Document Change Notice (DCN) Title: ETM & ITM ROC Specification Change

Document No. Doc-Rev	Title	New Rev
E080512-v2	Advanced LIGO End Test Mass (ETM)	v3
D080658-v2	ETM substrate	v3
E080511-v2	Advanced LIGO Input Test mass (ITM)	v3
D080657-v2	ITM Substrate	v3

(Continue on sheet 2 if needed)

CHANGE DESCRIPTION (FROM/TO) – Continue on next sheet if needed:

See sheet 2

REASON FOR CHANGE: Changing the Radii of Curvature (ROC) specification of the Test Masses to call out a ROC precision as well as an absolute range.

ACTION: ☒ **Incorporate Change** ☐ **Attach DCN to Drawings** ☐ **Other Action (specify):**

DISPOSITION OF HARDWARE (IDENTIFY SERIAL NUMBERS)
☒ **No hardware was affected (record change only):**
☐ **List S/Ns which comply already:**
☐ **List S/Ns to be reworked/scrapped:**
☒ **List S/N's to be built with this change: all**
☐ **List S/Ns to be retested per this change:**
☐ **Other disposition/instructions or additional comments:**

DCN DISTRIBUTION

Required:
excomm (Lab Grp Leads, LSC Spokesperson)
Michael Landry (LHO AdL Liaison)
Brian O'Reilly (LLO AdL Liaison)
Bill Tyler (Lab Safety & QA)

Recommended (AdL Area/Subsys Leads & Cog. Sci./Eng., subsystem email distribution lists): *[please delete if/as appropriate for this DCN]*

		GariLynn Billingsley
		Bill Kells
	Mike Smith	
Phil Willems	Benno Willke	
	aligo_sys	aligo_aos
aligo_coc	aligo_io	aligo_isc

Additional Distribution List for this DCN:

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

APPROVALS:	DATE	OTHER APPROVALS (SPECIFY)	DATE
ORIGINATOR: G Billingsley	3-26-09		
TASK LEADER: G Billingsley	3-26-09		
GROUP LEADER: D Coyne	3-26-09		
DCC RELEASE: see QA/approval setting in DCC			

CHANGE DESCRIPTION (FROM/TO) -- continued:

ITM E080511-v2

FROM

Optical Surface Figure, measured over the central 160 mm diameter
Surface 1: Spherical, concave. Radius of curvature: 1934m ± 3m.

TO - V3

Optical Surface Figure, measured over the central 160 mm diameter
Surface 1: Spherical, concave. Radius of curvature (R): 1934 m -5, +15 m absolute accuracy
ROC precision: R ± 3 m where 1929 m </= R </= 1949 m for all ITM optics

Similarly

ETM E080512-V2

FROM

Optical Surface Figure, measured over the central 160 mm diameter
Surface 1: Spherical, concave. Radius of curvature: 2245 m ± 3 m.

TO - V3

Optical Surface Figure, measured over the central 160 mm diameter
Surface 1: Spherical, concave. Radius of curvature (R): 2245 m -5, +15 m absolute accuracy
ROC precision: R ± 3 m where 2240 m </= R </= 2260 m for all ETM optics

D080657 and D080658: updated to include references to version -v3 of the associated polishing specification. No other changes