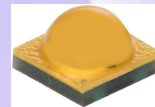




DATA SHEET

Lens Part No : OPLLS0124C

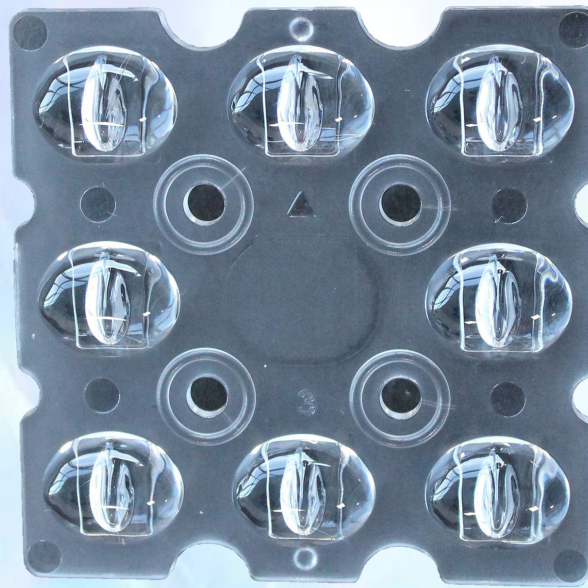
LED: CREE XLAMP XT-E





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) | 49.50 x 49.50 x 6..35mm |
| 3. | Operating Temperature (T _{Opt}) | -40 to +120° C |
| 4. | Lighting Application | Street 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 street light lens with CREE XLAMP XT-E LED.

LED Source Details

| SL.No | Parameter | Specification |
|-------|---------------------|---------------|
| 1. | Lamp | XLAMP XT-E |
| 2. | LED Manufacture | CREE |
| 3. | LED Forward Current | 350 mA |
| 4. | LED Forward Voltage | 2.85 V |
| 5. | LED Viewing Angle | 115° |
| 6. | Number of Sources | 8 |
| 7. | Simulation Tool | Trace-Pro |

Simulation Tool : Trace-Pro

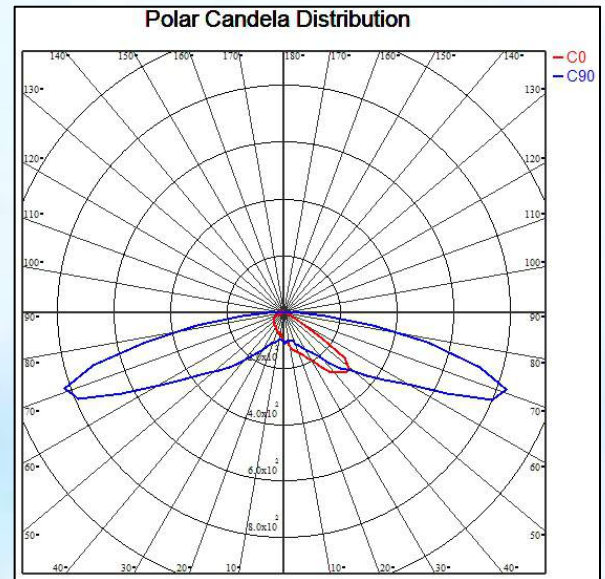
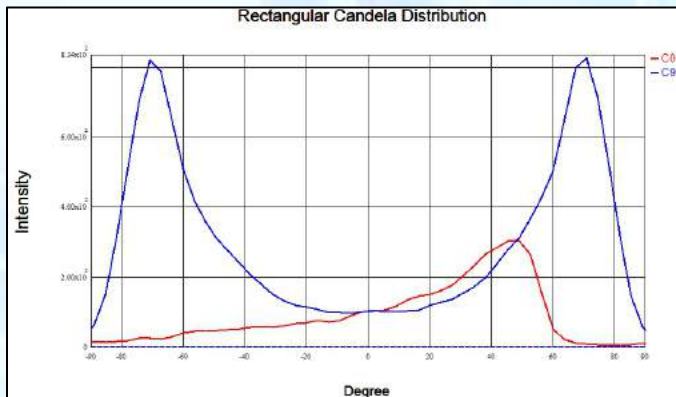
Trace-Pro is Award-Winning Opto-Mechanical software developed by ‘Lamda Research Corporation’USA, under SBIR grant from NASA.

