

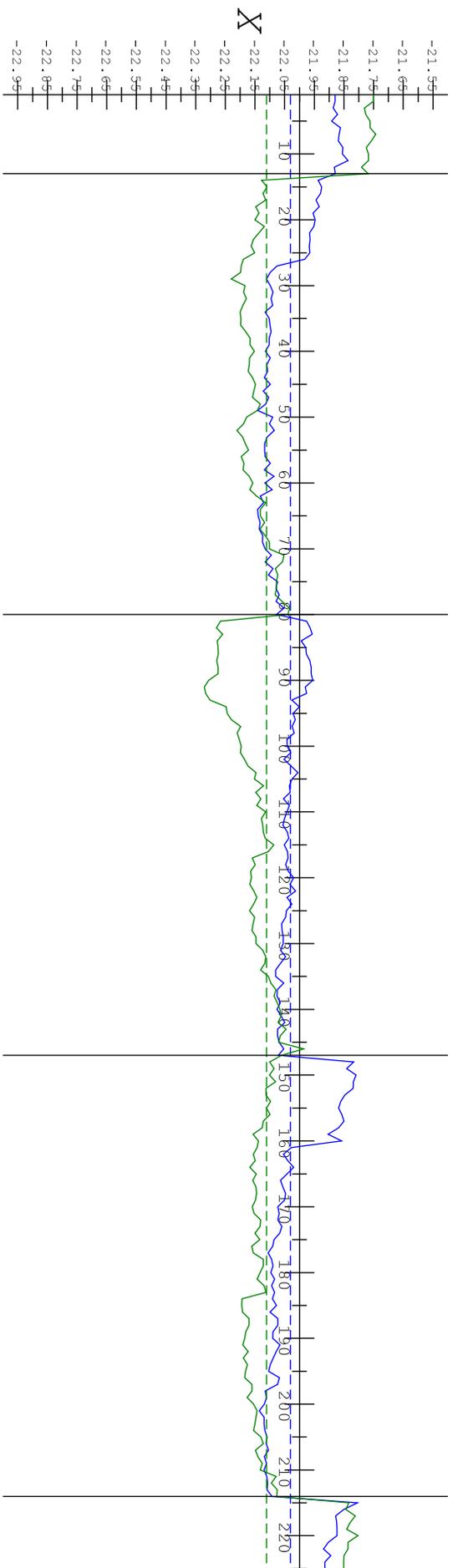
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 17-FEB-2009
 UNDULATOR # 08
 DATASET # 0002
 PROGRAM VERSION 2.9

