

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



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

£260.<sup>00</sup>

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### Volume Pricing

Qty 1-10	£260.00 each
Qty 11-49	£233.60 each
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**i** Prices shown are exclusive of VAT/local taxes

### Product Downloads

### 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,  $1/e^2$  (mm):

## Optical Properties

N-SF6

Substrate:

BBAR (500-850nm)

Coating:

500 - 850

Wavelength Range (nm):

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

Coating Specification:

1.458

Index of Refraction ( $n_d$ ):

45.00

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.