

TX-3838SW280C30F17-10H952770

PRODUCT SPECIFICATION (R&D version)

Features:

- ◆Excellent transiting heat from LED chip operating under 5.5A.
- ◆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:

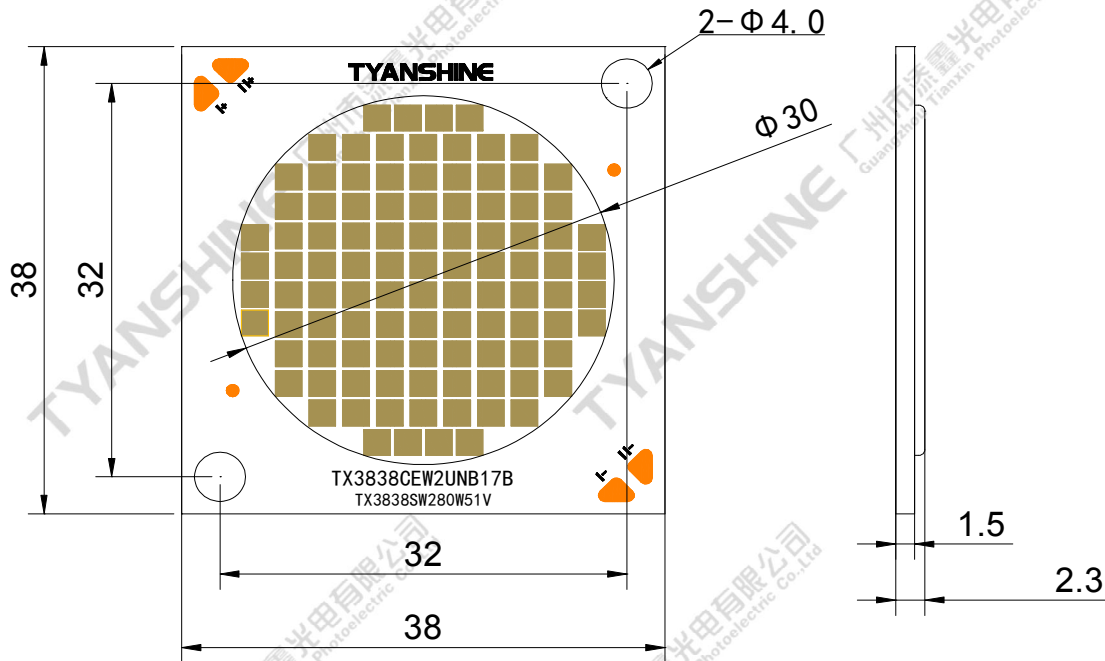
- ◆White
- ◆Warm white

Applications:

- ◆Commercial lighting
- ◆General Lighting

Part No.	TX-3838SW280C30F17-10H952770	Spec No.	WKF-DD0013	Page	1 of 8
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Package Dimensions:



I: Warm White (S) ; II: White (W)

Notes:

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

Code Formats:

TX-3838SW280C30F17-10H952770

TX	—	3838	SW	280	C	30	F	17	—	10	H95	2770
TYANSHINE	—	series	performance	watt typ	texture	LES	chip code	die count in series	—	BOM	Ra	CCT

Part No.	TX-3838SW280C30F17-10H952770	Spec No.	WKF-DD0013	Page	2 of 8
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Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Forward Current	IF	5.8	A
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	W	310
		S	310
		S+W	500
Junction Temperature	Tj	W	150
		S	150
Case Temperature (C)	Tc	105	°C
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
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.

