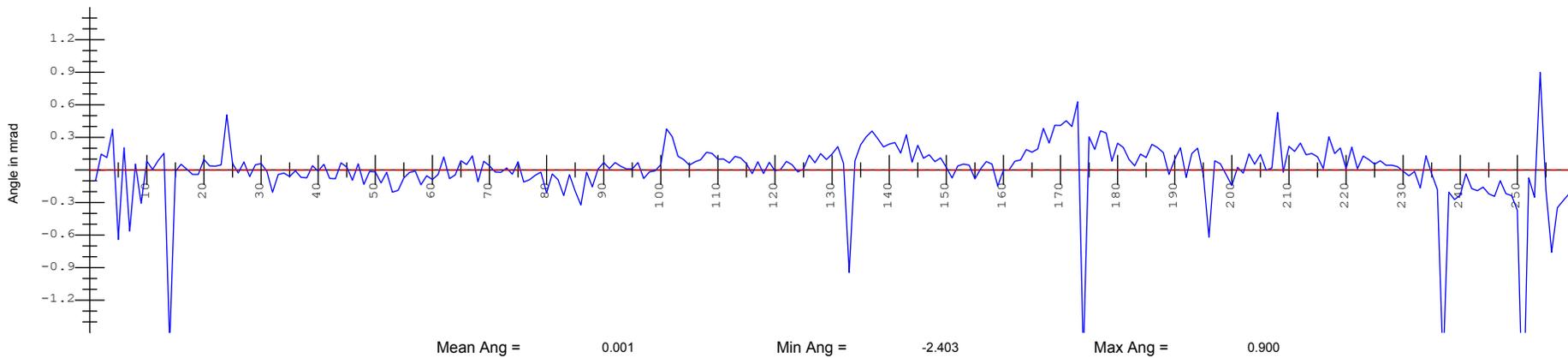


### Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

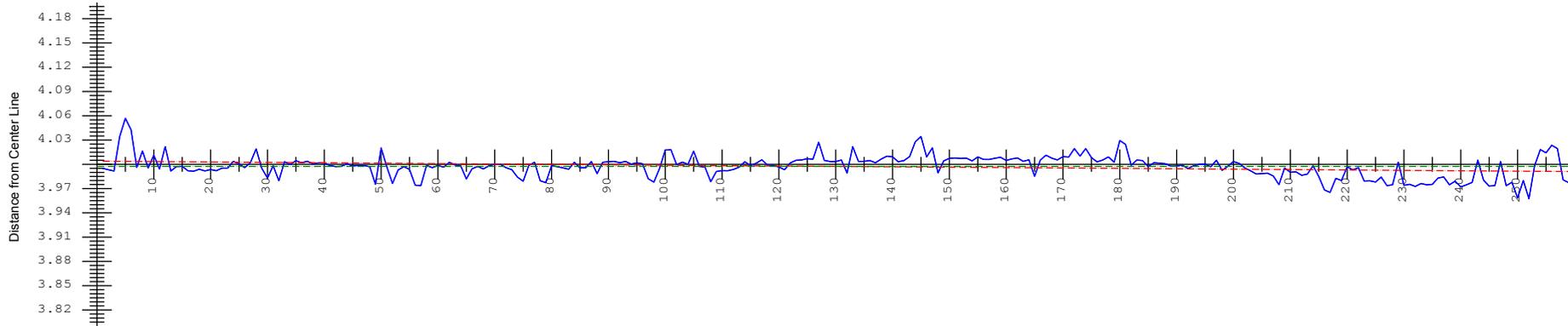


## HGVPU - Pole Tip Angles

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>7.9989</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>4.0040</b>	<b>DS Wall Half :</b>	<b>3.9541</b>
		<b>US Aisle Half :</b>	<b>4.0028</b>	<b>DS Aisle Half :</b>	<b>3.9559</b>

<b>S/N</b>	<b>: HXU_005</b>
<b>Date</b>	<b>: 14-AUG-2019</b>
<b>Data Set</b>	<b>: 0002</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>

