Top Jaw Pole Tips

10^{-3}

Y Dev. from Mean

30
24
18
12
6
-6
-12
-18
-24
-30
-36

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 TOP =   5.7727   Regression Line Ang. (mrad) =   0.0053

Pole Tip Num. ---->   Bottom Jaw Pole Tips   Minimum Effective Gap =   11.462

10^{-3}

Y Dev. from Mean

30
24
18
12
6
-6
-12
-18
-24
-30
-36

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 BTM =   -5.7506   Regression Line Ang. (mrad) =   0.0090

Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips =   7
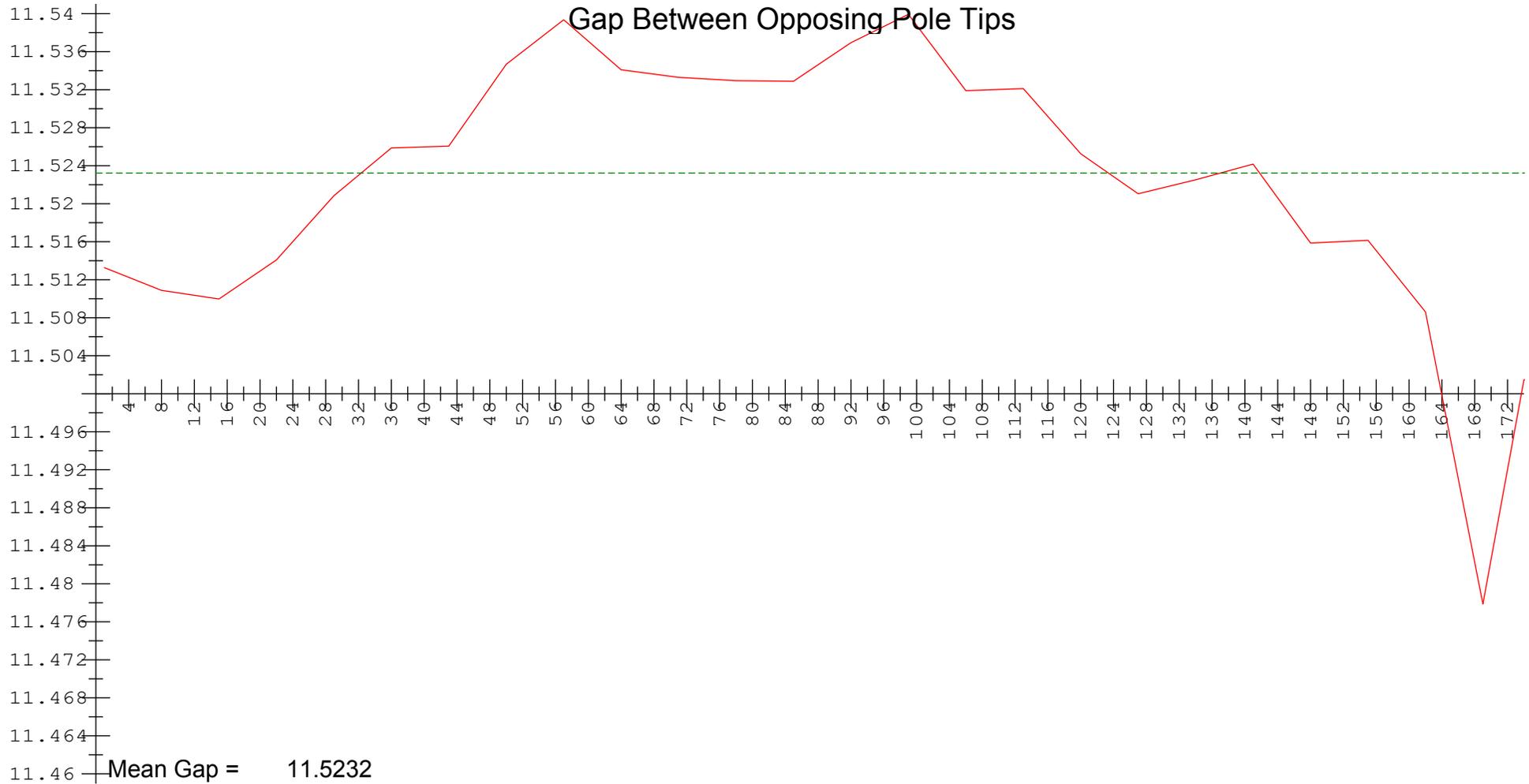
Regression Line Through Points =
Dimensions in mm

