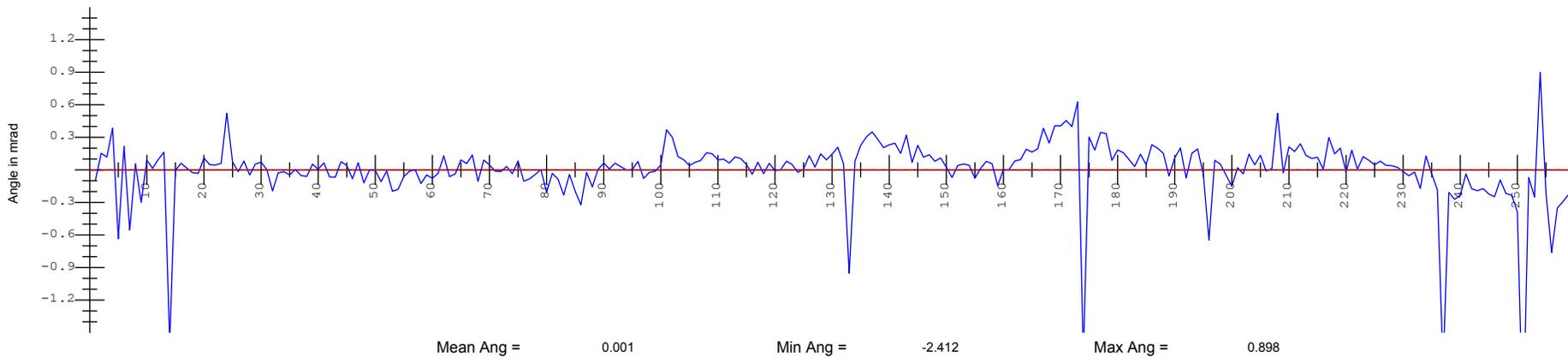


Included Angle Between Pole Tips

Pole Tip Num. ----->

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



Dimensions in MM, Angles in Milliradians

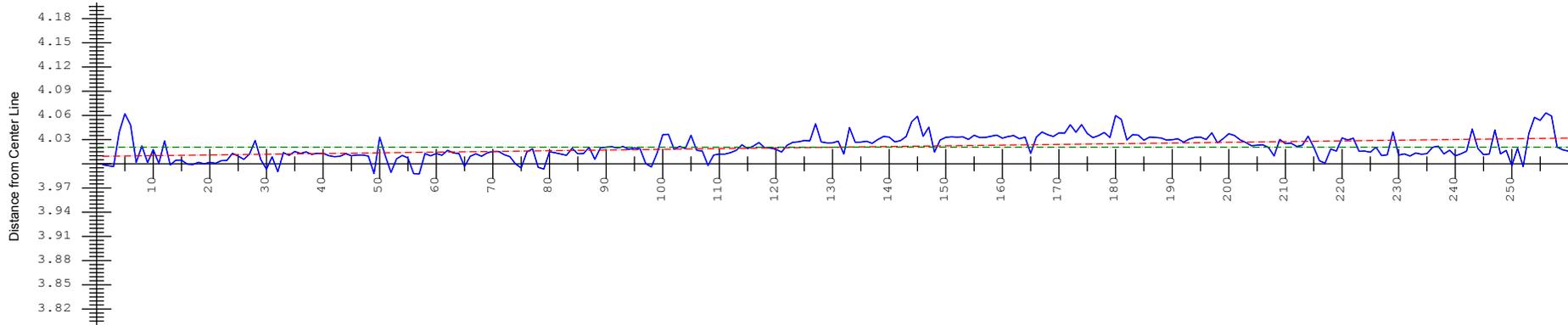


HGVPU - Pole Tip Angles

| | | | | | |
|----------------------|--------------|------------------------|---------------|------------------------|---------------|
| Nominal Gap : | 8.000 | US Full : | 7.9996 | DS Full : | 8.0005 |
| Nom. Taper : | 0.000 | US Wall Half : | 4.0044 | DS Wall Half : | 4.0026 |
| | | US Aisle Half : | 4.0015 | DS Aisle Half : | 4.0050 |

| | |
|-----------------|----------------------|
| S/N | : HXU_005 |
| Date | : 25-JUN-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |

Aisle Pole Mean = 4.021 Aisle Pole Min. = 3.988 Aisle Pole Max. = 4.063 Reg. Line Ang. = 0.007



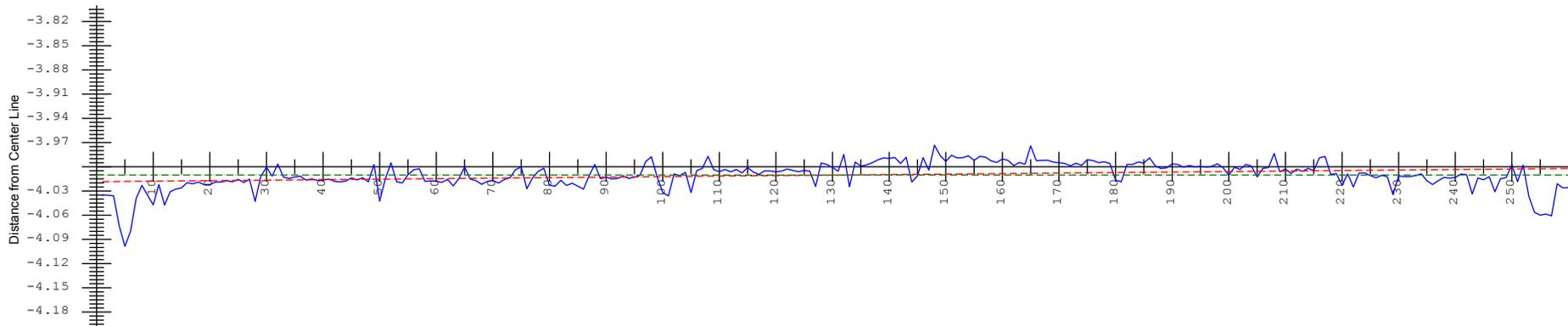
Aisle Pole Tips at Nom. Beam Height

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 = 7.946



Wall Pole Mean = -4.010 Wall Pole Min. = -4.099 Wall Pole Max. = -3.973 Reg. Line Ang. = 0.005

Girder centerline in reference to Pointed Magnets

Dimensions in MM, Angles in Milliradians



HGVPU - Pole Tip Location from Girder Centerline

| | | | | | |
|----------------------|--------------|------------------------|---------------|------------------------|---------------|
| Nominal Gap : | 8.000 | US Full : | 7.9996 | DS Full : | 8.0005 |
| Nom. Taper : | 0.000 | US Wall Half : | 4.0044 | DS Wall Half : | 4.0026 |
| | | US Aisle Half : | 4.0015 | DS Aisle Half : | 4.0050 |

| | |
|-----------------|----------------------|
| S/N | : HXU_005 |
| Date | : 25-JUN-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) | 4.009 | 0.000 | 8.750 | |
| US Wall Pole Tip(1) | -4.018 | 0.000 | 8.750 | |
| US Sym. Pt. | -0.005 | | | |
| US Gap | | | | 8.028 |
| DS Aisle Pole Tip(260) | 4.032 | 0.000 | 3375.750 | |
| DS Wall Pole Tip(260) | -4.002 | 0.000 | 3375.750 | |
| DS Sym. Pt. | 0.015 | | | |
| DS Gap | | | | 8.034 |
| Taper | | | | 0.006 |

