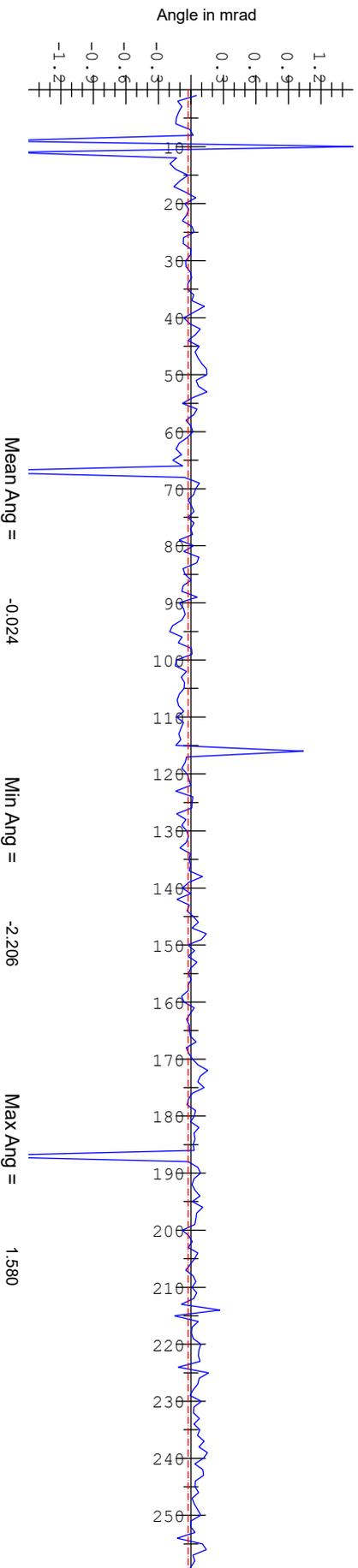


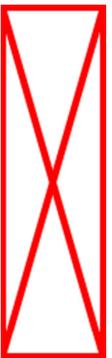
### Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

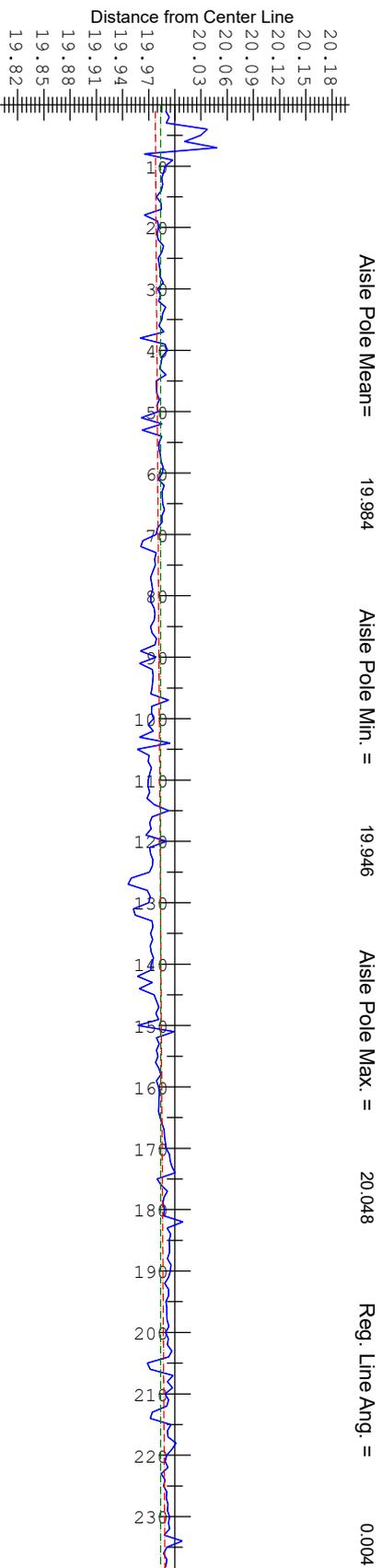


METROLOGY

## HGVPU - Pole Tip Angles

Nominal Gap :	40.000	US Full :	39.9999	DS Full :	40.0003
Nom. Taper :	0.000	US Wall Half :	19.9932	DS Wall Half :	19.9922
		US Aisle Half :	19.9924	DS Aisle Half :	19.9935

