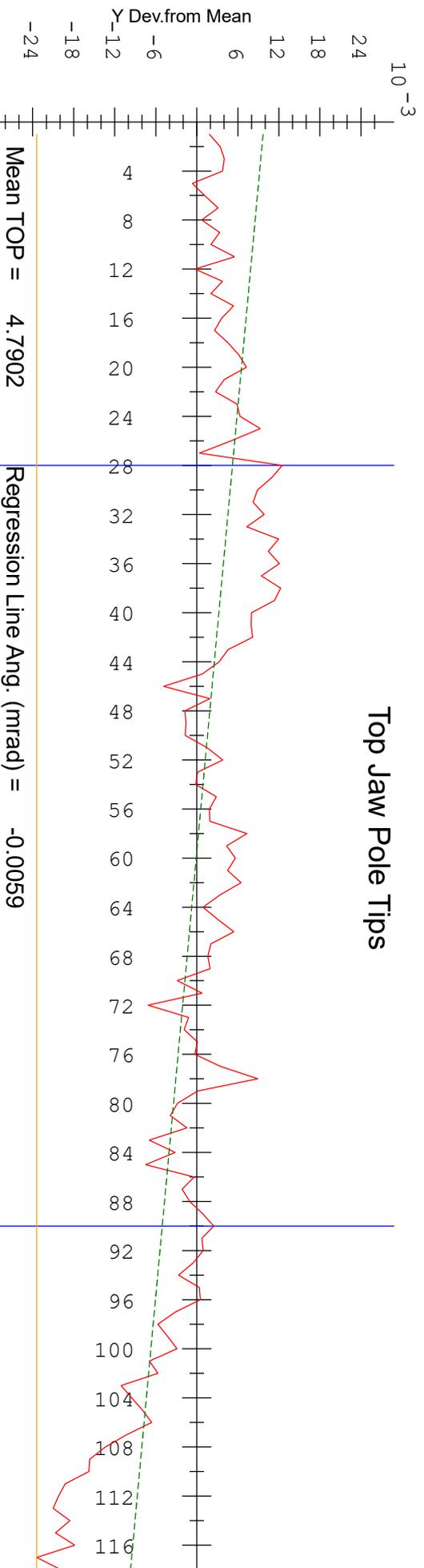


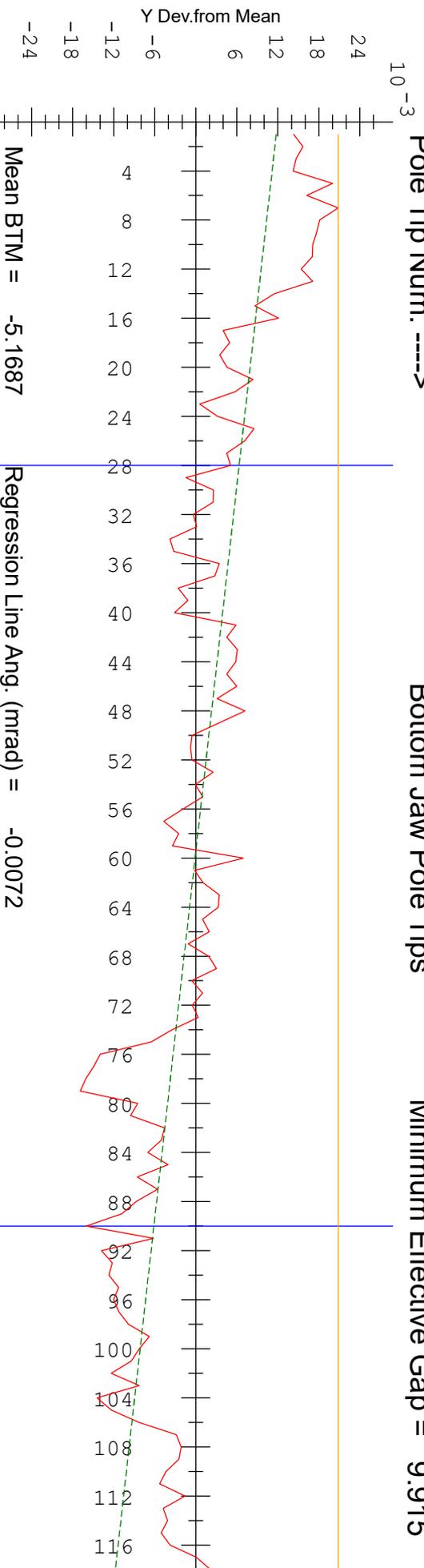
### Top Jaw Pole Tips



Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap = 9.915



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

