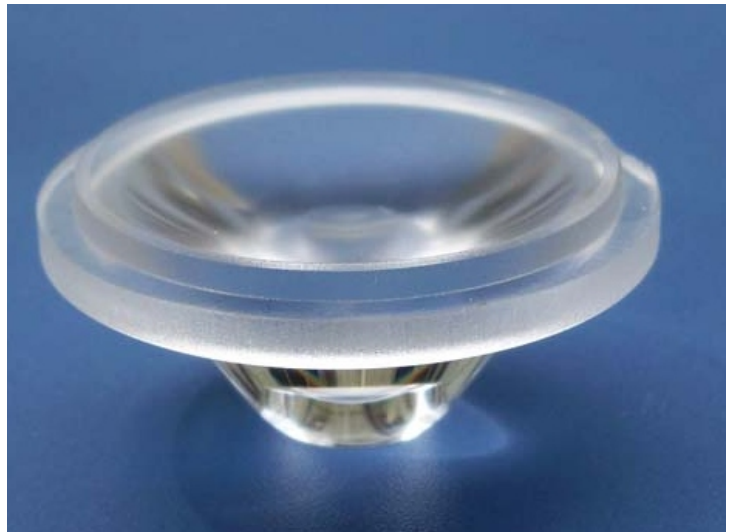


## \* PRODUCT DATASHEET

- \* Model: HX-C35-15M
- \* Dimensions:
  - Lens:  $\Phi 35.00\text{mm}$  H16.40mm
  - Cylinder holder: N/A
  - bipod striped cylinder holder: N/A
- \* Materials:
  - Lens: Optical Grade PMMA / PC
  - Holder: N/A
- \* Assembly Dimensions:
  - Lens with cylinder holder: N/A
  - Lens with bipod striped cylinder holder: N/A
- \* Surface Treatment: Matte surface
- \* Beam Angle: 15deg
- \* For Led:
  - CREE XM-L
  - CREE XML\_EZW
  - CREE XML\_HVW
  - Seoul Acrich A5
  - Luxeon M
- \* Certification: SGS RoHs



- \*Features:
  - High efficiency
  - Available in 1 beam Patterns
  - Optimized for uniform effects
  - Lens with holder
- \*Typical applications:
  - Stage lighting
  - Street lights
  - Decorative light
  - Architectural lighting
  - Down light
  - Flashlight

## \* Brief description :

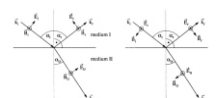
\*The OPTIC-FOV (Shenzhen Hongxuan Optoelectronic Technology Co., Ltd) lens offers low-profile lenses specifically designed for the Luxeon® LEDs, Edison® LEDs, Bridgelux® LEDs or Seoul® LEDs, Osram® LEDs, Cree® LEDs.

\*A software-optimized aspheric profile enables the generation of several different beam output patterns: narrow, medium, elliptical and wide beams.

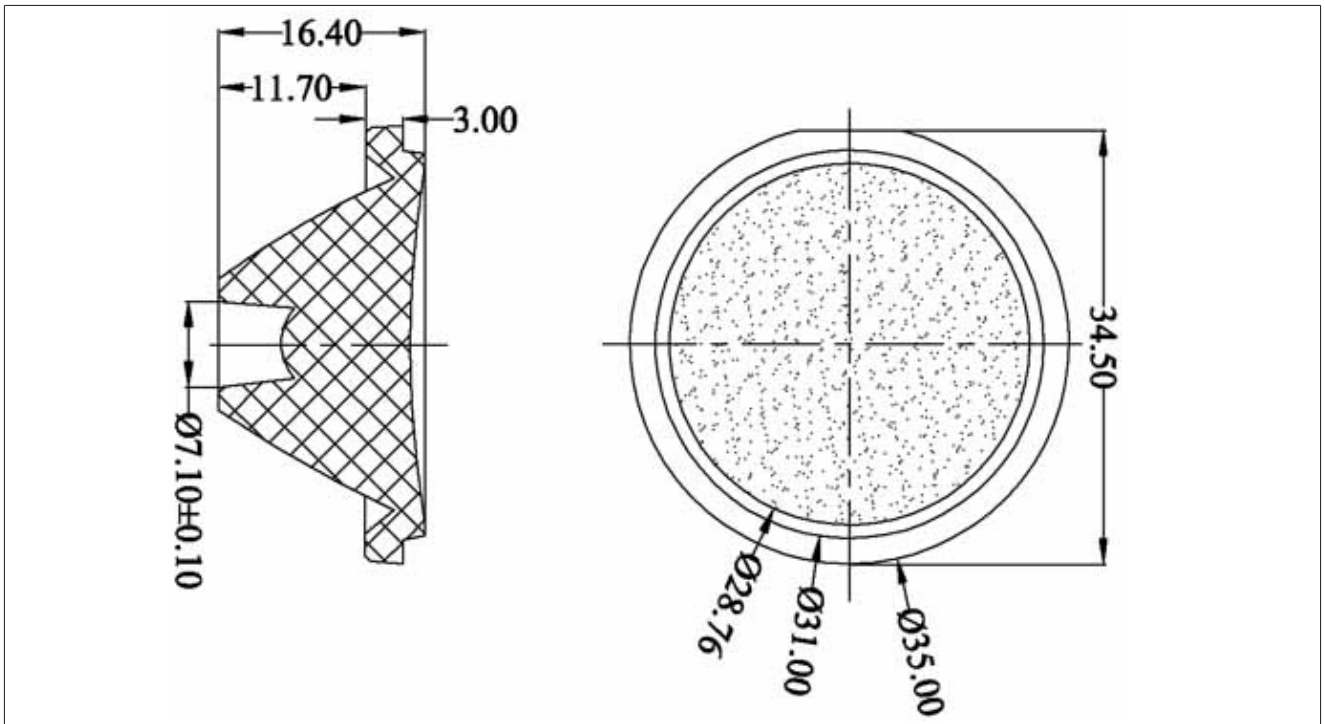
The high collection efficiency reaches 85% of the total flux emitted by the LEDs.

