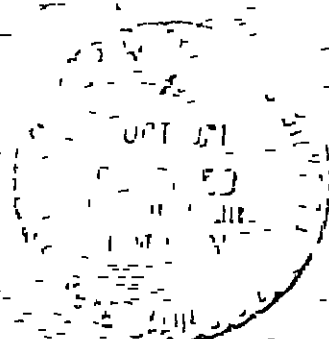




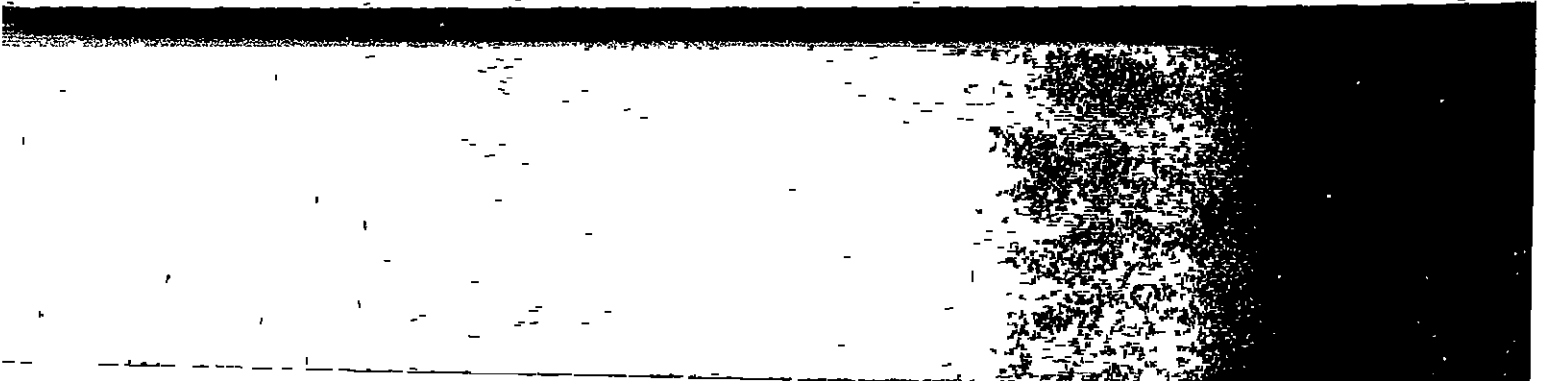
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# United Aircraft Research Laboratories



EAST HARTFORD, CONNECTICUT 06108

K-910904-2

Spectral Absorption Coefficients of  
Helium and Neon Buffer Gases and Nitric  
Oxide-Oxygen Seed Gas Mixture

NASA Contract No. SNPC-70

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## FOREWORD

An exploratory experimental and theoretical investigation of gaseous nuclear rocket technology is being conducted by the United Aircraft Research Laboratories under Contract SNPC-70 with the joint AEC-NASA Space Nuclear Systems Office. The Technical Supervisor of the Contract for NASA was Captain C. E. Franklin (USAF) for the first portion of the contract performance period and was Dr. Karlheinz Thom for the last portion of the contract performance period. Results obtained during the period September 16, 1970 and September 15, 1971 are described in the following seven reports (including the present report) which comprise the required second Interim Summary Technical Report under the Contract

1. Roman, W. C. and J. F. Jammet Experimental Investigations to Simulate the Thermal Environment and Fuel Region in Nuclear Light Bulb Reactors Using an R-F Radiant Energy Source. United Aircraft Research Laboratories Report K-910900-7, September 1971.
2. Klein, J. F. Experiments to Simulate Heating of the Propellant in a Nuclear Light Bulb Engine Using Thermal Radiation from a D-C Arc Radiant Energy Source. United Aircraft Research Laboratories Report K-910900-8, September 1971.
3. Bauer, H. E. Initial Experiments to Investigate Condensation of Flowing Metal-Vapor/Heated-Gas Mixtures in a Duct. United Aircraft Research Laboratories Report K-910900-9, September 1971.
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5. Latham, T. S. and H. E. Bauer Analytical Design Studies of In-Reactor Tests of a Nuclear Light Bulb Unit Cell. United Aircraft Research Laboratories Report K-910900-11, September 1971.
6. Krascella, N. L. Spectral Absorption Coefficients of Helium and Neon Buffer Gases and Nitric Oxide-Oxygen Seed Gas Mixture. United Aircraft Research Laboratories Report K-910904-2, September 1971. (present report)
7. Palma, G. E. and R. M. Gagosz Effect of 1.5 Mev Electron Irradiation on the Transmission of Optical Materials. United Aircraft Research Laboratories Report K-990929-2, September 1971.

Spectral Absorption Coefficients of Helium  
and Neon Buffer Gases and Nitric  
Oxide-Oxygen Seed Gas Mixture

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Spectral Absorption Coefficients of Helium  
and Neon Buffer Gases and Nitric  
Oxide-Oxygen Seed Gas Mixture

SUMMARY

A theoretical investigation was conducted to ascertain the spectral properties of helium and neon as a function of pressure, temperature and wave number. The spectral properties of these gases has a strong influence on radiative energy transfer in the buffer gas region of nuclear light bulb rocket engines.

A computer program was formulated and used to calculate spectral absorption coefficients of helium and neon at total pressures of 50, 100, 250, 500, 750 and 1000 atm in the temperature interval between 1,000 and 30,000 K. At each pressure and temperature, spectral properties were calculated for 47 wave numbers in the interval between  $1000 \text{ cm}^{-1}$  and  $1,000,000 \text{ cm}^{-1}$ .

In addition, previous estimates of spectral characteristics of a nitric oxide-oxygen seed mixture were extended to temperatures below 10,650 R.

## INTRODUCTION

Analytical and experimental investigations of various aspects of gaseous nuclear rocket technology are currently being conducted by the Research Laboratories of United Aircraft Corporation under Contract SNPC-70 administered by the joint AEC-NASA Space Nuclear Systems Office. Of primary interest under this contract is the nuclear light bulb engine concept described in Ref 1. In this concept, a vortex-stabilized gaseous nuclear reactor emits thermal radiation which is utilized to heat a seeded hydrogen propellant. The nuclear fuel, which is suspended in a neon or helium vortex, and the seeded propellant are physically separated by an internally cooled transparent wall. Knowledge of the spectral distribution of thermal radiation emitted from the nuclear fuel region and subsequently incident upon the transparent containment wall or reflective end wall is necessary in analyzing the feasibility of the nuclear light bulb engine concept.

Previous calculations performed at UARL were made to determine the spectral distribution of radiative energy emitted from the fuel-containment region of a nuclear light bulb engine (Refs. 2 and 3). These calculations were made for a seeded and unseeded fuel region but did not take into account radiative transfer and convection of energy in the rare gas (helium and neon) buffer region which can be seeded with a mixture of nitric oxide and oxygen. Solution of this energy transfer problem requires knowledge of the spectral properties of the rare gas buffer and the rare gas buffer-seed mixture. In order to provide this information, a program was formulated to determine the composition and spectral properties of helium and neon as functions of pressure, temperature and wave number, and to ascertain the spectral properties of a nitric oxide-oxygen seed-gas mixture at temperatures applicable to the buffer-gas region. These results were subsequently used in the radiant heat transfer analysis of the fuel and buffer gas regions of the nuclear light bulb engine (Ref 4).

## ANALYSIS OF RARE GAS ABSORPTION

A machine program was devised to enable calculation of the composition and spectral properties of helium and neon as functions of pressure, temperature and wave number. The calculational procedure used in the computer code is outlined in succeeding sections.

## Composition

Ionization Reactions

Because of the very high ionization potentials associated with helium and neon, and the temperature range of interest in the present study, only two stages of ionization were considered. These ionization reactions are



where A represents either helium or neon. The ionization potentials used were (Ref. 5)

Reaction (1)	He	24.581 ev (198,297 cm <sup>-1</sup> )	
	Ne:	21.559 ev (173,919 cm <sup>-1</sup> )	_____
Reaction (2)	He	54.403 ev (438,874 cm <sup>-1</sup> )	
	Ne	41.07 ev (331,316 cm <sup>-1</sup> )	

Mathematical Relations

The basic mathematical relations used to compute the composition of helium or neon in terms of neutral atoms, the first and second ionization species and electrons are

(a) Daltons' law of partial pressures.

$$P_{i,t} = \sum_{j=1}^3 P_{i,j} + P_e \quad (3)$$

where the P's represent pressures in atm. The subscript i refers to the specific buffer gas being examined, i = 1 - helium and i = 2 - neon. The subscript j defines a particular atomic or ionic species, j = 1 - neutral atoms, j = 2 - singly charged

ions,  $j = 3$  - doubly charged ions Subscripts t and e refer respectively to total quantities and electrons

(b) Equation of electrical neutrality

$$P_e = P_{i,2} + 2P_{i,3} \quad (4)$$

(c) Saha equations for ionization equilibrium

$$\frac{P_{i,j+1} P_e}{P_{i,j}} = \frac{2(2\pi m_e)^{3/2} (kT)^{5/2}}{h^3} \frac{Z_{i,j+1}}{Z_{i,j}} \times \exp - \left[ \frac{I_{i,j} - \Delta I_j}{kT} \right] \equiv \psi_{i,j,j=1,2} \quad (5)$$

where  $Z$  is a partition function,  $I$ , the ionization potential, and  $\Delta I$ , the ionization potential lowering

(d) Partition functions

$$Z_{i,j} = \sum_{n=1}^{n^*} g_{i,j,n} \exp - \left[ E_{i,j,n} / kT \right] \quad (6)$$

where

$$g_{i,j,n} = 2J_{i,j,n} + 1 \quad (7)$$

The requisite quantum number  $J$  and level energies  $E$  were obtained from Ref. 6 The quantity  $n^*$  is determined such that

$$n^* \Rightarrow E_{i,j,n} \leq I_{i,j} - \Delta I_{i,j} \quad (8)$$

It represents the last bound energy level in an atom or ion with a value equal to or less than the reduced ionization potential

It should be noted that Eq (6) was used to calculate partition functions for  $He^0$ ,  $Ne^0$  and  $Ne^+$  For all other species in the temperature range of interest

$$Z_{i,j} = g_{i,j,0} \quad (9)$$

where  $g_{i,j,0}$  is the statistical weight of the ground state of the atom or ion

(e) Ionization potential lowering



In the presence of electric fields due to electrons and ions, the ionization potential of an atomic or ionic species is reduced with reference to the isolated species according to the following relationship (Ref. 5)

$$\Delta I_j = (z+1)e_0^2/\rho_D \quad (10)$$

$$z = (j-1) \quad (11)$$

where  $\rho_D$  is the Debye length, a function of the electron and ion number densities. The quantity  $z$  is the electrical charge on the species in question ( $z = 0$ , neutral atoms,  $z = 1$ , singly ionized species, etc.).

(f) Maximum bound hydrogenic level

The summation in Eq (6) is limited such that the last level included in the sum is given by

$$E_{i,j,n^*} \leq I_{i,j} - \Delta I_j \quad (12)$$

(g) Debye length

The Debye length essentially determines the distance over which electrons and ions are effective in reducing the ionization potential of a species and is determined by the following relation (Ref. 5).

$$\rho_D = \left[ \frac{kT}{4\pi\epsilon_0^2 \left\{ N_e + \sum_{i,j} (j-1)^2 N_{i,j} \right\}} \right]^{1/2} \quad (13)$$

where the  $N$ 's are number densities. These quantities are related to corresponding partial pressures by

$$N = 7.341 \times 10^{21} \frac{P}{T} \quad (14)$$

#### Iteration Procedure

Equations (3), (4) and (5) can be solved to determine the electron pressure

$$P_e^3 + 2\psi_{1,1}P_e^2 + \psi_{1,1}(3\psi_{1,2} - P_t)P_e - 2\psi_{1,1}\psi_{1,2}\psi_{1,3}P_t = 0 \quad (15)$$

Once  $P_e$  is known, the partial pressures of the other species can be determined by means of the following relations

$$P_{i,3} = \psi_{i,2} P_e / D_i \quad (16)$$

$$P_{i,2} = P_e^2 / D_i \quad (17)$$

$$P_{i,1} = P_t - (P_{i,2} + P_{i,3} + P_e) \quad (18)$$

$$D_i = P_e + 2\psi_{i,2} \quad (19)$$

The Saha functions and partition functions depend on the electron pressure through the Debye length, thus an iterative procedure must be employed to determine composition as a function of temperature. Initially Eqs (15) through (19) are used to determine the partial pressures of all species assuming  $\rho_D = 0$ . These estimates of the partial pressures of electrons and ions are used to estimate  $\rho_D$  from Eq. (13). With this estimated  $\rho_D$ , a new determination of the composition is made. The procedure is repeated until successive values of  $P_e$  agree to within a specified tolerance given by

$$\left| P_e^{(m)} - P_e^{(m+1)} \right| \leq \text{TOL} \leq 10 \times 10^{-3} \quad (20)$$

Convergence is usually obtained after 4 or 5 attempts. After convergence, a final estimate of the partial pressures of all other species is made. Subsequently, all pressure data are converted to number densities by means of Eq (14). Both number densities and partial pressures are printed as part of the computer output.

### Spectral Absorption Coefficients

In previous studies of the spectral emission of radiant energy from the fuel region (see Refs. 2 and 3), the need for seeding to block radiation of energy in the ultraviolet spectral regions was demonstrated. Because of the relatively strong absorption of radiation by the seed mixtures in the bound-bound region of the rare gas species, only continuum transitions were considered in the current spectral absorption coefficient analysis for helium and neon. Continuum transitions included in the study were bound-free absorption of neutral atoms, free-free transitions of neutral atoms and free-free transitions of positive ions.

#### Helium, Bound-Free Transitions

The cross-section data of Ref 7 were used to estimate bound-free absorption from helium in the ground state and the first four excited states. These cross-sections are given by

$$\sigma_{1,1,1}^{bf}(\omega) = 3.2840 \times 10^{-7} / \omega^2, \omega \geq 198305 \text{ cm}^{-1} \quad (21)$$

$$\ln \sigma_{1,1,2}^{bf}(\omega) = -66.322167 + [5.801706 - 0.315732 \ln \omega] \ln \omega \quad (22)$$

$$\omega \geq 38455 \text{ cm}^{-1}$$

$$\sigma_{1,1,3}^{bf}(\omega) = 4.5633 \times 10^{-9} / \omega^{1.91}, \omega \geq 32033 \text{ cm}^{-1} \quad (23)$$

$$\sigma_{1,1,4}^{bf}(\omega) = \left( \frac{15390}{\omega^{2.9}} + \frac{3.0655}{\omega^{3.3}} \right) \times 10^{-4}, \omega \geq 29224 \text{ cm}^{-1} \quad (24)$$

$$\sigma_{1,1,5}^{bf}(\omega) = \left( \frac{4.3266}{\omega^{3.5}} + \frac{0.58003}{\omega^{3.6}} \right) \times 10^{-2}, \omega \geq 27176 \text{ cm}^{-1} \quad (25)$$

Each cross-section was multiplied by the appropriate level population density to give the corresponding absorption coefficient

$$a_{1,1,n}^{bf}(\omega) = \sigma_{1,1,n}^{bf}(\omega) N_{1,1,n} \quad (26)$$

The level population density,  $N_{1,1,n}$ , is given by

$$N_{1,1,n} = \frac{N_{1,1} g_{1,1,n}}{Z_{1,1}} \exp(-E_{1,1,n}/kT) \quad (27)$$

where the total number density of neutral helium atoms,  $N_{1,1}$  and the partition function,  $Z_{1,1}$  are obtained from the composition subroutine

### Neon, Bound-Free Transitions

A search of the current literature revealed that only bound-free transitions from the ground state of the neutral neon atom have been examined either theoretically or experimentally. The experimentally determined cross-section results of Ref 8 were used to compute ground state absorption of the neutral neon atom. Absorption coefficients were calculated by means of the following equations

$$a_{2,l,l}^{bf}(\omega) = \sigma_{2,l,l}^{bf}(\omega) N_{2,l,l} \quad (28)$$

The ground state population density,  $N_{2,1}$ , is given by

$$N_{2,l,l} = \frac{N_{2,l} g_{2,l,l}}{Z_{2,l}} \exp -(E_{2,l,n}/kT) \quad (29)$$

where the total number density of neutral neon atoms,  $N_{2,1}$  and the partition functions,  $Z_{2,1}$  are available from the composition subroutine.

#### Neutral Atom Bound-Free Transitions, Excited State Approximation

The contribution to bound-free absorption from the ground states of helium and neon as well as the first four excited states of helium were explicitly calculated by means of Eqs (26) and (28). Estimates of the contribution to bound-free absorption from all other states in helium and neon were based on the approximate treatment discussed in Refs. 9 and 10. The approximation is a modification of the quantum defect method originally proposed in Ref. 11.

The cross-section for transitions from higher excited states is given by (Ref. 9)

$$\sigma_{l,l}^{*bf}(\omega) = 6.59 \times 10^{-8} \frac{Z_{l,l} + 1}{Z_{l,l}} \frac{\zeta_l(\omega) T}{\omega^3} (e^{\mu^*} - 1) e^{-\mu_0} \quad (30)$$

where

$$\mu^* = 1.4389 \omega / T, \quad \omega \leq \omega_g \quad (31)$$

$$\mu^0 = 1.4389 \omega_g / T, \quad \omega > \omega_g \quad (32)$$

The quantity  $\omega_g$  was set equal to the ionization energy of the first excited state in neon and 5th excited state in helium. These values are

$$\omega_g(\text{helium}) = 1.50739 \times 10^4 \text{ cm}^{-1} \quad (33)$$

$$\omega_g(\text{neon}) = 3.98879 \times 10^4 \text{ cm}^{-1} \quad (34)$$

The reduced energy terms,  $\mu_0$ , are given by

$$\mu_0 = 1.4389 \omega_0 / T \quad (35)$$

where  $\omega_0$  is the ionization energy from the ground state of the atom. These values are

$$\omega_0(\text{helium}) = 1.98305 \times 10^5 \text{cm}^{-1} \quad (36)$$

$$\omega_0(\text{neon}) = 1.73932 \times 10^5 \text{cm}^{-1} \quad (37)$$

The factor  $\zeta_1(\omega)$  is determined by means of the quantum defect method of Ref 11. Values of  $\zeta_1(\omega)$  used in the program are shown in Fig. 1 for helium and neon and were obtained from Refs 10 and 12. The absorption coefficient is given by

$$a_{1,j} \text{ *bf}(\omega) = \sigma_{1,j} \text{ *bf}(\omega) N_{1,1} \quad (38)$$

where  $N_{1,1}$  is the number of neutral atoms of helium or neon

#### Positive Ions, Free-Free Transitions

The free-free cross-section of electrons in the fields of positive ions can be written as (Ref 10)

$$\sigma_{1,j}^{\text{ff}}(\omega) = \sigma_j^K(\omega) \bar{g}(\mu, \gamma^2) \zeta_1(\omega), \quad j=2,3 \quad (39)$$

The quantity  $\sigma_j^K(\omega)$  is the semi-classical absorption cross-section for free-free transitions (Ref 10) and is given by

$$\sigma_j^K(\omega) = \frac{4}{3\sqrt{6}\pi} \left( \frac{2\pi e_0^2}{hc} \right) \left( \frac{e_0^2}{m_e c^2} \right)^2 \left( \frac{m_0 c^2}{k} \right)^{1/2} \frac{1}{\omega T^{1/2}} \quad (40)$$

The averaged Gaunt factor  $\bar{g}(\mu, \gamma^2)$  is given in Ref 13 as a function of the dimensionless parameters  $\mu$  and  $\gamma^2$ , where

$$\mu = 1.4389 \omega / T \quad (41)$$

and

$$\gamma^2 = z^2 hc R_\infty / kT \quad (42)$$

Values of  $\bar{g}(\mu, \gamma^2)$  as a function of  $\mu$  and  $\gamma^2$  are given in Table I. A double interpolation scheme was used to interpolate in the two dimensional array shown in Table I for  $\bar{g}(\mu, \gamma^2)$ . The values of  $\zeta_1(\omega)$  were obtained from Fig 1.

Absorption coefficients for free-free transitions were calculated from

$$a_{i,j}^{ff}(\omega) = \sigma_{i,j}^{ff}(\omega) N_e N_{i,j}, j = 2,3 \quad (43)$$

where the electron density,  $N_e$  and ion density,  $N_{i,j}$  were obtained from the composition subroutine

#### Free-Free Transitions, Neutral Atoms

The free-free transitions of electrons in the fields of neutral atoms of helium or neon is given according to Ref 14 by

$$\sigma_{i,j}^{ff}(\omega) = \frac{4.512 \times 10^{-34}}{T^{3/2}} \left[ I_1(\mu) \left\{ D_1 + \frac{3\omega'}{\mu} D_3 \ln \omega' + \frac{3\omega'}{\mu} D_4 \right\} \right. \\ \left. + (\omega')^{1/2} D_2 I_2(\mu) + \omega' D_3 I_3(\mu) + (\omega')^{3/2} D_5 I_4(\mu) \right] \quad (44)$$

where

$$\mu = 1.4389 \omega / T \quad (45)$$

$$\omega' = 1.2395 \times 10^{-4} \omega \quad (46)$$

The coefficients  $D_1$  through  $D_5$  are listed in Table II for helium and neon. Values of  $I_1(\mu)$  through  $I_4(\mu)$  tabulated in Ref 14 as a function of the dimensionless quantity  $\mu$  were curve fit to equations of the form

$$\ln I_p(\mu) = A + B \ln \mu \quad (47)$$

Table III is a list of values of A and B used. These equations were also used to obtain  $I_p(\mu)$  for values of  $\mu > 2.50$ . The absorption coefficient was calculated from

$$\sigma_{i,j}^{ff}(\omega) = \sigma_{i,j}^{ff}(\omega) N_e N_{i,j} \quad (48)$$

where the electron density,  $N_e$  and the density of neutral helium or neon atoms  $N_{i,j}$  were obtained from the composition subroutines

#### Total Absorption Coefficient

The total absorption coefficient is given by

$$a_{i,t}(\omega) = \left[ a_{i,j,n}^{bf}(\omega) + a_{i,j}^{*bf}(\omega) + a_{i,j}^{ff}(\omega) + a_{i,j}^{ff}(\omega) \right] \left[ 1 - e^{-\frac{hc\omega}{kT}} \right] \quad (49)$$

where  $\left[ 1 - e^{-\frac{hc\omega}{kT}} \right]$  is the stimulated emission factor

## RESULTS OF CALCULATIONS FOR RARE GASES

Numerical results from the composition subroutine are listed in Table IV for helium and in Table V for neon. Tables IV and V indicate partial pressures in atms. and number densities in  $\text{cm}^{-3}$  of the various species for total pressures of 50, 100, 250, 500, 750 and 1,000 atms at 16 temperatures in the interval between  $1.0 \times 10^3$  and  $3.0 \times 10^4$  K. Typical partial pressure distributions as a function of temperature at representative pressures are graphically illustrated in Fig. 2 for helium and in Fig. 3 for neon.

Numerical results from the absorption coefficient subroutine are listed in Table VI for helium and in Table VII for neon. The tabulated data are total absorption coefficients in  $\text{cm}^{-1}$  at 47 wave numbers in the interval between  $1.0 \times 10^3$  and  $1.0 \times 10^6$   $\text{cm}^{-1}$ . Spectral absorption coefficients are tabulated for the same pressures and temperatures as the composition results. Typical spectral absorption coefficient distributions are plotted at several temperatures in Fig. 4 for helium and in Fig. 5 for neon for a total pressure of 750 atm.

SPECTRAL ABSORPTION COEFFICIENTS OF NITRIC  
OXIDE AND OXYGEN SEED GAS MIXTURE

Previous analysis of the spectral distribution of radiative energy emitted from the seeded fuel region of a gaseous nuclear light bulb engine (Ref 3) required an estimate of the spectral properties of a mixture of 5 atm of nitric oxide and 5 atm of oxygen. The absorption coefficient estimates for the seed gas mixture were made for temperatures greater than approximately 10,650 R. Current radiative transfer studies related to the seeded buffer gas region require similar estimates of seed gas absorption characteristics at temperatures between approximately 2000 R and 10,650 R. To estimate the seed gas absorption coefficients, extensive use was made of the spectral absorption coefficient results for heated air at various densities reported in Ref. 15. Spectral cross-sections for molecular oxygen, nitrogen and nitric oxide were estimated by dividing the tabulated absorption coefficients (Ref 15) by the appropriate concentration of absorber. Air composition distributions at various temperatures were obtained from Ref 16. The following molecular band systems and continua were calculated from these data

- (1) Molecular oxygen Schumann-Runge band system and continuum
- (2) Molecular nitrogen first and second positive band systems and the Birge-Hopfield No 1 band system
- (3) Nitric oxide Beta and Gamma band systems and the vibrational-rotational bands

Additional cross-sections were obtained from the miscellaneous bands of nitric oxide below a wavelength of 1000 Å from the results reported in Ref 17. Similarly, the results of Ref 17 were used to estimate average cross-sections for molecular oxygen and nitrogen for wavelengths less than approximately 1000 Å.

Monatomic species contributions to absorption includes photo-detachment from the negative oxygen ion, free-free transitions of the positive ions of oxygen and nitrogen as well as the bound-free transitions from atomic oxygen and nitrogen. Cross-section data for photo-detachment from the negative oxygen ion were obtained from Ref 15. A computer program was formulated to determine free-free cross-sections for positive ions and bound-free cross-sections due to the neutral species.

The requisite composition distribution as a function of temperature for a mixture of 5 atm each of nitric oxide and oxygen was computed using the UARL equilibrium composition machine codes (Ref 18). Subsequently, absorption coefficients were calculated for the mixture in the usual manner

$$\alpha_{\omega} = \sigma_{\omega} N \quad (50)$$



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Composition results for the nitric oxide - oxygen seed mixture for temperatures up to 11,650 R are shown in Fig 6 Spectral absorption coefficient results are illustrated in Fig 7 for various temperatures

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## LIST OF SYMBOLS

a	Absorption coefficient, $\text{cm}^{-1}$
A	Constant, see Eq (47) and Table III
B	Constant, see Eq. (47) and Table III
c	Velocity of light, $2.9978 \times 10^{10}$ cm/sec
D	Constant, see Eq (44) and Table II
$e_0$	Electron charge, $4.802 \times 10^{-10}$ esu
E	Energy of an atomic or ionic level, $\text{cm}^{-1}$
g	Statistical weight of a level
$\bar{g}$	Averaged Gaunt Factor, see Table I
h	Planck constant, $6.6237 \times 10^{-27}$ erg/sec
I	Ionization potential, ev or $\text{cm}^{-1}$
$\Delta I$	Ionizational potential lowering, ev
$I(\mu)$	See Eq. (44) and Table II
J	Quantum number
k	Boltzmann constant, $8.6163 \times 10^{-5}$ ev/deg K
$m_e$	Electron mass, $9.107 \times 10^{-28}$ g
N	Number density, $\text{cm}^{-3}$
P	Pressure, atm
R	Rydberg constant, $109,737.312 \text{ cm}^{-1}$
T	Temperature, K
z	Charge number
Z	Partition function

$\zeta(\omega)$  Quantum defect function, see Eq (30) and Fig. 1

$\mu$  Dimensionless energy or wave number

$\rho_D$  Debye length, cm

$\sigma$  Cross-section,  $\text{cm}^2$

$\psi$  Saha function,  $\text{cm}^{-3}$

$\omega$  Wave number,  $\text{cm}^{-1}$

Subscripts or superscripts

bf bound-free transition

e refers to electrons

ff free-free transition

i refers to a chemical species

j refers to an ionization species

\* refers to an excited state

o refers to ground state quantities

t refers to total quantities

Notation for Composition and Absorption Coefficient Tables

N(1 1) Number density of neutral atom,  $\text{cm}^{-3}$

N(1 2) Number density of singly ionized species,  $\text{cm}^{-3}$

N(1 3) Number density of doubly ionized species,  $\text{cm}^{-3}$

P(1 1) Partial pressure of neutral atom, atm

P(1.2) Partial pressure of singly ionized species, atm

P(1 3) Partial pressure of doubly ionized species, atm

Table I

Averaged Gaunt Factors,  $\bar{g} (\mu \gamma^2)$ 

(Ref 13)

$\mu$	$\gamma^2 = 3$	$\gamma^2 = 10$	$\gamma^2 = 100$	$\gamma^2 = 1000$
2	1 5000	1 3800	1 2000	1 1000
3	1 4250	1 3250	1 1600	1.0900
4	1 3750	1 2850	1 1400	1 0700
.6	1 3200	1 2400	1 1300	1 0600
8	1 2800	1 2300	1 1100	1.0550
1 0	1 2650	1 2000	1 1050	1 0500
1 2	1 2500	1 1925	1 1000	1 0480
1.4	1 2350	1 1825	1 0950	1 0470
1 6	1 2250	1 1770	1 0925	1 0450
1 8	1 2150	1 1700	1 0900	1 0440
2.0	1 2075	1 1660	1 0860	1 0425
2 4	1 1950	1 1600	1 0850	1 0413
2 8	1.1850	1 1550	1 0820	1 0400
3 2	1 1760	1 1500	1 0800	1 0390
3 6	1 1700	1 1475	1 0790	1.0380
4 2	1 1600	1 1450	1 0785	1 0370
5 0	1 1500	1 1400	1 0790	1 0365
5 8	1 1400	1.1375	1.0795	1 0375
6 2	1 1350	1 1350	1 0798	1 0380
7 2	1 1250	1 1340	1 0800	1 0390
8 2	1 1150	1 1325	1.0805	1.0395
9 2	1 1050	1 1300	1 0810	1 0400
10 2	1 0950	1 1280	1 0815	1 0410
12 0	1 0780	1 1250	1 0840	1 0420
14.2	1 0600	1 1200	1 0855	1 0435
16 2	1 0450	1 1170	1 0870	1 0450
18 0	1 0300	1 1140	1 0885	1 0460
20 6	1 0150	1 1075	1 0905	1 0465
23 0	1 0000	1 1020	1 0910	1 0475
25 4	0.9850	1 0975	1.0925	1 0485
26 4	0 9800	1 0950	1 0936	1 0490
28 0	0 9700	1 0900	1 0940	1 0495
30 0	0 9600	1 0860	1 0950	1 0500

Table II  
 Values of D Constants  
 (Ref 14)

	Helium	Neon
D <sub>1</sub>	1.32970	0 05760
D <sub>2</sub>	0 89047	0 36300
D <sub>3</sub>	0 17738	0 01488
D <sub>4</sub>	-0 63232	0.24610
D <sub>5</sub>	-	-0.19970

Table III  
 Calculated Values of Constants A and B

P	A	B
1	1.3383	-2.0123
2	1.8204	-2 5189
3	2.0789	-3.5236
4	3.1458	-3 5003

TABLE IV  
COMPOSITION DISTRIBUTIONS FOR HELIUM  
AT TOTAL PRESSURE = 50 ATM

TEMP (DEG K)	* ELECTRON PRESSURE	P(1,1)	P(1,2) ATM	P(1,3)
1.000+03	* 0.000	5.000+01	0.000	0.000
2.000+03	* 0.000	5.000+01	0.000	0.000
4.000+03	* 8.422-14	5.000+01	8.422-14	0.000
6.000+03	* 2.031-08	5.000+01	2.031-08	0.000
8.000+03	* 1.110-05	5.000+01	1.110-05	1.004-31
1.000+04	* 5.201-04	5.000+01	5.201-04	1.269-24
1.200+04	* 7.074-03	4.999+01	7.074-03	7.594-20
1.400+04	* 4.718-02	4.991+01	4.718-02	2.115-16
1.600+04	* 2.005-01	4.900+01	2.005-01	8.608-14
1.800+04	* 0.204-01	4.875+01	6.264-01	9.651-12
2.000+04	* 1.563+00	4.607+01	1.563+00	4.362-10
2.200+04	* 3.271+00	4.346+01	3.271+00	1.012-08
2.400+04	* 5.902+00	3.820+01	5.902+00	1.414-07
2.600+04	* 9.351+00	3.100+01	9.351+00	1.330-06
2.800+04	* 1.317+01	2.306+01	1.317+01	9.128-06
3.000+04	* 1.673+01	1.654+01	1.673+01	4.853-05

TEMP (DEG K)	* ELECTRON DENSITY	N(1,1)	N(1,2) CM <sup>-3</sup>	N(1,3)
1.000+03	* 0.000	3.670+20	0.000	0.000
2.000+03	* 0.000	1.835+20	0.000	0.000
4.000+03	* 1.546+05	9.176+19	1.546+05	0.000
6.000+03	* 2.485+10	6.117+19	2.485+10	0.000
8.000+03	* 1.018+13	4.598+19	1.018+13	9.216-14
1.000+04	* 3.818+14	3.670+19	3.818+14	9.317-07
1.200+04	* 4.328+15	3.058+19	4.328+15	4.645-02
1.400+04	* 2.474+16	2.617+19	2.474+16	1.109+02
1.600+04	* 9.199+16	2.276+19	9.199+16	3.949+04
1.800+04	* 2.555+17	1.988+19	2.555+17	3.936+06
2.000+04	* 5.738+17	1.720+19	5.738+17	1.601+08
2.200+04	* 1.092+18	1.450+19	1.092+18	3.376+09
2.400+04	* 1.805+18	1.168+19	1.805+18	4.325+10
2.600+04	* 2.640+18	8.837+18	2.640+18	3.756+11
2.800+04	* 3.453+18	6.203+18	3.453+18	2.393+12
3.000+04	* 4.093+18	4.048+18	4.093+18	1.187+13



TABLE IV  
COMPOSITION DISTRIBUTIONS FOR HELIUM  
----- AT TOTAL PRESSURE = 100 ATM -----

TEMP (DEG K)	* ELECTRON PRESSURE	P(1,1)	P(1,2) ATM	P(1,3)
1.000+03	* 0.000	1.000+02	0.000	0.000
2.000+03	* 0.000	1.000+02	0.000	0.000
4.000+03	* 1.191-13	1.000+02	1.191-13	0.000
6.000+03	* 2.872-08	1.000+02	2.872-08	0.000
6.000+03	* 1.570-05	1.000+02	1.570-05	1.005-31
1.000+04	* 7.360-04	1.000+02	7.360-04	1.272-24
1.200+04	* 1.002-02	9.998+01	1.002-02	7.643-20
1.400+04	* 6.695-02	9.967+01	6.695-02	2.142-16
1.600+04	* 2.853-01	9.943+01	2.853-01	8.780-14
1.800+04	* 8.954-01	9.821+01	3.954-01	9.925-12
2.000+04	* 2.252+00	9.500+01	2.252+00	4.525-10
2.200+04	* 4.774+00	9.045+01	4.774+00	1.059-08
2.400+04	* 8.790+00	8.242+01	8.790+00	1.493-07
2.600+04	* 1.434+01	7.102+01	1.434+01	1.417-06
2.800+04	* 2.101+01	5.797+01	2.101+01	9.804-05
3.000+04	* 2.793+01	4.413+01	2.793+01	5.246-05

