LCLS II-HE - SXR Undulator

METROLOGY

Top Jaw Pole Tips

Y Dev.from Mean

Mean TOP = 5.0622   Regression Line Ang. (mrad) = -0.0005

Pole Tip Num. --->

Bottom Jaw Pole Tips   Minimum Effective Gap = 9.981

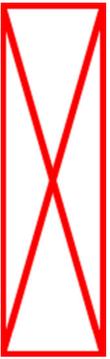Y Dev.from Mean

Mean BTM = -4.9377   Regression Line Ang. (mrad) = -0.0002

Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips = 1
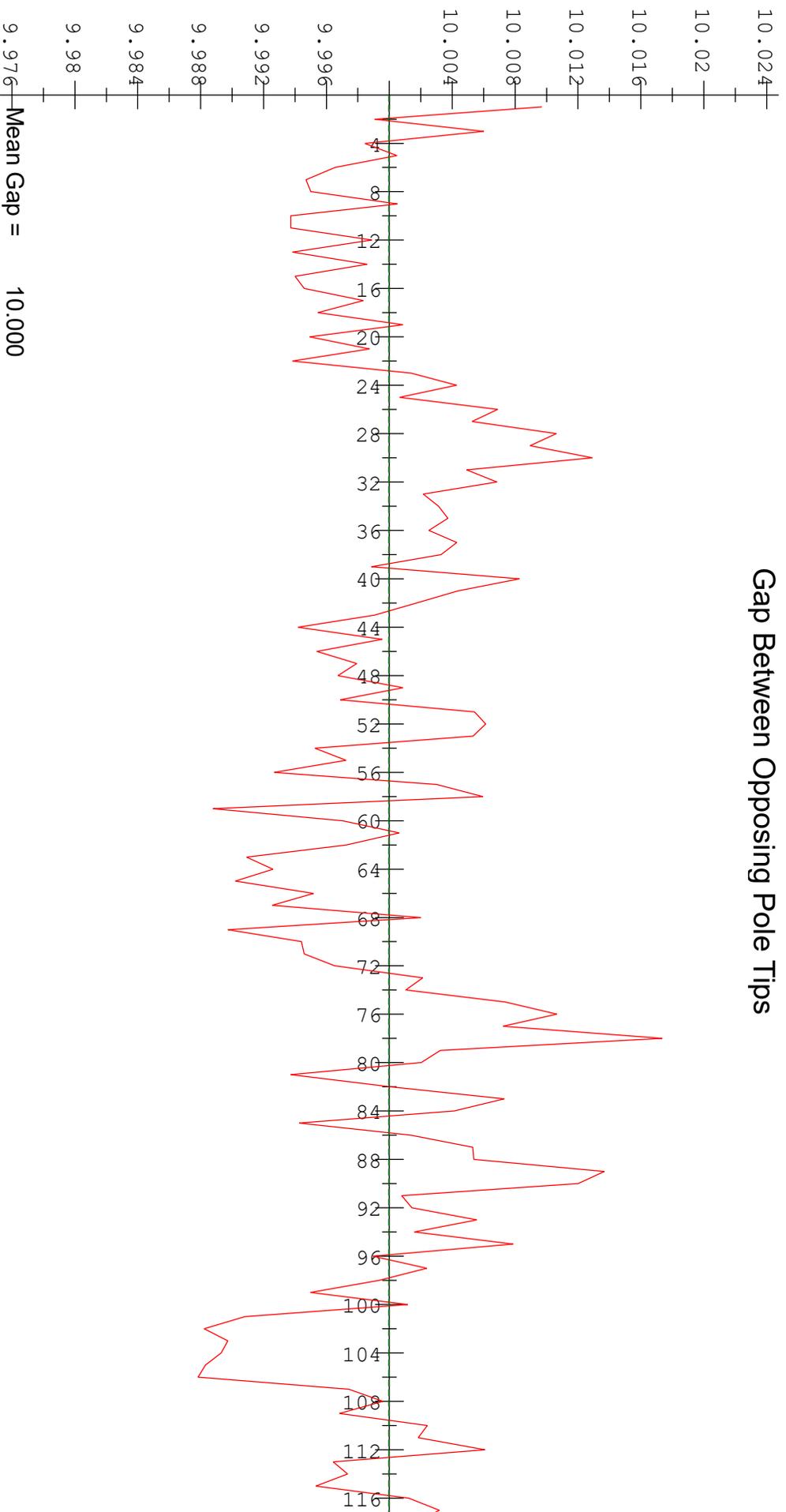
Regression Line Through Points =
Dimensions in mm

Nominal Gap = 10   Nominal Taper = 0.000
Gap Reading = 10.0003   US Encoder = 10.0006   DS Encoder = 10.0001

14-AUG-2024
S/N = 025
D/S = 0001
Run= 3

LCLS II-HE - SXR Undulator

Gap Between Opposing Pole Tips

Dimensions in mm

Nominal Gap = 10	Nominal Taper = 0.000
Gap Reading = 10.0003	US Encoder = 10.0006	DS Encoder = 10.0001

