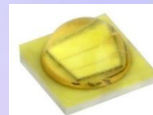




DATA SHEET

Lens Part No : OPLLC0011

LED: SEOUL Z5M1





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 | PMMA |
| 2. | Lens Dimensions | Ø 19.40 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 SEOUL Z5M1 LED.

LED Source Details

| SL.No | Parameter | Specification |
|-------|---------------------|------------------|
| 1. | Lamp | Z5M1 |
| 2. | LED Manufacture | SEOUL |
| 3. | LED Forward Current | 350 mA |
| 4. | LED Forward Voltage | 2.95 V |
| 5. | LED Viewing Angle | 118 ⁰ |
| 6. | Number of Sources | 1 |
| 7. | Simulation Tool | Trace-Pro |

Simulation Tool : Trace-Pro

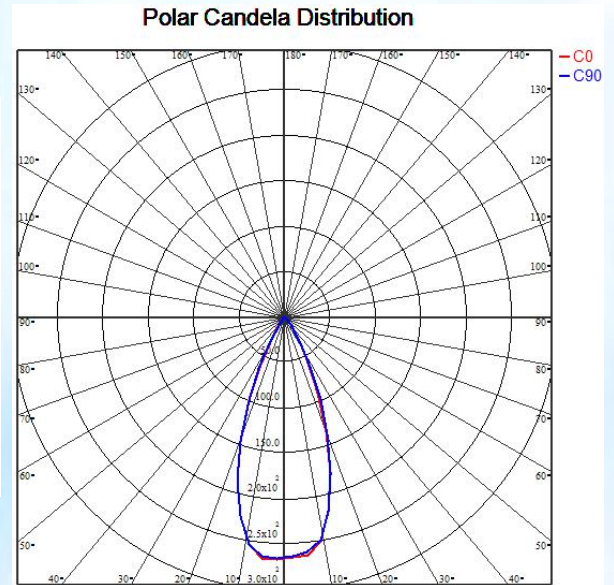
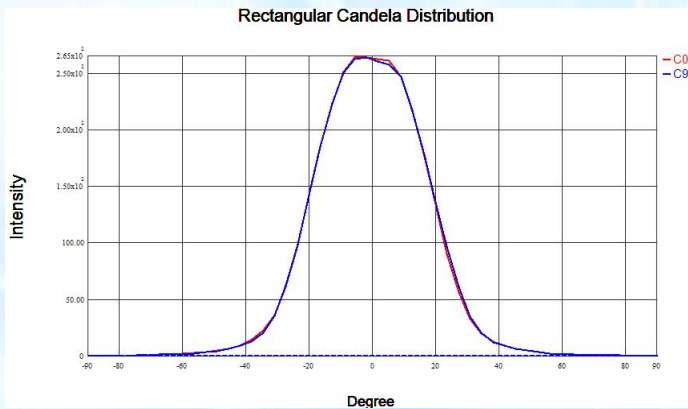
Trace-Pro is Award-Winning Opto-Mechanical software developed by ‘Lamda Research Corporation’USA, under SBIR grant from NASA.

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:



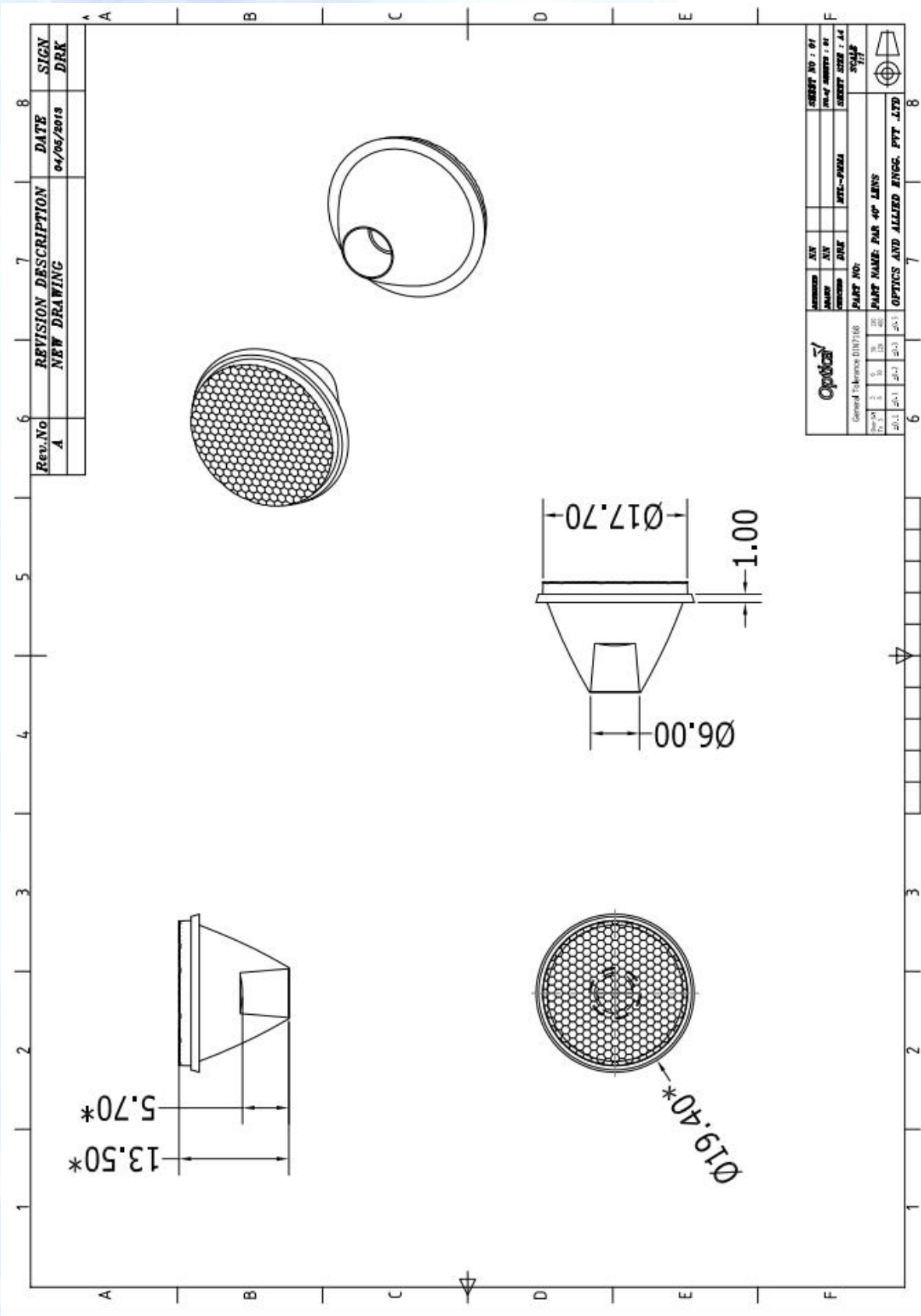
| S. No | Parameter | Beam Angle |
|-------|------------|------------|
| 1. | FWHM Angle | 41.3 |
| 2. | FWTM Angle | 67.08 |
| 3. | Efficiency | 93% |
| 4. | cd/lm | 1.9 |

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:



| | | | |
|---------|----------------------|------------|------|
| Rev. No | REVISION DESCRIPTION | DATE | SIGN |
| A | NEW DRAWING | 04/05/2013 | DRK |

| | | |
|----------------------------------|------------|------------------|
| APPROVED | REV | SECRET NO. : 01 |
| Optica | REV | REV. NUMBER : 01 |
| General Reference DIN7168 | DRG | SECRET CODE : A4 |
| Part No: | INT.-PART | SCALE |
| Ø19.40* ±0.1 | Ø6.00 ±0.3 | 1:1 |
| 13.50* ±0.1 | 5.70* ±0.3 | |
| PART NAME: PAR 40° LENS | | |
| OPTICS AND ALLIED ENGS. PVT. LTD | | |

“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