

TX-4575RGBLAC400FC120-NUVENG-01

PRODUCT SPECIFICATION

Features:

- ◆ Excellent transiting heat from LED chip operating under 1.3A.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ Red: AlInGaP
- ◆ Green: GaInN
- ◆ Blue: GaN
- ◆ Lemon light: GaN
- ◆ PC Amber: GaN
- ◆ Cyan: GaN

Emitting Color:

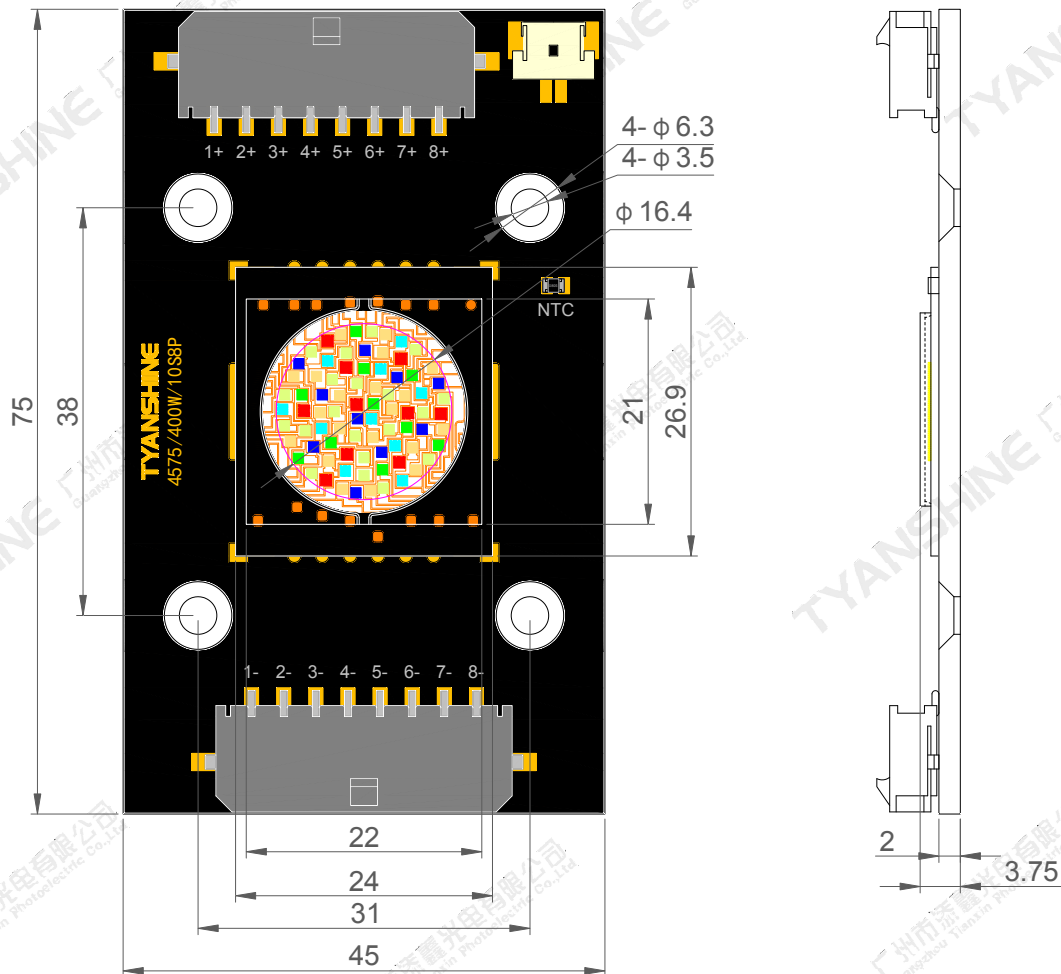
- ◆ Red (R)
- ◆ Green (G)
- ◆ Blue (B)
- ◆ Lemon light (L)
- ◆ PC Amber (A)
- ◆ Cyan (C)

Applications:

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

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Package Dimensions:



PC Amber : (1+)-(A1+) / (1-)-(A1-) ;
 Lemon light : (3+)-(L1+) / (3-)-(L1-) ;
 Lemon light : (5+)-(L2+) / (5-)-(L2-) ;
 Green : (7+)-(G+) / (7-)-(G-);

Cyan : (2+)-(C+) / (2-)-(C-) ;
 Blue : (4+)-(B+) / (4-)-(B-) ;
 Red : (6+)-(R+) / (6-)-(R-) ;
 PC Amber : (8+)-(A2+) / (8-)-(A2-) ;

Notes:

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are ± 0.1 mm .

