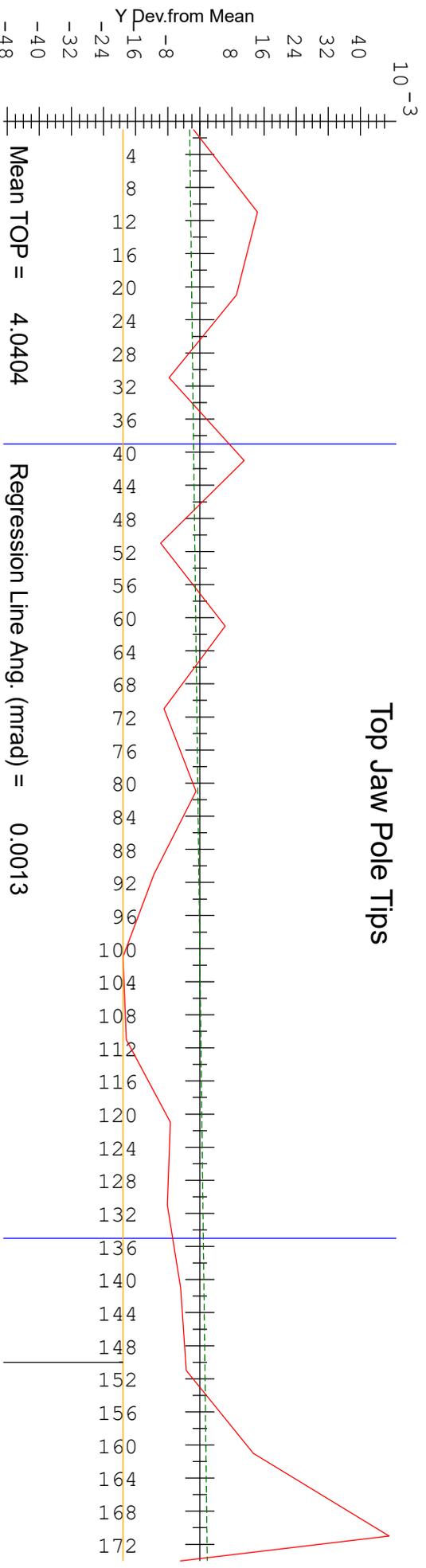


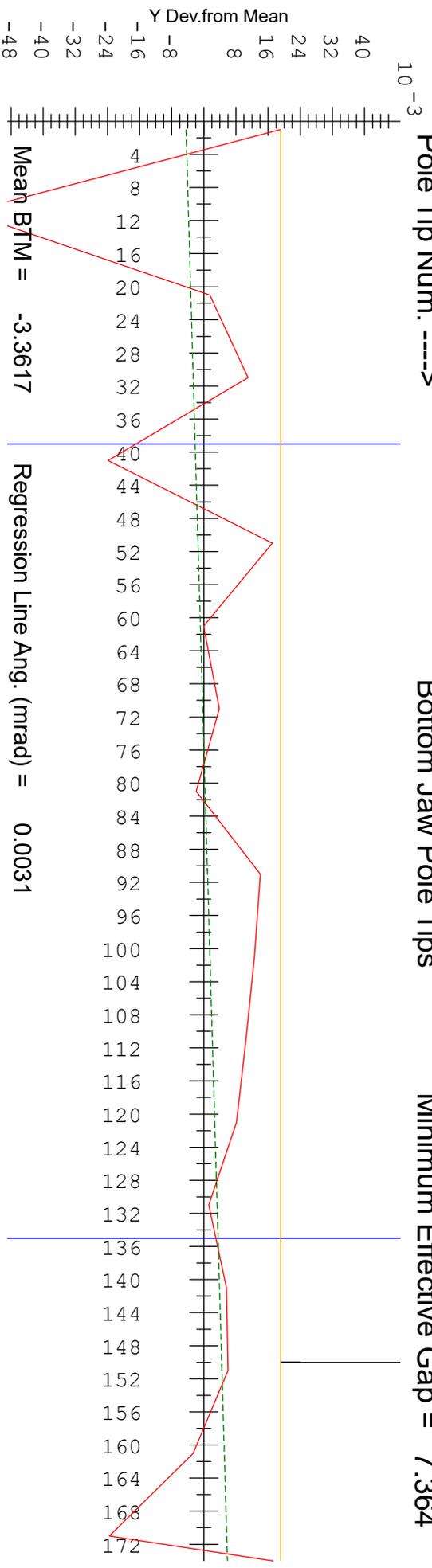
### Top Jaw Pole Tips



Pole Tip Num. ---->

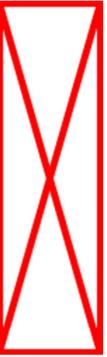
Bottom Jaw Pole Tips

Minimum Effective Gap = 7.364



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

