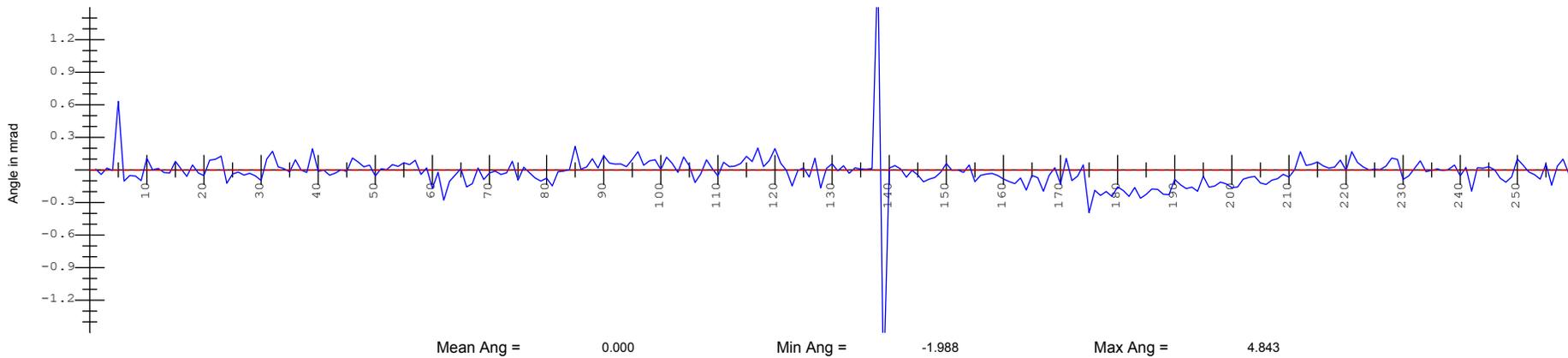


Included Angle Between Pole Tips

Pole Tip Num. ----->

Angle of Symmetry Line between Pole Tips to Tuning Gap ZX Plane



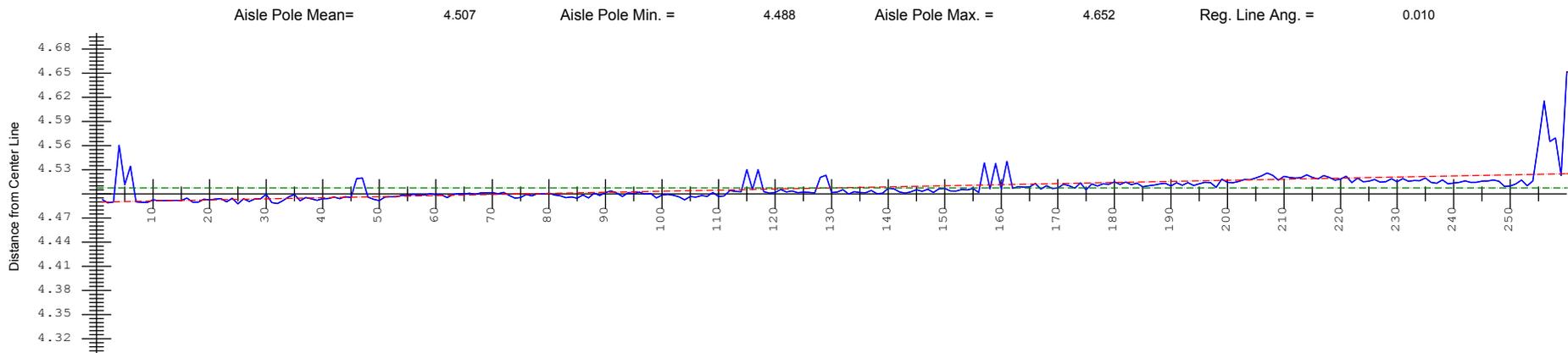
Dimensions in MM, Angles in Milliradians



HGVPU - Pole Tip Angles

Nominal Gap :	9.000	US Full :	8.9999	DS Full :	8.9995
Nom. Taper :	0.000	US Wall Half :	4.5002	DS Wall Half :	4.5001
		US Aisle Half :	4.5009	DS Aisle Half :	4.5005

