



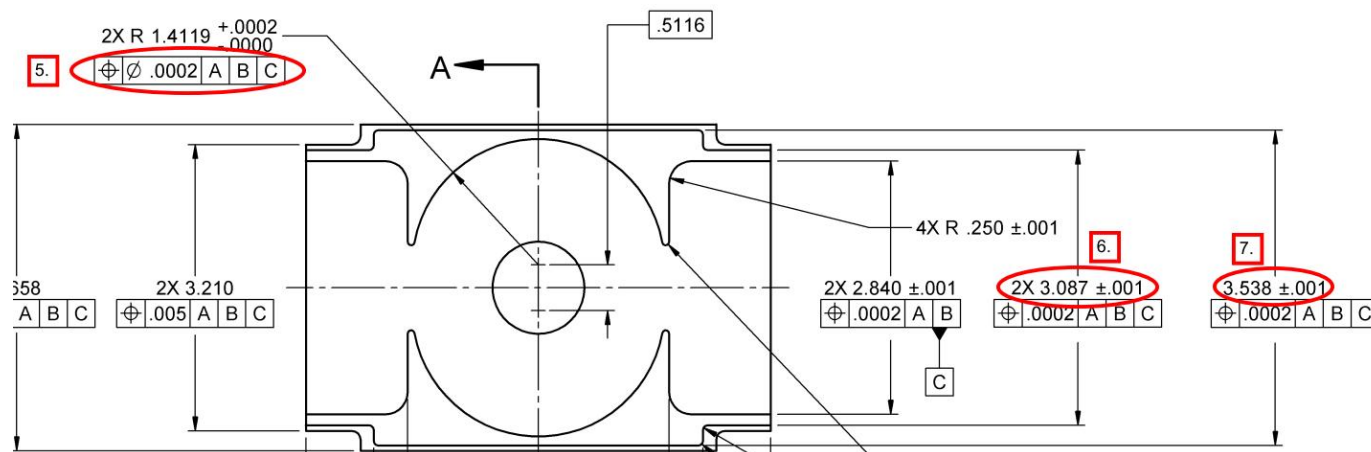
## NONCONFORMANCE REPORT (NCR)

SUBSYSTEM MFD 28932-15	DESCRIPTION OF ITEM BASE	DATE 11/16/12
ORIGINATOR K. Caban	PART NO. & REV. PF-380-805-01 R2	SERIAL NO.(s) 101

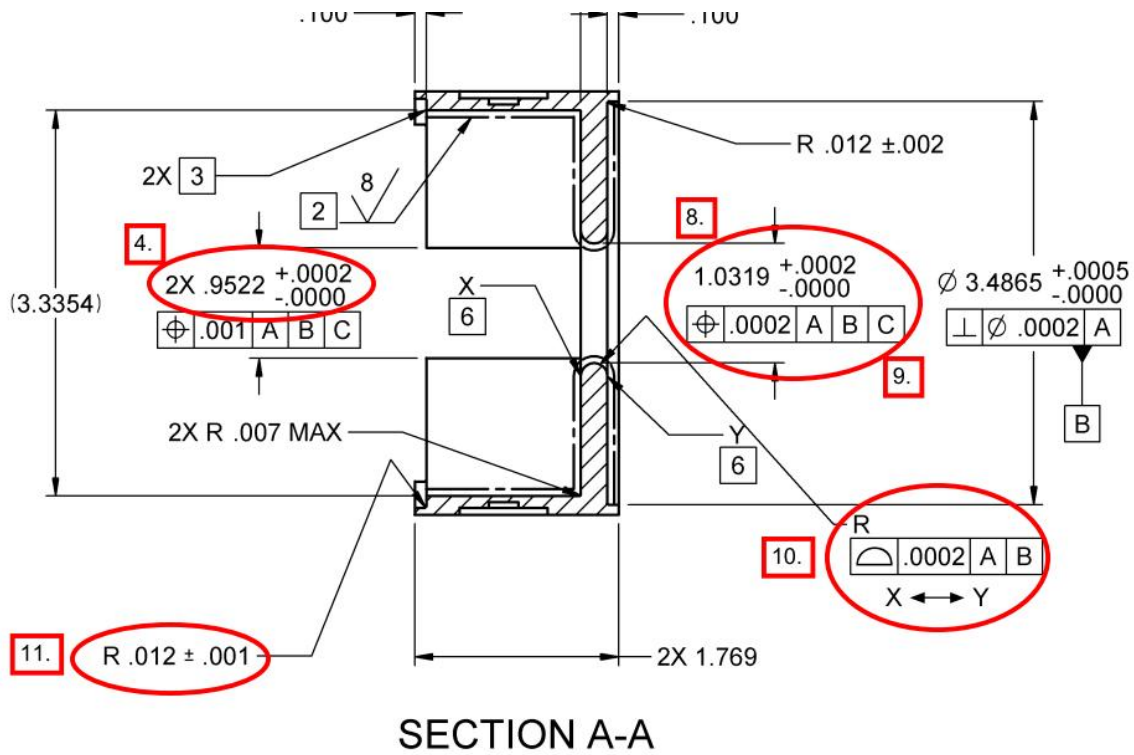
### NONCONFORMANCE DESCRIPTION

**Nonconformance Description** (Describe the nonconformance; ensure the applicable requirements, planned activities, procedures, specifications, drawing, standards, serial numbers, etc. are noted. Indicate who documented the nonconformance.)

