



Jefferson Lab Alignment Group

Data Transmittal

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Checked: JW

: A1605

DETAILS:

Data: 2B\BSY\1C_12\150225A-B

Below are the results from the recent survey carried out on the Line A Compton Electron and Photon detector. The Electron detector point of reference is centered on the upstream detector and at the bottom of the sensor. Values below are based on the location at which the chicane beam would intersect this point. The Y values for the home position are based on the as-set measurements of the top support flange fiducial after installed in the beam line. Note that the as-set offset in Z of -2.75 mm upstream reduces the detector/beam Y offsets shown by 0.11 mm because of the 2.32 degree pitched beam line. Values are based on a right handed coordinate system in millimeters. A +X is to the beam left, +Y is up, and a -Z is upstream. A -yaw angle (in degrees), is clockwise looking from above, a +pitch is ccw looking from the beam right, and a -roll angle is ccw looking from upstream. A distance of 35.64 mm below straight ahead beam was used for the ideal chicane beam line. A distance of 222.38 mm was used for the photon line.

ELECTRON DETECTOR:

LOCATION	Z	X	Y	YAW	PITCH	ROLL
Lower Pos.	-2.75	0.81	8.31	-0.6067	2.1997	-0.3604
Lower Pos. Rep.			8.43			
Home Pos..			131.02			
Home Pos. Rep.			130.99			

PHOTON DETECTOR:

LOCATION	Z	X	Y
Proton Det. Upstream 4 pin Avg.	-35.08	0.90	0.02
Dnst end circle		2.91	0.38