

Species Tag:	55002	Name:	CaCH3
Version:	3		Calcium Monomethyl,
Date:	April. 2005		X <sup>2</sup> A state, v = 0
Contributor:	B.J. Drouin		

Lines Listed:	5775	Q(300.0)=	47433.8531
Freq. (GHz) <	1456	Q(225.0)=	30783.9468
Max. J:	99	Q(150.0)=	16744.9376
LOGSTR0=	-10.0	Q(75.00)=	5919.3355
LOGSTR1=	-10.0	Q(37.50)=	2102.0300
Isotope Corr.:		Q(18.75)=	773.2050
Egy. (cm <sup>-1</sup> ) >	0.0	Q(9.375)=	302.9393
$\mu_a$ =	2.62	A=	163336.22
$\mu_b$ =		B=	7566.30814
$\mu_c$ =		C=	7566.30814

The experimental lines are from M. A. Anderson and L. M. Ziurys, The Astrophysical Journal, 460 :L77-L80, 1996. Data are fitted with  $\epsilon_{aa}$  instead of  $D_{NKS}$ . The A rotational constant and dipole moment are from A. J. Marr, F. Grieman, and T. C. Steimle J. Chem. Phys. 105 (10), 1996. The partition function is a sum over the ground state rotational levels within the given cutoffs.