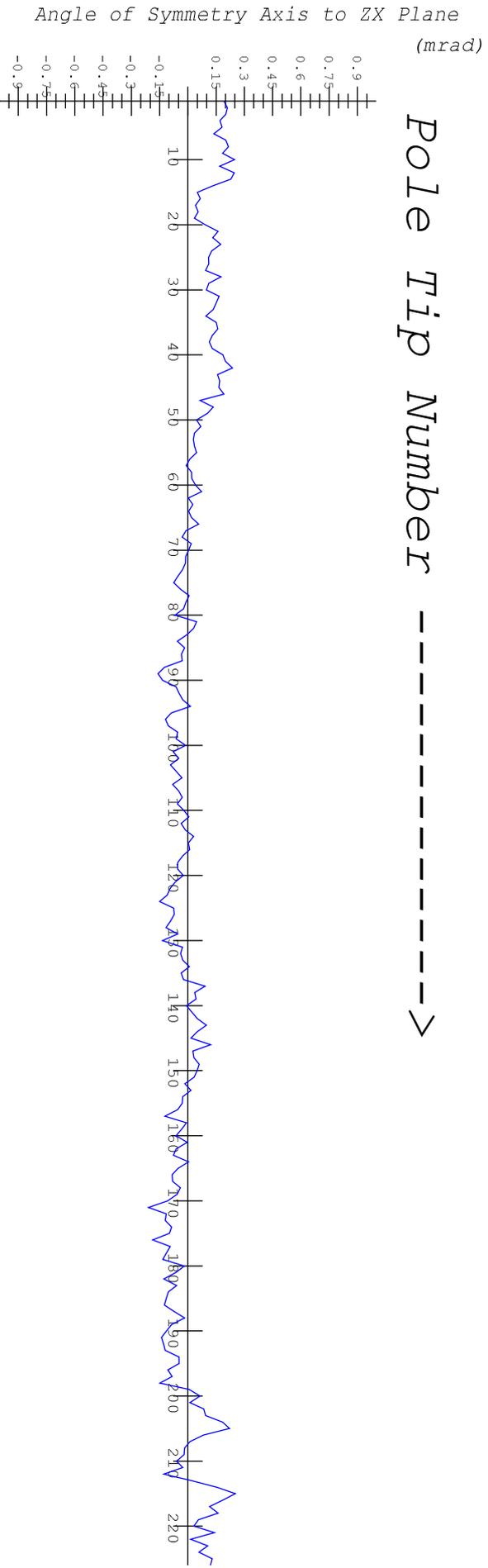


Pole Tip Number ----->



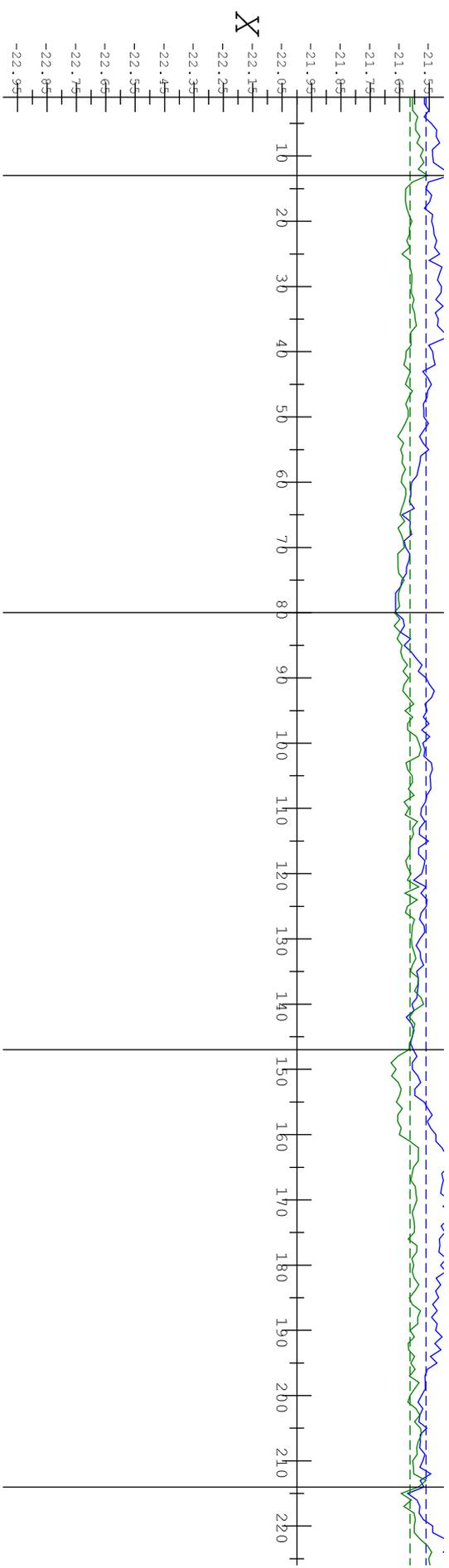
*Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
Included Angle is the angle between the Upper and Lower Pole Tips*



