



COMPONENT SPECIFICATION

TITLE
FLAT, TRANSMISSION, 150 mm, COATED

APPROVALS:	DATE	REV	DCN NO	BY	CHK	DCC	DATE
DRAWN: G. Billingsley		A	E980064-00-D				03-10-98
CHECKED:							
APPROVED:							
DCC RELEASE:							

Applicable Documents

LIGO-D970619 Flat, Transmission, 150mm Before Coating, LIGO

Requirements

Physical Configuration

Fabricate to
 LIGO-D970619 Flat, Transmission, 150mm Before Coating, LIGO

Serial Number

Each flat shall be uniquely serialized or identified to allow matching the part to the corresponding coating data.

Surface Quality (Surface A and B)

According to Notes 5 and 6 in LIGO-D970619-00-D

Surface Treatment

- Surface A:** "Clapham - Dew" type coating at 1064 nm; normal incidence
 - transmission through coating from interferometer=70%
 - return reflection from coating back through transmission flat=10%
 - secondary reflections off the front of the coating <0.5% (this is for light which gets transmitted through the transmission flat, reflects off the test surface and goes back into the interferometer - must be free of secondary reflections)
- Surface B:** AR at 1064 nm, normal incidence. Reflectivity < 0.5%

Inspections

Specification	Test Method	Data Delivered
Wavelength	Spectrophotometer	Provide a transmittance graph
Surface Figure / Quality	Interferometer / Visual	Provide an electronic phase map and report PV & rms over 150 mm aperture