

Synchrotron-based highest resolution Fourier transform infrared spectroscopy of naphthalene (C_{10}H_8) and indole ($\text{C}_8\text{H}_7\text{N}$) and application to astrophysical problems

by

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Supplementary Material

Table A1: Rovibrational transitions of $\nu_{46} \leftarrow \text{ground state}$ of naphthalene

J'' , K''_a and K''_c are lower state quantum numbers, J' , K'_a and K'_c are upper state quantum numbers, $\tilde{\nu}_{\text{obs.}}$ = observed wavenumber, $\tilde{\nu}_{\text{cal.}}$ = wavenumber calculated with the parameters from Table 3. All wavenumbers in cm^{-1} .

Table A2: Rovibrational transitions of $\nu_{35} \leftarrow \text{ground state}$ of indole

All symbols have the same meaning as in Table A1.

$\tilde{\nu}_{\text{cal.}}$ = wavenumber calculated with the parameters from Table 4.

Table A3: Rovibrational transitions of $2\nu_{40} \leftarrow \text{ground state}$ of indole

All symbols have the same meaning as in Table A1.

$\tilde{\nu}_{\text{cal.}}$ = wavenumber calculated with the parameters from Table 4.

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Table A 1: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$ /cm ⁻¹	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$ /cm ⁻¹
71	70	1	72	71	1	766.663290	-0.000209
71	70	2	72	71	2	766.663290	-0.000209
70	69	1	71	70	1	766.895830	0.000082
70	69	2	71	70	2	766.895830	0.000082
69	68	1	70	69	1	767.127650	-0.000059
69	68	2	70	69	2	767.127650	-0.000059
71	67	4	72	68	4	767.145090	-0.000203
71	67	5	72	68	5	767.145090	-0.000203
72	66	6	73	67	6	767.233430	-0.000476
72	66	7	73	67	7	767.233430	-0.000476
74	65	9	75	66	9	767.251010	0.000195
74	65	10	75	66	10	767.251010	0.000195
68	67	1	69	68	1	767.359320	-0.000064
68	67	2	69	68	2	767.359320	-0.000064
70	66	4	71	67	4	767.376530	-0.000140
70	66	5	71	67	5	767.376530	-0.000140
69	66	3	70	67	3	767.447980	-0.000053
69	66	4	70	67	4	767.447980	-0.000053
71	65	6	72	66	6	767.464900	-0.000097
71	65	7	72	66	7	767.464900	-0.000097
73	64	9	74	65	9	767.481720	0.000098
73	64	10	74	65	10	767.481720	0.000098
69	65	4	70	66	4	767.607980	0.000238
69	65	5	70	66	5	767.607980	0.000238
68	65	3	69	66	3	767.679050	-0.000058
68	65	4	69	66	4	767.679050	-0.000058
70	64	6	71	65	6	767.695730	-0.000047
70	64	7	71	65	7	767.695730	-0.000047
72	63	9	73	64	9	767.712410	0.000289
72	63	10	73	64	10	767.712410	0.000289
69	64	5	70	65	5	767.767170	0.000020
69	64	6	70	65	6	767.767170	0.000020
66	65	1	67	66	1	767.821650	-0.000165
66	65	2	67	66	2	767.821650	-0.000165
68	64	4	69	65	4	767.838630	0.000111
68	64	5	69	65	5	767.838630	0.000111
67	64	3	68	65	3	767.909480	-0.000404
67	64	4	68	65	4	767.909480	-0.000404
69	63	6	70	64	6	767.926270	0.000004
69	63	7	70	64	7	767.926270	0.000004
71	62	9	72	63	9	767.942490	0.000171
71	62	10	72	63	10	767.942490	0.000171
68	63	5	69	64	5	767.997560	-0.000078
68	63	6	69	64	6	767.997560	-0.000078
65	64	1	66	65	1	768.052300	-0.000292
65	64	2	66	65	2	768.052300	-0.000292
67	63	4	68	64	4	768.068950	-0.000052
67	63	5	68	64	5	768.068950	-0.000052
66	63	3	67	64	3	768.140150	-0.000213
66	63	4	67	64	4	768.140150	-0.000213
68	62	6	69	63	6	768.156380	-0.000071
68	62	7	69	63	7	768.156380	-0.000071
70	61	9	71	62	9	768.172600	0.000396
70	61	10	71	62	10	768.172600	0.000396
65	63	2	66	64	2	768.211270	-0.000444
65	63	3	66	64	3	768.211270	-0.000444
67	62	5	68	63	5	768.228050	0.000238
67	62	6	68	63	6	768.228050	0.000238
64	63	1	65	64	1	768.282980	-0.000083
64	63	2	65	64	2	768.282980	-0.000083
66	62	4	67	63	4	768.299310	0.000140
66	62	5	67	63	5	768.299310	0.000140
65	62	3	66	63	3	768.370390	-0.000139
65	62	4	66	63	4	768.370390	-0.000139
98	47	51	99	48	51	768.381600	-0.000082
67	61	6	68	62	6	768.386370	0.000043
67	61	7	68	62	7	768.386370	0.000043
69	60	9	70	61	9	768.402460	0.000662
69	60	10	70	61	10	768.402460	0.000662
64	62	2	65	63	2	768.441730	-0.000146
64	62	3	65	63	3	768.441730	-0.000146
97	47	50	98	48	50	768.451910	0.000225
66	61	5	67	62	5	768.457730	0.000041
66	61	6	67	62	6	768.457730	0.000041
63	62	1	64	63	1	768.513160	-0.000060
63	62	2	64	63	2	768.513160	-0.000060
65	61	4	66	62	4	768.528700	-0.000343
65	61	5	66	62	5	768.528700	-0.000343
62	62	0	63	63	0	768.584840	0.000281
62	62	1	63	63	1	768.584840	0.000281
95	47	48	96	48	48	768.591690	-0.000205
64	61	3	65	62	3	768.600240	-0.000151
64	61	4	65	62	4	768.600240	-0.000151
66	60	6	67	61	6	768.616130	0.000241
66	60	7	67	61	7	768.616130	0.000241
68	59	9	69	60	9	768.631880	0.000810
68	59	10	69	60	10	768.631880	0.000810
94	47	47	95	48	47	768.661860	-0.000237

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
63	61	2	64	62	2	768.671900	0.000162
63	61	3	64	62	3	768.671900	0.000162
65	60	5	66	61	5	768.687150	-0.000095
65	60	6	66	61	6	768.687150	-0.000095
93	47	46	94	48	46	768.732280	-0.000071
62	61	1	63	62	1	768.742950	-0.000133
62	61	2	63	62	2	768.742950	-0.000133
64	60	4	65	61	4	768.758090	-0.000515
64	60	5	65	61	5	768.758090	-0.000515
92	47	45	93	48	45	768.802350	-0.000317
61	61	0	62	62	0	768.814360	-0.000060
61	61	1	62	62	1	768.814360	-0.000060
63	60	3	64	61	3	768.829540	-0.000413
63	60	4	64	61	4	768.829540	-0.000413
65	59	6	66	60	6	768.845360	0.000209
65	59	7	66	60	7	768.845360	0.000209
91	47	44	92	48	44	768.872670	-0.000370
62	60	2	63	61	2	768.901210	-0.000083
62	60	3	63	61	3	768.901210	-0.000083
64	59	5	65	60	5	768.916850	0.000348
64	59	6	65	60	6	768.916850	0.000348
90	47	43	91	48	43	768.943290	-0.000176
61	60	1	62	61	1	768.972610	-0.000021
61	60	2	62	61	2	768.972610	-0.000021
63	59	4	64	60	4	768.987890	0.000039
63	59	5	64	60	5	768.987890	0.000039
60	60	0	61	61	0	769.043950	-0.000014
60	60	1	61	61	1	769.043950	-0.000014
62	59	3	63	60	3	769.058490	-0.000713
62	59	4	63	60	4	769.058490	-0.000713
64	58	6	65	59	6	769.074660	0.000556
64	58	7	65	59	7	769.074660	0.000556
88	47	41	89	48	41	769.084130	-0.000337
61	59	2	62	60	2	769.130220	-0.000321
61	59	3	62	60	3	769.130220	-0.000321
63	58	5	64	59	5	769.145940	0.000493
63	58	6	64	59	6	769.145940	0.000493
87	47	40	88	48	40	769.154790	-0.000249
60	59	1	61	60	1	769.201500	-0.000375
60	59	2	61	60	2	769.201500	-0.000375
62	58	4	63	59	4	769.216750	-0.000042
62	58	5	63	59	5	769.216750	-0.000042
86	47	39	87	48	39	769.225360	-0.000297
77	51	26	78	52	26	769.241930	-0.000534
77	51	27	78	52	27	769.241930	-0.000534
68	55	13	69	56	13	769.258860	-0.000831
68	55	14	69	56	14	769.258860	-0.000831
70	54	16	71	55	16	769.272950	-0.000499
59	59	0	60	60	0	769.272950	-0.000249
70	54	17	71	55	17	769.272950	-0.000499
59	59	1	60	60	1	769.272950	-0.000249
61	58	3	62	59	3	769.288150	0.000019
94	43	51	95	44	51	769.288150	0.000352
61	58	4	62	59	4	769.288150	0.000019
85	47	38	86	48	38	769.296150	-0.000170
71	53	18	72	54	18	769.357670	-0.000625
93	43	50	94	44	50	769.357670	0.000344
71	53	19	72	54	19	769.357670	-0.000625
84	47	37	85	48	37	769.366860	-0.000163
73	52	21	74	53	21	769.371060	-0.000566
73	52	22	74	53	22	769.371060	-0.000566
75	51	24	76	52	24	769.384390	-0.000442
75	51	25	76	52	25	769.384390	-0.000442
66	55	11	67	56	11	769.401560	-0.000814
66	55	12	67	56	12	769.401560	-0.000814
68	54	14	69	55	14	769.415650	-0.000445
68	54	15	69	55	15	769.415650	-0.000445
83	47	36	84	48	36	769.437730	-0.000039
61	57	4	62	58	4	769.444630	-0.000788
61	57	5	62	58	5	769.444630	-0.000788
74	51	23	75	52	23	769.456030	-0.000013
74	51	24	75	52	24	769.456030	-0.000013
76	50	26	77	51	26	769.468730	-0.000378
76	50	27	77	51	27	769.468730	-0.000378
65	55	10	66	56	10	769.473090	-0.000615
65	55	11	66	56	11	769.473090	-0.000615
67	54	13	68	55	13	769.486720	-0.000705
67	54	14	68	55	14	769.486720	-0.000705
91	43	48	92	44	48	769.496620	-0.000007
69	53	16	70	54	16	769.500580	-0.000315
69	53	17	70	54	17	769.500580	-0.000315
58	58	0	59	59	0	769.501800	-0.000330
58	58	1	59	59	1	769.501800	-0.000330
82	47	35	83	48	35	769.508350	-0.000205
60	57	3	61	58	3	769.516480	-0.000276
60	57	4	61	58	4	769.516480	-0.000276
73	51	22	74	52	22	769.527160	-0.000103
73	51	23	74	52	23	769.527160	-0.000103
62	56	6	63	57	6	769.530370	-0.000688
62	56	7	63	57	7	769.530370	-0.000688

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
66	54	12	67	55	12	769.558390	-0.000366
66	54	13	67	55	13	769.558390	-0.000366
90	43	47	91	44	47	769.566490	0.000075
68	53	15	69	54	15	769.571920	-0.000285
68	53	16	69	54	16	769.571920	-0.000285
70	52	18	71	53	18	769.585220	-0.000220
70	52	19	71	53	19	769.585220	-0.000220
72	51	21	73	52	21	769.598270	-0.000228
72	51	22	73	52	22	769.598270	-0.000228
61	56	5	62	57	5	769.601960	-0.000437
61	56	6	62	57	6	769.601960	-0.000437
74	50	24	75	51	24	769.611240	-0.000191
74	50	25	75	51	25	769.611240	-0.000191
65	54	11	66	55	11	769.629630	-0.000459
65	54	12	66	55	12	769.629630	-0.000459
67	53	14	68	54	14	769.643170	-0.000350
67	53	15	68	54	15	769.643170	-0.000350
58	57	1	59	58	1	769.659980	0.000559
58	57	2	59	58	2	769.659980	0.000559
60	56	4	61	57	4	769.673230	-0.000503
60	56	5	61	57	5	769.673230	-0.000503
73	50	23	74	51	23	769.682490	-0.000127
73	50	24	74	51	24	769.682490	-0.000127
62	55	7	63	56	7	769.687440	-0.000286
62	55	8	63	56	8	769.687440	-0.000286
75	49	26	76	50	26	769.695260	-0.000168
75	49	27	76	50	27	769.695260	-0.000168
64	54	10	65	55	10	769.701110	-0.000305
64	54	11	65	55	11	769.701110	-0.000305
88	43	45	89	44	45	769.706300	0.000082
66	53	13	67	54	13	769.714530	-0.000304
66	53	14	67	54	14	769.714530	-0.000304
68	52	16	69	53	16	769.727970	-0.000045
68	52	17	69	53	17	769.727970	-0.000045
57	57	0	58	58	0	769.730770	0.000032
57	57	1	58	58	1	769.730770	0.000032
72	50	22	73	51	22	769.753660	-0.000157
72	50	23	73	51	23	769.753660	-0.000157
61	55	6	62	56	6	769.758760	-0.000299
61	55	7	62	56	7	769.758760	-0.000299
63	54	9	64	55	9	769.772640	-0.000114
63	54	10	64	55	10	769.772640	-0.000114
87	43	44	88	44	44	769.776450	0.000217
65	53	12	66	54	12	769.785940	-0.000219
65	53	13	66	54	13	769.785940	-0.000219
67	52	15	68	53	15	769.799170	-0.000144
67	52	16	68	53	16	769.799170	-0.000144
69	51	18	70	52	18	769.812000	-0.000258
69	51	19	70	52	19	769.812000	-0.000258
58	56	2	59	57	2	769.816280	-0.000115
58	56	3	59	57	3	769.816280	-0.000115
71	50	21	72	51	21	769.825180	0.000139
71	50	22	72	51	22	769.825180	0.000139
60	55	5	61	56	5	769.830230	-0.000167
60	55	6	61	56	6	769.830230	-0.000167
73	49	24	74	50	24	769.837500	-0.000203
73	49	25	74	50	25	769.837500	-0.000203
62	54	8	63	55	8	769.844120	0.000031
62	54	9	63	55	9	769.844120	0.000031
86	43	43	87	44	43	769.846550	0.000226
64	53	11	65	54	11	769.857180	-0.000303
64	53	12	65	54	12	769.857180	-0.000303
66	52	14	67	53	14	769.870620	0.000001
66	52	15	67	53	15	769.870620	0.000001
57	56	1	58	57	1	769.887560	-0.000161
57	56	2	58	57	2	769.887560	-0.000161
59	55	4	60	56	4	769.901720	-0.000012
59	55	5	60	56	5	769.901720	-0.000012
72	49	23	73	50	23	769.908870	-0.000007
72	49	24	73	50	24	769.908870	-0.000007
61	54	7	62	55	7	769.915510	0.000090
61	54	8	62	55	8	769.915510	0.000090
74	48	26	75	49	26	769.920880	-0.000541
74	48	27	75	49	27	769.920880	-0.000541
63	53	10	64	54	10	769.928590	-0.000218
63	53	11	64	54	11	769.928590	-0.000218
65	52	13	66	53	13	769.941780	-0.000152
65	52	14	66	53	14	769.941780	-0.000152
67	51	16	68	52	16	769.954630	-0.000189
67	51	17	68	52	17	769.954630	-0.000189
56	56	0	57	57	0	769.958860	-0.000180
56	56	1	57	57	1	769.958860	-0.000180
58	55	3	59	56	3	769.972980	-0.000077
58	55	4	59	56	4	769.972980	-0.000077
71	49	22	72	50	22	769.980190	0.000132
71	49	23	72	50	23	769.980190	0.000132
60	54	6	61	55	6	769.986680	-0.000066
60	54	7	61	55	7	769.986680	-0.000066
62	53	9	63	54	9	770.000300	0.000169
62	53	10	63	54	10	770.000300	0.000169

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
64	52	12	65	53	12	770.013170	-0.000070
64	52	13	65	53	13	770.013170	-0.000070
66	51	15	67	52	15	770.025950	-0.000155
66	51	16	67	52	16	770.025950	-0.000155
68	50	18	69	51	18	770.038630	-0.000132
68	50	19	69	51	19	770.038630	-0.000132
57	55	2	58	56	2	770.043970	-0.000411
57	55	3	58	56	3	770.043970	-0.000411
70	49	21	71	50	21	770.051370	0.000118
70	49	22	71	50	22	770.051370	0.000118
59	54	5	60	55	5	770.057960	-0.000122
59	54	6	60	55	6	770.057960	-0.000122
72	48	24	73	49	24	770.063480	-0.000174
72	48	25	73	49	25	770.063480	-0.000174
61	53	8	62	54	8	770.071380	-0.000078
61	53	9	62	54	9	770.071380	-0.000078
74	47	27	75	48	27	770.076030	0.000010
74	47	28	75	48	28	770.076030	0.000010
63	52	11	64	53	11	770.084590	0.000031
63	52	12	64	53	12	770.084590	0.000031
65	51	14	66	52	14	770.097220	-0.000175
65	51	15	66	52	15	770.097220	-0.000175
56	55	1	57	56	1	770.115580	-0.000127
56	55	2	57	56	2	770.115580	-0.000127
69	49	20	70	50	20	770.122230	-0.000236
69	49	21	70	50	21	770.122230	-0.000236
82	43	39	83	44	39	770.127470	0.000123
58	54	4	59	55	4	770.129490	0.000082
58	54	5	59	55	5	770.129490	0.000082
71	48	23	72	49	23	770.134650	-0.000151
71	48	24	72	49	24	770.134650	-0.000151
60	53	7	61	54	7	770.142950	0.000159
60	53	8	61	54	8	770.142950	0.000159
73	47	26	74	48	26	770.147250	0.000171
73	47	27	74	48	27	770.147250	0.000171
62	52	10	63	53	10	770.156050	0.000175
62	52	11	63	53	11	770.156050	0.000175
66	50	16	67	51	16	770.181020	-0.000266
66	50	17	67	51	17	770.181020	-0.000266
55	55	0	56	56	0	770.186970	-0.000052
55	55	1	56	56	1	770.186970	-0.000052
68	49	19	69	50	19	770.193520	-0.000176
68	49	20	69	50	20	770.193520	-0.000176
81	43	38	82	44	38	770.198000	0.000236
57	54	3	58	55	3	770.200690	-0.000043
57	54	4	58	55	4	770.200690	-0.000043
70	48	22	71	49	22	770.205890	-0.000074
70	48	23	71	49	23	770.205890	-0.000074
59	53	6	60	54	6	770.214010	-0.000109
59	53	7	60	54	7	770.214010	-0.000109
63	51	12	64	52	12	770.240190	0.000191
63	51	13	64	52	13	770.240190	0.000191
65	50	15	66	51	15	770.252570	0.000000
65	50	16	66	51	16	770.252570	0.000000
67	49	18	68	50	18	770.264720	-0.000207
67	49	19	68	50	19	770.264720	-0.000207
80	43	37	81	44	37	770.268310	0.000084
56	54	2	57	55	2	770.272020	-0.000035
56	54	3	57	55	3	770.272020	-0.000035
69	48	21	70	49	21	770.277280	0.000135
69	48	22	70	49	22	770.277280	0.000135
58	53	5	59	54	5	770.285500	0.000067
58	53	6	59	54	6	770.285500	0.000067
71	47	24	72	48	24	770.289330	0.000055
71	47	25	72	48	25	770.289330	0.000055
60	52	8	61	53	8	770.298230	-0.000288
60	52	9	61	53	9	770.298230	-0.000288
73	46	27	74	47	27	770.301780	0.000391
73	46	28	74	47	28	770.301780	0.000391
62	51	11	63	52	11	770.311470	0.000161
62	51	12	63	52	12	770.311470	0.000161
64	50	14	65	51	14	770.324270	0.000417
64	50	15	65	51	15	770.324270	0.000417
66	49	17	67	50	17	770.336130	-0.000048
66	49	18	67	50	18	770.336130	-0.000048
79	43	36	80	44	36	770.338750	0.000004
68	48	20	69	49	20	770.348240	-0.000097
68	48	21	69	49	21	770.348240	-0.000097
57	53	4	58	54	4	770.356900	0.000138
57	53	5	58	54	5	770.356900	0.000138
70	47	23	71	48	23	770.360460	0.000068
70	47	24	71	48	24	770.360460	0.000068
59	52	7	60	53	7	770.369670	-0.000170
59	52	8	60	53	8	770.369670	-0.000170
72	46	26	73	47	26	770.372470	0.000050
72	46	27	73	47	27	770.372470	0.000050
61	51	10	62	52	10	770.382870	0.000247
61	51	11	62	52	11	770.382870	0.000247
63	50	13	64	51	13	770.395050	-0.000091
63	50	14	64	51	14	770.395050	-0.000091

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
65	49	16	66	50	16	770.407140	-0.000292
65	49	17	66	50	17	770.407140	-0.000292
78	43	35	79	44	35	770.409290	-0.000037
54	54	0	55	55	0	770.414630	-0.000050
54	54	1	55	55	1	770.414630	-0.000050
67	48	19	68	49	19	770.419750	0.000198
67	48	20	68	49	20	770.419750	0.000198
56	53	3	57	54	3	770.428140	0.000064
56	53	4	57	54	4	770.428140	0.000064
69	47	22	70	48	22	770.431510	-0.000036
69	47	23	70	48	23	770.431510	-0.000036
58	52	6	59	53	6	770.441210	0.000049
58	52	7	59	53	7	770.441210	0.000049
60	51	9	61	52	9	770.454330	0.000393
60	51	10	61	52	10	770.454330	0.000393
62	50	12	63	51	12	770.466630	0.000196
62	50	13	63	51	13	770.466630	0.000196
64	49	15	65	50	15	770.478860	0.000160
64	49	16	65	50	16	770.478860	0.000160
66	48	18	67	49	18	770.491010	0.000241
66	48	19	67	49	19	770.491010	0.000241
55	53	2	56	54	2	770.499600	0.000199
55	53	3	56	54	3	770.499600	0.000199
68	47	21	69	48	21	770.502670	-0.000037
68	47	22	69	48	22	770.502670	-0.000037
57	52	5	58	53	5	770.512450	-0.000024
57	52	6	58	53	6	770.512450	-0.000024
70	46	24	71	47	24	770.514640	0.000084
70	46	25	71	47	25	770.514640	0.000084
72	45	27	73	46	27	770.526500	0.000070
72	45	28	73	46	28	770.526500	0.000070
61	50	11	62	51	11	770.538220	0.000483
61	50	12	62	51	12	770.538220	0.000483
63	49	14	64	50	14	770.550560	0.000591
76	43	33	77	44	33	770.550560	-0.000056
63	49	15	64	50	15	770.550560	0.000591
65	48	17	66	49	17	770.562280	0.000273
65	48	18	66	49	18	770.562280	0.000273
54	53	1	55	54	1	770.570940	0.000227
54	53	2	55	54	2	770.570940	0.000227
67	47	20	68	48	20	770.573370	-0.000514
67	47	21	68	48	21	770.573370	-0.000514
56	52	4	57	53	4	770.583690	-0.000105
56	52	5	57	53	5	770.583690	-0.000105
69	46	23	70	47	23	770.585660	-0.000007
69	46	24	70	47	24	770.585660	-0.000007
58	51	7	59	52	7	770.596670	0.000107
58	51	8	59	52	8	770.596670	0.000107
60	50	10	61	51	10	770.609240	0.000201
60	50	11	61	51	11	770.609240	0.000201
62	49	13	63	50	13	770.621390	0.000133
75	43	32	76	44	32	770.621390	0.000051
62	49	14	63	50	14	770.621390	0.000133
64	48	16	65	49	16	770.633590	0.000335
64	48	17	65	49	17	770.633590	0.000335
53	53	0	54	54	0	770.642000	-0.000018
53	53	1	54	54	1	770.642000	-0.000018
66	47	19	67	48	19	770.645210	0.000134
66	47	20	67	48	20	770.645210	0.000134
55	52	3	56	53	3	770.655400	0.000290
55	52	4	56	53	4	770.655400	0.000290
68	46	22	69	47	22	770.657000	0.000210
68	46	23	69	47	23	770.657000	0.000210
57	51	6	58	52	6	770.668160	0.000284
57	51	7	58	52	7	770.668160	0.000284
59	50	9	60	51	9	770.680320	-0.000026
59	50	10	60	51	10	770.680320	-0.000026
61	49	12	62	50	12	770.692440	-0.000102
61	49	13	62	50	13	770.692440	-0.000102
63	48	15	64	49	15	770.704550	0.000049
63	48	16	64	49	16	770.704550	0.000049
65	47	18	66	48	18	770.716350	0.000063
65	47	19	66	48	19	770.716350	0.000063
67	46	21	68	47	21	770.728090	0.000158
67	46	22	68	47	22	770.728090	0.000158
69	45	24	70	46	24	770.739440	-0.000085
56	51	5	57	52	5	770.739440	0.000247
69	45	25	70	46	25	770.739440	-0.000085
56	51	6	57	52	6	770.739440	0.000247
71	44	27	72	45	27	770.751490	0.000350
58	50	8	59	51	8	770.751490	-0.000161
71	44	28	72	45	28	770.751490	0.000350
58	50	9	59	51	9	770.751490	-0.000161
60	49	11	61	50	11	770.763820	-0.000012
60	49	12	61	50	12	770.763820	-0.000012
62	48	14	63	49	14	770.775870	0.000103
62	48	15	63	49	15	770.775870	0.000103
64	47	17	65	48	17	770.787590	0.000090
64	47	18	65	48	18	770.787590	0.000090
66	46	20	67	47	20	770.799110	0.000014

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
66	46	21	67	47	21	770.799110	0.000014
55	51	4	56	52	4	770.810520	0.000022
68	45	23	69	46	23	770.810520	-0.000077
55	51	5	56	52	5	770.810520	0.000022
68	45	24	69	46	24	770.810520	-0.000077
57	50	7	58	51	7	770.822510	-0.000451
70	44	26	71	45	26	770.822510	0.000394
57	50	8	58	51	8	770.822510	-0.000451
70	44	27	71	45	27	770.822510	0.000394
59	49	10	60	50	10	770.835110	-0.000021
59	49	11	60	50	11	770.835110	-0.000021
61	48	13	62	49	13	770.847190	0.000151
61	48	14	62	49	14	770.847190	0.000151
63	47	16	64	48	16	770.858950	0.000214
63	47	17	64	48	17	770.858950	0.000214
52	52	0	53	53	0	770.868790	-0.000247
52	52	1	53	53	1	770.868790	-0.000247
65	46	19	66	47	19	770.870390	0.000117
65	46	20	66	47	20	770.870390	0.000117
67	45	22	68	46	22	770.881890	0.000184
54	51	3	55	52	3	770.881890	0.000075
67	45	23	68	46	23	770.881890	0.000184
54	51	4	55	52	4	770.881890	0.000075
58	49	9	59	50	9	770.906560	0.000137
58	49	10	59	50	10	770.906560	0.000137
60	48	12	61	49	12	770.918370	0.000053
60	48	13	61	49	13	770.918370	0.000053
62	47	15	63	48	15	770.930270	0.000294
62	47	16	63	48	16	770.930270	0.000294
64	46	18	65	47	18	770.941390	-0.000077
64	46	19	65	47	19	770.941390	-0.000077
66	45	21	67	46	21	770.953000	0.000171
53	51	2	54	52	2	770.953000	-0.000123
66	45	22	67	46	22	770.953000	0.000171
53	51	3	54	52	3	770.953000	-0.000123
55	50	5	56	51	5	770.965640	0.000061
55	50	6	56	51	6	770.965640	0.000061
70	43	27	71	44	27	770.975600	0.000074
70	43	28	71	44	28	770.975600	0.000074
57	49	8	58	50	8	770.977720	-0.000004
57	49	9	58	50	9	770.977720	-0.000004
59	48	11	60	49	11	770.989520	-0.000076
59	48	12	60	49	12	770.989520	-0.000076
61	47	14	62	48	14	771.001310	0.000075
61	47	15	62	48	15	771.001310	0.000075
63	46	17	64	47	17	771.012800	0.000131
63	46	18	64	47	18	771.012800	0.000131
52	51	1	53	52	1	771.024260	-0.000171
65	45	20	66	46	20	771.024260	0.000286
52	51	2	53	52	2	771.024260	-0.000171
65	45	21	66	46	21	771.024260	0.000286
67	44	23	68	45	23	771.035350	0.000145
67	44	24	68	45	24	771.035350	0.000145
54	50	4	55	51	4	771.037070	0.000186
54	50	5	55	51	5	771.037070	0.000186
69	43	26	70	44	26	771.046520	0.000052
69	43	27	70	44	27	771.046520	0.000052
56	49	7	57	50	7	771.049060	0.000029
56	49	8	57	50	8	771.049060	0.000029
58	48	10	59	49	10	771.060930	0.000042
58	48	11	59	49	11	771.060930	0.000042
73	41	32	74	42	32	771.069630	0.000106
73	41	33	74	42	33	771.069630	0.000106
62	46	16	63	47	16	771.084030	0.000138
62	46	17	63	47	17	771.084030	0.000138
64	45	19	65	46	19	771.095380	0.000248
51	51	0	52	52	0	771.095380	-0.000350
64	45	20	65	46	20	771.095380	0.000248
51	51	1	52	52	1	771.095380	-0.000350
53	50	3	54	51	3	771.108210	0.000013
53	50	4	54	51	4	771.108210	0.000013
55	49	6	56	50	6	771.120380	0.000047
55	49	7	56	50	7	771.120380	0.000047
57	48	9	58	49	9	771.132260	0.000079
57	48	10	58	49	10	771.132260	0.000079
61	46	15	62	47	15	771.155320	0.000198
61	46	16	62	47	16	771.155320	0.000198
63	45	18	64	46	18	771.166550	0.000242
63	45	19	64	46	19	771.166550	0.000242
65	44	21	66	45	21	771.177680	0.000291
65	44	22	66	45	22	771.177680	0.000291
52	50	2	53	51	2	771.179630	0.000136
52	50	3	53	51	3	771.179630	0.000136
67	43	24	68	44	24	771.188700	0.000253
67	43	25	68	44	25	771.188700	0.000253
54	49	5	55	50	5	771.191630	-0.000013
54	49	6	55	50	6	771.191630	-0.000013
69	42	27	70	43	27	771.199840	0.000261
69	42	28	70	43	28	771.199840	0.000261
56	48	8	57	49	8	771.203500	0.000023

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
56	48	9	57	49	9	771.203500	0.000023
58	47	11	59	48	11	771.214990	-0.000044
58	47	12	59	48	12	771.214990	-0.000044
60	46	14	61	47	14	771.226250	-0.000112
60	46	15	61	47	15	771.226250	-0.000112
62	45	17	63	46	17	771.237680	0.000173
62	45	18	63	46	18	771.237680	0.000173
64	44	20	65	45	20	771.248130	-0.000384
64	44	21	65	45	21	771.248130	-0.000384
51	50	1	52	51	1	771.250860	0.000065
51	50	2	52	51	2	771.250860	0.000065
66	43	23	67	44	23	771.259710	0.000231
66	43	24	67	44	24	771.259710	0.000231
53	49	4	54	50	4	771.262190	-0.000749
53	49	5	54	50	5	771.262190	-0.000749
68	42	26	69	43	26	771.270480	-0.000014
68	42	27	69	43	27	771.270480	-0.000014
55	48	7	56	49	7	771.275040	0.000272
55	48	8	56	49	8	771.275040	0.000272
57	47	10	58	48	10	771.286430	0.000111
57	47	11	58	48	11	771.286430	0.000111
72	40	32	73	41	32	771.293410	0.000257
72	40	33	73	41	33	771.293410	0.000257
59	46	13	60	47	13	771.297850	0.000237
59	46	14	60	47	14	771.297850	0.000237
61	45	16	62	46	16	771.308920	0.000213
61	45	17	62	46	17	771.308920	0.000213
63	44	19	64	45	19	771.319610	-0.000048
63	44	20	64	45	20	771.319610	-0.000048
50	50	0	51	51	0	771.321880	-0.000214
50	50	1	51	51	1	771.321880	-0.000214
65	43	22	66	44	22	771.330630	0.000092
65	43	23	66	44	23	771.330630	0.000092
52	49	3	53	50	3	771.334290	0.000041
52	49	4	53	50	4	771.334290	0.000041
54	48	6	55	49	6	771.346190	0.000123
54	48	7	55	49	7	771.346190	0.000123
56	47	9	57	48	9	771.357640	0.000038
56	47	10	57	48	10	771.357640	0.000038
58	46	12	59	47	12	771.369080	0.000203
58	46	13	59	47	13	771.369080	0.000203
60	45	15	61	46	15	771.380140	0.000213
60	45	16	61	46	16	771.380140	0.000213
62	44	18	63	45	18	771.390750	-0.000073
62	44	19	63	45	19	771.390750	-0.000073
64	43	21	65	44	21	771.401610	-0.000008
64	43	22	65	44	22	771.401610	-0.000008
51	49	2	52	50	2	771.405580	0.000041
51	49	3	52	50	3	771.405580	0.000041
66	42	24	67	43	24	771.412570	0.000156
66	42	25	67	43	25	771.412570	0.000156
53	48	5	54	49	5	771.417530	0.000164
53	48	6	54	49	6	771.417530	0.000164
68	41	27	69	42	27	771.423590	0.000284
68	41	28	69	42	28	771.423590	0.000284
55	47	8	56	48	8	771.429030	0.000137
55	47	9	56	48	9	771.429030	0.000137
57	46	11	58	47	11	771.440510	0.000367
57	46	12	58	47	12	771.440510	0.000367
59	45	14	60	46	14	771.451270	0.000112
59	45	15	60	46	15	771.451270	0.000112
61	44	17	62	45	17	771.462030	0.000023
61	44	18	62	45	18	771.462030	0.000023
63	43	20	64	44	20	771.472990	0.000265
63	43	21	64	44	21	771.472990	0.000265
50	49	1	51	50	1	771.477370	0.000532
50	49	2	51	50	2	771.477370	0.000532
65	42	23	66	43	23	771.483490	0.000074
65	42	24	66	43	24	771.483490	0.000074
52	48	4	53	49	4	771.488520	-0.000148
52	48	5	53	49	5	771.488520	-0.000148
67	41	26	68	42	26	771.494220	0.000034
67	41	27	68	42	27	771.494220	0.000034
54	47	7	55	48	7	771.500290	0.000106
54	47	8	55	48	8	771.500290	0.000106
56	46	10	57	47	10	771.511780	0.000363
56	46	11	57	47	11	771.511780	0.000363
71	39	32	72	40	32	771.516470	0.000006
71	39	33	72	40	33	771.516470	0.000006
58	45	13	59	46	13	771.522530	0.000131
58	45	14	59	46	14	771.522530	0.000131
60	44	16	61	45	16	771.532870	-0.000322
60	44	17	61	45	17	771.532870	-0.000322
62	43	19	63	44	19	771.543770	-0.000085
62	43	20	63	44	20	771.543770	-0.000085
64	42	22	65	43	22	771.554610	0.000156
64	42	23	65	43	23	771.554610	0.000156
51	48	3	52	49	3	771.559620	-0.000344
51	48	4	52	49	4	771.559620	-0.000344
66	41	25	67	42	25	771.565220	0.000124

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
66	41	26	67	42	26	771.565220	0.000124
53	47	6	54	48	6	771.571800	0.000327
53	47	7	54	48	7	771.571800	0.000327
57	45	12	58	46	12	771.593800	0.000148
57	45	13	58	46	13	771.593800	0.000148
72	38	34	73	39	34	771.598810	0.000155
72	38	35	73	39	35	771.598810	0.000155
59	44	15	60	45	15	771.604480	0.000081
59	44	16	60	45	16	771.604480	0.000081
61	43	18	62	44	18	771.615180	0.000184
61	43	19	62	44	19	771.615180	0.000184
50	48	2	51	49	2	771.631130	-0.000129
50	48	3	51	49	3	771.631130	-0.000129
65	41	24	66	42	24	771.636080	0.000032
65	41	25	66	42	25	771.636080	0.000032
52	47	5	53	48	5	771.642570	-0.000202
52	47	6	53	48	6	771.642570	-0.000202
67	40	27	68	41	27	771.646890	0.000190
67	40	28	68	41	28	771.646890	0.000190
54	46	8	55	47	8	771.654150	0.000179
54	46	9	55	47	9	771.654150	0.000179
56	45	11	57	46	11	771.665110	0.000199
56	45	12	57	46	12	771.665110	0.000199
58	44	14	59	45	14	771.675680	0.000056
58	44	15	59	45	15	771.675680	0.000056
60	43	17	61	44	17	771.686250	0.000089
60	43	18	61	44	18	771.686250	0.000089
62	42	20	63	43	20	771.696870	0.000267
62	42	21	63	43	21	771.696870	0.000267
49	48	1	50	49	1	771.702780	0.000229
49	48	2	50	49	2	771.702780	0.000229
64	41	23	65	42	23	771.707070	0.000040
64	41	24	65	42	24	771.707070	0.000040
51	47	4	52	48	4	771.714270	0.000209
51	47	5	52	48	5	771.714270	0.000209
53	46	7	54	47	7	771.725220	-0.000039
53	46	8	54	47	8	771.725220	-0.000039
55	45	10	56	46	10	771.736180	0.000006
55	45	11	56	46	11	771.736180	0.000006
70	38	32	71	39	32	771.739510	0.000051
70	38	33	71	39	33	771.739510	0.000051
57	44	13	58	45	13	771.746770	-0.000085
57	44	14	58	45	14	771.746770	-0.000085
59	43	16	60	44	16	771.757300	-0.000042
59	43	17	60	44	17	771.757300	-0.000042
61	42	19	62	43	19	771.768070	0.000361
61	42	20	62	43	20	771.768070	0.000361
48	48	0	49	49	0	771.773780	-0.000070
48	48	1	49	49	1	771.773780	-0.000070
63	41	22	64	42	22	771.778090	0.000054
63	41	23	64	42	23	771.778090	0.000054
50	47	3	51	48	3	771.785280	-0.000074
50	47	4	51	48	4	771.785280	-0.000074
65	40	25	66	41	25	771.788610	0.000185
65	40	26	66	41	26	771.788610	0.000185
52	46	6	53	47	6	771.796680	0.000136
52	46	7	53	47	7	771.796680	0.000136
54	45	9	55	46	9	771.807550	0.000100
54	45	10	55	46	10	771.807550	0.000100
56	44	12	57	45	12	771.818110	0.000017
56	44	13	57	45	13	771.818110	0.000017
71	37	34	72	38	34	771.821390	-0.000105
71	37	35	72	38	35	771.821390	-0.000105
58	43	15	59	44	15	771.828560	0.000024
58	43	16	59	44	16	771.828560	0.000024
60	42	18	61	43	18	771.838550	-0.000293
60	42	19	61	43	19	771.838550	-0.000293
62	41	21	63	42	21	771.849280	0.000200
62	41	22	63	42	22	771.849280	0.000200
49	47	2	50	48	2	771.856670	0.000027
49	47	3	50	48	3	771.856670	0.000027
64	40	24	65	41	24	771.859420	0.000076
64	40	25	65	41	25	771.859420	0.000076
51	46	5	52	47	5	771.868190	0.000352
51	46	6	52	47	6	771.868190	0.000352
66	39	27	67	40	27	771.869820	0.000051
66	39	28	67	40	28	771.869820	0.000051
53	45	8	54	46	8	771.879100	0.000373
53	45	9	54	46	9	771.879100	0.000373
55	44	11	56	45	11	771.889410	0.000065
55	44	12	56	45	12	771.889410	0.000065
57	43	14	58	44	14	771.899700	-0.000044
57	43	15	58	44	15	771.899700	-0.000044
59	42	17	60	43	17	771.910200	0.000214
59	42	18	60	43	18	771.910200	0.000214
61	41	20	62	42	20	771.920430	0.000293
61	41	21	62	42	21	771.920430	0.000293
48	47	1	49	48	1	771.928090	0.000155
48	47	2	49	48	2	771.928090	0.000155
52	45	7	53	46	7	771.950280	0.000282

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
52	45	8	53	46	8	771.950280	0.000282
54	44	10	55	45	10	771.960800	0.000194
54	44	11	55	45	11	771.960800	0.000194
56	43	13	57	44	13	771.970870	-0.000098
56	43	14	57	44	14	771.970870	-0.000098
58	42	16	59	43	16	771.981330	0.000179
58	42	17	59	43	17	771.981330	0.000179
62	40	22	63	41	22	772.000810	-0.000468
62	40	23	63	41	23	772.000810	-0.000468
49	46	3	50	47	3	772.010460	0.000052
49	46	4	50	47	4	772.010460	0.000052
64	39	25	65	40	25	772.011490	0.000066
64	39	26	65	40	26	772.011490	0.000066
51	45	6	52	46	6	772.021510	0.000225
51	45	7	52	46	7	772.021510	0.000225
53	44	9	54	45	9	772.032120	0.000258
53	44	10	54	45	10	772.032120	0.000258
55	43	12	56	44	12	772.042150	-0.000052
55	43	13	56	44	13	772.042150	-0.000052
57	42	15	58	43	15	772.052040	-0.000298
57	42	16	58	43	16	772.052040	-0.000298
59	41	18	60	42	18	772.062460	0.000119
59	41	19	60	42	19	772.062460	0.000119
61	40	21	62	41	21	772.072230	-0.000064
61	40	22	62	41	22	772.072230	-0.000064
63	39	24	64	40	24	772.082360	0.000050
63	39	25	64	40	25	772.082360	0.000050
65	38	27	66	39	27	772.092720	0.000206
50	45	5	51	46	5	772.092720	0.000155
65	38	28	66	39	28	772.092720	0.000206
50	45	6	51	46	6	772.092720	0.000155
67	37	30	68	38	30	772.103230	0.000144
52	44	8	53	45	8	772.103230	0.000099
67	37	31	68	38	31	772.103230	0.000144
52	44	9	53	45	9	772.103230	0.000099
54	43	11	55	44	11	772.113410	-0.000026
54	43	12	55	44	12	772.113410	-0.000026
56	42	14	57	43	14	772.123610	0.000077
56	42	15	57	43	15	772.123610	0.000077
58	41	17	59	42	17	772.133430	-0.000039
58	41	18	59	42	18	772.133430	-0.000039
60	40	20	61	41	20	772.143330	-0.000010
60	40	21	61	41	21	772.143330	-0.000010
47	46	1	48	47	1	772.153280	0.000294
62	39	23	63	40	23	772.153280	0.000047
47	46	2	48	47	2	772.153280	0.000294
62	39	24	63	40	24	772.153280	0.000047
49	45	4	50	46	4	772.163730	-0.000122
49	45	5	50	46	5	772.163730	-0.000122
51	44	7	52	45	7	772.174470	0.000067
51	44	8	52	45	8	772.174470	0.000067
53	43	10	54	44	10	772.184620	-0.000071
68	36	32	69	37	32	772.184620	0.000071
53	43	11	54	44	11	772.184620	-0.000071
68	36	33	69	37	33	772.184620	0.000071
55	42	13	56	43	13	772.194590	-0.000150
55	42	14	56	43	14	772.194590	-0.000150
57	41	16	58	42	16	772.204620	-0.000002
57	41	17	58	42	17	772.204620	-0.000002
59	40	19	60	41	19	772.214610	0.000205
59	40	20	60	41	20	772.214610	0.000205
61	39	22	62	40	22	772.224190	-0.000005
46	46	0	47	47	0	772.224190	-0.000083
61	39	23	62	40	23	772.224190	-0.000005
46	46	1	47	47	1	772.224190	-0.000083
48	45	3	49	46	3	772.235300	0.000170
48	45	4	49	46	4	772.235300	0.000170
50	44	6	51	45	6	772.245860	0.000182
50	44	7	51	45	7	772.245860	0.000182
52	43	9	53	44	9	772.256130	0.000181
52	43	10	53	44	10	772.256130	0.000181
69	35	34	70	36	34	772.266220	-0.000082
54	42	12	55	43	12	772.266220	0.000256
69	35	35	70	36	35	772.266220	-0.000082
54	42	13	55	43	13	772.266220	0.000256
56	41	15	57	42	15	772.275780	-0.000012
56	41	16	57	42	16	772.275780	-0.000012
58	40	18	59	41	18	772.285400	-0.000105
58	40	19	59	41	19	772.285400	-0.000105
60	39	21	61	40	21	772.295290	0.000108
60	39	22	61	40	22	772.295290	0.000108
62	38	24	63	39	24	772.305130	0.000189
62	38	25	63	39	25	772.305130	0.000189
47	45	2	48	46	2	772.306420	0.000003
47	45	3	48	46	3	772.306420	0.000003
64	37	27	65	38	27	772.315130	0.000197
64	37	28	65	38	28	772.315130	0.000197
49	44	5	50	45	5	772.317380	0.000422
49	44	6	50	45	6	772.317380	0.000422
66	36	30	67	37	30	772.325480	0.000129

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
66	36	31	67	37	31	772.325480	0.000129
51	43	8	52	44	8	772.327150	-0.000055
51	43	9	52	44	9	772.327150	-0.000055
68	35	33	69	36	33	772.336730	0.000295
53	42	11	54	43	11	772.336730	-0.000470
68	35	34	69	36	34	772.336730	0.000295
53	42	12	54	43	12	772.336730	-0.000470
55	41	14	56	42	14	772.347250	0.000272
55	41	15	56	42	15	772.347250	0.000272
70	34	36	71	35	36	772.348510	-0.000004
70	34	37	71	35	37	772.348510	-0.000004
57	40	17	58	41	17	772.356060	-0.000561
57	40	18	58	41	18	772.356060	-0.000561
59	39	20	60	40	20	772.366030	-0.000172
59	39	21	60	40	21	772.366030	-0.000172
61	38	23	62	39	23	772.376180	0.000352
61	38	24	62	39	24	772.376180	0.000352
46	45	1	47	46	1	772.377590	-0.000106
46	45	2	47	46	2	772.377590	-0.000106
63	37	26	64	38	26	772.385550	-0.000107
63	37	27	64	38	27	772.385550	-0.000107
48	44	4	49	45	4	772.388310	0.000070
48	44	5	49	45	5	772.388310	0.000070
50	43	7	51	44	7	772.398490	0.000016
50	43	8	51	44	8	772.398490	0.000016
67	35	32	68	36	32	772.406840	0.000193
67	35	33	68	36	33	772.406840	0.000193
52	42	10	53	43	10	772.408650	0.000213
52	42	11	53	43	11	772.408650	0.000213
54	41	13	55	42	13	772.418120	-0.000059
54	41	14	55	42	14	772.418120	-0.000059
56	40	16	57	41	16	772.427910	0.000159
56	40	17	57	41	17	772.427910	0.000159
58	39	19	59	40	19	772.437460	0.000212
58	39	20	59	40	20	772.437460	0.000212
60	38	22	61	39	22	772.446600	-0.000165
60	38	23	61	39	23	772.446600	-0.000165
45	45	0	46	46	0	772.448870	-0.000109
45	45	1	46	46	1	772.448870	-0.000109
62	37	25	63	38	25	772.456510	0.000083
62	37	26	63	38	26	772.456510	0.000083
47	44	3	48	45	3	772.460000	0.000478
47	44	4	48	45	4	772.460000	0.000478
49	43	6	50	44	6	772.469890	0.000149
49	43	7	50	44	7	772.469890	0.000149
51	42	9	52	43	9	772.479640	-0.000047
51	42	10	52	43	10	772.479640	-0.000047
55	40	15	56	41	15	772.498910	0.000004
55	40	16	56	41	16	772.498910	0.000004
57	39	18	58	40	18	772.507670	-0.000652
57	39	19	58	40	19	772.507670	-0.000652
59	38	21	60	39	21	772.517950	0.000221
59	38	22	60	39	22	772.517950	0.000221
61	37	24	62	38	24	772.527410	0.000169
61	37	25	62	38	25	772.527410	0.000169
63	36	27	64	37	27	772.537290	0.000267
63	36	28	64	37	28	772.537290	0.000267
48	43	5	49	44	5	772.541080	0.000068
48	43	6	49	44	6	772.541080	0.000068
65	35	30	66	36	30	772.547280	-0.000016
65	35	31	66	36	31	772.547280	-0.000016
50	42	8	51	43	8	772.550830	-0.000114
50	42	9	51	43	9	772.550830	-0.000114
67	34	33	68	35	33	772.558380	0.000048
67	34	34	68	35	34	772.558380	0.000048
52	41	11	53	42	11	772.560740	0.000123
52	41	12	53	42	12	772.560740	0.000123
69	33	36	70	34	36	772.570250	-0.000227
54	40	14	55	41	14	772.570250	0.000169
69	33	37	70	34	37	772.570250	-0.000227
54	40	15	55	41	15	772.570250	0.000169
56	39	17	57	40	17	772.579530	0.000112
56	39	18	57	40	18	772.579530	0.000112
58	38	20	59	39	20	772.588860	0.000140
58	38	21	59	39	21	772.588860	0.000140
60	37	23	61	38	23	772.598130	0.000036
60	37	24	61	38	24	772.598130	0.000036
45	44	1	46	45	1	772.602160	0.000084
45	44	2	46	45	2	772.602160	0.000084
47	43	4	48	44	4	772.612400	0.000104
47	43	5	48	44	5	772.612400	0.000104
49	42	7	50	43	7	772.622240	0.000040
49	42	8	50	43	8	772.622240	0.000040
66	34	32	67	35	32	772.628350	-0.000104
66	34	33	67	35	33	772.628350	-0.000104
51	41	10	52	42	10	772.631690	-0.000151
51	41	11	52	42	11	772.631690	-0.000151
53	40	13	54	41	13	772.641090	-0.000183
53	40	14	54	41	14	772.641090	-0.000183
55	39	16	56	40	16	772.649630	-0.000907

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
55	39	17	56	40	17	772.649630	-0.000907
57	38	19	58	39	19	772.659690	-0.000056
57	38	20	58	39	20	772.659690	-0.000056
59	37	22	60	38	22	772.668960	-0.000034
59	37	23	60	38	23	772.668960	-0.000034
44	44	0	45	45	0	772.673400	0.000046
44	44	1	45	45	1	772.673400	0.000046
61	36	25	62	37	25	772.678400	-0.000030
61	36	26	62	37	26	772.678400	-0.000030
46	43	3	47	44	3	772.683710	0.000140
46	43	4	47	44	4	772.683710	0.000140
48	42	6	49	43	6	772.693480	0.000011
48	42	7	49	43	7	772.693480	0.000011
50	41	9	51	42	9	772.703130	0.000045
50	41	10	51	42	10	772.703130	0.000045
67	33	34	68	34	34	772.709640	-0.000381
67	33	35	68	34	35	772.709640	-0.000381
52	40	12	53	41	12	772.712150	-0.000323
52	40	13	53	41	13	772.712150	-0.000323
56	38	18	57	39	18	772.731000	0.000201
56	38	19	57	39	19	772.731000	0.000201
60	36	24	61	37	24	772.749140	-0.000064
60	36	25	61	37	25	772.749140	-0.000064
62	35	27	63	36	27	772.758760	-0.000037
62	35	28	63	36	28	772.758760	-0.000037
47	42	5	48	43	5	772.765110	0.000375
47	42	6	48	43	6	772.765110	0.000375
64	34	30	65	35	30	772.768950	0.000003
64	34	31	65	35	31	772.768950	0.000003
49	41	8	50	42	8	772.774420	0.000086
49	41	9	50	42	9	772.774420	0.000086
66	33	33	67	34	33	772.779870	-0.000079
66	33	34	67	34	34	772.779870	-0.000079
51	40	11	52	41	11	772.783490	-0.000194
51	40	12	52	41	12	772.783490	-0.000194
68	32	36	69	33	36	772.792130	-0.000090
68	32	37	69	33	37	772.792130	-0.000090
55	38	17	56	39	17	772.802060	0.000182
55	38	18	56	39	18	772.802060	0.000182
57	37	20	58	38	20	772.811020	0.000120
57	37	21	58	38	21	772.811020	0.000120
59	36	23	60	37	23	772.820050	0.000022
59	36	24	60	37	24	772.820050	0.000022
44	43	1	45	44	1	772.826260	0.000142
44	43	2	45	44	2	772.826260	0.000142
46	42	4	47	43	4	772.835940	-0.000067
46	42	5	47	43	5	772.835940	-0.000067
48	41	7	49	42	7	772.845610	0.000025
48	41	8	49	42	8	772.845610	0.000025
65	33	32	66	34	32	772.849890	-0.000085
65	33	33	66	34	33	772.849890	-0.000085
50	40	10	51	41	10	772.854940	0.000035
50	40	11	51	41	11	772.854940	0.000035
52	39	13	53	40	13	772.864150	0.000128
52	39	14	53	40	14	772.864150	0.000128
54	38	16	55	39	16	772.873300	0.000311
54	38	17	55	39	17	772.873300	0.000311
56	37	19	57	38	19	772.881990	0.000088
56	37	20	57	38	20	772.881990	0.000088
58	36	22	59	37	22	772.890890	0.000001
58	36	23	59	37	23	772.890890	0.000001
43	43	0	44	44	0	772.897490	0.000109
43	43	1	44	44	1	772.897490	0.000109
60	35	25	61	36	25	772.900200	0.000097
60	35	26	61	36	26	772.900200	0.000097
45	42	3	46	43	3	772.907260	-0.000012
45	42	4	46	43	4	772.907260	-0.000012
47	41	6	48	42	6	772.916840	-0.000006
47	41	7	48	42	7	772.916840	-0.000006
49	40	9	50	41	9	772.926140	-0.000001
49	40	10	50	41	10	772.926140	-0.000001
66	32	34	67	33	34	772.931490	-0.000018
66	32	35	67	33	35	772.931490	-0.000018
51	39	12	52	40	12	772.935250	0.000040
51	39	13	52	40	13	772.935250	0.000040
53	38	15	54	39	15	772.944280	0.000170
53	38	16	54	39	16	772.944280	0.000170
55	37	18	56	38	18	772.952950	0.000011
55	37	19	56	38	19	772.952950	0.000011
57	36	21	58	37	21	772.961910	0.000114
57	36	22	58	37	22	772.961910	0.000114
59	35	24	60	36	24	772.971000	0.000160
59	35	25	60	36	25	772.971000	0.000160
44	42	2	45	43	2	772.977840	-0.000704
44	42	3	45	43	3	772.977840	-0.000704
46	41	5	47	42	5	772.988090	-0.000022
46	41	6	47	42	6	772.988090	-0.000022
63	33	30	64	34	30	772.990410	0.000104
63	33	31	64	34	31	772.990410	0.000104
48	40	8	49	41	8	772.997480	0.000092

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
48	40	9	49	41	9	772.997480	0.000092
65	32	33	66	33	33	773.001240	-0.000074
65	32	34	66	33	34	773.001240	-0.000074
50	39	11	51	40	11	773.006500	0.000086
50	39	12	51	40	12	773.006500	0.000086
67	31	36	68	32	36	773.013860	0.000098
67	31	37	68	32	37	773.013860	0.000098
52	38	14	53	39	14	773.015460	0.000206
52	38	15	53	39	15	773.015460	0.000206
54	37	17	55	38	17	773.024140	0.000144
54	37	18	55	38	18	773.024140	0.000144
56	36	20	57	37	20	773.032800	0.000056
56	36	21	57	37	21	773.032800	0.000056
58	35	23	59	36	23	773.041460	-0.000162
58	35	24	59	36	24	773.041460	-0.000162
43	42	1	44	43	1	773.050000	0.000187
43	42	2	44	43	2	773.050000	0.000187
45	41	4	46	42	4	773.059600	0.000222
45	41	5	46	42	5	773.059600	0.000222
64	32	32	65	33	32	773.070940	-0.000294
64	32	33	65	33	33	773.070940	-0.000294
49	39	10	50	40	10	773.077670	0.000043
49	39	11	50	40	11	773.077670	0.000043
51	38	13	52	39	13	773.086380	-0.000042
51	38	14	52	39	14	773.086380	-0.000042
53	37	16	54	38	16	773.095970	0.000880
53	37	17	54	38	17	773.095970	0.000880
55	36	19	56	37	19	773.103770	0.000047
55	36	20	56	37	20	773.103770	0.000047
57	35	22	58	36	22	773.112310	-0.000138
57	35	23	58	36	23	773.112310	-0.000138
59	34	25	60	35	25	773.121170	-0.000290
42	42	0	43	43	0	773.121170	0.000088
59	34	26	60	35	26	773.121170	-0.000290
42	42	1	43	43	1	773.121170	0.000088
44	41	3	45	42	3	773.130850	0.000206
44	41	4	45	42	4	773.130850	0.000206
46	40	6	47	41	6	773.139950	0.000071
46	40	7	47	41	7	773.139950	0.000071
65	31	34	66	32	34	773.152680	-0.000078
65	31	35	66	32	35	773.152680	-0.000078
50	38	12	51	39	12	773.157790	0.000189
50	38	13	51	39	13	773.157790	0.000189
52	37	15	53	38	15	773.166080	-0.000118
52	37	16	53	38	16	773.166080	-0.000118
56	35	21	57	36	21	773.183500	0.000172
56	35	22	57	36	22	773.183500	0.000172
60	33	27	61	34	27	773.201560	0.000161
43	41	2	44	42	2	773.201560	-0.000347
60	33	28	61	34	28	773.201560	0.000161
43	41	3	44	42	3	773.201560	-0.000347
62	32	30	63	33	30	773.211260	-0.000112
45	40	5	46	41	5	773.211260	0.000114
62	32	31	63	33	31	773.211260	-0.000112
45	40	6	46	41	6	773.211260	0.000114
47	39	8	48	40	8	773.220150	0.000057
47	39	9	48	40	9	773.220150	0.000057
64	31	33	65	32	33	773.222490	0.000054
64	31	34	65	32	34	773.222490	0.000054
49	38	11	50	39	11	773.228780	-0.000015
49	38	12	50	39	12	773.228780	-0.000015
66	30	36	67	31	36	773.235080	-0.000039
66	30	37	67	31	37	773.235080	-0.000039
51	37	14	52	38	14	773.237560	0.000232
51	37	15	52	38	15	773.237560	0.000232
55	35	20	56	36	20	773.254320	0.000077
55	35	21	56	36	21	773.254320	0.000077
57	34	23	58	35	23	773.263190	0.000309
57	34	24	58	35	24	773.263190	0.000309
42	41	1	43	42	1	773.273040	-0.000130
42	41	2	43	42	2	773.273040	-0.000130
44	40	4	45	41	4	773.281730	-0.000672
44	40	5	45	41	5	773.281730	-0.000672
63	31	32	64	32	32	773.292150	-0.000083
63	31	33	64	32	33	773.292150	-0.000083
48	38	10	49	39	10	773.300100	0.000101
48	38	11	49	39	11	773.300100	0.000101
50	37	13	51	38	13	773.308710	0.000229
50	37	14	51	38	14	773.308710	0.000229
54	35	19	55	36	19	773.325510	0.000320
54	35	20	55	36	20	773.325510	0.000320
56	34	22	57	35	22	773.333670	-0.000009
56	34	23	57	35	23	773.333670	-0.000009
58	33	25	59	34	25	773.342400	-0.000089
58	33	26	59	34	26	773.342400	-0.000089
41	41	0	42	42	0	773.344220	-0.000211
41	41	1	42	42	1	773.344220	-0.000211
43	40	3	44	41	3	773.353610	-0.000051
43	40	4	44	41	4	773.353610	-0.000051
45	39	6	46	40	6	773.362270	-0.000306

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
45	39	7	46	40	7	773.362270	-0.000306
47	38	9	48	39	9	773.371230	0.000014
47	38	10	48	39	10	773.371230	0.000014
64	30	34	65	31	34	773.373780	-0.000009
64	30	35	65	31	35	773.373780	-0.000009
49	37	12	50	38	12	773.379760	0.000112
49	37	13	50	38	13	773.379760	0.000112
53	35	18	54	36	18	773.396290	0.000112
53	35	19	54	36	19	773.396290	0.000112
55	34	21	56	35	21	773.404310	-0.000209
55	34	22	56	35	22	773.404310	-0.000209
57	33	24	58	34	24	773.413160	0.000035
57	33	25	58	34	25	773.413160	0.000035
42	40	2	43	41	2	773.424910	-0.000009
42	40	3	43	41	3	773.424910	-0.000009
61	31	30	62	32	30	773.432150	-0.000007
61	31	31	62	32	31	773.432150	-0.000007
44	39	5	45	40	5	773.433880	0.000054
44	39	6	45	40	6	773.433880	0.000054
63	30	33	64	31	33	773.443250	-0.000071
46	38	8	47	39	8	773.443250	0.000807
63	30	34	64	31	34	773.443250	-0.000071
46	38	9	47	39	9	773.443250	0.000807
48	37	11	49	38	11	773.451010	0.000179
48	37	12	49	38	12	773.451010	0.000179
65	29	36	66	30	36	773.456180	-0.000158
65	29	37	66	30	37	773.456180	-0.000158
50	36	14	51	37	14	773.459200	0.000152
50	36	15	51	37	15	773.459200	0.000152
52	35	17	53	36	17	773.467290	0.000092
52	35	18	53	36	18	773.467290	0.000092
54	34	20	55	35	20	773.475440	0.000044
54	34	21	55	35	21	773.475440	0.000044
56	33	23	57	34	23	773.483820	-0.000002
56	33	24	57	34	24	773.483820	-0.000002
41	40	1	42	41	1	773.496290	0.000110
41	40	2	42	41	2	773.496290	0.000110
43	39	4	44	40	4	773.505220	0.000140
43	39	5	44	40	5	773.505220	0.000140
62	30	32	63	31	32	773.512910	-0.000083
62	30	33	63	31	33	773.512910	-0.000083
47	37	10	48	38	10	773.522220	0.000190
47	37	11	48	38	11	773.522220	0.000190
49	36	13	50	37	13	773.530220	0.000034
49	36	14	50	37	14	773.530220	0.000034
51	35	16	52	36	16	773.538320	0.000066
51	35	17	52	36	17	773.538320	0.000066
53	34	19	54	35	19	773.546400	0.000080
53	34	20	54	35	20	773.546400	0.000080
55	33	22	56	34	22	773.554820	0.000251
55	33	23	56	34	23	773.554820	0.000251
57	32	25	58	33	25	773.563150	-0.000043
57	32	26	58	33	26	773.563150	-0.000043
40	40	0	41	41	0	773.566940	-0.000499
40	40	1	41	41	1	773.566940	-0.000499
44	38	6	45	39	6	773.584860	-0.000060
44	38	7	45	39	7	773.584860	-0.000060
63	29	34	64	30	34	773.594430	-0.000201
63	29	35	64	30	35	773.594430	-0.000201
48	36	12	49	37	12	773.601720	0.000371
48	36	13	49	37	13	773.601720	0.000371
50	35	15	51	36	15	773.609030	-0.000290
50	35	16	51	36	16	773.609030	-0.000290
52	34	18	53	35	18	773.617520	0.000236
52	34	19	53	35	19	773.617520	0.000236
54	33	21	55	34	21	773.625660	0.000291
54	33	22	55	34	22	773.625660	0.000291
56	32	24	57	33	24	773.634300	0.000528
56	32	25	57	33	25	773.634300	0.000528
58	31	27	59	32	27	773.642710	-0.000043
58	31	28	59	32	28	773.642710	-0.000043
41	39	2	42	40	2	773.647650	0.000057
41	39	3	42	40	3	773.647650	0.000057
60	30	30	61	31	30	773.652630	-0.000046
60	30	31	61	31	31	773.652630	-0.000046
43	38	5	44	39	5	773.656220	0.000056
43	38	6	44	39	6	773.656220	0.000056
45	37	8	46	38	8	773.665210	0.000752
45	37	9	46	38	9	773.665210	0.000752
47	36	11	48	37	11	773.672580	0.000065
47	36	12	48	37	12	773.672580	0.000065
64	28	36	65	29	36	773.677500	0.000055
64	28	37	65	29	37	773.677500	0.000055
49	35	14	50	36	14	773.680530	0.000100
49	35	15	50	36	15	773.680530	0.000100
51	34	17	52	35	17	773.688460	0.000184
51	34	18	52	35	18	773.688460	0.000184
53	33	20	54	34	20	773.696340	0.000125
53	33	21	54	34	21	773.696340	0.000125
55	32	23	56	33	23	773.704490	0.000073

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
55	32	24	56	33	24	773.704490	0.000073
57	31	26	58	32	26	773.713150	0.000017
57	31	27	58	32	27	773.713150	0.000017
40	39	1	41	40	1	773.718780	-0.000069
40	39	2	41	40	2	773.718780	-0.000069
42	38	4	43	39	4	773.727630	0.000207
42	38	5	43	39	5	773.727630	0.000207
61	29	32	62	30	32	773.733440	-0.000077
61	29	33	62	30	33	773.733440	-0.000077
44	37	7	45	38	7	773.735770	0.000079
44	37	8	45	38	8	773.735770	0.000079
46	36	10	47	37	10	773.743590	-0.000121
46	36	11	47	37	11	773.743590	-0.000121
48	35	13	49	36	13	773.751620	0.000066
48	35	14	49	36	14	773.751620	0.000066
50	34	16	51	35	16	773.759290	-0.000023
50	34	17	51	35	17	773.759290	-0.000023
52	33	19	53	34	19	773.767120	0.000007
52	33	20	53	34	20	773.767120	0.000007
54	32	22	55	33	22	773.775300	0.000173
54	32	23	55	33	23	773.775300	0.000173
56	31	25	57	32	25	773.783550	-0.000029
56	31	26	57	32	26	773.783550	-0.000029
39	39	0	40	40	0	773.790200	0.000097
39	39	1	40	40	1	773.790200	0.000097
41	38	3	42	39	3	773.798690	0.000020
41	38	4	42	39	4	773.798690	0.000020
43	37	6	44	38	6	773.807190	0.000263
43	37	7	44	38	7	773.807190	0.000263
62	28	34	63	29	34	773.815130	-0.000190
45	36	9	46	37	9	773.815130	0.000225
62	28	35	63	29	35	773.815130	-0.000190
45	36	10	46	37	10	773.815130	0.000225
47	35	12	48	36	12	773.822740	0.000042
47	35	13	48	36	13	773.822740	0.000042
49	34	15	50	35	15	773.830320	-0.000045
49	34	16	50	35	16	773.830320	-0.000045
51	33	18	52	34	18	773.838200	0.000150
51	33	19	52	34	19	773.838200	0.000150
53	32	21	54	33	21	773.845820	-0.000070
53	32	22	54	33	22	773.845820	-0.000070
55	31	24	56	32	24	773.854020	-0.000086
55	31	25	56	32	25	773.854020	-0.000086
57	30	27	58	31	27	773.862620	-0.000372
57	30	28	58	31	28	773.862620	-0.000372
40	38	2	41	39	2	773.870030	0.000103
40	38	3	41	39	3	773.870030	0.000103
59	29	30	60	30	30	773.872800	-0.000140
59	29	31	60	30	31	773.872800	-0.000140
42	37	5	43	38	5	773.878420	0.000254
42	37	6	43	38	6	773.878420	0.000254
61	28	33	62	29	33	773.884610	0.000100
61	28	34	62	29	34	773.884610	0.000100
44	36	8	45	37	8	773.886370	0.000251
44	36	9	45	37	9	773.886370	0.000251
46	35	11	47	36	11	773.893780	-0.000075
46	35	12	47	36	12	773.893780	-0.000075
63	27	36	64	28	36	773.898610	0.000108
63	27	37	64	28	37	773.898610	0.000108
48	34	14	49	35	14	773.901480	0.000028
48	34	15	49	35	15	773.901480	0.000028
50	33	17	51	34	17	773.909100	0.000083
50	33	18	51	34	18	773.909100	0.000083
52	32	20	53	33	20	773.916410	-0.000289
52	32	21	53	33	21	773.916410	-0.000289
54	31	23	55	32	23	773.924750	0.000055
54	31	24	55	32	24	773.924750	0.000055
56	30	26	57	31	26	773.933110	-0.000170
56	30	27	57	31	27	773.933110	-0.000170
39	38	1	40	39	1	773.941190	0.000015
39	38	2	40	39	2	773.941190	0.000015
41	37	4	42	38	4	773.949620	0.000210
41	37	5	42	38	5	773.949620	0.000210
60	28	32	61	29	32	773.953790	-0.000068
60	28	33	61	29	33	773.953790	-0.000068
43	36	7	44	37	7	773.956680	-0.000660
43	36	8	44	37	8	773.956680	-0.000660
45	35	10	46	36	10	773.964940	-0.000098
45	35	11	46	36	11	773.964940	-0.000098
47	34	13	48	35	13	773.972670	0.000106
47	34	14	48	35	14	773.972670	0.000106
49	33	16	50	34	16	773.980000	-0.000029
49	33	17	50	34	17	773.980000	-0.000029
51	32	19	52	33	19	773.987380	-0.000180
51	32	20	52	33	20	773.987380	-0.000180
53	31	22	54	32	22	773.995100	-0.000247
53	31	23	54	32	23	773.995100	-0.000247
55	30	25	56	31	25	774.003530	-0.000124
55	30	26	56	31	26	774.003530	-0.000124
38	38	0	39	39	0	774.012330	-0.000094

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
38	38	1	39	39	1	774.012330	-0.000094
40	37	3	41	38	3	774.020690	0.000032
40	37	4	41	38	4	774.020690	0.000032
42	36	6	43	37	6	774.028750	0.000182
42	36	7	43	37	7	774.028750	0.000182
61	27	34	62	28	34	774.036010	0.000120
44	35	9	45	36	9	774.036010	-0.000216
61	27	35	62	28	35	774.036010	0.000120
44	35	10	45	36	10	774.036010	-0.000216
46	34	12	47	35	12	774.043630	-0.000060
46	34	13	47	35	13	774.043630	-0.000060
48	33	15	49	34	15	774.051080	0.000021
48	33	16	49	34	16	774.051080	0.000021
50	32	18	51	33	18	774.058420	-0.000041
50	32	19	51	33	19	774.058420	-0.000041
52	31	21	53	32	21	774.066170	0.000103
52	31	22	53	32	22	774.066170	0.000103
54	30	24	55	31	24	774.074050	-0.000066
54	30	25	55	31	25	774.074050	-0.000066
56	29	27	57	30	27	774.082550	-0.000381
56	29	28	57	30	28	774.082550	-0.000381
58	28	30	59	29	30	774.092880	-0.000092
58	28	31	59	29	31	774.092880	-0.000092
41	36	5	42	37	5	774.099390	-0.000416
41	36	6	42	37	6	774.099390	-0.000416
60	27	33	61	28	33	774.104870	-0.000002
60	27	34	61	28	34	774.104870	-0.000002
43	35	8	44	36	8	774.107430	-0.000001
43	35	9	44	36	9	774.107430	-0.000001
45	34	11	46	35	11	774.115070	0.000226
45	34	12	46	35	12	774.115070	0.000226
47	33	14	48	34	14	774.122120	-0.000006
47	33	15	48	34	15	774.122120	-0.000006
49	32	17	50	33	17	774.129390	-0.000015
49	32	18	50	33	18	774.129390	-0.000015
51	31	20	52	32	20	774.137090	0.000248
51	31	21	52	32	21	774.137090	0.000248
53	30	23	54	31	23	774.144590	-0.000059
53	30	24	54	31	24	774.144590	-0.000059
55	29	26	56	30	26	774.153560	0.000426
55	29	27	56	30	27	774.153560	0.000426
38	37	1	39	38	1	774.162980	-0.000170
38	37	2	39	38	2	774.162980	-0.000170
40	36	4	41	37	4	774.171020	-0.000025
40	36	5	41	37	5	774.171020	-0.000025
59	27	32	60	28	32	774.174020	0.000000
59	27	33	60	28	33	774.174020	0.000000
42	35	7	43	36	7	774.178620	-0.000027
42	35	8	43	36	8	774.178620	-0.000027
44	34	10	45	35	10	774.186040	0.000030
44	34	11	45	35	11	774.186040	0.000030
46	33	13	47	34	13	774.193150	-0.000070
46	33	14	47	34	14	774.193150	-0.000070
48	32	16	49	33	16	774.200250	-0.000134
48	32	17	49	33	17	774.200250	-0.000134
50	31	19	51	32	19	774.207720	0.000054
50	31	20	51	32	20	774.207720	0.000054
52	30	22	53	31	22	774.215080	-0.000165
52	30	23	53	31	23	774.215080	-0.000165
54	29	25	55	30	25	774.223270	-0.000162
54	29	26	55	30	26	774.223270	-0.000162
37	37	0	38	38	0	774.234420	0.000023
37	37	1	38	38	1	774.234420	0.000023
39	36	3	40	37	3	774.242540	0.000254
39	36	4	40	37	4	774.242540	0.000254
41	35	6	42	36	6	774.249970	0.000104
41	35	7	42	36	7	774.249970	0.000104
60	26	34	61	27	34	774.256360	-0.000027
60	26	35	61	27	35	774.256360	-0.000027
45	33	12	46	34	12	774.264380	0.000040
45	33	13	46	34	13	774.264380	0.000040
47	32	15	48	33	15	774.271660	0.000253
47	32	16	48	33	16	774.271660	0.000253
49	31	18	50	32	18	774.278580	0.000046
49	31	19	50	32	19	774.278580	0.000046
51	30	21	52	31	21	774.285720	-0.000191
51	30	22	52	31	22	774.285720	-0.000191
55	28	27	56	29	27	774.302580	-0.000020
55	28	28	56	29	28	774.302580	-0.000020
57	27	30	58	28	30	774.312810	0.000024
38	36	2	39	37	2	774.312810	-0.000719
57	27	31	58	28	31	774.312810	0.000024
38	36	3	39	37	3	774.312810	-0.000719
40	35	5	41	36	5	774.321330	0.000230
40	35	6	41	36	6	774.321330	0.000230
59	26	33	60	27	33	774.325380	0.000261
59	26	34	60	27	34	774.325380	0.000261
42	34	8	43	35	8	774.328620	0.000231
42	34	9	43	35	9	774.328620	0.000231
46	32	14	47	33	14	774.342300	-0.000154

