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

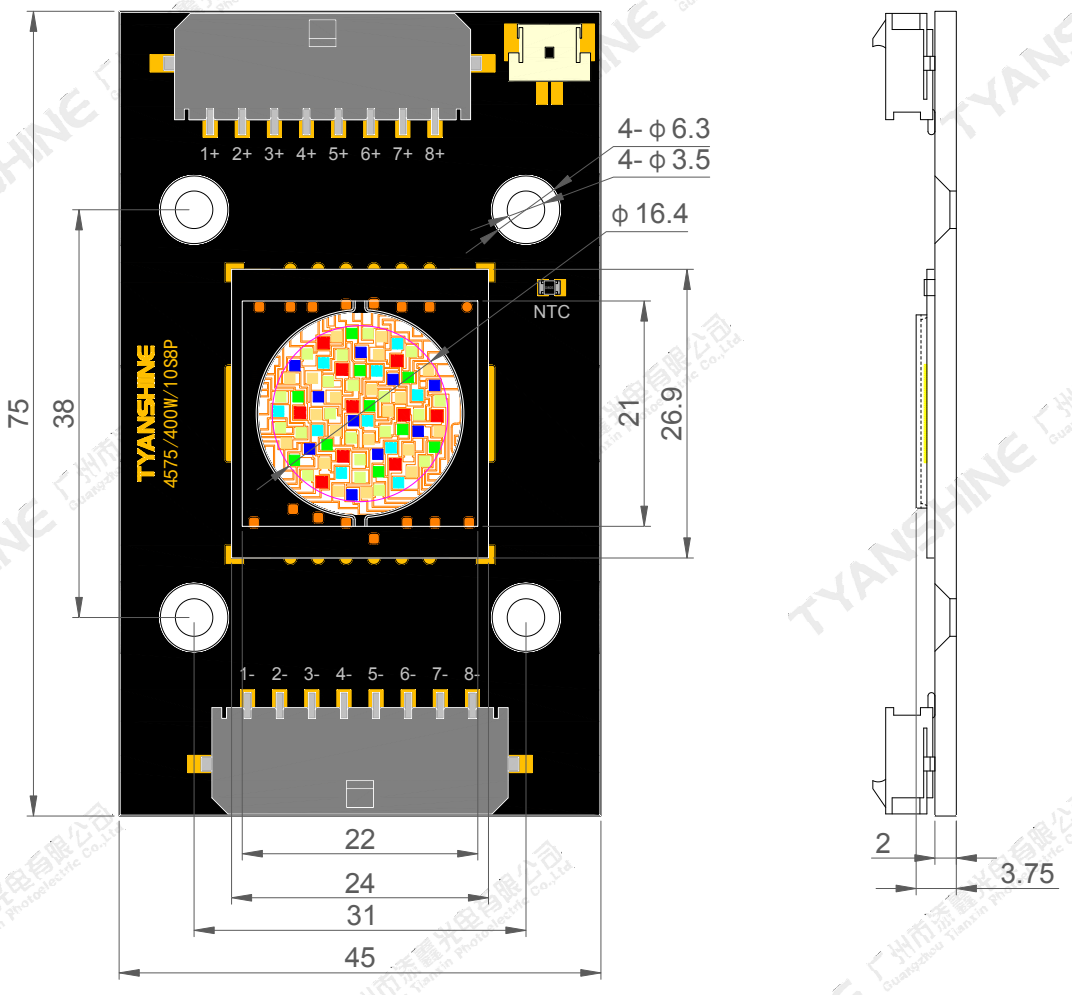
Emitting Color:

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

Applications:

◆Stage lighting
◆Landscape Lighting
◆Entertainment lighting

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：(1+)-(A2+) / (1-)-(A2-)；

Notes:

1.All dimensions are in millimeters .

2.Tolerances unless otherwise mentioned are ±0.1mm .

