CHIRPED-PULSE FOURIER TRANSFORM MICROWAVE SPECTROSCOPY OF *META*-CHLOROBENZALDEHYDE

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The pure rotational spectrum of *meta*-chlorobenzaldehyde (*m*-ClBA) has been measured from 8 - 18.5 GHz by chirped-pulse Fourier transform microwave (CP-FTMW) spectroscopy. The spectrum has been analyzed to discover the presence of two conformations of *m*-ClBA in the free jet expansion. For each conformation the rotational constants, the centrifugal distortion constants, and the nuclear quadrupole coupling constants have been found for both the ^{35}Cl and the ^{37}Cl isotopologue. The rotational constants and the nuclear quadrupole coupling constants have been compared to *ab initio* calculations performed using the Gaussian 03W software package.