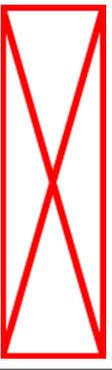


Y Value Scales Centered on Mean Values  
Step Between Measured Pole Tips = 1

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



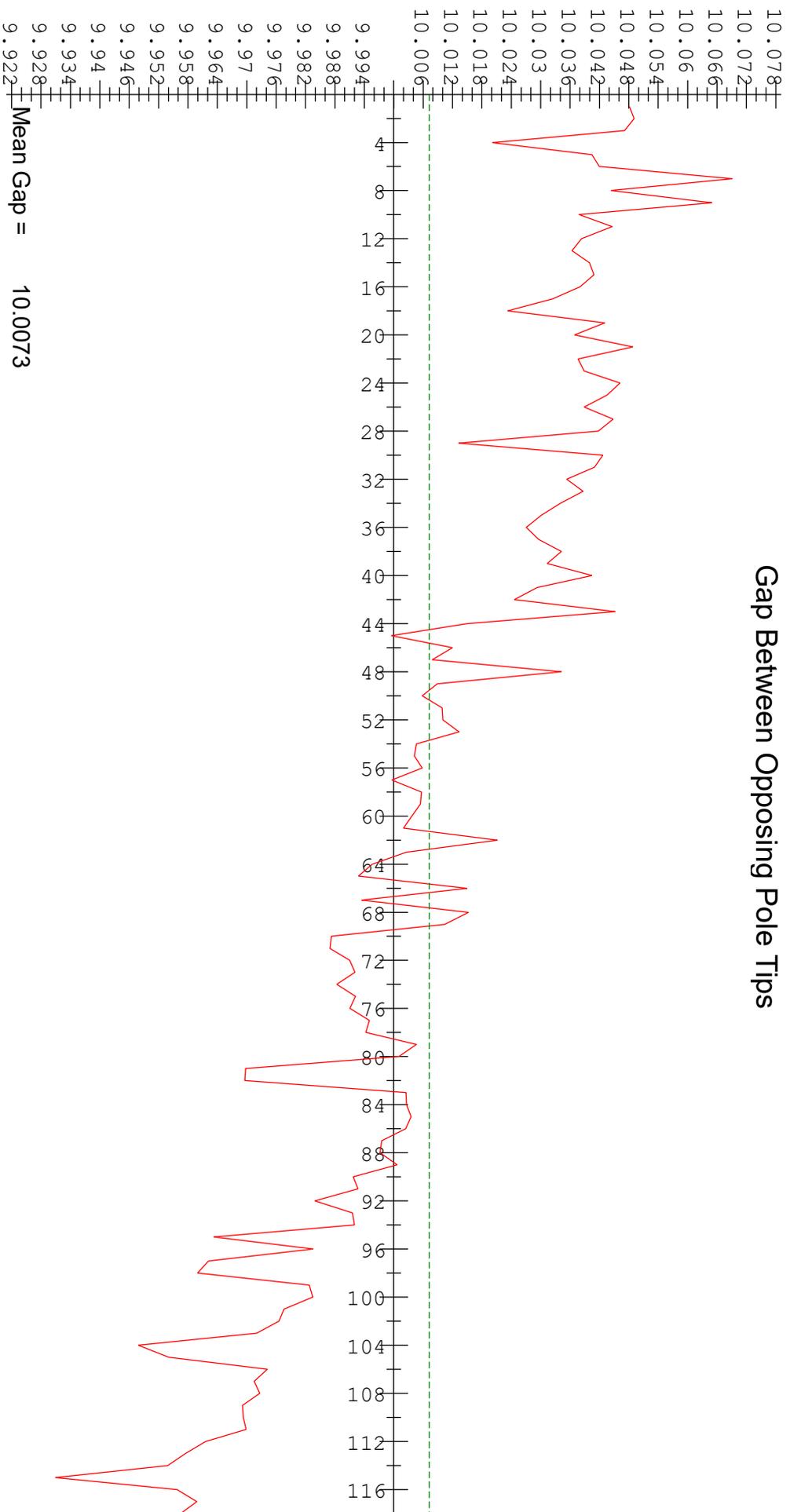
METROLOGY

**LCLS II-HE - SXR Undulator**

Nominal Gap = 10      Nominal Taper = -0.100  
Gap Reading = 9.9499      US Encoder = 10.0000      DS Encoder = 9.9000

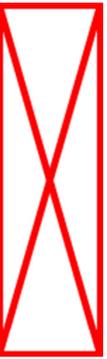
07-NOV-2025  
S/N = 018  
D/S = 0001  
Run = 5

