

# DATA SHIEFT

#### Lens Part No: OPLLC0010

LED: CREE XLAMP XP-G3

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## Lens Details, Usage & Maintenance

SL.No	Parameter	Specification
1.	Lens Material	PMMA
2.	Lens Dimensions	Ø 19.36 mm & Height 13.50 mm
3.	Operating Temperature $(T_{Opt})$	-40 to +80° C
4.	Lighting Application	Flood Light and 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 single Lens with CREE XLAMP XP-G3 LED.

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### **LED Source Details**

SL.No	Parameter	Specification
1.	Lamp	XLAMP XP-G3
2.	LED Manufacture	CREE
3.	LED Forward Current	350 mA
4.	LED Forward Voltage	2.73 V
5.	LED Viewing Angle	1250
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.

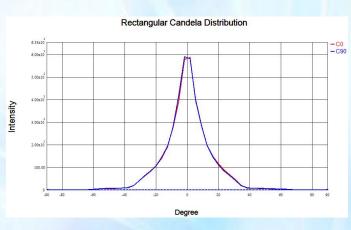
It combines design, ray tracing, analysis, optimization methods to solve a wide variety of new problems in illumination design.

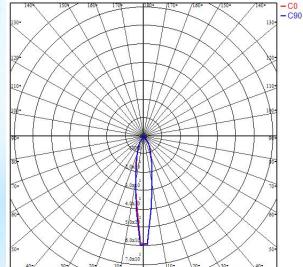
It provides advanced tools for designing medical devices, illumination, display back lights, light pipes, automotive lighting and many other applications.



#### **Plots and Results**

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





Polar Candela Distribution

S. No	Parameter	Beam Angle
1.	FWHM Angle	15.85
2.	FWTM Angle	56.11
3.	Efficiency	93%
4.	cd/lm	4.4

#### Note:

**FWHM angle -**Full Width Half Maximum angle (Beam angle at 50% of the maximum Intensity)

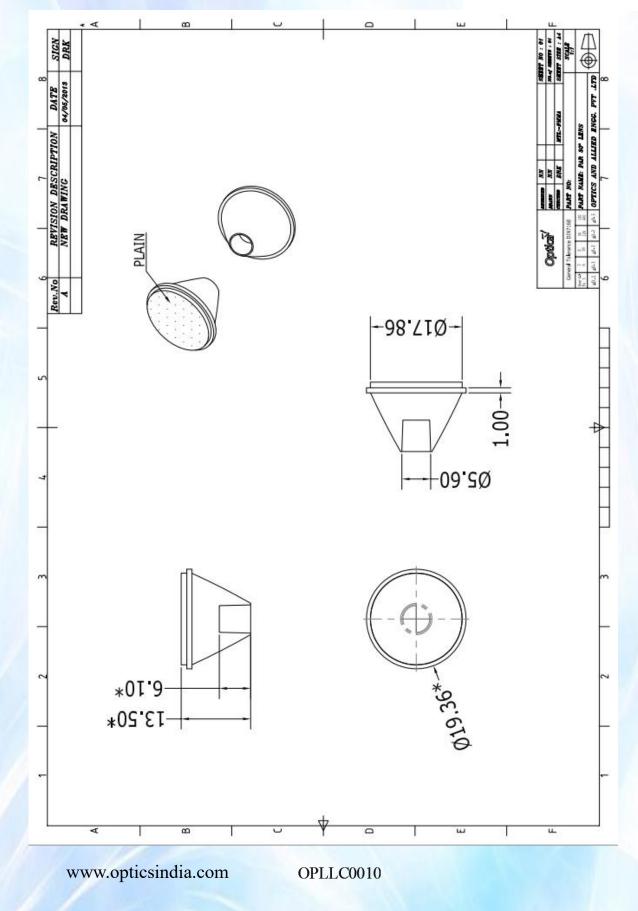
**FWTM angle -** Full Width Tenth Maximum angle (Beam angle at 10% of the maximum Intensity)

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**Lens Drawing:** 



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#### "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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