

Y Value Scales Centered on Mean Values  
Step Between Measured Pole Tips = 5

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



METROLOGY

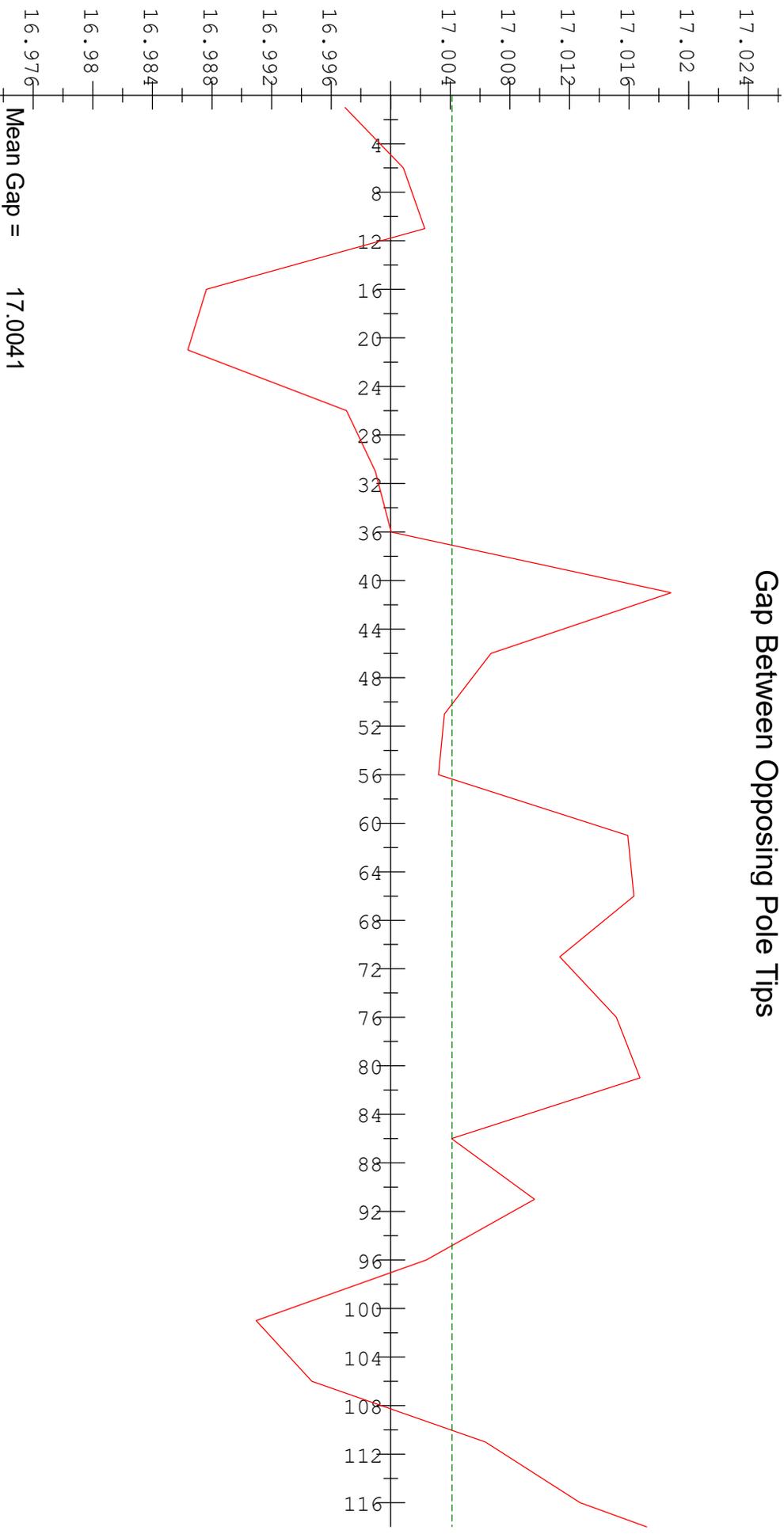
# LCLS II-HE - SXR Undulator

Nominal Gap = 17  
Gap Reading = 17.0000  
US Encoder = 17.0000

Nominal Taper = 0.000  
DS Encoder = 17.0001

23-MAY-2024  
S/N = 023  
D/S = 0001  
Run = 13

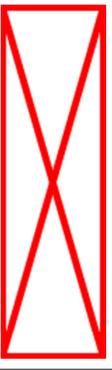
### Gap Between Opposing Pole Tips



Mean Gap = 17.0041

Step Between Measured Pole Tips = 5

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 17

Nominal Taper = 0.000

Gap Reading = 17.0000

US Encoder = 17.0000

DS Encoder = 17.0001

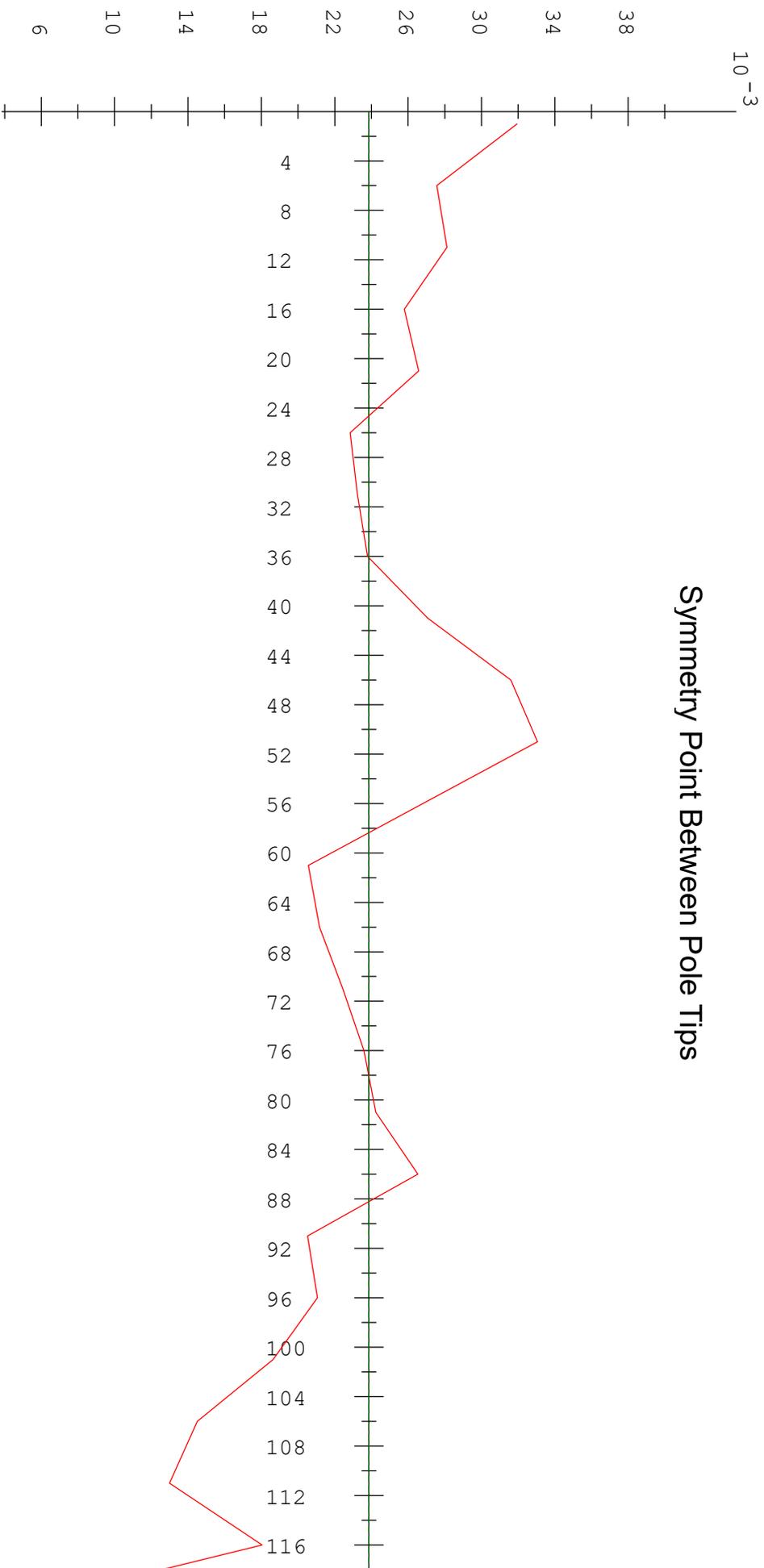
23-MAY-2024

S/N = 023

D/S = 0001

Run = 13

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.0239

Step Between Measured Pole Tips = 5

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 17      Nominal Taper = 0.000  
Gap Reading = 17.0000      US Encoder = 17.0000      DS Encoder = 17.0001

23-MAY-2024  
S/N = 023  
D/S = 0001  
Run = 13

## 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>	8.5293	8.5277	8.5240	8.5223
<b>Bottom</b>	-8.4690	-8.4735	-8.4837	-8.4883
<b>Gap</b>	16.9984			17.0106
<b>Taper</b>				0.0123

### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
8.5259	-8.4782	17.0041	0.0239

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	979.438
<b>Top Jaw Pitch (mrad)</b>	-0.002
<b>Bottom Jaw Pitch(mrad)</b>	-0.006
<b>Minimum Effective Gap</b>	16.978
<b>Reference Block Gap</b>	6.799

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 17      Nominal Taper = 0.000  
 Gap Reading = 17.0000      US Encoder = 17.0000      DS Encoder = 17.0001

23-MAY-2024  
 S/N = 023  
 D/S = 0001  
 Run = 13