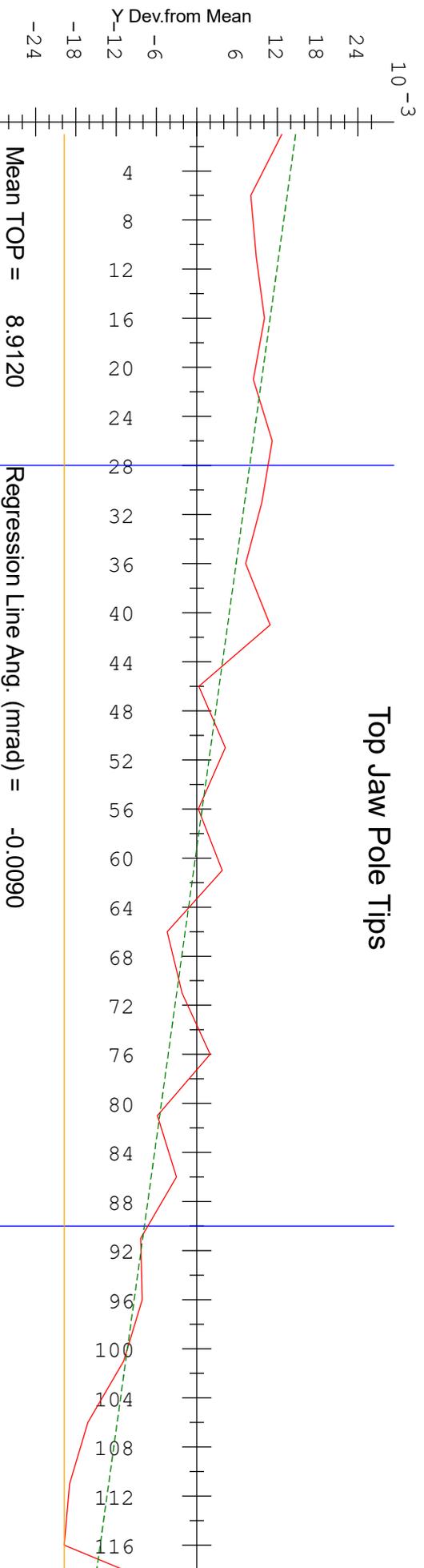
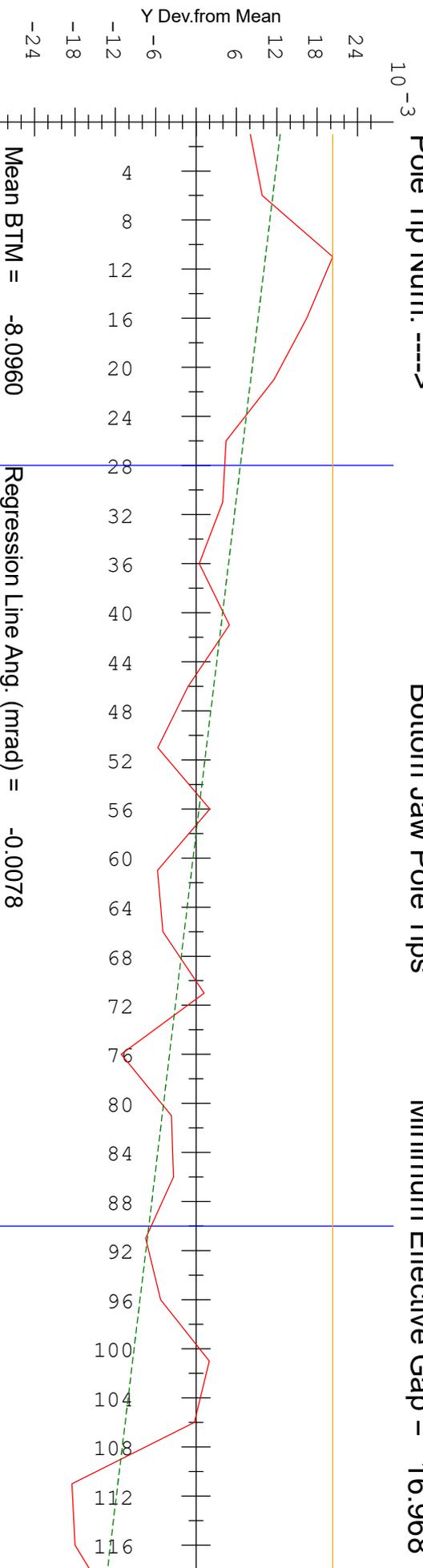


### Top Jaw Pole Tips



Pole Tip Num. ---->



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

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



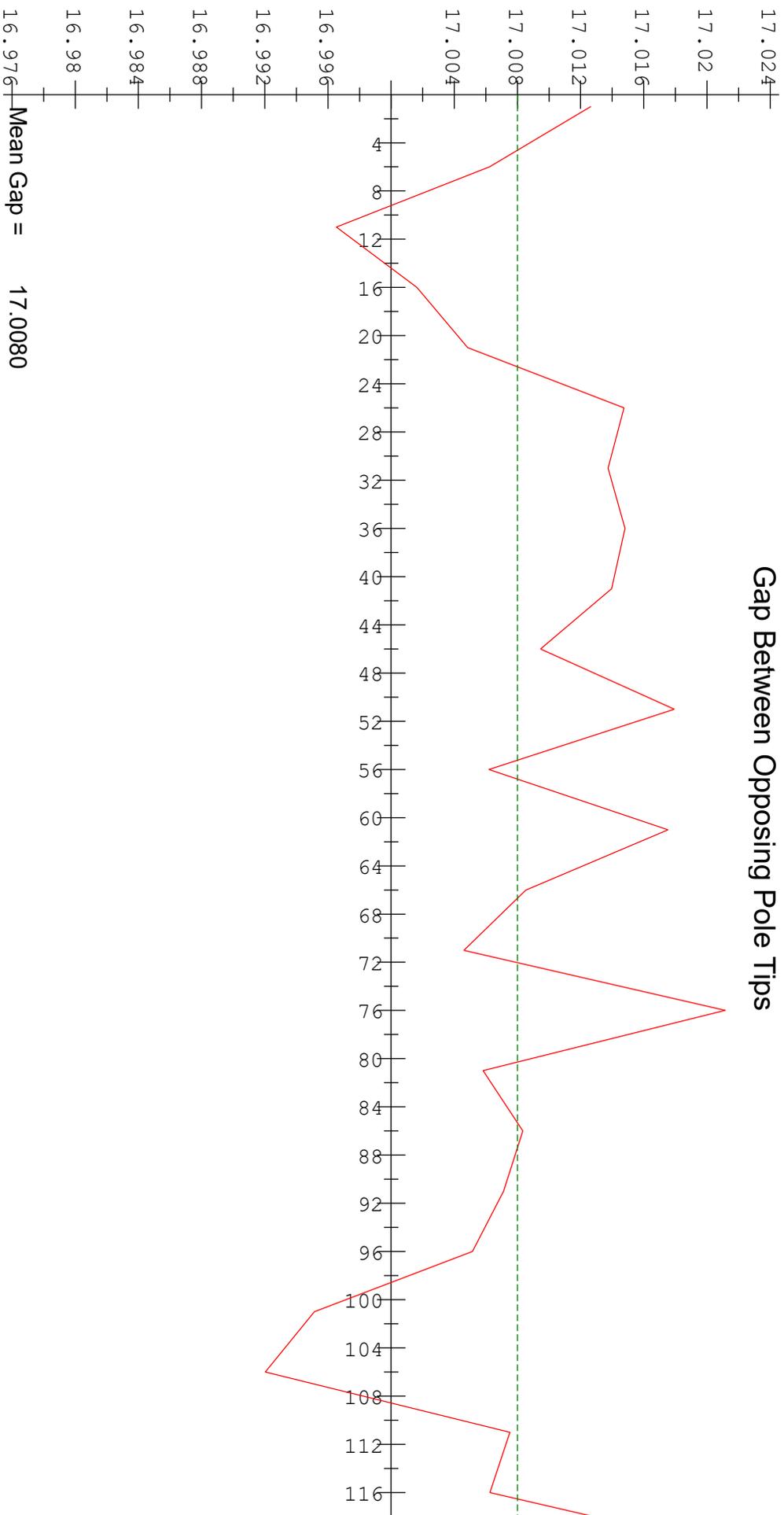
METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 17  
 Nominal Taper = 0.000  
 Gap Reading = 17.0001  
 US Encoder = 17.0001  
 DS Encoder = 17.0001

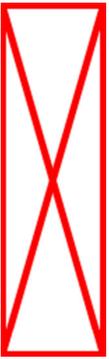
14-AUG-2024  
 S/N = 025  
 D/S = 0001  
 Run = 7

### Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 5

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 17

Nominal Taper = 0.000

Gap Reading = 17.0001

US Encoder = 17.0001

DS Encoder = 17.0001

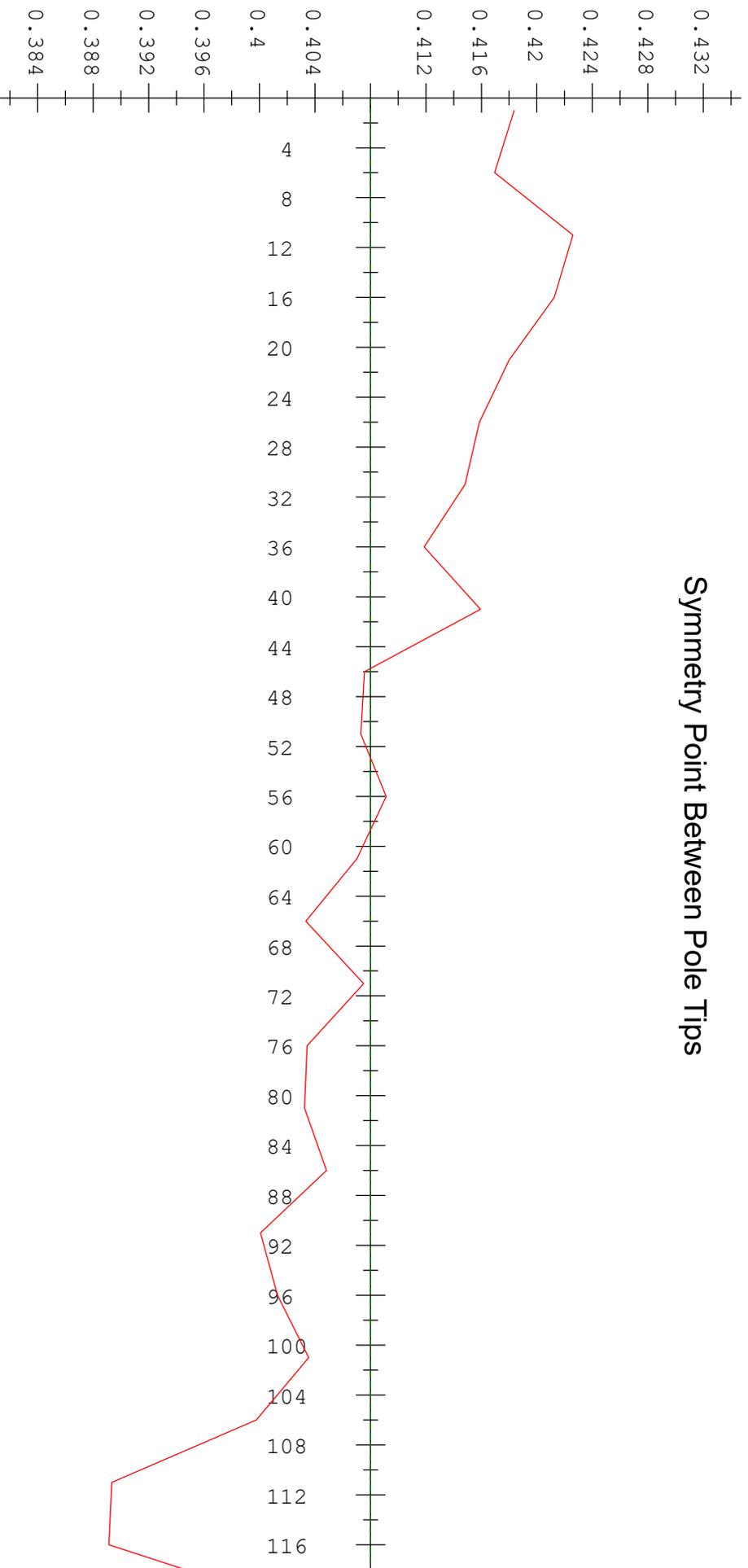
14-AUG-2024

S/N = 025

D/S = 0001

Run = 7

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.4080

Step Between Measured Pole Tips = 5

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 17  
Nominal Taper = 0.000  
Gap Reading = 17.0001  
US Encoder = 17.0001  
DS Encoder = 17.0001

14-AUG-2024  
S/N = 025  
D/S = 0001  
Run = 7

## 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>	8.9267	8.9199	8.9042	8.8971
<b>Bottom</b>	-8.0835	-8.0894	-8.1030	-8.1092
<b>Gap</b>	17.0102			17.0063
<b>Taper</b>				-0.0039

### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
8.9120	-8.0960	17.0080	0.4080

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	979.432
<b>Top Jaw Pitch (mrad)</b>	-0.009
<b>Bottom Jaw Pitch(mrad)</b>	-0.008
<b>Minimum Effective Gap</b>	16.968
<b>Reference Block Gap</b>	6.795

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 17      Nominal Taper = 0.000  
 Gap Reading = 17.0001      US Encoder = 17.0001      DS Encoder = 17.0001

14-AUG-2024  
 S/N = 025  
 D/S = 0001  
 Run = 7