*Undulator Pole Tip Angles
Post Magnetic Alignment*

DATE: 09-SEP-2009
 UNDULATOR # 27
 DATASET # 0001
 PROGRAM VERSION 2.9

Pole Tip Number ----->



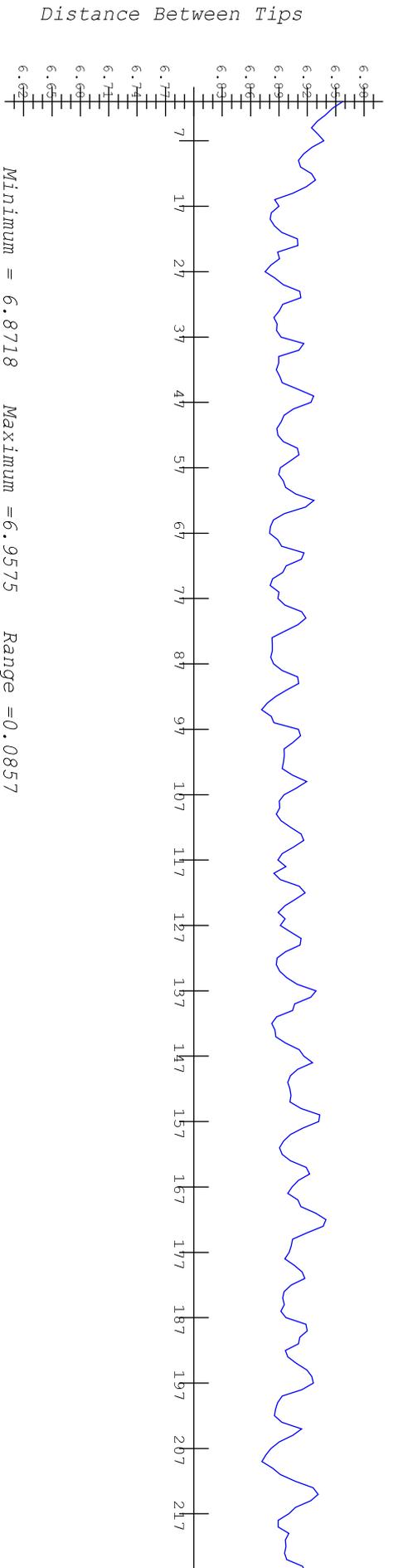
X values in mm

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 = -21.615
 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 = -21.560



