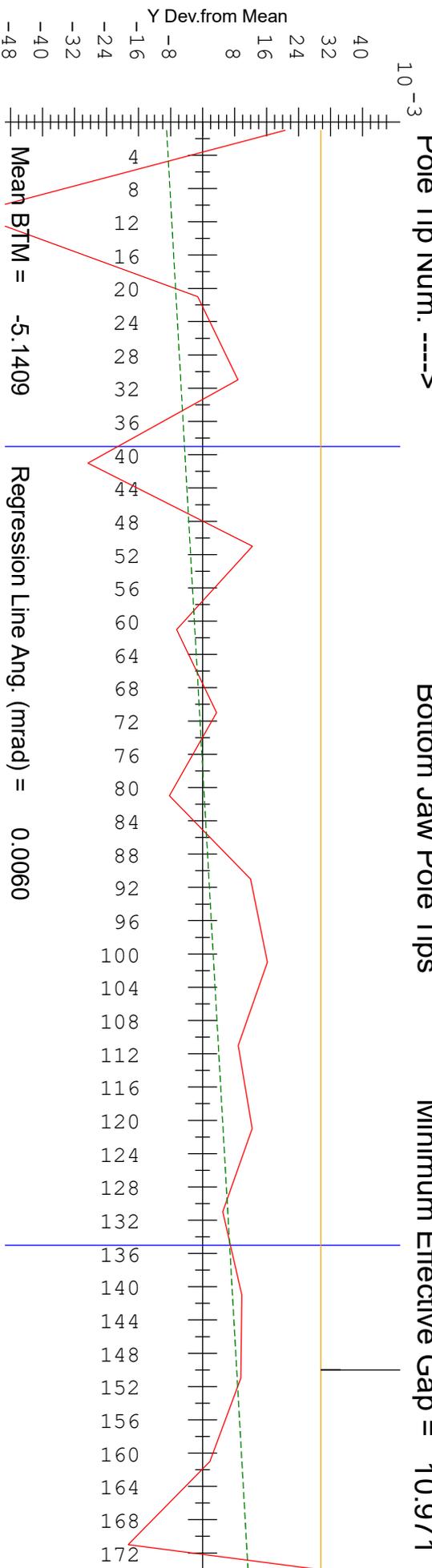
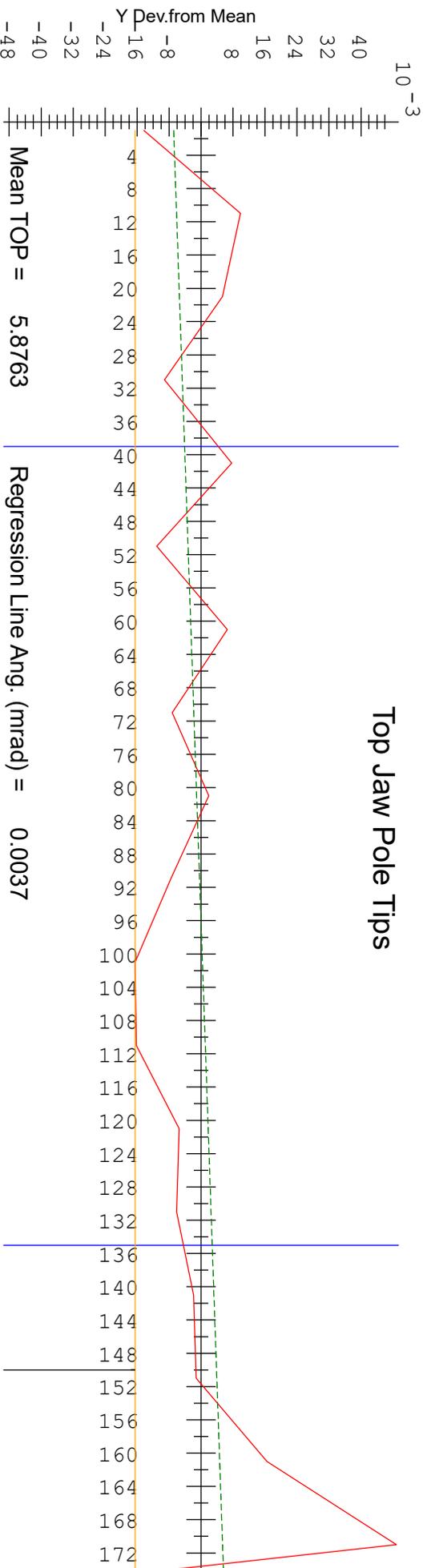


