



# DATA SHEET

**Lens Part No : OPLLC0011**

LED: SAMSUNG LH351C





## 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 SAMSUNG LH351C LED.**

## LED Source Details

SL.No	Parameter	Specification
1.	Lamp	LH351C
2.	LED Manufacture	SAMSUNG
3.	LED Forward Current	700 mA
4.	LED Forward Voltage	2.9 V
5.	LED Viewing Angle	128 <sup>0</sup>
6.	Number of Sources	1
7.	Simulation Tool	Trace-Pro

## Simulation Tool : Trace-Pro

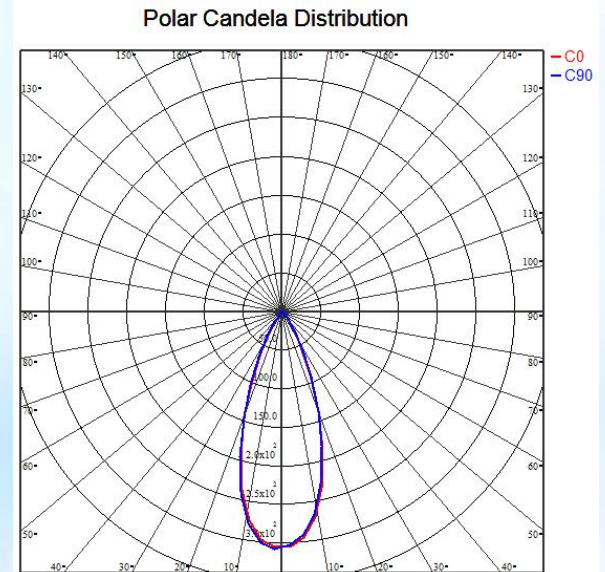
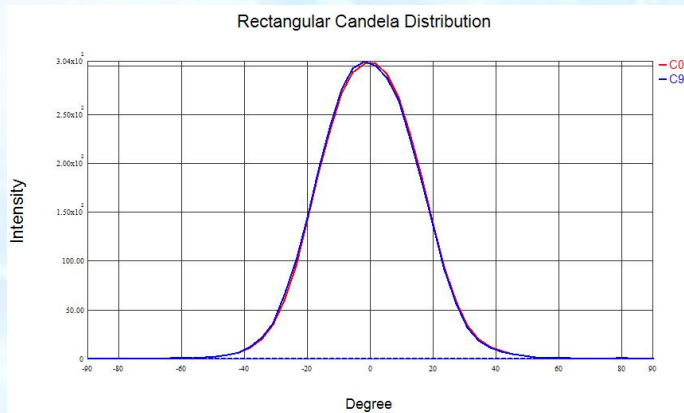
Trace-Pro is Award-Winning Opto-Mechanical software developed by ‘Lamda Research Corporation’USA, under SBIR grant from NASA.

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:



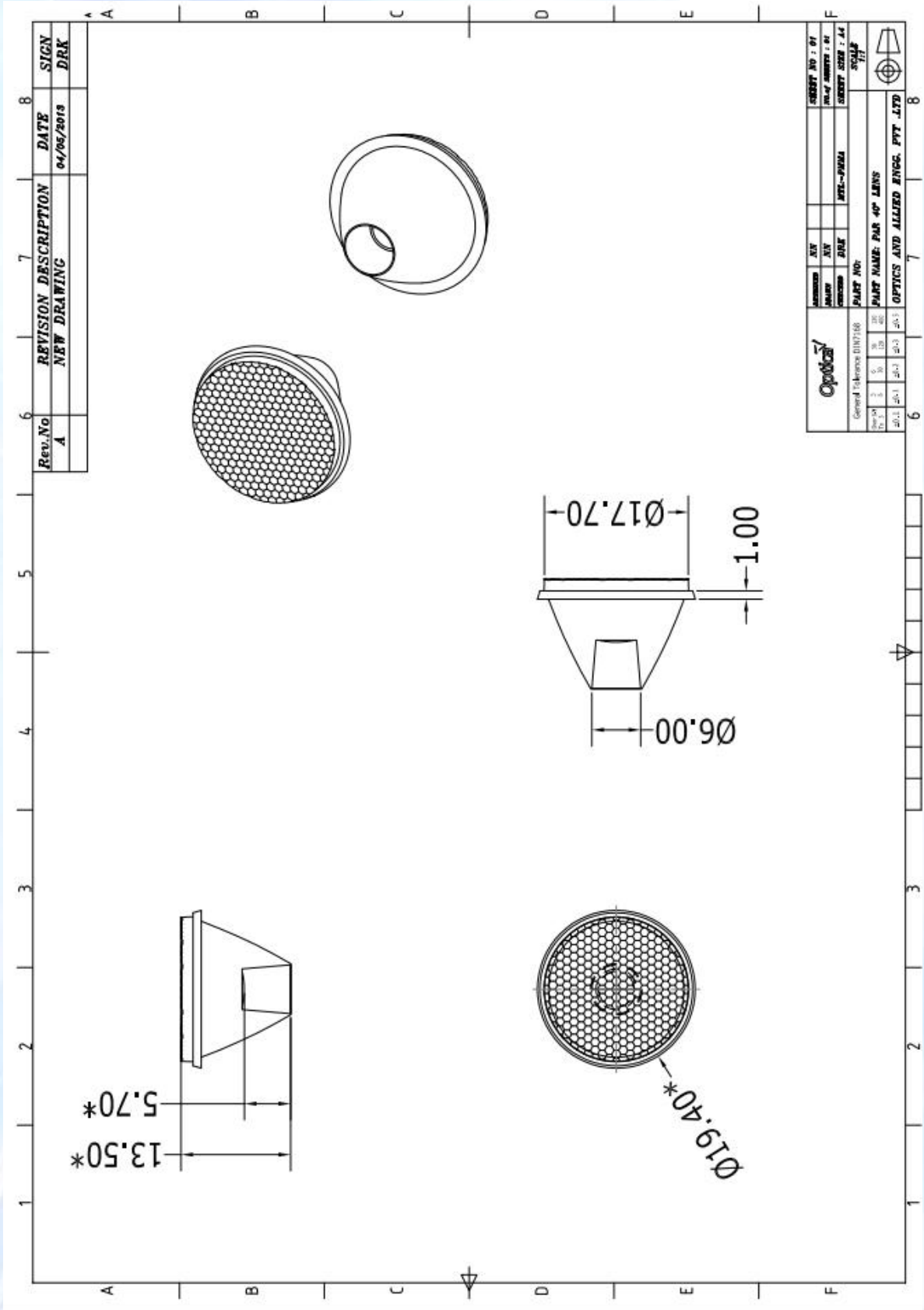
S. No	Parameter	Beam Angle
1.	FWHM Angle	38.86
2.	FWTM Angle	64.65
3.	Efficiency	93%
4.	cd/lm	2.1

#### 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	04/05/2019	DRK

ADDRESS	XY	XY	XY	XY	XY	XY
Optica						
General Reference DIM7188						
Part No:						
Part Name:	PAR 40° LENS					
Company:	OPTICS AND ALLED RINGS. PTT .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](mailto:sales@opticsindia.com)