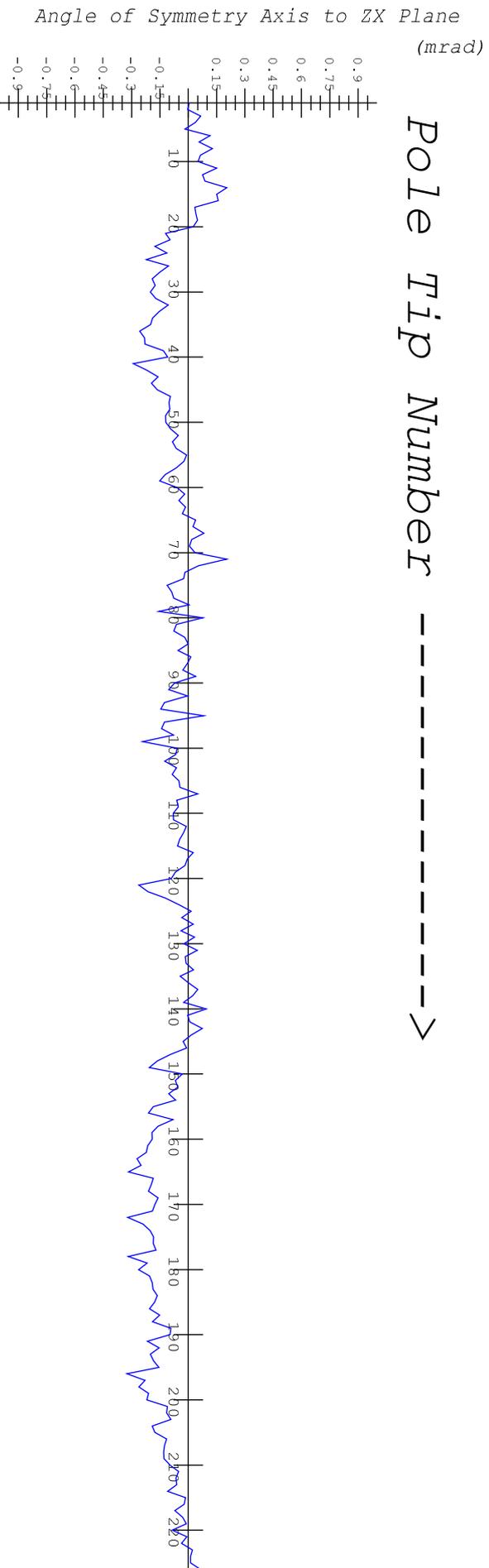


Pole Tip Number ----->



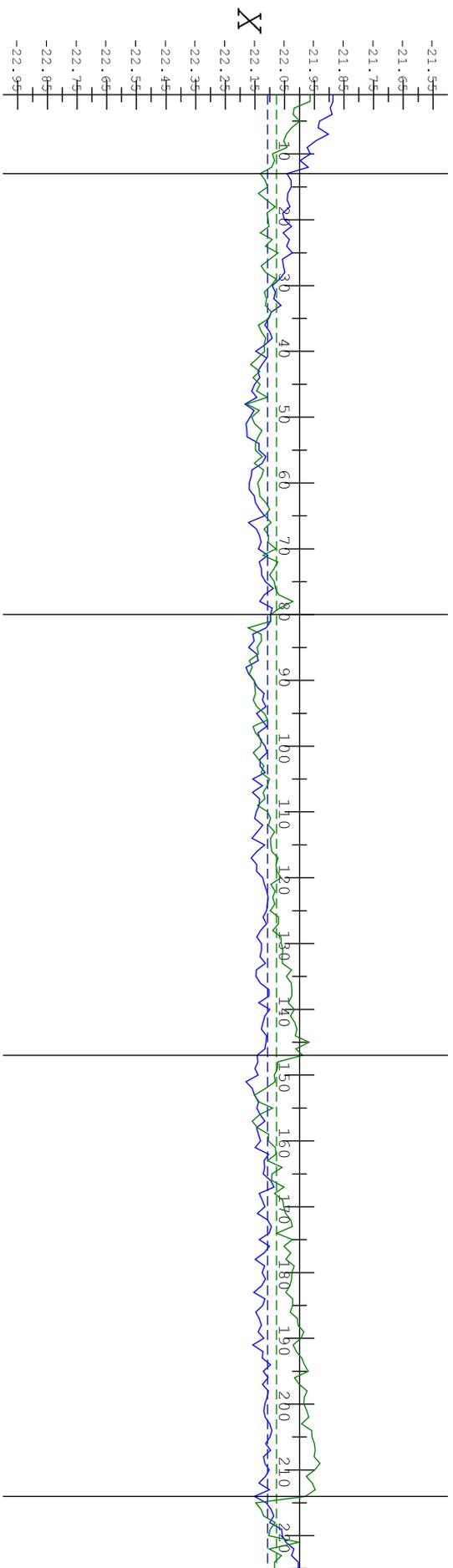
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles  
 Post Magnetic Alignment

