

Pole Tip Number ----->

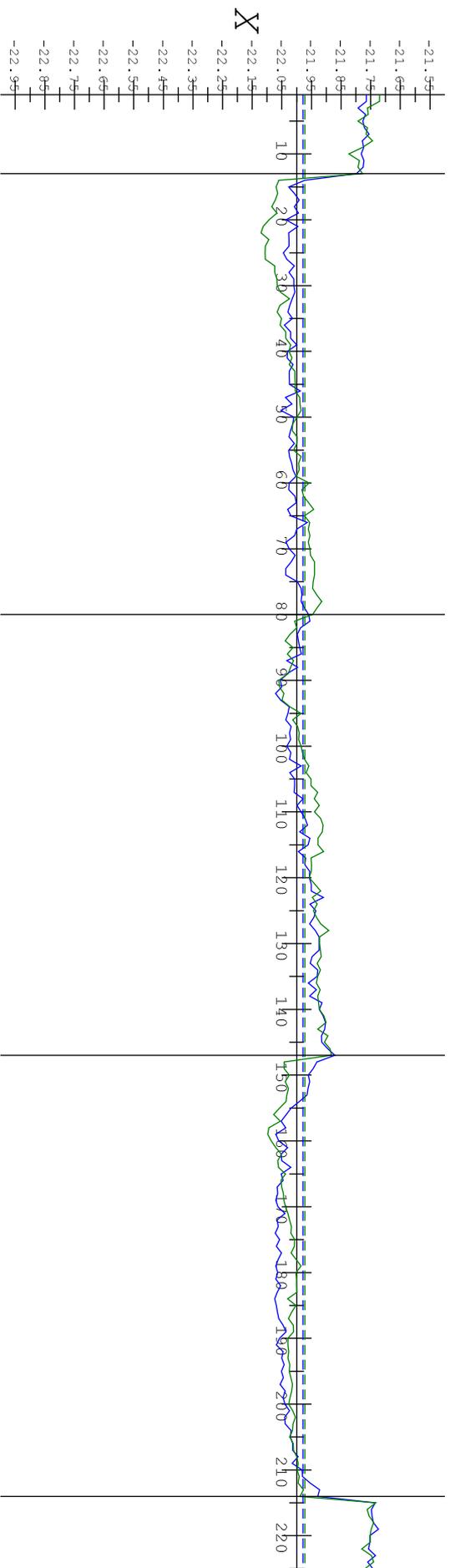
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 13-APR-2009
 UNDUULATOR #14
 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 = -21.972

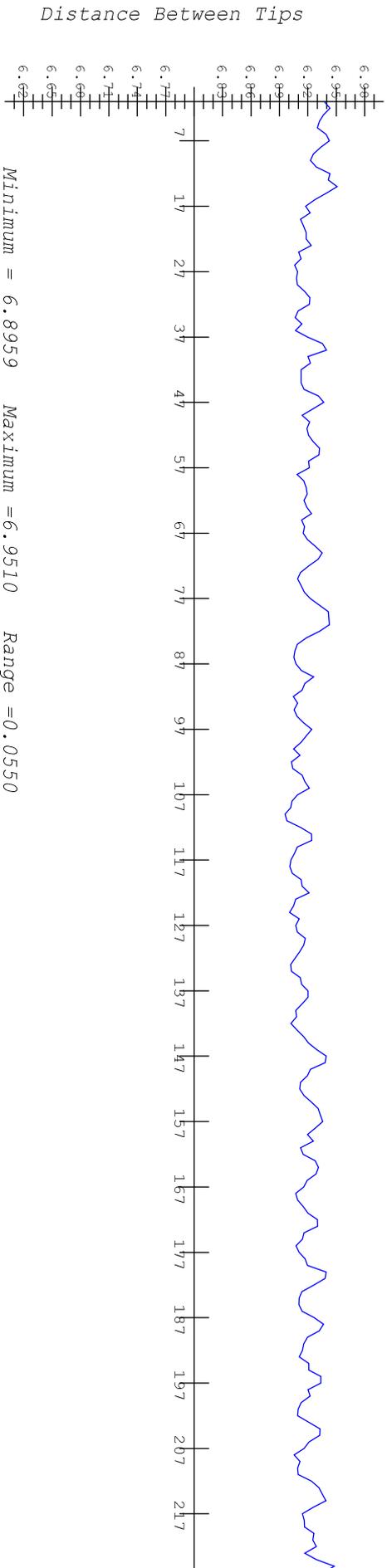
Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -21.979



