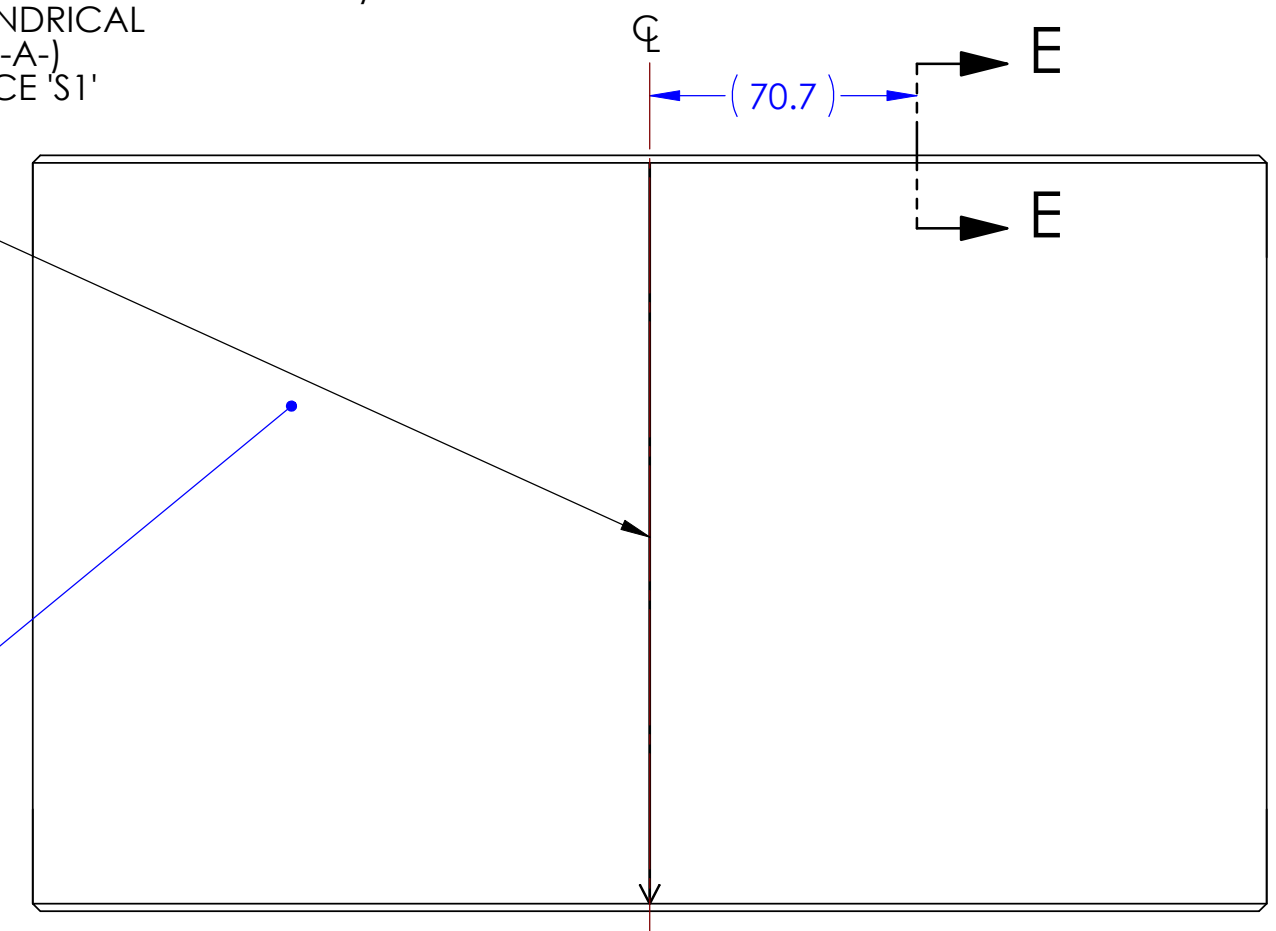
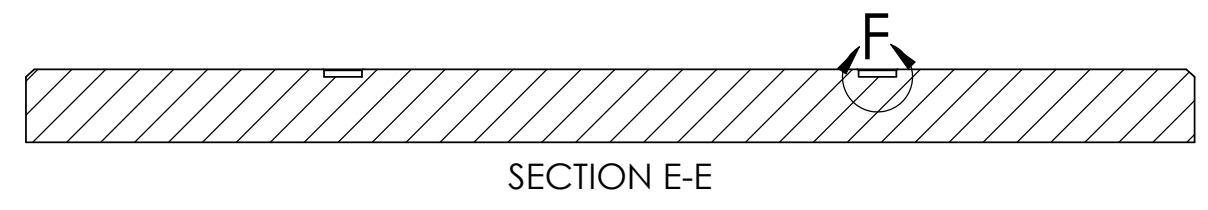


