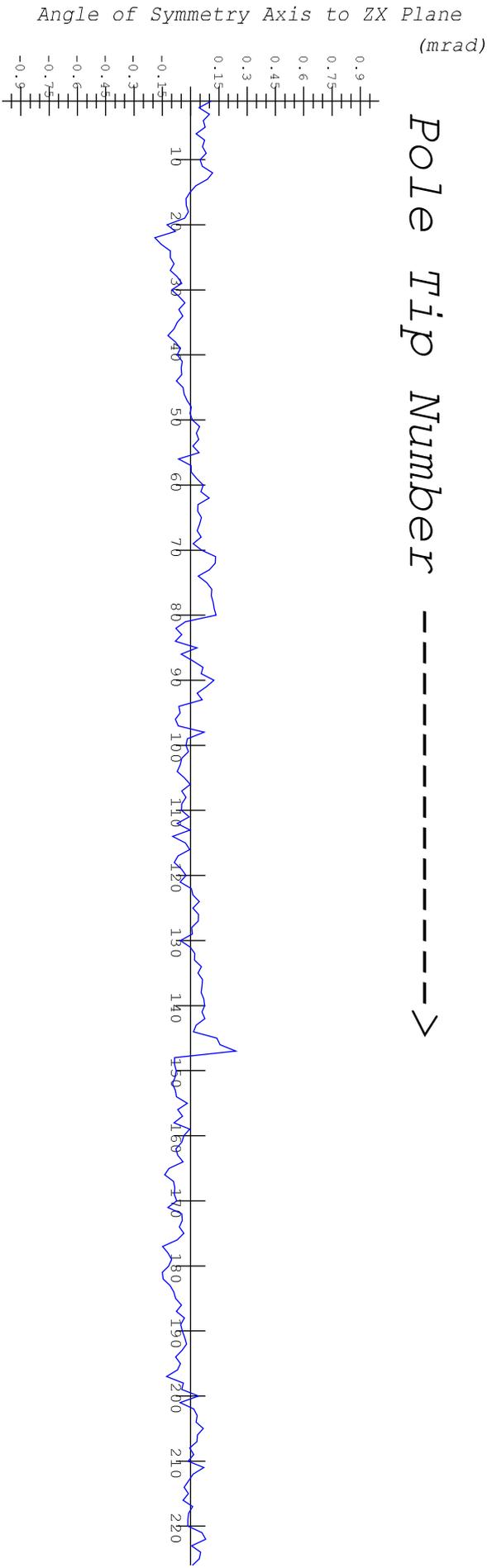


Pole Tip Number ----->



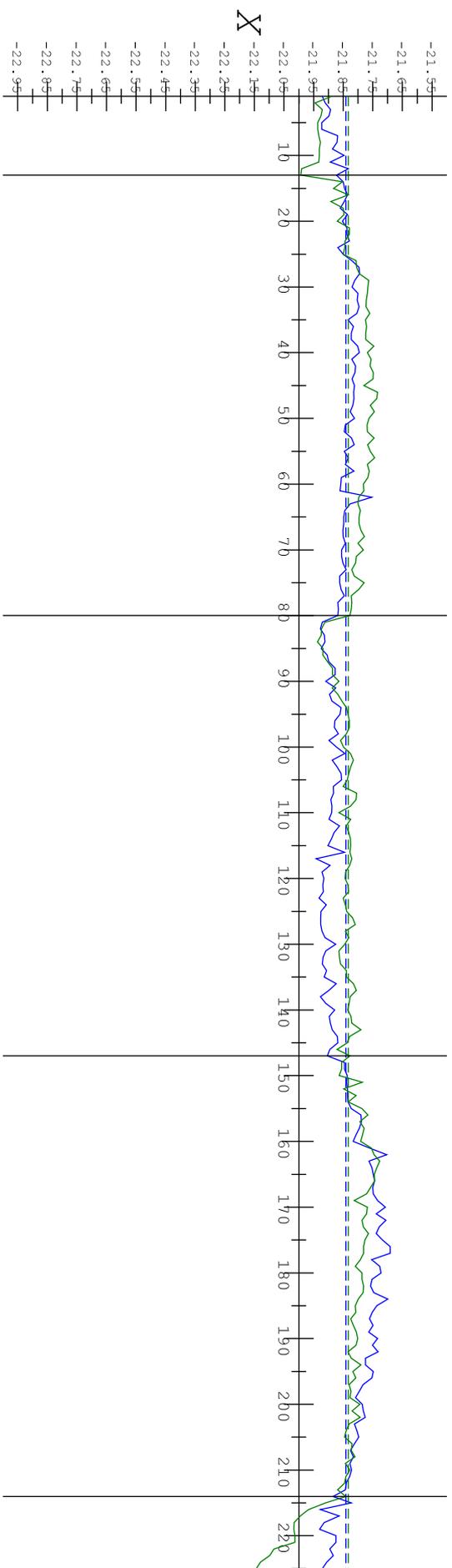
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

