

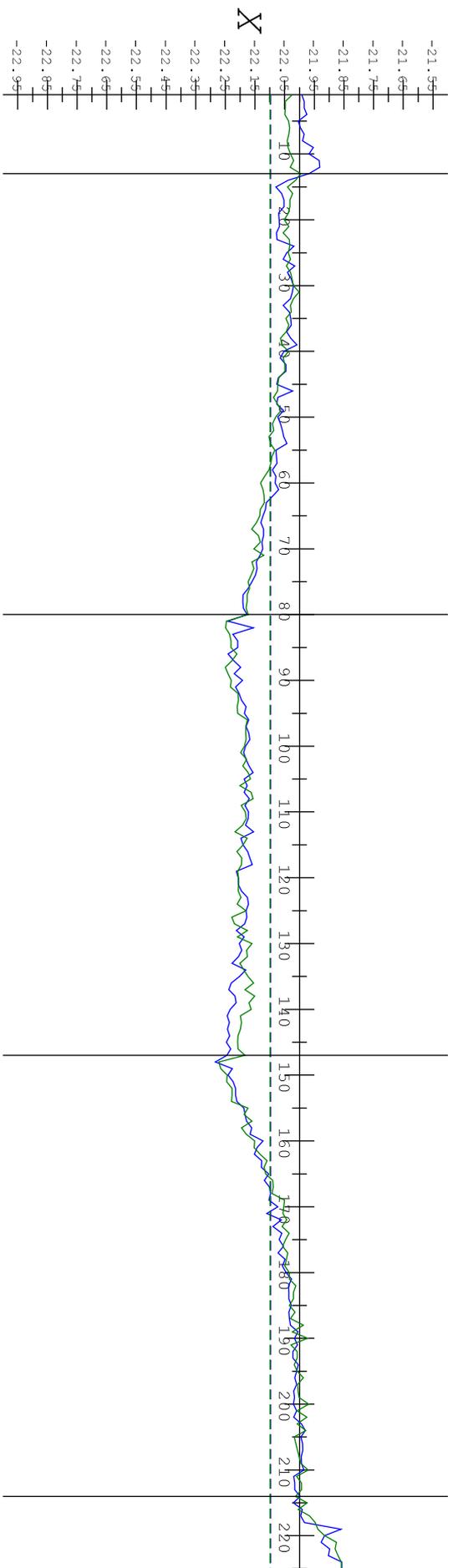
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

