

# TX-2828W100D180CUY-B01H95

## PRODUCT SPECIFICATION (R&D version)

### Features:

- ◆ Excellent transiting heat from LED chip operating under 3.0A.
- ◆ High luminous output.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ GaN

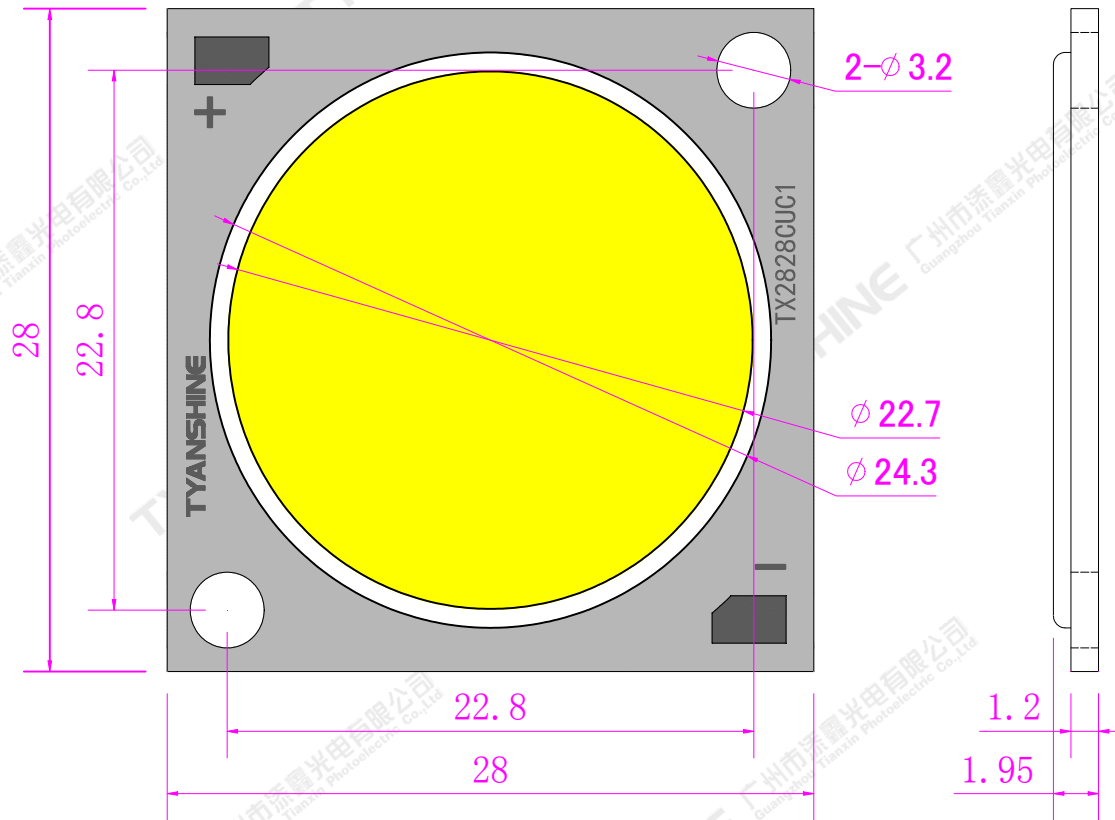
### Emitting Color:

- ◆ White

### Applications:

- ◆ Stage lighting
- ◆ Architectural lighting
- ◆ Projection lighting
- ◆ Medical lighting

**Package Dimensions:**



**Notes:**

- 1.All dimensions are in millimeters .
- 2.Tolerances unless otherwise mentioned are  $\pm 0.1\text{mm}$  .

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**Absolute Maximum Ratings**

Parameter	Symbol	Max Ratings	Unit
Forward Current	IF	3.0	A
Reverse Voltage	V <sub>R</sub>	Not designed for reverse operation	V
Power Dissipation	P <sub>D</sub>	108	W
Junction Temperature	T <sub>j</sub>	150	°C
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature	T <sub>stg</sub>	-40~70	°C
Operation Temperature	T <sub>opr</sub>	-30~100	

