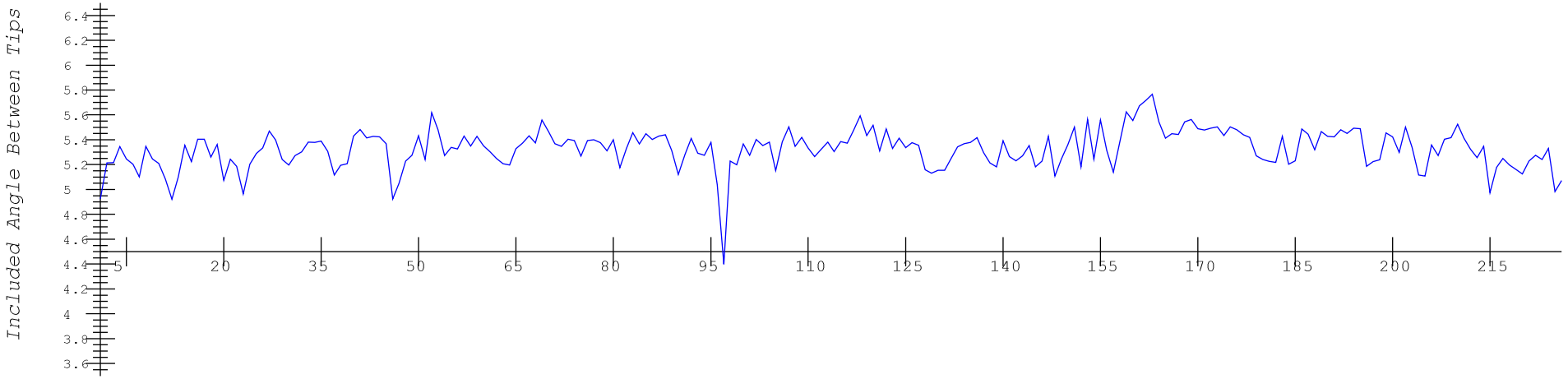
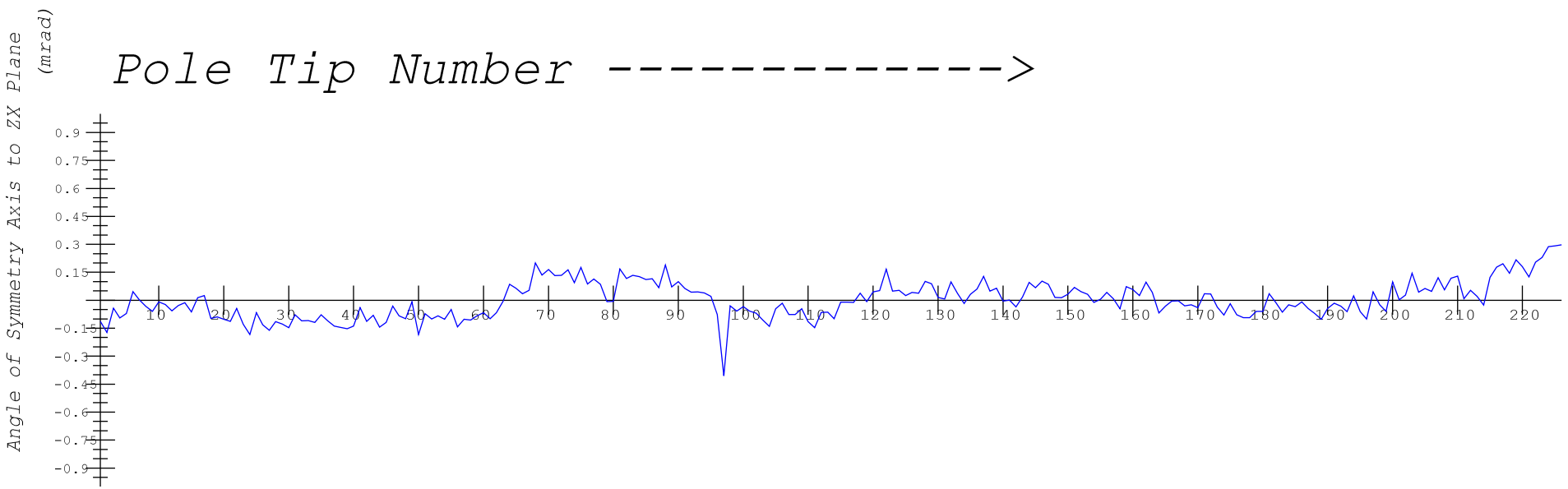


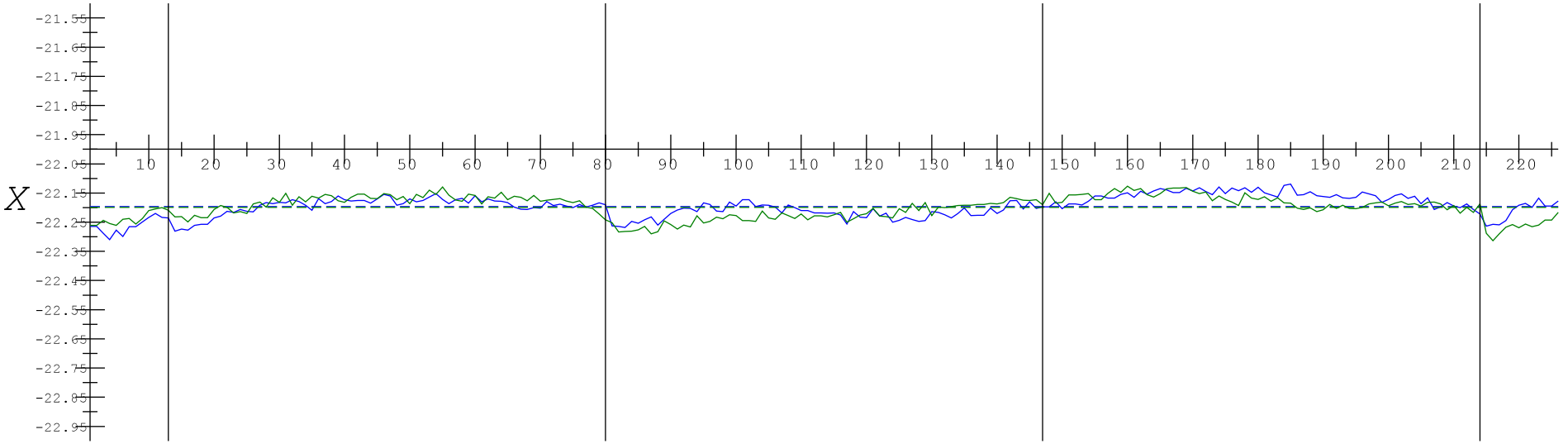
Pole Tip Number ---------->



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

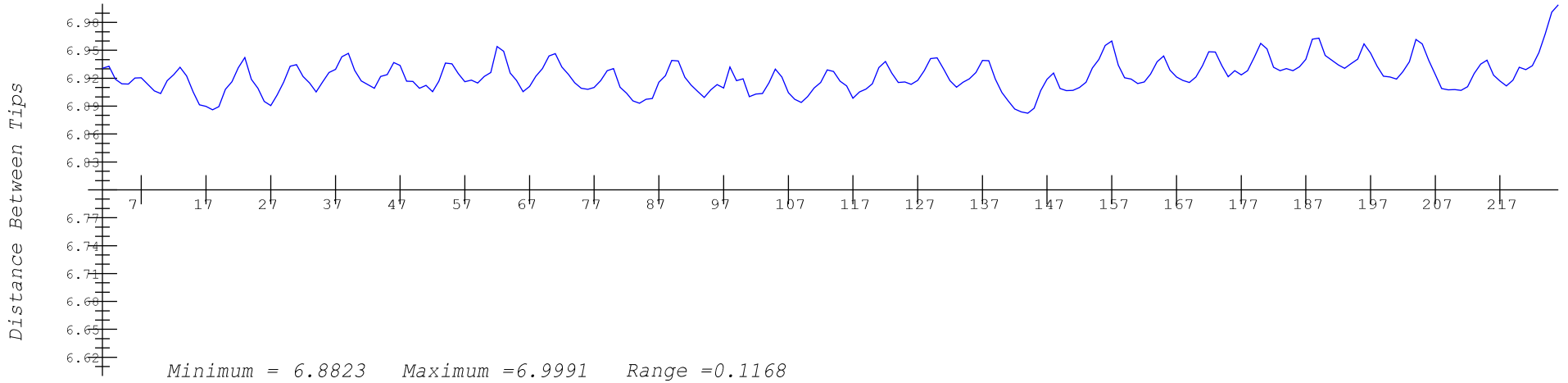
SLAC LCLS-MMF LEITZ CMM	*Undulator Pole Tip Angles* *Post Magnetic Alignment*	*DATE:08-SEP-2008* *UNDULATOR # 38* *DATASET # 0001* *PROGRAM VERSION 2.7*

