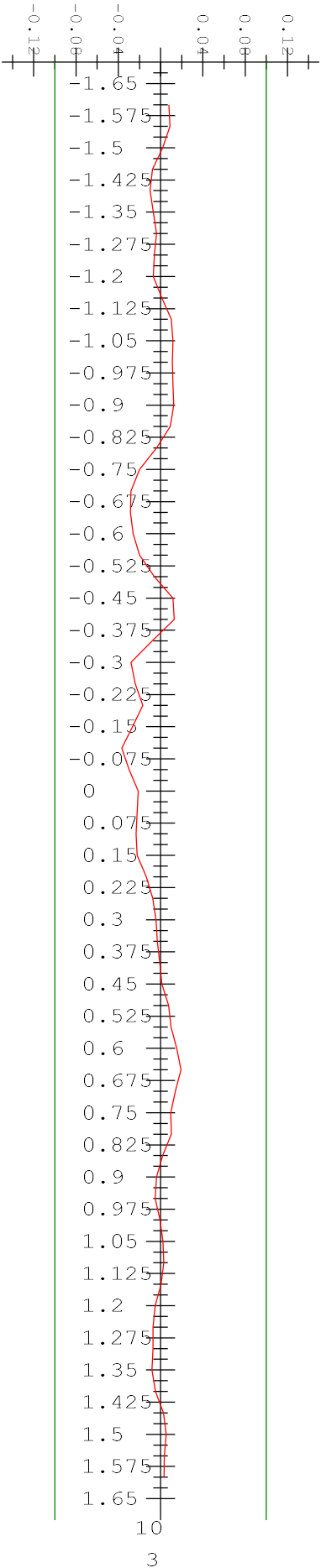


Vacuum Chamber Centerline Profile to Magnetic Axis X Centerline, Green line = +/- .100 Tol.

Red = Actual Chamber Centerline



Quadrupole

Value	Nominal	Actual	Deviation
X Center	0.000	-0.019	-0.019
Y Center	0.000	0.047	0.047
Z Center	1830.000	1829.942	-0.058
Roll	0.000	0.403	0.403
Pitch	0.000	0.307	0.307
Yaw	0.000	0.081	0.081

BPM

Value	Nominal	Actual	Deviation
US X	0.000	-0.032	-0.032
US Y	0.000	0.041	0.041
DS X	0.000	0.013	0.013
DS Y	0.000	0.002	0.002
Roll	0.000	0.712	0.712
BPM-QUAD	128.120	128.102	-0.018

Phase Shifter Chamber

Value	Nominal	Actual	Deviation
US X	0.000	0.006	0.006
US Y	0.000	0.096	0.096
DS X	0.000	-0.090	-0.090
DS Y	0.000	0.071	0.071

Dimensions in MM, Angles in Milliradians



NATIONAL ACCELERATOR LABORATORY
METROLOGY

HGVPU - Chamber Profile and Interspace Components

Installed Quad S/N: 0747

S/N	: HXU 031
Date	: 13-MAR-2020
Data Set	: 0001
Run	: RUN 1
Cam Pos.	: B