

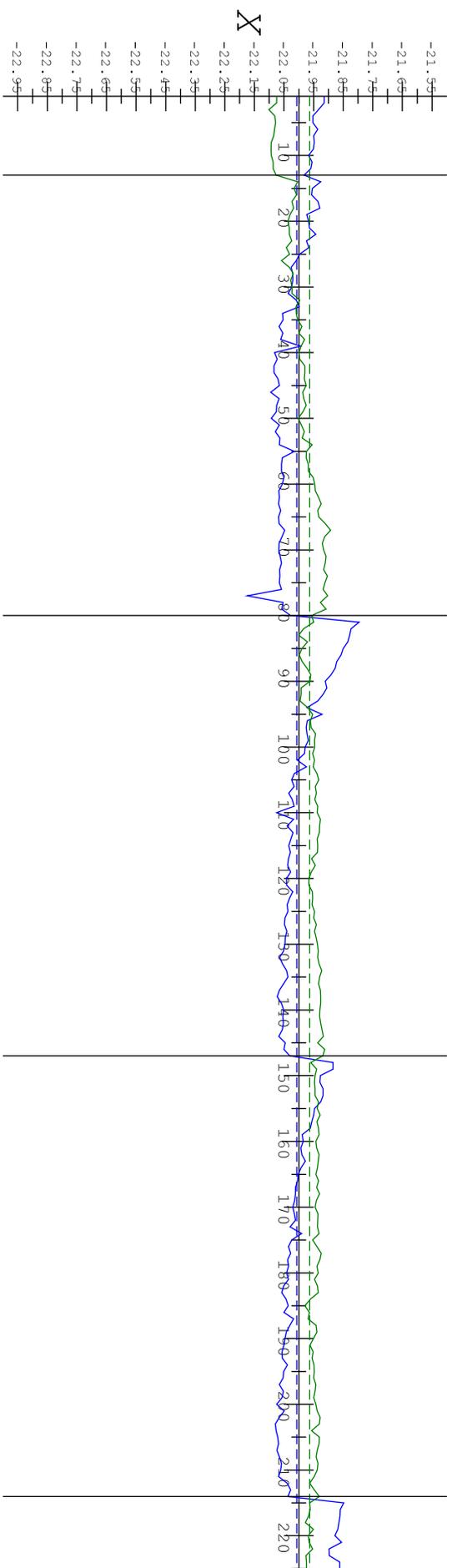
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles  
 Post Magnetic Alignment

