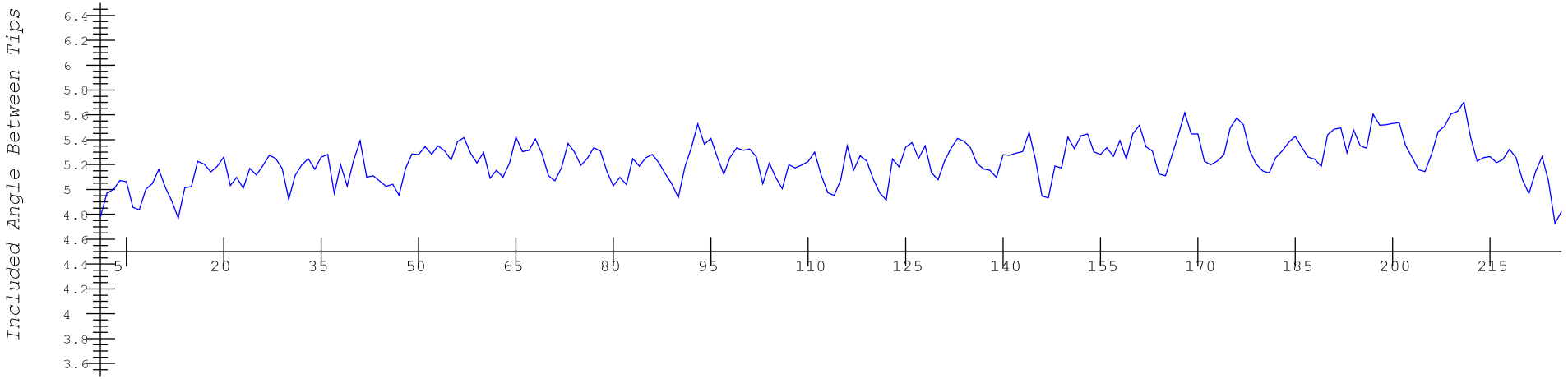
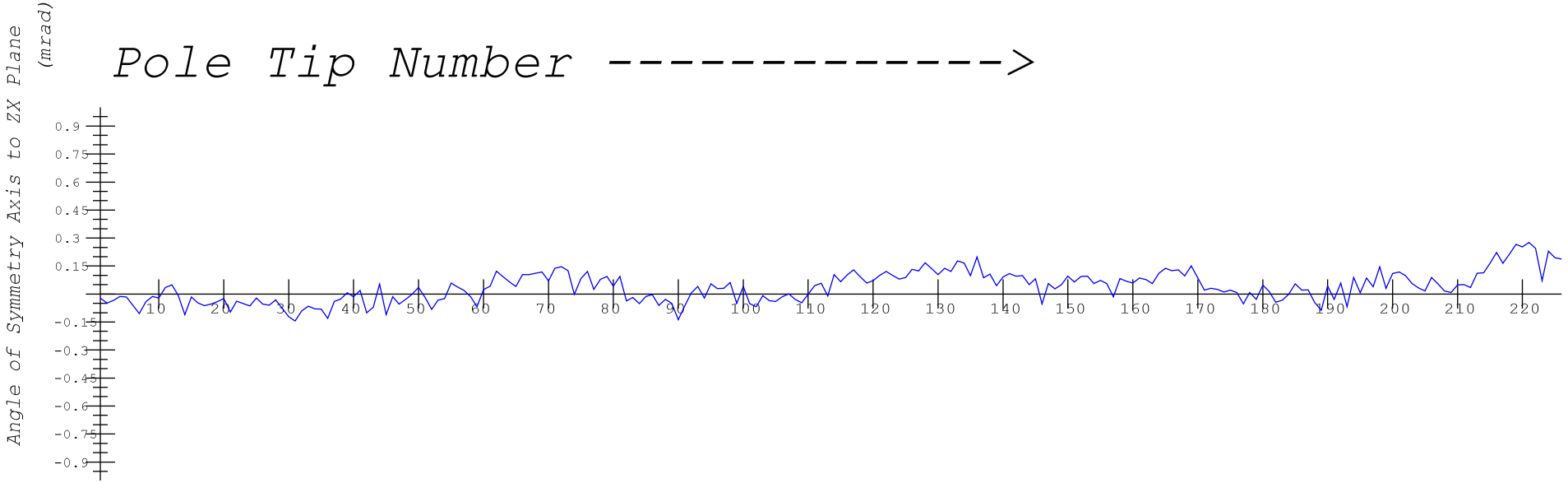


