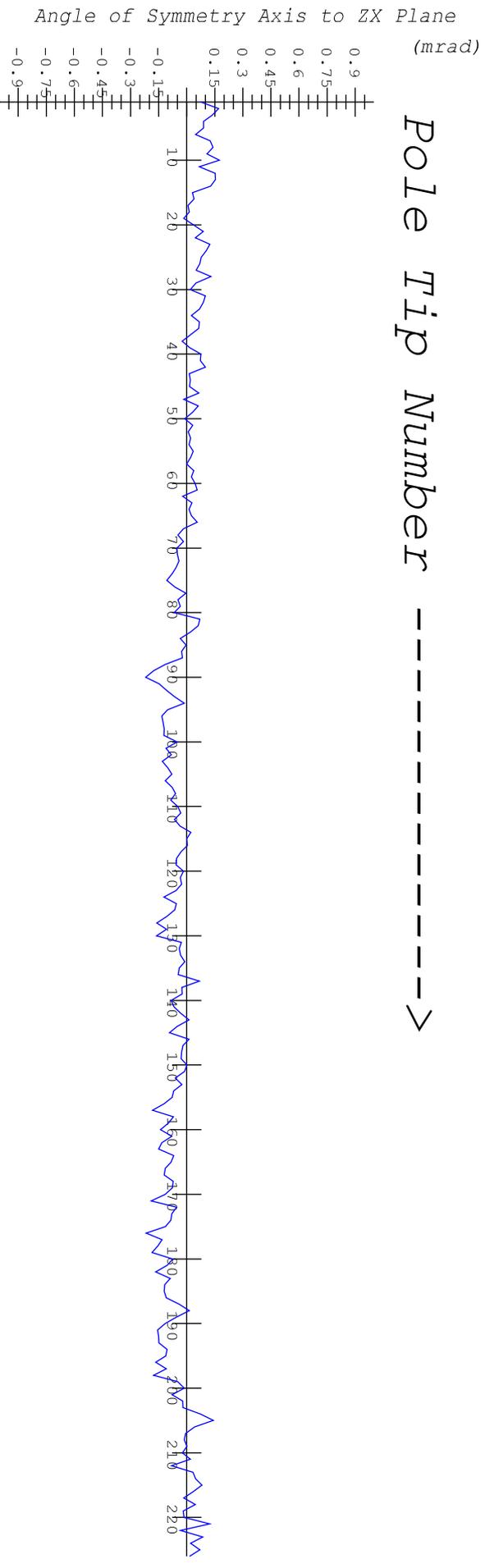


Pole Tip Number ----->



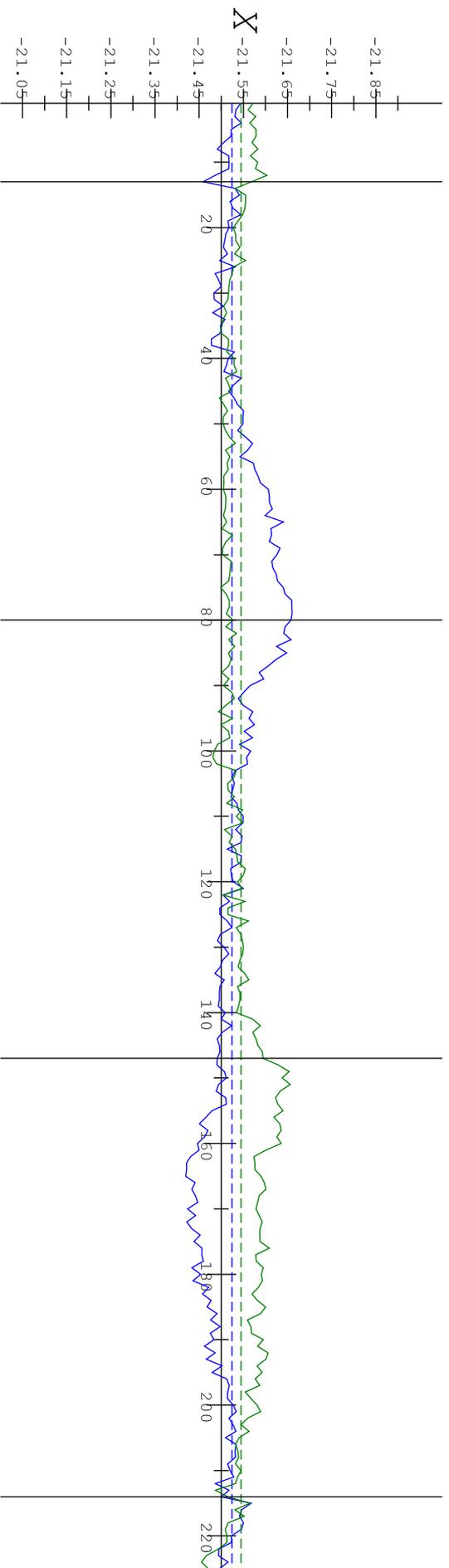
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips  
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles  
 Post Magnetic Alignment  
 Wide Gap Undulator

