

TX-1919RGB30D180-001

PRODUCT SPECIFICATION

Features:

- ◆ Excellent transiting heat from LED chip operating under 480 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

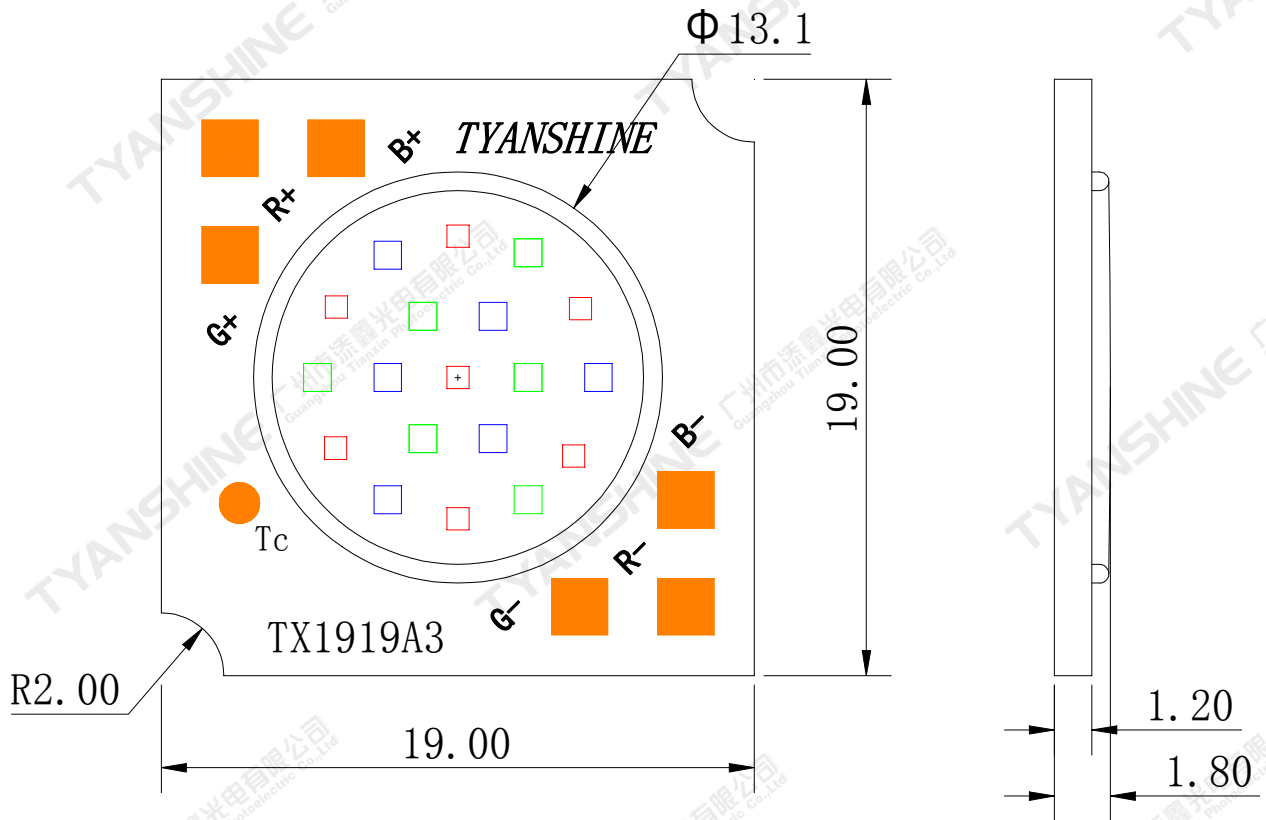
Emitting Color:

- ◆ Red
- ◆ Green
- ◆ Blue

Applications:

- ◆ Entertainment lighting
- ◆ Landscape lighting
- ◆ Commercial 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	480	mA
Reverse Voltage	VR	Not designed for reverse operation	V
Power Dissipation	PD	R	8640
		G	9600
		B	9600
Junction Temperature	Tj	R	115
		G	150
		B	150
Electrostatic Discharge Threshold (ESD)	ESD	2000	V
Storage Temperature	Tstg	-20~+70	°C
Operation Temperature	Topr	-40~+100	

Notes:

- Specifications are subject to change without notice.
- Under the stipulated Characteristics parameters above, the life span of the LED is more than 50,000hours.
- 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)

