

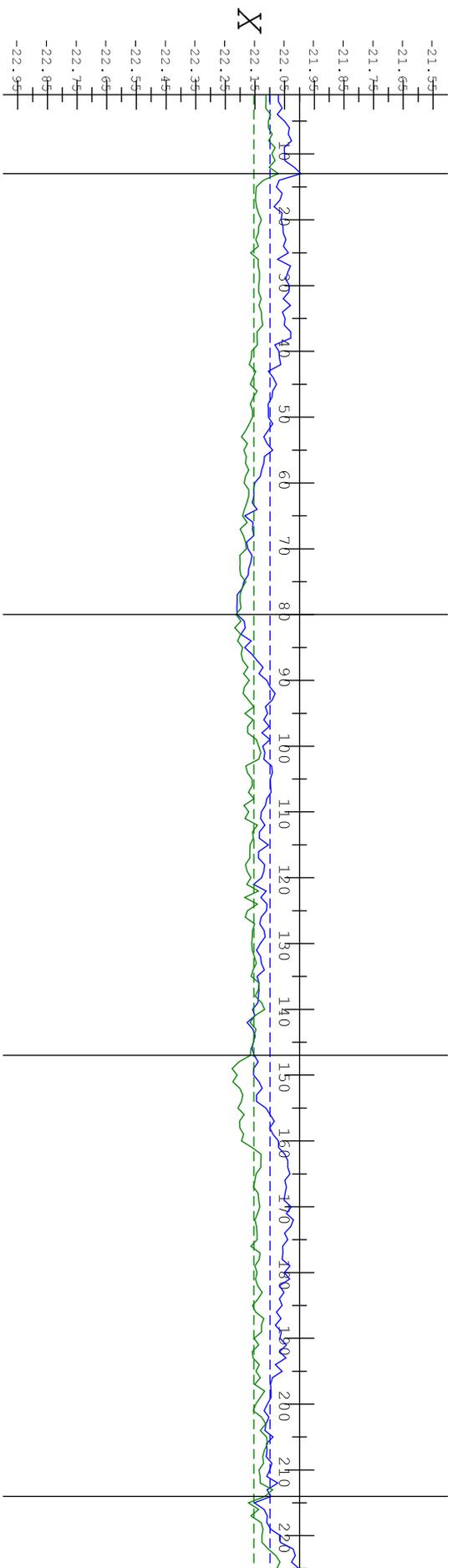
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 06-JUL-2009
 UNDUULATOR # 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 = -22.154

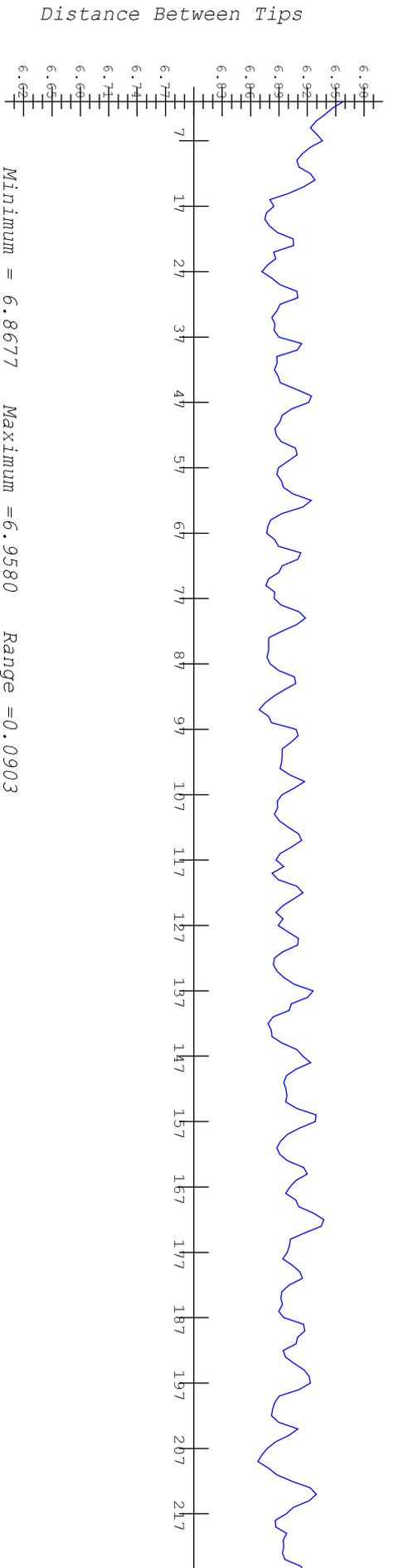
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.099



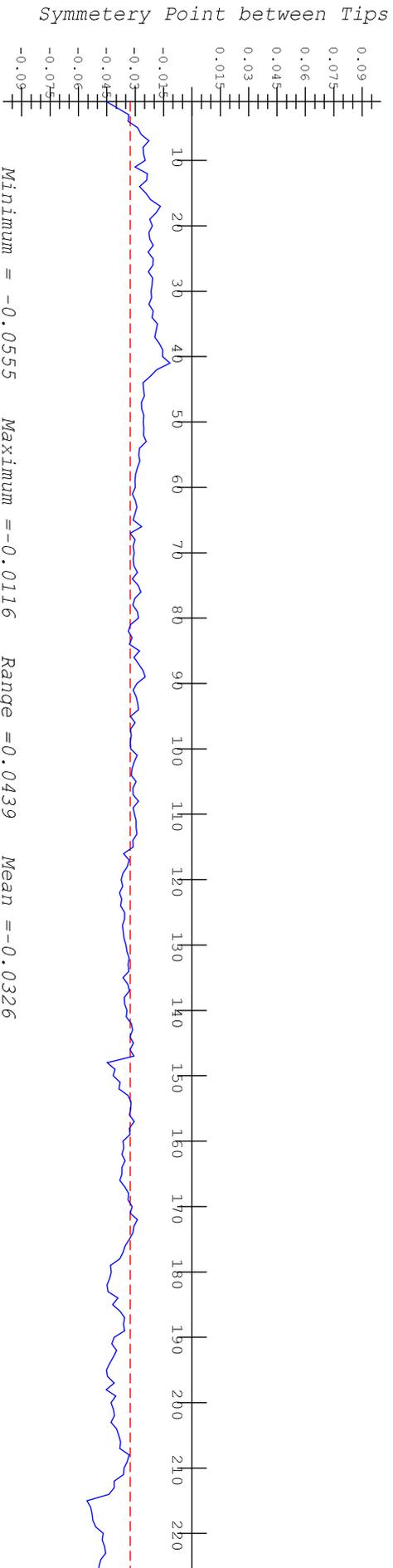
Undulator Pole Tip Location
Post Magnetic Alignment

