

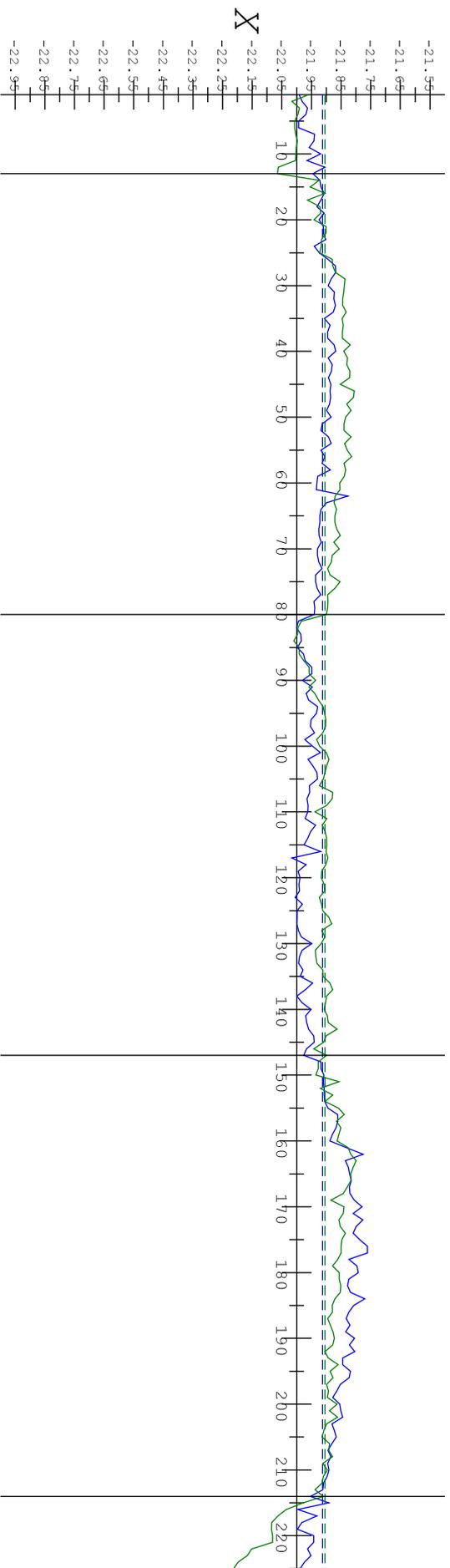
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 08-OCT-2009
 UNDUULATOR # 13
 DATASET # 0024
 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 = -21.904

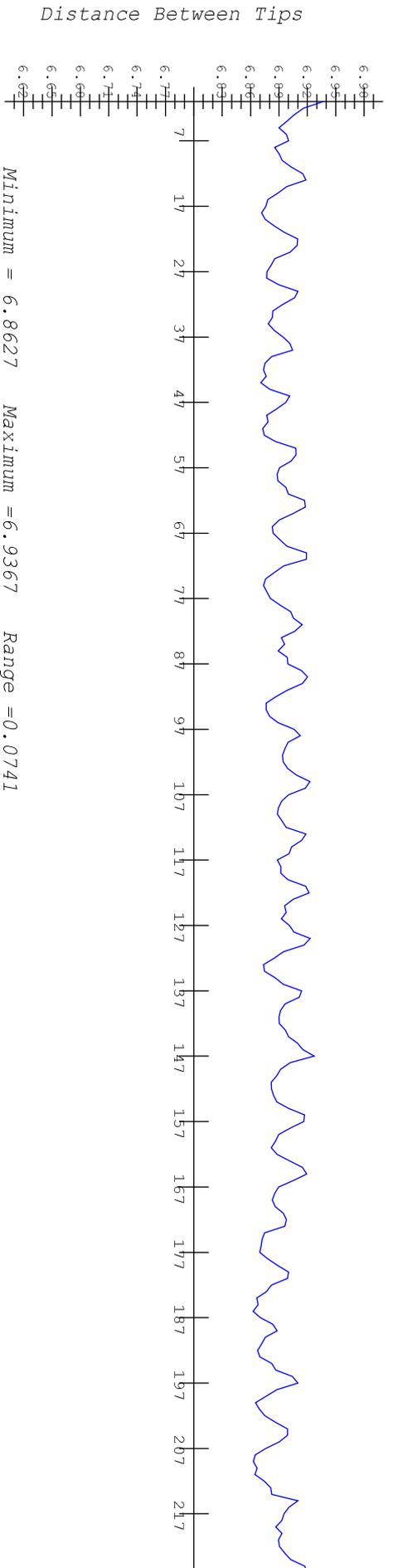
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -21.913



