

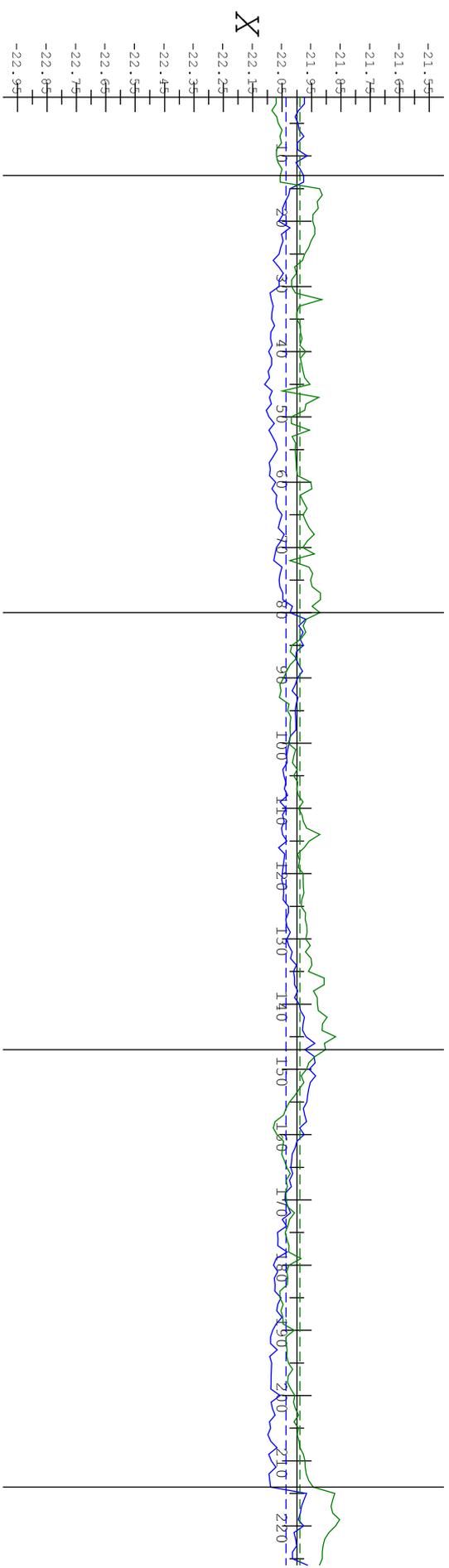
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 19-MAR-2009
 UNDULATOR #22
 DATASET #0002
 PROGRAM VERSION 2.9

Pole Tip Number ----->



X values in mm

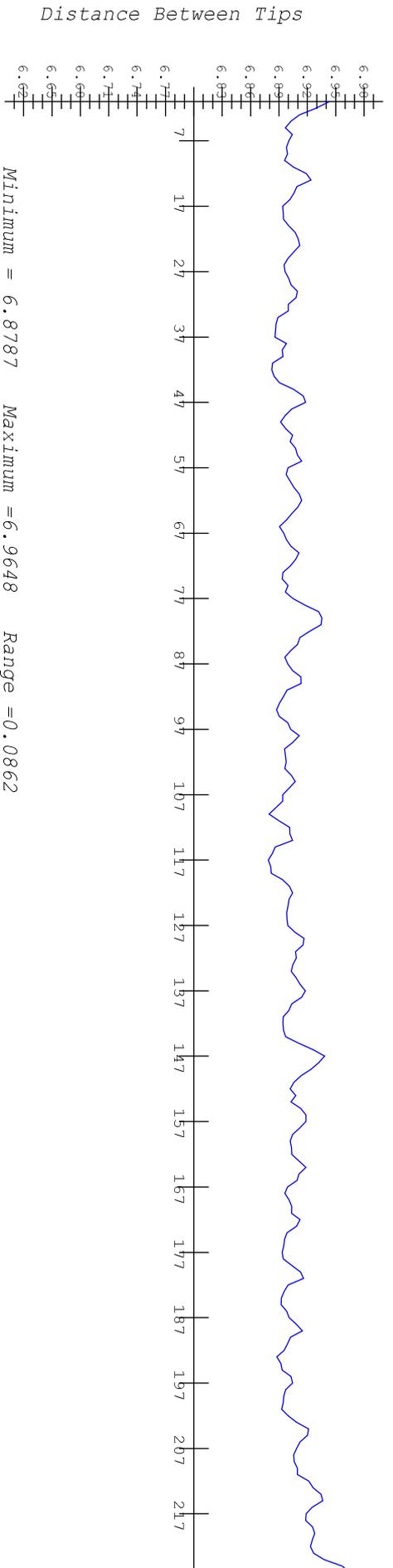
Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -21.989

