

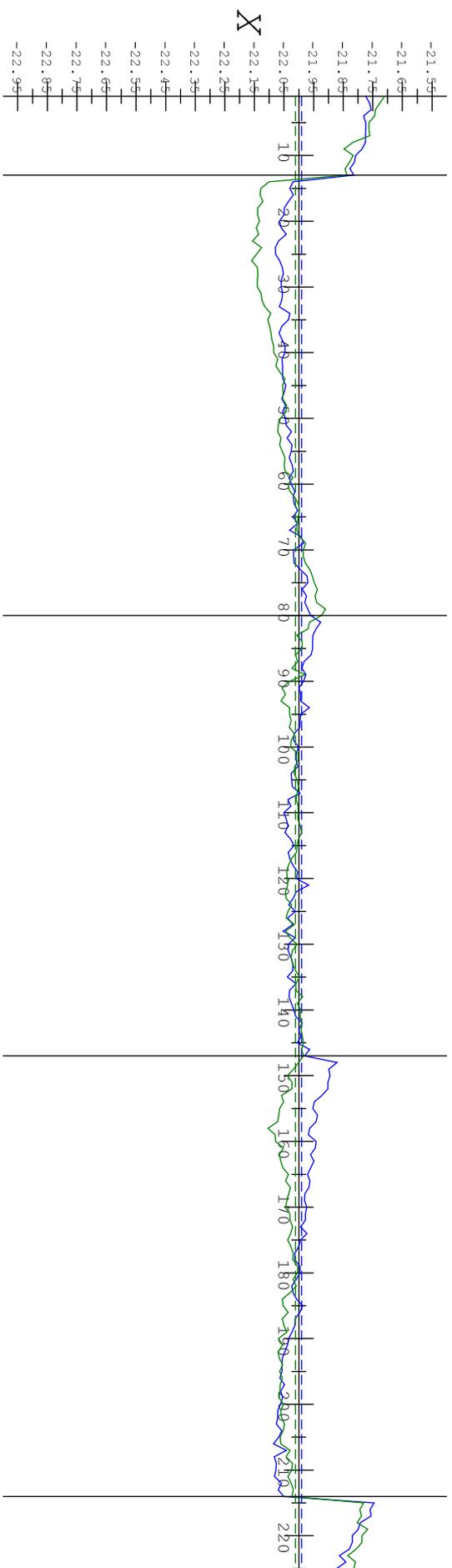
Symmetry Axis is the symmetry axis between the Upper and Lower Pole Tips
 Included Angle is the angle between the Upper and Lower Pole Tips



