

SSRL

BL 14-1 VERTICAL SLIT PACKAGE WITH MASK & GRAPHITE FILTER

The Mask was mounted to the U/S end of the Vertical Slit Tank and the Graphite Filter to the D/S end, the mask has no adjustment and is +.005" in "Y" relative to the Vertical Slit and Graphite Filter tanks centerline. I changed the "Y" values on the tanks to lower the tanks by .005". The Slits and Graphite Filter "Y" values will remain the same. The Graphite Filter is rotated 180° so the "X" & "Z" signs are opposite of the original signs, this GF was originally for BL 9-3, then 4-3 and now 14-4. I pitched, yawed and translated the values so the package can be set in the field. X, Y, Z center of the package is the center of the slit tank.

On the field printout VS= vertical slits & tank, GF=graphite filter and GFT= graphite filter tank.

Levirt
01/06/09

BL14-1 VERT. SLITS PACKAGE
PITCHED, YAWED & TRANSLATED
FIELD #'S

Job Description:

Report Units: inches, milliradians

Job File: C:\Documents and Settings\levirt\My Documents\My Documents\SSRL 2008\BL 14-

Job Date: Wednesday, February 20, 2008 02:27:14 PM

Report Frame: PART

BL141VSM	-5.557	-2.154	697.060
BL141VS1	-2.026	-2.052	694.089
BL141VS2	-2.092	-2.377	699.957
BL141VS3	-1.074	4.403	698.447
BL141VS4	-5.591	1.598	701.466
BL141VS5	-3.586	9.567	698.496
BL141VS6	-3.584	-13.900	695.701
BL141GFA	-5.997	4.029	710.094
BL141GFB	-8.047	4.071	707.944
BL141GFC	-3.288	4.048	707.984
BL141GFD	-5.953	4.098	704.848
BL141GFT1	-1.886	-2.333	711.118
BL141GFT2	-5.659	1.500	711.129
BL141GFT3	-9.474	-2.252	711.092

X Y Z

Report Date: Monday, February 23, 2009 10:36:55 AM

FARO Insight 5.0.5

BL14-1 VERT. SLITS PACKAGE

PITCHED - 9.6 MR

YAWED - 8.0 MR

Job Description:

Report Units: inches, milliradians

Job File: C:\Documents and Settings\levirt\My Documents\My Documents\SSRL 2008\BL 14-

Job Date: Wednesday, February 20, 2008 02:27:14 PM

Report Frame: PART

BL141VSM	0.000	0.000	0.000
BL141VS1	3.531	0.102	-2.971
BL141VS2	3.465	-0.223	2.897
BL141VS3	4.483	6.557	1.387
BL141VS4	-0.034	3.752	4.406
BL141VS5	1.971	11.721	1.436
BL141VS6	1.973	-11.746	-1.359
BL141GFA	-0.440	6.183	13.034
BL141GFB	-2.490	6.225	10.884
BL141GFC	2.269	6.202	10.924
BL141GFD	-0.396	6.252	7.788
BL141GFT1	3.671	-0.179	14.058
BL141GFT2	-0.102	3.654	14.069
BL141GFT3	-3.917	-0.098	14.032

X

Y

Z

Report Date: Monday, February 23, 2009 10:38:05 AM

FARO Insight 5.0.5

Page 1

Job Description:**Report Units: inches, milliradians**

Job File: C:\Documents and Settings\levirt\My Documents\My Documents\SSRL 2008\BL 14-

Job Date: Wednesday, February 20, 2008 02:27:14 PM

Report Frame: @STATION01

BL141VSM	0.000	0.000	0.000
BL141VS1	3.507	0.073	-3.000
BL141VS2	3.488	-0.195	2.871
BL141VS3	4.494	6.570	1.288
BL141VS4	0.001	3.794	4.370
BL141VS5	1.982	11.734	1.308
BL141VS6	1.962	-11.759	-1.262
BL141GFA	-0.336	6.308	12.977
BL141GFB	-2.403	6.329	10.843
BL141GFC	2.356	6.306	10.845
BL141GFD	-0.334	6.327	7.731
BL141GFT1	3.783	-0.044	14.029
BL141GFT2	0.011	3.789	14.034
BL141GFT3	-3.805	0.037	14.063