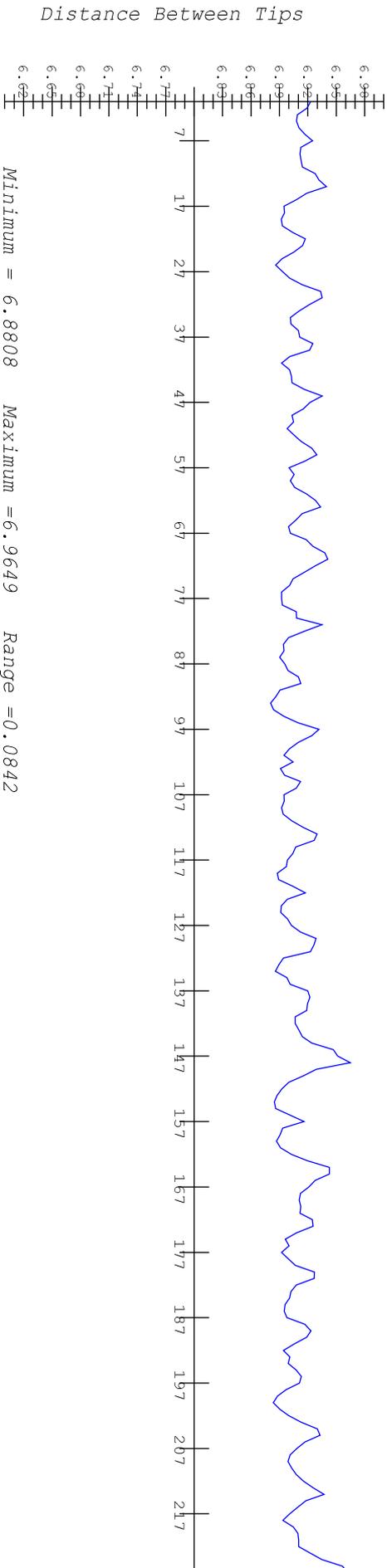
DATE: 12-NOV-2010
 UNDULATOR # 19
 DATASET # 0003
 PROGRAM VERSION 2.9

Pole Tip Number ----->



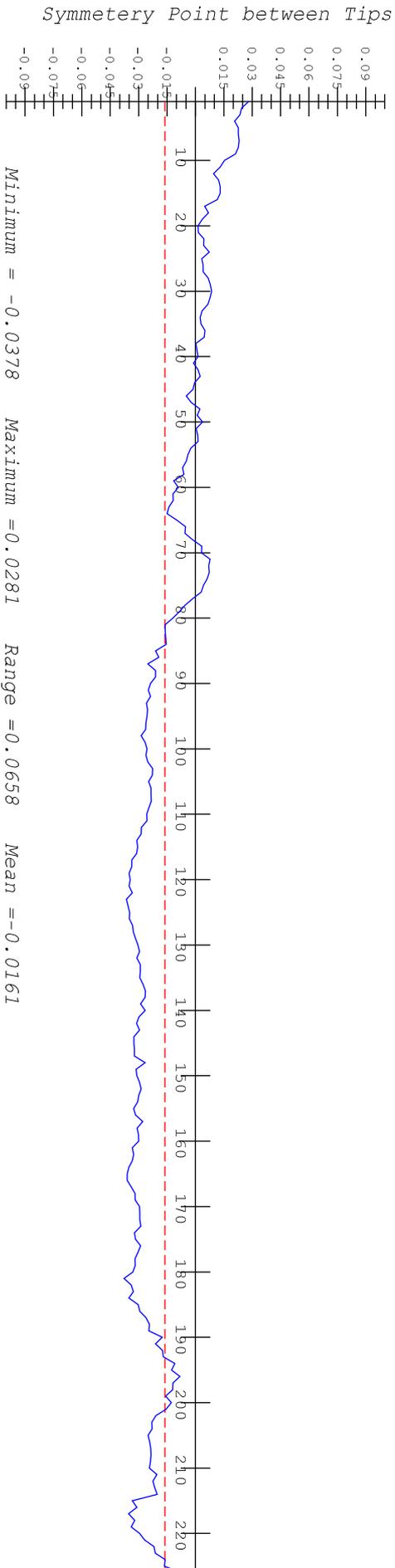
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 12-NOV-2010
 UNDUULATOR # 19
 DATASET # 0003
 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

