

Jefferson Lab Alignment Group

DATA TRANSMITTAL

TO: J. P. Chen, J. LeRose

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FROM: Jim Dahlberg

Checked: # : A674

DETAILS:

Below are the results of the Hall A compass and He3 target ladder alignment performed on May 24th and June 12th, 2001. The numbers shown for the target ladder represent the amount the survey target would have to move (in mm) to be in the ideal location. A negative X is a movement to the beam right, positive Y is up, and positive Z is downstream. The ideal beam line (compass) yaw angle from the North linac is 142.5 deg. Note that compass measurements #1,4, and 5 were preliminary shots.

Target (as found)	Del Z	Del X	Del Y
ATGLADE	0.31	-1.84	3.36
ATGLADF	-0.12	-1.73	3.19
ATGLADI	-0.10	-1.83	3.66
ATGLADJ	-0.43	-3.50	3.40

Target (as set)	Del Z	Del X	Del Y
ATGLADE	0.77	-0.29	0.78
ATGLADF	0.17	0.22	1.12
ATGLADI	-0.01	-0.16	1.26
ATGLADJ	-0.10	-0.59	1.24

Compass measurements

1) Droplight inside coils	142.7332
2) Removed light	142.6990
3) Reversed field	142.2369
4) Rotated compass 90 deg.	232.2503
5) Adjusted field, droplight inside coils	232.5597
6) Removed light	232.7285
7) Reversed field	232.6748

TARGET LADDER FRAME

Beam Direction

