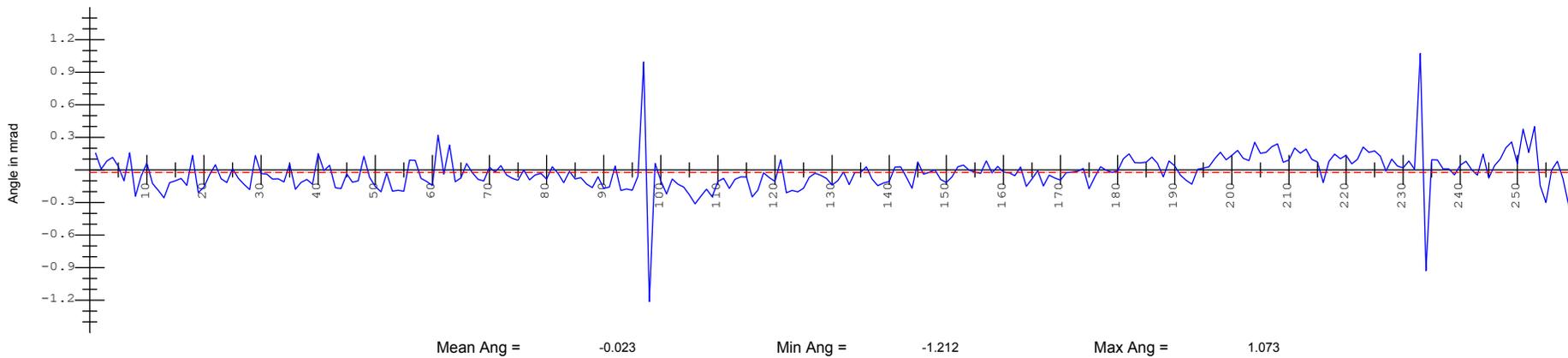




Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

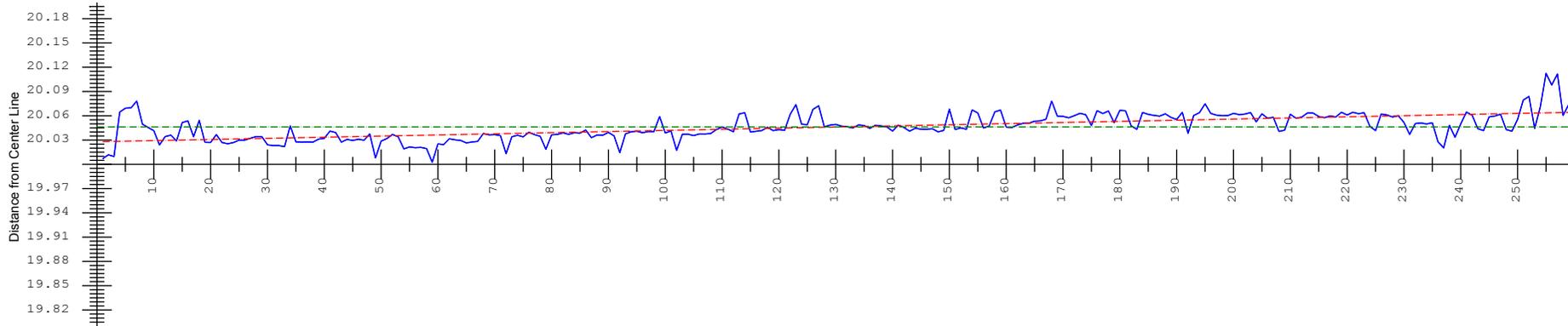


HGVPU - Pole Tip Angles

| | | | | | |
|----------------------|---------------|------------------------|----------------|------------------------|----------------|
| Nominal Gap : | 40.000 | US Full : | 40.0005 | DS Full : | 39.9997 |
| Nom. Taper : | 0.000 | US Wall Half : | 19.9923 | DS Wall Half : | 19.9957 |
| | | US Aisle Half : | 19.9907 | DS Aisle Half : | 19.9965 |

| | |
|-----------------|----------------------|
| S/N | : HXU_009 |
| Date | : 30-OCT-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |

Aisle Pole Mean = 20.046 Aisle Pole Min. = 20.002 Aisle Pole Max. = 20.112 Reg. Line Ang. = 0.011



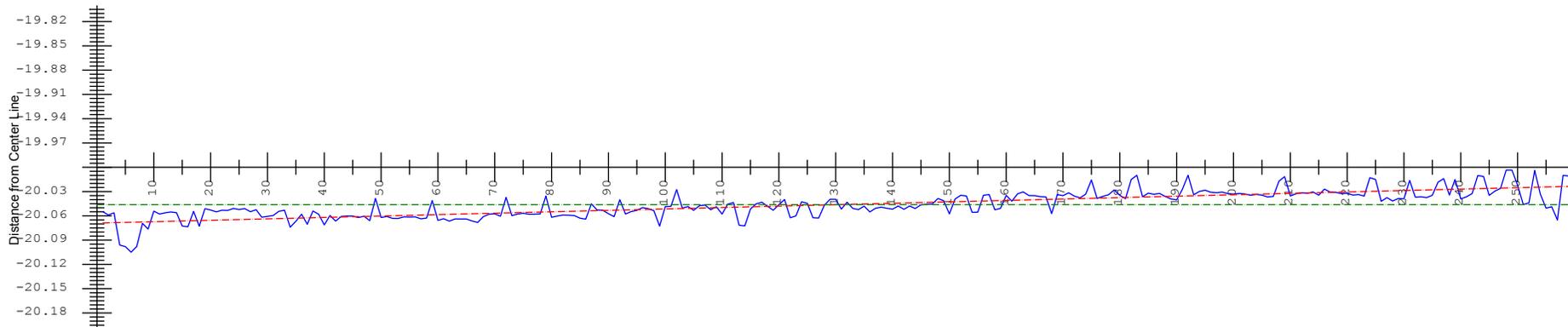
Aisle Pole Tips at Nom. Beam Height

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

Pole Tip Num. ----->

Wall Pole Tips at Nom. Beam Height

Minimum Clearance Gap = 40.005



Wall Pole Mean = -20.046 Wall Pole Min. = -20.105 Wall Pole Max. = -20.003 Reg. Line Ang. = 0.013

Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Pole Tip Location from Girder Centerline

| | | | | | |
|----------------------|---------------|------------------------|----------------|------------------------|----------------|
| Nominal Gap : | 40.000 | US Full : | 40.0005 | DS Full : | 39.9997 |
| Nom. Taper : | 0.000 | US Wall Half : | 19.9923 | DS Wall Half : | 19.9957 |
| | | US Aisle Half : | 19.9907 | DS Aisle Half : | 19.9965 |

| | |
|-----------------|----------------------|
| S/N | : HXU_009 |
| Date | : 30-OCT-2019 |
| 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) | 20.028 | 0.000 | 8.750 | |
| US Wall Pole Tip(1) | -20.069 | 0.000 | 8.750 | |
| US Sym. Pt. | -0.020 | | | |
| US Gap | | | | 40.097 |
| DS Aisle Pole Tip(260) | 20.064 | 0.000 | 3375.750 | |
| DS Wall Pole Tip(260) | -20.023 | 0.000 | 3375.750 | |
| DS Sym. Pt. | 0.020 | | | |
| DS Gap | | | | 40.088 |
| Taper | | | | -0.009 |

