

E1300498 V1

SPECIFICATION

Drawing No Rev. Group of 2 Sheet 1

Folding Mirror Coating Uniformity Demonstration

					APPROVALS		
AUTHOR:	CHECKED:		DATE	DCN NO.	REV	DATE	
G. Billingsley	P. Fritschel		5/29/13	E1300499	V1	5/29/13	
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Туре		FM					
Purpose		The goal is to demonstrate the existing CSIRO coating					
		uniformity. The coated flat will eventually be used as a					
		metrology reference surface.					
Applicable Docume	nts		•				
FF							
Blank Specification		E080045-A – Heraeus Suprasil 312					
Polish Specification		E080515-v3					
i onsu specification							
Polish Drawing (Fabricate From)		D080661-v2					
i onsh brawing (i abricate From)							
Conoral to Surfaces	1 & 7						
General to Surfaces	1 & 2						
Figure Change Before / After Coating		Goal: Over a 225 mm diameter aperture, coating					
		uniformity & stress from the coating process shall not					
		change the Sagitta more than 8 nanometers and shall					
		not add surface figure Zernike terms higher than					
		second order with amplitude > 0.5 nanometers					
		second order with unpittude > 0.5 hunometers.					
Coating Deposition Method		Ion Beam Sputtered					
Couring Deposition Me	liiou	Ton Dean	ii oputteret	*			
Coating Area		To Beve	1				
County in ca			L				
Surface 1							
ADDOWS ON ODTIC S	INE DOINT TO	SUDEAC	F 1				
ARTONS ON OFIICS	IDE FUINT IU	<u>SURFAC</u>					
Angle of Incidence		0 degrees					
Surface 2							
Coating Type		Antireflection – optional for stress demonstration					
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LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY

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Additional Deliverables	
Layer Thickness Information	For all layers in the design: designed thicknesses, and indices of refraction at 1064 nm for both coating materials (based on individual layers).