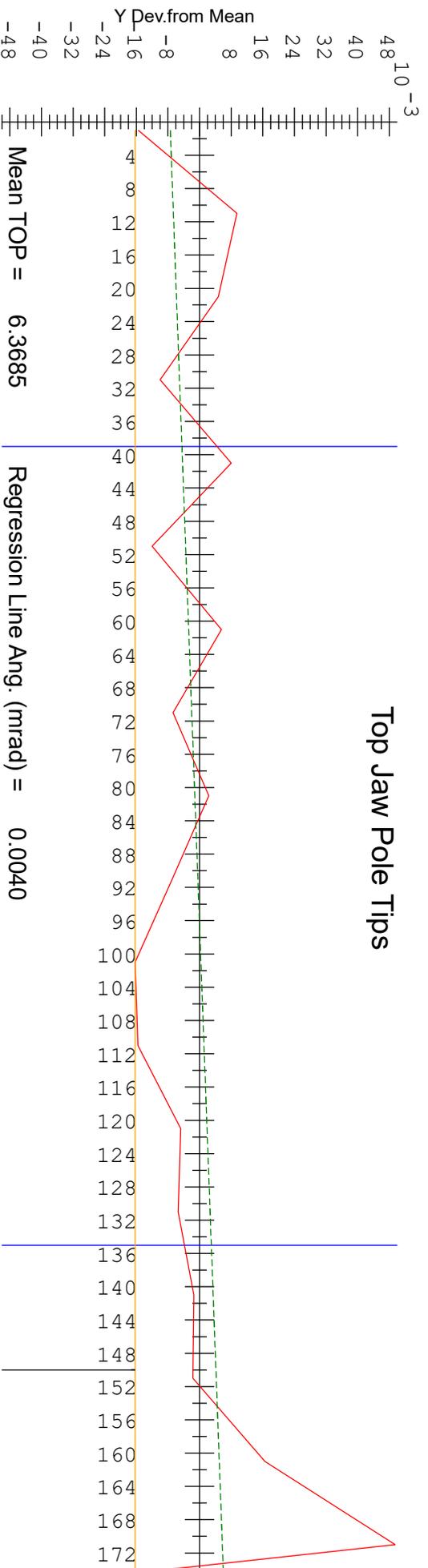


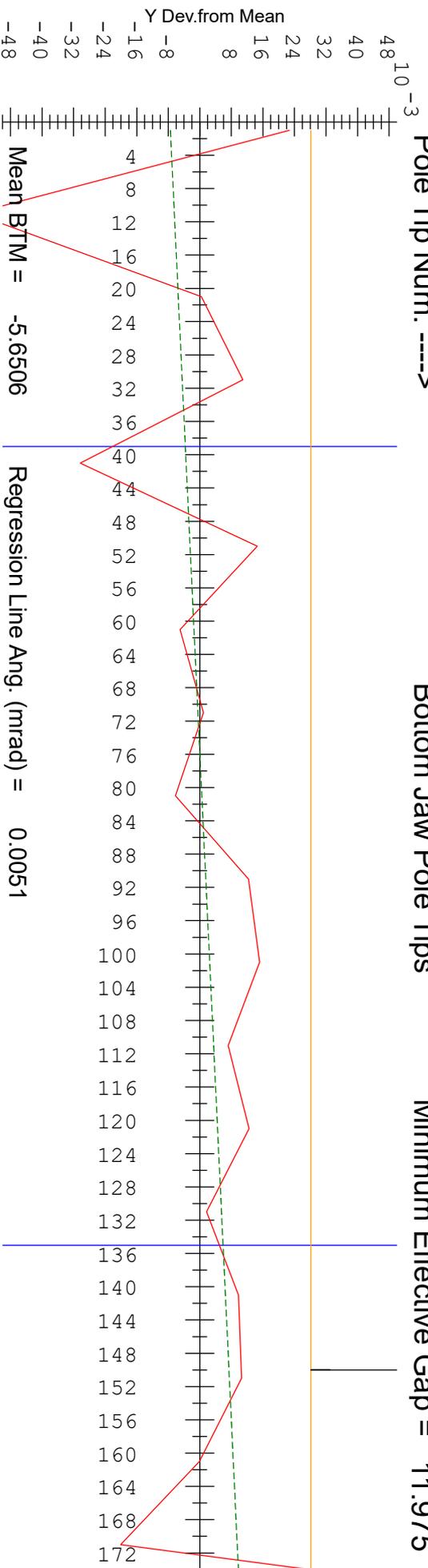
### Top Jaw Pole Tips



Pole Tip Num. ---->

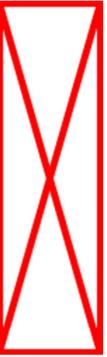
Bottom Jaw Pole Tips

Minimum Effective Gap = 11.975



Y Value Scales Centered on Mean Values  
Step Between Measured Pole Tips = 10