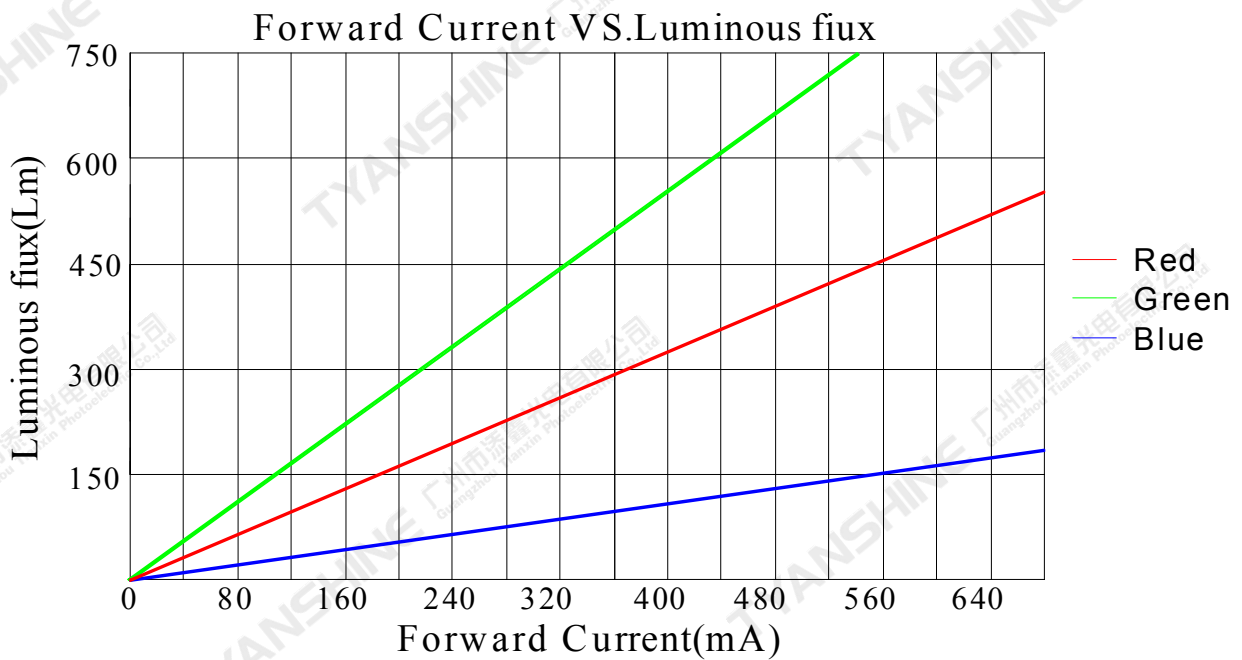
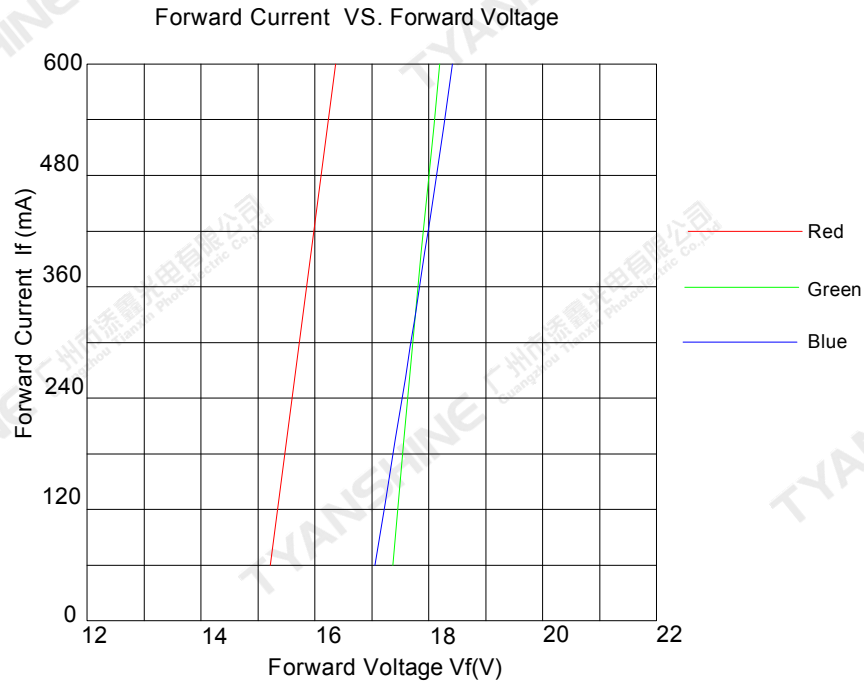
Parameter	Symbol	Condition	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	ϕ_v	If=480mA	R	330	360	—	lm
			G	620	650	—	
			B	100	130	—	
Dominant Wavelength	λ_d		R	618	623	628	nm
			G	522	527	532	
			B	455	460	465	
Peak-emission Wavelength	λ_p		R	625	630	635	nm
			G	518	523	528	
			B	451	456	461	
Spectral Line Half-Width	$\Delta\lambda$		R	15	20	25	nm
		G	25	30	35		
		B	15	20	25		
Forward Voltage	V_f	R	14	16	18	V	
		G	16	18	20		
		B	16	18	20		
Viewing Angle at 50 % IV	$2\theta_{1/2}$	—	—	—	120	—	Deg
Thermal Resistance Junction to Case	$R_{\theta J-C}$	If480mA	—	—	1.0	—	K/W
Temperature Coefficient of Voltage	$V\Delta F/T$		—	—	-2	—	mV/°C

