EPAPS Table 1. Measured $^{23}Na^{39}K$ $4^3\Pi_{\Omega=0}$ and $4^3\Pi_{\Omega=2}$ ro-vibrational level energies, along with ground state and intermediate state levels and PUMP and PROBE laser frequencies for each $^{23}Na^{39}K$ $4^3\Pi_{\Omega=0}(v, J) \leftarrow 1(b)^3\Pi_{\Omega=0}(v_b, J_b) \leftarrow 1(X)^1\Sigma^+(v_X, J_X)$ and $^{23}Na^{39}K$ $4^3\Pi_{\Omega=2}(v, J) \leftarrow 1(b)^3\Pi_{\Omega=2}(v_b, J_b) \leftarrow 1(X)^1\Sigma^+(v_X, J_X)$ PFOODR transition studied in this work. Measured $^{23}Na^{39}K$ $4^3\Pi_{\Omega=0}(v, J)$ level energies are compared to those determined from the non-adiabatic coupling model and fitting of diabatic potentials and coupling matrix elements presented in this work.

$^{23}Na^{39}K$ $4^3\Pi_{\Omega=0}$ Data

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[4^3\Pi(v, J)]$ measured value (cm^{-1})	$E[4^3\Pi(v, J)]$ from calculations (cm^{-1})		E[measured] – E[calculated] (cm^{-1})
0	14	15, 15	0, 14	81.7995	13269.6738	12498.3389	25849.8122	25848.9804		0.8318
0	14	15, 15	0, 16	87.6831	13263.7902	12498.3453	25849.8186	25848.9804		0.8382
0	14	15, 15	0, 16	87.6831	13263.7902	12498.3493	25849.8226	25848.9804		0.8422
0	16	15, 15	0, 14	81.7995	13269.6738	12501.6669	25853.1402	25852.3015		0.8387
0	16	15, 15	0, 16	87.6831	13263.7902	12501.6780	25853.1513	25852.3015		0.8498
0	25	17, 26	0, 25	123.5164	13488.0442	12262.1227	25873.6833	25872.8281		0.8552
0	27	17, 26	0, 25	123.5164	13488.0442	12267.9233	25879.4839	25878.6606		0.8233
1	14	15, 15	0, 14	81.7995	13269.6738	12641.8998	25993.3731	25993.9976		-0.6245
1	14	15, 15	0, 16	87.6831	13263.7902	12641.8996	25993.3729	25993.9976		-0.6247
1	14	15, 15	0, 16	87.6831	13263.7902	12641.9070	25993.3803	25993.9976		-0.6173
1	16	15, 15	0, 14	81.7995	13269.6738	12645.7372	25997.2105	25997.8384		-0.6279
1	16	15, 15	0, 16	87.6831	13263.7902	12645.7348	25997.2081	25997.8384		-0.6303
1	16	15, 15	0, 16	87.6831	13263.7902	12645.7440	25997.2173	25997.8384		-0.6211
1	25	17, 24	0, 25	123.5164	13475.4716	12420.8614	26019.8494	26020.4453		-0.5959
1	25	17, 26	0, 25	123.5164	13488.0442	12408.2759	26019.8365	26020.4453		-0.6088
1	25	17, 26	0, 27	133.5534	13478.0078	12408.2799	26019.8411	26020.4453		-0.6042
1	27	17, 26	0, 25	123.5164	13488.0442	12413.5404	26025.1010	26025.5321	a	-0.4311
1	27	17, 26	0, 25	123.5164	13488.0442	12413.5402	26025.1008	26025.5321	a	-0.4313
1	27	17, 26	0, 25	123.5164	13488.0442	12413.5392	26025.0998	26025.5321	a	-0.4323
1	27	17, 26	0, 27	133.5534	13478.0078	12413.5407	26025.1019	26025.5321	a	-0.4302
1	27	17, 28	0, 27	133.5534	13487.1007	12404.4601	26025.1142	26025.5321	a	-0.4179
1	27	17, 28	0, 27	133.5534	13487.1007	12404.4606	26025.1147	26025.5321	a	-0.4174
1	44	18, 43	0, 44	249.0876	13570.9995	12280.2914	26100.3785	26100.6858		-0.3073
1	44	18, 45	0, 44	249.0876	13589.1225	12262.1708	26100.3809	26100.6858		-0.3049
1	44	18, 45	0, 44	249.0876	13589.1225	12262.1695	26100.3796	26100.6858		-0.3062
1	44	18, 45	0, 46	266.2096	13572.0030	12262.1698	26100.3824	26100.6858		-0.3034
1	44	18, 45	0, 46	266.2096	13572.0030	12262.1646	26100.3772	26100.6858		-0.3086
1	44	18, 45	0, 46	266.2096	13572.0030	12262.1683	26100.3809	26100.6858		-0.3049
1	46	18, 45	0, 44	249.0876	13589.1225	12271.3343	26109.5444	26109.8047		-0.2603

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[4^3\Pi(v, J)]$ measured value (cm^{-1})	$E[4^3\Pi(v, J)]$ from calculations (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
1	46	18, 45	0, 46	266.2096	13572.0030	12271.3342	26109.5468	26109.8047	-0.2579
1	46	18, 45	0, 46	266.2096	13572.0030	12271.3320	26109.5446	26109.8047	-0.2601
1	46	18, 45	0, 46	266.2096	13572.0030	12271.3284	26109.5410	26109.8047	-0.2637
1	46	18, 47	0, 48	284.0685	13569.1915	12256.2752	26109.5352	26109.8047	-0.2695
2	14	15, 15	0, 14	81.7995	13269.6738	12769.1165	26120.5898	26120.8109	-0.2211
2	14	15, 15	0, 16	87.6831	13263.7902	12769.1211	26120.5944	26120.8109	-0.2165
2	14	15, 15	0, 16	87.6831	13263.7902	12769.1110	26120.5843	26120.8109	-0.2266
2	16	15, 15	0, 14	81.7995	13269.6738	12772.2650	26123.7383	26123.9542	-0.2159
2	16	15, 15	0, 16	87.6831	13263.7902	12772.2587	26123.7320	26123.9542	-0.2222
2	16	15, 15	0, 16	87.6831	13263.7902	12772.2690	26123.7423	26123.9542	-0.2119
2	25	17, 26	0, 25	123.5164	13488.0442	12532.4035	26143.9641	26143.6341	0.3300
2	27	17, 26	0, 25	123.5164	13488.0442	12537.5781	26149.1387	26149.2568	-0.1181
2	44	18, 43	0, 44	249.0876	13570.9995	12405.6152	26225.7023	26225.4253	0.2770
2	44	18, 45	0, 44	249.0876	13589.1225	12387.4901	26225.7002	26225.4253	0.2749
2	44	18, 45	0, 46	266.2096	13572.0030	12387.4911	26225.7037	26225.4253	0.2784
2	44	18, 45	0, 46	266.2096	13572.0030	12387.4905	26225.7031	26225.4253	0.2778
2	44	18, 45	0, 46	266.2096	13572.0030	12387.4973	26225.7099	26225.4253	0.2846
2	44	18, 45	0, 46	266.2096	13572.0030	12387.4919	26225.7045	26225.4253	0.2792
2	44	18, 45	0, 46	266.2096	13572.0030	12387.4923	26225.7049	26225.4253	0.2796
2	46	18, 45	0, 46	266.2096	13572.0030	12398.2051	26236.4177	26236.0968	0.3209
2	46	18, 45	0, 46	266.2096	13572.0030	12398.2061	26236.4187	26236.0968	0.3219
2	46	18, 45	0, 46	266.2096	13572.0030	12398.2054	26236.4180	26236.0968	0.3212
2	46	18, 45	0, 46	266.2096	13572.0030	12398.2055	26236.4181	26236.0968	0.3213
2	46	18, 45	0, 46	266.2096	13572.0030	12398.2043	26236.4169	26236.0968	0.3201
3	14	15, 15	0, 14	81.7995	13269.6738	12897.2617	26248.7350	26248.6284	0.1066
3	14	15, 15	0, 16	87.6831	13263.7902	12897.2635	26248.7368	26248.6284	0.1084
3	14	15, 15	0, 16	87.6831	13263.7902	12897.2676	26248.7409	26248.6284	0.1125
3	16	15, 15	0, 14	81.7995	13269.6738	12900.4478	26251.9211	26251.8170	0.1041
3	16	15, 15	0, 16	87.6831	13263.7902	12900.4513	26251.9246	26251.8170	0.1076
3	16	15, 15	0, 16	87.6831	13263.7902	12900.4466	26251.9199	26251.8170	0.1029
3	16	15, 15	0, 16	87.6831	13263.7902	12900.4435	26251.9168	26251.8170	0.0998
3	16	15, 15	0, 16	87.6831	13263.7902	12900.4422	26251.9155	26251.8170	0.0985
3	25	17, 24	0, 25	123.5164	13475.4716	12671.2828	26270.2708	26270.2002	0.0706
3	25	17, 26	0, 25	123.5164	13488.0442	12658.6964	26270.2570	26270.2002	0.0568
3	25	17, 26	0, 25	123.5164	13488.0442	12658.7023	26270.2629	26270.2002	0.0627
3	25	17, 26	0, 27	133.5534	13478.0078	12658.6990	26270.2602	26270.2002	0.0600
3	25	17, 26	0, 27	133.5534	13478.0078	12658.7033	26270.2645	26270.2002	0.0643
3	27	17, 26	0, 25	123.5164	13488.0442	12663.5149	26275.0755	26275.0267	0.0488
3	27	17, 26	0, 25	123.5164	13488.0442	12663.5172	26275.0778	26275.0267	0.0511

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[4^3\Pi(v, J)]$ measured value (cm^{-1})	$E[4^3\Pi(v, J)]$ from calculations (cm^{-1})		E[measured] – E[calculated] (cm^{-1})
3	27	17, 26	0, 25	123.5164	13488.0442	12663.5118	26275.0724	26275.0267		0.0457
3	27	17, 26	0, 25	123.5164	13488.0442	12663.5128	26275.0734	26275.0267		0.0467
3	27	17, 26	0, 27	133.5534	13478.0078	12663.5194	26275.0806	26275.0267		0.0539
3	27	17, 26	0, 27	133.5534	13478.0078	12663.5142	26275.0754	26275.0267		0.0487
3	27	17, 28	0, 27	133.5534	13487.1007	12654.4402	26275.0943	26275.0267		0.0676
3	44	18, 43	0, 44	249.0876	13571.0010	12527.0481	26347.1367	26346.6421		0.4946
3	44	18, 45	0, 44	249.0876	13589.1225	12508.9225	26347.1326	26346.6421		0.4905
3	44	18, 45	0, 46	266.2096	13572.0030	12508.9194	26347.1320	26346.6421		0.4899
3	44	18, 45	0, 46	266.2096	13572.0030	12508.9228	26347.1354	26346.6421		0.4933
3	44	18, 45	1, 44	371.2133	13466.9993	12508.9221	26347.1347	26346.6421		0.4926
3	44	18, 45	1, 46	388.2518	13449.9608	12508.9228	26347.1354	26346.6421		0.4933
3	46	18, 45	0, 44	249.0876	13589.1225	12517.2066	26355.4167	26354.9101		0.5066
3	46	18, 45	0, 46	266.2096	13572.0030	12517.2065	26355.4191	26354.9101		0.5090
3	46	18, 45	0, 46	266.2096	13572.0030	12517.2064	26355.4190	26354.9101		0.5089
3	46	18, 45	0, 46	266.2096	13572.0030	12517.2125	26355.4251	26354.9101		0.5150
3	46	18, 45	1, 44	371.2133	13466.9993	12517.2089	26355.4215	26354.9101		0.5114
3	46	18, 45	1, 46	388.2518	13449.9608	12517.2086	26355.4212	26354.9101		0.5111
3	46	18, 47	0, 48	284.0685	13569.1915	12502.1603	26355.4203	26354.9101		0.5102
4	14	15, 15	0, 14	81.7995	13269.6738	13008.9301	26360.4034	26360.6258		-0.2224
4	14	15, 15	0, 16	87.6831	13263.7902	13008.9393	26360.4126	26360.6258		-0.2132
4	14	15, 15	0, 16	87.6831	13263.7902	13008.9341	26360.4074	26360.6258		-0.2184
4	16	15, 15	0, 14	81.7995	13269.6738	13012.7936	26364.2669	26364.4267		-0.1598
4	16	15, 15	0, 16	87.6831	13263.7902	13012.8037	26364.2770	26364.4267		-0.1497
4	16	15, 15	0, 16	87.6831	13263.7902	13012.7951	26364.2684	26364.4267		-0.1583
4	25	17, 24	0, 23	114.2325	13484.7517	12788.4313	26387.4155	26387.3575		0.0580
4	25	17, 26	0, 25	123.5164	13488.0442	12775.8575	26387.4181	26387.3575		0.0606
4	25	17, 26	0, 25	123.5164	13488.0442	12775.8552	26387.4158	26387.3575		0.0583
4	25	17, 26	0, 25	123.5164	13488.0442	12775.8564	26387.4170	26387.3575		0.0595
4	44	18, 43	0, 44	249.0876	13571.0010	12645.1930	26465.2816	26464.6681		0.6135
4	44	18, 45	0, 44	249.0876	13589.1225	12627.0698	26465.2799	26464.6681		0.6118
4	44	18, 45	0, 46	266.2096	13572.0030	12627.0662	26465.2788	26464.6681		0.6107
4	44	18, 45	0, 46	266.2096	13572.0030	12627.0734	26465.2860	26464.6681		0.6179
4	44	18, 45	1, 44	371.2133	13466.9993	12627.0679	26465.2805	26464.6681		0.6124
4	44	18, 45	1, 46	388.2518	13449.9608	12627.0678	26465.2804	26464.6681		0.6123
4	46	18, 45	0, 44	249.0876	13589.1225	12634.6474	26472.8575	26472.3311	b	0.5264
4	46	18, 45	0, 46	266.2096	13572.0030	12634.6428	26472.8554	26472.3311	b	0.5243
4	46	18, 45	0, 46	266.2096	13572.0030	12634.6452	26472.8578	26472.3311	b	0.5267
4	46	18, 45	0, 46	266.2096	13572.0030	12634.6512	26472.8638	26472.3311	b	0.5327
4	46	18, 45	1, 44	371.2133	13466.9993	12634.6435	26472.8561	26472.3311	b	0.5250

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[4^3\Pi(v, J)]$ measured value (cm^{-1})	$E[4^3\Pi(v, J)]$ from calculations (cm^{-1})		E[measured] – E[calculated] (cm^{-1})
4	46	18, 45	1, 46	388.2518	13449.9608	12634.6476	26472.8602	26472.3311	b	0.5291
4	46	18, 47	0, 48	284.0685	13569.1915	12619.5986	26472.8586	26472.3311	b	0.5275
5	14	15, 15	0, 14	81.7995	13269.6738	13119.5772	26471.0505	26471.0892	c	-0.0387
5	14	15, 15	0, 16	87.6831	13263.7902	13119.5812	26471.0545	26471.0892	c	-0.0347
5	14	15, 15	0, 16	87.6831	13263.7902	13119.5801	26471.0534	26471.0892	c	-0.0358
5	14	15, 15	0, 16	87.6831	13263.7902	13119.5888	26471.0621	26471.0892	c	-0.0271
5	16	15, 15	0, 14	81.7995	13269.6738	13121.9394	26473.4127	26473.4865		-0.0738
5	16	15, 15	0, 16	87.6831	13263.7902	13121.9423	26473.4156	26473.4865		-0.0709
5	16	15, 15	0, 16	87.6831	13263.7902	13121.9516	26473.4249	26473.4865		-0.0616
5	16	15, 15	0, 16	87.6831	13263.7902	13121.9415	26473.4148	26473.4865		-0.0717
5	25	17, 24	0, 23	114.2325	13484.7517	12893.2074	26492.1916	26492.5970		-0.4054
5	25	17, 26	0, 25	123.5164	13488.0442	12880.6330	26492.1936	26492.5970		-0.4034
5	25	17, 26	0, 25	123.5164	13488.0442	12880.6360	26492.1966	26492.5970		-0.4004
5	25	17, 26	0, 25	123.5164	13488.0442	12880.6334	26492.1940	26492.5970		-0.4030
5	27	17, 26	0, 25	123.5164	13488.0442	12886.8289	26498.3895	26498.7956		-0.4061
5	27	17, 26	0, 25	123.5164	13488.0442	12886.8301	26498.3907	26498.7956		-0.4049
5	27	17, 28	0, 27	133.5534	13487.1007	12877.7366	26498.3907	26498.7956		-0.4049
6	14	15, 15	0, 14	81.7995	13269.6738	13223.9227	26575.3960	26576.4362		-1.0402
6	14	15, 15	0, 16	87.6831	13263.7902	13223.9280	26575.4013	26576.4362		-1.0349
6	14	15, 15	0, 16	87.6831	13263.7902	13223.9376	26575.4109	26576.4362		-1.0253
6	16	15, 15	0, 14	81.7995	13269.6738	13226.2857	26577.7590	26578.8457		-1.0867
6	16	15, 15	0, 16	87.6831	13263.7902	13226.2896	26577.7629	26578.8457		-1.0828
6	16	15, 15	0, 16	87.6831	13263.7902	13226.2960	26577.7693	26578.8457		-1.0764
6	44	18, 43	0, 44	249.0876	13571.0010	12853.6244	26673.7130	26674.5231		-0.8101
6	44	18, 45	0, 44	249.0876	13589.1225	12835.4980	26673.7081	26674.5231		-0.8150
6	44	18, 45	0, 44	249.0876	13589.1225	12835.5031	26673.7132	26674.5231		-0.8099
6	44	18, 45	0, 46	266.2096	13572.0030	12835.4971	26673.7097	26674.5231		-0.8134
6	44	18, 45	0, 46	266.2096	13572.0030	12835.5030	26673.7156	26674.5231		-0.8075
6	44	18, 45	0, 46	266.2096	13572.0030	12835.5062	26673.7188	26674.5231		-0.8043
6	44	18, 45	0, 46	266.2096	13572.0030	12835.5079	26673.7205	26674.5231		-0.8026
6	44	18, 45	1, 44	371.2133	13466.9993	12835.4988	26673.7114	26674.5231		-0.8117
6	44	18, 45	1, 46	388.2518	13449.9608	12835.5008	26673.7134	26674.5231		-0.8097
7	25	17, 26	0, 25	123.5164	13488.0442	13094.2437	26705.8043			
7	25	17, 26	0, 27	133.5534	13478.0078	13094.2363	26705.7975			
7	27	17, 26	0, 25	123.5164	13488.0442	13097.5588	26709.1194			
7	27	17, 26	0, 25	123.5164	13488.0442	13097.5556	26709.1162			
7	27	17, 26	0, 27	133.5534	13478.0078	13097.5479	26709.1091			
7	44	18, 45	0, 46	266.2096	13572.0030	12936.1445	26774.3571			
7	46	18, 45	0, 46	266.2096	13572.0030	12943.6032	26781.8158			

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[4^3\Pi(v, J)]$ measured value (cm^{-1})	$E[4^3\Pi(v, J)]$ from calculations (cm^{-1})	E[measured] – E[calculated] (cm^{-1})
8	14	15, 15	0, 14	81.7995	13269.6738	13430.4686	26781.9419		
8	14	15, 15	0, 16	87.6831	13263.7902	13430.4750	26781.9483		
8	14	15, 15	0, 16	87.6831	13263.7902	13430.4725	26781.9458		
8	14	15, 15	0, 16	87.6831	13263.7902	13430.4768	26781.9501		
8	14	15, 15	0, 16	87.6831	13263.7902	13430.4832	26781.9565		
8	16	15, 15	0, 14	81.7995	13269.6738	13434.4011	26785.8744		
8	16	15, 15	0, 16	87.6831	13263.7902	13434.4150	26785.8883		
8	16	15, 15	0, 16	87.6831	13263.7902	13434.4079	26785.8812		

a) The experimental bound-free spectrum indicates that this level has predominantly $4^3\Pi$ character. However, the non-adiabatic coupling calculations assign slightly more $3^3\Pi$ character to this member of the mutually perturbing $3^3\Pi(v=37, J=27) \sim 4^3\Pi(v=1, J=27)$ levels.

b) The experimental bound-free spectrum indicates that this level has predominantly $4^3\Pi$ character. However, the non-adiabatic coupling calculations assign slightly more $3^3\Pi$ character to this member of the mutually perturbing $3^3\Pi(v=50, J=46) \sim 4^3\Pi(v=4, J=46)$ levels.

c) The experimental bound-free spectrum indicates that this level has predominantly $4^3\Pi$ character. However, the non-adiabatic coupling calculations assign slightly more $3^3\Pi$ character to this member of the mutually perturbing $3^3\Pi(v=52, J=14) \sim 4^3\Pi(v=5, J=14)$ levels.

$^{23}Na^{39}K$ $4^3\Pi_{\Omega=2}$ Data

v	J	intermediate state level $1(b)^3\Pi(v, J)$	ground state level $1(X)^1\Sigma^+(v, J)$	ground state level energy (cm^{-1})	PUMP laser frequency (cm^{-1})	PROBE laser frequency (cm^{-1})	$E[4^3\Pi(v, J)]$ measured value (cm^{-1})
2	44	17, 45	0, 44	249.0876	13513.5303	12476.7204	26239.3383
2	44	17, 45	0, 44	249.0876	13513.5303	12476.7145	26239.3324
3	44	17, 45	0, 44	249.0876	13513.5303	12595.9776	26358.5955
3	44	17, 45	0, 44	249.0876	13513.5303	12595.9813	26358.5992
3	44	17, 45	0, 44	249.0876	13513.5303	12595.9821	26358.6000
3	44	17, 45	0, 44	249.0876	13513.5303	12595.9813	26358.5992
3	44	17, 45	0, 46	266.2096	13496.4074	12595.9792	26358.5962
3	46	17, 45	0, 44	249.0876	13513.5303	12604.1346	26366.7525
3	46	17, 45	0, 46	266.2096	13496.4074	12604.1354	26366.7524
4	31	20, 32	1, 31	278.4595	13713.9086	12423.1348	26415.5029
4	31	20, 32	1, 33	290.6890	13701.6791	12423.1388	26415.5069
4	33	20, 32	1, 31	278.4595	13713.9086	12427.7561	26420.1242
4	33	20, 32	1, 33	290.6890	13701.6791	12427.7621	26420.1302
4	33	20, 32	1, 33	290.6890	13701.6791	12427.7607	26420.1288
4	33	20, 32	1, 33	290.6890	13701.6791	12427.7607	26420.1288
4	33	20, 32	1, 33	290.6890	13701.6791	12427.7586	26420.1267
4	44	17, 45	0, 44	249.0876	13513.5303	12712.8917	26475.5096
4	44	17, 45	0, 44	249.0876	13513.5303	12712.8923	26475.5102
4	44	17, 45	0, 44	249.0876	13513.5303	12712.8925	26475.5104
4	44	17, 45	0, 46	266.2096	13496.4074	12712.8914	26475.5084
5	31	20, 32	1, 31	278.4595	13713.9086	12530.0925	26522.4606
5	31	20, 32	1, 31	278.4595	13713.9086	12530.0843	26522.4524
5	31	20, 32	1, 31	278.4595	13713.9086	12530.0861	26522.4542
5	31	20, 32	1, 33	290.6890	13701.6791	12530.0893	26522.4574
5	31	20, 32	1, 33	290.6890	13701.6791	12530.0960	26522.4641
5	33	20, 32	1, 31	278.4595	13713.9086	12535.9029	26528.2710
5	33	20, 32	1, 31	278.4595	13713.9086	12535.9132	26528.2813
5	33	20, 32	1, 33	290.6890	13701.6791	12535.9088	26528.2769
6	46	17, 45	0, 44	249.0876	13513.5303	12928.8657	26691.4836
6	46	17, 45	0, 46	266.2096	13496.4074	12928.8639	26691.4809

TABLE II: (EPAPS) Diabatic and adiabatic potentials determined by fitting measured ro-vibrational energy levels. At each value of the internuclear separation R, the distinct elements of the 2×2 diabatic electronic Hamiltonian are $V_{11}(R)$, $V_{22}(R)$, and $V_{12}(R)$. The eigenvalues of that matrix (the adiabatic energies) are E_1 and E_2. The transformation that diagonalizes the diabatic matrix is specified by $\theta(R)$.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
3.22	31779.4149	27249.3969	3.3461	1.5701	27249.3944	31779.4173	.0000
3.24	31471.2003	27089.8206	3.7427	1.5699	27089.8174	31471.2035	.0000
3.26	31179.8828	26939.2164	4.1779	1.5698	26939.2123	31179.8869	.0001
3.28	30904.3583	26797.9250	4.6547	1.5697	26797.9198	30904.3636	.0001
3.30	30643.6038	26666.0355	5.1762	1.5695	26666.0287	30643.6106	.0001
3.32	30396.6707	26543.4290	5.7457	1.5693	26543.4205	30396.6793	.0001
3.34	30162.6788	26429.8240	6.3665	1.5691	26429.8131	30162.6896	.0002
3.36	29940.8106	26324.8174	7.0423	1.5688	26324.8037	29940.8243	.0002
3.38	29730.3069	26227.9234	7.7766	1.5686	26227.9061	29730.3242	.0002
3.40	29530.4617	26138.6054	8.5735	1.5683	26138.5838	29530.4834	.0003
3.42	29340.6184	26056.3040	9.4368	1.5679	26056.2769	29340.6455	.0004
3.44	29160.1657	25980.4585	10.3707	1.5675	25980.4247	29160.1995	.0005
3.46	28988.5344	25910.5241	11.3795	1.5671	25910.4820	28988.5765	.0006
3.48	28825.1940	25845.9840	12.4674	1.5666	25845.9319	28825.2461	.0008
3.50	28669.6498	25786.3588	13.6391	1.5661	25786.2943	28669.7143	.0010
3.52	28521.4403	25731.2113	14.8990	1.5655	25731.1317	28521.5199	.0012
3.54	28380.1349	25680.1495	16.2519	1.5648	25680.0517	28380.2328	.0015
3.56	28245.3313	25632.8278	17.7025	1.5640	25632.7078	28245.4512	.0019
3.58	28116.6534	25588.9456	19.2557	1.5632	25588.7989	28116.8001	.0023
3.60	27993.7499	25548.2457	20.9162	1.5622	25548.0668	27993.9288	.0028
3.62	27876.2920	25510.5108	22.6890	1.5612	25510.2932	27876.5096	.0035
3.64	27763.9720	25475.5601	24.5790	1.5601	25475.2961	27764.2359	.0043
3.66	27656.5018	25443.2448	26.5911	1.5588	25442.9254	27656.8212	.0052
3.68	27553.6116	25413.4437	28.7301	1.5574	25413.0581	27553.9972	.0064
3.70	27455.0486	25386.0585	31.0009	1.5558	25385.5941	27455.5130	.0078
3.72	27360.5755	25361.0086	33.4081	1.5541	25360.4506	27361.1335	.0095
3.74	27269.9700	25338.2267	35.9564	1.5522	25337.5576	27270.6391	.0117
3.76	27183.0235	25317.6541	38.6503	1.5501	25316.8537	27183.8239	.0142
3.78	27099.5399	25299.2368	41.4940	1.5478	25298.2809	27100.4958	.0174
3.80	27019.3354	25282.9207	44.4918	1.5452	25281.7815	27020.4746	.0212
3.82	26942.2371	25268.6495	47.6475	1.5424	25267.2941	26943.5925	.0260
3.84	26868.0825	25256.3609	50.9648	1.5392	25254.7510	26869.6925	.0318
3.86	26796.7191	25245.9853	54.4471	1.5357	25244.0760	26798.6284	.0389
3.88	26728.0032	25237.4440	58.0974	1.5319	25235.1829	26730.2642	.0477
3.90	26661.7998	25230.6492	61.9185	1.5276	25227.9753	26664.4737	.0585
3.92	26597.9817	25225.5046	65.9126	1.5229	25222.3465	26601.1399	.0719
3.94	26536.4295	25221.9062	70.0818	1.5177	25218.1805	26540.1553	.0886
3.96	26477.0305	25219.7450	74.4274	1.5119	25215.3545	26481.4210	.1091
3.98	26419.6787	25218.9098	78.9506	1.5054	25213.7411	26424.8474	.1347
4.00	26364.2742	25219.3504	83.6516	1.4982	25213.2708	26370.3538	.1671
4.02	26310.7231	25221.3625	88.5306	1.4902	25214.2146	26317.8710	.2097
4.04	26258.9368	25225.2316	93.5869	1.4812	25216.8270	26267.3414	.2658
4.06	26208.8318	25231.0859	98.8193	1.4711	25221.1984	26218.7193	.3402
4.08	26160.3294	25238.9407	104.2260	1.4596	25227.2980	26171.9722	.4394
4.10	26113.3556	25248.7340	109.8045	1.4464	25235.0071	26127.0825	.5723
4.12	26067.8405	25260.3537	115.5516	1.4314	25244.1437	26084.0505	.7516
4.14	26023.7182	25273.6583	121.4635	1.4142	25254.4791	26042.8974	.9949
4.16	25980.9269	25288.4925	127.5357	1.3943	25265.7494	26003.6700	1.3266
4.18	25939.4080	25304.6991	133.7630	1.3713	25277.6608	25966.4463	1.7802
4.20	25899.1064	25322.1262	140.1394	1.3447	25289.8896	25931.3429	2.4002
4.22	25859.9702	25340.6331	146.6581	1.3137	25302.0797	25898.5237	3.2428
4.24	25821.9506	25360.0939	153.3118	1.2778	25313.8356	25868.2089	4.3709
4.26	25785.0016	25380.3986	160.0923	1.2361	25324.7167	25840.6835	5.8384
4.28	25749.0796	25401.4544	166.9906	1.1881	25334.2345	25816.2996	7.6549
4.30	25714.1439	25423.1850	173.9972	1.1336	25341.8621	25795.4668	9.7266
4.32	25680.1561	25445.5297	181.1016	1.0728	25347.0648	25778.6210	11.7965

TABLE II: (continued) Diabatic and adiabatic potentials.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
4.34	25647.0799	25468.4423	188.2928	1.0069	25349.3576	25766.1646	13.4451
4.36	25614.8813	25491.8893	195.5591	.9377	25348.3850	25758.3856	14.2246
4.38	25583.5284	25515.8480	202.8880	.8680	25343.9974	25755.3790	13.8939
4.40	25552.9909	25540.3051	210.2666	.8005	25336.2857	25757.0103	12.5707
4.42	25523.2407	25565.2543	217.6812	.7373	25325.5550	25762.9400	10.6532
4.44	25494.2512	25590.6951	225.1177	.6799	25312.2486	25772.6976	8.5895
4.46	25465.9974	25616.6309	232.5612	.6288	25296.8610	25785.7673	6.6972
4.48	25438.4559	25643.0675	239.9968	.5839	25279.8691	25801.6543	5.1226
4.50	25411.6048	25670.0118	247.4087	.5448	25261.6943	25819.9222	3.8868
4.52	25385.4234	25697.4706	254.7809	.5107	25242.6885	25840.2056	2.9493
4.54	25359.8926	25725.4496	262.0972	.4809	25223.1356	25862.2066	2.2502
4.56	25334.9942	25753.9524	269.3409	.4549	25203.2608	25885.6859	1.7322
4.58	25310.7115	25782.9800	276.4954	.4320	25183.2401	25910.4514	1.3482
4.60	25287.0285	25812.5300	283.5436	.4117	25163.2111	25936.3474	1.0622
4.62	25263.9306	25842.5961	290.4686	.3937	25143.2811	25963.2456	.8475
4.64	25241.4039	25873.1683	297.2534	.3775	25123.5337	25991.0385	.6848
4.66	25219.4357	25904.2320	303.8810	.3629	25104.0346	26019.6331	.5604
4.68	25198.0139	25935.7685	310.3346	.3497	25084.8351	26048.9473	.4641
4.70	25177.1274	25967.7544	316.5977	.3376	25065.9758	26078.9060	.3889
4.72	25156.7657	26000.1624	322.6538	.3266	25047.4886	26109.4395	.3296
4.74	25136.9193	26032.9606	328.4870	.3163	25029.3986	26140.4813	.2822
4.76	25117.5790	26066.1134	334.0817	.3068	25011.7256	26171.9668	.2441
4.78	25098.7366	26099.5814	339.4227	.2980	24994.4852	26203.8328	.2131
4.80	25080.3842	26133.3218	344.4956	.2897	24977.6895	26236.0165	.1878
4.82	25062.5146	26167.2886	349.2864	.2819	24961.3479	26268.4553	.1668
4.84	25045.1212	26201.4329	353.7819	.2746	24945.4675	26301.0866	.1493
4.86	25028.1976	26235.7036	357.9695	.2676	24930.0533	26333.8479	.1346
4.88	25011.7381	26270.0474	361.8375	.2610	24915.1091	26366.6764	.1222
4.90	24995.7374	26304.4092	365.3750	.2546	24900.6372	26399.5093	.1117
4.92	24980.1903	26338.7327	368.5721	.2486	24886.6389	26432.2841	.1026
4.94	24965.0923	26372.9604	371.4199	.2428	24873.1144	26464.9384	.0948
4.96	24950.4389	26407.0346	373.9102	.2372	24860.0631	26497.4104	.0881
4.98	24936.2262	26440.8968	376.0360	.2318	24847.4839	26529.6391	.0822
5.00	24922.4504	26474.4890	377.7916	.2265	24835.3750	26561.5644	.0771
5.02	24909.1077	26507.7533	379.1720	.2215	24823.7338	26593.1273	.0725
5.04	24896.1950	26540.6327	380.1735	.2165	24812.5575	26624.2702	.0685
5.06	24883.7089	26573.0708	380.7936	.2118	24801.8427	26654.9371	.0650
5.08	24871.6466	26605.0129	381.0308	.2071	24791.5858	26685.0737	.0618
5.10	24860.0050	26636.4055	380.8847	.2026	24781.7825	26714.6279	.0589
5.12	24848.7814	26667.1966	380.3564	.1981	24772.4285	26743.5495	.0564
5.14	24837.9731	26697.3366	379.4476	.1938	24763.5191	26771.7906	.0541
5.16	24827.5776	26726.7776	378.1616	.1895	24755.0492	26799.3059	.0520
5.18	24817.5922	26755.4740	376.5026	.1853	24747.0136	26826.0525	.0501
5.20	24808.0144	26783.3826	374.4759	.1812	24739.4069	26851.9901	.0483
5.22	24798.8418	26810.4628	372.0878	.1772	24732.2232	26877.0813	.0467
5.24	24790.0719	26836.6765	369.3458	.1732	24725.4569	26901.2914	.0452
5.26	24781.7020	26861.9883	366.2583	.1693	24719.1018	26924.5885	.0439
5.28	24773.7299	26886.3657	362.8346	.1654	24713.1519	26946.9437	.0426
5.30	24766.1528	26909.7787	359.0849	.1616	24707.6008	26968.3308	.0414
5.32	24758.9682	26932.2006	355.0205	.1579	24702.4421	26988.7267	.0403
5.34	24752.1733	26953.6072	350.6530	.1542	24697.6694	27008.1111	.0392
5.36	24745.7655	26973.9773	345.9953	.1506	24693.2761	27026.4667	.0382
5.38	24739.7420	26993.2925	341.0606	.1470	24689.2557	27043.7788	.0372
5.40	24734.0998	27011.5375	335.8628	.1434	24685.6015	27060.0358	.0363
5.42	24728.8358	27028.6996	330.4165	.1399	24682.3069	27075.2285	.0354
5.44	24723.9471	27044.7689	324.7366	.1364	24679.3653	27089.3507	.0346
5.46	24719.4303	27059.7384	318.8385	.1330	24676.7700	27102.3986	.0338
5.48	24715.2820	27073.6035	312.7379	.1296	24674.5145	27114.3711	.0330
5.50	24711.4989	27086.3625	306.4510	.1263	24672.5920	27125.2694	.0322

