

# TX-6060SW450C40F17-10H952770

## PRODUCT SPECIFICATION (R&D version)

### Features:

- ◆ Excellent transiting heat from LED chip operating under 8.8A.
- ◆ 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:

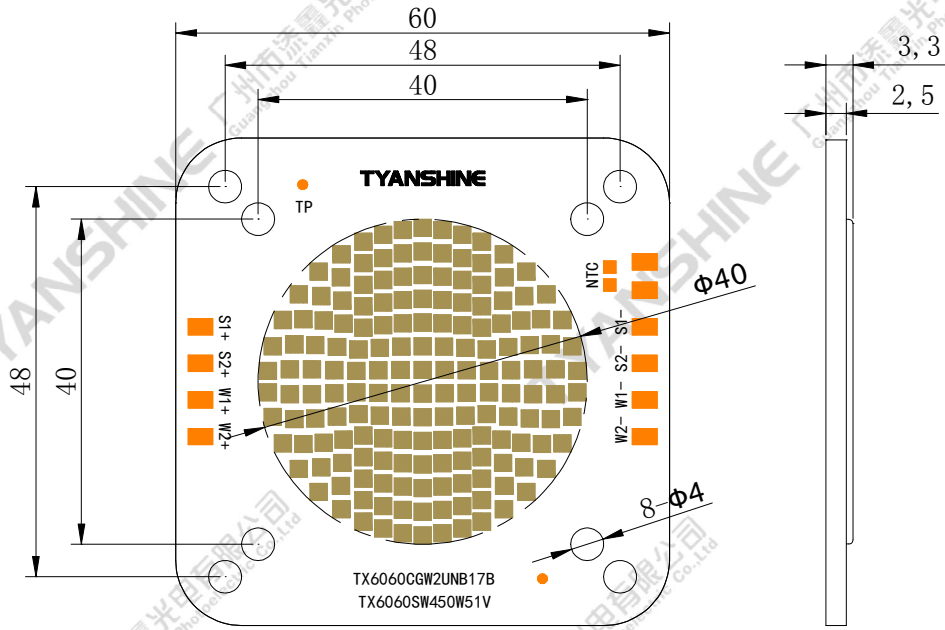
- ◆ White
- ◆ Warm white

### Applications:

- ◆ Commercial lighting
- ◆ General Lighting

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**Package Dimensions:**



S1/S2: Warm White(S) W1/W2: White(W)

**Notes:**

- 1. All dimensions are in millimeters .
- 2. Tolerances unless otherwise mentioned are  $\pm 0.25\text{mm}$  .

**Code Formats:**

TX-6060SW450C40F17-10H952770

TX	—	6060	SW	450	C	40	F	17	—	10	H95	2770
TYANSHINE	—	series	performance	watt typ	texture	LES	chip code	die count in series	—	BOM	Ra	CCT

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**Absolute Maximum Ratings**

Parameter	Symbol	Ratings	Unit
Forward Current	IF	9.5	A
	IF(S+W)	6.9A*2	A
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	S	500
		W	500
		S+W	700
Junction Temperature	Tj	S	135
		W	135
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Case Temperature (C)	Tc	105	°C
Storage Temperature	Tstg	-40~+100	°C
Operation Temperature	Topr	-40~+105	

**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 (Tc=25°C)**

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	$\phi_v$	If=3A	S	12000	14000	—	lm
			W	16500	18500	—	
Forward Voltage	$V_f$		S	45	48	51	V
			W	45	48	51	
Correlated Colour Temperature	CCT		S	2500	—	2700	K
			W	6000	—	7000	
Luminous Flux	$\phi_v$		S	30000	34000	—	lm
			W	43000	48000	—	
Forward Voltage	$V_f$		S	48	51	54	V
			W	48	51	54	
Correlated Colour Temperature	CCT	S	2550	—	2750	K	
		W	6500	—	7500		
Viewing Angle at 50 % IV	$2\theta_{1/2}$	If=8.8A	S	—	115	—	Deg
			W	—	115	—	
Thermal Resistance Junction to Case	$R\theta_{J-C}$		S	—	0.09	—	K/W
			W	—	0.09	—	
Color Rendering Index	Ra		S/W	95	—	—	—
TLCI	—		S/W	95	—	—	—
TM-30	RF		S/W	90	—	—	—
	RG		S/W	98	—	103	—