Undulator Pole Tip Angles
 Post Magnetic Alignment

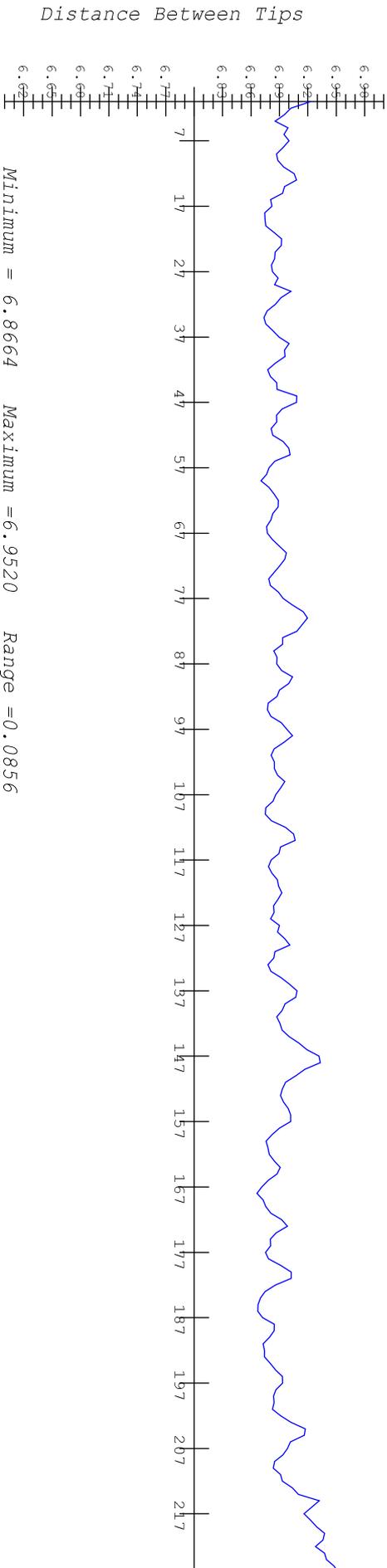
DATE: 21-JUL-2011
 UNDULATOR # 16
 DATASET # 00006
 PROGRAM VERSION 2.9

Pole Tip Number ----->



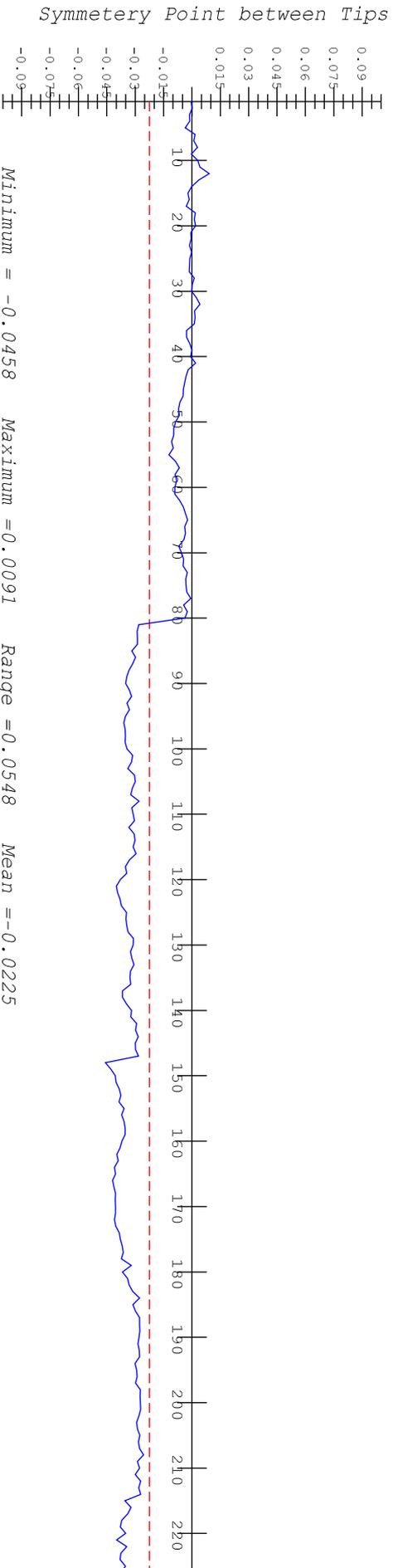
Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 21-JUL-2011
 UNDULATOR # 16
 DATASET # 0006
 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

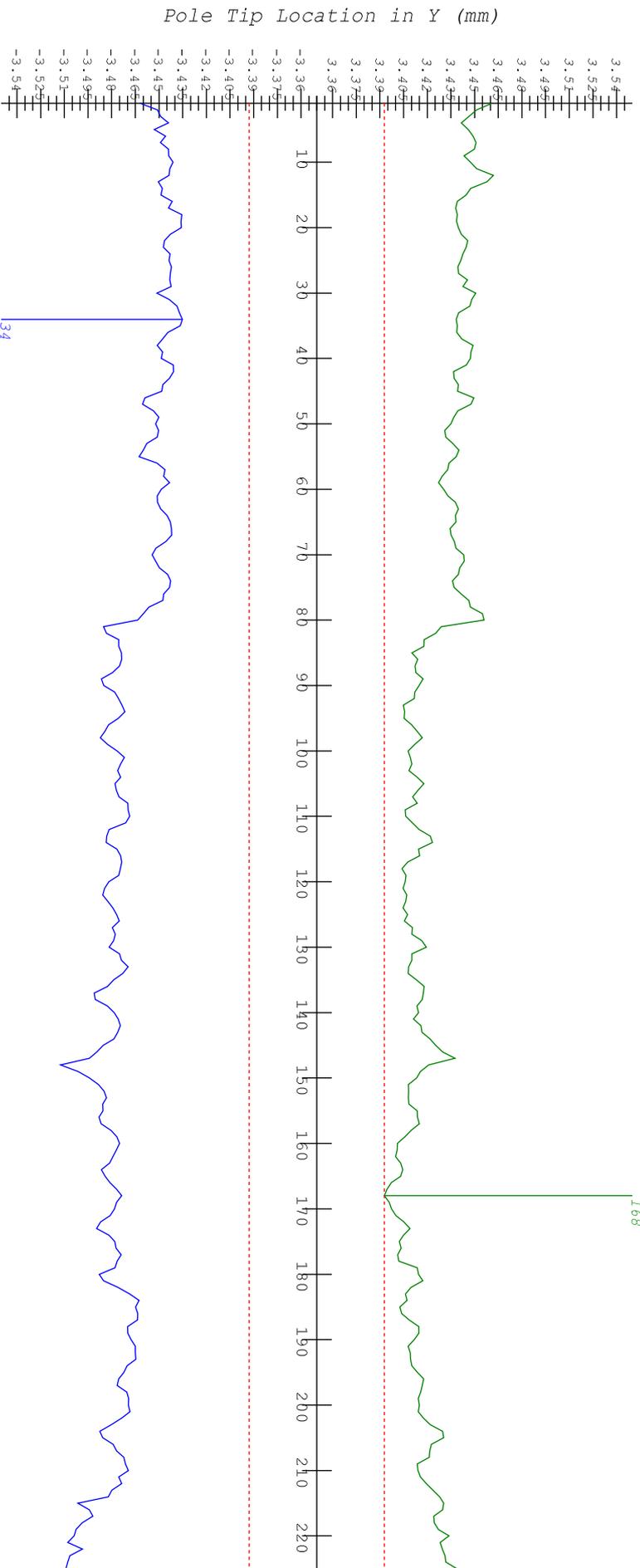


Undulator Pole Tip Location
 Post Magnetic Alignment

DATE: 21-JUL-2011
 UNDUULATOR # 16
 DATASET # 0006
 PROGRAM VERSION 2.9

Maximum Chamber Gap = 6.7856

Minimum = 3.3928 Maximum = 3.4618 Range = 0.0690



Minimum = -3.5135 Maximum = -3.4352 Range = 0.0783

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: 21-JUL-2011
UNDULATOR # 16
DATASET # 0006
PROGRAM VERSION 2.9



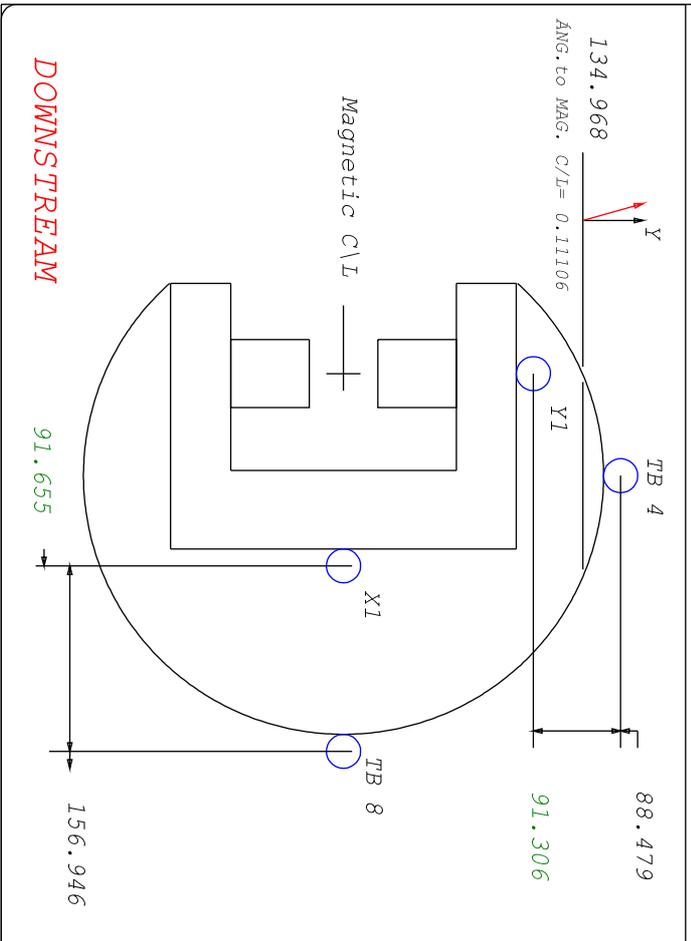
TOOLING BALL LOCATIONS

NUM.	X	Y	Z
1	0.3177	179.8015	-1558.421
2	0.4587	179.6816	-584.7257
3	0.4432	179.7373	591.2330
4	0.4108	179.7848	1562.0169
5	248.6471	0.0869	-1558.346
6	248.6539	0.0736	-584.6773
7	248.6565	0.0438	591.3116
8	248.6009	-0.0040	1562.2026

