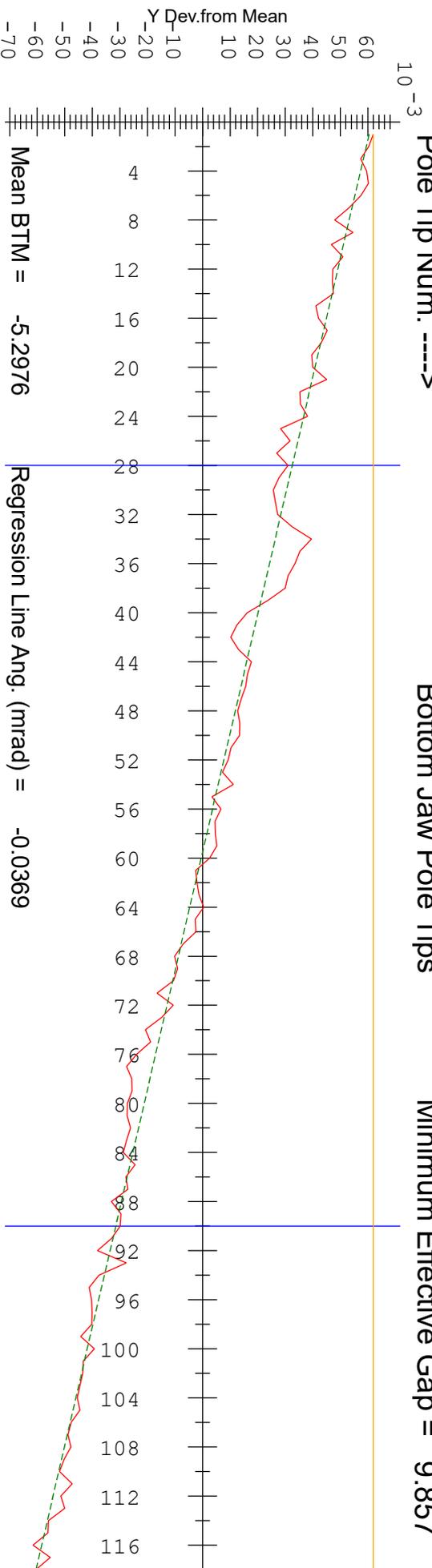
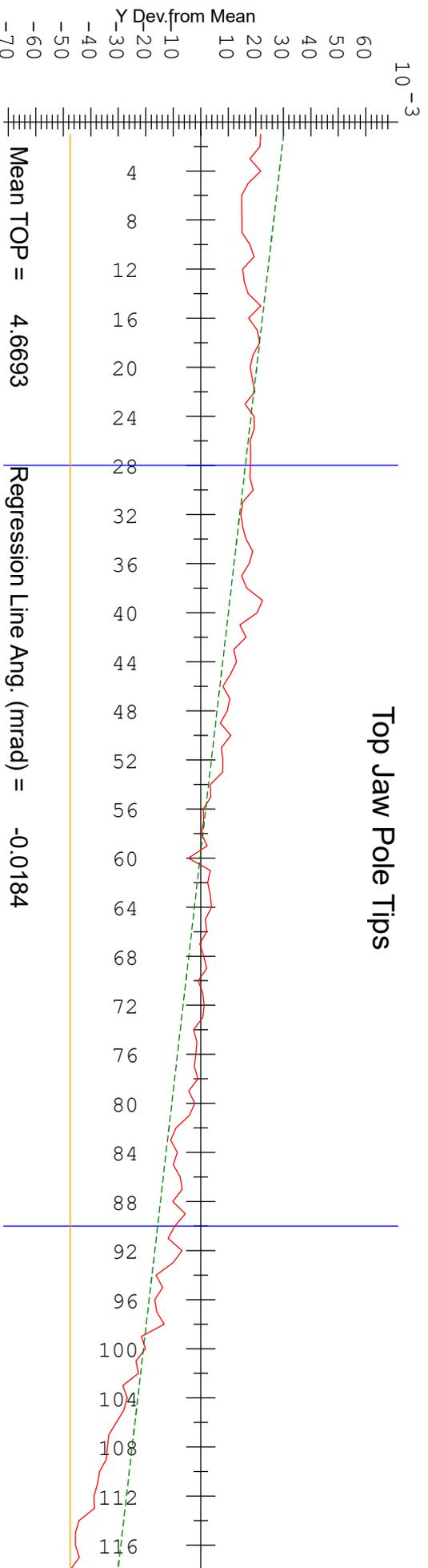


