



Jefferson Lab Alignment Group

Data Transmittal

TO: D. Carman, B. Miller

DATE: 01/08/2018

FROM: Kelly Tremblay

Checked:

: B1844

DETAILS:

data : calcs\hallb\12g_fwdcar\dec2017_runCalcs & data\step2b\hallb\carriages\fwd\171201a

An as-found survey of the forward carriage pre-shower and electron calorimeters was carried out on December 1st, 2017.

The x,y,z coordinates are the calculated locations of each detector relative to each sector's coordinate system. That is, each sector's coordinate system is rotated about the beam line's Z axis so that the centerline of the detector is it's actual Z axis. The 0,0 x/z position is the middle of the z axis. For panel 1A and panel2, the Y coordinate is offset into the detector from the surface of the scintillator's 25.4mm. For panel 1B the Y offset is 30mm. The attached spreadsheet contains additional information and a sketch is attached showing the 'in' and 'out' locations as will be explained below.

The data in the first table below shows each sector's translation and rotation from the ideal location. The ideal location is based on the explanation above. Note that the carriage for December 2017 is approximately two inches (50.4 millimeters) downstream along beamline from design to avoid contact with the torus magnet.