\*Lens holders are available in white or black, and provide the proper alignment between the LEDs and the lenses, set correct distance between the lens and LED.

\*The lens holder can be glued to the PCB to provide a secure assembly.



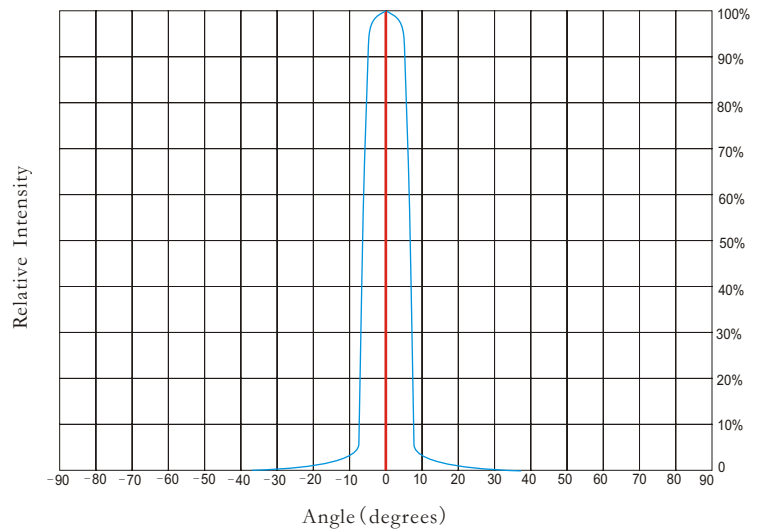
## \* Holder and Lens dimensions of the 2D views



## \* Beam Pattern



## \* Angular Intensity Distribution



## \* Typical illuminance values

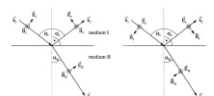
|                                      |        |         |       |      |
|--------------------------------------|--------|---------|-------|------|
| Normal Distance (m)                  | 1.5    | 2       | 5     | 9    |
| Illuminance (lux <sub>1W led</sub> ) | N/A    | N/A     | N/A   | N/A  |
| Illuminance (lux <sub>3W led</sub> ) | 1803.8 | 1016..5 | 163.8 | 51.5 |

Notes:

\*Cree flux characteristics at IF=700mA and TJ=25°C: for T5 (Part Name: XMLAWT-00-0000-000LT50F4/Neutral White/260lm/Lambertian LED)

\*Performance values given are typical values and will vary dependant on LED binning, colour and drive profile

\*Typical illuminance values is reference data (Receiving surface of the average illuminance values).



## \* LED Lens materials feature table

| Items                      | Features               | Experimental methods  | Units | PMMA |
|----------------------------|------------------------|-----------------------|-------|------|
| Physical properties        | Density                | ASTM D792             | g/cm  | 1.19 |
|                            | Absorbtion             | ASTM D570             | %     | 2    |
| Optical properties         | Refraction index       | ASTM D542             |       | 1.49 |
|                            | Transmittance          | ASTM D1003            | %     | 95   |
|                            | ABBE                   | ASTM D542             |       | 58   |
|                            | Birefringence          |                       | nm    | <20  |
| Thermodynamical properties | Glass transition point | DSC                   | °C    | 150  |
|                            | Heat distortion        | ASTM D648 (1.85kg/cm) | °C    | 120  |
| Mechanical properties      | Tensile strength       | ASTM D638             | MPA   | 730  |
|                            | Tensile elongation     | ASTM D638             | %     | 10   |
|                            | Flexural modulus       | ASTM D790             | 10MPA | 3    |

## \* Notes:

- 1.Engineering drawings and all dimensions are in millimeters,holder and lens tolerance,respectively  $\pm 0.10$  and  $\pm 0.05$ .
- 2.Product operating temperature range  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$  (upper limit  $+80^{\circ}\text{C}$ ).
- 3.Product storage temperature range  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$  (upper limit  $+80^{\circ}\text{C}$ ).
- 4.Average transmittance in visible specturm  $400\text{nm} \sim 700\text{nm} > 92\%$ .
- 5.If necessary,clean lenses with mild soap water and soft cloth.
- 6.Never use any commercial cleaning solvents on lenses,like alcohol.
- 7.Please handle and install lenses with wearing gloves,skin oils may damage lens or its optical characteristic.

