Top Jaw Pole Tips

Y Dev.from Mean

10^{-3}

Mean TOP =   5.7589   Regression Line Ang. (mrad) =   -0.0004

Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap =   10.488

Y Dev.from Mean

10^{-3}

Mean BTM =   -4.7554   Regression Line Ang. (mrad) =   0.0025

Y Value Scales Centered on Mean Values
Step Between Measured Pole Tips =   60

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

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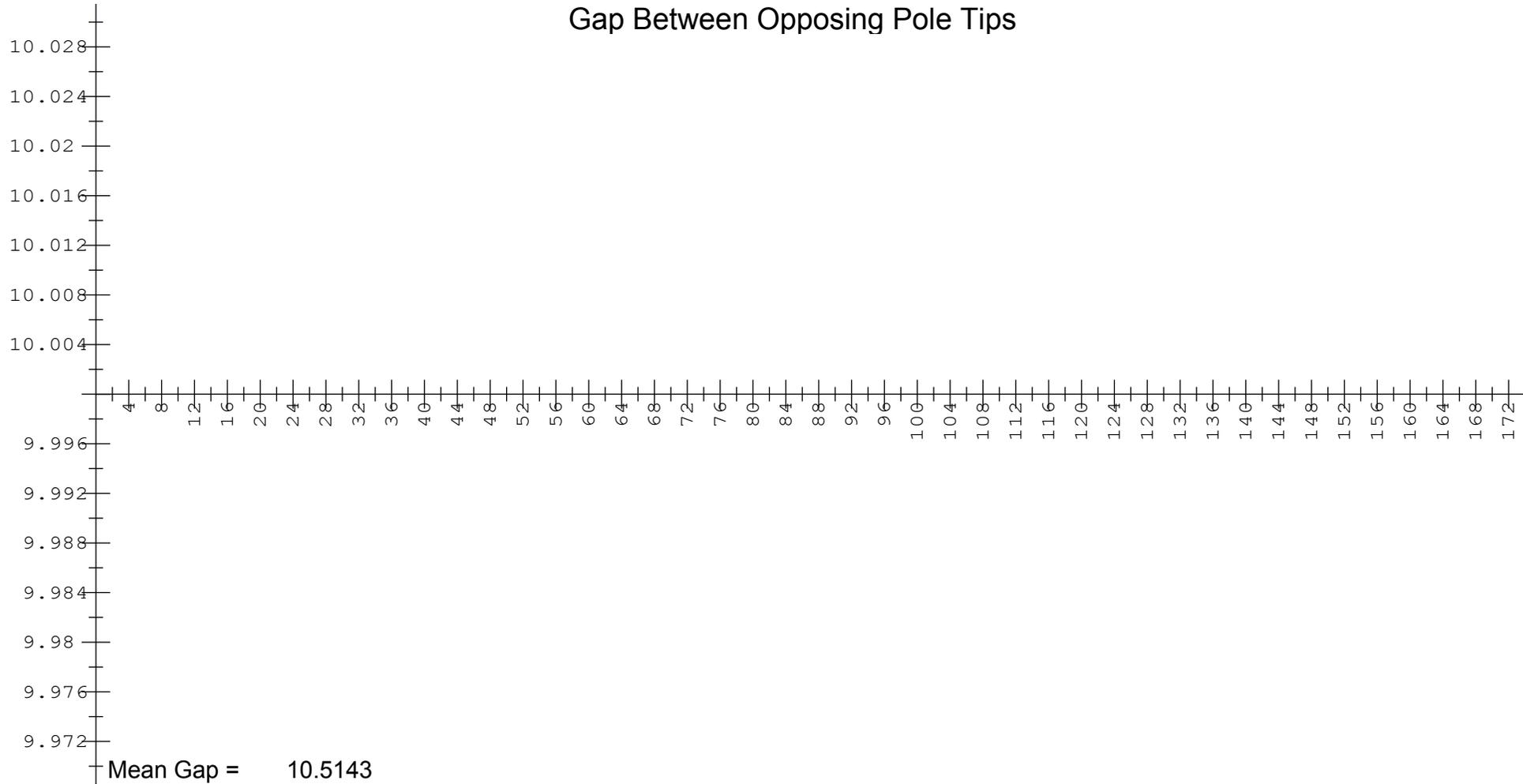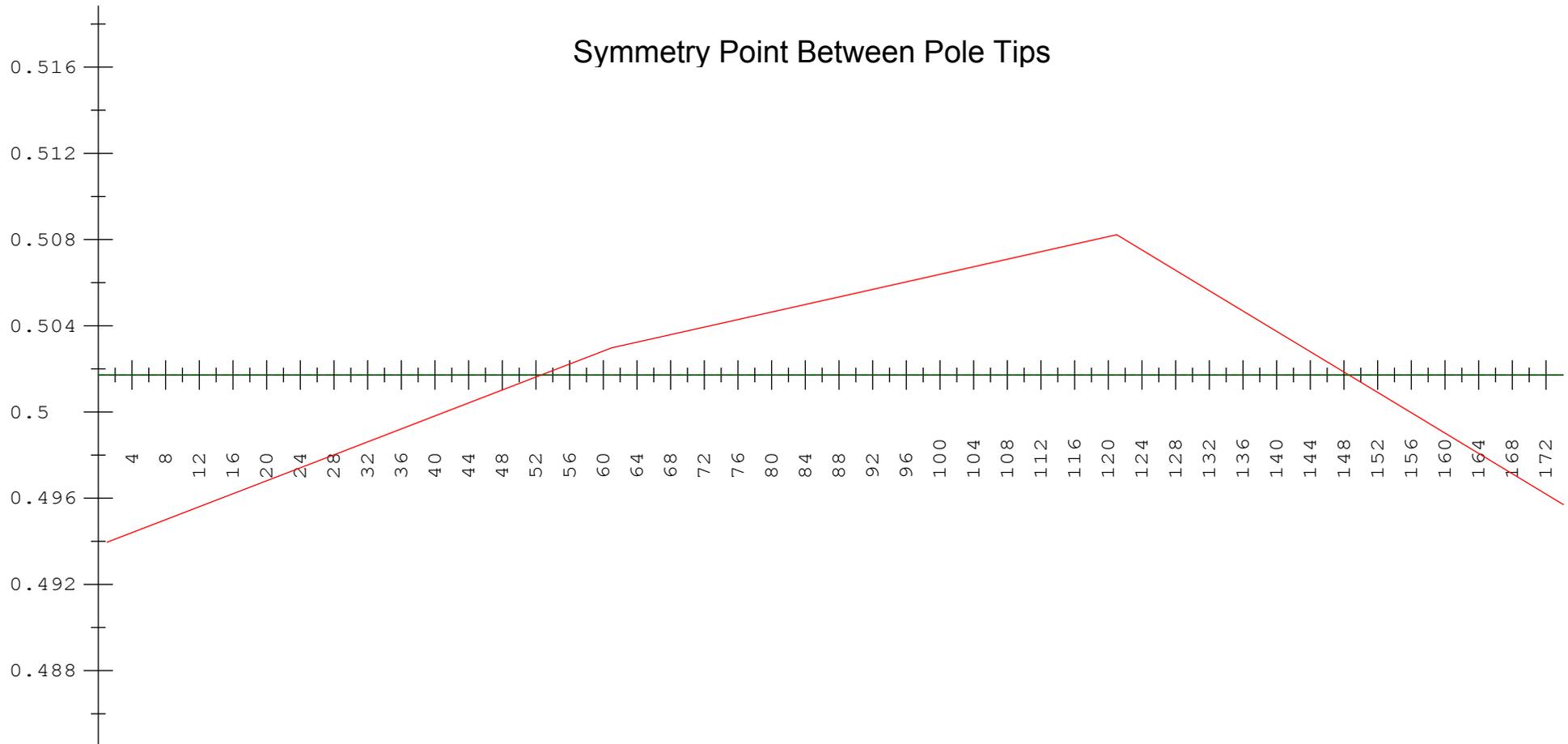METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 10   Nominal Taper = 0.000
Gap Reading = 0.0000   US Encoder = 0.0000   DS Encoder = 0.0000

