

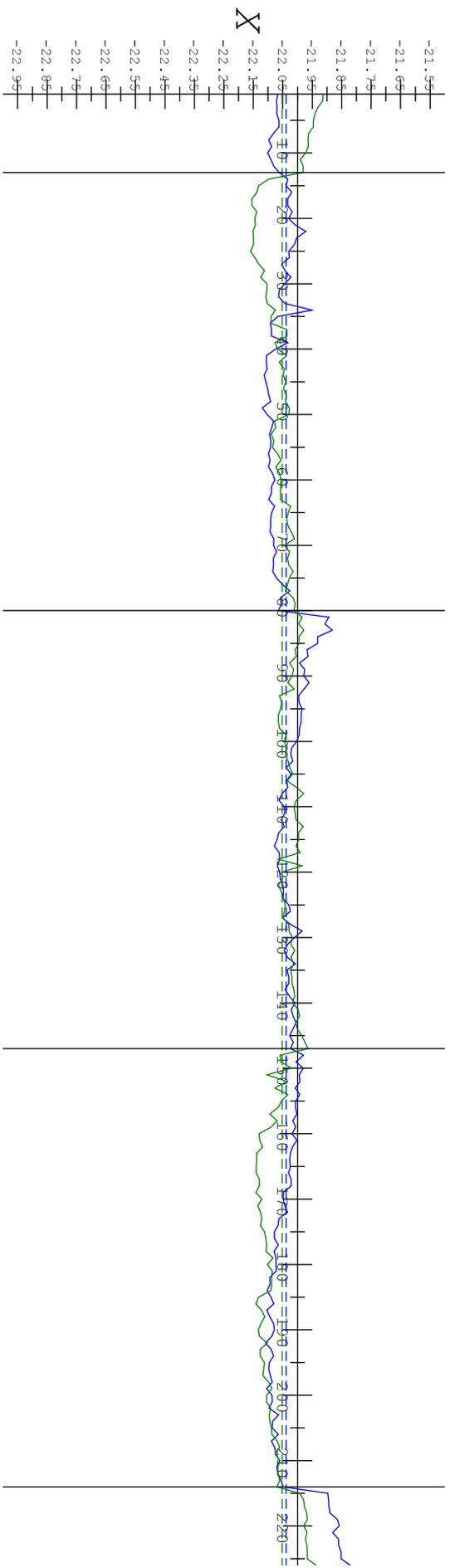
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles  
 Post Magnetic Alignment

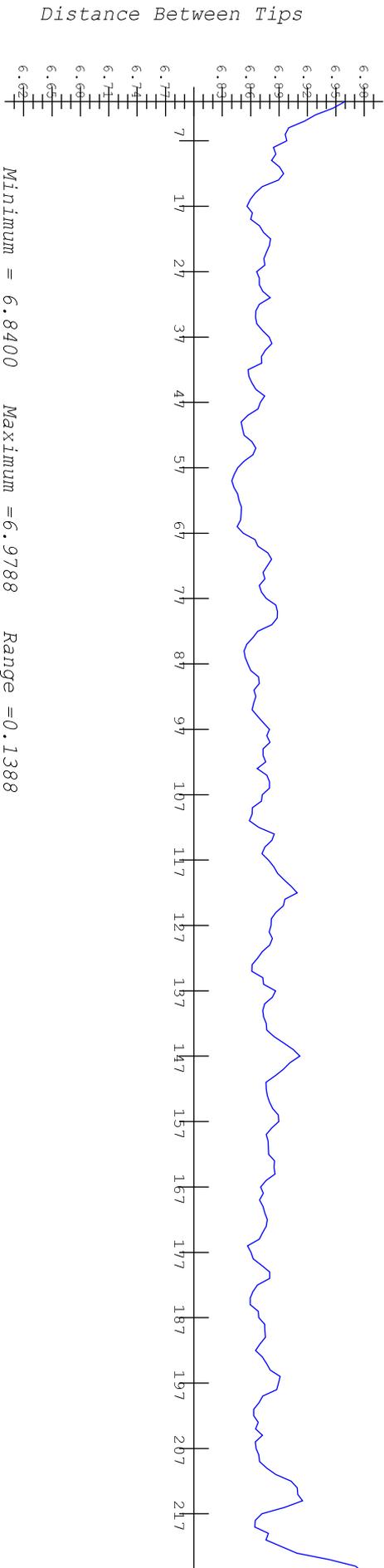
DATE: 30-APR-2009  
 UNDUULATOR # 33  
 DATASET # 0002  
 PROGRAM VERSION 2.9

# Pole Tip Number ----->

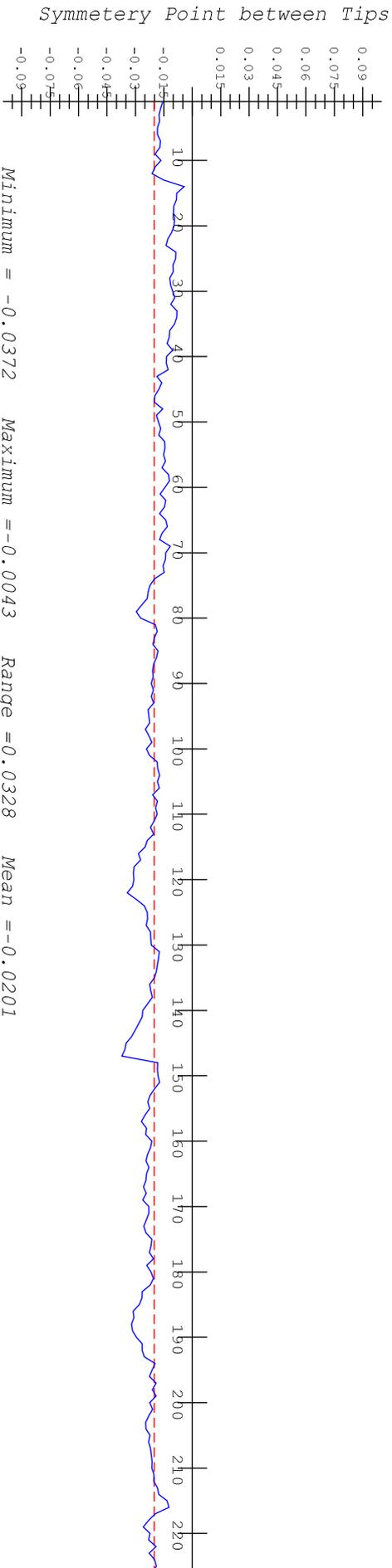


## Undulator Pole Tip Location Post Magnetic Alignment

DATE: 30-APR-2009  
 UNDUULATOR # 33  
