

$^{46}\text{Ti}^{35}\text{Cl}$ Assigned Transitions

Transitions are labeled using four columns, the excited state J value (J'), the ground state J value (J''), the observed transition wavenumber (Observed) and the fit residual multiplied by 10^3 (O-C).

${}^4\Gamma_{5/2} - X^4\Phi_{3/2} (0,0)$							
J'	J''	Observed	O-C	J'	J''	Observed	O-C
3.5	2.5	23845.3705	7.8	29.5	28.5	23854.2739	-2.0
5.5	4.5	23846.0264	-2.4	30.5	29.5	23854.6277	-2.3
6.5	5.5	23846.3625	-0.5	31.5	30.5	23854.9855	0.5
7.5	6.5	23846.6977	-0.3	8.5	9.5	23841.1142	-0.3
8.5	7.5	23847.0340	0.1	9.5	10.5	23840.7962	2.6
9.5	8.5	23847.3717	1.2	10.5	11.5	23840.4746	1.0
10.5	9.5	23847.7065	-1.5	11.5	12.5	23840.1553	0.8
12.5	11.5	23848.3881	2.7	12.5	13.5	23839.8363	0.0
13.5	12.5	23848.7268	1.5	13.5	14.5	23839.5176	-1.3
15.5	14.5	23849.4037	-3.9	14.5	15.5	23839.2006	-1.9
16.5	15.5	23849.7370	-12.9	15.5	16.5	23838.8864	-0.6
17.5	16.5	23850.0903	-2.8	16.5	17.5	23838.5707	-1.6
18.5	17.5	23850.4374	0.3	17.5	18.5	23838.2575	-1.1
19.5	18.5	23850.7829	1.0	18.5	19.5	23837.9473	1.5
20.5	19.5	23851.1252	-2.3	19.5	20.5	23837.6271	-6.9
21.5	20.5	23851.4730	-1.0	20.5	21.5	23837.3328	9.7
22.5	21.5	23851.8189	-2.4	21.5	22.5	23837.0090	-4.2
23.5	22.5	23852.1872	17.8	22.5	23.5	23836.6968	-7.4
24.5	23.5	23852.5225	4.1	23.5	24.5	23836.4045	8.3
25.5	24.5	23852.8712	3.0	24.5	25.5	23836.0908	1.7
26.5	25.5	23853.2167	-2.1	25.5	26.5	23835.7832	0.1
27.5	26.5	23853.5703	0.0	26.5	27.5	23835.4784	0.3
28.5	27.5	23853.9197	-3.0	27.5	28.5	23835.1726	-1.5

${}^4\Gamma_{7/2} - X^4\Phi_{5/2} (0,0)$							
J'	J''	Observed	O-C	J'	J''	Observed	O-C
3.5	2.5	23899.9391	-2.3	20.5	19.5	23905.6666	1.0
5.5	4.5	23900.6059	-0.1	21.5	20.5	23906.0113	2.6
6.5	5.5	23900.9377	-1.4	22.5	21.5	23906.3558	3.0
7.5	6.5	23901.2744	1.7	23.5	22.5	23906.6976	-0.2
8.5	7.5	23901.6084	1.5	25.5	24.5	23907.3879	-2.9
9.5	8.5	23901.9439	2.3	9.5	10.5	23895.3492	1.3
10.5	9.5	23902.2801	3.2	11.5	12.5	23894.7049	3.6
11.5	10.5	23902.6135	0.7	12.5	13.5	23894.3814	2.3
12.5	11.5	23902.9404	-8.8	13.5	14.5	23894.0581	0.5
13.5	12.5	23903.2840	-2.3	14.5	15.5	23893.7347	-2.3
14.5	13.5	23903.6224	-1.6	15.5	16.5	23893.4171	-0.2
15.5	14.5	23903.9635	1.1	16.5	17.5	23893.0956	-2.8
16.5	15.5	23904.3025	0.9	17.5	18.5	23892.7808	0.4
17.5	16.5	23904.6431	1.7	18.5	19.5	23892.4564	-7.0
18.5	17.5	23904.9866	4.6	19.5	20.5	23892.1448	-2.7
19.5	18.5	23905.3174	-6.0	20.5	21.5	23891.8407	8.2