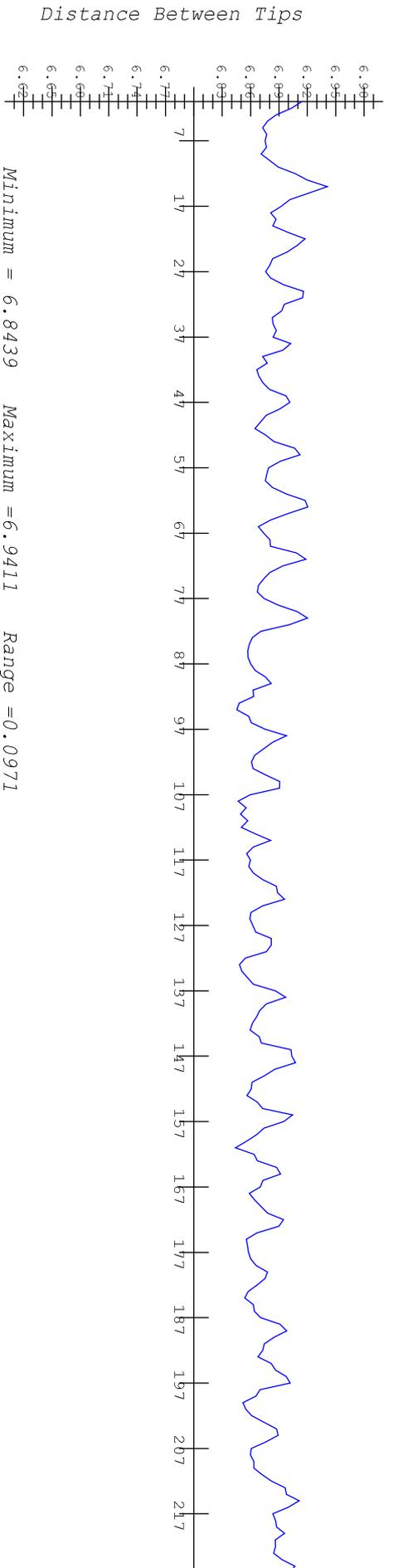
DATE: 11-FEB-2009  
 UNDUULATOR #07  
 DATASET #0002  
 PROGRAM VERSION 2.8

# Pole Tip Number ----->



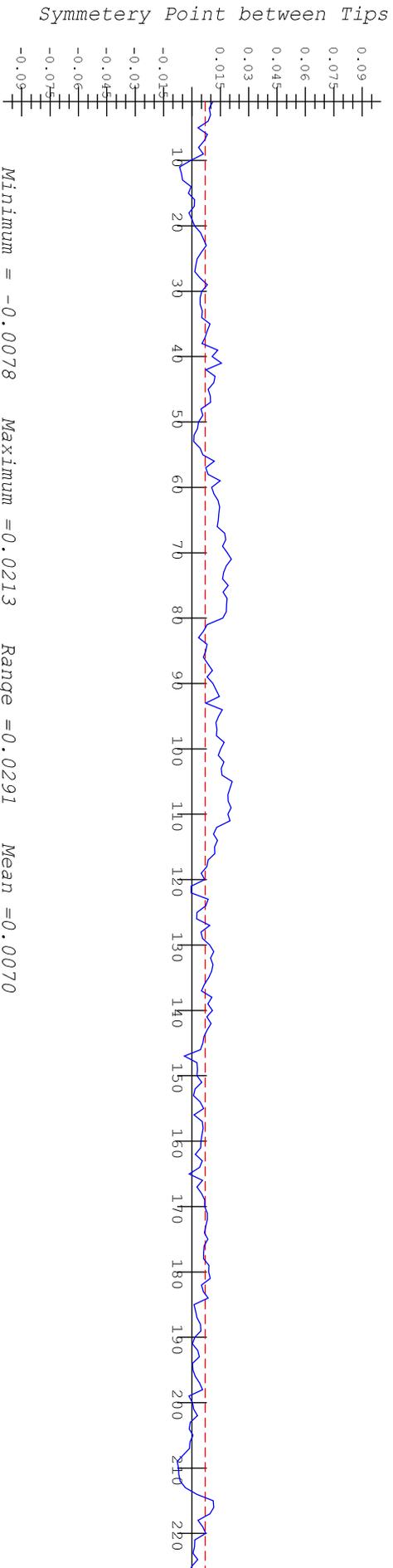
## Undulator Pole Tip Location Post Magnetic Alignment

