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-MAY-2024
S/N = 023
D/S= 0001
Run= 15

Top Jaw Pole Tips

Y Dev.from Mean

Mean TOP = 16.5559

Regression Line Ang. (mrad) = -0.0017

Bottom Jaw Pole Tips

Y Dev.from Mean

Pole Tip Num. --->

Minimum Effective Gap = 32.979

Mean BTM = -16.4476

Regression Line Ang. (mrad) = -0.0057

Y Value Scales Centered on Mean Values

Step Between Measured Pole Tips = 5

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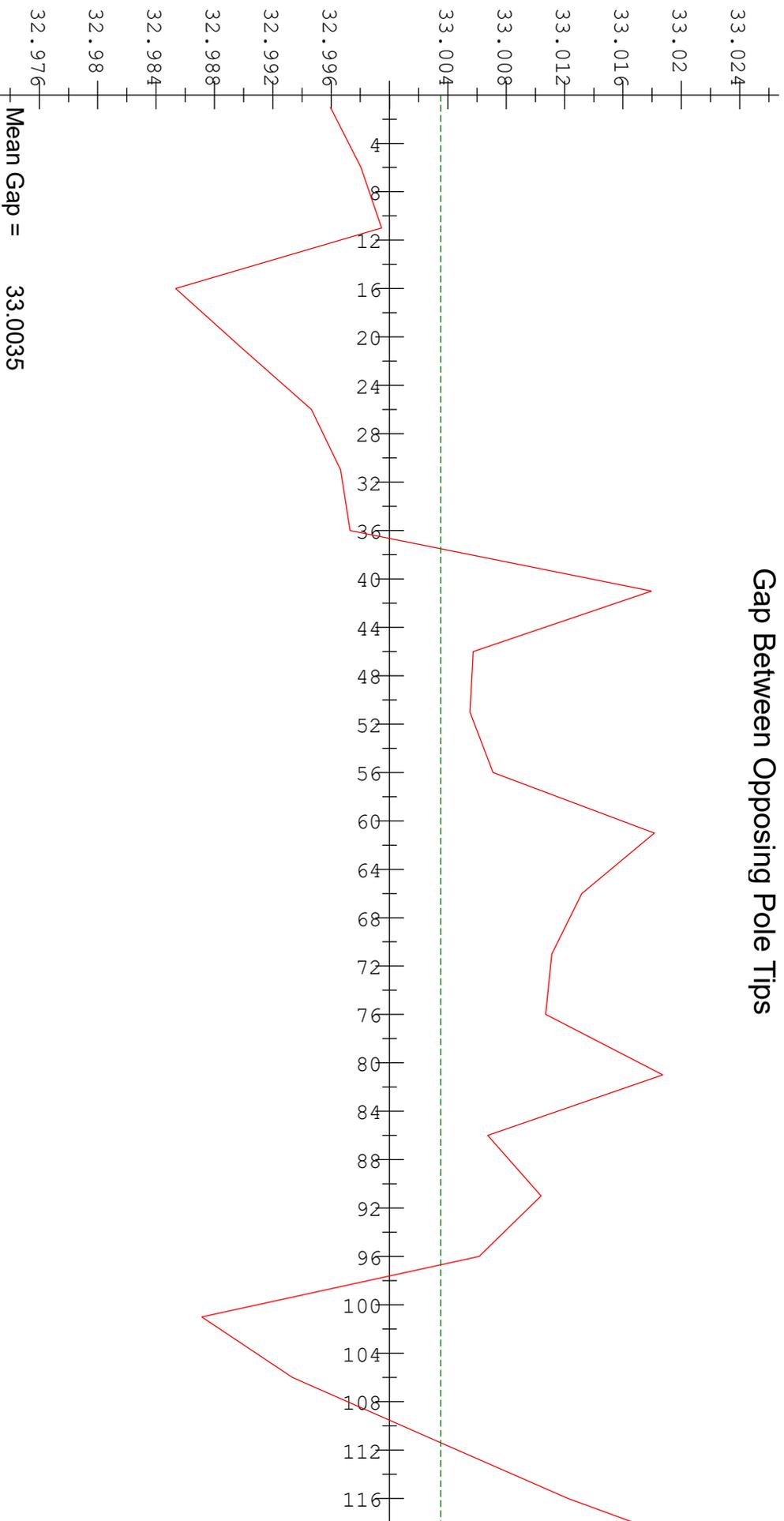
Dimensions in mm

