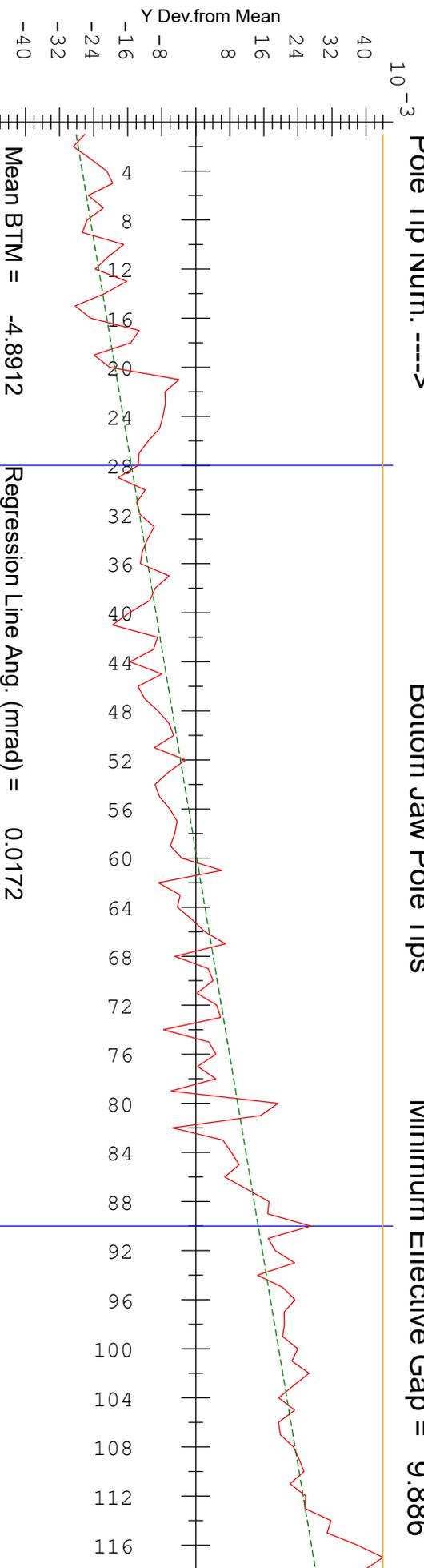
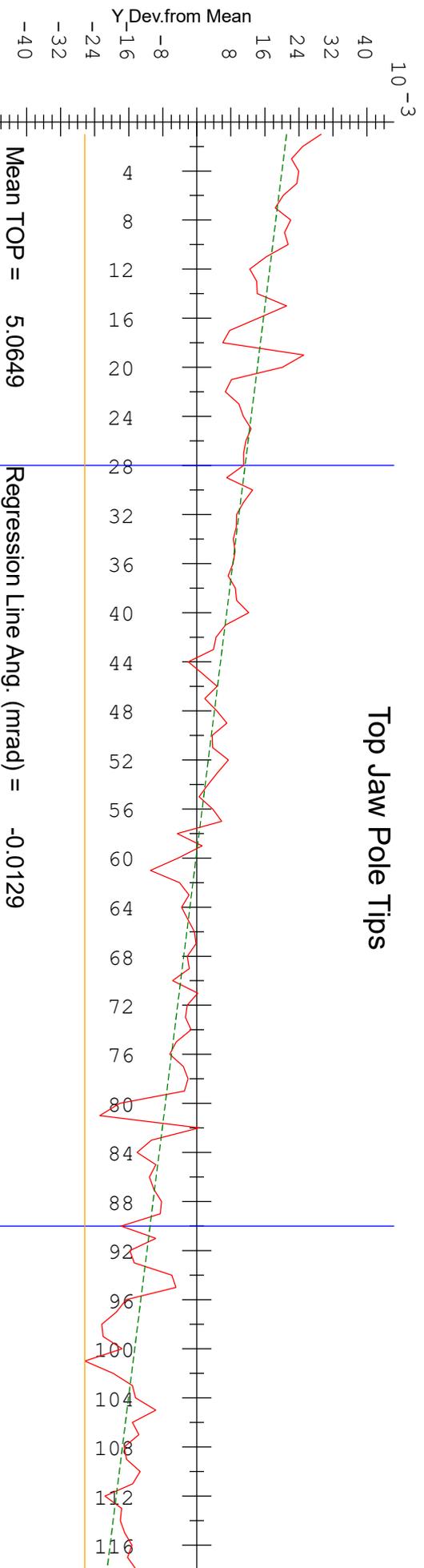