SLAC
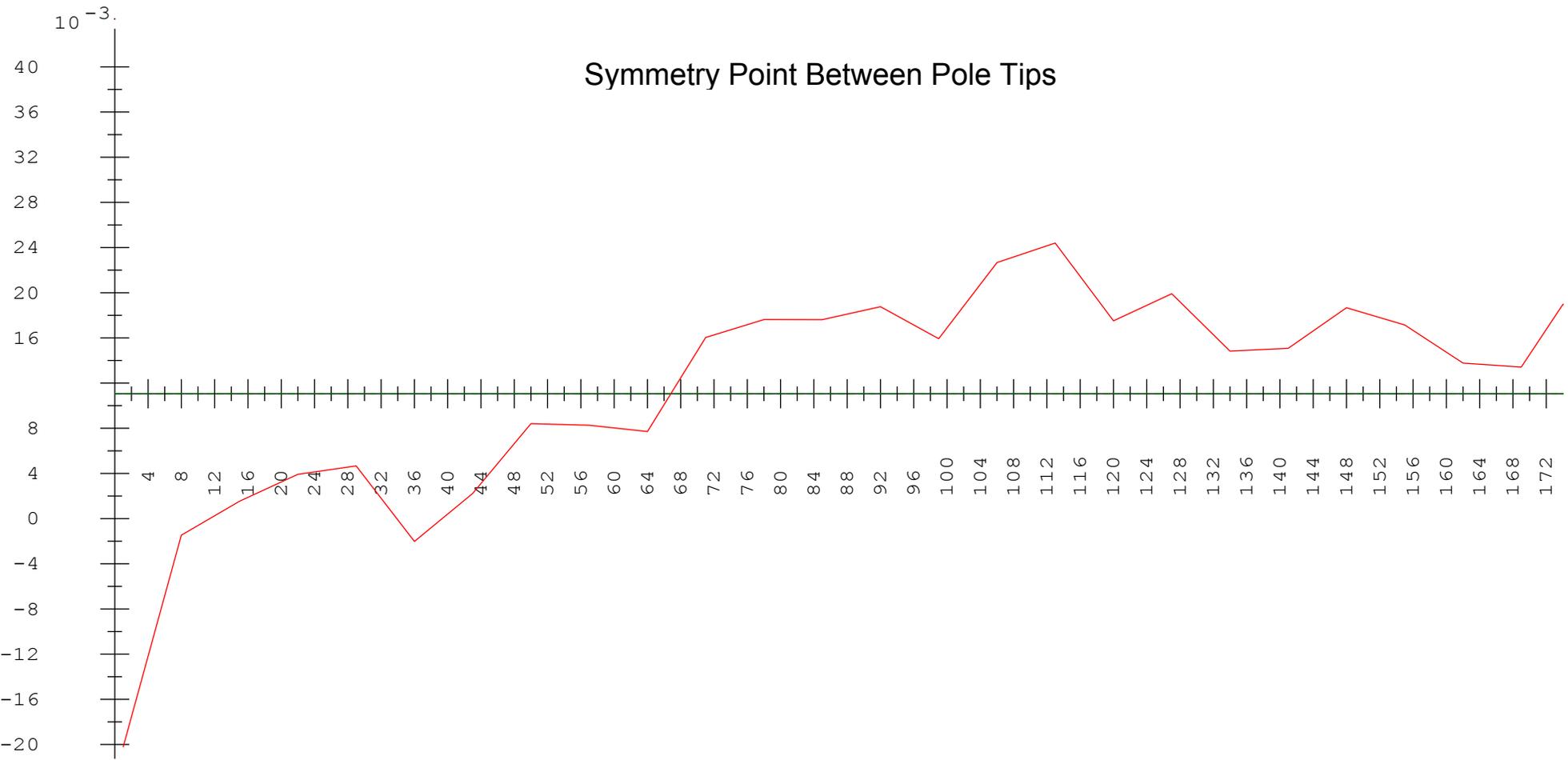### NATIONAL ACCELERATOR LABORATORY
METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 11.5   Nominal Taper = 0.000
Gap Reading = 11.5000   US Encoder = 11.5000   DS Encoder = 11.5000

15-MAR-2019
S/N =   022
D/S=   0001
Run=   7

Gap Between Opposing Pole Tips

Mean Gap =   11.5232

Step Between Measured Pole Tips =   7

Dimensions in mm

LCLS II - SXR Undulator

Nominal Gap = 11.5   Nominal Taper = 0.000

Gap Reading = 11.5000   US Encoder = 11.5000   DS Encoder = 11.5000

NATIONAL ACCELERATOR LABORATORY

METROLOGY

15-MAR-2019
S/N =   022
D/S=   0001
Run=   7

Symmetry Point Between Pole Tips

Mean Symmetry Value =   0.0111

Step Between Measured Pole Tips =   7

Dimensions in mm

SLAC
NATIONAL ACCELERATOR LABORATORY
METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 11.5   Nominal Taper = 0.000
Gap Reading = 11.5000   US Encoder = 11.5000   DS Encoder = 11.5000

15-MAR-2019
S/N =   022
D/S=   0001
Run=   7

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	5.7635	5.7674	5.7774	5.7814
Bottom	-5.7652	-5.7585	-5.7417	-5.7348
Gap	11.5287			11.5163
Taper				-0.0124

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.7727	-5.7506	11.5232	0.0111

Additional Calculated Values

Bottom Pole #1 Z Value	980.569
Top Jaw Pitch (mrad)	0.005
Bottom Jaw Pitch(mrad)	0.009
Minimum Effective Gap	11.462
Reference Block Gap	6.809

Dimensions in mm