# sefferson LLalu <br> <br> Jefferson Lab Alignment Group <br> <br> Jefferson Lab Alignment Group Data Transmittal 

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Below are the results from the survey of MQD5D00 and MQD5D01 carried out on September $10^{\text {th }}$, 2014. The coordinates below are given in millimeters and degrees. A right-handed coordinate system was established with the origin at the intersection of the Main Beamline and the 5D line rotated 25 degrees about the vertical axis. $\mathrm{A}+\mathrm{X}$ is left, +Y is above, and $+Z$ is downstream from ideal. This is the same coordinate system used in transmittal L1669 referencing the Bubble Chamber survey. Rotation angles are given such that a positive pitch angle (about $X$ ) is counter clockwise looking from the beam right side, a positive roll angle (about $Z$ ) is clockwise looking downstream, and a positive yaw angle (about Y ) is clockwise looking from above.

|  | X | Y | $\mathbf{Z}$ |  | Pitch | Yaw |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- |
| Roll |  |  |  |  |  |  |
| MQD5D00 | -0.01 | -0.04 | 685.18 |  | $0.04^{\circ}$ | $-0.06^{\circ}$ |
| MQD5D01 | $-0.02^{\circ}$ |  |  |  |  |  |
|  | -0.14 | -0.07 | 2082.33 |  | $0.06^{\circ}$ | $-0.01^{\circ}$ |
| $0.01^{\circ}$ |  |  |  |  |  |  |

