

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

# LCLS II-HE - SXR Undulator

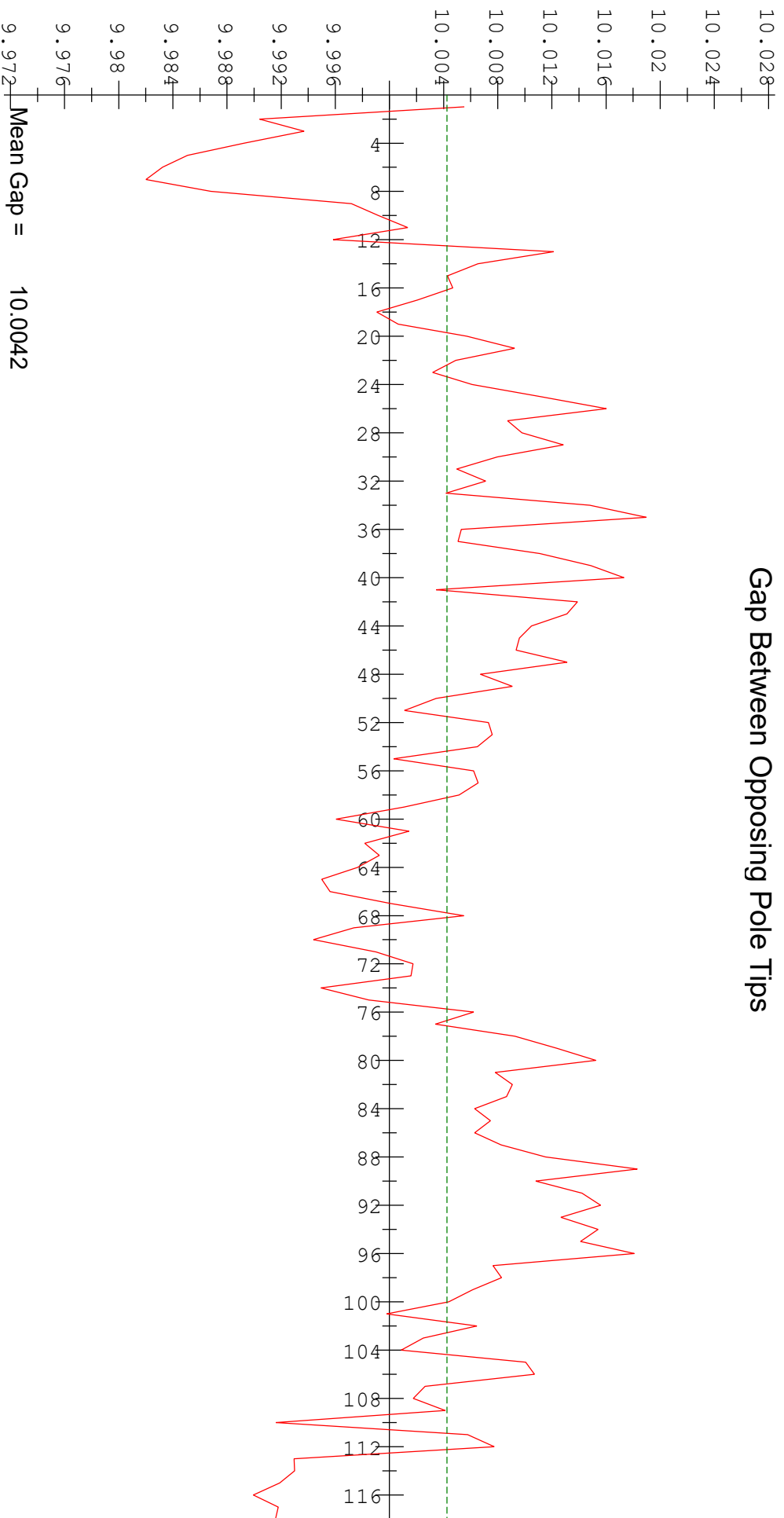
Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 10.0009      US Encoder = 10.0009      DS Encoder = 10.0008

