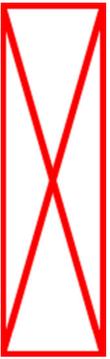


Y Value Scales Centered on Mean Values  
Step Between Measured Pole Tips = 1

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



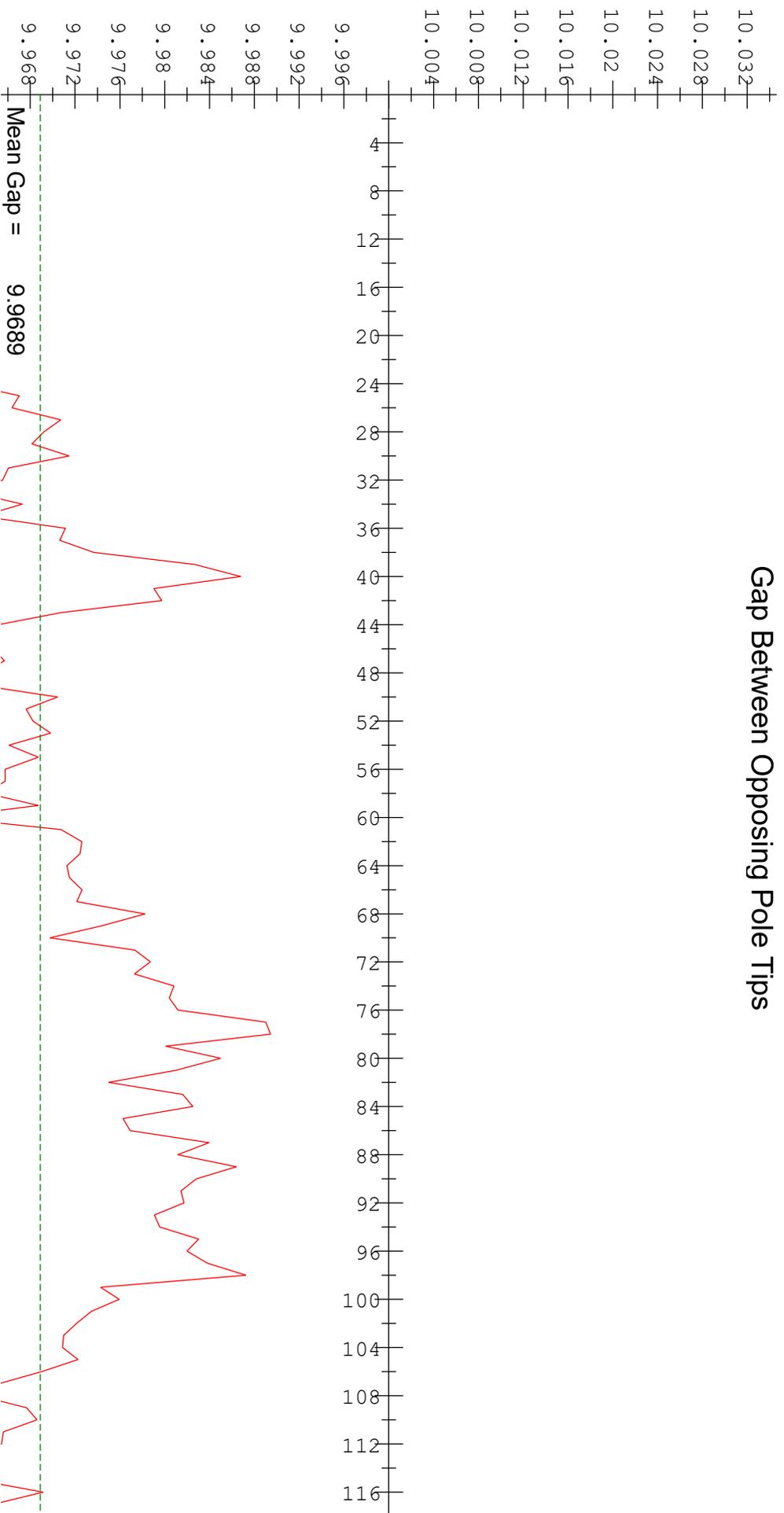
METROLOGY

# LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 9.9999      US Encoder = 10.0000      DS Encoder = 9.9997

14-JAN-2025  
S/N = 029  
D/S = 0001  
Run = 2

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



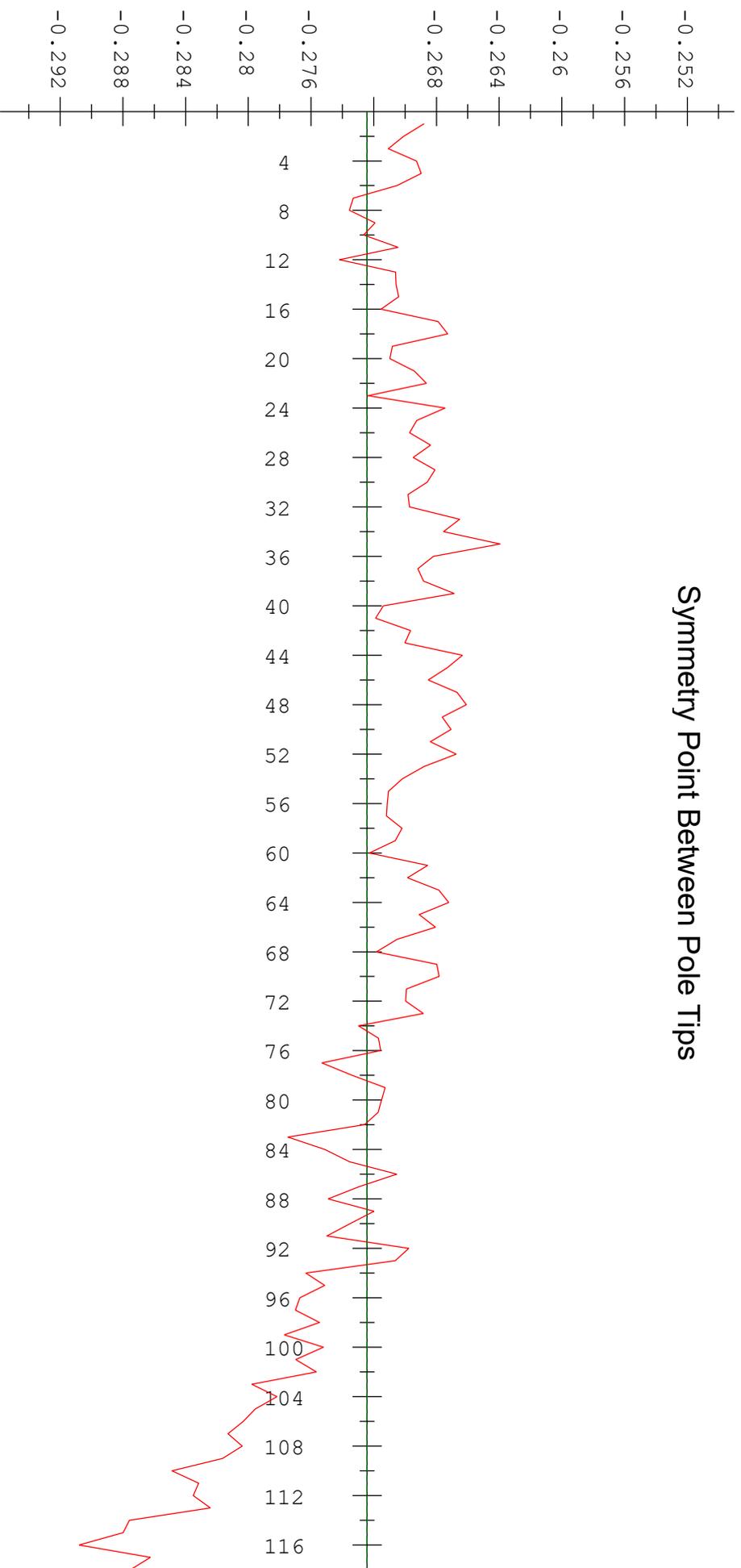
METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 9.9999      US Encoder = 10.0000      DS Encoder = 9.9997

14-JAN-2025  
S/N = 029  
D/S = 0001  
Run = 2

### Symmetry Point Between Pole Tips



Mean Symmetry Value = -0.2724

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 9.9999      US Encoder = 10.0000      DS Encoder = 9.9997

14-JAN-2025  
S/N = 029  
D/S = 0001  
Run = 2

## 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>	4.7127	4.7124	4.7117	4.7113
<b>Bottom</b>	-5.2448	-5.2504	-5.2631	-5.2689
<b>Gap</b>	9.9576			9.9802
<b>Taper</b>				0.0227

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.7120	-5.2569	9.9689	-0.2724

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.618</b>
<b>Top Jaw Pitch (mrad)</b>	<b>0.000</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>-0.007</b>
<b>Minimum Effective Gap</b>	<b>9.933</b>
<b>Reference Block Gap</b>	<b>6.794</b>

Dimensions in mm



METROLOGY

### LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
 Gap Reading = 9.9999      US Encoder = 10.0000      DS Encoder = 9.9997

14-JAN-2025  
 S/N = 029  
 D/S = 0001  
 Run = 2