### Top Jaw Pole Tips



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

Regression Line Through Points = 10  
Dimensions in mm



METROLOGY

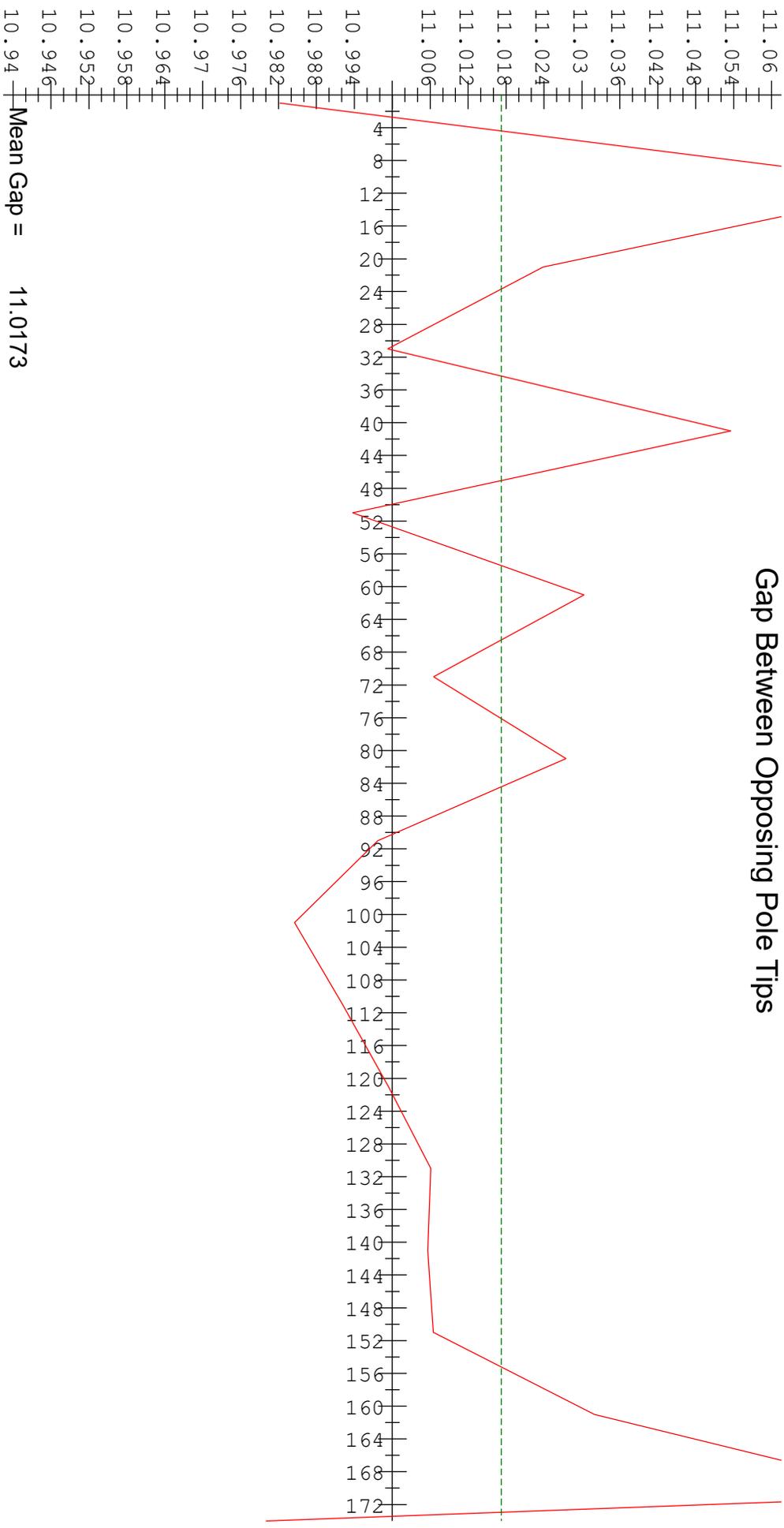
## LCLS II - SXR Undulator

Nominal Gap = 11  
Gap Reading = 11.0000  
US Encoder = 11.0000

Nominal Taper = 0.000  
DS Encoder = 11.0000

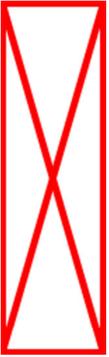
11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 18

### Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 10

Dimensions in mm



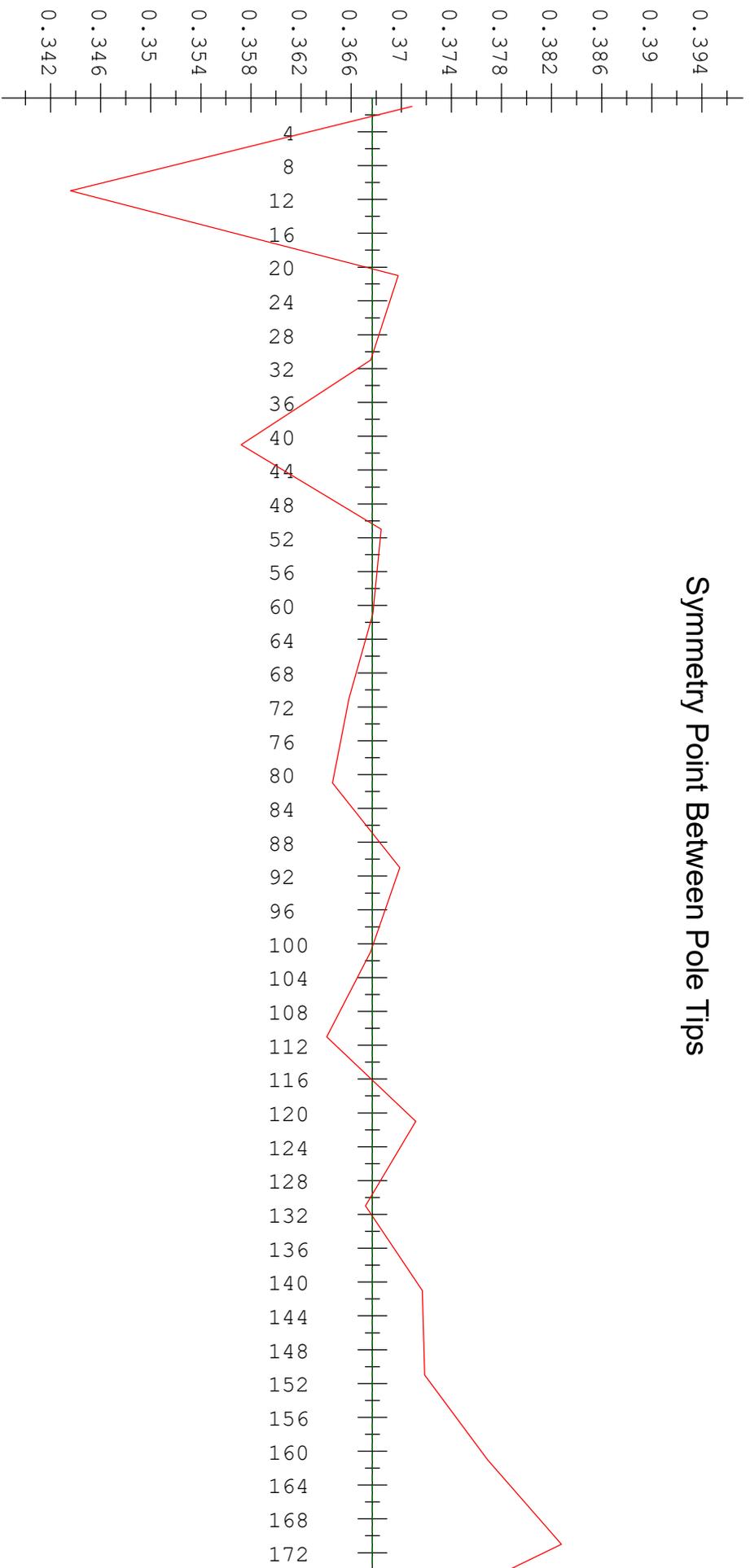
METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 11      Nominal Taper = 0.000  
 Gap Reading = 11.0000      US Encoder = 11.0000      DS Encoder = 11.0000

11-AUG-2021  
 S/N = 021  
 D/S = 0002  
 Run = 18

### Symmetry Point Between Pole Tips



Step Between Measured Pole Tips = 10

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 11      Nominal Taper = 0.000  
Gap Reading = 11.0000      US Encoder = 11.0000      DS Encoder = 11.0000

11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 18

## 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>	5.8695	5.8722	5.8791	5.8819
<b>Bottom</b>	-5.1499	-5.1455	-5.1342	-5.1296
<b>Gap</b>	11.0194			11.0115
<b>Taper</b>				-0.0079

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.8763	-5.1409	11.0173	0.3677

## 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>0.006</b>
<b>Minimum Effective Gap</b>	<b>10.971</b>
<b>Reference Block Gap</b>	<b>6.800</b>

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 11      US Encoder = 11.0000      Nominal Taper = 0.000  
 Gap Reading = 11.0000      DS Encoder = 11.0000

11-AUG-2021  
 S/N = 021  
 D/S = 0002  
 Run = 18