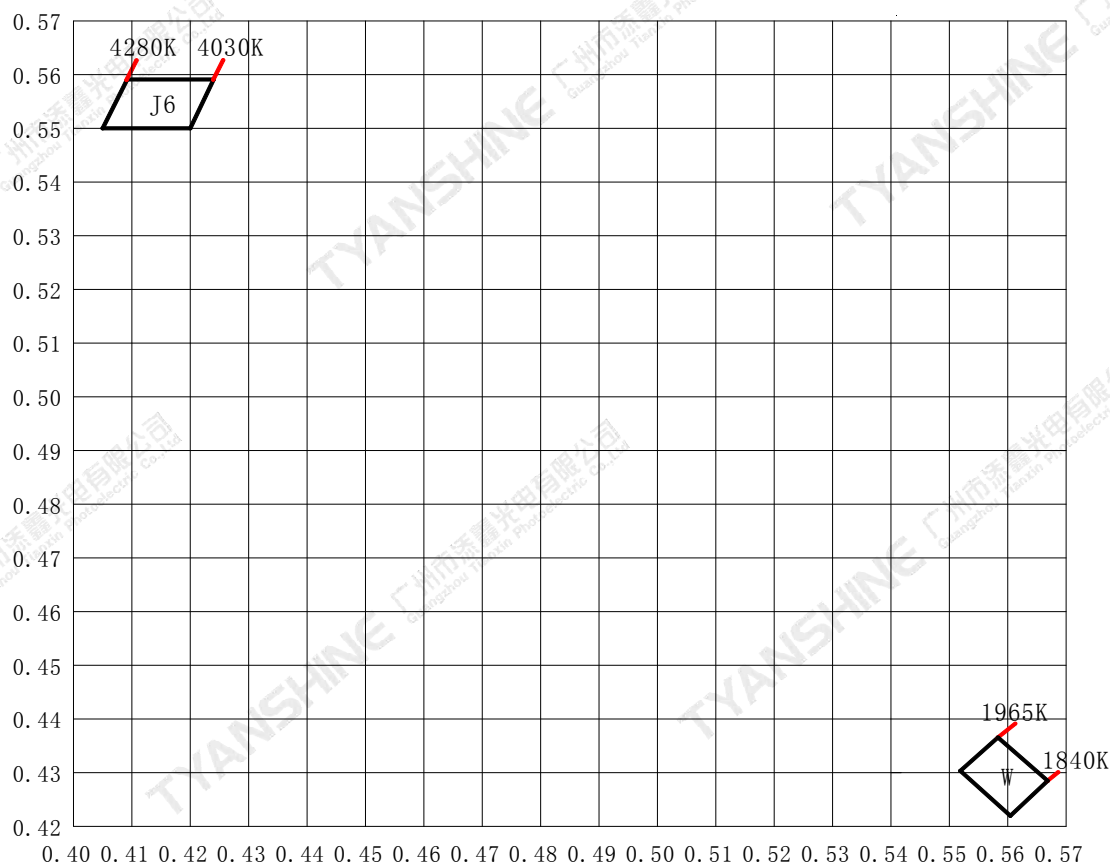
		If=1500mA (Tc=85℃)	R	16	21	26	
			G	31	36	41	
			B	18	23	28	
			L	101	106	111	
			A	82	87	92	
Forward Voltage	V _f	If=1500mA (Tc=25℃)	R	14	15.5	17	V
			G	18	21	24	
			B	11	12.5	14	
			L	20	21.5	23	
			A	20	21.5	23	
		If=1500mA (Tc=85℃)	R	13.5	15	16.5	
			G	16.5	19	22	
			B	10.5	12	13.5	
			L	19.5	20.5	22.5	
			A	19.5	20.5	22.5	
Reverse Current	I _R	—	—	—	—	—	μA
