Top Jaw Pole Tips

Mean TOP =    4.5058        Regression Line Ang. (mrad) =     0.0040

Pole Tip Num. ---->                    Bottom Jaw Pole Tips                    Minimum Effective Gap =   8.924

Mean BTM =   -4.4704        Regression Line Ang. (mrad) =     0.0032

Y Value Scales Centered on Mean Values                              Regression Line Through Points =———
Step Between Measured Pole Tips =    7                                         Dimensions in mm

**LCLS II - SXR Undulator**
Nominal Gap = 9        Nominal Taper = 0.000
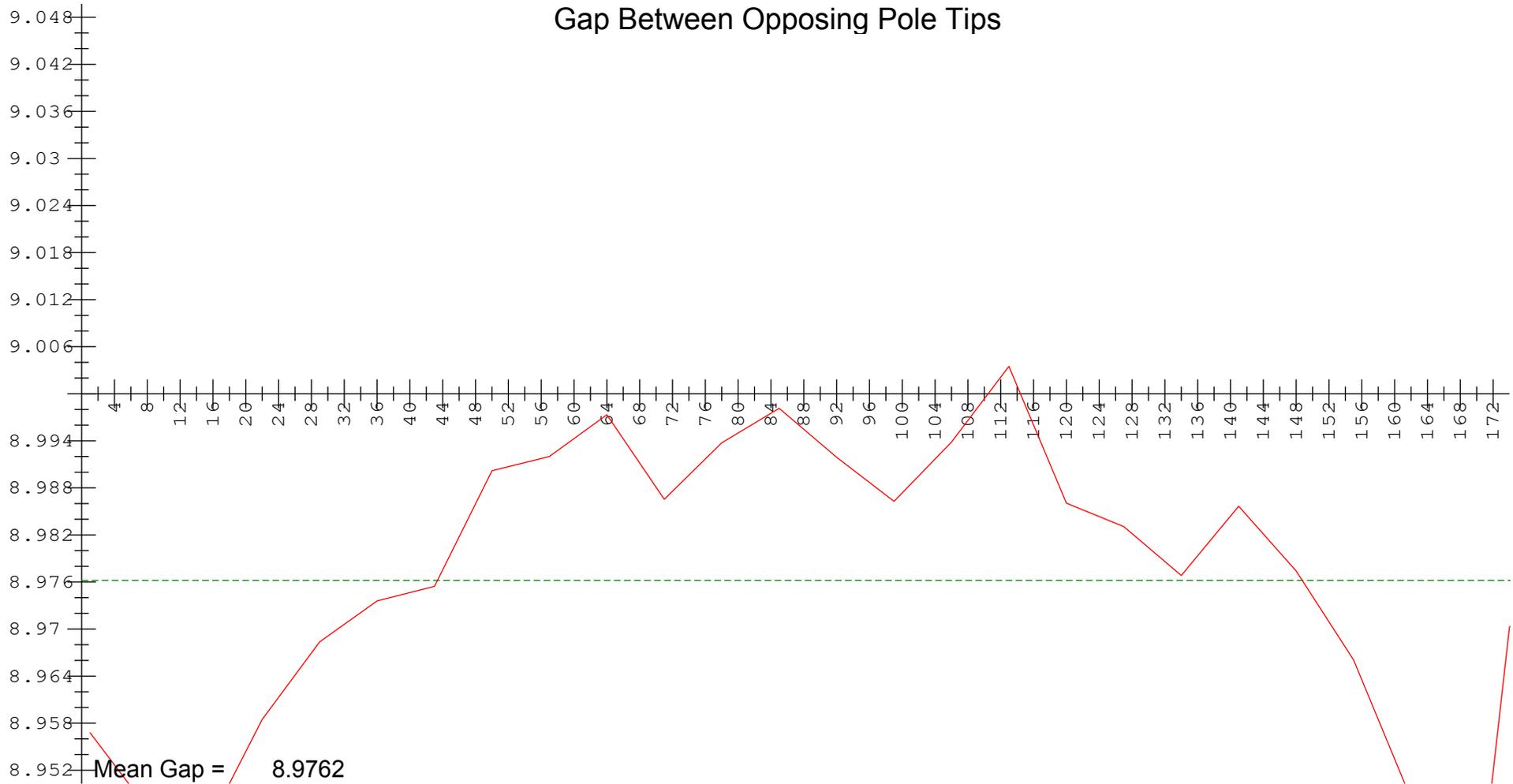Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0000

