GoldiLED
LED JUST RIGHT

1850SW14A-2757V36-02H80

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under 1.4 A.

◆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

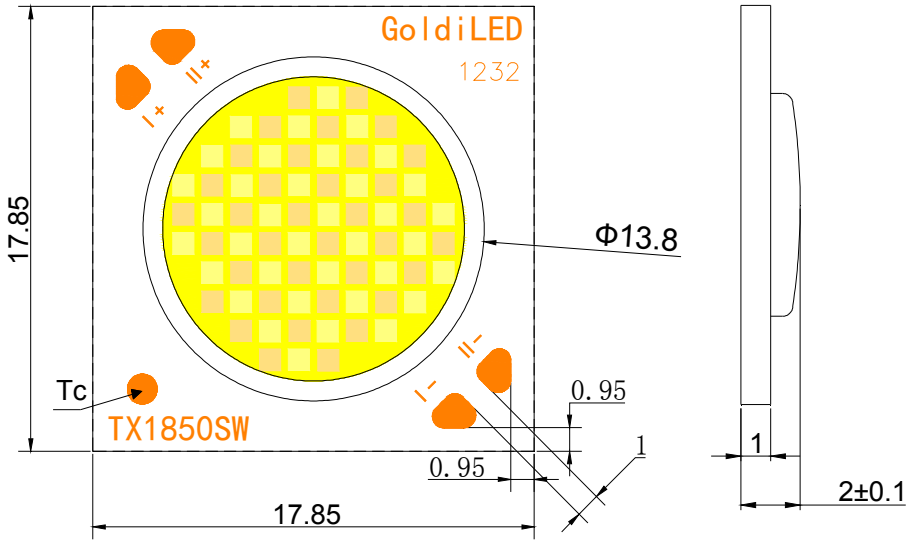
◆Warm white

Applications:

◆Commercial lighting

◆General Lighting

Package Dimensions:



Ⅰ: Warm white ; Ⅱ: White

Notes:

1.All dimensions are in millimeters .

2.Tolerances unless otherwise mentioned are ±0.25mm .

Code Formats:

1850SW14A-2757V36-02H80

18	50	SW	14	A	—	2757	V36	—	02	H80
series	watt typ	performance	LES	texture	—	CCT	VOLTs	—	BOM	Ra

Absolute Maximum Ratings

Parameter	Symbol		Ratings	Unit
Forward Current	IF		1.4	A
Reverse Voltage	V_R		Not designed for reverse operation	V
Power Dissipation	P_D	W	53	W
		S	53	
Junction Temperature	Tj	W	135	℃
		S	135	
Case Temperature (C)	Tc		105	℃
Electrostatic Discharge Threshold (ESD)	ESD		2000	V
Storage Temperature	T_{stg}		-30~+100	℃
Operation Temperature	T_{opr}		-30~+100	

Notes:

1.Specifications are subject to change without notice.

2.Under the stipulated Characteristics parameters above, the life span of the LED is more than 50,000hours.

3.The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.

4.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 (Tc=25°C)

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	φ_v	If=1.4A	S	—	3900	—	lm
			W	—	5000	—	
Forward Voltage	V_f		S	34	36	38	V
			W	34	36	38	
Correlated Colour Temperature	CCT		S	—	2700	—	K
			W	—	5700	—	
Viewing Angle at 50％IV	$2\theta_{1/2}$		S	—	115	—	Deg
			W	—	115	—	
Reverse Current	I_R	—	—	—	—	—	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	If=1.4A	S	—	0.75	—	K/W
			W	—	0.75	—	
Temperature Coefficient of Voltage	V△F/T		S	—	-12.3	—	mV/℃
			W	—	-12.1	—	
Color Rendering Index	Ra		S	80	—	—	—
			W	80	—	—	

Notes:

