

# PRODUCT SPECIFICATION

**Model No.: FYL-48D4UWC1C**

Descriptions:
<ul style="list-style-type: none"> <li>■ Dice material: InGaN.</li> <li>■ Emitting Color: Super Bright Cool White.</li> <li>■ Device Outline: Φ4.8mm helmet type.</li> <li>■ Lens Type: Water clear.</li> </ul>



CUSTOMER APPROVED SIGNATURES	APPROVED BY	CHECKED BY	PREPARED BY

**NINGBO FORYARD OPTOELECTRONICS CO.,LTD.**

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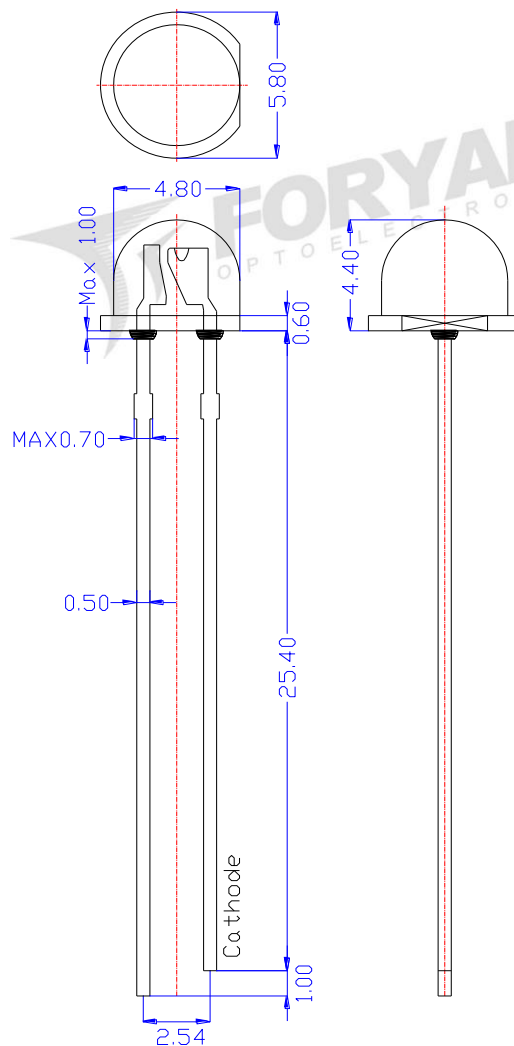
**E-mail:**Sales@foryard.com (General)

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**■ Features**

- 1.Low power consumption.
- 2.High efficiency.
- 3.General purpose leads.
- 4.High intensity.
- 5.RoHs compliant.

**■ Package configuration**



**Notes:**

1. All dimensions are millimeters (inches)
2. Tolerance is  $\pm 0.25\text{mm}$  (.010") unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
- 4.The drawing is different from the actual one, please refer to the sample.

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### ■ Absolute Maximum Ratings(Ta=25°C)

Parameter	MAX.	Unit
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	30	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +85°C	
Storage Temperature Range	-40°C to +100°C	
Lead Soldering Temperature[4mm(.157") From Body]	260°C for 5 Seconds	

### ■ Typical Electrical & Optical Characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_V$	1200	1800	3000	mcd	IF=20mA
Viewing Angle	$2\theta_{1/2}$	---	120	---	Deg	
Color temperature	CCT	6000	9500	---	---	
Chromaticity coordinates	X	0.32	0.285	---	---	
	Y	0.32	0.285	---	---	
Forward Voltage	$V_F$	2.6	3	3.4	V	VR=5V
Reverse Current	$I_R$	---	---	10	$\mu A$	

Note:

- 1.Luminous Intensity is based on the Foryard standards.
- 2.Pay attention about static for InGaN

#### ■ Luminous Intensity Guide (Unit: mcd) @IF=20mA

Code	W8	W9	W10	W11
Luminous Intensity(mcd)	1200~1500	1500~1800	1800~2200	2200~3000

