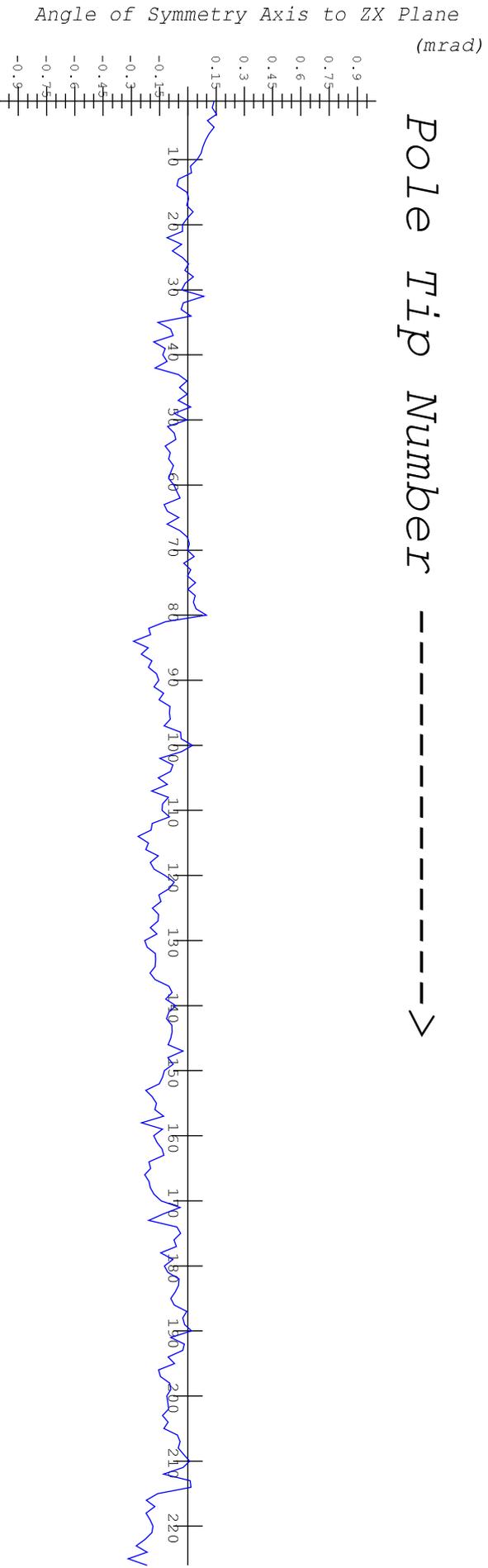


Pole Tip Number ----->



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

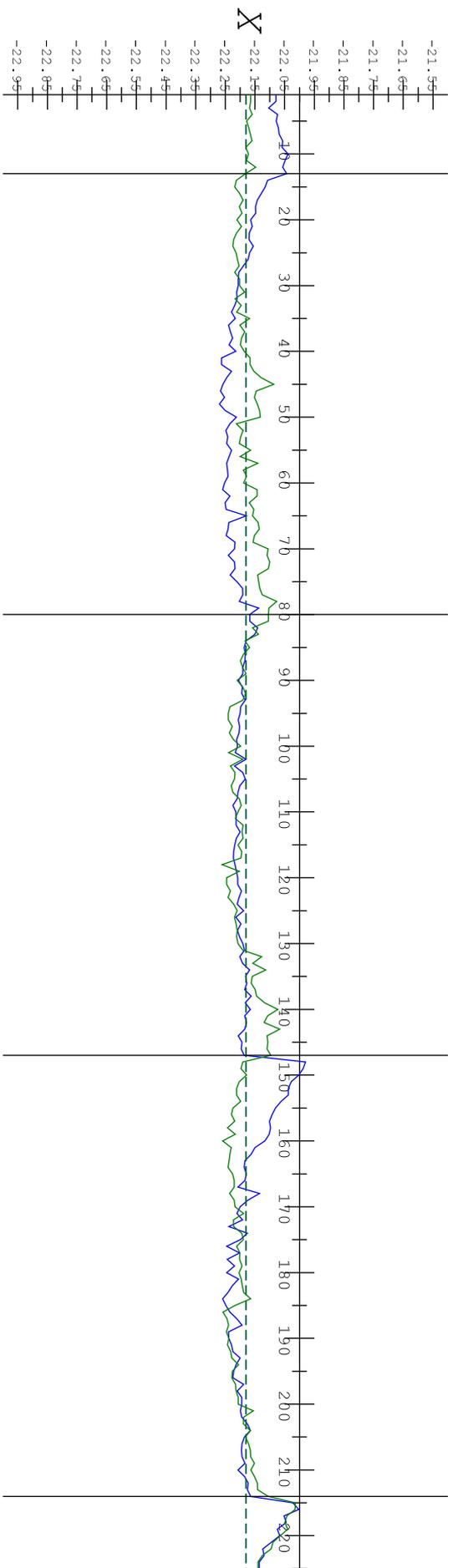


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Undulator Pole Tip Angles
 Post Magnetic Alignment

DATE: 22-JAN-2009
 UNDULATOR # 35
 DATASET # 0003
 PROGRAM VERSION 2.8