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

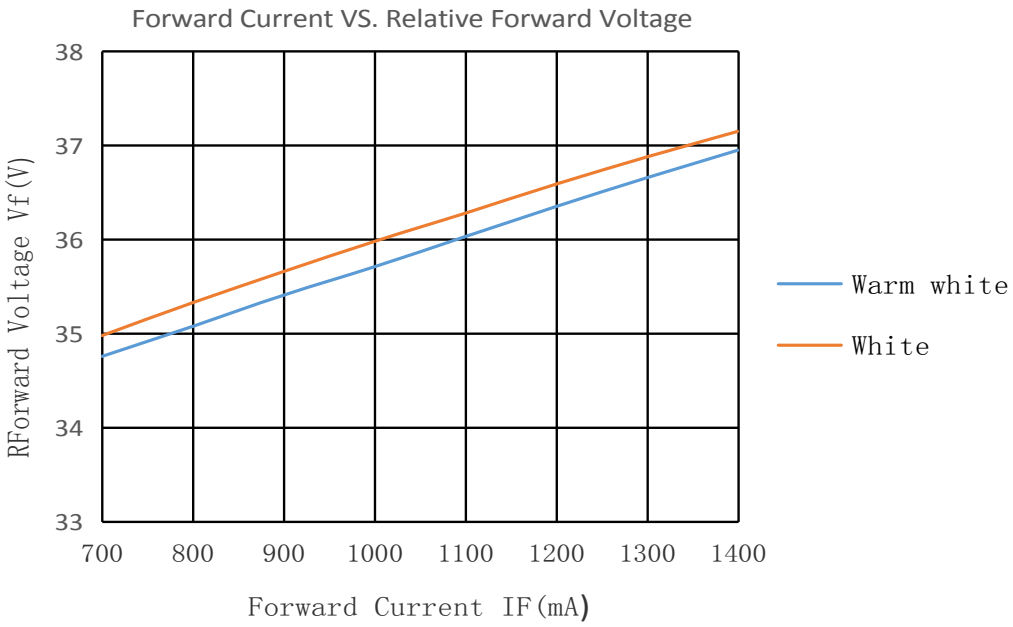
2.$\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

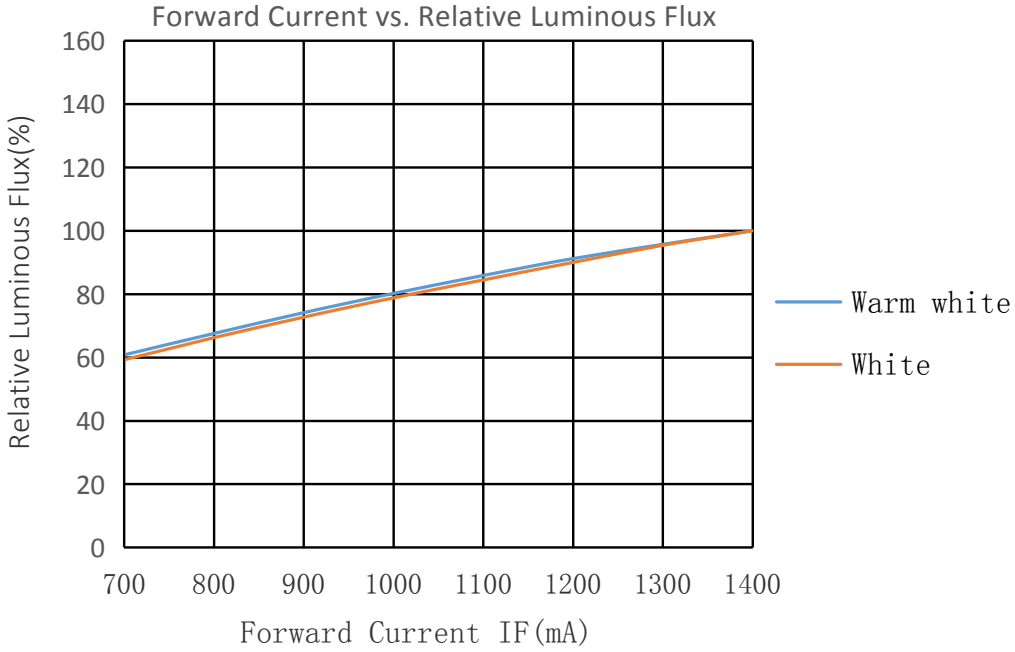
3.Luminous flux measurement tolerance:±15%.