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
46	32	15	47	33	15	774.342300	-0.000154
48	31	17	49	32	17	774.349860	0.000409
48	31	18	49	32	18	774.349860	0.000409
50	30	20	51	31	20	774.356730	0.000089
50	30	21	51	31	21	774.356730	0.000089
52	29	23	53	30	23	774.364350	0.000073
52	29	24	53	30	24	774.364350	0.000073
54	28	26	55	29	26	774.372930	0.000228
54	28	27	55	29	27	774.372930	0.000228
37	36	1	38	37	1	774.384580	-0.000191
37	36	2	38	37	2	774.384580	-0.000191
39	35	4	40	36	4	774.392300	-0.000028
39	35	5	40	36	5	774.392300	-0.000028
58	26	32	59	27	32	774.393940	-0.000099
58	26	33	59	27	33	774.393940	-0.000099
41	34	7	42	35	7	774.399780	0.000180
41	34	8	42	35	8	774.399780	0.000180
43	33	10	44	34	10	774.406850	0.000213
43	33	11	44	34	11	774.406850	0.000213
45	32	13	46	33	13	774.413310	-0.000219
45	32	14	46	33	14	774.413310	-0.000219
47	31	16	48	32	16	774.420790	0.000379
47	31	17	48	32	17	774.420790	0.000379
49	30	19	50	31	19	774.427780	0.000358
49	30	20	50	31	20	774.427780	0.000358
51	29	22	52	30	22	774.434740	-0.000079
51	29	23	52	30	23	774.434740	-0.000079
53	28	25	54	29	25	774.442660	-0.000250
53	28	26	54	29	26	774.442660	-0.000250
38	35	3	39	36	3	774.463360	-0.000205
38	35	4	39	36	4	774.463360	-0.000205
40	34	6	41	35	6	774.471300	0.000482
40	34	7	41	35	7	774.471300	0.000482
44	32	12	45	33	12	774.484660	0.000025
44	32	13	45	33	13	774.484660	0.000025
46	31	15	47	32	15	774.491490	0.000094
46	31	16	47	32	16	774.491490	0.000094
48	30	18	49	31	18	774.498510	0.000251
48	30	19	49	31	19	774.498510	0.000251
50	29	21	51	30	21	774.505510	0.000072
50	29	22	51	30	22	774.505510	0.000072
52	28	24	53	29	24	774.513130	-0.000083
52	28	25	53	29	25	774.513130	-0.000083
54	27	27	55	28	27	774.522040	0.000034
54	27	28	55	28	28	774.522040	0.000034
56	26	30	57	27	30	774.532340	-0.000086
56	26	31	57	27	31	774.532340	-0.000086
37	35	2	38	36	2	774.534680	-0.000126
37	35	3	38	36	3	774.534680	-0.000126
39	34	5	40	35	5	774.542260	0.000219
39	34	6	40	35	6	774.542260	0.000219
58	25	33	59	26	33	774.545280	-0.000039
58	25	34	59	26	34	774.545280	-0.000039
43	32	11	44	33	11	774.555750	-0.000007
43	32	12	44	33	12	774.555750	-0.000007
45	31	14	46	32	14	774.562290	-0.000143
45	31	15	46	32	15	774.562290	-0.000143
47	30	17	48	31	17	774.569210	0.000057
47	30	18	48	31	18	774.569210	0.000057
49	29	20	50	30	20	774.576120	0.000010
49	29	21	50	30	21	774.576120	0.000010
51	28	23	52	29	23	774.583480	-0.000119
51	28	24	52	29	24	774.583480	-0.000119
53	27	26	54	28	26	774.592040	0.000038
53	27	27	54	28	27	774.592040	0.000038
36	35	1	37	36	1	774.606070	0.000025
36	35	2	37	36	2	774.606070	0.000025
38	34	4	39	35	4	774.613870	0.000604
57	25	32	58	26	32	774.613870	-0.000107
38	34	5	39	35	5	774.613870	0.000604
57	25	33	58	26	33	774.613870	-0.000107
40	33	7	41	34	7	774.620210	0.000016
40	33	8	41	34	8	774.620210	0.000016
42	32	10	43	33	10	774.626880	-0.000028
42	32	11	43	33	11	774.626880	-0.000028
44	31	13	45	32	13	774.633480	-0.000010
44	31	14	45	32	14	774.633480	-0.000010
46	30	16	47	31	16	774.640160	0.000078
46	30	17	47	31	17	774.640160	0.000078
48	29	19	49	30	19	774.646940	0.000091
48	29	20	49	30	20	774.646940	0.000091
50	28	22	51	29	22	774.653720	-0.000355
50	28	23	51	29	23	774.653720	-0.000355
52	27	25	53	28	25	774.662040	-0.000067
52	27	26	53	28	26	774.662040	-0.000067
35	35	0	36	36	0	774.677510	0.000221
35	35	1	36	36	1	774.677510	0.000221
37	34	3	38	35	3	774.684780	0.000277
37	34	4	38	35	4	774.684780	0.000277
39	33	6	40	34	6	774.690940	-0.000469

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
39	33	7	40	34	7	774.690940	-0.000469
41	32	9	42	33	9	774.697920	-0.000152
41	32	10	42	33	10	774.697920	-0.000152
43	31	12	44	32	12	774.704820	0.000247
43	31	13	44	32	13	774.704820	0.000247
45	30	15	46	31	15	774.711060	0.000012
45	30	16	46	31	16	774.711060	0.000012
47	29	18	48	30	18	774.717300	-0.000351
47	29	19	48	30	19	774.717300	-0.000351
49	28	21	50	29	21	774.724710	0.000087
49	28	22	50	29	22	774.724710	0.000087
51	27	24	52	28	24	774.732340	0.000027
51	27	25	52	28	25	774.732340	0.000027
53	26	27	54	27	27	774.741220	0.000048
53	26	28	54	27	28	774.741220	0.000048
55	25	30	56	26	30	774.751710	-0.000199
55	25	31	56	26	31	774.751710	-0.000199
36	34	2	37	35	2	774.755980	0.000241
36	34	3	37	35	3	774.755980	0.000241
38	33	5	39	34	5	774.762690	0.000062
38	33	6	39	34	6	774.762690	0.000062
57	24	33	58	25	33	774.765580	0.000057
57	24	34	58	25	34	774.765580	0.000057
40	32	8	41	33	8	774.769370	0.000119
40	32	9	41	33	9	774.769370	0.000119
42	31	11	43	32	11	774.775950	0.000258
42	31	12	43	32	12	774.775950	0.000258
44	30	14	45	31	14	774.782120	0.000069
44	30	15	45	31	15	774.782120	0.000069
46	29	17	47	30	17	774.788560	0.000059
46	29	18	47	30	18	774.788560	0.000059
48	28	20	49	29	20	774.795250	-0.000004
48	28	21	49	29	21	774.795250	-0.000004
50	27	23	51	28	23	774.802450	-0.000172
50	27	24	51	28	24	774.802450	-0.000172
52	26	26	53	27	26	774.811060	0.000022
52	26	27	53	27	27	774.811060	0.000022
35	34	1	36	35	1	774.827160	0.000189
35	34	2	36	35	2	774.827160	0.000189
37	33	4	38	34	4	774.833950	0.000105
37	33	5	38	34	5	774.833950	0.000105
39	32	7	40	33	7	774.840510	0.000070
39	32	8	40	33	8	774.840510	0.000070
41	31	10	42	32	10	774.846890	0.000065
41	31	11	42	32	11	774.846890	0.000065
43	30	13	44	31	13	774.852450	-0.000645
43	30	14	44	31	14	774.852450	-0.000645
45	29	16	46	30	16	774.859500	0.000100
45	29	17	46	30	17	774.859500	0.000100
47	28	19	48	29	19	774.865860	-0.000083
47	28	20	48	29	20	774.865860	-0.000083
49	27	22	50	28	22	774.873090	0.000076
49	27	23	50	28	23	774.873090	0.000076
51	26	25	52	27	25	774.881160	0.000132
51	26	26	52	27	26	774.881160	0.000132
34	34	0	35	35	0	774.898400	0.000194
34	34	1	35	35	1	774.898400	0.000194
36	33	3	37	34	3	774.905220	0.000141
36	33	4	37	34	4	774.905220	0.000141
38	32	6	39	33	6	774.911720	0.000075
38	32	7	39	33	7	774.911720	0.000075
40	31	9	41	32	9	774.918050	0.000078
40	31	10	41	32	10	774.918050	0.000078
42	30	12	43	31	12	774.924430	0.000265
42	30	13	43	31	13	774.924430	0.000265
44	29	15	45	30	15	774.930390	0.000048
44	29	16	45	30	16	774.930390	0.000048
46	28	18	47	29	18	774.937090	0.000387
46	28	19	47	29	19	774.937090	0.000387
48	27	21	49	28	21	774.943390	-0.000111
48	27	22	49	28	22	774.943390	-0.000111
50	26	24	51	27	24	774.951200	0.000076
50	26	25	51	27	25	774.951200	0.000076
52	25	27	53	26	27	774.960490	0.000366
52	25	28	53	26	28	774.960490	0.000366
54	24	30	55	25	30	774.971450	0.000167
54	24	31	55	25	31	774.971450	0.000167
35	33	2	36	34	2	774.976380	0.000076
35	33	3	36	34	3	774.976380	0.000076
37	32	5	38	33	5	774.983190	0.000328
37	32	6	38	33	6	774.983190	0.000328
56	23	33	57	24	33	774.985850	0.000006
56	23	34	57	24	34	774.985850	0.000006
39	31	8	40	32	8	774.989330	0.000187
39	31	9	40	32	9	774.989330	0.000187
41	30	11	42	31	11	774.995490	0.000232
41	30	12	42	31	12	774.995490	0.000232
43	29	14	44	30	14	775.001440	0.000121
43	29	15	44	30	15	775.001440	0.000121
45	28	17	46	29	17	775.007350	-0.000155

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
45	28	18	46	29	18	775.007350	-0.000155
47	27	20	48	28	20	775.014090	0.000024
47	27	21	48	28	21	775.014090	0.000024
49	26	23	50	27	23	775.021470	0.000136
49	26	24	50	27	24	775.021470	0.000136
51	25	26	52	26	26	775.030150	0.000318
51	25	27	52	26	27	775.030150	0.000318
34	33	1	35	34	1	775.047820	0.000286
34	33	2	35	34	2	775.047820	0.000286
36	32	4	37	33	4	775.054170	0.000095
36	32	5	37	33	5	775.054170	0.000095
38	31	7	39	32	7	775.060460	0.000128
38	31	8	39	32	8	775.060460	0.000128
40	30	10	41	31	10	775.066500	0.000119
40	30	11	41	31	11	775.066500	0.000119
42	29	13	43	30	13	775.072470	0.000124
42	29	14	43	30	14	775.072470	0.000124
44	28	16	45	29	16	775.078930	0.000552
44	28	17	45	29	17	775.078930	0.000552
46	27	19	47	28	19	775.084620	-0.000078
46	27	20	47	28	20	775.084620	-0.000078
48	26	22	49	27	22	775.091560	-0.000092
48	26	23	49	27	23	775.091560	-0.000092
50	25	25	51	26	25	775.099690	0.000003
50	25	26	51	26	26	775.099690	0.000003
33	33	0	34	34	0	775.118940	0.000169
33	33	1	34	34	1	775.118940	0.000169
35	32	3	36	33	3	775.125600	0.000306
35	32	4	36	33	4	775.125600	0.000306
37	31	6	38	32	6	775.131540	0.000018
37	31	7	38	32	7	775.131540	0.000018
39	30	9	40	31	9	775.137570	0.000043
39	30	10	40	31	10	775.137570	0.000043
41	29	12	42	30	12	775.143460	0.000066
41	29	13	42	30	13	775.143460	0.000066
43	28	15	44	29	15	775.149320	0.000033
43	28	16	44	29	16	775.149320	0.000033
45	27	18	46	28	18	775.155300	-0.000112
45	27	19	46	28	19	775.155300	-0.000112
47	26	21	48	27	21	775.161930	-0.000131
47	26	22	48	27	22	775.161930	-0.000131
49	25	24	50	26	24	775.169630	-0.000038
49	25	25	50	26	25	775.169630	-0.000038
51	24	27	52	25	27	775.178880	0.000002
51	24	28	52	25	28	775.178880	0.000002
53	23	30	54	24	30	775.190660	0.000041
53	23	31	54	24	31	775.190660	0.000041
34	32	2	35	33	2	775.196710	0.000187
34	32	3	35	33	3	775.196710	0.000187
36	31	5	37	32	5	775.202690	-0.000041
36	31	6	37	32	6	775.202690	-0.000041
38	30	8	39	31	8	775.208720	0.000031
38	30	9	39	31	9	775.208720	0.000031
40	29	11	41	30	11	775.214650	0.000172
40	29	12	41	30	12	775.214650	0.000172
42	28	14	43	29	14	775.220520	0.000278
42	28	15	43	29	15	775.220520	0.000278
44	27	17	45	28	17	775.226230	0.000056
44	27	18	45	28	18	775.226230	0.000056
46	26	20	47	27	20	775.232740	0.000190
46	26	21	47	27	21	775.232740	0.000190
48	25	23	49	26	23	775.239850	0.000080
48	25	24	49	26	24	775.239850	0.000080
50	24	26	51	25	26	775.248550	0.000135
50	24	27	51	25	27	775.248550	0.000135
33	32	1	34	33	1	775.268010	0.000259
33	32	2	34	33	2	775.268010	0.000259
35	31	4	36	32	4	775.273970	0.000030
35	31	5	36	32	5	775.273970	0.000030
37	30	7	38	31	7	775.280020	0.000160
37	30	8	38	31	8	775.280020	0.000160
39	29	10	40	30	10	775.285690	0.000105
39	29	11	40	30	11	775.285690	0.000105
41	28	13	42	29	13	775.291360	0.000125
41	28	14	42	29	14	775.291360	0.000125
43	27	16	44	28	16	775.296640	-0.000360
43	27	17	44	28	17	775.296640	-0.000360
45	26	19	46	27	19	775.303090	-0.000042
45	26	20	46	27	20	775.303090	-0.000042
47	25	22	48	26	22	775.310200	0.000207
47	25	23	48	26	23	775.310200	0.000207
49	24	25	50	25	25	775.318470	0.000351
49	24	26	50	25	26	775.318470	0.000351
32	32	0	33	33	0	775.339130	0.000154
32	32	1	33	33	1	775.339130	0.000154
34	31	3	35	32	3	775.345190	0.000029
34	31	4	35	32	4	775.345190	0.000029
36	30	6	37	31	6	775.351100	0.000051
36	30	7	37	31	7	775.351100	0.000051
38	29	9	39	30	9	775.356780	0.000069

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
38	29	10	39	30	10	775.356780	0.000069
40	28	12	41	29	12	775.362540	0.000269
40	28	13	41	29	13	775.362540	0.000269
42	27	15	43	28	15	775.367840	-0.000038
42	27	16	43	28	16	775.367840	-0.000038
44	26	18	45	27	18	775.373620	-0.000163
44	26	19	45	27	19	775.373620	-0.000163
46	25	21	47	26	21	775.380270	-0.000038
46	25	22	47	26	22	775.380270	-0.000038
50	23	27	51	24	27	775.397630	0.000152
50	23	28	51	24	28	775.397630	0.000152
52	22	30	53	23	30	775.410350	0.000367
52	22	31	53	23	31	775.410350	0.000367
33	31	2	34	32	2	775.416500	0.000119
33	31	3	34	32	3	775.416500	0.000119
35	30	5	36	31	5	775.422330	0.000080
35	30	6	36	31	6	775.422330	0.000080
37	29	8	38	30	8	775.427630	-0.000234
37	29	9	38	30	9	775.427630	-0.000234
39	28	11	40	29	11	775.433510	0.000173
39	28	12	40	29	12	775.433510	0.000173
41	27	14	42	28	14	775.438730	-0.000079
41	27	15	42	28	15	775.438730	-0.000079
43	26	17	44	27	17	775.443920	-0.000582
43	26	18	44	27	18	775.443920	-0.000582
45	25	20	46	26	20	775.450710	-0.000015
45	25	21	46	26	21	775.450710	-0.000015
47	24	23	48	25	23	775.458100	0.000155
47	24	24	48	25	24	775.458100	0.000155
49	23	26	50	24	26	775.467040	0.000216
49	23	27	50	24	27	775.467040	0.000216
32	31	1	33	32	1	775.487800	0.000190
32	31	2	33	32	2	775.487800	0.000190
34	30	4	35	31	4	775.493470	0.000015
34	30	5	35	31	5	775.493470	0.000015
36	29	7	37	30	7	775.499150	0.000115
36	29	8	37	30	8	775.499150	0.000115
38	28	10	39	29	10	775.504120	-0.000310
38	28	11	39	29	11	775.504120	-0.000310
42	26	16	43	27	16	775.515160	-0.000134
42	26	17	43	27	17	775.515160	-0.000134
44	25	19	45	26	19	775.521300	0.000064
44	25	20	45	26	20	775.521300	0.000064
46	24	22	47	25	22	775.528160	0.000115
46	24	23	47	25	23	775.528160	0.000115
48	23	25	49	24	25	775.536760	0.000423
48	23	26	49	24	26	775.536760	0.000423
31	31	0	32	32	0	775.559000	0.000170
31	31	1	32	32	1	775.559000	0.000170
33	30	3	34	31	3	775.564610	-0.000057
33	30	4	34	31	4	775.564610	-0.000057
35	29	6	36	30	6	775.570290	0.000079
35	29	7	36	30	7	775.570290	0.000079
37	28	9	38	29	9	775.575530	-0.000020
37	28	10	38	29	10	775.575530	-0.000020
39	27	12	40	28	12	775.580740	-0.000049
39	27	13	40	28	13	775.580740	-0.000049
41	26	15	42	27	15	775.585780	-0.000352
41	26	16	42	27	16	775.585780	-0.000352
43	25	18	44	26	18	775.591920	0.000092
43	25	19	44	26	19	775.591920	0.000092
45	24	21	46	25	21	775.598130	-0.000141
45	24	22	46	25	22	775.598130	-0.000141
47	23	24	48	24	24	775.606030	0.000009
47	23	25	48	24	25	775.606030	0.000009
49	22	27	50	23	27	775.615940	-0.000025
49	22	28	50	23	28	775.615940	-0.000025
51	21	30	52	22	30	775.629460	-0.000011
51	21	31	52	22	31	775.629460	-0.000011
32	30	2	33	31	2	775.635810	-0.000074
32	30	3	33	31	3	775.635810	-0.000074
34	29	5	35	30	5	775.641460	0.000056
34	29	6	35	30	6	775.641460	0.000056
36	28	8	37	29	8	775.646570	-0.000113
36	28	9	37	29	9	775.646570	-0.000113
38	27	11	39	28	11	775.651690	-0.000146
38	27	12	39	28	12	775.651690	-0.000146
40	26	14	41	27	14	775.657020	-0.000003
40	26	15	41	27	15	775.657020	-0.000003
42	25	17	43	26	17	775.662510	0.000013
42	25	18	43	26	18	775.662510	0.000013
44	24	20	45	25	20	775.668620	0.000028
44	24	21	45	25	21	775.668620	0.000028
46	23	23	47	24	23	775.676100	0.000242
46	23	24	47	24	24	775.676100	0.000242
48	22	26	49	23	26	775.685080	0.000001
48	22	27	49	23	27	775.685080	0.000001
31	30	1	32	31	1	775.707030	-0.000076
31	30	2	32	31	2	775.707030	-0.000076
33	29	4	34	30	4	775.712680	0.000067

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Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
33	29	5	34	30	5	775.712680	0.000067
35	28	7	36	29	7	775.717700	-0.000150
35	28	8	36	29	8	775.717700	-0.000150
37	27	10	38	28	10	775.722990	0.000074
37	27	11	38	28	11	775.722990	0.000074
39	26	13	40	27	13	775.727790	-0.000183
39	26	14	40	27	14	775.727790	-0.000183
41	25	16	42	26	16	775.733140	-0.000096
41	25	17	42	26	17	775.733140	-0.000096
43	24	19	44	25	19	775.739020	-0.000010
43	24	20	44	25	20	775.739020	-0.000010
45	23	22	46	24	22	775.745910	0.000079
45	23	23	46	24	23	775.745910	0.000079
47	22	25	48	23	25	775.754180	-0.000205
47	22	26	48	23	26	775.754180	-0.000205
30	30	0	31	31	0	775.778270	-0.000055
30	30	1	31	31	1	775.778270	-0.000055
32	29	3	33	30	3	775.783910	0.000096
32	29	4	33	30	4	775.783910	0.000096
36	27	9	37	28	9	775.793240	-0.000784
36	27	10	37	28	10	775.793240	-0.000784
38	26	12	39	27	12	775.798860	-0.000093
38	26	13	39	27	13	775.798860	-0.000093
40	25	15	41	26	15	775.803940	-0.000091
40	25	16	41	26	16	775.803940	-0.000091
42	24	18	43	25	18	775.809410	-0.000140
42	24	19	43	25	19	775.809410	-0.000140
44	23	21	45	24	21	775.815880	-0.000065
44	23	22	45	24	22	775.815880	-0.000065
46	22	24	47	23	24	775.823890	0.000008
46	22	25	47	23	25	775.823890	0.000008
48	21	27	49	22	27	775.834580	0.000165
48	21	28	49	22	28	775.834580	0.000165
50	20	30	51	21	30	775.849040	-0.000181
50	20	31	51	21	31	775.849040	-0.000181
31	29	2	32	30	2	775.855230	0.000196
31	29	3	32	30	3	775.855230	0.000196
33	28	5	34	29	5	775.860370	0.000166
33	28	6	34	29	6	775.860370	0.000166
35	27	8	36	28	8	775.865310	0.000158
35	27	9	36	28	9	775.865310	0.000158
37	26	11	38	27	11	775.869550	-0.000434
37	26	12	38	27	12	775.869550	-0.000434
39	25	14	40	26	14	775.874830	-0.000063
39	25	15	40	26	15	775.874830	-0.000063
41	24	17	42	25	17	775.880370	0.000213
41	24	18	42	25	18	775.880370	0.000213
43	23	20	44	24	20	775.886390	0.000227
43	23	21	44	24	21	775.886390	0.000227
45	22	23	46	23	23	775.893670	0.000122
45	22	24	46	23	24	775.893670	0.000122
47	21	26	48	22	26	775.903330	0.000081
47	21	27	48	22	27	775.903330	0.000081
30	29	1	31	30	1	775.926480	0.000235
30	29	2	31	30	2	775.926480	0.000235
32	28	4	33	29	4	775.931210	-0.000195
32	28	5	33	29	5	775.931210	-0.000195
36	26	10	37	27	10	775.940930	-0.000112
36	26	11	37	27	11	775.940930	-0.000112
38	25	13	39	26	13	775.945680	-0.000127
38	25	14	39	26	14	775.945680	-0.000127
40	24	16	41	25	16	775.950820	-0.000018
40	24	17	41	25	17	775.950820	-0.000018
42	23	19	43	24	19	775.956870	0.000367
42	23	20	43	24	20	775.956870	0.000367
44	22	22	45	23	22	775.963360	-0.000014
44	22	23	45	23	23	775.963360	-0.000014
46	21	25	47	22	25	775.972340	0.000028
46	21	26	47	22	26	775.972340	0.000028
29	29	0	30	30	0	775.997330	-0.000131
29	29	1	30	30	1	775.997330	-0.000131
31	28	3	32	29	3	776.002850	0.000249
31	28	4	32	29	4	776.002850	0.000249
33	27	6	34	28	6	776.006640	-0.000824
33	27	7	34	28	7	776.006640	-0.000824
35	26	9	36	27	9	776.012170	0.000038
35	26	10	36	27	10	776.012170	0.000038
37	25	12	38	26	12	776.016630	-0.000141
37	25	13	38	26	13	776.016630	-0.000141
39	24	15	40	25	15	776.021590	-0.000007
39	24	16	40	25	16	776.021590	-0.000007
41	23	18	42	24	18	776.026990	0.000036
41	23	19	42	24	19	776.026990	0.000036
43	22	21	44	23	21	776.033260	-0.000087
43	22	22	44	23	22	776.033260	-0.000087
45	21	24	46	22	24	776.041550	-0.000032
45	21	25	46	22	25	776.041550	-0.000032
47	20	27	48	21	27	776.052930	0.000017
47	20	28	48	21	28	776.052930	0.000017
30	28	2	31	29	2	776.073790	-0.000024

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
30	28	3	31	29	3	776.073790	-0.000024
34	26	8	35	27	8	776.083350	0.000104
34	26	9	35	27	9	776.083350	0.000104
36	25	11	37	26	11	776.087810	0.000041
36	25	12	37	26	12	776.087810	0.000041
38	24	14	39	25	14	776.092420	0.000009
38	24	15	39	25	15	776.092420	0.000009
40	23	17	41	24	17	776.097560	0.000073
40	23	18	41	24	18	776.097560	0.000073
42	22	20	43	23	20	776.103470	0.000009
42	22	21	43	23	21	776.103470	0.000009
44	21	23	45	22	23	776.110840	-0.000209
44	21	24	45	22	24	776.110840	-0.000209
29	28	1	30	29	1	776.145090	0.000069
29	28	2	30	29	2	776.145090	0.000069
31	27	4	32	28	4	776.149910	0.000081
31	27	5	32	28	5	776.149910	0.000081
33	26	7	34	27	7	776.154520	0.000134
33	26	8	34	27	8	776.154520	0.000134
35	25	10	36	26	10	776.158690	-0.000123
35	25	11	36	26	11	776.158690	-0.000123
37	24	13	38	25	13	776.163220	-0.000075
37	24	14	38	25	14	776.163220	-0.000075
39	23	16	40	24	16	776.168240	0.000130
39	23	17	40	24	17	776.168240	0.000130
41	22	19	42	23	19	776.173810	0.000112
41	22	20	42	23	20	776.173810	0.000112
43	21	22	44	22	22	776.180820	0.000117
43	21	23	44	22	23	776.180820	0.000117
45	20	25	46	21	25	776.190110	-0.000054
45	20	26	46	21	26	776.190110	-0.000054
32	26	6	33	27	6	776.224970	-0.000571
32	26	7	33	27	7	776.224970	-0.000571
34	25	9	35	26	9	776.229870	-0.000011
34	25	10	35	26	10	776.229870	-0.000011
36	24	12	37	25	12	776.234050	-0.000168
36	24	13	37	25	13	776.234050	-0.000168
38	23	15	39	24	15	776.238860	0.000047
38	23	16	39	24	16	776.238860	0.000047
40	22	18	41	23	18	776.244210	0.000169
40	22	19	41	23	19	776.244210	0.000169
42	21	21	43	22	21	776.250290	-0.000231
42	21	22	43	22	22	776.250290	-0.000231
44	20	24	45	21	24	776.259190	0.000014
44	20	25	45	21	25	776.259190	0.000014
29	27	2	30	28	2	776.292450	0.000218
29	27	3	30	28	3	776.292450	0.000218
33	25	8	34	26	8	776.301000	0.000016
33	25	9	34	26	9	776.301000	0.000016
35	24	11	36	25	11	776.304910	-0.000285
35	24	12	36	25	12	776.304910	-0.000285
37	23	14	38	24	14	776.309760	0.000179
37	23	15	38	24	15	776.309760	0.000179
39	22	17	40	23	17	776.314460	-0.000036
39	22	18	40	23	18	776.314460	-0.000036
41	21	20	42	22	20	776.320590	0.000107
41	21	21	42	22	21	776.320590	0.000107
28	27	1	29	28	1	776.363230	-0.000212
28	27	2	29	28	2	776.363230	-0.000212
30	26	4	31	27	4	776.368150	0.000254
30	26	5	31	27	5	776.368150	0.000254
32	25	7	33	26	7	776.371840	-0.000270
32	25	8	33	26	8	776.371840	-0.000270
34	24	10	35	25	10	776.376430	0.000211
34	24	11	35	25	11	776.376430	0.000211
36	23	13	37	24	13	776.380460	0.000040
36	23	14	37	24	14	776.380460	0.000040
38	22	16	39	23	16	776.384490	-0.000560
38	22	17	39	23	17	776.384490	-0.000560
40	21	19	41	22	19	776.390540	-0.000064
40	21	20	41	22	20	776.390540	-0.000064
42	20	22	43	21	22	776.398070	0.000228
42	20	23	43	21	23	776.398070	0.000228
44	19	25	45	20	25	776.407960	-0.000082
44	19	26	45	20	26	776.407960	-0.000081
27	27	0	28	28	0	776.434740	0.000091
27	27	1	28	28	1	776.434740	0.000091
31	25	6	32	26	6	776.442870	-0.000393
31	25	7	32	26	7	776.442870	-0.000393
33	24	9	34	25	9	776.447200	-0.000078
33	24	10	34	25	10	776.447200	-0.000078
35	23	12	36	24	12	776.451220	-0.000106
35	23	13	36	24	13	776.451220	-0.000106
37	22	15	38	23	15	776.455660	-0.000030
37	22	16	38	23	16	776.455660	-0.000030
39	21	18	40	22	18	776.460360	-0.000488
39	21	19	40	22	19	776.460360	-0.000488
41	20	21	42	21	21	776.467290	-0.000186
41	20	22	42	21	22	776.467290	-0.000186
43	19	24	44	20	24	776.476620	-0.000102

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
43	19	25	44	20	25	776.476620	-0.000102
28	26	2	29	27	2	776.510330	0.000042
28	26	3	29	27	3	776.510330	0.000042
30	25	5	31	26	5	776.514240	-0.000188
30	25	6	31	26	6	776.514240	-0.000188
32	24	8	33	25	8	776.518360	-0.000006
32	24	9	33	25	9	776.518360	-0.000006
34	23	11	35	24	11	776.522120	-0.000148
34	23	12	35	24	12	776.522120	-0.000148
36	22	14	37	23	14	776.526630	0.000211
36	22	15	37	23	15	776.526630	0.000211
40	20	20	41	21	20	776.537250	-0.000032
40	20	21	41	21	21	776.537250	-0.000032
27	26	1	28	27	1	776.580690	-0.000799
27	26	2	28	27	2	776.580690	-0.000799
29	25	4	30	26	4	776.585610	0.000004
29	25	5	30	26	5	776.585610	0.000004
31	24	7	32	25	7	776.589610	0.000139
31	24	8	32	25	8	776.589610	0.000139
33	23	10	34	24	10	776.593250	-0.000018
33	23	11	34	24	11	776.593250	-0.000018
35	22	13	36	23	13	776.597420	0.000209
35	22	14	36	23	14	776.597420	0.000209
37	21	16	38	22	16	776.601640	-0.000040
37	21	17	38	22	17	776.601640	-0.000040
39	20	19	40	21	19	776.607420	0.000177
39	20	20	40	21	20	776.607420	0.000177
41	19	22	42	20	22	776.614910	0.000059
41	19	23	42	20	23	776.614910	0.000059
26	26	0	27	27	0	776.652810	0.000113
26	26	1	27	27	1	776.652810	0.000113
28	25	3	29	26	3	776.656770	-0.000020
28	25	4	29	26	4	776.656770	-0.000020
30	24	6	31	25	6	776.660510	-0.000103
30	24	7	31	25	7	776.660510	-0.000103
32	23	9	33	24	9	776.664730	0.000424
32	23	10	33	24	10	776.664730	0.000424
34	22	12	35	23	12	776.667950	-0.000121
34	22	13	35	23	13	776.667950	-0.000121
36	21	15	37	22	15	776.672330	0.000082
36	21	16	37	22	16	776.672330	0.000082
38	20	18	39	21	18	776.677210	-0.000154
38	20	19	39	21	19	776.677210	-0.000154
40	19	21	41	20	21	776.684240	-0.000021
40	19	22	41	20	22	776.684240	-0.000021
42	18	24	43	19	24	776.694370	0.000039
42	18	25	43	19	25	776.694370	0.000039
27	25	2	28	26	2	776.727750	-0.000233
27	25	3	28	26	3	776.727750	-0.000233
29	24	5	30	25	5	776.731620	-0.000146
29	24	6	30	25	6	776.731620	-0.000146
31	23	8	32	24	8	776.735440	0.000069
31	23	9	32	24	9	776.735440	0.000069
33	22	11	34	23	11	776.739020	0.000032
33	22	12	34	23	12	776.739020	0.000032
35	21	14	36	22	14	776.743120	0.000206
35	21	15	36	22	15	776.743120	0.000206
37	20	17	38	21	17	776.747760	0.000141
37	20	18	38	21	18	776.747760	0.000141
39	19	20	40	20	20	776.753650	-0.000212
39	19	21	40	20	21	776.753650	-0.000212
26	25	1	27	26	1	776.799150	-0.000034
26	25	2	27	26	2	776.799150	-0.000034
28	24	4	29	25	4	776.802690	-0.000251
28	24	5	29	25	5	776.802690	-0.000251
30	23	7	31	24	7	776.806450	-0.000030
30	23	8	31	24	8	776.806450	-0.000030
32	22	10	33	23	10	776.809980	0.000024
32	22	11	33	23	11	776.809980	0.000024
36	20	16	37	21	16	776.818220	0.000225
36	20	17	37	21	17	776.818220	0.000225
38	19	19	39	20	19	776.823760	0.000104
38	19	20	39	20	20	776.823760	0.000104
40	18	22	41	19	22	776.831810	0.000016
40	18	23	41	19	23	776.831810	0.000016
25	25	0	26	26	0	776.870410	0.000036
25	25	1	26	26	1	776.870410	0.000036
27	24	3	28	25	3	776.874030	-0.000092
27	24	4	28	25	4	776.874030	-0.000092
29	23	6	30	24	6	776.877560	-0.000046
29	23	7	30	24	7	776.877560	-0.000046
31	22	9	32	23	9	776.880910	-0.000057
31	22	10	32	23	10	776.880910	-0.000057
33	21	12	34	22	12	776.884570	0.000101
33	21	13	34	22	13	776.884570	0.000101
35	20	15	36	21	15	776.888400	-0.000080
35	20	16	36	21	16	776.888400	-0.000080
37	19	18	38	20	18	776.893820	0.000194
37	19	19	38	20	19	776.893820	0.000194
39	18	21	40	19	21	776.900840	-0.000082

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
39	18	22	40	19	22	776.900840	-0.000082
41	17	24	42	18	24	776.912270	0.000152
41	17	25	42	18	25	776.912270	0.000153
26	24	2	27	25	2	776.945060	-0.000246
26	24	3	27	25	3	776.945060	-0.000246
28	23	5	29	24	5	776.948710	-0.000043
28	23	6	29	24	6	776.948710	-0.000043
30	22	8	31	23	8	776.951940	-0.000088
30	22	9	31	23	9	776.951940	-0.000088
32	21	11	33	22	11	776.955490	0.000137
32	21	12	33	22	12	776.955490	0.000137
34	20	14	35	21	14	776.958920	-0.000147
34	20	15	35	21	15	776.958920	-0.000147
36	19	17	37	20	17	776.964230	0.000486
36	19	18	37	20	18	776.964230	0.000486
25	24	1	26	25	1	777.016570	0.000071
25	24	2	26	25	2	777.016570	0.000071
27	23	4	28	24	4	777.019820	-0.000095
27	23	5	28	24	5	777.019820	-0.000095
29	22	7	30	23	7	777.023050	-0.000060
29	22	8	30	23	8	777.023050	-0.000060
31	21	10	32	22	10	777.026440	0.000158
31	21	11	32	22	11	777.026440	0.000158
33	20	13	34	21	13	777.029690	-0.000061
33	20	14	34	21	14	777.029690	-0.000061
35	19	16	36	20	16	777.034280	0.000270
35	19	17	36	20	17	777.034280	0.000270
37	18	19	38	19	19	777.040170	0.000288
37	18	20	38	19	20	777.040170	0.000288
24	24	0	25	25	0	777.087780	0.000086
24	24	1	25	25	1	777.087780	0.000086
26	23	3	27	24	3	777.091180	0.000096
26	23	4	27	24	4	777.091180	0.000096
28	22	6	29	23	6	777.094330	0.000107
28	22	7	29	23	7	777.094330	0.000107
30	21	9	31	22	9	777.097280	0.000000
30	21	10	31	22	10	777.097280	0.000000
32	20	12	33	21	12	777.100600	0.000086
32	20	13	33	21	13	777.100600	0.000086
34	19	15	35	20	15	777.104510	0.000111
34	19	16	35	20	16	777.104510	0.000111
36	18	18	37	19	18	777.109740	0.000080
36	18	19	37	19	19	777.109740	0.000080
38	17	21	39	18	21	777.117810	0.000263
38	17	22	39	18	22	777.117810	0.000263
40	16	24	41	17	24	777.130470	0.000168
40	16	25	41	17	25	777.130470	0.000174
25	23	2	26	24	2	777.162440	0.000171
25	23	3	26	24	3	777.162440	0.000171
27	22	5	28	23	5	777.165320	-0.000037
27	22	6	28	23	6	777.165320	-0.000037
29	21	8	30	22	8	777.168310	-0.000001
29	21	9	30	22	9	777.168310	-0.000001
31	20	11	32	21	11	777.171450	0.000097
31	20	12	32	21	12	777.171450	0.000097
33	19	14	34	20	14	777.174920	0.000010
33	19	15	34	20	15	777.174920	0.000010
35	18	17	36	19	17	777.179800	0.000175
35	18	18	36	19	18	777.179800	0.000175
24	23	1	25	24	1	777.233370	-0.000093
24	23	2	25	24	2	777.233370	-0.000093
26	22	4	27	23	4	777.236500	-0.000016
26	22	5	27	23	5	777.236500	-0.000016
28	21	7	29	22	7	777.239490	0.000116
28	21	8	29	22	8	777.239490	0.000116
30	20	10	31	21	10	777.242100	-0.000159
30	20	11	31	21	11	777.242100	-0.000159
32	19	13	33	20	13	777.245630	0.000113
32	19	14	33	20	14	777.245630	0.000113
34	18	16	35	19	16	777.249740	-0.000015
34	18	17	35	19	17	777.249740	-0.000015
23	23	0	24	24	0	777.304570	-0.000085
23	23	1	24	24	1	777.304570	-0.000085
25	22	3	26	23	3	777.307980	0.000296
25	22	4	26	23	4	777.307980	0.000296
27	21	6	28	22	6	777.310720	0.000241
27	21	7	28	22	7	777.310720	0.000241
29	20	9	30	21	9	777.313400	0.000183
29	20	10	30	21	10	777.313400	0.000183
31	19	12	32	20	12	777.316220	-0.000007
31	19	13	32	20	13	777.316220	-0.000007
33	18	15	34	19	15	777.320160	0.000134
33	18	16	34	19	16	777.320160	0.000134
35	17	18	36	18	18	777.325530	0.000019
35	17	19	36	18	19	777.325530	0.000019
37	16	21	38	17	21	777.334360	0.000118
37	16	22	38	17	22	777.334360	0.000118
39	15	24	40	16	24	777.349160	0.000001
39	15	25	40	16	25	777.349160	0.000037
24	22	2	25	23	2	777.378870	0.000008

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
24	22	3	25	23	3	777.378870	0.000008
26	21	5	27	22	5	777.381790	0.000185
26	21	6	27	22	6	777.381790	0.000185
28	20	8	29	21	8	777.384350	0.000121
28	20	9	29	21	9	777.384350	0.000121
30	19	11	31	20	11	777.387100	0.000084
30	19	12	31	20	12	777.387100	0.000084
32	18	14	33	19	14	777.390570	0.000135
32	18	15	33	19	15	777.390570	0.000135
34	17	17	35	18	17	777.395190	-0.000097
34	17	18	35	18	18	777.395190	-0.000097
23	22	1	24	23	1	777.450110	0.000061
23	22	2	24	23	2	777.450110	0.000061
25	21	4	26	22	4	777.452760	0.000003
25	21	5	26	22	5	777.452760	0.000003
27	20	7	28	21	7	777.455420	0.000135
27	20	8	28	21	8	777.455420	0.000135
29	19	10	30	20	10	777.457820	-0.000062
29	19	11	30	20	11	777.457820	-0.000062
31	18	13	32	19	13	777.460950	-0.000016
31	18	14	32	19	14	777.460950	-0.000016
33	17	16	34	18	16	777.465390	0.000150
33	17	17	34	18	17	777.465390	0.000150
22	22	0	23	23	0	777.521360	0.000126
22	22	1	23	23	1	777.521360	0.000126
24	21	3	25	22	3	777.524050	0.000138
24	21	4	25	22	4	777.524050	0.000138
26	20	6	27	21	6	777.526640	0.000276
26	20	7	27	21	7	777.526640	0.000276
28	19	9	29	20	9	777.528910	0.000103
28	19	10	29	20	10	777.528910	0.000103
30	18	12	31	19	12	777.531470	-0.000127
30	18	13	31	19	13	777.531470	-0.000127
32	17	15	33	18	15	777.535400	0.000024
32	17	16	33	18	16	777.535400	0.000024
34	16	18	35	17	18	777.541190	-0.000047
34	16	19	35	17	19	777.541190	-0.000047
36	15	21	37	16	21	777.551400	0.000246
36	15	22	37	16	22	777.551400	0.000249
38	14	24	39	15	24	777.569170	-0.000048
38	14	25	39	15	25	777.569170	0.000173
23	21	2	24	22	2	777.595030	-0.000064
23	21	3	24	22	3	777.595030	-0.000064
25	20	5	26	21	5	777.597530	0.000052
25	20	6	26	21	6	777.597530	0.000052
27	19	8	28	20	8	777.599710	-0.000076
27	19	9	28	20	9	777.599710	-0.000076
29	18	11	30	19	11	777.602390	0.000055
29	18	12	30	19	12	777.602390	0.000055
31	17	14	32	18	14	777.605950	0.000281
31	17	15	32	18	15	777.605950	0.000281
33	16	17	34	17	17	777.610840	0.000071
33	16	18	34	17	18	777.610840	0.000071
22	21	1	23	22	1	777.666350	0.000077
22	21	2	23	22	2	777.666350	0.000077
24	20	4	25	21	4	777.668680	0.000057
24	20	5	25	21	5	777.668680	0.000057
26	19	7	27	20	7	777.670950	0.000131
26	19	8	27	20	8	777.670950	0.000131
28	18	10	29	19	10	777.673170	0.000019
28	18	11	29	19	11	777.673170	0.000019
30	17	13	31	18	13	777.676120	0.000026
30	17	14	31	18	14	777.676120	0.000026
32	16	16	33	17	16	777.680710	0.000184
32	16	17	33	17	17	777.680710	0.000184
21	21	0	22	22	0	777.737550	0.000098
21	21	1	22	22	1	777.737550	0.000098
23	20	3	24	21	3	777.740120	0.000345
23	20	4	24	21	4	777.740120	0.000345
25	19	6	26	20	6	777.741810	-0.000074
25	19	7	26	20	7	777.741810	-0.000074
27	18	9	28	19	9	777.744160	0.000123
27	18	10	28	19	10	777.744160	0.000123
29	17	12	30	18	12	777.746780	0.000134
29	17	13	30	18	13	777.746780	0.000134
31	16	15	32	17	15	777.750510	0.000032
31	16	16	32	17	16	777.750510	0.000032
33	15	18	34	16	18	777.757000	0.000090
33	15	19	34	16	19	777.757000	0.000090
35	14	21	36	15	21	777.768460	-0.000080
35	14	22	36	15	22	777.768460	-0.000056
22	20	2	23	21	2	777.811090	0.000148
22	20	3	23	21	3	777.811090	0.000148
24	19	5	25	20	5	777.813060	0.000070
24	19	6	25	20	6	777.813060	0.000070
26	18	8	27	19	8	777.814900	-0.000085
26	18	9	27	19	9	777.814900	-0.000085
28	17	11	29	18	11	777.817330	0.000024
28	17	12	29	18	12	777.817330	0.000024
30	16	14	31	17	14	777.820630	0.000003

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
30	16	15	31	17	15	777.820630	0.000003
21	20	1	22	21	1	777.882290	0.000172
21	20	2	22	21	2	777.882290	0.000172
23	19	4	24	20	4	777.884200	0.000083
23	19	5	24	20	5	777.884200	0.000083
25	18	7	26	19	7	777.886160	0.000172
25	18	8	26	19	8	777.886160	0.000172
27	17	10	28	18	10	777.887780	-0.000290
27	17	11	28	18	11	777.887780	-0.000290
29	16	13	30	17	13	777.890890	-0.000036
29	16	14	30	17	14	777.890890	-0.000036
31	15	16	32	16	16	777.895770	0.000131
31	15	17	32	16	17	777.895770	0.000131
20	20	0	21	21	0	777.953500	0.000198
20	20	1	21	21	1	777.953500	0.000198
22	19	3	23	20	3	777.955990	0.000725
22	19	4	23	20	4	777.955990	0.000725
26	17	9	27	18	9	777.958840	-0.000061
26	17	10	27	18	10	777.958840	-0.000061
28	16	12	29	17	12	777.961430	0.000054
28	16	13	29	17	13	777.961430	0.000054
30	15	15	31	16	15	777.965040	-0.000338
30	15	16	31	16	16	777.965040	-0.000338
32	14	18	33	15	18	777.972520	-0.000140
32	14	19	33	15	19	777.972520	-0.000138
21	19	2	22	20	2	778.026420	-0.000009
21	19	3	22	20	3	778.026420	-0.000009
23	18	5	24	19	5	778.028120	-0.000010
23	18	6	24	19	6	778.028120	-0.000010
25	17	8	26	18	8	778.029600	-0.000216
25	17	9	26	18	9	778.029600	-0.000216
27	16	11	28	17	11	778.031790	-0.000167
27	16	12	28	17	12	778.031790	-0.000167
20	19	1	21	20	1	778.097710	0.000107
20	19	2	21	20	2	778.097710	0.000107
22	18	4	23	19	4	778.099200	-0.000050
22	18	5	23	19	5	778.099200	-0.000050
24	17	7	25	18	7	778.100730	-0.000070
24	17	8	25	18	8	778.100730	-0.000070
26	16	10	27	17	10	778.102530	-0.000111
26	16	11	27	17	11	778.102530	-0.000111
28	15	13	29	16	13	778.105380	-0.000107
28	15	14	29	16	14	778.105380	-0.000107
30	14	16	31	15	16	778.110730	0.000061
30	14	17	31	15	17	778.110730	0.000061
21	18	3	22	19	3	778.170450	0.000066
21	18	4	22	19	4	778.170450	0.000066
23	17	6	24	18	6	778.171710	-0.000116
23	17	7	24	18	7	778.171710	-0.000116
25	16	9	26	17	9	778.173550	0.000118
25	16	10	26	17	10	778.173550	0.000118
27	15	12	28	16	12	778.175850	0.000036
27	15	13	28	16	13	778.175850	0.000036
29	14	15	30	15	15	778.179330	-0.000801
29	14	16	30	15	16	778.179330	-0.000801
22	17	5	23	18	5	778.242890	-0.000008
22	17	6	23	18	6	778.242890	-0.000008
24	16	8	25	17	8	778.244200	-0.000097
24	16	9	25	17	9	778.244200	-0.000097
26	15	11	27	16	11	778.246280	-0.000003
26	15	12	27	16	12	778.246280	-0.000003
21	17	4	22	18	4	778.314000	-0.000006
21	17	5	22	18	5	778.314000	-0.000006
23	16	7	24	17	7	778.315360	0.000115
23	16	8	24	17	8	778.315360	0.000115
25	15	10	26	16	10	778.316980	0.000091
25	15	11	26	16	11	778.316980	0.000091
27	14	13	28	15	13	778.319770	-0.000040
27	14	14	28	15	14	778.319770	-0.000040
18	18	0	19	19	0	778.384020	0.000137
18	18	1	19	19	1	778.384020	0.000137
20	17	3	21	18	3	778.385080	-0.000054
20	17	4	21	18	4	778.385080	-0.000054
19	17	2	20	18	2	778.456200	-0.000082
19	17	3	20	18	3	778.456200	-0.000082
25	14	11	26	15	11	778.460650	0.000334
25	14	12	26	15	12	778.460650	0.000334
24	14	10	25	15	10	778.530710	-0.000101
24	14	11	25	15	11	778.530710	-0.000101
26	13	13	27	14	13	778.534040	0.000095
26	13	14	27	14	14	778.534040	0.000095
17	17	0	18	18	0	778.598580	-0.000029
17	17	1	18	18	1	778.598580	-0.000029
25	13	12	26	14	12	778.603730	-0.000178
25	13	13	26	14	13	778.603730	-0.000178
20	15	5	21	16	5	778.671320	-0.000011
20	15	6	21	16	6	778.671320	-0.000011
22	14	8	23	15	8	778.672230	0.000029
22	14	9	23	15	9	778.672230	0.000029
24	13	11	25	14	11	778.674180	0.000105

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
24	13	12	25	14	12	778.674180	0.000105
19	15	4	20	16	4	778.742390	-0.000011
19	15	5	20	16	5	778.742390	-0.000011
23	13	10	24	14	10	778.744590	0.000145
23	13	11	24	14	11	778.744590	0.000145
25	12	13	26	13	13	778.748260	0.000288
25	12	14	26	13	14	778.748260	0.000289
16	16	0	17	17	0	778.813490	0.000521
18	15	3	19	16	3	778.813490	-0.000019
16	16	1	17	17	1	778.813490	0.000521
18	15	4	19	16	4	778.813490	-0.000019
24	12	12	25	13	12	778.817030	-0.000629
24	12	13	25	13	13	778.817030	-0.000629
21	13	8	22	14	8	778.885210	-0.000428
21	13	9	22	14	9	778.885210	-0.000428
23	12	11	24	13	11	778.887700	0.000083
23	12	12	24	13	12	778.887700	0.000083
18	14	4	19	15	4	778.956110	0.000068
18	14	5	19	15	5	778.956110	0.000068
22	12	10	23	13	10	778.957900	0.000097
22	12	11	23	13	11	778.957900	0.000097
24	11	13	25	12	13	778.962050	0.000027
24	11	14	25	12	14	778.962050	0.000037
15	15	0	16	16	0	779.027260	0.000310
17	14	3	18	15	3	779.027260	0.000126
15	15	1	16	16	1	779.027260	0.000310
17	14	4	18	15	4	779.027260	0.000126
16	14	2	17	15	2	779.098430	0.000168
20	12	8	21	13	8	779.098430	-0.000322
16	14	3	17	15	3	779.098430	0.000168
20	12	9	21	13	9	779.098430	-0.000322
22	11	11	23	12	11	779.101030	0.000044
22	11	12	23	12	12	779.101030	0.000045
17	13	4	18	14	4	779.169330	0.000013
17	13	5	18	14	5	779.169330	0.000013
21	11	10	22	12	10	779.171380	0.000441
21	11	11	22	12	11	779.171380	0.000441
14	14	0	15	15	0	779.240360	-0.000199
16	13	3	17	14	3	779.240360	-0.000030
14	14	1	15	15	1	779.240360	-0.000199
16	13	4	17	14	4	779.240360	-0.000030
15	13	2	16	14	2	779.311680	0.000171
19	11	8	20	12	8	779.311680	0.000115
15	13	3	16	14	3	779.311680	0.000171
19	11	9	20	12	9	779.311680	0.000115
21	10	11	22	11	11	779.314340	0.000023
21	10	12	22	11	12	779.314340	0.000036
16	12	4	17	13	4	779.382260	0.000043
16	12	5	17	13	5	779.382260	0.000043
13	13	0	14	14	0	779.453750	-0.000044
13	13	1	14	14	1	779.453750	-0.000044
14	12	2	15	13	2	779.524190	-0.000188
18	10	8	19	11	8	779.524190	0.000084
14	12	3	15	13	3	779.524190	-0.000188
18	10	9	19	11	9	779.524190	0.000084
20	9	11	21	10	11	779.527790	-0.000026
20	9	12	21	10	12	779.527790	0.000072
15	11	4	16	12	4	779.594570	-0.000174
15	11	5	16	12	5	779.594570	-0.000174
12	12	0	13	13	0	779.666700	0.000047
12	12	1	13	13	1	779.666700	0.000047
13	11	2	14	12	2	779.736430	-0.000438
17	9	8	18	10	8	779.736430	-0.000008
13	11	3	14	12	3	779.736430	-0.000438
17	9	9	18	10	9	779.736430	-0.000003
19	8	12	20	9	12	779.740920	-0.000462
14	10	4	15	11	4	779.806810	-0.000105
14	10	5	15	11	5	779.806810	-0.000105
11	11	0	12	12	0	779.879270	0.000137
11	11	1	12	12	1	779.879270	0.000137
12	10	2	13	11	2	779.948660	-0.000330
12	10	3	13	11	3	779.948660	-0.000330
13	9	4	14	10	4	780.018800	0.000081
13	9	5	14	10	5	780.018800	0.000081
12	9	3	13	10	3	780.089320	-0.000368
12	9	4	13	10	4	780.089320	-0.000368
10	10	0	11	11	0	780.091390	0.000158
10	10	1	11	11	1	780.091390	0.000158
11	9	2	12	10	2	780.160860	0.000128
11	9	3	12	10	3	780.160860	0.000128
12	8	4	13	9	4	780.230490	0.000302
12	8	5	13	9	5	780.230490	0.000303
11	8	3	12	9	3	780.301110	0.000021
11	8	4	12	9	4	780.301110	0.000021
9	9	0	10	10	0	780.303030	0.000078
9	9	1	10	10	1	780.303030	0.000078
10	8	2	11	9	2	780.372180	0.000078
10	8	3	11	9	3	780.372180	0.000078
11	7	4	12	8	4	780.441070	-0.000254
11	7	5	12	8	5	780.441070	-0.000250

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
10	7	3	11	8	3	780.512190	0.000053
10	7	4	11	8	4	780.512190	0.000054
8	8	0	9	9	0	780.514260	-0.000039
8	8	1	9	9	1	780.514260	-0.000039
10	6	4	11	7	4	780.652330	0.000133
10	6	5	11	7	5	780.652330	0.000174
9	6	3	10	7	3	780.722590	-0.000256
9	6	4	10	7	4	780.722590	-0.000245
7	7	0	8	8	0	780.725270	0.000010
7	7	1	8	8	1	780.725270	0.000010
9	5	5	10	6	5	780.862550	-0.000107
9	5	5	10	6	5	780.862550	-0.000107
6	6	0	7	7	0	780.935760	-0.000090
6	6	1	7	7	1	780.935760	-0.000090
8	4	5	9	5	5	781.071970	-0.000122
8	4	5	9	5	5	781.071970	-0.000122
8	7	1	7	6	1	783.780810	-0.000007
8	7	2	7	6	2	783.780810	-0.000007
9	7	2	8	6	2	783.851820	0.000044
9	7	3	8	6	3	783.851820	0.000042
8	8	0	7	7	0	783.915140	0.000133
8	8	1	7	7	1	783.915140	0.000133
9	8	1	8	7	1	783.985960	-0.000094
9	8	2	8	7	2	783.985960	-0.000094
10	8	2	9	7	2	784.057240	0.000198
10	8	3	9	7	3	784.057240	0.000198
9	9	0	8	8	0	784.119730	-0.000128
9	9	1	8	8	1	784.119730	-0.000128
13	8	5	12	7	5	784.269600	0.000439
13	8	6	12	7	6	784.269600	0.000425
10	10	0	9	9	0	784.324410	0.000086
10	10	1	9	9	1	784.324410	0.000086
12	9	3	11	8	3	784.332460	-0.000371
12	9	4	11	8	4	784.332460	-0.000371
11	10	1	10	9	1	784.395200	-0.000173
11	10	2	10	9	2	784.395200	-0.000173
12	10	2	11	9	2	784.466410	0.000029
12	10	3	11	9	3	784.466410	0.000029
14	9	5	13	8	5	784.474230	-0.000071
14	9	6	13	8	6	784.474230	-0.000073
11	11	0	10	10	0	784.528370	-0.000040
11	11	1	10	10	1	784.528370	-0.000040
13	10	3	12	9	3	784.537150	-0.000188
13	10	4	12	9	4	784.537150	-0.000188
12	11	1	11	10	1	784.599380	-0.000067
12	11	2	11	10	2	784.599380	-0.000067
14	10	4	13	9	4	784.608210	0.000009
14	10	5	13	9	5	784.608210	0.000009
13	11	2	12	10	2	784.670610	0.000139
13	11	3	12	10	3	784.670610	0.000139
15	10	5	14	9	5	784.678920	-0.000018
15	10	6	14	9	6	784.678920	-0.000018
12	12	0	11	11	0	784.732120	0.000014
12	12	1	11	11	1	784.732120	0.000014
14	11	3	13	10	3	784.741590	0.000158
14	11	4	13	10	4	784.741590	0.000158
13	12	1	12	11	1	784.802910	-0.000239
13	12	2	12	11	2	784.802910	-0.000239
15	11	4	14	10	4	784.811910	-0.000423
15	11	5	14	10	5	784.811910	-0.000423
14	12	2	13	11	2	784.873840	-0.000328
14	12	3	13	11	3	784.873840	-0.000328
16	11	5	15	10	5	784.883260	0.000125
16	11	6	15	10	6	784.883260	0.000125
13	13	0	12	12	0	784.935720	0.000292
13	13	1	12	12	1	784.935720	0.000292
15	12	3	14	11	3	784.944980	-0.000173
15	12	4	14	11	4	784.944980	-0.000173
14	13	1	13	12	1	785.006610	0.000141
14	13	2	13	12	2	785.006610	0.000141
16	12	4	15	11	4	785.016090	0.000022
16	12	5	15	11	5	785.016090	0.000022
18	11	7	17	10	7	785.024020	-0.000320
18	11	8	17	10	8	785.024020	-0.000320
15	13	2	14	12	2	785.077540	0.000056
15	13	3	14	12	3	785.077540	0.000056
17	12	5	16	11	5	785.086720	-0.000199
17	12	6	16	11	6	785.086720	-0.000199
14	14	0	13	13	0	785.138280	-0.000088
14	14	1	13	13	1	785.138280	-0.000088
16	13	3	15	12	3	785.148500	0.000024
16	13	4	15	12	4	785.148500	0.000024
15	14	1	14	13	1	785.209970	0.000569
15	14	2	14	13	2	785.209970	0.000569
17	13	4	16	12	4	785.219460	0.000045
17	13	5	16	12	5	785.219460	0.000045
19	12	7	18	11	7	785.228190	-0.000087
19	12	8	18	11	8	785.228190	-0.000087
16	14	2	15	13	2	785.280510	0.000085
16	14	3	15	13	3	785.280510	0.000085

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
18	13	5	17	12	5	785.290190	-0.000095
18	13	6	17	12	6	785.290190	-0.000095
15	15	0	14	14	0	785.341030	0.000100
15	15	1	14	14	1	785.341030	0.000100
17	14	3	16	13	3	785.351310	-0.000106
17	14	4	16	13	4	785.351310	-0.000106
19	13	6	18	12	6	785.360430	-0.000647
19	13	7	18	12	7	785.360430	-0.000647
21	12	9	20	11	9	785.369110	0.000083
21	12	10	20	11	10	785.369110	0.000083
16	15	1	15	14	1	785.412200	0.000239
16	15	2	15	14	2	785.412200	0.000239
18	14	4	17	13	4	785.422310	-0.000051
18	14	5	17	13	5	785.422310	-0.000051
20	13	7	19	12	7	785.431660	-0.000105
20	13	8	19	12	8	785.431660	-0.000105
17	15	2	16	14	2	785.483230	0.000254
17	15	3	16	14	3	785.483230	0.000254
19	14	5	18	13	5	785.493370	0.000119
19	14	6	18	13	6	785.493370	0.000119
23	12	11	22	11	11	785.508860	-0.000045
23	12	12	22	11	12	785.508860	-0.000046
16	16	0	15	15	0	785.543320	0.000212
16	16	1	15	15	1	785.543320	0.000212
18	15	3	17	14	3	785.553780	-0.000189
18	15	4	17	14	4	785.553780	-0.000189
20	14	6	19	13	6	785.563980	-0.000096
20	14	7	19	13	7	785.563980	-0.000096
22	13	9	21	12	9	785.572920	0.000177
22	13	10	21	12	10	785.572920	0.000177
17	16	1	16	15	1	785.614120	-0.000014
17	16	2	16	15	2	785.614120	-0.000014
19	15	4	18	14	4	785.624920	-0.000004
19	15	5	18	14	5	785.624920	-0.000004
21	14	7	20	13	7	785.634790	-0.000032
21	14	8	20	13	8	785.634790	-0.000032
18	16	2	17	15	2	785.685240	0.000089
18	16	3	17	15	3	785.685240	0.000089
20	15	5	19	14	5	785.695770	-0.000068
20	15	6	19	14	6	785.695770	-0.000068
24	13	11	23	12	11	785.713040	0.000018
24	13	12	23	12	12	785.713040	0.000018
17	17	0	16	16	0	785.744980	0.000075
17	17	1	16	16	1	785.744980	0.000075
19	16	3	18	15	3	785.756370	0.000233
19	16	4	18	15	4	785.756370	0.000233
21	15	6	20	14	6	785.766380	-0.000299
21	15	7	20	14	7	785.766380	-0.000299
23	14	9	22	13	9	785.776370	0.000403
23	14	10	22	13	10	785.776370	0.000403
18	17	1	17	16	1	785.815780	-0.000151
18	17	2	17	16	2	785.815780	-0.000151
22	15	7	21	14	7	785.837310	-0.000155
22	15	8	21	14	8	785.837310	-0.000155
24	14	10	23	13	10	785.846090	-0.000245
24	14	11	23	13	11	785.846090	-0.000245
19	17	2	18	16	2	785.886280	-0.000663
19	17	3	18	16	3	785.886280	-0.000663
21	16	5	20	15	5	785.898450	0.000431
21	16	6	20	15	6	785.898450	0.000431
23	15	8	22	14	8	785.908110	-0.000042
23	15	9	22	14	9	785.908110	-0.000042
25	14	11	24	13	11	785.916280	-0.000266
25	14	12	24	13	12	785.916280	-0.000266
18	18	0	17	17	0	785.946550	0.000226
18	18	1	17	17	1	785.946550	0.000226
20	17	3	19	16	3	785.957880	-0.000051
20	17	4	19	16	4	785.957880	-0.000051
22	16	6	21	15	6	785.968710	-0.000179
22	16	7	21	15	7	785.968710	-0.000179
24	15	9	23	14	9	785.978740	0.000000
24	15	10	23	14	10	785.978740	0.000000
19	18	1	18	17	1	786.017360	0.000016
19	18	2	18	17	2	786.017360	0.000016
21	17	4	20	16	4	786.028940	0.000045
21	17	5	20	16	5	786.028940	0.000045
23	16	7	22	15	7	786.039800	0.000103
23	16	8	22	15	8	786.039800	0.000103
25	15	10	24	14	10	786.049130	-0.000072
25	15	11	24	14	11	786.049130	-0.000072
27	14	13	26	13	13	786.056580	0.000239
27	14	14	26	13	14	786.056580	0.000239
20	18	2	19	17	2	786.088300	-0.000054
20	18	3	19	17	3	786.088300	-0.000054
22	17	5	21	16	5	786.099870	0.000052
22	17	6	21	16	6	786.099870	0.000052
24	16	8	23	15	8	786.110430	-0.000001
24	16	9	23	15	9	786.110430	-0.000001
26	15	11	25	14	11	786.119480	-0.000049
26	15	12	25	14	12	786.119480	-0.000049

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
19	19	0	18	18	0	786.147260	-0.000100
19	19	1	18	18	1	786.147260	-0.000100
21	18	3	20	17	3	786.158690	-0.000646
21	18	4	20	17	4	786.158690	-0.000646
23	17	6	22	16	6	786.171080	0.000374
23	17	7	22	16	7	786.171080	0.000374
25	16	9	24	15	9	786.181310	0.000237
25	16	10	24	15	10	786.181310	0.000237
27	15	12	26	14	12	786.189720	0.000018
27	15	13	26	14	13	786.189720	0.000018
20	19	1	19	18	1	786.218290	-0.000086
20	19	2	19	18	2	786.218290	-0.000086
22	18	4	21	17	4	786.229900	-0.000411
22	18	5	21	17	5	786.229900	-0.000411
24	17	7	23	16	7	786.241530	-0.000008
24	17	8	23	16	8	786.241530	-0.000008
26	16	10	25	15	10	786.251660	0.000043
26	16	11	25	15	11	786.251660	0.000043
28	15	13	27	14	13	786.259800	0.000112
28	15	14	27	14	14	786.259800	0.000112
30	14	16	29	13	16	786.264120	0.000052
30	14	17	29	13	17	786.264120	0.000049
21	19	2	20	18	2	786.289380	-0.000002
21	19	3	20	18	3	786.289380	-0.000002
23	18	5	22	17	5	786.301050	-0.000192
23	18	6	22	17	6	786.301050	-0.000192
25	17	8	24	16	8	786.312230	-0.000071
25	17	9	24	16	9	786.312230	-0.000071
27	16	11	26	15	11	786.322150	0.000113
27	16	12	26	15	12	786.322150	0.000113
29	15	14	28	14	14	786.329260	-0.000206
29	15	15	28	14	15	786.329260	-0.000206
20	20	0	19	19	0	786.347910	-0.000114
20	20	1	19	19	1	786.347910	-0.000114
22	19	3	21	18	3	786.360190	-0.000182
22	19	4	21	18	4	786.360190	-0.000182
24	18	6	23	17	6	786.372080	-0.000051
24	18	7	23	17	7	786.372080	-0.000051
26	17	9	25	16	9	786.382840	-0.000150
26	17	10	25	16	10	786.382840	-0.000150
28	16	12	27	15	12	786.392330	0.000005
28	16	13	27	15	13	786.392330	0.000005
30	15	15	29	14	15	786.398790	-0.000220
30	15	16	29	14	16	786.398790	-0.000221
21	20	1	20	19	1	786.419040	0.000002
21	20	2	20	19	2	786.419040	0.000002
23	19	4	22	18	4	786.431150	-0.000180
23	19	5	22	18	5	786.431150	-0.000180
25	18	7	24	17	7	786.442480	-0.000501
25	18	8	24	17	8	786.442480	-0.000501
29	16	13	28	15	13	786.462460	-0.000002
29	16	14	28	15	14	786.462460	-0.000002
31	15	16	30	14	16	786.468380	0.000079
31	15	17	30	14	17	786.468380	0.000079
22	20	2	21	19	2	786.490070	0.000036
22	20	3	21	19	3	786.490070	0.000036
24	19	5	23	18	5	786.501830	-0.000439
24	19	6	23	18	6	786.501830	-0.000439
26	18	8	25	17	8	786.513800	0.000031
26	18	9	25	17	9	786.513800	0.000031
28	17	11	27	16	11	786.524060	-0.000023
28	17	12	27	16	12	786.524060	-0.000023
30	16	14	29	15	14	786.532860	0.000438
30	16	15	29	15	15	786.532860	0.000438
21	21	0	20	20	0	786.548510	0.000206
21	21	1	20	20	1	786.548510	0.000206
23	20	3	22	19	3	786.561020	0.000005
23	20	4	22	19	4	786.561020	0.000005
27	18	9	26	17	9	786.584570	0.000081
27	18	10	26	17	10	786.584570	0.000081
29	17	12	28	16	12	786.594290	-0.000171
29	17	13	28	16	13	786.594290	-0.000171
31	16	15	30	15	15	786.602270	0.000079
31	16	16	30	15	16	786.602270	0.000079
22	21	1	21	20	1	786.619380	0.000068
22	21	2	21	20	2	786.619380	0.000068
24	20	4	23	19	4	786.632100	0.000117
24	20	5	23	19	5	786.632100	0.000117
26	19	7	25	18	7	786.644160	0.000124
26	19	8	25	18	8	786.644160	0.000124
28	18	10	27	17	10	786.655380	0.000248
28	18	11	27	17	11	786.655380	0.000248
30	17	13	29	16	13	786.664250	-0.000468
30	17	14	29	16	14	786.664250	-0.000468
32	16	16	31	15	16	786.671670	-0.000072
32	16	17	31	15	17	786.671670	-0.000072
23	21	2	22	20	2	786.690230	-0.000078
23	21	3	22	20	3	786.690230	-0.000078
25	20	5	24	19	5	786.702930	0.000007
25	20	6	24	19	6	786.702930	0.000007

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
27	19	8	26	18	8	786.715560	0.000721
27	19	9	26	18	9	786.715560	0.000721
29	18	11	28	17	11	786.725850	0.000157
29	18	12	28	17	12	786.725850	0.000157
31	17	14	30	16	14	786.734750	-0.000072
31	17	15	30	16	15	786.734750	-0.000072
22	22	0	21	21	0	786.748090	-0.000119
22	22	1	21	21	1	786.748090	-0.000119
24	21	3	23	20	3	786.761310	0.000021
24	21	4	23	20	4	786.761310	0.000021
26	20	6	25	19	6	786.773740	-0.000086
26	20	7	25	19	7	786.773740	-0.000086
28	19	9	27	18	9	786.785580	-0.000012
28	19	10	27	18	10	786.785580	-0.000012
30	18	12	29	17	12	786.796150	-0.000003
30	18	13	29	17	13	786.796150	-0.000003
32	17	15	31	16	15	786.804590	-0.000174
32	17	16	31	16	16	786.804590	-0.000174
23	22	1	22	21	1	786.819100	-0.000118
23	22	2	22	21	2	786.819100	-0.000118
25	21	4	24	20	4	786.832140	-0.000112
25	21	5	24	20	5	786.832140	-0.000112
27	20	7	26	19	7	786.844670	-0.000030
27	20	8	26	19	8	786.844670	-0.000030
29	19	10	28	18	10	786.856250	-0.000026
29	19	11	28	18	11	786.856250	-0.000026
31	18	13	30	17	13	786.866540	0.000051
31	18	14	30	17	14	786.866540	0.000051
33	17	16	32	16	16	786.875010	0.000492
33	17	17	32	16	17	786.875010	0.000492
35	16	19	34	15	19	786.878890	0.000058
35	16	20	34	15	20	786.878890	0.000058
24	22	2	23	21	2	786.890160	-0.000048
24	22	3	23	21	3	786.890160	-0.000048
26	21	5	25	20	5	786.903100	-0.000096
26	21	6	25	20	6	786.903100	-0.000096
28	20	8	27	19	8	786.915660	0.000133
28	20	9	27	19	9	786.915660	0.000133
30	19	11	29	18	11	786.926730	-0.000145
30	19	12	29	18	12	786.926730	-0.000145
32	18	14	31	17	14	786.936620	-0.000087
32	18	15	31	17	15	786.936620	-0.000087
23	23	0	22	22	0	786.947770	0.000025
23	23	1	22	22	1	786.947770	0.000025
25	22	3	24	21	3	786.960990	-0.000192
25	22	4	24	21	4	786.960990	-0.000192
27	21	6	26	20	6	786.974080	-0.000027
27	21	7	26	20	7	786.974080	-0.000027
31	19	12	30	18	12	786.997320	-0.000070
31	19	13	30	18	13	786.997320	-0.000070
33	18	15	32	17	15	787.006600	-0.000182
33	18	16	32	17	16	787.006600	-0.000182
24	23	1	23	22	1	787.018710	-0.000028
24	23	2	23	22	2	787.018710	-0.000028
26	22	4	25	21	4	787.032180	0.000033
26	22	5	25	21	5	787.032180	0.000033
28	21	7	27	20	7	787.045020	0.000037
28	21	8	27	20	8	787.045020	0.000037
30	20	10	29	19	10	787.056940	-0.000065
30	20	11	29	19	11	787.056940	-0.000065
32	19	13	31	18	13	787.067860	0.000050
32	19	14	31	18	14	787.067860	0.000050
34	18	16	33	17	16	787.076510	-0.000195
34	18	17	33	17	17	787.076510	-0.000195
36	17	19	35	16	19	787.082560	0.000076
36	17	20	35	16	20	787.082560	0.000076
25	23	2	24	22	2	787.089540	-0.000188
25	23	3	24	22	3	787.089540	-0.000188
27	22	5	26	21	5	787.103110	0.000022
27	22	6	26	21	6	787.103110	0.000022
29	21	8	28	20	8	787.115790	-0.000027
29	21	9	28	20	9	787.115790	-0.000027
31	20	11	30	19	11	787.127530	-0.000121
31	20	12	30	19	12	787.127530	-0.000121
33	19	14	32	18	14	787.138120	0.000003
33	19	15	32	18	15	787.138120	0.000003
35	18	17	34	17	17	787.146660	0.000206
24	24	0	23	23	0	787.146660	-0.000238
35	18	18	34	17	18	787.146660	0.000206
24	24	1	23	23	1	787.146660	-0.000238
37	17	20	36	16	20	787.151340	0.000053
37	17	21	36	16	21	787.151340	0.000053
26	23	3	25	22	3	787.160760	0.000063
26	23	4	25	22	4	787.160760	0.000063
28	22	6	27	21	6	787.173750	-0.000247
28	22	7	27	21	7	787.173750	-0.000247
30	21	9	29	20	9	787.186520	-0.000080
30	21	10	29	20	10	787.186520	-0.000080
32	20	12	31	19	12	787.197840	-0.000373
32	20	13	31	19	13	787.197840	-0.000373

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
34	19	15	33	18	15	787.208150	-0.000156
34	19	16	33	18	16	787.208150	-0.000156
25	24	1	24	23	1	787.217740	-0.000148
25	24	2	24	23	2	787.217740	-0.000148
27	23	4	26	22	4	787.232090	0.000436
27	23	5	26	22	5	787.232090	0.000436
29	22	7	28	21	7	787.244900	0.000015
29	22	8	28	21	8	787.244900	0.000015
31	21	10	30	20	10	787.257160	-0.000178
31	21	11	30	20	11	787.257160	-0.000178
33	20	13	32	19	13	787.268420	-0.000269
33	20	14	32	19	14	787.268420	-0.000269
35	19	16	34	18	16	787.278350	-0.000007
35	19	17	34	18	17	787.278350	-0.000007
37	18	19	36	17	19	787.285340	-0.000012
37	18	20	36	17	20	787.285340	-0.000012
26	24	2	25	23	2	787.288910	0.000040
26	24	3	25	23	3	787.288910	0.000040
28	23	5	27	22	5	787.302560	-0.000042
28	23	6	27	22	6	787.302560	-0.000042
30	22	8	29	21	8	787.315500	-0.000226
30	22	9	29	21	9	787.315500	-0.000226
32	21	11	31	20	11	787.328000	-0.000009
32	21	12	31	20	12	787.328000	-0.000009
34	20	14	33	19	14	787.339190	0.000118
34	20	15	33	19	15	787.339190	0.000118
25	25	0	24	24	0	787.345680	0.000007
25	25	1	24	24	1	787.345680	0.000007
36	19	17	35	18	17	787.348300	0.000043
36	19	18	35	18	18	787.348300	0.000043
38	18	20	37	17	20	787.354460	-0.000005
38	18	21	37	17	21	787.354460	-0.000005
27	24	3	26	23	3	787.359880	0.000038
27	24	4	26	23	4	787.359880	0.000038
29	23	6	28	22	6	787.373530	0.000023
29	23	7	28	22	7	787.373530	0.000023
31	22	9	30	21	9	787.386620	0.000090
31	22	10	30	21	10	787.386620	0.000090
33	21	12	32	20	12	787.398710	0.000094
33	21	13	32	20	13	787.398710	0.000094
35	20	15	34	19	15	787.409390	0.000048
35	20	16	34	19	16	787.409390	0.000048
26	25	1	25	24	1	787.416460	-0.000196
26	25	2	25	24	2	787.416460	-0.000196
28	24	4	27	23	4	787.430830	0.000030
28	24	5	27	23	5	787.430830	0.000030
30	23	7	29	22	7	787.444210	-0.000185
30	23	8	29	22	8	787.444210	-0.000185
32	22	10	31	21	10	787.457210	-0.000073
32	22	11	31	21	11	787.457210	-0.000073
34	21	13	33	20	13	787.469460	0.000320
34	21	14	33	20	14	787.469460	0.000320
36	20	16	35	19	16	787.479450	-0.000050
36	20	17	35	19	17	787.479450	-0.000050
38	19	19	37	18	19	787.487640	0.000097
27	25	2	26	24	2	787.487640	0.000004
38	19	20	37	18	20	787.487640	0.000097
27	25	3	26	24	3	787.487640	0.000004
40	18	22	39	17	22	787.491870	-0.000041
40	18	23	39	17	23	787.491870	-0.000042
29	24	5	28	23	5	787.501930	0.000192
29	24	6	28	23	6	787.501930	0.000192
31	23	8	30	22	8	787.515030	-0.000221
31	23	9	30	22	9	787.515030	-0.000221
33	22	11	32	21	11	787.527900	-0.000078
33	22	12	32	21	12	787.527900	-0.000078
35	21	14	34	20	14	787.539560	-0.000027
35	21	15	34	20	15	787.539560	-0.000027
26	26	0	25	25	0	787.543880	-0.000199
26	26	1	25	25	1	787.543880	-0.000199
37	20	17	36	19	17	787.549670	0.000140
37	20	18	36	19	18	787.549670	0.000140
39	19	20	38	18	20	787.556920	0.000012
39	19	21	38	18	21	787.556920	0.000012
28	25	3	27	24	3	787.558680	0.000077
28	25	4	27	24	4	787.558680	0.000077
30	24	6	29	23	6	787.572590	-0.000056
30	24	7	29	23	7	787.572590	-0.000056
34	22	12	33	21	12	787.598510	-0.000102
34	22	13	33	21	13	787.598510	-0.000102
36	21	15	35	20	15	787.609920	-0.000008
36	21	16	35	20	16	787.609920	-0.000008
27	26	1	26	25	1	787.615050	-0.000011
27	26	2	26	25	2	787.615050	-0.000011
31	24	7	30	23	7	787.643420	-0.000119
31	24	8	30	23	8	787.643420	-0.000119
33	23	10	32	22	10	787.656760	-0.000071
33	23	11	32	22	11	787.656760	-0.000071
35	22	13	34	21	13	787.669450	0.000272
35	22	14	34	21	14	787.669450	0.000272

