TX-1524SW11F13-08H903050

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under 700mA.

◆Provide uniform cross distribution of positive white and warm white dual color scheme, mixed pure.

◆High luminous output.

◆No UV.

◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

◆GaInN

Emitting Color:

◆White

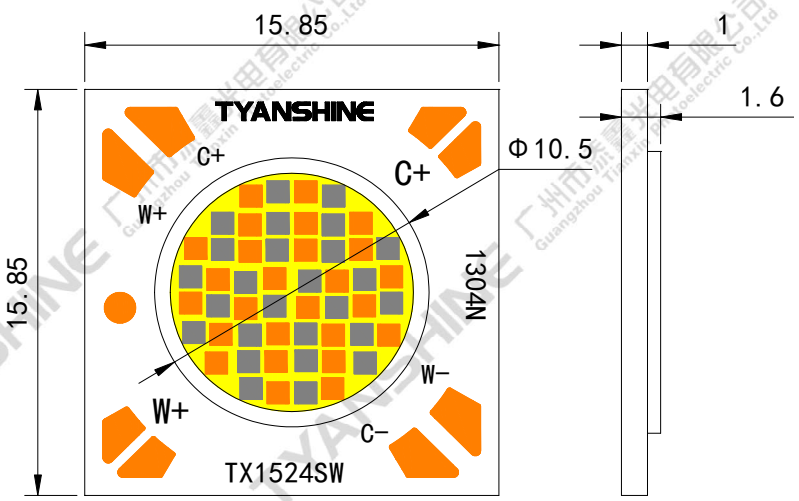
◆Warm white

Applications:

◆Commercial lighting

◆General Lighting

Package Dimensions:



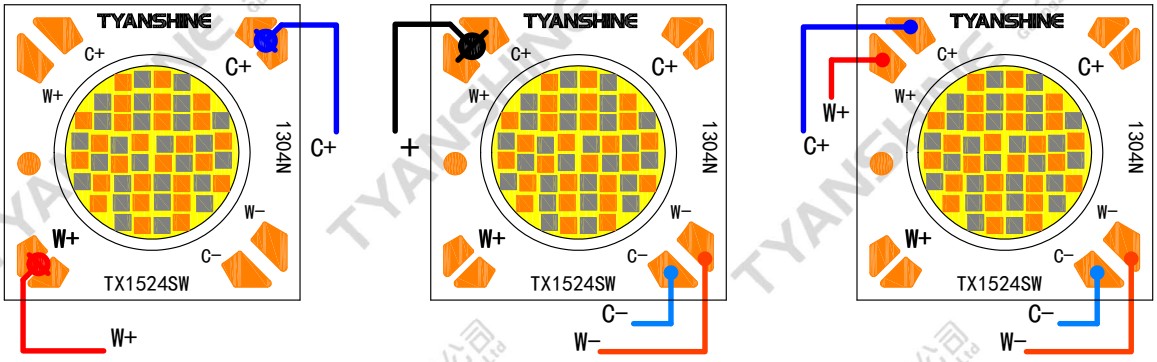
W：Warm White C:White

Notes:

1.All dimensions are in millimeters .

2.Tolerances unless otherwise mentioned are ±0.25mm .

Connections:



Code Formats:

TX-1524SW11F13-08H903050

TX	—	15	24	SW	11	F	13	—	08	H90	3050
TYANSHINE	—	series	Watt type	performance	LES	chip code	die count in series	—	BOM	Ra	CCT

Absolute Maximum Ratings

Parameter	Symbol		Ratings	Unit
Forward Current	IF		700	mA
Reverse Voltage	V_R		Not designed for reverse operation	V
Power Dissipation	P_D	W	27	W
		C	27	
		W+C	27	
Junction Temperature	Tj	W	150	℃
		C	150	
Case Temperature (C)	Tc		85	℃
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	T_{stg}		-30~+80	℃
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 (Tc=25°C)

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	φ_v	If=500A	W	1150	1390	1500	lm
			C	1300	1580	1700	
Forward Voltage	V_f		W	35	37	39	V
			C	35	37	39	
Correlated Colour Temperature	CCT		W	2920	3020	3150	K
			C	4800	5000	5250	
Viewing Angle at 50％IV	$2\theta_{1/2}$		W	—	115	—	Deg
			C	—	115	—	
Reverse Current	I_R	—	—	—	—	—	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=500A	—	—	1.45	—	K/W
Color Rendering Index	Ra		W	90	—	—	—
			C	90	—	—	

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.