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 = -22.037



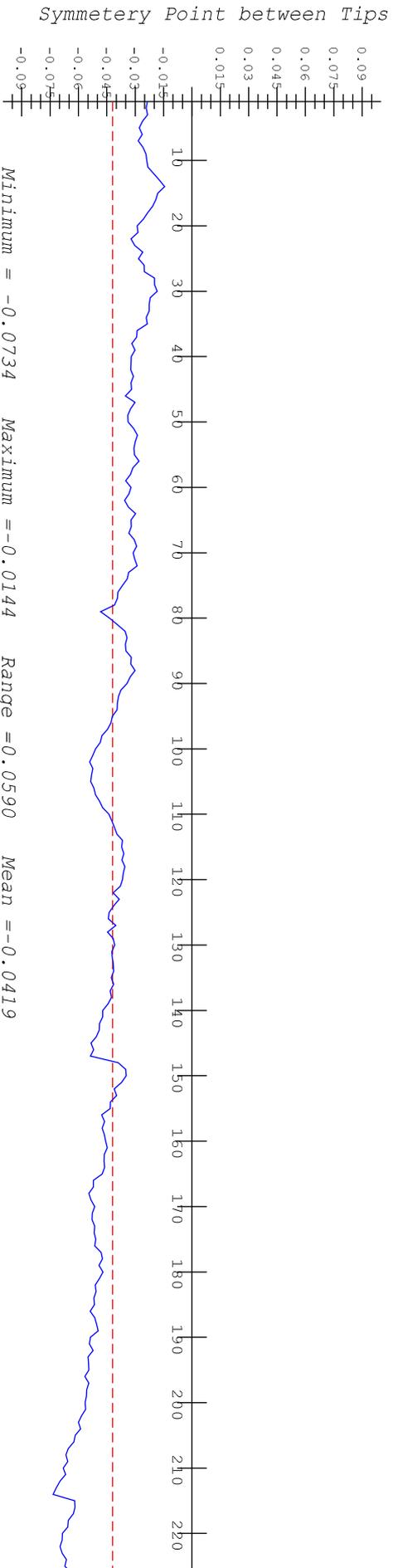
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 19-MAR-2009
 UNDULATOR #22
 DATASET #0002
 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