Absolute Maximum Ratings (Tc=25℃)

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	V_R		Not designed for reverse operation	V
Power Dissipation	P_D	R	53	W
		G	83	
		B	86	
		L1	73	
		L2	73	
		A1	73	
		A2	73	
		C	76	
Junction Temperature	Tj	R	115	℃
		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	℃
Operation Temperature	T_{opr}		-30~+85	

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 IF=1.3A ,Tc=25℃

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	λd	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	λp	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	$R\theta_{J-C}$	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△F/T	R	—	-17	—	mV/℃
		G	—	-31	—	
		B	—	-16.3	—	
		L1	—	-15.7	—	
		L2	—	-15.7	—	
		A1	—	-14.7	—	
		A2	—	-14.7	—	
		C	—	-22.7	—	
Thermistor(NTC)	Rt25	—	—	10	—	KΩ

Notes:

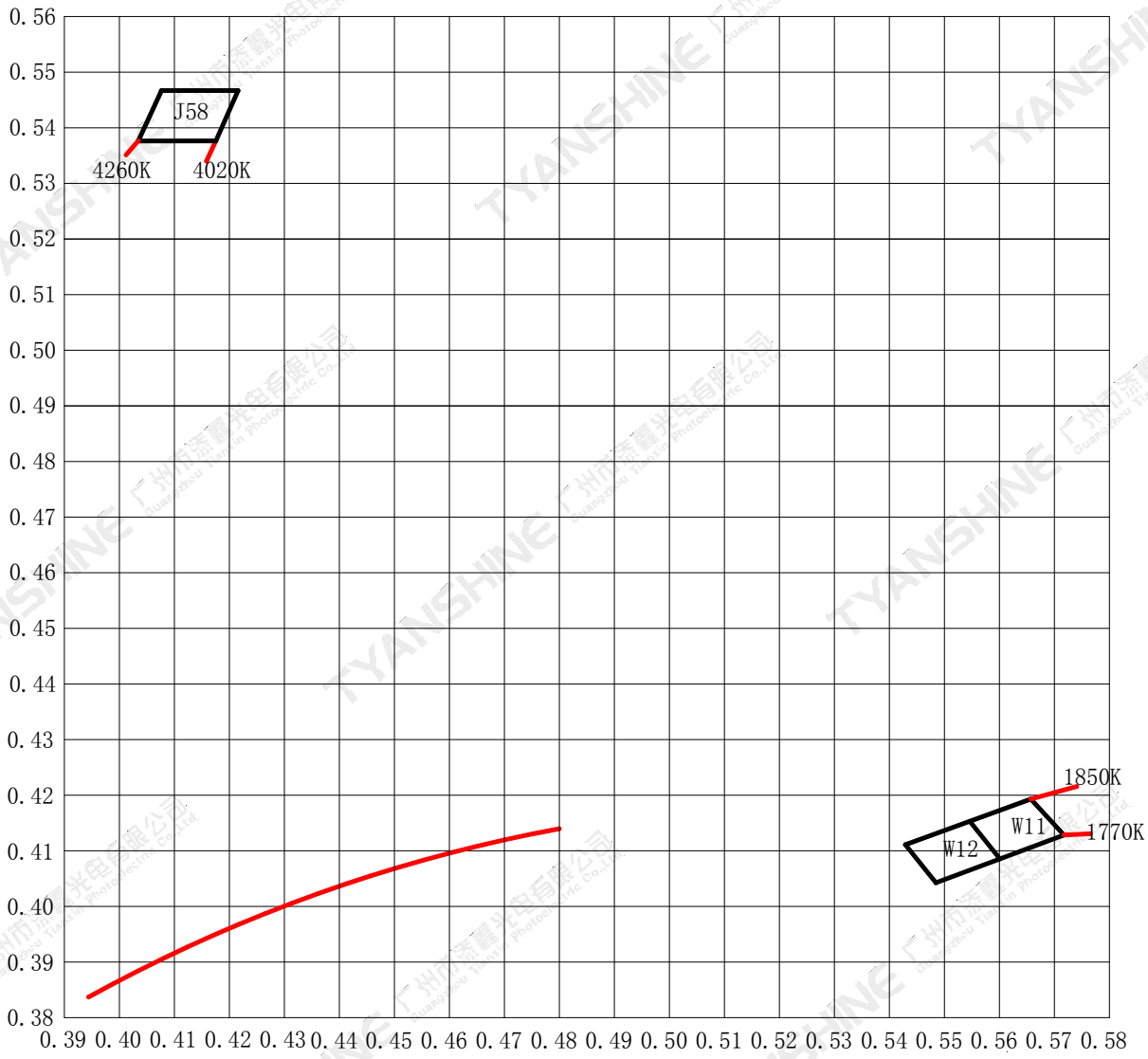
1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

