



# Jefferson Lab Alignment Group

## Data Transmittal

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**DATE:** 08 Apr 2010

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**Checked:**

**# :** A1279r

**DETAILS:**

Data: 2A\HallA\PREX\100127a  
 2B\HallA\PREX\100315a  
 Aalign\Electron..\E031710a

Below are the results from the surveys of the Q1 bore collimators, septum magnet and superharps for the PREX experiment. The Z, X, Y coordinates for the Q1 bore collimators and ideal septum location are given in millimeters in a beam following system based on the ideal target location. The deltas from the ideal location (in mm) are shown for the septum and also for the superharps, BCM and Faraday cup. Positive Z is downstream, positive X to the beam left, and positive Y is up. Positive pitch is counter-clockwise from beam-right; positive yaw is counter-clockwise from above; and positive roll is counter-clockwise from downstream. Angles are in degrees.

	<b>Z</b>	<b>X</b>	<b>Y</b>	<b>Pitch</b>
Q1 COL L	2395.97	298.47	-0.29	-0.110
Q1 COL R	2396.83	-297.49	-0.24	0.149
Septum ideal	1753.80	0.00	0.00	

	<b>DZ</b>	<b>DX</b>	<b>DY</b>	<b>Pitch</b>	<b>Yaw</b>	<b>Roll</b>
PREX septum	-0.70	0.16	0.16	-0.069	-.0038	0.054

	<b>DX</b>	<b>DY</b>
<b>Superharps</b>		
SH1H01A	0.16	0.03
SH1H01B	0.19	0.01
SH1H01C	0.28	0.07
SH1H02A	-0.20	-0.05
SH1H02B	-0.15	-0.05
SH1H02C	-0.15	-0.01
<b>Cavity BPM</b>		
BCM1H1B	0.24	-0.30
BCM1H1C	0.37	-0.23
BCM1H2A	-0.21	-0.33
BCM1H2D	0.17	-0.35
FY1H04	-0.07	-0.25