

Jefferson Lab Alignment Group

Data Transmittal

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DETAILS: Data: Step2B\HALLD\COMPCAL\181211A

Below are the results from the Hall D COMPCAL survey carried out on December 10, 2018. The location of COMPCAL was taken when the hall opened up (as-found); when the COMPCAL was placed into position (as-set); a final position survey (final); and the COMPCAL was moved/repositioned and surveyed (repeat).

The ideal and found coordinates are shown in meters relative to the CEBAF coordinate system. The beam following coordinates (bfs - millimeters) are also shown and are described as follows: Positive x is to the beam left from ideal beam looking downstream; negative y is the amount lower than beamline; negative z is amount upstream from ideal target. Positive yaw is the counter clockwise rotation about the Y axis; negative pitch is the clockwise rotation about the X axis (physics standard); positive roll is the clockwise rotation about the Z axis.

	Cebaf Coordinate Location [meters]			Beam Following [millimeters]			Angular Position [degrees]		
Position	X [m]	Y [m]	Z [m]	dX [mm]	dY [mm]	dZ [mm]	Yaw ^o	Pitch ^o	Roll ^o
Ideal	80.60000	104.70000	410.93959	-	1	-	0.00000	0.00000	0.00000
As-Found	80.59967	104.69975	410.93475	-0.33	-0.25	-4.84	0.05586	-0.01690	-0.07305
As-Set	80.59891	104.69957	410.93413	-1.09	-0.43	-5.46	0.02951	0.02435	0.00315
Final	80.60001	104.70002	410.93455	0.01	0.02	-5.04	0.03982	0.00888	-0.02235
Repeat	80.60000	104.70003	410.93459	0.00	0.03	-5.00	0.03839	0.01031	-0.02120