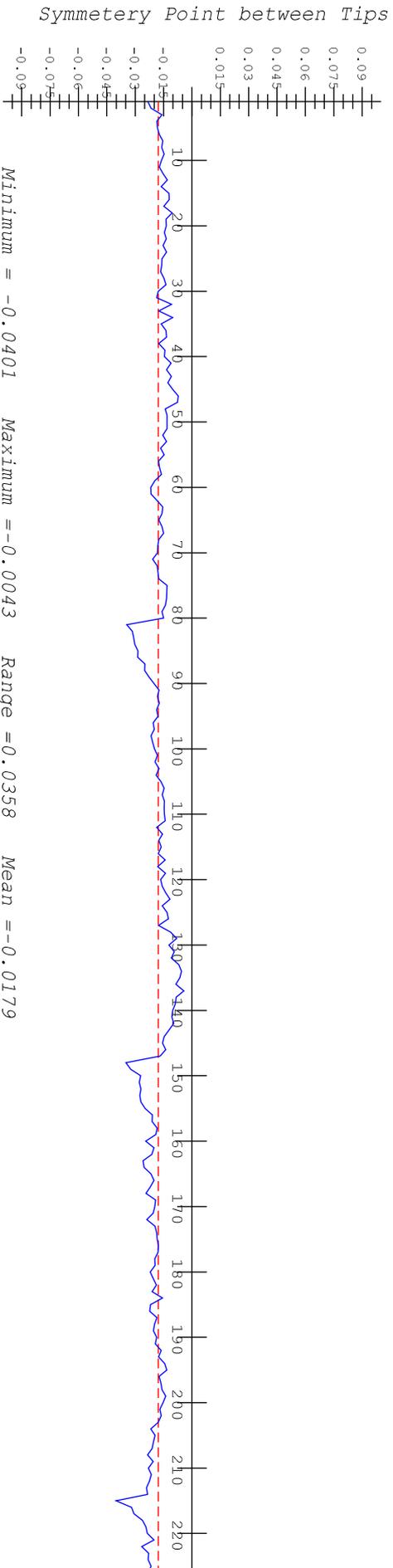
Undulator Pole Tip Location
Post Magnetic Alignment

DATE: 13-APR-2009
UNDULATOR #14
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

