

# PRODUCT SPECIFICATION

**Model No.: FYL-48D4UWC1A-UWW**

Descriptions:
<ul style="list-style-type: none"> <li>■ Dice material: InGaN.</li> <li>■ Emitting Color: Super Bright Warm 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.**

**Add:**No. 666 Jinghua Road, Hi-tech Park, Ningbo, Zhejiang, China

**Zip:**315103

**Tel:** 0086-574-87933652 87922206 87927870

**Fax:** 0086-574-87927917

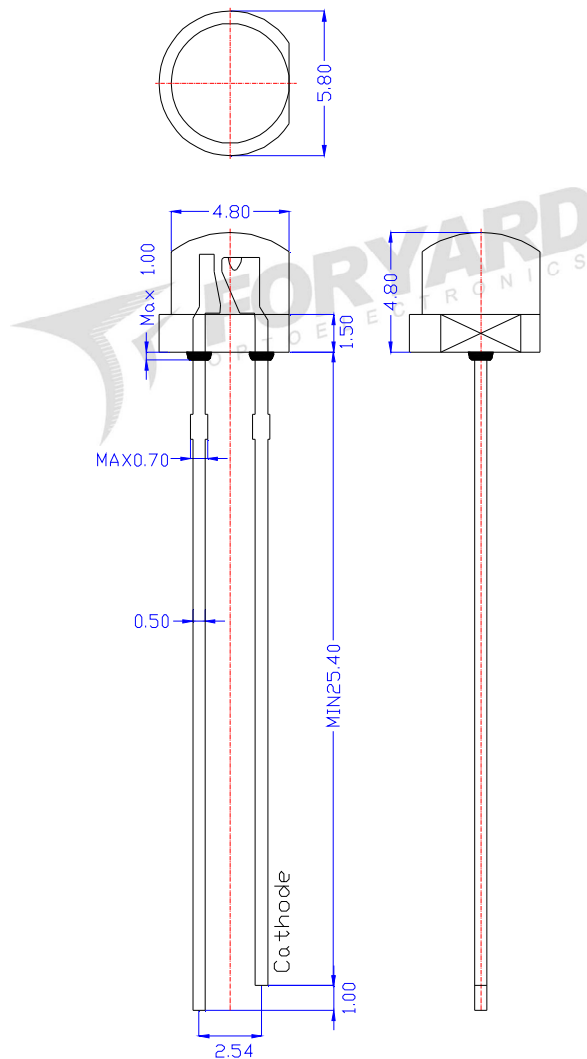
**E-mail:**Sales@foryard.com (General)

Model No.: FYL-48D4UWC1A-UWW

### ■ 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.

Model No.: FYL-48D4UWC1A-UWW

■ Absolute Maximun 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 Charcteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	1200	1800	3000	mcd	IF=20mA
Viewing Angle	2θ <sub>1/2</sub>	---	130	---	Deg	
Color temperature	CCT	3000	3500	4000	K	
Chromaticity coordinates	X	0.465	0.42	0.38	---	
	Y	0.465	0.415	0.38		
Forward Voltage	V <sub>F</sub>	2.6	3	3.4	V	
Reverse Current	I <sub>R</sub>	---	---	10	μA	VR=5V

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 ±15%

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

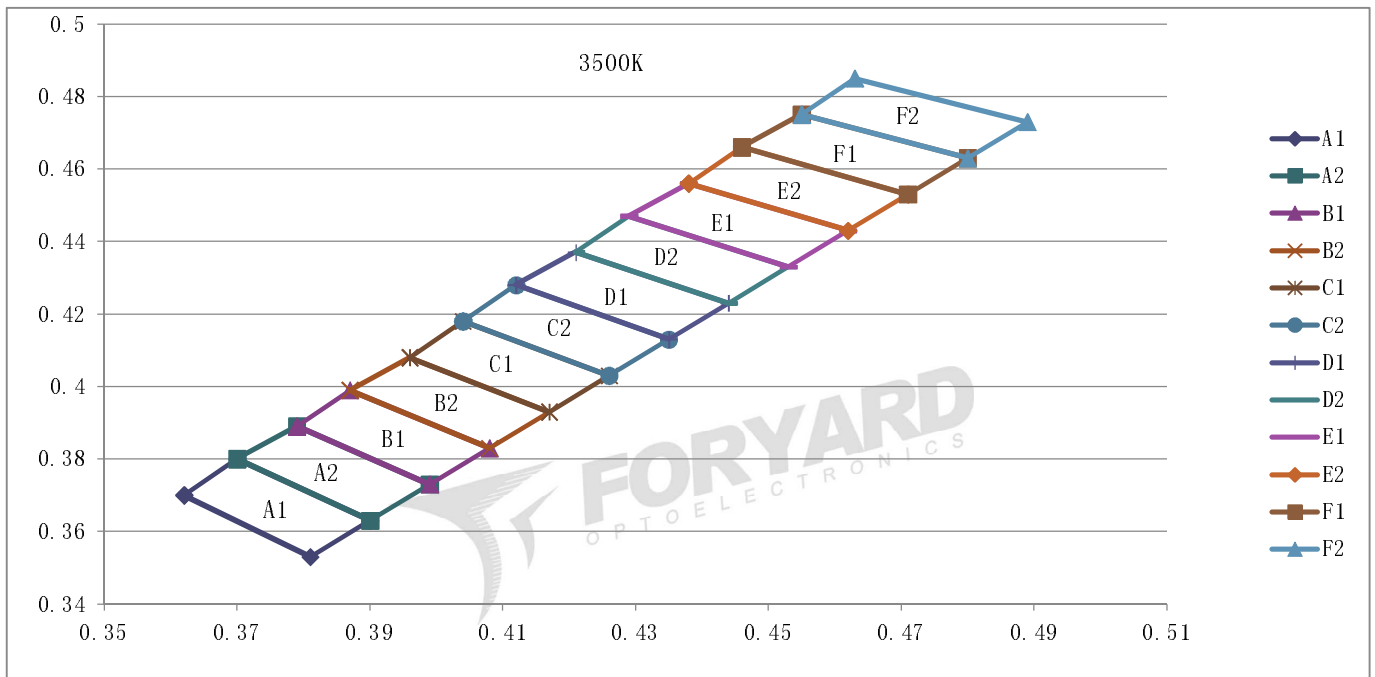
Code	V6	V7	V8	V9
Forward Voltage(V)	2.6~2.8	2.8~3.0	3.0~3.2	3.2~3.4

