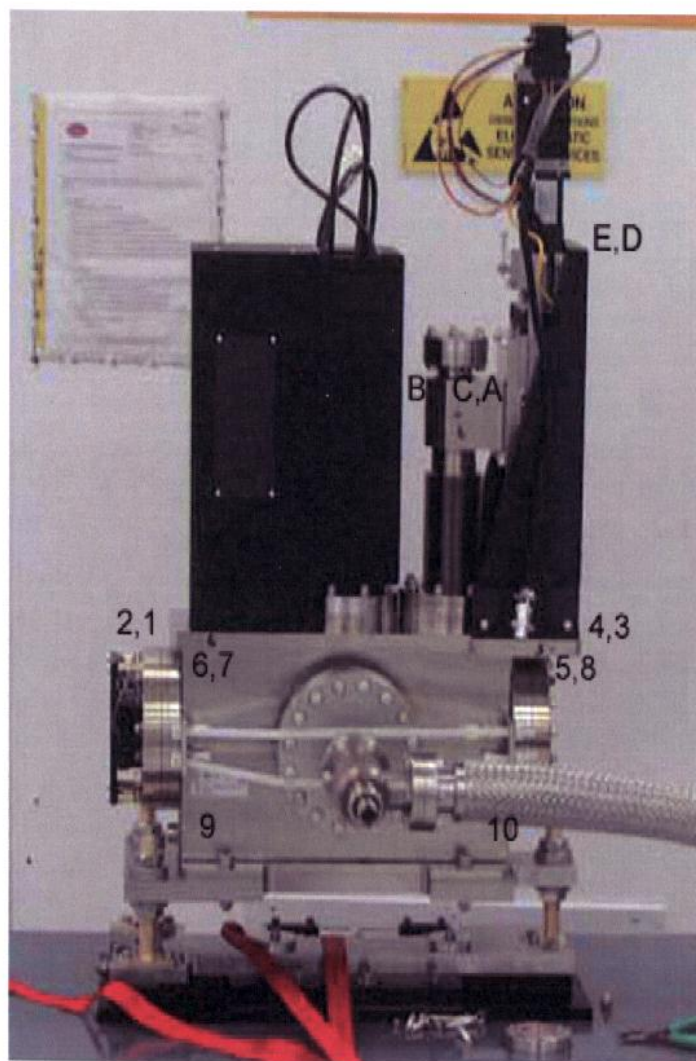


4-16-2010

JM, BR, LG

LCLS LUSI  
PIM TOP ASSY  
SN 0001



Looking up beam



## LCLS LUSI

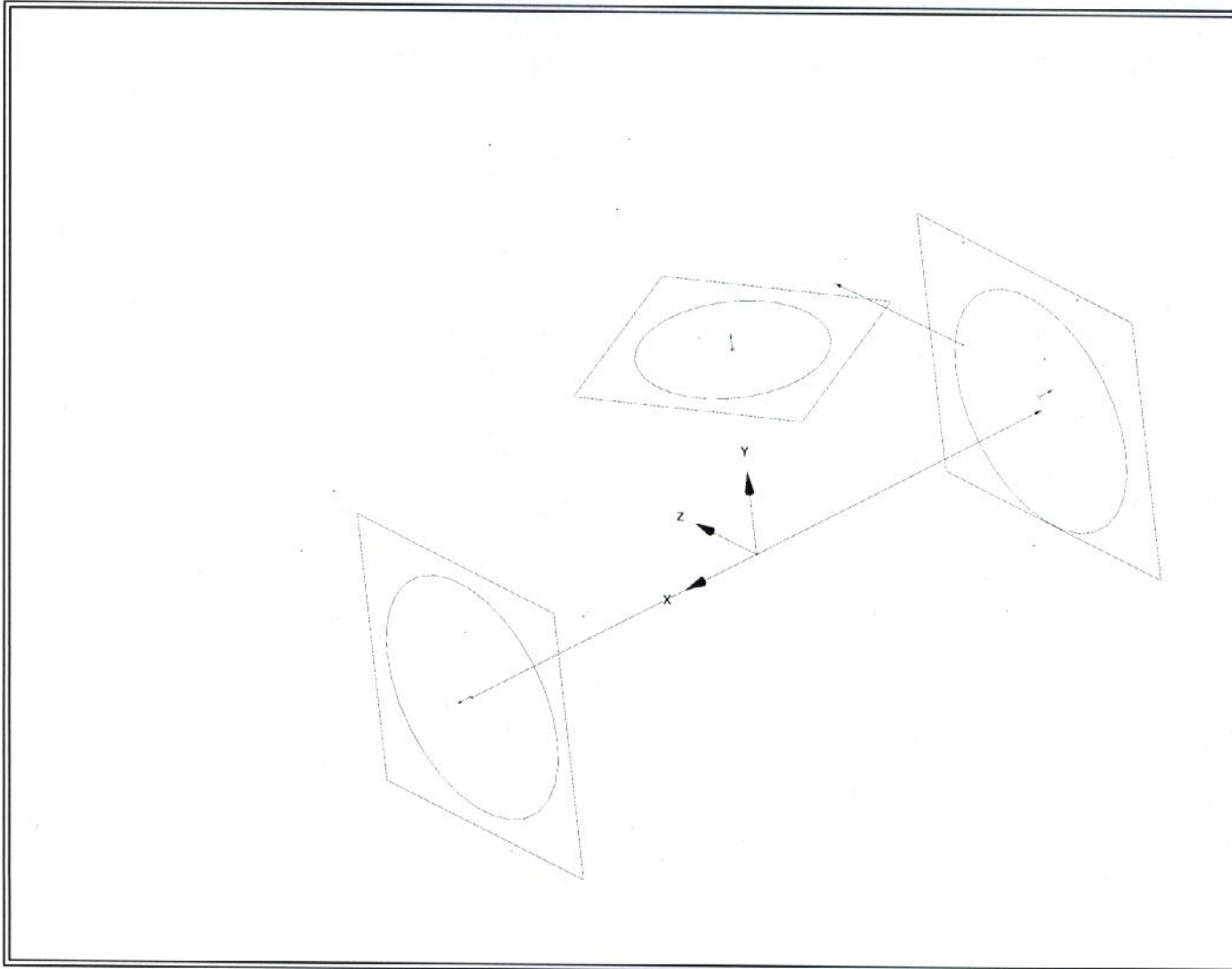
### PIM TOP ASSY SN 0001

TB	X	Y	Z	NOTES
1	-8.372	3.695	-1.997	
2	-8.375	3.695	2.001	
3	10.644	3.687	-2.854	
4	10.639	3.691	2.889	
5	8.390	3.694	4.388	
6	-6.127	3.694	3.499	
7	-6.118	3.695	-3.496	
8	8.398	3.692	-4.357	
9	-8.430	-3.741	0.755	
10	8.432	-3.754	-0.724	
A	4.519	11.816	-2.245	YAG on beam line
B	2.254	11.815	-0.008	YAG on beam line
C	4.494	11.806	2.251	YAG on beam line
A	4.519	12.934	-2.245	Diode on beam line
B	2.254	12.922	-0.008	Diode on beam line
C	4.494	12.916	2.251	Diode on beam line
D	9.217	19.003	-1.976	
E	9.194	19.001	2.025	

### FINAL NUMBERS

TB	X	Y	Z	NOTES
1	-8.396	3.695	-1.997	X offset -.024" to put YAG on B/L
2	-8.399	3.695	2.001	X offset -.024" to put YAG on B/L
3	10.62	3.687	-2.854	X offset -.024" to put YAG on B/L