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



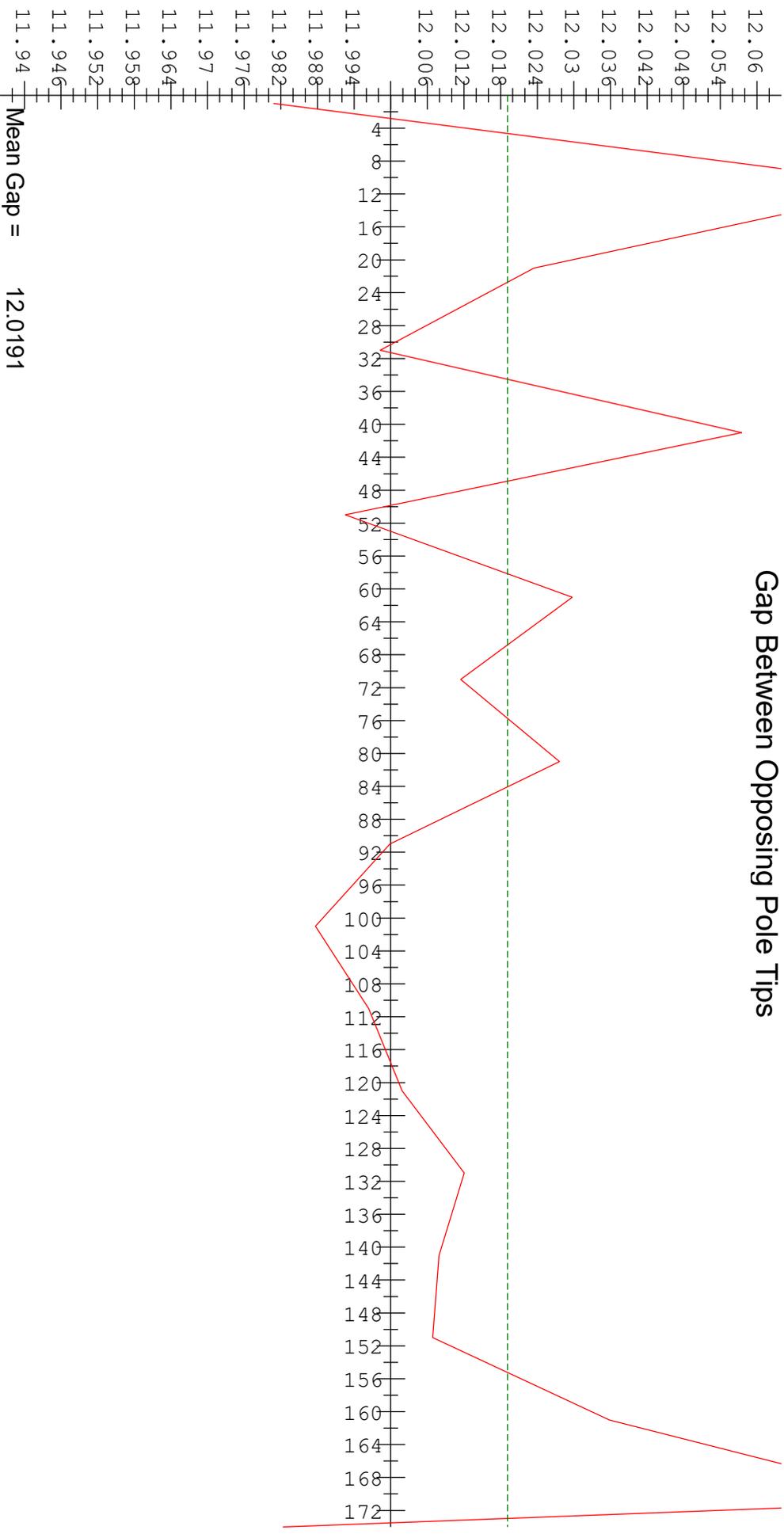
METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 12  
Nominal Taper = 0.000  
Gap Reading = 12.0000  
US Encoder = 12.0000  
DS Encoder = 12.0000

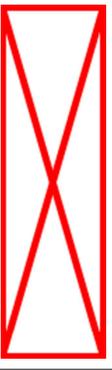
11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 20

### Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 10

Dimensions in mm



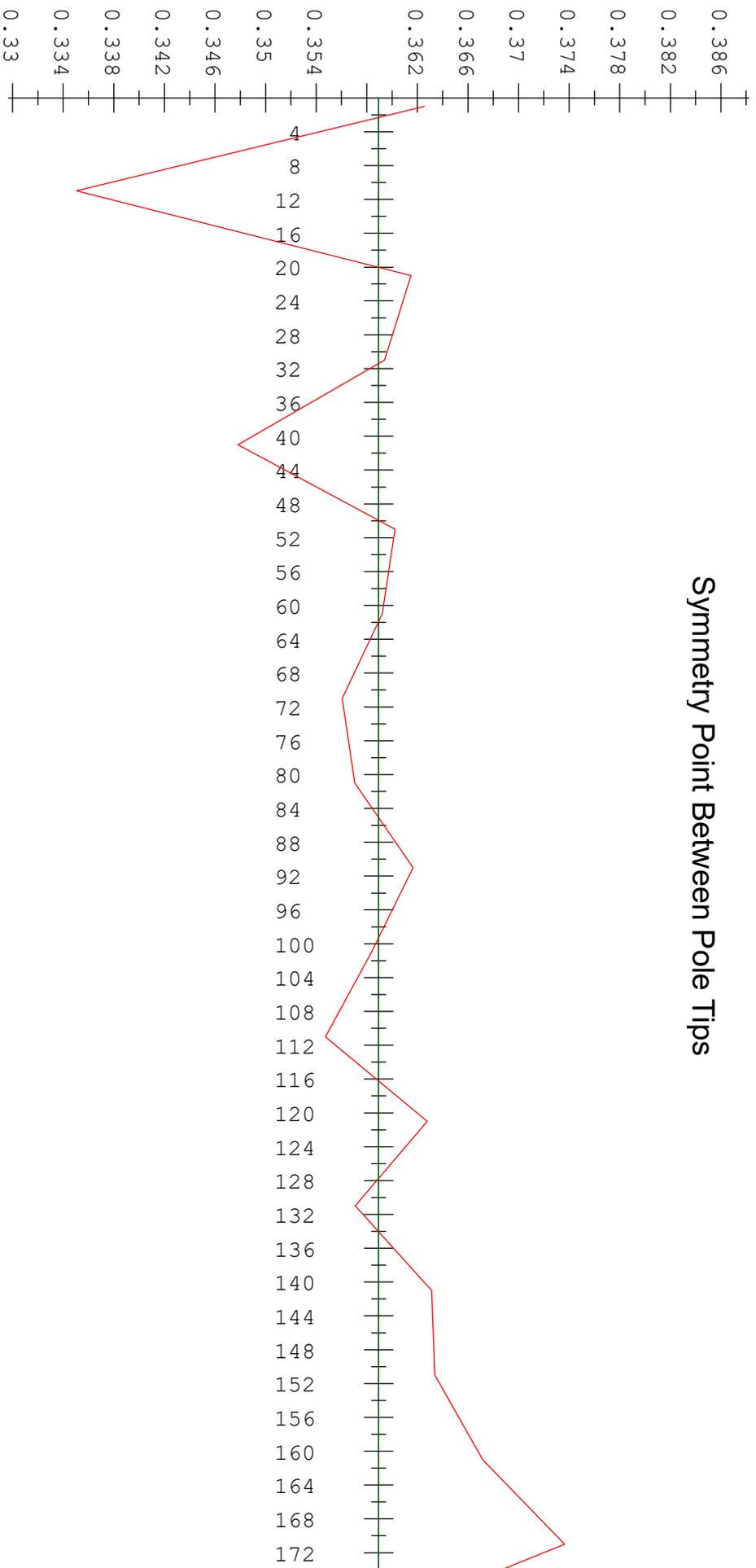
METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 12  
 Nominal Taper = 0.000  
 Gap Reading = 12.0000  
 US Encoder = 12.0000  
 DS Encoder = 12.0000

11-AUG-2021  
 S/N = 021  
 D/S = 0002  
 Run = 20

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.3589

Step Between Measured Pole Tips = 10

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 12      US Encoder = 12.0000  
Nominal Taper = 0.000      DS Encoder = 12.0000  
Gap Reading = 12.0000

11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 20

## 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>	6.3611	6.3641	6.3715	6.3745
<b>Bottom</b>	-5.6581	-5.6543	-5.6447	-5.6408
<b>Gap</b>	12.0192			12.0154
<b>Taper</b>				-0.0038

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
6.3685	-5.6506	12.0191	0.3589

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>980.195</b>
<b>Top Jaw Pitch (mrad)</b>	<b>0.004</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>0.005</b>
<b>Minimum Effective Gap</b>	<b>11.975</b>
<b>Reference Block Gap</b>	<b>6.800</b>

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 12      US Encoder = 12.0000      Nominal Taper = 0.000  
Gap Reading = 12.0000      DS Encoder = 12.0000

11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 20