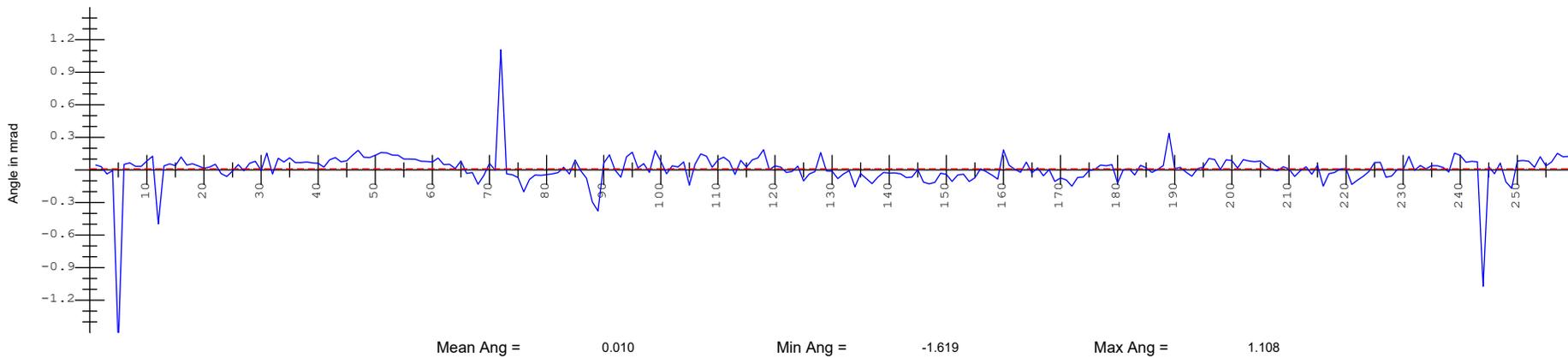


### Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

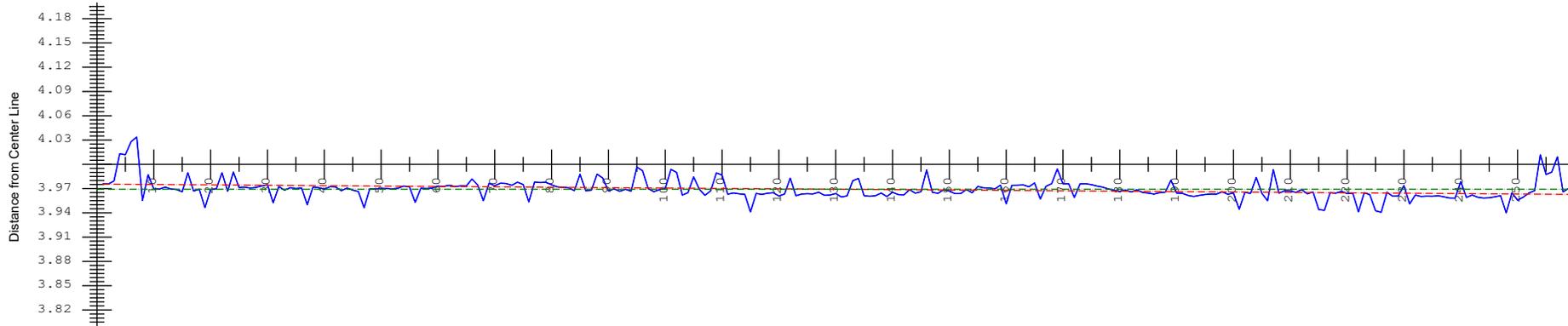


## HGVPU - Pole Tip Angles

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>8.0000</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>3.9990</b>	<b>DS Wall Half :</b>	<b>3.9514</b>
		<b>US Aisle Half :</b>	<b>4.0031</b>	<b>DS Aisle Half :</b>	<b>3.9524</b>

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<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>

Aisle Pole Mean = 3.969      Aisle Pole Min. = 3.940      Aisle Pole Max. = 4.034      Reg. Line Ang. = -0.004