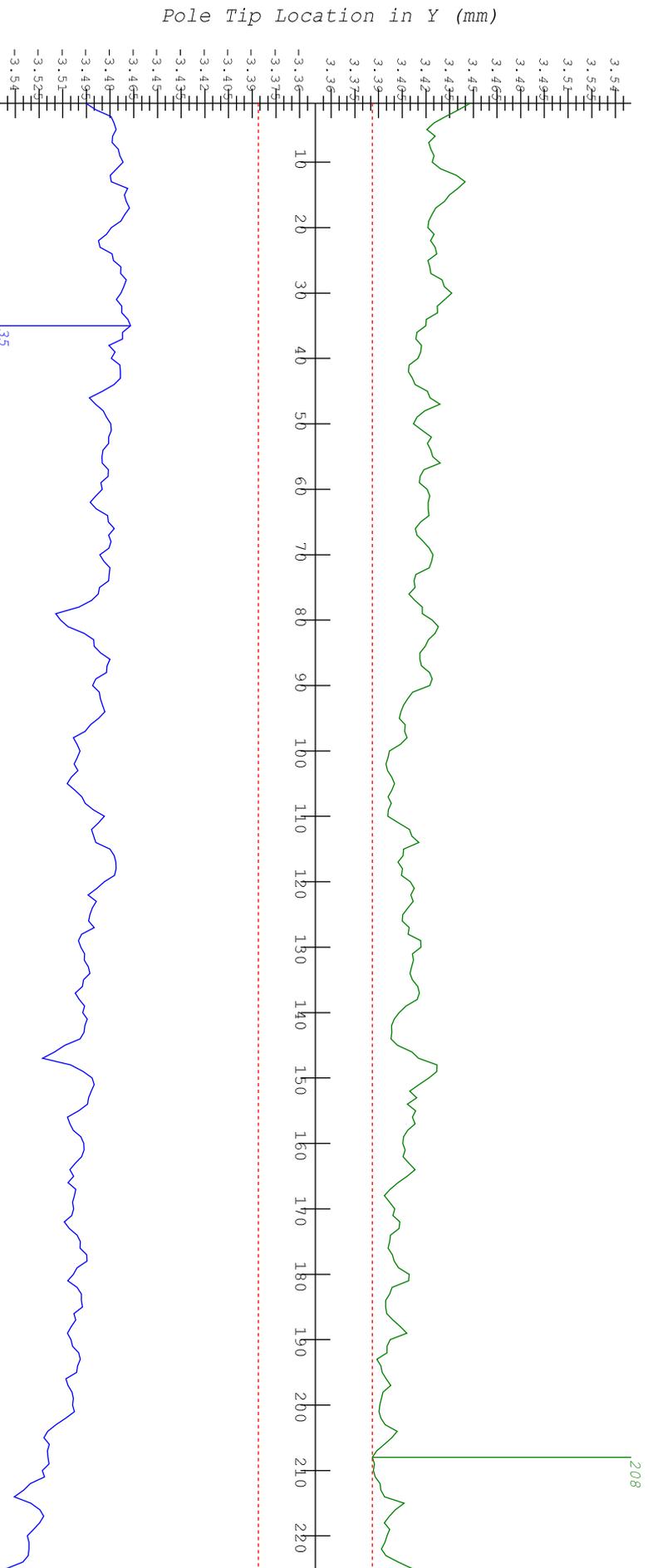


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 19-MAR-2009
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Maximum Chamber Gap = 6.7721

