# Jefferson Lab Alignment Group Data Transmittal 

TO: Arne Freyberger, Omar Garza
DATE: Apr 15, 2005
FROM: C. J. Curtis $\quad$ Checked: $\quad$ \# L988
M:\Step2B\NLNC\NL27\050209a
M:IStep2B\NECR\NE21050214a

## DETAILS:

Below are the results of the recent surveys of beam position monitors at the end of the north linac, and north east spreader. These include the two newly installed test stand BPMs IPM1L27A located upstream of the QB1L28 girder, and IPM1S00A located upstream of the QB1S01 girder. Upstream and downstream positions have been calculated for each BPM. Locations in the accelerator coordinate system are given, together with deviations from ideal location in a right handed beam following system (+ve $X$ is beam left, $+v e ~ Y$ is up). The $Z$ coordinates are approximate since they represent where the data points were taken, not the ends of the can.

| Name | Approx. <br> $\mathbf{Z}(\mathbf{m})$ | $\mathbf{X ( m )}$ | $\mathbf{Y}(\mathbf{m})$ | $\mathbf{D X}(\mathbf{m m})$ | $\mathbf{D Y}(\mathbf{m m})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IPM1L27_U | 87.442 | 80.6005 | 100.0003 | 0.50 | 0.30 |
| IPM1L27_D | 87.608 | 80.6006 | 100.0003 | 0.63 | 0.27 |
| IPM1L27A_U | 88.985 | 80.6014 | 99.9985 | 1.36 | -1.52 |
| IPM1L27A_D | 89.176 | 80.6002 | 99.9990 | 0.22 | -1.04 |
|  |  |  |  |  |  |
| IPM1L28_U | 89.867 | 80.6005 | 100.0001 | 0.47 | 0.13 |
| IPM1L28_D | 90.021 | 80.6008 | 100.0002 | 0.78 | 0.15 |
| IPM1S00A_U | 96.426 | 80.5993 | 101.3333 | -0.70 | -0.03 |
| IPM1S00A_D | 96.557 | 80.5992 | 101.3332 | -0.81 | -0.10 |
| IPM1S01_U | 96.635 | 80.5987 | 101.3331 | -1.33 | -0.22 |
| IPM1S01_D | 96.759 | 80.5981 | 101.3328 | -1.87 | -0.56 |

