



Jefferson Lab Alignment Group

Data Transmittal

TO: D. Carman, S. Taylor, B. Kross

DATE: 13 Feb 2007

FROM: J. Dahlberg

Checked: SH

: D1096

DETAILS:

Below are the results from the gluex prototype flatness measurements. A right handed coordinate system was established with the XZ origin centered on the g10 frame and the Y origin centered on the average kapton surface. A +Y is up and perpendicular to the kapton surface. Points labeled 1-149 were used to establish the XZ plane. Points 150-176 are local points sampled in a "good" area, 177-199 are in a "bad" area, and 200-276 are additional points derived from scanning the surface. The accuracy of the measurements is + - .04 millimeters. This does not allow for the dimpling effect from the weight of the survey target.

Loc	Z	X	Y	Loc	Z	X	Y	Loc	Z	X	Y
1	-393.76	259.31	-0.26	31	-212.55	-270.42	0.08	61	1.61	-285.33	0.14
2	-403.84	160.53	-0.09	32	-205.45	-339.91	-0.02	62	-2.61	-347.73	0.11
3	-412.31	59.29	-0.11	33	-206.27	-379.76	-0.17	63	0.37	-420.73	-0.16
4	-388.04	-18.84	-0.08	34	-118.53	-468.44	-0.52	64	2.98	-474.44	-0.62
5	-389.55	-60.53	-0.09	35	-108.87	-400.01	-0.13	65	59.17	-398.69	-0.05
6	-391.17	-121.67	-0.11	36	-103.66	-317.18	0.07	66	60.85	-319.69	0.10
7	-386.84	-184.05	-0.22	37	-98.58	-258.21	0.09	67	60.92	-258.21	0.12
8	-377.18	-242.02	-0.31	38	-101.17	-208.01	0.11	68	55.46	-194.46	0.12
9	-362.43	-300.95	-0.41	39	-98.70	-137.53	0.08	69	61.55	-135.92	0.11
10	-302.07	-318.05	-0.19	40	-98.06	-77.43	0.07	70	60.27	-80.57	0.12
11	-298.37	-239.91	-0.03	41	-101.02	-1.77	0.08	71	60.09	6.12	0.09
12	-292.18	-180.73	0.07	42	-99.24	58.35	0.07	72	60.79	68.04	0.11
13	-285.23	-118.55	0.06	43	-100.45	122.28	0.09	73	61.23	130.96	0.10
14	-286.98	-61.02	0.09	44	-100.69	190.90	0.07	74	60.03	207.05	0.10
15	-300.18	8.96	0.11	45	-101.10	249.19	0.12	75	60.97	268.53	0.09
16	-296.28	60.67	0.08	46	-100.96	313.23	0.13	76	60.17	330.51	0.05
17	-289.28	120.41	0.07	47	-100.98	402.51	0.04	77	60.26	409.11	-0.02
18	-299.30	236.53	0.12	48	-99.51	465.14	-0.17	78	60.75	462.67	-0.13
19	-300.89	301.17	0.06	49	-40.30	464.91	-0.09	79	120.54	453.27	-0.19
20	-294.78	357.66	-0.17	50	-10.38	398.25	0.06	80	118.87	400.27	-0.06
21	-232.74	409.42	-0.23	51	-4.09	340.78	0.09	81	111.16	319.86	0.02
22	-228.34	325.36	0.05	52	-4.71	269.37	0.10	82	118.88	249.99	0.05
23	-233.92	248.54	0.10	53	-1.97	200.37	0.10	83	113.87	204.78	0.08
24	-234.70	180.79	0.11	54	0.55	136.17	0.10	84	101.52	138.62	0.09
25	-235.36	91.59	0.10	55	-7.41	52.00	0.09	85	121.11	69.22	0.09
26	-230.07	23.91	0.09	56	-3.08	1.89	0.08	86	120.53	-1.78	0.09
27	-230.09	24.03	0.08	57	-7.06	-67.14	0.09	87	121.49	-58.63	0.11
28	-223.00	-48.22	0.06	58	-7.60	-119.97	0.09	88	120.10	-122.17	0.12
29	-214.61	-123.63	0.05	59	-3.63	-183.96	0.11	89	120.37	-187.37	0.12
30	-207.82	-208.13	0.09	60	0.06	-245.29	0.13	90	120.56	-247.53	0.15