Aisle Pole Mean = 3.997      Aisle Pole Min. = 3.957      Aisle Pole Max. = 4.057      Reg. Line Ang. = -0.004



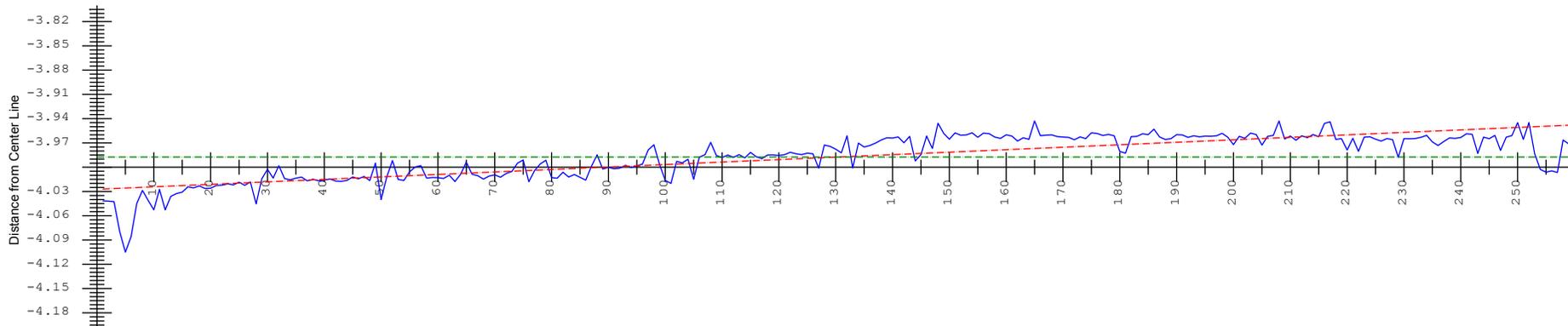
### Aisle Pole Tips at Nom. Beam Height

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 = 7.886



Wall Pole Mean = -3.987      Wall Pole Min. = -4.105      Wall Pole Max. = -3.943      Reg. Line Ang. = 0.024

### 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>7.9989</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>4.0040</b>	<b>DS Wall Half :</b>	<b>3.9541</b>
		<b>US Aisle Half :</b>	<b>4.0028</b>	<b>DS Aisle Half :</b>	<b>3.9559</b>

<b>S/N</b>	<b>: HXU_005</b>
<b>Date</b>	<b>: 14-AUG-2019</b>
<b>Data Set</b>	<b>: 0002</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>4.004</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Wall Pole Tip(1)</b>	<b>-4.027</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Sym. Pt.</b>	<b>-0.012</b>			
<b>US Gap</b>				<b>8.031</b>
<b>DS Aisle Pole Tip(260)</b>	<b>3.991</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Wall Pole Tip(260)</b>	<b>-3.948</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Sym. Pt.</b>	<b>0.022</b>			
<b>DS Gap</b>				<b>7.939</b>
<b>Taper</b>				<b>-0.092</b>

