LCLS II-HE - SXR Undulator

Top Jaw Pole Tips

Y Dev.from Mean

Mean TOP = 17.0454

Regression Line Ang. (mrad) = -0.0110

Bottom Jaw Pole Tips

Minimum Effective Gap = 32.963

Y Dev.from Mean

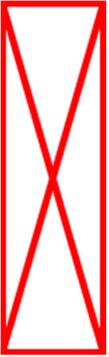Pole Tip Num. --->

Mean BTM = -15.9624

Regression Line Ang. (mrad) = -0.0105

Y Value Scales Centered on Mean Values

Step Between Measured Pole Tips = **5**
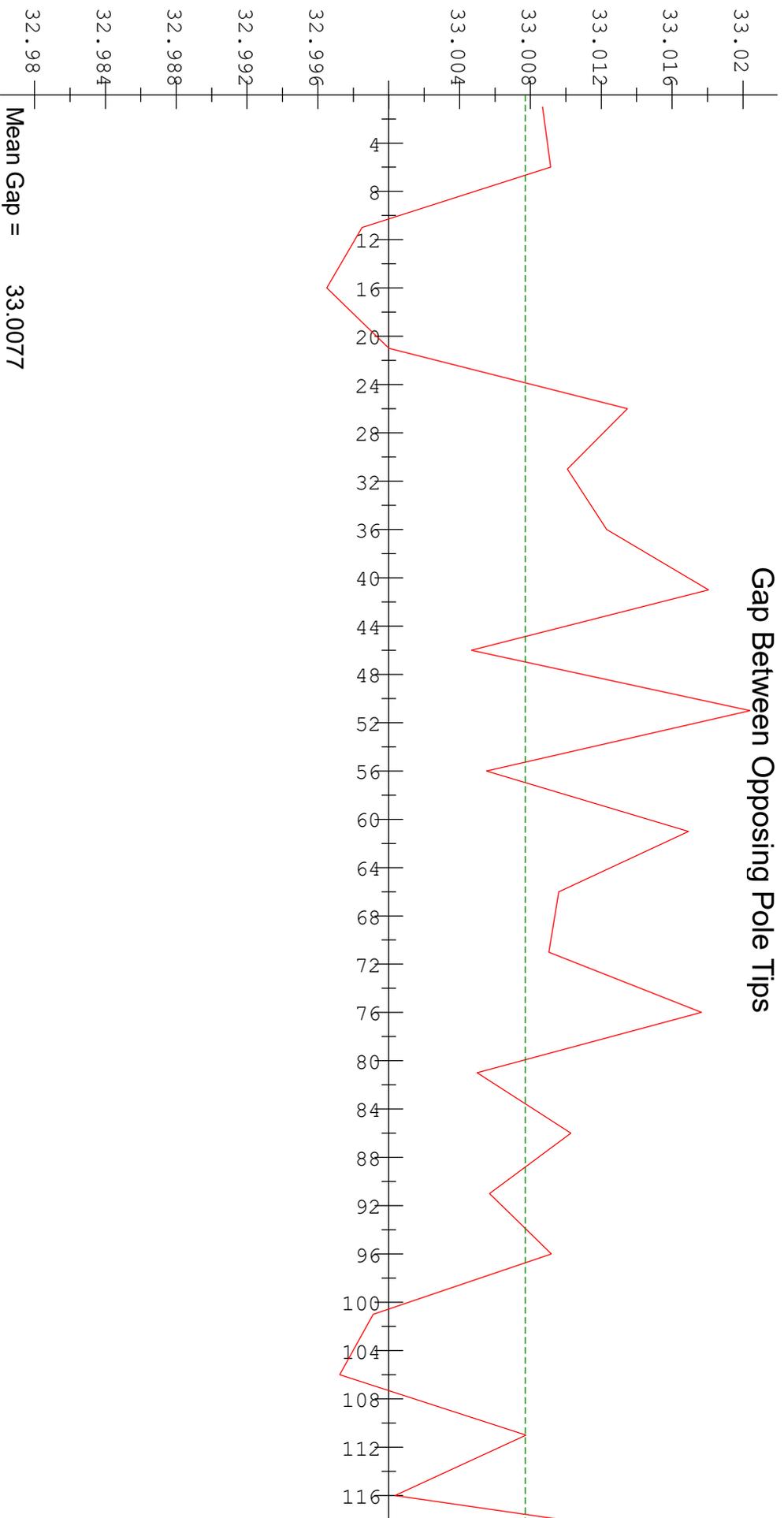
Regression Line Through Points =

Dimensions in mm

Nominal Gap = 33   Nominal Taper = 0.000

Gap Reading = 33.0001   US Encoder = 33.0000   DS Encoder = 33.0001

14-AUG-2024
S/N = 025
D/S= 0001
Run= 10

METROLOGY

LCLS II-HE - SXR Undulator

METROLOGY

Step Between Measured Pole Tips = 5

Mean Gap = 33.0077

Gap Between Opposing Pole Tips

Dimensions in mm

Nominal Gap = 33	Nominal Taper = 0.000	14-AUG-2024
Gap Reading = 33.0001		S/N = 025
US Encoder = 33.0000		D/S= 0001
DS Encoder = 33.0001		Run= 10