31-JUL-2019
S/N =   001
D/S=   0007
Run=   21

Gap Between Opposing Pole Tips

10.028
10.024
10.02
10.016
10.012
10.008
10.004

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

9.996
9.992
9.988
9.984
9.98
9.976
9.972

Mean Gap =   10.5143

Step Between Measured Pole Tips =   60   Dimensions in mm

LCLS II - SXR Undulator
Nominal Gap = 10   Nominal Taper = 0.000
Gap Reading = 0.0000   US Encoder = 0.0000   DS Encoder = 0.0000

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METROLOGY

31-JUL-2019
S/N =   001
D/S=   0007
Run=   21

Symmetry Point Between Pole Tips

Mean Symmetry Value =   0.5017

Step Between Measured Pole Tips =   60

Dimensions in mm

SLAC NATIONAL ACCELERATOR LABORATORY METROLOGY	**LCLS II - SXR Undulator** Nominal Gap = 10 Nominal Taper = 0.000 Gap Reading = 0.0000 US Encoder = 0.0000 DS Encoder = 0.0000	31-JUL-2019 S/N = 001 D/S= 0007 Run= 21

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	5.7579	5.7576	5.7569	5.7567
Bottom	-4.7611	-4.7593	-4.7546	-4.7527
Gap	10.5190			10.5094
Taper				-0.0096

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.7589	-4.7554	10.5143	0.5017

Additional Calculated Values

Bottom Pole #1 Z Value	980.086
Top Jaw Pitch (mrad)	0.000
Bottom Jaw Pitch(mrad)	0.002
Minimum Effective Gap	10.488
Reference Block Gap	6.805

Dimensions in mm

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METROLOGY

LCLS II - SXR Undulator
Nominal Gap = 10   Nominal Taper = 0.000
Gap Reading = 0.0000   US Encoder = 0.0000   DS Encoder = 0.0000

31-JUL-2019
S/N = 001
D/S = 0007
Run = 21