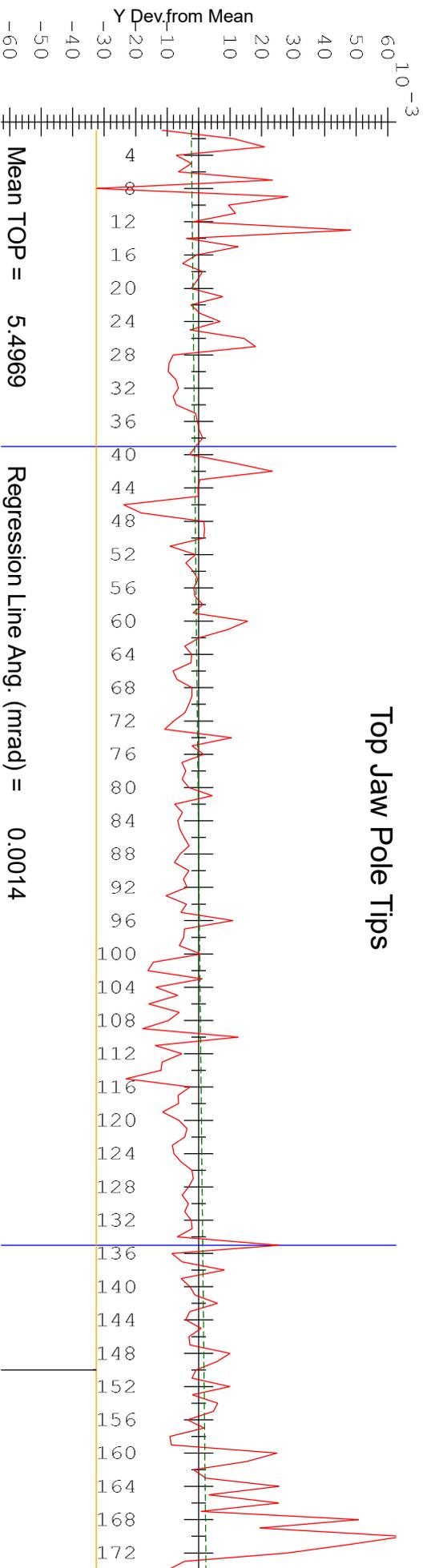


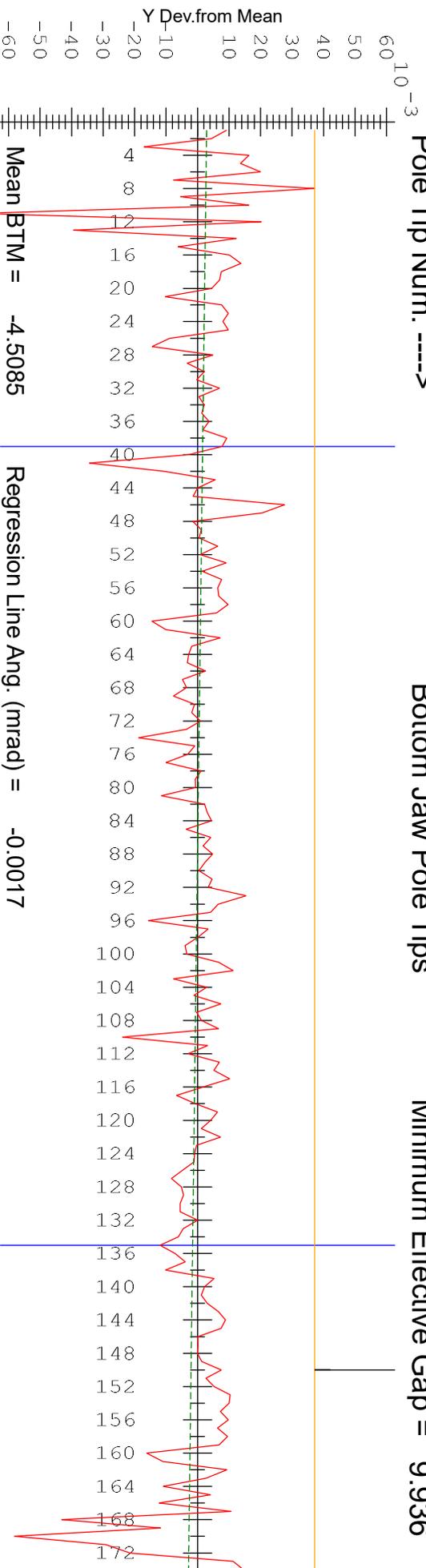
### Top Jaw Pole Tips



Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap = 9.936



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

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



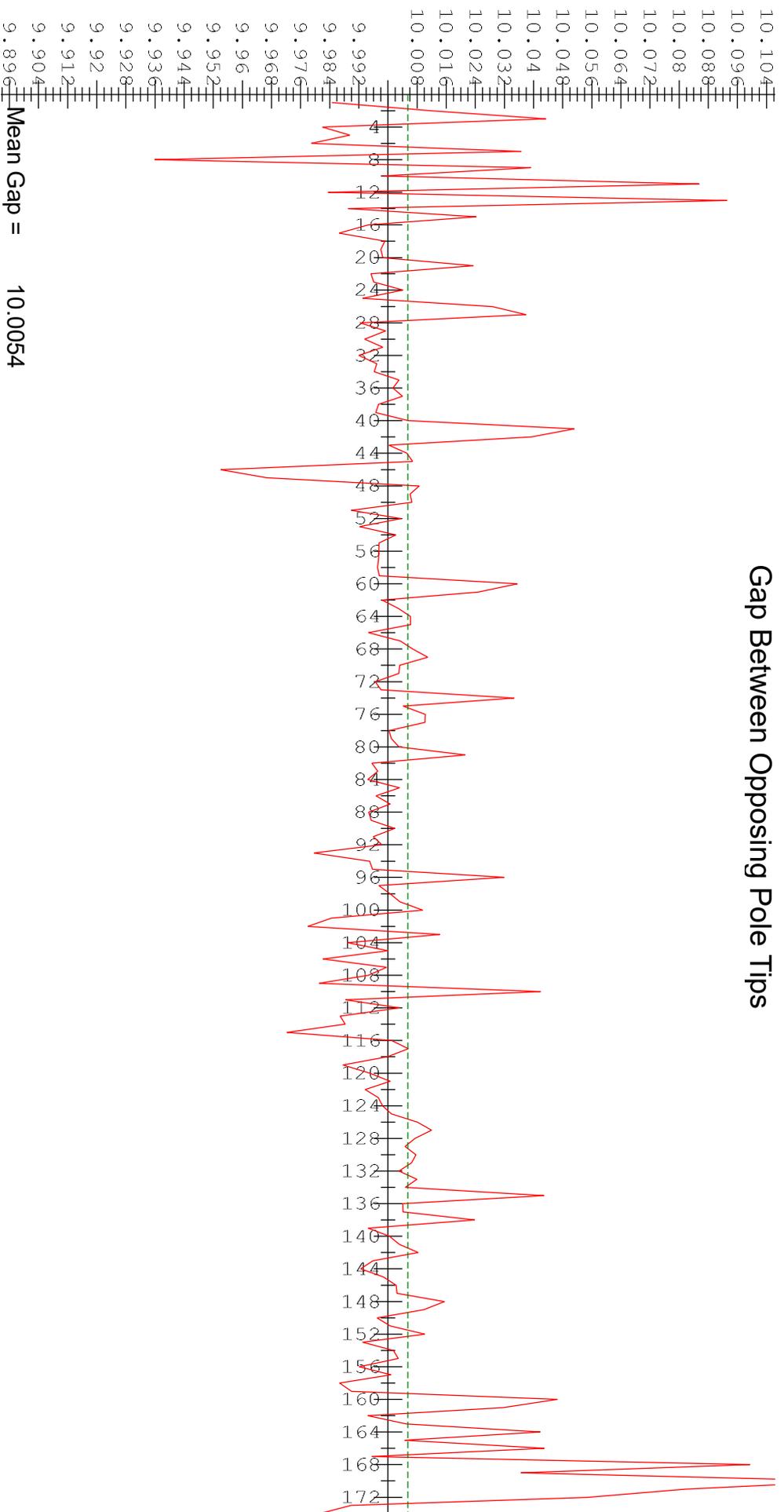
METROLOGY

## LCLS II - SXR Undulator

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

10-MAY-2021  
S/N = 021  
D/S = 0002  
Run = 4

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



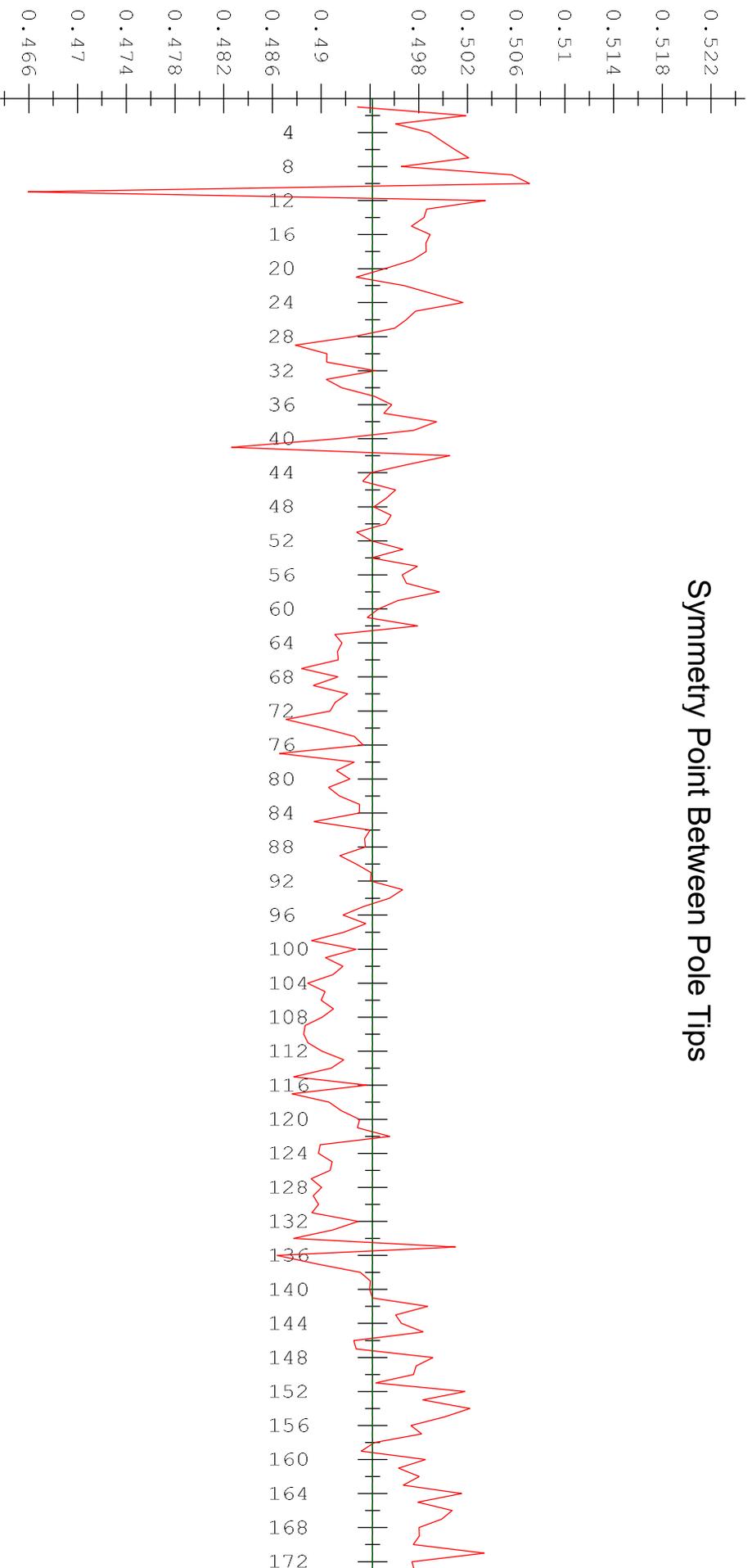
METROLOGY

