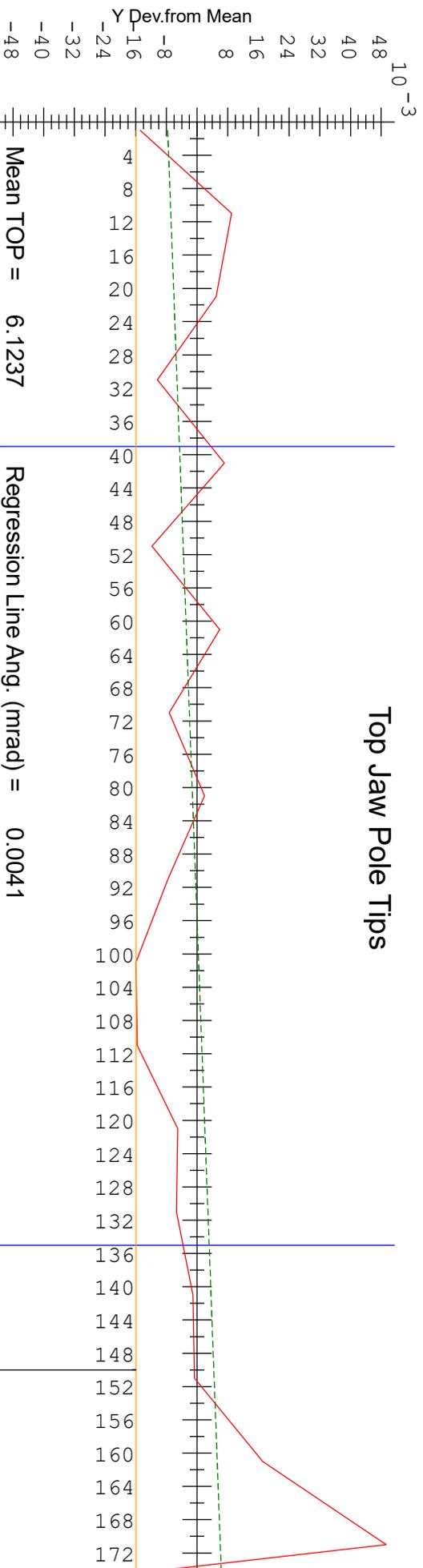


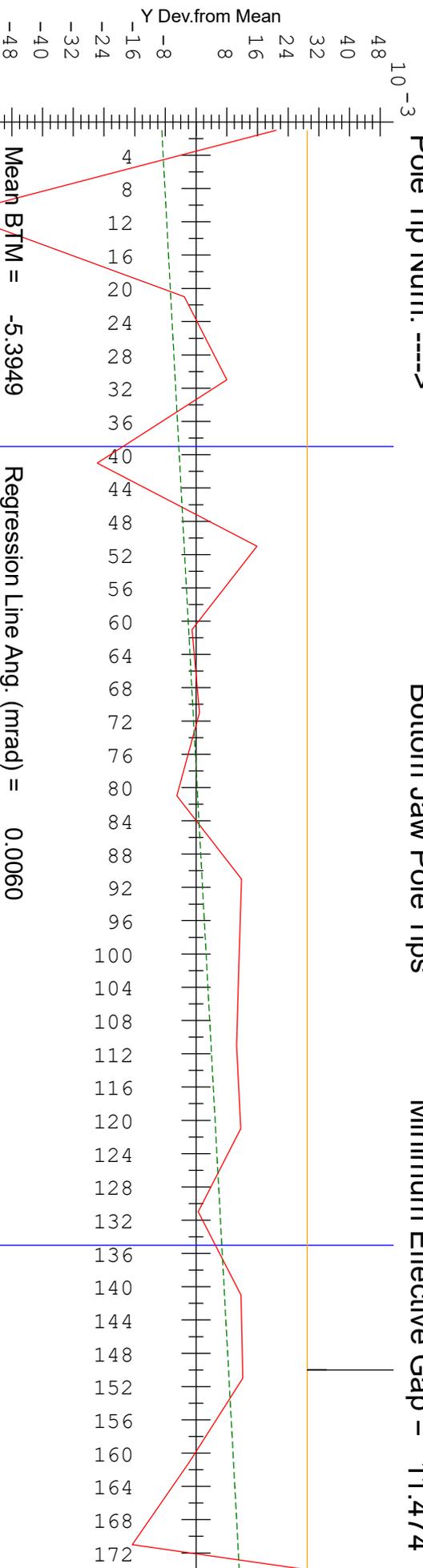
### Top Jaw Pole Tips



Pole Tip Num. ---->

Bottom Jaw Pole Tips

Minimum Effective Gap = 11.474



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

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