Part No.	TX-3838SW280C30F17-10H952770	Spec No.	WKF-DD0013	Page	3 of 8
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Electrical Optical Characteristics (Tc=25°C)

Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	If=3A	S	11800	13200	—	lm
			W	16000	18000	—	
Forward Voltage	V_f		S	46	49	52	V
			W	46	49	52	
Correlated Colour Temperature	CCT		S	2500	—	2700	K
			W	6000	—	7000	
Luminous Flux	ϕ_v	If=5.5A	S	19500	22000	—	lm
			W	26000	29000	—	
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	$2\theta_{1/2}$		S	—	115	—	Deg
			W	—	115	—	
Thermal Resistance Junction to Case	$R\theta_{J-C}$		S	—	0.143	—	K/W
			W	—	0.143	—	
Color Rendering Index	Ra		S/W	95	—	—	—
TLCI	—		S/W	95	—	—	—
TM-30	RF		S/W	90	—	—	—
	RG		S/W	98	—	103	—

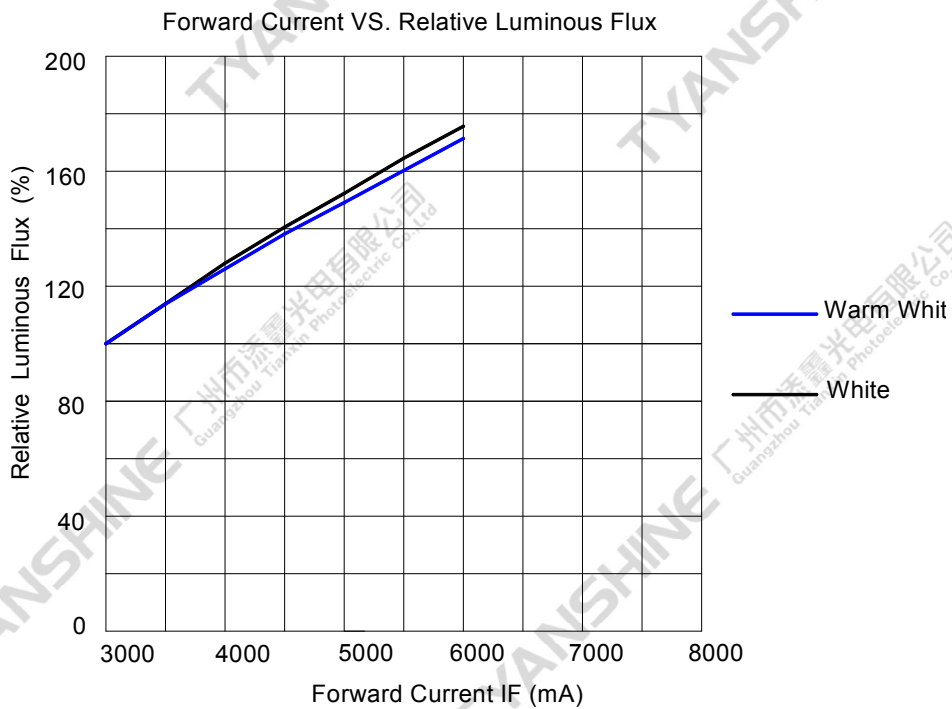
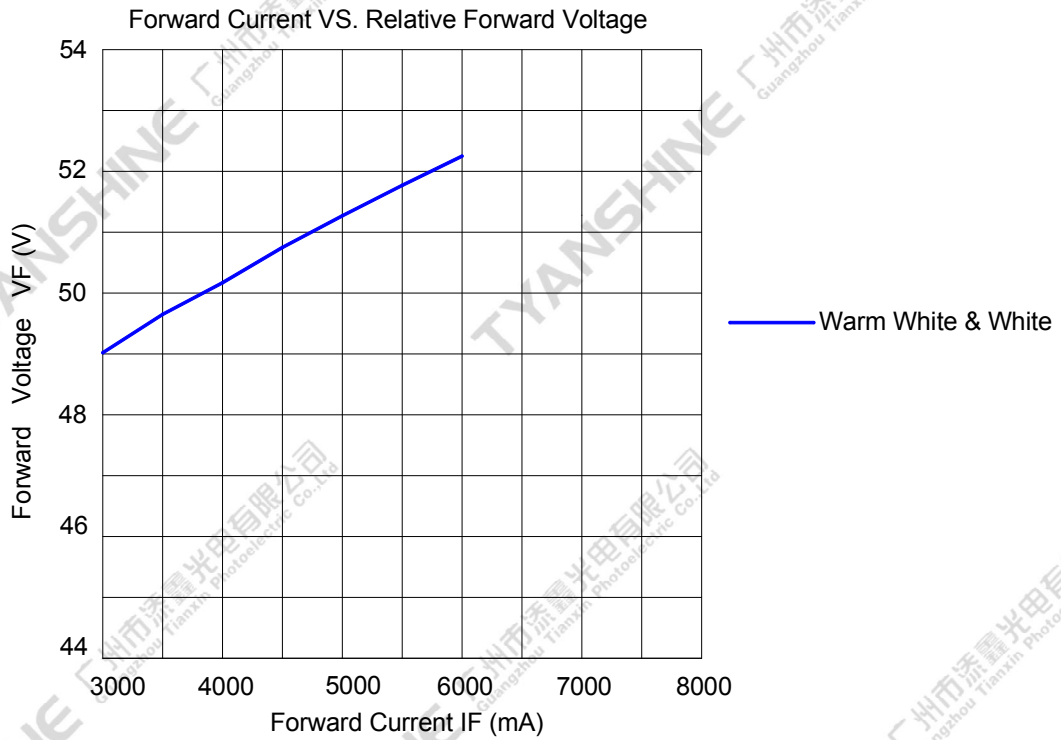
Notes:

- 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: ± 2 .
- chromaticity (x, y) measurements tolerance: ± 0.005 .

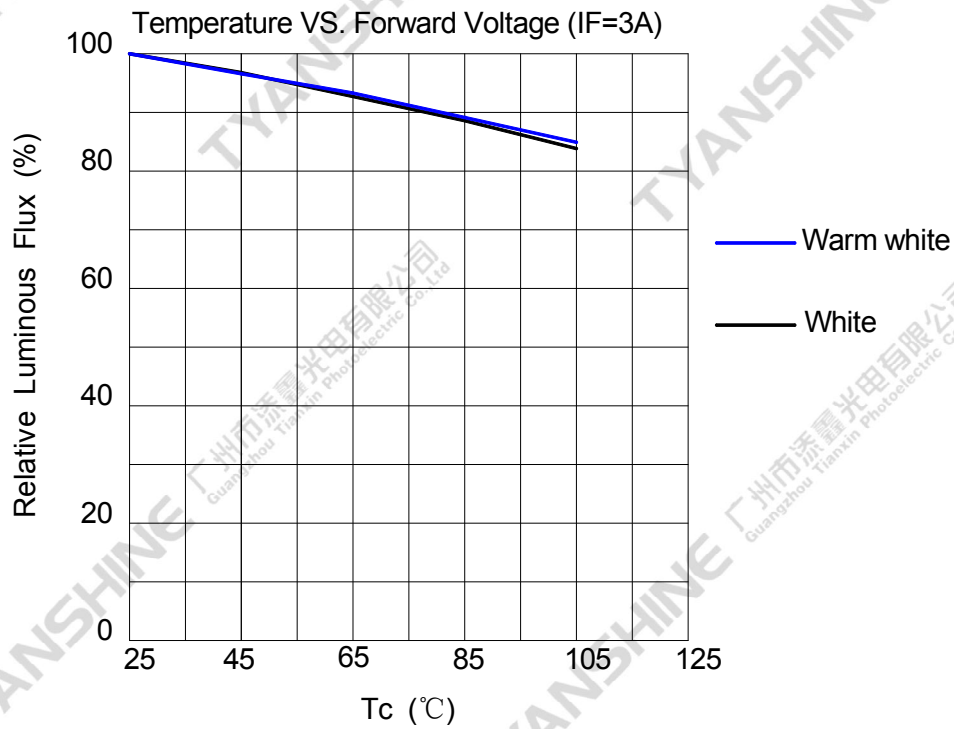