TEMP (DEG K)	* ELECTRON DENSITY	N(1,1)	N(1,2) CM <sup>-3</sup>	N(1,3)
1.000+03	* 0.000	7.341+20	0.000	0.000
2.000+03	* 0.000	3.670+20	0.000	0.000
4.000+03	* 2.186+05	1.835+20	2.186+05	0.000
6.000+03	* 3.514+10	1.223+20	3.514+10	0.000
8.000+03	* 1.440+13	9.176+19	1.440+13	9.221-14
1.000+04	* 5.403+14	7.341+19	5.403+14	9.340-07
1.200+04	* 6.130+15	6.116+19	6.130+15	4.676-02
1.400+04	* 3.511+16	5.237+19	3.511+16	1.123+02
1.600+04	* 1.309+17	4.562+19	1.309+17	4.028+04
1.800+04	* 3.652+17	4.005+19	3.652+17	4.048+06
2.000+04	* 8.265+17	3.505+19	8.265+17	1.661+08
2.200+04	* 1.593+18	3.018+19	1.593+18	3.534+09
2.400+04	* 2.689+18	2.521+19	2.689+18	4.567+10
2.600+04	* 4.049+18	2.014+19	4.049+18	4.001+11
2.800+04	* 5.509+18	1.520+19	5.509+18	2.570+12
3.000+04	* 6.835+18	1.080+19	6.835+18	1.284+13

TABLE IV  
COMPOSITION DISTRIBUTIONS FOR HELIUM . . .  
AT TOTAL PRESSURE =250 ATM

TEMP (DEG K)	* *	ELECTRON PRESSURE	P(1,1) ←-----	P(1,2) ATM	P(1,3) -----→
1.000+03	*	0.000	2.500+02	0.000	0.000
2.000+03	*	0.000	2.500+02	0.000	0.000
4.000+03	*	1.883-13	2.500+02	1.883-13	0.000
6.000+03	*	4.541-08	2.500+02	4.541-08	0.000
8.000+03	*	2.432-05	2.500+02	2.432-05	1.006-31
1.000+04	*	1.165-03	2.500+02	1.165-03	1.278-24
1.200+04	*	1.589-02	2.500+02	1.589-02	7.725-20
1.400+04	*	1.064-01	2.496+02	1.064-01	2.186-16
1.600+04	*	4.552-01	2.471+02	4.552-01	9.067-14
1.800+04	*	1.437+00	2.471+02	1.437+00	1.039-11
2.000+04	*	3.644+00	2.427+02	3.644+00	4.804-10
2.200+04	*	7.528+00	2.343+02	7.828+00	1.141-09
2.400+04	*	1.471+01	2.200+02	1.471+01	1.631-07
2.600+04	*	2.409+01	2.003+02	2.409+01	1.570-06
2.800+04	*	3.760+01	1.743+02	3.760+01	1.101-05
3.000+04	*	5.244+01	1.451+02	5.244+01	5.959-05

TEMP (DEG K)	* *	ELECTRON DENSITY	N(1,1) ←-----	N(1,2) CM <sup>-3</sup>	N(1,3) -----→
1.000+03	*	0.000	1.835+21	0.000	0.000
2.000+03	*	0.000	9.176+20	0.000	0.000
4.000+03	*	3.456+05	4.588+20	3.456+05	0.000
6.000+03	*	5.556+10	3.059+20	5.556+10	0.000
8.000+03	*	2.278+13	2.274+20	2.278+13	9.230-14
1.000+04	*	8.551+14	1.835+20	8.551+14	9.379-07
1.200+04	*	9.719+15	1.529+20	9.719+15	4.725-02
1.400+04	*	5.580+16	1.310+20	5.580+16	1.146+02
1.600+04	*	2.088+17	1.143+20	2.088+17	4.160+04
1.800+04	*	5.859+17	1.008+20	5.859+17	4.237+06
2.000+04	*	1.338+18	8.909+19	1.338+18	1.763+08
2.200+04	*	2.612+18	7.820+19	2.612+18	3.806+09
2.400+04	*	4.498+18	6.747+19	4.498+18	4.990+10
2.600+04	*	6.972+18	5.664+19	6.972+18	4.434+11
2.800+04	*	9.857+18	4.523+19	9.857+18	2.886+12
3.000+04	*	1.283+19	3.551+19	1.283+19	1.458+13

TABLE IV  
COMPOSITION DISTRIBUTIONS FOR HELIUM  
AT TOTAL PRESSURE = 500 ATM

TEMP (DEG K)	* *	ELECTRON PRESSURE	P(1,1) ←	P(1,2) ATM	P(1,3) →
*****					
1.000+03	*	0.000	5.000+02	0.000	0.000
2.000+03	*	0.000	5.000+02	0.000	0.000
4.000+03	*	2.663-13	5.000+02	2.663-13	0.000
6.000+03	*	6.422-08	5.000+02	6.422-08	0.000
8.000+03	*	3.511-05	5.000+02	3.511-05	1.007-31
1.000+04	*	1.649-03	5.000+02	1.649-03	1.282-24
1.200+04	*	2.252-02	5.000+02	2.252-02	7.801-20
1.400+04	*	1.512-01	4.997+02	1.512-01	2.227-16
1.600+04	*	6.489-01	4.967+02	6.489-01	9.343-14
1.800+04	*	2.057+00	4.939+02	2.057+00	1.084-11
2.000+04	*	5.248+00	4.895+02	5.248+00	5.081-10
2.200+04	*	1.137+01	4.773+02	1.137+01	1.223-08
2.400+04	*	2.151+01	4.568+02	2.161+01	1.772-07
2.600+04	*	3.639+01	4.262+02	3.639+01	1.728-06
2.800+04	*	5.738+01	3.852+02	5.738+01	1.226-05
3.000+04	*	6.217+01	3.357+02	8.217+01	6.711-05

TEMP (DEG K)	* *	ELECTRON DENSITY	N(1,1) ←	N(1,2) CM <sup>-3</sup>	N(1,3) →
*****					
1.000+03	*	0.000	3.670+21	0.000	0.000
2.000+03	*	0.000	1.875+21	0.000	0.000
4.000+03	*	4.888+05	9.176+20	4.888+05	0.000
6.000+03	*	7.858+10	6.117+20	7.858+10	0.000
8.000+03	*	3.222+13	4.588+20	3.222+13	9.238-14
1.000+04	*	1.210+15	3.670+20	1.210+15	9.415-07
1.200+04	*	1.378+16	3.058+20	1.378+16	4.772-02
1.400+04	*	7.930+16	2.620+20	7.930+16	1.168+02
1.600+04	*	2.977+17	2.288+20	2.977+17	4.287+04
1.800+04	*	8.389+17	2.022+20	8.389+17	4.422+06
2.000+04	*	1.926+18	1.797+20	1.926+18	1.865+08
2.200+04	*	3.793+18	1.593+20	3.793+18	4.080+09
2.400+04	*	6.609+18	1.397+20	6.609+18	5.421+10
2.600+04	*	1.042+19	1.203+20	1.042+19	4.880+11
2.800+04	*	1.504+19	1.010+20	1.504+19	3.215+12
3.000+04	*	2.011+19	8.214+19	2.011+19	1.642+13

TABLE IV  
COMPOSITION DISTRIBUTIONS FOR HELIUM  
AT TOTAL PRESSURE = 750 ATM

TEMP (DEG K)	* ELECTRON PRESSURE	P(1,1)      P(1,2)      P(1,3)		
		←----- ATM -----→		
*****				
1.000+03	* 0.000	7.500+02	0.000	0.000
2.000+03	* 0.000	7.500+02	0.000	0.000
4.000+03	* 3.262-13	7.500+02	3.262-13	0.000
6.000+03	* 7.866-08	7.500+02	7.866-08	0.000
8.000+03	* 4.301-05	7.500+02	4.301-05	1.007-31
1.000+04	* 2.021-03	7.500+02	2.021-03	1.286-24
1.200+04	* 2.763-02	7.499+02	2.763-02	7.852-20
1.400+04	* 1.858-01	7.496+02	1.858-01	2.255-16
1.600+04	* 7.990-01	7.484+02	7.990-01	9.534-14
1.800+04	* 2.539+00	7.449+02	2.539+00	1.116-11
2.000+04	* 6.501+00	7.370+02	6.501+00	5.278-10
2.200+04	* 1.414+01	7.217+02	1.414+01	1.282-08
2.400+04	* 2.705+01	6.959+02	2.705+01	1.875-07
2.600+04	* 4.655+01	6.501+02	4.655+01	1.944-06
2.800+04	* 7.315+01	6.037+02	7.315+01	1.319-05
3.000+04	* 1.063+02	5.371+02	1.063+02	7.279-05

TEMP (DEG K)	* ELECTRON DENSITY	N(1,1)      N(1,2)      N(1,3)		
		←----- CM <sup>-3</sup> -----→		
*****				
1.000+03	* 0.000	5.506+21	0.000	0.000
2.000+03	* 0.000	2.753+21	0.000	0.000
4.000+03	* 5.987+05	1.376+21	5.987+05	0.000
6.000+03	* 9.624+10	9.176+20	9.624+10	0.000
8.000+03	* 3.947+13	6.892+20	3.947+13	9.243-14
1.000+04	* 1.483+15	5.506+20	1.483+15	9.439-07
1.200+04	* 1.690+16	4.508+20	1.690+16	4.803-02
1.400+04	* 9.743+16	3.931+20	9.743+16	1.183+02
1.600+04	* 3.666+17	3.434+20	3.666+17	4.374+04
1.800+04	* 1.036+18	3.038+20	1.036+18	4.551+06
2.000+04	* 2.396+18	2.705+20	2.396+18	1.937+08
2.200+04	* 4.719+18	2.408+20	4.719+18	4.277+09
2.400+04	* 8.274+18	2.129+20	8.274+18	5.735+10
2.600+04	* 1.314+19	1.855+20	1.314+19	5.207+11
2.800+04	* 1.918+19	1.583+20	1.918+19	3.459+12
3.000+04	* 2.601+19	1.315+20	2.601+19	1.781+13

TABLE IV  
COMPOSITION DISTRIBUTIONS FOR HELIUM  
AT TOTAL PRESSURE = 1000 ATM

TEMP (DEG K)	* ELECTRON * PRESSURE	P(1,1)	P(1,2)	P(1,3)
		ATM		
*****				
1.000+03	* 0.000	1.000+00	0.000	0.000
2.000+03	* 0.000	1.000+00	0.000	0.000
4.000+03	* 3.767-13	1.000+00	3.767-13	0.000
6.000+03	* 9.083-08	1.000+00	9.083-08	0.000
8.000+03	* 4.967-05	1.000+00	4.967-05	1.008-31
1.000+04	* 2.335-03	1.000+00	2.335-03	1.288-24
1.200+04	* 3.195-02	9.999+02	3.195-02	7.892-20
1.400+04	* 2.151-01	9.996+02	2.151-01	2.277-16
1.600+04	* 9.263-01	9.981+02	9.263-01	9.685-14
1.800+04	* 2.950+00	9.941+02	2.950+00	1.141-11
2.000+04	* 7.571+00	9.849+02	7.571+00	5.436-10
2.200+04	* 1.652+01	9.670+02	1.652+01	1.330-08
2.400+04	* 3.173+01	9.305+02	3.173+01	1.959-07
2.600+04	* 5.489+01	8.902+02	5.489+01	1.941-06
2.800+04	* 8.682+01	8.264+02	8.682+01	1.397-05
3.000+04	* 1.274+02	7.433+02	1.274+02	7.756-05

TEMP (DEG K)	* ELECTRON * DENSITY	N(1,1)	N(1,2)	N(1,3)
		CM-3		
*****				
1.000+03	* 0.000	7.341+21	0.000	0.000
2.000+03	* 0.000	3.670+21	0.000	0.000
4.000+03	* 6.913+05	1.835+21	6.913+05	0.000
6.000+03	* 1.111+11	1.223+21	1.111+11	0.000
8.000+03	* 4.558+13	9.176+20	4.558+13	9.247-14
1.000+04	* 1.714+15	7.341+20	1.714+15	9.457-07
1.200+04	* 1.954+16	6.117+20	1.954+16	4.828-02
1.400+04	* 1.128+17	5.241+20	1.128+17	1.194+02
1.600+04	* 4.250+17	4.580+20	4.250+17	4.444+04
1.800+04	* 1.203+18	4.054+20	1.203+18	4.655+06
2.000+04	* 2.779+18	3.615+20	2.779+18	1.995+08
2.200+04	* 5.513+18	3.227+20	5.513+18	4.438+09
2.400+04	* 9.706+18	2.865+20	9.706+18	5.993+10
2.600+04	* 1.550+19	2.514+20	1.550+19	5.479+11
2.800+04	* 2.276+19	2.167+20	2.276+19	3.663+12
3.000+04	* 3.116+19	1.824+20	3.116+19	1.898+13

TABLE V  
COMPOSITION DISTRIBUTIONS FOR NEON  
AT TOTAL PRESSURE = 50 ATM

TEMP (DEG K)	* *	ELECTRON PRESSURE	P(1,1)	P(1,2)	P(1,3)
			ATM		
1.000+03	*	0.000	5.000+01	0.000	0.000
2.000+03	*	0.000	5.000+01	0.000	0.000
4.000+03	*	1.120-11	5.000+01	1.120-11	0.000
6.000+03	*	6.351-07	5.000+01	6.351-07	7.116-32
8.000+03	*	1.636-04	5.000+01	1.686-04	3.784-23
1.000+04	*	5.145-03	4.999+01	5.145-03	7.559-18
1.200+04	*	5.276-02	4.989+01	5.276-02	2.899-14
1.400+04	*	2.877-01	4.942+01	2.877-01	1.151-11
1.600+04	*	1.043+00	4.791+01	1.043+00	1.096-09
1.800+04	*	2.825+00	4.455+01	2.825+00	3.977-08
2.000+04	*	6.049+00	3.790+01	6.049+00	7.237-07
2.200+04	*	1.055+01	2.890+01	1.055+01	7.845-06
2.400+04	*	1.535+01	1.936+01	1.535+01	5.699-05
2.600+04	*	1.923+01	1.154+01	1.923+01	3.030-04
2.800+04	*	2.172+01	6.559+00	2.172+01	1.266-03
3.000+04	*	2.311+01	3.778+00	2.310+01	4.388-02

TEMP (DEG K)	* *	ELECTRON DENSITY	N(1,1)	N(1,2)	N(1,3)
			CM <sup>-3</sup>		
1.000+03	*	0.000	3.670+20	0.000	0.000
2.000+03	*	0.000	1.835+20	0.000	0.000
4.000+03	*	2.056+07	9.176+19	2.056+07	0.000
6.000+03	*	7.771+11	6.117+19	7.771+11	8.706-14
8.000+03	*	1.547+14	4.588+19	1.547+14	3.472-05
1.000+04	*	3.777+15	3.670+19	3.777+15	5.549+00
1.200+04	*	3.228+16	3.052+19	3.228+16	1.773+04
1.400+04	*	1.509+17	2.592+19	1.509+17	6.035+06
1.600+04	*	4.787+17	2.198+19	4.787+17	5.028+08
1.800+04	*	1.152+18	1.809+19	1.152+18	1.622+10
2.000+04	*	2.220+18	1.391+19	2.220+18	2.656+11
2.200+04	*	3.521+18	9.643+18	3.521+18	2.618+12
2.400+04	*	4.696+18	5.902+18	4.696+18	1.743+13
2.600+04	*	5.429+18	3.259+18	5.429+18	8.555+13
2.800+04	*	5.695+18	1.720+18	5.694+18	3.319+14
3.000+04	*	5.656+18	9.245+17	5.654+18	1.074+15

TABLE V  
 COMPOSITION DISTRIBUTIONS FOR NEON  
 AT TOTAL PRESSURE = 100 ATM

TEMP (DEG K)	* ELECTRON * PRESSURE	P(1,1)	P(1,2) ATM	P(1,3)
1.000+03	* 0.000	1.000+02	0.000	0.000
2.000+03	* 0.000	1.000+02	0.000	0.000
4.000+03	* 1.585-11	1.000+02	1.585-11	0.000
6.000+03	* 6.983-07	1.000+02	6.983-07	7.119-32
8.000+03	* 2.386-04	1.000+02	2.386-04	3.792-23
1.000+04	* 7.291-03	9.999+01	7.291-03	7.620-19
1.200+04	* 7.498-02	9.955+01	7.498-02	2.951-14
1.400+04	* 4.107-01	9.918+01	4.107-01	1.188-11
1.600+04	* 1.502+00	9.700+01	1.502+00	1.148-09
1.800+04	* 4.127+00	9.175+01	4.127+00	4.238-08
2.000+04	* 9.071+00	8.106+01	9.071+00	7.847-07
2.200+04	* 1.649+01	6.703+01	1.649+01	8.657-06
2.400+04	* 2.530+01	4.959+01	2.530+01	6.383-05
2.600+04	* 3.362+01	3.276+01	3.362+01	3.425-04
2.800+04	* 3.986+01	2.026+01	3.986+01	1.433-03
3.000+04	* 4.386+01	1.228+01	4.385+01	4.940-03

TEMP (DEG K)	* ELECTRON * DENSITY	N(1,1)	N(1,2) CM <sup>-3</sup>	N(1,3)
1.000+03	* 0.000	7.341+20	0.000	0.000
2.000+03	* 0.000	3.670+20	0.000	0.000
4.000+03	* 2.908+07	1.835+20	2.908+07	0.000
6.000+03	* 1.099+12	1.223+20	1.099+12	8.708-14
8.000+03	* 2.190+14	9.176+19	2.190+14	3.480-05
1.000+04	* 5.353+15	7.340+19	5.353+15	5.594+00
1.200+04	* 4.587+16	6.108+19	4.587+16	1.805+04
1.400+04	* 2.154+17	5.200+19	2.154+17	6.227+06
1.600+04	* 6.891+17	4.450+19	6.891+17	5.269+08
1.800+04	* 1.683+18	3.742+19	1.683+18	1.728+10
2.000+04	* 3.329+18	3.005+19	3.329+18	2.880+11
2.200+04	* 5.501+18	2.237+19	5.501+18	2.889+12
2.400+04	* 7.740+18	1.511+19	7.740+18	1.952+13
2.600+04	* 9.492+18	9.250+18	9.492+18	9.671+13
2.800+04	* 1.045+19	5.317+18	1.045+19	3.756+14
3.000+04	* 1.073+19	3.006+18	1.073+19	1.209+15

TABLE V  
COMPOSITION DISTRIBUTIONS FOR NEON  
AT TOTAL PRESSURE =250 ATM

TEMP (DEG K)	* *	ELECTRON PRESSURE	$\rho(1,1)$	$\rho(1,2)$	$\rho(1,3)$
			ATM		
*****					
1.000+03	*	0.000	2.500+02	0.000	0.000
2.000+03	*	0.000	2.500+02	0.000	0.000
4.000+03	*	2.505-11	2.500+02	2.505-11	0.000
6.000+03	*	1.420-06	2.500+02	1.420-06	7.120-32
8.000+03	*	3.776-04	2.500+02	3.776-04	3.806-23
1.000+04	*	1.157-02	2.500+02	1.157-02	7.720-18
1.200+04	*	1.195-01	2.498+02	1.195-01	3.039-14
1.400+04	*	6.587-01	2.487+02	6.587-01	1.250-11
1.600+04	*	2.434+00	2.451+02	2.434+00	1.240-09
1.800+04	*	6.801+00	2.364+02	6.801+00	4.704-08
2.000+04	*	1.535+01	2.193+02	1.535+01	8.962-07
2.200+04	*	2.907+01	1.919+02	2.907+01	1.017-05
2.400+04	*	4.717+01	1.557+02	4.717+01	7.697-05
2.600+04	*	6.687+01	1.163+02	6.687+01	4.211-04
2.800+04	*	8.453+01	8.094+01	8.453+01	1.777-03
3.000+04	*	9.798+01	5.404+01	9.797+01	6.117-03

TEMP (DEG K)	* *	ELECTRON DENSITY	$N(1,1)$	$N(1,2)$	$N(1,3)$
			CM <sup>-3</sup>		
*****					
1.000+03	*	0.000	1.835+21	0.000	0.000
2.000+03	*	0.000	9.176+20	0.000	0.000
4.000+03	*	4.598+07	4.598+20	4.598+07	0.000
6.000+03	*	1.738+12	3.059+20	1.738+12	8.712-14
8.000+03	*	3.465+14	2.294+20	3.465+14	3.493-05
1.000+04	*	8.491+15	1.835+20	8.491+15	5.667+00
1.200+04	*	7.307+16	1.528+20	7.307+16	1.859+04
1.400+04	*	3.454+17	1.304+20	3.454+17	6.553+06
1.600+04	*	1.117+18	1.125+20	1.117+18	5.689+08
1.800+04	*	2.773+18	9.641+19	2.773+18	1.918+10
2.000+04	*	5.634+18	8.050+19	5.634+18	3.290+11
2.200+04	*	9.700+18	6.402+19	9.700+18	3.395+12
2.400+04	*	1.443+19	4.761+19	1.443+19	2.354+13
2.600+04	*	1.898+19	3.282+19	1.888+19	1.189+14
2.800+04	*	2.216+19	2.122+19	2.216+19	4.660+14
3.000+04	*	2.398+19	1.322+19	2.397+19	1.497+15



TABLE V  
COMPOSITION DISTRIBUTIONS FOR NEON  
AT TOTAL PRESSURE = 500 ATM

TEMP (JEG K) *	ELECTRON PRESSURE *	P(1,1) ← ATM →	P(1,2) ← ATM →	P(1,3) ← ATM →
1.000+03 *	0.000	5.000+02	0.000	0.000
2.000+03 *	0.000	5.000+02	0.000	0.000
4.000+03 *	3.543-11	5.000+02	3.543-11	0.000
6.000+03 *	2.009-06	5.000+02	2.009-06	7.123-32
8.000+03 *	5.345-04	5.000+02	5.345-04	3.819-23
1.000+04 *	1.641-02	5.000+02	1.641-02	7.813-18
1.200+04 *	1.701-01	4.997+02	1.701-01	3.123-14
1.400+04 *	9.435-01	4.961+02	9.435-01	1.311-11
1.600+04 *	3.514+00	4.950+02	3.514+00	1.333-09
1.800+04 *	9.933+00	4.801+02	9.933+00	5.191-08
2.000+04 *	2.280+01	4.544+02	2.280+01	1.016-06
2.200+04 *	4.425+01	4.115+02	4.425+01	1.185-05
2.400+04 *	7.436+01	3.513+02	7.436+01	9.203-05
2.600+04 *	1.098+02	2.805+02	1.098+02	5.141-04
2.800+04 *	1.450+02	2.101+02	1.450+02	2.199-03
3.000+04 *	1.751+02	1.499+02	1.750+02	7.601-03

TEMP (JEG K) *	ELECTRON DENSITY *	N(1,1) ← CM <sup>-3</sup> →	N(1,2) ← CM <sup>-3</sup> →	N(1,3) ← CM <sup>-3</sup> →
1.000+03 *	0.000	3.670+21	0.000	0.000
2.000+03 *	0.000	1.875+21	0.000	0.000
4.000+03 *	6.502+07	9.176+20	6.502+07	0.000
6.000+03 *	2.458+12	6.117+20	2.458+12	8.715-14
8.000+03 *	4.905+14	4.588+20	4.905+14	3.505-05
1.000+04 *	1.204+16	3.670+20	1.204+16	5.736+00
1.200+04 *	1.041+17	3.057+20	1.041+17	1.910+04
1.400+04 *	4.947+17	2.612+20	4.947+17	6.874+06
1.600+04 *	1.612+18	2.262+20	1.612+18	6.114+08
1.800+04 *	4.051+18	1.958+20	4.051+18	2.117+10
2.000+04 *	8.370+18	1.668+20	8.370+18	3.731+11
2.200+04 *	1.476+19	1.373+20	1.476+19	3.955+12
2.400+04 *	2.274+19	1.075+20	2.274+19	2.815+13
2.600+04 *	3.099+19	7.919+19	3.099+19	1.452+14
2.800+04 *	3.801+19	5.507+19	3.801+19	5.766+14
3.000+04 *	4.284+19	3.668+19	4.283+19	1.860+15

TABLE V  
 COMPOSITION DISTRIBUTIONS FOR NEON  
 AT TOTAL PRESSURE = 750 ATM

TEMP (DEG K)	* ELECTRON PRESSURE	P(1,2) →		
		N(1,1)	ATM	
1.000+03	* 0.000	7.500+02	0.000	0.000
2.000+03	* 0.000	7.500+02	0.000	0.000
4.000+03	* 4.339-11	7.500+02	4.339-11	0.000
6.000+03	* 2.461-06	7.500+02	2.461-06	7.125-32
8.000+03	* 5.550-04	7.500+02	6.550-04	3.828-23
1.000+04	* 2.014-02	7.500+02	2.014-02	7.877-18
1.200+04	* 2.093-01	7.496+02	2.093-01	3.181-14
1.400+04	* 1.165+00	7.477+02	1.165+00	1.354-11
1.600+04	* 4.362+00	7.413+02	4.362+00	1.400-09
1.800+04	* 1.241+01	7.252+02	1.241+01	5.552-08
2.000+04	* 2.677+01	6.925+02	2.677+01	1.108-06
2.200+04	* 5.657+01	6.309+02	5.657+01	1.317-05
2.400+04	* 9.654+01	5.509+02	9.654+01	1.040-04
2.600+04	* 1.454+02	4.595+02	1.454+02	5.896-04
2.800+04	* 1.963+02	3.574+02	1.963+02	2.549-03
3.000+04	* 2.425+02	2.650+02	2.425+02	8.855-03

TEMP (DEG K)	* ELECTRON DENSITY	N(1,2) →		
		N(1,1)	CM <sup>-3</sup>	
1.000+03	* 0.000	5.506+21	0.000	0.000
2.000+03	* 0.000	2.753+21	0.000	0.000
4.000+03	* 7.964+07	1.376+21	7.964+07	0.000
6.000+03	* 3.011+12	9.176+20	3.011+12	8.717-14
8.000+03	* 6.010+14	6.882+20	6.010+14	3.513-05
1.000+04	* 1.478+16	5.505+20	1.478+16	5.782+00
1.200+04	* 1.280+17	4.586+20	1.280+17	1.946+04
1.400+04	* 6.111+17	3.920+20	6.111+17	7.100+06
1.600+04	* 2.002+18	3.401+20	2.002+18	6.421+08
1.800+04	* 5.063+18	2.957+20	5.063+18	2.264+10
2.000+04	* 1.056+19	2.542+20	1.056+19	4.067+11
2.200+04	* 1.688+19	2.125+20	1.688+19	4.395+12
2.400+04	* 2.953+19	1.703+20	2.953+19	3.182+13
2.600+04	* 4.104+19	1.207+20	4.104+19	1.665+14
2.800+04	* 5.146+19	9.371+19	5.146+19	6.682+14
3.000+04	* 5.934+19	6.484+19	5.934+19	2.167+15

TABLE V  
COMPOSITION DISTRIBUTIONS FOR NEON  
AT TOTAL PRESSURE = 1000 ATM

TEMP (DEG K)	* ELECTRON PRESSURE	P(1,1)	P(1,2)	P(1,3)
		ATM		
1.000+03	* 0.000	1.000+03	0.000	0.000
2.000+03	* 0.000	1.000+03	0.000	0.000
4.000+03	* 5.011-11	1.000+03	5.011-11	0.000
6.000+03	* 2.841-06	1.000+03	2.841-06	7.126-32
8.000+03	* 7.567-04	1.000+03	7.567-04	3.835-23
1.000+04	* 2.329-02	1.000+03	2.329-02	7.926-18
1.200+04	* 2.426-01	9.995+02	2.426-01	3.226-14
1.400+04	* 1.354+00	9.973+02	1.354+00	1.389-11
1.600+04	* 5.090+00	9.898+02	5.090+00	1.454-09
1.800+04	* 1.456+01	9.709+02	1.456+01	5.853-08
2.000+04	* 5.595+01	9.321+02	3.395+01	1.186-06
2.200+04	* 6.733+01	8.653+02	6.733+01	1.431-05
2.400+04	* 1.161+02	7.677+02	1.161+02	1.146-04
2.600+04	* 1.772+02	6.456+02	1.772+02	6.576-04
2.800+04	* 2.431+02	5.158+02	2.431+02	2.869-03
3.000+04	* 3.054+02	3.892+02	3.054+02	1.003-02

TEMP (DEG K)	* ELECTRON DENSITY	N(1,1)	N(1,2)	N(1,3)
		CM <sup>-3</sup>		
1.000+03	* 0.000	7.341+21	0.000	0.000
2.000+03	* 0.000	3.670+21	0.000	0.000
4.000+03	* 9.196+07	1.835+21	9.196+07	0.000
6.000+03	* 3.476+12	1.223+21	3.476+12	8.719-14
8.000+03	* 6.943+14	9.176+20	6.943+14	3.519-05
1.000+04	* 1.710+16	7.341+20	1.710+16	5.819+00
1.200+04	* 1.484+17	6.115+20	1.484+17	1.974+04
1.400+04	* 7.102+17	5.229+20	7.102+17	7.282+06
1.600+04	* 2.335+18	4.541+20	2.335+18	6.672+08
1.800+04	* 5.936+18	3.960+20	5.936+18	2.387+10
2.000+04	* 1.246+19	3.421+20	1.246+19	4.352+11
2.200+04	* 2.247+19	2.887+20	2.247+19	4.777+12
2.400+04	* 3.552+19	2.348+20	3.552+19	3.505+13
2.600+04	* 5.004+19	1.823+20	5.004+19	1.857+14
2.800+04	* 6.373+19	1.347+20	6.373+19	7.522+14
3.000+04	* 7.473+19	9.523+19	7.473+19	2.453+15

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 50 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
***** ←----- CM <sup>-1</sup> -----→ *****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	5.137-13	2.618-08	6.395-06
1.500+03	0.000	0.000	1.969-13	1.695-08	4.196-06
2.000+03	0.000	0.000	1.397-13	1.236-08	3.114-06
4.000+03	0.000	0.000	5.525-14	5.466-09	1.478-06
6.000+03	0.000	0.000	2.994-14	3.211-09	9.188-07
8.000+03	0.000	0.000	1.875-14	2.133-09	6.388-07
1.000+04	0.000	0.000	1.290-14	1.525-09	4.735-07
1.500+04	0.000	0.000	6.333-15	3.000-10	2.643-07
2.000+04	0.000	0.000	5.828-15	4.972-10	1.700-07
2.250+04	0.000	0.000	3.119-15	4.083-10	1.413-07
2.500+04	0.000	0.000	2.597-15	3.422-10	1.194-07
2.750+04	0.000	0.000	2.201-15	2.914-10	1.025-07
3.000+04	0.000	0.000	1.892-15	2.515-10	9.934-08
3.250+04	0.000	0.000	1.644-15	2.194-10	7.830-08
3.500+04	0.000	0.000	1.447-15	1.931-10	6.915-08
3.750+04	0.000	0.000	1.276-15	1.712-10	6.148-08
4.000+04	0.000	0.000	1.135-15	1.527-10	5.511-08
4.500+04	0.000	0.000	9.103-16	1.231-10	4.462-08
5.000+04	0.000	0.000	5.392-16	7.306-11	2.666-08
5.500+04	0.000	0.000	4.480-16	6.103-11	2.235-08
6.000+04	0.000	0.000	3.789-16	5.178-11	1.902-08
6.250+04	0.000	0.000	3.247-16	4.451-11	1.640-08
7.000+04	0.000	0.000	2.15-16	3.870-11	1.429-08
7.250+04	0.000	0.000	2.631-16	3.621-11	1.339-08
7.500+04	0.000	0.000	2.465-16	3.397-11	1.258-08
7.750+04	0.000	0.000	2.314-16	3.192-11	1.183-08
8.000+04	0.000	0.000	2.177-16	3.006-11	1.116-08
8.250+04	0.000	0.000	2.051-16	2.836-11	1.054-08
8.500+04	0.000	0.000	1.937-16	2.681-11	9.968-09
8.750+04	0.000	0.000	1.831-16	2.538-11	9.445-09
9.000+04	0.000	0.000	1.735-16	2.406-11	9.963-09
9.250+04	0.000	0.000	1.645-16	2.284-11	9.518-09
9.500+04	0.000	0.000	1.563-16	2.172-11	9.106-09
9.750+04	0.000	0.000	1.487-16	2.069-11	7.724-09
1.000+05	0.000	0.000	1.416-16	1.971-11	7.368-09
1.200+05	0.000	0.000	9.961-17	1.395-11	5.247-09
1.400+05	0.000	0.000	7.397-17	1.042-11	3.936-09
1.600+05	0.000	0.000	5.713-17	6.096-12	3.067-09
1.800+05	0.000	0.000	4.555-17	4.465-12	2.461-09
2.000+05	5.013+03	1.007+03	7.334+02	5.022+02	3.767+02
2.200+05	2.491+03	1.245+03	5.226+02	4.151+02	3.113+02
2.600+05	1.782+03	9.916+02	4.458+02	2.972+02	2.229+02
3.000+05	1.337+03	5.597+02	3.348+02	2.232+02	1.674+02
4.000+05	7.554+02	3.707+02	1.883+02	1.256+02	9.417+01
5.000+05	4.322+02	2.111+02	1.205+02	8.036+01	6.027+01
7.500+05	2.143+02	1.071+02	5.357+01	3.572+01	2.679+01
1.000+06	1.207+02	5.027+01	3.013+01	2.009+01	1.577+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 50 ATM

