



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Grames, A. Holfer, D. Turner, Y. Wang

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FROM: Elena Balan

Checked: SEH

: L2081

DETAILS:

M:\align\DATA\Step2B\INJ\SAD_2023\230807A

Components downstream of the R28_2 gun were surveyed on 7th August, 2023. The results are in a beam-following coordinate system relative to the R28_2 gun; +X is left of the beam, +Y is above the beam, and +Z is downstream.

Component	CEBAF Coord.			Beam Following relative to R28_2		
	X[m]	Y[m]	Z[m]	Δx [mm]	Δy [mm]	Δz [mm]
IPM2I00	81.08506	99.99930	-262.72749	1.72	-1.12	291.89
IPM2I00A	81.08468	100.00036	-262.35586	1.33	-0.07	677.77
MFX2I01	80.85378	100.00065	-262.19042	-0.17	0.20	850.28
IPM2I01A	80.74183	100.09421	-261.77175	3.03	-0.13	1283.47

- **approximate** position of the R28_2 gun:

Component	Beam Following			Angles [deg.]		
	Δx [mm]	Δy [mm]	Δz [mm]	Yaw	Pitch	Roll
R28_2	0.46	-0.46	-8.87		0.1308	

- Positive pitch is a clockwise rotation looking from left, also approximately determined.