

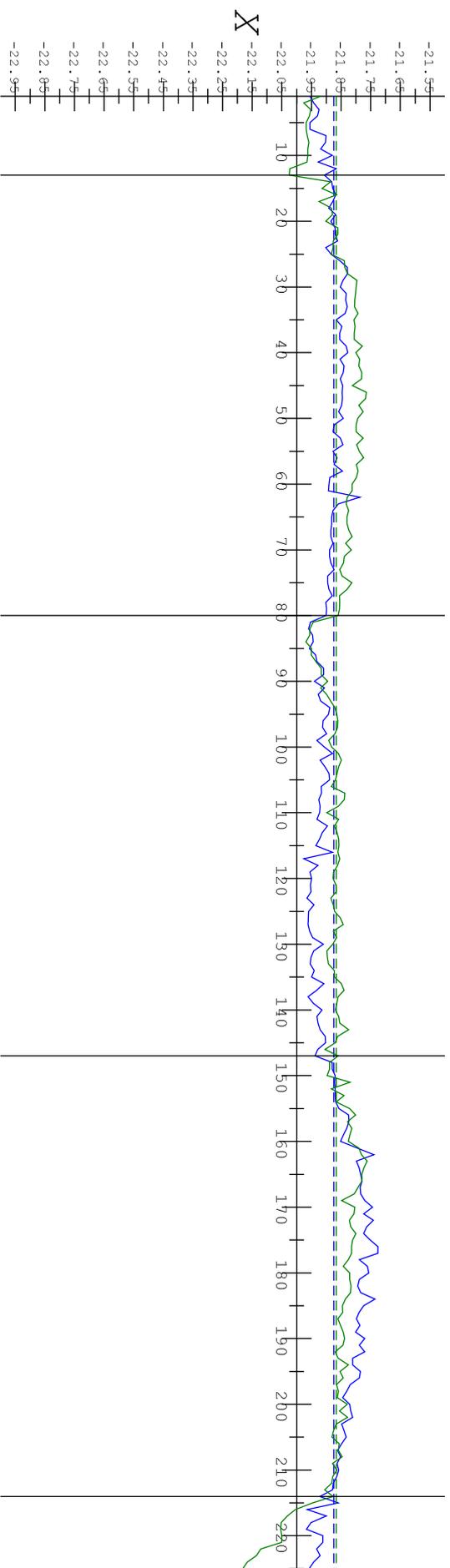
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 28-SEP-2010
 UNDULATOR #13
 DATASET # 0032
 PROGRAM VERSION 2.9

