



Spec. No.	PS-LL-N305WW4-B0
Rev.	A

PRODUCT SPECIFICATION

Model No : CSLR-N305WW4-B0

Descriptions:	
■ LED Type	: Lighting LED Lamp
■ LED Package	: Round LED Lamp
■ Emitting Color	: Warm White
■ Viewing Angle	: 30°
■ No Stopper	



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

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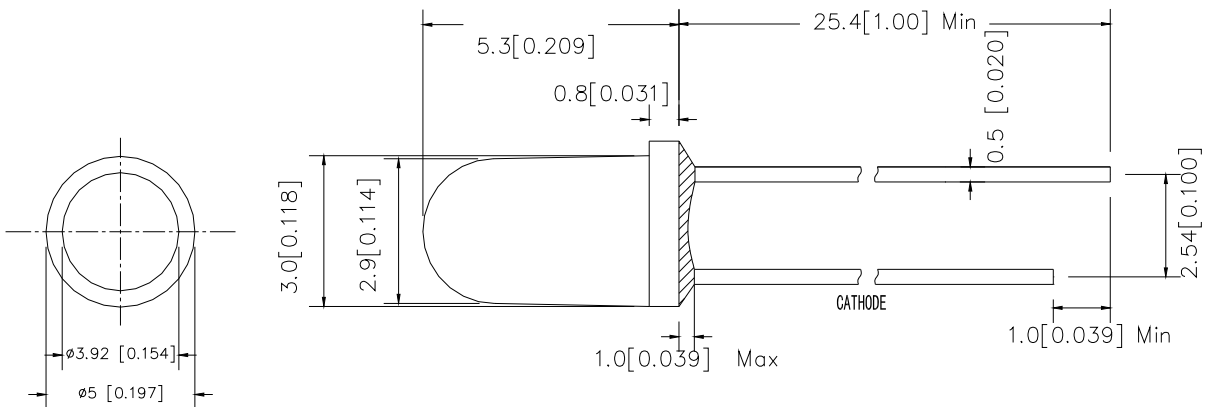
Features -

1. Low Power Consumption.
2. High Luminous Output
3. High Reliability and Solid Performance
4. Optimal Optical/Mechanical Design
5. Rohs Compliant

Device Selection Guide -

Part No.	Chip		LED Lens
	Material	Emitted Color	
CSLR-N305WW4-B0	InGaN	White	Water Transparent

Package Outline Dimensions -



* Tolerance : $\pm \frac{0.01}{0.25}$ Unit : $\pm \frac{\text{inch}}{\text{mm}}$



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■ Absolute Maximum Rating -

(Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	76	mW
Forward Current (DC)	IF	30	mA
Peak Forward Current *	IFP	100	mA
Reverse Voltage	VR	5	V
Operating Temp.	Topr	-30 ~ +80	°C
Storage Temp.	Tstg	-40 ~ +100	°C
Lead Soldering Temperature	Tsol	Max. 260°C for 5 sec Max. (3mm from the epoxy body)	

* Pulse width ≤ 0.1 msec. duty $\leq 1/10$

■ Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage	VF	-----	3.2	3.8	V	IF=20mA
Luminous Intensity	Iv	1800	3500	-----	mcd	
Chromaticity	X	-----	0.45	-----		
Coordination	Y	-----	0.41	-----		
Viewing Angle	2θ 1/2	-----	30	-----	deg	
Reverse Current	IR	-----	-----	50	μA	VR=5V



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■ Luminous Intensity Rank Limits (IF = 20mA)

unit : mcd

Part No. Code	CSLR-N305WW4-B0	
	min.	max.
Q	1800	2300
R	2300	3000
S	3000	3900
T	3900	5100
U	5100	6600

