

Spherical Lenses

Cylindrical Lenses

Lens Kits

Achromatic Doublets

Multi-Element

Micro Optics

Mirrors

Prisms

Substrates &amp; Windows

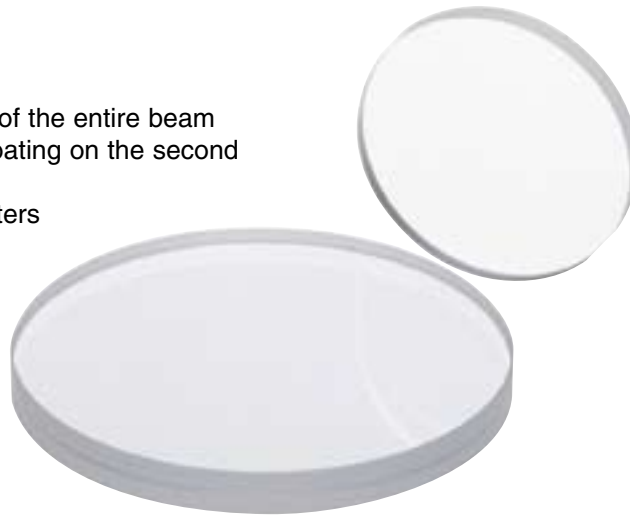
Beamsplitters

Polarizers

Filter &amp; Apertures

## Beam Samplers

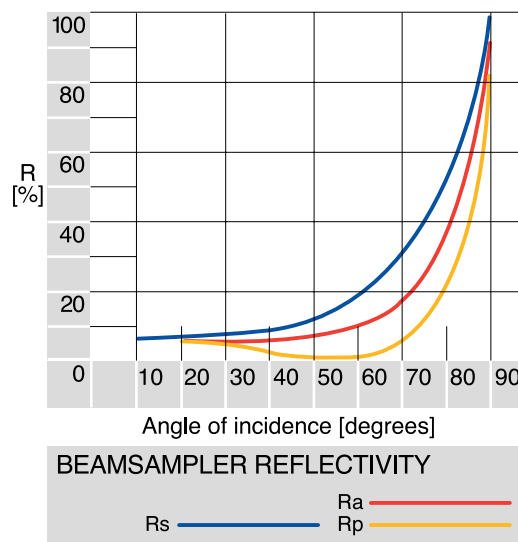
- Provides a 5% reflected sample of the entire beam
- Highly efficient Anti-Reflection coating on the second surface to eliminate ghosts
- Available in four standard diameters
- Wedged second surface also available for highly demanding applications
- Surfaces finished to  $\lambda/10$  flatness
- Standard diameters from 25.4 to 50.8mm



About 5% of a beam incident at 45 degrees is reflected from one surface of these BK7 beam samplers. The faces are parallel to within 5arcsec with a highly effective Anti-Reflection coating on the second surface. This coating eliminates virtually all ghost image problems. The 5% reflected beam is useful for diagnostic sampling or monitoring of the optical beam.

## Specifications & Tolerances

Surface flatness:  $\lambda/10$   
 Diameter: +0, -0.2mm  
 Surface quality: 20-10  
 Parallelism:  $\leq 5$ arcsec or  $1^\circ$  wedge  
 Thickness:  $\pm 0.2$ mm  
 Clear aperture:  $>90\%$  diameter  
 Bevel: 0.2mm x  $45^\circ$  typical  
 Material: BK7, grade A  
 Reflectance:  $R_{av} = 5\%$  at  $45^\circ$   
 Wedge (optional):  $1^\circ$



Sampling a beam is an effective way of providing feedback information for stabilization or calibration. Often one is tempted to insert a small plane mirror in an unused or vignetted portion of the beam to provide the sample. The danger, of course, is that the chosen region may not be typical of the entire beam.

## Beam Samplers

Diameter, D (Inches)	Diameter, D (mm)	Thickness, t (mm)	Price	PART NUMBER
1.00	25.4	3.0		038-2450
1.18	30.0	3.0		038-2460
1.97	50.0	5.0		038-2470
2.00	50.8	5.0		038-2480

For a  $1^\circ$  **wedged** substrate **append -W** to part number and add \$25 to the price.  
 Note: Wedged substrates are several mm thicker.

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