

# DATA SHIEET

Lens Part No: OPLLC0051

LED: CREE XLAMP XP-E







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## Lens Details, Usage & Maintenance

SL.No	Parameter	Specification
1.	Lens Material	PMMA
2.	Lens Dimensions	Ø 14.76mm & Height 8.45mm
3.	Holder Dimensions	Ø 16.20 mm & Height 9.80 mm
4.	Operating Temperature $(T_{Opt})$	-40 to +80° C
5.	Lighting Application	Flood Light and Bay Light

- 1. If necessary, clean Lenses with mild soap, water and soft cloth.
- 2. Never use any commercial cleaning solvents on Lenses, like alcohol.
- 3. Please handle or install Lenses with wearing gloves, skin oil may damage Lens or its Optical Characteristic.

Note: Simulation carried out by coupling single Lens with CREE XLAMP XP-E LED.



### **LED Source Details**

SL.No	Parameter	Specification
1.	Lamp	XLAMP XP-E
2.	LED Manufacture	CREE
3.	LED Forward Current	350 mA
4.	LED Forward Voltage	3.05 V
5.	LED Viewing Angle	1150
6.	Number of Sources	1
7.	Simulation Tool	Trace-Pro

## **Simulation Tool: Trace-Pro**

Trace-Pro is Award-Winning Opto-Mechanical software developed by 'Lamda Research Corporation'USA, under SBIR grant from NASA.

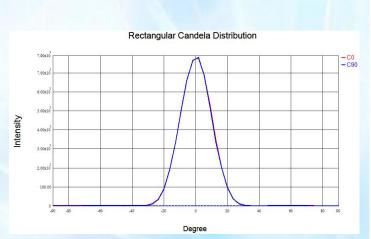
It combines design, ray tracing, analysis, optimization methods to solve a wide variety of new problems in illumination design.

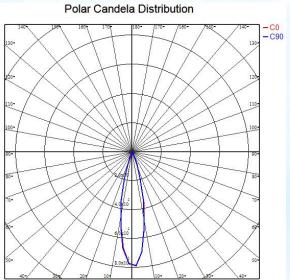
It provides advanced tools for designing medical devices, illumination, display back lights, light pipes, automotive lighting and many other applications.



## **Plots and Results**

### **Intensity Distribution Plots:**





S. No	Parameter	Beam Angle
1.	FWHM Angle	23
2.	FWTM Angle	40.95
3.	Efficiency	93%
4.	cd/lm	5.2

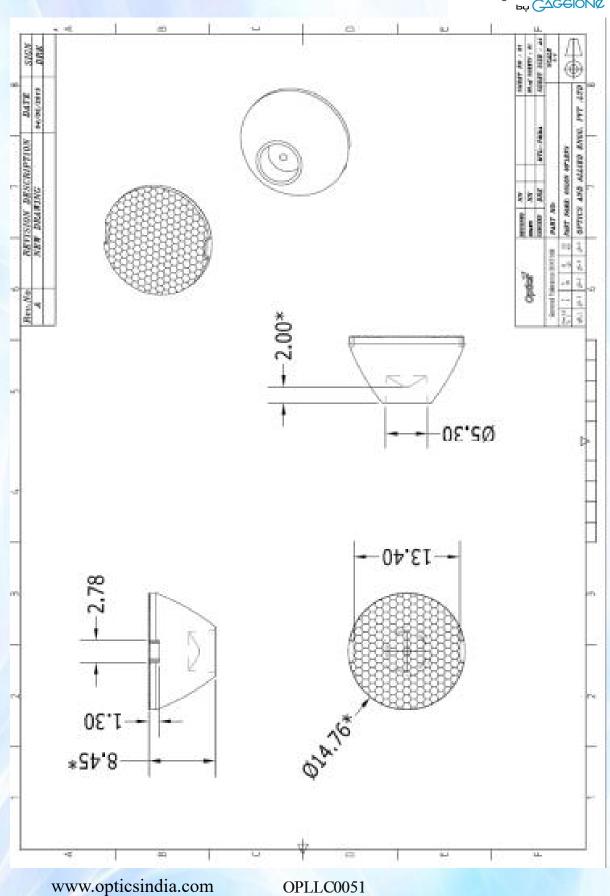
#### Note:

**FWHM angle** -Full Width Half Maximum angle (Beam angle at 50% of the maximum Intensity)

**FWTM angle -** Full Width Tenth Maximum angle (Beam angle at 10% of the maximum Intensity)

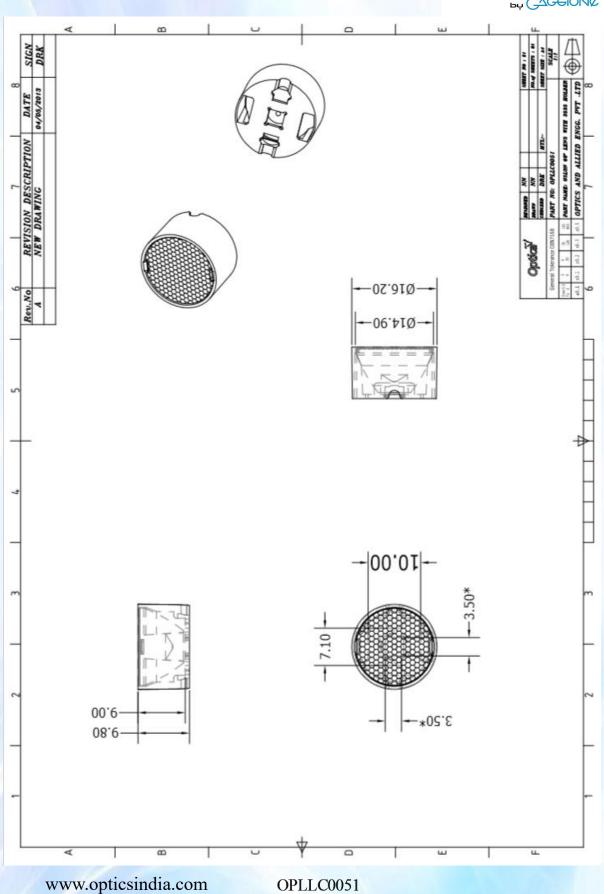
# **Lens Drawing:**





# **Holder Drawing:**





### "We Are Ready To Lead You Into The Future Of Optics"

- Our Components of high efficiency, are easy to mount and compact in size.
- ❖ Any flow lines on the external surface of the lens are acceptable if the optical characteristics are not affected.
- ❖ We are incredibly responsive to your requests and value your questions.



### **GET IN TOUCH WITH US**

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