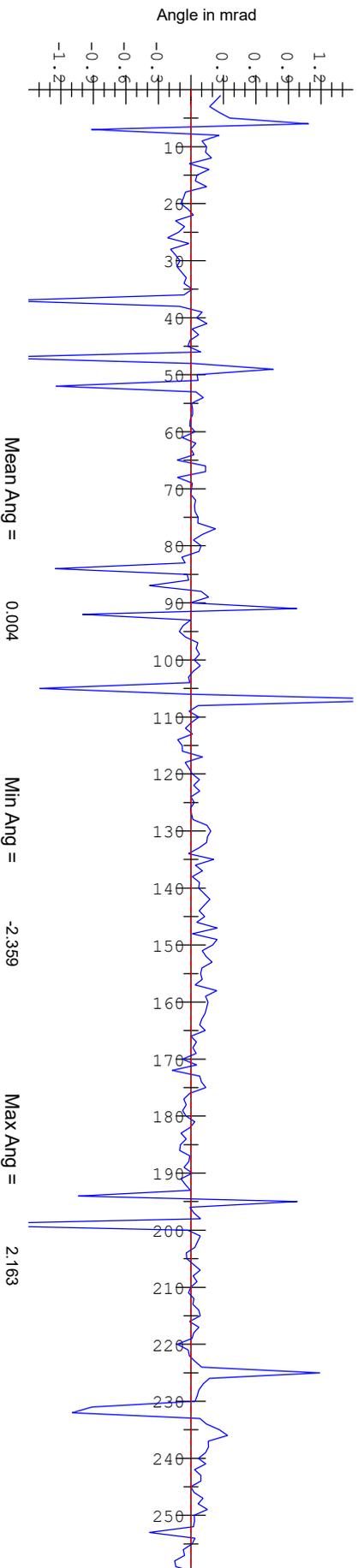


### Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

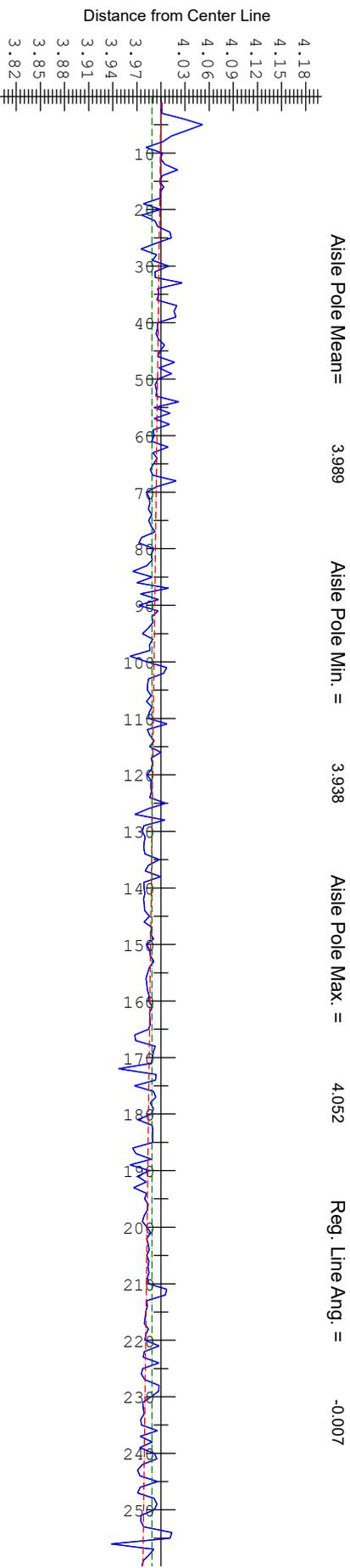


**SLAC**  
NATIONAL ACCELERATOR LABORATORY  
METROLOGY

## HGVPU - Pole Tip Angles

Nominal Gap :	8.000	US Full :	7.9997	DS Full :	7.8998
Nom. Taper :	-0.100	US Wall Half :	3.9999	DS Wall Half :	3.9475
		US Aisle Half :	4.0027	DS Aisle Half :	3.9497

S/N	: HXU 015
Date	: 05-NOV-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

