

# TX-2844RGBW80D180-001

## PRODUCT SPECIFICATION

### Features:

- ◆ Excellent transiting heat from LED chip operating under 1000 mA.
- ◆ Mixing any two colors of light, there will be no partial color and color spots uneven phenomenon.
- ◆ High luminous output.
- ◆ No UV.
- ◆ Encapsulated materials are environmentally certified and meet environmental requirements.

### Chip Material:

- ◆ Red: AlGaInP
- ◆ Green: GaInN
- ◆ Blue: GaN
- ◆ White: GaN

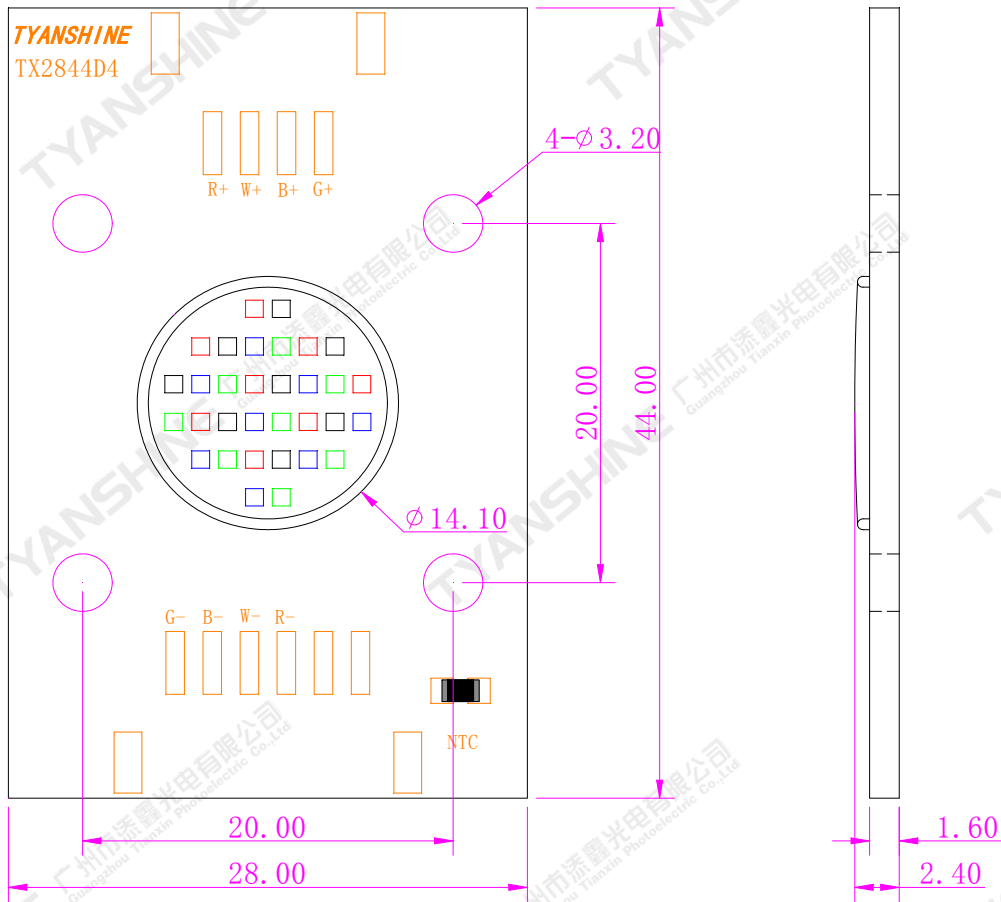
### Emitting Color:

- ◆ Red
- ◆ Green
- ◆ Blue
- ◆ White

### Applications:

- ◆ Entertainment lighting
- ◆ Landscape lighting
- ◆ Commercial lighting
- ◆ Decorative lighting

**Package Dimensions:**



R-Red (R) ; 
  G-Green (G) ;  
 B-Blue (B) ; 
  W-White (W)

**Notes:**

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

**Absolute Maximum Ratings (Tc=25°C)**

Parameter	Symbol	Ratings	Unit	
Forward Current	IF	R	1000	mA
		G	1000	
		B	1000	
		W	1000	
Reverse Voltage	VR	Not designed for reverse operation	V	
Power Dissipation	PD	R	20000	mW
		G	26000	
		B	26000	
		W	26000	
Junction Temperature	Tj	R	115	°C
		G	150	
		B	150	
		W	150	
Electrostatic Discharge Threshold (ESD)	ESD	2000	V	
Storage Temperature	Tstg	-40~+70	°C	
Operation Temperature	Topr	-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 (Tc=25°C)**

