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8.5mm Dia. x 7.4mm FL, NIR I Coated, Molded Aspheric Condenser Lens



Molded Aspheric Condenser Lenses

Stock **#15-880** [CONTACT US](#)

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1 C\$87⁵⁰

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| Volume Pricing | |
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| Qty 1-10 | C\$87.50 each |
| Qty 11-49 | C\$77.00 each |
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Product Downloads

General

Condenser Lens **Type:**

Note:
[Click here](#) for more information on the ISO 10110 surface quality specification.

Physical & Mechanical Properties

8.50 +/-0.3 **Diameter (mm):**

| | |
|----------------------|----------------------------------|
| ≤25 | Centering (arcmin): |
| 6.80 | Clear Aperture CA (mm): |
| 1.8 | Edge Thickness ET (mm): |
| 4.00 ±0.20 | Center Thickness CT (mm): |
| Protective as needed | Bevel: |
| 8.5 | Diameter of Asphere (mm): |
| Plano | Shape of Back Surface: |

Optical Properties

| | |
|---|--|
| 7.40 @ 587.6nm | Effective Focal Length EFL (mm): |
| 0.57 | Numerical Aperture NA: |
| 4.80 | Back Focal Length BFL (mm): |
| Liba2000+ | Substrate: □ |
| ±5 | Focal Length Tolerance (%): |
| NIR I (600-1050nm) | Coating: |
| $R_{avg} \leq 0.5\%$ @ 600 - 1050nm | Coating Specification: |
| Molded Side: 5/3 x 0.4; E 0.2 Polished Side: 5/3 x 0.25; E 0.2 | Surface Quality: |
| 0.87 | f#: |
| 58.85 | Abbe Number (v_d): |
| 1.520 | Index of Refraction (n_d): |
| Plano | Radius R_2 (mm): |
| 600 - 1050 | Wavelength Range (nm): |
| Infinite | Conjugate Distance: |
| 587.6 | Focal Length Specification Wavelength (nm): |

Material Properties

| | |
|-----|--|
| 9.4 | Coefficient of Thermal Expansion CTE ($10^{-6}/^{\circ}\text{C}$): |
|-----|--|

Regulatory Compliance

| | |
|---------------------------|------------------------------------|
| Compliant | RoHS 2015: |
| View | Certificate of Conformance: |
| Compliant | Reach 242: |

Product Details

- Hardened for Improved Durability
- High Numerical Apertures
- Ideal for Illumination Applications

Molded Aspheric Condenser Lenses are pressed, hardened, and annealed to meet precise optical and mechanical specifications. The hardening process improves the durability of the lenses, making them less susceptible to thermal shock and scratching than traditionally polished lenses. These Molded Aspheric Condenser Lenses are ground and polished on the second surface, enhancing the overall precision of the lenses. Molded Aspheric Condenser lenses are ideal for a wide range of illumination and detection applications, including biotech instruments such as DNA sequencers and polymerase chain reaction (PCR) testing platforms.

Technical Information

MgF₂ Coating

R_{avg} ≤ 1.75% @ 400 - 700nm

Typ. Energy Density Limit: 10 J/cm² @ 532nm, 10ns

