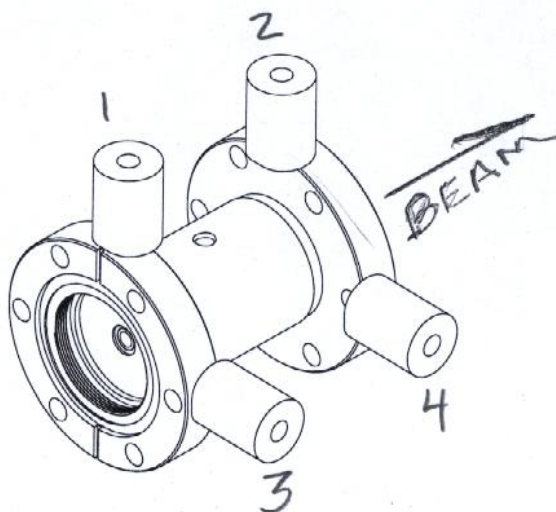


10-19-09

LCLS
XRAY OPTICS
SXR COLLIMATOR LONG
SNI



| | X | Y | Z |
|---|--------|--------|--------|
| 1 | + .037 | +3.337 | + .465 |
| 2 | + .024 | +3.345 | +4.169 |
| 3 | -3.332 | + .020 | + .445 |
| 4 | -3.338 | + .057 | +4.209 |

LCLS
XRAY OPTICS
SYR COLLIMATOR LONG
SN 1

10-19-09
JM, LG.

LAB DATA

(X)

D(s) 0.090
u(s) 0.069

$$18.023 + 0.090 = 18.113$$

$$18.045 + 0.069 = 18.114$$

-18.114 LOS

| | | | |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| $\begin{array}{r} 1) \ 17.151 \\ \quad \underline{1.} \\ \backslash 18.151 \\ \quad 18.114 \\ \backslash \boxed{+0.037} \end{array}$ | $\begin{array}{r} 2) \ 17.138 \\ \quad \underline{1.} \\ \backslash 18.138 \\ \quad 18.114 \\ \backslash \boxed{+0.024} \end{array}$ | $\begin{array}{r} 3) \ 13.782 \\ \quad \underline{1.} \\ \backslash 14.782 \\ \quad 18.114 \\ \backslash \boxed{-3.332} \end{array}$ | $\begin{array}{r} 4) \ 13.776 \\ \quad \underline{1.} \\ \backslash 14.776 \\ \quad 18.114 \\ \backslash \boxed{-3.338} \end{array}$ |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|

$$\begin{array}{r} 11.000 \text{ REF} \\ \underline{18.114 \text{ LOS}} \\ \backslash 29.114 = \text{E} \end{array}$$

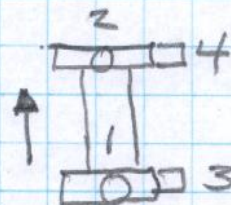
$$\begin{array}{r} \text{YAG} \\ \underline{\quad} \\ +0.077 \\ -0.083 \\ \boxed{-0.003} \end{array}$$

LAB DATA

(Y)

LCLS
X RAY OPTICS
SXR COLLIMATOR LONG
SN 1

10-19-09
JM, LG



CENTER FLANGE HOLES .264" PIN

u/s

D/s

$$\begin{array}{r} (+) 7.190 \\ .132 \\ \hline 7.322 \end{array}$$

$$\begin{array}{r} (-) 7.165 \\ .132 \\ \hline 7.297 \end{array}$$

$$\begin{array}{r} (+) 7.169 \\ .132 \\ \hline 7.301 \end{array}$$

$$\begin{array}{r} (-) 7.169 \\ .132 \\ \hline 7.301 \end{array}$$

u/s APERTURE .138φ

D/s HOLE .180φ

$$\begin{array}{r} 7.240 \\ .069 \\ \hline 7.309 \text{ HI} \end{array}$$

$$\begin{array}{r} 7.213 \\ .090 \\ \hline 7.303 \end{array}$$

YAG

$$\begin{array}{r} +.085 \\ -.079 \\ \hline \boxed{+.006} \end{array}$$

$$7.309 \text{ HI} \quad \begin{array}{r} 19.469 \\ 7.309 \\ \hline 12.160 = \phi \end{array}$$

$$\begin{array}{r} 1) 2.972 \\ 1. \text{---} \\ \hline 3.972 \\ 7.309 \end{array}$$

$$\begin{array}{r} 2) 2.964 \\ 1. \text{---} \\ \hline 3.964 \\ 7.309 \end{array}$$

$$\begin{array}{r} 3) 6.289 \\ 1. \text{---} \\ \hline 7.289 \\ 7.309 \end{array}$$

$$\begin{array}{r} 4) 6.252 \\ 1. \text{---} \\ \hline 7.252 \\ 7.309 \end{array}$$

$$\boxed{+3.337}$$

$$\boxed{+3.345}$$

$$\boxed{+.020}$$

$$\boxed{+.057}$$

10-19-09

LAB DATA X RAY OPTICS
SXR COLLIMATOR LONG
SNI

JM, LG.

(Z)

11.840 u/s FLANGE FACE

-11.840 LOS

| | | | |
|-----------------|-----------------|-----------------|-----------------|
| 1) 11.305 | 2) 15.009 | 3) 11.285 | 4) 15.049 |
| 1. — | 1. — | 1. — | 1. — |
| ✓ <u>12.305</u> | ✓ <u>16.009</u> | ✓ <u>12.285</u> | ✓ <u>16.049</u> |
| 11.840 | 11.840 | 11.840 | 11.840 |
| ✓ <u>4.465</u> | ✓ <u>4.169</u> | ✓ <u>4.445</u> | ✓ <u>4.209</u> |