S/N	: HXU_030
Date	: 18-NOV-2019
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B



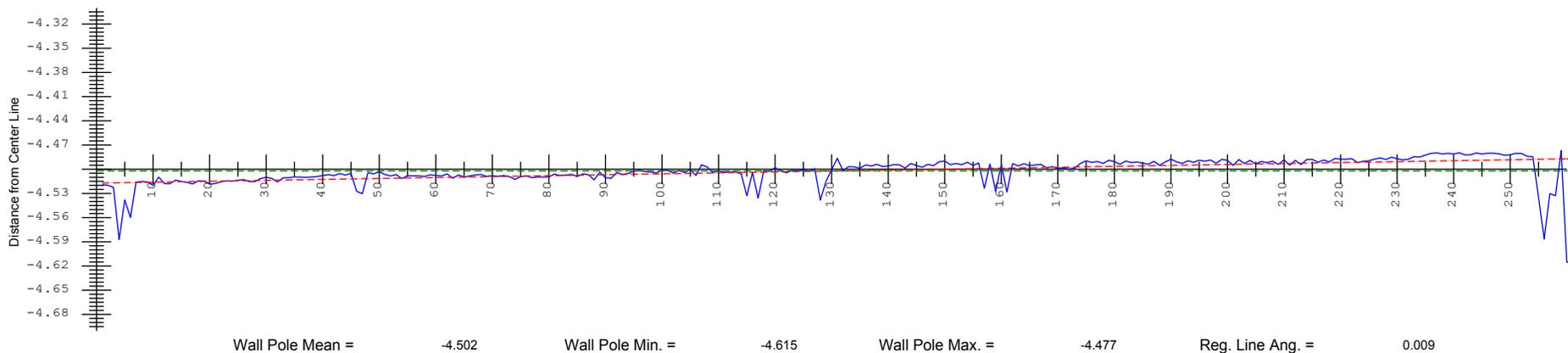
Aisle Pole Tips at Nom. Beam Height

Blue = Pole Tip points
 Green = Mean line
 Red = Regression line thru points

Pole Tip Num. ----->

Wall Pole Tips at Nom. Beam Height

Minimum Clearance Gap = 8.953



Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Pole Tip Location from Girder Centerline

Nominal Gap :	9.000	US Full :	8.9999	DS Full :	8.9995
Nom. Taper :	0.000	US Wall Half :	4.5002	DS Wall Half :	4.5001
		US Aisle Half :	4.5009	DS Aisle Half :	4.5005

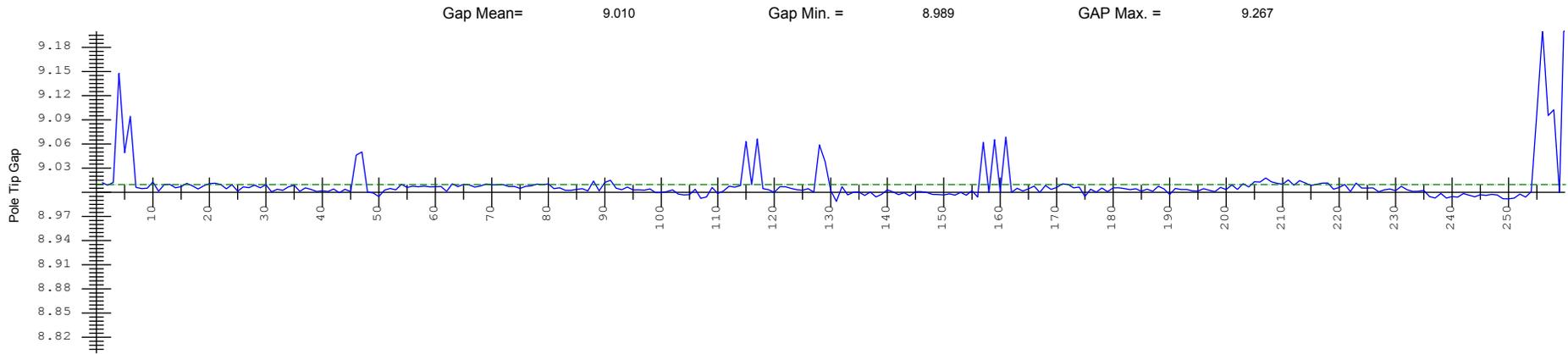
S/N	: HXU_030
Date	: 18-NOV-2019
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

