

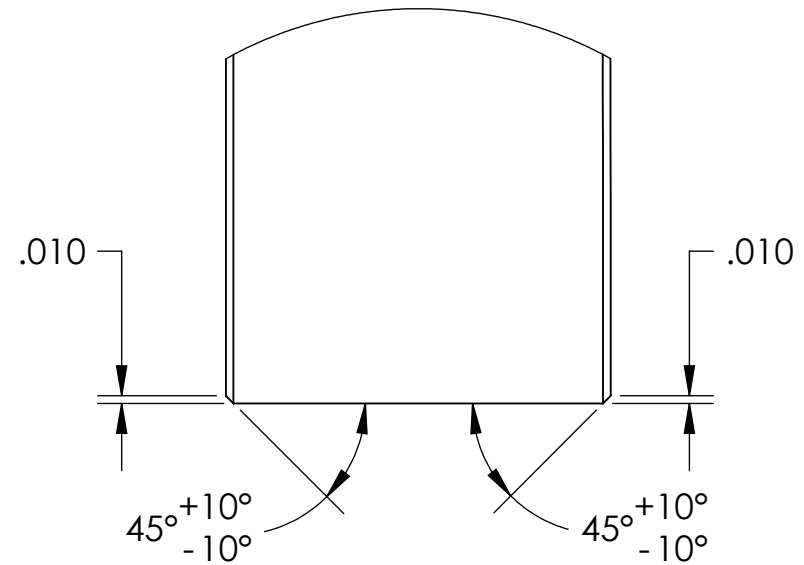
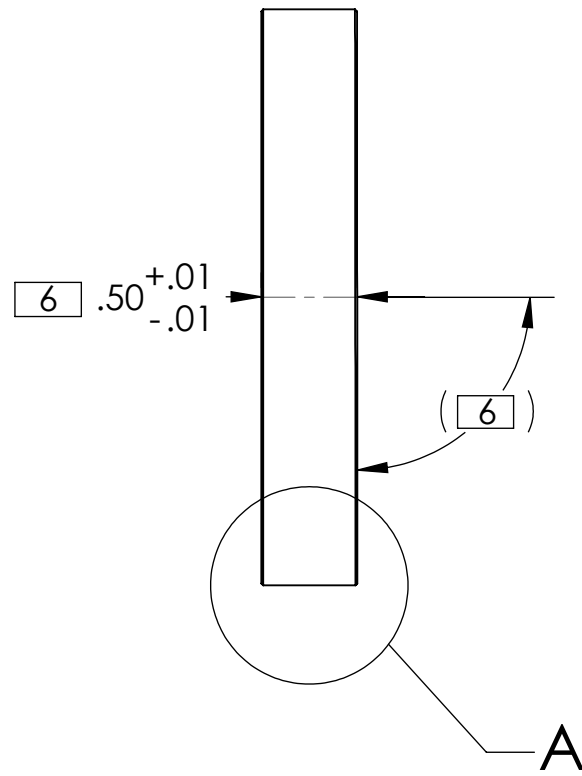
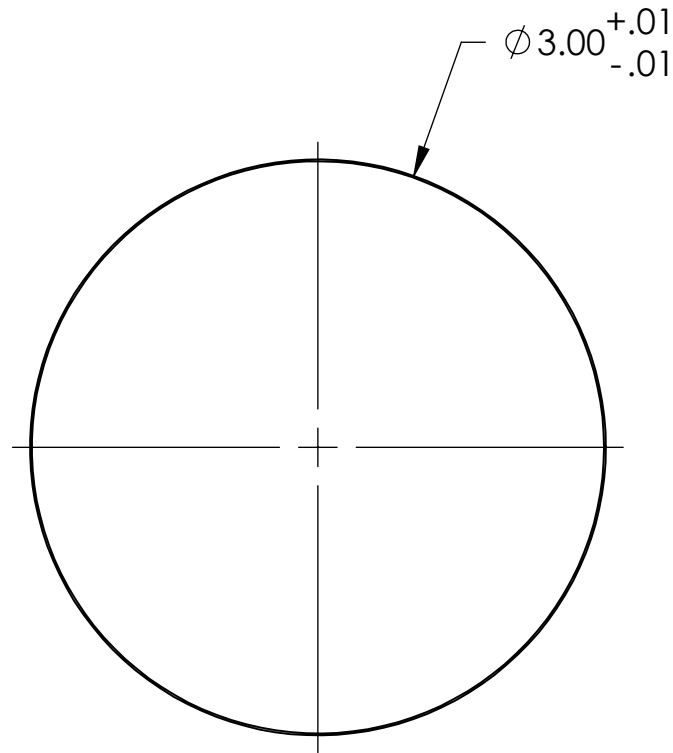
D1100540\_dLIGO TCS\_5" THICK OPTICAL WINDOW, PART PDM REV: X-002, DRAWING PDM REV: X-004

NOTES CONTINUED:

5 SCRIBE, ENGRAVE, LASER MARK OR MECHANICALLY STAMP (NO DYES OR INKS) A UNIQUE THREE DIGIT SERIAL NUMBER & REVISION NUMBER ON EACH PART. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. BAG AND TAG PARTS WITH THEIR DRAWING PART NUMBER, REVISION, VARIANT OR "TYPE" (IF APPLICABLE), AND QUANTITY, IF PARTS ARE TOO SMALL TO SCRIBE. BAGGING AND TAGGING ALONE IS SUFFICIENT.  
EXAMPLE (PART): 001-v1  
EXAMPLE (TAG): DXXXXXX-VY, TYPE-XX, QTY: TBD

6 MATERIAL: OPTICAL GRADE "A" FUSED SILICA (HEREAUS INFRASIL 301-A, HERASIL 1-A, SUPRASIL 311-A, or SUPRASIL 312-A)  
DIAMETER: 3.000", (+/-0.010)  
CLEAR APERTURE: 2.75"  
THICKNESS: 0.50" +/-0.010  
WEDGE: 3min. +/- 2min  
WAVEFRONT DISTORTION ACROSS ANY 20 mm DIAMETER WITHIN THE CLEAR APERTURE: < 1/10 LAMBDA @ 633 nm WAVELENGTH  
EDGE CHAMFER: 0.010" @ 45 DEG +/-10DEG  
SURFACE QUALITY: 10-5 LASER QUALITY

REV.	DATE	DCN #	DRAWING TREE #
v1	26 JUL 2011	E1100655-v1	E1100656-v1
-	-	-	-
-	-	-	-



DETAIL A  
SCALE 4 : 1

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

DIMENSIONS ARE IN INCHES	
TOLERANCES: .XX ± .01 .XXX ± .005 ANGULAR ± °	
1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. REMOVE ALL SHARP EDGES, .005-.015, FOR MACHINED PARTS. ROUND ALL EDGES APPROXIMATELY R.02 FOR SHEET METAL PARTS. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.	
MATERIAL	SEE NOTE 6
FINISH	6

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME aLIGO TCS .50" THICK OPTICAL WINDOW	
SYSTEM ADVANCED LIGO	SUB-SYSTEM AOS	DESIGNER A. LANGLEY	24 MAR 2011
NEXT ASSY D1003194	SCALE 1:1	DRAFTER A. LANGLEY	24 MAR 2011
	PROJECTION: 	CHECKER M. JACOBSON	26 JUL 2011
		APPROVAL P. WILLEMS	30 MAR 2011
		SIZE DWG. NO. B D1100540	REV. v1
		SHEET 1 OF 1	