

METROLOGY

**LCLS II-HE - SXR Undulator**

Nominal Gap = 10

Nominal Taper = -0.100

Gap Reading = 9.9499

US Encoder = 10.0000

DS Encoder = 9.9000

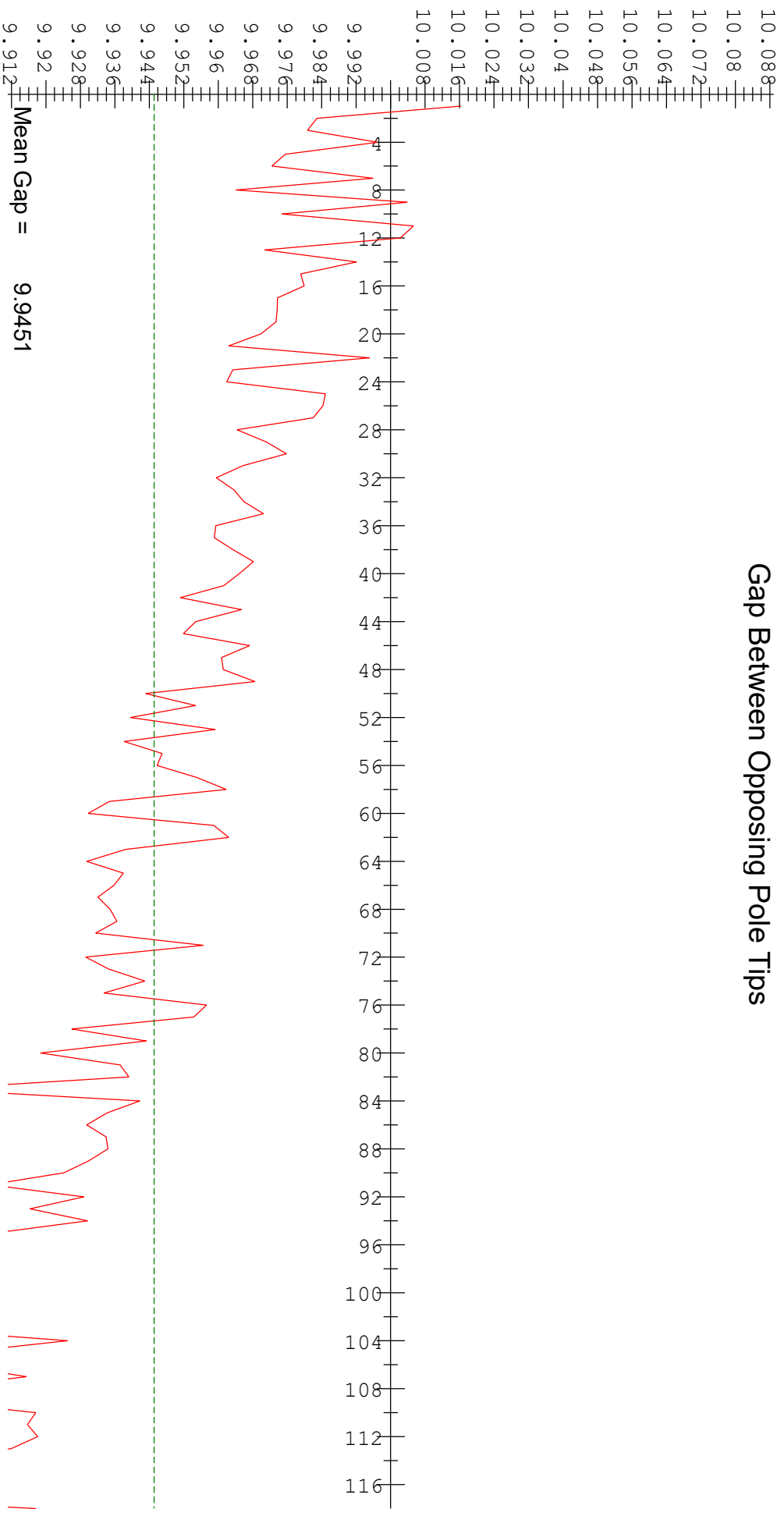
13-APR-2026

S/N = 008

D/S = 0001

Run = 5

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 1

Dimensions in mm



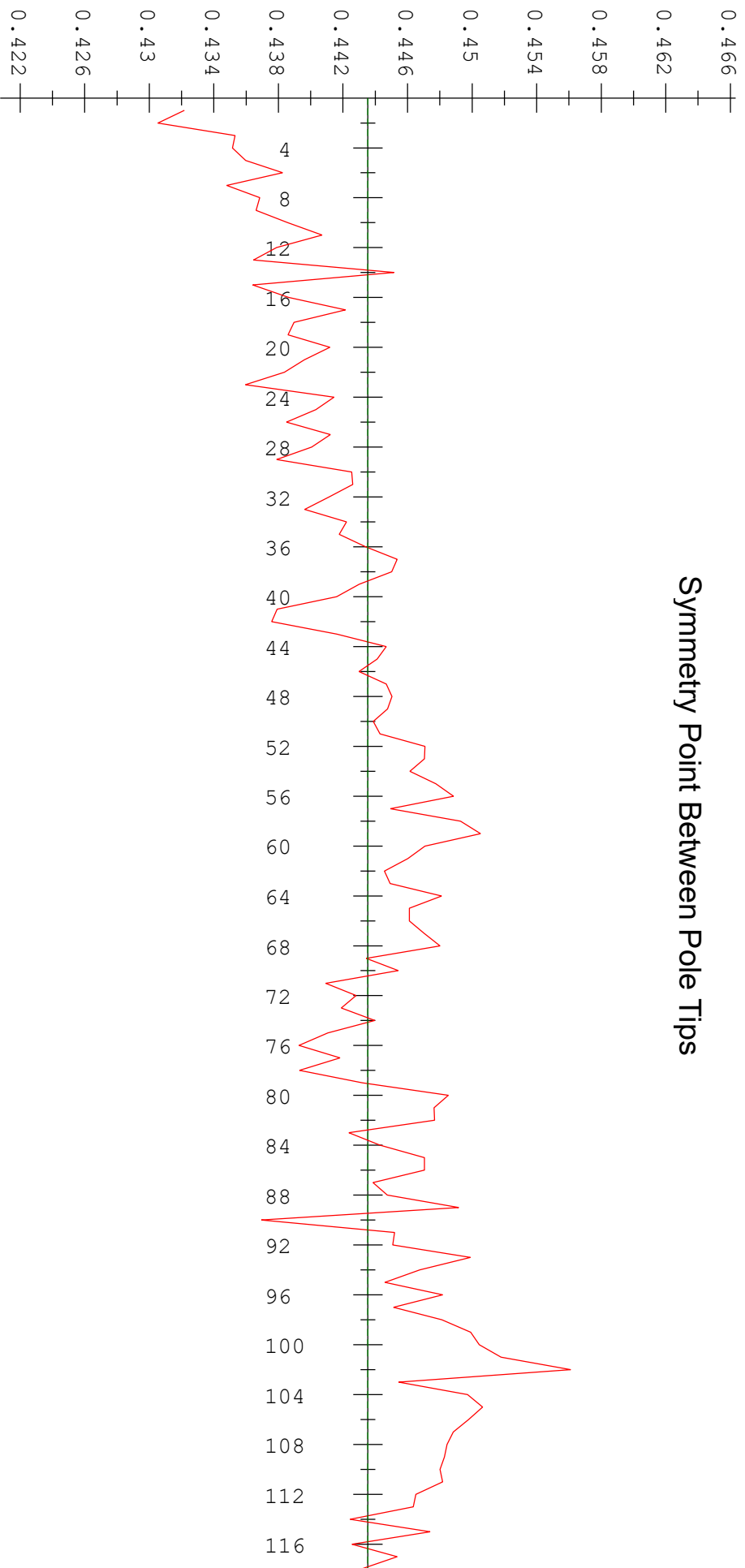
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### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.4435

Step Between Measured Pole Tips = 1

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## Top and Bottom Jaw Regression Line Intersect Points

Jaw	First Pole <i>(Pole -1)</i>	US Actuator <i>(Pole 28)</i>	DS Actuator <i>(Pole 90)</i>	Last Pole <i>(Pole 118)</i>
<b>Top</b>	5.4350	5.4263	5.4062	5.3972
<b>Bottom</b>	-4.5591	-4.5452	-4.5133	-4.4989
<b>Gap</b>	9.9941			9.8961
<b>Taper</b>				-0.0980

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
5.4161	-4.5290	9.9451	0.4435

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.993</b>
<b>Top Jaw Pitch (mrad)</b>	<b>-0.012</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>0.018</b>
<b>Minimum Effective Gap</b>	<b>9.859</b>
<b>Reference Block Gap</b>	<b>6.801</b>

Dimensions in mm



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