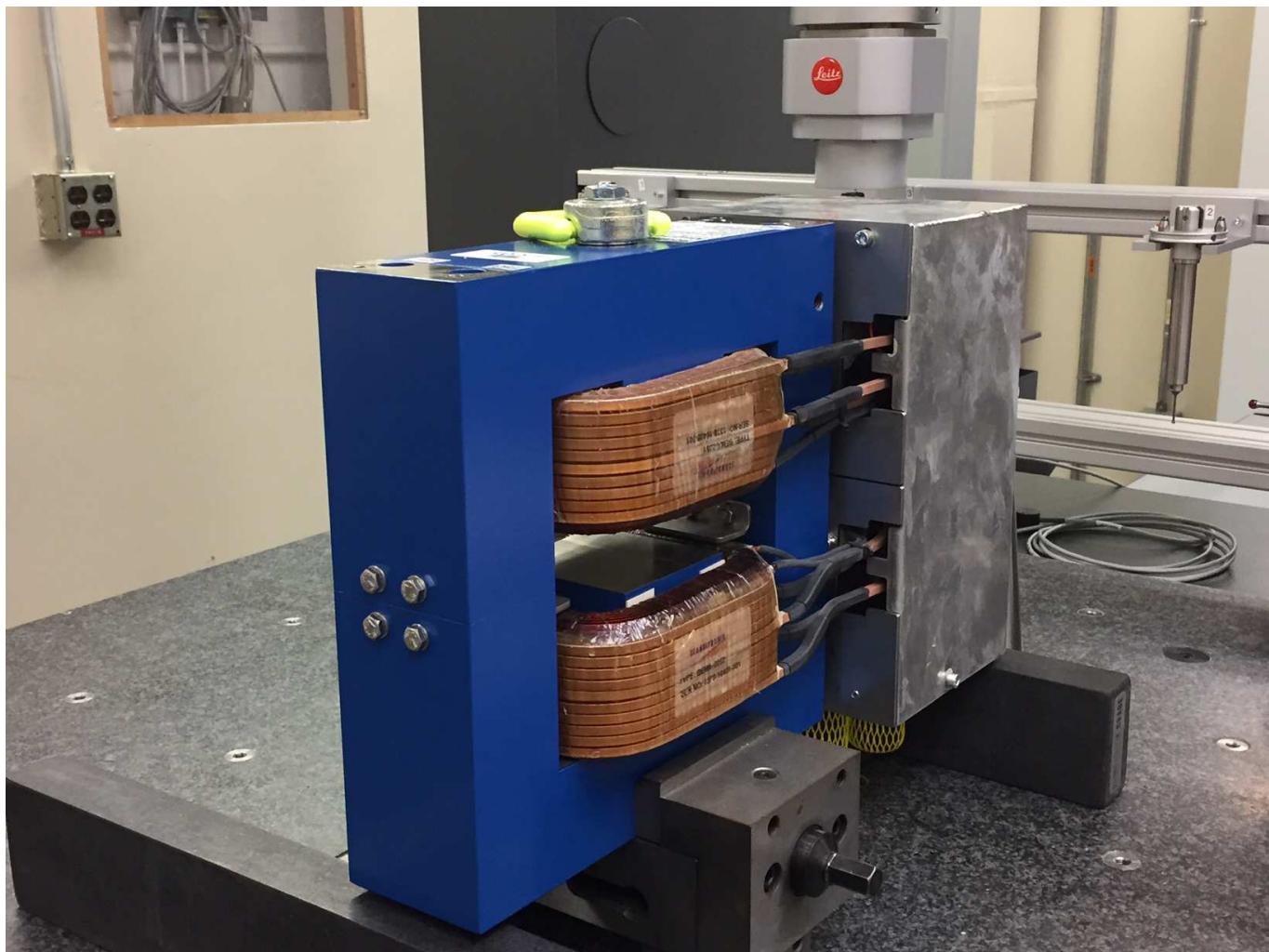


## **LCLS II Magnet Fiducialization Report Injector Laser Heater Chicane 5D3.9 Dipole**



Inspector : K. Caban  
Engineer : J. Amann  
Drawing No. : SA-380-331-12  
Barcode # : 4516  
Mfg. S/N : 16082-2

