LCLS II - SXR Undulator

METROLOGY

Nominal Gap = 25 Nominal Taper = 0.000

Gap Reading = 25.0000 US Encoder = 25.0001 DS Encoder = 25.0000

11-AUG-2021 S/N = 021 D/S= 0002 Run= 25

Gap Reading = 25.0000

Top Jaw Pole Tips

Y Dev.from Mean

Mean TOP = 12.9044

Regression Line Ang. (mrad) = 0.0022

Bottom Jaw Pole Tips

Y Dev.from Mean

Mean BTM = -12.1219

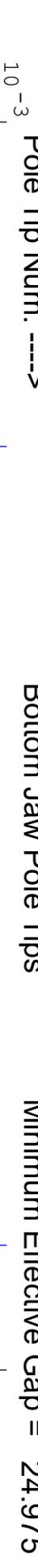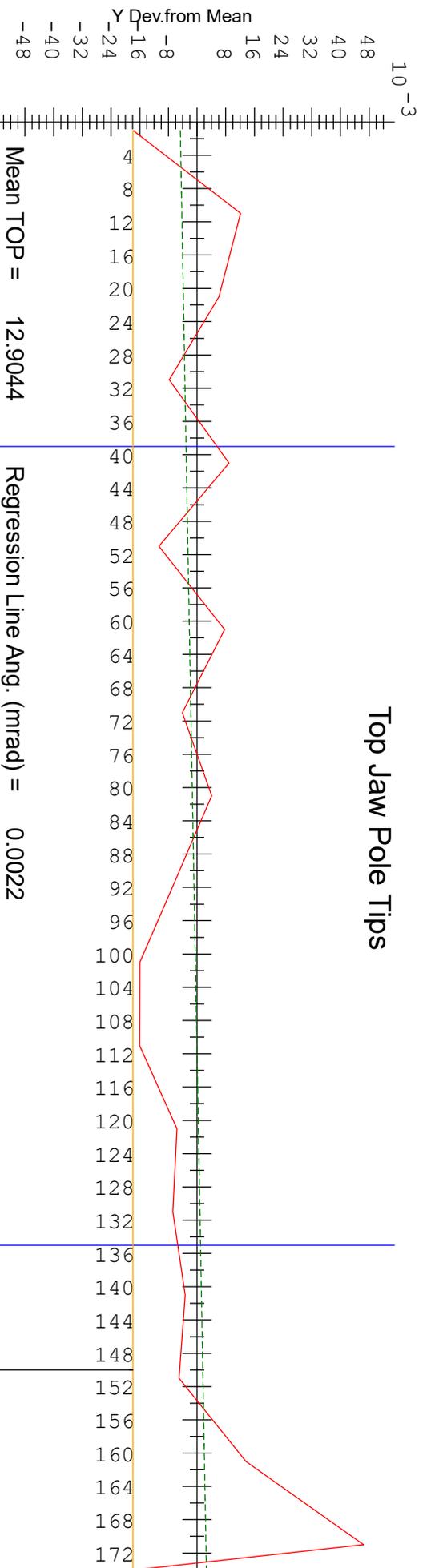Regression Line Ang. (mrad) = 0.0025