TABLE II: (continued) Diabatic and adiabatic potentials.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
5.52	24708.0773	27098.0161	299.9940	.1230	24670.9963	27135.0971	.0314
5.54	24705.0134	27108.5675	293.3832	.1197	24669.7206	27143.8603	.0306
5.56	24702.3034	27118.0223	286.6351	.1165	24668.7587	27151.5670	.0299
5.58	24699.9432	27126.3884	279.7662	.1133	24668.1042	27158.2274	.0291
5.60	24697.9286	27133.6759	272.7931	.1102	24667.7509	27163.8536	.0284
5.62	24696.2554	27139.8970	265.7319	.1071	24667.6925	27168.4599	.0277
5.64	24694.9191	27145.0658	258.5988	.1040	24667.9230	27172.0620	.0269
5.66	24693.9151	27149.1987	251.4099	.1010	24668.4362	27174.6775	.0262
5.68	24693.2386	27152.3135	244.1806	.0980	24669.2264	27176.3256	.0255
5.70	24692.8847	27154.4298	236.9264	.0951	24670.2877	27177.0268	.0247
5.72	24692.8488	27155.5691	229.6621	.0922	24671.6147	27176.8032	.0240
5.74	24693.1457	27155.7541	222.4021	.0893	24673.2214	27175.6784	.0233
5.76	24693.8077	27155.0090	215.1605	.0865	24675.1397	27173.6769	.0225
5.78	24694.8559	27153.3593	207.9508	.0838	24677.3906	27170.8246	.0217
5.80	24696.3008	27150.8318	200.7858	.0811	24679.9846	27167.1480	.0210
5.82	24698.1452	27147.4543	193.6779	.0784	24682.9248	27162.6747	.0202
5.84	24700.3855	27143.2557	186.6389	.0758	24686.2083	27157.4329	.0195
5.86	24703.0141	27138.2657	179.6799	.0733	24689.8282	27151.4516	.0187
5.88	24706.0202	27132.5150	172.8113	.0707	24693.7747	27144.7606	.0180
5.90	24709.3913	27126.0348	166.0429	.0683	24698.0361	27137.3899	.0173
5.92	24713.1136	27118.8571	159.3839	.0659	24702.6002	27129.3706	.0166
5.94	24717.1734	27111.0144	152.8425	.0635	24707.4541	27120.7337	.0159
5.96	24721.5567	27102.5397	146.4267	.0612	24712.5854	27111.5110	.0153
5.98	24726.2503	27093.4665	140.1434	.0589	24717.9824	27101.7343	.0146
6.00	24731.2418	27083.8282	133.9990	.0567	24723.6341	27091.4359	.0140
6.02	24736.5199	27073.6589	127.9992	.0546	24729.5306	27080.6482	.0133
6.04	24742.0742	27062.9927	122.1490	.0524	24735.6633	27069.4036	.0127
6.06	24747.8957	27051.8636	116.4527	.0504	24742.0246	27057.7347	.0121
6.08	24753.9764	27040.3059	110.9140	.0484	24748.6084	27045.6740	.0115
6.10	24760.3097	27028.3538	105.5360	.0464	24755.4095	27033.2539	.0109
6.12	24766.8898	27016.0412	100.3211	.0445	24762.4239	27020.5070	.0104
6.14	24773.7122	27003.4020	95.2713	.0426	24769.6488	27007.4654	.0098
6.16	24780.7732	26990.4699	90.3877	.0408	24777.0821	26994.1611	.0093
6.18	24788.0701	26977.2784	85.6712	.0391	24784.7226	26980.6259	.0088
6.20	24795.6008	26963.8604	81.1220	.0373	24792.5699	26966.8912	.0083
6.22	24803.3637	26950.2487	76.7398	.0357	24800.6242	26952.9883	.0078
6.24	24811.3581	26936.4757	72.5240	.0341	24808.8859	26938.9478	.0073
6.26	24819.5834	26922.5731	68.4732	.0325	24817.3563	26924.8002	.0069
6.28	24828.0394	26908.5724	64.5861	.0310	24826.0364	26910.5754	.0064
6.30	24836.7263	26894.5044	60.8606	.0295	24834.9279	26896.3028	.0060
6.32	24845.6442	26880.3994	57.2944	.0281	24844.0322	26882.0114	.0056
6.34	24854.7934	26866.2872	53.8850	.0268	24853.3510	26867.7296	.0052
6.36	24864.1741	26852.1969	50.6294	.0254	24862.8856	26853.4854	.0049
6.38	24873.7866	26838.1569	47.5244	.0242	24872.6375	26839.3060	.0045
6.40	24883.6307	26824.1952	44.5667	.0229	24882.6077	26825.2182	.0042
6.42	24893.7063	26810.3388	41.7527	.0218	24892.7972	26811.2479	.0039
6.44	24904.0131	26796.6142	39.0785	.0206	24903.2066	26797.4208	.0036
6.46	24914.5504	26783.0472	36.5403	.0195	24913.8360	26783.7615	.0033
6.48	24925.3170	26769.6628	34.1339	.0185	24924.6855	26770.2943	.0031
6.50	24936.3117	26756.4852	31.8551	.0175	24935.7544	26757.0425	.0028
6.52	24947.5329	26743.5379	29.6998	.0165	24947.0419	26744.0289	.0026
6.54	24958.9783	26730.8439	27.6636	.0156	24958.5465	26731.2757	.0024
6.56	24970.6457	26718.4250	25.7421	.0147	24970.2666	26718.8041	.0022
6.58	24982.5321	26706.3025	23.9310	.0139	24982.1999	26706.6347	.0020
6.60	24994.6344	26694.4969	22.2259	.0131	24994.3438	26694.7875	.0018
6.62	25006.9489	26683.0278	20.6223	.0123	25006.6952	26683.2815	.0017
6.64	25019.4717	26671.9142	19.1160	.0116	25019.2506	26672.1354	.0015
6.66	25032.1985	26661.1742	17.7026	.0109	25032.0061	26661.3666	.0014
6.68	25045.1245	26650.8252	16.3779	.0102	25044.9575	26650.9922	.0012

TABLE II: (continued) Diabatic and adiabatic potentials.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
6.70	25058.2448	26640.8837	15.1378	.0096	25058.1000	26641.0285	.0011
6.72	25071.5539	26631.3656	13.9780	.0090	25071.4286	26631.4908	.0010
6.74	25085.0462	26622.2858	12.8947	.0084	25084.9381	26622.3940	.0009
6.76	25098.7158	26613.6588	11.8839	.0078	25098.6226	26613.7520	.0008
6.78	25112.5564	26605.4980	10.9418	.0073	25112.4762	26605.5782	.0007
6.80	25126.5615	26597.8162	10.0647	.0068	25126.4926	26597.8850	.0007
6.82	25140.7244	26590.6255	9.2490	.0064	25140.6654	26590.6845	.0006
6.84	25155.0383	26583.9373	8.4912	.0059	25154.9878	26583.9878	.0005
6.86	25169.4960	26577.7621	7.7881	.0055	25169.4529	26577.8052	.0005
6.88	25184.0902	26572.1099	7.1362	.0051	25184.0535	26572.1466	.0004
6.90	25198.8136	26566.9898	6.5327	.0048	25198.7824	26567.0210	.0004
6.92	25213.6586	26562.4105	5.9744	.0044	25213.6321	26562.4370	.0003
6.94	25228.6175	26558.3798	5.4586	.0041	25228.5951	26558.4022	.0003
6.96	25243.6828	26554.9048	4.9826	.0038	25243.6639	26554.9237	.0003
6.98	25258.8466	26551.9921	4.5437	.0035	25258.8306	26552.0081	.0002
7.00	25274.1010	26549.6477	4.1395	.0032	25274.0876	26549.6611	.0002
7.02	25289.4384	26547.8768	3.7676	.0030	25289.4271	26547.8881	.0002
7.04	25304.8508	26546.6841	3.4258	.0028	25304.8413	26546.6936	.0002
7.06	25320.3304	26546.0738	3.1121	.0025	25320.3225	26546.0817	.0001
7.08	25335.8694	26546.0494	2.8243	.0023	25335.8629	26546.0560	.0001
7.10	25351.4602	26546.6138	2.5608	.0021	25351.4547	26546.6193	.0001
7.12	25367.0949	26547.7694	2.3195	.0020	25367.0904	26547.7740	.0001
7.14	25382.7661	26549.5181	2.0990	.0018	25382.7623	26549.5219	.0001
7.16	25398.4661	26551.8613	1.8977	.0016	25398.4630	26551.8645	.0001
7.18	25414.1876	26554.7998	1.7140	.0015	25414.1851	26554.8024	.0001
7.20	25429.9233	26558.3340	1.5466	.0014	25429.9212	26558.3362	.0000
7.22	25445.6659	26562.4638	1.3942	.0012	25445.6641	26562.4655	.0000
7.24	25461.4084	26567.1885	1.2556	.0011	25461.4070	26567.1899	.0000
7.26	25477.1439	26572.5072	1.1297	.0010	25477.1427	26572.5084	.0000
7.28	25492.8656	26578.4184	1.0155	.0009	25492.8647	26578.4193	.0000
7.30	25508.5670	26584.9202	.9120	.0008	25508.5662	26584.9210	.0000
7.32	25524.2415	26592.0104	.8182	.0008	25524.2408	26592.0110	.0000
7.34	25539.8828	26599.6862	.7333	.0007	25539.8823	26599.6867	.0000
7.36	25555.4850	26607.9447	.6567	.0006	25555.4846	26607.9451	.0000
7.38	25571.0419	26616.7825	.5874	.0006	25571.0416	26616.7828	.0000
7.40	25586.5480	26626.1957	.5250	.0005	25586.5477	26626.1960	.0000
7.42	25601.9976	26636.1804	.4688	.0005	25601.9974	26636.1806	.0000
7.44	25617.3853	26646.7321	.4182	.0004	25617.3851	26646.7323	.0000
7.46	25632.7059	26657.8461	.3727	.0004	25632.7058	26657.8463	.0000
7.48	25647.9546	26669.5175	.3318	.0003	25647.9545	26669.5176	.0000
7.50	25663.1263	26681.7409	.2951	.0003	25663.1262	26681.7410	.0000
7.52	25678.2166	26694.5108	.2622	.0003	25678.2165	26694.5109	.0000
7.54	25693.2210	26707.8215	.2328	.0002	25693.2209	26707.8215	.0000
7.56	25708.1352	26721.6668	.2065	.0002	25708.1352	26721.6668	.0000
7.58	25722.9553	26736.0405	.1830	.0002	25722.9553	26736.0406	.0000
7.60	25737.6774	26750.9362	.1620	.0002	25737.6774	26750.9362	.0000
7.62	25752.2978	26766.3471	.1432	.0001	25752.2977	26766.3471	.0000
7.64	25766.8130	26782.2664	.1266	.0001	25766.8130	26782.2664	.0000
7.66	25781.2197	26798.6869	.1117	.0001	25781.2197	26798.6869	.0000
7.68	25795.5149	26815.6015	.0985	.0001	25795.5149	26815.6015	.0000
7.70	25809.6956	26833.0027	.0868	.0001	25809.6956	26833.0027	.0000
7.72	25823.7590	26850.8830	.0764	.0001	25823.7590	26850.8830	.0000
7.74	25837.7026	26869.2346	.0672	.0001	25837.7026	26869.2346	.0000
7.76	25851.5239	26888.0499	.0590	.0001	25851.5239	26888.0499	.0000
7.78	25865.2208	26907.3207	.0518	.0000	25865.2208	26907.3207	.0000
7.80	25878.7911	26927.0391	.0454	.0000	25878.7911	26927.0391	.0000
7.82	25892.2329	26947.1968	.0398	.0000	25892.2329	26947.1968	.0000
7.84	25905.5444	26967.7857	.0348	.0000	25905.5444	26967.7857	.0000
7.86	25918.7241	26988.7973	.0304	.0000	25918.7241	26988.7973	.0000

TABLE II: (continued) Diabatic and adiabatic potentials.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
7.88	25931.7705	27010.2233	.0266	.0000	25931.7705	27010.2233	.0000
7.90	25944.6822	27032.0551	.0232	.0000	25944.6822	27032.0551	.0000
7.92	25957.4580	27054.2843	.0202	.0000	25957.4580	27054.2843	.0000
7.94	25970.0970	27076.9021	.0176	.0000	25970.0970	27076.9021	.0000
7.96	25982.5982	27099.9000	.0153	.0000	25982.5982	27099.9000	.0000
7.98	25994.9609	27123.2692	.0133	.0000	25994.9609	27123.2692	.0000
8.00	26007.1843	27147.0010	.0116	.0000	26007.1843	27147.0010	.0000
8.02	26019.2680	27171.0867	.0100	.0000	26019.2680	27171.0867	.0000
8.04	26031.2114	27195.5175	.0087	.0000	26031.2114	27195.5175	.0000
8.06	26043.0144	27220.2847	.0075	.0000	26043.0144	27220.2847	.0000
8.08	26054.6767	27245.3794	.0065	.0000	26054.6767	27245.3794	.0000
8.10	26066.1981	27270.7928	.0056	.0000	26066.1981	27270.7928	.0000
8.12	26077.5788	27296.5162	.0049	.0000	26077.5788	27296.5162	.0000
8.14	26088.8187	27322.5408	.0042	.0000	26088.8187	27322.5408	.0000
8.16	26099.9180	27348.8579	.0036	.0000	26099.9180	27348.8579	.0000
8.18	26110.8771	27375.4587	.0031	.0000	26110.8771	27375.4587	.0000
8.20	26121.6963	27402.3345	.0027	.0000	26121.6963	27402.3345	.0000
8.22	26132.3760	27429.4767	.0023	.0000	26132.3760	27429.4767	.0000
8.24	26142.9167	27456.8765	.0020	.0000	26142.9167	27456.8765	.0000
8.26	26153.3190	27484.5254	.0017	.0000	26153.3190	27484.5254	.0000
8.28	26163.5836	27512.4149	.0015	.0000	26163.5836	27512.4149	.0000
8.30	26173.7111	27540.5364	.0012	.0000	26173.7111	27540.5364	.0000
8.32	26183.7024	27568.8815	.0011	.0000	26183.7024	27568.8815	.0000
8.34	26193.5583	27597.4417	.0009	.0000	26193.5583	27597.4417	.0000
8.36	26203.2797	27626.2087	.0008	.0000	26203.2797	27626.2087	.0000
8.38	26212.8674	27655.1743	.0007	.0000	26212.8674	27655.1743	.0000
8.40	26222.3226	27684.3301	.0006	.0000	26222.3226	27684.3301	.0000
8.42	26231.6463	27713.6682	.0005	.0000	26231.6463	27713.6682	.0000
8.44	26240.8394	27743.1802	.0004	.0000	26240.8394	27743.1802	.0000
8.46	26249.9033	27772.8584	.0003	.0000	26249.9033	27772.8584	.0000
8.48	26258.8389	27802.6946	.0003	.0000	26258.8389	27802.6946	.0000
8.50	26267.6476	27832.6811	.0003	.0000	26267.6476	27832.6811	.0000
8.52	26276.3305	27862.8101	.0002	.0000	26276.3305	27862.8101	.0000
8.54	26284.8889	27893.0739	.0002	.0000	26284.8889	27893.0739	.0000
8.56	26293.3241	27923.4648	.0002	.0000	26293.3241	27923.4648	.0000
8.58	26301.6373	27953.9754	.0001	.0000	26301.6373	27953.9754	.0000
8.60	26309.8300	27984.5981	.0001	.0000	26309.8300	27984.5981	.0000
8.62	26317.9035	28015.3257	.0001	.0000	26317.9035	28015.3257	.0000
8.64	26325.8592	28046.1509	.0001	.0000	26325.8592	28046.1509	.0000
8.66	26333.6984	28077.0664	.0001	.0000	26333.6984	28077.0664	.0000
8.68	26341.4225	28108.0653	.0001	.0000	26341.4225	28108.0653	.0000
8.70	26349.0330	28139.1406	.0000	.0000	26349.0330	28139.1406	.0000
8.72	26356.5313	28170.2852	.0000	.0000	26356.5313	28170.2852	.0000
8.74	26363.9189	28201.4926	.0000	.0000	26363.9189	28201.4926	.0000
8.76	26371.1971	28232.7559	.0000	.0000	26371.1971	28232.7559	.0000
8.78	26378.3675	28264.0685	.0000	.0000	26378.3675	28264.0685	.0000
8.80	26385.4314	28295.4240	.0000	.0000	26385.4314	28295.4240	.0000
8.82	26392.3904	28326.8159	.0000	.0000	26392.3904	28326.8159	.0000
8.84	26399.2460	28358.2380	.0000	.0000	26399.2460	28358.2380	.0000
8.86	26405.9994	28389.6840	.0000	.0000	26405.9994	28389.6840	.0000
8.88	26412.6524	28421.1478	.0000	.0000	26412.6524	28421.1478	.0000
8.90	26419.2062	28452.6235	.0000	.0000	26419.2062	28452.6235	.0000
8.92	26425.6624	28484.1051	.0000	.0000	26425.6624	28484.1051	.0000
8.94	26432.0224	28515.5868	.0000	.0000	26432.0224	28515.5868	.0000
8.96	26438.2876	28547.0629	.0000	.0000	26438.2876	28547.0629	.0000
8.98	26444.4596	28578.5279	.0000	.0000	26444.4596	28578.5279	.0000
9.00	26450.5396	28609.9761	.0000	.0000	26450.5396	28609.9761	.0000
9.02	26456.5293	28641.4023	.0000	.0000	26456.5293	28641.4023	.0000
9.04	26462.4299	28672.8011	.0000	.0000	26462.4299	28672.8011	.0000

TABLE II: (continued) Diabatic and adiabatic potentials.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
9.06	26468.2429	28704.1672	.0000	.0000	26468.2429	28704.1672	.0000
9.08	26473.9697	28735.4957	.0000	.0000	26473.9697	28735.4957	.0000
9.10	26479.6116	28766.7815	.0000	.0000	26479.6116	28766.7815	.0000
9.12	26485.1702	28798.0197	.0000	.0000	26485.1702	28798.0197	.0000
9.14	26490.6466	28829.2055	.0000	.0000	26490.6466	28829.2055	.0000
9.16	26496.0423	28860.3342	.0000	.0000	26496.0423	28860.3342	.0000
9.18	26501.3586	28891.4012	.0000	.0000	26501.3586	28891.4012	.0000
9.20	26506.5969	28922.4019	.0000	.0000	26506.5969	28922.4019	.0000
9.22	26511.7584	28953.3320	.0000	.0000	26511.7584	28953.3320	.0000
9.24	26516.8445	28984.1872	.0000	.0000	26516.8445	28984.1872	.0000
9.26	26521.8564	29014.9631	.0000	.0000	26521.8564	29014.9631	.0000
9.28	26526.7954	29045.6558	.0000	.0000	26526.7954	29045.6558	.0000
9.30	26531.6627	29076.2612	.0000	.0000	26531.6627	29076.2612	.0000
9.32	26536.4597	29106.7752	.0000	.0000	26536.4597	29106.7752	.0000
9.34	26541.1875	29137.1942	.0000	.0000	26541.1875	29137.1942	.0000
9.36	26545.8472	29167.5142	.0000	.0000	26545.8472	29167.5142	.0000
9.38	26550.4402	29197.7317	.0000	.0000	26550.4402	29197.7317	.0000
9.40	26554.9676	29227.8431	.0000	.0000	26554.9676	29227.8431	.0000
9.42	26559.4306	29257.8449	.0000	.0000	26559.4306	29257.8449	.0000
9.44	26563.8302	29287.7337	.0000	.0000	26563.8302	29287.7337	.0000
9.46	26568.1676	29317.5063	.0000	.0000	26568.1676	29317.5063	.0000
9.48	26572.4439	29347.1592	.0000	.0000	26572.4439	29347.1592	.0000
9.50	26576.6603	29376.6896	.0000	.0000	26576.6603	29376.6896	.0000
9.52	26580.8177	29406.0942	.0000	.0000	26580.8177	29406.0942	.0000
9.54	26584.9172	29435.3701	.0000	.0000	26584.9172	29435.3701	.0000
9.56	26588.9599	29464.5145	.0000	.0000	26588.9599	29464.5145	.0000
9.58	26592.9468	29493.5245	.0000	.0000	26592.9468	29493.5245	.0000
9.60	26596.8789	29522.3974	.0000	.0000	26596.8789	29522.3974	.0000
9.62	26600.7572	29551.1306	.0000	.0000	26600.7572	29551.1306	.0000
9.64	26604.5827	29579.7215	.0000	.0000	26604.5827	29579.7215	.0000
9.66	26608.3563	29608.1677	.0000	.0000	26608.3563	29608.1677	.0000
9.68	26612.0789	29636.4667	.0000	.0000	26612.0789	29636.4667	.0000
9.70	26615.7515	29664.6162	.0000	.0000	26615.7515	29664.6162	.0000
9.72	26619.3749	29692.6139	.0000	.0000	26619.3749	29692.6139	.0000
9.74	26622.9502	29720.4577	.0000	.0000	26622.9502	29720.4577	.0000
9.76	26626.4781	29748.1455	.0000	.0000	26626.4781	29748.1455	.0000
9.78	26629.9594	29775.6752	.0000	.0000	26629.9594	29775.6752	.0000
9.80	26633.3951	29803.0448	.0000	.0000	26633.3951	29803.0448	.0000
9.82	26636.7860	29830.2525	.0000	.0000	26636.7860	29830.2525	.0000
9.84	26640.1328	29857.2965	.0000	.0000	26640.1328	29857.2965	.0000
9.86	26643.4364	29884.1749	.0000	.0000	26643.4364	29884.1749	.0000
9.88	26646.6976	29910.8861	.0000	.0000	26646.6976	29910.8861	.0000
9.90	26649.9170	29937.4285	.0000	.0000	26649.9170	29937.4285	.0000
9.92	26653.0955	29963.8005	.0000	.0000	26653.0955	29963.8005	.0000
9.94	26656.2338	29990.0007	.0000	.0000	26656.2338	29990.0007	.0000
9.96	26659.3325	30016.0275	.0000	.0000	26659.3325	30016.0275	.0000
9.98	26662.3925	30041.8796	.0000	.0000	26662.3925	30041.8796	.0000
10.00	26665.4144	30067.5557	.0000	.0000	26665.4144	30067.5557	.0000
10.02	26668.3988	30093.0545	.0000	.0000	26668.3988	30093.0545	.0000
10.04	26671.3464	30118.3750	.0000	.0000	26671.3464	30118.3750	.0000
10.06	26674.2579	30143.5158	.0000	.0000	26674.2579	30143.5158	.0000
10.08	26677.1340	30168.4760	.0000	.0000	26677.1340	30168.4760	.0000
10.10	26679.9751	30193.2545	.0000	.0000	26679.9751	30193.2545	.0000
10.12	26682.7820	30217.8504	.0000	.0000	26682.7820	30217.8504	.0000
10.14	26685.5552	30242.2627	.0000	.0000	26685.5552	30242.2627	.0000
10.16	26688.2954	30266.4906	.0000	.0000	26688.2954	30266.4906	.0000
10.18	26691.0030	30290.5333	.0000	.0000	26691.0030	30290.5333	.0000
10.20	26693.6786	30314.3900	.0000	.0000	26693.6786	30314.3900	.0000
10.22	26696.3228	30338.0601	.0000	.0000	26696.3228	30338.0601	.0000

TABLE II: (continued) Diabatic and adiabatic potentials.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
10.24	26698.9362	30361.5427	.0000	.0000	26698.9362	30361.5427	.0000
10.26	26701.5191	30384.8375	.0000	.0000	26701.5191	30384.8375	.0000
10.28	26704.0722	30407.9437	.0000	.0000	26704.0722	30407.9437	.0000
10.30	26706.5960	30430.8608	.0000	.0000	26706.5960	30430.8608	.0000
10.32	26709.0908	30453.5885	.0000	.0000	26709.0908	30453.5885	.0000
10.34	26711.5573	30476.1263	.0000	.0000	26711.5573	30476.1263	.0000
10.36	26713.9958	30498.4737	.0000	.0000	26713.9958	30498.4737	.0000
10.38	26716.4069	30520.6305	.0000	.0000	26716.4069	30520.6305	.0000
10.40	26718.7909	30542.5963	.0000	.0000	26718.7909	30542.5963	.0000
10.42	26721.1484	30564.3709	.0000	.0000	26721.1484	30564.3709	.0000
10.44	26723.4796	30585.9541	.0000	.0000	26723.4796	30585.9541	.0000
10.46	26725.7851	30607.3457	.0000	.0000	26725.7851	30607.3457	.0000
10.48	26728.0653	30628.5455	.0000	.0000	26728.0653	30628.5455	.0000
10.50	26730.3204	30649.5535	.0000	.0000	26730.3204	30649.5535	.0000
10.52	26732.5511	30670.3695	.0000	.0000	26732.5511	30670.3695	.0000
10.54	26734.7575	30690.9936	.0000	.0000	26734.7575	30690.9936	.0000
10.56	26736.9401	30711.4258	.0000	.0000	26736.9401	30711.4258	.0000
10.58	26739.0992	30731.6661	.0000	.0000	26739.0992	30731.6661	.0000
10.60	26741.2353	30751.7146	.0000	.0000	26741.2353	30751.7146	.0000
10.62	26743.3485	30771.5713	.0000	.0000	26743.3485	30771.5713	.0000
10.64	26745.4394	30791.2364	.0000	.0000	26745.4394	30791.2364	.0000
10.66	26747.5081	30810.7102	.0000	.0000	26747.5081	30810.7102	.0000
10.68	26749.5551	30829.9927	.0000	.0000	26749.5551	30829.9927	.0000
10.70	26751.5806	30849.0842	.0000	.0000	26751.5806	30849.0842	.0000
10.72	26753.5850	30867.9850	.0000	.0000	26753.5850	30867.9850	.0000
10.74	26755.5684	30886.6954	.0000	.0000	26755.5684	30886.6954	.0000
10.76	26757.5314	30905.2156	.0000	.0000	26757.5314	30905.2156	.0000
10.78	26759.4740	30923.5461	.0000	.0000	26759.4740	30923.5461	.0000
10.80	26761.3966	30941.6872	.0000	.0000	26761.3966	30941.6872	.0000
10.82	26763.2995	30959.6392	.0000	.0000	26763.2995	30959.6392	.0000
10.84	26765.1830	30977.4026	.0000	.0000	26765.1830	30977.4026	.0000
10.86	26767.0472	30994.9779	.0000	.0000	26767.0472	30994.9779	.0000
10.88	26768.8925	31012.3655	.0000	.0000	26768.8925	31012.3655	.0000
10.90	26770.7191	31029.5658	.0000	.0000	26770.7191	31029.5658	.0000
10.92	26772.5272	31046.5795	.0000	.0000	26772.5272	31046.5795	.0000
10.94	26774.3171	31063.4070	.0000	.0000	26774.3171	31063.4070	.0000
10.96	26776.0890	31080.0490	.0000	.0000	26776.0890	31080.0490	.0000
10.98	26777.8431	31096.5058	.0000	.0000	26777.8431	31096.5058	.0000
11.00	26779.5797	31112.7783	.0000	.0000	26779.5797	31112.7783	.0000
11.02	26781.2989	31128.8670	.0000	.0000	26781.2989	31128.8670	.0000
11.04	26783.0010	31144.7724	.0000	.0000	26783.0010	31144.7724	.0000
11.06	26784.6862	31160.4954	.0000	.0000	26784.6862	31160.4954	.0000
11.08	26786.3547	31176.0364	.0000	.0000	26786.3547	31176.0364	.0000
11.10	26788.0067	31191.3963	.0000	.0000	26788.0067	31191.3963	.0000
11.12	26789.6423	31206.5758	.0000	.0000	26789.6423	31206.5758	.0000
11.14	26791.2618	31221.5755	.0000	.0000	26791.2618	31221.5755	.0000
11.16	26792.8654	31236.3961	.0000	.0000	26792.8654	31236.3961	.0000
11.18	26794.4532	31251.0385	.0000	.0000	26794.4532	31251.0385	.0000
11.20	26796.0253	31265.5035	.0000	.0000	26796.0253	31265.5035	.0000
11.22	26797.5820	31279.7917	.0000	.0000	26797.5820	31279.7917	.0000
11.24	26799.1235	31293.9039	.0000	.0000	26799.1235	31293.9039	.0000
11.26	26800.6499	31307.8411	.0000	.0000	26800.6499	31307.8411	.0000
11.28	26802.1613	31321.6040	.0000	.0000	26802.1613	31321.6040	.0000
11.30	26803.6579	31335.1934	.0000	.0000	26803.6579	31335.1934	.0000
11.32	26805.1400	31348.6101	.0000	.0000	26805.1400	31348.6101	.0000
11.34	26806.6075	31361.8551	.0000	.0000	26806.6075	31361.8551	.0000
11.36	26808.0607	31374.9292	.0000	.0000	26808.0607	31374.9292	.0000
11.38	26809.4997	31387.8333	.0000	.0000	26809.4997	31387.8333	.0000
11.40	26810.9247	31400.5683	.0000	.0000	26810.9247	31400.5683	.0000

TABLE II: (continued) Diabatic and adiabatic potentials.

R (Å)	V_{11} (cm^{-1})	V_{22} (cm^{-1})	V_{12} (cm^{-1})	θ	E_1 (cm^{-1})	E_2 (cm^{-1})	$\frac{\hbar^2}{2\mu}\left(\frac{d\theta}{dR}\right)^2$ (cm^{-1})
11.42	26812.3357	31413.1350	.0000	.0000	26812.3357	31413.1350	.0000
11.44	26813.7330	31425.5343	.0000	.0000	26813.7330	31425.5343	.0000
11.46	26815.1167	31437.7673	.0000	.0000	26815.1167	31437.7673	.0000
11.48	26816.4868	31449.8348	.0000	.0000	26816.4868	31449.8348	.0000
11.50	26817.8435	31461.7376	.0000	.0000	26817.8435	31461.7376	.0000
11.52	26819.1870	31473.4769	.0000	.0000	26819.1870	31473.4769	.0000
11.54	26820.5173	31485.0535	.0000	.0000	26820.5173	31485.0535	.0000
11.56	26821.8347	31496.4684	.0000	.0000	26821.8347	31496.4684	.0000
11.58	26823.1391	31507.7225	.0000	.0000	26823.1391	31507.7225	.0000
11.60	26824.4307	31518.8168	.0000	.0000	26824.4307	31518.8168	.0000
11.62	26825.7097	31529.7523	.0000	.0000	26825.7097	31529.7523	.0000
11.64	26826.9761	31540.5299	.0000	.0000	26826.9761	31540.5299	.0000
11.66	26828.2300	31551.1507	.0000	.0000	26828.2300	31551.1507	.0000
11.68	26829.4716	31561.6157	.0000	.0000	26829.4716	31561.6157	.0000
11.70	26830.7009	31571.9257	.0000	.0000	26830.7009	31571.9257	.0000
11.72	26831.9181	31582.0819	.0000	.0000	26831.9181	31582.0819	.0000
11.74	26833.1233	31592.0852	.0000	.0000	26833.1233	31592.0852	.0000
11.76	26834.3165	31601.9367	.0000	.0000	26834.3165	31601.9367	.0000
11.78	26835.4979	31611.6373	.0000	.0000	26835.4979	31611.6373	.0000
11.80	26836.6675	31621.1881	.0000	.0000	26836.6675	31621.1881	.0000
11.82	26837.8255	31630.5901	.0000	.0000	26837.8255	31630.5901	.0000
11.84	26838.9719	31639.8443	.0000	.0000	26838.9719	31639.8443	.0000
11.86	26840.1068	31648.9517	.0000	.0000	26840.1068	31648.9517	.0000
11.88	26841.2304	31657.9134	.0000	.0000	26841.2304	31657.9134	.0000
11.90	26842.3426	31666.7303	.0000	.0000	26842.3426	31666.7303	.0000
11.92	26843.4437	31675.4036	.0000	.0000	26843.4437	31675.4036	.0000
11.94	26844.5336	31683.9343	.0000	.0000	26844.5336	31683.9343	.0000
11.96	26845.6126	31692.3233	.0000	.0000	26845.6126	31692.3233	.0000
11.98	26846.6805	31700.5717	.0000	.0000	26846.6805	31700.5717	.0000
12.00	26847.7376	31708.6806	.0000	.0000	26847.7376	31708.6806	.0000

TABLE III: (EPAPS) Calculated energies and available experimental energies for the mixed levels of the $3\,^3\Pi$ and $4\,^3\Pi$ electronic states. For states that are predominantly $3\,^3\Pi$, energies are reported for v=0–56, and for states that are predominantly $4\,^3\Pi$, energies are reported for v=0–6. For all these vibrational levels, calculations are reported for J=0–60, and also for J=86 and 88 for those cases where experimental levels were measured. The first column gives the theoretical assignment, which is taken to be the electronic state with the larger of the fractions given in the last two columns. The fractions are determined by summing the squares of the appropriate components of the theoretical eigenvectors. Notes are at the end of the table (page 34).