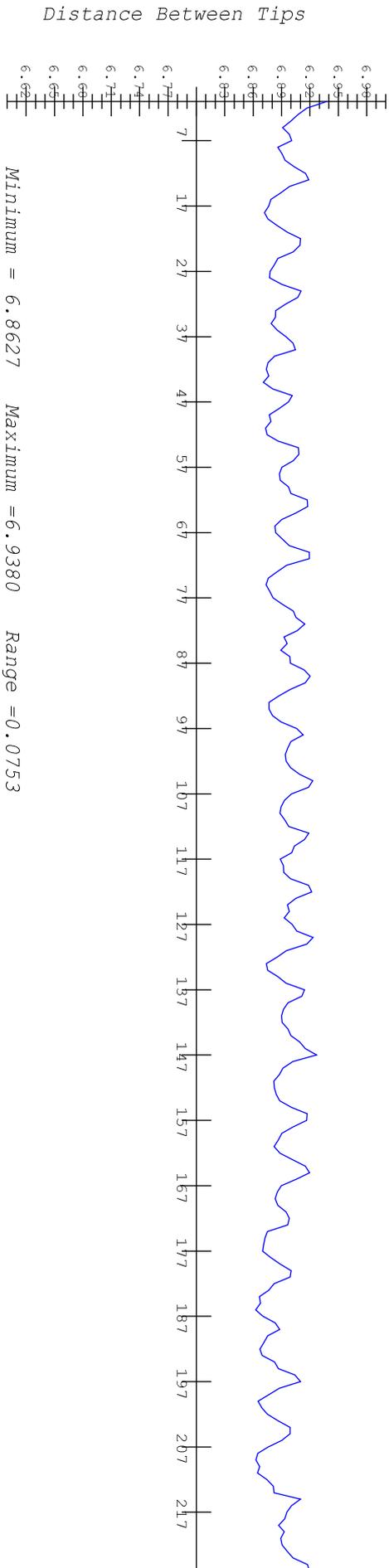
DATE: 06-NOV-2009
 UNDUULATOR # 13
 DATASET # 25
 PROGRAM VERSION 2.9

Pole Tip Number ----->



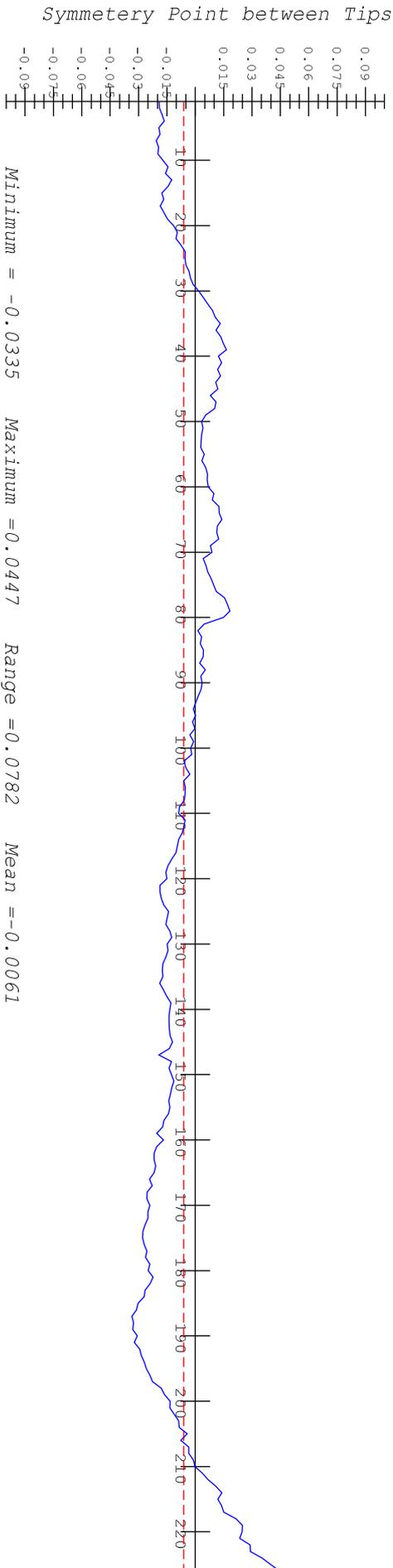
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 06-NOV-2009
 UNDULATOR # 13
 DATASET # 25
 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

