

Septum Window– Coating Specifications

AUTHOR	CHECKED	REV	DATE	APPROVALS		
				DCN NO.	REV	DATE
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L. Austin	M. Smith	v2	16-Jun-2011	See DCC entry for approval		

1 Material

Fused Silica 7980, OA

2 Applicable Documents

LIGO- E070069- v1
LIGO-D1101005

Septum Window Polish, Enhanced LIGO
aLIGO, high quality, .75 deg wedged, 6 in. Viewport Optic

3 Coating

Wavelength: 1064 nm
Angle of incidence: 0 degrees
Scatter <15 ppm

Side 1 and 2

AR – Reflection:
Goal: < 10ppm
Requirement: < 50ppm

Coating vendor to provide:

One 1 arc second wedged coating sample ahead of time to evaluate vendor’s capability to meet coating specifications.

1. One 1 arc second wedged witness sample from each coating run
2. Spectrophotometer graphs of the reflectance of the AR coating from 800nm to 1200nm
3. Spectrophotometer graphs of the reflectance of the AR coating with increased sensitivity, to show wavelengths from 950nm to 1100nm