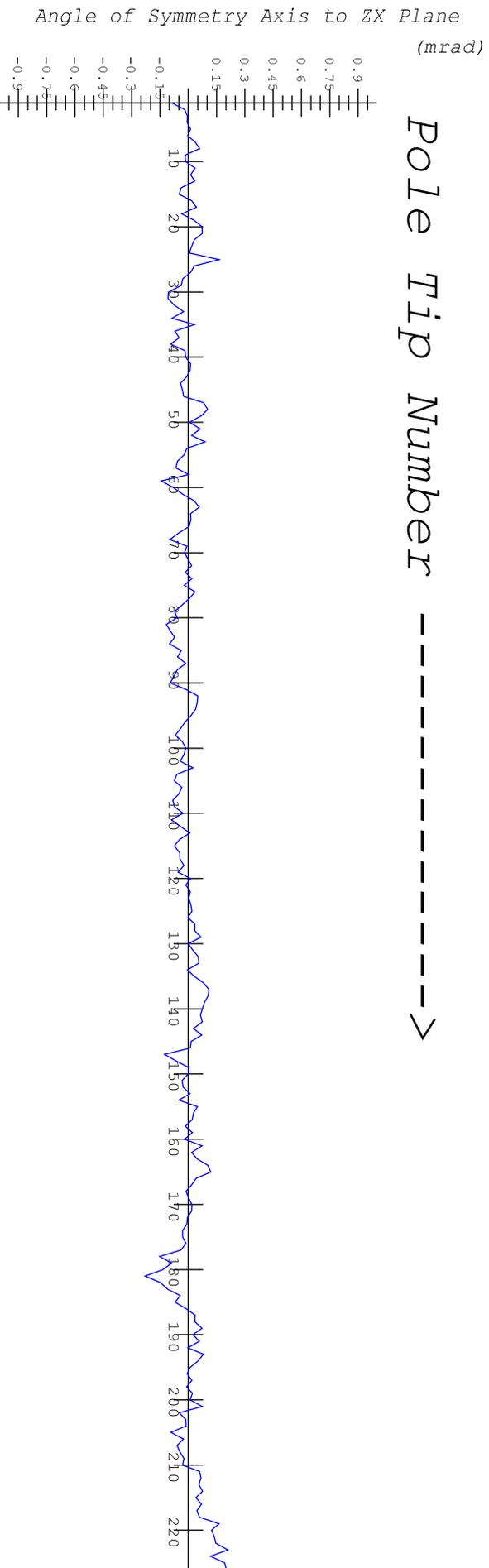


Pole Tip Number ----->



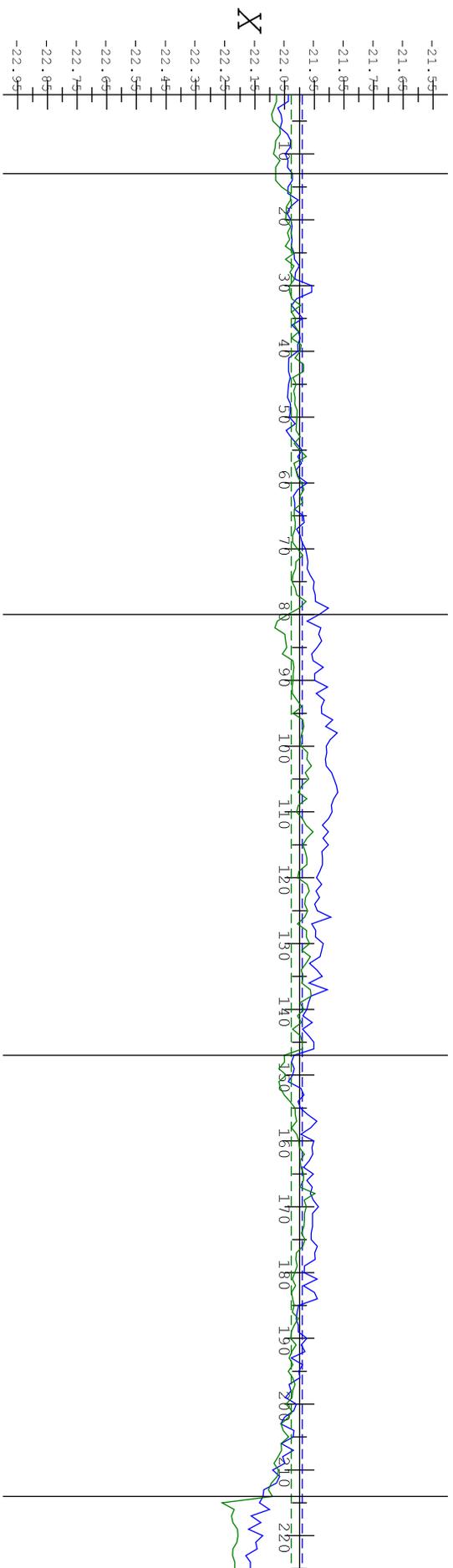
*Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
Included Angle is the angle between the Upper and Lower Pole Tips*



