

Jefferson Lab Alignment Group

Data Transmittal

FROM: Chris Curtis	Checked:	# : A1235	
TO: J.P. Chen, D. Higinbotham, G.Jin, J. LeRose		DATE: 03 Aug 2009	

<u>DETAILS:</u>

Data: AALIGN\Electron&sh\2009\E031709A, E041009A & E051209A

..\Hadron\\2009\H042309A & H051209A

Below are the results from the left and right spectrometer surveys carried out in March, April and May of this year. The table shows the angle of the central ray of the spectrometer (in degrees); the horizontal mis-pointing perpendicular to the spectrometer center-line (in mm, d is downstream); the vertical mis-pointing (in mm, +ve is up) and the corrected pointing angle if the spectrometer were moved to point exactly at the target. The last two columns give statistics for the transformation (std. dev. of fit (9par)) and the adjustment (std. dev. (3DD)).

The superharp girder components were measured in the April survey. The DX and DY values represent the difference in millimeters from the ideal position of each fiducial, except for the calorimeter which represents the centerline.

Spectrom.	Central Ray	H Misptg	V Misptg	Corrected Ptg	9par	3DD
E031709A (Left)	-44.985	1.01 u	-0.15	-45.008	0.127	1.31
E041009A (Left)	-16.994	1.64 u	+0.52	-17.005	0.117	1.47
E051209A (Left)	-14.491	1.61 u	+0.10	-14.502	0.141	2.33
H042309A (Right)	17.018	3.03 d	+0.67	16.998	0.132	1.39
H051209A (Right)	16.020	3.25 d	+0.44	15.998	0.129	1.63

		DX	DY
E041009A			
Superharps	SH1H01A	0.30	0.08
	SH1H01B	0.37	0.08
	SH1H01C	0.40	0.11
	SH1H02A	-0.24	-0.07
	SH1H02B	-0.17	-0.08
	SH1H02C	-0.20	-0.03
Cavity BPMs	BCM1H1B	0.28	-0.35
	BCM1H1C	0.28	-0.24
	BCM1H2A	-0.38	-0.21
	BCM1H2D	0.08	-0.27
Calorimeter	FY1H04	-0.07	-0.16