Values Calculated from Regression Line End Points

Dimension	X Value	Y Value	Z Value	Calc. Value
US Aisle Pole Tip(1)	4.490	0.000	8.750	
US Wall Pole Tip(1)	-4.517	0.000	8.750	
US Sym. Pt.	-0.014			
US Gap				9.007
DS Aisle Pole Tip(260)	4.525	0.000	3375.750	
DS Wall Pole Tip(260)	-4.487	0.000	3375.750	
DS Sym. Pt.	0.019			
DS Gap				9.012
Taper				0.005

Dimensions in MM

 <p>SLAC NATIONAL ACCELERATOR LABORATORY METROLOGY</p>	<p>HGVPU - Gap Calc. from Regression Line End Points</p>				<p>S/N : HXU_030</p>	
	<p>Nominal Gap : 9.000</p>	<p>US Full : 8.9999</p>	<p>DS Full : 8.9995</p>	<p>US Wall Half : 4.5002</p>	<p>DS Wall Half : 4.5001</p>	<p>Date : 18-NOV-2019</p>
	<p>Nom. Taper : 0.000</p>	<p>US Aisle Half : 4.5009</p>	<p>DS Aisle Half : 4.5005</p>	<p>Data Set : 0001</p>	<p>Run : FINAL</p>	<p>Cam Pos. : B</p>