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



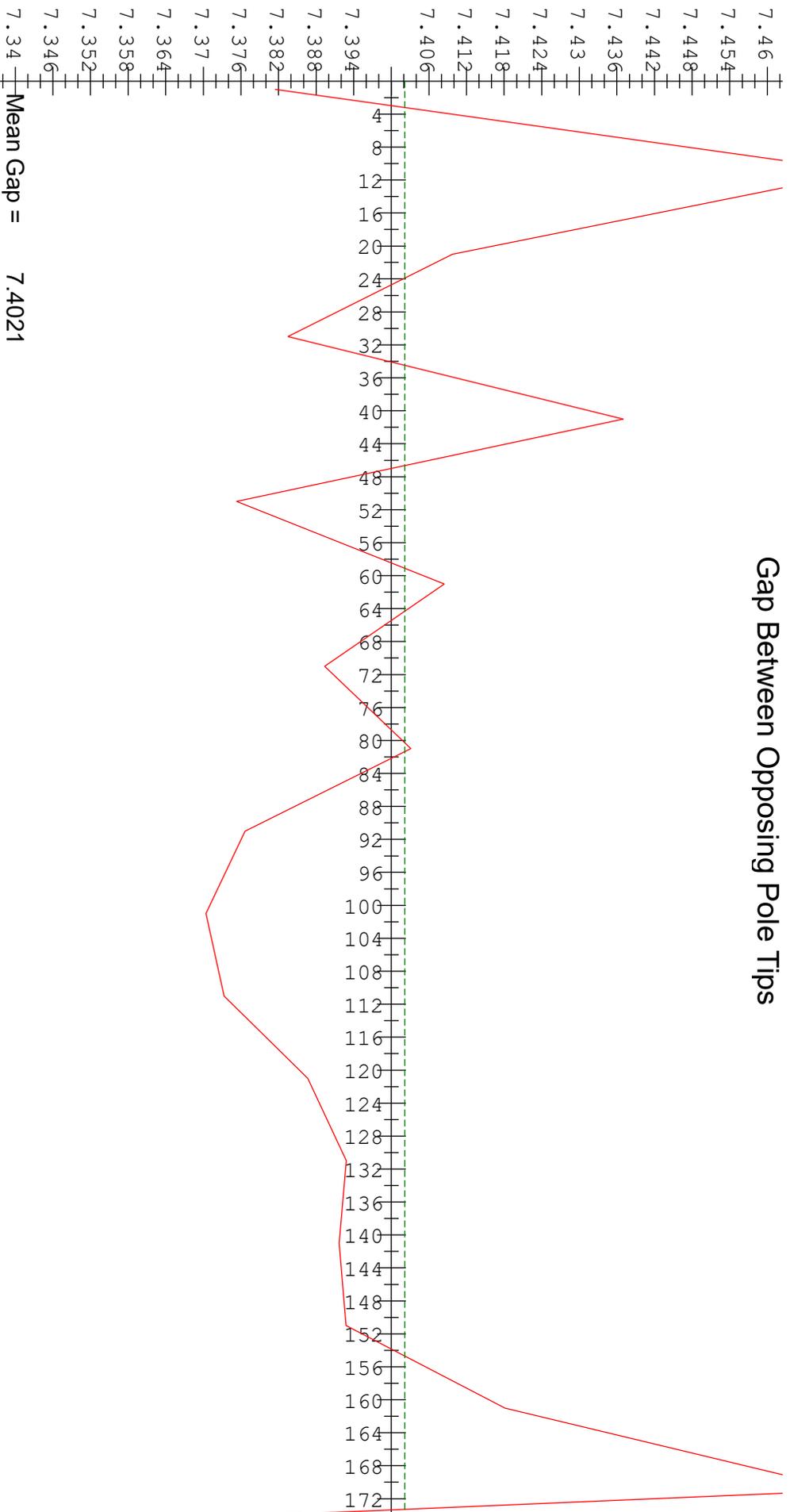
METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 7.4      Nominal Taper = 0.000  
Gap Reading = 7.3999      US Encoder = 7.3999      DS Encoder = 7.3999