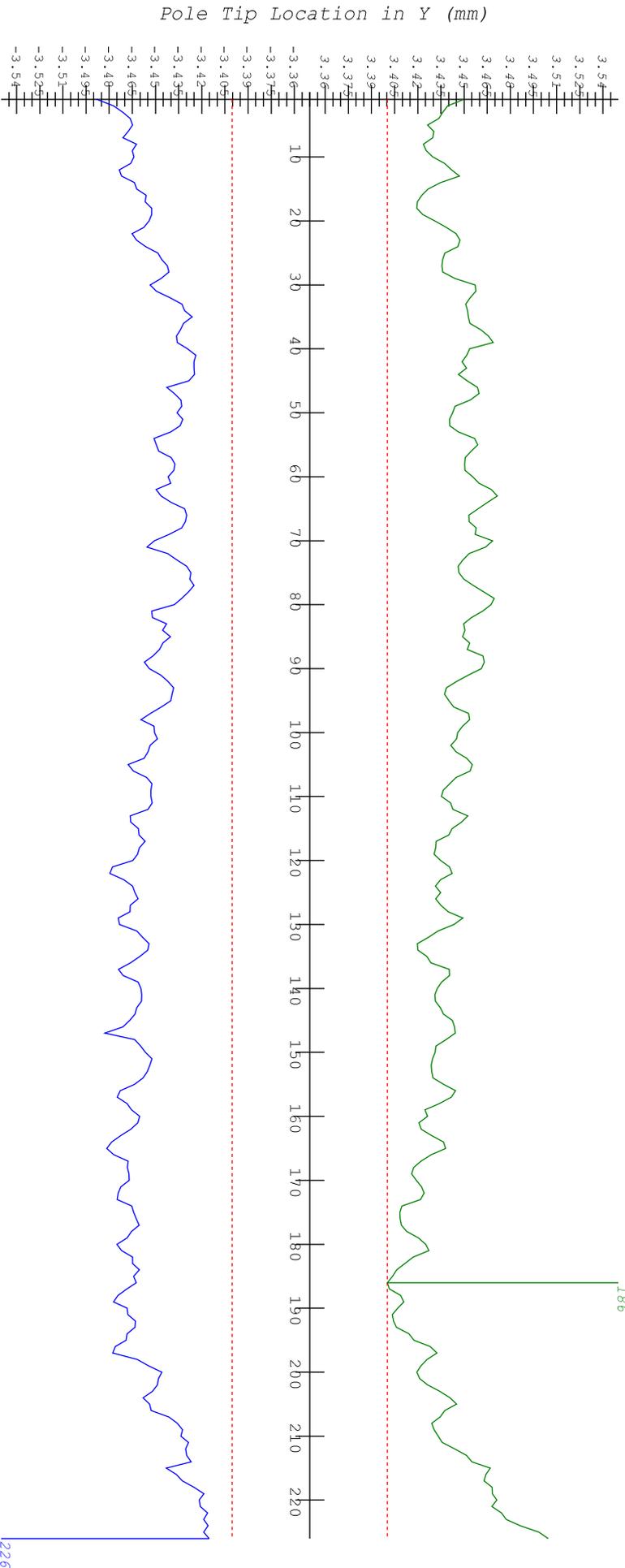


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 06-NOV-2009
 UNDUULATOR # 13
 DATASET # 25
 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.8005

Minimum = 3.4003 Maximum = 3.5045 Range = 0.1042



Minimum = -3.4881 Maximum = -3.4152 Range = 0.0729

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: 06-NOV-2009
