OMC – Flat 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 – Flat Mirror Specifications LIGO-E070011-00-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 = 8,000 ppm +/- 750 ppm Best effort for +/- 500 ppm

Side 2

AR - R 0.1% (+/-100 ppm)

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.