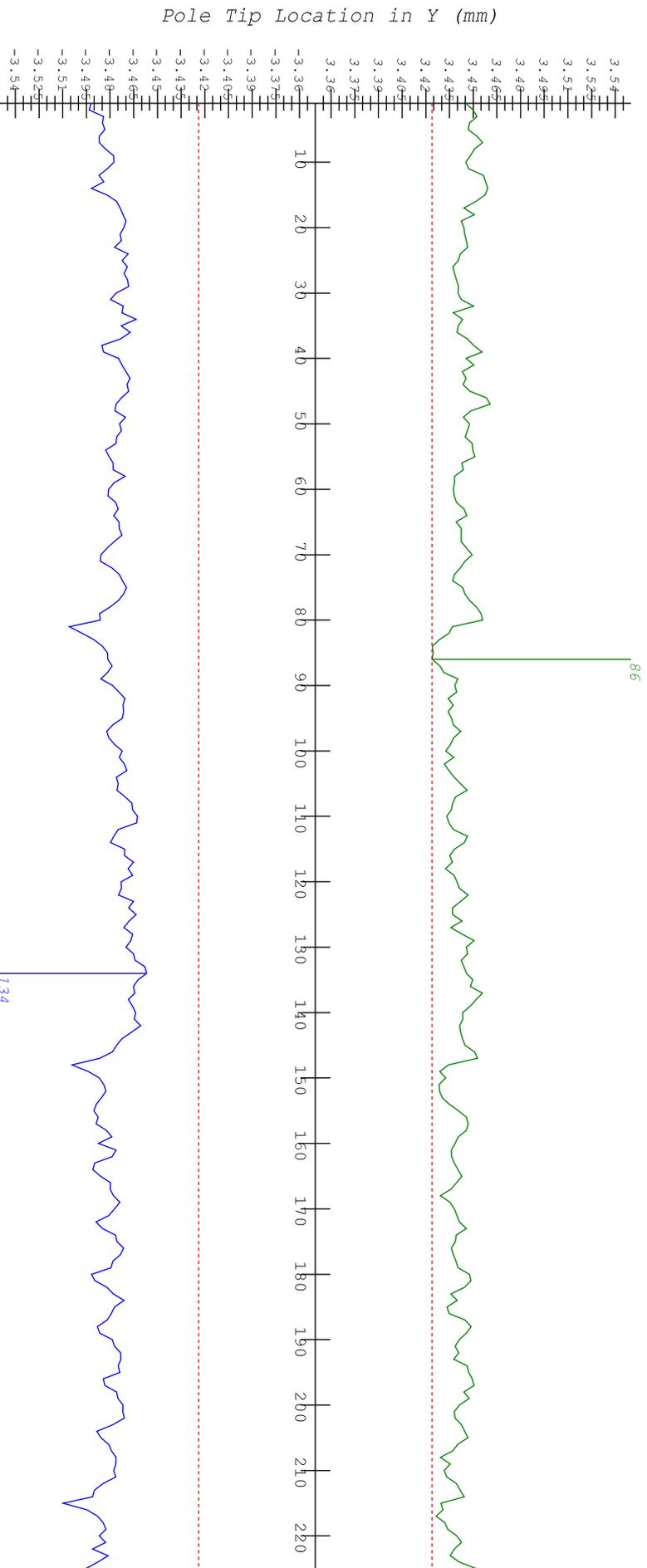


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 13-APR-2009
 UNDUULATOR #14
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 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.8478

Minimum = 3.4239 Maximum = 3.4608 Range = 0.0368



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: 13-APR-2009
UNDULATOR #14
DATASET # 0002
PROGRAM VERSION 2.9



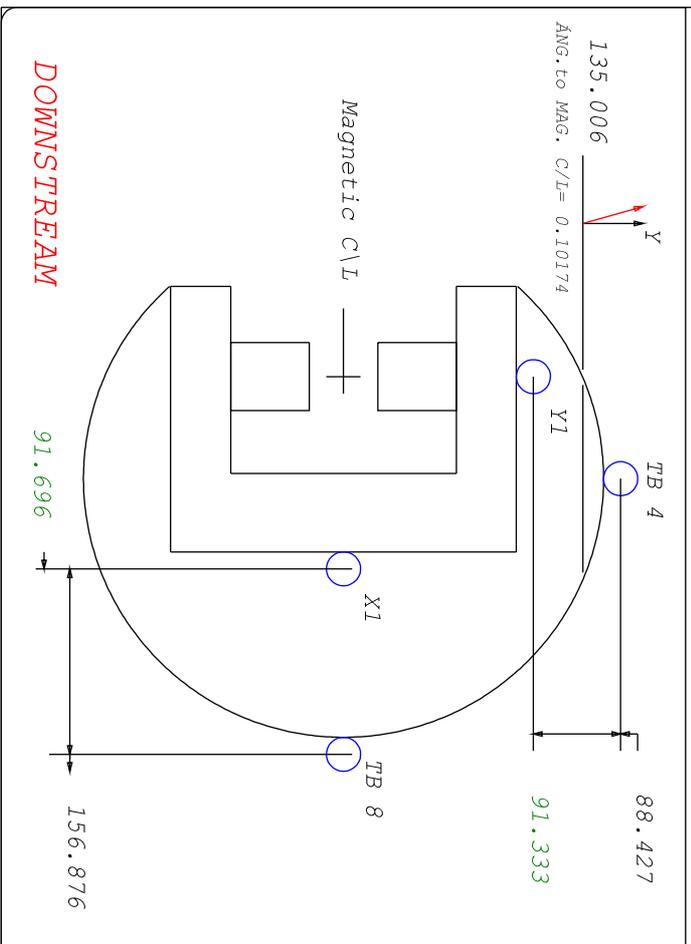
----- TOOLING BALL LOCATIONS -----

NUM.	X	Y	Z
1	0.3440	179.8441	-1558.210
2	0.3761	179.6973	-584.6248
3	0.4711	179.7094	591.3889
4	0.3509	179.7601	1562.3628
5	248.6235	-0.0594	-1558.270
6	248.6530	0.0363	-584.5729
7	248.7327	0.0585	591.4884
8	248.5725	0.0078	1562.3289