*Undulator Pole Tip Angles
Post Magnetic Alignment*

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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 = -22.028

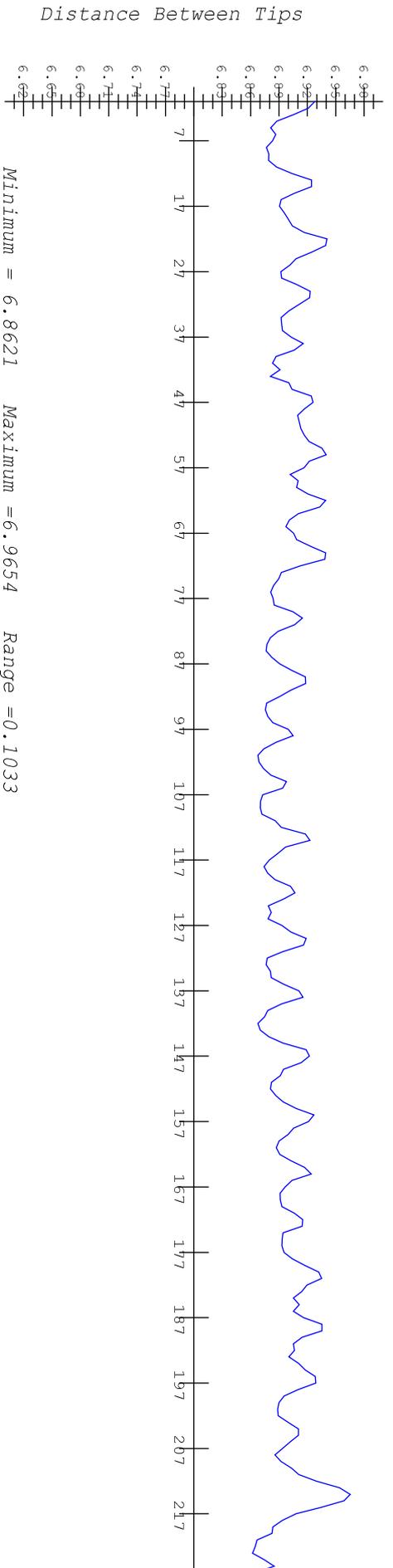
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -21.991



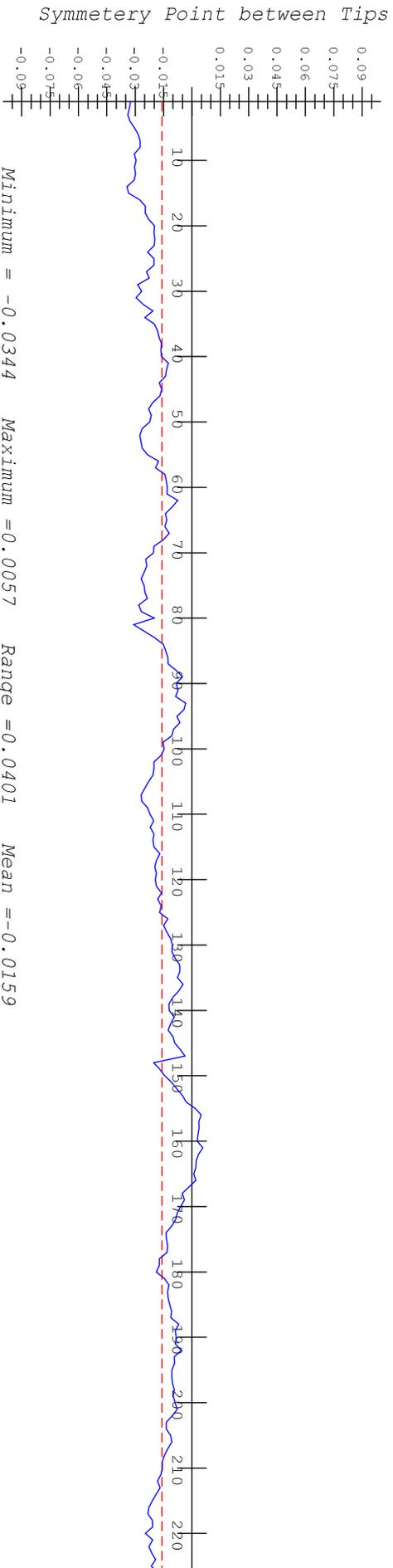
Undulator Pole Tip Location
Post Magnetic Alignment