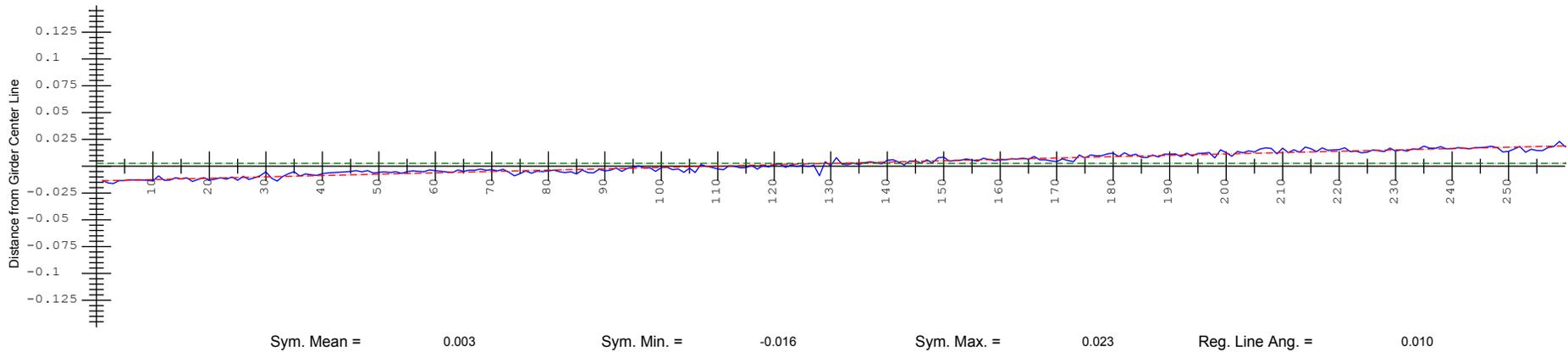


Pole Tip Gap at Nom. Beam Height

Blue = Pole Tip points
 Green = Mean line
 Red = Regression line thru points

Pole Tip Num. ----->

Pole Tip Symmetry Point at Nom. Beam Height



Girder centerline in reference to Pointed Magnets

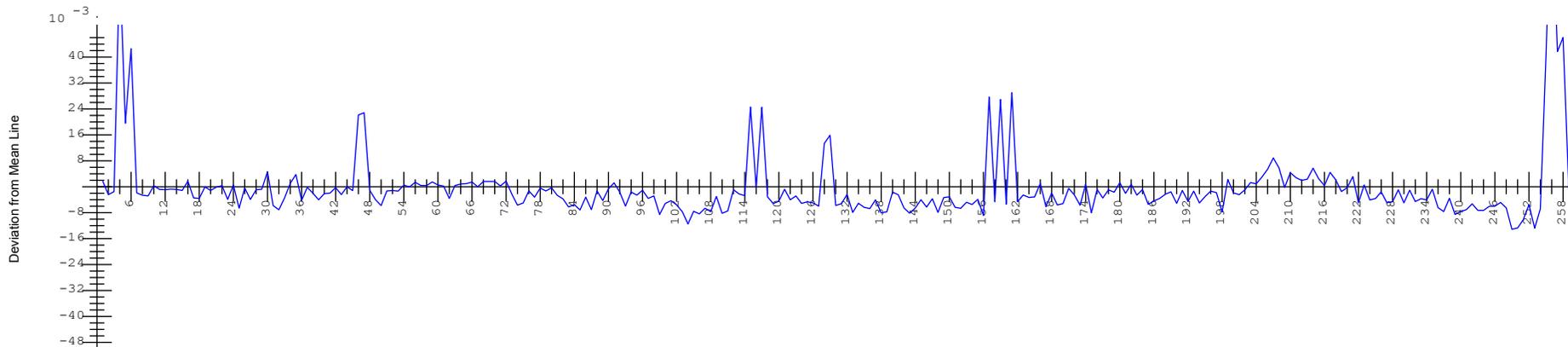
Dimensions in MM, Angles in Milliradians



HGVPU - Pole Tip Gap and Symmetry Point Location

Nominal Gap :	9.000	US Full :	8.9999	DS Full :	8.9995
Nom. Taper :	0.000	US Wall Half :	4.5002	DS Wall Half :	4.5001
		US Aisle Half :	4.5009	DS Aisle Half :	4.5005

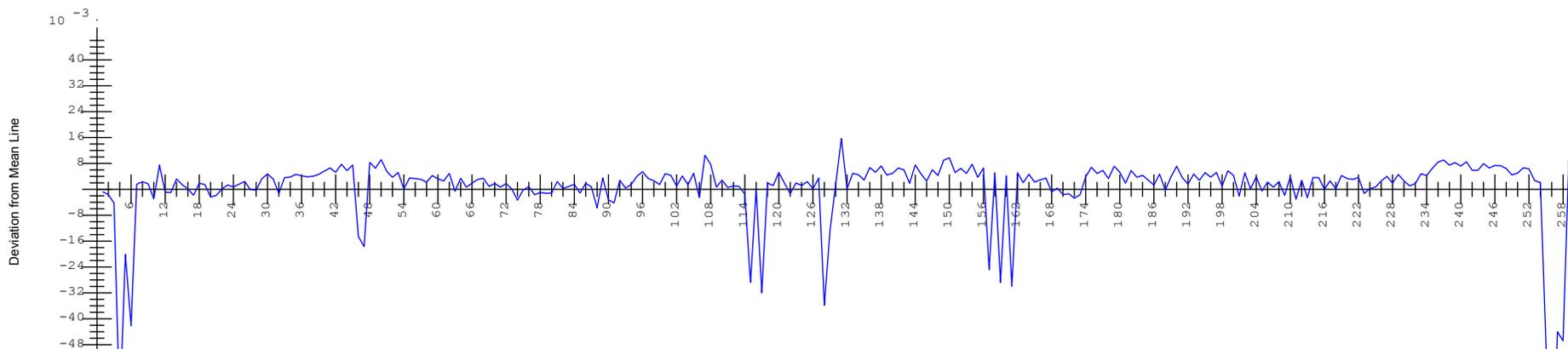
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Date	: 18-NOV-2019
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B



Aisle Pole Tips

Pole Tip Num. ----->

Wall Pole Tips



Pole Tip Deviations from Jaw Mean Lines when aligned to actual Gap Sym. Plane

Dimensions in MM



HGVPU - Pole Tip Deviation from Mean Line

Nominal Gap :	9.000	US Full :	8.9999	DS Full :	8.9995
Nom. Taper :	0.000	US Wall Half :	4.5002	DS Wall Half :	4.5001
		US Aisle Half :	4.5009	DS Aisle Half :	4.5005

S/N	: HXU_030
Date	: 18-NOV-2019
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B