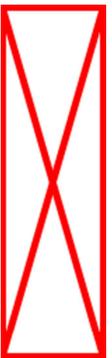


Y Value Scales Centered on Mean Values  
Step Between Measured Pole Tips = 1

Regression Line Through Points = 1  
Dimensions in mm



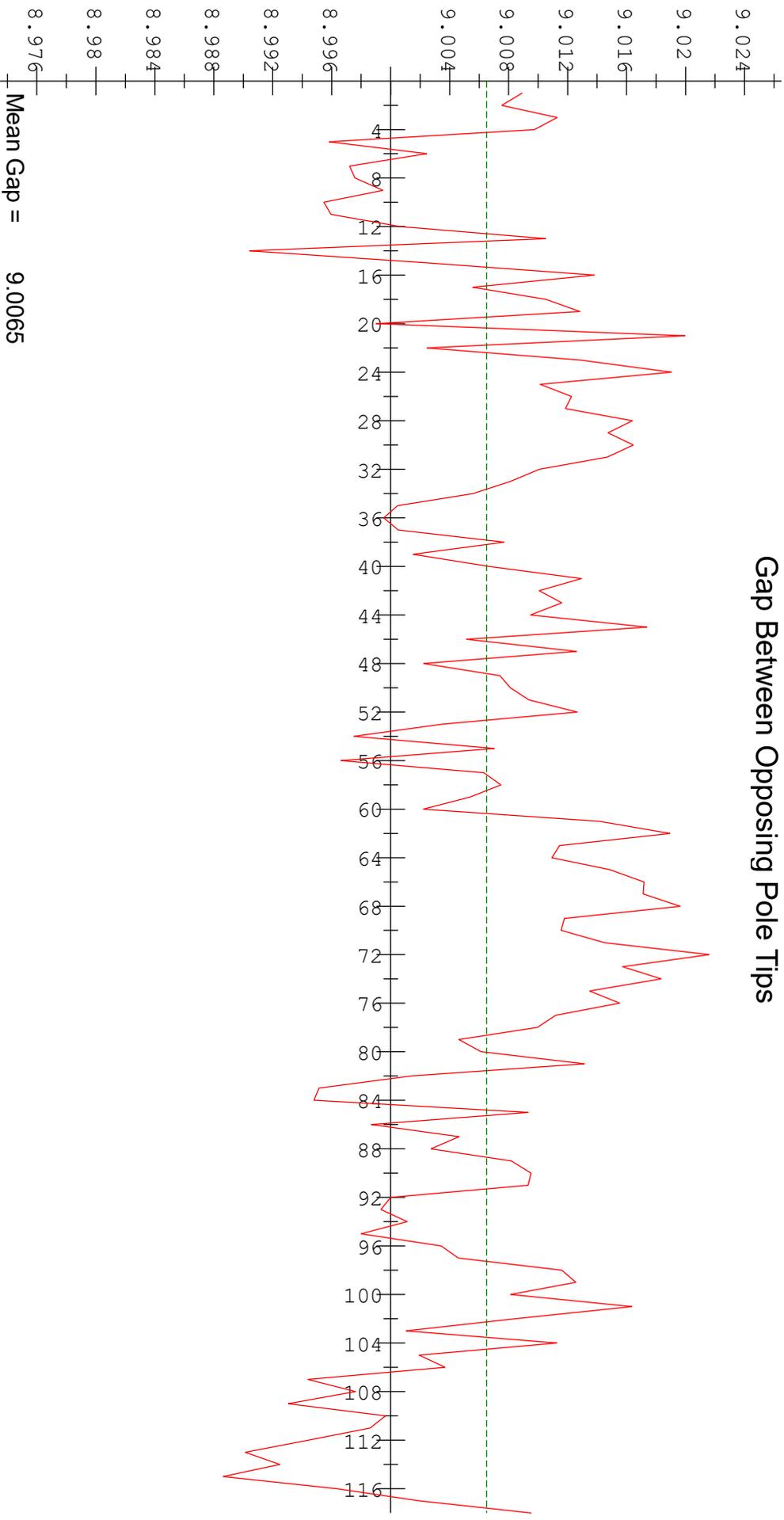
METROLOGY

# LCLS II-HE - SXR Undulator

Nominal Gap = 9  
Nominal Taper = 0.000  
Gap Reading = 9.0000  
US Encoder = 9.0000  
DS Encoder = 9.0000

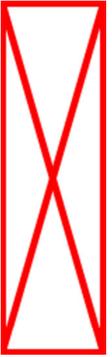
30-AUG-2022  
S/N = 000  
D/S = 0001  
Run = 9