3 or $4\,^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	$3\,^3\Pi$ fraction	$4\,^3\Pi$ fraction
3	0	1			24688.8226		1.0000	0.0000
3	0	2			24688.9706		1.0000	0.0000
3	0	3			24689.1926		1.0000	0.0000
3	0	4			24689.4887		1.0000	0.0000
3	0	5			24689.8587		1.0000	0.0000
3	0	6			24690.3027		1.0000	0.0000
3	0	7			24690.8207		1.0000	0.0000
3	0	8			24691.4126		1.0000	0.0000
3	0	9			24692.0785		1.0000	0.0000
3	0	10			24692.8182		1.0000	0.0000
3	0	11			24693.6318		1.0000	0.0000
3	0	12			24694.5192		1.0000	0.0000
3	0	13			24695.4805		1.0000	0.0000
3	0	14	24696.5671	a	24696.5155	0.0516	1.0000	0.0000
3	0	15			24697.6243		1.0000	0.0000
3	0	16	24698.8462	a	24698.8068	0.0394	1.0000	0.0000
3	0	17			24700.0629		1.0000	0.0000
3	0	18			24701.3927		1.0000	0.0000
3	0	19			24702.7960		1.0000	0.0000
3	0	20			24704.2728		1.0000	0.0000
3	0	21			24705.8231		1.0000	0.0000
3	0	22			24707.4468		1.0000	0.0000
3	0	23			24709.1438		1.0000	0.0000
3	0	24			24710.9141		1.0000	0.0000
3	0	25	24712.7234	a	24712.7577	−0.0343	1.0000	0.0000
3	0	26			24714.6744		1.0000	0.0000
3	0	27	24716.6095	a	24716.6642	−0.0547	1.0000	0.0000
3	0	28			24718.7271		1.0000	0.0000
3	0	29			24720.8628		1.0000	0.0000
3	0	30			24723.0715		1.0000	0.0000
3	0	31			24725.3530		1.0000	0.0000
3	0	32			24727.7071		1.0000	0.0000
3	0	33			24730.1340		1.0000	0.0000
3	0	34			24732.6333		1.0000	0.0000
3	0	35			24735.2052		1.0000	0.0000
3	0	36			24737.8494		1.0000	0.0000
3	0	37	24740.3871	a	24740.5659	−0.1788	1.0000	0.0000
3	0	38			24743.3546		1.0000	0.0000
3	0	39	24746.0076	a	24746.2153	−0.2077	1.0000	0.0000
3	0	40			24749.1481		1.0000	0.0000
3	0	41			24752.1528		1.0000	0.0000
3	0	42			24755.2292		1.0000	0.0000
3	0	43			24758.3774		1.0000	0.0000
3	0	44	24761.3110	a	24761.5971	−0.2861	1.0000	0.0000
3	0	45			24764.8883		1.0000	0.0000
3	0	46	24767.9311	a	24768.2508	−0.3197	1.0000	0.0000
3	0	47			24771.6846		1.0000	0.0000
3	0	48			24775.1895		1.0000	0.0000
3	0	49			24778.7654		1.0000	0.0000
3	0	50			24782.4123		1.0000	0.0000
3	0	51			24786.1298		1.0000	0.0000
3	0	52			24789.9181		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or $4\,^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	$3\,^3\Pi$ fraction	$4\,^3\Pi$ fraction
3	0	53			24793.7768		1.0000	0.0000
3	0	54			24797.7059		1.0000	0.0000
3	0	55			24801.7053		1.0000	0.0000
3	0	56			24805.7748		1.0000	0.0000
3	0	57			24809.9143		1.0000	0.0000
3	0	58			24814.1237		1.0000	0.0000
3	0	59			24818.4028		1.0000	0.0000
3	0	60			24822.7514		1.0000	0.0000
3	1	0			24731.5263		1.0000	0.0000
3	1	1			24731.6005		1.0000	0.0000
3	1	2			24731.7487		1.0000	0.0000
3	1	3			24731.9711		1.0000	0.0000
3	1	4			24732.2676		1.0000	0.0000
3	1	5			24732.6381		1.0000	0.0000
3	1	6			24733.0828		1.0000	0.0000
3	1	7			24733.6015		1.0000	0.0000
3	1	8			24734.1943		1.0000	0.0000
3	1	9			24734.8611		1.0000	0.0000
3	1	10			24735.6019		1.0000	0.0000
3	1	11			24736.4168		1.0000	0.0000
3	1	12			24737.3055		1.0000	0.0000
3	1	13			24738.2682		1.0000	0.0000
3	1	14	24739.6710	a	24739.3048	0.3662	1.0000	0.0000
3	1	15			24740.4153		1.0000	0.0000
3	1	16	24741.9534	a	24741.5996	0.3538	1.0000	0.0000
3	1	17			24742.8576		1.0000	0.0000
3	1	18			24744.1894		1.0000	0.0000
3	1	19			24745.5949		1.0000	0.0000
3	1	20			24747.0740		1.0000	0.0000
3	1	21			24748.6267		1.0000	0.0000
3	1	22			24750.2530		1.0000	0.0000
3	1	23			24751.9528		1.0000	0.0000
3	1	24			24753.7259		1.0000	0.0000
3	1	25	24755.8512	a	24755.5725	0.2787	1.0000	0.0000
3	1	26			24757.4923		1.0000	0.0000
3	1	27	24759.7429	a	24759.4854	0.2575	1.0000	0.0000
3	1	28			24761.5517		1.0000	0.0000
3	1	29			24763.6911		1.0000	0.0000
3	1	30			24765.9035		1.0000	0.0000
3	1	31			24768.1888		1.0000	0.0000
3	1	32			24770.5471		1.0000	0.0000
3	1	33			24772.9781		1.0000	0.0000
3	1	34			24775.4819		1.0000	0.0000
3	1	35			24778.0582		1.0000	0.0000
3	1	36			24780.7072		1.0000	0.0000
3	1	37	24783.5549	a	24783.4286	0.1263	1.0000	0.0000
3	1	38			24786.2223		1.0000	0.0000
3	1	39	24789.1834	a	24789.0883	0.0951	1.0000	0.0000
3	1	40			24792.0265		1.0000	0.0000
3	1	41			24795.0368		1.0000	0.0000
3	1	42			24798.1191		1.0000	0.0000
3	1	43			24801.2732		1.0000	0.0000
3	1	44	24804.5084	a	24804.4991	0.0093	1.0000	0.0000
3	1	45			24807.7966		1.0000	0.0000
3	1	46	24811.1378	a	24811.1657	−0.0279	1.0000	0.0000
3	1	47			24814.6063		1.0000	0.0000
3	1	48			24818.1181		1.0000	0.0000
3	1	49			24821.7012		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	1	50			24825.3553		1.0000	0.0000
3	1	51			24829.0805		1.0000	0.0000
3	1	52			24832.8764		1.0000	0.0000
3	1	53			24836.7431		1.0000	0.0000
3	1	54			24840.6804		1.0000	0.0000
3	1	55			24844.6881		1.0000	0.0000
3	1	56			24848.7661		1.0000	0.0000
3	1	57			24852.9143		1.0000	0.0000
3	1	58			24857.1326		1.0000	0.0000
3	1	59			24861.4208		1.0000	0.0000
3	1	60			24865.7788		1.0000	0.0000
3	2	0			24774.8542		1.0000	0.0000
3	2	1			24774.9283		1.0000	0.0000
3	2	2			24775.0764		1.0000	0.0000
3	2	3			24775.2987		1.0000	0.0000
3	2	4			24775.5950		1.0000	0.0000
3	2	5			24775.9653		1.0000	0.0000
3	2	6			24776.4097		1.0000	0.0000
3	2	7			24776.9282		1.0000	0.0000
3	2	8			24777.5206		1.0000	0.0000
3	2	9			24778.1870		1.0000	0.0000
3	2	10			24778.9274		1.0000	0.0000
3	2	11			24779.7417		1.0000	0.0000
3	2	12			24780.6299		1.0000	0.0000
3	2	13			24781.5920		1.0000	0.0000
3	2	14	24782.7366	a	24782.6280	0.1086	1.0000	0.0000
3	2	15			24783.7377		1.0000	0.0000
3	2	16	24785.0221	a	24784.9212	0.1009	1.0000	0.0000
3	2	17			24786.1784		1.0000	0.0000
3	2	18			24787.5093		1.0000	0.0000
3	2	19			24788.9139		1.0000	0.0000
3	2	20			24790.3920		1.0000	0.0000
3	2	21			24791.9436		1.0000	0.0000
3	2	22			24793.5687		1.0000	0.0000
3	2	23			24795.2672		1.0000	0.0000
3	2	24			24797.0391		1.0000	0.0000
3	2	25	24798.9382	a	24798.8842	0.0540	1.0000	0.0000
3	2	26			24800.8026		1.0000	0.0000
3	2	27	24802.8350	a	24802.7941	0.0409	1.0000	0.0000
3	2	28			24804.8587		1.0000	0.0000
3	2	29			24806.9963		1.0000	0.0000
3	2	30			24809.2068		1.0000	0.0000
3	2	31			24811.4902		1.0000	0.0000
3	2	32			24813.8464		1.0000	0.0000
3	2	33			24816.2752		1.0000	0.0000
3	2	34			24818.7767		1.0000	0.0000
3	2	35			24821.3506		1.0000	0.0000
3	2	36			24823.9970		1.0000	0.0000
3	2	37	24826.6775	a	24826.7157	−0.0382	1.0000	0.0000
3	2	38			24829.5067		1.0000	0.0000
3	2	39	24832.3131	a	24832.3698	−0.0567	1.0000	0.0000
3	2	40			24835.3049		1.0000	0.0000
3	2	41			24838.3119		1.0000	0.0000
3	2	42			24841.3908		1.0000	0.0000
3	2	43			24844.5414		1.0000	0.0000
3	2	44	24847.6571	a	24847.7636	−0.1065	1.0000	0.0000
3	2	45			24851.0573		1.0000	0.0000
3	2	46	24854.2946	a	24854.4224	−0.1278	1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	2	47			24857.8587		1.0000	0.0000
3	2	48			24861.3662		1.0000	0.0000
3	2	49			24864.9447		1.0000	0.0000
3	2	50			24868.5941		1.0000	0.0000
3	2	51			24872.3143		1.0000	0.0000
3	2	52			24876.1051		1.0000	0.0000
3	2	53			24879.9665		1.0000	0.0000
3	2	54			24883.8982		1.0000	0.0000
3	2	55			24887.9002		1.0000	0.0000
3	2	56			24891.9723		1.0000	0.0000
3	2	57			24896.1144		1.0000	0.0000
3	2	58			24900.3263		1.0000	0.0000
3	2	59			24904.6079		1.0000	0.0000
3	2	60			24908.9590		1.0000	0.0000
3	3	0			24817.9411		1.0000	0.0000
3	3	1			24818.0151		1.0000	0.0000
3	3	2			24818.1630		1.0000	0.0000
3	3	3			24818.3849		1.0000	0.0000
3	3	4			24818.6807		1.0000	0.0000
3	3	5			24819.0504		1.0000	0.0000
3	3	6			24819.4941		1.0000	0.0000
3	3	7			24820.0117		1.0000	0.0000
3	3	8			24820.6031		1.0000	0.0000
3	3	9			24821.2685		1.0000	0.0000
3	3	10			24822.0076		1.0000	0.0000
3	3	11			24822.8206		1.0000	0.0000
3	3	12			24823.7074		1.0000	0.0000
3	3	13			24824.6679		1.0000	0.0000
3	3	14	24825.7591	a	24825.7022	0.0569	1.0000	0.0000
3	3	15			24826.8101		1.0000	0.0000
3	3	16	24828.0473	a	24827.9917	0.0556	1.0000	0.0000
3	3	17			24829.2469		1.0000	0.0000
3	3	18			24830.5756		1.0000	0.0000
3	3	19			24831.9779		1.0000	0.0000
3	3	20			24833.4536		1.0000	0.0000
3	3	21			24835.0027		1.0000	0.0000
3	3	22			24836.6252		1.0000	0.0000
3	3	23			24838.3210		1.0000	0.0000
3	3	24			24840.0900		1.0000	0.0000
3	3	25	24841.9793	a	24841.9322	0.0471	1.0000	0.0000
3	3	26			24843.8475		1.0000	0.0000
3	3	27	24845.8806	a	24845.8358	0.0448	1.0000	0.0000
3	3	28			24847.8971		1.0000	0.0000
3	3	29			24850.0313		1.0000	0.0000
3	3	30			24852.2384		1.0000	0.0000
3	3	31			24854.5182		1.0000	0.0000
3	3	32			24856.8706		1.0000	0.0000
3	3	33			24859.2957		1.0000	0.0000
3	3	34			24861.7932		1.0000	0.0000
3	3	35			24864.3632		1.0000	0.0000
3	3	36			24867.0055		1.0000	0.0000
3	3	37	24869.7497	a	24869.7200	0.0297	1.0000	0.0000
3	3	38			24872.5067		1.0000	0.0000
3	3	39	24875.3915	a	24875.3655	0.0260	1.0000	0.0000
3	3	40			24878.2962		1.0000	0.0000
3	3	41			24881.2987		1.0000	0.0000
3	3	42			24884.3730		1.0000	0.0000
3	3	43			24887.5189		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	3	44	24890.7521	a	24890.7363	0.0158	1.0000	0.0000
3	3	45			24894.0252		1.0000	0.0000
3	3	46	24897.3967	a	24897.3854	0.0113	1.0000	0.0000
3	3	47			24900.8168		1.0000	0.0000
3	3	48			24904.3193		1.0000	0.0000
3	3	49			24907.8927		1.0000	0.0000
3	3	50			24911.5370		1.0000	0.0000
3	3	51			24915.2520		1.0000	0.0000
3	3	52			24919.0377		1.0000	0.0000
3	3	53			24922.8938		1.0000	0.0000
3	3	54			24926.8202		1.0000	0.0000
3	3	55			24930.8168		1.0000	0.0000
3	3	56			24934.8836		1.0000	0.0000
3	3	57			24939.0202		1.0000	0.0000
3	3	58			24943.2267		1.0000	0.0000
3	3	59			24947.5029		1.0000	0.0000
3	3	60			24951.8486		1.0000	0.0000
3	4	0			24860.9218		1.0000	0.0000
3	4	1			24860.9957		1.0000	0.0000
3	4	2			24861.1435		1.0000	0.0000
3	4	3			24861.3652		1.0000	0.0000
3	4	4			24861.6607		1.0000	0.0000
3	4	5			24862.0302		1.0000	0.0000
3	4	6			24862.4735		1.0000	0.0000
3	4	7			24862.9906		1.0000	0.0000
3	4	8			24863.5816		1.0000	0.0000
3	4	9			24864.2463		1.0000	0.0000
3	4	10			24864.9849		1.0000	0.0000
3	4	11			24865.7972		1.0000	0.0000
3	4	12			24866.6832		1.0000	0.0000
3	4	13			24867.6429		1.0000	0.0000
3	4	14	24868.7332	a	24868.6763	0.0569	1.0000	0.0000
3	4	15			24869.7833		1.0000	0.0000
3	4	16	24871.0237	a	24870.9639	0.0598	1.0000	0.0000
3	4	17			24872.2180		1.0000	0.0000
3	4	18			24873.5456		1.0000	0.0000
3	4	19			24874.9467		1.0000	0.0000
3	4	20			24876.4211		1.0000	0.0000
3	4	21			24877.9689		1.0000	0.0000
3	4	22			24879.5900		1.0000	0.0000
3	4	23			24881.2843		1.0000	0.0000
3	4	24			24883.0518		1.0000	0.0000
3	4	25	24884.9694	a	24884.8924	0.0770	1.0000	0.0000
3	4	26			24886.8061		1.0000	0.0000
3	4	27	24888.8745	a	24888.7927	0.0818	1.0000	0.0000
3	4	28			24890.8522		1.0000	0.0000
3	4	29			24892.9846		1.0000	0.0000
3	4	30			24895.1897		1.0000	0.0000
3	4	31			24897.4676		1.0000	0.0000
3	4	32			24899.8180		1.0000	0.0000
3	4	33			24902.2409		1.0000	0.0000
3	4	34			24904.7363		1.0000	0.0000
3	4	35			24907.3040		1.0000	0.0000
3	4	36			24909.9440		1.0000	0.0000
3	4	37	24912.7664	a	24912.6561	0.1103	1.0000	0.0000
3	4	38			24915.4403		1.0000	0.0000
3	4	39	24918.4134	a	24918.2965	0.1169	1.0000	0.0000
3	4	40			24921.2246		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	4	41			24924.2245		1.0000	0.0000
3	4	42			24927.2960		1.0000	0.0000
3	4	43			24930.4391		1.0000	0.0000
3	4	44	24933.7881	a	24933.6536	0.1345	1.0000	0.0000
3	4	45			24936.9395		1.0000	0.0000
3	4	46	24940.4387	a	24940.2967	0.1420	1.0000	0.0000
3	4	47			24943.7249		1.0000	0.0000
3	4	48			24947.2242		1.0000	0.0000
3	4	49			24950.7943		1.0000	0.0000
3	4	50			24954.4353		1.0000	0.0000
3	4	51			24958.1468		1.0000	0.0000
3	4	52			24961.9289		1.0000	0.0000
3	4	53			24965.7814		1.0000	0.0000
3	4	54			24969.7042		1.0000	0.0000
3	4	55			24973.6970		1.0000	0.0000
3	4	56			24977.7599		1.0000	0.0000
3	4	57			24981.8927		1.0000	0.0000
3	4	58			24986.0952		1.0000	0.0000
3	4	59			24990.3672		1.0000	0.0000
3	4	60			24994.7088		1.0000	0.0000
3	5	0			24903.8220		1.0000	0.0000
3	5	1			24903.8959		1.0000	0.0000
3	5	2			24904.0436		1.0000	0.0000
3	5	3			24904.2651		1.0000	0.0000
3	5	4			24904.5605		1.0000	0.0000
3	5	5			24904.9297		1.0000	0.0000
3	5	6			24905.3727		1.0000	0.0000
3	5	7			24905.8895		1.0000	0.0000
3	5	8			24906.4800		1.0000	0.0000
3	5	9			24907.1444		1.0000	0.0000
3	5	10			24907.8824		1.0000	0.0000
3	5	11			24908.6942		1.0000	0.0000
3	5	12			24909.5796		1.0000	0.0000
3	5	13			24910.5387		1.0000	0.0000
3	5	14	24911.6534	a	24911.5713	0.0821	1.0000	0.0000
3	5	15			24912.6776		1.0000	0.0000
3	5	16	24913.9457	a	24913.8574	0.0883	1.0000	0.0000
3	5	17			24915.1107		1.0000	0.0000
3	5	18			24916.4374		1.0000	0.0000
3	5	19			24917.8375		1.0000	0.0000
3	5	20			24919.3110		1.0000	0.0000
3	5	21			24920.8578		1.0000	0.0000
3	5	22			24922.4778		1.0000	0.0000
3	5	23			24924.1710		1.0000	0.0000
3	5	24			24925.9373		1.0000	0.0000
3	5	25	24927.9029	a	24927.7767	0.1262	1.0000	0.0000
3	5	26			24929.6891		1.0000	0.0000
3	5	27	24931.8111	a	24931.6744	0.1367	1.0000	0.0000
3	5	28			24933.7326		1.0000	0.0000
3	5	29			24935.8636		1.0000	0.0000
3	5	30			24938.0673		1.0000	0.0000
3	5	31			24940.3437		1.0000	0.0000
3	5	32			24942.6926		1.0000	0.0000
3	5	33			24945.1140		1.0000	0.0000
3	5	34			24947.6078		1.0000	0.0000
3	5	35			24950.1739		1.0000	0.0000
3	5	36			24952.8122		1.0000	0.0000
3	5	37	24955.7219	a	24955.5227	0.1992	1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	5	38			24958.3051		1.0000	0.0000
3	5	39	24961.3732	a	24961.1596	0.2136	1.0000	0.0000
3	5	40			24964.0859		1.0000	0.0000
3	5	41			24967.0839		1.0000	0.0000
3	5	42			24970.1536		1.0000	0.0000
3	5	43			24973.2948		1.0000	0.0000
3	5	44	24976.7596	a	24976.5075	0.2521	1.0000	0.0000
3	5	45			24979.7915		1.0000	0.0000
3	5	46	24983.4150	a	24983.1467	0.2683	1.0000	0.0000
3	5	47			24986.5730		1.0000	0.0000
3	5	48			24990.0703		1.0000	0.0000
3	5	49			24993.6384		1.0000	0.0000
3	5	50			24997.2774		1.0000	0.0000
3	5	51			25000.9869		1.0000	0.0000
3	5	52			25004.7670		1.0000	0.0000
3	5	53			25008.6174		1.0000	0.0000
3	5	54			25012.5381		1.0000	0.0000
3	5	55			25016.5290		1.0000	0.0000
3	5	56			25020.5898		1.0000	0.0000
3	5	57			25024.7205		1.0000	0.0000
3	5	58			25028.9209		1.0000	0.0000
3	5	59			25033.1909		1.0000	0.0000
3	5	60			25037.5304		1.0000	0.0000
3	6	0			24946.6884		1.0000	0.0000
3	6	1			24946.7623		1.0000	0.0000
3	6	2			24946.9100		1.0000	0.0000
3	6	3			24947.1315		1.0000	0.0000
3	6	4			24947.4268		1.0000	0.0000
3	6	5			24947.7960		1.0000	0.0000
3	6	6			24948.2390		1.0000	0.0000
3	6	7			24948.7557		1.0000	0.0000
3	6	8			24949.3463		1.0000	0.0000
3	6	9			24950.0105		1.0000	0.0000
3	6	10			24950.7485		1.0000	0.0000
3	6	11			24951.5602		1.0000	0.0000
3	6	12			24952.4456		1.0000	0.0000
3	6	13			24953.4046		1.0000	0.0000
3	6	14			24954.4372		1.0000	0.0000
3	6	15			24955.5434		1.0000	0.0000
3	6	16			24956.7231		1.0000	0.0000
3	6	17			24957.9763		1.0000	0.0000
3	6	18			24959.3029		1.0000	0.0000
3	6	19			24960.7029		1.0000	0.0000
3	6	20			24962.1763		1.0000	0.0000
3	6	21			24963.7229		1.0000	0.0000
3	6	22			24965.3428		1.0000	0.0000
3	6	23			24967.0359		1.0000	0.0000
3	6	24			24968.8020		1.0000	0.0000
3	6	25	24970.7836		24970.6413	0.1423	1.0000	0.0000
3	6	26			24972.5535		1.0000	0.0000
3	6	27	24974.6886		24974.5386	0.1500	1.0000	0.0000
3	6	28			24976.5966		1.0000	0.0000
3	6	29			24978.7274		1.0000	0.0000
3	6	30			24980.9308		1.0000	0.0000
3	6	31			24983.2069		1.0000	0.0000
3	6	32			24985.5556		1.0000	0.0000
3	6	33			24987.9767		1.0000	0.0000
3	6	34			24990.4702		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	6	35			24993.0360		1.0000	0.0000
3	6	36			24995.6739		1.0000	0.0000
3	6	37			24998.3840		1.0000	0.0000
3	6	38			25001.1661		1.0000	0.0000
3	6	39			25004.0202		1.0000	0.0000
3	6	40			25006.9460		1.0000	0.0000
3	6	41			25009.9436		1.0000	0.0000
3	6	42			25013.0128		1.0000	0.0000
3	6	43			25016.1535		1.0000	0.0000
3	6	44			25019.3656		1.0000	0.0000
3	6	45			25022.6490		1.0000	0.0000
3	6	46	25026.4118		25026.0036	0.4082	1.0000	0.0000
3	6	47			25029.4293		1.0000	0.0000
3	6	48			25032.9259		1.0000	0.0000
3	6	49			25036.4933		1.0000	0.0000
3	6	50			25040.1315		1.0000	0.0000
3	6	51			25043.8403		1.0000	0.0000
3	6	52			25047.6195		1.0000	0.0000
3	6	53			25051.4691		1.0000	0.0000
3	6	54			25055.3889		1.0000	0.0000
3	6	55			25059.3788		1.0000	0.0000
3	6	56			25063.4386		1.0000	0.0000
3	6	57			25067.5683		1.0000	0.0000
3	6	58			25071.7676		1.0000	0.0000
3	6	59			25076.0365		1.0000	0.0000
3	6	60			25080.3749		1.0000	0.0000
3	7	0			24989.5182		1.0000	0.0000
3	7	1			24989.5920		1.0000	0.0000
3	7	2			24989.7398		1.0000	0.0000
3	7	3			24989.9613		1.0000	0.0000
3	7	4			24990.2567		1.0000	0.0000
3	7	5			24990.6259		1.0000	0.0000
3	7	6			24991.0690		1.0000	0.0000
3	7	7			24991.5858		1.0000	0.0000
3	7	8			24992.1764		1.0000	0.0000
3	7	9			24992.8408		1.0000	0.0000
3	7	10			24993.5789		1.0000	0.0000
3	7	11			24994.3907		1.0000	0.0000
3	7	12			24995.2762		1.0000	0.0000
3	7	13			24996.2354		1.0000	0.0000
3	7	14	24997.3090		24997.2681	0.0409	1.0000	0.0000
3	7	15			24998.3744		1.0000	0.0000
3	7	16	24999.5971		24999.5543	0.0428	1.0000	0.0000
3	7	17			25000.8076		1.0000	0.0000
3	7	18			25002.1344		1.0000	0.0000
3	7	19			25003.5346		1.0000	0.0000
3	7	20			25005.0082		1.0000	0.0000
3	7	21			25006.5550		1.0000	0.0000
3	7	22			25008.1751		1.0000	0.0000
3	7	23			25009.8683		1.0000	0.0000
3	7	24			25011.6347		1.0000	0.0000
3	7	25	25013.5421		25013.4742	0.0679	1.0000	0.0000
3	7	26			25015.3866		1.0000	0.0000
3	7	27	25017.4489		25017.3719	0.0770	1.0000	0.0000
3	7	28			25019.4301		1.0000	0.0000
3	7	29			25021.5611		1.0000	0.0000
3	7	30			25023.7648		1.0000	0.0000
3	7	31			25026.0411		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	7	32			25028.3900		1.0000	0.0000
3	7	33			25030.8113		1.0000	0.0000
3	7	34			25033.3050		1.0000	0.0000
3	7	35			25035.8710		1.0000	0.0000
3	7	36			25038.5092		1.0000	0.0000
3	7	37			25041.2195		1.0000	0.0000
3	7	38			25044.0018		1.0000	0.0000
3	7	39			25046.8560		1.0000	0.0000
3	7	40			25049.7821		1.0000	0.0000
3	7	41			25052.7799		1.0000	0.0000
3	7	42			25055.8493		1.0000	0.0000
3	7	43			25058.9902		1.0000	0.0000
3	7	44			25062.2025		1.0000	0.0000
3	7	45			25065.4860		1.0000	0.0000
3	7	46	25069.0993		25068.8408	0.2585	1.0000	0.0000
3	7	47			25072.2666		1.0000	0.0000
3	7	48			25075.7634		1.0000	0.0000
3	7	49			25079.3310		1.0000	0.0000
3	7	50			25082.9694		1.0000	0.0000
3	7	51			25086.6783		1.0000	0.0000
3	7	52			25090.4577		1.0000	0.0000
3	7	53			25094.3074		1.0000	0.0000
3	7	54			25098.2273		1.0000	0.0000
3	7	55			25102.2173		1.0000	0.0000
3	7	56			25106.2772		1.0000	0.0000
3	7	57			25110.4070		1.0000	0.0000
3	7	58			25114.6064		1.0000	0.0000
3	7	59			25118.8753		1.0000	0.0000
3	7	60			25123.2137		1.0000	0.0000
3	8	0			25032.3033		1.0000	0.0000
3	8	1			25032.3772		1.0000	0.0000
3	8	2			25032.5250		1.0000	0.0000
3	8	3			25032.7467		1.0000	0.0000
3	8	4			25033.0422		1.0000	0.0000
3	8	5			25033.4117		1.0000	0.0000
3	8	6			25033.8550		1.0000	0.0000
3	8	7			25034.3721		1.0000	0.0000
3	8	8			25034.9630		1.0000	0.0000
3	8	9			25035.6278		1.0000	0.0000
3	8	10			25036.3663		1.0000	0.0000
3	8	11			25037.1786		1.0000	0.0000
3	8	12			25038.0646		1.0000	0.0000
3	8	13			25039.0242		1.0000	0.0000
3	8	14	25040.0539		25040.0575	−0.0036	1.0000	0.0000
3	8	15			25041.1645		1.0000	0.0000
3	8	16	25042.3467		25042.3449	0.0018	1.0000	0.0000
3	8	17			25043.5990		1.0000	0.0000
3	8	18			25044.9264		1.0000	0.0000
3	8	19			25046.3274		1.0000	0.0000
3	8	20			25047.8017		1.0000	0.0000
3	8	21			25049.3493		1.0000	0.0000
3	8	22			25050.9702		1.0000	0.0000
3	8	23			25052.6642		1.0000	0.0000
3	8	24			25054.4315		1.0000	0.0000
3	8	25	25056.2696		25056.2718	−0.0022	1.0000	0.0000
3	8	26			25058.1851		1.0000	0.0000
3	8	27	25060.1813		25060.1714	0.0099	1.0000	0.0000
3	8	28			25062.2305		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	8	29			25064.3624		1.0000	0.0000
3	8	30			25066.5671		1.0000	0.0000
3	8	31			25068.8443		1.0000	0.0000
3	8	32			25071.1942		1.0000	0.0000
3	8	33			25073.6165		1.0000	0.0000
3	8	34			25076.1112		1.0000	0.0000
3	8	35			25078.6781		1.0000	0.0000
3	8	36			25081.3173		1.0000	0.0000
3	8	37			25084.0286		1.0000	0.0000
3	8	38			25086.8119		1.0000	0.0000
3	8	39			25089.6671		1.0000	0.0000
3	8	40			25092.5941		1.0000	0.0000
3	8	41			25095.5929		1.0000	0.0000
3	8	42			25098.6632		1.0000	0.0000
3	8	43			25101.8050		1.0000	0.0000
3	8	44	25105.1863		25105.0182	0.1681	1.0000	0.0000
3	8	45			25108.3027		1.0000	0.0000
3	8	46	25111.8592		25111.6583	0.2009	1.0000	0.0000
3	8	47			25115.0850		1.0000	0.0000
3	8	48			25118.5826		1.0000	0.0000
3	8	49			25122.1510		1.0000	0.0000
3	8	50			25125.7901		1.0000	0.0000
3	8	51			25129.4997		1.0000	0.0000
3	8	52			25133.2798		1.0000	0.0000
3	8	53			25137.1301		1.0000	0.0000
3	8	54			25141.0506		1.0000	0.0000
3	8	55			25145.0412		1.0000	0.0000
3	8	56			25149.1016		1.0000	0.0000
3	8	57			25153.2318		1.0000	0.0000
3	8	58			25157.4317		1.0000	0.0000
3	8	59			25161.7010		1.0000	0.0000
3	8	60			25166.0396		1.0000	0.0000
3	9	0			25075.0092		1.0000	0.0000
3	9	1			25075.0832		1.0000	0.0000
3	9	2			25075.2311		1.0000	0.0000
3	9	3			25075.4529		1.0000	0.0000
3	9	4			25075.7487		1.0000	0.0000
3	9	5			25076.1185		1.0000	0.0000
3	9	6			25076.5622		1.0000	0.0000
3	9	7			25077.0797		1.0000	0.0000
3	9	8			25077.6712		1.0000	0.0000
3	9	9			25078.3365		1.0000	0.0000
3	9	10			25079.0756		1.0000	0.0000
3	9	11			25079.8885		1.0000	0.0000
3	9	12			25080.7752		1.0000	0.0000
3	9	13			25081.7357		1.0000	0.0000
3	9	14	25082.7197		25082.7698	−0.0501	1.0000	0.0000
3	9	15			25083.8776		1.0000	0.0000
3	9	16	25085.0116		25085.0590	−0.0474	1.0000	0.0000
3	9	17			25086.3140		1.0000	0.0000
3	9	18			25087.6425		1.0000	0.0000
3	9	19			25089.0445		1.0000	0.0000
3	9	20			25090.5199		1.0000	0.0000
3	9	21			25092.0687		1.0000	0.0000
3	9	22			25093.6908		1.0000	0.0000
3	9	23			25095.3861		1.0000	0.0000
3	9	24			25097.1547		1.0000	0.0000
3	9	25	25098.9612		25098.9963	−0.0351	1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	9	26			25100.9110		1.0000	0.0000
3	9	27	25102.8738		25102.8986	−0.0248	1.0000	0.0000
3	9	28			25104.9592		1.0000	0.0000
3	9	29			25107.0925		1.0000	0.0000
3	9	30			25109.2986		1.0000	0.0000
3	9	31			25111.5774		1.0000	0.0000
3	9	32			25113.9287		1.0000	0.0000
3	9	33			25116.3526		1.0000	0.0000
3	9	34			25118.8488		1.0000	0.0000
3	9	35			25121.4173		1.0000	0.0000
3	9	36			25124.0581		1.0000	0.0000
3	9	37			25126.7710		1.0000	0.0000
3	9	38			25129.5559		1.0000	0.0000
3	9	39			25132.4127		1.0000	0.0000
3	9	40			25135.3413		1.0000	0.0000
3	9	41			25138.3416		1.0000	0.0000
3	9	42			25141.4136		1.0000	0.0000
3	9	43			25144.5570		1.0000	0.0000
3	9	44	25147.8743		25147.7718	0.1025	1.0000	0.0000
3	9	45			25151.0578		1.0000	0.0000
3	9	46	25154.5445		25154.4150	0.1295	1.0000	0.0000
3	9	47			25157.8432		1.0000	0.0000
3	9	48			25161.3424		1.0000	0.0000
3	9	49			25164.9123		1.0000	0.0000
3	9	50			25168.5529		1.0000	0.0000
3	9	51			25172.2640		1.0000	0.0000
3	9	52			25176.0455		1.0000	0.0000
3	9	53			25179.8972		1.0000	0.0000
3	9	54			25183.8191		1.0000	0.0000
3	9	55			25187.8110		1.0000	0.0000
3	9	56			25191.8728		1.0000	0.0000
3	9	57			25196.0043		1.0000	0.0000
3	9	58			25200.2053		1.0000	0.0000
3	9	59			25204.4758		1.0000	0.0000
3	9	60			25208.8156		1.0000	0.0000
3	10	0			25117.5955		1.0000	0.0000
3	10	1			25117.6696		1.0000	0.0000
3	10	2			25117.8177		1.0000	0.0000
3	10	3			25118.0399		1.0000	0.0000
3	10	4			25118.3361		1.0000	0.0000
3	10	5			25118.7063		1.0000	0.0000
3	10	6			25119.1506		1.0000	0.0000
3	10	7			25119.6688		1.0000	0.0000
3	10	8			25120.2611		1.0000	0.0000
3	10	9			25120.9273		1.0000	0.0000
3	10	10			25121.6674		1.0000	0.0000
3	10	11			25122.4814		1.0000	0.0000
3	10	12			25123.3692		1.0000	0.0000
3	10	13			25124.3309		1.0000	0.0000
3	10	14	25125.2874		25125.3664	−0.0790	1.0000	0.0000
3	10	15			25126.4756		1.0000	0.0000
3	10	16	25127.5655		25127.6586	−0.0931	1.0000	0.0000
3	10	17			25128.9151		1.0000	0.0000
3	10	18			25130.2453		1.0000	0.0000
3	10	19			25131.6490		1.0000	0.0000
3	10	20			25133.1262		1.0000	0.0000
3	10	21			25134.6769		1.0000	0.0000
3	10	22			25136.3009		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	10	23			25137.9982		1.0000	0.0000
3	10	24			25139.7688		1.0000	0.0000
3	10	25	25141.5407		25141.6125	−0.0718	1.0000	0.0000
3	10	26			25143.5293		1.0000	0.0000
3	10	27	25145.4537		25145.5192	−0.0655	1.0000	0.0000
3	10	28			25147.5819		1.0000	0.0000
3	10	29			25149.7176		1.0000	0.0000
3	10	30			25151.9260		1.0000	0.0000
3	10	31			25154.2071		1.0000	0.0000
3	10	32			25156.5608		1.0000	0.0000
3	10	33			25158.9870		1.0000	0.0000
3	10	34			25161.4857		1.0000	0.0000
3	10	35			25164.0566		1.0000	0.0000
3	10	36			25166.6998		1.0000	0.0000
3	10	37			25169.4151		1.0000	0.0000
3	10	38			25172.2024		1.0000	0.0000
3	10	39			25175.0617		1.0000	0.0000
3	10	40			25177.9927		1.0000	0.0000
3	10	41			25180.9955		1.0000	0.0000
3	10	42			25184.0698		1.0000	0.0000
3	10	43			25187.2156		1.0000	0.0000
3	10	44	25190.4652		25190.4327	0.0325	1.0000	0.0000
3	10	45			25193.7211		1.0000	0.0000
3	10	46	25197.1353		25197.0806	0.0547	1.0000	0.0000
3	10	47			25200.5111		1.0000	0.0000
3	10	48			25204.0124		1.0000	0.0000
3	10	49			25207.5845		1.0000	0.0000
3	10	50			25211.2272		1.0000	0.0000
3	10	51			25214.9404		1.0000	0.0000
3	10	52			25218.7239		1.0000	0.0000
3	10	53			25222.5776		1.0000	0.0000
3	10	54			25226.5014		1.0000	0.0000
3	10	55			25230.4951		1.0000	0.0000
3	10	56			25234.5587		1.0000	0.0000
3	10	57			25238.6918		1.0000	0.0000
3	10	58			25242.8945		1.0000	0.0000
3	10	59			25247.1665		1.0000	0.0000
3	10	60			25251.5077		1.0000	0.0000
3	11	0			25159.9960		1.0000	0.0000
3	11	1			25160.0702		1.0000	0.0000
3	11	2			25160.2186		1.0000	0.0000
3	11	3			25160.4413		1.0000	0.0000
3	11	4			25160.7381		1.0000	0.0000
3	11	5			25161.1091		1.0000	0.0000
3	11	6			25161.5543		1.0000	0.0000
3	11	7			25162.0736		1.0000	0.0000
3	11	8			25162.6670		1.0000	0.0000
3	11	9			25163.3345		1.0000	0.0000
3	11	10			25164.0761		1.0000	0.0000
3	11	11			25164.8918		1.0000	0.0000
3	11	12			25165.7814		1.0000	0.0000
3	11	13			25166.7450		1.0000	0.0000
3	11	14	25167.6736		25167.7825	−0.1089	1.0000	0.0000
3	11	15			25168.8938		1.0000	0.0000
3	11	16	25169.9680		25170.0790	−0.1110	1.0000	0.0000
3	11	17			25171.3380		1.0000	0.0000
3	11	18			25172.6707		1.0000	0.0000
3	11	19			25174.0770		1.0000	0.0000