Pole Tip Number ----->



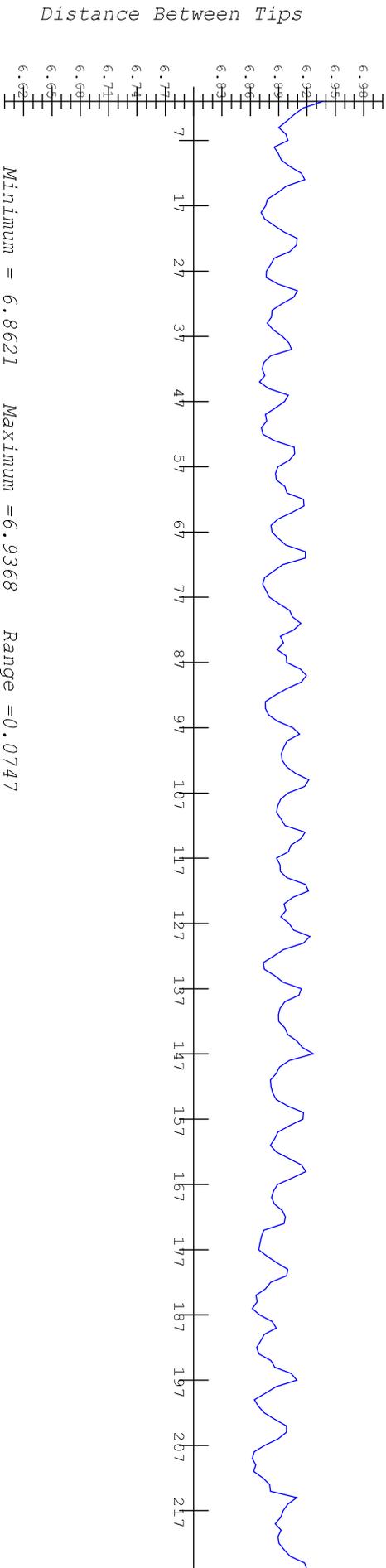
X values in mm

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 = -21.866

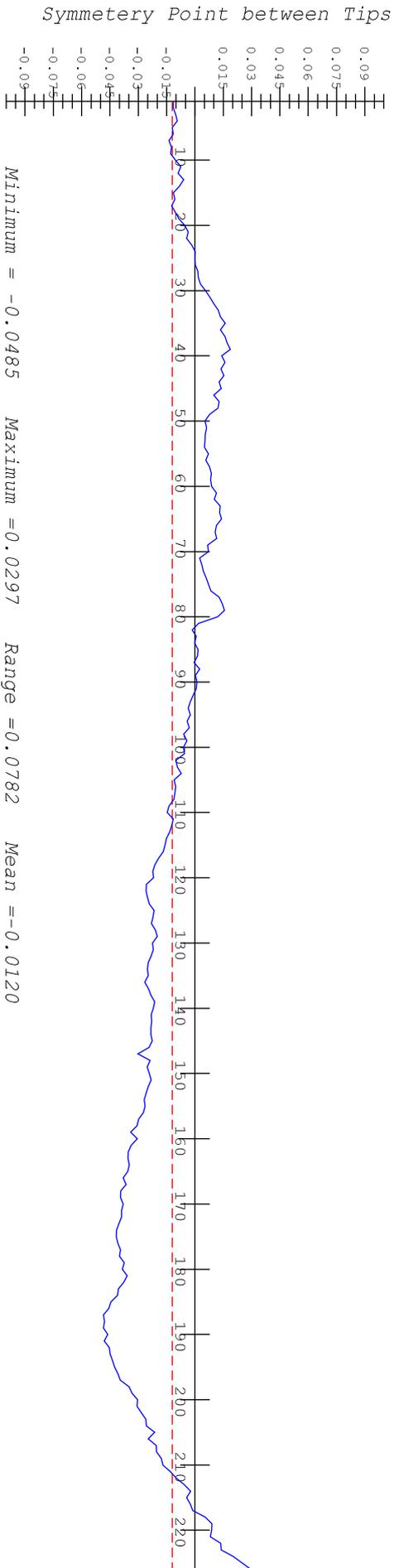
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -21.875



