



# DATA SHEET

**Lens Part No : OPLLF0099**

**LED: EDISON FEDERAL 3535 FX**





## 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 × W × H)	49.5mm x 49.5mm x 7.5mm
3.	Operating Temperature (T <sub>Opt</sub> )	-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 EDISON FEDERAL 3535 FX LED.**

## LED Source Details

SL.No	Parameter	Specification
1.	Lamp	FEDERAL 3535 FX
2.	LED Manufacture	EDISON
3.	LED Forward Current	350 mA
4.	LED Forward Voltage	2.8 V
5.	LED Viewing Angle	115 <sup>0</sup>
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.

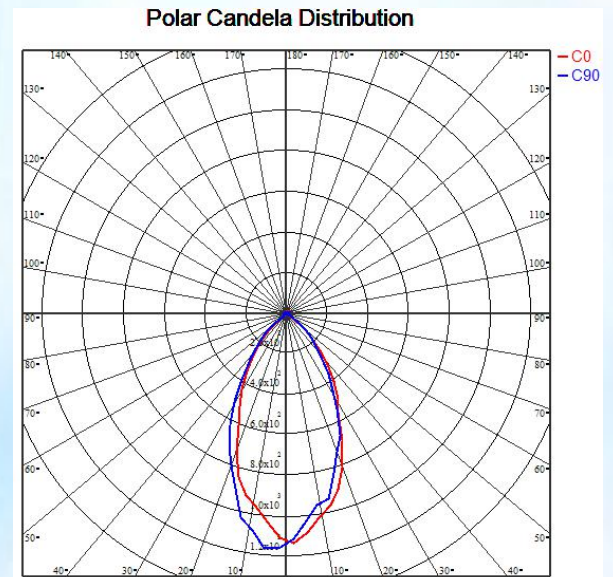
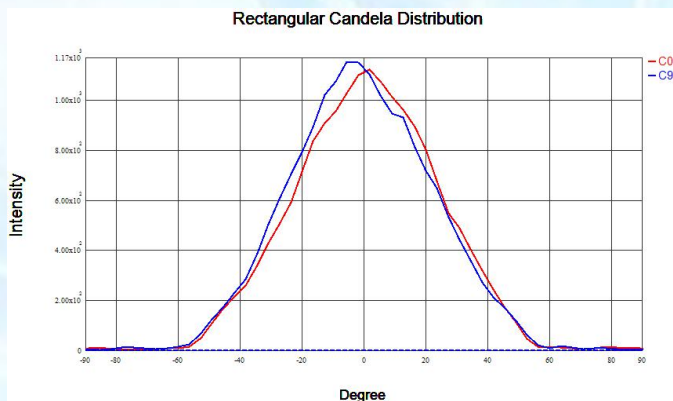
It combines design, ray tracing, analysis, optimization methods to solve a wide variety of new problems in illumination design.

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:



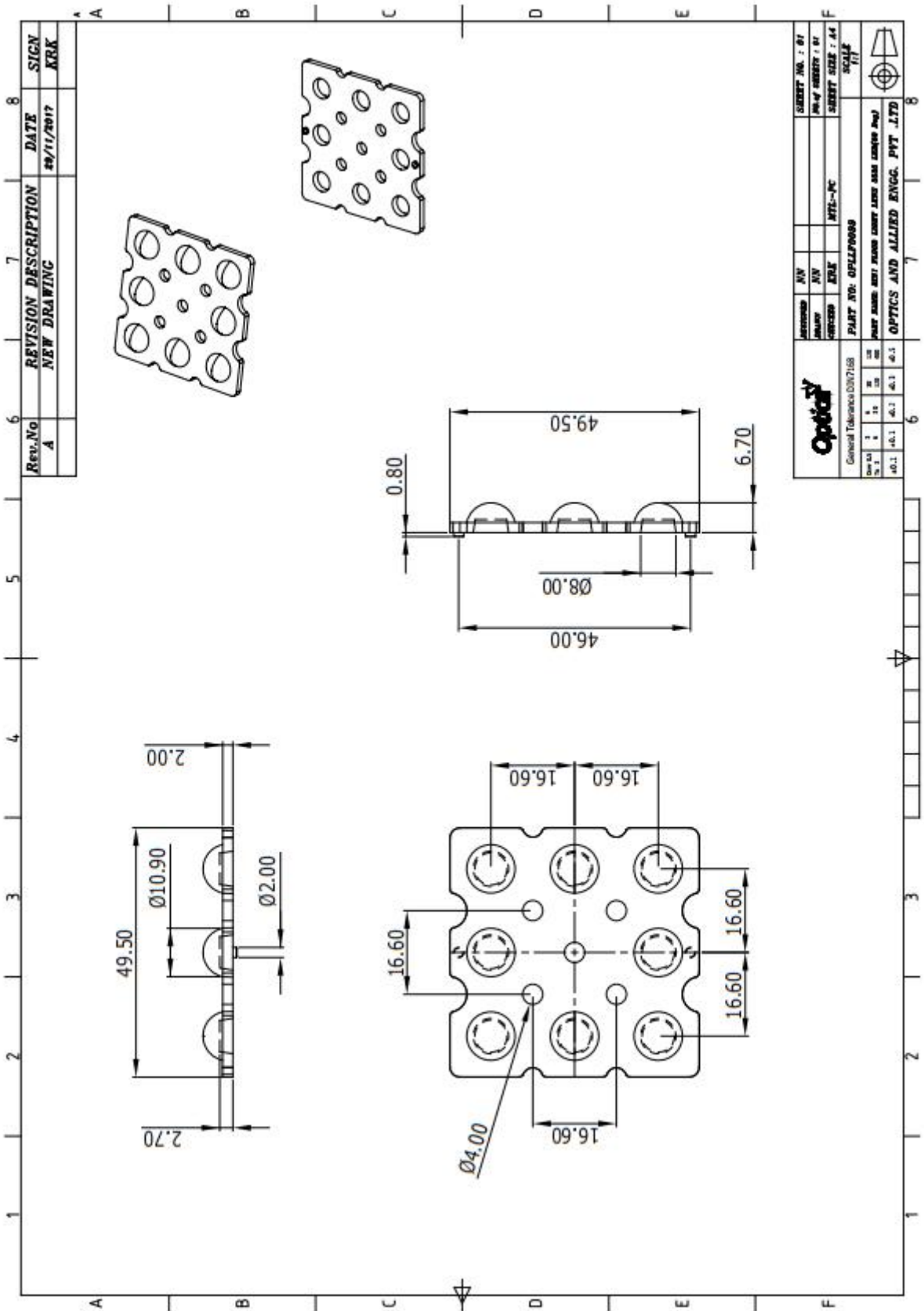
S. No	Parameter	Beam Angle
1.	FWHM Angle	50.7
2.	FWTM Angle	98.1
3.	Efficiency	89%
4.	cd/lm	1.05

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