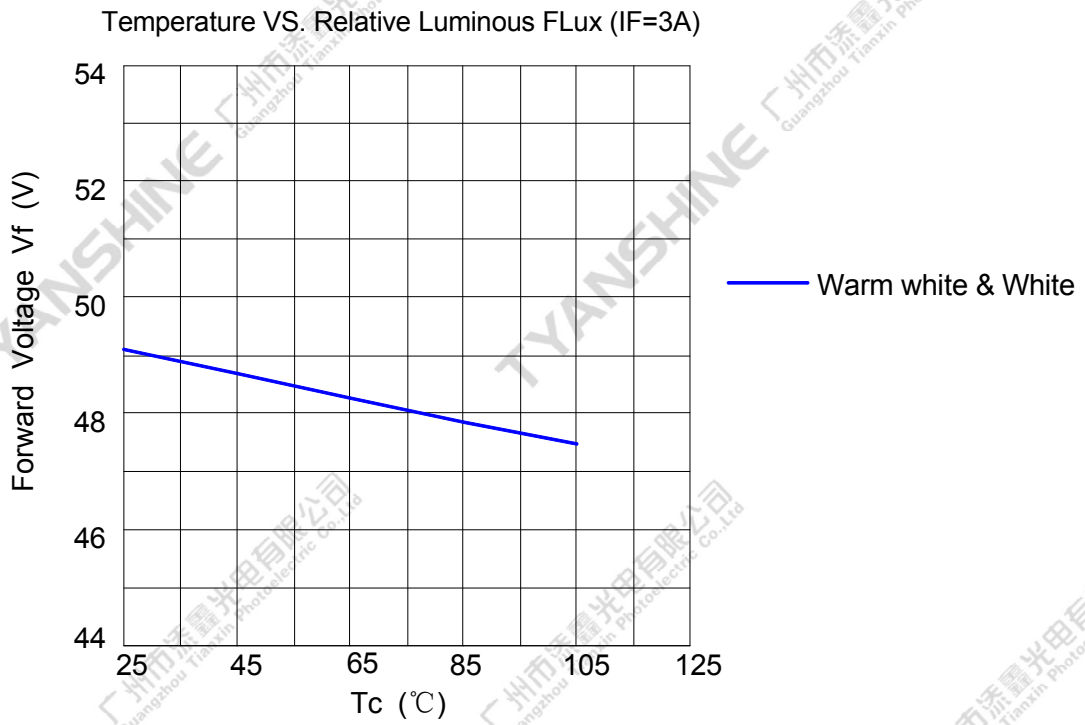
Part No.	TX-3838SW280C30F17-10H952770	Spec No.	WKF-DD0013	Page	4 of 8
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