DATE: 11-FEB-2009  
 UNDUULATOR #07  
 DATASET #0002  
 PROGRAM VERSION 2.8



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

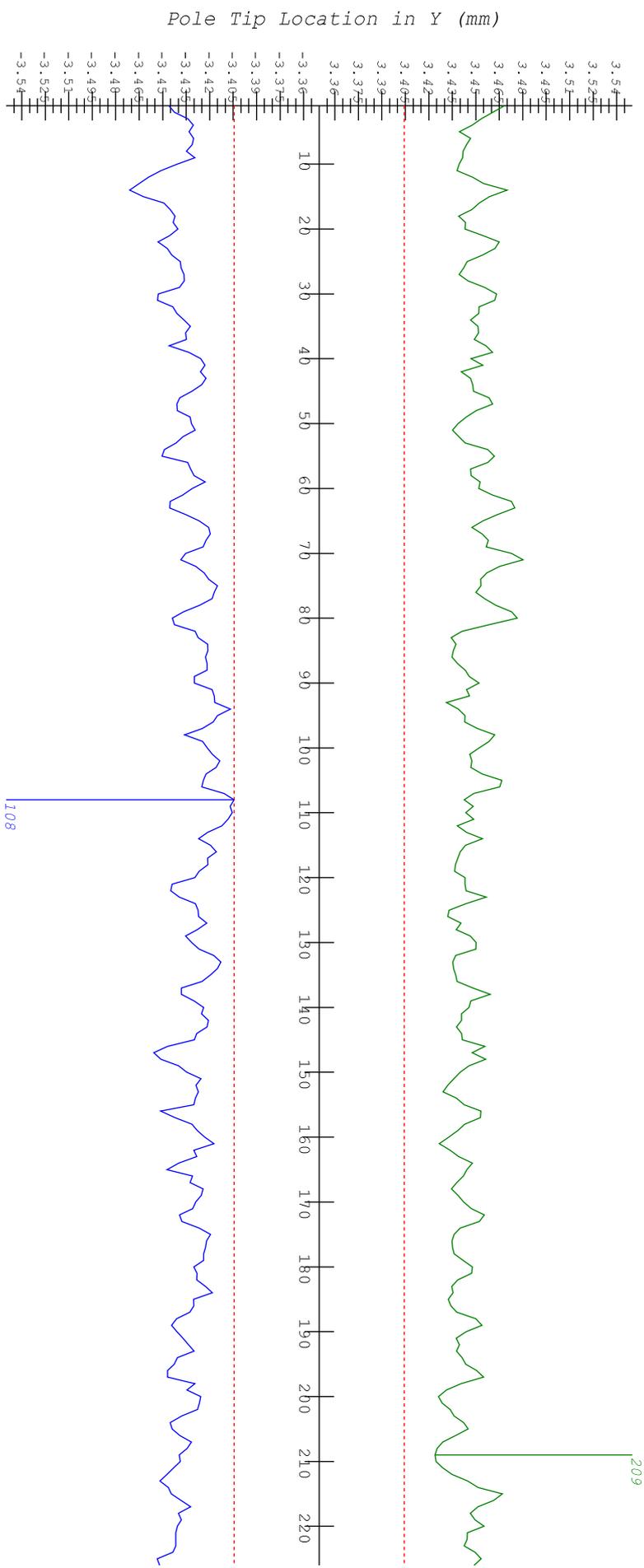


Undulator Pole Tip Location  
 Post Magnetic Alignment

DATE: 11-FEB-2009  
 UNDUULATOR #07  
 DATASET #0002  
 PROGRAM VERSION 2.8

Maximum Chamber Gap = 6.8086

Minimum = 3.4239    Maximum = 3.4802    Range = 0.0562



Minimum = -3.4711    Maximum = -3.4043    Range = 0.0668