REV	DATE	DCN #	DRAWING TREE #
B	12/2008	LIGO-E080172-B	

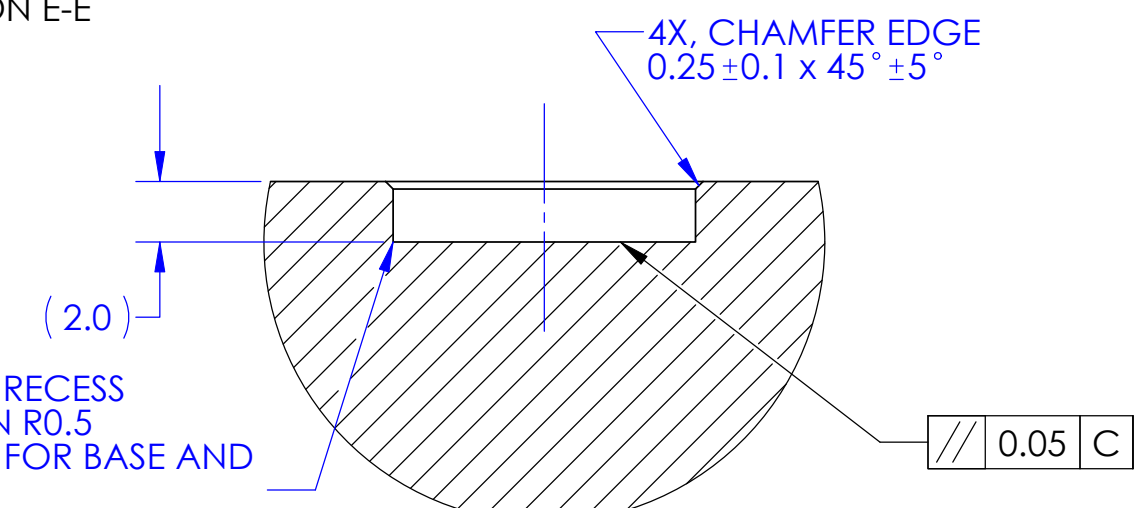
ETCH, GRIND OR SANDBLAST LEGIBLE REFERENCE GROOVE (0.25mm ± 0.05mm WIDE) ALONG ϕ , PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-) WITH ARROW POINTING TO SURFACE 'S1' WITHIN ±0.1mm