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# Pole Tip Number ----->



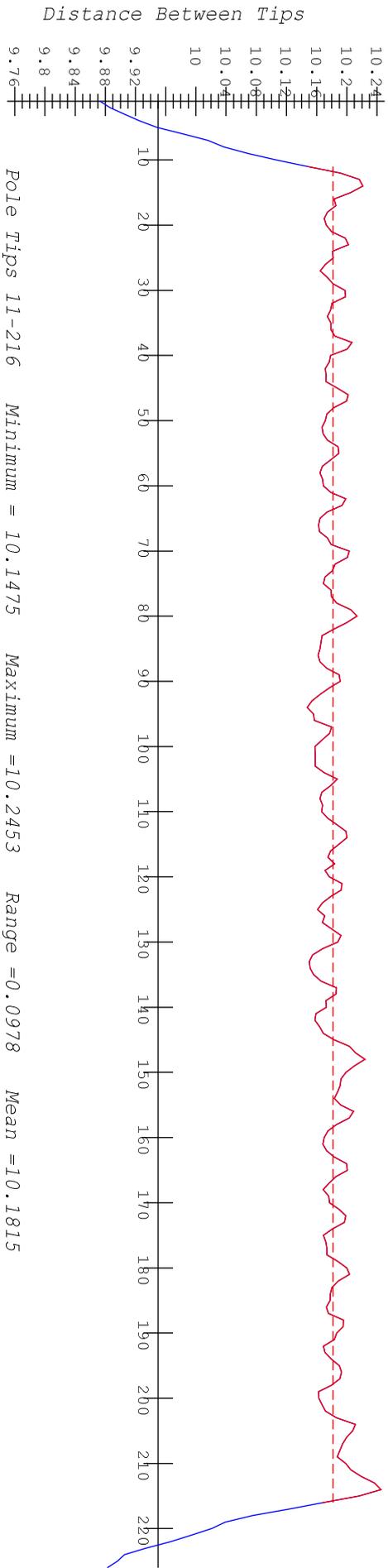
X values in mm

Green Solid = Point on front face of Upper Pole Tip 11.5mm above Magnetic C/L

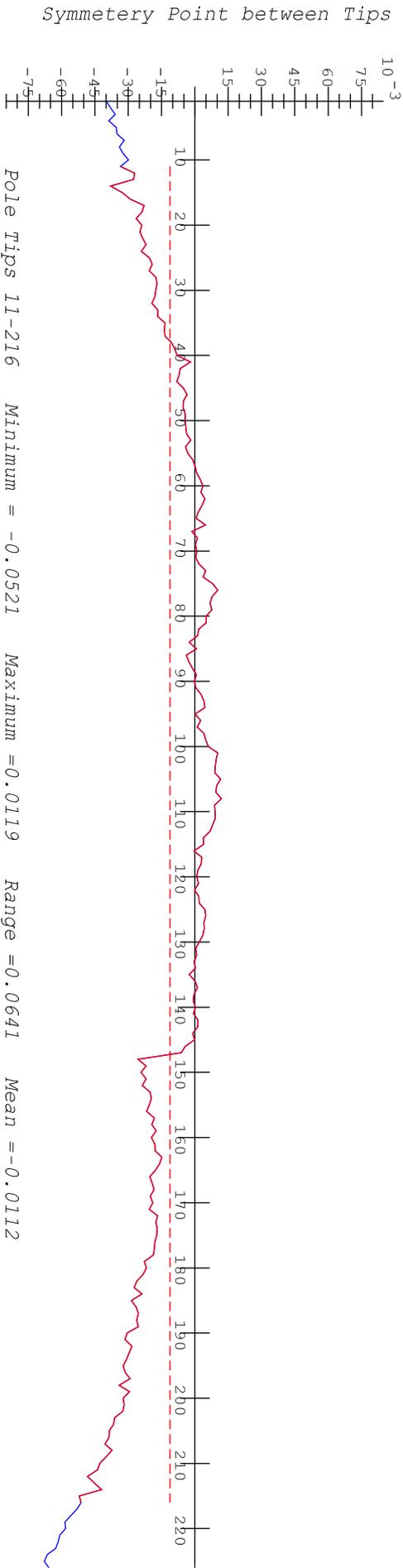
Green Dash = Mean value of all Upper Pole Tips 11.5mm above Magnetic C/L Mean value Upper Pole Tips = -21.545

Blue Solid = Point on front face of Lower Pole Tip 11.5mm below Magnetic C/L

Blue Dash = Mean value of all Lower Pole Tips 11.5mm below Magnetic C/L Mean value Lower Pole Tips = -21.524



