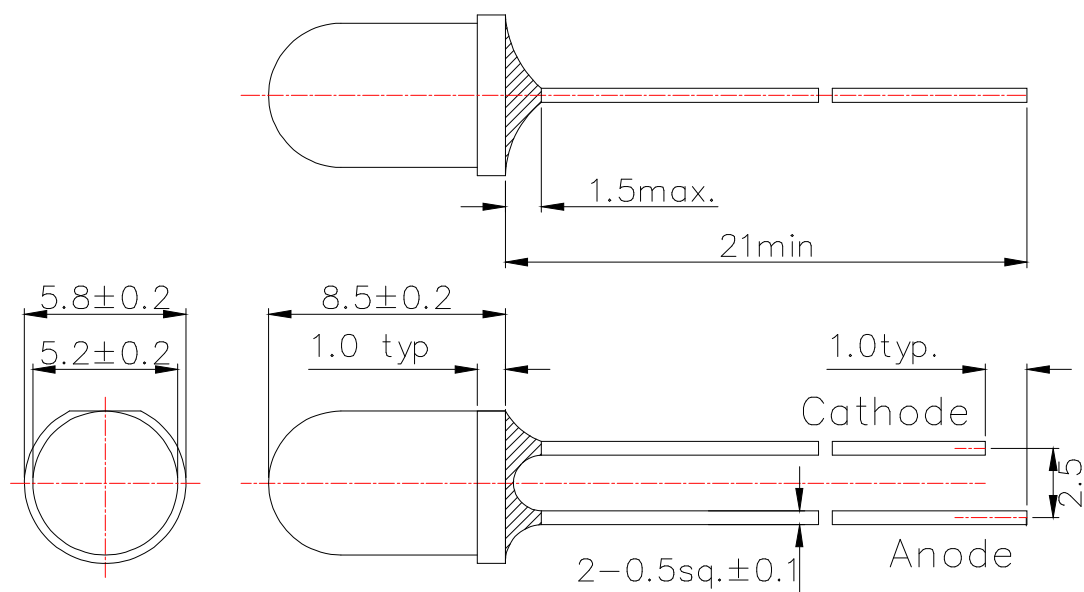


**epitex****PRELIMINARY**

## L470R-02

Super Bright Blue LED Lamp

### Outline and Internal Circuit



(Unit : mm)

### Features

- Chip Material : InGaN
- Chip Dimension : 350um \* 350um
- Number of Chips : 1pce
- Peak Wavelength : 470nm typ.
- Package Type :  $\phi 5$ mm clear molding
- Lead Frame : Soldered (Lead Free)
- Lens : UV Resin

### Application

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

Item	Symbol	Ratings	Unit
Power Dissipation	PD	200	mW
Forward Current	IF	50	mA
Pulse Forward Current	IFP	100	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthjs	180	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	Topr	-20 ~ +100	°C
Storage Temperature	Tstg	-20 ~ +100	°C

‡Pulse Forward Current condition : Duty 1% and Pulse Width=10us.

‡Soldering condition : Refer to technical support information on the website.