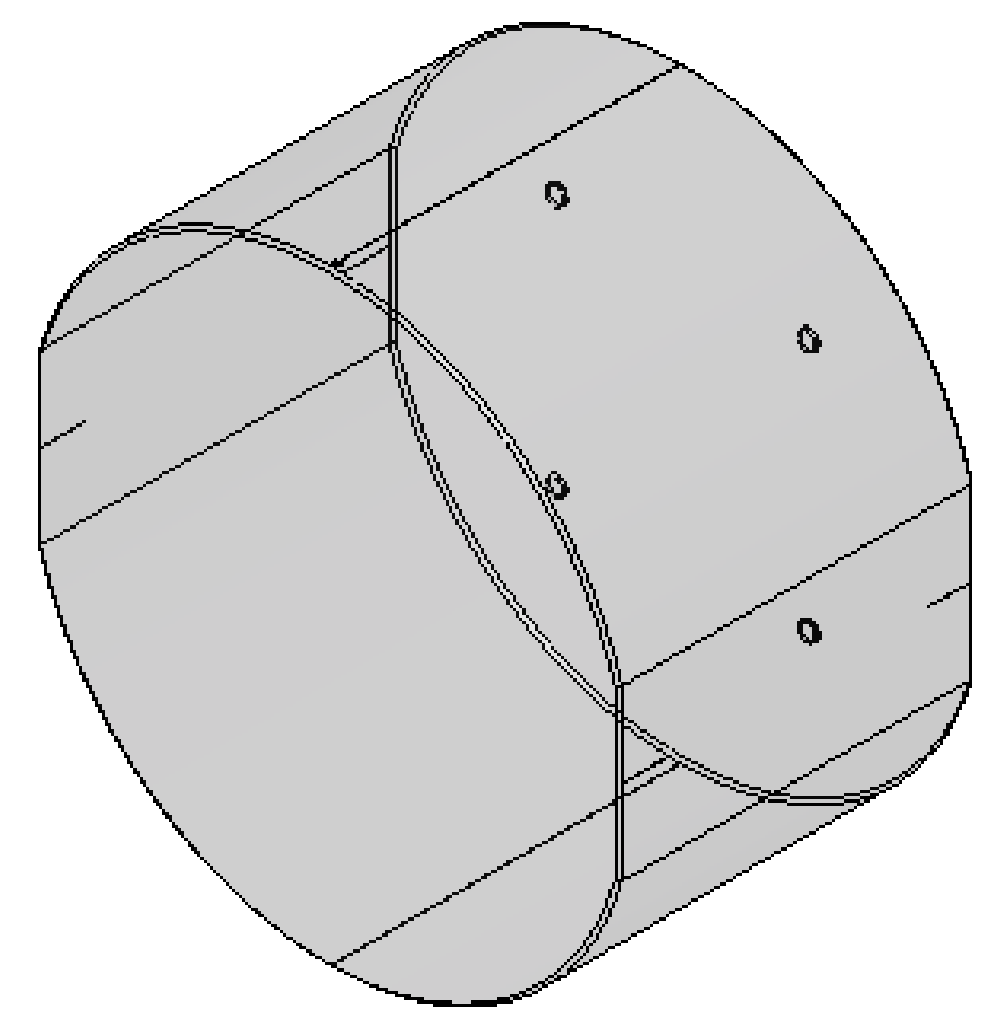
INSPECTION POLISH (SEE NOTE 3)