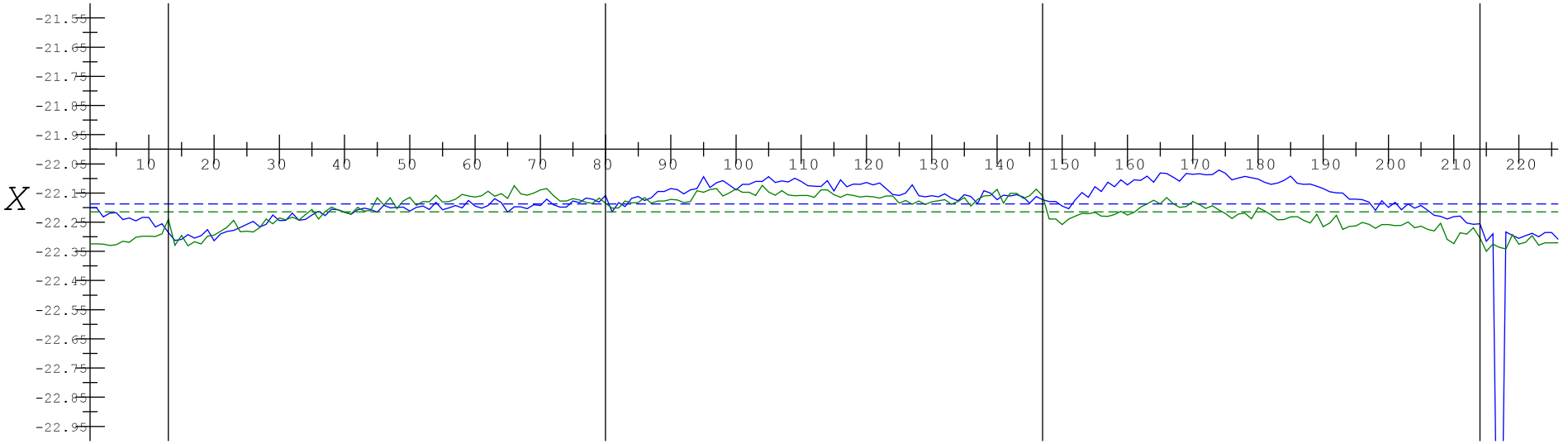
Pole Tip Number ---------->



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

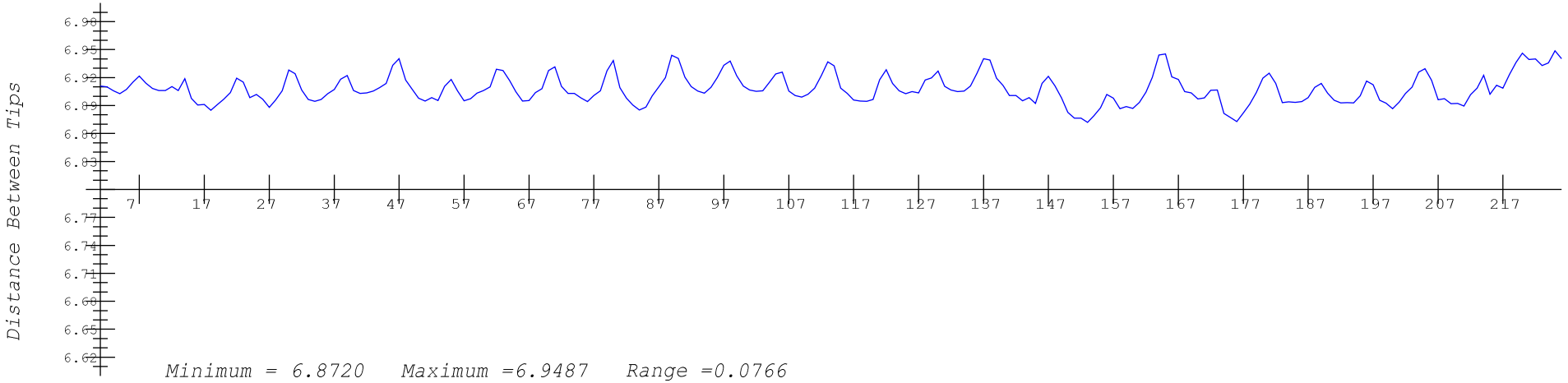
SLAC LCLS-MMF LEITZ CMM	*Undulator Pole Tip Angles* *Post Magnetic Alignment*	*DATE:15-SEP-2008* *UNDULATOR # 36* *DATASET # 0001* *PROGRAM VERSION 2.7*

