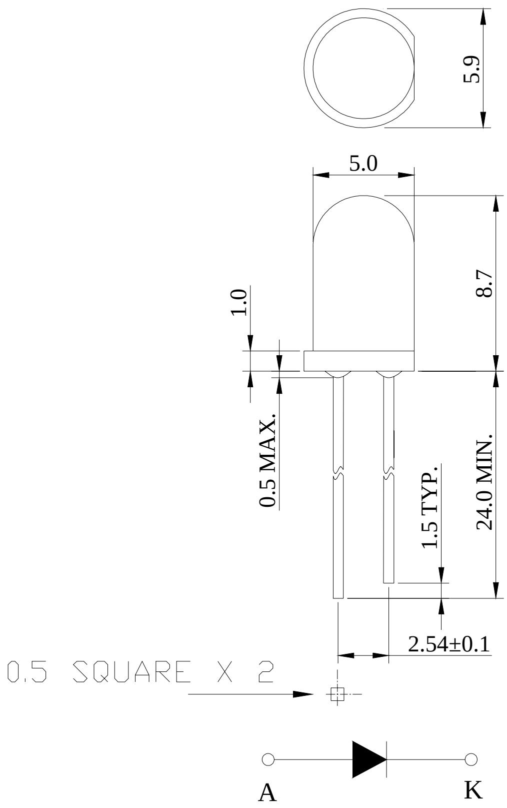
Description

This white lamp is made with InGaN/Sapphire chip and water clear epoxy resin.



Notes:

1. All dimensions are in mm.
2. Tolerance is ± 0.25mm unless otherwise noted.

Description

Part No.	LED Chip		Lens Color
	Material	Emitting Color	
L500WC8-L-15	InGaN/Sapphire	White	Water clear

Absolute Maximum Ratings at Ta=25℃

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	120	mW
Reverse Voltage	V_R	5	V
D.C. Forward Current	If	30	mA
Reverse (Leakage) Current	Ir	50	μ A
Peak Current(1/10Duty Cycle,0.1ms Pulse Width.)	If(Peak)	100	mA
Operating Temperature Range	Topr	-25 to +85	℃
Storage Temperature Range	Tstg	-40 to +100	℃
Soldering Temperature(1.6mm from body)	Tsol	Dip Soldering : 260℃ for 5 sec. Hand Soldering : 350℃ for 3 sec.	
Electrostatic discharge	ESD	6000	V

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	8000	15000		mcd
Forward Voltage	Vf	If=20mA		3.2	4.0	V
CIE Chromaticity Coordinates:X Axis	X	If=20mA		0.31		
CIE Chromaticity Coordinates:Y Axis	Y	If=20mA		0.30		
Reverse (Leakage) Current	Ir	Vr=5V			50	μA
Viewing Angle	2 θ 1/2	If=20mA		15		deg

Notes:1. The datas tested by IS tester.

