LCLS II-HE - SXR Undulator

METROLOGY

Nominal Gap = 33   Nominal Taper = 0.000

Gap Reading = 33.0000   US Encoder = 33.0000   DS Encoder = 33.0000

23-SEP-2024
S/N =   024
D/S=   0001
Run=   11

Top Jaw Pole Tips

Y Dev.from Mean

Mean TOP =   17.1899   Regression Line Ang. (mrad) =   0.0017

Pole Tip Num. --->

Bottom Jaw Pole Tips   **Minimum Effective Gap =   32.982**

Y Dev.from Mean

Mean BTM =   -15.8214   Regression Line Ang. (mrad) =   0.0017
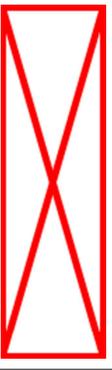
Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips =   5
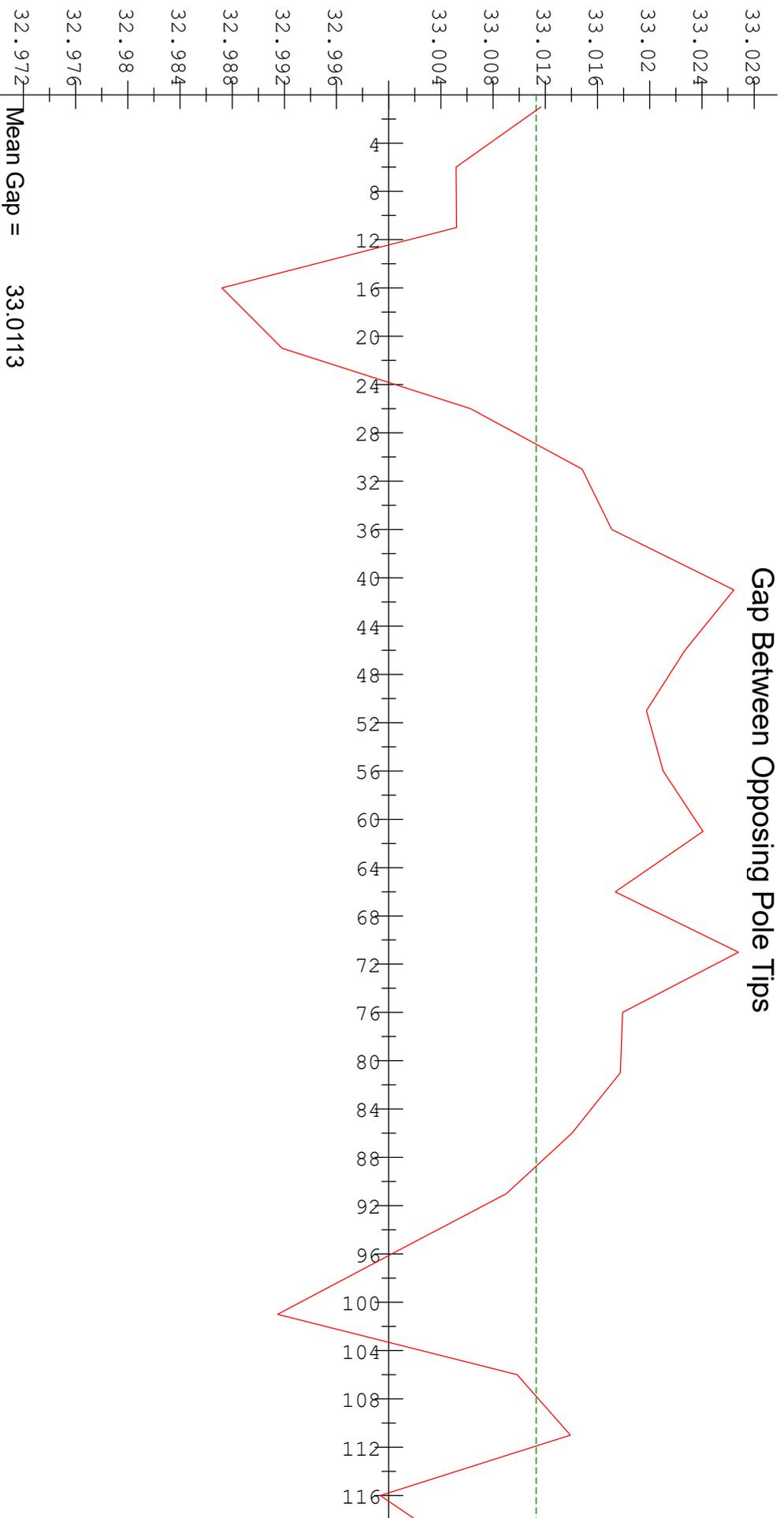
Regression Line Through Points =
Dimensions in mm