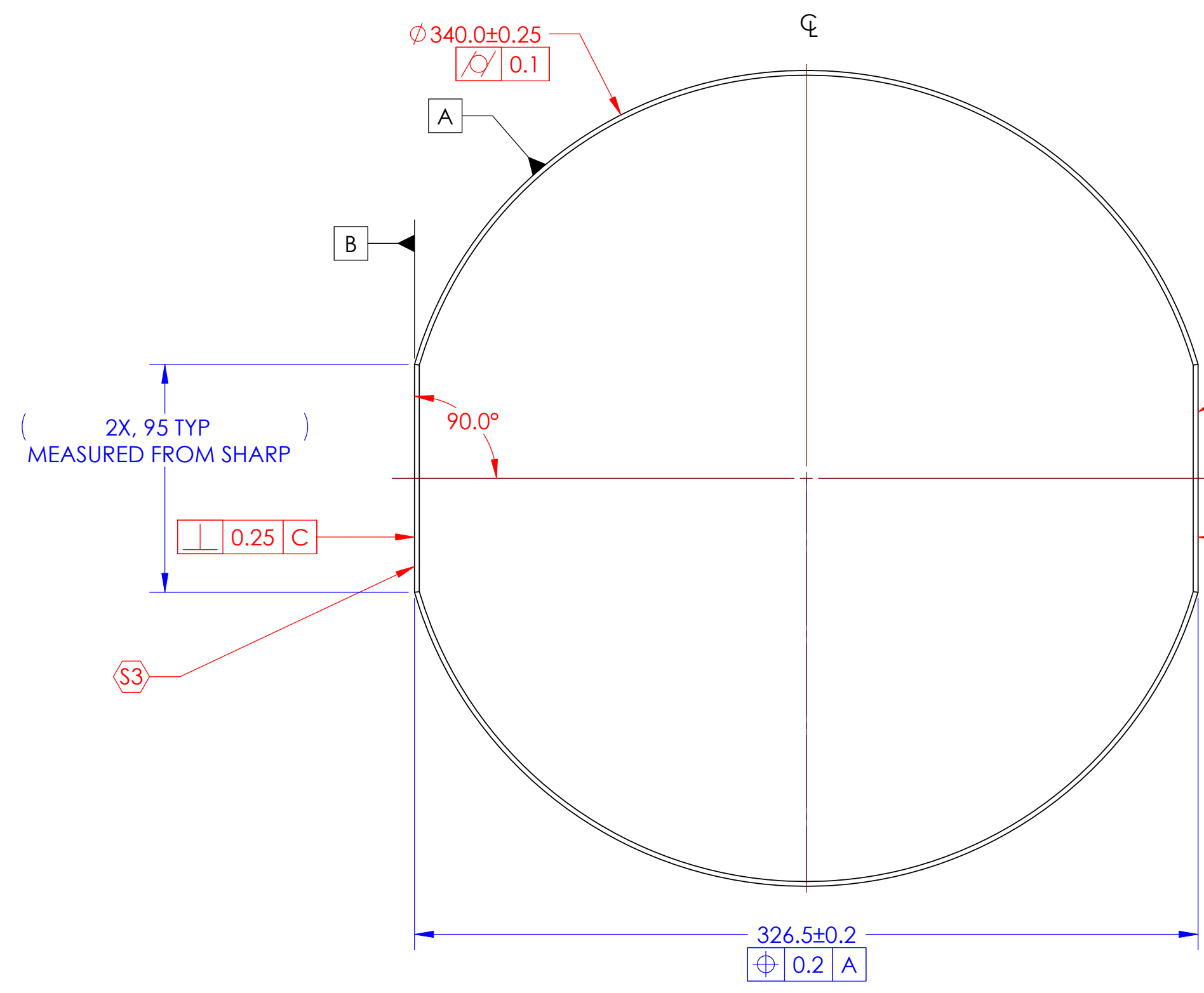
SECTION E-E



DETAIL F SCALE 4:1



4X, Ø 10.0 ± 0.2 EQUALLY SPACED ON A Ø 200 ± 0.5 BOLT CIRCLE. EDGE CHIPPING TO BE MINIMISED. (SEE ALSO DETAIL 'F' ABOVE)