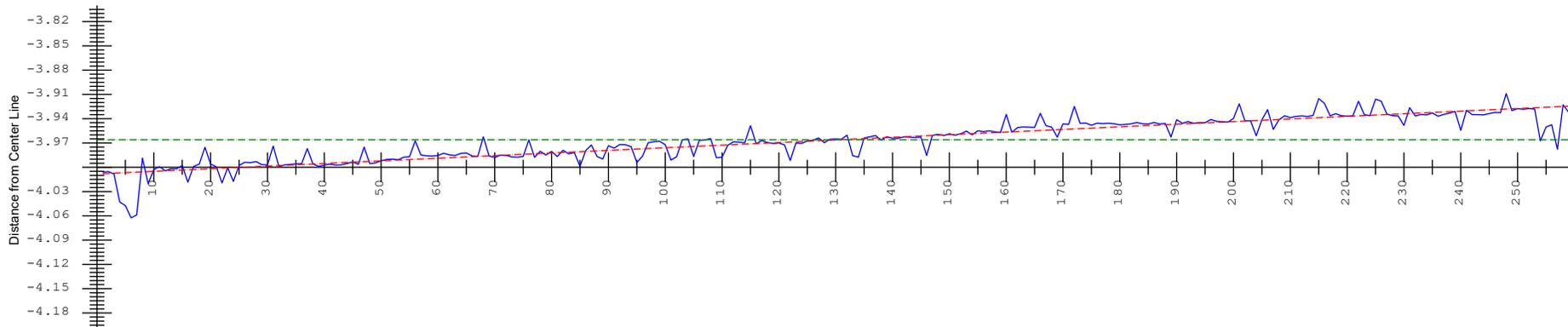
### Aisle Pole Tips at Nom. Beam Height

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 = 7.818



Wall Pole Mean = -3.966      Wall Pole Min. = -4.062      Wall Pole Max. = -3.909      Reg. Line Ang. = 0.025

### Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



### HGVPU - Pole Tip Location from Girder Centerline

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>8.0000</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>3.9990</b>	<b>DS Wall Half :</b>	<b>3.9514</b>
		<b>US Aisle Half :</b>	<b>4.0031</b>	<b>DS Aisle Half :</b>	<b>3.9524</b>

<b>S/N</b>	<b>: HXU_010</b>
<b>Date</b>	<b>: 06-DEC-2019</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>

**Values Calculated from Regression Line End Points**

<b>Dimension</b>	<b>X Value</b>	<b>Y Value</b>	<b>Z Value</b>	<b>Calc. Value</b>
<b>US Aisle Pole Tip(1)</b>	<b>3.976</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Wall Pole Tip(1)</b>	<b>-4.008</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Sym. Pt.</b>	<b>-0.016</b>			
<b>US Gap</b>				<b>7.983</b>
<b>DS Aisle Pole Tip(260)</b>	<b>3.963</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Wall Pole Tip(260)</b>	<b>-3.924</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Sym. Pt.</b>	<b>0.019</b>			
<b>DS Gap</b>				<b>7.887</b>
<b>Taper</b>				<b>-0.096</b>