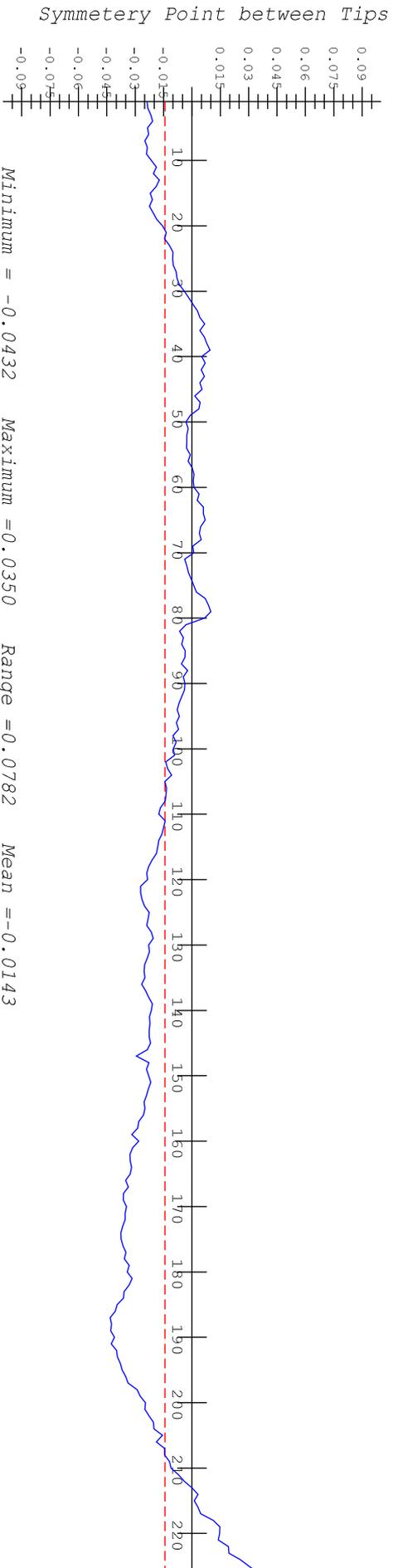
Undulator Pole Tip Location
Post Magnetic Alignment

DATE: 08-OCT-2009
UNDULATOR # 13
DATASET # 0024
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