X

Y

Z

Report Date: Monday, February 23, 2009 10:36:30 AM

Griffin, Levirt

From: Harrington, Daniel
Sent: Wednesday, November 19, 2008 7:11 AM
To: Griffin, Levirt
Cc: Vargas, Joe L.; Peck, James W.
Subject: RE: BL14-1 slit tank location

Levirt,

Pitch= -9.6 +/-1.0mrad
Yaw= -8.0 +/-1.0mrad

Dan

-----Original Message-----

From: Griffin, Levirt
Sent: Wednesday, November 19, 2008 6:38 AM
To: Harrington, Daniel
Subject: RE: BL14-1 slit tank location

Dan,

What is the PITCH and YAW again.

Levirt

-----Original Message-----

From: Harrington, Daniel
Sent: Tuesday, November 18, 2008 3:48 PM
To: Griffin, Levirt
Cc: Vargas, Joe L.
Subject: BL14-1 slit tank location

Levirt,

The center of the slit tank is located at:

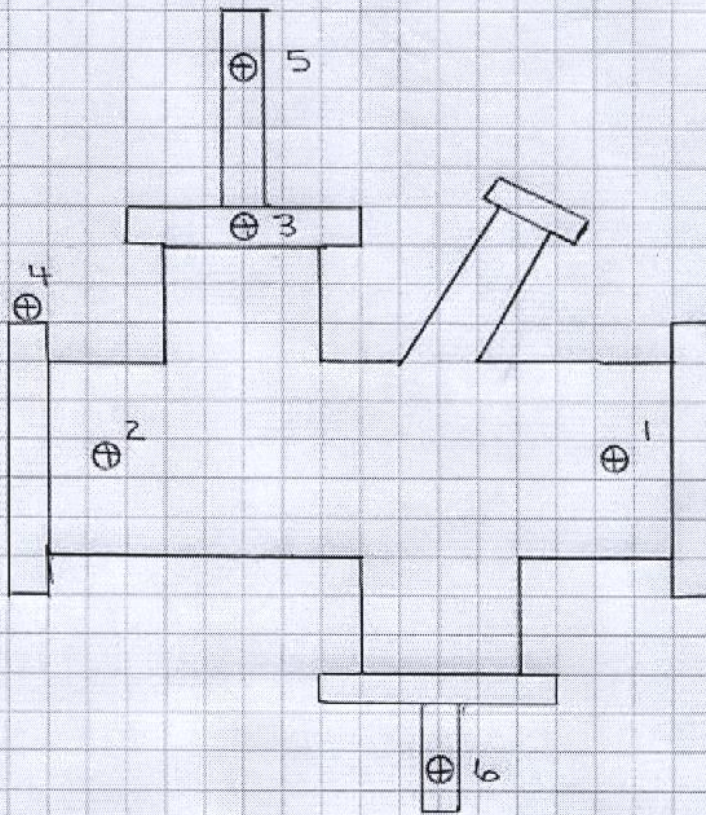
Z= +697.06 +/-0.08"
X= -5.557 +/-0.010"
Y= -2.154 +/-0.010"

relative to BL14 bend magnet source.

Dan

SSRL 14-1 VERT SLIT

10-6-08
LG MR



	X	Y	Z
1	+3.507	+0.078	-3.000
2	+3.488	-0.190	+2.871
3	+4.494	+6.575	+1.288
4	+0.001	+3.799	+4.370
5	+1.982	+11.734	+1.308
6	+1.962	-11.759	-1.262

U/S MASK (#3) +.005 NO ADJUSTMENT
LOWER TANKS ONLY (SLIT & G.F.) .005"

