

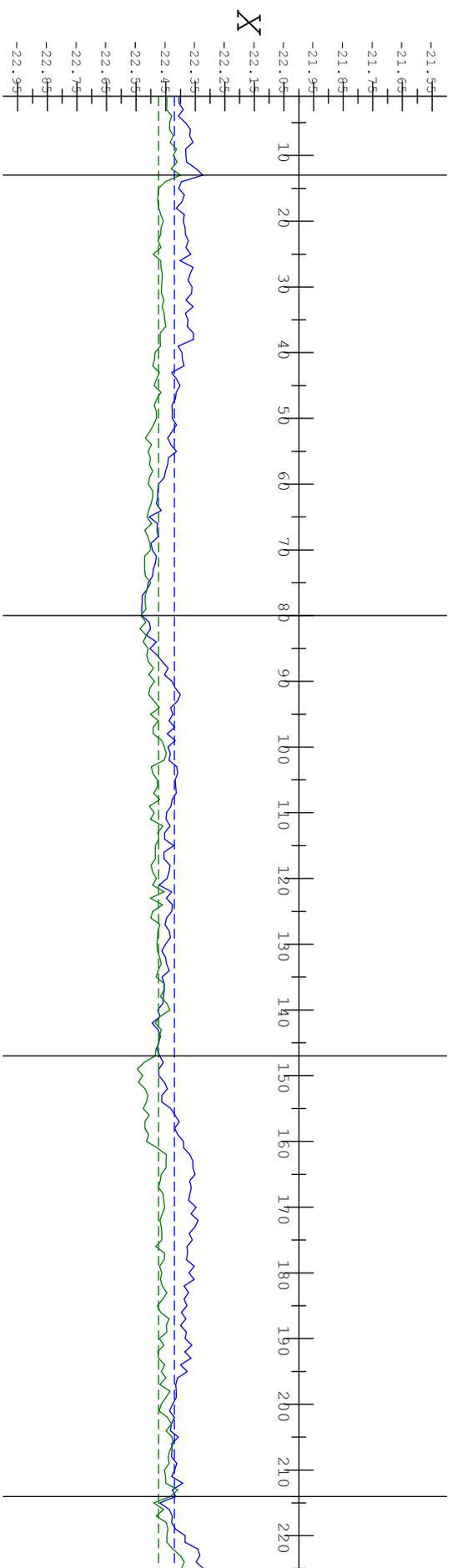
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 06-AUG-2009
 UNDULATOR #27
 DATASET # 0001
 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 = -22.474

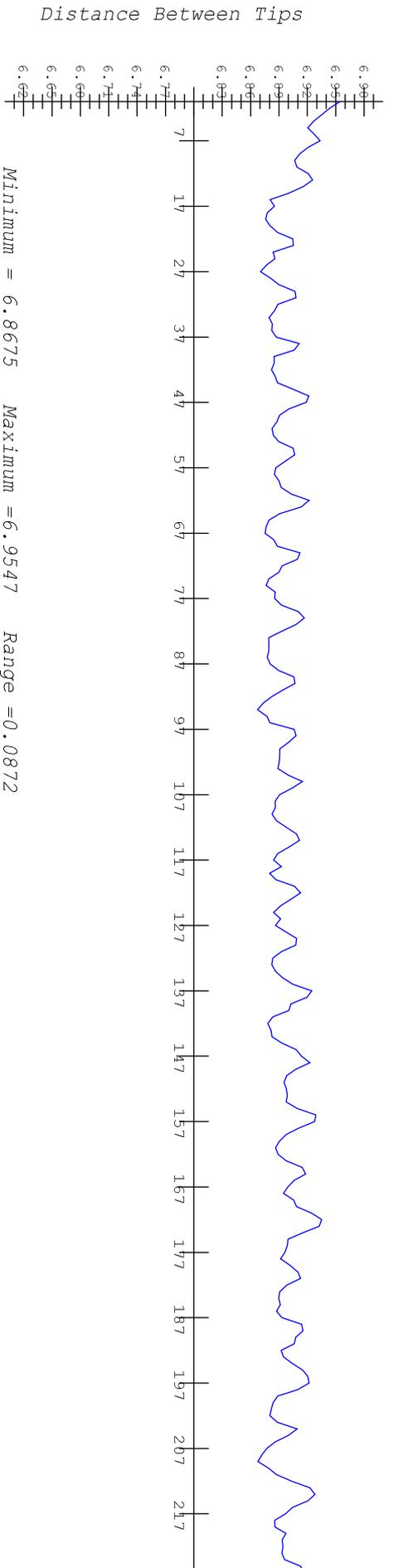
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.420



