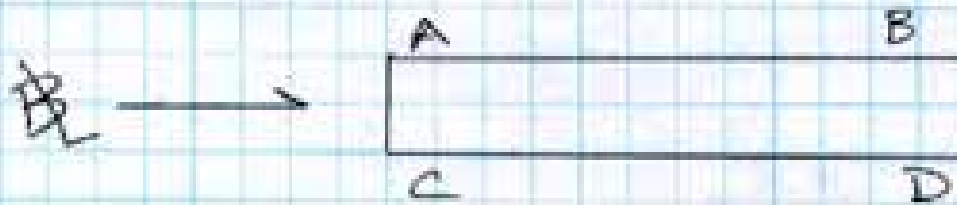


SSRL BL4-1

10-02-07

MØ TILT PLATE



TB	Z	X	Y
A	522.811	+0.948	-16.880
B	522.734	+0.716	-16.912
C	548.306	-7.301	-16.839
D	548.232	-7.534	-16.873

BL 4-1 M/S SSRL
TILT PLATE

CLEAN ROOM
FIDUCIALIZATION

10-2-07
FG, BR

(Y) HI = 13.583



A)
$$\begin{array}{r} 9.323 \\ 21.222 \\ \hline 30.550 \\ 13.583 \\ \hline -16.967 \\ +.087 \\ \hline \boxed{-16.880} \end{array}$$

B)
$$\begin{array}{r} 9.355 \\ 21.227 \\ \hline 30.582 \\ 13.583 \\ \hline -16.999 \\ +.087 \\ \hline \boxed{-16.912} \end{array}$$

C)
$$\begin{array}{r} 9.282 \\ 21.227 \\ \hline 30.509 \\ 13.583 \\ \hline 16.926 \\ .087 \\ \hline \boxed{-16.839} \end{array}$$

D)
$$\begin{array}{r} 9.316 \\ 21.227 \\ \hline 30.543 \\ 13.583 \\ \hline 16.960 \\ .087 \\ \hline \boxed{-16.873} \end{array}$$

NOTE: ADDED ".087" TO VALUES. COULD NOT ADJUST MIRROR TO ϕ BECAUSE OF STANCHIONS. LEFT MIRROR LOW BY AN AVERAGE OF $-.087$ ", DURING ADJUSTMENT.

(X) LOS = +12.871

A)
$$\begin{array}{r} 10.923 \\ 1 \\ \hline 11.923 \\ 12.871 \\ \hline \boxed{+0.948} \end{array}$$

B)
$$\begin{array}{r} 11.155 \\ 1 \\ \hline 12.155 \\ 12.871 \\ \hline \boxed{+0.716} \end{array}$$

C)
$$\begin{array}{r} 11.301 \\ 8.871 \\ \hline 20.172 \\ 12.871 \\ \hline \boxed{-7.301} \end{array}$$

D)
$$\begin{array}{r} 11.534 \\ 8.871 \\ \hline 20.405 \\ 12.871 \\ \hline \boxed{-7.534} \end{array}$$

SSAL CLEAN ROOM
PL 4-1 MAP

10-2-07
BR, FG

Z) F. 7131 = 516.245
N. 783 = 516.242

TILT PLATE

11 + 1 = 12

12.101 + 1 = 13.101

15 + 1 = 16 ✓

14.816 + 1 = 15.816 ✓

~~15.418 - 1 = 14.418~~

~~15.421 - 1 = 14.421~~

15.437 - 1 = 14.437

15.434 - 1 = 14.434

LOS = ~~+500.827~~
500.808

A)
$$\begin{array}{r} 21.003 \\ 1 \\ \hline 22.003 \\ 500.808 \\ \hline \end{array}$$

$$\boxed{+522.811}$$

C)
$$\begin{array}{r} 20.926 \\ 1 \\ \hline 21.926 \\ 500.808 \\ \hline \end{array}$$

$$\boxed{+522.734}$$

B)
$$\begin{array}{r} 47.248 \\ .250 \\ \hline 47.498 \\ 500.808 \\ \hline \end{array}$$