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
37	21	16	36	20	16	787.679990	-0.000186
37	21	17	36	20	17	787.679990	-0.000186
28	26	2	27	25	2	787.686210	0.000182
28	26	3	27	25	3	787.686210	0.000182
39	20	19	38	19	19	787.689150	0.000015
39	20	20	38	19	20	787.689150	0.000015
41	19	22	40	18	22	787.694910	-0.000038
41	19	23	40	18	23	787.694910	-0.000038
30	25	5	29	24	5	787.700440	-0.000053
30	25	6	29	24	6	787.700440	-0.000053
32	24	8	31	23	8	787.714420	0.000025
32	24	9	31	23	9	787.714420	0.000025
34	23	11	33	22	11	787.727550	-0.000003
34	23	12	33	22	12	787.727550	-0.000003
36	22	14	35	21	14	787.739940	0.000264
36	22	15	35	21	15	787.739940	0.000264
27	27	0	26	26	0	787.742070	-0.000041
27	27	1	26	26	1	787.742070	-0.000041
38	21	17	37	20	17	787.750320	0.000016
38	21	18	37	20	18	787.750320	0.000016
29	26	3	28	25	3	787.757040	0.000047
29	26	4	28	25	4	787.757040	0.000047
40	20	20	39	19	20	787.758510	-0.000176
40	20	21	39	19	21	787.758510	-0.000176
31	25	6	30	24	6	787.771270	-0.000136
31	25	7	30	24	7	787.771270	-0.000136
33	24	9	32	23	9	787.785130	-0.000087
33	24	10	32	23	10	787.785130	-0.000087
37	22	15	36	21	15	787.809950	-0.000126
37	22	16	36	21	16	787.809950	-0.000126
28	27	1	27	26	1	787.813040	-0.000046
28	27	2	27	26	2	787.813040	-0.000046
30	26	4	29	25	4	787.828000	0.000063
30	26	5	29	25	5	787.828000	0.000063
32	25	7	31	24	7	787.842480	0.000184
32	25	8	31	24	8	787.842480	0.000184
34	24	10	33	23	10	787.856040	0.000040
34	24	11	33	23	11	787.856040	0.000040
36	23	13	35	22	13	787.868810	-0.000004
36	23	14	35	22	14	787.868810	-0.000004
38	22	16	37	21	16	787.880240	-0.000148
38	22	17	37	21	17	787.880240	-0.000148
29	27	2	28	26	2	787.884090	0.000040
29	27	3	28	26	3	787.884090	0.000040
40	21	19	39	20	19	787.890170	0.000002
40	21	20	39	20	20	787.890170	0.000002
42	20	22	41	19	22	787.897030	-0.000189
42	20	23	41	19	23	787.897030	-0.000189
31	26	5	30	25	5	787.898810	-0.000061
31	26	6	30	25	6	787.898810	-0.000061
33	25	8	32	24	8	787.912890	-0.000269
33	25	9	32	24	9	787.912890	-0.000269
35	24	11	34	23	11	787.926760	0.000028
35	24	12	34	23	12	787.926760	0.000028
37	23	14	36	22	14	787.939580	0.000233
28	28	0	27	27	0	787.939580	-0.000187
37	23	15	36	22	15	787.939580	0.000233
28	28	1	27	27	1	787.939580	-0.000187
39	22	17	38	21	17	787.950350	-0.000255
39	22	18	38	21	18	787.950350	-0.000255
30	27	3	29	26	3	787.954820	-0.000185
30	27	4	29	26	4	787.954820	-0.000185
41	21	20	40	20	20	787.959740	-0.000135
41	21	21	40	20	21	787.959740	-0.000135
43	20	23	42	19	23	787.966190	0.000032
43	20	24	42	19	24	787.966190	0.000032
32	26	6	31	25	6	787.969910	0.000118
32	26	7	31	25	7	787.969910	0.000118
34	25	9	33	24	9	787.983920	-0.000059
34	25	10	33	24	10	787.983920	-0.000059
36	24	12	35	23	12	787.997440	0.000026
36	24	13	35	23	13	787.997440	0.000026
38	23	15	37	22	15	788.009700	-0.000106
38	23	16	37	22	16	788.009700	-0.000106
40	22	18	39	21	18	788.020740	0.000034
40	22	19	39	21	19	788.020740	0.000034
31	27	4	30	26	4	788.026160	0.000202
31	27	5	30	26	5	788.026160	0.000202
33	26	7	32	25	7	788.040630	-0.000050
33	26	8	32	25	8	788.040630	-0.000050
35	25	10	34	24	10	788.054500	-0.000269
35	25	11	34	24	11	788.054500	-0.000269
37	24	13	36	23	13	788.067960	-0.000086
37	24	14	36	23	14	788.067960	-0.000086
39	23	16	38	22	16	788.080210	0.000040
39	23	17	38	22	17	788.080210	0.000040
30	28	2	29	27	2	788.081720	0.000017
30	28	3	29	27	3	788.081720	0.000017
41	22	19	40	21	19	788.090490	-0.000195
41	22	20	40	21	20	788.090490	-0.000195

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
32	27	5	31	26	5	788.096870	-0.000013
32	27	6	31	26	6	788.096870	-0.000013
43	21	22	42	20	22	788.098810	0.000007
43	21	23	42	20	23	788.098810	0.000007
34	26	8	33	25	8	788.111610	0.000070
34	26	9	33	25	9	788.111610	0.000070
36	25	11	35	24	11	788.125560	0.000032
36	25	12	35	24	12	788.125560	0.000032
29	29	0	28	28	0	788.137100	0.000043
29	29	1	28	28	1	788.137100	0.000043
38	24	14	37	23	14	788.138560	-0.000053
38	24	15	37	23	15	788.138560	-0.000053
40	23	17	39	22	17	788.150400	-0.000060
40	23	18	39	22	18	788.150400	-0.000060
31	28	3	30	27	3	788.152390	-0.000256
31	28	4	30	27	4	788.152390	-0.000256
42	22	20	41	21	20	788.160640	0.000112
42	22	21	41	21	21	788.160640	0.000112
44	21	23	43	20	23	788.167940	-0.000046
33	27	6	32	26	6	788.167940	0.000151
44	21	24	43	20	24	788.167940	-0.000046
33	27	7	32	26	7	788.167940	0.000151
46	20	26	45	19	26	788.171030	-0.000447
46	20	27	45	19	27	788.171030	-0.000447
35	26	9	34	25	9	788.182280	-0.000098
35	26	10	34	25	10	788.182280	-0.000098
37	25	12	36	24	12	788.196490	0.000262
37	25	13	36	24	13	788.196490	0.000262
41	23	18	40	22	18	788.220650	0.000016
41	23	19	40	22	19	788.220650	0.000016
32	28	4	31	27	4	788.223740	0.000153
32	28	5	31	27	5	788.223740	0.000153
34	27	7	33	26	7	788.238700	0.000014
34	27	8	33	26	8	788.238700	0.000014
36	26	10	35	25	10	788.252870	-0.000305
36	26	11	35	25	11	788.252870	-0.000305
38	25	13	37	24	13	788.267370	0.000490
38	25	14	37	24	14	788.267370	0.000490
40	24	16	39	23	16	788.279140	-0.000387
31	29	2	30	28	2	788.279140	0.000168
40	24	17	39	23	17	788.279140	-0.000387
31	29	3	30	28	3	788.279140	0.000168
42	23	19	41	22	19	788.290680	-0.000026
42	23	20	41	22	20	788.290680	-0.000026
33	28	5	32	27	5	788.294450	-0.000066
33	28	6	32	27	6	788.294450	-0.000066
46	21	25	45	20	25	788.305810	0.000090
46	21	26	45	20	26	788.305810	0.000090
35	27	8	34	26	8	788.309730	0.000187
35	27	9	34	26	9	788.309730	0.000187
37	26	11	36	25	11	788.323890	-0.000036
37	26	12	36	25	12	788.323890	-0.000036
30	30	0	29	29	0	788.334010	0.000047
30	30	1	29	29	1	788.334010	0.000047
39	25	14	38	24	14	788.337420	-0.000055
39	25	15	38	24	15	788.337420	-0.000055
41	24	17	40	23	17	788.349920	0.000047
32	29	3	31	28	3	788.349920	-0.000006
41	24	18	40	23	18	788.349920	0.000047
32	29	4	31	28	4	788.349920	-0.000006
43	23	20	42	22	20	788.360720	0.000052
43	23	21	42	22	21	788.360720	0.000052
34	28	6	33	27	6	788.365200	-0.000228
34	28	7	33	27	7	788.365200	-0.000228
45	22	23	44	21	23	788.369270	0.000108
45	22	24	44	21	24	788.369270	0.000108
47	21	26	46	20	26	788.373930	-0.000307
47	21	27	46	20	27	788.373930	-0.000307
36	27	9	35	26	9	788.380350	-0.000032
36	27	10	35	26	10	788.380350	-0.000032
38	26	12	37	25	12	788.394400	-0.000247
38	26	13	37	25	13	788.394400	-0.000247
31	30	1	30	29	1	788.404760	-0.000166
31	30	2	30	29	2	788.404760	-0.000166
40	25	15	39	24	15	788.407790	-0.000215
40	25	16	39	24	16	788.407790	-0.000215
33	29	4	32	28	4	788.420490	-0.000367
42	24	18	41	23	18	788.420490	0.000371
33	29	5	32	28	5	788.420490	-0.000367
42	24	19	41	23	19	788.420490	0.000371
35	28	7	34	27	7	788.436080	-0.000232
35	28	8	34	27	8	788.436080	-0.000232
37	27	10	36	26	10	788.451190	0.000006
37	27	11	36	26	11	788.451190	0.000006
39	26	13	38	25	13	788.465240	-0.000081
39	26	14	38	25	14	788.465240	-0.000081
41	25	16	40	24	16	788.478340	-0.000130
41	25	17	40	24	17	788.478340	-0.000130
43	24	19	42	23	19	788.490310	0.000036
43	24	20	42	23	20	788.490310	0.000036

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
34	29	5	33	28	5	788.491780	0.000003
34	29	6	33	28	6	788.491780	0.000003
45	23	22	44	22	22	788.500070	-0.000115
45	23	23	44	22	23	788.500070	-0.000115
47	22	25	46	21	25	788.507190	-0.000180
36	28	8	35	27	8	788.507190	0.000007
47	22	26	46	21	26	788.507190	-0.000180
36	28	9	35	27	9	788.507190	0.000007
38	27	11	37	26	11	788.521850	-0.000107
38	27	12	37	26	12	788.521850	-0.000107
31	31	0	30	30	0	788.530660	0.000144
31	31	1	30	30	1	788.530660	0.000144
40	26	14	39	25	14	788.536080	0.000141
40	26	15	39	25	15	788.536080	0.000141
33	30	3	32	29	3	788.546890	0.000070
33	30	4	32	29	4	788.546890	0.000070
42	25	17	41	24	17	788.548800	-0.000060
42	25	18	41	24	18	788.548800	-0.000060
44	24	20	43	23	20	788.560330	0.000012
44	24	21	43	23	21	788.560330	0.000012
35	29	6	34	28	6	788.562560	-0.000120
35	29	7	34	28	7	788.562560	-0.000120
46	23	23	45	22	23	788.569820	0.000092
46	23	24	45	22	24	788.569820	0.000092
48	22	26	47	21	26	788.576020	-0.000137
48	22	27	47	21	27	788.576020	-0.000137
37	28	9	36	27	9	788.577980	-0.000037
37	28	10	36	27	10	788.577980	-0.000037
39	27	12	38	26	12	788.592690	0.000002
39	27	13	38	26	13	788.592690	0.000002
32	31	1	31	30	1	788.601320	-0.000142
32	31	2	31	30	2	788.601320	-0.000142
41	26	15	40	25	15	788.606540	0.000043
41	26	16	40	25	16	788.606540	0.000043
34	30	4	33	29	4	788.617700	-0.000056
34	30	5	33	29	5	788.617700	-0.000056
43	25	18	42	24	18	788.619120	-0.000044
43	25	19	42	24	19	788.619120	-0.000044
36	29	7	35	28	7	788.633580	0.000008
36	29	8	35	28	8	788.633580	0.000008
38	28	10	37	27	10	788.649100	0.000277
38	28	11	37	27	11	788.649100	0.000277
40	27	13	39	26	13	788.663450	0.000082
40	27	14	39	26	14	788.663450	0.000082
33	31	2	32	30	2	788.672320	-0.000087
33	31	3	32	30	3	788.672320	-0.000087
42	26	16	41	25	16	788.676990	-0.000006
42	26	17	41	25	17	788.676990	-0.000006
44	25	19	43	24	19	788.688870	-0.000513
35	30	5	34	29	5	788.688870	0.000203
44	25	20	43	24	20	788.688870	-0.000513
35	30	6	34	29	6	788.688870	0.000203
46	24	22	45	23	22	788.699910	-0.000156
46	24	23	45	23	23	788.699910	-0.000156
37	29	8	36	28	8	788.704330	-0.000101
37	29	9	36	28	9	788.704330	-0.000101
48	23	25	47	22	25	788.708360	0.000029
48	23	26	47	22	26	788.708360	0.000029
39	28	11	38	27	11	788.719640	0.000040
39	28	12	38	27	12	788.719640	0.000040
32	32	0	31	31	0	788.726500	-0.000183
32	32	1	31	31	1	788.726500	-0.000183
41	27	14	40	26	14	788.734020	0.000015
41	27	15	40	26	15	788.734020	0.000015
34	31	3	33	30	3	788.743120	-0.000226
34	31	4	33	30	4	788.743120	-0.000226
43	26	17	42	25	17	788.747550	0.000122
43	26	18	42	25	18	788.747550	0.000122
45	25	20	44	24	20	788.759450	-0.000060
36	30	6	35	29	6	788.759450	-0.000120
45	25	21	44	24	21	788.759450	-0.000060
36	30	7	35	29	7	788.759450	-0.000120
38	29	9	37	28	9	788.775260	-0.000016
38	29	10	37	28	10	788.775260	-0.000016
49	23	26	48	22	26	788.777240	-0.000120
49	23	27	48	22	27	788.777240	-0.000120
40	28	12	39	27	12	788.790520	0.000176
40	28	13	39	27	13	788.790520	0.000176
42	27	15	41	26	15	788.804660	0.000064
42	27	16	41	26	16	788.804660	0.000064
35	31	4	34	30	4	788.814630	0.000361
35	31	5	34	30	5	788.814630	0.000361
44	26	18	43	25	18	788.817570	-0.000210
44	26	19	43	25	19	788.817570	-0.000210
37	30	7	36	29	7	788.830440	-0.000014
37	30	8	36	29	8	788.830440	-0.000014
39	29	10	38	28	10	788.845920	-0.000167
39	29	11	38	28	11	788.845920	-0.000167
52	22	30	51	21	30	788.848830	-0.000082
52	22	31	51	21	31	788.848830	-0.000082

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
41	28	13	40	27	13	788.861010	-0.000028
41	28	14	40	27	14	788.861010	-0.000028
34	32	2	33	31	2	788.868750	0.000173
34	32	3	33	31	3	788.868750	0.000173
43	27	16	42	26	16	788.875190	0.000067
43	27	17	42	26	17	788.875190	0.000067
36	31	5	35	30	5	788.885180	-0.000007
36	31	6	35	30	6	788.885180	-0.000007
45	26	19	44	25	19	788.887920	-0.000137
45	26	20	44	25	20	788.887920	-0.000137
47	25	22	46	24	22	788.899510	0.000064
47	25	23	46	24	23	788.899510	0.000064
38	30	8	37	29	8	788.901220	-0.000092
38	30	9	37	29	9	788.901220	-0.000092
49	24	25	48	23	25	788.908550	-0.000120
49	24	26	48	23	26	788.908550	-0.000120
40	29	11	39	28	11	788.916550	-0.000321
40	29	12	39	28	12	788.916550	-0.000321
33	33	0	32	32	0	788.922690	0.000195
33	33	1	32	32	1	788.922690	0.000195
42	28	14	41	27	14	788.931680	-0.000009
42	28	15	41	27	15	788.931680	-0.000009
35	32	3	34	31	3	788.939630	0.000119
35	32	4	34	31	4	788.939630	0.000119
44	27	17	43	26	17	788.945290	-0.000299
44	27	18	43	26	18	788.945290	-0.000299
37	31	6	36	30	6	788.955880	-0.000201
37	31	7	36	30	7	788.955880	-0.000201
46	26	20	45	25	20	788.958210	-0.000048
46	26	21	45	25	21	788.958210	-0.000048
48	25	23	47	24	23	788.969140	-0.000102
48	25	24	47	24	24	788.969140	-0.000102
39	30	9	38	29	9	788.971940	-0.000220
39	30	10	38	29	10	788.971940	-0.000220
50	24	26	49	23	26	788.977750	-0.000150
50	24	27	49	23	27	788.977750	-0.000150
52	23	29	51	22	29	788.983240	0.000038
52	23	30	51	22	30	788.983240	0.000038
41	29	12	40	28	12	788.987690	0.000073
41	29	13	40	28	13	788.987690	0.000073
34	33	1	33	32	1	788.993350	-0.000091
34	33	2	33	32	2	788.993350	-0.000091
36	32	4	35	31	4	789.010840	0.000416
36	32	5	35	31	5	789.010840	0.000416
45	27	18	44	26	18	789.016120	0.000136
45	27	19	44	26	19	789.016120	0.000136
38	31	7	37	30	7	789.026830	-0.000136
38	31	8	37	30	8	789.026830	-0.000136
47	26	21	46	25	21	789.028370	0.000019
47	26	22	46	25	22	789.028370	0.000019
40	30	10	39	29	10	789.042790	-0.000180
40	30	11	39	29	11	789.042790	-0.000180
53	23	30	52	22	30	789.051180	-0.000171
53	23	31	52	22	31	789.051180	-0.000171
42	29	13	41	28	13	789.058040	-0.000286
42	29	14	41	28	14	789.058040	-0.000286
35	33	2	34	32	2	789.064130	-0.000237
35	33	3	34	32	3	789.064130	-0.000237
44	28	16	43	27	16	789.072020	-0.000831
44	28	17	43	27	17	789.072020	-0.000831
37	32	5	36	31	5	789.081360	0.000028
37	32	6	36	31	6	789.081360	0.000028
46	27	19	45	26	19	789.086340	0.000031
46	27	20	45	26	20	789.086340	0.000031
48	26	22	47	25	22	789.097930	-0.000420
39	31	8	38	30	8	789.097930	0.000104
48	26	23	47	25	23	789.097930	-0.000420
39	31	9	38	30	9	789.097930	0.000104
50	25	25	49	24	25	789.108420	-0.000023
50	25	26	49	24	26	789.108420	-0.000023
41	30	11	40	29	11	789.113340	-0.000412
41	30	12	40	29	12	789.113340	-0.000412
34	34	0	33	33	0	789.117970	0.000033
34	34	1	33	33	1	789.117970	0.000033
43	29	14	42	28	14	789.129200	0.000213
43	29	15	42	28	15	789.129200	0.000213
36	33	3	35	32	3	789.135310	0.000011
36	33	4	35	32	4	789.135310	0.000011
45	28	17	44	27	17	789.143250	-0.000094
45	28	18	44	27	18	789.143250	-0.000094
38	32	6	37	31	6	789.152530	0.000297
38	32	7	37	31	7	789.152530	0.000297
47	27	20	46	26	20	789.156410	-0.000149
47	27	21	46	26	21	789.156410	-0.000149
49	26	23	48	25	23	789.168360	0.000111
40	31	9	39	30	9	789.168360	-0.000311
49	26	24	48	25	24	789.168360	0.000111
40	31	10	39	30	10	789.168360	-0.000311
51	25	26	50	24	26	789.177700	-0.000127
51	25	27	50	24	27	789.177700	-0.000127

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
53	24	29	52	23	29	789.184430	-0.000049
42	30	12	41	29	12	789.184430	-0.000083
53	24	30	52	23	30	789.184430	-0.000049
42	30	13	41	29	13	789.184430	-0.000083
35	34	1	34	33	1	789.188880	0.000003
35	34	2	34	33	2	789.188880	0.000003
44	29	15	43	28	15	789.199610	-0.000008
44	29	16	43	28	16	789.199610	-0.000008
37	33	4	36	32	4	789.206210	-0.000005
37	33	5	36	32	5	789.206210	-0.000005
46	28	18	45	27	18	789.213910	0.000128
46	28	19	45	27	19	789.213910	0.000128
39	32	7	38	31	7	789.223140	0.000032
39	32	8	38	31	8	789.223140	0.000032
48	27	21	47	26	21	789.226670	-0.000050
48	27	22	47	26	22	789.226670	-0.000050
41	31	10	40	30	10	789.239610	0.000126
41	31	11	40	30	11	789.239610	0.000126
54	24	30	53	23	30	789.252770	-0.000158
54	24	31	53	23	31	789.252770	-0.000158
43	30	13	42	29	13	789.255080	-0.000144
43	30	14	42	29	14	789.255080	-0.000144
36	34	2	35	33	2	789.259880	0.000076
36	34	3	35	33	3	789.259880	0.000076
45	29	16	44	28	16	789.270030	-0.000161
45	29	17	44	28	17	789.270030	-0.000161
38	33	5	37	32	5	789.277060	-0.000055
38	33	6	37	32	6	789.277060	-0.000055
40	32	8	39	31	8	789.294150	0.000182
40	32	9	39	31	9	789.294150	0.000182
49	27	22	48	26	22	789.296810	0.000014
49	27	23	48	26	23	789.296810	0.000014
51	26	25	50	25	25	789.307710	0.000030
51	26	26	50	25	26	789.307710	0.000030
42	31	11	41	30	11	789.310080	-0.000186
42	31	12	41	30	12	789.310080	-0.000186
35	35	0	34	34	0	789.312950	-0.000057
35	35	1	34	34	1	789.312950	-0.000057
44	30	14	43	29	14	789.325810	-0.000090
44	30	15	43	29	15	789.325810	-0.000090
37	34	3	36	33	3	789.330690	-0.000033
37	34	4	36	33	4	789.330690	-0.000033
46	29	17	45	28	17	789.340670	-0.000042
46	29	18	45	28	18	789.340670	-0.000042
39	33	6	38	32	6	789.347970	-0.000038
39	33	7	38	32	7	789.347970	-0.000038
48	28	20	47	27	20	789.354230	-0.000213
48	28	21	47	27	21	789.354230	-0.000213
41	32	9	40	31	9	789.364920	0.000114
41	32	10	40	31	10	789.364920	0.000114
50	27	23	49	26	23	789.366870	0.000100
50	27	24	49	26	24	789.366870	0.000100
52	26	26	51	25	26	789.377350	0.000148
52	26	27	51	25	27	789.377350	0.000148
43	31	12	42	30	12	789.381030	0.000003
43	31	13	42	30	13	789.381030	0.000003
54	25	29	53	24	29	789.384920	-0.000102
54	25	30	53	24	30	789.384920	-0.000102
56	24	32	55	23	32	789.389260	0.000132
56	24	33	55	23	33	789.389260	0.000132
45	30	15	44	29	15	789.396470	-0.000076
45	30	16	44	29	16	789.396470	-0.000076
38	34	4	37	33	4	789.401700	0.000073
38	34	5	37	33	5	789.401700	0.000073
47	29	18	46	28	18	789.411280	0.000105
47	29	19	46	28	19	789.411280	0.000105
40	33	7	39	32	7	789.418970	0.000093
40	33	8	39	32	8	789.418970	0.000093
49	28	21	48	27	21	789.424580	-0.000084
49	28	22	48	27	22	789.424580	-0.000084
44	31	13	43	30	13	789.451590	-0.000161
44	31	14	43	30	14	789.451590	-0.000161
55	25	30	54	24	30	789.453690	-0.000031
55	25	31	54	24	31	789.453690	-0.000031
37	35	2	36	34	2	789.454880	0.000017
37	35	3	36	34	3	789.454880	0.000017
46	30	16	45	29	16	789.466790	-0.000343
46	30	17	45	29	17	789.466790	-0.000343
39	34	5	38	33	5	789.472670	0.000143
39	34	6	38	33	6	789.472670	0.000143
48	29	19	47	28	19	789.480860	-0.000712
48	29	20	47	28	20	789.480860	-0.000712
41	33	8	40	32	8	789.489820	0.000088
41	33	9	40	32	9	789.489820	0.000088
50	28	22	49	27	22	789.494590	-0.000212
50	28	23	49	27	23	789.494590	-0.000212
52	27	25	51	26	25	789.506360	-0.000047
43	32	11	42	31	11	789.506360	-0.000046
52	27	26	51	26	26	789.506360	-0.000047
43	32	12	42	31	12	789.506360	-0.000046

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
36	36	0	35	35	0	789.507730	0.000007
36	36	1	35	35	1	789.507730	0.000007
45	31	14	44	30	14	789.522200	-0.000234
45	31	15	44	30	15	789.522200	-0.000234
38	35	3	37	34	3	789.525960	0.000185
38	35	4	37	34	4	789.525960	0.000185
47	30	17	46	29	17	789.537400	-0.000275
47	30	18	46	29	18	789.537400	-0.000275
40	34	6	39	33	6	789.543310	-0.000108
40	34	7	39	33	7	789.543310	-0.000108
49	29	20	48	28	20	789.551840	-0.000076
49	29	21	48	28	21	789.551840	-0.000076
42	33	9	41	32	9	789.560460	-0.000114
42	33	10	41	32	10	789.560460	-0.000114
51	28	23	50	27	23	789.564810	-0.000038
51	28	24	50	27	24	789.564810	-0.000038
53	27	26	52	26	26	789.575890	-0.000158
53	27	27	52	26	27	789.575890	-0.000158
37	36	1	36	35	1	789.578740	0.000093
37	36	2	36	35	2	789.578740	0.000093
55	26	29	54	25	29	789.584860	-0.000058
55	26	30	54	25	30	789.584860	-0.000058
57	25	32	56	24	32	789.590580	0.000071
57	25	33	56	24	33	789.590580	0.000071
46	31	15	45	30	15	789.593050	-0.000036
46	31	16	45	30	16	789.593050	-0.000036
39	35	4	38	34	4	789.596820	0.000138
39	35	5	38	34	5	789.596820	0.000138
48	30	18	47	29	18	789.608190	0.000020
48	30	19	47	29	19	789.608190	0.000020
41	34	7	40	33	7	789.614180	-0.000102
41	34	8	40	33	8	789.614180	-0.000102
50	29	21	49	28	21	789.622230	0.000049
50	29	22	49	28	22	789.622230	0.000049
43	33	10	42	32	10	789.631390	0.000001
43	33	11	42	32	11	789.631390	0.000001
45	32	13	44	31	13	789.647910	0.000011
45	32	14	44	31	14	789.647910	0.000011
38	36	2	37	35	2	789.649640	0.000079
38	36	3	37	35	3	789.649640	0.000079
56	26	30	55	25	30	789.653490	-0.000339
56	26	31	55	25	31	789.653490	-0.000339
47	31	16	46	30	16	789.663590	-0.000105
47	31	17	46	30	17	789.663590	-0.000105
40	35	5	39	34	5	789.667650	0.000077
40	35	6	39	34	6	789.667650	0.000077
49	30	19	48	29	19	789.678280	-0.000316
49	30	20	48	29	20	789.678280	-0.000316
42	34	8	41	33	8	789.685250	0.000111
42	34	9	41	33	9	789.685250	0.000111
51	29	22	50	28	22	789.692600	0.000228
51	29	23	50	28	23	789.692600	0.000228
44	33	11	43	32	11	789.702160	-0.000019
37	37	0	36	36	0	789.702160	0.000087
44	33	12	43	32	12	789.702160	-0.000019
37	37	1	36	36	1	789.702160	0.000087
53	28	25	52	27	25	789.704450	-0.000198
53	28	26	52	27	26	789.704450	-0.000198
46	32	14	45	31	14	789.718450	-0.000139
46	32	15	45	31	15	789.718450	-0.000139
39	36	3	38	35	3	789.720400	-0.000071
39	36	4	38	35	4	789.720400	-0.000071
48	31	17	47	30	17	789.734410	0.000155
48	31	18	47	30	18	789.734410	0.000155
41	35	6	40	34	6	789.738490	0.000031
41	35	7	40	34	7	789.738490	0.000031
50	30	20	49	29	20	789.749800	0.000825
50	30	21	49	29	21	789.749800	0.000825
43	34	9	42	33	9	789.755940	-0.000035
43	34	10	42	33	10	789.755940	-0.000035
52	29	23	51	28	23	789.762350	-0.000127
52	29	24	51	28	24	789.762350	-0.000127
38	37	1	37	36	1	789.773000	0.000017
45	33	12	44	32	12	789.773000	0.000066
38	37	2	37	36	2	789.773000	0.000017
45	33	13	44	32	13	789.773000	0.000066
54	28	26	53	27	26	789.774410	0.000010
54	28	27	53	27	27	789.774410	0.000010
56	27	29	55	26	29	789.783590	-0.000612
56	27	30	55	26	30	789.783590	-0.000612
47	32	15	46	31	15	789.789000	-0.000256
47	32	16	46	31	16	789.789000	-0.000256
40	36	4	39	35	4	789.791190	-0.000181
58	26	32	57	25	32	789.791190	0.000081
40	36	5	39	35	5	789.791190	-0.000181
58	26	33	57	25	33	789.791190	0.000081
49	31	18	48	30	18	789.804660	-0.000106
49	31	19	48	30	19	789.804660	-0.000106
42	35	7	41	34	7	789.809530	0.000214
42	35	8	41	34	8	789.809530	0.000214

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
51	30	21	50	29	21	789.819210	-0.000069
51	30	22	50	29	22	789.819210	-0.000069
44	34	10	43	33	10	789.826990	0.000210
44	34	11	43	33	11	789.826990	0.000210
46	33	13	45	32	13	789.843860	0.000193
39	37	2	38	36	2	789.843860	-0.000033
46	33	14	45	32	14	789.843860	0.000193
39	37	3	38	36	3	789.843860	-0.000033
48	32	16	47	31	16	789.859640	-0.000227
48	32	17	47	31	17	789.859640	-0.000227
41	36	5	40	35	5	789.862290	0.000029
41	36	6	40	35	6	789.862290	0.000029
50	31	19	49	30	19	789.875170	-0.000052
50	31	20	49	30	20	789.875170	-0.000052
43	35	8	42	34	8	789.880240	0.000070
43	35	9	42	34	9	789.880240	0.000070
38	38	0	37	37	0	789.895970	-0.000079
38	38	1	37	37	1	789.895970	-0.000079
45	34	11	44	33	11	789.897580	0.000011
45	34	12	44	33	12	789.897580	0.000011
47	33	14	46	32	14	789.914640	0.000273
40	37	3	39	36	3	789.914640	-0.000154
47	33	15	46	32	15	789.914640	0.000273
40	37	4	39	36	4	789.914640	-0.000154
49	32	17	48	31	17	789.930290	-0.000163
49	32	18	48	31	18	789.930290	-0.000163
42	36	6	41	35	6	789.932940	-0.000190
42	36	7	41	35	7	789.932940	-0.000190
51	31	20	50	30	20	789.945600	-0.000030
51	31	21	50	30	21	789.945600	-0.000030
44	35	9	43	34	9	789.950870	-0.000131
44	35	10	43	34	10	789.950870	-0.000131
53	30	23	52	29	23	789.959560	-0.000112
53	30	24	52	29	24	789.959560	-0.000112
39	38	1	38	37	1	789.967020	0.000056
39	38	2	38	37	2	789.967020	0.000056
46	34	12	45	33	12	789.968370	0.000039
46	34	13	45	33	13	789.968370	0.000039
55	29	26	54	28	26	789.972370	0.000110
55	29	27	54	28	27	789.972370	0.000110
57	28	29	56	27	29	789.982930	0.000009
57	28	30	56	27	30	789.982930	0.000009
41	37	4	40	36	4	789.985930	0.000239
41	37	5	40	36	5	789.985930	0.000239
59	27	32	58	26	32	789.990770	-0.000222
59	27	33	58	26	33	789.990770	-0.000222
43	36	7	42	35	7	790.003840	-0.000149
43	36	8	42	35	8	790.003840	-0.000149
52	31	21	51	30	21	790.015850	-0.000124
52	31	22	51	30	22	790.015850	-0.000124
45	35	10	44	34	10	790.021700	-0.000105
45	35	11	44	34	11	790.021700	-0.000105
40	38	2	39	37	2	790.037990	0.000120
40	38	3	39	37	3	790.037990	0.000120
58	28	30	57	27	30	790.052060	-0.000108
58	28	31	57	27	31	790.052060	-0.000108
42	37	5	41	36	5	790.056710	0.000141
42	37	6	41	36	6	790.056710	0.000141
51	32	19	50	31	19	790.071520	0.000057
51	32	20	50	31	20	790.071520	0.000057
44	36	8	43	35	8	790.074810	-0.000021
44	36	9	43	35	9	790.074810	-0.000021
53	31	22	52	30	22	790.086530	0.000284
53	31	23	52	30	23	790.086530	0.000284
39	39	0	38	38	0	790.089690	0.000015
39	39	1	38	38	1	790.089690	0.000015
46	35	11	45	34	11	790.092640	0.000038
46	35	12	45	34	12	790.092640	0.000038
55	30	25	54	29	25	790.100120	0.000362
55	30	26	54	29	26	790.100120	0.000362
41	38	3	40	37	3	790.109010	0.000241
41	38	4	40	37	4	790.109010	0.000241
43	37	6	42	36	6	790.127520	0.000075
43	37	7	42	36	7	790.127520	0.000075
52	32	20	51	31	20	790.141980	0.000093
52	32	21	51	31	21	790.141980	0.000093
45	36	9	44	35	9	790.145610	-0.000052
45	36	10	44	35	10	790.145610	-0.000052
54	31	23	53	30	23	790.155900	-0.000551
54	31	24	53	30	24	790.155900	-0.000551
40	39	1	39	38	1	790.160590	0.000012
40	39	2	39	38	2	790.160590	0.000012
47	35	12	46	34	12	790.163100	-0.000265
47	35	13	46	34	13	790.163100	-0.000265
56	30	26	55	29	26	790.169770	0.000102
56	30	27	55	29	27	790.169770	0.000102
58	29	29	57	28	29	790.180580	-0.000535
58	29	30	57	28	30	790.180580	-0.000535
51	33	18	50	32	18	790.196760	-0.000046
51	33	19	50	32	19	790.196760	-0.000046

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
44	37	7	43	36	7	790.198280	-0.000018
44	37	8	43	36	8	790.198280	-0.000018
53	32	21	52	31	21	790.212120	-0.000141
53	32	22	52	31	22	790.212120	-0.000141
46	36	10	45	35	10	790.216380	-0.000087
46	36	11	45	35	11	790.216380	-0.000087
41	39	2	40	38	2	790.231780	0.000307
41	39	3	40	38	3	790.231780	0.000307
48	35	13	47	34	13	790.234240	0.000136
48	35	14	47	34	14	790.234240	0.000136
57	30	27	56	29	27	790.239720	0.000247
57	30	28	56	29	28	790.239720	0.000247
50	34	16	49	33	16	790.250630	-0.000462
43	38	5	42	37	5	790.250630	0.000099
59	29	30	58	28	30	790.250630	0.000136
50	34	17	49	33	17	790.250630	-0.000462
43	38	6	42	37	6	790.250630	0.000099
59	29	31	58	28	31	790.250630	0.000136
52	33	19	51	32	19	790.267330	0.000030
52	33	20	51	32	20	790.267330	0.000030
45	37	8	44	36	8	790.269270	0.000136
45	37	9	44	36	9	790.269270	0.000136
54	32	22	53	31	22	790.282720	0.000149
40	40	0	39	39	0	790.282720	-0.000219
54	32	23	53	31	23	790.282720	0.000149
40	40	1	39	39	1	790.282720	-0.000219
47	36	11	46	35	11	790.287240	-0.000018
47	36	12	46	35	12	790.287240	-0.000018
56	31	25	55	30	25	790.296720	0.000074
56	31	26	55	30	26	790.296720	0.000074
42	39	3	41	38	3	790.302130	-0.000236
42	39	4	41	38	4	790.302130	-0.000236
49	35	14	48	34	14	790.304840	0.000027
49	35	15	48	34	15	790.304840	0.000027
51	34	17	50	33	17	790.321660	-0.000030
44	38	6	43	37	6	790.321660	0.000266
51	34	18	50	33	18	790.321660	-0.000030
44	38	7	43	37	7	790.321660	0.000266
53	33	20	52	32	20	790.337820	0.000066
53	33	21	52	32	21	790.337820	0.000066
55	32	23	54	31	23	790.352760	-0.000060
55	32	24	54	31	24	790.352760	-0.000060
41	40	1	40	39	1	790.353890	0.000053
41	40	2	40	39	2	790.353890	0.000053
48	36	12	47	35	12	790.357930	-0.000089
48	36	13	47	35	13	790.357930	-0.000089
57	31	26	56	30	26	790.366360	-0.000251
57	31	27	56	30	27	790.366360	-0.000251
43	39	4	42	38	4	790.372880	-0.000368
43	39	5	42	38	5	790.372880	-0.000368
59	30	29	58	29	29	790.378770	-0.000025
59	30	30	58	29	30	790.378770	-0.000025
61	29	32	60	28	32	790.388600	-0.000245
61	29	33	60	28	33	790.388600	-0.000245
45	38	7	44	37	7	790.392300	0.000056
52	34	18	51	33	18	790.392300	0.000052
45	38	8	44	37	8	790.392300	0.000056
52	34	19	51	33	19	790.392300	0.000052
54	33	21	53	32	21	790.408130	-0.000018
54	33	22	53	32	22	790.408130	-0.000018
47	37	10	46	36	10	790.410820	0.000055
47	37	11	46	36	11	790.410820	0.000055
42	40	2	41	39	2	790.424910	0.000184
42	40	3	41	39	3	790.424910	0.000184
49	36	13	48	35	13	790.428830	0.000075
49	36	14	48	35	14	790.428830	0.000075
58	31	27	57	30	27	790.436580	0.000079
58	31	28	57	30	28	790.436580	0.000079
44	39	5	43	38	5	790.444190	0.000068
44	39	6	43	38	6	790.444190	0.000068
60	30	30	59	29	30	790.448250	-0.000037
60	30	31	59	29	31	790.448250	-0.000037
53	34	19	52	33	19	790.462670	-0.000095
46	38	8	45	37	8	790.462670	-0.000410
53	34	20	52	33	20	790.462670	-0.000095
46	38	9	45	37	9	790.462670	-0.000410
41	41	0	40	40	0	790.475750	-0.000091
41	41	1	40	40	1	790.475750	-0.000091
55	33	22	54	32	22	790.478240	-0.000250
55	33	23	54	32	23	790.478240	-0.000250
48	37	11	47	36	11	790.481730	0.000184
48	37	12	47	36	12	790.481730	0.000184
43	40	3	42	39	3	790.495640	0.000027
43	40	4	42	39	4	790.495640	0.000027
50	36	14	49	35	14	790.499440	-0.000027
50	36	15	49	35	15	790.499440	-0.000027
45	39	6	44	38	6	790.514890	-0.000082
45	39	7	44	38	7	790.514890	-0.000082
54	34	20	53	33	20	790.533300	0.000074
54	34	21	53	33	21	790.533300	0.000074

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
49	37	12	48	36	12	790.552370	0.000064
49	37	13	48	36	13	790.552370	0.000064
58	32	26	57	31	26	790.562810	-0.000316
58	32	27	57	31	27	790.562810	-0.000316
44	40	4	43	39	4	790.566710	0.000224
44	40	5	43	39	5	790.566710	0.000224
60	31	29	59	30	29	790.575750	-0.000233
60	31	30	59	30	30	790.575750	-0.000233
46	39	7	45	38	7	790.585800	-0.000025
46	39	8	45	38	8	790.585800	-0.000025
62	30	32	61	29	32	790.587060	0.000154
53	35	18	52	34	18	790.587060	-0.000250
62	30	33	61	29	33	790.587060	0.000154
53	35	19	52	34	19	790.587060	-0.000250
55	34	21	54	33	21	790.603700	0.000057
55	34	22	54	33	22	790.603700	0.000057
43	41	2	42	40	2	790.617700	0.000079
43	41	3	42	40	3	790.617700	0.000079
50	37	13	49	36	13	790.623150	0.000097
50	37	14	49	36	14	790.623150	0.000097
59	32	27	58	31	27	790.632960	-0.000124
59	32	28	58	31	28	790.632960	-0.000124
45	40	5	44	39	5	790.637280	-0.000069
45	40	6	44	39	6	790.637280	-0.000069
52	36	16	51	35	16	790.640970	0.000175
52	36	17	51	35	17	790.640970	0.000175
61	31	30	60	30	30	790.645660	0.000085
61	31	31	60	30	31	790.645660	0.000085
47	39	8	46	38	8	790.656190	-0.000464
47	39	9	46	38	9	790.656190	-0.000464
54	35	19	53	34	19	790.657380	-0.000454
54	35	20	53	34	20	790.657380	-0.000454
42	42	0	41	41	0	790.668420	0.000038
42	42	1	41	41	1	790.668420	0.000038
56	34	22	55	33	22	790.673990	-0.000025
56	34	23	55	33	23	790.673990	-0.000025
49	38	11	48	37	11	790.675510	0.000032
49	38	12	48	37	12	790.675510	0.000032
44	41	3	43	40	3	790.688910	0.000417
44	41	4	43	40	4	790.688910	0.000417
51	37	14	50	36	14	790.693800	0.000044
51	37	15	50	36	15	790.693800	0.000044
46	40	6	45	39	6	790.708120	-0.000085
46	40	7	45	39	7	790.708120	-0.000085
53	36	17	52	35	17	790.711270	-0.000144
53	36	18	52	35	18	790.711270	-0.000144
55	35	20	54	34	20	790.727540	-0.000780
55	35	21	54	34	21	790.727540	-0.000780
43	42	1	42	41	1	790.739340	0.000066
43	42	2	42	41	2	790.739340	0.000066
57	34	23	56	33	23	790.744780	0.000453
57	34	24	56	33	24	790.744780	0.000453
50	38	12	49	37	12	790.745970	-0.000270
50	38	13	49	37	13	790.745970	-0.000270
45	41	4	44	40	4	790.759260	-0.000100
59	33	26	58	32	26	790.759260	0.000046
45	41	5	44	40	5	790.759260	-0.000100
59	33	27	58	32	27	790.759260	0.000046
61	32	29	60	31	29	790.772890	0.000174
61	32	30	60	31	30	790.772890	0.000174
47	40	7	46	39	7	790.778960	-0.000076
47	40	8	46	39	8	790.778960	-0.000076
54	36	18	53	35	18	790.782220	0.000227
54	36	19	53	35	19	790.782220	0.000227
63	31	32	62	30	32	790.784810	0.000388
63	31	33	62	30	33	790.784810	0.000388
49	39	10	48	38	10	790.798220	-0.000039
49	39	11	48	38	11	790.798220	-0.000039
44	42	2	43	41	2	790.810340	0.000188
44	42	3	43	41	3	790.810340	0.000188
51	38	13	50	37	13	790.817540	0.000569
51	38	14	50	37	14	790.817540	0.000569
46	41	5	45	40	5	790.829550	-0.000669
60	33	27	59	32	27	790.829550	0.000330
46	41	6	45	40	6	790.829550	-0.000669
60	33	28	59	32	28	790.829550	0.000330
53	37	16	52	36	16	790.835370	0.000275
53	37	17	52	36	17	790.835370	0.000275
62	32	30	61	31	30	790.842480	0.000087
62	32	31	61	31	31	790.842480	0.000087
48	40	8	47	39	8	790.850160	0.000291
48	40	9	47	39	9	790.850160	0.000291
55	36	19	54	35	19	790.852490	-0.000047
55	36	20	54	35	20	790.852490	-0.000047
43	43	0	42	42	0	790.860520	-0.000057
43	43	1	42	42	1	790.860520	-0.000057
57	35	22	56	34	22	790.868830	-0.000316
50	39	11	49	38	11	790.868830	-0.000209
57	35	23	56	34	23	790.868830	-0.000316
50	39	12	49	38	12	790.868830	-0.000209

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
45	42	3	44	41	3	790.880990	-0.000033
45	42	4	44	41	4	790.880990	-0.000033
52	38	14	51	37	14	790.887380	-0.000303
52	38	15	51	37	15	790.887380	-0.000303
47	41	6	46	40	6	790.901020	-0.000051
47	41	7	46	40	7	790.901020	-0.000051
54	37	17	53	36	17	790.905830	0.000115
54	37	18	53	36	18	790.905830	0.000115
56	36	20	55	35	20	790.922770	-0.000261
56	36	21	55	35	21	790.922770	-0.000261
44	43	1	43	42	1	790.931070	-0.000387
44	43	2	43	42	2	790.931070	-0.000387
58	35	23	57	34	23	790.939600	0.000114
51	39	12	50	38	12	790.939600	-0.000200
58	35	24	57	34	24	790.939600	0.000114
51	39	13	50	38	13	790.939600	-0.000200
46	42	4	45	41	4	790.952010	0.000132
46	42	5	45	41	5	790.952010	0.000132
60	34	26	59	33	26	790.954980	0.000090
60	34	27	59	33	27	790.954980	0.000090
53	38	15	52	37	15	790.958370	0.000003
53	38	16	52	37	16	790.958370	0.000003
62	33	29	61	32	29	790.968780	-0.000207
62	33	30	61	32	30	790.968780	-0.000207
48	41	7	47	40	7	790.971950	0.000055
48	41	8	47	40	8	790.971950	0.000055
55	37	18	54	36	18	790.976420	0.000123
55	37	19	54	36	19	790.976420	0.000123
64	32	32	63	31	32	790.981540	0.000106
64	32	33	63	31	33	790.981540	0.000106
50	40	10	49	39	10	790.991820	0.000354
50	40	11	49	39	11	790.991820	0.000354
57	36	21	56	35	21	790.993700	0.000217
57	36	22	56	35	22	790.993700	0.000217
45	43	2	44	42	2	791.002380	0.000051
45	43	3	44	42	3	791.002380	0.000051
52	39	13	51	38	13	791.010450	-0.000083
52	39	14	51	38	14	791.010450	-0.000083
47	42	5	46	41	5	791.022900	0.000165
47	42	6	46	41	6	791.022900	0.000165
61	34	27	60	33	27	791.025020	0.000084
61	34	28	60	33	28	791.025020	0.000084
54	38	16	53	37	16	791.028550	-0.000475
54	38	17	53	37	17	791.028550	-0.000475
63	33	30	62	32	30	791.039090	0.000359
63	33	31	62	32	31	791.039090	0.000359
49	41	8	48	40	8	791.042820	0.000097
49	41	9	48	40	9	791.042820	0.000097
56	37	19	55	36	19	791.046830	-0.000024
56	37	20	55	36	20	791.046830	-0.000024
44	44	0	43	43	0	791.052410	0.000005
44	44	1	43	43	1	791.052410	0.000005
58	36	22	57	35	22	791.063990	0.000101
58	36	23	57	35	23	791.063990	0.000101
46	43	3	45	42	3	791.073110	-0.000080
46	43	4	45	42	4	791.073110	-0.000080
53	39	14	52	38	14	791.081110	-0.000127
53	39	15	52	38	15	791.081110	-0.000127
48	42	6	47	41	6	791.093520	-0.000053
48	42	7	47	41	7	791.093520	-0.000053
55	38	17	54	37	17	791.099740	0.000091
55	38	18	54	37	18	791.099740	0.000091
57	37	20	56	36	20	791.117120	-0.000234
57	37	21	56	36	21	791.117120	-0.000234
45	44	1	44	43	1	791.123100	-0.000183
45	44	2	44	43	2	791.123100	-0.000183
52	40	12	51	39	12	791.132360	-0.000630
52	40	13	51	39	13	791.132360	-0.000630
59	36	23	58	35	23	791.134340	0.000095
59	36	24	58	35	24	791.134340	0.000095
47	43	4	46	42	4	791.144070	0.000026
47	43	5	46	42	5	791.144070	0.000026
61	35	26	60	34	26	791.150230	0.000091
61	35	27	60	34	27	791.150230	0.000091
54	39	15	53	38	15	791.152060	0.000132
54	39	16	53	38	16	791.152060	0.000132
49	42	7	48	41	7	791.164480	0.000081
63	34	29	62	33	29	791.164480	-0.000330
49	42	8	48	41	8	791.164480	0.000081
63	34	30	62	33	30	791.164480	-0.000330
56	38	18	55	37	18	791.170220	-0.000014
56	38	19	55	37	19	791.170220	-0.000014
65	33	32	64	32	32	791.177870	-0.000081
65	33	33	64	32	33	791.177870	-0.000081
51	41	10	50	40	10	791.184450	0.000137
51	41	11	50	40	11	791.184450	0.000137
58	37	21	57	36	21	791.187730	-0.000098
58	37	22	57	36	22	791.187730	-0.000098
46	44	2	45	43	2	791.194240	0.000089
46	44	3	45	43	3	791.194240	0.000089

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
53	40	13	52	39	13	791.203370	-0.000357
53	40	14	52	39	14	791.203370	-0.000357
48	43	5	47	42	5	791.214920	0.000032
48	43	6	47	42	6	791.214920	0.000032
62	35	27	61	34	27	791.220200	-0.000038
62	35	28	61	34	28	791.220200	-0.000038
55	39	16	54	38	16	791.222690	0.000105
55	39	17	54	38	17	791.222690	0.000105
50	42	8	49	41	8	791.235170	-0.000046
64	34	30	63	33	30	791.235170	0.000539
50	42	9	49	41	9	791.235170	-0.000046
64	34	31	63	33	31	791.235170	0.000539
57	38	19	56	37	19	791.240750	-0.000043
57	38	20	56	37	20	791.240750	-0.000043
45	45	0	44	44	0	791.243920	0.000037
45	45	1	44	44	1	791.243920	0.000037
66	33	33	65	32	33	791.247340	-0.000073
66	33	34	65	32	34	791.247340	-0.000073
52	41	11	51	40	11	791.255060	-0.000017
52	41	12	51	40	12	791.255060	-0.000017
59	37	22	58	36	22	791.257970	-0.000285
59	37	23	58	36	23	791.257970	-0.000285
47	44	3	46	43	3	791.265060	0.000052
47	44	4	46	43	4	791.265060	0.000052
54	40	14	53	39	14	791.274590	0.000153
54	40	15	53	39	15	791.274590	0.000153
49	43	6	48	42	6	791.285550	-0.000175
49	43	7	48	42	7	791.285550	-0.000175
58	38	20	57	37	20	791.311260	-0.000056
58	38	21	57	37	21	791.311260	-0.000056
46	45	1	45	44	1	791.314670	-0.000085
46	45	2	45	44	2	791.314670	-0.000085
60	37	23	59	36	23	791.328520	-0.000104
60	37	24	59	36	24	791.328520	-0.000104
48	44	4	47	43	4	791.335600	-0.000254
48	44	5	47	43	5	791.335600	-0.000254
62	36	26	61	35	26	791.345070	0.000074
55	40	15	54	39	15	791.345070	-0.000051
62	36	27	61	35	27	791.345070	0.000074
55	40	16	54	39	16	791.345070	-0.000051
50	43	7	49	42	7	791.356490	-0.000057
50	43	8	49	42	8	791.356490	-0.000057
64	35	29	63	34	29	791.360230	0.000024
64	35	30	63	34	30	791.360230	0.000024
57	39	18	56	38	18	791.363900	0.000092
57	39	19	56	38	19	791.363900	0.000092
52	42	10	51	41	10	791.376920	0.000129
52	42	11	51	41	11	791.376920	0.000129
59	38	21	58	37	21	791.381840	0.000044
59	38	22	58	37	22	791.381840	0.000044
47	45	2	46	44	2	791.385760	0.000149
47	45	3	46	44	3	791.385760	0.000149
54	41	13	53	40	13	791.396610	0.000052
54	41	14	53	40	14	791.396610	0.000052
49	44	5	48	43	5	791.406830	0.000137
49	44	6	48	43	6	791.406830	0.000137
63	36	27	62	35	27	791.414990	-0.000135
63	36	28	62	35	28	791.414990	-0.000135
51	43	8	50	42	8	791.427460	0.000111
51	43	9	50	42	9	791.427460	0.000111
65	35	30	64	34	30	791.429980	-0.000106
65	35	31	64	34	31	791.429980	-0.000106
58	39	19	57	38	19	791.434990	0.000624
46	46	0	45	45	0	791.434990	-0.000026
58	39	20	57	38	20	791.434990	0.000624
46	46	1	45	45	1	791.434990	-0.000026
67	34	33	66	33	33	791.443540	-0.000003
67	34	34	66	33	34	791.443540	-0.000003
53	42	11	52	41	11	791.447520	-0.000043
53	42	12	52	41	12	791.447520	-0.000043
60	38	22	59	37	22	791.452310	0.000079
60	38	23	59	37	23	791.452310	0.000079
48	45	3	47	44	3	791.456510	0.000042
48	45	4	47	44	4	791.456510	0.000042
55	41	14	54	40	14	791.467120	-0.000150
55	41	15	54	40	15	791.467120	-0.000150
50	44	6	49	43	6	791.477220	-0.000302
50	44	7	49	43	7	791.477220	-0.000302
57	40	17	56	39	17	791.486290	-0.000109
57	40	18	56	39	18	791.486290	-0.000109
59	39	20	58	38	20	791.504920	0.000033
59	39	21	58	38	21	791.504920	0.000033
47	46	1	46	45	1	791.505910	0.000031
47	46	2	46	45	2	791.505910	0.000031
54	42	12	53	41	12	791.518390	0.000085
54	42	13	53	41	13	791.518390	0.000085
61	38	23	60	37	23	791.522440	-0.000183
61	38	24	60	37	24	791.522440	-0.000183
49	45	4	48	44	4	791.527460	0.000157
49	45	5	48	44	5	791.527460	0.000157

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
56	41	15	55	40	15	791.537710	-0.000239
56	41	16	55	40	16	791.537710	-0.000239
51	44	7	50	43	7	791.548210	-0.000123
51	44	8	50	43	8	791.548210	-0.000123
65	36	29	64	35	29	791.554870	-0.000310
65	36	30	64	35	30	791.554870	-0.000310
58	40	18	57	39	18	791.557020	0.000015
58	40	19	57	39	19	791.557020	0.000015
53	43	10	52	42	10	791.569250	0.000324
67	35	32	66	34	32	791.569250	-0.000336
53	43	11	52	42	11	791.569250	0.000324
67	35	33	66	34	33	791.569250	-0.000336
60	39	21	59	38	21	791.575550	0.000172
60	39	22	59	38	22	791.575550	0.000172
48	46	2	47	45	2	791.576830	0.000106
48	46	3	47	45	3	791.576830	0.000106
55	42	13	54	41	13	791.588670	-0.000359
55	42	14	54	41	14	791.588670	-0.000359
50	45	5	49	44	5	791.598250	0.000111
50	45	6	49	44	6	791.598250	0.000111
57	41	16	56	40	16	791.608860	0.000254
64	37	27	63	36	27	791.608860	-0.000748
57	41	17	56	40	17	791.608860	0.000254
64	37	28	63	36	28	791.608860	-0.000748
52	44	8	51	43	8	791.618690	-0.000445
52	44	9	51	43	9	791.618690	-0.000445
47	47	0	46	46	0	791.625590	-0.000202
66	36	30	65	35	30	791.625590	0.000484
47	47	1	46	46	1	791.625590	-0.000202
66	36	31	65	35	31	791.625590	0.000484
59	40	19	58	39	19	791.627590	0.000021
59	40	20	58	39	20	791.627590	0.000021
54	43	11	53	42	11	791.639480	-0.000202
68	35	33	67	34	33	791.639480	0.000278
54	43	12	53	42	12	791.639480	-0.000202
68	35	34	67	34	34	791.639480	0.000278
61	39	22	60	38	22	791.645870	0.000045
61	39	23	60	38	23	791.645870	0.000045
49	46	3	48	45	3	791.647490	-0.000086
49	46	4	48	45	4	791.647490	-0.000086
56	42	14	55	41	14	791.660170	0.000438
56	42	15	55	41	15	791.660170	0.000438
51	45	6	50	44	6	791.669010	0.000057
51	45	7	50	44	7	791.669010	0.000057
58	41	17	57	40	17	791.679560	0.000330
58	41	18	57	40	18	791.679560	0.000330
48	47	1	47	46	1	791.696670	0.000027
48	47	2	47	46	2	791.696670	0.000027
60	40	20	59	39	20	791.698000	-0.000094
60	40	21	59	39	21	791.698000	-0.000094
55	43	12	54	42	12	791.710330	-0.000096
55	43	13	54	42	13	791.710330	-0.000096
62	39	23	61	38	23	791.715920	-0.000314
62	39	24	61	38	24	791.715920	-0.000314
50	46	4	49	45	4	791.718630	0.000220
50	46	5	49	45	5	791.718630	0.000220
57	42	15	56	41	15	791.730210	-0.000203
57	42	16	56	41	16	791.730210	-0.000203
64	38	26	63	37	26	791.733380	-0.000120
64	38	27	63	37	27	791.733380	-0.000120
66	37	29	65	36	29	791.749840	0.000102
59	41	18	58	40	18	791.749840	0.000010
66	37	30	65	36	30	791.749840	0.000102
59	41	19	58	40	19	791.749840	0.000010
54	44	10	53	43	10	791.760780	0.000088
54	44	11	53	43	11	791.760780	0.000088
68	36	32	67	35	32	791.764620	-0.000097
68	36	33	67	35	33	791.764620	-0.000097
49	47	2	48	46	2	791.767530	0.000043
49	47	3	48	46	3	791.767530	0.000043
56	43	13	55	42	13	791.781200	0.000052
56	43	14	55	42	14	791.781200	0.000052
51	46	5	50	45	5	791.789350	0.000121
51	46	6	50	45	6	791.789350	0.000121
58	42	16	57	41	16	791.800970	-0.000095
58	42	17	57	41	17	791.800970	-0.000095
65	38	27	64	37	27	791.803900	0.000208
65	38	28	64	37	28	791.803900	0.000208
53	45	8	52	44	8	791.810500	-0.000065
53	45	9	52	44	9	791.810500	-0.000065
48	48	0	47	47	0	791.816270	0.000057
48	48	1	47	47	1	791.816270	0.000057
60	41	19	59	40	19	791.820200	-0.000196
67	37	30	66	36	30	791.820200	0.000497
60	41	20	59	40	20	791.820200	-0.000196
67	37	31	66	36	31	791.820200	0.000497
55	44	11	54	43	11	791.831190	-0.000253
55	44	12	54	43	12	791.831190	-0.000253
69	36	33	68	35	33	791.834360	-0.000046
69	36	34	68	35	34	791.834360	-0.000046

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
50	47	3	49	46	3	791.838290	-0.000036
50	47	4	49	46	4	791.838290	-0.000036
57	43	14	56	42	14	791.851910	0.000066
57	43	15	56	42	15	791.851910	0.000066
64	39	25	63	38	25	791.857150	0.000247
64	39	26	63	38	26	791.857150	0.000247
52	46	6	51	45	6	791.860040	-0.000008
52	46	7	51	45	7	791.860040	-0.000008
59	42	17	58	41	17	791.871800	0.000105
59	42	18	58	41	18	791.871800	0.000105
54	45	9	53	44	9	791.881480	0.000141
54	45	10	53	44	10	791.881480	0.000141
49	48	1	48	47	1	791.887080	0.000013
49	48	2	48	47	2	791.887080	0.000013
56	44	12	55	43	12	791.902090	-0.000097
56	44	13	55	43	13	791.902090	-0.000097
51	47	4	50	46	4	791.909180	0.000028
63	40	23	62	39	23	791.909180	-0.000281
51	47	5	50	46	5	791.909180	0.000028
63	40	24	62	39	24	791.909180	-0.000281
58	43	15	57	42	15	791.922470	-0.000054
58	43	16	57	42	16	791.922470	-0.000054
65	39	26	64	38	26	791.927130	-0.000041
65	39	27	64	38	27	791.927130	-0.000041
53	46	7	52	45	7	791.930820	-0.000024
53	46	8	52	45	8	791.930820	-0.000024
60	42	18	59	41	18	791.942360	0.000066
60	42	19	59	41	19	791.942360	0.000066
67	38	29	66	37	29	791.944040	0.000152
67	38	30	66	37	30	791.944040	0.000152
55	45	10	54	44	10	791.951920	-0.000182
55	45	11	54	44	11	791.951920	-0.000182
69	37	32	68	36	32	791.959480	0.000057
69	37	33	68	36	33	791.959480	0.000057
62	41	21	61	40	21	791.961440	0.000002
62	41	22	61	40	22	791.961440	0.000002
52	47	5	51	46	5	791.979930	-0.000046
52	47	6	51	46	6	791.979930	-0.000046
59	43	16	58	42	16	791.993390	0.000222
59	43	17	58	42	17	791.993390	0.000222
66	39	27	65	38	27	791.997430	0.000051
66	39	28	65	38	28	791.997430	0.000051
54	46	8	53	45	8	792.001490	-0.000142
54	46	9	53	45	9	792.001490	-0.000142
49	49	0	48	48	0	792.006150	-0.000140
49	49	1	48	48	1	792.006150	-0.000140
61	42	19	60	41	19	792.013120	0.000254
61	42	20	60	41	20	792.013120	0.000254
56	45	11	55	44	11	792.022910	0.000057
56	45	12	55	44	12	792.022910	0.000057
51	48	3	50	47	3	792.029020	0.000287
70	37	33	69	36	33	792.029020	-0.000145
51	48	4	50	47	4	792.029020	0.000287
70	37	34	69	36	34	792.029020	-0.000145
63	41	22	62	40	22	792.032300	0.000401
63	41	23	62	40	23	792.032300	0.000401
65	40	25	64	39	25	792.050590	0.000425
53	47	6	52	46	6	792.050590	-0.000190
65	40	26	64	39	26	792.050590	0.000425
53	47	7	52	46	7	792.050590	-0.000190
60	43	17	59	42	17	792.064000	0.000199
60	43	18	59	42	18	792.064000	0.000199
55	46	9	54	45	9	792.072360	-0.000054
55	46	10	54	45	10	792.072360	-0.000054
50	49	1	49	48	1	792.077360	0.000222
50	49	2	49	48	2	792.077360	0.000222
57	45	12	56	44	12	792.093450	-0.000139
57	45	13	56	44	13	792.093450	-0.000139
52	48	4	51	47	4	792.099450	-0.000103
52	48	5	51	47	5	792.099450	-0.000103
64	41	23	63	40	23	792.102250	-0.000075
64	41	24	63	40	24	792.102250	-0.000075
59	44	15	58	43	15	792.114210	-0.000053
59	44	16	58	43	16	792.114210	-0.000053
66	40	26	65	39	26	792.120660	0.000211
66	40	27	65	39	27	792.120660	0.000211
61	43	18	60	42	18	792.134730	0.000329
61	43	19	60	42	19	792.134730	0.000329
68	39	29	67	38	29	792.137890	0.000258
68	39	30	67	38	30	792.137890	0.000258
56	46	10	55	45	10	792.143040	-0.000131
56	46	11	55	45	11	792.143040	-0.000131
51	49	2	50	48	2	792.148020	0.000049
51	49	3	50	48	3	792.148020	0.000049
70	38	32	69	37	32	792.153820	0.000123
63	42	21	62	41	21	792.153820	-0.000087
70	38	33	69	37	33	792.153820	0.000123
63	42	22	62	41	22	792.153820	-0.000087
58	45	13	57	44	13	792.164150	-0.000151
58	45	14	57	44	14	792.164150	-0.000151

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
53	48	5	52	47	5	792.170570	0.000201
53	48	6	52	47	6	792.170570	0.000201
67	40	27	66	39	27	792.190800	0.000124
67	40	28	66	39	28	792.190800	0.000124
55	47	8	54	46	8	792.192320	-0.000039
55	47	9	54	46	9	792.192320	-0.000039
62	43	19	61	42	19	792.205190	0.000220
62	43	20	61	42	20	792.205190	0.000220
69	39	30	68	38	30	792.207630	-0.000040
69	39	31	68	38	31	792.207630	-0.000040
57	46	11	56	45	11	792.214010	0.000095
57	46	12	56	45	12	792.214010	0.000095
52	49	3	51	48	3	792.218670	-0.000119
52	49	4	51	48	4	792.218670	-0.000119
64	42	22	63	41	22	792.224100	-0.000275
64	42	23	63	41	23	792.224100	-0.000275
59	45	14	58	44	14	792.234660	-0.000325
59	45	15	58	44	15	792.234660	-0.000325
54	48	6	53	47	6	792.241030	-0.000142
54	48	7	53	47	7	792.241030	-0.000142
66	41	25	65	40	25	792.243050	-0.000003
66	41	26	65	40	26	792.243050	-0.000003
61	44	17	60	43	17	792.255340	-0.000203
61	44	18	60	43	18	792.255340	-0.000203
56	47	9	55	46	9	792.263070	-0.000052
56	47	10	55	46	10	792.263070	-0.000052
51	50	1	50	49	1	792.267230	0.000368
51	50	2	50	49	2	792.267230	0.000368
63	43	20	62	42	20	792.275060	-0.000448
63	43	21	62	42	21	792.275060	-0.000448
58	46	12	57	45	12	792.284660	0.000026
58	46	13	57	45	13	792.284660	0.000026
53	49	4	52	48	4	792.289640	0.000039
53	49	5	52	48	5	792.289640	0.000039
65	42	23	64	41	23	792.295000	0.000195
65	42	24	64	41	24	792.295000	0.000195
60	45	15	59	44	15	792.305490	-0.000162
60	45	16	59	44	16	792.305490	-0.000162
55	48	7	54	47	7	792.312140	0.000187
55	48	8	54	47	8	792.312140	0.000187
67	41	26	66	40	26	792.313570	0.000229
67	41	27	66	40	27	792.313570	0.000229
62	44	18	61	43	18	792.326120	-0.000021
62	44	19	61	43	19	792.326120	-0.000021
57	47	10	56	46	10	792.333680	-0.000192
57	47	11	56	46	11	792.333680	-0.000192
52	50	2	51	49	2	792.337500	-0.000182
52	50	3	51	49	3	792.337500	-0.000182
64	43	21	63	42	21	792.346210	0.000198
64	43	22	63	42	22	792.346210	0.000198
59	46	13	58	45	13	792.355330	-0.000013
59	46	14	58	45	14	792.355330	-0.000013
54	49	5	53	48	5	792.360510	0.000097
54	49	6	53	48	6	792.360510	0.000097
61	45	16	60	44	16	792.376530	0.000223
61	45	17	60	44	17	792.376530	0.000223
68	41	27	67	40	27	792.383690	0.000100
68	41	28	67	40	28	792.383690	0.000100
51	51	0	50	50	0	792.385370	-0.000034
51	51	1	50	50	1	792.385370	-0.000034
63	44	19	62	43	19	792.396460	-0.000246
63	44	20	62	43	20	792.396460	-0.000246
53	50	3	52	49	3	792.408400	-0.000101
53	50	4	52	49	4	792.408400	-0.000101
65	43	22	64	42	22	792.416410	-0.000079
65	43	23	64	42	23	792.416410	-0.000079
60	46	14	59	45	14	792.425970	-0.000054
60	46	15	59	45	15	792.425970	-0.000054
55	49	6	54	48	6	792.431300	0.000099
55	49	7	54	48	7	792.431300	0.000099
67	42	25	66	41	25	792.435720	0.000163
67	42	26	66	41	26	792.435720	0.000163
62	45	17	61	44	17	792.447070	0.000143
62	45	18	61	44	18	792.447070	0.000143
57	48	9	56	47	9	792.453670	0.000180
57	48	10	56	47	10	792.453670	0.000180
52	51	1	51	50	1	792.456320	0.000089
52	51	2	51	50	2	792.456320	0.000089
64	44	20	63	43	20	792.467270	0.000027
64	44	21	63	43	21	792.467270	0.000027
59	47	12	58	46	12	792.475250	-0.000085
59	47	13	58	46	13	792.475250	-0.000085
54	50	4	53	49	4	792.479370	0.000060
54	50	5	53	49	5	792.479370	0.000060
66	43	23	65	42	23	792.486960	0.000037
66	43	24	65	42	24	792.486960	0.000037
61	46	15	60	45	15	792.496690	0.000003
61	46	16	60	45	16	792.496690	0.000003
56	49	7	55	48	7	792.501880	-0.000100
56	49	8	55	48	8	792.501880	-0.000100

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
68	42	26	67	41	26	792.506150	0.000287
68	42	27	67	41	27	792.506150	0.000287
63	45	18	62	44	18	792.517410	-0.000109
63	45	19	62	44	19	792.517410	-0.000109
58	48	10	57	47	10	792.524070	-0.000167
70	41	29	69	40	29	792.524070	0.000133
58	48	11	57	47	11	792.524070	-0.000167
70	41	30	69	40	30	792.524070	0.000133
53	51	2	52	50	2	792.527020	-0.000038
53	51	3	52	50	3	792.527020	-0.000038
65	44	21	64	43	21	792.538040	0.000281
65	44	22	64	43	22	792.538040	0.000281
72	40	32	71	39	32	792.541190	0.000197
72	40	33	71	39	33	792.541190	0.000197
60	47	13	59	46	13	792.546620	0.000588
60	47	14	59	46	14	792.546620	0.000588
55	50	5	54	49	5	792.550200	0.000091
55	50	6	54	49	6	792.550200	0.000091
62	46	16	61	45	16	792.567350	0.000018
62	46	17	61	45	17	792.567350	0.000018
57	49	8	56	48	8	792.572740	-0.000013
57	49	9	56	48	9	792.572740	-0.000013
52	52	0	51	51	0	792.574670	0.000224
52	52	1	51	51	1	792.574670	0.000224
64	45	19	63	44	19	792.588070	-0.000022
64	45	20	63	44	20	792.588070	-0.000022
71	41	30	70	40	30	792.594180	0.000152
71	41	31	70	40	31	792.594180	0.000152
54	51	3	53	50	3	792.597810	-0.000061
54	51	4	53	50	4	792.597810	-0.000061
66	44	22	65	43	22	792.608350	0.000123
66	44	23	65	43	23	792.608350	0.000123
73	40	33	72	39	33	792.611020	0.000146
73	40	34	72	39	34	792.611020	0.000146
61	47	14	60	46	14	792.616920	0.000211
61	47	15	60	46	15	792.616920	0.000211
56	50	6	55	49	6	792.621210	0.000318
56	50	7	55	49	7	792.621210	0.000318
68	43	25	67	42	25	792.627790	0.000105
68	43	26	67	42	26	792.627790	0.000105
63	46	17	62	45	17	792.637880	-0.000069
63	46	18	62	45	18	792.637880	-0.000069
58	49	9	57	48	9	792.643560	0.000055
58	49	10	57	48	10	792.643560	0.000055
53	52	1	52	51	1	792.645290	0.000022
53	52	2	52	51	2	792.645290	0.000022
65	45	20	64	44	20	792.658560	-0.000063
65	45	21	64	44	21	792.658560	-0.000063
60	48	12	59	47	12	792.666340	0.000667
60	48	13	59	47	13	792.666340	0.000667
55	51	4	54	50	4	792.668940	0.000268
55	51	5	54	50	5	792.668940	0.000268
67	44	23	66	43	23	792.678940	0.000264
67	44	24	66	43	24	792.678940	0.000264
62	47	15	61	46	15	792.687500	0.000134
62	47	16	61	46	16	792.687500	0.000134
57	50	7	56	49	7	792.691650	-0.000016
57	50	8	56	49	8	792.691650	-0.000016
69	43	26	68	42	26	792.697950	-0.000051
69	43	27	68	42	27	792.697950	-0.000051
59	49	10	58	48	10	792.714380	0.000134
59	49	11	58	48	11	792.714380	0.000134
54	52	2	53	51	2	792.716230	0.000148
71	42	29	70	41	29	792.716230	-0.000271
54	52	3	53	51	3	792.716230	0.000148
71	42	30	70	41	30	792.716230	-0.000271
66	45	21	65	44	21	792.729480	0.000349
66	45	22	65	44	22	792.729480	0.000349
73	41	32	72	40	32	792.734380	0.000349
73	41	33	72	40	33	792.734380	0.000349
61	48	13	60	47	13	792.736470	0.000099
61	48	14	60	47	14	792.736470	0.000099
56	51	5	55	50	5	792.739010	-0.000443
56	51	6	55	50	6	792.739010	-0.000443
63	47	16	62	46	16	792.757950	-0.000060
63	47	17	62	46	17	792.757950	-0.000060
53	53	0	52	52	0	792.763000	-0.000142
53	53	1	52	52	1	792.763000	-0.000142
65	46	19	64	45	19	792.779000	-0.000111
65	46	20	64	45	20	792.779000	-0.000111
60	49	11	59	48	11	792.785120	0.000152
60	49	12	59	48	12	792.785120	0.000152
55	52	3	54	51	3	792.786790	-0.000092
72	42	30	71	41	30	792.786790	0.000181
55	52	4	54	51	4	792.786790	-0.000092
72	42	31	71	41	31	792.786790	0.000181
67	45	22	66	44	22	792.799880	0.000267
67	45	23	66	44	23	792.799880	0.000267
74	41	33	73	40	33	792.804030	0.000088
74	41	34	73	40	34	792.804030	0.000088

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
62	48	14	61	47	14	792.806970	-0.000074
62	48	15	61	47	15	792.806970	-0.000074
57	51	6	56	50	6	792.810090	-0.000150
57	51	7	56	50	7	792.810090	-0.000150
64	47	17	63	46	17	792.828620	0.000003
64	47	18	63	46	18	792.828620	0.000003
59	50	9	58	49	9	792.833020	-0.000153
59	50	10	58	49	10	792.833020	-0.000153
54	53	1	53	52	1	792.834380	0.000420
54	53	2	53	52	2	792.834380	0.000420
61	49	12	60	48	12	792.855820	0.000147
61	49	13	60	48	13	792.855820	0.000147
56	52	4	55	51	4	792.857430	-0.000256
56	52	5	55	51	5	792.857430	-0.000256
68	45	23	67	44	23	792.870680	0.000623
68	45	24	67	44	24	792.870680	0.000623
63	48	15	62	47	15	792.877820	0.000119
63	48	16	62	47	16	792.877820	0.000119
58	51	7	57	50	7	792.880440	-0.000559
58	51	8	57	50	8	792.880440	-0.000559
70	44	26	69	43	26	792.889730	-0.000033
70	44	27	69	43	27	792.889730	-0.000033
65	47	18	64	46	18	792.899020	-0.000190
65	47	19	64	46	19	792.899020	-0.000190
60	50	10	59	49	10	792.903870	-0.000034
60	50	11	59	49	11	792.903870	-0.000034
72	43	29	71	42	29	792.908650	-0.000035
72	43	30	71	42	30	792.908650	-0.000035
67	46	21	66	45	21	792.920020	-0.000139
67	46	22	66	45	22	792.920020	-0.000139
62	49	13	61	48	13	792.926610	0.000251
74	42	32	73	41	32	792.926610	-0.000063
62	49	14	61	48	14	792.926610	0.000251
74	42	33	73	41	33	792.926610	-0.000063
57	52	5	56	51	5	792.928540	0.000080
57	52	6	56	51	6	792.928540	0.000080
64	48	16	63	47	16	792.948290	-0.000043
64	48	17	63	47	17	792.948290	-0.000043
59	51	8	58	50	8	792.951650	-0.000101
54	54	0	53	53	0	792.951650	0.000154
59	51	9	58	50	9	792.951650	-0.000101
54	54	1	53	53	1	792.951650	0.000154
66	47	19	65	46	19	792.969740	-0.000027
66	47	20	65	46	20	792.969740	-0.000027
61	50	11	60	49	11	792.974420	-0.000197
61	50	12	60	49	12	792.974420	-0.000197
56	53	3	55	52	3	792.975530	-0.000034
56	53	4	55	52	4	792.975530	-0.000034
73	43	30	72	42	30	792.978760	-0.000050
73	43	31	72	42	31	792.978760	-0.000050
68	46	22	67	45	22	792.990520	-0.000107
68	46	23	67	45	23	792.990520	-0.000107
63	49	14	62	48	14	792.996810	-0.000220
75	42	33	74	41	33	792.996810	0.000191
63	49	15	62	48	15	792.996810	-0.000220
75	42	34	74	41	34	792.996810	0.000191
58	52	6	57	51	6	792.998660	-0.000573
58	52	7	57	51	7	792.998660	-0.000573
65	48	17	64	47	17	793.018690	-0.000243
65	48	18	64	47	18	793.018690	-0.000243
55	54	1	54	53	1	793.022400	0.000093
60	51	9	59	50	9	793.022400	-0.000092
55	54	2	54	53	2	793.022400	0.000093
60	51	10	59	50	10	793.022400	-0.000092
62	50	12	61	49	12	793.045390	0.000070
62	50	13	61	49	13	793.045390	0.000070
69	46	23	68	45	23	793.061140	0.000064
69	46	24	68	45	24	793.061140	0.000064
59	52	7	58	51	7	793.069750	-0.000246
59	52	8	58	51	8	793.069750	-0.000246
71	45	26	70	44	26	793.081280	0.000116
71	45	27	70	44	27	793.081280	0.000116
66	48	18	65	47	18	793.089130	-0.000388
66	48	19	65	47	19	793.089130	-0.000388
61	51	10	60	50	10	793.093000	-0.000223
56	54	2	55	53	2	793.093000	-0.000115
61	51	11	60	50	11	793.093000	-0.000223
56	54	3	55	53	3	793.093000	-0.000115
73	44	29	72	43	29	793.100700	0.000217
73	44	30	72	43	30	793.100700	0.000217
63	50	13	62	49	13	793.115930	-0.000065
63	50	14	62	49	14	793.115930	-0.000065
75	43	32	74	42	32	793.119000	0.000082
75	43	33	74	42	33	793.119000	0.000082
65	49	16	64	48	16	793.138110	-0.000194
65	49	17	64	48	17	793.138110	-0.000194
60	52	8	59	51	8	793.139870	-0.000873
55	55	0	54	54	0	793.139870	0.000351
60	52	9	59	51	9	793.139870	-0.000873
55	55	1	54	54	1	793.139870	0.000351

