Species Tag: 72001  
Name: CaS  
Version: 1  
Date: Mar 2008  
ν = 0, 1  
Contributor: S. Yu  
B. Drouin  

Lines Listed: 382  
Freq. (GHz) < 1933  
Max. J: 191  
LOGSTR0= -36.5  
LOGSTR1= -36.5  
Isotope Corr.: 0.0  
Egy. (cm$^{-1}$) > 0.0  

$\mu_a = 6$  
$\mu_b =$  
$\mu_c =$  

The rotational line frequencies were taken from: Takano, Yamamoto, and Saito, 1989, Chem. Phys. Lett. 159, 563,  
The visible line frequencies used in the analysis were taken from: Melville and Coxon, 2002, J. Phys.Chem. A 106, 8271.  
The frequency analysis includes electronic states from $A \Sigma^+ v = 0-3$ to $X \Sigma^+ v = 0-3$. The ground state and the A state were fitted using equilibrium parameters. The $A \Sigma^+ v =3$ was fitted with perturbation from two dark states included.  
The dipole moment was estimated from similar species.