Step Between Measured Pole Tips = **1**

Mean Gap = 10.000

METROLOGY

14-AUG-2024
S/N = 025
D/S = 0001
Run= 3

Symmetry Point Between Pole Tips

Mean Symmetry Value = 0.0623
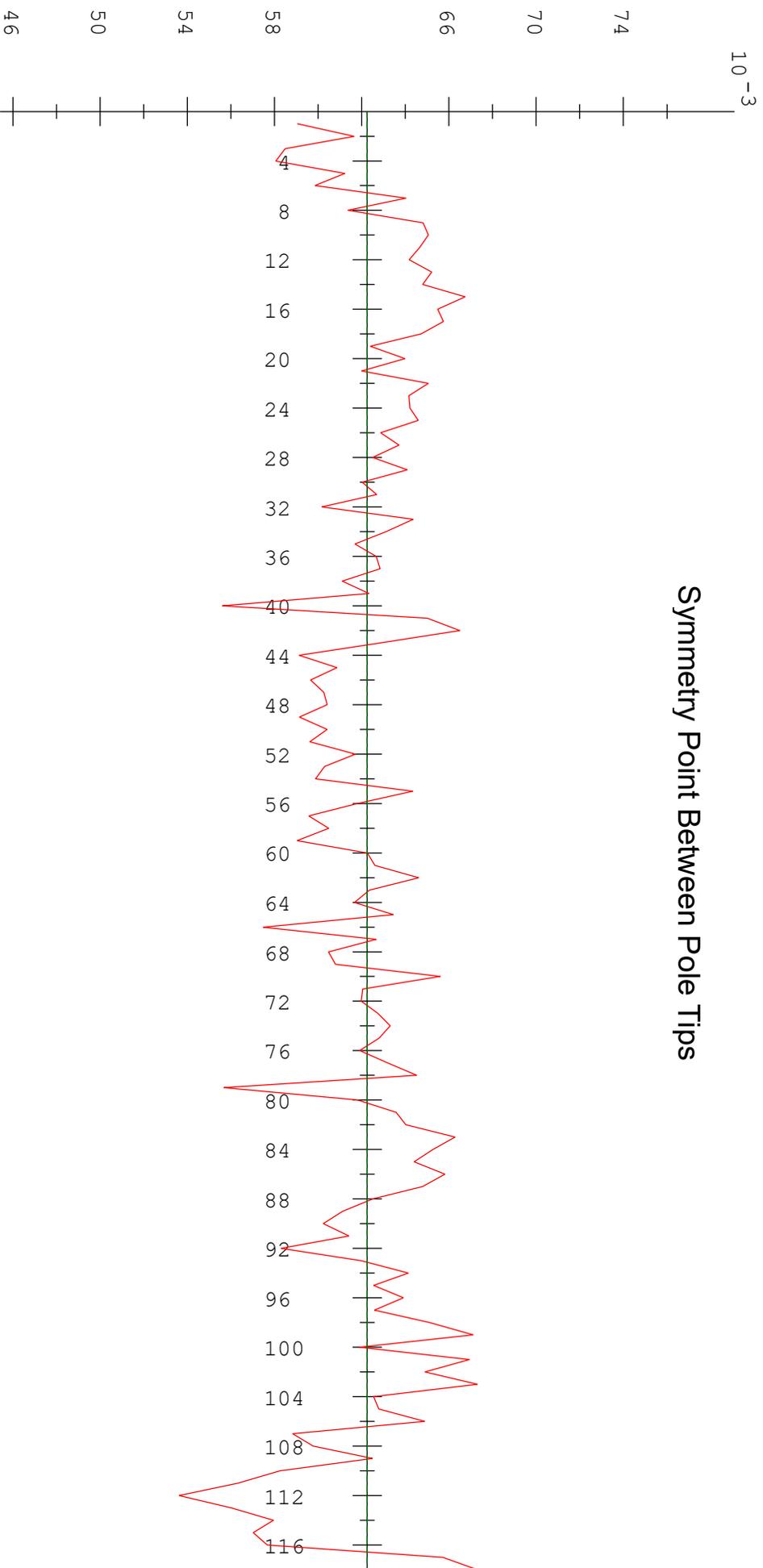
Step Between Measured Pole Tips = 1

METROLOGY

LCLS II-HE - SXR Undulator

Nominal Gap = 10   Nominal Taper = 0.000

Gap Reading = 10.0003   US Encoder = 10.0006   DS Encoder = 10.0001

Dimensions in mm

14-AUG-2024
S/N = 025
D/S = 0001
Run= 3

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	5.0631	5.0627	5.0618	5.0614
Bottom	-4.9374	-4.9375	-4.9379	-4.9381
Gap	10.0005			9.9994
Taper				-0.0011

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.0622	-4.9377	10.0000	0.0623

Additional Calculated Values

Bottom Pole #1 Z Value	979.432
Top Jaw Pitch (mrad)	-0.001
Bottom Jaw Pitch(mrad)	0.000
Minimum Effective Gap	9.981
Reference Block Gap	6.795

LCLS II-HE - SXR Undulator

Nominal Gap = 10   Nominal Taper = 0.000

Nominal Gap = 10.0003

Gap Reading = 10.0003   US Encoder = 10.0006   DS Encoder = 10.0001