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: 11-FEB-2009  
UNDULATOR #07  
DATASET #0002  
PROGRAM VERSION 2.8



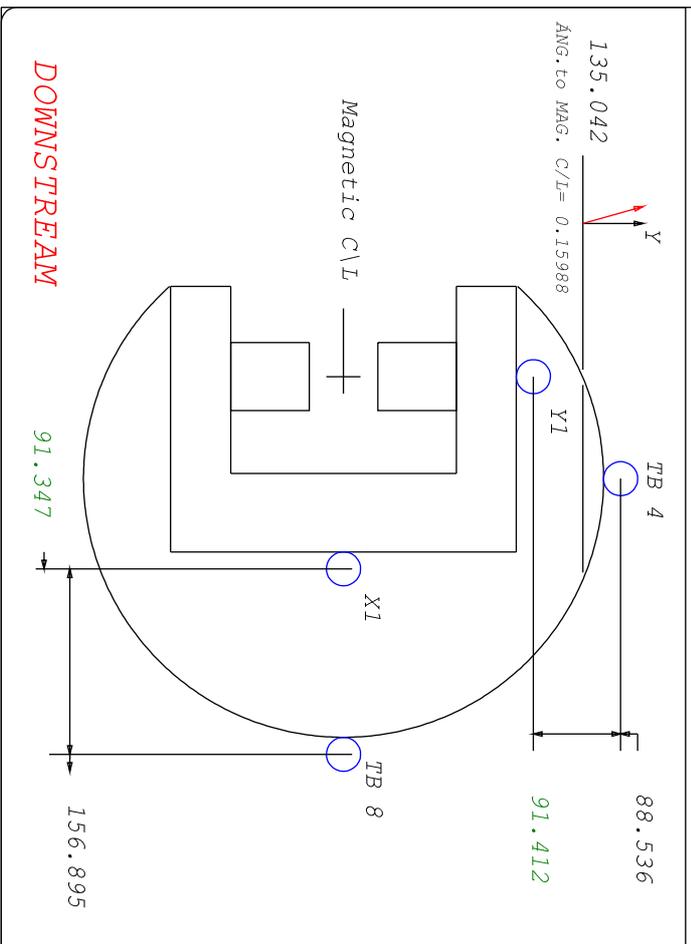
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.0527	179.9170	-1558.386
2	-0.0502	179.8817	-584.6885
3	-0.1124	179.8898	591.2413
4	-0.0539	179.9479	1562.0119
5	248.3392	0.0178	-1558.239
6	248.2134	0.1039	-584.6087
7	248.1935	0.0449	591.3874
8	248.2421	0.0002	1562.2117