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Ratings	Unit	
Forward Current	IF	R	2.0	A
		G	2.5	
		B	2.5	
		L1	2.2	
		L2	2.2	
		A1	2.2	
		A2	2.2	
		C	2.2	
Reverse Voltage	VR	Not designed for reverse operation	V	
Power Dissipation	PD	R	53	W
		G	83	
		B	86	
		L1	73	
		L2	73	
		A1	73	
		A2	73	
		C	76	
Junction Temperature	Tj	R	115	°C
		G	150	
		B	150	
		L1	150	
		L2	150	
		A1	150	
		A2	150	
		C	150	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V	
Storage Temperature	T _{stg}	-20~+70	°C	
Operation Temperature	T _{opr}	-30~+85		

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.

Electrical Optical Characteristics IF=1.3A ,Tc=25°C

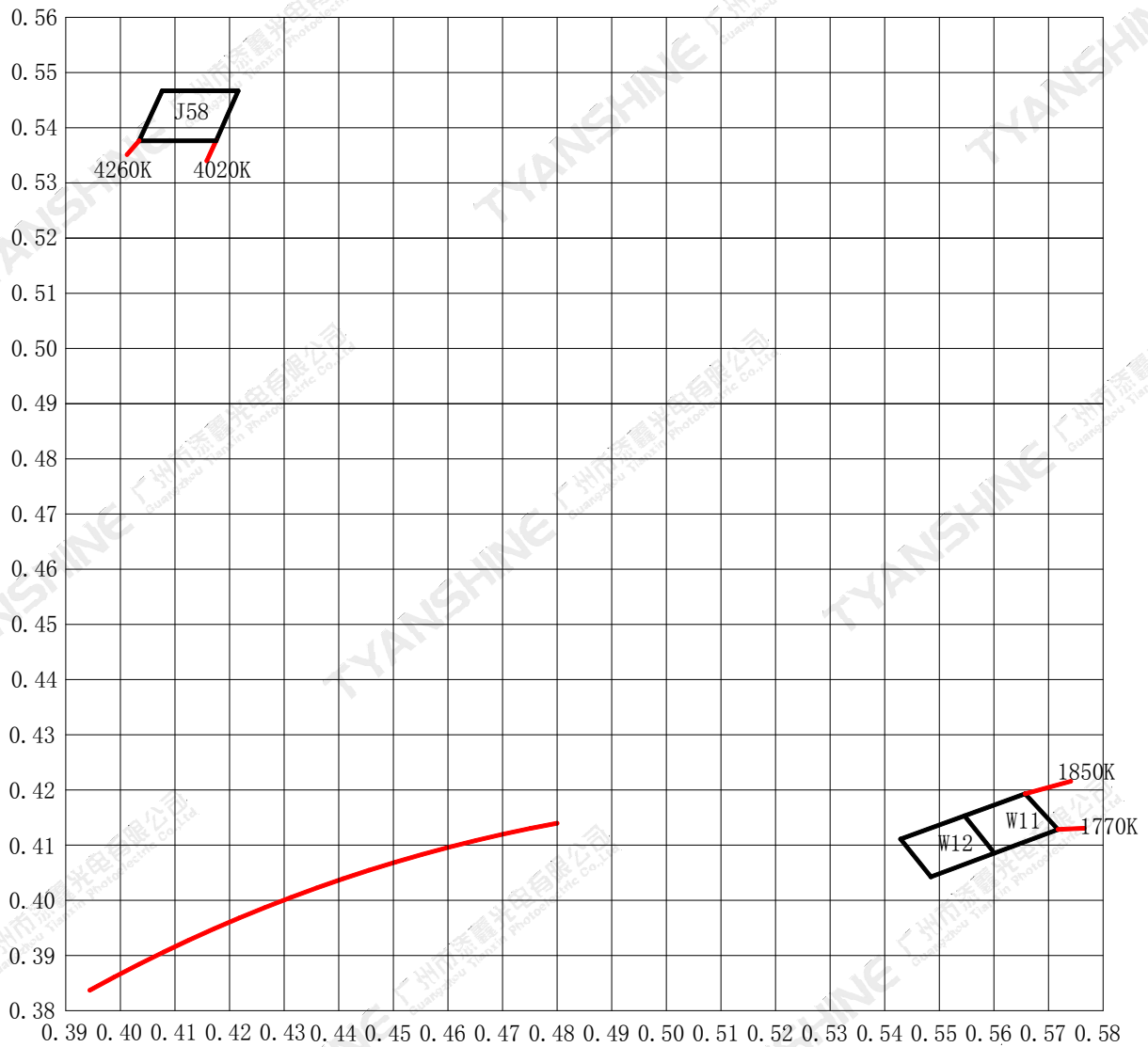
Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	R	1300	1550	1800	lm
		G	2500	2800	3100	
		B	530	580	620	
		L1	3300	3750	4100	
		L2	3300	3750	4100	
		A1	1600	1850	2100	
		A2	1600	1850	2100	
		C	1000	1200	1400	
Dominant Wavelength	λ_d	R	618	623	628	nm
		G	520	525	532	
		B	450	455	460	
		C	485	487.5	490	
		L	565	567	569	
Peak-emission Wavelength	λ_p	R	625	630	635	nm
		G	515	520	525	
		B	444	449	454	
		C	480	485	490	
		L	542	546	550	
Correlated Colour Temperature	CCT	L	4020	—	4260	K
		A	1770	—	1850	
Forward Voltage	V_f	R	21	23.5	25	V
		G	28	30.5	33	
		B	29	31.5	34	
		L1	29	31	33	
		L2	29	31	33	
		A1	29	31	33	
		A2	29	31	33	
		C	30	32.5	35	
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	—	120	—	Deg
Reverse Current	I_R	—	—	—	—	μA