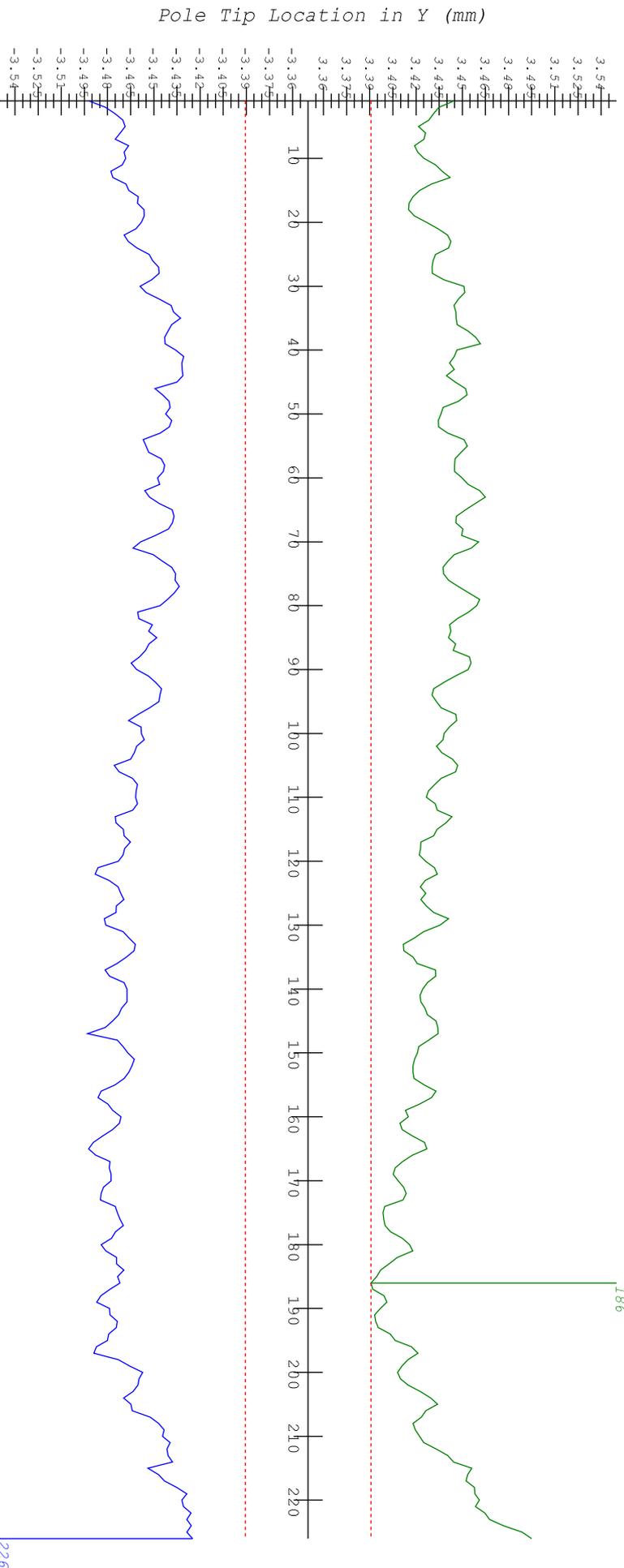


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 08-OCT-2009
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Maximum Chamber Gap = 6.7814