### Top Jaw Pole Tips



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

## LCLS II-HE - SXR Undulator

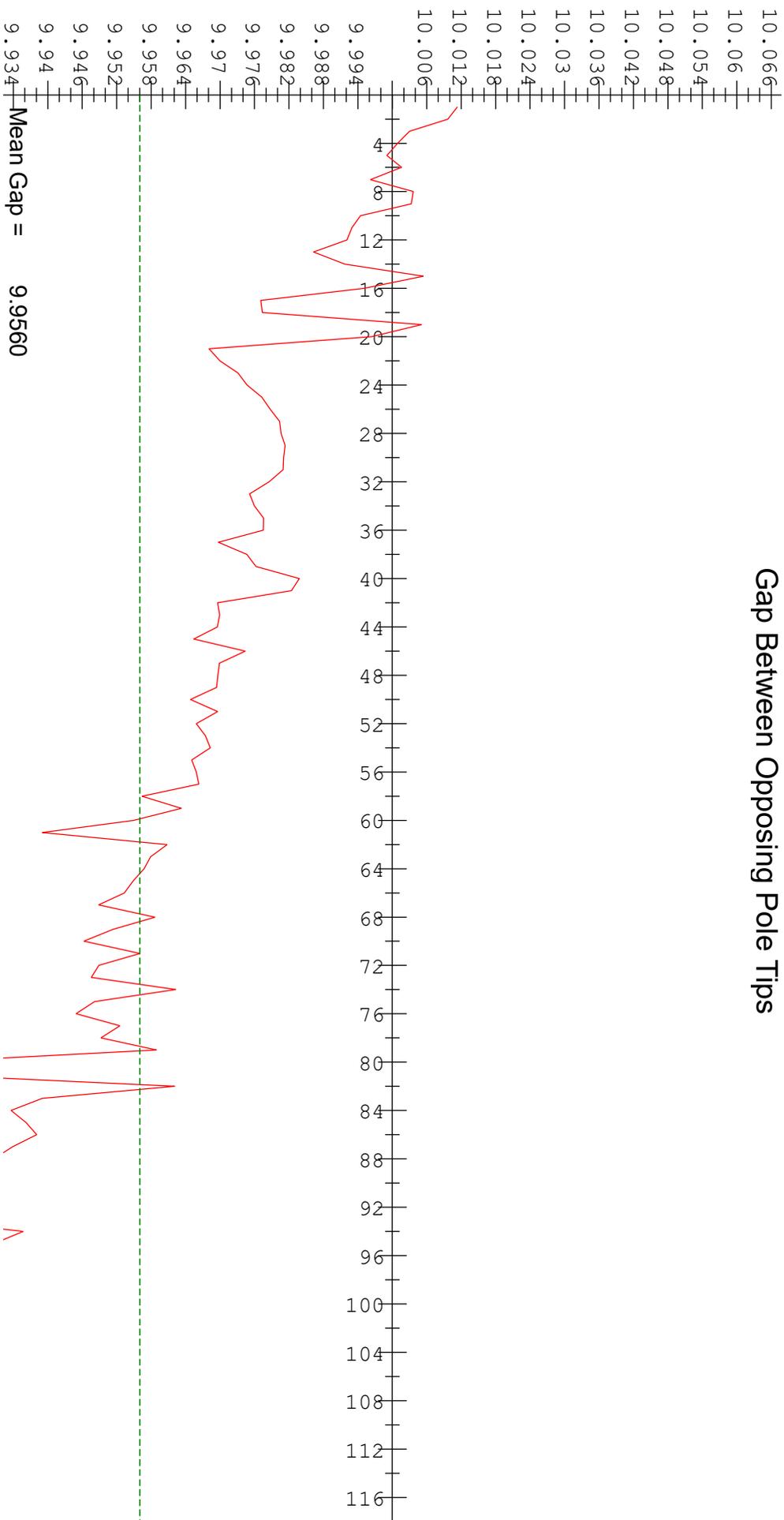
Nominal Gap = 10      Nominal Taper = -0.100  
Gap Reading = 9.9499      US Encoder = 10.0000      DS Encoder = 9.8999