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
67	48	19	66	47	19	793.159470	-0.000611
67	48	20	66	47	20	793.159470	-0.000611
57	54	3	56	53	3	793.163840	-0.000058
57	54	4	56	53	4	793.163840	-0.000058
74	44	30	73	43	30	793.170830	0.000202
74	44	31	73	43	31	793.170830	0.000202
69	47	22	68	46	22	793.181670	0.000383
69	47	23	68	46	23	793.181670	0.000383
59	53	6	58	52	6	793.187870	-0.000026
59	53	7	58	52	7	793.187870	-0.000026
66	49	17	65	48	17	793.208530	-0.000377
66	49	18	65	48	18	793.208530	-0.000377
61	52	9	60	51	9	793.211430	-0.000040
61	52	10	60	51	10	793.211430	-0.000040
68	48	20	67	47	20	793.230280	-0.000329
68	48	21	67	47	21	793.230280	-0.000329
58	54	4	57	53	4	793.234490	-0.000190
58	54	5	57	53	5	793.234490	-0.000190
70	47	23	69	46	23	793.251620	-0.000115
70	47	24	69	46	24	793.251620	-0.000115
60	53	7	59	52	7	793.258800	0.000153
60	53	8	59	52	8	793.258800	0.000153
72	46	26	71	45	26	793.272090	-0.000106
72	46	27	71	45	27	793.272090	-0.000106
67	49	18	66	48	18	793.279230	-0.000248
67	49	19	66	48	19	793.279230	-0.000248
62	52	10	61	51	10	793.281900	-0.000288
62	52	11	61	51	11	793.281900	-0.000288
74	45	29	73	44	29	793.291770	-0.000139
74	45	30	73	44	30	793.291770	-0.000139
64	51	13	63	50	13	793.305360	0.000066
59	54	5	58	53	5	793.305360	-0.000093
64	51	14	63	50	14	793.305360	0.000066
59	54	6	58	53	6	793.305360	-0.000093
76	44	32	75	43	32	793.310690	-0.000074
76	44	33	75	43	33	793.310690	-0.000074
66	50	16	65	49	16	793.327300	-0.000622
56	56	0	55	55	0	793.327300	0.000104
66	50	17	65	49	17	793.327300	-0.000622
56	56	1	55	55	1	793.327300	0.000104
61	53	8	60	52	8	793.328980	-0.000407
61	53	9	60	52	9	793.328980	-0.000407
68	49	19	67	48	19	793.349920	-0.000116
68	49	20	67	48	20	793.349920	-0.000116
58	55	3	57	54	3	793.352080	0.000181
58	55	4	57	54	4	793.352080	0.000181
75	45	30	74	44	30	793.361970	-0.000092
75	45	31	74	44	31	793.361970	-0.000092
70	48	22	69	47	22	793.371530	-0.000056
70	48	23	69	47	23	793.371530	-0.000056
65	51	14	64	50	14	793.375840	-0.000102
60	54	6	59	53	6	793.375840	-0.000364
65	51	15	64	50	15	793.375840	-0.000102
60	54	7	59	53	7	793.375840	-0.000364
77	44	33	76	43	33	793.380870	0.000112
77	44	34	76	43	34	793.380870	0.000112
57	56	1	56	55	1	793.398290	0.000304
67	50	17	66	49	17	793.398290	-0.000222
57	56	2	56	55	2	793.398290	0.000304
67	50	18	66	49	18	793.398290	-0.000222
62	53	9	61	52	9	793.400380	0.000271
62	53	10	61	52	10	793.400380	0.000271
69	49	20	68	48	20	793.420480	-0.000084
69	49	21	68	48	21	793.420480	-0.000084
59	55	4	58	54	4	793.422550	-0.000117
59	55	5	58	54	5	793.422550	-0.000117
71	48	23	70	47	23	793.442150	0.000125
71	48	24	70	47	24	793.442150	0.000125
61	54	7	60	53	7	793.446380	-0.000570
61	54	8	60	53	8	793.446380	-0.000570
73	47	26	72	46	26	793.462970	0.000119
73	47	27	72	46	27	793.462970	0.000119
58	56	2	57	55	2	793.468520	-0.000253
58	56	3	57	55	3	793.468520	-0.000253
63	53	10	62	52	10	793.470510	-0.000304
63	53	11	62	52	11	793.470510	-0.000304
65	52	13	64	51	13	793.493400	-0.000838
60	55	5	59	54	5	793.493400	-0.000031
65	52	14	64	51	14	793.493400	-0.000838
60	55	6	59	54	6	793.493400	-0.000031
77	45	32	76	44	32	793.502280	0.000043
77	45	33	76	44	33	793.502280	0.000043
57	57	0	56	56	0	793.513970	-0.000568
57	57	1	56	56	1	793.513970	-0.000568
67	51	16	66	50	16	793.517520	0.000323
62	54	8	61	53	8	793.517520	-0.000167
67	51	17	66	50	17	793.517520	0.000323
62	54	9	61	53	9	793.517520	-0.000167
69	50	19	68	49	19	793.539280	-0.000363
59	56	3	58	55	3	793.539280	-0.000279

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
69	50	20	68	49	20	793.539280	-0.000363
59	56	4	58	55	4	793.539280	-0.000279
71	49	22	70	48	22	793.561300	-0.000234
71	49	23	70	48	23	793.561300	-0.000234
61	55	6	60	54	6	793.563810	-0.000368
61	55	7	60	54	7	793.563810	-0.000368
78	45	33	77	44	33	793.572160	-0.000077
78	45	34	77	44	34	793.572160	-0.000077
58	57	1	57	56	1	793.585750	0.000429
58	57	2	57	56	2	793.585750	0.000429
68	51	17	67	50	17	793.587620	-0.000164
68	51	18	67	50	18	793.587620	-0.000164
60	56	4	59	55	4	793.610070	-0.000254
70	50	20	69	49	20	793.610070	-0.000093
60	56	5	59	55	5	793.610070	-0.000254
70	50	21	69	49	21	793.610070	-0.000093
72	49	23	71	48	23	793.631760	-0.000210
72	49	24	71	48	24	793.631760	-0.000210
62	55	7	61	54	7	793.634900	-0.000019
62	55	8	61	54	8	793.634900	-0.000019
74	48	26	73	47	26	793.653020	-0.000131
74	48	27	73	47	27	793.653020	-0.000131
64	54	10	63	53	10	793.658430	-0.000670
69	51	18	68	50	18	793.658430	0.000080
64	54	11	63	53	11	793.658430	-0.000670
69	51	19	68	50	19	793.658430	0.000080
76	47	29	75	46	29	793.673380	-0.000256
76	47	30	75	46	30	793.673380	-0.000256
66	53	13	65	52	13	793.682420	-0.000426
66	53	14	65	52	14	793.682420	-0.000426
78	46	32	77	45	32	793.692970	-0.000344
78	46	33	77	45	33	793.692970	-0.000344
58	58	0	57	57	0	793.701650	0.000114
58	58	1	57	57	1	793.701650	0.000114
68	52	16	67	51	16	793.705870	-0.000253
63	55	8	62	54	8	793.705870	0.000223
68	52	17	67	51	17	793.705870	-0.000253
63	55	9	62	54	9	793.705870	0.000223
60	57	3	59	56	3	793.726700	-0.000179
60	57	4	59	56	4	793.726700	-0.000179
70	51	19	69	50	19	793.728740	-0.000149
70	51	20	69	50	20	793.728740	-0.000149
72	50	22	71	49	22	793.750920	-0.000206
62	56	6	61	55	6	793.750920	-0.000903
72	50	23	71	49	23	793.750920	-0.000206
62	56	7	61	55	7	793.750920	-0.000903
67	53	14	66	52	14	793.753100	-0.000384
67	53	15	66	52	15	793.753100	-0.000384
79	46	33	78	45	33	793.763280	-0.000056
79	46	34	78	45	34	793.763280	-0.000056
59	58	1	58	57	1	793.772520	0.000194
59	58	2	58	57	2	793.772520	0.000194
69	52	17	68	51	17	793.776010	-0.000696
64	55	9	63	54	9	793.776010	-0.000346
69	52	18	68	51	18	793.776010	-0.000696
61	57	4	60	56	4	793.797490	-0.000150
61	57	5	60	56	5	793.797490	-0.000150
71	51	20	70	50	20	793.799450	0.000039
71	51	21	70	50	21	793.799450	0.000039
73	50	23	72	49	23	793.821420	-0.000133
73	50	24	72	49	24	793.821420	-0.000133
63	56	7	62	55	7	793.823320	0.000770
63	56	8	62	55	8	793.823320	0.000770
60	58	2	59	57	2	793.843050	-0.000049
75	49	26	74	48	26	793.843050	-0.000043
60	58	3	59	57	3	793.843050	-0.000049
75	49	27	74	48	27	793.843050	-0.000043
65	55	10	64	54	10	793.846510	-0.000534
65	55	10	64	54	10	793.846510	-0.000534
65	55	11	64	54	11	793.846510	-0.000534
77	48	29	76	47	29	793.863470	-0.000468
77	48	30	76	47	30	793.863470	-0.000468
79	47	32	78	46	32	793.883940	-0.000081
79	47	33	78	46	33	793.883940	-0.000081
59	59	0	58	58	0	793.888440	0.000233
59	59	1	58	58	1	793.888440	0.000233
69	53	16	68	52	16	793.894260	-0.000440
69	53	17	68	52	17	793.894260	-0.000440
61	58	3	60	57	3	793.914170	0.000306
61	58	4	60	57	4	793.914170	0.000306
66	55	11	65	54	11	793.917060	-0.000659
63	57	6	62	56	6	793.938610	-0.000512
63	57	7	62	56	7	793.938610	-0.000512
73	51	22	72	50	22	793.939930	-0.000432
73	51	23	72	50	23	793.939930	-0.000432
80	47	33	79	46	33	793.954080	0.000027
80	47	34	79	46	34	793.954080	0.000027
60	59	1	59	58	1	793.959190	0.000202
60	59	2	59	58	2	793.959190	0.000202
70	53	17	69	52	17	793.964570	-0.000702

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
70	53	18	69	52	18	793.964570	-0.000702
62	58	4	61	57	4	793.984760	0.000146
62	58	5	61	57	5	793.984760	0.000146
64	57	7	63	56	7	794.010190	0.000345
74	51	23	73	50	23	794.010190	-0.000604
64	57	8	63	56	8	794.010190	0.000345
74	51	24	73	50	24	794.010190	-0.000604
61	59	2	60	58	2	794.029770	0.000015
61	59	3	60	58	3	794.029770	0.000015
76	50	26	75	49	26	794.033110	0.000438
76	50	27	75	49	27	794.033110	0.000438
66	56	10	65	55	10	794.035130	0.000485
66	56	11	65	55	11	794.035130	0.000485
78	49	29	77	48	29	794.053710	-0.000170
78	49	30	77	48	30	794.053710	-0.000170
80	48	32	79	47	32	794.074280	-0.000066
60	60	0	59	59	0	794.074280	-0.000264
80	48	33	79	47	33	794.074280	-0.000066
60	60	1	59	59	1	794.074280	-0.000264
65	57	8	64	56	8	794.080370	-0.000175
65	57	9	64	56	9	794.080370	-0.000175
70	54	16	69	53	16	794.082180	-0.000751
70	54	17	69	53	17	794.082180	-0.000751
62	59	3	61	58	3	794.100510	-0.000005
62	59	4	61	58	4	794.100510	-0.000005
74	52	22	73	51	22	794.128670	-0.000572
74	52	23	73	51	23	794.128670	-0.000572
69	55	14	68	54	14	794.129820	0.000179
69	55	15	68	54	15	794.129820	0.000179
81	48	33	80	47	33	794.144260	-0.000137
81	48	34	80	47	34	794.144260	-0.000137
66	57	9	65	56	9	794.151170	-0.000072
66	57	10	65	56	10	794.151170	-0.000072
63	59	4	62	58	4	794.171120	-0.000136
63	59	5	62	58	5	794.171120	-0.000136
65	58	7	64	57	7	794.197230	0.000435
65	58	8	64	57	8	794.197230	0.000435
62	60	2	61	59	2	794.215980	-0.000106
62	60	3	61	59	3	794.215980	-0.000106
67	57	10	66	56	10	794.222650	0.000734
77	51	26	76	50	26	794.222650	0.000759
67	57	11	66	56	11	794.222650	0.000734
77	51	27	76	50	27	794.222650	0.000759
61	61	0	60	60	0	794.260670	0.000114
61	61	1	60	60	1	794.260670	0.000114
63	60	3	62	59	3	794.286970	0.000134
63	60	4	62	59	4	794.286970	0.000134
70	56	14	69	55	14	794.316650	-0.000571
70	56	15	69	55	15	794.316650	-0.000571
62	61	1	61	60	1	794.331610	0.000293
62	61	2	61	60	2	794.331610	0.000293
82	49	33	81	48	33	794.334160	-0.000192
82	49	34	81	48	34	794.334160	-0.000192
67	58	9	66	57	9	794.338220	0.000034
67	58	10	66	57	10	794.338220	0.000034
64	60	4	63	59	4	794.357770	0.000198
64	60	5	63	59	5	794.357770	0.000198
66	59	7	65	58	7	794.383850	0.000424
66	59	8	65	58	8	794.383850	0.000424
63	61	2	62	60	2	794.402070	-0.000003
63	61	3	62	60	3	794.402070	-0.000003
65	60	5	64	59	5	794.428490	0.000193
65	60	6	64	59	6	794.428490	0.000193
62	62	0	61	61	0	794.446550	0.000322
62	62	1	61	61	1	794.446550	0.000322
71	57	14	70	56	14	794.504270	-0.000181
71	57	15	70	56	15	794.504270	-0.000181
63	62	1	62	61	1	794.516920	-0.000071
63	62	2	62	61	2	794.516920	-0.000071
65	61	4	64	60	4	794.543740	0.000184
65	61	5	64	60	5	794.543740	0.000184
67	60	7	66	59	7	794.569840	0.000124
67	60	8	66	59	8	794.569840	0.000124
64	62	2	63	61	2	794.587790	0.000051
64	62	3	63	61	3	794.587790	0.000051
66	61	5	65	60	5	794.614210	-0.000064
66	61	6	65	60	6	794.614210	-0.000064
71	58	13	70	57	13	794.620490	-0.000264
71	58	14	70	57	14	794.620490	-0.000264
63	63	0	62	62	0	794.631740	0.000160
63	63	1	62	62	1	794.631740	0.000160
68	60	8	67	59	8	794.640500	0.000099
68	60	9	67	59	9	794.640500	0.000099
65	62	3	64	61	3	794.658200	-0.000286
65	62	4	64	61	4	794.658200	-0.000286
67	61	6	66	60	6	794.684860	-0.000122
67	61	7	66	60	7	794.684860	-0.000122
72	58	14	71	57	14	794.690450	-0.000905
72	58	15	71	57	15	794.690450	-0.000905
64	63	1	63	62	1	794.702580	0.000239

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
64	63	2	63	62	2	794.702580	0.000239
66	62	4	65	61	4	794.729150	-0.000055
66	62	5	65	61	5	794.729150	-0.000055
68	61	7	67	60	7	794.756010	0.000338
68	61	8	67	60	8	794.756010	0.000338
65	63	2	64	62	2	794.773150	0.000068
65	63	3	64	62	3	794.773150	0.000068
70	60	10	69	59	10	794.782030	0.000313
70	60	11	69	59	11	794.782030	0.000313
67	62	5	66	61	5	794.800080	0.000160
67	62	6	66	61	6	794.800080	0.000160
64	64	0	63	63	0	794.816830	0.000228
64	64	1	63	63	1	794.816830	0.000228
69	61	8	68	60	8	794.826540	0.000188
69	61	9	68	60	9	794.826540	0.000188
66	63	3	65	62	3	794.844010	0.000194
66	63	4	65	62	4	794.844010	0.000194
68	62	6	67	61	6	794.870960	0.000341
68	62	7	67	61	7	794.870960	0.000341
73	59	14	72	58	14	794.878430	0.000513
73	59	15	72	58	15	794.878430	0.000513
65	64	1	64	63	1	794.886500	-0.000850
65	64	2	64	63	2	794.886500	-0.000850
70	61	9	69	60	9	794.897410	0.000393
70	61	10	69	60	10	794.897410	0.000393
67	63	4	66	62	4	794.914860	0.000324
67	63	5	66	62	5	794.914860	0.000324
66	64	2	65	63	2	794.958000	-0.000089
66	64	3	65	63	3	794.958000	-0.000089
71	61	10	70	60	10	794.968260	0.000607
71	61	11	70	60	11	794.968260	0.000607
68	63	5	67	62	5	794.985250	0.000008
68	63	6	67	62	6	794.985250	0.000008
65	65	0	64	64	0	795.001280	-0.000019
65	65	1	64	64	1	795.001280	-0.000019
70	62	8	69	61	8	795.012520	0.000545
70	62	9	69	61	9	795.012520	0.000545
67	64	3	66	63	3	795.029190	0.000366
67	64	4	66	63	4	795.029190	0.000366
69	63	6	68	62	6	795.056000	0.000071
69	63	7	68	62	7	795.056000	0.000071
66	65	1	65	64	1	795.071370	-0.000677
66	65	2	65	64	2	795.071370	-0.000677
71	62	9	70	61	9	795.082550	-0.000078
71	62	10	70	61	10	795.082550	-0.000078
68	64	4	67	63	4	795.099080	-0.000454
68	64	5	67	63	5	795.099080	-0.000454
70	63	7	69	62	7	795.127050	0.000436
70	63	8	69	62	8	795.127050	0.000436
67	65	2	66	64	2	795.142600	-0.000177
67	65	3	66	64	3	795.142600	-0.000177
72	62	10	71	61	10	795.153460	0.000197
72	62	11	71	61	11	795.153460	0.000197
69	64	5	68	63	5	795.169940	-0.000292
69	64	6	68	63	6	795.169940	-0.000292
74	61	13	73	60	13	795.180160	0.000685
74	61	14	73	60	14	795.180160	0.000685
66	66	0	65	65	0	795.185830	0.000158
66	66	1	65	65	1	795.185830	0.000158
71	63	8	70	62	8	795.197550	0.000276
71	63	9	70	62	9	795.197550	0.000276
68	65	3	67	64	3	795.213520	0.000018
68	65	4	67	64	4	795.213520	0.000018
70	64	6	69	63	6	795.240500	-0.000417
70	64	7	69	63	7	795.240500	-0.000417
75	61	14	74	60	14	795.250090	0.000044
75	61	15	74	60	15	795.250090	0.000044
67	66	1	66	65	1	795.256830	0.000417
67	66	2	66	65	2	795.256830	0.000417
72	63	9	71	62	9	795.268540	0.000622
72	63	10	71	62	10	795.268540	0.000622
69	65	4	68	64	4	795.284230	0.000024
69	65	5	68	64	5	795.284230	0.000024
71	64	7	70	63	7	795.311420	-0.000173
71	64	8	70	63	8	795.311420	-0.000173
68	66	2	67	65	2	795.327220	0.000074
68	66	3	67	65	3	795.327220	0.000074
73	63	10	72	62	10	795.338800	0.000261
73	63	11	72	62	11	795.338800	0.000261
70	65	5	69	64	5	795.354820	-0.000087
70	65	6	69	64	6	795.354820	-0.000087
75	62	13	74	61	13	795.365950	0.000890
75	62	14	74	61	14	795.365950	0.000890
67	67	0	66	66	0	795.369790	0.000064
67	67	1	66	66	1	795.369790	0.000064
72	64	8	71	63	8	795.381510	-0.000734
72	64	9	71	63	9	795.381510	-0.000734
69	66	3	68	65	3	795.397950	0.000091
69	66	4	68	65	4	795.397950	0.000091
71	65	6	70	64	6	795.425750	0.000170

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
71	65	7	70	64	7	795.425750	0.000170
68	67	1	67	66	1	795.440700	0.000243
68	67	2	67	66	2	795.440700	0.000243
73	64	9	72	63	9	795.453010	0.000128
73	64	10	72	63	10	795.453010	0.000128
70	66	4	69	65	4	795.468710	0.000152
70	66	5	69	65	5	795.468710	0.000152
72	65	7	71	64	7	795.496540	0.000300
72	65	8	71	64	8	795.496540	0.000300
69	67	2	68	66	2	795.511350	0.000167
69	67	3	68	66	3	795.511350	0.000167
74	64	10	73	63	10	795.523240	-0.000259
74	64	11	73	63	11	795.523240	-0.000259
71	66	5	70	65	5	795.539050	-0.000199
71	66	6	70	65	6	795.539050	-0.000199
68	68	0	67	67	0	795.553480	0.000023
68	68	1	67	67	1	795.553480	0.000023
73	65	8	72	64	8	795.567090	0.000206
73	65	9	72	64	9	795.567090	0.000206
70	67	3	69	66	3	795.581690	-0.000201
70	67	4	69	66	4	795.581690	-0.000201
72	66	6	71	65	6	795.610020	0.000101
72	66	7	71	65	7	795.610020	0.000101
77	63	14	76	62	14	795.621520	0.000654
77	63	15	76	62	15	795.621520	0.000654
69	68	1	68	67	1	795.624270	0.000081
69	68	2	68	67	2	795.624270	0.000081
74	65	9	73	64	9	795.637500	-0.000017
74	65	9	73	64	9	795.637500	-0.000017
74	65	10	73	64	10	795.637500	-0.000017
71	67	4	70	66	4	795.652730	0.000134
71	67	5	70	66	5	795.652730	0.000134
70	68	2	69	67	2	795.694810	-0.000098
70	68	3	69	67	3	795.694810	-0.000098
75	65	10	74	64	10	795.708170	0.000043
75	65	10	74	64	10	795.708170	0.000043
75	65	11	74	64	11	795.708170	0.000043
69	69	0	68	68	0	795.736650	-0.000211
69	69	1	68	68	1	795.736650	-0.000211
74	66	8	73	65	8	795.750780	-0.000429
74	66	9	73	65	9	795.750780	-0.000429
71	68	3	70	67	3	795.765520	-0.000095
71	68	4	70	67	4	795.765520	-0.000095
76	65	11	75	64	11	795.779030	0.000307
73	67	6	72	66	6	795.793680	-0.000257
73	67	7	72	66	7	795.793680	-0.000257
78	64	14	77	63	14	795.805520	-0.000261
78	64	15	77	63	15	795.805520	-0.000261
75	66	9	74	65	9	795.822170	0.000338
75	66	10	74	65	10	795.822170	0.000338
72	68	4	71	67	4	795.836070	-0.000230
72	68	5	71	67	5	795.836070	-0.000230
77	65	12	76	64	12	795.849570	0.000280
74	67	7	73	66	7	795.864720	0.000132
74	67	8	73	66	8	795.864720	0.000132
73	68	5	72	67	5	795.907050	0.000074
73	68	6	72	67	6	795.907050	0.000074
78	65	13	77	64	13	795.920210	0.000368
70	70	0	69	69	0	795.920210	0.000253
78	65	14	77	64	14	795.920210	0.000368
70	70	1	69	69	1	795.920210	0.000253
75	67	8	74	66	8	795.935400	0.000187
75	67	9	74	66	9	795.935400	0.000187
72	69	3	71	68	3	795.948830	-0.000180
72	69	4	71	68	4	795.948830	-0.000180
74	68	6	73	67	6	795.977580	-0.000061
74	68	7	73	67	7	795.977580	-0.000061
71	70	1	70	69	1	795.990680	-0.000005
79	65	14	78	64	14	795.990680	0.000307
71	70	2	70	69	2	795.990680	-0.000005
79	65	15	78	64	15	795.990680	0.000307
76	67	9	75	66	9	796.005730	-0.000097
76	67	10	75	66	10	796.005730	-0.000097
73	69	4	72	68	4	796.019630	-0.000062
73	69	5	72	68	5	796.019630	-0.000062
75	68	7	74	67	7	796.048560	0.000285
75	68	8	74	67	8	796.048560	0.000285
72	70	2	71	69	2	796.061430	0.000039
72	70	3	71	69	3	796.061430	0.000039
77	67	10	76	66	10	796.076560	0.000139
77	67	11	76	66	11	796.076560	0.000139
74	69	5	73	68	5	796.089870	-0.000494
74	69	6	73	68	6	796.089870	-0.000494
79	66	13	78	65	13	796.104580	0.000461
79	66	14	78	65	14	796.104580	0.000461
76	68	8	75	67	8	796.118690	-0.000209
76	68	9	75	67	9	796.118690	-0.000209
73	70	3	72	69	3	796.132290	0.000205
73	70	4	72	69	4	796.132290	0.000205
75	69	6	74	68	6	796.161150	0.000134

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
75	69	7	74	68	7	796.161150	0.000134
72	71	1	71	70	1	796.173550	0.000098
72	71	2	71	70	2	796.173550	0.000098
80	66	14	79	65	14	796.175230	0.000595
80	66	15	79	65	15	796.175230	0.000595
77	68	9	76	67	9	796.189500	-0.000007
77	68	10	76	67	10	796.189500	-0.000007
74	70	4	73	69	4	796.202590	-0.000180
74	70	5	73	69	5	796.202590	-0.000180
76	69	7	75	68	7	796.231570	-0.000084
76	69	8	75	68	8	796.231570	-0.000084
73	71	2	72	70	2	796.244220	0.000058
73	71	3	72	70	3	796.244220	0.000058
78	68	10	77	67	10	796.260530	0.000439
78	68	11	77	67	11	796.260530	0.000439
75	70	5	74	69	5	796.273440	0.000003
75	70	6	74	69	6	796.273440	0.000003
72	72	0	71	71	0	796.284930	-0.000267
72	72	1	71	71	1	796.284930	-0.000267
80	67	13	79	66	13	796.288900	0.000824
80	67	14	79	66	14	796.288900	0.000824
77	69	8	76	68	8	796.302330	0.000066
77	69	9	76	68	9	796.302330	0.000066
74	71	3	73	70	3	796.314850	-0.000001
74	71	4	73	70	4	796.314850	-0.000001
76	70	6	75	69	6	796.343970	-0.000105
76	70	7	75	69	7	796.343970	-0.000105
73	72	1	72	71	1	796.356060	0.000151
73	72	2	72	71	2	796.356060	0.000151
81	67	14	80	66	14	796.359360	0.000769
81	67	15	80	66	15	796.359360	0.000769
78	69	9	77	68	9	796.372930	0.000070
78	69	10	77	68	10	796.372930	0.000070
77	70	7	76	69	7	796.414800	0.000096
77	70	8	76	69	8	796.414800	0.000096
74	72	2	73	71	2	796.426400	-0.000217
74	72	3	73	71	3	796.426400	-0.000217
79	69	10	78	68	10	796.443540	0.000105
79	69	11	78	68	11	796.443540	0.000105
76	71	5	75	70	5	796.456310	0.000120
76	71	6	75	70	6	796.456310	0.000120
73	73	0	72	72	0	796.467560	0.000219
73	73	1	72	72	1	796.467560	0.000219
81	68	13	80	67	13	796.471900	0.000178
81	68	14	80	67	14	796.471900	0.000178
78	70	8	77	69	8	796.485200	-0.000111
78	70	9	77	69	9	796.485200	-0.000111
77	71	6	76	70	6	796.525970	-0.000854
77	71	7	76	70	7	796.525970	-0.000854
74	73	1	73	72	1	796.538140	0.000081
74	73	2	73	72	2	796.538140	0.000081
82	68	14	81	67	14	796.542270	0.000056
82	68	15	81	67	15	796.542270	0.000056
79	70	9	78	69	9	796.555870	-0.000034
79	70	10	78	69	10	796.555870	-0.000034
75	73	2	74	72	2	796.608560	-0.000204
75	73	3	74	72	3	796.608560	-0.000204
80	70	10	79	69	10	796.626670	0.000201
80	70	11	79	69	11	796.626670	0.000201
77	72	5	76	71	5	796.638130	-0.000501
77	72	6	76	71	6	796.638130	-0.000501
74	74	0	73	73	0	796.649220	0.000045
74	74	1	73	73	1	796.649220	0.000045
82	69	13	81	68	13	796.655380	0.000343
82	69	14	81	68	14	796.655380	0.000343
76	73	3	75	72	3	796.679180	-0.000258
76	73	4	75	72	4	796.679180	-0.000258
81	70	11	80	69	11	796.697040	0.000016
78	72	6	77	71	6	796.709110	-0.000155
78	72	7	77	71	7	796.709110	-0.000155
75	74	1	74	73	1	796.719740	-0.000149
75	74	2	74	73	2	796.719740	-0.000149
83	69	14	82	68	14	796.726030	0.000500
83	69	15	82	68	15	796.726030	0.000500
82	70	12	81	69	12	796.767860	0.000312
76	74	2	75	73	2	796.790480	-0.000107
76	74	3	75	73	3	796.790480	-0.000107
81	71	10	80	70	10	796.809200	0.000011
81	71	11	80	70	11	796.809200	0.000011
78	73	5	77	72	5	796.820710	-0.000043
78	73	6	77	72	6	796.820710	-0.000043
75	75	0	74	74	0	796.831060	0.000360
75	75	1	74	74	1	796.831060	0.000360
83	70	13	82	69	13	796.838210	0.000165
83	70	13	82	69	13	796.838210	0.000165
83	70	14	82	69	14	796.838210	0.000165
77	74	3	76	73	3	796.861220	-0.000048
77	74	4	76	73	4	796.861220	-0.000048
79	73	6	78	72	6	796.890670	-0.000712
79	73	7	78	72	7	796.890670	-0.000712

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
76	75	1	75	74	1	796.901620	0.000207
76	75	2	75	74	2	796.901620	0.000207
84	70	14	83	69	14	796.909070	0.000546
84	70	14	83	69	14	796.909070	0.000546
84	70	15	83	69	15	796.909070	0.000546
77	75	2	76	74	2	796.972190	0.000083
77	75	3	76	74	3	796.972190	0.000083
85	70	15	84	69	15	796.979470	0.000493
76	76	0	75	75	0	797.012170	0.000259
76	76	1	75	75	1	797.012170	0.000259
84	71	13	83	70	13	797.021390	0.000652
84	71	14	83	70	14	797.021390	0.000652
78	75	3	77	74	3	797.042920	0.000131
78	75	4	77	74	4	797.042920	0.000131
86	70	16	85	69	16	797.049970	0.000573
80	74	6	79	73	6	797.072950	-0.000248
80	74	7	79	73	7	797.072950	-0.000248
77	76	1	76	75	1	797.083050	0.000424
77	76	2	76	75	2	797.083050	0.000424
85	71	14	84	70	14	797.091710	0.000503
85	71	15	84	70	15	797.091710	0.000503
78	76	2	77	75	2	797.153500	0.000176
78	76	3	77	75	3	797.153500	0.000176
77	77	0	76	76	0	797.192950	0.000124
77	77	1	76	76	1	797.192950	0.000124
79	76	3	78	75	3	797.223920	-0.000074
79	76	4	78	75	4	797.223920	-0.000074
81	75	6	80	74	6	797.254880	0.000182
81	75	7	80	74	7	797.254880	0.000182
78	77	1	77	76	1	797.263720	0.000191
78	77	2	77	76	2	797.263720	0.000191
79	77	2	78	76	2	797.334420	0.000191
79	77	3	78	76	3	797.334420	0.000191
78	78	0	77	77	0	797.373910	0.000491
78	78	1	77	77	1	797.373910	0.000491
80	77	3	79	76	3	797.404960	0.000065
80	77	4	79	76	4	797.404960	0.000065
82	76	6	81	75	6	797.435790	-0.000111
82	76	7	81	75	7	797.435790	-0.000111
80	78	2	79	77	2	797.514980	0.000156
80	78	3	79	77	3	797.514980	0.000156
79	79	0	78	78	0	797.553960	0.000247
79	79	1	78	78	1	797.553960	0.000247
81	78	3	80	77	3	797.585440	-0.000057
81	78	4	80	77	4	797.585440	-0.000057
83	77	6	82	76	6	797.616560	-0.000232
83	77	7	82	76	7	797.616560	-0.000232
82	79	3	81	78	3	797.765500	-0.000283
82	79	4	81	78	4	797.765500	-0.000283
84	78	6	83	77	6	797.797030	-0.000348
84	78	7	83	77	7	797.797030	-0.000348
82	80	2	81	79	2	797.875360	0.000251
82	80	3	81	79	3	797.875360	0.000251
81	81	0	80	80	0	797.913870	0.000477
81	81	1	80	80	1	797.913870	0.000477
83	80	3	82	79	3	797.945840	0.000065
83	80	4	82	79	4	797.945840	0.000065
85	79	6	84	78	6	797.977170	-0.000492
85	79	7	84	78	7	797.977170	-0.000492
83	81	2	82	80	2	798.054850	0.000051
83	81	3	82	80	3	798.054850	0.000051
82	82	0	81	81	0	798.093530	0.000749
82	82	1	81	81	1	798.093530	0.000749
84	81	3	83	80	3	798.125040	-0.000420
84	81	4	83	80	4	798.125040	-0.000420
86	80	6	85	79	6	798.157670	0.000026
86	80	7	85	79	7	798.157670	0.000026
84	82	2	83	81	2	798.234390	0.000211
84	82	3	83	81	3	798.234390	0.000211
85	82	3	84	81	3	798.304720	-0.000124
85	82	4	84	81	4	798.304720	-0.000124
87	81	6	86	80	6	798.337140	-0.000185
87	81	7	86	80	7	798.337140	-0.000185
85	83	2	84	82	2	798.413400	0.000126
85	83	3	84	82	3	798.413400	0.000126
86	83	3	85	82	3	798.483870	-0.000071
86	83	4	85	82	4	798.483870	-0.000071
88	82	6	87	81	6	798.516150	-0.000557
88	82	7	87	81	7	798.516150	-0.000557
87	84	3	86	83	3	798.662510	-0.000215
87	84	4	86	83	4	798.662510	-0.000215
89	83	6	88	82	6	798.694990	-0.000797
89	83	7	88	82	7	798.694990	-0.000797
88	85	3	87	84	3	798.841280	0.000056
88	85	4	87	84	4	798.841280	0.000056
90	84	6	89	83	6	798.874400	-0.000174
90	84	7	89	83	7	798.874400	-0.000174
89	86	3	88	85	3	799.019440	0.000018
89	86	4	88	85	4	799.019440	0.000018
91	85	6	90	84	6	799.052290	-0.000775

Continuation, see next page

Continuation of **Table A1**: $\nu_{46} \leftarrow$ ground state of naphthalene

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
91	85	7	90	84	7	799.052290	-0.000775
90	87	3	89	86	3	799.197530	0.000205
90	87	4	89	86	4	799.197530	0.000205

Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$ /cm ⁻¹	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$ /cm ⁻¹
78	58	20	79	59	20	721.092040	0.000108
78	58	21	79	59	21	721.092040	0.000108
77	57	20	78	58	20	721.361880	0.000130
77	57	21	78	58	21	721.361880	0.000130
72	59	13	73	60	13	721.484980	0.000239
72	59	14	73	60	14	721.484980	0.000239
76	56	20	77	57	20	721.631570	0.000185
76	56	21	77	57	21	721.631570	0.000185
74	57	17	75	58	17	721.645960	0.000297
74	57	18	75	58	18	721.645960	0.000297
71	58	13	72	59	13	721.754640	0.000068
71	58	14	72	59	14	721.754640	0.000068
63	62	1	64	63	1	721.810180	-0.000151
63	62	2	64	63	2	721.810180	-0.000151
75	55	20	76	56	20	721.900990	0.000155
75	55	21	76	56	21	721.900990	0.000155
73	56	17	74	57	17	721.915290	0.000065
73	56	18	74	57	18	721.915290	0.000065
70	57	13	71	58	13	722.024040	-0.000189
70	57	14	71	58	14	722.024040	-0.000189
62	61	1	63	62	1	722.080200	-0.000270
62	61	2	63	62	2	722.080200	-0.000270
74	54	20	75	55	20	722.170150	0.000044
74	54	21	75	55	21	722.170150	0.000044
72	55	17	73	56	17	722.184560	-0.000040
72	55	18	73	56	18	722.184560	-0.000040
69	56	13	70	57	13	722.293810	0.000118
69	56	14	70	57	14	722.293810	0.000118
61	60	1	62	61	1	722.350340	-0.000097
61	60	2	62	61	2	722.350340	-0.000097
73	53	20	74	54	20	722.438900	-0.000298
73	53	21	74	54	21	722.438900	-0.000298
71	54	17	72	55	17	722.453760	-0.000043
71	54	18	72	55	18	722.453760	-0.000043
67	56	11	68	57	11	722.482610	-0.000312
67	56	12	68	57	12	722.482610	-0.000312
68	55	13	69	56	13	722.562970	-0.000016
68	55	14	69	56	14	722.562970	-0.000016
66	56	10	67	57	10	722.578150	0.000629
66	56	11	67	57	11	722.578150	0.000629
62	58	4	63	59	4	722.606340	0.000164
62	58	5	63	59	5	722.606340	0.000164
72	52	20	73	53	20	722.707630	-0.000474
72	52	21	73	53	21	722.707630	-0.000474
70	53	17	71	54	17	722.722770	-0.000042
70	53	18	71	54	18	722.722770	-0.000042
68	54	14	69	55	14	722.737430	-0.000093
68	54	15	69	55	15	722.737430	-0.000093
66	55	11	67	56	11	722.752210	0.000042
66	55	12	67	56	12	722.752210	0.000042
75	50	25	76	51	25	722.773610	0.000265
75	50	26	76	51	26	722.773610	0.000265
60	58	2	61	59	2	722.795280	-0.000014
60	58	3	61	59	3	722.795280	-0.000014
67	54	13	68	55	13	722.832250	0.000154
67	54	14	68	55	14	722.832250	0.000154
65	55	10	66	56	10	722.846800	0.000050
65	55	11	66	56	11	722.846800	0.000050
61	57	4	62	58	4	722.875470	-0.000182
61	57	5	62	58	5	722.875470	-0.000182
72	51	21	73	52	21	722.882000	-0.000369
72	51	22	73	52	22	722.882000	-0.000369
59	58	1	60	59	1	722.889900	0.000068
59	58	2	60	59	2	722.889900	0.000068
73	50	23	74	51	23	722.962000	-0.000106
73	50	24	74	51	24	722.962000	-0.000106
71	51	20	72	52	20	722.977100	0.000259
71	51	21	72	52	21	722.977100	0.000259
69	52	17	70	53	17	722.991500	-0.000148
69	52	18	70	53	18	722.991500	-0.000148
67	53	14	68	54	14	723.006060	-0.000409
67	53	15	68	54	15	723.006060	-0.000409
65	54	11	66	55	11	723.021630	0.000392
65	54	12	66	55	12	723.021630	0.000392
74	49	25	75	50	25	723.041880	0.000006
74	49	26	75	50	26	723.041880	0.000006

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
59	57	2	60	58	2	723.064910	0.000161
59	57	3	60	58	3	723.064910	0.000161
70	51	19	71	52	19	723.071350	0.000031
70	51	20	71	52	20	723.071350	0.000031
66	53	13	67	54	13	723.100960	-0.000067
66	53	14	67	54	14	723.100960	-0.000067
64	54	10	65	55	10	723.116280	0.000474
64	54	11	65	55	11	723.116280	0.000474
62	55	7	63	56	7	723.130480	0.000018
62	55	8	63	56	8	723.130480	0.000018
60	56	4	61	57	4	723.144880	-0.000079
60	56	5	61	57	5	723.144880	-0.000079
71	50	21	72	51	21	723.150300	-0.000645
71	50	22	72	51	22	723.150300	-0.000645
58	57	1	59	58	1	723.159230	-0.000034
58	57	2	59	58	2	723.159230	-0.000034
72	49	23	73	50	23	723.230590	0.000022
72	49	24	73	50	24	723.230590	0.000022
70	50	20	71	51	20	723.245310	-0.000077
70	50	21	71	51	21	723.245310	-0.000077
68	51	17	69	52	17	723.260610	0.000310
68	51	18	69	52	18	723.260610	0.000310
66	52	14	67	53	14	723.275000	-0.000237
66	52	15	67	53	15	723.275000	-0.000237
64	53	11	65	54	11	723.290200	0.000072
64	53	12	65	54	12	723.290200	0.000072
73	48	25	74	49	25	723.310100	-0.000126
73	48	26	74	49	26	723.310100	-0.000126
58	56	2	59	57	2	723.334200	0.000179
58	56	3	59	57	3	723.334200	0.000179
69	50	19	70	51	19	723.339690	-0.000155
69	50	20	70	51	20	723.339690	-0.000155
65	52	13	66	53	13	723.370130	0.000356
65	52	14	66	53	14	723.370130	0.000356
63	53	10	64	54	10	723.385000	0.000323
63	53	11	64	54	11	723.385000	0.000323
61	54	7	62	55	7	723.399620	0.000163
61	54	8	62	55	8	723.399620	0.000163
59	55	4	60	56	4	723.413740	-0.000344
59	55	5	60	56	5	723.413740	-0.000344
70	49	21	71	50	21	723.419320	-0.000027
70	49	22	71	50	22	723.419320	-0.000027
71	48	23	72	49	23	723.498890	0.000038
71	48	24	72	49	24	723.498890	0.000038
69	49	20	70	50	20	723.513860	0.000102
69	49	21	70	50	21	723.513860	0.000102
56	56	0	57	57	0	723.523210	0.000192
56	56	1	57	57	1	723.523210	0.000192
67	50	17	68	51	17	723.528880	0.000105
67	50	18	68	51	18	723.528880	0.000105
65	51	14	66	52	14	723.543590	-0.000234
65	51	15	66	52	15	723.543590	-0.000234
63	52	11	64	53	11	723.558290	-0.000548
63	52	12	64	53	12	723.558290	-0.000548
72	47	25	73	48	25	723.578810	0.000414
72	47	26	73	48	26	723.578810	0.000414
57	55	2	58	56	2	723.603150	0.000040
57	55	3	58	56	3	723.603150	0.000040
68	49	19	69	50	19	723.608200	0.000021
68	49	20	69	50	20	723.608200	0.000021
64	51	13	65	52	13	723.638290	-0.000050
64	51	14	65	52	14	723.638290	-0.000050
62	52	10	63	53	10	723.653030	-0.000336
62	52	11	63	53	11	723.653030	-0.000336
60	53	7	61	54	7	723.668460	0.000190
60	53	8	61	54	8	723.668460	0.000190
58	54	4	59	55	4	723.683010	-0.000025
58	54	5	59	55	5	723.683010	-0.000025
69	48	21	70	49	21	723.687550	-0.000008
69	48	22	70	49	22	723.687550	-0.000008
70	47	23	71	48	23	723.766420	-0.000534
70	47	24	71	48	24	723.766420	-0.000534
68	48	20	69	49	20	723.781820	-0.000126
68	48	21	69	49	21	723.781820	-0.000126
55	55	0	56	56	0	723.792050	-0.000026
55	55	1	56	56	1	723.792050	-0.000026
66	49	17	67	50	17	723.796810	-0.000257
66	49	18	67	50	18	723.796810	-0.000257
64	50	14	65	51	14	723.812450	0.000221
64	50	15	65	51	15	723.812450	0.000221
62	51	11	63	52	11	723.827060	-0.000297
62	51	12	63	52	12	723.827060	-0.000297
73	45	28	74	46	28	723.832000	0.000127
73	45	29	74	46	29	723.832000	0.000127
71	46	25	72	47	25	723.846560	0.000163
71	46	26	72	47	26	723.846560	0.000163
58	53	5	59	54	5	723.857020	-0.000284
58	53	6	59	54	6	723.857020	-0.000284
67	48	19	68	49	19	723.876580	0.000236
67	48	20	68	49	20	723.876580	0.000236

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
63	50	13	64	51	13	723.906490	-0.000228
63	50	14	64	51	14	723.906490	-0.000228
61	51	10	62	52	10	723.921890	0.000017
61	51	11	62	52	11	723.921890	0.000017
59	52	7	60	53	7	723.936600	-0.000310
59	52	8	60	53	8	723.936600	-0.000310
68	47	21	69	48	21	723.955260	-0.000340
68	47	22	69	48	22	723.955260	-0.000340
55	54	1	56	55	1	723.966570	0.000073
55	54	2	56	55	2	723.966570	0.000073
69	46	23	70	47	23	724.034840	-0.000037
69	46	24	70	47	24	724.034840	-0.000037
67	47	20	68	48	20	724.049950	-0.000006
67	47	21	68	48	21	724.049950	-0.000006
54	54	0	55	55	0	724.060920	-0.000042
54	54	1	55	55	1	724.060920	-0.000042
65	48	17	66	49	17	724.065370	0.000194
65	48	18	66	49	18	724.065370	0.000194
63	49	14	64	50	14	724.080460	0.000003
63	49	15	64	50	15	724.080460	0.000003
74	43	31	75	44	31	724.085260	-0.000401
74	43	32	75	44	32	724.085260	-0.000401
61	50	11	62	51	11	724.095630	-0.000079
61	50	12	62	51	12	724.095630	-0.000079
72	44	28	73	45	28	724.099750	0.000089
72	44	29	73	45	29	724.099750	0.000089
70	45	25	71	46	25	724.114340	0.000115
70	45	26	71	46	26	724.114340	0.000115
57	52	5	58	53	5	724.125620	-0.000287
57	52	6	58	53	6	724.125620	-0.000287
66	47	19	67	48	19	724.144550	0.000225
66	47	20	67	48	20	724.144550	0.000225
62	49	13	63	50	13	724.175100	0.000170
62	49	14	63	50	14	724.175100	0.000170
60	50	10	61	51	10	724.190130	-0.000067
60	50	11	61	51	11	724.190130	-0.000067
58	51	7	59	52	7	724.205170	-0.000194
58	51	8	59	52	8	724.205170	-0.000194
56	52	4	57	53	4	724.220120	-0.000267
56	52	5	57	53	5	724.220120	-0.000267
65	47	18	66	48	18	724.238740	0.000030
65	47	19	66	48	19	724.238740	0.000030
68	45	23	69	46	23	724.302390	-0.000232
68	45	24	69	46	24	724.302390	-0.000232
55	52	3	56	53	3	724.315110	0.000251
55	52	4	56	53	4	724.315110	0.000251
66	46	20	67	47	20	724.317870	0.000086
66	46	21	67	47	21	724.317870	0.000086
53	53	0	54	54	0	724.329930	0.000261
53	53	1	54	54	1	724.329930	0.000261
73	42	31	74	43	31	724.352970	-0.000348
73	42	32	74	43	32	724.352970	-0.000348
60	49	11	61	50	11	724.364080	0.000204
60	49	12	61	50	12	724.364080	0.000204
71	43	28	72	44	28	724.367070	-0.000221
71	43	29	72	44	29	724.367070	-0.000221
69	44	25	70	45	25	724.382260	0.000386
69	44	26	70	45	26	724.382260	0.000386
56	51	5	57	52	5	724.394110	-0.000219
56	51	6	57	52	6	724.394110	-0.000219
65	46	19	66	47	19	724.413000	0.000873
65	46	20	66	47	20	724.413000	0.000873
63	47	16	64	48	16	724.427240	-0.000277
63	47	17	64	48	17	724.427240	-0.000277
61	48	13	62	49	13	724.442620	-0.000326
61	48	14	62	49	14	724.442620	-0.000326
59	49	10	60	50	10	724.458300	-0.000044
59	49	11	60	50	11	724.458300	-0.000044
57	50	7	58	51	7	724.473680	0.000041
57	50	8	58	51	8	724.473680	0.000041
55	51	4	56	52	4	724.488650	-0.000141
55	51	5	56	52	5	724.488650	-0.000141
66	45	21	67	46	21	724.491480	0.000339
66	45	22	67	46	22	724.491480	0.000339
64	46	18	65	47	18	724.506590	0.000104
64	46	19	65	47	19	724.506590	0.000104
62	47	15	63	48	15	724.521850	-0.000078
62	47	16	63	48	16	724.521850	-0.000078
67	44	23	68	45	23	724.570310	0.000108
67	44	24	68	45	24	724.570310	0.000108
54	51	3	55	52	3	724.583080	-0.000170
54	51	4	55	52	4	724.583080	-0.000170
65	45	20	66	46	20	724.585790	0.000356
65	45	21	66	46	21	724.585790	0.000356
52	52	0	53	53	0	724.598300	0.000105
52	52	1	53	53	1	724.598300	0.000105
63	46	17	64	47	17	724.600670	-0.000184
63	46	18	64	47	18	724.600670	-0.000184
61	47	14	62	48	14	724.616230	-0.000123
61	47	15	62	48	15	724.616230	-0.000123

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
59	48	11	60	49	11	724.632500	0.000643
59	48	12	60	49	12	724.632500	0.000643
70	42	28	71	43	28	724.634500	-0.000267
70	42	29	71	43	29	724.634500	-0.000267
68	43	25	69	44	25	724.649050	-0.000310
68	43	26	69	44	26	724.649050	-0.000310
55	50	5	56	51	5	724.662690	0.000123
55	50	6	56	51	6	724.662690	0.000123
53	51	2	54	52	2	724.677650	-0.000047
53	51	3	54	52	3	724.677650	-0.000047
64	45	19	65	46	19	724.680390	0.000639
64	45	20	65	46	20	724.680390	0.000639
62	46	16	63	47	16	724.695250	0.000015
62	46	17	63	47	17	724.695250	0.000015
60	47	13	61	48	13	724.710620	-0.000163
60	47	14	61	48	14	724.710620	-0.000163
58	48	10	59	49	10	724.726540	0.000236
58	48	11	59	49	11	724.726540	0.000236
56	49	7	57	50	7	724.741960	0.000225
56	49	8	57	50	8	724.741960	0.000225
67	43	24	68	44	24	724.743450	-0.000017
67	43	25	68	44	25	724.743450	-0.000017
54	50	4	55	51	4	724.756980	-0.000042
54	50	5	55	51	5	724.756980	-0.000042
52	51	1	53	52	1	724.772310	0.000186
52	51	2	53	52	2	724.772310	0.000186
63	45	18	64	46	18	724.774150	0.000071
63	45	19	64	46	19	724.774150	0.000071
61	46	15	62	47	15	724.789560	-0.000071
61	46	16	62	47	16	724.789560	-0.000071
66	43	23	67	44	23	724.837500	-0.000100
66	43	24	67	44	24	724.837500	-0.000100
53	50	3	54	51	3	724.851770	0.000313
53	50	4	54	51	4	724.851770	0.000313
64	44	20	65	45	20	724.853190	0.000285
64	44	21	65	45	21	724.853190	0.000285
51	51	0	52	52	0	724.866430	-0.000108
51	51	1	52	52	1	724.866430	-0.000108
62	45	17	63	46	17	724.868480	0.000062
62	45	18	63	46	18	724.868480	0.000062
60	46	14	61	47	14	724.883640	-0.000392
60	46	15	61	47	15	724.883640	-0.000392
71	40	31	72	41	31	724.888130	-0.000066
71	40	32	72	41	32	724.888130	-0.000066
58	47	11	59	48	11	724.899810	0.000157
58	47	12	59	48	12	724.899810	0.000157
69	41	28	70	42	28	724.901870	-0.000202
69	41	29	70	42	29	724.901870	-0.000202
56	48	8	57	49	8	724.915170	-0.000041
56	48	9	57	49	9	724.915170	-0.000041
67	42	25	68	43	25	724.916630	-0.000044
67	42	26	68	43	26	724.916630	-0.000044
54	49	5	55	50	5	724.930930	0.000297
54	49	6	55	50	6	724.930930	0.000297
52	50	2	53	51	2	724.946060	0.000167
52	50	3	53	51	3	724.946060	0.000167
61	45	16	62	46	16	724.963040	0.000263
61	45	17	62	46	17	724.963040	0.000263
59	46	13	60	47	13	724.978810	0.000365
59	46	14	60	47	14	724.978810	0.000365
57	47	10	58	48	10	724.994010	-0.000080
57	47	11	58	48	11	724.994010	-0.000080
53	49	4	54	50	4	725.025000	-0.000070
53	49	5	54	50	5	725.025000	-0.000070
51	50	1	52	51	1	725.040270	-0.000031
51	50	2	52	51	2	725.040270	-0.000031
62	44	18	63	45	18	725.041760	0.000273
62	44	19	63	45	19	725.041760	0.000273
60	45	15	61	46	15	725.057080	-0.000074
60	45	16	61	46	16	725.057080	-0.000074
54	48	6	55	49	6	725.104120	0.000038
65	42	23	66	43	23	725.104120	-0.000708
54	48	7	55	49	7	725.104120	0.000038
65	42	24	66	43	24	725.104120	-0.000708
52	49	3	53	50	3	725.119820	0.000329
52	49	4	53	50	4	725.119820	0.000329
63	43	20	64	44	20	725.120880	0.000682
63	43	21	64	44	21	725.120880	0.000682
50	50	0	51	51	0	725.134760	0.000055
50	50	1	51	51	1	725.134760	0.000055
61	44	17	62	45	17	725.135800	-0.000012
61	44	18	62	45	18	725.135800	-0.000012
59	45	14	60	46	14	725.151790	0.000258
59	45	15	60	46	15	725.151790	0.000258
70	39	31	71	40	31	725.155550	0.000125
70	39	32	71	40	32	725.155550	0.000125
57	46	11	58	47	11	725.167520	0.000252
57	46	12	58	47	12	725.167520	0.000252
55	47	8	56	48	8	725.183090	0.000135
55	47	9	56	48	9	725.183090	0.000135

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
53	48	5	54	49	5	725.198990	0.000478
64	42	22	65	43	22	725.198990	0.000029
53	48	6	54	49	6	725.198990	0.000478
64	42	23	65	43	23	725.198990	0.000029
51	49	2	52	50	2	725.214530	0.000623
62	43	19	63	44	19	725.214530	0.000077
51	49	3	52	50	3	725.214530	0.000623
62	43	20	63	44	20	725.214530	0.000077
60	44	16	61	45	16	725.230160	0.000018
60	44	17	61	45	17	725.230160	0.000018
58	45	13	59	46	13	725.245890	-0.000035
58	45	14	59	46	14	725.245890	-0.000035
54	47	7	55	48	7	725.277650	0.000269
65	41	24	66	42	24	725.277650	-0.000188
54	47	8	55	48	8	725.277650	0.000269
65	41	25	66	42	25	725.277650	-0.000188
52	48	4	53	49	4	725.292900	-0.000029
52	48	5	53	49	5	725.292900	-0.000029
50	49	1	51	50	1	725.308380	0.000069
50	49	2	51	50	2	725.308380	0.000069
53	47	6	54	48	6	725.371860	0.000060
64	41	23	65	42	23	725.371860	-0.000028
53	47	7	54	48	7	725.371860	0.000060
64	41	24	65	42	24	725.371860	-0.000028
51	48	3	52	49	3	725.387390	0.000045
62	42	20	63	43	20	725.387390	0.000069
51	48	4	52	49	4	725.387390	0.000045
62	42	21	63	43	21	725.387390	0.000069
49	49	0	50	50	0	725.402710	0.000019
60	43	17	61	44	17	725.402710	-0.000301
49	49	1	50	50	1	725.402710	0.000019
60	43	18	61	44	18	725.402710	-0.000301
58	44	14	59	45	14	725.418860	0.000009
58	44	15	59	45	15	725.418860	0.000009
69	38	31	70	39	31	725.422480	-0.000057
69	38	32	70	39	32	725.422480	-0.000057
56	45	11	57	46	11	725.434750	0.000044
56	45	12	57	46	12	725.434750	0.000044
67	39	28	68	40	28	725.436030	-0.000206
67	39	29	68	40	29	725.436030	-0.000206
54	46	8	55	47	8	725.450690	0.000175
54	46	9	55	47	9	725.450690	0.000175
63	41	22	64	42	22	725.465980	0.000003
63	41	23	64	42	23	725.465980	0.000003
50	48	2	51	49	2	725.481900	0.000160
61	42	19	62	43	19	725.481900	0.000364
50	48	3	51	49	3	725.481900	0.000160
61	42	20	62	43	20	725.481900	0.000364
59	43	16	60	44	16	725.497090	-0.000235
59	43	17	60	44	17	725.497090	-0.000235
57	44	13	58	45	13	725.513500	0.000285
57	44	14	58	45	14	725.513500	0.000285
55	45	10	56	46	10	725.529060	-0.000050
55	45	11	56	46	11	725.529060	-0.000050
53	46	7	54	47	7	725.544820	-0.000104
64	40	24	65	41	24	725.544820	0.000055
53	46	8	54	47	8	725.544820	-0.000104
64	40	25	65	41	25	725.544820	0.000055
51	47	4	52	48	4	725.560610	-0.000010
51	47	5	52	48	5	725.560610	-0.000010
60	42	18	61	43	18	725.575490	-0.000290
60	42	19	61	43	19	725.575490	-0.000290
58	43	15	59	44	15	725.591930	0.000280
58	43	16	59	44	16	725.591930	0.000280
52	46	6	53	47	6	725.639010	-0.000319
63	40	23	64	41	23	725.639010	0.000238
52	46	7	53	47	7	725.639010	-0.000319
63	40	24	64	41	24	725.639010	0.000238
50	47	3	51	48	3	725.654810	-0.000199
61	41	20	62	42	20	725.654810	0.000554
50	47	4	51	48	4	725.654810	-0.000199
61	41	21	62	42	21	725.654810	0.000554
48	48	0	49	49	0	725.670420	-0.000080
59	42	17	60	43	17	725.670420	0.000380
48	48	1	49	49	1	725.670420	-0.000080
59	42	18	60	43	18	725.670420	0.000380
57	43	14	58	44	14	725.686280	0.000298
57	43	15	58	44	15	725.686280	0.000298
68	37	31	69	38	31	725.689440	-0.000074
68	37	32	69	38	32	725.689440	-0.000074
55	44	11	56	45	11	725.702100	0.000134
55	44	12	56	45	12	725.702100	0.000134
66	38	28	67	39	28	725.703340	0.000240
66	38	29	67	39	29	725.703340	0.000240
53	45	8	54	46	8	725.717760	-0.000140
64	39	25	65	40	25	725.717760	0.000131
53	45	9	54	46	9	725.717760	-0.000140
64	39	26	65	40	26	725.717760	0.000131
62	40	22	63	41	22	725.733190	0.000365
62	40	23	63	41	23	725.733190	0.000365

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
60	41	19	61	42	19	725.748500	0.000057
60	41	20	61	42	20	725.748500	0.000057
58	42	16	59	43	16	725.764420	0.000096
58	42	17	59	43	17	725.764420	0.000096
56	43	13	57	44	13	725.780290	-0.000035
56	43	14	57	44	14	725.780290	-0.000035
54	44	10	55	45	10	725.796420	0.000078
54	44	11	55	45	11	725.796420	0.000078
52	45	7	53	46	7	725.812050	-0.000246
63	39	24	64	40	24	725.812050	0.000511
52	45	8	53	46	8	725.812050	-0.000246
63	39	25	64	40	25	725.812050	0.000511
50	46	4	51	47	4	725.828250	0.000132
50	46	5	51	47	5	725.828250	0.000132
59	41	18	60	42	18	725.842490	-0.000162
59	41	19	60	42	19	725.842490	-0.000162
57	42	15	58	43	15	725.858330	-0.000298
57	42	16	58	43	16	725.858330	-0.000298
62	39	23	63	40	23	725.905480	-0.000018
62	39	24	63	40	24	725.905480	-0.000018
51	45	6	52	46	6	725.906620	-0.000066
51	45	7	52	46	7	725.906620	-0.000066
60	40	20	61	41	20	725.921250	0.000226
60	40	21	61	41	21	725.921250	0.000226
58	41	17	59	42	17	725.936740	-0.000151
58	41	18	59	42	18	725.936740	-0.000151
56	42	14	57	43	14	725.952940	0.000009
56	42	15	57	43	15	725.952940	0.000009
67	36	31	68	37	31	725.956810	0.000421
67	36	32	68	37	32	725.956810	0.000421
54	43	11	55	44	11	725.968830	-0.000204
54	43	12	55	44	12	725.968830	-0.000204
63	38	25	64	39	25	725.984330	0.000039
63	38	26	64	39	26	725.984330	0.000039
52	44	8	53	45	8	725.985120	0.000019
52	44	9	53	45	9	725.985120	0.000019
61	39	22	62	40	22	725.999570	0.000077
61	39	23	62	40	23	725.999570	0.000077
50	45	5	51	46	5	726.000960	-0.000103
50	45	6	51	46	6	726.000960	-0.000103
59	40	19	60	41	19	726.015300	0.000118
59	40	20	60	41	20	726.015300	0.000118
48	46	2	49	47	2	726.016620	-0.000248
48	46	3	49	47	3	726.016620	-0.000248
57	41	16	58	42	16	726.030650	-0.000493
57	41	17	58	42	17	726.030650	-0.000493
55	42	13	56	43	13	726.047240	-0.000014
55	42	14	56	43	14	726.047240	-0.000014
53	43	10	54	44	10	726.063380	-0.000015
53	43	11	54	44	11	726.063380	-0.000015
62	38	24	63	39	24	726.078280	0.000132
62	38	25	63	39	25	726.078280	0.000132
49	45	4	50	46	4	726.095420	-0.000020
49	45	5	50	46	5	726.095420	-0.000020
58	40	18	59	41	18	726.109360	0.000001
58	40	19	59	41	19	726.109360	0.000001
47	46	1	48	47	1	726.111110	-0.000118
47	46	2	48	47	2	726.111110	-0.000118
56	41	15	57	42	15	726.125260	-0.000161
56	41	16	57	42	16	726.125260	-0.000161
61	38	23	62	39	23	726.172000	-0.000054
61	38	24	62	39	24	726.172000	-0.000054
50	44	6	51	45	6	726.173880	0.000027
50	44	7	51	45	7	726.173880	0.000027
59	39	20	60	40	20	726.187630	0.000008
59	39	21	60	40	21	726.187630	0.000008
46	46	0	47	47	0	726.205450	-0.000128
46	46	1	47	47	1	726.205450	-0.000128
55	41	14	56	42	14	726.219600	-0.000104
55	41	15	56	42	15	726.219600	-0.000104
66	35	31	67	36	31	726.223390	0.000240
66	35	32	67	36	32	726.223390	0.000240
53	42	11	54	43	11	726.235750	-0.000178
53	42	12	54	43	12	726.235750	-0.000178
62	37	25	63	38	25	726.250790	-0.000015
62	37	26	63	38	26	726.250790	-0.000015
51	43	8	52	44	8	726.252070	-0.000057
51	43	9	52	44	9	726.252070	-0.000057
60	38	22	61	39	22	726.265960	-0.000044
60	38	23	61	39	23	726.265960	-0.000044
49	44	5	50	45	5	726.268350	0.000125
49	44	6	50	45	6	726.268350	0.000125
58	39	19	59	40	19	726.281660	-0.000075
58	39	20	59	40	20	726.281660	-0.000075
47	45	2	48	46	2	726.284230	0.000069
47	45	3	48	46	3	726.284230	0.000069
56	40	16	57	41	16	726.297740	-0.000047
56	40	17	57	41	17	726.297740	-0.000047
54	41	13	55	42	13	726.314010	0.000006
54	41	14	55	42	14	726.314010	0.000006

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
52	42	10	53	43	10	726.330070	-0.000194
52	42	11	53	43	11	726.330070	-0.000194
61	37	24	62	38	24	726.344650	0.000059
61	37	25	62	38	25	726.344650	0.000059
50	43	7	51	44	7	726.346560	0.000078
50	43	8	51	44	8	726.346560	0.000078
59	38	21	60	39	21	726.360190	0.000194
59	38	22	60	39	22	726.360190	0.000194
48	44	4	49	45	4	726.362690	0.000104
48	44	5	49	45	5	726.362690	0.000104
57	39	18	58	40	18	726.376010	0.000136
57	39	19	58	40	19	726.376010	0.000136
46	45	1	47	46	1	726.378860	0.000349
46	45	2	47	46	2	726.378860	0.000349
55	40	15	56	41	15	726.391940	-0.000089
55	40	16	56	41	16	726.391940	-0.000089
60	37	23	61	38	23	726.438400	-0.000045
60	37	24	61	38	24	726.438400	-0.000045
49	43	6	50	44	6	726.440590	-0.000255
49	43	7	50	44	7	726.440590	-0.000255
58	38	20	59	39	20	726.453940	-0.000096
58	38	21	59	39	21	726.453940	-0.000096
47	44	3	48	45	3	726.457000	0.000070
47	44	4	48	45	4	726.457000	0.000070
56	39	17	57	40	17	726.469940	-0.000113
56	39	18	57	40	18	726.469940	-0.000113
45	45	0	46	46	0	726.472710	-0.000126
45	45	1	46	46	1	726.472710	-0.000126
54	40	14	55	41	14	726.486300	0.000007
54	40	15	55	41	15	726.486300	0.000007
65	34	31	66	35	31	726.489930	0.000104
65	34	32	66	35	32	726.489930	0.000104
52	41	11	53	42	11	726.502750	0.000120
63	35	28	64	36	28	726.502750	-0.000102
52	41	12	53	42	12	726.502750	0.000120
63	35	29	64	36	29	726.502750	-0.000102
61	36	25	62	37	25	726.516760	-0.000400
61	36	26	62	37	26	726.516760	-0.000400
50	42	8	51	43	8	726.519230	0.000277
50	42	9	51	43	9	726.519230	0.000277
59	37	22	60	38	22	726.532140	-0.000198
59	37	23	60	38	23	726.532140	-0.000198
48	43	5	49	44	5	726.535300	0.000107
48	43	6	49	44	6	726.535300	0.000107
57	38	19	58	39	19	726.547960	-0.000153
57	38	20	58	39	20	726.547960	-0.000153
46	44	2	47	45	2	726.551020	-0.000260
46	44	3	47	45	3	726.551020	-0.000260
55	39	16	56	40	16	726.564100	-0.000145
55	39	17	56	40	17	726.564100	-0.000145
53	40	13	54	41	13	726.580360	-0.000211
53	40	14	54	41	14	726.580360	-0.000211
51	41	10	52	42	10	726.596150	-0.000800
51	41	11	52	42	11	726.596150	-0.000800
60	36	24	61	37	24	726.611320	0.000439
60	36	25	61	37	25	726.611320	0.000439
49	42	7	50	43	7	726.613190	-0.000111
49	42	8	50	43	8	726.613190	-0.000111
58	37	21	59	38	21	726.626280	-0.000010
58	37	22	59	38	22	726.626280	-0.000010
47	43	4	48	44	4	726.629830	0.000292
47	43	5	48	44	5	726.629830	0.000292
56	38	18	57	39	18	726.642340	0.000121
56	38	19	57	39	19	726.642340	0.000121
45	44	1	46	45	1	726.645540	-0.000066
45	44	2	46	45	2	726.645540	-0.000066
54	39	15	55	40	15	726.658380	-0.000084
54	39	16	55	40	16	726.658380	-0.000084
59	36	23	60	37	23	726.704660	-0.000017
59	36	24	60	37	24	726.704660	-0.000017
48	42	6	49	43	6	726.707540	-0.000109
48	42	7	49	43	7	726.707540	-0.000109
57	37	20	58	38	20	726.720170	-0.000118
57	37	21	58	38	21	726.720170	-0.000118
46	43	3	47	44	3	726.723990	0.000113
46	43	4	47	44	4	726.723990	0.000113
55	38	17	56	39	17	726.736630	0.000264
55	38	18	56	39	18	726.736630	0.000264
44	44	0	45	45	0	726.740000	0.000077
44	44	1	45	45	1	726.740000	0.000077
53	39	14	54	40	14	726.752750	0.000051
53	39	15	54	40	15	726.752750	0.000051
64	33	31	65	34	31	726.756370	-0.000061
64	33	32	65	34	32	726.756370	-0.000061
51	40	11	52	41	11	726.769220	0.000062
62	34	28	63	35	28	726.769220	0.000030
51	40	12	52	41	12	726.769220	0.000062
62	34	29	63	35	29	726.769220	0.000030
60	35	25	61	36	25	726.783200	-0.000163
60	35	26	61	36	26	726.783200	-0.000163

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
49	41	8	50	42	8	726.785700	0.000087
49	41	9	50	42	9	726.785700	0.000087
58	36	22	59	37	22	726.798460	-0.000062
58	36	23	59	37	23	726.798460	-0.000062
47	42	5	48	43	5	726.801440	-0.000538
47	42	6	48	43	6	726.801440	-0.000538
56	37	19	57	38	19	726.814350	0.000027
56	37	20	57	38	20	726.814350	0.000027
45	43	2	46	44	2	726.818160	-0.000040
45	43	3	46	44	3	726.818160	-0.000040
54	38	16	55	39	16	726.830320	-0.000213
54	38	17	55	39	17	726.830320	-0.000213
52	39	13	53	40	13	726.847130	0.000173
52	39	14	53	40	14	726.847130	0.000173
50	40	10	51	41	10	726.862780	-0.000680
50	40	11	51	41	11	726.862780	-0.000680
59	35	24	60	36	24	726.876790	-0.000227
59	35	25	60	36	25	726.876790	-0.000227
48	41	7	49	42	7	726.880010	0.000068
48	41	8	49	42	8	726.880010	0.000068
57	36	21	58	37	21	726.892460	0.000044
57	36	22	58	37	22	726.892460	0.000044
46	42	4	47	43	4	726.896190	-0.000126
46	42	5	47	43	5	726.896190	-0.000126
55	37	18	56	38	18	726.908530	0.000140
55	37	19	56	38	19	726.908530	0.000140
44	43	1	45	44	1	726.912360	-0.000161
44	43	2	45	44	2	726.912360	-0.000161
53	38	15	54	39	15	726.924670	-0.000052
53	38	16	54	39	16	726.924670	-0.000052
47	41	6	48	42	6	726.974040	-0.000229
47	41	7	48	42	7	726.974040	-0.000229
56	36	20	57	37	20	726.986670	0.000301
56	36	21	57	37	21	726.986670	0.000301
45	42	3	46	43	3	726.990590	-0.000044
45	42	4	46	43	4	726.990590	-0.000044
54	37	17	55	38	17	727.002560	0.000059
54	37	18	55	38	18	727.002560	0.000059
43	43	0	44	44	0	727.006220	-0.000606
43	43	1	44	44	1	727.006220	-0.000606
52	38	14	53	39	14	727.018870	-0.000058
52	38	15	53	39	15	727.018870	-0.000058
63	32	31	64	33	31	727.022940	-0.000028
63	32	32	64	33	32	727.022940	-0.000028
50	39	11	51	40	11	727.035580	0.000088
61	33	28	62	34	28	727.035580	0.000172
50	39	12	51	40	12	727.035580	0.000088
61	33	29	62	34	29	727.035580	0.000172
59	34	25	60	35	25	727.049480	0.000046
59	34	26	60	35	26	727.049480	0.000046
48	40	8	49	41	8	727.052070	-0.000013
48	40	9	49	41	9	727.052070	-0.000013
46	41	5	47	42	5	727.068780	0.000193
46	41	6	47	42	6	727.068780	0.000193
55	36	19	56	37	19	727.080520	0.000160
55	36	20	56	37	20	727.080520	0.000160
44	42	2	45	43	2	727.084860	-0.000086
44	42	3	45	43	3	727.084860	-0.000086
53	37	16	54	38	16	727.096870	0.000241
53	37	17	54	38	17	727.096870	0.000241
51	38	13	52	39	13	727.113360	0.000202
51	38	14	52	39	14	727.113360	0.000202
49	39	10	50	40	10	727.129290	-0.000486
49	39	11	50	40	11	727.129290	-0.000486
58	34	24	59	35	24	727.143040	0.000025
58	34	25	59	35	25	727.143040	0.000025
47	40	7	48	41	7	727.146220	-0.000176
47	40	8	48	41	8	727.146220	-0.000176
56	35	21	57	36	21	727.158870	0.000494
56	35	22	57	36	22	727.158870	0.000494
45	41	4	46	42	4	727.162820	-0.000088
45	41	5	46	42	5	727.162820	-0.000088
54	36	18	55	37	18	727.174700	0.000311
54	36	19	55	37	19	727.174700	0.000311
43	42	1	44	43	1	727.179570	0.000319
43	42	2	44	43	2	727.179570	0.000319
52	37	15	53	38	15	727.190630	-0.000162
52	37	16	53	38	16	727.190630	-0.000162
48	39	9	49	40	9	727.223920	-0.000157
48	39	10	49	40	10	727.223920	-0.000157
57	34	23	58	35	23	727.236670	0.000001
57	34	24	58	35	24	727.236670	0.000001
46	40	6	47	41	6	727.240800	0.000095
46	40	7	47	41	7	727.240800	0.000095
55	35	20	56	36	20	727.252490	0.000214
55	35	21	56	36	21	727.252490	0.000214
44	41	3	45	42	3	727.257260	0.000051
44	41	4	45	42	4	727.257260	0.000051
53	36	17	54	37	17	727.268070	-0.000380
53	36	18	54	37	18	727.268070	-0.000380

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Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
42	42	0	43	43	0	727.273400	-0.000140
42	42	1	43	43	1	727.273400	-0.000140
51	37	14	52	38	14	727.285330	0.000353
51	37	15	52	38	15	727.285330	0.000353
62	31	31	63	32	31	727.289390	-0.000082
62	31	32	63	32	32	727.289390	-0.000082
49	38	11	50	39	11	727.301700	0.000050
60	32	28	61	33	28	727.301700	0.000168
49	38	12	50	39	12	727.301700	0.000050
60	32	29	61	33	29	727.301700	0.000168
47	39	8	48	40	8	727.318330	-0.000040
47	39	9	48	40	9	727.318330	-0.000040
56	34	22	57	35	22	727.330550	0.000163
56	34	23	57	35	23	727.330550	0.000163
45	40	5	46	41	5	727.335260	0.000252
45	40	6	46	41	6	727.335260	0.000252
54	35	19	55	36	19	727.346210	-0.000012
54	35	20	55	36	20	727.346210	-0.000012
43	41	2	44	42	2	727.351330	-0.000183
43	41	3	44	42	3	727.351330	-0.000183
52	36	16	53	37	16	727.362400	-0.000160
52	36	17	53	37	17	727.362400	-0.000160
50	37	13	51	38	13	727.379040	-0.000135
50	37	14	51	38	14	727.379040	-0.000135
48	38	10	49	39	10	727.395880	-0.000042
48	38	11	49	39	11	727.395880	-0.000042
57	33	24	58	34	24	727.408760	-0.000105
57	33	25	58	34	25	727.408760	-0.000105
46	39	7	47	40	7	727.412600	-0.000061
46	39	8	47	40	8	727.412600	-0.000061
55	34	21	56	35	21	727.424240	0.000064
55	34	22	56	35	22	727.424240	0.000064
44	40	4	45	41	4	727.429400	0.000087
44	40	5	45	41	5	727.429400	0.000087
53	35	18	54	36	18	727.440020	-0.000185
53	35	19	54	36	19	727.440020	-0.000185
42	41	1	43	42	1	727.445800	-0.000004
42	41	2	43	42	2	727.445800	-0.000004
47	38	9	48	39	9	727.490230	0.000035
47	38	10	48	39	10	727.490230	0.000035
56	33	23	57	34	23	727.502380	-0.000063
56	33	24	57	34	24	727.502380	-0.000063
45	39	6	46	40	6	727.506930	-0.000023
45	39	7	46	40	7	727.506930	-0.000023
54	34	20	55	35	20	727.517850	-0.000170
54	34	21	55	35	21	727.517850	-0.000170
43	40	3	44	41	3	727.523470	-0.000142
43	40	4	44	41	4	727.523470	-0.000142
52	35	17	53	36	17	727.534080	-0.000160
52	35	18	53	36	18	727.534080	-0.000160
41	41	0	42	42	0	727.540140	0.000060
41	41	1	42	42	1	727.540140	0.000060
50	36	14	51	37	14	727.550640	-0.000199
50	36	15	51	37	15	727.550640	-0.000199
61	30	31	62	31	31	727.556030	0.000068
61	30	32	62	31	32	727.556030	0.000068
48	37	11	49	38	11	727.567680	0.000046
59	31	28	60	32	28	727.567680	0.000100
48	37	12	49	38	12	727.567680	0.000046
59	31	29	60	32	29	727.567680	0.000100
57	32	25	58	33	25	727.581450	0.000288
57	32	26	58	33	26	727.581450	0.000288
46	38	8	47	39	8	727.584500	0.000034
46	38	9	47	39	9	727.584500	0.000034
55	33	22	56	34	22	727.596070	-0.000020
55	33	23	56	34	23	727.596070	-0.000020
44	39	5	45	40	5	727.601210	-0.000039
44	39	6	45	40	6	727.601210	-0.000039
53	34	19	54	35	19	727.611300	-0.000614
53	34	20	54	35	20	727.611300	-0.000614
42	40	2	43	41	2	727.617840	-0.000053
42	40	3	43	41	3	727.617840	-0.000053
51	35	16	52	36	16	727.627800	-0.000505
51	35	17	52	36	17	727.627800	-0.000505
49	36	13	50	37	13	727.644240	-0.000777
49	36	14	50	37	14	727.644240	-0.000777
47	37	10	48	38	10	727.662010	0.000133
47	37	11	48	38	11	727.662010	0.000133
56	32	24	57	33	24	727.674810	0.000239
56	32	25	57	33	25	727.674810	0.000239
45	38	7	46	39	7	727.678690	-0.000057
45	38	8	46	39	8	727.678690	-0.000057
54	33	21	55	34	21	727.689740	-0.000077
54	33	22	55	34	22	727.689740	-0.000077
43	39	4	44	40	4	727.695480	-0.000060
43	39	5	44	40	5	727.695480	-0.000060
52	34	18	53	35	18	727.705980	0.000119
52	34	19	53	35	19	727.705980	0.000119
41	40	1	42	41	1	727.712480	0.000314
41	40	2	42	41	2	727.712480	0.000314

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
50	35	15	51	36	15	727.722000	-0.000401
50	35	16	51	36	16	727.722000	-0.000401
48	36	12	49	37	12	727.739160	-0.000054
48	36	13	49	37	13	727.739160	-0.000054
46	37	9	47	38	9	727.756340	0.000209
46	37	10	47	38	10	727.756340	0.000209
55	32	23	56	33	23	727.768130	0.000060
55	32	24	56	33	24	727.768130	0.000060
44	38	6	45	39	6	727.772960	-0.000073
44	38	7	45	39	7	727.772960	-0.000073
53	33	20	54	34	20	727.783400	-0.000202
53	33	21	54	34	21	727.783400	-0.000202
42	39	3	43	40	3	727.789770	-0.000053
42	39	4	43	40	4	727.789770	-0.000053
51	34	17	52	35	17	727.799600	-0.000244
51	34	18	52	35	18	727.799600	-0.000244
40	40	0	41	41	0	727.806260	-0.000179
40	40	1	41	41	1	727.806260	-0.000179
49	35	14	50	36	14	727.816610	0.000088
49	35	15	50	36	15	727.816610	0.000088
60	29	31	61	30	31	727.822170	-0.000286
60	29	32	61	30	32	727.822170	-0.000286
47	36	11	48	37	11	727.833530	0.000106
58	30	28	59	31	28	727.833530	-0.000019
47	36	12	48	37	12	727.833530	0.000106
58	30	29	59	31	29	727.833530	-0.000019
56	31	25	57	32	25	727.846910	0.000061
56	31	26	57	32	26	727.846910	0.000061
45	37	8	46	38	8	727.850030	-0.000362
45	37	9	46	38	9	727.850030	-0.000362
54	32	22	55	33	22	727.861660	0.000009
54	32	23	55	33	23	727.861660	0.000009
43	38	5	44	39	5	727.867190	-0.000119
43	38	6	44	39	6	727.867190	-0.000119
52	33	19	53	34	19	727.877300	-0.000140
52	33	20	53	34	20	727.877300	-0.000140
41	39	2	42	40	2	727.884030	-0.000066
41	39	3	42	40	3	727.884030	-0.000066
50	34	16	51	35	16	727.893800	-0.000074
50	34	17	51	35	17	727.893800	-0.000074
48	35	13	49	36	13	727.910490	-0.000183
48	35	14	49	36	14	727.910490	-0.000183
46	36	10	47	37	10	727.927480	-0.000169
46	36	11	47	37	11	727.927480	-0.000169
55	31	24	56	32	24	727.940160	0.000005
55	31	25	56	32	25	727.940160	0.000005
44	37	7	45	38	7	727.944800	0.000154
44	37	8	45	38	8	727.944800	0.000154
53	32	21	54	33	21	727.954680	-0.000617
53	32	22	54	33	22	727.954680	-0.000617
42	38	4	43	39	4	727.961000	-0.000577
42	38	5	43	39	5	727.961000	-0.000577
51	33	18	52	34	18	727.971420	0.000080
51	33	19	52	34	19	727.971420	0.000080
40	39	1	41	40	1	727.978090	-0.000262
40	39	2	41	40	2	727.978090	-0.000262
49	34	15	50	35	15	727.987750	-0.000185
49	34	16	50	35	16	727.987750	-0.000185
47	35	12	48	36	12	728.004840	-0.000010
47	35	13	48	36	13	728.004840	-0.000010
45	36	9	46	37	9	728.021890	0.000005
45	36	10	46	37	10	728.021890	0.000005
54	31	23	55	32	23	728.033460	-0.000107
54	31	24	55	32	24	728.033460	-0.000107
43	37	6	44	38	6	728.038910	-0.000003
43	37	7	44	38	7	728.038910	-0.000003
52	32	20	53	33	20	728.048990	-0.000035
52	32	21	53	33	21	728.048990	-0.000035
41	38	3	42	39	3	728.055750	-0.000095
41	38	4	42	39	4	728.055750	-0.000095
50	33	17	51	34	17	728.065340	0.000055
50	33	18	51	34	18	728.065340	0.000055
39	39	0	40	40	0	728.072640	0.000032
39	39	1	40	40	1	728.072640	0.000032
48	34	14	49	35	14	728.082070	0.000036
48	34	15	49	35	15	728.082070	0.000036
59	28	31	60	29	31	728.088940	-0.000077
59	28	32	60	29	32	728.088940	-0.000077
46	35	11	47	36	11	728.099150	0.000114
57	29	28	58	30	28	728.099150	-0.000322
46	35	12	47	36	12	728.099150	0.000114
57	29	29	58	30	29	728.099150	-0.000322
55	30	25	56	31	25	728.112500	0.000076
55	30	26	56	31	26	728.112500	0.000076
44	36	8	45	37	8	728.116080	-0.000042
44	36	9	45	37	9	728.116080	-0.000042
53	31	22	54	32	22	728.127050	-0.000007
53	31	23	54	32	23	728.127050	-0.000007
42	37	5	43	38	5	728.133250	0.000075
42	37	6	43	38	6	728.133250	0.000075

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
51	32	19	52	33	19	728.142680	-0.000131
51	32	20	52	33	20	728.142680	-0.000131
40	38	2	41	39	2	728.150000	-0.000108
40	38	3	41	39	3	728.150000	-0.000108
49	33	16	50	34	16	728.159400	0.000122
49	33	17	50	34	17	728.159400	0.000122
45	35	10	46	36	10	728.193480	0.000240
45	35	11	46	36	11	728.193480	0.000240
54	30	24	55	31	24	728.205870	0.000254
54	30	25	55	31	25	728.205870	0.000254
43	36	7	44	37	7	728.210470	0.000105
43	36	8	44	37	8	728.210470	0.000105
52	31	21	53	32	21	728.220410	-0.000230
52	31	22	53	32	22	728.220410	-0.000230
41	37	4	42	38	4	728.227410	-0.000026
41	37	5	42	38	5	728.227410	-0.000026
50	32	18	51	33	18	728.236730	0.000074
50	32	19	51	33	19	728.236730	0.000074
39	38	1	40	39	1	728.244260	-0.000099
39	38	2	40	39	2	728.244260	-0.000099
48	33	15	49	34	15	728.253460	0.000161
48	33	16	49	34	16	728.253460	0.000161
46	34	12	47	35	12	728.270220	-0.000075
46	34	13	47	35	13	728.270220	-0.000075
44	35	9	45	36	9	728.287510	0.000063
44	35	10	45	36	10	728.287510	0.000063
53	30	23	54	31	23	728.298890	-0.000035
53	30	24	54	31	24	728.298890	-0.000035
42	36	6	43	37	6	728.304470	-0.000151
42	36	7	43	37	7	728.304470	-0.000151
51	31	20	52	32	20	728.314290	0.000004
51	31	21	52	32	21	728.314290	0.000004
40	37	3	41	38	3	728.321880	0.000189
40	37	4	41	38	4	728.321880	0.000189
49	32	17	50	33	17	728.330710	0.000162
49	32	18	50	33	18	728.330710	0.000162
38	38	0	39	39	0	728.338630	0.000041
38	38	1	39	39	1	728.338630	0.000041
47	33	14	48	34	14	728.347470	0.000105
47	33	15	48	34	15	728.347470	0.000105
58	27	31	59	28	31	728.355700	0.000037
58	27	32	59	28	32	728.355700	0.000037
45	34	11	46	35	11	728.364320	-0.000144
45	34	12	46	35	12	728.364320	-0.000144
56	28	28	57	29	28	728.365250	-0.000121
56	28	29	57	29	29	728.365250	-0.000121
54	29	25	55	30	25	728.377920	0.000019
54	29	26	55	30	26	728.377920	0.000019
43	35	8	44	36	8	728.381380	-0.000295
43	35	9	44	36	9	728.381380	-0.000295
52	30	22	53	31	22	728.392450	0.000119
52	30	23	53	31	23	728.392450	0.000119
41	36	5	42	37	5	728.398840	-0.000026
41	36	6	42	37	6	728.398840	-0.000026
50	31	19	51	32	19	728.407790	-0.000229
50	31	20	51	32	20	728.407790	-0.000229
39	37	2	40	38	2	728.415920	-0.000015
39	37	3	40	38	3	728.415920	-0.000015
48	32	16	49	33	16	728.424590	0.000095
48	32	17	49	33	17	728.424590	0.000095
46	33	13	47	34	13	728.441530	0.000081
46	33	14	47	34	14	728.441530	0.000081
53	29	24	54	30	24	728.471030	0.000053
53	29	25	54	30	25	728.471030	0.000053
42	35	7	43	36	7	728.475940	0.000037
42	35	8	43	36	8	728.475940	0.000037
51	30	21	52	31	21	728.485910	0.000078
51	30	22	52	31	22	728.485910	0.000078
40	36	4	41	37	4	728.493000	-0.000108
40	36	5	41	37	5	728.493000	-0.000108
49	31	18	50	32	18	728.501670	-0.000135
49	31	19	50	32	19	728.501670	-0.000135
38	37	1	39	38	1	728.510280	0.000111
38	37	2	39	38	2	728.510280	0.000111
47	32	15	48	33	15	728.518380	-0.000106
47	32	16	48	33	16	728.518380	-0.000106
43	34	9	44	35	9	728.553060	0.000223
43	34	10	44	35	10	728.553060	0.000223
52	29	23	53	30	23	728.564160	-0.000010
52	29	24	53	30	24	728.564160	-0.000010
41	35	6	42	36	6	728.570240	0.000103
41	35	7	42	36	7	728.570240	0.000103
50	30	20	51	31	20	728.579480	0.000069
50	30	21	51	31	21	728.579480	0.000069
39	36	3	40	37	3	728.587360	0.000016
39	36	4	40	37	4	728.587360	0.000016
48	31	17	49	32	17	728.595700	0.000053
48	31	18	49	32	18	728.595700	0.000053
37	37	0	38	38	0	728.604450	0.000054
37	37	1	38	38	1	728.604450	0.000054

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
46	32	14	47	33	14	728.612380	-0.000130
46	32	15	47	33	15	728.612380	-0.000130
57	26	31	58	27	31	728.622410	-0.000066
57	26	32	58	27	32	728.622410	-0.000066
44	33	11	45	34	11	728.629660	-0.000048
44	33	12	45	34	12	728.629660	-0.000048
55	27	28	56	28	28	728.631110	-0.000165
55	27	29	56	28	29	728.631110	-0.000165
53	28	25	54	29	25	728.643640	0.000346
53	28	26	54	29	26	728.643640	0.000346
42	34	8	43	35	8	728.646920	-0.000126
42	34	9	43	35	9	728.646920	-0.000126
51	29	22	52	30	22	728.657560	0.000082
51	29	23	52	30	23	728.657560	0.000082
40	35	5	41	36	5	728.664340	-0.000032
40	35	6	41	36	6	728.664340	-0.000032
49	30	19	50	31	19	728.673040	-0.000020
49	30	20	50	31	20	728.673040	-0.000020
38	36	2	39	37	2	728.681680	0.000101
38	36	3	39	37	3	728.681680	0.000101
47	31	16	48	32	16	728.689540	-0.000010
47	31	17	48	32	17	728.689540	-0.000010
45	32	13	46	33	13	728.706490	-0.000081
45	32	14	46	33	14	728.706490	-0.000081
43	33	10	44	34	10	728.723770	-0.000101
43	33	11	44	34	11	728.723770	-0.000101
52	28	24	53	29	24	728.736430	0.000192
52	28	25	53	29	25	728.736430	0.000192
41	34	7	42	35	7	728.741140	-0.000118
41	34	8	42	35	8	728.741140	-0.000118
50	29	21	51	30	21	728.750990	0.000105
50	29	22	51	30	22	728.750990	0.000105
39	35	4	40	36	4	728.758440	-0.000154
39	35	5	40	36	5	728.758440	-0.000154
48	30	18	49	31	18	728.767050	0.000262
48	30	19	49	31	19	728.767050	0.000262
37	36	1	38	37	1	728.775780	-0.000025
37	36	2	38	37	2	728.775780	-0.000025
46	31	15	47	32	15	728.783360	-0.000135
46	31	16	47	32	16	728.783360	-0.000135
44	32	12	45	33	12	728.800680	0.000025
44	32	13	45	33	13	728.800680	0.000025
42	33	9	43	34	9	728.818450	0.000408
42	33	10	43	34	10	728.818450	0.000408
51	28	23	52	29	23	728.829250	-0.000058
51	28	24	52	29	24	728.829250	-0.000058
40	34	6	41	35	6	728.835330	-0.000140
40	34	7	41	35	7	728.835330	-0.000140
49	29	20	50	30	20	728.844460	0.000084
49	29	21	50	30	21	728.844460	0.000084
38	35	3	39	36	3	728.852630	-0.000196
38	35	4	39	36	4	728.852630	-0.000196
47	30	17	48	31	17	728.860600	0.000019
47	30	18	48	31	18	728.860600	0.000019
36	36	0	37	37	0	728.869970	-0.000047
36	36	1	37	37	1	728.869970	-0.000047
45	31	14	46	32	14	728.877600	0.000114
45	31	15	46	32	15	728.877600	0.000114
56	25	31	57	26	31	728.889600	0.000102
56	25	32	57	26	32	728.889600	0.000102
43	32	11	44	33	11	728.894590	-0.000186
43	32	12	44	33	12	728.894590	-0.000186
54	26	28	55	27	28	728.897210	0.000000
54	26	29	55	27	29	728.897210	0.000000
52	27	25	53	28	25	728.908590	-0.000041
52	27	26	53	28	26	728.908590	-0.000041
41	33	8	42	34	8	728.912130	-0.000094
41	33	9	42	34	9	728.912130	-0.000094
50	28	22	51	29	22	728.922520	0.000019
50	28	23	51	29	23	728.922520	0.000019
39	34	5	40	35	5	728.929580	-0.000103
39	34	6	40	35	6	728.929580	-0.000103
48	29	19	49	30	19	728.937900	-0.000059
48	29	20	49	30	20	728.937900	-0.000059
37	35	2	38	36	2	728.946860	-0.000179
37	35	3	38	36	3	728.946860	-0.000179
46	30	16	47	31	16	728.954340	-0.000096
46	30	17	47	31	17	728.954340	-0.000096
44	31	13	45	32	13	728.971450	-0.000063
44	31	14	45	32	14	728.971450	-0.000063
42	32	10	43	33	10	728.988900	-0.000010
42	32	11	43	33	11	728.988900	-0.000010
51	27	24	52	28	24	729.000990	-0.000434
51	27	25	52	28	25	729.000990	-0.000434
40	33	7	41	34	7	729.006510	0.000091
40	33	8	41	34	8	729.006510	0.000091
49	28	21	50	29	21	729.015790	-0.000017
49	28	22	50	29	22	729.015790	-0.000017
38	34	4	39	35	4	729.023920	0.000016
38	34	5	39	35	5	729.023920	0.000016

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
47	29	18	48	30	18	729.031520	-0.000096
47	29	19	48	30	19	729.031520	-0.000096
36	35	1	37	36	1	729.041130	-0.000122
36	35	2	37	36	2	729.041130	-0.000122
45	30	15	46	31	15	729.048380	0.000047
45	30	16	46	31	16	729.048380	0.000047
43	31	12	44	32	12	729.065350	-0.000215
43	31	13	44	32	13	729.065350	-0.000215
41	32	9	42	33	9	729.083200	0.000139
41	32	10	42	33	10	729.083200	0.000139
50	27	23	51	28	23	729.094210	-0.000145
50	27	24	51	28	24	729.094210	-0.000145
39	33	6	40	34	6	729.101050	0.000433
39	33	7	40	34	7	729.101050	0.000433
48	28	20	49	29	20	729.109120	-0.000088
48	28	21	49	29	21	729.109120	-0.000088
37	34	3	38	35	3	729.117530	-0.000581
37	34	4	38	35	4	729.117530	-0.000581
46	29	17	47	30	17	729.125300	-0.000048
46	29	18	47	30	18	729.125300	-0.000048
35	35	0	36	36	0	729.135260	-0.000189
35	35	1	36	36	1	729.135260	-0.000189
44	30	14	45	31	14	729.142190	-0.000095
44	30	15	45	31	15	729.142190	-0.000095
55	24	31	56	25	31	729.157030	0.000180
55	24	32	56	25	32	729.157030	0.000180
42	31	11	43	32	11	729.159530	-0.000122
42	31	12	43	32	12	729.159530	-0.000122
51	26	25	52	27	25	729.174000	0.000066
51	26	26	52	27	26	729.174000	0.000066
40	32	8	41	33	8	729.177250	0.000024
40	32	9	41	33	9	729.177250	0.000024
49	27	22	50	28	22	729.187400	-0.000022
49	27	23	50	28	23	729.187400	-0.000022
38	33	5	39	34	5	729.194870	0.000050
38	33	6	39	34	6	729.194870	0.000050
47	28	19	48	29	19	729.202730	0.000025
47	28	20	48	29	20	729.202730	0.000025
36	34	2	37	35	2	729.212290	-0.000028
36	34	3	37	35	3	729.212290	-0.000028
45	29	16	46	30	16	729.219690	0.000542
45	29	17	46	30	17	729.219690	0.000542
43	30	13	44	31	13	729.236240	-0.000030
43	30	14	44	31	14	729.236240	-0.000030
41	31	10	42	32	10	729.253850	0.000085
41	31	11	42	32	11	729.253850	0.000085
50	26	24	51	27	24	729.266680	0.000133
50	26	25	51	27	25	729.266680	0.000133
39	32	7	40	33	7	729.271450	0.000046
39	32	8	40	33	8	729.271450	0.000046
48	27	21	49	28	21	729.280470	-0.000139
48	27	22	49	28	22	729.280470	-0.000139
37	33	4	38	34	4	729.289160	0.000140
37	33	5	38	34	5	729.289160	0.000140
46	28	18	47	29	18	729.296600	0.000304
46	28	19	47	29	19	729.296600	0.000304
35	34	1	36	35	1	729.306440	-0.000077
35	34	2	36	35	2	729.306440	-0.000077
44	29	15	45	30	15	729.313000	0.000003
44	29	16	45	30	16	729.313000	0.000003
42	30	12	43	31	12	729.330300	0.000004
42	30	13	43	31	13	729.330300	0.000004
49	26	23	50	27	23	729.359420	0.000097
49	26	24	50	27	24	729.359420	0.000097
38	32	6	39	33	6	729.365870	0.000289
38	32	7	39	33	7	729.365870	0.000289
47	27	20	48	28	20	729.374120	0.000207
47	27	21	48	28	21	729.374120	0.000207
36	33	3	37	34	3	729.382990	-0.000226
36	33	4	37	34	4	729.382990	-0.000226
45	28	17	46	29	17	729.389860	-0.000102
45	28	18	46	29	18	729.389860	-0.000102
34	34	0	35	35	0	729.400740	0.000033
34	34	1	35	35	1	729.400740	0.000033
41	30	11	42	31	11	729.424510	0.000153
54	23	31	55	24	31	729.424510	-0.000126
41	30	12	42	31	12	729.424510	0.000153
54	23	32	55	24	32	729.424510	-0.000126
39	31	8	40	32	8	729.442510	0.000467
39	31	9	40	32	9	729.442510	0.000467
48	26	22	49	27	22	729.451860	-0.000382
48	26	23	49	27	23	729.451860	-0.000382
37	32	5	38	33	5	729.459870	0.000097
37	32	6	38	33	6	729.459870	0.000097
46	27	19	47	28	19	729.467350	0.000025
46	27	20	47	28	20	729.467350	0.000025
35	33	2	36	34	2	729.477690	0.000275
35	33	3	36	34	3	729.477690	0.000275
44	28	16	45	29	16	729.483680	-0.000016
44	28	17	45	29	17	729.483680	-0.000016

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Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
42	29	13	43	30	13	729.500790	-0.000071
42	29	14	43	30	14	729.500790	-0.000071
40	30	10	41	31	10	729.518410	-0.000029
40	30	11	41	31	11	729.518410	-0.000029
49	25	24	50	26	24	729.531790	0.000151
49	25	25	50	26	25	729.531790	0.000151
38	31	7	39	32	7	729.536000	-0.000194
38	31	8	39	32	8	729.536000	-0.000194
47	26	21	48	27	21	729.545460	0.000155
47	26	22	48	27	22	729.545460	0.000155
36	32	4	37	33	4	729.554110	0.000151
36	32	5	37	33	5	729.554110	0.000151
34	33	1	35	34	1	729.571700	0.000100
34	33	2	35	34	2	729.571700	0.000100
43	28	15	44	29	15	729.577610	0.000109
43	28	16	44	29	16	729.577610	0.000109
41	29	12	42	30	12	729.594780	-0.000068
41	29	13	42	30	13	729.594780	-0.000068
39	30	9	40	31	9	729.612640	0.000099
39	30	10	40	31	10	729.612640	0.000099
48	25	23	49	26	23	729.624180	-0.000055
48	25	24	49	26	24	729.624180	-0.000055
37	31	6	38	32	6	729.630210	-0.000153
37	31	7	38	32	7	729.630210	-0.000153
46	26	20	47	27	20	729.638470	-0.000020
46	26	21	47	27	21	729.638470	-0.000020
35	32	3	36	33	3	729.648190	0.000052
35	32	4	36	33	4	729.648190	0.000052
44	27	17	45	28	17	729.654480	0.000058
44	27	18	45	28	18	729.654480	0.000058
33	33	0	34	34	0	729.665660	-0.000109
33	33	1	34	34	1	729.665660	-0.000109
40	29	11	41	30	11	729.688750	-0.000122
40	29	12	41	30	12	729.688750	-0.000122
53	22	31	54	23	31	729.692890	-0.000130
53	22	32	54	23	32	729.692890	-0.000129
38	30	8	39	31	8	729.706780	0.000114
38	30	9	39	31	9	729.706780	0.000114
47	25	22	48	26	22	729.717240	0.000250
47	25	23	48	26	23	729.717240	0.000250
36	31	5	37	32	5	729.724430	-0.000100
36	31	6	37	32	6	729.724430	-0.000100
45	26	19	46	27	19	729.731730	-0.000074
45	26	20	46	27	20	729.731730	-0.000074
34	32	2	35	33	2	729.742540	0.000219
34	32	3	35	33	3	729.742540	0.000219
41	28	13	42	29	13	729.765320	0.000050
41	28	14	42	29	14	729.765320	0.000050
39	29	10	40	30	10	729.782750	-0.000177
39	29	11	40	30	11	729.782750	-0.000177
48	24	24	49	25	24	729.796800	0.000075
48	24	25	49	25	25	729.796800	0.000075
37	30	7	38	31	7	729.800630	-0.000174
37	30	8	38	31	8	729.800630	-0.000174
46	25	21	47	26	21	729.809770	-0.000135
46	25	22	47	26	22	729.809770	-0.000135
35	31	4	36	32	4	729.818650	-0.000054
35	31	5	36	32	5	729.818650	-0.000054
44	26	18	45	27	18	729.824850	-0.000365
44	26	19	45	27	19	729.824850	-0.000365
33	32	1	34	33	1	729.837120	0.000627
33	32	2	34	33	2	729.837120	0.000627
42	27	15	43	28	15	729.841650	-0.000184
42	27	16	43	28	16	729.841650	-0.000184
40	28	12	41	29	12	729.859370	0.000153
40	28	13	41	29	13	729.859370	0.000153
38	29	9	39	30	9	729.876800	-0.000213
38	29	10	39	30	10	729.876800	-0.000213
47	24	23	48	25	23	729.889260	0.000147
47	24	24	48	25	24	729.889260	0.000147
36	30	6	37	31	6	729.895080	0.000121
36	30	7	37	31	7	729.895080	0.000121
45	25	20	46	26	20	729.902930	-0.000034
45	25	21	46	26	21	729.902930	-0.000034
34	31	3	35	32	3	729.912740	-0.000135
34	31	4	35	32	4	729.912740	-0.000135
43	26	17	44	27	17	729.918670	-0.000058
43	26	18	44	27	18	729.918670	-0.000058
32	32	0	33	33	0	729.930600	-0.000055
32	32	1	33	33	1	729.930600	-0.000055
41	27	14	42	28	14	729.935480	-0.000162
41	27	15	42	28	15	729.935480	-0.000162
39	28	11	40	29	11	729.953340	0.000121
39	28	12	40	29	12	729.953340	0.000121
46	24	22	47	25	22	729.981680	-0.000008
46	24	23	47	25	23	729.981680	-0.000008
35	30	5	36	31	5	729.989140	0.000031
35	30	6	36	31	6	729.989140	0.000031
44	25	19	45	26	19	729.996120	-0.000036
44	25	20	45	26	20	729.996120	-0.000036

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
33	31	2	34	32	2	730.006790	-0.000252
33	31	3	34	32	3	730.006790	-0.000252
42	26	16	43	27	16	730.012270	-0.000054
42	26	17	43	27	17	730.012270	-0.000054
40	27	13	41	28	13	730.029600	0.000098
40	27	14	41	28	14	730.029600	0.000098
38	28	10	39	29	10	730.047200	-0.000041
38	28	11	39	29	11	730.047200	-0.000041
47	23	24	48	24	24	730.062010	0.000151
47	23	25	48	24	25	730.062010	0.000151
36	29	7	37	30	7	730.065210	-0.000019
36	29	8	37	30	8	730.065210	-0.000019
45	24	21	46	25	21	730.074320	-0.000123
45	24	22	46	25	22	730.074320	-0.000123
34	30	4	35	31	4	730.083210	-0.000058
34	30	5	35	31	5	730.083210	-0.000058
43	25	18	44	26	18	730.089340	-0.000128
43	25	19	44	26	19	730.089340	-0.000128
32	31	1	33	32	1	730.101250	0.000055
32	31	2	33	32	2	730.101250	0.000055
41	26	15	42	27	15	730.105880	-0.000119
41	26	16	42	27	16	730.105880	-0.000119
39	27	12	40	28	12	730.123550	0.000136
39	27	13	40	28	13	730.123550	0.000136
37	28	9	38	29	9	730.141450	0.000157
37	28	10	38	29	10	730.141450	0.000157
46	23	23	47	24	23	730.154000	0.000002
46	23	24	47	24	24	730.154000	0.000002
35	29	6	36	30	6	730.159200	-0.000166
35	29	7	36	30	7	730.159200	-0.000166
44	24	20	45	25	20	730.167440	0.000087
44	24	21	45	25	21	730.167440	0.000087
33	30	3	34	31	3	730.177430	0.000005
33	30	4	34	31	4	730.177430	0.000005
42	25	17	43	26	17	730.182950	0.000059
42	25	18	43	26	18	730.182950	0.000059
31	31	0	32	32	0	730.195290	-0.000054
31	31	1	32	32	1	730.195290	-0.000054
40	26	14	41	27	14	730.199900	0.000148
40	26	15	41	27	15	730.199900	0.000148
38	27	11	39	28	11	730.217260	-0.000120
38	27	12	39	28	12	730.217260	-0.000120
36	28	8	37	29	8	730.235560	0.000181
36	28	9	37	29	9	730.235560	0.000181
45	23	22	46	24	22	730.246360	0.000002
45	23	23	46	24	23	730.246360	0.000002
34	29	5	35	30	5	730.253480	-0.000019
34	29	6	35	30	6	730.253480	-0.000019
43	24	19	44	25	19	730.260130	-0.000276
43	24	20	44	25	20	730.260130	-0.000276
32	30	2	33	31	2	730.271630	0.000054
32	30	3	33	31	3	730.271630	0.000054
41	25	16	42	26	16	730.276220	-0.000184
41	25	17	42	26	17	730.276220	-0.000184
39	26	13	40	27	13	730.293470	-0.000095
39	26	14	40	27	14	730.293470	-0.000095
37	27	10	38	28	10	730.311200	-0.000169
37	27	11	38	28	11	730.311200	-0.000169
46	22	24	47	23	24	730.327130	0.000053
46	22	25	47	23	25	730.327130	0.000053
35	28	7	36	29	7	730.329400	-0.000072
35	28	8	36	29	8	730.329400	-0.000072
44	23	21	45	24	21	730.338850	-0.000073
44	23	22	45	24	22	730.338850	-0.000073
33	29	4	34	30	4	730.347600	-0.000042
33	29	5	34	30	5	730.347600	-0.000042
42	24	18	43	25	18	730.353490	-0.000115
42	24	19	43	25	19	730.353490	-0.000115
31	30	1	32	31	1	730.365850	0.000126
31	30	2	32	31	2	730.365850	0.000126
40	25	15	41	26	15	730.369880	-0.000136
40	25	16	41	26	16	730.369880	-0.000136
38	26	12	39	27	12	730.387400	-0.000041
38	26	13	39	27	13	730.387400	-0.000041
36	27	9	37	28	9	730.405260	-0.000144
36	27	10	37	28	10	730.405260	-0.000144
45	22	23	46	23	23	730.418740	-0.000197
45	22	24	46	23	24	730.418740	-0.000197
34	28	6	35	29	6	730.423550	-0.000040
34	28	7	35	29	7	730.423550	-0.000040
43	23	20	44	24	20	730.431790	0.000125
43	23	21	44	24	21	730.431790	0.000125
32	29	3	33	30	3	730.441790	0.000008
32	29	4	33	30	4	730.441790	0.000008
41	24	17	42	25	17	730.446880	-0.000042
41	24	18	42	25	18	730.446880	-0.000042
30	30	0	31	31	0	730.460000	0.000141
30	30	1	31	31	1	730.460000	0.000141
39	25	14	40	26	14	730.463760	0.000060
39	25	15	40	26	15	730.463760	0.000060

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Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
37	26	11	38	27	11	730.481740	0.000384
37	26	12	38	27	12	730.481740	0.000384
35	27	8	36	28	8	730.499480	0.000022
35	27	9	36	28	9	730.499480	0.000022
44	22	22	45	23	22	730.511630	0.000587
44	22	23	45	23	23	730.511630	0.000587
33	28	5	34	29	5	730.517770	0.000066
33	28	6	34	29	6	730.517770	0.000066
31	29	2	32	30	2	730.535910	-0.000016
31	29	3	32	30	3	730.535910	-0.000016
40	24	16	41	25	16	730.540300	-0.000044
40	24	17	41	25	17	730.540300	-0.000044
38	25	13	39	26	13	730.557160	-0.000305
38	25	14	39	26	14	730.557160	-0.000305
36	26	10	37	27	10	730.575480	0.000158
36	26	11	37	27	11	730.575480	0.000158
43	22	21	44	23	21	730.603070	-0.000314
43	22	22	44	23	22	730.603070	-0.000314
32	28	4	33	29	4	730.611550	-0.000285
32	28	5	33	29	5	730.611550	-0.000285
41	23	18	42	24	18	730.617730	0.000099
41	23	19	42	24	19	730.617730	0.000099
30	29	1	31	30	1	730.629870	-0.000186
30	29	2	31	30	2	730.629870	-0.000186
39	24	15	40	25	15	730.633720	-0.000154
39	24	16	40	25	16	730.633720	-0.000154
37	25	12	38	26	12	730.651290	0.000000
37	25	13	38	26	13	730.651290	0.000000
35	26	9	36	27	9	730.669270	-0.000054
35	26	10	36	27	10	730.669270	-0.000054
42	22	20	43	23	20	730.695820	-0.000111
42	22	21	43	23	21	730.695820	-0.000111
31	28	3	32	29	3	730.705970	0.000006
31	28	4	32	29	4	730.705970	0.000006
40	23	17	41	24	17	730.710930	0.000100
40	23	18	41	24	18	730.710930	0.000100
29	29	0	30	30	0	730.724050	-0.000130
29	29	1	30	30	1	730.724050	-0.000130
38	24	14	39	25	14	730.727230	-0.000261
38	24	15	39	25	15	730.727230	-0.000261
36	25	11	37	26	11	730.744980	-0.000187
36	25	12	37	26	12	730.744980	-0.000187
34	26	8	35	27	8	730.763320	-0.000025
34	26	9	35	27	9	730.763320	-0.000025
43	21	22	44	22	22	730.775930	0.000141
43	21	23	44	22	23	730.775930	0.000141
32	27	5	33	28	5	730.781580	-0.000146
32	27	6	33	28	6	730.781580	-0.000146
41	22	19	42	23	19	730.788390	-0.000265
41	22	20	42	23	20	730.788390	-0.000265
30	28	2	31	29	2	730.799980	-0.000107
30	28	3	31	29	3	730.799980	-0.000107
39	23	16	40	24	16	730.804230	0.000076
39	23	17	40	24	17	730.804230	0.000076
37	24	13	38	25	13	730.821480	0.000285
37	24	14	38	25	14	730.821480	0.000285
35	25	10	36	26	10	730.839160	0.000066
35	25	11	36	26	11	730.839160	0.000066
42	21	21	43	22	21	730.867900	0.000037
42	21	22	43	22	22	730.867900	0.000037
31	27	4	32	28	4	730.875770	-0.000073
31	27	5	32	28	5	730.875770	-0.000073
40	22	18	41	23	18	730.881700	0.000134
40	22	19	41	23	19	730.881700	0.000134
29	28	1	30	29	1	730.894060	-0.000144
29	28	2	30	29	2	730.894060	-0.000144
38	23	15	39	24	15	730.897520	-0.000072
38	23	16	39	24	16	730.897520	-0.000072
36	24	12	37	25	12	730.915100	0.000141
36	24	13	37	25	13	730.915100	0.000141
34	25	9	35	26	9	730.933110	0.000055
34	25	10	35	26	10	730.933110	0.000055
32	26	6	33	27	6	730.951660	0.000184
32	26	7	33	27	7	730.951660	0.000184
41	21	20	42	22	20	730.959960	-0.000221
41	21	21	42	22	21	730.959960	-0.000221
30	27	3	31	28	3	730.969980	0.000027
30	27	4	31	28	4	730.969980	0.000027
39	22	17	40	23	17	730.974640	0.000012
39	22	18	40	23	18	730.974640	0.000012
28	28	0	29	29	0	730.988360	0.000043
28	28	1	29	29	1	730.988360	0.000043
37	23	14	38	24	14	730.991160	0.000030
37	23	15	38	24	15	730.991160	0.000030
35	24	11	36	25	11	731.008810	0.000013
35	24	12	36	25	12	731.008810	0.000013
33	25	8	34	26	8	731.026960	-0.000105
33	25	9	34	26	9	731.026960	-0.000105
42	20	22	43	21	22	731.040690	0.000030
42	20	23	43	21	23	731.040690	0.000030

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
31	26	5	32	27	5	731.045710	0.000147
31	26	6	32	27	6	731.045710	0.000147
40	21	19	41	22	19	731.052750	0.000049
40	21	20	41	22	20	731.052750	0.000049
29	27	2	30	28	2	731.064140	0.000073
29	27	3	30	28	3	731.064140	0.000073
38	22	16	39	23	16	731.067860	0.000023
38	22	17	39	23	17	731.067860	0.000023
36	23	13	37	24	13	731.084850	0.000087
36	23	14	37	24	14	731.084850	0.000087
34	24	10	35	25	10	731.102550	-0.000132
34	24	11	35	25	11	731.102550	-0.000132
32	25	7	33	26	7	731.121120	0.000035
32	25	8	33	26	8	731.121120	0.000035
41	20	21	42	21	21	731.132370	-0.000050
41	20	22	42	21	22	731.132370	-0.000050
30	26	4	31	27	4	731.139510	-0.000142
30	26	5	31	27	5	731.139510	-0.000142
39	21	18	40	22	18	731.145360	-0.000068
39	21	19	40	22	19	731.145360	-0.000068
28	27	1	29	28	1	731.158160	-0.000013
28	27	2	29	28	2	731.158160	-0.000013
37	22	15	38	23	15	731.161060	-0.000107
37	22	16	38	23	16	731.161060	-0.000107
35	23	12	36	24	12	731.178480	0.000004
35	23	13	36	24	13	731.178480	0.000004
33	24	9	34	25	9	731.196710	0.000097
33	24	10	34	25	10	731.196710	0.000097
31	25	6	32	26	6	731.214930	-0.000213
31	25	7	32	26	7	731.214930	-0.000213
40	20	20	41	21	20	731.224490	0.000039
40	20	21	41	21	21	731.224490	0.000039
29	26	3	30	27	3	731.233740	-0.000017
29	26	4	30	27	4	731.233740	-0.000017
38	21	17	39	22	17	731.238610	0.000267
38	21	18	39	22	18	731.238610	0.000267
27	27	0	28	28	0	731.252020	-0.000248
27	27	1	28	28	1	731.252020	-0.000248
36	22	14	37	23	14	731.254640	0.000014
36	22	15	37	23	15	731.254640	0.000014
34	23	11	35	24	11	731.272280	0.000026
34	23	12	35	24	12	731.272280	0.000026
32	24	8	33	25	8	731.290560	-0.000031
32	24	9	33	25	9	731.290560	-0.000031
41	19	22	42	20	22	731.305880	0.000154
41	19	23	42	20	23	731.305880	0.000154
30	25	5	31	26	5	731.309270	0.000064
30	25	6	31	26	6	731.309270	0.000064
39	20	19	40	21	19	731.316580	-0.000166
39	20	20	40	21	20	731.316580	-0.000166
28	26	2	29	27	2	731.327870	0.000022
28	26	3	29	27	3	731.327870	0.000022
37	21	16	38	22	16	731.331510	0.000099
37	21	17	38	22	17	731.331510	0.000099
35	22	13	36	23	13	731.348070	-0.000102
35	22	14	36	23	14	731.348070	-0.000102
33	23	10	34	24	10	731.366010	-0.000089
33	23	11	34	24	11	731.366010	-0.000089
31	24	7	32	25	7	731.384600	0.000014
31	24	8	32	25	8	731.384600	0.000014
40	19	21	41	20	21	731.397320	0.000203
40	19	22	41	20	22	731.397320	0.000203
29	25	4	30	26	4	731.403220	-0.000069
29	25	5	30	26	5	731.403220	-0.000069
38	20	18	39	21	18	731.409500	0.000237
38	20	19	39	21	19	731.409500	0.000237
27	26	1	28	27	1	731.421910	-0.000036
27	26	2	28	27	2	731.421910	-0.000036
36	21	15	37	22	15	731.424670	0.000040
36	21	16	37	22	16	731.424670	0.000040
34	22	12	35	23	12	731.441960	0.000137
34	22	13	35	23	13	731.441960	0.000137
32	23	9	33	24	9	731.460200	0.000211
32	23	10	33	24	10	731.460200	0.000211
30	24	6	31	25	6	731.478830	0.000206
30	24	7	31	25	7	731.478830	0.000206
37	20	17	38	21	17	731.502060	0.000079
37	20	18	38	21	18	731.502060	0.000079
26	26	0	27	27	0	731.515820	-0.000209
26	26	1	27	27	1	731.515820	-0.000209
35	21	14	36	22	14	731.517830	-0.000145
35	21	15	36	22	15	731.517830	-0.000145
33	22	11	34	23	11	731.535660	0.000111
33	22	12	34	23	12	731.535660	0.000111
31	23	8	32	24	8	731.553760	-0.000168
31	23	9	32	24	9	731.553760	-0.000168
40	18	22	41	19	22	731.570780	-0.000346
40	18	23	41	19	23	731.570780	-0.000346
29	24	5	30	25	5	731.572620	-0.000046
29	24	6	30	25	6	731.572620	-0.000046

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Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
38	19	19	39	20	19	731.580570	-0.000247
38	19	20	39	20	20	731.580570	-0.000247
27	25	2	28	26	2	731.591360	-0.000098
27	25	3	28	26	3	731.591360	-0.000098
36	20	16	37	21	16	731.594620	-0.000271
36	20	17	37	21	17	731.594620	-0.000271
34	21	13	35	22	13	731.611480	0.000044
34	21	14	35	22	14	731.611480	0.000044
32	22	10	33	23	10	731.629310	-0.000027
32	22	11	33	23	11	731.629310	-0.000027
30	23	7	31	24	7	731.647600	-0.000311
30	23	8	31	24	8	731.647600	-0.000311
39	18	21	40	19	21	731.661910	-0.000138
39	18	22	40	19	22	731.661910	-0.000138
28	24	4	29	25	4	731.666650	-0.000076
28	24	5	29	25	5	731.666650	-0.000076
37	19	18	38	20	18	731.673100	0.000018
37	19	19	38	20	19	731.673100	0.000018
26	25	1	27	26	1	731.685530	-0.000006
26	25	2	27	26	2	731.685530	-0.000006
35	20	15	36	21	15	731.688100	0.000135
35	20	16	36	21	16	731.688100	0.000135
33	21	12	34	22	12	731.704920	-0.000088
33	21	13	34	22	13	731.704920	-0.000088
31	22	9	32	23	9	731.723160	-0.000032
31	22	10	32	23	10	731.723160	-0.000032
29	23	6	30	24	6	731.742020	0.000107
29	23	7	30	24	7	731.742020	0.000107
27	24	3	28	25	3	731.760550	-0.000253
27	24	4	28	25	4	731.760550	-0.000253
36	19	17	37	20	17	731.765470	-0.000114
36	19	18	37	20	18	731.765470	-0.000114
25	25	0	26	26	0	731.779570	-0.000045
25	25	1	26	26	1	731.779570	-0.000045
34	20	14	35	21	14	731.780900	-0.000297
34	20	15	35	21	15	731.780900	-0.000297
32	21	11	33	22	11	731.798580	-0.000084
32	21	12	33	22	12	731.798580	-0.000084
30	22	8	31	23	8	731.816920	-0.000178
30	22	9	31	23	9	731.816920	-0.000178
28	23	5	29	24	5	731.835520	-0.000423
28	23	6	29	24	6	731.835520	-0.000423
37	18	19	38	19	19	731.845020	0.000020
37	18	20	38	19	20	731.845020	0.000020
26	24	2	27	25	2	731.854830	-0.000043
26	24	3	27	25	3	731.854830	-0.000043
35	19	16	36	20	16	731.858200	-0.000112
35	19	17	36	20	17	731.858200	-0.000112
33	20	13	34	21	13	731.874720	0.000158
33	20	14	34	21	14	731.874720	0.000158
31	21	10	32	22	10	731.892480	0.000078
31	21	11	32	22	11	731.892480	0.000078
36	18	18	37	19	18	731.936920	-0.000036
36	18	19	37	19	19	731.936920	-0.000036
25	24	1	26	25	1	731.948770	-0.000169
25	24	2	26	25	2	731.948770	-0.000169
34	19	15	35	20	15	731.951440	0.000218
34	19	16	35	20	16	731.951440	0.000218
32	20	12	33	21	12	731.967920	-0.000124
32	20	13	33	21	13	731.967920	-0.000124
30	21	9	31	22	9	731.986130	-0.000083
30	21	10	31	22	10	731.986130	-0.000083
28	22	6	29	23	6	732.004810	-0.000215
28	22	7	29	23	7	732.004810	-0.000215
26	23	3	27	24	3	732.023980	-0.000059
26	23	4	27	24	4	732.023980	-0.000059
35	18	17	36	19	17	732.029150	-0.000043
35	18	18	36	19	18	732.029150	-0.000043
24	24	0	25	25	0	732.042870	-0.000129
24	24	1	25	25	1	732.042870	-0.000129
33	19	14	34	20	14	732.044230	-0.000079
33	19	15	34	20	15	732.044230	-0.000079
31	20	11	32	21	11	732.061540	-0.000094
31	20	12	32	21	12	732.061540	-0.000094
29	21	8	30	22	8	732.080180	0.000098
29	21	9	30	22	9	732.080180	0.000098
27	22	5	28	23	5	732.099060	0.000025
27	22	6	28	23	6	732.099060	0.000025
36	17	19	37	18	19	732.109350	-0.000009
36	17	20	37	18	20	732.109350	-0.000008
25	23	2	26	24	2	732.118170	0.000077
25	23	3	26	24	3	732.118170	0.000077
34	18	16	35	19	16	732.121560	-0.000130
34	18	17	35	19	17	732.121560	-0.000130
32	19	13	33	20	13	732.137200	-0.000355
32	19	14	33	20	14	732.137200	-0.000355
30	20	10	31	21	10	732.155280	-0.000025
30	20	11	31	21	11	732.155280	-0.000025
28	21	7	29	22	7	732.173620	-0.000380
28	21	8	29	22	8	732.173620	-0.000380

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
26	22	4	27	23	4	732.193140	0.000082
26	22	5	27	23	5	732.193140	0.000082
24	23	1	25	24	1	732.212030	-0.000121
24	23	2	25	24	2	732.212030	-0.000121
33	18	15	34	19	15	732.214480	0.000074
33	18	16	34	19	16	732.214480	0.000074
31	19	12	32	20	12	732.230880	-0.000054
31	19	13	32	20	13	732.230880	-0.000054
29	20	9	30	21	9	732.249210	0.000143
29	20	10	30	21	10	732.249210	0.000143
27	21	6	28	22	6	732.267980	0.000032
27	21	7	28	22	7	732.267980	0.000032
25	22	3	26	23	3	732.287200	0.000105
25	22	4	26	23	4	732.287200	0.000105
34	17	17	35	18	17	732.292730	-0.000134
34	17	18	35	18	18	732.292730	-0.000134
23	23	0	24	24	0	732.306250	0.000051
23	23	1	24	24	1	732.306250	0.000051
32	18	14	33	19	14	732.307320	-0.000017
32	18	15	33	19	15	732.307320	-0.000017
30	19	11	31	20	11	732.324480	0.000041
30	19	12	31	20	12	732.324480	0.000041
28	20	8	29	21	8	732.342660	-0.000225
28	20	9	29	21	9	732.342660	-0.000225
26	21	5	27	22	5	732.361890	-0.000039
26	21	6	27	22	6	732.361890	-0.000039
35	16	19	36	17	19	732.373580	-0.000456
35	16	20	36	17	20	732.373580	-0.000455
24	22	2	25	23	2	732.381100	-0.000037
24	22	3	25	23	3	732.381100	-0.000037
33	17	16	34	18	16	732.384960	-0.000124
33	17	17	34	18	17	732.384960	-0.000124
31	18	13	32	19	13	732.400500	0.000062
31	18	14	32	19	14	732.400500	0.000062
29	19	10	30	20	10	732.418040	-0.000007
29	19	11	30	20	11	732.418040	-0.000007
27	20	7	28	21	7	732.436710	-0.000054
27	20	8	28	21	8	732.436710	-0.000054
25	21	4	26	22	4	732.455650	-0.000286
25	21	5	26	22	5	732.455650	-0.000286
23	22	1	24	23	1	732.474890	-0.000289
23	22	2	24	23	2	732.474890	-0.000289
32	17	15	33	18	15	732.477560	-0.000004
32	17	16	33	18	16	732.477560	-0.000004
30	18	12	31	19	12	732.493750	0.000049
30	18	13	31	19	13	732.493750	0.000049
28	19	9	29	20	9	732.511830	0.000091
28	19	10	29	20	10	732.511830	0.000091
26	20	6	27	21	6	732.530880	0.000185
26	20	7	27	21	7	732.530880	0.000185
24	21	3	25	22	3	732.549530	-0.000427
24	21	4	25	22	4	732.549530	-0.000427
33	16	17	34	17	17	732.556730	0.000059
33	16	18	34	17	18	732.556730	0.000059
22	22	0	23	23	0	732.569220	0.000004
22	22	1	23	23	1	732.569220	0.000004
29	18	11	30	19	11	732.587010	-0.000089
29	18	12	30	19	12	732.587010	-0.000089
27	19	8	28	20	8	732.605690	0.000175
27	19	9	28	20	9	732.605690	0.000175
25	20	5	26	21	5	732.624660	0.000011
25	20	6	26	21	6	732.624660	0.000011
23	21	2	24	22	2	732.643530	-0.000460
23	21	3	24	22	3	732.643530	-0.000460
32	16	16	33	17	16	732.648420	-0.000130
32	16	17	33	17	17	732.648420	-0.000130
30	17	13	31	18	13	732.663140	-0.000079
30	17	14	31	18	14	732.663140	-0.000079
28	18	10	29	19	10	732.680480	-0.000139
28	18	11	29	19	11	732.680480	-0.000139
26	19	7	27	20	7	732.699270	-0.000082
26	19	8	27	20	8	732.699270	-0.000082
24	20	4	25	21	4	732.718680	0.000046
24	20	5	25	21	5	732.718680	0.000046
22	21	1	23	22	1	732.737880	-0.000140
22	21	2	23	22	2	732.737880	-0.000140
29	17	12	30	18	12	732.756260	-0.000079
29	17	13	30	18	13	732.756260	-0.000079
27	18	9	28	19	9	732.774170	-0.000083
27	18	10	28	19	10	732.774170	-0.000083
25	19	6	26	20	6	732.793210	-0.000033
25	19	7	26	20	7	732.793210	-0.000033
23	20	3	24	21	3	732.812740	0.000104
23	20	4	24	21	4	732.812740	0.000104
21	21	0	22	22	0	732.832010	-0.000026
21	21	1	22	22	1	732.832010	-0.000026
28	17	11	29	18	11	732.849690	0.000057
28	17	12	29	18	12	732.849690	0.000057
26	18	8	27	19	8	732.867950	-0.000024
26	18	9	27	19	9	732.867950	-0.000024

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
24	19	5	25	20	5	732.886970	-0.000207
24	19	6	25	20	6	732.886970	-0.000207
22	20	2	23	21	2	732.906760	0.000107
22	20	3	23	21	3	732.906760	0.000107
31	15	16	32	16	16	732.911970	-0.000201
31	15	17	32	16	17	732.911970	-0.000200
29	16	13	30	17	13	732.925950	0.000008
29	16	14	30	17	14	732.925950	0.000008
27	17	10	28	18	10	732.943070	0.000018
27	17	11	28	18	11	732.943070	0.000018
23	19	4	24	20	4	732.981120	-0.000022
23	19	5	24	20	5	732.981120	-0.000022
21	20	1	22	21	1	733.000610	-0.000055
21	20	2	22	21	2	733.000610	-0.000055
28	16	12	29	17	12	733.018840	-0.000058
28	16	13	29	17	13	733.018840	-0.000058
26	17	9	27	18	9	733.036710	0.000106
26	17	10	27	18	10	733.036710	0.000106
24	18	6	25	19	6	733.055790	0.000173
24	18	7	25	19	7	733.055790	0.000173
22	19	3	23	20	3	733.075130	0.000002
22	19	4	23	20	4	733.075130	0.000002
20	20	0	21	21	0	733.094920	0.000245
20	20	1	21	21	1	733.094920	0.000245
27	16	11	28	17	11	733.112030	-0.000011
27	16	12	28	17	12	733.112030	-0.000011
25	17	8	26	18	8	733.130210	-0.000046
25	17	9	26	18	9	733.130210	-0.000046
23	18	5	24	19	5	733.149450	-0.000078
23	18	6	24	19	6	733.149450	-0.000078
21	19	2	22	20	2	733.169170	0.000044
21	19	3	22	20	3	733.169170	0.000044
28	15	13	29	16	13	733.188530	-0.000112
28	15	14	29	16	14	733.188530	-0.000112
26	16	10	27	17	10	733.205380	0.000034
26	16	11	27	17	11	733.205380	0.000034
24	17	7	25	18	7	733.224200	0.000196
24	17	8	25	18	8	733.224200	0.000196
22	18	4	23	19	4	733.243390	-0.000075
22	18	5	23	19	5	733.243390	-0.000075
20	19	1	21	20	1	733.262880	-0.000251
20	19	2	21	20	2	733.262880	-0.000251
27	15	12	28	16	12	733.281430	0.000043
27	15	13	28	16	13	733.281430	0.000043
25	16	9	26	17	9	733.298970	0.000164
25	16	10	26	17	10	733.298970	0.000164
23	17	6	24	18	6	733.317870	0.000054
23	17	7	24	18	7	733.317870	0.000054
21	18	3	22	19	3	733.337380	-0.000046
21	18	4	22	19	4	733.337380	-0.000046
19	19	0	20	20	0	733.357060	-0.000068
19	19	1	20	20	1	733.357060	-0.000068
26	15	11	27	16	11	733.374190	-0.000163
26	15	12	27	16	12	733.374190	-0.000163
24	16	8	25	17	8	733.392160	-0.000217
24	16	9	25	17	9	733.392160	-0.000217
22	17	5	23	18	5	733.411620	-0.000066
22	17	6	23	18	6	733.411620	-0.000066
20	18	2	21	19	2	733.431260	-0.000151
20	18	3	21	19	3	733.431260	-0.000151
27	14	13	28	15	13	733.451420	0.000044
27	14	14	28	15	14	733.451420	0.000044
25	15	10	26	16	10	733.467190	-0.000326
25	15	11	26	16	11	733.467190	-0.000326
23	16	7	24	17	7	733.485980	-0.000077
23	16	8	24	17	8	733.485980	-0.000077
21	17	4	22	18	4	733.506070	0.000475
21	17	5	22	18	5	733.506070	0.000475
19	18	1	20	19	1	733.525520	0.000118
19	18	2	20	19	2	733.525520	0.000118
26	14	12	27	15	12	733.543620	-0.000234
26	14	13	27	15	13	733.543620	-0.000234
24	15	9	25	16	9	733.560950	0.000093
24	15	10	25	16	10	733.560950	0.000093
22	16	6	23	17	6	733.579870	0.000046
22	16	7	23	17	7	733.579870	0.000046
20	17	3	21	18	3	733.599600	0.000054
20	17	4	21	18	4	733.599600	0.000054
18	18	0	19	19	0	733.619310	-0.000077
18	18	1	19	19	1	733.619310	-0.000077
25	14	11	26	15	11	733.636500	-0.000096
25	14	12	26	15	12	733.636500	-0.000096
23	15	8	24	16	8	733.654200	-0.000143
23	15	9	24	16	9	733.654200	-0.000143
21	16	5	22	17	5	733.673540	-0.000124
21	16	6	22	17	6	733.673540	-0.000124
19	17	2	20	18	2	733.693430	-0.000075
19	17	3	20	18	3	733.693430	-0.000075
26	13	13	27	14	13	733.714400	0.000169
26	13	14	27	14	14	733.714400	0.000170

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
24	14	10	25	15	10	733.729730	0.000138
24	14	11	25	15	11	733.729730	0.000138
22	15	7	23	16	7	733.747890	-0.000058
22	15	8	23	16	8	733.747890	-0.000058
20	16	4	21	17	4	733.767620	0.000081
20	16	5	21	17	5	733.767620	0.000081
18	17	1	19	18	1	733.787520	0.000042
18	17	2	19	18	2	733.787520	0.000042
25	13	12	26	14	12	733.806350	-0.000004
25	13	13	26	14	13	733.806350	-0.000003
23	14	9	24	15	9	733.822920	0.000128
23	14	10	24	15	10	733.822920	0.000128
21	15	6	22	16	6	733.841650	-0.000013
21	15	7	22	16	7	733.841650	-0.000013
17	17	0	18	18	0	733.881720	0.000272
17	17	1	18	18	1	733.881720	0.000272
24	13	11	25	14	11	733.898630	-0.000202
24	13	12	25	14	12	733.898630	-0.000202
22	14	8	23	15	8	733.916310	0.000145
22	14	9	23	15	9	733.916310	0.000145
20	15	5	21	16	5	733.935370	-0.000081
20	15	6	21	16	6	733.935370	-0.000081
18	16	2	19	17	2	733.955230	-0.000182
18	16	3	19	17	3	733.955230	-0.000182
23	13	10	24	14	10	733.991590	-0.000008
23	13	11	24	14	11	733.991590	-0.000008
21	14	7	22	15	7	734.009520	-0.000166
21	14	8	22	15	8	734.009520	-0.000166
19	15	4	20	16	4	734.029140	-0.000163
19	15	5	20	16	5	734.029140	-0.000163
17	16	1	18	17	1	734.049280	-0.000095
17	16	2	18	17	2	734.049280	-0.000095
24	12	12	25	13	12	734.068960	-0.000052
24	12	13	25	13	13	734.068960	-0.000049
22	13	9	23	14	9	734.084490	-0.000123
22	13	10	23	14	10	734.084490	-0.000123
20	14	6	21	15	6	734.103400	0.000071
20	14	7	21	15	7	734.103400	0.000071
18	15	3	19	16	3	734.123270	0.000070
18	15	4	19	16	4	734.123270	0.000070
16	16	0	17	17	0	734.143340	0.000009
16	16	1	17	17	1	734.143340	0.000009
23	12	11	24	13	11	734.161190	0.000074
23	12	12	24	13	12	734.161190	0.000075
21	13	8	22	14	8	734.177870	0.000022
21	13	9	22	14	9	734.177870	0.000022
19	14	5	20	15	5	734.196990	-0.000076
19	14	6	20	15	6	734.196990	-0.000076
17	15	2	18	16	2	734.217390	0.000261
17	15	3	18	16	3	734.217390	0.000261
20	13	7	21	14	7	734.271390	0.000128
20	13	8	21	14	8	734.271390	0.000128
18	14	4	19	15	4	734.290910	0.000024
18	14	5	19	15	5	734.290910	0.000024
16	15	1	17	16	1	734.311020	-0.000052
16	15	2	17	16	2	734.311020	-0.000052
23	11	12	24	12	12	734.332030	0.000067
23	11	13	24	12	13	734.332030	0.000088
21	12	9	22	13	9	734.346400	0.000029
21	12	10	22	13	10	734.346400	0.000029
19	13	6	20	14	6	734.365180	0.000350
19	13	7	20	14	7	734.365180	0.000350
17	14	3	18	15	3	734.384810	0.000053
17	14	4	18	15	4	734.384810	0.000053
15	15	0	16	16	0	734.405070	0.000051
15	15	1	16	16	1	734.405070	0.000051
20	12	8	21	13	8	734.439410	-0.000020
20	12	9	21	13	9	734.439410	-0.000020
18	13	5	19	14	5	734.458680	0.000177
18	13	6	19	14	6	734.458680	0.000177
16	14	2	17	15	2	734.478820	0.000158
16	14	3	17	15	3	734.478820	0.000158
19	12	7	20	13	7	734.532770	0.000057
19	12	8	20	13	8	734.532770	0.000057
17	13	4	18	14	4	734.552600	0.000324
17	13	5	18	14	5	734.552600	0.000324
15	14	1	16	15	1	734.572560	-0.000029
15	14	2	16	15	2	734.572560	-0.000029
20	11	9	21	12	9	734.608160	0.000036
20	11	10	21	12	10	734.608160	0.000036
18	12	6	19	13	6	734.626150	-0.000014
18	12	7	19	13	7	734.626150	-0.000014
16	13	3	17	14	3	734.646090	-0.000024
16	13	4	17	14	4	734.646090	-0.000024
14	14	0	15	15	0	734.666450	-0.000067
14	14	1	15	15	1	734.666450	-0.000067
19	11	8	20	12	8	734.701100	0.000162
19	11	9	20	12	9	734.701100	0.000162
17	12	5	18	13	5	734.719680	-0.000091
17	12	6	18	13	6	734.719680	-0.000091

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
15	13	2	16	14	2	734.739940	-0.000061
15	13	3	16	14	3	734.739940	-0.000061
18	11	7	19	12	7	734.793600	-0.000444
18	11	8	19	12	8	734.793600	-0.000444
16	12	4	17	13	4	734.813410	-0.000075
16	12	5	17	13	5	734.813410	-0.000075
14	13	1	15	14	1	734.834040	0.000129
14	13	2	15	14	2	734.834040	0.000129
19	10	9	20	11	9	734.870110	0.000169
19	10	10	20	11	10	734.870110	0.000176
17	11	6	18	12	6	734.887650	0.000286
17	11	7	18	12	7	734.887650	0.000286
13	13	0	14	14	0	734.927840	0.000009
13	13	1	14	14	1	734.927840	0.000009
18	10	8	19	11	8	734.962300	-0.000141
18	10	9	19	11	9	734.962300	-0.000138
17	10	7	18	11	7	735.055390	0.000091
17	10	8	18	11	8	735.055390	0.000092
15	11	4	16	12	4	735.074380	-0.000150
15	11	5	16	12	5	735.074380	-0.000150
13	12	1	14	13	1	735.094960	-0.000080
13	12	2	14	13	2	735.094960	-0.000080
18	9	9	19	10	9	735.131790	-0.000218
18	9	10	19	10	10	735.131790	-0.000160
16	10	6	17	11	6	735.148370	-0.000073
16	10	7	17	11	7	735.148370	-0.000072
12	12	0	13	13	0	735.189020	0.000070
12	12	1	13	13	1	735.189020	0.000070
17	9	8	18	10	8	735.223660	-0.000369
17	9	9	18	10	9	735.223660	-0.000349
15	10	5	16	11	5	735.241620	-0.000212
15	10	6	16	11	6	735.241620	-0.000212
13	11	2	14	12	2	735.261990	-0.000123
13	11	3	14	12	3	735.261990	-0.000123
16	9	7	17	10	7	735.316490	-0.000047
16	9	8	17	10	8	735.316490	-0.000040
12	11	1	13	12	1	735.356090	0.000110
12	11	2	13	12	2	735.356090	0.000110
15	9	6	16	10	6	735.409510	0.000066
15	9	7	16	10	7	735.409510	0.000068
11	11	0	12	12	0	735.449800	-0.000068
11	11	1	12	12	1	735.449800	-0.000068
14	9	5	15	10	5	735.502540	-0.000110
14	9	6	15	10	6	735.502540	-0.000110
12	10	2	13	11	2	735.522820	-0.000064
12	10	3	13	11	3	735.522820	-0.000064
15	8	7	16	9	7	735.577550	-0.000349
15	8	8	16	9	8	735.577550	-0.000294
11	10	1	12	11	1	735.616760	0.000030
11	10	2	12	11	2	735.616760	0.000030
10	10	0	11	11	0	735.710230	-0.000378
10	10	1	11	11	1	735.710230	-0.000378
13	8	5	14	9	5	735.763690	0.000302
13	8	6	14	9	6	735.763690	0.000307
11	9	2	12	10	2	735.783380	-0.000094
11	9	3	12	10	3	735.783380	-0.000094
10	9	1	11	10	1	735.877340	0.000049
10	9	2	11	10	2	735.877340	0.000049
9	9	0	10	10	0	735.971190	0.000041
9	9	1	10	10	1	735.971190	0.000041
10	8	2	11	9	2	736.043750	-0.000121
10	8	3	11	9	3	736.043750	-0.000121
9	8	1	10	9	1	736.137640	-0.000019
9	8	2	10	9	2	736.137640	-0.000019
7	7	0	8	8	0	736.491720	0.000062
7	7	1	8	8	1	736.491720	0.000062
6	6	0	7	7	0	736.751670	0.000044
6	6	1	7	7	1	736.751670	0.000044
5	5	0	6	6	0	737.011320	-0.000088
5	5	1	6	6	1	737.011320	-0.000087
4	4	0	5	5	0	737.270990	-0.000006
4	4	1	5	5	1	737.270990	0.000009
45	5	40	45	6	40	738.471100	-0.000081
45	6	40	45	5	40	738.471100	-0.000081
46	5	41	46	6	41	738.471100	-0.000035
46	6	41	46	5	41	738.471100	-0.000035
47	5	42	47	6	42	738.471100	-0.000013
47	6	42	47	5	42	738.471100	-0.000013
48	5	43	48	6	43	738.471100	-0.000017
48	6	43	48	5	43	738.471100	-0.000017
44	5	39	44	6	39	738.471200	-0.000049
44	6	39	44	5	39	738.471200	-0.000050
38	4	34	38	5	34	738.475200	-0.000026
38	5	34	38	4	34	738.475200	-0.000027
39	4	35	39	5	35	738.475200	0.000012
39	5	35	39	4	35	738.475200	0.000011
37	4	33	37	5	33	738.475200	-0.000082
37	5	33	37	4	33	738.475200	-0.000085
36	4	32	36	5	32	738.475200	-0.000156
40	4	36	40	5	36	738.475200	0.000030

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
40	5	36	40	4	36	738.475200	0.000029
36	5	32	36	4	32	738.475200	-0.000161
35	4	31	35	5	31	738.475200	-0.000245
41	4	37	41	5	37	738.475200	0.000026
41	5	37	41	4	37	738.475200	0.000026
35	5	31	35	4	31	738.475200	-0.000255
34	4	30	34	5	30	738.475200	-0.000347
34	5	30	34	4	30	738.475200	-0.000369
28	3	25	28	4	25	738.478600	0.000008
29	3	26	29	4	26	738.478600	0.000058
28	4	25	28	3	25	738.478600	-0.000063
29	4	26	29	3	26	738.478600	0.000023
30	3	27	30	4	27	738.478600	0.000103
30	4	27	30	3	27	738.478600	0.000086
29	2	27	29	3	27	738.481500	0.000446
29	3	27	29	2	27	738.481500	0.000445
30	2	28	30	3	28	738.481500	0.000372
30	3	28	30	2	28	738.481500	0.000371
8	5	4	7	4	4	739.973320	0.000734
9	6	3	8	5	3	740.229990	0.000406
9	6	4	8	5	4	740.229990	0.000124
8	8	0	7	7	0	740.464400	-0.000014
8	8	1	7	7	1	740.464400	-0.000014
10	7	3	9	6	3	740.486880	-0.000559
10	7	4	9	6	4	740.486880	-0.000588
9	9	0	8	8	0	740.721520	0.000080
9	9	1	8	8	1	740.721520	0.000080
11	8	3	10	7	3	740.744750	-0.000075
11	8	4	10	7	4	740.744750	-0.000078
10	9	1	9	8	1	740.814450	-0.000586
10	9	2	9	8	2	740.814450	-0.000586
10	10	0	9	9	0	740.978310	0.000038
10	10	1	9	9	1	740.978310	0.000038
12	9	3	11	8	3	741.001830	-0.000097
12	9	4	11	8	4	741.001830	-0.000097
11	10	1	10	9	1	741.071860	-0.000004
11	10	2	10	9	2	741.071860	-0.000004
13	9	4	12	8	4	741.095450	0.000338
13	9	5	12	8	5	741.095450	0.000336
11	11	0	10	10	0	741.234480	-0.000428
11	11	1	10	10	1	741.234480	-0.000428
13	10	3	12	9	3	741.257890	-0.000908
13	10	4	12	9	4	741.257890	-0.000908
12	11	1	11	10	1	741.328410	-0.000074
12	11	2	11	10	2	741.328410	-0.000074
14	10	4	13	9	4	741.352250	0.000189
14	10	5	13	9	5	741.352250	0.000189
16	9	7	15	8	7	741.372960	0.000285
16	9	8	15	8	8	741.372960	0.000231
13	11	2	12	10	2	741.422070	0.000063
13	11	3	12	10	3	741.422070	0.000063
15	10	5	14	9	5	741.445180	0.000061
15	10	6	14	9	6	741.445180	0.000060
12	12	0	11	11	0	741.491420	0.000076
12	12	1	11	11	1	741.491420	0.000076
14	11	3	13	10	3	741.515290	-0.000154
14	11	4	13	10	4	741.515290	-0.000154
13	12	1	12	11	1	741.585120	0.000208
13	12	2	12	11	2	741.585120	0.000208
15	11	4	14	10	4	741.608800	0.000040
15	11	5	14	10	5	741.608800	0.000040
17	10	7	16	9	7	741.630330	-0.000010
17	10	8	16	9	8	741.630330	-0.000017
14	12	2	13	11	2	741.678670	0.000231
14	12	3	13	11	3	741.678670	0.000231
16	11	5	15	10	5	741.701850	-0.000054
16	11	6	15	10	6	741.701850	-0.000054
13	13	0	12	12	0	741.747670	0.000087
13	13	1	12	12	1	741.747670	0.000087
15	12	3	14	11	3	741.772590	0.000706
15	12	4	14	11	4	741.772590	0.000706
17	11	6	16	10	6	741.795240	0.000401
17	11	7	16	10	7	741.795240	0.000401
19	10	9	18	9	9	741.814280	0.000444
19	10	10	18	9	10	741.814280	0.000385
14	13	1	13	12	1	741.841440	0.000301
14	13	2	13	12	2	741.841440	0.000301
16	12	4	15	11	4	741.865180	-0.000040
16	12	5	15	11	5	741.865180	-0.000040
18	11	7	17	10	7	741.887300	-0.000207
18	11	8	17	10	8	741.887300	-0.000208
15	13	2	14	12	2	741.934910	0.000255
15	13	3	14	12	3	741.934910	0.000255
17	12	5	16	11	5	741.958420	-0.000014
17	12	6	16	11	6	741.958420	-0.000014
19	11	8	18	10	8	741.979940	0.000099
19	11	9	18	10	9	741.979940	0.000097
14	14	0	13	13	0	742.003430	-0.000193
14	14	1	13	13	1	742.003430	-0.000193
16	13	3	15	12	3	742.028630	0.000524

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
16	13	4	15	12	4	742.028630	0.000524
18	12	6	17	11	6	742.051510	0.000049
18	12	7	17	11	7	742.051510	0.000048
20	11	9	19	10	9	742.071820	0.000038
20	11	10	19	10	10	742.071820	0.000031
15	14	1	14	13	1	742.097070	-0.000103
15	14	2	14	13	2	742.097070	-0.000103
17	13	4	16	12	4	742.121420	-0.000047
17	13	5	16	12	5	742.121420	-0.000047
19	12	7	18	11	7	742.143850	-0.000435
19	12	8	18	11	8	742.143850	-0.000435
16	14	2	15	13	2	742.190780	0.000102
16	14	3	15	13	3	742.190780	0.000102
18	13	5	17	12	5	742.214720	0.000000
18	13	6	17	12	6	742.214720	0.000000
20	12	8	19	11	8	742.236740	-0.000098
20	12	9	19	11	9	742.236740	-0.000098
15	15	0	14	14	0	742.259590	0.000119
15	15	1	14	14	1	742.259590	0.000119
17	14	3	16	13	3	742.284170	0.000039
17	14	4	16	13	4	742.284170	0.000039
19	13	6	18	12	6	742.307830	0.000008
19	13	7	18	12	7	742.307830	0.000008
21	12	9	20	11	9	742.329180	0.000094
21	12	10	20	11	10	742.329180	0.000093
16	15	1	15	14	1	742.353010	0.000009
16	15	2	15	14	2	742.353010	0.000009
18	14	4	17	13	4	742.377540	0.000038
18	14	5	17	13	5	742.377540	0.000038
20	13	7	19	12	7	742.400840	0.000094
20	13	8	19	12	8	742.400840	0.000094
17	15	2	16	14	2	742.446460	-0.000042
17	15	3	16	14	3	742.446460	-0.000042
19	14	5	18	13	5	742.470950	0.000168
19	14	6	18	13	6	742.470950	0.000168
21	13	8	20	12	8	742.493480	0.000019
21	13	9	20	12	9	742.493480	0.000019
16	16	0	15	15	0	742.515220	0.000109
16	16	1	15	15	1	742.515220	0.000109
18	15	3	17	14	3	742.539940	-0.000002
18	15	4	17	14	4	742.539940	-0.000002
20	14	6	19	13	6	742.563930	0.000000
20	14	7	19	13	7	742.563930	0.000000
22	13	9	21	12	9	742.586010	0.000097
22	13	10	21	12	10	742.586010	0.000097
17	16	1	16	15	1	742.608810	0.000176
17	16	2	16	15	2	742.608810	0.000176
19	15	4	18	14	4	742.633260	-0.000068
19	15	5	18	14	5	742.633260	-0.000068
21	14	7	20	13	7	742.657090	0.000157
21	14	8	20	13	8	742.657090	0.000157
18	16	2	17	15	2	742.702050	-0.000063
18	16	3	17	15	3	742.702050	-0.000063
20	15	5	19	14	5	742.727080	0.000458
20	15	6	19	14	6	742.727080	0.000458
22	14	8	21	13	8	742.749950	0.000187
22	14	9	21	13	9	742.749950	0.000187
17	17	0	16	16	0	742.770360	-0.000196
24	13	11	23	12	11	742.770360	0.000487
17	17	1	16	16	1	742.770360	-0.000196
24	13	12	23	12	12	742.770360	0.000486
19	16	3	18	15	3	742.795480	-0.000073
19	16	4	18	15	4	742.795480	-0.000073
21	15	6	20	14	6	742.819740	-0.000071
21	15	7	20	14	7	742.819740	-0.000071
23	14	9	22	13	9	742.842230	-0.000140
23	14	10	22	13	10	742.842230	-0.000140
18	17	1	17	16	1	742.864060	-0.000005
18	17	2	17	16	2	742.864060	-0.000005
20	16	4	19	15	4	742.888990	0.000054
20	16	5	19	15	5	742.888990	0.000054
22	15	7	21	14	7	742.912920	0.000051
22	15	8	21	14	8	742.912920	0.000051
24	14	10	23	13	10	742.934920	0.000186
24	14	11	23	13	11	742.934920	0.000186
19	17	2	18	16	2	742.957680	0.000142
19	17	3	18	16	3	742.957680	0.000142
21	16	5	20	15	5	742.982080	-0.000162
21	16	6	20	15	6	742.982080	-0.000162
23	15	8	22	14	8	743.005650	-0.000124
23	15	9	22	14	9	743.005650	-0.000124
18	18	0	17	17	0	743.025820	0.000019
18	18	1	17	17	1	743.025820	0.000019
25	14	11	24	13	11	743.026960	0.000159
25	14	12	24	13	12	743.026960	0.000158
20	17	3	19	16	3	743.050980	0.000011
20	17	4	19	16	4	743.050980	0.000011
22	16	6	21	15	6	743.075460	0.000004
22	16	7	21	15	7	743.075460	0.000004
24	15	9	23	14	9	743.098610	0.000111

