



# DATA SHEET

**Lens Part No : OPLLC0136**

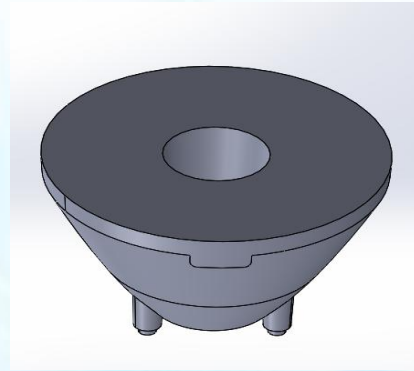
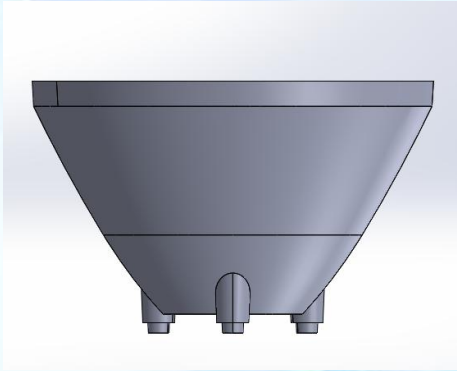
LED: CREE XLAMP XHP50.2





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## Lens Details, Usage & Maintenance

SL.No	Parameter	Specification
1.	Lens Material	PMMA
2.	Lens Dimensions (D × H)	35.19 X 22.01 mm
3.	Operating Temperature (T <sub>Opt</sub> )	-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 XLAMP XHP50.2 LED.**

## LED Source Details

SL.No	Parameter	Specification
1.	Lamp	XLAMP XHP50.2
2.	LED Manufacture	CREE
3.	LED Forward Current	1400 mA
4.	LED Forward Voltage	5.6 V
5.	LED Viewing Angle	120 <sup>0</sup>
6.	Number of Sources	1
7.	Simulation Tool	Trace-Pro

## Simulation Tool : Trace-Pro

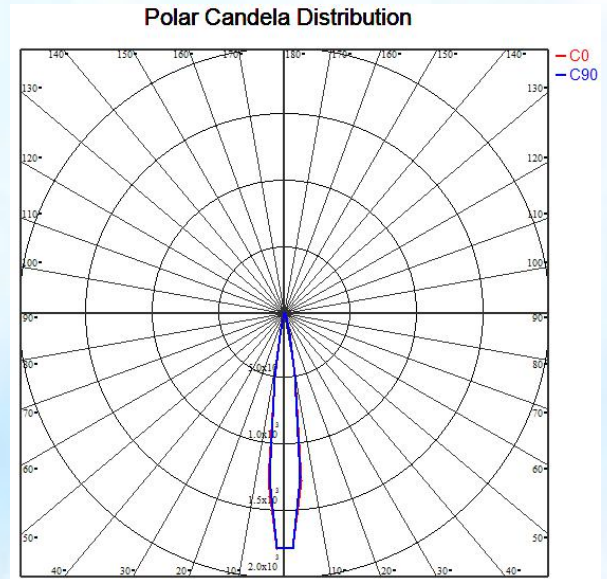
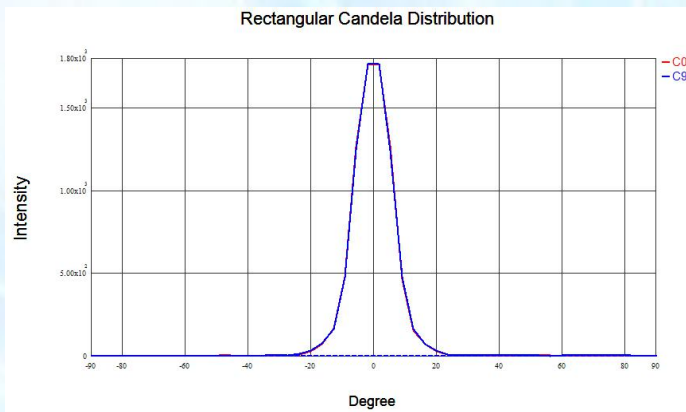
Trace-Pro is Award-Winning Opto-Mechanical software developed by ‘Lamda Research Corporation’USA, under SBIR grant from NASA.

