

TX-90100W1000FC120-NUVENG-B01H80

PRODUCT SPECIFICATION (R&D version)

Features:

- ◆ Excellent transiting heat from white LED chip operating under 3.5A*8.
- ◆ No UV.
- ◆ High luminous output.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

- ◆ GaInN

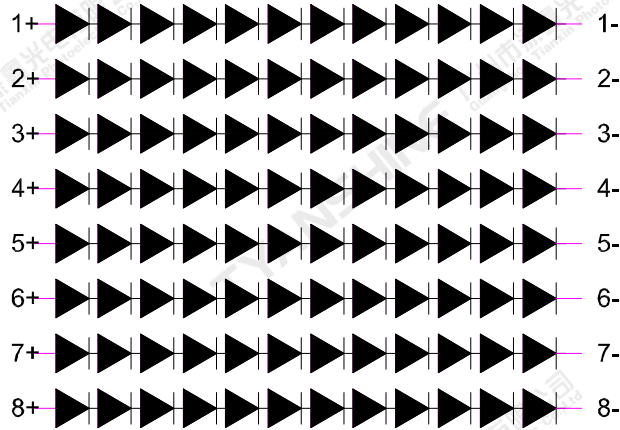
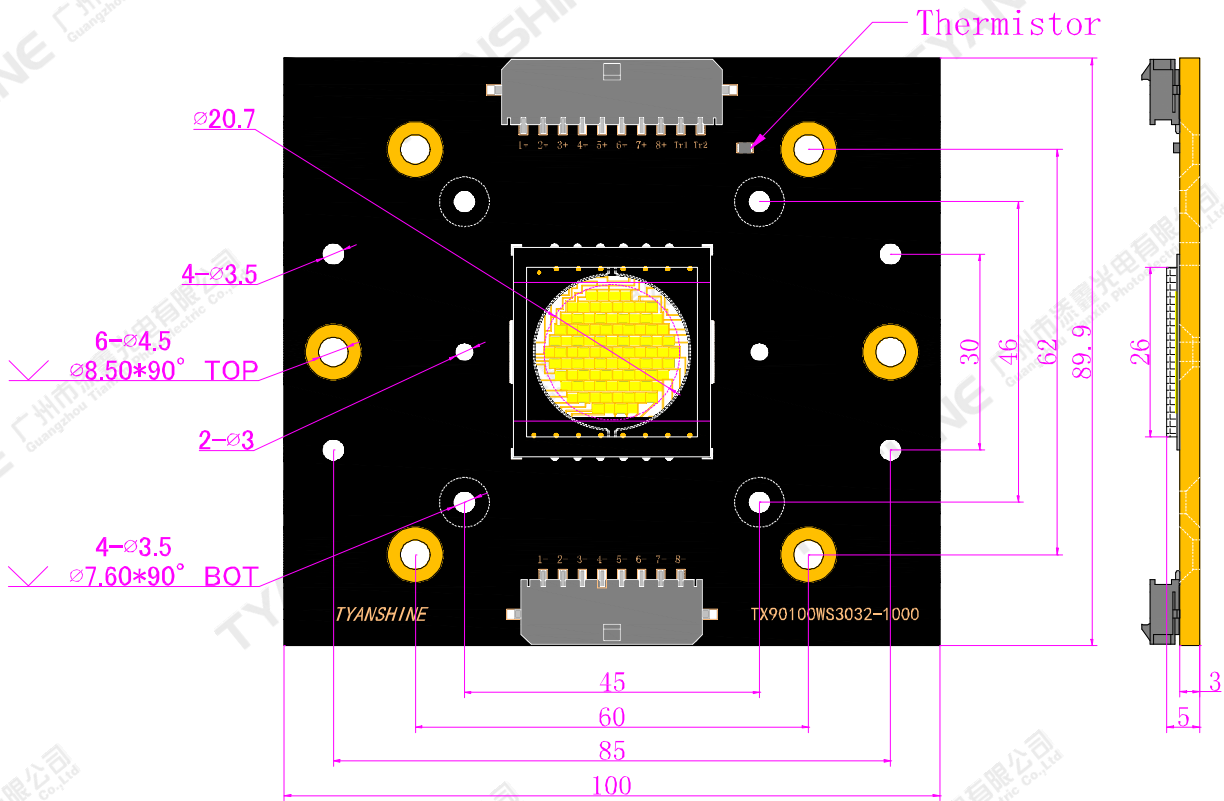
Emitting Color:

- ◆ White

Applications:

- ◆ Auxiliary lighting
- ◆ Ambient lighting
- ◆ Architectural lighting

Package Dimensions:



Notes:

1. All dimensions are in millimeters .
2. Tolerances unless otherwise mentioned are ± 0.1 mm .

Absolute Maximum Ratings (Tc=25°C)

Parameter	Symbol	Ratings	Unit	
Forward Current	IF	1	3.5	A
		2	3.5	
		3	3.5	
		4	3.5	
		5	3.5	
		6	3.5	
		7	3.5	
		8	3.5	
Reverse Voltage	V _R	—	V	
Power Dissipation	P _D	1000	W	
Junction Temperature	T _j	150	°C	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V	
Storage Temperature	T _{stg}	-40~+70	°C	
Operation Temperature	T _{opr}	-40~+100		

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.

Electrical Optical Characteristics

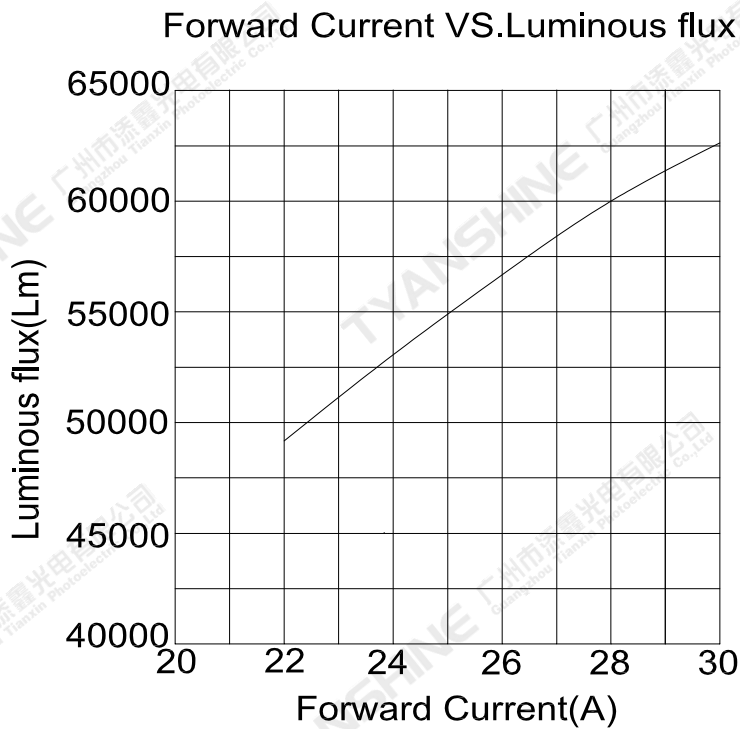
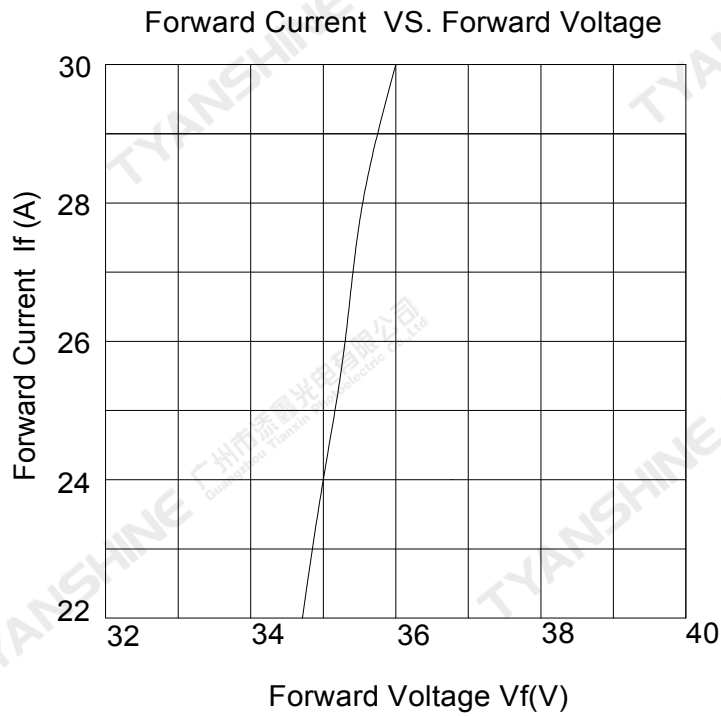
Parameter	Symbol	Condition	Emitting color	Min.	Typ.	Max.	Units
Luminous Flux	Φ_v	If=28A (Ta=25°C)	W	56000	60000	64000	lm
		If=28A (Ta=85°C)	W	46000	50000	54000	
Forward Voltage	V_f	If=28A (Ta=25°C)	W	33	36	39	V
		If=28A (Ta=85°C)	W	32	35	38	
Correlated Colour Temperature	CCT	If=28A (Ta=25°C)	W	5800	6000	6500	K
		If=28A (Ta=85°C)	W	6000	6500	7000	
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	W	—	120	—	Deg
Reverse Current	I_R	—	W	—	—	—	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	W	—	0.023	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$	If=28A	W	—	-19	—	mV/°C
Color Rendering Index	Ra		W	80	82.5	—	—