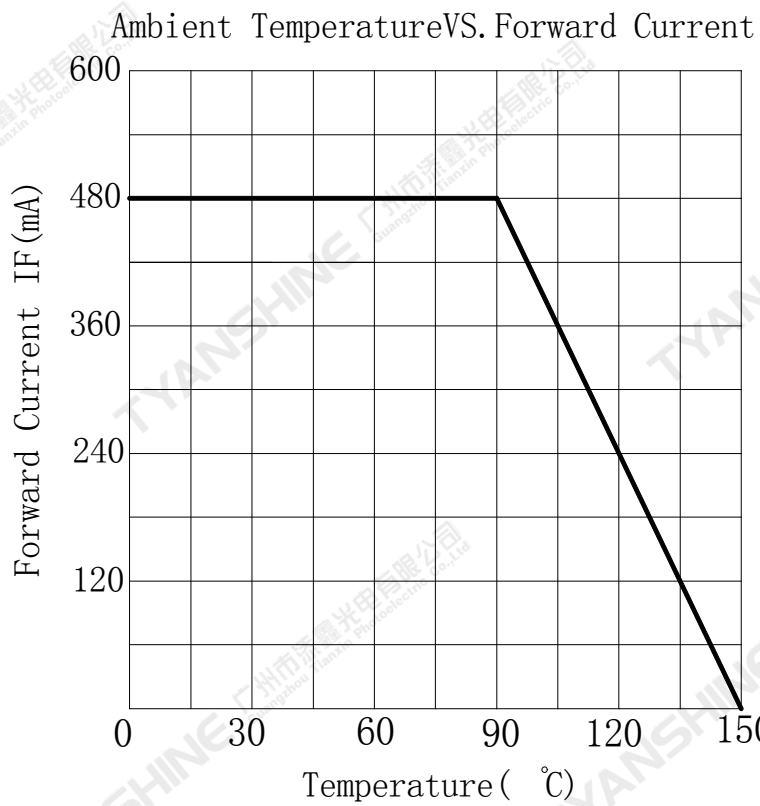
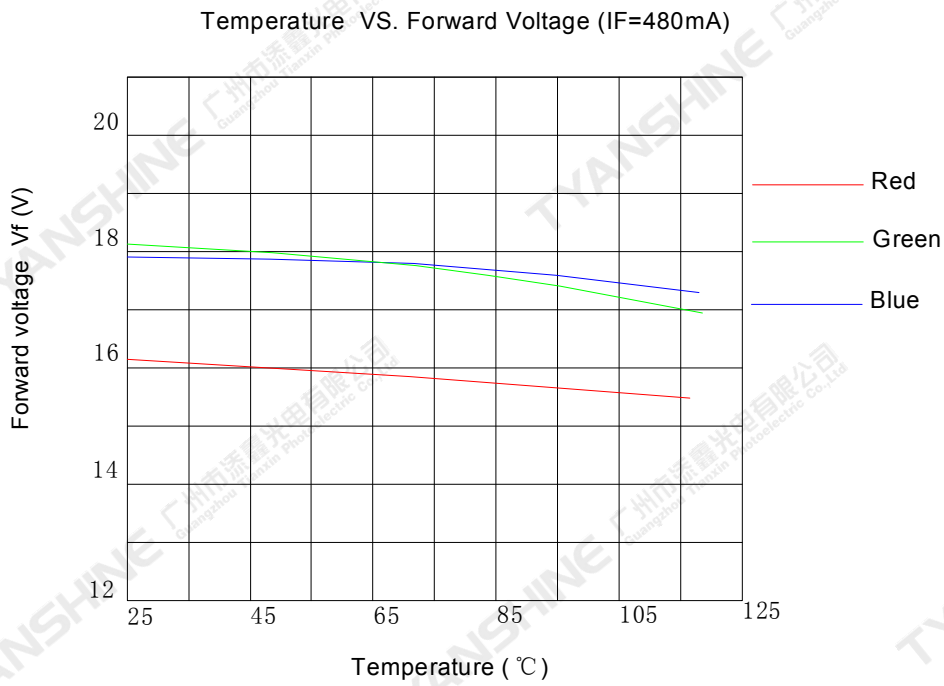
Notes:

- 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.

