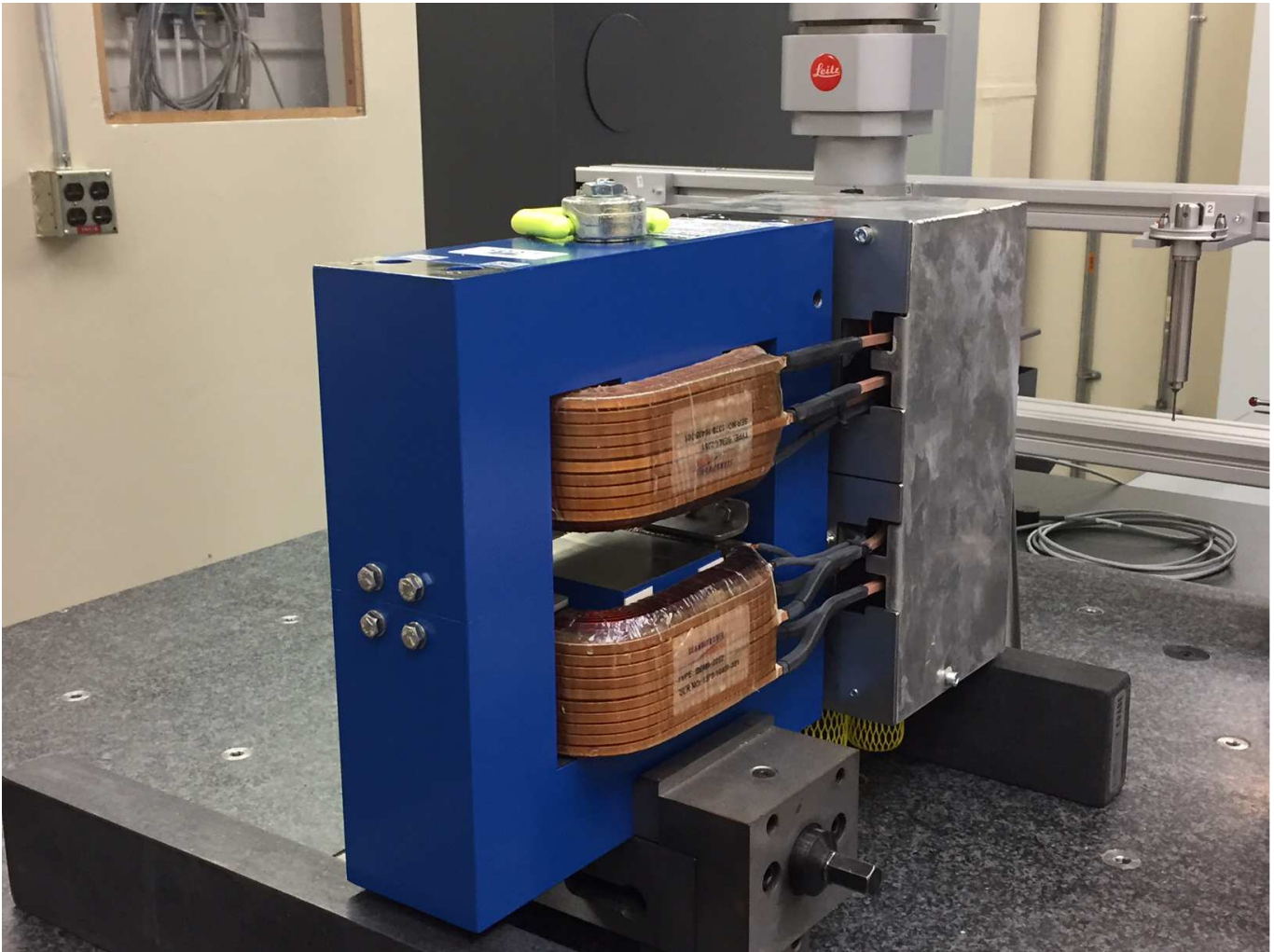


## LCLS II Magnet Fiducialization Report Injector Laser Heater Chicane 5D3.9 Dipole



Inspector : K. Caban  
Engineer : J. Amann  
Drawing No. : SA-380-331-12  
Barcode # : 4518  
Mfg. S/N : 16082-4

