



# Jefferson Lab Alignment Group

## Data Transmittal

**TO:** S. Benson, D. Douglas

**DATE:** 31 Aug 2016

**FROM:** Kelly Tremblay

**Checked:** (tps)

**# :** F1728

**DETAILS:**

data: step2b\fel\fel4\160822a – 160726a,160719a,160720a,160721a

The Darklight experiment components were surveyed over various dates in late July and August. The as-found component centers are shown below. Note that the ideal yaw and pitch angles are not shown. They are 0.0000 degrees.

Component	Ideal Coordinates			Deltas Beam Following System			Ideal Roll	Delta Angles (deg)		
	X	Y	Z	dX[mm]	dY[mm]	dZ[mm]		dyaw	dpitch	droll
QX4F01	14.60000	105.00000	65.18963	0.04	0.03	-0.02	0.00	0.0054	0.0321	-0.0023
QX4F02	14.60000	105.00000	65.98963	-0.09	-0.02	-0.01	0.00	0.0181	0.0086	-0.0278
QX4F03	14.60000	105.00000	66.78963	0.07	0.01	0.00	0.00	0.0026	-0.0172	0.0275
QX4F03AS	14.60000	105.00000	67.48963	0.03	-0.01	0.02	-45.00	-0.0003	0.0043	0.0034
QX4F03BS	14.60000	105.00000	68.48963	-0.02	0.01	-0.14	-45.00	0.0052	-0.0032	0.0050
QX4F03CS	14.60000	105.00000	69.48963	0.15	-0.14	0.06	-45.00	-0.0415	0.0309	0.0475
QX4F03DS	14.60000	105.00000	70.48963	0.13	-0.03	-0.33	-45.00	-0.0115	-0.0123	0.0439
QX4F03ES	14.60000	105.00000	71.48963	0.05	-0.04	-0.34	-45.00	-0.0129	-0.0407	0.0147
QX4F04	14.60000	105.00000	72.18963	0.03	-0.04	-0.05	0.00	-0.0163	-0.0043	0.0000
QX4F05	14.60000	105.00000	72.98963	0.17	-0.02	0.01	0.00	0.0493	0.0063	0.0579
QX4F06	14.60000	105.00000	73.78963	0.14	-0.05	-0.12	0.00	0.0060	-0.0066	0.0255
Solenoid	14.60000	105.00000	75.86463	0.07	0.10	-0.07	0.00	-0.0123	-0.0037	-0.0086
QX4F07	14.60000	105.00000	78.55463	0.00	-0.01	-0.01	0.00	-0.0226	0.0000	0.0275
QX4F08	14.60000	105.00000	79.55463	0.11	-0.10	-0.22	0.00	-0.0080	-0.0301	0.0275
QX4F09	14.60000	105.00000	80.55463	0.09	-0.03	0.03	0.00	0.0103	0.0192	0.0209
QX4F09AS	14.60000	105.00000	81.25963	0.13	-0.02	-0.05	-45.00	0.0034	0.0072	0.0082
QX4F09BS	14.60000	105.00000	82.25963	0.10	-0.03	-0.03	-45.00	0.0118	-0.0160	0.0095
QX4F09CS	14.60000	105.00000	83.25963	-0.05	0.09	0.01	-45.00	-0.0097	0.0054	-0.0294
QX4F09DS	14.60000	105.00000	84.25963	0.15	-0.13	0.07	-45.00	0.0129	-0.0086	0.0459
QX4F09ES	14.60000	105.00000	85.25963	0.00	0.00	0.27	-45.00	0.0415	-0.0029	-0.0035
QX4F10	14.60000	105.00000	85.96463	-0.02	0.01	0.03	0.00	0.0069	0.0172	-0.0229
QX4F11	14.60000	105.00000	86.96463	-0.01	0.08	-0.02	0.00	0.0155	-0.0215	-0.0092
QX4F12	14.60000	105.00000	87.96463	0.02	0.01	-0.10	0.00	0.0249	-0.0172	0.0049