

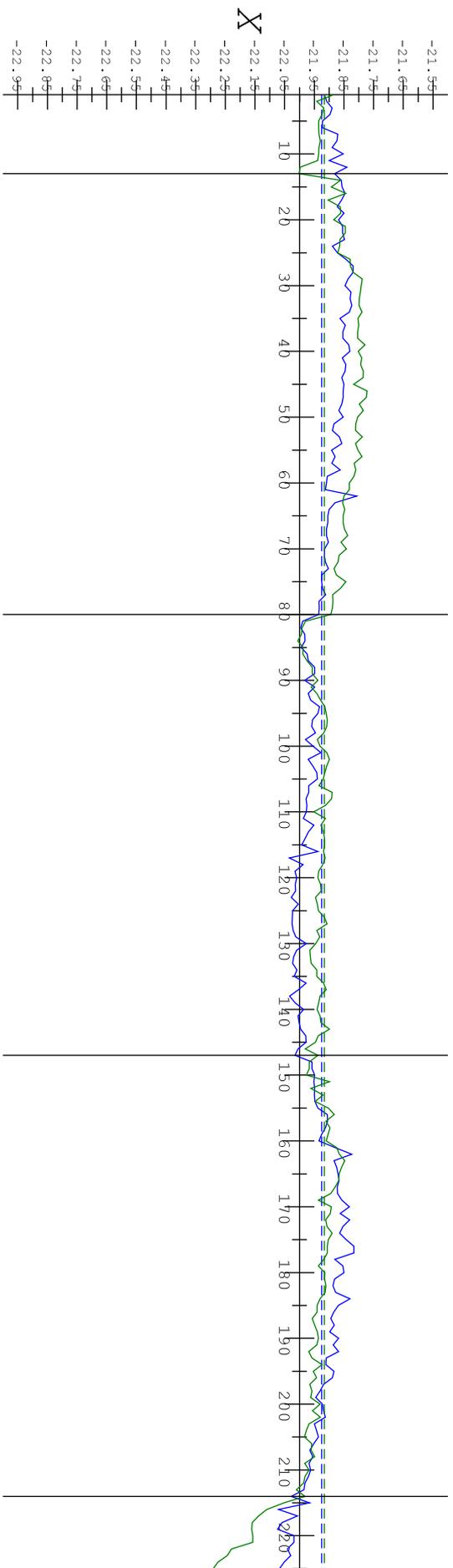
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips

SLAC
 LCLS-MMF
 LEITZ CMM

Undulator Pole Tip Angles
 Post Magnetic Alignment

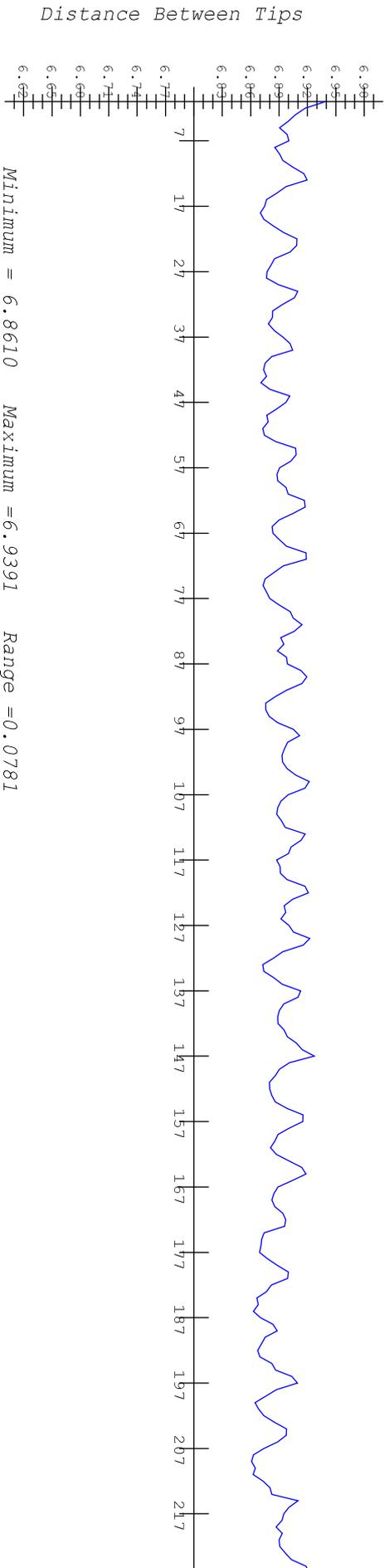
DATE: 25-AUG-2008
 UNDULATOR # 13
 DATASET # 0011
 PROGRAM VERSION 2.7

Pole Tip Number ----->

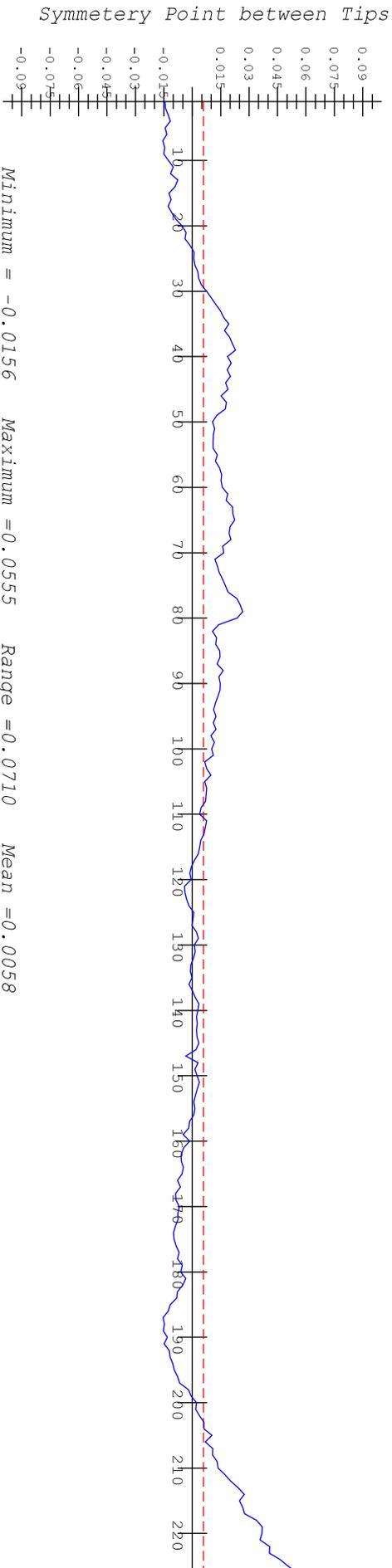


X values in mm
 Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -21.917
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
 Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -21.925

<p>SLAC LCLS-MMF LEITZ CMM</p>	<p>Undulator Pole Tip Location Post Magnetic Alignment</p>	<p>DATE: 25-AUG-2008 UNDULATOR # 13 DATASET # 0011 PROGRAM VERSION 2.7</p>
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Pole Tip Number ----->



Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L
 Broken Red line is Mean Value of Symmetry Points
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L

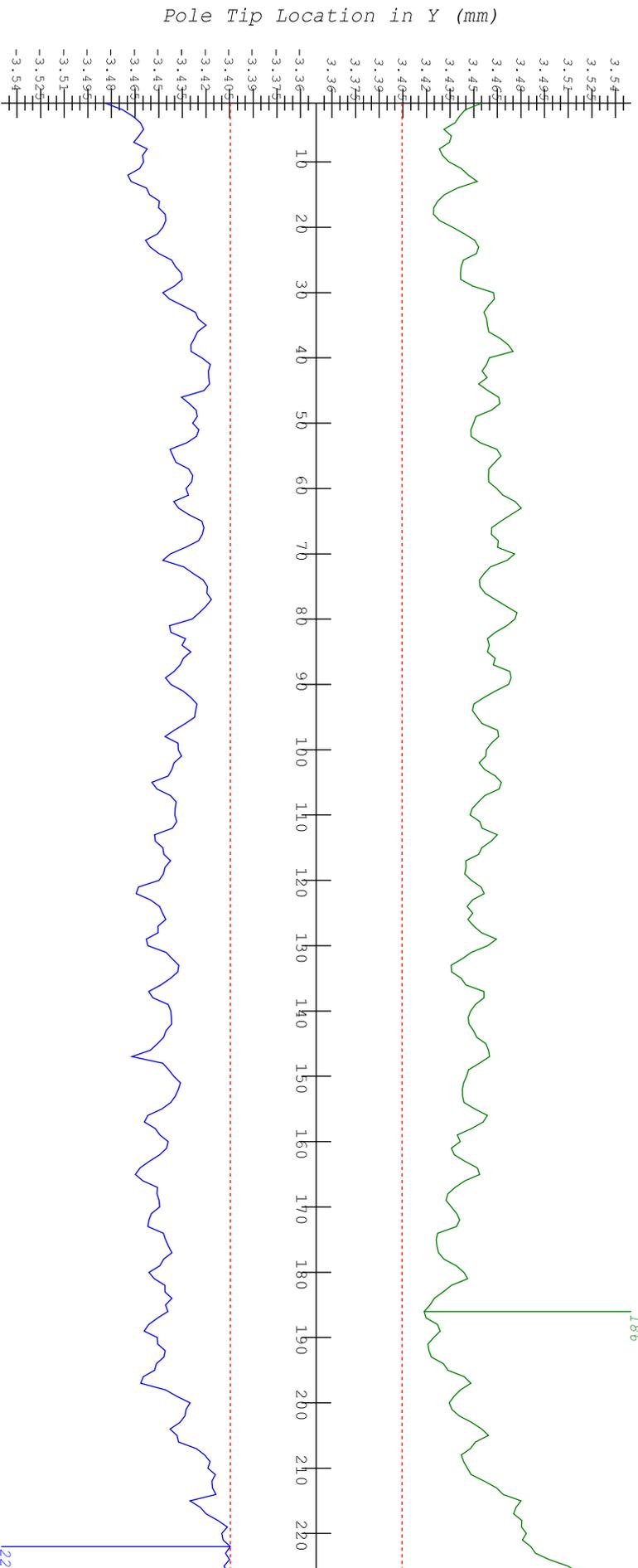
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Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 25-AUG-2008
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Maximum Chamber Gap = 6.8091

Minimum = 3.4186 Maximum = 3.5163 Range = 0.0977



Pole Tip Number ----->

Green = The position of the Upper Pole Tips at Magnetic C\L
Blue = The position of the Lower Pole Tips at Magnetic C\L
Max. Chamber Gap = The maximum width vacuum chamber that will fit centered on the Magnetic C\L (2*Min. Dev. from C\L)

SLAC
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Undulator Pole Tip Location
Post Magnetic Alignment

DATE: 25-AUG-2008
UNDULATOR # 13
DATASET # 0011
PROGRAM VERSION 2.7



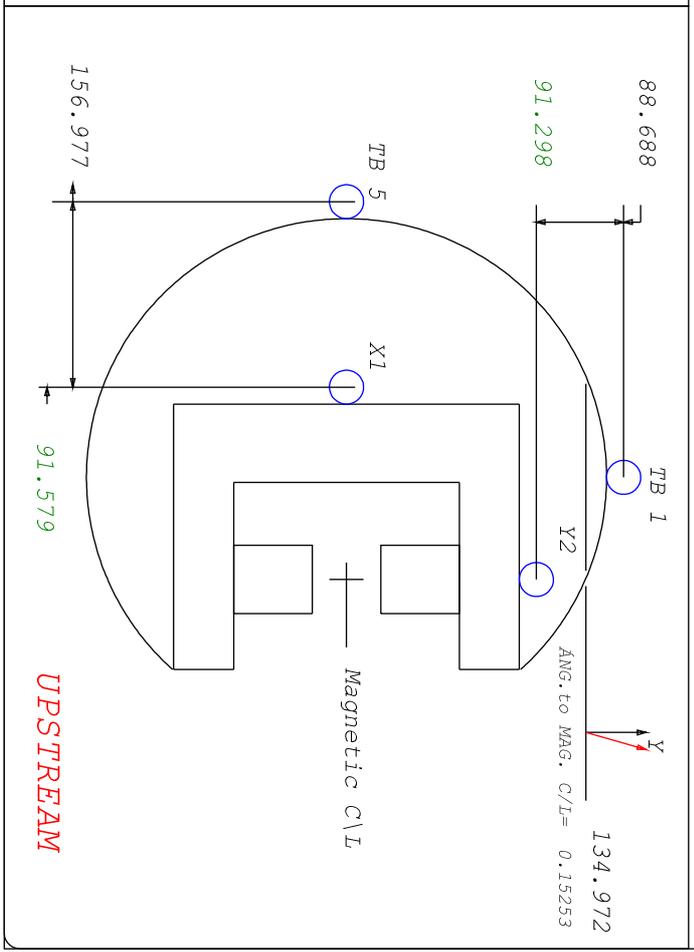
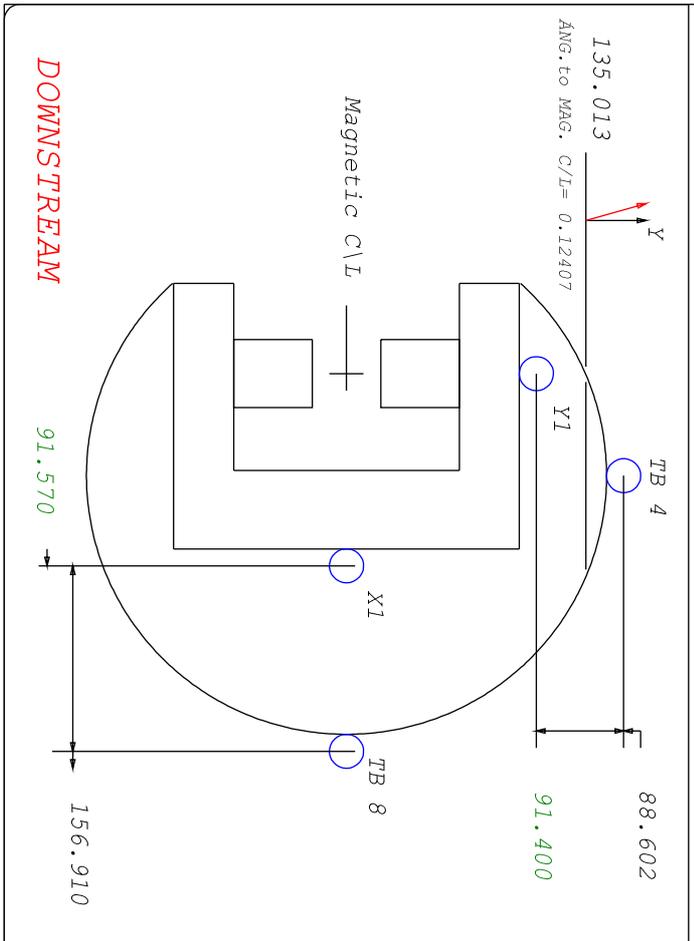
TOOLING BALL LOCATIONS

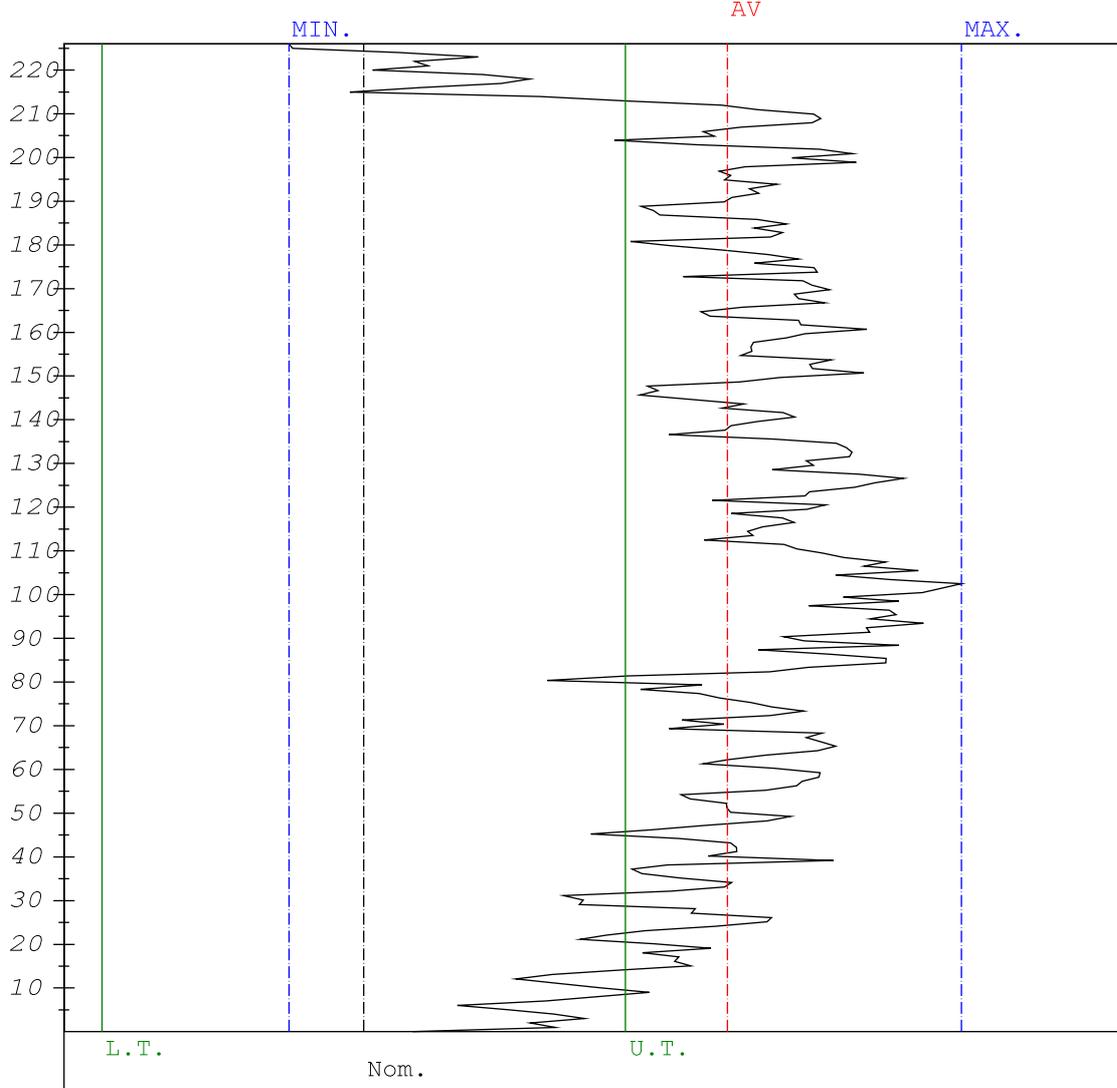
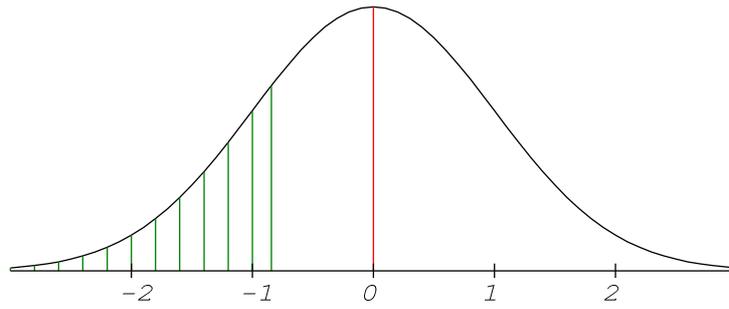
NUM.	X	Y	Z
1	0.2309	179.9861	-1558.289
2	0.3344	180.0157	-584.4557
3	0.1910	179.9056	591.3031
4	0.1260	180.0016	1562.0758
5	248.5360	0.0757	-1558.319
6	248.4770	-0.0251	-584.5896
7	248.4565	0.0471	591.3337
8	248.4796	-0.0599	1562.0920

	C/L Offset	Length
Top Magnetic Structure	-0.096	3381.069
Bottom Magnetic Structure	0.096	3381.293
Strongback	0.252	3399.790

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 5.1949	Cent.-Dev. : 0.6949
Up. Tol. : 0.5	Maximum : 5.6419	U.Tol.Ex. > : 80.0 %
Low.Tol. : -0.5	Minimum : 4.3576	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2312	In Tolerance: 20.0 %
Outlier : 0	Distribution : NOR	Dimension : mrad

<p>SLAC LCLS-MMF LEITZ CMM</p>	<p>Statistical Evaluation Pole Tip Gap Angle Post Magnetic Alignment</p>	<p>DATE: 25-AUG-2008 UNDULATOR # 13 DATASET # 0011 PROGRAM VERSION 2.7</p>
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