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 = -22.215
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 = -22.188

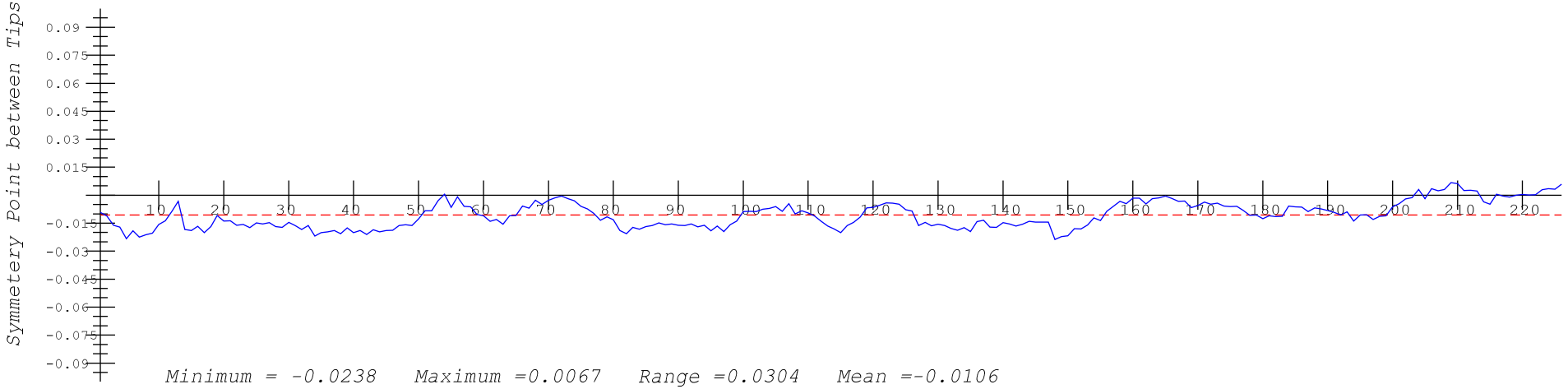
SLAC LCLS-MMF LEITZ CMM	Undulator Pole Tip Location Post Magnetic Alignment	DATE:15-SEP-2008 UNDULATOR # 36 DATASET # 0001 PROGRAM VERSION 2.7