UNDULATOR # 13
DATASET # 25
PROGRAM VERSION 2.9



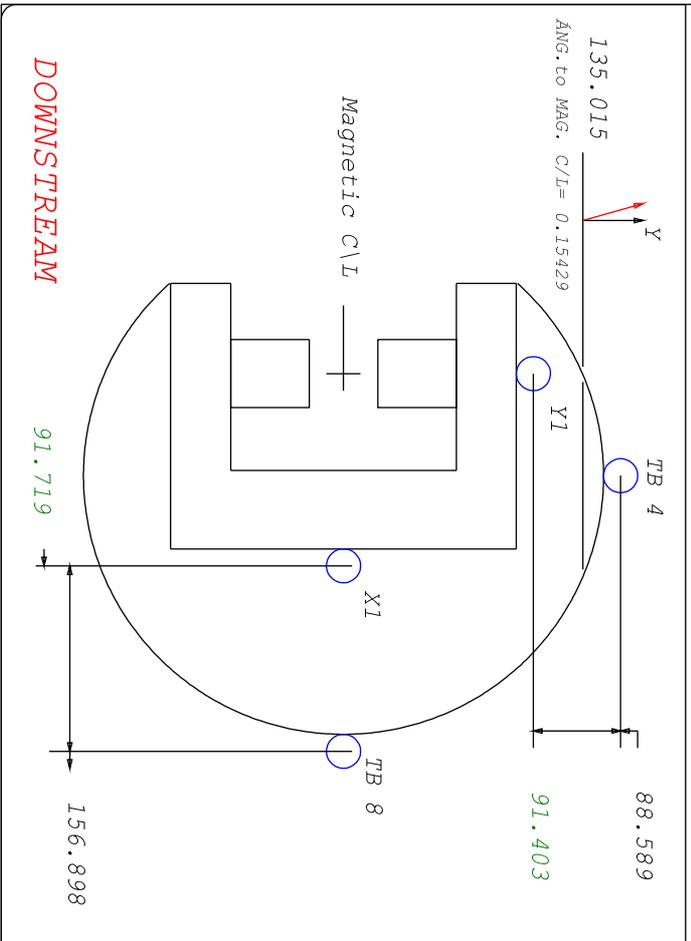
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.2339	179.9834	-1558.283
2	0.3965	180.0106	-584.4547
3	0.3009	179.8960	591.3009
4	0.2578	179.9924	1562.0688
5	248.5639	0.0715	-1558.357
6	248.5406	-0.0239	-584.6033
7	248.5694	0.0427	591.3235
8	248.6174	-0.0589	1562.0816

