

# DATA SHIEET

Lens Part No: OPLLF0100

LED: LUMILED LUXEON Q







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## 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 7mm    |
| 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 LUMILED LUXEON Q LED.



### **LED Source Details**

| SL.No | Parameter           | Specification |
|-------|---------------------|---------------|
| 1.    | Lamp                | LUXEON Q      |
| 2.    | LED Manufacture     | LUMILED       |
| 3.    | LED Forward Current | 350 mA        |
| 4.    | LED Forward Voltage | 2.8 V         |
| 5.    | LED Viewing Angle   | 1350          |
| 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.

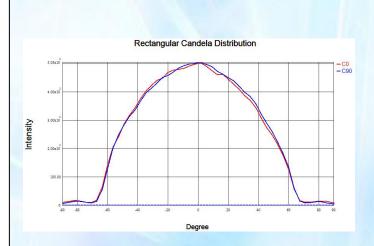
It provides advanced tools for designing medical devices, illumination, display back lights, light pipes, automotive lighting and many other applications.

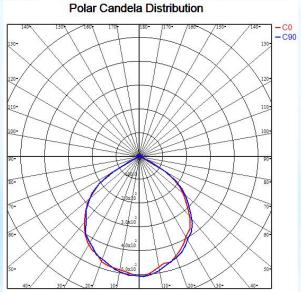


## **Plots and Results**

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







| S. No | Parameter  | Beam Angle |
|-------|------------|------------|
| 1.    | FWHM Angle | 98.62      |
| 2.    | FWTM Angle | 127.55     |
| 3.    | Efficiency | 89%        |
| 4.    | cd/lm      | 0.42       |

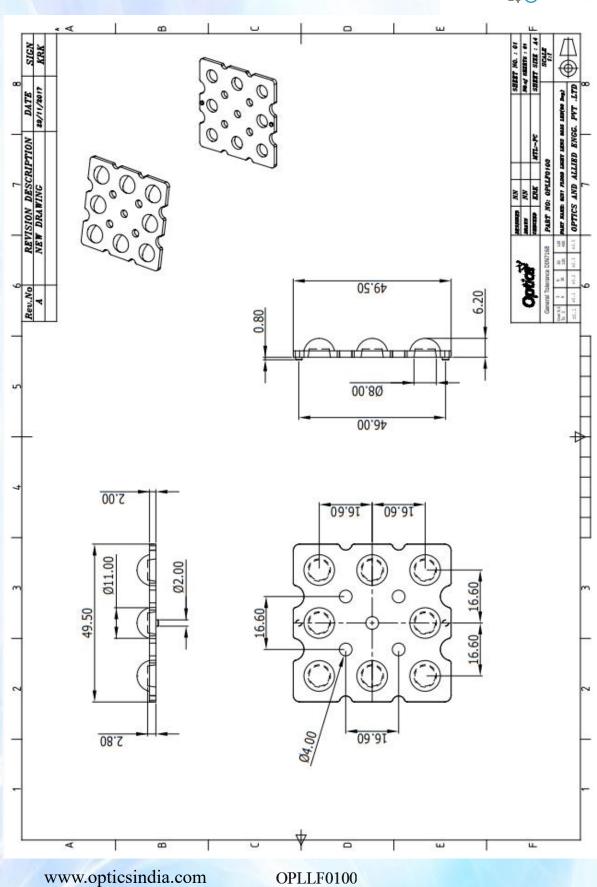
#### Note:

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**

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