Tolerance of measurement of forward voltage is ±0.1V

**Model No.: FYL-48D4UWC1A-UWW**

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

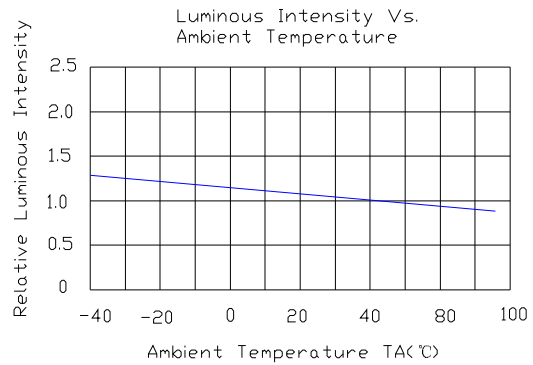
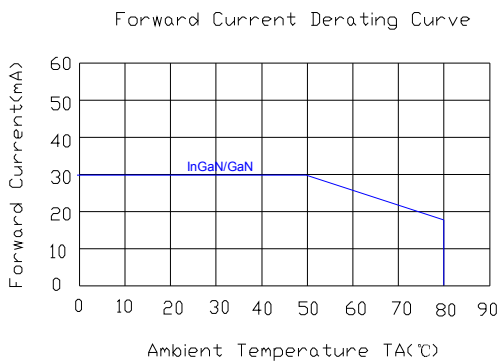
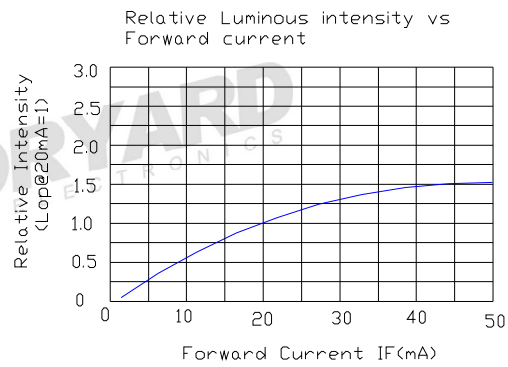
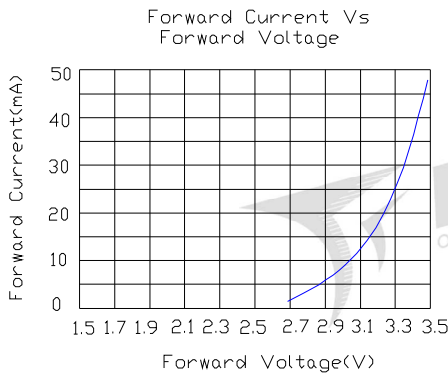
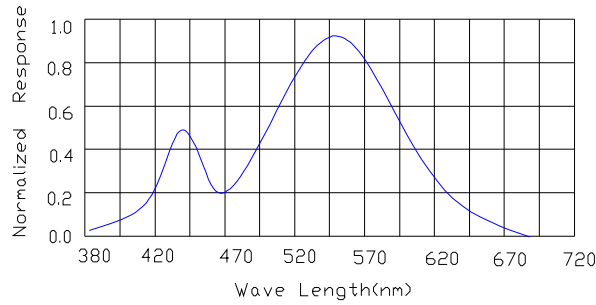
Test Condition: If=20mA, Ta=25°C