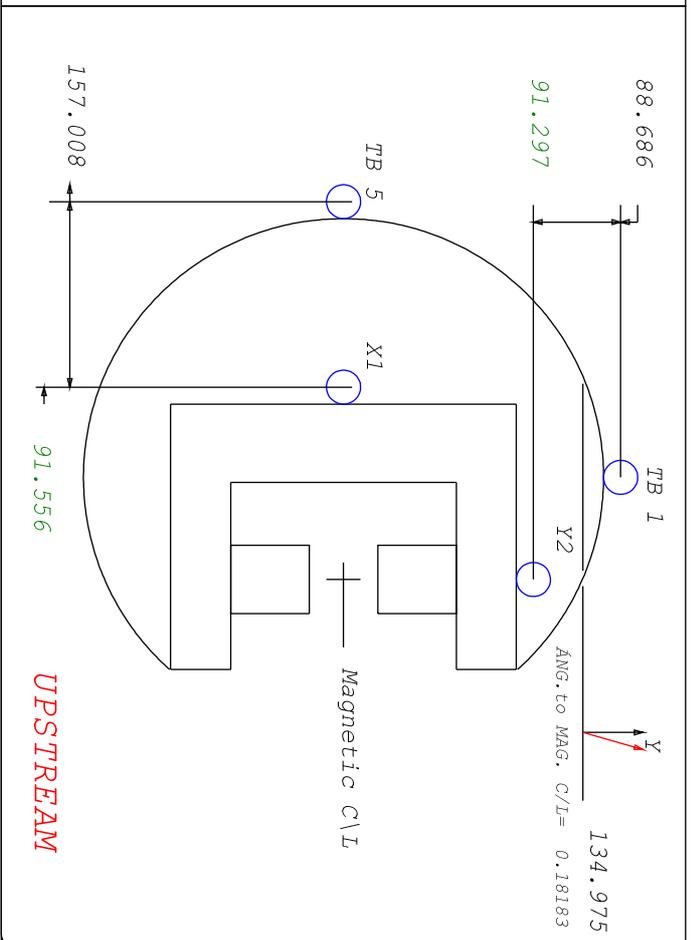
	C/L Offset	Length
Top Magnetic Structure	-0.096	3381.048
Bottom Magnetic Structure	0.096	3381.272
Strongback	0.250	3399.772

