



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** J. P. Chen, J. LeRose, D. Higinbotham

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**FROM:** J. Dahlberg

**Checked:**

**# :** A1219

**DETAILS:**

Data: Step2b\HallA\BigBite\_Detector\090206a, 090206b

Below are the results from the surveys performed on the BigBite detector stack at 30° and 45°. The coordinates (in millimeters) are based on the ideal Hall A target center and straight ahead beam. A +X is to the beam left, a +Z is downstream, and a +Y is up. The corner points on the detectors are to the upstream of the detector frames, derived from fiducial data. Accuracy is estimated to be around 1mm due to deformation of the detector stack as noted in DT# A1191.

**30 °**

**DETECTOR CENTERS**

LOC.	Z	X	Y
1CL	2395.3	-1357.9	68.0
2CL	2507.0	-1421.8	80.5
3CL	3099.6	-1763.4	218.7

**DETECTOR CORNERS**

LOC.	Z	X	Y
1TOPBR	2055.4	-1628.9	953.0
1TOPBL	2459.6	-923.9	950.9
1BOTBR	2330.8	-1791.9	-814.6
1BOTBL	2735.2	-1086.8	-817.2
2TOPBR	2070.3	-1749.1	1272.2
2TOPBL	2573.6	-874.2	1269.7
2BOTBR	2440.1	-1970.0	-1108.7
2BOTBL	2944.1	-1093.9	-1111.1
3TOPBR	2662.9	-2090.2	1409.6
3TOPBL	3165.1	-1214.5	1408.5
3BOTBR	3034.1	-2312.4	-971.0
3BOTBL	3536.4	-1436.5	-972.1

**DETECTOR FIDUCIALS**

LOC.	Z	X	Y
E	1952.3	-2166.7	1428.7
F	3056.8	-2743.5	1645.6
G	3155.6	-2811.4	-1019.2
H	2356.3	-2404.4	-1158.3

**45°**

**DETECTOR CENTERS**

LOC.	Z	X	Y
1CL	1956.9	-1934.1	68.4
2CL	2048.2	-2025.0	81.0
3CL	2531.3	-2509.2	219.4

**DETECTOR CORNERS**

LOC.	Z	X	Y
1TOPBR	1557.2	-2108.0	952.8
1TOPBL	2131.1	-1532.5	951.7
1BOTBR	1782.7	-2335.8	-814.7
1BOTBL	2356.7	-1760.3	-816.2
2TOPBR	1540.0	-2228.1	1272.0
2TOPBL	2253.7	-1514.4	1270.8
2BOTBR	1842.1	-2536.0	-1108.9
2BOTBL	2556.9	-1821.3	-1110.0
3TOPBR	2023.3	-2711.9	1409.5
3TOPBL	2736.1	-1997.1	1409.7
3BOTBR	2326.4	-3021.3	-971.0
3BOTBL	3039.4	-2306.4	-970.8

**DETECTOR FIDUCIALS**

LOC.	Z	X	Y
E	1317.2	-2600.8	1428.0
F	2233.2	-3445.3	1645.2
G	2313.9	-3534.7	-1019.5
H	1648.2	-2933.6	-1158.9