FOURIER TRANSFORM EMISSION SPECTROSCOPY OF SOME NEW BANDS OF ReN

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The emission spectrum of ReN has been reinvestigated in the visible region using a Fourier transform spectrometer. Two new bands have been located at 22110 and 22224 cm^{-1} and assigned as the 0^+ - A1 and 0^- - A1 transitions. From the rotational analysis of these bands it has been concluded that the current 0^+ - A1 transition and the [24.7]0^+ - X0^+ transition observed previously by Balfour et al. [J. Mol. Spectrosc. 183, 113-118 (1997)] have an upper state in common. This assignment provides T_{00} = 2596 cm^{-1} for the A1 state. It is likely that the A1 and X0^+ states are two components of the $^3\Sigma^-$ ground state.