LCLS II-HE - SXR Undulator

METROLOGY

Nominal Gap = 10   Nominal Taper = 0.000

Gap Reading = 10.0000   US Encoder = 10.0000   DS Encoder = 10.0000
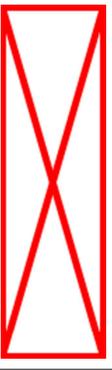
Nominal Gap = 10.0000

23-MAY-2024
S/N = 023
D/S = 0001
Run = 8

Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips = **1**

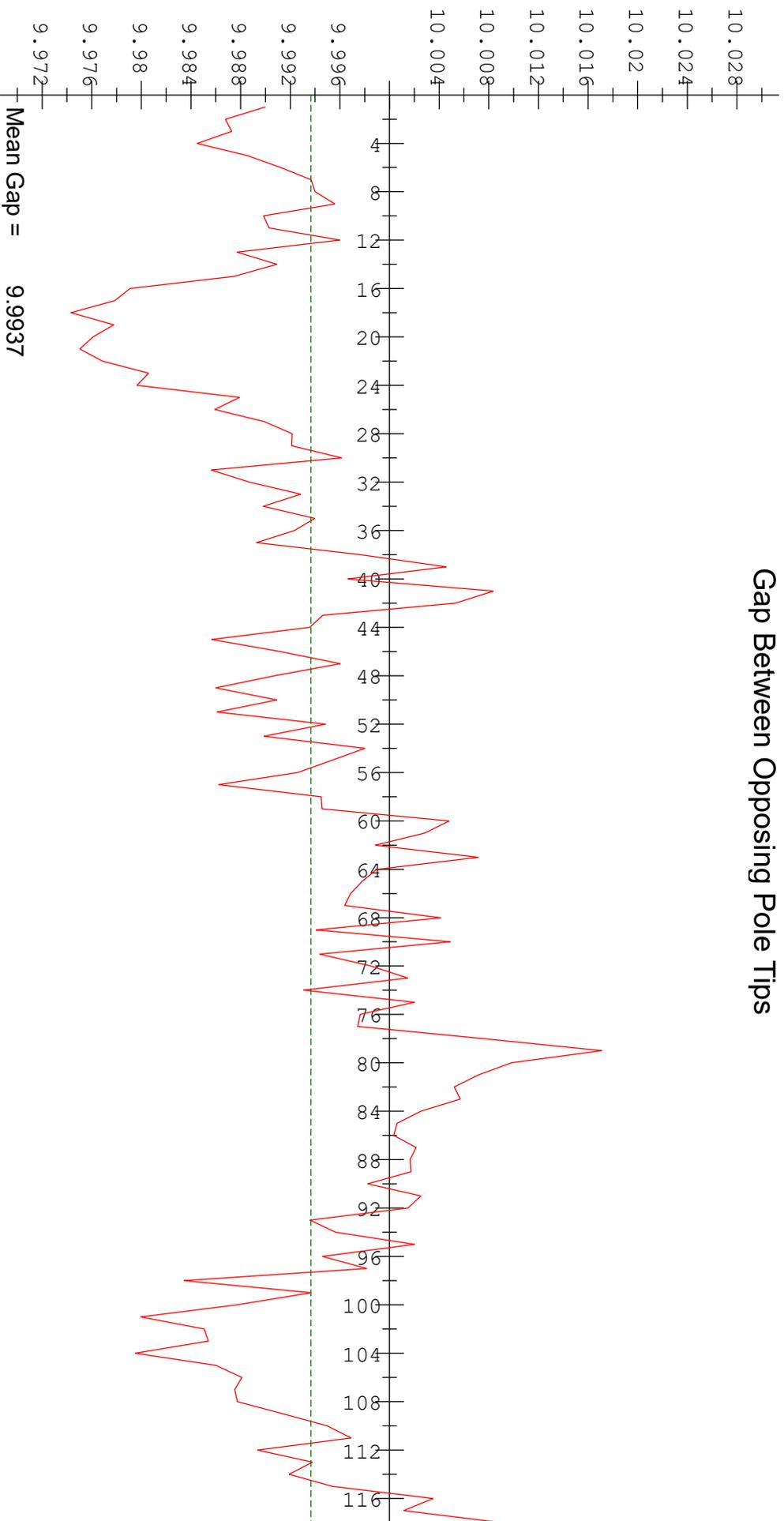Regression Line Through Points = ------
Dimensions in mm

Top Jaw Pole Tips

Y Dev.from Mean

10^{-3}

Mean TOP = 4.9813   Regression Line Ang. (mrad) = 0.0006

Bottom Jaw Pole Tips

Y Dev.from Mean

10^{-3}

Pole Tip Num. ---->   Minimum Effective Gap = 9.967

Mean BTM = -5.0123   Regression Line Ang. (mrad) = -0.0026

Y Dev.from Mean

10^{-3}

LCLS II-HE - SXR Undulator

Gap Between Opposing Pole Tips

Step Between Measured Pole Tips = 1

Mean Gap = 9.9937

Nominal Gap = 10	Nominal Taper = 0.000
Gap Reading = 10.0000	US Encoder = 10.0000	DS Encoder = 10.0000

Dimensions in mm

23-MAY-2024
S/N = 023
D/S= 0001
Run= 8

METROLOGY

Symmetry Point Between Pole Tips

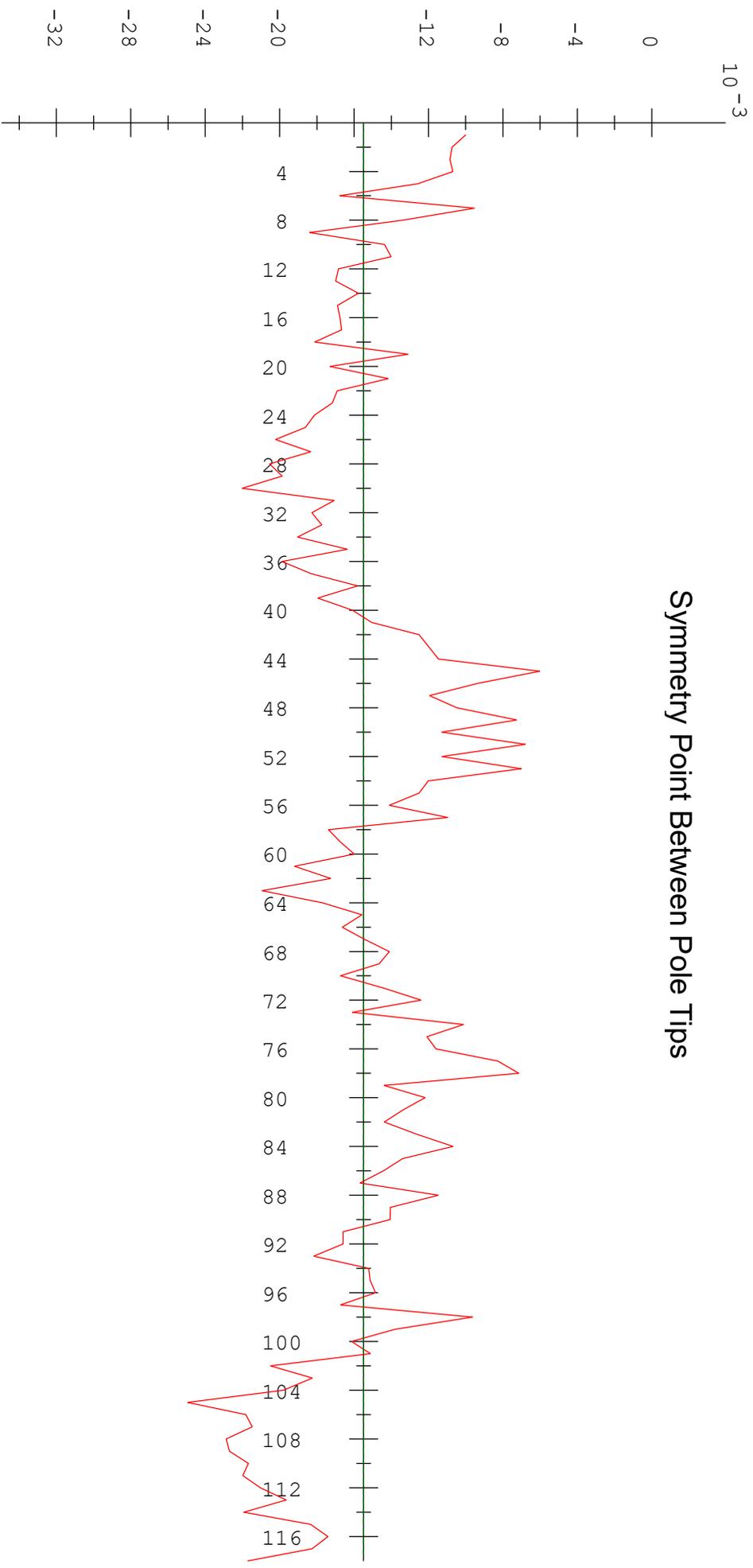Mean Symmetry Value = -0.0155

Step Between Measured Pole Tips = 1

LCLS II-HE - SXR Undulator

Nominal Gap = 10   Nominal Taper = 0.000

Gap Reading = 10.0000   US Encoder = 10.0000   DS Encoder = 10.0000

METROLOGY

Dimensions in mm

23-MAY-2024
S/N = 023
D/S = 0001
Run = 8

METROLOGY

Top and Bottom Jaw
Regression Line Intersect Points

Jaw	First Pole (Pole 1)	US Actuator (Pole 28)	DS Actuator (Pole 90)	Last Pole (Pole 118)
Top	4.9803	4.9808	4.9819	4.9823
Bottom	-5.0080	-5.0100	-5.0146	-5.0166
Gap	9.9884			9.9990
Taper				0.0106

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.9813	-5.0123	9.9937	-0.0155

Additional Calculated Values

Bottom Pole #1 Z Value	979.438
Top Jaw Pitch (mrad)	0.001
Bottom Jaw Pitch(mrad)	-0.003
Minimum Effective Gap	9.967
Reference Block Gap	6.799

LCLS II-HE - SXR Undulator

Nominal Gap = 10   Nominal Taper = 0.000

Nominal Gap = 10.0000

Gap Reading = 10.0000   US Encoder = 10.0000   DS Encoder = 10.0000

Dimensions in mm

23-MAY-2024
S/N = 023
D/S = 0001
Run = 8