

Jefferson Lab Alignment Group Data Transmittal

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DETAILS:

Below are the alignment results of the Hall C G0 components. The values are relative to ideal design location (in mm and deg), with a +X to the beam left, +Y above, and +Z downstream. A +pitch is cw looking from the beam right side, a +yaw is ccw looking from above, and a +roll is cw looking downstream. The X and Y position of the <u>target</u> is based on the alignment performed while looking down the beam centerline after the service module was installed. The Z value is based on the target location relative to the service module prior to installation and the as-set position of the service module. The location of the Ferris wheel (average octant assembly) prior to the last roll out along the Z-axis was -0.27 in X, +0.20 in Y, and -0.54 in Z from its current position. This may be used as an indicator for repeatability.

COMPONENT	Χ	Υ	Z	PITCH	YAW	ROLL
TARGET SMS	+0.56 +0.06	+0.50 -0.15	-7.66 -0.92	+0.01°	+0.01°	+0.01°
OCTANTS:						
0°(USA top)	+0.27	-0.26	+1.02	+0.01°	+0.01°	+0.01°
45°(French)	+0.62	-2.05	+1.11	-0.02°	+0.01°	+0.02°
90°(USA beam right)	-0.64	+0.97	+1.11	-0.01°	0.00°	0.00°
135°(French)	+0.22	-0.11	+1.14	0.00°	+0.01°	+0.02°
180°(USA bottom)	+0.27	+0.53	+1.05	+0.01°	+0.01°	0.00°
225°(French)	-0.49	-0.02	+1.16	+0.01°	+0.02°	-0.01°
270°(USA beam left)	+0.55	+0.72	+1.15	+0.02°	+0.01°	+0.01°
315°(French)	+0.49	-1.81	+1.24	+0.03°	+0.02°	-0.02°