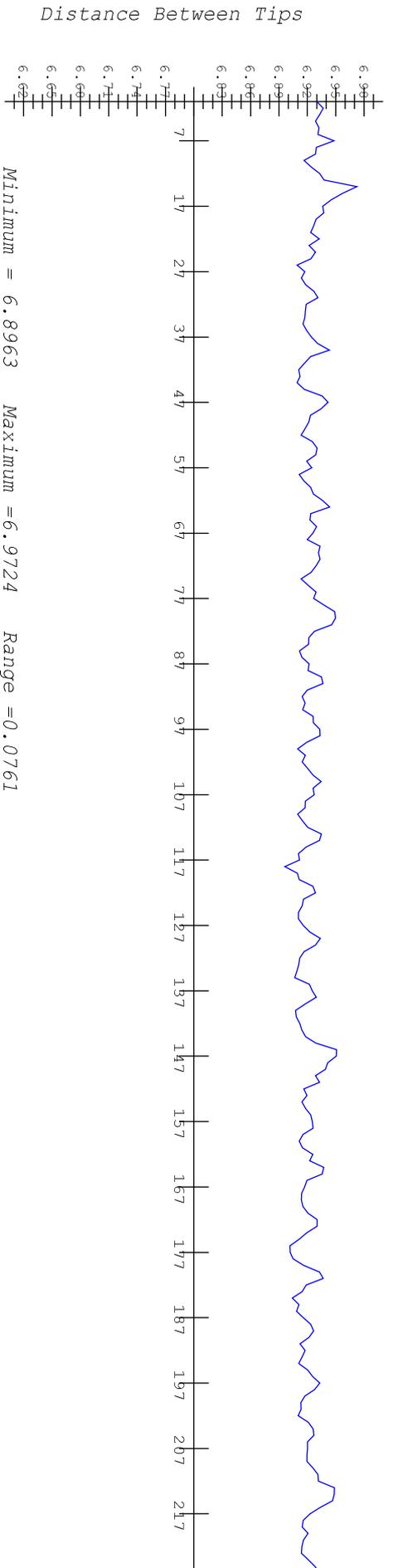
Pole Tip Number ----->



Undulator Pole Tip Location Post Magnetic Alignment

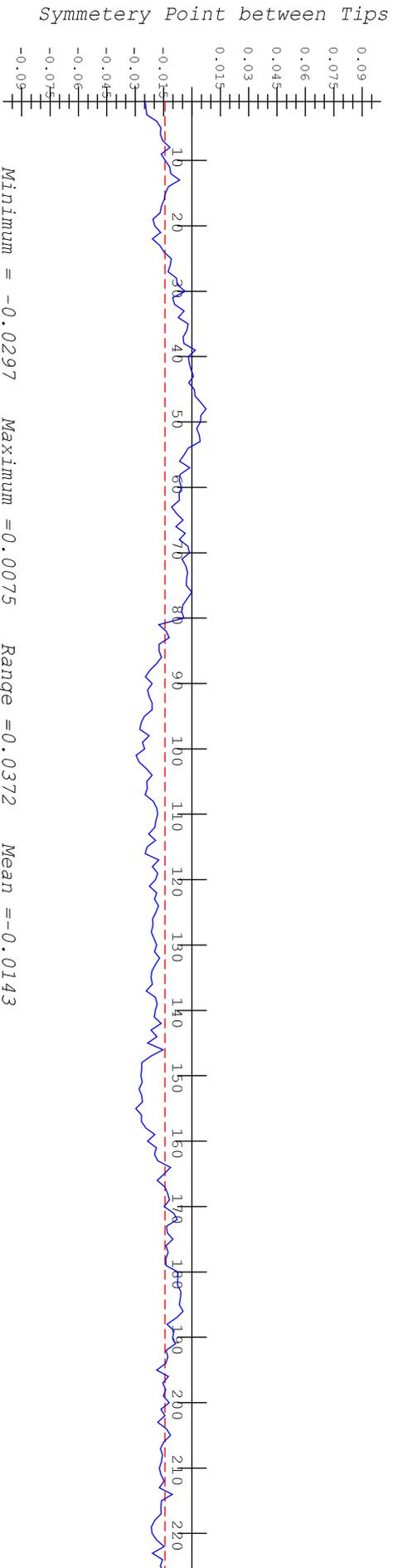
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Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
 Blue Dash = Mean value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