Minimum = 6.8720 Maximum =6.9487 Range =0.0766

Pole Tip Number ---------->

in mm

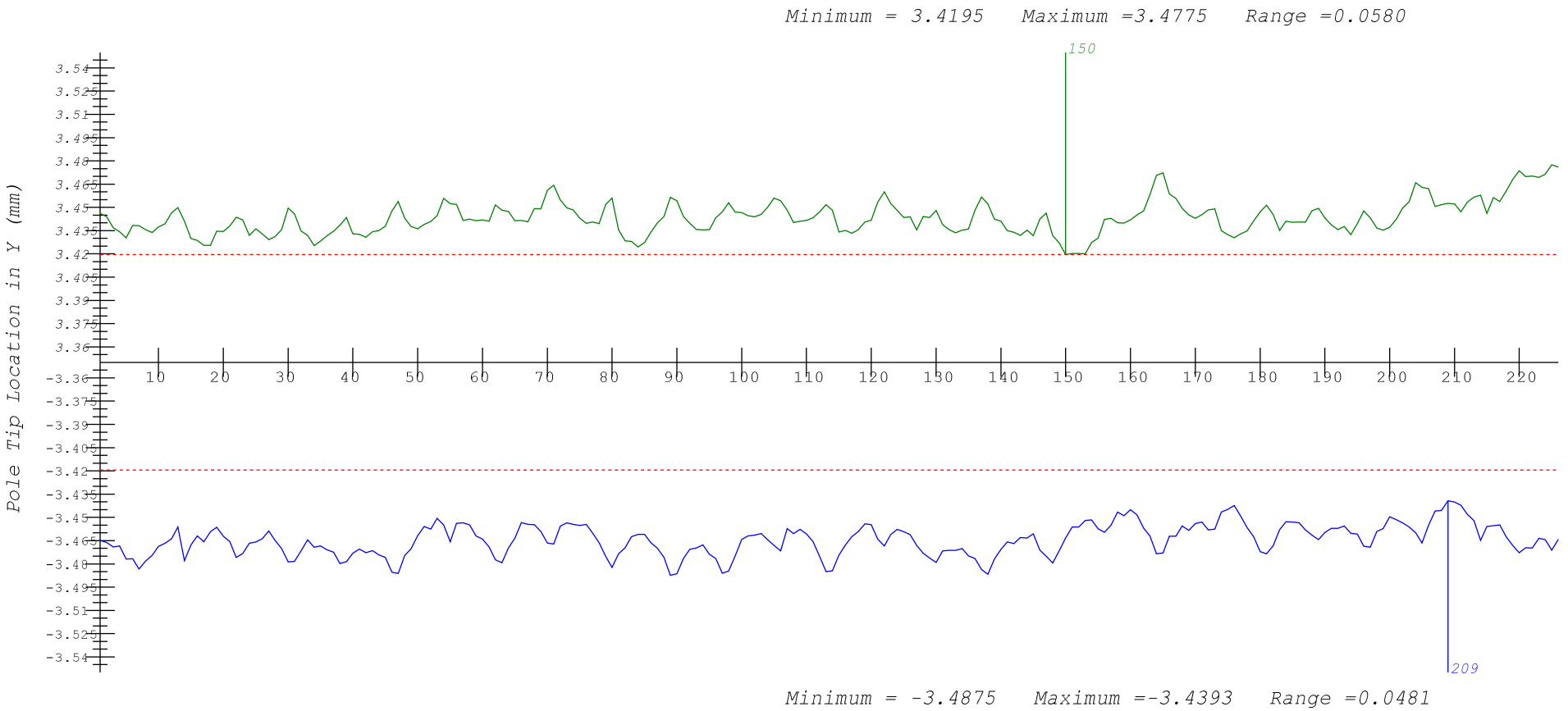


Minimum = -0.0238 Maximum =0.0067 Range =0.0304 Mean =-0.0106

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 Symmetery 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

SLAC LCLS-MMF LEITZ CMM	*Undulator Pole Tip Location* *Post Magnetic Alignment*	*DATE:15-SEP-2008* *UNDULATOR # 36* *DATASET # 0001* *PROGRAM VERSION 2.7*

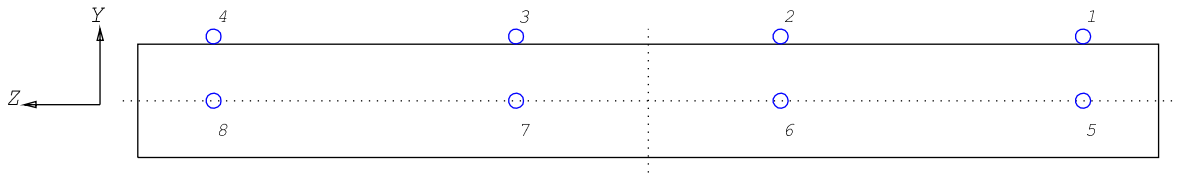
Maximum Chamber Gap = 6.8391



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 Magentic C\L (2*Min. Dev. from C\L)*

SLAC LCLS-MMF LEITZ CMM	*Undulator Pole Tip Location* *Post Magnetic Alignment*	*DATE:15-SEP-2008* *UNDULATOR # 36* *DATASET # 0001* *PROGRAM VERSION 2.7*