Thermal Resistance Junction to Case	R θ_{J-C}	R	—	0.41	—	K/W
		G	—	0.9	—	
		B	—	0.9	—	
		L1	—	0.9	—	
		L2	—	0.9	—	
		A1	—	0.9	—	
		A2	—	0.9	—	
		C	—	0.9	—	
		Total thermal resistance	—	0.12	—	
Temperature Coefficient of Voltage	V Δ F/T	R	—	-17	—	mV/°C
		G	—	-31	—	
		B	—	-16.3	—	
		L1	—	-15.7	—	
		L2	—	-15.7	—	
		A1	—	-14.7	—	
		A2	—	-14.7	—	
		C	—	-22.7	—	
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.Luminous flux measurement tolerance: $\pm 15\%$.
- 4.Forward voltage measurement tolerance: $\pm 0.15V$.

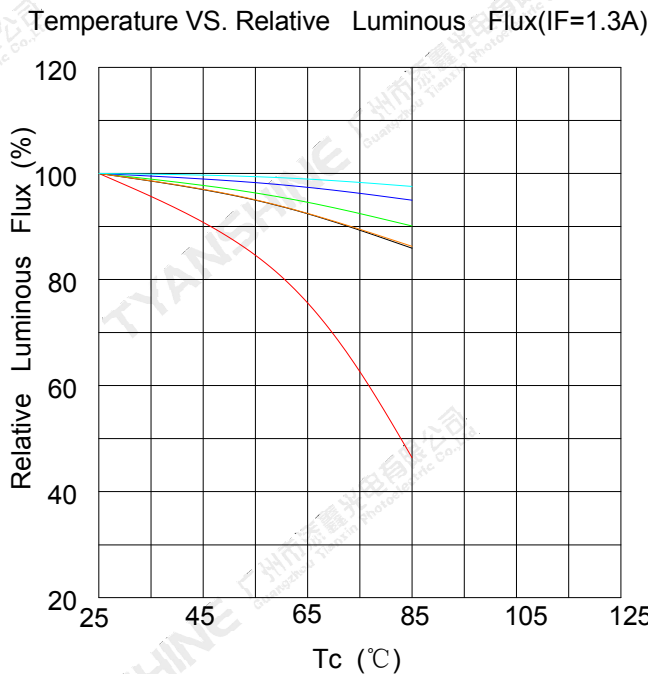
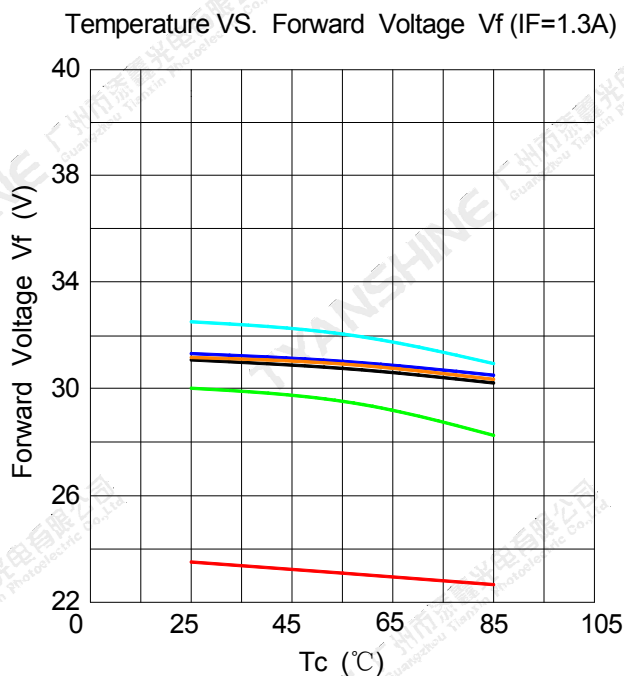
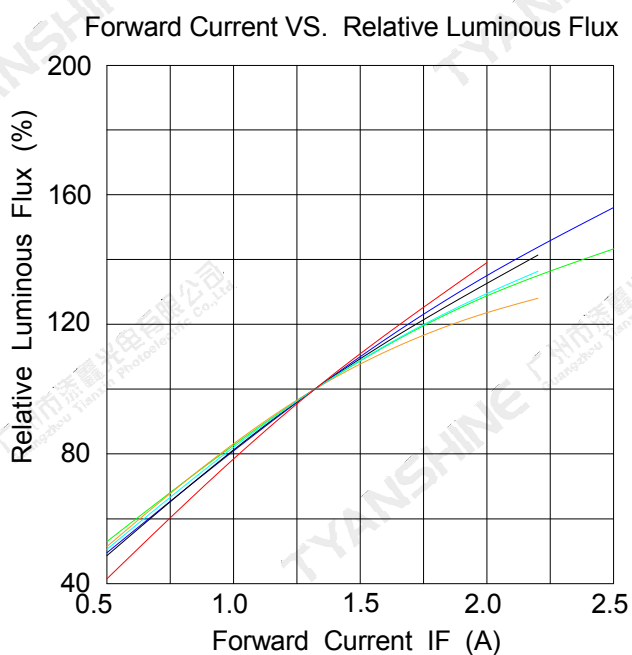
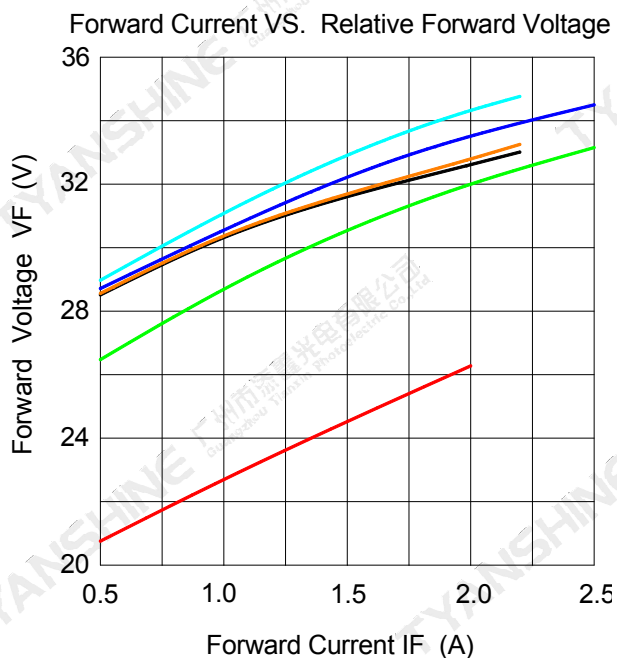
White light Color coordinate filing (IF=1.3A, Tc=25°C)