Notes:

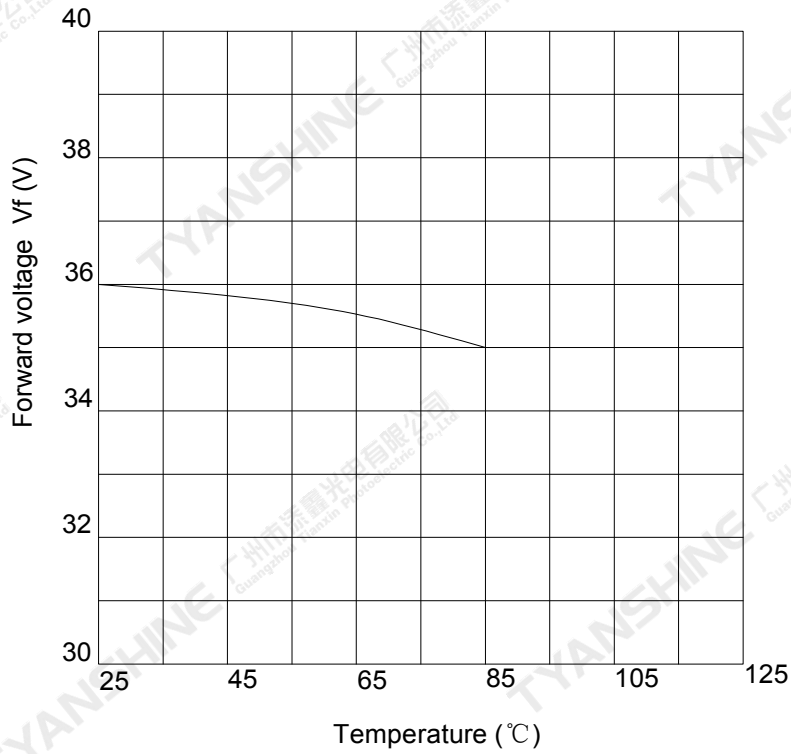
- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- Luminous flux measurement tolerance: $\pm 15\%$.
- Forward voltage measurement tolerance: $\pm 0.15V$.