## 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

**Barcode # : 4516**

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## Tooling Ball Locations



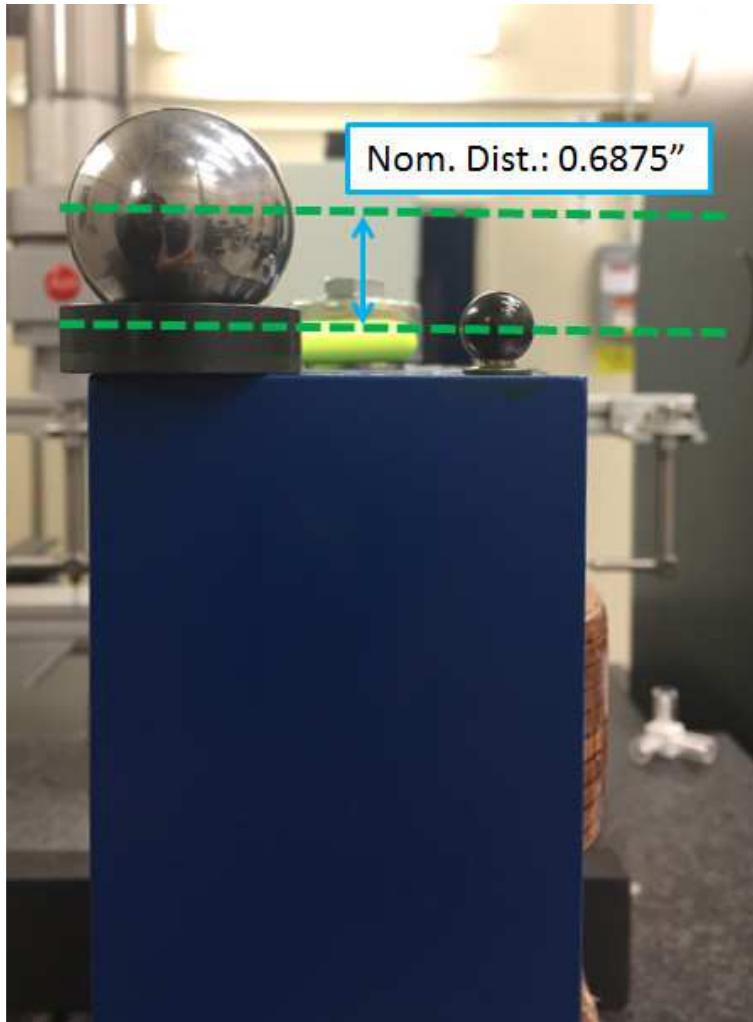
Tooling Ball	X Coord.	Y Coord.	Z Coord.
TB 1	5.1980	6.5164	-1.0644
TB 2	5.1988	6.5180	1.0644
TB 3	-5.1960	6.5182	1.0585
TB 4	-5.1952	6.5156	-1.0672
TB A	5.1972	5.8287	-1.0631
TB B	5.1976	5.8296	1.0658
TB C	-5.1980	5.8325	1.0599
TB D	-5.1963	5.8283	-1.0672

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



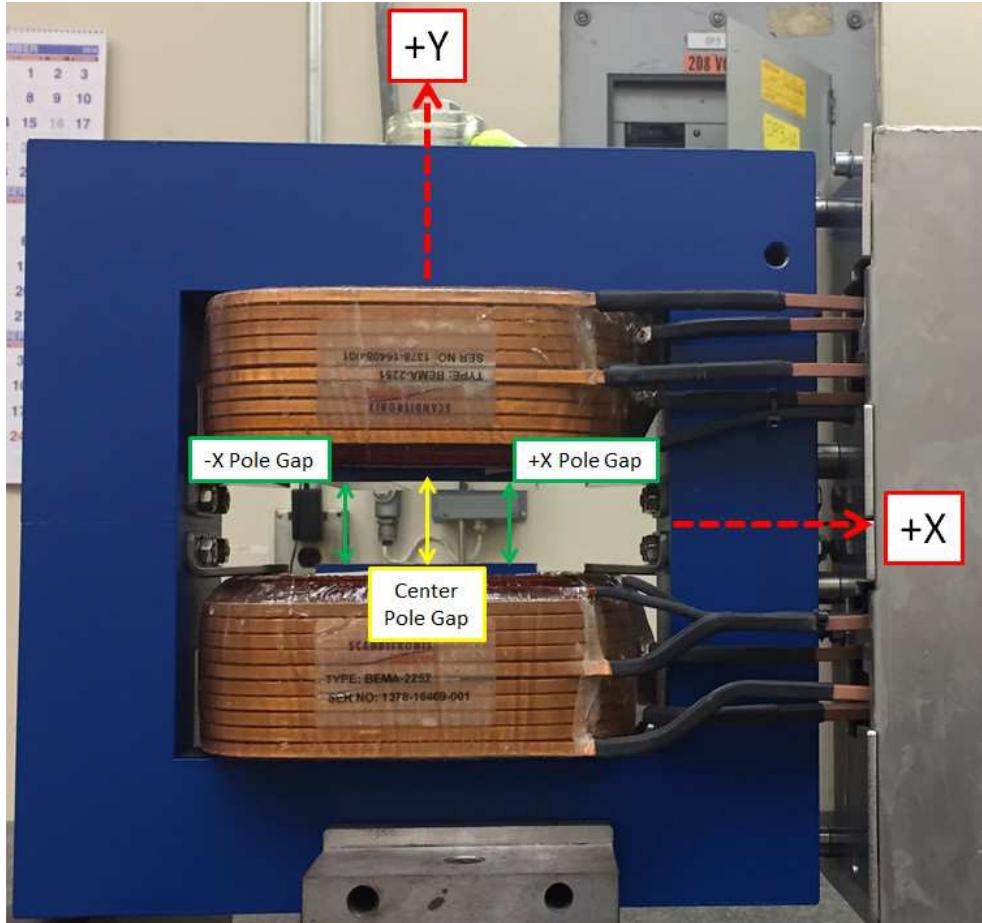
Tooling Ball	Nom Dist.	Actual Dist.	ACT-NOM
TB 1	$0.6875 \pm 0.001$	0.6877	0.0002
TB 2	$0.6875 \pm 0.001$	0.6884	0.0009
TB 3	$0.6875 \pm 0.001$	0.6858	-0.0017
TB 4	$0.6875 \pm 0.001$	0.6873	-0.0002

Dimensions in Inch

**Barcode # : 4516**

**Mfg. S/N : 16082-2**

## Pole Gap Measurements



	U/S -X	U/S +X	D/S -X	D/S +X	U/S CENTER	D/S CENTER
GAP DIST.	1.1814	1.18138	1.18148	1.18159	1.19673	1.19683

Dimensions in Inch

**Barcode # : 4516**  
**MFG S/N: 16082-2**