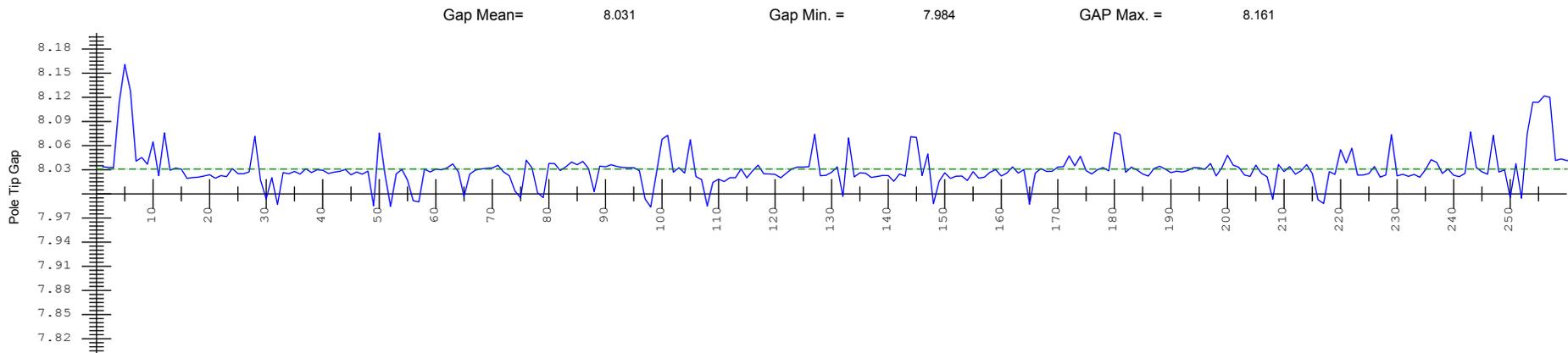
Dimensions in MM



HGVPU - Gap Calc. from Regression Line End Points

| | | | | | |
|----------------------|--------------|------------------------|---------------|------------------------|---------------|
| Nominal Gap : | 8.000 | US Full : | 7.9996 | DS Full : | 8.0005 |
| Nom. Taper : | 0.000 | US Wall Half : | 4.0044 | DS Wall Half : | 4.0026 |
| | | US Aisle Half : | 4.0015 | DS Aisle Half : | 4.0050 |

| | |
|-----------------|----------------------|
| S/N | : HXU_005 |
| Date | : 25-JUN-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |

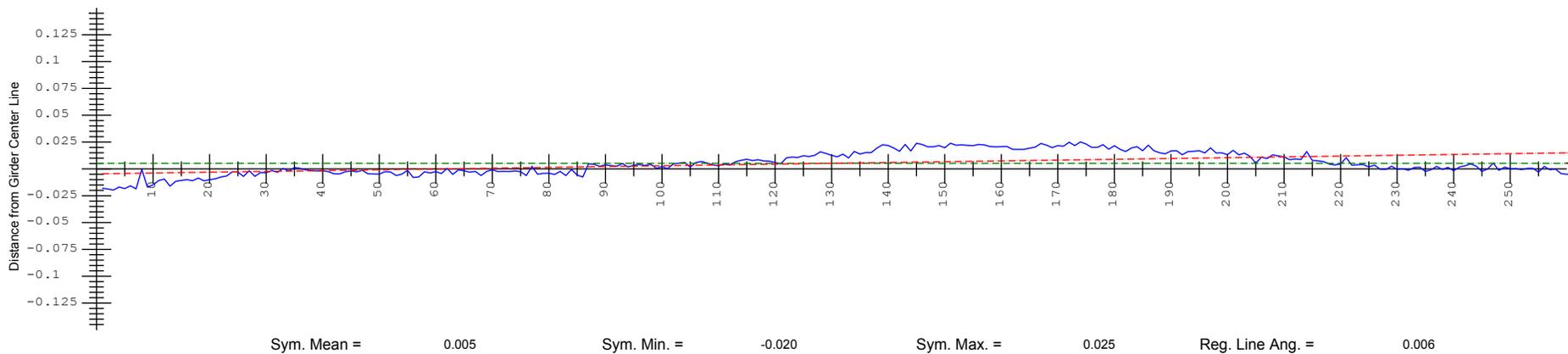


Pole Tip Gap at Nom. Beam Height

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

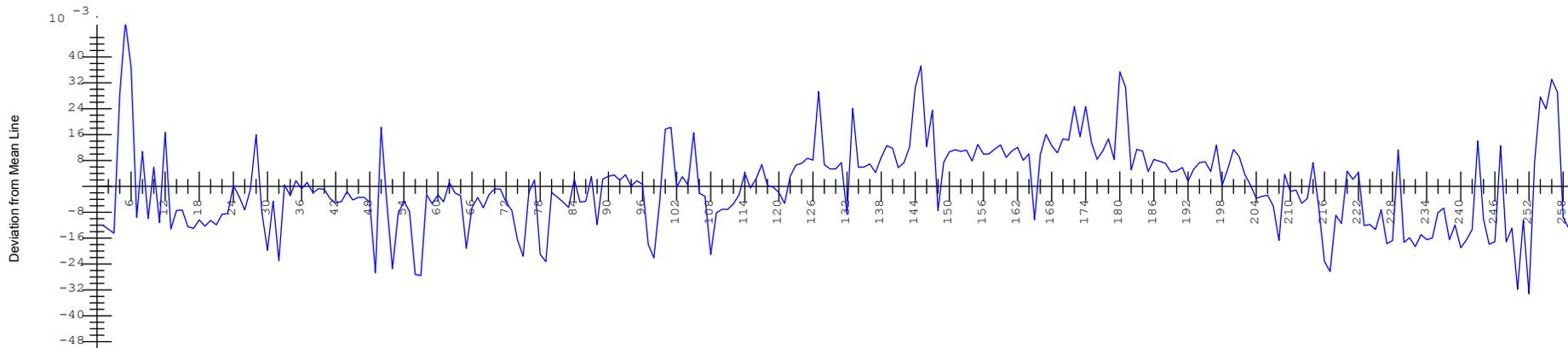
Dimensions in MM, Angles in Milliradians



HGVPU - Pole Tip Gap and Symmetry Point Location

| | | | | | |
|----------------------|--------------|------------------------|---------------|------------------------|---------------|
| Nominal Gap : | 8.000 | US Full : | 7.9996 | DS Full : | 8.0005 |
| Nom. Taper : | 0.000 | US Wall Half : | 4.0044 | DS Wall Half : | 4.0026 |
| | | US Aisle Half : | 4.0015 | DS Aisle Half : | 4.0050 |

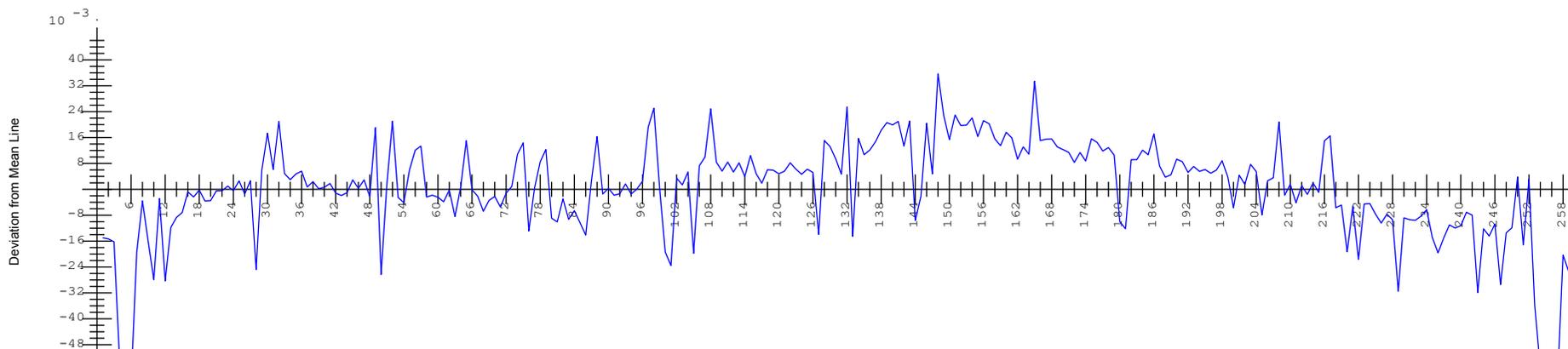
| | |
|-----------------|----------------------|
| S/N | : HXU_005 |
| Date | : 25-JUN-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |



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 : | 8.000 | US Full : | 7.9996 | DS Full : | 8.0005 |
| Nom. Taper : | 0.000 | US Wall Half : | 4.0044 | DS Wall Half : | 4.0026 |
| | | US Aisle Half : | 4.0015 | DS Aisle Half : | 4.0050 |

| | |
|-----------------|----------------------|
| S/N | : HXU_005 |
| Date | : 25-JUN-2019 |
| Data Set | : 0001 |
| Run | : FINAL |
| Cam Pos. | : B |