



SPECIFICATION

Mirror Specifications

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

1 Material

Fused Silica 7980, OA

2 Dimensions

2" dia. +0/- .010"

Thickness: 1/2" ± .010"

Chamfers: 0.002" ± 0.001" @ 45° ±15°

3 Surface Roughness

Side 1

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

Side 2

< 5 Angstrom over central 80 % of diameter

4 Surface Figure

Side 1

Flat ≤ λ/10 at 632.8 over central 80% (clear aperture)

Side 2

Flat ≤ λ/10 at 632.8 over central 80% (clear aperture)

5 Coating

Wavelength: 1064 nm

Angle of incidence: 0° - 45°



Mirror Specifications

Side 1

HR - $R > 99.9\%$ for 0-45 deg incidence, both s-and p-pol

Side 2

AOI – 0-45 degrees incidence, both s-and p-pol

AR - $R \leq 0.2\%$

Coating vendor to provide:

1. One 1” witness sample from each coating run
2. Two spectrophotometer graphs of the reflectance and transmittance of the HR coatings must be provided; one covering the spectrum from 530nm to 1200nm; the other, with increased sensitivity, to show wavelengths from 900nm to 1100nm
3. Spectrophotometer graphs of the reflectance of the AR coating taken as cited above.