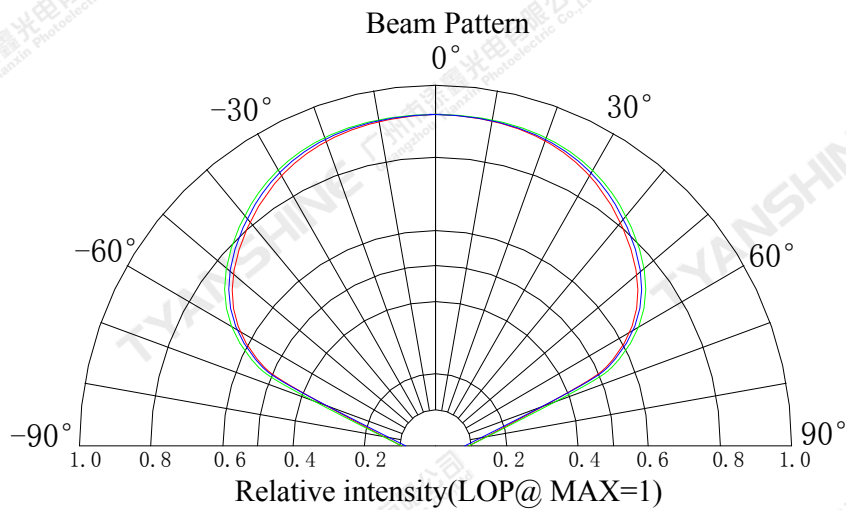
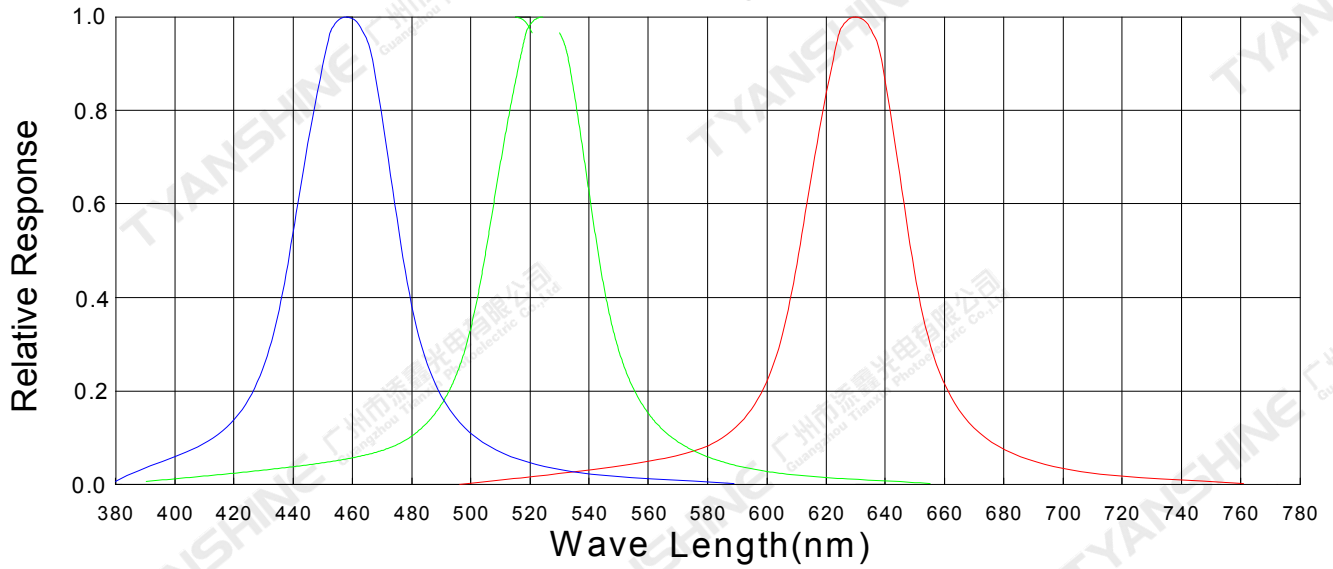
Typical Electrical/Optical Characteristics Curves

(25°C Ambient Temperature Unless Otherwise Noted)





Spectral Radiance: Red Peak@630nm
Green Peak@523nm
Blue Peak@456nm



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 $\pm 5^\circ$.