



Jefferson Lab Alignment Group

Data Transmittal

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Checked: (jcd)

: C1295

DETAILS:

data: step2b\hallc\qweak\100624A

The three collimators downstream from the Qweak target were located June 24th, 2010. The ideal distance along beamline that the collimators centers (column PivotDist) are from the historical Hall C pivot were ascertained from a sketch by Paulo Medeiros.

Differences from the ideal positions are shown as dX/dY/dZ. A +dX value indicates the calculated center of the collimator is to the beam left of the ideal X coordinate; a +dY is above the ideal Y coordinate; a positive dZ indicates downstream from the ideal Z coordinate.

The dYaw/dPitch/dRoll values are the differences from the ideal values. A positive dYaw is rotated counterclockwise when looked from above; positive dPitch is rotated counterclockwise when looked towards the beam left from beam right; positive dRoll is clockwise about the beam.

The downstream collimator was located approximately. This collimator was not fiducialized by the alignment group and it's location is based off dimensions from plan 67503-00500.

Center	PivotDist	X ideal	Y ideal	Z ideal	dX	dY	dZ	dYaw°	dPitch°	dRoll°
Units	(cm)	(meters)			(millimeters)			(degrees)		
Up Stream	670.6	-128.7666	99.9883	-393.6922	-0.1	-0.6	-0.3	-0.0179	0.0249	0.0003
Defining	984.6	-129.9691	99.9883	-395.2583	-0.2	-0.4	-0.1	-0.0093	-0.0100	0.0037
Down Str.	990.1	-130.6442	99.9883	-396.1296	4.9	0.5	-18.7	.712	-1.407	-0.216