



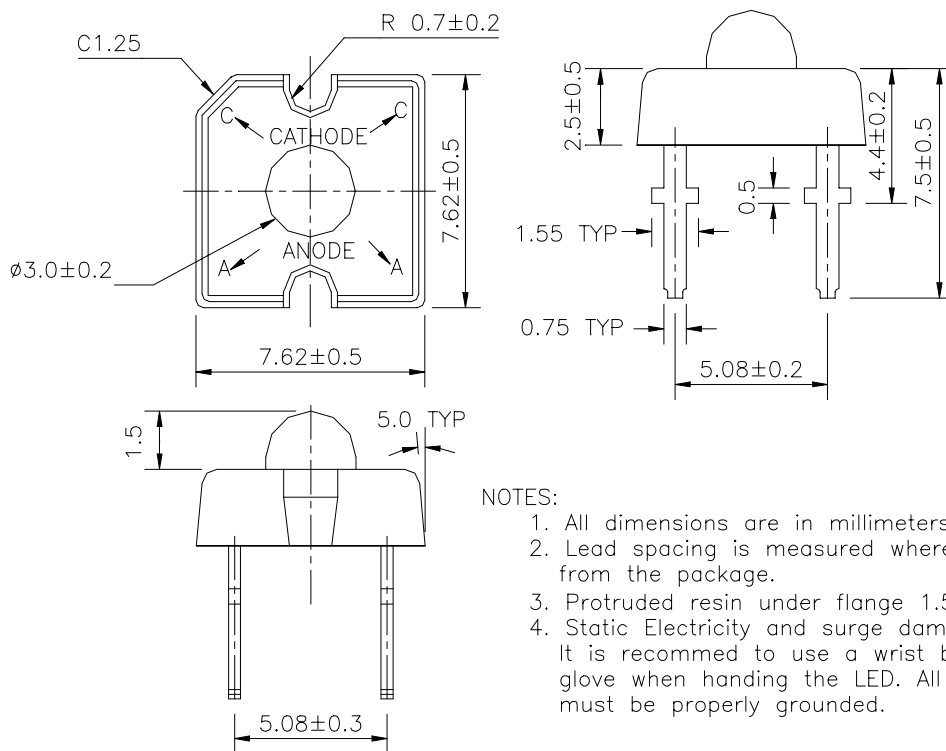
**White Power LED**

**PART NO: 30-01UWC/1B**

Device Number: DLE-300-014 REV: 1.1

ECN: \_\_\_\_\_ Page: 1/5

**■ Package Dimensions**



**NOTES:**

1. All dimensions are in millimeters.
  2. Lead spacing is measured where the leads emerge from the package.
  3. Protruded resin under flange 1.5mm (0.59") Max.
  4. Static Electricity and surge damage the LED.
- It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machine must be properly grounded.

**■ Notes:** All dimensions are in millimeters.

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**<http://www.everlight.com>**



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ECN: \_\_\_\_\_ Page: 2/5

## ■ Features

- Fluorescence Type
- High Luminous Intensity
- High Efficiency
- Emission Color:  $x=0.29, y=0.30$

## ■ Descriptions

The white LED which was fabricated using a blue LED and a phosphor, and the phosphor is excited by blue light and emits yellow fluorescence. The mixture of blue light and yellow light results in a white emission.

## ■ Applications

- OA Equipment
- Backlighting of LCD
- Automotive Equipment
- Replacement of Conventional Light Bulbs and Fluorescent Lamps



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ECN: \_\_\_\_\_ Page: 3/5

■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Units
Forward Current	I <sub>F</sub>	30	mA
Pulse Forward Current <sup>*1</sup>	I <sub>FP</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	120	mW
Operating Temperature	T <sub>opr</sub>	-30 ~ +80	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C
Soldering Temperature <sup>*2</sup>	T <sub>sol</sub>	260	°C

\*1:I<sub>FP</sub> Conditions--Pulse Width ≤ 10msec and Duty ≤ 1/10.

\*2:Soldering time ≤ 5 seconds.

■ Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Units
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	--	3.6	4.0	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	--	--	10	μ A
Total Flux	Φ <sub>v</sub>	I <sub>F</sub> =20mA	520	780	--	mlm
Viewing Angle	2 θ 1/2	I <sub>F</sub> =20mA	--	50	--	deg
Chromaticity <sup>*1</sup>	x	I <sub>F</sub> =20mA	--	0.29	--	
	y		--	0.30	--	

\*The C.I.E. 1931 chromatically diagram.

\*The products are sensitive to static electricity and care must be fully taken when handling products.



