



# Jefferson Lab Alignment Group

## Data Transmittal

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**DATE:** 03 Aug 2018

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**Checked:**

**# :** L1874

**DETAILS:**

M:\align\DATA\Step2B\INJ\2D LINE\180727A

Below are the results of the Injector and 2D line as-found surveys. All positions are in a beam following coordinate system. The as-set location of the cathode defines the beam axis for the Injector components. The as-set location of MDL0L02 rotated 30 degrees defines the beam axis for the 2D line. Z locations for the Injector BPM's and solenoid are relative to the as-set locations of the cathode centerline. Z locations for the 2D BPM are relative to the centerline of MDL0L02 rotated 30 degrees. BPM locations are defined by the average of the upstream and downstream can body. The location of the solenoid is to the center. A positive X is to the beam left and a positive Y is up. A negative Pitch angle is rotated clockwise when viewed from the beam left. A negative Yaw angle is rotated clockwise when viewed from above. All values are in millimeters and degrees.

Injector BPM's and Solenoid As-Founds					
	X	Y	Z	rX (pitch)	rY (yaw)
US BPM	-0.78	-0.60	534.6		
SOLENOID	-0.65	-0.20	880.0	-0.208	-0.011
DS BPM	0.06	-0.14	1200.1		
2D Line BPM					
	X	Y	Z		
2D BPM	1.12	-0.35	3181.9		