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



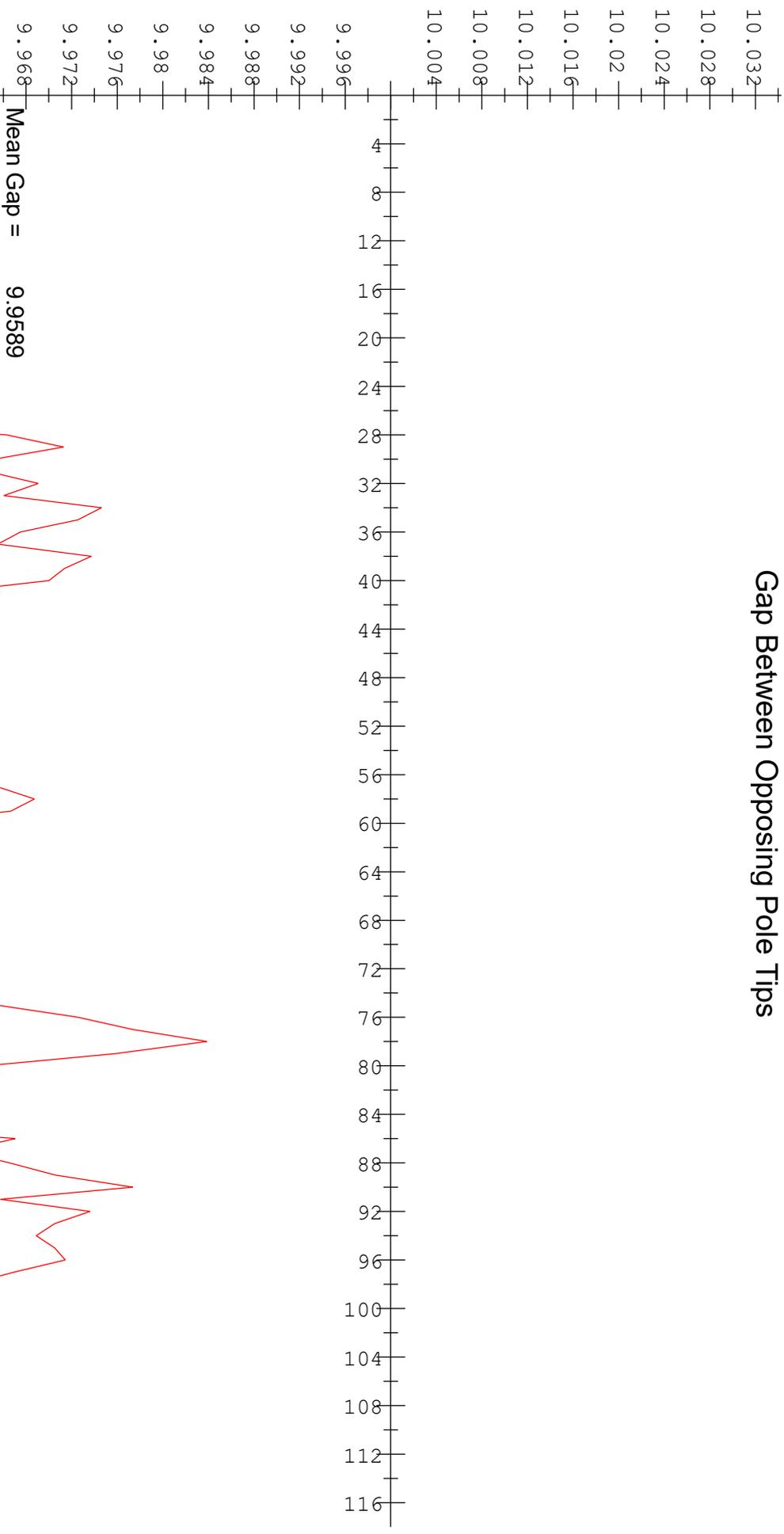
METROLOGY

## LCLS II-HE - SXR Undulator

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

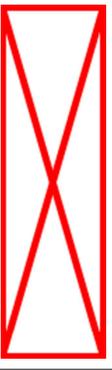
14-OCT-2024  
S/N = 027  
D/S = 0001  
Run = 1