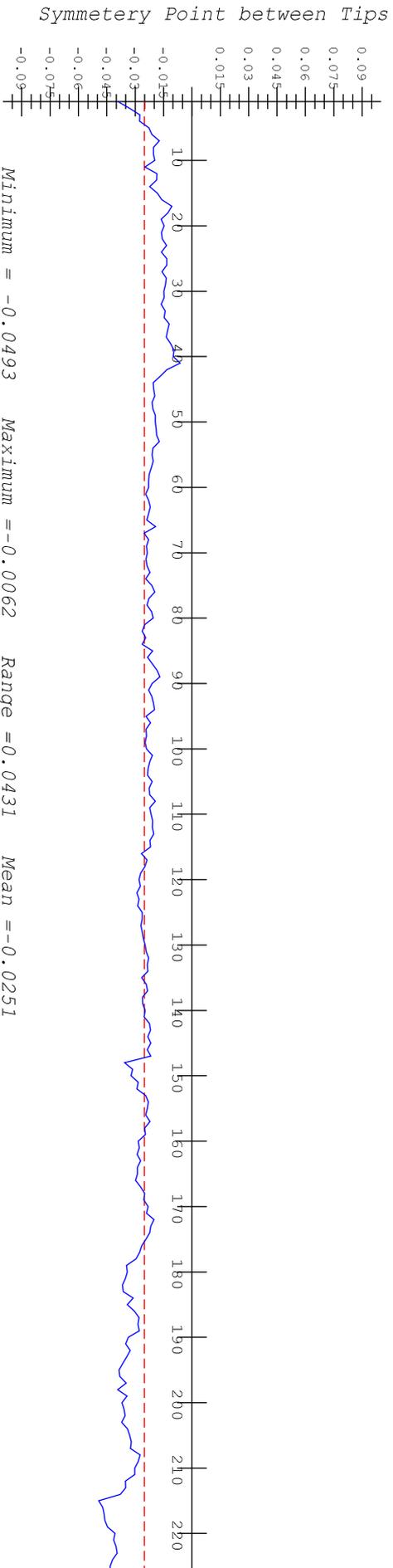
Undulator Pole Tip Location Post Magnetic Alignment

DATE: 06-AUG-2009
UNDULATOR #27
DATASET # 0001
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

