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EFFECT OF DIFFERENCE BETWEEN GROUP
CONSTANTS PROCESSED BY CODES TIMS
AND ETOX ON INTEGRAL QUANTITIES

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Effect of Difference between Group Constants

Processed by Codes TIMS and ETOX on Integral Quantities

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Group constants of ^{235}U , ^{238}U , ^{239}Pu , ^{240}Pu and ^{241}Pu have been produced with the processing code TIMS using the evaluated nuclear data of JENDL-1. The temperature and composition dependent self-shielding factors have been calculated for the two cases with and without considering mutual interference resonant nuclei.

By using the group constants set produced by the TIMS code, the integral quantities, i.e. multiplication factor, Na-void reactivity effect and Doppler reactivity effect, are calculated and compared with those calculated with the use of the cross sections set produced by the ETOX code to evaluate accuracy of the approximate calculation method in ETOX. There is much difference in self-shielding factor in each energy group between the two codes. For the fast reactor assemblies under study, however, the integral quantities calculated with these two sets are in good agreement with each other, because of eventual cancellation of errors.

Keywords ; Group Constant Sets, Uranium, Plutonium, ETOX Code, TIMS Code, Accuracy of Calculation Method, JENDL-1 Nuclear Data, Self-shielding Factors, Multiplication Factor, Doppler Effect, Na-void Effect.

プロセスコード TIMS と ETOX で計算した炉定数間の差の積分量への影響

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^{235}U , ^{238}U , ^{239}Pu , ^{240}Pu と ^{241}Pu の群定数を評価済み核データ JENDL - 1 を用いて、プロセスコード TIMS でもって作成した。その際温度と組成依存の自己遮蔽因子を、異核種間の干渉効果を考慮した場合と考慮しない場合について計算した。

一方、ETOX コードで用いられている近似計算法の精度を評価するために、TIMS と ETOX で作成した群定数を用いて積分量；実効増倍係数、ナトリウム・ボイド及びドップラー反応効果を計算し、それらの結果を比較した。自己遮蔽因子間にはかなりの差が各エネルギー群で見られるが、ここで考えられた高速臨界集合体については、これら 2 つのセットで計算された積分量は互いに良く一致している。この一致は誤差の偶然的な打ち消し合いのためである。

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1. Introduction

Nuclear design calculations and analyses of experiments of fast reactors are usually performed by the use of multigroup transport or diffusion theory codes. The multigroup calculations are often based on the concept of multigroup constants set such as the ABBN⁽¹⁾ or JAERI-Fast set.⁽²⁾⁽³⁾⁽⁴⁾ The principal advantage of multigroup constant method is that the calculation of integral quantities can be made by using the same set of multigroup constants for the various reactors with different compositions and sizes. Consequently, there has been arisen a need to develop a computer code which economically and conveniently calculates these group constants using an updated nuclear data file. For this purpose, some processing codes such as SUPERTOG,⁽⁵⁾ PROF-GROUCH-G,⁽⁶⁾ PROF-GROUCH-G-II,⁽⁷⁾ ETOX⁽⁸⁾ and TIMS,⁽⁹⁾ were developed. However, calculational methods of group constants used in these codes are different. Especially, the effective cross sections in resonance energy region are calculated by using various methods. The difference of these methods affects the final results of integral quantities in neutronics calculation of fast reactors. It is essential in reactor calculation to well comprehend the effect of these different methods on integral quantities.

In the present report, we study the influence of two different group cross sections sets on some integral quantities: One was produced^(*) by using the processing codes PROF-GROUCH-G-II and ETOX, and another was produced by PROF-GROUCH-G-II and TIMS. The evaluated nuclear data of JENDL-1⁽¹⁰⁾ were used in these calculations. The codes ETOX and TIMS calculate the group cross sections of heavy resonant nuclides in the

(*) The calculation of group constants was performed by the Reactor Group Constants Working Group of JNDC.

resonance energy regions. In the two sets, the group constants of light and medium nuclei and of heavy nuclei in smooth region above resonance energy have been calculated by the PROF-GROUCH-G-II code. Thus, the effects of different methods between TIMS and ETOX on integral quantities can be studied by performing the neutronics calculation using two group constants sets.

In the ETOX code, the effective group cross sections are calculated by assuming the constancy of collision density. Moreover, the isolated narrow resonance approximation is used in the unresolved resonance region. On the other hand, in order to avoid the calculational errors⁽¹¹⁾ caused from these approximations, the TIMS code calculates the effective cross sections by directly solving the neutron slowing down equation using the recurrence formula for slowing down source. For this purpose, the TIMS code generates a ladder of resonance levels and parameters by using Monte Carlo method in the unresolved resonance region.

The difference between TIMS and ETOX methods are described in detail and the self-shielding factors calculated with two codes are compared in Chapter 2. Some integral quantities, such as effective multiplication factors and Doppler reactivity worths were calculated by using these different group constants sets, and compared with the experimental results. The comparisons of these results are given in Chapter 3.

The group constants of five nuclides, ^{235}U , ^{238}U , ^{239}Pu , ^{240}Pu and ^{241}Pu calculated by the TIMS code are shown in Appendix.

2. Production Method for Group Constants of Heavy Resonant Nuclei in Resonance Energy Region

The effective group cross sections are defined by the following equation:

$$\tilde{\sigma}_{x,i} = \frac{\int_{\Delta E_i} \sigma_x(E,T) \phi(E) dE}{\int_{\Delta E_i} \phi(E) dE}, \quad (1)$$

where $\sigma_x(E,T)$ is an energy and temperature dependent resonance cross section, the subscript x stands for capture, fission and elastic scattering reactions, ΔE_i the energy width of the considered group i and $\phi(E)$ the neutron flux. In the conventional method, the calculation of Eq.(1) is usually performed by assuming the constant collision density, that is,

$$\phi(E) = 1 / [E \Sigma_t(E)], \quad (2)$$

where $\Sigma_t(E)$ the macroscopic total cross section. The group constants of the ABBN set were calculated under this assumption. The ETOX code also calculates the group constants following the assumption. Moreover, the isolated narrow-resonance approximation is used for unresolved resonance region. With this approach, the mutual interference effect between resonances of different nuclides and self-overlapping effect are ignored. Furthermore, the self-shielding of elastic removal cross section is assumed to be neglected.

On the other hand, the TIMS code calculates the effective cross section by solving numerically the neutron slowing down equation using the recurrence formula for slowing down source. The neutron slowing down equation in an infinite homogeneous system can be expressed as

$$\Sigma_t(u)\phi(u) = \sum_k S_k(u) = \sum_k \frac{1}{1-\alpha_k} \int_{u-\varepsilon_k}^u e^{u'-u} \sum_{sk}(u')\phi(u')du' , \quad (3)$$

$$\alpha_k = (A_k - 1)^2 / (A_k + 1)^2 , \quad (4)$$

$$\varepsilon_k = -\ln \alpha_k , \quad (5)$$

where the subscript k stands for the nuclear species and $\phi(u)$ the neutron spectrum at lethargy u. On an ultrafine group representation, the slowing down source is easily shown to be written as ⁽⁴⁾

$$S_k^m = S_k^{m-1} + \frac{\Delta u_m}{1+\alpha_k} (F_k^m - F_k^{m-L_k^m}) , \quad (6)$$

$$F_k^m = \int_{\Delta u_m} \sum_{sk}(u)\phi(u)du = \sum_{sk}^m \phi^m , \quad (7)$$

$$F_k^{m-L_k^m} = \int_{u_0 - \varepsilon_k}^{u_0 - \varepsilon_k} \sum_{sk}(u')\phi(u')du' , \quad (8)$$

where u_0 is the lower bound of the (m-1)-th fine group and L_k^m an integral number of groups which corresponds to the maximum lethargy gain by elastic collision.

The neutron spectrum on an ultrafine group m can be calculated numerically from Eqs.(3) and (6), when the Doppler broadened microscopic cross sections are provided on ultrafine group structure. Then, the effective group cross sections for capture, fission and elastic scattering are given by

$$\tilde{\sigma}_x = \frac{\sum_x \sigma_x^m \phi^m}{\Delta E} / \frac{\sum \phi^m}{\Delta E} , \quad (9)$$

and the total and elastic removal cross sections are defined, respectively by

$$\tilde{\sigma}_t = \frac{\sum \phi^m}{\Delta E} - \frac{\sum \phi^m}{\Delta E} \cdot \frac{\sum \phi^m}{\sum \frac{\phi^m}{\Delta E \sigma_{t,1}^m + R_0 \sigma_{t,2}^m + \sigma_0}} \quad (10)$$

and

$$\tilde{\sigma}_{er} = \frac{\Delta E' \sum \sigma_n^m \phi^m \frac{E_L - \alpha E_m}{(1-\alpha)E_m}}{\sum \phi^m \Delta E} \quad , \quad (11)$$

where $\Delta E' = E_L/\alpha - E_L$, $\sigma_{t,1}$ the total cross section of the resonant nuclei under consideration, $\sigma_{t,2}$ that of the other resonant material, R_0 the atomic density ratio of the nuclei (2) to (1), E_L the lower group energy boundary of integration interval ΔE and σ_0 the admixture background scattering cross section of Bondarenko's type.

The numerical calculations were performed by assuming the average moderator mass $A_k = 30$.⁽³⁾ The resulting group constants for ^{235}U , ^{238}U , ^{239}Pu , ^{240}Pu and ^{241}Pu are shown as tables of the JAERI Fast set format in Appendix.

The self-shielding factors calculated with the TIMS and ETOX codes are compared for some typical energy groups in Figs.1.0 ~ 5.8.

Figures 1.0 ~ 1.10 show the comparison of the self-shielding factors for fission cross sections of ^{235}U . The differences between the self-shielding factors obtained by TIMS and ETOX are considerably observed from these figures. The composition dependence of the self-shielding factors calculated by the TIMS code is larger than that obtained by the ETOX code, as seen from Fig.1.0. The temperature coefficients of the self-shielding factors are also different between the results of TIMS and ETOX. For the

ETOX results, especially, the temperature dependence is negligibly small in the high energy groups. Furthermore it should be noticed that the magnitude of the temperature coefficient of self-shielding factors changes between the TIMS and ETOX results according to the change in σ_0 -values. As seen from Fig.1.6, for example, the temperature dependence of self-shielding factors calculated by ETOX is larger than the one obtained by TIMS for $\sigma_0 = 10$ (barns), but the temperature dependence becomes inversely small for $\sigma_0 = 1000$ (barns) in the high energy groups.

In Figs.2.0 ~ 2.7, the self-shielding factors for capture cross sections of ^{238}U are compared for several energy groups. The temperature dependence of self-shielding factors calculated by ETOX is larger than the one by TIMS for the case of $\sigma_0 = 10$ barns in the unresolved energy groups. This tendency can be seen also for the case of $\sigma_0 = 1000$ barns.

This fact differs from the result described above for ^{235}U , which may be attributed to the difference in the expression of resonance cross section. In the TIMS code, Doppler broadened cross sections of ^{238}U and ^{240}Pu were calculated by a multilevel formula⁽¹²⁾ to avoid unreasonable result produced by adding the floor correction cross sections to the Breit-Wigner single-level expression, as shown in Fig.6.

In Figs.3.0 ~ 3.9, the self-shielding factors for fission cross sections of ^{239}Pu are compared for several energy groups. The comparison results can be similarly summarized to those observed for ^{235}U mentioned above.

In Figs.4.0 ~ 4.5 and Figs.5.0 ~ 5.8, the self-shielding factors of ^{240}Pu and ^{241}Pu are compared for several energy groups, respectively. It is observed also for this case that the difference between the self-shielding factors calculated with the two different methods are remarkable and each method gives a different temperature dependence of self-shielding

factors.

In the next chapter, thus, we study the effects of these differences between the self-shielding factors calculated with TIMS and ETOX codes on the integral quantities in fast reactor system.

In Figs.7 ~ 18, the Doppler broadened cross sections of ^{238}U and ^{239}Pu calculated with the TIMS code are shown for several energy ranges. The change of resonance cross sections broadened by temperature raising from 300 °K to 900 or 2100 °K can be intuitively known for the resolved and unresolved ranges from these figures.

3. Comparison of Integral Quantities Calculated by Two Group Cross Section Sets Obtained from TIMS and ETOX Methods

The differences between two group constants sets obtained from the TIMS and ETOX codes exist only in the effective group cross sections of heavy nuclides in the resonance energy regions. As integral quantities to be studied, we selected the effective multiplication factor (k_{eff}), Doppler reactivity effect and sodium void reactivity effect. Main characteristics of fast reactor critical assemblies used for this comparison calculation of these integral quantities are summarized in Table 1. Assembly FCA-VI-1 is the physics mockup core of JOYO (Experimental Fast Reactor). The SEFOR assembly is the testing core for both static power reactivity and rapid super-prompt-critical reactivity measurements. In the present analysis, the experimental isothermal Doppler coefficient was calculated with the use of the benchmark specification model.⁽¹³⁾ The assemblies, ZPPR-2 and ZPR-6-7 are the demonstration fast reactor benchmark cores to provide physics data necessary for LMFBR design.

The neutronics calculations of the integral quantities were performed with the use of diffusion theory code, DOPP2D⁽¹⁴⁾ using two group constants sets of JENDL-TIMS and JENDL-ETOX with the 70 group structure.

3.1 Effective Multiplication Factor

The effective multiplication factors were calculated with the two-dimensional R-Z homogeneous model. The difference between JENDL-ETOX and JENDL-TIMS is very small and below about 0.2 %, as shown in Table 2. Hence, the difference between the two calculational methods for the group constants may be negligibly small for the k_{eff} calculation.

3.2 Sodium Void Reactivity Effect

The experimental results of sodium void reactivity effect in ZPPR assembly 2 have been analysed with one-dimensional spherical homogeneous model. The sodium-voided zone consists of 93 matrix positions with all voided 12 inches each half core. In the present analysis, some important corrections such as two-dimensional, heterogeneity and neutron streaming effects were not considered, because the present aim lies only in studying the influence of two different calculational methods for group constants on sodium void effect.

Table 3 shows the comparison of the sodium void reactivity separated to each component term. The difference between JENDL-TIMS and JENDL-ETOX is negligible small for the total reactivity, though the difference by about 11 % is observed for " $v\Sigma_f$ " component term.

3.3 Doppler Reactivity Effect

The temperature dependence of the group cross sections calculated by the two different codes, TIMS and ETOX, has been tested from the analyses of Doppler experiments performed in ZPPR-2 and SEFOR assemblies. The experiment in ZPPR-2 was the sample Doppler reactivity measurement for the natural UO_2 (NUO_2), and in SEFOR assembly was the measurement of the isothermal Doppler coefficient for the full core.

The results analysed for the NUO_2 sample Doppler experiment in ZPPR assembly 2 are shown in Fig.19. The calculation was performed with the one-dimensional first-order perturbation theory. The temperature dependence of group cross sections of ^{238}U can be tested from this experimental analysis. Both the results calculated with the use of JENDL-TIMS and -ETOX are larger than the experimental values by 10 ~ 14 %. The results of JENDL-TIMS and -ETOX are in a very good agreement with each other, but

the values of ETOX are larger than those of TIMS by 1 ~ 2 %, although the comparison of the groupwise Doppler reactivity effect indicates remarkable discrepancies between the results of JENDL-TIMS and JENDL-ETOX. It is observed that JENDL-ETOX results are larger than JENDL-TIMS ones in the unresolved resonance region and reversely small in the resolved region. This tendency observed produces an accidental cancellation and gives a good agreement between the results of JENDL-TIMS and -ETOX for the total Doppler reactivity.

The results analysed for the Doppler reactivity measurement of the full core in SEFOR assembly are compared in Figs.20 and 21. This analysis was performed with the first-order perturbation theory using two-dimensional R-Z benchmark model. The results of JENDL-TIMS and -ETOX overestimate the experimental values by 19 % and 23 %, respectively. In both the results, the positive Doppler reactivity by fission component term is more than 30 % in comparison with the negative one by capture term. The difference in the fission component between JENDL-TIMS and -ETOX is remarkable as seen from Fig.21, and the result of JENDL-TIMS is larger than the one of JENDL-ETOX, especially in the unresolved region. This tendency differs from the results for the capture component as shown in Fig.20. The tendency for the capture term is similar to the results of the NUO_2 sample Doppler analysis indicated in Fig.19, because the total capture component contributes dominantly to the ^{238}U Doppler effect. These different tendencies for $v\Sigma_f$ - and Σ_c -terms between JENDL-TIMS and -ETOX can be comprehended by observing Figs.1.1 ~ 5.8. These figures show that the magnitude of the temperature dependence of the group cross sections calculated with two different methods differs between TIMS and ETOX results, depending on the σ_0 -values, as described in Chapter 2. For example, as seen from Fig.1.6, the temperature dependence of self-shielding factors calculated

by ETOX is larger than the one by TIMS for $\sigma_o = 10$ (barns), but the magnitude of the temperature dependence becomes inversely small for $\sigma_o = 1000$ (barns) in the unresolved resonance region. The values of σ_o for ^{238}U are commonly less than 100 barns and those for ^{239}Pu more than 100 barns for typical core compositions. However, the comparison of the total Doppler reactivities shows that the difference between the results of JENDL-TIMS and -ETOX is very small because of the eventual cancellation mentioned above.

4. Concluding Remarks

Some integral quantities, k_{eff} , Na-void reactivity and Doppler reactivity effects, were calculated by using the two different group cross sections sets, which were produced with the different methods of TIMS and ETOX codes. The calculated values were compared with each other and the results are summarized as follows: The values obtained from these two sets are in a good agreement with each other. However, as for the Doppler effect of the effective cross sections, the difference between the results of TIMS and ETOX depends strongly on the energy groups and the compositions. A good agreement between the results of the Doppler reactivity effects from JENDL-TIMS and -ETOX methods is considered to be due to the eventual cancellation. Hence, it cannot be concluded that the difference between the TIMS and ETOX methods to the Doppler effect is always negligibly small for any fast reactor systems. This remark will become more clear if the mutual interference effect⁽¹⁴⁾⁽¹⁵⁾ is taken into account for the calculation of the self-shielding factors in the TIMS method. Moreover, the present remark will be an interesting problem for neutronics calculations of heterogeneous composed core reactors, because each core region may produce different Doppler coefficient.

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Table 1. Main characteristics of fast reactor critical assemblies

Assembly	Fuel	R = Fertile/Fissile		Core volume(λ)
		Inner core	Outer core	
FCA-VI-1	Pu, U	4.3	3.0	223
SEFOR	Pu	4.3		558
ZPPR-2	Pu	6.5	4.0	2400
ZPR-6-7	Pu	6.5	6.5	3120
LMFBR*	Pu	8.7	6.6	5000

* Large sodium-cooled fast breeder reactor for an international comparison calculation.

Table 2 Effective multiplication factors calculated by the DOPP2D code for 2-dimensional R-Z model

Set Assembly	JENDL-TIMS	JENDL-ETOX	TIMS/ETOX
FCA-VI-1	0.99797	0.99819	0.9998
ZPPR-2 L-90(normal)	0.99135	0.99275	0.9986
ZPR-6-7 (H240)	0.99022	0.99134	0.9989
LMFBR (Na-in)	1.02372	1.02494	0.9988
SEFOR	1.02327	1.02332	0.9999

Table 3. Central Na-void reactivity by 70-group
1-dimensional 1-st order perturbation
calculation in ZPPR-2 Assembly

Set Component \n	JENDL-TIMS	JENDL-ETOX	Difference between TIMS and ETOX
ΔK by $\nu\Sigma_f$	-3.632 -5	-3.281 -5	-3.51 -6
ΔK by Σ_r	3.556 -3	3.340 -3	2.16 -4
ΔK by Σ_a	1.134 -3	1.112 -3	2.20 -5
ΔK by Σ_{in}	3.340 -3	3.326 -3	1.40 -5
ΔK by D	-4.884 -4	-4.826 -4	-5.80 -6
Total reactivity	7.505 -3	7.262 -3	2.43 -4

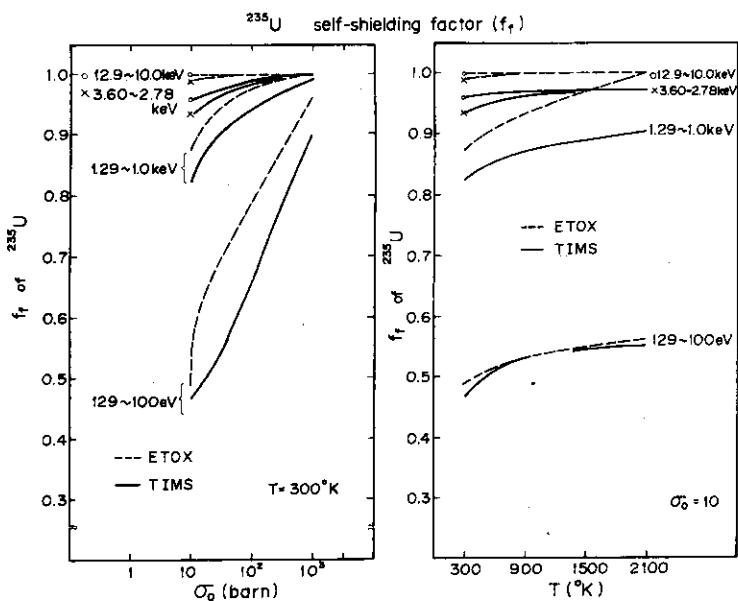


Fig. 1.0 Comparison of fission self-shielding factors of ^{235}U calculated with the TIMS and ETOX codes

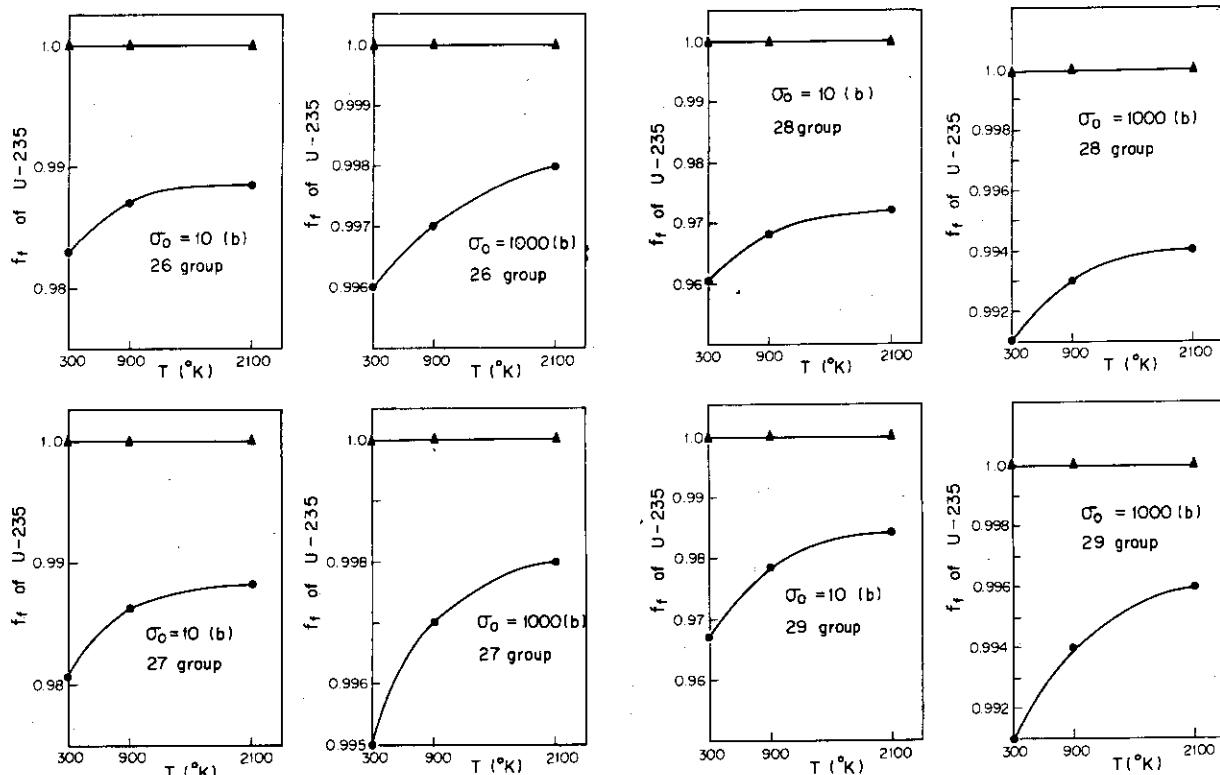


Fig. 1.1 Comparison of fission self-shielding factors of ^{235}U .
● : TIMS, ▲ : ETOX

Fig. 1.2 Comparison of self shielding factors of ^{235}U .
● : TIMS, ▲ : ETOX

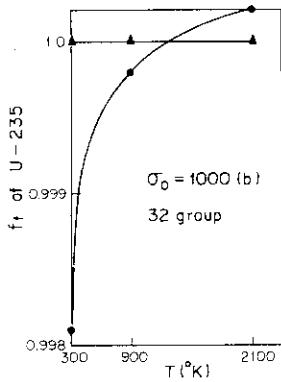
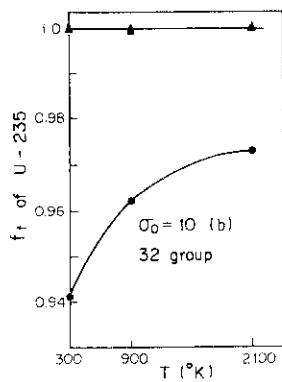
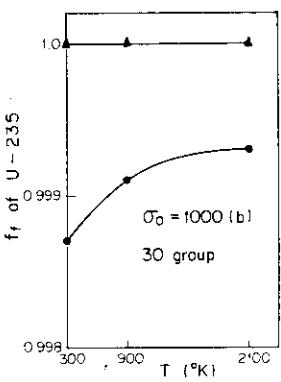
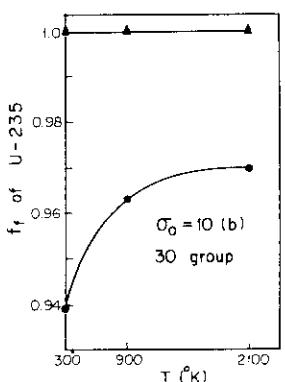


Fig. 1.3. Comparison of self-shielding factors of ^{235}U ,
 : TIMS, : ETOX

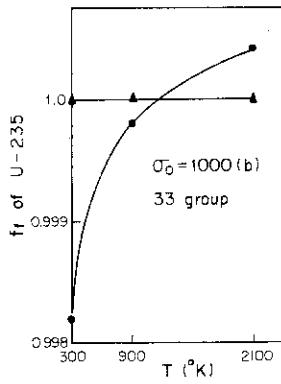
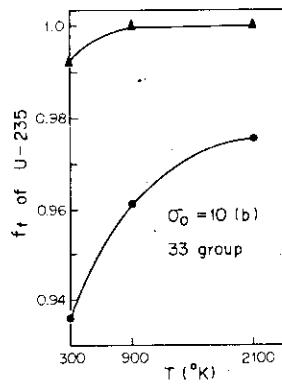
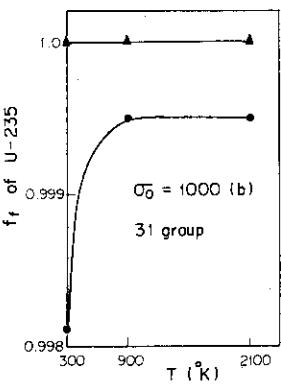
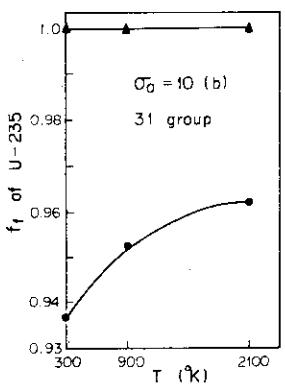


Fig. 1.4. Comparison of self-shielding factors of ^{235}U ,
 •—• : TIMS, ▲—▲ : ETOX

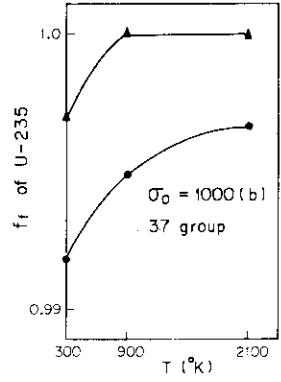
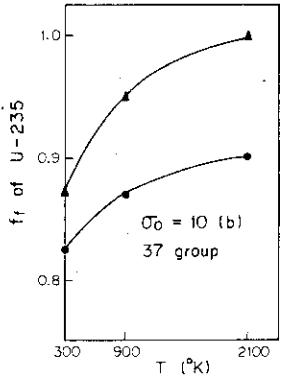
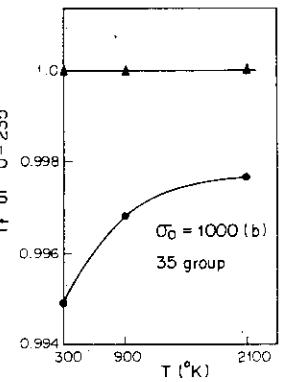
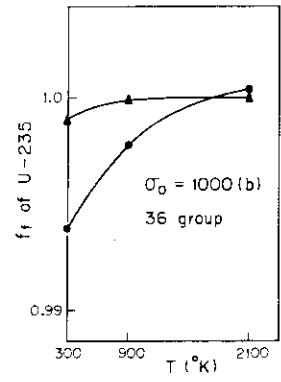
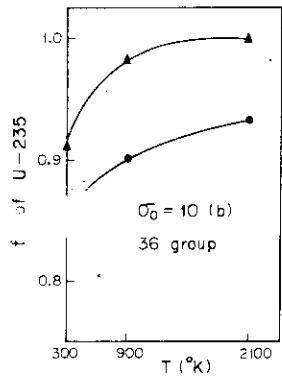
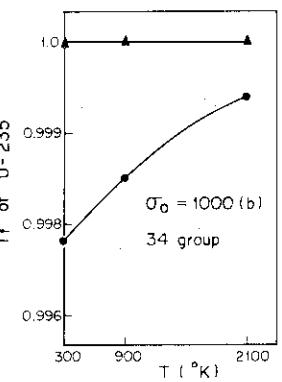
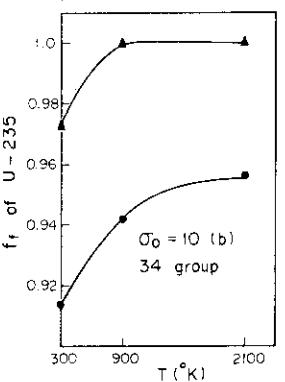
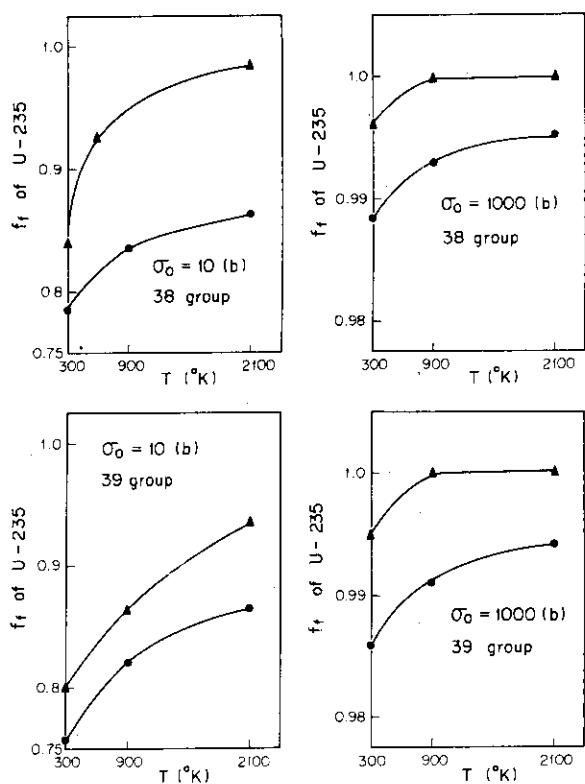
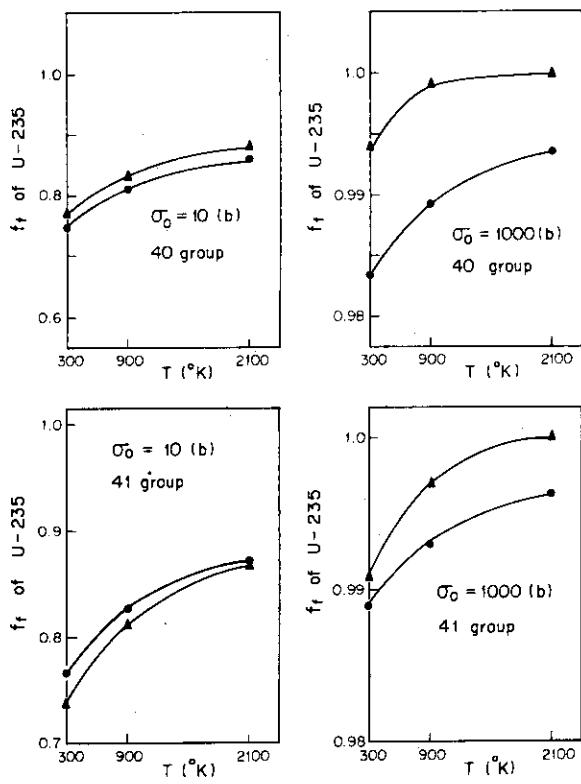
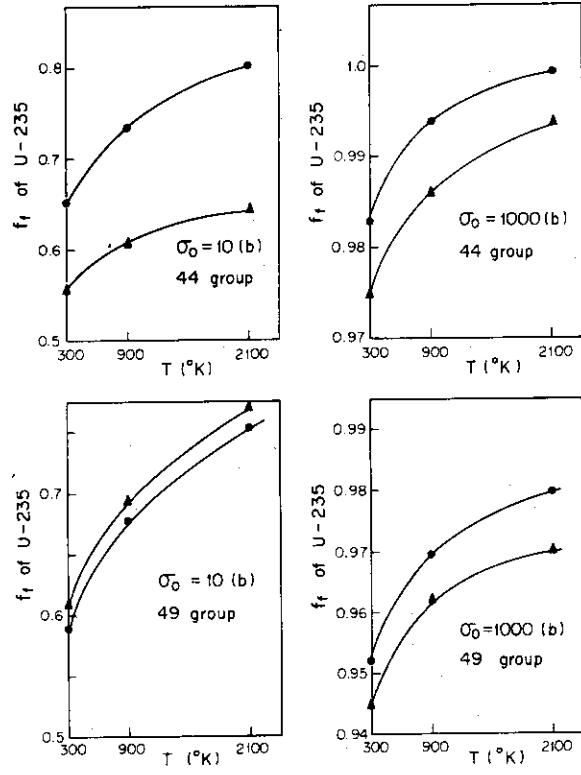
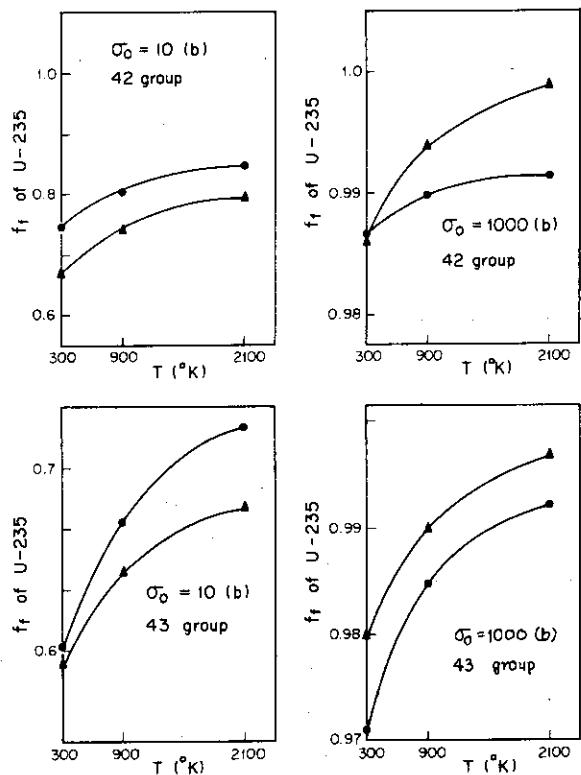


Fig. 1.5. Comparison of self-shielding factors of ^{235}U ,
 • : TIMS, ▲ : ETOX

Fig. 1.6 Comparison of self-shielding factors of ^{235}U ,
 • : TIMS, ▲ : ETOX

Fig. 1.7 Comparison of self-shielding factors of ^{235}U .Fig. 1.8 Comparison of self-shielding factors of ^{235}U .Fig. 1.9 Comparison of self-shielding factors of ^{235}U .Fig. 1.10 Comparison of self-shielding factors of ^{235}U .

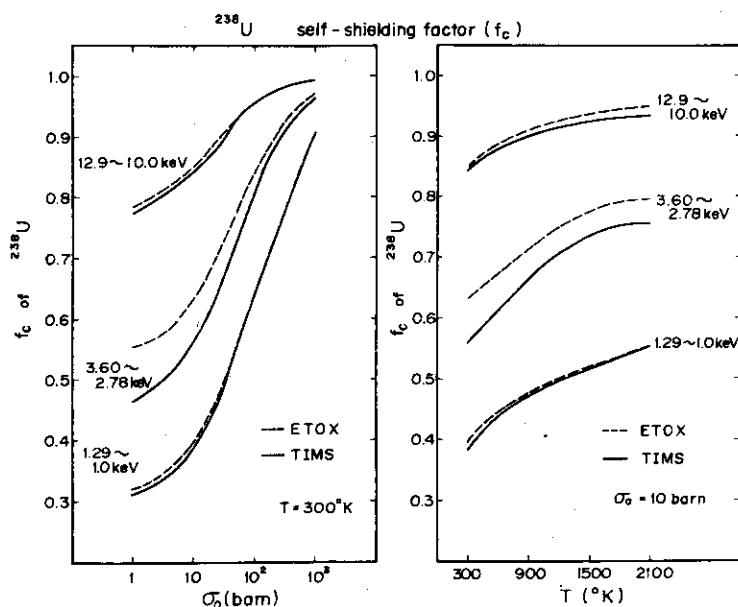


Fig. 2.0 Comparison of capture self-shielding factors of ^{238}U calculated with the TIMS and ETOX codes

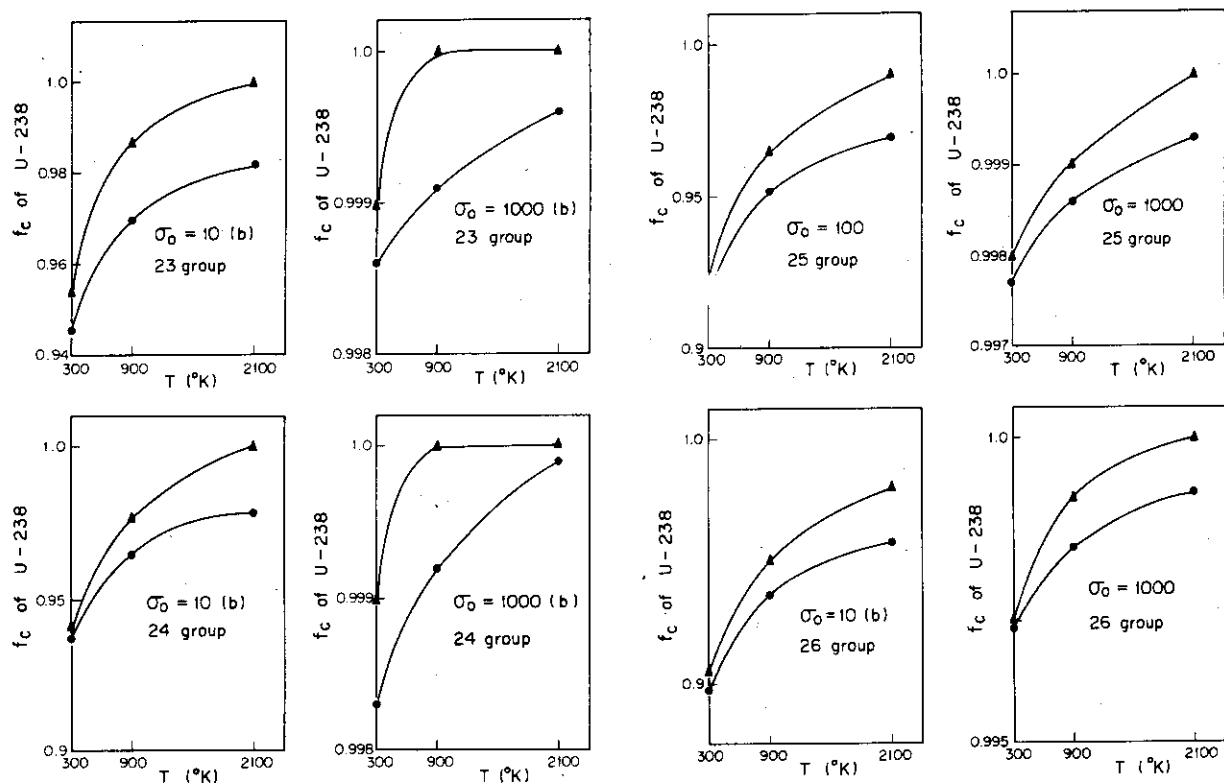


Fig. 2.1 Comparison of capture self-shielding factors of ^{238}U .
●—● : TIMS, ▲—▲ : ETOX

Fig. 2.2 Comparison of capture self-shielding factors of ^{238}U .
●—● : TIMS, ▲—▲ : ETOX

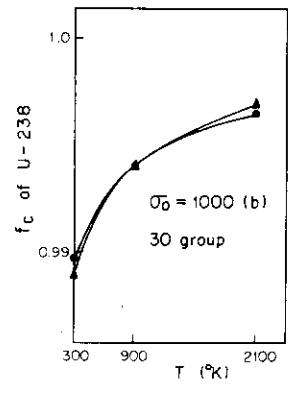
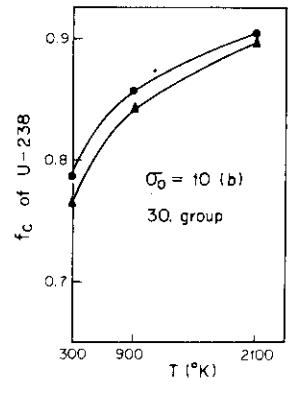
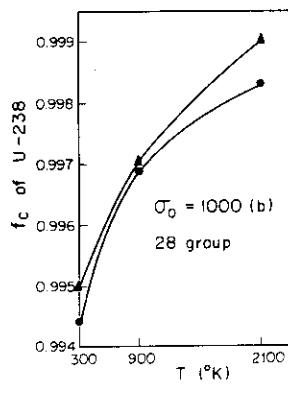
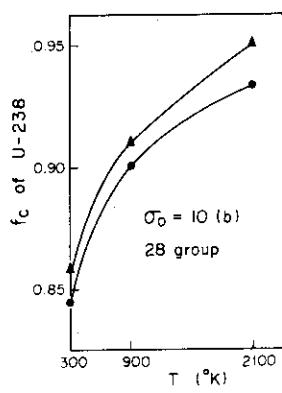
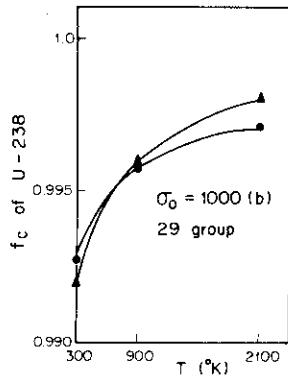
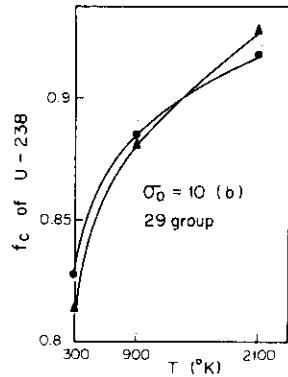
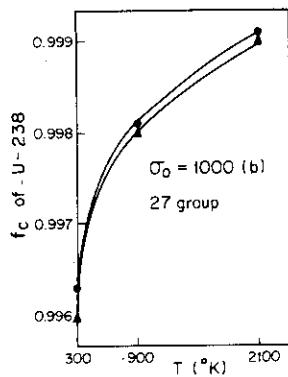
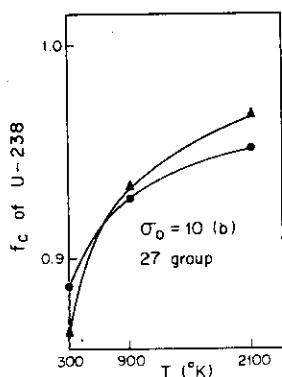


Fig. 2.3 Comparison of capture self-shielding factors of ^{238}U .
 ●—● : TIMS, ▲—▲ : ETOX

Fig. 2.4 Comparison of capture self-shielding factors of ^{238}U .
 ●—● : TIMS, ▲—▲ : ETOX

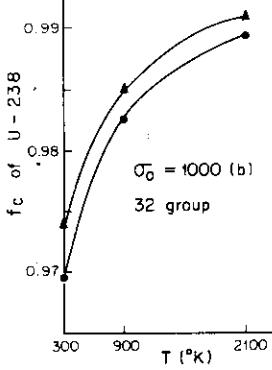
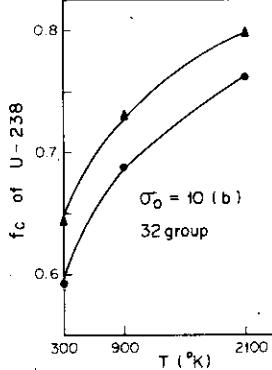
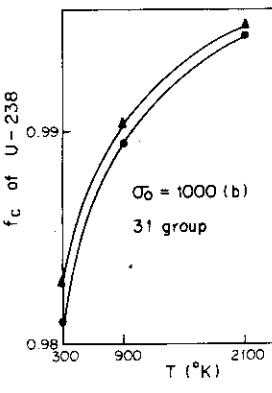
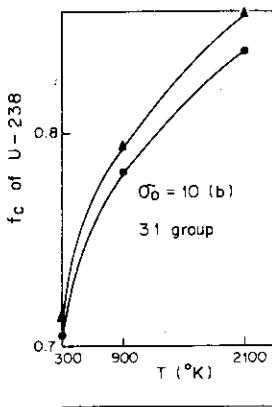


Fig. 2.5 Comparison of capture self-shielding factors of ^{238}U .
 ●—● : TIMS, ▲—▲ : ETOX

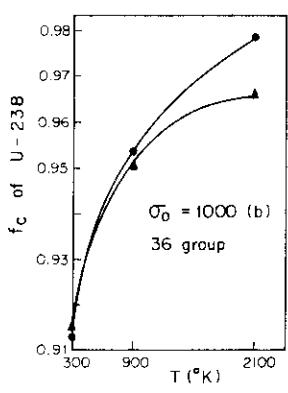
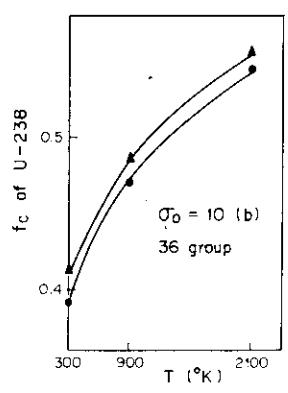
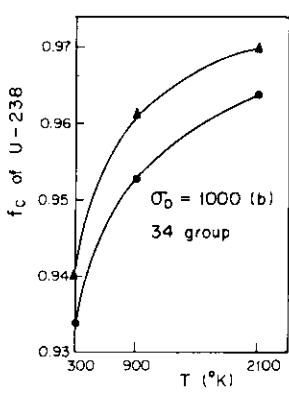
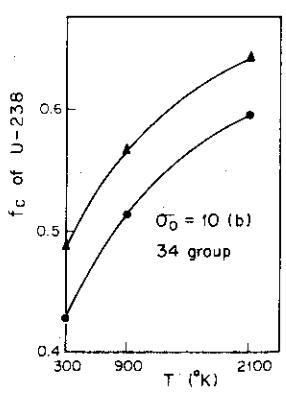
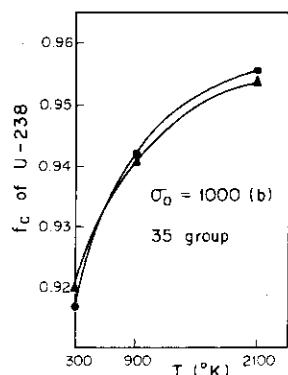
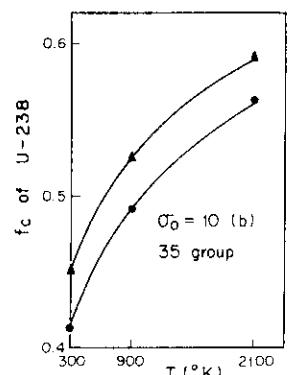
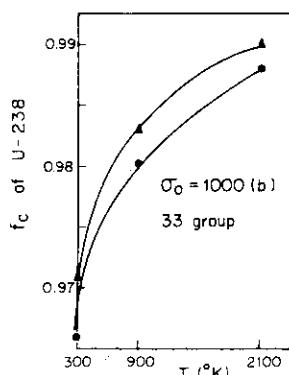
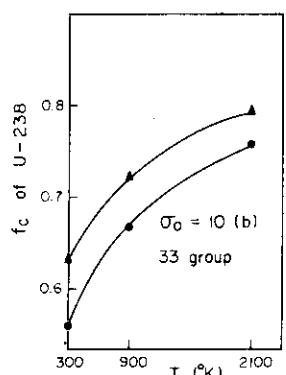


Fig. 2.6. Comparison of capture self-shielding factors of ^{238}U ,
—●— : TIMS, —▲— : ETOX

Fig. 2.7. Comparison of capture self-shielding factors of ^{238}U ,
—●— : TIMS, —▲— : ETOX

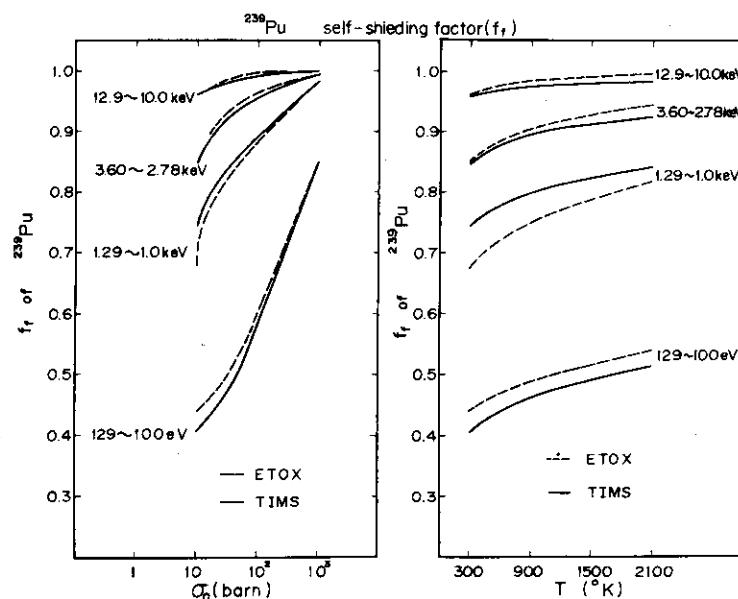


Fig. 3.0 Comparison of fission self-shielding factors of ^{239}Pu calculated with the TIMS and ETOX codes

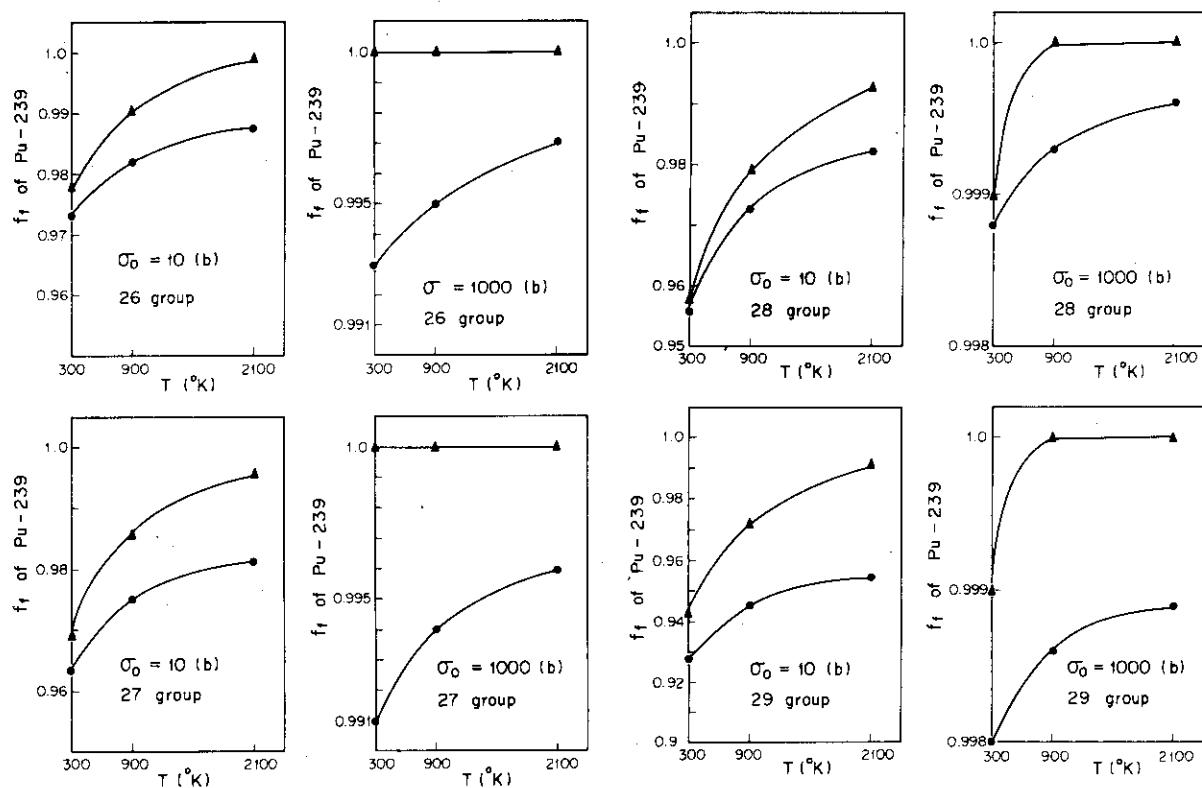


Fig. 3.1 Comparison of fission self-shielding factors of ^{239}Pu ,
● : TIMS, ▲ : ETOX

Fig. 3.2. Comparison of fission self-shielding factors of ^{239}Pu ,
● : TIMS, ▲ : ETOX

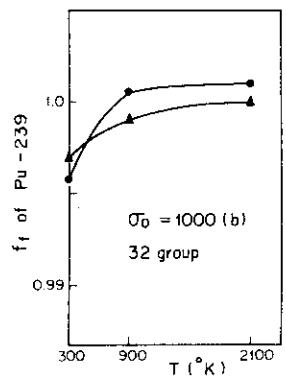
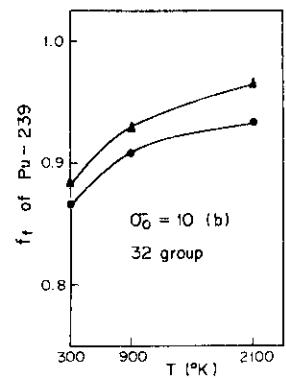
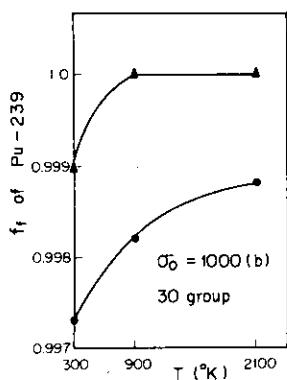
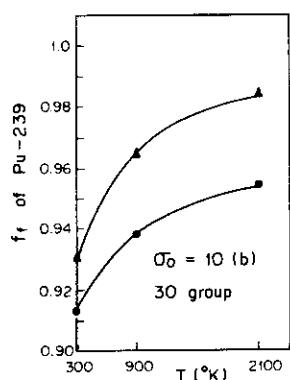


Fig. 3.3. Comparison of fission self-shielding factors of ^{239}Pu .
 ●—● : TIMS, ▲—▲ : ETOX

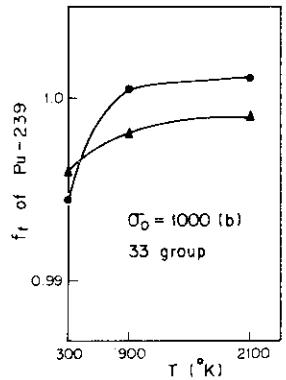
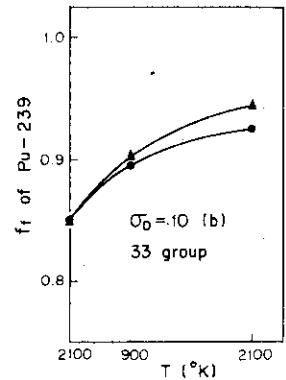
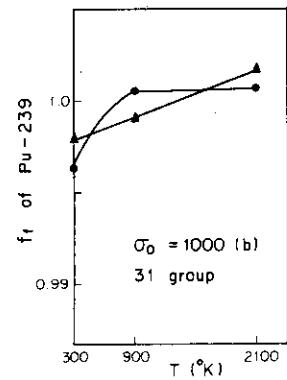


Fig. 3.4. Comparison of fission self-shielding factors of ^{239}Pu .

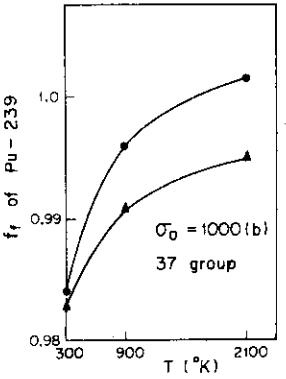
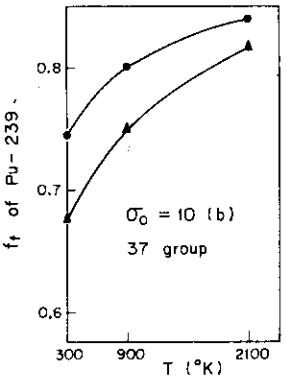
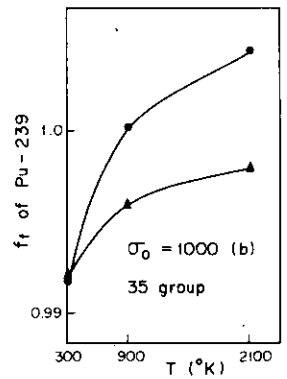
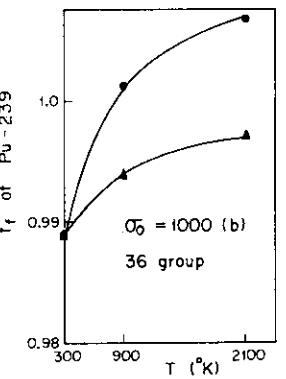
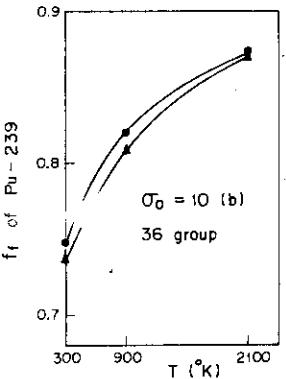
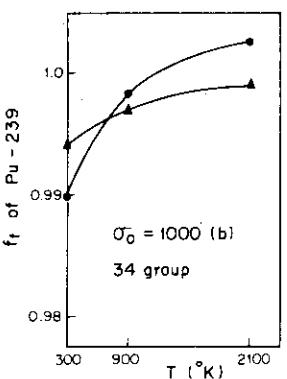
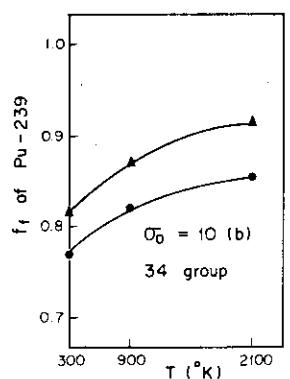


Fig. 3.5. Comparison of fission self-shielding factors of ^{239}Pu .

Fig. 3.6 Comparison of fission self-shielding factors of ^{239}Pu .
 ●—● : TIMS, ▲—▲ : ETOX

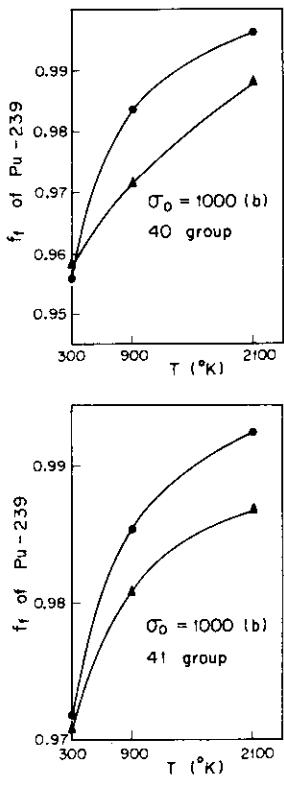
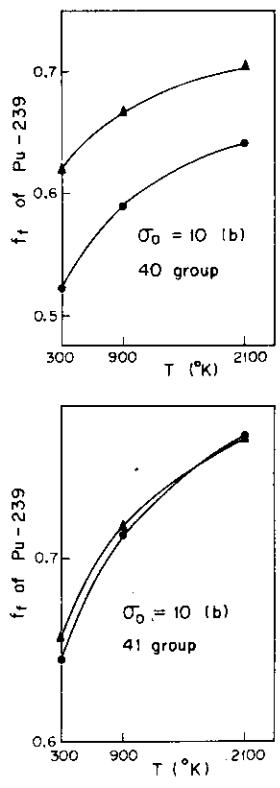
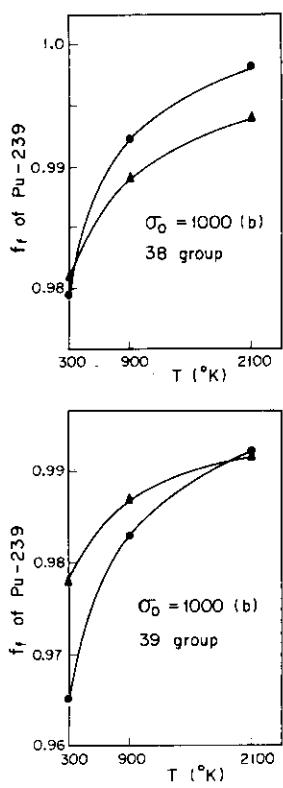
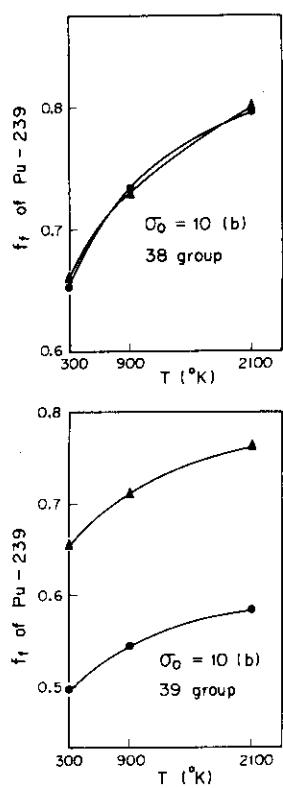


Fig. 3.7. Comparison of fission self-shielding factors of ^{239}Pu
—●— : TIMS, —▲— : ETOX

Fig. 3.8. Comparison of fission self-shielding factors of ^{239}Pu
—●— : TIMS, —▲— : ETOX

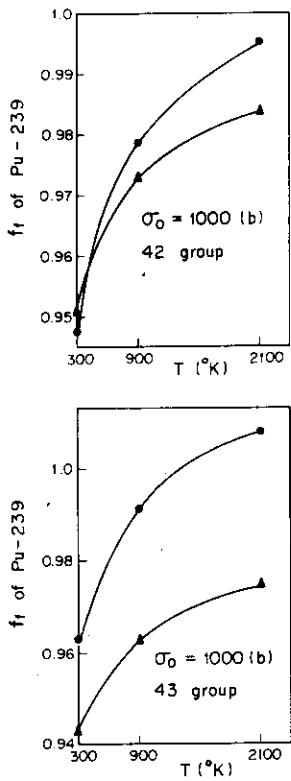
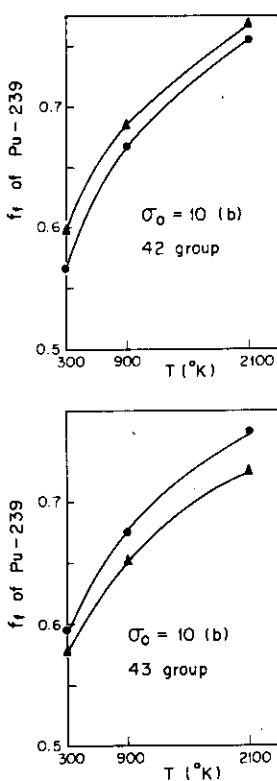


Fig. 3.9. Comparison of fission self-shielding factors of ^{239}Pu ,
—●— : TIMS, —▲— : ETOX

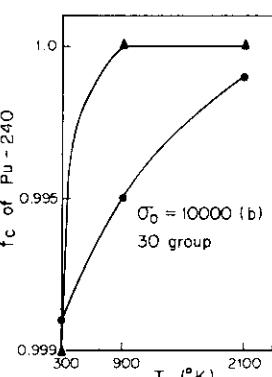
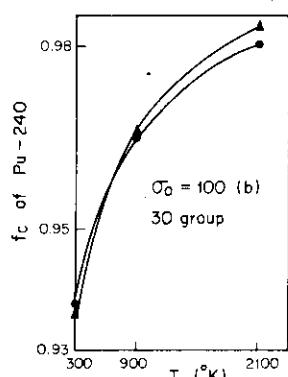
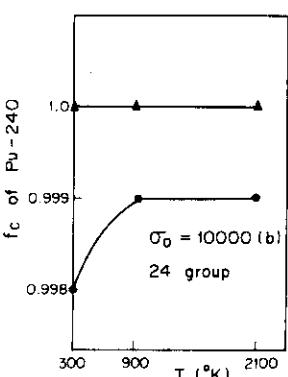
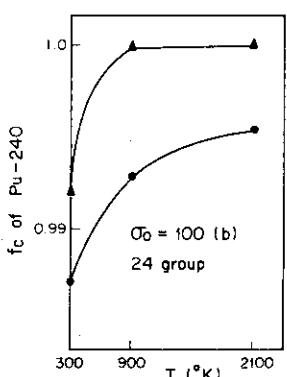
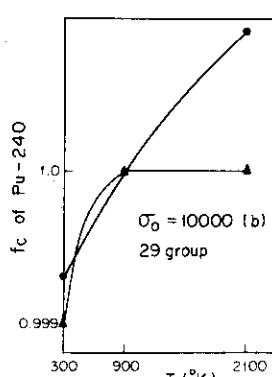
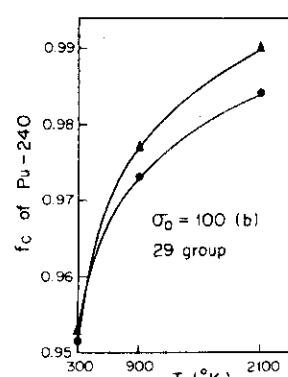
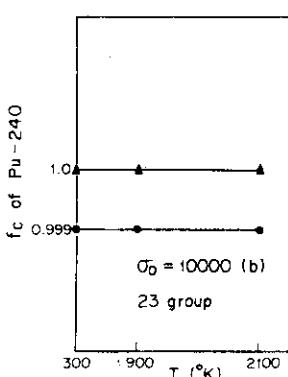
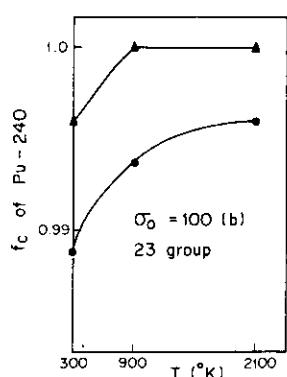


Fig. 4.1 Comparison of capture self-shielding factors of ^{240}Pu .
●—● : TIMS, ▲—▲ : ETOX

Fig. 4.2. Comparison of capture self-shielding factors of ^{240}Pu .
●—● : TIMS, ▲—▲ : ETOX

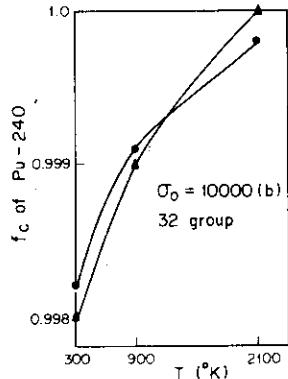
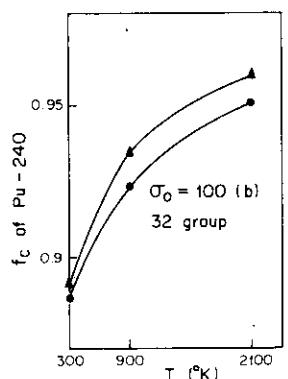
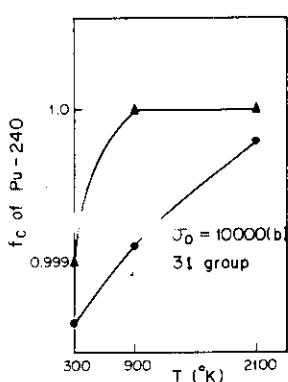
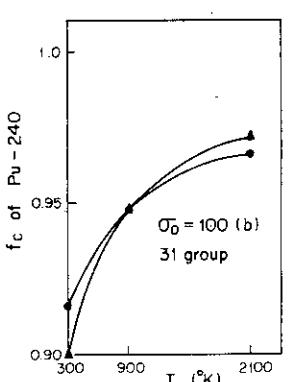


Fig. 4.3 Comparison of capture self-shielding factors of ^{240}Pu .
●—● : TIMS, ▲—▲ : ETOX

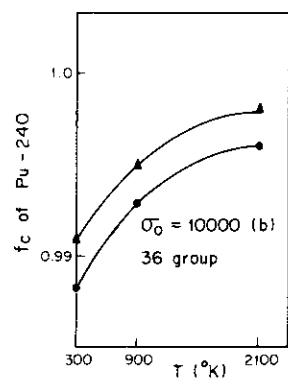
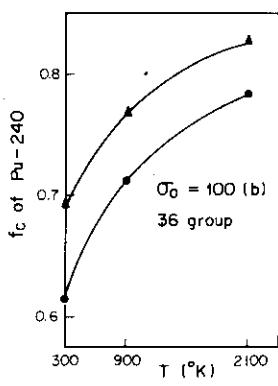
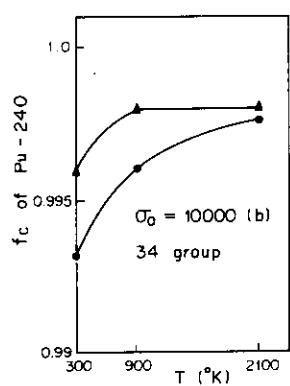
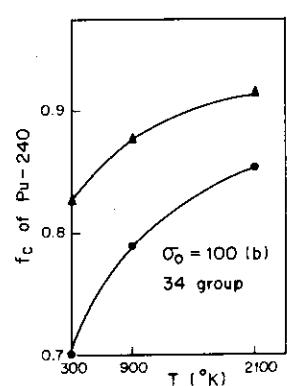
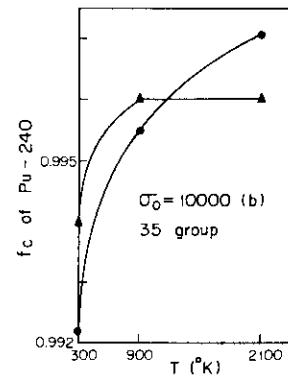
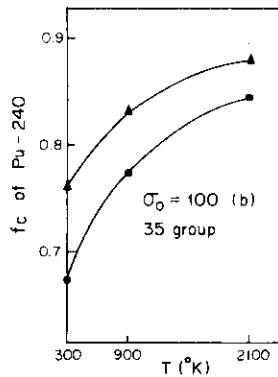
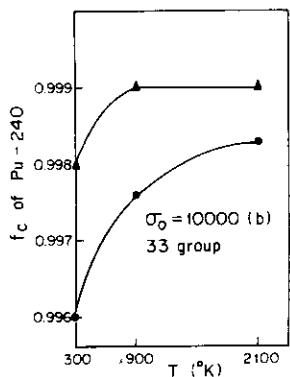
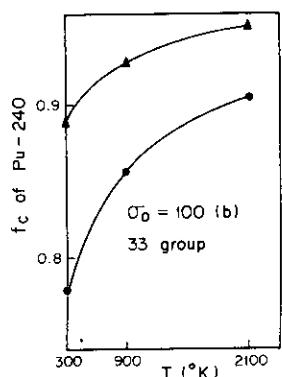


Fig. 4.4. Comparison of capture self-shielding factors of ^{240}Pu .
●—● : TIMS, ▲—▲ : ETOX

Fig. 4.5. Comparison of capture self-shielding factors of ^{240}Pu ,
●—● : TIMS, ▲—▲ : ETOX

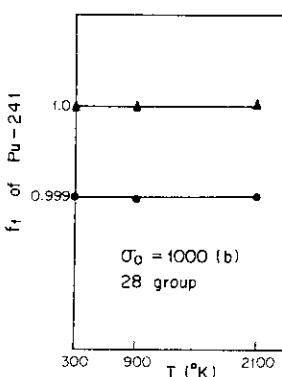
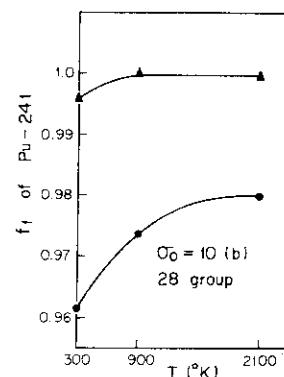
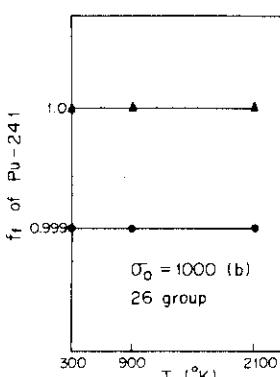
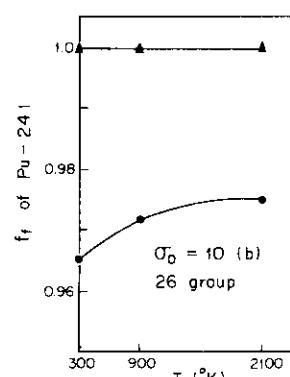


Fig. 5.1. Comparison of fission self-shielding factors of ^{241}Pu ,

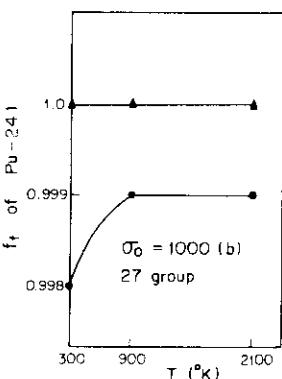
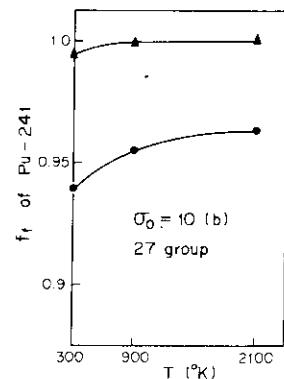
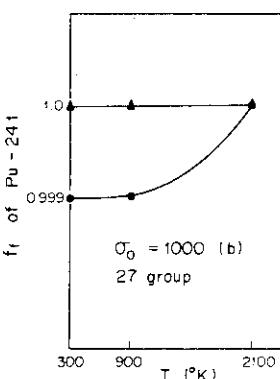
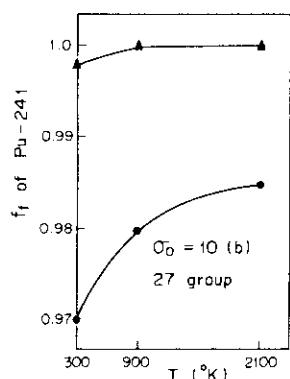


Fig 5.2 Comparison of fission self-shielding factors of ^{241}Pu .

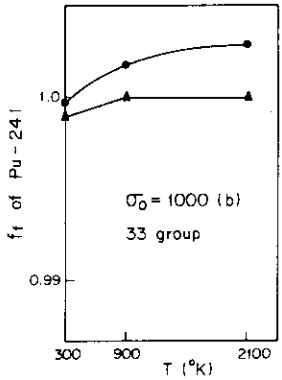
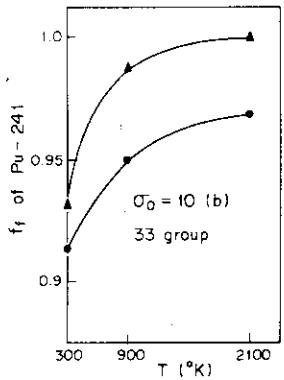
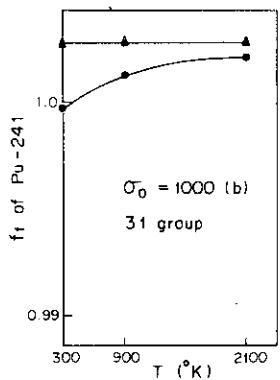
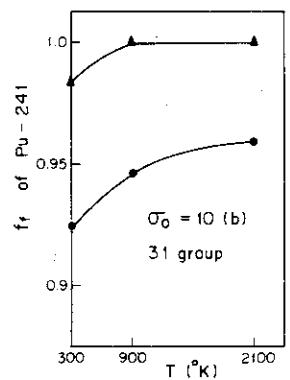
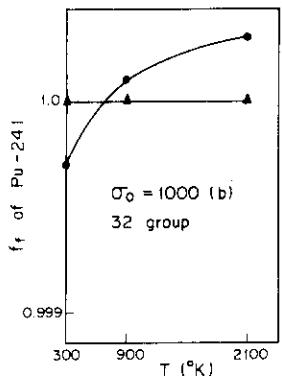
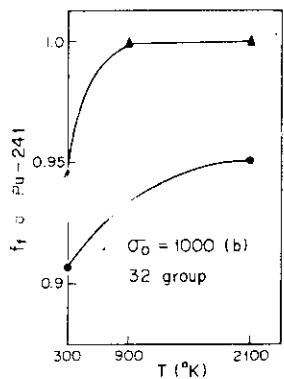
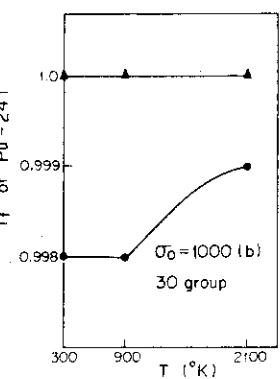
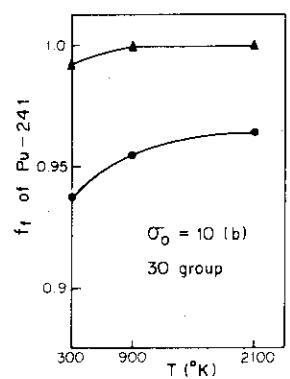


Fig. 5.3. Comparison of fission self-shielding factors of ^{241}Pu

Fig. 5.4. Comparison of fission self-shielding factor of ^{241}Pu ,
 •—• : TIMS, ▲—▲ : ETOX

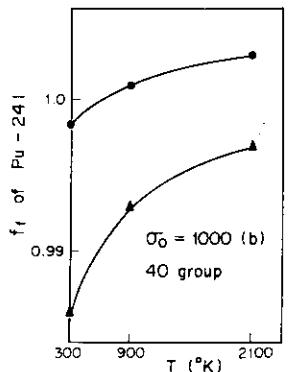
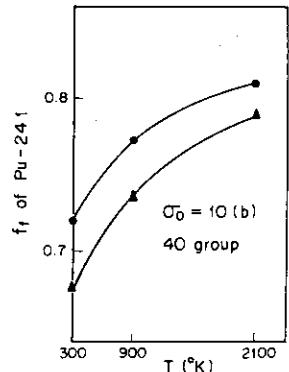
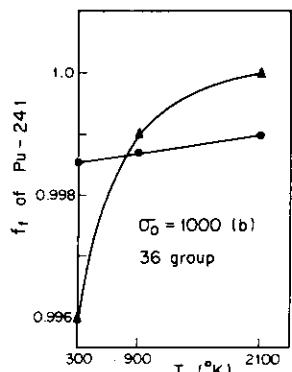
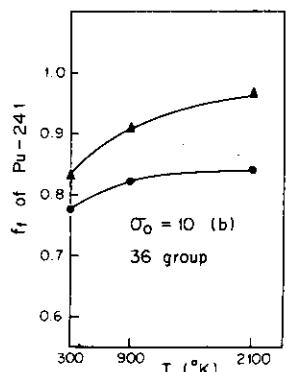


Fig. 5.5. Comparison of fission self-shielding factors of ^{241}Pu .
 ●—● : TIMS. ▲—▲ : ETOX

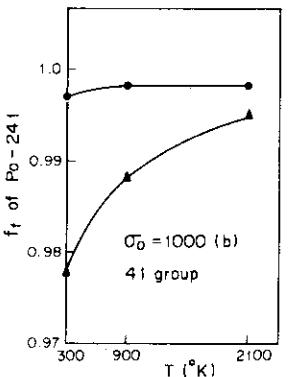
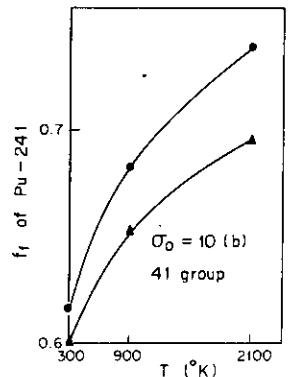
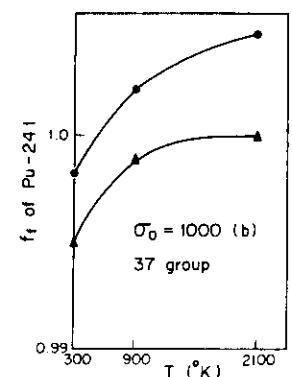
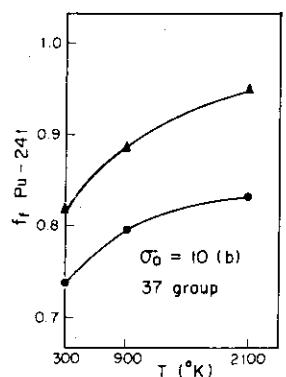


Fig. 5.6. Comparison of fission self-shielding factors of ^{241}Pu ,
 ●—● : TIMS, ▲—▲ : ETOX

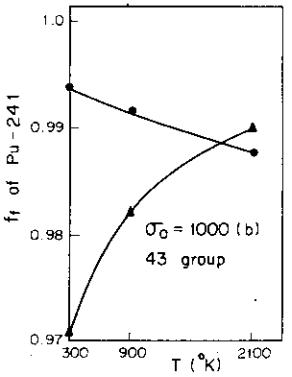
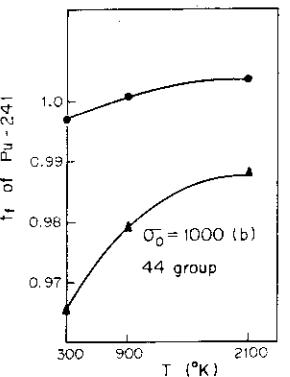
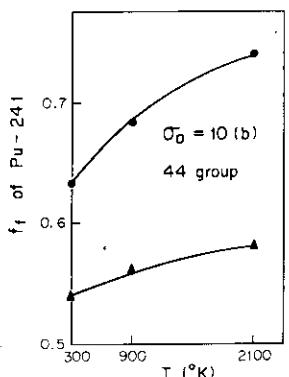
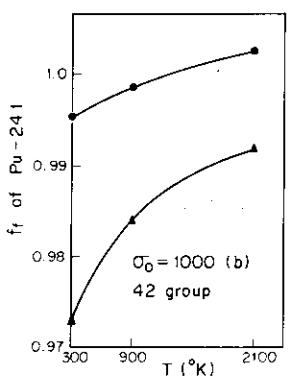
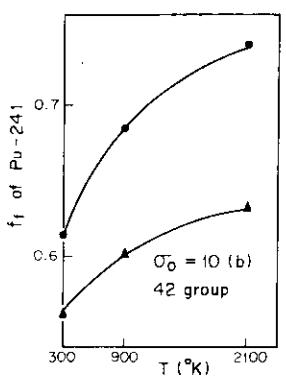


Fig. 5.7. Comparison of fission self-shielding factors of ^{241}Pu .
 ●—● : TIMS, ▲—▲ : ETOX

Fig. 5.8. Comparison of fission self-shielding factors of ^{241}Pu .
 •—• : TIMS, ▲—▲ : ETOX

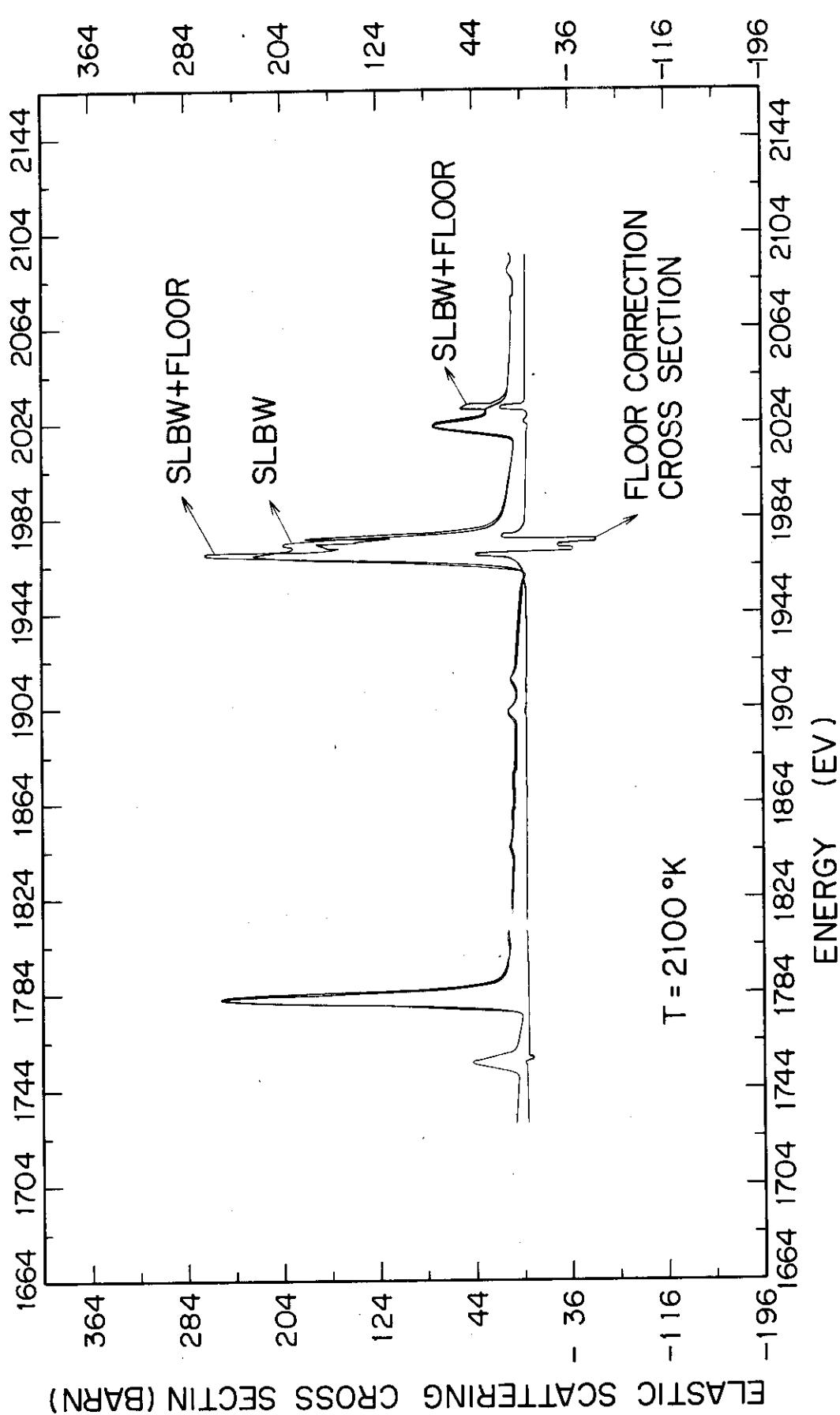


Fig. 6 Unreasonable Doppler-broadened cross sections caused by large values of floor correction cross sections

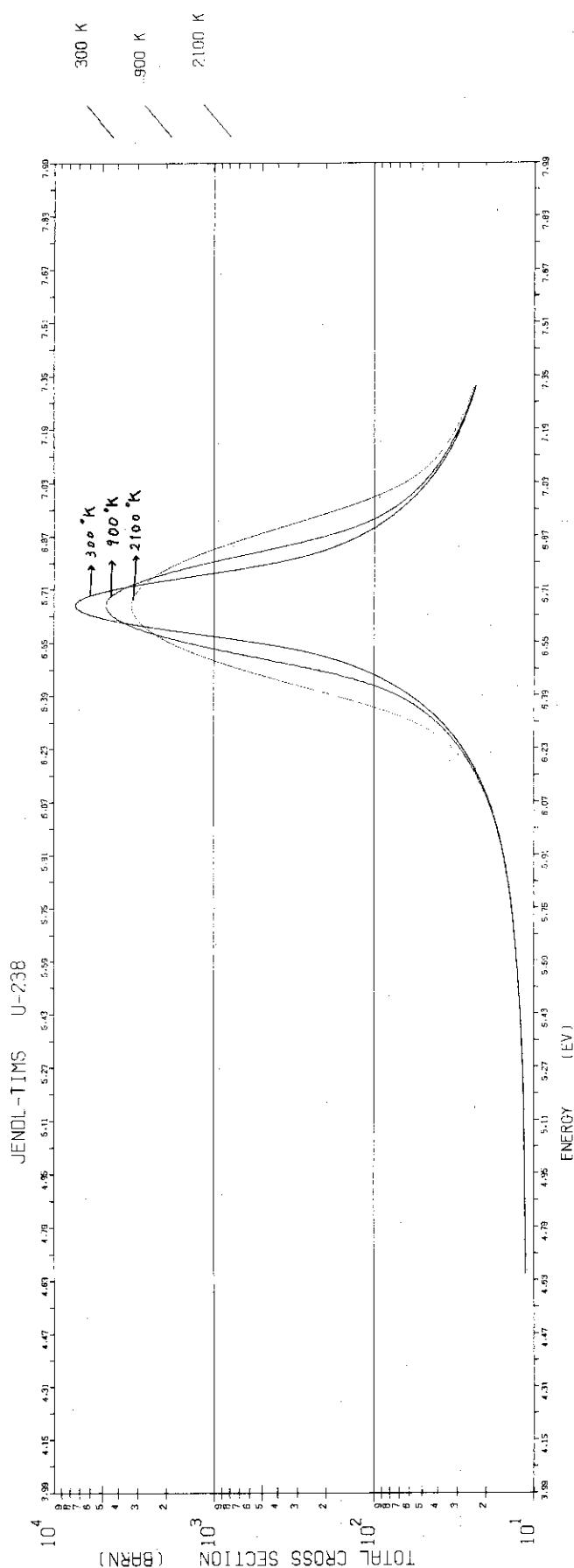


Fig. 7 Doppler broadened cross sections of ^{238}U in the energy range from 4.65 to 7.35 eV

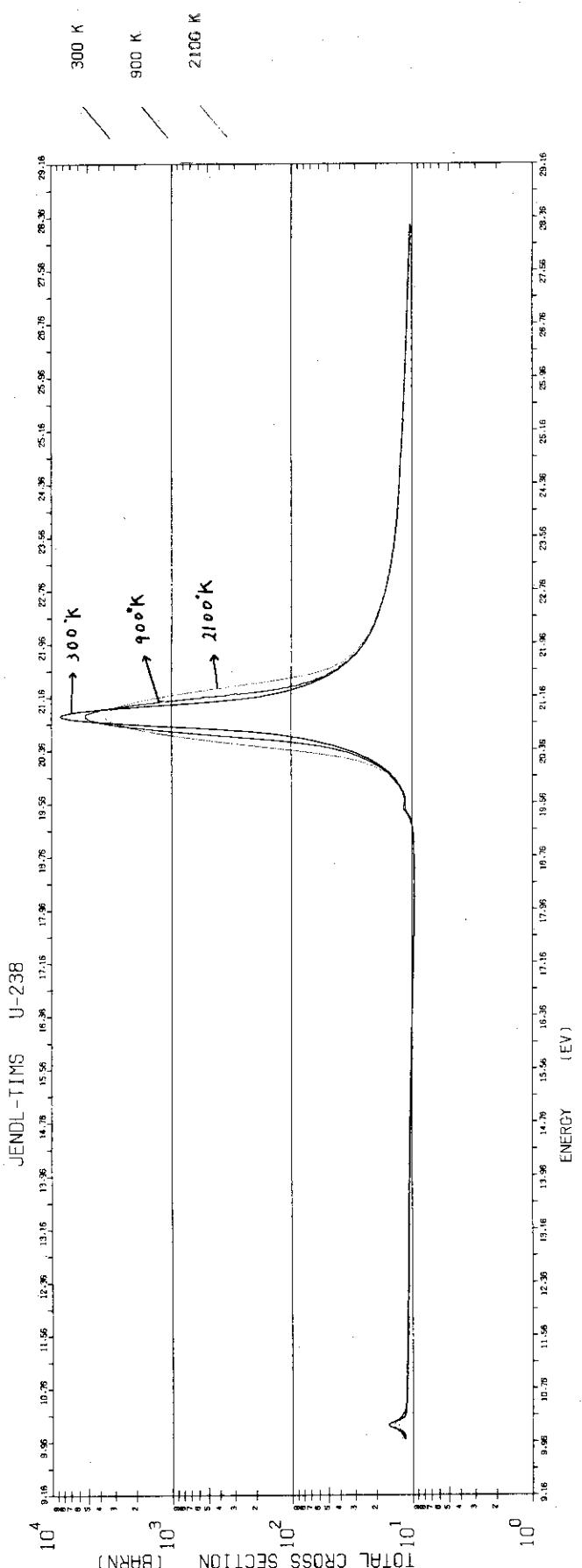


Fig. 8 Doppler broadened cross sections of ^{238}U in the energy range from 9.9 to 28 eV

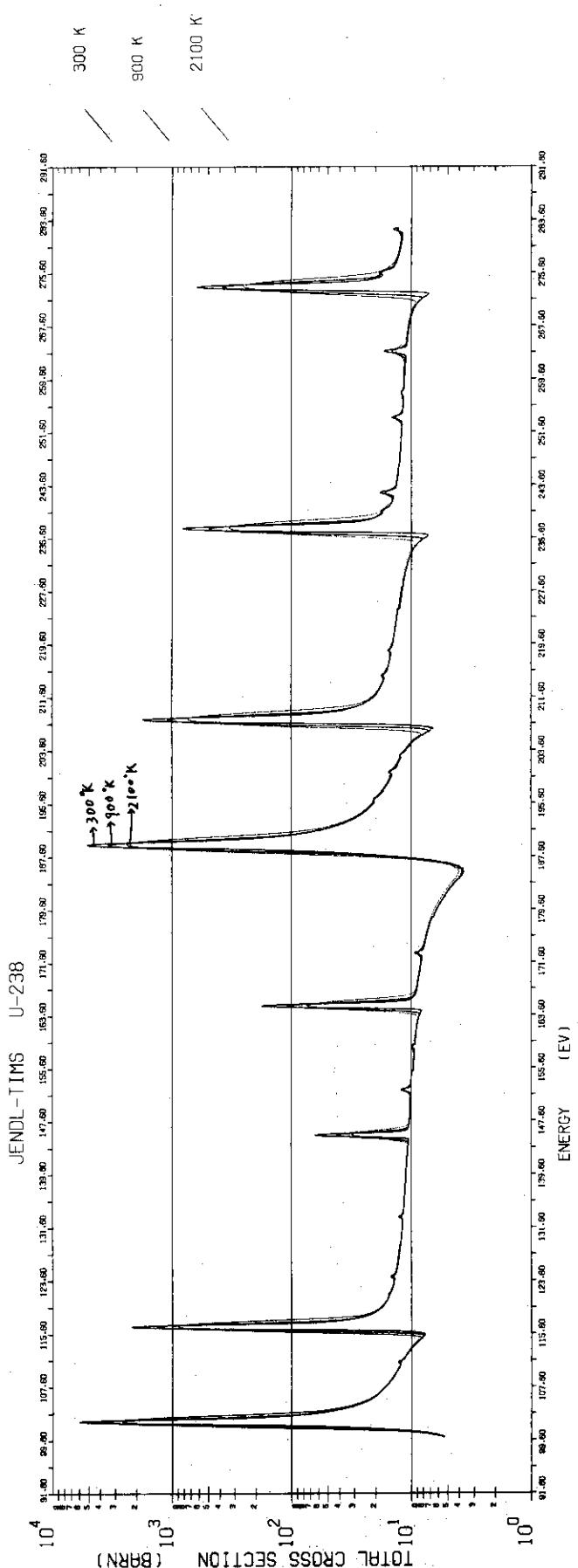


Fig. 9 Doppler broadened cross sections of ^{238}U in the energy range from 99.6 to 280 eV

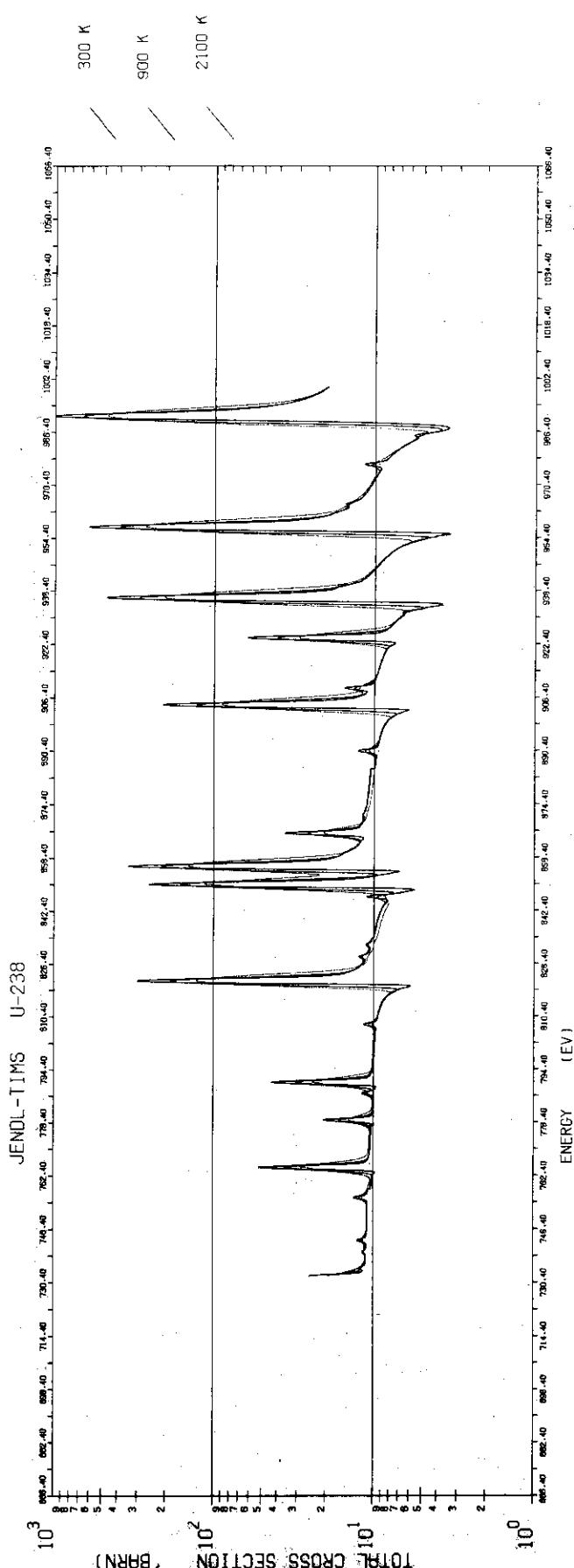


Fig. 10 Doppler broadened cross sections of ^{238}U in the energy range from 730 to 1000 eV

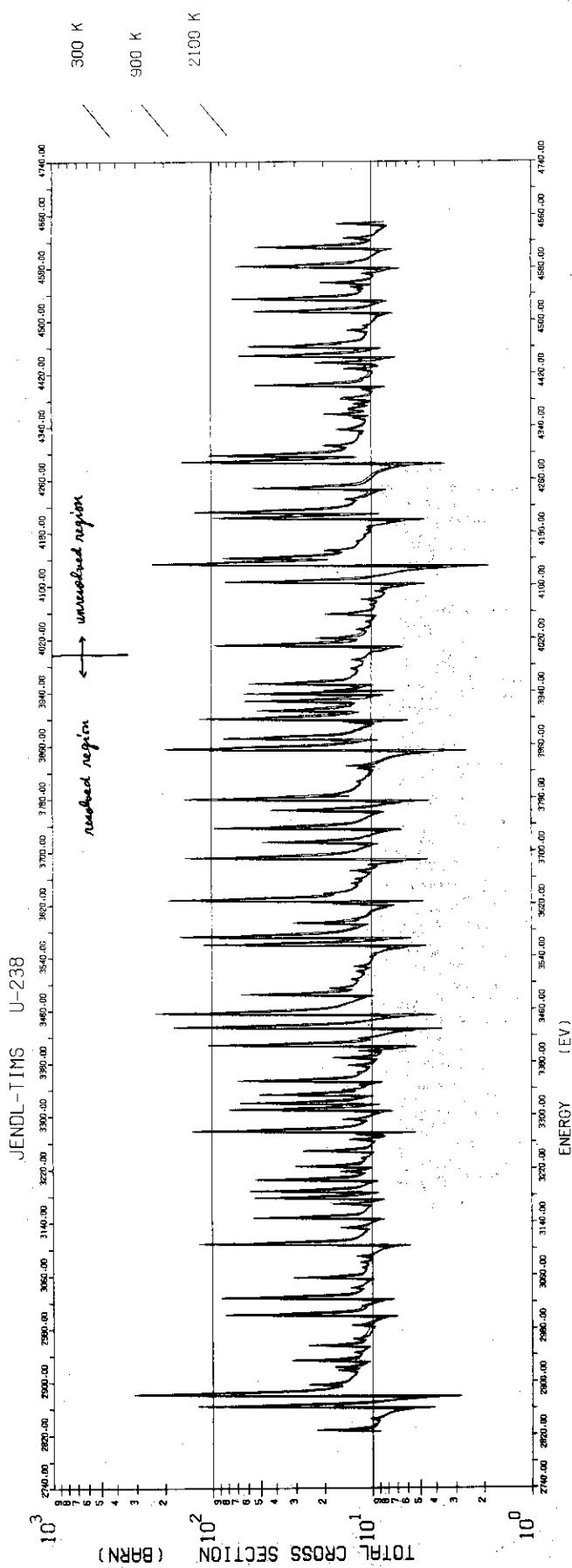


Fig. 11 Doppler broadened cross sections of ^{238}U in the energy range from 2820 to 4650 eV

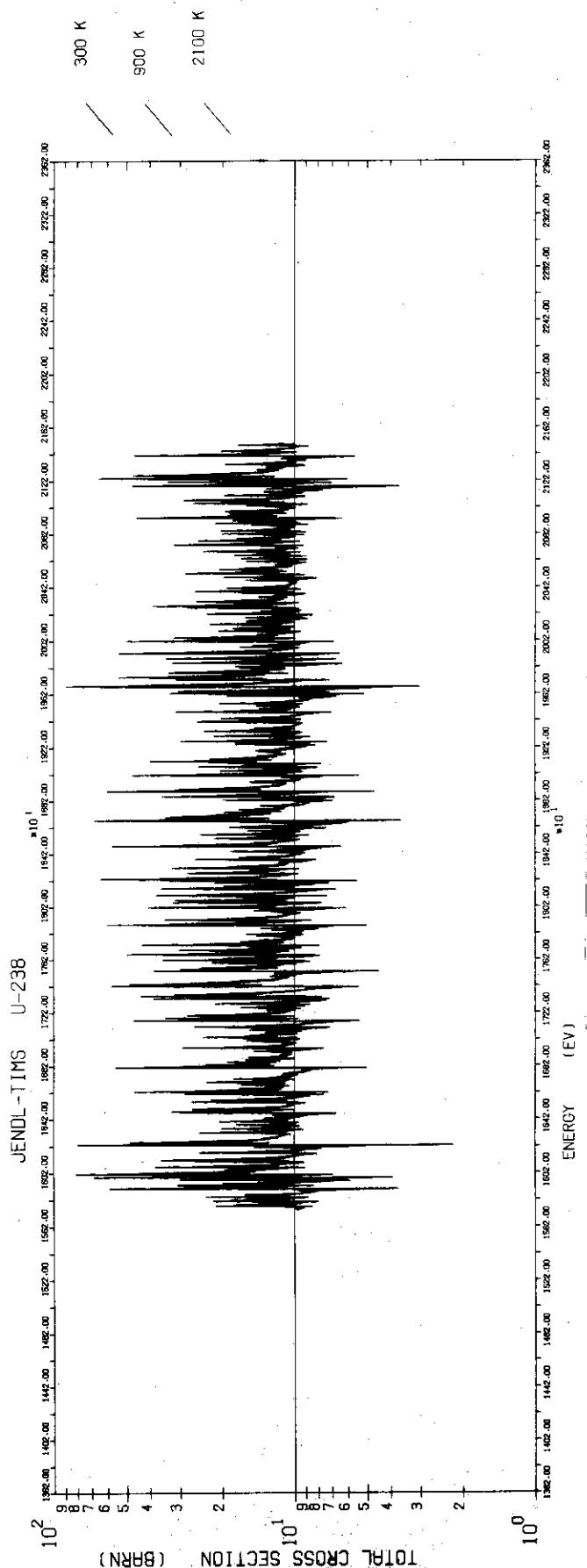


Fig. 12 Doppler broadened cross sections of ^{238}U in the energy range from 15.62 to 21.5 keV

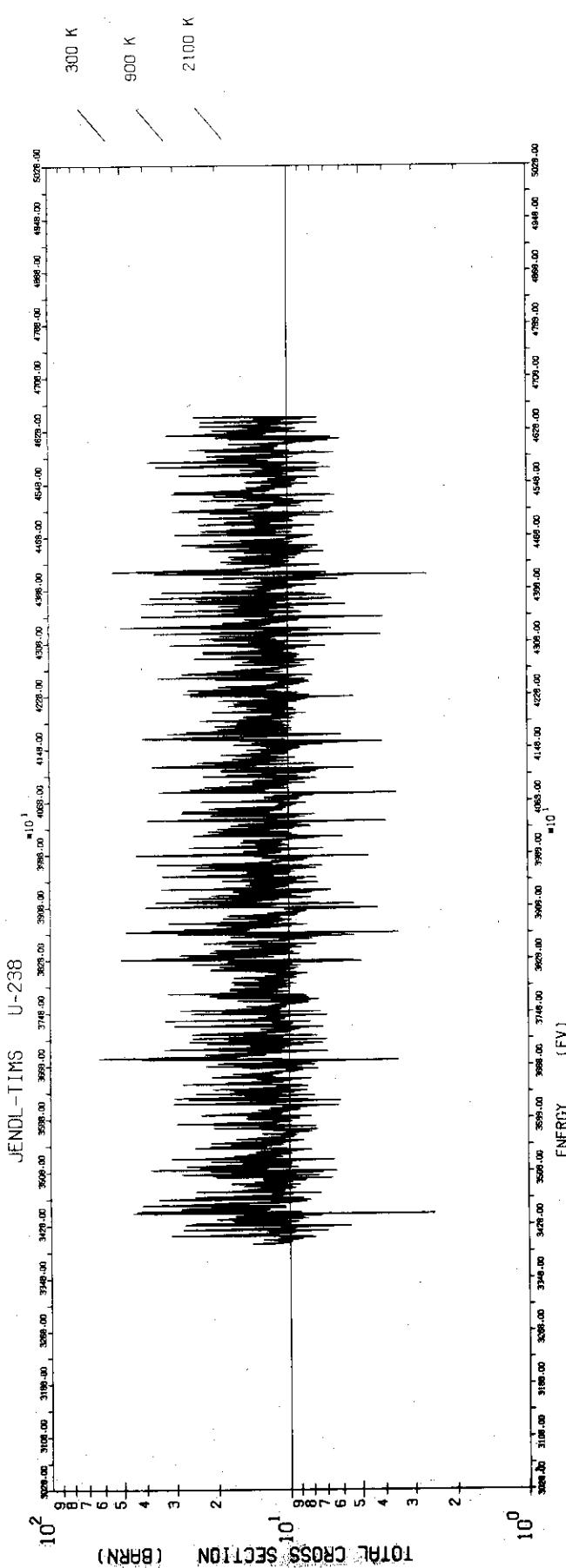


Fig. 13 Doppler broadened cross sections of ^{238}U in the energy range from 34 to 46.5 keV

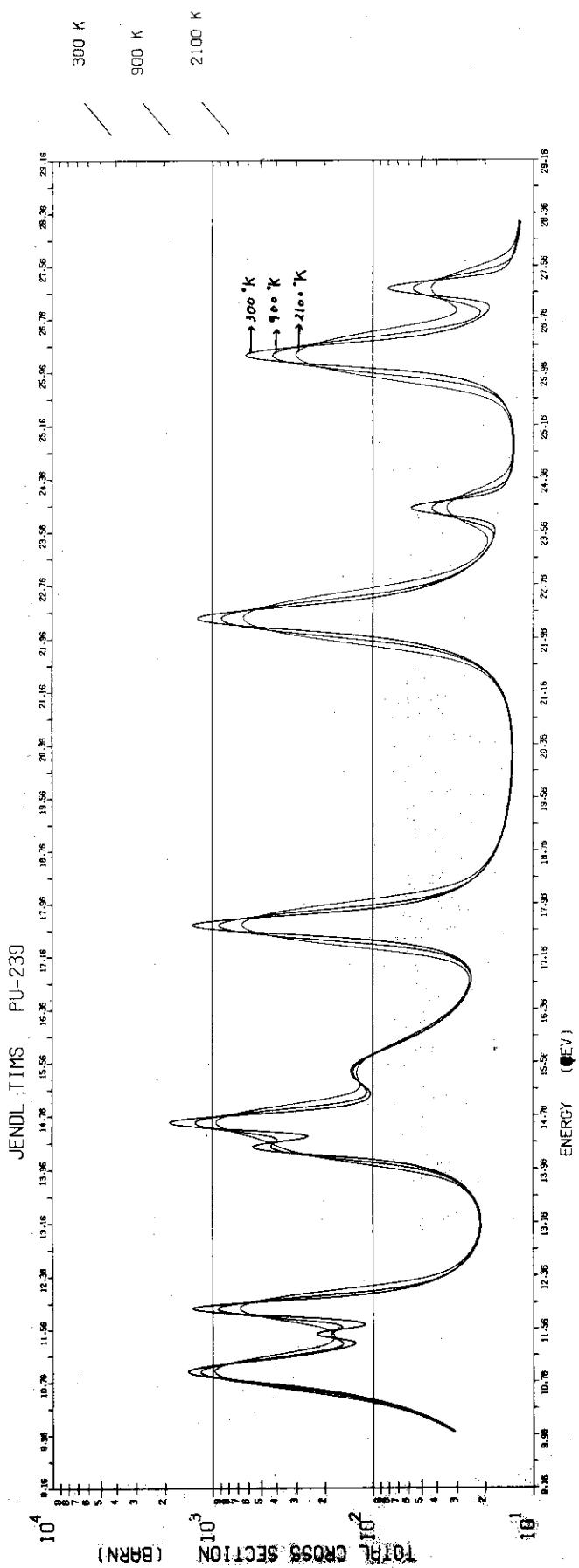


Fig. 14 Doppler broadened cross sections of ^{239}Pu in the energy range from 9.96 to 27.8 eV

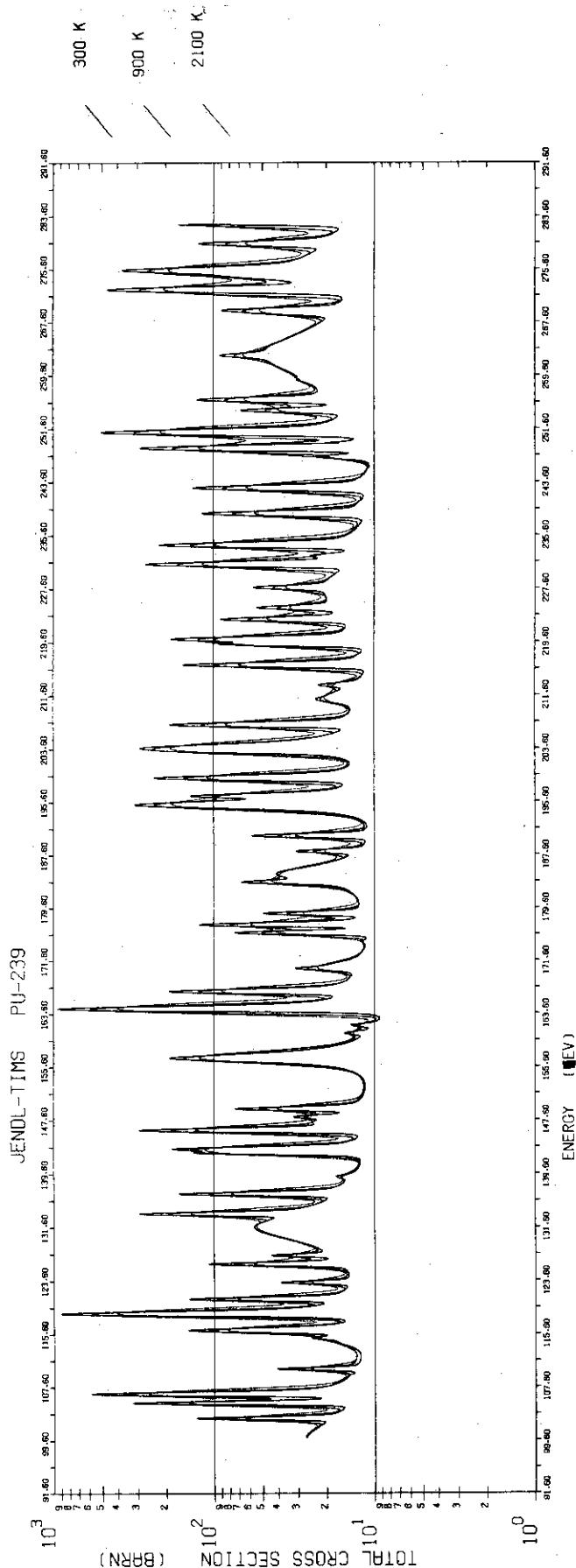


Fig. 15 Doppler broadened cross sections of ^{239}Pu in the energy range from 99.6 to 278 eV

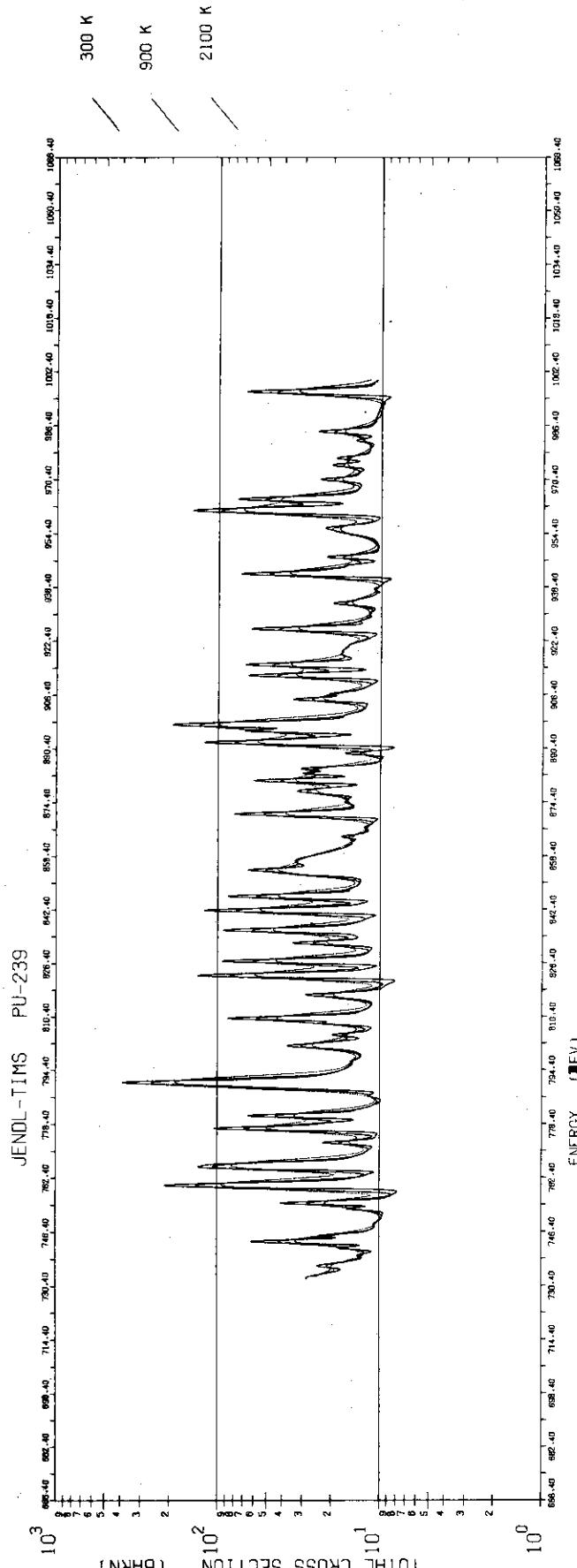


Fig. 16 Doppler broadened cross sections of ^{239}Pu in the energy range from 728 to 7000 eV

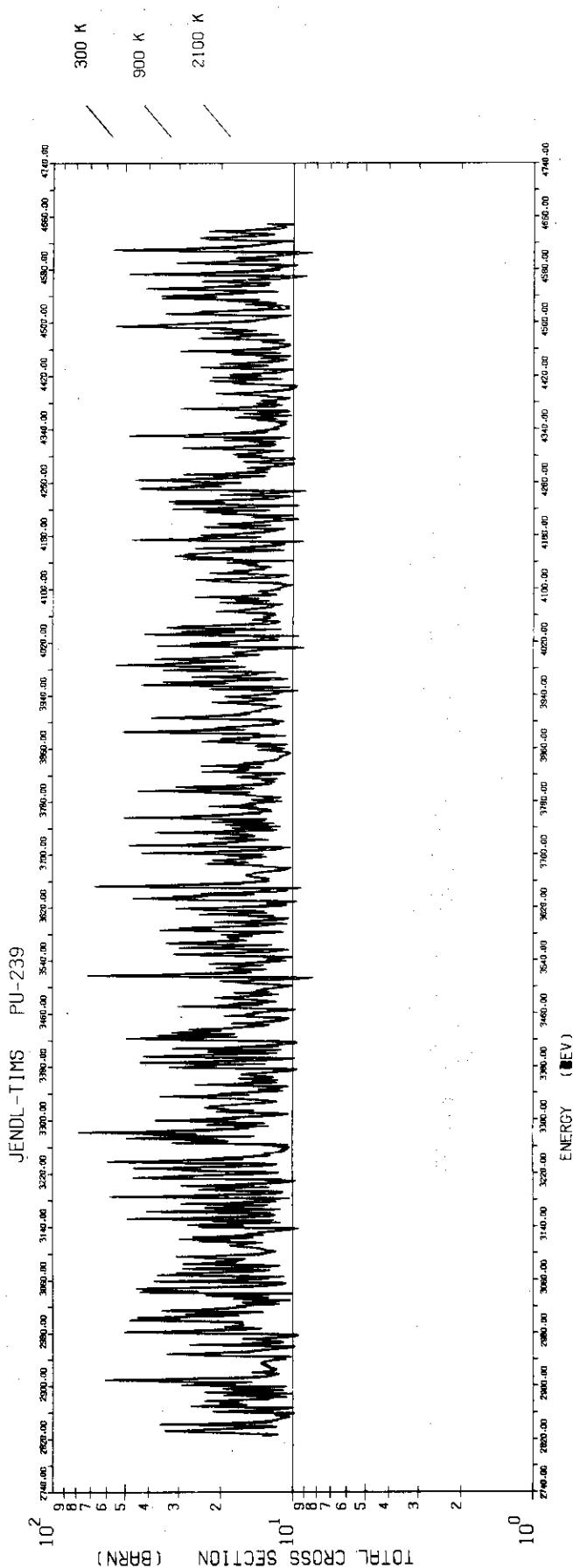


Fig. 17 Doppler broadened cross sections of ^{239}Pu in the energy range from 2780 to 4650 eV

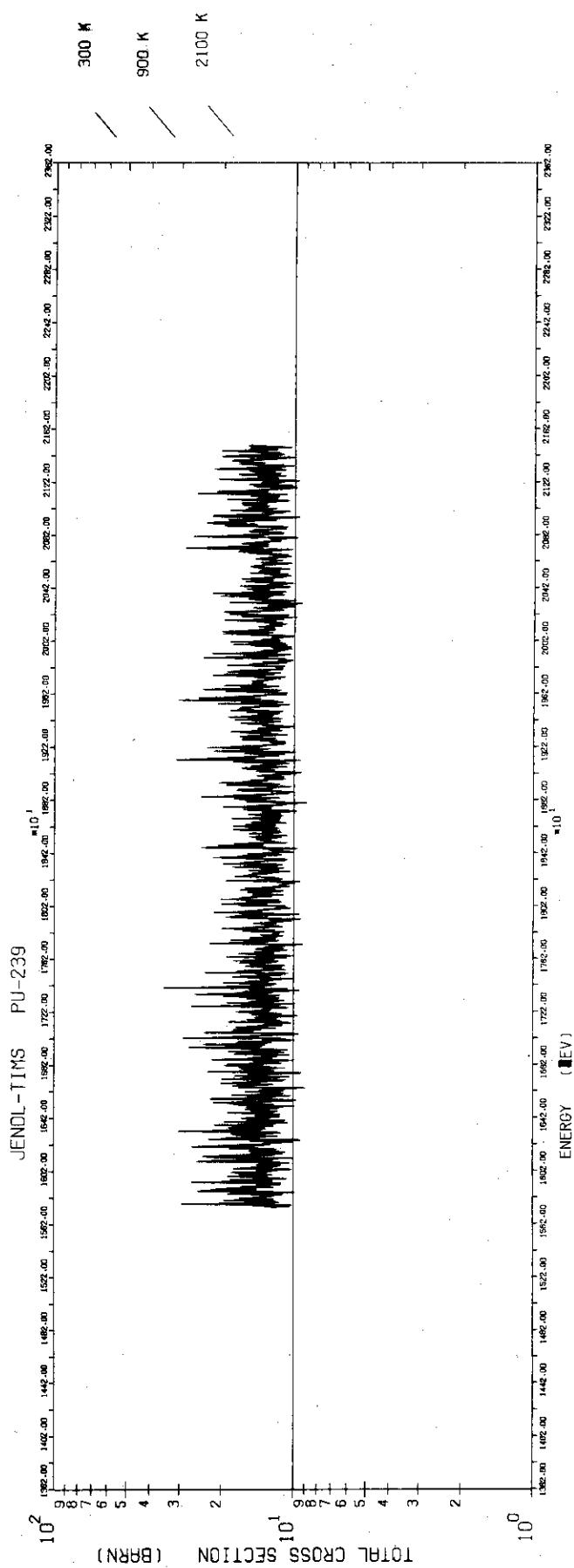


Fig. 18 Doppler broadened cross sections of ^{239}Pu in the energy range from 15.62 to 21.5 keV

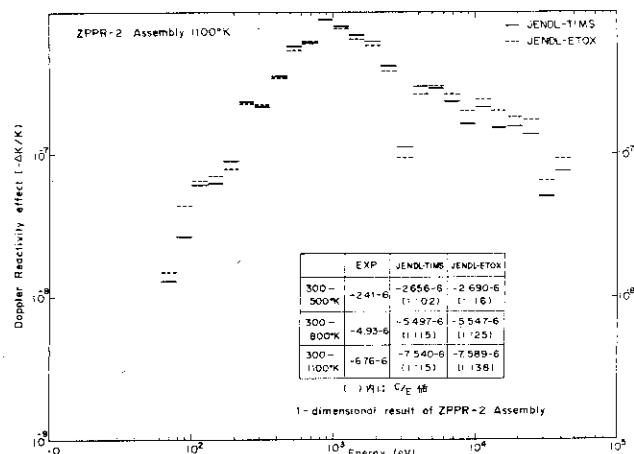


Fig. 19 Energy group-wise contribution of Doppler reactivity effect calculated by one-dimensional first order perturbation code for ZPPR assembly 2

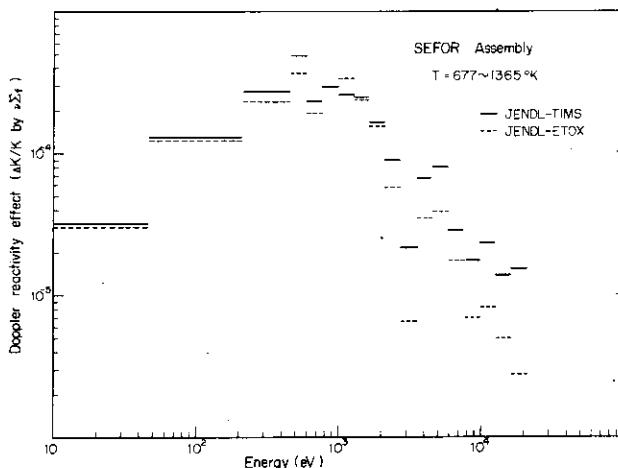


Fig. 20 Energy group-wise contribution of fission Doppler effect calculated by two-dimensional first order perturbation code for SEFOR assembly

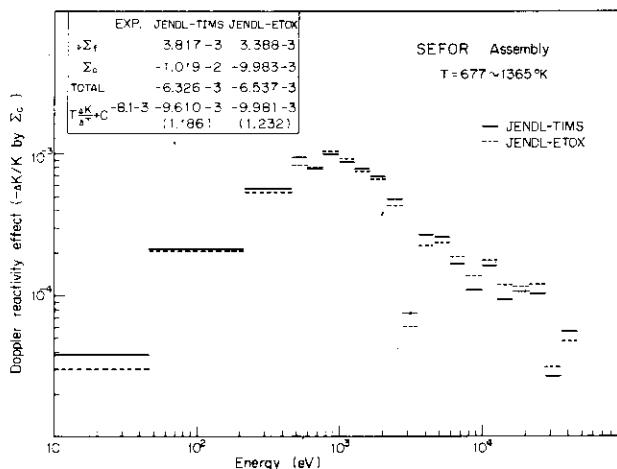


Fig. 21 Energy group-wise contribution of capture Doppler effect calculated by two-dimensional first order perturbation code for SEFOR assembly

APPENDIX : Tables of 70 Group Constants of ^{235}U , ^{238}U , ^{239}Pu , ^{240}Pu and ^{241}Pu Produced by the Processing Code TIMS Using the Evaluated Nuclear Data of JENDL-1

The results calculated with the TIMS code were arranged in the conventional form of the infinitely dilute cross sections and the resonance shielding factors. As already described in Chapter 2, the TIMS code can calculate the resonance shielding factors depending on the three variables; composition (σ_o), temperature (T) and mutual interference parameter (R), where R is defined by

$$R = \frac{^{238}\text{N}}{^{235}\text{N}}, \frac{^{238}\text{N}}{^{239}\text{N}} \text{ or } \frac{^{238}\text{N}}{^{240}\text{N}} .$$

In the present calculation, the two R-values were selected so as to cover the practical range of R depending on another composition variable σ_o of the Bondarenko's type. These R-values are shown in Table A-1. The composition variable σ_o considered for the calculation of effective cross sections without the mutual interference effect are shown in Table A-2. The considered temperatures were 300, 900 and 2100°K. The group constants depending on these variables were calculated with the group structure as shown in Table A-3. The group constants depending on the R-parameters are tabulated in Tables A-4.1 ~ 4.5, and those without considering the mutual interference effect are also tabulated in Tables A-5.1 ~ 5.5.

Table A-1. Values of atomic density ratios, R_1 and R_2
 used for the consideration of the mutual
 interference effect of heavy nuclides
 with ^{238}U

σ_o (barns)	U-235		Pu-239		Pu-240	
	R_1	R_2	R_1	R_2	R_1	R_2
10000.	250.	500.	500.	1000.	200.	500.
1000.	25.	50.	50.	100.	20.	50.
100.	1.	5.	5.	10.	5.	15.
10.	0.2	0.6	1.	2.	—	—

Table A-2. Values of composition variable σ_o used for the calculation of the resonance shielding factors without the mutual interference effect

Nuclide	σ_o (barns)
U-235	0, 10, 100, 1000
U-238	0, 1, 10, 100, 1000
Pu-239	0, 10, 100, 1000
Pu-240	0, 100, 1000, 10000
Pu-241	0, 10, 100, 1000, 10000

Table A-3. 70-group structure

Group	Upper energy	Lower energy	Lethargy width
1	10.5 (MeV)	8.3	0.2351
2	8.3 (MeV)	6.5	0.2445
3	6.5 (MeV)	5.1	0.2426
4	5.1 (MeV)	4.0	0.2429
5	4.0 (MeV)	3.1	0.2549
6	3.1 (MeV)	2.5	0.2151
7	2.5 (MeV)	1.9	0.2744
8	1.9 (MeV)	1.4	0.3054
9	1.4 (MeV)	1.1	0.2412
10	1.1 (MeV)	0.8	0.3185
11	0.8 (MeV)	0.63	0.2389
12	0.63 (MeV)	0.50	0.2311
13	0.50 (MeV)	0.4	0.2231
14	0.4 (MeV)	0.31	0.2549
15	0.31 (MeV)	0.25	0.2151
16	0.25 (MeV)	0.2	0.2231
17	0.2 (MeV)	0.15	0.2877
18	0.15 (MeV)	0.12	0.2231
19	0.12 (MeV)	0.1	0.1823
20	100 (KeV)	77.3	0.2575
21	77.3 (KeV)	59.8	0.2567
22	59.8 (KeV)	46.5	0.2516
23	46.5 (KeV)	36.0	0.2559
24	36.0 (KeV)	27.8	0.2585
25	27.8 (KeV)	21.5	0.2570
26	21.5 (KeV)	16.6	0.2587
27	16.6 (KeV)	12.9	0.2522
28	12.9 (KeV)	10.0	0.2546
29	10.0 (KeV)	...	0.2575
30	7.73 (KeV)	5.98	0.2567
31	5.98 (KeV)	4.65	0.2516
32	4.65 (KeV)	3.60	0.2559
33	3.60 (KeV)	2.78	0.2585
34	2.78 (KeV)	2.15	0.2570
35	2.15 (KeV)	1.66	0.2587
36	1.66 (KeV)	1.29	0.2522
37	1.29 (KeV)	1.0	0.2546
38	1000 (eV)	773	0.2575
39	773 (eV)	598	0.2567
40	598 (eV)	465	0.2516
41	465 (eV)	360	0.2559
42	360 (eV)	278	0.2585
43	278 (eV)	215	0.2570
44	215 (eV)	166	0.2587
45	166 (eV)	129	0.2522
46	129 (eV)	100	0.2546
47	100 (eV)	77.3	0.2575

Table A-3. (Continued)

Group	Upper energy	Lower energy	Lethargy width
48	77.3 (eV)	59.8	0.2567
49	59.8 (eV)	46.5	0.2516
50	46.5 (eV)	36.0	0.2559
51	36.0 (eV)	27.8	0.2585
52	27.8 (eV)	21.5	0.2570
53	21.5 (eV)	16.6	0.2587
54	16.6 (eV)	12.9	0.2522
55	12.9 (eV)	10.0	0.2546
56	10.0 (eV)	7.73	0.2575
57	7.73 (eV)	5.98	0.2567
58	5.98 (eV)	4.65	0.2516
59	4.65 (eV)	3.60	0.2559
60	3.60 (eV)	2.78	0.2585
61	2.78 (eV)	2.15	0.2570
62	2.15 (eV)	1.66	0.2587
63	1.66 (eV)	1.29	0.2522
64	1.29 (eV)	1.0	0.2546
65	1.0 (eV)	0.773	0.2575
66	0.773(eV)	0.598	0.2567
67	0.598(eV)	0.465	0.2516
68	0.465(eV)	0.360	0.2559
69	0.360(eV)	0.278	0.2585
70	0.278(eV)	0.215	0.2570

Table A-4.1.1 INFINITE DILUTION CROSS SECTION CODE NO = 925

U=235 ,,, PAGE 1

GROUP	TOTAL	FISSION	N	CAPTURE	INELASTIC	ELASTIC	MU	ELAS	REMOVAL
26	1.45413E 01	2.38109E 00	2.44418E 00	6.83060E-01	1.75922E-02	1.12995E 01	2.12126E-02	3.69995E-01	
27	1.45941E 01	2.58063E 00	2.44388E 00	9.69978E-01	6.96995E-03	1.14365E 01	1.66317E-02	3.85692E-01	
28	1.55631E 01	2.87766E 00	2.44330E 00	1.11000E 00	5.95486E-05	1.15753E 01	1.31874E-02	3.87826E-01	
29	1.61831E 01	3.15208E 00	2.44301E 00	1.30421E 00	1.43028E-05	1.17268E 01	1.05408E-02	3.88034E-01	
30	1.65702E 01	3.50213E 00	2.44300E 00	1.32106E 00	6.99843E-06	1.17470E 01	7.72386E-03	3.92027E-01	
31	1.71172E 01	3.93810E 00	2.44300E 00	1.41234E 00	3.12726E-06	1.17867E 01	2.86092E-03	4.01830E-01	
32	1.76327E 01	4.56539E 00	2.44257E 00	1.46552E 00	7.86141E-07	1.18017E 01	2.86092E-03	3.94320E-01	
33	1.84798E 01	5.04807E 00	2.44202E 00	1.60043F 00	6.10904E-07	1.18313E 01	2.86092E-03	3.93394E-01	
34	1.95329E 01	5.60339E 00	2.44200E 00	1.98740E 00	5.68003E-07	1.19415E 01	2.86092E-03	3.99481E-01	
35	2.10233E 01	6.53484E 00	2.44200E 00	2.42757E 00	5.25078E-07	1.20609E 01	2.86092E-03	4.01012E-01	
36	2.26783E 01	7.46716E 00	2.44177E 00	3.03153E 00	4.62570E-07	1.21958E 01	2.86092E-03	4.16210E-01	
37	2.39435E 01	7.64118E 00	2.44257E 00	3.95429E 00	4.40634E-07	1.23481E 01	2.86092E-03	4.17543E-01	
38	2.51566E 01	8.44909E 00	2.44200E 00	4.37837E 00	3.98207E-07	1.23373E 01	2.86092E-03	4.11673E-01	
39	2.87130E 01	1.17926E 01	2.44200E 00	4.55632E 00	3.55464E-07	1.23641E 01	2.86092E-03	4.10579E-01	
40	3.14630E 01	1.47675E 01	2.44200E 00	4.56826E 00	3.12953E-07	1.23947E 01	2.86092E-03	4.15764E-01	
41	3.13468E 01	1.37452E 01	2.44200E 00	5.36873E 00	2.70859E-07	1.22329E 01	2.86092E-03	4.10576E-01	
42	3.49649E 01	1.54409E 01	2.44200E 00	7.16672E 00	2.27978E-07	1.24218E 01	2.86092E-03	4.16422E-01	
43	4.21060E 01	2.03662E 01	2.44200E 00	9.03824E 00	1.63079E-07	1.27016E 01	2.86092E-03	4.22817E-01	
44	4.39430E 01	2.09989E 01	2.44200E 00	1.03412E 01	1.42245E-07	1.26430E 01	2.86092E-03	4.16765E-01	
45	4.56591E 01	2.13632E 01	2.44200E 00	1.17277E 01	9.97265E-08	1.25682E 01	2.86092E-03	4.28549E-01	
46	4.91890E 01	2.29916E 01	2.44200E 00	1.36203E 01	5.75729E-08	1.25770E 01	2.86092E-03	4.22957E-01	
47	4.99671E 01	2.34708E 01	2.44200E 00	1.39664E 01	1.54705E-08	1.25300E 01	2.86092E-03	4.18341E-01	
48	4.68345E 01	2.50013E 01	2.44200E 00	9.36511E 00	0.0	1.26680E 01	2.86092E-03	4.40106E-01	
49	9.63383E 01	5.75594E 01	2.44200E 00	2.59115E 01	0.0	1.28637E 01	2.86092E-03	3.82233E-01	
50	5.94441E 01	3.08162E 01	2.44200E 00	1.59241E 01	0.0	1.23036E 01	2.86092E-03	4.84694E-01	
51	1.05761E 02	5.77566E 01	2.44200E 00	3.60907E 01	0.0	1.29142E 01	2.86092E-03	4.16383E-01	
52	7.19767E 01	4.06357E 01	2.44200E 00	1.96534E 01	0.0	1.16876E 01	2.86092E-03	4.18007E-01	
53	1.30274E 02	7.14923E 01	2.44200E 00	4.53734E 01	0.0	1.34132E 01	2.86092E-03	3.82234E-01	
54	6.34381E 01	3.48521E 01	2.44200E 00	1.74282E 01	0.0	1.11578E 01	2.86092E-03	4.20950E-01	
55	2.29916E 02	4.66967E 01	2.44200E 00	7.10536E 01	0.0	1.21657E 01	2.86092E-03	3.60870E-01	
56	1.44034E 02	1.00457E 02	2.44200E 00	3.55897E 01	0.0	1.15865E 01	2.86092E-03	3.32930E-01	
57	9.71322E 01	3.15094E 01	2.44200E 00	5.48149E 01	0.0	1.08579E 01	2.86092E-03	3.24433E-01	
58	4.36774E 01	1.19784E 01	2.44200E 00	2.10201E 01	0.0	1.06789E 01	2.86092E-03	3.57127E-01	
59	2.99846E 01	1.07794E 01	2.44200E 00	8.05477E 00	0.0	1.11504E 01	2.86092E-03	4.01170E-01	
60	5.21504E 01	3.07195E 01	2.44200E 00	1.01249E 01	0.0	1.13021E 01	2.86092E-03	3.83018E-01	
61	2.43576E 01	7.78584E 00	2.44200E 00	2.79796E 00	0.0	1.17714E 01	2.86092E-03	4.00183E-01	
62	4.10477E 01	1.57944E 01	2.44200E 00	1.31453E 01	0.0	1.21079E 01	2.86092E-03	4.06718E-01	
63	3.43945E 01	1.74791E 01	2.44200E 00	4.89824E 00	0.0	1.25672E 01	2.86092E-03	4.36921E-01	
64	1.06849E 02	7.48432E 01	2.44177E 00	1.96678E 01	0.0	1.29790E 01	2.86092E-03	4.33054E-01	
65	7.79038E 01	5.84164E 01	2.44200E 00	6.54795E 00	0.0	1.29446E 01	2.86092E-03	4.38667E-01	
66	8.10135E 01	6.15829E 01	2.44200E 00	6.03030E 00	0.0	1.34280E 01	2.86092E-03	4.54633E-01	
67	1.01171E 02	7.84507E 01	2.44200E 00	8.86804E 00	0.0	1.38424E 01	2.86092E-03	4.77266E-01	
68	1.45377E 02	1.19177E 02	2.44178E 00	1.73798E 01	0.0	1.42198E 01	2.86092E-03	4.81325E-01	
69	2.30392E 02	1.75911E 02	2.44189E 00	4.00072E 01	0.0	1.44743E 01	2.86092E-03	4.79823E-01	
70	2.44416E 02	1.85093E 02	2.44200E 00	4.47845E 01	0.0	1.45377E 01	1.3951BE-02	4.86576E-01	

Table A-4.1.2 SELF-SHIELDING FACTOR TABLES CODE NO = 925

GROUP	T(K)	FF1		FF2		FC1		FC2	
		10.	100.	1000.	10.	100.	1000.	10.	100.
26	300.	0.9541	0.9970	1.0003	0.9859	0.9981	1.0003	0.9884	0.9987
	900.	0.9578	0.9979	1.0001	0.9890	0.9985	1.0001	0.9909	0.9989
	2100.	0.9191	0.9923	1.0000	0.9960	0.9985	0.9999	0.9914	0.9987
27	300.	0.9808	0.9950	0.9973	0.9817	0.9941	0.9965	0.9879	0.9969
	900.	0.9861	0.9963	0.9974	0.9862	0.9949	0.9983	0.9919	0.9947
	2100.	0.9884	0.9972	0.9979	0.9885	0.9939	0.9971	0.9932	0.9953
28	300.	0.9533	0.9927	0.9992	0.9668	0.9940	0.9992	0.9720	0.9914
	900.	0.9700	0.9945	0.9994	0.9726	0.9952	0.9993	0.9679	0.9928
	2100.	0.9713	0.9953	0.9995	0.9731	0.9958	0.9994	0.9719	0.9938
29	300.	0.9704	0.9939	1.0003	0.9751	0.9965	1.0014	0.9734	0.9969
	900.	0.9808	0.9961	1.0010	0.9841	0.9986	1.0018	0.9815	0.9988
	2100.	0.9857	0.9971	1.0007	0.9883	0.9991	1.0014	0.9862	1.0000
30	300.	0.9540	0.9930	0.9994	0.9596	0.9913	0.9988	0.9678	0.9985
	900.	0.9655	0.9932	0.9981	0.9694	0.9969	0.9971	0.9622	0.9992
	2100.	0.9710	0.9927	0.9966	0.9733	0.9953	0.9985	0.9745	0.9918
31	300.	0.9424	0.9858	1.0007	0.9513	0.9900	1.0014	0.9572	0.9903
	900.	0.9573	0.9897	1.0006	0.9639	0.9918	1.0004	0.9708	0.9932
	2100.	0.9634	0.9903	0.9983	0.9687	0.9902	0.9971	0.9769	0.9942
32	300.	0.9474	0.9867	0.9995	0.9541	0.9883	0.9983	0.9559	0.9936
	900.	0.9557	0.9925	1.0014	0.9717	0.9939	1.0006	0.9777	0.9949
	2100.	0.9758	0.9955	1.0030	0.9814	0.9979	1.0032	0.9876	0.9923
33	300.	0.9434	0.9895	1.0044	0.9531	0.9975	1.0063	0.9525	0.9945
	900.	0.9685	0.9879	1.0087	0.9774	0.9974	1.0092	0.9937	0.9980
	2100.	0.9821	1.0017	1.0101	0.9903	0.9812	1.0144	0.9732	1.0019
34	300.	0.9235	0.9812	1.0052	0.9374	0.9889	1.0058	0.9311	0.9821
	900.	0.9354	0.9915	1.0107	0.9645	0.9995	1.0119	0.9626	0.9993
	2100.	0.9675	0.9964	1.0141	0.9783	0.9839	1.0056	0.9789	1.0011
35	300.	0.8777	0.9593	0.9875	0.8861	0.9624	0.9868	0.9336	0.9673
	900.	0.9151	0.9724	0.9918	0.9205	0.9736	0.9908	0.9307	0.9790
	2100.	0.9363	0.9795	0.9925	0.9418	0.9782	0.9907	0.9527	0.9865
36	300.	0.8631	0.9556	0.9934	0.8795	0.9678	0.9961	0.8588	0.9553
	900.	0.9062	0.9704	0.9945	0.9180	0.9776	0.9981	0.9051	0.9622
	2100.	0.9375	0.9815	0.9989	0.9645	0.9878	1.0004	0.9576	0.9889
37	300.	0.8284	0.9369	0.9757	0.8406	0.9422	0.9736	0.8175	0.9517
	900.	0.8742	0.9570	0.9847	0.9158	0.9815	0.9987	0.8973	0.9553
	2100.	0.9053	0.9716</						

Table A-4.1.2 (Continued)

GROUP	T(K)	FF1			FF2			FC1			FC2			
		10.	100.	1000.	10.	100.	1000.	10.	100.	1000.	10.	100.	1000.	
41	300.	0.7752	0.9244	0.9443	0.7901	0.9370	0.9858	0.7419	0.8990	0.9729	0.7577	0.9131	0.9737	
	900.	0.6330	0.9489	0.9841	0.8432	0.9534	0.9835	0.8298	0.9362	0.9740	0.8395	0.9403	0.9727	
	2100.	0.8752	0.9660	0.9865	0.8831	0.9668	0.9856	0.8856	0.9558	0.9742	0.8917	0.9551	0.9722	
42	300.	0.7633	0.9205	1.0017	0.7871	0.9469	1.0080	0.7479	0.8909	0.9841	0.7688	0.9161	0.9856	
	900.	0.6257	0.9529	1.0151	0.8504	0.9805	1.0237	0.8242	0.9267	0.9531	0.8433	0.9486	0.9947	
	2100.	0.8713	0.9750	1.0237	0.8962	1.0023	1.0334	0.8805	0.9512	0.9992	0.8971	0.9699	1.0003	
43	300.	0.6018	0.8168	0.9336	0.6157	0.8251	0.9335	0.6111	0.8487	0.9681	0.6277	0.8630	0.9731	
	900.	0.6574	0.8545	0.9136	0.6752	0.8401	0.9024	0.6599	0.9103	0.9797	0.7091	0.9116	0.9813	
	2100.	0.7148	0.8804	0.9442	0.7165	0.8466	0.8868	0.7442	0.9427	0.9857	0.7538	0.9319	0.9842	
44	300.	0.6663	0.9180	1.0193	0.6850	0.9302	1.0239	0.6171	0.8125	0.9776	0.6364	0.8486	0.9814	
	900.	0.7413	0.9722	1.0259	0.7934	0.9652	1.0284	0.7134	0.8735	0.9916	0.7283	0.9015	0.9932	
	2100.	0.8007	1.0006	1.0159	0.8013	0.9688	1.0241	0.7815	0.9053	0.9897	0.8594	0.9236	0.9888	
45	300.	0.6249	0.8727	0.9926	0.6603	0.8754	1.0009	0.6137	0.8671	0.9360	0.6307	0.8787	1.0056	
	900.	0.6926	0.9251	1.0045	0.7057	0.9172	1.0124	0.6932	0.9281	1.0100	0.7085	0.9286	1.0199	
	2100.	0.7239	0.9659	1.0142	0.7599	0.9479	1.0216	0.7502	0.9628	1.0215	0.7623	0.9587	1.0317	
46	300.	0.5083	0.7032	0.9135	0.5378	0.7578	0.9100	0.4664	0.6648	0.8552	0.4707	0.7018	0.8678	
	900.	0.5757	0.7480	0.9164	0.6034	0.7907	0.9089	0.5335	0.7242	0.8803	0.5532	0.7457	0.8623	
	2100.	0.6401	0.7796	0.8995	0.6637	0.8090	0.8933	0.5644	0.7530	0.8486	0.6183	0.7606	0.8361	
47	300.	0.6353	0.8421	0.9923	0.6479	0.8538	1.0011	0.5469	0.7980	0.9900	0.5631	0.8199	1.0025	
	900.	0.7019	0.8863	1.0006	0.7103	0.8894	1.0078	0.5385	0.8671	1.0102	0.6528	0.8852	1.0222	
	2100.	0.7505	0.9136	1.0052	0.7554	0.9104	1.0106	0.5969	0.9054	1.0189	0.7087	0.9187	1.0299	
48	300.	0.4008	0.8363	1.0273	0.6340	0.8946	1.0541	0.5540	0.7697	0.9666	0.5718	0.8085	0.9816	
	900.	0.4559	0.8843	1.0489	0.6925	0.9399	1.0736	0.5303	0.8336	0.9913	0.6215	0.8724	1.0060	
	2100.	0.7305	0.9396	1.0527	0.7732	0.9496	1.1052	0.7273	0.9097	1.0369	0.7538	0.9491	1.0518	
49	300.	0.6021	0.7787	0.9638	0.6156	0.8078	0.9706	0.5631	0.7427	0.9312	0.5763	0.7760	0.9586	
	900.	0.6857	0.8367	0.9798	0.6962	0.8579	0.9841	0.6229	0.8181	0.9706	0.6729	0.8396	0.9752	
	2100.	0.7599	0.9007	0.9920	0.7666	0.8938	0.9931	0.7478	0.8693	0.9428	0.7538	0.8836	0.9853	
50	300.	0.7417	0.8907	1.0606	0.7806	0.9589	1.0788	0.5768	0.8026	1.0945	0.6296	0.9158	1.1309	
	900.	0.6111	0.9480	1.0854	0.8493	1.0085	1.0993	0.6586	0.8925	1.1292	0.7255	0.9971	1.1591	
	2100.	0.8931	1.0137	1.1148	0.9289	1.0618	1.1256	0.7774	0.9559	1.1676	0.8350	1.0762	1.1925	
51	300.	0.9135	0.5652	1.0183	0.5191	0.5589	1.0159	0.3267	0.5567	0.9726	0.3332	0.5555	0.9688	
	900.	0.3626	0.6223	1.0795	0.3677	0.6089	1.0557	0.3693	0.6335	1.0295	0.3958	0.6204	1.0073	
	2100.	0.4290	0.6758	1.1082	0.4230	0.6547	1.0957	0.4696	0.6928	1.1225	0.4720	0.6722	1.0233	
52	300.	0.7599	0.9092	1.0158	0.6332	0.9106	1.0329	0.5791	0.5851	0.9137	0.4294	0.5842	0.9383	
	900.	0.8264	0.9487	1.0264	0.6763	0.9411	1.0425	0.6231	0.6339	0.9364	0.4829	0.7400	0.9577	
	2100.	0.8965	0.9538	1.0580	0.7200	0.9705	1.0531	0.6553	0.6744	0.9567	0.5477	0.7886	0.9771	
53	300.	0.3347	0.5196	0.7554	0.3393	0.4972	0.7831	0.2767	0.4753	0.6754	0.2606	0.3811	0.6506	
	900.	0.3714	0.5605	0.8271	0.3681	0.5292	0.8195	0.3044	0.5087	0.7022	0.2806	0.4003	0.6750	
	2100.	0.4284	0.6406	0.8561	0.4216	0.5822	0.8706	0.3498	0.5681	0.7596	0.3171	0.4379	0.7134	
54	300.	0.6524	0.8255	0.9744	0.6740	0.8793	0.9899	0.5804	0.8626	0.9840	0.6925	0.8385	0.9456	
	900.	0.7626	0.8887	0.9941	0.7628	0.9263	1.0069	0.7989	0.9167	1.0068	0.8075	0.9098	0.9630	
	2100.	0.8269	0.9425	1.0105	0.8628	0.9663	1.0222	0.7912	0.9437	1.0205	0.9198	0.9632	0.9718	
55	300.	0.4296	0.5863	0.8701	0.4225	0.5815	0.8594	0.2394	0.4507	0.8367	0.2432	0.4506	0.8320	
	900.	0.4614	0.6552	0.9248	0.4645	0.6469	0.9062	0.2742	0.5352	0.9045	0.2782	0.5318	0.8884	
	2100.	0.5022	0.7374	0.9663	0.5057	0.7261	0.9407	0.3236	0.6329	0.9226	0.3278	0.6282	0.9283	
56	300.	0.2621	0.4304	0.8312	0.2712	0.5083	0.8474	0.2816	0.4893	0.8298	0.2689	0.5079	0.8467	
	900.	0.2723	0.5160	0.8617	0.2419	0.5354	0.8757	0.2953	0.5189	0.8610	0.3032	0.5381	0.8755	
	2100.	0.2907	0.5532	0.8949	0.3010	0.5742	0.9070	0.3175	0.5600	0.9229	0.3262	0.5799	0.9076	
57	300.	0.3511	0.6072	0.6662	0.3628	0.5716	0.6000	0.2345	0.4552	0.5416	0.2394	0.4170	0.4688	
	900.	0.3769	0.6446	0.6510	0.3856	0.5889	0.5839	0.2611	0.4936	0.5174	0.2634	0.4329	0.4461	
	2100.	0.4066	0.6503	0.5423	0.4071	0.5651	0.5239	0.2956	0.4953	0.4356	0.2852	0.4075	0.3789	
58	300.	0.8711	0.8959	0.9525	0.8694	0.8883	0.9310	0.4411	0.7574	1.0623	0.4544	0.8165	1.1529	
	900.	0.9100	0.9201	0.9548	0.9078	0.9131	0.9363	0.4966	0.8480	1.1105	0.5112	0.9005	1.1867	
	2100.	0.9445	0.9490	0.9562	0.9609	0.9402	0.9621	0.5656	0.9229	1.1241	0.5813	0.9698	1.2065	
59	300.	0.3743	0.7026	1.0073	0.3830	0.7292	1.0292	0.4719	0.7635	1.0135	0.4805	0.7875	1.0329	
	900.	0.3955	0.7266	0.9910	0.4044	0.7481	1.0050	0.4900	0.7882	1.0294	0.4958	0.8058	1.0151	
	2100.	0.4370	0.7622	0.9841	0.4459	0.7783	0.9879	0.5353	0.8377	1.0195	0.5444	0.8507	1.0236	
60	300.	0.8586	0.9117	0.9879	0.8593	0.9514	0.9880	0.5314	0.9492	0.9799	0.8298	0.8446	0.9793	
	900.	0.8493	0.9767	1.0023	0.8898	0.9760	1.0029	0.4789	0.9496	1.0101	0.8771	0.9898	1.0109	
	2100.	0.8920	1.0057	1.0155	0.9322	1.0043	1.0169	0.9412	1.0450	1.0367	0.9395	1.0393	1.0393	
61	300.	0.9946	1.0051	1.0009	0.9948	1.0021	0.9999	0.9718	0.9957	1.0094	0.9725	0.9948	1.0084	
	900.	1.0022	1.0119	1.0099	1.0025	1.0108	1.0087	1.0067	1.0436	1.0484	1.0106	1.0423	1.0468	
	2100.	1.0217	1.0346	1.0334	1.0221	1.0334	1.0320	1.0112	1.1670	1.1776	1.1037	1.1650	1.1738	
62	300.	0.9420	0.9430	0.9490	0.9430	0.9584	0.9654	0.1005	0.9427	0.9725	0.9910	0.9437	0.9726	0.9876
	900.	0.9568	0.9915	0.9944	0.9576	0.9928	0.9808	0.1008	0.9762	0.9643	0.9961	0.9712	1.0051	1.0051
	2100.	0.9705	0.9980	0.9983	0.9712	0.9967	0.9996	0.1014	0.9762	0.9663	0.9815	0.9707	0.9816	0.9816
63	300.	0.9707	0.949											

Table A-4.1.2 (continued)

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	F11	F12	F11	F12
26	100.0	100.0	100.0	100.0
300.	0.9986 0.9992	0.9994 0.9998	0.9991 0.9995	0.9938 1.0003
900.	0.9975 0.9994	0.9997 0.9975	0.9992 0.9999	0.9959 1.0003
2100.	0.9979 0.9996	0.9998 0.9980	0.9994 0.9998	0.9966 1.0002
27	100.0	100.0	100.0	100.0
300.	0.9979 0.9992	0.9984 0.9980	0.9990 0.9992	0.9982 0.9994
900.	0.9989 0.9995	0.9995 0.9990	0.9992 0.9993	0.9966 0.9997
2100.	0.9994 0.9997	0.9996 0.9994	0.9995 0.9998	0.9977 0.9998
28	100.0	100.0	100.0	100.0
300.	0.9948 0.9988	0.9997 0.9953	0.9989 0.9994	0.9840 0.9988
900.	0.9963 0.9992	0.9998 0.9963	0.9993 0.9998	0.9885 0.9994
2100.	0.9970 0.9995	0.9999 0.9973	0.9995 0.9997	0.9905 0.9996
29	100.0	100.0	100.0	100.0
300.	0.9956 0.9992	1.0006 0.9967	1.0002 1.0010	0.9846 0.9999
900.	0.9975 0.9997	1.0007 0.9983	1.0005 1.0010	0.9916 1.0011
2100.	0.9985 0.9998	1.0008 0.9992	1.0006 1.0009	0.9948 1.0013
30	100.0	100.0	100.0	100.0
300.	0.9943 0.9989	1.0006 0.9952	0.9998 1.0009	0.9777 0.9985
900.	0.9961 0.9992	1.0002 0.9967	0.9997 1.0004	0.9859 0.9997
2100.	0.9970 0.9993	0.9999 0.9974	0.9996 1.0005	0.9895 0.9997
31	100.0	100.0	100.0	100.0
300.	0.9933 0.9982	0.9998 0.9941	0.9987 0.9998	0.9723 0.9974
900.	0.9954 0.9988	0.9997 0.9959	0.9989 0.9997	0.9824 0.9995
2100.	0.9966 0.9991	0.9997 0.9969	0.9991 0.9998	0.9872 0.9996
32	100.0	100.0	100.0	100.0
300.	0.9936 0.9982	0.9996 0.9943	0.9985 0.9998	0.9694 0.9966
900.	0.9962 0.9991	1.0001 0.9969	0.9996 1.0003	0.9844 1.0014
2100.	0.9976 0.9996	1.0004 0.9982	1.0002 1.0006	0.9918 1.0035
33	100.0	100.0	100.0	100.0
300.	0.9931 0.9988	1.0009 0.9946	1.0004 1.0013	0.9588 0.9959
900.	0.9961 0.9986	1.0013 0.9975	1.0013 1.0021	0.9790 1.0023
2100.	0.9977 1.0002	1.0014 0.9989	1.0019 1.0022	0.9894 1.0054
34	100.0	100.0	100.0	100.0
300.	0.9908 0.9972	0.9988 0.9916	0.9971 0.9985	0.9503 0.9933
900.	0.9945 0.9987	0.9996 0.9950	0.9985 0.9992	0.9756 1.0035
2100.	0.9967 0.9997	1.0005 0.9971	0.9996 1.0002	0.9962 0.0059
35	100.0	100.0	100.0	100.0
300.	0.9862 0.9958	0.9996 0.9877	0.9965 0.9994	0.9015 0.9713
900.	0.9913 0.9978	1.0006 0.9927	0.9987 1.0007	0.9360 0.9834
2100.	0.9943 0.9988	1.0011 0.9957	0.9999 1.0013	0.9883 0.9932
36	100.0	100.0	100.0	100.0
300.	0.9781 0.9922	0.9989 0.9799	0.9940 0.9992	0.8750 0.9612
900.	0.9845 0.9947	0.9992 0.9860	0.9961 0.9993	0.9935 0.9749
2100.	0.9891 0.9965	0.9999 0.9904	0.9979 1.0003	0.9448 0.9889
37	100.0	100.0	100.0	100.0
300.	0.9687 0.9870	0.9962 0.9709	0.9878 0.9953	0.8308 0.9356
900.	0.9770 0.9906	0.9973 0.9788	0.9910 0.9964	0.8763 0.9587
2100.	0.9828 0.9930	0.9828 0.9842	0.9932 0.9975	0.9090 0.9751
38	100.0	100.0	100.0	100.0
300.	0.9755 0.9890	0.9947 0.9760	0.9885 0.9938	0.8203 0.9264
900.	0.9821 0.9922	0.9954 0.9822	0.9911 0.9945	0.8652 0.9497
2100.	0.9864 0.9940	0.9952 0.9861	0.9921 0.9939	0.8926 0.9620
39	100.0	100.0	100.0	100.0
300.	0.9712 0.9885	0.9953 0.9725	0.9896 0.9952	0.7632 0.8935
900.	0.9799 0.9932	0.9967 0.9807	0.9942 0.9962	0.8174 0.9210
2100.	0.9861 0.9963	0.9979 0.9867	0.9972 0.9972	0.8591 0.9399
40	100.0	100.0	100.0	100.0
300.	0.9614 0.9803	0.9947 0.9627	0.9822 0.9947	0.7263 0.8826
900.	0.9704 0.9850	0.9937 0.9708	0.9846 0.9930	0.7890 0.9148
2100.	0.9782 0.9887	0.9940 0.9781	0.9874 0.9974	0.8457 0.9388
41	100.0	100.0	100.0	100.0
300.	0.9788 0.9931	0.9977 0.9802	0.9942 0.9980	0.7387 0.8960
900.	0.9852 0.9961	0.9974 0.9860	0.9963 0.9976	0.8027 0.9284
2100.	0.9895 0.9978	0.9974 0.9900	0.9975 0.9976	0.8327 0.9506
42	100.0	100.0	100.0	100.0
300.	0.9876 0.9951	1.0009 0.9895	0.9974 1.0013	0.7426 0.9052
900.	0.9915 0.9970	1.0017 0.9932	0.9991 1.0019	0.8064 0.9466
2100.	0.9944 0.9984	1.0020 0.9957	1.0000 1.0020	0.8598 0.9757
43	100.0	100.0	100.0	100.0
300.	0.9449 0.9714	0.9910 0.9470	0.9731 0.9904	0.6020 0.7862
900.	0.9544 0.9785	0.9890 0.9565	0.9779 0.9885	0.6575 0.8323
2100.	0.9612 0.9836	0.9898 0.9628	0.9809 0.9879	0.6563 0.8588
44	100.0	100.0	100.0	100.0
300.	0.9577 0.9749	0.9913 0.9591	0.9778 0.9921	0.5907 0.8121
900.	0.9645 0.9737	0.9904 0.9651	0.9812 0.9907	0.6605 0.8778
2100.	0.9708 0.9827	0.9898 0.9705	0.9836 0.9901	0.7272 0.9201
45	100.0	100.0	100.0	100.0
300.	0.9714 0.9877	0.9975 0.9724	0.9879 0.9980	0.5910 0.8088
900.	0.9754 0.9914	0.9981 0.9766	0.9913 0.9984	0.6459 0.8667
2100.	0.9787 0.9936	0.9977 0.9799	0.9930 0.9983	0.6931 0.9114
46	100.0	100.0	100.0	100.0
300.	0.8981 0.9232	0.9605 0.9029	0.9306 0.9545	0.4444 0.6340
900.	0.9113 0.9337	0.9610 0.9154	0.9380 0.9540	0.5268 0.6899
2100.	0.9211 0.9389	0.9540 0.9244	0.9399 0.9483	0.6014 0.7415
47	100.0	100.0	100.0	100.0
300.	0.9629 0.9795	1.0019 0.9655	0.9833 1.0048	0.5372 0.7656
900.	0.9662 0.9840	1.0034 0.9692	0.9884 1.0065	0.6179 0.8287
2100.	0.9676 0.9872	1.0046 0.9709	0.9957 1.0077	0.6586 0.8697
48	100.0	100.0	100.0	100.0
300.	0.9831 0.9894	0.9960 0.9847	0.9920 0.9958	0.5366 0.7697
900.	0.9896 0.9958	1.0002 0.9915	0.9983 1.0001	0.6065 0.8316
2100.	0.9942 0.9998	1.0019 0.9959	0.9971 1.0018	0.6820 1.0020
49	100.0	100.0	100.0	100.0
300.	0.9700 0.9888	1.0023 0.9712	0.9894 1.0034	0.4646 0.6549
900.	0.9810 0.9996	1.0092 0.9819	0.9991 1.0093	0.5489 0.7328
2100.	0.9873 1.0059	1.0142 0.9878	0.9977 1.0122	0.6425 0.7991
50	100.0	100.0	100.0	100.0
300.	0.9610 0.9710	0.9823 0.9581	0.9700 0.9804	0.6339 0.8333
900.	0.9620 0.9725	0.9799 0.9599	0.9709 0.9781	0.7350 0.9022
2100.	0.9646 0.9736	0.9768 0.9610	0.9711 0.9760	0.8243 0.9808
51	100.0	100.0	100.0	100.0
300.	0.8530 0.9102	1.0164 0.8541	0.9072 1.0130	0.2494 0.4153
900.	0.8629 0.9223	1.0328 0.8639	0.9172 1.0253	0.2782 0.4694
2100.	0.8757 0.9336	1.0713 0.8761	0.9239 1.0367	0.3298 0.5292
52	100.0	100.0	100.0	100.0
300.	0.9583 0.9809	0.9957 0.9800	0.9886 0.9966	0.5668 0.7394
900.	0.9616 0.9827	0.9962 0.9816	0.9901 0.9970	0.6266 0.7900
2100.	0.9652 0.9848	0.9973 0.9844	0.9919 0.9979	0.6973 0.8375
53	100.0	100.0	100.0	100.0
300.	0.8502 0.9233	0.9728 0.8365	0.8671 0.9604	0.2628 0.3965
900.	0.8441 0.9300	0.9818 0.8314	0.8669 0.9668	0.2783 0.4290
2100.	0.8504 0.9440	0.9974 0.8398	0.8774 0.9760	0.3140 0.5016
54	100.0	100.0	100.0	100.0
300.	0.9818 0.9866	0.9980 0.9832	0.9957 0.0013	0.5730 0.7660
900.	0.9910 0.9929	0.9990 0.9918	0.9981 1.0010	0.6713 0.8485
2100.	0.9950 0.9993	0.9954 0.9991	0.9991 1.0018	0.7881 0.9184
55	100.0	100.0	100.0	100.0
300.	0.8856 0.9272	0.9812 0.8873	0.9269 0.9787	0.2828 0.3866
900.	0.8885 0.9342	0.9905 0.8901	0.9373 0.9861	0.3290 0.5103
2100.	0.8953 0.9350	0.9974 0.8944	0.9911 0.9979	0.3034 0.4934
56	100.0	100.0	100.0	100.0
300.	0.9176 0.9625	0.9952 0.9200	0.9633 0.9964	0.2108 0.3765
900.	0.9165 0.9629	0.9973 0.9190	0.9664 0.9982	0.2116 0.3880
2100.	0.9177 0.9636	0.9996 0.9202	0.9693 1.0002	0.2156 0.4080
57	100.0	100.0	100.0	100.0
300.	0.9720 0.9792	0.9839 0.9709	0.9767 0.9809	0.2430 0.3998
900.	0.9702 0.9782	0.9821 0.9694	0.9755 0.9793	0.2463 0.4211
2100.	0.9696 0.9779	0.9799 0.9685	0.9781 0.9770	0.2592 0.4227
58	100.0	100.0	100.0	100.0
300.	1.0014 1.0028	1.0031 1.0019	1.0043 1.0049	0.6243 0.7537
900.	1.0010 1.0034	1.0039 1.0015	1.0045 1.0054	0.6504 0.8107
2100.	1.0006 1.0039	1.0051 1.0010	1.0049 1.0062	0.6969 0.8745
59	100.0	100.0	100.0	100.0
300.	0.9939 0.9987	1.0013 0.9941	0.9990 1.0018	0.5650 0.7161
900.	0.9944 0.9990	1.0015 0.9945	0.9993 1.0019	0.5827 0.7521
2100.	0.9951 0.9994	1.0018 0.9952	0.9996 1.0020	0.6207 0.8082
60	100.0	100.0	100.0	100.0
300.	0.9991 0.9987	1.0001 0.9993	0.9991 1.0002	0.6033 0.8113
900.	0.9994 0.9989	1.0002 0.9995	0.9993 1.0003	0.6199 0.8245
2100.	1.0000 0.9991	1.0002 0.9991	1.0002 0.9992	0.6454 0.8469

Table A-4.1.2 (continued)

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GROUP	T(K)	FE1			FE2			FT1			FT2		
		10.	100.	1000.	10.	100.	1000.	10.	100.	1000.	10.	100.	1000.
61	300.	0.9995	1.0002	1.0001	0.9995	1.0001	1.0000	0.9995	0.9997	1.0002	0.9914	0.9994	0.9996
	900.	0.9995	1.0002	1.0001	0.9995	1.0001	1.0000	0.9883	0.9993	1.0002	0.9890	0.9990	0.9996
	2100.	0.9993	1.0002	1.0001	0.9993	1.0001	1.0000	0.9902	0.9972	1.0003	0.9812	0.9971	0.9993
62	300.	1.0006	1.0001	1.0000	1.0006	1.0001	0.9999	0.8274	0.9278	0.9925	0.8320	0.9401	0.9972
	900.	1.0007	1.0001	1.0000	1.0007	1.0001	0.9999	0.8529	0.9521	0.9965	0.8580	0.9622	1.0000
	2100.	1.0007	1.0000	1.0000	1.0007	1.0000	0.9999	0.8858	0.9731	0.9990	0.8908	0.9805	1.0030
63	300.	0.9979	0.9990	0.9997	0.9980	0.9990	0.9995	0.9726	0.9877	0.9965	0.9735	0.9882	0.9953
	900.	0.9979	0.9990	0.9997	0.9979	0.9990	0.9995	0.9702	0.9867	0.9943	0.9713	0.9873	0.9950
	2100.	0.9977	0.9990	0.9997	0.9978	0.9990	0.9995	0.9620	0.9844	0.9859	0.9662	0.9852	0.9944
64	300.	0.9821	0.9808	0.9914	0.9822	0.9825	0.9899	0.7115	0.8062	0.9611	0.7172	0.8252	0.9598
	900.	0.9818	0.9805	0.9912	0.9819	0.9821	0.9898	0.7307	0.8175	0.9625	0.7361	0.8352	0.9608
	2100.	0.9814	0.9800	0.9911	0.9816	0.9806	0.9896	0.7622	0.8341	0.9641	0.7669	0.8495	0.9619
65	300.	0.9998	0.9994	0.9991	0.9999	0.9995	0.9991	0.9978	1.0012	1.0031	0.9979	1.0010	1.0034
	900.	0.9999	0.9994	0.9991	0.9999	0.9995	0.9991	0.9978	1.0011	1.0030	0.9979	1.0009	1.0034
	2100.	0.9999	0.9994	0.9992	0.9999	0.9995	0.9991	0.9978	1.0011	1.0030	0.9979	1.0009	1.0034
66	300.	0.9988	0.9990	0.9993	0.9988	0.9990	0.9993	0.9917	0.9938	0.9981	0.9918	0.9940	0.9960
	900.	0.9988	0.9990	0.9993	0.9988	0.9990	0.9993	0.9917	0.9938	0.9982	0.9918	0.9941	0.9960
	2100.	0.9988	0.9990	0.9993	0.9988	0.9990	0.9993	0.9917	0.9938	0.9982	0.9918	0.9941	0.9960
67	300.	0.9987	0.9987	0.9992	0.9987	0.9988	0.9992	0.9812	0.9843	0.9918	0.9814	0.9851	0.9917
	900.	0.9987	0.9987	0.9992	0.9987	0.9988	0.9992	0.9812	0.9843	0.9919	0.9814	0.9851	0.9917
	2100.	0.9987	0.9987	0.9992	0.9987	0.9988	0.9992	0.9812	0.9843	0.9919	0.9814	0.9851	0.9917
68	300.	0.9984	0.9983	0.9990	0.9984	0.9984	0.9990	0.9559	0.9611	0.9794	0.9563	0.9631	0.9800
	900.	0.9984	0.9983	0.9990	0.9984	0.9984	0.9990	0.9559	0.9611	0.9794	0.9563	0.9631	0.9800
	2100.	0.9984	0.9983	0.9990	0.9984	0.9984	0.9990	0.9559	0.9611	0.9794	0.9563	0.9631	0.9800
69	300.	0.9997	0.9997	0.9998	0.9997	0.9997	0.9998	0.9710	0.9719	0.9797	0.9712	0.9731	0.9812
	900.	0.9997	0.9997	0.9998	0.9997	0.9997	0.9998	0.9710	0.9719	0.9798	0.9712	0.9731	0.9812
	2100.	0.9997	0.9997	0.9998	0.9997	0.9997	0.9998	0.9710	0.9719	0.9798	0.9712	0.9731	0.9812
70	300.	0.9999	0.9999	0.9996	0.9999	0.9999	0.9996	1.0004	1.0009	1.0048	1.0004	1.0010	1.0042
	900.	0.9999	0.9999	0.9996	0.9999	0.9999	0.9996	1.0004	1.0009	1.0048	1.0004	1.0010	1.0042
	2100.	0.9999	0.9999	0.9996	0.9999	0.9999	0.9996	1.0004	1.0009	1.0048	1.0004	1.0010	1.0042

GROUP	T(K)	FR1			FR2			GROUP	T(K)	FR1			FR2			
		10.0	100.0	1000.0	10.0	100.0	1000.0			10.0	100.0	1000.0	10.0	100.0	1000.0	
26	300.	0.6142	0.9293	0.9597	0.6073	0.8927	0.9359	49	300.	0.6173	0.6459	0.8466	0.6374	0.7375	0.8529	
	900.	0.6168	0.9298	0.9578	0.6096	0.8902	0.9318		900.	0.6598	0.6806	0.8378	0.6790	0.7705	0.8520	
	2100.	0.6240	0.9311	0.9566	0.6128	0.8888	0.9247		2100.	0.7527	0.7358	0.8154	0.7678	0.8247	0.8561	
27	300.	0.6148	0.9291	0.9647	0.6113	0.8996	0.9453	50	300.	1.1744	0.9974	0.5919	1.0073	0.6272	0.4190	
	900.	0.6148	0.9291	0.9635	0.6104	0.8972	0.9424		900.	1.2252	1.0190	0.5601	1.0256	0.6082	0.3931	
	2100.	0.6172	0.9284	0.9582	0.6105	0.8899	0.9331		2100.	1.0345	0.8525	0.3904	0.8045	0.4333	0.2685	
28	300.	0.5857	0.9203	0.9544	0.5792	0.8693	0.9192	51	300.	0.5360	0.5608	0.9390	0.5852	0.5951	1.0330	0.9244
	900.	0.5842	0.9206	0.9544	0.5774	0.8675	0.9170		900.	0.5990	0.6090	1.0018	0.9327	0.6336	1.1283	0.9200
	2100.	0.5848	0.9219	0.9563	0.5785	0.8705	0.9199		2100.	0.7024	0.10897	0.6948	0.7335	1.2017	0.9187	
29	300.	0.5907	0.9195	0.9506	0.6158	0.9115	0.9776	52	300.	0.3842	0.3484	0.6495	1.6638	0.7344	0.5558	
	900.	0.5898	0.9214	0.9560	0.6178	0.9201	0.9873		900.	0.3825	0.5286	0.6372	1.6954	0.7259	0.5405	
	2100.	0.5885	0.9236	0.9502	0.6195	0.9311	0.9988		2100.	0.3246	0.4823	0.5872	1.5141	0.6567	0.4889	
30	300.	0.6357	0.9107	0.9754	0.6613	0.8827	0.9494	53	300.	0.5262	0.5042	0.9287	0.6284	1.1687	1.1607	
	900.	0.6337	0.9116	0.9791	0.6610	0.8862	0.9539		900.	0.5312	0.5570	0.9578	0.7353	1.2997	1.2089	
	2100.	0.6285	0.9128	0.9830	0.6571	0.8903	0.9590		2100.	0.8454	0.6490	1.0192	0.9628	1.5147	1.3266	
31	300.	0.6807	0.8796	0.9555	0.7081	0.8701	0.9499	54	300.	0.3094	0.7400	0.9585	0.8357	1.0073	0.7145	
	900.	0.6768	0.8746	0.9422	0.6986	0.8521	0.9292		900.	0.9320	0.7938	0.9634	0.9526	1.0424	0.8046	
	2100.	0.6811	0.8708	0.9302	0.6863	0.8361	0.9103		2100.	1.0270	0.8505	0.9776	1.0399	1.0541	0.7105	
32	300.	0.7678	0.8823	0.9635	0.7785	0.8646	0.9475	55	300.	1.1053	1.0777	0.9501	1.0926	1.1361	0.9958	
	900.	0.7654	0.8793	0.9563	0.7819	0.8539	0.9358		900.	1.1308	1.1374	0.9490	1.1203	1.1742	0.9917	
	2100.	0.7591	0.8755	0.9473	0.7730	0.8422	0.9227		2100.	1.2433	1.2317	0.9569	1.2355	1.2424	0.9997	
33	300.	0.8687	0.8786	0.9475	0.8766	0.8449	0.9190	56	300.	2.5069	1.1227	0.8175	2.3588	1.0588	0.8193	
	900.	0.8715	0.8787	0.9473	0.8848	0.8448	0.9188		900.	2.5770	1.1725	0.8219	2.4251	1.0875	0.8217	
	2100.	0.8712	0.8788	0.9479	0.8894	0.8474	0.9213		2100.	2.6711	1.2237	0.8316	2.5149	1.1187	0.8276	
34	300.	0.8358	0.8716	0.9170	0.8522	0.8615	0.9565	57	300.	0.6478	0.5929	0.7001	0.6937	0.7101	0.3147	
	900.	0.8237	0.8645	0.9186	0.8419	0.8602	0.9109		900.	0.6709	0.6935	0.8246	0.7196	0.7098	0.3052	
	2100.	0.8217	0.8626	0.9050	0.8512	0.7904	0.9014		2100.	0.8180	0.6365	0.5027	0.1886	0.6591	0.6014	
35	300.	0.7999	0.7827	0.9423	0.7756	0.7145	0.7961	58	300.	1.2668						

TABLE A-4.2.1 INFINITE DILUTION CROSS SECTION CODE NO = 928 U-238,1 PAGE 1

GROUP	TOTAL	FISSION	NU	CAPTURE	INELASTIC	ELASTIC	NU	ELAB	GENERAL
23	1.31948E 01	4.00000E-05	2.32389E 00	3.78939E-01	3.29536E-05	1.27726E 01	3.00159E-02	4.00000E-01	
24	1.33609E 01	4.44835E-05	2.32433E 00	4.32634E-01	0.0	1.29282E 01	3.91633E-02	4.12006E-01	
25	1.35969E 01	7.00000E-05	2.32330E 00	4.08881E-01	0.0	1.31079E 01	3.06215E+02	4.23152E-01	
26	1.38478E 01	7.00000E-05	2.32243E 00	5.45041E-01	0.0	1.33027E 01	2.39115E-02	4.30400E-01	
27	1.41243E 01	7.00000E-05	2.32177E 00	6.03553E-01	0.0	1.35507E 01	1.87554E-02	4.51731E-01	
28	1.44732E 01	7.00000E-05	2.32126E 00	6.62882E-01	0.0	1.38102E 01	1.48304E-02	4.58213E-01	
29	1.49186E 01	0.0	0.0	7.31682E-01	0.0	1.41869E 01	1.17833E-02	4.69204E-01	
30	1.54873E 01	0.0	0.0	8.16624E-01	0.0	1.46706E 01	9.48295E-03	4.88783E-01	
31	1.61335E 01	0.0	0.0	9.16171E-01	0.0	1.52375E 01	5.37853E-03	5.20405E-01	
32	1.82604E 01	4.64908E-11	2.30622E 00	1.07148E 00	0.0	1.71889E 01	2.82479E-03	6.23134E-01	
33	1.77589E 01	2.11977E-10	2.33851E 00	1.26397E 00	0.0	1.64930E 01	2.82479E-03	5.80454E-01	
34	2.32234E 01	5.41263E-10	2.33188E 00	1.55814E 00	0.0	2.16762E 01	2.82479E-03	6.04558E-01	
35	2.30077E 01	1.79734E-09	2.32469E 00	1.62560E 00	0.0	2.13821E 01	2.82479E-03	6.68417E-01	
36	1.80308E 01	1.84409E-08	2.32027E 00	1.58270E 00	0.0	1.64481E 01	2.82479E-03	3.66625E-01	
37	2.09798E 01	3.71767E-04	2.31969E 00	2.31035E 00	0.0	1.86691E 01	2.82479E-03	4.91626E-01	
38	2.69529E 01	9.85520E-08	2.31972E 00	3.29382E 00	0.0	2.36591E 01	2.82479E-03	2.99890E-01	
39	1.91860E 01	1.72498E-03	2.31961E 00	2.91419E 00	0.0	1.62701E 01	2.82479E-03	3.92273E-01	
40	2.12671E 01	4.81848E-08	2.31799E 00	3.67983E 00	0.0	1.73872E 01	2.82479E-03	3.24203E-01	
41	1.425239E 01	2.000115E-08	2.32110E 00	2.73249E 00	0.0	1.15214E 01	2.82479E-03	3.78029E-01	
42	2.45930E 01	1.36790E-08	2.32842E 00	4.54679E 00	0.0	2.00462E 01	2.82479E-03	3.68719E-01	
43	2.55559E 01	1.13808E-08	2.33308E 00	6.58534E 00	0.0	1.89705E 01	2.82479E-03	4.77491E-01	
44	1.03362E 02	1.05312E-08	2.31939E 00	1.55714E 01	0.0	8.77908E 01	2.82479E-03	2.51650E-01	
45	1.18330E 01	1.03336E-08	2.32325E 00	2.51196E 00	0.0	9.32099E 00	2.82479E-03	3.65225E-01	
46	1.53174E 02	1.05679E-08	2.32298E 00	4.43964E 01	0.0	1.08777E 02	2.82479E-03	4.81987E-02	
47	1.22596E 01	1.11060E-08	2.32411E 00	4.96073E 00	0.0	7.29892E 00	2.82479E-03	3.01836E-01	
48	1.01619E 02	1.19141E-08	2.32174E 00	4.45886E 01	0.0	5.70307E 01	2.82479E-03	2.52056E-01	
49	9.88108E 00	1.29533E-08	2.31803E 00	1.33059E-01	0.0	9.75802E 00	2.82479E-03	3.81255E-01	
50	3.75957E 02	1.42303E-08	2.32139E 00	1.64466E 02	0.0	2.111491E 02	2.82479E-03	1.66824E 00	
51	7.83318E 00	1.57802E-08	2.32070E 00	2.00698E 00	0.0	5.82621E 00	2.82479E-03	2.75639E-01	
52	1.39955E 01	1.75045E-08	2.32024E 00	2.07405E 00	0.0	1.19214E 01	2.82479E-03	7.82329E-01	
53	3.23374E 02	1.97311E-08	2.32484E 00	2.39122E 02	0.0	8.42519E 01	2.82479E-03	2.43496E-01	
54	8.61112E 00	2.21720E-08	2.31997E 00	3.63485E-01	0.0	8.24774E 00	2.82479E-03	2.92096E-01	
55	9.65079E 00	2.49447E-08	2.31993E 00	5.61431E-01	0.0	9.08936E 00	2.82479E-03	3.13211E-01	
56	1.13683E 01	2.81539E-08	2.32140E 00	1.16279E 00	0.0	1.02055E 01	2.82479E-03	3.70330E-01	
57	5.46743E 02	3.18487E-08	2.32353E 00	5.07712E 02	0.0	3.90315E 01	2.82479E-03	1.96883E-01	
58	1.06055E 01	3.60255E-08	2.31965E 00	3.05716E 00	0.0	7.54837E 00	2.82479E-03	2.76962E-01	
59	9.47754E 00	4.08465E-08	2.31950E 00	9.12958E-01	0.0	8.56496E 00	2.82479E-03	2.89785E-01	
60	9.51212E 00	4.64163E-08	2.31950E 00	6.03061E-01	0.0	8.90906E 00	2.82479E-03	2.94322E-01	
61	9.51831E 00	5.27930E-08	2.31950E 00	5.10266E-01	0.0	9.07287E 00	2.82479E-03	3.00922E-01	
62	9.64830E 00	6.01126E-08	2.31950E 00	4.84984E-01	0.0	9.16331E 00	2.82479E-03	3.00554E-01	
63	9.71657E 00	6.91663E-08	2.31950E 00	4.94148E-01	0.0	9.22242E 00	2.82479E-03	3.09746E-01	
64	9.77593E 00	7.79693E-08	2.31950E 00	5.14537E-01	0.0	9.26140E 00	2.82479E-03	3.07881E-01	
65	9.38513E 00	7.20623E-08	2.31950E 00	5.44332E-01	0.0	8.84080E 00	2.82479E-03	2.90633E-01	
66	9.46121E 00	5.57249E-08	2.31950E 00	5.92658E-01	0.0	8.86955E 00	2.82479E-03	2.92327E-01	
67	9.54087E 00	4.32153E-08	2.31950E 00	6.51856E-01	0.0	8.88901E 00	2.82479E-03	2.98882E-01	
68	9.63127E 00	3.35333E-08	2.31950E 00	7.22621E-01	0.0	8.90856E 00	2.82479E-03	2.94212E-01	
69	9.72316E 00	2.59294E-08	2.31950E 00	8.06973E-01	0.0	8.91618E 00	2.82479E-03	2.91648E-01	
70	9.83055E 00	2.00374E-08	2.31950E 00	9.03537E-01	0.0	8.92519E 00	1.37278E-02	2.93607E-01	

Table A-4.2.2 Self-Shielding Factors TABLE Code No = 925

GROUP	T(K)	FF1			FC			FE					
		1.	10.	100.	1.	10.	100.	1.	10.	100.	1000.		
23	300.	1.0000	1.0000	1.0000	1.0000	0.9059	0.9433	0.9879	0.9986	0.8964	0.9309	0.9823	0.9978
	900.	1.0000	1.0000	1.0000	1.0000	0.9490	0.9699	0.9935	0.9991	0.9305	0.9540	0.9888	0.9986
	2100.	1.0000	1.0000	1.0000	1.0000	0.9688	0.9822	0.9963	0.9996	0.9499	0.9673	0.9927	0.9995
24	300.	1.0000	1.0000	1.0000	1.0000	0.8986	0.9371	0.9835	0.9983	0.8873	0.9227	0.9789	0.9974
	900.	1.0000	1.0000	1.0000	1.0000	0.9404	0.9645	0.9925	0.9992	0.9211	0.9468	0.9866	0.9984
	2100.	1.0000	1.0000	1.0000	1.0000	0.9616	0.9782	0.9958	0.9999	0.9403	0.9606	0.9908	0.9990
25	300.	1.0000	1.0000	1.0000	1.0000	0.8713	0.9193	0.9808	0.9977	0.8820	0.9174	0.9762	0.9969
	900.	1.0000	1.0000	1.0000	1.0000	0.9518	0.9825	0.9890	0.9986	0.9162	0.9420	0.9845	0.9980
	2100.	1.0000	1.0000	1.0000	1.0000	0.9493	0.9699	0.9935	0.9993	0.9375	0.9571	0.9886	0.9980
26	300.	1.0000	1.0000	1.0000	1.0000	0.8435	0.8980	0.9744	0.9969	0.8622	0.9009	0.9700	0.9961
	900.	1.0000	1.0000	1.0000	1.0000	0.9006	0.9366	0.9854	0.9982	0.9004	0.9302	0.9809	0.9975
	2100.	1.0000	1.0000	1.0000	1.0000	0.9323	0.9581	0.9910	0.9991	0.9267	0.9493	0.9868	0.9981
27	300.	1.0000	1.0000	1.0000	1.0000	0.8261	0.8871	0.9707	0.9963	0.8449	0.8847	0.9615	0.9947
	900.	1.0000	1.0000	1.0000	1.0000	0.8853	0.9280	0.9827	0.9981	0.8839	0.9150	0.9745	0.9969
	2100.	1.0000	1.0000	1.0000	1.0000	0.9209	0.9517	0.9891	0.9991	0.9121	0.9373	0.9836	0.9992
28	300.	1.0000	1.0000	1.0000	1.0000	0.7745	0.8456	0.9566	0.9944	0.8298	0.8730	0.9537	0.9937
	900.	1.0000	1.0000	1.0000	1.0000	0.8498	0.9001	0.9743	0.9969	0.8691	0.9051	0.9707	0.9961
	2100.	1.0000	1.0000	1.0000	1.0000	0.8985	0.9340	0.9842	0.9989	0.8979	0.9282	0.9797	0.9973
29	300.	0.0560	0.0560	0.0560	0.0560	0.7605	0.8284	0.9468	0.9927	0.8017	0.8435	0.9393	0.9907
	900.	0.0560	0.0560	0.0560	0.0560	0.8357	0.8856	0.9677	0.9957	0.8409	0.8776	0.9583	0.9942
	2100.	0.0560	0.0560	0.0560	0.0560	0.8802	0.9181	0.9784	0.9973	0.8691	0.9014	0.9680	0.9942
30	300.	0.0100	0.0100	0.0100	0.0100	0.7011	0.7873	0.9307	0.9897	0.7659	0.8123	0.9146	0.9845
	900.	0.0100	0.0100	0.0100	0.0100	0.7911	0.8582	0.9587	0.9940	0.8031	0.8445	0.9365	0.9898
	2100.	0.0100	0.0100	0.0100	0.0100	0.8594	0.9047	0.9747	0.9982	0.8326	0.8701	0.95	

Table A-4.2.2 (continued)

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GROUP	TERM	PPF			FC			PE					
		1	10	100	1000	1	10	100	1000	1	10	100	1000
38	300.	0.9670	1.0000	1.0000	1.0000	0.1872	0.2498	0.4853	0.8418	0.3978	0.4430	0.5873	0.6669
	900.	0.9960	1.0000	1.0000	1.0000	0.2317	0.3061	0.5810	0.8941	0.4233	0.4720	0.6409	0.8925
	2100.	1.0000	1.0000	1.0000	1.0000	0.2817	0.3369	0.6844	0.9279	0.4479	0.5012	0.6883	0.9164
39	300.	0.7250	0.8510	0.9860	1.0000	0.2272	0.2874	0.5343	0.8626	0.6424	0.6686	0.7571	0.9136
	900.	0.8530	0.9420	1.0000	1.0000	0.2436	0.3559	0.6268	0.9093	0.6393	0.6877	0.7917	0.9403
	2100.	0.9500	1.0000	1.0000	1.0000	0.3448	0.4237	0.7027	0.9394	0.6813	0.7119	0.8278	0.9616
40	300.	1.0000	0.9910	0.9910	0.9970	0.1354	0.1840	0.4095	0.8178	0.5534	0.5843	0.6958	0.9033
	900.	0.9900	0.9830	0.9870	0.9970	0.1695	0.2371	0.5158	0.8836	0.5772	0.6115	0.7475	0.9374
	2100.	0.9770	0.9740	0.9840	0.9970	0.2133	0.3007	0.6137	0.9236	0.5937	0.6369	0.7901	0.9524
41	300.	1.0000	1.0000	1.0000	1.0000	0.2377	0.3143	0.6174	0.9198	0.9005	0.9079	0.9443	0.9872
	900.	1.0000	1.0000	1.0000	1.0000	0.3223	0.4153	0.7247	0.9525	0.9112	0.9191	0.9581	0.9922
	2100.	1.0000	0.9990	1.0000	1.0000	0.4072	0.5101	0.8011	0.9688	0.9232	0.9310	0.9707	0.9973
42	300.	1.0000	1.0000	0.9990	1.0000	0.1163	0.1498	0.3244	0.7293	0.5246	0.5470	0.6264	0.8262
	900.	1.0000	1.0000	0.9990	1.0000	0.1357	0.1824	0.4085	0.8036	0.5357	0.5610	0.6621	0.8743
	2100.	1.0000	0.9990	0.9990	1.0000	0.1640	0.2240	0.4362	0.8621	0.5637	0.5930	0.7157	0.9230
43	300.	1.0000	1.0000	1.0000	1.0000	0.1005	0.1301	0.2955	0.7228	0.6231	0.6368	0.7113	0.8868
	900.	1.0000	1.0000	1.0000	1.0000	0.1189	0.1638	0.3911	0.8156	0.6400	0.6542	0.7499	0.9242
	2100.	1.0000	0.9990	0.9990	1.0000	0.1463	0.2092	0.4909	0.8761	0.6710	0.6877	0.8027	0.9615
44	300.	0.9960	0.9970	0.9990	1.0000	0.0677	0.0896	0.1682	0.4489	0.1256	0.1538	0.2299	0.4671
	900.	0.9950	0.9970	0.9990	1.0000	0.0698	0.0954	0.2017	0.5400	0.1280	0.1595	0.2520	0.5396
	2100.	0.9950	0.9970	0.9990	1.0000	0.0763	0.1094	0.2541	0.6328	0.1326	0.1704	0.2884	0.6216
45	300.	1.0000	1.0000	1.0000	1.0000	0.2015	0.2990	0.6373	0.9424	0.9833	0.9768	0.9881	0.9978
	900.	1.0000	1.0000	1.0000	1.0000	0.2561	0.3932	0.7506	0.9720	0.9876	0.9805	0.9914	0.9985
	2100.	1.0000	1.0000	1.0000	1.0000	0.2967	0.4398	0.8081	0.9640	0.9870	0.9797	0.9888	0.9939
46	300.	1.0000	0.9990	0.9990	1.0000	0.0366	0.0533	0.1269	0.3858	0.1354	0.1468	0.2077	0.4249
	900.	1.0000	0.9990	0.9990	1.0000	0.0380	0.0576	0.1556	0.4824	0.1389	0.1517	0.2290	0.5048
	2100.	0.9990	0.9980	0.9990	1.0000	0.0406	0.0650	0.1976	0.5813	0.1415	0.1569	0.2388	0.5890
47	300.	0.9940	0.9970	0.9990	1.0000	0.1687	0.2061	0.4623	0.8590	0.9611	0.9330	0.9645	0.9907
	900.	0.9940	0.9970	0.9990	1.0000	0.1973	0.2485	0.5613	0.9094	0.9516	0.9295	0.9663	0.9927
	2100.	0.9940	0.9970	0.9990	1.0000	0.2174	0.2901	0.6371	0.9324	0.9052	0.8894	0.9299	0.9580
48	300.	1.0000	1.0000	1.0000	1.0000	0.0286	0.0444	0.1109	0.3609	0.2072	0.2123	0.2591	0.4665
	900.	1.0000	1.0000	1.0000	1.0000	0.0294	0.0472	0.1380	0.4677	0.2077	0.2166	0.2839	0.5556
	2100.	1.0000	1.0000	1.0000	1.0000	0.0303	0.0527	0.1775	0.5731	0.2033	0.2177	0.3142	0.6405
49	300.	0.9980	0.9990	1.0000	1.0000	0.0991	0.0973	0.1987	0.5993	1.0119	0.9992	0.9995	0.9998
	900.	0.9980	0.9990	1.0000	1.0000	0.0997	0.0979	0.1987	0.5999	1.0124	1.0003	0.9992	0.9998
	2100.	0.9980	0.9990	1.0000	1.0000	0.0999	0.0990	0.1984	0.6001	1.009	1.0275	1.0272	1.0359
50	300.	0.9850	0.9860	0.9930	0.9970	0.0092	0.0177	0.0635	0.2250	0.0759	0.0855	0.1285	0.2765
	900.	0.9850	0.9870	0.9930	0.9960	0.0093	0.0181	0.0698	0.2846	0.0760	0.0863	0.1356	0.3330
	2100.	0.9840	0.9860	0.9910	0.9960	0.0092	0.0189	0.0791	0.3580	0.0744	0.0858	0.1444	0.3998
51	300.	0.9990	1.0000	1.0000	1.0000	0.5715	1.0241	1.1226	1.0422	1.1288	1.0036	0.9870	0.9998
	900.	0.9990	1.0000	1.0000	1.0000	0.5777	1.0463	1.2181	1.1047	1.1300	1.0161	0.9933	1.0033
	2100.	0.9990	1.0000	1.0000	1.0000	0.5918	1.0978	1.5300	1.3336	1.1009	1.0275	1.0272	1.0359
52	300.	0.9920	0.9940	0.9990	1.0000	0.4465	0.7216	0.9191	0.9863	0.8673	0.9420	0.9831	0.9971
	900.	0.9910	0.9940	0.9990	1.0000	0.4500	0.7372	0.9389	0.1015	0.8674	0.9443	0.9846	1.0003
	2100.	0.9910	0.9940	0.9980	1.0000	0.4601	0.7775	1.0100	1.1374	0.8451	0.9256	0.9647	0.9874
53	300.	1.0000	1.0000	1.0000	1.0000	0.0128	0.0421	0.1075	0.3013	0.0764	0.1028	0.1606	0.3422
	900.	1.0000	1.0000	1.0000	1.0000	0.0129	0.0441	0.1353	0.4037	0.0761	0.1033	0.1859	0.4385
	2100.	1.0000	1.0000	1.0000	1.0000	0.0128	0.0482	0.1984	0.5293	0.0738	0.1026	0.2399	0.5540
54	300.	0.9980	1.0000	1.0000	1.0000	0.9784	0.9793	1.0014	1.0009	1.0044	1.0043	0.9997	0.9998
	900.	0.9980	1.0000	1.0000	1.0000	0.9788	0.9787	1.0029	1.0013	1.0044	1.0043	0.9995	0.9998
	2100.	0.9980	1.0000	1.0000	1.0000	0.9822	0.9804	1.0126	1.0054	0.9778	0.9782	0.9716	0.9731
55	300.	0.9980	0.9990	1.0000	1.0000	0.8314	0.9445	0.9811	0.9949	0.9973	1.0001	0.9997	0.9999
	900.	0.9980	0.9990	1.0000	1.0000	0.8471	0.9610	0.9798	0.9923	0.9973	1.0001	0.9996	0.9999
	2100.	0.9980	0.9990	1.0000	1.0000	0.8503	0.9610	0.9502	0.9778	0.9720	0.9750	0.9737	0.9746
56	300.	0.9970	0.9980	1.0000	1.0000	0.8318	0.9381	0.9843	0.9958	0.9849	0.9946	0.9986	0.9996
	900.	0.9970	0.9980	1.0000	1.0000	0.8357	0.9433	0.9878	0.9978	0.9878	0.9943	0.9846	1.0003
	2100.	0.9970	0.9980	1.0000	1.0000	0.8494	0.9602	0.9903	1.0180	0.9614	0.9714	0.9737	0.9763
57	300.	0.9950	0.9960	0.9970	0.9990	0.0235	0.0302	0.0877	0.2955	0.2932	0.3209	0.3571	0.4856
	900.	0.9940	0.9950	0.9970	0.9990	0.0241	0.0313	0.0987	0.3672	0.2943	0.3223	0.3720	0.5479
	2100.	0.9930	0.9930	0.9960	0.9980	0.0256	0.0335	0.1153	0.4522	0.2903	0.3179	0.3892	0.6144
58	300.	1.0000	1.0000	1.0000	1.0000	0.8094	0.8370	0.9933	0.9956	1.0266	1.0227	1.0004	1.0003
	900.	1.0000	1.0000	1.0000	1.0000	0.8127	0.8376	1.0034	1.0021	1.0264	1.0230	0.9995	1.0000
	2100.	1.0000	1.0000	1.0000	1.0000	1.1805	1.0747	1.0097	1.0013	0.9800	0.9900	0.9986	0.9998
59	300.	1.0000	1.0000	1.0000	1.0000	0.9918	0.9835	0.9916	0.9913	1.0008	1.0015	0.9999	0.9999
	900.	1.0000	1.0000	1.0000	1.0000	0.9927	0.9843	1.0040	1.0023	1.0007	1.0015	0.9997	0.9998
	2100.	1.0000	1.0000	1.0000	1.0000	0.9951	0.9977	1.0022	1.0007	1.0004	1.0000	0.9993	0.9998
60	300.	1.0000	1.0000	1.0000	1.0000	1.0023	1.0985	1.0008	1.0006	0.9998	0.9999	0.	

Table A-4.2.2 (continued)

GROUP	T(K)	FT				GROUP	T(K)	FT			
		1.	10.	100.	1000.			1.	10.	100.	1000.
23	300.	0.8207	0.8791	0.9664	0.9958	47	300.	0.6110	0.6172	0.7017	0.8970
	900.	0.8777	0.9175	0.9786	0.9973		900.	0.6073	0.6199	0.7337	0.9301
	2100.	0.9099	0.9399	0.9855	0.9986		2100.	0.5819	0.6017	0.7415	0.9264
24	300.	0.6120	0.8691	0.9605	0.9948	48	300.	0.1072	0.1118	0.1326	0.2395
	900.	0.8655	0.9071	0.9746	0.9968		900.	0.1063	0.1113	0.1351	0.2990
	2100.	0.8984	0.9295	0.9822	0.9980		2100.	0.1029	0.1087	0.1400	0.3740
25	300.	0.8051	0.8620	0.9559	0.9940	49	300.	1.0052	0.9954	0.9988	0.9998
	900.	0.8593	0.9002	0.9708	0.9962		900.	1.0054	0.9965	0.9985	0.9998
	2100.	0.8938	0.9252	0.9790	0.9944		2100.	0.9780	0.9707	0.9698	0.9717
26	300.	0.7794	0.8382	0.9448	0.9922	50	300.	0.0402	0.0451	0.0600	0.1223
	900.	0.8353	0.8810	0.9641	0.9952		900.	0.0401	0.0430	0.0586	0.1376
	2100.	0.8757	0.9111	0.9741	0.9966		2100.	0.0391	0.0418	0.0562	0.1650
27	300.	0.7584	0.8190	0.9311	0.9896	51	300.	0.9815	0.9631	1.0087	1.0086
	900.	0.8155	0.8611	0.9529	0.9937		900.	0.9829	0.9702	1.0330	1.0282
	2100.	0.8548	0.8926	0.9678	0.9971		2100.	0.9608	0.9500	1.0990	1.1072
28	300.	0.7404	0.8035	0.9209	0.9877	52	300.	0.7456	0.8520	0.9497	0.9921
	900.	0.7963	0.8465	0.9458	0.9923		900.	0.7455	0.8541	0.9524	0.9990
	2100.	0.8376	0.8796	0.9617	0.9948		2100.	0.7265	0.8381	0.9397	1.0066
29	300.	0.7117	0.7690	0.8936	0.9820	53	300.	0.0230	0.0286	0.0515	0.1326
	900.	0.7649	0.8114	0.9251	0.9886		900.	0.0229	0.0278	0.0516	0.1719
	2100.	0.8013	0.8431	0.9430	0.9904		2100.	0.0222	0.0260	0.0563	0.2387
30	300.	0.6607	0.7354	0.8625	0.9707	54	300.	1.0024	1.0028	0.9997	0.9998
	900.	0.7146	0.7748	0.8937	0.9804		900.	1.0024	1.0029	0.9995	0.9998
	2100.	0.7578	0.8069	0.9167	0.9866		2100.	0.9771	0.9779	0.9734	0.9746
31	300.	0.6143	0.6777	0.8187	0.9598	55	300.	0.9819	0.9927	0.9977	0.9994
	900.	0.6679	0.7190	0.8599	0.9737		900.	0.9836	0.9945	0.9977	0.9993
	2100.	0.7096	0.7583	0.8944	0.9841		2100.	0.9607	0.9715	0.9718	0.9748
32	300.	0.5757	0.6362	0.7876	0.9528	56	300.	0.9597	0.9523	0.9957	0.9991
	900.	0.6241	0.6776	0.8376	0.9701		900.	0.9602	0.9828	0.9961	0.9998
	2100.	0.6624	0.7157	0.8750	0.9791		2100.	0.9407	0.9638	0.9742	0.9807
33	300.	0.6002	0.6540	0.7886	0.9477	57	300.	0.0336	0.0374	0.0588	0.1476
	900.	0.6471	0.6939	0.8349	0.9661		900.	0.0336	0.0372	0.0581	0.1793
	2100.	0.6888	0.7345	0.8728	0.9768		2100.	0.0331	0.0355	0.0586	0.2339
34	300.	0.4032	0.4802	0.6308	0.8800	58	300.	0.9517	0.9604	0.9969	0.9987
	900.	0.4413	0.5096	0.6814	0.9125		900.	0.9524	0.9607	0.9993	1.0004
	2100.	0.4794	0.5459	0.7351	0.9374		2100.	0.10182	0.10368	1.0004	1.0001
35	300.	0.3531	0.4383	0.5771	0.8264	59	300.	0.9998	0.9997	1.0000	1.0000
	900.	0.3740	0.4566	0.6134	0.8674		900.	0.9999	0.9997	1.0001	1.0001
	2100.	0.4100	0.4825	0.6482	0.8861		2100.	0.9999	1.0002	1.0000	1.0000
36	300.	0.5024	0.5522	0.6629	0.8779	60	300.	0.9999	1.0000	1.0000	1.0000
	900.	0.5343	0.5760	0.7074	0.9203		900.	0.9999	1.0000	1.0000	1.0000
	2100.	0.5590	0.5977	0.7447	0.9460		2100.	0.9999	1.0000	1.0000	1.0000
37	300.	0.4609	0.5238	0.6388	0.8564	61	300.	0.9999	1.0000	1.0000	1.0000
	900.	0.4971	0.5490	0.6801	0.8980		900.	0.9999	1.0000	1.0000	1.0000
	2100.	0.5367	0.5913	0.7260	0.9406		2100.	0.9999	1.0000	1.0000	1.0000
38	300.	0.2957	0.3421	0.4513	0.7415	62	300.	0.9998	0.9993	1.0000	1.0000
	900.	0.3149	0.3595	0.4947	0.8056		900.	0.9998	0.9993	1.0000	1.0000
	2100.	0.3396	0.3762	0.5395	0.8587		2100.	0.9998	0.9999	1.0000	1.0000
39	300.	0.5228	0.5570	0.6405	0.8388	63	300.	0.9998	0.9999	1.0000	1.0000
	900.	0.5429	0.5739	0.6761	0.8829		900.	0.9998	0.9998	1.0000	1.0000
	2100.	0.5662	0.5960	0.7161	0.9173		2100.	0.9998	0.9999	1.0000	1.0000
40	300.	0.4325	0.4552	0.5356	0.8009	64	300.	0.9708	0.9782	0.9938	0.9986
	900.	0.4499	0.4699	0.5801	0.8633		900.	0.9708	0.9782	0.9937	0.9987
	2100.	0.4608	0.4832	0.6269	0.9399		2100.	0.9700	0.9774	0.9936	0.9987
41	300.	0.7445	0.7569	0.8284	0.9528	65	300.	0.9998	0.9993	0.9999	1.0000
	900.	0.7591	0.7752	0.8634	0.9705		900.	0.9998	0.9998	0.9998	1.0000
	2100.	0.7760	0.7965	0.8943	0.9824		2100.	0.9998	0.9998	0.9999	1.0000
42	300.	0.4001	0.4266	0.4852	0.6896	66	300.	0.9998	0.9998	0.9999	1.0000
	900.	0.4109	0.4336	0.5081	0.7571		900.	0.9998	0.9998	0.9999	1.0000
	2100.	0.4365	0.4552	0.5499	0.8237		2100.	0.9998	0.9998	0.9999	1.0000
43	300.	0.4525	0.4854	0.5164	0.7382	67	300.	0.9998	0.9993	0.9999	1.0000
	900.	0.4640	0.4737	0.5453	0.8102		900.	0.9998	0.9998	0.9999	1.0000
	2100.	0.4832	0.4943	0.5937	0.8724		2100.	0.9998	0.9998	0.9999	1.0000
44	300.	0.0710	0.0931	0.1381	0.2805	68	300.	0.9997	0.9997	0.9998	0.9999
	900.	0.0711	0.0936	0.1415	0.3306		900.	0.9997	0.9997	0.9998	1.0000
	2100.	0.0721	0.0960	0.1525	0.3992		2100.	0.9997	0.9997	0.9998	1.0000
45	300.	0.8044	0.8692	0.8742	0.9720	69	300.	0.9997	0.9997	0.9999	1.0000
	900.	0.8132	0.8227	0.9033	0.9839		900.	0.9997	0.9997	0.9999	1.0000
	2100.	0.8202	0.8329	0.9194	0.9818		2100.	0.9997	0.9997	0.9999	1.0000
46	300.	0.0844	0.0911	0.1185	0.2377	70	300.	0.9997	0.9997	0.9999	1.0000
	900.	0.0852	0.0915	0.1213	0.2915		900.	0.9997	0.9997	0.9999	1.0000
	2100.	0.0859	0.0916	0.1286	0.3615		2100.	0.9997	0.9997	0.9999	1.0000

Table A-4.2.2 (continued)

FR						FR					
GROUP	T(K)	1.	10.	100.	1000.	GROUP	T(K)	1.	10.	100.	1000.
23	300.	0.7421	0.9088	0.9836	0.9980	47	300.	0.8364	0.8515	0.9567	0.9887
	900.	0.7657	0.9289	0.9889	0.9983		900.	0.7413	0.8335	0.9429	0.9873
	2100.	0.7782	0.9379	0.9912	0.9984		2100.	0.6598	0.7985	0.8906	0.9504
24	300.	0.5889	0.7586	0.9345	0.9915	48	300.	0.9181	0.7210	0.8968	0.9636
	900.	0.6077	0.7830	0.9479	0.9934		900.	0.9760	0.7169	0.8663	0.9533
	2100.	0.6196	0.8022	0.9651	1.0052		2100.	0.9910	0.6910	0.7887	0.9028
25	300.	0.6611	0.8485	0.9671	0.9957	49	300.	1.1982	0.9698	0.9850	0.9952
	900.	0.6773	0.8661	0.9736	0.9944		900.	1.1647	0.9871	0.9790	0.9947
	2100.	0.6889	0.8801	0.9813	0.9980		2100.	1.1409	0.9597	0.9370	0.9659
26	300.	0.6448	0.8039	0.9519	0.9936	50	300.	0.0709	0.0816	0.3971	0.8733
	900.	0.6664	0.8215	0.9562	0.9882		900.	0.0835	0.1003	0.5759	1.7876
	2100.	0.6817	0.8345	0.9612	0.9876		2100.	0.1137	0.1328	0.9257	3.6433
27	300.	0.6205	0.7798	0.9387	0.9914	51	300.	1.5165	1.0883	0.9661	0.9880
	900.	0.6407	0.8023	0.9513	0.9934		900.	1.5191	1.1153	0.9527	0.9848
	2100.	0.6578	0.8262	0.9716	1.0085		2100.	1.4846	1.1380	0.8892	0.9502
28	300.	0.5516	0.7736	0.9520	0.9940	52	300.	0.1289	0.4368	0.8252	0.9724
	900.	0.5734	0.8054	0.9674	0.9951		900.	0.1244	0.4583	0.8305	0.9934
	2100.	0.5905	0.8242	0.9700	0.9903		2100.	0.1009	0.4183	0.8299	1.0609
29	300.	0.7671	0.9133	0.9921	0.9988	53	300.	2.1264	1.4613	1.0063	1.0024
	900.	0.8221	0.9434	1.0006	1.0003		900.	2.1458	1.5252	1.0073	1.0057
	2100.	0.8444	0.9455	0.9743	0.9690		2100.	2.1241	1.6037	0.9458	0.9824
30	300.	0.7128	0.8967	0.9495	0.9996	54	300.	1.1258	1.1546	0.9868	0.9917
	900.	0.7360	0.9115	1.0013	1.0014		900.	1.1263	1.1632	0.9795	0.9916
	2100.	0.7535	0.9203	1.0030	1.0003		2100.	1.0994	1.1477	0.9071	0.9646
31	300.	0.3694	0.4454	0.7042	0.9396	55	300.	0.6276	0.9526	0.9764	0.9902
	900.	0.4183	0.4870	0.7643	0.9592		900.	0.6124	0.9424	0.9677	0.9898
	2100.	0.4420	0.5232	0.8021	0.9379		2100.	0.5975	0.9199	0.8994	0.9641
32	300.	0.5818	0.5781	0.7674	0.9502	56	300.	0.4566	0.7674	0.9455	0.9889
	900.	0.6162	0.6079	0.8141	0.9665		900.	0.4548	0.7674	0.9410	0.9875
	2100.	0.6472	0.6371	0.8261	0.9838		2100.	0.4382	0.7501	0.5817	0.9656
33	300.	0.8972	0.8966	0.9809	0.9963	57	300.	0.7284	0.2426	0.3445	0.7186
	900.	0.9302	0.9028	0.9819	0.9967		900.	0.7313	0.2354	0.2674	0.6532
	2100.	0.9692	0.9223	0.9969	0.0119		2100.	0.7202	0.2241	0.1149	0.5743
34	300.	0.3321	0.3593	0.6072	0.9089	58	300.	1.5262	1.4658	0.9851	0.9921
	900.	0.3632	0.3812	0.6404	0.8727		900.	1.5298	1.4737	0.9708	0.9927
	2100.	0.3932	0.4079	0.6628	0.8288		2100.	0.9371	0.8435	0.9743	0.9959
35	300.	0.2667	0.3382	0.5942	0.9011	59	300.	1.0423	1.1303	0.9851	0.9874
	900.	0.2795	0.3489	0.6143	0.8589		900.	1.0426	1.1521	0.9735	0.9877
	2100.	0.2943	0.3649	0.6256	0.9099		2100.	1.0231	0.9351	0.9800	0.9926
36	300.	0.8358	0.8818	0.9763	0.9950	60	300.	0.7380	1.0225	0.9812	0.9853
	900.	0.8656	0.8742	0.9753	0.9951		900.	0.9380	1.0231	0.9724	0.9855
	2100.	0.9033	0.8795	0.9921	0.0141		2100.	0.9377	0.9386	0.9774	0.9893
37	300.	0.5903	0.7840	0.9610	0.9932	61	300.	0.9018	0.9721	0.9767	0.9835
	900.	0.6095	0.7770	0.9606	0.9944		900.	0.9018	0.9724	0.9699	0.9837
	2100.	0.6331	0.7652	0.9546	0.9901		2100.	0.9020	0.9727	0.9738	0.9866
38	300.	0.8275	0.8650	0.9758	0.9951	62	300.	0.8857	0.9423	0.9726	0.9820
	900.	0.8473	0.8502	0.9736	0.9951		900.	0.8857	0.9425	0.9672	0.9821
	2100.	0.8735	0.8471	0.9842	1.0078		2100.	0.8857	0.9194	0.9708	0.9844
39	300.	0.7364	0.8406	0.9690	0.9938	63	300.	0.8819	0.9257	0.9704	0.9816
	900.	0.7578	0.8362	0.9697	0.9965		900.	0.8819	0.9258	0.9683	0.9817
	2100.	0.7768	0.8331	0.9736	1.0056		2100.	0.8818	0.9087	0.9688	0.9834
40	300.	0.9100	0.9130	0.9870	0.9967	64	300.	0.5281	0.6905	0.9199	0.9752
	900.	0.9320	0.9037	0.9863	0.9972		900.	0.5281	0.6906	0.9167	0.9753
	2100.	0.9534	0.8880	0.9796	0.9922		2100.	0.5231	0.6794	0.9185	0.9767
41	300.	0.9311	0.9021	0.9746	0.9935	65	300.	0.8574	0.8787	0.9600	0.9786
	900.	0.9722	0.8882	0.9710	0.9935		900.	0.8574	0.8757	0.9572	0.9787
	2100.	1.0390	0.9039	1.0033	1.0297		2100.	0.8571	0.8690	0.9587	0.9798
42	300.	0.8165	0.8862	0.9764	0.9937	66	300.	0.8631	0.8773	0.9587	0.9781
	900.	0.8127	0.8833	0.9748	0.9941		900.	0.8631	0.8773	0.9563	0.9781
	2100.	0.8164	0.8961	0.9923	0.0143		2100.	0.8630	0.8691	0.9576	0.9790
43	300.	0.5391	0.8608	0.9660	0.9902	67	300.	0.8664	0.8753	0.9579	0.9784
	900.	0.8988	0.8623	0.9620	0.9900		900.	0.8664	0.8753	0.9560	0.9784
	2100.	0.9768	0.8698	0.9632	0.9960		2100.	0.8664	0.8633	0.9570	0.9791
44	300.	0.9736	0.9266	0.9853	0.9905	68	300.	0.5386	0.8638	0.9537	0.9769
	900.	0.9196	0.9359	0.9877	0.9973		900.	0.8586	0.8638	0.9520	0.9770
	2100.	0.8571	0.9190	1.0105	1.0387		2100.	0.8586	0.8590	0.9529	0.9776
45	300.	1.0594	0.9447	0.9837	0.9936	69	300.	0.8563	0.8633	0.9531	0.9774
	900.	1.1407	0.9545	0.9839	0.9936		900.	0.8563	0.8633	0.9518	0.9774
	2100.	1.1848	0.9637	0.9767	0.9866		2100.	0.8563	0.8597	0.9525	0.9779
46	300.	0.7627	1.0576	1.2445	1.1301	70	300.	0.8596	0.8522	0.9486	0.9760
	900.	0.9400	1.2844	1.6551	1.5035		900.	0.8596	0.8522	0.9474	0.9760
	2100.	1.2712	2.0100	3.8276	4.3967		2100.	0.8596	0.8494	0.9481	0.9764

Table A-4.3.1 INFINITE DILUTION CROSS SECTION CODE NO = 949

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GROUP	TOTAL	FISSION	NU	CAPTURE	INELASTIC	ELASTIC	MU	ELAS	REMOVAL
26	1.36666E 01	1.70041E 00	2.88192E 00	7.34187E-01	1.81760E-01	1.10503E 01	3.71232E-02	3.92547E-01	
27	1.40031E 01	1.77003E 00	2.88155E 00	8.47558E-01	1.71994E-01	1.12133E 01	2.52106E-02	3.70250E-01	
28	1.45049E 01	1.86945E 00	2.88126E 00	1.02205E 00	1.50809E-01	1.14626E 01	1.99440E-02	3.77959E-01	
29	1.52497E 01	2.09076E 00	2.88099E 00	1.26945E 00	7.60429E-02	1.18135E 01	1.59316E-02	3.82433E-01	
30	1.56257E 01	2.09939E 00	2.88075E 00	1.55777E 00	0.0	1.19685E 01	1.28433E-02	3.96260E-01	
31	1.65460E 01	2.26727E 00	2.88055E 00	1.92886E 00	0.0	1.23496E 01	1.05503E-02	4.11311E-01	
32	1.72498E 01	2.60713E 00	2.87966E 00	2.19068E 00	0.0	1.24520E 01	8.77953E-03	4.10090E-01	
33	1.84465E 01	2.94252E 00	2.87976E 00	2.67308E 00	0.4	1.28308E 01	5.28876E-03	4.28720E-01	
34	2.00627E 01	3.30789E 00	2.88020E 00	3.36736E 00	0.0	1.33875E 01	2.81295E-03	4.37536E-01	
35	2.07475E 01	3.84160E 00	2.88013E 00	3.66950E 00	0.0	1.32364E 01	2.81295E-03	4.26610E-01	
36	2.18147E 01	4.66795E 00	2.88008E 00	3.99758E 00	0.0	1.31492E 01	2.81295E-03	4.47770E-01	
37	2.15103E 01	6.37338E 00	2.88004E 00	4.86763E 00	0.0	1.38620E 01	2.81295E-03	4.72313E-01	
38	2.44624E 01	6.35428E 00	2.88001E 00	4.94323E 00	0.0	1.31649E 01	2.81295E-03	4.15307E-01	
39	2.59574E 01	5.70450E 00	2.87998E 00	6.68200E 00	0.0	1.35709E 01	2.81295E-03	5.11581E-01	
40	3.64193E 01	1.40544E 01	2.87997E 00	7.01939E 00	0.0	1.53455E 01	2.81295E-03	3.45702E-01	
41	2.47156E 01	9.09022E 00	2.87994E 00	4.05290E 00	0.0	1.15725E 01	2.81295E-03	3.67694E-01	
42	4.07042E 01	1.18236E 01	2.87994E 00	1.27380E 01	0.0	1.61426E 01	2.81295E-03	5.33869E-01	
43	5.16141E 01	1.81638E 01	2.87994E 00	1.80373E 01	0.0	1.54111E 01	2.81295E-03	3.87379E-01	
44	3.85345E 01	1.76334E 01	2.87992E 00	8.74787E 00	0.0	1.21512E 01	2.81295E-03	4.70934E-01	
45	5.04524E 01	1.80311E 01	2.87992E 00	1.70758E 01	0.0	1.53456E 01	2.81295E-03	3.00463E-01	
46	5.49954E 01	2.01599E 01	2.87991E 00	2.01685E 01	0.0	1.46310E 01	2.81295E-03	3.31168E-01	
47	8.73914E 01	4.69163E 01	2.87991E 00	2.45480E 01	0.0	1.59271E 01	2.81295E-03	3.93491E-01	
48	1.14926E 02	5.45654E 01	2.87991E 00	3.15181E 01	0.0	1.90429E 01	2.81295E-03	4.16360E-01	
49	1.43647E 02	7.05735E 01	2.87991E 00	5.65339E 01	0.0	1.63683E 01	2.81295E-03	2.37521E-01	
50	8.72864E 01	1.21202E 01	2.87990E 00	6.18496E 01	0.0	1.33348E 01	2.81295E-03	2.31622E-01	
51	1.52557E 01	3.90503E 00	2.87990E 00	3.62298E 00	0.0	7.72765E 00	2.81295E-03	2.82525E-01	
52	1.01418E 02	5.12754E 01	2.87990E 00	3.97030E 01	0.0	1.04394E 01	2.81295E-03	1.84418E-01	
53	8.18270E 01	3.50305E 01	2.87990E 00	3.67938E 01	0.0	1.00276E 01	2.81295E-03	2.57051E-01	
54	1.82461E 02	9.86724E 01	2.87990E 00	7.27724E 01	0.0	1.10365E 01	2.81295E-03	2.58585E-01	
55	2.86542E 02	1.64769E 02	2.87990E 00	1.11930E 02	0.0	9.84271E 00	2.81295E-03	1.65081E-01	
56	1.47320E 02	7.05718E 01	2.87990E 00	6.20060E 01	0.0	8.29565E 00	2.81295E-03	4.05686E-01	
57	3.64286E 01	1.80657E 01	2.87990E 00	1.12096E 01	0.0	7.15335E 00	2.81295E-03	2.72587E-01	
58	1.77326E 01	7.92520E 00	2.87990E 00	1.14880E 00	0.0	8.65763E 00	2.81295E-03	2.97119E-01	
59	1.87715E 01	8.58773E 00	2.87993E 00	1.14016E 00	0.0	9.04364E 00	2.81295E-03	3.01279E-01	
60	2.09295E 01	1.03059E 01	2.87990E 00	1.35863E 00	0.0	9.26490E 00	2.81295E-03	3.04593E-01	
61	2.33651E 01	1.21241E 01	2.87990E 00	1.77433E 00	0.0	9.46666E 00	2.81295E-03	3.13261E-01	
62	2.60011E 01	1.57689E 01	2.87990E 00	2.56202E 00	0.0	9.67012E 00	2.81295E-03	3.17650E-01	
63	3.53819E 01	2.13261E 01	2.87990E 00	4.16175E 00	0.0	9.89204E 00	2.81295E-03	3.34554E-01	
64	4.75010E 01	3.00364E 01	2.88004E 00	7.25189E 00	0.0	1.02126E 01	2.81295E-03	3.43331E-01	
65	7.05343E 01	4.59774E 01	2.87990E 00	1.39374E 01	0.0	1.06231E 01	2.81295E-03	3.53282E-01	
66	1.18939E 02	7.78790E 01	2.88026E 00	2.99148E 01	0.0	1.11657E 01	2.81295E-03	3.76941E-01	
67	2.69625E 02	1.47390E 02	2.87990E 00	8.35690E 01	0.0	1.21480E 01	2.81295E-03	4.31597E-01	
68	1.00626E 03	6.21113E 02	2.87990E 00	3.70637E 02	0.0	1.44526E 01	2.81295E-03	5.36103E-01	
69	4.18700E 03	2.47591E 03	2.87990E 00	1.69561E 03	0.0	1.54567E 01	2.81295E-03	3.34792E-01	
70	3.07429E 03	1.82406E 03	2.87990E 00	1.24337E 03	0.0	6.85088E 00	1.23815E-02	1.97929E-01	

Table A-4.3.2 SELF-SHIELDING FACTOR TABLES CODE NO = 949

GROUP	T(K)	FF1			FF2			FC1			FC2		
		10.	100.	1000.	10.	100.	1000.	10.	100.	1000.	10.	100.	1000.
26	300.	0.9689	0.9466	1.0006	0.9749	0.9959	1.0007	0.9797	0.9929	0.9961	0.9827	0.9923	0.9946
	900.	0.9400	0.9970	1.0007	0.9838	0.9977	1.0006	0.9872	0.9954	0.9975	0.9896	0.9952	0.9967
	2100.	0.9485	0.7954	1.0011	0.9887	0.9991	1.0012	0.9918	0.9973	0.9987	0.9961	0.9975	0.9986
27	300.	0.9628	0.9550	1.0032	0.9724	0.9984	1.0049	0.9795	1.0001	1.0052	0.9863	1.0029	1.0070
	900.	0.9764	0.9572	1.0023	0.9828	0.9996	1.0036	0.9851	0.9992	1.0024	0.9891	1.0005	1.0031
	2100.	0.9435	0.9982	1.0017	0.9881	0.9999	1.0027	0.9875	0.9984	1.0007	0.9900	0.9988	1.0006
28	300.	0.9443	0.9836	0.9394	0.9529	0.9841	0.9913	0.9711	0.9938	0.9997	0.9782	0.9958	1.0003
	900.	0.9626	0.9879	0.9938	0.9671	0.9873	0.9918	0.9846	0.9992	1.0018	0.9901	1.0003	1.0029
	2100.	0.9728	0.4915	0.9956	0.9761	0.9908	0.9939	0.9921	1.0005	1.0028	0.9965	1.0022	1.0043
29	300.	0.9316	0.9860	1.0042	0.9438	0.9897	1.0027	0.9471	0.9892	1.0031	0.9555	0.9900	0.9984
	900.	0.9531	0.9886	0.9973	0.9602	0.9894	0.9964	0.9599	0.9924	1.0003	0.9665	0.9929	0.9991
	2100.	0.965	0.9902	0.9958	0.9691	0.9897	0.9941	0.9663	0.9933	0.9997	0.9717	0.9936	0.9988
30	300.	0.9079	0.9790	0.9937	0.9247	0.9819	0.9977	0.9433	0.9880	1.0008	0.9556	0.9909	1.0003
	900.	0.9431	0.9904	1.0034	0.9553	0.9928	1.0028	0.9640	0.9949	1.0034	0.9743	0.9985	1.0047
	2100.	0.9614	0.9955	1.0047	0.9709	0.9976	1.0047	0.9780	0.9999	1.0059	0.9876	1.0045	1.0089
31	300.	0.9609	0.9717	0.9435	0.9185	0.9766	0.9533	0.9560	0.9779	0.9994	0.9244	0.9809	0.9986
	900.	0.9413	0.9663	0.9957	0.9542	0.9910	1.0013	0.9329	0.9891	1.0052	0.9477	0.9903	1.0036
	2100.	0.9613	0.9921	1.0011	0.9711	0.9862	1.0033	0.9479	1.0065	0.9602	0.9934	1.0040	
32	300.	0.9362	0.9590	0.9906	0.8836	0.9610	0.9850	0.9060	0.9780	1.0002	0.9223	0.9788	0.9981
	900.	0.9153	0.9770	0.9954	0.9309	0.9774	0.9916	0.9330	0.9925	1.0091	0.9517	0.9931	1.0062
	2100.	0.9341	0.9856	0.9983	0.9557	0.9854	0.9949	0.9979	1.0112	0.9662	0.9983	1.0089	
33	300.	0.8459	0.9537	0.9903	0.8668	0.9619	0.9907	0.8852	0.9679	0.9951	0.9066	0.9753	0.9974
	900.	0.9008	0.9726	0.9928	0.9175	0.9769	0.9924	0.9245	0.9852	1.0037	0.9405	0.9890	1.0038
	2100.	0.9355	0.9830	0.9950	0.9669	0.9859	0.9930	0.9486	0.9936	1.0069	0.9601	0.9947	1.0052
34	300.	0.7986	0.9354	0.983									

Table A-4.3.2 (continued)

GROUP	T(K)	FF1			FF2			FC1			FC2		
		10.	100.	1000.	10.	100.	1000.	10.	100.	1000.	10.	100.	1000.
41	300.	0.7098	0.8982	1.0095	0.7485	0.9234	1.0180	0.6232	0.8770	1.0145	0.6689	0.9058	1.0264
	900.	0.7776	0.9441	1.0269	0.8129	0.9639	1.0384	0.7258	0.9454	1.0363	0.7658	0.9644	1.0481
	2100.	0.8250	0.9707	1.0352	0.8562	0.9861	1.0420	0.7949	0.9811	1.0446	0.8279	0.9923	1.0567
42	300.	0.6213	0.8088	0.9692	0.6531	0.8382	0.9736	0.4153	0.6935	0.9567	0.4613	0.7464	0.9713
	900.	0.7168	0.8756	0.9887	0.7471	0.9005	0.9890	0.5532	0.8181	0.9976	0.6030	0.8573	1.0073
	2100.	0.7944	0.9171	0.9943	0.8196	0.9378	0.9941	0.6727	0.8982	1.0211	0.7226	0.9328	1.0324
43	300.	0.6508	0.8990	1.0065	0.6851	0.9091	1.0192	0.4017	0.6643	0.9577	0.4475	0.7168	0.9762
	900.	0.7343	0.9490	1.0002	0.7642	0.9423	1.0012	0.5342	0.7684	0.9690	0.5793	0.8081	0.9728
	2100.	0.8136	0.9784	0.9895	0.8346	0.9572	0.9835	0.6695	0.8377	0.9677	0.6982	0.8840	0.9631
44	300.	0.6997	0.7813	1.0128	0.5404	0.8214	1.0331	0.4692	0.7952	1.0429	0.5158	0.8400	1.0643
	900.	0.5601	0.8463	1.0502	0.6035	0.8807	1.0680	0.5434	0.8138	0.9692	0.5843	0.8326	0.9649
	2100.	0.6299	0.9237	1.1076	0.6737	0.9517	1.1204	0.6309	0.8250	0.9347	0.6349	0.8313	0.9239
45	300.	0.5096	0.7630	0.9574	0.5525	0.8044	0.9693	0.2612	0.5073	0.8582	0.2926	0.5454	0.8708
	900.	0.5507	0.8047	0.9624	0.5947	0.8408	0.9700	0.3204	0.5767	0.8236	0.3529	0.5966	0.7984
	2100.	0.5965	0.8420	0.9667	0.6395	0.8716	0.9740	0.3869	0.6385	0.8095	0.4176	0.6388	0.7634
46	300.	0.4364	0.6272	0.8671	0.4639	0.6644	0.9051	0.2736	0.4935	0.6221	0.3104	0.5472	0.8430
	900.	0.4814	0.6756	0.9021	0.5073	0.7083	0.9109	0.3291	0.5714	0.8623	0.3693	0.6221	0.8747
	2100.	0.5142	0.7158	0.9135	0.5375	0.7423	0.9145	0.3797	0.6365	0.8901	0.4201	0.6811	0.8968
47	300.	0.5530	0.7266	0.9305	0.5687	0.7523	0.9515	0.2461	0.4314	0.8175	0.2665	0.4721	0.8665
	900.	0.5719	0.7450	0.9463	0.5879	0.7715	0.9711	0.2997	0.5117	0.8912	0.3226	0.5646	0.9370
	2100.	0.5909	0.7415	0.9554	0.6063	0.7876	0.9853	0.3550	0.5976	0.9360	0.3802	0.6452	0.9798
48	300.	0.2903	0.4527	0.7581	0.3037	0.4761	0.7869	0.1622	0.3290	0.7122	0.1756	0.3508	0.7336
	900.	0.3016	0.4740	0.7756	0.3170	0.4955	0.8017	0.1723	0.3425	0.7116	0.1840	0.3590	0.7286
	2100.	0.3166	0.4981	0.8050	0.3314	0.5180	0.8234	0.1867	0.3579	0.7310	0.1956	0.3698	0.7346
49	300.	0.4461	0.6511	0.9551	0.4649	0.6593	0.9414	0.7451	0.4629	0.7504	0.2673	0.4458	0.7972
	900.	0.4815	0.7216	0.9780	0.5024	0.7398	0.9482	0.2944	0.4788	0.8164	0.3205	0.5242	0.8552
	2100.	0.5408	0.7681	0.9853	0.5609	0.7792	0.9380	0.3697	0.5619	0.8615	0.3963	0.6030	0.8928
50	300.	0.3278	0.5530	1.0375	0.3802	0.6481	1.1287	0.1369	0.3506	0.9451	0.1724	0.4372	1.0346
	900.	0.3577	0.6194	1.1082	0.4123	0.7132	1.1800	0.1603	0.4299	0.9495	0.2024	0.5285	1.1387
	2100.	0.3948	0.6978	1.1775	0.4550	0.7978	1.2376	0.2039	0.5393	1.1436	0.2547	0.6428	1.2090
51	300.	0.5970	0.7550	0.9318	0.5297	0.7649	0.8948	0.3562	0.6538	1.0982	0.3660	0.6169	0.8961
	900.	0.5785	0.8380	1.0141	0.6095	0.8407	0.9585	0.4076	0.6819	1.1349	0.4072	0.6402	0.8847
	2100.	0.6029	1.0309	1.1662	0.8320	1.0331	1.1198	0.4564	0.7039	1.1642	0.4492	0.6488	0.8610
52	300.	0.1571	0.3477	0.7133	0.1702	0.3748	0.7441	0.2039	0.3910	0.7458	0.2224	0.4217	0.7729
	900.	0.1762	0.3918	0.7507	0.1898	0.4179	0.7759	0.2341	0.4404	0.7829	0.2530	0.4693	0.8031
	2100.	0.2164	0.4559	0.7916	0.2295	0.4772	0.8089	0.2762	0.4955	0.8137	0.2936	0.5230	0.8257
53	300.	0.2195	0.4469	0.8002	0.2451	0.4631	0.9702	0.1662	0.3571	0.7824	0.1913	0.4145	0.9551
	900.	0.2352	0.4653	0.8870	0.2629	0.5289	0.1664	0.1845	0.4191	0.8729	0.2089	0.4825	1.0550
	2100.	0.2764	0.5755	1.0176	0.3077	0.6435	1.1965	0.2145	0.5216	0.9955	0.2440	0.5901	1.1779
54	300.	0.3607	0.5092	0.8040	0.3082	0.5178	0.8170	0.1710	0.3038	0.6900	0.1551	0.3178	0.7252
	900.	0.3084	0.5299	0.8363	0.3163	0.5387	0.8450	0.1599	0.3319	0.7411	0.1643	0.3461	0.7703
	2100.	0.3250	0.5561	0.8637	0.3332	0.5654	0.8702	0.1759	0.3685	0.7644	0.1805	0.3819	0.8077
55	300.	0.2055	0.3877	0.7426	0.2094	0.3840	0.7823	0.1234	0.4376	0.8032	0.2388	0.4583	0.8384
	900.	0.2170	0.3945	0.7762	0.2212	0.4111	0.8119	0.2503	0.4426	0.8506	0.2572	0.5030	0.8795
	2100.	0.2426	0.4373	0.8170	0.2469	0.4535	0.8466	0.2607	0.5414	0.8962	0.2881	0.5616	0.9182
56	300.	0.1535	0.2858	0.6210	0.1573	0.2951	0.6263	0.1235	0.2622	0.6075	0.1274	0.2715	0.6127
	900.	0.1570	0.2989	0.6347	0.1613	0.3084	0.6937	0.1244	0.2751	0.6212	0.1305	0.2846	0.6198
	2100.	0.1683	0.3225	0.6458	0.1725	0.3315	0.6361	0.1321	0.2938	0.6273	0.1365	0.3029	0.6168
57	300.	0.7884	1.2597	1.8334	0.8753	1.3952	2.0117	0.7268	1.4079	2.2143	0.8568	1.6015	2.4547
	900.	0.6418	1.4678	2.3938	0.9447	1.6505	2.6491	0.7935	1.6796	2.9463	0.9400	1.9344	3.2934
	2100.	0.9863	1.9188	3.3490	1.1276	2.1883	3.7128	0.9504	2.2442	4.1808	1.1510	2.6125	4.6691
58	300.	1.0010	1.0022	1.0023	1.0014	1.0024	1.0026	0.9968	0.9850	0.9848	0.9884	0.9835	0.9826
	900.	1.0079	1.0061	1.0092	1.0082	1.0093	1.0095	1.0041	0.9980	0.9976	1.0017	0.9967	0.9957
	2100.	1.0707	1.0721	1.0724	1.0711	1.0724	1.0727	1.0116	1.0049	1.0029	1.0037	1.0026	
59	300.	0.9979	1.0019	1.0030	0.9984	1.0018	1.0027	0.9981	1.0016	1.0016	0.9985	1.0016	1.0024
	900.	1.0046	1.0086	1.0098	1.0051	1.0085	1.0095	1.0123	1.0158	1.0165	1.0127	1.0157	1.0166
	2100.	1.0672	1.0715	1.0726	1.0677	1.0714	1.0723	1.0195	1.0231	1.0243	1.0199	1.0230	1.0240
60	300.	0.9912	0.9984	1.0016	0.9919	0.9981	1.0005	0.9912	0.9983	1.0016	0.9919	0.9980	1.0005
	900.	0.9972	1.0045	1.0077	0.9979	1.0041	1.0066	1.0040	1.0112	1.0145	1.0047	1.0108	1.0133
	2100.	1.0637	1.0611	1.0646	1.0544	1.0607	1.0634	1.0115	1.0177	1.0212	1.0112	1.0173	1.0200
61	300.	0.9947	0.9973	0.9995	0.9949	0.9971	0.9987	0.9876	0.9846	0.9948	0.9991	0.9901	0.9945
	900.	1.0003	1.0029	1.0052	1.0005	1.0028	1.0044	1.0004	1.0056	1.0100	1.0009	1.0009	1.0084
	2100.	1.0534	1.0561	1.0586	1.0537	1.0560	1.0577	1.0060	1.0111	1.0157	1.0065	1.0108	1.0141
62	300.	0.9857	0.9911	0.9972	0.9863	0.9913	0.9957	0.9737	0.9867	0.9958	0.9796	0.9870	0.9935
	900.	0.9905	0.9959	1.0020	0.9911	0.9961	1.0005	0.9670	0.9950	1.0041	0.9679	0.9953	1.0018
	2100.	1.0352	1.0405	1.0468	1.0358	1.0406	1.0452	0.9917	0.9994	1.0087	0.9923	0.9996	1.0064
63	300.	0.9833	0.9870	0.9954	0.9839	0.9879							

Table A-4.3.2 (continued)

GROUP	T(K)	FT1			FT2			FT1			FT2		
		10,0	100,0	1000,0	10,0	100,0	1000,0	10,0	100,0	1000,0	10,0	100,0	1000,0
26	300.	0.9868	0.9975	1.0003	0.9899	0.9984	1.0006	0.9912	1.0095	1.0166	1.0097	1.0228	1.0290
	900.	0.9918	0.9985	1.0002	0.9939	0.9992	1.0005	0.9982	1.0093	1.0140	1.0131	1.0207	1.0247
	2100.	0.9947	0.9993	1.0005	0.9964	0.9999	1.0008	1.0015	1.0089	1.0123	1.0141	1.0190	1.0220
27	300.	0.9882	0.9992	1.0024	0.9926	1.0011	1.0036	0.9949	1.0162	1.0248	1.0183	1.0333	1.0409
	900.	0.9939	1.0000	1.0019	0.9970	1.0014	1.0028	1.0034	1.0151	1.0203	1.0208	1.0284	1.0329
	2100.	0.9971	1.0005	1.0017	0.9994	1.0017	1.0022	1.0071	1.0136	1.0171	1.0215	1.0250	1.0280
28	300.	0.9837	0.9969	1.0009	0.9886	0.9986	1.0016	0.9799	1.0075	1.0140	1.0025	1.0223	1.0313
	900.	0.9985	1.0007	1.0007	0.9946	0.9997	1.0014	0.9936	1.0098	1.0163	1.0113	1.0223	1.0278
	2100.	0.9957	0.9995	1.0009	0.9981	1.0005	1.0013	1.0011	1.0105	1.0149	1.0153	1.0212	1.0248
29	300.	0.9733	0.9948	1.0022	0.9791	0.9980	1.0047	0.9593	1.0071	1.0282	0.9842	1.0307	1.0573
	900.	0.9831	0.9960	0.9998	0.9868	0.9974	1.0006	0.9777	1.0079	1.0192	0.9966	1.0224	1.0332
	2100.	0.9887	0.9965	0.9988	0.9911	0.9972	0.9988	0.9877	1.0073	1.0145	1.0034	1.0185	1.0246
30	300.	0.9587	0.9895	0.9999	0.9667	0.9920	0.9999	0.9643	0.9929	1.0159	0.9669	1.0093	1.0278
	900.	0.9746	0.9955	1.0021	0.9811	0.9979	1.0029	0.9657	1.0071	1.0226	0.9926	1.0219	1.0340
	2100.	0.9839	0.9984	1.0030	0.9892	1.0008	1.0043	0.9843	1.0144	1.0255	1.0052	1.0273	1.0361
31	300.	0.9608	0.9905	1.0004	0.9682	0.9931	1.0007	0.9727	0.9942	1.0204	0.9565	1.0117	1.0336
	900.	0.9754	0.9957	1.0019	0.9811	0.9980	1.0027	0.9601	1.0089	1.0268	0.9847	1.0245	1.0395
	2100.	0.9831	0.9974	1.0015	0.9874	0.9992	1.0023	0.9786	1.0142	1.0274	1.0008	1.0292	1.0402
32	300.	0.9536	0.9890	1.0012	0.9623	0.9915	1.0007	0.9036	0.9846	1.0146	0.9369	0.9963	1.0196
	900.	0.9729	0.9966	1.0039	0.9798	0.9986	1.0040	0.9537	1.0067	1.0261	0.9770	1.0177	1.0325
	2100.	0.9847	1.0006	1.0054	0.9902	1.0027	1.0062	0.9815	1.0188	1.0327	1.0030	1.0308	1.0413
33	300.	0.9468	0.9857	0.9991	0.9557	0.9893	0.9996	0.9532	0.9770	1.0155	0.9163	0.9984	1.0303
	900.	0.9664	0.9932	1.0009	0.9730	0.9957	1.0015	0.9284	0.9962	1.0200	0.9556	1.0128	1.0318
	2100.	0.9789	0.9975	1.0021	0.9839	0.9996	1.0030	0.9597	1.0076	1.0234	0.9833	1.0233	1.0359
34	300.	0.9292	0.9801	1.0001	0.9406	0.9852	1.0011	0.8408	0.9638	1.0243	0.8869	0.9937	1.0453
	900.	0.9512	0.9918	1.0036	0.9616	0.9968	1.0077	0.8933	0.9957	1.0396	0.9358	1.0243	1.0620
	2100.	0.9678	1.0011	1.0113	0.9775	1.0064	1.0146	0.9347	1.0225	1.0579	0.9769	1.0544	1.0859
35	300.	0.9525	0.9680	0.9874	0.9325	0.9694	0.9849	0.8160	0.9285	0.9874	0.8603	0.9549	1.0042
	900.	0.9433	0.9734	0.9862	0.9482	0.9731	0.9830	0.8657	0.9482	0.9874	0.9046	0.9702	1.0028
	2100.	0.9552	0.9765	0.9854	0.9585	0.9753	0.9823	0.8989	0.9602	0.9880	0.9305	0.9778	1.0011
36	300.	0.8623	0.9460	0.9961	0.8789	0.9557	0.9968	0.7155	0.8933	1.0101	0.7554	0.9290	1.0348
	900.	0.8972	0.9589	0.9902	0.9099	0.9632	0.9878	0.7456	0.9305	1.0067	0.8207	0.9538	1.0201
	2100.	0.9172	0.9598	0.9793	0.9254	0.9597	0.9743	0.8382	0.9443	0.9932	0.8644	0.9579	0.9976
37	300.	0.8570	0.9455	1.0030	0.8753	0.9599	1.0086	0.7216	0.8882	1.0227	0.7639	0.9273	1.0479
	900.	0.8912	0.9700	1.0097	0.9096	0.9821	1.0153	0.7826	0.9471	1.0489	0.8270	0.9840	1.0741
	2100.	0.9177	0.9825	1.0103	0.9344	0.9916	1.0143	0.9344	0.9776	1.0523	0.8777	1.0070	1.0694
38	300.	0.8667	0.9547	0.9986	0.8891	0.9627	0.9992	0.6859	0.8587	0.9801	0.7157	0.8782	0.9808
	900.	0.9328	0.9827	1.0095	0.9439	0.9895	1.0113	0.721	0.9281	1.0088	0.8155	0.9460	1.0132
	2100.	0.9660	0.9988	1.0159	0.9752	1.0056	1.0194	0.8795	0.9632	1.0374	0.9063	1.0012	1.0464
39	300.	0.8302	0.9240	0.9940	0.8442	0.9361	0.9959	0.5816	0.7922	0.9665	0.6108	0.8077	0.9676
	900.	0.8573	0.9485	1.0005	0.8714	0.9574	1.0008	0.6333	0.8435	0.9925	0.6660	0.8662	0.9921
	2100.	0.8781	0.9622	1.0013	0.8915	0.9684	1.0003	0.6531	0.8667	1.0042	0.7183	0.9061	1.0027
40	300.	0.8420	0.9423	1.0190	0.8557	0.9636	1.0307	0.5648	0.7934	1.0366	0.5983	0.8297	1.0256
	900.	0.8766	0.9827	1.0362	0.8899	1.0035	1.0486	0.6308	0.7872	1.0363	0.6659	0.9166	1.0785
	2100.	0.9047	1.0140	1.0503	0.9171	1.0339	1.0639	0.6268	0.9580	1.1043	0.7364	1.0010	1.1333
41	300.	0.9496	0.9842	1.0034	0.9563	0.9886	1.0056	0.7229	0.8871	1.0169	0.7548	0.9159	1.0311
	900.	0.9609	0.9934	1.0074	0.9673	0.9964	1.0094	0.7113	0.9464	1.0411	0.8137	0.9658	1.0550
	2100.	0.9700	0.9993	1.0097	0.9756	1.0030	1.0113	0.824	0.9763	1.0565	0.8616	0.9998	1.0729
42	300.	0.7955	0.8909	0.9483	0.8159	0.9084	0.9888	0.5742	0.6927	0.9468	0.5353	0.7348	0.9634
	900.	0.8502	0.9363	1.0034	0.8676	0.9512	1.0061	0.5161	0.5741	0.7948	0.5195	0.8357	1.0041
	2100.	0.8938	0.9675	1.0145	0.9111	0.9801	1.0168	0.6261	0.8794	1.0246	0.7123	0.9199	1.0394
43	300.	0.7299	0.8476	0.9841	0.7472	0.8686	0.9981	0.4443	0.6589	0.9449	0.4823	0.6988	0.9781
	900.	0.7713	0.8844	0.9718	0.7883	0.8463	0.9742	0.5278	0.7469	0.9436	0.6275	0.7797	0.9535
	2100.	0.8110	0.9092	0.9647	0.8248	0.9129	0.9623	0.6256	0.8194	0.9474	0.6655	0.8421	0.9207
44	300.	0.9035	0.9571	1.0089	0.9116	0.9679	1.0143	0.5227	0.7329	0.9880	0.5613	0.7805	1.0065
	900.	0.9057	0.9616	1.0033	0.9162	0.9667	1.0054	0.5620	0.7796	0.9422	0.6045	0.8183	0.9878
	2100.	0.9170	0.9742	1.0104	0.9267	0.9784	1.0100	0.5733	0.8333	1.0105	0.6492	0.8592	1.0065
45	300.	0.6857	0.7651	0.9188	0.6969	0.7767	0.9238	0.3594	0.5342	0.8329	0.3817	0.5699	0.8580
	900.	0.7072	0.7927	0.8978	0.7177	0.7951	0.8816	0.3920	0.5797	0.8091	0.4086	0.6117	0.8067
	2100.	0.7304	0.8168	0.8901	0.7402	0.8104	0.8618	0.4133	0.6260	0.7972	0.4430	0.6491	0.7893
46	300.	0.7749	0.8417	0.9685	0.7910	0.8669	0.9847	0.3745	0.4913	0.7244	0.3947	0.5151	0.7154
	900.	0.8038	0.8827	1.0001	0.8214	0.9080	1.0123	0.4014	0.5349	0.7574	0.4213	0.5545	0.7357
	2100.	0.8271	0.9203	1.0280	0.8463	0.9444	1.0373	0.4212	0.5727	0.7805	0.4400	0.5871	0.7487
47	300.	0.7643	0.8165	0.9407	0.7729	0.8327	0.9581	0.4063	0.5377	0.8077	0.4209	0.5614	0.6325
	900.	0.7876	0.8539	0.9739	0.7984	0.8730	0.9921	0.4257	0.5705	0.8589	0.4418	0.5978	0.8834
	2100.	0.8081	0.8852	0.9959	0.8196	0.9047	1.0110	0.4445	0.6057	0.8947	0.4654	0.6341	0.9184
48	300.												

Table A-4.3.2 (continued)

GROUP	T(K)	FE1			FE2			FT1			FT2			
		10.0	100.0	1000.0	10.0	100.0	1000.0	10.0	100.0	1000.0	10.0	100.0	1000.0	
61	300.	0.9995	0.9997	1.0000	0.9995	0.9997	0.9999	0.9961	0.9981	0.9997	0.9964	0.9981	0.9992	
	900.	0.9803	0.9805	0.9808	0.9803	0.9805	0.9807	0.9902	0.9922	0.9938	0.9905	0.9921	0.9933	
	2100.	0.9688	0.9691	0.9693	0.9688	0.9691	0.9692	0.9090	0.9110	0.9127	0.0092	1.0110	1.0121	
62	300.	0.9993	0.9996	0.9999	0.9993	0.9996	0.9998	0.9887	0.9936	0.9981	0.9895	0.9939	0.9971	
	900.	0.9806	0.9809	0.9812	0.9807	0.9809	0.9811	0.9842	0.9891	0.9935	0.9849	0.9893	0.9925	
	2100.	0.9695	0.9697	0.9700	0.9695	0.9697	0.9700	0.0025	1.0073	1.0119	1.0032	1.0075	1.0109	
63	300.	0.9990	0.9992	0.9997	0.9990	0.9993	0.9996	0.9842	0.9892	0.9963	0.9851	0.9900	0.9952	
	900.	0.9808	0.9810	0.9813	0.9808	0.9810	0.9814	0.9810	0.9861	0.9931	0.9819	0.9868	0.9920	
	2100.	0.9699	0.9701	0.9706	0.9699	0.9702	0.9705	0.9890	1.0029	1.0102	0.9989	1.0038	1.0091	
64	300.	0.9668	0.9689	0.9938	0.9868	0.9890	0.9922	0.9591	0.9666	0.9814	0.9601	0.9677	0.9779	
	900.	0.9696	0.9717	0.9766	0.9696	0.9717	0.9750	0.9571	0.9647	0.9795	0.9582	0.9658	0.9760	
	2100.	0.9594	0.9615	0.9663	0.9594	0.9615	0.9667	0.9719	0.9793	0.9942	0.9729	0.9803	0.9906	
65	300.	0.9975	0.9974	0.9996	0.9976	0.9976	0.9989	0.9605	0.9650	0.9874	0.9617	0.9667	0.9868	
	900.	0.9975	0.9974	0.9996	0.9976	0.9976	0.9989	0.9605	0.9651	0.9875	0.9620	0.9692	0.9868	
	2100.	0.9976	0.9974	0.9990	0.9976	0.9976	0.9989	0.9645	0.9687	0.9875	0.9621	0.9692	0.9868	
66	300.	0.9949	0.9946	0.9975	0.9950	0.9950	0.9976	0.9201	0.9299	0.9712	0.9221	0.9359	0.9728	
	900.	0.9949	0.9946	0.9975	0.9950	0.9950	0.9976	0.9201	0.9300	0.9712	0.9221	0.9359	0.9728	
	2100.	0.9949	0.9947	0.9975	0.9950	0.9951	0.9974	0.9201	0.9302	0.9712	0.9221	0.9361	0.9727	
67	300.	0.9883	0.9875	0.9917	0.9883	0.9879	0.9927	0.8515	0.8622	0.9226	0.8534	0.8687	0.9318	
	900.	0.9883	0.9875	0.9917	0.9883	0.9879	0.9927	0.8515	0.8622	0.9226	0.8534	0.8687	0.9317	
	2100.	0.9883	0.9875	0.9917	0.9883	0.9880	0.9926	0.8515	0.8622	0.9226	0.8534	0.8687	0.9317	
68	300.	0.9626	0.9616	0.9595	0.9626	0.9619	0.9645	0.6448	0.6538	0.6992	0.6461	0.6589	0.7309	
	900.	0.9626	0.9616	0.9597	0.9626	0.9619	0.9645	0.6448	0.6538	0.6992	0.6461	0.6589	0.7309	
	2100.	0.9626	0.9616	0.9597	0.9626	0.9619	0.9645	0.6448	0.6538	0.6992	0.6461	0.6589	0.7308	
69	300.	1.0347	1.0358	1.0364	1.0347	1.0358	1.0358	1.0505	0.9539	0.8542	0.8264	0.8541	0.8551	0.8459
	900.	1.0347	1.0358	1.0364	1.0354	1.0358	1.0358	1.0505	0.9539	0.8542	0.8264	0.8541	0.8551	0.8459
	2100.	1.0347	1.0358	1.0364	1.0354	1.0358	1.0358	1.0505	0.9539	0.8542	0.8264	0.8541	0.8551	0.8459
70	300.	0.9726	0.9729	0.9771	0.9726	0.9731	0.9779	0.8535	0.8575	0.8884	0.8539	0.8590	0.8958	
	900.	0.9726	0.9729	0.9771	0.9726	0.9731	0.9779	0.8535	0.8575	0.8884	0.8539	0.8590	0.8958	
	2100.	0.9726	0.9729	0.9771	0.9726	0.9731	0.9779	0.8535	0.8575	0.8884	0.8539	0.8590	0.8958	

GROUP	T(K)	FR1			FR2			FR1			FR2				
		10.0	100.0	1000.0	10.0	100.0	1000.0	10.0	100.0	1000.0	10.0	100.0	1000.0		
26	300.	0.6745	0.9049	0.9358	0.6593	0.8733	0.9007	49	300.	1.5073	1.1559	0.8760	1.4113	1.1507	0.9585
	900.	0.6743	0.9036	0.9338	0.6579	0.8701	0.8966	50	300.	1.5637	1.1755	0.8650	1.4670	1.1672	0.9849
	2100.	0.6732	0.9011	0.9305	0.6551	0.8649	0.8903	51	300.	1.6110	1.1857	0.8589	1.5186	1.1795	1.0287
27	300.	0.6647	0.9144	0.9531	0.6563	0.8887	0.9234	52	300.	0.9451	1.0789	0.4233	0.8313	0.4821	0.3050
	900.	0.6632	0.9115	0.9487	0.6526	0.8821	0.9192	53	300.	1.4770	1.3576	0.9903	1.3261	1.4184	1.2050
	2100.	0.6615	0.9019	0.9369	0.6424	0.8661	0.8957	54	300.	1.5119	1.3622	0.9809	1.5523	1.4375	1.2343
28	300.	0.6532	0.8731	0.9111	0.6190	0.8259	0.8556	55	300.	1.4710	1.3576	0.9903	1.3261	1.4184	1.2050
	900.	0.6350	0.8758	0.9112	0.6151	0.8226	0.8515	56	300.	1.5119	1.3622	0.9809	1.5523	1.4375	1.2343
	2100.	0.6332	0.8539	0.9116	0.6148	0.8282	0.8575	57	300.	1.4911	1.4022	0.9782	1.5322	1.4533	1.2716
29	300.	0.6582	0.9294	0.9828	0.6749	0.9072	0.9537	58	300.	0.3599	0.5275	0.5294	0.2763	0.4030	0.4446
	900.	0.6623	0.9368	0.9908	0.6825	0.9173	0.9646	59	300.	0.3393	0.5062	0.5132	0.2722	0.3849	0.4334
	2100.	0.6601	0.9341	0.9902	0.6825	0.9192	0.9646	60	300.	0.3018	0.4416	0.4596	0.2374	0.3294	0.3856
30	300.	0.6477	0.8363	0.9483	0.6697	0.8515	0.9016	61	300.	1.1586	1.3785	1.1631	1.3499	1.6012	1.5315
	900.	0.6587	0.8926	0.9514	0.6821	0.8554	0.9026	62	300.	1.2098	1.4597	1.1916	1.3985	1.6764	1.5917
	2100.	0.6666	0.8982	0.9558	0.6919	0.8605	0.9066	63	300.	1.3006	1.6097	1.2949	1.6827	1.8105	1.7092
31	300.	0.6579	0.8444	0.9322	0.7031	0.8563	0.9193	64	300.	1.8942	1.1763	1.0120	1.8923	1.2350	1.1235
	900.	0.6560	0.8457	0.9068	0.6938	0.8273	0.8833	65	300.	1.9474	1.2192	1.0203	1.9431	1.2669	1.1320
	2100.	0.6550	0.8255	0.8802	0.6819	0.7977	0.8468	66	300.	2.0280	1.2155	1.0511	2.0197	1.3160	1.1480
32	300.	0.7328	0.8765	0.9456	0.7758	0.8543	0.9119	67	300.	1.3411	0.9952	0.8928	1.2851	0.9718	0.8947
	900.	0.7525	0.8748	0.9400	0.7889	0.8477	0.9019	68	300.	1.3971	1.0372	0.8907	1.3342	1.0033	0.8882
	2100.	0.7504	0.8836	0.9247	0.7891	0.8329	0.8837	69	300.	1.4968	1.0942	0.8995	1.4284	1.0500	0.8885
33	300.	0.7813	0.8487	0.9196	0.8029	0.8202	0.8777	70	300.	0.0290	0.1365	0.5039	0.0303	0.1392	0.5014
	900.	0.8028	0.8508	0.9198	0.8306	0.8225	0.8781	71	300.	0.0310	0.1466	0.5358	0.0327	0.1501	0.5262
	2100.	0.8182	0.8538	0.9218	0.8520	0.8279	0.8827	72	300.	0.0372	0.1705	0.5801	0.0392	0.1740	0.5601
34	300.	0.7259	0.8508	0.9973	0.7601	0.8565	0.9876	73	300.	1.9360	1.0226	0.3865	1.9190	1.0129	0.4361
	900.	0.7305	0.8475	0.9806	0.7578	0.8418	0.9571	74	300.	2.0733	1.0368	0.3870	2.0543	1.0893	0.4432
	2100.	0.7447	0.8590	0.9866	0.7733	0.8525	0.9628	75	300.	2.3935	1.2567	0.3859	2.3726	1.2433	0.4564
35	300.	0.6299	0.7032	0.8078	0.6291	0.6797	0.7672	76	300.	1.1479	1.3773	1.4034	1.2127	1.4188	1.4628
	900.	0.6092	0.6724	0.7259	0.5933	0.6006	0.								