## LCLS II - SXR Undulator

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

10-MAY-2021  
S/N = 021  
D/S = 0002  
Run = 4

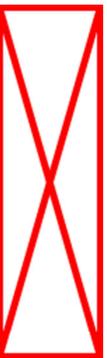
### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.4942

Step Between Measured Pole Tips = 1

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

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

10-MAY-2021  
S/N = 021  
D/S = 0002  
Run = 4

## Top and Bottom Jaw Regression Line Intersect Points

Jaw	First Pole <i>(Pole -1)</i>	US Actuator <i>(Pole 39)</i>	DS Actuator <i>(Pole 135)</i>	Last Pole <i>(Pole 174)</i>
<b>Top</b>	5.4946	5.4956	5.4982	5.4993
<b>Bottom</b>	-4.5056	-4.5069	-4.5101	-4.5114
<b>Gap</b>	10.0002			10.0107
<b>Taper</b>				0.0104

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.4969	-4.5085	10.0054	0.4942

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>980.211</b>
<b>Top Jaw Pitch (mrad)</b>	<b>0.001</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>-0.002</b>
<b>Minimum Effective Gap</b>	<b>9.936</b>
<b>Reference Block Gap</b>	<b>6.800</b>

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

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

10-MAY-2021  
 S/N = 021  
 D/S = 0002  
 Run = 4