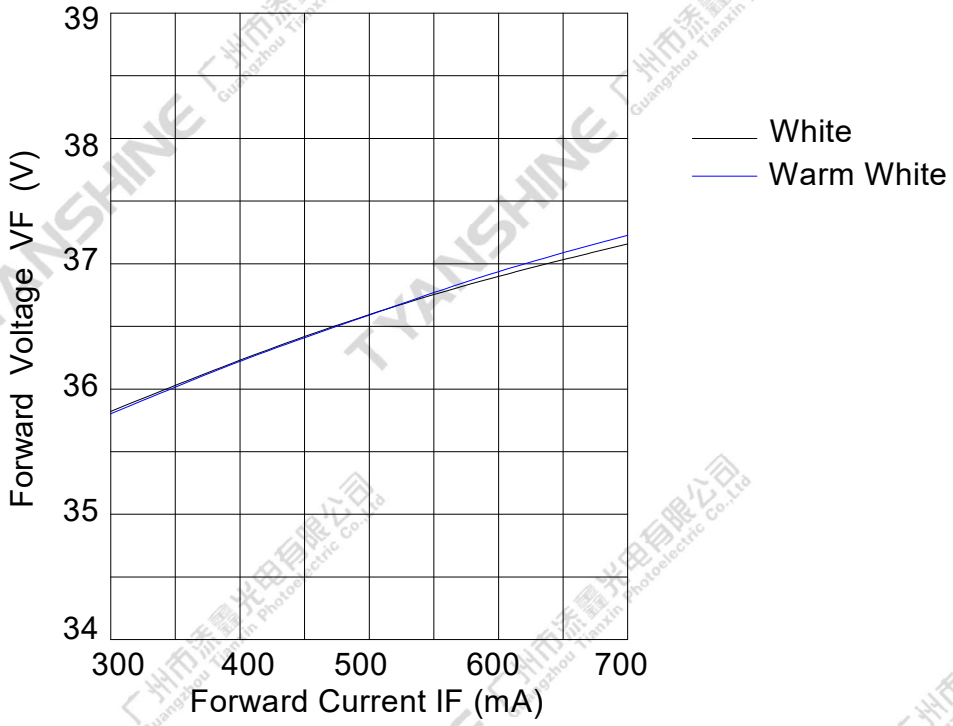
3.Luminous flux measurement tolerance:±15%.

4.Forward voltage measurement tolerance:±3%.

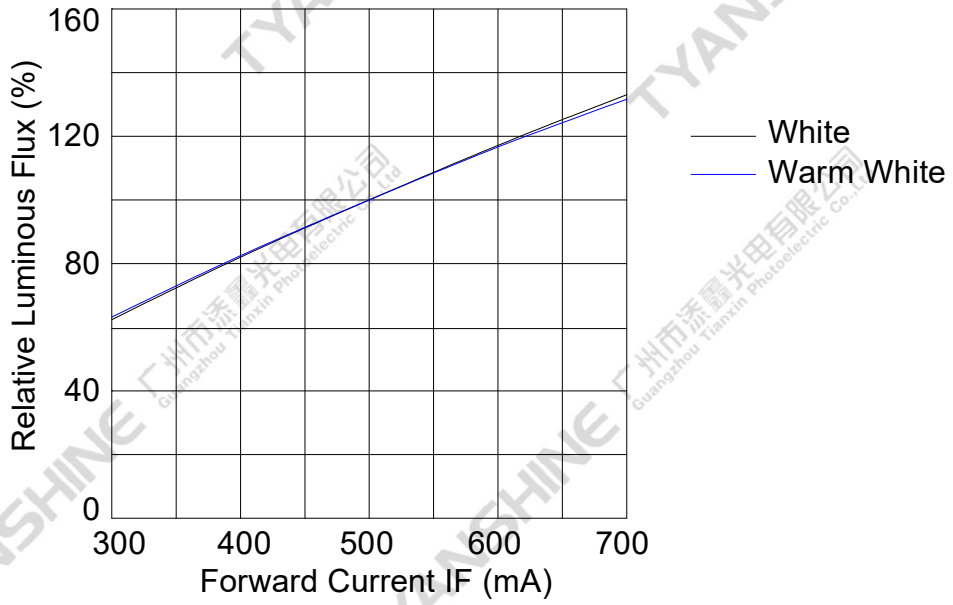
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