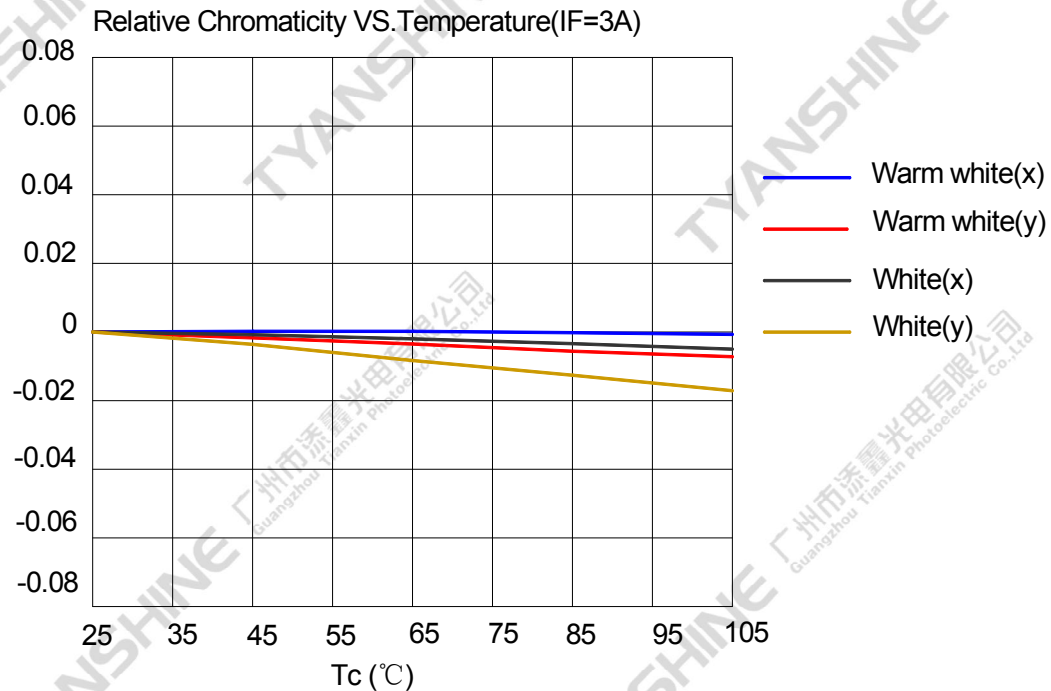
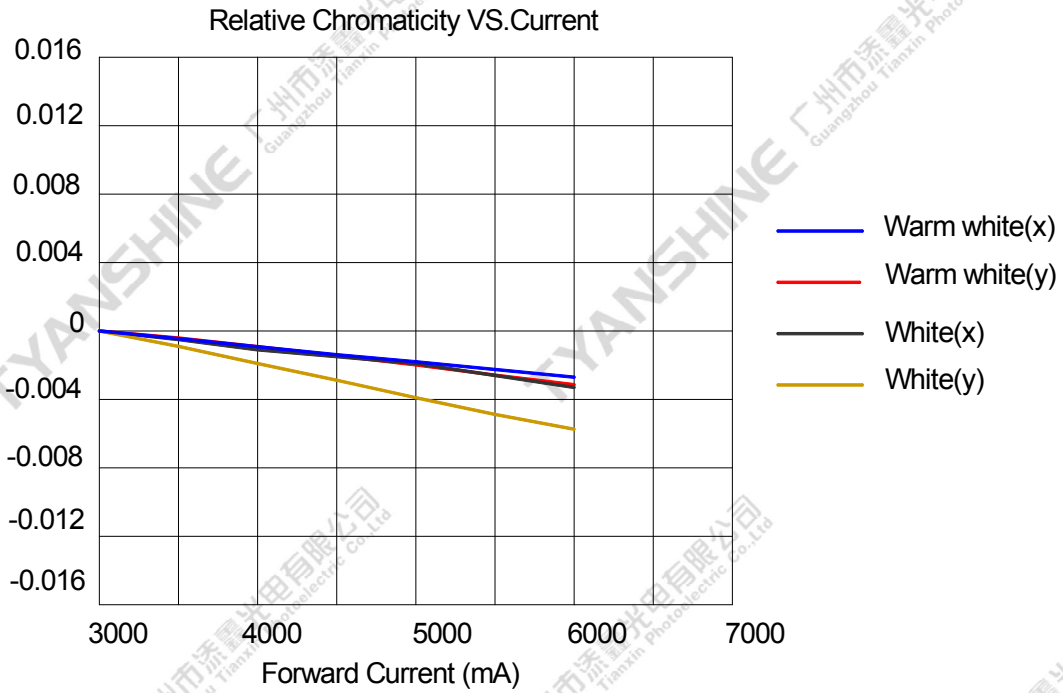
Typical Electrical/Optical Characteristics Curves

