TX-1919RGBW40D180-001H90

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under RGB:350mA S:700mA.

◆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

◆Warm White:GaN

Emitting Color:

◆Red

◆Green

◆Blue

◆Warm White

Applications:

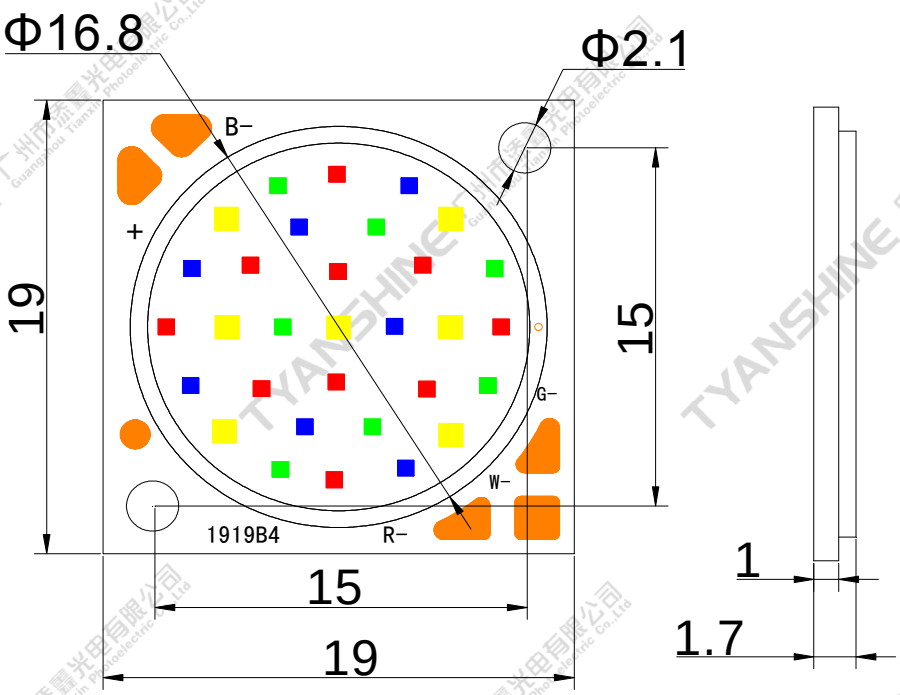
◆Indoor lighting

◆Outdoor lighting

◆Industrial Lighting

◆Consumer Lighting

Package Dimensions:



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25 mm (0.01”) unless otherwise noted.

Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol		MAX.	Unit
LED Junction Temperature	Tj		110	℃
Power Dissipation	P_D	R	8000	mW
		G	8000	
		B	8000	
		W	16000	
Continuous Forward Current	IF	R	350	mA
		G	350	
		B	350	
		W	700	
Reverse Voltage	V_R		—	V
ElectrostaticDischarge Threshoid (ESD)	ESD		2000	V
Operating Temperature Range	T_{opr}		-30 to +70	℃
Storage Temperature Range	T_{spr}		-40 to +100	

Notes:

1. Specifications are subject to change without notice.
2. The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.
3. 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.