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

3.Luminous flux measurement tolerance:±15%.

4.Forward voltage measurement tolerance:±0.15V.

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

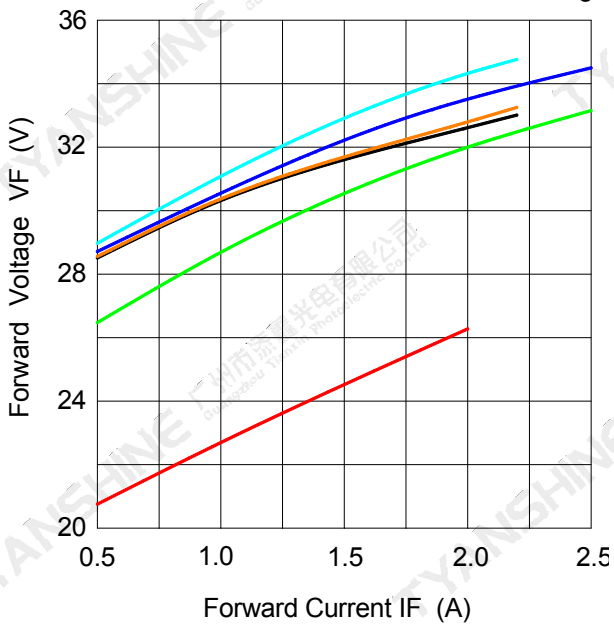


Grade	TC	P1		P2		P3		P4	
		X1	Y1	X2	Y2	X3	Y3	X4	Y4
J58	4020-4260K	0.4035	0.5378	0.4176	0.5378	0.4216	0.5468	0.4077	0.5468
W11	1770-1850K	0.5546	0.4154	0.56	0.4088	0.5718	0.413	0.5658	0.4194
W12	1770-1850K	0.5429	0.4112	0.5485	0.4044	0.56	0.4088	0.5546	0.4154

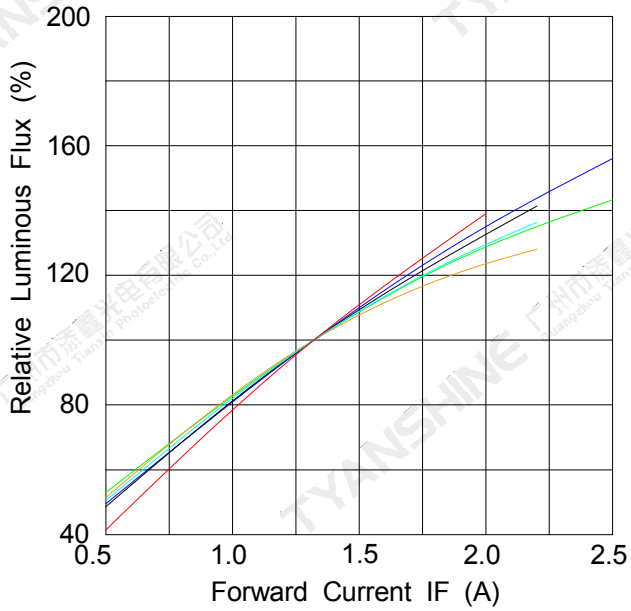
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