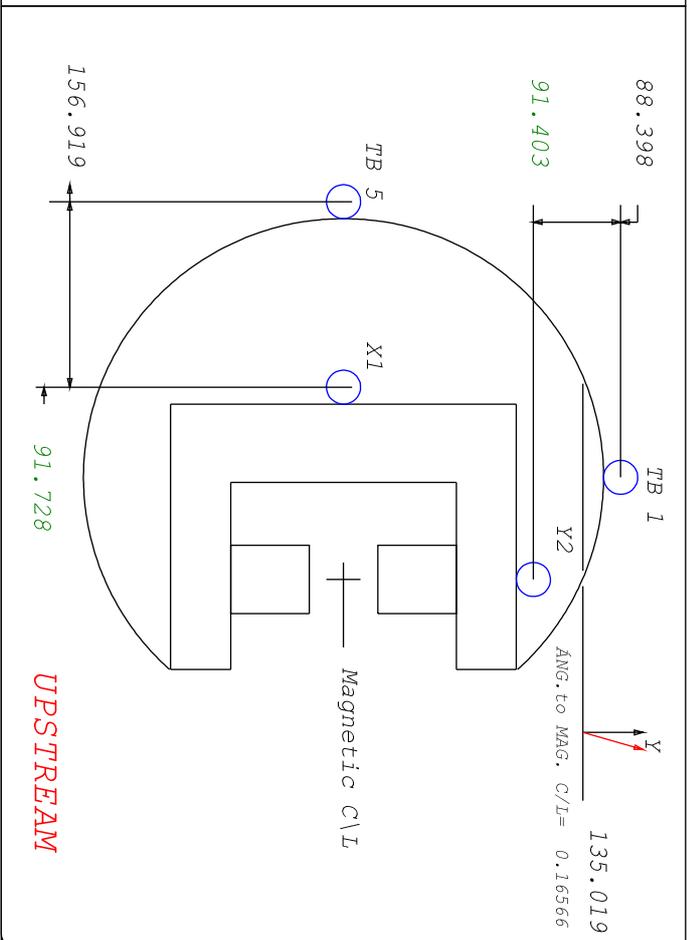
	C/L Offset	Length
Top Magnetic Structure	0.097	3381.393
Bottom Magnetic Structure	-0.097	3381.090
Strongback	0.243	3399.955