Viewing Angle at 50 % IV	2θ _{1/2}	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	Rθ _{J-C}	—	R	—	0.47	—	K/W
			G	—	0.47	—	
			B	—	0.56	—	
			L	—	0.33	—	
			A	—	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	—	
			L	—	-16.7	—	
			A	—	-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.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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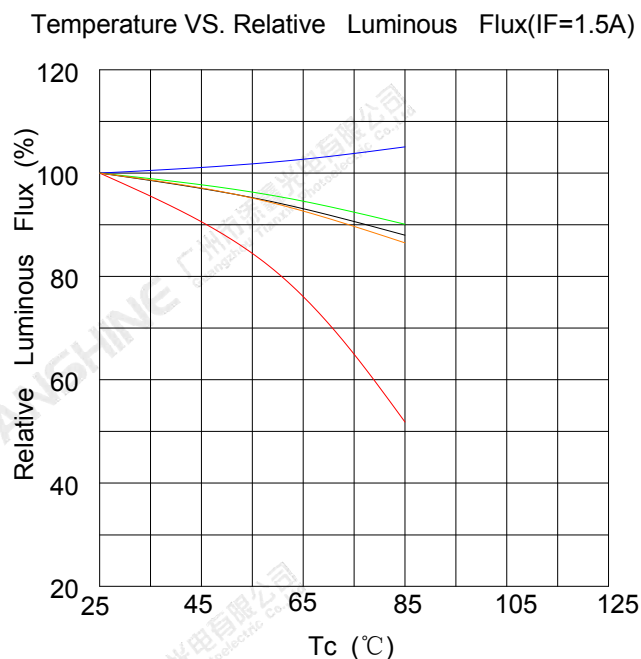