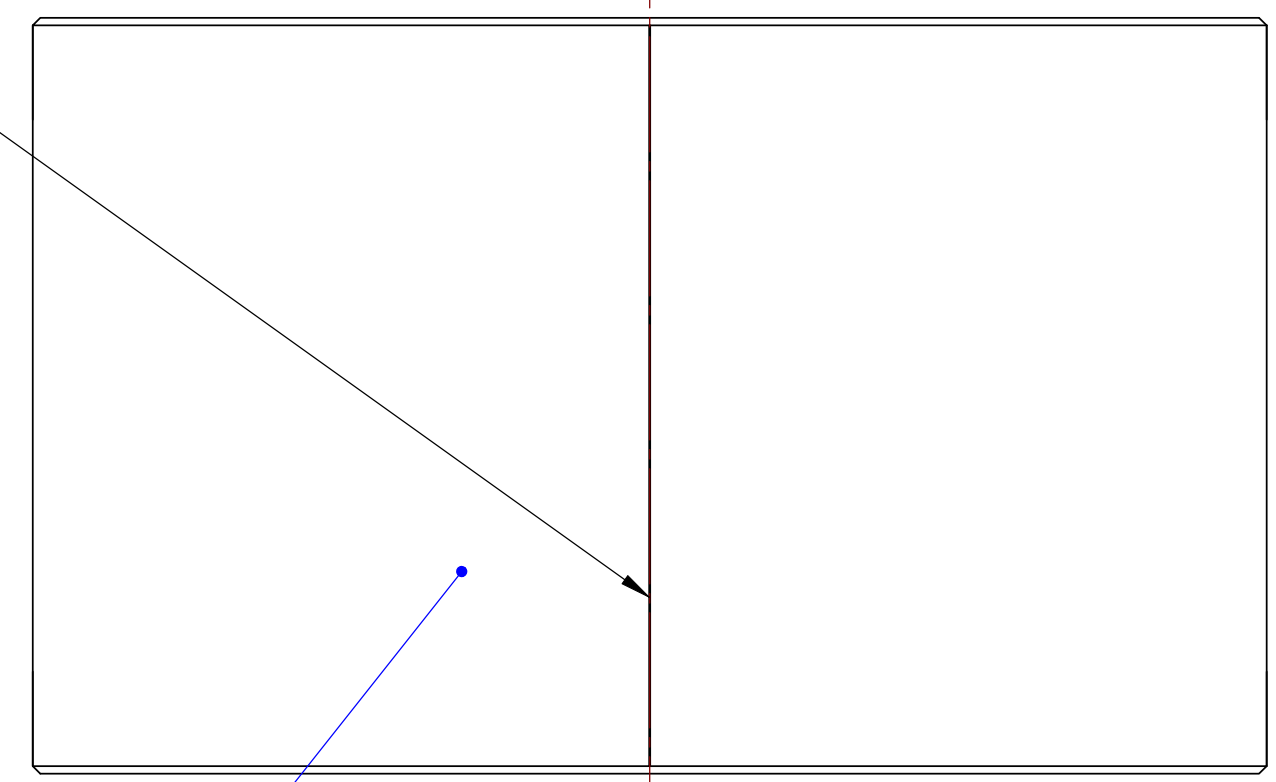


2X, 95 TYP MEASURED FROM SHARP

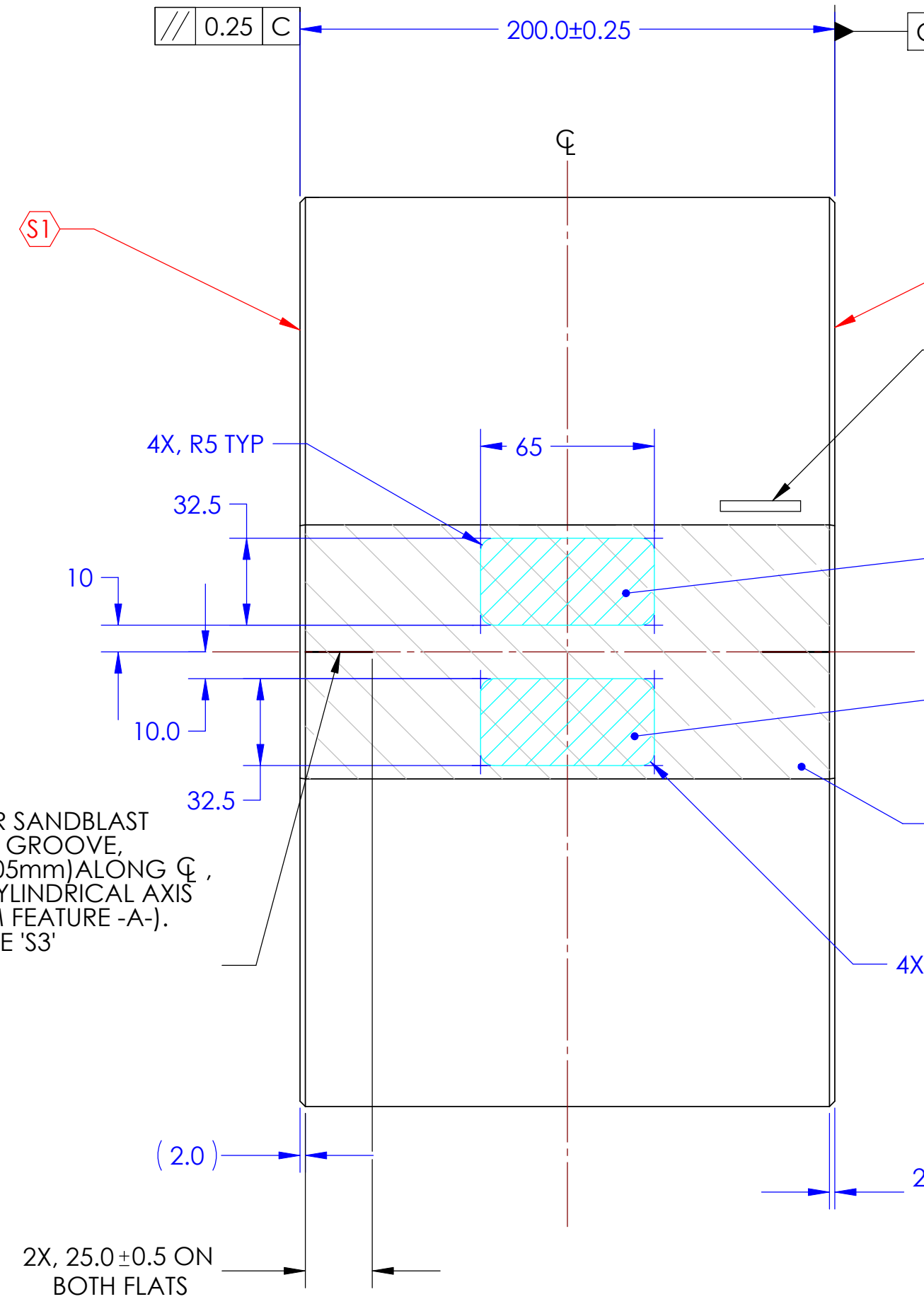
0.25 B
0.25 C

2X, ETCH, GRIND OR SANDBLAST LEGIBLE REFERENCE GROOVE (WIDTH 0.25mm ± 0.05mm) ALONG ϕ , PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-). REPEAT ON SURFACE 'S3' WITHIN ±0.1mm