Dimensions in mm

Angles in mrad



DOWNSTREAM

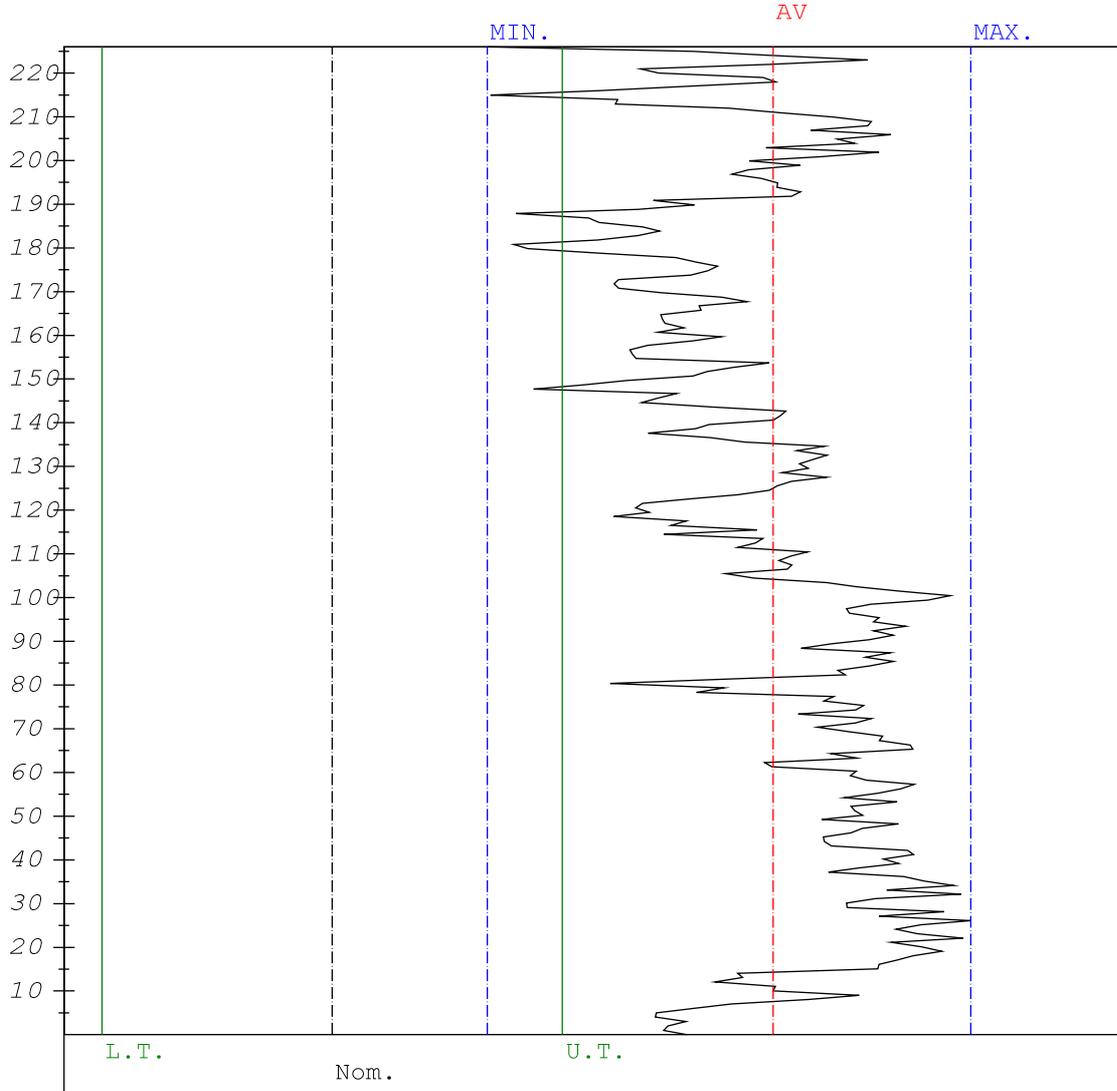
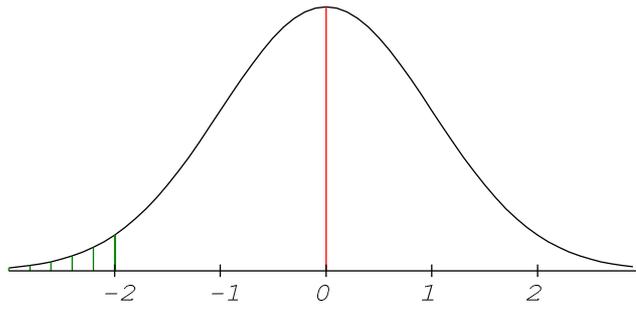


UPSTREAM



Undulator Dimensional Fiducialization Post Magnetic Alignment

DATE: 21-JUL-2011
 UNDULATOR # 16
 DATASET # 0006
 PROGRAM VERSION 2.9



Nominal : 4.5000	Averag : 5.458	Cent.-Dev. : 0.958
Up. Tol. : 0.5	Maximum : 5.8876	U.Tol.Ex. > : 97.7 %
Low.Tol. : -0.5	Minimum : 4.8372	L.Tol.Ex. < : 0.0 %
Spl.Size : 226	Stand.-Dev.: 0.2298	In Tolerance: 2.3 %
Outlier : 0	Distribution : NOR	Dimension : mrad



Statistical Evaluation
 Pole Tip Gap Angle
 Post Magnetic Alignment

DATE: 21-JUL-2011
 UNDULATOR # 16
 DATASET # 0006
 PROGRAM VERSION 2.9