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

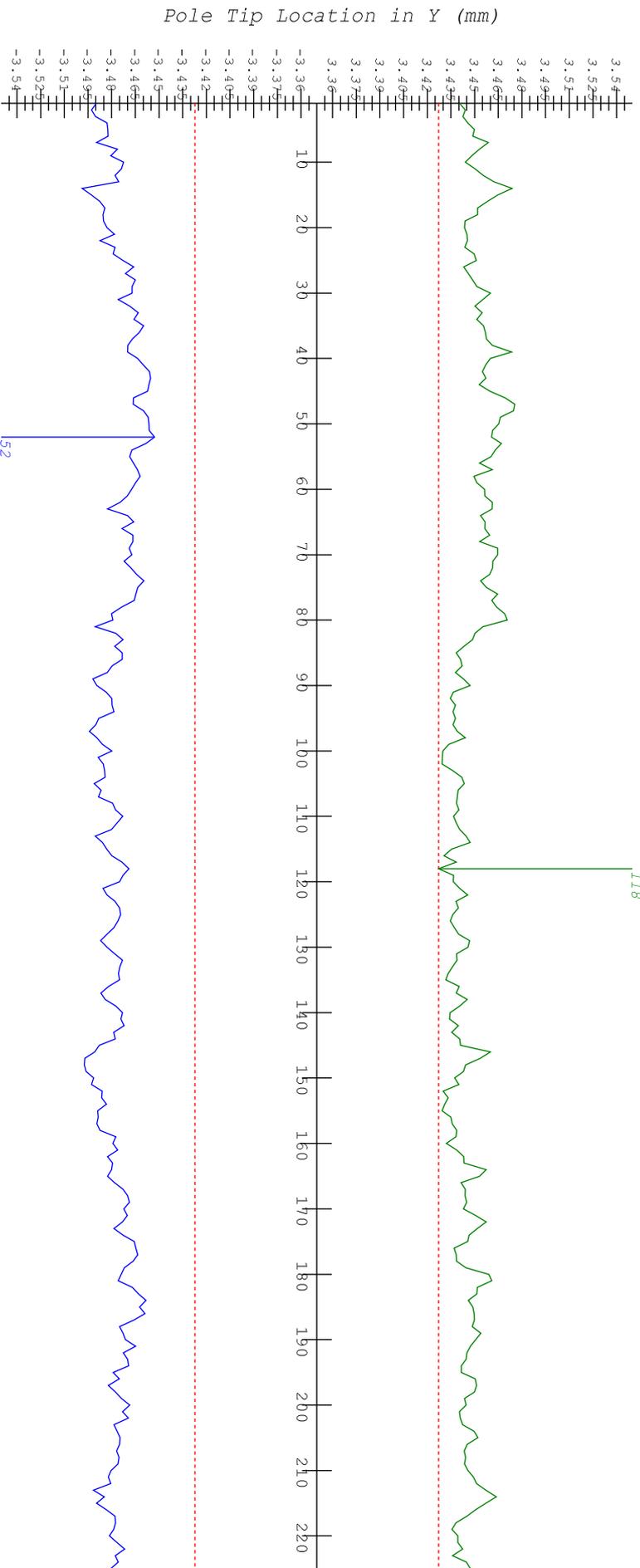


Undulator Pole Tip Location
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Maximum Chamber Gap = 6.8545