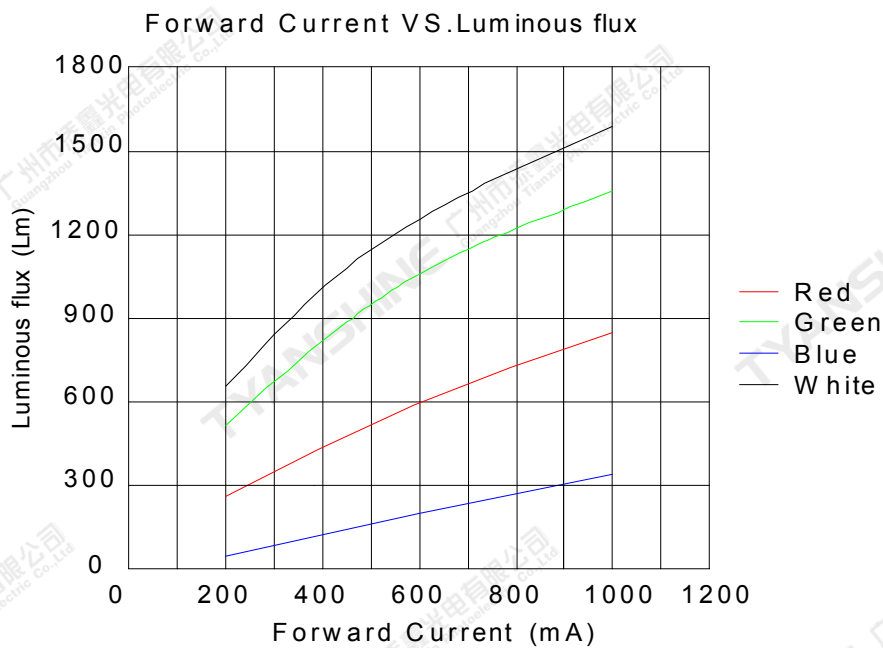
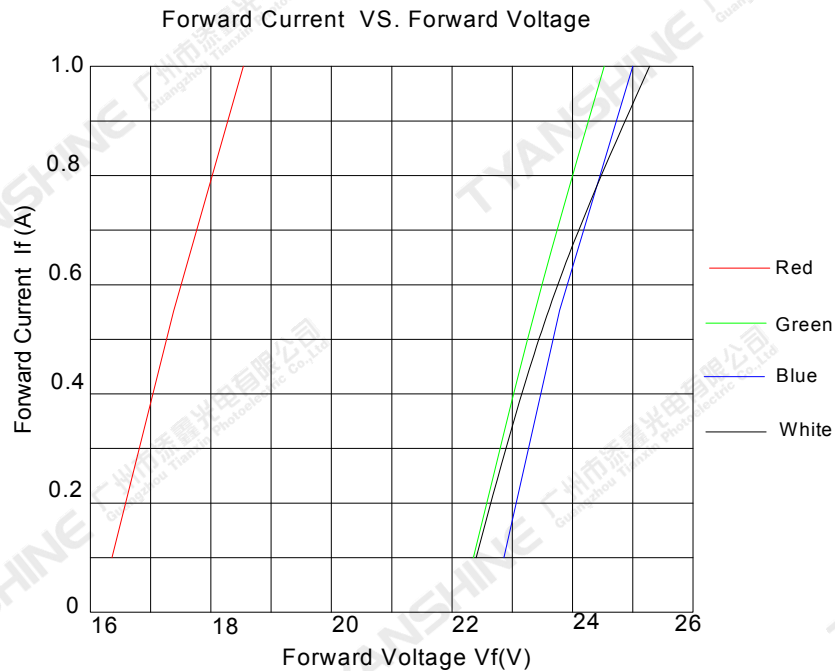
Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units	
Luminous Flux	$\phi_v$	If=800mA	R	630	720	800	lm	
			G	1100	1250	1400		
			B	300	350	400		
			W	1150	1600	1800		
Dominant Wavelength	$\lambda_d$		R	618	625	628	nm	
			G	522	527	532		
			B	452	456	460		
Peak-emission Wavelength	$\lambda_p$		R	632	637	642	nm	
			G	516	521	526		
			B	448	452	456		
Correlated Colour Temperature	CCT			W	6000	6500	7000	K
Spectral Line Half-Width	$\Delta\lambda$		R	13	17	21	nm	
		G	31	36	41			
		B	17	22	27			
		W	12	16	20			
Forward Voltage	$V_f$	R	16	18	20	V		
		G	22	24	26			
		B	23	24.5	26			
		W	23	24.5	26			
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	—	—	120	—	Deg	
Thermal Resistance Junction to Case	$R\theta_{J-C}$	R	—	1.11	—	K/W		
		G	—	1.11	—			
		B	—	1.11	—			
		W	—	1.11	—			
Temperature Coefficient of Voltage	$V\Delta F/T$	R	—	-15	—	mV/°C		
		G	—	-25.3	—			
		B	—	-13.3	—			
		W	—	-12.9	—			

