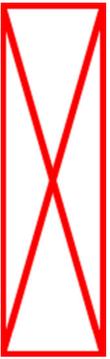


Y Value Scales Centered on Mean Values  
Step Between Measured Pole Tips = 1

Regression Line Through Points =  
Dimensions in mm



METROLOGY

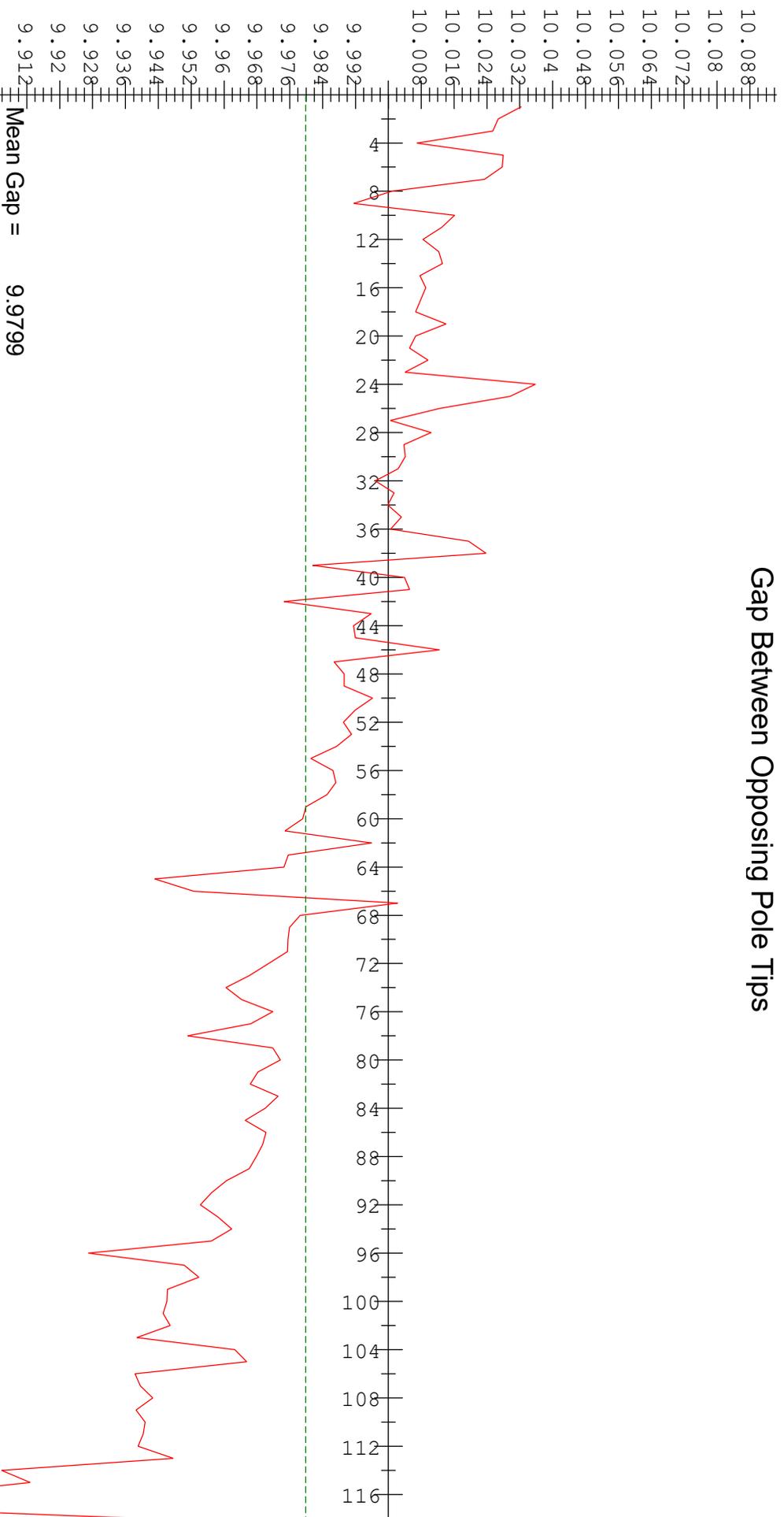
# LCLS II-HE - SXR Undulator

Nominal Gap = 10  
Gap Reading = 9.9499  
US Encoder = 10.0000  
DS Encoder = 9.9000