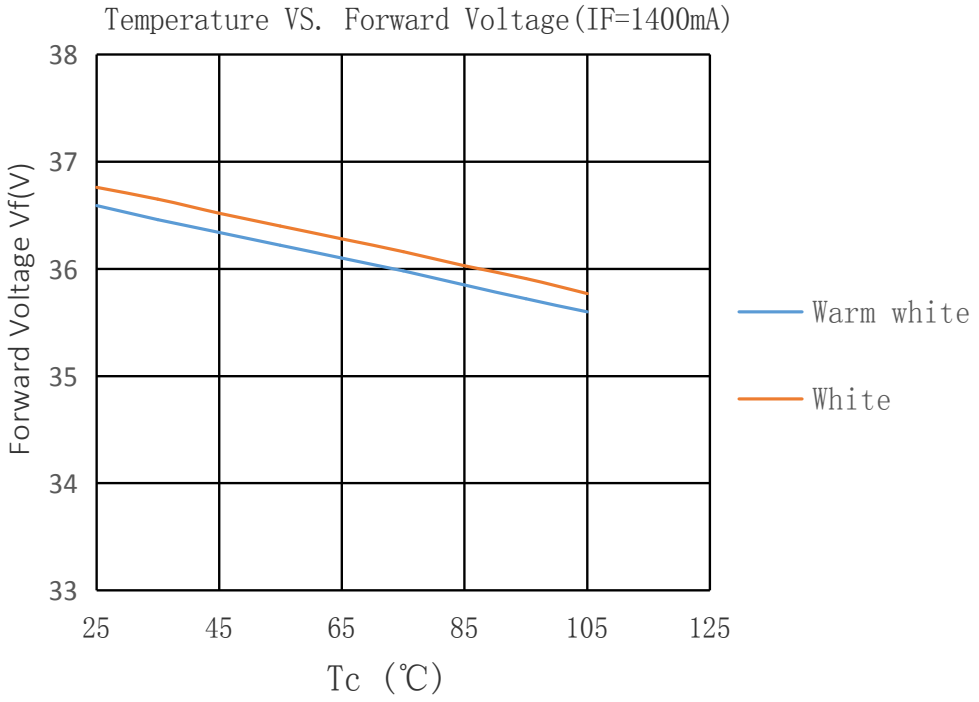
4.Forward voltage measurement tolerance:±0.15V.

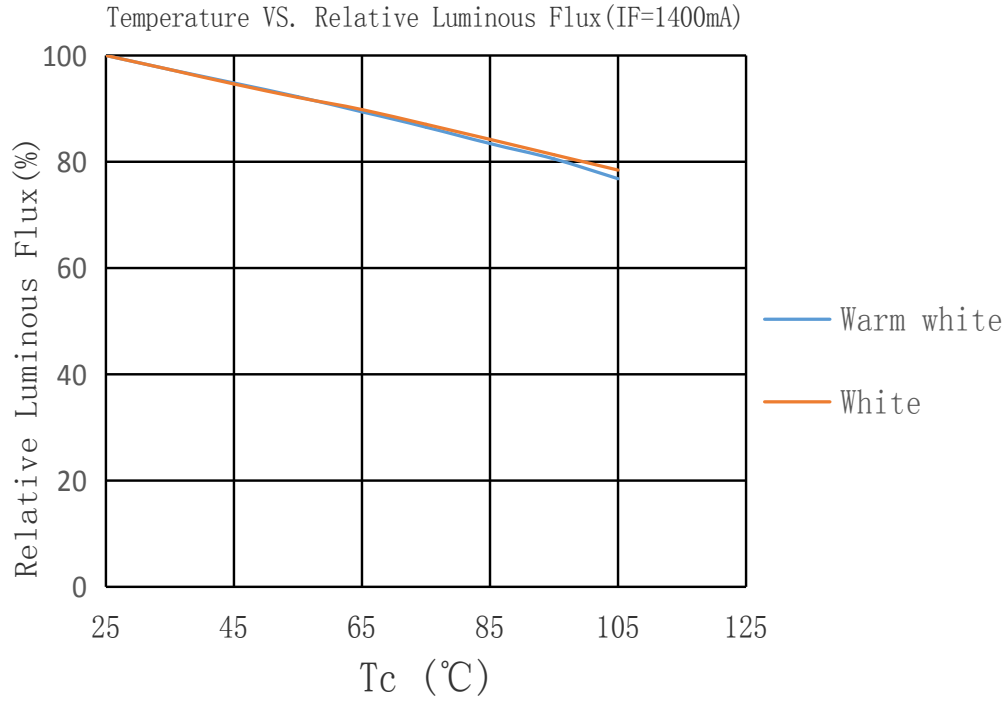
Typical Electrical/Optical Characteristics Curves

