Jefferson Lab Alignment Group

Data Transmittal

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DETAILS:

Data: Step2b\HallA\BigBite_Detector\080626A

Below are the results from the survey performed on the BigBite hadron detector package. The first set of coordinates (in millimeters) is based on the ideal Hall A target center and straight ahead beam. The second set is based on the nominal rotation angle of -48 degrees from the straight ahead beam and pitched 25 degrees. A +X is to the beam left, a +Z is downstream, and a +Y is up. The coordinate for each fiducial point is relative to the center of the survey target placed in each fiducial block. The survey target is 7.9 mm in height (standard center of tooling ball). The points on the detectors are to corner points on the detector frame. The perpendicular distance between the downstream faces of detector C1 and C2 is 764.03 mm. Note that the detector coordinates are derived from fiducial locations surveyed on March 31st 2008 (DT#1164). The detector package may not have been in the final running position at that time.

FID / DET POINT	Z	X	Y
HABBDTA	1747.6	-3387.1	-181.4
HABBDTB	2685.3	-2717.4	-182.8
HABBDTC	2157.0	-2454.6	921.0
HABBDTD	1668.8	-2806.4	917.2
HABBDTE	1213.6	-2641.4	1759.9
HABBDTF	2149.7	-1971.7	1758.5
C1_BOTR	1167.5	-2315.3	-434.6
C1_BOTL	1826.3	-1839.3	-434.5
C1_TOPL	1368.1	-1204.9	1225.6
C1_TOPR	708.9	-1681.1	1225.5
C2_BOTR	1590.1	-3007.0	-363.6
C2_TOPR	987.7	-2170.0	1825.4
C2_TOPL	1777.8	-1605.0	1826.6
C2_BOTL	2380.2	-2441.9	-362.2

FID / DET POINT	Z	X	Y	ROTATED -48˚ PITCHED 25˚
HABBDTA	3264.5	-967.7	-1722.4	
HABBDTB	3381.4	177.3	-1778.4	
HABBDTC	3350.5	-39.5	-546.2	
HABBDTD	3289.8	-637.6	-522.0	
HABBDTE	3258.8	-865.6	422.2	
HABBDTF	3374.8	278.2	366.6	
C1_BOTR	2083.7	-681.6	-1451.2	
C1_BOTL	2162.7	126.5	-1487.9	
C1_TOPL	2159.1	210.5	345.5	
C1_TOPR	2080.0	-598.0	382.2	
C2_BOTR	2835.9	-830.4	-1723.6	
C2_TOPR	2831.9	-718.0	693.6	
C2_TOPL	2931.1	247.2	648.6	
C2_BOTL	2935.0	134.9	-1768.3	