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



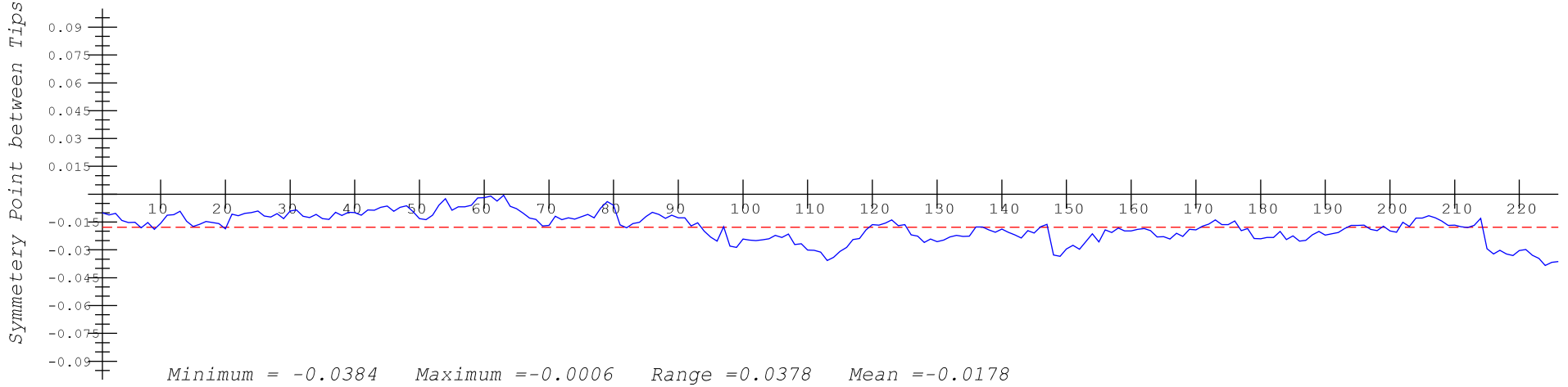
X values in mm
Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -22.200
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.196

SLAC LCLS-MMF LEITZ CMM	Undulator Pole Tip Location Post Magnetic Alignment	DATE:08-SEP-2008 UNDULATOR # 38 DATASET # 0001 PROGRAM VERSION 2.7