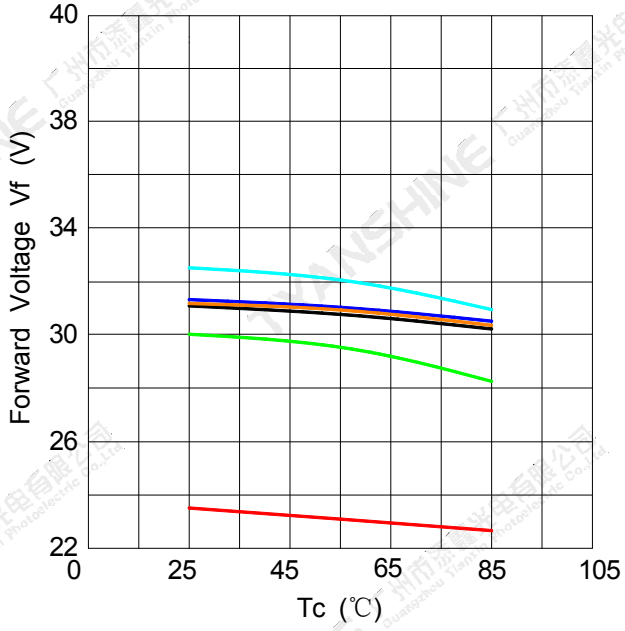
Forward Current VS. Relative Forward Voltage



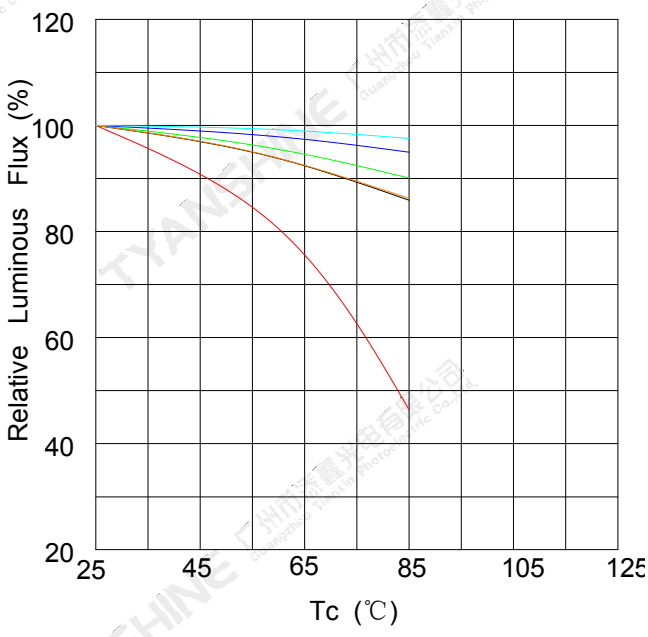
Forward Current VS. Relative Luminous Flux



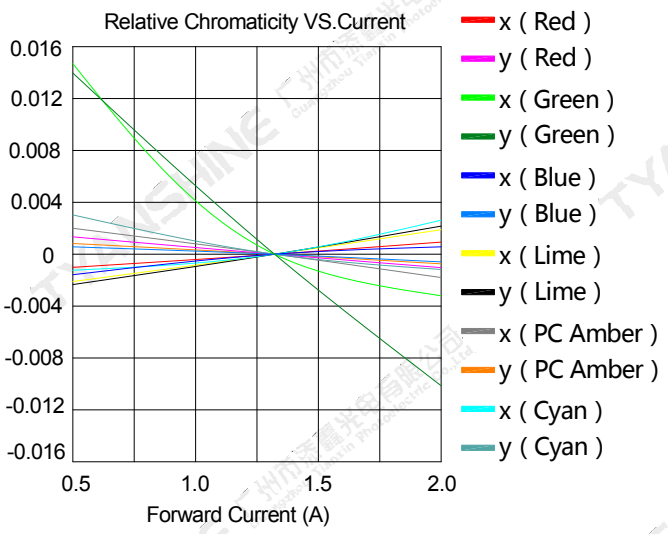
Temperature VS. Forward Voltage Vf (IF=1.3A)