Tolerance of measurement of luminous intensity is  $\pm 15\%$

#### ■ Forward Voltage Guide (Unit: V) @IF=20mA

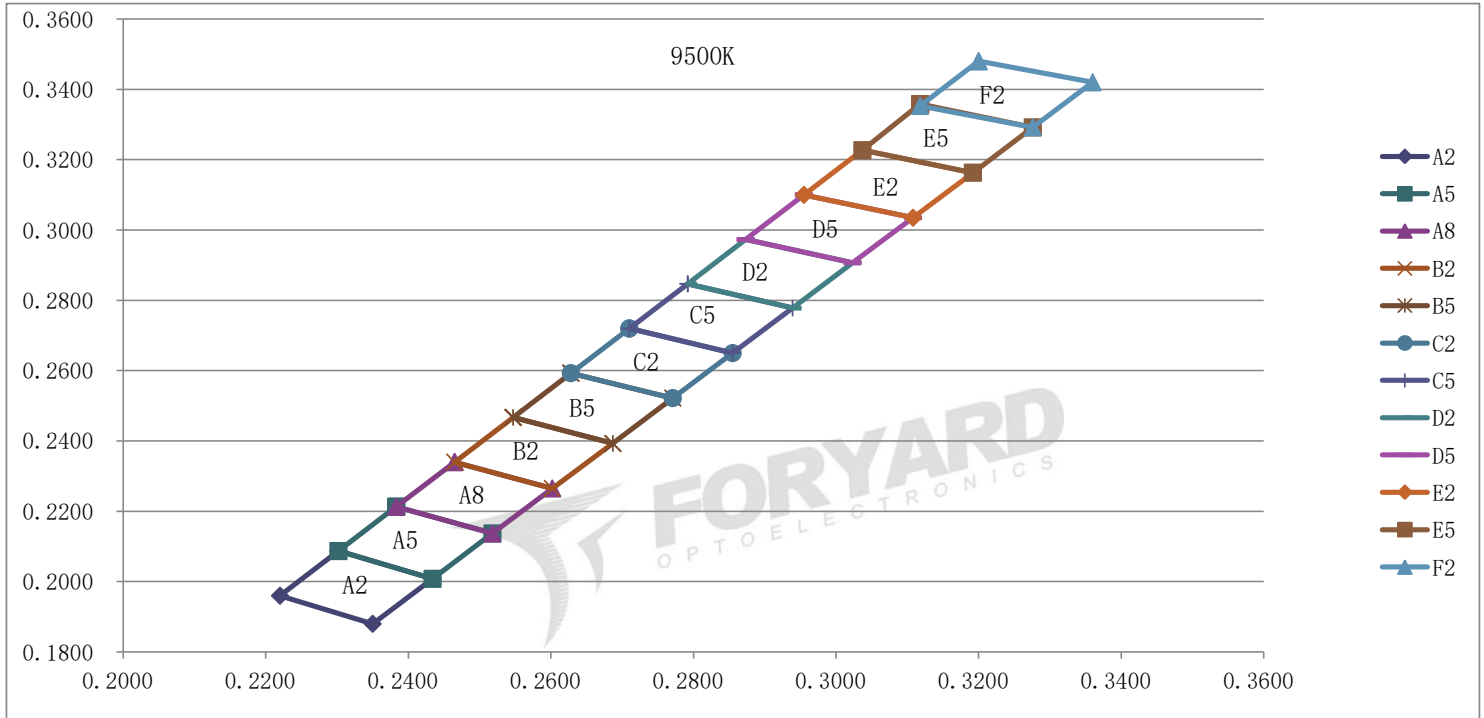
Code	V6	V7	V8	V9
Forward Voltage(V)	2.6~2.8	2.8~3.0	3.0~3.2	3.2~3.4

Tolerance of measurement of forward voltage is  $\pm 0.1V$

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**Chromaticity Coordinate Grade of White Chip-LED Products**

