

Jefferson Lab Alignment Group

Data Transmittal

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DETAILS:

Data: Step2b\halla\target\2007\070926a Step2b\halla\TargetCan\070926a

Below are the results of the recent Hall A target survey. A +X is beam left from ideal target centerline, a +Y is above, and a +Z is downstream. A +pitch is counter clockwise looking from the beam right, a +yaw is ccw from above, and a +roll is cw looking from upstream. Values are in millimeters and degrees.

Note: A second survey of the target can while under vacuum revealed movements on the fiducial points of up to 0.80 mm. Therefore, the accuracy of the final positions listed below is estimated to be around 1 millimeter.

COMPONENT	Z	X	Υ	Yaw	Pitch	Roll
Racetrack tgt:						
Initial alignment	0.12	0.35	0.09	-0.05°	0.06°	0.02°
Repeat	0.10	0.14	0.00	-0.01°	0.07°	0.07°
L2 Target block (top):						
L2 Top cell CL	-0.40	0.86	0.04	-0.13°	0.03°	
L2 Bot. cell CL	-0.34	1.16	-0.34	-0.28°	-0.12°	
L3 Target block (bot):						
L3 Top cell CL	0.14	0.93	0.41	-0.56°	0.11°	
L3 Bot. cell CL	0.56	1.26	-0.17	-0.66°	-0.02°	
Top lower solid targets	:					
Dnst face top slot	0.26	0.21	-0.10	-51.78°	-0.06°	
Dnst face bot slot	0.33	0.27	-0.09	-51.78°	-0.06°	
Bot lower solid targets:						
Dnst face top slot	0.51	-2.05	0.04	48.56°	0.15°	
Dnst face bot slot	0.59	-2.12	-0.05	48.56°	0.15°	