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm

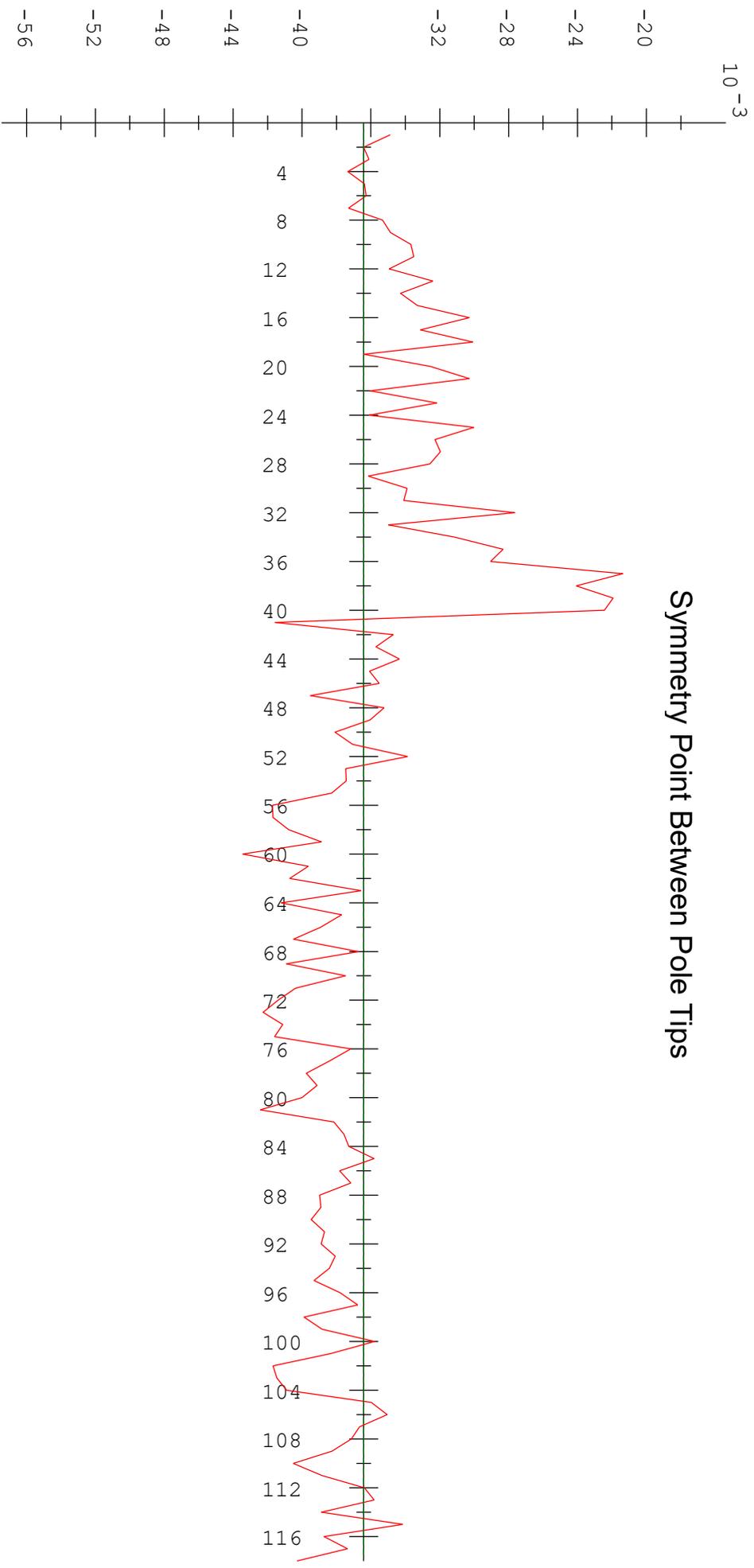


METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 9      Nominal Taper = 0.000  
Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0000

30-AUG-2022  
S/N = 000  
D/S = 0001  
Run = 9



Symmetry Point Between Pole Tips

Mean Symmetry Value = -0.0364

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

### LCLS II-HE - SXR Undulator

Nominal Gap = 9      Nominal Taper = 0.000  
 Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0000

30-AUG-2022  
 S/N = 000  
 D/S = 0001  
 Run = 9

## Top and Bottom Jaw Regression Line Intersect Points

Jaw	First Pole <i>(Pole -1)</i>	US Actuator <i>(Pole 28)</i>	DS Actuator <i>(Pole 90)</i>	Last Pole <i>(Pole 118)</i>
<b>Top</b>	4.4715	4.4694	4.4644	4.4621
<b>Bottom</b>	-4.5374	-4.5384	-4.5409	-4.5420
<b>Gap</b>	9.0089			9.0041
<b>Taper</b>				-0.0048

### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.4668	-4.5397	9.0065	-0.0364

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	974.854
<b>Top Jaw Pitch (mrad)</b>	-0.003
<b>Bottom Jaw Pitch(mrad)</b>	-0.001
<b>Minimum Effective Gap</b>	8.978
<b>Reference Block Gap</b>	6.801

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 9      Nominal Taper = 0.000  
 Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0000

30-AUG-2022  
 S/N = 000  
 D/S = 0001  
 Run = 9