

# DATA SHIEET

Lens Part No: OPLLC0137

LED: CREE X-LAMP XP-E2







# Contents

- 1. Lens Details, Usage & Maintenance
- 2. LED Source Details
- 3. Simulation Tool Details
- 4. Plots and Results
- 5. Lens Drawing And Package Specification
- 6. Contact Details





# Lens Details, Usage & Maintenance

SL.No	Parameter	Specification
1.	Lens Material	PMMA
2.	Lens Dimensions $(D \times H)$	21.94 X 15.45 mm
3.	Operating Temperature $(T_{Opt})$	-40 to +70° C
4.	Lighting Application	Down 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 Downlight lens with CREE X-LAMP XP-E2 LED.



### **LED Source Details**

SL.No	Parameter	Specification
1.	Lamp	X-LAMP-XP-E2
2.	LED Manufacture	CREE
3.	LED Forward Current	350 mA
4.	LED Forward Voltage	2.9 V
5.	LED Viewing Angle	1100
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.

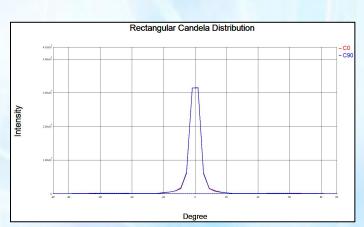
It combines design, ray tracing, analysis, optimization methods to solve a wide variety of new problems in illumination design.

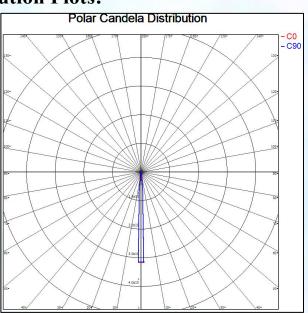
It provides advanced tools for designing medical devices, illumination, display back lights, light pipes, automotive lighting and many other applications.



## **Plots and Results**

#### **Intensity Distribution Plots:**





S. No	Parameter	Beam Angle
1.	FWHM Angle	6
2.	FWTM Angle	11.9
3.	Efficiency	90.5%
4.	cd/lm	33

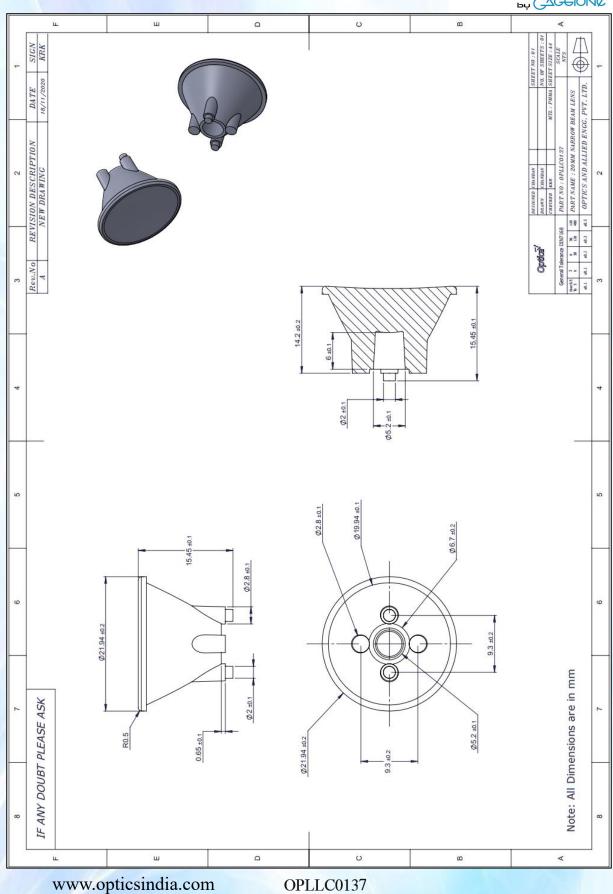
#### Note:

**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:**





### "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**

#### Optics & Allied Engg. Pvt. Ltd.

No. 9Q, 1st Phase, Jigani Link Road, Bommasandra Industrial Area, Bangalore-560099, INDIA

Tel: +91-80-4113 4421

Email: sales@opticsindia.com