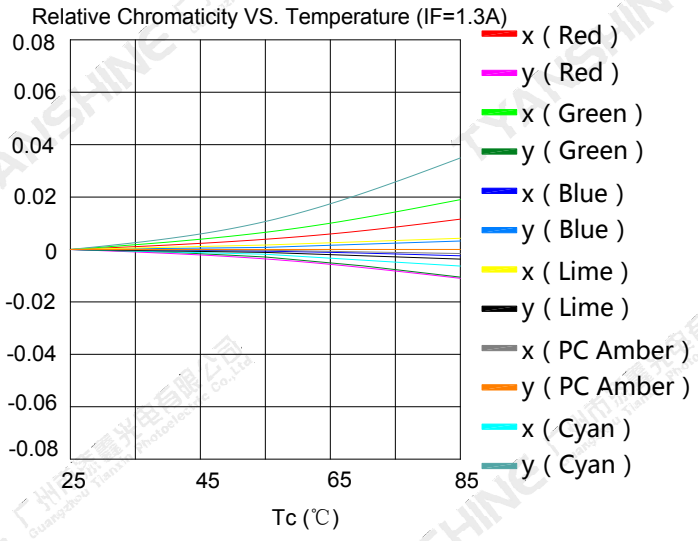


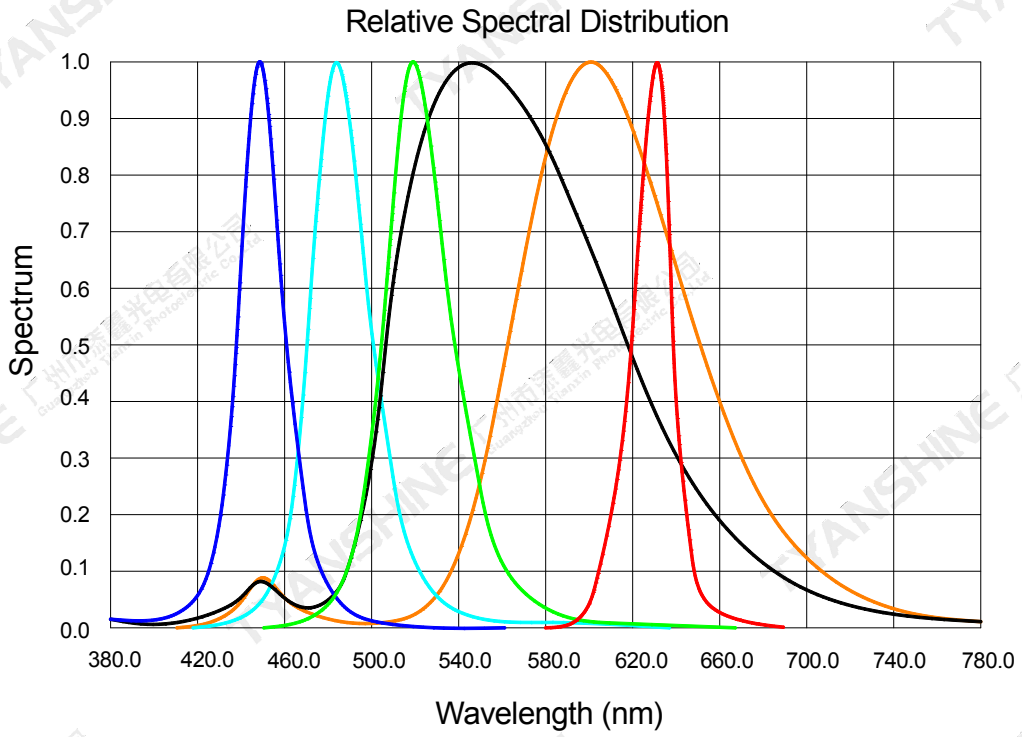
Temperature VS. Relative Luminous Flux(IF=1.3A)



