Top Jaw Pole Tips

Y Dev.from Mean

-20 -16 -12 -8 -4 4 8 12 16 20 10^{-3}

Mean TOP =   13.1115   Regression Line Ang. (mrad) =   0.0011

Pole Tip Num. --->

Y Dev.from Mean

-20 -16 -12 -8 -4 4 8 12 16 20 10^{-3}

Bottom Jaw Pole Tips   Minimum Effective Gap =   24.983

Y Dev.from Mean

-20 -16 -12 -8 -4 4 8 12 16 20 10^{-3}

Mean BTM =   -11.9005   Regression Line Ang. (mrad) =   0.0012

Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips =   5

Regression Line Through Points =
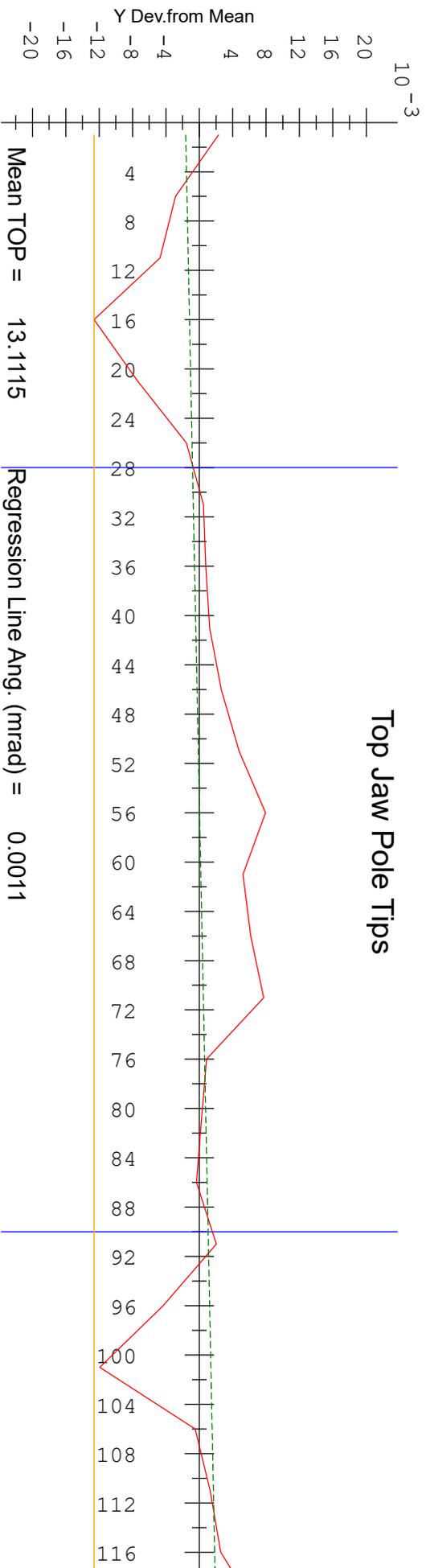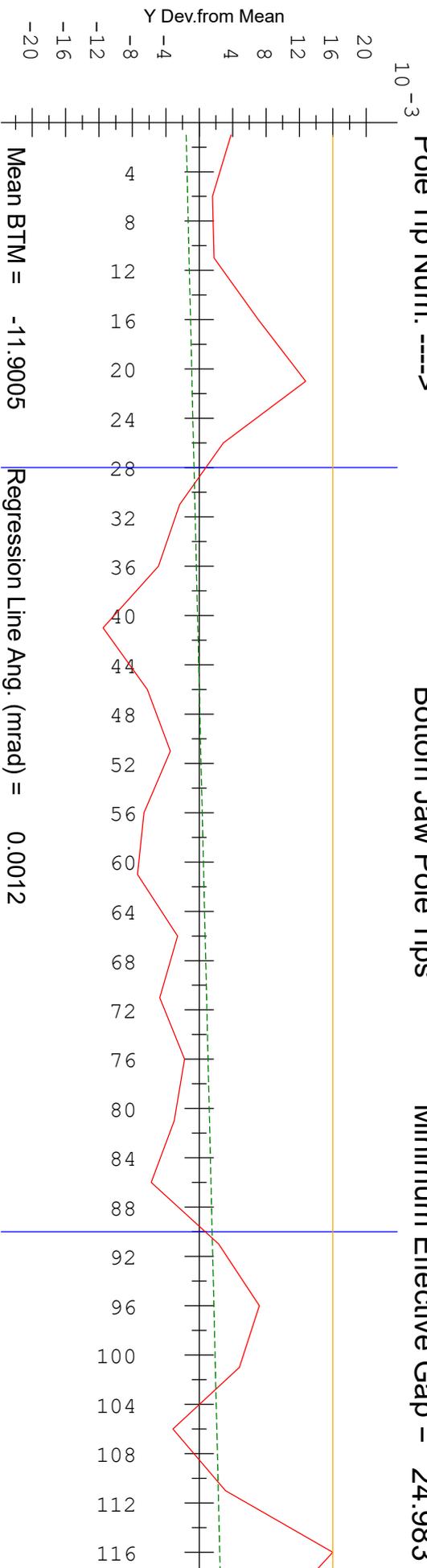Dimensions in mm

