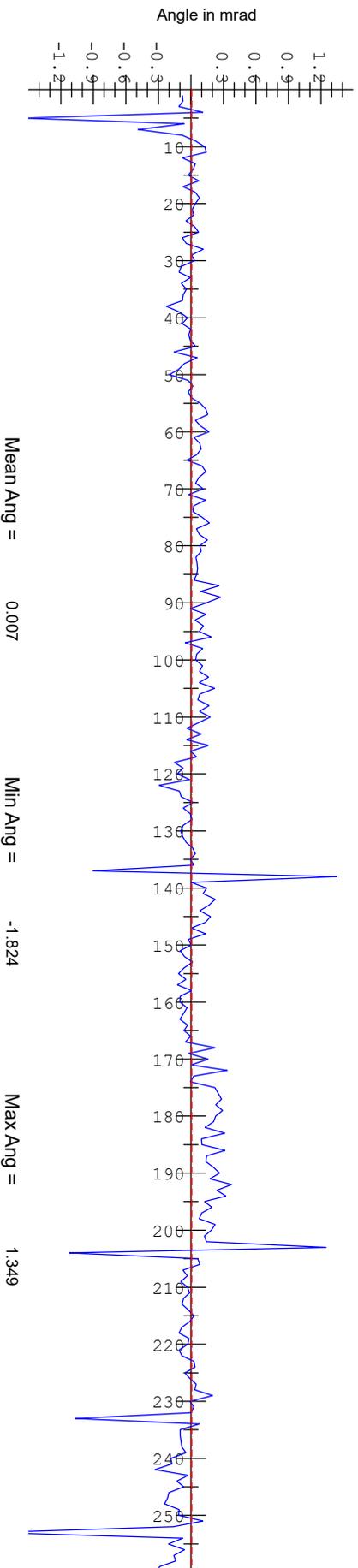


### Included Angle Between Pole Tips

Pole Tip Num. ----->

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



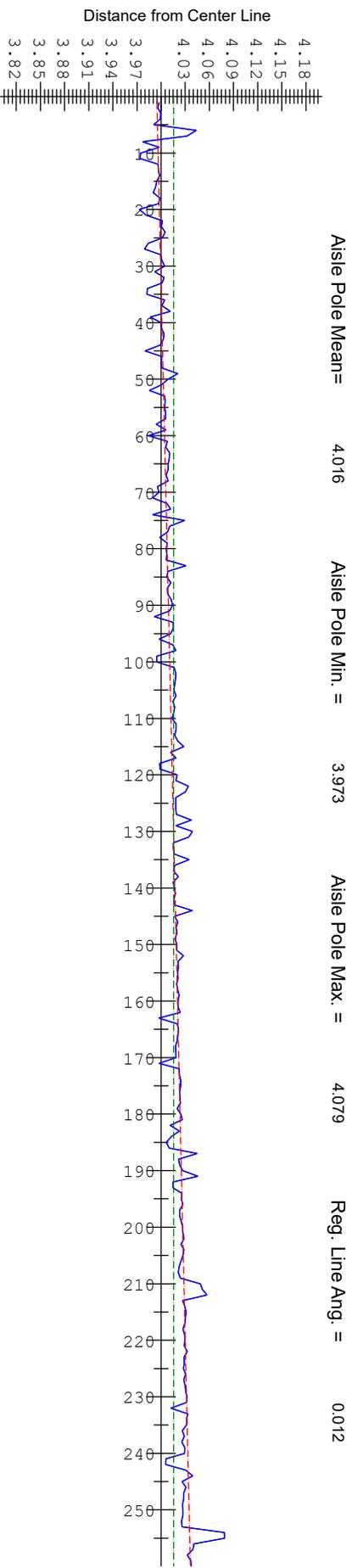
Dimensions in MM, Angles in Milliradians



## HGVPU - Pole Tip Angles

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>7.9997</b>	<b>DS Full :</b>	<b>7.9999</b>
<b>Nom. Taper :</b>	<b>0.000</b>	<b>US Wall Half :</b>	<b>4.0011</b>	<b>DS Wall Half :</b>	<b>4.0014</b>
		<b>US Aisle Half :</b>	<b>4.0021</b>	<b>DS Aisle Half :</b>	<b>4.0019</b>