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	11	20			25175.5569		1.0000	0.0000
3	11	21			25177.1104		1.0000	0.0000
3	11	22			25178.7373		1.0000	0.0000
3	11	23			25180.4376		1.0000	0.0000
3	11	24			25182.2112		1.0000	0.0000
3	11	25	25183.9484		25184.0581	−0.1097	1.0000	0.0000
3	11	26			25185.9782		1.0000	0.0000
3	11	27	25187.8635		25187.9713	−0.1078	1.0000	0.0000
3	11	28			25190.0375		1.0000	0.0000
3	11	29			25192.1766		1.0000	0.0000
3	11	30			25194.3885		1.0000	0.0000
3	11	31			25196.6731		1.0000	0.0000
3	11	32			25199.0304		1.0000	0.0000
3	11	33			25201.4602		1.0000	0.0000
3	11	34			25203.9625		1.0000	0.0000
3	11	35			25206.5372		1.0000	0.0000
3	11	36			25209.1840		1.0000	0.0000
3	11	37	25211.8239		25211.9031	−0.0792	1.0000	0.0000
3	11	38			25214.6941		1.0000	0.0000
3	11	39	25217.4928		25217.5571	−0.0643	1.0000	0.0000
3	11	40			25220.4918		1.0000	0.0000
3	11	41			25223.4983		1.0000	0.0000
3	11	42			25226.5763		1.0000	0.0000
3	11	43			25229.7258		1.0000	0.0000
3	11	44	25232.9007		25232.9466	−0.0459	1.0000	0.0000
3	11	45			25236.2386		1.0000	0.0000
3	11	46	25239.5831		25239.6017	−0.0186	1.0000	0.0000
3	11	47			25243.0358		1.0000	0.0000
3	11	48			25246.5406		1.0000	0.0000
3	11	49			25250.1162		1.0000	0.0000
3	11	50			25253.7623		1.0000	0.0000
3	11	51			25257.4788		1.0000	0.0000
3	11	52			25261.2656		1.0000	0.0000
3	11	53			25265.1225		1.0000	0.0000
3	11	54			25269.0494		1.0000	0.0000
3	11	55			25273.0462		1.0000	0.0000
3	11	56			25277.1127		1.0000	0.0000
3	11	57			25281.2487		1.0000	0.0000
3	11	58			25285.4541		1.0000	0.0000
3	11	59			25289.7288		1.0000	0.0000
3	11	60			25294.0726		1.0000	0.0000
3	12	0			25202.1197		0.9999	0.0001
3	12	1			25202.1941		0.9999	0.0001
3	12	2			25202.3431		0.9999	0.0001
3	12	3			25202.5665		0.9999	0.0001
3	12	4			25202.8644		0.9999	0.0001
3	12	5			25203.2367		0.9999	0.0001
3	12	6			25203.6834		0.9999	0.0001
3	12	7			25204.2045		0.9999	0.0001
3	12	8			25204.7999		0.9999	0.0001
3	12	9			25205.4698		0.9999	0.0001
3	12	10			25206.2139		0.9999	0.0001
3	12	11			25207.0322		0.9999	0.0001
3	12	12			25207.9248		0.9999	0.0001
3	12	13			25208.8916		0.9999	0.0001
3	12	14	25209.8110		25209.9325	−0.1215	0.9999	0.0001
3	12	15			25211.0475		0.9999	0.0001
3	12	16	25212.1106		25212.2364	−0.1258	0.9999	0.0001

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	12	17			25213.4994		0.9999	0.0001
3	12	18			25214.8362		0.9999	0.0001
3	12	19			25216.2469		0.9999	0.0001
3	12	20			25217.7313		0.9999	0.0001
3	12	21			25219.2894		0.9999	0.0001
3	12	22			25220.9212		0.9999	0.0001
3	12	23			25222.6264		0.9999	0.0001
3	12	24			25224.4051		0.9999	0.0001
3	12	25	25226.1184		25226.2572	−0.1388	0.9999	0.0001
3	12	26			25228.1826		0.9999	0.0001
3	12	27	25230.0398		25230.1811	−0.1413	0.9999	0.0001
3	12	28			25232.2528		0.9999	0.0001
3	12	29			25234.3974		0.9999	0.0001
3	12	30			25236.6150		0.9999	0.0001
3	12	31			25238.9053		0.9999	0.0001
3	12	32			25241.2684		0.9999	0.0001
3	12	33			25243.7040		0.9999	0.0001
3	12	34			25246.2121		0.9999	0.0001
3	12	35			25248.7927		0.9999	0.0001
3	12	36			25251.4454		0.9999	0.0001
3	12	37	25254.0340		25254.1703	−0.1363	0.9999	0.0001
3	12	38			25256.9673		0.9999	0.0001
3	12	39	25259.7080		25259.8361	−0.1281	0.9999	0.0001
3	12	40			25262.7767		0.9999	0.0001
3	12	41			25265.7890		0.9999	0.0001
3	12	42			25268.8728		0.9999	0.0001
3	12	43			25272.0281		0.9999	0.0001
3	12	44	25275.1429		25275.2546	−0.1117	1.0000	0.0000
3	12	45			25278.5522		1.0000	0.0000
3	12	46	25281.8315		25281.9209	−0.0894	1.0000	0.0000
3	12	47			25285.3604		1.0000	0.0000
3	12	48			25288.8707		1.0000	0.0000
3	12	49			25292.4515		1.0000	0.0000
3	12	50			25296.1028		1.0000	0.0000
3	12	51			25299.8245		1.0000	0.0000
3	12	52			25303.6162		1.0000	0.0000
3	12	53			25307.4780		1.0000	0.0000
3	12	54			25311.4097		1.0000	0.0000
3	12	55			25315.4111		1.0000	0.0000
3	12	56			25319.4821		1.0000	0.0000
3	12	57			25323.6224		1.0000	0.0000
3	12	58			25327.8321		1.0000	0.0000
3	12	59			25332.1108		1.0000	0.0000
3	12	60			25336.4585		1.0000	0.0000
3	13	0			25243.7746		0.9999	0.0001
3	13	1			25243.8498		0.9999	0.0001
3	13	2			25244.0001		0.9999	0.0001
3	13	3			25244.2256		0.9999	0.0001
3	13	4			25244.5261		0.9999	0.0001
3	13	5			25244.9017		0.9999	0.0001
3	13	6			25245.3523		0.9999	0.0001
3	13	7			25245.8779		0.9999	0.0001
3	13	8			25246.4784		0.9999	0.0001
3	13	9			25247.1536		0.9999	0.0001
3	13	10			25247.9037		0.9999	0.0001
3	13	11			25248.7284		0.9999	0.0001
3	13	12			25249.6277		0.9999	0.0001
3	13	13			25250.6016		0.9999	0.0001

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	13	14	25251.5483		25251.6499	−0.1016	0.9999	0.0001
3	13	15			25252.7726		0.9999	0.0001
3	13	16	25253.8648		25253.9697	−0.1049	0.9999	0.0001
3	13	17			25255.2409		0.9999	0.0001
3	13	18			25256.5863		0.9999	0.0001
3	13	19			25258.0057		0.9999	0.0001
3	13	20			25259.4992		0.9999	0.0001
3	13	21			25261.0665		0.9999	0.0001
3	13	22			25262.7076		0.9999	0.0001
3	13	23			25264.4224		0.9999	0.0001
3	13	24			25266.2108		0.9999	0.0001
3	13	25	25267.9276		25268.0727	−0.1451	0.9999	0.0001
3	13	26			25270.0080		0.9999	0.0001
3	13	27	25271.8654		25272.0166	−0.1512	0.9999	0.0001
3	13	28			25274.0984		0.9999	0.0001
3	13	29			25276.2533		0.9999	0.0001
3	13	30			25278.4811		0.9999	0.0001
3	13	31			25280.7818		0.9999	0.0001
3	13	32			25283.1552		0.9999	0.0001
3	13	33			25285.6013		0.9999	0.0001
3	13	34			25288.1198		0.9999	0.0001
3	13	35			25290.7107		0.9999	0.0001
3	13	36			25293.3739		0.9999	0.0001
3	13	37	25295.9431		25296.1092	−0.1661	0.9999	0.0001
3	13	38			25298.9164		0.9999	0.0001
3	13	39	25301.6293		25301.7955	−0.1662	0.9999	0.0001
3	13	40			25304.7464		0.9999	0.0001
3	13	41			25307.7688		0.9999	0.0001
3	13	42			25310.8626		0.9999	0.0001
3	13	43			25314.0278		0.9999	0.0001
3	13	44	25317.1885		25317.2641	−0.0756	0.9999	0.0001
3	13	45			25320.5715		0.9999	0.0001
3	13	46	25323.8469		25323.9497	−0.1028	0.9999	0.0001
3	13	47			25327.3987		0.9999	0.0001
3	13	48			25330.9182		0.9999	0.0001
3	13	49			25334.5082		0.9999	0.0001
3	13	50			25338.1685		0.9999	0.0001
3	13	51			25341.8989		0.9999	0.0001
3	13	52			25345.6992		0.9999	0.0001
3	13	53			25349.5694		0.9999	0.0001
3	13	54			25353.5093		0.9999	0.0001
3	13	55			25357.5186		0.9999	0.0001
3	13	56			25361.5973		0.9999	0.0001
3	13	57			25365.7452		0.9999	0.0001
3	13	58			25369.9621		0.9999	0.0001
3	13	59			25374.2479		0.9999	0.0001
3	13	60			25378.6024		0.9999	0.0001
3	14	0			25258.6007		0.9999	0.0001
3	14	1			25258.7463		0.9999	0.0001
3	14	2			25259.0375		0.9999	0.0001
3	14	3			25259.4743		0.9999	0.0001
3	14	4			25260.0568		0.9999	0.0001
3	14	5			25260.7848		0.9999	0.0001
3	14	6			25261.6584		0.9999	0.0001
3	14	7			25262.6775		0.9999	0.0001
3	14	8			25263.8422		0.9999	0.0001
3	14	9			25265.1523		0.9999	0.0001
3	14	10			25266.6079		0.9999	0.0001

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	14	11			25268.2087		0.9999	0.0001
3	14	12			25269.9548		0.9999	0.0001
3	14	13			25271.8459		0.9999	0.0001
3	14	14	25274.2126		25273.8820	0.3306	0.9999	0.0001
3	14	15			25276.0628		0.9999	0.0001
3	14	16	25278.6615		25278.3880	0.2735	0.9999	0.0001
3	14	17			25280.8572		0.9999	0.0001
3	14	18			25283.4701		0.9999	0.0001
3	14	19			25286.2258		0.9999	0.0001
3	14	20			25289.1233		0.9999	0.0001
3	14	21	25292.3105		25292.1610	0.1495	0.9999	0.0001
3	14	22	25295.4460		25295.3359	0.1101	0.9999	0.0001
3	14	23	25298.7331		25298.6426	0.0905	0.9999	0.0001
3	14	24	25302.1365		25302.0689	0.0676	0.9999	0.0001
3	14	25	25305.6352		25305.5834	0.0518	0.9999	0.0001
3	14	26	25309.1260		25309.0845	0.0415	1.0000	0.0000
3	14	27	25312.2659		25312.2654	0.0005	1.0000	0.0000
3	14	28	25314.8454		25314.8923	−0.0469	0.9999	0.0001
3	14	29	25317.1913		25317.2679	−0.0766	0.9999	0.0001
3	14	30			25319.6086		0.9999	0.0001
3	14	31			25321.9809		0.9998	0.0002
3	14	32			25324.4064		0.9998	0.0002
3	14	33			25326.8940		0.9998	0.0002
3	14	34			25329.4478		0.9998	0.0002
3	14	35			25332.0698		0.9998	0.0002
3	14	36			25334.7613		0.9998	0.0002
3	14	37	25337.3650		25337.5228	−0.1578	0.9998	0.0002
3	14	38			25340.3547		0.9998	0.0002
3	14	39	25343.0897		25343.2573	−0.1676	0.9998	0.0002
3	14	40			25346.2305		0.9998	0.0002
3	14	41			25349.2745		0.9998	0.0002
3	14	42			25352.3892		0.9998	0.0002
3	14	43			25355.5745		0.9999	0.0001
3	14	44			25358.8304		0.9999	0.0001
3	14	45			25362.1567		0.9999	0.0001
3	14	46	25365.3950		25365.5534	−0.1584	0.9999	0.0001
3	14	47			25369.0203		0.9999	0.0001
3	14	48			25372.5573		0.9999	0.0001
3	14	49			25376.1642		0.9999	0.0001
3	14	50			25379.8410		0.9999	0.0001
3	14	51			25383.5874		0.9999	0.0001
3	14	52			25387.4034		0.9999	0.0001
3	14	53			25391.2887		0.9999	0.0001
3	14	54			25395.2433		0.9999	0.0001
3	14	55			25399.2669		0.9999	0.0001
3	14	56			25403.3594		0.9999	0.0001
3	14	57			25407.5207		0.9999	0.0001
3	14	58			25411.7505		0.9999	0.0001
3	14	59			25416.0488		0.9999	0.0001
3	14	60			25420.4153		0.9999	0.0001
3	15	0			25284.8246		0.9997	0.0003
3	15	1			25284.9008		0.9997	0.0003
3	15	2			25285.0532		0.9997	0.0003
3	15	3			25285.2817		0.9997	0.0003
3	15	4			25285.5864		0.9997	0.0003
3	15	5			25285.9672		0.9997	0.0003
3	15	6			25286.4241		0.9997	0.0003
3	15	7			25286.9571		0.9997	0.0003

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	15	8			25287.5660		0.9997	0.0003
3	15	9			25288.2509		0.9997	0.0003
3	15	10			25289.0117		0.9997	0.0003
3	15	11			25289.8484		0.9997	0.0003
3	15	12			25290.7610		0.9997	0.0003
3	15	13			25291.7493		0.9997	0.0003
3	15	14	25292.7735		25292.8135	−0.0400	0.9997	0.0003
3	15	15			25293.9535		0.9997	0.0003
3	15	16	25295.1197		25295.1695	−0.0498	0.9997	0.0003
3	15	17			25296.4615		0.9997	0.0003
3	15	18	25297.7826		25297.8299	−0.0473	0.9997	0.0003
3	15	19			25299.2752		0.9997	0.0003
3	15	20	25300.7422		25300.7980	−0.0558	0.9997	0.0003
3	15	21	25302.3443		25302.3999	−0.0556	0.9997	0.0003
3	15	22	25304.0144		25304.0834	−0.0690	0.9997	0.0003
3	15	23	25305.7969		25305.8538	−0.0569	0.9997	0.0003
3	15	24	25307.7664		25307.7229	0.0435	0.9997	0.0003
3	15	25	25309.4922		25309.7218	−0.2296	0.9997	0.0003
3	15	26	25311.7632		25311.9518	−0.1886	0.9997	0.0003
3	15	27	25314.5550		25314.7193	−0.1643	0.9997	0.0003
3	15	28	25318.1090		25318.2577	−0.1487	0.9997	0.0003
3	15	29			25322.2640		0.9998	0.0002
3	15	30			25326.5212		0.9998	0.0002
3	15	31			25330.9625		0.9998	0.0002
3	15	32			25335.5655		0.9998	0.0002
3	15	33			25340.3208		0.9998	0.0002
3	15	34			25345.2234		0.9998	0.0002
3	15	35			25350.2703		0.9998	0.0002
3	15	36			25355.4590		0.9998	0.0002
3	15	37	25360.7023		25360.7867	−0.0844	0.9998	0.0002
3	15	38			25366.2499		0.9998	0.0002
3	15	39	25371.7791		25371.8427	−0.0636	0.9998	0.0002
3	15	40			25377.5530		0.9999	0.0001
3	15	41			25383.3516		0.9999	0.0001
3	15	42			25389.1446		0.9999	0.0001
3	15	43			25394.5672		1.0000	0.0000
3	15	44	25398.9287		25398.9600	−0.0313	0.9999	0.0001
3	15	45			25402.6885		0.9998	0.0002
3	15	46	25406.1622		25406.2685	−0.1063	0.9998	0.0002
3	15	47			25409.8457		0.9998	0.0002
3	15	48			25413.4613		0.9998	0.0002
3	15	49			25417.1301		0.9998	0.0002
3	15	50			25420.8588		0.9998	0.0002
3	15	51			25424.6507		0.9998	0.0002
3	15	52			25428.5074		0.9998	0.0002
3	15	53			25432.4300		0.9998	0.0002
3	15	54			25436.4190		0.9998	0.0002
3	15	55			25440.4748		0.9998	0.0002
3	15	56			25444.5975		0.9998	0.0002
3	15	57			25448.7873		0.9998	0.0002
3	15	58			25453.0442		0.9998	0.0002
3	15	59			25457.3681		0.9998	0.0002
3	15	60			25461.7589		0.9998	0.0002
3	16	0			25323.5412		0.9996	0.0004
3	16	1			25323.6240		0.9996	0.0004
3	16	2			25323.7895		0.9996	0.0004
3	16	3			25324.0376		0.9996	0.0004
3	16	4			25324.3678		0.9996	0.0004

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	16	5			25324.7800		0.9996	0.0004
3	16	6			25325.2736		0.9996	0.0004
3	16	7			25325.8481		0.9996	0.0004
3	16	8			25326.5030		0.9996	0.0004
3	16	9			25327.2377		0.9996	0.0004
3	16	10			25328.0516		0.9996	0.0004
3	16	11			25328.9441		0.9996	0.0004
3	16	12			25329.9147		0.9996	0.0004
3	16	13			25330.9626		0.9996	0.0004
3	16	14	25332.2256		25332.0874	0.1382	0.9996	0.0004
3	16	15			25333.2885		0.9996	0.0004
3	16	16	25334.6883		25334.5655	0.1228	0.9996	0.0004
3	16	17			25335.9177		0.9996	0.0004
3	16	18			25337.3449		0.9996	0.0004
3	16	19			25338.8467		0.9996	0.0004
3	16	20			25340.4226		0.9996	0.0004
3	16	21			25342.0723		0.9996	0.0004
3	16	22			25343.7957		0.9996	0.0004
3	16	23			25345.5923		0.9996	0.0004
3	16	24			25347.4621		0.9996	0.0004
3	16	25	25349.4388		25349.4047	0.0341	0.9996	0.0004
3	16	26			25351.4201		0.9996	0.0004
3	16	27	25353.5219		25353.5081	0.0138	0.9996	0.0004
3	16	28			25355.6686		0.9997	0.0003
3	16	29			25357.9016		0.9997	0.0003
3	16	30			25360.2069		0.9997	0.0003
3	16	31			25362.5845		0.9997	0.0003
3	16	32			25365.0347		0.9997	0.0003
3	16	33			25367.5575		0.9997	0.0003
3	16	34			25370.1531		0.9997	0.0003
3	16	35			25372.8222		0.9997	0.0003
3	16	36			25375.5655		0.9997	0.0003
3	16	37	25378.2755		25378.3845	−0.1090	0.9997	0.0003
3	16	38			25381.2819		0.9997	0.0003
3	16	39	25384.1535		25384.2628	−0.1093	0.9997	0.0003
3	16	40			25387.3383		0.9997	0.0003
3	16	41			25390.5371		0.9996	0.0004
3	16	42			25393.9523		0.9996	0.0004
3	16	43			25397.9480		0.9996	0.0004
3	16	44	25402.9550		25403.1825	−0.2275	0.9996	0.0004
3	16	45			25409.2897		0.9997	0.0003
3	16	46	25415.7951		25415.7521	0.0430	0.9997	0.0003
3	16	47			25422.4228		0.9998	0.0002
3	16	48			25429.2582		0.9998	0.0002
3	16	49			25436.2402		0.9998	0.0002
3	16	50			25443.3566		0.9998	0.0002
3	16	51			25450.5944		0.9998	0.0002
3	16	52			25457.9303		0.9998	0.0002
3	16	53			25465.3076		0.9999	0.0001
3	16	54			25472.5415		0.9999	0.0001
3	16	55			25479.0208		0.9999	0.0001
3	16	56			25484.2317		0.9999	0.0001
3	16	57			25488.8447		0.9998	0.0002
3	16	58			25493.3174		0.9998	0.0002
3	16	59			25497.7790		0.9998	0.0002
3	16	60			25502.2706		0.9998	0.0002
3	17	0			25344.6356		0.9990	0.0010
3	17	1			25344.7621		0.9990	0.0010

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	17	2			25345.0150		0.9990	0.0010
3	17	3			25345.3942		0.9990	0.0010
3	17	4			25345.8997		0.9990	0.0010
3	17	5			25346.5314		0.9990	0.0010
3	17	6			25347.2888		0.9990	0.0010
3	17	7			25348.1717		0.9990	0.0010
3	17	8			25349.1795		0.9990	0.0010
3	17	9			25350.3115		0.9991	0.0009
3	17	10			25351.5668		0.9991	0.0009
3	17	11			25352.9441		0.9991	0.0009
3	17	12			25354.4418		0.9991	0.0009
3	17	13			25356.0580		0.9991	0.0009
3	17	14	25357.6414		25357.7900	−0.1486	0.9991	0.0009
3	17	15			25359.6348		0.9991	0.0009
3	17	16	25361.4369		25361.5887	−0.1518	0.9992	0.0008
3	17	17			25363.6469		0.9992	0.0008
3	17	18			25365.8043		0.9992	0.0008
3	17	19			25368.0543		0.9992	0.0008
3	17	20			25370.3896		0.9993	0.0007
3	17	21			25372.8020		0.9993	0.0007
3	17	22			25375.2825		0.9993	0.0007
3	17	23			25377.8216		0.9994	0.0006
3	17	24			25380.4099		0.9994	0.0006
3	17	25	25383.0378		25383.0387	−0.0009	0.9994	0.0006
3	17	26			25385.7005		0.9994	0.0006
3	17	27	25388.4463		25388.3897	0.0566	0.9995	0.0005
3	17	28	25391.1816		25391.1028	0.0788	0.9995	0.0005
3	17	29			25393.8386		0.9995	0.0005
3	17	30			25396.5980		0.9995	0.0005
3	17	31			25399.3831		0.9995	0.0005
3	17	32			25402.1974		0.9995	0.0005
3	17	33			25405.0446		0.9995	0.0005
3	17	34			25407.9289		0.9995	0.0005
3	17	35			25410.8540		0.9995	0.0005
3	17	36			25413.8238		0.9995	0.0005
3	17	37	25416.9218		25416.8413	0.0805	0.9995	0.0005
3	17	38			25419.9095		0.9995	0.0005
3	17	39	25423.0856		25423.0311	0.0545	0.9995	0.0005
3	17	40			25426.2081		0.9995	0.0005
3	17	41			25429.4426		0.9996	0.0004
3	17	42			25432.7362		0.9996	0.0004
3	17	43			25436.0904		0.9996	0.0004
3	17	44	25439.5040		25439.5067	−0.0027	0.9996	0.0004
3	17	45			25442.9864		0.9996	0.0004
3	17	46	25446.5036		25446.5310	−0.0274	0.9996	0.0004
3	17	47			25450.1421		0.9996	0.0004
3	17	48			25453.8218		0.9996	0.0004
3	17	49			25457.5731		0.9996	0.0004
3	17	50			25461.4013		0.9996	0.0004
3	17	51			25465.3157		0.9996	0.0004
3	17	52			25469.3371		0.9996	0.0004
3	17	53			25473.5204		0.9995	0.0005
3	17	54			25478.0490		0.9995	0.0005
3	17	55			25483.5320		0.9995	0.0005
3	17	56			25490.4816		0.9996	0.0004
3	17	57			25498.2244		0.9996	0.0004
3	17	58			25506.2994		0.9997	0.0003
3	17	59			25514.5716		0.9997	0.0003

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	17	60			25522.9903		0.9997	0.0003
3	18	0			25367.3643		0.9988	0.0012
3	18	1			25367.4519		0.9988	0.0012
3	18	2			25367.6272		0.9988	0.0012
3	18	3			25367.8902		0.9988	0.0012
3	18	4			25368.2413		0.9988	0.0012
3	18	5			25368.6806		0.9988	0.0012
3	18	6			25369.2087		0.9988	0.0012
3	18	7			25369.8261		0.9988	0.0012
3	18	8			25370.5334		0.9988	0.0012
3	18	9			25371.3314		0.9988	0.0012
3	18	10			25372.2212		0.9988	0.0012
3	18	11			25373.2040		0.9988	0.0012
3	18	12			25374.2814		0.9988	0.0012
3	18	13			25375.4552		0.9988	0.0012
3	18	14	25376.8355		25376.7278	0.1077	0.9988	0.0012
3	18	15			25378.1019		0.9988	0.0012
3	18	16	25379.6322		25379.5809	0.0513	0.9988	0.0012
3	18	17			25381.1688		0.9988	0.0012
3	18	18			25382.8703		0.9987	0.0013
3	18	19			25384.6911		0.9987	0.0013
3	18	20			25386.6375		0.9987	0.0013
3	18	21			25388.7166		0.9987	0.0013
3	18	22			25390.9362		0.9987	0.0013
3	18	23			25393.3042		0.9987	0.0013
3	18	24			25395.8284		0.9987	0.0013
3	18	25	25398.1348		25398.5155	−0.3807	0.9987	0.0013
3	18	26			25401.3707		0.9986	0.0014
3	18	27	25403.8985		25404.3970	−0.4985	0.9986	0.0014
3	18	28			25407.5948		0.9987	0.0013
3	18	29			25410.9616		0.9987	0.0013
3	18	30			25414.4924		0.9987	0.0013
3	18	31			25418.1799		0.9987	0.0013
3	18	32			25422.0145		0.9987	0.0013
3	18	33			25425.9851		0.9987	0.0013
3	18	34			25430.0787		0.9988	0.0012
3	18	35			25434.2807		0.9988	0.0012
3	18	36			25438.5743		0.9989	0.0011
3	18	37	25442.3869		25442.9408	−0.5539	0.9989	0.0011
3	18	38			25447.3593		0.9990	0.0010
3	18	39	25451.3968		25451.8071	−0.4103	0.9990	0.0010
3	18	40			25456.2607		0.9991	0.0009
3	18	41			25460.6977		0.9991	0.0009
3	18	42			25465.0992		0.9992	0.0008
3	18	43			25469.4527		0.9992	0.0008
3	18	44	25473.7486		25473.7527	−0.0041	0.9993	0.0007
3	18	45			25478.0018		0.9993	0.0007
3	18	46	25482.2914		25482.2080	0.0834	0.9993	0.0007
3	18	47			25486.3833		0.9994	0.0006
3	18	48			25490.5408		0.9994	0.0006
3	18	49			25494.6934		0.9994	0.0006
3	18	50			25498.8529		0.9994	0.0006
3	18	51			25503.0295		0.9994	0.0006
3	18	52			25507.2319		0.9994	0.0006
3	18	53			25511.4673		0.9994	0.0006
3	18	54			25515.7420		0.9994	0.0006
3	18	55			25520.0613		0.9995	0.0005
3	18	56			25524.4301		0.9995	0.0005

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	18	57			25528.8530		0.9995	0.0005
3	18	58			25533.3353		0.9995	0.0005
3	18	59			25537.8838		0.9995	0.0005
3	18	60			25542.5086		0.9995	0.0005
3	19	0			25401.1284		0.9985	0.0015
3	19	1			25401.2190		0.9985	0.0015
3	19	2			25401.4000		0.9985	0.0015
3	19	3			25401.6715		0.9985	0.0015
3	19	4			25402.0331		0.9985	0.0015
3	19	5			25402.4847		0.9985	0.0015
3	19	6			25403.0261		0.9985	0.0015
3	19	7			25403.6569		0.9985	0.0015
3	19	8			25404.3766		0.9985	0.0015
3	19	9			25405.1851		0.9985	0.0015
3	19	10			25406.0817		0.9985	0.0015
3	19	11			25407.0660		0.9985	0.0015
3	19	12			25408.1375		0.9985	0.0015
3	19	13			25409.2958		0.9985	0.0015
3	19	14	25411.1590		25410.5403	0.6187	0.9985	0.0015
3	19	15			25411.8705		0.9986	0.0014
3	19	16	25413.8707		25413.2860	0.5847	0.9986	0.0014
3	19	17			25414.7861		0.9986	0.0014
3	19	18			25416.3707		0.9986	0.0014
3	19	19			25418.0391		0.9986	0.0014
3	19	20			25419.7913		0.9986	0.0014
3	19	21			25421.6269		0.9986	0.0014
3	19	22			25423.5460		0.9986	0.0014
3	19	23			25425.5485		0.9986	0.0014
3	19	24			25427.6347		0.9986	0.0014
3	19	25	25430.1775		25429.8051	0.3724	0.9986	0.0014
3	19	26	25432.3961		25432.0604	0.3357	0.9986	0.0014
3	19	27	25434.7097		25434.4015	0.3082	0.9987	0.0013
3	19	28	25437.0983		25436.8301	0.2682	0.9987	0.0013
3	19	29			25439.3478		0.9987	0.0013
3	19	30			25441.9574		0.9987	0.0013
3	19	31			25444.6619		0.9987	0.0013
3	19	32			25447.4657		0.9987	0.0013
3	19	33			25450.3740		0.9986	0.0014
3	19	34			25453.3937		0.9986	0.0014
3	19	35			25456.5331		0.9986	0.0014
3	19	36			25459.8028		0.9986	0.0014
3	19	37	25463.0166		25463.2156	−0.1990	0.9986	0.0014
3	19	38			25466.7864		0.9986	0.0014
3	19	39	25470.1736		25470.5318	−0.3582	0.9985	0.0015
3	19	40			25474.4693		0.9985	0.0015
3	19	41			25478.6148		0.9985	0.0015
3	19	42			25482.9800		0.9985	0.0015
3	19	43			25487.5701		0.9984	0.0016
3	19	44	25491.6362		25492.3813	−0.7451	0.9984	0.0016
3	19	45			25497.4012		0.9985	0.0015
3	19	46	25501.8221		25502.6094	−0.7873	0.9985	0.0015
3	19	47			25507.9796		0.9985	0.0015
3	19	48			25513.4813		0.9985	0.0015
3	19	49			25519.0810		0.9986	0.0014
3	19	50			25524.7427		0.9987	0.0013
3	19	51			25530.4292		0.9987	0.0013
3	19	52			25536.1035		0.9988	0.0012
3	19	53			25541.7315		0.9989	0.0011

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	19	54			25547.2856		0.9989	0.0011
3	19	55			25552.7485		0.9990	0.0010
3	19	56			25558.1148		0.9991	0.0009
3	19	57			25563.3904		0.9991	0.0009
3	19	58			25568.5889		0.9992	0.0008
3	19	59			25573.7285		0.9992	0.0008
3	19	60			25578.8281		0.9992	0.0008
3	20	0			25430.0718		0.9977	0.0023
3	20	1			25430.1711		0.9977	0.0023
3	20	2			25430.3695		0.9977	0.0023
3	20	3			25430.6670		0.9977	0.0023
3	20	4			25431.0637		0.9977	0.0023
3	20	5			25431.5593		0.9977	0.0023
3	20	6			25432.1539		0.9977	0.0023
3	20	7			25432.8471		0.9977	0.0023
3	20	8			25433.6389		0.9977	0.0023
3	20	9			25434.5290		0.9977	0.0023
3	20	10			25435.5171		0.9977	0.0023
3	20	11			25436.6029		0.9977	0.0023
3	20	12			25437.7859		0.9977	0.0023
3	20	13			25439.0657		0.9978	0.0022
3	20	14			25440.4417		0.9978	0.0022
3	20	15			25441.9133		0.9978	0.0022
3	20	16			25443.4797		0.9978	0.0022
3	20	17			25445.1401		0.9978	0.0022
3	20	18			25446.8935		0.9978	0.0022
3	20	19			25448.7390		0.9979	0.0021
3	20	20			25450.6754		0.9979	0.0021
3	20	21			25452.7014		0.9979	0.0021
3	20	22			25454.8158		0.9979	0.0021
3	20	23			25457.0171		0.9980	0.0020
3	20	24			25459.3040		0.9980	0.0020
3	20	25	25462.1488		25461.6749	0.4739	0.9980	0.0020
3	20	26	25464.6036		25464.1283	0.4753	0.9981	0.0019
3	20	27	25467.1389		25466.6627	0.4762	0.9981	0.0019
3	20	28	25469.7522		25469.2766	0.4756	0.9981	0.0019
3	20	29			25471.9685		0.9982	0.0018
3	20	30			25474.7372		0.9982	0.0018
3	20	31			25477.5813		0.9982	0.0018
3	20	32			25480.4999		0.9982	0.0018
3	20	33			25483.4920		0.9983	0.0017
3	20	34			25486.5570		0.9983	0.0017
3	20	35			25489.6945		0.9983	0.0017
3	20	36			25492.9045		0.9984	0.0016
3	20	37	25496.5376		25496.1872	0.3504	0.9984	0.0016
3	20	38			25499.5433		0.9984	0.0016
3	20	39	25503.2668		25502.9740	0.2928	0.9984	0.0016
3	20	40			25506.4810		0.9984	0.0016
3	20	41			25510.0666		0.9984	0.0016
3	20	42			25513.7340		0.9985	0.0015
3	20	43			25517.4873		0.9985	0.0015
3	20	44	25521.4221		25521.3319	0.0902	0.9985	0.0015
3	20	45			25525.2744		0.9985	0.0015
3	20	46	25529.2990		25529.3234	−0.0244	0.9985	0.0015
3	20	47			25533.4897		0.9985	0.0015
3	20	48			25537.7867		0.9984	0.0016
3	20	49			25542.2308		0.9984	0.0016
3	20	50			25546.8413		0.9984	0.0016

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	20	51			25551.6397		0.9984	0.0016
3	20	52			25556.6481		0.9983	0.0017
3	20	53			25561.8859		0.9983	0.0017
3	20	54			25567.3656		0.9983	0.0017
3	20	55			25573.0888		0.9982	0.0018
3	20	56			25579.0432		0.9982	0.0018
3	20	57			25585.2034		0.9983	0.0017
3	20	58			25591.5329		0.9983	0.0017
3	20	59			25597.9875		0.9983	0.0017
3	20	60			25604.5188		0.9984	0.0016
3	21	0			25459.1043		0.9973	0.0027
3	21	1			25459.1982		0.9973	0.0027
3	21	2			25459.3860		0.9973	0.0027
3	21	3			25459.6679		0.9973	0.0027
3	21	4			25460.0438		0.9973	0.0027
3	21	5			25460.5139		0.9973	0.0027
3	21	6			25461.0784		0.9973	0.0027
3	21	7			25461.7373		0.9973	0.0027
3	21	8			25462.4911		0.9973	0.0027
3	21	9			25463.3397		0.9972	0.0028
3	21	10			25464.2836		0.9972	0.0028
3	21	11			25465.3231		0.9972	0.0028
3	21	12			25466.4584		0.9972	0.0028
3	21	13			25467.6899		0.9972	0.0028
3	21	14	25469.0390		25469.0181	0.0209	0.9972	0.0028
3	21	15			25470.4432		0.9972	0.0028
3	21	16	25471.9562		25471.9658	−0.0096	0.9972	0.0028
3	21	17			25473.5863		0.9972	0.0028
3	21	18			25475.3052		0.9972	0.0028
3	21	19			25477.1227		0.9972	0.0028
3	21	20			25479.0394		0.9972	0.0028
3	21	21			25481.0557		0.9972	0.0028
3	21	22			25483.1718		0.9972	0.0028
3	21	23			25485.3880		0.9973	0.0027
3	21	24			25487.7045		0.9973	0.0027
3	21	25	25490.0275		25490.1212	−0.0937	0.9973	0.0027
3	21	26	25492.5439		25492.6381	−0.0942	0.9973	0.0027
3	21	27	25495.1655		25495.2549	−0.0894	0.9973	0.0027
3	21	28	25497.8856		25497.9710	−0.0854	0.9973	0.0027
3	21	29			25500.7857		0.9973	0.0027
3	21	30			25503.6981		0.9974	0.0026
3	21	31			25506.7068		0.9974	0.0026
3	21	32			25509.8105		0.9974	0.0026
3	21	33			25513.0071		0.9975	0.0025
3	21	34			25516.2947		0.9975	0.0025
3	21	35			25519.6709		0.9975	0.0025
3	21	36			25523.1331		0.9976	0.0024
3	21	37	25526.7820		25526.6786	0.1034	0.9976	0.0024
3	21	38			25530.3043		0.9977	0.0023
3	21	39	25534.1678		25534.0075	0.1603	0.9977	0.0023
3	21	40			25537.7851		0.9978	0.0022
3	21	41			25541.6343		0.9978	0.0022
3	21	42			25545.5525		0.9979	0.0021
3	21	43			25549.5372		0.9979	0.0021
3	21	44	25553.8638		25553.5865	0.2773	0.9980	0.0020
3	21	45			25557.6989		0.9980	0.0020
3	21	46	25562.1581		25561.8732	0.2849	0.9981	0.0019
3	21	47			25566.1092		0.9981	0.0019

