



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Dunne

DATE: 12 Oct 2010

FROM: J. Dahlberg

Checked:

: C1332

DETAILS:

Data: Fiduc\HallC\Qweak\100927a

Below are the results from the Qweak hydrogen and optics target fiducializations. The hydrogen target fiducials have been updated. The optics target fiducials are unchanged from the previous run with the 5 targets below updated. The optics target is centered in X and Y on the average of the bottom center targets 0F1 through 0F5. Z is centered on the average of the upstream target surfaces from the previous run. A +X is to the beam left, a +Y is up, and a +Z is downstream. Values are in millimeters.

OPTICS TARGET

LOCATION	Z	X	Y
Slot T5 downstream face	357.55	0.06	196.88
Target T5 downstream face	346.47	-0.03	196.69
Slot T7 upstream face	-6.46	40.09	158.17
Target T7 upstream face	0.20	40.58	158.03
Slot T8 upstream face	-6.54	0.10	158.30
Target T8 upstream face	0.15	-0.30	158.51
Slot T9 upstream face	-6.64	-39.89	158.38
Target T9 upstream face	0.51	-39.82	158.04
Slot T16 upstream face	-6.29	39.86	58.66
Target T16 intersect of two edges upstream face.	0.41	39.17	58.39
Fiducial A	2.84	-103.56	-9.85
Fiducial B	2.57	-103.04	218.71
Fiducial C	307.39	-103.12	218.92
Fiducial D	307.67	-103.34	-9.67
Fiducial E	3.32	102.97	-10.40
Fiducial F	2.97	103.50	218.19
Fiducial G	307.80	103.28	218.65
Fiducial H	308.10	103.28	-9.98

HYDROGEN TARGET

LOCATION	Z	X	Y
Upstream flange where the cell window flange attaches.	-41.40	0.00	0.01
Downstream flange	324.56	-0.68	0.17
Downstream end of cone	323.02	0.00	0.00
Fiducial A	286.43	111.54	111.35
Fiducial B	-3.52	111.50	111.28
Fiducial C	-3.36	111.37	-111.51
Fiducial D	286.50	111.37	-111.52
Fiducial E	286.48	-111.27	111.57
Fiducial F	-3.30	-111.21	111.59
Fiducial G	-3.28	-111.51	-111.29
Fiducial H	286.59	-111.43	-111.34