in mm  
 Pole Tip Number ----->

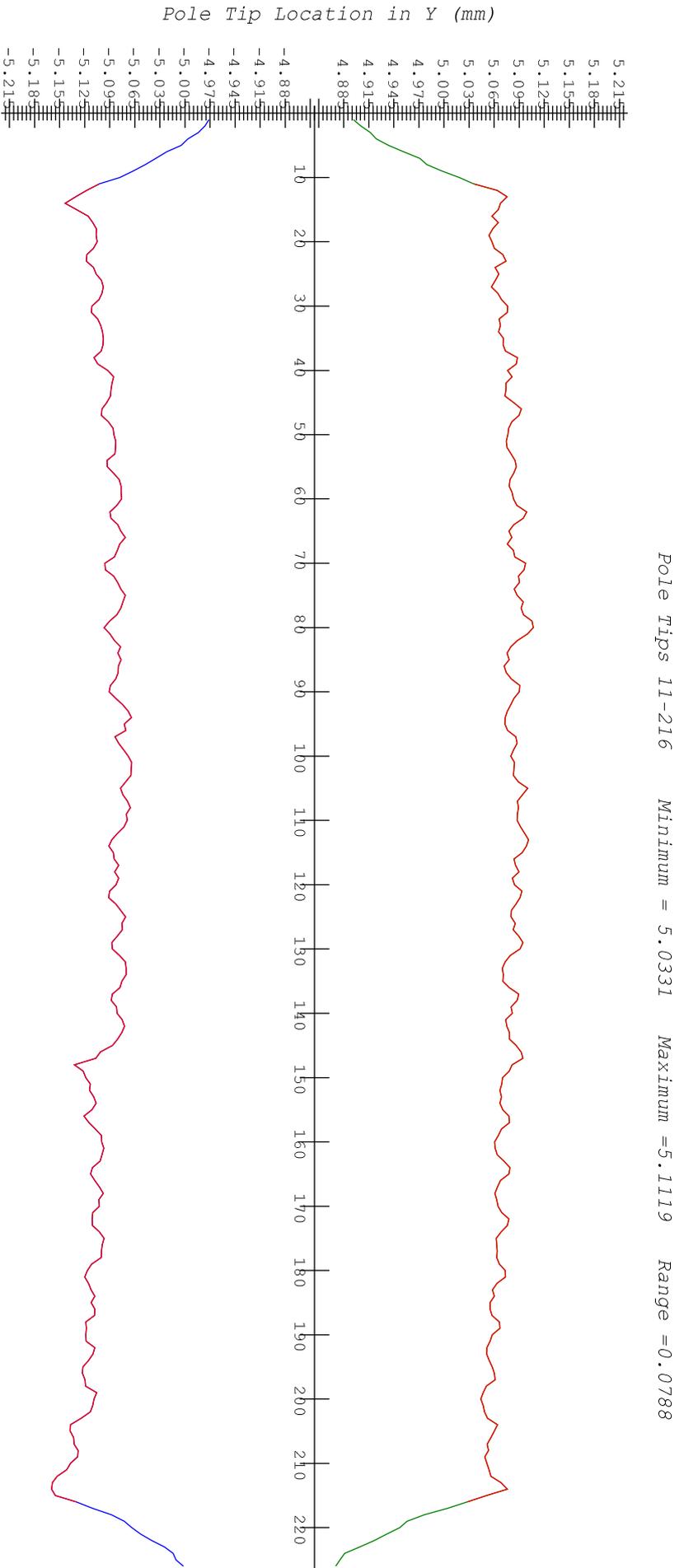


Symmetry Point is the symmetry point between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L  
 Broken Red line is Mean Value of Symmetry Points and Mean Value of Gap Distance  
 Distance Between Tips is the distance between the Upper and Lower Pole Tips were they intersect a YZ plane at the Magnetic C\L



Undulator Pole Tip Location  
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Green + Red = The position of the Upper Pole Tips at Magnetic C/L (Pole Tips 11-216 in Red)  
 Blue + Red = The position of the Lower Pole Tips at Magnetic C/L (Pole Tips 11-216 in Red)