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	21	48			25570.4071		0.9981	0.0019
3	21	49			25574.7679		0.9982	0.0018
3	21	50			25579.1935		0.9982	0.0018
3	21	51			25583.6866		0.9982	0.0018
3	21	52			25588.2513		0.9983	0.0017
3	21	53			25592.8927		0.9983	0.0017
3	21	54			25597.6173		0.9983	0.0017
3	21	55			25602.4337		0.9983	0.0017
3	21	56			25607.3524		0.9983	0.0017
3	21	57			25612.3866		0.9983	0.0017
3	21	58			25617.5525		0.9983	0.0017
3	21	59			25622.8694		0.9982	0.0018
3	21	60			25628.3593		0.9982	0.0018
3	22	0			25491.3934		0.9972	0.0028
3	22	1			25491.4843		0.9972	0.0028
3	22	2			25491.6663		0.9972	0.0028
3	22	3			25491.9392		0.9972	0.0028
3	22	4			25492.3031		0.9972	0.0028
3	22	5			25492.7579		0.9972	0.0028
3	22	6			25493.3037		0.9972	0.0028
3	22	7			25493.9403		0.9972	0.0028
3	22	8			25494.6678		0.9972	0.0028
3	22	9			25495.4861		0.9972	0.0028
3	22	10			25496.3952		0.9972	0.0028
3	22	11			25497.3952		0.9972	0.0028
3	22	12			25498.4859		0.9972	0.0028
3	22	13			25499.6675		0.9972	0.0028
3	22	14	25501.2825		25500.9399	0.3426	0.9972	0.0028
3	22	15			25502.3031		0.9972	0.0028
3	22	16	25504.0519		25503.7573	0.2946	0.9972	0.0028
3	22	17			25505.3026		0.9972	0.0028
3	22	18			25506.9390		0.9972	0.0028
3	22	19			25508.6667		0.9972	0.0028
3	22	20			25510.4860		0.9972	0.0028
3	22	21			25512.3971		0.9972	0.0028
3	22	22			25514.4004		0.9972	0.0028
3	22	23			25516.4961		0.9971	0.0029
3	22	24			25518.6847		0.9971	0.0029
3	22	25			25520.9668		0.9971	0.0029
3	22	26			25523.3429		0.9971	0.0029
3	22	27	25525.7800		25525.8136	−0.0336	0.9971	0.0029
3	22	28			25528.3798		0.9971	0.0029
3	22	29			25531.0421		0.9971	0.0029
3	22	30			25533.8015		0.9971	0.0029
3	22	31			25536.6588		0.9971	0.0029
3	22	32			25539.6150		0.9970	0.0030
3	22	33			25542.6710		0.9970	0.0030
3	22	34			25545.8278		0.9970	0.0030
3	22	35			25549.0862		0.9970	0.0030
3	22	36			25552.4471		0.9970	0.0030
3	22	37	25555.5755		25555.9109	−0.3354	0.9970	0.0030
3	22	38			25559.4782		0.9970	0.0030
3	22	39			25563.1491		0.9970	0.0030
3	22	40			25566.9233		0.9970	0.0030
3	22	41			25570.8003		0.9971	0.0029
3	22	42			25574.7789		0.9971	0.0029
3	22	43			25578.8575		0.9971	0.0029
3	22	44	25582.7706		25583.0339	−0.2633	0.9971	0.0029

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	22	45			25587.3056		0.9972	0.0028
3	22	46	25591.4773		25591.6692	−0.1919	0.9972	0.0028
3	22	47			25596.1210		0.9973	0.0027
3	22	48			25600.6569		0.9973	0.0027
3	22	49			25605.2725		0.9974	0.0026
3	22	50			25609.9634		0.9975	0.0025
3	22	51			25614.7250		0.9975	0.0025
3	22	52			25619.5531		0.9976	0.0024
3	22	53			25624.4438		0.9977	0.0023
3	22	54			25629.3939		0.9977	0.0023
3	22	55			25634.4007		0.9978	0.0022
3	22	56			25639.4626		0.9979	0.0021
3	22	57			25644.5792		0.9979	0.0021
3	22	58			25649.7508		0.9980	0.0020
3	22	59			25654.9795		0.9980	0.0020
3	22	60			25660.2683		0.9981	0.0019
3	22	88	25850.3134		25849.7661	0.5473	0.9990	0.0010
3	23	0			25523.8473		0.9968	0.0032
3	23	1			25523.9394		0.9968	0.0032
3	23	2			25524.1237		0.9968	0.0032
3	23	3			25524.4000		0.9968	0.0032
3	23	4			25524.7684		0.9968	0.0032
3	23	5			25525.2288		0.9968	0.0032
3	23	6			25525.7812		0.9968	0.0032
3	23	7			25526.4254		0.9968	0.0032
3	23	8			25527.1614		0.9968	0.0032
3	23	9			25527.9891		0.9968	0.0032
3	23	10			25528.9083		0.9968	0.0032
3	23	11			25529.9189		0.9969	0.0031
3	23	12			25531.0209		0.9969	0.0031
3	23	13			25532.2139		0.9969	0.0031
3	23	14			25533.4979		0.9969	0.0031
3	23	15			25534.8726		0.9969	0.0031
3	23	16			25536.3379		0.9969	0.0031
3	23	17			25537.8935		0.9969	0.0031
3	23	18			25539.5392		0.9970	0.0030
3	23	19			25541.2748		0.9970	0.0030
3	23	20			25543.1000		0.9970	0.0030
3	23	21			25545.0146		0.9970	0.0030
3	23	22			25547.0184		0.9970	0.0030
3	23	23			25549.1110		0.9970	0.0030
3	23	24			25551.2923		0.9970	0.0030
3	23	25	25553.8729		25553.5621	0.3108	0.9970	0.0030
3	23	26			25555.9202		0.9970	0.0030
3	23	27	25558.6338		25558.3663	0.2675	0.9971	0.0029
3	23	28			25560.9005		0.9971	0.0029
3	23	29			25563.5225		0.9971	0.0029
3	23	30			25566.2325		0.9971	0.0029
3	23	31			25569.0304		0.9971	0.0029
3	23	32			25571.9163		0.9971	0.0029
3	23	33			25574.8906		0.9970	0.0030
3	23	34			25577.9535		0.9970	0.0030
3	23	35			25581.1053		0.9970	0.0030
3	23	36			25584.3468		0.9970	0.0030
3	23	37	25587.6067		25587.6785	−0.0718	0.9970	0.0030
3	23	38			25591.1013		0.9970	0.0030
3	23	39	25594.4646		25594.6160	−0.1514	0.9970	0.0030
3	23	40			25598.2239		0.9969	0.0031

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	23	41			25601.9260		0.9969	0.0031
3	23	42			25605.7237		0.9969	0.0031
3	23	43			25609.6185		0.9969	0.0031
3	23	44			25613.6117		0.9969	0.0031
3	23	45			25617.7049		0.9968	0.0032
3	23	46	25621.5164		25621.8995	−0.3831	0.9968	0.0032
3	23	47			25626.1968		0.9968	0.0032
3	23	48			25630.5978		0.9968	0.0032
3	23	49			25635.1033		0.9968	0.0032
3	23	50			25639.7136		0.9968	0.0032
3	23	51			25644.4285		0.9968	0.0032
3	23	52			25649.2469		0.9968	0.0032
3	23	53			25654.1674		0.9969	0.0031
3	23	54			25659.1873		0.9969	0.0031
3	23	55			25664.3034		0.9970	0.0030
3	23	56			25669.5115		0.9970	0.0030
3	23	57			25674.8069		0.9971	0.0029
3	23	58			25680.1842		0.9972	0.0028
3	23	59			25685.6377		0.9972	0.0028
3	23	60			25691.1616		0.9973	0.0027
3	23	86	25866.3729		25865.8245	0.5484	0.9981	0.0019
3	23	88	25882.2900		25881.6068	0.6832	0.9984	0.0016
3	24	0			25556.0389		0.9957	0.0043
3	24	1			25556.1307		0.9957	0.0043
3	24	2			25556.3143		0.9957	0.0043
3	24	3			25556.5896		0.9957	0.0043
3	24	4			25556.9568		0.9957	0.0043
3	24	5			25557.4157		0.9957	0.0043
3	24	6			25557.9665		0.9957	0.0043
3	24	7			25558.6090		0.9958	0.0042
3	24	8			25559.3434		0.9958	0.0042
3	24	9			25560.1696		0.9958	0.0042
3	24	10			25561.0875		0.9958	0.0042
3	24	11			25562.0973		0.9958	0.0042
3	24	12			25563.1990		0.9958	0.0042
3	24	13			25564.3924		0.9959	0.0041
3	24	14	25566.0127		25565.6776	0.3351	0.9959	0.0041
3	24	15			25567.0545		0.9959	0.0041
3	24	16			25568.5231		0.9959	0.0041
3	24	17			25570.0833		0.9960	0.0040
3	24	18			25571.7351		0.9960	0.0040
3	24	19			25573.4784		0.9960	0.0040
3	24	20			25575.3131		0.9961	0.0039
3	24	21			25577.2389		0.9961	0.0039
3	24	22			25579.2558		0.9961	0.0039
3	24	23			25581.3636		0.9962	0.0038
3	24	24			25583.5620		0.9962	0.0038
3	24	25	25586.0609		25585.8508	0.2101	0.9963	0.0037
3	24	26			25588.2297		0.9963	0.0037
3	24	27	25590.8900		25590.6983	0.1917	0.9963	0.0037
3	24	28			25593.2564		0.9964	0.0036
3	24	29			25595.9035		0.9964	0.0036
3	24	30			25598.6392		0.9965	0.0035
3	24	31			25601.4630		0.9965	0.0035
3	24	32			25604.3746		0.9966	0.0034
3	24	33			25607.3733		0.9966	0.0034
3	24	34			25610.4588		0.9967	0.0033
3	24	35			25613.6305		0.9967	0.0033

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	24	36			25616.8879		0.9967	0.0033
3	24	37	25620.2973		25620.2306	0.0667	0.9968	0.0032
3	24	38			25623.6583		0.9968	0.0032
3	24	39	25627.2041		25627.1705	0.0336	0.9968	0.0032
3	24	40			25630.7670		0.9969	0.0031
3	24	41			25634.4476		0.9969	0.0031
3	24	42			25638.2123		0.9969	0.0031
3	24	43			25642.0612		0.9969	0.0031
3	24	44	25645.9236		25645.9944	−0.0708	0.9969	0.0031
3	24	45			25650.0124		0.9969	0.0031
3	24	46	25653.9867		25654.1158	−0.1291	0.9969	0.0031
3	24	47			25658.3053		0.9969	0.0031
3	24	48			25662.5820		0.9968	0.0032
3	24	49			25666.9471		0.9968	0.0032
3	24	50			25671.4019		0.9968	0.0032
3	24	51			25675.9481		0.9968	0.0032
3	24	52			25680.5875		0.9967	0.0033
3	24	53			25685.3220		0.9967	0.0033
3	24	54			25690.1534		0.9967	0.0033
3	24	55			25695.0839		0.9967	0.0033
3	24	56			25700.1151		0.9966	0.0034
3	24	57			25705.2487		0.9966	0.0034
3	24	58			25710.4859		0.9966	0.0034
3	24	59			25715.8273		0.9966	0.0034
3	24	60			25721.2728		0.9966	0.0034
3	25	0			25588.9776		0.9953	0.0047
3	25	1			25589.0676		0.9953	0.0047
3	25	2			25589.2476		0.9953	0.0047
3	25	3			25589.5177		0.9953	0.0047
3	25	4			25589.8778		0.9952	0.0048
3	25	5			25590.3280		0.9952	0.0048
3	25	6			25590.8683		0.9952	0.0048
3	25	7			25591.4986		0.9952	0.0048
3	25	8			25592.2190		0.9952	0.0048
3	25	9			25593.0295		0.9952	0.0048
3	25	10			25593.9301		0.9952	0.0048
3	25	11			25594.9209		0.9952	0.0048
3	25	12			25596.0019		0.9952	0.0048
3	25	13			25597.1732		0.9952	0.0048
3	25	14	25598.7231		25598.4347	0.2884	0.9952	0.0048
3	25	15			25599.7865		0.9952	0.0048
3	25	16	25601.4835		25601.2287	0.2548	0.9952	0.0048
3	25	17			25602.7614		0.9952	0.0048
3	25	18			25604.3846		0.9952	0.0048
3	25	19			25606.0983		0.9952	0.0048
3	25	20			25607.9027		0.9952	0.0048
3	25	21			25609.7978		0.9952	0.0048
3	25	22			25611.7838		0.9952	0.0048
3	25	23			25613.8605		0.9952	0.0048
3	25	24			25616.0283		0.9952	0.0048
3	25	25	25618.3759		25618.2870	0.0889	0.9952	0.0048
3	25	26			25620.6368		0.9952	0.0048
3	25	27	25623.1304		25623.0777	0.0527	0.9953	0.0047
3	25	28			25625.6097		0.9953	0.0047
3	25	29			25628.2329		0.9953	0.0047
3	25	30			25630.9471		0.9954	0.0046
3	25	31			25633.7524		0.9954	0.0046
3	25	32			25636.6487		0.9954	0.0046

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	25	33			25639.6357		0.9955	0.0045
3	25	34			25642.7133		0.9956	0.0044
3	25	35			25645.8812		0.9956	0.0044
3	25	36			25649.1392		0.9957	0.0043
3	25	37	25652.3951		25652.4867	−0.0916	0.9957	0.0043
3	25	38			25655.9233		0.9958	0.0042
3	25	39	25659.3494		25659.4486	−0.0992	0.9959	0.0041
3	25	40			25663.0618		0.9960	0.0040
3	25	41			25666.7623		0.9961	0.0039
3	25	42			25670.5495		0.9961	0.0039
3	25	43			25674.4224		0.9962	0.0038
3	25	44	25678.2848		25678.3804	−0.0956	0.9963	0.0037
3	25	45			25682.4225		0.9964	0.0036
3	25	46	25686.4481		25686.5481	−0.1000	0.9964	0.0036
3	25	47			25690.7563		0.9965	0.0035
3	25	48			25695.0464		0.9966	0.0034
3	25	49			25699.4178		0.9966	0.0034
3	25	50			25703.8701		0.9967	0.0033
3	25	51			25708.4028		0.9967	0.0033
3	25	52			25713.0160		0.9967	0.0033
3	25	53			25717.7097		0.9967	0.0033
3	25	54			25722.4842		0.9967	0.0033
3	25	55			25727.3402		0.9967	0.0033
3	25	56			25732.2786		0.9967	0.0033
3	25	57			25737.3006		0.9967	0.0033
3	25	58			25742.4076		0.9967	0.0033
3	25	59			25747.6016		0.9966	0.0034
3	25	60			25752.8845		0.9966	0.0034
3	25	88	25936.1426		25936.1343	0.0083	0.9976	0.0024
3	26	0			25622.5632		0.9955	0.0045
3	26	1			25622.6525		0.9955	0.0045
3	26	2			25622.8310		0.9955	0.0045
3	26	3			25623.0987		0.9955	0.0045
3	26	4			25623.4557		0.9955	0.0045
3	26	5			25623.9018		0.9955	0.0045
3	26	6			25624.4372		0.9955	0.0045
3	26	7			25625.0617		0.9955	0.0045
3	26	8			25625.7753		0.9955	0.0045
3	26	9			25626.5779		0.9955	0.0045
3	26	10			25627.4696		0.9955	0.0045
3	26	11			25628.4503		0.9955	0.0045
3	26	12			25629.5198		0.9955	0.0045
3	26	13			25630.6783		0.9955	0.0045
3	26	14	25632.3224		25631.9256	0.3968	0.9955	0.0045
3	26	15			25633.2617		0.9954	0.0046
3	26	16	25635.0472		25634.6864	0.3608	0.9954	0.0046
3	26	17			25636.1999		0.9954	0.0046
3	26	18			25637.8021		0.9954	0.0046
3	26	19			25639.4928		0.9954	0.0046
3	26	20			25641.2721		0.9953	0.0047
3	26	21			25643.1400		0.9953	0.0047
3	26	22			25645.0964		0.9953	0.0047
3	26	23			25647.1413		0.9953	0.0047
3	26	24			25649.2749		0.9952	0.0048
3	26	25	25651.6644		25651.4970	0.1674	0.9952	0.0048
3	26	26			25653.8077		0.9952	0.0048
3	26	27	25656.3219		25656.2072	0.1147	0.9951	0.0049
3	26	28			25658.6954		0.9951	0.0049

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	26	29			25661.2725		0.9951	0.0049
3	26	30			25663.9385		0.9950	0.0050
3	26	31			25666.6937		0.9950	0.0050
3	26	32			25669.5382		0.9950	0.0050
3	26	33			25672.4721		0.9949	0.0051
3	26	34			25675.4955		0.9949	0.0051
3	26	35			25678.6087		0.9949	0.0051
3	26	36			25681.8119		0.9949	0.0051
3	26	37	25684.9604		25685.1051	−0.1447	0.9949	0.0051
3	26	38			25688.4886		0.9949	0.0051
3	26	39	25691.7795		25691.9625	−0.1830	0.9949	0.0051
3	26	40			25695.5268		0.9949	0.0051
3	26	41			25699.1817		0.9949	0.0051
3	26	42			25702.9270		0.9950	0.0050
3	26	43			25706.7626		0.9950	0.0050
3	26	44	25710.4420		25710.6885	−0.2465	0.9951	0.0049
3	26	45			25714.7042		0.9951	0.0049
3	26	46	25718.5507		25718.8095	−0.2588	0.9952	0.0048
3	26	47			25723.0037		0.9953	0.0047
3	26	48			25727.2863		0.9954	0.0046
3	26	49			25731.6564		0.9955	0.0045
3	26	50			25736.1133		0.9956	0.0044
3	26	51			25740.6558		0.9957	0.0043
3	26	52			25745.2829		0.9958	0.0042
3	26	53			25749.9935		0.9960	0.0040
3	26	54			25754.7864		0.9961	0.0039
3	26	55			25759.6605		0.9962	0.0038
3	26	56			25764.6145		0.9963	0.0037
3	26	57			25769.6475		0.9963	0.0037
3	26	58			25774.7586		0.9964	0.0036
3	26	59			25779.9471		0.9965	0.0035
3	26	60			25785.2128		0.9965	0.0035
3	26	86	25952.3407		25952.0383	0.3024	0.9974	0.0026
3	26	88	25967.2725		25966.9576	0.3149	0.9975	0.0025
3	27	0			25656.1703		0.9946	0.0054
3	27	1			25656.2595		0.9946	0.0054
3	27	2			25656.4380		0.9946	0.0054
3	27	3			25656.7058		0.9947	0.0053
3	27	4			25657.0627		0.9947	0.0053
3	27	5			25657.5088		0.9947	0.0053
3	27	6			25658.0441		0.9947	0.0053
3	27	7			25658.6686		0.9947	0.0053
3	27	8			25659.3821		0.9947	0.0053
3	27	9			25660.1846		0.9948	0.0052
3	27	10			25661.0762		0.9948	0.0052
3	27	11			25662.0566		0.9948	0.0052
3	27	12			25663.1258		0.9949	0.0051
3	27	13			25664.2838		0.9949	0.0051
3	27	14	25665.9341		25665.5305	0.4036	0.9949	0.0051
3	27	15			25666.8657		0.9950	0.0050
3	27	16	25668.6673		25668.2894	0.3779	0.9950	0.0050
3	27	17			25669.8014		0.9951	0.0049
3	27	18			25671.4016		0.9951	0.0049
3	27	19			25673.0900		0.9951	0.0049
3	27	20			25674.8662		0.9952	0.0048
3	27	21			25676.7303		0.9952	0.0048
3	27	22			25678.6819		0.9952	0.0048
3	27	23			25680.7211		0.9953	0.0047

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	27	24			25682.8476		0.9953	0.0047
3	27	25	25685.2706		25685.0613	0.2093	0.9953	0.0047
3	27	26			25687.3620		0.9953	0.0047
3	27	27	25689.9265		25689.7495	0.1770	0.9953	0.0047
3	27	28			25692.2238		0.9954	0.0046
3	27	29			25694.7846		0.9954	0.0046
3	27	30			25697.4318		0.9953	0.0047
3	27	31			25700.1654		0.9953	0.0047
3	27	32			25702.9852		0.9953	0.0047
3	27	33			25705.8912		0.9953	0.0047
3	27	34			25708.8833		0.9953	0.0047
3	27	35			25711.9615		0.9952	0.0048
3	27	36			25715.1259		0.9952	0.0048
3	27	37	25718.3266		25718.3765	−0.0499	0.9951	0.0049
3	27	38			25721.7133		0.9951	0.0049
3	27	39	25725.0325		25725.1367	−0.1042	0.9950	0.0050
3	27	40			25728.6466		0.9950	0.0050
3	27	41			25732.2434		0.9949	0.0051
3	27	42			25735.9273		0.9948	0.0052
3	27	43			25739.6986		0.9948	0.0052
3	27	44	25743.3450		25743.5576	−0.2126	0.9947	0.0053
3	27	45			25747.5047		0.9947	0.0053
3	27	46	25751.2836		25751.5401	−0.2565	0.9946	0.0054
3	27	47			25755.6642		0.9946	0.0054
3	27	48			25759.8774		0.9946	0.0054
3	27	49			25764.1798		0.9946	0.0054
3	27	50			25768.5717		0.9946	0.0054
3	27	51			25773.0531		0.9946	0.0054
3	27	52			25777.6241		0.9946	0.0054
3	27	53			25782.2845		0.9947	0.0053
3	27	54			25787.0340		0.9948	0.0052
3	27	55			25791.8721		0.9948	0.0052
3	27	56			25796.7982		0.9950	0.0050
3	27	57			25801.8113		0.9951	0.0049
3	27	58			25806.9105		0.9952	0.0048
3	27	59			25812.0945		0.9953	0.0047
3	27	60			25817.3618		0.9955	0.0045
3	28	0			25689.7473		0.9920	0.0080
3	28	1			25689.8359		0.9920	0.0080
3	28	2			25690.0130		0.9920	0.0080
3	28	3			25690.2787		0.9920	0.0080
3	28	4			25690.6330		0.9920	0.0080
3	28	5			25691.0759		0.9920	0.0080
3	28	6			25691.6073		0.9920	0.0080
3	28	7			25692.2273		0.9921	0.0079
3	28	8			25692.9359		0.9921	0.0079
3	28	9			25693.7330		0.9921	0.0079
3	28	10			25694.6187		0.9922	0.0078
3	28	11			25695.5930		0.9922	0.0078
3	28	12			25696.6558		0.9923	0.0077
3	28	13			25697.8072		0.9923	0.0077
3	28	14	25699.3700		25699.0471	0.3229	0.9924	0.0076
3	28	15			25700.3755		0.9925	0.0075
3	28	16	25702.0869		25701.7924	0.2945	0.9925	0.0075
3	28	17			25703.2978		0.9926	0.0074
3	28	18			25704.8915		0.9927	0.0073
3	28	19			25706.5736		0.9928	0.0072
3	28	20			25708.3440		0.9929	0.0071

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	28	21			25710.2026		0.9930	0.0070
3	28	22			25712.1492		0.9931	0.0069
3	28	23			25714.1839		0.9932	0.0068
3	28	24			25716.3064		0.9933	0.0067
3	28	25	25718.6737		25718.5167	0.1570	0.9935	0.0065
3	28	26			25720.8145		0.9936	0.0064
3	28	27	25723.3231		25723.1997	0.1234	0.9937	0.0063
3	28	28			25725.6720		0.9938	0.0062
3	28	29			25728.2313		0.9940	0.0060
3	28	30			25730.8773		0.9941	0.0059
3	28	31			25733.6097		0.9942	0.0058
3	28	32			25736.4282		0.9944	0.0056
3	28	33			25739.3326		0.9945	0.0055
3	28	34			25742.3225		0.9946	0.0054
3	28	35			25745.3977		0.9947	0.0053
3	28	36			25748.5577		0.9948	0.0052
3	28	37	25751.7640		25751.8023	−0.0383	0.9949	0.0051
3	28	38			25755.1313		0.9950	0.0050
3	28	39	25758.4770		25758.5442	−0.0672	0.9950	0.0050
3	28	40			25762.0408		0.9951	0.0049
3	28	41			25765.6209		0.9951	0.0049
3	28	42			25769.2844		0.9951	0.0049
3	28	43			25773.0310		0.9951	0.0049
3	28	44	25776.7224		25776.8606	−0.1382	0.9951	0.0049
3	28	45			25780.7733		0.9951	0.0049
3	28	46	25784.5802		25784.7691	−0.1889	0.9951	0.0049
3	28	47			25788.8481		0.9950	0.0050
3	28	48			25793.0105		0.9949	0.0051
3	28	49			25797.2566		0.9949	0.0051
3	28	50			25801.5867		0.9948	0.0052
3	28	51			25806.0012		0.9947	0.0053
3	28	52			25810.5007		0.9946	0.0054
3	28	53			25815.0856		0.9945	0.0055
3	28	54			25819.7565		0.9944	0.0056
3	28	55			25824.5140		0.9944	0.0056
3	28	56			25829.3585		0.9943	0.0057
3	28	57			25834.2907		0.9943	0.0057
3	28	58			25839.3109		0.9943	0.0057
3	28	59			25844.4193		0.9943	0.0057
3	28	60			25849.6162		0.9943	0.0057
3	28	88	26027.8455		26027.8524	−0.0069	0.9959	0.0041
3	29	0			25723.6869		0.9907	0.0093
3	29	1			25723.7740		0.9907	0.0093
3	29	2			25723.9483		0.9907	0.0093
3	29	3			25724.2098		0.9907	0.0093
3	29	4			25724.5584		0.9907	0.0093
3	29	5			25724.9942		0.9907	0.0093
3	29	6			25725.5171		0.9907	0.0093
3	29	7			25726.1272		0.9907	0.0093
3	29	8			25726.8245		0.9906	0.0094
3	29	9			25727.6090		0.9906	0.0094
3	29	10			25728.4806		0.9906	0.0094
3	29	11			25729.4395		0.9905	0.0095
3	29	12			25730.4856		0.9905	0.0095
3	29	13			25731.6190		0.9905	0.0095
3	29	14			25732.8396		0.9905	0.0095
3	29	15			25734.1476		0.9904	0.0096
3	29	16	25735.8008		25735.5429	0.2579	0.9904	0.0096

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	29	17			25737.0255		0.9904	0.0096
3	29	18			25738.5956		0.9904	0.0096
3	29	19			25740.2531		0.9904	0.0096
3	29	20			25741.9981		0.9904	0.0096
3	29	21			25743.8307		0.9904	0.0096
3	29	22			25745.7508		0.9904	0.0096
3	29	23			25747.7585		0.9904	0.0096
3	29	24			25749.8540		0.9904	0.0096
3	29	25	25752.1433		25752.0371	0.1062	0.9905	0.0095
3	29	26			25754.3079		0.9905	0.0095
3	29	27			25756.6665		0.9906	0.0094
3	29	28			25759.1128		0.9907	0.0093
3	29	29			25761.6469		0.9908	0.0092
3	29	30			25764.2687		0.9909	0.0091
3	29	31			25766.9782		0.9910	0.0090
3	29	32			25769.7752		0.9912	0.0088
3	29	33			25772.6597		0.9914	0.0086
3	29	34			25775.6315		0.9915	0.0085
3	29	35			25778.6904		0.9917	0.0083
3	29	36			25781.8362		0.9920	0.0080
3	29	37			25785.0686		0.9922	0.0078
3	29	38			25788.3873		0.9924	0.0076
3	29	39			25791.7918		0.9926	0.0074
3	29	40			25795.2819		0.9929	0.0071
3	29	41			25798.8570		0.9931	0.0069
3	29	42			25802.5166		0.9934	0.0066
3	29	43			25806.2602		0.9936	0.0064
3	29	44			25810.0872		0.9938	0.0062
3	29	45			25813.9971		0.9941	0.0059
3	29	46	25817.7973		25817.9892	−0.1919	0.9943	0.0057
3	29	47			25822.0631		0.9944	0.0056
3	29	48			25826.2182		0.9946	0.0054
3	29	49			25830.4541		0.9947	0.0053
3	29	50			25834.7702		0.9948	0.0052
3	29	51			25839.1663		0.9949	0.0051
3	29	52			25843.6421		0.9949	0.0051
3	29	53			25848.1975		0.9949	0.0051
3	29	54			25852.8324		0.9949	0.0051
3	29	55			25857.5471		0.9949	0.0051
3	29	56			25862.3416		0.9948	0.0052
3	29	57			25867.2164		0.9947	0.0053
3	29	58			25872.1721		0.9946	0.0054
3	29	59			25877.2091		0.9945	0.0055
3	29	60			25882.3283		0.9944	0.0056
3	29	86	26044.1261		26044.1869	−0.0608	0.9961	0.0039
3	29	88	26058.7031		26058.7377	−0.0346	0.9959	0.0041
3	30	0			25757.9803		0.9926	0.0074
3	30	1			25758.0667		0.9926	0.0074
3	30	2			25758.2395		0.9926	0.0074
3	30	3			25758.4987		0.9926	0.0074
3	30	4			25758.8443		0.9925	0.0075
3	30	5			25759.2762		0.9925	0.0075
3	30	6			25759.7945		0.9925	0.0075
3	30	7			25760.3990		0.9924	0.0076
3	30	8			25761.0897		0.9924	0.0076
3	30	9			25761.8665		0.9924	0.0076
3	30	10			25762.7295		0.9923	0.0077
3	30	11			25763.6784		0.9922	0.0078

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	30	12			25764.7134		0.9922	0.0078
3	30	13			25765.8342		0.9921	0.0079
3	30	14	25767.3517		25767.0409	0.3108	0.9920	0.0080
3	30	15			25768.3334		0.9919	0.0081
3	30	16	25769.9936		25769.7116	0.2820	0.9918	0.0082
3	30	17			25771.1754		0.9917	0.0083
3	30	18			25772.7248		0.9915	0.0085
3	30	19			25774.3598		0.9914	0.0086
3	30	20			25776.0803		0.9912	0.0088
3	30	21			25777.8864		0.9911	0.0089
3	30	22			25779.7779		0.9909	0.0091
3	30	23			25781.7550		0.9908	0.0092
3	30	24			25783.8176		0.9906	0.0094
3	30	25	25786.0978		25785.9657	0.1321	0.9904	0.0096
3	30	26			25788.1995		0.9902	0.0098
3	30	27	25790.6130		25790.5189	0.0941	0.9900	0.0100
3	30	28			25792.9242		0.9899	0.0101
3	30	29			25795.4153		0.9897	0.0103
3	30	30			25797.9924		0.9896	0.0104
3	30	31			25800.6557		0.9894	0.0106
3	30	32			25803.4052		0.9893	0.0107
3	30	33			25806.2412		0.9892	0.0108
3	30	34			25809.1638		0.9891	0.0109
3	30	35			25812.1732		0.9890	0.0110
3	30	36			25815.2695		0.9890	0.0110
3	30	37			25818.4529		0.9890	0.0110
3	30	38			25821.7234		0.9890	0.0110
3	30	39	25824.9172		25825.0812	−0.1640	0.9890	0.0110
3	30	40			25828.5264		0.9891	0.0109
3	30	41			25832.0588		0.9893	0.0107
3	30	42			25835.6785		0.9894	0.0106
3	30	43			25839.3853		0.9897	0.0103
3	30	44	25842.9584		25843.1789	−0.2205	0.9899	0.0101
3	30	45			25847.0592		0.9902	0.0098
3	30	46	25850.7825		25851.0257	−0.2432	0.9905	0.0095
3	30	47			25855.0780		0.9908	0.0092
3	30	48			25859.2153		0.9912	0.0088
3	30	49			25863.4372		0.9916	0.0084
3	30	50			25867.7427		0.9920	0.0080
3	30	51			25872.1310		0.9923	0.0077
3	30	52			25876.6014		0.9927	0.0073
3	30	53			25881.1527		0.9931	0.0069
3	30	54			25885.7841		0.9934	0.0066
3	30	55			25890.4947		0.9938	0.0062
3	30	56			25895.2835		0.9940	0.0060
3	30	57			25900.1498		0.9943	0.0057
3	30	58			25905.0928		0.9945	0.0055
3	30	59			25910.1121		0.9946	0.0054
3	30	60			25915.2072		0.9947	0.0053
3	31	0			25791.9206		0.9848	0.0152
3	31	1			25792.0081		0.9848	0.0152
3	31	2			25792.1832		0.9849	0.0151
3	31	3			25792.4457		0.9851	0.0149
3	31	4			25792.7957		0.9853	0.0147
3	31	5			25793.2331		0.9855	0.0145
3	31	6			25793.7577		0.9858	0.0142
3	31	7			25794.3695		0.9861	0.0139
3	31	8			25795.0683		0.9865	0.0135

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	31	9			25795.8541		0.9868	0.0132
3	31	10			25796.7265		0.9872	0.0128
3	31	11			25797.6855		0.9877	0.0123
3	31	12			25798.7309		0.9881	0.0119
3	31	13			25799.8624		0.9886	0.0114
3	31	14	25801.3465		25801.0798	0.2667	0.9890	0.0110
3	31	15			25802.3829		0.9894	0.0106
3	31	16	25804.0114		25803.7714	0.2400	0.9899	0.0101
3	31	17			25805.2450		0.9903	0.0097
3	31	18			25806.8036		0.9907	0.0093
3	31	19			25808.4468		0.9911	0.0089
3	31	20			25810.1743		0.9914	0.0086
3	31	21			25811.9858		0.9917	0.0083
3	31	22			25813.8811		0.9919	0.0081
3	31	23			25815.8599		0.9921	0.0079
3	31	24			25817.9220		0.9923	0.0077
3	31	25	25820.1735		25820.0671	0.1064	0.9924	0.0076
3	31	26			25822.2950		0.9925	0.0075
3	31	27	25824.6790		25824.6054	0.0736	0.9924	0.0076
3	31	28			25826.9983		0.9924	0.0076
3	31	29			25829.4735		0.9923	0.0077
3	31	30			25832.0308		0.9921	0.0079
3	31	31			25834.6703		0.9919	0.0081
3	31	32			25837.3920		0.9916	0.0084
3	31	33			25840.1958		0.9913	0.0087
3	31	34			25843.0818		0.9910	0.0090
3	31	35			25846.0502		0.9907	0.0093
3	31	36			25849.1012		0.9903	0.0097
3	31	37	25852.1421		25852.2349	−0.0928	0.9899	0.0101
3	31	38			25855.4518		0.9895	0.0105
3	31	39	25858.6345		25858.7521	−0.1176	0.9891	0.0109
3	31	40			25862.1361		0.9887	0.0113
3	31	41			25865.6044		0.9883	0.0117
3	31	42			25869.1572		0.9880	0.0120
3	31	43			25872.7952		0.9877	0.0123
3	31	44	25876.3325		25876.5186	−0.1861	0.9874	0.0126
3	31	45			25880.3280		0.9872	0.0128
3	31	46	25884.0111		25884.2237	−0.2126	0.9870	0.0130
3	31	47			25888.2062		0.9869	0.0131
3	31	48			25892.2757		0.9869	0.0131
3	31	49			25896.4325		0.9870	0.0130
3	31	50			25900.6765		0.9871	0.0129
3	31	51			25905.0079		0.9873	0.0127
3	31	52			25909.4265		0.9876	0.0124
3	31	53			25913.9319		0.9880	0.0120
3	31	54			25918.5235		0.9884	0.0116
3	31	55			25923.2008		0.9889	0.0111
3	31	56			25927.9627		0.9894	0.0106
3	31	57			25932.8083		0.9900	0.0100
3	31	58			25937.7364		0.9906	0.0094
3	31	59			25942.7454		0.9912	0.0088
3	31	60			25947.8342		0.9918	0.0082
3	31	86	26106.6111		26106.6591	−0.0480	0.9945	0.0055
3	31	88	26121.1254		26121.0501	0.0753	0.9951	0.0049
3	32	0			25822.9943		0.7646	0.2354
3	32	1			25823.0893		0.7654	0.2346
3	32	2			25823.2793		0.7670	0.2330
3	32	3			25823.5641		0.7693	0.2307

