



# Jefferson Lab Alignment Group

## Data Transmittal

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**Checked:**

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### DETAILS:

Below are the results of the recent measurements of as-found magnet locations in the CEBAF accelerator. In each of the regions (except for 2S) a sample of the most accessible magnets were measured, the total measured is listed in the first column. The max DX DY refers to the largest deviation recorded for individual fiducials. The other columns refer to the number of magnets where the average DX falls into the category. The tolerance for 2B is 0.28mm DX and DY.

All magnets in the 2S region were measured and aligned to 2B tolerance. All magnets in other regions found to be over 1mm from ideal were re-aligned. As-found data was not specifically measured for WA01, WA04, and WA05, so the results below were obtained during the 2B re-alignment. In the 1S region the DX is towards the wall not the aisle. Also in 1S, although no magnet was found to be over 1mm, no magnet was found to be within 2B tolerance either.

A spreadsheet with more detail is available.

	Measured	Max DX	Max DY	2B Tol.	< 0.5mm	0.5-1mm	1-2mm	2-3mm	> 3mm
<b>1S Region</b>	22	0.9	-0.5	0	16	6	0	0	0
<b>1R Region</b>	24	-0.8	-0.8	4	22	2	0	0	0
<b>2S Region</b>	43	-6.4	-2.4	10	30	3	5	2	3
<b>2R Region</b>	28	-4.9	-1.7	11	25	1	0	1	1
<b>3R Region</b>	18	-1.8	-1.0	6	14	2	2	0	0
<b>WA01</b>	NA	-11.0	NA	NA	NA	NA	NA	NA	1+
<b>WA02</b>	11	-6.3	-1.5	4	4	1	3	2	1
<b>WA03</b>	12	-3.1	-0.8	8	8	1	1	2	0
<b>WA04</b>	3	-10.4	-2.8	1	1	0	0	2	0
<b>WA05</b>	3	-7.6	-2.2	1	1	0	0	2	0
<b>WA13</b>	7	-1.6	-0.6	2	3	3	1	0	0
<b>WA15</b>	7	-3.4	-0.9	0	0	0	3	4	0
<b>EA07</b>	9	-0.9	-0.5	4	8	1	0	0	0
<b>EA08</b>	9	-0.7	-0.4	1	8	1	0	0	0
<b>EA14</b>	8	-0.6	-0.4	1	7	1	0	0	0