LCLS II-HE - SXR Undulator

METROLOGY

Step Between Measured Pole Tips =   5

Mean Gap =   33.0035

Gap Between Opposing Pole Tips

Dimensions in mm

Nominal Gap = 33   Nominal Taper = 0.000

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

23-MAY-2024
S/N =   023
D/S=   0001
Run=   15

LCLS II-HE - SXR Undulator

Symmetry Point Between Pole Tips
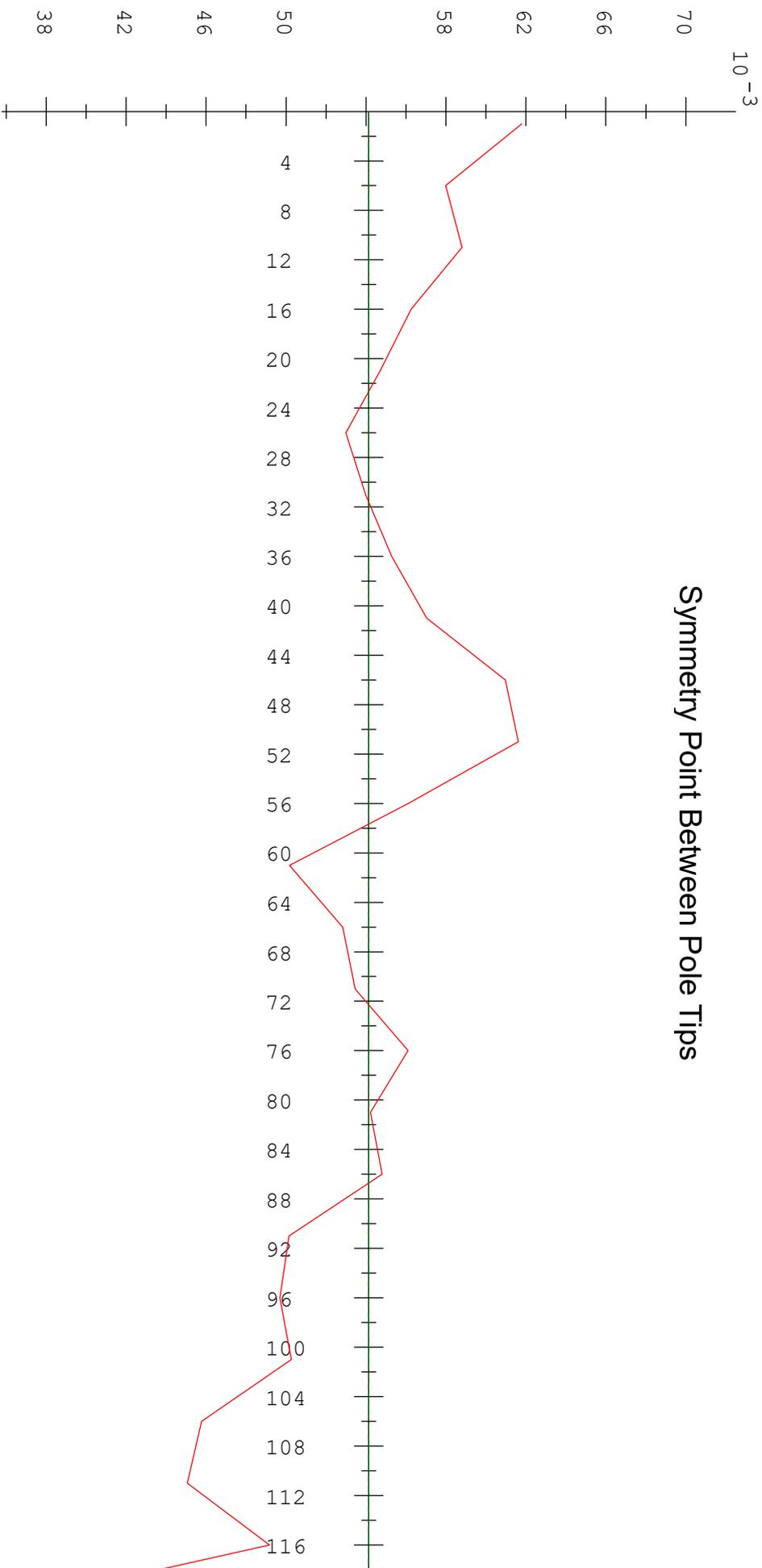
Dimensions in mm

Mean Symmetry Value = 0.0541

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-MAY-2024	
S/N =	023
D/S=	0001
Run=	15

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	16.5586	16.5573	16.5543	16.5530
Bottom	-16.4387	-16.4430	-16.4530	-16.4575
Gap	32.9973		33.0105	
Taper				0.0132

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
16.5559	-16.4476	33.0035	0.0541

Additional Calculated Values

Bottom Pole #1 Z Value	979.438
Top Jaw Pitch (mrad)	-0.002
Bottom Jaw Pitch(mrad)	-0.006
Minimum Effective Gap	32.979
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

METROLOGY