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in mm

Pole Tip Number ----->



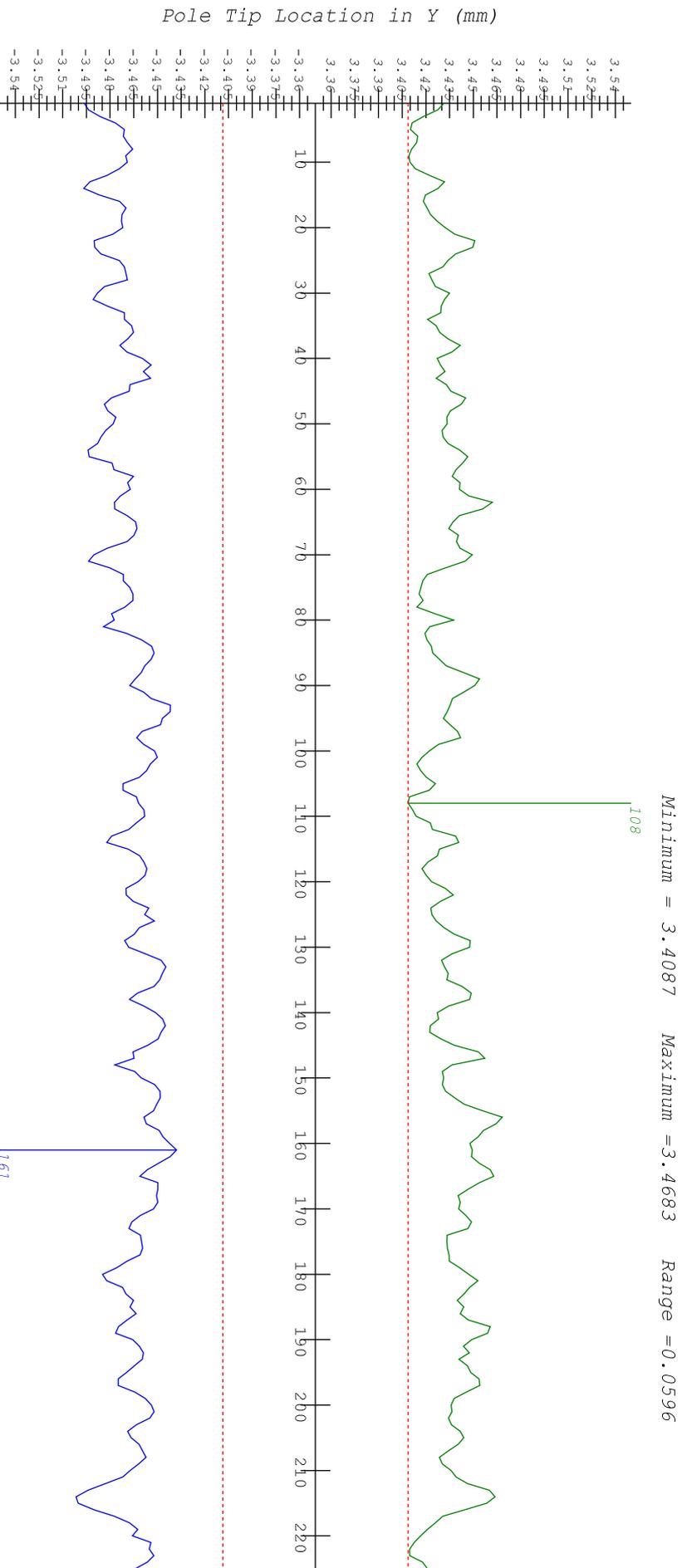
Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L
 Broken Red line is Mean Value of Symmetry Points
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L



Undulator Pole Tip Location
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Maximum Chamber Gap = 6.8174



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)



