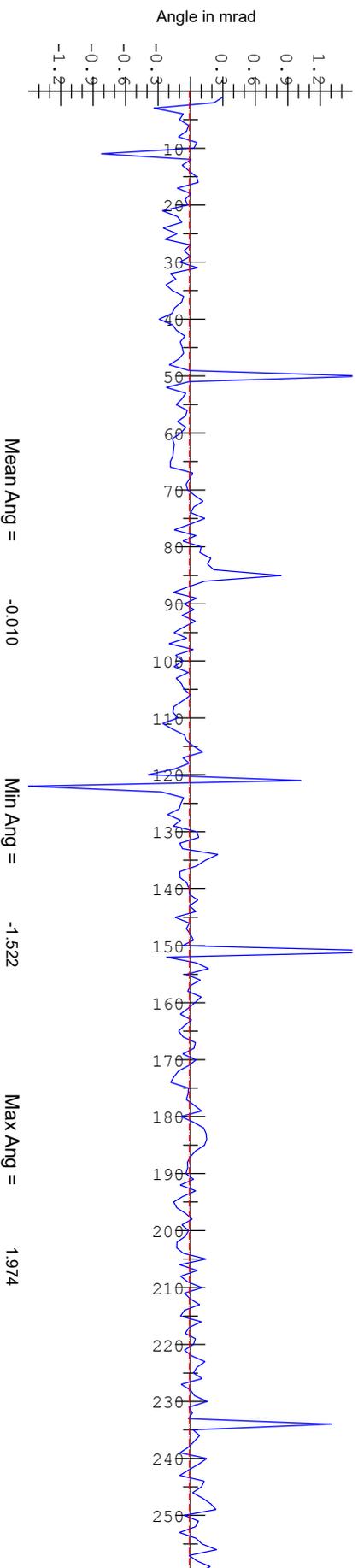


### Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

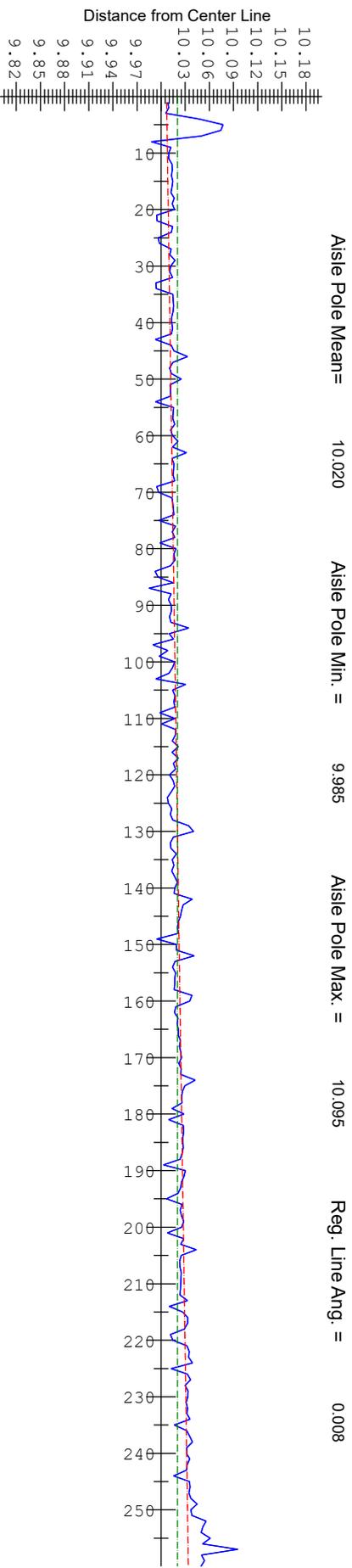


NATIONAL ACCELERATOR LABORATORY  
METROLOGY

## HGVPU - Pole Tip Angles

Nominal Gap :	20.000	US Full :	20.0000	DS Full :	20.0002
Nom. Taper :	0.000	US Wall Half :	9.9932	DS Wall Half :	9.9935
		US Aisle Half :	9.9943	DS Aisle Half :	9.9943

S/N	: HXU 014
Date	: 25-AUG-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B



