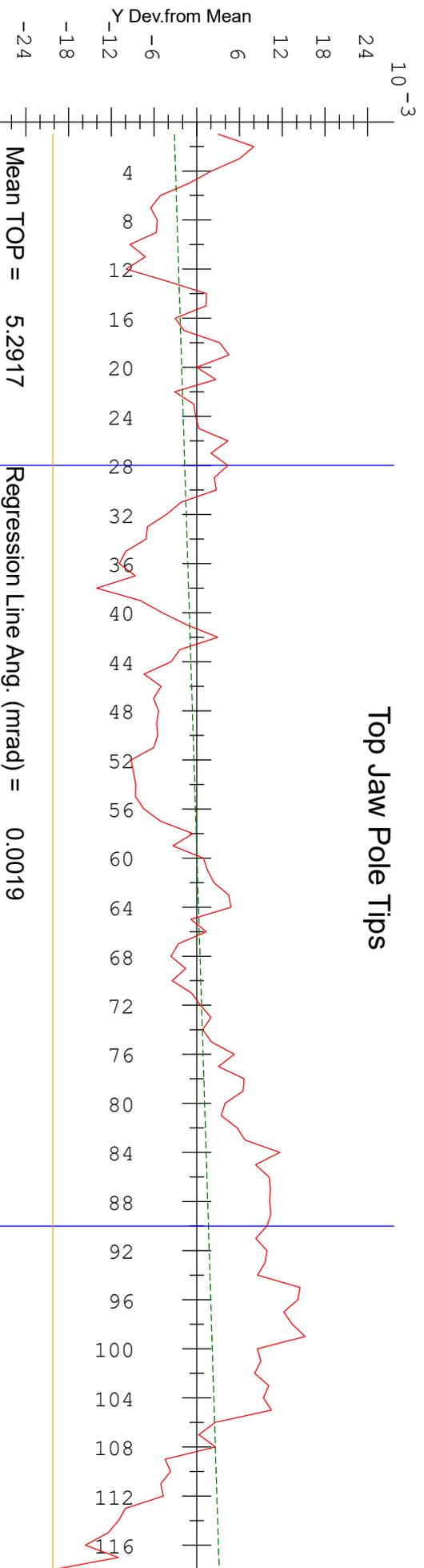


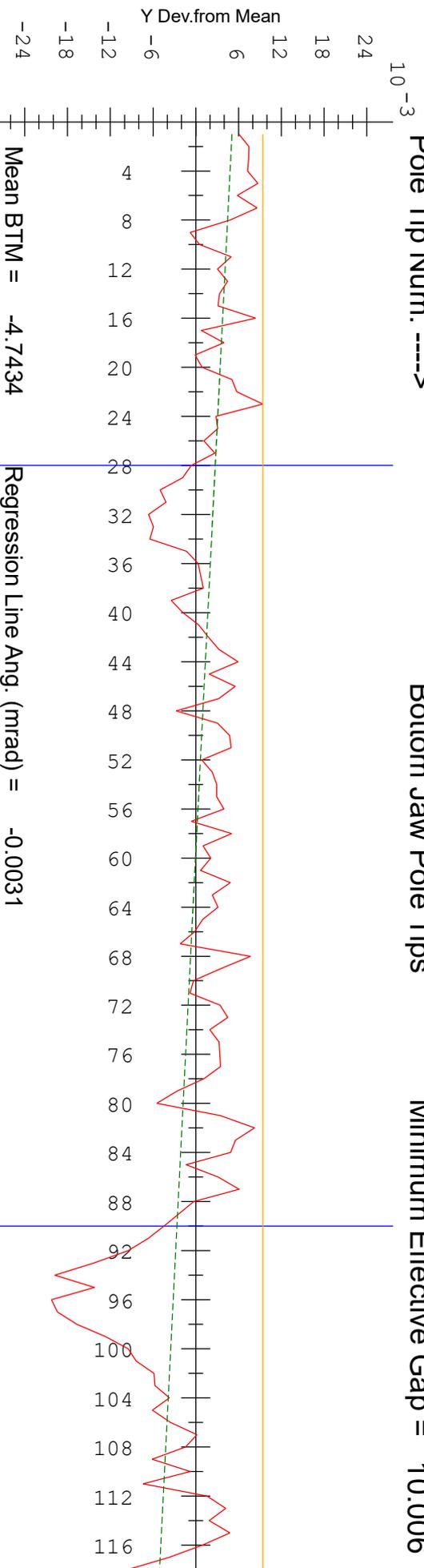
### Top Jaw Pole Tips



Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap = 10.006



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

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