DATE: 04-FEB-2009  
 UNDUULATOR # 26  
 DATASET # 0003  
 PROGRAM VERSION 2.8

# Pole Tip Number ----->

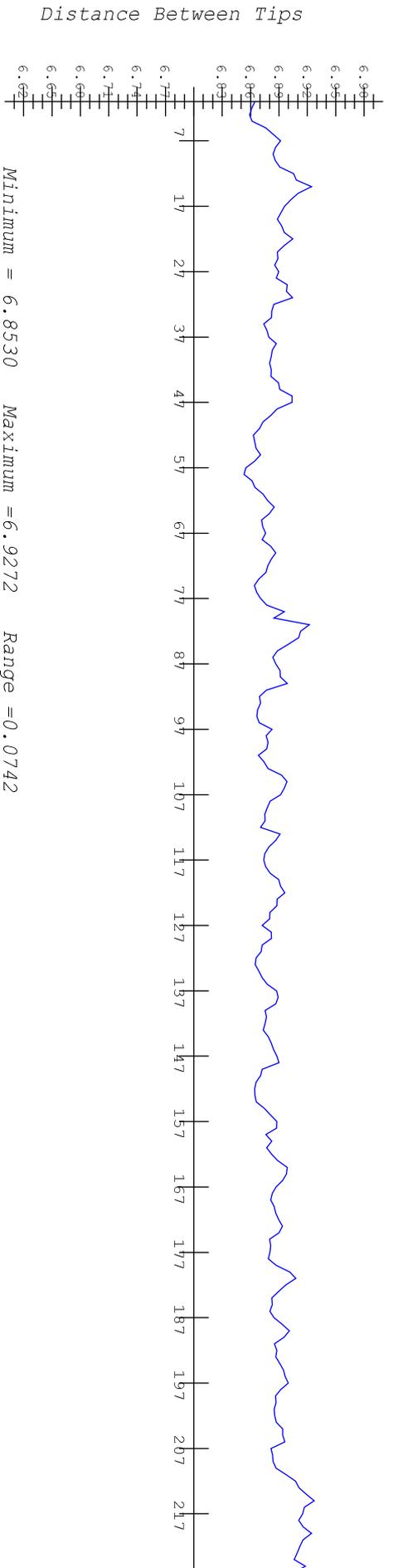


## Undulator Pole Tip Location Post Magnetic Alignment

DATE: 04-FEB-2009  
 UNDULATOR # 26  
 DATASET # 0003  
 PROGRAM VERSION 2.8

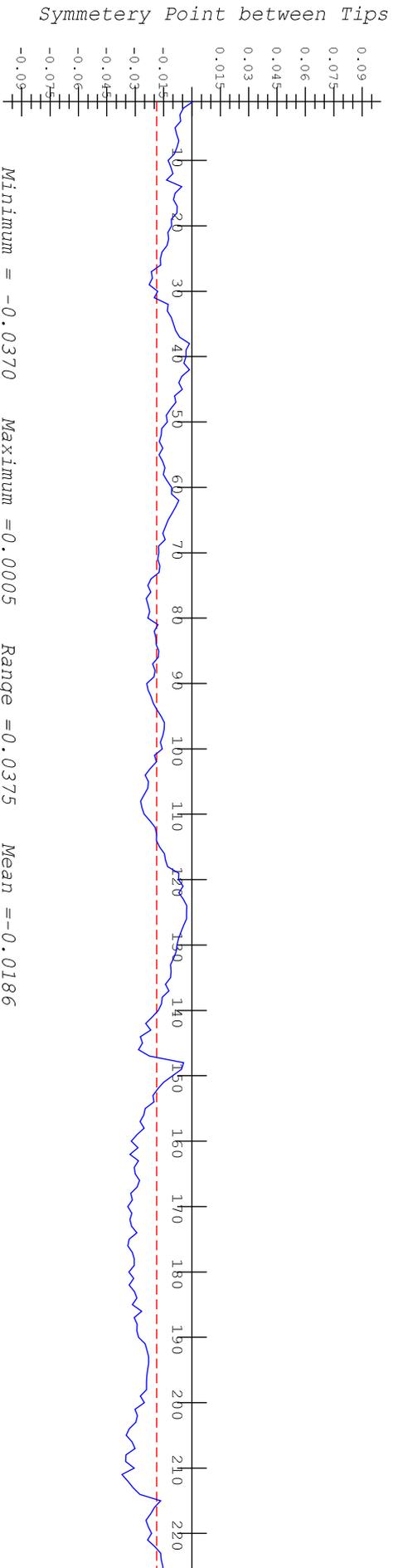
Green Solid = Point on front face of Upper Pole Tip 10mm above Magnetic C/L  
 Green Dash = Mean value of all Upper Pole Tips 10mm above Magnetic C/L  
 Blue Solid = Point on front face of Lower Pole Tip 10mm below Magnetic C/L  
 Blue Dash = Mean value of all Lower Pole Tips 10mm below Magnetic C/L