S/N	: HXU 011
Date	: 27-OCT-2021
Data Set	: 0004
Run	: FINAL
Cam Pos.	: B

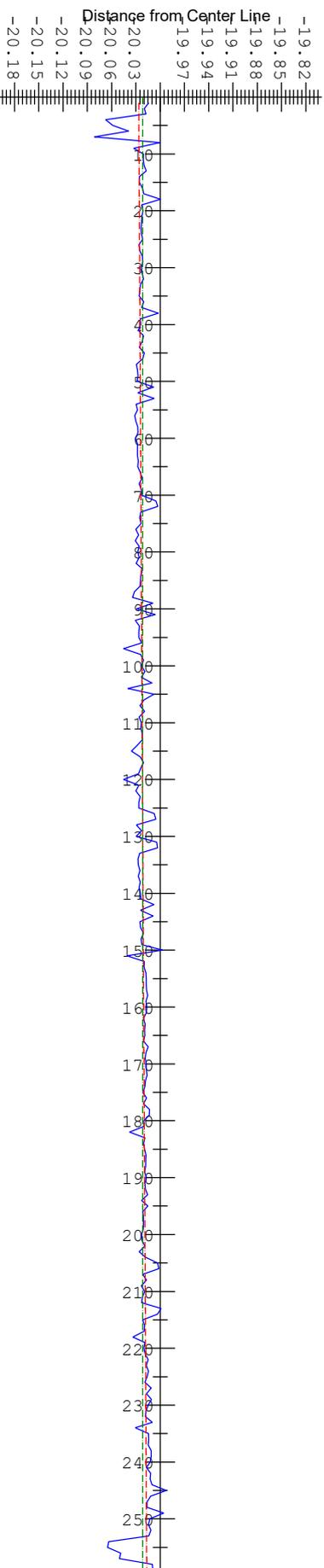


Pole Tip Num. ----->

### Aisle Pole Tips at Nom. Beam Height

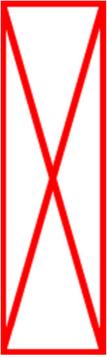
Blue = Pole Tip points  
Green = Mean line  
Red = Regression line thru points

Minimum Clearance Gap = 39.893



### Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



**METROLOGY**

## HGVPU - Pole Tip Location from Girder Centerline

Nominal Gap :	40.000	US Full :	39.9999	DS Full :	40.0003
US Wall Half :	19.9932	US Aisle Half :	19.9924	DS Wall Half :	19.9922
DS Aisle Half :	19.9935				

S/N	: HXU 011	Date	: 27-OCT-2021
Data Set	: 0004	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)	19.978	0.000	8.750	
US Wall Pole Tip(1)	-20.027	0.000	8.750	
US Sym. Pt.	-0.024			
US Gap				40.004
DS Aisle Pole Tip(260)	19.990	0.000	3375.750	
DS Wall Pole Tip(260)	-20.017	0.000	3375.750	
DS Sym. Pt.	-0.013			
DS Gap				40.006
Taper				0.002

Dimensions in MM

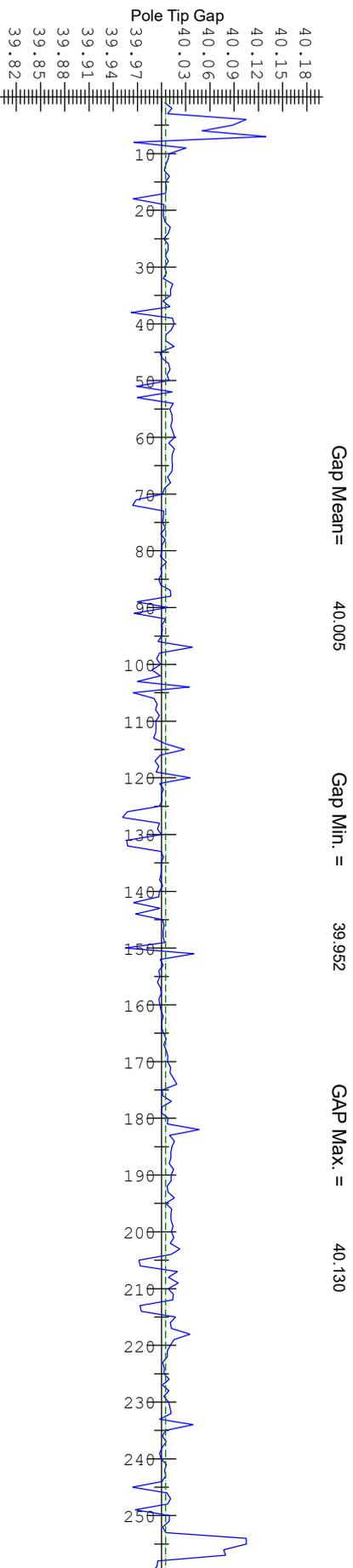
**HGVPVU - Gap Calc. from Regression Line End Points**

Nominal Gap : 40.000    US Full : 39.9999    DS Full : 40.0003  
 US Wall Half : 19.9932    DS Wall Half : 19.9922  
 Norm. Taper : 0.000    US Aisle Half : 19.9924    DS Aisle Half : 19.9935



METROLOGY

S/N : HXU\_011  
 Date : 27-OCT-2021  
 Data Set : 0004  
 Run : FINAL  
 Cam Pos. : B

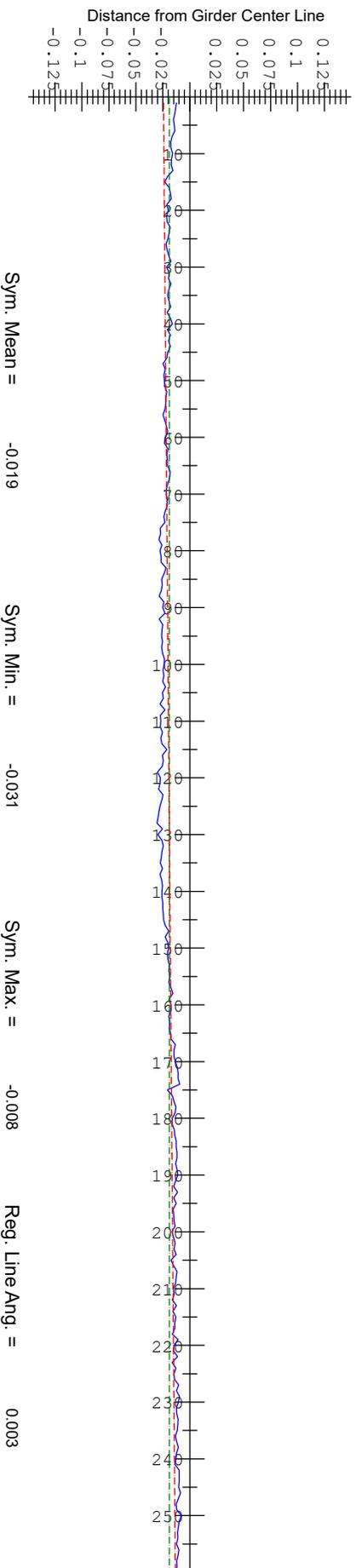


### Pole Tip Gap at Nom. Beam Height

Pole Tip Num. ----->

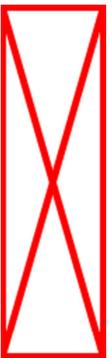
Blue = Pole Tip points  
 Green = Mean line  
 Red = Regression line thru points