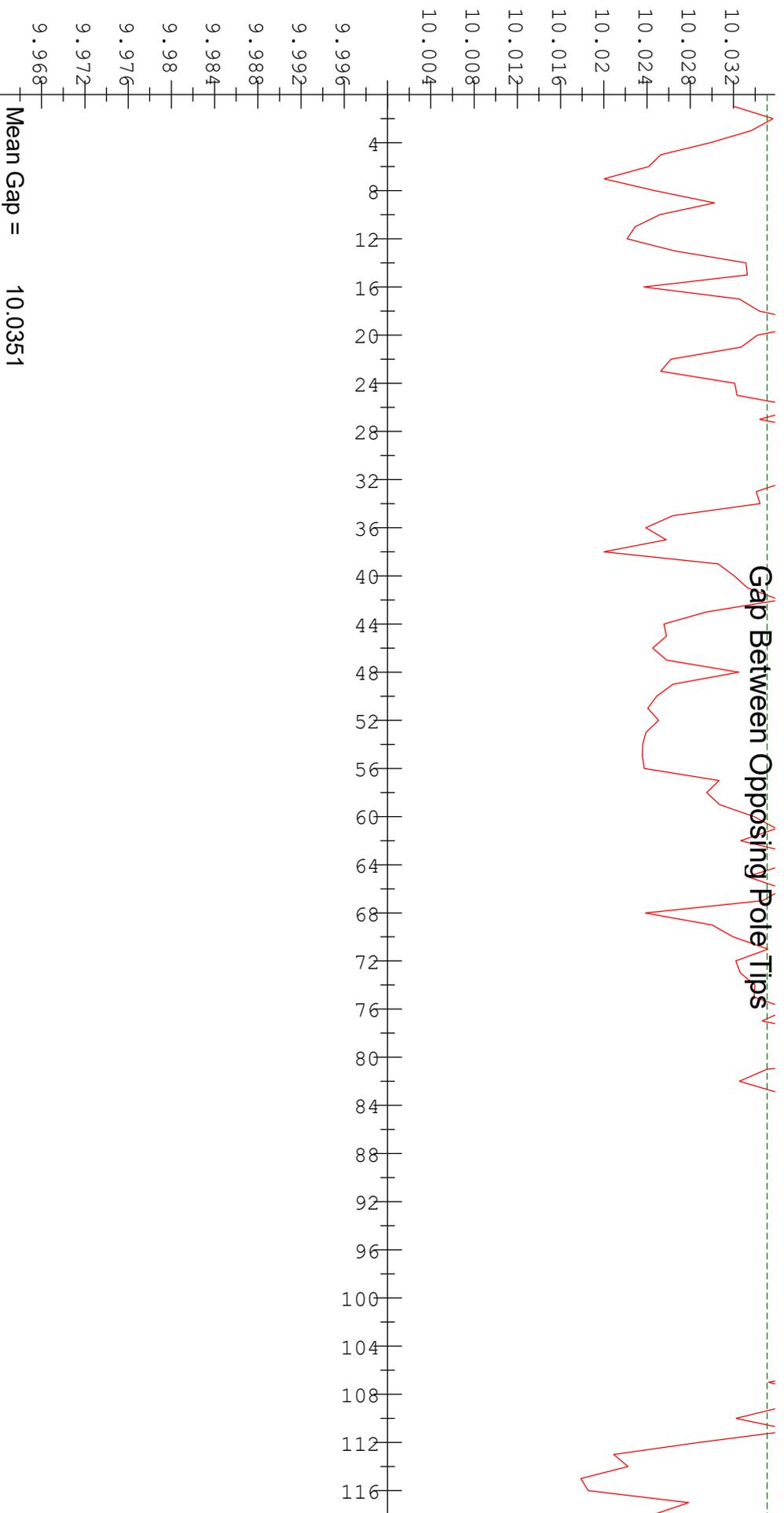


METROLOGY

## LCLS II-HE - SXR Undulator

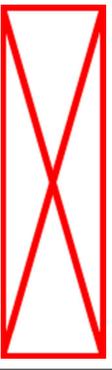
Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 10.0000      US Encoder = 10.0001      DS Encoder = 10.0000