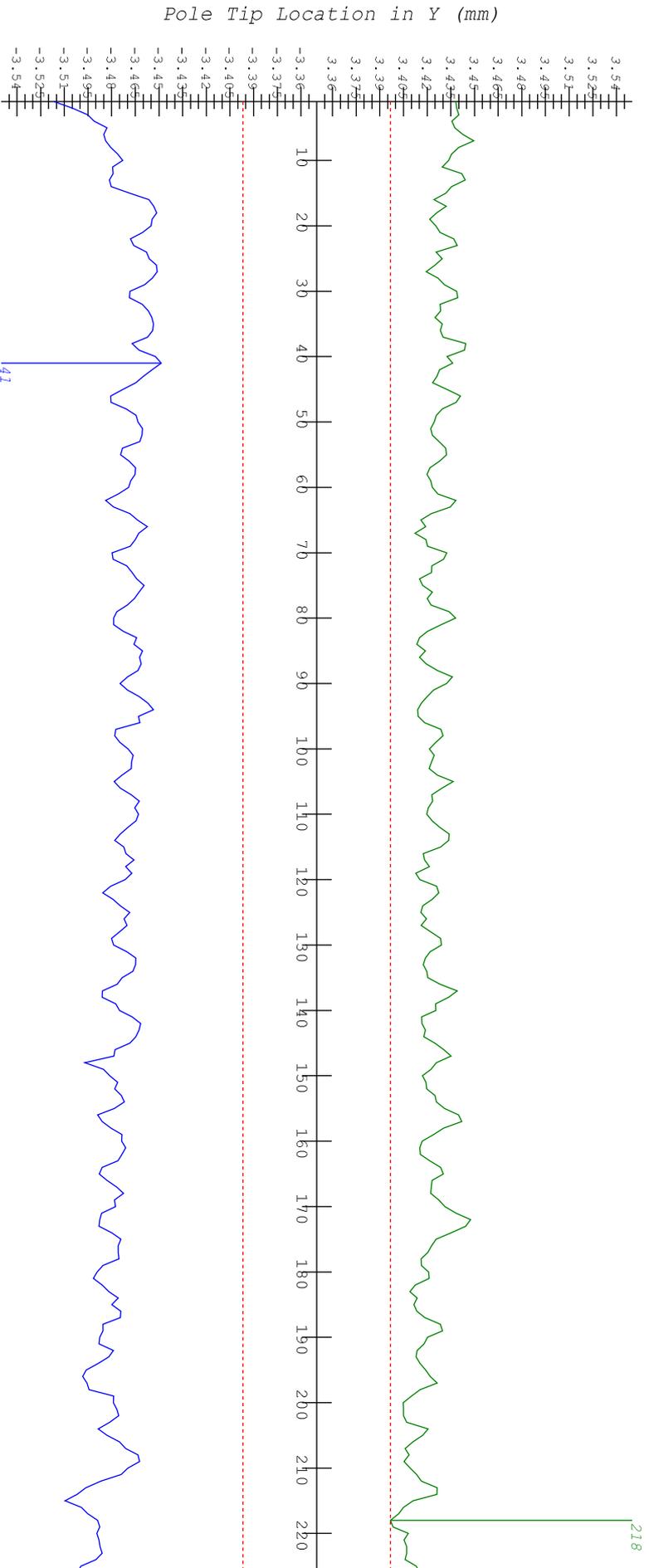


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 06-AUG-2009
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Maximum Chamber Gap = 6.7935