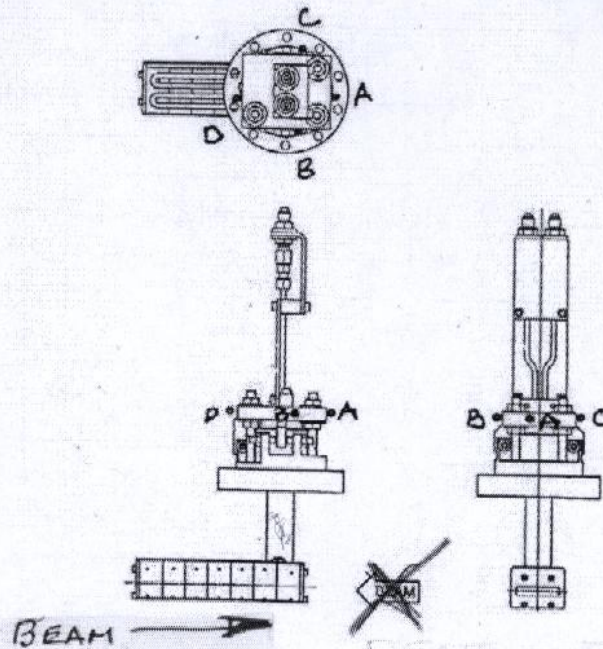
- 1) +.073 ✓
- 2) -.195 ✓
- 3) +6.570 ✓
- 4) +3.794 ✓

SSRL
 FIXED GRAPHITE FILTER
 LN MONO VERT. SLIT ASSEMBLY

1-3-05
 J.M., L.G.

BL ~~4-3~~ 9-3 (5-23-05)
 20

SCANNED



	X	Y	Z
A	- .336	+6.308	+2.630
B	-2.403	+6.329	+ .498
C	+2.356	+6.306	+ .500
D	- .334	+6.327	-2.616

BL 9-3 ASSEMBLY INSTALLED ON BL 4-3

THIS IS NOW 4-3

NOW 14-1

11/08

ROTATED 180°

GRAPHITE FILTER
SSRL 14-1 VERT SLIT

11-19-08

LG MR

41.20 TOP FLANGE OF GF TANK
2310 RAD.
 $\frac{7.667 \text{ LOS}}{5.357 \text{ SIR}}$ ✓

6.000 BOTTOM FLANGE OF GF
3.000 RAD
 $\frac{7.667}{4.667 \text{ SIR}}$ ✓

A) $\frac{7.667}{(-1.336)}$ ✓
 $\frac{8.003}{1}$ ✓
 $\frac{7.003}{7.003}$ ✓ SIR

D) $\frac{7.667}{(-).334}$ ✓
 $\frac{8.001}{1}$ ✓
 $\frac{7.001}{6.998+3}$ ✓

HI 10.896

A) $\frac{10.896}{6.308}$ ✓
 $\frac{4.588}{1}$ ✓
 $\frac{3.588}{3.486+2}$ ✓ SIR

B) $\frac{10.896}{6.329}$ ✓
 $\frac{4.567}{1}$ ✓
 $\frac{3.567}{3.562+5}$ ✓ SIR

C) $\frac{10.896}{6.306}$ ✓
 $\frac{4.590}{1}$ ✓
 $\frac{3.590}{3.582+8}$ ✓ SIR

D) $\frac{10.896}{6.327}$ ✓
 $\frac{4.569}{1}$ ✓
 $\frac{3.569}{3.566+3}$ ✓ SIR

NEW T/BS ONS DIS FLANGE OF CAN (FILTER)

Y) 1) $\frac{9.935}{1}$ ✓
 $\frac{10.935}{10.896}$ ✓
 $\frac{-0.39}{+3.794}$ ✓

LOWER .005"

2) $\frac{6.102}{1}$ ✓
 $\frac{7.102}{10.896}$ ✓
 $\frac{+3.789}{+1.037}$ ✓

X) 1) $\frac{2.884}{1}$ ✓
 $\frac{3.884}{7.667}$ ✓
 $\frac{+3.783}{+0.011}$ ✓

2) $\frac{6.656}{1}$ ✓
 $\frac{7.656}{7.667}$ ✓
 $\frac{+0.011}{-3.805}$ ✓

3) $\frac{9.854}{1}$ ✓
 $\frac{10.854}{10.896}$ ✓
 $\frac{+0.42}{-3.805}$ ✓

2g
11/08

SSRL 14-1
GRAPHITE FILTER

11-20-08
LG MR

- Z)
- B) +.498
- C) +.500

11.000+1=12.000
10.994+1=11.994
14.000+1=17.000
15.713+1=16.713
11.929-1=10.929
11.927-1=10.927
12.427
11.999-1=10.999
11.997-1=10.997
12.497

