Top Jaw Pole Tips

Y Dev. from Mean

10^{-3}

Mean TOP = 5.9819   Regression Line Ang. (mrad) = 0.0019

Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap = 11.986

Y Dev. from Mean

10^{-3}

Mean BTM = -6.0174   Regression Line Ang. (mrad) = 0.0014

Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips = 87

Regression Line Through Points =
Dimensions in mm

SLAC
NATIONAL ACCELERATOR LABORATORY
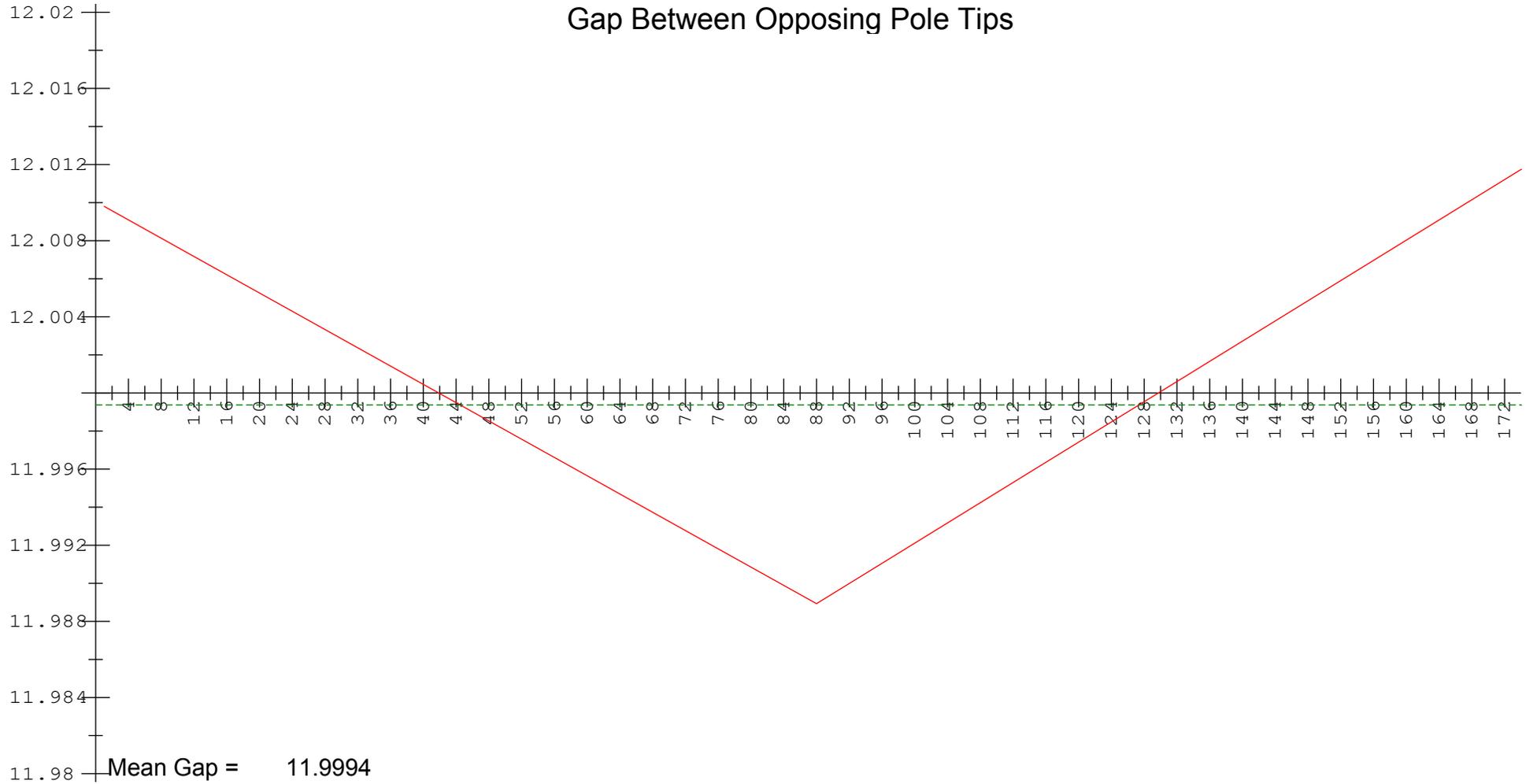## METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 12   Nominal Taper = 0.000
Gap Reading = 0.0000   US Encoder = 0.0000   DS Encoder = 0.0000