Typical Electrical/Optical Characteristics Curves

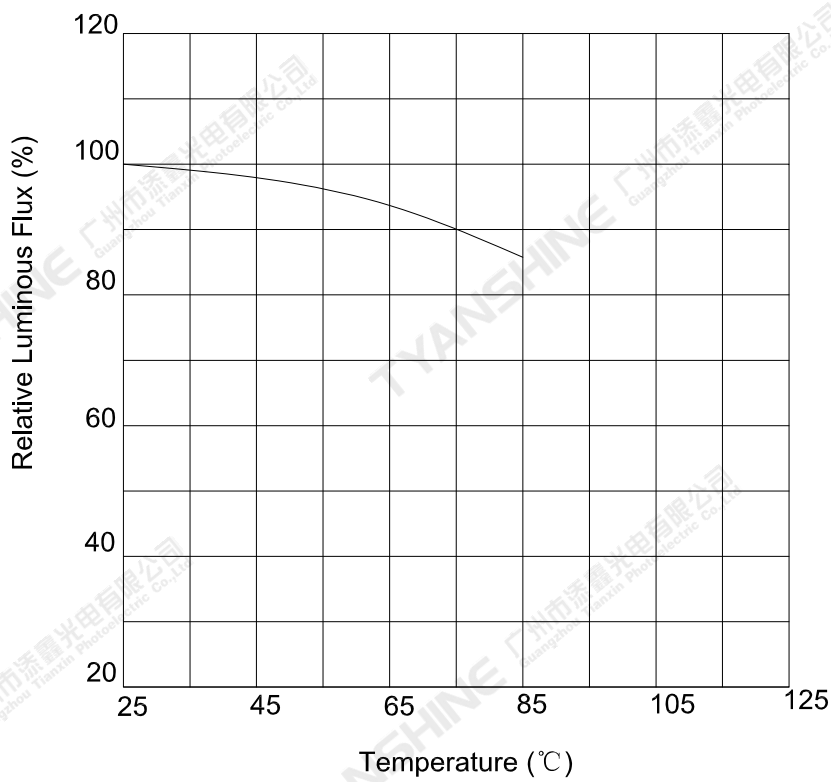
(25°C Ambient Temperature Unless Otherwise Noted)