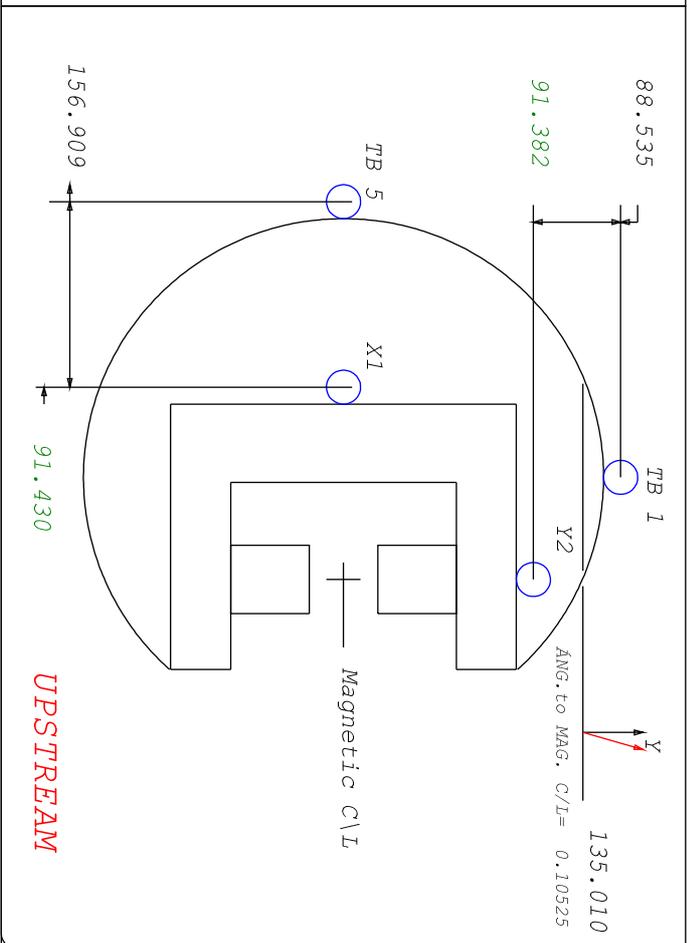
	C/L Offset	Length
Top Magnetic Structure	-0.016	3381.114
Bottom Magnetic Structure	0.016	3381.163
Strongback	0.319	3399.906