2. Customer’s special requirements are also welcome.

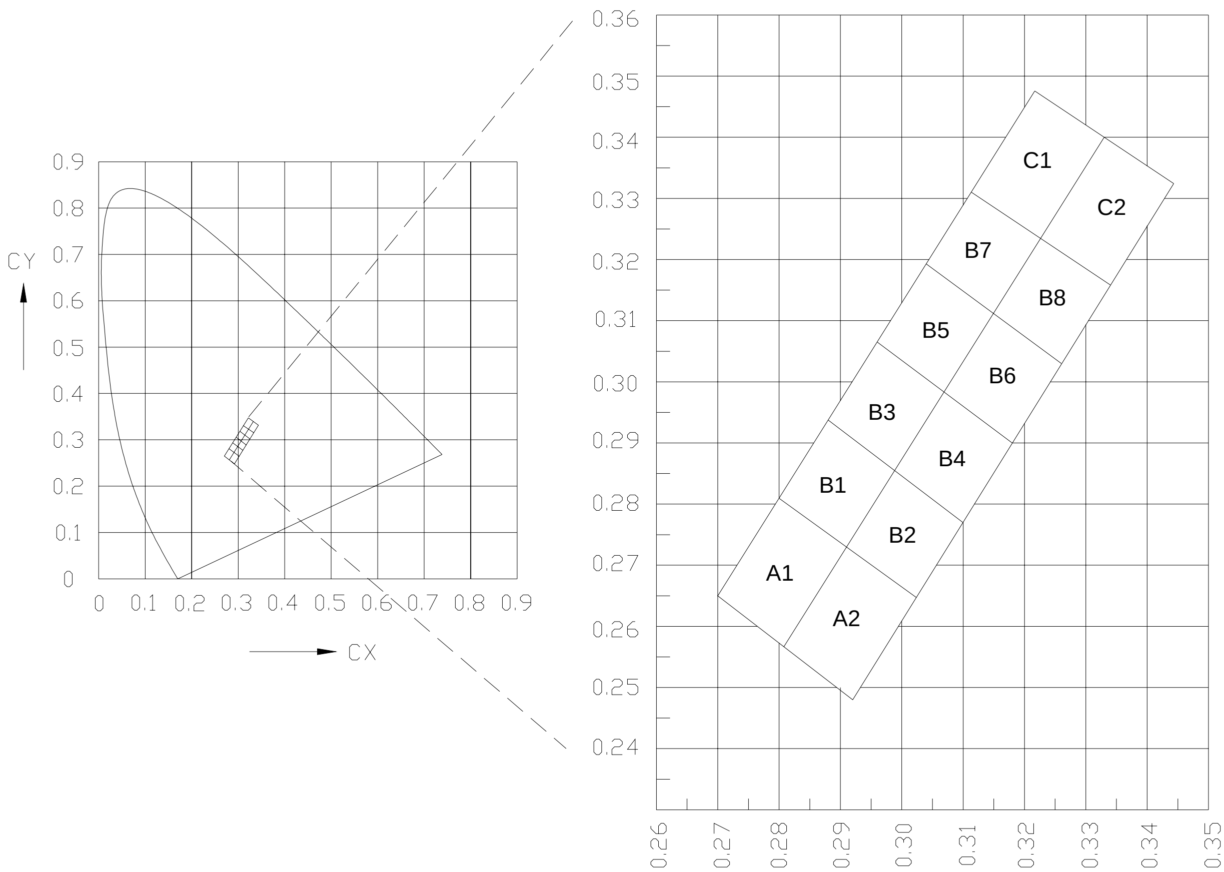
Chromaticity Coordinates Specifications for Bin Grading:

COLOR RANKS(IF=20Ma.Ta=25℃)

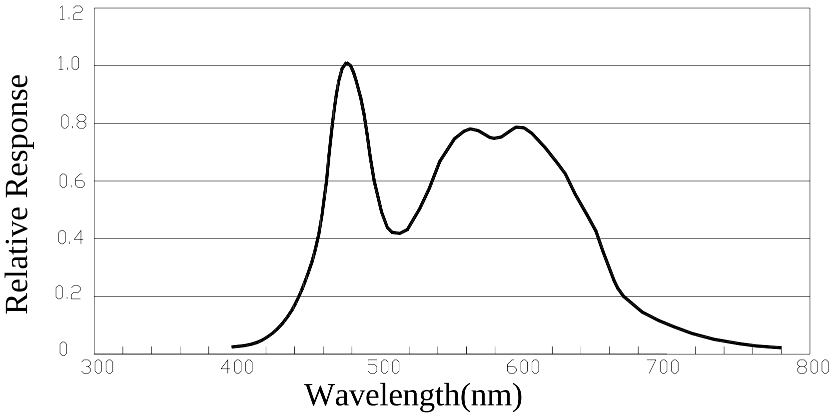
BiN	RANK					BiN	RANK				
A1	X	0.27	0.28	0.291	0.281	B5	X	0.296	0.304	0.315	0.307
	Y	0.265	0.282	0.273	0.256		Y	0.307	0.319	0.311	0.298
A2	X	0.281	0.291	0.302	0.292	B6	X	0.307	0.315	0.326	0.318
	Y	0.256	0.273	0.265	0.248		Y	0.298	0.311	0.303	0.29
B1	X	0.28	0.288	0.299	0.291	B7	X	0.304	0.312	0.323	0.315
	Y	0.282	0.294	0.286	0.273		Y	0.319	0.331	0.323	0.311
B2	X	0.291	0.299	0.31	0.302	B8	X	0.315	0.323	0.334	0.326
	Y	0.273	0.286	0.277	0.265		Y	0.311	0.323	0.315	0.303
B3	X	0.288	0.296	0.307	0.299	C1	X	0.312	0.322	0.333	0.323
	Y	0.294	0.307	0.298	0.286		Y	0.331	0.348	0.34	0.323
B4	X	0.299	0.307	0.318	0.31	C2	X	0.323	0.333	0.344	0.334
	Y	0.286	0.298	0.29	0.277		Y	0.323	0.34	0.332	0.315

Notes:X.Y Tolereanceeach Bin limit is±0.01.