WAVE NOS. CM-1	TEMPERATURES (DEG. K)				
	1,000+04	1,200+04	1,400+04	1,600+04	1,800+04
	←----- CM-1 ----->				
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.589-04	1.606-03	1.551-02	1.337-01	8.107-01
1.500+03	1.036-04	9.649-04	7.905-03	6.241-02	3.683-01
2.000+03	7.735-05	6.903-04	5.069-03	3.705-02	2.124-01
4.000+03	3.845-05	3.326-04	1.921-03	1.079-02	5.438-02
6.000+03	2.497-05	2.202-04	1.205-03	5.969-03	2.722-02
8.000+03	1.800-05	1.627-04	8.781-04	4.091-03	1.750-02
1.000+04	1.376-05	1.273-04	6.880-04	3.112-03	1.275-02
1.500+04	3.132-06	7.942-05	4.478-04	1.958-03	7.622-03
2.000+04	5.414-06	5.397-05	2.984-04	1.266-03	4.704-03
2.250+04	4.553-06	4.577-05	2.521-04	1.043-03	3.740-03
2.500+04	3.887-06	3.737-05	2.164-04	8.798-04	3.059-03
2.750+04	3.389-06	3.569-05	2.106-04	9.264-04	3.375-03
3.000+04	3.102-06	3.807-05	2.871-04	1.569-03	6.416-03
3.250+04	2.735-06	3.368-05	2.537-04	1.380-03	5.618-03
3.500+04	2.416-06	2.946-05	2.178-04	1.166-03	4.701-03
3.750+04	2.149-06	2.598-05	1.889-04	9.967-04	3.981-03
4.000+04	1.957-06	2.443-05	1.832-04	9.802-04	3.917-03
4.500+04	1.588-06	1.970-05	1.455-04	7.656-04	3.022-03
5.000+04	9.692-07	1.261-05	9.861-05	5.397-04	2.172-03
5.500+04	8.139-07	1.055-05	8.164-05	4.420-04	1.765-03
6.000+04	6.940-07	8.966-06	6.881-05	3.694-04	1.464-03
6.500+04	5.993-07	7.726-06	5.889-05	3.137-04	1.235-03
7.000+04	5.232-07	6.734-06	5.103-05	2.699-04	1.057-03
7.250+04	4.907-07	6.310-06	4.770-05	2.516-04	9.829-04
7.500+04	4.611-07	5.927-06	4.470-05	2.350-04	9.158-04
7.750+04	4.342-07	5.579-06	4.199-05	2.202-04	8.555-04
8.000+04	4.097-07	5.261-06	3.952-05	2.067-04	8.013-04
8.250+04	3.872-07	4.971-06	3.727-05	1.945-04	7.523-04
8.500+04	3.666-07	4.705-06	3.522-05	1.833-04	7.077-04
8.750+04	3.477-07	4.460-06	3.333-05	1.732-04	6.671-04
9.000+04	3.302-07	4.235-06	3.160-05	1.638-04	6.299-04
9.250+04	3.140-07	4.026-06	3.001-05	1.553-04	5.959-04
9.500+04	2.990-07	3.834-06	2.853-05	1.474-04	5.646-04
9.750+04	2.851-07	3.655-06	2.717-05	1.401-04	5.357-04
1.000+05	2.721-07	3.488-06	2.590-05	1.333-04	5.091-04
1.200+05	1.947-07	2.493-06	1.838-05	9.356-05	3.534-04
1.400+05	1.465-07	1.876-06	1.374-05	6.940-05	2.600-04
1.600+05	1.145-07	1.464-06	1.068-05	5.354-05	1.992-04
1.800+05	9.205-03	1.176-06	8.534-06	4.254-05	1.574-04
2.000+05	3.013+02	2.511+02	2.148+02	1.868+02	1.632+02
2.200+05	2.490+02	2.075+02	1.776+02	1.544+02	1.349+02
2.500+05	1.783+02	1.486+02	1.271+02	1.106+02	9.658+01
3.000+05	1.339+02	1.116+02	9.540+01	8.304+01	7.254+01
4.000+05	7.534+01	6.276+01	5.371+01	4.671+01	4.080+01
5.000+05	4.821+01	4.017+01	3.437+01	2.989+01	2.612+01
7.500+05	2.143+01	1.785+01	1.528+01	1.329+01	1.161+01
1.000+06	1.205+01	1.004+01	8.594+00	7.473+00	6.529+00

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 50 ATM

WAVE NOS. CM-1	TEMPERATURES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
	←-----CM-1-----→				
	*****				
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	3.435+00	1.073+01	2.577+01	4.895+01	7.505+01
1.500+03	1.547+00	4.319+00	1.155+01	2.193+01	3.361+01
2.000+03	0.835-01	2.741+00	6.560+00	1.244+01	1.906+01
4.000+03	2.173-01	6.763-01	1.638+00	3.154+00	4.905+00
6.000+03	1.020-01	3.014-01	7.070-01	1.329+00	2.027+00
8.000+03	6.292-02	1.615-01	4.173-01	7.729-01	1.167+00
1.000+04	4.439-02	1.253-01	2.840-01	5.215-01	7.826-01
1.500+04	2.520-02	6.830-02	1.503-01	2.698-01	3.981-01
2.000+04	1.398-02	3.621-02	7.875-02	1.410-01	2.087-01
2.250+04	1.103-02	2.879-02	5.989-02	1.069-01	1.582-01
2.500+04	9.362-03	2.399-02	4.893-02	8.311-02	1.228-01
2.750+04	1.050-02	2.631-02	5.432-02	9.071-02	1.257-01
3.000+04	2.016-02	5.027-02	1.015-01	1.663-01	2.246-01
3.250+04	1.760-02	4.367-02	6.774-02	1.454-01	1.970-01
3.500+04	1.465-02	3.630-02	7.280-02	1.204-01	1.660-01
3.750+04	1.235-02	3.052-02	6.117-02	1.010-01	1.390-01
4.000+04	1.207-02	2.960-02	5.881-02	9.632-02	1.313-01
4.500+04	9.247-03	2.255-02	4.462-02	7.302-02	9.945-02
5.000+04	6.669-03	1.631-02	3.212-02	5.229-02	7.075-02
5.500+04	5.405-03	1.317-02	2.585-02	4.193-02	5.666-02
6.000+04	4.439-03	1.070-02	2.120-02	3.433-02	4.633-02
6.500+04	3.744-03	9.039-03	1.769-02	2.859-02	3.854-02
7.000+04	3.186-03	7.066-03	1.498-02	2.416-02	3.252-02
7.250+04	2.959-03	7.092-03	1.325-02	2.232-02	3.002-02
7.500+04	2.753-03	6.591-03	1.244-02	2.068-02	2.779-02
7.750+04	2.568-03	5.130-03	1.121-02	1.921-02	2.580-02
8.000+04	2.402-03	5.733-03	1.114-02	1.789-02	2.401-02
8.250+04	2.250-03	5.367-03	1.041-02	1.671-02	2.240-02
8.500+04	2.112-03	5.030-03	9.752-03	1.563-02	2.095-02
8.750+04	1.967-03	4.733-03	9.158-03	1.466-02	1.963-02
9.000+04	1.874-03	4.456-03	8.617-03	1.377-02	1.843-02
9.250+04	1.776-03	4.201-03	8.123-03	1.297-02	1.733-02
9.500+04	1.674-03	3.967-03	7.670-03	1.224-02	1.633-02
9.750+04	1.586-03	3.755-03	7.252-03	1.157-02	1.541-02
1.000+05	1.500-03	3.559-03	6.863-03	1.095-02	1.458-02
1.200+05	1.035-03	2.426-03	4.642-03	7.359-03	9.765-03
1.400+05	7.556-04	1.760-03	3.347-03	5.279-03	6.970-03
1.600+05	5.756-04	1.334-03	2.524-03	3.963-03	5.212-03
1.800+05	4.524-04	1.044-03	1.968-03	3.078-03	4.034-03
2.000+05	1.412+02	1.190+02	9.559+01	7.204+01	5.019+01
2.200+05	1.107+02	9.834+01	7.900+01	5.954+01	4.148+01
2.600+05	8.357+01	7.041+01	5.656+01	4.263+01	2.970+01
3.000+05	5.277+01	5.289+01	4.248+01	3.202+01	2.231+01
4.000+05	3.531+01	2.975+01	2.390+01	1.801+01	1.255+01
5.000+05	2.269+01	1.904+01	1.529+01	1.153+01	8.030+00
7.500+05	1.004+01	3.462+00	6.797+00	5.123+00	3.569+00
1.000+06	5.000+00	4.760+00	3.823+00	2.881+00	2.007+00

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 50 ATM

WAVE	*	TEMPERATURES (DEG K)				
NOS.	*	3.000+04	0.000	0.000	0.000	0.000
CM <sup>-1</sup>	*	←————— CM <sup>-1</sup> —————→				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	9.530+01	0.000	0.000	0.000	0.000
1.500+03	*	4.267+01	0.000	0.000	0.000	0.000
2.000+03	*	2.419+01	0.000	0.000	0.000	0.000
4.000+03	*	6.257+00	0.000	0.000	0.000	0.000
6.000+03	*	2.600+00	0.000	0.000	0.000	0.000
8.000+03	*	1.472+00	0.000	0.000	0.000	0.000
1.000+04	*	9.803-01	0.000	0.000	0.000	0.000
1.500+04	*	4.927-01	0.000	0.000	0.000	0.000
2.000+04	*	2.591-01	0.000	0.000	0.000	0.000
2.250+04	*	1.969-01	0.000	0.000	0.000	0.000
2.500+04	*	1.530-01	0.000	0.000	0.000	0.000
2.750+04	*	1.524-01	0.000	0.000	0.000	0.000
3.000+04	*	2.571-01	0.000	0.000	0.000	0.000
3.250+04	*	2.251-01	0.000	0.000	0.000	0.000
3.500+04	*	1.902-01	0.000	0.000	0.000	0.000
3.750+04	*	1.627-01	0.000	0.000	0.000	0.000
4.000+04	*	1.525-01	0.000	0.000	0.000	0.000
4.500+04	*	1.151-01	0.000	0.000	0.000	0.000
5.000+04	*	8.130-02	0.000	0.000	0.000	0.000
5.500+04	*	6.507-02	0.000	0.000	0.000	0.000
6.000+04	*	5.315-02	0.000	0.000	0.000	0.000
6.500+04	*	4.417-02	0.000	0.000	0.000	0.000
7.000+04	*	3.724-02	0.000	0.000	0.000	0.000
7.250+04	*	3.436-02	0.000	0.000	0.000	0.000
7.500+04	*	3.179-02	0.000	0.000	0.000	0.000
7.750+04	*	2.950-02	0.000	0.000	0.000	0.000
8.000+04	*	2.744-02	0.000	0.000	0.000	0.000
8.250+04	*	2.556-02	0.000	0.000	0.000	0.000
8.500+04	*	2.390-02	0.000	0.000	0.000	0.000
8.750+04	*	2.238-02	0.000	0.000	0.000	0.000
9.000+04	*	2.100-02	0.000	0.000	0.000	0.000
9.250+04	*	1.974-02	0.000	0.000	0.000	0.000
9.500+04	*	1.859-02	0.000	0.000	0.000	0.000
9.750+04	*	1.753-02	0.000	0.000	0.000	0.000
1.000+05	*	1.657-02	0.000	0.000	0.000	0.000
1.200+05	*	1.107-02	0.000	0.000	0.000	0.000
1.400+05	*	7.856-03	0.000	0.000	0.000	0.000
1.600+05	*	5.853-03	0.000	0.000	0.000	0.000
1.800+05	*	4.516-03	0.000	0.000	0.000	0.000
2.000+05	*	3.233+01	0.000	0.000	0.000	0.000
2.200+05	*	2.672+01	0.000	0.000	0.000	0.000
2.600+05	*	1.913+01	0.000	0.000	0.000	0.000
3.000+05	*	1.437+01	0.000	0.000	0.000	0.000
4.000+05	*	8.082+00	0.000	0.000	0.000	0.000
5.000+05	*	5.173+00	0.000	0.000	0.000	0.000
7.500+05	*	2.299+00	0.000	0.000	0.000	0.000
1.000+06	*	1.293+00	0.000	0.000	0.000	0.000

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 100 ATM

WAVE NOS. CM-1	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	6.873-13	7.404-08	1.809-05
1.500+03	0.000	0.000	5.570-13	4.794-08	1.187-05
2.000+03	0.000	0.000	3.936-13	3.495-08	8.810-06
4.000+03	0.000	0.000	1.563-13	1.546-08	4.180-06
6.000+03	0.000	0.000	6.468-14	9.082-09	2.599-06
8.000+03	0.000	0.000	5.313-14	6.034-09	1.807-06
1.000+04	0.000	0.000	3.632-14	4.313-09	1.340-06
1.500+04	0.000	0.000	1.791-14	2.263-09	7.475-07
2.000+04	0.000	0.000	1.083-14	1.406-09	4.810-07
2.250+04	0.000	0.000	6.820-15	1.155-09	3.996-07
2.500+04	0.000	0.000	7.345-15	9.678-10	3.378-07
2.750+04	0.000	0.000	6.225-15	8.243-10	2.898-07
3.000+04	0.000	0.000	5.350-15	7.114-10	2.523-07
3.250+04	0.000	0.000	4.651-15	6.206-10	2.211-07
3.500+04	0.000	0.000	4.081-15	5.463-10	1.953-07
3.750+04	0.000	0.000	3.608-15	4.843-10	1.737-07
4.000+04	0.000	0.000	3.209-15	4.319-10	1.556-07
4.500+04	0.000	0.000	2.575-15	3.481-10	1.260-07
5.000+04	0.000	0.000	1.522-15	2.066-10	7.522-08
5.500+04	0.000	0.000	1.267-15	1.726-10	6.306-08
6.000+04	0.000	0.000	1.072-15	1.465-10	5.367-08
6.500+04	0.000	0.000	9.185-16	1.259-10	4.627-08
7.000+04	0.000	0.000	7.963-16	1.095-10	4.033-08
7.250+04	0.000	0.000	7.442-16	1.024-10	3.779-08
7.500+04	0.000	0.000	6.972-16	9.607-11	3.548-08
7.750+04	0.000	0.000	6.545-16	9.029-11	3.339-08
8.000+04	0.000	0.000	6.157-16	8.503-11	3.147-08
8.250+04	0.000	0.000	5.802-16	8.022-11	2.973-08
8.500+04	0.000	0.000	5.478-16	7.582-11	2.812-08
8.750+04	0.000	0.000	5.180-16	7.177-11	2.665-08
9.000+04	0.000	0.000	4.906-16	6.805-11	2.529-08
9.250+04	0.000	0.000	4.654-16	6.461-11	2.403-08
9.500+04	0.000	0.000	4.421-16	6.143-11	2.287-08
9.750+04	0.000	0.000	4.205-16	5.848-11	2.179-08
1.000+05	0.000	0.000	4.005-16	5.574-11	2.079-08
1.200+05	0.000	0.000	2.817-16	3.946-11	1.480-08
1.400+05	0.000	0.000	2.093-16	2.946-11	1.110-08
1.600+05	0.000	0.000	1.617-16	2.287-11	8.653-09
1.800+05	0.000	0.000	1.288-16	1.829-11	6.942-09
2.000+05	6.027+03	3.013+03	1.507+03	1.004+03	7.534+02
2.200+05	4.981+03	2.490+03	1.245+03	8.302+02	6.226+02
2.600+05	3.566+03	1.783+03	6.916+02	5.044+02	4.458+02
3.000+05	2.679+03	1.339+03	5.697+02	4.464+02	3.348+02
4.000+05	1.507+03	7.334+02	3.767+02	2.511+02	1.883+02
5.000+05	9.343+02	4.322+02	2.411+02	1.607+02	1.275+02
7.500+05	4.286+02	2.143+02	1.071+02	7.143+01	5.357+01
1.000+06	2.411+02	1.205+02	6.027+01	4.018+01	3.013+01



TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 100 ATM.

WAVE NOS.	*	TEMPERATURES (DEG K)				
CM-1	*	1,000+04	1,200+04	1,400+04	1,600+04	1,800+04
		←----- CM-1 -----→				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1,000+03	*	4.461-04	4.208-03	3.519-02	2.813-01	1.678+00
1,500+03	*	2.917-04	2.579-03	1.845-02	1.329-01	7.648-01
2,000+03	*	2.181-04	1.870-03	1.212-02	7.993-02	4.430-01
4,000+03	*	1.086-04	9.209-04	4.907-03	2.460-02	1.164-01
6,000+03	*	7.056-05	6.133-04	3.154-03	1.410-02	5.965-02
8,000+03	*	5.088-05	4.541-04	2.328-03	9.876-03	3.906-02
1,000+04	*	3.889-05	3.556-04	1.838-03	7.615-03	2.886-02
1,500+04	*	2.297-05	2.216-04	1.195-03	4.858-03	1.756-02
2,000+04	*	1.530-05	1.513-04	8.100-04	3.223-03	1.115-02
2,250+04	*	1.287-05	1.285-04	6.883-04	2.689-03	9.006-03
2,500+04	*	1.099-05	1.106-04	5.934-04	2.292-03	7.471-03
2,750+04	*	9.559-06	9.921-05	5.628-04	2.327-03	7.971-03
3,000+04	*	8.635-06	1.006-04	6.999-04	3.565-03	1.398-02
3,250+04	*	7.611-06	8.910-05	6.197-04	3.144-03	1.227-02
3,500+04	*	6.732-06	7.832-05	5.364-04	2.679-03	1.034-02
3,750+04	*	5.995-06	6.937-05	4.689-04	2.307-03	8.813-03
4,000+04	*	5.438-06	6.455-05	4.488-04	2.246-03	8.614-03
4,500+04	*	4.418-06	5.227-05	3.590-04	1.769-03	6.696-03
5,000+04	*	2.681-06	3.297-05	2.384-04	1.225-03	4.747-03
5,500+04	*	2.253-06	2.764-05	1.982-04	1.008-03	3.874-03
6,000+04	*	1.922-06	2.353-05	1.677-04	8.455-04	3.225-03
6,500+04	*	1.660-06	2.031-05	1.439-04	7.205-04	2.730-03
7,000+04	*	1.450-06	1.772-05	1.250-04	6.219-04	2.344-03
7,250+04	*	1.360-06	1.662-05	1.170-04	5.803-04	2.182-03
7,500+04	*	1.278-06	1.562-05	1.097-04	5.429-04	2.035-03
7,750+04	*	1.203-06	1.470-05	1.032-04	5.091-04	1.904-03
8,000+04	*	1.135-06	1.387-05	9.719-05	4.785-04	1.785-03
8,250+04	*	1.073-06	1.311-05	9.174-05	4.507-04	1.677-03
8,500+04	*	1.016-06	1.241-05	8.675-05	4.253-04	1.580-03
8,750+04	*	9.636-07	1.177-05	8.217-05	4.021-04	1.490-03
9,000+04	*	9.152-07	1.118-05	7.795-05	3.808-04	1.409-03
9,250+04	*	8.704-07	1.063-05	7.406-05	3.611-04	1.334-03
9,500+04	*	8.288-07	1.013-05	7.046-05	3.430-04	1.265-03
9,750+04	*	7.903-07	9.657-06	6.713-05	3.263-04	1.201-03
1,000+05	*	7.544-07	9.220-06	6.404-05	3.108-04	1.142-03
1,200+05	*	5.398-07	6.601-06	4.560-05	2.192-04	7.970-04
1,400+05	*	4.064-07	4.973-06	3.421-05	1.632-04	5.888-04
1,600+05	*	3.177-07	3.888-06	2.664-05	1.264-04	4.529-04
1,800+05	*	2.555-07	3.126-06	2.135-05	1.007-04	3.589-04
2,000+05	*	5.027+02	5.021+02	4.299+02	3.745+02	3.288+02
2,200+05	*	4.981+02	4.150+02	3.553+02	3.095+02	2.718+02
2,600+05	*	3.566+02	2.971+02	2.544+02	2.216+02	1.946+02
3,000+05	*	2.679+02	2.232+02	1.911+02	1.665+02	1.461+02
4,000+05	*	1.507+02	1.255+02	1.075+02	9.363+01	8.221+01
5,000+05	*	9.643+01	8.034+01	6.879+01	5.993+01	5.261+01
7,500+05	*	4.286+01	3.571+01	3.057+01	2.663+01	2.338+01
1,000+06	*	2.411+01	2.009+01	1.720+01	1.498+01	1.315+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 100 ATM

WAVE NO. $\lambda$ CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****	*****				
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	7.100+00	2.289+01	5.719+01	1.151+02	1.910+02
1.500+03	3.227+00	1.022+01	2.562+01	5.154+01	8.547+01
2.000+03	1.845+00	5.046+00	1.455+01	2.922+01	4.844+01
4.000+03	4.584-01	1.446+00	3.633+00	7.399+00	1.244+01
6.000+03	2.176-01	6.480-01	1.570+00	3.116+00	5.135+00
8.000+03	1.358-01	3.924-01	9.288-01	1.813+00	2.953+00
1.000+04	9.006-02	2.723-01	6.338-01	1.224+00	1.980+00
1.500+04	5.569-02	1.500-01	3.371-01	6.344-01	1.007+00
2.000+04	3.100-02	8.112-02	1.791-01	3.348-01	5.311-01
2.250+04	2.667-02	6.488-02	1.373-01	2.552-01	4.038-01
2.500+04	2.173-02	5.461-02	1.120-01	1.995-01	3.147-01
2.750+04	1.301-02	3.690-02	1.239-01	2.159-01	3.203-01
3.000+04	4.528-02	1.085-01	1.252-01	3.875-01	5.624-01
3.250+04	3.702-02	9.431-02	1.940-01	3.391-01	4.936-01
3.500+04	3.166-02	7.674-02	1.620-01	2.813-01	4.167-01
3.750+04	2.681-02	6.046-02	1.366-01	2.365-01	3.495-01
4.000+04	2.611-02	6.420-02	1.312-01	2.253-01	3.299-01
4.500+04	2.011-02	4.220-02	1.000-01	1.713-01	2.504-01
5.000+04	1.441-02	3.001-02	7.167-02	1.222-01	1.775-01
5.500+04	1.109-02	2.051-02	5.771-02	9.818-02	1.424-01
6.000+04	9.673-03	2.051-02	4.742-02	8.051-02	1.166-01
6.500+04	6.144-03	1.971-02	3.965-02	6.716-02	9.710-02
7.000+04	6.900-03	1.070-02	3.363-02	5.685-02	8.205-02
7.250+04	6.401-03	1.056-02	3.113-02	5.255-02	7.578-02
7.500+04	6.018-03	1.446-02	2.300-02	4.872-02	7.020-02
7.750+04	5.620-03	1.345-02	2.689-02	4.530-02	6.520-02
8.000+04	5.201-03	1.260-02	2.009-02	4.222-02	6.071-02
8.250+04	4.900-03	1.101-02	2.347-02	3.944-02	5.667-02
8.500+04	4.600-03	1.100-02	2.200-02	3.693-02	5.302-02
8.750+04	4.300-03	1.040-02	2.068-02	3.465-02	4.970-02
9.000+04	4.119-03	9.020-03	1.947-02	3.258-02	4.669-02
9.250+04	3.890-03	9.200-03	1.836-02	3.070-02	4.393-02
9.500+04	3.686-03	8.701-03	1.735-02	2.898-02	4.142-02
9.750+04	3.495-03	3.290-03	1.642-02	2.740-02	3.911-02
1.000+05	3.319-03	7.080-03	1.554-02	2.595-02	3.701-02
1.200+05	2.290-03	5.089-03	1.056-02	1.750-02	2.436-02
1.400+05	1.601-03	3.924-03	7.639-03	1.259-02	1.779-02
1.600+05	1.205-03	2.983-03	5.773-03	9.482-03	1.334-02
1.800+05	1.014-03	2.340-03	4.516-03	7.383-03	1.035-02
2.000+05	1.377+02	2.477+02	2.064+02	1.642+02	1.233+02
2.200+05	2.378+02	2.047+02	1.705+02	1.357+02	1.019+02
2.600+05	1.703+02	1.466+02	1.221+02	9.713+01	7.296+01
3.000+05	1.274+02	1.101+02	9.171+01	7.206+01	5.480+01
4.000+05	7.194+01	5.192+01	5.159+01	4.104+01	3.083+01
5.000+05	4.604+01	3.963+01	3.302+01	2.626+01	1.973+01
7.500+05	2.040+01	1.701+01	1.467+01	1.167+01	8.768+00
1.000+06	1.101+01	9.907+00	6.254+00	6.566+00	4.032+00

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 100 ATM

WAVE	*	TEMPERATURES (DEG. K.)				
NOS.	*	3.000+04	0.000	0.000	0.000	0.000
CM <sup>-1</sup>	*	CM <sup>-1</sup>				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	2.655+02	0.000	0.000	0.000	0.000
1.500+03	*	1.188+02	0.000	0.000	0.000	0.000
2.000+03	*	6.732+01	0.000	0.000	0.000	0.000
4.000+03	*	1.737+01	0.000	0.000	0.000	0.000
6.000+03	*	7.205+00	0.000	0.000	0.000	0.000
8.000+03	*	4.073+00	0.000	0.000	0.000	0.000
1.000+04	*	2.709+00	0.000	0.000	0.000	0.000
1.500+04	*	1.359+00	0.000	0.000	0.000	0.000
2.000+04	*	7.175-01	0.000	0.000	0.000	0.000
2.250+04	*	5.465-01	0.000	0.000	0.000	0.000
2.500+04	*	4.258-01	0.000	0.000	0.000	0.000
2.750+04	*	4.221-01	0.000	0.000	0.000	0.000
3.000+04	*	7.010-01	0.000	0.000	0.000	0.000
3.250+04	*	6.142-01	0.000	0.000	0.000	0.000
3.500+04	*	5.200-01	0.000	0.000	0.000	0.000
3.750+04	*	4.455-01	0.000	0.000	0.000	0.000
4.000+04	*	4.171-01	0.000	0.000	0.000	0.000
4.500+04	*	3.153-01	0.000	0.000	0.000	0.000
5.000+04	*	2.221-01	0.000	0.000	0.000	0.000
5.500+04	*	1.779-01	0.000	0.000	0.000	0.000
6.000+04	*	1.455-01	0.000	0.000	0.000	0.000
6.500+04	*	1.210-01	0.000	0.000	0.000	0.000
7.000+04	*	1.021-01	0.000	0.000	0.000	0.000
7.250+04	*	9.429-02	0.000	0.000	0.000	0.000
7.500+04	*	8.728-02	0.000	0.000	0.000	0.000
7.750+04	*	8.101-02	0.000	0.000	0.000	0.000
8.000+04	*	7.538-02	0.000	0.000	0.000	0.000
8.250+04	*	7.031-02	0.000	0.000	0.000	0.000
8.500+04	*	6.573-02	0.000	0.000	0.000	0.000
8.750+04	*	6.157-02	0.000	0.000	0.000	0.000
9.000+04	*	5.779-02	0.000	0.000	0.000	0.000
9.250+04	*	5.435-02	0.000	0.000	0.000	0.000
9.500+04	*	5.120-02	0.000	0.000	0.000	0.000
9.750+04	*	4.831-02	0.000	0.000	0.000	0.000
1.000+05	*	4.565-02	0.000	0.000	0.000	0.000
1.200+05	*	3.060-02	0.000	0.000	0.000	0.000
1.400+05	*	2.176-02	0.000	0.000	0.000	0.000
1.600+05	*	1.624-02	0.000	0.000	0.000	0.000
1.800+05	*	1.256-02	0.000	0.000	0.000	0.000
2.000+05	*	8.670+01	0.000	0.000	0.000	0.000
2.200+05	*	7.166+01	0.000	0.000	0.000	0.000
2.600+05	*	5.131+01	0.000	0.000	0.000	0.000
3.000+05	*	3.854+01	0.000	0.000	0.000	0.000
4.000+05	*	2.168+01	0.000	0.000	0.000	0.000
5.000+05	*	1.387+01	0.000	0.000	0.000	0.000
7.500+05	*	6.166+00	0.000	0.000	0.000	0.000
1.000+06	*	3.468+00	0.000	0.000	0.000	0.000

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE =250 ATM

WAVE NOS. CM=1	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	3.507-12	2.927-07	7.151-05
1.500+03	0.000	0.000	2.202-12	1.805-07	4.692-05
2.000+03	0.000	0.000	1.556-12	1.381-07	3.483-05
4.000+03	0.000	0.000	0.177-13	6.111-08	1.653-05
6.000+03	0.000	0.000	3.347-13	3.590-08	1.028-05
8.000+03	0.000	0.000	2.096-13	2.385-08	7.144-06
1.000+04	0.000	0.000	1.436-13	1.705-08	5.296-06
1.500+04	0.000	0.000	7.081-14	6.945-09	2.955-06
2.000+04	0.000	0.000	4.280-14	5.559-09	1.902-06
2.250+04	0.000	0.000	3.486-14	4.565-09	1.580-06
2.500+04	0.000	0.000	2.903-14	3.826-09	1.335-06
2.750+04	0.000	0.000	2.460-14	3.258-09	1.146-06
3.000+04	0.000	0.000	2.115-14	2.812-09	9.962-07
3.250+04	0.000	0.000	1.830-14	2.453-09	8.731-07
3.500+04	0.000	0.000	1.613-14	2.159-09	7.713-07
3.750+04	0.000	0.000	1.426-14	1.914-09	6.859-07
4.000+04	0.000	0.000	1.269-14	1.707-09	6.141-07
4.500+04	0.000	0.000	1.018-14	1.376-09	4.972-07
5.000+04	0.000	0.000	0.017-15	8.168-10	2.967-07
5.500+04	0.000	0.000	5.033-15	6.823-10	2.487-07
6.000+04	0.000	0.000	4.236-15	5.789-10	2.117-07
6.500+04	0.000	0.000	3.631-15	4.977-10	1.825-07
7.000+04	0.000	0.000	3.143-15	4.327-10	1.591-07
7.250+04	0.000	0.000	2.947-15	4.049-10	1.490-07
7.500+04	0.000	0.000	2.756-15	3.798-10	1.400-07
7.750+04	0.000	0.000	2.587-15	3.569-10	1.317-07
8.000+04	0.000	0.000	2.434-15	3.361-10	1.241-07
8.250+04	0.000	0.000	2.293-15	3.171-10	1.173-07
8.500+04	0.000	0.000	2.165-15	2.997-10	1.109-07
8.750+04	0.000	0.000	2.048-15	2.837-10	1.051-07
9.000+04	0.000	0.000	1.939-15	2.690-10	9.974-08
9.250+04	0.000	0.000	1.840-15	2.554-10	9.479-08
9.500+04	0.000	0.000	1.747-15	2.428-10	9.020-08
9.750+04	0.000	0.000	1.662-15	2.312-10	8.595-08
1.000+05	0.000	0.000	1.583-15	2.204-10	8.199-08
1.200+05	0.000	0.000	1.114-15	1.560-10	5.838-08
1.400+05	0.000	0.000	0.272-16	1.165-10	4.379-08
1.600+05	0.000	0.000	0.393-16	9.040-11	3.413-08
1.800+05	0.000	0.000	0.093-16	7.229-11	2.738-08
2.000+05	1.507+04	7.534+03	0.767+03	2.511+03	1.283+03
2.200+05	1.245+04	6.224+03	3.113+03	2.075+03	1.557+03
2.600+05	3.910+03	4.451+03	2.229+03	1.426+03	1.114+03
3.000+05	6.097+03	3.344+03	1.674+03	1.116+03	8.371+02
4.000+05	3.707+03	1.883+03	9.417+02	6.278+02	4.709+02
5.000+05	2.411+03	1.205+03	6.027+02	4.018+02	3.013+02
7.500+05	1.071+03	5.357+02	2.679+02	1.786+02	1.339+02
1.000+06	6.027+02	3.013+02	1.507+02	1.004+02	7.534+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 250 ATM.