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Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
24	15	10	23	14	10	743.098610	0.000111
19	18	1	18	17	1	743.119190	-0.000104
19	18	2	18	17	2	743.119190	-0.000104
21	17	4	20	16	4	743.144370	0.000018
21	17	5	20	16	5	743.144370	0.000018
23	16	7	22	15	7	743.168540	-0.000026
23	16	8	22	15	8	743.168540	-0.000026
25	15	10	24	14	10	743.190890	-0.000121
25	15	11	24	14	11	743.190890	-0.000121
20	18	2	19	17	2	743.212620	-0.000136
20	18	3	19	17	3	743.212620	-0.000136
22	17	5	21	16	5	743.237810	0.000147
22	17	6	21	16	6	743.237810	0.000147
24	16	8	23	15	8	743.261270	-0.000258
24	16	9	23	15	9	743.261270	-0.000258
19	19	0	18	18	0	743.280810	-0.000033
19	19	1	18	18	1	743.280810	-0.000033
26	15	11	25	14	11	743.283300	0.000011
26	15	12	25	14	12	743.283300	0.000011
21	18	3	20	17	3	743.306200	0.000024
21	18	4	20	17	4	743.306200	0.000024
23	17	6	22	16	6	743.330940	0.000047
23	17	7	22	16	7	743.330940	0.000047
25	16	9	24	15	9	743.354400	0.000055
25	16	10	24	15	10	743.354400	0.000055
20	19	1	19	18	1	743.374750	0.000432
20	19	2	19	18	2	743.374750	0.000432
22	18	4	21	17	4	743.399580	0.000024
22	18	5	21	17	5	743.399580	0.000024
24	17	7	23	16	7	743.424030	0.000006
24	17	8	23	16	8	743.424030	0.000006
26	16	10	25	15	10	743.447100	0.000123
26	16	11	25	15	11	743.447100	0.000123
21	19	2	20	18	2	743.467420	-0.000357
21	19	3	20	18	3	743.467420	-0.000357
23	18	5	22	17	5	743.493110	0.000236
23	18	6	22	17	6	743.493110	0.000236
25	17	8	24	16	8	743.517100	0.000063
25	17	9	24	16	9	743.517100	0.000063
20	20	0	19	19	0	743.535790	0.000105
20	20	1	19	19	1	743.535790	0.000105
27	16	11	26	15	11	743.539560	0.000157
27	16	12	26	15	12	743.539560	0.000157
22	19	3	21	18	3	743.561170	-0.000022
22	19	4	21	18	4	743.561170	-0.000022
31	14	17	30	13	17	743.570450	0.000167
31	14	18	30	13	18	743.570450	0.000124
24	18	6	23	17	6	743.585830	-0.000287
24	18	7	23	17	7	743.585830	-0.000287
26	17	9	25	16	9	743.610000	0.000086
26	17	10	25	16	10	743.610000	0.000086
21	20	1	20	19	1	743.629130	-0.000017
21	20	2	20	19	2	743.629130	-0.000017
28	16	12	27	15	12	743.631690	0.000100
28	16	13	27	15	13	743.631690	0.000100
23	19	4	22	18	4	743.654360	-0.000196
23	19	5	22	18	5	743.654360	-0.000196
25	18	7	24	17	7	743.679230	-0.000035
25	18	8	24	17	8	743.679230	-0.000035
27	17	10	26	16	10	743.702570	-0.000070
27	17	11	26	16	11	743.702570	-0.000070
22	20	2	21	19	2	743.722630	0.000039
22	20	3	21	19	3	743.722630	0.000039
24	19	5	23	18	5	743.747990	0.000112
24	19	6	23	18	6	743.747990	0.000112
26	18	8	25	17	8	743.772240	-0.000075
26	18	9	25	17	9	743.772240	-0.000075
21	21	0	20	20	0	743.790450	0.000118
21	21	1	20	20	1	743.790450	0.000118
28	17	11	27	16	11	743.795270	0.000089
28	17	12	27	16	12	743.795270	0.000089
32	15	17	31	14	17	743.829410	-0.000174
32	15	18	31	14	18	743.829410	-0.000180
27	18	9	26	17	9	743.865390	0.000147
27	18	10	26	17	10	743.865390	0.000147
22	21	1	21	20	1	743.883710	-0.000070
22	21	2	21	20	2	743.883710	-0.000070
29	17	12	28	16	12	743.887520	-0.000005
29	17	13	28	16	13	743.887520	-0.000005
24	20	4	23	19	4	743.909380	0.000019
24	20	5	23	19	5	743.909380	0.000019
26	19	7	25	18	7	743.934110	-0.000180
26	19	8	25	18	8	743.934110	-0.000180
28	18	10	27	17	10	743.958140	0.000106
28	18	11	27	17	11	743.958140	0.000106
23	21	2	22	20	2	743.977110	-0.000098
23	21	3	22	20	3	743.977110	-0.000098
30	17	13	29	16	13	743.979770	0.000134
30	17	14	29	16	14	743.979770	0.000134
27	19	8	26	18	8	744.027440	0.000073

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
27	19	9	26	18	9	744.027440	0.000073
22	22	0	21	21	0	744.044930	0.000156
22	22	1	21	21	1	744.044930	0.000156
29	18	11	28	17	11	744.050620	-0.000050
29	18	12	28	17	12	744.050620	-0.000050
31	17	14	30	16	14	744.071540	0.000046
31	17	15	30	16	15	744.071540	0.000046
33	16	17	32	15	17	744.087830	0.000037
33	16	18	32	15	18	744.087830	0.000036
26	20	6	25	19	6	744.095730	-0.000196
26	20	7	25	19	7	744.095730	-0.000196
28	19	9	27	18	9	744.120290	-0.000048
28	19	10	27	18	10	744.120290	-0.000048
23	22	1	22	21	1	744.138130	-0.000076
23	22	2	22	21	2	744.138130	-0.000076
30	18	12	29	17	12	744.143260	0.000132
30	18	13	29	17	13	744.143260	0.000132
25	21	4	24	20	4	744.163900	-0.000061
25	21	5	24	20	5	744.163900	-0.000061
27	20	7	26	19	7	744.188840	-0.000259
27	20	8	26	19	8	744.188840	-0.000259
29	19	10	28	18	10	744.213070	-0.000111
29	19	11	28	18	11	744.213070	-0.000111
24	22	2	23	21	2	744.231700	0.000083
24	22	3	23	21	3	744.231700	0.000083
31	18	13	30	17	13	744.235540	0.000145
31	18	14	30	17	14	744.235540	0.000145
26	21	5	25	20	5	744.257390	0.000130
26	21	6	25	20	6	744.257390	0.000130
28	20	8	27	19	8	744.282430	0.000232
28	20	9	27	19	9	744.282430	0.000232
23	23	0	22	22	0	744.299100	0.000090
23	23	1	22	22	1	744.299100	0.000090
30	19	11	29	18	11	744.305720	-0.000166
30	19	12	29	18	12	744.305720	-0.000166
25	22	3	24	21	3	744.325030	0.000025
25	22	4	24	21	4	744.325030	0.000025
32	18	14	31	17	14	744.327480	0.000053
32	18	15	31	17	15	744.327480	0.000053
34	17	17	33	16	17	744.345230	0.000039
34	17	18	33	16	18	744.345230	0.000039
27	21	6	26	20	6	744.350500	-0.000010
27	21	7	26	20	7	744.350500	-0.000010
29	20	9	28	19	9	744.375300	0.000107
29	20	10	28	19	10	744.375300	0.000107
24	23	1	23	22	1	744.392440	0.000008
24	23	2	23	22	2	744.392440	0.000008
31	19	12	30	18	12	744.398450	0.000011
31	19	13	30	18	13	744.398450	0.000011
26	22	4	25	21	4	744.418290	-0.000062
26	22	5	25	21	5	744.418290	-0.000062
33	18	15	32	17	15	744.419310	0.000088
33	18	16	32	17	16	744.419310	0.000088
28	21	7	27	20	7	744.443750	0.000047
28	21	8	27	20	8	744.443750	0.000047
30	20	10	29	19	10	744.468080	-0.000001
30	20	11	29	19	11	744.468080	-0.000001
25	23	2	24	22	2	744.486090	0.000254
25	23	3	24	22	3	744.486090	0.000254
32	19	13	31	18	13	744.490770	-0.000046
32	19	14	31	18	14	744.490770	-0.000046
27	22	5	26	21	5	744.511860	0.000209
27	22	6	26	21	6	744.511860	0.000209
29	21	8	28	20	8	744.536760	-0.000049
29	21	9	28	20	9	744.536760	-0.000049
24	24	0	23	23	0	744.553090	0.000035
24	24	1	23	23	1	744.553090	0.000035
31	20	11	30	19	11	744.560830	-0.000015
31	20	12	30	19	12	744.560830	-0.000015
26	23	3	25	22	3	744.579070	-0.000133
26	23	4	25	22	4	744.579070	-0.000133
33	19	14	32	18	14	744.583010	0.000008
33	19	15	32	18	15	744.583010	0.000008
35	18	17	34	17	17	744.601910	-0.000033
35	18	18	34	17	18	744.601910	-0.000033
28	22	6	27	21	6	744.605070	0.000175
28	22	7	27	21	7	744.605070	0.000175
30	21	9	29	20	9	744.629450	-0.000377
30	21	10	29	20	10	744.629450	-0.000377
25	24	1	24	23	1	744.646700	0.000238
25	24	2	24	23	2	744.646700	0.000238
32	20	12	31	19	12	744.653420	-0.000051
32	20	13	31	19	13	744.653420	-0.000051
27	23	4	26	22	4	744.672600	0.000059
27	23	5	26	22	5	744.672600	0.000059
34	19	15	33	18	15	744.675100	0.000139
34	19	16	33	18	16	744.675100	0.000139
29	22	7	28	21	7	744.698100	0.000014
29	22	8	28	21	8	744.698100	0.000014
31	21	10	30	20	10	744.722580	-0.000173

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Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
31	21	11	30	20	11	744.722580	-0.000173
26	24	2	25	23	2	744.739900	0.000049
26	24	3	25	23	3	744.739900	0.000049
33	20	13	32	19	13	744.745840	-0.000099
33	20	14	32	19	14	744.745840	-0.000099
28	23	5	27	22	5	744.766120	0.000282
28	23	6	27	22	6	744.766120	0.000282
30	22	8	29	21	8	744.791160	-0.000043
30	22	9	29	21	9	744.791160	-0.000043
25	25	0	24	24	0	744.807220	0.000330
25	25	1	24	24	1	744.807220	0.000330
32	21	11	31	20	11	744.815470	-0.000088
32	21	12	31	20	12	744.815470	-0.000088
27	24	3	26	23	3	744.833360	0.000157
27	24	4	26	23	4	744.833360	0.000157
34	20	14	33	19	14	744.838140	-0.000098
34	20	15	33	19	15	744.838140	-0.000098
36	19	17	35	18	17	744.858200	0.000051
36	19	18	35	18	18	744.858200	0.000051
31	22	9	30	21	9	744.884400	0.000161
31	22	10	30	21	10	744.884400	0.000161
26	25	1	25	24	1	744.900390	0.000100
26	25	2	25	24	2	744.900390	0.000100
33	21	12	32	20	12	744.908470	0.000232
33	21	13	32	20	13	744.908470	0.000232
28	24	4	27	23	4	744.926490	-0.000037
28	24	5	27	23	5	744.926490	-0.000037
35	20	15	34	19	15	744.930450	0.000100
35	20	16	34	19	16	744.930450	0.000100
30	23	7	29	22	7	744.952280	0.000012
30	23	8	29	22	8	744.952280	0.000012
32	22	10	31	21	10	744.977020	-0.000168
32	22	11	31	21	11	744.977020	-0.000168
27	25	2	26	24	2	744.993570	-0.000084
27	25	3	26	24	3	744.993570	-0.000084
34	21	13	33	20	13	745.000890	0.000102
34	21	14	33	20	14	745.000890	0.000102
29	24	5	28	23	5	745.020180	0.000364
29	24	6	28	23	6	745.020180	0.000364
36	20	16	35	19	16	745.022220	-0.000024
36	20	17	35	19	17	745.022220	-0.000024
31	23	8	30	22	8	745.045550	0.000162
31	23	9	30	22	9	745.045550	0.000162
26	26	0	25	25	0	745.060690	0.000163
26	26	1	25	25	1	745.060690	0.000163
33	22	11	32	21	11	745.070680	0.000647
33	22	12	32	21	12	745.070680	0.000647
28	25	3	27	24	3	745.087280	0.000283
28	25	4	27	24	4	745.087280	0.000283
35	21	14	34	20	14	745.093210	0.000023
35	21	15	34	20	15	745.093210	0.000023
30	24	6	29	23	6	745.113150	0.000098
37	20	17	36	19	17	745.113150	-0.000764
30	24	7	29	23	7	745.113150	0.000098
37	20	18	36	19	18	745.113150	-0.000764
32	23	9	31	22	9	745.138670	0.000236
32	23	10	31	22	10	745.138670	0.000236
27	26	1	26	25	1	745.154010	0.000106
27	26	2	26	25	2	745.154010	0.000106
34	22	12	33	21	12	745.162820	0.000051
34	22	13	33	21	13	745.162820	0.000051
29	25	4	28	24	4	745.180340	0.000031
29	25	5	28	24	5	745.180340	0.000031
36	21	15	35	20	15	745.185440	0.000041
36	21	16	35	20	16	745.185440	0.000041
31	24	7	30	23	7	745.206090	-0.000141
31	24	8	30	23	8	745.206090	-0.000141
33	23	10	32	22	10	745.231550	0.000150
33	23	11	32	22	11	745.231550	0.000150
28	26	2	27	25	2	745.247420	0.000156
28	26	3	27	25	3	745.247420	0.000156
35	22	13	34	21	13	745.255510	0.000140
35	22	14	34	21	14	745.255510	0.000140
30	25	5	29	24	5	745.273680	0.000092
30	25	6	29	24	6	745.273680	0.000092
37	21	16	36	20	16	745.277430	-0.000014
37	21	17	36	20	17	745.277430	-0.000014
32	24	8	31	23	8	745.299410	0.000055
32	24	9	31	23	9	745.299410	0.000055
27	27	0	26	26	0	745.313940	-0.000024
27	27	1	26	26	1	745.313940	-0.000024
34	23	11	33	22	11	745.324220	-0.000058
34	23	12	33	22	12	745.324220	-0.000058
29	26	3	28	25	3	745.340670	0.000073
29	26	4	28	25	4	745.340670	0.000073
36	22	14	35	21	14	745.347850	0.000010
36	22	15	35	21	15	745.347850	0.000010
31	25	6	30	24	6	745.366880	0.000061
31	25	7	30	24	7	745.366880	0.000061
38	21	17	37	20	17	745.369160	-0.000113

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Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
38	21	18	37	20	18	745.369160	-0.000113
33	24	9	32	23	9	745.392500	0.000081
33	24	10	32	23	10	745.392500	0.000081
28	27	1	27	26	1	745.407350	0.000027
28	27	2	27	26	2	745.407350	0.000027
35	23	12	34	22	12	745.417170	0.000125
35	23	13	34	22	13	745.417170	0.000125
30	26	4	29	25	4	745.433820	-0.000075
30	26	5	29	25	5	745.433820	-0.000075
37	22	15	36	21	15	745.440450	0.000289
37	22	16	36	21	16	745.440450	0.000289
32	25	7	31	24	7	745.459960	-0.000035
32	25	8	31	24	8	745.459960	-0.000035
34	24	10	33	23	10	745.485180	-0.000215
34	24	11	33	23	11	745.485180	-0.000215
29	27	2	28	26	2	745.500670	0.000003
29	27	3	28	26	3	745.500670	0.000003
36	23	13	35	22	13	745.509770	0.000065
36	23	14	35	22	14	745.509770	0.000065
31	26	5	30	25	5	745.527310	0.000148
31	26	6	30	25	6	745.527310	0.000148
38	22	16	37	21	16	745.532090	-0.000216
38	22	17	37	21	17	745.532090	-0.000216
33	25	8	32	24	8	745.553140	0.000018
33	25	9	32	24	9	745.553140	0.000018
35	24	11	34	23	11	745.578380	0.000086
35	24	12	34	23	12	745.578380	0.000086
30	27	3	29	26	3	745.593920	-0.000069
30	27	4	29	26	4	745.593920	-0.000069
37	23	14	36	22	14	745.602080	-0.000153
37	23	15	36	22	15	745.602080	-0.000153
32	26	6	31	25	6	745.620330	-0.000054
32	26	7	31	25	7	745.620330	-0.000054
39	22	17	38	21	17	745.624190	-0.000079
39	22	18	38	21	18	745.624190	-0.000079
34	25	9	33	24	9	745.646240	0.000057
34	25	10	33	24	10	745.646240	0.000057
29	28	1	28	27	1	745.660640	0.000092
29	28	2	28	27	2	745.660640	0.000092
36	24	12	35	23	12	745.671210	0.000120
36	24	13	35	23	13	745.671210	0.000120
31	27	4	30	26	4	745.687270	-0.000006
31	27	5	30	26	5	745.687270	-0.000006
38	23	15	37	22	15	745.694610	-0.000020
38	23	16	37	22	16	745.694610	-0.000020
33	26	7	32	25	7	745.713430	-0.000130
33	26	8	32	25	8	745.713430	-0.000130
40	22	18	39	21	18	745.716080	0.000041
40	22	19	39	21	19	745.716080	0.000041
35	25	10	34	24	10	745.739190	0.000013
35	25	11	34	24	11	745.739190	0.000013
30	28	2	29	27	2	745.753880	0.000009
30	28	3	29	27	3	745.753880	0.000009
37	24	13	36	23	13	745.763940	0.000152
37	24	14	36	23	14	745.763940	0.000152
32	27	5	31	26	5	745.780380	-0.000146
32	27	6	31	26	6	745.780380	-0.000146
39	23	16	38	22	16	745.786790	-0.000078
39	23	17	38	22	17	745.786790	-0.000078
34	26	8	33	25	8	745.806770	0.000094
34	26	9	33	25	9	745.806770	0.000094
29	29	0	28	28	0	745.820030	-0.000193
29	29	1	28	28	1	745.820030	-0.000193
36	25	11	35	24	11	745.831890	-0.000196
36	25	12	35	24	12	745.831890	-0.000196
31	28	3	30	27	3	745.847370	0.000197
31	28	4	30	27	4	745.847370	0.000197
38	24	14	37	23	14	745.856320	-0.000057
38	24	15	37	23	15	745.856320	-0.000057
33	27	6	32	26	6	745.873810	0.000071
33	27	7	32	26	7	745.873810	0.000071
40	23	17	39	22	17	745.878820	-0.000131
40	23	18	39	22	18	745.878820	-0.000131
35	26	9	34	25	9	745.899710	-0.000035
35	26	10	34	25	10	745.899710	-0.000035
30	29	1	29	28	1	745.913700	0.000139
30	29	2	29	28	2	745.913700	0.000139
37	25	12	36	24	12	745.924390	-0.000520
37	25	13	36	24	13	745.924390	-0.000520
32	28	4	31	27	4	745.940430	-0.000020
32	28	5	31	27	5	745.940430	-0.000020
39	24	15	38	23	15	745.948870	0.000038
39	24	16	38	23	16	745.948870	0.000038
34	27	7	33	26	7	745.966840	-0.000063
34	27	8	33	26	8	745.966840	-0.000063
41	23	18	40	22	18	745.970860	0.000008
41	23	19	40	22	19	745.970860	0.000008
36	26	10	35	25	10	745.992860	0.000120
36	26	11	35	25	11	745.992860	0.000120
45	21	24	44	20	24	746.004820	0.000271

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
45	21	25	44	20	25	746.004820	0.000271
31	29	2	30	28	2	746.006860	-0.000010
31	29	3	30	28	3	746.006860	-0.000010
38	25	13	37	24	13	746.017530	-0.000115
38	25	14	37	24	14	746.017530	-0.000115
33	28	5	32	27	5	746.033760	0.000068
33	28	6	32	27	6	746.033760	0.000068
40	24	16	39	23	16	746.041070	-0.000076
40	24	17	39	23	17	746.041070	-0.000076
35	27	8	34	26	8	746.060010	-0.000019
35	27	9	34	26	9	746.060010	-0.000019
42	23	19	41	22	19	746.062610	0.000052
42	23	20	41	22	20	746.062610	0.000052
30	30	0	29	29	0	746.073120	0.000067
30	30	1	29	29	1	746.073120	0.000067
37	26	11	36	25	11	746.085640	-0.000027
37	26	12	36	25	12	746.085640	-0.000027
32	29	3	31	28	3	746.100140	-0.000013
32	29	4	31	28	4	746.100140	-0.000013
39	25	14	38	24	14	746.110330	0.000063
39	25	15	38	24	15	746.110330	0.000063
34	28	6	33	27	6	746.126920	0.000028
34	28	7	33	27	7	746.126920	0.000028
41	24	17	40	23	17	746.133360	0.000040
41	24	18	40	23	18	746.133360	0.000040
36	27	9	35	26	9	746.153150	0.000063
36	27	10	35	26	10	746.153150	0.000063
31	30	1	30	29	1	746.166450	0.000079
31	30	2	30	29	2	746.166450	0.000079
38	26	12	37	25	12	746.178380	-0.000124
38	26	13	37	25	13	746.178380	-0.000124
33	29	4	32	28	4	746.193250	-0.000165
33	29	5	32	28	5	746.193250	-0.000165
40	25	15	39	24	15	746.202940	0.000166
40	25	16	39	24	16	746.202940	0.000166
35	28	7	34	27	7	746.220070	0.000023
35	28	8	34	27	8	746.220070	0.000023
42	24	18	41	23	18	746.225360	0.000028
42	24	19	41	23	19	746.225360	0.000028
37	27	10	36	26	10	746.245910	-0.000176
37	27	11	36	26	11	746.245910	-0.000176
32	30	2	31	29	2	746.259520	-0.000146
32	30	3	31	29	3	746.259520	-0.000146
46	22	24	45	21	24	746.261350	-0.000025
46	22	25	45	21	25	746.261350	-0.000025
39	26	13	38	25	13	746.271210	-0.000053
39	26	14	38	25	14	746.271210	-0.000053
34	29	5	33	28	5	746.286500	-0.000145
34	29	6	33	28	6	746.286500	-0.000145
41	25	16	40	24	16	746.295220	0.000061
41	25	17	40	24	17	746.295220	0.000061
36	28	8	35	27	8	746.313250	0.000088
36	28	9	35	27	9	746.313250	0.000088
43	24	19	42	23	19	746.317420	0.000257
43	24	20	42	23	20	746.317420	0.000257
31	31	0	30	30	0	746.325750	0.000071
31	31	1	30	30	1	746.325750	0.000071
38	27	11	37	26	11	746.339240	0.000212
38	27	12	37	26	12	746.339240	0.000212
33	30	3	32	29	3	746.352850	-0.000083
33	30	4	32	29	4	746.352850	-0.000083
40	26	14	39	25	14	746.363930	0.000007
40	26	15	39	25	15	746.363930	0.000007
35	29	6	34	28	6	746.379720	-0.000116
35	29	7	34	28	7	746.379720	-0.000116
42	25	17	41	24	17	746.387510	0.000097
42	25	18	41	24	18	746.387510	0.000097
37	28	9	36	27	9	746.406400	0.000171
37	28	10	36	27	10	746.406400	0.000171
32	31	1	31	30	1	746.419200	0.000224
32	31	2	31	30	2	746.419200	0.000224
39	27	12	38	26	12	746.431860	-0.000023
39	27	13	38	26	13	746.431860	-0.000023
34	30	4	33	29	4	746.446290	0.000108
34	30	5	33	29	5	746.446290	0.000108
41	26	15	40	25	15	746.456490	0.000014
41	26	16	40	25	16	746.456490	0.000014
36	29	7	35	28	7	746.472920	-0.000068
36	29	8	35	28	8	746.472920	-0.000068
43	25	18	42	24	18	746.479600	0.000095
43	25	19	42	24	19	746.479600	0.000095
45	24	21	44	23	21	746.500220	-0.000031
45	24	22	44	23	22	746.500220	-0.000031
33	31	2	32	30	2	746.512190	-0.000066
33	31	3	32	30	3	746.512190	-0.000066
47	23	24	46	22	24	746.517610	0.000055
47	23	25	46	22	25	746.517610	0.000055
40	27	13	39	26	13	746.524820	0.000162
40	27	14	39	26	14	746.524820	0.000162
35	30	5	34	29	5	746.539390	-0.000007

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
35	30	6	34	29	6	746.539390	-0.000007
42	26	16	41	25	16	746.548950	0.000041
42	26	17	41	25	17	746.548950	0.000041
37	29	8	36	28	8	746.566170	0.000074
37	29	9	36	28	9	746.566170	0.000074
44	25	19	43	24	19	746.571450	-0.000006
44	25	20	43	24	20	746.571450	-0.000006
32	32	0	31	31	0	746.578120	0.000021
32	32	1	31	31	1	746.578120	0.000021
39	28	11	38	27	11	746.591900	-0.000268
39	28	12	38	27	12	746.591900	-0.000268
34	31	3	33	30	3	746.605450	-0.000065
34	31	4	33	30	4	746.605450	-0.000065
48	23	25	47	22	25	746.607750	0.000034
48	23	26	47	22	26	746.607750	0.000034
41	27	14	40	26	14	746.617610	0.000268
41	27	15	40	26	15	746.617610	0.000268
36	30	6	35	29	6	746.632560	-0.000014
36	30	7	35	29	7	746.632560	-0.000014
43	26	17	42	25	17	746.641260	0.000038
43	26	18	42	25	18	746.641260	0.000038
38	29	9	37	28	9	746.659230	0.000081
38	29	10	37	28	10	746.659230	0.000081
45	25	20	44	24	20	746.663340	0.000114
45	25	21	44	24	21	746.663340	0.000114
33	32	1	32	31	1	746.671160	-0.000219
33	32	2	32	31	2	746.671160	-0.000219
40	28	12	39	27	12	746.685090	0.000053
40	28	13	39	27	13	746.685090	0.000053
35	31	4	34	30	4	746.698690	-0.000053
35	31	5	34	30	5	746.698690	-0.000053
42	27	15	41	26	15	746.709870	-0.000061
42	27	16	41	26	16	746.709870	-0.000061
37	30	7	36	29	7	746.725860	0.000136
37	30	8	36	29	8	746.725860	0.000136
44	26	18	43	25	18	746.733600	0.000194
44	26	19	43	25	19	746.733600	0.000194
39	29	10	38	28	10	746.752240	0.000087
39	29	11	38	28	11	746.752240	0.000087
46	25	21	45	24	21	746.754980	0.000168
46	25	22	45	24	22	746.754980	0.000168
34	32	2	33	31	2	746.764560	-0.000082
34	32	3	33	31	3	746.764560	-0.000082
48	24	24	47	23	24	746.773230	0.000049
48	24	25	47	23	25	746.773230	0.000049
41	28	13	40	27	13	746.777700	-0.000126
41	28	14	40	27	14	746.777700	-0.000126
36	31	5	35	30	5	746.791840	-0.000105
36	31	6	35	30	6	746.791840	-0.000105
43	27	16	42	26	16	746.802550	0.000143
43	27	17	42	26	17	746.802550	0.000143
38	30	8	37	29	8	746.818590	-0.000225
38	30	9	37	29	9	746.818590	-0.000225
45	26	19	44	25	19	746.825610	0.000176
45	26	20	44	25	20	746.825610	0.000176
33	33	0	32	32	0	746.830280	-0.000032
33	33	1	32	32	1	746.830280	-0.000032
40	29	11	39	28	11	746.845130	0.000037
40	29	12	39	28	12	746.845130	0.000037
47	25	22	46	24	22	746.846060	-0.000142
47	25	23	46	24	23	746.846060	-0.000142
35	32	3	34	31	3	746.857890	0.000001
35	32	4	34	31	4	746.857890	0.000001
49	24	25	48	23	25	746.863610	-0.000022
49	24	26	48	23	26	746.863610	-0.000022
42	28	14	41	27	14	746.870360	-0.000167
42	28	15	41	27	15	746.870360	-0.000167
37	31	6	36	30	6	746.885060	-0.000052
37	31	7	36	30	7	746.885060	-0.000052
44	27	17	43	26	17	746.894750	-0.000025
44	27	18	43	26	18	746.894750	-0.000025
39	30	9	38	29	9	746.911730	-0.000140
39	30	10	38	29	10	746.911730	-0.000140
46	26	20	45	25	20	746.917240	-0.000072
46	26	21	45	25	21	746.917240	-0.000072
34	33	1	33	32	1	746.923460	-0.000118
34	33	2	33	32	2	746.923460	-0.000118
41	29	12	40	28	12	746.937600	-0.000370
41	29	13	40	28	13	746.937600	-0.000370
36	32	4	35	31	4	746.951120	0.000018
36	32	5	35	31	5	746.951120	0.000018
43	28	15	42	27	15	746.963430	0.000280
43	28	16	42	27	16	746.963430	0.000280
38	31	7	37	30	7	746.978280	0.000032
38	31	8	37	30	8	746.978280	0.000032
45	27	18	44	26	18	746.986950	-0.000066
45	27	19	44	26	19	746.986950	-0.000066
40	30	10	39	29	10	747.004980	0.000109
40	30	11	39	29	11	747.004980	0.000109
47	26	21	46	25	21	747.008960	-0.000067

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
47	26	22	46	25	22	747.008960	-0.000067
35	33	2	34	32	2	747.016840	0.000009
35	33	3	34	32	3	747.016840	0.000009
49	25	24	48	24	24	747.028280	-0.000033
49	25	25	48	24	25	747.028280	-0.000033
42	29	13	41	28	13	747.030490	-0.000286
42	29	14	41	28	14	747.030490	-0.000286
37	32	5	36	31	5	747.044050	-0.000238
51	24	27	50	23	27	747.044050	0.000423
37	32	6	36	31	6	747.044050	-0.000238
51	24	28	50	23	28	747.044050	0.000423
44	28	16	43	27	16	747.055760	0.000094
44	28	17	43	27	17	747.055760	0.000094
39	31	8	38	30	8	747.071510	0.000171
39	31	9	38	30	9	747.071510	0.000171
46	27	19	45	26	19	747.079280	0.000152
46	27	20	45	26	20	747.079280	0.000152
34	34	0	33	33	0	747.082340	0.000021
34	34	1	33	33	1	747.082340	0.000021
41	30	11	40	29	11	747.097750	-0.000060
41	30	12	40	29	12	747.097750	-0.000060
48	26	22	47	25	22	747.100510	-0.000044
48	26	23	47	25	23	747.100510	-0.000044
36	33	3	35	32	3	747.110050	-0.000007
36	33	4	35	32	4	747.110050	-0.000007
50	25	25	49	24	25	747.119080	0.000062
50	25	26	49	24	26	747.119080	0.000062
43	29	14	42	28	14	747.123470	-0.000028
43	29	15	42	28	15	747.123470	-0.000028
38	32	6	37	31	6	747.137720	0.000274
38	32	7	37	31	7	747.137720	0.000274
45	28	17	44	27	17	747.147970	-0.000108
45	28	18	44	27	18	747.147970	-0.000108
40	31	9	39	30	9	747.164450	0.000070
40	31	10	39	30	10	747.164450	0.000070
47	27	20	46	26	20	747.171060	-0.000038
47	27	21	46	26	21	747.171060	-0.000038
35	34	1	34	33	1	747.175600	0.000020
35	34	2	34	33	2	747.175600	0.000020
42	30	12	41	29	12	747.190670	-0.000019
42	30	13	41	29	13	747.190670	-0.000019
37	33	4	36	32	4	747.203660	0.000400
37	33	5	36	32	5	747.203660	0.000400
44	29	15	43	28	15	747.216060	-0.000079
44	29	16	43	28	16	747.216060	-0.000079
39	32	7	38	31	7	747.230620	0.000057
39	32	8	38	31	8	747.230620	0.000057
46	28	18	45	27	18	747.240290	-0.000082
46	28	19	45	27	19	747.240290	-0.000082
41	31	10	40	30	10	747.256970	-0.000410
41	31	11	40	30	11	747.256970	-0.000410
48	27	21	47	26	21	747.262770	-0.000145
48	27	22	47	26	22	747.262770	-0.000145
36	34	2	35	33	2	747.269180	0.000370
36	34	3	35	33	3	747.269180	0.000370
43	30	13	42	29	13	747.283320	-0.000178
50	26	24	49	25	24	747.283320	0.000309
43	30	14	42	29	14	747.283320	-0.000178
50	26	25	49	25	25	747.283320	0.000309
38	33	5	37	32	5	747.296540	0.000111
38	33	6	37	32	6	747.296540	0.000111
52	25	27	51	24	27	747.299560	-0.000044
52	25	28	51	24	28	747.299560	-0.000044
45	29	16	44	28	16	747.308800	0.000117
45	29	17	44	28	17	747.308800	0.000117
40	32	8	39	31	8	747.323630	-0.000011
40	32	9	39	31	9	747.323630	-0.000011
47	28	19	46	27	19	747.332650	0.000095
47	28	20	46	27	20	747.332650	0.000095
35	35	0	34	34	0	747.334180	0.000054
35	35	1	34	34	1	747.334180	0.000054
42	31	11	41	30	11	747.350470	0.000152
42	31	12	41	30	12	747.350470	0.000152
49	27	22	48	26	22	747.354710	0.000151
49	27	23	48	26	23	747.354710	0.000151
37	34	3	36	33	3	747.362060	0.000039
37	34	4	36	33	4	747.362060	0.000039
51	26	25	50	25	25	747.374100	0.000181
51	26	26	50	25	26	747.374100	0.000181
44	30	14	43	29	14	747.376240	-0.000003
44	30	15	43	29	15	747.376240	-0.000003
39	33	6	38	32	6	747.389670	0.000099
39	33	7	38	32	7	747.389670	0.000099
46	29	17	45	28	17	747.400870	-0.000265
46	29	18	45	28	18	747.400870	-0.000265
41	32	9	40	31	9	747.416790	0.000108
41	32	10	40	31	10	747.416790	0.000108
48	28	20	47	27	20	747.424710	0.000110
48	28	21	47	27	21	747.424710	0.000110
36	35	1	35	34	1	747.427350	-0.000019

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
36	35	2	35	34	2	747.427350	-0.000019
43	31	12	42	30	12	747.443190	-0.000005
43	31	13	42	30	13	747.443190	-0.000005
38	34	4	37	33	4	747.455210	0.000005
38	34	5	37	33	5	747.455210	0.000005
52	26	26	51	25	26	747.464760	0.000170
52	26	27	51	25	27	747.464760	0.000170
45	30	15	44	29	15	747.468900	0.000004
45	30	16	44	29	16	747.468900	0.000004
40	33	7	39	32	7	747.482670	-0.000011
40	33	8	39	32	8	747.482670	-0.000011
47	29	18	46	28	18	747.493470	-0.000009
47	29	19	46	28	19	747.493470	-0.000009
42	32	10	41	31	10	747.509850	0.000179
42	32	11	41	31	11	747.509850	0.000179
49	28	21	48	27	21	747.516540	0.000047
49	28	22	48	27	22	747.516540	0.000047
37	35	2	36	34	2	747.520590	0.000005
37	35	3	36	34	3	747.520590	0.000005
44	31	13	43	30	13	747.536120	0.000102
44	31	14	43	30	14	747.536120	0.000102
39	34	5	38	33	5	747.548880	0.000518
39	34	6	38	33	6	747.548880	0.000518
53	26	27	52	25	27	747.555060	0.000050
53	26	28	52	25	28	747.555060	0.000050
46	30	16	45	29	16	747.561480	0.000014
46	30	17	45	29	17	747.561480	0.000014
41	33	8	40	32	8	747.575780	0.000028
41	33	9	40	32	9	747.575780	0.000028
36	36	0	35	35	0	747.585700	-0.000029
48	29	19	47	28	19	747.585700	-0.000005
36	36	1	35	35	1	747.585700	-0.000029
48	29	20	47	28	20	747.585700	-0.000005
43	32	11	42	31	11	747.602520	-0.000092
43	32	12	42	31	12	747.602520	-0.000092
50	28	22	49	27	22	747.608240	-0.000012
50	28	23	49	27	23	747.608240	-0.000012
38	35	3	37	34	3	747.613830	0.000058
38	35	4	37	34	4	747.613830	0.000058
45	31	14	44	30	14	747.628320	-0.000439
52	27	25	51	26	25	747.628320	-0.000078
45	31	15	44	30	15	747.628320	-0.000439
52	27	26	51	26	26	747.628320	-0.000078
40	34	6	39	33	6	747.641600	0.000111
40	34	7	39	33	7	747.641600	0.000111
47	30	17	46	29	17	747.654060	0.000108
47	30	18	46	29	18	747.654060	0.000108
42	33	9	41	32	9	747.668940	0.000167
42	33	10	41	32	10	747.668940	0.000167
49	29	20	48	28	20	747.677790	-0.000028
49	29	21	48	28	21	747.677790	-0.000028
37	36	1	36	35	1	747.678990	0.000036
37	36	2	36	35	2	747.678990	0.000036
44	32	12	43	31	12	747.695500	0.000014
44	32	13	43	31	13	747.695500	0.000014
51	28	23	50	27	23	747.699770	-0.000071
51	28	24	50	27	24	747.699770	-0.000071
39	35	4	38	34	4	747.707020	0.000070
39	35	5	38	34	5	747.707020	0.000070
53	27	26	52	26	26	747.719440	0.000171
53	27	27	52	26	27	747.719440	0.000171
46	31	15	45	30	15	747.721350	-0.000085
46	31	16	45	30	16	747.721350	-0.000085
41	34	7	40	33	7	747.734830	0.000243
41	34	8	40	33	8	747.734830	0.000243
43	33	10	42	32	10	747.761700	-0.000052
43	33	11	42	32	11	747.761700	-0.000052
38	36	2	37	35	2	747.772230	0.000080
38	36	3	37	35	3	747.772230	0.000080
45	32	13	44	31	13	747.788470	0.000165
45	32	14	44	31	14	747.788470	0.000165
52	28	24	51	27	24	747.791160	-0.000099
52	28	25	51	27	25	747.791160	-0.000099
40	35	5	39	34	5	747.800120	0.000027
40	35	6	39	34	6	747.800120	0.000027
54	27	27	53	26	27	747.810010	0.000100
54	27	28	53	26	28	747.810010	0.000100
47	31	16	46	30	16	747.813960	-0.000066
47	31	17	46	30	17	747.813960	-0.000066
42	34	8	41	33	8	747.827570	-0.000071
42	34	9	41	33	9	747.827570	-0.000071
37	37	0	36	36	0	747.837180	0.000046
37	37	1	36	36	1	747.837180	0.000046
49	30	19	48	29	19	747.838450	-0.000158
49	30	20	48	29	20	747.838450	-0.000158
44	33	11	43	32	11	747.854570	-0.000120
44	33	12	43	32	12	747.854570	-0.000120
51	29	22	50	28	22	747.861720	0.000092
51	29	23	50	28	23	747.861720	0.000092
39	36	3	38	35	3	747.865410	0.000084

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
39	36	4	38	35	4	747.865410	0.000084
46	32	14	45	31	14	747.881190	0.000125
46	32	15	45	31	15	747.881190	0.000125
53	28	25	52	27	25	747.882440	-0.000053
53	28	26	52	27	26	747.882440	-0.000053
41	35	6	40	34	6	747.893310	0.000109
41	35	7	40	34	7	747.893310	0.000109
48	31	17	47	30	17	747.906540	0.000010
48	31	18	47	30	18	747.906540	0.000010
43	34	9	42	33	9	747.920940	0.000281
43	34	10	42	33	10	747.920940	0.000281
38	37	1	37	36	1	747.930500	0.000165
50	30	20	49	29	20	747.930500	-0.000276
38	37	2	37	36	2	747.930500	0.000165
50	30	21	49	29	21	747.930500	-0.000276
45	33	12	44	32	12	747.947640	0.000069
45	33	13	44	32	13	747.947640	0.000069
52	29	23	51	28	23	747.953460	0.000142
52	29	24	51	28	24	747.953460	0.000142
40	36	4	39	35	4	747.958420	-0.000062
40	36	5	39	35	5	747.958420	-0.000062
47	32	15	46	31	15	747.973630	-0.000117
54	28	26	53	27	26	747.973630	0.000103
47	32	16	46	31	16	747.973630	-0.000117
54	28	27	53	27	27	747.973630	0.000103
42	35	7	41	34	7	747.986260	-0.000029
42	35	8	41	34	8	747.986260	-0.000029
49	31	18	48	30	18	747.998920	-0.000024
49	31	19	48	30	19	747.998920	-0.000024
44	34	10	43	33	10	748.013710	0.000076
44	34	11	43	33	11	748.013710	0.000076
39	37	2	38	36	2	748.023310	-0.000205
51	30	21	50	29	21	748.023310	0.000496
39	37	3	38	36	3	748.023310	-0.000205
51	30	22	50	29	22	748.023310	0.000496
46	33	13	45	32	13	748.040450	0.000058
46	33	14	45	32	14	748.040450	0.000058
53	29	24	52	28	24	748.044670	-0.000180
53	29	25	52	28	25	748.044670	-0.000180
41	36	5	40	35	5	748.051600	-0.000008
41	36	6	40	35	6	748.051600	-0.000008
55	28	27	54	27	27	748.064460	0.000103
55	28	28	54	27	28	748.064460	0.000103
48	32	16	47	31	16	748.066360	0.000008
48	32	17	47	31	17	748.066360	0.000008
43	35	8	42	34	8	748.079410	0.000081
43	35	9	42	34	9	748.079410	0.000081
38	38	0	37	37	0	748.088400	0.000075
38	38	1	37	37	1	748.088400	0.000075
50	31	19	49	30	19	748.091210	-0.000051
50	31	20	49	30	20	748.091210	-0.000051
45	34	11	44	33	11	748.106330	-0.000224
45	34	12	44	33	12	748.106330	-0.000224
52	30	22	51	29	22	748.114900	0.000176
52	30	23	51	29	23	748.114900	0.000176
40	37	3	39	36	3	748.116110	-0.000564
40	37	4	39	36	4	748.116110	-0.000564
47	33	14	46	32	14	748.133050	-0.000101
47	33	15	46	32	15	748.133050	-0.000101
54	29	25	53	28	25	748.136360	0.000141
54	29	26	53	28	26	748.136360	0.000141
42	36	6	41	35	6	748.144810	0.000097
42	36	7	41	35	7	748.144810	0.000097
49	32	17	48	31	17	748.159060	0.000180
49	32	18	48	31	18	748.159060	0.000180
44	35	9	43	34	9	748.172480	0.000145
44	35	10	43	34	10	748.172480	0.000145
39	38	1	38	37	1	748.181360	-0.000149
39	38	2	38	37	2	748.181360	-0.000149
51	31	20	50	30	20	748.183630	0.000157
51	31	21	50	30	21	748.183630	0.000157
46	34	12	45	33	12	748.199380	-0.000050
46	34	13	45	33	13	748.199380	-0.000050
53	30	23	52	29	23	748.206540	0.000038
53	30	24	52	29	24	748.206540	0.000038
41	37	4	40	36	4	748.209670	-0.000145
41	37	5	40	36	5	748.209670	-0.000145
48	33	15	47	32	15	748.225780	-0.000061
48	33	16	47	32	16	748.225780	-0.000061
55	29	26	54	28	26	748.227230	-0.000169
55	29	27	54	28	27	748.227230	-0.000169
43	36	7	42	35	7	748.238010	0.000237
43	36	8	42	35	8	748.238010	0.000237
50	32	18	49	31	18	748.251170	-0.000156
50	32	19	49	31	19	748.251170	-0.000156
59	27	32	58	26	32	748.259360	0.000229
59	27	33	58	26	33	748.259360	0.000229
45	35	10	44	34	10	748.265580	0.000278
45	35	11	44	34	11	748.265580	0.000278
52	31	21	51	30	21	748.275370	-0.000201

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
52	31	22	51	30	22	748.275370	-0.000201
47	34	13	46	33	13	748.292290	0.000040
47	34	14	46	33	14	748.292290	0.000040
54	30	24	53	29	24	748.298110	-0.000018
54	30	25	53	29	25	748.298110	-0.000018
42	37	5	41	36	5	748.303560	0.000630
42	37	6	41	36	6	748.303560	0.000630
49	33	16	48	32	16	748.318470	0.000012
56	29	27	55	28	27	748.318470	0.000077
49	33	17	48	32	17	748.318470	0.000012
56	29	28	55	28	28	748.318470	0.000077
44	36	8	43	35	8	748.331010	0.000198
44	36	9	43	35	9	748.331010	0.000198
39	39	0	38	38	0	748.339270	-0.000036
39	39	1	38	38	1	748.339270	-0.000036
51	32	19	50	31	19	748.343600	-0.000072
51	32	20	50	31	20	748.343600	-0.000072
46	35	11	45	34	11	748.358720	0.000497
46	35	12	45	34	12	748.358720	0.000497
41	38	3	40	37	3	748.367670	-0.000148
53	31	22	52	30	22	748.367670	0.000126
41	38	4	40	37	4	748.367670	-0.000148
53	31	23	52	30	23	748.367670	0.000126
48	34	14	47	33	14	748.385220	0.000206
48	34	15	47	33	15	748.385220	0.000206
55	30	25	54	29	25	748.389550	-0.000056
55	30	26	54	29	26	748.389550	-0.000056
43	37	6	42	36	6	748.396000	-0.000010
43	37	7	42	36	7	748.396000	-0.000010
50	33	17	49	32	17	748.411120	0.000116
50	33	18	49	32	18	748.411120	0.000116
45	36	9	44	35	9	748.423960	0.000153
45	36	10	44	35	10	748.423960	0.000153
40	39	1	39	38	1	748.432550	0.000077
40	39	2	39	38	2	748.432550	0.000077
52	32	20	51	31	20	748.436500	0.000582
52	32	21	51	31	21	748.436500	0.000582
47	35	12	46	34	12	748.451280	0.000186
47	35	13	46	34	13	748.451280	0.000186
54	31	23	53	30	23	748.459350	-0.000043
54	31	24	53	30	24	748.459350	-0.000043
49	34	15	48	33	15	748.477470	-0.000244
49	34	16	48	33	16	748.477470	-0.000244
56	30	26	55	29	26	748.480820	-0.000093
56	30	27	55	29	27	748.480820	-0.000093
44	37	7	43	36	7	748.488910	-0.000154
44	37	8	43	36	8	748.488910	-0.000154
58	29	29	57	28	29	748.499700	-0.000064
58	29	30	57	28	30	748.499700	-0.000064
51	33	18	50	32	18	748.503480	0.000020
51	33	19	50	32	19	748.503480	0.000020
60	28	32	59	27	32	748.514700	-0.000211
60	28	33	59	27	33	748.514700	-0.000211
46	36	10	45	35	10	748.517480	0.000723
46	36	11	45	35	11	748.517480	0.000723
41	39	2	40	38	2	748.525790	0.000166
41	39	3	40	38	3	748.525790	0.000166
53	32	21	52	31	21	748.527850	-0.000208
53	32	22	52	31	22	748.527850	-0.000208
48	35	13	47	34	13	748.543960	0.000051
48	35	14	47	34	14	748.543960	0.000051
55	31	24	54	30	24	748.551240	0.000137
55	31	25	54	30	25	748.551240	0.000137
43	38	5	42	37	5	748.553970	-0.000065
43	38	6	42	37	6	748.553970	-0.000065
50	34	16	49	33	16	748.570330	-0.000016
50	34	17	49	33	17	748.570330	-0.000016
57	30	27	56	29	27	748.571860	-0.000187
57	30	28	56	29	28	748.571860	-0.000187
45	37	8	44	36	8	748.581940	-0.000139
45	37	9	44	36	9	748.581940	-0.000139
40	40	0	39	39	0	748.590100	0.000016
40	40	1	39	39	1	748.590100	0.000016
52	33	19	51	32	19	748.595790	-0.000046
52	33	20	51	32	20	748.595790	-0.000046
47	36	11	46	35	11	748.609890	0.000221
47	36	12	46	35	12	748.609890	0.000221
42	39	3	41	38	3	748.618790	0.000035
42	39	4	41	38	4	748.618790	0.000035
54	32	22	53	31	22	748.620020	-0.000077
54	32	23	53	31	23	748.620020	-0.000077
49	35	14	48	34	14	748.636490	-0.000180
49	35	15	48	34	15	748.636490	-0.000180
56	31	25	55	30	25	748.642570	-0.000102
56	31	26	55	30	26	748.642570	-0.000102
44	38	6	43	37	6	748.647070	-0.000029
44	38	7	43	37	7	748.647070	-0.000029
51	34	17	50	33	17	748.663010	0.000117
51	34	18	50	33	18	748.663010	0.000117
46	37	9	45	36	9	748.675140	0.000079

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
46	37	10	45	36	10	748.675140	0.000079
41	40	1	40	39	1	748.683130	-0.000104
41	40	2	40	39	2	748.683130	-0.000104
53	33	20	52	32	20	748.687990	-0.000135
53	33	21	52	32	21	748.687990	-0.000135
48	36	12	47	35	12	748.702630	0.000095
48	36	13	47	35	13	748.702630	0.000095
43	39	4	42	38	4	748.711970	0.000115
55	32	23	54	31	23	748.711970	-0.000033
43	39	5	42	38	5	748.711970	0.000115
55	32	24	54	31	24	748.711970	-0.000033
50	35	15	49	34	15	748.729350	-0.000018
50	35	16	49	34	16	748.729350	-0.000018
57	31	26	56	30	26	748.734100	0.000002
57	31	27	56	30	27	748.734100	0.000002
45	38	7	44	37	7	748.740170	0.000026
45	38	8	44	37	8	748.740170	0.000026
59	30	29	58	29	29	748.753920	0.000165
59	30	30	58	29	30	748.753920	0.000165
52	34	18	51	33	18	748.755370	-0.000008
52	34	19	51	33	19	748.755370	-0.000008
47	37	10	46	36	10	748.768170	0.000167
47	37	11	46	36	11	748.768170	0.000167
61	29	32	60	28	32	748.770190	0.000097
61	29	33	60	28	33	748.770190	0.000097
42	40	2	41	39	2	748.776370	-0.000002
42	40	3	41	39	3	748.776370	-0.000002
54	33	21	53	32	21	748.780420	0.000114
54	33	22	53	32	22	748.780420	0.000114
49	36	13	48	35	13	748.795210	-0.000136
49	36	14	48	35	14	748.795210	-0.000136
56	32	24	55	31	24	748.804010	0.000222
56	32	25	55	31	25	748.804010	0.000222
51	35	16	50	34	16	748.822070	0.000068
51	35	17	50	34	17	748.822070	0.000068
58	31	27	57	30	27	748.825340	-0.000009
58	31	28	57	30	28	748.825340	-0.000009
46	38	8	45	37	8	748.833050	-0.000098
46	38	9	45	37	9	748.833050	-0.000098
41	41	0	40	40	0	748.840940	0.000280
41	41	1	40	40	1	748.840940	0.000280
53	34	19	52	33	19	748.847670	-0.000099
53	34	20	52	33	20	748.847670	-0.000099
48	37	11	47	36	11	748.861300	0.000388
48	37	12	47	36	12	748.861300	0.000388
43	40	3	42	39	3	748.869560	0.000080
43	40	4	42	39	4	748.869560	0.000080
55	33	22	54	32	22	748.872440	0.000055
55	33	23	54	32	23	748.872440	0.000055
50	36	14	49	35	14	748.888190	0.000084
50	36	15	49	35	15	748.888190	0.000084
57	32	25	56	31	25	748.895480	0.000032
57	32	26	56	31	26	748.895480	0.000032
45	39	6	44	38	6	748.898110	0.000119
45	39	7	44	38	7	748.898110	0.000119
52	35	17	51	34	17	748.914710	0.000143
52	35	18	51	34	18	748.914710	0.000143
47	38	9	46	37	9	748.925790	-0.000321
47	38	10	46	37	10	748.925790	-0.000321
54	34	20	53	33	20	748.940140	0.000052
54	34	21	53	33	21	748.940140	0.000052
49	37	12	48	36	12	748.953840	0.000075
49	37	13	48	36	13	748.953840	0.000075
44	40	4	43	39	4	748.962670	0.000100
44	40	5	43	39	5	748.962670	0.000100
56	33	23	55	32	23	748.964200	-0.000154
56	33	24	55	32	24	748.964200	-0.000154
51	36	15	50	35	15	748.980860	0.000058
51	36	16	50	35	16	748.980860	0.000058
58	32	26	57	31	26	748.986750	-0.000204
58	32	27	57	31	27	748.986750	-0.000204
46	39	7	45	38	7	748.991000	-0.000005
46	39	8	45	38	8	748.991000	-0.000005
53	35	18	52	34	18	749.007250	0.000188
60	31	29	59	30	29	749.007250	-0.000099
53	35	19	52	34	19	749.007250	0.000188
60	31	30	59	30	30	749.007250	-0.000099
48	38	10	47	37	10	749.019000	-0.000041
48	38	11	47	37	11	749.019000	-0.000041
62	30	32	61	29	32	749.024560	-0.000170
62	30	33	61	29	33	749.024560	-0.000170
43	41	2	42	40	2	749.026870	-0.000038
43	41	3	42	40	3	749.026870	-0.000038
55	34	21	54	33	21	749.032330	0.000027
55	34	22	54	33	22	749.032330	0.000027
50	37	13	49	36	13	749.046340	-0.000224
50	37	14	49	36	14	749.046340	-0.000224
45	40	5	44	39	5	749.055890	0.000264
57	33	24	56	32	24	749.055890	-0.000304
45	40	6	44	39	6	749.055890	0.000264

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
57	33	25	56	32	25	749.055890	-0.000304
52	36	16	51	35	16	749.073680	0.000240
52	36	17	51	35	17	749.073680	0.000240
59	32	27	58	31	27	749.077950	-0.000369
59	32	28	58	31	28	749.077950	-0.000369
42	42	0	41	41	0	749.091260	0.000233
42	42	1	41	41	1	749.091260	0.000233
54	35	19	53	34	19	749.099520	0.000046
54	35	20	53	34	20	749.099520	0.000046
49	38	11	48	37	11	749.111800	-0.000135
49	38	12	48	37	12	749.111800	-0.000135
44	41	3	43	40	3	749.120070	0.000070
44	41	4	43	40	4	749.120070	0.000070
56	34	22	55	33	22	749.124420	0.000006
56	34	23	55	33	23	749.124420	0.000006
51	37	14	50	36	14	749.139210	-0.000114
51	37	15	50	36	15	749.139210	-0.000114
58	33	25	57	32	25	749.147780	-0.000146
58	33	26	57	32	26	749.147780	-0.000146
53	36	17	52	35	17	749.165990	-0.000028
53	36	18	52	35	18	749.165990	-0.000028
48	39	9	47	38	9	749.176840	-0.000114
48	39	10	47	38	10	749.176840	-0.000114
43	42	1	42	41	1	749.184410	0.000266
43	42	2	42	41	2	749.184410	0.000266
55	35	20	54	34	20	749.191980	0.000169
55	35	21	54	34	21	749.191980	0.000169
50	38	12	49	37	12	749.204460	-0.000323
50	38	13	49	37	13	749.204460	-0.000323
45	41	4	44	40	4	749.213230	0.000156
45	41	5	44	40	5	749.213230	0.000156
57	34	23	56	33	23	749.216390	-0.000040
57	34	24	56	33	24	749.216390	-0.000040
52	37	15	51	36	15	749.232070	0.000048
52	37	16	51	36	16	749.232070	0.000048
59	33	26	58	32	26	749.239330	-0.000185
59	33	27	58	32	27	749.239330	-0.000185
47	40	7	46	39	7	749.241670	0.000003
47	40	8	46	39	8	749.241670	0.000003
54	36	18	53	35	18	749.258560	0.000043
54	36	19	53	35	19	749.258560	0.000043
61	32	29	60	31	29	749.261070	0.000501
61	32	30	60	31	30	749.261070	0.000501
49	39	10	48	38	10	749.269960	0.000084
49	39	11	48	38	11	749.269960	0.000084
63	31	32	62	30	32	749.278370	-0.000512
63	31	33	62	30	33	749.278370	-0.000512
56	35	21	55	34	21	749.284160	0.000106
56	35	22	55	34	22	749.284160	0.000106
51	38	13	50	37	13	749.297510	-0.000067
51	38	14	50	37	14	749.297510	-0.000067
46	41	5	45	40	5	749.306230	0.000111
46	41	6	45	40	6	749.306230	0.000111
58	34	24	57	33	24	749.308300	-0.000035
58	34	25	57	33	25	749.308300	-0.000035
53	37	16	52	36	16	749.324850	0.000188
53	37	17	52	36	17	749.324850	0.000188
48	40	8	47	39	8	749.334830	0.000180
48	40	9	47	39	9	749.334830	0.000180
43	43	0	42	42	0	749.341390	0.000196
43	43	1	42	42	1	749.341390	0.000196
55	36	19	54	35	19	749.351410	0.000460
55	36	20	54	35	20	749.351410	0.000460
50	39	11	49	38	11	749.362610	-0.000140
50	39	12	49	38	12	749.362610	-0.000140
45	42	3	44	41	3	749.370360	0.000039
45	42	4	44	41	4	749.370360	0.000039
57	35	22	56	34	22	749.377040	0.000834
57	35	23	56	34	23	749.377040	0.000834
52	38	14	51	37	14	749.390430	0.000101
52	38	15	51	37	15	749.390430	0.000101
47	41	6	46	40	6	749.399330	0.000197
47	41	7	46	40	7	749.399330	0.000197
54	37	17	53	36	17	749.417100	-0.000139
54	37	18	53	36	18	749.417100	-0.000139
49	40	9	48	39	9	749.427690	0.000100
49	40	10	48	39	10	749.427690	0.000100
44	43	1	43	42	1	749.434540	0.000252
44	43	2	43	42	2	749.434540	0.000252
56	36	20	55	35	20	749.443140	-0.000159
56	36	21	55	35	21	749.443140	-0.000159
51	39	12	50	38	12	749.455410	-0.000182
51	39	13	50	38	13	749.455410	-0.000182
46	42	4	45	41	4	749.463320	-0.000052
46	42	5	45	41	5	749.463320	-0.000052
58	35	23	57	34	23	749.467630	-0.000624
58	35	24	57	34	24	749.467630	-0.000624
53	38	15	52	37	15	749.483250	0.000221
53	38	16	52	37	16	749.483250	0.000221
48	41	7	47	40	7	749.491980	-0.000142

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Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
60	34	26	59	33	26	749.491980	0.000198
48	41	8	47	40	8	749.491980	-0.000142
60	34	27	59	33	27	749.491980	0.000198
55	37	18	54	36	18	749.509810	0.000060
55	37	19	54	36	19	749.509810	0.000060
62	33	29	61	32	29	749.513200	-0.000235
62	33	30	61	32	30	749.513200	-0.000235
50	40	10	49	39	10	749.520350	-0.000146
50	40	11	49	39	11	749.520350	-0.000146
45	43	2	44	42	2	749.527590	0.000224
45	43	3	44	42	3	749.527590	0.000224
64	32	32	63	31	32	749.532580	-0.000012
64	32	33	63	31	33	749.532580	-0.000012
57	36	21	56	35	21	749.535540	-0.000032
57	36	22	56	35	22	749.535540	-0.000032
52	39	13	51	38	13	749.548360	-0.000016
52	39	14	51	38	14	749.548360	-0.000016
47	42	5	46	41	5	749.556640	0.000245
47	42	6	46	41	6	749.556640	0.000245
59	35	24	58	34	24	749.559880	-0.000334
59	35	25	58	34	25	749.559880	-0.000334
54	38	16	53	37	16	749.575600	-0.000073
54	38	17	53	37	17	749.575600	-0.000073
61	34	27	60	33	27	749.582950	-0.000374
61	34	28	60	33	28	749.582950	-0.000374
49	41	8	48	40	8	749.584940	-0.000144
49	41	9	48	40	9	749.584940	-0.000144
44	44	0	43	43	0	749.591090	-0.000062
44	44	1	43	43	1	749.591090	-0.000062
56	37	19	55	36	19	749.602130	-0.000067
56	37	20	55	36	20	749.602130	-0.000067
51	40	11	50	39	11	749.613110	-0.000247
51	40	12	50	39	12	749.613110	-0.000247
46	43	3	45	42	3	749.620330	-0.000093
46	43	4	45	42	4	749.620330	-0.000093
58	36	22	57	35	22	749.627990	0.000240
58	36	23	57	35	23	749.627990	0.000240
53	39	14	52	38	14	749.640880	-0.000247
53	39	15	52	38	15	749.640880	-0.000247
48	42	6	47	41	6	749.649460	0.000060
48	42	7	47	41	7	749.649460	0.000060
55	38	17	54	37	17	749.668200	-0.000048
55	38	18	54	37	18	749.668200	-0.000048
50	41	9	49	40	9	749.678070	0.000059
50	41	10	49	40	10	749.678070	0.000059
45	44	1	44	43	1	749.684410	0.000187
45	44	2	44	43	2	749.684410	0.000187
57	37	20	56	36	20	749.694720	0.000163
57	37	21	56	36	21	749.694720	0.000163
52	40	12	51	39	12	749.706360	0.000171
52	40	13	51	39	13	749.706360	0.000171
47	43	4	46	42	4	749.713270	-0.000193
47	43	5	46	42	5	749.713270	-0.000193
59	36	23	58	35	23	749.719660	-0.000175
59	36	24	58	35	24	749.719660	-0.000175
54	39	15	53	38	15	749.733840	0.000026
54	39	16	53	38	16	749.733840	0.000026
49	42	7	48	41	7	749.742140	-0.000229
49	42	8	48	41	8	749.742140	-0.000229
61	35	26	60	34	26	749.743820	0.000041
61	35	27	60	34	27	749.743820	0.000041
56	38	18	55	37	18	749.760580	-0.000189
56	38	19	55	37	19	749.760580	-0.000189
63	34	29	62	33	29	749.765860	-0.000119
63	34	30	62	33	30	749.765860	-0.000119
51	41	10	50	40	10	749.770930	0.000029
51	41	11	50	40	11	749.770930	0.000029
46	44	2	45	43	2	749.777300	0.000016
46	44	3	45	43	3	749.777300	0.000016
65	33	32	64	32	32	749.786060	0.000171
65	33	33	64	32	33	749.786060	0.000171
53	40	13	52	39	13	749.799230	0.000266
53	40	14	52	39	14	749.799230	0.000266
48	43	5	47	42	5	749.806190	-0.000283
48	43	6	47	42	6	749.806190	-0.000283
55	39	16	54	38	16	749.826500	0.000051
55	39	17	54	38	17	749.826500	0.000051
50	42	8	49	41	8	749.835210	-0.000101
62	35	27	61	34	27	749.835210	-0.000166
50	42	9	49	41	9	749.835210	-0.000101
62	35	28	61	34	28	749.835210	-0.000166
45	45	0	44	44	0	749.840710	-0.000185
45	45	1	44	44	1	749.840710	-0.000185
57	38	19	56	37	19	749.853100	-0.000115
57	38	20	56	37	20	749.853100	-0.000115
52	41	11	51	40	11	749.863710	-0.000051
52	41	12	51	40	12	749.863710	-0.000051
47	44	3	46	43	3	749.870230	-0.000092
47	44	4	46	43	4	749.870230	-0.000092
59	37	22	58	36	22	749.878970	-0.000084

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Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
59	37	23	58	36	23	749.878970	-0.000084
54	40	14	53	39	14	749.891900	0.000200
54	40	15	53	39	15	749.891900	0.000200
49	43	6	48	42	6	749.899410	-0.000038
49	43	7	48	42	7	749.899410	-0.000038
61	36	25	60	35	25	749.903850	0.000137
61	36	26	60	35	26	749.903850	0.000137
56	39	17	55	38	17	749.919090	0.000056
56	39	18	55	38	18	749.919090	0.000056
51	42	9	50	41	9	749.928360	0.000136
51	42	10	50	41	10	749.928360	0.000136
46	45	1	45	44	1	749.933820	-0.000130
46	45	2	45	44	2	749.933820	-0.000130
58	38	20	57	37	20	749.945350	-0.000239
58	38	21	57	37	21	749.945350	-0.000239
65	34	31	64	33	31	749.948040	0.000019
65	34	32	64	33	32	749.948040	0.000019
53	41	12	52	40	12	749.957130	0.000555
53	41	13	52	40	13	749.957130	0.000555
48	44	4	47	43	4	749.963310	-0.000030
48	44	5	47	43	5	749.963310	-0.000030
60	37	23	59	36	23	749.971180	0.000016
60	37	24	59	36	24	749.971180	0.000016
55	40	15	54	39	15	749.984550	0.000162
55	40	16	54	39	16	749.984550	0.000162
50	43	7	49	42	7	749.992360	-0.000045
50	43	8	49	42	8	749.992360	-0.000045
62	36	26	61	35	26	749.995660	0.000171
62	36	27	61	35	27	749.995660	0.000171
57	39	18	56	38	18	750.011440	-0.000109
57	39	19	56	38	19	750.011440	-0.000109
64	35	29	63	34	29	750.017790	-0.000412
64	35	30	63	34	30	750.017790	-0.000412
52	42	10	51	41	10	750.021080	-0.000019
52	42	11	51	41	11	750.021080	-0.000019
47	45	2	46	44	2	750.026700	-0.000291
47	45	3	46	44	3	750.026700	-0.000291
59	38	21	58	37	21	750.038760	0.000864
66	34	32	65	33	32	750.038760	-0.000045
59	38	22	58	37	22	750.038760	0.000864
66	34	33	65	33	33	750.038760	-0.000045
54	41	13	53	40	13	750.049220	-0.000123
54	41	14	53	40	14	750.049220	-0.000123
49	44	5	48	43	5	750.056520	0.000193
49	44	6	48	43	6	750.056520	0.000193
61	37	24	60	36	24	750.063330	0.000136
61	37	25	60	36	25	750.063330	0.000136
56	40	16	55	39	16	750.076810	-0.000216
56	40	17	55	39	17	750.076810	-0.000216
51	43	8	50	42	8	750.085140	-0.000199
51	43	9	50	42	9	750.085140	-0.000199
63	36	27	62	35	27	750.087180	0.000020
63	36	28	62	35	28	750.087180	0.000020
46	46	0	45	45	0	750.090610	0.000173
46	46	1	45	45	1	750.090610	0.000173
58	39	19	57	38	19	750.103820	-0.000188
58	39	20	57	38	20	750.103820	-0.000188
65	35	30	64	34	30	750.109470	0.000067
65	35	31	64	34	31	750.109470	0.000067
53	42	11	52	41	11	750.113940	-0.000001
53	42	12	52	41	12	750.113940	-0.000001
48	45	3	47	44	3	750.120110	0.000095
48	45	4	47	44	4	750.120110	0.000095
60	38	22	59	37	22	750.130040	-0.000080
60	38	23	59	37	23	750.130040	-0.000080
55	41	14	54	40	14	750.142180	0.000115
55	41	15	54	40	15	750.142180	0.000115
50	44	6	49	43	6	750.149220	-0.000082
50	44	7	49	43	7	750.149220	-0.000082
62	37	25	61	36	25	750.155350	0.000228
62	37	26	61	36	26	750.155350	0.000228
57	40	17	56	39	17	750.169410	-0.000195
57	40	18	56	39	18	750.169410	-0.000195
52	43	9	51	42	9	750.178330	0.000095
52	43	10	51	42	10	750.178330	0.000095
47	46	1	46	45	1	750.183800	0.000324
47	46	2	46	45	2	750.183800	0.000324
59	39	20	58	38	20	750.195700	-0.000699
59	39	21	58	38	21	750.195700	-0.000699
66	35	31	65	34	31	750.200440	-0.000021
66	35	32	65	34	32	750.200440	-0.000021
54	42	12	53	41	12	750.206720	-0.000029
54	42	13	53	41	13	750.206720	-0.000029
49	45	4	48	44	4	750.213000	-0.000015
49	45	5	48	44	5	750.213000	-0.000015
61	38	23	60	37	23	750.222540	0.000280
61	38	24	60	37	24	750.222540	0.000280
56	41	15	55	40	15	750.234960	0.000209
56	41	16	55	40	16	750.234960	0.000209
51	44	7	50	43	7	750.242180	-0.000053

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Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
51	44	8	50	43	8	750.242180	-0.000053
63	37	26	62	36	26	750.246780	-0.000170
63	37	27	62	36	27	750.246780	-0.000170
58	40	18	57	39	18	750.262160	0.000033
58	40	19	57	39	19	750.262160	0.000033
53	43	10	52	42	10	750.271050	-0.000044
53	43	11	52	42	11	750.271050	-0.000044
48	46	2	47	45	2	750.276360	-0.000134
48	46	3	47	45	3	750.276360	-0.000134
60	39	21	59	38	21	750.288750	0.000041
60	39	22	59	38	22	750.288750	0.000041
67	35	32	66	34	32	750.291400	0.000043
67	35	33	66	34	33	750.291400	0.000043
55	42	13	54	41	13	750.299530	0.000021
55	42	14	54	41	14	750.299530	0.000021
50	45	5	49	44	5	750.305970	-0.000017
50	45	6	49	44	6	750.305970	-0.000017
62	38	24	61	37	24	750.314430	0.000120
62	38	25	61	37	25	750.314430	0.000120
57	41	16	56	40	16	750.327480	0.000108
57	41	17	56	40	17	750.327480	0.000108
52	44	8	51	43	8	750.335140	-0.000006
52	44	9	51	43	9	750.335140	-0.000006
47	47	0	46	46	0	750.339780	0.000010
47	47	1	46	46	1	750.339780	0.000010
59	40	19	58	39	19	750.354570	-0.000009
59	40	20	58	39	20	750.354570	-0.000009
66	36	30	65	35	30	750.361240	-0.000173
66	36	31	65	35	31	750.361240	-0.000173
54	43	11	53	42	11	750.363660	-0.000255
54	43	12	53	42	12	750.363660	-0.000255
49	46	3	48	45	3	750.369500	0.000002
49	46	4	48	45	4	750.369500	0.000002
61	39	22	60	38	22	750.381430	0.000481
61	39	23	60	38	23	750.381430	0.000481
56	42	14	55	41	14	750.392350	0.000129
56	42	15	55	41	15	750.392350	0.000129
63	38	25	62	37	25	750.406420	0.000144
63	38	26	62	37	26	750.406420	0.000144
58	41	17	57	40	17	750.419760	-0.000187
58	41	18	57	40	18	750.419760	-0.000187
53	44	9	52	43	9	750.427970	-0.000060
53	44	10	52	43	10	750.427970	-0.000060
48	47	1	47	46	1	750.432660	-0.000130
48	47	2	47	46	2	750.432660	-0.000130
60	40	20	59	39	20	750.446990	0.000014
60	40	21	59	39	21	750.446990	0.000014
67	36	31	66	35	31	750.452600	0.000041
67	36	32	66	35	32	750.452600	0.000041
55	43	12	54	42	12	750.456830	0.000123
55	43	13	54	42	13	750.456830	0.000123
50	46	4	49	45	4	750.462580	0.000098
50	46	5	49	45	5	750.462580	0.000098
62	39	23	61	38	23	750.472880	-0.000231
62	39	24	61	38	24	750.472880	-0.000231
57	42	15	56	41	15	750.484720	-0.000173
57	42	16	56	41	16	750.484720	-0.000173
52	45	7	51	44	7	750.491800	-0.000054
52	45	8	51	44	8	750.491800	-0.000054
64	38	26	63	37	26	750.498140	0.000003
64	38	27	63	37	27	750.498140	0.000003
59	41	18	58	40	18	750.512650	0.000185
59	41	19	58	40	19	750.512650	0.000185
54	44	10	53	43	10	750.520890	0.000023
66	37	29	65	36	29	750.520890	-0.000863
54	44	11	53	43	11	750.520890	0.000023
66	37	30	65	36	30	750.520890	-0.000863
49	47	2	48	46	2	750.525800	0.000009
49	47	3	48	46	3	750.525800	0.000009
61	40	21	60	39	21	750.539240	-0.000057
61	40	22	60	39	22	750.539240	-0.000057
68	36	32	67	35	32	750.543420	-0.000152
68	36	33	67	35	33	750.543420	-0.000152
56	43	13	55	42	13	750.549330	-0.000127
56	43	14	55	42	14	750.549330	-0.000127
51	46	5	50	45	5	750.555440	0.000008
51	46	6	50	45	6	750.555440	0.000008
63	39	24	62	38	24	750.565250	0.000063
63	39	25	62	38	25	750.565250	0.000063
58	42	16	57	41	16	750.577560	0.000045
58	42	17	57	41	17	750.577560	0.000045
53	45	8	52	44	8	750.584790	0.000037
53	45	9	52	44	9	750.584790	0.000037
48	48	0	47	47	0	750.589030	0.000140
48	48	1	47	47	1	750.589030	0.000140
60	41	19	59	40	19	750.604910	-0.000019
60	41	20	59	40	20	750.604910	-0.000019
55	44	11	54	43	11	750.613370	-0.000309
67	37	30	66	36	30	750.613370	0.000252
55	44	12	54	43	12	750.613370	-0.000309

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
67	37	31	66	36	31	750.613370	0.000252
50	47	3	49	46	3	750.618730	-0.000046
50	47	4	49	46	4	750.618730	-0.000046
57	43	14	56	42	14	750.641940	-0.000217
57	43	15	56	42	15	750.641940	-0.000217
52	46	6	51	45	6	750.648380	0.000020
52	46	7	51	45	7	750.648380	0.000020
64	39	25	63	38	25	750.657150	-0.000034
64	39	26	63	38	26	750.657150	-0.000034
59	42	17	58	41	17	750.669860	-0.000219
59	42	18	58	41	18	750.669860	-0.000219
54	45	9	53	44	9	750.677400	-0.000214
54	45	10	53	44	10	750.677400	-0.000214
49	48	1	48	47	1	750.681800	-0.000091
66	38	28	65	37	28	750.681800	0.000242
49	48	2	48	47	2	750.681800	-0.000091
66	38	29	65	37	29	750.681800	0.000242
61	41	20	60	40	20	750.697240	-0.000089
61	41	21	60	40	21	750.697240	-0.000089
68	37	31	67	36	31	750.704350	-0.000001
68	37	32	67	36	32	750.704350	-0.000001
56	44	12	55	43	12	750.706670	0.000208
56	44	13	55	43	13	750.706670	0.000208
51	47	4	50	46	4	750.711850	0.000114
51	47	5	50	46	5	750.711850	0.000114
63	40	23	62	39	23	750.723390	-0.000340
63	40	24	62	39	24	750.723390	-0.000340
58	43	15	57	42	15	750.734890	0.000072
58	43	16	57	42	16	750.734890	0.000072
53	46	7	52	45	7	750.741200	-0.000062
53	46	8	52	45	8	750.741200	-0.000062
65	39	26	64	38	26	750.749060	-0.000020
65	39	27	64	38	27	750.749060	-0.000020
60	42	18	59	41	18	750.762670	0.000068
60	42	19	59	41	19	750.762670	0.000068
55	45	10	54	44	10	750.770350	-0.000090
55	45	11	54	44	11	750.770350	-0.000090
67	38	29	66	37	29	750.772940	-0.000165
67	38	30	66	37	30	750.772940	-0.000165
50	48	2	49	47	2	750.774770	-0.000106
50	48	3	49	47	3	750.774770	-0.000106
62	41	21	61	40	21	750.789870	0.000210
62	41	22	61	40	22	750.789870	0.000210
69	37	32	68	36	32	750.795420	-0.000033
69	37	33	68	36	33	750.795420	-0.000033
57	44	13	56	43	13	750.799450	0.000258
57	44	14	56	43	14	750.799450	0.000258
52	47	5	51	46	5	750.804810	0.000142
52	47	6	51	46	6	750.804810	0.000142
64	40	24	63	39	24	750.815690	-0.000139
64	40	25	63	39	25	750.815690	-0.000139
59	43	16	58	42	16	750.827310	-0.000121
59	43	17	58	42	17	750.827310	-0.000121
54	46	8	53	45	8	750.834130	-0.000013
54	46	9	53	45	9	750.834130	-0.000013
49	49	0	48	48	0	750.837970	0.000157
49	49	1	48	48	1	750.837970	0.000157
66	39	27	65	38	27	750.840880	-0.000004
66	39	28	65	38	28	750.840880	-0.000004
61	42	19	60	41	19	750.855340	0.000284
61	42	20	60	41	20	750.855340	0.000284
56	45	11	55	44	11	750.863290	0.000050
56	45	12	55	44	12	750.863290	0.000050
68	38	30	67	37	30	750.864470	-0.000073
68	38	31	67	37	31	750.864470	-0.000073
51	48	3	50	47	3	750.867550	-0.000292
51	48	4	50	47	4	750.867550	-0.000292
63	41	22	62	40	22	750.882160	0.000237
63	41	23	62	40	23	750.882160	0.000237
58	44	14	57	43	14	750.891950	0.000069
58	44	15	57	43	15	750.891950	0.000069
53	47	6	52	46	6	750.897820	0.000235
53	47	7	52	46	7	750.897820	0.000235
65	40	25	64	39	25	750.907800	-0.000040
65	40	26	64	39	26	750.907800	-0.000040
60	43	17	59	42	17	750.920030	0.000030
60	43	18	59	42	18	750.920030	0.000030
55	46	9	54	45	9	750.926680	-0.000301
55	46	10	54	45	10	750.926680	-0.000301
50	49	1	49	48	1	750.930600	-0.000189
50	49	2	49	48	2	750.930600	-0.000189
67	39	28	66	38	28	750.932970	0.000379
67	39	29	66	38	29	750.932970	0.000379
62	42	20	61	41	20	750.947500	0.000047
62	42	21	61	41	21	750.947500	0.000047
57	45	12	56	44	12	750.955890	-0.000102
69	38	31	68	37	31	750.955890	0.000046
57	45	13	56	44	13	750.955890	-0.000102
69	38	32	68	37	32	750.955890	0.000046
52	48	4	51	47	4	750.960860	0.000082