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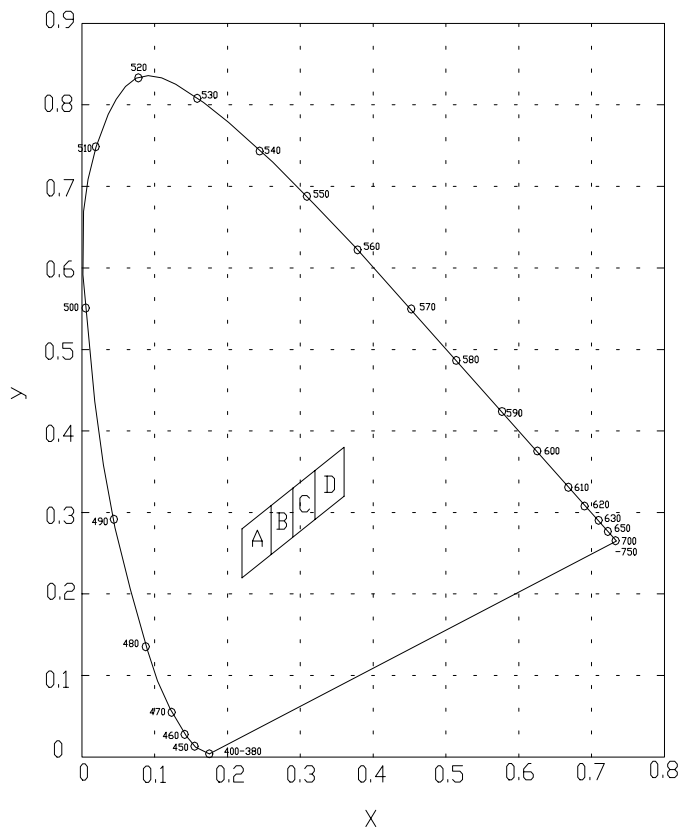
Device Number: DLE-300-014 REV: 1.1

ECN: \_\_\_\_\_ Page: 4/5

**■ Chromaticity Coordinates Specifications for Bin Grading**

Rank	Chromaticity Coordinates				
	A	x	0.220	0.220	0.260
	y	0.220	0.280	0.310	0.250
B	x	0.260	0.260	0.290	0.290
	y	0.250	0.310	0.330	0.270
C	x	0.290	0.290	0.320	0.320
	y	0.270	0.330	0.350	0.290
D	x	0.320	0.320	0.360	0.360
	y	0.290	0.350	0.380	0.320
* Tolerance	$x \pm 0.02$			$y \pm 0.02$	

**■ CIE Chromaticity Diagram**





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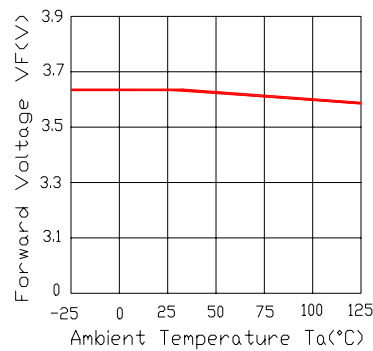
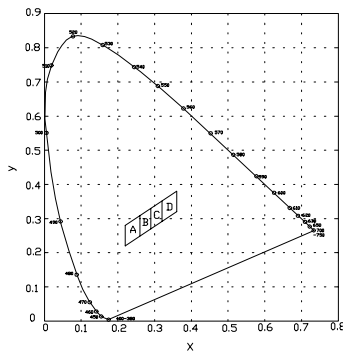
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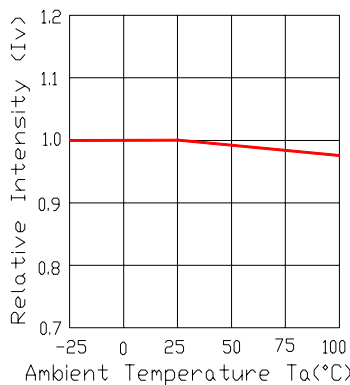
ECN: \_\_\_\_\_ Page: 5/5

### Typical Electro-Optical Characteristics Curves

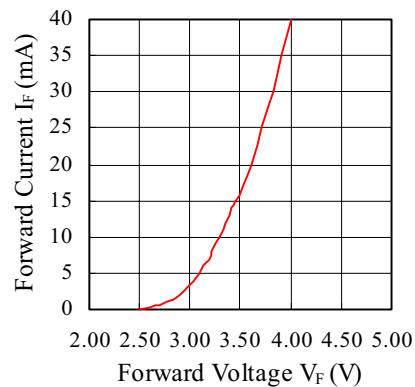
● Forward Current vs. Ambient Temperature ● Forward Voltage vs. Ambient Temperature



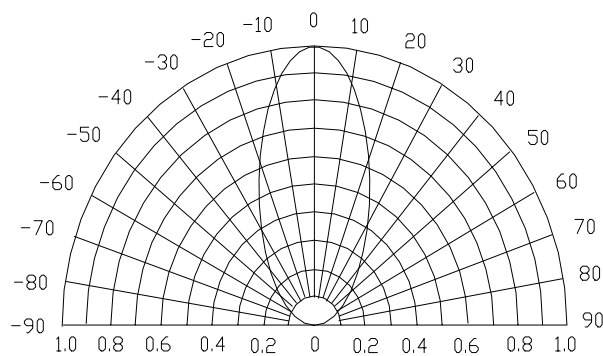
● Relative Intensity vs. Ambient Temperature



● Forward Current vs. Forward Voltage



● Directivity Radiation Angle: 50 degree (Typ.)



● Luminous Spectrum (T\_a=25°C)

