

10° Fan Angle, 500 - 850nm AR Coated, High Precision Powell Lens



Stock #70-138 **2 In Stock**

⊖ 1 ⊕ A\$520⁰⁰

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Volume Pricing	
Qty 1-10	A\$520.00 each
Qty 11-49	A\$467.20 each
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General

Beam Shaping Lens **Type:**

Physical & Mechanical Properties

8.90 +0.00/-0.15 **Dimensions (mm):**

8.90 +0.00/-2.00 **Height (mm):**

1.3 **Input Beam Diameter, 1/e² (mm):**

Optical Properties

N-BK7

Substrate:

BBAR (500-850nm)

Coating:

500 - 850

Wavelength Range (nm):

R_{abs} <1.0% @ 500 - 700nm
R_{abs} <1.5% @ 700 - 850nm

Coating Specification:

1.458

Index of Refraction (n_d):

10.00

Fan Angle (°):

Regulatory Compliance

[View](#)

Certificate of Conformance:

Product Details

- Generate Uniform, Flat-Top Profile Over Entire Line
- Fan Angles from 1° to 75° Available
- AR Coated for 400 - 500nm or 500 - 850nm

Precision Powell Lenses, also known as aspheric line generators (ALGs), spread an input beam across a uniform line with a top-hat beam profile at a specified fan angle. These Powell lenses are produced through a precision manufacturing process to ensure high contained power, uniformity, and line straightness across the entire produced line, as well as superior part-to-part consistency. They are designed for a specific input beam diameter to provide best line uniformity; larger input beams will result in higher intensity at the ends of the generated line, while smaller will create a more Gaussian distribution. Precision Powell Lenses are ideal for use in machine vision and life science applications including 3D profile measurement, PCB inspection, line-scan SD-OCT, line-scan confocal microscopy, flow cytometry, and particle analysis.