Characteristics (Ta=25°C,RGB:IF=350mA,W:IF=700mA)：

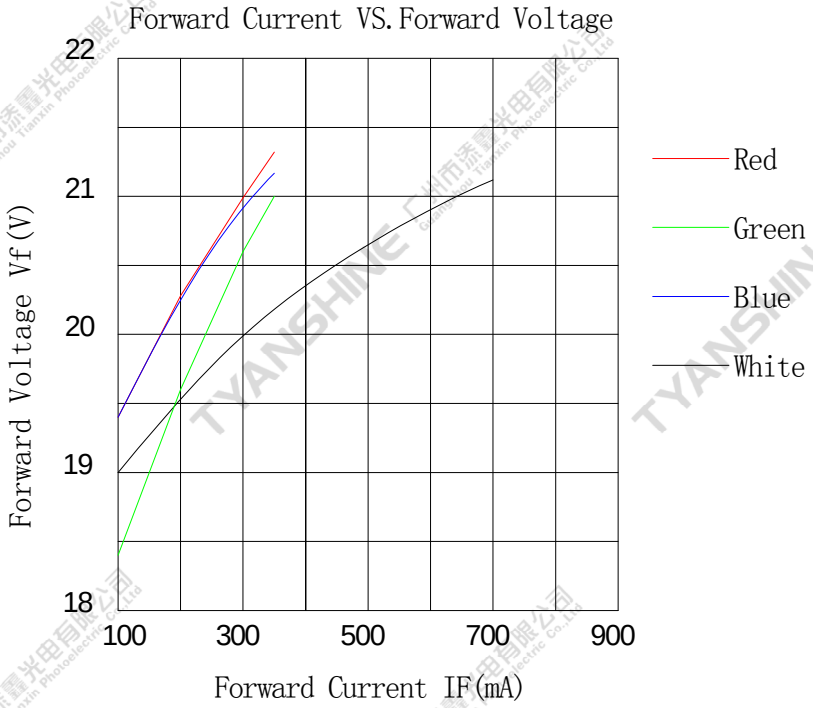
Parameter	Symbol	Emitting Color	Values			Units
			Min.	Typ.	Max.	
Luminous Flux	φ_V	R	320	450	—	lm
		G	480	650	—	
		B	88	115	—	
		W	640	850	—	
Viewing Angle at 50％IV	$2\theta_{1/2}$	R	—	180	—	Deg
		G	—	180	—	
		B	—	180	—	
		W	—	180	—	
Peak Emission Wavelength	λp	R	627	632	637	nm
		G	515	520	525	
		B	447	452	457	
Dominant Wavelength	λd	R	618	623	628	nm
		G	522	525	528	
		B	452	455	457	
Spectral Line Half-Width	△λ	R	15	20	25	nm
		G	25	30	35	
		B	15	20	25	
Forward Voltage	V_f	R	19	21	22	V
		G	19	21	22	
		B	19	21	22	
Correlated Colour Temperature	CCT	W	4100	—	4300	K
Color Rendering Index	Ra	W	—	90	—	
Reverse Current	I_R	—	—	—	—	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$	—	—	1.5	—	K/W
Temperature Coefficient of Forward Voltage	V△F/T	—	—	-2	—	mV/℃

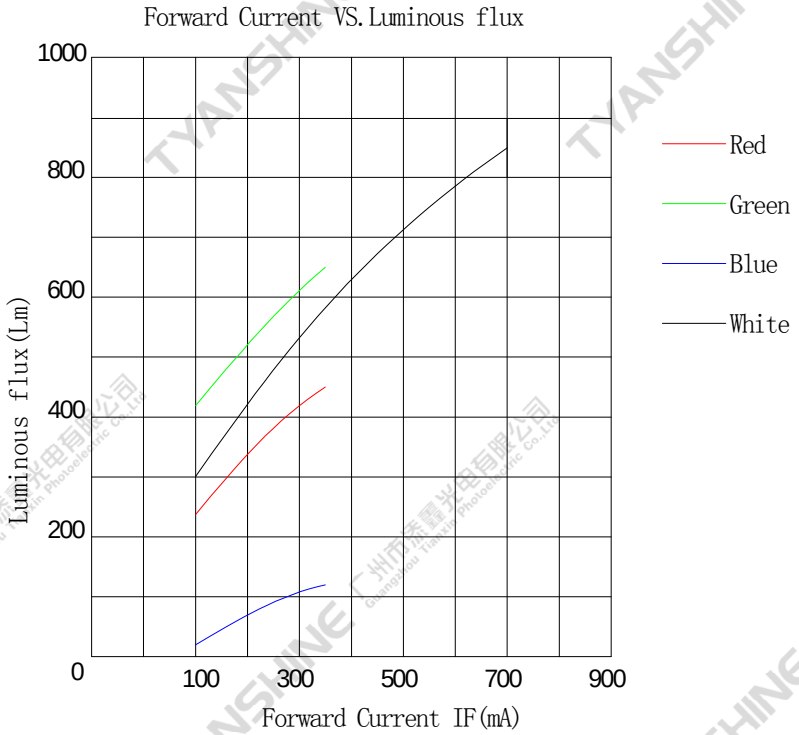
Notes:

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 (λd) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.
4. Flux is measured with an accuracy of ±15%.
5. Forward voltage is measured with an accuracy of ±0.15V.

