

Specifications



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|--------------------------|--|
| Model | DIA.20-45HM |
| Specification | Lens \varnothing 20.00mm X H10.23mm Holder \varnothing 21.95mm X H13.10mm |
| Material | Lens Optical Grade PMMA PC Holder ABS |
| Beam Angle(θ /2) | 45Deg |
| For Led | Luxeon Edixeon Seoul |

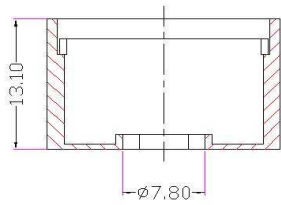
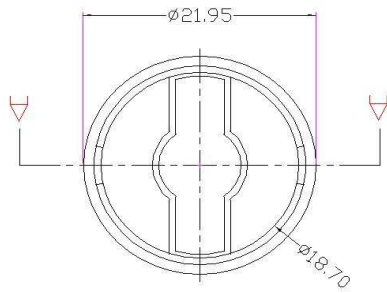
Features:

- High efficiency
- Available in 1 beam Patterns
- Optimized for uniform effects
- Lens with holder

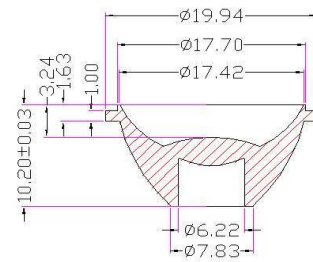
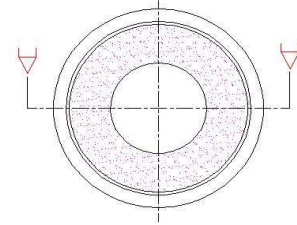
Typical applications:

- Stage lighting
- Street lights
- Decorative light
- Architectural lighting
- Down light
- Flashlight

1. Holder and Lens dimensions of the 2D Views



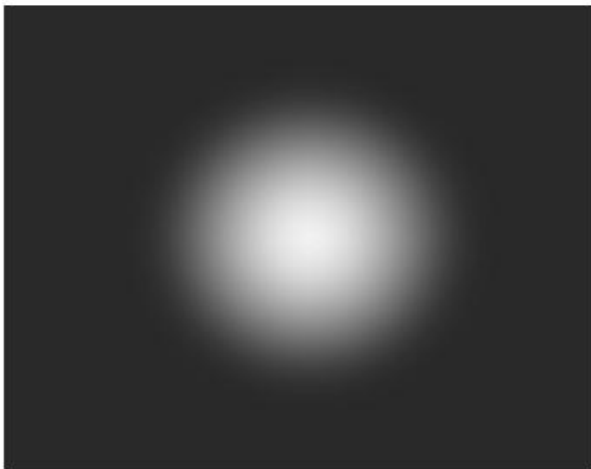
HOLDER



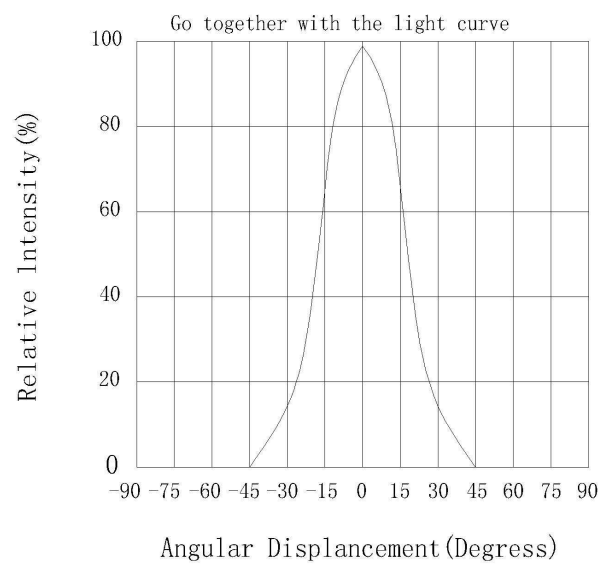
LENS

SECTION A-A

2. Beam Pattern



3. Angular Intensity Distribution



LED LENS MATERIALS FEATURES TABLE

| | FEATURES | EXPERIMENTAL METHODS | UNITS | PMMA |
|----------------------------|------------------------|-----------------------|-------|------|
| PHYSICAL PROPERTIES | DENSITY | ASTM D792 | g/cm | 1.19 |
| | ABSORPTION | 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, tolerance is ± 0.10 .
- 2.Product operating temperature range $-40\text{ }^{\circ}\text{C} \sim +70\text{ }^{\circ}\text{C}$ (upper limit $+80\text{ }^{\circ}\text{C}$).
- 3.Product storage temperature range $-40\text{ }^{\circ}\text{C} \sim +70\text{ }^{\circ}\text{C}$ (upper limit $+80\text{ }^{\circ}\text{C}$).
- 4.Average transmittance in visible specturm $400\text{nm} \sim 700\text{nm} \sim 92\%$.
- 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.