11-FEB-2019
S/N =    020
D/S=    0001
Run=    3

# Gap Between Opposing Pole Tips



Mean Gap = 8.9762

Step Between Measured Pole Tips = 7
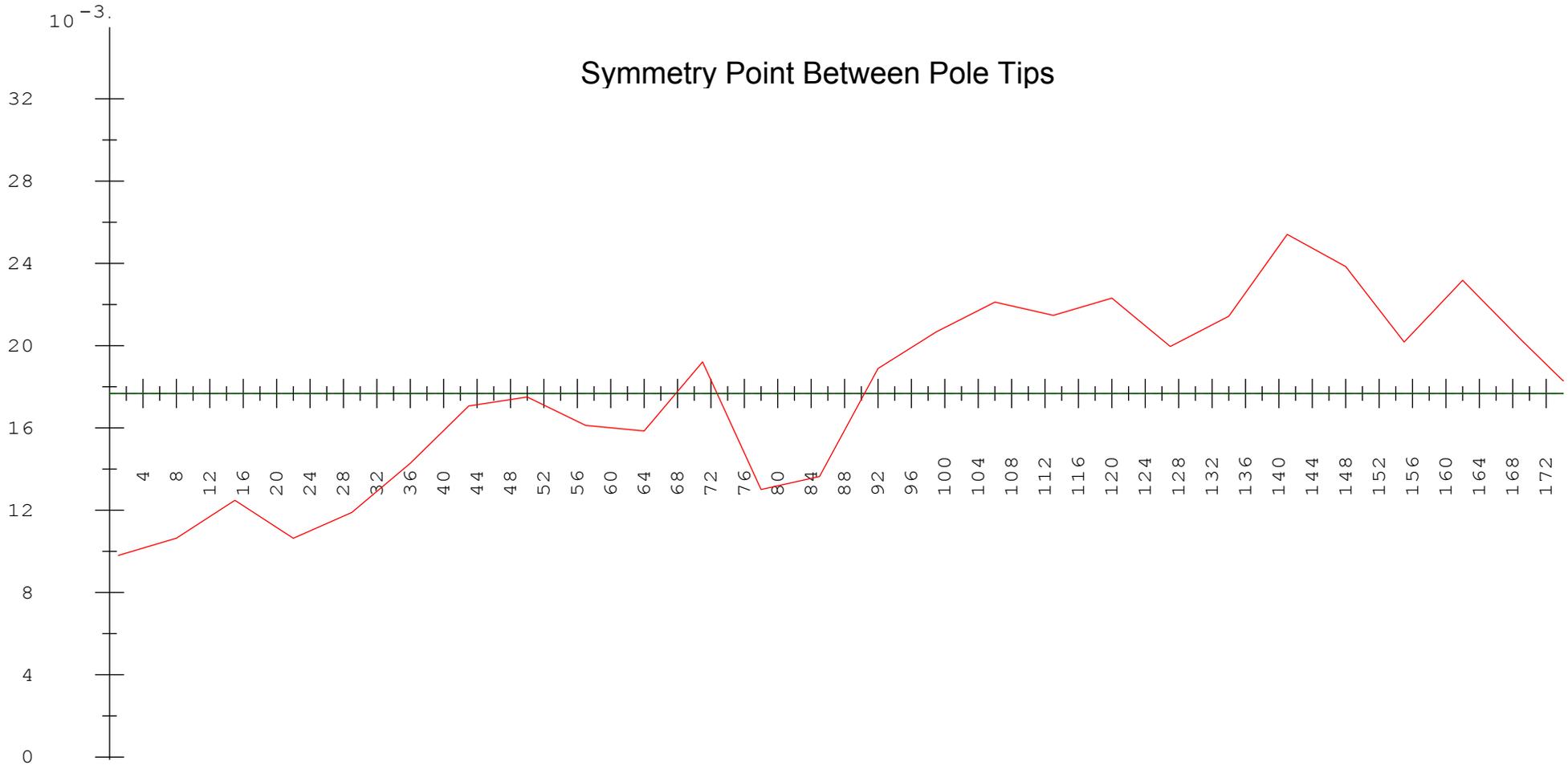
Dimensions in mm

**LCLS II - SXR Undulator**

Nominal Gap = 9          Nominal Taper = 0.000

Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0000

11-FEB-2019
S/N = 020
D/S= 0001
Run= 3

Symmetry Point Between Pole Tips

Mean Symmetry Value = 0.0177

Step Between Measured Pole Tips = 7

Dimensions in mm

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**LCLS II - SXR Undulator**
Nominal Gap = 9     Nominal Taper = 0.000
Gap Reading = 9.0000     US Encoder = 9.0000     DS Encoder = 9.0000

11-FEB-2019
S/N = 020
D/S= 0001
Run= 3

## Top and Bottom Jaw
## Regression Line Intersect Points

| Jaw | First Pole (Pole 1) | US Actuator (Pole 39) | DS Actuator (Pole 135) | Last Pole (Pole 174) |
|---|---|---|---|---|
| **Top** | 4.4989 | 4.5018 | 4.5093 | 4.5124 |
| **Bottom** | -4.4758 | -4.4734 | -4.4674 | -4.4649 |
| **Gap** | 8.9746 | | | 8.9773 |
| **Taper** | | | | 0.0027 |

## Summary of Mean Values

| Top Jaw Poles | Btm. Jaw Poles | Gap Values | Sym. Pt. Values |
|---|---|---|---|
| 4.5058 | -4.4704 | 8.9762 | 0.0177 |

## Additional Calculated Values

| | |
|---|---|
| **Bottom Pole #1 Z Value** | 980.504 |
| **Top Jaw Pitch (mrad)** | 0.004 |
| **Bottom Jaw Pitch(mrad)** | 0.003 |
| **Minimum Effective Gap** | 8.924 |
| **Reference Block Gap** | 6.811 |

Dimensions in mm

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## LCLS II - SXR Undulator
Nominal Gap = 9       Nominal Taper = 0.000
Gap Reading = 9.0000    US Encoder = 9.0000    DS Encoder = 9.0000

11-FEB-2019
S/N = 020
D/S= 0001
Run= 3