



SPECIFICATION

Polish LASTI Compensation Plate

AUTHOR:	CHECKED:	DATE	APPROVALS		
			DCN NO.	REV	DATE
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Applicable Documents

- LIGO-D060534-A Thermal Compensation Plate
- LIGO-D060527-A Fused Silica Blank LASTI Compensation Plate
- LIGO-E060273-A Fused Silica Blank, LASTI Compensation Plate

Requirements

Physical Configuration

Shape and Polish according to
 LIGO-D060534-A Thermal Compensation Plate

Fabricate from
 LIGO-D060527-A Fused Silica Blank LASTI Compensation Plate
 LIGO-E060273-A Fused Silica Blank, LASTI Compensation Plate

Registration Marks

Registration marks shall be etched, ground or sandblasted and located per LIGO- D060534

Serial Number

Serial and Part Numbers shall be etched, ground or sandblasted and located per LIGO- D060534

Side and Bevel Polish

Sides and Bevels shall be polished using a progression of smaller grit sizes. The last step before final polish shall be equal to or less than a five micrometer grit finish. These surfaces shall appear transparent with no grey, scuffs or scratches visible to the naked eye when viewed in normal room light against a black background.

Surfaces

The optical surfaces, 1 and 2, shall be polished using a progression of smaller grit sizes. The last step before final polish shall be equal to or less than a five micrometer grit finish.

Surfaces 1 and 2 are to be polished flat to 150 nm peak to valley as measured over the central 120 mm diameter. Surface finish shall be 40/20 scratch/dig, or better.



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Inspections

Specification	Test Method	Data Delivered
Outside Diameter	Physical inspection	Measured dimension
Wedge	Physical inspection	Measured dimension
Thickness	Physical inspection	Measured dimension
Flatness, Surfaces 1 and 2	Interferometry	Interferogram