COMPONENT SPECIFICATION

TITLE

SUBSTRATE, SUPRASIL 312

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

Applicable Documents

LIGO-E960095-A-D	Mirror Blank Material, Input Test Mass
LIGO-D960794-A-D	Core Optic Blank
LIGO-E960093-C-D	Substrate, Input Test Mass

Requirements

Physical Configuration

Fabricate from

LIGO-E960095 Mirror Blank Material, Input Test Mass
Wedge: None
Thickness: Nominally 108 mm
Diameter: Nominally 250 mm
Bevel for safety (~ 2mm)

Serial Number

The Serial number shall be IM11

Surface Figure

All specified quantities refer to the physical surface of the optic.
Surfaces 1 and 2: Flat to within 170 nm Peak to valley within the central 200 mm

Surface Treatment

Surfaces 1 and 2 shall undergo the same surface processes as used in the manufacture of Input Test Masses in accordance with Specification LIGO-E960093. This piece is to be used in tests of Core Optic bulk and surface properties and should be chemically the same as all other LIGO substrates.

Inspections

Specification	Test Method	Data Delivered
Physical Dimensions: Diameter, Thickness, Wedge angle	Visual Inspection	Report to accuracy of 0.1 mm
Surface Figure	Interferometry	Report PV & rms over 200 mm