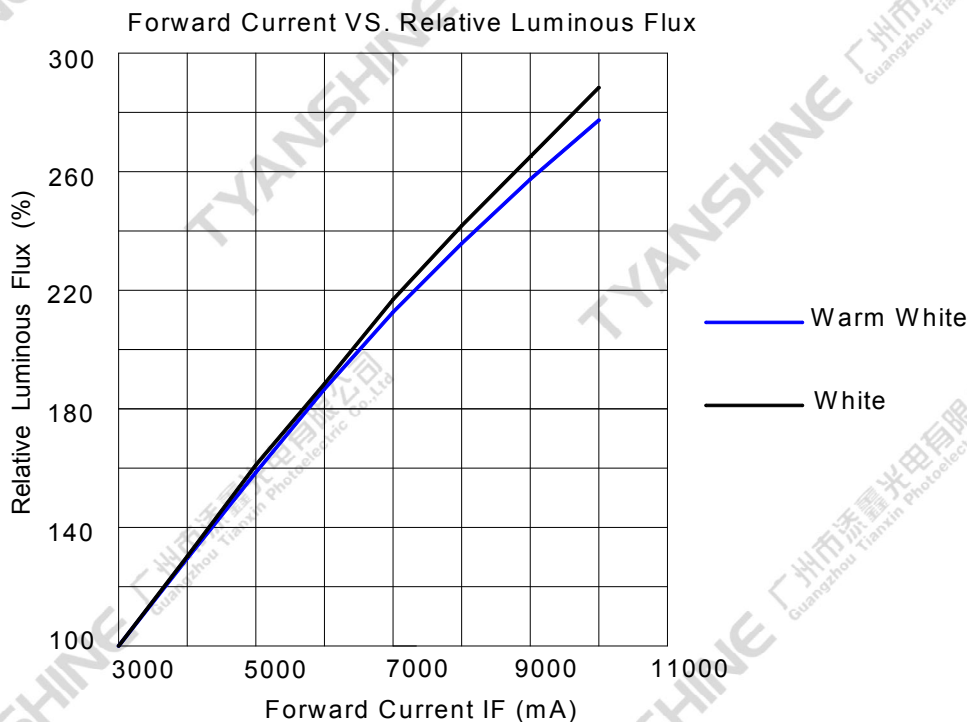
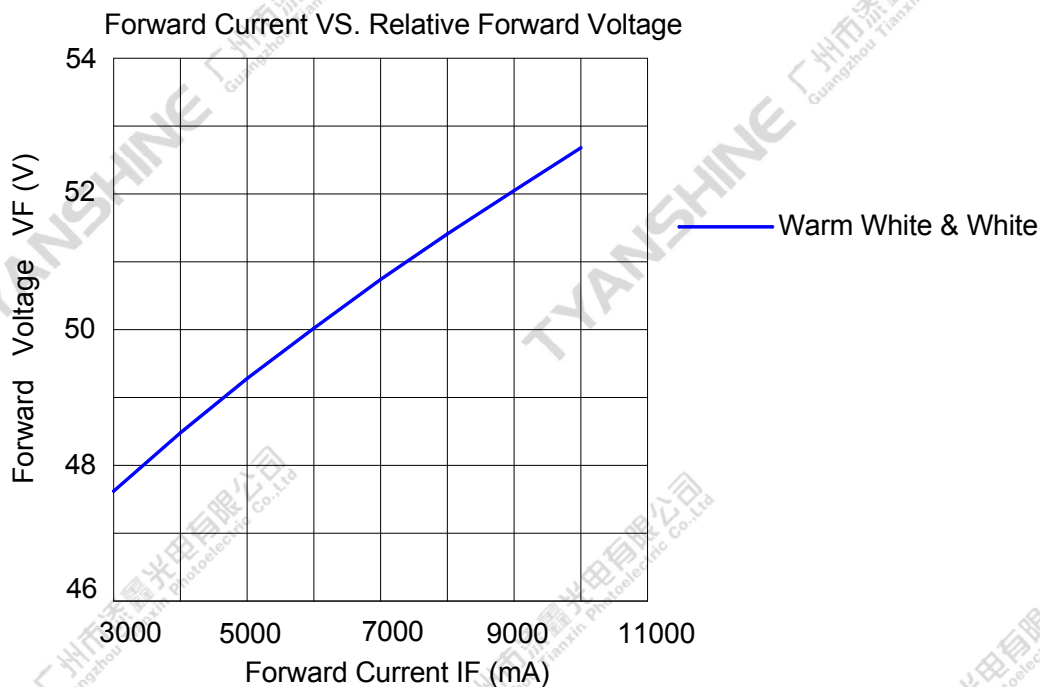
**Notes:**

