

$10 \pm 0,20$

Back surface

Front surface

Wide edge

$50 \pm 0,20$

$50 \pm 0,20$

75 Arc Sec.

Specifications:

Material: Fused silica

Wedge Angle: 75 ± 20 Arc Sec. (Please see Important Note)

Clear Diameter: 45 mm

Design Wavelength: 633 nm

Surface Quality: 40-20 Scratch Dig

Transmitted Wavefront: $\lambda/10$ (p-v at 633 nm) over the central 35mm diameter circle; $\lambda/8$ (p-v at 633 nm) across the central 45 mm.

AR Coating (both front and back surfaces): Reflection coefficient at normal incidence less than 1.5% at 633nm wavelength.

Chamfer: 0.5 mm @ 45 degrees.

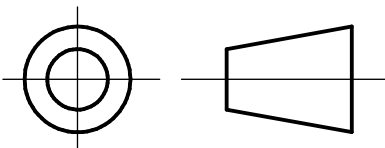
Mark the wide edges and indicate the front surfaces of both pieces.

Flatness for the surface of the wide edge need to better than 0.07 mm.

Important Note:

The two wedges need to form a matched pair in the following sense: Laying the back surface of both wedges on the same horizontal surface, and with the wide edges of both wedges resting against the same straight edge, then the normal to the front surface of one wedge should be parallel to the normal of the front surface of the other wedge to within 4 arcseconds.

SI



Material:
Fused silica

All dimensions in:
Millimetre

Drawn by:
X Sun

Chk. by:
D Busher

Date:
05/06/07

Quantity:
2 off.

Drg. No.
MROI-070b

University of Cambridge, Department of Physics
CAVENDISH LABORATORY

Title:
Wedge

Project:
MROI

Scale:

Size:
A4