LUCKY LIGHT

LL-304WC2E-W2-2AE

DATA SHEET

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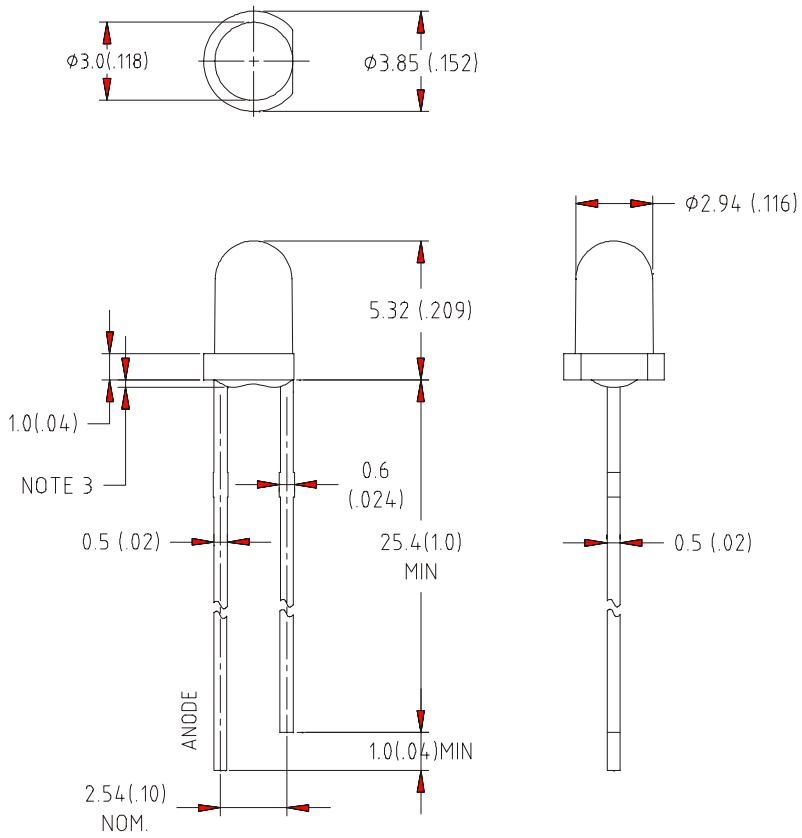
Features

- High intensity
- Standard T-1 diameter package
- Wide viewing angle
- General purpose leads
- Reliable and rugged

Package Dimension:



Part NO.	Lens Color	Source Color
LL-304WC2E-W2-2AE	Water Clear	White

Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(.010")mm unless otherwise noted.
3. Protruded resin under flange is 1.0mm(.04") max
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice
6. Caution in ESD:
   Static Electricity and surge damages the LED. It is recommend to use a wrist band or anti-electrostatic glove when handling the LED.All devices, equipment and machinery must be properly grounded.

Absolute Maximum Ratings at Ta=25℃

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	35	mA
Derating Linear From 50℃	0.4	mA/℃
Reverse Voltage	5	V
Operating Temperature Range	-40℃ to +80℃	
Storage Temperature Range	-40℃ to +80℃	
Lead Soldering Temperature [4mm(.157") From Body]	260℃ for 5 Seconds	

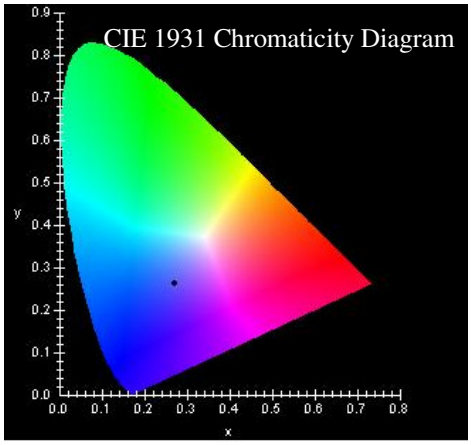
Electrical Optical Characteristics at Ta=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	1600	2500	---	mcd	I_f=20mA (Note 1)
Viewing Angle	$2\theta_{1/2}$	---	40	---	Deg	(Note 2)
$x=\frac{X}{X+Y+Z}=\frac{Red}{Red+Green+Blue}$	x	---	0.31	---		I_F=20mA (Note 3)
$y=\frac{Y}{X+Y+Z}=\frac{Green}{Red+Green+Blue}$	y	---	0.32	---		I_F=20mA (Note 3)
Forward Voltage	V_F	---	3.5	4.0	V	I_F=20mA
Reverse Current	I_R	---	---	100	μA	V_R=5V

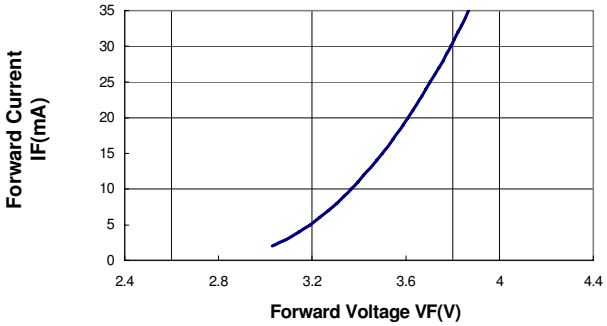
Notes:

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. It use many parameters that correspond to the CIE 1931 2°. X,Y, and Z are CIE 1931 2°values of Red, Green and Blue content of the measurement.

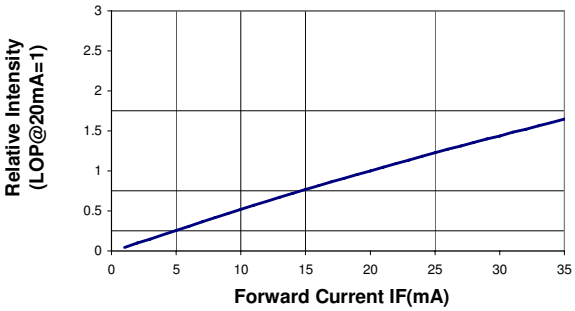
Typical Electrical / Optical Characteristics Curves
(25℃ Ambient Temperature Unless Otherwise Noted)



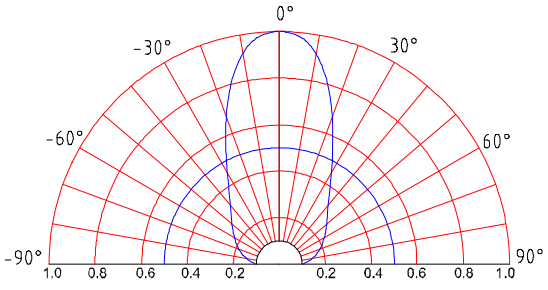
Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



Beam Patter



Relative Intensity (LOP @ MAX=1)