Dimensions in MM

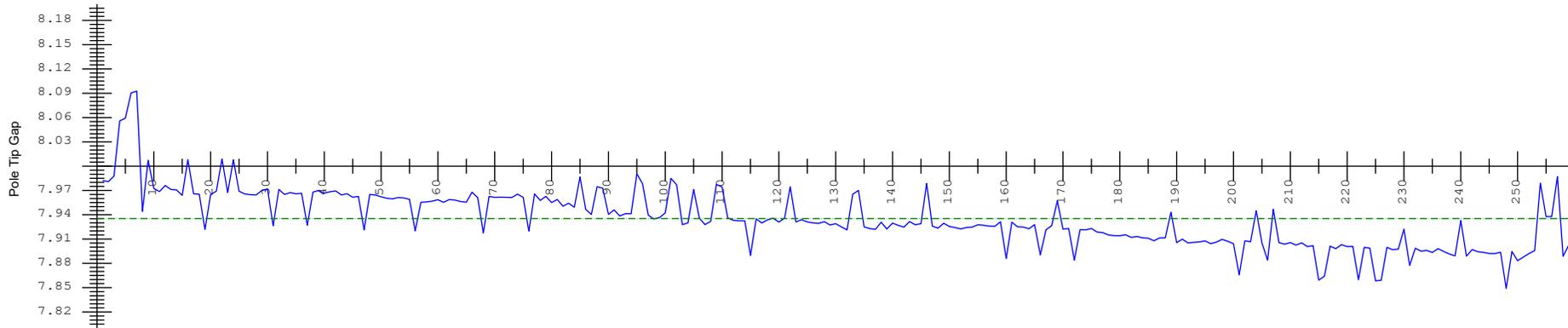


**HGVPU - Gap Calc. from Regression Line End Points**

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>8.0000</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>3.9990</b>	<b>DS Wall Half :</b>	<b>3.9514</b>
		<b>US Aisle Half :</b>	<b>4.0031</b>	<b>DS Aisle Half :</b>	<b>3.9524</b>

<b>S/N</b>	: HXU_010
<b>Date</b>	: 06-DEC-2019
<b>Data Set</b>	: 0001
<b>Run</b>	: FINAL
<b>Cam Pos.</b>	: B

Gap Mean= 7.935      Gap Min. = 7.849      GAP Max. = 8.093

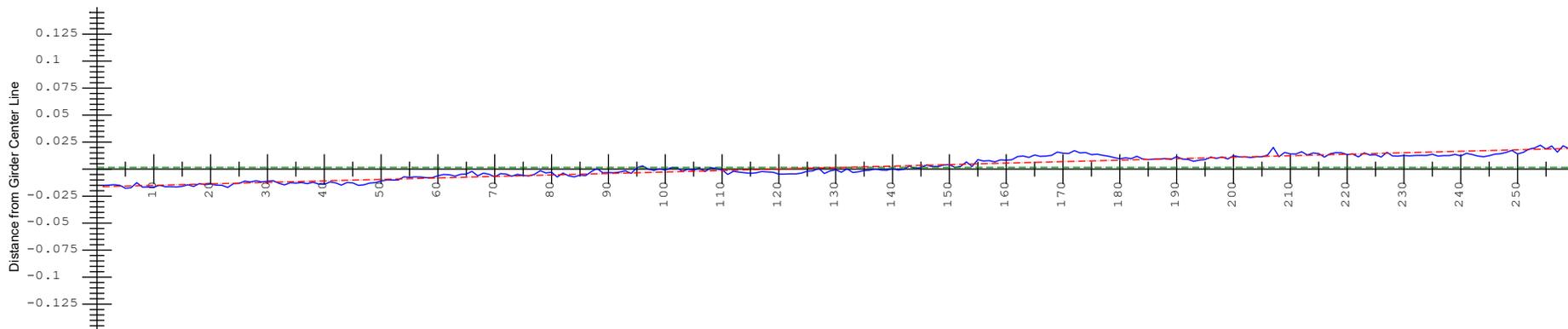


### Pole Tip Gap at Nom. Beam Height

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

Pole Tip Num. ----->

### Pole Tip Symmetry Point at Nom. Beam Height



Sym. Mean = 0.002      Sym. Min. = -0.018      Sym. Max. = 0.022      Reg. Line Ang. = 0.011