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



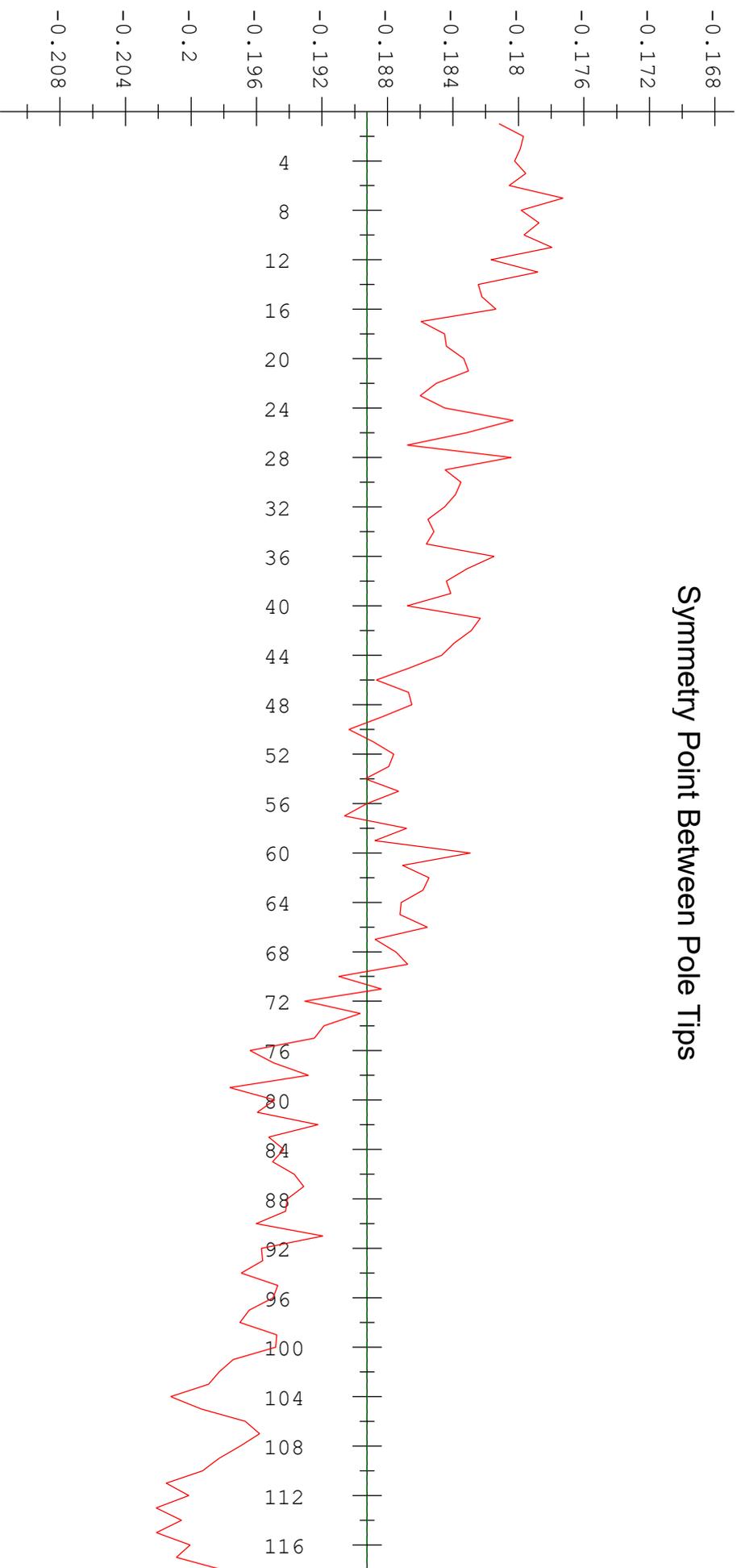
METROLOGY

## LCLS II-HE - SXR Undulator

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

14-OCT-2024  
S/N = 027  
D/S = 0001  
Run = 1

### Symmetry Point Between Pole Tips



Mean Symmetry Value = -0.1892

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

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

14-OCT-2024  
S/N = 027  
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>	4.7999	4.7954	4.7851	4.7805
<b>Bottom</b>	-5.1569	-5.1623	-5.1748	-5.1804
<b>Gap</b>	9.9568			9.9609
<b>Taper</b>				0.0041

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.7902	-5.1687	9.9589	-0.1892

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.897</b>
<b>Top Jaw Pitch (mrad)</b>	<b>-0.006</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>-0.007</b>
<b>Minimum Effective Gap</b>	<b>9.915</b>
<b>Reference Block Gap</b>	<b>6.799</b>

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

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

14-OCT-2024  
 S/N = 027  
 D/S = 0001  
 Run = 1