II. Observed and fitted gnd state 2-line combination differences
from JILA measured nu_3 and nu_4 bands and Miller et al.

Residual std dev: 0.0025

J'	Ka'	Kc'	J"	Ka"	Kc"	Obs	Calc	Obs-Calc	Weighting factors
nu_3:						[cm^-1]	[cm^-1]	[cm^-1]	
6	0	6	4	0	4	1.46496	1.46381	0.00006	0.5
6	1	6	4	1	4	1.44593	1.44460	0.00005	0.5
7	0	7	5	0	5	1.70281	1.70149	0.00006	0.5
7	1	7	5	1	5	1.69241	1.69164	0.00006	0.5
8	0	8	6	0	6	1.94271	1.94101	0.00007	0.5
8	1	7	6	1	5	2.21259	2.21677	0.00030	0.5
8	1	8	6	1	6	1.93902	1.93638	0.00007	0.5
8	2	7	6	2	4	2.14798	2.15405	0.00022	0.5
9	0	9	7	0	7	2.18392	2.18194	0.00008	0.5
9	1	8	7	1	6	2.44971	2.44883	0.00029	0.5
9	1	9	7	1	7	2.17984	2.17989	0.00008	0.5
9	2	8	7	2	6	2.40952	2.40987	0.00025	0.5
10	0	10	8	0	8	2.42726	2.42366	0.00010	0.5
10	1	9	8	1	7	2.68759	2.68177	0.00030	0.5
10	1	10	8	1	8	2.42463	2.42278	0.00010	0.5
10	2	9	8	2	7	2.66341	2.66025	0.00028	0.5
11	0	11	9	0	9	2.66709	2.66579	0.00012	1
11	1	10	9	1	8	2.91925	2.91795	0.00031	0.5
11	1	11	9	1	9	2.66709	2.66542	0.00012	1
11	2	10	9	2	8	2.90644	2.90702	0.00030	0.5
12	0	12	10	0	10	2.91062	2.90812	0.00014	1
12	1	11	10	1	9	3.15835	3.15688	0.00033	0.5
12	1	12	10	1	10	2.91062	2.90797	0.00014	1
12	2	11	10	2	9	3.14719	3.15165	0.00032	0.5
13	0	13	11	0	11	3.15222	3.15056	0.00016	1
13	1	12	11	1	10	3.39597	3.39754	0.00034	0.5
13	1	13	11	1	11	3.15222	3.15050	0.00016	1
13	2	12	11	2	10	3.39476	3.39514	0.00034	0.5
14	0	14	12	0	12	3.39457	3.39306	0.00019	1
14	1	13	12	1	11	3.63947	3.63915	0.00036	0.5
14	1	14	12	1	12	3.39457	3.39304	0.00019	1
14	2	13	12	2	11	3.63790	3.63809	0.00036	0.5

15	0	15	13	0	13	3.63734	3.63562	0.00022	1
15	1	14	13	1	12	3.87974	3.88128	0.00038	1
15	1	15	13	1	13	3.63734	3.63561	0.00022	1
15	2	14	13	2	12	3.87857	3.88082	0.00038	1
16	0	16	14	0	14	3.88008	3.87822	0.00025	1
16	1	15	14	1	13	4.12341	4.12368	0.00040	1
16	1	16	14	1	14	3.88008	3.87822	0.00025	1
16	2	15	14	2	13	4.12341	4.12349	0.00040	1
17	0	17	15	0	15	4.12204	4.12085	0.00029	1
17	1	16	15	1	14	4.36650	4.36624	0.00042	1
17	1	17	15	1	15	4.12204	4.12085	0.00029	1
17	2	16	15	2	14	4.36650	4.36616	0.00042	1
18	0	18	16	0	16	4.36468	4.36353	0.00032	1
18	1	18	16	1	16	4.36468	4.36352	0.00032	1
19	0	19	17	0	17	4.60710	4.60623	0.00036	1
19	1	19	17	1	17	4.60710	4.60623	0.00036	1
20	0	20	18	0	18	4.84885	4.84897	0.00041	1
20	1	20	18	1	18	4.84885	4.84897	0.00041	1
21	0	21	19	0	19	5.09112	5.09174	0.00045	1
21	1	21	19	1	19	5.09112	5.09174	0.00045	1
22	0	22	20	0	20	5.33030	5.33454	0.00050	1
22	1	22	20	1	20	5.33030	5.33454	0.00050	1
23	0	23	21	0	21	5.57387	5.57738	0.00055	1
23	1	23	21	1	21	5.57387	5.57738	0.00055	1
24	0	24	22	0	22	5.81908	5.82024	0.00061	1
24	1	24	22	1	22	5.81908	5.82024	0.00061	1
25	0	25	23	0	23	6.06202	6.06314	0.00067	1
25	1	25	23	1	23	6.06202	6.06314	0.00067	1
26	0	26	24	0	24	6.30444	6.30608	0.00073	1
26	1	26	24	1	24	6.30444	6.30608	0.00073	1

nu 4:

5	0	5	3	0	3	1.22900	1.22656	0.00006	1
5	1	5	3	1	3	1.19700	1.19387	0.00004	1
6	0	6	4	0	4	1.46630	1.46381	0.00006	1
6	1	5	4	1	3	1.97840	1.97795	0.00032	1
6	1	6	4	1	4	1.44640	1.44460	0.00005	1
7	0	7	5	0	5	1.70350	1.70149	0.00006	1
7	1	6	5	1	4	2.15180	2.15405	0.00022	1
7	1	7	5	1	5	1.69380	1.69164	0.00006	1
7	2	6	5	2	4	2.21700	2.21677	0.00030	1
8	0	8	6	0	6	1.94450	1.94101	0.00007	1
8	1	7	6	1	5	2.41190	2.40987	0.00025	1

8	1	8	6	1	6	1.93810	1.93638	0.00007	1
8	2	7	6	2	5	2.44830	2.44883	0.00029	1
9	0	9	7	0	7	2.18240	2.18194	0.00008	2
9	1	8	7	1	6	2.65890	2.66025	0.00028	1
9	1	9	7	1	7	2.18240	2.17989	0.00008	2
9	2	8	7	2	6	2.68220	2.68177	0.00030	1
10	0	10	8	0	8	2.42446	2.42366	0.00010	2
10	1	9	8	1	7	2.90435	2.90702	0.00030	1
10	1	10	8	1	8	2.42446	2.42278	0.00010	2
10	2	9	8	2	7	2.91840	2.91795	0.00031	1
11	0	11	9	0	9	2.66830	2.66579	0.00012	2
11	1	11	9	1	9	2.66830	2.66542	0.00012	2
12	0	12	10	0	10	2.91100	2.90812	0.00014	2
12	1	11	10	1	9	3.15460	3.15688	0.00033	2
12	1	12	10	1	10	2.91100	2.90797	0.00014	2
13	2	12	10	2	9	3.39230	3.39514	0.00034	2
13	0	13	11	0	11	3.15250	3.15056	0.00016	2
13	1	12	11	1	10	3.39909	3.39754	0.00034	2
13	1	13	11	1	11	3.15250	3.15050	0.00016	2
14	0	14	12	0	12	3.39481	3.39306	0.00019	2
14	1	13	12	1	11	3.63730	3.63915	0.00036	2
14	1	14	12	1	12	3.39481	3.39304	0.00019	2
14	2	13	12	2	10	3.63730	3.63809	0.00036	2
15	0	15	13	0	13	3.63960	3.63562	0.00022	2
15	1	14	13	1	12	3.87990	3.88128	0.00038	2
15	1	15	13	1	13	3.63960	3.63561	0.00022	2
15	2	14	13	2	12	3.87990	3.88082	0.00038	2
16	0	16	14	0	14	3.88020	3.87822	0.00025	2
16	1	16	14	1	14	3.88020	3.87822	0.00025	2

Miller et al.:

2	2	0	0	0	0	0.89472	0.89347	0.00037	0.4
3	3	1	0	1	0	1.61185	1.61369	0.00088	0.4
2	2	1	1	0	1	0.73721	0.73684	0.00039	0.4
2	2	1	1	0	1	0.73721	0.73684	0.00039	0.4
4	0	4	2	0	2	0.98555	0.98362	0.00007	0.4
3	2	2	2	0	2	0.89352	0.89374	0.00032	0.4
5	1	4	3	1	2	1.44580	1.44208	0.00029	0.4
5	1	5	3	1	3	1.19479	1.19387	0.00004	0.4
4	2	3	3	2	1	0.56873	0.57036	0.00026	0.4
4	2	3	3	2	1	0.57406	0.57036	0.00026	0.4
5	5	0	3	3	0	3.10258	3.09962	0.00248	0.4
4	3	2	3	3	0	0.61289	0.61259	0.00077	0.4

6	0	6	4	0	4	1.46805	1.46381	0.00006	0.4
5	3	3	4	1	3	1.51848	1.52297	0.00065	0.4
6	0	6	4	1	4	1.44640	1.44460	0.00005	0.4
6	2	5	4	2	3	1.62080	1.61950	0.00019	0.4
6	4	3	4	2	3	3.00905	3.00698	0.00128	0.4
6	1	2	4	2	4	2.26590	2.27055	0.00126	0.4
6	2	5	5	0	5	1.45611	1.45543	0.00019	0.4
6	2	5	5	2	3	0.71923	0.72177	0.00019	0.4
6	4	3	5	2	3	2.10796	2.10925	0.00128	0.4
7	2	6	5	2	4	1.89110	1.89101	0.00020	0.4
7	4	4	5	2	4	3.35048	3.34872	0.00109	0.4
8	0	8	6	0	6	1.94194	1.94101	0.00007	0.4
10	0	10	8	0	8	2.42564	2.42366	0.00010	0.4
10	1	10	8	1	8	2.42564	2.42278	0.00010	0.4