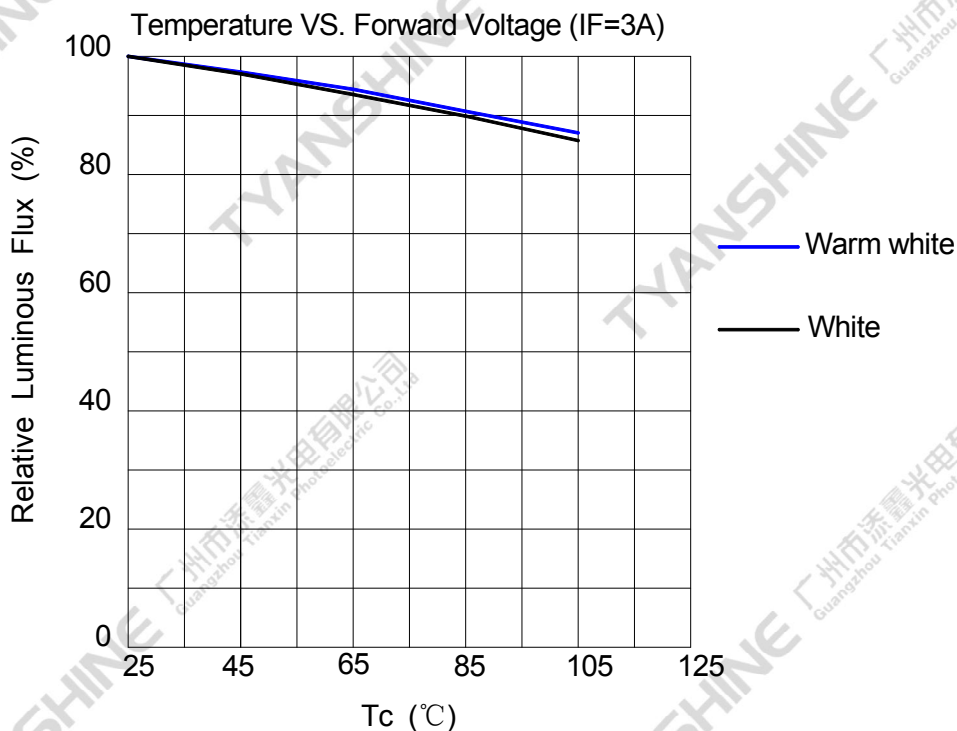
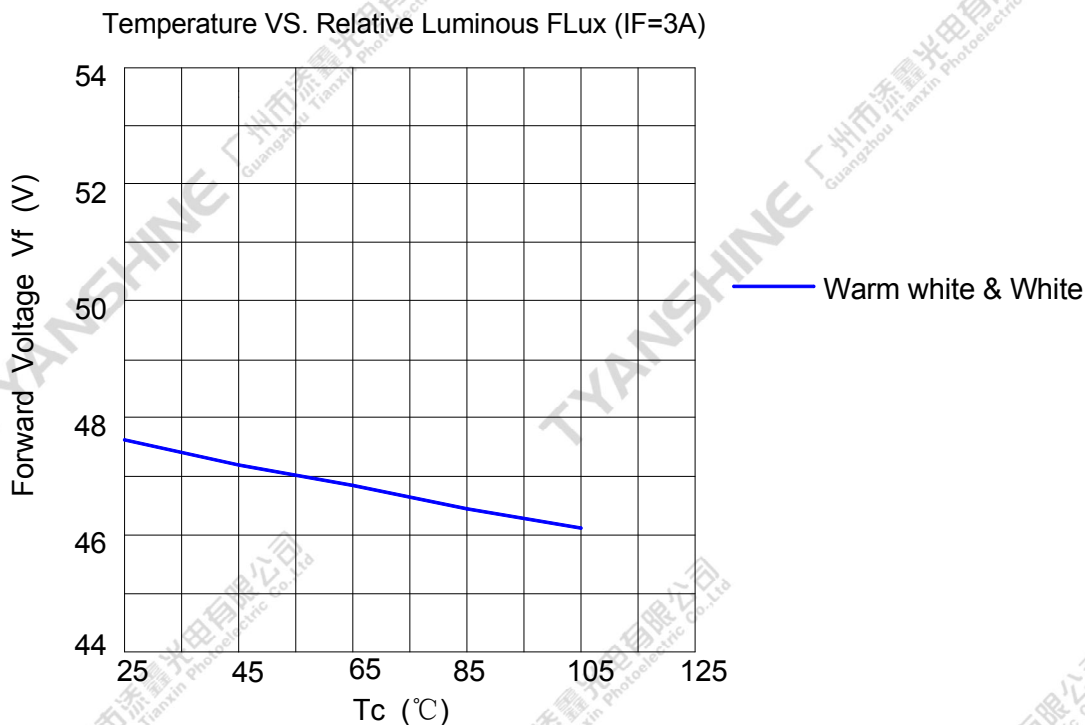
- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- Luminous flux measurement tolerance:  $\pm 15\%$ .
- Forward voltage measurement tolerance:  $\pm 3\%$ .
- Ra measurement tolerance:  $\pm 2$ .
- chromaticity (x, y) measurements tolerance:  $\pm 0.005$ .