LCLS II-HE - SXR Undulator

METROLOGY

Step Between Measured Pole Tips = **5**

Mean Gap = 33.0113

Gap Reading = 33.0000

Nominal Gap = 33

Nominal Taper = 0.000

US Encoder = 33.0000

DS Encoder = 33.0000

Dimensions in mm

23-SEP-2024
S/N = 024
D/S = 0001
Run = 11

Gap Between Opposing Pole Tips

LCLS II-HE - SXR Undulator

Symmetry Point Between Pole Tips
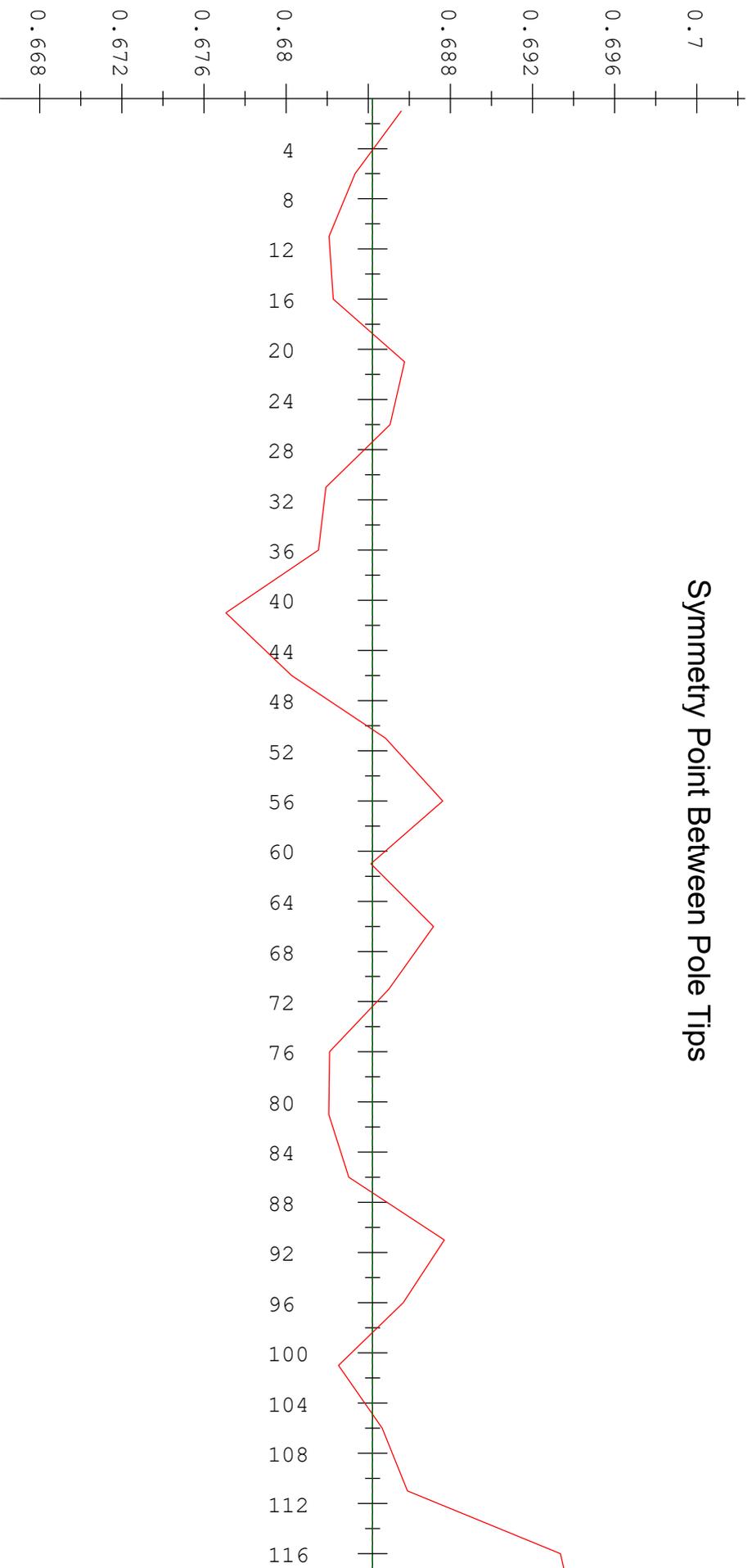
Dimensions in mm

Mean Symmetry Value = 0.6842

Step Between Measured Pole Tips = 5

METROLOGY

Nominal Gap = 33	Nominal Taper = 0.000	
Gap Reading = 33.0000	US Encoder = 33.0000	DS Encoder = 33.0000

23-SEP-2024	S/N = 024
	D/S = 0001
	Run= 11

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	17.1873	17.1885	17.1914	17.1927
Bottom	-15.8238	-15.8225	-15.8194	-15.8181
Gap	33.0111		33.0108	
Taper				-0.0003

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
17.1899	-15.8214	33.0113	0.6842

Additional Calculated Values

Bottom Pole #1 Z Value	978.595
Top Jaw Pitch (mrad)	0.002
Bottom Jaw Pitch(mrad)	0.002
Minimum Effective Gap	32.982
Reference Block Gap	6.799

LCLS II-HE - SXR Undulator

Nominal Gap = 33   **Nominal Taper = 0.000**

Gap Reading = 33.0000   US Encoder = 33.0000   DS Encoder = 33.0000

Dimensions in mm

23-SEP-2024
S/N = 024
D/S= 0001
Run= 11