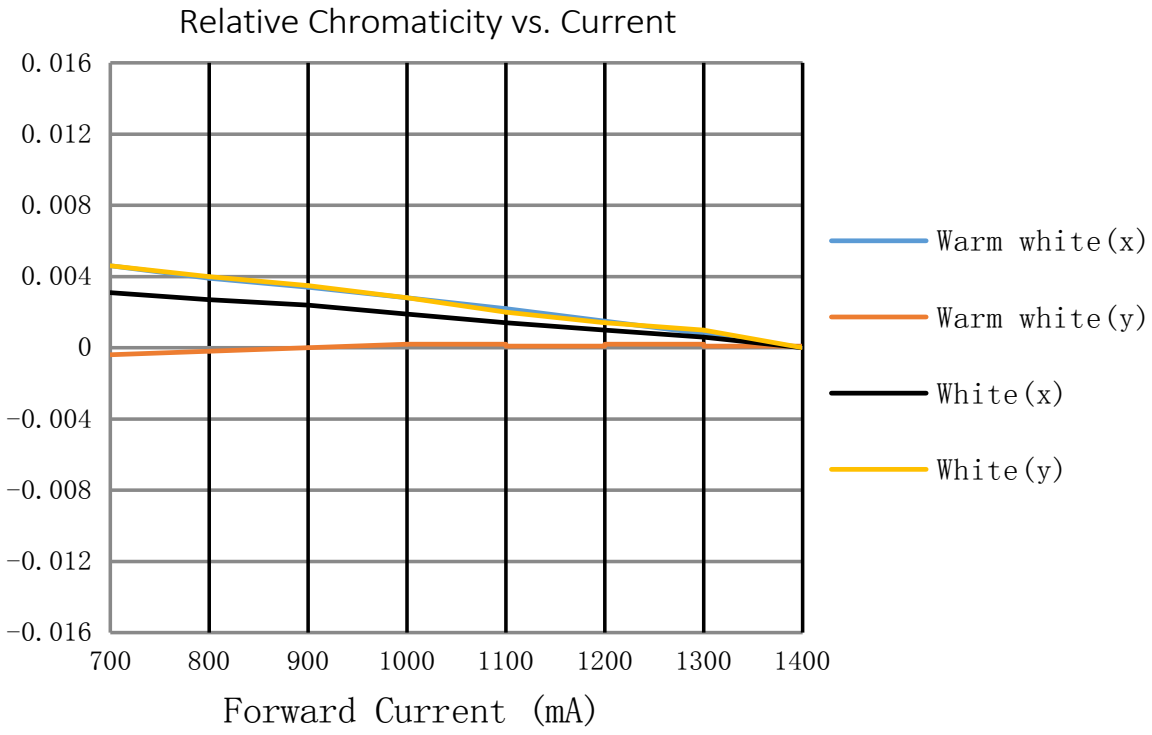
(25℃ Ambient Temperature Unless Otherwise Noted)