Minimum = 6.8823 Maximum =6.9991 Range =0.1168

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

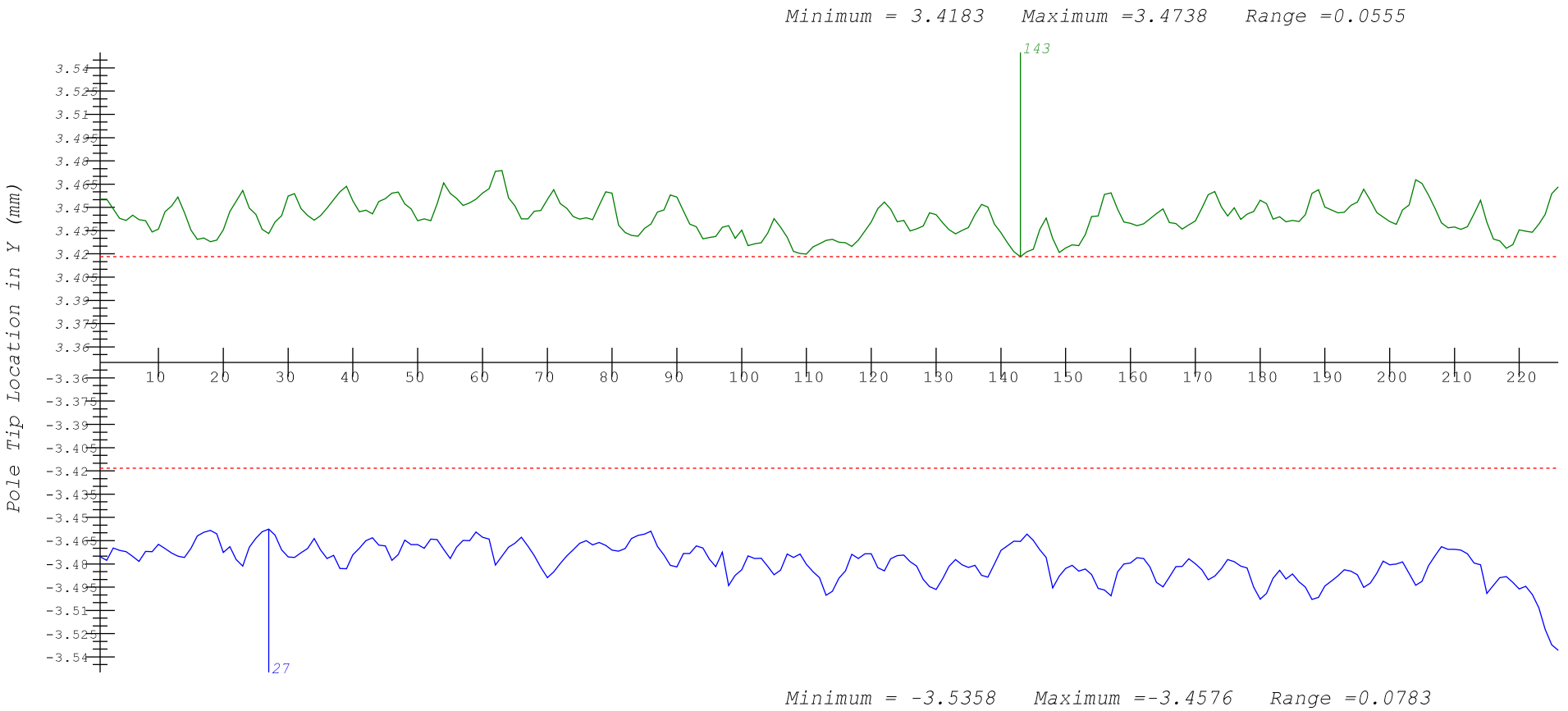


Minimum = -0.0384 Maximum =-0.0006 Range =0.0378 Mean =-0.0178

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:08-SEP-2008* *UNDULATOR # 38* *DATASET # 0001* *PROGRAM VERSION 2.7*

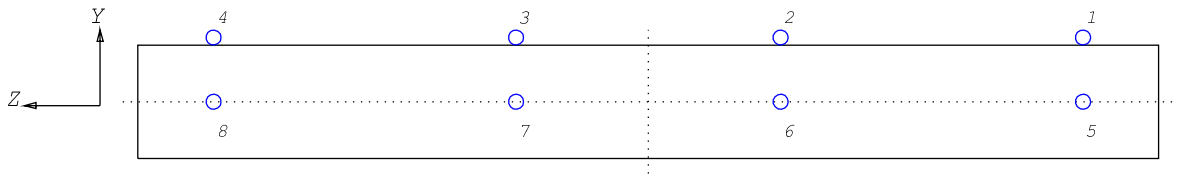
Maximum Chamber Gap = 6.8366



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:08-SEP-2008* *UNDULATOR # 38* *DATASET # 0001* *PROGRAM VERSION 2.7*