Undulator Pole Tip Location  
 Post Magnetic Alignment  
 Wide Gap Undulator

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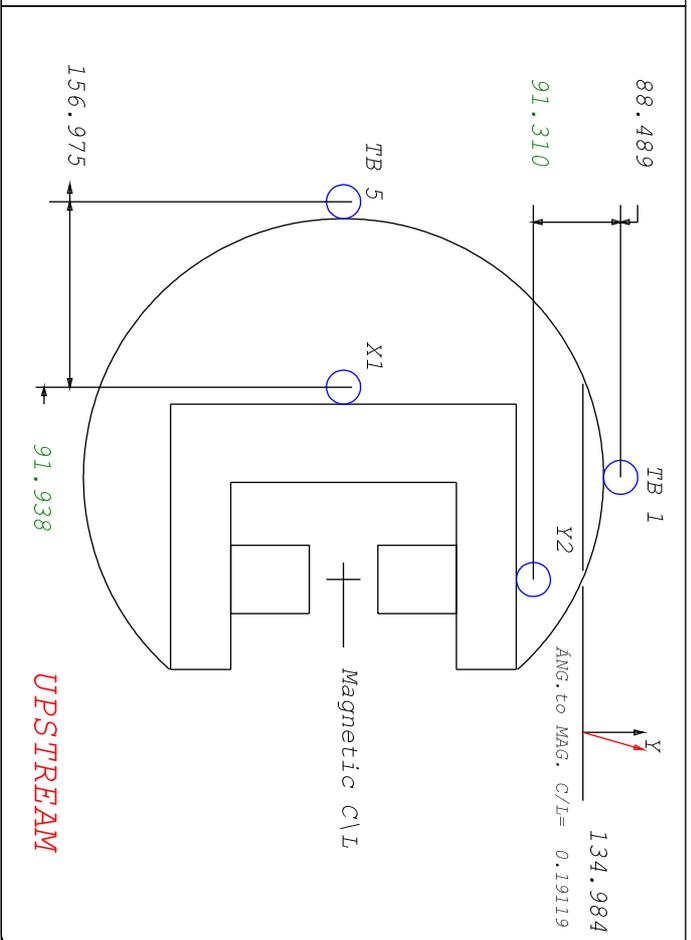
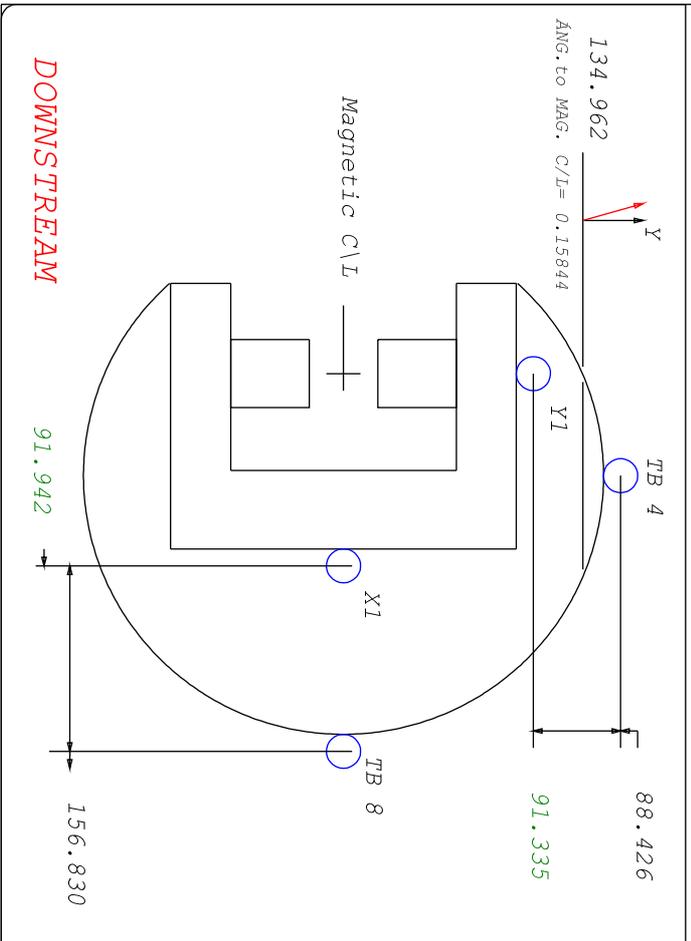
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.5976	179.7991	-1558.393
2	0.4339	179.7581	-584.6732
3	0.4679	179.7029	591.3025
4	0.3780	179.7607	1562.1416
5	248.9125	-0.0234	-1558.126
6	248.7710	0.0972	-584.5991
7	248.7122	0.0534	591.3800
8	248.7724	-0.0580	1562.2407

	C/L Offset	Length
Top Magnetic Structure	-0.051	3380.757
Bottom Magnetic Structure	0.051	3380.696
Strongback	0.393	3399.796

