

**DOCUMENT CHANGE NOTICE
(DCN)**

DOCUMENT No. (DOC-REV-GP.ID)	TITLE	NEW REV.
E960100-C-D	Specification for Substrate, Beam Splitter	D

CHANGE DESCRIPTION (FROM /TO, CONTINUE ON PG. 2 IF NECESSARY):

The specification for "Surface Figure, measured over the central 200 mm diameter"

Changes from:

Surface 1: Flat.

The parabolic sag of the reflected wavefront is required to be between 14 nm and -50nm

Astigmatism: < 16 nanometers (surface peak to valley)

Changes to: ...reflected wavefront is required to be between 39 and -25 nm...

The rest of the specification, including transmitted wavefront remains the same.

This is based on comparative analysis of CITs post-coating measurements and CSIROs pre-coating measurements (analyzed over 150mm.

We find that the sag changes an average of -14nm (toward cx), with a standard deviation of 7 nm, when measured over 150mm for the 5 Beamsplitters we have had the opportunity to measure. This corresponds to an average sag change of -25nm over a 200 mm diameter aperture. We are therefore biasing the specification by 25 nm in anticipation of the changes due to coating induced stress.

REASON FOR CHANGE: Attempt to get post-coating BSs closer to flat by pre-figuring to compensate for coating stress

Action: ☐ Incorporate change ☐ Attach DCN to drawing(s) ☐ Other action (specify):

DISPOSITION OF HARDWARE (IDENTIFY SERIAL NUMBERS)	DCN DISTRIBUTION	
<input type="checkbox"/> No hardware affected (record change only)	Barish	Coyne
<input type="checkbox"/> List S/Ns which comply already:	Lazzarini	Lindquist
<input type="checkbox"/> List S/Ns to be reworked or scrapped:	Sanders	Shoemaker
<input checked="" type="checkbox"/> List S/Ns to be built with this change: BS02, BS06	Weiss	Whitcomb
<input type="checkbox"/> List S/Ns to be retested per this change:		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

SAFETY, COST, SCHEDULE, REQUIREMENTS IMPACT? ☒ NO ☐ YES (If yes, enter CR (CCB) or TCP (TRB) no:

APPROVALS	DATE	OTHER APPROVALS (specify)	DATE
ORIGINATOR: G. Billingsley	10/17/01		
TASK LEADER:			
GROUP LEADER: D. Coyne			
DCC RELEASE			