Upper Pole Tips = -21.964  
 Lower Pole Tips = -22.007



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

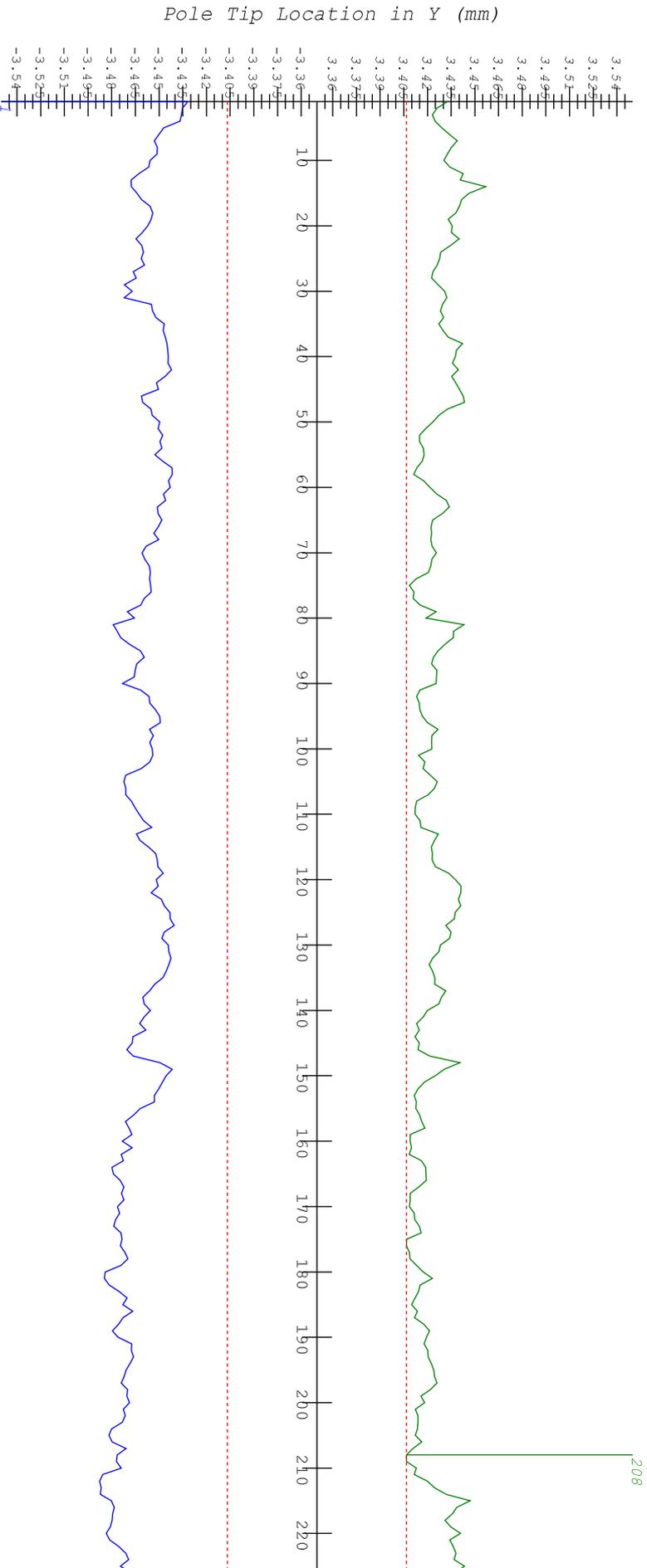


Undulator Pole Tip Location  
 Post Magnetic Alignment

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Maximum Chamber Gap = 6.8135