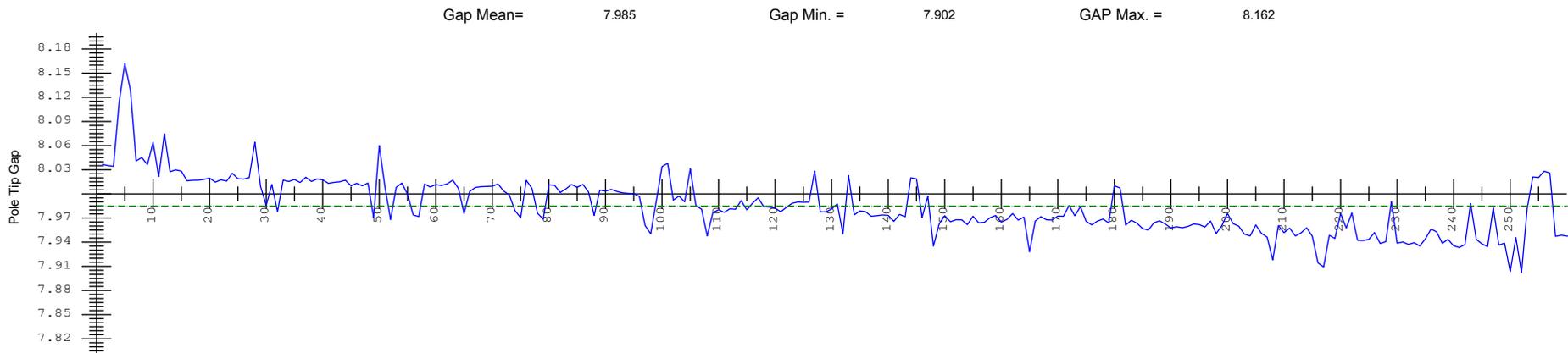
Dimensions in MM



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

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>7.9989</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>4.0040</b>	<b>DS Wall Half :</b>	<b>3.9541</b>
		<b>US Aisle Half :</b>	<b>4.0028</b>	<b>DS Aisle Half :</b>	<b>3.9559</b>

<b>S/N</b>	: HXU_005
<b>Date</b>	: 14-AUG-2019
<b>Data Set</b>	: 0002
<b>Run</b>	: FINAL
<b>Cam Pos.</b>	: B

