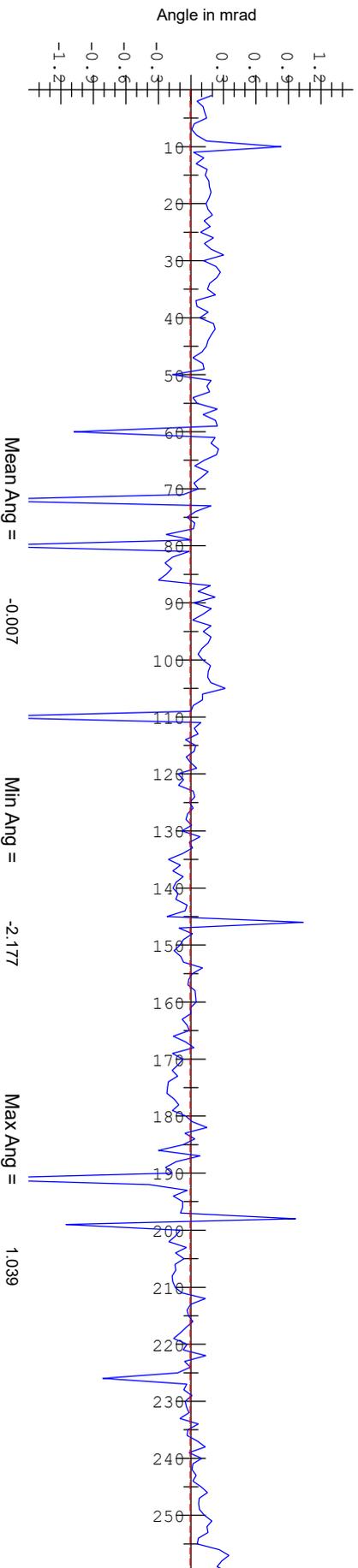


### Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

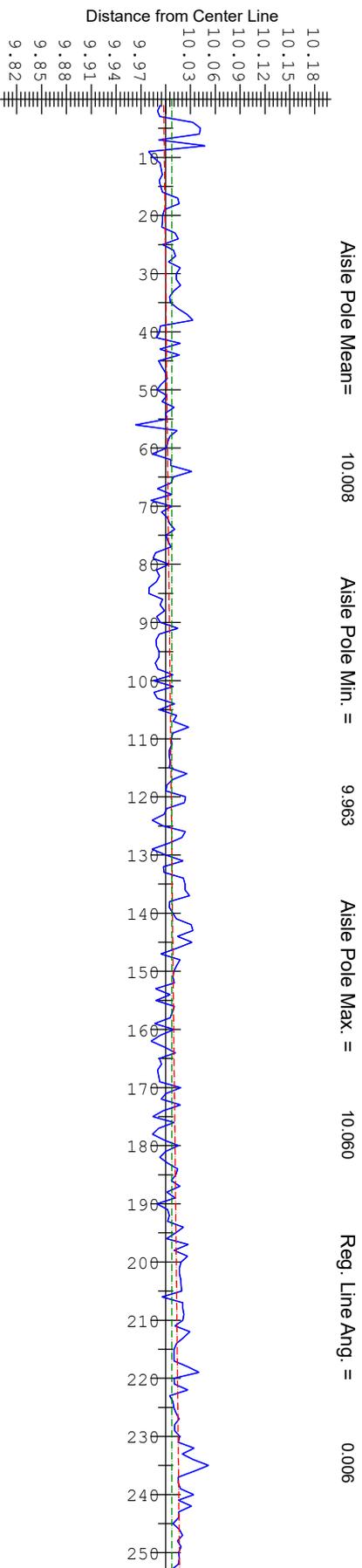


**SLAC**  
NATIONAL ACCELERATOR LABORATORY  
METROLOGY

## HGVPU - Pole Tip Angles

Nominal Gap :	20.000	US Full :	20.0002	DS Full :	20.0000
Nom. Taper :	0.000	US Wall Half :	9.9933	DS Wall Half :	9.9941
		US Aisle Half :	9.9953	DS Aisle Half :	9.9934

S/N	: HXU 016
Date	: 22-JAN-2021
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B



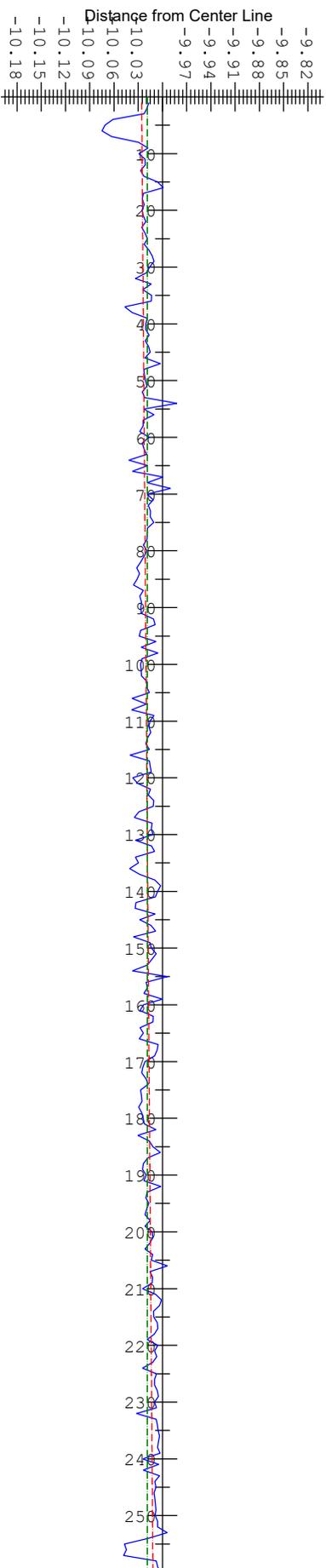
Pole Tip Num. ----->

### Aisle Pole Tips at Nom. Beam Height

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

Minimum Clearance Gap = 19.927

### Wall Pole Tips at Nom. Beam Height



### Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



## HGVPU - Pole Tip Location from Girder Centerline

Nominal Gap :	20.000	US Full :	20.0002	DS Full :	20.0000
Nom. Taper :	0.000	US Wall Half :	9.9933	DS Wall Half :	9.9941
		US Aisle Half :	9.9953	DS Aisle Half :	9.9934

S/N	: HXU 016
Date	: 22-JAN-2021
Data Set	: 0002
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)	9.998	0.000	8.750	
US Wall Pole Tip(1)	-10.026	0.000	8.750	
US Sym. Pt.	-0.014			
US Gap				20.023
DS Aisle Pole Tip(260)	10.017	0.000	3375.750	
DS Wall Pole Tip(260)	-10.012	0.000	3375.750	
DS Sym. Pt.	0.003			
DS Gap				20.029
Taper				0.006

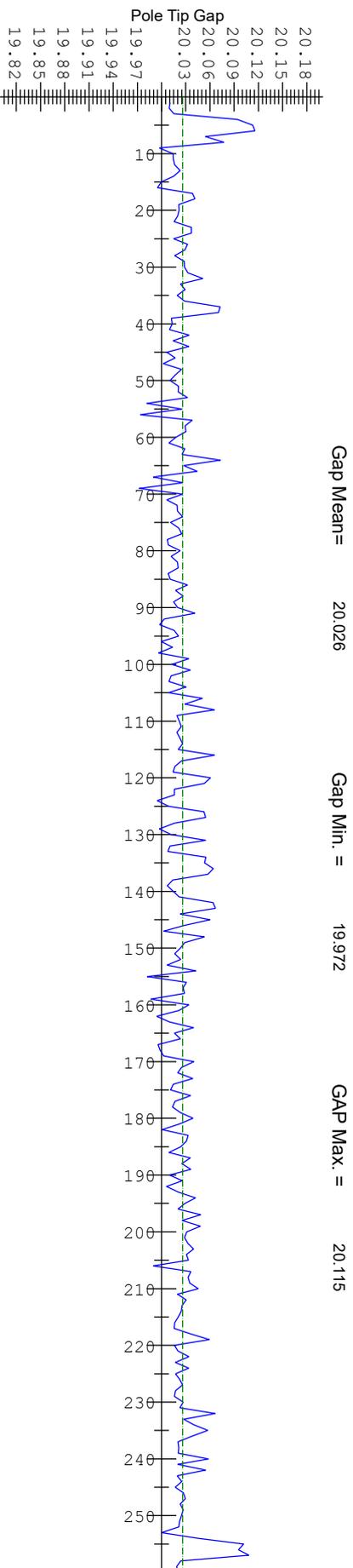
Dimensions in MM



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

Nominal Gap :	20.000	US Full :	20.0002	DS Full :	20.0000
US Wall Half :	9.9933	US Wall Half :	9.9933	DS Wall Half :	9.9941
US Aisle Half :	9.9953	US Aisle Half :	9.9953	DS Aisle Half :	9.9934
Nom. Taper :	0.000				

S/N	: HXU_016
Date	: 22-JAN-2021
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B

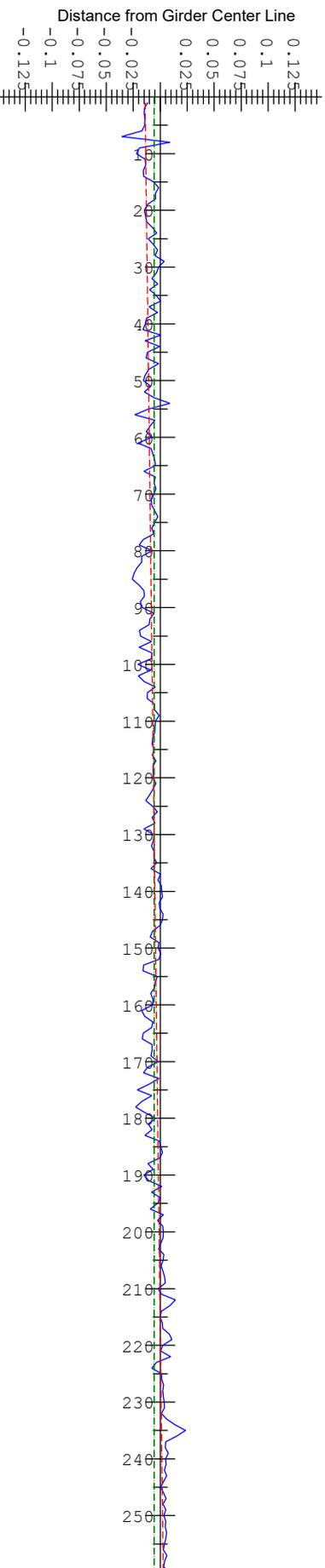


### Pole Tip Gap at Nom. Beam Height

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 : 20.000      US Full : 20.0002      DS Full : 20.0000

Nom. Taper : 0.000      US Wall Half : 9.9933      DS Wall Half : 9.9941

US Aisle Half : 9.9953      DS Aisle Half : 9.9934

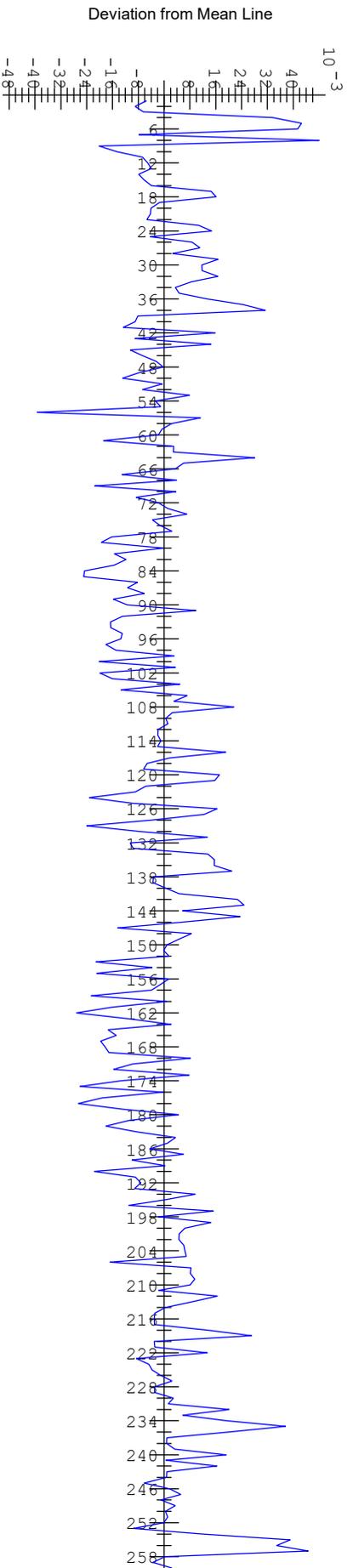
S/N : HXU 016

Date : 22-JAN-2021

Data Set : 0002

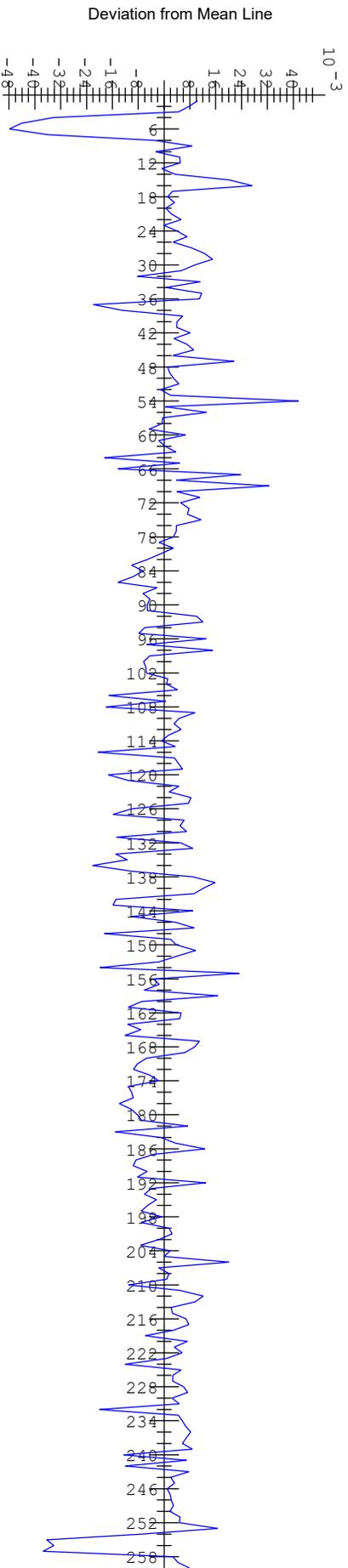
Run : FINAL

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 :	20.000	US Full :	20.0002	DS Full :	20.0000
Nom. Taper :	0.000	US Wall Half :	9.9933	DS Wall Half :	9.9941
		US Aisle Half :	9.9953	DS Aisle Half :	9.9934

S/N	: HXU 016
Date	: 22-JAN-2021
Data Set	: 0002
Run	: FINAL
Cam Pos.	: B