METROLOGY

LCLS II-HE - SXR Undulator
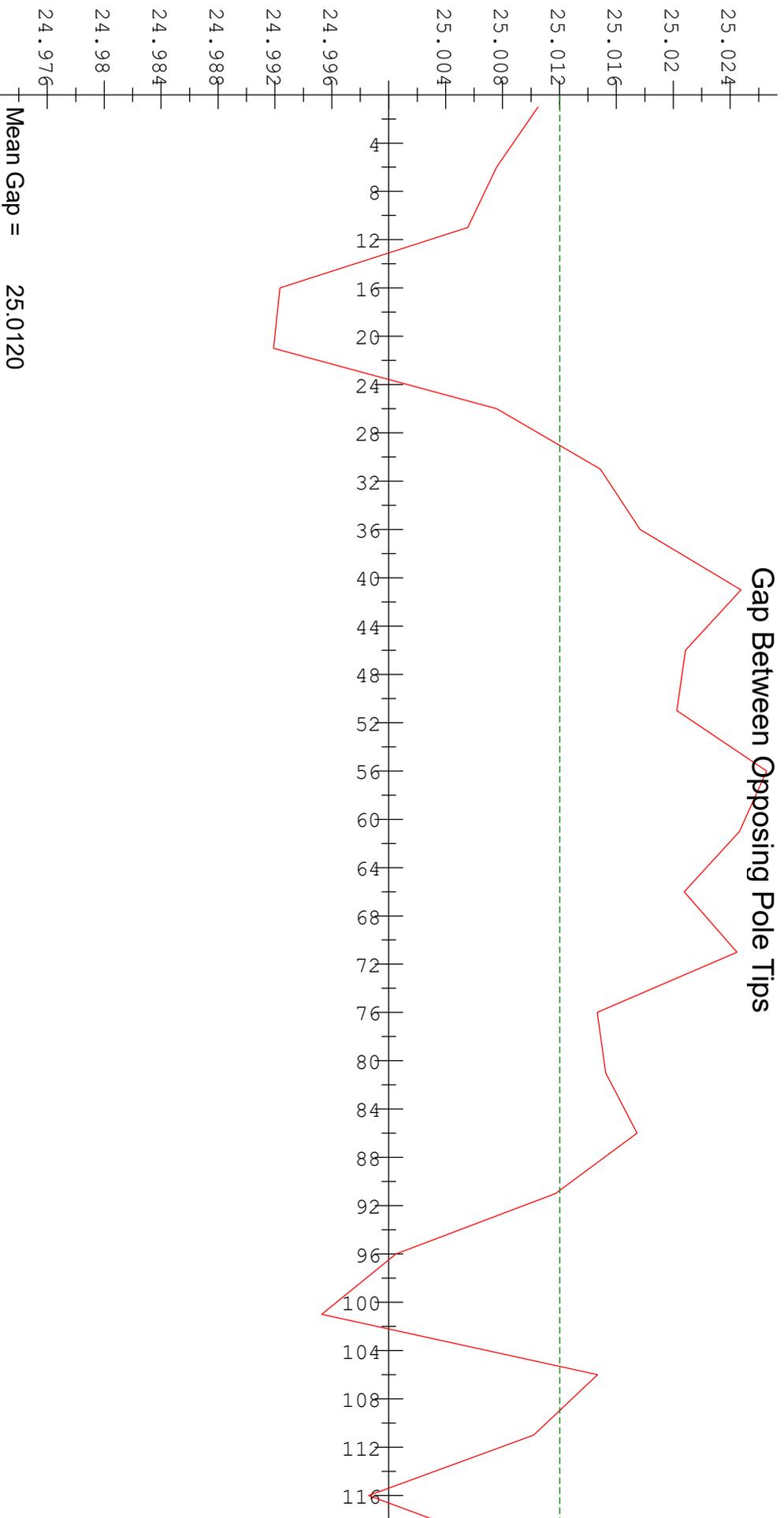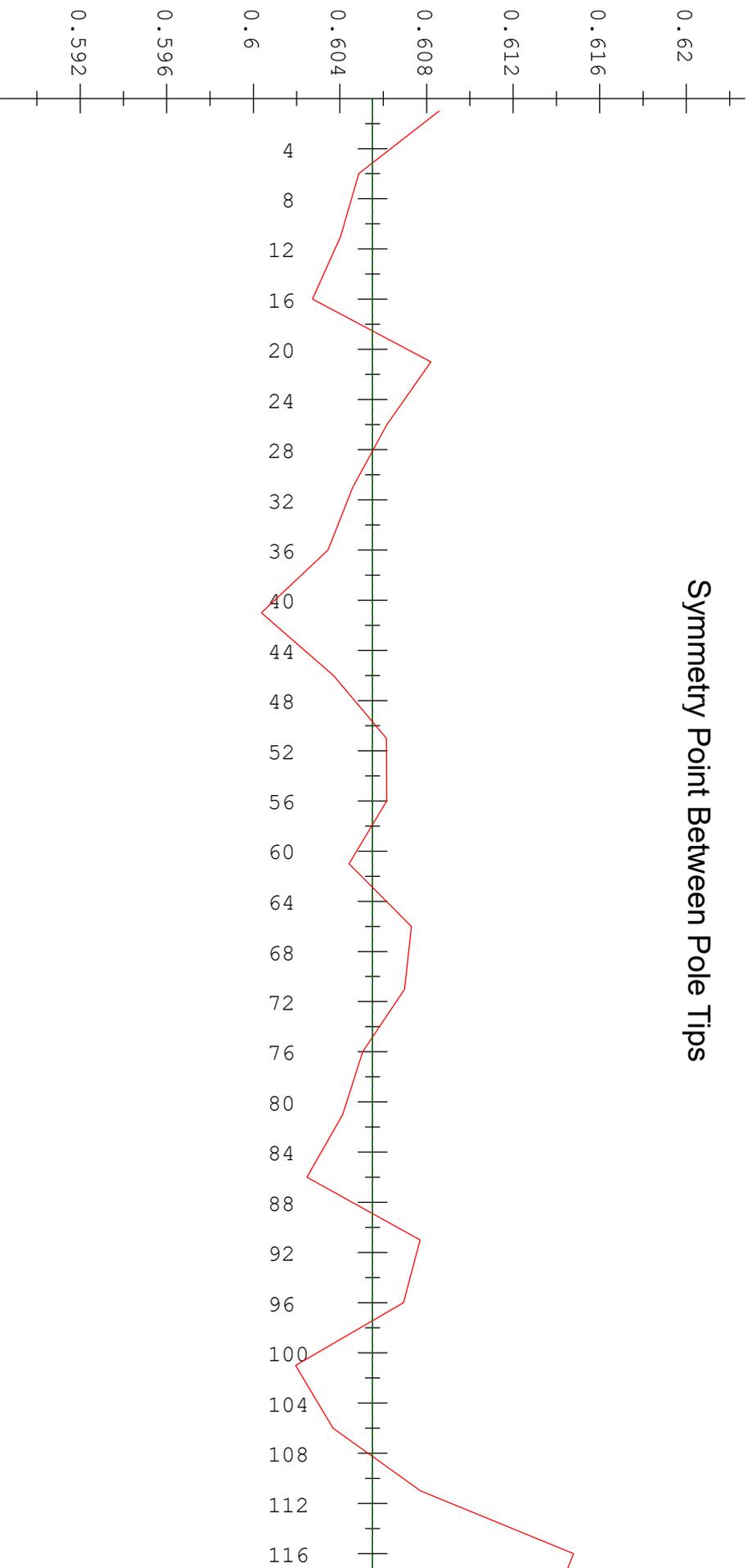Nominal Gap = 25   Nominal Taper = 0.000
Gap Reading = 25.0000   US Encoder = 25.0000   DS Encoder = 25.0000

