

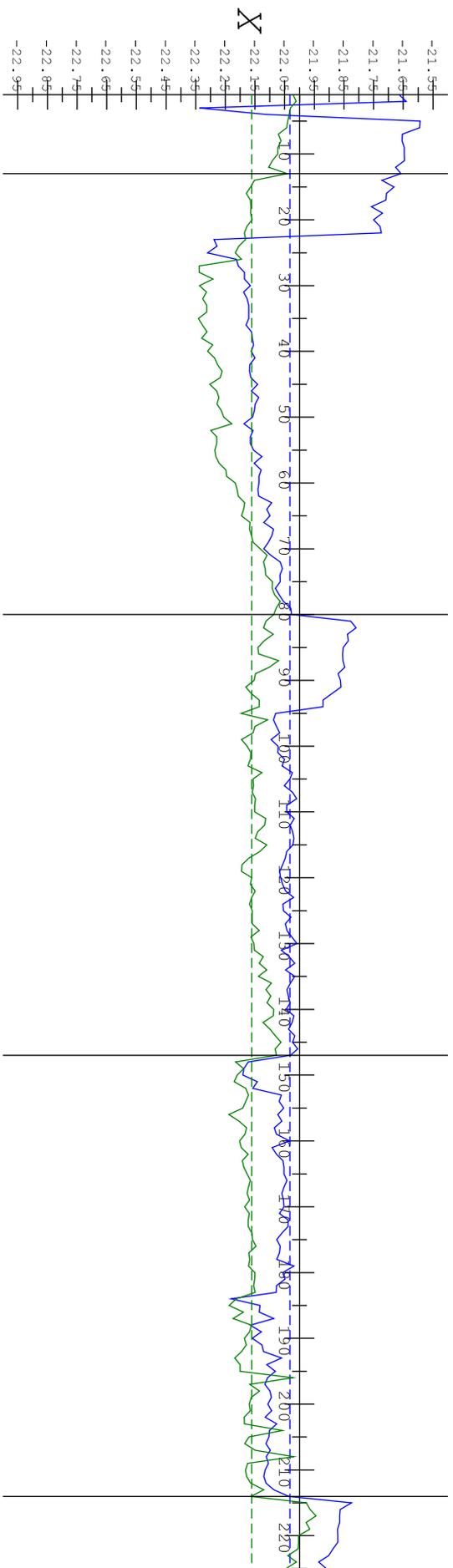
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips

SLAC
 LCLS-MMF
 LEITZ CMM

Undulator Pole Tip Angles
 Post Magnetic Alignment

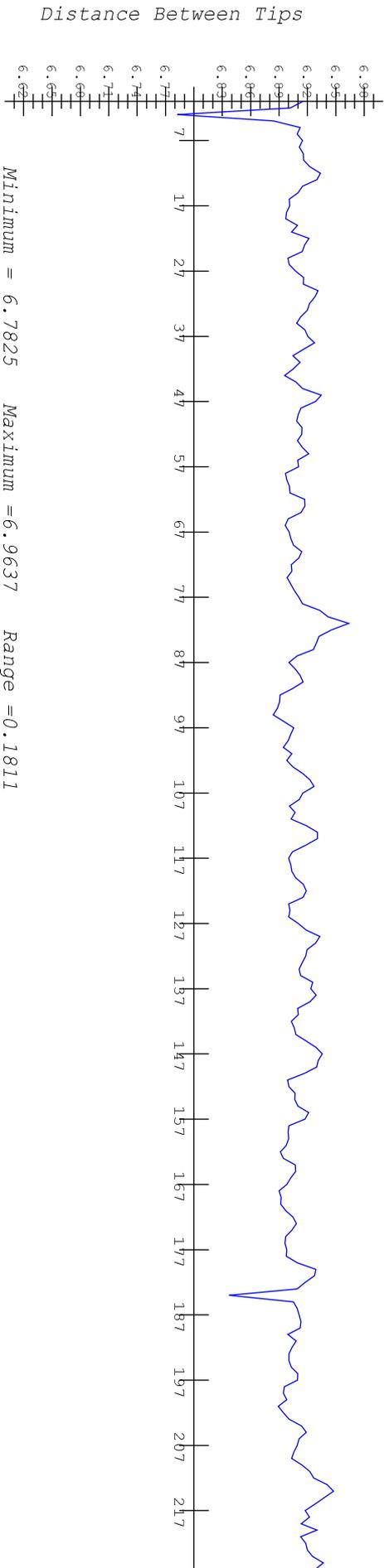
DATE: 18-DEC-2007
 UNDULATOR # 04
 DATASET # 0001
 PROGRAM VERSION 2.5

Pole Tip Number ----->

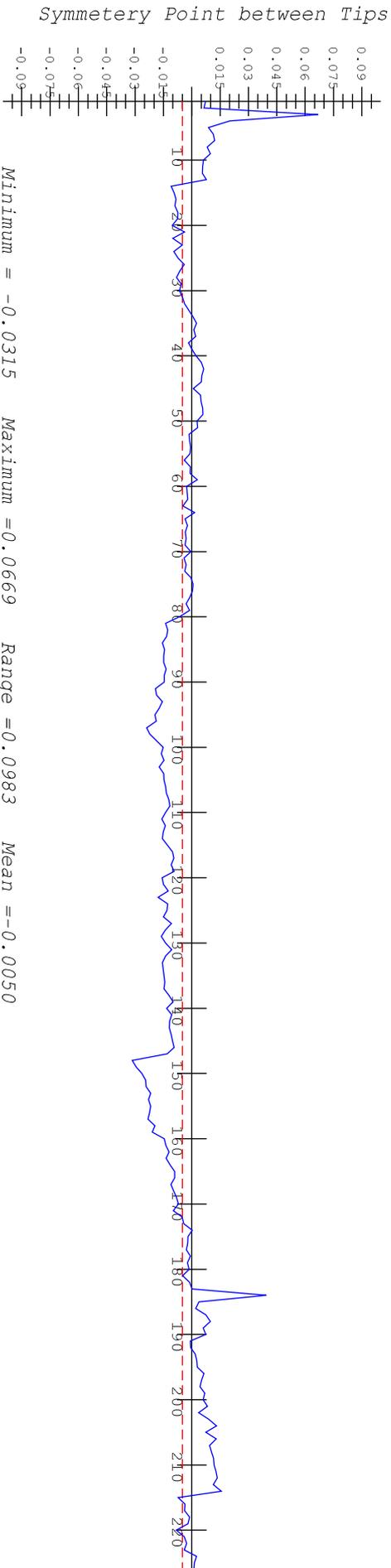


X values in mm
 Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -22.161
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
 Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.033

<p>SLAC LCLS-MMF LEITZ CMM</p>	<p>Undulator Pole Tip Location Post Magnetic Alignment</p>	<p>DATE: 18-DEC-2007 UNDULATOR # 04 DATASET # 0001 PROGRAM VERSION 2.5</p>
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Pole Tip Number ----->

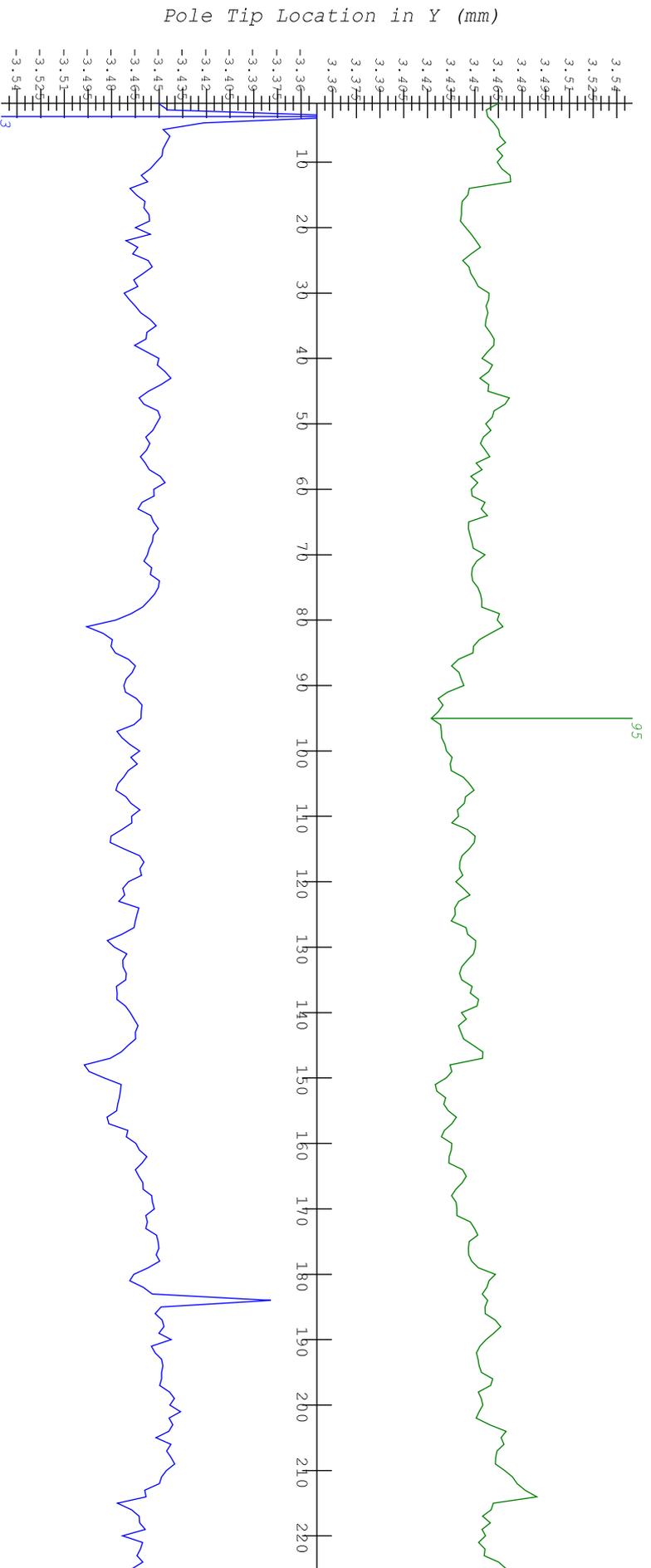


Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L
 Broken Red line is Mean Value of Symmetry Points
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C/L

<p>SLAC LCLS-MMF LEITZ CMM</p>	<p>Undulator Pole Tip Location Post Magnetic Alignment</p>	<p>DATE: 18-DEC-2007 UNDUULATOR # 04 DATASET # 0001 PROGRAM VERSION 2.5</p>
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Maximum Chamber Gap = 6.6488

Minimum = 3.4224 Maximum = 3.4894 Range = 0.0670



Minimum = -3.4973 Maximum = -3.3244 Range = 0.1729

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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LEITZ CMM

Undulator Pole Tip Location
Post Magnetic Alignment

DATE: 18-DEC-2007
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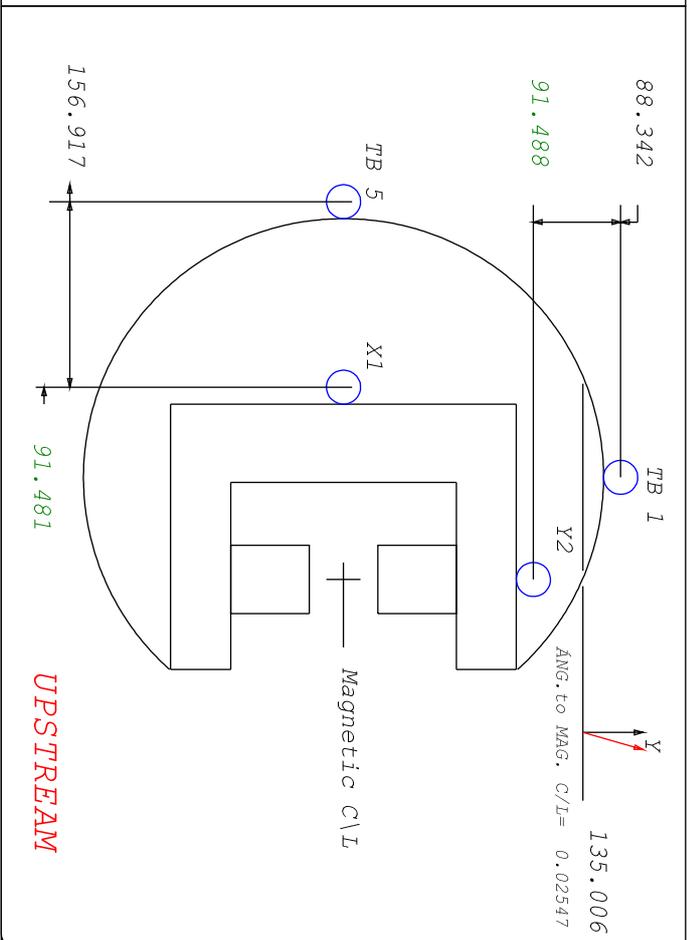
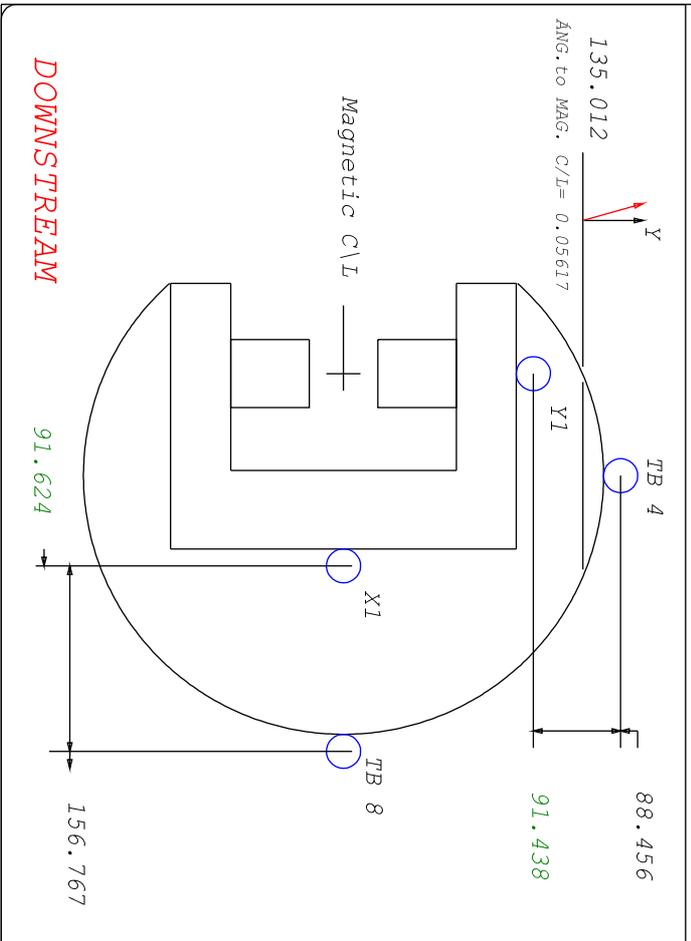
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.1786	179.8299	-1558.640
2	0.3025	179.7645	-584.9803
3	0.2779	179.7617	591.0547
4	0.2911	179.8937	1561.9152
5	248.3979	-0.0625	-1558.527
6	248.4849	0.0526	-584.8330
7	248.5534	-0.0008	591.1963
8	248.3910	0.0360	1561.9670

	C/L Offset	Length
Top Magnetic Structure	-0.033	3381.361
Bottom Magnetic Structure	0.033	3381.298
Strongback	0.035	3399.991

Dimensions in mm

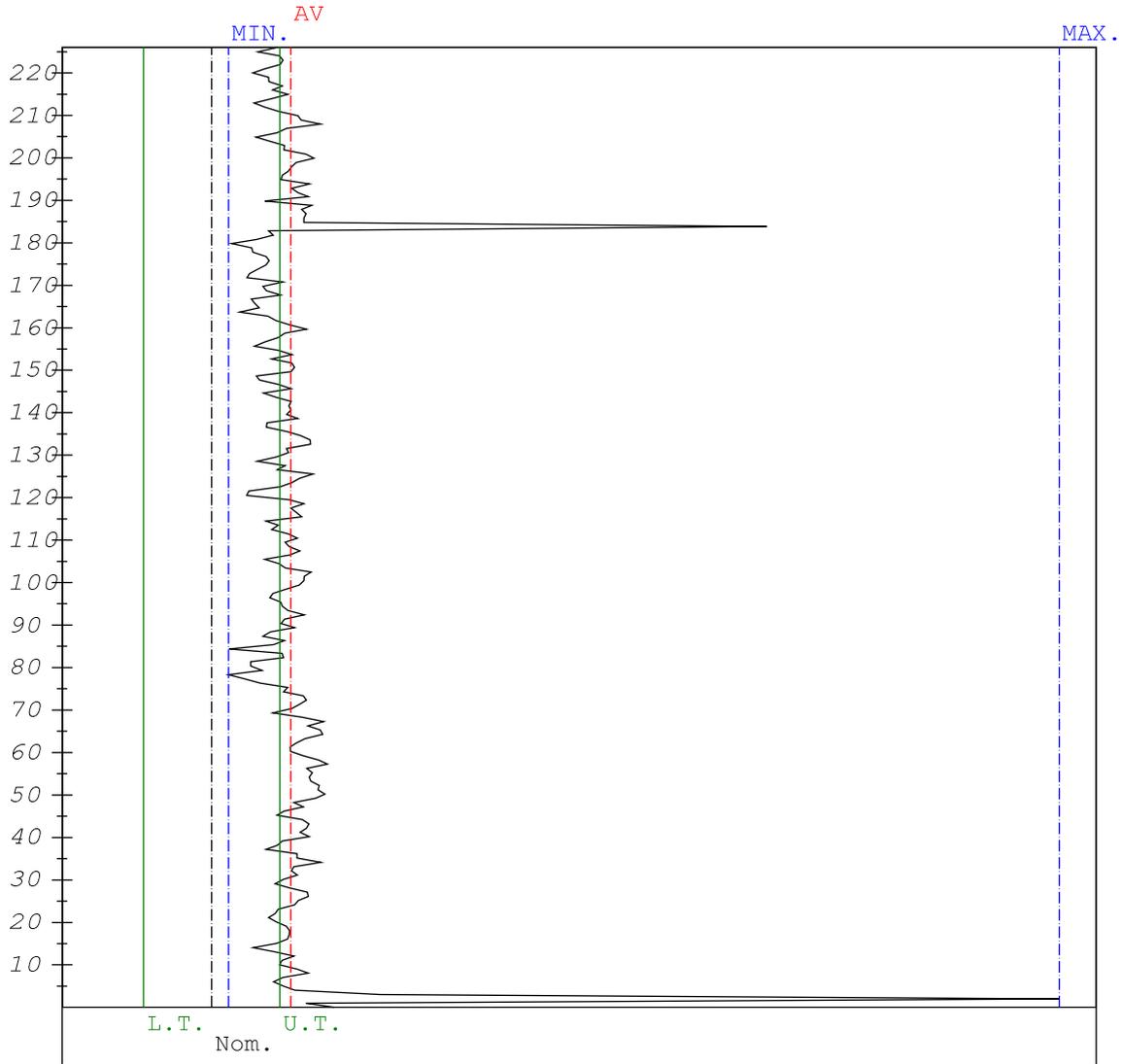
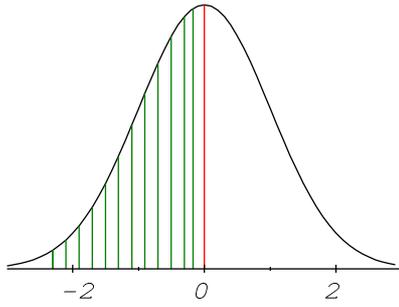
Angles in mrad



SLAC
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Undulator Dimensional Fiducialization
Post Magnetic Alignment

DATE: 18-DEC-2007
UNDULATOR # 04
DATASET # 0001
PROGRAM VERSION 2.5



Nominal : 4.5000	Averag : 5.0818	Cent.-Dev. : 0.5818
Up. Tol. : 0.5	Maximum : 10.7226	U.Tol.Ex. > : 56.9 %
Low.Tol. : -0.5	Minimum : 4.6233	L.Tol.Ex. < : 1.0 %
Spl.Size : 226	Stand.-Dev.: 0.4695	In Tolerance: 42.1 %
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:18-DEC-2007 UNDULATOR # 04 DATASET # 0001 PROGRAM VERSION 2.5</p>
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