



Jefferson Lab Alignment Group

Data Transmittal

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Checked:

: A1947

DETAILS:

data : step2b\halla\prex2019\target\191023a

The CREX target was surveyed October 23rd, 2019. The results below show the location of the targets based on the ideal center of the CREX target. The resulting can location is also shown for reference. The targets were exercised in and out and the results are marked below.

The first two tables show the coordinates for the horizontal and forty five degree ladders. These coordinates are based at the CREX target center and are looking downstream. A positive dx value is to the beam left looking downstream along beam from the ideal; a positive dy is higher vertically from ideal; A positive dz is downstream from ideal.

The third table shows the reference information for the hall center (normal target), CREX target and the as-found beam following location of the can.

Horizontal Target Ladder				
target	dx[mm]	dy[mm]	dz[mm]	Comment
CA40	0.43	-2.49	-15.58	
CA48	0.28	-1.92	-15.53	
CarbonHole	0.42	-0.48	0.69	
CarbonHole**	0.46	-0.50	0.69	After ladder exercised in/out

45 Degree Target Ladder				
H2O	-0.43	0.24	0.93	
H2O_REP	-0.45	0.02	0.90	After ladder exercised in/out
CARBONHOLE_45_1	-1.42	-0.51	10.80	
CARBONHOLE_45_2	-1.45	-0.56	10.40	After ladder exercised in/out

	Ideal [m]			As- Found BFS [mm]			As-Found BFS rotations [deg]		
	X	Y	Z	x[mm]	y[mm]	z[mm]	dYaw	dPitch	dRoll
Hall A Center	-32.95843	100.02200	-393.03108						
CREX Target	-33.65924	100.02200	-392.11777						
CREX Can	-33.65924	100.02200	-392.11777	-0.33	-0.76	2.04	0.01279	-0.03151	0.07964