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
52	48	5	51	47	5	750.960860	0.000082
64	41	23	63	40	23	750.974060	-0.000049
64	41	24	63	40	24	750.974060	-0.000049
59	44	15	58	43	15	750.984140	-0.000395
59	44	16	58	43	16	750.984140	-0.000395
54	47	7	53	46	7	750.990520	0.000055
54	47	8	53	46	8	750.990520	0.000055
66	40	26	65	39	26	751.000160	0.000386
66	40	27	65	39	27	751.000160	0.000386
61	43	18	60	42	18	751.012290	-0.000216
61	43	19	60	42	19	751.012290	-0.000216
56	46	10	55	45	10	751.019970	0.000174
56	46	11	55	45	11	751.019970	0.000174
51	49	2	50	48	2	751.023850	0.000091
68	39	29	67	38	29	751.023850	-0.000340
51	49	3	50	48	3	751.023850	0.000091
68	39	30	67	38	30	751.023850	-0.000340
63	42	21	62	41	21	751.039560	-0.000233
63	42	22	62	41	22	751.039560	-0.000233
70	38	32	69	37	32	751.046940	-0.000087
70	38	33	69	37	33	751.046940	-0.000087
58	45	13	57	44	13	751.048670	-0.000049
58	45	14	57	44	14	751.048670	-0.000049
53	48	5	52	47	5	751.053580	-0.000117
53	48	6	52	47	6	751.053580	-0.000117
60	44	16	59	43	16	751.077110	-0.000024
60	44	17	59	43	17	751.077110	-0.000024
55	47	8	54	46	8	751.083380	0.000053
55	47	9	54	46	9	751.083380	0.000053
50	50	0	49	49	0	751.086470	-0.000043
50	50	1	49	49	1	751.086470	-0.000043
67	40	27	66	39	27	751.091680	0.000066
67	40	28	66	39	28	751.091680	0.000066
57	46	11	56	45	11	751.112380	-0.000199
57	46	12	56	45	12	751.112380	-0.000199
52	49	3	51	48	3	751.115910	-0.000785
69	39	30	68	38	30	751.115910	0.000239
52	49	4	51	48	4	751.115910	-0.000785
69	39	31	68	38	31	751.115910	0.000239
64	42	22	63	41	22	751.131830	-0.000235
64	42	23	63	41	23	751.131830	-0.000235
59	45	14	58	44	14	751.141550	0.000154
59	45	15	58	44	15	751.141550	0.000154
54	48	6	53	47	6	751.146430	-0.000159
54	48	7	53	47	7	751.146430	-0.000159
66	41	25	65	40	25	751.158290	0.000022
66	41	26	65	40	26	751.158290	0.000022
61	44	17	60	43	17	751.169670	-0.000024
61	44	18	60	43	18	751.169670	-0.000024
56	47	9	55	46	9	751.176160	0.000010
56	47	10	55	46	10	751.176160	0.000010
51	50	1	50	49	1	751.179610	0.000134
51	50	2	50	49	2	751.179610	0.000134
68	40	28	67	39	28	751.183360	0.000004
68	40	29	67	39	29	751.183360	0.000004
63	43	20	62	42	20	751.197090	-0.000275
63	43	21	62	42	21	751.197090	-0.000275
58	46	12	57	45	12	751.205410	0.000085
58	46	13	57	45	13	751.205410	0.000085
70	39	31	69	38	31	751.207090	0.000038
70	39	32	69	38	32	751.207090	0.000038
53	49	4	52	48	4	751.209300	-0.000323
53	49	5	52	48	5	751.209300	-0.000323
65	42	23	64	41	23	751.224470	0.000209
65	42	24	64	41	24	751.224470	0.000209
60	45	15	59	44	15	751.233670	-0.000362
60	45	16	59	44	16	751.233670	-0.000362
55	48	7	54	47	7	751.238990	-0.000469
55	48	8	54	47	8	751.238990	-0.000469
67	41	26	66	40	26	751.250010	-0.000211
67	41	27	66	40	27	751.250010	-0.000211
62	44	18	61	43	18	751.262130	-0.000064
62	44	19	61	43	19	751.262130	-0.000064
57	47	10	56	46	10	751.268920	-0.000027
57	47	11	56	46	11	751.268920	-0.000027
52	50	2	51	49	2	751.272500	0.000081
52	50	3	51	49	3	751.272500	0.000081
69	40	29	68	39	29	751.274560	-0.000436
69	40	30	68	39	30	751.274560	-0.000436
64	43	21	63	42	21	751.289250	-0.000454
64	43	22	63	42	22	751.289250	-0.000454
59	46	13	58	45	13	751.298020	-0.000003
71	39	32	70	38	32	751.298020	-0.000278
59	46	14	58	45	14	751.298020	-0.000003
71	39	33	70	38	33	751.298020	-0.000278
54	49	5	53	48	5	751.302170	-0.000347
54	49	6	53	48	6	751.302170	-0.000347
66	42	24	65	41	24	751.316590	0.000195
66	42	25	65	41	25	751.316590	0.000195
61	45	16	60	44	16	751.326850	0.000223

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
61	45	17	60	44	17	751.326850	0.000223
56	48	8	55	47	8	751.332410	0.000115
56	48	9	55	47	9	751.332410	0.000115
51	51	0	50	50	0	751.334950	-0.000068
51	51	1	50	50	1	751.334950	-0.000068
68	41	27	67	40	27	751.341980	-0.000106
68	41	28	67	40	28	751.341980	-0.000106
63	44	19	62	43	19	751.354910	0.000260
63	44	20	62	43	20	751.354910	0.000260
58	47	11	57	46	11	751.361630	-0.000074
58	47	12	57	46	12	751.361630	-0.000074
53	50	3	52	49	3	751.365510	0.000166
53	50	4	52	49	4	751.365510	0.000166
70	40	30	69	39	30	751.366510	-0.000026
70	40	31	69	39	31	751.366510	-0.000026
65	43	22	64	42	22	751.382020	0.000041
65	43	23	64	42	23	751.382020	0.000041
60	46	14	59	45	14	751.390670	-0.000021
60	46	15	59	45	15	751.390670	-0.000021
55	49	6	54	48	6	751.395240	-0.000153
55	49	7	54	48	7	751.395240	-0.000153
67	42	25	66	41	25	751.408100	-0.000343
67	42	26	66	41	26	751.408100	-0.000343
62	45	17	61	44	17	751.419140	-0.000033
62	45	18	61	44	18	751.419140	-0.000033
57	48	9	56	47	9	751.425170	0.000068
57	48	10	56	47	10	751.425170	0.000068
52	51	1	51	50	1	751.427920	-0.000033
52	51	2	51	50	2	751.427920	-0.000033
69	41	28	68	40	28	751.433630	-0.000227
69	41	29	68	40	29	751.433630	-0.000227
64	44	20	63	43	20	751.446920	-0.000128
64	44	21	63	43	21	751.446920	-0.000128
59	47	12	58	46	12	751.454630	0.000192
59	47	13	58	46	13	751.454630	0.000192
54	50	4	53	49	4	751.457910	-0.000333
71	40	31	70	39	31	751.457910	-0.000051
54	50	5	53	49	5	751.457910	-0.000333
71	40	32	70	39	32	751.457910	-0.000051
66	43	23	65	42	23	751.473690	-0.000491
66	43	24	65	42	24	751.473690	-0.000491
61	46	15	60	45	15	751.483260	-0.000057
61	46	16	60	45	16	751.483260	-0.000057
56	49	7	55	48	7	751.488230	-0.000009
56	49	8	55	48	8	751.488230	-0.000009
68	42	26	67	41	26	751.500460	0.000037
68	42	27	67	41	27	751.500460	0.000037
58	48	10	57	47	10	751.517940	0.000064
58	48	11	57	47	11	751.517940	0.000064
53	51	2	52	50	2	751.520760	-0.000118
53	51	3	52	50	3	751.520760	-0.000118
70	41	29	69	40	29	751.525390	-0.000151
70	41	30	69	40	30	751.525390	-0.000151
65	44	21	64	43	21	751.539390	0.000001
65	44	22	64	43	22	751.539390	0.000001
60	47	13	59	46	13	751.547110	-0.000016
60	47	14	59	46	14	751.547110	-0.000016
72	40	32	71	39	32	751.549150	-0.000133
72	40	33	71	39	33	751.549150	-0.000133
55	50	5	54	49	5	751.550980	-0.000139
55	50	6	54	49	6	751.550980	-0.000139
67	43	24	66	42	24	751.566190	-0.000133
67	43	25	66	42	25	751.566190	-0.000133
62	46	16	61	45	16	751.575970	0.000075
62	46	17	61	45	17	751.575970	0.000075
57	49	8	56	48	8	751.581240	0.000186
57	49	9	56	48	9	751.581240	0.000186
52	52	0	51	51	0	751.583410	0.000109
52	52	1	51	51	1	751.583410	0.000109
69	42	27	68	41	27	751.592420	0.000105
69	42	28	68	41	28	751.592420	0.000105
64	45	19	63	44	19	751.604340	0.000220
64	45	20	63	44	20	751.604340	0.000220
59	48	11	58	47	11	751.610400	-0.000224
59	48	12	58	47	12	751.610400	-0.000224
54	51	3	53	50	3	751.613800	0.000014
54	51	4	53	50	4	751.613800	0.000014
71	41	30	70	40	30	751.617240	0.000111
71	41	31	70	40	31	751.617240	0.000111
66	44	22	65	43	22	751.631770	0.000111
66	44	23	65	43	23	751.631770	0.000111
61	47	14	60	46	14	751.640120	0.000341
61	47	15	60	46	15	751.640120	0.000341
56	50	6	55	49	6	751.643750	-0.000230
56	50	7	55	49	7	751.643750	-0.000230
68	43	25	67	42	25	751.658330	-0.000056
68	43	26	67	42	26	751.658330	-0.000056
63	46	17	62	45	17	751.668620	0.000186
63	46	18	62	45	18	751.668620	0.000186
58	49	9	57	48	9	751.673800	-0.000048

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
58	49	10	57	48	10	751.673800	-0.000048
53	52	1	52	51	1	751.676450	0.000219
53	52	2	52	51	2	751.676450	0.000219
70	42	28	69	41	28	751.684060	-0.000057
70	42	29	69	41	29	751.684060	-0.000057
65	45	20	64	44	20	751.696740	0.000234
65	45	21	64	44	21	751.696740	0.000234
60	48	12	59	47	12	751.703240	-0.000091
60	48	13	59	47	13	751.703240	-0.000091
55	51	4	54	50	4	751.706810	0.000146
55	51	5	54	50	5	751.706810	0.000146
72	41	31	71	40	31	751.708710	0.000101
72	41	32	71	40	32	751.708710	0.000101
67	44	23	66	43	23	751.724280	0.000399
67	44	24	66	43	24	751.724280	0.000399
62	47	15	61	46	15	751.732570	0.000182
62	47	16	61	46	16	751.732570	0.000182
57	50	7	56	49	7	751.736720	-0.000085
57	50	8	56	49	8	751.736720	-0.000085
69	43	26	68	42	26	751.750650	0.000270
69	43	27	68	42	27	751.750650	0.000270
64	46	18	63	45	18	751.760930	-0.000001
64	46	19	63	45	19	751.760930	-0.000001
59	49	10	58	48	10	751.766510	-0.000097
59	49	11	58	48	11	751.766510	-0.000097
54	52	2	53	51	2	751.769260	0.000126
54	52	3	53	51	3	751.769260	0.000126
71	42	29	70	41	29	751.775720	-0.000113
71	42	30	70	41	30	751.775720	-0.000113
66	45	21	65	44	21	751.788840	-0.000003
66	45	22	65	44	22	751.788840	-0.000003
61	48	13	60	47	13	751.796100	0.000095
61	48	14	60	47	14	751.796100	0.000095
56	51	5	55	50	5	751.799490	-0.000034
73	41	32	72	40	32	751.799490	-0.000493
56	51	6	55	50	6	751.799490	-0.000034
73	41	33	72	40	33	751.799490	-0.000493
68	44	24	67	43	24	751.815550	-0.000475
68	44	25	67	43	25	751.815550	-0.000475
63	47	16	62	46	16	751.825280	0.000319
63	47	17	62	46	17	751.825280	0.000319
53	53	0	52	52	0	751.831520	0.000137
53	53	1	52	52	1	751.831520	0.000137
70	43	27	69	42	27	751.842100	-0.000190
70	43	28	69	42	28	751.842100	-0.000190
65	46	19	64	45	19	751.853240	-0.000126
65	46	20	64	45	20	751.853240	-0.000126
60	49	11	59	48	11	751.859420	0.000089
60	49	12	59	48	12	751.859420	0.000089
55	52	3	54	51	3	751.861900	-0.000113
55	52	4	54	51	4	751.861900	-0.000113
72	42	30	71	41	30	751.867420	-0.000041
72	42	31	71	41	31	751.867420	-0.000041
67	45	22	66	44	22	751.881480	0.000357
67	45	23	66	44	23	751.881480	0.000357
62	48	14	61	47	14	751.888610	-0.000036
62	48	15	61	47	15	751.888610	-0.000036
57	51	6	56	50	6	751.892450	0.000091
57	51	7	56	50	7	751.892450	0.000091
69	44	25	68	43	25	751.907470	-0.000630
69	44	26	68	43	26	751.907470	-0.000630
64	47	17	63	46	17	751.917300	-0.000180
64	47	18	63	46	18	751.917300	-0.000180
59	50	9	58	49	9	751.922530	0.000161
59	50	10	58	49	10	751.922530	0.000161
54	53	1	53	52	1	751.924410	0.000122
54	53	2	53	52	2	751.924410	0.000122
66	46	20	65	45	20	751.945830	0.000076
66	46	21	65	45	21	751.945830	0.000076
61	49	12	60	48	12	751.952090	0.000063
61	49	13	60	48	13	751.952090	0.000063
56	52	4	55	51	4	751.955000	0.000129
56	52	5	55	51	5	751.955000	0.000129
73	42	31	72	41	31	751.958880	-0.000098
73	42	32	72	41	32	751.958880	-0.000098
68	45	23	67	44	23	751.973290	-0.000054
68	45	24	67	44	24	751.973290	-0.000054
63	48	15	62	47	15	751.981660	0.000415
63	48	16	62	47	16	751.981660	0.000415
58	51	7	57	50	7	751.985120	-0.000042
58	51	8	57	50	8	751.985120	-0.000042
70	44	26	69	43	26	752.000550	0.000447
70	44	27	69	43	27	752.000550	0.000447
65	47	18	64	46	18	752.010040	0.000074
65	47	19	64	46	19	752.010040	0.000074
60	50	10	59	49	10	752.014800	-0.000314
60	50	11	59	49	11	752.014800	-0.000314
55	53	2	54	52	2	752.017320	0.000152
55	53	3	54	52	3	752.017320	0.000152
72	43	29	71	42	29	752.025260	-0.000613

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
72	43	30	71	42	30	752.025260	-0.000613
67	46	21	66	45	21	752.038210	0.000124
67	46	22	66	45	22	752.038210	0.000124
62	49	13	61	48	13	752.044710	0.000032
62	49	14	61	48	14	752.044710	0.000032
57	52	5	56	51	5	752.047600	-0.000115
57	52	6	56	51	6	752.047600	-0.000115
74	42	32	73	41	32	752.050150	-0.000256
74	42	33	73	41	33	752.050150	-0.000256
69	45	24	68	44	24	752.065670	0.000177
69	45	25	68	44	25	752.065670	0.000177
64	48	16	63	47	16	752.073890	0.000092
64	48	17	63	47	17	752.073890	0.000092
54	54	0	53	53	0	752.079380	0.000125
54	54	1	53	53	1	752.079380	0.000125
71	44	27	70	43	27	752.092440	0.000400
71	44	28	70	43	28	752.092440	0.000400
66	47	19	65	46	19	752.102390	-0.000002
66	47	20	65	46	20	752.102390	-0.000002
61	50	11	60	49	11	752.107390	-0.000432
61	50	12	60	49	12	752.107390	-0.000432
56	53	3	55	52	3	752.110240	0.000207
56	53	4	55	52	4	752.110240	0.000207
73	43	30	72	42	30	752.117190	-0.000339
73	43	31	72	42	31	752.117190	-0.000339
68	46	22	67	45	22	752.130620	0.000264
68	46	23	67	45	23	752.130620	0.000264
63	49	14	62	48	14	752.137380	0.000077
63	49	15	62	48	15	752.137380	0.000077
58	52	6	57	51	6	752.140390	-0.000128
58	52	7	57	51	7	752.140390	-0.000128
70	45	25	69	44	25	752.157340	-0.000235
70	45	26	69	44	26	752.157340	-0.000235
65	48	17	64	47	17	752.166400	0.000087
65	48	18	64	47	18	752.166400	0.000087
60	51	9	59	50	9	752.171100	0.000405
60	51	10	59	50	10	752.171100	0.000405
67	47	20	66	46	20	752.194590	-0.000183
67	47	21	66	46	21	752.194590	-0.000183
62	50	12	61	49	12	752.200180	-0.000320
62	50	13	61	49	13	752.200180	-0.000320
57	53	4	56	52	4	752.202840	-0.000028
57	53	5	56	52	5	752.202840	-0.000028
74	43	31	73	42	31	752.209170	0.000081
74	43	32	73	42	32	752.209170	0.000081
69	46	23	68	45	23	752.222900	0.000324
69	46	24	68	45	24	752.222900	0.000324
64	49	15	63	48	15	752.229840	-0.000044
64	49	16	63	48	16	752.229840	-0.000044
59	52	7	58	51	7	752.233030	-0.000273
59	52	8	58	51	8	752.233030	-0.000273
71	45	26	70	44	26	752.249910	0.000316
71	45	27	70	44	27	752.249910	0.000316
66	48	18	65	47	18	752.258790	0.000013
66	48	19	65	47	19	752.258790	0.000013
61	51	10	60	50	10	752.263580	0.000168
61	51	11	60	50	11	752.263580	0.000168
56	54	2	55	53	2	752.264880	-0.000119
56	54	3	55	53	3	752.264880	-0.000119
73	44	29	72	43	29	752.275010	-0.000646
73	44	30	72	43	30	752.275010	-0.000646
68	47	21	67	46	21	752.286790	-0.000315
68	47	22	67	46	22	752.286790	-0.000315
63	50	13	62	49	13	752.292990	-0.000146
63	50	14	62	49	14	752.292990	-0.000146
58	53	5	57	52	5	752.295730	0.000041
58	53	6	57	52	6	752.295730	0.000041
75	43	32	74	42	32	752.300150	-0.000407
75	43	33	74	42	33	752.300150	-0.000407
70	46	24	69	45	24	752.314640	-0.000095
70	46	25	69	45	25	752.314640	-0.000095
65	49	16	64	48	16	752.322670	0.000250
65	49	17	64	48	17	752.322670	0.000250
55	55	0	54	54	0	752.326550	-0.000368
55	55	1	54	54	1	752.326550	-0.000368
72	45	27	71	44	27	752.341450	-0.000083
72	45	28	71	44	28	752.341450	-0.000083
67	48	19	66	47	19	752.351160	-0.000038
67	48	20	66	47	20	752.351160	-0.000038
62	51	11	61	50	11	752.355920	-0.000183
62	51	12	61	50	12	752.355920	-0.000183
57	54	3	56	53	3	752.357760	-0.000083
57	54	4	56	53	4	752.357760	-0.000083
74	44	30	73	43	30	752.368070	0.000730
74	44	31	73	43	31	752.368070	0.000730
64	50	14	63	49	14	752.385900	0.000158
64	50	15	63	49	15	752.385900	0.000158
59	53	6	58	52	6	752.388330	-0.000150
59	53	7	58	52	7	752.388330	-0.000150
71	46	25	70	45	25	752.407250	0.000429

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
71	46	26	70	45	26	752.407250	0.000429
66	49	17	65	48	17	752.414890	-0.000033
66	49	18	65	48	18	752.414890	-0.000033
56	55	1	55	54	1	752.419700	-0.000084
56	55	2	55	54	2	752.419700	-0.000084
73	45	28	72	44	28	752.433730	0.000322
73	45	29	72	44	29	752.433730	0.000322
68	48	20	67	47	20	752.443420	-0.000148
68	48	21	67	47	21	752.443420	-0.000148
63	51	12	62	50	12	752.448360	-0.000397
63	51	13	62	50	13	752.448360	-0.000397
58	54	4	57	53	4	752.450930	0.000269
58	54	5	57	53	5	752.450930	0.000269
75	44	31	74	43	31	752.459630	0.000696
75	44	32	74	43	32	752.459630	0.000696
70	47	23	69	46	23	752.471520	-0.000066
70	47	24	69	46	24	752.471520	-0.000066
65	50	15	64	49	15	752.478200	-0.000109
65	50	16	64	49	16	752.478200	-0.000109
72	46	26	71	45	26	752.498870	0.000027
72	46	27	71	45	27	752.498870	0.000027
67	49	18	66	48	18	752.507110	-0.000266
67	49	19	66	48	19	752.507110	-0.000266
62	52	10	61	51	10	752.511390	-0.000106
62	52	11	61	51	11	752.511390	-0.000106
57	55	2	56	54	2	752.512550	-0.000066
57	55	3	56	54	3	752.512550	-0.000066
69	48	21	68	47	21	752.536470	0.000572
69	48	22	68	47	22	752.536470	0.000572
64	51	13	63	50	13	752.541410	0.000034
64	51	14	63	50	14	752.541410	0.000034
59	54	5	58	53	5	752.544080	0.000627
59	54	6	58	53	6	752.544080	0.000627
71	47	24	70	46	24	752.563950	0.000206
71	47	25	70	46	25	752.563950	0.000206
66	50	16	65	49	16	752.570730	-0.000105
66	50	17	65	49	17	752.570730	-0.000105
56	56	0	55	55	0	752.574050	-0.000320
56	56	1	55	55	1	752.574050	-0.000320
73	46	27	72	45	27	752.591380	0.000580
73	46	28	72	45	28	752.591380	0.000580
68	49	19	67	48	19	752.599660	-0.000127
68	49	20	67	48	20	752.599660	-0.000127
63	52	11	62	51	11	752.604390	0.000221
63	52	12	62	51	12	752.604390	0.000221
58	55	3	57	54	3	752.605540	0.000101
58	55	4	57	54	4	752.605540	0.000101
75	45	30	74	44	30	752.617410	0.000507
75	45	31	74	44	31	752.617410	0.000507
70	48	22	69	47	22	752.628340	0.000181
70	48	23	69	47	23	752.628340	0.000181
65	51	14	64	50	14	752.633940	-0.000023
65	51	15	64	50	15	752.633940	-0.000023
60	54	6	59	53	6	752.636310	0.000091
60	54	7	59	53	7	752.636310	0.000091
67	50	17	66	49	17	752.663250	-0.000068
67	50	18	66	49	18	752.663250	-0.000068
57	56	1	56	55	1	752.666970	-0.000236
57	56	2	56	55	2	752.666970	-0.000236
74	46	28	73	45	28	752.682910	0.000228
74	46	29	73	45	29	752.682910	0.000228
69	49	20	68	48	20	752.692330	0.000184
69	49	21	68	48	21	752.692330	0.000184
64	52	12	63	51	12	752.696750	-0.000058
64	52	13	63	51	13	752.696750	-0.000058
59	55	4	58	54	4	752.698090	-0.000142
59	55	5	58	54	5	752.698090	-0.000142
76	45	31	75	44	31	752.709010	0.000482
76	45	32	75	44	32	752.709010	0.000482
71	48	23	70	47	23	752.720220	-0.000148
71	48	24	70	47	24	752.720220	-0.000148
66	51	15	65	50	15	752.726160	-0.000358
66	51	16	65	50	16	752.726160	-0.000358
61	54	7	60	53	7	752.728760	-0.000200
61	54	8	60	53	8	752.728760	-0.000200
73	47	26	72	46	26	752.748410	0.000540
73	47	27	72	46	27	752.748410	0.000540
68	50	18	67	49	18	752.755730	-0.000034
68	50	19	67	49	19	752.755730	-0.000034
58	56	2	57	55	2	752.759650	-0.000380
63	53	10	62	52	10	752.759650	0.000278
58	56	3	57	55	3	752.759650	-0.000380
63	53	11	62	52	11	752.759650	0.000278
75	46	29	74	45	29	752.774500	0.000012
75	46	30	74	45	30	752.774500	0.000012
70	49	21	69	48	21	752.784550	0.000089
70	49	22	69	48	22	752.784550	0.000089
65	52	13	64	51	13	752.789370	-0.000036
65	52	14	64	51	14	752.789370	-0.000036
60	55	5	59	54	5	752.790940	-0.000067

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
60	55	6	59	54	6	752.790940	-0.000067
72	48	24	71	47	24	752.812530	0.000007
72	48	25	71	47	25	752.812530	0.000007
67	51	16	66	50	16	752.818780	-0.000243
67	51	17	66	50	17	752.818780	-0.000243
57	57	0	56	56	0	752.821700	0.000088
57	57	1	56	56	1	752.821700	0.000088
74	47	27	73	46	27	752.839870	0.000044
74	47	28	73	46	28	752.839870	0.000044
59	56	3	58	55	3	752.852320	-0.000504
64	53	11	63	52	11	752.852320	0.000301
59	56	4	58	55	4	752.852320	-0.000504
64	53	12	63	52	12	752.852320	0.000301
71	49	22	70	48	22	752.876810	0.000091
71	49	23	70	48	23	752.876810	0.000091
66	52	14	65	51	14	752.881860	-0.000111
66	52	15	65	51	15	752.881860	-0.000111
73	48	25	72	47	25	752.905080	0.000453
73	48	26	72	47	26	752.905080	0.000453
58	57	1	57	56	1	752.914460	0.000029
58	57	2	57	56	2	752.914460	0.000029
75	47	28	74	46	28	752.931980	0.000255
75	47	29	74	46	29	752.931980	0.000255
70	50	20	69	49	20	752.940670	0.000160
70	50	21	69	49	21	752.940670	0.000160
65	53	12	64	52	12	752.944710	0.000070
65	53	13	64	52	13	752.944710	0.000070
77	46	31	76	45	31	752.957980	0.000112
77	46	32	76	45	32	752.957980	0.000112
72	49	23	71	48	23	752.969150	0.000215
72	49	24	71	48	24	752.969150	0.000215
67	52	15	66	51	15	752.974920	0.000414
67	52	16	66	51	16	752.974920	0.000414
74	48	26	73	47	26	752.997160	0.000503
74	48	27	73	47	27	752.997160	0.000503
59	57	2	58	56	2	753.007040	-0.000189
64	54	10	63	53	10	753.007040	0.000007
59	57	3	58	56	3	753.007040	-0.000189
64	54	11	63	53	11	753.007040	0.000007
76	47	29	75	46	29	753.023430	-0.000111
76	47	30	75	46	30	753.023430	-0.000111
71	50	21	70	49	21	753.032260	-0.000554
71	50	22	70	49	22	753.032260	-0.000554
66	53	13	65	52	13	753.037100	-0.000127
66	53	14	65	52	14	753.037100	-0.000127
61	56	5	60	55	5	753.038280	-0.000069
61	56	6	60	55	6	753.038280	-0.000069
73	49	24	72	48	24	753.061510	0.000432
73	49	25	72	48	25	753.061510	0.000432
58	58	0	57	57	0	753.068850	0.000203
58	58	1	57	57	1	753.068850	0.000203
75	48	27	74	47	27	753.088710	0.000082
75	48	28	74	47	28	753.088710	0.000082
60	57	3	59	56	3	753.100000	0.000001
65	54	11	64	53	11	753.100000	0.000342
60	57	4	59	56	4	753.100000	0.000001
65	54	12	64	53	12	753.100000	0.000342
77	47	30	76	46	30	753.115090	-0.000203
77	47	31	76	46	31	753.115090	-0.000203
72	50	22	71	49	22	753.124700	-0.000364
72	50	23	71	49	23	753.124700	-0.000364
67	53	14	66	52	14	753.129770	-0.000006
67	53	15	66	52	15	753.129770	-0.000006
74	49	25	73	48	25	753.153290	0.000111
74	49	26	73	48	26	753.153290	0.000111
59	58	1	58	57	1	753.161570	0.000130
59	58	2	58	57	2	753.161570	0.000130
76	48	28	75	47	28	753.180630	0.000104
76	48	29	75	47	29	753.180630	0.000104
71	51	20	70	50	20	753.189030	0.000378
71	51	21	70	50	21	753.189030	0.000378
66	54	12	65	53	12	753.192400	0.000142
66	54	13	65	53	13	753.192400	0.000142
78	47	31	77	46	31	753.206870	-0.000088
78	47	32	77	46	32	753.206870	-0.000088
73	50	23	72	49	23	753.216930	-0.000333
73	50	24	72	49	24	753.216930	-0.000333
68	53	15	67	52	15	753.222440	0.000151
68	53	16	67	52	16	753.222440	0.000151
63	56	7	62	55	7	753.223770	-0.000008
63	56	8	62	55	8	753.223770	-0.000008
75	49	26	74	48	26	753.245130	-0.000084
75	49	27	74	48	27	753.245130	-0.000084
70	52	18	69	51	18	753.251760	-0.000106
70	52	19	69	51	19	753.251760	-0.000106
60	58	2	59	57	2	753.254100	-0.000111
65	55	10	64	54	10	753.254100	-0.000375
60	58	3	59	57	3	753.254100	-0.000111
65	55	11	64	54	11	753.254100	-0.000375
77	48	29	76	47	29	753.272530	0.000169

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
77	48	30	76	47	30	753.272530	0.000169
72	51	21	71	50	21	753.281550	0.000609
72	51	22	71	50	22	753.281550	0.000609
62	57	5	61	56	5	753.285210	-0.000275
67	54	13	66	53	13	753.285210	0.000384
62	57	6	61	56	6	753.285210	-0.000275
67	54	14	66	53	14	753.285210	0.000384
69	53	16	68	52	16	753.314830	0.000069
69	53	17	68	52	17	753.314830	0.000069
59	59	0	58	58	0	753.315680	0.000212
59	59	1	58	58	1	753.315680	0.000212
76	49	27	75	48	27	753.336900	-0.000282
76	49	28	75	48	28	753.336900	-0.000282
61	58	3	60	57	3	753.346920	-0.000049
66	55	11	65	54	11	753.346920	-0.000169
61	58	4	60	57	4	753.346920	-0.000049
66	55	12	65	54	12	753.346920	-0.000169
73	51	22	72	50	22	753.373090	-0.000093
73	51	23	72	50	23	753.373090	-0.000093
60	59	1	59	58	1	753.408400	0.000161
60	59	2	59	58	2	753.408400	0.000161
77	49	28	76	48	28	753.428720	-0.000366
77	49	29	76	48	29	753.428720	-0.000366
72	52	20	71	51	20	753.437050	0.000486
72	52	21	71	51	21	753.437050	0.000486
67	55	12	66	54	12	753.439700	0.000035
67	55	13	66	54	13	753.439700	0.000035
79	48	31	78	47	31	753.456040	0.000230
79	48	32	78	47	32	753.456040	0.000230
74	51	23	73	50	23	753.465460	0.000079
74	51	24	73	50	24	753.465460	0.000079
64	57	7	63	56	7	753.470360	-0.000502
69	54	15	68	53	15	753.470360	0.000512
64	57	8	63	56	8	753.470360	-0.000502
69	54	16	68	53	16	753.470360	0.000512
76	50	26	75	49	26	753.493750	0.000216
76	50	27	75	49	27	753.493750	0.000216
71	53	18	70	52	18	753.499940	0.000347
71	53	19	70	52	19	753.499940	0.000347
66	56	10	65	55	10	753.501670	-0.000042
66	56	11	65	55	11	753.501670	-0.000042
78	49	29	77	48	29	753.521150	0.000217
78	49	30	77	48	30	753.521150	0.000217
73	52	21	72	51	21	753.529100	0.000251
73	52	22	72	51	22	753.529100	0.000251
63	58	5	62	57	5	753.532230	-0.000164
68	55	13	67	54	13	753.532230	0.000029
63	58	6	62	57	6	753.532230	-0.000164
68	55	14	67	54	14	753.532230	0.000029
80	48	32	79	47	32	753.547450	0.000037
80	48	33	79	47	33	753.547450	0.000037
60	60	0	59	59	0	753.562100	0.000027
70	54	16	69	53	16	753.562100	-0.000203
60	60	1	59	59	1	753.562100	0.000027
70	54	17	69	53	17	753.562100	-0.000203
77	50	27	76	49	27	753.585340	-0.000168
77	50	28	76	49	28	753.585340	-0.000168
62	59	3	61	58	3	753.594110	0.000396
67	56	11	66	55	11	753.594110	-0.000183
62	59	4	61	58	4	753.594110	0.000396
67	56	12	66	55	12	753.594110	-0.000183
79	49	30	78	48	30	753.613050	0.000343
79	49	31	78	48	31	753.613050	0.000343
74	52	22	73	51	22	753.621020	-0.000058
74	52	23	73	51	23	753.621020	-0.000058
78	50	28	77	49	28	753.676700	-0.000721
78	50	29	77	49	29	753.676700	-0.000721
80	49	31	79	48	31	753.704570	0.000170
80	49	32	79	48	32	753.704570	0.000170
75	52	23	74	51	23	753.713090	-0.000171
75	52	24	74	51	24	753.713090	-0.000171
65	58	7	64	57	7	753.717410	-0.000321
70	55	15	69	54	15	753.717410	0.000222
65	58	8	64	57	8	753.717410	-0.000321
70	55	16	69	54	16	753.717410	0.000222
77	51	26	76	50	26	753.741740	0.000105
77	51	27	76	50	27	753.741740	0.000105
72	54	18	71	53	18	753.747350	0.000243
72	54	19	71	53	19	753.747350	0.000243
74	53	21	73	52	21	753.776320	-0.000209
74	53	22	73	52	22	753.776320	-0.000209
64	59	5	63	58	5	753.778920	-0.000181
64	59	6	63	58	6	753.778920	-0.000181
81	49	32	80	48	32	753.796140	0.000109
81	49	33	80	48	33	753.796140	0.000109
61	61	0	60	60	0	753.808580	0.000105
61	61	1	60	60	1	753.808580	0.000105
71	55	16	70	54	16	753.809930	0.000303
71	55	17	70	54	17	753.809930	0.000303
78	51	27	77	50	27	753.832970	-0.000634

Continuation, see next page

Continuation of Table A 2: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
78	51	28	77	50	28	753.832970	-0.000634
68	57	11	67	56	11	753.841390	0.000096
68	57	12	67	56	12	753.841390	0.000096
80	50	30	79	49	30	753.861070	0.000026
80	50	31	79	49	31	753.861070	0.000026
75	53	22	74	52	22	753.868840	0.000094
75	53	23	74	52	23	753.868840	0.000094
74	54	20	73	53	20	753.931640	-0.000100
74	54	21	73	53	21	753.931640	-0.000100
81	50	31	80	49	31	753.952480	-0.000278
81	50	32	80	49	32	753.952480	-0.000278
76	53	23	75	52	23	753.960630	-0.000292
76	53	24	75	52	24	753.960630	-0.000292
66	59	7	65	58	7	753.964290	-0.000107
71	56	15	70	55	15	753.964290	-0.000032
66	59	8	65	58	8	753.964290	-0.000107
71	56	16	70	55	16	753.964290	-0.000032
78	52	26	77	51	26	753.989180	-0.000316
78	52	27	77	51	27	753.989180	-0.000316
68	58	10	67	57	10	753.995220	-0.000315
68	58	11	67	57	11	753.995220	-0.000315
80	51	29	79	50	29	754.017530	0.000169
80	51	30	79	50	30	754.017530	0.000169
75	54	21	74	53	21	754.023780	-0.000212
75	54	22	74	53	22	754.023780	-0.000212
82	50	32	81	49	32	754.044340	-0.000053
82	50	33	81	49	33	754.044340	-0.000053
62	62	0	61	61	0	754.054680	0.000020
62	62	1	61	61	1	754.054680	0.000020
72	56	16	71	55	16	754.056530	-0.000206
72	56	17	71	55	17	754.056530	-0.000206
64	61	3	63	60	3	754.086400	-0.000185
64	61	4	63	60	4	754.086400	-0.000185
81	51	30	80	50	30	754.109330	0.000181
81	51	31	80	50	31	754.109330	0.000181
76	54	22	75	53	22	754.116390	0.000196
76	54	23	75	53	23	754.116390	0.000196
75	55	20	74	54	20	754.178940	-0.000059
75	55	21	74	54	21	754.178940	-0.000059
77	54	23	76	53	23	754.208340	-0.000019
77	54	24	76	53	24	754.208340	-0.000019
67	60	7	66	59	7	754.210730	-0.000109
72	57	15	71	56	15	754.210730	-0.000498
67	60	8	66	59	8	754.210730	-0.000109
72	57	16	71	56	16	754.210730	-0.000498
79	53	26	78	52	26	754.236910	-0.000219
79	53	27	78	52	27	754.236910	-0.000219
69	59	10	68	58	10	754.241600	-0.000523
74	56	18	73	55	18	754.241600	0.000137
69	59	11	68	58	11	754.241600	-0.000523
74	56	19	73	55	19	754.241600	0.000137
81	52	29	80	51	29	754.265280	0.000052
81	52	30	80	51	30	754.265280	0.000052
76	55	21	75	54	21	754.271450	0.000223
76	55	22	75	54	22	754.271450	0.000223
63	63	0	62	62	0	754.300740	0.000105
63	63	1	62	62	1	754.300740	0.000105
73	57	16	72	56	16	754.303430	-0.000193
73	57	17	72	56	17	754.303430	-0.000193
65	62	3	64	61	3	754.332950	0.000249
65	62	4	64	61	4	754.332950	0.000249
82	52	30	81	51	30	754.356960	-0.000060
82	52	31	81	51	31	754.356960	-0.000060
77	55	22	76	54	22	754.364210	0.000783
77	55	23	76	54	23	754.364210	0.000783
76	56	20	75	55	20	754.425940	-0.000087
76	56	21	75	55	21	754.425940	-0.000087
78	55	23	77	54	23	754.455390	-0.000184
78	55	24	77	54	24	754.455390	-0.000184
80	54	26	79	53	26	754.484820	0.000281
80	54	27	79	53	27	754.484820	0.000281
70	60	10	69	59	10	754.488310	-0.000189
75	57	18	74	56	18	754.488310	-0.000004
70	60	11	69	59	11	754.488310	-0.000189
75	57	19	74	56	19	754.488310	-0.000004
82	53	29	81	52	29	754.512670	-0.000180
82	53	30	81	52	30	754.512670	-0.000180
77	56	21	76	55	21	754.518350	0.000106
77	56	22	76	55	22	754.518350	0.000106
64	64	0	63	63	0	754.546630	0.000232
64	64	1	63	63	1	754.546630	0.000232
74	58	16	73	57	16	754.549980	-0.000317
74	58	17	73	57	17	754.549980	-0.000317
83	53	30	82	52	30	754.604880	0.000233
83	53	31	82	52	31	754.604880	0.000233
77	57	20	76	56	20	754.672850	0.000004
77	57	21	76	56	21	754.672850	0.000004
79	56	23	78	55	23	754.702220	-0.000335
79	56	24	78	55	24	754.702220	-0.000335
74	59	15	73	58	15	754.704030	-0.000363

Continuation, see next page

Continuation of **Table A 2**: $\nu_{35} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
74	59	16	73	58	16	754.704030	-0.000363
81	55	26	80	54	26	754.731790	0.000071
81	55	27	80	54	27	754.731790	0.000071
83	54	29	82	53	29	754.760280	0.000032
83	54	30	82	53	30	754.760280	0.000032
65	65	0	64	64	0	754.792350	0.000399
65	65	1	64	64	1	754.792350	0.000399
67	64	3	66	63	3	754.824440	0.000141
67	64	4	66	63	4	754.824440	0.000141
78	58	20	77	57	20	754.919110	-0.000324
78	58	21	77	57	21	754.919110	-0.000324
82	56	26	81	55	26	754.978590	-0.000086
82	56	27	81	55	27	754.978590	-0.000086
77	59	18	76	58	18	754.981240	-0.000114
77	59	19	76	58	19	754.981240	-0.000114
79	59	20	78	58	20	755.165270	-0.000529
79	59	21	78	58	21	755.165270	-0.000529
83	57	26	82	56	26	755.224700	-0.000697
83	57	27	82	56	27	755.224700	-0.000697
78	60	18	77	59	18	755.227680	0.000143
78	60	19	77	59	19	755.227680	0.000143
69	66	3	68	65	3	755.315530	0.000488
69	66	4	68	65	4	755.315530	0.000488
70	67	3	69	66	3	755.560070	-0.000021
70	67	4	69	66	4	755.560070	-0.000021
71	68	3	70	67	3	755.805060	0.000136
71	68	4	70	67	4	755.805060	0.000136

Table A 3: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$ /cm ⁻¹	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$ /cm ⁻¹
97	10	87	98	10	88	782.380480	-0.000362
97	11	87	98	11	88	782.380480	-0.000362
96	10	86	97	10	87	782.459070	-0.000264
96	11	86	97	11	87	782.459070	-0.000264
98	8	90	99	8	91	782.473230	-0.000007
98	9	90	99	9	91	782.473230	-0.000007
95	10	85	96	10	86	782.537570	-0.000261
95	11	85	96	11	86	782.537570	-0.000261
97	8	89	98	8	90	782.551560	-0.000063
97	9	89	98	9	90	782.551560	-0.000063
98	7	91	99	7	92	782.558700	0.000299
98	8	91	99	8	92	782.558700	0.000299
94	10	84	95	10	85	782.616200	-0.000140
94	11	84	95	11	85	782.616200	-0.000140
96	8	88	97	8	89	782.630140	0.000131
96	9	88	97	9	89	782.630140	0.000131
97	7	90	98	7	91	782.636850	0.000128
97	8	90	98	8	91	782.636850	0.000128
93	10	83	94	10	84	782.695200	0.000341
93	11	83	94	11	84	782.695200	0.000341
94	9	85	95	9	86	782.701310	-0.000394
94	10	85	95	10	86	782.701310	-0.000394
95	8	87	96	8	88	782.708750	0.000342
95	9	87	96	9	88	782.708750	0.000342
93	9	84	94	9	85	782.780240	0.000065
93	10	84	94	10	85	782.780240	0.000065
94	8	86	95	8	87	782.786840	0.000013
94	9	86	95	9	87	782.786840	0.000013
95	7	88	96	7	89	782.793520	0.000117
95	8	88	96	8	89	782.793520	0.000117
91	10	81	92	10	82	782.851950	0.000031
91	11	81	92	11	82	782.851950	0.000031
92	9	83	93	9	84	782.858330	-0.000319
92	10	83	93	10	84	782.858330	-0.000319
93	8	85	94	8	86	782.865180	-0.000071
93	9	85	94	9	86	782.865180	-0.000071
94	7	87	95	7	88	782.871770	0.000007
94	8	87	95	8	88	782.871770	0.000007
90	10	80	91	10	81	782.930660	0.000201
90	11	80	91	11	81	782.930660	0.000201
91	9	82	92	9	83	782.937060	-0.000078
91	10	82	92	10	83	782.937060	-0.000078
92	8	84	93	8	85	782.943720	0.000042
92	9	84	93	9	85	782.943720	0.000042
93	7	86	94	7	87	782.949800	-0.000329
93	8	86	94	8	87	782.949800	-0.000329
94	6	88	95	6	89	782.956410	-0.000131
94	7	88	95	7	89	782.956410	-0.000131
95	5	90	96	5	91	782.962610	-0.000348
95	6	90	96	6	91	782.962610	-0.000348
98	2	96	99	2	97	782.982130	-0.000185
98	3	96	99	3	97	782.982130	-0.000185

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
89	10	79	90	10	80	783.008970	-0.000021
89	11	79	90	11	80	783.008970	-0.000021
90	9	81	91	9	82	783.015450	-0.000179
90	10	81	91	10	82	783.015450	-0.000179
91	8	83	92	8	84	783.022140	0.000032
91	9	83	92	9	84	783.022140	0.000032
92	7	85	93	7	86	783.027960	-0.000547
92	8	85	93	8	86	783.027960	-0.000547
93	6	87	94	6	88	783.034650	-0.000206
93	7	87	94	7	88	783.034650	-0.000206
94	5	89	95	5	90	783.041300	0.000096
94	6	89	95	6	90	783.041300	0.000096
97	2	95	98	2	96	783.060340	-0.000032
97	3	95	98	3	96	783.060340	-0.000032
89	9	80	90	9	81	783.094310	0.000179
89	10	80	90	10	81	783.094310	0.000179
90	8	82	91	8	83	783.100570	0.000015
90	9	82	91	9	83	783.100570	0.000015
91	7	84	92	7	85	783.106590	-0.000296
91	8	84	92	8	85	783.106590	-0.000296
93	5	88	94	5	89	783.119770	0.000313
93	6	88	94	6	89	783.119770	0.000313
88	9	79	89	9	80	783.172690	0.000061
88	10	79	89	10	80	783.172690	0.000061
89	8	81	90	8	82	783.178740	-0.000259
89	9	81	90	9	82	783.178740	-0.000259
91	6	85	92	6	86	783.191220	-0.000282
91	7	85	92	7	86	783.191220	-0.000282
92	5	87	93	5	88	783.197540	-0.000172
92	6	87	93	6	88	783.197540	-0.000172
87	9	78	88	9	79	783.250660	-0.000472
87	10	78	88	10	79	783.250660	-0.000472
88	8	80	89	8	81	783.257230	-0.000215
88	9	80	89	9	81	783.257230	-0.000215
90	6	84	91	6	85	783.269490	-0.000332
90	7	84	91	7	85	783.269490	-0.000332
91	5	86	92	5	87	783.276220	0.000238
91	6	86	92	6	87	783.276220	0.000238
92	4	88	93	4	89	783.281850	-0.000302
92	5	88	93	5	89	783.281850	-0.000302
93	3	90	94	3	91	783.288480	0.000122
93	4	90	94	4	91	783.288480	0.000122
94	2	92	95	2	93	783.294390	-0.000208
94	3	92	95	3	93	783.294390	-0.000208
85	10	75	86	10	76	783.323700	0.000551
85	11	75	86	11	76	783.323700	0.000551
86	9	77	87	9	78	783.329300	-0.000329
86	10	77	87	10	78	783.329300	-0.000329
87	8	79	88	8	80	783.335350	-0.000553
87	9	79	88	9	80	783.335350	-0.000553
88	7	81	89	7	82	783.342560	0.000500
88	8	81	89	8	82	783.342560	0.000500
89	6	83	90	6	84	783.347870	-0.000294
89	7	83	90	7	84	783.347870	-0.000294
90	5	85	91	5	86	783.354000	-0.000257
90	6	85	91	6	86	783.354000	-0.000257
91	4	87	92	4	88	783.360140	-0.000223
91	5	87	92	5	88	783.360140	-0.000223
92	3	89	93	3	90	783.366360	-0.000146
92	4	89	93	4	90	783.366360	-0.000146
84	10	74	85	10	75	783.402040	0.000352
84	11	74	85	11	75	783.402040	0.000352
85	9	76	86	9	77	783.407830	-0.000302
85	10	76	86	10	77	783.407830	-0.000302
86	8	78	87	8	79	783.413940	-0.000419
86	9	78	87	9	79	783.413940	-0.000419
87	7	80	88	7	81	783.420560	0.000105
87	8	80	88	8	81	783.420560	0.000105
88	6	82	89	6	83	783.426450	-0.000043
88	7	82	89	7	83	783.426450	-0.000043
89	5	84	90	5	85	783.432600	0.000074
89	6	84	90	6	85	783.432600	0.000074
90	4	86	91	4	87	783.438030	-0.000544
90	5	86	91	5	87	783.438030	-0.000544
91	3	88	92	3	89	783.444470	-0.000184
91	4	88	92	4	89	783.444470	-0.000184
92	2	90	93	2	91	783.450270	-0.000513
92	3	90	93	3	91	783.450270	-0.000513
94	0	94	95	0	95	783.462860	-0.000329
94	1	94	95	1	95	783.462860	-0.000329
83	10	73	84	10	74	783.480460	0.000240
83	11	73	84	11	74	783.480460	0.000240
84	9	75	85	9	76	783.486430	-0.000201
84	10	75	85	10	76	783.486430	-0.000201
85	8	77	86	8	78	783.493070	0.000260
85	9	77	86	9	78	783.493070	0.000260
86	7	79	87	7	80	783.498700	-0.000158
86	8	79	87	8	80	783.498700	-0.000158
87	6	81	88	6	82	783.504650	-0.000189
87	7	81	88	7	82	783.504650	-0.000189

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
88	5	83	89	5	84	783.511020	0.000216
88	6	83	89	6	84	783.511020	0.000216
89	4	85	90	4	86	783.516420	-0.000374
89	5	85	90	5	86	783.516420	-0.000374
90	3	87	91	3	88	783.523000	0.000188
90	4	87	91	4	88	783.523000	0.000188
91	2	89	92	2	90	783.528710	-0.000172
91	3	89	92	3	90	783.528710	-0.000172
93	0	93	94	0	94	783.540740	-0.000447
93	1	93	94	1	94	783.540740	-0.000447
82	10	72	83	10	73	783.558710	-0.000039
82	11	72	83	11	73	783.558710	-0.000039
83	9	74	84	9	75	783.565060	-0.000070
83	10	74	84	10	75	783.565060	-0.000070
84	8	76	85	8	77	783.571440	0.000175
84	9	76	85	9	77	783.571440	0.000175
85	7	78	86	7	79	783.577150	-0.000100
85	8	78	86	8	79	783.577150	-0.000100
86	6	80	87	6	81	783.583270	0.000092
86	7	80	87	7	81	783.583270	0.000092
88	4	84	89	4	85	783.595010	0.000000
88	5	84	89	5	85	783.595010	0.000000
89	3	86	90	3	87	783.600860	-0.000110
89	4	86	90	4	87	783.600860	-0.000110
90	2	88	91	2	89	783.606870	-0.000115
90	3	88	91	3	89	783.606870	-0.000115
92	0	92	93	0	93	783.618550	-0.000628
92	1	92	93	1	93	783.618550	-0.000628
81	10	71	82	10	72	783.637170	-0.000088
81	11	71	82	11	72	783.637170	-0.000088
82	9	73	83	9	74	783.643630	0.000008
82	10	73	83	10	74	783.643630	0.000008
83	8	75	84	8	76	783.649990	0.000270
83	9	75	84	9	76	783.649990	0.000270
84	7	77	85	7	78	783.655340	-0.000311
84	8	77	85	8	78	783.655340	-0.000311
85	6	79	86	6	80	783.661250	-0.000276
85	7	79	86	7	80	783.661250	-0.000276
86	5	81	87	5	82	783.667710	0.000345
86	6	81	87	6	82	783.667710	0.000345
87	4	83	88	4	84	783.673150	-0.000081
87	5	83	88	5	84	783.673150	-0.000081
88	3	85	89	3	86	783.679250	0.000117
88	4	85	89	4	86	783.679250	0.000117
89	2	87	90	2	88	783.684900	-0.000189
89	3	87	90	3	88	783.684900	-0.000189
91	0	91	92	0	92	783.696820	-0.000357
91	1	91	92	1	92	783.696820	-0.000357
80	10	70	81	10	71	783.715710	-0.000066
80	11	70	81	11	71	783.715710	-0.000066
81	9	72	82	9	73	783.721740	-0.000371
81	10	72	82	10	73	783.721740	-0.000371
82	8	74	83	8	75	783.728250	0.000080
82	9	74	83	9	75	783.728250	0.000080
83	7	76	84	7	77	783.734070	0.000019
83	8	76	84	8	77	783.734070	0.000019
84	6	78	85	6	79	783.739760	-0.000107
84	7	78	85	7	79	783.739760	-0.000107
85	5	80	86	5	81	783.745710	0.000065
85	6	80	86	6	81	783.745710	0.000065
86	4	82	87	4	83	783.751350	-0.000097
86	5	82	87	5	83	783.751350	-0.000097
88	2	86	89	2	87	783.763810	0.000620
88	3	86	89	3	87	783.763810	0.000620
90	0	90	91	0	91	783.775010	-0.000164
90	1	90	91	1	91	783.775010	-0.000164
79	10	69	80	10	70	783.794100	-0.000176
79	11	69	80	11	70	783.794100	-0.000176
80	9	71	81	9	72	783.800340	-0.000255
80	10	71	81	10	72	783.800340	-0.000255
81	8	73	82	8	74	783.806860	0.000248
81	9	73	82	9	74	783.806860	0.000248
82	7	75	83	7	76	783.812130	-0.000323
82	8	75	83	8	76	783.812130	-0.000323
83	6	77	84	6	78	783.818010	-0.000195
83	7	77	84	7	78	783.818010	-0.000195
84	5	79	85	5	80	783.823660	-0.000273
84	6	79	85	6	80	783.823660	-0.000273
85	4	81	86	4	82	783.829790	0.000118
85	5	81	86	5	82	783.829790	0.000118
86	3	83	87	3	84	783.835310	-0.000140
86	4	83	87	4	84	783.835310	-0.000140
87	2	85	88	2	86	783.841550	0.000255
87	3	85	88	3	86	783.841550	0.000255
89	0	89	90	0	90	783.853000	-0.000167
89	1	89	90	1	90	783.853000	-0.000167
78	10	68	79	10	69	783.872190	-0.000575
78	11	68	79	11	69	783.872190	-0.000575
80	8	72	81	8	73	783.885210	0.000154
80	9	72	81	9	73	783.885210	0.000154

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
81	7	74	82	7	75	783.890940	0.000087
81	8	74	82	8	75	783.890940	0.000087
82	6	76	83	6	77	783.896600	0.000052
82	7	76	83	7	77	783.896600	0.000052
83	5	78	84	5	79	783.902300	0.000088
83	6	78	84	6	79	783.902300	0.000088
84	4	80	85	4	81	783.908120	0.000226
84	5	80	85	5	81	783.908120	0.000226
85	3	82	86	3	83	783.913650	0.000042
85	4	82	86	4	83	783.913650	0.000042
86	2	84	87	2	85	783.919660	0.000264
86	3	84	87	3	85	783.919660	0.000264
88	0	88	89	0	89	783.930920	-0.000246
88	1	88	89	1	89	783.930920	-0.000246
77	10	67	78	10	68	783.950960	-0.000291
77	11	67	78	11	68	783.950960	-0.000291
78	9	69	79	9	70	783.956990	-0.000558
78	10	69	79	10	70	783.956990	-0.000558
79	8	71	80	8	72	783.963480	-0.000016
79	9	71	80	9	72	783.963480	-0.000016
80	7	73	81	7	74	783.969410	0.000170
80	8	73	81	8	74	783.969410	0.000170
81	6	75	82	6	76	783.975060	0.000176
81	7	75	82	7	76	783.975060	0.000176
82	5	77	83	5	78	783.980360	-0.000135
82	6	77	83	6	78	783.980360	-0.000135
83	4	79	84	4	80	783.986200	0.000091
83	5	79	84	5	80	783.986200	0.000091
84	3	81	85	3	82	783.991550	-0.000218
84	4	81	85	4	82	783.991550	-0.000218
85	2	83	86	2	84	783.997380	-0.000114
85	3	83	86	3	84	783.997380	-0.000114
87	0	87	88	0	88	784.009050	-0.000112
87	1	87	88	1	88	784.009050	-0.000112
76	10	66	77	10	67	784.029780	0.000073
76	11	66	77	11	67	784.029780	0.000073
77	9	68	78	9	69	784.035920	-0.000089
77	10	68	78	10	69	784.035920	-0.000089
78	8	70	79	8	71	784.042000	0.000067
78	9	70	79	9	71	784.042000	0.000067
79	7	72	80	7	73	784.047580	-0.000055
79	8	72	80	8	73	784.047580	-0.000055
80	6	74	81	6	75	784.053170	-0.000047
80	7	74	81	7	75	784.053170	-0.000047
81	5	76	82	5	77	784.058610	-0.000156
81	6	76	82	6	77	784.058610	-0.000156
82	4	78	83	4	79	784.064410	0.000084
82	5	78	83	5	79	784.064410	0.000084
83	3	80	84	3	81	784.069560	-0.000365
83	4	80	84	4	81	784.069560	-0.000365
84	2	82	85	2	83	784.075580	-0.000013
84	3	82	85	3	83	784.075580	-0.000013
85	1	84	86	1	85	784.081220	-0.000119
85	2	84	86	2	85	784.081220	-0.000119
86	0	86	87	0	87	784.087160	0.000002
86	1	86	87	1	87	784.087160	0.000002
75	10	65	76	10	66	784.108800	0.000635
75	11	65	76	11	66	784.108800	0.000635
76	9	67	77	9	68	784.114360	-0.000102
76	10	67	77	10	68	784.114360	-0.000102
77	8	69	78	8	70	784.120670	0.000314
77	9	69	78	9	70	784.120670	0.000314
78	7	71	79	7	72	784.126040	0.000028
78	8	71	79	8	72	784.126040	0.000028
79	6	73	80	6	74	784.131170	-0.000377
79	7	73	80	7	74	784.131170	-0.000377
80	5	75	81	5	76	784.137170	0.000126
80	6	75	81	6	76	784.137170	0.000126
81	4	77	82	4	78	784.142510	-0.000028
81	5	77	82	5	78	784.142510	-0.000028
82	3	79	83	3	80	784.147930	-0.000148
82	4	79	83	4	80	784.147930	-0.000148
83	2	81	84	2	82	784.153660	-0.000031
83	3	81	84	3	82	784.153660	-0.000031
84	1	83	85	1	84	784.159290	-0.000085
84	2	83	85	2	84	784.159290	-0.000085
85	0	85	86	0	86	784.165380	0.000235
85	1	85	86	1	86	784.165380	0.000235
74	10	64	75	10	65	784.187540	0.000939
74	11	64	75	11	65	784.187540	0.000939
75	9	66	76	9	67	784.193040	0.000137
75	10	66	76	10	67	784.193040	0.000137
77	7	70	78	7	71	784.204370	-0.000027
77	8	70	78	8	71	784.204370	-0.000027
78	6	72	79	6	73	784.209970	0.000092
78	7	72	79	7	73	784.209970	0.000092
79	5	74	80	5	75	784.215140	-0.000178
79	6	74	80	6	75	784.215140	-0.000178
80	4	76	81	4	77	784.221110	0.000356
80	5	76	81	5	77	784.221110	0.000356

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
81	3	78	82	3	79	784.226110	-0.000121
81	4	78	82	4	79	784.226110	-0.000121
82	2	80	83	2	81	784.231710	-0.000077
82	3	80	83	3	81	784.231710	-0.000077
83	1	82	84	1	83	784.237410	-0.000003
83	2	82	84	2	83	784.237410	-0.000003
84	0	84	85	0	85	784.243360	0.000226
84	1	84	85	1	85	784.243360	0.000226
73	10	63	74	10	64	784.265120	0.000108
73	11	63	74	11	64	784.265120	0.000108
74	9	65	75	9	66	784.271240	-0.000099
74	10	65	75	10	66	784.271240	-0.000099
75	8	67	76	8	68	784.277390	0.000200
75	9	67	76	9	68	784.277390	0.000200
76	7	69	77	7	70	784.282710	-0.000061
76	8	69	77	8	70	784.282710	-0.000061
77	6	71	78	6	72	784.287960	-0.000237
77	7	71	78	7	72	784.287960	-0.000237
78	5	73	79	5	74	784.293650	0.000068
78	6	73	79	6	74	784.293650	0.000068
79	4	75	80	4	76	784.299000	0.000041
79	5	75	80	5	76	784.299000	0.000041
80	3	77	81	3	78	784.304280	-0.000102
80	4	77	81	4	78	784.304280	-0.000102
81	2	79	82	2	80	784.310510	0.000634
81	3	79	82	3	80	784.310510	0.000634
82	1	81	83	1	82	784.315550	0.000098
82	2	81	83	2	82	784.315550	0.000098
83	0	83	84	0	84	784.320990	-0.000128
83	1	83	84	1	84	784.320990	-0.000128
72	10	62	73	10	63	784.343720	0.000313
72	11	62	73	11	63	784.343720	0.000313
73	9	64	74	9	65	784.349590	-0.000162
73	10	64	74	10	65	784.349590	-0.000162
74	8	66	75	8	67	784.355950	0.000356
74	9	66	75	9	67	784.355950	0.000356
75	7	68	76	7	69	784.361370	0.000234
75	8	68	76	8	69	784.361370	0.000234
76	6	70	77	6	71	784.366480	-0.000039
76	7	70	77	7	71	784.366480	-0.000039
77	5	72	78	5	73	784.372090	0.000253
77	6	72	78	6	73	784.372090	0.000253
78	4	74	79	4	75	784.377310	0.000151
78	5	74	79	5	75	784.377310	0.000151
79	3	76	80	3	77	784.382580	0.000053
79	4	76	80	4	77	784.382580	0.000053
80	2	78	81	2	79	784.388240	0.000278
80	3	78	81	3	79	784.388240	0.000278
81	1	80	82	1	81	784.392990	-0.000484
81	2	80	82	2	81	784.392990	-0.000484
82	0	82	83	0	83	784.398940	-0.000156
82	1	82	83	1	83	784.398940	-0.000156
71	10	61	72	10	62	784.421790	0.000005
71	11	61	72	11	62	784.421790	0.000005
73	8	65	74	8	66	784.434180	0.000194
73	9	65	74	9	66	784.434180	0.000194
74	7	67	75	7	68	784.439290	-0.000205
74	8	67	75	8	68	784.439290	-0.000205
75	6	69	76	6	70	784.444740	-0.000091
75	7	69	76	7	70	784.444740	-0.000091
76	5	71	77	5	72	784.449730	-0.000369
76	6	71	77	6	72	784.449730	-0.000369
77	4	73	78	4	74	784.455190	-0.000172
77	5	73	78	5	74	784.455190	-0.000172
79	2	77	80	2	78	784.466160	0.000120
79	3	77	80	3	78	784.466160	0.000120
80	1	79	81	1	80	784.471440	-0.000057
80	2	79	81	2	80	784.471440	-0.000057
81	0	81	82	0	82	784.477370	0.000306
81	1	81	82	1	82	784.477370	0.000306
72	8	64	73	8	65	784.512530	0.000167
72	9	64	73	9	65	784.512530	0.000167
73	7	66	74	7	67	784.518070	0.000232
73	8	66	74	8	67	784.518070	0.000232
74	6	68	75	6	69	784.523180	0.000050
74	7	68	75	7	69	784.523180	0.000050
75	5	70	76	5	71	784.528320	-0.000020
75	6	70	76	6	71	784.528320	-0.000020
76	4	72	77	4	73	784.533790	0.000240
76	5	72	77	5	73	784.533790	0.000240
77	3	74	78	3	75	784.538430	-0.000359
77	4	74	78	4	75	784.538430	-0.000359
78	2	76	79	2	77	784.544580	0.000471
78	3	76	79	3	77	784.544580	0.000471
79	1	78	80	1	79	784.549940	0.000426
79	2	78	80	2	79	784.549940	0.000426
80	0	80	81	0	81	784.555430	0.000409
80	1	80	81	1	81	784.555430	0.000409
69	10	59	70	10	60	784.578400	-0.000065
69	11	59	70	11	60	784.578400	-0.000065

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
70	9	61	71	9	62	784.585140	0.000227
70	10	61	71	10	62	784.585140	0.000227
71	8	63	72	8	64	784.590740	0.000007
71	9	63	72	9	64	784.590740	0.000007
72	7	65	73	7	66	784.596230	0.000043
72	8	65	73	8	66	784.596230	0.000043
73	6	67	74	6	68	784.601540	0.000113
73	7	67	74	7	68	784.601540	0.000113
74	5	69	75	5	70	784.606620	0.000029
74	6	69	75	6	70	784.606620	0.000029
75	4	71	76	4	72	784.611650	-0.000087
75	5	71	76	5	72	784.611650	-0.000087
76	3	73	77	3	74	784.616830	-0.000084
76	4	73	77	4	74	784.616830	-0.000084
77	2	75	78	2	76	784.622120	-0.000060
77	3	75	78	3	76	784.622120	-0.000060
78	1	77	79	1	78	784.627890	0.000368
78	2	77	79	2	78	784.627890	0.000368
79	0	79	80	0	80	784.633210	0.000227
79	1	79	80	1	80	784.633210	0.000227
68	10	58	69	10	59	784.656860	0.000091
68	11	58	69	11	59	784.656860	0.000091
69	9	60	70	9	61	784.663550	0.000280
69	10	60	70	10	61	784.663550	0.000280
70	8	62	71	8	63	784.669540	0.000452
70	9	62	71	9	63	784.669540	0.000452
71	7	64	72	7	65	784.674590	0.000071
71	8	64	72	8	65	784.674590	0.000071
72	6	66	73	6	67	784.679740	0.000020
72	7	66	73	7	67	784.679740	0.000020
73	5	68	74	5	69	784.684670	-0.000150
73	6	68	74	6	69	784.684670	-0.000150
74	4	70	75	4	71	784.690140	0.000231
74	5	70	75	5	71	784.690140	0.000231
75	3	72	76	3	73	784.695130	0.000098
75	4	72	76	4	73	784.695130	0.000098
76	2	74	77	2	75	784.700180	-0.000054
76	3	74	77	3	75	784.700180	-0.000054
77	1	76	78	1	77	784.705520	-0.000009
77	2	76	78	2	77	784.705520	-0.000009
78	0	78	79	0	79	784.711050	0.000120
78	1	78	79	1	79	784.711050	0.000120
67	10	57	68	10	58	784.734930	-0.000100
67	11	57	68	11	58	784.734930	-0.000100
68	9	59	69	9	60	784.741560	-0.000042
68	10	59	69	10	60	784.741560	-0.000042
69	8	61	70	8	62	784.747430	-0.000008
69	9	61	70	9	62	784.747430	-0.000008
70	7	63	71	7	64	784.753160	0.000322
70	8	63	71	8	64	784.753160	0.000322
71	6	65	72	6	66	784.757980	-0.000023
71	7	65	72	7	66	784.757980	-0.000023
72	5	67	73	5	68	784.763300	0.000254
72	6	67	73	6	68	784.763300	0.000254
73	4	69	74	4	70	784.768400	0.000323
73	5	69	74	5	70	784.768400	0.000323
74	3	71	75	3	72	784.773100	-0.000050
74	4	71	75	4	72	784.773100	-0.000050
75	2	73	76	2	74	784.778030	-0.000254
75	3	73	76	3	74	784.778030	-0.000254
76	1	75	77	1	76	784.783480	-0.000047
76	2	75	77	2	76	784.783480	-0.000047
77	0	77	78	0	78	784.789160	0.000284
77	1	77	78	1	78	784.789160	0.000284
67	9	58	68	9	59	784.820220	0.000304
67	10	58	68	10	59	784.820220	0.000304
68	8	60	69	8	61	784.825800	0.000033
68	9	60	69	9	61	784.825800	0.000033
69	7	62	70	7	63	784.831270	0.000125
69	8	62	70	8	63	784.831270	0.000125
70	6	64	71	6	65	784.836590	0.000317
70	7	64	71	7	65	784.836590	0.000317
71	5	66	72	5	67	784.841300	0.000029
71	6	66	72	6	67	784.841300	0.000029
72	4	68	73	4	69	784.846220	-0.000019
72	5	68	73	5	69	784.846220	-0.000019
73	3	70	74	3	71	784.851330	0.000077
73	4	70	74	4	71	784.851330	0.000077
74	2	72	75	2	73	784.856340	0.000011
74	3	72	75	3	73	784.856340	0.000011
75	1	74	76	1	75	784.862010	0.000501
75	2	74	76	2	75	784.862010	0.000501
76	0	76	77	0	77	784.866730	-0.000071
76	1	76	77	1	77	784.866730	-0.000071
66	9	57	67	9	58	784.898470	0.000270
66	10	57	67	10	58	784.898470	0.000270
67	8	59	68	8	60	784.903990	-0.000087
67	9	59	68	9	60	784.903990	-0.000087
68	7	61	69	7	62	784.909280	-0.000169
68	8	61	69	8	62	784.909280	-0.000169

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Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
70	5	65	71	5	66	784.919460	-0.000019
70	6	65	71	6	66	784.919460	-0.000019
71	4	67	72	4	68	784.924790	0.000397
71	5	67	72	5	68	784.924790	0.000397
72	3	69	73	3	70	784.929380	0.000038
72	4	69	73	4	70	784.929380	0.000038
73	2	71	74	2	72	784.934470	0.000105
73	3	71	74	3	72	784.934470	0.000105
74	1	73	75	1	74	784.939480	-0.000011
74	2	73	75	2	74	784.939480	-0.000011
75	0	75	76	0	76	784.944830	0.000101
75	1	75	76	1	76	784.944830	0.000101
65	9	56	66	9	57	784.976240	-0.000231
65	10	56	66	10	57	784.976240	-0.000231
66	8	58	67	8	59	784.982540	0.000167
66	9	58	67	9	59	784.982540	0.000167
67	7	60	68	7	61	784.987810	0.000080
67	8	60	68	8	61	784.987810	0.000080
68	6	62	69	6	63	784.992710	-0.000077
68	7	62	69	7	63	784.992710	-0.000077
69	5	64	70	5	65	784.997470	-0.000217
69	6	64	70	6	65	784.997470	-0.000217
70	4	66	71	4	67	785.002810	0.000271
70	5	66	71	5	67	785.002810	0.000271
71	3	68	72	3	69	785.007590	0.000162
71	4	68	72	4	69	785.007590	0.000162
72	2	70	73	2	71	785.012440	0.000053
72	3	70	73	3	71	785.012440	0.000053
73	1	72	74	1	73	785.017130	-0.000326
73	2	72	74	2	73	785.017130	-0.000326
74	0	74	75	0	75	785.022760	0.000113
74	1	74	75	1	75	785.022760	0.000113
64	9	55	65	9	56	785.054210	-0.000498
64	10	55	65	10	56	785.054210	-0.000498
65	8	57	66	8	58	785.060990	0.000333
65	9	57	66	9	58	785.060990	0.000333
66	7	59	67	7	60	785.066350	0.000343
66	8	59	67	8	60	785.066350	0.000343
67	6	61	68	6	62	785.071100	0.000074
67	7	61	68	7	62	785.071100	0.000074
68	5	63	69	5	64	785.076050	0.000172
68	6	63	69	6	64	785.076050	0.000172
69	4	65	70	4	66	785.080720	0.000041
69	5	65	70	5	66	785.080720	0.000041
70	3	67	71	3	68	785.085510	0.000000
70	4	67	71	4	68	785.085510	0.000000
71	2	69	72	2	70	785.090470	0.000059
71	3	69	72	3	70	785.090470	0.000059
72	1	71	73	1	72	785.095870	0.000450
72	2	71	73	2	72	785.095870	0.000450
73	0	73	74	0	74	785.101000	0.000453
73	1	73	74	1	74	785.101000	0.000453
63	9	54	64	9	55	785.132590	-0.000328
63	10	54	64	10	55	785.132590	-0.000328
64	8	56	65	8	57	785.138920	0.000010
64	9	56	65	9	57	785.138920	0.000010
65	7	58	66	7	59	785.144550	0.000286
65	8	58	66	8	59	785.144550	0.000286
66	6	60	67	6	61	785.149040	-0.000213
66	7	60	67	7	61	785.149040	-0.000213
67	5	62	68	5	63	785.154150	0.000094
67	6	62	68	6	63	785.154150	0.000094
68	4	64	69	4	65	785.158900	0.000092
68	5	64	69	5	65	785.158900	0.000092
69	3	66	70	3	67	785.163990	0.000416
69	4	66	70	4	67	785.163990	0.000416
70	2	68	71	2	69	785.168680	0.000269
70	3	68	71	3	69	785.168680	0.000269
71	1	70	72	1	71	785.173430	0.000064
71	2	70	72	2	71	785.173430	0.000064
72	0	72	73	0	73	785.178710	0.000272
72	1	72	73	1	73	785.178710	0.000272
62	9	53	63	9	54	785.210960	-0.000127
62	10	53	63	10	54	785.210960	-0.000127
63	8	55	64	8	56	785.217410	0.000262
63	9	55	64	9	56	785.217410	0.000262
64	7	57	65	7	58	785.222900	0.000390
64	8	57	65	8	58	785.222900	0.000390
65	6	59	66	6	60	785.227470	-0.000002
65	7	59	66	7	60	785.227470	-0.000002
66	5	61	67	5	62	785.232290	0.000065
66	6	61	67	6	62	785.232290	0.000065
67	4	63	68	4	64	785.237140	0.000214
67	5	63	68	5	64	785.237140	0.000214
68	3	65	69	3	66	785.241530	-0.000101
68	4	65	69	4	66	785.241530	-0.000101
69	2	67	70	2	68	785.246340	-0.000076
69	3	67	70	3	68	785.246340	-0.000076
70	1	69	71	1	70	785.251530	0.000226
70	2	69	71	2	70	785.251530	0.000226

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
71	0	71	72	0	72	785.256540	0.000223
71	1	71	72	1	72	785.256540	0.000223
61	9	52	62	9	53	785.289070	-0.000165
61	10	52	62	10	53	785.289070	-0.000165
62	8	54	63	8	55	785.295220	-0.000145
62	9	54	63	9	55	785.295220	-0.000145
63	7	56	64	7	57	785.300860	0.000128
63	8	56	64	8	57	785.300860	0.000128
64	6	58	65	6	59	785.305640	-0.000035
64	7	58	65	7	59	785.305640	-0.000035
65	5	60	66	5	61	785.310650	0.000255
65	6	60	66	6	61	785.310650	0.000255
66	4	62	67	4	63	785.315120	0.000096
66	5	62	67	5	63	785.315120	0.000096
67	3	64	68	3	65	785.319880	0.000201
67	4	64	68	4	65	785.319880	0.000201
68	2	66	69	2	67	785.324160	-0.000234
68	3	66	69	3	67	785.324160	-0.000234
69	1	68	70	1	69	785.329230	-0.000004
69	2	68	70	2	69	785.329230	-0.000004
70	0	70	71	0	71	785.334100	-0.000096
70	1	70	71	1	71	785.334100	-0.000096
60	9	51	61	9	52	785.366950	-0.000385
60	10	51	61	10	52	785.366950	-0.000385
61	8	53	62	8	54	785.373700	0.000142
61	9	53	62	9	54	785.373700	0.000142
62	7	55	63	7	56	785.379130	0.000180
62	8	55	63	8	56	785.379130	0.000180
63	6	57	64	6	58	785.383710	-0.000156
63	7	57	64	7	58	785.383710	-0.000156
64	5	59	65	5	60	785.388690	0.000148
64	6	59	65	6	60	785.388690	0.000148
65	4	61	66	4	62	785.393290	0.000164
65	5	61	66	5	62	785.393290	0.000164
66	3	63	67	3	64	785.397900	0.000188
66	4	63	67	4	64	785.397900	0.000188
67	2	65	68	2	66	785.402430	0.000059
67	3	65	68	3	66	785.402430	0.000059
68	1	67	69	1	68	785.407070	-0.000074
68	2	67	69	2	68	785.407070	-0.000074
69	0	69	70	0	70	785.412420	0.000369
69	1	69	70	1	70	785.412420	0.000369
59	9	50	60	9	51	785.444800	-0.000600
59	10	50	60	10	51	785.444800	-0.000600
60	8	52	61	8	53	785.452020	0.000293
60	9	52	61	9	53	785.452020	0.000293
61	7	54	62	7	55	785.456990	-0.000153
61	8	54	62	8	55	785.456990	-0.000153
62	6	56	63	6	57	785.462080	0.000045
62	7	56	63	7	57	785.462080	0.000045
63	5	58	64	5	59	785.466830	0.000156
63	6	58	64	6	59	785.466830	0.000156
64	4	60	65	4	61	785.471380	0.000169
64	5	60	65	5	61	785.471380	0.000169
65	3	62	66	3	63	785.476150	0.000406
65	4	62	66	4	63	785.476150	0.000406
66	2	64	67	2	65	785.480090	-0.000247
66	3	64	67	3	65	785.480090	-0.000247
67	1	66	68	1	67	785.485070	0.000016
67	2	66	68	2	67	785.485070	0.000016
68	0	68	69	0	69	785.490140	0.000237
68	1	68	69	1	69	785.490140	0.000237
59	8	51	60	8	52	785.530290	0.000419
59	9	51	60	9	52	785.530290	0.000419
60	7	53	61	7	54	785.535150	-0.000161
60	8	53	61	8	54	785.535150	-0.000161
61	6	55	62	6	56	785.540310	0.000110
61	7	55	62	7	56	785.540310	0.000110
62	5	57	63	5	58	785.545130	0.000332
62	6	57	63	6	58	785.545130	0.000332
63	4	59	64	4	60	785.549260	-0.000022
63	5	59	64	5	60	785.549260	-0.000022
64	3	61	65	3	62	785.553750	-0.000010
64	4	61	65	4	62	785.553750	-0.000010
65	2	63	66	2	64	785.558260	-0.000031
65	3	63	66	3	64	785.558260	-0.000031
66	1	65	67	1	66	785.563180	0.000234
66	2	65	67	2	66	785.563180	0.000234
67	0	67	68	0	68	785.567900	0.000168
67	1	67	68	1	68	785.567900	0.000168
59	7	52	60	7	53	785.613790	0.000323
59	8	52	60	8	53	785.613790	0.000323
60	6	54	61	6	55	785.618420	0.000068
60	7	54	61	7	55	785.618420	0.000068
61	5	56	62	5	57	785.622910	0.000001
61	6	56	62	6	57	785.622910	0.000001
62	4	58	63	4	59	785.627330	-0.000011
62	5	58	63	5	59	785.627330	-0.000011
63	3	60	64	3	61	785.631910	0.000149
63	4	60	64	4	61	785.631910	0.000149