Minimum = 3.3860 Maximum = 3.4480 Range = 0.0620



Minimum = -3.5462 Maximum = -3.4670 Range = 0.0792

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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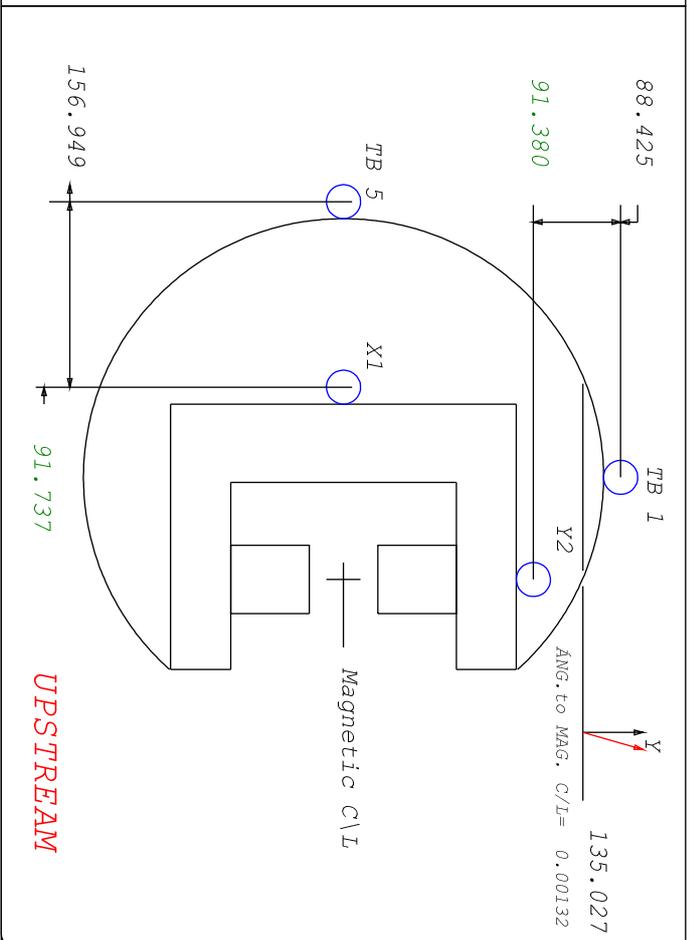
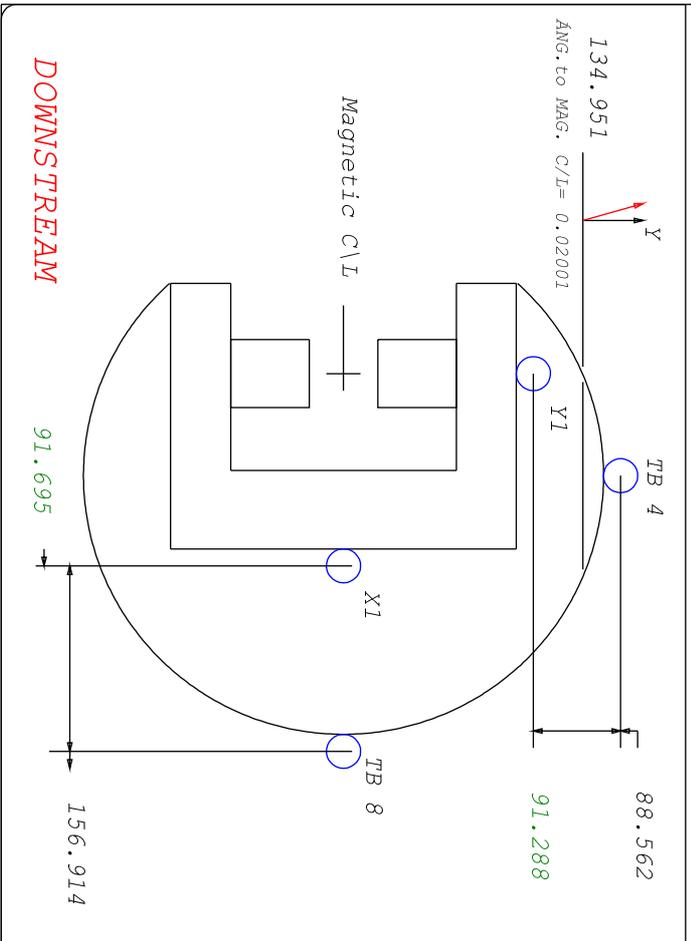
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.2567	179.8050	-1558.309
2	0.2678	179.7350	-584.7169
3	0.3859	179.7551	591.2702
4	0.3663	179.8498	1562.0888
5	248.6861	-0.0107	-1558.349
6	248.6715	-0.0329	-584.7575
7	248.7225	-0.0526	591.2605
8	248.6092	-0.0664	1562.0972

	C/L Offset	Length
Top Magnetic Structure	0.077	3381.092
Bottom Magnetic Structure	-0.077	3380.930
Strongback	0.242	3400.002