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







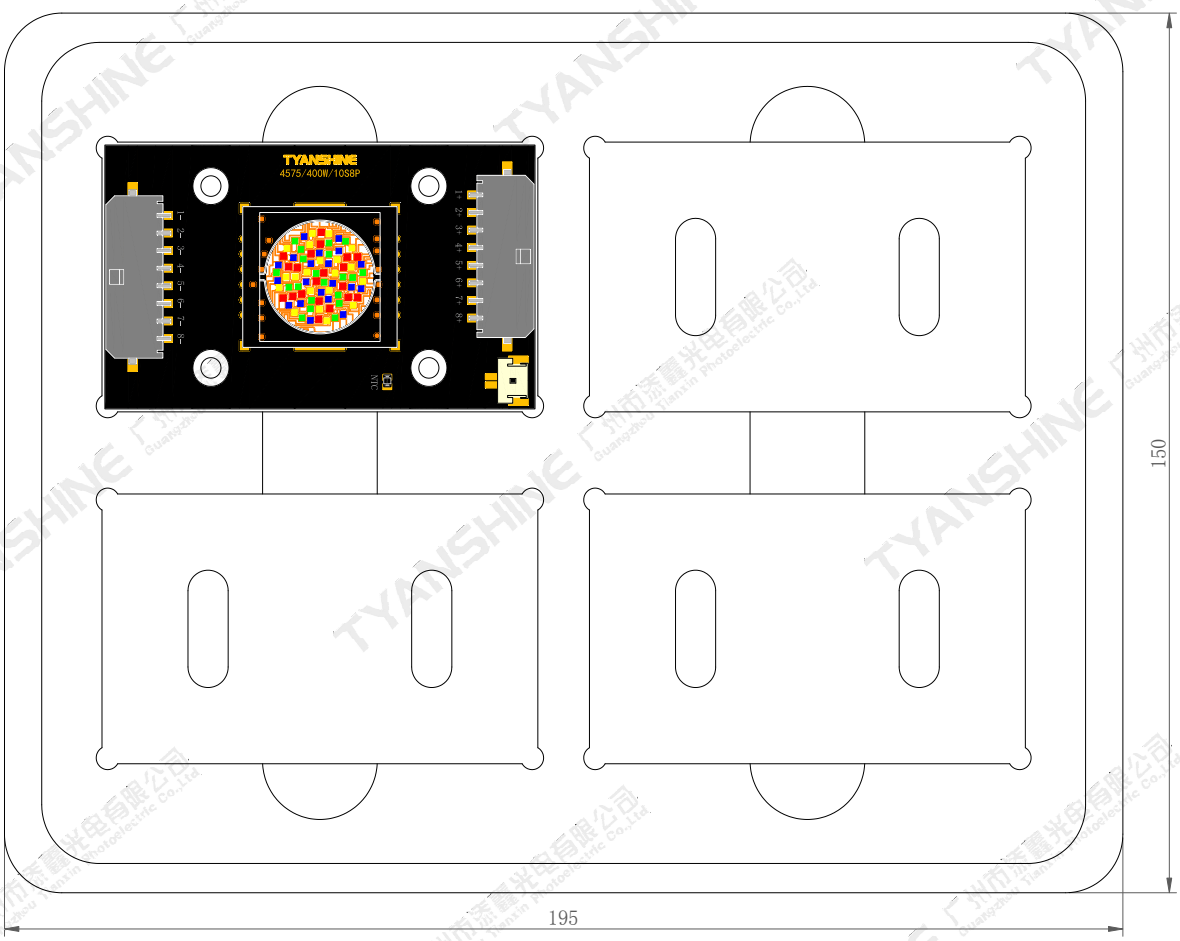
Notes: Red; Green; Blue; Lemon light (L1/L2) ; Cyan PC Amber (A1/A2) ;

Notes:

1. 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: 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.