Minimum = 3.3968 Maximum = 3.4495 Range = 0.0527



Minimum = -3.5164 Maximum = -3.4486 Range = 0.0678

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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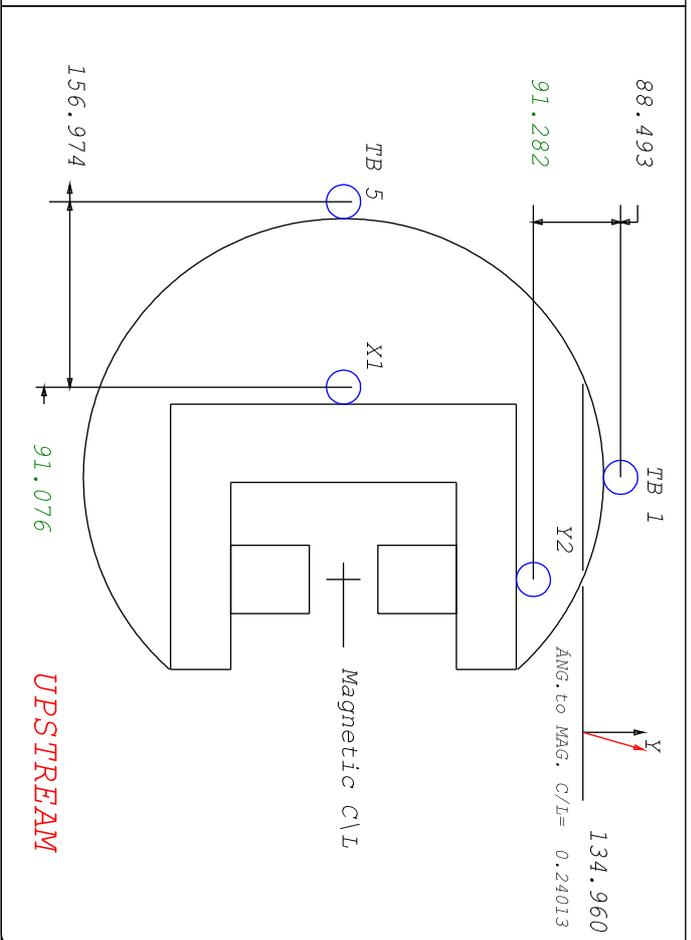
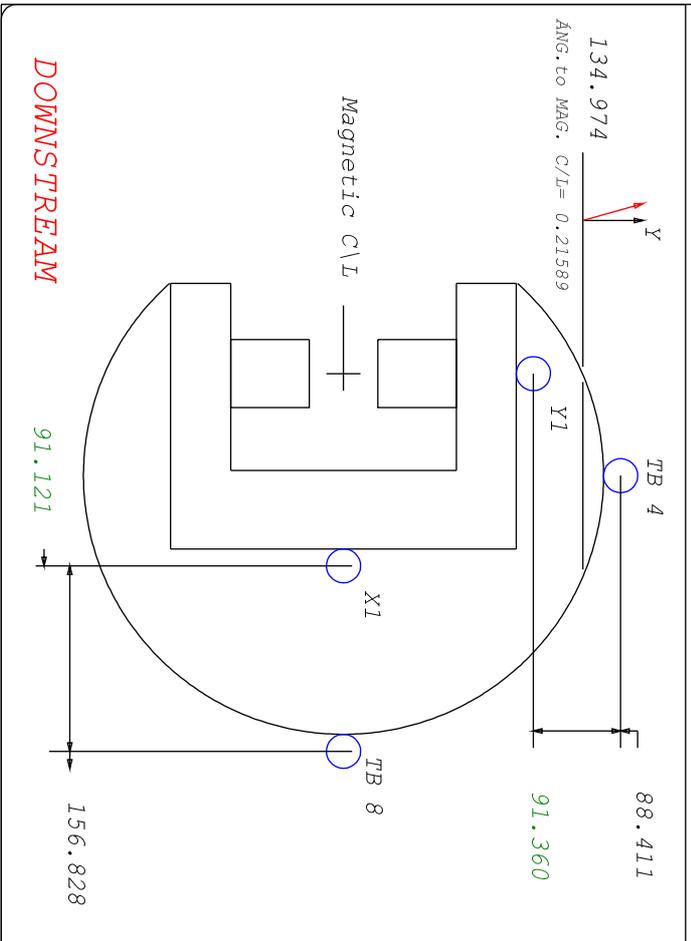
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	-0.2753	179.7749	-1558.407
2	-0.4589	179.7458	-584.6764
3	-0.4098	179.7050	591.3147
4	-0.4610	179.7708	1562.1612
5	248.0503	-0.0267	-1558.135
6	247.8938	0.0964	-584.5996
7	247.8491	0.0627	591.3833
8	247.9489	-0.0335	1562.2438

	C/L Offset	Length
Top Magnetic Structure	-0.010	3380.998
Bottom Magnetic Structure	0.010	3381.055
Strongback	0.395	3399.825