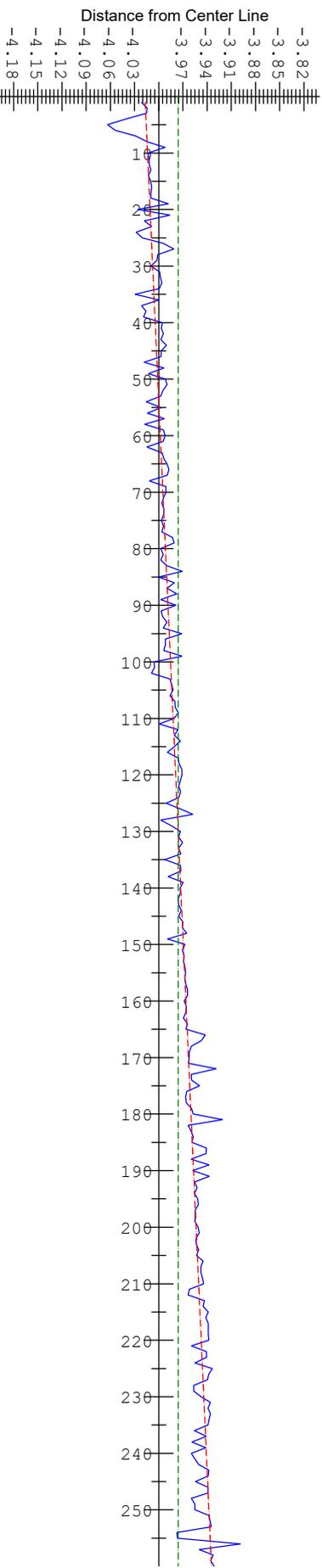


## Aisle Pole Tips at Nom. Beam Height

Pole Tip Num. ----->

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

Minimum Clearance Gap = 7.797



## Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians

	<b>HGVPU - Pole Tip Location from Girder Centerline</b>				
	Nominal Gap :	8.000	US Wall Half :	3.9999	
Nom. Taper :	-0.100	US Full :	7.9997	DS Full :	7.8998
		US Aisle Half :	4.0027	DS Wall Half :	3.9475
		DS Aisle Half :	3.9497	Run	: FINAL
		Cam Pos.	: B	S/N	: HXU 015
				Date	: 05-NOV-2020
				Data Set	: 0001

**Values Calculated from Regression Line End Points**

Dimension	X Value	Y Value	Z Value	Calc. Value
US Aisle Pole Tip(1)	4.000	0.000	8.750	
US Wall Pole Tip(1)	-4.017	0.000	8.750	
US Sym. Pt.	-0.008			
US Gap				8.017
DS Aisle Pole Tip(260)	3.978	0.000	3375.750	
DS Wall Pole Tip(260)	-3.935	0.000	3375.750	
DS Sym. Pt.	0.021			
DS Gap				7.912
Taper				-0.105

Dimensions in MM



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

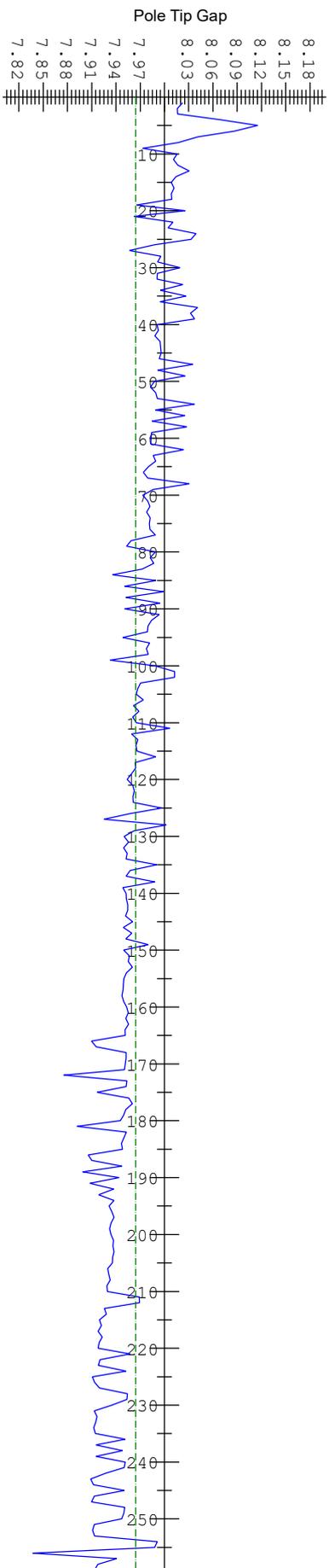
Nominal Gap :	8.000	US Full :	7.9997	DS Full :	7.8998
Nom. Taper :	-0.100	US Wall Half :	3.9999	DS Wall Half :	3.9475
		US Aisle Half :	4.0027	DS Aisle Half :	3.9497

S/N	: HXU 015
Date	: 05-NOV-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B