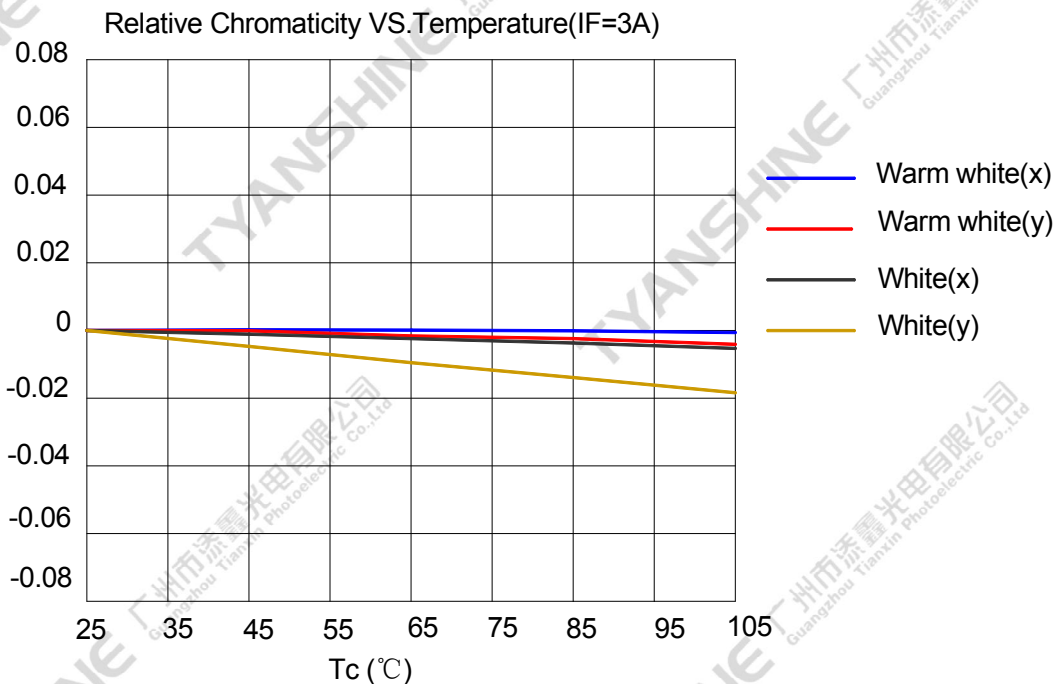
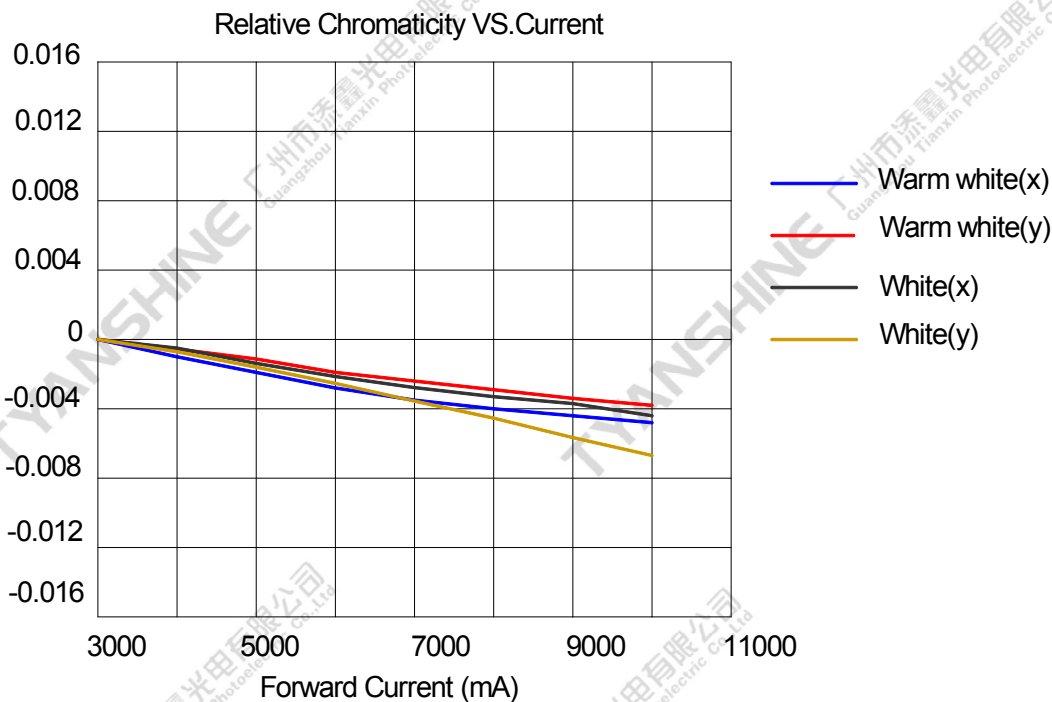
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