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	32	4			25823.9436		0.7724	0.2276
3	32	5			25824.4176		0.7763	0.2237
3	32	6			25824.9859		0.7809	0.2191
3	32	7			25825.6481		0.7861	0.2139
3	32	8			25826.4039		0.7921	0.2079
3	32	9			25827.2530		0.7986	0.2014
3	32	10			25828.1948		0.8058	0.1942
3	32	11			25829.2289		0.8134	0.1866
3	32	12			25830.3548		0.8216	0.1784
3	32	13			25831.5717		0.8301	0.1699
3	32	14	25833.2589	b	25832.8792	0.3797	0.8390	0.1610
3	32	15			25834.2765		0.8482	0.1518
3	32	16	25836.0928	b	25835.7629	0.3299	0.8576	0.1424
3	32	17	25837.6506	b	25837.3375	0.3131	0.8671	0.1329
3	32	18	25839.2943	b	25838.9996	0.2947	0.8767	0.1233
3	32	19	25841.0333	b	25840.7483	0.2850	0.8863	0.1137
3	32	20	25842.8248	b	25842.5826	0.2422	0.8958	0.1042
3	32	21			25844.5017		0.9051	0.0949
3	32	22			25846.5046		0.9141	0.0859
3	32	23			25848.5903		0.9229	0.0771
3	32	24			25850.7579		0.9312	0.0688
3	32	25	25853.1483		25853.0064	0.1419	0.9391	0.0609
3	32	26			25855.3348		0.9465	0.0535
3	32	27	25857.6139		25857.7422	−0.1283	0.9533	0.0467
3	32	28			25860.2277		0.9596	0.0404
3	32	29			25862.7905		0.9653	0.0347
3	32	30			25865.4298		0.9704	0.0296
3	32	31			25868.1449		0.9749	0.0251
3	32	32			25870.9352		0.9788	0.0212
3	32	33			25873.8002		0.9821	0.0179
3	32	34			25876.7395		0.9849	0.0151
3	32	35			25879.7527		0.9871	0.0129
3	32	36			25882.8396		0.9889	0.0111
3	32	37	25885.8805		25886.0002	−0.1197	0.9902	0.0098
3	32	38			25889.2345		0.9911	0.0089
3	32	39	25892.3952		25892.5427	−0.1475	0.9917	0.0083
3	32	40			25895.9250		0.9919	0.0081
3	32	41			25899.3818		0.9919	0.0081
3	32	42			25902.9135		0.9917	0.0083
3	32	43			25906.5208		0.9913	0.0087
3	32	44	25910.0198		25910.2044	−0.1846	0.9907	0.0093
3	32	45			25913.9650		0.9900	0.0100
3	32	46	25917.6094		25917.8036	−0.1942	0.9893	0.0107
3	32	47			25921.7209		0.9885	0.0115
3	32	48			25925.7181		0.9877	0.0123
3	32	49			25929.7962		0.9869	0.0131
3	32	50			25933.9562		0.9862	0.0138
3	32	51			25938.1991		0.9855	0.0145
3	32	52			25942.5261		0.9849	0.0151
3	32	53			25946.9382		0.9844	0.0156
3	32	54			25951.4362		0.9841	0.0159
3	32	55			25956.0211		0.9838	0.0162
3	32	56			25960.6933		0.9837	0.0163
3	32	57			25965.4535		0.9838	0.0162
3	32	58			25970.3019		0.9840	0.0160
3	32	59			25975.2384		0.9843	0.0157
3	32	60			25980.2628		0.9848	0.0152
3	32	86	26137.7079		26137.6940	0.0139	0.9928	0.0072

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	33	0			25861.9409		0.9442	0.0558
3	33	1			25862.0298		0.9440	0.0560
3	33	2			25862.2077		0.9437	0.0563
3	33	3			25862.4746		0.9432	0.0568
3	33	4			25862.8304		0.9425	0.0575
3	33	5			25863.2752		0.9417	0.0583
3	33	6			25863.8090		0.9406	0.0594
3	33	7			25864.4317		0.9394	0.0606
3	33	8			25865.1435		0.9380	0.0620
3	33	9			25865.9442		0.9363	0.0637
3	33	10			25866.8339		0.9345	0.0655
3	33	11			25867.8125		0.9323	0.0677
3	33	12			25868.8801		0.9300	0.0700
3	33	13			25870.0366		0.9273	0.0727
3	33	14			25871.2819		0.9243	0.0757
3	33	15			25872.6160		0.9210	0.0790
3	33	16			25874.0387		0.9174	0.0826
3	33	17			25875.5500		0.9133	0.0867
3	33	18			25877.1498		0.9089	0.0911
3	33	19			25878.8380		0.9039	0.0961
3	33	20			25880.6143		0.8984	0.1016
3	33	21			25882.4788		0.8924	0.1076
3	33	22			25884.4312		0.8857	0.1143
3	33	23			25886.4715		0.8782	0.1218
3	33	24			25888.5997		0.8699	0.1301
3	33	25	25890.9336		25890.8158	0.1178	0.8606	0.1394
3	33	26			25893.1201		0.8503	0.1497
3	33	27	25895.6454		25895.5129	0.1325	0.8386	0.1614
3	33	28	25898.1399	b	25897.9948	0.1451	0.8254	0.1746
3	33	29			25900.5669		0.8103	0.1897
3	33	30			25903.2305		0.7931	0.2069
3	33	31			25905.9879		0.7732	0.2268
3	33	32			25908.8420		0.7500	0.2500
3	33	33			25911.7972		0.7229	0.2771
3	33	34			25914.8593		0.6909	0.3091
3	33	35			25918.0363		0.6530	0.3470
3	33	36			25921.3392		0.6084	0.3916
3	33	37			25924.7820		0.5562	0.4438
3	33	38			25918.5061		0.5608	0.4392
3	33	39			25922.5878		0.6294	0.3706
3	33	40			25926.6793		0.7010	0.2990
3	33	41			25930.7625		0.7706	0.2294
3	33	42			25934.8265		0.8327	0.1673
3	33	43			25938.8692		0.8835	0.1165
3	33	44	25942.7154		25942.8968	−0.1814	0.9221	0.0779
3	33	45			25946.9207		0.9495	0.0505
3	33	46			25950.9539		0.9678	0.0322
3	33	47			25955.0089		0.9794	0.0206
3	33	48			25959.0967		0.9862	0.0138
3	33	49			25963.2266		0.9898	0.0102
3	33	50			25967.4060		0.9913	0.0087
3	33	51			25971.6412		0.9913	0.0087
3	33	52			25975.9373		0.9905	0.0095
3	33	53			25980.2986		0.9892	0.0108
3	33	54			25984.7290		0.9876	0.0124
3	33	55			25989.2318		0.9859	0.0141
3	33	56			25993.8099		0.9842	0.0158
3	33	57			25998.4660		0.9827	0.0173

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	33	58			26003.2027		0.9813	0.0187
3	33	59			26008.0222		0.9801	0.0199
3	33	60			26012.9265		0.9792	0.0208
3	34	0			25894.3310		0.9809	0.0191
3	34	1			25894.4162		0.9809	0.0191
3	34	2			25894.5868		0.9809	0.0191
3	34	3			25894.8427		0.9809	0.0191
3	34	4			25895.1839		0.9809	0.0191
3	34	5			25895.6106		0.9809	0.0191
3	34	6			25896.1227		0.9808	0.0192
3	34	7			25896.7204		0.9808	0.0192
3	34	8			25897.4038		0.9808	0.0192
3	34	9			25898.1729		0.9808	0.0192
3	34	10			25899.0278		0.9808	0.0192
3	34	11			25899.9688		0.9808	0.0192
3	34	12			25900.9958		0.9807	0.0193
3	34	13			25902.1091		0.9807	0.0193
3	34	14	25903.6259		25903.3087	0.3172	0.9806	0.0194
3	34	15			25904.5948		0.9805	0.0195
3	34	16	25905.9849		25905.9675	0.0174	0.9804	0.0196
3	34	17			25907.4270		0.9802	0.0198
3	34	18			25908.9732		0.9801	0.0199
3	34	19			25910.6063		0.9799	0.0201
3	34	20			25912.3263		0.9796	0.0204
3	34	21			25914.1332		0.9793	0.0207
3	34	22			25916.0271		0.9790	0.0210
3	34	23			25918.0077		0.9785	0.0215
3	34	24			25920.0750		0.9781	0.0219
3	34	25	25922.1851		25922.2288	−0.0437	0.9775	0.0225
3	34	26			25924.4688		0.9768	0.0232
3	34	27	25926.7242		25926.7947	−0.0705	0.9761	0.0239
3	34	28			25929.2059		0.9752	0.0248
3	34	29			25931.7019		0.9743	0.0257
3	34	30			25934.2822		0.9732	0.0268
3	34	31			25936.9459		0.9719	0.0281
3	34	32			25939.6923		0.9706	0.0294
3	34	33			25942.5203		0.9691	0.0309
3	34	34			25945.4290		0.9674	0.0326
3	34	35			25948.4173		0.9656	0.0344
3	34	36			25951.4841		0.9636	0.0364
3	34	37			25954.6280		0.9615	0.0385
3	34	38			25957.8479		0.9591	0.0409
3	34	39			25961.1425		0.9566	0.0434
3	34	40			25964.5107		0.9539	0.0461
3	34	41			25967.9513		0.9509	0.0491
3	34	42			25971.4633		0.9478	0.0522
3	34	43			25975.0456		0.9443	0.0557
3	34	44	25978.5915	b	25978.6976	−0.1061	0.9406	0.0594
3	34	45			25982.4187		0.9365	0.0635
3	34	46	25986.1429	b	25986.2084	−0.0655	0.9319	0.0681
3	34	47			25990.0668		0.9268	0.0732
3	34	48			25993.9942		0.9207	0.0793
3	34	49			25997.9914		0.9135	0.0865
3	34	50			26002.0601		0.9044	0.0956
3	34	51			26006.2032		0.8923	0.1077
3	34	52			26010.4261		0.8749	0.1251
3	34	53			26014.7398		0.8473	0.1527
3	34	54			26019.1703		0.7965	0.2035

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	34	55			26023.7931		0.6837	0.3163
3	34	56			26025.7145		0.6385	0.3615
3	34	57			26031.2740		0.9154	0.0846
3	34	58			26036.2704		0.9853	0.0147
3	34	59			26041.1175		0.9903	0.0097
3	34	60			26045.9643		0.9854	0.0146
3	35	0			25928.0574		0.9732	0.0268
3	35	1			25928.1393		0.9732	0.0268
3	35	2			25928.3033		0.9732	0.0268
3	35	3			25928.5494		0.9732	0.0268
3	35	4			25928.8774		0.9731	0.0269
3	35	5			25929.2876		0.9731	0.0269
3	35	6			25929.7799		0.9731	0.0269
3	35	7			25930.3544		0.9731	0.0269
3	35	8			25931.0112		0.9731	0.0269
3	35	9			25931.7504		0.9730	0.0270
3	35	10			25932.5722		0.9730	0.0270
3	35	11			25933.4765		0.9730	0.0270
3	35	12			25934.4636		0.9730	0.0270
3	35	13			25935.5336		0.9730	0.0270
3	35	14	25936.7490		25936.6867	0.0623	0.9730	0.0270
3	35	15			25937.9231		0.9731	0.0269
3	35	16	25939.2880		25939.2430	0.0450	0.9731	0.0269
3	35	17			25940.6466		0.9732	0.0268
3	35	18			25942.1343		0.9733	0.0267
3	35	19			25943.7062		0.9734	0.0266
3	35	20			25945.3626		0.9735	0.0265
3	35	21			25947.1039		0.9737	0.0263
3	35	22			25948.9304		0.9739	0.0261
3	35	23			25950.8423		0.9741	0.0259
3	35	24			25952.8401		0.9744	0.0256
3	35	25	25954.8768		25954.9240	−0.0472	0.9747	0.0253
3	35	26			25957.0943		0.9750	0.0250
3	35	27	25959.2776		25959.3514	−0.0738	0.9754	0.0246
3	35	28			25961.6956		0.9757	0.0243
3	35	29			25964.1270		0.9761	0.0239
3	35	30			25966.6458		0.9766	0.0234
3	35	31			25969.2521		0.9770	0.0230
3	35	32			25971.9460		0.9775	0.0225
3	35	33			25974.7273		0.9779	0.0221
3	35	34			25977.5960		0.9783	0.0217
3	35	35			25980.5515		0.9788	0.0212
3	35	36			25983.5934		0.9792	0.0208
3	35	37			25986.7212		0.9795	0.0205
3	35	38			25989.9338		0.9798	0.0202
3	35	39			25993.2303		0.9801	0.0199
3	35	40			25996.6095		0.9802	0.0198
3	35	41			26000.0699		0.9803	0.0197
3	35	42			26003.6101		0.9803	0.0197
3	35	43			26007.2282		0.9802	0.0198
3	35	44	26010.7068		26010.9225	−0.2157	0.9800	0.0200
3	35	45			26014.6910		0.9796	0.0204
3	35	46	26018.3293		26018.5319	−0.2026	0.9792	0.0208
3	35	47			26022.4432		0.9786	0.0214
3	35	48			26026.4230		0.9780	0.0220
3	35	49			26030.4696		0.9773	0.0227
3	35	50			26034.5814		0.9765	0.0235
3	35	51			26038.7571		0.9757	0.0243

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	35	52			26042.9956		0.9749	0.0251
3	35	53			26047.2960		0.9741	0.0259
3	35	54			26051.6578		0.9734	0.0266
3	35	55			26056.0809		0.9727	0.0273
3	35	56			26060.5655		0.9722	0.0278
3	35	57			26065.1121		0.9719	0.0281
3	35	58			26069.7217		0.9718	0.0282
3	35	59			26074.3957		0.9721	0.0279
3	35	60			26079.1359		0.9728	0.0272
3	35	86	26231.0384		26230.7310	0.3074	0.9879	0.0121
3	36	0			25962.4321		0.9709	0.0291
3	36	1			25962.5120		0.9708	0.0292
3	36	2			25962.6717		0.9707	0.0293
3	36	3			25962.9112		0.9704	0.0296
3	36	4			25963.2306		0.9702	0.0298
3	36	5			25963.6298		0.9698	0.0302
3	36	6			25964.1087		0.9694	0.0306
3	36	7			25964.6673		0.9689	0.0311
3	36	8			25965.3057		0.9684	0.0316
3	36	9			25966.0237		0.9678	0.0322
3	36	10			25966.8214		0.9672	0.0328
3	36	11			25967.6988		0.9666	0.0334
3	36	12			25968.6558		0.9659	0.0341
3	36	13			25969.6926		0.9652	0.0348
3	36	14	25970.7863		25970.8091	−0.0228	0.9645	0.0355
3	36	15			25972.0054		0.9638	0.0362
3	36	16	25973.2406		25973.2816	−0.0410	0.9631	0.0369
3	36	17			25974.6378		0.9624	0.0376
3	36	18			25976.0742		0.9617	0.0383
3	36	19			25977.5909		0.9610	0.0390
3	36	20			25979.1881		0.9604	0.0396
3	36	21			25980.8661		0.9598	0.0402
3	36	22			25982.6251		0.9592	0.0408
3	36	23			25984.4655		0.9588	0.0412
3	36	24			25986.3876		0.9583	0.0417
3	36	25	25988.2931		25988.3917	−0.0986	0.9580	0.0420
3	36	26			25990.4784		0.9577	0.0423
3	36	27	25992.5338		25992.6480	−0.1142	0.9575	0.0425
3	36	28			25994.9011		0.9574	0.0426
3	36	29			25997.2382		0.9574	0.0426
3	36	30			25999.6598		0.9575	0.0425
3	36	31			26002.1667		0.9577	0.0423
3	36	32			26004.7594		0.9580	0.0420
3	36	33			26007.4385		0.9584	0.0416
3	36	34			26010.2048		0.9590	0.0410
3	36	35			26013.0587		0.9596	0.0404
3	36	36			26016.0010		0.9604	0.0396
3	36	37			26019.0321		0.9613	0.0387
3	36	38			26022.1525		0.9624	0.0376
3	36	39			26025.3626		0.9635	0.0365
3	36	40			26028.6626		0.9648	0.0352
3	36	41			26032.0526		0.9661	0.0339
3	36	42			26035.5324		0.9676	0.0324
3	36	43			26039.1016		0.9691	0.0309
3	36	44	26042.5580		26042.7594	−0.2014	0.9706	0.0294
3	36	45			26046.5050		0.9722	0.0278
3	36	46	26050.1372		26050.3370	−0.1998	0.9738	0.0262
3	36	47			26054.2537		0.9754	0.0246

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	36	48			26058.2532		0.9769	0.0231
3	36	49			26062.3331		0.9783	0.0217
3	36	50			26066.4909		0.9796	0.0204
3	36	51			26070.7239		0.9807	0.0193
3	36	52			26075.0290		0.9817	0.0183
3	36	53			26079.4035		0.9825	0.0175
3	36	54			26083.8444		0.9832	0.0168
3	36	55			26088.3490		0.9836	0.0164
3	36	56			26092.9149		0.9839	0.0161
3	36	57			26097.5400		0.9840	0.0160
3	36	58			26102.2227		0.9840	0.0160
3	36	59			26106.9618		0.9839	0.0161
3	36	60			26111.7567		0.9837	0.0163
3	37	0			25996.9226		0.9632	0.0368
3	37	1			25997.0011		0.9632	0.0368
3	37	2			25997.1582		0.9633	0.0367
3	37	3			25997.3938		0.9635	0.0365
3	37	4			25997.7079		0.9637	0.0363
3	37	5			25998.1005		0.9640	0.0360
3	37	6			25998.5717		0.9644	0.0356
3	37	7			25999.1214		0.9649	0.0351
3	37	8			25999.7497		0.9654	0.0346
3	37	9			26000.4565		0.9661	0.0339
3	37	10			26001.2419		0.9668	0.0332
3	37	11			26002.1060		0.9678	0.0322
3	37	12			26003.0490		0.9688	0.0312
3	37	13			26004.0709		0.9701	0.0299
3	37	14	26005.1351		26005.1721	−0.0370	0.9715	0.0285
3	37	15			26006.3529		0.9732	0.0268
3	37	16	26007.5758		26007.6139	−0.0381	0.9751	0.0249
3	37	17			26008.9558		0.9773	0.0227
3	37	18			26010.3800		0.9797	0.0203
3	37	19			26011.8884		0.9823	0.0177
3	37	20			26013.4841		0.9847	0.0153
3	37	21			26015.1726		0.9860	0.0140
3	37	22			26016.9637		0.9838	0.0162
3	37	23			26018.8767		0.9715	0.0285
3	37	24			26020.9509		0.9322	0.0678
3	37	25	26023.1293		26023.2604	−0.1311	0.8335	0.1665
3	37	26			26025.8967		0.6679	0.3321
3	37	27	26025.1010	c	26025.5321	−0.4311	0.5795	0.4205
3	37	28			26027.9259		0.6894	0.3106
3	37	29			26030.3139		0.7562	0.2438
3	37	30			26032.7361		0.7977	0.2023
3	37	31			26035.2128		0.8249	0.1751
3	37	32			26037.7547		0.8438	0.1562
3	37	33			26040.3679		0.8577	0.1423
3	37	34			26043.0564		0.8682	0.1318
3	37	35			26045.8229		0.8766	0.1234
3	37	36			26048.6694		0.8835	0.1165
3	37	37			26051.5977		0.8893	0.1107
3	37	38			26054.6093		0.8944	0.1056
3	37	39			26057.7057		0.8990	0.1010
3	37	40			26060.8882		0.9032	0.0968
3	37	41			26064.1581		0.9072	0.0928
3	37	42			26067.5167		0.9110	0.0890
3	37	43			26070.9652		0.9148	0.0852
3	37	44			26074.5047		0.9185	0.0815

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	37	45			26078.1363		0.9223	0.0777
3	37	46	26081.6829		26081.8608	−0.1779	0.9262	0.0738
3	37	47			26085.6788		0.9302	0.0698
3	37	48			26089.5907		0.9343	0.0657
3	37	49			26093.5965		0.9385	0.0615
3	37	50			26097.6958		0.9427	0.0573
3	37	51			26101.8876		0.9471	0.0529
3	37	52			26106.1705		0.9515	0.0485
3	37	53			26110.5423		0.9558	0.0442
3	37	54			26115.0004		0.9601	0.0399
3	37	55			26119.5414		0.9643	0.0357
3	37	56			26124.1616		0.9683	0.0317
3	37	57			26128.8567		0.9719	0.0281
3	37	58			26133.6223		0.9753	0.0247
3	37	59			26138.4539		0.9782	0.0218
3	37	60			26143.3469		0.9808	0.0192
3	38	0			26030.9776		0.9761	0.0239
3	38	1			26031.0568		0.9761	0.0239
3	38	2			26031.2150		0.9761	0.0239
3	38	3			26031.4522		0.9760	0.0240
3	38	4			26031.7685		0.9760	0.0240
3	38	5			26032.1637		0.9760	0.0240
3	38	6			26032.6377		0.9760	0.0240
3	38	7			26033.1905		0.9759	0.0241
3	38	8			26033.8219		0.9759	0.0241
3	38	9			26034.5317		0.9759	0.0241
3	38	10			26035.3200		0.9758	0.0242
3	38	11			26036.1864		0.9758	0.0242
3	38	12			26037.1310		0.9758	0.0242
3	38	13			26038.1534		0.9757	0.0243
3	38	14	26039.1956	b	26039.2535	−0.0579	0.9757	0.0243
3	38	15			26040.4312		0.9757	0.0243
3	38	16	26041.6175	b	26041.6864	−0.0689	0.9757	0.0243
3	38	17			26043.0189		0.9757	0.0243
3	38	18			26044.4285		0.9758	0.0242
3	38	19			26045.9152		0.9759	0.0241
3	38	20			26047.4789		0.9760	0.0240
3	38	21			26049.1196		0.9761	0.0239
3	38	22			26050.8372		0.9763	0.0237
3	38	23			26052.6318		0.9766	0.0234
3	38	24			26054.5035		0.9769	0.0231
3	38	25	26056.3374		26056.4525	−0.1151	0.9773	0.0227
3	38	26			26058.4789		0.9777	0.0223
3	38	27	26060.4575		26060.5833	−0.1258	0.9782	0.0218
3	38	28			26062.7660		0.9788	0.0212
3	38	29			26065.0276		0.9795	0.0205
3	38	30			26067.3691		0.9803	0.0197
3	38	31			26069.7913		0.9811	0.0189
3	38	32			26072.2956		0.9820	0.0180
3	38	33			26074.8838		0.9828	0.0172
3	38	34			26077.5579		0.9836	0.0164
3	38	35			26080.3208		0.9842	0.0158
3	38	36			26083.1762		0.9845	0.0155
3	38	37			26086.1288		0.9840	0.0160
3	38	38			26089.1851		0.9823	0.0177
3	38	39			26092.3541		0.9786	0.0214
3	38	40			26095.6476		0.9714	0.0286
3	38	41			26099.0824		0.9587	0.0413

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	38	42			26102.6806		0.9373	0.0627
3	38	43			26106.4710		0.9032	0.0968
3	38	44	26110.3810		26110.4870	−0.1060	0.8526	0.1474
3	38	45			26114.7594		0.7847	0.2153
3	38	46	26119.2534	b	26119.3060	−0.0526	0.7039	0.2961
3	38	47			26124.1216		0.6194	0.3806
3	38	48			26118.5594		0.5542	0.4458
3	38	49			26122.8591		0.6182	0.3818
3	38	50			26127.1514		0.6712	0.3288
3	38	51			26131.4645		0.7147	0.2853
3	38	52			26135.8199		0.7504	0.2496
3	38	53			26140.2336		0.7802	0.2198
3	38	54			26144.7169		0.8057	0.1943
3	38	55			26149.2778		0.8279	0.1721
3	38	56			26153.9212		0.8477	0.1523
3	38	57			26158.6501		0.8657	0.1343
3	38	58			26163.4652		0.8823	0.1177
3	38	59			26168.3652		0.8976	0.1024
3	38	60			26173.3474		0.9119	0.0881
3	39	0			26063.9628		0.9791	0.0209
3	39	1			26064.0444		0.9791	0.0209
3	39	2			26064.2075		0.9792	0.0208
3	39	3			26064.4522		0.9793	0.0207
3	39	4			26064.7782		0.9795	0.0205
3	39	5			26065.1854		0.9797	0.0203
3	39	6			26065.6737		0.9799	0.0201
3	39	7			26066.2429		0.9801	0.0199
3	39	8			26066.8927		0.9804	0.0196
3	39	9			26067.6227		0.9806	0.0194
3	39	10			26068.4328		0.9809	0.0191
3	39	11			26069.3226		0.9812	0.0188
3	39	12			26070.2918		0.9814	0.0186
3	39	13			26071.3398		0.9817	0.0183
3	39	14			26072.4664		0.9819	0.0181
3	39	15			26073.6711		0.9821	0.0179
3	39	16			26074.9535		0.9823	0.0177
3	39	17			26076.3131		0.9825	0.0175
3	39	18			26077.7495		0.9826	0.0174
3	39	19			26079.2622		0.9827	0.0173
3	39	20			26080.8508		0.9827	0.0173
3	39	21			26082.5148		0.9827	0.0173
3	39	22			26084.2537		0.9826	0.0174
3	39	23			26086.0673		0.9825	0.0175
3	39	24			26087.9551		0.9824	0.0176
3	39	25	26089.8160	b	26089.9168	−0.1008	0.9822	0.0178
3	39	26			26091.9520		0.9821	0.0179
3	39	27	26094.0046	b	26094.0605	−0.0559	0.9818	0.0182
3	39	28			26096.2422		0.9816	0.0184
3	39	29			26098.4969		0.9813	0.0187
3	39	30			26100.8244		0.9811	0.0189
3	39	31			26103.2249		0.9809	0.0191
3	39	32			26105.6984		0.9806	0.0194
3	39	33			26108.2450		0.9804	0.0196
3	39	34			26110.8652		0.9803	0.0197
3	39	35			26113.5592		0.9801	0.0199
3	39	36			26116.3276		0.9801	0.0199
3	39	37			26119.1711		0.9801	0.0199
3	39	38			26122.0904		0.9801	0.0199

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	39	39			26125.0866		0.9803	0.0197
3	39	40			26128.1609		0.9805	0.0195
3	39	41			26131.3148		0.9808	0.0192
3	39	42			26134.5498		0.9811	0.0189
3	39	43			26137.8680		0.9815	0.0185
3	39	44	26141.1847		26141.2719	−0.0872	0.9818	0.0182
3	39	45			26144.7640		0.9821	0.0179
3	39	46	26148.2915		26148.3479	−0.0564	0.9823	0.0177
3	39	47			26152.0271		0.9821	0.0179
3	39	48			26155.8065		0.9815	0.0185
3	39	49			26159.6911		0.9802	0.0198
3	39	50			26163.6872		0.9777	0.0223
3	39	51			26167.8022		0.9735	0.0265
3	39	52			26172.0442		0.9670	0.0330
3	39	53			26176.4226		0.9571	0.0429
3	39	54			26180.9476		0.9428	0.0572
3	39	55			26185.6298		0.9227	0.0773
3	39	56			26190.4792		0.8954	0.1046
3	39	57			26195.5041		0.8600	0.1400
3	39	58			26200.7097		0.8161	0.1839
3	39	59			26206.0966		0.7642	0.2358
3	39	60			26211.6600		0.7062	0.2938
3	40	0			26093.5060		0.8039	0.1961
3	40	1			26093.5974		0.8047	0.1953
3	40	2			26093.7801		0.8061	0.1939
3	40	3			26094.0540		0.8084	0.1916
3	40	4			26094.4189		0.8113	0.1887
3	40	5			26094.8746		0.8149	0.1851
3	40	6			26095.4205		0.8193	0.1807
3	40	7			26096.0564		0.8243	0.1757
3	40	8			26096.7817		0.8299	0.1701
3	40	9			26097.5958		0.8361	0.1639
3	40	10			26098.4980		0.8429	0.1571
3	40	11			26099.4875		0.8501	0.1499
3	40	12			26100.5635		0.8578	0.1422
3	40	13			26101.7248		0.8658	0.1342
3	40	14	26102.8873	b	26102.9706	−0.0833	0.8742	0.1258
3	40	15			26104.2996		0.8827	0.1173
3	40	16	26105.6212	b	26105.7105	−0.0893	0.8914	0.1086
3	40	17			26107.2021		0.9001	0.0999
3	40	18			26108.7729		0.9087	0.0913
3	40	19			26110.4214		0.9171	0.0829
3	40	20			26112.1463		0.9253	0.0747
3	40	21			26113.9461		0.9331	0.0669
3	40	22			26115.8192		0.9406	0.0594
3	40	23			26117.7642		0.9475	0.0525
3	40	24			26119.7798		0.9538	0.0462
3	40	25			26121.8646		0.9596	0.0404
3	40	26	26123.9028	b	26124.0175	−0.1147	0.9647	0.0353
3	40	27	26126.1301		26126.2374	−0.1073	0.9692	0.0308
3	40	28			26128.5234		0.9731	0.0269
3	40	29			26130.8746		0.9763	0.0237
3	40	30			26133.2904		0.9789	0.0211
3	40	31			26135.7702		0.9810	0.0190
3	40	32			26138.3138		0.9826	0.0174
3	40	33			26140.9208		0.9837	0.0163
3	40	34			26143.5913		0.9844	0.0156
3	40	35			26146.3252		0.9848	0.0152

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	40	36			26149.1228		0.9848	0.0152
3	40	37			26151.9843		0.9847	0.0153
3	40	38			26154.9103		0.9843	0.0157
3	40	39			26157.9012		0.9838	0.0162
3	40	40			26160.9578		0.9832	0.0168
3	40	41			26164.0808		0.9825	0.0175
3	40	42			26167.2712		0.9819	0.0181
3	40	43			26170.5300		0.9812	0.0188
3	40	44	26173.8286		26173.8583	−0.0297	0.9805	0.0195
3	40	45			26177.2576		0.9800	0.0200
3	40	46	26180.8050	b	26180.7293	0.0757	0.9795	0.0205
3	40	47			26184.2751		0.9791	0.0209
3	40	48			26187.8968		0.9788	0.0212
3	40	49			26191.5965		0.9786	0.0214
3	40	50			26195.3766		0.9785	0.0215
3	40	51			26199.2394		0.9785	0.0215
3	40	52			26203.1879		0.9786	0.0214
3	40	53			26207.2252		0.9788	0.0212
3	40	54			26211.3545		0.9789	0.0211
3	40	55			26215.5794		0.9790	0.0210
3	40	56			26219.9037		0.9788	0.0212
3	40	57			26224.3313		0.9784	0.0216
3	40	58			26228.8659		0.9774	0.0226
3	40	59			26233.5112		0.9757	0.0243
3	40	60			26238.2703		0.9729	0.0271
3	41	0			26132.8489		0.8746	0.1254
3	41	1			26132.9321		0.8743	0.1257
3	41	2			26133.0984		0.8738	0.1262
3	41	3			26133.3478		0.8729	0.1271
3	41	4			26133.6803		0.8718	0.1282
3	41	5			26134.0958		0.8704	0.1296
3	41	6			26134.5941		0.8686	0.1314
3	41	7			26135.1753		0.8666	0.1334
3	41	8			26135.8391		0.8642	0.1358
3	41	9			26136.5854		0.8615	0.1385
3	41	10			26137.4140		0.8584	0.1416
3	41	11			26138.3249		0.8550	0.1450
3	41	12			26139.3178		0.8511	0.1489
3	41	13			26140.3925		0.8468	0.1532
3	41	14			26141.5489		0.8420	0.1580
3	41	15			26142.7867		0.8367	0.1633
3	41	16			26144.1059		0.8309	0.1691
3	41	17			26145.5064		0.8244	0.1756
3	41	18			26146.9880		0.8172	0.1828
3	41	19			26148.5509		0.8092	0.1908
3	41	20			26150.1953		0.8004	0.1996
3	41	21			26151.9213		0.7905	0.2095
3	41	22			26153.7296		0.7795	0.2205
3	41	23			26155.6211		0.7671	0.2329
3	41	24			26157.5968		0.7531	0.2469
3	41	25	26159.6181	b	26159.6586	−0.0405	0.7372	0.2628
3	41	26			26161.8088		0.7191	0.2809
3	41	27	26164.0153	b	26164.0506	−0.0353	0.6982	0.3018
3	41	28			26166.3886		0.6742	0.3258
3	41	29			26168.8285		0.6463	0.3537
3	41	30			26171.3783		0.6141	0.3859
3	41	31			26174.0482		0.5769	0.4231
3	41	32			26165.0526		0.5700	0.4300

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	41	33			26168.4337		0.6210	0.3790
3	41	34			26171.8524		0.6765	0.3235
3	41	35			26175.2894		0.7342	0.2658
3	41	36			26178.7268		0.7905	0.2095
3	41	37			26182.1513		0.8420	0.1580
3	41	38			26185.5563		0.8855	0.1145
3	41	39			26188.9426		0.9197	0.0803
3	41	40			26192.3168		0.9448	0.0552
3	41	41			26195.6884		0.9621	0.0379
3	41	42			26199.0683		0.9734	0.0266
3	41	43			26202.4668		0.9802	0.0198
3	41	44			26205.8929		0.9839	0.0161
3	41	45			26209.3544		0.9854	0.0146
3	41	46	26212.9106		26212.8579	0.0527	0.9856	0.0144
3	41	47			26216.4089		0.9849	0.0151
3	41	48			26220.0119		0.9837	0.0163
3	41	49			26223.6709		0.9822	0.0178
3	41	50			26227.3896		0.9806	0.0194
3	41	51			26231.1712		0.9791	0.0209
3	41	52			26235.0188		0.9777	0.0223
3	41	53			26238.9354		0.9764	0.0236
3	41	54			26242.9238		0.9753	0.0247
3	41	55			26246.9871		0.9745	0.0255
3	41	56			26251.1284		0.9738	0.0262
3	41	57			26255.3507		0.9734	0.0266
3	41	58			26259.6575		0.9732	0.0268
3	41	59			26264.0521		0.9732	0.0268
3	41	60			26268.5381		0.9734	0.0266
3	42	0			26162.2269		0.9632	0.0368
3	42	1			26162.3082		0.9632	0.0368
3	42	2			26162.4709		0.9632	0.0368
3	42	3			26162.7149		0.9632	0.0368
3	42	4			26163.0402		0.9631	0.0369
3	42	5			26163.4468		0.9631	0.0369
3	42	6			26163.9348		0.9630	0.0370
3	42	7			26164.5040		0.9629	0.0371
3	42	8			26165.1546		0.9627	0.0373
3	42	9			26165.8864		0.9625	0.0375
3	42	10			26166.6994		0.9623	0.0377
3	42	11			26167.5935		0.9621	0.0379
3	42	12			26168.5686		0.9618	0.0382
3	42	13			26169.6246		0.9615	0.0385
3	42	14			26170.7614		0.9610	0.0390
3	42	15			26171.9786		0.9606	0.0394
3	42	16			26173.2761		0.9600	0.0400
3	42	17			26174.6536		0.9594	0.0406
3	42	18			26176.1106		0.9586	0.0414
3	42	19			26177.6468		0.9578	0.0422
3	42	20			26179.2617		0.9568	0.0432
3	42	21			26180.9547		0.9558	0.0442
3	42	22			26182.7251		0.9546	0.0454
3	42	23			26184.5722		0.9532	0.0468
3	42	24			26186.4954		0.9517	0.0483
3	42	25	26188.4465		26188.4937	−0.0472	0.9501	0.0499
3	42	26	26190.5148	b	26190.5662	−0.0514	0.9483	0.0517
3	42	27	26192.6754		26192.7120	−0.0366	0.9463	0.0537
3	42	28			26194.9300		0.9441	0.0559
3	42	29			26197.2194		0.9417	0.0583