**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**

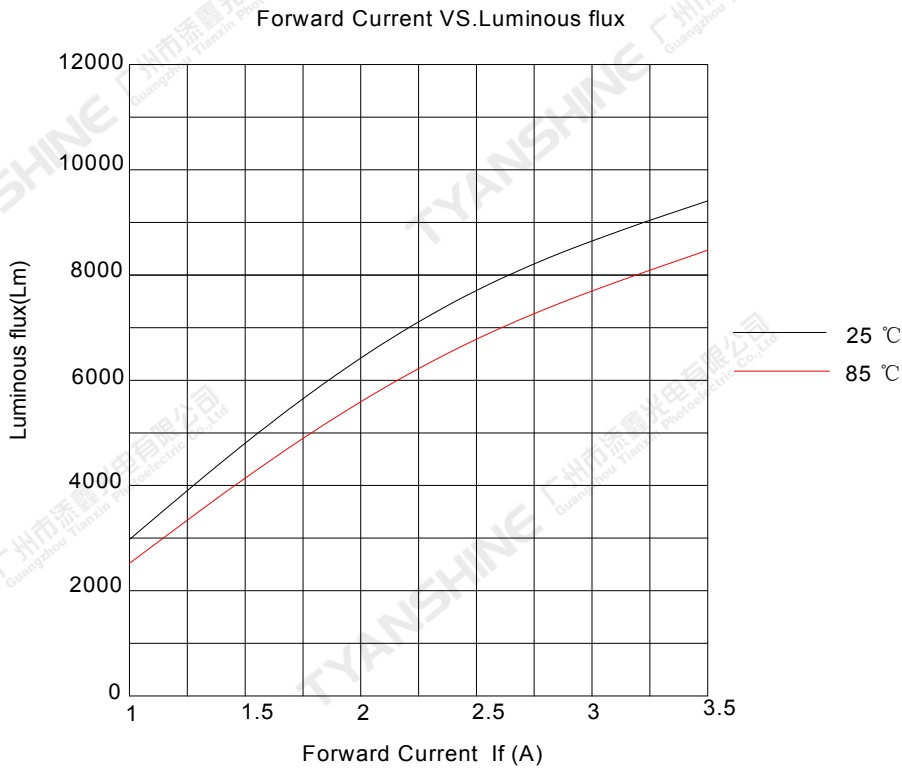
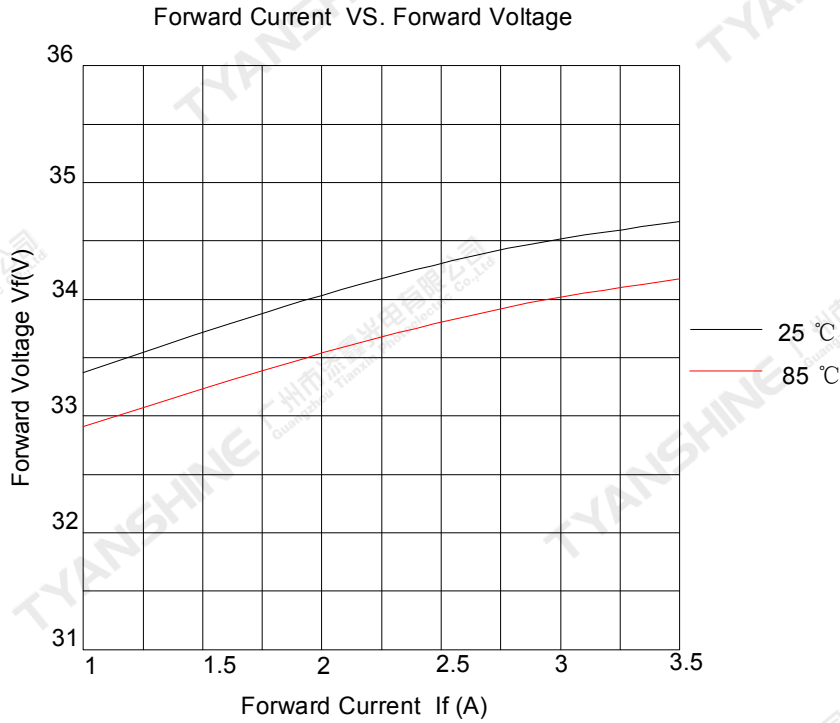
Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Luminous Flux	$\phi_v$	If=2.8A (Tc=25°C)	7750	8500	—	lm
		If=2.8A (Tc=85°C)	6500	7300	—	
Correlated Colour Temperature	CCT	If=2.8A (Tc=25°C)	5400	5600	5800	K
		If=2.8A (Tc=85°C)	5600	5800	6100	
Forward Voltage	Vf	If=2.8A (Tc=25°C)	33	34.5	36	V
		If=2.8A (Tc=85°C)	32.5	34	35.5	
Reverse Current	IR	—	—	—	—	$\mu$ A
Viewing Angle at 50% IV	2 $\theta_{1/2}$	—	—	115	—	Deg
Thermal Resistance Junction to Case	R $\theta_{J-C}$	—	—	0.13	—	K/W
Temperature Coefficient of Voltage	V $\Delta$ F/T	If=2.8A	—	-12.4	—	mV/°C
Color Rendering Index	Ra	If=2.8A (Tc=85°C)	95	97	—	—
Thermistor(NTC)	Rt25	—	—	10	—	K $\Omega$