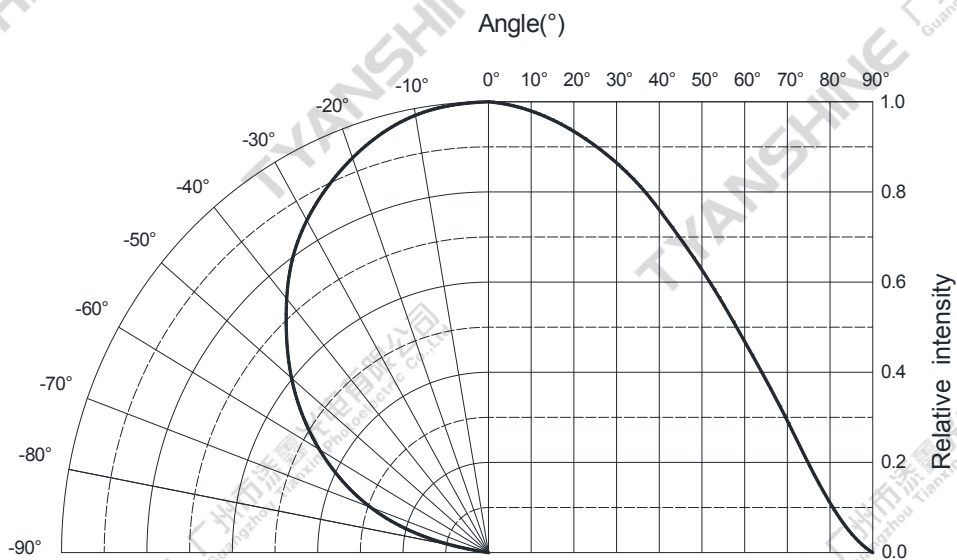
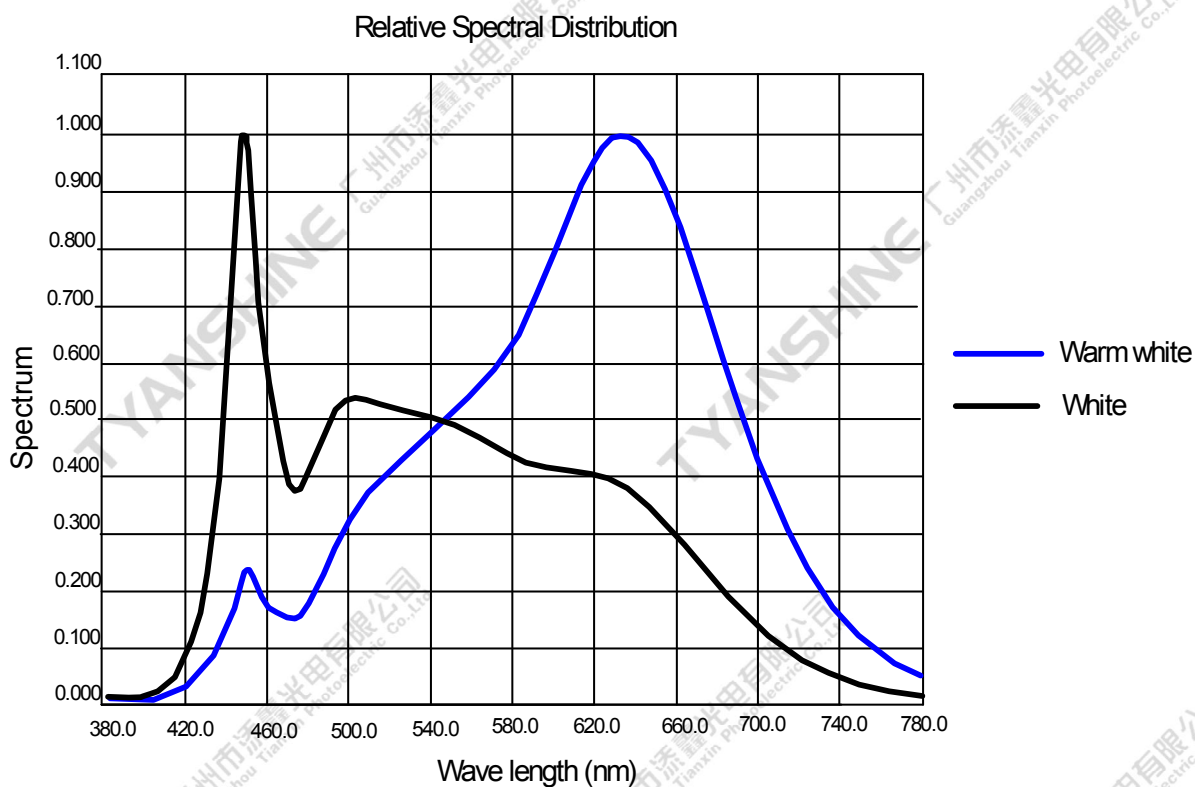
# Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)









**Notes:**

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

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