



Jefferson Lab Alignment Group

Data Transmittal

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Checked:

: A1102

DETAILS:

Below are results of the spectrometer pointings carried out on 22nd February, 2007. Also included are the coordinates of the three link points, and the four points on the new sieve slits. These coordinates are in millimeters relative to the Hall A target and beamline, with +Z along the beam, +X to the beam left, and +Y up. The horizontal offset from points X, Y, and Z to a line between the ideal target and the spectrometer Jack point is also shown.

===== RESULTS ===== E022207A (Left)

The central ray of the spectrometer is at -12.494 degrees.

It is missing the defined target center by 2.09 mm upstream, & -0.47 mm vertically (+ve is up).

If corrected by secondary alignment, the spectrometer will be at -12.508 degrees.

*.9PR : 0.121

*.3DD : 1.85

E022207A	Z (mm)	X (mm)	Y (mm)	Offset (mm)
JACK	8256.32	1831.64	-2.03	0.00
ESLITNA	937.65	266.64	93.16	**
ESLITNB	960.70	161.81	93.42	**
ESLITNC	960.14	161.24	-88.92	**
ESLITND	937.10	266.02	-89.18	**
ESPECTX	1224.67	2288.19	-2067.89	1968.64
ESPECTY	5600.71	2901.01	-1988.13	1619.14
ESPECTZ	5689.38	202.40	-1966.42	-1034.62

===== RESULTS ===== H022207A (Right)

The central ray of the spectrometer is at 12.525 degrees.

It is missing the defined target center by 2.47 mm downstream, & -0.38 mm vertically (+ve is up).

If corrected by secondary alignment, the spectrometer will be at 12.508 degrees.

*.9PR : 0.126

*.3DD : 1.44

H022207A	Z (mm)	X (mm)	Y (mm)	Offset (mm)
JACK	8255.13	-1831.37	-1.57	0.00
HSLITNA	988.23	-163.21	87.88	**
HSLITNB	964.91	-267.95	88.09	**
HSLITNC	964.87	-268.29	-94.26	**
HSLITND	988.23	-163.57	-94.45	**
HSPECTX	980.82	-2228.54	-2547.63	-1963.22
HSPECTY	5805.81	-2943.78	-2507.81	-1616.48
HSPECTZ	5710.00	-193.62	-2470.07	1047.65