## **Coordinate System Setup**

### **Spatial Alignment**

Symmetry Plane between 2 Pole surfaces

### **Planar Alignment**

Symmetry Plane between the side planes of (2X) Poles

### **Coordinate Origins**

X Origin - Symmetry Plane between poles

Y Origin - Symmetry Plane between the side planes of (2X) Poles

Z Origin - Symmetry plane between Up Stream and Down Stream end surfaces

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## Tooling Ball Locations



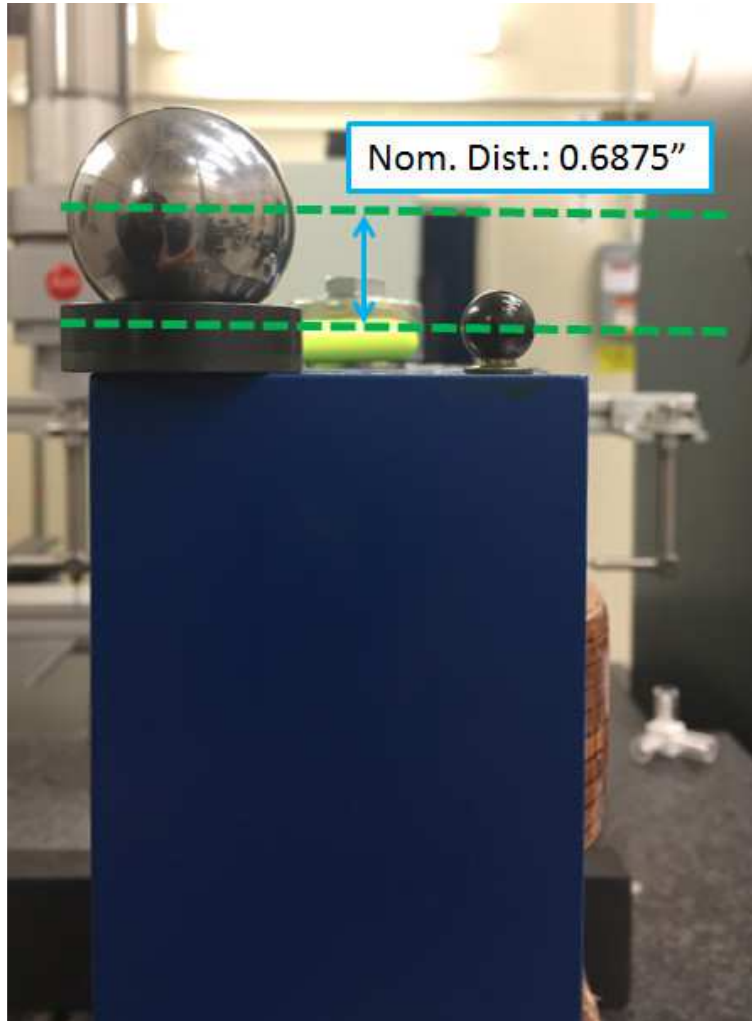
Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	5.1940	6.5171	-1.0633
TB 2	5.1955	6.5186	1.0621
TB 3	-5.1935	6.5233	1.0589
TB 4	-5.1972	6.5201	-1.0675
TB A	5.1955	5.8311	-1.0656
TB B	5.1949	5.8310	1.0610
TB C	-5.1956	5.8334	1.0587
TB D	-5.1948	5.8332	-1.0685

Tooling Ball Locations (1-4) are 1 inch above Tooling Ball Plane  
 Tooling Ball Locations (A-D) are 5/16 inch above Tooling Ball Plane  
 Dimensions in Inch

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# 1" Tooling Ball to 5/16" Tooling Ball Difference



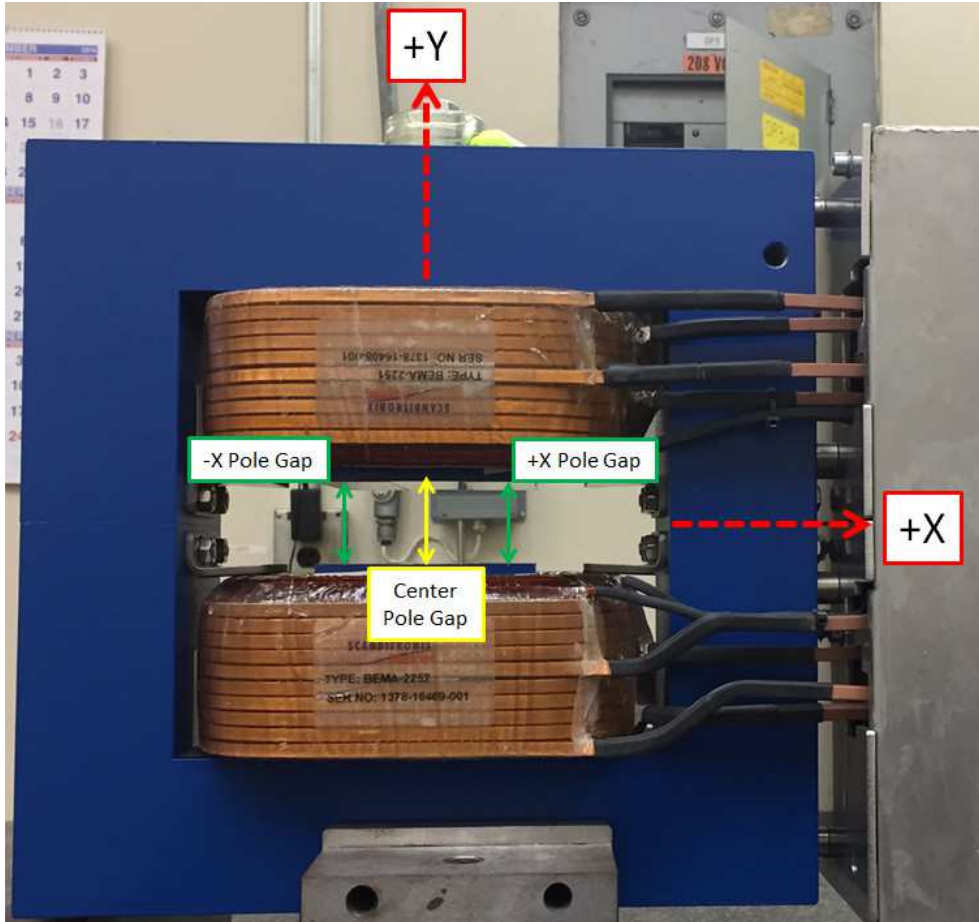
Tooling Ball	Nom Dist.	Actual Dist.	ACT-NOM
TB 1	0.6875 ± 0.001	0.686	-0.0015
TB 2	0.6875 ± 0.001	0.6876	0.0001
TB 3	0.6875 ± 0.001	0.6899	0.0024
TB 4	0.6875 ± 0.001	0.6869	-0.0007

Dimensions in Inch

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## Pole Gap Measurements



	U/S -X	U/S +X	D/S -X	D/S +X	U/S CENTER	D/S CENTER
GAP DIST.	1.18105	1.18106	1.18106	1.18104	1.19646	1.19639

Dimensions in Inch

**Barcode # : 4518**  
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