



Jefferson Lab Alignment Group

Data Transmittal

TO: S. Malace

DATE: 09/23/2022

FROM: Elena Balan

Checked: cg

: A2050

DETAILS:

M:\align\DATA\Step2B\BSY1C_12\220923A
M:\align\DATA\Step2A\HALLA\GE_n_22\220916A

The alignment group located the three bpm boxes and two superharps on the diagnostic girder upstream of the Hall A target on September 22, 2022, and the CuCollimator flange on 16th September, 2022.

Locations below are in a Beam Following System. In a BFS, a positive dx value is to the beam left looking downstream along beam from the ideal; a positive dy is higher vertically from ideal; dist. in this case is the distance from the Target Center. The distance between the target and BPM's should be considered approximate. Additionally, the deltas from ideal rotation angles are shown in degrees. A positive dYaw is counter clockwise about the +y axis; a negative pitch is clockwise about the +x axis; a positive roll is clockwise about the +z axis.

Component	BFS [millimeters]			Rotations [degrees]		
	dx [mm]	dy [mm]	Dist. [mm]	dYaw	dPitch	dRoll
MQK1H04	0.00	-0.08	-9025.28	0.00625	0.00659	0.02779
IPM1H04A	0.27	0.48	-8641			
IPM1H04B	-0.25	-0.90	-7628			
IHA1H04A	0.06	0.08	-7349.87			
IBC1H04B	0.07	-0.04	-6547.96			
IBC1H04C	-0.02	0.09	-5009.93			
IBC1H04D	-0.12	-0.15	-3512.47			
IPM1H04D	-0.47	-0.77	2572			
IHA1H04B	0.04	-0.09	-2220.67			
CuCOLIMATOR_FLG	0.53	0.12	-421.05			