Minimum = 3.4272 Maximum = 3.4755 Range = 0.0483



Minimum = -3.4987 Maximum = -3.4529 Range = 0.0458

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
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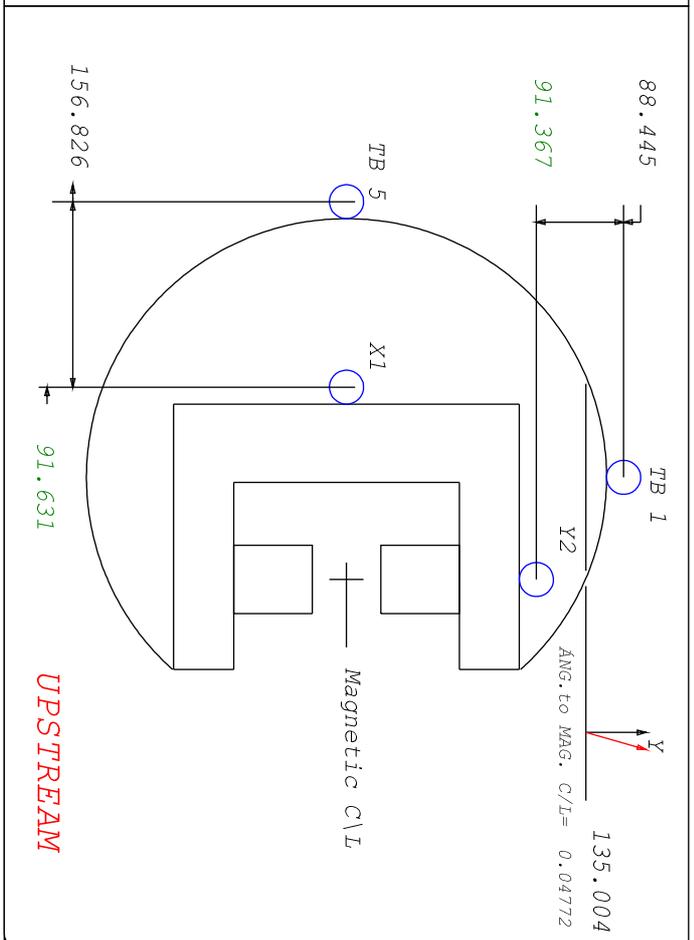
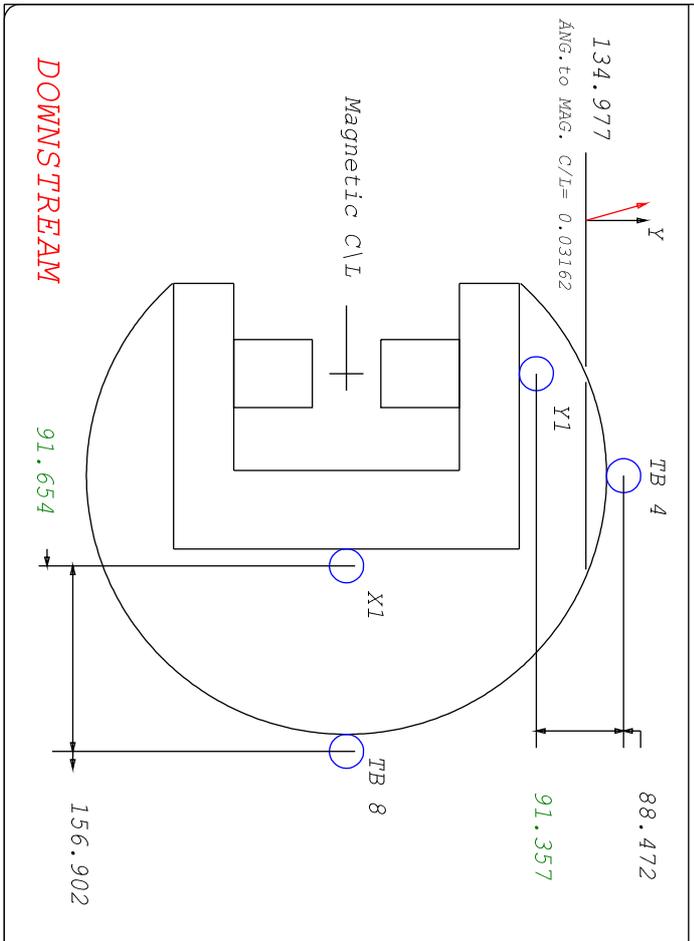
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.1712	179.8121	-1558.294
2	0.2964	179.7633	-584.7451
3	0.3053	179.7160	591.2860
4	0.3105	179.8293	1562.1316
5	248.4571	-0.0761	-1558.237
6	248.6479	0.0012	-584.6415
7	248.5849	0.0124	591.4522
8	248.5561	-0.0324	1562.1613

	C/L Offset	Length
Top Magnetic Structure	0.036	3381.020
Bottom Magnetic Structure	-0.036	3380.923
Strongback	0.309	3400.005