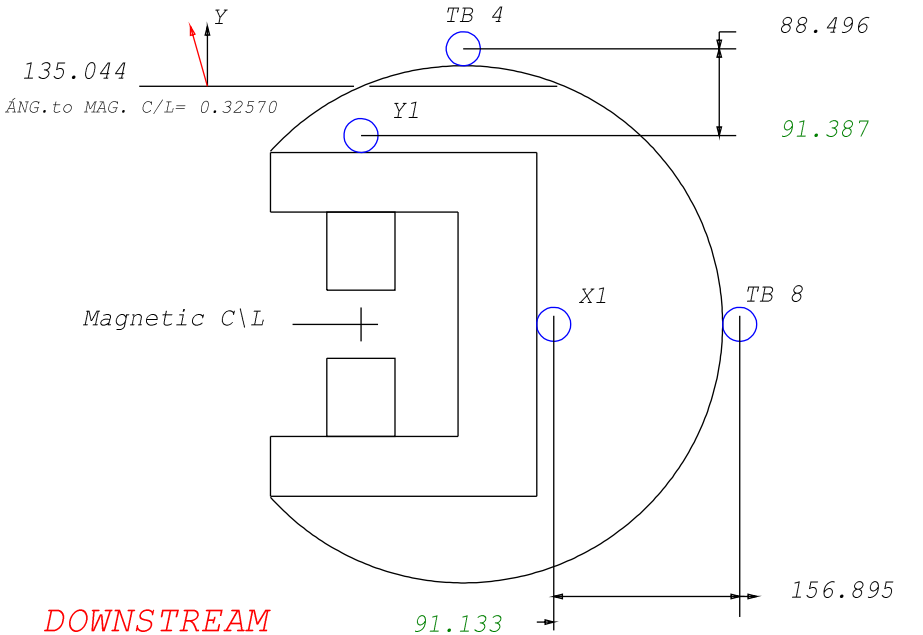


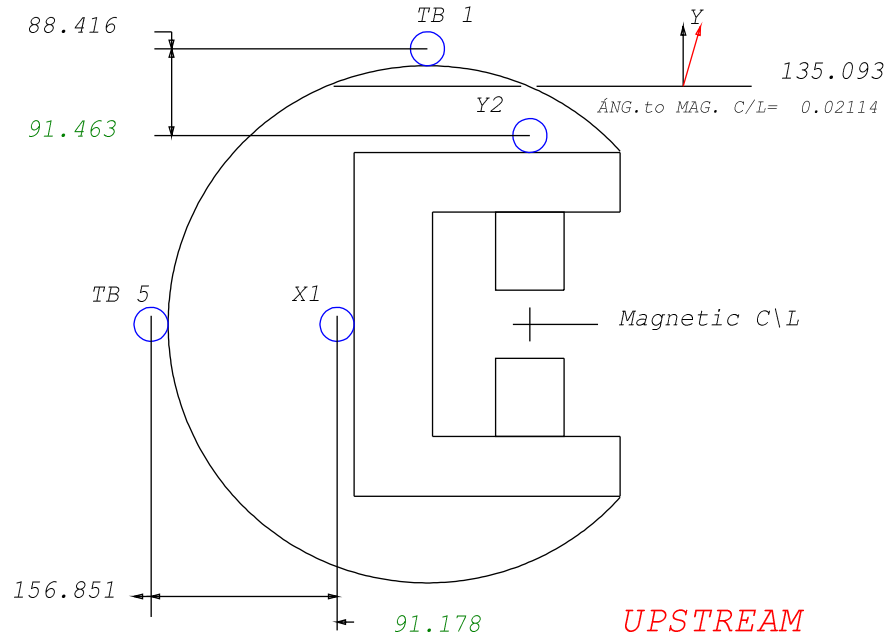
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	-0.2887	179.8787	-1558.096
2	-0.2203	179.7785	-584.5266
3	-0.1607	179.7247	591.4864
4	-0.1569	179.8833	1562.2884
5	248.0288	0.1219	-1558.057
6	248.1108	0.0776	-584.4861
7	248.1143	0.0795	591.5350
8	248.0280	0.1001	1562.3892

	C\L Offset	Length
Top Magnetic Structure	0.047	3380.837
Bottom Magnetic Structure	-0.047	3380.759
Strongback	0.528	3400.011