DATE: 06-JUL-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

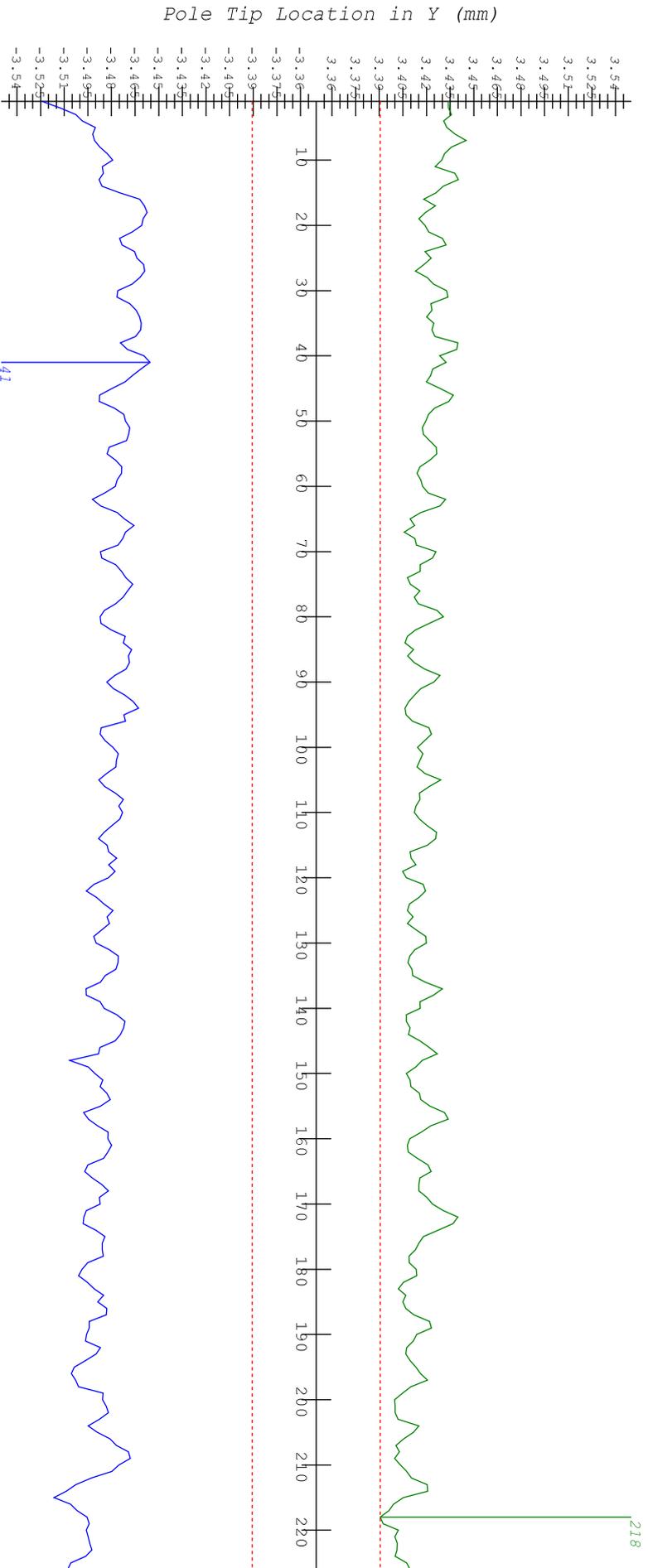


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 06-JUL-2009
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 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.7814

Minimum = 3.3907 Maximum = 3.4452 Range = 0.0545



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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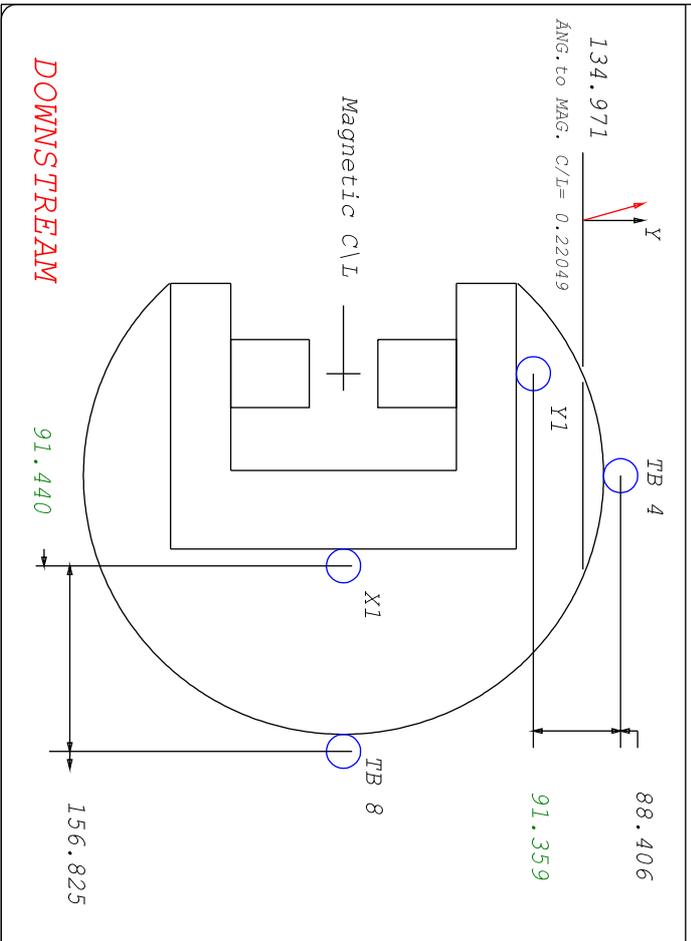
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.0623	179.7696	-1558.404
2	-0.1349	179.7401	-584.6740
3	-0.0934	179.6997	591.3162
4	-0.1405	179.7653	1562.1619
5	248.3846	-0.0446	-1558.119
6	248.2149	0.0884	-584.5950
7	248.1636	0.0527	591.3859
8	248.2654	-0.0378	1562.2401

