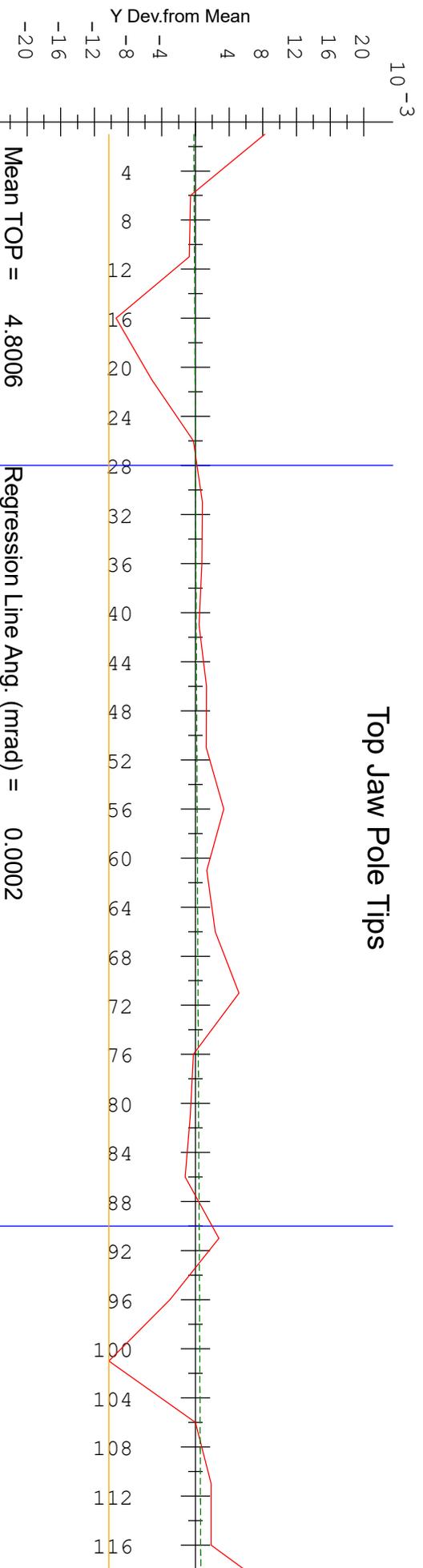
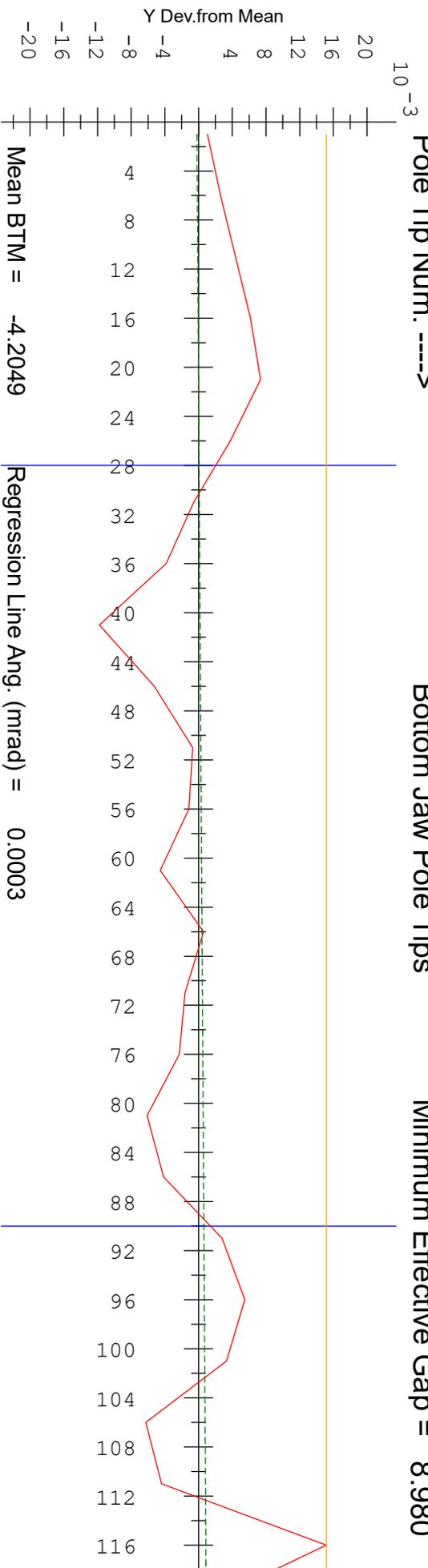


