

IV. Observed and fitted positions of the **nu_3** excited state, assuming gnd state fitted to combination differences from JILA data (nu_3 and nu_4 bands) plus Miller's LIF data

Residual std
 dev: 0.0029

Excited state (v=1):			Gnd State (v=0):			Observed [cm ⁻¹]	Calculated [cm ⁻¹]	Obs-Calc [cm ⁻¹]	Weighting factors	
J'	Ka'	Kc'	J''	Ka''	Kc''					
P										
Branch										
	4	1	4	5	0	5	3072.5845	3072.5849	-0.0004	1
	4	0	4	5	1	5	3072.5475	3072.5503	-0.0028	1
	5	1	5	6	0	6	3072.4538	3072.4542	-0.0004	1
	5	0	5	6	1	6	3072.4364	3072.4377	-0.0013	1
	6	1	6	7	0	7	3072.3273	3072.3281	-0.0008	1
	6	2	5	7	1	6	3072.2664	3072.268	-0.0017	1
	6	0	6	7	1	7	3072.3197	3072.3208	-0.0011	1
	7	1	7	8	0	8	3072.2033	3072.2045	-0.0011	1
	7	2	6	8	1	7	3072.1171	3072.1145	0.0027	1
	7	0	7	8	1	8	3072.1992	3072.2013	-0.0021	1
	7	1	6	8	2	7	3072.0427	3072.0408	0.0019	1
	8	1	8	9	0	9	3072.0801	3072.0819	-0.0018	0.5
	8	2	7	9	1	8	3071.9739	3071.9742	-0.0003	0.5
	8	0	8	9	1	9	3072.0801	3072.0807	-0.0005	0.5
	8	1	7	9	2	8	3071.9347	3071.9368	-0.0021	0.5
	9	1	9	10	0	10	3071.9579	3071.9599	-0.002	0.5
	9	2	8	10	1	9	3071.8399	3071.8425	-0.0026	1
	9	0	9	10	1	10	3071.9579	3071.9594	-0.0015	0.5
	9	1	8	10	2	9	3071.8206	3071.8247	-0.0041	1
	10	1	10	11	0	11	3071.8367	3071.838	-0.0013	0.5
	10	2	9	11	1	10	3071.7131	3071.7156	-0.0024	1
	10	0	10	11	1	11	3071.8367	3071.8378	-0.0011	0.5
	10	1	9	11	2	10	3071.7072	3071.7075	-0.0002	1
	11	1	11	12	0	12	3071.7146	3071.7162	-0.0017	0.5
	11	2	10	12	1	11	3071.5867	3071.5911	-0.0043	1
	11	0	11	12	1	12	3071.7146	3071.7161	-0.0016	0.5
	11	1	10	12	2	11	3071.5834	3071.5875	-0.0041	1

12	1	12	13	0	13	3071.5921	3071.5944	-0.0024	0.5
12	2	11	13	1	12	3071.4635	3071.4677	-0.0042	0.5
12	0	12	13	1	13	3071.5921	3071.5944	-0.0023	0.5
12	1	11	13	2	12	3071.4635	3071.4662	-0.0027	0.5
13	1	13	14	0	14	3071.4673	3071.4726	-0.0053	0.5
13	2	12	14	1	13	3071.3393	3071.3449	-0.0056	0.5
13	0	13	14	1	14	3071.4673	3071.4726	-0.0053	0.5
13	1	12	14	2	13	3071.3393	3071.3442	-0.0049	0.5
14	1	14	15	0	15	3071.3471	3071.3507	-0.0036	0.5
14	2	13	15	1	14	3071.2204	3071.2222	-0.0018	0.5
14	0	14	15	1	15	3071.3471	3071.3507	-0.0036	0.5
14	1	13	15	2	14	3071.2204	3071.2219	-0.0015	0.5
15	1	15	16	0	16	3071.2285	3071.2289	-0.0003	0.5
15	0	15	16	1	16	3071.2285	3071.2289	-0.0003	0.5
16	1	16	17	0	17	3071.1026	3071.1069	-0.0043	0.5
16	0	16	17	1	17	3071.1026	3071.1069	-0.0043	0.5
17	1	17	18	0	18	3070.9809	3070.985	-0.0041	0.5
17	0	17	18	1	18	3070.9809	3070.985	-0.0041	0.5
18	1	18	19	0	19	3070.8578	3070.863	-0.0052	0.5
18	0	18	19	1	19	3070.8578	3070.863	-0.0052	0.5
19	1	19	20	0	20	3070.7369	3070.741	-0.0041	0.5
19	0	19	20	1	20	3070.7369	3070.741	-0.0041	0.5
20	1	20	21	0	21	3070.6149	3070.619	-0.004	0.5
20	0	20	21	1	21	3070.6149	3070.619	-0.004	0.5

R Branch:

5	1	5	4	0	4	3073.9187	3073.9173	0.0014	1
5	0	5	4	1	4	3073.8827	3073.8818	0.001	1
6	1	6	5	0	5	3074.0302	3074.0287	0.0014	1
6	0	6	5	1	5	3074.0123	3074.0116	0.0007	1
7	1	7	6	0	6	3074.146	3074.1443	0.0017	1
7	2	6	6	1	5	3074.3294	3074.3291	0.0003	1
7	0	7	6	1	6	3074.1382	3074.1366	0.0016	1
7	1	6	6	2	5	3074.1964	3074.1931	0.0034	1
8	1	8	7	0	7	3074.264	3074.2625	0.0016	1
8	2	7	7	1	6	3074.4236	3074.4205	0.0031	1
8	0	8	7	1	7	3074.26	3074.2591	0.0008	1
8	1	7	7	2	6	3074.3453	3074.3444	0.0008	1
9	1	9	8	0	8	3074.3851	3074.3818	0.0033	1
9	2	8	8	1	7	3074.5227	3074.5213	0.0014	1
9	0	9	8	1	8	3074.3825	3074.3804	0.002	1

9	1	8	8	2	7	3074.482	3074.4822	-0.0002	1
10	1	10	9	0	9	3074.5038	3074.5017	0.0021	0.5
10	2	9	9	1	8	3074.6323	3074.6301	0.0022	1
10	0	10	9	1	9	3074.5038	3074.5012	0.0026	0.5
10	1	9	9	2	8	3074.6115	3074.6112	0.0003	1
11	1	11	10	0	10	3074.6252	3074.6219	0.0033	0.5
11	2	10	10	1	9	3074.7475	3074.744	0.0035	1
11	0	11	10	1	10	3074.6252	3074.6216	0.0035	0.5
11	1	10	10	2	9	3074.7383	3074.7353	0.003	1
12	1	12	11	0	11	3074.7443	3074.7421	0.0022	0.5
12	2	11	11	1	10	3074.8608	3074.8608	0	1
12	0	12	11	1	11	3074.7443	3074.742	0.0023	0.5
12	1	11	11	2	10	3074.8577	3074.8569	0.0008	1
13	1	13	12	0	12	3074.8618	3074.8623	-0.0005	0.5
13	2	12	12	1	11	3074.9785	3074.979	-0.0005	1
13	0	13	12	1	12	3074.8618	3074.8623	-0.0004	0.5
13	1	12	12	2	11	3074.9767	3074.9773	-0.0006	1
14	1	14	13	0	13	3074.9845	3074.9825	0.0019	0.5
14	2	13	13	1	12	3075.0998	3075.0978	0.002	0.5
14	0	14	13	1	13	3074.9845	3074.9825	0.0019	0.5
14	1	13	13	2	12	3075.0998	3075.0971	0.0028	0.5
16	1	16	15	0	15	3075.2248	3075.2229	0.0019	0.5
16	2	15	15	1	14	3075.3348	3075.3362	-0.0014	0.5
16	0	16	15	1	15	3075.2248	3075.2229	0.0019	0.5
16	1	15	15	2	14	3075.3348	3075.3361	-0.0013	0.5
17	1	17	16	0	16	3075.3457	3075.3431	0.0027	0.5
17	2	16	16	1	15	3075.4534	3075.4555	-0.0021	0.5
17	0	17	16	1	16	3075.3457	3075.3431	0.0027	0.5
17	1	16	16	2	15	3075.4534	3075.4555	-0.002	0.5
18	1	18	17	0	17	3075.4647	3075.4632	0.0015	0.5
18	2	17	17	1	16	3075.5816	3075.5748	0.0068	0.5
18	0	18	17	1	17	3075.4647	3075.4632	0.0015	0.5
18	1	17	17	2	16	3075.5816	3075.5748	0.0068	0.5
19	1	19	18	0	18	3075.5856	3075.5833	0.0024	0.5
19	2	18	18	1	17	3075.6974	3075.6941	0.0032	0.5
19	0	19	18	1	18	3075.5856	3075.5833	0.0024	0.5
19	1	18	18	2	17	3075.6974	3075.6941	0.0033	0.5
20	1	20	19	0	19	3075.7061	3075.7033	0.0027	0.5
20	2	19	19	1	18	3075.8143	3075.8134	0.0009	0.5
20	0	20	19	1	19	3075.7061	3075.7033	0.0027	0.5
20	1	19	19	2	18	3075.8143	3075.8134	0.0009	0.5

21	1	21	20	0	20	3075.8256	3075.8233	0.0022	0.5
21	2	20	20	1	19	3075.9346	3075.9327	0.0019	0.5
21	0	21	20	1	20	3075.8256	3075.8233	0.0022	0.5
21	1	20	20	2	19	3075.9346	3075.9327	0.0019	0.5
22	1	22	21	0	21	3075.9437	3075.9433	0.0004	0.5
22	0	22	21	1	21	3075.9437	3075.9433	0.0004	0.5