# - 3e, <br> <br> Jefferson Lab Alignment Group <br> <br> Jefferson Lab Alignment Group Data Transmittal 

TO: S. Stepanyan, B. Miller
DATE: 14 Dec 2017
FROM: Kelly Tremblay
Checked: (seh)
\# : B1837
DETAILS:
data: step2b\hallb\fwd_tag_hodo\171107a
The forward tagger hodoscope was surveyed on November $6^{\text {th }}$, 2017. The results are shown below. A plane was formed on each surface ( 180 degree plane was not measured). A threaded rod was inserted as directed by Hall B staff and a prism was measured at the end of the rod for each plane. The prism point at the rod end was then projected to the corresponding calculated plane surface.

The table below shows the location of each planar point at the various plane angles. The origin is the 12 G design target location. A positive X is to the left from the design beamline (looking downstream); a positive $Y$ is vertical from the design beam; a positive $z$ is downstream along design beam. The vector1 column shows the distance from the point to design beamline. The vector column is the distance to the 'as-set' beamline of the torus magnet. Units are millimeters.

| Plane [deg] | $\mathrm{X}[\mathrm{mm}]$ | $\mathrm{Y}[\mathrm{mm}]$ | $\mathrm{Z}[\mathrm{mm}]$ | vector1 | vector2 |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 0 | -1.0 | 175.8 | 1776.7 | 175.8 | 175.4 |
| 60 | -151.1 | 85.8 | 1775.8 | 173.7 | 173.2 |
| 120 | -152.7 | -86.3 | 1776.4 | 175.4 | 175.3 |
| 240 | 150.4 | -87.5 | 1776.8 | 174.0 | 174.6 |
| 300 | 148.0 | 88.4 | 1776.7 | 172.4 | 172.5 |