Nominal Taper = -0.100

17-MAR-2025  
S/N = 031  
D/S = 0001  
Run = 6

# Gap Between Opposing Pole Tips



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 = 9.9000

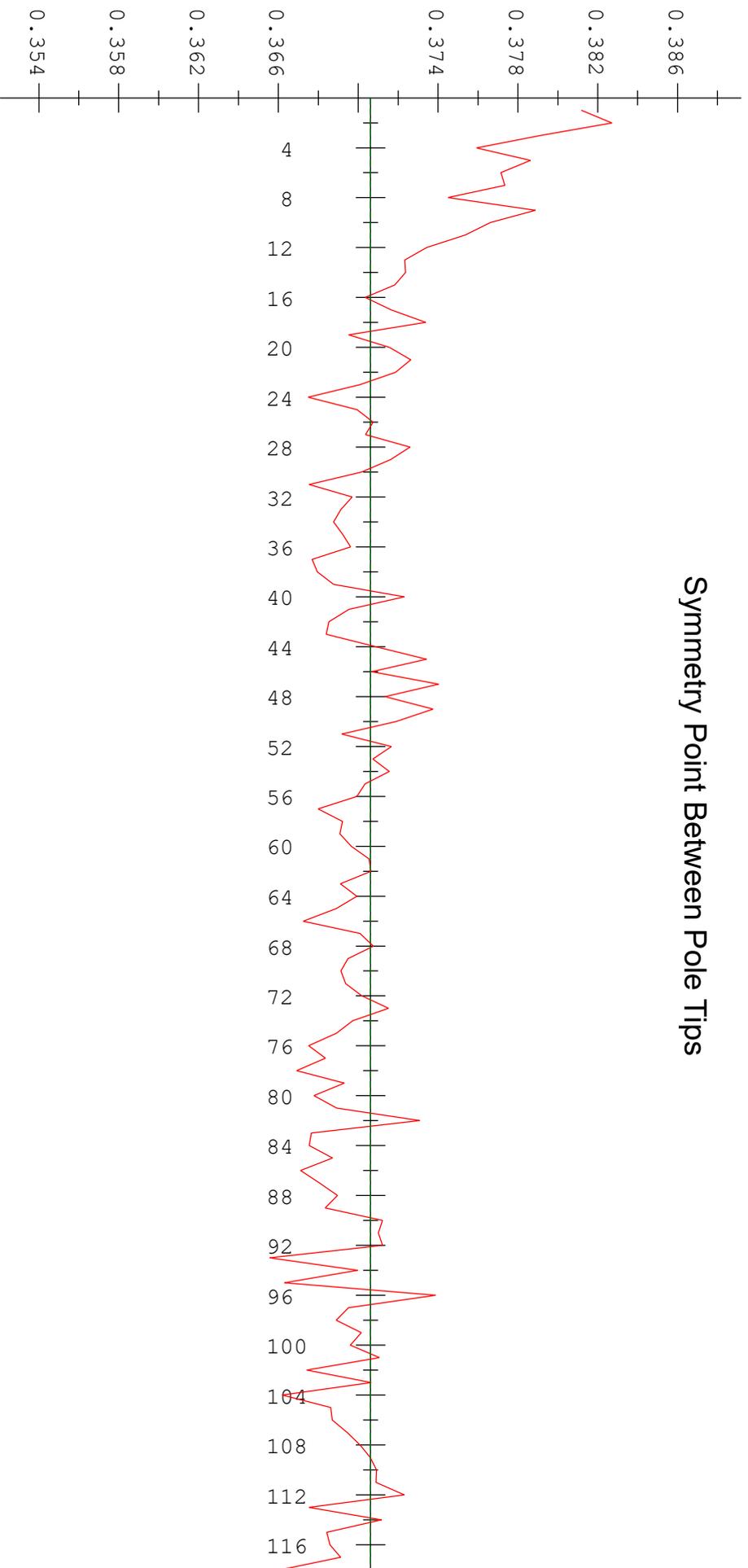
17-MAR-2025

S/N = 031

D/S = 0001

Run = 6

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.3706

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

17-MAR-2025  
S/N = 031  
D/S = 0001  
Run = 6

## 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>	5.3875	5.3750	5.3465	5.3336
<b>Bottom</b>	-4.6403	-4.6306	-4.6084	-4.5983
<b>Gap</b>	10.0278			9.9320
<b>Taper</b>				-0.0959

### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.3606	-4.6193	9.9799	0.3706

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.415</b>
<b>Top Jaw Pitch (mrad)</b>	<b>-0.016</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>0.013</b>
<b>Minimum Effective Gap</b>	<b>9.867</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

17-MAR-2025  
 S/N = 031  
 D/S = 0001  
 Run = 6