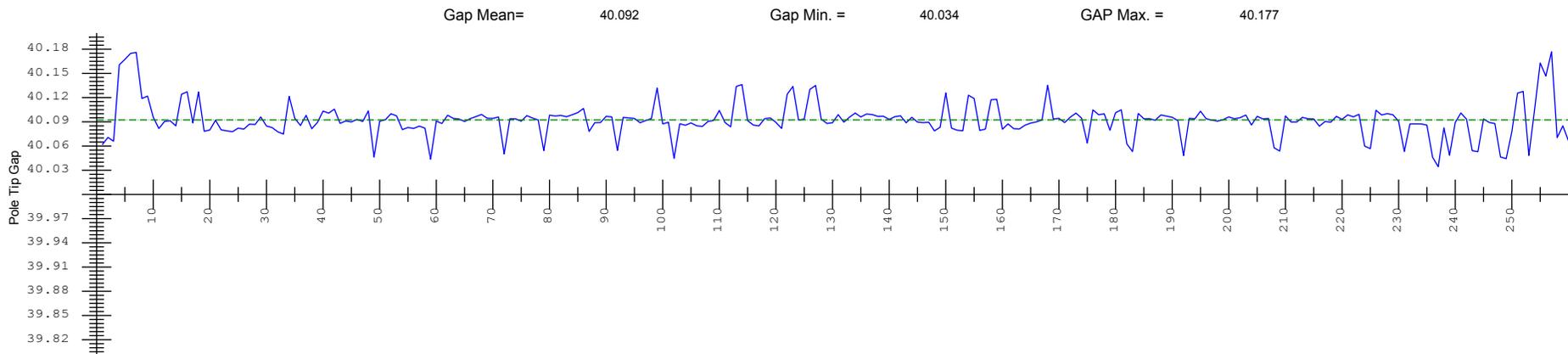
Dimensions in MM



HGVPU - Gap Calc. from Regression Line End Points

| | | | | | |
|----------------------|---------------|------------------------|----------------|------------------------|----------------|
| Nominal Gap : | 40.000 | US Full : | 40.0005 | DS Full : | 39.9997 |
| Nom. Taper : | 0.000 | US Wall Half : | 19.9923 | DS Wall Half : | 19.9957 |
| | | US Aisle Half : | 19.9907 | DS Aisle Half : | 19.9965 |

| | |
|-----------------|----------------------|
| S/N | : HXU_009 |
| Date | : 30-OCT-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |

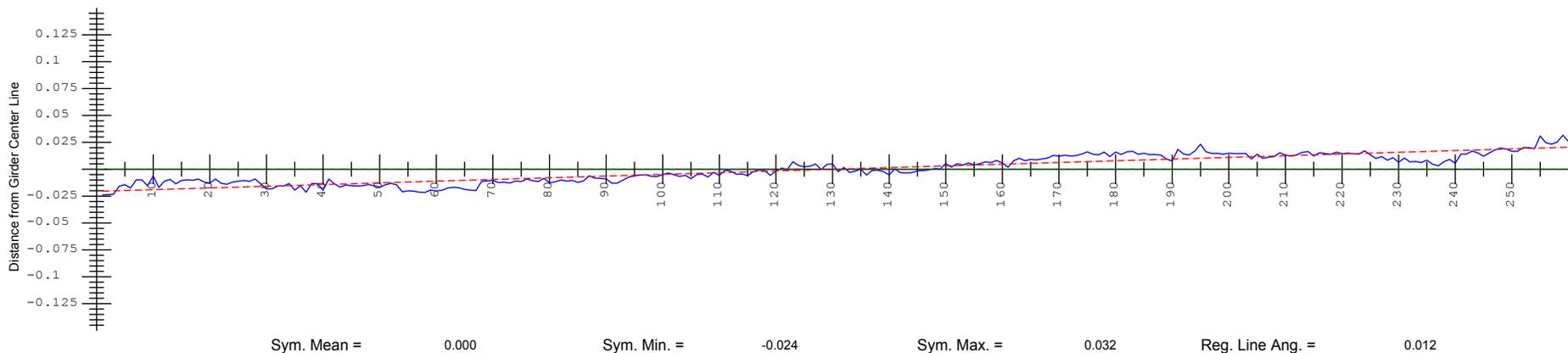


Pole Tip Gap at Nom. Beam Height

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

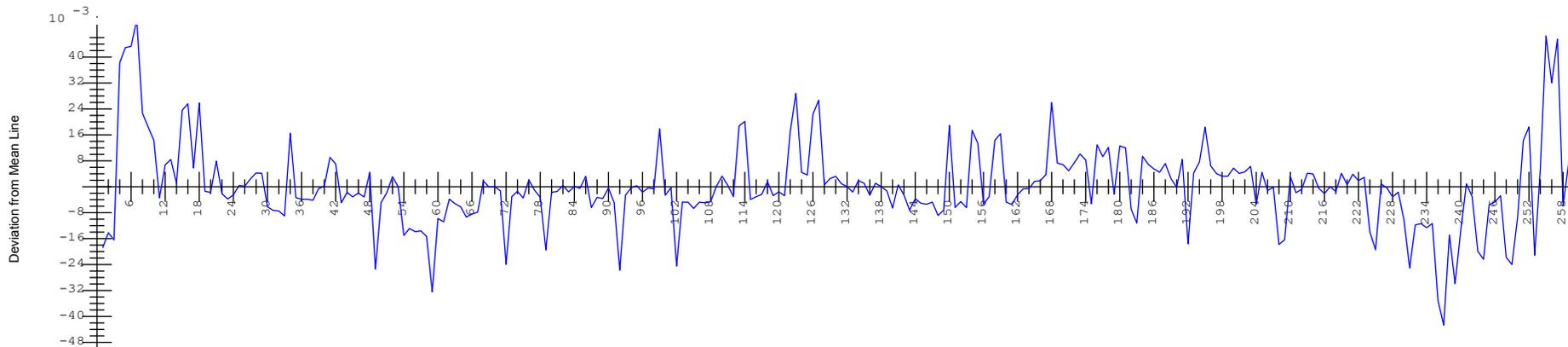
Dimensions in MM, Angles in Milliradians



HGVPU - Pole Tip Gap and Symmetry Point Location

| | | | | | |
|----------------------|---------------|------------------------|----------------|------------------------|----------------|
| Nominal Gap : | 40.000 | US Full : | 40.0005 | DS Full : | 39.9997 |
| Nom. Taper : | 0.000 | US Wall Half : | 19.9923 | DS Wall Half : | 19.9957 |
| | | US Aisle Half : | 19.9907 | DS Aisle Half : | 19.9965 |

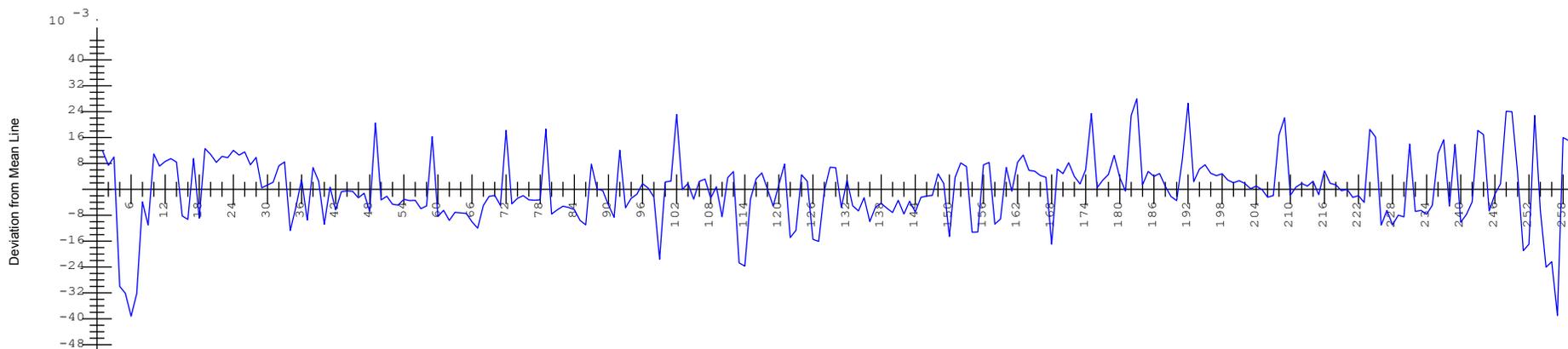
| | |
|-----------------|----------------------|
| S/N | : HXU_009 |
| Date | : 30-OCT-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |



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 : | 40.000 | US Full : | 40.0005 | DS Full : | 39.9997 |
| Nom. Taper : | 0.000 | US Wall Half : | 19.9923 | DS Wall Half : | 19.9957 |
| | | US Aisle Half : | 19.9907 | DS Aisle Half : | 19.9965 |

| | |
|-----------------|----------------------|
| S/N | : HXU_009 |
| Date | : 30-OCT-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |