



METROLOGY

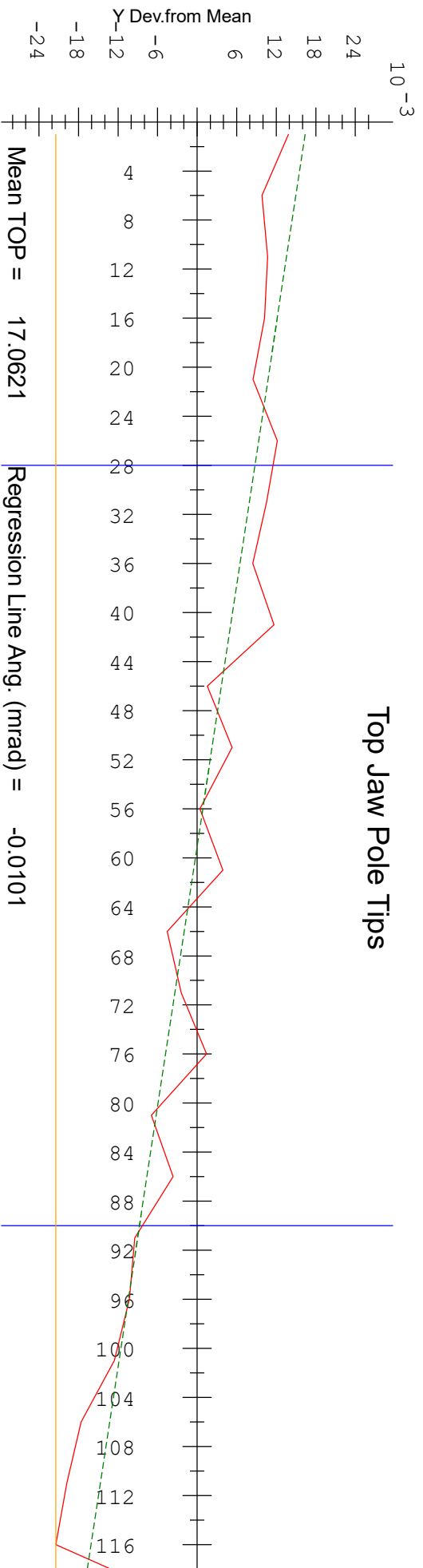
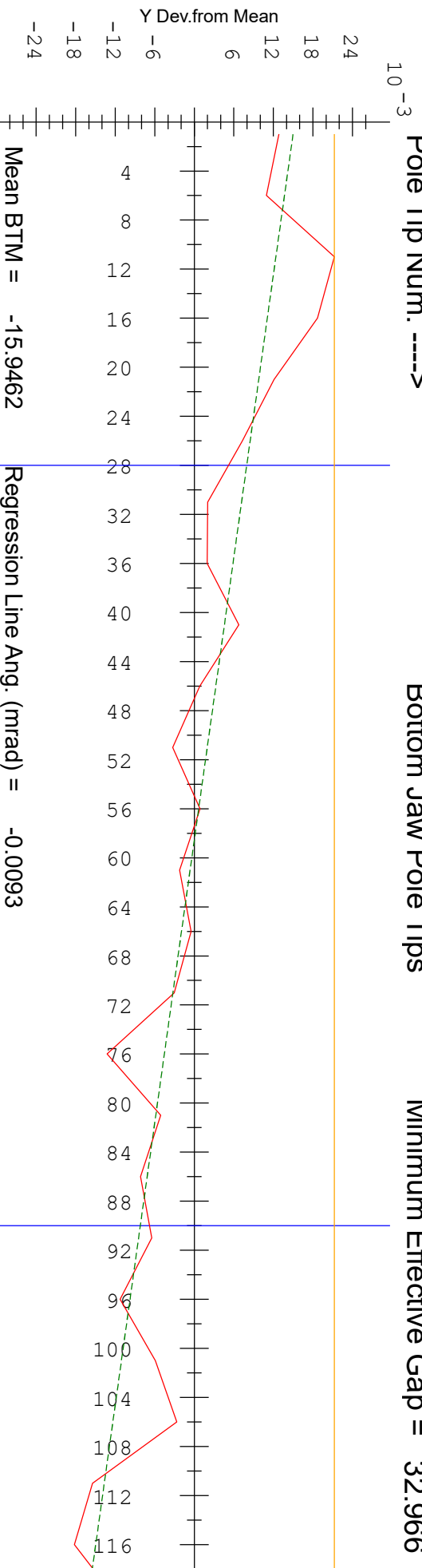
# LCLS II-HE - SXR Undulator

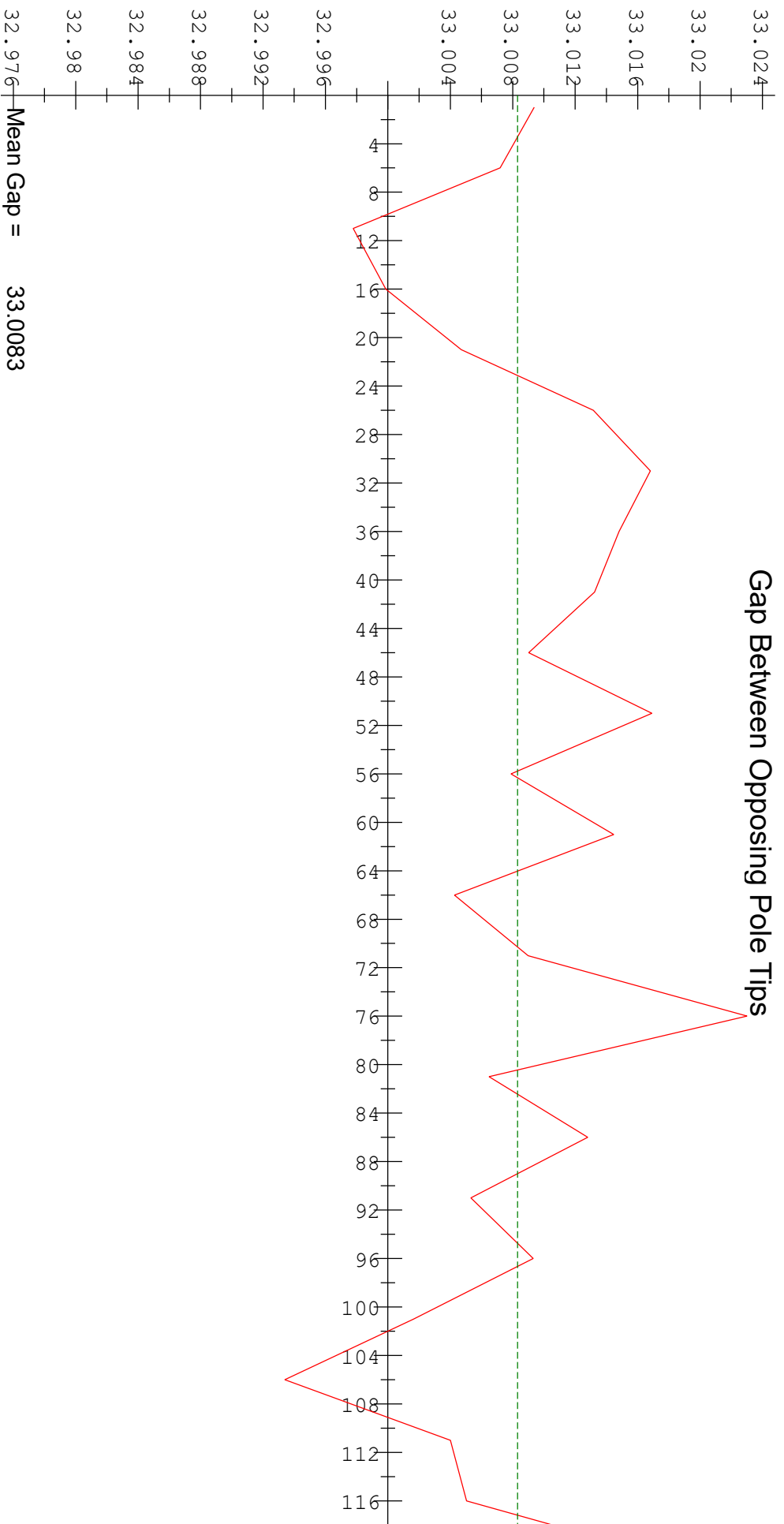
Nominal Gap = 33  
Gap Reading = 33.0000  
US Encoder = 33.0001  
DS Encoder = 33.0000

14-AUG-2024  
S/N = 025  
D/S = 0001  
Run = 9

Y Value Scales Centered on Mean Values  
Step Between Measured Pole Tips = 5

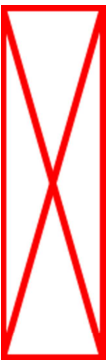
Regression Line Through Points = -----  
Dimensions in mm





Step Between Measured Pole Tips = 5

Dimensions in mm



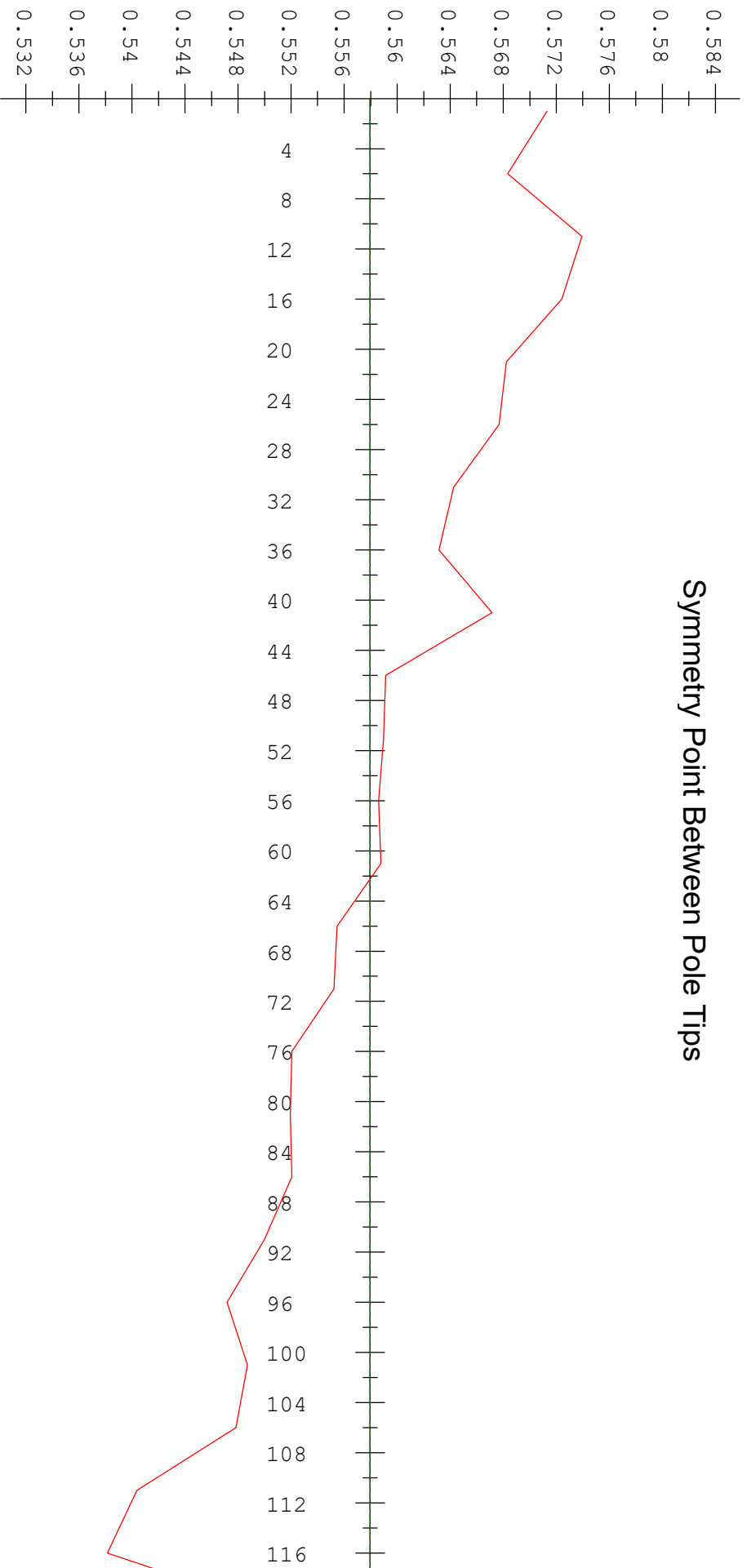
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# LCLS II-HE - SXR Undulator

Nominal Gap = 33      Nominal Taper = 0.000  
 Gap Reading = 33.0000      US Encoder = 33.0001      DS Encoder = 33.0000

14-AUG-2024  
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 Run = 9

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.5580

Step Between Measured Pole Tips = 5

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 28)</i>	DS Actuator <i>(Pole 90)</i>	Last Pole <i>(Pole 118)</i>
<b>Top</b>	17.0785	17.0709	17.0534	17.0455
<b>Bottom</b>	-15.9312	-15.9383	-15.9544	-15.9617
<b>Gap</b>	33.0097			33.0071
<b>Taper</b>				-0.0026

## Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
17.0621	-15.9462	33.0083	0.5580

## Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	979.432
<b>Top Jaw Pitch (mrad)</b>	-0.010
<b>Bottom Jaw Pitch(mrad)</b>	-0.009
<b>Minimum Effective Gap</b>	32.966
<b>Reference Block Gap</b>	6.795

Dimensions in mm



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