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
64	2	62	65	2	63	785.636220	-0.000013
64	3	62	65	3	63	785.636220	-0.000013
65	1	64	66	1	65	785.640820	-0.000007
65	2	64	66	2	65	785.640820	-0.000007
66	0	66	67	0	67	785.645610	0.000057
66	1	66	67	1	67	785.645610	0.000057
58	7	51	59	7	52	785.691690	0.000095
58	8	51	59	8	52	785.691690	0.000095
59	6	53	60	6	54	785.696510	0.000034
59	7	53	60	7	54	785.696510	0.000034
60	5	55	61	5	56	785.701020	0.000009
60	6	55	61	6	56	785.701020	0.000009
61	4	57	62	4	58	785.705460	0.000071
61	5	57	62	5	58	785.705460	0.000071
62	3	59	63	3	60	785.709350	-0.000398
62	4	59	63	4	60	785.709350	-0.000398
63	2	61	64	2	62	785.714410	0.000246
63	3	61	64	3	62	785.714410	0.000246
64	1	63	65	1	64	785.718950	0.000259
64	2	63	65	2	64	785.718950	0.000259
65	0	65	66	0	66	785.723500	0.000135
65	1	65	66	1	66	785.723500	0.000135
57	7	50	58	7	51	785.769620	-0.000091
57	8	50	58	8	51	785.769620	-0.000091
58	6	52	59	6	53	785.774630	0.000033
58	7	52	59	7	53	785.774630	0.000033
59	5	54	60	5	55	785.779470	0.000372
59	6	54	60	6	55	785.779470	0.000372
60	4	56	61	4	57	785.783670	0.000239
60	5	56	61	5	57	785.783670	0.000239
61	3	58	62	3	59	785.787710	-0.000017
61	4	58	62	4	59	785.787710	-0.000017
62	2	60	63	2	61	785.792100	0.000019
62	3	60	63	3	61	785.792100	0.000019
63	1	62	64	1	63	785.796650	0.000101
63	2	62	64	2	63	785.796650	0.000101
64	0	64	65	0	65	785.801320	0.000153
64	1	64	65	1	65	785.801320	0.000153
56	7	49	57	7	50	785.847800	-0.000002
56	8	49	57	8	50	785.847800	-0.000002
57	6	51	58	6	52	785.852710	0.000015
57	7	51	58	7	52	785.852710	0.000015
58	5	53	59	5	54	785.857440	0.000274
58	6	53	59	6	54	785.857440	0.000274
59	4	55	60	4	56	785.861620	0.000167
59	5	55	60	5	56	785.861620	0.000167
60	3	57	61	3	58	785.865720	0.000023
60	4	57	61	4	58	785.865720	0.000023
61	2	59	62	2	60	785.869660	-0.000329
61	3	59	62	3	60	785.869660	-0.000329
62	1	61	63	1	62	785.874440	0.000048
62	2	61	63	2	62	785.874440	0.000048
63	0	63	64	0	64	785.879060	0.000119
63	1	63	64	1	64	785.879060	0.000119
54	8	46	55	8	47	785.920590	0.000523
54	9	46	55	9	47	785.920590	0.000523
55	7	48	56	7	49	785.925410	-0.000450
55	8	48	56	8	49	785.925410	-0.000450
56	6	50	57	6	51	785.930840	0.000062
56	7	50	57	7	51	785.930840	0.000062
57	5	52	58	5	53	785.935200	-0.000021
57	6	52	58	6	53	785.935200	-0.000021
58	4	54	59	4	55	785.939430	-0.000036
58	5	54	59	5	55	785.939430	-0.000036
59	3	56	60	3	57	785.943810	0.000159
59	4	56	60	4	57	785.943810	0.000159
60	2	58	61	2	59	785.948270	0.000386
60	3	58	61	3	59	785.948270	0.000386
61	1	60	62	1	61	785.952280	0.000057
61	2	60	62	2	61	785.952280	0.000057
62	0	62	63	0	63	785.956980	0.000264
62	1	62	63	1	63	785.956980	0.000264
53	8	45	54	8	46	785.998250	0.000265
53	9	45	54	9	46	785.998250	0.000264
54	7	47	55	7	48	786.003140	-0.000759
54	8	47	55	8	48	786.003140	-0.000759
55	6	49	56	6	50	786.008810	-0.000024
55	7	49	56	7	50	786.008810	-0.000024
56	5	51	57	5	52	786.012940	-0.000324
56	6	51	57	6	52	786.012940	-0.000324
57	4	53	58	4	54	786.017330	-0.000135
57	5	53	58	5	54	786.017330	-0.000135
58	3	55	59	3	56	786.021650	0.000061
58	4	55	59	4	56	786.021650	0.000061
59	2	57	60	2	58	786.025750	-0.000011
59	3	57	60	3	58	786.025750	-0.000011
60	1	59	61	1	60	786.030070	0.000025
60	2	59	61	2	60	786.030070	0.000025
61	0	61	62	0	62	786.034540	0.000072
61	1	61	62	1	62	786.034540	0.000072

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
52	8	44	53	8	45	786.076140	0.000286
52	9	44	53	9	45	786.076140	0.000284
54	6	48	55	6	49	786.086730	-0.000141
54	7	48	55	7	49	786.086730	-0.000141
55	5	50	56	5	51	786.091250	-0.000043
55	6	50	56	6	51	786.091250	-0.000043
56	4	52	57	4	53	786.095560	0.000111
56	5	52	57	5	53	786.095560	0.000111
57	3	54	58	3	55	786.099860	0.000342
57	4	54	58	4	55	786.099860	0.000342
58	2	56	59	2	57	786.103770	0.000147
58	3	56	59	3	57	786.103770	0.000147
59	1	58	60	1	59	786.108160	0.000315
59	2	58	60	2	59	786.108160	0.000315
60	0	60	61	0	61	786.112170	-0.000041
60	1	60	61	1	61	786.112170	-0.000041
51	8	43	52	8	44	786.153770	0.000092
51	9	43	52	9	44	786.153770	0.000088
52	7	45	53	7	46	786.160100	0.000233
52	8	45	53	8	46	786.160100	0.000233
53	6	47	54	6	48	786.164350	-0.000548
53	7	47	54	7	48	786.164350	-0.000548
54	5	49	55	5	50	786.169410	0.000107
54	6	49	55	6	50	786.169410	0.000107
55	4	51	56	4	52	786.173580	0.000161
55	5	51	56	5	52	786.173580	0.000161
56	3	53	57	3	54	786.177920	0.000482
56	4	53	57	4	54	786.177920	0.000482
57	2	55	58	2	56	786.182080	0.000595
57	3	55	58	3	56	786.182080	0.000595
58	1	57	59	1	58	786.185890	0.000252
58	2	57	59	2	58	786.185890	0.000252
50	8	42	51	8	43	786.231180	-0.000252
50	9	42	51	9	43	786.231180	-0.000260
51	7	44	52	7	45	786.237700	-0.000114
51	8	44	52	8	45	786.237700	-0.000114
52	6	46	53	6	47	786.242420	-0.000477
52	7	46	53	7	47	786.242420	-0.000477
53	5	48	54	5	49	786.247290	-0.000010
53	6	48	54	6	49	786.247290	-0.000010
55	3	52	56	3	53	786.255380	0.000048
55	4	52	56	4	53	786.255380	0.000048
56	2	54	57	2	55	786.259440	0.000115
56	3	54	57	3	55	786.259440	0.000115
57	1	56	58	1	57	786.263440	0.000028
57	2	56	58	2	57	786.263440	0.000028
58	0	58	59	0	59	786.267680	0.000023
58	1	58	59	1	59	786.267680	0.000023
50	7	43	51	7	44	786.315490	-0.000222
50	8	43	51	8	44	786.315490	-0.000222
51	6	45	52	6	46	786.321430	0.000563
51	7	45	52	7	46	786.321430	0.000563
52	5	47	53	5	48	786.325520	0.000246
52	6	47	53	6	48	786.325520	0.000246
53	4	49	54	4	50	786.329310	0.000001
53	5	49	54	5	50	786.329310	0.000001
54	3	51	55	3	52	786.333630	0.000405
54	4	51	55	4	52	786.333630	0.000405
55	2	53	56	2	54	786.337240	0.000097
55	3	53	56	3	54	786.337240	0.000097
56	1	55	57	1	56	786.341210	0.000039
56	2	55	57	2	56	786.341210	0.000039
57	0	57	58	0	58	786.345550	0.000194
57	1	57	58	1	58	786.345550	0.000194
49	7	42	50	7	43	786.393820	0.000248
49	8	42	50	8	43	786.393820	0.000247
50	6	44	51	6	45	786.399180	0.000365
50	7	44	51	7	45	786.399180	0.000365
51	5	46	52	5	47	786.403250	0.000025
51	6	46	52	6	47	786.403250	0.000025
52	4	48	53	4	49	786.407570	0.000328
52	5	48	53	5	49	786.407570	0.000328
53	3	50	54	3	51	786.411310	0.000209
53	4	50	54	4	51	786.411310	0.000209
54	2	52	55	2	53	786.415110	0.000153
54	3	52	55	3	53	786.415110	0.000153
55	1	54	56	1	55	786.419200	0.000282
55	2	54	56	2	55	786.419200	0.000282
56	0	56	57	0	57	786.422960	-0.000077
56	1	56	57	1	57	786.422960	-0.000077
48	7	41	49	7	42	786.471110	-0.000281
48	8	41	49	8	42	786.471110	-0.000283
49	6	43	50	6	44	786.477100	0.000362
49	7	43	50	7	44	786.477100	0.000362
51	4	47	52	4	48	786.485240	0.000096
51	5	47	52	5	48	786.485240	0.000096
52	3	49	53	3	50	786.489090	0.000128
52	4	49	53	4	50	786.489090	0.000128
53	2	51	54	2	52	786.492890	0.000130
53	3	51	54	3	52	786.492890	0.000130

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
54	1	53	55	1	54	786.496710	0.000060
54	2	53	55	2	54	786.496710	0.000060
55	0	55	56	0	56	786.500580	-0.000130
55	1	55	56	1	56	786.500580	-0.000130
47	7	40	48	7	41	786.548890	-0.000263
47	8	40	48	8	41	786.548890	-0.000267
48	6	42	49	6	43	786.554450	-0.000181
48	7	42	49	7	43	786.554450	-0.000181
49	5	44	50	5	45	786.559660	0.000578
49	6	44	50	6	45	786.559660	0.000578
50	4	46	51	4	47	786.562710	-0.000331
50	5	46	51	5	47	786.562710	-0.000331
51	3	48	52	3	49	786.566780	-0.000020
51	4	48	52	4	49	786.566780	-0.000020
52	2	50	53	2	51	786.570650	0.000108
52	3	50	53	3	51	786.570650	0.000108
53	1	52	54	1	53	786.573930	-0.000448
53	2	52	54	2	53	786.573930	-0.000448
54	0	54	55	0	55	786.578240	-0.000126
54	1	54	55	1	55	786.578240	-0.000126
46	7	39	47	7	40	786.626210	-0.000659
46	8	39	47	8	40	786.626210	-0.000667
47	6	41	48	6	42	786.632570	0.000074
47	7	41	48	7	42	786.632570	0.000074
48	5	43	49	5	44	786.637170	0.000183
48	6	43	49	6	44	786.637170	0.000183
49	4	45	50	4	46	786.640670	-0.000253
49	5	45	50	5	46	786.640670	-0.000253
50	3	47	51	3	48	786.644800	0.000161
50	4	47	51	4	48	786.644800	0.000161
51	2	49	52	2	50	786.648800	0.000483
51	3	49	52	3	50	786.648800	0.000483
52	1	51	53	1	52	786.651610	-0.000466
52	2	51	53	2	52	786.651610	-0.000466
53	0	53	54	0	54	786.655980	-0.000021
53	1	53	54	1	54	786.655980	-0.000021
46	6	40	47	6	41	786.710400	0.000071
46	7	40	47	7	41	786.710400	0.000071
48	4	44	49	4	45	786.718520	-0.000270
48	5	44	49	5	45	786.718520	-0.000270
49	3	46	50	3	47	786.722800	0.000344
49	4	46	50	4	47	786.722800	0.000344
50	2	48	51	2	49	786.725950	-0.000123
50	3	48	51	3	49	786.725950	-0.000123
51	1	50	52	1	51	786.729580	-0.000194
51	2	50	52	2	51	786.729580	-0.000194
52	0	52	53	0	53	786.733290	-0.000336
52	1	52	53	1	53	786.733290	-0.000336
45	6	39	46	6	40	786.788280	0.000159
45	7	39	46	7	40	786.788280	0.000158
46	5	41	47	5	42	786.793090	0.000370
46	6	41	47	6	42	786.793090	0.000370
47	4	43	48	4	44	786.797070	0.000436
47	5	43	48	5	44	786.797070	0.000436
48	3	45	49	3	46	786.800310	0.000062
48	4	45	49	4	46	786.800310	0.000062
49	2	47	50	2	48	786.803660	-0.000152
49	3	47	50	3	48	786.803660	-0.000152
50	1	49	51	1	50	786.807290	-0.000155
50	2	49	51	2	50	786.807290	-0.000155
51	0	51	52	0	52	786.811260	0.000024
51	1	51	52	1	52	786.811260	0.000024
44	6	38	45	6	39	786.865960	0.000089
44	7	38	45	7	39	786.865960	0.000087
45	5	40	46	5	41	786.870700	0.000148
45	6	40	46	6	41	786.870700	0.000148
46	4	42	47	4	43	786.874260	-0.000198
46	5	42	47	5	43	786.874260	-0.000198
47	3	44	48	3	45	786.877850	-0.000188
47	4	44	48	4	45	786.877850	-0.000188
48	2	46	49	2	47	786.881750	0.000209
48	3	46	49	3	47	786.881750	0.000209
49	1	48	50	1	49	786.885160	0.000047
49	2	48	50	2	49	786.885160	0.000047
50	0	50	51	0	51	786.888700	-0.000135
50	1	50	51	1	51	786.888700	-0.000135
43	6	37	44	6	38	786.943300	-0.000285
43	7	37	44	7	38	786.943300	-0.000288
44	5	39	45	5	40	786.948460	0.000108
44	6	39	45	6	40	786.948460	0.000108
45	4	41	46	4	42	786.952330	0.000062
45	5	41	46	5	42	786.952330	0.000062
46	3	43	47	3	44	786.955820	0.000007
46	4	43	47	4	44	786.955820	0.000007
47	2	45	48	2	46	786.959370	0.000120
47	3	45	48	3	46	786.959370	0.000120
48	1	47	49	1	48	786.962770	0.000017
48	2	47	49	2	48	786.962770	0.000017
49	0	49	50	0	50	786.966260	-0.000153
49	1	49	50	1	50	786.966260	-0.000153

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
42	6	36	43	6	37	787.020940	-0.000304
42	7	36	43	7	37	787.020940	-0.000311
43	5	38	44	5	39	787.025930	-0.000203
43	6	38	44	6	39	787.025930	-0.000203
44	4	40	45	4	41	787.030490	0.000430
44	5	40	45	5	41	787.030490	0.000430
45	3	42	46	3	43	787.033780	0.000220
45	4	42	46	4	43	787.033780	0.000220
46	2	44	47	2	45	787.036780	-0.000168
46	3	44	47	3	45	787.036780	-0.000168
47	1	46	48	1	47	787.040920	0.000533
47	2	46	48	2	47	787.040920	0.000533
48	0	48	49	0	49	787.043850	-0.000127
48	1	48	49	1	49	787.043850	-0.000127
41	6	35	42	6	36	787.098600	-0.000255
41	7	35	42	7	36	787.098600	-0.000269
42	5	37	43	5	38	787.104040	0.000157
42	6	37	43	6	38	787.104040	0.000157
43	4	39	44	4	40	787.107450	-0.000378
43	5	39	44	5	40	787.107450	-0.000378
44	3	41	45	3	42	787.111530	0.000220
44	4	41	45	4	42	787.111530	0.000220
45	2	43	46	2	44	787.114450	-0.000181
45	3	43	46	3	44	787.114450	-0.000181
46	1	45	47	1	46	787.117900	-0.000109
46	2	45	47	2	46	787.117900	-0.000109
47	0	47	48	0	48	787.121340	-0.000187
47	1	47	48	1	48	787.121340	-0.000187
40	6	34	41	6	35	787.176410	0.000011
40	7	34	41	7	35	787.176410	-0.000017
41	5	36	42	5	37	787.181760	0.000157
41	6	36	42	6	37	787.181760	0.000157
42	4	38	43	4	39	787.185620	0.000035
42	5	38	43	5	39	787.185620	0.000035
43	3	40	44	3	41	787.189310	0.000286
43	4	40	44	4	41	787.189310	0.000286
44	2	42	45	2	43	787.191940	-0.000360
44	3	42	45	3	43	787.191940	-0.000360
45	1	44	46	1	45	787.195590	-0.000014
45	2	44	46	2	45	787.195590	-0.000014
46	0	46	47	0	47	787.199020	-0.000036
46	1	46	47	1	47	787.199020	-0.000036
40	5	35	41	5	36	787.259220	-0.000069
40	6	35	41	6	36	787.259220	-0.000071
41	4	37	42	4	38	787.263400	0.000091
41	5	37	42	5	38	787.263400	0.000091
42	3	39	43	3	40	787.267310	0.000577
42	4	39	43	4	40	787.267310	0.000577
43	2	41	44	2	42	787.269800	-0.000158
43	3	41	44	3	42	787.269800	-0.000158
44	1	43	45	1	44	787.272850	-0.000348
44	2	43	45	2	44	787.272850	-0.000348
45	0	45	46	0	46	787.276430	-0.000144
45	1	45	46	1	46	787.276430	-0.000144
39	5	34	40	5	35	787.336510	-0.000416
39	6	34	40	6	35	787.336510	-0.000419
40	4	36	41	4	37	787.341140	0.000117
40	5	36	41	5	37	787.341140	0.000117
42	2	40	43	2	41	787.347800	0.000209
42	3	40	43	3	41	787.347800	0.000209
43	1	42	44	1	43	787.350950	0.000188
43	2	42	44	2	43	787.350950	0.000188
44	0	44	45	0	45	787.353990	-0.000087
44	1	44	45	1	45	787.353990	-0.000087
39	4	35	40	4	36	787.418370	-0.000330
39	5	35	40	5	36	787.418370	-0.000330
41	2	39	42	2	40	787.424980	-0.000237
41	3	39	42	3	40	787.424980	-0.000237
42	1	41	43	1	42	787.428380	0.000059
42	2	41	43	2	42	787.428380	0.000059
43	0	43	44	0	44	787.431600	0.000034
43	1	43	44	1	44	787.431600	0.000034
38	4	34	39	4	35	787.496570	0.000208
38	5	34	39	5	35	787.496570	0.000208
40	2	38	41	2	39	787.502760	-0.000067
40	3	38	41	3	39	787.502760	-0.000067
41	1	40	42	1	41	787.505990	0.000119
41	2	40	42	2	41	787.505990	0.000119
42	0	42	43	0	43	787.509150	0.000107
42	1	42	43	1	43	787.509150	0.000107
39	2	37	40	2	38	787.580410	-0.000003
39	3	37	40	3	38	787.580410	-0.000003
40	1	39	41	1	40	787.583040	-0.000353
40	2	39	41	2	40	787.583040	-0.000353
36	4	32	37	4	33	787.651820	0.000220
36	5	32	37	5	33	787.651820	0.000219
38	2	36	39	2	37	787.657980	-0.000007
38	3	36	39	3	37	787.657980	-0.000007
39	1	38	40	1	39	787.661140	0.000235
39	2	38	40	2	39	787.661140	0.000235

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
40	0	40	41	0	41	787.663630	-0.000305
40	1	40	41	1	41	787.663630	-0.000305
35	4	31	36	4	32	787.729290	0.000124
35	5	31	36	5	32	787.729290	0.000121
37	2	35	38	2	36	787.735720	0.000174
37	3	35	38	3	36	787.735720	0.000174
38	1	37	39	1	38	787.738290	-0.000111
38	2	37	39	2	38	787.738290	-0.000111
39	0	39	40	0	40	787.741310	-0.000048
39	1	39	40	1	40	787.741310	-0.000048
34	4	30	35	4	31	787.806680	-0.000023
34	5	30	35	5	31	787.806680	-0.000029
35	3	32	36	3	33	787.810280	0.000104
35	4	32	36	4	33	787.810280	0.000103
36	2	34	37	2	35	787.813020	-0.000077
36	3	34	37	3	35	787.813020	-0.000077
37	1	36	38	1	37	787.815970	0.000093
37	2	36	38	2	37	787.815970	0.000093
38	0	38	39	0	39	787.818270	-0.000504
38	1	38	39	1	39	787.818270	-0.000504
33	4	29	34	4	30	787.883740	-0.000456
33	5	29	34	5	30	787.883740	-0.000467
34	3	31	35	3	32	787.887800	0.000063
34	4	31	35	4	32	787.887800	0.000063
35	2	33	36	2	34	787.890770	0.000153
35	3	33	36	3	34	787.890770	0.000153
36	1	35	37	1	36	787.893320	-0.000026
36	2	35	37	2	36	787.893320	-0.000026
37	0	37	38	0	38	787.896250	0.000085
37	1	37	38	1	38	787.896250	0.000085
32	4	28	33	4	29	787.961770	0.000120
32	5	28	33	5	29	787.961770	0.000098
33	3	30	34	3	31	787.965120	-0.000153
33	4	30	34	4	31	787.965120	-0.000154
34	2	32	35	2	33	787.968100	-0.000031
34	3	32	35	3	33	787.968100	-0.000031
35	1	34	36	1	35	787.971000	0.000202
35	2	34	36	2	35	787.971000	0.000202
36	0	36	37	0	37	787.973290	-0.000251
36	1	36	37	1	37	787.973290	-0.000251
31	4	27	32	4	28	788.038970	-0.000078
31	5	27	32	5	28	788.038970	-0.000121
32	3	29	33	3	30	788.042960	0.000179
32	4	29	33	4	30	788.042960	0.000178
33	2	31	34	2	32	788.045500	-0.000123
33	3	31	34	3	32	788.045500	-0.000123
34	1	33	35	1	34	788.048220	-0.000013
34	2	33	35	2	34	788.048220	-0.000013
35	0	35	36	0	36	788.050910	-0.000001
35	1	35	36	1	36	788.050910	-0.000001
30	4	26	31	4	27	788.116440	0.000057
30	5	26	31	5	27	788.116440	-0.000029
31	3	28	32	3	29	788.120180	-0.000078
31	4	28	32	4	29	788.120180	-0.000080
32	2	30	33	2	31	788.122990	-0.000108
32	3	30	33	3	31	788.122990	-0.000108
33	1	32	34	1	33	788.125620	-0.000030
33	2	32	34	2	33	788.125620	-0.000030
34	0	34	35	0	35	788.128020	-0.000235
34	1	34	35	1	35	788.128020	-0.000235
29	4	25	30	4	26	788.193530	-0.000102
29	5	25	30	5	26	788.193530	-0.000268
30	3	27	31	3	28	788.197860	0.000146
30	4	27	31	4	28	788.197860	0.000141
31	2	29	32	2	30	788.200680	0.000124
31	3	29	32	3	30	788.200680	0.000124
32	1	31	33	1	32	788.203460	0.000405
32	2	31	33	2	32	788.203460	0.000405
33	0	33	34	0	34	788.205410	-0.000182
33	1	33	34	1	34	788.205410	-0.000182
29	3	26	30	3	27	788.275150	0.000004
29	4	26	30	4	27	788.275150	-0.000005
30	2	28	31	2	29	788.277830	-0.000166
30	3	28	31	3	29	788.277830	-0.000166
31	1	30	32	1	31	788.280460	0.000011
31	2	30	32	2	31	788.280460	0.000011
32	0	32	33	0	33	788.283170	0.000261
32	1	32	33	1	33	788.283170	0.000261
29	2	27	30	2	28	788.355310	-0.000109
29	3	27	30	3	28	788.355310	-0.000110
30	1	29	31	1	30	788.357960	0.000139
30	2	29	31	2	30	788.357960	0.000139
31	0	31	32	0	32	788.360230	0.000020
31	1	31	32	1	32	788.360230	0.000020
28	2	26	29	2	27	788.432930	0.000108
28	3	26	29	3	27	788.432930	0.000108
29	1	28	30	1	29	788.435380	0.000197
29	2	28	30	2	29	788.435380	0.000197
30	0	30	31	0	31	788.437460	-0.000031
30	1	30	31	1	31	788.437460	-0.000031

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Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
27	2	25	28	2	26	788.510530	0.000327
27	3	25	28	3	26	788.510530	0.000326
29	0	29	30	0	30	788.514710	-0.000057
29	1	29	30	1	30	788.514710	-0.000057
25	3	22	26	3	23	788.584500	0.000104
25	4	22	26	4	23	788.584500	-0.000039
26	2	24	27	2	25	788.587540	-0.000019
26	3	24	27	3	25	788.587540	-0.000022
28	0	28	29	0	29	788.592080	0.000059
28	1	28	29	1	29	788.592080	0.000059
24	3	21	25	3	22	788.661500	-0.000025
24	4	21	25	4	22	788.661500	-0.000303
25	2	23	26	2	24	788.664900	0.000005
25	3	23	26	3	24	788.664900	-0.000001
27	0	27	28	0	28	788.669350	0.000088
27	1	27	28	1	28	788.669350	0.000088
23	3	20	24	3	21	788.738480	-0.000045
23	4	20	24	4	21	788.738480	-0.000580
24	2	22	25	2	23	788.742280	0.000076
24	3	22	25	3	23	788.742280	0.000063
26	0	26	27	0	27	788.746220	-0.000266
26	1	26	27	1	27	788.746220	-0.000266
22	3	19	23	3	20	788.815220	-0.000102
22	4	19	23	4	20	788.815220	-0.001110
23	2	21	24	2	22	788.819730	0.000257
23	3	21	24	3	22	788.819730	0.000230
25	0	25	26	0	26	788.823710	0.000016
25	1	25	26	1	26	788.823710	0.000016
22	2	20	23	2	21	788.896910	0.000198
22	3	20	23	3	21	788.896910	0.000142
24	0	24	25	0	25	788.901040	0.000146
24	1	24	25	1	25	788.901040	0.000146
21	2	19	22	2	20	788.974010	0.000111
21	3	19	22	3	20	788.974010	-0.000001
23	0	23	24	0	24	788.977960	-0.000110
23	1	23	24	1	24	788.977960	-0.000110
20	2	18	21	2	19	789.051290	0.000279
20	3	18	21	3	19	789.051290	0.000056
22	0	22	23	0	23	789.055190	-0.000045
22	1	22	23	1	23	789.055190	-0.000045
19	2	17	20	2	18	789.128570	0.000548
19	3	17	20	3	18	789.128570	0.000111
21	0	21	22	0	22	789.132620	0.000231
21	1	21	22	1	22	789.132620	0.000231
18	2	16	19	2	17	789.205590	0.000713
18	3	16	19	3	17	789.205590	-0.000132
20	0	20	21	0	21	789.209380	-0.000146
20	1	20	21	1	21	789.209380	-0.000146
19	0	19	20	0	20	789.286610	-0.000031
19	1	19	20	1	20	789.286610	-0.000031
18	0	18	19	0	19	789.363890	0.000143
18	1	18	19	1	19	789.363890	0.000142
17	0	17	18	0	18	789.440910	0.000076
17	1	17	18	1	18	789.440910	0.000075
16	0	16	17	0	17	789.518210	0.000304
16	1	16	17	1	17	789.518210	0.000301
15	0	15	16	0	16	789.594660	-0.000300
15	1	15	16	1	16	789.594660	-0.000306
14	0	14	15	0	15	789.672080	0.000088
14	1	14	15	1	15	789.672080	0.000073
13	0	13	14	0	14	789.749480	0.000468
13	1	13	14	1	14	789.749480	0.000436
12	0	12	13	0	13	789.826680	0.000681
12	1	12	13	1	13	789.826680	0.000612
16	0	16	15	0	15	792.128650	0.000205
16	1	16	15	1	15	792.128650	0.000212
17	0	17	16	0	16	792.204420	-0.000500
17	1	17	16	1	16	792.204420	-0.000497
18	0	18	17	0	17	792.281570	0.000187
18	1	18	17	1	17	792.281570	0.000189
19	0	19	18	0	18	792.357580	-0.000239
19	1	19	18	1	18	792.357580	-0.000239
20	0	20	19	0	19	792.434280	0.000028
20	1	20	19	1	19	792.434280	0.000028
21	0	21	20	0	20	792.510750	0.000077
21	1	21	20	1	20	792.510750	0.000077
22	0	22	21	0	21	792.586700	-0.000367
22	1	22	21	1	21	792.586700	-0.000367
23	0	23	22	0	22	792.663660	0.000203
23	1	23	22	1	22	792.663660	0.000203
24	0	24	23	0	23	792.739890	0.000065
24	1	24	23	1	23	792.739890	0.000065
26	0	26	25	0	25	792.893000	0.000475
26	1	26	25	1	25	792.893000	0.000475
26	1	25	25	1	24	792.966850	-0.000080
26	2	25	25	2	24	792.966850	-0.000080
27	0	27	26	0	26	792.969250	0.000399
27	1	27	26	1	26	792.969250	0.000399
27	1	26	26	1	25	793.042870	-0.000282
27	2	26	26	2	25	793.042870	-0.000282

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
28	0	28	27	0	27	793.045240	0.000078
28	1	28	27	1	27	793.045240	0.000078
27	2	25	26	2	24	793.118150	0.000183
27	3	25	26	3	24	793.118150	0.000187
28	1	27	27	1	26	793.119440	0.000087
28	2	27	27	2	26	793.119440	0.000088
29	0	29	28	0	28	793.121410	-0.000048
29	1	29	28	1	28	793.121410	-0.000048
28	2	26	27	2	25	793.193970	-0.000054
28	3	26	27	3	25	793.193970	-0.000053
29	1	28	28	1	27	793.195510	-0.000029
29	2	28	28	2	27	793.195510	-0.000029
30	0	30	29	0	29	793.197670	-0.000062
30	1	30	29	1	29	793.197670	-0.000062
29	2	27	28	2	26	793.270120	0.000039
29	3	27	28	3	26	793.270120	0.000040
30	1	29	29	1	28	793.271700	-0.000014
30	2	29	29	2	28	793.271700	-0.000014
31	0	31	30	0	30	793.273660	-0.000340
31	1	31	30	1	30	793.273660	-0.000340
30	2	28	29	2	27	793.345920	-0.000196
30	3	28	29	3	27	793.345920	-0.000196
31	1	30	30	1	29	793.347660	-0.000215
31	2	30	30	2	29	793.347660	-0.000215
32	0	32	31	0	31	793.349570	-0.000671
32	1	32	31	1	31	793.349570	-0.000671
31	2	29	30	2	28	793.422210	0.000062
31	3	29	30	3	28	793.422210	0.000062
32	1	31	31	1	30	793.424230	0.000204
32	2	31	31	2	30	793.424230	0.000204
33	0	33	32	0	32	793.426520	0.000046
33	1	33	32	1	32	793.426520	0.000046
32	2	30	31	2	29	793.497760	-0.000416
32	3	30	31	3	29	793.497760	-0.000416
33	1	32	32	1	31	793.500410	0.000256
33	2	32	32	2	31	793.500410	0.000256
34	0	34	33	0	33	793.502820	0.000125
34	1	34	33	1	33	793.502820	0.000125
34	1	33	33	1	32	793.576310	0.000041
34	2	33	33	2	32	793.576310	0.000041
35	0	35	34	0	34	793.578450	-0.000444
35	1	35	34	1	34	793.578450	-0.000444
33	3	30	32	3	29	793.648630	-0.000210
33	4	30	32	4	29	793.648630	-0.000209
34	2	32	33	2	31	793.650070	-0.000119
34	3	32	33	3	31	793.650070	-0.000119
35	1	34	34	1	33	793.652480	0.000105
35	2	34	34	2	33	793.652480	0.000105
36	0	36	35	0	35	793.654980	-0.000095
36	1	36	35	1	35	793.654980	-0.000095
34	3	31	33	3	30	793.724600	-0.000079
34	4	31	33	4	30	793.724600	-0.000078
35	2	33	34	2	32	793.726040	-0.000130
35	3	33	34	3	32	793.726040	-0.000130
36	1	35	35	1	34	793.728300	-0.000154
36	2	35	35	2	34	793.728300	-0.000154
37	0	37	36	0	36	793.731290	0.000044
37	1	37	36	1	36	793.731290	0.000044
35	3	32	34	3	31	793.800340	-0.000179
35	4	32	34	4	31	793.800340	-0.000179
36	2	34	35	2	33	793.802060	-0.000082
36	3	34	35	3	33	793.802060	-0.000082
37	1	36	36	1	35	793.804380	-0.000150
37	2	36	36	2	35	793.804380	-0.000150
38	0	38	37	0	37	793.807300	-0.000097
38	1	38	37	1	37	793.807300	-0.000097
36	3	33	35	3	32	793.876260	-0.000086
36	4	33	35	4	32	793.876260	-0.000086
37	2	35	36	2	34	793.878340	0.000233
37	3	35	36	3	34	793.878340	0.000233
38	1	37	37	1	36	793.880600	0.000010
38	2	37	37	2	36	793.880600	0.000010
39	0	39	38	0	38	793.883580	0.000048
39	1	39	38	1	38	793.883580	0.000048
37	3	34	36	3	33	793.952370	0.000200
37	4	34	36	4	33	793.952370	0.000200
38	2	36	37	2	35	793.953820	-0.000232
38	3	36	37	3	35	793.953820	-0.000232
39	1	38	38	1	37	793.956520	-0.000107
39	2	38	38	2	37	793.956520	-0.000107
40	0	40	39	0	39	793.959440	-0.000210
40	1	40	39	1	39	793.959440	-0.000210
38	3	35	37	3	34	794.027710	-0.000266
38	4	35	37	4	34	794.027710	-0.000266
39	2	37	38	2	36	794.030170	0.000185
39	3	37	38	3	36	794.030170	0.000185
40	1	39	39	1	38	794.032770	0.000114
40	2	39	39	2	38	794.032770	0.000114
41	0	41	40	0	40	794.035730	-0.000024
41	1	41	40	1	40	794.035730	-0.000024

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
38	4	34	37	4	33	794.102850	0.000218
38	5	34	37	5	33	794.102850	0.000218
40	2	38	39	2	37	794.105800	-0.000111
40	3	38	39	3	37	794.105800	-0.000111
41	1	40	40	1	39	794.108510	-0.000154
41	2	40	40	2	39	794.108510	-0.000154
42	0	42	41	0	41	794.111910	0.000071
42	1	42	41	1	41	794.111910	0.000071
39	4	35	38	4	34	794.178490	0.000227
39	5	35	38	5	34	794.178490	0.000227
40	3	37	39	3	36	794.179720	0.000148
40	4	37	39	4	36	794.179720	0.000148
41	2	39	40	2	38	794.181580	-0.000236
41	3	39	40	3	38	794.181580	-0.000236
42	1	41	41	1	40	794.184380	-0.000278
42	2	41	41	2	40	794.184380	-0.000278
43	0	43	42	0	42	794.187200	-0.000707
43	1	43	42	1	42	794.187200	-0.000707
40	4	36	39	4	35	794.253960	0.000076
40	5	36	39	5	35	794.253960	0.000076
41	3	38	40	3	37	794.255650	0.000288
41	4	38	40	4	37	794.255650	0.000288
42	2	40	41	2	39	794.257520	-0.000185
42	3	40	41	3	39	794.257520	-0.000185
43	1	42	42	1	41	794.260760	0.000126
43	2	42	42	2	41	794.260760	0.000126
44	0	44	43	0	43	794.263610	-0.000349
44	1	44	43	1	43	794.263610	-0.000349
42	3	39	41	3	38	794.331170	0.000042
42	4	39	41	4	38	794.331170	0.000042
43	2	41	42	2	40	794.333480	-0.000108
43	3	41	42	3	40	794.333480	-0.000108
44	1	43	43	1	42	794.336290	-0.000305
44	2	43	43	2	42	794.336290	-0.000305
45	0	45	44	0	44	794.339920	-0.000086
45	1	45	44	1	44	794.339920	-0.000086
42	4	38	41	4	37	794.405540	0.000423
42	5	38	41	5	37	794.405540	0.000423
43	3	40	42	3	39	794.406700	-0.000186
43	4	40	42	4	39	794.406700	-0.000186
44	2	42	43	2	41	794.409530	0.000076
44	3	42	43	3	41	794.409530	0.000076
45	1	44	44	1	43	794.412400	-0.000143
45	2	44	44	2	43	794.412400	-0.000143
46	0	46	45	0	45	794.415910	-0.000116
46	1	46	45	1	45	794.415910	-0.000116
43	4	39	42	4	38	794.480950	0.000222
43	5	39	42	5	38	794.480950	0.000222
44	3	41	43	3	40	794.482740	0.000104
44	4	41	43	4	40	794.482740	0.000104
45	2	43	44	2	42	794.485120	-0.000175
45	3	43	44	3	42	794.485120	-0.000175
46	1	45	45	1	44	794.488650	0.000170
46	2	45	45	2	44	794.488650	0.000170
47	0	47	46	0	46	794.491940	-0.000092
47	1	47	46	1	46	794.491940	-0.000092
43	5	38	42	5	37	794.555620	0.000245
43	6	38	42	6	37	794.555620	0.000245
44	4	40	43	4	39	794.556260	-0.000075
44	5	40	43	5	39	794.556260	-0.000075
45	3	42	44	3	41	794.558560	0.000184
45	4	42	44	4	41	794.558560	0.000184
46	2	44	45	2	43	794.561350	0.000217
46	3	44	45	3	43	794.561350	0.000217
47	1	46	46	1	45	794.564350	-0.000042
47	2	46	46	2	45	794.564350	-0.000042
48	0	48	47	0	47	794.568050	0.000031
48	1	48	47	1	47	794.568050	0.000031
44	5	39	43	5	38	794.630960	0.000174
44	6	39	43	6	38	794.630960	0.000174
46	3	43	45	3	42	794.634220	0.000118
46	4	43	45	4	42	794.634220	0.000118
47	2	45	46	2	44	794.636640	-0.000312
47	3	45	46	3	44	794.636640	-0.000312
48	1	47	47	1	46	794.640730	0.000438
48	2	47	47	2	46	794.640730	0.000438
49	0	49	48	0	48	794.643720	-0.000270
49	1	49	48	1	48	794.643720	-0.000270
45	5	40	44	5	39	794.706110	-0.000089
45	6	40	44	6	39	794.706110	-0.000089
46	4	42	45	4	41	794.707640	0.000119
46	5	42	45	5	41	794.707640	0.000119
48	2	46	47	2	45	794.712340	-0.000421
48	3	46	47	3	45	794.712340	-0.000421
49	1	48	48	1	47	794.716180	0.000006
49	2	48	48	2	47	794.716180	0.000006
50	0	50	49	0	49	794.719700	-0.000241
50	1	50	49	1	49	794.719700	-0.000241
46	5	41	45	5	40	794.781640	0.000021
46	6	41	45	6	40	794.781640	0.000021

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
47	4	43	46	4	42	794.783310	0.000207
47	5	43	46	5	42	794.783310	0.000207
48	3	45	47	3	44	794.785540	0.000033
48	4	45	47	4	44	794.785540	0.000033
49	2	47	48	2	46	794.788410	-0.000137
49	3	47	48	3	46	794.788410	-0.000137
50	1	49	49	1	48	794.792200	0.000156
50	2	49	49	2	48	794.792200	0.000156
51	0	51	50	0	50	794.795850	-0.000032
51	1	51	50	1	50	794.795850	-0.000032
47	5	42	46	5	41	794.856690	-0.000335
47	6	42	46	6	41	794.856690	-0.000335
48	4	44	47	4	43	794.858420	-0.000258
48	5	44	47	5	43	794.858420	-0.000258
49	3	46	48	3	45	794.861130	-0.000066
49	4	46	48	4	45	794.861130	-0.000066
50	2	48	49	2	47	794.864180	-0.000151
50	3	48	49	3	47	794.864180	-0.000151
51	1	50	50	1	49	794.867730	-0.000167
51	2	50	50	2	49	794.867730	-0.000167
52	0	52	51	0	51	794.871450	-0.000352
52	1	52	51	1	51	794.871450	-0.000352
48	5	43	47	5	42	794.932620	0.000176
48	6	43	47	6	42	794.932620	0.000177
49	4	45	48	4	44	794.934250	0.000015
49	5	45	48	5	44	794.934250	0.000015
50	3	47	49	3	46	794.937120	0.000252
50	4	47	49	4	46	794.937120	0.000252
51	2	49	50	2	48	794.939930	-0.000161
51	3	49	50	3	48	794.939930	-0.000161
52	1	51	51	1	50	794.943550	-0.000189
52	2	51	51	2	50	794.943550	-0.000189
53	0	53	52	0	52	794.947650	-0.000059
53	1	53	52	1	52	794.947650	-0.000059
49	5	44	48	5	43	795.008170	0.000323
49	6	44	48	6	43	795.008170	0.000323
51	3	48	50	3	47	795.012280	-0.000245
51	4	48	50	4	47	795.012280	-0.000245
52	2	50	51	2	49	795.015860	0.000028
52	3	50	51	3	49	795.015860	0.000028
53	1	52	52	1	51	795.019520	-0.000041
53	2	52	52	2	51	795.019520	-0.000041
54	0	54	53	0	53	795.023380	-0.000223
54	1	54	53	1	53	795.023380	-0.000223
50	5	45	49	5	44	795.082710	-0.000537
50	6	45	49	6	44	795.082710	-0.000537
52	3	49	51	3	48	795.088260	0.000083
52	4	49	51	4	48	795.088260	0.000083
53	2	51	52	2	50	795.091510	-0.000054
53	3	51	52	3	50	795.091510	-0.000054
54	1	53	53	1	52	795.095270	-0.000099
54	2	53	53	2	52	795.095270	-0.000099
55	0	55	54	0	54	795.099280	-0.000192
55	1	55	54	1	54	795.099280	-0.000192
51	5	46	50	5	45	795.157860	-0.000781
51	6	46	50	6	45	795.157860	-0.000781
52	4	48	51	4	47	795.160820	-0.000040
52	5	48	51	5	47	795.160820	-0.000040
53	3	50	52	3	49	795.163970	0.000163
53	4	50	52	4	49	795.163970	0.000163
54	2	52	53	2	51	795.167270	-0.000012
54	3	52	53	3	51	795.167270	-0.000012
55	1	54	54	1	53	795.170980	-0.000180
55	2	54	54	2	53	795.170980	-0.000180
56	0	56	55	0	55	795.175250	-0.000089
56	1	56	55	1	55	795.175250	-0.000089
52	5	47	51	5	46	795.233600	-0.000437
52	6	47	51	6	46	795.233600	-0.000437
53	4	49	52	4	48	795.236440	0.000056
53	5	49	52	5	48	795.236440	0.000056
54	3	51	53	3	50	795.239590	0.000161
54	4	51	53	4	50	795.239590	0.000161
55	2	53	54	2	52	795.242670	-0.000321
55	3	53	54	3	52	795.242670	-0.000321
56	1	55	55	1	54	795.246920	-0.000010
56	2	55	55	2	54	795.246920	-0.000010
57	0	57	56	0	56	795.250800	-0.000379
57	1	57	56	1	56	795.250800	-0.000379
53	5	48	52	5	47	795.309450	0.000037
53	6	48	52	6	47	795.309450	0.000037
54	4	50	53	4	49	795.311930	0.000038
54	5	50	53	5	49	795.311930	0.000038
55	3	52	54	3	51	795.314850	-0.000179
55	4	52	54	4	51	795.314850	-0.000179
56	2	54	55	2	53	795.318540	-0.000132
56	3	54	55	3	53	795.318540	-0.000132
57	1	56	56	1	55	795.322360	-0.000338
57	2	56	56	2	55	795.322360	-0.000338
58	0	58	57	0	57	795.326840	-0.000159
58	1	58	57	1	57	795.326840	-0.000159

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
56	3	53	55	3	52	795.390350	-0.000282
56	4	53	55	4	52	795.390350	-0.000282
57	2	55	56	2	54	795.394100	-0.000250
57	3	55	56	3	54	795.394100	-0.000250
58	1	57	57	1	56	795.398520	0.000084
58	2	57	57	2	56	795.398520	0.000084
59	0	59	58	0	58	795.402910	0.000099
59	1	59	58	1	58	795.402910	0.000099
54	6	48	53	6	47	795.458380	0.000072
54	7	48	53	7	47	795.458380	0.000072
55	5	50	54	5	49	795.460240	0.000077
55	6	50	54	6	49	795.460240	0.000077
56	4	52	55	4	51	795.462830	-0.000045
56	5	52	55	5	51	795.462830	-0.000045
57	3	54	56	3	53	795.465810	-0.000399
57	4	54	56	4	53	795.465810	-0.000399
58	2	56	57	2	55	795.469890	-0.000122
58	3	56	57	3	55	795.469890	-0.000122
59	1	58	58	1	57	795.474320	0.000147
59	2	58	58	2	57	795.474320	0.000147
60	0	60	59	0	59	795.478130	-0.000472
60	1	60	59	1	59	795.478130	-0.000472
55	6	49	54	6	48	795.533480	-0.000040
55	7	49	54	7	48	795.533480	-0.000040
56	5	51	55	5	50	795.535450	-0.000074
56	6	51	55	6	50	795.535450	-0.000074
57	4	53	56	4	52	795.538230	-0.000112
57	5	53	56	5	52	795.538230	-0.000112
58	3	55	57	3	54	795.541730	-0.000048
58	4	55	57	4	54	795.541730	-0.000048
59	2	57	58	2	56	795.545660	0.000006
59	3	57	58	3	56	795.545660	0.000006
60	1	59	59	1	58	795.550130	0.000242
60	2	59	59	2	58	795.550130	0.000242
61	0	61	60	0	60	795.554080	-0.000302
61	1	61	60	1	60	795.554080	-0.000302
56	6	50	55	6	49	795.608740	0.000017
56	7	50	55	7	49	795.608740	0.000017
57	5	52	56	5	51	795.611120	0.000245
57	6	52	56	6	51	795.611120	0.000245
58	4	54	57	4	53	795.613720	-0.000092
58	5	54	57	5	53	795.613720	-0.000092
59	3	56	58	3	55	795.617370	0.000043
59	4	56	58	4	55	795.617370	0.000043
60	2	58	59	2	57	795.621160	-0.000129
60	3	58	59	3	57	795.621160	-0.000129
61	1	60	60	1	59	795.625470	-0.000113
61	2	60	60	2	59	795.625470	-0.000113
62	0	62	61	0	61	795.630080	-0.000066
62	1	62	61	1	61	795.630080	-0.000066
57	6	51	56	6	50	795.684190	0.000258
57	7	51	56	7	50	795.684190	0.000258
58	5	53	57	5	52	795.685590	-0.000624
58	6	53	57	6	52	795.685590	-0.000624
59	4	55	58	4	54	795.689320	0.000064
59	5	55	58	5	54	795.689320	0.000064
60	3	57	59	3	56	795.692970	0.000103
60	4	57	59	4	56	795.692970	0.000103
61	2	59	60	2	58	795.696820	-0.000080
61	3	59	60	3	58	795.696820	-0.000080
62	1	61	61	1	60	795.701230	-0.000037
62	2	61	61	2	60	795.701230	-0.000037
63	0	63	62	0	62	795.705800	-0.000091
63	1	63	62	1	62	795.705800	-0.000091
58	6	52	57	6	51	795.759100	-0.000024
58	7	52	57	7	51	795.759100	-0.000024
59	5	54	58	5	53	795.761270	-0.000280
59	6	54	58	6	53	795.761270	-0.000280
60	4	56	59	4	55	795.764870	0.000175
60	5	56	59	5	55	795.764870	0.000175
61	3	58	60	3	57	795.768390	-0.000002
61	4	58	60	4	57	795.768390	-0.000002
62	2	60	61	2	59	795.772280	-0.000227
62	3	60	61	3	59	795.772280	-0.000227
63	1	62	62	1	61	795.777010	0.000072
63	2	62	62	2	61	795.777010	0.000072
64	0	64	63	0	63	795.781830	0.000204
64	1	64	63	1	63	795.781830	0.000204
59	6	53	58	6	52	795.834460	0.000140
59	7	53	58	7	52	795.834460	0.000140
60	5	55	59	5	54	795.836910	0.000039
60	6	55	59	6	54	795.836910	0.000039
61	4	57	60	4	56	795.839980	-0.000147
61	5	57	60	5	56	795.839980	-0.000147
62	3	59	61	3	58	795.844070	0.000165
62	4	59	61	4	58	795.844070	0.000165
63	2	61	62	2	60	795.848090	-0.000008
63	3	61	62	3	60	795.848090	-0.000008
64	1	63	63	1	62	795.852950	0.000350
64	2	63	63	2	62	795.852950	0.000350

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
65	0	65	64	0	64	795.857000	-0.000337
65	1	65	64	1	64	795.857000	-0.000337
60	6	54	59	6	53	795.909480	-0.000033
60	7	54	59	7	53	795.909480	-0.000033
61	5	56	60	5	55	795.912280	0.000090
61	6	56	60	6	55	795.912280	0.000090
62	4	58	61	4	57	795.915640	0.000100
62	5	58	61	5	57	795.915640	0.000100
63	3	60	62	3	59	795.919890	0.000482
63	4	60	62	4	59	795.919890	0.000482
64	2	62	63	2	61	795.923440	-0.000232
64	3	62	63	3	61	795.923440	-0.000232
65	1	64	64	1	63	795.928170	-0.000069
65	2	64	64	2	63	795.928170	-0.000069
66	0	66	65	0	65	795.933320	0.000274
66	1	66	65	1	65	795.933320	0.000274
61	6	55	60	6	54	795.984970	0.000276
61	7	55	60	7	54	795.984970	0.000276
62	5	57	61	5	56	795.986840	-0.000659
62	6	57	61	6	56	795.986840	-0.000659
63	4	59	62	4	58	795.990630	-0.000322
63	5	59	62	5	58	795.990630	-0.000322
64	3	61	63	3	60	795.994970	0.000074
64	4	61	63	4	60	795.994970	0.000074
65	2	63	64	2	62	795.999290	0.000055
65	3	63	64	3	62	795.999290	0.000055
66	1	65	65	1	64	796.003920	0.000050
66	2	65	65	2	64	796.003920	0.000050
67	0	67	66	0	66	796.008900	0.000163
67	1	67	66	1	66	796.008900	0.000163
62	6	56	61	6	55	796.059920	0.000049
62	7	56	61	7	55	796.059920	0.000049
63	5	58	62	5	57	796.062500	-0.000294
63	6	58	62	6	57	796.062500	-0.000294
64	4	60	63	4	59	796.066400	0.000061
64	5	60	63	5	59	796.066400	0.000061
65	3	62	64	3	61	796.070500	0.000121
65	4	62	64	4	61	796.070500	0.000121
66	2	64	65	2	63	796.074710	-0.000075
66	3	64	65	3	63	796.074710	-0.000075
67	1	66	66	1	65	796.079500	0.000019
67	2	66	66	2	65	796.079500	0.000019
68	0	68	67	0	67	796.084870	0.000465
68	1	68	67	1	67	796.084870	0.000465
64	5	59	63	5	58	796.138110	0.000032
64	6	59	63	6	58	796.138110	0.000032
65	4	61	64	4	60	796.141600	-0.000127
65	5	61	64	5	60	796.141600	-0.000127
66	3	63	65	3	62	796.145800	-0.000039
66	4	63	65	4	62	796.145800	-0.000039
67	2	65	66	2	64	796.150150	-0.000164
67	3	65	66	3	64	796.150150	-0.000164
68	1	67	67	1	66	796.155100	0.000023
68	2	67	67	2	66	796.155100	0.000023
69	0	69	68	0	68	796.160380	0.000316
69	1	69	68	1	68	796.160380	0.000316
63	7	56	62	7	55	796.207680	-0.000136
63	8	56	62	8	55	796.207680	-0.000136
64	6	58	63	6	57	796.210200	-0.000002
64	7	58	63	7	57	796.210200	-0.000002
65	5	60	64	5	59	796.213240	-0.000115
65	6	60	64	6	59	796.213240	-0.000115
66	4	62	65	4	61	796.216700	-0.000397
66	5	62	65	5	61	796.216700	-0.000397
67	3	64	66	3	63	796.221240	-0.000051
67	4	64	66	4	63	796.221240	-0.000051
68	2	66	67	2	65	796.225860	0.000016
68	3	66	67	3	65	796.225860	0.000016
69	1	68	68	1	67	796.230730	0.000065
69	2	68	68	2	67	796.230730	0.000065
70	0	70	69	0	69	796.235470	-0.000233
70	1	70	69	1	69	796.235470	-0.000233
64	7	57	63	7	56	796.283110	0.000280
64	8	57	63	8	56	796.283110	0.000280
65	6	59	64	6	58	796.285280	-0.000080
65	7	59	64	7	58	796.285280	-0.000080
66	5	61	65	5	60	796.288870	0.000251
66	6	61	65	6	60	796.288870	0.000251
67	4	63	66	4	62	796.292710	0.000253
67	5	63	66	5	62	796.292710	0.000253
68	3	65	67	3	64	796.296660	-0.000076
68	4	65	67	4	64	796.296660	-0.000076
69	2	67	68	2	66	796.300720	-0.000635
69	3	67	68	3	66	796.300720	-0.000635
70	1	69	69	1	68	796.306310	0.000072
70	2	69	69	2	68	796.306310	0.000072
71	0	71	70	0	70	796.311530	0.000190
71	1	71	70	1	70	796.311530	0.000190
65	7	58	64	7	57	796.357830	-0.000018
65	8	58	64	8	57	796.357830	-0.000018

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
66	6	60	65	6	59	796.360530	0.000019
66	7	60	65	7	59	796.360530	0.000019
67	5	62	66	5	61	796.364120	0.000238
67	6	62	66	6	61	796.364120	0.000238
68	4	64	67	4	63	796.367900	0.000091
68	5	64	67	5	63	796.367900	0.000091
69	3	66	68	3	65	796.372350	0.000185
69	4	66	68	4	65	796.372350	0.000185
70	2	68	69	2	67	796.376400	-0.000447
70	3	68	69	3	67	796.376400	-0.000447
71	1	70	70	1	69	796.381670	-0.000130
71	2	70	70	2	69	796.381670	-0.000130
66	7	59	65	7	58	796.432760	-0.000101
66	8	59	65	8	58	796.432760	-0.000101
68	5	63	67	5	62	796.439420	0.000287
68	6	63	67	6	62	796.439420	0.000287
69	4	65	68	4	64	796.442690	-0.000456
69	5	65	68	5	64	796.442690	-0.000456
70	3	67	69	3	66	796.447420	-0.000154
70	4	67	69	4	66	796.447420	-0.000154
71	2	69	70	2	68	796.452410	0.000072
71	3	69	70	3	68	796.452410	0.000072
72	1	71	71	1	70	796.457830	0.000485
72	2	71	71	2	70	796.457830	0.000485
73	0	73	72	0	72	796.462240	-0.000322
73	1	73	72	1	72	796.462240	-0.000322
67	7	60	66	7	59	796.507730	-0.000137
67	8	60	66	8	59	796.507730	-0.000137
68	6	62	67	6	61	796.510680	-0.000112
68	7	62	67	7	61	796.510680	-0.000112
69	5	64	68	5	63	796.514460	0.000082
69	6	64	68	6	63	796.514460	0.000082
71	3	68	70	3	67	796.522710	-0.000279
71	4	68	70	4	67	796.522710	-0.000279
72	2	70	71	2	69	796.527680	-0.000128
72	3	70	71	3	69	796.527680	-0.000128
73	1	72	72	1	71	796.533090	0.000207
73	2	72	72	2	71	796.533090	0.000207
74	0	74	73	0	73	796.538220	0.000064
74	1	74	73	1	73	796.538220	0.000064
68	7	61	67	7	60	796.582360	-0.000510
68	8	61	67	8	60	796.582360	-0.000510
69	6	63	68	6	62	796.586060	0.000142
69	7	63	68	7	62	796.586060	0.000142
70	5	65	69	5	64	796.589980	0.000371
70	6	65	69	6	64	796.589980	0.000371
71	4	67	70	4	66	796.593680	-0.000116
71	5	67	70	5	66	796.593680	-0.000116
72	3	69	71	3	68	796.598430	0.000048
72	4	69	71	4	68	796.598430	0.000048
73	2	71	72	2	70	796.602930	-0.000341
73	3	71	72	3	70	796.602930	-0.000341
74	1	73	73	1	72	796.608520	0.000117
74	2	73	73	2	72	796.608520	0.000117
75	0	75	74	0	74	796.613900	0.000165
75	1	75	74	1	74	796.613900	0.000165
69	7	62	68	7	61	796.657710	-0.000169
69	8	62	68	8	61	796.657710	-0.000169
70	6	64	69	6	63	796.661320	0.000281
70	7	64	69	7	63	796.661320	0.000281
71	5	66	70	5	65	796.665050	0.000217
71	6	66	70	6	65	796.665050	0.000217
72	4	68	71	4	67	796.669140	0.000037
72	5	68	71	5	67	796.669140	0.000037
73	3	70	72	3	69	796.673870	0.000106
73	4	70	72	4	69	796.673870	0.000106
74	2	72	73	2	71	796.679100	0.000377
74	3	72	73	3	71	796.679100	0.000377
75	1	74	74	1	73	796.683890	-0.000031
75	2	74	74	2	73	796.683890	-0.000031
76	0	76	75	0	75	796.689310	0.000013
76	1	76	75	1	75	796.689310	0.000013
70	7	63	69	7	62	796.732940	0.000064
70	8	63	69	8	62	796.732940	0.000064
71	6	65	70	6	64	796.735990	-0.000169
71	7	65	70	7	64	796.735990	-0.000169
72	5	67	71	5	66	796.739980	-0.000066
72	6	67	71	6	66	796.739980	-0.000066
73	4	69	72	4	68	796.744660	0.000253
73	5	69	72	5	68	796.744660	0.000253
74	3	71	73	3	70	796.748780	-0.000356
74	4	71	73	4	70	796.748780	-0.000356
75	2	73	74	2	72	796.754020	-0.000149
75	3	73	74	3	72	796.754020	-0.000149
76	1	75	75	1	74	796.759240	-0.000179
76	2	75	75	2	74	796.759240	-0.000179
77	0	77	76	0	76	796.765190	0.000336
77	1	77	76	1	76	796.765190	0.000336
71	7	64	70	7	63	796.807720	-0.000152
71	8	64	70	8	63	796.807720	-0.000152

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
72	6	66	71	6	65	796.811530	0.000256
72	7	66	71	7	65	796.811530	0.000256
73	5	68	72	5	67	796.815280	0.000026
73	6	68	72	6	67	796.815280	0.000026
74	4	70	73	4	69	796.819790	0.000088
74	5	70	73	5	69	796.819790	0.000088
75	3	72	74	3	71	796.824410	-0.000092
75	4	72	74	4	71	796.824410	-0.000092
76	2	74	75	2	73	796.829500	-0.000097
76	3	74	75	3	73	796.829500	-0.000097
77	1	76	76	1	75	796.834740	-0.000171
77	2	76	76	2	75	796.834740	-0.000171
78	0	78	77	0	77	796.840520	0.000119
78	1	78	77	1	77	796.840520	0.000119
72	7	65	71	7	64	796.882760	-0.000095
72	8	65	71	8	64	796.882760	-0.000095
73	6	67	72	6	66	796.885890	-0.000482
73	7	67	72	7	66	796.885890	-0.000482
74	5	69	73	5	68	796.890450	-0.000003
74	6	69	73	6	68	796.890450	-0.000003
75	4	71	74	4	70	796.894770	-0.000210
75	5	71	74	5	70	796.894770	-0.000210
76	3	73	75	3	72	796.899960	0.000096
76	4	73	75	4	72	796.899960	0.000096
77	2	75	76	2	74	796.905160	0.000140
77	3	75	76	3	74	796.905160	0.000140
78	1	77	77	1	76	796.910510	0.000116
78	2	77	77	2	76	796.910510	0.000116
79	0	79	78	0	78	796.916070	0.000134
79	1	79	78	1	78	796.916070	0.000134
73	7	66	72	7	65	796.958050	0.000206
73	8	66	72	8	65	796.958050	0.000206
74	6	68	73	6	67	796.961340	-0.000134
74	7	68	73	7	67	796.961340	-0.000134
75	5	70	74	5	69	796.965910	0.000258
75	6	70	74	6	69	796.965910	0.000258
76	4	72	75	4	71	796.970630	0.000371
76	5	72	75	5	71	796.970630	0.000371
77	3	74	76	3	73	796.974950	-0.000256
77	4	74	76	4	73	796.974950	-0.000256
78	2	76	77	2	75	796.980470	0.000041
78	3	76	77	3	75	796.980470	0.000041
79	1	78	78	1	77	796.985930	0.000074
79	2	78	78	2	77	796.985930	0.000074
80	0	80	79	0	79	796.991600	0.000145
80	1	80	79	1	79	796.991600	0.000145
74	7	67	73	7	66	797.032850	0.000026
74	8	67	73	8	66	797.032850	0.000026
75	6	69	74	6	68	797.036150	-0.000420
75	7	69	74	7	68	797.036150	-0.000420
76	5	71	75	5	70	797.040900	0.000068
76	6	71	75	6	70	797.040900	0.000068
77	4	73	76	4	72	797.045420	-0.000102
77	5	73	76	5	72	797.045420	-0.000102
78	3	75	77	3	74	797.050270	-0.000280
78	4	75	77	4	74	797.050270	-0.000280
79	2	77	78	2	76	797.055910	0.000078
79	3	77	78	3	76	797.055910	0.000078
80	1	79	79	1	78	797.061520	0.000199
80	2	79	79	2	78	797.061520	0.000199
81	0	81	80	0	80	797.067010	0.000048
81	1	81	80	1	80	797.067010	0.000048
75	7	68	74	7	67	797.107710	-0.000092
75	8	68	74	8	67	797.107710	-0.000092
76	6	70	75	6	69	797.111390	-0.000265
76	7	70	75	7	69	797.111390	-0.000265
77	5	72	76	5	71	797.115810	-0.000203
77	6	72	76	6	71	797.115810	-0.000203
78	4	74	77	4	73	797.120500	-0.000284
78	5	74	77	5	73	797.120500	-0.000284
79	3	76	78	3	75	797.125860	-0.000016
79	4	76	78	4	75	797.125860	-0.000016
80	2	78	79	2	77	797.131100	-0.000125
80	3	78	79	3	77	797.131100	-0.000125
81	1	80	80	1	79	797.136900	0.000129
81	2	80	80	2	79	797.136900	0.000129
82	0	82	81	0	81	797.142490	0.000020
82	1	82	81	1	81	797.142490	0.000020
76	7	69	75	7	68	797.182730	-0.000054
76	8	69	75	8	68	797.182730	-0.000054
77	6	71	76	6	70	797.186400	-0.000339
77	7	71	76	7	70	797.186400	-0.000339
78	5	73	77	5	72	797.190830	-0.000361
78	6	73	77	6	72	797.190830	-0.000361
79	4	75	78	4	74	797.195800	-0.000237
79	5	75	78	5	74	797.195800	-0.000237
80	3	77	79	3	76	797.200900	-0.000296
80	4	77	79	4	76	797.200900	-0.000296
81	2	79	80	2	78	797.206570	-0.000042
81	3	79	80	3	78	797.206570	-0.000042

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
82	1	81	81	1	80	797.212310	0.000090
82	2	81	81	2	80	797.212310	0.000090
83	0	83	82	0	82	797.218130	0.000167
83	1	83	82	1	82	797.218130	0.000167
77	7	70	76	7	69	797.257880	0.000127
77	8	70	76	8	69	797.257880	0.000127
78	6	72	77	6	71	797.261790	-0.000023
78	7	72	77	7	71	797.261790	-0.000023
79	5	74	78	5	73	797.266630	0.000272
79	6	74	78	6	73	797.266630	0.000272
80	4	76	79	4	75	797.270620	-0.000658
80	5	76	79	5	75	797.270620	-0.000658
81	3	78	80	3	77	797.276260	-0.000257
81	4	78	80	4	77	797.276260	-0.000257
83	1	82	82	1	81	797.287620	-0.000032
83	2	82	82	2	81	797.287620	-0.000032
84	0	84	83	0	83	797.293640	0.000190
84	1	84	83	1	83	797.293640	0.000190
79	6	73	78	6	72	797.337010	0.000121
79	7	73	78	7	72	797.337010	0.000121
80	5	75	79	5	74	797.341790	0.000270
80	6	75	79	6	74	797.341790	0.000270
81	4	77	80	4	76	797.345880	-0.000641
81	5	77	80	5	76	797.345880	-0.000641
82	3	79	81	3	78	797.351690	-0.000128
82	4	79	81	4	78	797.351690	-0.000128
83	2	81	82	2	80	797.357310	-0.000046
83	3	81	82	3	80	797.357310	-0.000046
84	1	83	83	1	82	797.362710	-0.000367
84	2	83	83	2	82	797.362710	-0.000367
85	0	85	84	0	84	797.368830	-0.000102
85	1	85	84	1	84	797.368830	-0.000102
79	7	72	78	7	71	797.407140	-0.000553
79	8	72	78	8	71	797.407140	-0.000553
80	6	74	79	6	73	797.411640	-0.000312
80	7	74	79	7	73	797.411640	-0.000312
81	5	76	80	5	75	797.416340	-0.000337
81	6	76	80	6	75	797.416340	-0.000337
82	4	78	81	4	77	797.421290	-0.000463
82	5	78	81	5	77	797.421290	-0.000463
83	3	80	82	3	79	797.426730	-0.000400
83	4	80	82	4	79	797.426730	-0.000400
84	2	82	83	2	81	797.432610	-0.000112
84	3	82	83	3	81	797.432610	-0.000112
85	1	84	84	1	83	797.438490	-0.000007
85	2	84	84	2	83	797.438490	-0.000007
86	0	86	85	0	85	797.444720	0.000318
86	1	86	85	1	85	797.444720	0.000318
80	7	73	79	7	72	797.482530	-0.000130
80	8	73	79	8	72	797.482530	-0.000130
81	6	75	80	6	74	797.486990	-0.000033
81	7	75	80	7	74	797.486990	-0.000033
82	5	77	81	5	76	797.491960	0.000138
82	6	77	81	6	76	797.491960	0.000138
83	4	79	82	4	78	797.496640	-0.000344
83	5	79	82	5	78	797.496640	-0.000344
84	3	81	83	3	80	797.502660	0.000232
84	4	81	83	4	80	797.502660	0.000232
85	2	83	84	2	82	797.508100	0.000012
85	3	83	84	3	82	797.508100	0.000012
86	1	85	85	1	84	797.514200	0.000291
86	2	85	85	2	84	797.514200	0.000291
87	0	87	86	0	86	797.519970	0.000105
87	1	87	86	1	86	797.519970	0.000105
81	7	74	80	7	73	797.557330	-0.000286
81	8	74	80	8	73	797.557330	-0.000286
82	6	76	81	6	75	797.562070	-0.000010
82	7	76	81	7	75	797.562070	-0.000010
83	5	78	82	5	77	797.567050	0.000076
83	6	78	82	6	77	797.567050	0.000076
84	4	80	83	4	79	797.571620	-0.000583
84	5	80	83	5	79	797.571620	-0.000583
85	3	82	84	3	81	797.577810	0.000099
85	4	82	84	4	81	797.577810	0.000099
86	2	84	85	2	83	797.583350	-0.000087
86	3	84	85	3	83	797.583350	-0.000087
87	1	86	86	1	85	797.589530	0.000209
87	2	86	86	2	85	797.589530	0.000209
82	7	75	81	7	74	797.632220	-0.000360
82	8	75	81	8	74	797.632220	-0.000360
83	6	77	82	6	76	797.636910	-0.000230
83	7	77	82	7	76	797.636910	-0.000230
84	5	79	83	5	78	797.641750	-0.000368
84	6	79	83	6	78	797.641750	-0.000368
85	4	81	84	4	80	797.646800	-0.000627
85	5	81	84	5	80	797.646800	-0.000627
86	3	83	85	3	82	797.653010	0.000012
86	4	83	85	4	82	797.653010	0.000012
87	2	85	86	2	84	797.659060	0.000278
87	3	85	86	3	84	797.659060	0.000278

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
88	1	87	87	1	86	797.664890	0.000163
88	2	87	87	2	86	797.664890	0.000163
83	7	76	82	7	75	797.707700	0.000155
83	8	76	82	8	75	797.707700	0.000155
84	6	78	83	6	77	797.712320	0.000122
84	7	78	83	7	77	797.712320	0.000122
85	5	80	84	5	79	797.717420	0.000161
85	6	80	84	6	79	797.717420	0.000161
87	3	84	86	3	83	797.728150	-0.000133
87	4	84	86	4	83	797.728150	-0.000133
88	2	86	87	2	85	797.734040	-0.000091
88	3	86	87	3	85	797.734040	-0.000091
89	1	88	88	1	87	797.740090	-0.000042
89	2	88	88	2	87	797.740090	-0.000042
84	7	77	83	7	76	797.782570	0.000071
84	8	77	83	8	76	797.782570	0.000071
86	5	81	85	5	80	797.792360	-0.000037
86	6	81	85	6	80	797.792360	-0.000037
88	3	85	87	3	84	797.803480	-0.000093
88	4	85	87	4	84	797.803480	-0.000093
89	2	87	88	2	86	797.809440	-0.000039
89	3	87	88	3	86	797.809440	-0.000039
90	1	89	89	1	88	797.815480	-0.000041
90	2	89	89	2	88	797.815480	-0.000041
85	7	78	84	7	77	797.857450	-0.000010
85	8	78	84	8	77	797.857450	-0.000010
86	6	80	85	6	79	797.862470	0.000165
86	7	80	85	7	79	797.862470	0.000165
87	5	82	86	5	81	797.867640	0.000103
87	6	82	86	6	81	797.867640	0.000103
89	3	86	88	3	85	797.878860	0.000014
89	4	86	88	4	85	797.878860	0.000014
90	2	88	89	2	87	797.885200	0.000390
90	3	88	89	3	87	797.885200	0.000390
91	1	90	90	1	89	797.891080	0.000166
91	2	90	90	2	89	797.891080	0.000166
87	6	81	86	6	80	797.936970	-0.000386
87	7	81	86	7	80	797.936970	-0.000386
88	5	83	87	5	82	797.942530	-0.000138
88	6	83	87	6	82	797.942530	-0.000138
90	3	87	89	3	86	797.953770	-0.000359
90	4	87	89	4	86	797.953770	-0.000359
91	2	89	90	2	88	797.960280	0.000124
91	3	89	90	3	88	797.960280	0.000124
92	1	91	91	1	90	797.965810	-0.000501
92	2	91	91	2	90	797.965810	-0.000501
87	7	80	86	7	79	798.006930	-0.000453
87	8	80	86	8	79	798.006930	-0.000453
88	6	82	87	6	81	798.012410	-0.000008
88	7	82	87	7	81	798.012410	-0.000008
92	2	90	91	2	89	798.035500	0.000015
92	3	90	91	3	89	798.035500	0.000015
93	1	92	92	1	91	798.041420	-0.000285
93	2	92	92	2	91	798.041420	-0.000285
88	7	81	87	7	80	798.082340	-0.000009
88	8	81	87	8	80	798.082340	-0.000009
89	6	83	88	6	82	798.087880	0.000405
89	7	83	88	7	82	798.087880	0.000405
93	2	91	92	2	90	798.111150	0.000324
93	3	91	92	3	90	798.111150	0.000324
94	1	93	93	1	92	798.116960	-0.000133
94	2	93	93	2	92	798.116960	-0.000133
89	7	82	88	7	81	798.157210	-0.000108
89	8	82	88	8	81	798.157210	-0.000108
90	6	84	89	6	83	798.162620	0.000090
90	7	84	89	7	83	798.162620	0.000090
94	2	92	93	2	91	798.185980	-0.000185
94	3	92	93	3	91	798.185980	-0.000185
95	1	94	94	1	93	798.192590	0.000098
95	2	94	94	2	93	798.192590	0.000098
90	7	83	89	7	82	798.232380	0.000093
90	8	83	89	8	82	798.232380	0.000093
91	6	85	90	6	84	798.238180	0.000592
91	7	85	90	7	84	798.238180	0.000592
95	2	93	94	2	92	798.261460	-0.000046
95	3	93	94	3	92	798.261460	-0.000046
96	2	94	95	2	93	798.337030	0.000179
96	3	94	95	3	93	798.337030	0.000179
97	1	96	96	1	95	798.343350	0.000070
97	2	96	96	2	95	798.343350	0.000070
98	1	97	97	1	96	798.418190	-0.000487
98	2	97	97	2	96	798.418190	-0.000487
98	2	96	97	2	95	798.487840	0.000298
98	3	96	97	3	95	798.487840	0.000298
99	1	98	98	1	97	798.493700	-0.000394
99	2	98	98	2	97	798.493700	-0.000394
94	7	87	93	7	86	798.532270	0.000065
94	8	87	93	8	86	798.532270	0.000065
99	2	97	98	2	96	798.563460	0.000561
99	3	97	98	3	96	798.563460	0.000561

Continuation, see next page

Continuation of **Table A 3**: $2\nu_{40} \leftarrow$ ground state of indole

J'	K'_a	K'_c	J''	K''_a	K''_c	$\tilde{\nu}_{observed}$	$\tilde{\nu}_{obs.} - \tilde{\nu}_{cal.}$
95	7	88	94	7	87	798.607330	0.000133
95	8	88	94	8	87	798.607330	0.000133
96	7	89	95	7	88	798.682720	0.000515
96	8	89	95	8	88	798.682720	0.000515
97	7	90	96	7	89	798.758060	0.000845
97	8	90	96	8	89	798.758060	0.000845
98	7	91	97	7	90	798.832940	0.000702
98	8	91	97	8	90	798.832940	0.000702
99	7	92	98	7	91	798.907890	0.000621
99	8	92	98	8	91	798.907890	0.000621