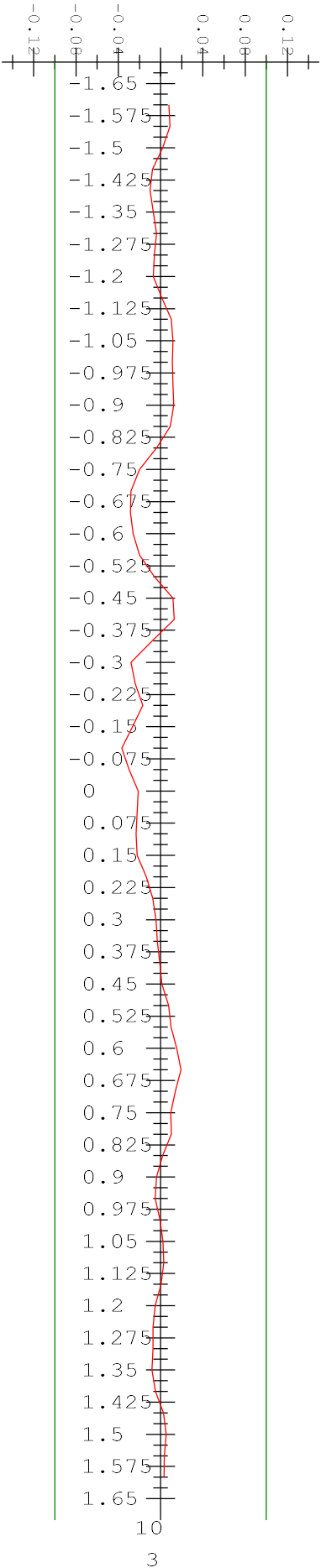


Vacuum Chamber Centerline Profile to Magnetic Axis X Centerline, Green line = +/- .100 Tol.

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           |