

E040514 00 D

SPECIFICATION

Drawing No Rev. Group

Sheet 1 of 2

Lenses

APPROVALS	DATE	REV	DCN NO.	BY	CHECK	DCC	DATE
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CHECKED:							
APPROVED: P. Fritschel							
DCC RELEASE							

1 Material

Fused Silica 7980, low inclusion Grade OA

2 Dimensions

2" dia. + 0/-.010" Chamfers: $0.002'' \pm 0.001''$ (a) $45^{\circ} \pm 15^{\circ}$

3 Lens – 1 Plano-Convex

Focal Length (at 1064 nm): 1146 mm \pm 2%, or, ROC of spherical surface = 515.1 mm TC = 6.6 mm TE = 4.6 mmThickness tolerance: ± 0.25 mm

Lens – 2 Plano-Convex

Focal Length at 1064 nm: 687.5 mm \pm 2%, or, ROC of spherical surface = 309.1mm TC = 6.4 mm TE = 5.3 mmThickness tolerance: ± 0.25 mm

4 Surface Accuracy

 $\lambda/10$ irregularity at 1064 nm over the clear aperture (80% dia.)

Surface Quality 5

Superpolished - < 1 Angstrom over central 80 % of diameter with 10-5 scratch-dig; best effort for 0/0

20-10 scratch-dig outside central 80 % of diameter

6 Concentricity

< 0.001"

7 Clear Aperture

> 80% diameter

8 Coating - Both sides

AR coating @ 1064 nm Normal incidence



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R < 500 ppm

Coating vendor to provide one 1"dia. witness plate and a spectrophotometer graph from each coating run.