

MEASUREMENTS OF 1-0 BAND OF CARBON MONOXIDE AT TEMPERATURES BETWEEN 11 AND 296 KELVINS

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We measured the R (O) absorption line in pure CO between room temperature and 30 Kelvins, using an unstabilized lead salt laser. At temperatures below 30 Kelvins we could measure CO absorption only in a gaseous helium bath using the collisional cooling technique described by De Lucia and co-workers.

We will describe the results of our attempts to simultaneously fit the line intensity, self and foreign broadening coefficients as well as their temperature dependence.