23-SEP-2024
S/N =   024
D/S=   0001
Run=   10

LCLS II-HE - SXR Undulator

METROLOGY

Step Between Measured Pole Tips = 5

Mean Gap = 25.0120

Gap Between Opposing Pole Tips

Dimensions in mm

Nominal Gap = 25	Nominal Taper = 0.000	23-SEP-2024
Gap Reading = 25.0000	US Encoder = 25.0000	S/N = 024
	DS Encoder = 25.0000	D/S = 0001
		Run= 10

Axis labels (gap values): 24.976, 24.98, 24.984, 24.988, 24.992, 24.996, 25.004, 25.008, 25.012, 25.016, 25.02, 25.024

Pole tip numbers: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, 84, 88, 92, 96, 100, 104, 108, 112, 116

LCLS II-HE - SXR Undulator

METROLOGY

Symmetry Point Between Pole Tips

Mean Symmetry Value = 0.6055

Step Between Measured Pole Tips = 5

Nominal Gap = 25	Nominal Taper = 0.000
Gap Reading = 25.0000	US Encoder = 25.0000	DS Encoder = 25.0000

Dimensions in mm

23-SEP-2024
S/N = 024
D/S = 0001
Run = 10

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	13.1099	13.1107	13.1126	13.1134
Bottom	-11.9021	-11.9011	-11.8990	-11.8980
Gap	25.0120			25.0114
Taper				-0.0006

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
13.1115	-11.9005	25.0120	0.6055

Additional Calculated Values

Bottom Pole #1 Z Value	978.595
Top Jaw Pitch (mrad)	0.001
Bottom Jaw Pitch(mrad)	0.001
Minimum Effective Gap	24.983
Reference Block Gap	6.799

LCLS II-HE - SXR Undulator

Nominal Gap = 25   **Nominal Taper = 0.000**

Gap Reading = 25.0000   US Encoder = 25.0000   DS Encoder = 25.0000

Dimensions in mm

23-SEP-2024
S/N =   024
D/S=   0001
Run=   10