Pole Tip Number ----->



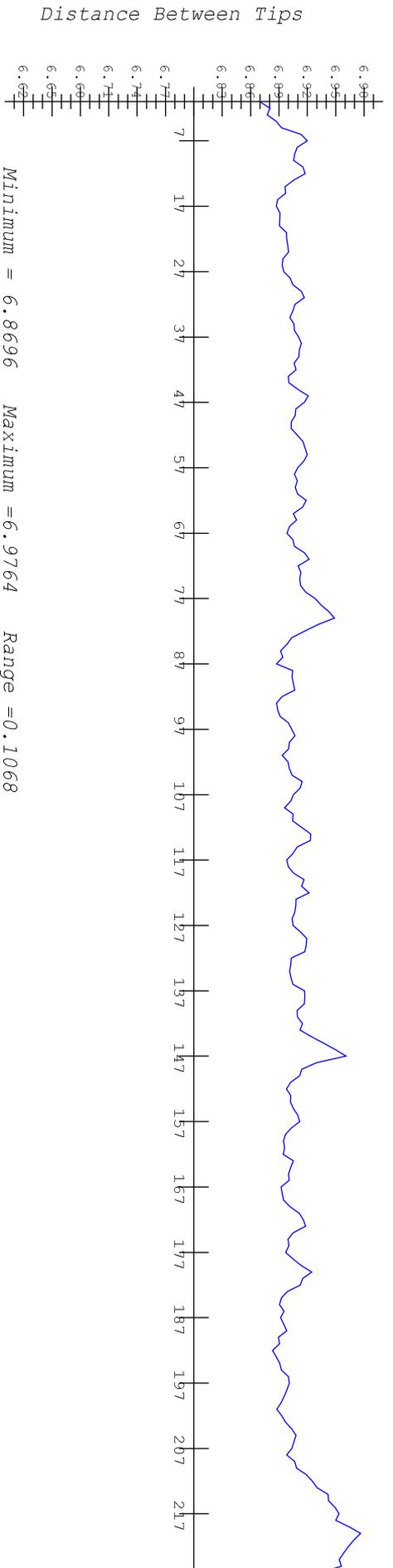
X values in mm
 Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L Mean value Upper Pole Tips = -22.180
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L
 Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L Mean value Lower Pole Tips = -22.181