11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 15

## Gap Between Opposing Pole Tips



Mean Gap = 7.4021

Step Between Measured Pole Tips = 10

Dimensions in mm



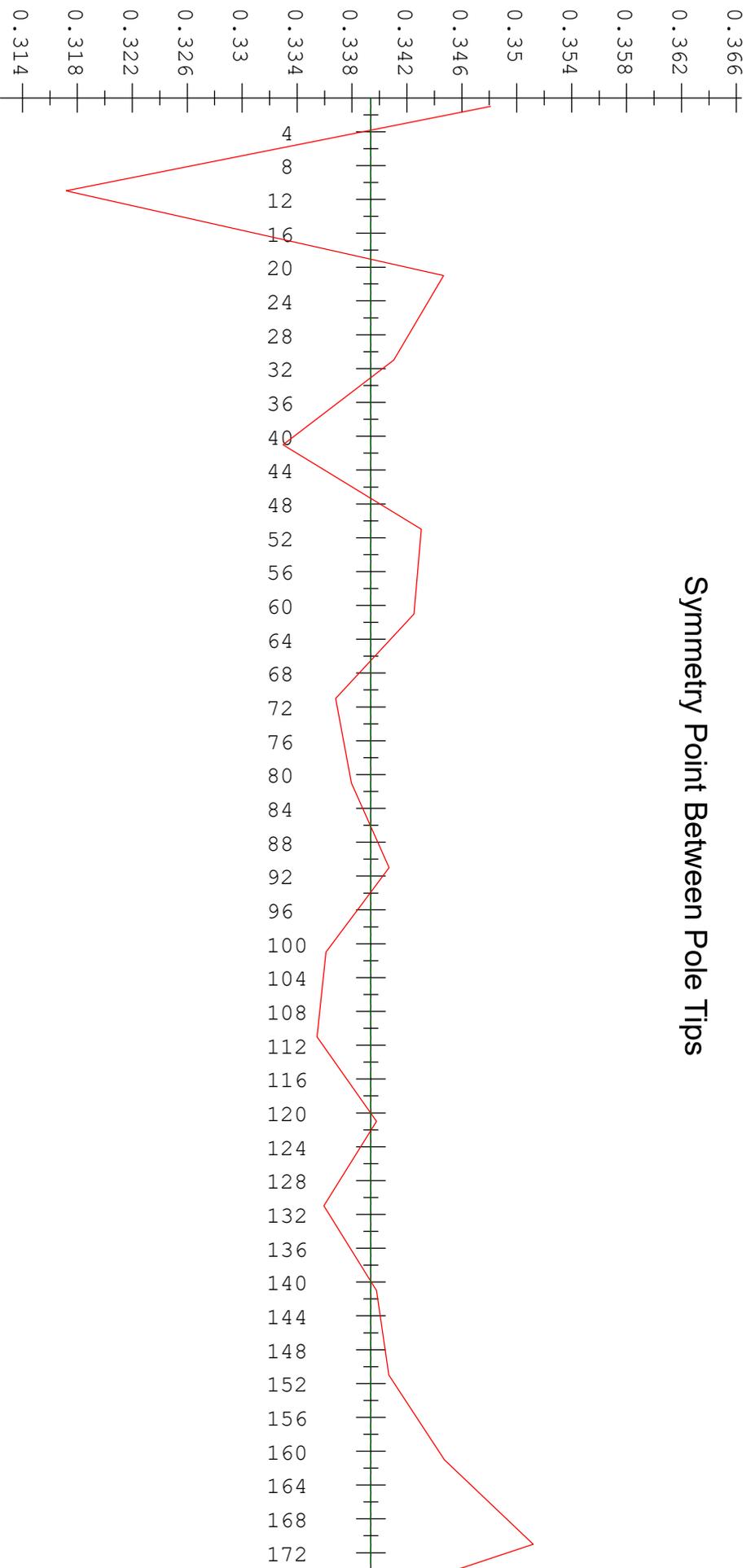
METROLOGY

### LCLS II - SXR Undulator

Nominal Gap = 7.4      Nominal Taper = 0.000  
 Gap Reading = 7.3999      US Encoder = 7.3999      DS Encoder = 7.3999

11-AUG-2021  
 S/N = 021  
 D/S = 0002  
 Run = 15

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.3394

Step Between Measured Pole Tips = 10

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 7.4      US Encoder = 7.3999  
Nominal Taper = 0.000      DS Encoder = 7.3999  
Gap Reading = 7.3999

11-AUG-2021  
S/N = 021  
D/S = 0002  
Run = 15

## 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>	4.0379	4.0389	4.0413	4.0423
<b>Bottom</b>	-3.3661	-3.3639	-3.3581	-3.3558
<b>Gap</b>	7.4040			7.3981
<b>Taper</b>				-0.0059

### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.0404	-3.3617	7.4021	0.3394

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>980.195</b>
<b>Top Jaw Pitch (mrad)</b>	<b>0.001</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>0.003</b>
<b>Minimum Effective Gap</b>	<b>7.364</b>
<b>Reference Block Gap</b>	<b>6.800</b>

Dimensions in mm



METROLOGY

## LCLS II - SXR Undulator

Nominal Gap = 7.4      Nominal Taper = 0.000  
 Gap Reading = 7.3999      US Encoder = 7.3999      DS Encoder = 7.3999

11-AUG-2021  
 S/N = 021  
 D/S = 0002  
 Run = 15