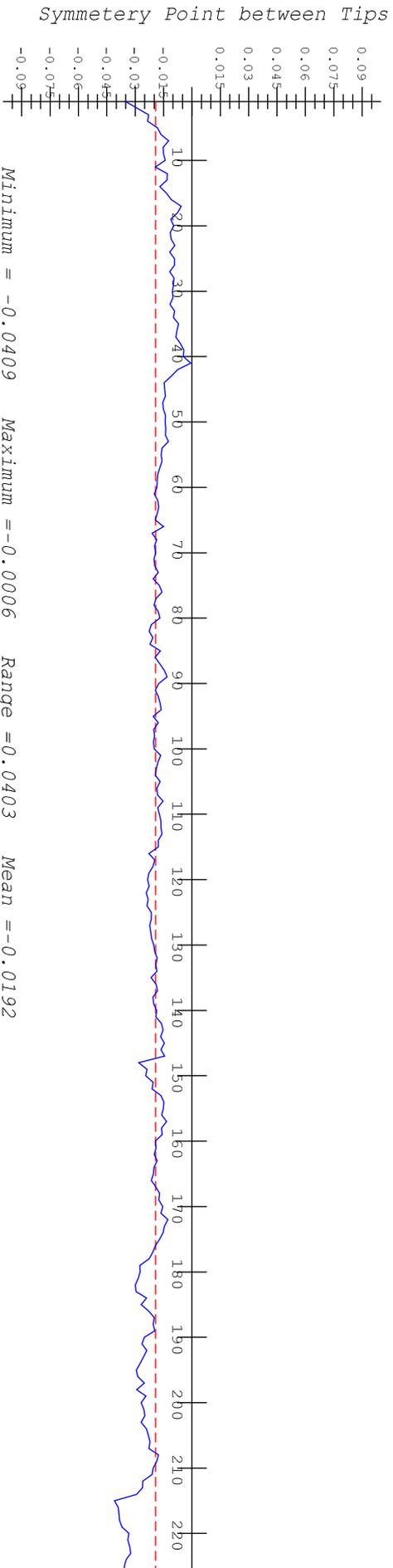
Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 09-SEP-2009
 UNDUULATOR # 27
 DATASET # 0001
 PROGRAM VERSION 2.9