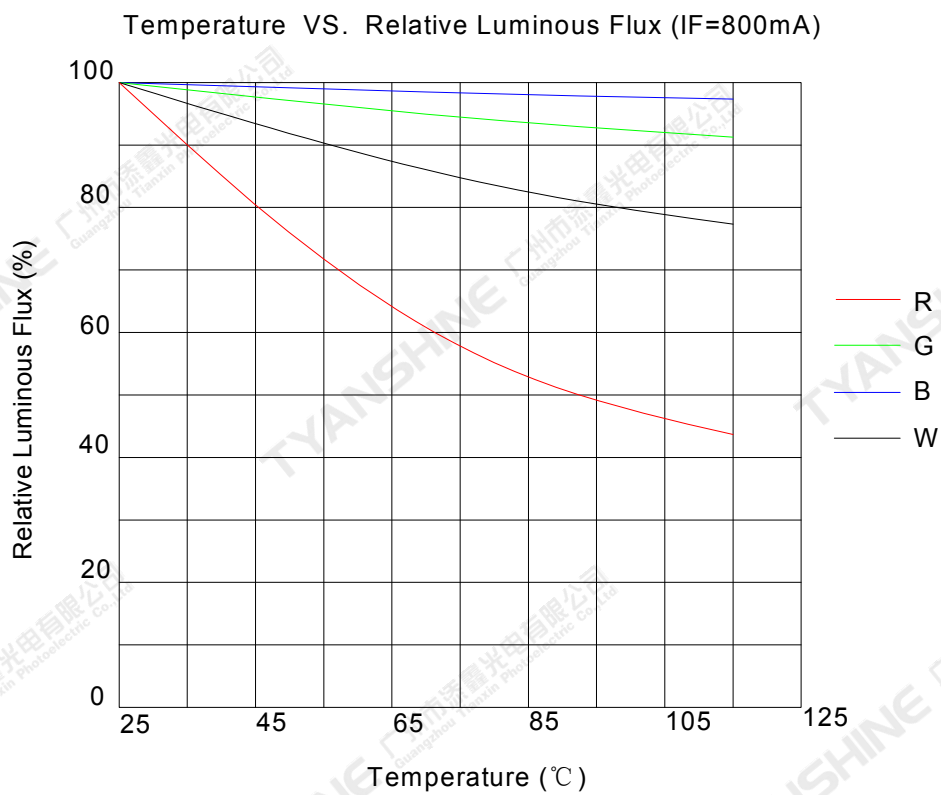
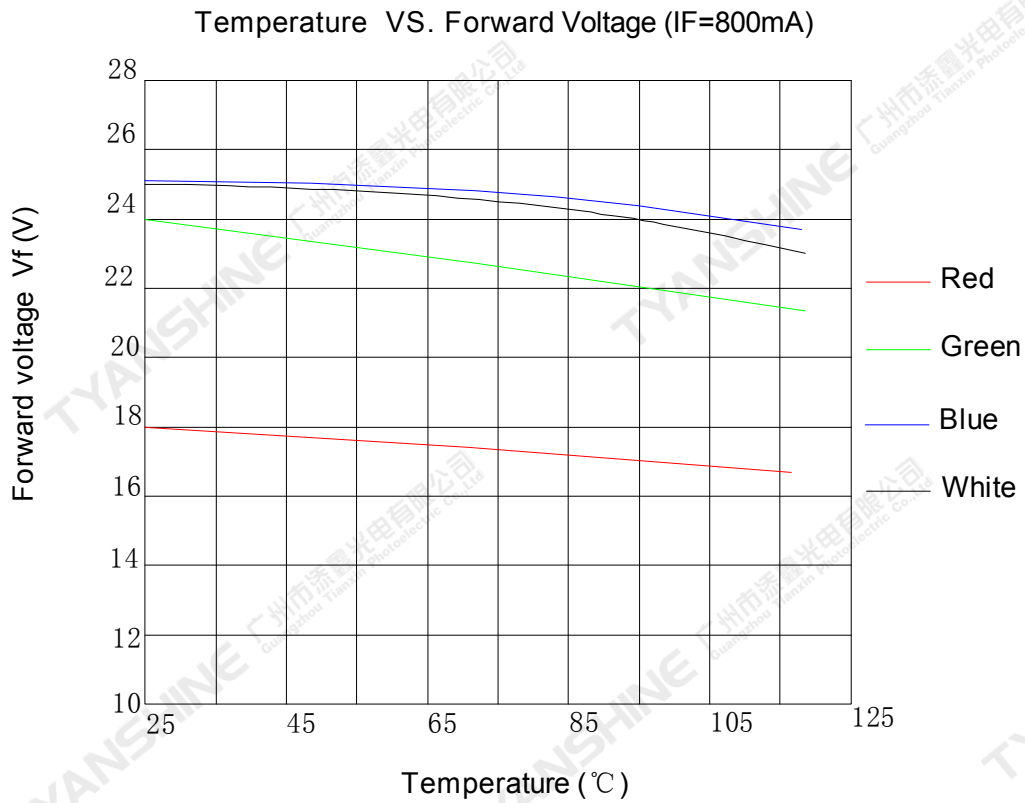
**Notes:**