GRAPHITE FILTER		GRAPHITE FILTER TANK	
A) 8.865	1) 7.813	2) 7.808	3) 7.779
<u>1. —</u>	<u>1. —</u>	<u>1. —</u>	<u>1. —</u>
9.865	8.813	8.808	8.779
22.842	22.842	22.842	22.842
<u>12.977</u> ✓	<u>14.029</u> ✓	<u>14.034</u> ✓	<u>14.063</u> ✓

TANK (SLIT)

3) 20.549	5) 20.548	6) 23.096
<u>1. —</u>	<u>1. —</u>	<u>1. —</u>
21.549	21.548	24.096
1.288	+1.308	-1.262
<u>22.837</u> ✓	<u>22.856</u> ✓	<u>22.834</u> ✓

LOS +22.842 ✓

GRAPHITE FILTER
Z'S FROM VERT. SLIT TANK &

A) 8.865	B) 10.999	C) 10.997	D) 5.746 A-D
<u>1. —</u>	<u>1. —</u>	<u>1. —</u>	<u>1.500</u>
9.865 ✓	11.999 ✓	11.997 ✓	5.246 ✓
22.842	22.842	22.842	12.977
<u>+12.977</u> ✓	<u>+10.843</u> ✓	<u>+10.845</u> ✓	<u>+7.731</u> ✓

SSRL 14-1 VERT. SLIT SETTING GF + MASK

11-18-08
LG MR

Y) 27307 REF

1) 9.817¹⁹

$$\begin{array}{r} 1 \\ \hline 10.817 \\ + 0.078 \\ \hline 10.895 \end{array}$$

2) 10.087

$$\begin{array}{r} 1 \\ \hline 11.087 \\ - 0.190 \\ \hline 10.897 \end{array}$$

3) 3.321

$$\begin{array}{r} 1 \\ \hline 4.321 \\ + 6.575 \\ \hline 10.896 \end{array}$$

HI 10.896

27308

16.410 E BLADE

.138 1/2 GAP

- 16.272 S/R BOT.

- 14.548 S/R TOP

TOP FLAT MASK

+

8.643

10.896

2.253

MARK BOTTOM

+

+1.005

-

+1.006

-

8.644

10.896

2.252

TOP

+

+1.005

-

+1.005

X) 3.507

3488

4290 + 1 = 5.290

4224 + 1 = 5.224

3000 + 1 = 4.000

3.031 + 1 = 4.031

4.160 - 1 = 3.160

4.179 - 1 = 3.179

7.667

3) 7.667

+4.494

3.173

1

2.173

2.169

+0.004

4) 7.667

+10.001

7.666

1

6.666

6.666

0

(+) FLAT

TOP SIDE MASK

5.418

7.667

+2.249

BOTTOM SIDE MASK

5.415

7.667

+2.252

16.415 = 4

SSRL
10 896 HI. BL 14-1 SLITS

11-20-08
M.R., L.G.

Y

$$\begin{array}{r} 27.309 \\ 10.896 \\ \hline 16.413 \end{array}$$

$$\begin{array}{r} 5) 10.896 \\ \underline{11.734} \\ .838 \\ \underline{.005} \\ 0.843 \\ \underline{.250} \\ .593 \text{ SIR} \end{array}$$

$$\begin{array}{r} 16.413 \\ 4.183 \\ \hline -12.230 \end{array}$$

$$\begin{array}{r} 6) -12.230 \\ \underline{-11.759} \\ .471 \\ \underline{.005} \\ .476 \\ \underline{.250} \\ .226 \end{array}$$