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DRWG NO. REV.		
GID	1 2	
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COMPONENT SPECIFICATION

TITLE 2 km MODE CLEANER CURVED MIRROR SUBSTRATE, COATED

APPROVALS: David Reitze	06-23-98	REV	DCN NO	BY	СНК	DCC	DATE
DRAWN:	25 70						
CHECKED:							
APPROVED:							
DCC RELEASE:							

Applicable Documents

LIGO-D970592-00-D 2 km Mode Cleaner Curved Mirror Substrate LIGO-E970150-00-D Substrate, 2 km Mode Cleaner Curved Mirror

Requirements

Physical Configuration

Fabricate from

LIGO-D970592-00-D 2 km Mode Cleaner Curved Mirror Substrate

Surface 1 and 2

Coating to be centered at 1064 nm Angle of Incidence to be 0 degrees

Note: HR Coating to cover only central 2.8 cm of substrate

Coating Uniformity: 1nm rms - central 1.8 cm

10 nm p-v over 2.8 cm

Scatter: <15 ppm Absorption: <1 ppm

Zero surface electrical field

Surface Quality

To comply with LIGO Component Specification E960093-A-D (Page 2):

"Scratches and Point Defects"

Coating to resist abrasion test per MIL-M-13508C

Surface 1: HR Coating

Note: HR Coating to Cover Central 2.8 cm of substrate

Transmission: <20 ppm

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COMPONENT SPECIFICATION

TITLE 2 km MODE CLEANER CURVED MIRROR SUBSTRATE, COATED

Surface 2: AR Coating	
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Reflection: < 300 ppm

NOTE:

Coating manufacturer to provide:

- 1. One (1 in.) witness plate from each coating run
- 2. Spectrophotometer graphs of Reflectance and Transmittance of HR coating