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

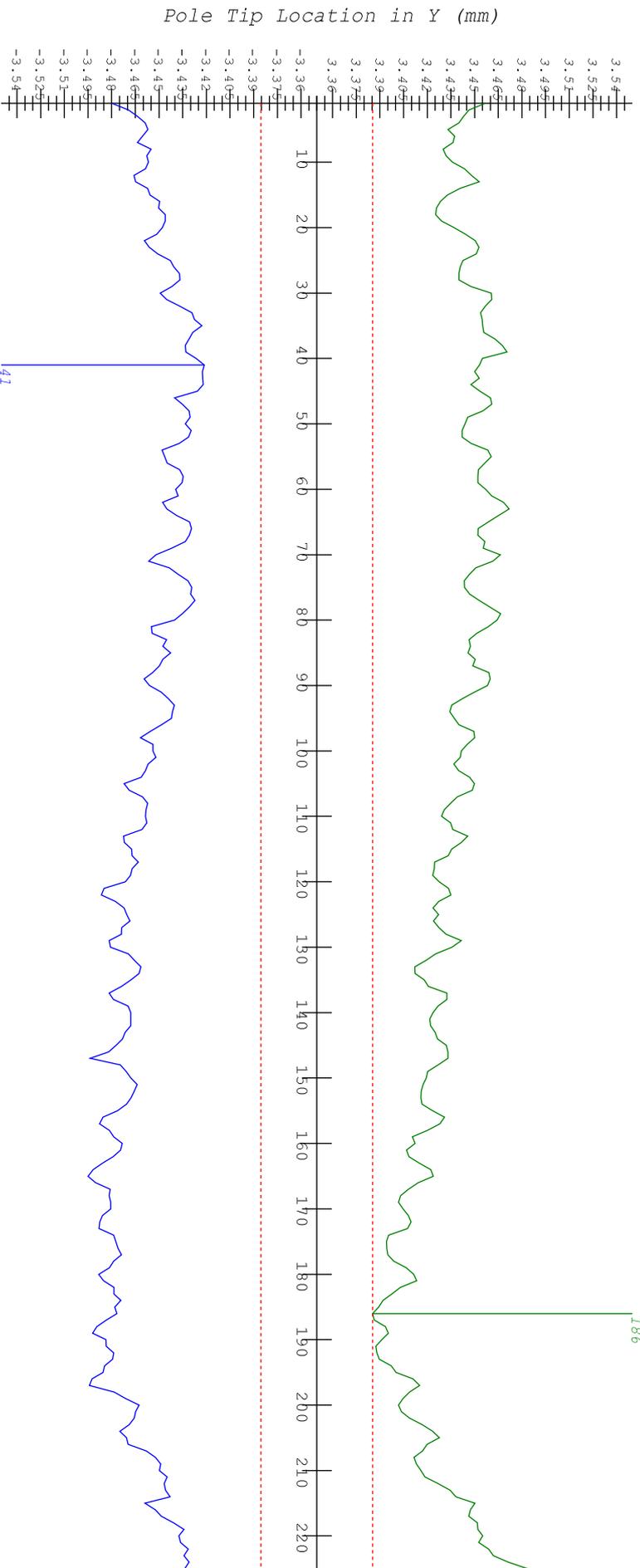


Undulator Pole Tip Location
 Post Magnetic Alignment

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Maximum Chamber Gap = 6.7708