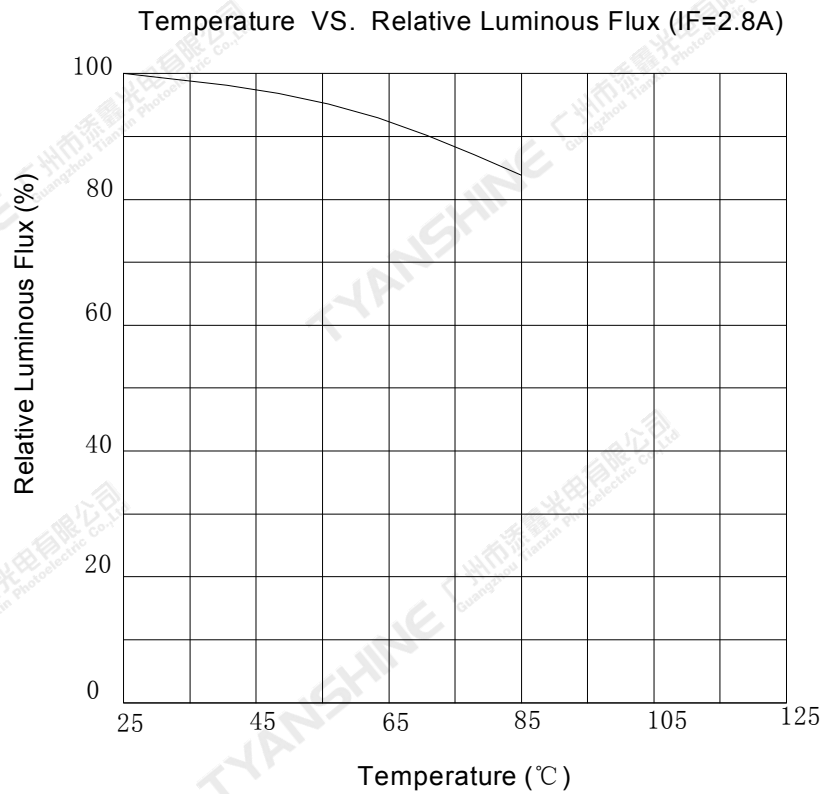
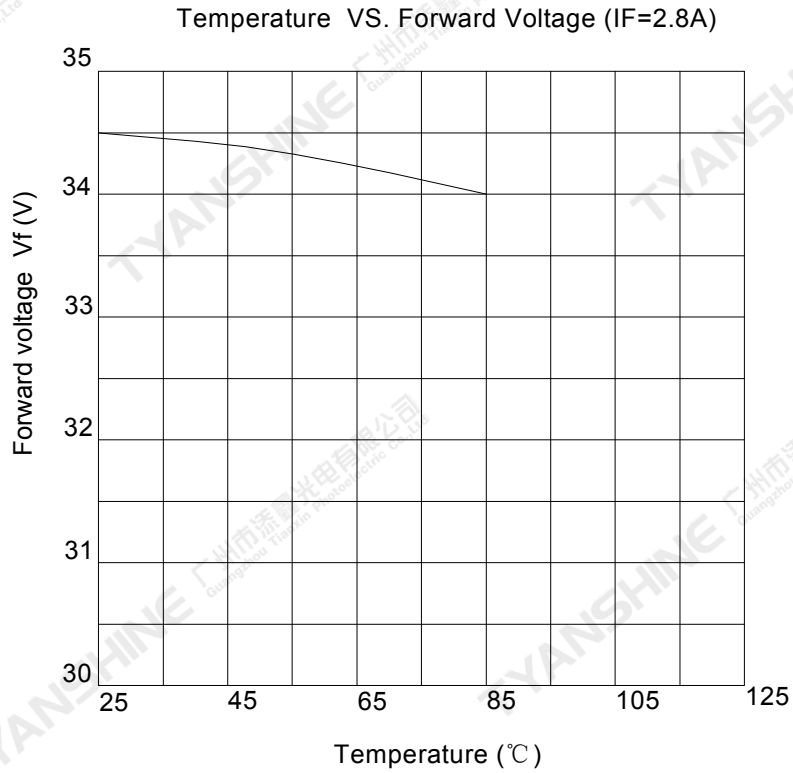
**Notes:**