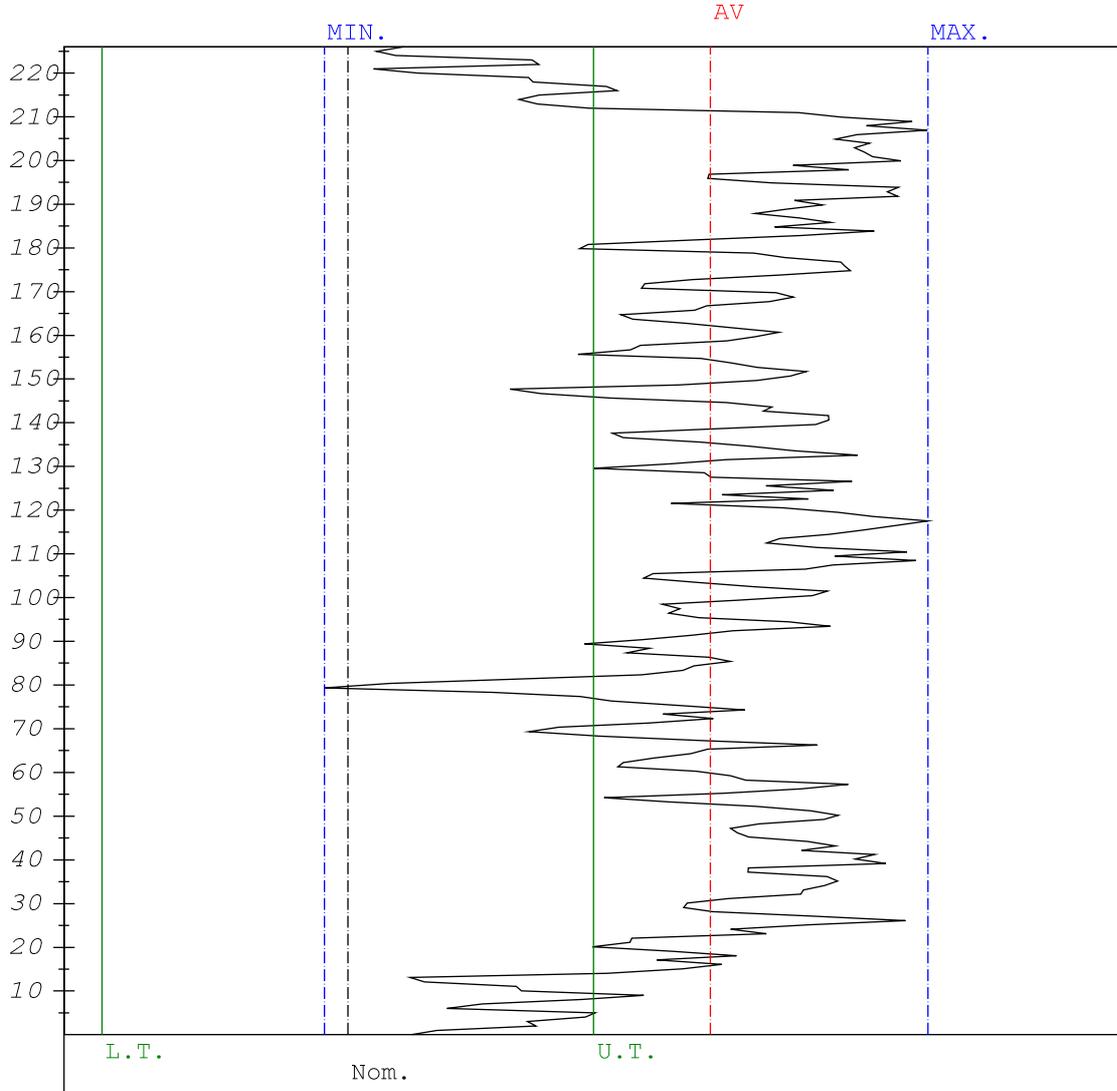
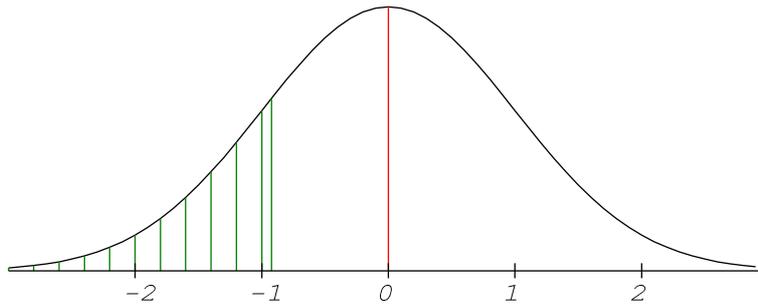
Dimensions in mm

Angles in mrad



Undulator Dimensional Fiducialization  
 Post Magnetic Alignment  
 Wide Gap Undulator

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Nominal : 4.5000	Averag : 5.2374	Cent.-Dev. : 0.7374
Up. Tol. : 0.5	Maximum : 5.6795	U.Tol.Ex. > : 82.2 %
Low.Tol. : -0.5	Minimum : 4.4523	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2576	In Tolerance: 17.8 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation  
 Pole Tip Gap Angle  
 Post Magnetic Alignment

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 PROGRAM VERSION 4.1