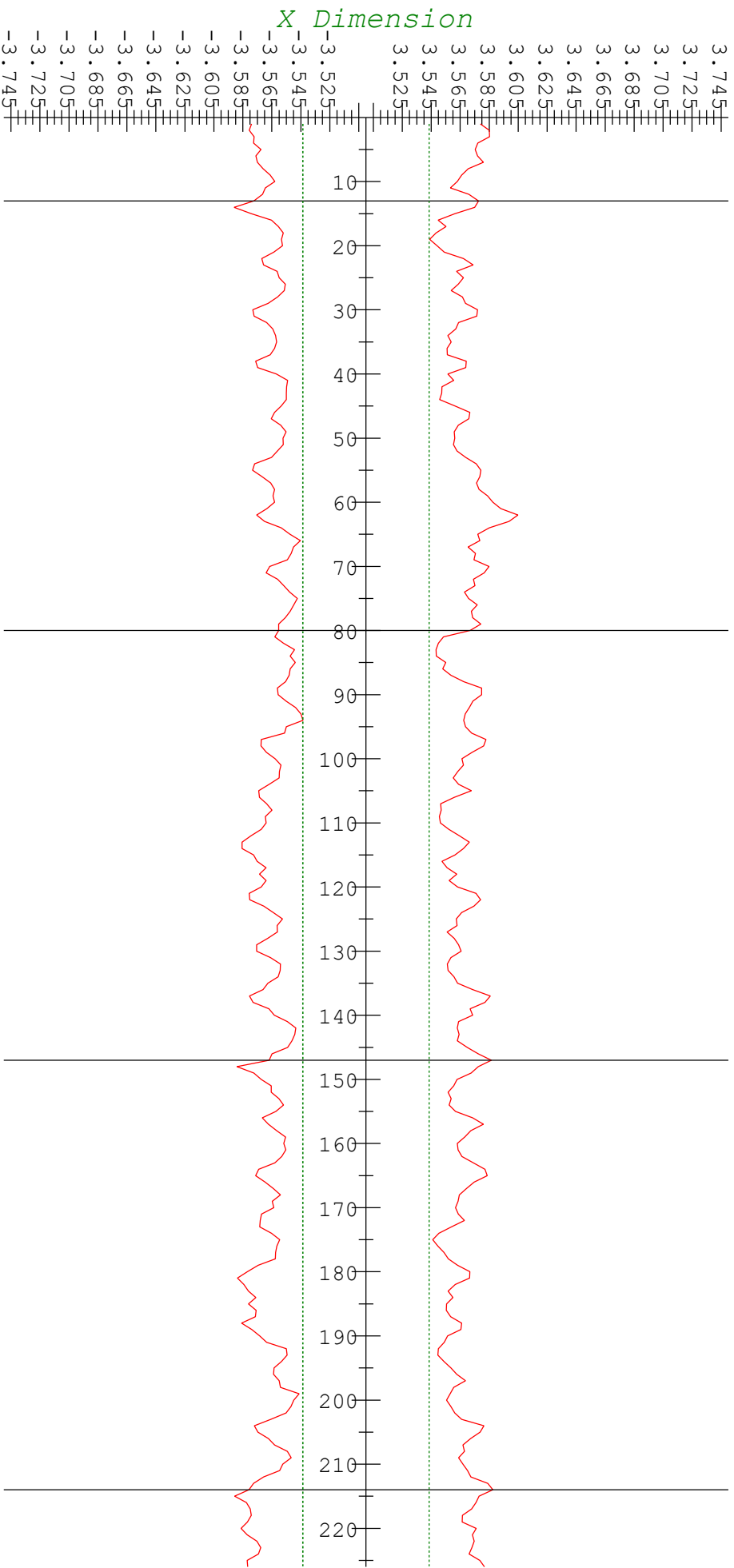


Pole Tip Number ----->



Minimum Gap = 7.087

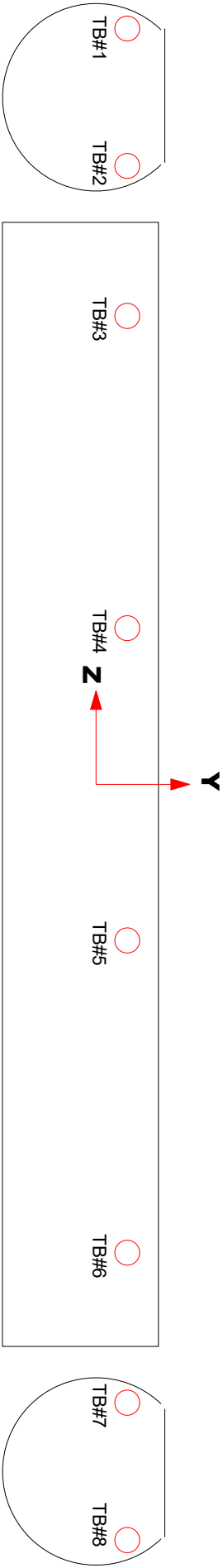


METROLOGY

LCLS II HXR Reference Undulator
Pole Tip Gap

14-SEP-2026

Location of Tooling Ball Center 1 inch above Socket Surface



TB Number	X Corr.	Y Corr.	Z Corr.
#1	-5.07837	0.0042	67.92251
#2	5.07869	0.00747	67.92228
#3	7.0798	0.01427	61.48013
#4	7.07968	0.00802	23.25828
#5	7.08072	0.00989	-23.03999
#6	7.07998	0.0071	-61.37543
#7	5.07491	0.01011	-67.93291
#8	-5.08123	0.00811	-67.9332

Dimensions in Inch



METROLOGY

LCLS II HXR Reference Undulator
Tooling Ball Locations

14-SEP-2026