4	10.615	3.691	2.889	X offset -.024" to put YAG on B/L
5	8.366	3.694	4.388	X offset -.024" to put YAG on B/L
6	-6.151	3.694	3.499	X offset -.024" to put YAG on B/L
7	-6.142	3.695	-3.496	X offset -.024" to put YAG on B/L
8	8.374	3.692	-4.357	X offset -.024" to put YAG on B/L
9	-8.454	-3.741	0.755	X offset -.024" to put YAG on B/L
10	8.408	-3.754	-0.724	X offset -.024" to put YAG on B/L
A	4.495	11.816	-2.245	YAG on beam line, X offset -.024" to put YAG on B/L
B	2.230	11.815	-0.008	YAG on beam line, X offset -.024" to put YAG on B/L
C	4.470	11.806	2.251	YAG on beam line, X offset -.024" to put YAG on B/L
A	4.495	12.934	-2.245	Diode on beam line, X offset -.024" to put YAG on B/L
B	2.230	12.922	-0.008	Diode on beam line, X offset -.024" to put YAG on B/L
C	4.470	12.916	2.251	Diode on beam line, X offset -.024" to put YAG on B/L
D	9.193	19.003	-1.976	X offset -.024" to put YAG on B/L
E	9.170	19.001	2.025	X offset -.024" to put YAG on B/L

	<p>Operator : LG, BR                  Part Name : LUSI PIM                  Part Serial Number : 0001                  Device Serial Number :                  Controller Version : 0.00                  Certification Date :                  Time &amp; Date : 11:55:53 4/16/2010                  Units : Inches</p>	
---	--	---



M TBE (Measured Point , number of points 7)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0009.1935					
Center Y	0019.0013					
Z	0002.0253					
Form	0000.0005		0000.0500		0000.0005	*****



## M\_TB01 (Measured Point , number of points 9)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	-0008.3718					
Center Y	0003.6955					
Z	-0001.9973					
Form	0000.0044		0000.0500		0000.0044	*****

## M\_TB02 (Measured Point , number of points 8)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	-0008.3747					
Center Y	0003.6946					
Z	0002.0013					
Form	0000.0009		0000.0500		0000.0009	*****

## M\_TB03 (Measured Point , number of points 7)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0010.6441					
Center Y	0003.6873					
Z	-0002.8536					
Form	0000.0015		0000.0500		0000.0015	*****

## M\_TB04 (Measured Point , number of points 8)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0010.6387					
Center Y	0003.6909					
Z	0002.8893					
Form	0000.0014		0000.0500		0000.0014	*****

## M\_TB05 (Measured Point , number of points 6)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0008.3903					
Center Y	0003.6936					
Z	0004.3884					
Form	0000.0025		0000.0500		0000.0025	*****

## M\_TB06 (Measured Point , number of points 7)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	-0006.1273					
Center Y	0003.6943					
Z	0003.4990					
Form	0000.0006		0000.0500		0000.0006	*****

## M\_TB07 (Measured Point , number of points 6)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	-0006.1182					
Center Y	0003.6955					
Z	-0003.4958					
Form	0000.0021		0000.0500		0000.0021	*****

## M\_TB08 (Measured Point , number of points 7)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0008.3978					
Center Y	0003.6925					
Z	-0004.3568					
Form	0000.0004		0000.0500		0000.0004	*****

## M\_TB09 (Measured Point , number of points 7)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	-0008.4298					
Center Y	-0003.7411					
Z	0000.7551					
Form	0000.0012		0000.0500		0000.0012	*****

## M\_TB10 (Measured Point , number of points 6)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0008.4317					
Center Y	-0003.7543					
Z	-0000.7244					
Form	0000.0010		0000.0500		0000.0010	*****

## M\_TBA1 (Measured Point , number of points 7)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0004.5189					
Center Y	0011.7926					
Z	-0002.2447					
Form	0000.0011		0000.0500		0000.0011	*****

## M\_TBB1 (Measured Point , number of points 6)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0002.2535					
Center Y	0011.7876					
Z	-0000.0076					
Form	0000.0007		0000.0500		0000.0007	*****

## M\_TBC1 (Measured Point , number of points 6)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0004.4940					
Center Y	0011.7795					
Z	0002.2505					
Form	0000.0004		0000.0500		0000.0004	*****

## M\_TBD (Measured Point , number of points 7)

	<u>Measured</u>	<u>Nominal</u>	<u>+Tol</u>	<u>-Tol</u>	<u>Dev</u>	<u>Out of Tol</u>
X	0009.2167					
Center Y	0019.0025					
Z	-0001.9762					
Form	0000.0005		0000.0500		0000.0005	*****



LCLS LUSI  
 PIM TOP ASSY  
 SA-391-738-00 REV 1  
 SN0001

4-16-10  
 BR, LG

Y

$$\begin{array}{r} 5) 13.892 \\ \underline{1.} \\ 14.892 \\ \underline{3.694} \\ 18.586 \end{array}$$

$$\begin{array}{r} 6) 13.892 \\ \underline{1.} \\ 14.892 \\ \underline{3.694} \\ 18.586 \end{array}$$

$$\begin{array}{r} 7) 13.891 \\ \underline{1.} \\ 14.891 \\ \underline{3.696} \\ 18.587 \end{array}$$

18.586 HF

$$\begin{array}{r} B \\ \times 4.664 \quad -.047 \\ 4.675 \quad -.065 \\ 5.675 \quad -.040 \quad -.029 \\ \times 5.664 \quad .025 \end{array}$$

YAG ON B/L

$$\begin{array}{r} A) 5.770 \\ \underline{1.} \\ 6.770 \\ 18.586 \\ \hline 11.816 \end{array}$$

$$\begin{array}{r} B) 5.771 \\ \underline{1.} \\ 6.771 \\ 18.586 \\ \hline 11.815 \end{array}$$

$$\begin{array}{r} C) 5.780 \\ \underline{1.} \\ 6.780 \\ 18.586 \\ \hline 11.806 \end{array} \quad \text{X} \quad \boxed{+.024}$$

DIODE ON RL

X  $\boxed{+.023}$

$$\begin{array}{r} A) 4.652 \\ \underline{1.} \\ 5.652 \\ 18.586 \\ \hline 12.934 \end{array}$$

$$\begin{array}{r} B) 4.664 \\ \underline{1.} \\ 5.664 \\ 18.586 \\ \hline 12.922 \end{array}$$

$$\begin{array}{r} C) 4.670 \\ \underline{1.} \\ 5.670 \\ 18.586 \\ \hline 12.916 \end{array}$$



LCLS LUST  
 PIM TOP ASSY  
 SA-391-738-00 REY1  
 SN 0001

4-15-10  
 JM, BR, LG

Y

$$\begin{array}{r} 16.207 \text{ REF} \\ 10.000 \text{ €} \\ \hline 6.207 \text{ HI} \end{array}$$

16.207

5) 6.207  
 3.694  
2.513  
 1.           
1.513 s/R  
 1.510  
+002

6) 6.207  
 3.694  
2.513  
 1.           
1.513 s/R  
 1.512  
+001

7) 6.207  
 3.696  
2.511  
 1.           
1.511 s/R  
 1.511  
 ⊕

8) 6.207  
 3.693  
2.514  
 1.           
1.514 s/R  
 1.515  
-001

PITCH  
 u/s 2.193  
 o/s 2.194

5.970  
 -FL  
 6.207  
2.985  
3.222  
3.219  
 +3

X

2) -8.375  
 1) -8.372  
 .100+1  
 .117+1  
 4.600+1  
 3.872+1  
 1.477-1  
 1.480-1  
 -9.852 LOS

20.000 REF  
 9.852 LOS  
10.148 = €

DIODE

9.648 = +.500 LOS      10.648 = -.500 LOS  
 +035                      +.010

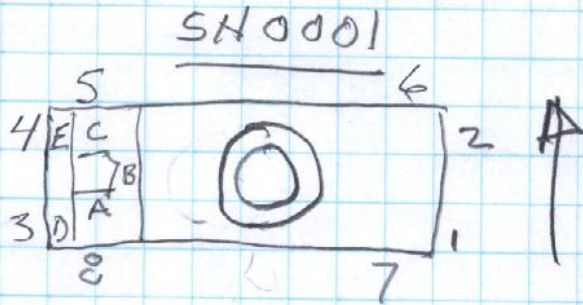
+023

#9 9.852  
 8.430  
1.422 ✓



LCLS-LUST  
PIM TOP ASSY  
SA-391-738-00 REV1

4-15-10  
JM, BH, LG



SH0002

T.F  
4.466

-X

5.969

(G)  
8.394



LCLS LUS1  
PIM TOP ASSY  
SA -391 - 738-00-REV1  
SN 0001

4-16-10  
BR, LG

(B)

4.664

$$\begin{array}{r} - .047 \\ - .1440 \\ \hline .1187 \\ \hline \end{array}$$

$$\begin{array}{r} 10.090 \\ \hline 9.540 \\ - .460 \text{ HI} \\ - .052 \text{ to Bot} \\ \hline \end{array}$$

-52

$$\begin{array}{r} -.460 \\ .029 \\ \hline .489 \end{array}$$

- .512

1.512

- .460 HI

ct.