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:



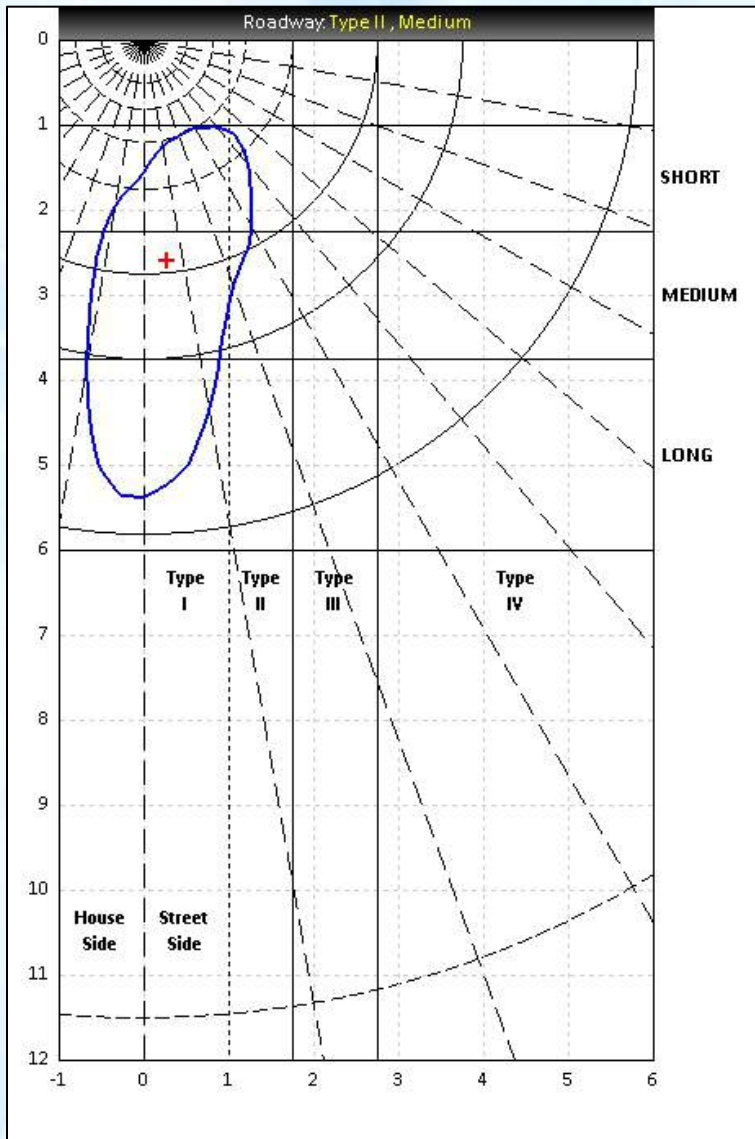
| S. No | Parameter | Spread | Throw |
|-------|------------|--------|-------|
| 1. | FWHM Angle | 160° | 78° |
| 2. | FWTM Angle | 174° | 123° |
| 3. | Efficiency | 89% | |
| 4. | cd/lm | 0.80 | |

Note:

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

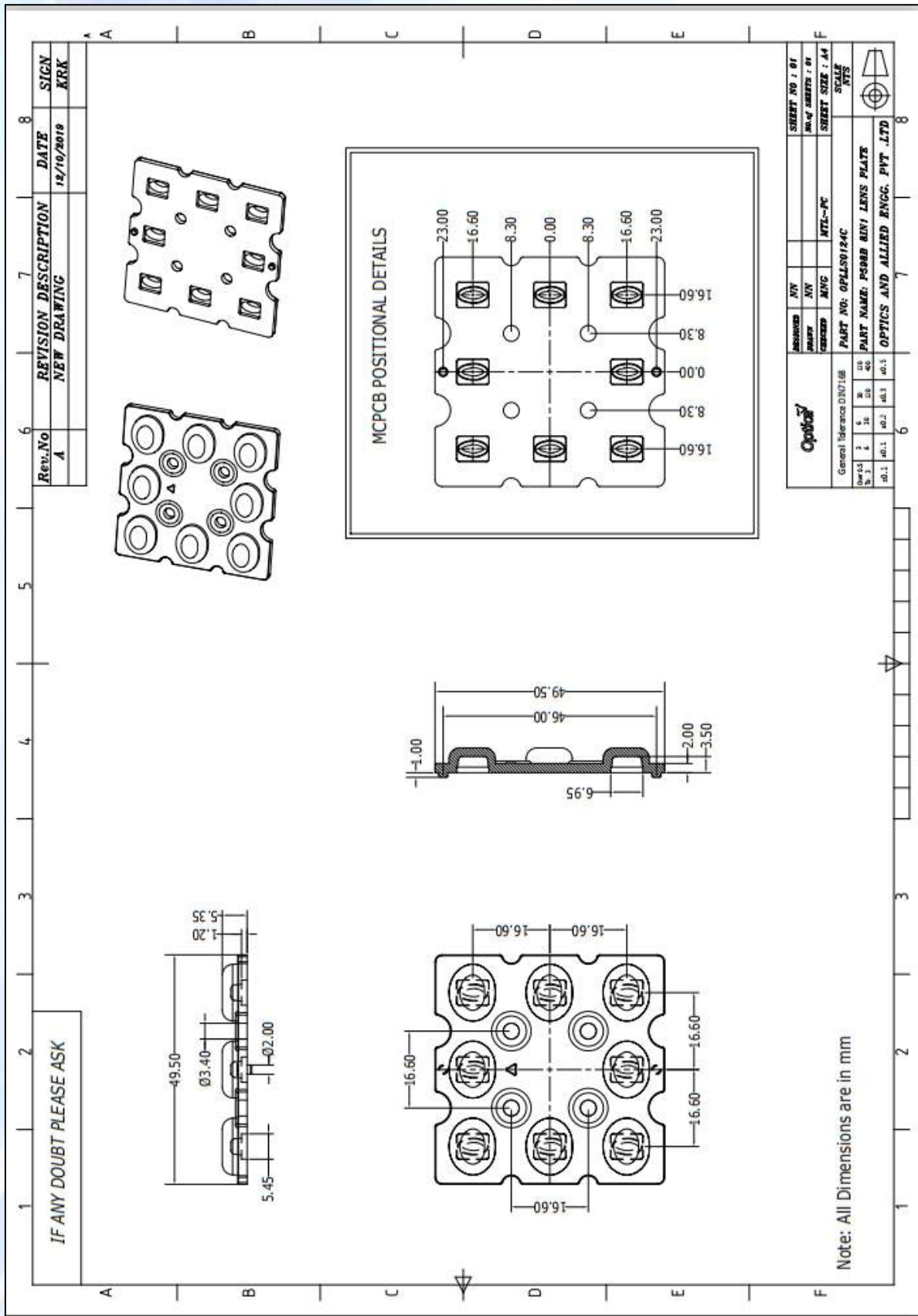
FWTM angle - Full Width Tenth Maximum angle (Beam angle at 10% of the maximum Intensity)

Roadway Classification:



Roadway Analysis :

| BOOM ANGLE | DISTRIBUTION TYPE |
|---------------|----------------------|
| 0° | II MEDIUM |
| 5° | II MEDIUM |
| 10° | III MEDIUM |
| 15° | III MEDIUM |



“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: +91-80-4113 4421
Email: sales@opticsindia.com