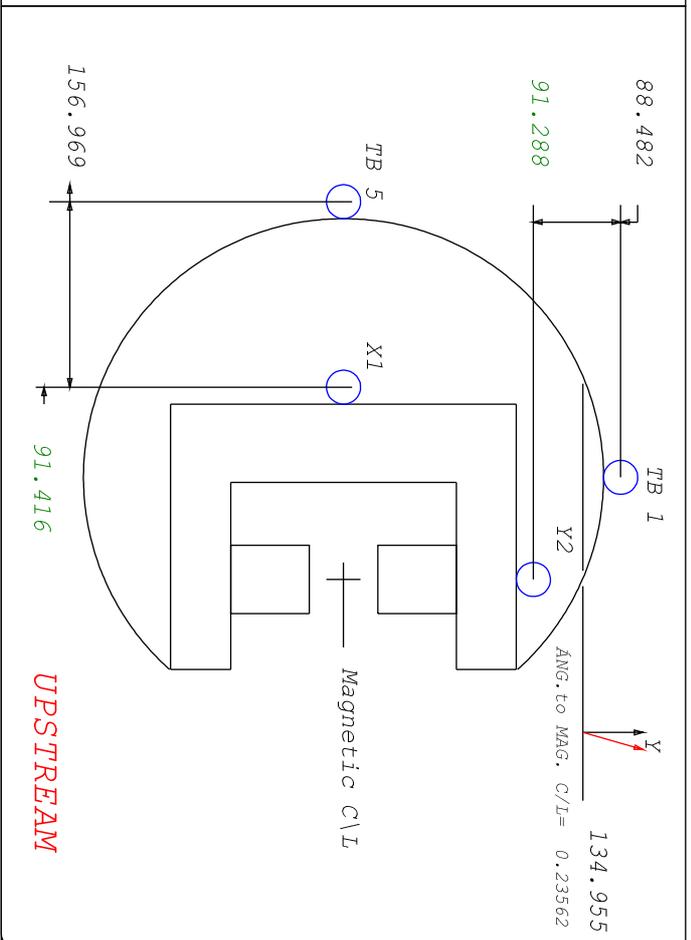
	C/L Offset	Length
Top Magnetic Structure	-0.010	3380.988
Bottom Magnetic Structure	0.010	3381.044
Strongback	0.397	3399.817