### Optical and Electrical Characteristics (Tc=25°C)

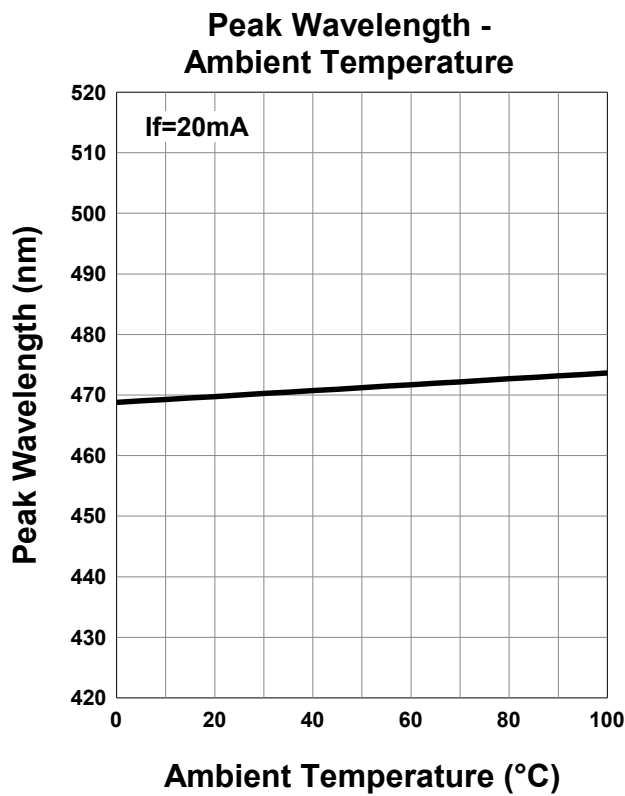
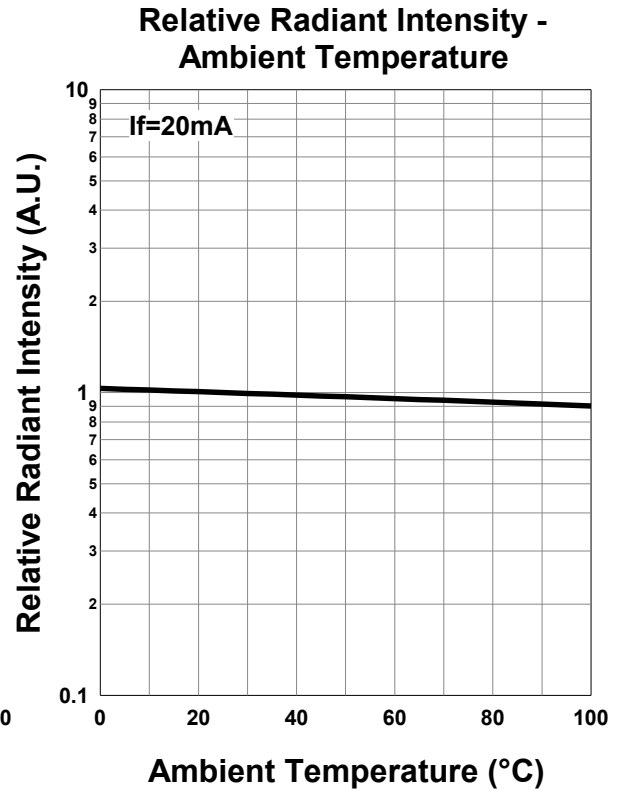
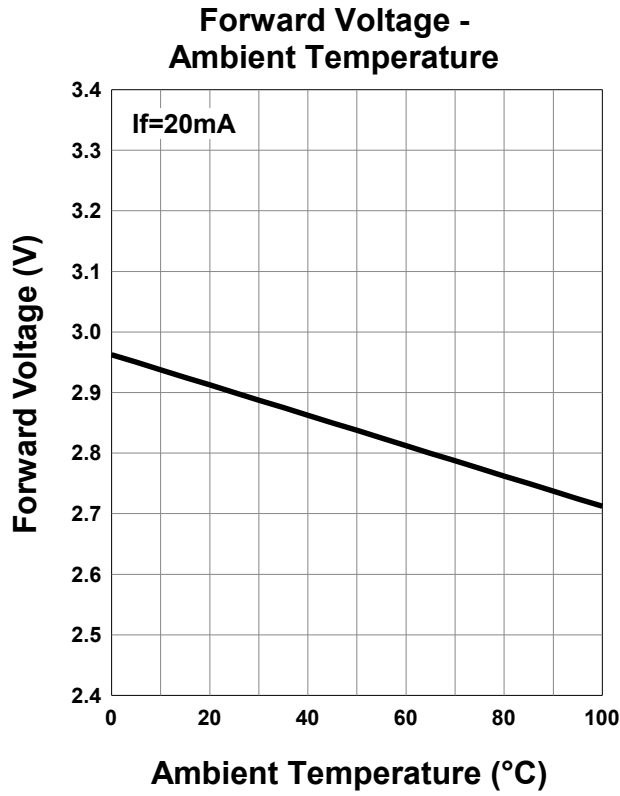
(\*: 100% testing, \*\*: reference value)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	VF		2.9	4.0	V	IF=20mA*
	VFP		3.7			IFP=100mA**
Reverse Current	IR			10	uA	VR=5V*
Total Radiated Power	PO	16	23		mW	IF=20mA*
			83			IFP=100mA**
Radiant Intensity	IE		290		mW/sr	IF=20mA**
			1000			IFP=100mA**
Luminous Flux	ΦV		2000		mlm	IF=20mA**
Peak Wavelength	λp	460		480	nm	IF=20mA*
Dominant Wavelength	λD		474		nm	IF=20mA**
Half Width	Δλ		24		nm	IF=20mA**
Viewing Half Angle	θ1/2		±4		deg.	IF=20mA**
Rise Time	tr		15		ns	IF=20mA**
Fall Time	tf		20		ns	IF=20mA**

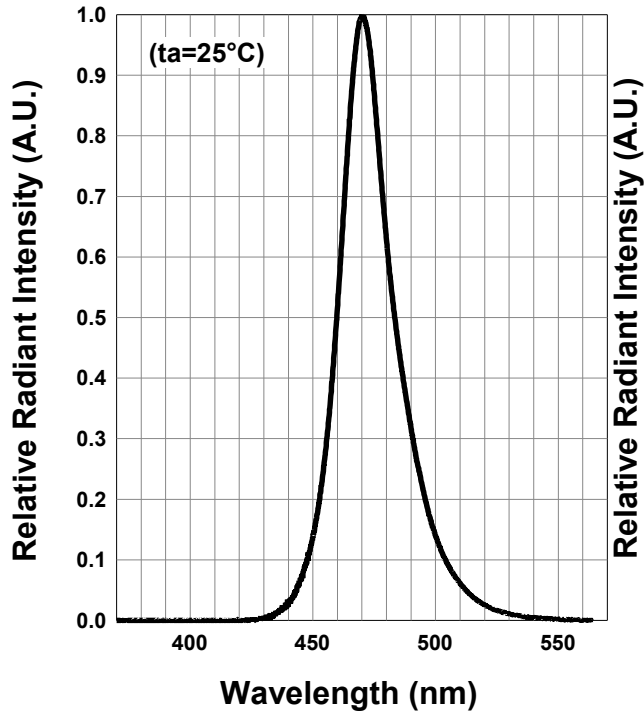
‡ Radiated Power is measured by S3584-08.