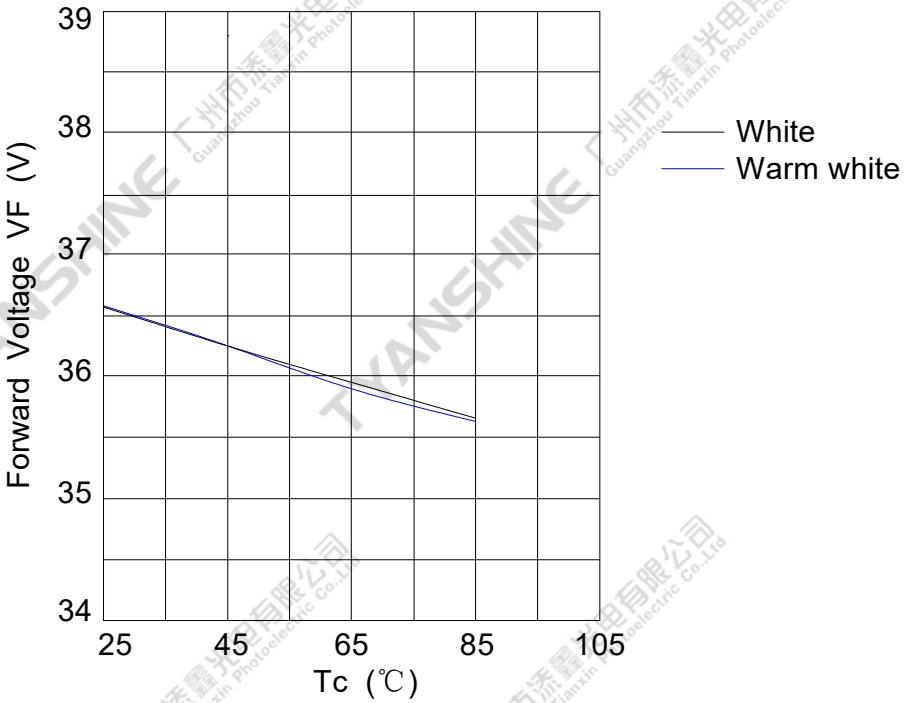
Forward Current VS. Relative Forward Voltage



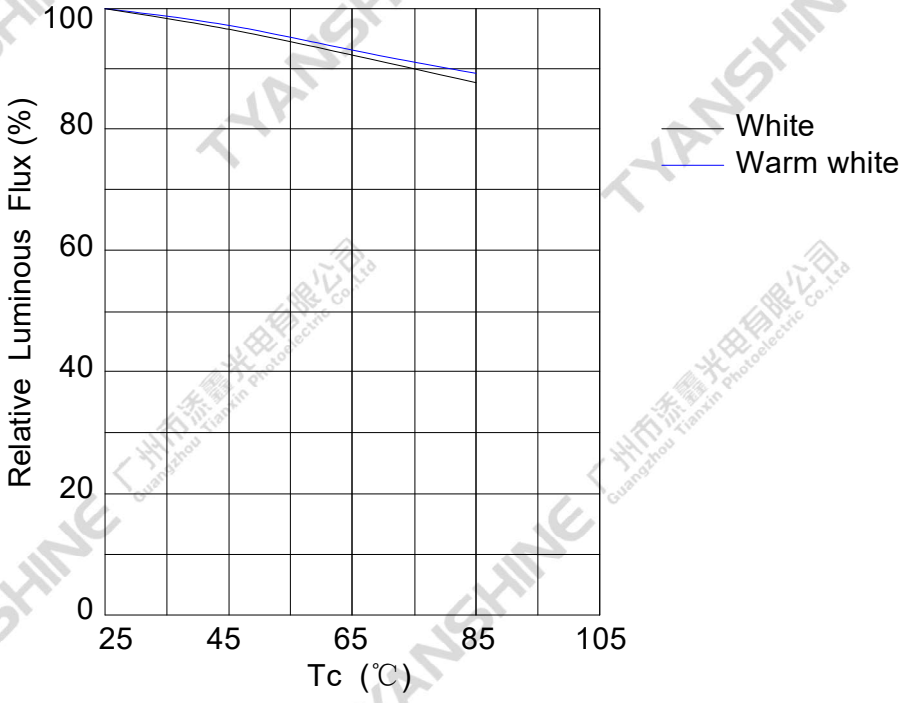
Forward Current VS. Relative Luminous Flux

