



COMPONENT SPECIFICATION

TITLE
FOLDING MIRROR SUBSTRATE, COATED

APPROVALS:	DATE	REV	DCN NO	BY	CHK	DCC	DATE
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CHECKED: J. Camp	4-6-98						
APPROVED: S. Whitcomb	4-6-98						
DCC RELEASE:							

Applicable Documents

LIGO-D960790-A-D Folding Mirror Substrate
 LIGO-E960101-A-D Substrate, Folding Mirror

Requirements

Physical Configuration

Fabricate from
 LIGO-D960790-A-D Folding Mirror Substrate

Surface 1 and 2

Coating to be centered at 1064 nm
 Angle of Incidence to be 45 degrees - Optimized for "P" polarization

Coating Uniformity: 1nm rms - central 8 cm
 15 nm p-v - over 20 cm
 Scatter: <15 ppm
 Absorption: <1 ppm

Zero surface electrical field

Surface Quality

To comply with LIGO Component Specification E960101-A-D (Page 2):
 "Scratches and Point Defects"
 Coating to resist abrasion test per MIL-M-13508C

Surface 1: HR Coating

Transmission: <500 ppm