



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** A. Hofler

**DATE:** 08 Feb 2019

**FROM:** Chris Gould

**Checked:**

**# :** L1905

**DETAILS:**

Below are the results of the 2D line survey. Refer to ELOG #3642345 for the ideal positions of the harp wires when inserted into beam. Coordinates are provided in the CEBAF Mechanical and Beam Following System. For the BFS a +X is beam left, +Y is up and a +Z is downstream. Angles are in degrees.

STRAIGHT AHEAD BEAM, BEAM FOLLOING COORDINATE SYSTEM						
	X (mm)	Y(mm)	Z(mm)	Rx(Pitch)	Ry(Yaw)	Rz(Roll)
MDL0L02	3.93	-0.04	1.72	-0.0059	0.0195	-0.0111
CEBAF MECHANICAL COORDINATE SYSTEM						
	IDEAL			FOUND		
	X(Meters)	Y(Meters)	Z(Meters)	X(Meters)	Y(Meters)	Z(Meters)
MDL0L02	80.60000	100.00000	-243.25814	80.60393	99.99996	-243.25642
2D line (30deg.) , BEAM FOLLOING COORDINATE SYSTEM						
	X (mm)	Y(mm)	Z(mm)	Rx(Pitch)	Ry(Yaw)	Rz(Roll)
IHA2D00	-0.11	-0.15	1.65	0.012	-0.1906	-0.0523
IPM2D00	0.16	-0.02				
***Center of bpm is 165.5 mm upstream of IHA2D00						
***Calculated bpm position is midpoint of upstream and downstream flange						
CEBAF MECHANICAL COORDINATE SYSTEM						
	IDEAL			FOUND		
	X(Meters)	Y(Meters)	Z(Meters)	X(Meters)	Y(Meters)	Z(Meters)
IHA2D00	82.27500	100.00000	-240.35870	82.27573	99.99985	-240.35722