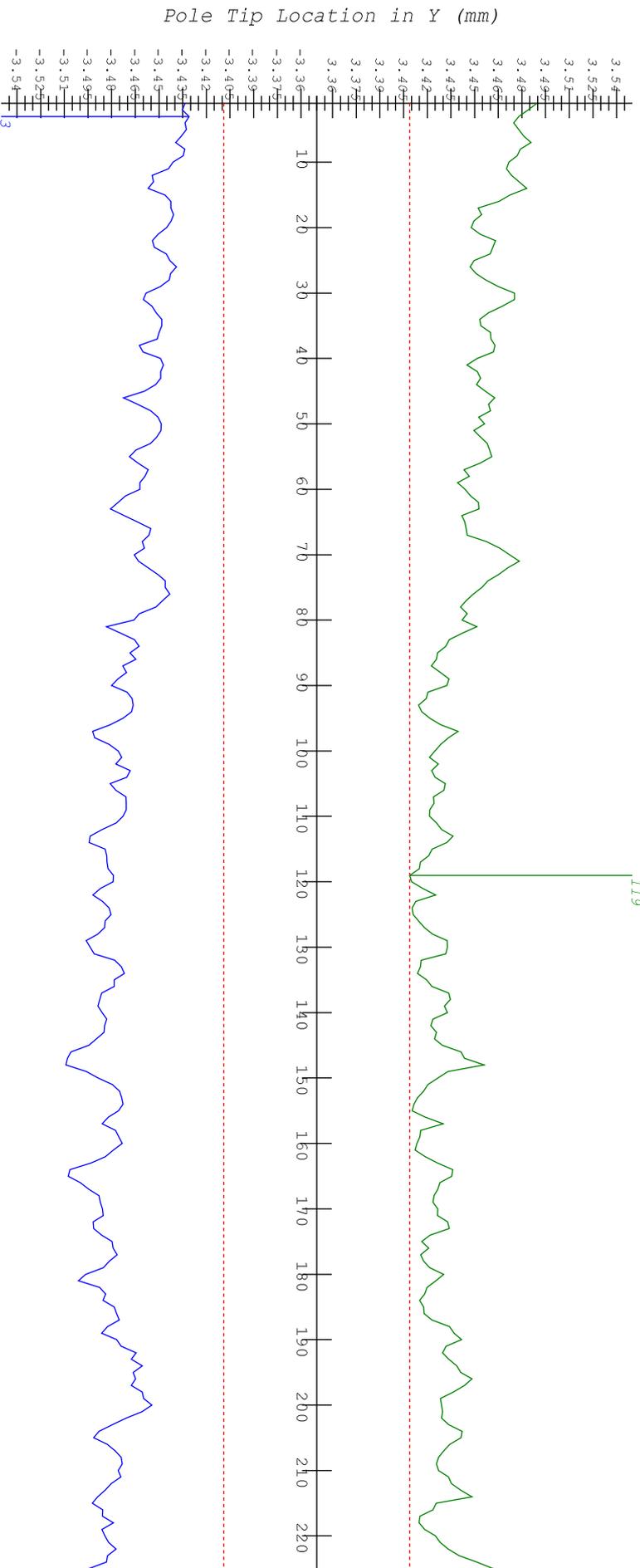


Undulator Pole Tip Location
 Post Magnetic Alignment

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Maximum Chamber Gap = 6.8178

Minimum = 3.4089 Maximum = 3.4896 Range = 0.0807



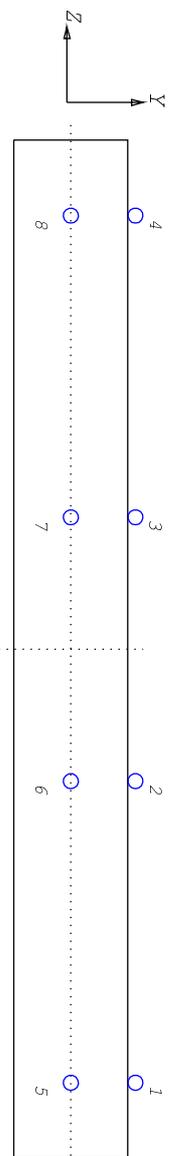
Pole Tip Number ----->

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

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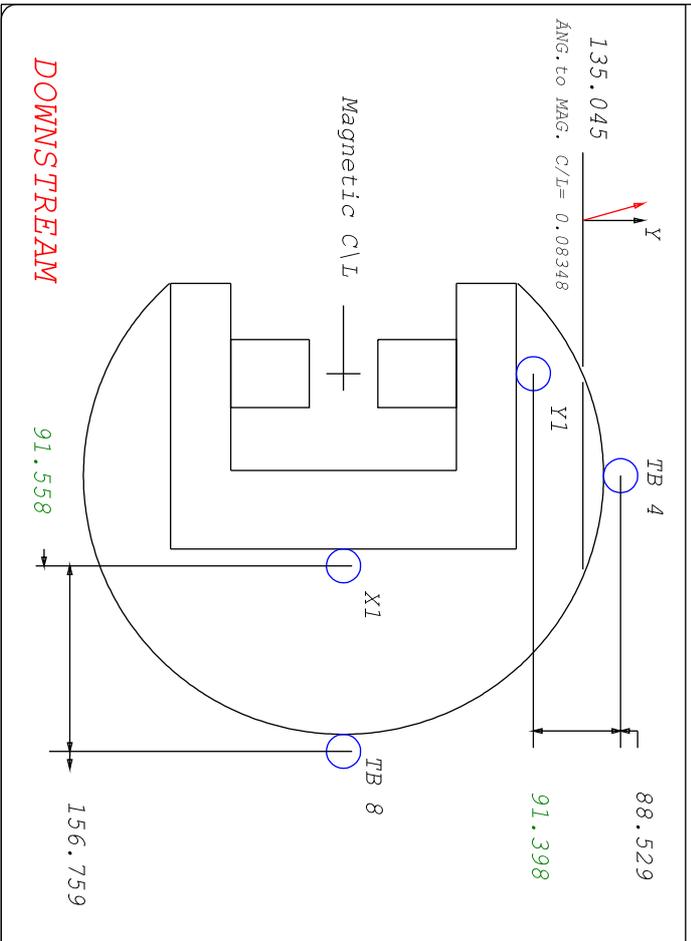
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.1562	180.1014	-1558.271
2	-0.1240	179.8284	-584.6164
3	-0.3351	179.8753	591.2622
4	0.2341	179.9274	1562.1246
5	248.2708	0.0231	-1558.206
6	248.1579	-0.0415	-584.5737
7	248.0911	0.1316	591.3498
8	248.3173	0.0233	1562.1717

