# ASMT-M0xx

Collimator Lens Option for Power LED ASMT-Mxxx and QSMT-MWBx



# **Data Sheet**



# Introduction

Power LED Light Source is a high performance energy efficient device which can handle high thermal and high driving current. The Collimator Lens ASMT-M0xx are design to efficiently collimate the light of Power LED ASMT-Mxxx & QSMT-MWBx into a 6°, 15° and 30° beam.

The collimating optics has been effectively design to collimate the light to 6°, 15° and 30° viewing angle. The design and Acrylic material use bring the efficiency >85%.

## **The Lens Material Properties**

The lens material is made from optical grade Acrylic and the lens max allowable operating temperature is 75°C. It can be used for all colors.

#### Features

- Available in 6°, 15° & 30° beam
- Energy efficient
- Work with all Power LED ASMT-Mxxx. For white QSMT-MWBx is recommended
- Acrylic plastic

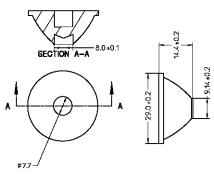
#### **Applications**

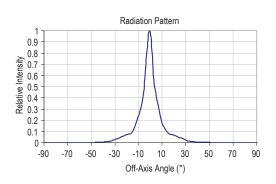
- Portable (flash light, bicycle head light)
- Reading light
- Architectural lighting
- Garden lighting
- Decorative lighting

## **Collimator Lens Dimension**

# ASMT-M006 (6° beam)

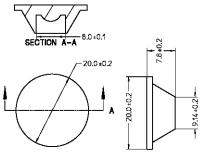


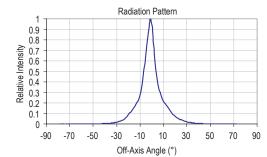




#### ASMT-M015 (15° beam)

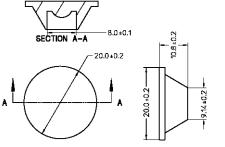


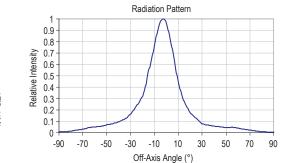




#### ASMT-M030 (30° beam)







Note:

- 1. All dimensions in millimeters.
- 2. The collimator rim peripherals surface can be use as a press fitting feature to support the collimator.
- 3. The light source must be protected from any axial or lateral loads cause by the collimator.

A

4. The collimator is molded from optical grade Acrylic. Do not subject the collimator to temperature greater than 75 °C as it may deform.

#### **Device Selection Guide**

Collimating Angle, Degree (°)
Тур
6
15
30

# **Application of Collimator Lens**

# Lens Attachment

Lens attachment to the unit is through "press-fitting". To make sure that the lens is properly attached, the lens need to be press-fitted until it reaches a hard stop at the top surface of the unit.

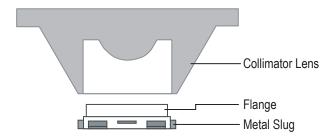


Figure 1. Collimator Lens ASMT-M0xx and ASMT-Mxxx unit

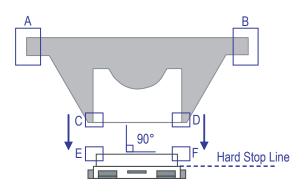


Figure 2. Attachment between collimator lens and unit.

Hold the lens by position A & B and make sure that the lens is perpendicular to the unit top surface as shown in Figure 2.

Surface C and D of the Collimator Lens have to be pressed perpendicularly onto the flange surface of E and F until the hard stop.

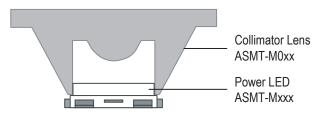


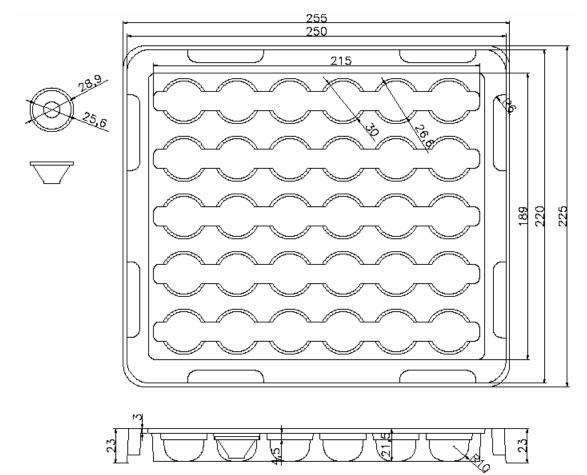
Figure 3. Complete attachment between Collimator Lens and ASMT-Mxxx unit

#### Precaution

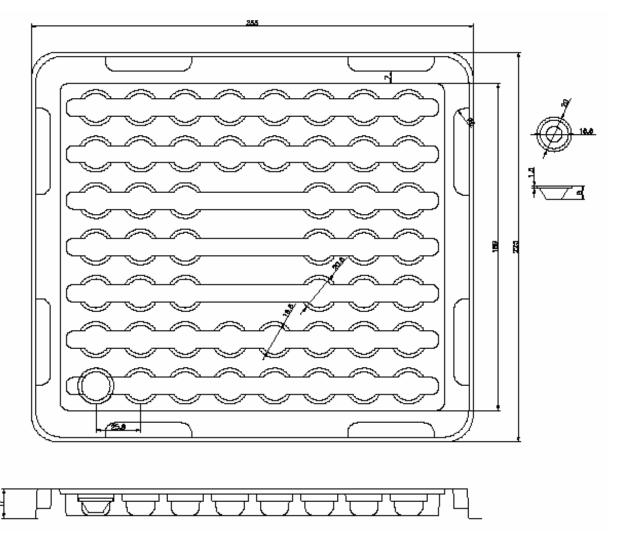
This lens is designed for press-fitting only. Do not overpress the lens while attaching both lens and unit. No adhesive and/or lubricant is applicable for this application. Avoid using corrosive chemical to clean the lens. Use only Iso Propyl Alcohol (IPA) for this purpose.

# Package Tray Dimensions

For ASMT-M006 (6° beam)



For ASMT-M015 and ASMT-M030 (15° and 30° beam)



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