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

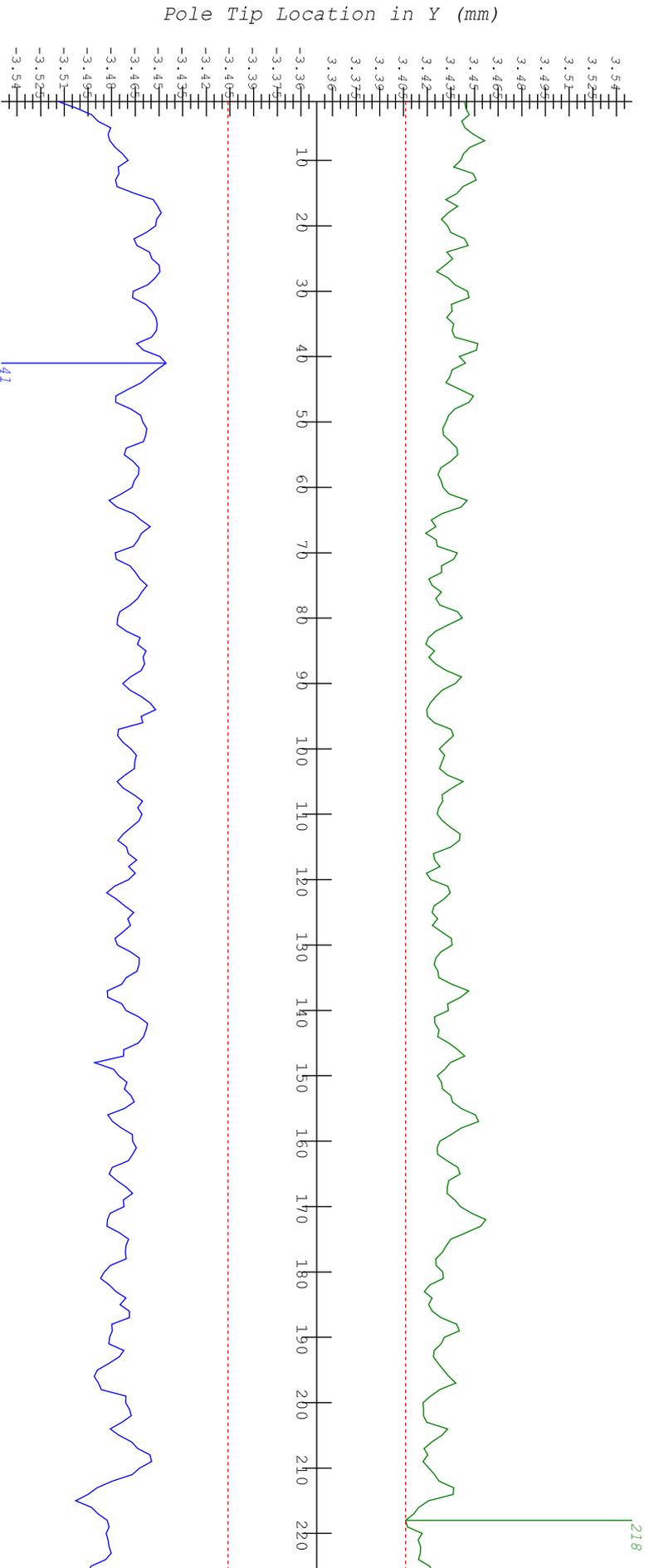


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 09-SEP-2009
 UNDUULATOR # 27
 DATASET # 0001
 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.8127