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	42	30			26199.5790		0.9392	0.0608
3	42	31			26202.0078		0.9364	0.0636
3	42	32			26204.5048		0.9334	0.0666
3	42	33			26207.0691		0.9302	0.0698
3	42	34			26209.6998		0.9267	0.0733
3	42	35			26212.3960		0.9229	0.0771
3	42	36			26215.1573		0.9187	0.0813
3	42	37			26217.9830		0.9141	0.0859
3	42	38			26220.8729		0.9090	0.0910
3	42	39			26223.8269		0.9033	0.0967
3	42	40			26226.8454		0.8966	0.1034
3	42	41			26229.9291		0.8889	0.1111
3	42	42			26233.0796		0.8794	0.1206
3	42	43			26236.2995		0.8676	0.1324
3	42	44			26239.5930		0.8521	0.1479
3	42	45			26242.9680		0.8306	0.1694
3	42	46			26246.4385		0.7989	0.2011
3	42	47			26250.0330		0.7484	0.2516
3	42	48			26253.8134		0.6613	0.3387
3	42	49			26252.5238		0.5828	0.4172
3	42	50			26257.5702		0.7845	0.2155
3	42	51			26262.1084		0.9235	0.0765
3	42	52			26266.2998		0.9738	0.0262
3	42	53			26270.3490		0.9853	0.0147
3	42	54			26274.3644		0.9848	0.0152
3	42	55			26278.3951		0.9812	0.0188
3	42	56			26282.4653		0.9771	0.0229
3	42	57			26286.5884		0.9734	0.0266
3	42	58			26290.7727		0.9703	0.0297
3	42	59			26295.0242		0.9678	0.0322
3	42	60			26299.3479		0.9658	0.0342
3	43	0			26192.2455		0.9345	0.0655
3	43	1			26192.3240		0.9346	0.0654
3	43	2			26192.4811		0.9347	0.0653
3	43	3			26192.7168		0.9350	0.0650
3	43	4			26193.0311		0.9353	0.0647
3	43	5			26193.4242		0.9357	0.0643
3	43	6			26193.8961		0.9362	0.0638
3	43	7			26194.4469		0.9368	0.0632
3	43	8			26195.0769		0.9375	0.0625
3	43	9			26195.7862		0.9382	0.0618
3	43	10			26196.5748		0.9390	0.0610
3	43	11			26197.4431		0.9399	0.0601
3	43	12			26198.3911		0.9409	0.0591
3	43	13			26199.4192		0.9420	0.0580
3	43	14			26200.5274		0.9431	0.0569
3	43	15			26201.7160		0.9443	0.0557
3	43	16	26202.8438		26202.9852	−0.1414	0.9455	0.0545
3	43	17			26204.3350		0.9468	0.0532
3	43	18			26205.7658		0.9482	0.0518
3	43	19			26207.2774		0.9496	0.0504
3	43	20			26208.8701		0.9510	0.0490
3	43	21			26210.5438		0.9525	0.0475
3	43	22			26212.2985		0.9540	0.0460
3	43	23			26214.1339		0.9555	0.0445
3	43	24			26216.0499		0.9570	0.0430
3	43	25	26217.9340		26218.0461	−0.1121	0.9585	0.0415
3	43	26			26220.1220		0.9599	0.0401

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	43	27	26222.1823		26222.2770	−0.0947	0.9613	0.0387
3	43	28			26224.5103		0.9625	0.0375
3	43	29			26226.8211		0.9637	0.0363
3	43	30			26229.2082		0.9648	0.0352
3	43	31			26231.6706		0.9657	0.0343
3	43	32			26234.2068		0.9665	0.0335
3	43	33			26236.8153		0.9671	0.0329
3	43	34			26239.4946		0.9676	0.0324
3	43	35			26242.2430		0.9678	0.0322
3	43	36			26245.0587		0.9678	0.0322
3	43	37			26247.9400		0.9677	0.0323
3	43	38			26250.8850		0.9673	0.0327
3	43	39			26253.8922		0.9668	0.0332
3	43	40			26256.9598		0.9660	0.0340
3	43	41			26260.0864		0.9651	0.0349
3	43	42			26263.2705		0.9640	0.0360
3	43	43			26266.5111		0.9629	0.0371
3	43	44			26269.8070		0.9616	0.0384
3	43	45			26273.1574		0.9602	0.0398
3	43	46			26276.5619		0.9589	0.0411
3	43	47			26280.0199		0.9574	0.0426
3	43	48			26283.5314		0.9560	0.0440
3	43	49			26287.0964		0.9547	0.0453
3	43	50			26290.7151		0.9534	0.0466
3	43	51			26294.3879		0.9523	0.0477
3	43	52			26298.1155		0.9513	0.0487
3	43	53			26301.8986		0.9505	0.0495
3	43	54			26305.7382		0.9500	0.0500
3	43	55			26309.6354		0.9499	0.0501
3	43	56			26313.5916		0.9504	0.0496
3	43	57			26317.6087		0.9519	0.0481
3	43	58			26321.6894		0.9556	0.0444
3	43	59			26325.8400		0.9652	0.0348
3	43	60			26330.1302		0.9768	0.0232
3	44	0			26221.3736		0.7509	0.2491
3	44	1			26221.4522		0.7515	0.2485
3	44	2			26221.6093		0.7526	0.2474
3	44	3			26221.8450		0.7543	0.2457
3	44	4			26222.1591		0.7565	0.2435
3	44	5			26222.5515		0.7593	0.2407
3	44	6			26223.0221		0.7625	0.2375
3	44	7			26223.5707		0.7661	0.2339
3	44	8			26224.1973		0.7702	0.2298
3	44	9			26224.9017		0.7746	0.2254
3	44	10			26225.6837		0.7793	0.2207
3	44	11			26226.5435		0.7843	0.2157
3	44	12			26227.4808		0.7895	0.2105
3	44	13			26228.4958		0.7949	0.2051
3	44	14	26229.4173		26229.5884	−0.1711	0.8005	0.1995
3	44	15			26230.7588		0.8062	0.1938
3	44	16	26231.8369		26232.0072	−0.1703	0.8120	0.1880
3	44	17			26233.3337		0.8179	0.1821
3	44	18			26234.7386		0.8239	0.1761
3	44	19			26236.2222		0.8299	0.1701
3	44	20			26237.7849		0.8359	0.1641
3	44	21			26239.4271		0.8420	0.1580
3	44	22			26241.1493		0.8481	0.1519
3	44	23			26242.9518		0.8542	0.1458

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	44	24			26244.8352		0.8604	0.1396
3	44	25	26246.6705		26246.7998	−0.1293	0.8666	0.1334
3	44	26	26248.7217	b	26248.8462	−0.1245	0.8728	0.1272
3	44	27	26250.8632		26250.9746	−0.1114	0.8791	0.1209
3	44	28			26253.1855		0.8853	0.1147
3	44	29			26255.4789		0.8916	0.1084
3	44	30			26257.8550		0.8979	0.1021
3	44	31			26260.3137		0.9043	0.0957
3	44	32			26262.8545		0.9105	0.0895
3	44	33			26265.4771		0.9168	0.0832
3	44	34			26268.1804		0.9229	0.0771
3	44	35			26270.9636		0.9290	0.0710
3	44	36			26273.8249		0.9348	0.0652
3	44	37			26276.7628		0.9405	0.0595
3	44	38			26279.7751		0.9458	0.0542
3	44	39			26282.8595		0.9509	0.0491
3	44	40			26286.0132		0.9555	0.0445
3	44	41			26289.2335		0.9597	0.0403
3	44	42			26292.5174		0.9634	0.0366
3	44	43			26295.8620		0.9666	0.0334
3	44	44			26299.2642		0.9693	0.0307
3	44	45			26302.7214		0.9715	0.0285
3	44	46	26306.5014		26306.2309	0.2705	0.9731	0.0269
3	44	47			26309.7906		0.9743	0.0257
3	44	48			26313.3986		0.9750	0.0250
3	44	49			26317.0534		0.9753	0.0247
3	44	50			26320.7541		0.9753	0.0247
3	44	51			26324.5000		0.9751	0.0249
3	44	52			26328.2910		0.9747	0.0253
3	44	53			26332.1273		0.9742	0.0258
3	44	54			26336.0095		0.9736	0.0264
3	44	55			26339.9385		0.9731	0.0269
3	44	56			26343.9156		0.9727	0.0273
3	44	57			26347.9423		0.9724	0.0276
3	44	58			26352.0206		0.9724	0.0276
3	44	59			26356.1529		0.9727	0.0273
3	44	60			26360.3421		0.9734	0.0266
3	45	0			26257.1231		0.9570	0.0430
3	45	1			26257.2021		0.9568	0.0432
3	45	2			26257.3603		0.9564	0.0436
3	45	3			26257.5979		0.9557	0.0443
3	45	4			26257.9150		0.9549	0.0451
3	45	5			26258.3120		0.9538	0.0462
3	45	6			26258.7895		0.9524	0.0476
3	45	7			26259.3479		0.9506	0.0494
3	45	8			26259.9880		0.9486	0.0514
3	45	9			26260.7105		0.9460	0.0540
3	45	10			26261.5165		0.9431	0.0569
3	45	11			26262.4069		0.9395	0.0605
3	45	12			26263.3831		0.9353	0.0647
3	45	13			26264.4464		0.9303	0.0697
3	45	14			26265.5985		0.9245	0.0755
3	45	15			26266.8412		0.9177	0.0823
3	45	16			26268.1763		0.9096	0.0904
3	45	17			26269.6062		0.9003	0.0997
3	45	18			26271.1331		0.8894	0.1106
3	45	19			26272.7594		0.8769	0.1231
3	45	20			26274.4878		0.8625	0.1375

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	45	21			26276.3207		0.8462	0.1538
3	45	22			26278.2606		0.8278	0.1722
3	45	23			26280.3097		0.8073	0.1927
3	45	24			26282.4698		0.7847	0.2153
3	45	25	26284.8914		26284.7423	0.1491	0.7602	0.2398
3	45	26			26287.1278		0.7340	0.2660
3	45	27	26289.8371		26289.6261	0.2110	0.7065	0.2935
3	45	28			26292.2364		0.6780	0.3220
3	45	29			26294.9566		0.6491	0.3509
3	45	30			26297.7841		0.6201	0.3799
3	45	31			26300.7155		0.5916	0.4084
3	45	32			26288.1111		0.5838	0.4162
3	45	33			26290.9102		0.6090	0.3910
3	45	34			26293.7750		0.6339	0.3661
3	45	35			26296.7078		0.6586	0.3414
3	45	36			26299.7110		0.6828	0.3172
3	45	37			26302.7869		0.7067	0.2933
3	45	38			26305.9370		0.7302	0.2698
3	45	39			26309.1625		0.7532	0.2468
3	45	40			26312.4639		0.7758	0.2242
3	45	41			26315.8407		0.7979	0.2021
3	45	42			26319.2916		0.8195	0.1805
3	45	43			26322.8144		0.8403	0.1597
3	45	44			26326.4058		0.8603	0.1397
3	45	45			26330.0619		0.8792	0.1208
3	45	46	26334.0845		26333.7777	0.3068	0.8968	0.1032
3	45	47			26337.5482		0.9128	0.0872
3	45	48			26341.3678		0.9272	0.0728
3	45	49			26345.2312		0.9398	0.0602
3	45	50			26349.1337		0.9505	0.0495
3	45	51			26353.0710		0.9592	0.0408
3	45	52			26357.0399		0.9662	0.0338
3	45	53			26361.0382		0.9715	0.0285
3	45	54			26365.0646		0.9754	0.0246
3	45	55			26369.1188		0.9780	0.0220
3	45	56			26373.2014		0.9797	0.0203
3	45	57			26377.3137		0.9805	0.0195
3	45	58			26381.4576		0.9807	0.0193
3	45	59			26385.6353		0.9806	0.0194
3	45	60			26389.8497		0.9802	0.0198
3	46	0			26286.9983		0.9685	0.0315
3	46	1			26287.0701		0.9685	0.0315
3	46	2			26287.2137		0.9685	0.0315
3	46	3			26287.4291		0.9685	0.0315
3	46	4			26287.7164		0.9686	0.0314
3	46	5			26288.0757		0.9686	0.0314
3	46	6			26288.5070		0.9687	0.0313
3	46	7			26289.0105		0.9687	0.0313
3	46	8			26289.5864		0.9688	0.0312
3	46	9			26290.2348		0.9689	0.0311
3	46	10			26290.9560		0.9690	0.0310
3	46	11			26291.7501		0.9691	0.0309
3	46	12			26292.6175		0.9692	0.0308
3	46	13			26293.5585		0.9693	0.0307
3	46	14	26294.5139	b	26294.5735	−0.0596	0.9694	0.0306
3	46	15			26295.6628		0.9695	0.0305
3	46	16	26296.7384		26296.8270	−0.0886	0.9696	0.0304
3	46	17			26298.0666		0.9697	0.0303

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	46	18			26299.3822		0.9698	0.0302
3	46	19			26300.7745		0.9698	0.0302
3	46	20			26302.2442		0.9697	0.0303
3	46	21			26303.7923		0.9696	0.0304
3	46	22			26305.4196		0.9694	0.0306
3	46	23			26307.1273		0.9690	0.0310
3	46	24			26308.9164		0.9685	0.0315
3	46	25	26310.7403		26310.7883	−0.0480	0.9678	0.0322
3	46	26			26312.7444		0.9667	0.0333
3	46	27	26314.7626		26314.7861	−0.0235	0.9653	0.0347
3	46	28			26316.9151		0.9635	0.0365
3	46	29			26319.1330		0.9611	0.0389
3	46	30			26321.4417		0.9581	0.0419
3	46	31			26323.8427		0.9542	0.0458
3	46	32			26326.3380		0.9494	0.0506
3	46	33			26328.9292		0.9435	0.0565
3	46	34			26331.6177		0.9363	0.0637
3	46	35			26334.4049		0.9276	0.0724
3	46	36			26337.2915		0.9171	0.0829
3	46	37			26340.2780		0.9048	0.0952
3	46	38			26343.3643		0.8905	0.1095
3	46	39			26346.5497		0.8741	0.1259
3	46	40			26349.8332		0.8554	0.1446
3	46	41			26353.2130		0.8344	0.1656
3	46	42			26356.6872		0.8110	0.1890
3	46	43			26360.2540		0.7854	0.2146
3	46	44			26363.9120		0.7575	0.2425
3	46	45			26367.6606		0.7272	0.2728
3	46	46			26371.5008		0.6948	0.3052
3	46	47			26375.4356		0.6600	0.3400
3	46	48			26379.4707		0.6232	0.3768
3	46	49			26383.6150		0.5844	0.4156
3	46	50			26372.4631		0.6129	0.3871
3	46	51			26377.0253		0.6602	0.3398
3	46	52			26381.6281		0.7104	0.2896
3	46	53			26386.2512		0.7614	0.2386
3	46	54			26390.8740		0.8103	0.1897
3	46	55			26395.4784		0.8547	0.1453
3	46	56			26400.0517		0.8923	0.1077
3	46	57			26404.5874		0.9224	0.0776
3	46	58			26409.0860		0.9449	0.0551
3	46	59			26413.5524		0.9608	0.0392
3	46	60			26417.9949		0.9714	0.0286
3	47	0			26317.4622		0.9582	0.0418
3	47	1			26317.5311		0.9582	0.0418
3	47	2			26317.6691		0.9581	0.0419
3	47	3			26317.8760		0.9581	0.0419
3	47	4			26318.1520		0.9580	0.0420
3	47	5			26318.4970		0.9579	0.0421
3	47	6			26318.9110		0.9578	0.0422
3	47	7			26319.3941		0.9577	0.0423
3	47	8			26319.9463		0.9576	0.0424
3	47	9			26320.5676		0.9575	0.0425
3	47	10			26321.2582		0.9573	0.0427
3	47	11			26322.0181		0.9572	0.0428
3	47	12			26322.8474		0.9571	0.0429
3	47	13			26323.7461		0.9570	0.0430
3	47	14	26324.6509		26324.7145	−0.0636	0.9569	0.0431

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	47	15			26325.7527		0.9569	0.0431
3	47	16	26326.8006		26326.8608	−0.0602	0.9568	0.0432
3	47	17			26328.0391		0.9568	0.0432
3	47	18			26329.2878		0.9568	0.0432
3	47	19			26330.6072		0.9569	0.0431
3	47	20			26331.9976		0.9570	0.0430
3	47	21			26333.4593		0.9571	0.0429
3	47	22			26334.9929		0.9573	0.0427
3	47	23			26336.5987		0.9575	0.0425
3	47	24			26338.2773		0.9578	0.0422
3	47	25	26340.0162		26340.0293	−0.0131	0.9581	0.0419
3	47	26			26341.8553		0.9585	0.0415
3	47	27	26343.7587		26343.7561	0.0026	0.9590	0.0410
3	47	28			26345.7326		0.9595	0.0405
3	47	29			26347.7856		0.9600	0.0400
3	47	30			26349.9161		0.9606	0.0394
3	47	31			26352.1252		0.9612	0.0388
3	47	32			26354.4141		0.9618	0.0382
3	47	33			26356.7839		0.9624	0.0376
3	47	34			26359.2361		0.9629	0.0371
3	47	35			26361.7719		0.9634	0.0366
3	47	36			26364.3926		0.9638	0.0362
3	47	37			26367.0997		0.9639	0.0361
3	47	38			26369.8943		0.9639	0.0361
3	47	39			26372.7775		0.9635	0.0365
3	47	40			26375.7502		0.9628	0.0372
3	47	41			26378.8129		0.9615	0.0385
3	47	42			26381.9656		0.9596	0.0404
3	47	43			26385.2079		0.9570	0.0430
3	47	44			26388.5387		0.9536	0.0464
3	47	45			26391.9562		0.9492	0.0508
3	47	46			26395.4580		0.9437	0.0563
3	47	47			26399.0408		0.9371	0.0629
3	47	48			26402.7009		0.9291	0.0709
3	47	49			26406.4344		0.9198	0.0802
3	47	50			26410.2370		0.9090	0.0910
3	47	51			26414.1051		0.8966	0.1034
3	47	52			26418.0356		0.8822	0.1178
3	47	53			26422.0271		0.8657	0.1343
3	47	54			26426.0799		0.8464	0.1536
3	47	55			26430.1977		0.8236	0.1764
3	47	56			26434.3885		0.7960	0.2040
3	47	57			26438.6667		0.7617	0.2383
3	47	58			26443.0566		0.7182	0.2818
3	47	59			26447.5971		0.6621	0.3379
3	47	60			26452.3485		0.5903	0.4097
3	48	0			26348.2119		0.7335	0.2665
3	48	1			26348.3087		0.7164	0.2836
3	48	2			26348.5061		0.6817	0.3183
3	48	3			26348.8110		0.6299	0.3701
3	48	4			26349.2327		0.5649	0.4351
3	48	5			26348.2086		0.6108	0.3892
3	48	6			26348.6743		0.6767	0.3233
3	48	7			26349.1961		0.7324	0.2676
3	48	8			26349.7743		0.7761	0.2239
3	48	9			26350.4105		0.8092	0.1908
3	48	10			26351.1067		0.8340	0.1660
3	48	11			26351.8646		0.8526	0.1474

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	48	12			26352.6854		0.8668	0.1332
3	48	13			26353.5703		0.8778	0.1222
3	48	14	26354.5255		26354.5198	0.0057	0.8864	0.1136
3	48	15			26355.5347		0.8932	0.1068
3	48	16	26356.6258		26356.6153	0.0105	0.8988	0.1012
3	48	17			26357.7621		0.9033	0.0967
3	48	18			26358.9752		0.9071	0.0929
3	48	19			26360.2551		0.9104	0.0896
3	48	20			26361.6020		0.9131	0.0869
3	48	21			26363.0161		0.9155	0.0845
3	48	22			26364.4977		0.9177	0.0823
3	48	23			26366.0471		0.9196	0.0804
3	48	24			26367.6645		0.9213	0.0787
3	48	25	26369.3986		26369.3504	0.0482	0.9229	0.0771
3	48	26	26371.1531		26371.1050	0.0481	0.9244	0.0756
3	48	27	26372.9889		26372.9288	0.0601	0.9259	0.0741
3	48	28			26374.8223		0.9273	0.0727
3	48	29			26376.7860		0.9286	0.0714
3	48	30			26378.8205		0.9300	0.0700
3	48	31			26380.9265		0.9314	0.0686
3	48	32			26383.1046		0.9328	0.0672
3	48	33			26385.3557		0.9342	0.0658
3	48	34			26387.6808		0.9357	0.0643
3	48	35			26390.0809		0.9372	0.0628
3	48	36			26392.5569		0.9388	0.0612
3	48	37			26395.1102		0.9405	0.0595
3	48	38			26397.7421		0.9422	0.0578
3	48	39			26400.4537		0.9440	0.0560
3	48	40			26403.2466		0.9459	0.0541
3	48	41			26406.1222		0.9479	0.0521
3	48	42			26409.0819		0.9498	0.0502
3	48	43			26412.1269		0.9518	0.0482
3	48	44			26415.2585		0.9538	0.0462
3	48	45			26418.4773		0.9557	0.0443
3	48	46			26421.7841		0.9574	0.0426
3	48	47			26425.1786		0.9590	0.0410
3	48	48			26428.6603		0.9602	0.0398
3	48	49			26432.2275		0.9611	0.0389
3	48	50			26435.8780		0.9615	0.0385
3	48	51			26439.6084		0.9613	0.0387
3	48	52			26443.4145		0.9605	0.0395
3	48	53			26447.2911		0.9589	0.0411
3	48	54			26451.2326		0.9566	0.0434
3	48	55			26455.2326		0.9534	0.0466
3	48	56			26459.2852		0.9493	0.0507
3	48	57			26463.3845		0.9443	0.0557
3	48	58			26467.5255		0.9384	0.0616
3	48	59			26471.7042		0.9315	0.0685
3	48	60			26475.9181		0.9235	0.0765
3	49	0			26377.2964		0.9703	0.0297
3	49	1			26377.3630		0.9703	0.0297
3	49	2			26377.4964		0.9703	0.0297
3	49	3			26377.6964		0.9704	0.0296
3	49	4			26377.9630		0.9705	0.0295
3	49	5			26378.2963		0.9706	0.0294
3	49	6			26378.6962		0.9708	0.0292
3	49	7			26379.1628		0.9709	0.0291
3	49	8			26379.6960		0.9711	0.0289

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	49	9			26380.2959		0.9714	0.0286
3	49	10			26380.9625		0.9717	0.0283
3	49	11			26381.6958		0.9720	0.0280
3	49	12			26382.4960		0.9724	0.0276
3	49	13			26383.3630		0.9729	0.0271
3	49	14			26384.2971		0.9734	0.0266
3	49	15			26385.2984		0.9739	0.0261
3	49	16			26386.3672		0.9746	0.0254
3	49	17			26387.5040		0.9753	0.0247
3	49	18			26388.7091		0.9761	0.0239
3	49	19			26389.9832		0.9769	0.0231
3	49	20			26391.3273		0.9778	0.0222
3	49	21			26392.7425		0.9787	0.0213
3	49	22			26394.2307		0.9795	0.0205
3	49	23			26395.7942		0.9800	0.0200
3	49	24			26397.4366		0.9800	0.0200
3	49	25	26399.1722		26399.1631	0.0091	0.9789	0.0211
3	49	26			26400.9819		0.9757	0.0243
3	49	27	26402.8961		26402.9057	−0.0096	0.9684	0.0316
3	49	28			26404.9553		0.9531	0.0469
3	49	29			26407.1645		0.9230	0.0770
3	49	30			26409.5853		0.8675	0.1325
3	49	31			26412.2851		0.7783	0.2217
3	49	32			26415.3191		0.6636	0.3364
3	49	33			26412.0418		0.5725	0.4275
3	49	34			26414.6942		0.6614	0.3386
3	49	35			26417.2854		0.7258	0.2742
3	49	36			26419.8617		0.7713	0.2287
3	49	37			26422.4534		0.8038	0.1962
3	49	38			26425.0800		0.8277	0.1723
3	49	39			26427.7540		0.8458	0.1542
3	49	40			26430.4838		0.8601	0.1399
3	49	41			26433.2754		0.8716	0.1284
3	49	42			26436.1335		0.8813	0.1187
3	49	43			26439.0617		0.8896	0.1104
3	49	44	26442.4059		26442.0633	0.3426	0.8969	0.1031
3	49	45			26445.1412		0.9036	0.0964
3	49	46	26448.6819		26448.2979	0.3840	0.9098	0.0902
3	49	47			26451.5357		0.9156	0.0844
3	49	48			26454.8567		0.9212	0.0788
3	49	49			26458.2628		0.9266	0.0734
3	49	50			26461.7551		0.9319	0.0681
3	49	51			26465.3344		0.9370	0.0630
3	49	52			26469.0008		0.9419	0.0581
3	49	53			26472.7530		0.9466	0.0534
3	49	54			26476.5892		0.9510	0.0490
3	49	55			26480.5057		0.9550	0.0450
3	49	56			26484.4979		0.9585	0.0415
3	49	57			26488.5599		0.9613	0.0387
3	49	58			26492.6847		0.9634	0.0366
3	49	59			26496.8646		0.9647	0.0353
3	49	60			26501.0915		0.9651	0.0349
3	50	0			26406.1899		0.9754	0.0246
3	50	1			26406.2561		0.9754	0.0246
3	50	2			26406.3883		0.9754	0.0246
3	50	3			26406.5867		0.9753	0.0247
3	50	4			26406.8511		0.9753	0.0247
3	50	5			26407.1814		0.9752	0.0248

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	50	6			26407.5777		0.9751	0.0249
3	50	7			26408.0397		0.9750	0.0250
3	50	8			26408.5674		0.9749	0.0251
3	50	9			26409.1607		0.9748	0.0252
3	50	10			26409.8194		0.9747	0.0253
3	50	11			26410.5434		0.9746	0.0254
3	50	12			26411.3325		0.9745	0.0255
3	50	13			26412.1868		0.9743	0.0257
3	50	14			26413.1059		0.9742	0.0258
3	50	15			26414.0899		0.9741	0.0259
3	50	16			26415.1386		0.9740	0.0260
3	50	17			26416.2519		0.9739	0.0261
3	50	18			26417.4298		0.9738	0.0262
3	50	19			26418.6722		0.9738	0.0262
3	50	20			26419.9791		0.9738	0.0262
3	50	21			26421.3505		0.9738	0.0262
3	50	22			26422.7865		0.9739	0.0261
3	50	23			26424.2873		0.9740	0.0260
3	50	24			26425.8530		0.9741	0.0259
3	50	25	26427.5222		26427.4838	0.0384	0.9744	0.0256
3	50	26			26429.1802		0.9747	0.0253
3	50	27	26430.9927		26430.9426	0.0501	0.9750	0.0250
3	50	28			26432.7715		0.9755	0.0245
3	50	29			26434.6679		0.9760	0.0240
3	50	30			26436.6326		0.9765	0.0235
3	50	31			26438.6670		0.9771	0.0229
3	50	32			26440.7727		0.9777	0.0223
3	50	33			26442.9519		0.9782	0.0218
3	50	34			26445.2076		0.9786	0.0214
3	50	35			26447.5436		0.9786	0.0214
3	50	36			26449.9652		0.9779	0.0221
3	50	37			26452.4799		0.9759	0.0241
3	50	38			26455.0982		0.9719	0.0281
3	50	39			26457.8353		0.9641	0.0359
3	50	40			26460.7130		0.9501	0.0499
3	50	41			26463.7630		0.9258	0.0742
3	50	42			26467.0278		0.8858	0.1142
3	50	43			26470.5580		0.8254	0.1746
3	50	44	26474.9949	b	26474.3975	0.5974	0.7452	0.2548
3	50	45			26478.5609		0.6547	0.3453
3	50	46	26472.8585	b, d	26472.3311	0.5274	0.5834	0.4166
3	50	47			26475.9598		0.6520	0.3480
3	50	48			26479.5201		0.7069	0.2931
3	50	49			26483.0559		0.7498	0.2502
3	50	50			26486.6001		0.7834	0.2166
3	50	51			26490.1761		0.8103	0.1897
3	50	52			26493.8008		0.8324	0.1676
3	50	53			26497.4860		0.8511	0.1489
3	50	54			26501.2405		0.8673	0.1327
3	50	55			26505.0701		0.8819	0.1181
3	50	56			26508.9786		0.8952	0.1048
3	50	57			26512.9674		0.9074	0.0926
3	50	58			26517.0360		0.9188	0.0812
3	50	59			26521.1814		0.9294	0.0706
3	50	60			26525.3984		0.9390	0.0610
3	51	0			26433.9443		0.9758	0.0242
3	51	1			26434.0130		0.9759	0.0241
3	51	2			26434.1502		0.9762	0.0238

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	51	3			26434.3559		0.9765	0.0235
3	51	4			26434.6296		0.9769	0.0231
3	51	5			26434.9712		0.9773	0.0227
3	51	6			26435.3802		0.9779	0.0221
3	51	7			26435.8561		0.9784	0.0216
3	51	8			26436.3985		0.9789	0.0211
3	51	9			26437.0068		0.9794	0.0206
3	51	10			26437.6805		0.9798	0.0202
3	51	11			26438.4190		0.9802	0.0198
3	51	12			26439.2219		0.9805	0.0195
3	51	13			26440.0886		0.9808	0.0192
3	51	14			26441.0186		0.9809	0.0191
3	51	15			26442.0115		0.9809	0.0191
3	51	16			26443.0669		0.9808	0.0192
3	51	17			26444.1843		0.9807	0.0193
3	51	18			26445.3636		0.9804	0.0196
3	51	19			26446.6043		0.9801	0.0199
3	51	20			26447.9062		0.9797	0.0203
3	51	21			26449.2692		0.9792	0.0208
3	51	22			26450.6932		0.9788	0.0212
3	51	23			26452.1779		0.9782	0.0218
3	51	24			26453.7233		0.9777	0.0223
3	51	25	26455.3172		26455.3294	−0.0122	0.9771	0.0229
3	51	26			26456.9964		0.9766	0.0234
3	51	27	26458.7290		26458.7241	0.0049	0.9761	0.0239
3	51	28			26460.5128		0.9756	0.0244
3	51	29			26462.3627		0.9752	0.0248
3	51	30			26464.2741		0.9748	0.0252
3	51	31			26466.2471		0.9745	0.0255
3	51	32			26468.2824		0.9742	0.0258
3	51	33			26470.3802		0.9741	0.0259
3	51	34			26472.5414		0.9740	0.0260
3	51	35			26474.7666		0.9740	0.0260
3	51	36			26477.0568		0.9742	0.0258
3	51	37			26479.4131		0.9744	0.0256
3	51	38			26481.8367		0.9747	0.0253
3	51	39			26484.3295		0.9751	0.0249
3	51	40			26486.8934		0.9755	0.0245
3	51	41			26489.5310		0.9759	0.0241
3	51	42			26492.2456		0.9762	0.0238
3	51	43			26495.0412		0.9762	0.0238
3	51	44			26497.9230		0.9758	0.0242
3	51	45			26500.8980		0.9746	0.0254
3	51	46			26503.9749		0.9721	0.0279
3	51	47			26507.1656		0.9673	0.0327
3	51	48			26510.4854		0.9589	0.0411
3	51	49			26513.9545		0.9450	0.0550
3	51	50			26517.5982		0.9229	0.0771
3	51	51			26521.4457		0.8895	0.1105
3	51	52			26525.5263		0.8425	0.1575
3	51	53			26529.8599		0.7823	0.2177
3	51	54			26534.4466		0.7133	0.2867
3	51	55			26539.2605		0.6431	0.3569
3	51	56			26530.6792		0.6090	0.3910
3	51	57			26535.0101		0.6622	0.3378
3	51	58			26539.3124		0.7093	0.2907
3	51	59			26543.6178		0.7505	0.2495
3	51	60			26547.9500		0.7866	0.2134

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	52	0			26463.7150		0.8054	0.1946
3	52	1			26463.7825		0.8046	0.1954
3	52	2			26463.9175		0.8028	0.1972
3	52	3			26464.1202		0.8002	0.1998
3	52	4			26464.3909		0.7965	0.2035
3	52	5			26464.7301		0.7917	0.2083
3	52	6			26465.1383		0.7856	0.2144
3	52	7			26465.6165		0.7780	0.2220
3	52	8			26466.1656		0.7687	0.2313
3	52	9			26466.7873		0.7573	0.2427
3	52	10			26467.4835		0.7432	0.2568
3	52	11			26468.2572		0.7260	0.2740
3	52	12			26469.1121		0.7048	0.2952
3	52	13			26470.0537		0.6785	0.3215
3	52	14	26471.0550	e	26471.0892	−0.0342	0.6460	0.3540
3	52	15			26472.2290		0.6060	0.3940
3	52	16			26466.6095		0.5618	0.4382
3	52	17			26468.3116		0.6209	0.3791
3	52	18			26470.0437		0.6870	0.3130
3	52	19			26471.7847		0.7552	0.2448
3	52	20			26473.5179		0.8192	0.1808
3	52	21			26475.2352		0.8729	0.1271
3	52	22			26476.9381		0.9136	0.0864
3	52	23			26478.6351		0.9419	0.0581
3	52	24			26480.3378		0.9603	0.0397
3	52	25			26482.0572		0.9714	0.0286
3	52	26			26483.8030		0.9778	0.0222
3	52	27			26485.5826		0.9810	0.0190
3	52	28			26487.4018		0.9823	0.0177
3	52	29			26489.2650		0.9824	0.0176
3	52	30			26491.1754		0.9817	0.0183
3	52	31			26493.1356		0.9807	0.0193
3	52	32			26495.1476		0.9795	0.0205
3	52	33			26497.2129		0.9782	0.0218
3	52	34			26499.3329		0.9769	0.0231
3	52	35			26501.5087		0.9756	0.0244
3	52	36			26503.7413		0.9745	0.0255
3	52	37			26506.0316		0.9735	0.0265
3	52	38			26508.3807		0.9727	0.0273
3	52	39			26510.7894		0.9720	0.0280
3	52	40			26513.2587		0.9715	0.0285
3	52	41			26515.7899		0.9711	0.0289
3	52	42			26518.3841		0.9709	0.0291
3	52	43			26521.0427		0.9708	0.0292
3	52	44			26523.7675		0.9709	0.0291
3	52	45			26526.5603		0.9712	0.0288
3	52	46			26529.4233		0.9715	0.0285
3	52	47			26532.3594		0.9720	0.0280
3	52	48			26535.3718		0.9724	0.0276
3	52	49			26538.4643		0.9728	0.0272
3	52	50			26541.6417		0.9729	0.0271
3	52	51			26544.9097		0.9727	0.0273
3	52	52			26548.2751		0.9716	0.0284
3	52	53			26551.7462		0.9693	0.0307
3	52	54			26555.3328		0.9651	0.0349
3	52	55			26559.0463		0.9579	0.0421
3	52	56			26562.8995		0.9466	0.0534
3	52	57			26566.9056		0.9294	0.0706

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	52	58			26571.0772		0.9048	0.0952
3	52	59			26575.4235		0.8715	0.1285
3	52	60			26579.9476		0.8291	0.1709
3	53	0			26489.1696		0.9495	0.0505
3	53	1			26489.2332		0.9495	0.0505
3	53	2			26489.3604		0.9493	0.0507
3	53	3			26489.5512		0.9492	0.0508
3	53	4			26489.8054		0.9490	0.0510
3	53	5			26490.1230		0.9487	0.0513
3	53	6			26490.5037		0.9484	0.0516
3	53	7			26490.9476		0.9480	0.0520
3	53	8			26491.4542		0.9475	0.0525
3	53	9			26492.0236		0.9470	0.0530
3	53	10			26492.6554		0.9465	0.0535
3	53	11			26493.3494		0.9458	0.0542
3	53	12			26494.1054		0.9451	0.0549
3	53	13			26494.9230		0.9443	0.0557
3	53	14			26495.8021		0.9434	0.0566
3	53	15			26496.7423		0.9425	0.0575
3	53	16	26497.5408		26497.7434	−0.2026	0.9414	0.0586
3	53	17			26498.8050		0.9402	0.0598
3	53	18			26499.9270		0.9389	0.0611
3	53	19			26501.1090		0.9375	0.0625
3	53	20			26502.3508		0.9359	0.0641
3	53	21			26503.6523		0.9341	0.0659
3	53	22			26505.0132		0.9320	0.0680
3	53	23			26506.4334		0.9296	0.0704
3	53	24			26507.9131		0.9268	0.0732
3	53	25	26509.3150		26509.4521	−0.1371	0.9235	0.0765
3	53	26			26511.0509		0.9194	0.0806
3	53	27	26512.6008		26512.7101	−0.1093	0.9142	0.0858
3	53	28			26514.4308		0.9074	0.0926
3	53	29			26516.2151		0.8978	0.1022
3	53	30			26518.0673		0.8835	0.1165
3	53	31			26519.9964		0.8599	0.1401
3	53	32			26522.0246		0.8150	0.1850
3	53	33			26524.2185		0.7122	0.2878
3	53	34			26524.0711		0.6422	0.3578
3	53	35			26527.0493		0.9043	0.0957
3	53	36			26529.5378		0.9746	0.0254
3	53	37			26531.8914		0.9832	0.0168
3	53	38			26534.2354		0.9811	0.0189
3	53	39			26536.6079		0.9775	0.0225
3	53	40			26539.0233		0.9742	0.0258
3	53	41			26541.4883		0.9714	0.0286
3	53	42			26544.0066		0.9692	0.0308
3	53	43			26546.5806		0.9675	0.0325
3	53	44			26549.2119		0.9662	0.0338
3	53	45			26551.9023		0.9653	0.0347
3	53	46			26554.6531		0.9647	0.0353
3	53	47			26557.4658		0.9643	0.0357
3	53	48			26560.3422		0.9642	0.0358
3	53	49			26563.2842		0.9644	0.0356
3	53	50			26566.2937		0.9648	0.0352
3	53	51			26569.3733		0.9653	0.0347
3	53	52			26572.5258		0.9660	0.0340
3	53	53			26575.7544		0.9669	0.0331
3	53	54			26579.0629		0.9677	0.0323