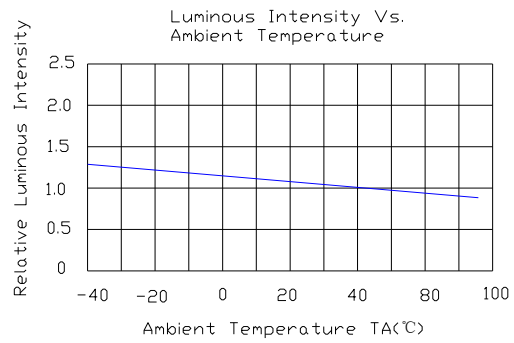
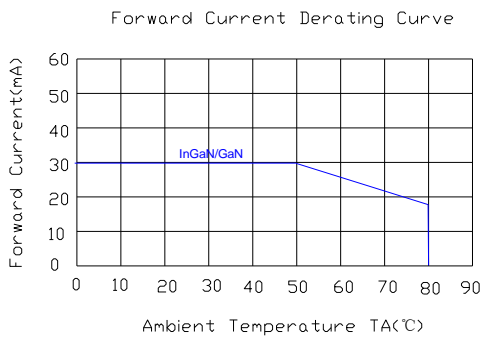
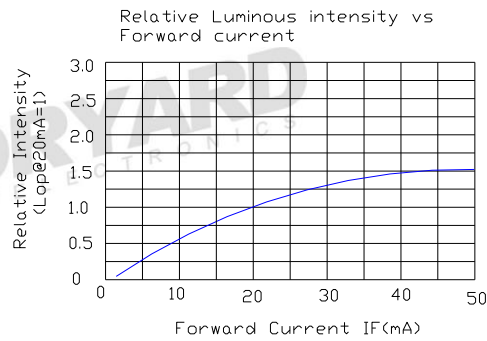
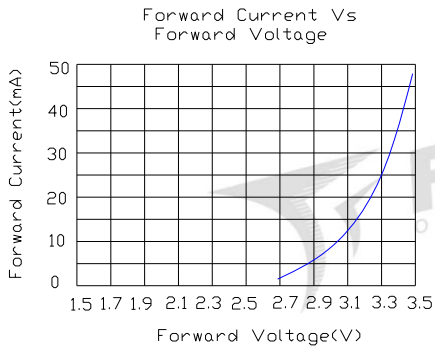
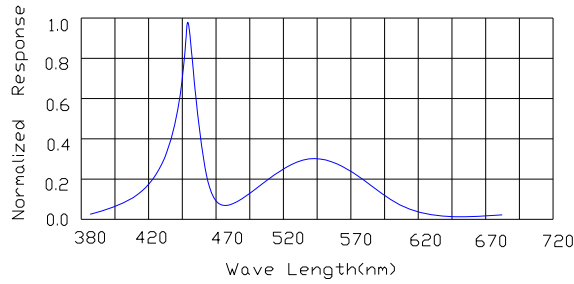
Test Condition: If=20mA, Ta=25°C