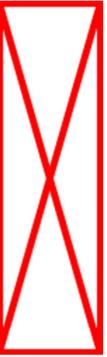Pole Tip Num. --->

Minimum Effective Gap = 24.975

Y Value Scales Centered on Mean Values

Step Between Measured Pole Tips = 10

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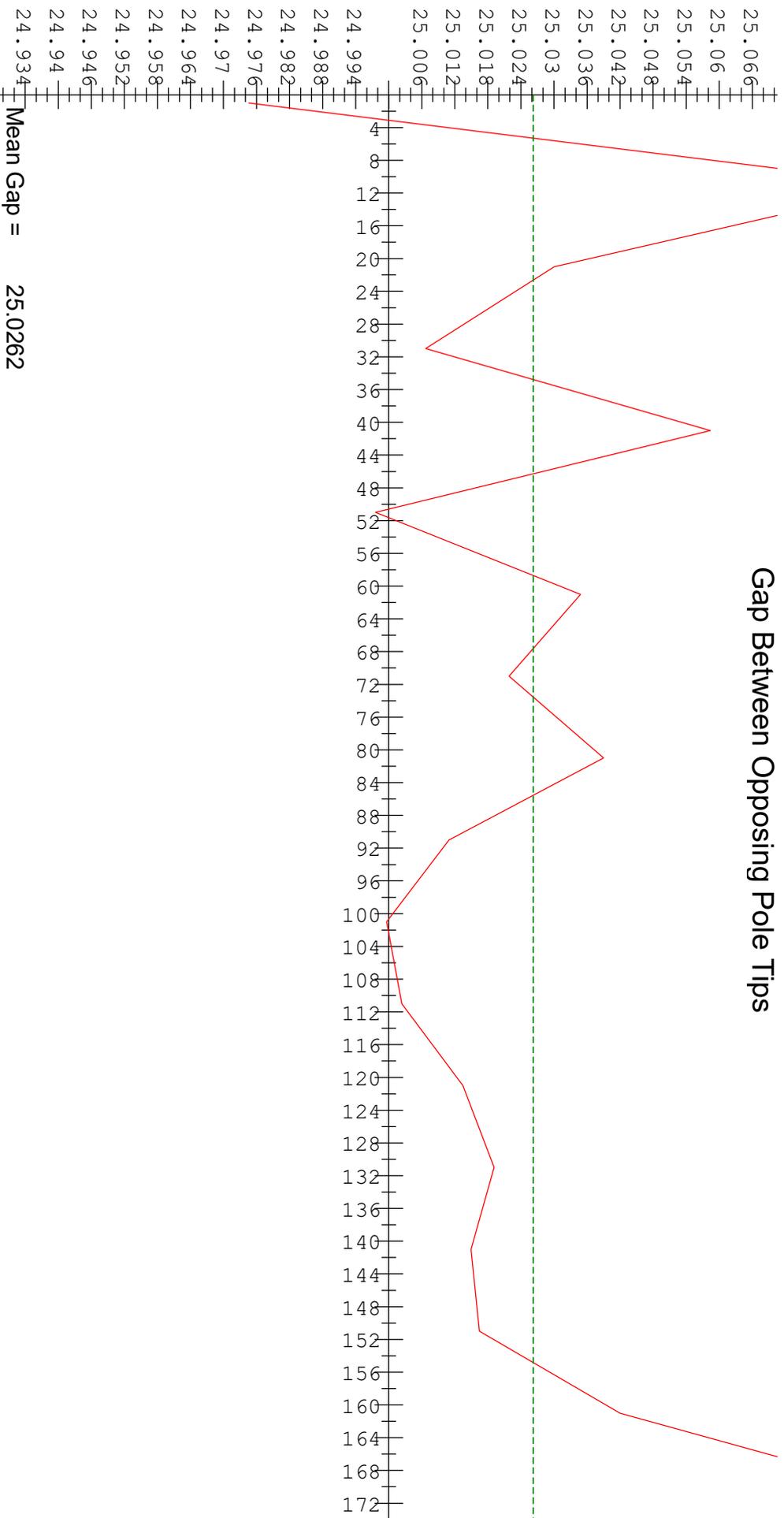
Dimensions in mm