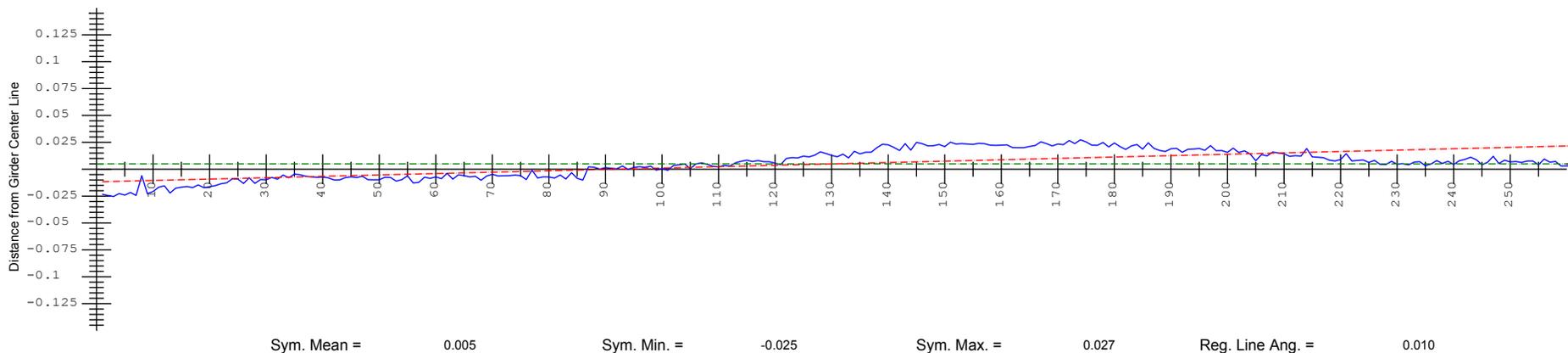


### Pole Tip Gap at Nom. Beam Height

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

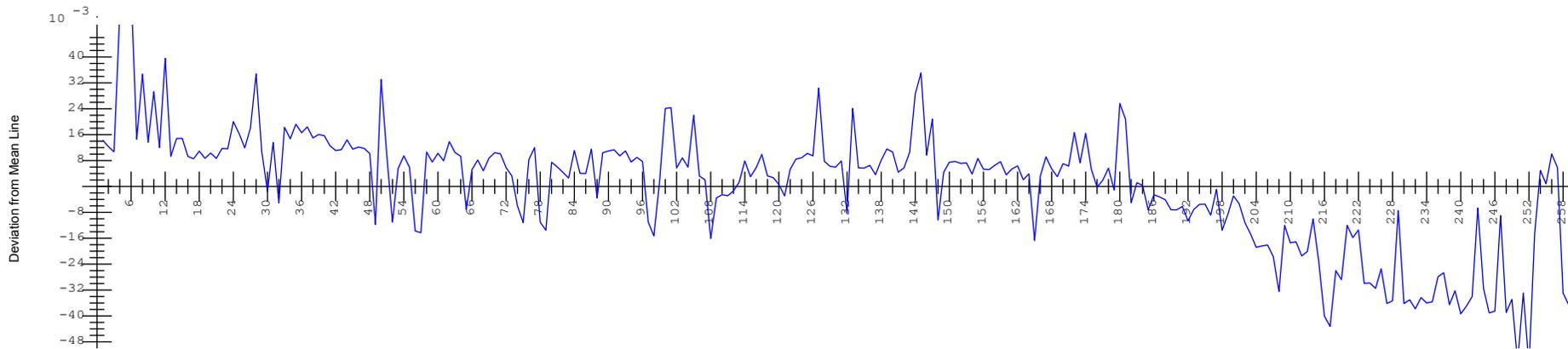
Dimensions in MM, Angles in Milliradians



### HGVPU - Pole Tip Gap and Symmetry Point Location

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>7.9989</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>4.0040</b>	<b>DS Wall Half :</b>	<b>3.9541</b>
		<b>US Aisle Half :</b>	<b>4.0028</b>	<b>DS Aisle Half :</b>	<b>3.9559</b>

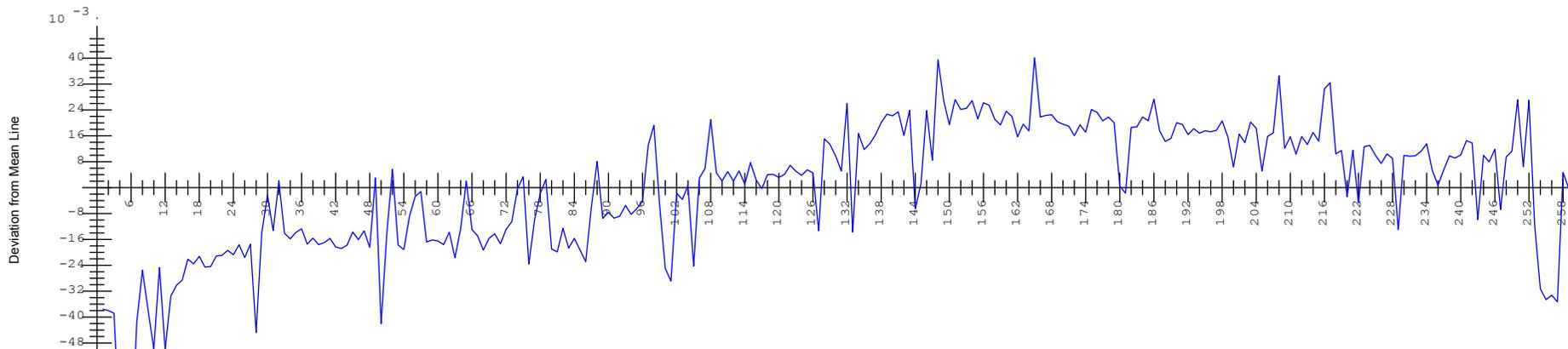
<b>S/N</b>	<b>: HXU_005</b>
<b>Date</b>	<b>: 14-AUG-2019</b>
<b>Data Set</b>	<b>: 0002</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>



### 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>7.9989</b>	<b>DS Full :</b>	<b>7.8998</b>
<b>Nom. Taper :</b>	<b>-0.100</b>	<b>US Wall Half :</b>	<b>4.0040</b>	<b>DS Wall Half :</b>	<b>3.9541</b>
		<b>US Aisle Half :</b>	<b>4.0028</b>	<b>DS Aisle Half :</b>	<b>3.9559</b>

<b>S/N</b>	<b>: HXU_005</b>
<b>Date</b>	<b>: 14-AUG-2019</b>
<b>Data Set</b>	<b>: 0002</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>