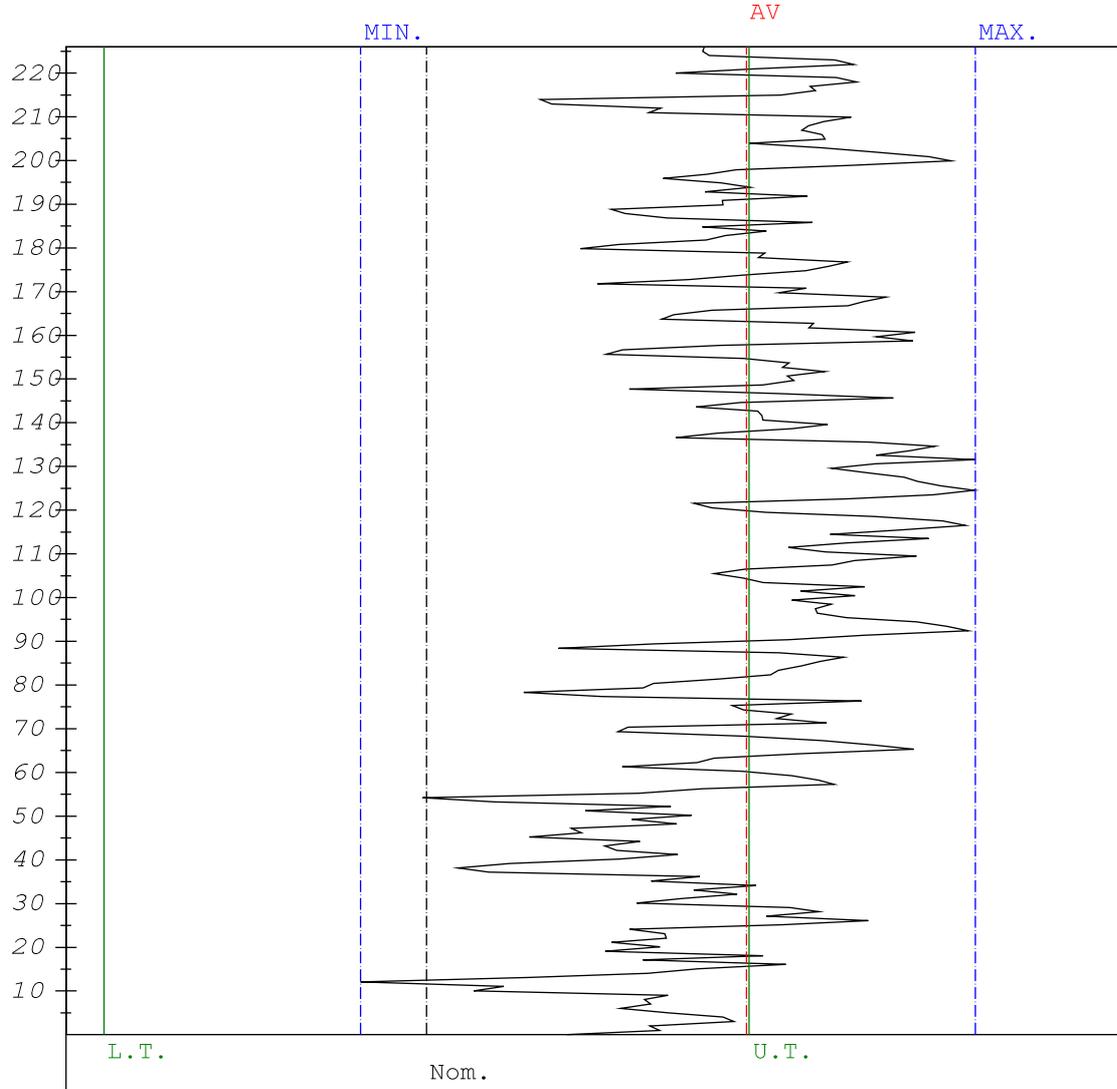
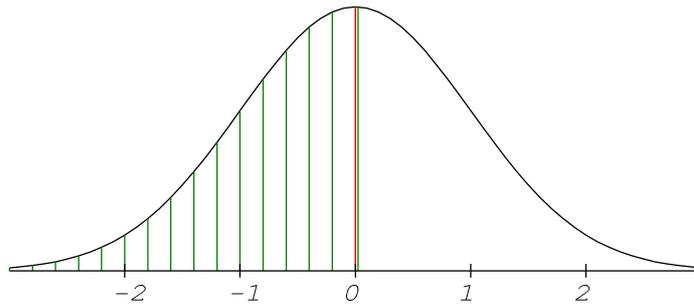
Dimensions in mm

Angles in mrad



Undulator Dimensional Fiducialization
Post Magnetic Alignment

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Nominal : 4.5000	Averag : 4.9961	Cent.-Dev. : 0.4961
Up. Tol. : 0.5	Maximum : 5.3511	U.Tol.Ex. > : 49.1 %
Low.Tol. : -0.5	Minimum : 4.3981	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1788	In Tolerance: 50.9 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
 Pole Tip Gap Angle
 Post Magnetic Alignment

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