Dimensions in mm

Angles in mrad



DOWNSTREAM



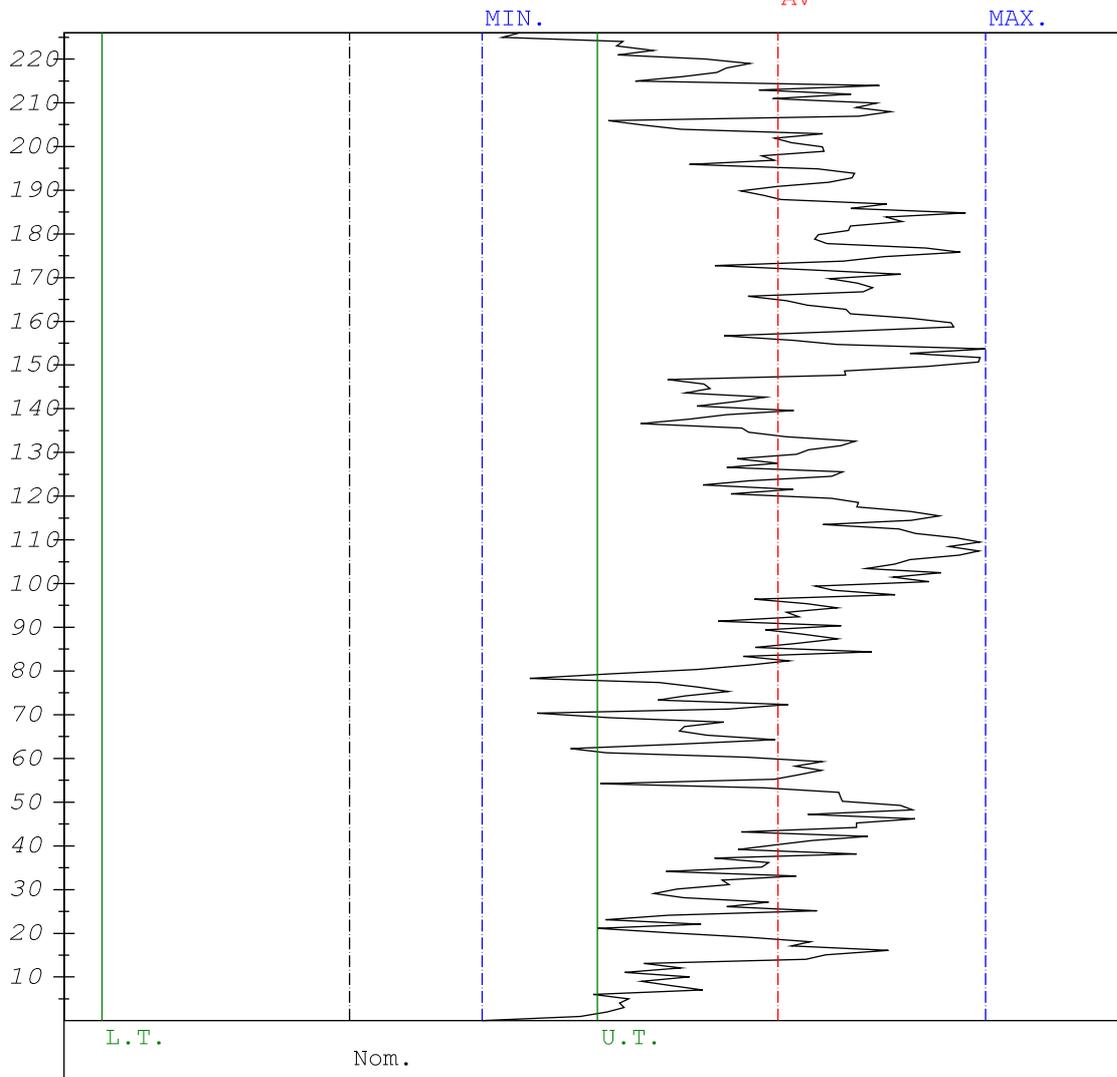
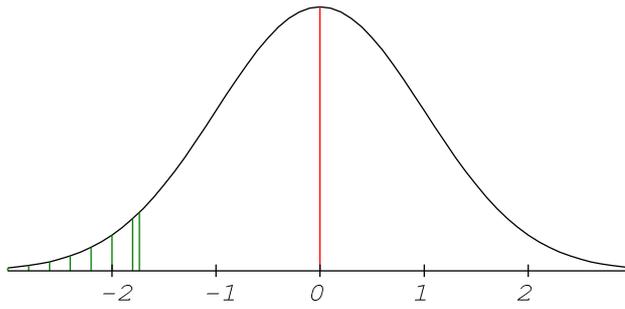
UPSTREAM



MMF GRE 45129

# Undulator Dimensional Fiducialization Post Magnetic Alignment

DATE: 11-FEB-2009  
 UNDUULATOR #07  
 DATASET #0002  
 PROGRAM VERSION 2.8



Nominal : 4.5000	Averag : 5.3647	Cent.-Dev. : 0.8647
Up. Tol. : 0.5	Maximum : 5.7831	U.Tol.Ex. > : 95.9 %
Low.Tol. : -0.5	Minimum : 4.7674	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2101	In Tolerance: 4.1 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation  
Pole Tip Gap Angle  
Post Magnetic Alignment

DATE: 11-FEB-2009  
UNDULATOR #07  
DATASET #0002  
PROGRAM VERSION 2.8