



Jefferson Lab Alignment Group

Data Transmittal

TO: H. Egiyen, T. Whitlatch

DATE: 09 Jun 2017

FROM: Jacob Walker

Checked: CG

: D1795

DETAILS:

M:\align\DATA\Step2B\HallD\COLLIMATOR\170609A

Below are the results from the June 9, 2017 Hall D collimator alignment and repeatability survey. Repeatability checks of the home location were completed as well as repeatability checks of moving the 5mm and 3.4mm collimator holes into beam. All locations are reported in an ideal beamline coordinate system. +Y is above beam, +X is left of beam, and +Z is downstream of ideal collimator center. +Pitch is a clockwise rotation looking from right of beam. +Yaw is a counter-clockwise rotation looking down from above beam. +Roll is a clockwise rotation looking downstream from upstream of collimator.

LOCATION	X	Y	Z	PITCH	YAW	ROLL
5mm BL	-0.05	0.02	0.13	-0.0015	0.0077	-0.0095
5mm BL_RPT1	-0.06	0.06	0.14	0.0011	0.0052	0.0089
5mm BL_RPT2	-0.04	0.11	0.21	0.0020	0.0005	-0.0102
5mm HOME	115.39	4.83	-0.02	-0.0045	0.0087	-0.0271
5mm HOME_RPT1	115.39	4.83	-0.02	-0.0018	0.0086	-0.0240
5mm HOME_RPT2	115.39	4.83	-0.00	-0.0009	0.0037	-0.0274
3.4mm BL	101.63	-0.01	0.05	0.0091	0.0035	-0.0315
3.4mm BL_RPT1	101.63	0.01	0.04	0.0083	0.0066	-0.0262
3.4mm BL_RPT2	101.62	-0.00	0.05	0.0145	0.0076	-0.0293

X ENCODER

Y ENCODER

5mm at BL	-115.230275	4.72
3.4mm at BL	-13.759815	4.81