- 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.

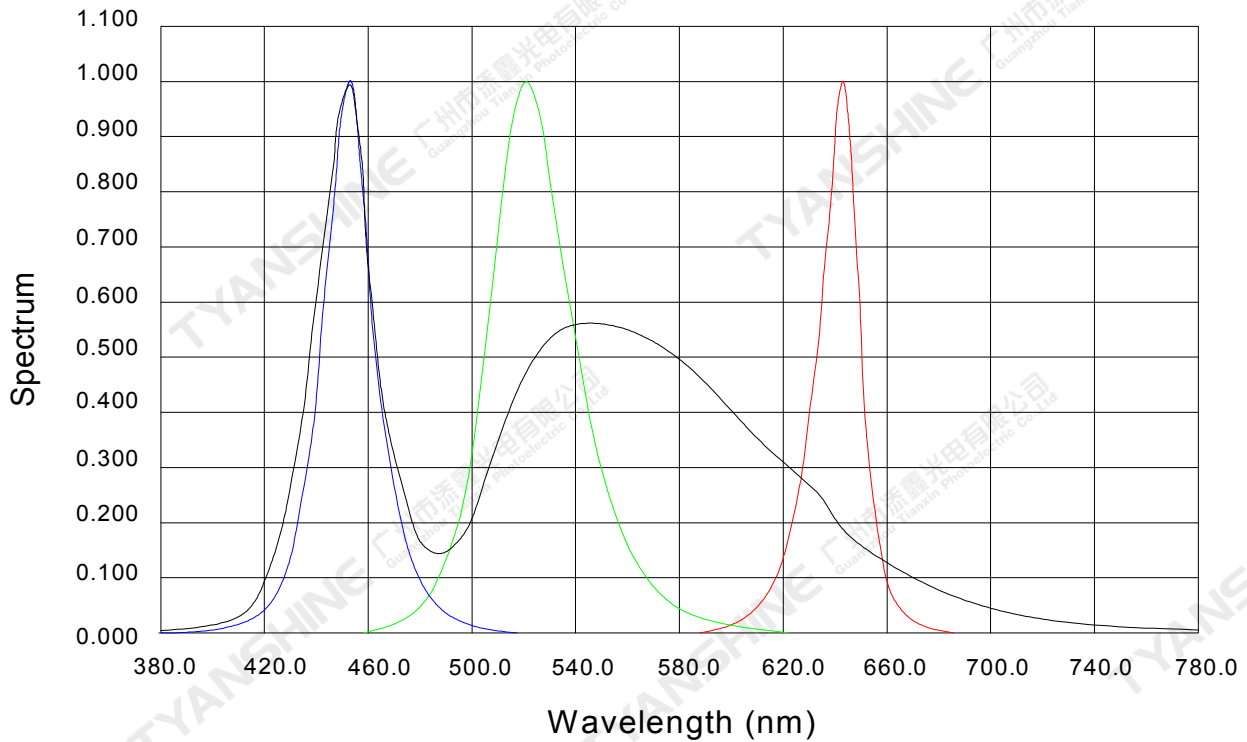
## Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)