ETCH, GRIND OR SANDBLAST LEGIBLE REFERENCE GROOVE (0.25mm ± 0.05mm WIDE) ALONG ϕ , PARALLEL TO THE CYLINDRICAL AXIS (DEFINED BY DATUM FEATURE -A-) WITHIN ±0.1mm



INSPECTION POLISH (SEE NOTE 3)



ETCH, GRIND OR SANDBLAST PART AND SERIAL NUMBER, APPROX. WHERE SHOWN, LETTERING APPROX. 4mm HIGH (SEE NOTE 7)

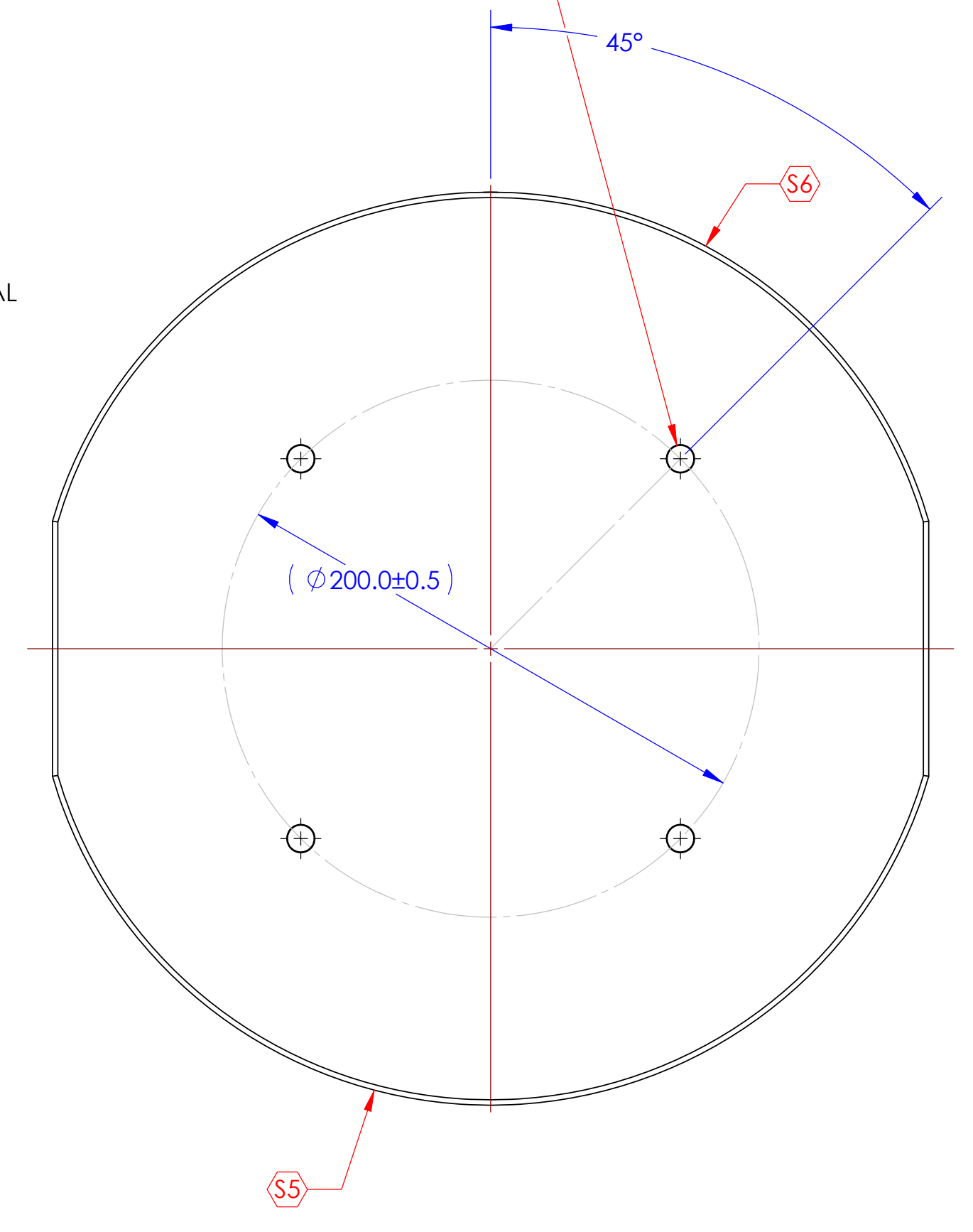
SEE NOTE 4 "ZONE 1" (CROSS HATCHED) (REPEAT ON SURFACE 'S3')