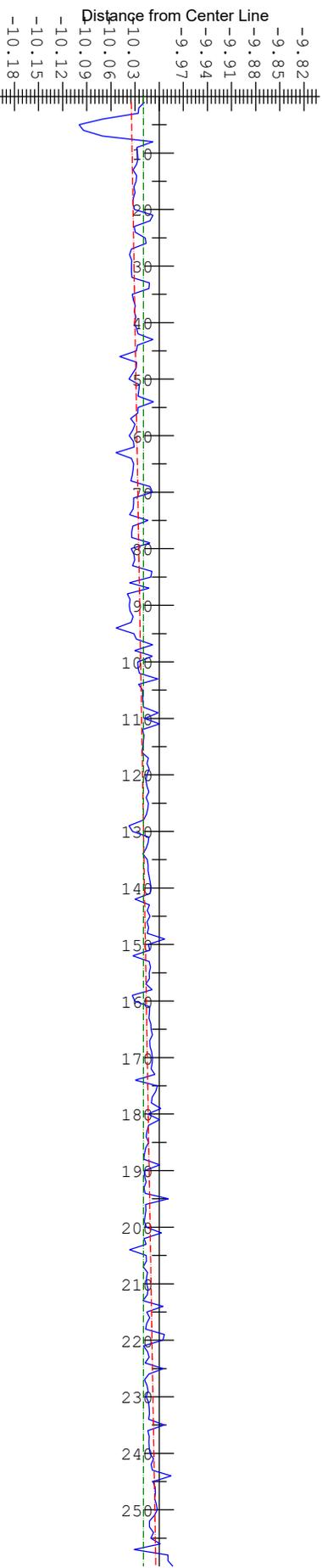
Pole Tip Num. ----->

### Aisle Pole Tips at Nom. Beam Height

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

### Wall Pole Tips at Nom. Beam Height

Minimum Clearance Gap = 19.966



### Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians

	<b>HGVPU - Pole Tip Location from Girder Centerline</b>				
	Nominal Gap :	20.000	US Wall Half :	9.9932	
Nom. Taper :	0.000	US Aisle Half :	9.9943	DS Wall Half :	9.9935
		DS Aisle Half :	9.9943		
S/N	: HXU 014	Date	: 25-AUG-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
US Aisle Pole Tip(1)	10.007	0.000	8.750	
US Wall Pole Tip(1)	-10.035	0.000	8.750	
US Sym. Pt.	-0.014			
US Gap				20.042
DS Aisle Pole Tip(260)	10.034	0.000	3375.750	
DS Wall Pole Tip(260)	-10.004	0.000	3375.750	
DS Sym. Pt.	0.015			
DS Gap				20.038
Taper				-0.004

Dimensions in MM

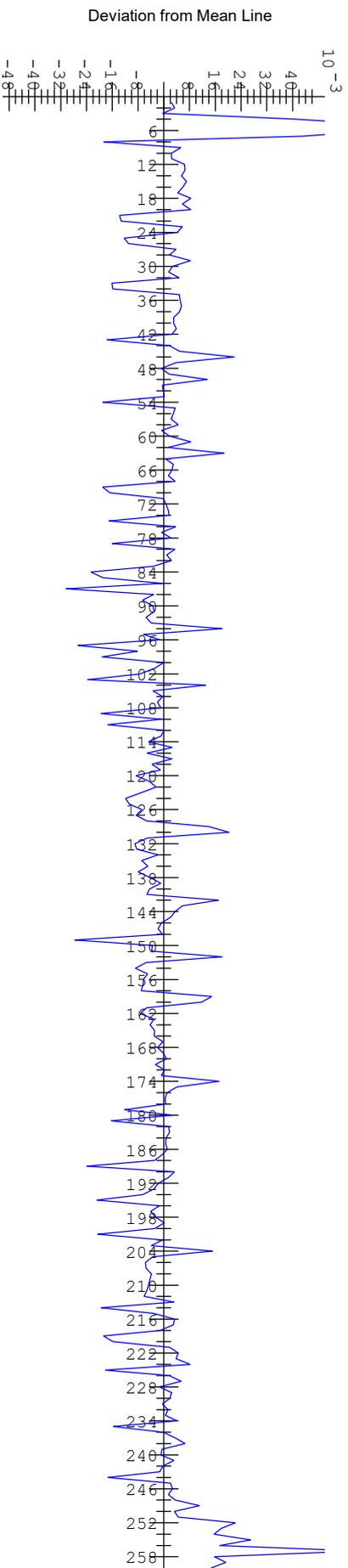


**HGVPU - Gap Calc. from Regression Line End Points**

Nominal Gap :	20.000	US Full :	20.0000	DS Full :	20.0002
Norm. Taper :	0.000	US Wall Half :	9.9932	DS Wall Half :	9.9935
		US Aisle Half :	9.9943	DS Aisle Half :	9.9943

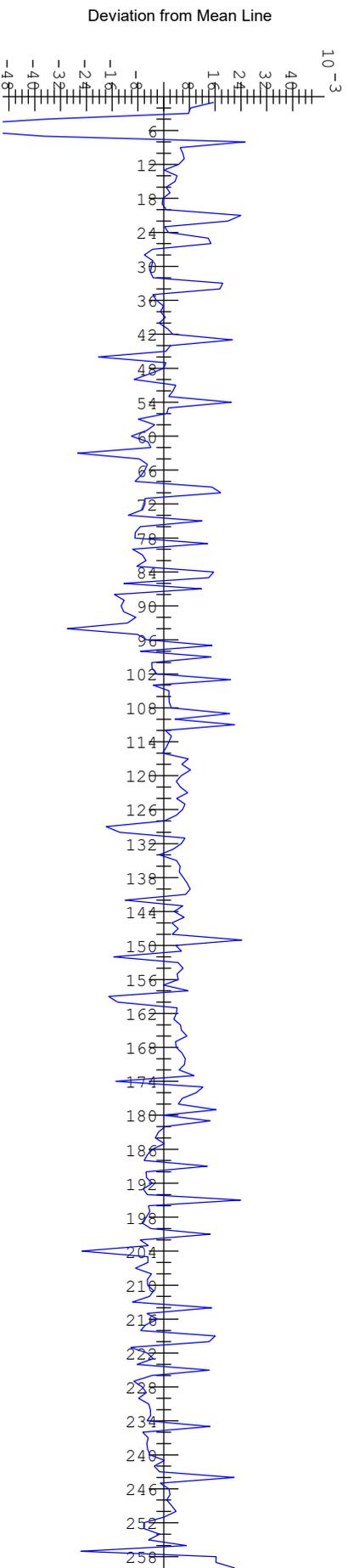
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Date	: 25-AUG-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B





### 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

Nominal Gap :	20.000	US Full :	20.0000	DS Full :	20.0002
Nom. Taper :	0.000	US Wall Half :	9.9932	DS Wall Half :	9.9935
		US Aisle Half :	9.9943	DS Aisle Half :	9.9943

S/N	: HXU_014
Date	: 25-AUG-2020
Data Set	: 0001
Run	: FINAL
Cam Pos.	: B