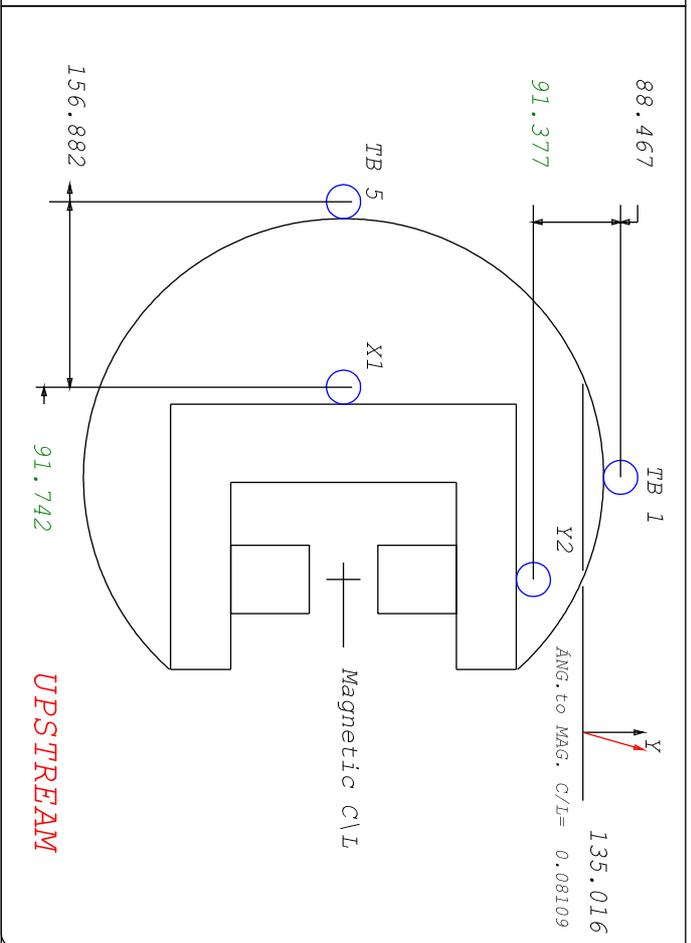
	C/L Offset	Length
Top Magnetic Structure	0.013	3380.996
Bottom Magnetic Structure	-0.013	3380.922
Strongback	0.423	3399.999

Dimensions in mm

Angles in mrad



DOWNSTREAM

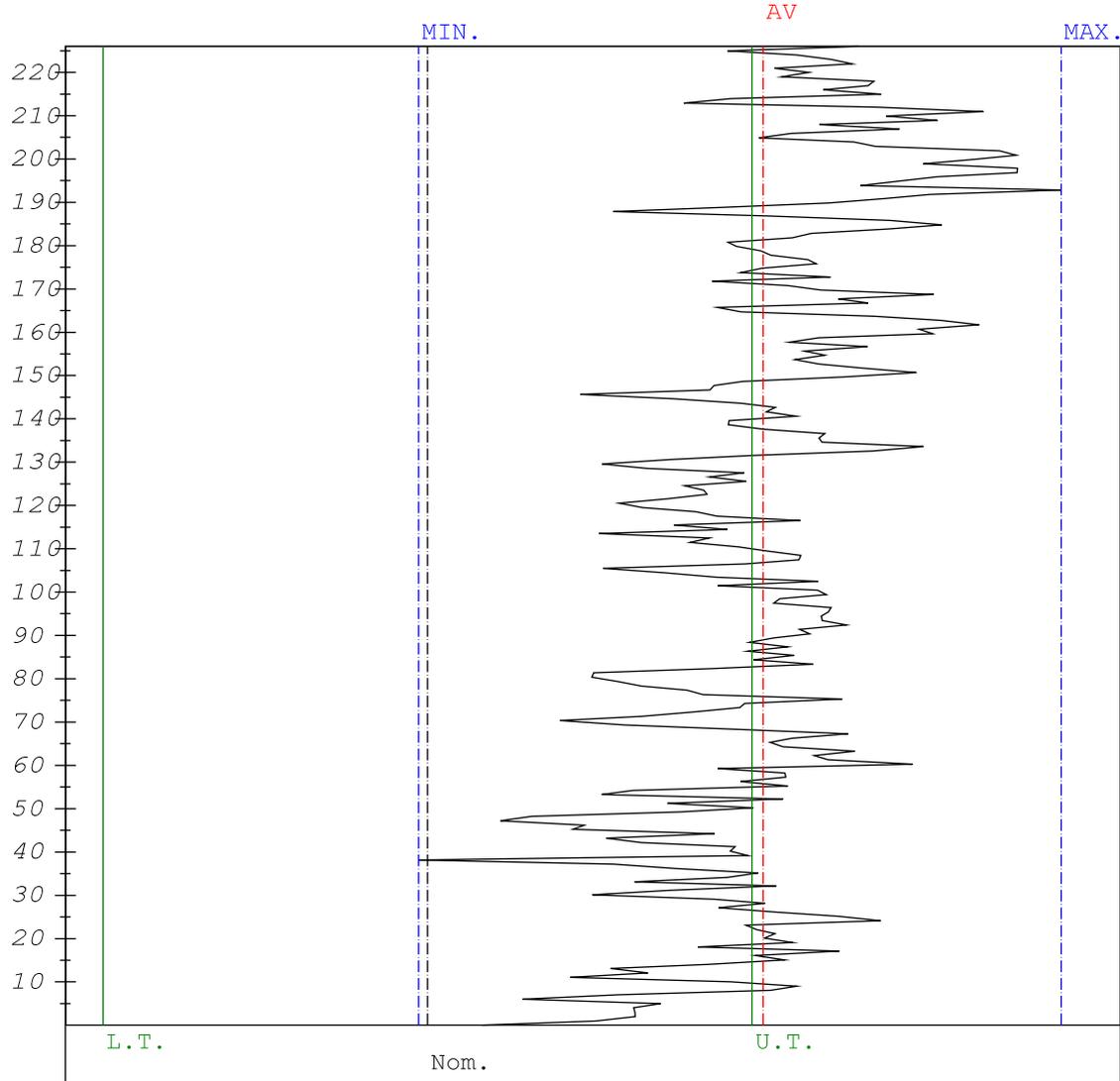
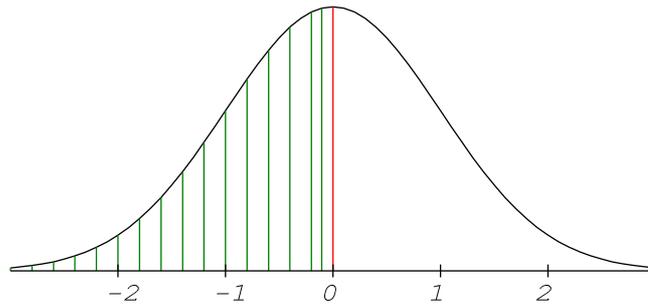


UPSTREAM



Undulator Dimensional Fiducialization Post Magnetic Alignment

DATE: 13-APR-2009
UNDULATOR #14
DATASET # 0002
PROGRAM VERSION 2.9



Nominal : 4.5000	Averag : 5.0172	Cent.-Dev. : 0.5172
Up. Tol. : 0.5	Maximum : 5.4762	U.Tol.Ex. > : 54.2 %
Low.Tol. : -0.5	Minimum : 4.4865	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1641	In Tolerance: 45.8 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
Pole Tip Gap Angle
Post Magnetic Alignment

DATE: 13-APR-2009
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PROGRAM VERSION 2.9