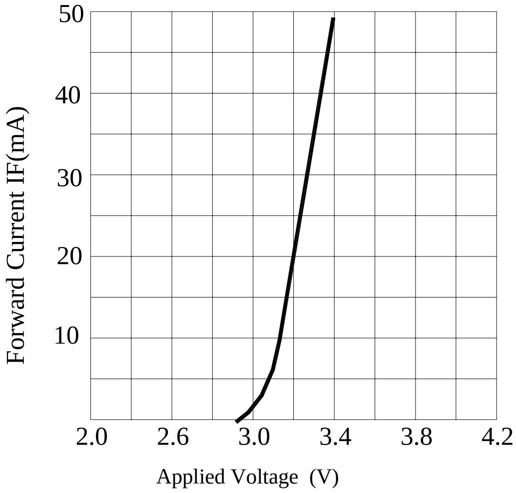
Chromaticity Coordinates & Bin grading diabram:



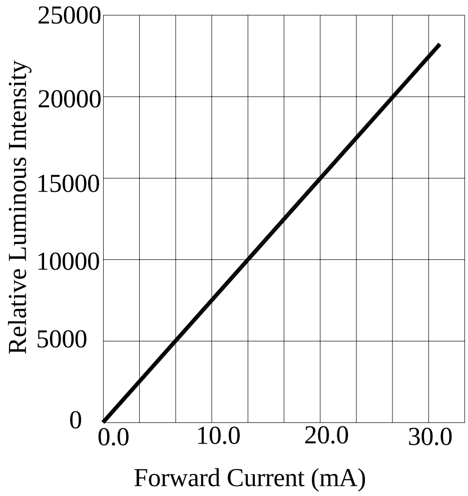
Typical Electrical / Optical Characteristics Curves :



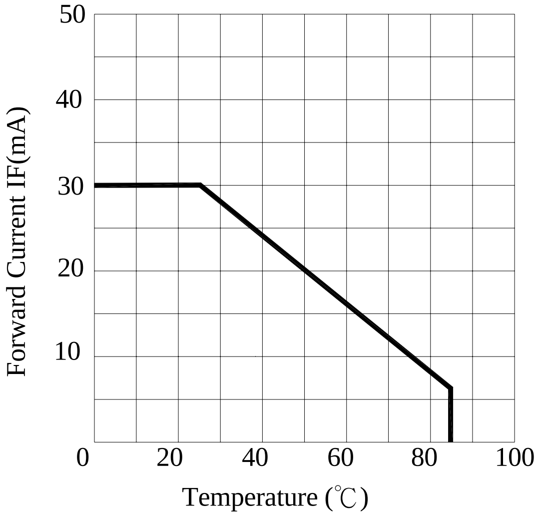
WHITE LED SPECTRUM VS. WAVELENGTH



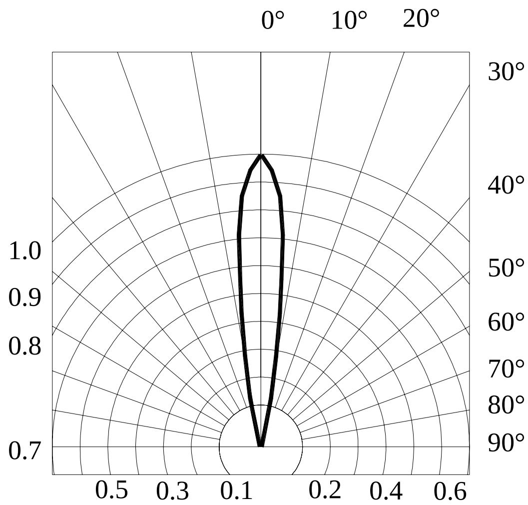
FORWARD CURRENT VS.APPLIED VOLTAGE



FORWARD CURRENT VS. LUMINOUS INTENSITY



FORWARD CURRENT VS. AMBIENT TEMPERATURE



RADIATION DIAGRAM