$$\boxed{+548.306}$$

D)
$$\begin{array}{r} 47.194 \\ .250 \\ \hline 47.424 \\ 500.808 \\ \hline \end{array}$$

$$\boxed{+548.232}$$

Buck-In

X) TB (2) F.V. 8.996
TB (1) N.V. 8.999

6 + 1 = 7 2.940 + 1
5.282 + 1 = ~~6.292~~ 2.926 + 1

3 + 1 = 4 3.726
2.983 + 1 = ~~3.983~~ 3.757

S/A F 3.940 - 1 = 2.940 ~~3.893 - 1~~ 3.893 2.877

O/R N 3.937 - 1 = 2.937 ~~3.247~~ 2.890 2.889

LOS ~~12.936~~ LOS + 12.889 10-2-07 part moved
rebucked-in.

0.6 mrad of yaw

-3.206 offset @ center mirror

Mirror 1.2 meters long $47.244'' \div 2 = 23.622''$

30 mm wide = $1.181'' \div 2 = .591''$

$23.622 \times .006 = .142$

W/S
3.206
- .142

O/S
3.206
- .142

Shot (+) Edge of Mirror

Value -3.064

-3.348

W/S
12.936
- 3.064

O/S
12.936
- 3.348

16.000
- .142

16.284
- .142

S/A 15.409
15.269 + .140
15.402
15.406 + 3

S/A 15.693
15.907 - .214
15.795
15.696 + 3

Back-In

CLEAN RM. SSRL
BL 4-1 MØ

10-2-07
BR, FG



2.996
2.999

Adjusting Mirror

$$2.897 + 1 = 3.897$$

$$2.889 + 1 = 3.889$$

$$2.41 = 3$$

$$2.2 + 1 = 3.2$$

$$3.875 - 1 = 2.875$$

$$3.872 - 1 = 2.872$$

LOS 12.871

MIRROR

W/S

D/S

12.871
- 3.064
15.935
 .591

12.871
- 3.348
16.219
 .591

S/A 15.344
15.356 - 12
15.346 - 2
15.350 - 6

S/A 15.628
15.651 - 23
15.629 - 1
15.624 + 4

SET 15.352 -8

15.642 -14

SSRL CLEAN ROOM
BL 4-1 MØ LID & PLATE

10/01/07
BR, FG

① Values

1) -9.154	2) -9.165	3) -9.148	4) -9.167
<u>21.737</u>	<u>21.747</u>	<u>21.727</u>	<u>21.752</u>
12.583	12.582	12.581	12.585
<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
13.583	13.582	13.581	13.585

AVG HI = 13.583

Using back cone of mirror for rough alignment.

<u>2/s</u>		<u>D/s</u>	
(+)	(-)	(+)	(-)
18.201	18.205	18.217	18.222
		18.218	18.218
18.217	18.205	18.218	18.205

Mirror	No Roll, No	Pitch	CANNOT ADJUST MIRROR UP, BECAUSE OF STANCHIONS LEAVING MIRROR LOW .100", HAVE TO CORRECT TO 4.	
		S/A 13.583		
(+)	(-)	(+)	(-)	
	13.635		13.571	
13.675 -92	13.673 -90	13.682 -99	13.687 -109	
13.676 -93	13.680 -97	13.682 -99	13.687 -104	
13.680	13.680	13.680	13.685	
13.668	13.672	13.670	13.675	
13.690	13.690	13.680	13.683	
13.685	13.685	13.675	13.680	
	13	13.678	13.682	
13.682	13.680	13.670	13.678	
83	79	76	77	

Mirror
u/s

S/R 13.583

F6, ER
10/2/07

(Y)

D/S

lbs

(+)	(-)	(+)	(-)	lbs
13.683	13.679	13.675	13.678	60
13.680	13.678	13.675	13.675	60
82	80	79	77	∅
81	82	79	78	60
13.685	13.682	13.673	13.670	
13.702	13.697	67	63	
85	80	75	70	
72	70	75	72	
SET 13.669 [-86]	13.668 [-85]	13.672 [-89]	13.671 [-88]	

BL 4-1 Mφ

CONTINUED FROM 10/1/07

ADJUSTING MIRROR