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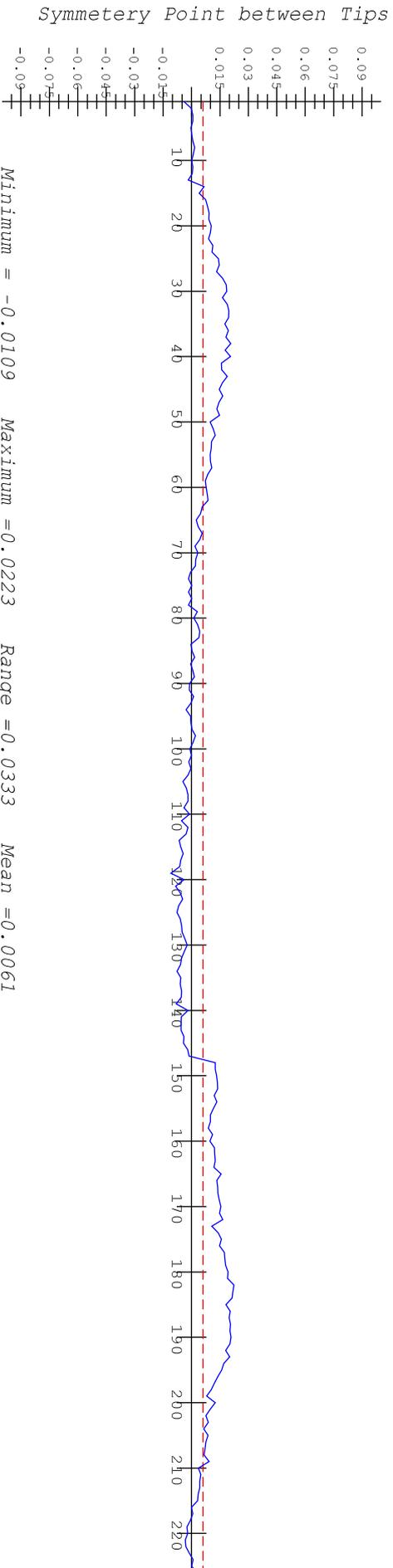
Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 22-JAN-2009
 UNDUULATOR # 35
 DATASET # 0003
 PROGRAM VERSION 2.8



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



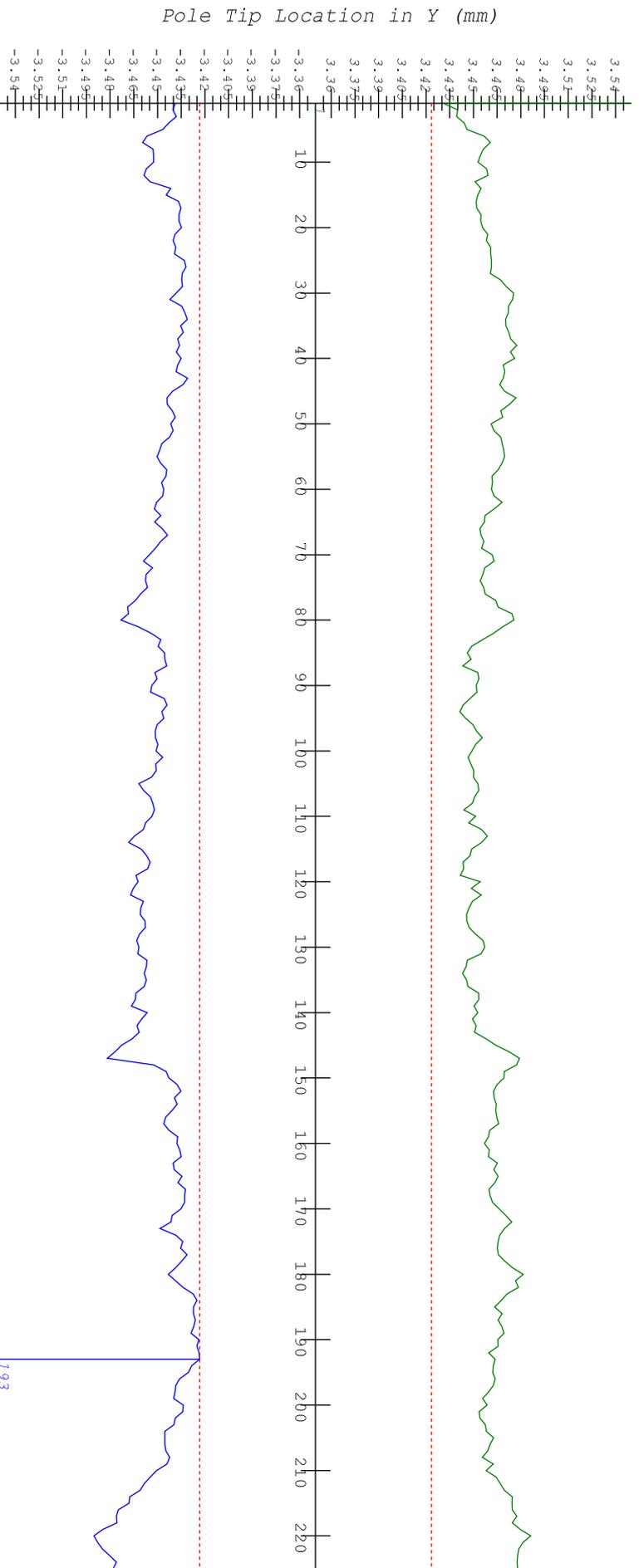
Undulator Pole Tip Location
 Post Magnetic Alignment