Undulator Pole Tip Location
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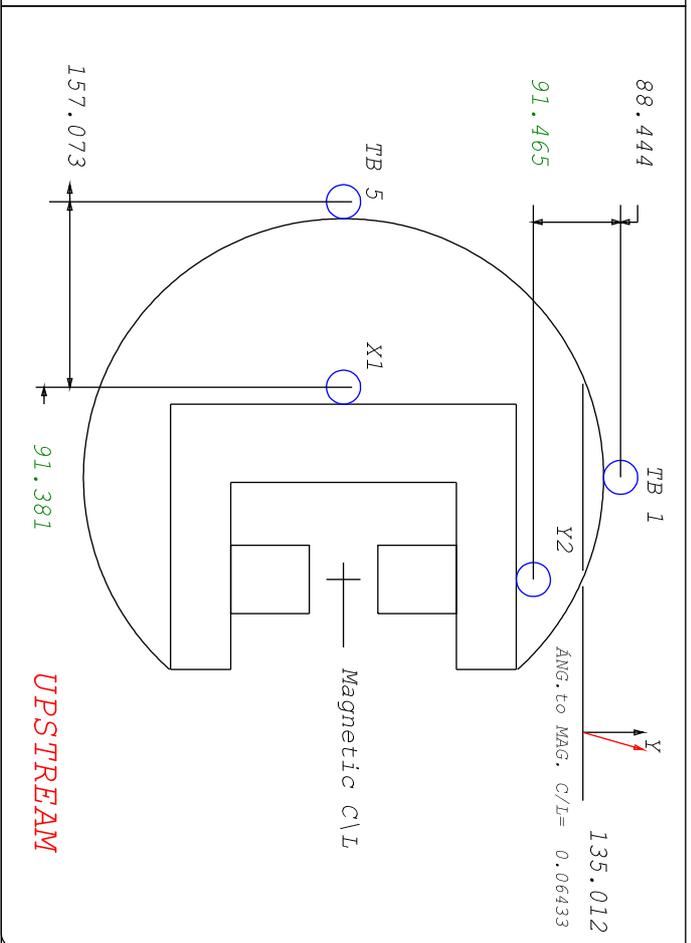
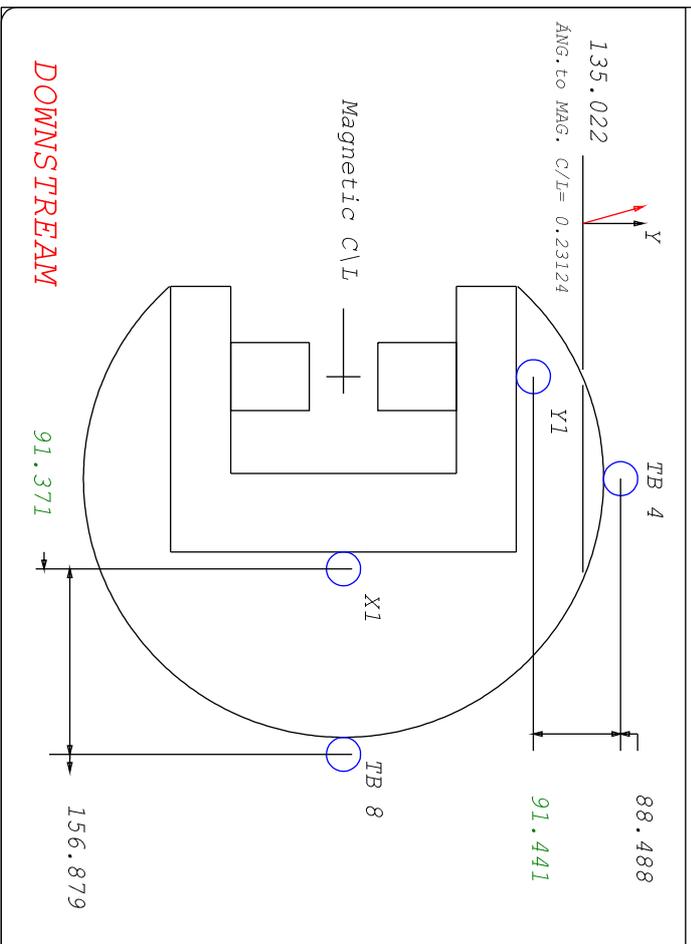
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	-0.1288	179.9088	-1558.118
2	-0.0057	179.8191	-584.5060
3	0.1088	179.8572	591.5806
4	-0.0752	179.9293	1562.3688
5	248.4539	0.1981	-1558.080
6	248.3637	0.1886	-584.4247
7	248.3686	0.1575	591.6251
8	248.2504	0.1785	1562.4445

	C/L Offset	Length
Top Magnetic Structure	-0.029	3380.919
Bottom Magnetic Structure	0.029	3380.896
Strongback	0.532	3399.981