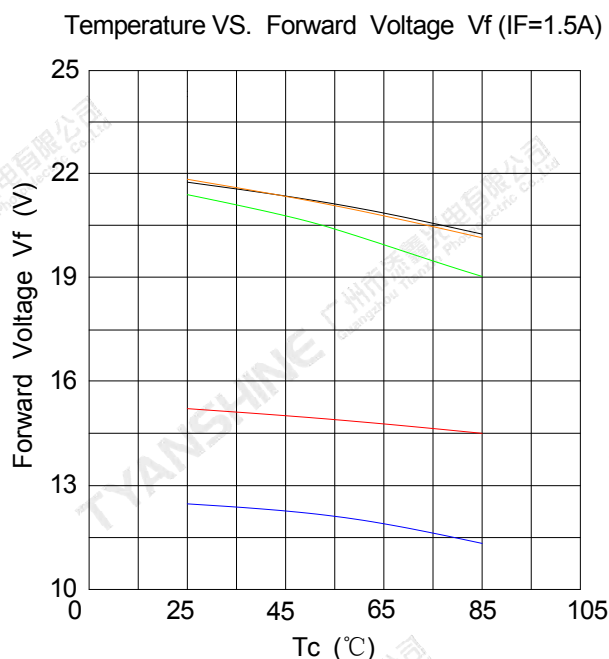
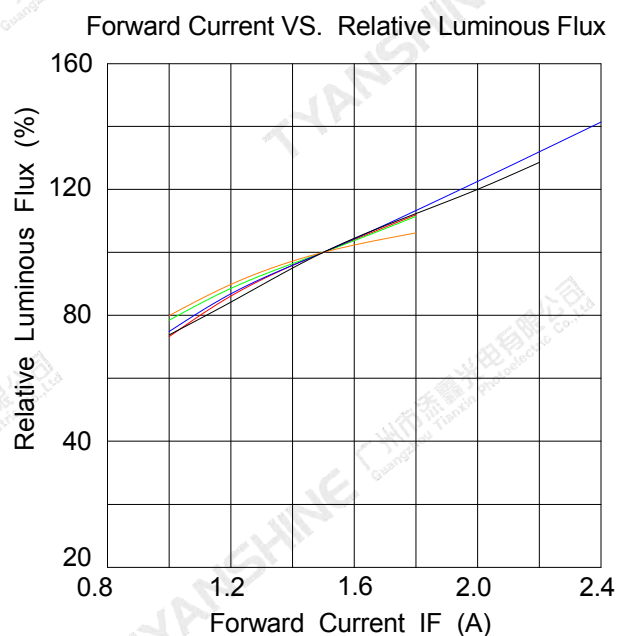
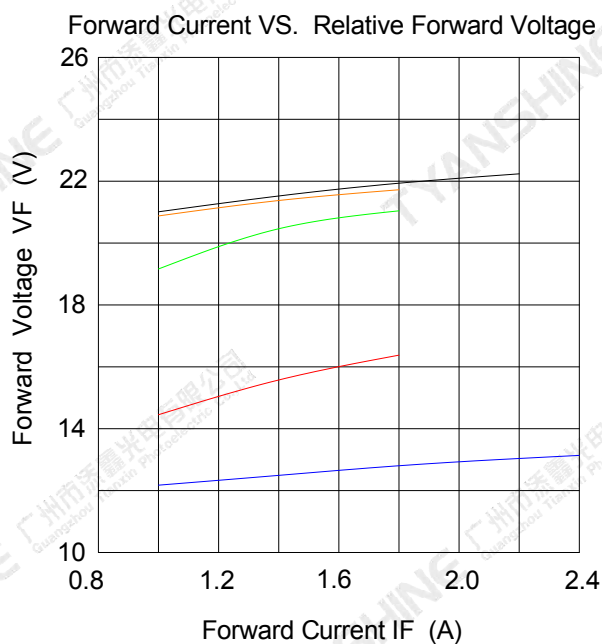
White light Color coordinate filing (Tc=25℃)



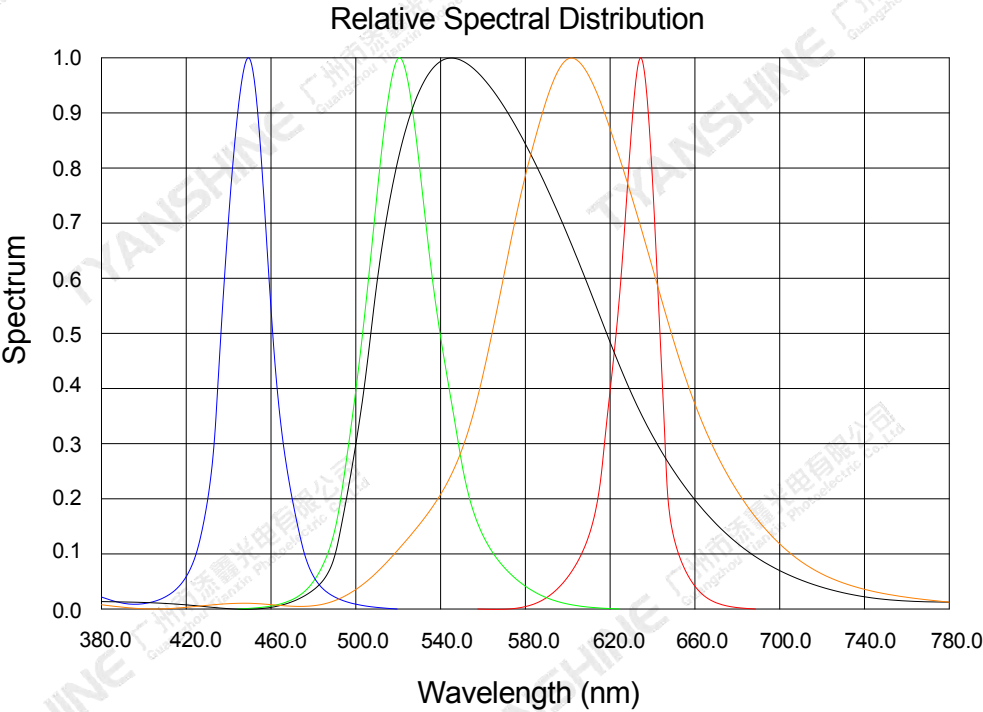
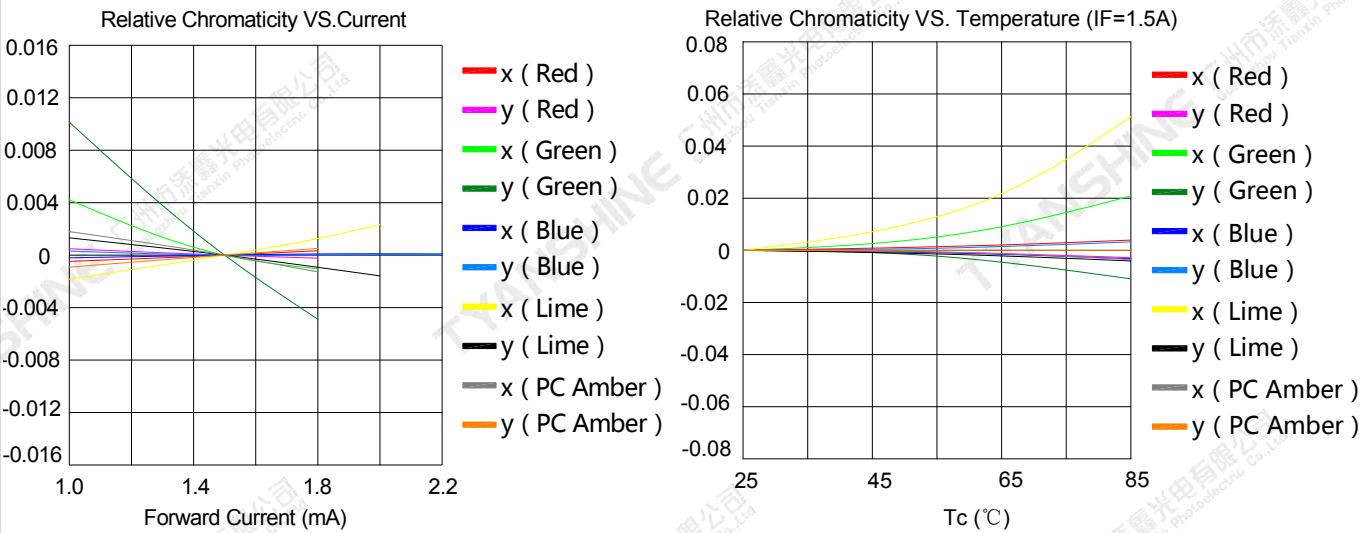
Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
J6	4030-4280K	0.4092	0.5591	0.424	0.5591	0.42	0.55	0.405	0.55