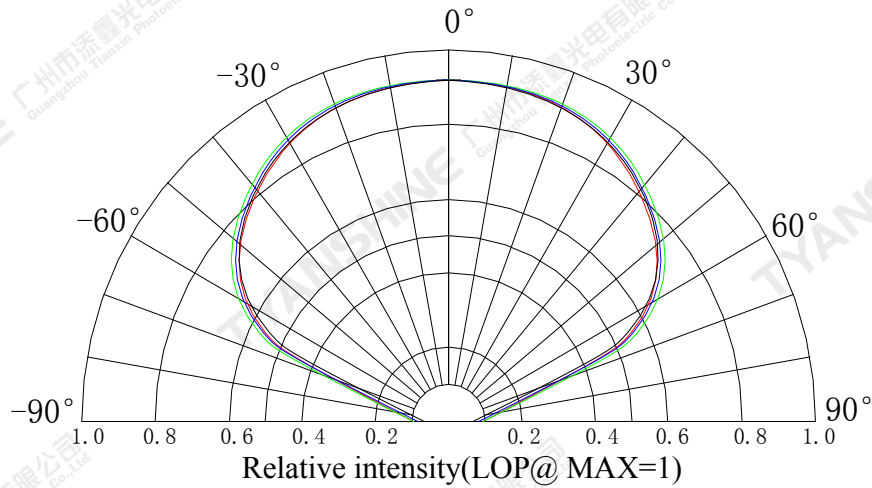




Relative Spectral Distribution



Beam Pattern

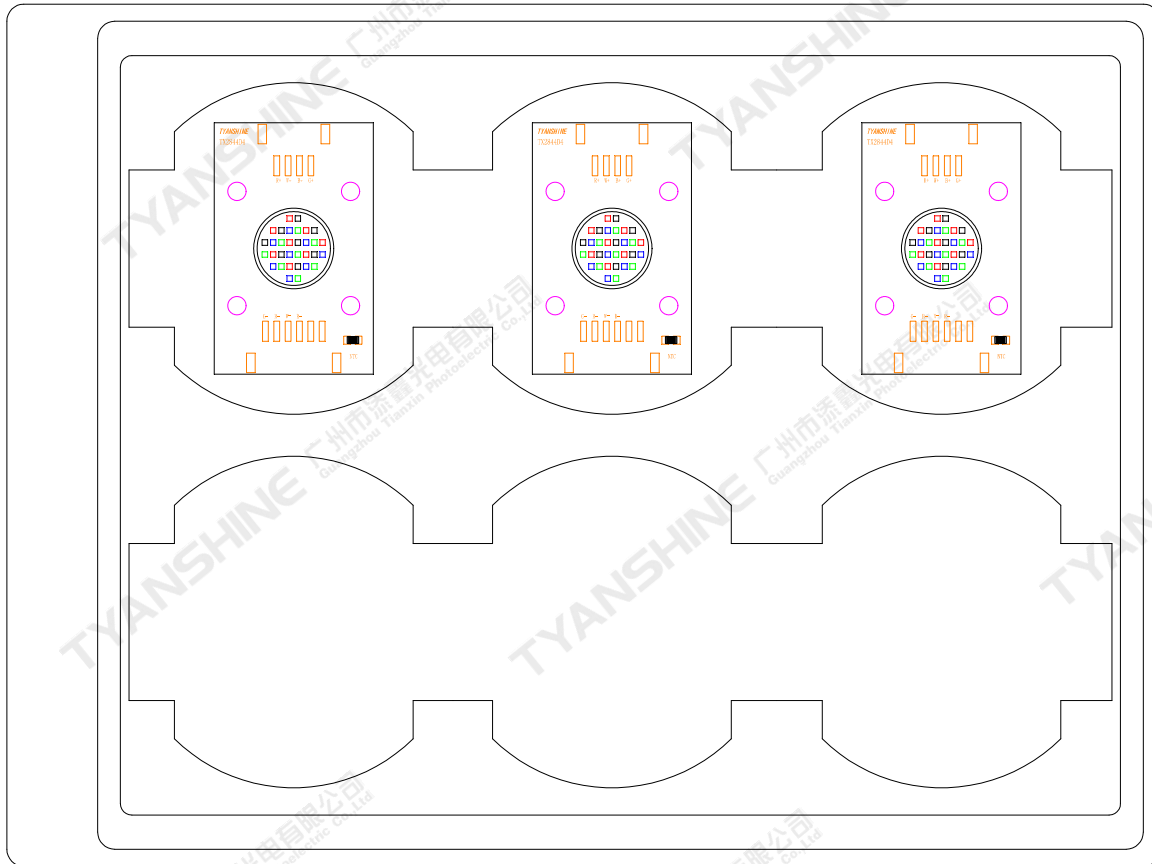


Notes:

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  $\pm 5^\circ$ .

**Dimensions For Cannulation And Packaging**

**Quantity: 6PCS**



**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, Irreponsible of the Company.

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