Minimum = 3.3854 Maximum = 3.4897 Range = 0.1043



Minimum = -3.4951 Maximum = -3.4213 Range = 0.0738

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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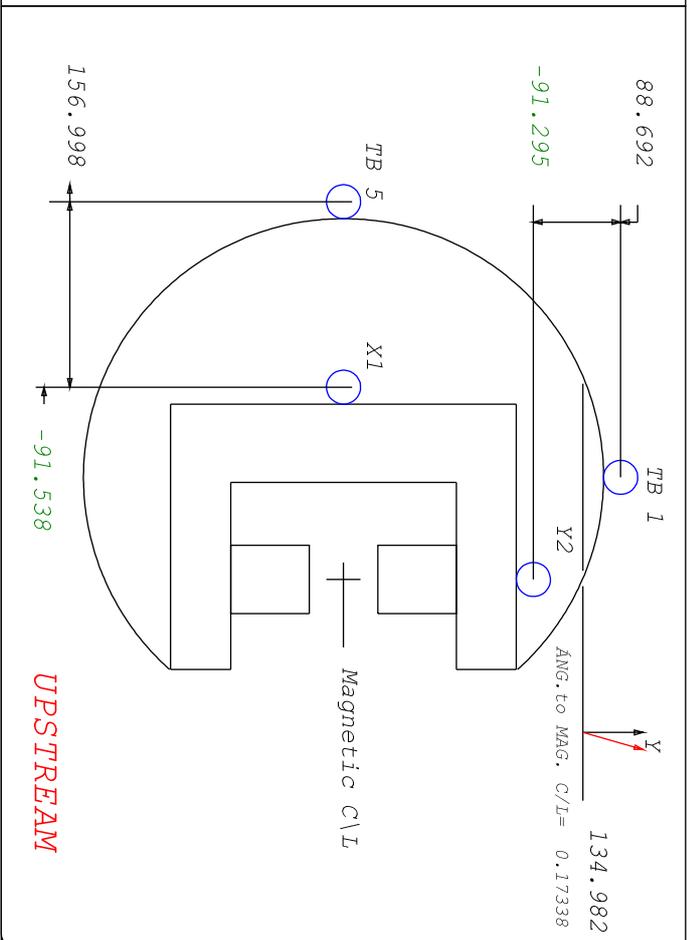
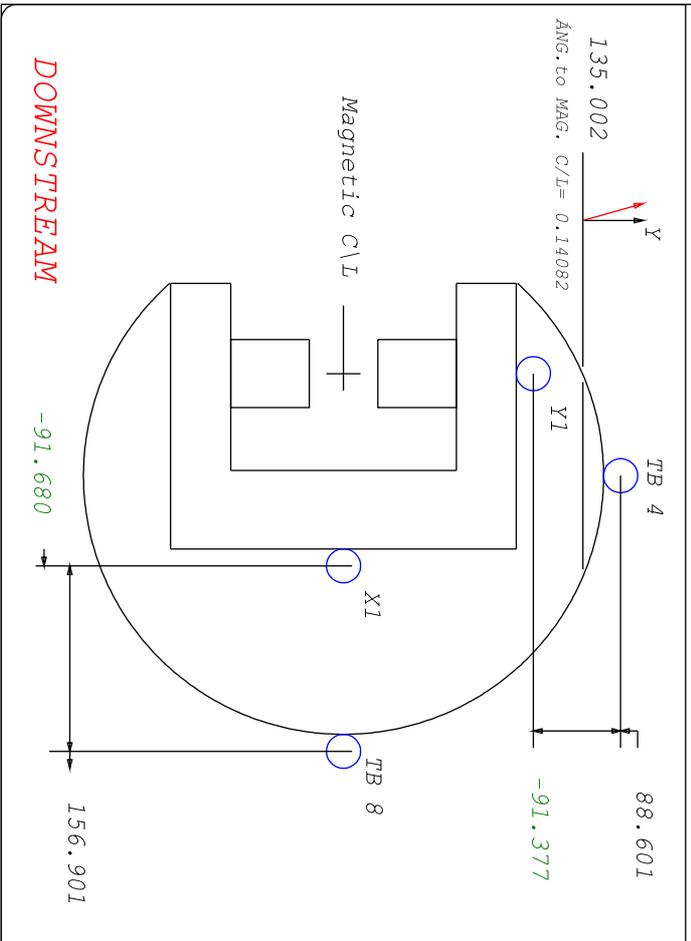
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.2022	179.9867	-1558.287
2	0.3623	180.0082	-584.4542
3	0.2665	179.8843	591.3043
4	0.2252	179.9775	1562.0695
5	248.5358	0.0725	1558.357
6	248.5094	-0.0289	-584.6025
7	248.5342	0.0291	591.3242
8	248.5808	-0.0772	1562.0847

	C/L Offset	Length
Top Magnetic Structure	-0.096	3381.054
Bottom Magnetic Structure	0.096	3381.278
Strongback	0.249	3399.775