### Top Jaw Pole Tips



Pole Tip Num. ---->



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

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



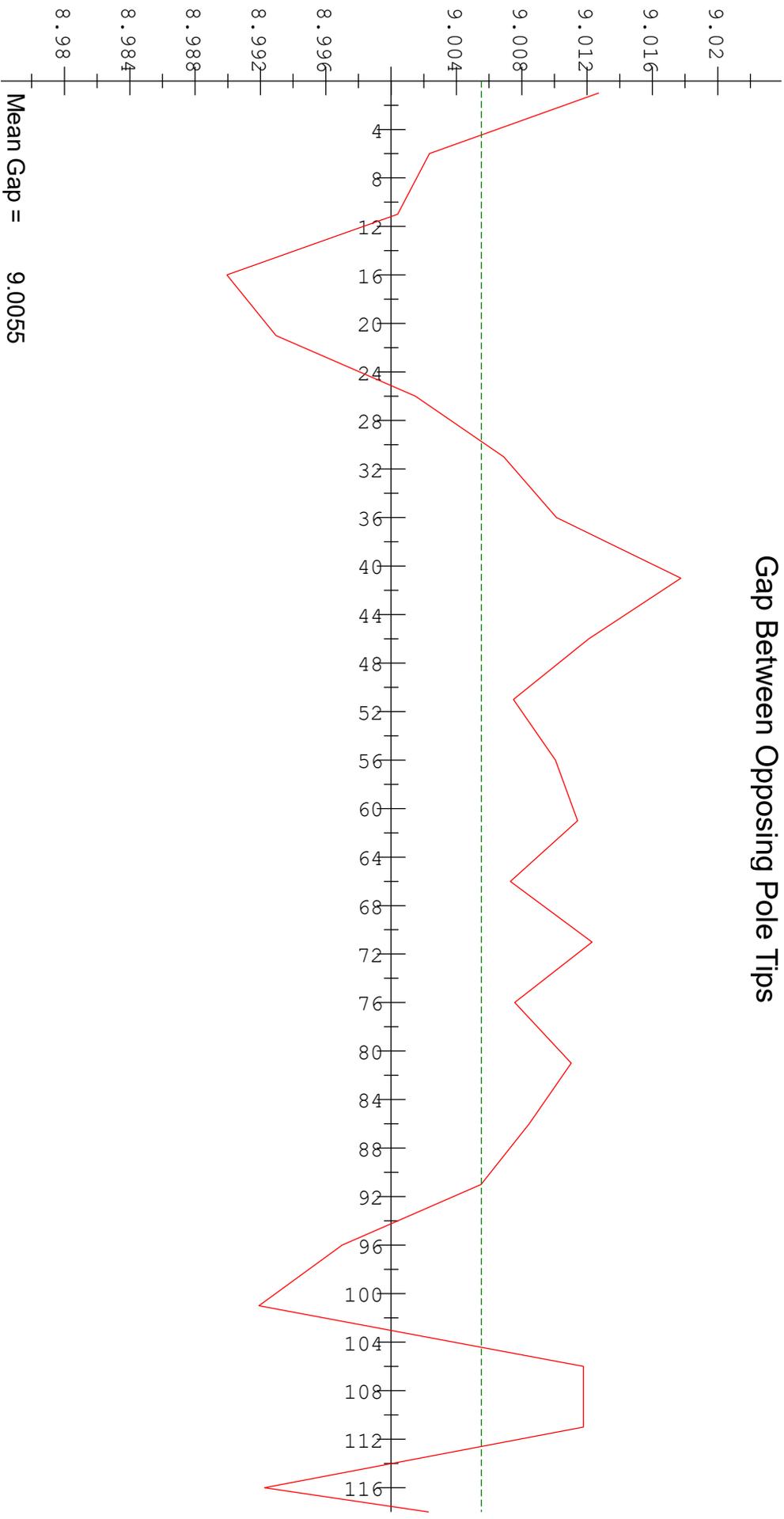
METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 9  
Nominal Taper = 0.000  
Gap Reading = 9.0000  
US Encoder = 9.0000  
DS Encoder = 9.0001

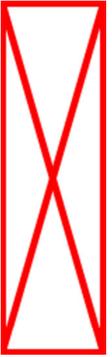
23-SEP-2024  
S/N = 024  
D/S = 0001  
Run = 6

