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45° Fan Angle, 500 - 850nm AR Coated, High Precision Powell Lens



Stock **#70-142** 1 In Stock

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1

+

S\$455^{.00}

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Volume Pricing	
Qty 1-10	S\$455.00 each
Qty 11-49	S\$408.80 each
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General

Type:

Beam Shaping Lens

Physical & Mechanical Properties

Dimensions (mm):

8.90 +0.00/-0.15

Height (mm):

8.90 +0.00/-2.00

Input Beam Diameter, 1/e² (mm):

1.3

Optical Properties	
N-SF6	Substrate: ☐
	Coating:
BBAR (500-850nm)	
Wavelength Range (nm):	
500 - 850	
Coating Specification:	
R _{abs} <1.0% @ 500 - 700nm R _{abs} <1.5% @ 700 - 850nm	
Index of Refraction (n _d):	
1.458	
Fan Angle (°):	
45.00	
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.