03-OCT-2024  
S/N = 024  
D/S = 0001  
Run = 14



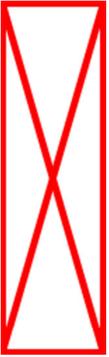
METROLOGY

## Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



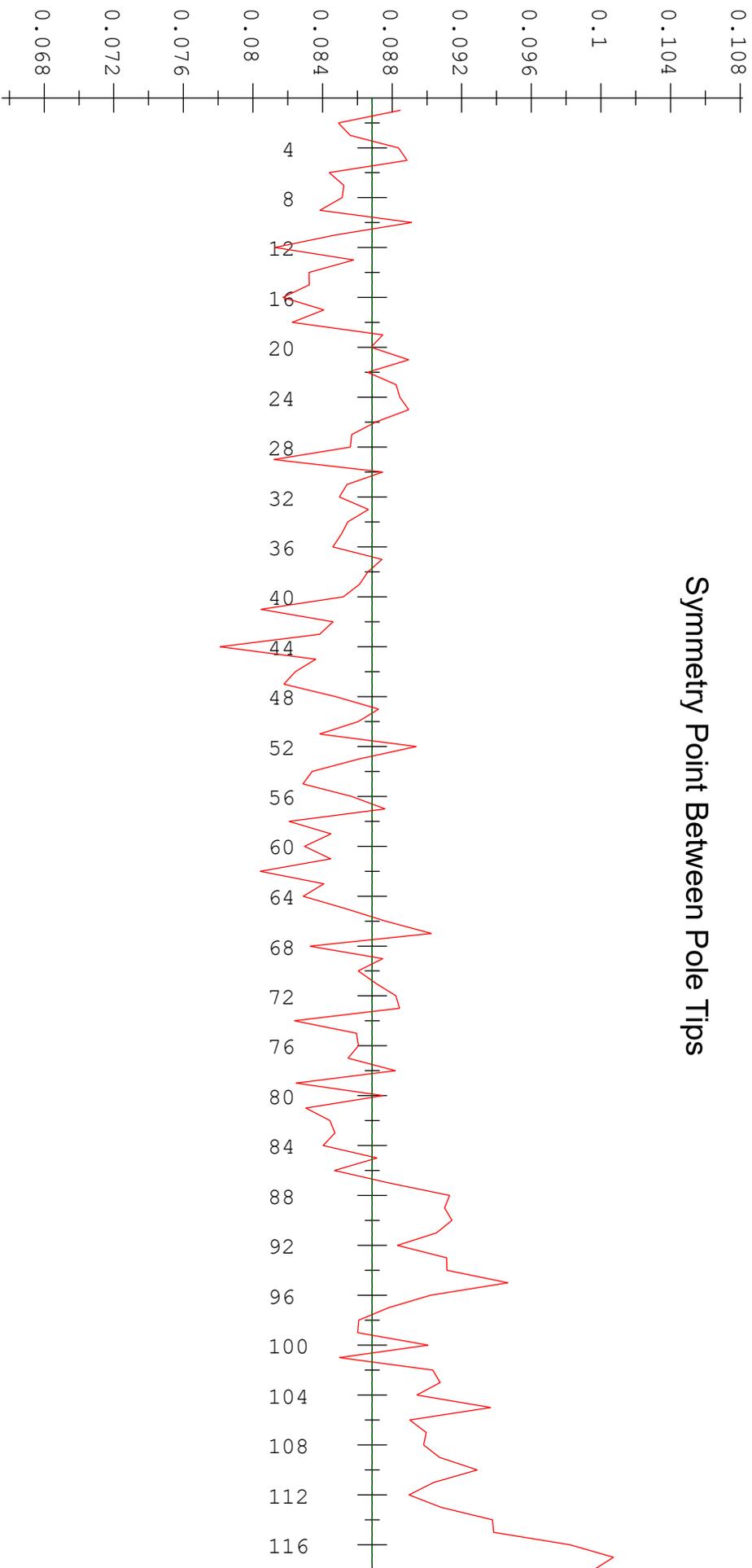
METROLOGY

### LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = -0.100  
 Gap Reading = 9.9499      US Encoder = 10.0000      DS Encoder = 9.8999

03-OCT-2024  
 S/N = 024  
 D/S = 0001  
 Run = 14

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.0869

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10

Gap Reading = 9.9499

US Encoder = 10.0000

Nominal Taper = -0.100

DS Encoder = 9.8999

03-OCT-2024

S/N = 024

D/S = 0001

Run = 14

## 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>	5.0860	5.0762	5.0539	5.0438
<b>Bottom</b>	-4.9193	-4.9063	-4.8765	-4.8630
<b>Gap</b>	10.0052			9.9068
<b>Taper</b>				-0.0984

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.0649	-4.8912	9.9560	0.0869

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.587</b>
<b>Top Jaw Pitch (mrad)</b>	<b>-0.013</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>0.017</b>
<b>Minimum Effective Gap</b>	<b>9.886</b>
<b>Reference Block Gap</b>	<b>6.801</b>

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = -0.100  
 Gap Reading = 9.9499      US Encoder = 10.0000      DS Encoder = 9.8999

03-OCT-2024  
 S/N = 024  
 D/S = 0001  
 Run = 14