Minimum = 3.4063 Maximum = 3.4571 Range = 0.0508



Minimum = -3.5137 Maximum = -3.4456 Range = 0.0682

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
Post Magnetic Alignment

DATE: 09-SEP-2009
UNDULATOR # 27
DATASET # 0001
PROGRAM VERSION 2.9



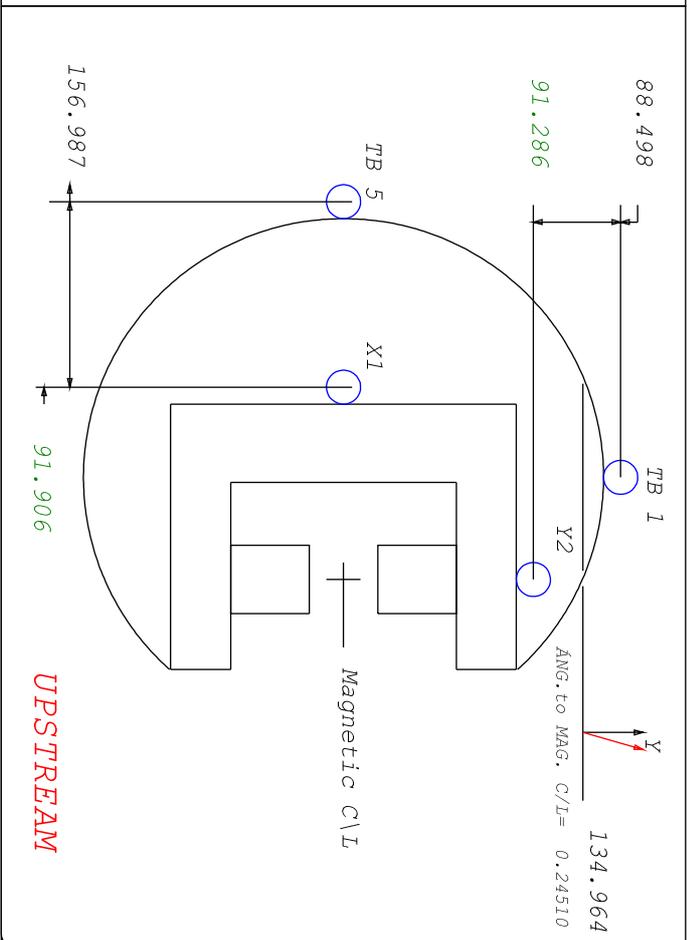
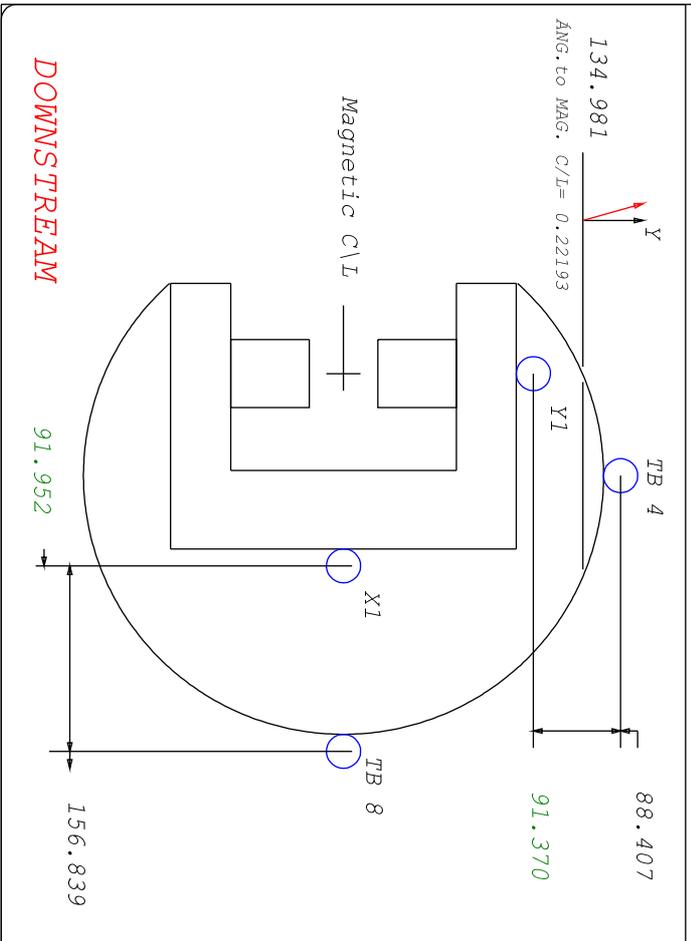
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.5705	179.7842	-1558.389
2	0.4059	179.7535	-584.6698
3	0.4541	179.7129	591.3073
4	0.3851	179.7773	1562.1438
5	248.8929	-0.0276	-1558.116
6	248.7558	0.1042	-584.5949
7	248.7096	0.0740	591.3786
8	248.7915	-0.0266	1562.2348

	C/L Offset	Length
Top Magnetic Structure	-0.010	3380.940
Bottom Magnetic Structure	0.010	3380.997
Strongback	0.395	3399.778

