



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** Dave Gaskell, Yves Roblin

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**Checked:** (cjc)

**# :** A1554

**DETAILS:**

data: step2b\bsy\1c\_12\140305a

The beam position monitors in the Line A compton were surveyed March 5<sup>th</sup>, 2014. The results are shown below. The beamline elevation for IPM1P02A and IPM1P02B is 215.5 millimeters lower than the line A standard elevation of 100.0220 meters.

IPM1P03A BPM is on the pitched beamline between compton magnet MMC1P03 and MMC1P04. CASA's ideal values for entrance and exit for these magnets were used as the ideal beamline. [Note the beamline through the compton table was originally designed to be 218.2 mm below the main 1C line and was shifted to 215.5 mm from the main line.] By design the BPM 3A is not centered on the beamline [ ref. dwg. A00011-02-03-0000 rev E sheet 4 of 4]. The upstream end of BPM 3A is intended to be 4.2 mm above the beam centerline and the downstream end 12.9 mm above the beam centerline. The delta y values for 3A shown below are from the ideal beamline passing through the bpm and also the deltas to the flange centerlines.

A +dx is to the beam left, and +dy is up in the beam following system.

BPM	X[m]	Y[m]	Z[m]	dx [mm]	dy [mm]	dy flange [mm]
IPM1C02A	-53.8338	99.7961	-365.8273	1.0	-10.4	
IPM1C02B	-52.9563	99.7959	-366.9701	0.5	-10.6	
IPM1C03A US	-51.2719	99.8889	-369.1639	-0.4	10.9	6.7
IPM1C03A DS	-51.1654	99.8956	-369.301	-1.2	10.5	-2.4

IPM1C03A sketch