# Gap Between Opposing Pole Tips



Step Between Measured Pole Tips = 5

Dimensions in mm



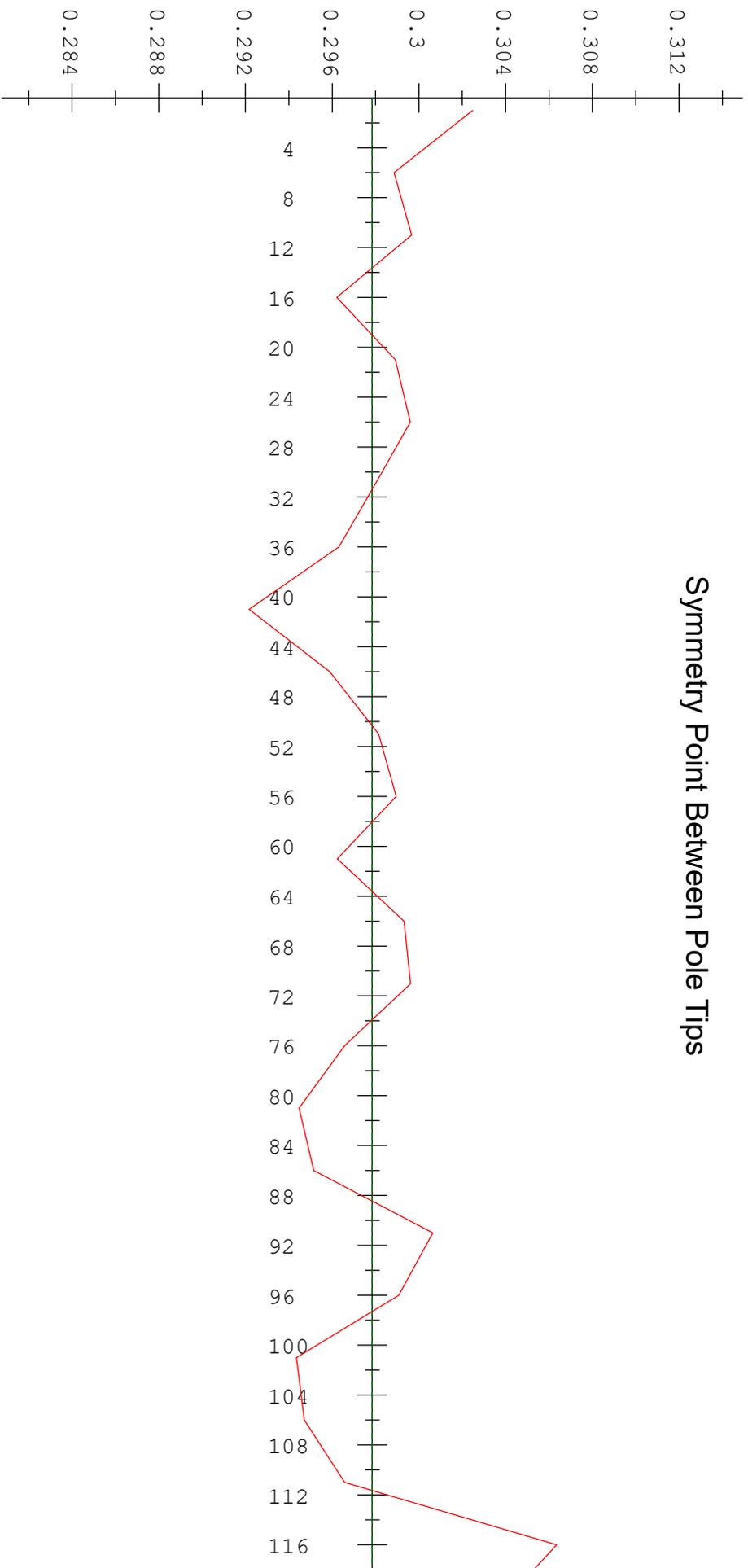
METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 9      Nominal Taper = 0.000  
Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0001

23-SEP-2024  
S/N = 024  
D/S = 0001  
Run = 6

### Symmetry Point Between Pole Tips



Mean Symmetry Value = 0.2978

Step Between Measured Pole Tips = 5

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 9      Nominal Taper = 0.000  
Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0001

23-SEP-2024  
S/N = 024  
D/S = 0001  
Run = 6

## 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>	4.8004	4.8006	4.8010	4.8012
<b>Bottom</b>	-4.2051	-4.2049	-4.2043	-4.2040
<b>Gap</b>	9.0055			9.0053
<b>Taper</b>				-0.0003

### Summary of Mean Values

Top Jaw Poles	Btm. Jaw Poles	Gap Values	Sym. Pt. Values
4.8006	-4.2049	9.0055	0.2978

### Additional Calculated Values

<b>Bottom Pole #1 Z Value</b>	<b>978.595</b>
<b>Top Jaw Pitch (mrad)</b>	<b>0.000</b>
<b>Bottom Jaw Pitch(mrad)</b>	<b>0.000</b>
<b>Minimum Effective Gap</b>	<b>8.980</b>
<b>Reference Block Gap</b>	<b>6.799</b>

Dimensions in mm



METROLOGY

## LCLS II-HE - SXR Undulator

Nominal Gap = 9      Nominal Taper = 0.000  
 Gap Reading = 9.0000      US Encoder = 9.0000      DS Encoder = 9.0001

23-SEP-2024  
 S/N = 024  
 D/S = 0001  
 Run = 6