<b>S/N</b>	<b>: HXU 017</b>
<b>Date</b>	<b>: 02-OCT-2020</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>



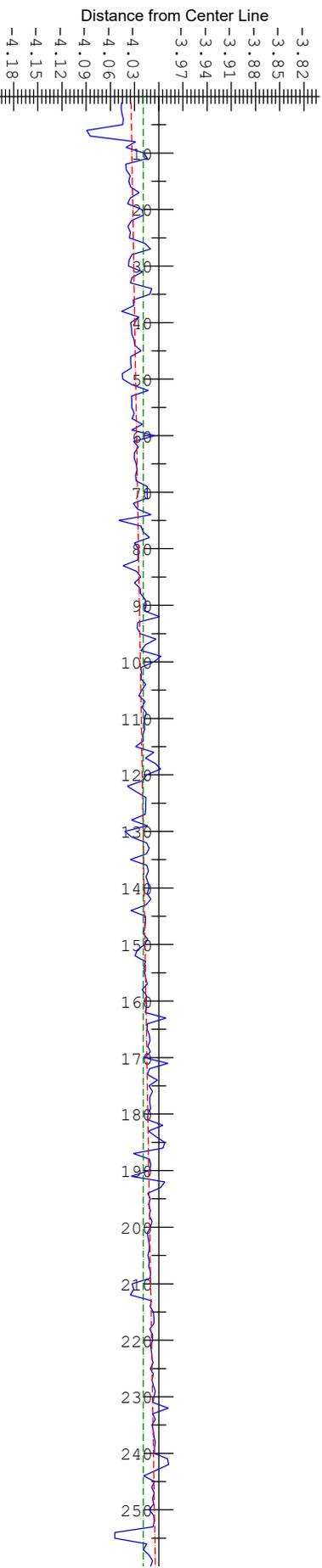
Pole Tip Num. ----->

### Aisle Pole Tips at Nom. Beam Height

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

### Wall Pole Tips at Nom. Beam Height

Minimum Clearance Gap = 7.946



### Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians

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## HGVPU - Pole Tip Location from Girder Centerline

Nominal Gap :	8.000	US Full :	7.9997	DS Full :	7.9999
Nom. Taper :	0.000	US Wall Half :	4.0011	DS Wall Half :	4.0014
		US Aisle Half :	4.0021	DS Aisle Half :	4.0019

S/N	: HXU 017
Date	: 02-OCT-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

**Values Calculated from Regression Line End Points**

Dimension	X Value	Y Value	Z Value	Calc. Value
<b>US Aisle Pole Tip(1)</b>	<b>3.995</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Wall Pole Tip(1)</b>	<b>-4.034</b>	<b>0.000</b>	<b>8.750</b>	
<b>US Sym. Pt.</b>	<b>-0.020</b>			
<b>US Gap</b>				<b>8.029</b>
<b>DS Aisle Pole Tip(260)</b>	<b>4.036</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Wall Pole Tip(260)</b>	<b>-4.004</b>	<b>0.000</b>	<b>3375.750</b>	
<b>DS Sym. Pt.</b>	<b>0.016</b>			
<b>DS Gap</b>				<b>8.041</b>
<b>Taper</b>				<b>0.011</b>