1. Parallelism .0002 of distance .2299 to Datum –A- measures 0.00022 (+0.00002” out of parallel).
2. Distance  $1.3390 \pm 0.0002$  measures 1.33958 (+0.00038” out of tolerance).
3. Parallelism .0002 of distance 1.3390 to Datum –A- 0.00021 (+0.00001” out of parallel).
4. 2X Distance .9522 +0.0002/-0.0000 measures 0.95179 (-0.00041” out of tolerance).
5. 2X Position of 0.0002 of 2X R 1.4119 measures 0.00091 (+0.00071” out of position).
6. Distance 2X  $3.087 \pm 0.001$  measures 3.08470 (-0.00130” out of tolerance).
7. Distance 2X  $3.538 \pm 0.001$  measures 3.53569 (-0.00131” out of tolerance).
8. Iris diameter  $1.0319 +0.0002/-0.0000$  measures 1.03161 (-0.00029” out of tolerance).
9. Position of 0.0002 of Iris diameter 1.0319 measures 0.00032 (+0.00012” out of position).
10. Profile 0.0002 X-Y is out of surface profile (see attached profile plot, also has plots of cavity and cover-lid where near top of the part, where top of cavity and lid profiles “spring” inward, bottom of cavity is okay).
11. R.  $.012 \pm 0.001$  measures 0.0172 (+0.0042” out of tolerance).



See next page for more info...



**DISPOSITION**

**Disposition:** (Describe for each cause what action(s) will be taken with the item or process, including, as applicable, the completion dates, disposition of material, and responsible staff for each action. The completion dates, disposition of material, and responsible staff for each action.

**CORRECTIVE/PREVENTIVE ACTION | ASSIGNED TO:**

**Corrective/Preventive Action:** Describe, as applicable, what actions are needed to prevent recurrence of the identified nonconformance, such as process improvement, procedure revisions, training plan, etc., and include completion dates and responsible staff for each action.)

**FOLLOW-UP REQUIRED:** ρ Yes ρ No

**NCR CLOSEOUT APPROVALS**

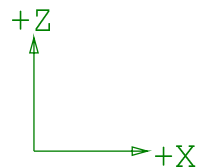
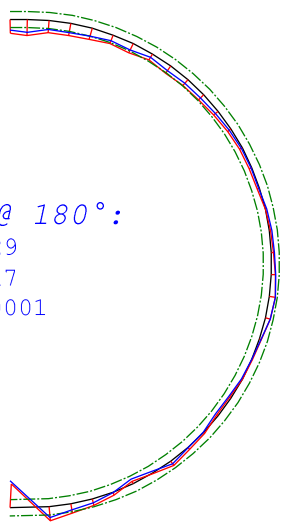
LCLS-II TECHNICAL REPRESENTATIVE	DATE	LCLS-II QUALITY ASSURANCE	DATE
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FOLLOW UP EFFECTIVE ρ Yes ρ No	FOLLOW UP BY:	DATE
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# XZ PLANE

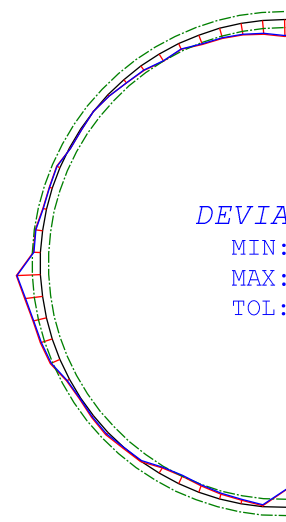
DEVIATIONS @ 180°:

MIN: -0.00029  
MAX: 0.00017  
TOL: +/- 0.0001



DEVIATIONS @ 0°:

MIN: -0.00034  
MAX: 0.00030  
TOL: +/- 0.0001

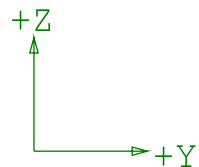
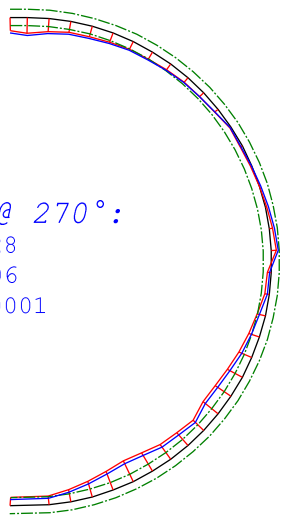


IRIS 2D-XZ DIST.: 1.03161

# YZ PLANE

DEVIATIONS @ 270°:

MIN: -0.00028  
MAX: 0.00006  
TOL: +/- 0.0001



DEVIATIONS @ 90°:

MIN: -0.00022  
MAX: 0.00024  
TOL: +/- 0.0001



IRIS 2D-YZ DIST.: 1.03173



IRIS PROFILE  
DRAWING NO.: PF-380-805-01 R2  
SERIAL NO.: 101

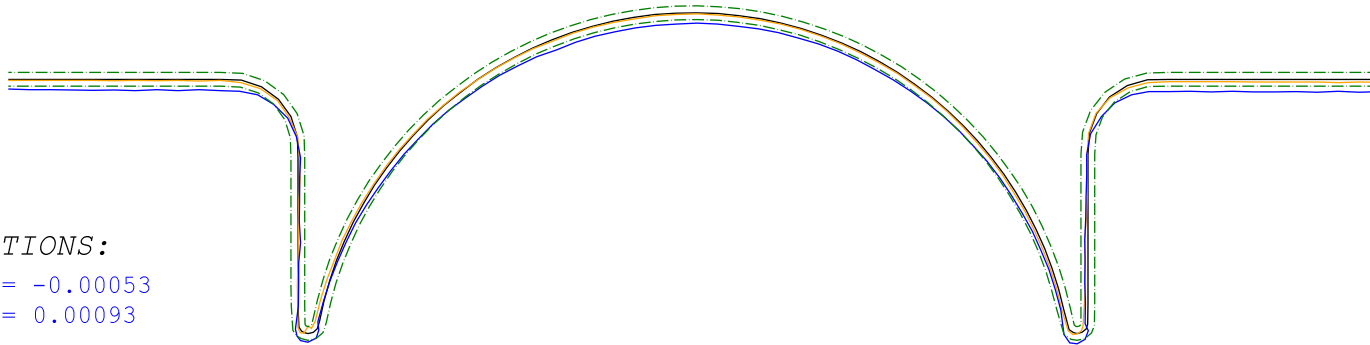
BLUE = BEST FIT CRV  
RED = ACT-NOM CRV  
GREEN = TOLERANCE  
INSP.: kcaban  
16-NOV-2012

# INSIDE CAVITY PROFILE

DEVIATIONS:

MIN = -0.00053

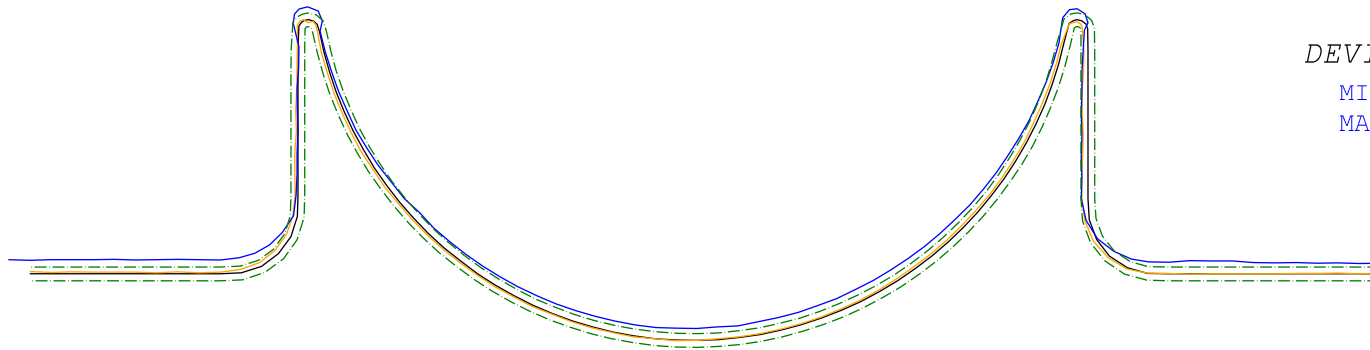
MAX = 0.00093



DEVIATIONS:

MIN = -0.00046

MAX = 0.00112



BLUE = TOP PROFILE: Z = -0.500"

ORANGE = BOTTOM PROFILE: Z = -1.500"



NATIONAL ACCELERATOR LABORATORY

PMM 581

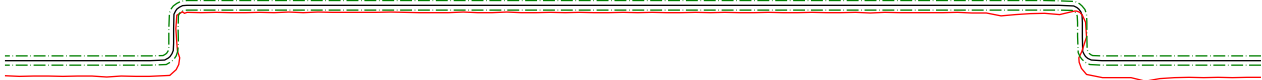
COMPOSITE CAVITY PROFILE TOP - BOTTOM  
BASE

DRAWING NO.: PF-380-805-01 R2

SERIAL NO.: 101

BLACK = NOMINAL  
BLUE/ORANGE = DEV.  
GREEN = +/-0.0005 TOL  
INSP: K. CABAN  
16-NOV-2012

LID PROFILE



DEVIATIONS:  
 MIN = -0.00046  
 MAX = 0.00219

DEVIATIONS:  
 MIN = -0.00015  
 MAX = 0.00178



COVER/LID PROFILE  
 BASE  
 DRAWING NO.: PF-380-805-01 R2  
 SERIAL NO.: 101

BLACK = NOMINAL  
 RED = DEV.  
 GREEN = +/-0.0005 TOL  
 INSP: K. CABAN  
 16-NOV-2012