



OMC – Curved Substrate Coating Specifications

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

1 Material

Fused Silica 7980, Class 0C

2 Applicable Documents

Adv. LIGO-OMC-Curved Substrate Specifications

LIGO-E-070012-00-D

3 Coating

Wavelength: 1064 nm

Angle of incidence: 7.0 degrees

P - Polarization

Coating absorption < 1 ppm

Scatter <15 ppm

Coating uniformity: 1nm rms

Side 1

HR: T <= 10 ppm

Side 2

Ar: R <= 0.1 % (+/- 100 ppm if possible)

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.