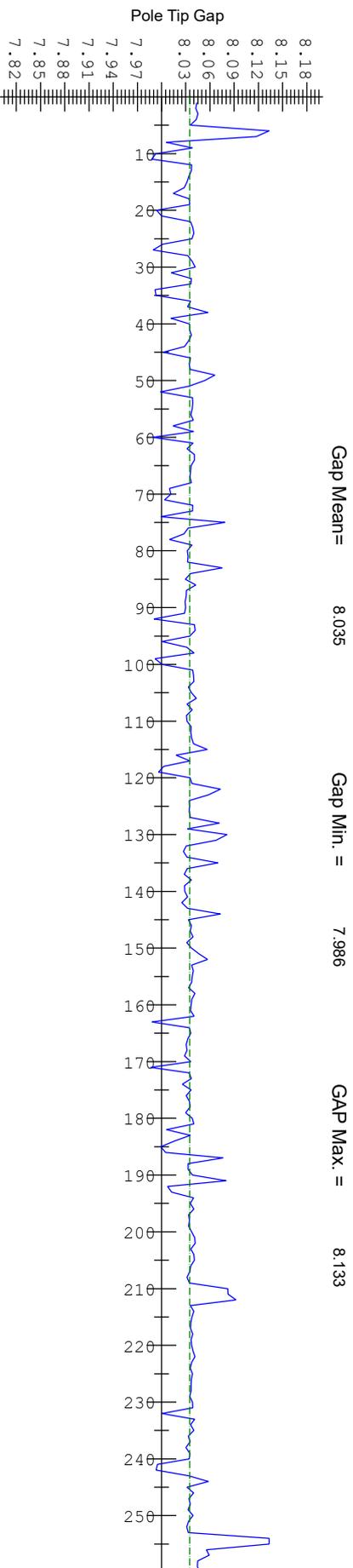
Dimensions in MM



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

<b>Nominal Gap :</b>	<b>8.000</b>	<b>US Full :</b>	<b>7.9997</b>	<b>DS Full :</b>	<b>7.9999</b>
<b>Nom. Taper :</b>	<b>0.000</b>	<b>US Wall Half :</b>	<b>4.0011</b>	<b>DS Wall Half :</b>	<b>4.0014</b>
		<b>US Aisle Half :</b>	<b>4.0021</b>	<b>DS Aisle Half :</b>	<b>4.0019</b>

<b>S/N</b>	<b>: HXU_017</b>
<b>Date</b>	<b>: 02-OCT-2020</b>
<b>Data Set</b>	<b>: 0001</b>
<b>Run</b>	<b>: FINAL</b>
<b>Cam Pos.</b>	<b>: B</b>