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	53	55			26582.4554		0.9686	0.0314
3	53	56			26585.9369		0.9692	0.0308
3	53	57			26589.5126		0.9693	0.0307
3	53	58			26593.1883		0.9687	0.0313
3	53	59			26596.9698		0.9670	0.0330
3	53	60			26600.8628		0.9635	0.0365
3	54	0			26514.2517		0.9695	0.0305
3	54	1			26514.3166		0.9695	0.0305
3	54	2			26514.4465		0.9695	0.0305
3	54	3			26514.6411		0.9696	0.0304
3	54	4			26514.9004		0.9696	0.0304
3	54	5			26515.2242		0.9697	0.0303
3	54	6			26515.6122		0.9698	0.0302
3	54	7			26516.0642		0.9698	0.0302
3	54	8			26516.5799		0.9699	0.0301
3	54	9			26517.1588		0.9699	0.0301
3	54	10			26517.8007		0.9699	0.0301
3	54	11			26518.5050		0.9699	0.0301
3	54	12			26519.2714		0.9699	0.0301
3	54	13			26520.0994		0.9698	0.0302
3	54	14	26520.4384	b	26520.9884	−0.5500	0.9697	0.0303
3	54	15			26521.9381		0.9696	0.0304
3	54	16	26522.4176	b	26522.9478	−0.5302	0.9694	0.0306
3	54	17			26524.0171		0.9691	0.0309
3	54	18			26525.1454		0.9688	0.0312
3	54	19			26526.3322		0.9685	0.0315
3	54	20			26527.5771		0.9681	0.0319
3	54	21			26528.8795		0.9677	0.0323
3	54	22			26530.2390		0.9672	0.0328
3	54	23			26531.6550		0.9667	0.0333
3	54	24			26533.1272		0.9661	0.0339
3	54	25			26534.6551		0.9655	0.0345
3	54	26			26536.2383		0.9649	0.0351
3	54	27			26537.8766		0.9643	0.0357
3	54	28			26539.5694		0.9637	0.0363
3	54	29			26541.3166		0.9631	0.0369
3	54	30			26543.1179		0.9625	0.0375
3	54	31			26544.9731		0.9620	0.0380
3	54	32			26546.8819		0.9614	0.0386
3	54	33			26548.8443		0.9610	0.0390
3	54	34			26550.8601		0.9606	0.0394
3	54	35			26552.9292		0.9603	0.0397
3	54	36			26555.0517		0.9601	0.0399
3	54	37			26557.2277		0.9601	0.0399
3	54	38			26559.4571		0.9603	0.0397
3	54	39			26561.7404		0.9609	0.0391
3	54	40			26564.0779		0.9621	0.0379
3	54	41			26566.4704		0.9642	0.0358
3	54	42			26568.9201		0.9684	0.0316
3	54	43			26571.4358		0.9779	0.0221
3	54	44			26574.2069		0.8202	0.1798
3	54	45			26576.5159		0.8997	0.1003
3	54	46	26578.8164	b	26579.2018	−0.3854	0.9294	0.0706
3	54	47			26581.9296		0.9379	0.0621
3	54	48			26584.7113		0.9420	0.0580
3	54	49			26587.5501		0.9446	0.0554
3	54	50			26590.4479		0.9466	0.0534
3	54	51			26593.4064		0.9482	0.0518

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	54	52			26596.4274		0.9498	0.0502
3	54	53			26599.5126		0.9513	0.0487
3	54	54			26602.6642		0.9528	0.0472
3	54	55			26605.8848		0.9545	0.0455
3	54	56			26609.1770		0.9562	0.0438
3	54	57			26612.5439		0.9580	0.0420
3	54	58			26615.9891		0.9599	0.0401
3	54	59			26619.5162		0.9618	0.0382
3	54	60			26623.1294		0.9636	0.0364
3	55	0			26537.4596		0.9171	0.0829
3	55	1			26537.5305		0.9176	0.0824
3	55	2			26537.6722		0.9185	0.0815
3	55	3			26537.8844		0.9198	0.0802
3	55	4			26538.1668		0.9216	0.0784
3	55	5			26538.5190		0.9237	0.0763
3	55	6			26538.9405		0.9262	0.0738
3	55	7			26539.4305		0.9290	0.0710
3	55	8			26539.9883		0.9320	0.0680
3	55	9			26540.6132		0.9353	0.0647
3	55	10			26541.3041		0.9387	0.0613
3	55	11			26542.0602		0.9421	0.0579
3	55	12			26542.8804		0.9457	0.0543
3	55	13			26543.7636		0.9492	0.0508
3	55	14			26544.7087		0.9526	0.0474
3	55	15			26545.7147		0.9559	0.0441
3	55	16			26546.7804		0.9590	0.0410
3	55	17			26547.9047		0.9620	0.0380
3	55	18			26549.0866		0.9646	0.0354
3	55	19			26550.3249		0.9671	0.0329
3	55	20			26551.6189		0.9692	0.0308
3	55	21			26552.9674		0.9710	0.0290
3	55	22			26554.3698		0.9726	0.0274
3	55	23			26555.8252		0.9738	0.0262
3	55	24			26557.3328		0.9748	0.0252
3	55	25			26558.8921		0.9755	0.0245
3	55	26			26560.5026		0.9760	0.0240
3	55	27			26562.1637		0.9763	0.0237
3	55	28			26563.8750		0.9764	0.0236
3	55	29			26565.6363		0.9763	0.0237
3	55	30			26567.4471		0.9762	0.0238
3	55	31			26569.3074		0.9759	0.0241
3	55	32			26571.2169		0.9755	0.0245
3	55	33			26573.1755		0.9750	0.0250
3	55	34			26575.1833		0.9746	0.0254
3	55	35			26577.2402		0.9741	0.0259
3	55	36			26579.3462		0.9737	0.0263
3	55	37			26581.5016		0.9734	0.0266
3	55	38			26583.7065		0.9731	0.0269
3	55	39			26585.9612		0.9729	0.0271
3	55	40			26588.2659		0.9729	0.0271
3	55	41			26590.6213		0.9730	0.0270
3	55	42			26593.0280		0.9734	0.0266
3	55	43			26595.4867		0.9740	0.0260
3	55	44	26597.0915	b	26597.9987	−0.9072	0.9749	0.0251
3	55	45			26600.5657		0.9763	0.0237
3	55	46	26602.2623	b	26603.1905	−0.9282	0.9780	0.0220
3	55	47			26605.8778		0.9803	0.0197
3	55	48			26608.6367		0.9828	0.0172

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	55	49			26611.4881		0.9836	0.0164
3	55	50			26614.4913		0.9727	0.0273
3	55	51			26617.8712		0.8837	0.1163
3	55	52			26622.3397		0.5621	0.4379
3	55	53			26622.0847		0.7823	0.2177
3	55	54			26625.3451		0.8598	0.1402
3	55	55			26628.5464		0.8927	0.1073
3	55	56			26631.7637		0.9104	0.0896
3	55	57			26635.0228		0.9215	0.0785
3	55	58			26638.3358		0.9294	0.0706
3	55	59			26641.7102		0.9355	0.0645
3	55	60			26645.1514		0.9406	0.0594
3	56	0			26568.7060		0.6829	0.3171
3	56	1			26568.7772		0.6820	0.3180
3	56	2			26568.9198		0.6800	0.3200
3	56	3			26569.1338		0.6772	0.3228
3	56	4			26569.4198		0.6733	0.3267
3	56	5			26569.7781		0.6683	0.3317
3	56	6			26570.2094		0.6623	0.3377
3	56	7			26570.7144		0.6552	0.3448
3	56	8			26571.2943		0.6469	0.3531
3	56	9			26571.9502		0.6373	0.3627
3	56	10			26572.6837		0.6264	0.3736
3	56	11			26573.4966		0.6142	0.3858
3	56	12			26561.5241		0.6014	0.3986
3	56	13			26562.6457		0.6176	0.3824
3	56	14	26564.8501	b	26563.8463	1.0038	0.6359	0.3641
3	56	15			26565.1231		0.6562	0.3438
3	56	16			26566.4723		0.6786	0.3214
3	56	17			26567.8900		0.7028	0.2972
3	56	18			26569.3712		0.7286	0.2714
3	56	19			26570.9106		0.7554	0.2446
3	56	20			26572.5027		0.7829	0.2171
3	56	21			26574.1418		0.8101	0.1899
3	56	22			26575.8227		0.8365	0.1635
3	56	23			26577.5405		0.8614	0.1386
3	56	24			26579.2913		0.8841	0.1159
3	56	25			26581.0723		0.9043	0.0957
3	56	26			26582.8817		0.9217	0.0783
3	56	27			26584.7185		0.9363	0.0637
3	56	28			26586.5827		0.9482	0.0518
3	56	29			26588.4752		0.9577	0.0423
3	56	30			26590.3968		0.9650	0.0350
3	56	31			26592.3491		0.9705	0.0295
3	56	32			26594.3334		0.9745	0.0255
3	56	33			26596.3515		0.9772	0.0228
3	56	34			26598.4047		0.9791	0.0209
3	56	35			26600.4944		0.9802	0.0198
3	56	36			26602.6221		0.9807	0.0193
3	56	37			26604.7888		0.9808	0.0192
3	56	38			26606.9958		0.9807	0.0193
3	56	39			26609.2441		0.9803	0.0197
3	56	40			26611.5346		0.9799	0.0201
3	56	41			26613.8683		0.9794	0.0206
3	56	42			26616.2461		0.9790	0.0210
3	56	43			26618.6688		0.9786	0.0214
3	56	44			26621.1375		0.9783	0.0217
3	56	45			26623.6530		0.9781	0.0219

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
3	56	46			26626.2164		0.9781	0.0219
3	56	47			26628.8291		0.9783	0.0217
3	56	48			26631.4925		0.9787	0.0213
3	56	49			26634.2087		0.9794	0.0206
3	56	50			26636.9801		0.9804	0.0196
3	56	51			26639.8106		0.9815	0.0185
3	56	52			26642.7059		0.9828	0.0172
3	56	53			26645.6757		0.9837	0.0163
3	56	54			26648.7377		0.9831	0.0169
3	56	55			26651.9289		0.9769	0.0231
3	56	56			26655.3374		0.9510	0.0490
3	56	57			26659.1923		0.8586	0.1414
3	56	58			26663.9379		0.6449	0.3551
3	56	59			26662.1869		0.7018	0.2982
3	56	60			26665.9530		0.8059	0.1941
4	0	0			25837.8293		0.3072	0.6928
4	0	1			25837.9348		0.3066	0.6934
4	0	2			25838.1458		0.3053	0.6947
4	0	3			25838.4625		0.3033	0.6967
4	0	4			25838.8849		0.3008	0.6992
4	0	5			25839.4132		0.2977	0.7023
4	0	6			25840.0476		0.2940	0.7060
4	0	7			25840.7883		0.2898	0.7102
4	0	8			25841.6357		0.2852	0.7148
4	0	9			25842.5900		0.2801	0.7199
4	0	10			25843.6516		0.2747	0.7253
4	0	11			25844.8210		0.2691	0.7309
4	0	12			25846.0986		0.2632	0.7368
4	0	13			25847.4849		0.2573	0.7427
4	0	14	25849.8178		25848.9804	0.8374	0.2513	0.7487
4	0	15			25850.5857		0.2454	0.7546
4	0	16	25853.1458		25852.3015	0.8443	0.2398	0.7602
4	0	17			25854.1284		0.2344	0.7656
4	0	18			25856.0671		0.2295	0.7705
4	0	19			25858.1183		0.2252	0.7748
4	0	20			25860.2827		0.2216	0.7784
4	0	21			25862.5612		0.2189	0.7811
4	0	22			25864.9543		0.2172	0.7828
4	0	23			25867.4627		0.2167	0.7833
4	0	24			25870.0872		0.2175	0.7825
4	0	25	25873.6833	b	25872.8281	0.8552	0.2199	0.7801
4	0	26			25875.6859		0.2241	0.7759
4	0	27	25879.4839	b	25878.6606	0.8233	0.2302	0.7698
4	0	28			25881.7522		0.2387	0.7613
4	0	29			25884.9600		0.2497	0.7503
4	0	30			25888.2831		0.2637	0.7363
4	0	31			25891.7196		0.2811	0.7189
4	0	32			25895.2669		0.3026	0.6974
4	0	33			25898.9209		0.3288	0.6712
4	0	34			25902.6760		0.3606	0.6394
4	0	35			25906.5245		0.3989	0.6011
4	0	36			25910.4555		0.4448	0.5552
4	0	37			25914.4552		0.4988	0.5012
4	0	38			25928.3824		0.4966	0.5034
4	0	39			25932.1610		0.4310	0.5690
4	0	40			25936.1389		0.3629	0.6371
4	0	41			25940.3342		0.2974	0.7026
4	0	42			25944.7582		0.2398	0.7602

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
4	0	43			25949.4128		0.1938	0.8062
4	0	44			25954.2922		0.1606	0.8394
4	0	45			25959.3849		0.1391	0.8609
4	0	46			25964.6781		0.1273	0.8727
4	0	47			25970.1591		0.1227	0.8773
4	0	48			25975.8166		0.1238	0.8762
4	0	49			25981.6410		0.1294	0.8706
4	0	50			25987.6235		0.1388	0.8612
4	0	51			25993.7559		0.1526	0.8474
4	0	52			26000.0283		0.1724	0.8276
4	0	53			26006.4266		0.2028	0.7972
4	0	54			26012.9222		0.2565	0.7435
4	0	55			26019.4378		0.3720	0.6280
4	0	56			26028.8654		0.4196	0.5804
4	0	57			26034.8643		0.1447	0.8553
4	0	58			26041.6346		0.0763	0.9237
4	0	59			26048.7615		0.0720	0.9280
4	0	60			26056.0947		0.0769	0.9231
4	1	0			25980.9617		0.1157	0.8843
4	1	1			25981.0859		0.1157	0.8843
4	1	2			25981.3343		0.1157	0.8843
4	1	3			25981.7068		0.1158	0.8842
4	1	4			25982.2036		0.1158	0.8842
4	1	5			25982.8245		0.1159	0.8841
4	1	6			25983.5697		0.1159	0.8841
4	1	7			25984.4391		0.1159	0.8841
4	1	8			25985.4327		0.1158	0.8842
4	1	9			25986.5505		0.1157	0.8843
4	1	10			25987.7924		0.1155	0.8845
4	1	11			25989.1582		0.1152	0.8848
4	1	12			25990.6479		0.1147	0.8853
4	1	13			25992.2611		0.1140	0.8860
4	1	14	25993.3754		25993.9976	−0.6222	0.1131	0.8869
4	1	15			25995.8569		0.1120	0.8880
4	1	16	25997.2120		25997.8384	−0.6264	0.1106	0.8894
4	1	17			25999.9410		0.1088	0.8912
4	1	18			26002.1633		0.1067	0.8933
4	1	19			26004.5033		0.1044	0.8956
4	1	20			26006.9576		0.1022	0.8978
4	1	21			26009.5205		0.1010	0.8990
4	1	22			26012.1818		0.1032	0.8968
4	1	23			26014.9219		0.1153	0.8847
4	1	24			26017.7012		0.1542	0.8458
4	1	25	26019.8385		26020.4453	−0.6068	0.2523	0.7477
4	1	26			26023.0620		0.4173	0.5827
4	1	27	26028.5263	f	26028.8784	−0.3521	0.5048	0.4952
4	1	28			26032.1347		0.3938	0.6062
4	1	29			26035.5943		0.3257	0.6743
4	1	30			26039.2161		0.2827	0.7173
4	1	31			26042.9788		0.2537	0.7463
4	1	32			26046.8702		0.2329	0.7671
4	1	33			26050.8825		0.2170	0.7830
4	1	34			26055.0095		0.2043	0.7957
4	1	35			26059.2456		0.1938	0.8062
4	1	36			26063.5852		0.1850	0.8150
4	1	37			26068.0216		0.1779	0.8221
4	1	38			26072.5467		0.1726	0.8274
4	1	39			26077.1502		0.1697	0.8303

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
4	1	40			26081.8185		0.1705	0.8295
4	1	41			26086.5334		0.1769	0.8231
4	1	42			26091.2709		0.1922	0.8078
4	1	43			26096.0001		0.2201	0.7799
4	1	44	26100.3811		26100.6858	−0.3047	0.2646	0.7354
4	1	45			26105.2942		0.3265	0.6735
4	1	46	26109.5441		26109.8047	−0.2606	0.4014	0.5986
4	1	47			26114.2190		0.4802	0.5198
4	1	48			26129.1795		0.5404	0.4596
4	1	49			26134.4417		0.4720	0.5280
4	1	50			26139.8686		0.4158	0.5842
4	1	51			26145.4250		0.3709	0.6291
4	1	52			26151.0806		0.3364	0.6636
4	1	53			26156.8097		0.3113	0.6887
4	1	54			26162.5896		0.2954	0.7046
4	1	55			26168.4000		0.2891	0.7109
4	1	56			26174.2234		0.2929	0.7071
4	1	57			26180.0451		0.3076	0.6924
4	1	58			26185.8551		0.3332	0.6668
4	1	59			26191.6487		0.3692	0.6308
4	1	60			26197.4270		0.4142	0.5858
4	2	0			26110.3659		0.3589	0.6411
4	2	1			26110.4639		0.3584	0.6416
4	2	2			26110.6601		0.3576	0.6424
4	2	3			26110.9545		0.3563	0.6437
4	2	4			26111.3475		0.3546	0.6454
4	2	5			26111.8393		0.3525	0.6475
4	2	6			26112.4304		0.3500	0.6500
4	2	7			26113.1212		0.3473	0.6527
4	2	8			26113.9124		0.3444	0.6556
4	2	9			26114.8046		0.3412	0.6588
4	2	10			26115.7985		0.3379	0.6621
4	2	11			26116.8951		0.3346	0.6654
4	2	12			26118.0954		0.3314	0.6686
4	2	13			26119.4002		0.3284	0.6716
4	2	14	26120.5896		26120.8109	−0.2213	0.3256	0.6744
4	2	15			26122.3285		0.3233	0.6767
4	2	16	26123.7375		26123.9542	−0.2167	0.3216	0.6784
4	2	17			26125.6894		0.3206	0.6794
4	2	18			26127.5353		0.3205	0.6795
4	2	19			26129.4930		0.3216	0.6784
4	2	20			26131.5637		0.3239	0.6761
4	2	21			26133.7483		0.3278	0.6722
4	2	22			26136.0475		0.3336	0.6664
4	2	23			26138.4617		0.3414	0.6586
4	2	24			26140.9908		0.3515	0.6485
4	2	25	26143.9641	b	26143.6341	0.3300	0.3644	0.6356
4	2	26			26146.3902		0.3804	0.6196
4	2	27	26149.1387	b	26149.2568	−0.1181	0.3999	0.6001
4	2	28			26152.2302		0.4236	0.5764
4	2	29			26155.3050		0.4519	0.5481
4	2	30			26158.4741		0.4854	0.5146
4	2	31			26161.7275		0.5247	0.4753
4	2	32			26176.8510		0.5346	0.4654
4	2	33			26179.8028		0.4872	0.5128
4	2	34			26182.9218		0.4361	0.5639
4	2	35			26186.2273		0.3836	0.6164
4	2	36			26189.7370		0.3330	0.6670

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
4	2	37			26193.4639		0.2881	0.7119
4	2	38			26197.4142		0.2519	0.7481
4	2	39			26201.5863		0.2259	0.7741
4	2	40			26205.9728		0.2100	0.7900
4	2	41			26210.5629		0.2031	0.7969
4	2	42			26215.3438		0.2041	0.7959
4	2	43			26220.3025		0.2120	0.7880
4	2	44	26225.7071		26225.4253	0.2818	0.2267	0.7733
4	2	45			26230.6969		0.2494	0.7506
4	2	46	26236.4179	b	26236.0968	0.3211	0.2837	0.7163
4	2	47			26241.5915		0.3377	0.6623
4	2	48			26247.1147		0.4285	0.5715
4	2	49			26257.9195		0.5110	0.4890
4	2	50			26262.5967		0.3132	0.6868
4	2	51			26267.9885		0.1778	0.8222
4	2	52			26273.9319		0.1308	0.8692
4	2	53			26280.2204		0.1221	0.8779
4	2	54			26286.7448		0.1248	0.8752
4	2	55			26293.4544		0.1298	0.8702
4	2	56			26300.3242		0.1343	0.8657
4	2	57			26307.3395		0.1369	0.8631
4	2	58			26314.4899		0.1363	0.8637
4	2	59			26321.7635		0.1287	0.8713
4	2	60			26329.0865		0.1177	0.8823
4	3	0			26237.5521		0.3668	0.6332
4	3	1			26237.6591		0.3663	0.6337
4	3	2			26237.8732		0.3654	0.6346
4	3	3			26238.1941		0.3640	0.6360
4	3	4			26238.6217		0.3621	0.6379
4	3	5			26239.1556		0.3600	0.6400
4	3	6			26239.7954		0.3575	0.6425
4	3	7			26240.5405		0.3548	0.6452
4	3	8			26241.3904		0.3519	0.6481
4	3	9			26242.3441		0.3490	0.6510
4	3	10			26243.4007		0.3462	0.6538
4	3	11			26244.5590		0.3436	0.6564
4	3	12			26245.8175		0.3414	0.6586
4	3	13			26247.1746		0.3396	0.6604
4	3	14	26248.7376		26248.6284	0.1092	0.3384	0.6616
4	3	15			26250.1767		0.3381	0.6619
4	3	16	26251.9196		26251.8170	0.1026	0.3388	0.6612
4	3	17			26253.5466		0.3407	0.6593
4	3	18			26255.3624		0.3440	0.6560
4	3	19			26257.2612		0.3490	0.6510
4	3	20			26259.2395		0.3558	0.6442
4	3	21			26261.2937		0.3646	0.6354
4	3	22			26263.4203		0.3755	0.6245
4	3	23			26265.6157		0.3887	0.6113
4	3	24			26267.8766		0.4041	0.5959
4	3	25	26270.2610		26270.2002	0.0608	0.4216	0.5784
4	3	26			26272.5841		0.4411	0.5589
4	3	27	26275.0772		26275.0267	0.0505	0.4624	0.5376
4	3	28			26277.5269		0.4851	0.5149
4	3	29			26280.0845		0.5089	0.4911
4	3	30			26282.7002		0.5335	0.4665
4	3	31			26285.3752		0.5586	0.4414
4	3	32			26303.7468		0.5642	0.4358
4	3	33			26306.8735		0.5381	0.4619

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
4	3	34			26310.0913		0.5139	0.4861
4	3	35			26313.3957		0.4918	0.5082
4	3	36			26316.7828		0.4723	0.5277
4	3	37			26320.2490		0.4556	0.5444
4	3	38			26323.7919		0.4421	0.5579
4	3	39			26327.4097		0.4318	0.5682
4	3	40			26331.1020		0.4252	0.5748
4	3	41			26334.8693		0.4224	0.5776
4	3	42			26338.7134		0.4237	0.5763
4	3	43			26342.6367		0.4293	0.5707
4	3	44	26347.1345	b	26346.6421	0.4924	0.4395	0.5605
4	3	45			26350.7325		0.4547	0.5453
4	3	46	26355.4204	b	26354.9101	0.5103	0.4751	0.5249
4	3	47			26359.1755		0.5011	0.4989
4	3	48			26363.5269		0.5328	0.4672
4	3	49			26367.9591		0.5702	0.4298
4	3	50			26387.8813		0.5443	0.4557
4	3	51			26392.2854		0.5039	0.4961
4	3	52			26396.8461		0.4650	0.5350
4	3	53			26401.5832		0.4298	0.5702
4	3	54			26406.5143		0.4017	0.5983
4	3	55			26411.6514		0.3837	0.6163
4	3	56			26416.9967		0.3791	0.6209
4	3	57			26422.5398		0.3905	0.6095
4	3	58			26428.2538		0.4203	0.5797
4	3	59			26434.0926		0.4709	0.5291
4	3	60			26439.9853		0.5441	0.4559
4	4	0			26346.9129		0.3721	0.6279
4	4	1			26347.0070		0.3892	0.6108
4	4	2			26347.1916		0.4239	0.5761
4	4	3			26347.4595		0.4756	0.5244
4	4	4			26347.8015		0.5406	0.4594
4	4	5			26349.7802		0.4946	0.5054
4	4	6			26350.4597		0.4285	0.5715
4	4	7			26351.2738		0.3727	0.6273
4	4	8			26352.2221		0.3288	0.6712
4	4	9			26353.3026		0.2955	0.7045
4	4	10			26354.5134		0.2704	0.7296
4	4	11			26355.8526		0.2514	0.7486
4	4	12			26357.3185		0.2367	0.7633
4	4	13			26358.9100		0.2252	0.7748
4	4	14	26360.4078		26360.6258	−0.2180	0.2160	0.7840
4	4	15			26362.4651		0.2084	0.7916
4	4	16	26364.2727		26364.4267	−0.1540	0.2020	0.7980
4	4	17			26366.5099		0.1964	0.8036
4	4	18			26368.7134		0.1914	0.8086
4	4	19			26371.0362		0.1869	0.8131
4	4	20			26373.4767		0.1827	0.8173
4	4	21			26376.0331		0.1788	0.8212
4	4	22			26378.7031		0.1752	0.8248
4	4	23			26381.4836		0.1719	0.8281
4	4	24			26384.3704		0.1693	0.8307
4	4	25	26387.4170		26387.3575	0.0595	0.1677	0.8323
4	4	26			26390.4359		0.1682	0.8318
4	4	27			26393.5918		0.1728	0.8272
4	4	28			26396.8034		0.1853	0.8147
4	4	29			26400.0357		0.2124	0.7876
4	4	30			26403.2350		0.2649	0.7351

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
4	4	31			26406.3321		0.3509	0.6491
4	4	32			26409.2696		0.4622	0.5378
4	4	33			26418.6902		0.5500	0.4500
4	4	34			26422.3493		0.4579	0.5421
4	4	35			26426.2332		0.3904	0.6096
4	4	36			26430.2896		0.3424	0.6576
4	4	37			26434.4796		0.3085	0.6915
4	4	38			26438.7723		0.2852	0.7148
4	4	39			26443.1385		0.2713	0.7287
4	4	40			26447.5462		0.2674	0.7326
4	4	41			26451.9557		0.2765	0.7235
4	4	42			26456.3168		0.3032	0.6968
4	4	43			26460.5717		0.3519	0.6481
4	4	44	26465.2812	b	26464.6681	0.6131	0.4219	0.5781
4	4	45			26468.5823		0.5036	0.4964
4	4	46			26483.0196		0.5681	0.4319
4	4	47			26487.7136		0.4954	0.5046
4	4	48			26492.5727		0.4404	0.5596
4	4	49			26497.5289		0.4034	0.5966
4	4	50			26502.5196		0.3844	0.6156
4	4	51			26507.4862		0.3843	0.6157
4	4	52			26512.3756		0.4038	0.5962
4	4	53			26517.1470		0.4416	0.5584
4	4	54			26521.7804		0.4932	0.5068
4	4	55			26526.2819		0.5513	0.4487
4	4	56			26544.2535		0.5795	0.4205
4	4	57			26549.3672		0.5284	0.4716
4	4	58			26554.5441		0.4932	0.5068
4	4	59			26559.7356		0.4754	0.5246
4	4	60			26564.9067		0.4750	0.5250
4	5	0			26451.8025		0.3046	0.6954
4	5	1			26451.9142		0.3054	0.6946
4	5	2			26452.1375		0.3071	0.6929
4	5	3			26452.4725		0.3098	0.6902
4	5	4			26452.9192		0.3135	0.6865
4	5	5			26453.4774		0.3183	0.6817
4	5	6			26454.1469		0.3245	0.6755
4	5	7			26454.9274		0.3323	0.6677
4	5	8			26455.8183		0.3419	0.6581
4	5	9			26456.8185		0.3537	0.6463
4	5	10			26457.9266		0.3684	0.6316
4	5	11			26459.1402		0.3864	0.6136
4	5	12			26460.4561		0.4086	0.5914
4	5	13			26461.8694		0.4360	0.5640
4	5	14			26463.3731		0.4699	0.5301
4	5	15			26464.9575		0.5115	0.4885
4	5	16	26473.4167		26473.4865	−0.0698	0.5575	0.4425
4	5	17			26474.8794		0.5004	0.4996
4	5	18			26476.4284		0.4367	0.5633
4	5	19			26478.1545		0.3711	0.6289
4	5	20			26480.0747		0.3100	0.6900
4	5	21			26482.1972		0.2594	0.7406
4	5	22			26484.5205		0.2221	0.7779
4	5	23			26487.0360		0.1976	0.8024
4	5	24			26489.7320		0.1836	0.8164
4	5	25	26492.1947		26492.5970	−0.4023	0.1773	0.8227
4	5	26			26495.6210		0.1765	0.8235
4	5	27	26498.3895		26498.7956	−0.4061	0.1800	0.8200

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
4	5	28			26502.1135		0.1871	0.8129
4	5	29			26505.5681		0.1980	0.8020
4	5	30			26509.1515		0.2144	0.7856
4	5	31			26512.8519		0.2404	0.7596
4	5	32			26516.6449		0.2878	0.7122
4	5	33			26520.4619		0.3930	0.6070
4	5	34			26526.8084		0.4653	0.5347
4	5	35			26530.2161		0.2053	0.7947
4	5	36			26534.2991		0.1368	0.8632
4	5	37			26538.7013		0.1296	0.8704
4	5	38			26543.2962		0.1326	0.8674
4	5	39			26548.0447		0.1364	0.8636
4	5	40			26552.9307		0.1391	0.8609
4	5	41			26557.9459		0.1400	0.8600
4	5	42			26563.0835		0.1378	0.8622
4	5	43			26568.3312		0.1294	0.8706
4	5	44			26573.4965		0.2873	0.7127
4	5	45			26579.2936		0.2070	0.7930
4	5	46			26584.8793		0.1755	0.8245
4	5	47			26590.5826		0.1642	0.8358
4	5	48			26596.3809		0.1566	0.8434
4	5	49			26602.2484		0.1515	0.8485
4	5	50			26608.1214		0.1583	0.8417
4	5	51			26613.7702		0.2430	0.7570
4	5	52			26618.4758		0.5599	0.4401
4	5	53			26628.0392		0.3351	0.6649
4	5	54			26634.2014		0.2541	0.7459
4	5	55			26640.4971		0.2229	0.7771
4	5	56			26646.7584		0.2265	0.7735
4	5	57			26652.7224		0.3029	0.6971
4	5	58			26657.9195		0.5046	0.4954
4	5	59			26669.7051		0.4399	0.5601
4	5	60			26676.0120		0.3362	0.6638
4	6	0			26554.7146		0.5237	0.4763
4	6	1			26554.8023		0.5244	0.4756
4	6	2			26554.9777		0.5259	0.4741
4	6	3			26555.2407		0.5283	0.4717
4	6	4			26555.5914		0.5315	0.4685
4	6	5			26556.0297		0.5357	0.4643
4	6	6			26556.5554		0.5409	0.4591
4	6	7			26557.1685		0.5473	0.4527
4	6	8			26557.8685		0.5550	0.4450
4	6	9			26558.6550		0.5641	0.4359
4	6	10			26559.5271		0.5748	0.4252
4	6	11			26560.4840		0.5871	0.4129
4	6	12			26574.3912		0.6007	0.3993
4	6	13			26575.3700		0.5857	0.4143
4	6	14	26575.4027	b	26576.4362	−1.0335	0.5693	0.4307
4	6	15			26577.5934		0.5517	0.4483
4	6	16	26577.7637	b	26578.8457	−1.0820	0.5331	0.4669
4	6	17			26580.1977		0.5137	0.4863
4	6	18			26581.6544		0.4940	0.5060
4	6	19			26583.2210		0.4746	0.5254
4	6	20			26584.9024		0.4564	0.5436
4	6	21			26586.7035		0.4402	0.5598
4	6	22			26588.6280		0.4271	0.5729
4	6	23			26590.6782		0.4182	0.5818
4	6	24			26592.8547		0.4145	0.5855

TABLE III: (continued) Calculated and experimental energies. Notes are at the end of the table (page 34).

3 or 4 $^3\Pi$ assignment	v	J	E (cm^{-1}) experimental	note	E (cm^{-1}) theoretical	ΔE	3 $^3\Pi$ fraction	4 $^3\Pi$ fraction
4	6	25			26595.1553		0.4174	0.5826
4	6	26			26597.5751		0.4277	0.5723
4	6	27			26600.1049		0.4467	0.5533
4	6	28			26602.7313		0.4756	0.5244
4	6	29			26605.4348		0.5156	0.4844
4	6	30			26608.1894		0.5670	0.4330
4	6	31			26620.8446		0.5492	0.4508
4	6	32			26623.3672		0.4876	0.5124
4	6	33			26626.1274		0.4286	0.5714
4	6	34			26629.1420		0.3804	0.6196
4	6	35			26632.4081		0.3494	0.6506
4	6	36			26635.9038		0.3390	0.6610
4	6	37			26639.5917		0.3507	0.6493
4	6	38			26643.4205		0.3869	0.6131
4	6	39			26647.3172		0.4534	0.5466
4	6	40			26651.1730		0.5571	0.4429
4	6	41			26662.0707		0.4673	0.5327
4	6	42			26665.7539		0.3514	0.6486
4	6	43			26669.9432		0.2834	0.7166
4	6	44	26673.7137	b	26674.5231	−0.8094	0.2659	0.7341
4	6	45			26679.3582		0.2899	0.7101
4	6	46			26684.3028		0.3638	0.6362
4	6	47			26689.1103		0.5271	0.4729
4	6	48			26698.5561		0.3654	0.6346
4	6	49			26703.4452		0.2264	0.7736
4	6	50			26708.9674		0.2004	0.7996
4	6	51			26714.7930		0.2297	0.7703
4	6	52			26720.6717		0.3450	0.6550
4	6	53			26729.1781		0.3834	0.6166
4	6	54			26734.8004		0.1603	0.8397
4	6	55			26741.2313		0.1476	0.8524
4	6	56			26747.9201		0.1775	0.8225
4	6	57			26754.5183		0.4320	0.5680
4	6	58			26762.2205		0.1140	0.8860
4	6	59			26769.3248		0.1121	0.8879
4	6	60			26776.6189		0.1160	0.8840

Notes

[a] Artificial data used to constrain the fit (as described in the manuscript).

[b] Data not included in the fit (either because the data were not available when the fit was concluded, or, for certain values of v, the convergence of the calculations was doubted).

[c] Experimental data show that this level is the predominantly 4 $^3\Pi$ component of the mutually perturbing 3 $^3\Pi(v = 37, J = 27) \sim 4\,^3\Pi(v = 1, J = 27)$ pair (see page 20).

[d] Experimental data show that this level is the predominantly 4 $^3\Pi$ component of the mutually perturbing 3 $^3\Pi(v = 50, J = 46) \sim 4\,^3\Pi(v = 4, J = 46)$ pair (see page 27).

[e] Experimental data show that this level is the predominantly 4 $^3\Pi$ component of the mutually perturbing 3 $^3\Pi(v = 52, J = 14) \sim 4\,^3\Pi(v = 5, J = 14)$ pair (see page 28).

[f] Experimental data show that this level is the predominantly 3 $^3\Pi$ component of the mutually perturbing 3 $^3\Pi(v = 37, J = 27) \sim 4\,^3\Pi(v = 1, J = 27)$ pair (see page 31).