Minimum = 3.4067    Maximum = 3.4569    Range = 0.0501



Minimum = -3.4877    Maximum = -3.4319    Range = 0.0558

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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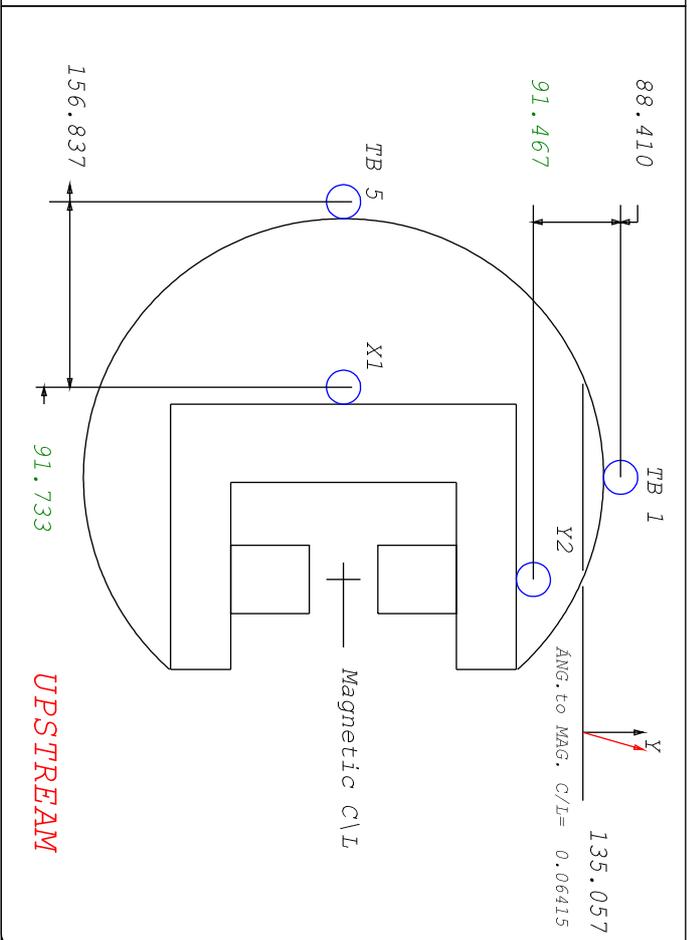
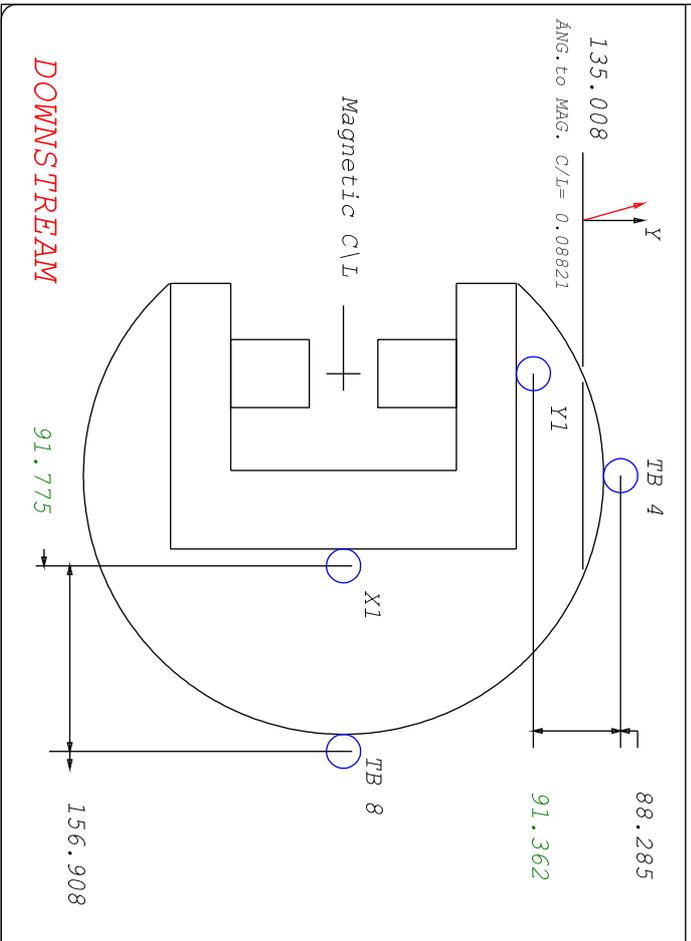
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.2277	179.8773	-1558.472
2	0.3339	179.7307	-584.8272
3	0.4124	179.7771	591.1673
4	0.4294	179.6465	1562.1098
5	248.5701	0.0636	-1558.496
6	248.6141	0.0492	-584.7295
7	248.6540	0.1553	591.2013
8	248.6831	0.0887	1562.0055

	C/L Offset	Length
Top Magnetic Structure	0.032	3381.084
Bottom Magnetic Structure	-0.032	3381.013
Strongback	0.180	3400.005