WAVE NOS. CM-1	TEMPERATURES (DEG. K.)				
	1.000+04	1.200+04	1.400+04	1.600+04	1.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.753-03	1.547-02	1.087-01	7.695-01	4.427+00
1.500+03	1.149-03	9.677-03	5.926-02	3.712-01	2.032+00
2.000+03	8.599-04	7.111-03	4.016-02	2.281-01	1.187+00
4.000+03	4.289-04	3.574-03	1.757-02	7.645-02	3.266-01
6.000+03	2.788-04	2.393-03	1.160-02	4.598-02	1.741-01
8.000+03	2.011-04	1.776-03	8.671-03	3.313-02	1.174-01
1.000+04	1.537-04	1.392-03	6.888-03	2.597-02	8.852-02
1.500+04	9.075-05	8.662-04	4.478-03	1.684-02	5.532-02
2.000+04	6.048-05	5.937-04	3.089-03	1.151-02	3.647-02
2.250+04	5.088-05	5.050-04	2.640-03	9.741-03	3.009-02
2.500+04	4.344-05	4.353-04	2.286-03	8.392-03	2.541-02
2.750+04	3.771-05	3.865-04	2.113-03	8.185-03	2.599-02
3.000+04	3.365-05	3.736-04	2.377-03	1.104-02	4.053-02
3.250+04	2.966-05	3.309-04	2.110-03	9.773-03	3.572-02
3.500+04	2.627-05	2.924-04	1.844-03	8.423-03	3.041-02
3.750+04	2.342-05	2.601-04	1.626-03	7.333-03	2.618-02
4.000+04	2.116-05	2.394-04	1.533-03	7.040-03	2.533-02
4.500+04	1.721-05	1.947-04	1.237-03	5.607-03	1.992-02
5.000+04	1.039-05	1.209-04	8.013-04	3.784-03	1.383-02
5.500+04	8.737-06	1.016-04	6.698-04	3.135-03	1.136-02
6.000+04	7.455-06	8.672-05	5.690-04	2.645-03	9.512-03
6.500+04	6.442-06	7.495-05	4.901-04	2.265-03	8.094-03
7.000+04	5.627-06	6.548-05	4.270-04	1.963-03	6.980-03
7.250+04	5.277-06	6.143-05	4.001-04	1.835-03	6.510-03
7.500+04	4.960-06	5.775-05	3.758-04	1.720-03	6.085-03
7.750+04	4.672-06	5.441-05	3.537-04	1.616-03	5.701-03
8.000+04	4.408-06	5.135-05	3.335-04	1.521-03	5.355-03
8.250+04	4.167-06	4.856-05	3.151-04	1.434-03	5.040-03
8.500+04	3.946-06	4.599-05	2.982-04	1.355-03	4.754-03
8.750+04	3.742-06	4.363-05	2.827-04	1.283-03	4.491-03
9.000+04	3.554-06	4.145-05	2.684-04	1.216-03	4.251-03
9.250+04	3.380-06	3.943-05	2.552-04	1.155-03	4.030-03
9.500+04	3.219-06	3.756-05	2.430-04	1.098-03	3.826-03
9.750+04	3.069-06	3.583-05	2.317-04	1.046-03	3.638-03
1.000+05	2.930-06	3.421-05	2.211-04	9.972-04	3.463-03
1.200+05	2.097-06	2.454-05	1.581-04	7.079-04	2.436-03
1.400+05	1.579-06	1.851-05	1.190-04	5.300-04	1.811-03
1.600+05	1.235-06	1.449-05	9.300-05	4.122-04	1.400-03
1.800+05	9.932-07	1.167-05	7.474-05	3.300-04	1.115-03
2.000+05	1.507+03	1.255+03	1.075+03	9.383+02	8.274+02
2.200+05	1.245+03	1.038+03	8.887+02	7.754+02	6.838+02
2.600+05	8.916+02	7.429+02	6.363+02	5.552+02	4.896+02
3.000+05	6.697+02	5.580+02	4.779+02	4.170+02	3.678+02
4.000+05	3.767+02	3.139+02	2.688+02	2.346+02	2.069+02
5.000+05	2.411+02	2.009+02	1.721+02	1.501+02	1.324+02
7.500+05	1.071+02	8.928+01	7.647+01	6.672+01	5.884+01
1.000+06	0.027+01	5.722+01	4.301+01	3.753+01	3.310+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE =250 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG. K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.893+01	6.177+01	1.602+02	3.413+02	6.109+02
1.500+03	8.542+00	2.772+01	7.174+01	1.526+02	2.731+02
2.000+03	4.897+00	1.578+01	4.070+01	8.647+01	1.546+02
4.000+03	1.240+00	3.927+00	1.017+01	2.186+01	3.962+01
6.000+03	6.018-01	1.778+00	4.415+00	9.205+00	1.631+01
8.000+03	3.829-01	1.088+00	2.624+00	5.365+00	9.376+00
1.000+04	2.770-01	7.627-01	1.800+00	3.630+00	6.287+00
1.500+04	1.636-01	4.278-01	9.680-01	1.891+00	3.200+00
2.000+04	9.775-02	2.399-01	5.277-01	1.016+00	1.709+00
2.250+04	8.295-02	1.948-01	4.101-01	7.821-01	1.309+00
2.500+04	6.882-02	1.657-01	3.408-01	6.177-01	1.028+00
2.750+04	7.166-02	1.748-01	3.670-01	6.594-01	1.036+00
3.000+04	1.211-01	3.009-01	6.353-01	1.138+00	1.761+00
3.250+04	1.002-01	2.627-01	5.511-01	9.982-01	1.549+00
3.500+04	8.967-02	2.206-01	4.610-01	8.315-01	1.312+00
3.750+04	7.657-02	1.874-01	3.904-01	7.019-01	1.104+00
4.000+04	7.410-02	1.806-01	3.738-01	6.676-01	1.041+00
4.500+04	5.766-02	1.394-01	2.870-01	5.104-01	7.932-01
5.000+04	4.006-02	9.898-02	2.039-01	3.615-01	5.590-01
5.500+04	3.317-02	9.635-02	1.649-01	2.915-01	4.498-01
6.000+04	2.761-02	6.654-02	1.360-01	2.399-01	3.693-01
6.500+04	2.355-02	5.603-02	1.141-01	2.007-01	3.084-01
7.000+04	2.003-02	4.786-02	9.716-02	1.704-01	2.613-01
7.250+04	1.804-02	4.443-02	9.006-02	1.577-01	2.416-01
7.500+04	1.759-02	4.137-02	8.373-02	1.464-01	2.240-01
7.750+04	1.627-02	3.862-02	7.804-02	1.363-01	2.083-01
8.000+04	1.526-02	3.616-02	7.292-02	1.272-01	1.942-01
8.250+04	1.433-02	3.392-02	6.829-02	1.190-01	1.814-01
8.500+04	1.343-02	3.190-02	6.411-02	1.115-01	1.699-01
8.750+04	1.272-02	3.005-02	6.032-02	1.048-01	1.595-01
9.000+04	1.202-02	2.834-02	5.686-02	9.860-02	1.499-01
9.250+04	1.137-02	2.678-02	5.367-02	9.302-02	1.412-01
9.500+04	1.078-02	2.534-02	5.079-02	8.790-02	1.332-01
9.750+04	1.023-02	2.402-02	4.810-02	8.319-02	1.259-01
1.000+05	9.730-03	2.281-02	4.559-02	7.886-02	1.193-01
1.200+05	6.778-03	1.574-02	3.119-02	5.355-02	8.062-02
1.400+05	5.002-03	1.154-02	2.271-02	3.875-02	5.800-02
1.600+05	3.845-03	8.321-03	1.727-02	2.932-02	4.367-02
1.800+05	3.048-03	6.950-03	1.356-02	2.294-02	3.403-02
2.000+05	1.313+02	6.417+02	5.526+02	4.624+02	3.725+02
2.200+05	6.044+02	5.303+02	4.567+02	3.821+02	3.078+02
2.600+05	4.327+02	3.797+02	3.270+02	2.736+02	2.204+02
3.000+05	3.250+02	2.852+02	2.456+02	2.055+02	1.656+02
4.000+05	1.828+02	1.604+02	1.381+02	1.156+02	9.312+01
5.000+05	1.170+02	1.027+02	8.841+01	7.308+01	5.960+01
7.500+05	5.201+01	4.563+01	3.922+01	3.288+01	2.649+01
1.000+06	2.925+01	2.567+01	2.210+01	1.849+01	1.490+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE =250 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)-				
		3.000+04	0.000	0.000	0.000	0.000
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	9.350+02	0.000	0.000	0.000	0.000
1.500+03	*	4.179+02	0.000	0.000	0.000	0.000
2.000+03	*	2.365+02	0.000	0.000	0.000	0.000
4.000+03	*	6.085+01	0.000	0.000	0.000	0.000
6.000+03	*	2.515+01	0.000	0.000	0.000	0.000
8.000+03	*	1.419+01	0.000	0.000	0.000	0.000
1.000+04	*	9.428+00	0.000	0.000	0.000	0.000
1.500+04	*	4.719+00	0.000	0.000	0.000	0.000
2.000+04	*	2.514+00	0.000	0.000	0.000	0.000
2.250+04	*	1.924+00	0.000	0.000	0.000	0.000
2.500+04	*	1.507+00	0.000	0.000	0.000	0.000
2.750+04	*	1.481+00	0.000	0.000	0.000	0.000
3.000+04	*	2.394+00	0.000	0.000	0.000	0.000
3.250+04	*	2.100+00	0.000	0.000	0.000	0.000
3.500+04	*	1.794+00	0.000	0.000	0.000	0.000
3.750+04	*	1.533+00	0.000	0.000	0.000	0.000
4.000+04	*	1.433+00	0.000	0.000	0.000	0.000
4.500+04	*	1.087+00	0.000	0.000	0.000	0.000
5.000+04	*	7.614-01	0.000	0.000	0.000	0.000
5.500+04	*	6.116-01	0.000	0.000	0.000	0.000
6.000+04	*	5.013-01	0.000	0.000	0.000	0.000
6.500+04	*	4.179-01	0.000	0.000	0.000	0.000
7.000+04	*	3.534-01	0.000	0.000	0.000	0.000
7.250+04	*	3.266-01	0.000	0.000	0.000	0.000
7.500+04	*	3.026-01	0.000	0.000	0.000	0.000
7.750+04	*	2.811-01	0.000	0.000	0.000	0.000
8.000+04	*	2.618-01	0.000	0.000	0.000	0.000
8.250+04	*	2.444-01	0.000	0.000	0.000	0.000
8.500+04	*	2.287-01	0.000	0.000	0.000	0.000
8.750+04	*	2.144-01	0.000	0.000	0.000	0.000
9.000+04	*	2.014-01	0.000	0.000	0.000	0.000
9.250+04	*	1.895-01	0.000	0.000	0.000	0.000
9.500+04	*	1.787-01	0.000	0.000	0.000	0.000
9.750+04	*	1.687-01	0.000	0.000	0.000	0.000
1.000+05	*	1.596-01	0.000	0.000	0.000	0.000
1.200+05	*	1.075-01	0.000	0.000	0.000	0.000
1.400+05	*	7.683-02	0.000	0.000	0.000	0.000
1.600+05	*	5.759-02	0.000	0.000	0.000	0.000
1.800+05	*	4.470-02	0.000	0.000	0.000	0.000
2.000+05	*	2.967+02	0.000	0.000	0.000	0.000
2.200+05	*	2.370+02	0.000	0.000	0.000	0.000
2.600+05	*	1.697+02	0.000	0.000	0.000	0.000
3.000+05	*	1.274+02	0.000	0.000	0.000	0.000
4.000+05	*	7.168+01	0.000	0.000	0.000	0.000
5.000+05	*	4.588+01	0.000	0.000	0.000	0.000
7.500+05	*	2.039+01	0.000	0.000	0.000	0.000
1.000+06	*	1.147+01	0.000	0.000	0.000	0.000

TABLE VI  
ABSORPTION COEFFICIENTS OF HELIUM

AT TOTAL PRESSURE = 500 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
		CM <sup>-1</sup>				
	*	*****				
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	0.000	0.000	9.920-12	8.278-07	2.023-04
1.500+03	*	0.000	0.000	6.223-12	5.360-07	1.327-04
2.000+03	*	0.000	0.000	4.401-12	3.907-07	9.853-05
4.000+03	*	0.000	0.000	1.747-12	1.729-07	4.675-05
6.000+03	*	0.000	0.000	9.468-13	1.015-07	2.907-05
8.000+03	*	0.000	0.000	5.929-13	6.746-08	2.021-05
1.000+04	*	0.000	0.000	4.060-13	4.823-08	1.498-05
1.500+04	*	0.000	0.000	2.003-13	2.530-08	8.361-06
2.000+04	*	0.000	0.000	1.211-13	1.572-08	5.381-06
2.250+04	*	0.000	0.000	9.861-14	1.291-08	4.470-06
2.500+04	*	0.000	0.000	8.212-14	1.082-08	3.778-06
2.750+04	*	0.000	0.000	6.959-14	9.216-09	3.241-06
3.000+04	*	0.000	0.000	5.981-14	7.954-09	2.816-06
3.250+04	*	0.000	0.000	5.200-14	6.939-09	2.468-06
3.500+04	*	0.000	0.000	4.563-14	6.108-09	2.180-06
3.750+04	*	0.000	0.000	4.034-14	5.415-09	1.939-06
4.000+04	*	0.000	0.000	3.538-14	4.829-09	1.736-06
4.500+04	*	0.000	0.000	2.879-14	3.892-09	1.405-06
5.000+04	*	0.000	0.000	1.702-14	2.310-09	8.384-07
5.500+04	*	0.000	0.000	1.417-14	1.930-09	7.028-07
6.000+04	*	0.000	0.000	1.198-14	1.638-09	5.982-07
6.500+04	*	0.000	0.000	1.027-14	1.408-09	5.157-07
7.000+04	*	0.000	0.000	0.903-15	1.224-09	4.495-07
7.250+04	*	0.000	0.000	3.321-15	1.145-09	4.212-07
7.500+04	*	0.000	0.000	7.795-15	1.074-09	3.955-07
7.750+04	*	0.000	0.000	7.318-15	1.010-09	3.721-07
8.000+04	*	0.000	0.000	6.823-15	9.507-10	3.508-07
8.250+04	*	0.000	0.000	6.427-15	8.970-10	3.313-07
8.500+04	*	0.000	0.000	6.124-15	8.477-10	3.134-07
8.750+04	*	0.000	0.000	5.792-15	8.025-10	2.970-07
9.000+04	*	0.000	0.000	5.435-15	7.608-10	2.810-07
9.250+04	*	0.000	0.000	5.203-15	7.224-10	2.678-07
9.500+04	*	0.000	0.000	4.943-15	6.869-10	2.549-07
9.750+04	*	0.000	0.000	4.701-15	6.539-10	2.429-07
1.000+05	*	0.000	0.000	4.477-15	6.233-10	2.317-07
1.200+05	*	0.000	0.000	3.150-15	4.412-10	1.650-07
1.400+05	*	0.000	0.000	2.340-15	3.294-10	1.237-07
1.600+05	*	0.000	0.000	1.809-15	2.557-10	9.643-08
1.800+05	*	0.000	0.000	1.441-15	2.045-10	7.737-08
2.000+05	*	3.013+04	1.507+04	7.534+03	5.022+03	3.767+03
2.200+05	*	2.490+04	1.245+04	6.226+03	4.151+03	3.113+03
2.600+05	*	1.784+04	8.916+03	4.458+03	2.972+03	2.229+03
3.000+05	*	1.330+04	6.697+03	3.348+03	2.232+03	1.674+03
4.000+05	*	7.534+03	3.767+03	1.833+03	1.276+03	9.417+02
5.000+05	*	4.822+03	2.411+03	1.205+03	8.036+02	6.027+02
7.500+05	*	2.143+03	1.071+03	5.357+02	3.572+02	2.679+02
1.000+06	*	1.205+03	6.027+02	3.013+02	2.009+02	1.507+02



TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 500 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1,000+04	1,200+04	1,400+04	1,600+04	1,800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	4.945-03	4.215-02	2.642-01	1.685+00	9.323+00
1.500+03	5.244-03	2.666-02	1.482-01	8.289-01	4.308+00
2.000+03	2.430-03	1.973-02	1.026-01	5.194-01	2.539+00
4.000+03	1.213-03	1.002-02	4.718-02	1.867-01	7.310-01
6.000+03	7.887-04	6.733-03	3.164-02	1.163-01	4.039-01
8.000+03	5.688-04	5.001-03	2.381-02	8.543-02	2.790-01
1.000+04	4.348-04	3.022-03	1.898-02	6.771-02	2.140-01
1.500+04	2.567-04	2.439-03	1.234-02	4.438-02	1.365-01
2.000+04	1.711-04	1.675-03	8.594-03	3.090-02	9.250-02
2.250+04	1.440-04	1.426-03	7.365-03	2.636-02	7.744-02
2.500+04	1.229-04	1.230-03	6.392-03	2.285-02	6.617-02
2.750+04	1.066-04	1.086-03	5.831-03	2.176-02	6.575-02
3.000+04	9.455-05	1.023-03	6.178-03	2.691-02	9.359-02
3.250+04	8.333-05	9.066-04	5.491-03	2.389-02	8.278-02
3.500+04	7.385-05	8.032-04	4.830-03	2.077-02	7.111-02
3.750+04	6.587-05	7.161-04	4.282-03	1.823-02	6.173-02
4.000+04	5.940-05	6.555-04	3.998-03	1.732-02	5.924-02
4.500+04	4.832-05	5.341-04	3.243-03	1.391-02	4.702-02
5.000+04	2.911-05	3.290-04	2.069-03	9.209-03	3.207-02
5.500+04	2.448-05	2.769-04	1.735-03	7.671-03	2.650-02
6.000+04	2.089-05	2.365-04	1.478-03	6.500-03	2.230-02
6.500+04	1.806-05	2.046-04	1.276-03	5.586-03	1.905-02
7.000+04	1.577-05	1.789-04	1.114-03	4.856-03	1.649-02
7.250+04	1.479-05	1.679-04	1.045-03	4.546-03	1.541-02
7.500+04	1.391-05	1.579-04	9.818-04	4.266-03	1.442-02
7.750+04	1.310-05	1.487-04	9.247-04	4.011-03	1.353-02
8.000+04	1.236-05	1.404-04	8.726-04	3.780-03	1.273-02
8.250+04	1.168-05	1.328-04	8.249-04	3.569-03	1.200-02
8.500+04	1.106-05	1.258-04	7.811-04	3.376-03	1.133-02
8.750+04	1.049-05	1.194-04	7.409-04	3.198-03	1.072-02
9.000+04	9.965-06	1.134-04	7.038-04	3.035-03	1.015-02
9.250+04	9.477-06	1.079-04	6.695-04	2.884-03	9.636-03
9.500+04	9.025-06	1.028-04	6.377-04	2.744-03	9.157-03
9.750+04	8.606-06	9.309-05	6.082-04	2.615-03	8.715-03
1.000+05	8.216-06	8.368-05	5.808-04	2.495-03	8.305-03
1.200+05	5.821-06	6.725-05	4.164-04	1.780-03	5.877-03
1.400+05	4.129-06	5.077-05	3.142-04	1.337-03	4.391-03
1.600+05	3.463-06	3.977-05	2.459-04	1.044-03	3.410-03
1.800+05	2.786-06	3.204-05	1.980-04	8.378-04	2.726-03
2.000+05	3.013+03	2.511+03	2.151+03	1.879+03	1.660+03
2.200+05	2.490+03	2.075+03	1.778+03	1.553+03	1.372+03
2.400+05	1.783+03	1.486+03	1.273+03	1.112+03	9.825+02
3.000+05	1.339+03	1.116+03	9.561+02	8.349+02	7.379+02
4.000+05	7.534+02	6.278+02	5.378+02	4.696+02	4.151+02
5.000+05	4.822+02	4.018+02	3.442+02	3.006+02	2.657+02
7.500+05	2.143+02	1.786+02	1.530+02	1.336+02	1.181+02
1.000+06	1.205+02	1.004+02	8.605+01	7.514+01	6.641+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 500 ATM

WAVE POS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****		*****				
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	3.966+01	1.308+02	3.464+02	7.619+02	1.422+03
1.500+03	*	1.793+01	5.868+01	1.549+02	3.404+02	6.351+02
2.000+03	*	1.031+01	3.341+01	6.787+01	1.927+02	3.592+02
4.000+03	*	2.603+00	8.379+00	2.200+01	4.866+01	9.184+01
6.000+03	*	1.323+00	3.039+00	9.592+00	2.051+01	3.777+01
8.000+03	*	8.579-01	2.377+00	5.736+00	1.198+01	2.171+01
1.000+04	*	6.300-01	1.083+00	3.959+00	8.132+00	1.457+01
1.500+04	*	3.809-01	9.017-01	2.155+00	4.265+00	7.435+00
2.000+04	*	2.352-01	5.080-01	1.206+00	2.335+00	4.026+00
2.250+04	*	2.023-01	4.090-01	9.493-01	1.816+00	3.106+00
2.500+04	*	1.702-01	3.941-01	7.966-01	1.449+00	2.458+00
2.750+04	*	1.728-01	4.072-01	8.434-01	1.526+00	2.454+00
3.000+04	*	2.699-01	6.094-01	1.392+00	2.536+00	4.043+00
3.250+04	*	2.376-01	5.776-01	1.211+00	2.228+00	3.561+00
3.500+04	*	2.022-01	4.380-01	1.019+00	1.864+00	3.020+00
3.750+04	*	1.740-01	4.176-01	8.671-01	1.581+00	2.557+00
4.000+04	*	1.674-01	4.003-01	8.281-01	1.501+00	2.407+00
4.500+04	*	1.314-01	3.120-01	6.404-01	1.154+00	1.844+00
5.000+04	*	9.134-02	2.189-01	4.507-01	8.115-01	1.291+00
5.500+04	*	7.495-02	1.786-01	3.652-01	6.571-01	1.043+00
6.000+04	*	6.268-02	1.486-01	3.034-01	5.426-01	8.588-01
6.500+04	*	5.325-02	1.257-01	2.555-01	4.556-01	7.193-01
7.000+04	*	4.535-02	1.077-01	2.182-01	3.880-01	6.110-01
7.250+04	*	4.274-02	1.002-01	2.026-01	3.597-01	5.657-01
7.500+04	*	3.995-02	9.344-02	1.887-01	3.344-01	5.253-01
7.750+04	*	3.743-02	8.737-02	1.761-01	3.117-01	4.890-01
8.000+04	*	3.514-02	8.191-02	1.648-01	2.912-01	4.564-01
8.250+04	*	3.306-02	7.695-02	1.545-01	2.727-01	4.269-01
8.500+04	*	3.115-02	7.244-02	1.452-01	2.560-01	4.002-01
8.750+04	*	2.941-02	6.833-02	1.369-01	2.407-01	3.759-01
9.000+04	*	2.783-02	6.454-02	1.291-01	2.268-01	3.538-01
9.250+04	*	2.637-02	6.104-02	1.221-01	2.142-01	3.336-01
9.500+04	*	2.502-02	5.782-02	1.156-01	2.026-01	3.151-01
9.750+04	*	2.378-02	5.480-02	1.096-01	1.919-01	2.980-01
1.000+05	*	2.263-02	5.217-02	1.040-01	1.821-01	2.826-01
1.200+05	*	1.587-02	3.627-02	7.165-02	1.245-01	1.922-01
1.400+05	*	1.172-02	2.674-02	5.247-02	9.061-02	1.390-01
1.600+05	*	9.090-03	2.054-02	4.010-02	6.890-02	1.052-01
1.800+05	*	7.242-03	1.625-02	3.164-02	5.410-02	8.232-02
2.000+05	*	1.475+03	1.007+03	1.144+03	9.837+02	8.219+02
2.200+05	*	1.214+03	1.060+03	9.457+02	8.130+02	6.792+02
2.600+05	*	6.728+02	7.733+02	6.771+02	5.821+02	4.863+02
3.000+05	*	6.555+02	5.002+02	3.986+02	4.372+02	3.653+02
4.000+05	*	3.607+02	3.267+02	2.861+02	2.439+02	2.055+02
5.000+05	*	2.300+02	2.091+02	1.831+02	1.574+02	1.315+02
7.500+05	*	1.049+02	9.293+01	5.137+01	6.995+01	5.845+01
1.000+06	*	5.900+01	5.227+01	4.577+01	3.935+01	3.289+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 500 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	3.000+04	0.000	0.000	0.000	0.000
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	2.294+03	0.000	0.000	0.000	0.000
1.500+03	1.024+03	0.000	0.000	0.000	0.000
2.000+03	5.790+02	0.000	0.000	0.000	0.000
4.000+03	1.485+02	0.000	0.000	0.000	0.000
6.000+03	6.126+01	0.000	0.000	0.000	0.000
8.000+03	3.452+01	0.000	0.000	0.000	0.000
1.000+04	2.292+01	0.000	0.000	0.000	0.000
1.500+04	1.147+01	0.000	0.000	0.000	0.000
2.000+04	5.167+00	0.000	0.000	0.000	0.000
2.250+04	4.747+00	0.000	0.000	0.000	0.000
2.500+04	3.740+00	0.000	0.000	0.000	0.000
2.750+04	3.648+00	0.000	0.000	0.000	0.000
3.000+04	5.730+00	0.000	0.000	0.000	0.000
3.250+04	5.041+00	0.000	0.000	0.000	0.000
3.500+04	4.295+00	0.000	0.000	0.000	0.000
3.750+04	3.703+00	0.000	0.000	0.000	0.000
4.000+04	3.457+00	0.000	0.000	0.000	0.000
4.500+04	2.033+00	0.000	0.000	0.000	0.000
5.000+04	1.834+00	0.000	0.000	0.000	0.000
5.500+04	1.478+00	0.000	0.000	0.000	0.000
6.000+04	1.214+00	0.000	0.000	0.000	0.000
6.500+04	1.015+00	0.000	0.000	0.000	0.000
7.000+04	8.604-01	0.000	0.000	0.000	0.000
7.250+04	7.959-01	0.000	0.000	0.000	0.000
7.500+04	7.383-01	0.000	0.000	0.000	0.000
7.750+04	6.666-01	0.000	0.000	0.000	0.000
8.000+04	6.401-01	0.000	0.000	0.000	0.000
8.250+04	5.982-01	0.000	0.000	0.000	0.000
8.500+04	5.602-01	0.000	0.000	0.000	0.000
8.750+04	5.257-01	0.000	0.000	0.000	0.000
9.000+04	4.943-01	0.000	0.000	0.000	0.000
9.250+04	4.656-01	0.000	0.000	0.000	0.000
9.500+04	4.394-01	0.000	0.000	0.000	0.000
9.750+04	4.152-01	0.000	0.000	0.000	0.000
1.000+05	3.930-01	0.000	0.000	0.000	0.000
1.200+05	2.664-01	0.000	0.000	0.000	0.000
1.400+05	1.913-01	0.000	0.000	0.000	0.000
1.600+05	1.441-01	0.000	0.000	0.000	0.000
1.800+05	1.123-01	0.000	0.000	0.000	0.000
2.000+05	6.632+02	0.000	0.000	0.000	0.000
2.200+05	5.482+02	0.000	0.000	0.000	0.000
2.600+05	3.925+02	0.000	0.000	0.000	0.000
3.000+05	2.948+02	0.000	0.000	0.000	0.000
4.000+05	1.058+02	0.000	0.000	0.000	0.000
5.000+05	1.061+02	0.000	0.000	0.000	0.000
7.500+05	4.717+01	0.000	0.000	0.000	0.000
1.000+06	2.653+01	0.000	0.000	0.000	0.000

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 750 ATM

WAVE NOS. CM	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
***** CM <sup>-1</sup> *****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.007	1.822-11	1.521-06	3.716-04
1.500+03	0.000	0.000	1.144-11	9.846-07	2.439-04
2.000+03	0.000	0.000	8.084-12	7.179-07	1.810-04
4.000+03	0.000	0.000	3.210-12	3.176-07	8.590-05
6.000+03	0.000	0.000	1.739-12	1.865-07	5.341-05
8.000+03	0.000	0.000	1.089-12	1.239-07	3.713-05
1.000+04	0.000	0.000	7.459-13	8.860-08	2.753-05
1.500+04	0.000	0.000	3.679-13	4.648-08	1.536-05
2.000+04	0.000	0.000	2.224-13	2.889-08	9.886-06
2.250+04	0.000	0.000	1.812-13	2.372-08	8.212-06
2.500+04	0.000	0.000	1.509-13	1.988-08	6.942-06
2.750+04	0.000	0.000	1.279-13	1.693-08	5.954-06
3.000+04	0.000	0.000	1.090-13	1.461-08	5.173-06
3.250+04	0.000	0.000	9.553-14	1.275-08	4.534-06
3.500+04	0.000	0.000	8.382-14	1.122-08	4.005-06
3.750+04	0.000	0.000	7.411-14	9.948-09	3.562-06
4.000+04	0.000	0.000	6.592-14	8.872-09	3.188-06
4.500+04	0.000	0.000	5.288-14	7.150-09	2.581-06
5.000+04	0.000	0.000	3.127-14	4.244-09	1.540-06
5.500+04	0.000	0.000	2.602-14	3.540-09	1.291-06
6.000+04	0.000	0.000	2.201-14	3.008-09	1.099-06
6.500+04	0.000	0.000	1.587-14	2.586-09	9.471-07
7.000+04	0.000	0.000	1.636-14	2.248-09	8.255-07
7.250+04	0.000	0.000	1.529-14	2.104-09	7.734-07
7.500+04	0.000	0.000	1.432-14	1.973-09	7.262-07
7.750+04	0.000	0.000	1.344-14	1.855-09	6.833-07
8.000+04	0.000	0.000	1.265-14	1.747-09	6.442-07
8.250+04	0.000	0.000	1.192-14	1.648-09	6.084-07
8.500+04	0.000	0.000	1.125-14	1.557-09	5.756-07
8.750+04	0.000	0.000	1.064-14	1.474-09	5.454-07
9.000+04	0.000	0.000	1.008-14	1.398-09	5.176-07
9.250+04	0.000	0.000	9.559-15	1.327-09	4.919-07
9.500+04	0.000	0.000	9.030-15	1.262-09	4.680-07
9.750+04	0.000	0.000	8.637-15	1.201-09	4.460-07
1.000+05	0.000	0.000	8.225-15	1.145-09	4.254-07
1.200+05	0.000	0.000	8.797-15	8.106-10	3.029-07
1.400+05	0.000	0.000	4.298-15	6.052-10	2.272-07
1.600+05	0.000	0.000	3.322-15	4.698-10	1.771-07
1.800+05	0.000	0.000	2.646-15	3.756-10	1.421-07
2.000+05	4.520+04	2.260+04	1.130+04	7.534+03	5.650+03
2.200+05	3.736+04	1.863+04	9.339+03	6.226+03	4.670+03
2.600+05	2.675+04	1.337+04	6.687+03	4.458+03	3.343+03
3.000+05	2.009+04	1.004+04	5.022+03	3.348+03	2.511+03
4.000+05	1.130+04	5.059+03	2.825+03	1.883+03	1.413+03
5.000+05	7.232+03	3.018+03	1.608+03	1.205+03	7.040+02
7.500+05	3.214+03	1.007+03	8.036+02	5.357+02	4.018+02
1.000+06	1.806+03	9.040+02	4.520+02	3.013+02	2.260+02

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 750 ATM

WAVE NOS.	*	TEMPERATURES (DEG K)				
	*	1.000+04	1.200+04	1.400+04	1.600+04	1.800+04
CM-1	*	CM-1				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	9.076-03	7.616-02	4.503-01	2.694+00	1.450+01
1.500+03	*	5.956-03	4.842-02	2.567-01	1.342+00	6.733+00
2.000+03	*	4.464-03	3.596-02	1.798-01	8.518-01	3.992+00
4.000+03	*	2.229-03	1.836-02	8.469-02	3.192-01	1.185+00
6.000+03	*	1.449-03	1.235-02	5.722-02	2.027-01	6.700-01
8.000+03	*	1.045-03	9.176-03	4.321-02	1.504-01	4.698-01
1.000+04	*	7.990-04	7.196-03	3.450-02	1.199-01	3.638-01
1.500+04	*	4.717-04	4.474-03	2.243-02	7.899-02	2.348-01
2.000+04	*	3.145-04	3.076-03	1.569-02	5.548-02	1.615-01
2.250+04	*	2.646-04	2.619-03	1.346-02	4.752-02	1.362-01
2.500+04	*	2.260-04	2.259-03	1.170-02	4.132-02	1.171-01
2.750+04	*	1.958-04	1.991-03	1.060-02	3.891-02	1.147-01
3.000+04	*	1.732-04	1.853-03	1.092-02	4.598-02	1.549-01
3.250+04	*	1.527-04	1.643-03	9.709-03	4.088-02	1.373-01
3.500+04	*	1.353-04	1.457-03	8.568-03	3.572-02	1.186-01
3.750+04	*	1.207-04	1.300-03	7.615-03	3.147-02	1.035-01
4.000+04	*	1.088-04	1.187-03	7.076-03	2.974-02	9.880-02
4.500+04	*	8.851-05	9.683-04	5.756-03	2.399-02	7.886-02
5.000+04	*	5.327-05	5.941-04	3.642-03	1.572-02	5.322-02
5.500+04	*	4.480-05	5.003-04	3.061-03	1.313-02	4.414-02
6.000+04	*	3.824-05	4.276-04	2.611-03	1.115-02	3.725-02
6.500+04	*	3.305-05	3.700-04	2.257-03	9.603-03	3.191-02
7.000+04	*	2.887-05	3.236-04	1.972-03	8.363-03	2.768-02
7.250+04	*	2.708-05	3.037-04	1.850-03	7.835-03	2.588-02
7.500+04	*	2.545-05	2.857-04	1.739-03	7.357-03	2.425-02
7.750+04	*	2.397-05	2.692-04	1.639-03	6.923-03	2.278-02
8.000+04	*	2.262-05	2.542-04	1.547-03	6.527-03	2.144-02
8.250+04	*	2.139-05	2.404-04	1.463-03	6.166-03	2.022-02
8.500+04	*	2.025-05	2.278-04	1.385-03	5.835-03	1.911-02
8.750+04	*	1.920-05	2.161-04	1.314-03	5.531-03	1.809-02
9.000+04	*	1.824-05	2.054-04	1.249-03	5.251-03	1.715-02
9.250+04	*	1.735-05	1.954-04	1.188-03	4.992-03	1.628-02
9.500+04	*	1.652-05	1.862-04	1.132-03	4.753-03	1.549-02
9.750+04	*	1.575-05	1.777-04	1.080-03	4.531-03	1.475-02
1.000+05	*	1.504-05	1.697-04	1.031-03	4.324-03	1.406-02
1.200+05	*	1.076-05	1.219-04	7.406-04	3.092-03	9.985-03
1.400+05	*	8.108-06	9.203-05	5.593-04	2.328-03	7.480-03
1.600+05	*	6.340-06	7.212-05	4.382-04	1.820-03	5.823-03
1.800+05	*	5.102-06	5.912-05	3.531-04	1.463-03	4.665-03
2.000+05	*	4.520+03	3.767+03	3.227+03	2.819+03	2.494+03
2.200+05	*	3.736+03	3.113+03	2.667+03	2.330+03	2.061+03
2.400+05	*	2.675+03	2.229+03	1.910+03	1.668+03	1.476+03
3.000+05	*	2.009+03	1.574+03	1.434+03	1.253+03	1.109+03
4.000+05	*	1.130+03	9.416+02	8.068+02	7.048+02	6.236+02
5.000+05	*	7.232+02	6.727+02	5.163+02	4.511+02	3.991+02
7.500+05	*	3.214+02	2.578+02	2.295+02	2.005+02	1.774+02
1.000+06	*	1.808+02	1.507+02	1.291+02	1.128+02	9.977+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 750 ATM

WAVE NO. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	6.133+01	2.031+02	5.436+02	1.214+03	2.311+03
1.500+03	2.776+01	9.113+01	2.430+02	5.418+02	1.031+03
2.000+03	1.599+01	5.191+01	1.378+02	3.065+02	5.830+02
4.000+03	4.194+00	1.300+01	3.454+01	7.736+01	1.488+02
6.000+03	2.117+00	6.052+00	1.512+01	3.265+01	6.118+01
8.000+03	1.391+00	3.770+00	9.085+00	1.911+01	3.518+01
1.000+04	1.032+00	2.096+00	6.299+00	1.300+01	2.363+01
1.500+04	6.329-01	1.360+00	3.460+00	6.856+00	1.209+01
2.000+04	4.015-01	9.253-01	1.970+00	3.804+00	6.611+00
2.250+04	3.456-01	7.677-01	1.565+00	2.979+00	5.129+00
2.500+04	2.900-01	6.025-01	1.322+00	2.394+00	4.082+00
2.750+04	2.934-01	6.763-01	1.384+00	2.501+00	4.052+00
3.000+04	4.364-01	1.052+00	2.212+00	4.045+00	6.524+00
3.250+04	3.801-01	9.336-01	1.928+00	3.560+00	5.756+00
3.500+04	3.295-01	7.345-01	1.628+00	2.989+00	4.908+00
3.750+04	2.649-01	6.738-01	1.391+00	2.542+00	4.155+00
4.000+04	2.700-01	6.451-01	1.326+00	2.410+00	3.907+00
4.500+04	2.107-01	5.040-01	1.031+00	1.362+00	3.005+00
5.000+04	1.405-01	3.516-01	7.210-01	1.302+00	2.095+00
5.500+04	1.225-01	2.677-01	5.877-01	1.057+00	1.696+00
6.000+04	1.026-01	2.403-01	4.813-01	8.756-01	1.400+00
6.500+04	6.741-02	2.037-01	4.124-01	7.370-01	1.175+00
7.000+04	7.545-02	1.751-01	3.530-01	6.289-01	1.000+00
7.250+04	7.041-02	1.630-01	3.281-01	5.836-01	9.270-01
7.500+04	6.507-02	1.522-01	3.058-01	5.431-01	8.615-01
7.750+04	6.177-02	1.424-01	2.857-01	5.067-01	8.028-01
8.000+04	5.806-02	1.337-01	2.676-01	4.739-01	7.498-01
8.250+04	5.406-02	1.257-01	2.511-01	4.442-01	7.019-01
8.500+04	5.154-02	1.184-01	2.363-01	4.172-01	6.586-01
8.750+04	4.871-02	1.115-01	2.220-01	3.927-01	6.191-01
9.000+04	4.612-02	1.057-01	2.104-01	3.702-01	5.831-01
9.250+04	4.373-02	1.000-01	1.990-01	3.499-01	5.502-01
9.500+04	4.155-02	9.462-02	1.886-01	3.312-01	5.200-01
9.750+04	3.949-02	9.006-02	1.789-01	3.140-01	4.922-01
1.000+05	3.761-02	8.566-02	1.699-01	2.981-01	4.669-01
1.200+05	2.649-02	5.983-02	1.176-01	2.048-01	3.191-01
1.400+05	1.973-02	4.427-02	6.648-02	1.496-01	2.317-01
1.600+05	1.522-02	3.412-02	5.632-02	1.142-01	1.759-01
1.800+05	1.219-02	2.711-02	5.247-02	8.995-02	1.380-01
2.000+05	2.221+03	1.376+03	1.744+03	1.516+03	1.238+03
2.200+05	1.835+03	1.633+03	1.441+03	1.253+03	1.064+03
2.600+05	1.314+03	1.160+03	1.032+03	8.971+02	7.621+02
3.000+05	9.876+02	8.783+02	7.751+02	6.733+02	5.724+02
4.000+05	5.502+02	4.941+02	4.360+02	3.790+02	3.220+02
5.000+05	3.553+02	3.162+02	2.790+02	2.426+02	2.061+02
7.500+05	1.079+02	1.405+02	1.240+02	1.073+02	7.159+01
1.000+06	3.863+01	7.900+01	6.975+01	6.064+01	5.152+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 750 ATM.