12-AUG-2019
S/N = 001
D/S= 0007
Run= 37

Gap Between Opposing Pole Tips

Mean Gap =   11.9994

Step Between Measured Pole Tips =   87

Dimensions in mm

SLAC
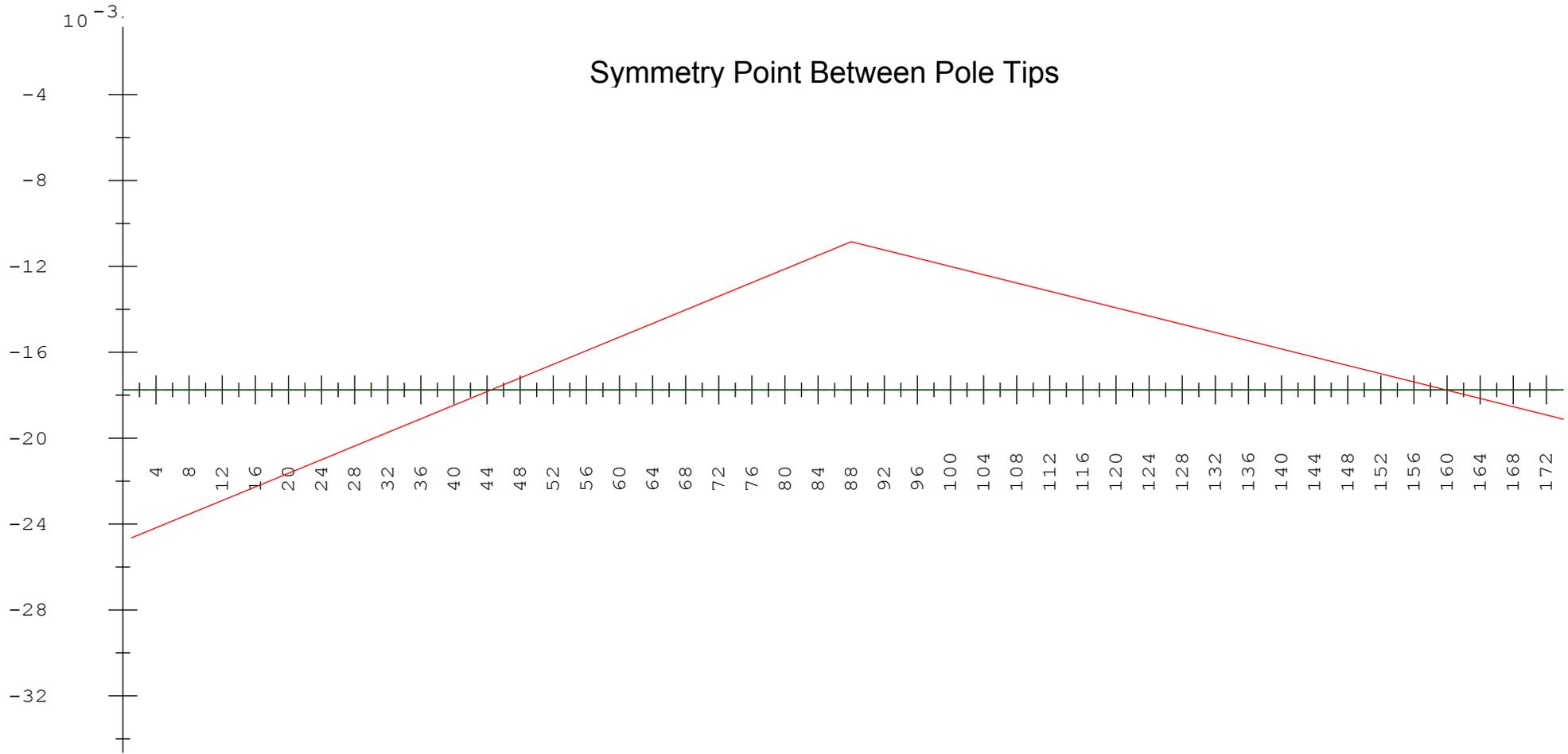NATIONAL ACCELERATOR LABORATORY
METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 12   Nominal Taper = 0.000
Gap Reading = 0.0000   US Encoder = 0.0000   DS Encoder = 0.0000

12-AUG-2019
S/N =   001
D/S=   0007
Run=   37

Symmetry Point Between Pole Tips

10^{-3}.

(y-axis labels, top to bottom: -4, -8, -12, -16, -20, -24, -28, -32)

(x-axis labels: 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, 120, 124, 128, 132, 136, 140, 144, 148, 152, 156, 160, 164, 168, 172)

Mean Symmetry Value =   -0.0178

Step Between Measured Pole Tips =   87

Dimensions in mm

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METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 12   Nominal Taper = 0.000
Gap Reading = 0.0000   US Encoder = 0.0000   DS Encoder = 0.0000

12-AUG-2019
S/N =   001
D/S=   0007
Run=   37

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	5.9803	5.9817	5.9853	5.9868
Bottom	-6.0223	-6.0213	-6.0187	-6.0176
Gap	12.0026			12.0044
Taper				0.0018

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.9819	-6.0174	11.9994	-0.0178

Additional Calculated Values

Bottom Pole #1 Z Value	980.086
Top Jaw Pitch (mrad)	0.002
Bottom Jaw Pitch(mrad)	0.001
Minimum Effective Gap	11.986
Reference Block Gap	6.801

Dimensions in mm

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METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 12   Nominal Taper = 0.000
Gap Reading = 0.0000   US Encoder = 0.0000   DS Encoder = 0.0000

12-AUG-2019
S/N = 001
D/S = 0007
Run = 37