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



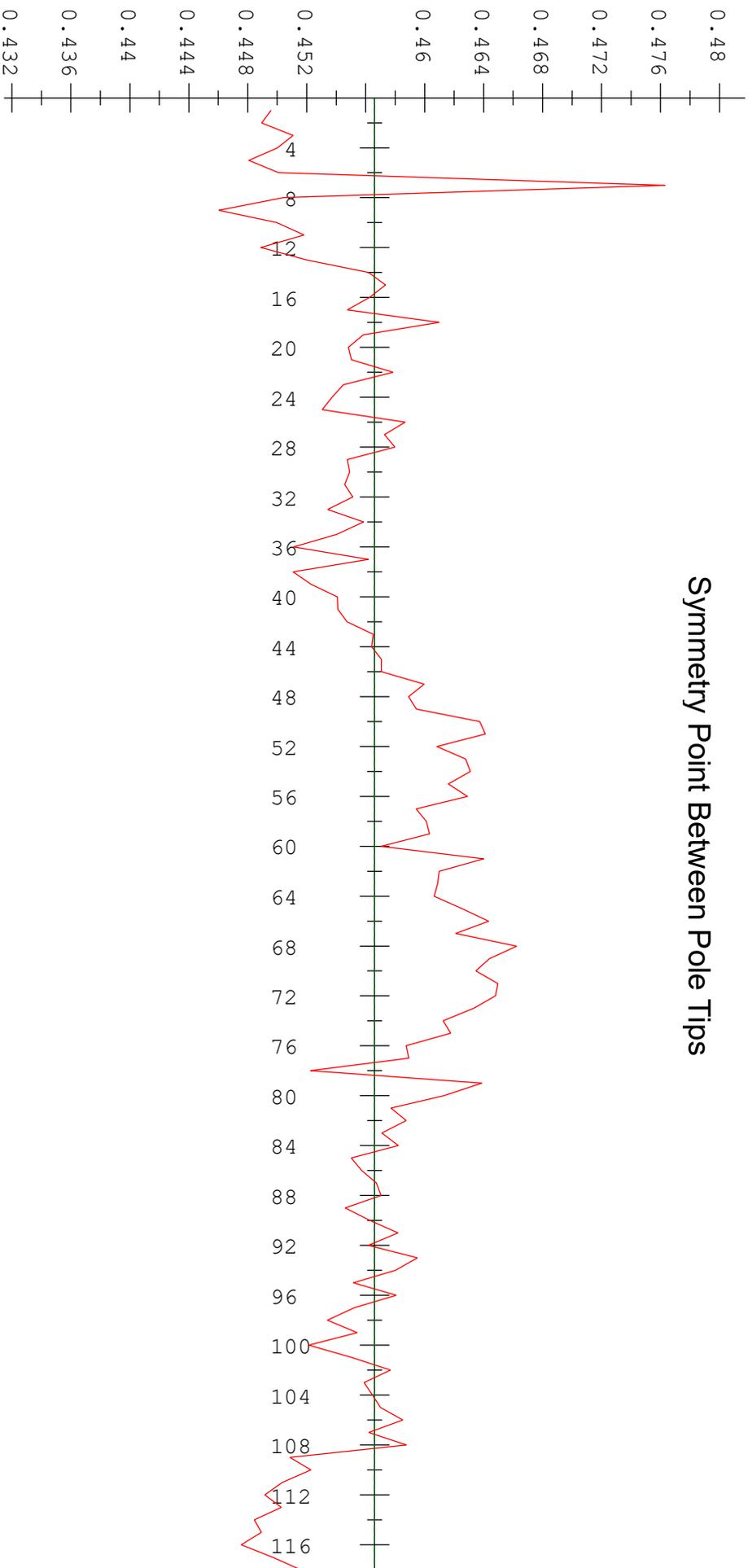
METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = -0.100  
Gap Reading = 9.9499      US Encoder = 10.0000      DS Encoder = 9.9000

07-NOV-2025  
S/N = 018  
D/S = 0001  
Run = 5

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.4566

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 = 9.9000

07-NOV-2025  
S/N = 018  
D/S = 0001  
Run = 5

## 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>	5.4832	5.4726	5.4483	5.4373
<b>Bottom</b>	-4.5711	-4.5600	-4.5345	-4.5229
<b>Gap</b>	10.0543			9.9602
<b>Taper</b>				-0.0941

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.4602	-4.5470	10.0073	0.4566

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.967</b>
<b>Top Jaw Pitch (mrad)</b>	<b>-0.014</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>0.015</b>
<b>Minimum Effective Gap</b>	<b>9.931</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 = 9.9000

07-NOV-2025  
 S/N = 018  
 D/S = 0001  
 Run = 5