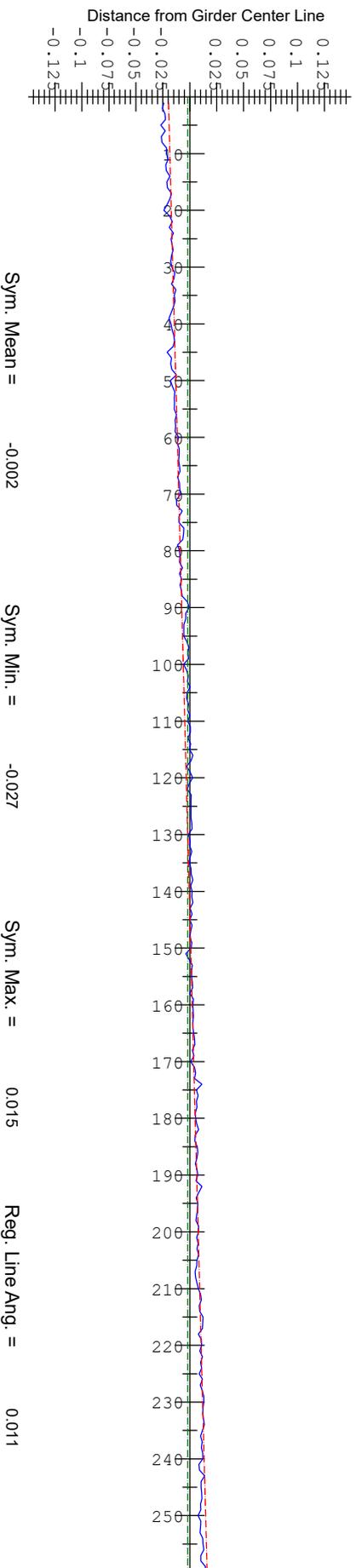


### Pole Tip Gap at Nom. Beam Height

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

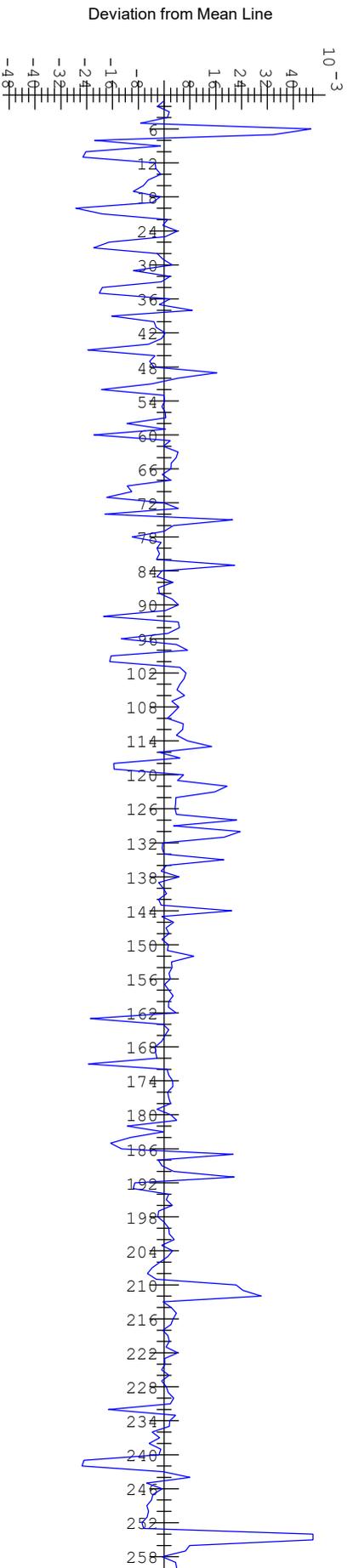
Dimensions in MM, Angles in Milliradians

**SLAC**  
NATIONAL ACCELERATOR LABORATORY  
METROLOGY

## HGVPU - Pole Tip Gap and Symmetry Point Location

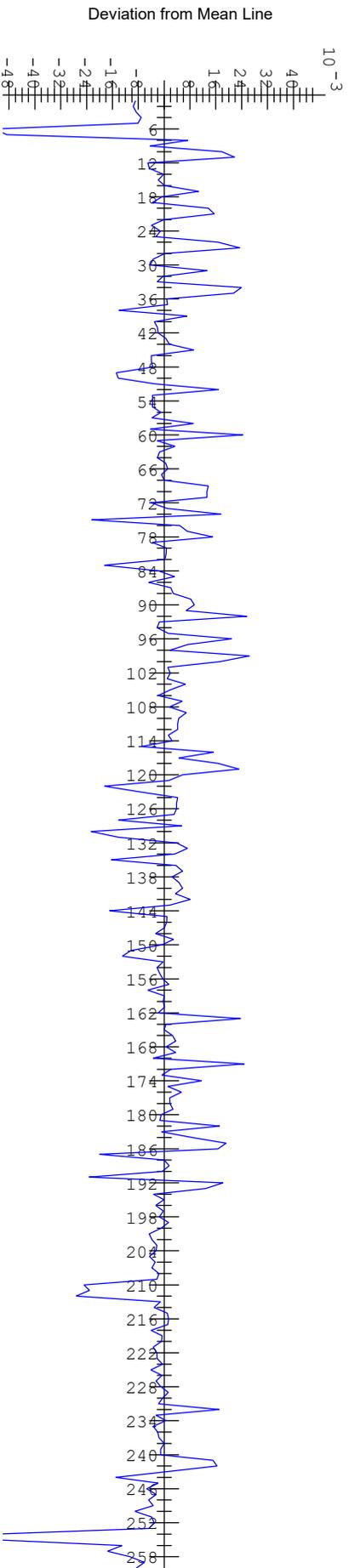
Nominal Gap :	8.000	US Full :	7.9997	DS Full :	7.9999
Nom. Taper :	0.000	US Wall Half :	4.0011	DS Wall Half :	4.0014
		US Aisle Half :	4.0021	DS Aisle Half :	4.0019

S/N	: HXU_017
Date	: 02-OCT-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B



### Aisle Pole Tips

### 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 :	8.000	US Full :	7.9997	DS Full :	7.9999
Nom. Taper :	0.000	US Wall Half :	4.0011	DS Wall Half :	4.0014
		US Aisle Half :	4.0021	DS Aisle Half :	4.0019

S/N	: HXU_017
Date	: 02-OCT-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B