

Jefferson Lab Alignment Group

Data Transmittal

TO: J. Fischer, O. Pastor DATE: 24 Jan 2014

FROM: Kelly Tremblay Checked: #: B1539

DETAILS:

data: inspection\hallb\shielding plates\140108A

The shielding plates for the Hall B Torus magnet were measured January 14th, 2014. Listed below are the results for back panel B [ref dwg B00000-04-01-1224 revB]. The table's columns below are as follows:

Name – name for the circle / bolt hole measured referenced to the plot at the bottom

dVec – sum of the error found versus design

dRad – difference in the radius found versus design

dX – difference in X coordinate (design – found)

dY – difference in Y coordinate(design – found)

dZ – difference in height (design – found) for points on bent plane.

Units are millimeters. Bent section data follows the Sketch on final page.

Ideal	dVec	dRad	dX	dY	d ht
ci_bb1	0.15	-0.03	-0.01	0.15	
ci_bb2	0.15	-0.03	-0.02	0.15	
ci_bb3	0.14	-0.03	-0.04	0.14	
ci_bb4	0.11	-0.03	-0.06	0.10	
ci_bb5	0.11	-2.96	-0.08	0.08	
ci_bb6	0.11	-0.03	-0.08	0.08	
ci_bb7	0.08	-0.03	-0.07	0.04	
ci_bb8	0.08	-0.03	-0.08	0.02	
ci_bb9	0.12	-0.03	-0.10	0.06	
ci_bb10	0.16	-0.04	-0.01	0.16	
ci_bb11	5.19	-0.40	-0.03	-5.19	
ci_bb12	0.14	-0.03	-0.05	0.13	
ci_bb13	0.13	-0.03	-0.06	0.11	
ci_bb14	0.12	-0.03	-0.08	0.08	
ci_bb15	0.11	-0.03	-0.09	0.06	
ci_bb16	0.09	-0.03	-0.08	0.03	
ci_bb17	0.83	-0.04	-0.03	0.83	
ci_bb18	0.16	-0.03	-0.01	0.16	
ci_bb19	0.07	3.10	0.07	-0.01	
ci_bb20	0.08	3.11	0.08	0.01	
ci_bb21	0.09	3.10	-0.08	0.03	
ci_bb22	0.09	3.09	-0.08	-0.05	

ci_bb25	75.39	9.72	-65.04	-38.14	
ci_bb26	41.47	9.72	15.98	-38.27	
ci_bb27	0.10	2.10	-0.09	-0.05	4.22
ci_bb28	0.10	0.43	-0.10	0.00	2.93

The angle formed by the bent and main plane was found to be 59.545 degrees. The coordinates calculated from where the intersection of the two planes occured are:

Point	X[mm]	Y[mm]	
1	1765.28	0.00	
2	1609.75	388.09	

