

# DATA SHIEET

Lens Part No: OPLLC0132

LED: LUMILED LUXEON 2835







## 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 (D×H)             | 19.50 X 10mm   |
| 3.    | Operating Temperature $(T_{Opt})$ | -40 to +120° 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 LUMILED LUXEON 2835 LED.



#### **LED Source Details**

| SL.No | Parameter           | Specification |
|-------|---------------------|---------------|
| 1.    | Lamp                | LUXEON 2835   |
| 2.    | LED Manufacture     | LUMILED       |
| 3.    | LED Forward Current | 150 mA        |
| 4.    | LED Forward Voltage | 9.1V          |
| 5.    | LED Viewing Angle   | 1200          |
| 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.

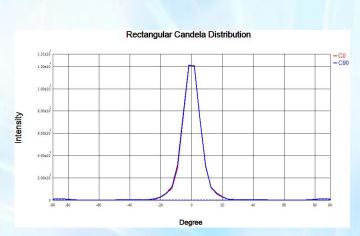
It provides advanced tools for designing medical devices, illumination, display back lights, light pipes, automotive lighting and many other applications.

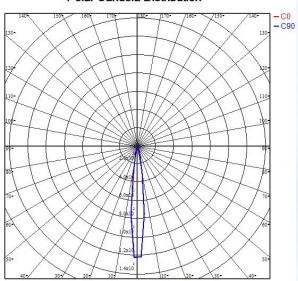


#### **Plots and Results**

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

#### Polar Candela Distribution





| S. No | Parameter  | Beam Angle |
|-------|------------|------------|
| 1.    | FWHM Angle | 12.19      |
| 2.    | FWTM Angle | 23.87      |
| 3.    | Efficiency | 89%        |
| 4.    | cd/lm      | 13         |

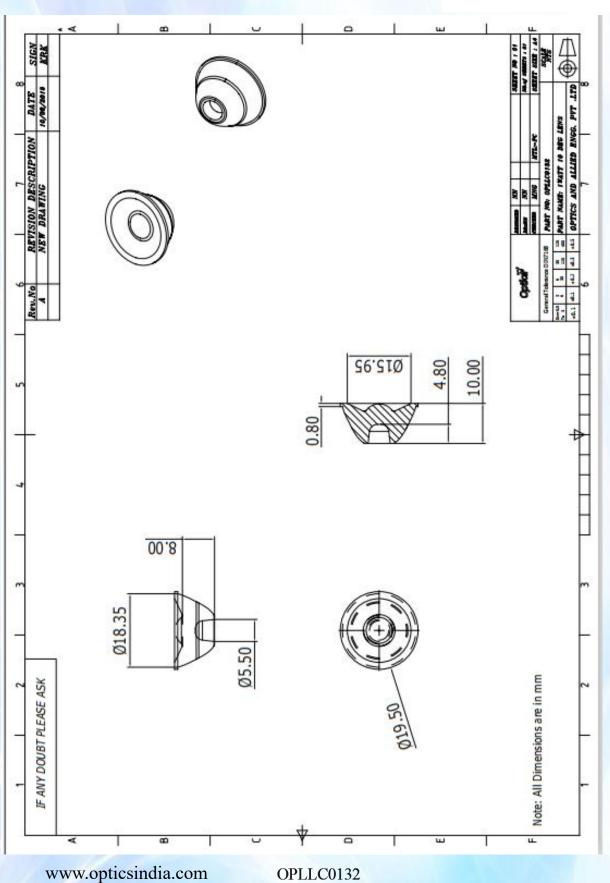
#### Note:

**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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