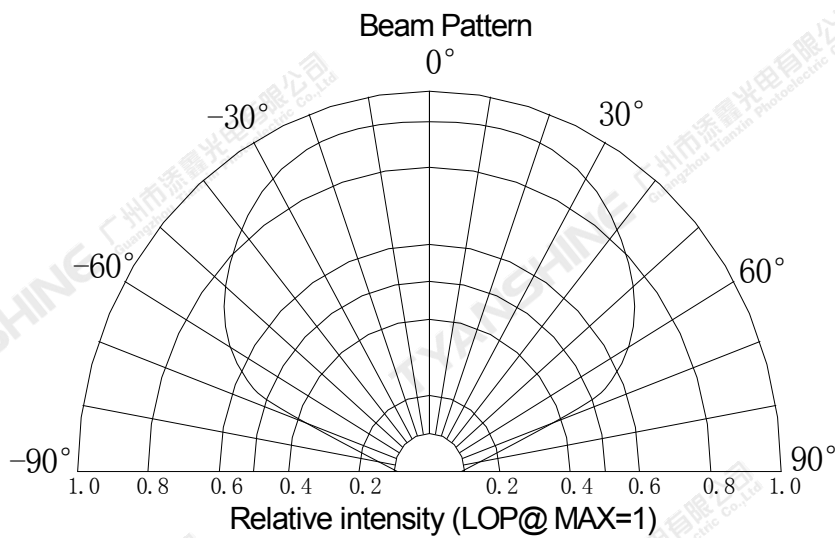
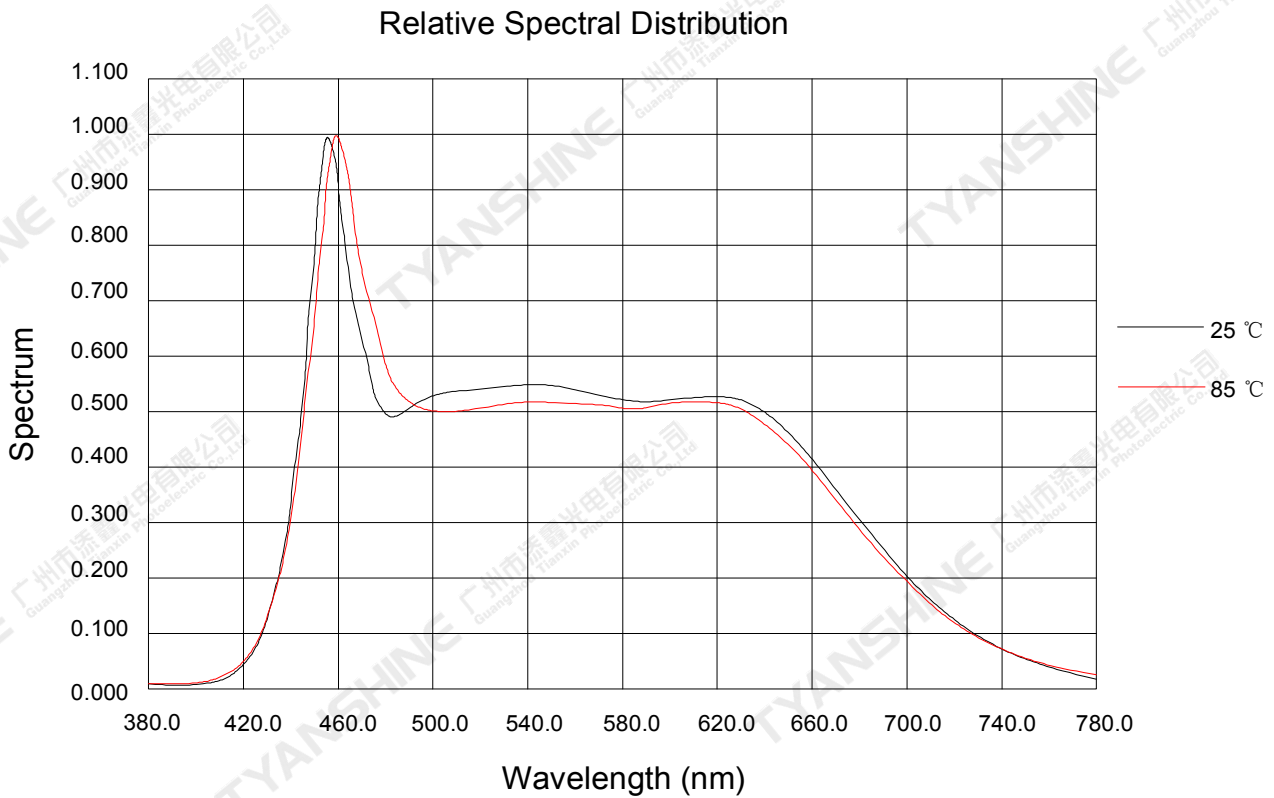
- 1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
- 3.The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
- 4.Luminous flux measurement tolerance:±15%.
- 5.Forward voltage measurement tolerance:±0.15V.

## Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)







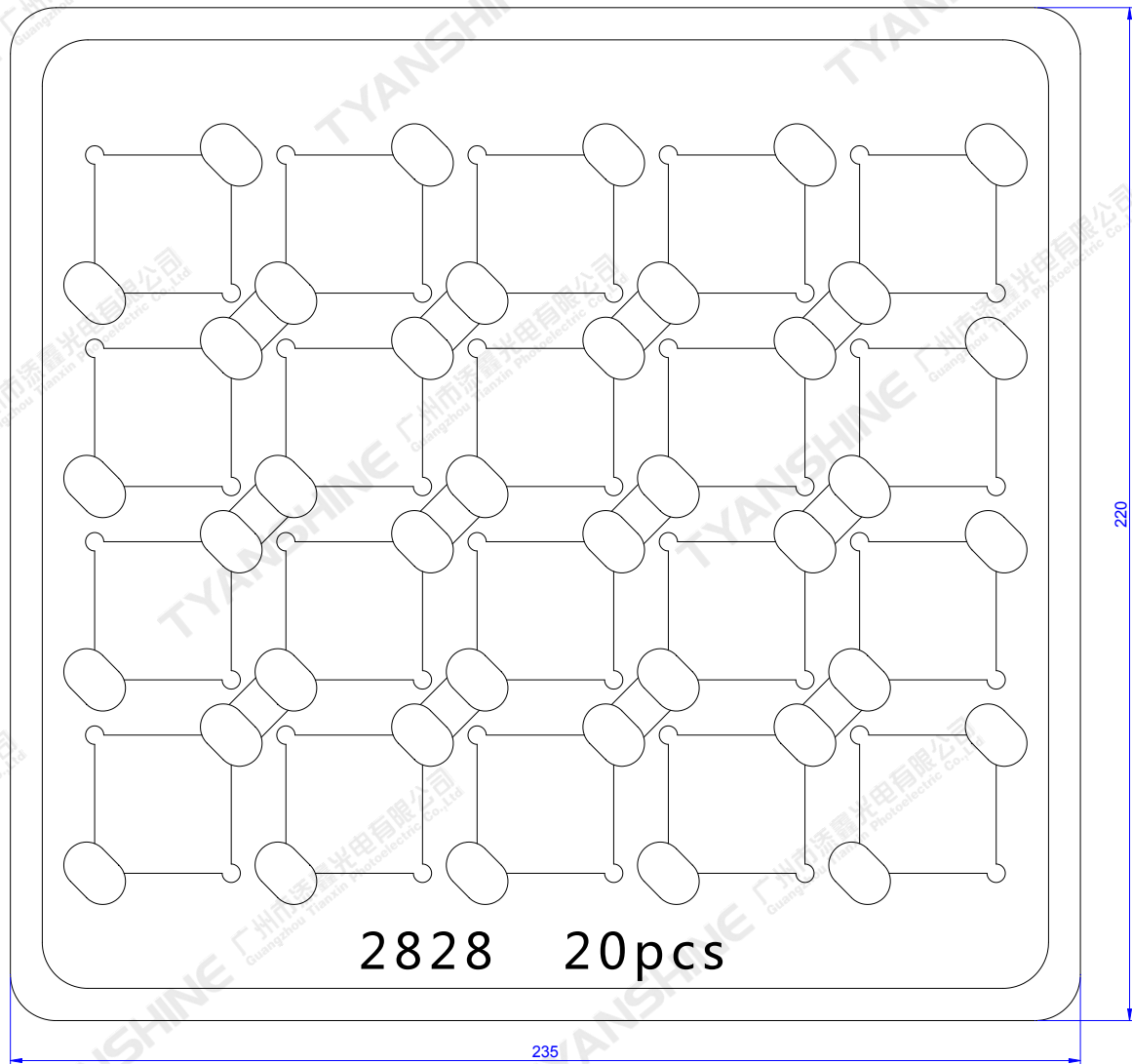
**Notes:**

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  $\pm 5^\circ$ .

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**Dimensions For Cannulation And Packaging**

**Quantity: 20 PCS**



**Notes:**

1. All dimensions are in millimeters.
2. Tolerances are  $\pm 2.0$  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.

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