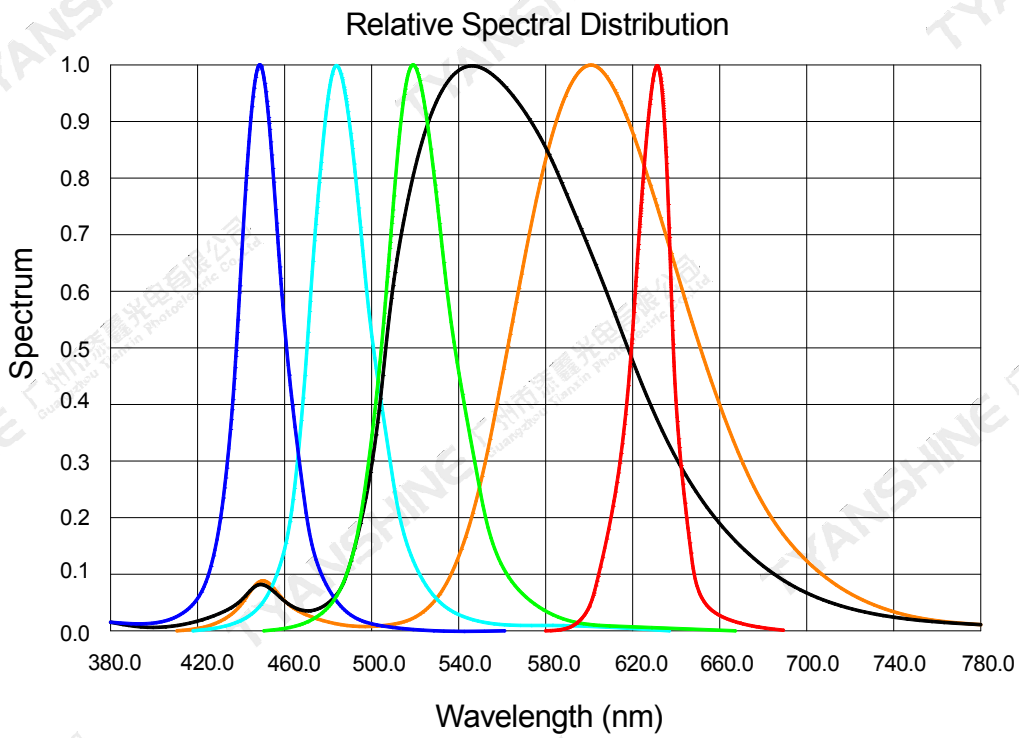
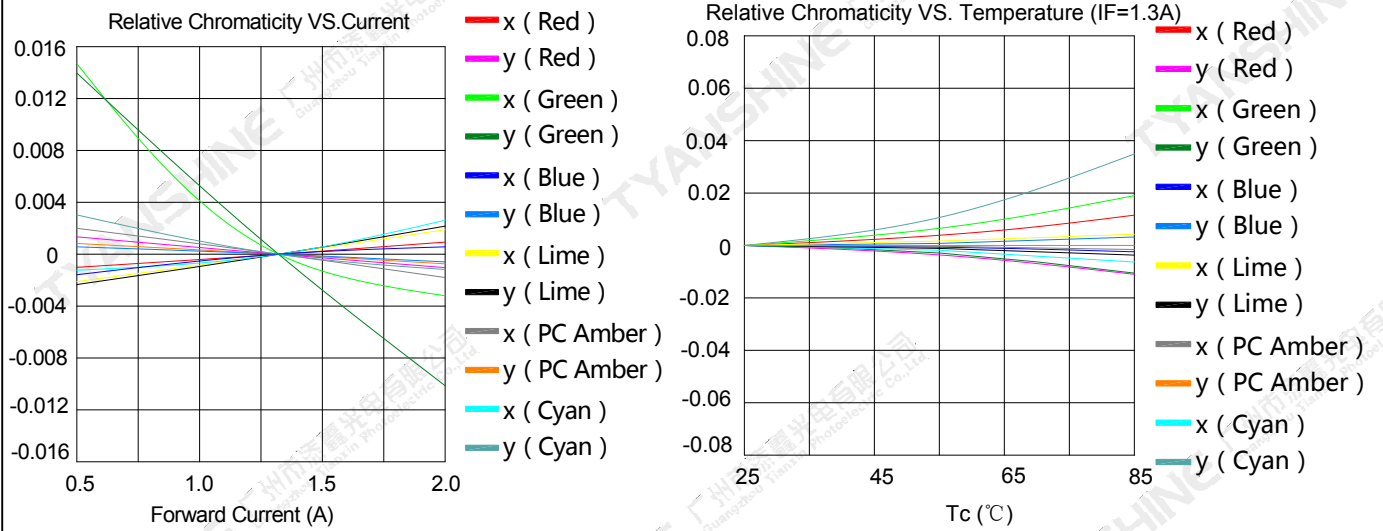
Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
J58	4020-4260K	0.4035	0.5378	0.4176	0.5378	0.4216	0.5468	0.4077	0.5468
W11	1770-1850K	0.5546	0.4154	0.56	0.4088	0.5718	0.413	0.5658	0.4194
W12	1770-1850K	0.5429	0.4112	0.5485	0.4044	0.56	0.4088	0.5546	0.4154

Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)



Notes: ■ Red; ■ Green; ■ Blue; ■ Lemon light (L1/L2); ■ Cyan ■ PC Amber (A1/A2);



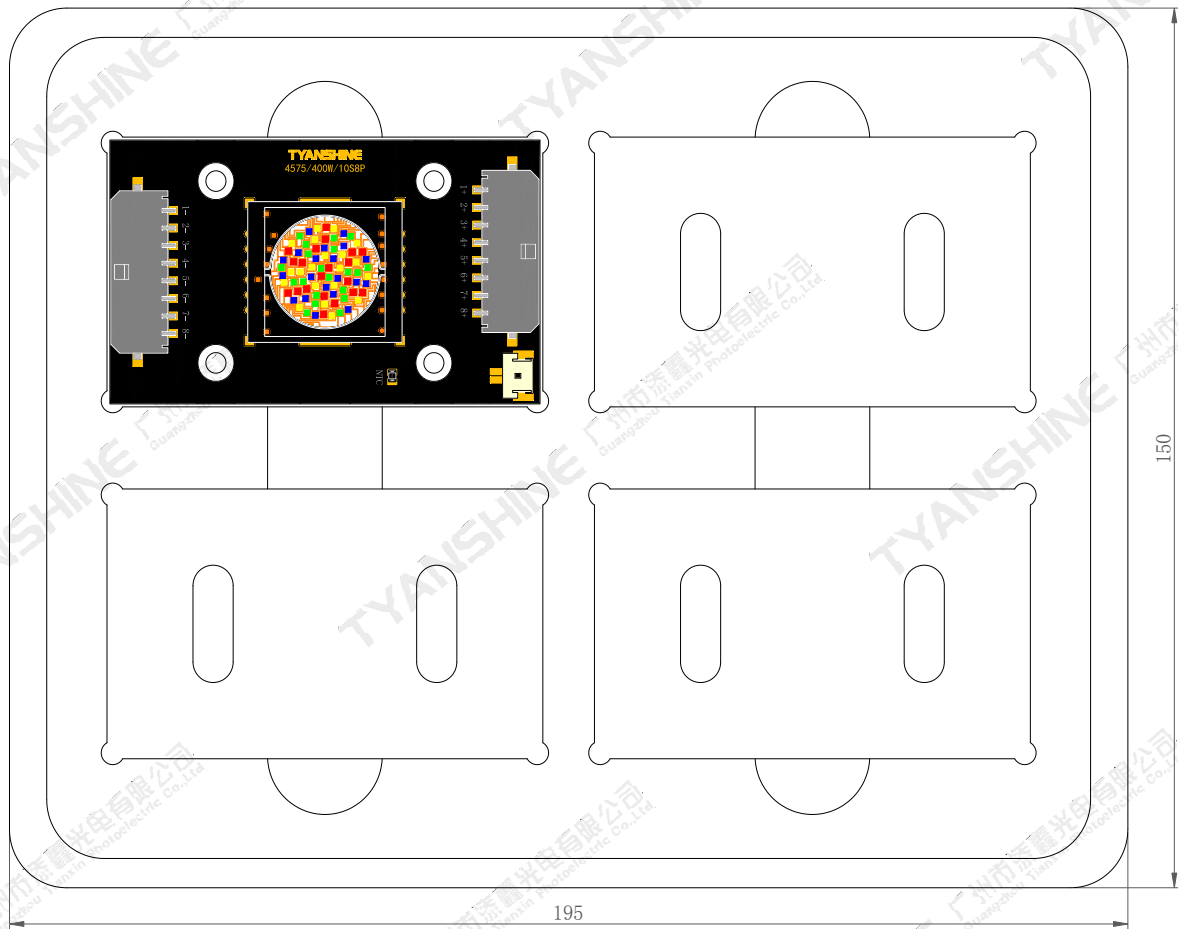
Notes: — Red; — Green; — Blue; — Lemon light (L1/L2); — Cyan — PC Amber (A1/A2);

Notes:

1. $2\theta_{1/2}$ is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is $\pm 5^\circ$.

Dimensions For Cannulation And Packaging

Quantity: 4PCS



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.