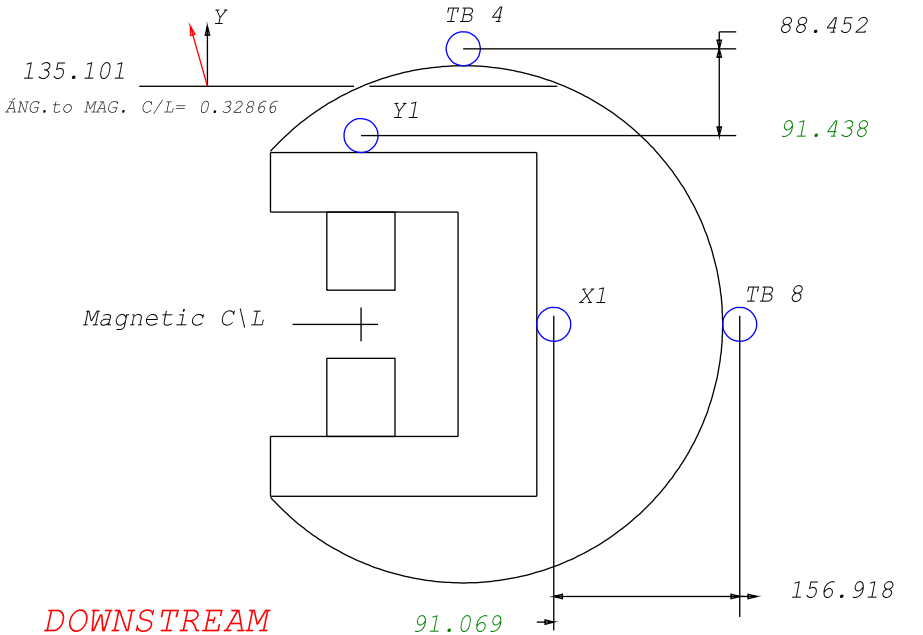


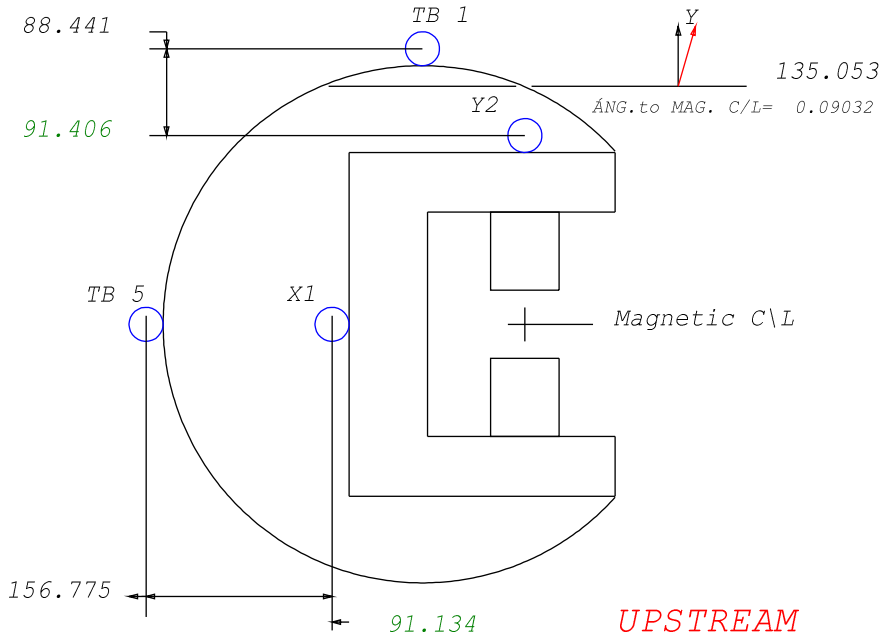
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	-0.3512	179.8474	-1558.252
2	-0.1738	179.7927	-584.5969
3	-0.1027	179.7210	591.3521
4	-0.1740	179.8900	1562.2228
5	247.9089	0.0021	-1558.302
6	248.1491	0.0918	-584.6785
7	248.1627	0.0260	591.4752
8	247.9869	0.0993	1562.2841

	C\L Offset	Length
Top Magnetic Structure	-0.013	3380.965
Bottom Magnetic Structure	0.013	3381.039
Strongback	0.387	3399.930

