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| --- | --- | --- | --- | --- | --- | --- |
| **AUTHOR** | **CHECKED** | **REV** | **DATE** | **APPROVALS** | | |
| **DCN NO.** | **REV** | **DATE** |
| H. Armandula | G. Billingsley | A/v1 | 05-08-07 | E070141 | 00 | 05-08-07 |
| L. Austin | M. Smith | v2 | 16-Jun-2011 | See DCC entry for approval | | |
| M. Smith | L. Austin | V3 | 3/18/13 | See DCC entry for approval | | |

# Material

Fused Silica 7980, OA

# Applicable Documents

LIGO- E070069- v1 Septum Window Polish, Enhanced LIGO

LIGO-D1101005 aLIGO, high quality, .75 deg wedged, 6 in. Viewport Optic

# Coating

Wavelength: 1064 nm

Angle of incidence: 0 degrees

Scatter <15 ppm

**Side 1 and 2**

AR – Reflection:

Goal: < 300 ppm

Requirement: < 500 ppm

Absorption:

Requirement: < 10 ppm

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
4. Total transmissivity measurement @ 1064 nm