01-MAY-2025  
S/N = 021  
D/S = 0001  
Run = 2



Step Between Measured Pole Tips = 1

Dimensions in mm



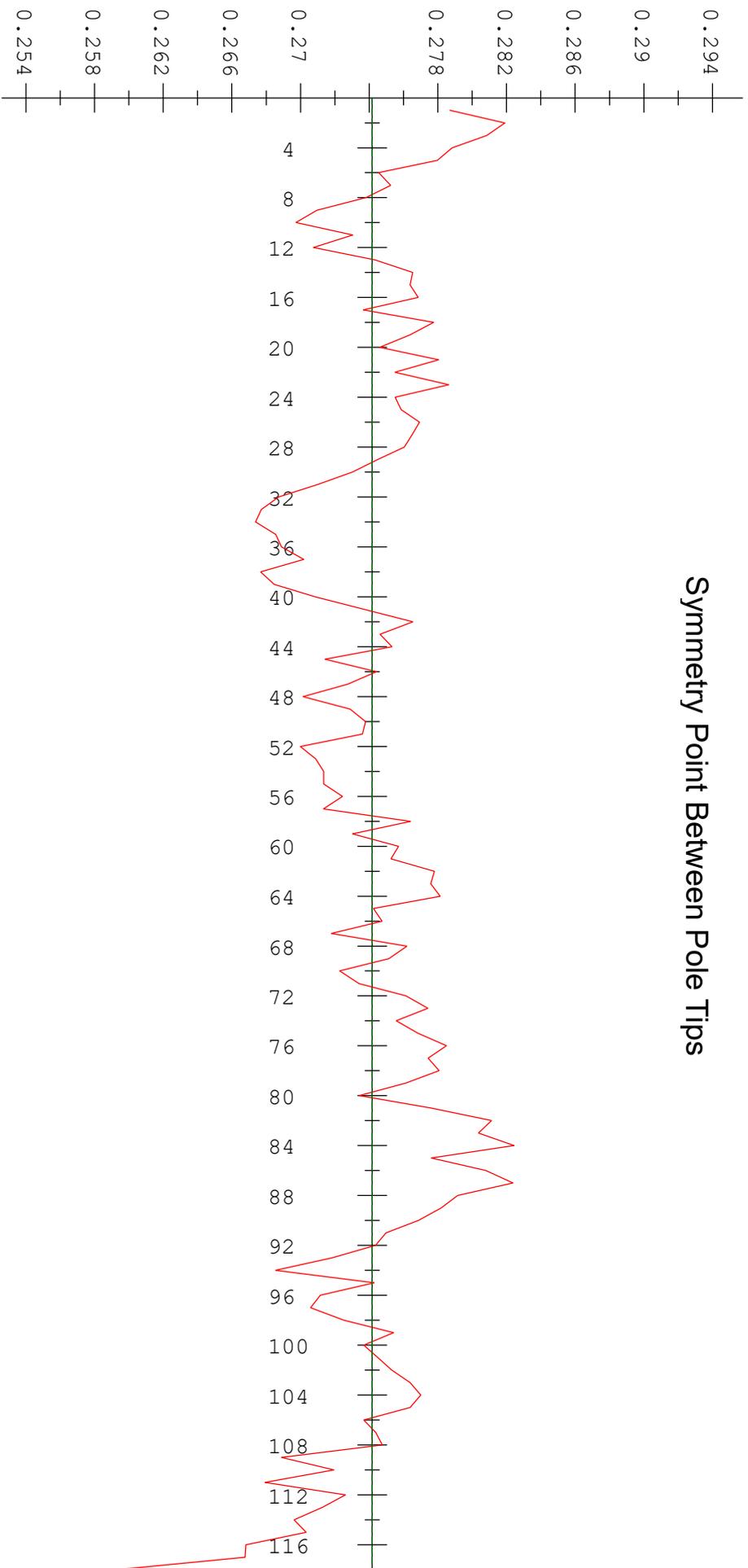
METROLOGY

# LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
 Gap Reading = 10.0000      US Encoder = 10.0001      DS Encoder = 10.0000

01-MAY-2025  
 S/N = 021  
 D/S = 0001  
 Run = 2

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.2742

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
Gap Reading = 10.0000      US Encoder = 10.0001      DS Encoder = 10.0000

01-MAY-2025  
S/N = 021  
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>	5.2886	5.2900	5.2934	5.2949
<b>Bottom</b>	-4.7383	-4.7406	-4.7460	-4.7485
<b>Gap</b>	10.0269			10.0433
<b>Taper</b>				0.0164

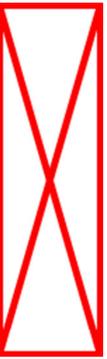
### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.2917	-4.7434	10.0351	0.2742

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.740</b>
<b>Top Jaw Pitch (mrad)</b>	<b>0.002</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>-0.003</b>
<b>Minimum Effective Gap</b>	<b>10.006</b>
<b>Reference Block Gap</b>	<b>6.800</b>

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 10      Nominal Taper = 0.000  
 Gap Reading = 10.0000      US Encoder = 10.0001      DS Encoder = 10.0000

01-MAY-2025  
 S/N = 021  
 D/S = 0001  
 Run = 2