20-MAY-2026  
S/N = 022  
D/S = 0001  
Run = 2



METROLOGY

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



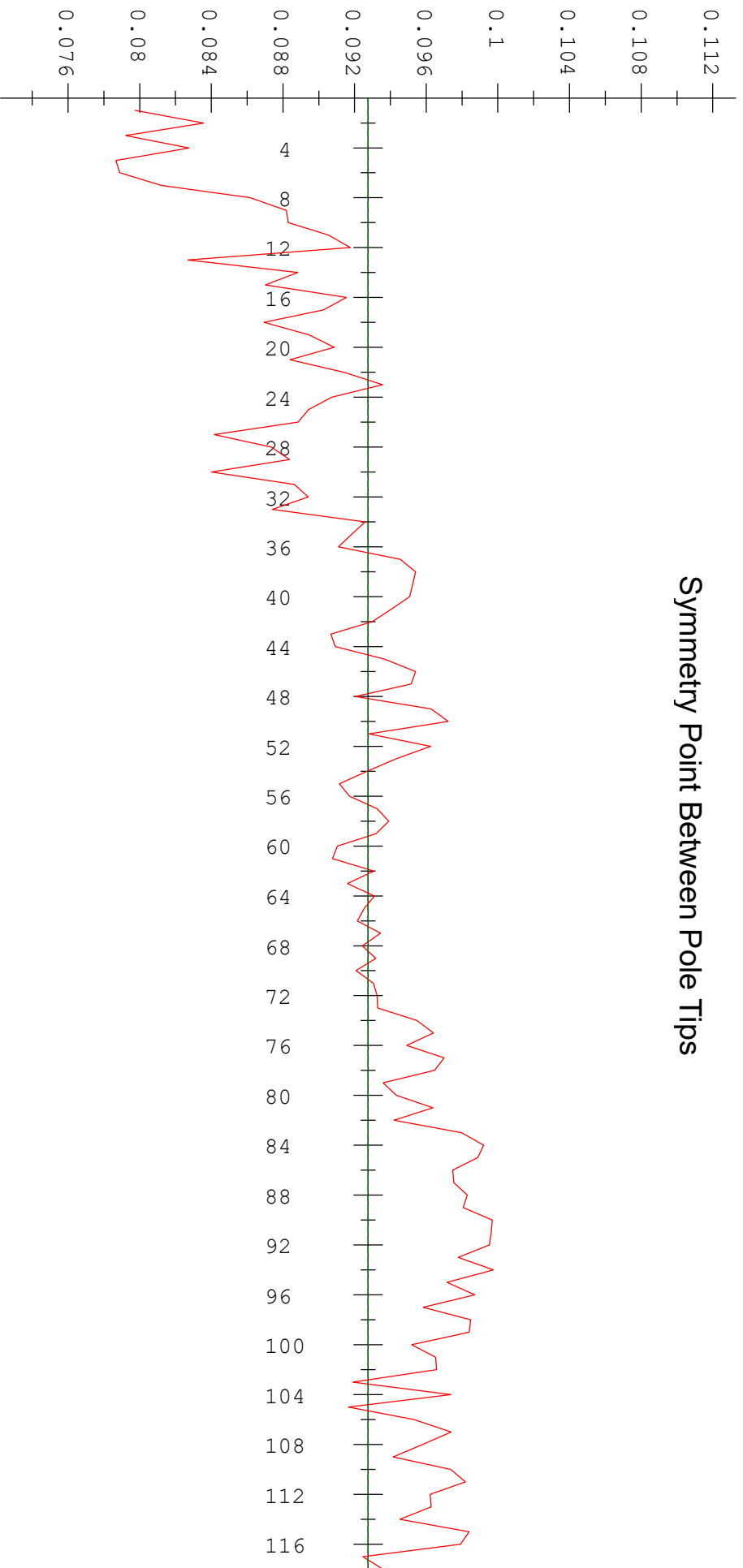
METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 10.0009      US Encoder = 10.0009      DS Encoder = 10.0008

20-MAY-2026  
S/N = 022  
D/S = 0001  
Run = 2

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.0928

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 10.0009      US Encoder = 10.0009      DS Encoder = 10.0008

20-MAY-2026  
S/N = 022  
D/S = 0001  
Run = 2

## 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>	5.0879	5.0911	5.0985	5.1018
<b>Bottom</b>	-4.9150	-4.9124	-4.9064	-4.9037
<b>Gap</b>	10.0030			10.0055
<b>Taper</b>				0.0025

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.0949	-4.9094	10.0042	0.0928

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	978.404
<b>Top Jaw Pitch (mrad)</b>	0.004
<b>Bottom Jaw Pitch(mrad)</b>	0.003
<b>Minimum Effective Gap</b>	9.968
<b>Reference Block Gap</b>	6.794

Dimensions in mm



METROLOGY

### LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
 Gap Reading = 10.0009      US Encoder = 10.0009      DS Encoder = 10.0008

20-MAY-2026  
 S/N = 022  
 D/S = 0001  
 Run = 2