Top Jaw Pole Tips

Y Value

Mean TOP = 5.2380   Regression Line Ang. (mrad) = 0.0058

Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap = 9.968

Y Value

Mean BTM = -4.7615   Regression Line Ang. (mrad) = -0.0044
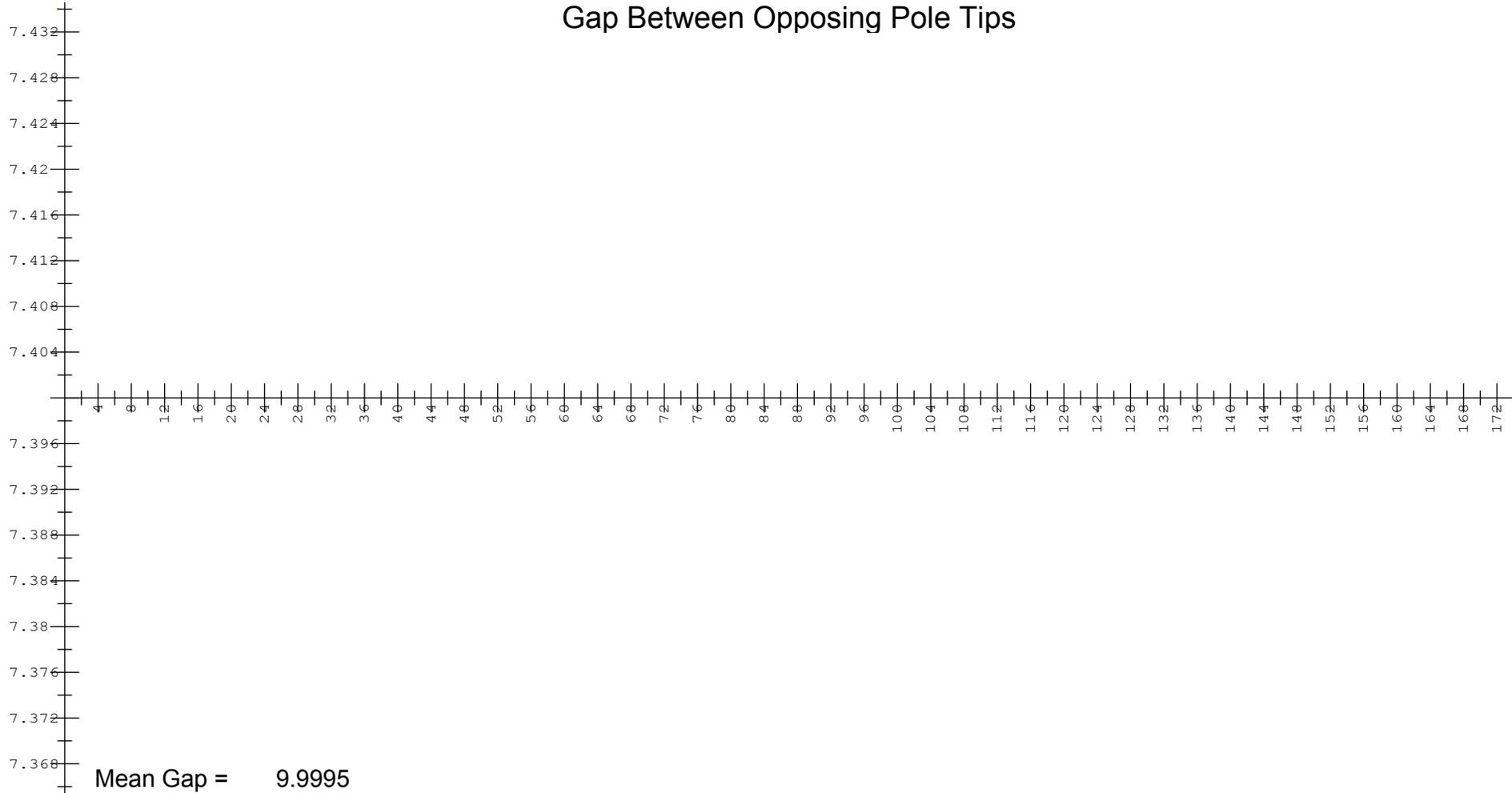
Y Value Scales Centered on Mean Values

Step Between Measured Pole Tips = 5

Regression Line Through Points =

Dimensions in mm

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LCLS II - SXR Undulator
Nominal Gap = 7.4
Gap Reading = 10.0000   US Encoder = 10.0000   DS Encoder = 10.0000

08-MAR-2018
S/N = 007
D/S = 0001
Run = 5

Gap Between Opposing Pole Tips

7.432
7.428
7.424
7.42
7.416
7.412
7.408
7.404

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

7.396
7.392
7.388
7.384
7.38
7.376
7.372
7.368

Mean Gap =   9.9995

Step Between Measured Pole Tips =   5

Dimensions in mm

LCLS II - SXR Undulator
Nominal Gap = 7.4
Gap Reading = 10.0000   US Encoder = 10.0000   DS Encoder = 10.0000