Dimensions in mm Angles in mrad





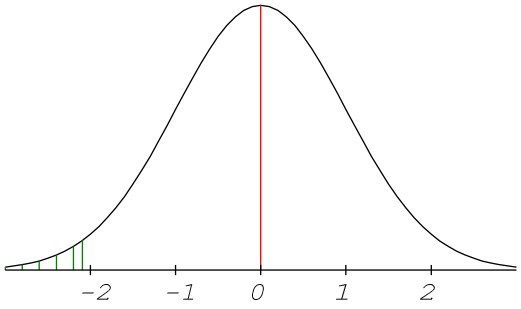
SLAC
LCLS-MMF
LEITZ CMM

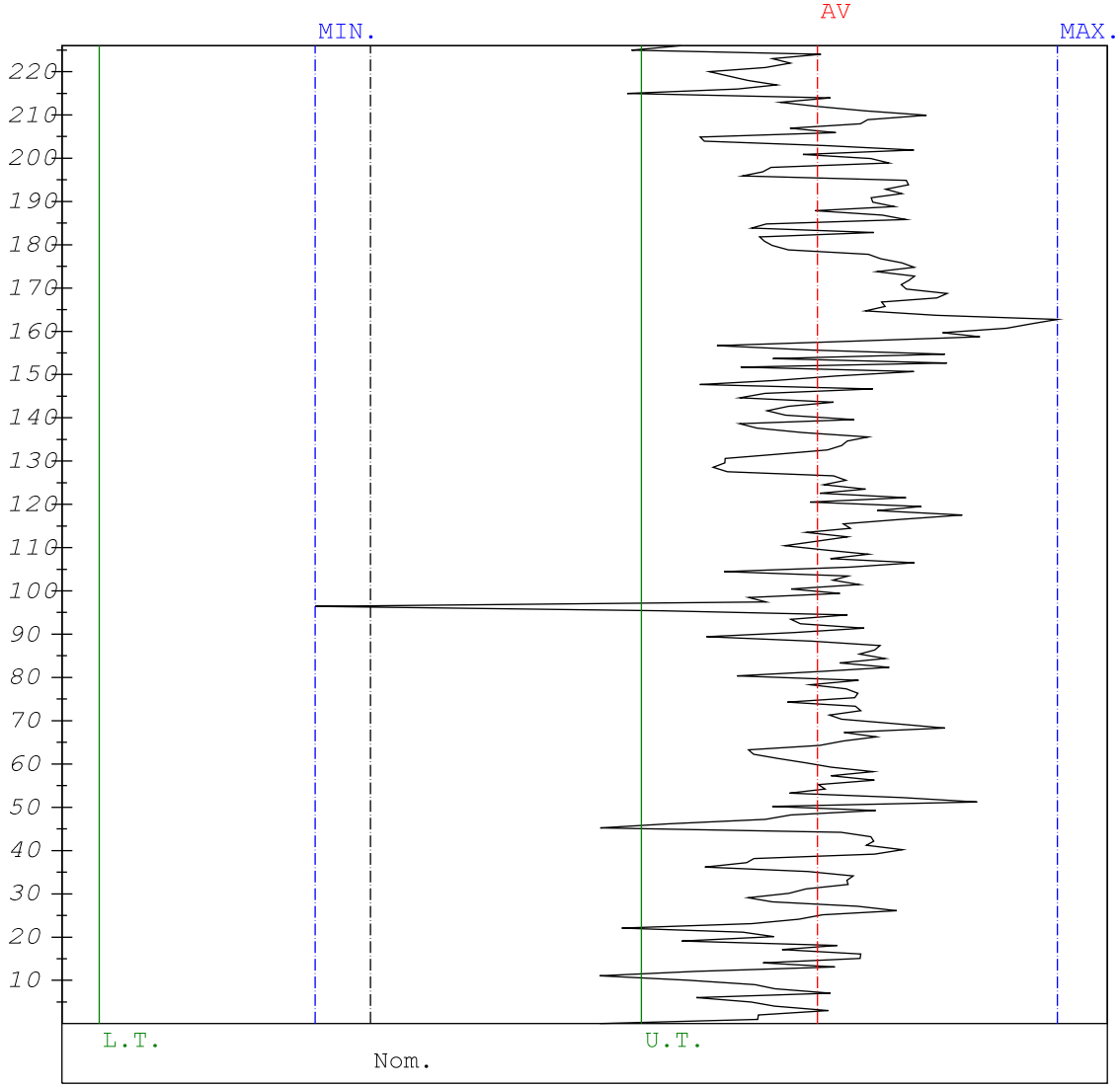
Undulator Dimensional Fiducialization
Post Magnetic Alignment

DATE:08-SEP-2008

UNDULATOR # 38
DATASET # 0001

PROGRAM VERSION 2.7





Nominal : 4.5000	Averag :5.3246	Cent.-Dev. :0.8246
Up. Tol. :0.5	Maximum : 5.7666	U.Tol.Ex. > : 98.2 %
Low.Tol. :-0.5	Minimum : 4.3981	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1551	In Tolerance: 1.8 %
Outlier : 0	Distribution : NOR	Dimension : mrad

SLAC LCLS-MMF LEITZ CMM	Statistical Evaluation Pole Tip Gap Angle *Post Magnetic Alignment*	*DATE:08-SEP-2008* *UNDULATOR # 38* *DATASET # 0001* *PROGRAM VERSION 2.7*