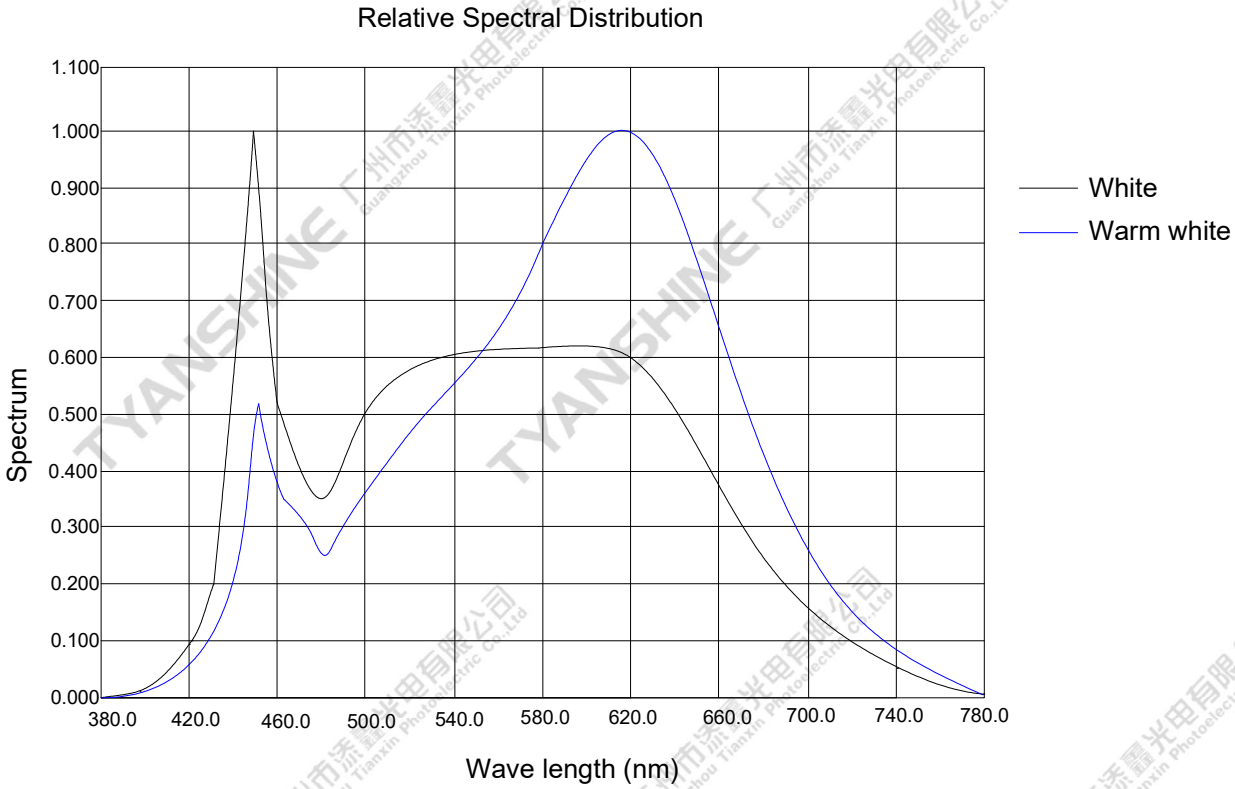


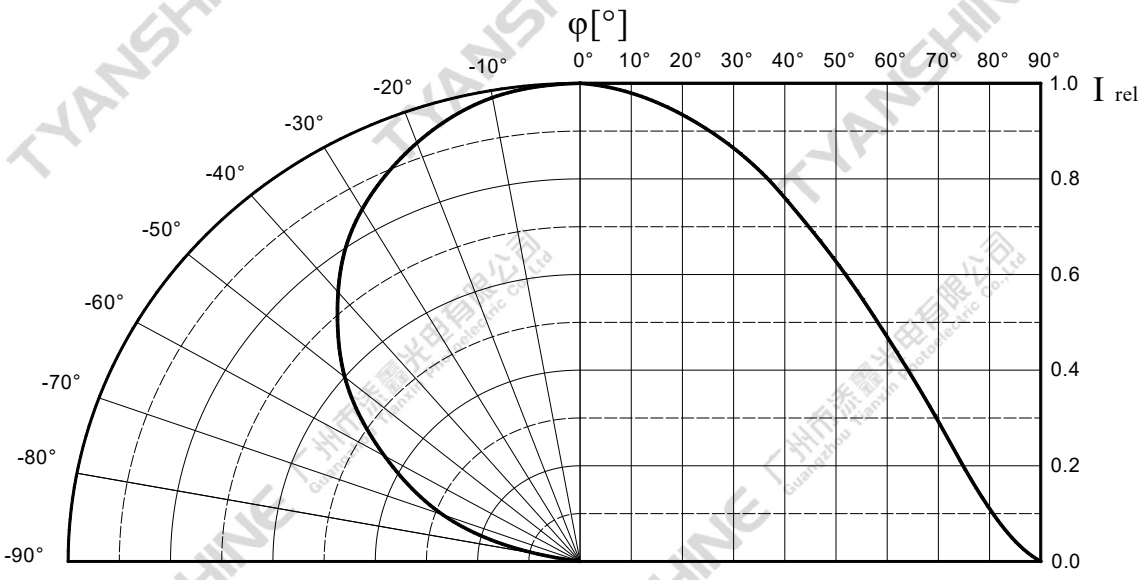
Temperature VS. Forward Voltage (IF=500mA)



Temperature VS. Relative Luminous Flux (IF=500mA)



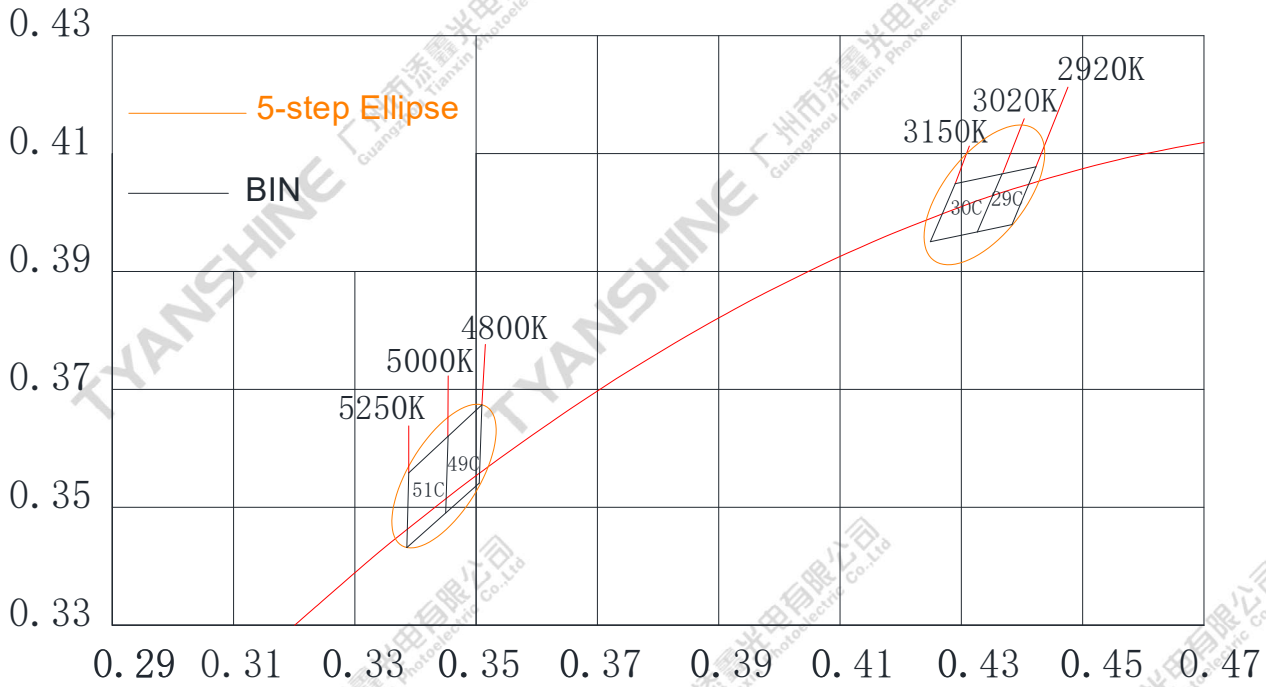




Notes:

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°.