Dimensions in mm

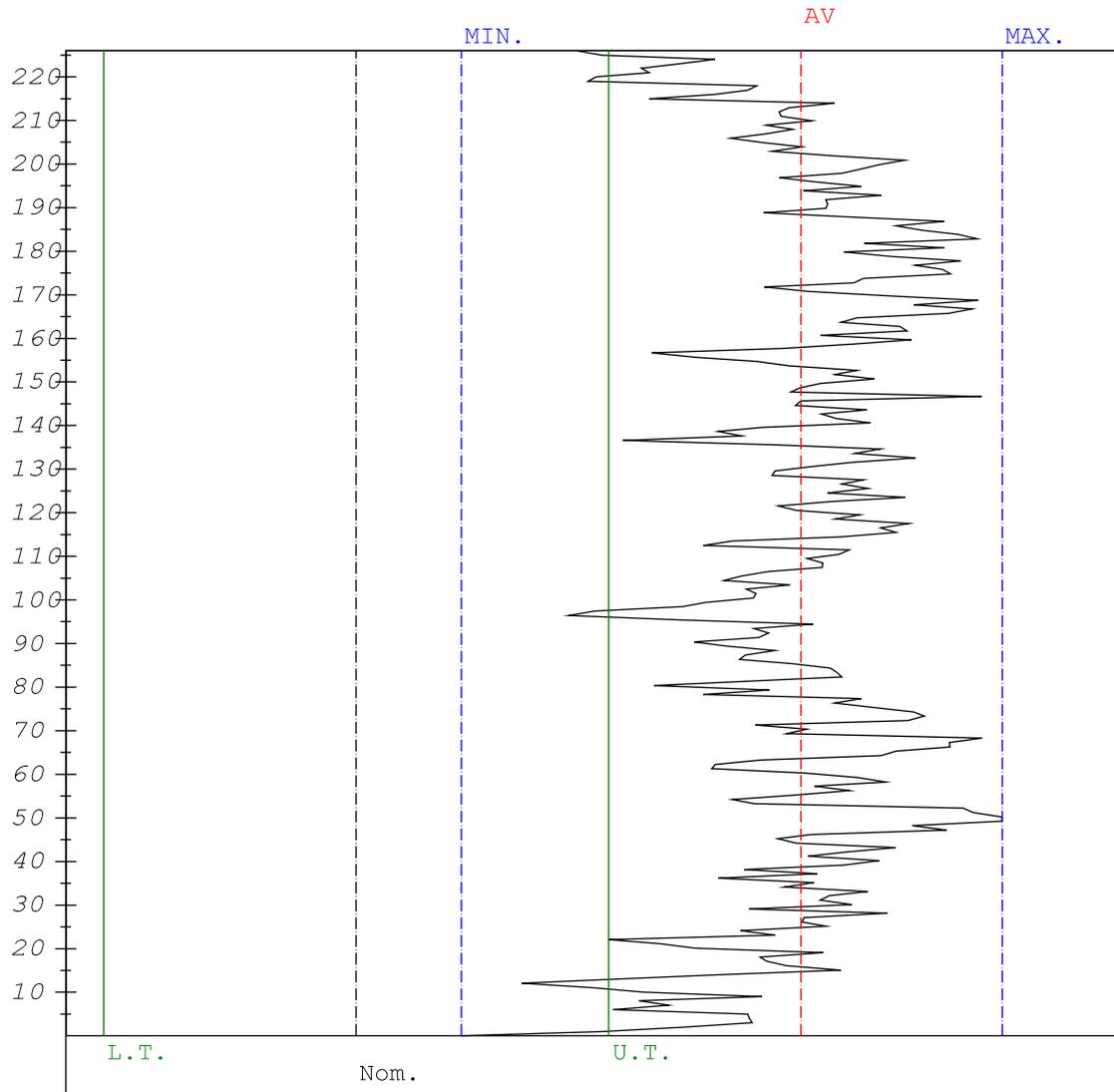
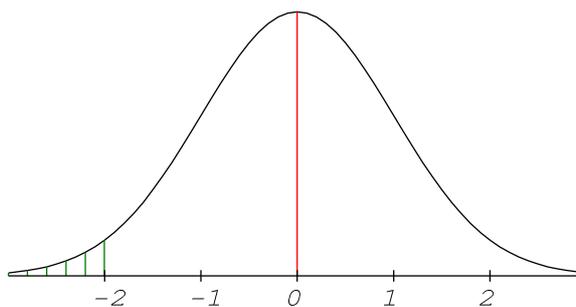
Angles in mrad



MMF GRE 45129

Undulator Dimensional Fiducialization Post Magnetic Alignment

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Nominal : 4.5000	Averag : 5.381	Cent.-Dev. : 0.881
Up. Tol. : 0.5	Maximum : 5.7794	U.Tol.Ex. > : 97.8 %
Low.Tol. : -0.5	Minimum : 4.7081	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1903	In Tolerance: 2.2 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 22-OCT-2009

UNDULATOR #40
DATASET #0001
PROGRAM VERSION 2.9