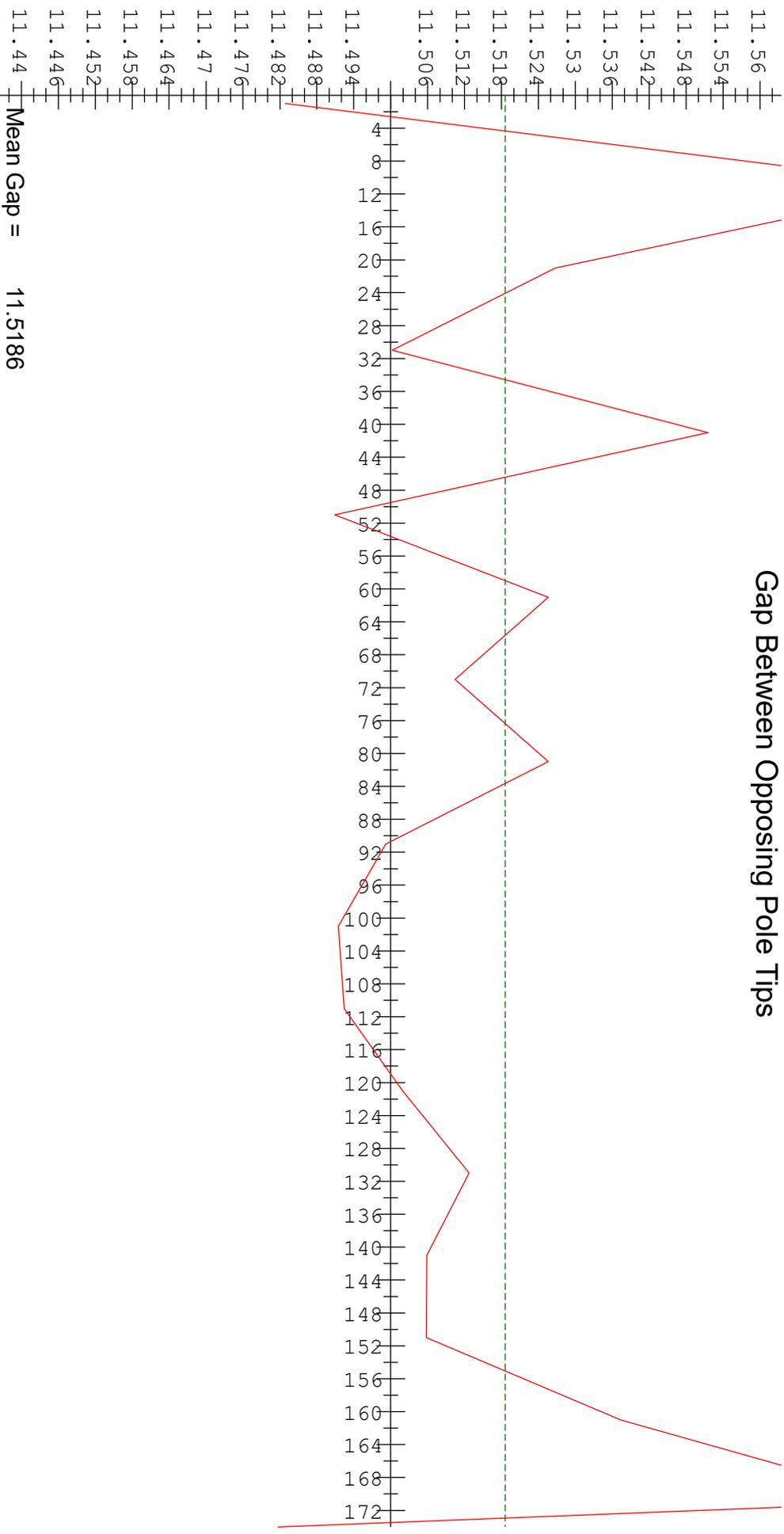
METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 11.5  
Nominal Taper = 0.000  
Gap Reading = 11.5000  
US Encoder = 11.5000  
DS Encoder = 11.5000

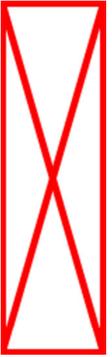
11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 19

### Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 10

Dimensions in mm



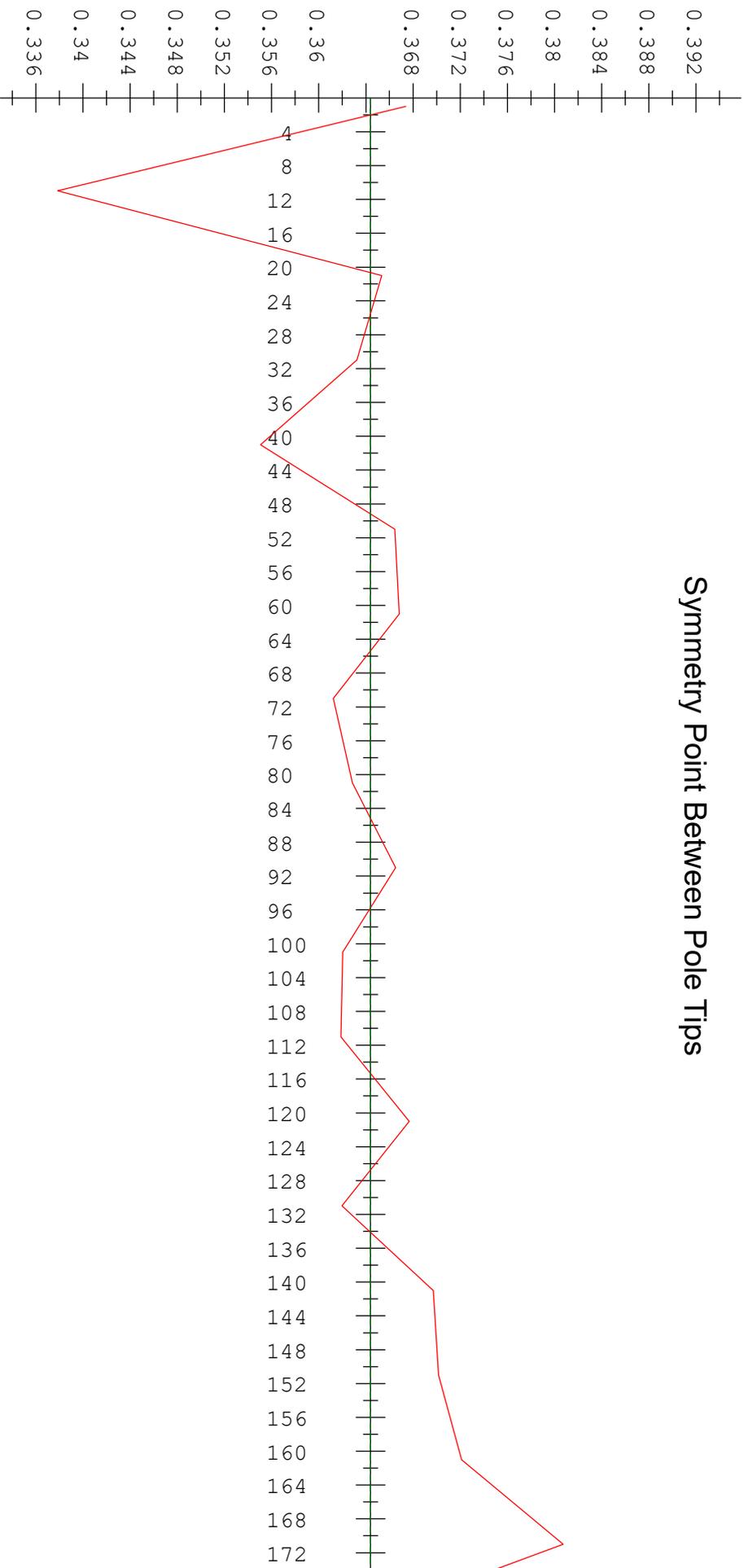
METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 11.5      Nominal Taper = 0.000  
 Gap Reading = 11.5000      US Encoder = 11.5000      DS Encoder = 11.5000

11-AUG-2021  
 S/N = 021  
 D/S = 0002  
 Run = 19

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.3644

Step Between Measured Pole Tips = 10

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 11.5      Nominal Taper = 0.000  
Gap Reading = 11.5000      US Encoder = 11.5000      DS Encoder = 11.5000

11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 19

## 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>	6.1161	6.1191	6.1269	6.1300
<b>Bottom</b>	-5.4039	-5.3994	-5.3882	-5.3836
<b>Gap</b>	11.5199			11.5137
<b>Taper</b>				-0.0063

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
6.1237	-5.3949	11.5186	0.3644

## 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>11.474</b>
<b>Reference Block Gap</b>	<b>6.800</b>

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 11.5      Nominal Taper = 0.000  
 Gap Reading = 11.5000      US Encoder = 11.5000      DS Encoder = 11.5000

11-AUG-2021  
 S/N = 021  
 D/S = 0002  
 Run = 19