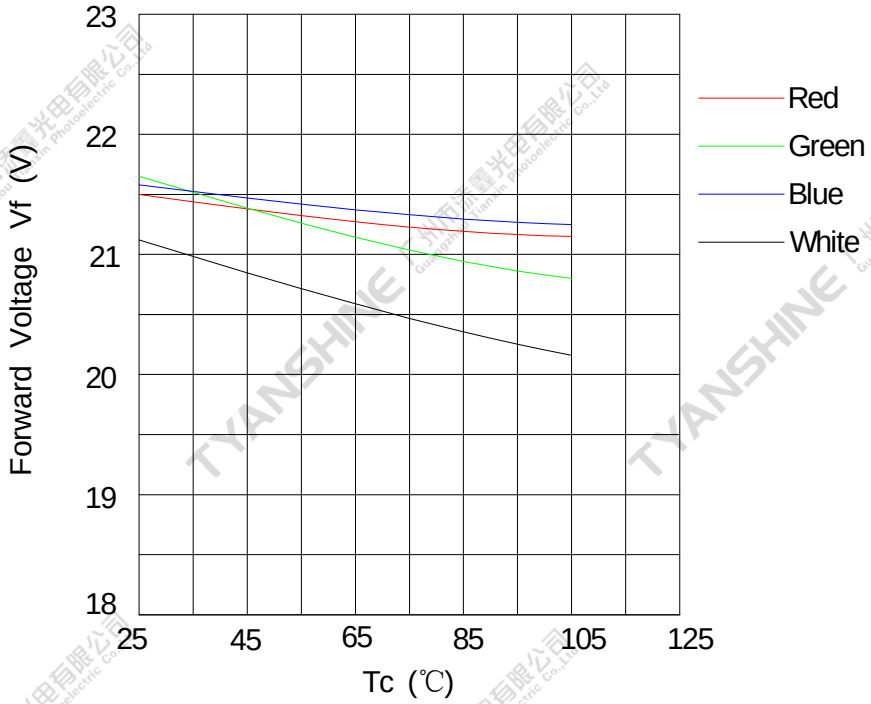
Typical Electrical / Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

