

**BLANK MATERIAL, AdLIGO FOLDING MIRROR**

APPROVALS	DATE	REV	DCN NO.	BY	CHECK	DCC	DATE
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CHECKED: G Billingsley	04/04/08	A					
APPROVED:							
DCC RELEASE							

**Applicable Documents**

LIGO-D080054-A AdLIGO FM Mirror Blank

MIL-G-174-B Glass, Optical

**Requirements**

Physical Dimensions per LIGO- D080054-A AdLIGO FM Mirror Blank

Clear Aperture Central 315 mm

Serial Number Blanks shall be serialized as FMXX, where XX increments starting at 01

Material Fused Silica

Final shaping Shaping shall be performed using a progression of grit size ending with a 320 or smaller grit tool.

Defect depth Maximum on any surface or corner is less than 0.5 mm

Birefringence  $\leq 5$  nm/cm

Bubble and Inclusion Cross section No bubbles or inclusions within 5mm of the flat surface within the clear aperture



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Specification	Method	Frequency of Inspection	Data Delivered
Physical Dimensions	Visual Inspection	100%	Diameter Thickness
Serial number	Visual Inspection	100%	Inspection Report included with Certification
Material	Process Control Material Certification	100%	Inspection Report included with Certification
Defect depth	Visual Inspection	100%	Hand sketch indicating location and dimensions
Birefringence	MIL-G-174 Section 4.4.5	100%	Inspection Report included with Certification
Inclusions	Visual Inspection	100%	Hand sketch indicating location and dimensions

**Table 1: MEASUREMENT MATRIX: FREQUENCY AND METHOD**