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



### Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians

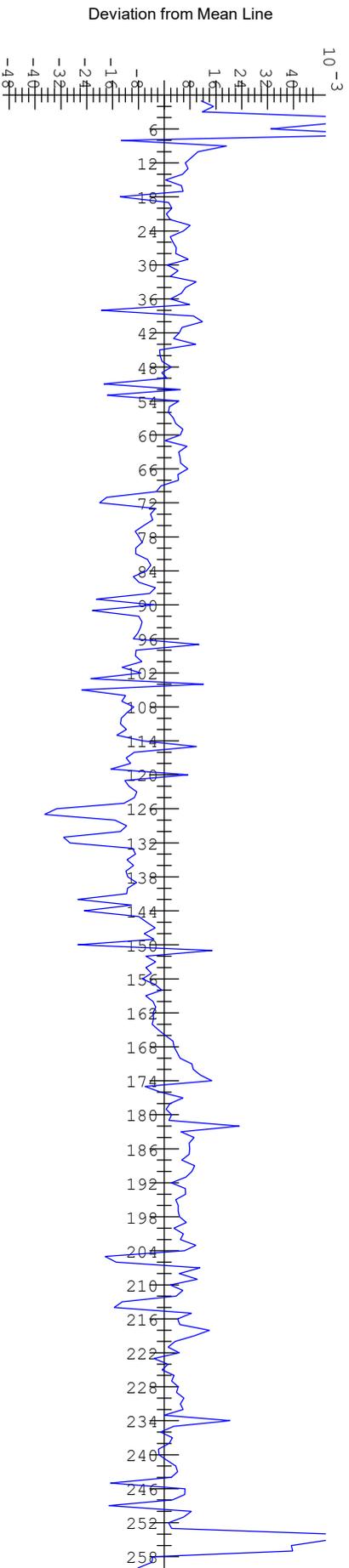


**METROLOGY**

## HGVPU - Pole Tip Gap and Symmetry Point Location

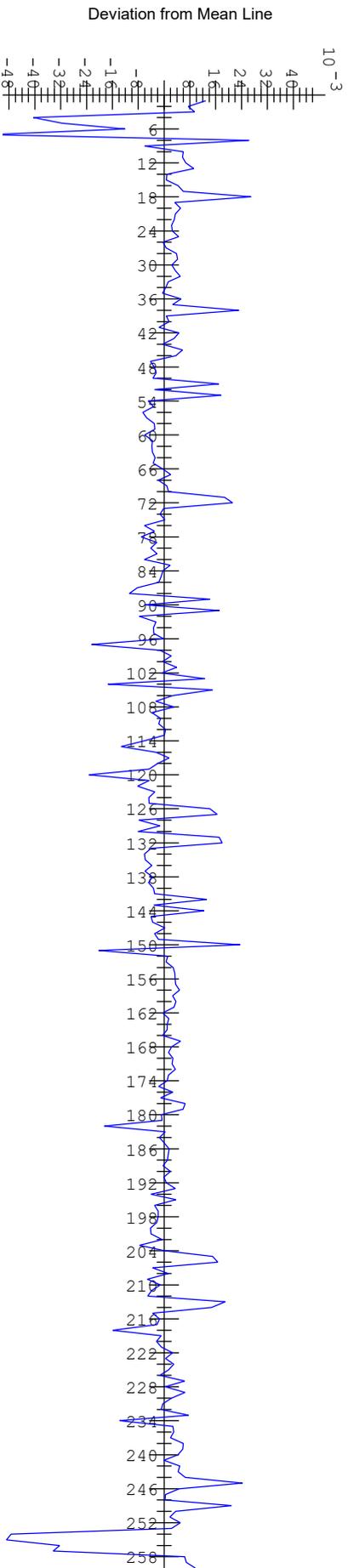
Nominal Gap :	40.000	US Full :	39.9999	DS Full :	40.0003
Nom. Taper :	0.000	US Wall Half :	19.9932	DS Wall Half :	19.9922
		US Aisle Half :	19.9924	DS Aisle Half :	19.9935

S/N	: HXU 011	Date	: 27-OCT-2021
Data Set	: 0004	Run	: FINAL
Cam Pos.	: B		



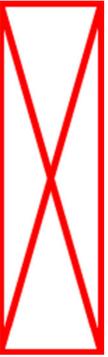
### Aisle Pole Tips

### Wall Pole Tips



### Pole Tip Deviations from Jaw Mean Lines when aligned to actual Gap Sym. Plane

Dimensions in MM



METROLOGY

## HGVPU - Pole Tip Deviation from Mean Line

Nominal Gap :	40.000	US Full :	39.9999	DS Full :	40.0003
Nom. Taper :	0.000	US Wall Half :	19.9932	DS Wall Half :	19.9922
		US Aisle Half :	19.9924	DS Aisle Half :	19.9935

S/N	: HXU_011
Date	: 27-OCT-2021
Data Set	: 0004
Run	: FINAL
Cam Pos.	: B