

Table 1: Freqs, ZPT=5721.6 (cm-1)

Mode	HARM	FUND	CORR
1	3832.2	3619.5	3619.5
2	3731.9	3532.4	3532.4
3	1618.5	1525.4	1584.2
4	913.5	858.0	858.0
5	888.1	818.3	818.3
6	696.4	657.8	657.8

Table 2: ABC (cm-1)

Constant	Value
A_0	9.659009
B_0	0.795297
C_0	0.768410
A_1	9.513865
B_1	0.796336
C_1	0.769840
A_2	9.483843
B_2	0.796657
C_2	0.769366
A_3	9.545067
B_3	0.798080
C_3	0.768440
A_4	9.929258
B_4	0.785740
C_4	0.760892
A_5	9.650853
B_5	0.788587
C_5	0.758964
A_6	9.656057
B_6	0.786146
C_6	0.760746

Table 3: Deltas

Constant	Units	Value
Δ_J	kHz	102.927
Δ_K	MHz	11.706
Δ_{JK}	MHz	1.919
δ_J	kHz	4.050
δ_K	kHz	739.559

Table 4: Phis

Constant	Units	Value
Φ_J	mHz	-5.639
Φ_K	kHz	3.560
Φ_{JK}	Hz	8.631
Φ_{KJ}	Hz	71.602
ϕ_j	mHz	21.725
ϕ_{jk}	Hz	11.351
ϕ_k	kHz	2.274

Table 5: Geom (A or Deg)

COORD	R(EQUIL)	R(ALPHA)
r(O1-O2)	1.5283027	1.5429019
r(O2-H3)	0.9651581	0.9716735
r(O2-H4)	0.9651581	0.9716735
\angle (O2-O1-H3)	100.6670973	100.0678971
\angle (O2-O1-H4)	100.6670973	100.0678971
\angle (O2-H3-H4)	106.9033367	107.4340913

Table 6: Fermi Resonances

$$2\nu_5=\nu_6+\nu_4=\nu_3$$