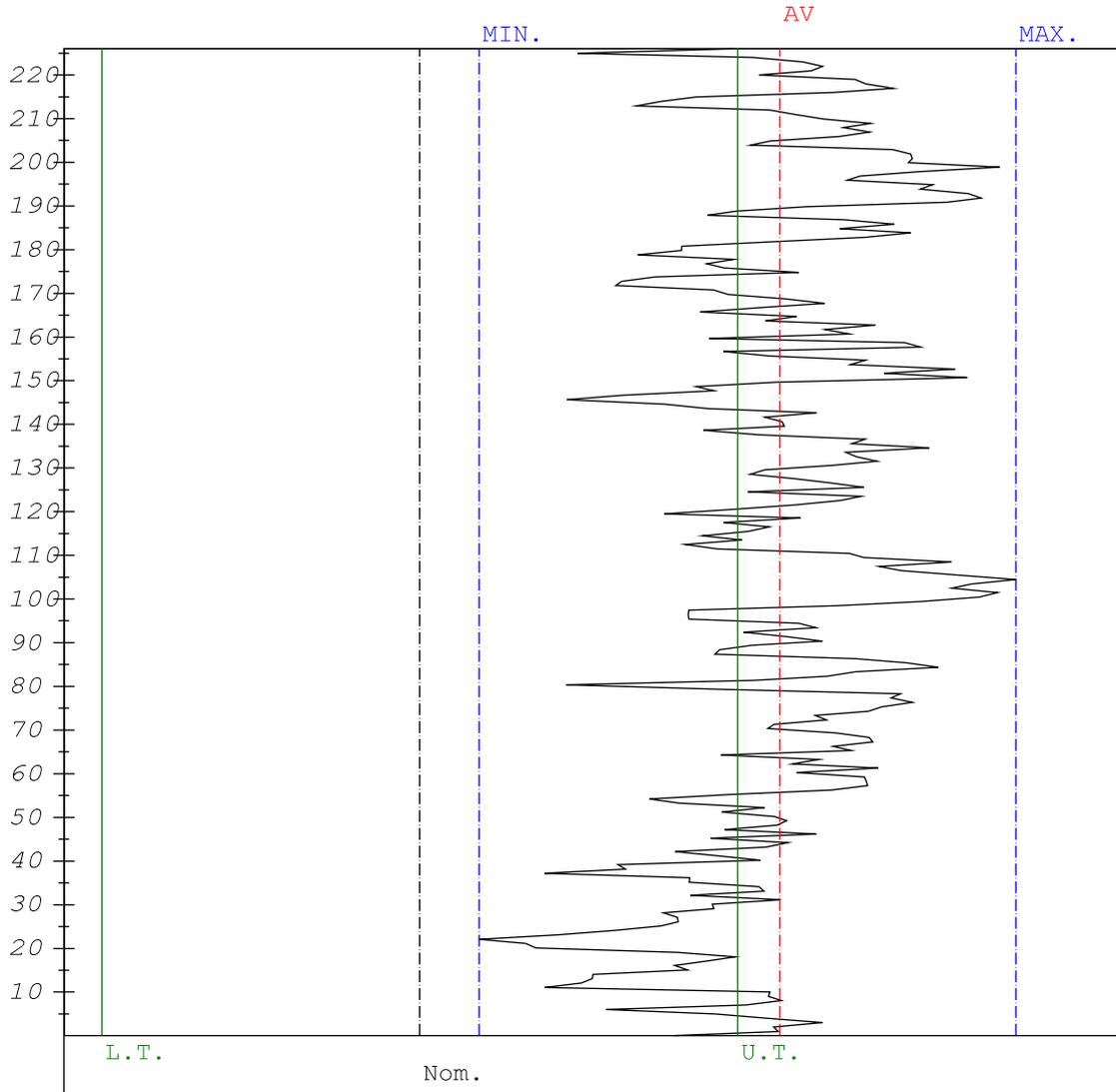
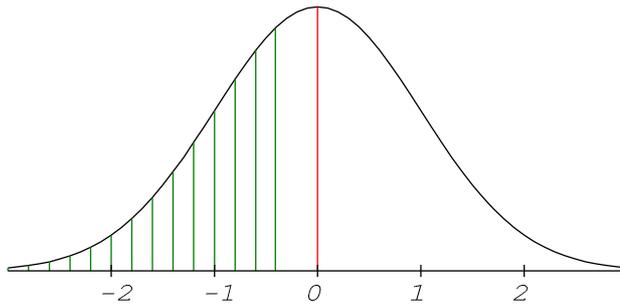
Dimensions in mm

Angles in mrad



Undulator Dimensional Fiducialization Post Magnetic Alignment

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Nominal : 4.5000	Averag : 5.0666	Cent.-Dev. : 0.5666
Up. Tol. : 0.5	Maximum : 5.4378	U.Tol.Ex. > : 65.9 %
Low.Tol. : -0.5	Minimum : 4.5936	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1622	In Tolerance: 34.1 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE:19-MAR-2009

UNDULATOR #22
DATASET #0002

PROGRAM VERSION 2.9