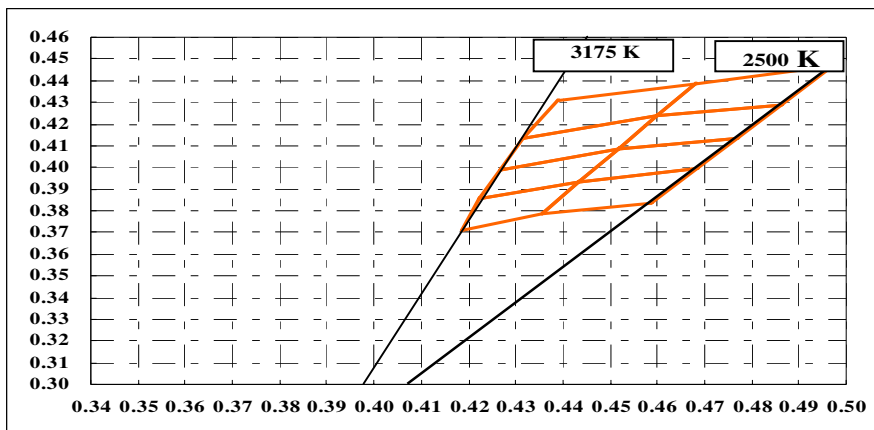
■ Forward Voltage Rank Limits(IF=20mA)

unit : V

Part No. Code	CSLR-N305WW4-B0	
	min.	max.
H	2.8	3.0
J	3.0	3.2
K	3.2	3.4
L	3.4	3.6
M	3.6	3.8

■ Color Rank Limits (IF = 20mA)

L1					L5				
X	0.4314	0.4390	0.4680	0.4601	X	0.4601	0.4680	0.4970	0.4863
Y	0.4135	0.4310	0.4385	0.4238	Y	0.4238	0.4385	0.4466	0.4290
L2					L6				
X	0.4267	0.4314	0.4601	0.4519	X	0.4519	0.4601	0.4863	0.4770
Y	0.3986	0.4135	0.4238	0.4086	Y	0.4086	0.4238	0.4290	0.4137
L3					L7				
X	0.4222	0.4267	0.4519	0.4434	X	0.4434	0.4519	0.4770	0.4683
Y	0.3853	0.3986	0.4086	0.3930	Y	0.3930	0.4086	0.4137	0.3995
L4					L8				
X	0.4186	0.4222	0.4434	0.4355	X	0.4355	0.4434	0.4683	0.4588
Y	0.3709	0.3853	0.3930	0.3785	Y	0.3785	0.3930	0.3995	0.3838



Notes:

1. Tolerance of measurement of luminous intensity :±15%
2. Tolerance of measurement of Color Coordinates :±0.01
3. Tolerance of measurement of forward voltage :±0.05v
4. All data are measured by CSC's test equipment.
5. One delivery will include several color rank, VF rank and Iv ranks of the products.
6. The quantity-ratio of the ranks is decided by CSC.
7. Please confirm with CSC salesman,if your request different form standard specification.

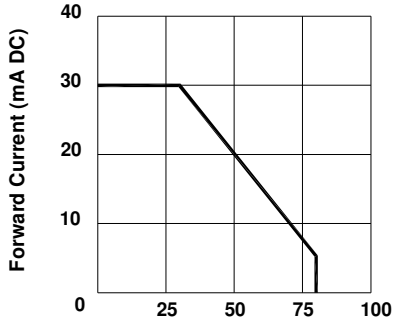


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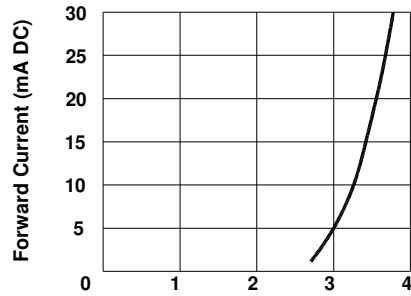
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Typical Electrical / Optical Characteristics Curves -

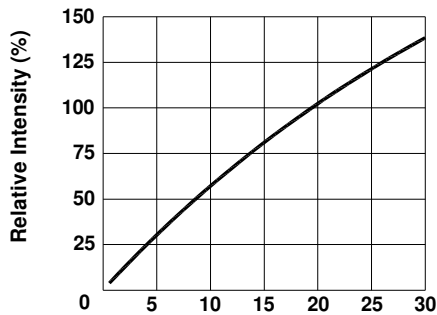
(Ta = 25°C Unless Otherwise Noted)



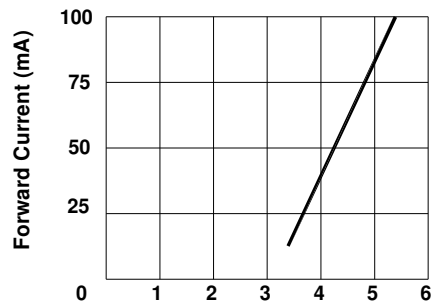
Ambient Temperature Ta (°C)
**Fig 1. Forward Current
Vs. Ambient Temperature**