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 DATASET # 0003
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Maximum Chamber Gap = 6.8468

Minimum = 3.4309 Maximum = 3.4862 Range = 0.0554



Pole Tip Number ----->

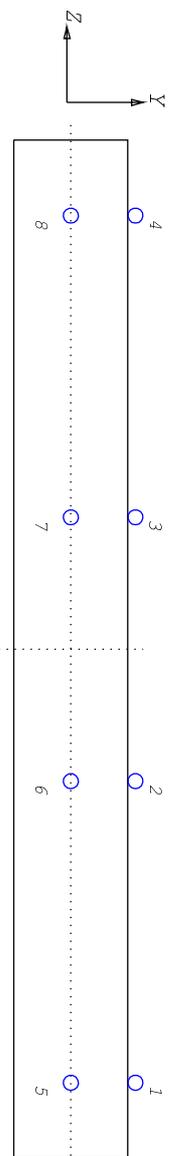
Green = The position of the Upper Pole Tips at Magnetic C\L
Blue = The position of the Lower Pole Tips at Magnetic C\L
Max. Chamber Gap = The maximum width vacuum chamber that will fit centered on the Magnetic C\L (2*Min. Dev. from C\L)



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Undulator Pole Tip Location
Post Magnetic Alignment

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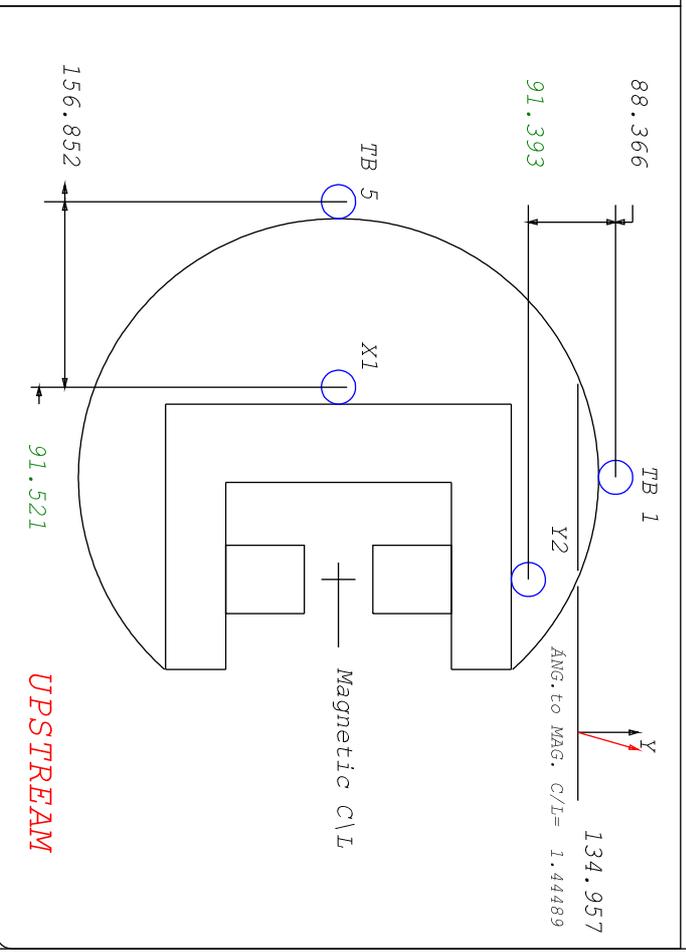
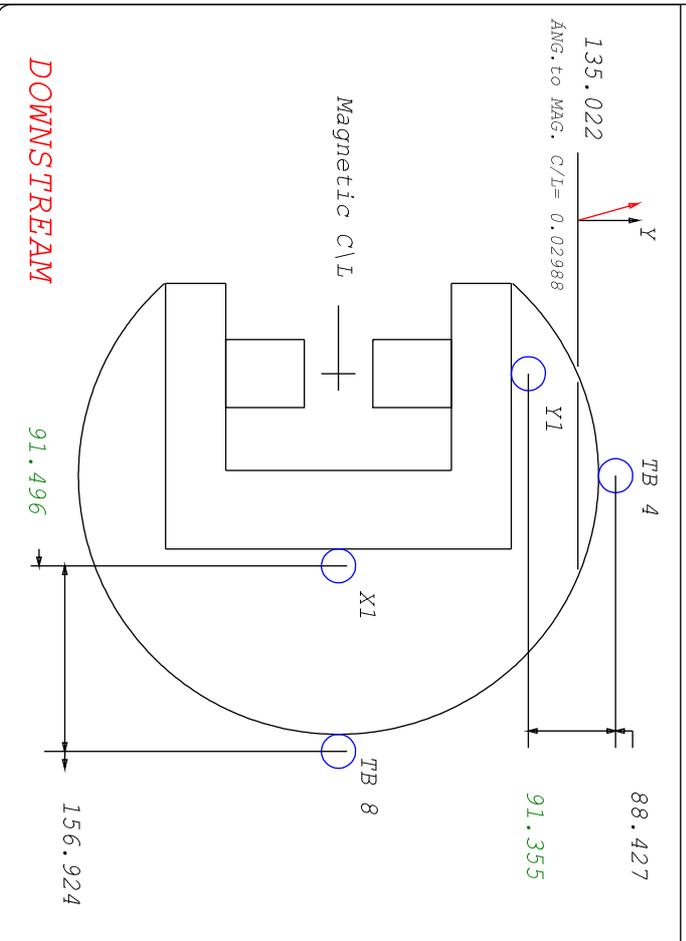


TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.0985	179.7591	-1558.346
2	0.1489	179.6973	-584.7863
3	0.2693	179.7081	591.3322
4	0.2197	179.7818	1562.1396
5	248.3732	0.1182	-1558.325
6	248.4885	0.1144	-584.6950
7	248.5083	0.0845	591.3047
8	248.4203	-0.0171	1562.1614

	C/L Offset	Length
Top Magnetic Structure	0.092	3381.336
Bottom Magnetic Structure	-0.092	3381.291
Strongback	0.271	3400.037