W	1840-1965K	0.5612	0.4212	0.5495	0.4326	0.5556	0.4392	0.5680	0.4274

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



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



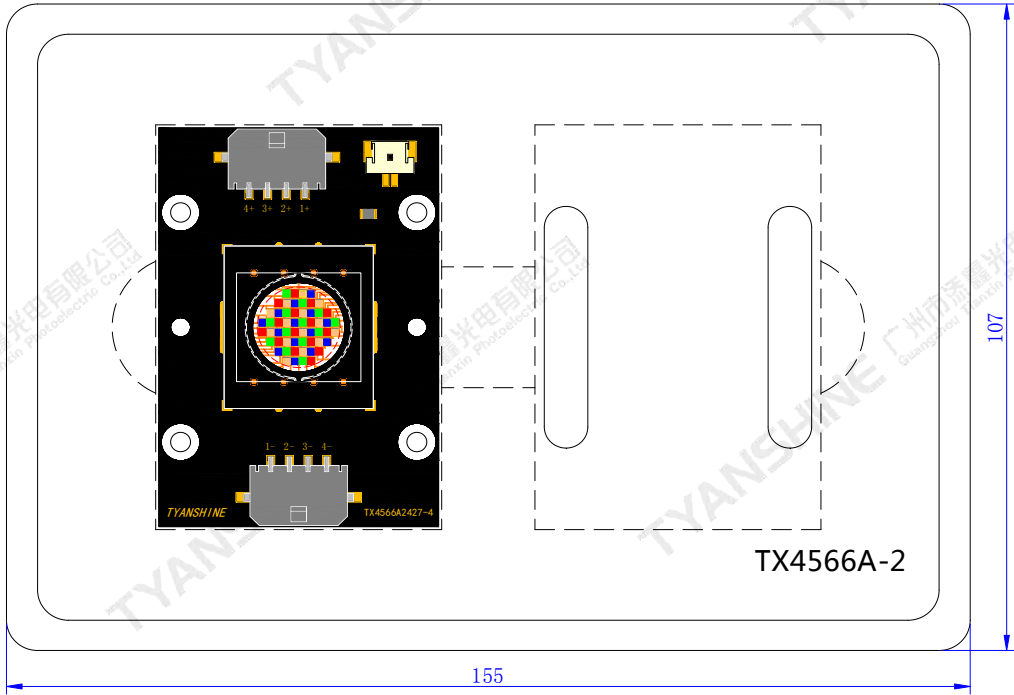
Notes: Red; Green; Blue; Lime; PC Amber;

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.

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