LCLS II - SXR Undulator

Gap Between Opposing Pole Tips

METROLOGY

Step Between Measured Pole Tips = 10

Mean Gap = 25.0262

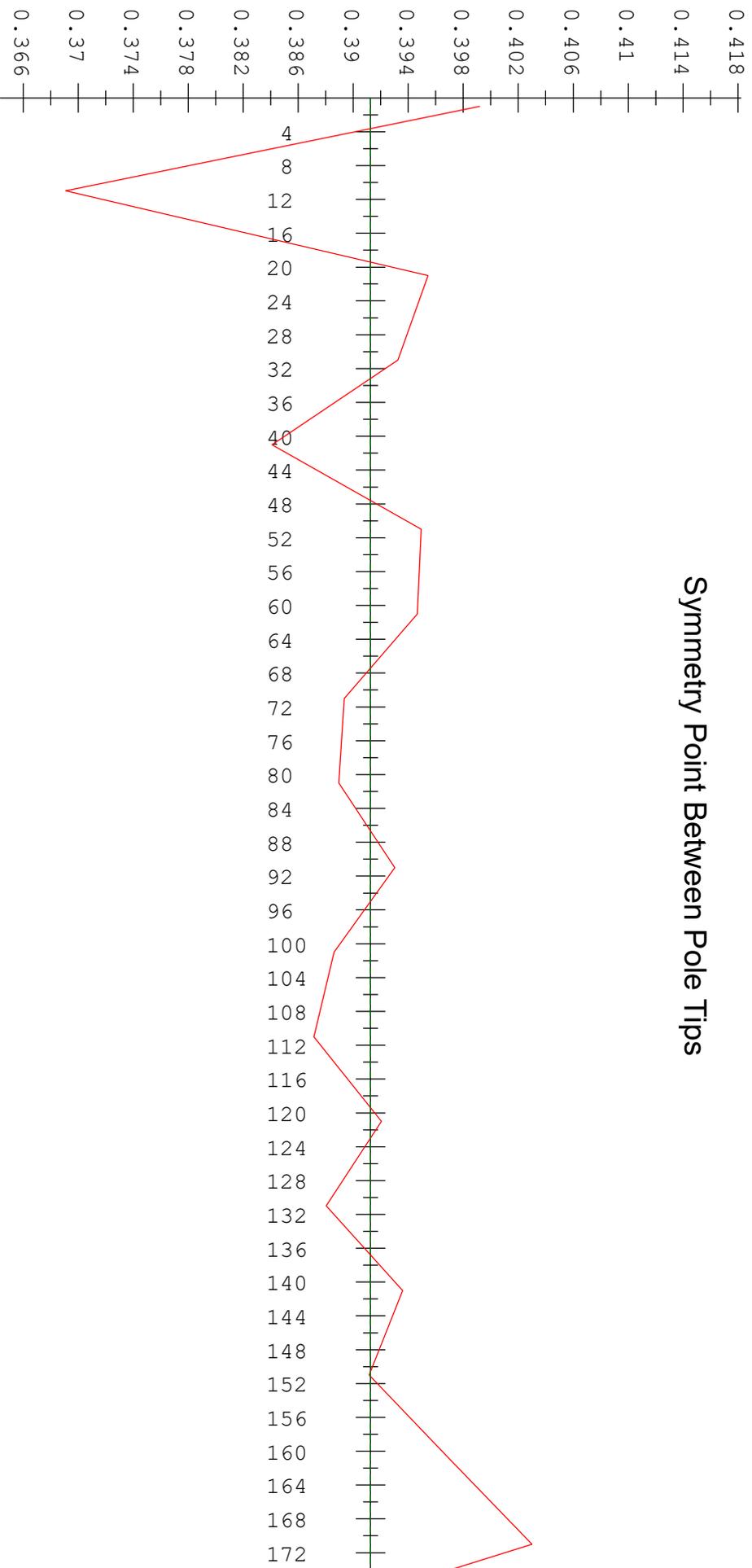| Nominal Gap = 25	Nominal Taper = 0.000	11-AUG-2021
Gap Reading = 25.0000	US Encoder = 25.0001	S/N = 021
	DS Encoder = 25.0000	D/S = 0002
		Run = 25

Dimensions in mm

LCLS II - SXR Undulator

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

Gap Reading = 25.0000   US Encoder = 25.0001   DS Encoder = 25.0000

METROLOGY

Step Between Measured Pole Tips = **10**

Mean Symmetry Value = 0.3913

Symmetry Point Between Pole Tips

Dimensions in mm

11-AUG-2021
S/N = 021
D/S = 0002
Run = 25

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	12.8997	12.9013	12.9054	12.9070
Bottom	-12.1248	-12.1229	-12.1182	-12.1163
Gap	25.0245		25.0232	
Taper				-0.0012

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
12.9044	-12.1219	25.0262	0.3913

Additional Calculated Values

Bottom Pole #1 Z Value	980.195
Top Jaw Pitch (mrad)	0.002
Bottom Jaw Pitch(mrad)	0.003
Minimum Effective Gap	24.975
Reference Block Gap	6.800

LCLS II - SXR Undulator

Nominal Gap = 25   Nominal Taper = 0.000

Gap Reading = 25.0000   US Encoder = 25.0001   DS Encoder = 25.0000