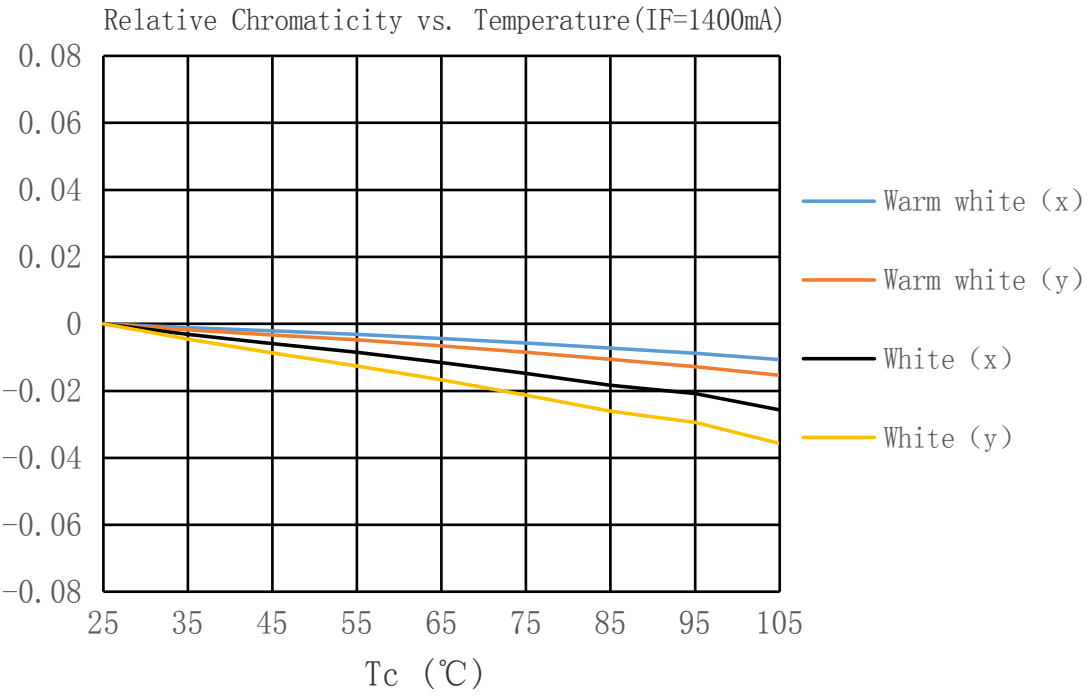


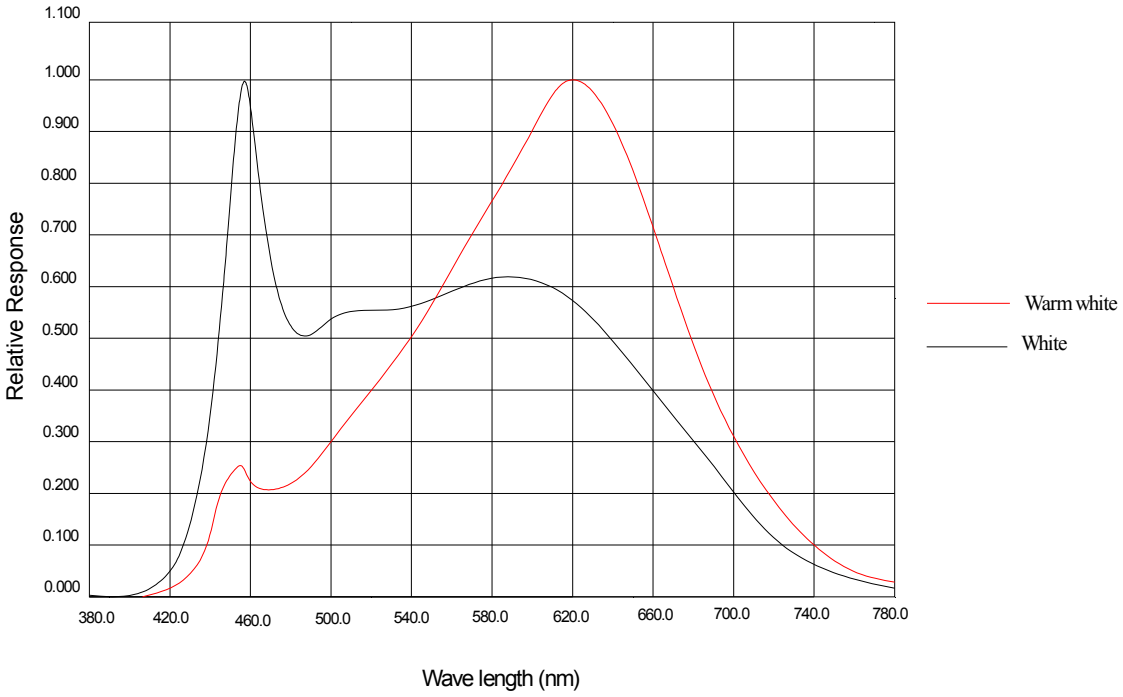


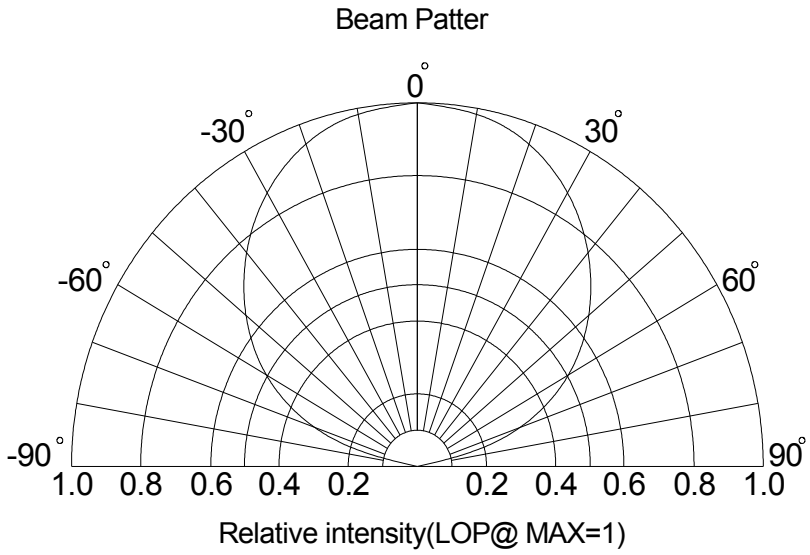

Temperature VS. Forward Voltage(IF=1400mA)
Forward Voltage Vf(V)
38
37
36
35
34
33
25
45
65
85
105
125
Tc (℃)
Warm white
White


Temperature VS. Relative Luminous Flux(IF=1400mA)
Relative Luminous Flux(%)
100
80
60
40
20
0
25
45
65
85
105
125
Tc (℃)
Warm white
White


Relative Chromaticity vs. Current
0.016
0.012
0.008
0.004
0
-0.004
-0.008
-0.012
-0.016
700
800
900
1000
1100
1200
1300
1400
Forward Current (mA)
Warm white(x)
Warm white(y)
White(x)
White(y)


Relative Chromaticity vs. Temperature(IF=1400mA)
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
-0.08
25
35
45
55
65
75
85
95
105
Tc (℃)
Warm white (x)
Warm white (y)
White (x)
White (y)

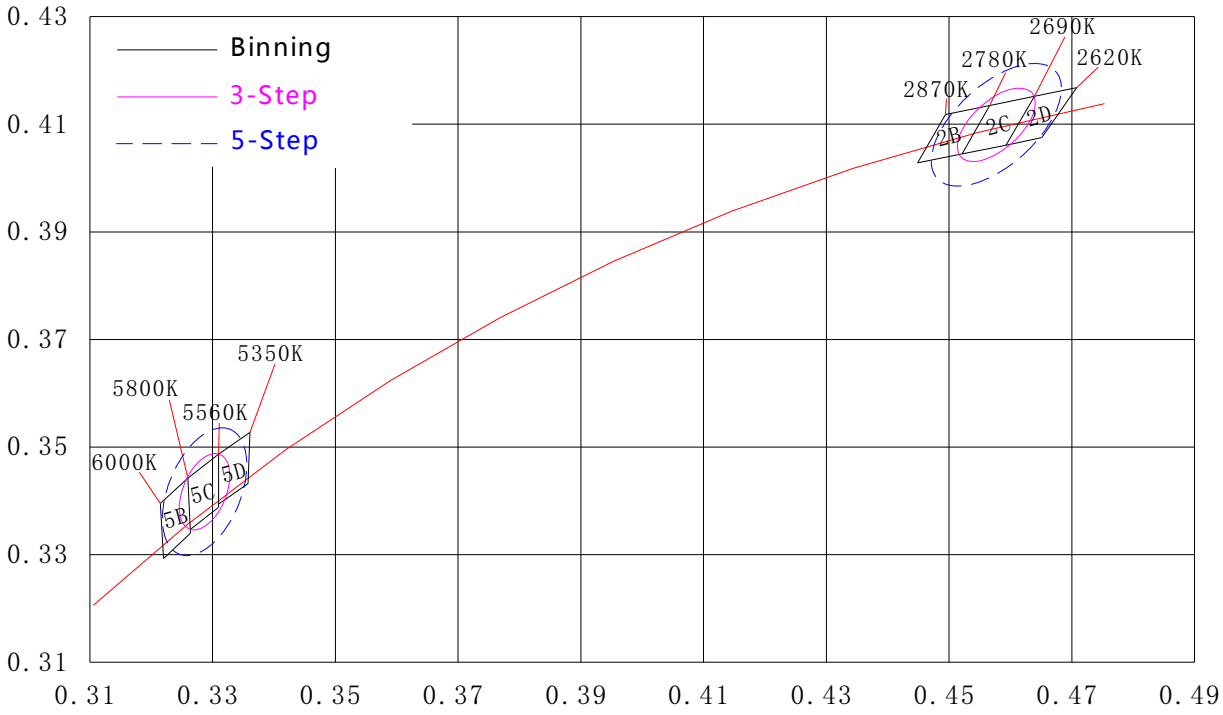




Notes:

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=1400mA，Tc=25℃）

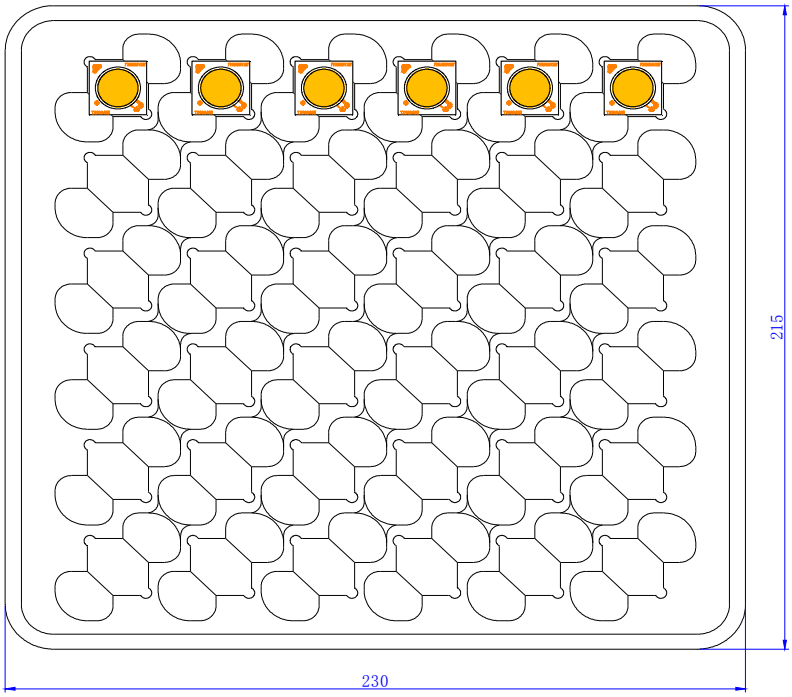


Reliability Test

Test Item	Test Condition
Continuous Operation Test	IF=1400mA 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	-30 ℃ × 30 minutes – 100 ℃ × 30 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.