 DATASET # 0002  
 PROGRAM VERSION 2.9



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

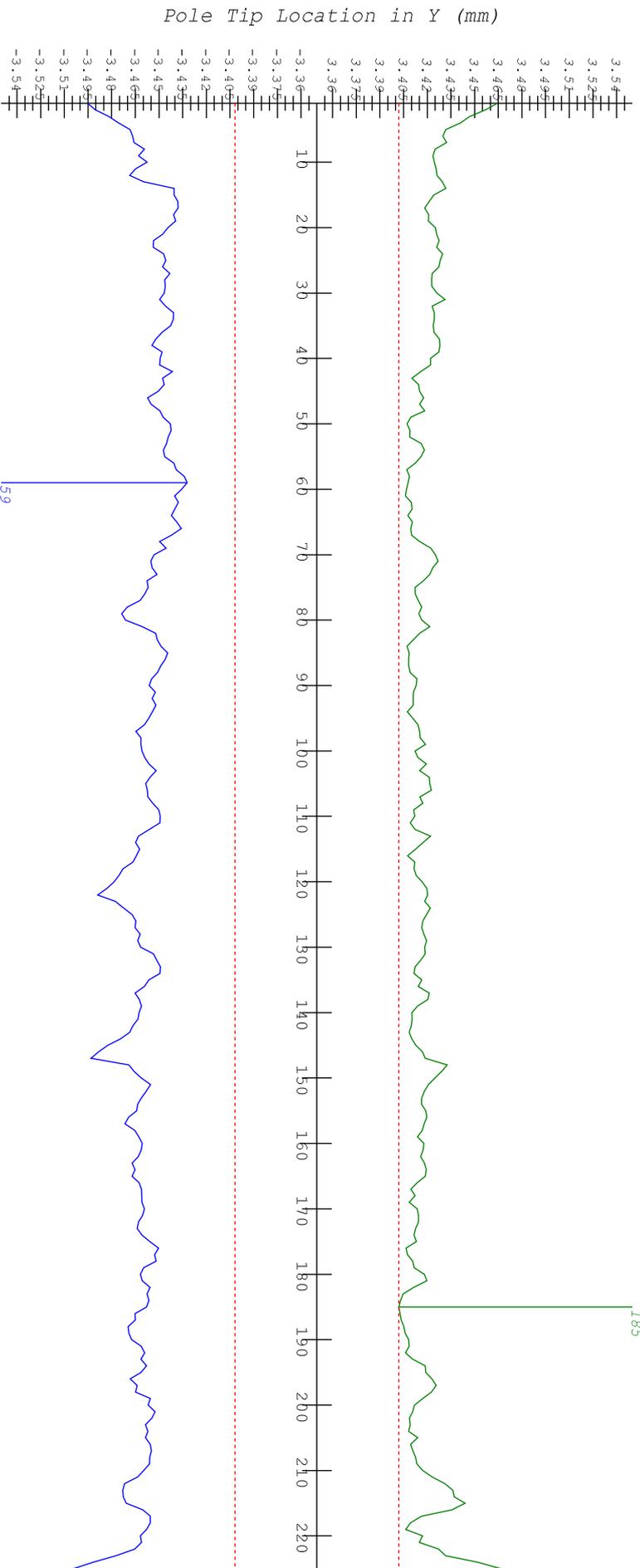


Undulator Pole Tip Location  
 Post Magnetic Alignment

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Maximum Chamber Gap = 6.8037

Minimum = 3.4019    Maximum = 3.4681    Range = 0.0663



Minimum = -3.5107    Maximum = -3.4321    Range = 0.0786

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

DATE: 30-APR-2009  
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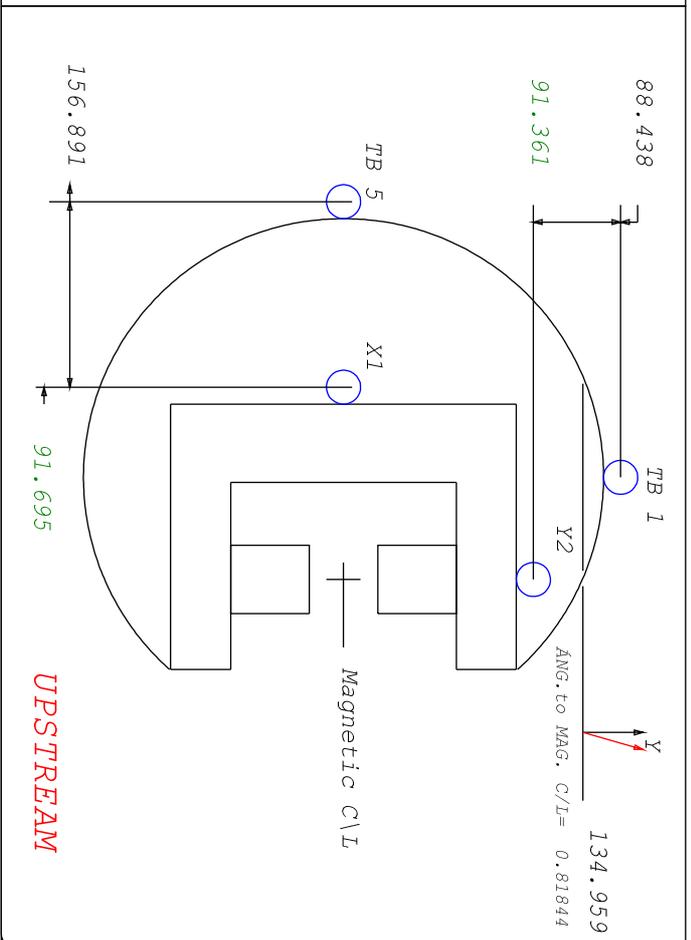
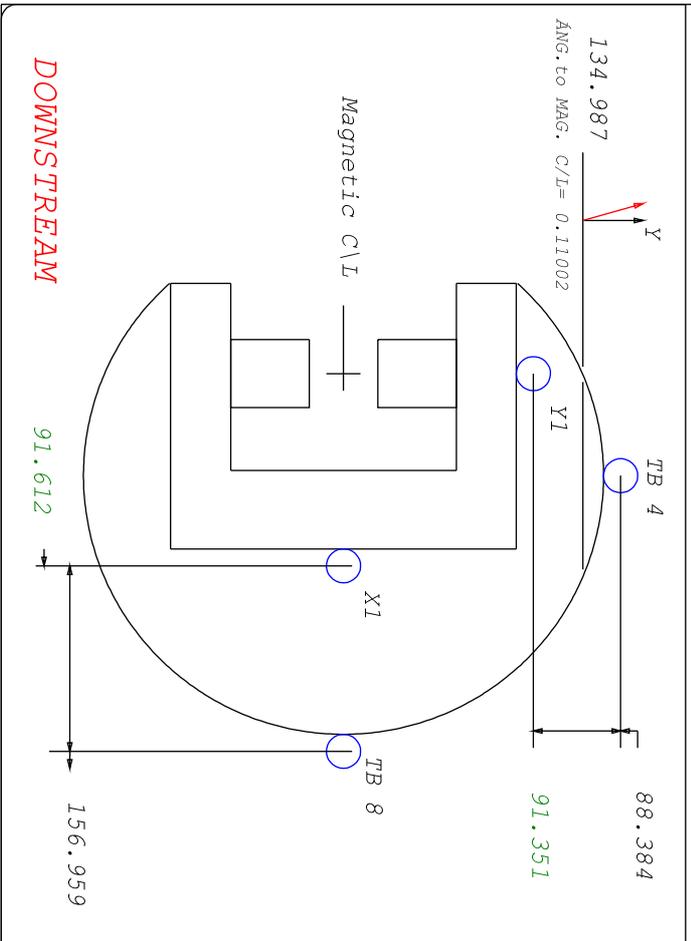
TOOLING BALL LOCATIONS

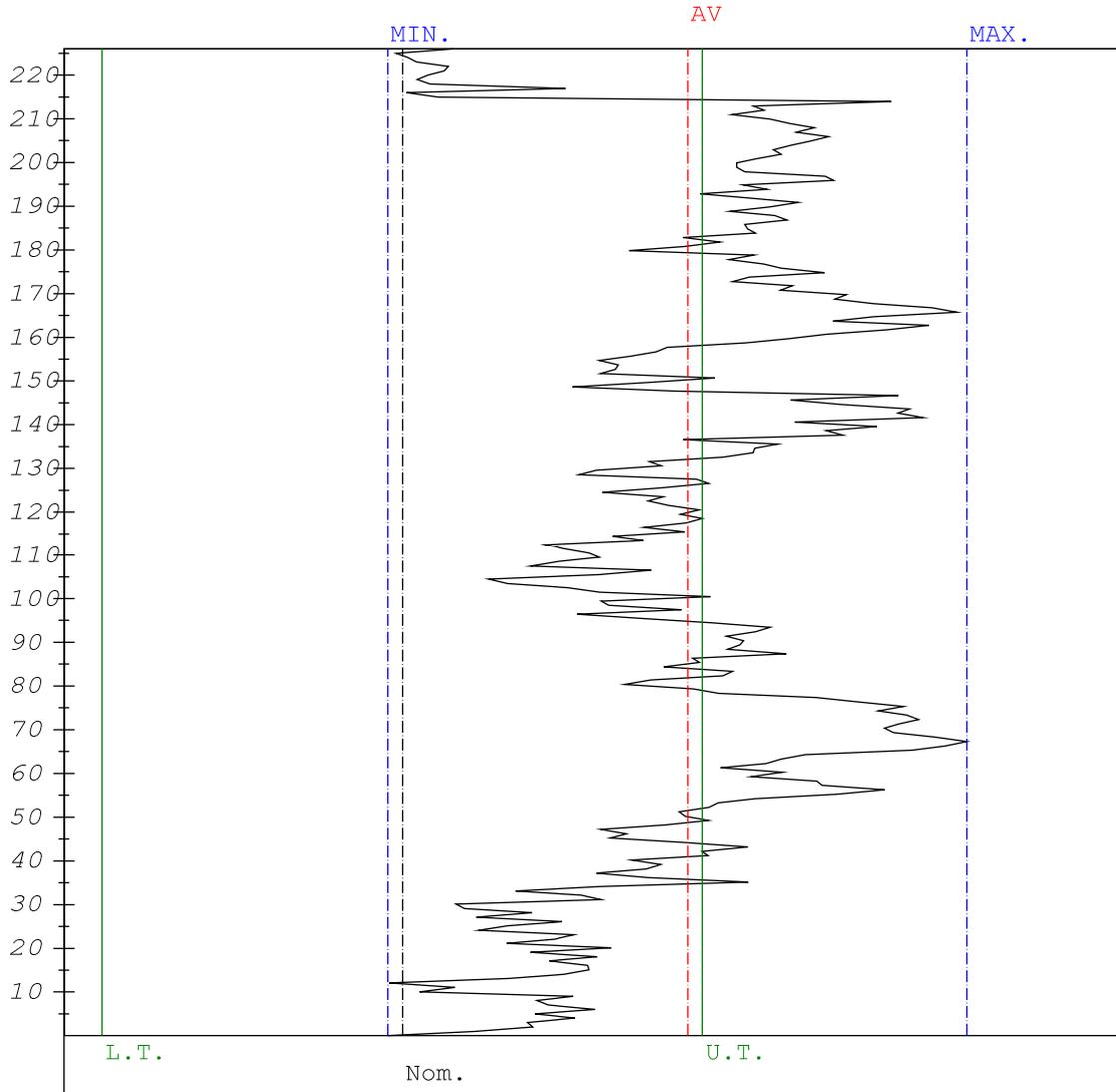
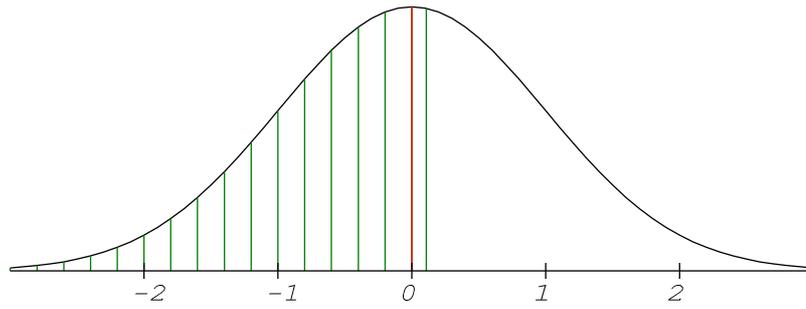
NUM.	X	Y	Z
1	0.2592	179.7990	-1558.265
2	0.3943	179.6690	-584.5636
3	0.4300	179.6903	591.4250
4	0.4029	179.7353	1562.2121
5	248.5863	0.0094	1558.256
6	248.6234	-0.0572	-584.6001
7	248.6127	-0.0476	591.4555
8	248.5710	-0.0335	1562.2921

	C/L Offset	Length
Top Magnetic Structure	0.055	3381.068
Bottom Magnetic Structure	-0.055	3381.029
Strongback	0.413	3399.950

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 4.9759	Cent.-Dev. : 0.4759
Up. Tol. : 0.5	Maximum : 5.4400	U.Tol.Ex. > : 45.7 %
Low.Tol. : -0.5	Minimum : 4.4754	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2226	In Tolerance: 54.3 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation  
Pole Tip Gap Angle  
Post Magnetic Alignment

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