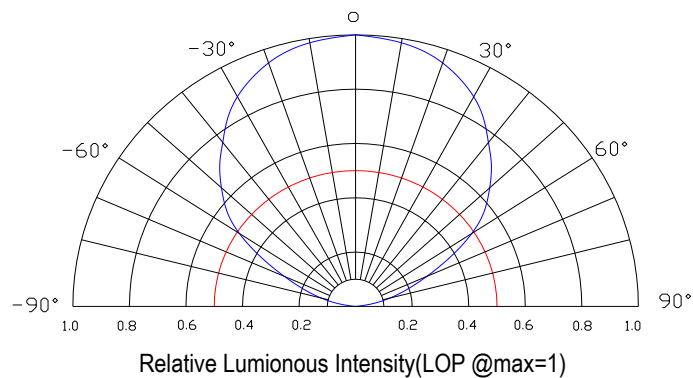
F2	X	0.3200	0.3360	0.3276	0.3118	E5	X	0.3118	0.3276	0.3192	0.3037
	Y	0.3480	0.3420	0.3292	0.3353		Y	0.3358	0.3292	0.3163	0.3227
E2	X	0.3037	0.3192	0.3108	0.2955	D5	X	0.2955	0.3108	0.3023	0.2873
	Y	0.3227	0.3163	0.3035	0.3100		Y	0.3100	0.3035	0.2907	0.2973
D2	X	0.2873	0.3023	0.2939	0.2792	C5	X	0.2792	0.2939	0.2855	0.2710
	Y	0.2973	0.2907	0.2778	0.2847		Y	0.2847	0.2778	0.2650	0.2720
C2	X	0.2710	0.2855	0.2771	0.2628	B5	X	0.2628	0.2771	0.2687	0.2547
	Y	0.2720	0.2650	0.2522	0.2593		Y	0.2593	0.2522	0.2393	0.2467
B2	X	0.2547	0.2687	0.2602	0.2465	A8	X	0.2465	0.2602	0.2518	0.2383
	Y	0.2467	0.2393	0.2265	0.2340		Y	0.2340	0.2265	0.2137	0.2213
A5	X	0.2383	0.2518	0.2434	0.2302	A2	X	0.2302	0.2434	0.2350	0.2220
	Y	0.2213	0.2137	0.2008	0.2087		Y	0.2087	0.2008	0.1880	0.1960

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**Typical Electrical/Optical Characteristics Curves(Ta=25°C Unless Otherwise Noted)**



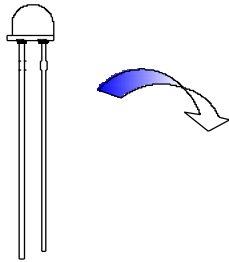
**Radiation pattern**



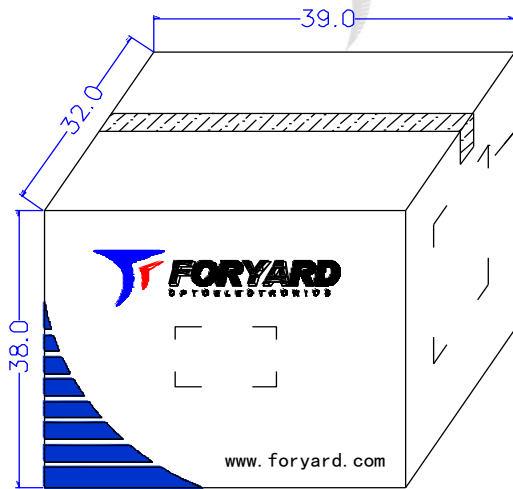
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Date / Rev.	2020.04.14 / A

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■ LAMP PACKING.

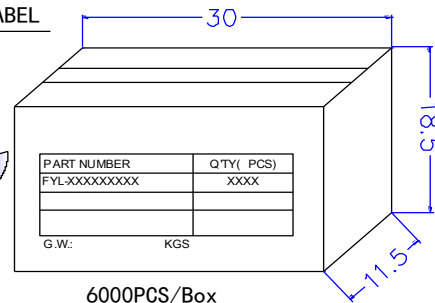


5mm 500PCS/Polybag

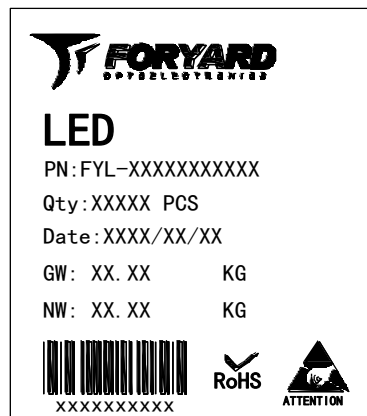


36000PCS/Carton

OUTSIDE LABEL



6000PCS/Box



OUTSIDE LABEL

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