Gap Mean = 7.964

Gap Min. = 7.837

Gap Max. = 8.115

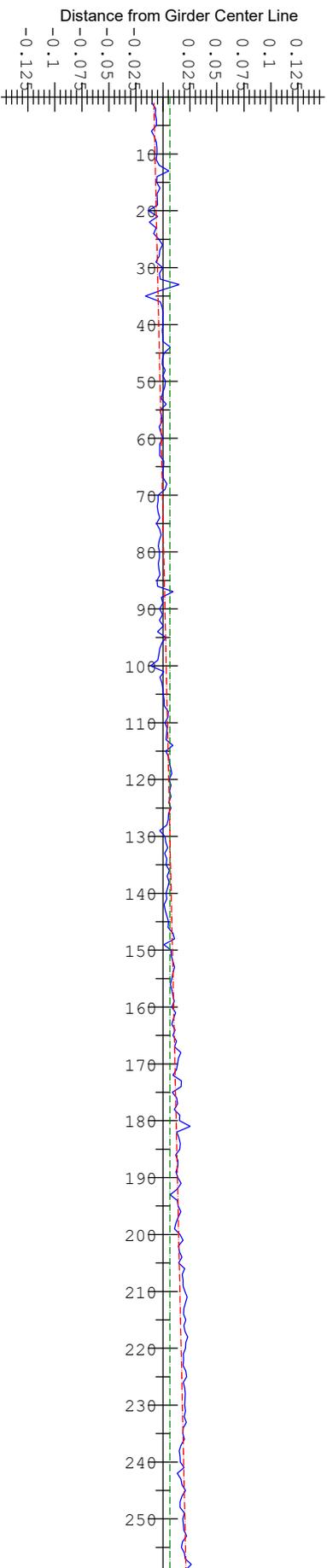


### Pole Tip Gap at Nom. Beam Height

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 =

0.007

Sym. Min. =

-0.016

Sym. Max. =

0.026

Reg. Line Ang. =

0.009

### Girder centerline in reference to Pointed Magnets

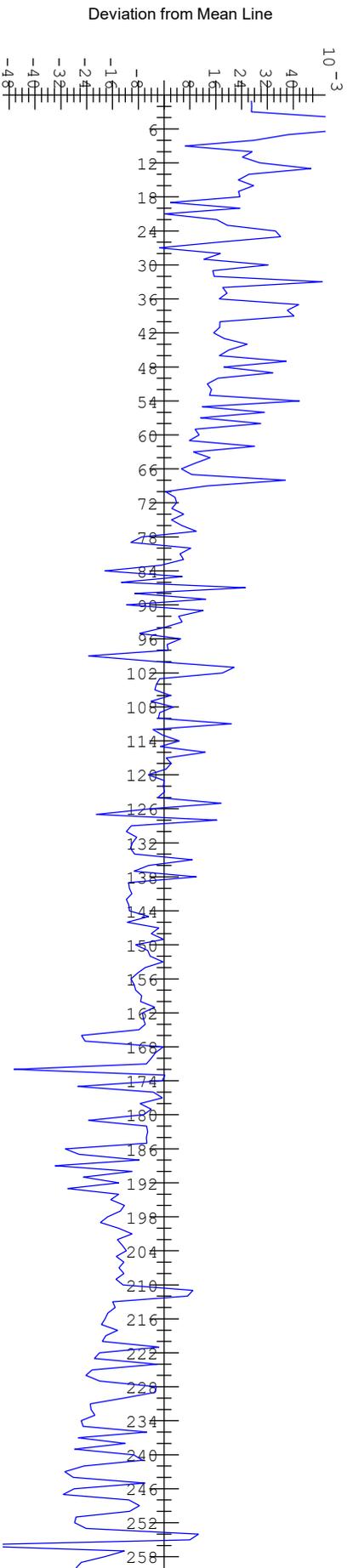
Dimensions in MM, Angles in Milliradians



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

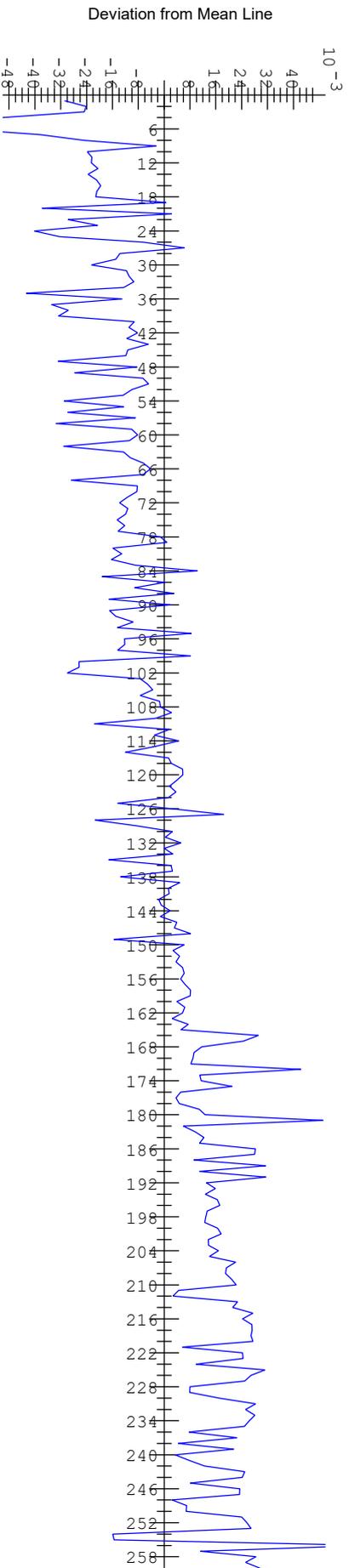
Nominal Gap :	8.000	US Full :	7.9997	DS Full :	7.8998
Nom. Taper :	-0.100	US Wall Half :	3.9999	DS Wall Half :	3.9475
		US Aisle Half :	4.0027	DS Aisle Half :	3.9497

S/N	: HXU 015
Date	: 05-NOV-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 :	7.8998
Nom. Taper :	-0.100	US Wall Half :	3.9999	DS Wall Half :	3.9475
		US Aisle Half :	4.0027	DS Aisle Half :	3.9497

S/N	: HXU_015
Date	: 05-NOV-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B