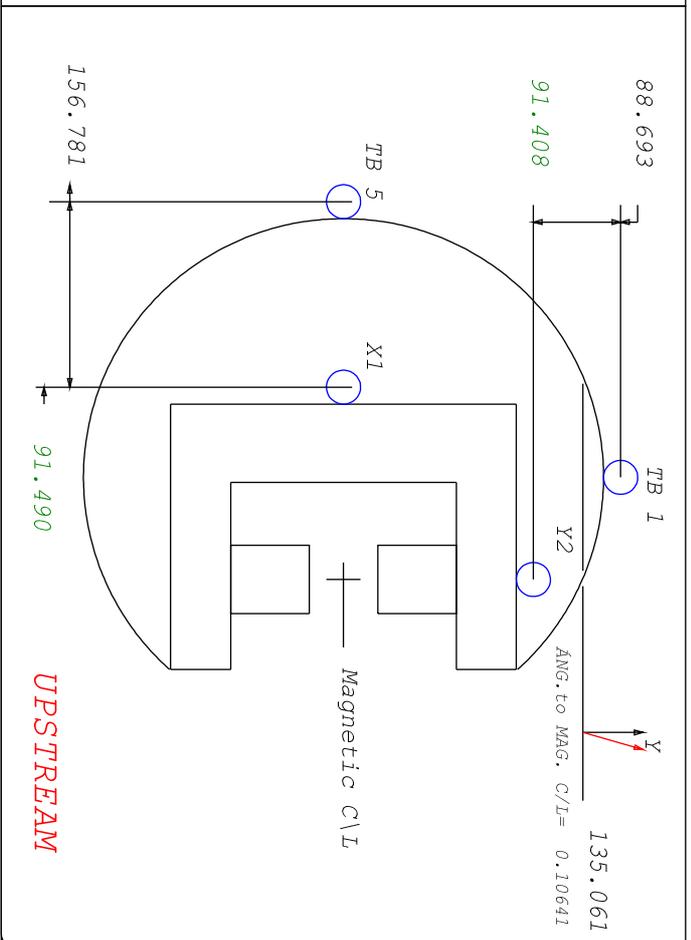
	C/L Offset	Length
Top Magnetic Structure	0.028	3381.129
Bottom Magnetic Structure	-0.028	3381.096
Strongback	0.281	3399.919