SEE NOTE 4 "ZONE 2" (CROSS HATCHED) (REPEAT ON SURFACE 'S3')

POLISHING EXTENDS TO ALL EDGES OF SURFACE 'S4' (REPEAT ON SURFACE 'S3')

4X, R5 TYP

2X, 2.0 ± 0.2 x 45° ± 5° CHAMFER, ALL AROUND



- MANUFACTURE NOTES:**
- DO NOT SCALE FROM DRAWING.
 - THIS DRAWING IS ACCOMPANIED BY LIGO SPECIFICATION "E080090"
 - INSPECTION POLISH ALL FACES (SURFACES S1, S2, S5, AND S6), EDGES AND CHAMFERS. SURFACES SHALL APPEAR TRANSPARENT WITH NO GREY, SCUFFS OR SCRATCHES VISIBLE TO THE NAKED EYE WHEN VIEWED WITH A NORMAL ROOM LIGHT AGAINST A BLACK BACKGROUND.
 - SURFACE S4: POLISH FLAT TO $\lambda/10$ PEAK TO VALLEY, OVER APERTURE "ZONE 1" AND APERTURE "ZONE 2" (WHERE APERTURE "ZONE 1" AND APERTURE "ZONE 2" ARE CENTERED ON FLAT IN THE POSITIONS SHOWN).
 - $\lambda = 633\text{nm}$ FOR SURFACE MEASUREMENTS
 - SURFACE S3: ADD FEATURES AND POLISH AS PER INSTRUCTIONS FOR SURFACE S4.
 - ETCH, GRIND OR SANDBLAST THE SERIAL NUMBER "ETM PM XX", APPROX. WHERE SHOWN, LETTERING APPROX. 4mm HIGH, WHERE "XX" IS INCREMENTAL STARTING WITH "01"

PARTS LIST

NOTES: (UNLESS OTHERWISE SPECIFIED)
DIMENSIONS ARE IN MILLIMETERS

TOLERANCES:	± 0.1	± 0.05	± 0.1
ANGULAR:	± 0.1°		

MATERIAL: AS PER LIGO-E080090
FINISH: SEE NOTES

DRAWN	NAME	DATE	SIZE	DWG. NO.	REV.
CHECKED	R. JONES	JAN 08	D	D080117	B
APPROVED	C. TORRE	DEC 08			

SCALE: 1:2 PROJECTION: FIRST ANGLE SHEET 1 OF 1