Dimensions in mm Angles in mrad





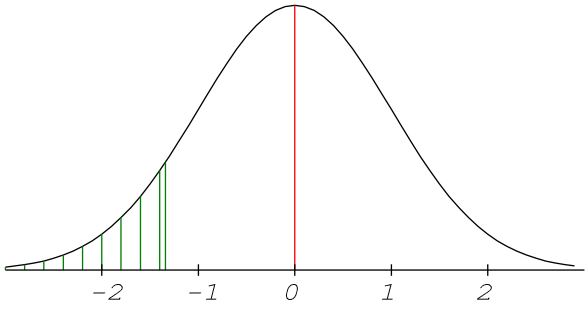
SLAC
LCLS-MMF
LEITZ CMM

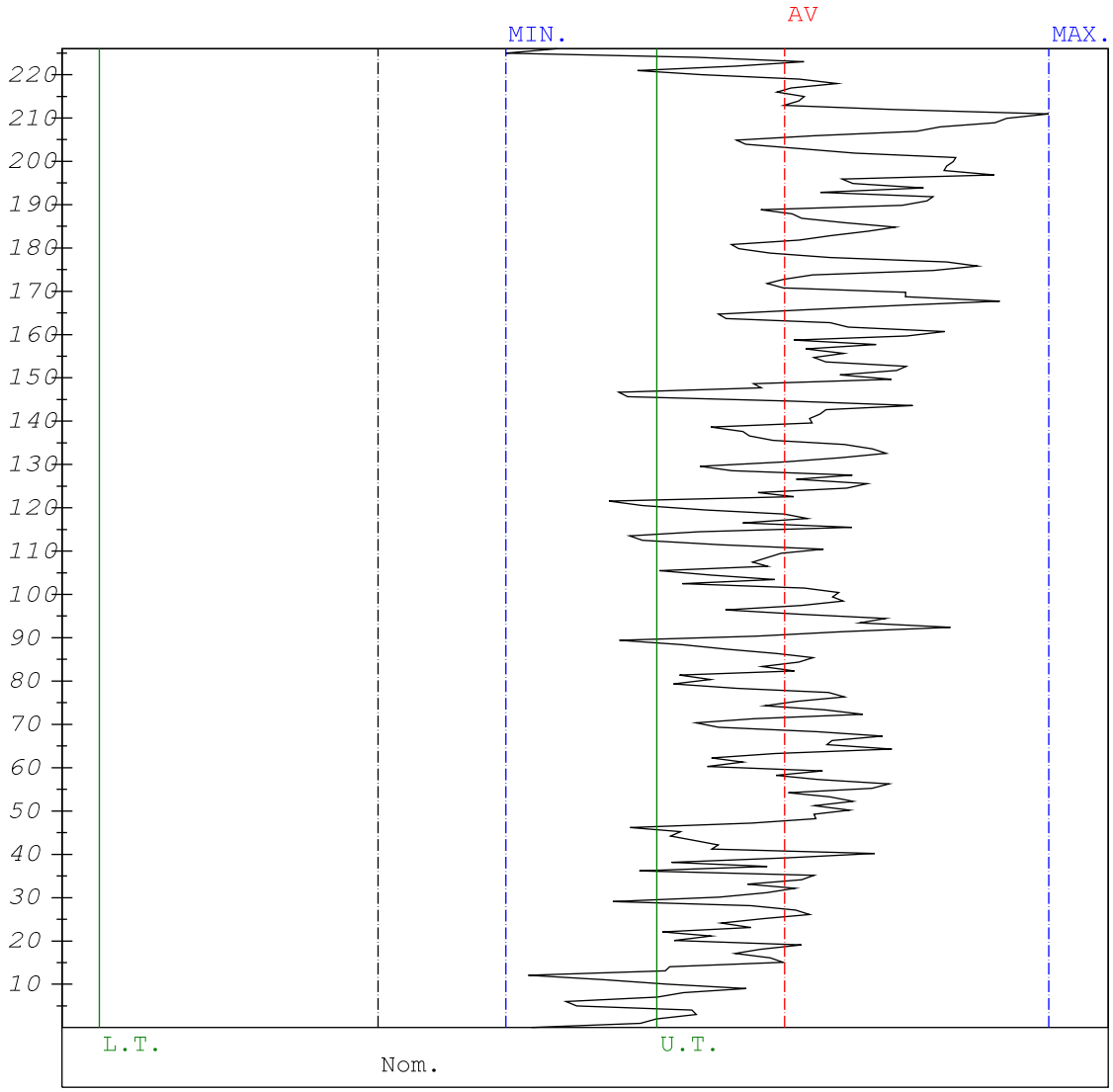
Undulator Dimensional Fiducialization
Post Magnetic Alignment

DATE:15-SEP-2008

UNDULATOR # 36
DATASET # 0001

PROGRAM VERSION 2.7





Nominal : 4.5000	Averag :5.2296	Cent.-Dev. :0.7296
Up. Tol. :0.5	Maximum : 5.7033	U.Tol.Ex. > : 91.0 %
Low.Tol. :-0.5	Minimum : 4.7296	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1711	In Tolerance: 9.0 %
Outlier : 0	Distribution : NOR	Dimension : mrad

SLAC
LCLS-MMF
LEITZ CMM

Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE:15-SEP-2008

UNDULATOR # 36
DATASET # 0001

PROGRAM VERSION 2.7