



Jefferson Lab Alignment Group

Data Transmittal

TO: Steve Benson, Wes Moore

DATE: 27 Sep 2011

FROM: Kelly Tremblay

Checked: S.E.H.

: F1408

DETAILS:

data : step2a\fel\fel7\110923a

The FEL Ultraviolet wiggler magnet was aligned on September 23, 2011. At that time a precise level was set up and the tooling balls and height gauge pads were measured at the 31.8 millimeter gap setting. Below are the values which Steve Benson calculated, the measured surveyed values and the differences between the calculated and measured values.

Tooling ball locations for 31.8 mm gap (cm)							
	Calc. (cm)		measured Top (mm)	measured Bottom (mm)		top calc- meas (mm)	bot calc- meas (mm)
1A	-8.7554		87.63	-87.47		0.076	-0.084
2A	-8.7611		87.66	-87.54		0.049	-0.071
3A	-8.7643		87.65	-87.65		0.007	0.007
4A	-8.7555		87.47	-87.55		-0.085	-0.005
5A	-8.7520		87.45	-87.46		-0.070	-0.060
6A	-8.7515		87.51	-87.53		-0.005	0.015
Gauge block locations for 31.8 mm gap (cm)							
	Calc. (cm)		measured Top (mm)	measured Bottom (mm)		top calc- meas (mm)	bot calc- meas (mm)
1B	-7.5886		75.90	-75.80		0.014	-0.086
2B	-7.5924		75.98	-75.94		0.056	0.016
3B	-7.5844		75.88	-75.90		0.036	0.056
4B	-7.5886		75.92	-75.87		0.034	-0.016
5B	-7.5831		75.84	-75.84		0.009	0.009
6B	-7.5911		75.92	-75.98		0.009	0.069
7B	-7.5819		75.82	-75.90		0.001	0.081
8B	-7.5898		75.88	-75.96		-0.018	0.062