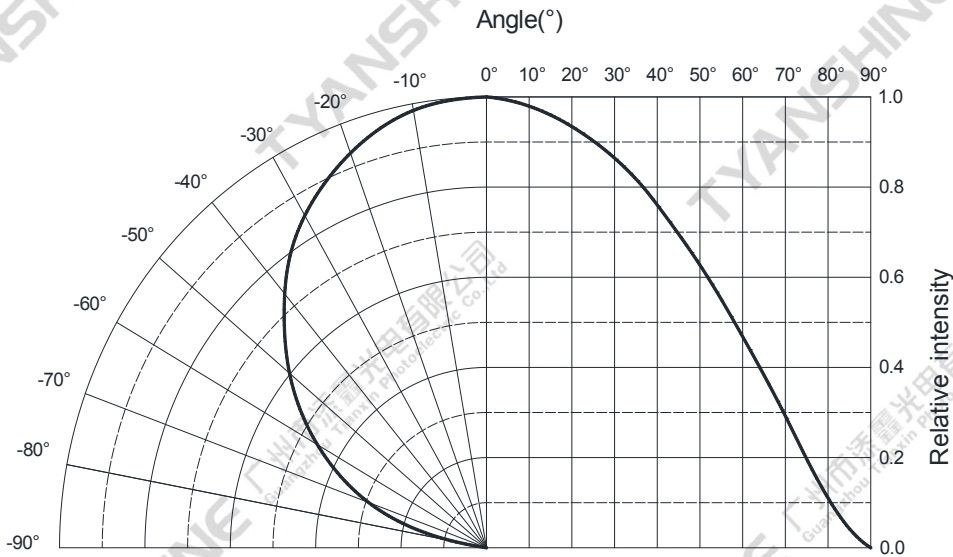
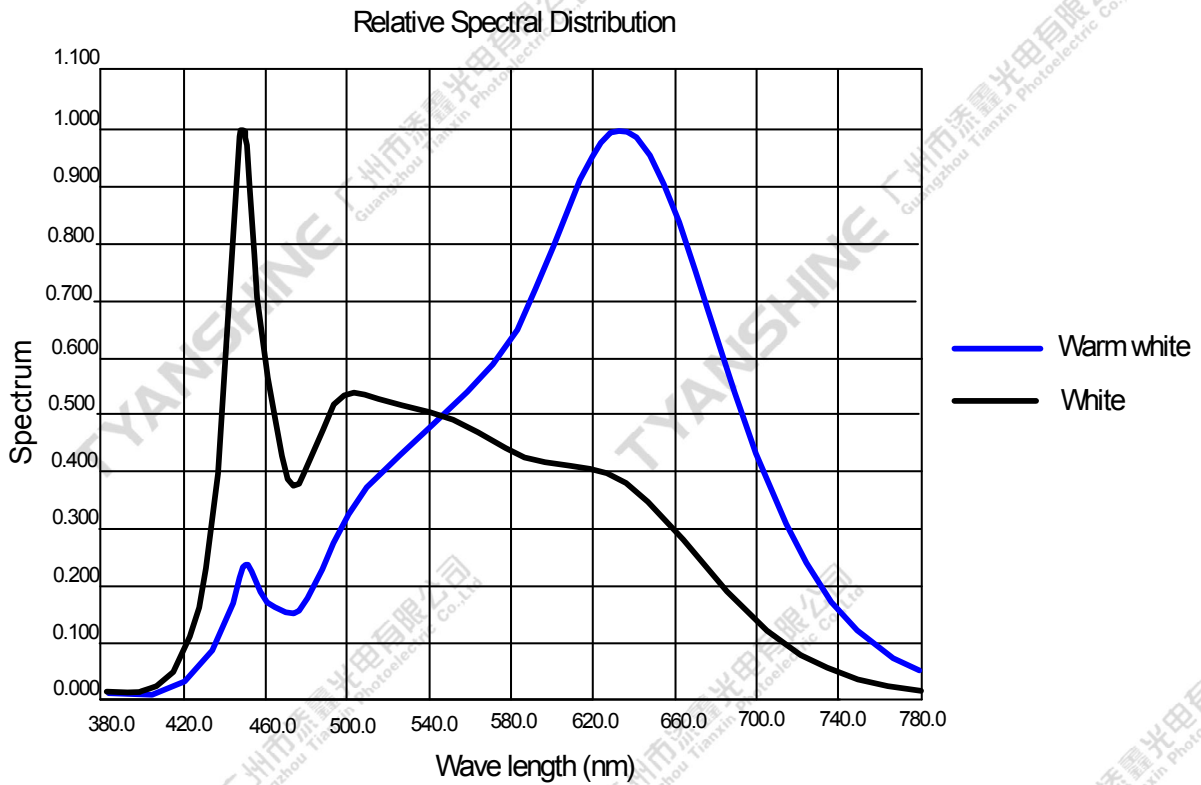
(25°C Ambient Temperature Unless Otherwise Noted)



Part No.	TX-3838SW280C30F17-10H952770	Spec No.	WKF-DD0013	Page	5 of 8
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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 $\pm 5^\circ$.

Part No.	TX-3838SW280C30F17-10H952770	Spec No.	WKF-DD0013	Page	8 of 8
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