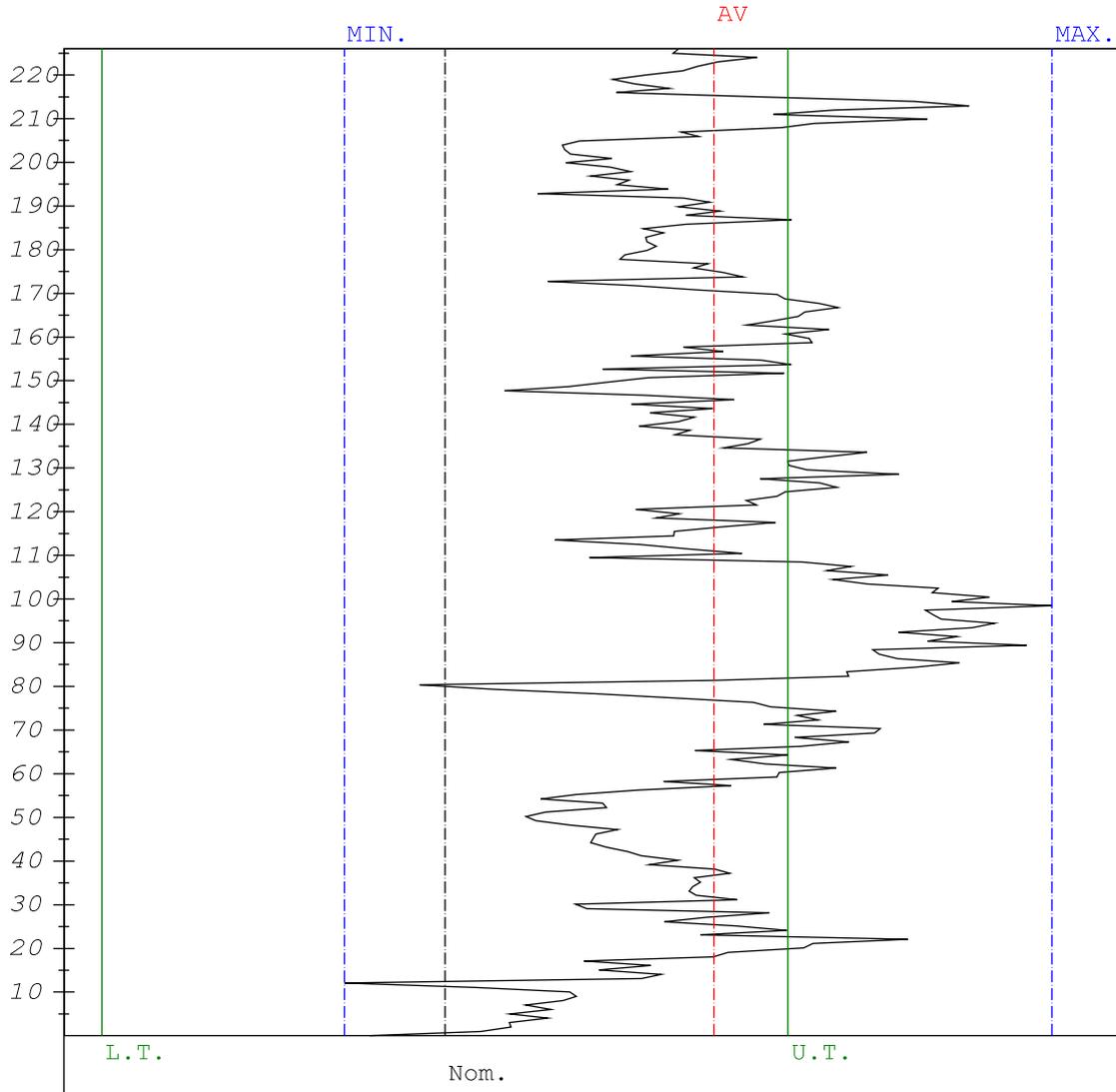
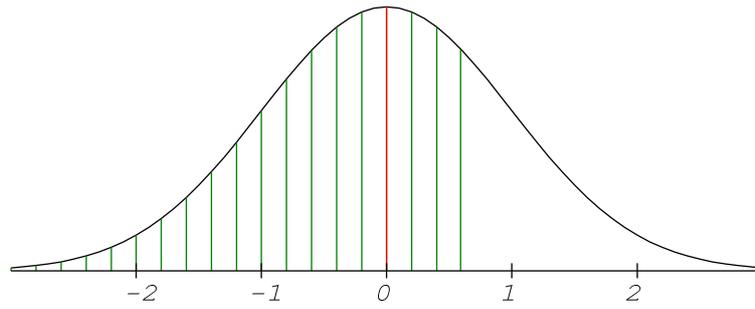
Dimensions in mm Angles in mrad



MMF GRE 45129

Undulator Fiducialization
Post Magnetic Alignment

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Nominal : 4.5000	Averag : 4.8921	Cent.-Dev. : 0.3921
Up. Tol. : 0.5	Maximum : 5.3845	U.Tol.Ex. > : 27.7 %
Low.Tol. : -0.5	Minimum : 4.3534	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1823	In Tolerance: 72.3 %
Outlier : 0	Distribution : NOR	Dimension : mrad



MMF GRE 45129

Statistical Evaluation
 Pole Tip Gap Angle
 Post Magnetic Alignment

DATE: 22-JAN-2009

UNDULATOR # 35
 DATASET # 0003

PROGRAM VERSION 2.8