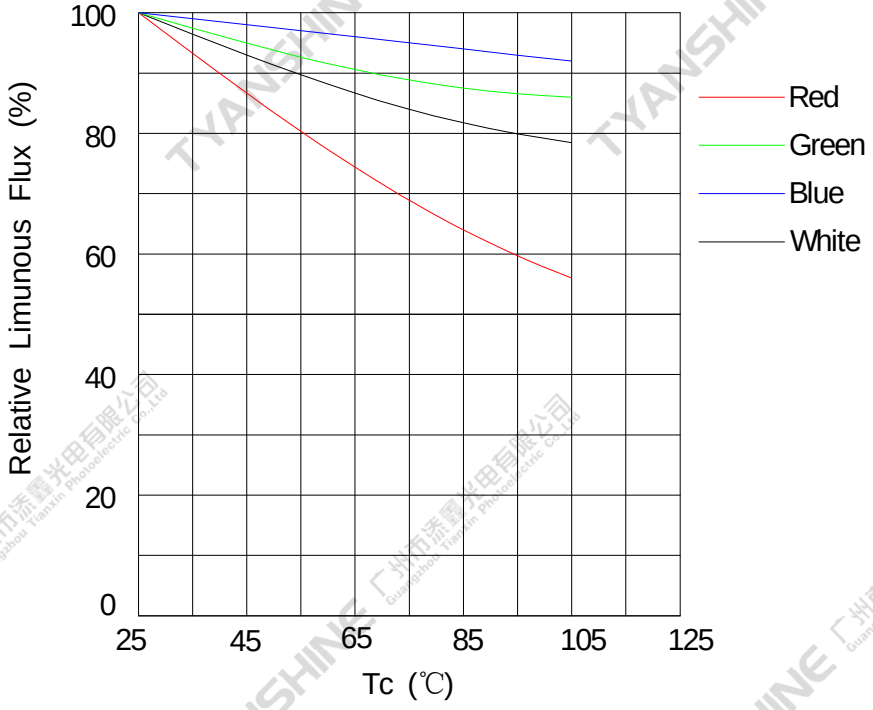


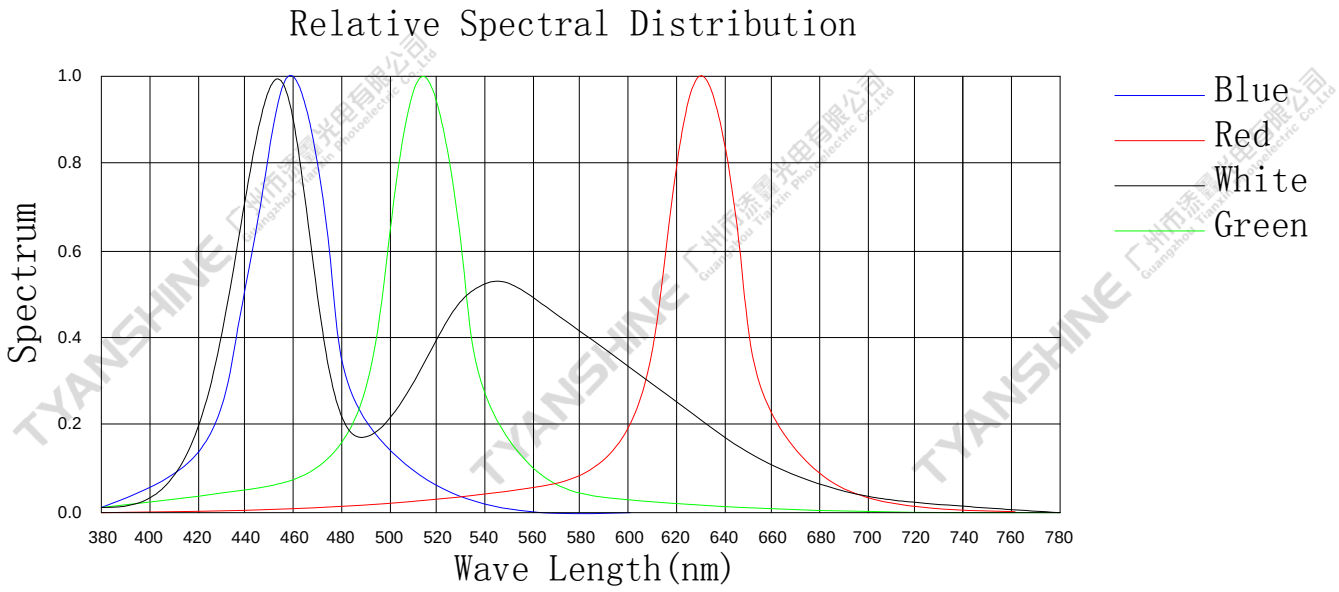


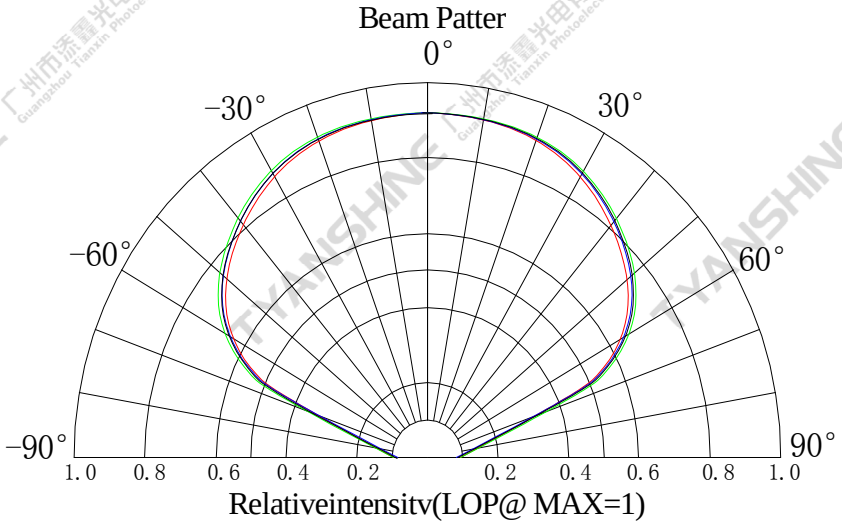
Temperature VS. Forward Voltage ($IF_{(RGB)}$=350mA,$IF_{(W)}$=700mA)



Temperature VS. Relative Luminous FLux ($IF_{(RGB)}$=350mA,$IF_{(W)}$=700mA)







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°.