



# SPECIFICATION

## PMC - Mirror Specifications

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

### 1 Material

Fused Silica 7980, Class 0C

### 2 Dimensions

1" dia. +0/- .010"

Thickness: 0.250" ± .010"

Chamfers: 0.010" + 0/- 0.005" @ 45° ±15°

Side 2: Wedge < 5 minutes

### 3 Surface Roughness / Quality

#### Side 1 and Side 2

Superpolished - < 1 Angstrom over central 80 % of diameter with 10-5 scratch-dig;  
20-10 scratch-dig outside central 80 % of diameter

### 4 Surface Figure

#### Side 1 and 2

##### After coating

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

### 5 Coating

Wavelength: 1064 nm

Angle of incidence: 43.6 degrees

P - Polarization

Coating absorption ≤ 1 ppm

Scatter <15 ppm

Coating uniformity: 1nm rms

#### Side 1



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**HR** - T = 14,000 ppm +/- 1,000 ppm – Best effort for +/- 650 ppm

**Side 2**

**AR** - R ≤ 0.1%

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.