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Loc	Z	X	Y	Loc	Z	X	Y	Loc	Z	X	Y
91	121.75	-303.87	0.12	131	321.70	241.78	-0.06	171	120.77	-172.89	0.06
92	120.73	-361.37	0.07	132	319.42	302.87	-0.17	172	114.83	-82.94	0.04
93	120.40	-421.68	-0.09	133	320.40	363.83	-0.37	173	112.59	-9.74	0.04
94	181.44	-421.43	-0.17	134	377.55	297.14	-0.27	174	106.81	87.49	0.04
95	178.33	-359.93	0.06	135	376.12	221.08	-0.12	175	101.06	156.08	0.03
96	185.31	-286.01	0.13	136	373.55	141.66	-0.01	176	41.27	376.90	-0.04
97	189.80	-219.08	0.15	137	370.84	85.58	0.09	177	-58.31	490.19	-0.24
98	200.24	-158.24	0.15	138	378.04	22.05	0.15	178	-59.93	473.74	-0.14
99	198.52	-88.35	0.13	139	384.87	-42.01	0.19	179	-61.83	455.15	-0.06
100	200.32	-0.18	0.11	140	379.61	-92.17	0.15	180	-65.58	435.84	0.02
101	200.58	65.25	0.09	141	381.23	-145.14	0.14	181	-66.86	400.87	0.10
102	200.71	124.11	0.08	142	381.19	-197.73	0.06	182	-70.23	375.05	0.13
103	201.29	191.86	0.04	143	398.07	-259.41	-0.34	183	-71.42	358.02	0.14
104	201.01	242.39	-0.01	144	459.07	-169.59	-0.44	184	-47.99	359.75	0.14
105	200.41	303.11	-0.07	145	455.98	-96.42	-0.15	185	-46.31	400.79	0.10
106	206.07	379.60	-0.16	146	456.48	-20.78	-0.09	186	-42.64	434.62	0.03
107	201.72	444.33	-0.33	147	458.48	47.78	-0.17	187	-42.11	458.70	-0.06
108	255.39	404.06	-0.32	148	459.38	102.17	-0.24	188	-41.09	482.22	-0.18
109	251.76	320.04	-0.15	149	455.48	160.82	-0.33	189	-6.48	483.55	-0.16
110	255.21	262.28	-0.08	150	-165.24	61.15	-0.06	190	-20.20	457.67	-0.05
111	255.71	206.34	-0.02	151	-159.91	17.62	-0.08	191	-19.94	428.22	0.04
112	256.93	139.60	0.06	152	-153.90	-63.08	-0.08	192	-18.93	403.99	0.08
113	260.70	80.20	0.11	153	-150.19	-135.96	-0.04	193	-17.07	376.67	0.10
114	260.04	10.74	0.09	154	-101.76	-112.47	0.02	194	-20.48	356.86	0.12
115	258.46	-55.72	0.16	155	-100.77	-37.49	0.02	195	8.98	362.65	0.10
116	260.38	-128.10	0.13	156	-104.38	20.26	-0.01	196	8.19	401.88	0.06
117	260.76	-179.22	0.17	157	-109.10	84.52	-0.04	197	7.25	424.28	0.03
118	260.60	-242.61	0.16	158	-57.57	101.04	-0.01	198	6.28	446.71	-0.03
119	259.67	-298.97	0.01	159	-51.03	29.94	-0.02	199	6.57	476.47	-0.13
120	259.91	-363.61	-0.13	160	-48.85	-50.99	0.02	201	-407.12	178.68	-0.16
121	255.92	-420.94	-0.45	161	-44.12	-130.14	0.02	202	-408.09	48.86	-0.09
122	319.68	-360.27	-0.39	162	12.48	-127.56	0.05	203	-400.16	-51.36	-0.12
123	319.41	-290.76	0.02	163	9.16	-20.84	0.02	204	-398.18	-151.70	-0.18
124	320.14	-199.67	0.20	164	1.53	93.49	0.04	205	-396.89	-225.61	-0.35
125	319.73	-141.34	0.21	165	-9.39	170.51	0.02	206	-312.42	-337.78	-0.34
126	320.57	-98.73	0.27	166	69.67	179.25	0.08	207	-317.34	-267.28	-0.10
127	321.02	-25.07	0.19	167	63.39	99.74	0.03	208	-320.28	-170.81	0.02
128	319.20	43.31	0.17	168	66.26	-15.61	0.05	209	-322.84	-65.81	0.08
129	319.51	102.52	0.09	169	63.87	-122.63	0.05	210	-323.04	48.49	0.12
130	324.06	166.49	0.00	170	59.34	-188.87	0.06	211	-327.05	159.28	0.14

