

Table IX Wavenumbers of the Observed and Calculated Transitions in the $2\nu_3 - \nu_3$ Band of $\text{F}^{37}\text{Cl}^{16}\text{O}_3$

(I)			(II)	(III)	(IV)	(V)	(I)			(II)	(III)	(IV)	(V)
18	17	12	554.18362	554.17964	0.00398	0.00	31	32	15	536.63368	536.63376	-0.00008	1.00
17	16	12	553.83342	553.83067	0.00275	0.00	32	33	15	536.28189	536.28117	0.00072	1.00
16	15	12	553.48329	553.48160	0.00169	0.00	33	34	15	535.92859	535.92852	0.00007	1.00
15	14	12	553.13324	553.13243	0.00081	1.00	34	35	15	535.57549	535.57581	-0.00033	1.00
14	13	12	552.78313	552.78315	-0.00003	1.00	35	36	15	535.22228	535.22305	-0.00077	1.00
13	12	9	552.43326	552.43304	0.00022	1.00	36	37	15	534.86989	534.87023	-0.00034	1.00
12	11	9	552.08336	552.08356	-0.00020	1.00	37	38	15	534.51760	534.51735	0.00025	1.00
11	10	9	551.73349	551.73399	-0.00051	1.00	38	39	15	534.16420	534.16441	-0.00021	1.00
10	9	6	551.38348	551.38379	-0.00031	1.00	39	40	15	533.81093	533.81142	-0.00049	1.00
9	8	6	551.03329	551.03403	-0.00074	1.00	40	41	15	533.45839	533.45836	0.00003	1.00
8	7	6	550.68355	550.68418	-0.00063	1.00	41	42	15	533.10507	533.10525	-0.00018	1.00
7	6	3	550.33371	550.33391	-0.00019	1.00	42	43	15	532.75182	532.75207	-0.00025	1.00
6	5	3	549.98404	549.98388	0.00016	1.00	43	44	15	532.39849	532.39883	-0.00035	1.00
8	9	6	544.72375	544.72445	-0.00069	1.00	44	45	15	532.04611	532.04554	0.00057	1.00
9	10	9	544.37468	544.37386	0.00082	1.00	45	46	15	531.69249	531.69218	0.00031	1.00
10	11	9	544.02297	544.02257	0.00040	1.00	46	47	15	531.33928	531.33876	0.00053	1.00
11	12	9	543.67239	543.67122	0.00117	1.00	47	48	15	530.98424	530.98527	-0.00103	1.00
12	13	12	543.31981	543.32072	-0.00091	1.00	48	49	15	530.63142	530.63172	-0.00030	1.00
13	14	12	542.96832	542.96925	-0.00092	1.00	49	50	15	530.27809	530.27811	-0.00002	1.00
14	15	12	542.61747	542.61771	-0.00024	1.00	50	51	15	529.92414	529.92443	-0.00029	1.00
15	16	12	542.26395	542.26611	-0.00216	0.00	51	52	15	529.57149	529.57069	0.00080	0.00
16	17	12	541.91487	541.91445	0.00042	1.00	52	53	15	529.21716	529.21688	0.00028	1.00
17	18	12	541.56271	541.56273	-0.00001	1.00	53	54	15	528.85500	528.86300	-0.00800	0.00
18	19	12	541.21086	541.21094	-0.00009	1.00	54	55	15	528.50917	528.50905	0.00012	1.00
19	20	12	540.85917	540.85910	0.00007	1.00	55	56	15	528.15557	528.15504	0.00053	1.00
20	21	12	540.50708	540.50720	-0.00012	1.00	56	57	15	527.80179	527.80095	0.00084	1.00
21	22	12	540.15581	540.15523	0.00057	1.00	57	58	15	527.44300	527.44679	-0.00379	0.00
22	23	12	539.80347	539.80321	0.00026	1.00	58	59	15	527.09194	527.09256	-0.00062	1.00
23	24	12	539.45133	539.45113	0.00020	1.00	59	60	15	526.73772	526.73825	-0.00052	1.00
24	25	12	539.09927	539.09900	0.00028	1.00	60	61	15	526.38000	526.38387	-0.00387	0.00
25	26	12	538.74720	538.74680	0.00039	1.00	61	62	15	526.02949	526.02941	0.00008	1.00
26	27	12	538.39551	538.39455	0.00096	1.00	62	63	15	525.67279	525.67487	-0.00208	0.00
27	28	12	538.04253	538.04224	0.00030	1.00	63	64	15	525.32043	525.32026	0.00018	1.00
28	29	12	537.68986	537.68987	0.00000	1.00	64	65	15	524.96364	524.96556	-0.00192	0.00
29	30	12	537.33774	537.33744	0.00030	1.00	65	66	15	524.61500	524.61078	0.00422	0.00
30	31	15	536.98581	536.98629	-0.00048	1.00							

(I) In order the values of J upper, J lower and K lower are reported.

(II) Observed wavenumbers (in cm^{-1}).

(III) Calculated wavenumbers (in cm^{-1}).

(IV) Observed – Calculated values (in cm^{-1}).

(V) Transition weight..