# LedEngin, Inc.

High Efficiency / High Uniformity Color-mixing Lens

- Narrow Flood Beam

Superior color uniformity for white and multi-color emitters



LLNF-3T08-H

This unique lens enables the design and implementation of new high quality, high brightness products with precision optics delivering a high quality smooth beam pattern and superior color-mixing quality. This narrow flood beam lens combined with LedEngin 40W White LEDs provides a well-controlled, smooth light gradient for illumination applications. The high uniformity, high efficiency color-mixing design delivers exceptional color quality for 40W multicolor RGB emitters.

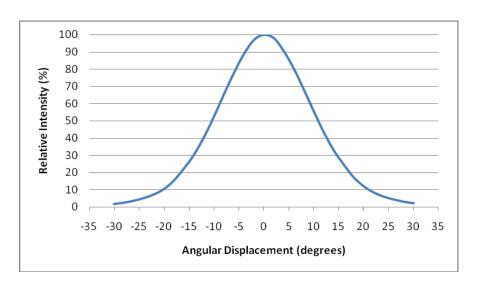
### **Key Features**

- Smooth light gradient eliminates hot spots and rings for superior illumination
- Superior color uniformity for multi-color RGB emitters over the full color spectrum
- High optical efficiency
- Designed specifically for 40W white and multi-color RGB emitter
- Optical grade PMMA lens material allows use of high current and temperature conditions
- Lens holder aligns with LedEngin MCPCB option for easy installation and assembly
- Lens holder fastens easily to PCB with appropriate adhesive, e.g. epoxy or polyurethane based
- Patent pending

### Optical Specifications - Typical Values

| Parameter            | Value    |
|----------------------|----------|
| Viewing Angle (FWHM) | 24°      |
| Optical Efficiency   | 80%      |
| Color Mixing         | Superior |

# Typical Relative Intensity over Angle



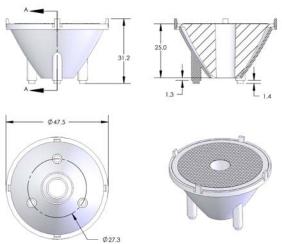
## **Mechanical Specifications**

(Includes Lens and Holder)

| Parameter                     | Value                                 |
|-------------------------------|---------------------------------------|
| Height from Seating Plane     | 25.0mm                                |
| Maximum Width                 | 47.50mm                               |
| Operating Temperature Range   | -40°C ~ +110°C                        |
| Acceptable bonding materials* | Epoxy or polyurethane-based adhesives |

<sup>\*</sup>Note: do not use a cyanoacrylate (superglue) adhesive!

#### **Outline Dimensions**



Contact Information

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