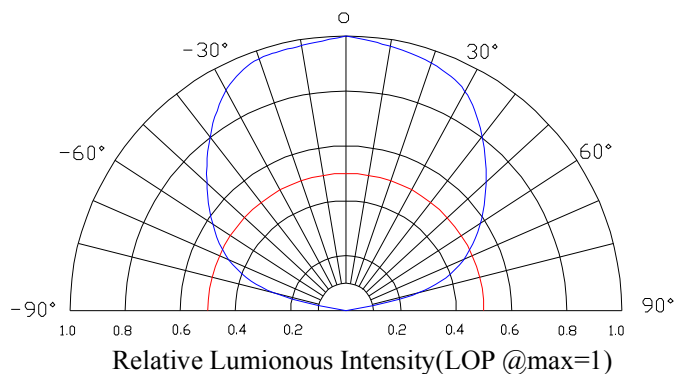
F1	X	0.4460	0.4550	0.4800	0.4710	F2	X	0.4550	0.4630	0.4890	0.4800
	Y	0.4660	0.4750	0.4630	0.4530		Y	0.4750	0.4850	0.4730	0.4630
E1	X	0.4290	0.4380	0.4620	0.4530	E2	X	0.4380	0.4460	0.4710	0.4620
	Y	0.4470	0.4560	0.4430	0.4330		Y	0.4560	0.4660	0.4530	0.4430
D1	X	0.4120	0.4210	0.4440	0.4350	D2	X	0.4210	0.4290	0.4530	0.4440
	Y	0.4280	0.4370	0.4230	0.4130		Y	0.4370	0.4470	0.4330	0.4230
C1	X	0.3960	0.4040	0.4260	0.4170	C2	X	0.4040	0.4120	0.4350	0.4260
	Y	0.4080	0.4180	0.4030	0.3930		Y	0.4180	0.4280	0.4130	0.4030
B1	X	0.3790	0.3870	0.4080	0.3990	B2	X	0.3870	0.3960	0.4170	0.4080
	Y	0.3890	0.3990	0.3830	0.3730		Y	0.3990	0.4080	0.3930	0.3830
A1	X	0.3620	0.3700	0.3900	0.3810	A2	X	0.3700	0.3790	0.3990	0.3900
	Y	0.3700	0.3800	0.3630	0.3530		Y	0.3800	0.3890	0.3730	0.3630

Model No.: FYL-48D4UWC1A-UWW

■ Typical Eletrical/Optical Characteristics Curves(Ta=25°C Unless Otherwise Noted)

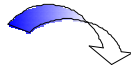


■ Radiation pattern

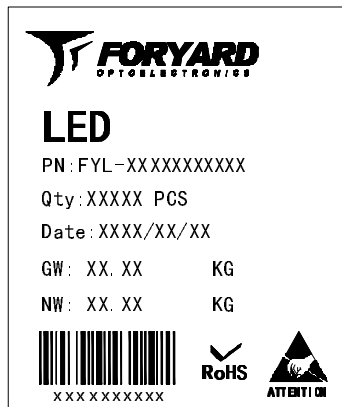
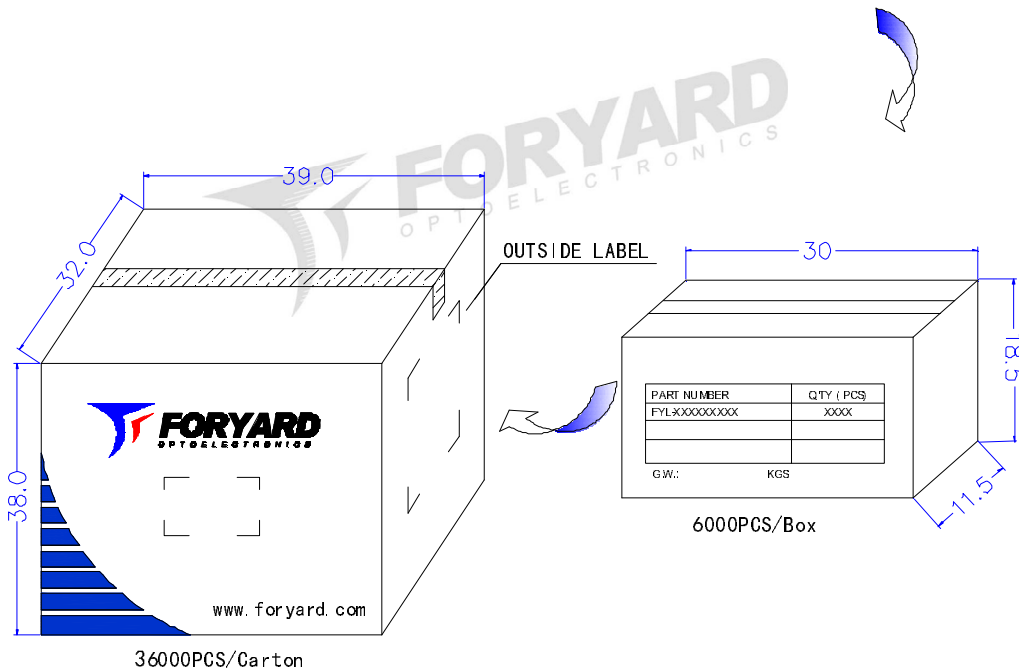


**Model No.: FYL-48D4UWC1A-UWW**

**■ LAMP PACKING.**



4.8mm 500PCS/Polybag



OUTSIDE LABEL

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