Dimensions in mm

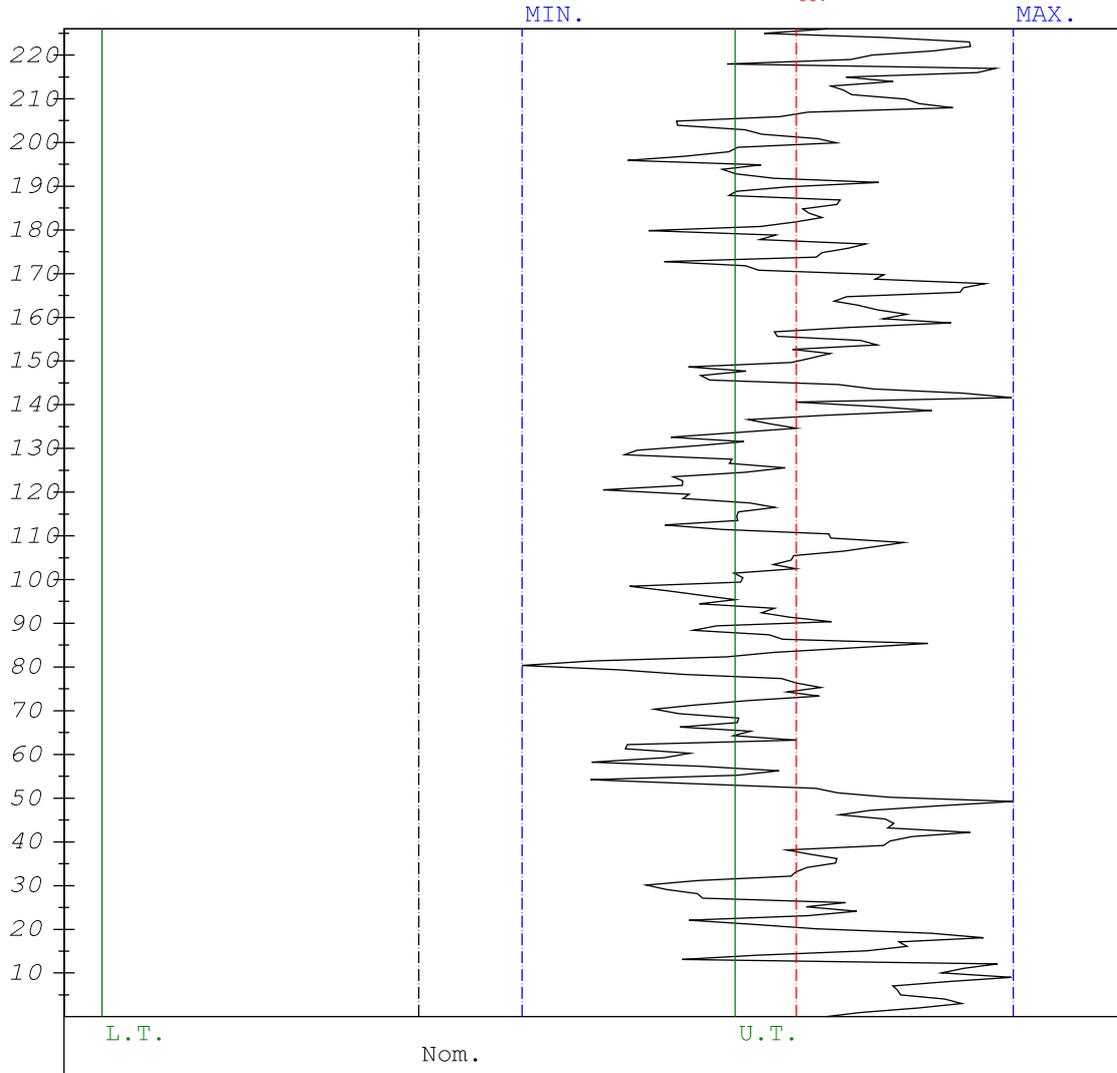
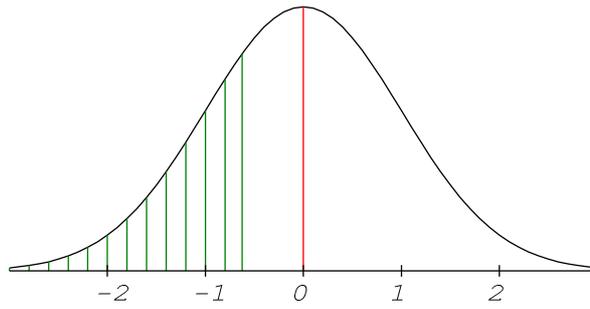
Angles in mrad



MMF GRE 45129

# Undulator Dimensional Fiducialization Post Magnetic Alignment

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 PROGRAM VERSION 2.8



Nominal : 4.5000	Averag : 5.0965	Cent.-Dev. : 0.5965
Up. Tol. : 0.5	Maximum : 5.4388	U.Tol.Ex. > : 73.3 %
Low.Tol. : -0.5	Minimum : 4.6633	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.1547	In Tolerance: 26.7 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation  
 Pole Tip Gap Angle  
 Post Magnetic Alignment

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