# Mirror Specifications

| APPROVALS | DATE | REV | DCN NO. | BY | CHECK | DCC | DATE |
|---|---|---|---|---|---|---|---|
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| DCC RELEASE | | | | | | | |

## 1 Description

1” Ø Flat/Flat mirror @ 532nm

## 2 Material

Corning HPFS 7980 (high purity fused silica, UV grade)
Grade 0A (Low inclusion class: <0.3 mm² cross section, 0.1 mm max. size; Homogeneity < 1ppm)

## 3 Dimensions

1"Ø +.000/-.005" X .250" ± .020" tk., Plano / Plano

## 4 Wedge

<60 arc seconds

## 5 Surface Roughness

**Side 1**
Super polish
Surface Roughness: <1Å RMS in CA
Surface Quality: 10-5
**Side 2**
Commercial Polish
Surface Roughness: <5Å RMS in CA
Surface Quality:40-20

## 6 Surface Figure

**Side 1**
Flat < λ/10 at 632.8 over central 80%
**Side 2**
Flat < λ/4 at 632.8 over central 80%

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## 7 Coating

Wavelength: 532nm
Angle of incidence: 0°- 45°
**Side 1**
R > 99.95% @ 532nm and AOI 0°- 45°, both s and p pol
**Side 2**
AR coating, R<1% @ 532nm and AOI 0°- 45°, both s and p pol

### Coating vendor to provide:

1. Two spectrophotometer graphs of the reflectance and transmittance of the HR coatings; one covering the spectrum from 440nm to 1200nm; the other, with increased sensitivity, showing wavelengths from 450nm to 650nm.
2. Spectrophotometer graphs of the reflectance of the AR coating taken as cited above.