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:



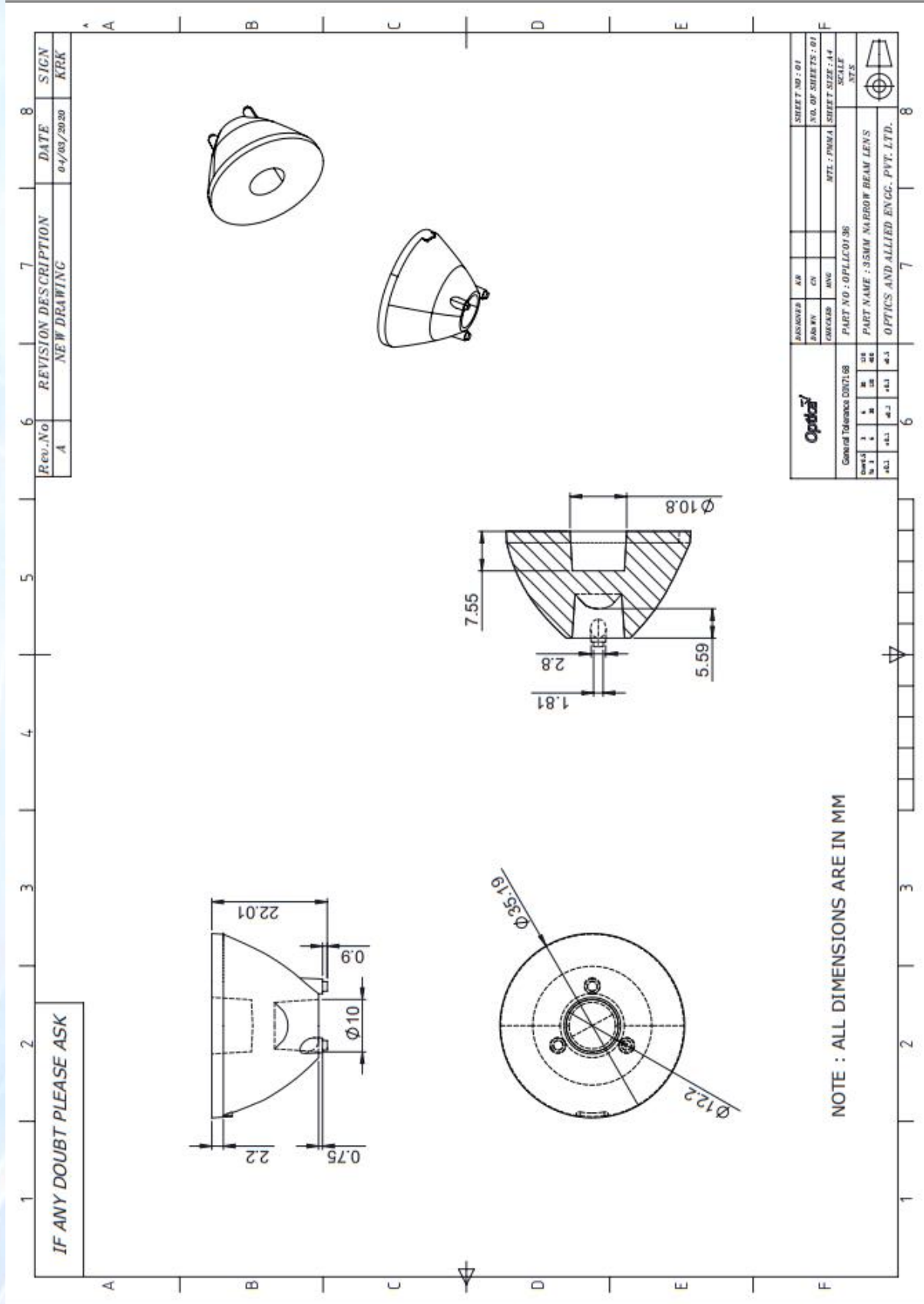
S. No	Parameter	Beam Angle
1.	FWHM Angle	13.93
2.	FWTM Angle	24.4
3.	Efficiency	91.1%
4.	cd/lm	12.5

#### 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.



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**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](mailto:sales@opticsindia.com)