Forward Voltage VF (V)
**Fig 2. Forward Current
Vs. Forward Voltage**



Forward Current IF (mA DC)
**Fig 3. Relative Intensity
Vs. Forward Current**



Forward Voltage (V)
**Fig 4. Peak Forward Voltage
Vs. Forward Current
(100us test pulse, 1% duty cycle)**

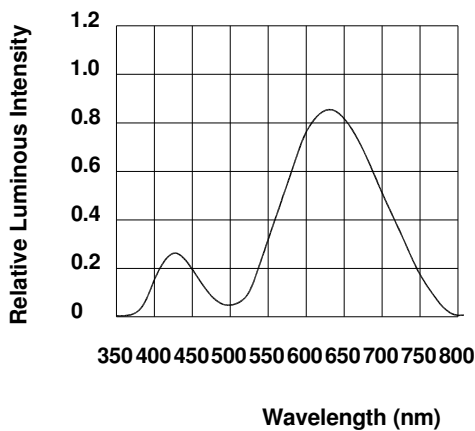


Fig 5. Relative Intensity Vs. Wavelength

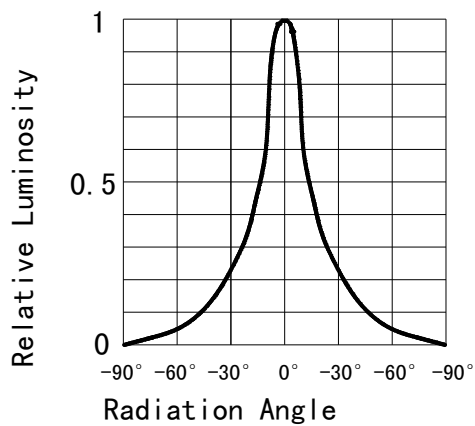


Fig 6. Relative Luminous Intensity vs. Radiation Angle

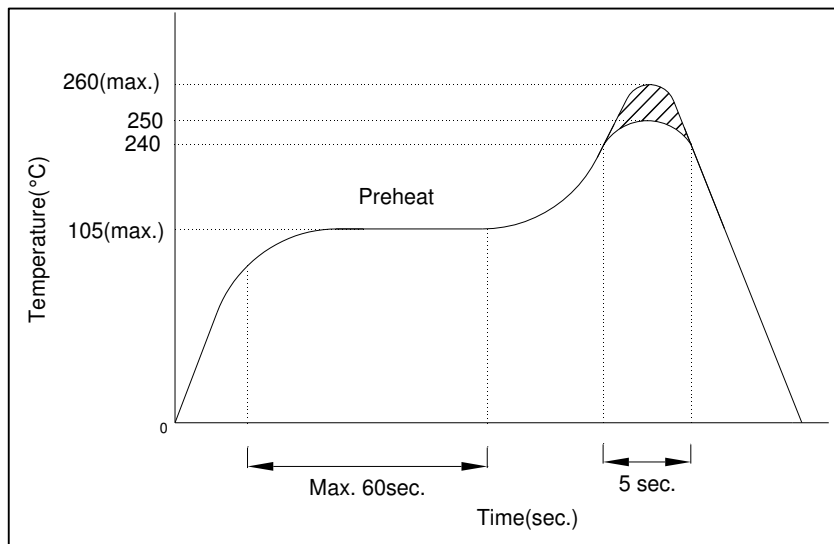


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■ Precautions For Use -

1. Recommended Soldering conditions

Wave Soldering



2. Soldering Iron

Basic SPEC. is ≤ 5 sec. When 260°C . If temperature is higher, time should be shorter ($+10^{\circ}\text{C} \rightarrow -1$ sec.). Power dissipation of iron should be smaller than 15W, and temperature should be controllable. Surface temperature of the device should be under 230°C .

3. Static Electricity

- a. Static electricity or surge voltage damages LEDs..

It is recommended that a wrist band or an anti-electrostatic glove be used when handling the LEDs.

- b. All devices, equipment and machinery must be properly grounded. It is recommended that measures be taken against surge voltage to the equipment that mounts the LEDs.

Note: The specifications are subject to change without notice. Please contact us for updated information.