

# DATA SHIEET

Lens Part No: OPLLF0099

LED: SAMSUNG LH508A







## 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	Polycarbonate
2.	Lens Dimensions $(L \times W \times H)$	49.5mm x 49.5mm x 7.5mm
3.	Operating Temperature $(T_{Opt})$	-40 to +120° C
4.	Lighting Application	Flood Light or 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 8 in 1 flood light lens with SAMSUNG LH508A LED.



#### **LED Source Details**

SL.No	Parameter	Specification
1.	Lamp	LH508A
2.	LED Manufacture	SAMSUNG
3.	LED Forward Current	160 mA
4.	LED Forward Voltage	24.5 V
5.	LED Viewing Angle	1160
6.	Number of Sources	8
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.

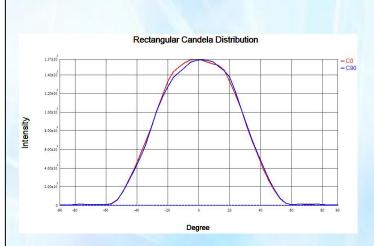
It combines design, ray tracing, analysis, optimization methods to solve a wide variety of new problems in illumination design.

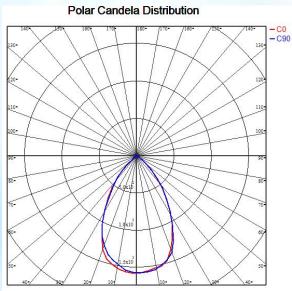
It provides advanced tools for designing medical devices, illumination, display back lights, light pipes, automotive lighting and many other applications.



### **Plots and Results**

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





S. No	Parameter	Beam Angle
1.	FWHM Angle	63.77
2.	FWTM Angle	98.28
3.	Efficiency	89%
4.	cd/lm	0.85

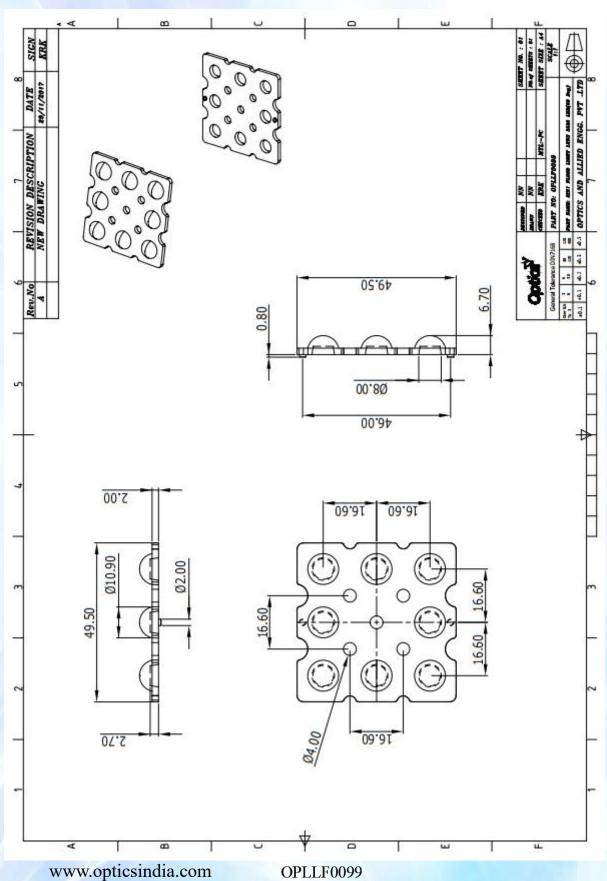
#### Note:

**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: +91-80-41134421

Email: sales@opticsindia.com