Chromaticity Coordinates (Condition：IF=500mA，Tc=25℃)



5-step Ellipse					
CCT	Center Point		Major Axis	Minor Axis	Rotation Angle (°)
	x	y	a	b	
3000K	0.4338	0.403	0.0139	0.0068	53.2
5000K	0.3447	0.3553	0.0137	0.0059	59.6

White light Color coordinate filing (IF=350mA，Tc=25℃ 原始色坐标)

Region	CCT Range		X1	Y1	X2	Y2	X3	Y3	X4	Y4
	Min	Max								
29C	2920K	3020K	0.4423	0.4077	0.4383	0.3979	0.4367	0.4065	0.4326	0.3967
30C	3020K	3150K	0.4367	0.4065	0.4326	0.3967	0.4248	0.3950	0.4289	0.4049
49C	4800K	5000K	0.3509	0.3659	0.3505	0.3550	0.3453	0.3606	0.3450	0.3498
51C	5000K	5250K	0.3453	0.3606	0.3450	0.3498	0.3386	0.3438	0.3388	0.3544

Notes:

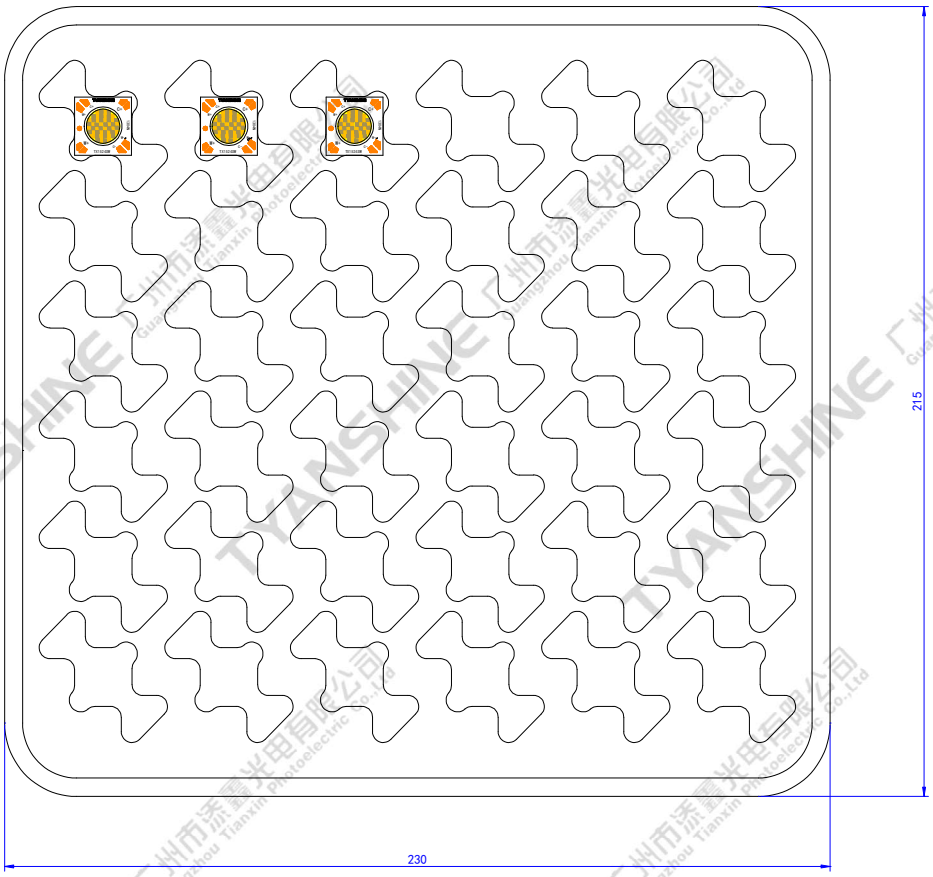
1.chromaticity (x, y) measurements tolerance:±0.003.

Reliability Test

Test Item	Test Condition
Continuous Operation Test	IF=500mA Ta=25℃ ×1000hrs
Low Temperature Storage Test	-30℃ × 1000 hours
High Temperature Storage Test	100 ℃ × 1000 hours
Moisture-proof Test	85 ℃, 85 %RH for 500 hours
Thermal Shock Test	-40 ℃ × 15 minutes – 125 ℃ × 15 minutes, 100 cycle

Dimensions For Cannulation And Packaging

Quantity: 36PCS



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.