SLAC
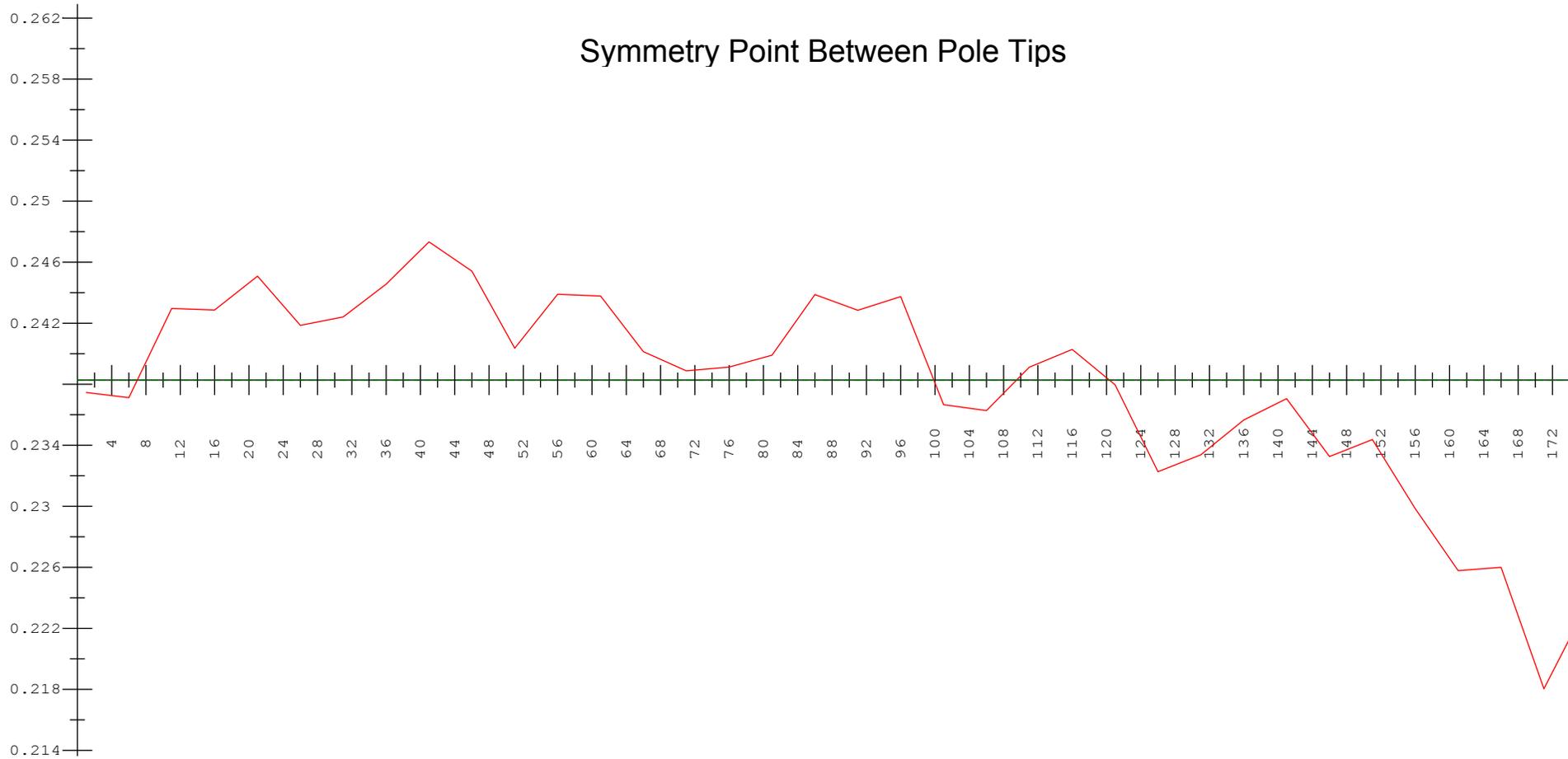NATIONAL ACCELERATOR LABORATORY
METROLOGY

08-MAR-2018
S/N =   007
D/S=   0001
Run=   5

Symmetry Point Between Pole Tips

Mean Symmetry Value =   0.2383

Step Between Measured Pole Tips =   5

Dimensions in mm

LCLS II - SXR Undulator
Nominal Gap = 7.4
Gap Reading = 10.0000   US Encoder = 10.0000   DS Encoder = 10.0000

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S/N =   007
D/S=   0001
Run=   5

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	5.2479	5.2435	5.2326	5.2282
Bottom	-4.7548	-4.7581	-4.7663	-4.7696
Gap	10.0027			9.9978
Taper				-0.0049

Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.2380	-4.7615	9.9995	0.2383

Additional Calculated Values

Bottom Pole #1 Z Value	979.176
Top Jaw Pitch (mrad)	0.006
Bottom Jaw Pitch(mrad)	-0.004
Minimum Effective Gap	9.968
Reference Block Gap	6.804

Dimensions in mm

LCLS II - SXR Undulator
Nominal Gap = 7.4
Gap Reading = 10.0000   US Encoder = 10.0000   DS Encoder = 10.0000

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METROLOGY

08-MAR-2018
S/N =   007
D/S=   0001
Run=   5