### Top Jaw Pole Tips



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

## LCLS II-HE - SXR Undulator

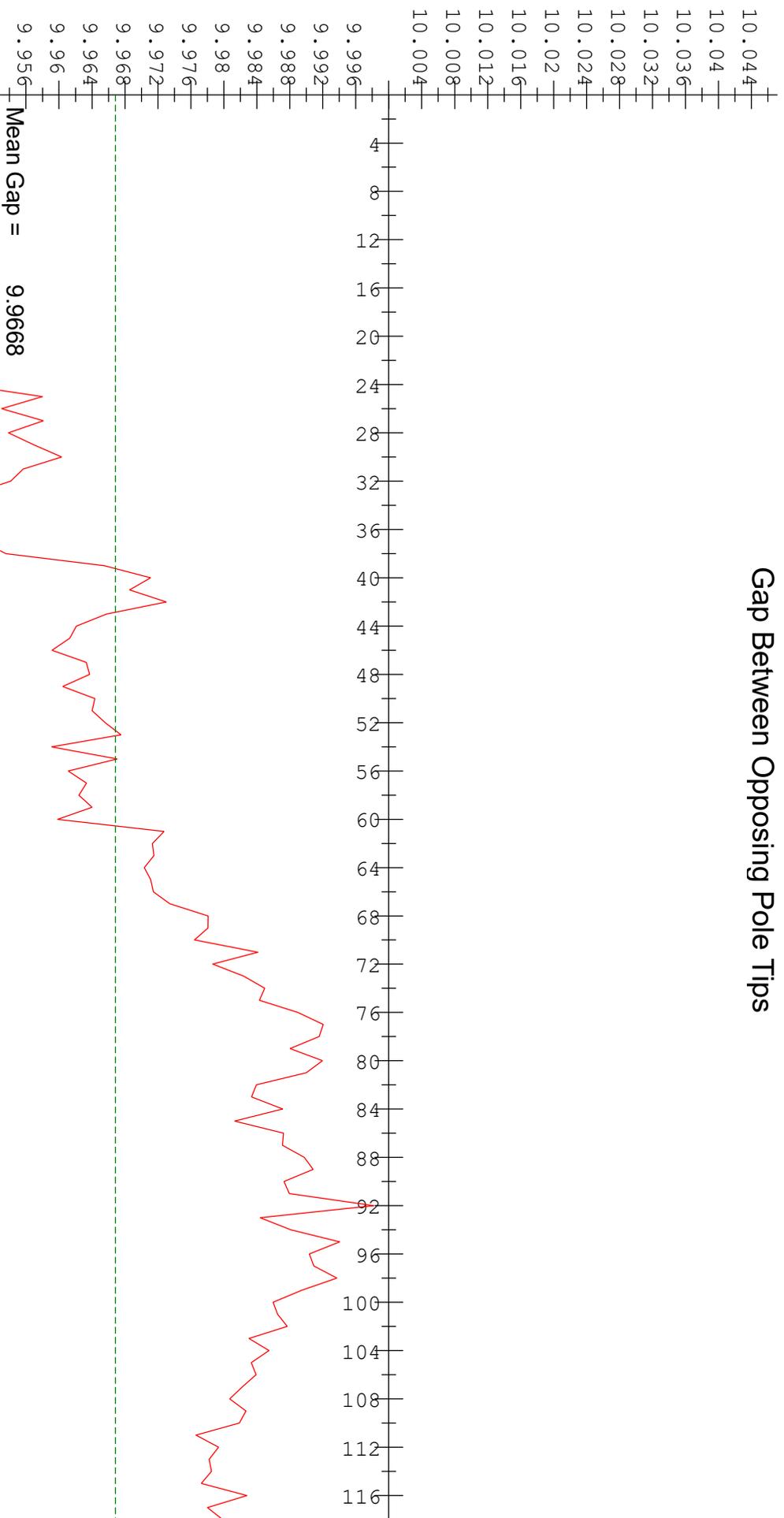
Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 9.9997      US Encoder = 9.9995      DS Encoder = 9.9998