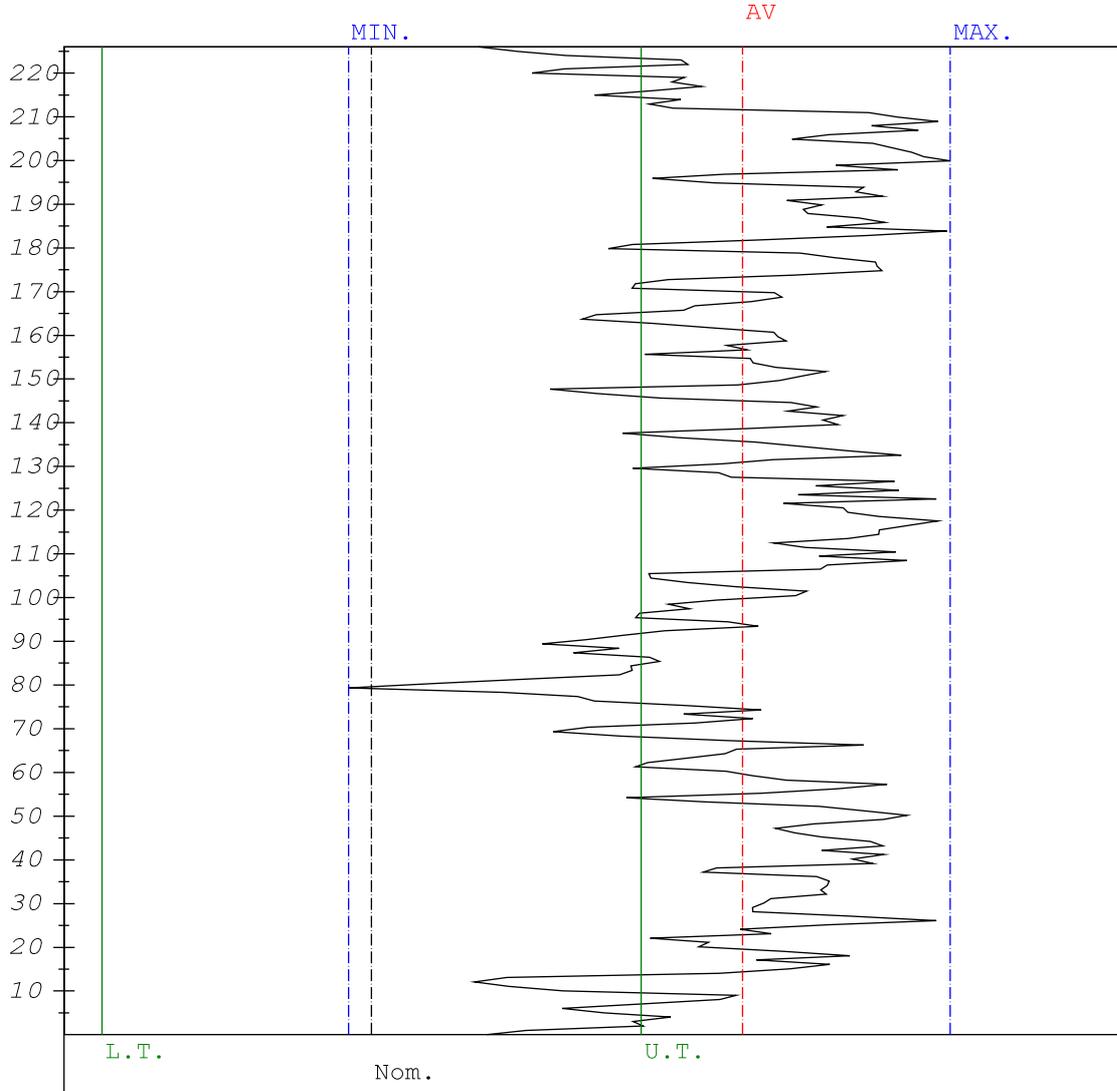
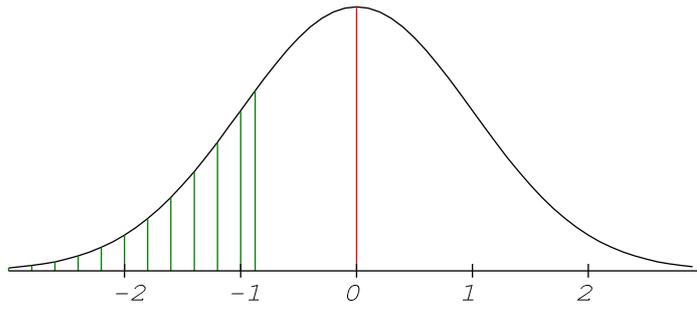
Dimensions in mm

Angles in mrad



Undulator Dimensional Fiducialization Post Magnetic Alignment

DATE: 09-SEP-2009
 UNDULATOR # 27
 DATASET # 0001
 PROGRAM VERSION 2.9



Nominal : 4.5000	Averag : 5.1883	Cent.-Dev. : 0.6883
Up. Tol. : 0.5	Maximum : 5.5738	U.Tol.Ex. > : 80.9 %
Low.Tol. : -0.5	Minimum : 4.4577	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2151	In Tolerance: 19.1 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 09-SEP-2009
UNDULATOR # 27
DATASET # 0001
PROGRAM VERSION 2.9