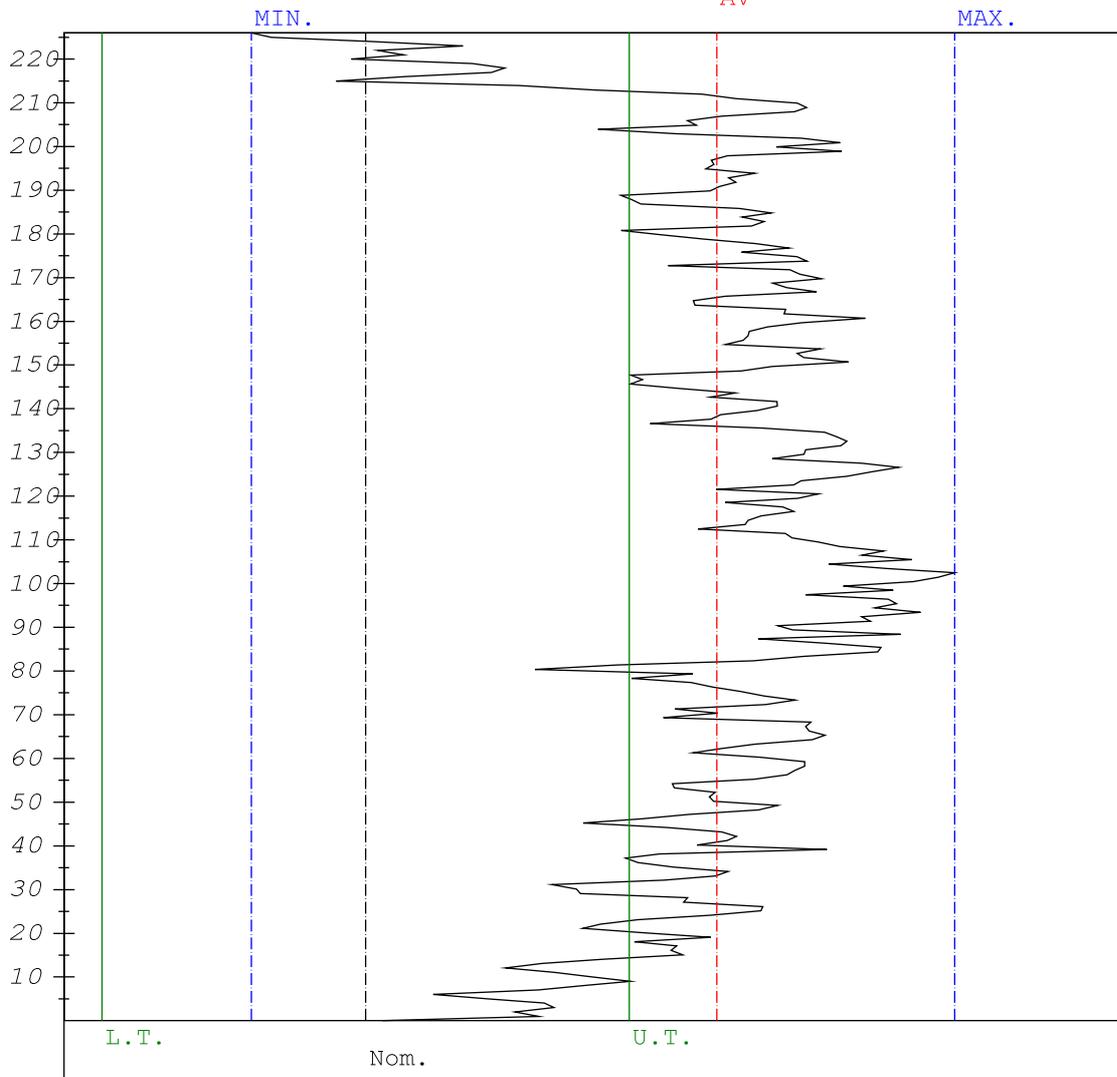
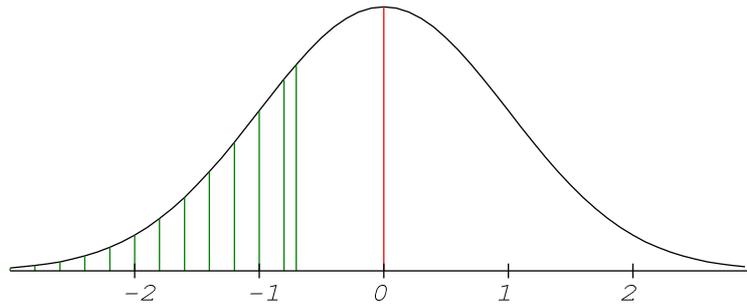
Dimensions in mm

Angles in mrad



Undulator Dimensional Fiducialization
Post Magnetic Alignment

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Nominal : 4.5000	Averag : 5.166	Cent.-Dev. : 0.666
Up. Tol. : 0.5	Maximum : 5.6173	U.Tol.Ex. > : 75.9 %
Low.Tol. : -0.5	Minimum : 4.2833	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2362	In Tolerance: 24.1 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

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