### Girder centerline in reference to Pointed Magnets

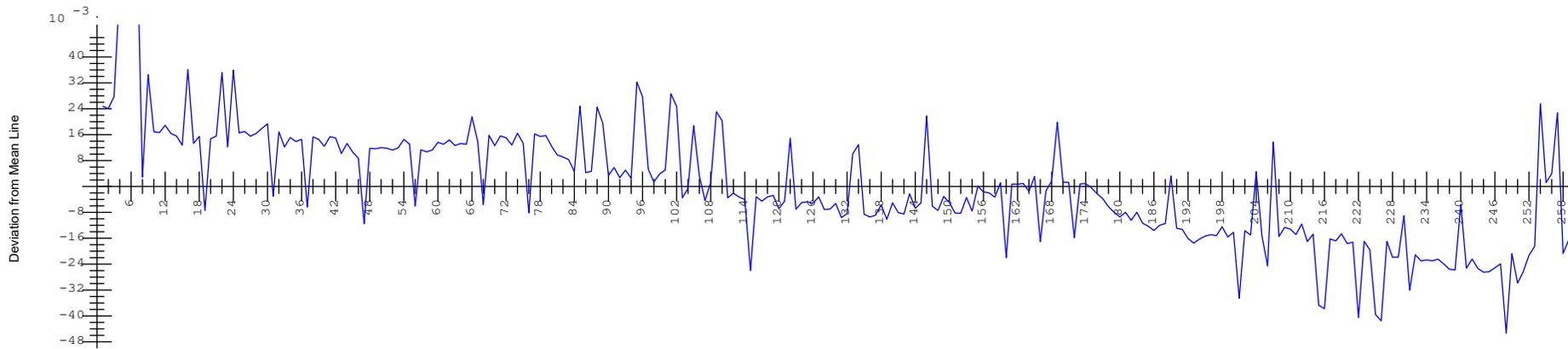
Dimensions in MM, Angles in Milliradians



## HGVPU - Pole Tip Gap and Symmetry Point Location

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>8.0000</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>3.9990</b>	<b>DS Wall Half :</b>	<b>3.9514</b>
		<b>US Aisle Half :</b>	<b>4.0031</b>	<b>DS Aisle Half :</b>	<b>3.9524</b>

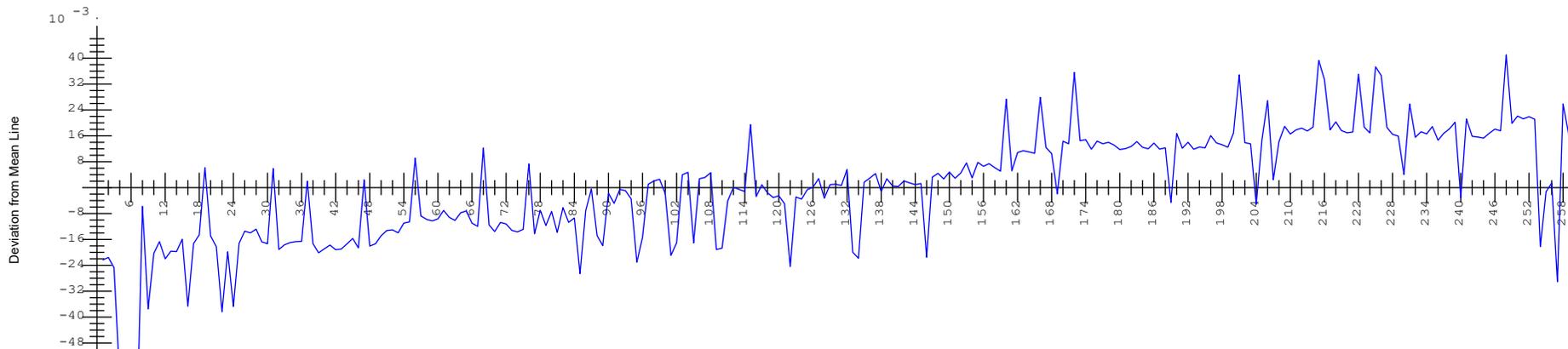
<b>S/N</b>	<b>: HXU_010</b>
<b>Date</b>	<b>: 06-DEC-2019</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>



### 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

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>8.0000</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>3.9990</b>	<b>DS Wall Half :</b>	<b>3.9514</b>
		<b>US Aisle Half :</b>	<b>4.0031</b>	<b>DS Aisle Half :</b>	<b>3.9524</b>

<b>S/N</b>	<b>: HXU_010</b>
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<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>