Minimum = 3.3907 Maximum = 3.4949 Range = 0.1041



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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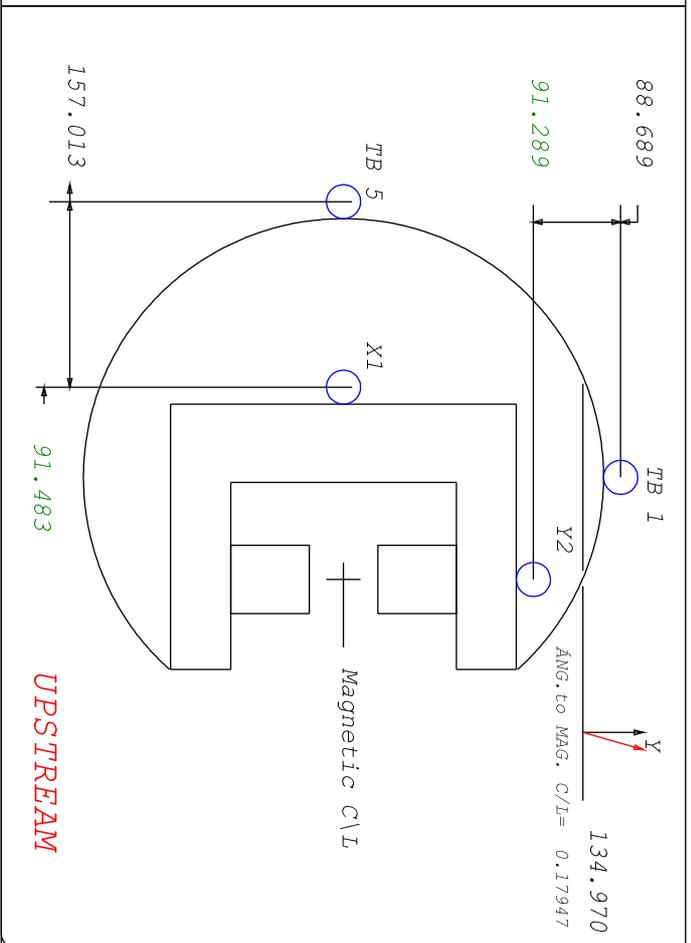
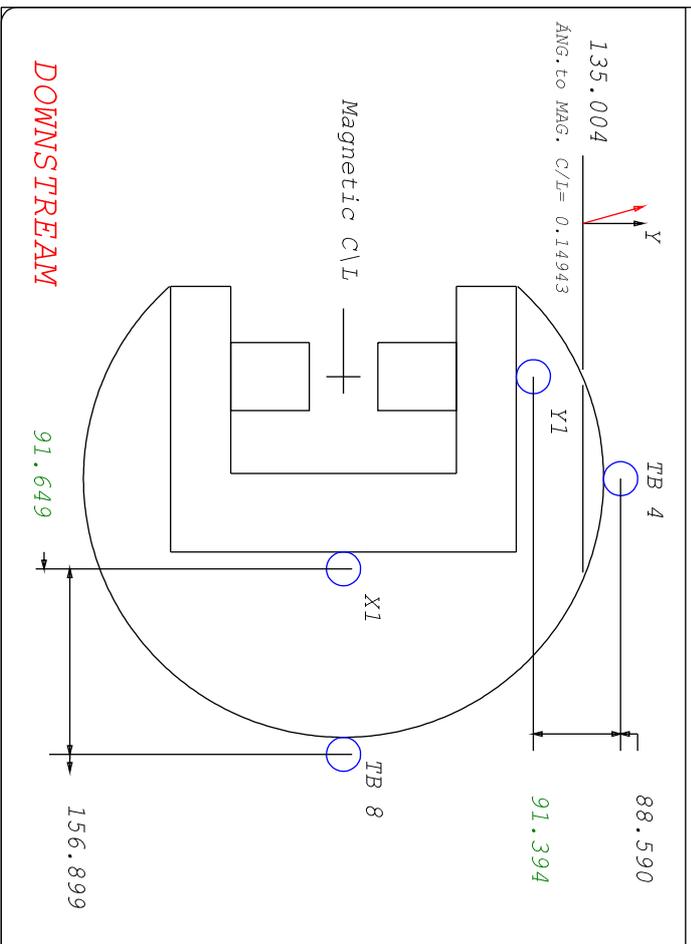
TOOLING BALL LOCATIONS