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		3.000+04	0.000	0.000	0.000	0.000
*****						
	*	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)
1.000+03	*	3.838+03	0.000	0.000	0.000	0.000
1.500+03	*	1.712+03	0.000	0.000	0.000	0.000
2.000+03	*	9.674+02	0.000	0.000	0.000	0.000
4.000+03	*	2.477+02	0.000	0.000	0.000	0.000
6.000+03	*	1.020+02	0.000	0.000	0.000	0.000
8.000+03	*	5.744+01	0.000	0.000	0.000	0.000
1.000+04	*	3.813+01	0.000	0.000	0.000	0.000
1.500+04	*	1.909+01	0.000	0.000	0.000	0.000
2.000+04	*	1.034+01	0.000	0.000	0.000	0.000
2.250+04	*	7.990+00	0.000	0.000	0.000	0.000
2.500+04	*	6.322+00	0.000	0.000	0.000	0.000
2.750+04	*	5.136+00	0.000	0.000	0.000	0.000
3.000+04	*	4.463+00	0.000	0.000	0.000	0.000
3.250+04	*	3.829+00	0.000	0.000	0.000	0.000
3.500+04	*	3.113+00	0.000	0.000	0.000	0.000
3.750+04	*	2.446+00	0.000	0.000	0.000	0.000
4.000+04	*	1.733+00	0.000	0.000	0.000	0.000
4.500+04	*	1.381+00	0.000	0.000	0.000	0.000
5.000+04	*	1.040+00	0.000	0.000	0.000	0.000
5.500+04	*	7.454+00	0.000	0.000	0.000	0.000
6.000+04	*	5.021+00	0.000	0.000	0.000	0.000
6.500+04	*	3.692+00	0.000	0.000	0.000	0.000
7.000+04	*	2.437+00	0.000	0.000	0.000	0.000
7.250+04	*	1.330+00	0.000	0.000	0.000	0.000
7.500+04	*	1.235+00	0.000	0.000	0.000	0.000
7.750+04	*	1.150+00	0.000	0.000	0.000	0.000
8.000+04	*	1.073+00	0.000	0.000	0.000	0.000
8.250+04	*	1.003+00	0.000	0.000	0.000	0.000
8.500+04	*	9.400-01	0.000	0.000	0.000	0.000
8.750+04	*	8.827-01	0.000	0.000	0.000	0.000
9.000+04	*	8.306-01	0.000	0.000	0.000	0.000
9.250+04	*	7.829-01	0.000	0.000	0.000	0.000
9.500+04	*	7.392-01	0.000	0.000	0.000	0.000
9.750+04	*	6.991-01	0.000	0.000	0.000	0.000
1.000+05	*	6.621-01	0.000	0.000	0.000	0.000
1.200+05	*	4.507-01	0.000	0.000	0.000	0.000
1.400+05	*	3.248-01	0.000	0.000	0.000	0.000
1.600+05	*	2.454-01	0.000	0.000	0.000	0.000
1.800+05	*	1.918-01	0.000	0.000	0.000	0.000
2.000+05	*	1.066+03	0.000	0.000	0.000	0.000
2.200+05	*	8.810+02	0.000	0.000	0.000	0.000
2.600+05	*	6.308+02	0.000	0.000	0.000	0.000
3.000+05	*	4.738+02	0.000	0.000	0.000	0.000
4.000+05	*	2.665+02	0.000	0.000	0.000	0.000
5.000+05	*	1.706+02	0.000	0.000	0.000	0.000
7.500+05	*	7.581+01	0.000	0.000	0.000	0.000
1.000+06	*	4.264+01	0.000	0.000	0.000	0.000

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 1000 ATM

WAVL NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
	CM <sup>-1</sup>				
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	2.806-11	2.342-06	5.722-04
1.500+03	0.000	0.000	1.762-11	1.516-06	3.755-04
2.000+03	0.000	0.000	1.245-11	1.105-06	2.787-04
4.000+03	0.000	0.000	4.942-12	4.889-07	1.323-04
6.000+03	0.000	0.000	2.678-12	2.872-07	8.224-05
8.000+03	0.000	0.000	1.677-12	1.908-07	5.718-05
1.000+04	0.000	0.000	1.148-12	1.364-07	4.239-05
1.500+04	0.000	0.000	5.665-13	7.156-08	2.366-05
2.000+04	0.000	0.000	3.424-13	4.447-08	1.522-05
2.250+04	0.000	0.000	2.789-13	3.652-08	1.264-05
2.500+04	0.000	0.000	2.323-13	3.061-08	1.069-05
2.750+04	0.000	0.000	1.968-13	2.607-08	9.168-06
3.000+04	0.000	0.000	1.692-13	2.250-08	7.964-06
3.250+04	0.000	0.000	1.471-13	1.913-08	6.979-06
3.500+04	0.000	0.000	1.291-13	1.728-08	6.166-06
3.750+04	0.000	0.000	1.141-13	1.522-08	5.484-06
4.000+04	0.000	0.000	1.015-13	1.366-08	4.907-06
4.500+04	0.000	0.000	6.142-14	1.101-08	3.974-06
5.000+04	0.000	0.000	4.914-14	6.535-09	2.370-06
5.500+04	0.000	0.000	4.007-14	5.459-09	1.987-06
6.000+04	0.000	0.000	3.389-14	4.632-09	1.691-06
6.500+04	0.000	0.000	2.904-14	3.982-09	1.458-06
7.000+04	0.000	0.000	2.518-14	3.461-09	1.271-06
7.250+04	0.000	0.000	2.353-14	3.239-09	1.191-06
7.500+04	0.000	0.000	2.205-14	3.038-09	1.118-06
7.750+04	0.000	0.000	2.070-14	2.856-09	1.052-06
8.000+04	0.000	0.000	1.947-14	2.689-09	9.916-07
8.250+04	0.000	0.000	1.835-14	2.537-09	9.365-07
8.500+04	0.000	0.000	1.732-14	2.398-09	8.860-07
8.750+04	0.000	0.000	1.638-14	2.270-09	8.395-07
9.000+04	0.000	0.000	1.552-14	2.152-09	7.967-07
9.250+04	0.000	0.000	1.472-14	2.043-09	7.571-07
9.500+04	0.000	0.000	1.398-14	1.943-09	7.205-07
9.750+04	0.000	0.000	1.330-14	1.849-09	6.865-07
1.000+05	0.000	0.000	1.266-14	1.763-09	6.549-07
1.200+05	0.000	0.000	6.910-15	1.248-09	4.663-07
1.400+05	0.000	0.000	6.618-15	9.318-10	3.498-07
1.600+05	0.000	0.000	5.115-15	7.232-10	2.726-07
1.800+05	0.000	0.000	4.074-15	5.783-10	2.187-07
2.000+05	6.027+04	3.011+04	2.507+04	1.004+04	7.534+03
2.200+05	4.961+04	2.490+04	1.245+04	8.302+03	6.226+03
2.600+05	3.560+04	1.787+04	6.916+03	5.944+03	4.458+03
3.000+05	2.679+04	1.339+04	6.697+03	4.464+03	3.348+03
4.000+05	1.567+04	7.334+03	3.767+03	2.511+03	1.883+03
5.000+05	9.643+03	4.622+03	2.411+03	1.607+03	1.205+03
7.000+05	4.286+03	2.147+03	1.071+03	7.143+02	5.357+02
1.000+06	2.411+03	1.205+03	6.027+02	4.018+02	3.013+02



TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 1000 ATM

WAVE NOS. $\text{CM}^{-1}$	TEMPERATURES (DEG K)				
	1.000+04	1.200+04	1.400+04	1.600+04	1.800+04
	$\text{CM}^{-1}$				
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.397-02	1.161-01	6.614-01	3.778+00	1.989+01
1.500+03	9.169-03	7.405-02	3.800-01	1.901+00	9.274+00
2.000+03	6.873-03	5.511-02	2.688-01	1.218+00	5.526+00
4.000+03	3.433-03	2.822-02	1.286-01	4.699-01	1.680+00
6.000+03	2.232-03	1.899-02	8.732-02	3.022-01	9.656-01
8.000+03	1.610-03	1.412-02	6.607-02	2.257-01	6.843-01
1.000+04	1.231-03	1.108-02	5.280-02	1.805-01	5.334-01
1.500+04	7.264-04	6.884-03	3.434-02	1.194-01	3.471-01
2.000+04	4.844-04	4.736-03	2.407-02	8.432-02	2.411-01
2.250+04	4.075-04	4.033-03	2.068-02	7.240-02	2.044-01
2.500+04	3.480-04	3.479-03	1.797-02	6.307-02	1.764-01
2.750+04	3.015-04	3.063-03	1.623-02	5.897-02	1.710-01
3.000+04	2.663-04	2.830-03	1.642-02	6.765-02	2.230-01
3.250+04	2.347-04	2.508-03	1.461-02	6.022-02	1.980-01
3.500+04	2.081-04	2.227-03	1.292-02	5.278-02	1.717-01
3.750+04	1.856-04	1.939-03	1.150-02	4.664-02	1.503-01
4.000+04	1.672-04	1.813-03	1.065-02	4.390-02	1.430-01
4.500+04	1.360-04	1.479-03	8.681-03	3.552-02	1.146-01
5.000+04	8.182-05	9.054-04	5.465-03	2.311-02	7.675-02
5.500+04	6.881-05	7.628-04	4.597-03	1.935-02	6.381-02
6.000+04	5.874-05	6.522-04	3.926-03	1.646-02	5.398-02
6.500+04	5.077-05	5.645-04	3.395-03	1.419-02	4.632-02
7.000+04	4.435-05	4.938-04	2.969-03	1.237-02	4.023-02
7.250+04	4.160-05	4.635-04	2.786-03	1.160-02	3.765-02
7.500+04	3.911-05	4.360-04	2.620-03	1.089-02	3.530-02
7.750+04	3.683-05	4.109-04	2.469-03	1.025-02	3.317-02
8.000+04	3.476-05	3.880-04	2.331-03	9.673-03	3.125-02
8.250+04	3.286-05	3.670-04	2.205-03	9.141-03	2.949-02
8.500+04	3.111-05	3.477-04	2.089-03	8.653-03	2.788-02
8.750+04	2.951-05	3.299-04	1.982-03	8.205-03	2.640-02
3.000+04	2.802-05	3.135-04	1.883-03	7.791-03	2.504-02
9.250+04	2.665-05	2.984-04	1.792-03	7.410-03	2.379-02
9.500+04	2.538-05	2.843-04	1.708-03	7.056-03	2.263-02
9.750+04	2.420-05	2.712-04	1.629-03	6.728-03	2.156-02
1.000+05	2.311-05	2.591-04	1.556-03	6.424-03	2.056-02
1.200+05	1.654-05	1.861-04	1.118-03	4.601-03	1.464-02
1.400+05	1.246-05	1.406-04	8.452-04	3.469-03	1.099-02
1.600+05	9.743-06	1.102-04	6.626-04	2.714-03	8.566-03
1.800+05	7.840-06	3.883-05	5.342-04	2.185-03	6.873-03
2.000+05	6.927-06	5.022-05	4.303-03	3.760-03	3.329-03
2.200+05	4.981-06	4.151-05	3.556-03	3.107-03	2.751-03
2.600+05	3.566-06	2.972-05	2.546-03	2.225-03	1.970-03
3.000+05	2.679-06	2.232-05	1.912-03	1.671-03	1.479-03
4.000+05	1.507-06	1.256-05	1.076-03	9.400-03	8.321-02
5.000+05	9.643-07	8.035-06	6.885-04	6.016-03	5.326-02
7.500+05	4.286-07	3.571-06	3.060-04	2.674-03	2.367-02
1.000+06	2.411-07	2.009-06	1.721-04	1.504-03	1.331-02

TABLE VI  
ABSORPTION COEFFICIENTS OF HELIUM  
AT TOTAL PRESSURE = 1000 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	8.372+01	2.780+02	7.488+02	1.687+03	3.256+03
1.500+03	3.794+01	1.247+02	3.346+02	7.529+02	1.452+03
2.000+03	2.190+01	7.106+01	1.897+02	4.259+02	8.203+02
4.000+03	5.611+00	1.800+01	4.761+01	1.074+02	2.092+02
6.000+03	2.971+00	8.383+00	2.091+01	4.538+01	8.596+01
8.000+03	1.971+00	5.270+00	1.261+01	2.662+01	4.946+01
1.000+04	1.473+00	3.782+00	8.778+00	1.814+01	3.325+01
1.500+04	9.134-01	2.211+00	4.858+00	9.613+00	1.705+01
2.000+04	5.886-01	1.333+00	2.805+00	5.391+00	9.400+00
2.250+04	5.086-01	1.112+00	2.243+00	4.245+00	7.324+00
2.500+04	4.335-01	9.637-01	1.903+00	3.430+00	5.855+00
2.750+04	4.299-01	9.752-01	1.977+00	3.560+00	5.785+00
3.000+04	6.175-01	1.473+00	3.081+00	5.640+00	9.152+00
3.250+04	5.459-01	1.295+00	2.690+00	4.970+00	8.084+00
3.500+04	4.638-01	1.104+00	2.278+00	4.183+00	6.908+00
3.750+04	4.068-01	9.512-01	1.953+00	3.567+00	5.860+00
4.000+04	3.889-01	9.089-01	1.860+00	3.379+00	5.507+00
4.500+04	3.065-01	7.245-01	1.451+00	2.620+00	4.249+00
5.000+04	2.109-01	4.946-01	1.010+00	1.825+00	2.952+00
5.500+04	1.742-01	4.061-01	8.252-01	1.485+00	2.394+00
6.000+04	1.465-01	3.597-01	6.873-01	1.232+00	1.981+00
6.500+04	1.251-01	2.686-01	5.815-01	1.039+00	1.665+00
7.000+04	1.081-01	2.485-01	4.488-01	8.884-01	1.420+00
7.250+04	1.010-01	2.316-01	4.640-01	8.251-01	1.317+00
7.500+04	9.455-02	2.164-01	4.328-01	7.684-01	1.225+00
7.750+04	8.873-02	2.027-01	4.046-01	7.174-01	1.142+00
8.000+04	8.345-02	1.903-01	3.792-01	6.714-01	1.067+00
8.250+04	7.801-02	1.791-01	3.562-01	6.298-01	9.998-01
8.500+04	7.419-02	1.688-01	3.353-01	5.919-01	9.386-01
8.750+04	7.015-02	1.595-01	3.163-01	5.574-01	8.829-01
9.000+04	6.644-02	1.503-01	2.990-01	5.259-01	8.320-01
9.250+04	6.304-02	1.422-01	2.830-01	4.973-01	7.855-01
9.500+04	5.989-02	1.355-01	2.683-01	4.710-01	7.428-01
9.750+04	5.695-02	1.238-01	2.547-01	4.468-01	7.035-01
1.000+05	5.429-02	1.225-01	2.420-01	4.244-01	6.677-01
1.200+05	5.836-02	8.568-02	1.631-01	2.926-01	4.579-01
1.400+05	2.863-02	6.371-02	1.240-01	2.144-01	3.335-01
1.600+05	2.222-02	4.921-02	9.528-02	1.640-01	2.538-01
1.800+05	1.776-02	3.913-02	7.555-02	1.295-01	1.996-01
2.000+05	2.966+03	2.548+03	2.347+03	2.055+03	1.763+03
2.200+05	2.453+03	2.162+03	1.940+03	1.608+03	1.457+03
2.600+05	1.756+03	1.507+03	1.389+03	1.216+03	1.043+03
3.000+05	1.310+03	1.177+03	1.043+03	9.132+02	7.836+02
4.000+05	7.419+02	6.517+02	5.562+02	5.137+02	4.407+02
5.000+05	4.748+02	4.236+02	3.756+02	3.287+02	2.821+02
7.500+05	2.110+02	1.383+02	1.669+02	1.461+02	1.254+02
1.000+06	1.187+02	1.059+02	9.390+01	8.213+01	7.052+01

TABLE VI  
 ABSORPTION COEFFICIENTS OF HELIUM  
 AT TOTAL PRESSURE = 1000 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		3.000+04	0.000	0.000	0.000	0.000
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	5.506+03	0.000	0.000	0.000	0.000
1.500+03	*	2.455+03	0.000	0.000	0.000	0.000
2.000+03	*	1.387+03	0.000	0.000	0.000	0.000
4.000+03	*	3.546+02	0.000	0.000	0.000	0.000
6.000+03	*	1.458+02	0.000	0.000	0.000	0.000
8.000+03	*	8.210+01	0.000	0.000	0.000	0.000
1.000+04	*	5.449+01	0.000	0.000	0.000	0.000
1.500+04	*	2.730+01	0.000	0.000	0.000	0.000
2.000+04	*	1.487+01	0.000	0.000	0.000	0.000
2.250+04	*	1.153+01	0.000	0.000	0.000	0.000
2.500+04	*	9.156+00	0.000	0.000	0.000	0.000
2.750+04	*	8.853+00	0.000	0.000	0.000	0.000
3.000+04	*	1.345+01	0.000	0.000	0.000	0.000
3.250+04	*	1.185+01	0.000	0.000	0.000	0.000
3.500+04	*	1.014+01	0.000	0.000	0.000	0.000
3.750+04	*	8.776+00	0.000	0.000	0.000	0.000
4.000+04	*	8.181+00	0.000	0.000	0.000	0.000
4.500+04	*	6.267+00	0.000	0.000	0.000	0.000
5.000+04	*	4.336+00	0.000	0.000	0.000	0.000
5.500+04	*	3.507+00	0.000	0.000	0.000	0.000
6.000+04	*	2.893+00	0.000	0.000	0.000	0.000
6.500+04	*	2.426+00	0.000	0.000	0.000	0.000
7.000+04	*	2.063+00	0.000	0.000	0.000	0.000
7.250+04	*	1.911+00	0.000	0.000	0.000	0.000
7.500+04	*	1.770+00	0.000	0.000	0.000	0.000
7.750+04	*	1.654+00	0.000	0.000	0.000	0.000
8.000+04	*	1.544+00	0.000	0.000	0.000	0.000
8.250+04	*	1.445+00	0.000	0.000	0.000	0.000
8.500+04	*	1.355+00	0.000	0.000	0.000	0.000
8.750+04	*	1.273+00	0.000	0.000	0.000	0.000
9.000+04	*	1.198+00	0.000	0.000	0.000	0.000
9.250+04	*	1.130+00	0.000	0.000	0.000	0.000
9.500+04	*	1.067+00	0.000	0.000	0.000	0.000
9.750+04	*	1.010+00	0.000	0.000	0.000	0.000
1.000+05	*	4.571-01	0.000	0.000	0.000	0.000
1.200+05	*	3.533-01	0.000	0.000	0.000	0.000
1.400+05	*	4.725-01	0.000	0.000	0.000	0.000
1.600+05	*	3.579-01	0.000	0.000	0.000	0.000
1.800+05	*	2.803-01	0.000	0.000	0.000	0.000
2.000+05	*	1.482+03	0.000	0.000	0.000	0.000
2.200+05	*	1.225+03	0.000	0.000	0.000	0.000
2.600+05	*	3.770+02	0.000	0.000	0.000	0.000
3.000+05	*	6.587+02	0.000	0.000	0.000	0.000
4.000+05	*	3.705+02	0.000	0.000	0.000	0.000
5.000+05	*	2.371+02	0.000	0.000	0.000	0.000
7.500+05	*	1.054+02	0.000	0.000	0.000	0.000
1.000+06	*	5.922+01	0.000	0.000	0.000	0.000

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 50 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	0.000	0.000	1.192-11	2.638-07	3.262-05
1.500+03	*	0.000	0.000	7.207-12	1.633-07	2.018-05
2.000+03	*	0.000	0.000	4.923-12	1.142-07	1.421-05
4.000+03	*	0.000	0.000	1.743-12	4.403-08	5.709-06
6.000+03	*	0.000	0.000	8.550-13	2.306-08	3.112-06
8.000+03	*	0.000	0.000	4.875-13	1.380-08	1.928-06
1.000+04	*	0.000	0.000	3.048-13	8.932-09	1.285-06
1.500+04	*	0.000	0.000	1.200-13	3.683-09	5.588-07
2.000+04	*	0.000	0.000	5.759-14	1.799-09	2.840-07
2.250+04	*	0.000	0.000	4.166-14	1.307-09	2.104-07
2.500+04	*	0.000	0.000	3.072-14	9.664-10	1.592-07
2.750+04	*	0.000	0.000	2.297-14	7.239-10	1.228-07
3.000+04	*	0.000	0.000	1.735-14	5.473-10	9.649-08
3.250+04	*	0.000	0.000	1.319-14	4.165-10	7.739-08
3.500+04	*	0.000	0.000	1.007-14	3.181-10	6.350-08
3.750+04	*	0.000	0.000	7.696-15	2.433-10	5.349-08
4.000+04	*	0.000	0.000	5.878-15	1.860-10	4.608-08
4.500+04	*	0.000	0.000	3.396-15	1.075-10	2.557-08
5.000+04	*	0.000	0.000	1.917-15	6.075-11	1.396-08
5.500+04	*	0.000	0.000	1.057-15	3.351-11	7.482-09
6.000+04	*	0.000	0.000	5.927-16	1.881-11	4.097-09
6.500+04	*	0.000	0.000	3.901-16	1.239-11	2.642-09
7.000+04	*	0.000	0.000	3.339-16	1.061-11	2.221-09
7.250+04	*	0.000	0.000	3.114-16	9.898-12	2.055-09
7.500+04	*	0.000	0.000	2.910-16	9.254-12	1.906-09
7.750+04	*	0.000	0.000	2.726-16	8.671-12	1.773-09
8.000+04	*	0.000	0.000	2.559-16	8.142-12	1.653-09
8.250+04	*	0.000	0.000	2.407-16	7.660-12	1.545-09
8.500+04	*	0.000	0.000	2.268-16	7.220-12	1.447-09
8.750+04	*	0.000	0.000	2.141-16	6.817-12	1.358-09
9.000+04	*	0.000	0.000	2.024-16	6.446-12	1.277-09
9.250+04	*	0.000	0.000	1.917-16	6.105-12	1.203-09
9.500+04	*	0.000	0.000	1.818-16	5.791-12	1.135-09
9.750+04	*	0.000	0.000	1.726-16	5.500-12	1.073-09
1.000+05	*	0.000	0.000	1.641-16	5.231-12	1.016-09
1.200+05	*	0.000	0.000	1.142-16	3.644-12	6.868-10
1.400+05	*	0.000	0.000	8.400-17	2.684-12	4.951-10
1.600+05	*	0.000	0.000	6.439-17	2.060-12	3.737-10
1.800+05	*	2.015+03	1.006+03	5.038+02	3.359+02	2.519+02
2.000+05	*	3.136+03	1.568+03	7.839+02	5.226+02	3.920+02
2.200+05	*	3.367+03	1.084+03	8.418+02	5.612+02	4.209+02
2.600+05	*	3.525+03	1.763+03	8.813+02	5.875+02	4.406+02
3.000+05	*	3.454+03	1.727+03	5.636+02	5.757+02	4.318+02
4.000+05	*	3.042+03	1.521+03	7.606+02	5.070+02	3.803+02
5.000+05	*	2.627+03	1.314+03	5.568+02	4.379+02	3.284+02
7.500+05	*	1.727+03	8.033+02	4.317+02	2.878+02	2.158+02
1.000+06	*	1.119+03	5.596+02	2.798+02	1.865+02	1.399+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 50 ATM

WAVE	*	TEMPERATURES (DEG K)				
NOS.	*	1.000+04	1.200+04	1.400+04	1.600+04	1.800+04
CM <sup>-1</sup>	*	CM <sup>-1</sup>				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	8.467-04	2.403-02	3.848-01	3.149+00	1.536+01
1.500+03	*	4.544-04	1.100-02	1.707-01	1.393+00	6.780+00
2.000+03	*	2.907-04	6.145-03	9.539-02	7.803-01	3.790+00
4.000+03	*	1.052-04	1.586-03	2.136-02	1.724-01	8.322-01
6.000+03	*	5.695-05	7.641-04	9.592-03	7.539-02	3.568-01
8.000+03	*	3.585-05	4.617-04	5.528-03	4.253-02	1.985-01
1.000+04	*	2.462-05	3.138-04	3.657-03	2.756-02	1.267-01
1.500+04	*	1.186-05	1.695-04	1.934-03	1.285-02	5.686-02
2.000+04	*	6.868-06	1.106-04	1.229-03	8.366-03	3.590-02
2.250+04	*	5.519-06	9.486-05	1.043-03	6.855-03	2.856-02
2.500+04	*	4.582-06	3.372-05	9.089-04	5.807-03	2.346-02
2.750+04	*	3.923-06	7.560-05	8.081-04	5.017-03	1.981-02
3.000+04	*	3.458-06	6.955-05	7.295-04	4.401-03	1.697-02
3.250+04	*	3.132-06	6.493-05	6.660-04	3.904-03	1.471-02
3.500+04	*	2.907-06	6.131-05	6.130-04	3.491-03	1.284-02
3.750+04	*	2.755-06	5.838-05	5.673-04	3.136-03	1.127-02
4.000+04	*	2.623-06	5.517-05	5.204-04	2.797-03	9.824-03
4.500+04	*	1.382-06	2.859-05	2.690-04	1.449-03	5.108-03
5.000+04	*	7.193-07	1.463-05	1.372-04	7.398-04	2.615-03
5.500+04	*	3.690-07	7.378-06	6.897-05	3.719-04	1.317-03
6.000+04	*	1.941-07	3.816-06	3.550-05	1.917-04	6.790-04
6.500+04	*	1.206-07	2.332-06	2.160-05	1.166-04	4.136-04
7.000+04	*	9.801-08	1.864-06	1.719-05	9.264-05	3.294-04
7.250+04	*	8.921-08	1.683-06	1.547-05	8.341-05	2.960-04
7.500+04	*	8.143-08	1.525-06	1.399-05	7.536-05	2.681-04
7.750+04	*	7.460-08	1.387-06	1.268-05	6.831-05	2.429-04
8.000+04	*	6.862-08	1.265-06	1.154-05	6.211-05	2.209-04
8.250+04	*	6.324-08	1.157-06	1.053-05	5.664-05	2.014-04
8.500+04	*	5.844-08	1.061-06	9.632-06	5.179-05	1.842-04
9.750+04	*	5.414-08	9.757-07	8.835-06	4.748-05	1.689-04
9.000+04	*	5.028-08	8.994-07	8.124-06	4.364-05	1.552-04
9.250+04	*	4.679-08	8.310-07	7.488-06	4.020-05	1.430-04
9.500+04	*	4.364-08	7.695-07	6.917-06	3.711-05	1.320-04
9.750+04	*	4.078-08	7.140-07	6.402-06	3.433-05	1.221-04
1.000+05	*	3.818-08	6.638-07	5.938-06	3.182-05	1.132-04
1.200+05	*	2.398-08	3.937-07	3.454-06	1.842-05	6.551-05
1.400+05	*	1.617-08	2.540-07	2.186-06	1.160-05	4.127-05
1.600+05	*	1.159-08	1.743-07	1.472-06	7.772-06	2.765-05
1.800+05	*	2.015+02	1.676+02	1.423+02	1.207+02	9.927+01
2.000+05	*	3.135+02	2.608+02	2.214+02	1.878+02	1.545+02
2.200+05	*	3.366+02	2.800+02	2.377+02	2.016+02	1.658+02
2.600+05	*	3.524+02	2.931+02	2.489+02	2.111+02	1.736+02
3.000+05	*	3.454+02	2.873+02	2.439+02	2.069+02	1.702+02
4.000+05	*	3.042+02	2.530+02	2.148+02	1.822+02	1.498+02
5.000+05	*	2.627+02	2.185+02	1.855+02	1.573+02	1.294+02
7.500+05	*	1.726+02	1.436+02	1.219+02	1.034+02	8.505+01
1.000+06	*	1.119+02	9.307+01	7.902+01	6.703+01	5.513+01

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 50 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	2,000+04	2,200+04	2,400+04	2,600+04	2,800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1,000+03	4.891+01	1.070+02	1.677+02	1.995+02	1.971+02
1,500+03	2.156+01	4.715+01	7.386+01	8.786+01	8.676+01
2,000+03	1.204+01	2.029+01	4.117+01	4.897+01	4.835+01
4,000+03	2.001+00	5.941+00	9.498+00	1.152+01	1.158+01
6,000+03	1.112+00	2.404+00	3.760+00	4.478+00	4.434+00
8,000+03	0.126-01	1.313+00	2.031+00	2.399+00	2.359+00
1,000+04	3.800-01	8.215-01	1.264+00	1.487+00	1.459+00
1,500+04	1.688-01	3.517-01	5.320-01	6.186-01	6.015-01
2,000+04	9.605-02	1.914-01	2.847-01	3.272-01	3.156-01
2,250+04	0.058-02	1.534-01	2.197-01	2.503-01	2.398-01
2,500+04	6.532-02	1.280-01	1.794-01	1.963-01	1.868-01
2,750+04	5.375-02	1.051-01	1.493-01	1.622-01	1.487-01
3,000+04	4.518-02	8.050-02	1.236-01	1.349-01	1.232-01
3,250+04	5.841-02	7.236-02	1.017-01	1.122-01	1.024-01
3,500+04	3.292-02	6.106-02	8.461-02	9.207-02	8.527-02
3,750+04	2.034-02	5.178-02	7.076-02	7.617-02	6.976-02
4,000+04	2.427-02	4.369-02	5.909-02	6.291-02	5.701-02
4,500+04	1.267-02	2.187-02	3.106-02	3.317-02	3.016-02
5,000+04	6.504-03	1.177-02	1.604-02	1.718-02	1.566-02
5,500+04	3.202-03	5.964-03	6.136-03	8.735-03	7.979-03
6,000+04	1.695-03	3.085-03	4.218-03	4.535-03	4.154-03
6,500+04	1.053-03	1.382-03	2.577-03	2.778-03	2.547-03
7,000+04	0.225-04	1.500-03	2.056-03	2.213-03	2.038-03
7,250+04	7.416-04	1.552-03	1.854-03	2.002-03	1.840-03
7,500+04	0.710-04	1.223-03	1.677-03	1.811-03	1.666-03
7,750+04	0.090-04	1.109-03	1.522-03	1.644-03	1.513-03
8,000+04	5.544-04	1.010-03	1.385-03	1.497-03	1.378-03
8,250+04	5.054-04	9.225-04	1.264-03	1.367-03	1.258-03
8,500+04	4.012-04	8.451-04	1.157-03	1.251-03	1.152-03
8,750+04	4.233-04	7.752-04	1.063-03	1.148-03	1.057-03
9,000+04	3.890-04	7.131-04	9.784-04	1.055-03	9.724-04
9,250+04	3.504-04	6.502-04	9.026-04	9.737-04	8.964-04
9,500+04	3.308-04	6.052-04	8.345-04	9.005-04	8.280-04
9,750+04	3.001-04	5.597-04	7.721-04	8.344-04	7.664-04
1,000+05	2.837-04	5.190-04	7.151-04	7.747-04	7.117-04
1,200+05	1.642-04	3.004-04	4.132-04	4.479-04	4.137-04
1,400+05	1.034-04	1.092-04	2.601-04	2.819-04	2.603-04
1,600+05	0.952-05	1.262-04	1.743-04	1.889-04	1.743-04
1,800+05	7.608+01	5.223+01	3.148+01	1.687+01	8.478+00
2,000+05	1.104+02	8.127+01	4.898+01	2.626+01	1.319+01
2,200+05	1.271+02	8.726+01	5.260+01	2.819+01	1.417+01
2,600+05	1.331+02	9.136+01	5.507+01	2.952+01	1.483+01
3,000+05	1.504+02	8.953+01	5.396+01	2.892+01	1.453+01
4,000+05	1.149+02	7.084+01	4.752+01	2.547+01	1.280+01
5,000+05	9.919+01	6.009+01	4.104+01	2.200+01	1.105+01
7,500+05	6.518+01	4.475+01	2.677+01	1.446+01	7.264+00
1,000+06	4.225+01	2.901+01	1.748+01	9.371+00	4.779+00

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 50 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	3.000+04	0.000	0.000	0.000	0.000
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.757+02	0.000	0.000	0.000	0.000
1.500+03	7.737+01	0.000	0.000	0.000	0.000
2.000+03	4.312+01	0.000	0.000	0.000	0.000
4.000+03	1.039+01	0.000	0.000	0.000	0.000
6.000+03	4.011+00	0.000	0.000	0.000	0.000
8.000+03	2.104+00	0.000	0.000	0.000	0.000
1.000+04	1.295+00	0.000	0.000	0.000	0.000
1.500+04	5.303-01	0.000	0.000	0.000	0.000
2.000+04	2.761-01	0.000	0.000	0.000	0.000
2.250+04	2.090-01	0.000	0.000	0.000	0.000
2.500+04	1.619-01	0.000	0.000	0.000	0.000
2.750+04	1.276-01	0.000	0.000	0.000	0.000
3.000+04	1.029-01	0.000	0.000	0.000	0.000
3.250+04	8.502-02	0.000	0.000	0.000	0.000
3.500+04	7.063-02	0.000	0.000	0.000	0.000
3.750+04	5.874-02	0.000	0.000	0.000	0.000
4.000+04	4.758-02	0.000	0.000	0.000	0.000
4.500+04	2.517-02	0.000	0.000	0.000	0.000
5.000+04	1.310-02	0.000	0.000	0.000	0.000
5.500+04	6.691-03	0.000	0.000	0.000	0.000
6.000+04	3.490-03	0.000	0.000	0.000	0.000
6.500+04	2.144-03	0.000	0.000	0.000	0.000
7.000+04	1.718-03	0.000	0.000	0.000	0.000
7.250+04	1.552-03	0.000	0.000	0.000	0.000
7.500+04	1.406-03	0.000	0.000	0.000	0.000
7.750+04	1.277-03	0.000	0.000	0.000	0.000
8.000+04	1.164-03	0.000	0.000	0.000	0.000
8.250+04	1.063-03	0.000	0.000	0.000	0.000
8.500+04	9.739-04	0.000	0.000	0.000	0.000
8.750+04	8.940-04	0.000	0.000	0.000	0.000
9.000+04	8.226-04	0.000	0.000	0.000	0.000
9.250+04	7.585-04	0.000	0.000	0.000	0.000
9.500+04	7.008-04	0.000	0.000	0.000	0.000
9.750+04	6.488-04	0.000	0.000	0.000	0.000
1.000+05	6.017-04	0.000	0.000	0.000	0.000
1.200+05	3.524-04	0.000	0.000	0.000	0.000
1.400+05	2.298-04	0.000	0.000	0.000	0.000
1.600+05	1.478-04	0.000	0.000	0.000	0.000
1.800+05	4.294+00	0.000	0.000	0.000	0.000
2.000+05	6.574+00	0.000	0.000	0.000	0.000
2.200+05	7.059+00	0.000	0.000	0.000	0.000
2.600+05	7.390+00	0.000	0.000	0.000	0.000
3.000+05	7.242+00	0.000	0.000	0.000	0.000
4.000+05	6.378+00	0.000	0.000	0.000	0.000
5.000+05	5.508+00	0.000	0.000	0.000	0.000
7.500+05	3.620+00	0.000	0.000	0.000	0.000
1.000+06	2.346+00	0.000	0.000	0.000	0.000