Dimensions in mm

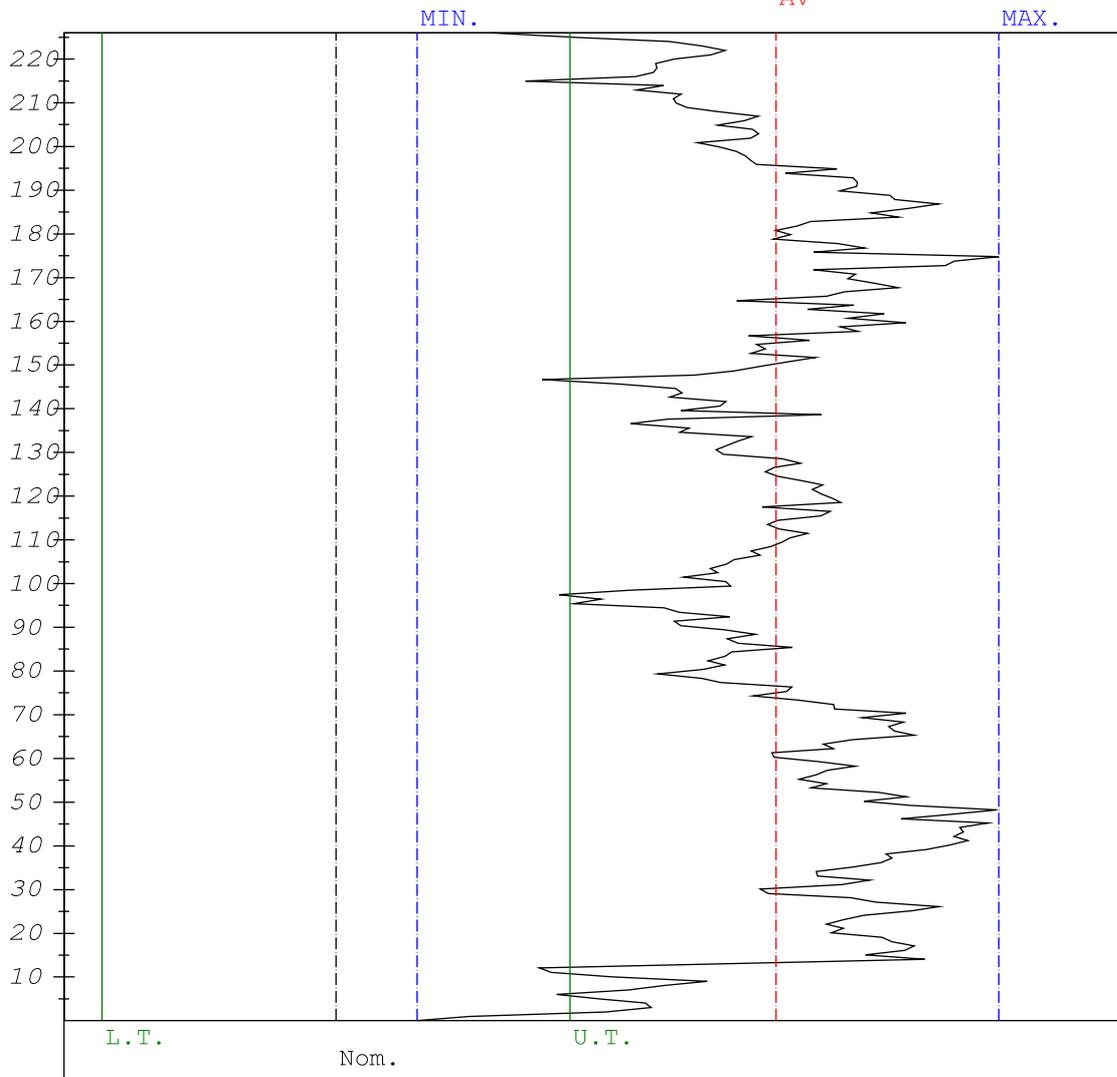
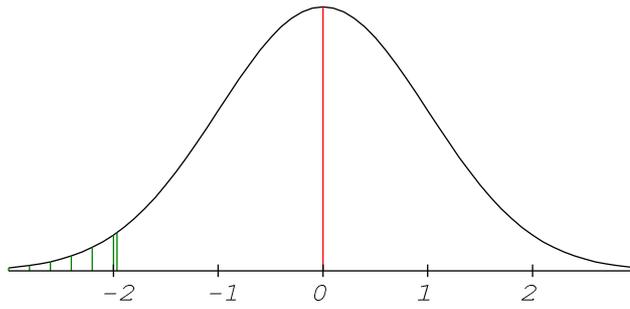
Angles in mrad



DOWNSTREAM



UPSTREAM



Nominal : 4.5000	Averag : 5.4403	Cent.-Dev. : 0.9403
Up. Tol. : 0.5	Maximum : 5.9163	U.Tol.Ex. > : 97.6 %
Low.Tol. : -0.5	Minimum : 4.6733	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2240	In Tolerance: 2.4 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

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