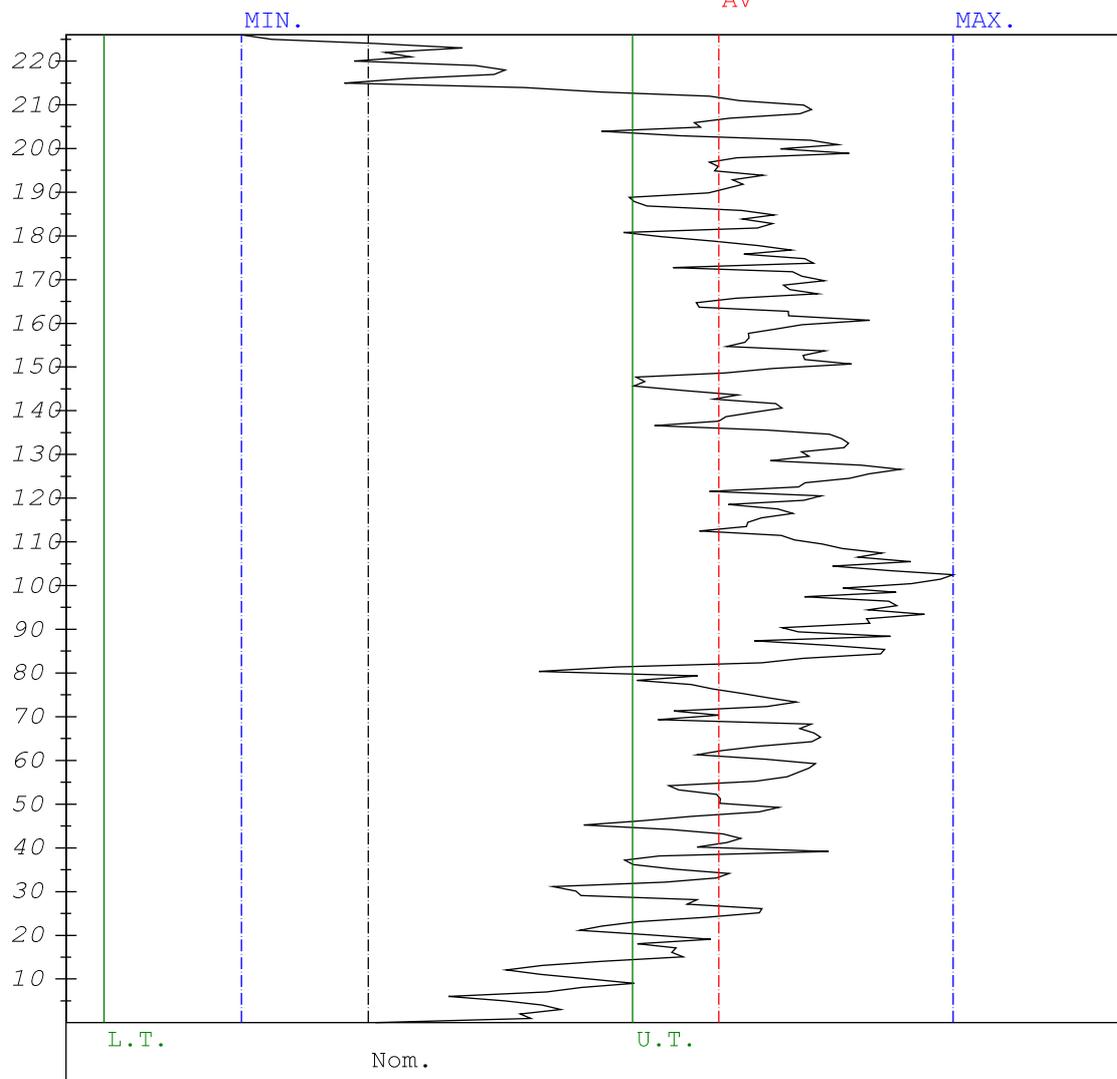
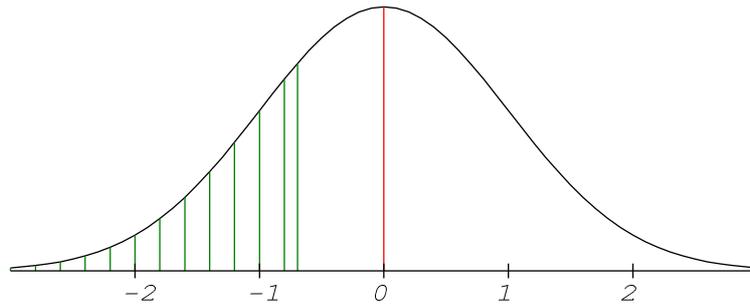
NUM.	X	Y	Z
1	0.1673	179.9782	-1558.289
2	0.3216	180.0029	-584.4554
3	0.2281	179.8865	591.3046
4	0.1922	179.9836	1562.0741
5	248.4959	0.0664	-1558.362
6	248.4687	-0.0315	-584.6072
7	248.4967	0.0337	591.3225
8	248.5479	-0.0689	1562.0836

	C/L Offset	Length
Top Magnetic Structure	-0.096	3381.057
Bottom Magnetic Structure	0.096	3381.281
Strongback	0.250	3399.782

Dimensions in mm

Angles in mrad





Nominal : 4.5000	Averag : 5.1633	Cent.-Dev. : 0.6633
Up. Tol. : 0.5	Maximum : 5.6064	U.Tol.Ex. > : 75.6 %
Low.Tol. : -0.5	Minimum : 4.2599	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2354	In Tolerance: 24.4 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

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PROGRAM VERSION 2.9