13-JAN-2025  
S/N = 029  
D/S = 0001  
Run = 1



METROLOGY

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



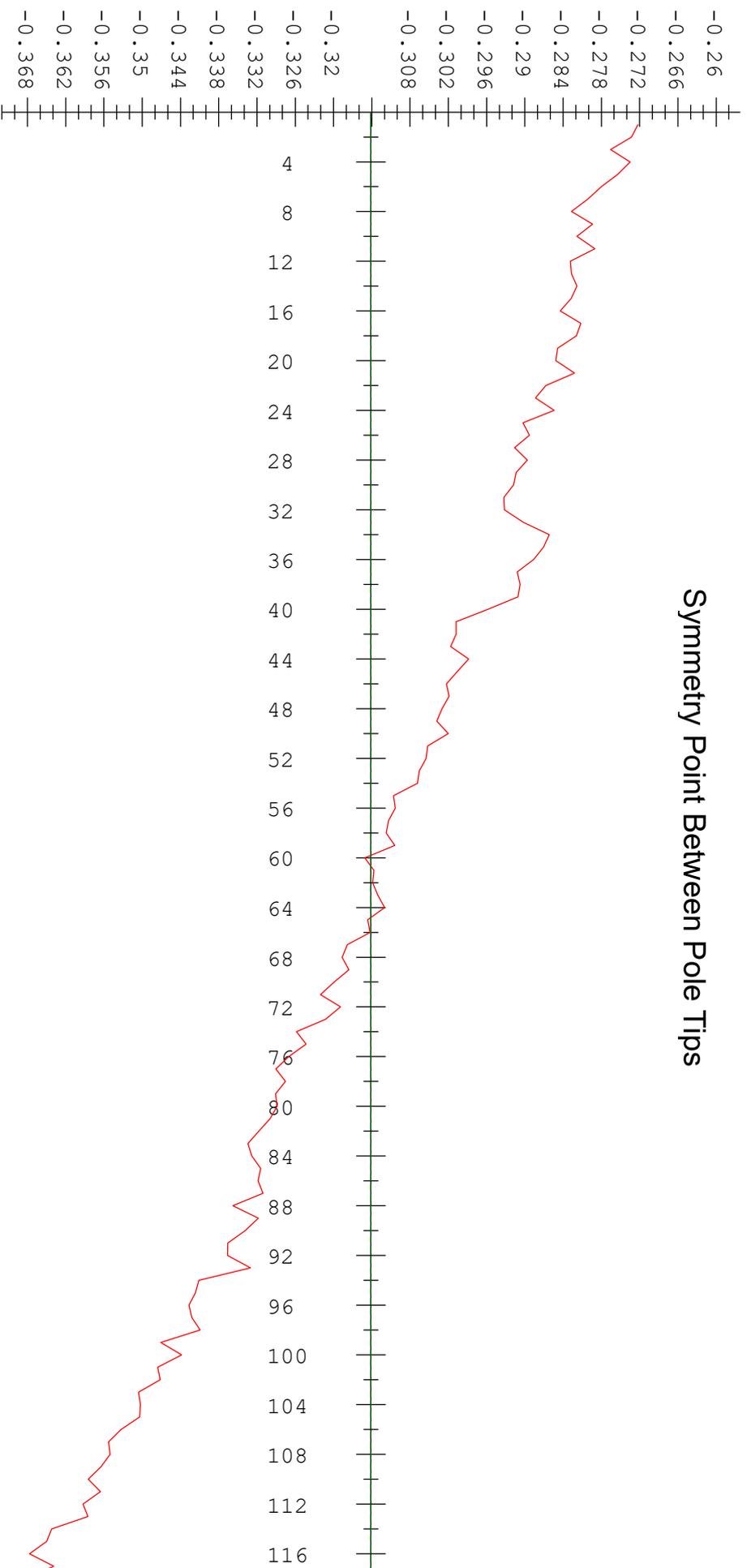
METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 9.9997      US Encoder = 9.9995      DS Encoder = 9.9998

13-JAN-2025  
S/N = 029  
D/S = 0001  
Run = 1

### Symmetry Point Between Pole Tips



Mean Symmetry Value = -0.3141

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10

Gap Reading = 9.9997

US Encoder = 9.9995

DS Encoder = 9.9998

Nominal Taper = 0.000

13-JAN-2025  
S/N = 029  
D/S = 0001  
Run = 1

## 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>	4.6994	4.6855	4.6536	4.6392
<b>Bottom</b>	-5.2371	-5.2650	-5.3291	-5.3580
<b>Gap</b>	9.9365			9.9972
<b>Taper</b>				0.0607

### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.6693	-5.2976	9.9668	-0.3141

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.618</b>
<b>Top Jaw Pitch (mrad)</b>	<b>-0.018</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>-0.037</b>
<b>Minimum Effective Gap</b>	<b>9.857</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 = 9.9997      US Encoder = 9.9995      DS Encoder = 9.9998

13-JAN-2025  
 S/N = 029  
 D/S = 0001  
 Run = 1