‡ Radiant Intensity is measured by CIE127-2007 Condition B.

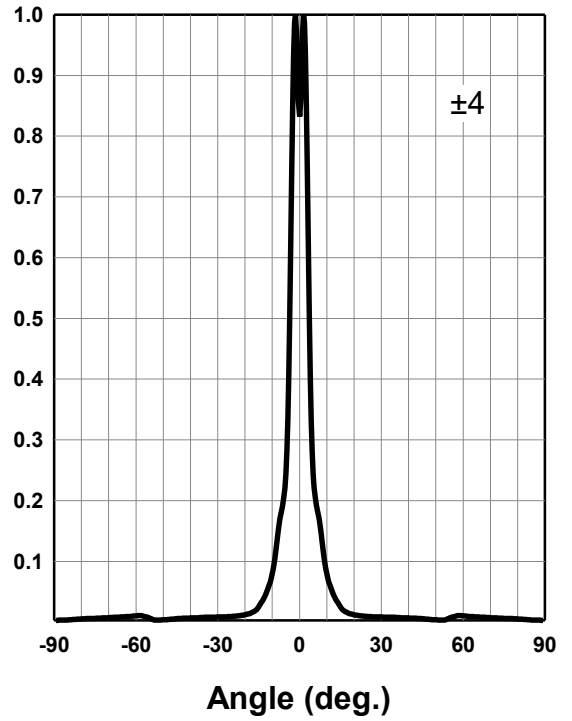




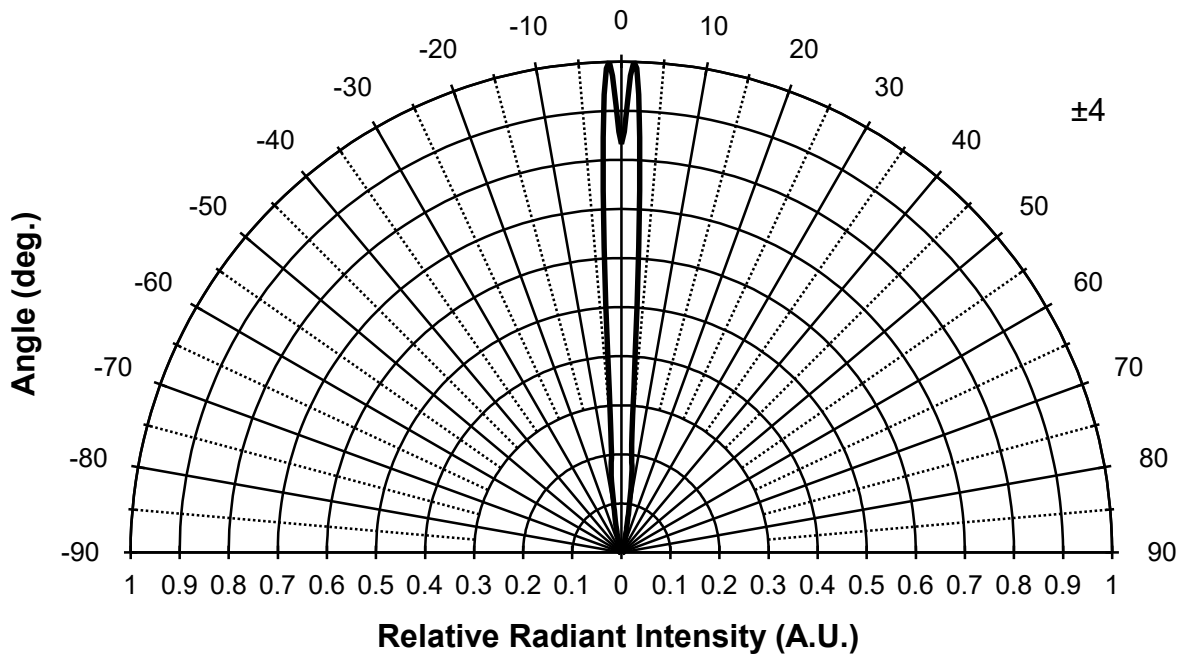
Relative Spectral Emission



Radiation Characteristics



Radiation Characteristics



## Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements.

Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

## Technical Support Information

<https://www.ushio.co.jp/en/led/technology/index.html>



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