Dimensions in mm

Angles in mrad



DOWNSTREAM



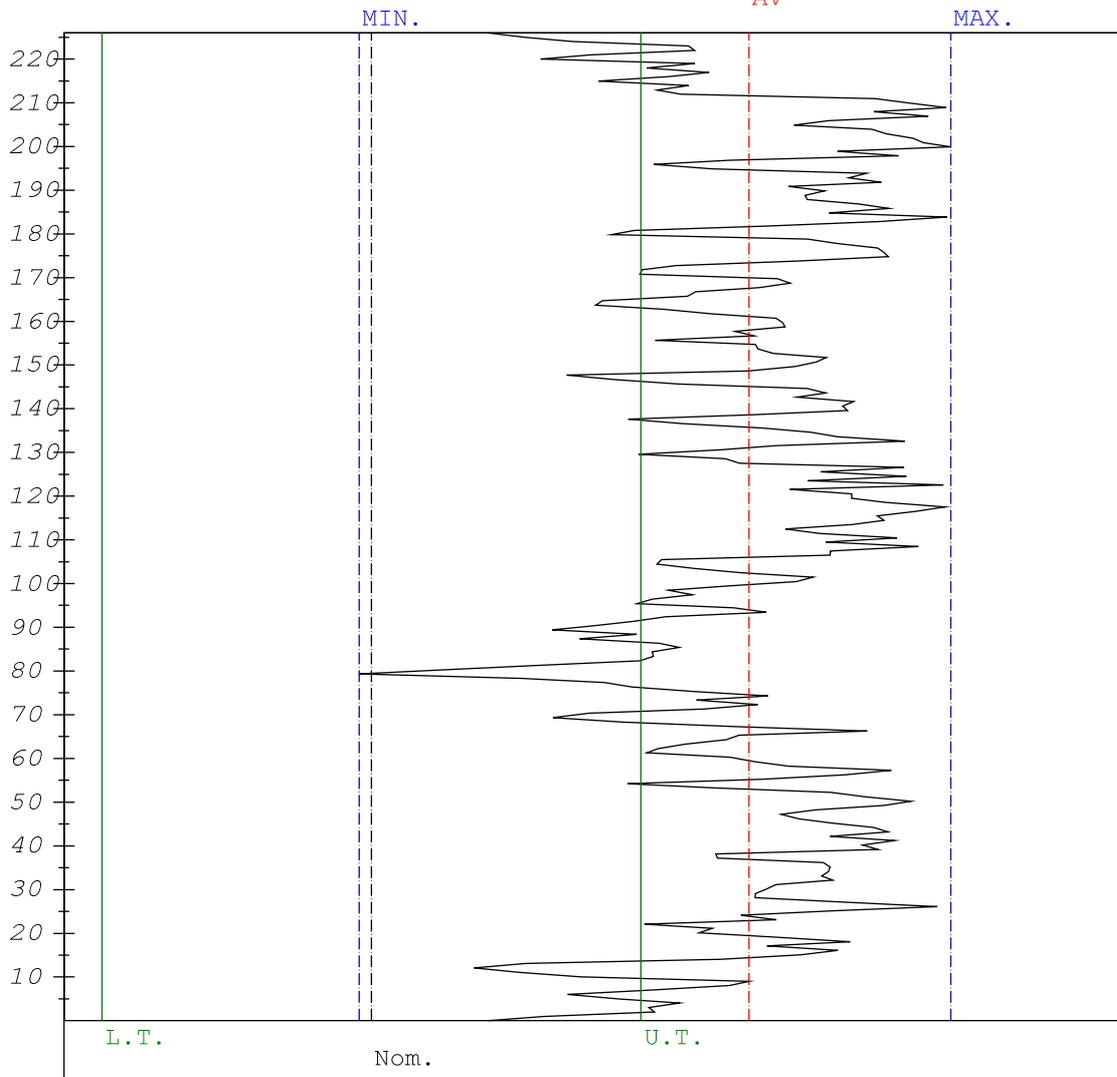
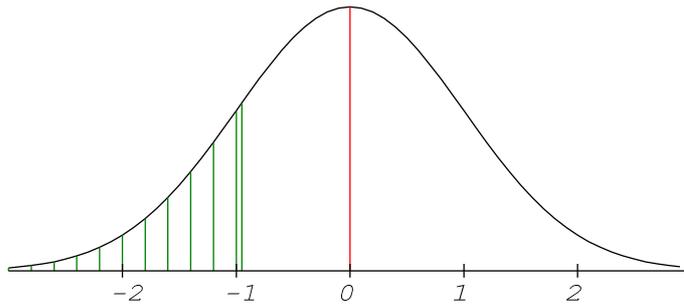
UPSTREAM



MMF GRE 45129

Undulator Dimensional Fiducialization Post Magnetic Alignment

DATE: 06-JUL-2009
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 PROGRAM VERSION 2.9



Nominal : 4.5000	Averag : 5.201	Cent.-Dev. : 0.701
Up. Tol. : 0.5	Maximum : 5.5755	U.Tol.Ex. > : 82.9 %
Low.Tol. : -0.5	Minimum : 4.4772	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2112	In Tolerance: 17.1 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

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PROGRAM VERSION 2.9