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 100 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1,000+03	2,000+03	4,000+03	6,000+03	8,000+03
***** CM <sup>-1</sup> ← CM = 1 →					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	3.373-11	7.461-07	9.152-05
1.500+03	0.000	0.000	2.039-11	4.619-07	5.679-05
2.000+03	0.000	0.000	1.392-11	3.231-07	4.004-05
4.000+03	0.000	0.000	4.929-12	1.245-07	1.611-05
6.000+03	0.000	0.000	2.418-12	6.524-08	8.784-06
8.000+03	0.000	0.000	1.379-12	3.904-08	5.440-06
1.000+04	0.000	0.000	8.621-13	2.527-08	3.624-06
1.500+04	0.000	0.000	3.393-13	1.042-08	1.573-06
2.000+04	0.000	0.000	1.629-13	5.090-09	7.961-07
2.250+04	0.000	0.000	1.178-13	3.698-09	5.878-07
2.500+04	0.000	0.000	8.689-14	2.734-09	4.425-07
2.750+04	0.000	0.000	0.497-14	2.048-09	3.389-07
3.000+04	0.000	0.000	4.907-14	1.548-09	2.637-07
3.250+04	0.000	0.000	3.731-14	1.178-09	2.087-07
3.500+04	0.000	0.000	2.848-14	8.999-10	1.683-07
3.750+04	0.000	0.000	2.177-14	6.883-10	1.386-07
4.000+04	0.000	0.000	1.663-14	5.260-10	1.163-07
4.500+04	0.000	0.000	9.605-15	3.042-10	6.515-08
5.000+04	0.000	0.000	5.422-15	1.718-10	3.584-08
5.500+04	0.000	0.000	2.989-15	9.480-11	1.934-08
6.000+04	0.000	0.000	1.676-15	5.321-11	1.065-08
6.500+04	0.000	0.000	1.103-15	3.505-11	6.905-09
7.000+04	0.000	0.000	9.444-16	3.001-11	5.831-09
7.250+04	0.000	0.000	8.807-16	2.800-11	5.405-09
7.500+04	0.000	0.000	8.232-16	2.618-11	5.024-09
7.750+04	0.000	0.000	7.712-16	2.453-11	4.682-09
8.000+04	0.000	0.000	7.239-16	2.303-11	4.373-09
8.250+04	0.000	0.000	6.809-16	2.167-11	4.094-09
8.500+04	0.000	0.000	6.416-16	2.042-11	3.841-09
8.750+04	0.000	0.000	6.056-16	1.928-11	3.611-09
9.000+04	0.000	0.000	5.726-16	1.823-11	3.400-09
9.250+04	0.000	0.000	5.422-16	1.727-11	3.208-09
9.500+04	0.000	0.000	5.141-16	1.638-11	3.032-09
9.750+04	0.000	0.000	4.882-16	1.556-11	2.869-09
1.000+05	0.000	0.000	4.642-16	1.480-11	2.720-09
1.200+05	0.000	0.000	3.229-16	1.031-11	1.853-09
1.400+05	0.000	0.000	2.376-16	7.593-12	1.344-09
1.600+05	0.000	0.000	1.821-16	5.827-12	1.020-09
1.800+05	4.031+03	2.015+03	1.008+03	6.718+02	5.038+02
2.000+05	6.272+03	3.136+03	1.568+03	1.045+03	7.839+02
2.200+05	6.734+03	3.367+03	1.684+03	1.122+03	8.418+02
2.600+05	7.050+03	3.525+03	1.763+03	1.175+03	8.813+02
3.000+05	6.909+03	3.454+03	1.727+03	1.151+03	8.636+02
4.000+05	6.085+03	3.042+03	1.521+03	1.014+03	7.606+02
5.000+05	5.255+03	2.627+03	1.314+03	8.758+02	6.568+02
7.500+05	3.453+03	1.727+03	8.633+02	5.755+02	4.317+02
1.000+06	2.256+03	1.119+03	3.596+02	3.731+02	2.798+02



TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 100 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		1.000+04	1.200+04	1.400+04	1.600+04	1.800+04
		CM <sup>-1</sup>				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	2.067-03	5.000-02	7.849-01	6.518+00	3.274+01
1.500+03	*	1.141-03	2.310-02	3.481-01	2.881+00	1.445+01
2.000+03	*	7.462-04	1.304-02	1.945-01	1.613+00	8.069+00
4.000+03	*	2.787-04	3.466-03	4.350-02	3.553-01	1.766+00
6.000+03	*	1.522-04	1.694-03	1.952-02	1.550-01	7.547-01
8.000+03	*	9.599-05	1.030-03	1.124-02	8.724-02	4.186-01
1.000+04	*	6.577-05	7.009-04	7.433-03	5.641-02	2.664-01
1.500+04	*	3.117-05	3.733-04	3.924-03	2.619-02	1.189-01
2.000+04	*	1.756-05	2.394-04	2.487-03	1.702-02	7.494-02
2.250+04	*	1.387-05	2.033-04	2.109-03	1.393-02	5.951-02
2.500+04	*	1.128-05	1.777-04	1.836-03	1.179-02	4.882-02
2.750+04	*	9.448-06	1.591-04	1.631-03	1.018-02	4.117-02
3.000+04	*	8.137-06	1.451-04	1.471-03	8.928-03	3.524-02
3.250+04	*	7.198-06	1.345-04	1.342-03	7.917-03	3.052-02
3.500+04	*	6.530-06	1.262-04	1.235-03	7.076-03	2.663-02
3.750+04	*	6.061-06	1.196-04	1.142-03	6.356-03	2.336-02
4.000+04	*	5.669-06	1.125-04	1.047-03	5.666-03	2.036-02
4.500+04	*	3.009-06	5.944-05	5.414-04	2.935-03	1.058-02
5.000+04	*	1.578-06	2.998-05	2.763-04	1.499-03	5.419-03
5.500+04	*	8.150-07	1.515-05	1.389-04	7.534-04	2.729-03
6.000+04	*	4.516-07	7.857-06	7.155-05	3.883-04	1.407-03
6.500+04	*	2.699-07	4.813-06	4.354-05	2.363-04	8.570-04
7.000+04	*	2.206-07	3.856-06	3.465-05	1.877-04	6.827-04
7.250+04	*	2.013-07	3.486-06	3.122-05	1.690-04	6.152-04
7.500+04	*	1.844-07	3.162-06	2.823-05	1.527-04	5.556-04
7.750+04	*	1.694-07	2.878-06	2.560-05	1.384-04	5.033-04
8.000+04	*	1.561-07	2.628-06	2.330-05	1.258-04	4.577-04
8.250+04	*	1.443-07	2.407-06	2.126-05	1.148-04	4.174-04
8.500+04	*	1.337-07	2.210-06	1.946-05	1.049-04	3.817-04
8.750+04	*	1.242-07	2.034-06	1.785-05	9.620-05	3.499-04
9.000+04	*	1.156-07	1.877-06	1.642-05	8.841-05	3.216-04
9.250+04	*	1.078-07	1.737-06	1.514-05	8.144-05	2.962-04
9.500+04	*	1.008-07	1.610-06	1.399-05	7.512-05	2.735-04
9.750+04	*	9.441-08	1.495-06	1.295-05	6.955-05	2.530-04
1.000+05	*	8.859-08	1.392-06	1.201-05	6.446-05	2.345-04
1.200+05	*	5.632-08	8.326-07	7.001-06	3.732-05	1.357-04
1.400+05	*	3.867-08	5.416-07	4.441-06	2.350-05	8.551-05
1.600+05	*	2.807-08	3.745-07	2.996-06	1.575-05	5.730-05
1.800+05	*	4.030+02	3.354+02	2.855+02	2.443+02	2.053+02
2.000+05	*	6.271+02	5.218+02	4.443+02	3.802+02	3.195+02
2.200+05	*	6.733+02	5.603+02	4.771+02	4.082+02	3.431+02
2.600+05	*	7.049+02	5.866+02	4.994+02	4.274+02	3.592+02
3.000+05	*	6.908+02	5.749+02	4.894+02	4.188+02	3.520+02
4.000+05	*	6.084+02	5.063+02	4.310+02	3.688+02	3.100+02
5.000+05	*	5.254+02	4.372+02	3.723+02	3.185+02	2.677+02
7.500+05	*	3.453+02	2.873+02	2.446+02	2.093+02	1.759+02
1.000+06	*	2.238+02	1.963+02	1.586+02	1.357+02	1.140+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 100 ATM

WAVL NOS. CM <sup>-1</sup>	TEMPERATUPES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.098+02	2.008+02	4.549+02	6.088+02	7.625+02
1.500+03	4.838+01	1.148+02	2.001+02	2.678+02	2.914+02
2.000+03	2.698+01	6.397+01	1.114+02	1.491+02	1.623+02
4.000+03	5.943+00	1.440+01	2.561+01	3.495+01	3.873+01
6.000+03	2.475+00	5.800+00	1.009+01	1.352+01	1.476+01
8.000+03	1.358+00	3.156+00	5.428+00	7.212+00	7.820+00
1.000+04	8.545-01	1.968+00	3.364+00	4.455+00	4.820+00
1.500+04	3.707-01	8.350-01	1.404+00	1.836+00	1.970+00
2.000+04	2.098-01	4.319-01	7.462-01	9.642-01	1.026+00
2.250+04	1.760-01	3.017-01	5.738-01	7.351-01	7.772-01
2.500+04	1.424-01	3.014-01	4.680-01	5.747-01	6.034-01
2.750+04	1.170-01	2.471-01	3.890-01	4.743-01	4.791-01
3.000+04	9.820-02	2.030-01	3.215-01	3.939-01	3.965-01
3.250+04	8.341-02	1.696-01	2.640-01	3.271-01	3.292-01
3.500+04	7.141-02	1.429-01	2.193-01	2.680-01	2.739-01
3.750+04	6.144-02	1.211-01	1.834-01	2.213-01	2.236-01
4.000+04	5.25E-02	1.021-01	1.528-01	1.826-01	1.825-01
4.500+04	2.744-02	5.347-02	8.030-02	9.626-02	9.652-02
5.000+04	1.409-02	2.754-02	4.148-02	4.985-02	5.012-02
5.500+04	7.110-03	1.393-02	2.103-02	2.534-02	2.553-02
6.000+04	3.672-03	7.206-03	1.090-02	1.317-02	1.329-02
6.500+04	2.233-03	4.397-03	6.663-03	8.059-03	8.150-03
7.000+04	1.782-03	3.504-03	5.315-03	6.437-03	6.521-03
7.250+04	1.607-03	3.150-03	4.792-03	5.807-03	5.886-03
7.500+04	1.454-03	2.850-03	4.335-03	5.255-03	5.329-03
7.750+04	1.319-03	2.591-03	3.934-03	4.770-03	4.840-03
8.000+04	1.201-03	2.360-03	3.580-03	4.343-03	4.407-03
8.250+04	1.095-03	2.156-03	3.267-03	3.964-03	4.025-03
8.500+04	1.000-03	1.974-03	2.991-03	3.628-03	3.685-03
8.750+04	9.109-04	1.812-03	2.747-03	3.329-03	3.382-03
9.000+04	8.427-04	1.666-03	2.529-03	3.061-03	3.110-03
9.250+04	7.763-04	1.533-03	2.333-03	2.824-03	2.867-03
9.500+04	7.167-04	1.414-03	2.157-03	2.612-03	2.648-03
9.750+04	6.630-04	1.309-03	1.997-03	2.421-03	2.451-03
1.000+05	6.145-04	1.212-03	1.847-03	2.247-03	2.277-03
1.200+05	3.557-04	7.015-04	1.068-03	1.299-03	1.323-03
1.400+05	2.241-04	4.410-04	6.724-04	8.177-04	8.325-04
1.600+05	1.502-04	2.961-04	4.506-04	5.478-04	5.574-04
1.800+05	1.643+02	1.214+02	5.081+01	4.851+01	2.684+01
2.000+05	2.557+02	1.880+02	1.257+02	7.548+01	4.176+01
2.200+05	2.745+02	2.021+02	1.350+02	8.105+01	4.485+01
2.600+05	2.874+02	2.123+02	1.414+02	8.485+01	6.695+01
3.000+05	2.817+02	2.061+02	1.385+02	8.315+01	4.601+01
4.000+05	2.481+02	1.832+02	1.220+02	7.323+01	4.052+01
5.000+05	2.142+02	1.583+02	1.054+02	6.324+01	3.499+01
7.500+05	1.408+02	1.040+02	6.924+01	4.156+01	2.300+01
1.000+06	9.125+01	6.742+01	4.488+01	2.694+01	1.491+01

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 100 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	3.000+04	0.000	0.000	0.000	0.000
	CM <sup>-1</sup>				
*****					
	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)
1.000+03	6.319+02	0.000	0.000	0.000	0.000
1.500+03	2.780+02	0.000	0.000	0.000	0.000
2.000+03	1.548+02	0.000	0.000	0.000	0.000
4.000+03	3.720+01	0.000	0.000	0.000	0.000
5.000+03	1.430+01	0.000	0.000	0.000	0.000
8.000+03	7.472+00	0.000	0.000	0.000	0.000
1.000+04	4.584+00	0.000	0.000	0.000	0.000
1.500+04	1.862+00	0.000	0.000	0.000	0.000
2.000+04	9.629-01	0.000	0.000	0.000	0.000
2.250+04	7.268-01	0.000	0.000	0.000	0.000
2.500+04	5.612-01	0.000	0.000	0.000	0.000
2.750+04	4.413-01	0.000	0.000	0.000	0.000
3.000+04	3.551-01	0.000	0.000	0.000	0.000
3.250+04	2.930-01	0.000	0.000	0.000	0.000
3.500+04	2.432-01	0.000	0.000	0.000	0.000
3.750+04	2.021-01	0.000	0.000	0.000	0.000
4.000+04	1.635-01	0.000	0.000	0.000	0.000
4.500+04	8.646-02	0.000	0.000	0.000	0.000
5.000+04	4.500-02	0.000	0.000	0.000	0.000
5.500+04	2.298-02	0.000	0.000	0.000	0.000
6.000+04	1.198-02	0.000	0.000	0.000	0.000
6.500+04	7.361-03	0.000	0.000	0.000	0.000
7.000+04	5.898-03	0.000	0.000	0.000	0.000
7.250+04	5.327-03	0.000	0.000	0.000	0.000
7.500+04	4.827-03	0.000	0.000	0.000	0.000
7.750+04	4.386-03	0.000	0.000	0.000	0.000
8.000+04	3.976-03	0.000	0.000	0.000	0.000
8.250+04	3.651-03	0.000	0.000	0.000	0.000
8.500+04	3.343-03	0.000	0.000	0.000	0.000
8.750+04	3.069-03	0.000	0.000	0.000	0.000
9.000+04	2.824-03	0.000	0.000	0.000	0.000
9.250+04	2.604-03	0.000	0.000	0.000	0.000
9.500+04	2.406-03	0.000	0.000	0.000	0.000
9.750+04	2.227-03	0.000	0.000	0.000	0.000
1.000+05	2.065-03	0.000	0.000	0.000	0.000
1.200+05	1.210-03	0.000	0.000	0.000	0.000
1.400+05	7.579-04	0.000	0.000	0.000	0.000
1.600+05	5.073-04	0.000	0.000	0.000	0.000
1.800+05	1.434+01	0.000	0.000	0.000	0.000
2.000+05	2.232+01	0.000	0.000	0.000	0.000
2.200+05	2.396+01	0.000	0.000	0.000	0.000
2.400+05	2.509+01	0.000	0.000	0.000	0.000
3.000+05	2.459+01	0.000	0.000	0.000	0.000
4.000+05	2.165+01	0.000	0.000	0.000	0.000
5.000+05	1.870+01	0.000	0.000	0.000	0.000
7.500+05	1.229+01	0.000	0.000	0.000	0.000
1.000+06	7.965+00	0.000	0.000	0.000	0.000

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE =250 ATM

WAVE NOS, CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	1.333-10	2.950-06	3.593-04
1.500+03	0.000	0.000	8.058-11	1.826-06	2.235-04
2.000+03	0.000	0.000	5.504-11	1.277-06	1.578-04
4.000+03	0.000	0.000	1.949-11	4.924-07	6.356-05
6.000+03	0.000	0.000	9.559-12	2.579-07	3.467-05
8.000+03	0.000	0.000	5.451-12	1.543-07	2.147-05
1.000+04	0.000	0.000	3.408-12	9.988-08	1.429-05
1.500+04	0.000	0.000	1.341-12	4.119-08	6.195-06
2.000+04	0.000	0.000	6.439-13	2.012-08	3.123-06
2.250+04	0.000	0.000	4.658-13	1.462-08	2.299-06
2.500+04	0.000	0.000	3.435-13	1.081-08	1.722-06
2.750+04	0.000	0.000	2.569-13	8.094-09	1.311-06
3.000+04	0.000	0.000	1.940-13	6.120-09	1.011-06
3.250+04	0.000	0.000	1.475-13	4.658-09	7.898-07
3.500+04	0.000	0.000	1.126-13	3.558-09	6.257-07
3.750+04	0.000	0.000	8.604-14	2.721-09	5.035-07
4.000+04	0.000	0.000	6.572-14	2.080-09	4.110-07
4.500+04	0.000	0.000	3.797-14	1.203-09	2.324-07
5.000+04	0.000	0.000	2.143-14	6.793-10	1.290-07
5.500+04	0.000	0.000	1.181-14	3.748-10	7.008-08
6.000+04	0.000	0.000	6.626-15	2.103-10	3.884-08
6.500+04	0.000	0.000	4.362-15	1.385-10	2.531-08
7.000+04	0.000	0.000	3.733-15	1.187-10	2.148-08
7.250+04	0.000	0.000	3.481-15	1.107-10	1.995-08
7.500+04	0.000	0.000	3.254-15	1.035-10	1.858-08
7.750+04	0.000	0.000	3.048-15	9.696-11	1.735-08
8.000+04	0.000	0.000	2.862-15	9.105-11	1.623-08
8.250+04	0.000	0.000	2.691-15	8.566-11	1.522-08
8.500+04	0.000	0.000	2.536-15	8.073-11	1.431-08
8.750+04	0.000	0.000	2.394-15	7.622-11	1.347-08
9.000+04	0.000	0.000	2.263-15	7.208-11	1.270-08
9.250+04	0.000	0.000	2.143-15	6.827-11	1.200-08
9.500+04	0.000	0.000	2.032-15	6.475-11	1.136-08
9.750+04	0.000	0.000	1.930-15	6.150-11	1.076-08
1.000+05	0.000	0.000	1.835-15	5.849-11	1.021-08
1.200+05	0.000	0.000	1.276-15	4.075-11	7.017-09
1.400+05	0.000	0.000	9.391-16	3.002-11	5.110-09
1.600+05	0.000	0.000	7.199-16	2.304-11	3.900-09
1.800+05	1.008+04	5.038+03	2.519+03	1.679+03	1.260+03
2.000+05	1.568+04	7.639+03	3.920+03	2.613+03	1.960+03
2.200+05	1.684+04	8.417+03	4.209+03	2.806+03	2.104+03
2.600+05	1.765+04	8.813+03	4.406+03	2.938+03	2.203+03
3.000+05	1.727+04	8.636+03	4.318+03	2.879+03	2.159+03
4.000+05	1.521+04	7.606+03	3.303+03	2.535+03	1.901+03
5.000+05	1.314+04	6.568+03	3.284+03	2.189+03	1.642+03
7.500+05	8.633+03	4.317+03	2.158+03	1.439+03	1.079+03
1.000+06	5.596+03	2.798+03	1.399+03	9.327+02	6.995+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEQN  
 AT TOTAL PRESSURE =250 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1.000+04	1.200+04	1.400+04	1.600+04	1.800+04
***** CM <sup>-1</sup> *****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	7.026-03	1.343-01	2.023+00	1.708+01	8.868+01
1.500+03	4.011-03	6.313-02	8.965-01	7.544+00	3.908+01
2.000+03	2.686-03	3.627-02	5.006-01	4.219+00	2.180+01
4.000+03	1.037-03	1.012-02	1.119-01	9.248-01	4.745+00
6.000+03	5.711-04	5.056-03	5.017-02	4.018-01	2.018+00
8.000+03	3.610-04	3.104-03	2.887-02	2.253-01	1.114+00
1.000+04	2.467-04	2.117-03	1.907-02	1.452-01	7.060-01
1.500+04	1.150-04	1.104-03	1.004-02	6.693-02	3.123-01
2.000+04	6.298-05	6.889-04	6.343-03	4.339-02	1.961-01
2.250+04	4.875-05	5.760-04	5.369-03	3.545-02	1.552-01
2.500+04	3.875-05	4.955-04	4.666-03	2.996-02	1.270-01
2.750+04	3.160-05	4.367-04	4.137-03	2.585-02	1.069-01
3.000+04	2.642-05	3.929-04	3.726-03	2.264-02	9.141-02
3.250+04	2.265-05	3.595-04	3.394-03	2.006-02	7.906-02
3.500+04	1.990-05	3.335-04	3.118-03	1.792-02	6.892-02
3.750+04	1.789-05	3.127-04	2.881-03	1.609-02	6.040-02
4.000+04	1.627-05	2.920-04	2.639-03	1.434-02	5.261-02
4.500+04	8.744-06	1.523-04	1.366-03	7.428-03	2.735-02
5.000+04	4.637-06	7.950-05	6.975-04	3.793-03	1.400-02
5.500+04	2.421-06	3.986-05	3.510-04	1.907-03	7.051-03
6.000+04	1.295-06	2.075-05	1.809-04	9.827-04	3.636-03
6.500+04	8.171-07	1.277-05	1.102-04	5.981-04	2.215-03
7.000+04	6.736-07	1.027-05	8.779-05	4.750-04	1.764-03
7.250+04	6.174-07	9.307-06	7.913-05	4.277-04	1.590-03
7.500+04	5.678-07	8.461-06	7.157-05	3.864-04	1.436-03
7.750+04	5.237-07	7.717-06	6.495-05	3.503-04	1.301-03
8.000+04	4.845-07	7.060-06	5.913-05	3.185-04	1.183-03
8.250+04	4.494-07	6.479-06	5.399-05	2.904-04	1.079-03
8.500+04	4.178-07	5.961-06	4.943-05	2.656-04	9.863-04
8.750+04	3.894-07	5.499-06	4.538-05	2.435-04	9.043-04
9.000+04	3.637-07	5.085-06	4.175-05	2.237-04	8.310-04
9.250+04	3.404-07	4.712-06	3.851-05	2.061-04	7.655-04
9.500+04	3.193-07	4.377-06	3.560-05	1.903-04	7.067-04
9.750+04	3.000-07	4.074-06	3.298-05	1.760-04	6.537-04
1.000+05	2.823-07	3.799-06	3.061-05	1.631-04	6.059-04
1.200+05	1.834-07	2.307-06	1.791-05	9.443-05	3.508-04
1.400+05	1.282-07	1.521-06	1.141-05	5.948-05	2.210-04
1.600+05	9.448-08	1.066-06	7.728-06	3.985-05	1.481-04
1.800+05	1.008+03	8.389+02	7.160+02	6.175+02	5.291+02
2.000+05	1.568+03	1.305+03	1.114+03	9.608+02	8.233+02
2.200+05	1.683+03	1.402+03	1.196+03	1.032+03	8.840+02
2.600+05	1.762+03	1.467+03	1.252+03	1.080+03	9.255+02
3.000+05	1.727+03	1.438+03	1.227+03	1.058+03	9.069+02
4.000+05	1.521+03	1.266+03	1.081+03	9.321+02	7.987+02
5.000+05	1.314+03	1.094+03	9.334+02	8.050+02	6.898+02
7.500+05	8.632+02	7.187+02	6.134+02	5.290+02	4.533+02
1.000+06	5.596+02	4.659+02	3.976+02	3.429+02	2.938+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE =250 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	3.136+02	8.088+02	1.576+03	2.402+03	2.971+03
1.500+03	1.380+02	3.555+02	6.925+02	1.055+03	1.305+03
2.000+03	7.686+01	1.978+02	3.851+02	5.866+02	7.257+02
4.000+03	1.603+01	4.425+01	6.796+01	1.367+02	1.722+02
6.000+03	6.967+00	1.771+01	3.441+01	5.248+01	6.515+01
8.000+03	3.803+00	9.578+00	1.839+01	2.780+01	3.428+01
1.000+04	2.381+00	5.939+00	1.133+01	1.706+01	2.100+01
1.500+04	1.021+00	2.491+00	4.664+00	6.933+00	8.461+00
2.000+04	5.733-01	1.332+00	2.448+00	3.593+00	4.351+00
2.250+04	4.605-01	1.063+00	1.872+00	2.723+00	3.276+00
2.500+04	3.876-01	8.844-01	1.523+00	2.118+00	2.529+00
2.750+04	3.176-01	7.220-01	1.264+00	1.744+00	1.999+00
3.000+04	2.600-01	5.920-01	1.042+00	1.446+00	1.651+00
3.250+04	2.255-01	4.933-01	8.523-01	1.198+00	1.368+00
3.500+04	1.928-01	4.149-01	7.061-01	9.778-01	1.136+00
3.750+04	1.657-01	3.508-01	5.892-01	8.053-01	9.243-01
4.000+04	1.416-01	2.953-01	4.898-01	6.626-01	7.521-01
4.500+04	7.392-02	1.547-01	2.574-01	3.493-01	3.977-01
5.000+04	3.795-02	7.968-02	1.330-01	1.809-01	2.065-01
5.500+04	1.915-02	4.030-02	6.742-02	9.195-02	1.052-01
6.000+04	9.890-03	2.085-02	3.495-02	4.776-02	5.475-02
6.500+04	6.026-03	1.272-02	2.135-02	2.923-02	3.357-02
7.000+04	4.798-03	1.013-02	1.703-02	2.335-02	2.685-02
7.250+04	4.327-03	9.133-03	1.530-02	2.106-02	2.424-02
7.500+04	3.915-03	8.252-03	1.339-02	1.906-02	2.194-02
7.750+04	3.553-03	7.494-03	1.260-02	1.730-02	1.993-02
8.000+04	3.235-03	6.827-03	1.147-02	1.575-02	1.815-02
8.250+04	2.940-03	6.235-03	1.047-02	1.438-02	1.657-02
8.500+04	2.694-03	5.711-03	9.585-03	1.316-02	1.517-02
8.750+04	2.409-03	5.243-03	8.803-03	1.207-02	1.392-02
9.000+04	2.270-03	4.819-03	8.105-03	1.110-02	1.280-02
9.250+04	2.091-03	4.434-03	7.473-03	1.024-02	1.180-02
9.500+04	1.930-03	4.080-03	6.915-03	9.473-03	1.090-02
9.750+04	1.765-03	3.783-03	6.401-03	8.780-03	1.009-02
1.000+05	1.655-03	3.506-03	5.925-03	8.152-03	9.372-03
1.200+05	9.572-04	2.029-03	3.421-03	4.711-03	5.448-03
1.400+05	6.034-04	1.273-03	2.154-03	2.965-03	3.426-03
1.600+05	4.044-04	8.564-04	1.444-03	1.986-03	2.294-03
1.800+05	4.402+02	3.482+02	2.558+02	1.731+02	1.084+02
2.000+05	6.850+02	5.417+02	3.930+02	2.693+02	1.686+02
2.200+05	7.355+02	5.517+02	4.274+02	2.892+02	1.811+02
2.600+05	7.700+02	6.090+02	4.474+02	3.028+02	1.396+02
3.000+05	7.546+02	5.968+02	4.334+02	2.957+02	1.853+02
4.000+05	6.645+02	5.256+02	3.861+02	2.613+02	1.636+02
5.000+05	5.739+02	4.539+02	3.335+02	2.257+02	1.413+02
7.500+05	3.772+02	2.983+02	2.191+02	1.483+02	9.235+01
1.000+06	2.445+02	1.934+02	1.421+02	9.013+01	6.019+01

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE =250 ATM

WAVE NOS. $CM^{-1}$	*	TEMPERATURES (DEG K)				
	*	3.000+04	0.000	0.000	0.000	0.000
	*	$CM^{-1}$				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	3.145+03	0.000	0.000	0.000	0.000
1.500+03	*	1.382+03	0.000	0.000	0.000	0.000
2.000+03	*	7.686+02	0.000	0.000	0.000	0.000
4.000+03	*	1.837+02	0.000	0.000	0.000	0.000
6.000+03	*	7.013+01	0.000	0.000	0.000	0.000
8.000+03	*	3.641+01	0.000	0.000	0.000	0.000
1.000+04	*	2.221+01	0.000	0.000	0.000	0.000
1.500+04	*	8.898+00	0.000	0.000	0.000	0.000
2.000+04	*	4.545+00	0.000	0.000	0.000	0.000
2.250+04	*	3.412+00	0.000	0.000	0.000	0.000
2.500+04	*	2.620+00	0.000	0.000	0.000	0.000
2.750+04	*	2.050+00	0.000	0.000	0.000	0.000
3.000+04	*	1.644+00	0.000	0.000	0.000	0.000
3.250+04	*	1.354+00	0.000	0.000	0.000	0.000
3.500+04	*	1.122+00	0.000	0.000	0.000	0.000
3.750+04	*	9.306-01	0.000	0.000	0.000	0.000
4.000+04	*	7.503-01	0.000	0.000	0.000	0.000
4.500+04	*	3.967-01	0.000	0.000	0.000	0.000
5.000+04	*	2.064-01	0.000	0.000	0.000	0.000
5.500+04	*	1.054-01	0.000	0.000	0.000	0.000
6.000+04	*	5.495-02	0.000	0.000	0.000	0.000
6.500+04	*	3.375-02	0.000	0.000	0.000	0.000
7.000+04	*	2.704-02	0.000	0.000	0.000	0.000
7.250+04	*	2.442-02	0.000	0.000	0.000	0.000
7.500+04	*	2.213-02	0.000	0.000	0.000	0.000
7.750+04	*	2.011-02	0.000	0.000	0.000	0.000
8.000+04	*	1.832-02	0.000	0.000	0.000	0.000
8.250+04	*	1.673-02	0.000	0.000	0.000	0.000
8.500+04	*	1.532-02	0.000	0.000	0.000	0.000
8.750+04	*	1.407-02	0.000	0.000	0.000	0.000
9.000+04	*	1.294-02	0.000	0.000	0.000	0.000
9.250+04	*	1.193-02	0.000	0.000	0.000	0.000
9.500+04	*	1.102-02	0.000	0.000	0.000	0.000
9.750+04	*	1.021-02	0.000	0.000	0.000	0.000
1.000+05	*	9.464-03	0.000	0.000	0.000	0.000
1.200+05	*	5.548-03	0.000	0.000	0.000	0.000
1.400+05	*	3.473-03	0.000	0.000	0.000	0.000
1.600+05	*	2.324-03	0.000	0.000	0.000	0.000
1.800+05	*	6.433+01	0.000	0.000	0.000	0.000
2.000+05	*	1.091+02	0.000	0.000	0.000	0.000
2.200+05	*	1.075+02	0.000	0.000	0.000	0.000
2.400+05	*	1.125+02	0.000	0.000	0.000	0.000
3.000+05	*	1.193+02	0.000	0.000	0.000	0.000
4.000+05	*	9.712+01	0.000	0.000	0.000	0.000
5.000+05	*	8.388+01	0.000	0.000	0.000	0.000
7.500+05	*	5.512+01	0.000	0.000	0.000	0.000
1.000+06	*	3.573+01	0.000	0.000	0.000	0.000

TABLE VII  
ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 500 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
***** ←----- CM <sup>-1</sup> -----→					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	3.771-10	8.343-06	1.013-03
1.500+03	0.000	0.000	2.279-10	5.165-06	6.310-04
2.000+03	0.000	0.000	1.557-10	3.613-06	4.458-04
4.000+03	0.000	0.000	5.511-11	1.393-06	1.797-04
6.000+03	0.000	0.000	2.704-11	7.295-07	9.802-05
8.000+03	0.000	0.000	1.542-11	4.366-07	6.070-05
1.000+04	0.000	0.000	9.639-12	2.825-07	4.040-05
1.500+04	0.000	0.000	3.794-12	1.165-07	1.749-05
2.000+04	0.000	0.000	1.321-12	5.692-08	8.803-06
2.250+04	0.000	0.000	1.312-12	4.135-08	6.469-06
2.500+04	0.000	0.000	9.715-13	3.057-08	4.836-06
2.750+04	0.000	0.000	7.264-13	2.290-08	3.667-06
3.000+04	0.000	0.000	5.486-13	1.731-08	2.614-06
3.250+04	0.000	0.000	4.171-13	1.317-08	2.184-06
3.500+04	0.000	0.000	5.124-13	1.006-08	1.714-06
3.750+04	0.000	0.000	2.434-13	7.697-09	1.361-06
4.000+04	0.000	0.000	1.859-13	5.882-09	1.093-06
4.500+04	0.000	0.000	1.074-13	3.402-09	6.219-07
5.000+04	0.000	0.000	6.062-14	1.922-09	3.467-07
5.500+04	0.000	0.000	3.341-14	1.060-09	1.892-07
6.000+04	0.000	0.000	1.874-14	5.950-10	1.052-07
6.500+04	0.000	0.000	1.234-14	3.919-10	6.878-08
7.000+04	0.000	0.000	1.056-14	3.356-10	5.852-08
7.250+04	0.000	0.000	9.846-15	3.131-10	5.443-08
7.500+04	0.000	0.000	9.294-15	2.927-10	5.075-08
7.750+04	0.000	0.000	8.622-15	2.743-10	4.743-08
8.000+04	0.000	0.000	8.094-15	2.575-10	4.443-08
8.250+04	0.000	0.000	7.613-15	2.423-10	4.171-08
8.500+04	0.000	0.000	7.173-15	2.284-10	3.923-08
8.750+04	0.000	0.000	6.771-15	2.156-10	3.696-08
9.000+04	0.000	0.000	6.402-15	2.039-10	3.489-08
9.250+04	0.000	0.000	6.062-15	1.931-10	3.299-08
9.500+04	0.000	0.000	5.749-15	1.832-10	3.124-08
9.750+04	0.000	0.000	5.459-15	1.740-10	2.962-08
1.000+05	0.000	0.000	5.190-15	1.655-10	2.813-08
1.200+05	0.000	0.000	3.610-15	1.153-10	1.941-08
1.400+05	0.000	0.000	2.656-15	8.491-11	1.421-08
1.600+05	0.000	0.000	2.036-15	6.516-11	1.085-08
1.800+05	2.015+04	1.008+04	5.033+03	3.359+03	2.519+03
2.000+05	3.156+04	1.568+04	7.839+03	5.226+03	3.920+03
2.200+05	3.367+04	1.684+04	8.412+03	5.612+03	4.279+03
2.600+05	3.525+04	1.763+04	8.813+03	5.875+03	4.496+03
3.000+05	3.454+04	1.727+04	8.636+03	5.757+03	4.318+03
4.000+05	3.042+04	1.521+04	7.996+03	5.070+03	3.803+03
5.000+05	2.627+04	1.314+04	6.559+03	4.379+03	3.234+03
7.500+05	1.727+04	8.633+03	4.317+03	2.273+03	2.158+03
1.000+06	1.119+04	5.996+03	2.798+03	1.865+03	1.399+03



TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 500 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1.000+04	1.200+04	1.400+04	1.600+04	1.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.825-02	2.890-01	4.158+00	3.555+01	1.888+02
1.500+03	1.064-02	1.382-01	1.843+00	1.568+01	8.312+01
2.000+03	7.231-03	8.075-02	1.029+00	8.763+00	4.633+01
4.000+03	2.843-03	2.353-02	2.298-01	1.913+00	1.003+01
6.000+03	1.574-03	1.197-02	1.030-01	8.278-01	4.246+00
8.000+03	9.959-04	7.407-03	5.927-02	4.625-01	2.334+00
1.000+04	6.796-04	5.064-03	3.914-02	2.971-01	1.473+00
1.500+04	3.138-04	2.597-03	2.056-02	1.361-01	6.460-01
2.000+04	1.691-04	1.584-03	1.294-02	8.800-02	4.042-01
2.250+04	1.294-04	1.306-03	1.093-02	7.175-02	3.190-01
2.500+04	1.014-04	1.107-03	9.482-03	6.057-02	2.605-01
2.750+04	8.127-05	9.622-04	8.392-03	5.219-02	2.189-01
3.000+04	6.061-05	8.538-04	7.545-03	4.568-02	1.869-01
3.250+04	5.583-05	7.714-04	6.863-03	4.045-02	1.614-01
3.500+04	4.788-05	7.075-04	6.296-03	3.612-02	1.406-01
3.750+04	4.200-05	6.567-04	5.809-03	3.241-02	1.231-01
4.000+04	3.731-05	6.080-04	5.317-03	2.888-02	1.072-01
4.500+04	2.025-05	3.188-04	2.754-03	1.496-02	5.571-02
5.000+04	1.084-05	1.650-04	1.408-03	7.639-03	2.852-02
5.500+04	5.709-06	8.417-05	7.092-04	3.839-03	1.436-02
6.000+04	3.077-06	4.403-05	3.659-04	1.979-03	7.406-03
6.500+04	1.957-06	2.721-05	2.231-04	1.204-03	4.511-03
7.000+04	1.624-06	2.198-05	1.779-04	9.565-04	3.594-03
7.250+04	1.493-06	1.996-05	1.604-04	8.612-04	3.239-03
7.500+04	1.377-06	1.818-05	1.452-04	7.781-04	2.924-03
7.750+04	1.274-06	1.662-05	1.318-04	7.053-04	2.649-03
8.000+04	1.182-06	1.523-05	1.201-04	6.413-04	2.409-03
8.250+04	1.099-06	1.401-05	1.097-04	5.848-04	2.197-03
3.500+04	1.025-06	1.291-05	1.005-04	5.348-04	2.009-03
3.750+04	9.577-07	1.193-05	9.229-05	4.902-04	1.842-03
9.000+04	8.968-07	1.106-05	8.497-05	4.505-04	1.693-03
9.250+04	8.414-07	1.027-05	7.841-05	4.150-04	1.559-03
9.500+04	7.909-07	9.554-06	7.252-05	3.831-04	1.439-03
9.750+04	7.448-07	8.909-06	6.721-05	3.544-04	1.331-03
1.000+05	7.025-07	3.323-06	6.242-05	3.285-04	1.234-03
1.200+05	4.634-07	5.125-06	3.669-05	1.902-04	7.144-04
1.400+05	3.279-07	3.424-06	2.347-05	1.198-04	4.501-04
1.600+05	2.440-07	2.427-06	1.597-05	8.024-05	3.016-04
1.800+05	2.015+03	1.578+03	1.434+03	1.242+03	1.075+03
2.000+05	3.136+03	2.611+03	2.231+03	1.932+03	1.672+03
2.200+05	3.367+03	2.804+03	2.396+03	2.075+03	1.795+03
2.600+05	3.525+03	2.936+03	2.508+03	2.172+03	1.880+03
3.000+05	3.454+03	2.877+03	2.458+03	2.129+03	1.842+03
4.000+05	3.042+03	2.534+03	2.165+03	1.875+03	1.622+03
5.000+05	2.627+03	2.188+03	1.870+03	1.610+03	1.401+03
7.500+05	1.727+03	1.438+03	1.229+03	1.064+03	9.207+02
1.000+06	1.119+03	9.321+02	7.964+02	6.896+02	5.968+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 500 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	6.907+02	1.369+03	3.906+03	6.454+03	8.717+03
1.500+03	3.036+02	8.206+02	1.714+03	2.832+03	3.824+03
2.000+03	1.689+02	4.361+02	9.521+02	1.572+03	2.124+03
4.000+03	3.678+01	1.015+02	2.163+02	3.644+02	5.015+02
6.000+03	1.515+01	4.036+01	8.404+01	1.390+02	1.884+02
8.000+03	8.228+00	2.171+01	4.466+01	7.318+01	9.852+01
1.000+04	5.126+00	1.339+01	2.736+01	4.465+01	6.000+01
1.500+04	2.176+00	5.550+00	1.112+01	1.790+01	2.384+01
2.000+04	1.212+00	2.937+00	5.766+00	9.160+00	1.211+01
2.250+04	1.015+00	2.337+00	4.387+00	6.903+00	9.061+00
2.500+04	8.165-01	1.942+00	3.560+00	5.340+00	6.956+00
2.750+04	6.670-01	1.583+00	2.949+00	4.388+00	5.472+00
3.000+04	5.575-01	1.292+00	2.424+00	3.630+00	4.509+00
3.250+04	4.718-01	1.074+00	1.976+00	3.000+00	3.730+00
3.500+04	4.027-01	9.014-01	1.633+00	2.440+00	3.090+00
3.750+04	3.456-01	7.008-01	1.359+00	2.004+00	2.506+00
4.000+04	2.952-01	6.396-01	1.128+00	1.645+00	2.033+00
4.500+04	1.541-01	3.350-01	5.926-01	8.669-01	1.075+00
5.000+04	7.910-02	1.725-01	3.061-01	4.489-01	5.579-01
5.500+04	3.991-02	8.725-02	1.552-01	2.281-01	2.841-01
6.000+04	2.001-02	4.513-02	8.043-02	1.185-01	1.479-01
6.500+04	1.250-02	2.753-02	4.914-02	7.252-02	9.067-02
7.000+04	9.999-03	2.194-02	3.919-02	5.791-02	7.252-02
7.250+04	9.017-03	1.977-02	3.533-02	5.224-02	6.545-02
7.500+04	8.109-03	1.788-02	3.196-02	4.727-02	5.926-02
7.750+04	7.400-03	1.022-02	2.900-02	4.290-02	5.381-02
8.000+04	6.743-03	1.478-02	2.639-02	3.906-02	4.900-02
8.250+04	6.147-03	1.350-02	2.409-02	3.565-02	4.474-02
8.500+04	5.615-03	1.236-02	2.205-02	3.263-02	4.096-02
8.750+04	5.146-03	1.135-02	2.026-02	2.993-02	3.758-02
9.000+04	4.730-03	1.043-02	1.865-02	2.752-02	3.457-02
9.250+04	4.357-03	9.599-03	1.721-02	2.540-02	3.186-02
9.500+04	4.022-03	8.351-03	1.592-02	2.349-02	2.943-02
9.750+04	3.721-03	8.188-03	1.473-02	2.178-02	2.724-02
1.000+05	3.442-03	7.590-03	1.363-02	2.022-02	2.530-02
1.200+05	1.990-03	4.391-02	7.872-03	1.168-02	1.471-02
1.400+05	1.257-03	2.766-03	4.955-03	7.351-03	2.249-03
1.600+05	8.427-04	1.054-03	3.321-03	4.924-03	6.191-03
1.800+05	9.126+02	7.473+02	5.811+02	4.220+02	2.865+02
2.000+05	1.420+03	1.163+03	9.042+02	6.567+02	4.459+02
2.200+05	1.525+03	1.248+03	9.703+02	7.052+02	4.788+02
2.600+05	1.596+03	1.307+03	1.017+03	7.383+02	5.013+02
3.000+05	1.564+03	1.281+03	9.361+02	7.235+02	4.912+02
4.000+05	1.378+03	1.128+03	8.773+02	6.371+02	4.326+02
5.000+05	1.190+03	9.742+02	7.576+02	5.502+02	3.736+02
7.500+05	7.810+02	6.402+02	4.970+02	3.616+02	2.455+02
1.000+06	5.066+02	4.150+02	3.227+02	2.344+02	1.591+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 500 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	3.000+04	0.000	0.000	0.000	0.000
	CM <sup>-1</sup>				
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	1.002+04	0.000	0.000	0.000	0.000
1.500+03	4.395+03	0.000	0.000	0.000	0.000
2.000+03	2.441+03	0.000	0.000	0.000	0.000
4.000+03	5.807+02	0.000	0.000	0.000	0.000
6.000+03	2.202+02	0.000	0.000	0.000	0.000
8.000+03	1.137+02	0.000	0.000	0.000	0.000
1.000+04	6.892+01	0.000	0.000	0.000	0.000
1.500+04	2.725+01	0.000	0.000	0.000	0.000
2.000+04	1.375+01	0.000	0.000	0.000	0.000
2.250+04	1.026+01	0.000	0.000	0.000	0.000
2.500+04	7.837+00	0.000	0.000	0.000	0.000
2.750+04	6.100+00	0.000	0.000	0.000	0.000
3.000+04	4.672+00	0.000	0.000	0.000	0.000
3.250+04	4.002+00	0.000	0.000	0.000	0.000
3.500+04	3.310+00	0.000	0.000	0.000	0.000
3.750+04	2.742+00	0.000	0.000	0.000	0.000
4.000+04	2.204+00	0.000	0.000	0.000	0.000
4.500+04	1.165+00	0.000	0.000	0.000	0.000
5.000+04	0.059-01	0.000	0.000	0.000	0.000
5.500+04	3.093-01	0.000	0.000	0.000	0.000
6.000+04	1.612-01	0.000	0.000	0.000	0.000
6.500+04	9.902-02	0.000	0.000	0.000	0.000
7.000+04	7.933-02	0.000	0.000	0.000	0.000
7.250+04	7.165-02	0.000	0.000	0.000	0.000
7.500+04	6.491-02	0.000	0.000	0.000	0.000
7.750+04	5.897-02	0.000	0.000	0.000	0.000
8.000+04	5.373-02	0.000	0.000	0.000	0.000
8.250+04	4.908-02	0.000	0.000	0.000	0.000
8.500+04	4.494-02	0.000	0.000	0.000	0.000
8.750+04	4.125-02	0.000	0.000	0.000	0.000
9.000+04	3.795-02	0.000	0.000	0.000	0.000
9.250+04	3.499-02	0.000	0.000	0.000	0.000
9.500+04	3.233-02	0.000	0.000	0.000	0.000
9.750+04	2.992-02	0.000	0.000	0.000	0.000
1.000+05	2.775-02	0.000	0.000	0.000	0.000
1.200+05	1.628-02	0.000	0.000	0.000	0.000
1.400+05	1.018-02	0.000	0.000	0.000	0.000
1.600+05	6.813-03	0.000	0.000	0.000	0.000
1.800+05	1.842+02	0.000	0.000	0.000	0.000
2.000+05	2.860+02	0.000	0.000	0.000	0.000
2.200+05	3.078+02	0.000	0.000	0.000	0.000
2.600+05	3.222+02	0.000	0.000	0.000	0.000
3.000+05	3.158+02	0.000	0.000	0.000	0.000
4.000+05	2.781+02	0.000	0.000	0.000	0.000
5.000+05	2.402+02	0.000	0.000	0.000	0.000
7.300+05	1.579+02	0.000	0.000	0.000	0.000
1.000+06	1.023+02	0.000	0.000	0.000	0.000

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 750 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
		CM <sup>-1</sup>				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	0.000	0.000	6.928-10	1.533-05	1.859-03
1.500+03	*	0.000	0.000	4.187-10	9.489-06	1.159-03
2.000+03	*	0.000	0.000	2.860-10	6.637-06	9.186-04
4.000+03	*	0.000	0.000	1.013-10	2.559-06	3.301-04
6.000+03	*	0.000	0.000	4.967-11	1.340-06	1.801-04
8.000+03	*	0.000	0.000	2.832-11	8.021-07	1.115-04
1.000+04	*	0.000	0.000	1.771-11	5.191-07	7.422-05
1.500+04	*	0.000	0.000	6.970-12	2.140-07	3.212-05
2.000+04	*	0.000	0.000	3.346-12	1.046-07	1.615-05
2.250+04	*	0.000	0.000	2.420-12	7.597-08	1.186-05
2.500+04	*	0.000	0.000	1.785-12	5.616-08	8.856-06
2.750+04	*	0.000	0.000	1.335-12	4.207-08	6.705-06
3.000+04	*	0.000	0.000	1.008-12	3.181-08	5.135-06
3.250+04	*	0.000	0.000	7.663-13	2.421-08	3.973-06
3.500+04	*	0.000	0.000	5.849-13	1.849-08	3.104-06
3.750+04	*	0.000	0.000	4.471-13	1.414-08	2.450-06
4.000+04	*	0.000	0.000	3.415-13	1.081-08	1.952-06
4.500+04	*	0.000	0.000	1.973-13	6.249-09	1.114-06
5.000+04	*	0.000	0.000	1.114-13	3.531-09	6.224-07
5.500+04	*	0.000	0.000	6.138-14	1.948-09	3.403-07
6.000+04	*	0.000	0.000	3.443-14	1.093-09	1.896-07
6.500+04	*	0.000	0.000	2.266-14	7.200-10	1.241-07
7.000+04	*	0.000	0.000	1.940-14	6.166-10	1.057-07
7.250+04	*	0.000	0.000	1.809-14	5.752-10	9.838-08
7.500+04	*	0.000	0.000	1.691-14	5.378-10	9.178-08
7.750+04	*	0.000	0.000	1.584-14	5.039-10	8.582-08
8.000+04	*	0.000	0.000	1.487-14	4.732-10	8.043-08
8.250+04	*	0.000	0.000	1.390-14	4.452-10	7.553-08
8.500+04	*	0.000	0.000	1.318-14	4.196-10	7.107-08
8.750+04	*	0.000	0.000	1.244-14	3.961-10	6.700-08
9.000+04	*	0.000	0.000	1.176-14	3.746-10	6.326-08
9.250+04	*	0.000	0.000	1.114-14	3.548-10	5.983-08
9.500+04	*	0.000	0.000	1.056-14	3.365-10	5.668-08
9.750+04	*	0.000	0.000	1.003-14	3.196-10	5.376-08
1.000+05	*	0.000	0.000	9.535-15	3.040-10	5.107-08
1.200+05	*	0.000	0.000	6.633-15	2.118-10	3.531-08
1.400+05	*	0.000	0.000	4.880-15	1.560-10	2.588-08
1.600+05	*	0.000	0.000	3.741-15	1.197-10	1.979-08
1.800+05	*	3.023+04	1.512+04	7.558+03	5.038+03	3.779+03
2.000+05	*	4.704+04	2.352+04	1.175+04	7.839+03	5.380+03
2.200+05	*	5.051+04	2.525+04	1.263+04	8.418+03	6.313+03
2.600+05	*	5.282+04	2.647+04	1.322+04	8.813+03	6.610+03
3.000+05	*	5.182+04	2.591+04	1.295+04	8.636+03	6.477+03
4.000+05	*	4.563+04	2.282+04	1.141+04	7.606+03	5.704+03
5.000+05	*	3.941+04	1.971+04	9.153+03	6.568+03	4.926+03
7.500+05	*	2.590+04	1.295+04	6.475+03	4.317+03	3.237+03
1.000+06	*	1.679+04	3.394+03	4.197+03	2.798+03	2.099+03

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 750 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1,000+04	1,200+04	1,400+04	1,600+04	1,800+04
*****	*****				
*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1,000+03 *	3.223-02	4.567-01	6.355+00	5.471+01	2.945+02
1,500+03 *	1.898-02	2.211-01	2.815+00	2.413+01	1.296+02
2,000+03 *	1.299-02	1.306-01	1.571+00	1.347+01	7.217+01
4,000+03 *	5.153-03	3.910-02	3.510-01	2.932+00	1.558+01
6,000+03 *	2.859-03	2.711-02	1.574-01	1.266+00	6.571+00
8,000+03 *	1.810-03	1.250-02	9.055-02	7.055-01	3.602+00
1,000+04 *	1.235-03	8.556-03	5.970-02	4.522-01	2.268+00
1,500+04 *	5.677-04	4.346-03	3.136-02	2.061-01	9.882-01
2,000+04 *	3.036-04	2.614-03	1.969-02	1.331-01	6.168-01
2,250+04 *	2.310-04	2.137-03	1.661-02	1.084-01	4.850-01
2,500+04 *	1.797-04	1.796-03	1.430-02	9.142-02	3.961-01
2,750+04 *	1.428-04	1.546-03	1.272-02	7.871-02	3.325-01
3,000+04 *	1.158-04	1.360-03	1.142-02	6.885-02	2.835-01
3,250+04 *	9.592-05	1.218-03	1.038-02	6.094-02	2.447-01
3,500+04 *	8.115-05	1.108-03	9.508-03	5.439-02	2.130-01
3,750+04 *	7.017-05	1.021-03	8.765-03	4.880-02	1.864-01
4,000+04 *	6.146-05	9.399-04	8.016-03	4.346-02	1.622-01
4,500+04 *	3.357-05	4.945-04	4.155-03	2.251-02	8.432-02
5,000+04 *	1.897-05	2.568-04	2.125-03	1.150-02	4.317-02
5,500+04 *	9.560-06	1.314-04	1.072-03	5.778-03	2.174-02
6,000+04 *	5.180-06	6.896-05	5.533-04	2.979-03	1.121-02
6,500+04 *	3.307-06	4.274-05	3.376-04	1.813-03	6.827-03
7,000+04 *	2.756-06	3.464-05	2.694-04	1.440-03	5.439-03
7,250+04 *	2.538-06	3.149-05	2.431-04	1.296-03	4.902-03
7,500+04 *	2.345-06	2.873-05	2.200-04	1.171-03	4.426-03
7,750+04 *	2.173-06	2.629-05	1.999-04	1.062-03	4.000-03
8,000+04 *	2.019-06	2.414-05	1.821-04	9.652-04	3.646-03
8,250+04 *	1.881-06	2.222-05	1.665-04	8.802-04	3.325-03
8,500+04 *	1.756-06	2.052-05	1.525-04	8.048-04	3.040-03
8,750+04 *	1.643-06	1.899-05	1.402-04	7.378-04	2.787-03
9,000+04 *	1.541-06	1.761-05	1.291-04	6.781-04	2.562-03
9,250+04 *	1.448-06	1.638-05	1.192-04	6.246-04	2.360-03
9,500+04 *	1.362-06	1.526-05	1.103-04	5.766-04	2.178-03
9,750+04 *	1.284-06	1.425-05	1.022-04	5.334-04	2.015-03
1,000+05 *	1.213-06	1.333-05	9.499-05	4.944-04	1.868-03
1,200+05 *	8.066-07	8.281-06	5.602-05	2.862-04	1.081-03
1,400+05 *	5.744-07	5.577-06	3.596-05	1.803-04	6.811-04
1,600+05 *	4.296-07	3.983-06	2.456-05	1.208-04	4.564-04
1,800+05 *	3.023+03	2.518+03	2.153+03	1.867+03	1.623+03
2,000+05 *	4.703+03	3.918+03	3.349+03	2.905+03	2.525+03
2,200+05 *	5.050+03	4.207+03	3.596+03	3.120+03	2.712+03
2,600+05 *	5.287+03	4.404+03	3.765+03	3.266+03	2.839+03
3,000+05 *	5.181+03	4.316+03	3.690+03	3.201+03	2.782+03
4,000+05 *	4.563+03	3.901+03	3.249+03	2.819+03	2.450+03
5,000+05 *	3.941+03	3.282+03	2.806+03	2.434+03	2.116+03
7,500+05 *	2.590+03	2.157+03	1.844+03	1.600+03	1.391+03
1,000+06 *	1.679+03	1.398+03	1.195+03	1.037+03	9.014+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 750 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****					
	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)
1.000+03	1.097+03	3.051+03	6.575+03	1.130+04	1.596+04
1.500+03	4.820+02	1.339+03	2.883+03	4.954+03	6.995+03
2.000+03	2.680+02	7.434+02	1.600+03	2.749+03	3.882+03
4.000+03	5.815+01	1.648+02	3.622+02	6.349+02	9.136+02
6.000+03	2.386+01	6.528+01	1.401+02	2.411+02	3.416+02
8.000+03	1.292+01	3.500+01	7.419+01	1.264+02	1.779+02
1.000+04	8.022+00	2.151+01	4.528+01	7.685+01	1.080+02
1.500+04	3.381+00	8.842+00	1.823+01	3.052+01	4.250+01
2.000+04	1.873+00	4.644+00	9.382+00	1.549+01	2.140+01
2.250+04	1.568+00	3.688+00	7.113+00	1.162+01	1.595+01
2.500+04	1.259+00	3.062+00	5.762+00	8.960+00	1.219+01
2.750+04	1.026+00	2.491+00	4.766+00	7.351+00	9.559+00
3.000+04	8.564-01	2.020+00	3.912+00	6.072+00	7.867+00
3.250+04	7.238-01	1.683+00	3.181+00	5.011+00	6.497+00
3.500+04	6.172-01	1.411+00	2.622+00	4.065+00	5.376+00
3.750+04	5.292-01	1.189+00	2.179+00	3.330+00	4.347+00
4.000+04	4.516-01	9.985-01	1.805+00	2.729+00	3.519+00
4.500+04	2.357-01	5.229-01	9.487-01	1.438+00	1.860+00
5.000+04	1.210-01	2.693-01	4.900-01	7.446-01	9.656-01
5.500+04	6.106-02	1.362-01	2.484-01	3.784-01	4.917-01
6.000+04	3.153-02	7.045-02	1.287-01	1.965-01	2.559-01
6.500+04	1.921-02	4.297-02	7.865-02	1.203-01	1.569-01
7.000+04	1.530-02	3.424-02	6.272-02	9.604-02	1.255-01
7.250+04	1.379-02	3.086-02	5.655-02	8.662-02	1.132-01
7.500+04	1.248-02	2.790-02	5.115-02	7.838-02	1.025-01
7.750+04	1.133-02	2.532-02	4.641-02	7.114-02	9.308-02
8.000+04	1.032-02	2.307-02	4.223-02	6.476-02	8.476-02
8.250+04	9.404-03	2.107-02	3.854-02	5.911-02	7.739-02
8.500+04	8.590-03	1.930-02	3.529-02	5.410-02	7.084-02
8.750+04	7.872-03	1.772-02	3.242-02	4.962-02	6.501-02
9.000+04	7.235-03	1.629-02	2.985-02	4.563-02	5.979-02
9.250+04	6.605-03	1.494-02	2.755-02	4.211-02	5.511-02
9.500+04	6.153-03	1.381-02	2.548-02	3.896-02	5.090-02
9.750+04	5.692-03	1.270-02	2.358-02	3.611-02	4.711-02
1.000+05	5.275-03	1.185-02	2.182-02	3.354-02	4.376-02
1.200+05	3.053-03	6.853-03	1.260-02	1.937-02	2.544-02
1.400+05	1.923-03	4.316-03	7.929-03	1.219-02	1.600-02
1.600+05	1.289-03	2.893-03	5.314-03	8.163-03	1.071-02
1.800+05	1.391+03	1.159+03	9.215+02	6.911+02	4.880+02
2.000+05	2.164+03	1.603+03	1.434+03	1.075+03	7.594+02
2.200+05	2.324+03	1.936+03	1.540+03	1.155+03	8.154+02
2.600+05	2.433+03	2.027+03	1.612+03	1.209+03	8.537+02
3.000+05	2.384+03	1.987+03	1.580+03	1.185+03	8.366+02
4.000+05	2.099+03	1.750+03	1.391+03	1.043+03	7.368+02
5.000+05	1.813+03	1.511+03	1.201+03	9.010+02	6.363+02
7.500+05	1.192+03	9.930+02	7.995+02	5.921+02	4.181+02
1.000+06	7.724+02	6.437+02	5.118+02	3.830+02	2.710+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 750 ATM

WAVE NOS. CM-1	*	TEMPERATURES (DEG K)				
		3,000+04	0,000	0,000	0,000	0,000
	*	CM <sup>-1</sup>				
*****						
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	1.919+04	0.000	0.000	0.000	0.000
1.500+03	*	8.416+03	0.000	0.000	0.000	0.000
2.000+03	*	4.671+03	0.000	0.000	0.000	0.000
4.000+03	*	1.108+03	0.000	0.000	0.000	0.000
6.000+03	*	4.183+02	0.000	0.000	0.000	0.000
6.000+03	*	2.150+02	0.000	0.000	0.000	0.000
1.000+04	*	1.299+02	0.000	0.000	0.000	0.000
1.500+04	*	5.088+01	0.000	0.000	0.000	0.000
2.000+04	*	2.545+01	0.000	0.000	0.000	0.000
2.250+04	*	1.892+01	0.000	0.000	0.000	0.000
2.500+04	*	1.439+01	0.000	0.000	0.000	0.000
2.750+04	*	1.116+01	0.000	0.000	0.000	0.000
3.000+04	*	8.888+00	0.000	0.000	0.000	0.000
3.250+04	*	7.291+00	0.000	0.000	0.000	0.000
3.500+04	*	6.022+00	0.000	0.000	0.000	0.000
3.750+04	*	4.983+00	0.000	0.000	0.000	0.000
4.000+04	*	3.995+00	0.000	0.000	0.000	0.000
4.500+04	*	2.110+00	0.000	0.000	0.000	0.000
5.000+04	*	1.093+00	0.000	0.000	0.000	0.000
5.500+04	*	5.602-01	0.000	0.000	0.000	0.000
6.000+04	*	2.920-01	0.000	0.000	0.000	0.000
6.500+04	*	1.793-01	0.000	0.000	0.000	0.000
7.000+04	*	1.437-01	0.000	0.000	0.000	0.000
7.250+04	*	1.297-01	0.000	0.000	0.000	0.000
7.500+04	*	1.175-01	0.000	0.000	0.000	0.000
7.750+04	*	1.068-01	0.000	0.000	0.000	0.000
8.000+04	*	9.729-02	0.000	0.000	0.000	0.000
8.250+04	*	8.886-02	0.000	0.000	0.000	0.000
8.500+04	*	8.136-02	0.000	0.000	0.000	0.000
8.750+04	*	7.467-02	0.000	0.000	0.000	0.000
9.000+04	*	6.870-02	0.000	0.000	0.000	0.000
9.250+04	*	6.334-02	0.000	0.000	0.000	0.000
9.500+04	*	5.852-02	0.000	0.000	0.000	0.000
9.750+04	*	5.417-02	0.000	0.000	0.000	0.000
1.000+05	*	5.023-02	0.000	0.000	0.000	0.000
1.200+05	*	2.948-02	0.000	0.000	0.000	0.000
1.400+05	*	1.843-02	0.000	0.000	0.000	0.000
1.600+05	*	1.233-02	0.000	0.000	0.000	0.000
1.800+05	*	3.275+02	0.000	0.000	0.000	0.000
2.000+05	*	5.097+02	0.000	0.000	0.000	0.000
2.200+05	*	5.473+02	0.000	0.000	0.000	0.000
2.600+05	*	5.730+02	0.000	0.000	0.000	0.000
3.000+05	*	5.615+02	0.000	0.000	0.000	0.000
4.000+05	*	4.945+02	0.000	0.000	0.000	0.000
5.000+05	*	4.271+02	0.000	0.000	0.000	0.000
7.500+05	*	2.897+02	0.000	0.000	0.000	0.000
1.000+06	*	1.819+02	0.000	0.000	0.000	0.000

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 1000 ATM

WAVE NOS. CM <sup>-1</sup>	TEMPERATURES (DEG K)				
	1.000+03	2.000+03	4.000+03	6.000+03	8.000+03
*****					
	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	0.000	0.000	1.067-09	2.360-05	2.861-03
1.500+03	0.000	0.000	6.447-10	1.461-05	1.783-03
2.000+03	0.000	0.000	4.403-10	1.022-05	1.260-03
4.000+03	0.000	0.000	1.559-10	3.940-06	5.083-04
6.000+03	0.000	0.000	7.647-11	2.064-06	2.773-04
8.000+03	0.000	0.000	4.360-11	1.235-06	1.717-04
1.000+04	0.000	0.000	2.726-11	7.992-07	1.143-04
1.500+04	0.000	0.000	1.073-11	3.296-07	4.945-05
2.000+04	0.000	0.000	5.151-12	1.610-07	2.485-05
2.250+04	0.000	0.000	3.727-12	1.170-07	1.824-05
2.500+04	0.000	0.000	2.748-12	8.647-08	1.361-05
2.750+04	0.000	0.000	2.055-12	6.477-08	1.030-05
3.000+04	0.000	0.000	1.552-12	4.897-08	7.875-06
3.250+04	0.000	0.000	1.180-12	3.727-08	6.082-06
3.500+04	0.000	0.000	9.005-13	2.847-08	4.738-06
3.750+04	0.000	0.000	6.883-13	2.177-08	3.726-06
4.000+04	0.000	0.000	5.258-13	1.664-08	2.954-06
4.500+04	0.000	0.000	3.037-13	9.622-09	1.688-06
5.000+04	0.000	0.000	1.714-13	5.436-09	9.450-07
5.500+04	0.000	0.000	9.451-14	2.999-09	5.173-07
6.000+04	0.000	0.000	5.301-14	1.683-09	2.885-07
6.500+04	0.000	0.000	3.489-14	1.109-09	1.890-07
7.000+04	0.000	0.000	2.986-14	9.494-10	1.611-07
7.250+04	0.000	0.000	2.785-14	8.856-10	1.500-07
7.500+04	0.000	0.000	2.603-14	8.280-10	1.400-07
7.750+04	0.000	0.000	2.439-14	7.759-10	1.309-07
8.000+04	0.000	0.000	2.289-14	7.285-10	1.227-07
8.250+04	0.000	0.000	2.153-14	6.854-10	1.153-07
8.500+04	0.000	0.000	2.029-14	6.460-10	1.085-07
8.750+04	0.000	0.000	1.915-14	6.099-10	1.023-07
9.000+04	0.000	0.000	1.811-14	5.768-10	0.964-08
9.250+04	0.000	0.000	1.715-14	5.463-10	0.914-08
9.500+04	0.000	0.000	1.626-14	5.191-10	0.866-08
9.750+04	0.000	0.000	1.544-14	4.921-10	0.821-08
1.000+05	0.000	0.000	1.468-14	4.680-10	7.808-08
1.200+05	0.000	0.000	1.021-14	3.260-10	5.405-08
1.400+05	0.000	0.000	7.513-15	2.402-10	3.965-08
1.600+05	0.000	0.000	5.759-15	1.843-10	3.034-08
1.800+05	4.631+04	2.015+04	1.008+04	6.718+03	5.038+03
2.000+05	6.272+04	3.136+04	1.568+04	1.045+04	7.839+03
2.200+05	6.734+04	3.367+04	1.694+04	1.122+04	8.418+03
2.600+05	7.050+04	3.525+04	1.763+04	1.175+04	8.413+03
3.000+05	6.909+04	3.454+04	1.727+04	1.151+04	8.636+03
4.000+05	6.085+04	3.042+04	1.521+04	1.014+04	7.606+03
5.000+05	5.255+04	2.627+04	1.314+04	8.758+03	6.568+03
7.500+05	3.453+04	1.727+04	6.633+03	5.755+03	4.317+03
1.000+06	2.238+04	1.119+04	5.596+03	3.731+03	2.798+03



TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 1000 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		1,000+04	1,200+04	1,400+04	1,600+04	1,800+04
*****		*****				
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	4.845-02	6.351-01	8.598+00	7.440+01	4.045+02
1.500+03	*	2.872-02	3.101-01	3.808+00	3.279+01	1.778+02
2.000+03	*	1.974-02	1.947-01	2.126+00	1.830+01	9.900+01
4.000+03	*	7.872-03	5.642-02	4.748-01	3.975+00	2.131+01
6.000+03	*	4.374-03	2.925-02	2.129-01	1.712+00	8.970+00
8.000+03	*	2.770-03	1.924-02	1.225-01	9.527-01	4.906+00
1.000+04	*	1.889-03	1.249-02	8.090-02	6.097-01	3.082+00
1.500+04	*	8.661-04	6.303-03	4.239-02	2.769-01	1.337+00
2.000+04	*	4.610-04	3.755-03	2.656-02	1.785-01	8.328-01
2.250+04	*	3.495-04	3.051-03	2.239-02	1.453-01	6.550-01
2.500+04	*	2.707-04	2.547-03	1.937-02	1.224-01	5.332-01
2.750+04	*	2.139-04	2.178-03	1.710-02	1.053-01	4.471-01
3.000+04	*	1.723-04	1.902-03	1.534-02	9.211-02	3.810-01
3.250+04	*	1.416-04	1.693-03	1.392-02	8.150-02	3.286-01
3.500+04	*	1.187-04	1.531-03	1.275-02	7.271-02	2.859-01
3.750+04	*	1.016-04	1.403-03	1.174-02	6.522-02	2.501-01
4.000+04	*	8.814-05	1.285-03	1.073-02	5.808-02	2.175-01
4.500+04	*	4.836-05	6.777-04	5.566-03	3.009-02	1.131-01
5.000+04	*	2.614-05	3.529-04	2.849-03	1.536-02	5.789-02
5.500+04	*	1.388-05	1.911-04	1.437-03	7.722-03	2.915-02
6.000+04	*	7.543-06	9.525-05	7.427-04	3.980-03	1.503-02
6.500+04	*	4.829-06	5.918-05	4.534-04	2.422-03	9.155-03
7.000+04	*	4.034-06	4.807-05	3.621-04	1.924-03	7.294-03
7.250+04	*	3.721-06	4.375-05	3.267-04	1.732-03	6.574-03
7.500+04	*	3.442-06	3.995-05	2.950-04	1.565-03	5.936-03
7.750+04	*	3.193-06	3.661-05	2.689-04	1.419-03	5.376-03
8.000+04	*	2.970-06	3.364-05	2.451-04	1.290-03	4.880-03
8.250+04	*	2.769-06	3.100-05	2.241-04	1.176-03	4.459-03
8.500+04	*	2.588-06	2.865-05	2.054-04	1.075-03	4.077-03
8.750+04	*	2.424-06	2.654-05	1.888-04	9.860-04	3.738-03
9.000+04	*	2.275-06	2.465-05	1.740-04	9.061-04	3.435-03
9.250+04	*	2.139-06	2.294-05	1.607-04	8.346-04	3.164-03
9.500+04	*	2.015-06	2.139-05	1.487-04	7.705-04	2.921-03
9.750+04	*	1.901-06	1.999-05	1.379-04	7.128-04	2.702-03
1.000+05	*	1.797-06	1.872-05	1.282-04	6.607-04	2.505-03
1.200+05	*	1.201-06	1.171-05	7.580-05	3.825-04	1.450-03
1.400+05	*	8.588-07	7.936-06	4.880-05	2.409-04	9.130-04
1.600+05	*	6.444-07	5.697-06	3.341-05	1.614-04	6.121-04
1.800+05	*	4.030+03	3.357+03	2.871+03	2.493+03	2.173+03
2.000+05	*	6.271+03	5.224+03	4.467+03	3.880+03	3.381+03
2.200+05	*	6.734+03	5.609+03	4.797+03	4.166+03	3.631+03
2.600+05	*	7.050+03	5.872+03	5.022+03	4.361+03	3.801+03
3.000+05	*	6.909+03	5.755+03	4.922+03	4.274+03	3.725+03
4.000+05	*	6.084+03	5.068+03	4.334+03	3.764+03	3.280+03
5.000+05	*	5.255+03	4.377+03	3.743+03	3.251+03	2.833+03
7.500+05	*	3.453+03	2.976+03	2.460+03	2.136+03	1.862+03
1.000+06	*	2.238+03	1.864+03	1.595+03	1.385+03	1.207+03

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 1000 ATM

WAVE NOS. CM <sup>-1</sup>	*	TEMPERATURES (DEG K)				
		2.000+04	2.200+04	2.400+04	2.600+04	2.800+04
*****		*****				
	*	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)	A(TOTAL)
1.000+03	*	1.527+03	4.317+03	9.503+03	1.678+04	2.444+04
1.500+03	*	6.701+02	1.693+03	4.164+03	7.351+03	1.071+04
2.000+03	*	3.724+02	1.051+03	2.310+03	4.077+03	5.939+03
4.000+03	*	8.059+01	2.523+02	5.215+02	9.392+02	1.394+03
6.000+03	*	3.297+01	9.172+01	2.011+02	3.554+02	5.197+02
8.000+03	*	1.781+01	4.903+01	1.062+02	1.858+02	2.698+02
1.000+04	*	1.103+01	3.006+01	6.460+01	1.126+02	1.632+02
1.500+04	*	4.623+00	1.228+01	2.584+01	4.440+01	6.379+01
2.000+04	*	2.549+00	6.411+00	1.321+01	2.238+01	3.189+01
2.250+04	*	2.134+00	5.082+00	9.986+00	1.675+01	2.369+01
2.500+04	*	1.710+00	4.217+00	8.078+00	1.287+01	1.806+01
2.750+04	*	1.392+00	3.425+00	6.675+00	1.055+01	1.412+01
3.000+04	*	1.160+00	2.784+00	5.470+00	8.700+00	1.160+01
3.250+04	*	9.796-01	2.307+00	4.439+00	7.170+00	9.572+00
3.500+04	*	8.346-01	1.931+00	3.654+00	5.804+00	7.910+00
3.750+04	*	7.151-01	1.626+00	3.032+00	4.746+00	6.383+00
4.000+04	*	6.099-01	1.364+00	2.509+00	3.884+00	5.158+00
4.500+04	*	5.183-01	7.144-01	1.319+00	2.047+00	2.726+00
5.000+04	*	1.634-01	3.672-01	6.503-01	1.060+00	1.415+00
5.500+04	*	8.245-02	1.860-01	3.452-01	5.384-01	7.205-01
6.000+04	*	4.257-02	9.023-02	1.789-01	2.796-01	3.750-01
6.500+04	*	2.594-02	5.870-02	1.093-01	1.711-01	2.299-01
7.000+04	*	2.005-02	4.677-02	8.714-02	1.366-01	1.838-01
7.250+04	*	1.863-02	4.215-02	7.856-02	1.232-01	1.659-01
7.500+04	*	1.685-02	3.811-02	7.106-02	1.115-01	1.502-01
7.750+04	*	1.530-02	3.459-02	6.447-02	1.012-01	1.364-01
8.000+04	*	1.393-02	3.151-02	5.867-02	9.212-02	1.242-01
8.250+04	*	1.270-02	2.678-02	5.353-02	8.409-02	1.134-01
8.500+04	*	1.160-02	2.036-02	4.903-02	7.695-02	1.038-01
8.750+04	*	1.063-02	2.421-02	4.504-02	7.059-02	9.522-02
9.000+04	*	9.770-03	2.225-02	4.147-02	6.490-02	8.757-02
9.250+04	*	6.999-03	2.047-02	3.829-02	5.990-02	8.071-02
9.500+04	*	8.508-03	1.687-02	3.540-02	5.542-02	7.454-02
9.750+04	*	7.685-03	1.746-02	3.277-02	5.137-02	6.899-02
1.000+05	*	7.123-03	1.018-02	3.032-02	4.771-02	6.410-02
1.200+05	*	4.122-03	9.360-03	1.750-02	2.755-02	3.727-02
1.400+05	*	2.597-03	5.895-03	1.101-02	1.733-02	2.343-02
1.600+05	*	1.741-03	3.951-03	7.382-03	1.161-02	1.568-02
1.800+05	*	1.872+03	1.575+03	1.270+03	9.729+02	7.055+02
2.000+05	*	2.913+03	2.451+03	1.977+03	1.514+03	1.098+03
2.200+05	*	3.128+03	2.031+03	2.122+03	1.625+03	1.179+03
2.600+05	*	3.275+03	2.755+03	2.222+03	1.702+03	1.234+03
3.000+05	*	3.209+03	2.700+03	2.177+03	1.668+03	1.209+03
4.000+05	*	2.626+03	2.577+03	1.918+03	1.469+03	1.055+03
5.000+05	*	2.441+03	2.053+03	1.656+03	1.268+03	9.198+02
7.500+05	*	1.604+03	1.549+03	1.088+03	6.335+02	6.045+02
1.000+06	*	1.040+03	8.746+02	7.055+02	5.403+02	3.918+02

TABLE VII  
 ABSORPTION COEFFICIENTS OF NEON  
 AT TOTAL PRESSURE = 1000 ATM

WAVE NOS. CM-1	TEMPERATURES (DEG K)				
	3.000+04	0.000	0.000	0.000	0.000
	←----- CM <sup>-1</sup> -----→				
	*****				
	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)	A (TOTAL)
1.000+03	3.040+04	0.000	0.000	0.000	0.000
1.500+03	1.332+04	0.000	0.000	0.000	0.000
2.000+03	7.391+03	0.000	0.000	0.000	0.000
4.000+03	1.748+03	0.000	0.000	0.000	0.000
6.000+03	6.581+02	0.000	0.000	0.000	0.000
8.000+03	3.371+02	0.000	0.000	0.000	0.000
1.000+04	2.031+02	0.000	0.000	0.000	0.000
1.500+04	7.898+01	0.000	0.000	0.000	0.000
2.000+04	3.925+01	0.000	0.000	0.000	0.000
2.250+04	2.907+01	0.000	0.000	0.000	0.000
2.500+04	2.205+01	0.000	0.000	0.000	0.000
2.750+04	1.705+01	0.000	0.000	0.000	0.000
3.000+04	1.354+01	0.000	0.000	0.000	0.000
3.250+04	1.109+01	0.000	0.000	0.000	0.000
3.500+04	9.152+00	0.000	0.000	0.000	0.000
3.750+04	7.566+00	0.000	0.000	0.000	0.000
4.000+04	6.053+00	0.000	0.000	0.000	0.000
4.500+04	3.196+00	0.000	0.000	0.000	0.000
5.000+04	1.662+00	0.000	0.000	0.000	0.000
5.500+04	8.434-01	0.000	0.000	0.000	0.000
6.000+04	4.422-01	0.000	0.000	0.000	0.000
6.500+04	2.716-01	0.000	0.000	0.000	0.000
7.000+04	2.175-01	0.000	0.000	0.000	0.000
7.250+04	1.964-01	0.000	0.000	0.000	0.000
7.500+04	1.780-01	0.000	0.000	0.000	0.000
7.750+04	1.617-01	0.000	0.000	0.000	0.000
8.000+04	1.473-01	0.000	0.000	0.000	0.000
8.250+04	1.345-01	0.000	0.000	0.000	0.000
8.500+04	1.232-01	0.000	0.000	0.000	0.000
8.750+04	1.130-01	0.000	0.000	0.000	0.000
9.000+04	1.040-01	0.000	0.000	0.000	0.000
9.250+04	9.598-02	0.000	0.000	0.000	0.000
9.500+04	8.857-02	0.000	0.000	0.000	0.000
9.750+04	8.198-02	0.000	0.000	0.000	0.000
1.000+05	7.602-02	0.000	0.000	0.000	0.000
1.200+05	4.464-02	0.000	0.000	0.000	0.000
1.400+05	2.789-02	0.000	0.000	0.000	0.000
1.600+05	1.866-02	0.000	0.000	0.000	0.000
1.800+05	4.882+02	0.000	0.000	0.000	0.000
2.000+05	7.597+02	0.000	0.000	0.000	0.000
2.200+05	8.158+02	0.000	0.000	0.000	0.000
2.600+05	8.541+02	0.000	0.000	0.000	0.000
3.000+05	8.370+02	0.000	0.000	0.000	0.000
4.000+05	7.371+02	0.000	0.000	0.000	0.000
5.000+05	6.366+02	0.000	0.000	0.000	0.000
7.500+05	4.184+02	0.000	0.000	0.000	0.000
1.000+06	2.712+02	0.000	0.000	0.000	0.000

$\xi(\omega)$  FUNCTION FOR NEON AND HELIUM

(REFS 10 AND 12)

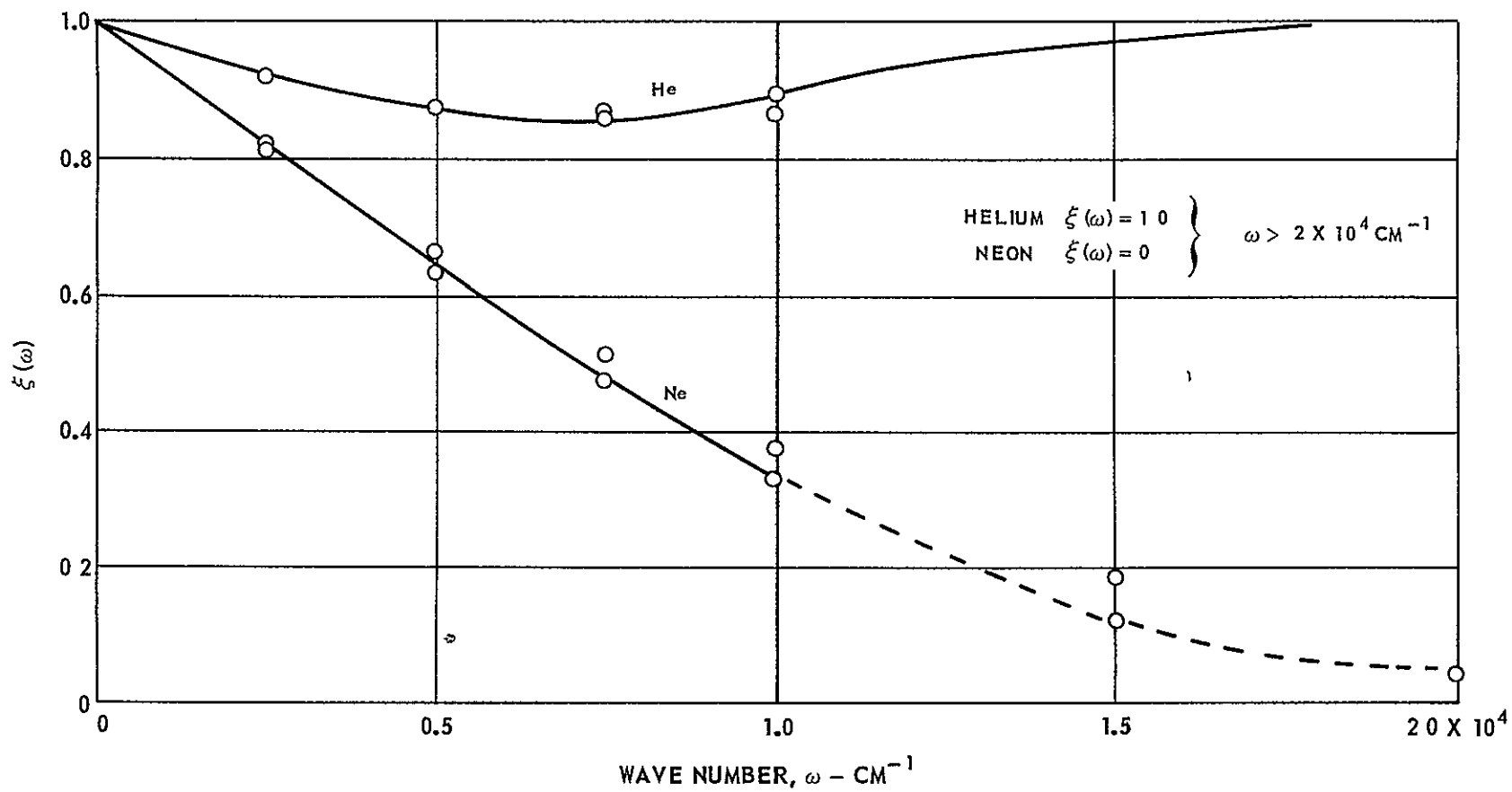
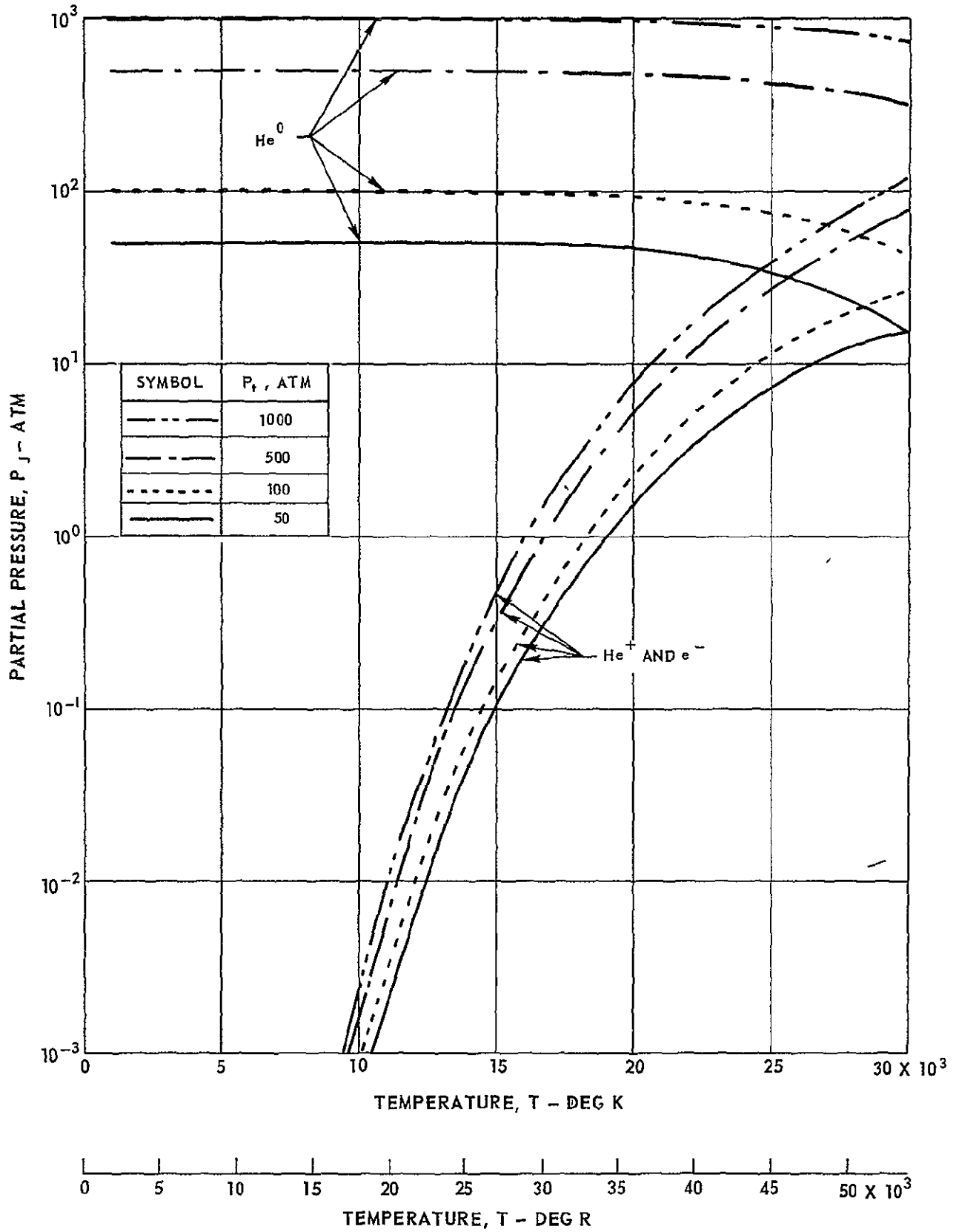
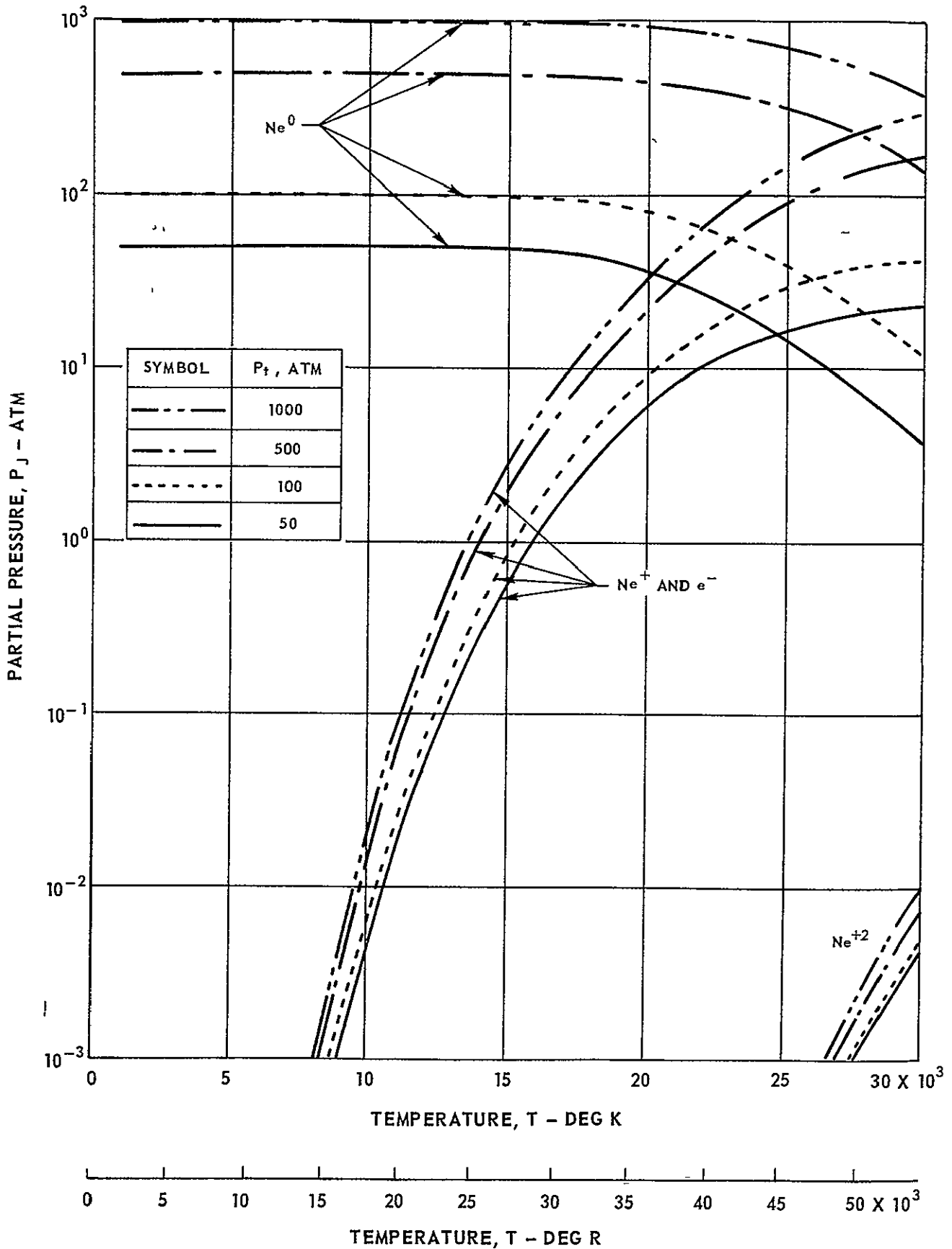


FIG 1

PARTIAL PRESSURE DISTRIBUTION FOR HELIUM AS A FUNCTION OF TEMPERATURE AT VARIOUS TOTAL PRESSURES

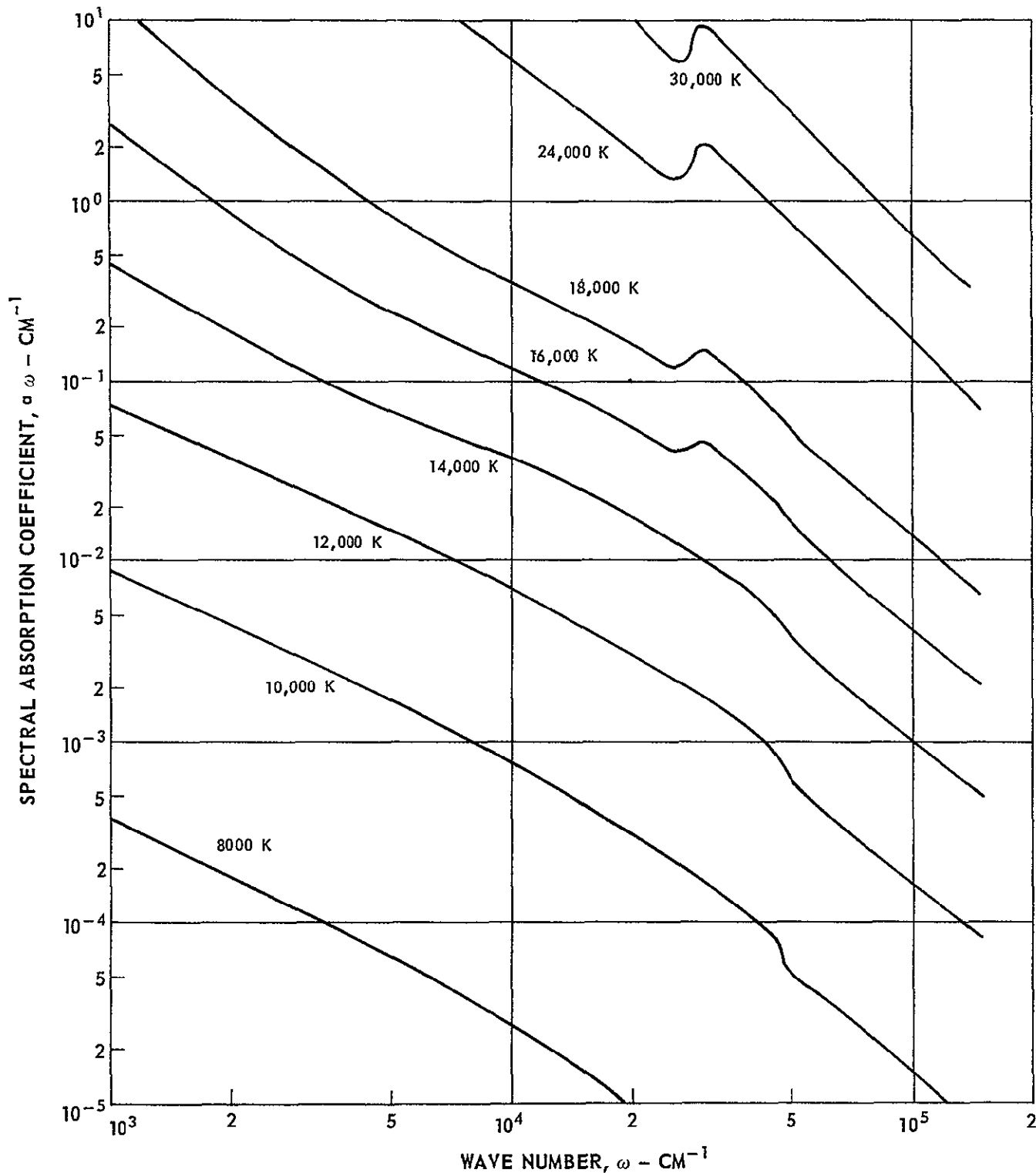


PARTIAL PRESSURE DISTRIBUTION FOR NEON AS A FUNCTION OF TEMPERATURE AT VARIOUS TOTAL PRESSURES



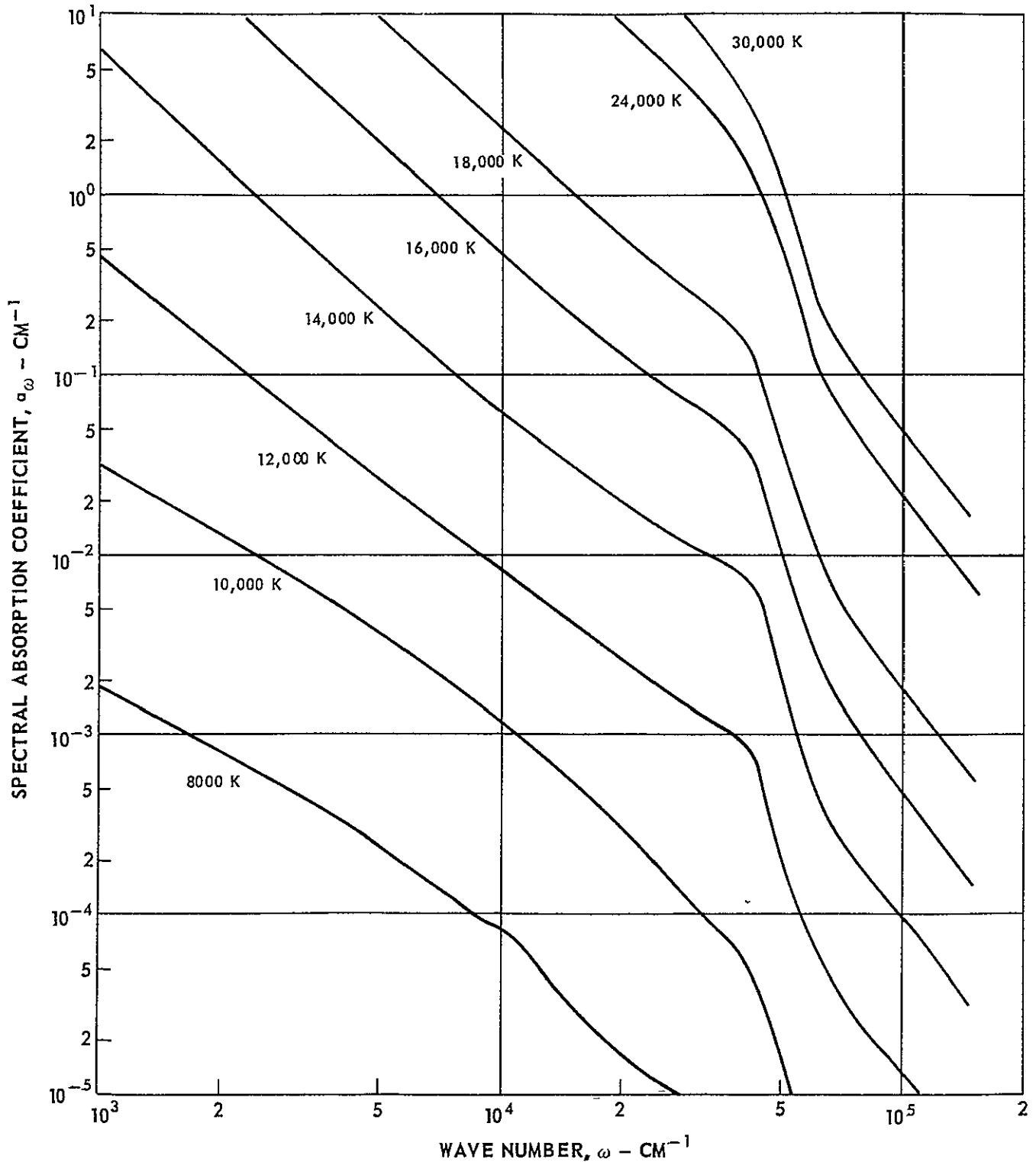
SPECTRAL ABSORPTION COEFFICIENT OF HELIUM AT VARIOUS TEMPERATURES  
AT A TOTAL PRESSURE OF 750 ATM

IONIZATION POTENTIALS	
He <sup>0</sup>	24 581 eV (198,297 CM <sup>-1</sup> )
He <sup>+</sup>	54 403 eV (438,874 CM <sup>-1</sup> )



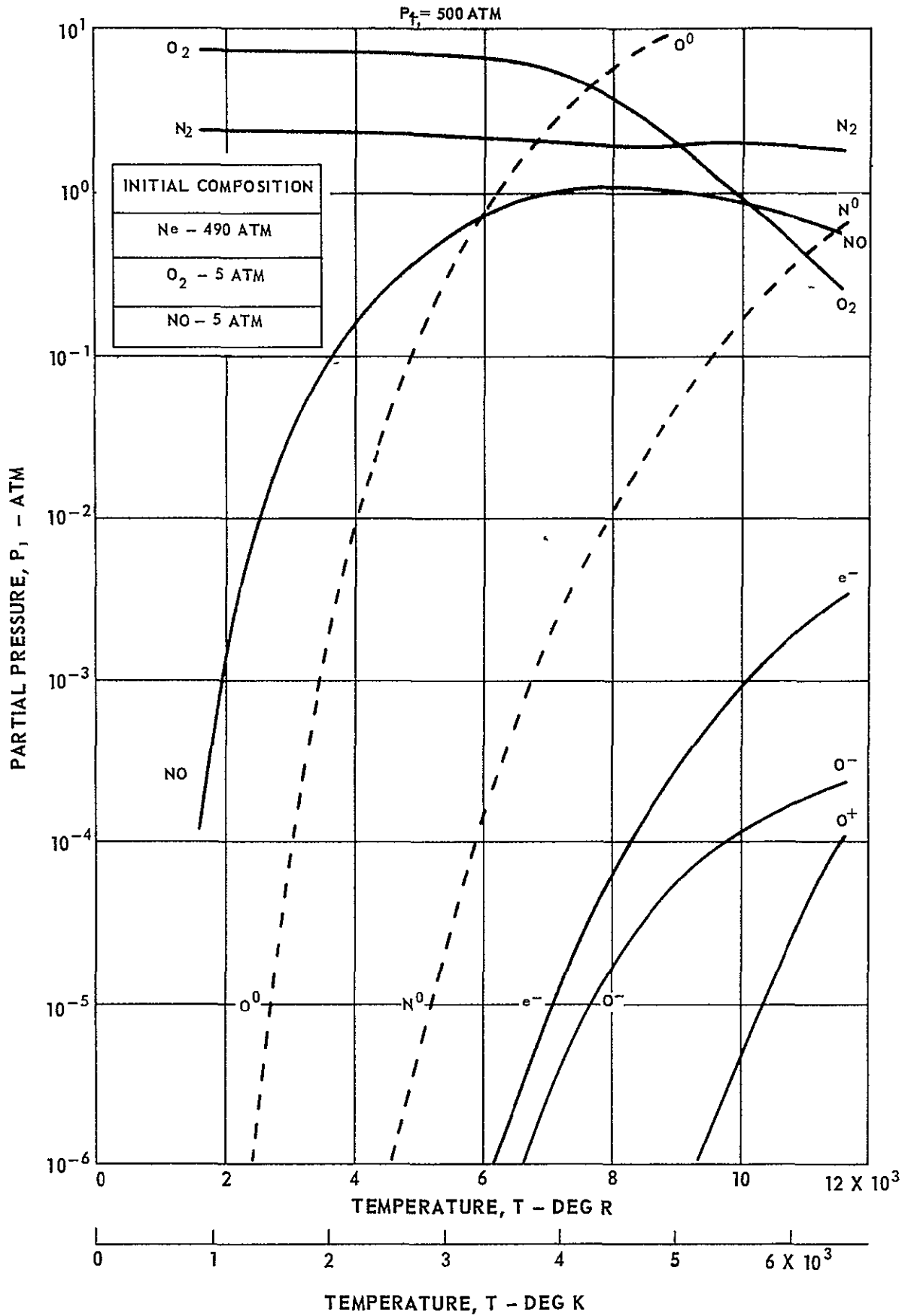
SPECTRAL ABSORPTION COEFFICIENT OF NEON AT VARIOUS TEMPERATURES  
AT A TOTAL PRESSURE OF 750 ATM

IONIZATION POTENTIALS	
Ne <sup>0</sup>	21 559 eV (173,919 CM <sup>-1</sup> )
Ne <sup>+</sup>	41 07 eV (331,316 CM <sup>-1</sup> )





COMPOSITION OF A NEON, NITRIC OXIDE, OXYGEN MIXTURE  
AS A FUNCTION OF TEMPERATURE



SPECTRAL ABSORPTION COEFFICIENT OF NITRIC OXIDE - OXYGEN SEED MIXTURE

