

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

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



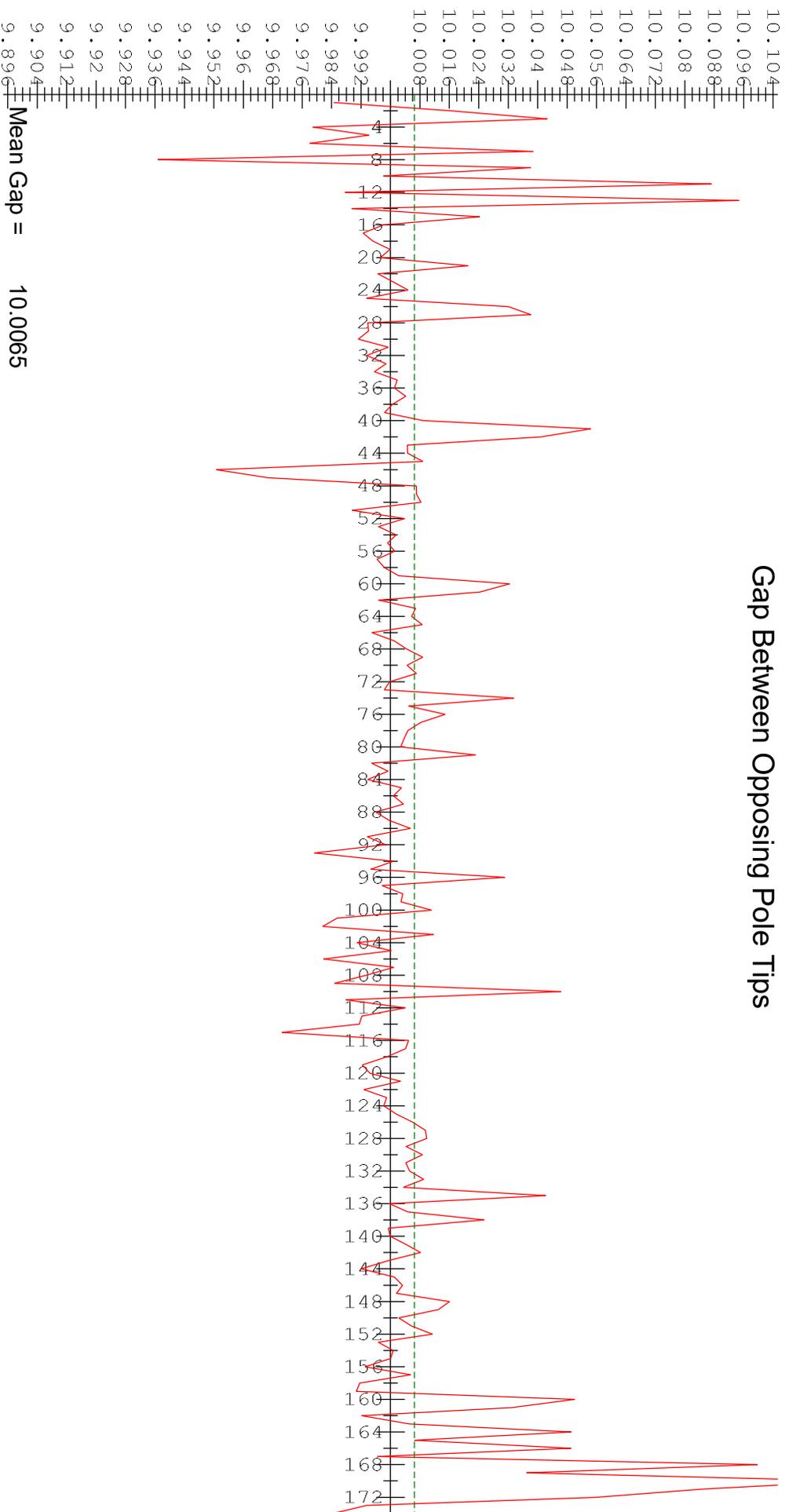
METROLOGY

# LCLS II - SXR Undulator

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

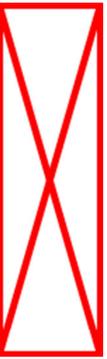
10-MAY-2021  
S/N = 021  
D/S = 0002  
Run = 5