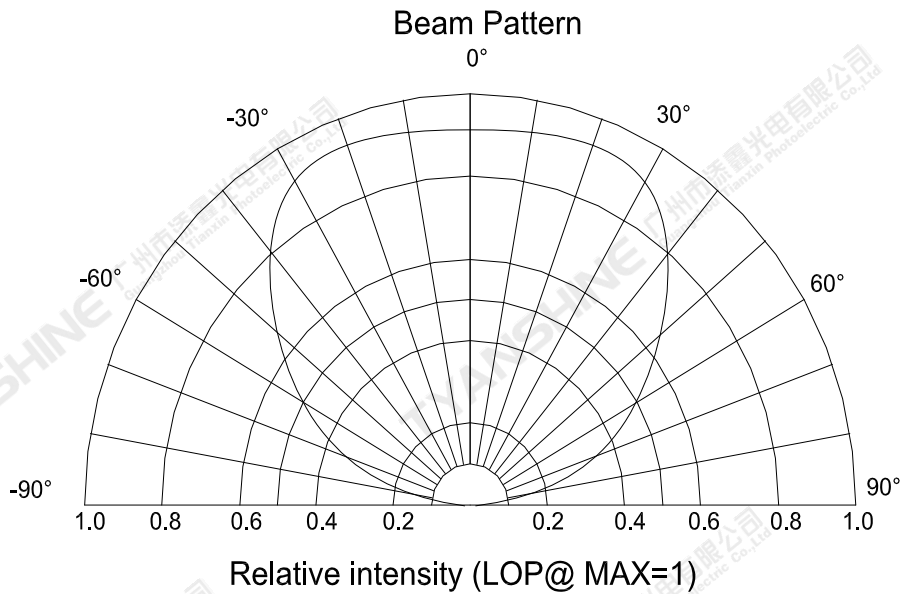
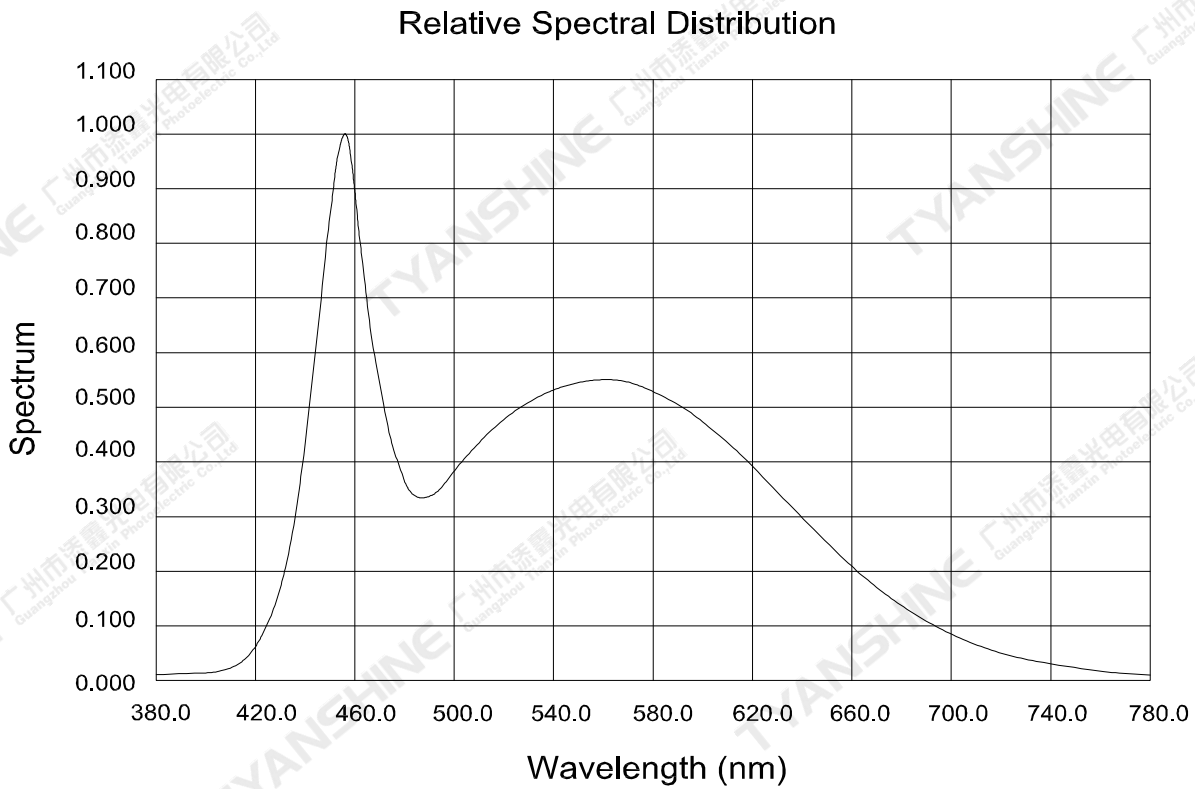


Temperature VS. Forward Voltage (IF=28A)



Temperature VS. Relative Luminous Flux (IF=28A)





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°.

Part No.	TX-90100W1000FC120-NUVENG-B01H80	Spec No.	WKF-BE0815	Page 7 of 7
----------	----------------------------------	----------	------------	-------------