Dimensions in mm

Angles in mrad



DOWNSTREAM



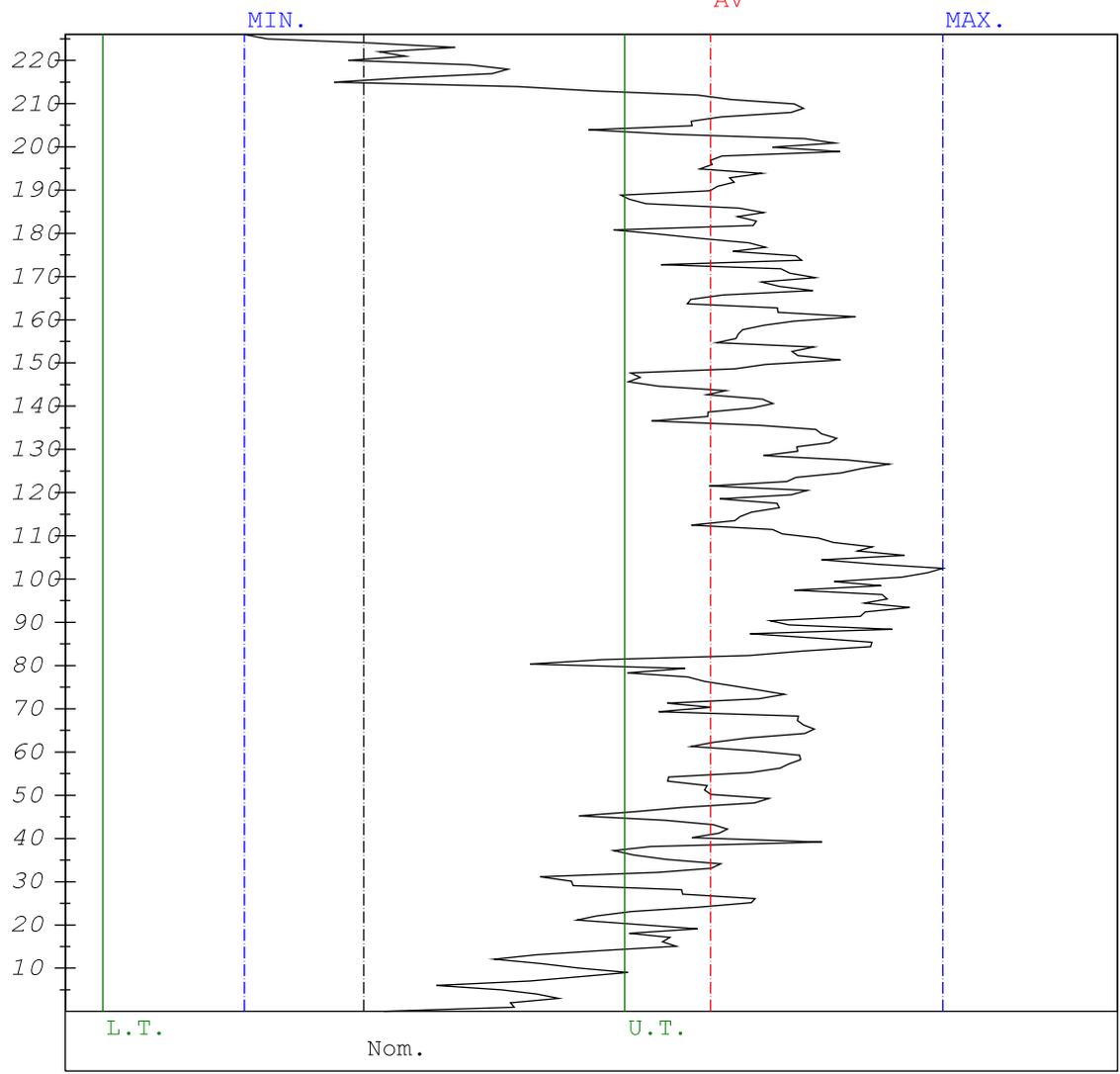
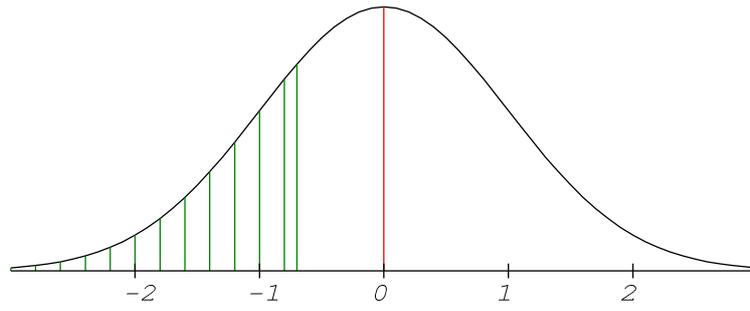
UPSTREAM



MMF GRE 45129

Undulator Dimensional Fiducialization Post Magnetic Alignment

DATE: 06-NOV-2009
 UNDULATOR # 13
 DATASET # 25
 PROGRAM VERSION 2.9



Nominal : 4.5000	Averag : 5.1649	Cent.-Dev. : 0.6649
Up. Tol. : 0.5	Maximum : 5.6096	U.Tol.Ex. > : 75.8 %
Low.Tol. : -0.5	Minimum : 4.2714	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2357	In Tolerance: 24.2 %
Outlier : 0	Distribution : NOR	Dimension : mrad

 <p>MMF GRE 45129</p>	<p>Statistical Evaluation Pole Tip Gap Angle Post Magnetic Alignment</p>	<p>DATE: 06-NOV-2009 UNDULATOR # 13 DATASET # 25 PROGRAM VERSION 2.9</p>
--	--	--