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



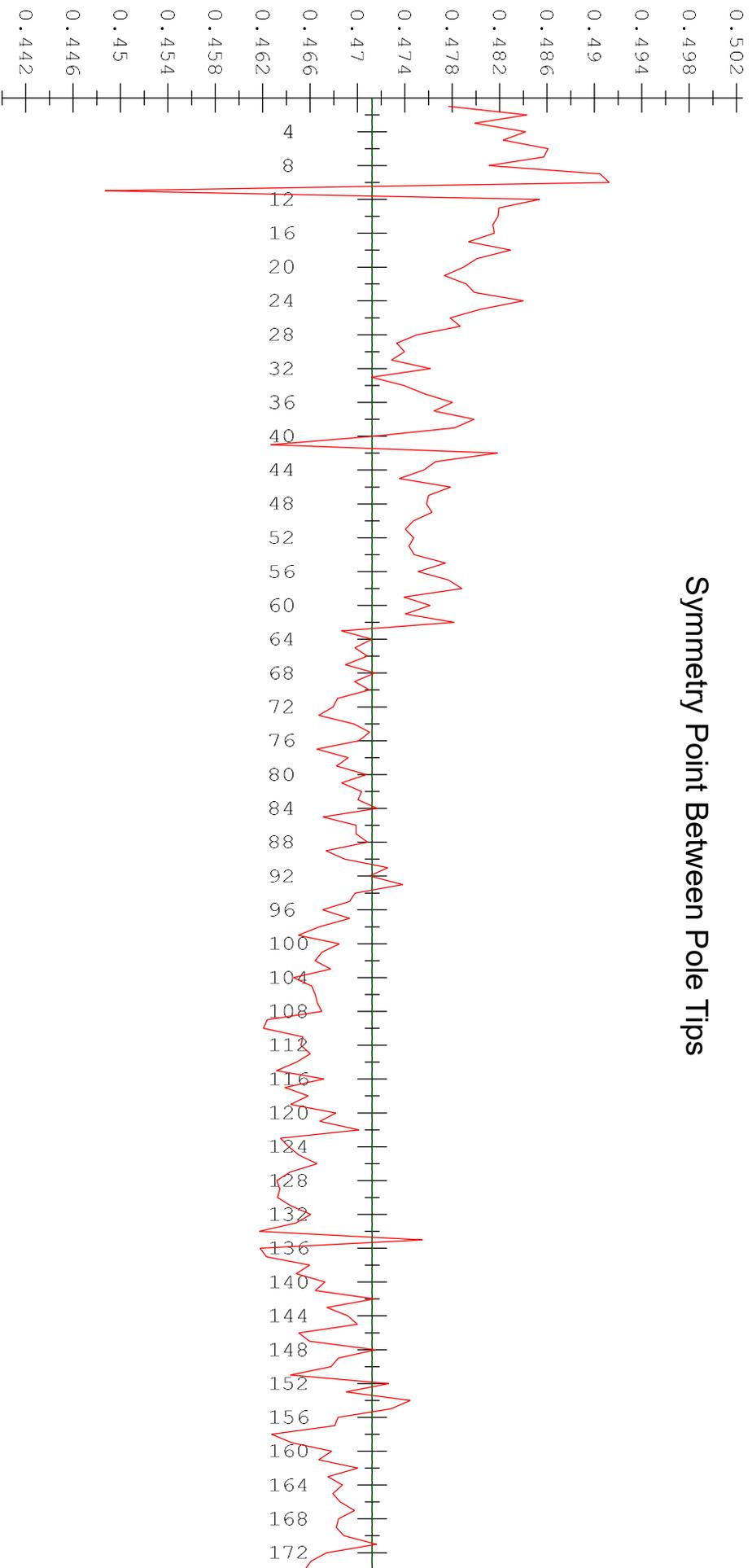
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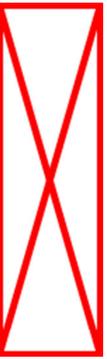
### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.4712

Step Between Measured Pole Tips = 1

Dimensions in mm



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## 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>	5.4795	5.4773	5.4717	5.4695
<b>Bottom</b>	-4.5214	-4.5261	-4.5378	-4.5426
<b>Gap</b>	10.0009			10.0121
<b>Taper</b>				0.0112

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.4745	-4.5320	10.0065	0.4712

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>980.211</b>
<b>Top Jaw Pitch (mrad)</b>	<b>-0.003</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>-0.006</b>
<b>Minimum Effective Gap</b>	<b>9.936</b>
<b>Reference Block Gap</b>	<b>6.800</b>

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