LCLS II-HE - SXR Undulator

Symmetry Point Between Pole Tips
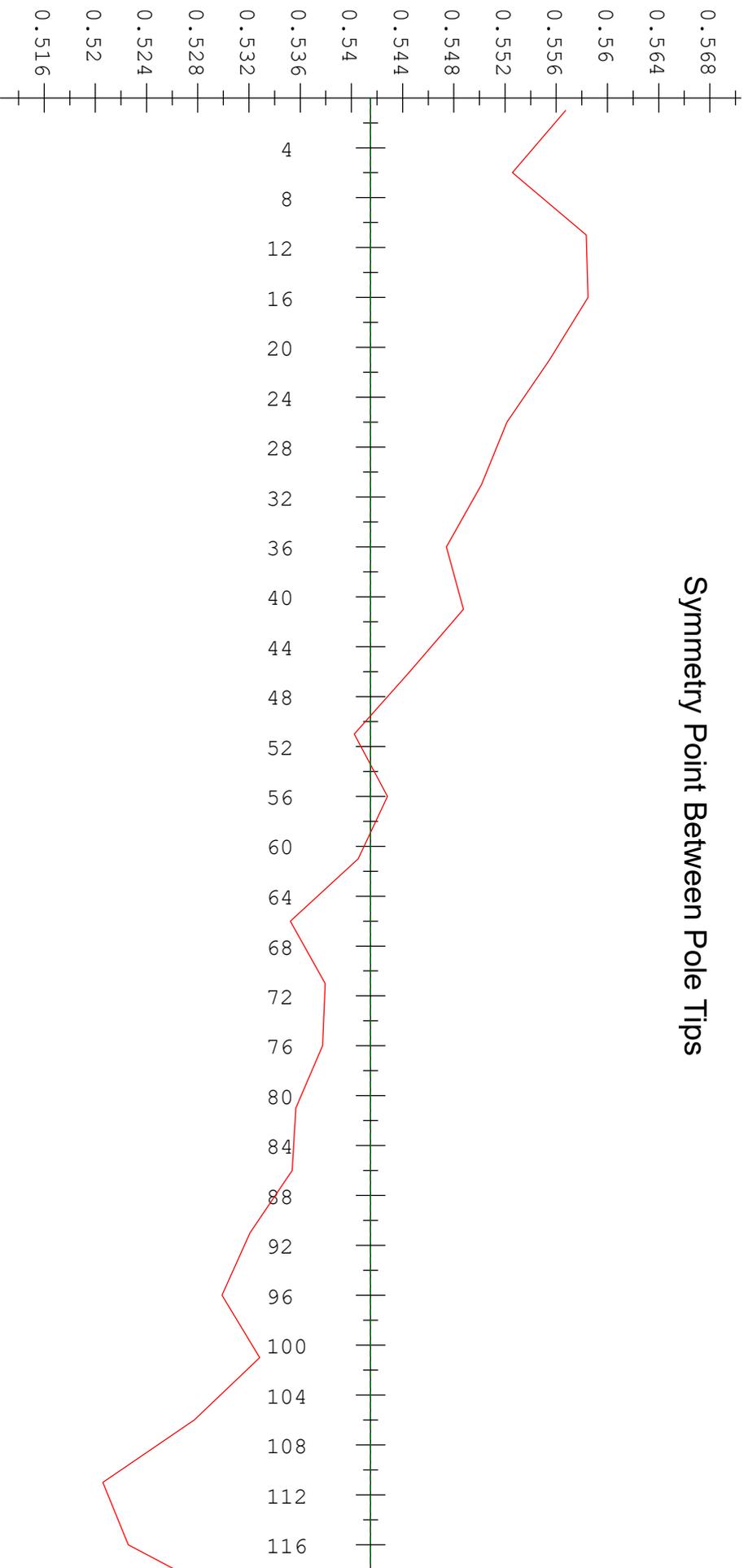
Mean Symmetry Value = 0.5415

Step Between Measured Pole Tips = 5

METROLOGY

Nominal Gap = 33   Nominal Taper = 0.000

Gap Reading = 33.0001   US Encoder = 33.0000   DS Encoder = 33.0001

Dimensions in mm

14-AUG-2024
S/N = 025
D/S= 0001
Run= 10

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	17.0632	17.0549	17.0358	17.0272
Bottom	-15.9454	-15.9534	-15.9716	-15.9798
Gap	33.0086	33.0077	33.0070	
Taper				-0.0017

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
17.0454	-15.9624	33.0077	0.5415

Additional Calculated Values

Bottom Pole #1 Z Value	979.432
Top Jaw Pitch (mrad)	-0.011
Bottom Jaw Pitch(mrad)	-0.010
Minimum Effective Gap	32.963
Reference Block Gap	6.795

LCLS II-HE - SXR Undulator

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

Gap Reading = 33.0001   US Encoder = 33.0000   DS Encoder = 33.0001