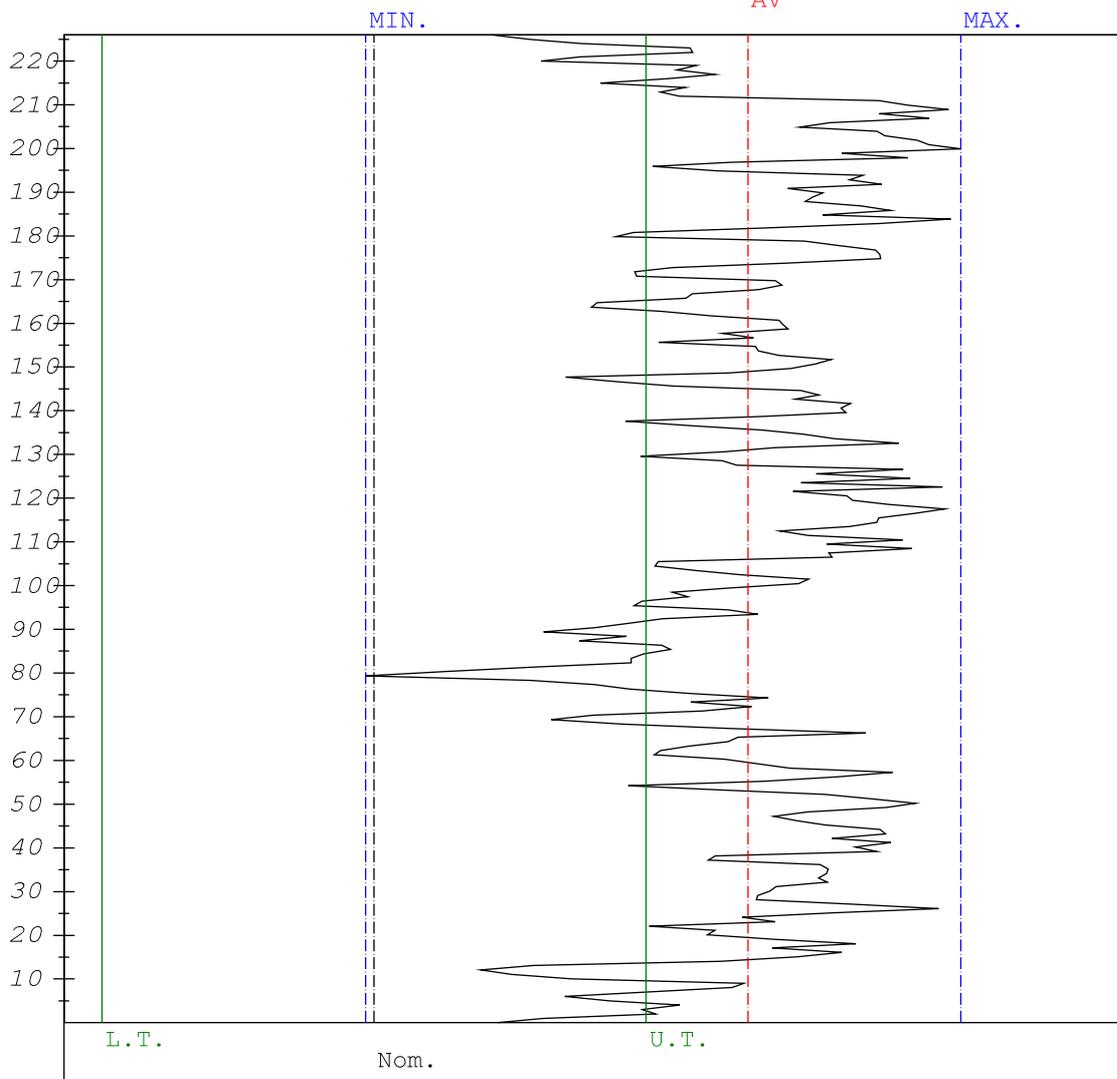
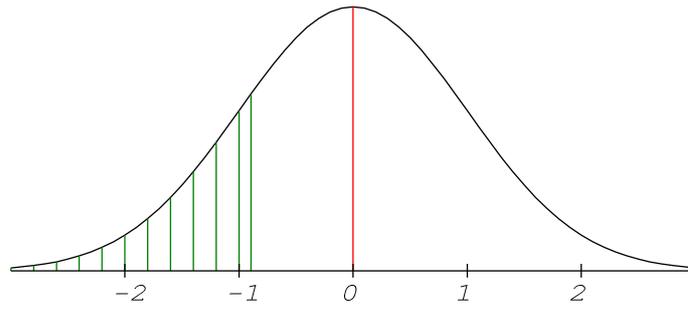
Dimensions in mm

Angles in mrad



Undulator Dimensional Fiducialization Post Magnetic Alignment

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Nominal : 4.5000	Averag : 5.1878	Cent.-Dev. : 0.6878
Up. Tol. : 0.5	Maximum : 5.5785	U.Tol.Ex. > : 81.5 %
Low.Tol. : -0.5	Minimum : 4.4850	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2097	In Tolerance: 18.5 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 06-AUG-2009

UNDULATOR #27
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PROGRAM VERSION 2.9