TableA-4.4.1 INFINITE DILUTION CROSS SECTION CODE NO = 940 PU=240,1 PAGE 1

GROUP	TOTAL	FISSION	NU	CAPTURE	INELASTIC	ELASTIC	MU	ELAS	REMOVAL
23	1.39345E 01	1.13573E-01	2.87577E 00	6.43564E-01	6.82882E-03	1.31706E 01	5.37961E-02	4.15849E-01	
24	1.42491E 01	1.24902E-01	2.87443E 00	7.41118E-01	0.0	1.33831E 01	4.25662E-02	4.20373E-01	
25	1.44671E 01	1.28279E-01	2.87341E 00	8.28291E-01	0.0	1.34905E 01	3.34621E-02	4.29107E-01	
26	1.45984E 01	1.17702E-01	2.87261E 00	9.14554E-01	0.0	1.35561E 01	2.63052E-02	4.33047E-01	
27	1.49527E 01	9.51803E-02	2.87201E 00	1.02510E 00	0.0	1.38324E 01	2.08242E-02	4.57576E-01	
28	1.54006E 01	7.06930E-02	2.87151E 00	1.14249E 00	0.0	1.41874E 01	1.66034E-02	4.66843E-01	
29	1.57773E 01	5.48309E-02	2.87110E 00	1.25033E 00	0.0	1.44709E 01	1.33503E-02	4.68730E-01	
30	1.59555E 01	6.63250E-02	2.87079E 00	1.32444E 00	0.0	1.45448E 01	1.08514E-02	4.80325E-01	
31	1.69022E 01	9.35232E-02	2.87056E 00	1.50466E 00	0.0	1.53040E 01	8.93822E-03	5.17078E-01	
32	1.71530E 01	1.19357E-01	2.87040E 00	1.62189E 00	0.0	1.54217E 01	1.20034E-02	4.27120E-01	
33	1.72036E 01	1.57456E-01	2.87027E 00	1.89609E 00	0.0	1.51500E 01	2.80121E-03	3.76933E-01	
34	2.12024E 01	2.69429E-01	2.87018E 00	2.58598E 00	0.0	1.83470E 01	2.80121E-03	3.64840E-01	
35	2.14393E 01	3.22783E-01	2.87008E 00	2.72956E 00	0.0	1.83870E 01	2.80121E-03	3.80541E-01	
36	2.38673E 01	1.96566E-01	2.87001E 00	3.21423E 00	0.0	2.04656E 01	2.80121E-03	9.86847E-01	
37	2.18334E 01	1.31354E-01	2.86997E 00	3.83324E 00	0.0	1.78586E 01	2.80121E-03	8.75868E-01	
38	3.04517E 01	4.98441E-01	2.86992E 00	5.98144E 00	0.0	2.39718E 01	2.80121E-03	2.69480E-01	
39	2.27231E 01	2.81242E-01	2.86990E 00	4.25212E 00	0.0	1.81898E 01	2.80121E-03	3.72650E-01	
40	2.08076E 01	1.78572E-01	2.86988E 00	6.42715E 00	0.0	1.42019E 01	2.80121E-03	3.38945E-01	
41	2.8737CE 01	1.98636E-01	2.86974E 00	4.73475E 00	0.0	2.11010E 01	2.80121E-03	6.44840E-01	
42	4.57840E 01	2.41641E-01	2.86985E 00	1.13642E 01	0.0	3.41782E 01	2.80121E-03	1.59737E-01	
43	1.89357E 01	2.10265E-01	2.86984E 00	6.13433E 00	0.0	1.25911E 01	2.80121E-03	3.17276E-01	
44	2.97846E 01	2.52971E-01	2.86983E 00	1.19070E 01	0.0	1.76244E 01	2.80121E-03	2.76371E-01	
45	4.45032E 01	3.19868E-01	2.86982E 00	2.20726E 01	0.0	2.21107E 01	2.80121E-03	3.17767E-01	
46	9.69619E 01	4.03636E-01	2.86982E 00	4.17556E 01	0.0	5.48016E 01	2.80121E-03	2.03645E-01	
47	4.11611E 01	1.32866E-01	2.86981E 00	2.43220E 01	0.0	1.67062E 01	2.80121E-03	4.54268E-01	
48	2.64705E 02	7.42634E-01	2.86981E 00	1.02124E 02	0.0	1.62748E 02	2.80121E-03	1.48090E-01	
49	8.14751E 00	1.69649E-03	2.86981E 00	2.68385E-01	0.0	7.87742E 00	2.80121E-03	3.54205E-01	
50	3.24551E 02	9.52346E-01	2.86981E 00	2.02317E 02	0.0	1.21282E 02	2.80121E-03	6.55580E-02	
51	5.81337E 00	2.03433E-03	2.86980E 00	4.61144E-01	0.0	5.35019E 00	2.80121E-03	2.15421E-01	
52	7.78244E 00	2.35764E-03	2.86980E 00	4.19588E-01	0.0	7.36049E 00	2.80121E-03	2.86174E-01	
53	9.06309E 01	4.76515E-01	2.86980E 00	7.72879E 01	0.0	1.28665E 01	2.80121E-03	2.47280E-01	
54	8.26028E 00	9.37418E-04	2.86980E 00	2.42956E 01	0.0	8.01678E 00	2.80121E-03	2.75474E-01	
55	6.43911E 00	6.58446E-04	2.86980E 00	2.78470E 01	0.0	8.56009E 00	2.80121E-03	2.89795E-01	
56	9.5543CE 00	6.36786E-04	2.86980E 00	4.35619E-01	0.0	9.11805E 00	2.80121E-03	3.06811E-01	
57	1.06227E 01	7.06112E-04	2.86980E 00	7.69036E-01	0.0	9.85295E 00	2.80121E-03	3.35661E-01	
58	1.23342E 01	8.70133E-04	2.86980E 00	1.45751E 00	0.0	1.08759E 01	2.80121E-03	9.82046E-01	
59	1.53522E 01	1.21155E-03	2.86980E 00	2.97517E 00	0.0	1.23818E 01	2.80121E-03	4.36447E-01	
60	2.13579E 01	1.190649E-03	2.86980E 00	6.68144E 00	0.0	1.46745E 01	2.80121E-03	5.20873E-01	
61	3.57245E 01	4.06649E-03	2.86980E 00	1.70982E 01	0.0	1.86221E 01	2.80121E-03	7.07353E-01	
62	8.28712E 01	1.13097E-02	2.86980E 00	5.44807E 01	0.0	2.83792E 01	2.80121E-03	1.20666E 00	
63	3.58614E 02	5.67730E-02	2.86980E 00	2.91995E 02	0.0	6.65622E 01	2.80121E-03	3.98751E 00	
64	3.12429E 02	5.50298E 04	2.86980E 00	2.885523E 04	0.0	2.44249E 03	2.80121E-03	4.03682E 01	
65	2.92120E 03	5.31429E-01	2.86980E 00	2.77669E 03	0.0	1.43773E 02	2.80121E-03	4.96101E-01	
66	4.30205E 02	8.25726E-02	2.86980E 00	4.24508E 02	0.0	5.42966E 00	2.80121E-03	4.75810E-02	
67	2.36557E 02	4.63566E-02	2.86980E 00	2.35047E 02	0.0	7.03620E-01	2.80121E-03	3.28025E-02	
68	1.79504E 02	3.45450E-02	2.86980E 00	1.78222E 02	0.0	1.24807E 00	2.80121E-03	4.94744E-02	
69	1.57289E 02	3.03248E-02	2.86980E 00	1.55436E 02	0.0	1.80215E 00	2.80121E-03	6.64693E-02	
70	1.49810E 02	2.89115E-02	2.86980E 00	1.47495E 02	0.0	2.286601E 00	1.45137E-02	8.09032E-02	

TableA-4.4.2 SELF-SHIELDING FACTOR TABLES CODE NO = 940 FC1 FC2 FF1 FF2

GROUP	T(K)	FC1	FF1	FC2	FF2
23	300	0.9983 1.0027	1.0037	0.9943 1.0066	0.9925 0.9999
	900	0.9991 1.0017	1.0022	1.0014 1.0037	0.9951 0.9997
	2100	0.9985 1.0007	1.0011	0.9989 1.0013	0.9965 0.9993
24	300	0.9870 0.9966	0.9978	0.9869 0.9949	0.9957 0.9905
	900	0.9946 0.9993	0.9999	0.9952 0.9990	0.9995 0.9996
	2100	0.9981 1.0004	1.0008	0.9993 1.0010	0.9995 0.9997
25	300	0.9949 1.0000	1.0009	0.9991 1.0011	0.9918 0.9984
	900	0.9981 1.0002	1.0006	1.0009 1.0010	0.9944 0.9990
	2100	0.9998 1.0007	1.0010	1.0023 1.0015	0.9973 1.0000
26	300	0.9901 0.9943	0.9915	0.9974 1.0014	0.9887 0.9990
	900	0.9921 0.9980	0.9988	0.9943 0.9973	0.9927 0.9986
	2100	0.9973 0.9978	0.9992	0.9934 0.9964	0.9947 0.9994
27	300	0.9944 1.0019	1.0040	0.9940 1.0078	0.9993 0.9995
	900	0.9993 1.0007	1.0015	0.9912 1.0044	0.9910 0.9986
	2100	1.0020 1.0004	1.0008	1.0034 1.0033	0.9938 0.9999
28	300	0.9923 1.0040	1.0069	0.9912 1.0106	0.9807 1.0002
	900	0.9965 1.0010	1.0023	0.9889 1.0048	0.9980 0.9993
	2100	0.9988 1.0003	1.0092	0.9924 1.0228	0.9925 0.9989
29	300	0.9447 0.9811	0.9857	0.9437 0.9743	0.9778 0.9974
	900	0.9648 0.9880	0.9906	0.9597 0.9817	0.9803 0.9998
	2100	0.9767 0.9931	0.9948	0.9705 0.9887	0.9864 0.9980
30	300	0.9458 0.9883	0.9949	0.9527 0.9834	0.9882 0.9966
	900	0.9666 0.9919	0.9953	0.9650 0.9950	0.9814 0.9997
	2100	0.9831 0.9968	0.9987	0.9831 0.9949	0.9936 0.9996
31	300	0.9592 1.0134	1.0252	1.0004 1.0161	0.9503 1.0016
	900	0.9776 1.0082	1.0147	1.0048 1.0197	0.9253 1.0055
	2100	0.9824 1.0016	1.0053	0.9983 1.0066	0.9882 1.0061
32	300	0.8926 0.9605	0.9725	0.9712 0.9537	0.9626 0.9190
	900	0.9350 0.9783	0.9856	0.9662 0.9762	0.9561 0.9954
	2100	0.9712 0.9907	0.9844	0.9702 0.9970	0.9970 0.9999
33	300	1.0538 1.0910	1.1071	1.1867 1.1599	1.1731 0.8009
	900	1.1388 1.1164	1.1267	1.2681 1.2023	1.2098 0.8658
	2100	1.1961 1.1376	1.1420	1.3485 1.2355	1.2399 0.8360
34	300	0.6970 0.9740	1.0544	0.8394 1.0253	0.9759 0.9878
	900	0.7975 0.9943	1.0505	0.9227 1.0402	0.8745 0.9874
	2100	0.8835 1.0201	1.0527	0.9912 1.0573	0.9403 0.9929
35	300	0.7050 0.9920	0.9756	0.8166 1.0473	0.9711 0.9723
	900	0.8487 1.0659	1.1217	0.9761 1.1352	0.9826 0.9941
	2100	0.9653 1.1127	1.1510	1.1458 1.1978	1.2374 0.9823
36	300	0.8019 0.9416	0.9644	0.7730 0.9665	0.9241 0.8687
	900	0.8053 0.9204	0.9328	0.7442 0.8653	0.8745 0.8780
	2100	0.7722 0.8838	0.8911	0.6872 0.8077	0.8514 0.9858
37	300	0.6873 0.9398	1.0108	0.7695 0.9546	1.0117 0.6790
	900	0.7827 0.9694	1.0129	0.8545 0.9827	1.0174 0.7794
	2100	0.8440 0.9770	1.0050	0.9044 0.9901	1.0121 0.8466
38	300	0.4762 0.7920	0.9274	0.4932 0.7673	0.8824 0.

Table A-4.4.2 (continued)

GROUP	T(K)	FF1			FF2			FC1			FC2		
		100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.
40	300.	0.6481	0.9332	1.0103	0.7384	0.9483	1.0101	0.6433	0.9322	1.0101	0.7348	0.9474	1.0099
	900.	0.7506	0.9540	0.9986	0.8284	0.9665	1.0020	0.7482	0.9546	0.9998	0.8274	0.9672	1.0092
	2100.	0.8131	0.9482	0.9742	0.8773	0.9607	0.9817	0.8135	0.9509	0.9773	0.8791	0.9636	0.9849
41	300.	0.4686	0.8229	0.9963	0.5382	0.8507	0.9982	0.4586	0.8187	0.9932	0.5491	0.8467	0.9988
	900.	0.5705	0.8920	1.0134	0.6822	0.9149	1.0183	0.5612	0.8889	1.0125	0.6542	0.9118	1.0171
	2100.	0.6579	0.9381	1.0251	0.7500	0.9586	1.0325	0.6501	0.9362	1.0248	0.7437	0.9555	1.0318
42	300.	0.4624	0.7995	1.0289	0.5676	0.8552	1.0634	0.4466	0.7895	1.0237	0.5489	0.8400	1.0558
	900.	0.5433	0.8573	1.0368	0.6315	0.8914	1.0480	0.5256	0.8451	1.0337	0.6121	0.8792	1.0432
	2100.	0.5862	0.8741	1.0111	0.6495	0.8839	1.0006	0.5691	0.8666	1.0110	0.6324	0.8763	0.9995
43	300.	0.4229	0.8212	0.9882	0.5266	0.8481	0.9850	0.4136	0.8183	0.9893	0.5195	0.8472	0.9879
	900.	0.5371	0.8938	1.0043	0.6386	0.9108	1.0006	0.5298	0.8929	1.0062	0.6339	0.9120	1.0045
	2100.	0.6124	0.9105	0.9845	0.6971	0.9155	0.9755	0.6086	0.9124	0.9885	0.6963	0.9202	0.9822
44	300.	0.3767	0.8252	1.0934	0.4892	0.9200	1.1889	0.3771	0.8285	1.0984	0.4912	0.9257	1.1973
	900.	0.5088	0.9599	1.1531	0.6570	1.0599	1.2511	0.5091	0.9652	1.1597	0.6613	1.0680	1.2611
	2100.	0.6602	1.0937	1.2382	0.8419	1.1972	1.3386	0.6657	1.1022	1.2478	0.8495	1.2086	1.3514
45	300.	0.3114	0.7202	0.9705	0.4059	0.7637	0.9834	0.3159	0.7177	0.9695	0.4038	0.7613	0.9824
	900.	0.4220	0.8166	0.9931	0.5217	0.8539	1.0059	0.4187	0.8142	0.9920	0.5196	0.8516	1.0048
	2100.	0.5240	0.8818	1.0063	0.6245	0.9139	1.0210	0.5202	0.8795	1.0052	0.6229	0.9118	1.0200
46	300.	0.2020	0.5258	0.8788	0.2782	0.5769	0.8688	0.1908	0.5067	0.8668	0.2605	0.5525	0.8555
	900.	0.2624	0.6280	0.9175	0.3572	0.6697	0.8995	0.2461	0.6055	0.8999	0.3339	0.6415	0.8739
	2100.	0.3338	0.7176	0.9471	0.4392	0.7456	0.9233	0.3116	0.6917	0.9265	0.4101	0.7130	0.8936
47	300.	0.3018	0.6950	0.9609	0.3648	0.7373	0.9842	0.2573	0.6812	0.9576	0.3473	0.7237	0.9809
	900.	0.3850	0.7927	0.9878	0.4542	0.8314	1.0136	0.3670	0.7813	0.9855	0.4337	0.8203	1.0112
	2100.	0.4554	0.8567	0.9985	0.5244	0.8876	1.0236	0.4364	0.8478	0.9568	0.5031	0.8788	1.0218
48	300.	0.1309	0.3537	0.6831	0.1649	0.3869	0.6648	0.1306	0.3523	0.6815	0.1644	0.3857	0.6525
	900.	0.1564	0.4067	0.6453	0.1937	0.4288	0.6250	0.1559	0.4052	0.6411	0.1930	0.4270	0.6221
	2100.	0.1901	0.4548	0.6140	0.2242	0.4608	0.5977	0.1894	0.4528	0.6111	0.2232	0.4583	0.5943
49	300.	0.9962	0.9979	0.9984	0.9937	0.9975	0.9980	0.9970	0.9970	0.9974	1.0019	0.9959	0.9960
	900.	0.9980	0.9988	0.9988	0.9937	0.9979	0.9983	0.9991	0.9965	0.9974	1.0038	0.9960	0.9960
	2100.	1.0053	1.0085	1.0088	1.0035	1.0076	1.0081	1.0108	1.0050	1.0057	1.0147	1.0050	1.0047
50	300.	0.1387	0.4194	0.9036	0.1858	0.4774	0.9337	0.1277	0.3991	0.8737	0.1703	0.4490	0.8836
	900.	0.1706	0.5283	0.9747	0.2274	0.5816	0.9839	0.1567	0.5008	0.9410	0.2080	0.5445	0.9286
	2100.	0.2154	0.6347	1.0256	0.2755	0.6763	1.0175	0.1967	0.5972	0.9860	0.2905	0.6293	0.9558
51	300.	0.9954	1.0499	1.0470	0.8794	1.0535	1.0579	0.9954	1.0549	1.0519	0.8880	1.0591	1.0638
	900.	0.9719	1.0729	1.0668	0.8659	1.0704	1.0764	0.9699	1.0807	1.0717	0.8577	1.0779	1.0849
	2100.	0.9539	1.1562	1.124	0.8667	1.1118	1.1257	0.9491	1.1710	1.1325	0.8531	1.1221	1.1371
52	300.	0.8965	0.9191	0.9188	0.8257	0.8684	0.8626	0.9067	0.9269	0.9284	0.8428	0.8811	0.8758
	900.	0.9096	0.9154	0.9175	0.8285	0.8685	0.8600	0.9187	0.9235	0.9254	0.8454	0.8812	0.8734
	2100.	0.9239	0.9777	0.9054	0.8315	0.8688	0.8529	0.9327	0.9303	0.9159	0.8493	0.8825	0.8681
53	300.	0.2411	0.6553	0.5982	0.1705	0.6066	0.8198	0.2417	0.6556	0.9582	0.1712	0.6069	0.8195
	900.	0.2790	0.6784	0.8646	0.1764	0.5913	0.7382	0.2796	0.6787	0.8648	0.1771	0.5916	0.7384
	2100.	0.2865	0.5672	0.6312	0.1482	0.4885	0.5855	0.2371	0.5676	0.6375	0.1489	0.4689	0.5858
54	300.	0.9987	0.9996	0.9987	0.9951	0.9979	0.9985	0.9984	0.9997	0.9998	0.9934	0.9973	0.9981
	900.	0.9986	0.9997	0.9998	0.9951	0.9981	0.9990	0.9984	0.9948	1.0000	0.9936	0.9976	0.9989
	2100.	1.0011	1.0025	1.0026	0.9974	1.0007	1.0038	1.0068	1.0085	1.0086	1.0021	1.0063	1.0101
55	300.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9982	0.9987	0.9986	0.9982	0.9992	0.9988
	900.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9986	0.9990	0.9989	0.9982	0.9997	0.9984
	2100.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9969	0.9971	0.9970	1.0063	1.0077	1.0033
56	300.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9986	0.9944	0.9945	0.9810	0.9912	0.9904
	900.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9958	0.9947	0.9947	0.9810	0.9913	0.9899
	2100.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9958	0.9963	0.9963	0.9863	0.9968	0.9916
57	300.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9845	0.8674	0.8671	0.8309	0.8422	0.8410
	900.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9834	0.8570	0.8567	0.8274	0.8357	0.8337
	2100.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.8276	0.8430	0.8427	0.8235	0.8274	0.8203
58	300.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0383	1.0101	1.0094	1.0574	1.0412	1.0402
	900.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0427	1.0149	1.0142	1.0586	1.0451	1.0435
	2100.	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0522	1.0275	1.0265	1.0630	1.0541	1.0458
59	300.	1.0540	1.0020	1.0021	0.9940	1.0060	1.0061	1.0118	1.0057	1.0055	1.0121	1.0170	1.0173
	900.	1.0045	1.0031	1.0031	1.0042	1.0065	1.0065	1.0132	1.0086	1.0087	1.0126	1.0183	1.0184
	2100.	1.0175	1.0172	1.0173	1.0167	1.0197	1.0193	1.0167	1.0167	1.0165	1.0147	1.0215	1.0202
60	300.	0.9939	1.0005	0.9928	0.9033	1.0042	0.9918	1.0006	1.0020	0.9904	1.0044	1.0056	
	900.	0.9947	1.0021	1.0031	0.9933	1.0040	1.0049	0.9928	1.0028	1.0042	1.0010	1.0054	1.0066
	2100.	1.0094	1.0184	1.0195	1.0076	1.0187	1.0192	0.9933	1.0074	1.0089	0.9929	1.0079	1.0085
61	300.	0.9649	0.9941	0.9985	0.9688	0.9946	0.9984	0.9545	0.9932	0.9983	0.9639	0.9938	0.9981
	900.	0.9662	0.9962	1.0006	0.9698	0.9959	0.9996	0.9110	0.9957	1.0008	0.9651	0.9953	0.9996
	2100.	0.9754	1.0071	1.0116	0.9787	1.0055	1.0089	0.9640	1.0065	1.0037	0.9677	0.9986	1.0025
62	300.	0.8730	0.9722	0.9929									

Table A-4.4.2 (continued)

GROUP	T(K)	FE1			FE2			FT1			FT2		
		100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.
23	300.	0.9927	0.9996	1.0007	0.9970	1.0007	1.0018	1.0017	1.0053	1.0077	1.0344	1.0188	1.0207
	900.	0.9957	0.9998	1.0004	0.9980	1.0003	1.0008	1.0030	1.0038	1.0048	1.0241	1.0128	1.0134
	2100.	0.9972	0.9999	1.0003	0.9985	1.0002	1.0005	1.0032	1.0029	1.0038	1.0189	1.0097	1.0104
24	300.	0.9868	0.9974	0.9990	0.9907	0.9973	0.9988	0.9887	1.0003	1.0032	1.0198	1.0107	1.0130
	900.	0.9915	0.9982	0.9991	0.9934	0.9978	0.9983	0.9940	1.0001	1.0027	1.0137	1.0069	1.0079
	2100.	0.9940	0.9987	0.9993	0.9950	0.9982	0.9987	0.9965	1.0000	1.0014	1.0110	1.0052	1.0064
25	300.	0.9882	0.9981	0.9997	0.9936	0.9987	0.9998	0.9903	1.0015	1.0041	1.0208	1.0120	1.0148
	900.	0.9932	0.9988	0.9997	0.9966	0.9991	0.9998	0.9965	1.0013	1.0032	1.0173	1.0090	1.0104
	2100.	0.9959	0.9993	0.9999	0.9985	0.9997	1.0001	0.9998	1.0016	1.0029	1.0159	1.0078	1.0090
26	300.	0.9847	0.9972	0.9992	0.9905	0.9976	0.9992	0.9852	1.0010	1.0048	1.0128	1.0110	1.0149
	900.	0.9908	0.9981	0.9993	0.9945	0.9982	0.9991	0.9934	1.0008	1.0026	1.0137	1.0086	1.0104
	2100.	0.9954	0.9995	1.0002	0.9978	0.9996	1.0002	0.9981	1.0017	1.0024	1.0145	1.0082	1.0096
27	300.	0.9798	0.9965	0.9992	0.9865	0.9969	0.9990	0.9780	1.0006	1.0064	1.0119	1.0124	1.0171
	900.	0.9878	0.9979	0.9995	0.9917	0.9980	0.9992	0.9896	1.0014	1.0043	1.0122	1.0104	1.0130
	2100.	0.9922	0.9990	1.0000	0.9948	0.9990	0.9997	0.9957	1.0021	1.0042	1.0140	1.0099	1.0111
28	300.	0.9740	0.9975	1.0016	0.9846	0.9991	1.0023	0.9676	1.0033	1.0116	1.0046	1.0145	1.0215
	900.	0.9838	0.9981	1.0005	0.9909	0.9991	1.0009	0.9846	1.0037	1.0081	1.0125	1.0141	1.0177
	2100.	0.9885	0.9979	0.9995	0.9937	0.9986	0.9998	0.9924	1.0029	1.0060	1.0156	1.0124	1.0151
29	300.	0.9721	0.9956	0.9996	0.9815	0.9962	0.9993	0.9638	0.9999	1.0084	1.0033	1.0114	1.0183
	900.	0.9828	0.9973	0.9996	0.9889	0.9975	0.9993	0.9826	1.0025	1.0071	1.0127	1.0128	1.0167
	2100.	0.9889	0.9984	0.9998	0.9926	0.9981	0.9992	0.9924	1.0029	1.0059	1.0161	1.0118	1.0138
30	300.	0.9523	0.9922	0.9996	0.9651	0.9925	0.9982	0.9315	0.9929	1.0071	0.9802	1.0024	1.0134
	900.	0.9710	0.9967	1.0010	0.9796	0.9971	1.0005	0.9631	1.0018	1.0102	0.9979	1.0103	1.0166
	2100.	0.9843	1.0006	0.9934	0.9914	1.0021	1.0042	0.9875	1.0100	1.0156	1.0159	1.0206	1.0242
31	300.	0.9443	1.0004	1.0131	0.9703	1.0107	1.0222	0.9236	1.0169	1.0447	1.0020	1.0574	1.0863
	900.	0.9616	1.0004	1.0081	0.9782	1.0060	1.0125	0.9534	1.0150	1.0309	1.0085	1.0416	1.0572
	2100.	0.9685	0.9964	1.0011	0.9750	0.9964	1.0001	0.9634	1.0030	1.0124	0.9936	1.0147	1.0219
32	300.	0.9301	0.9819	0.9918	0.9460	0.9802	0.9879	0.8924	0.9740	0.9938	0.9430	0.9818	0.9971
	900.	0.9510	0.9851	0.9919	0.9606	0.9828	0.9871	0.9282	0.9824	0.9937	0.9631	0.9873	0.9958
	2100.	0.9638	0.9875	0.9910	0.9712	0.9846	0.9872	0.9559	0.9885	0.9955	0.9878	0.9969	1.0027
33	300.	0.9410	0.9937	1.0025	0.9608	0.9935	1.0041	0.9018	0.9915	1.0152	0.9529	1.0063	1.0253
	900.	0.9610	0.9957	1.0022	0.9750	0.9981	1.0033	0.9400	1.0022	1.0169	0.9812	1.0162	1.0277
	2100.	0.9720	0.9971	1.0012	0.9784	0.9963	0.9994	0.9588	1.0015	1.0102	0.9857	1.0097	1.0163
34	300.	0.8602	0.9849	1.0202	0.9122	1.0039	1.0346	0.7866	0.9872	1.0626	0.9177	1.0471	1.1182
	900.	0.8988	0.9926	1.0145	0.9434	1.0059	1.0245	0.8465	1.0032	1.0506	0.9733	1.0525	1.0964
	2100.	0.9306	0.9966	1.0104	0.9657	1.0062	1.0176	0.8992	1.0116	1.0415	1.0139	1.0555	1.0827
35	300.	0.8161	0.9531	1.0002	0.8556	0.9688	1.0133	0.7191	0.9156	1.0129	0.8380	0.9847	1.0942
	900.	0.8517	0.9521	0.9776	0.8828	0.9568	0.9786	0.7816	0.9272	0.9790	0.9116	0.9852	1.0391
	2100.	0.8781	0.9482	0.9618	0.8997	0.9455	0.9563	0.8358	0.9321	0.9595	0.9691	0.9833	1.0110
36	300.	0.7671	0.9323	0.9939	0.8119	0.9414	0.9918	0.6613	0.8862	0.9991	0.7194	0.9016	0.9933
	900.	0.8176	0.9574	0.9996	0.8599	0.9639	0.9978	0.7252	0.9343	1.0152	0.7841	0.9484	1.0112
	2100.	0.8638	0.9777	1.0070	0.9018	0.9827	1.0059	0.7905	0.9737	1.0322	0.8458	0.9839	1.0298
37	300.	0.9122	0.9584	1.0022	0.8554	0.9668	1.0025	0.6913	0.9151	1.0057	0.7640	0.9370	1.0126
	900.	0.9609	0.9767	1.0043	0.8991	0.9826	1.0050	0.7601	0.9553	1.0158	0.8350	0.9759	1.0251
	2100.	0.8901	0.9784	0.9966	0.9209	0.9818	0.9963	0.8185	0.9731	1.0125	0.8854	0.9880	1.0195
38	300.	0.6672	0.8893	0.9820	0.7156	0.9009	0.9807	0.5103	0.8018	0.9804	0.5646	0.8280	0.9864
	900.	0.7321	0.9236	0.9846	0.7775	0.9279	0.9786	0.5833	0.8839	0.9856	0.6429	0.8789	0.9807
	2100.	0.7957	0.9592	0.9960	0.8362	0.9572	0.9920	0.6662	0.9227	1.0106	0.7280	0.9383	1.0122
39	300.	0.7207	0.8859	0.9751	0.7570	0.8954	0.9643	0.5931	0.7939	0.9306	0.6205	0.7901	0.8886
	900.	0.7635	0.9235	0.9878	0.8011	0.9270	0.9759	0.6405	0.8488	0.9545	0.6725	0.8374	0.9104
	2100.	0.7946	0.9393	0.9851	0.8282	0.9356	0.9692	0.6815	0.8777	0.9554	0.7169	0.8614	0.9131
40	300.	0.8627	0.9701	1.0017	0.8965	0.9751	0.9993	0.6900	0.9111	0.9904	0.7435	0.9153	0.9766
	900.	0.8936	0.9703	0.9881	0.9203	0.9725	0.9859	0.7622	0.9410	0.9886	0.8212	0.9480	0.9850
	2100.	0.8994	0.9497	0.9592	0.9174	0.9493	0.9565	0.8171	0.9454	0.9736	0.8755	0.9595	0.9825
41	300.	0.6650	0.8705	1.0004	0.7090	0.8911	1.0056	0.5073	0.7637	1.0027	0.6091	0.8024	1.0202
	900.	0.7511	0.9189	1.0160	0.7588	0.9365	1.0206	0.5595	0.8451	1.0358	0.6274	0.8872	1.0599
	2100.	0.7635	0.9604	1.0322	0.8118	0.9754	1.0373	0.6228	0.9145	1.0642	0.7045	0.9601	1.0948
42	300.	0.4429	0.7081	0.9811	0.5032	0.7328	0.9608	0.3607	0.6000	0.9594	0.4397	0.6662	1.0120
	900.	0.4518	0.7697	0.9853	0.5339	0.7852	0.9734	0.3889	0.5987	0.9910	0.4599	0.7096	1.0123
	2100.	0.5205	0.8186	0.9942	0.5627	0.8232	0.9738	0.4095	0.7087	1.0048	0.4696	0.7456	1.0094
43	300.	0.8255	0.9472	1.0006	0.8594	0.9583	1.0028	0.5875	0.8219	0.9772	0.6302	0.8382	0.9687
	900.	0.8627	0.9721	1.0078	0.8978	0.9813	1.0108	0.6359	0.8870	0.9982	0.6898	0.8968	0.9883
	2100.	0.8961	0.9878	1.0122	0.9287	0.9952	1.0154	0.5860	0.9206	0.9998	0.7466	0.9285	0.9933
44	300.	0.7503	0.9363	0.9666	0.7956	0.9763	1.0871	0.5229	0.8599	1.2167	0.6411	1.0376	1.4708
	900.	0.8022	0.9911	1.0711	0.8629	1.0328	1.1120	0.5945	1.0464	1.4104	0.7174	1.2178	1.5473
	2100.	0.8676	1.0510	1.1114	0.9411	1.0924	1.1514	0.7026	1.1238	1.3748	0.9476	1.3852	1.6359
45	300.	0.6268	0.8360	0.9									

Table A-4.4.2 (continued)

		FE1			FE2			FT1			FT2		
GROUP	T(K)	100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.
50	300.	0.9983	1.0001	1.0004	0.9986	1.0009	1.0012	0.9948	1.0000	1.0009	0.9947	1.0017	1.0024
	900.	0.9984	1.0005	1.0008	0.9980	1.0010	1.0013	0.9950	1.0007	1.0015	0.9947	1.0018	1.0026
	2100.	0.9985	1.0011	1.0014	0.9980	1.0012	1.0013	0.9953	1.0020	1.0029	0.9947	1.0022	1.0026
61	300.	0.9886	0.9981	0.9995	0.9898	0.9983	0.9995	0.9694	0.9948	0.9988	0.9741	0.9953	0.9986
	900.	0.9886	0.9984	0.9999	0.9898	0.9983	0.9995	0.9695	0.9956	0.9995	0.9740	0.9954	0.9987
	2100.	0.9886	0.9990	1.0005	0.9897	0.9985	0.9996	0.9694	0.9968	1.0008	0.9737	0.9957	0.9988
62	300.	0.9484	0.9884	0.9970	0.9577	0.9885	0.9958	0.8747	0.9712	0.9933	0.8899	0.9724	0.9910
	900.	0.9482	0.9887	0.9978	0.9574	0.9885	0.9959	0.8742	0.9718	0.9941	0.8893	0.9724	0.9911
	2100.	0.9474	0.9893	0.9981	0.9565	0.9884	0.9959	0.8724	0.9728	0.9955	0.8966	0.9722	0.9910
63	300.	0.7887	0.8949	0.9795	0.8105	0.9019	0.9768	0.6018	0.7912	0.9594	0.6378	0.8081	0.9569
	900.	0.7848	0.8928	0.9796	0.8066	0.8993	0.9763	0.5958	0.7868	0.9592	0.6315	0.8032	0.9559
	2100.	0.7748	0.8870	0.9793	0.7966	0.8926	0.9749	0.5813	0.7757	0.9579	0.6162	0.7911	0.9531
64	300.	0.1332	0.1097	0.2427	0.1345	0.1173	0.2533	0.0500	0.0524	0.1125	0.0508	0.0547	0.1219
	900.	0.1446	0.1174	0.2638	0.1460	0.1255	0.2754	0.0526	0.0554	0.1222	0.0535	0.0577	0.1331
	2100.	0.1734	0.1370	0.3049	0.1731	0.1461	0.3177	0.0606	0.0638	0.1494	0.0616	0.0664	0.1631
65	300.	0.4213	0.4608	0.8924	0.4241	0.4640	0.7918	0.3642	0.4119	0.7449	0.3697	0.4207	0.7055
	900.	0.3359	0.3706	0.7694	0.3382	0.3741	0.6824	0.2928	0.3308	0.6094	0.2971	0.3382	0.5833
	2100.	0.2502	0.2822	0.6381	0.2522	0.2859	0.5760	0.2073	0.2352	0.4610	0.2103	0.2408	0.4510
66	300.	0.9247	0.9261	0.9575	0.9281	0.9317	0.9591	0.9241	0.9486	0.9766	0.9309	0.9536	0.9781
	900.	0.9227	0.9240	0.9507	0.9261	0.9297	0.9547	0.9221	0.9470	0.9731	0.9291	0.9521	0.9757
	2100.	0.9190	0.9198	0.9427	0.9224	0.9256	0.9490	0.9179	0.9435	0.9685	0.9250	0.9488	0.9724
67	300.	0.9870	0.9832	0.9881	0.9899	0.9875	0.9934	0.9836	0.9907	0.9959	0.9865	0.9927	0.9976
	900.	0.9660	0.9827	0.9863	0.9893	0.9870	0.9923	0.9832	0.9900	0.9946	0.9854	0.9921	0.9968
	2100.	0.9848	0.9812	0.9839	0.9879	0.9858	0.9907	0.9823	0.9900	0.9946	0.9862	0.9925	0.9973
68	300.	0.9979	1.0008	1.0013	0.9972	0.9992	0.9987	0.9993	0.9993	0.9994	1.0000	1.0001	1.0006
	900.	0.9979	1.0009	1.0016	0.9973	0.9993	0.9989	0.9993	0.9993	0.9993	1.0000	1.0000	1.0005
	2100.	0.9980	1.0010	1.0020	0.9973	0.9994	0.9991	0.9993	0.9992	0.9991	1.0000	1.0000	1.0004
69	300.	0.9962	0.9983	0.9994	0.9959	0.9973	0.9976	1.0008	1.0004	1.0002	1.0010	1.0007	1.0007
	900.	0.9962	0.9983	0.9995	0.9959	0.9973	0.9976	1.0008	1.0004	1.0001	1.0010	1.0007	1.0007
	2100.	0.9962	0.9983	0.9997	0.9959	0.9973	0.9977	1.0003	1.0002	1.0001	1.0004	1.0003	1.0002
70	300.	0.9964	0.9977	0.9989	0.9962	0.9971	0.9975	1.0003	1.0002	1.0001	1.0004	1.0003	1.0002
	900.	0.9964	0.9977	0.9990	0.9962	0.9971	0.9976	1.0003	1.0002	1.0001	1.0004	1.0003	1.0002
	2100.	0.9964	0.9977	0.9990	0.9962	0.9971	0.9976	1.0003	1.0002	1.0001	1.0004	1.0003	1.0002

		FR1'			FR2			FR1'			FR2				
GROUP	T(K)	100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.	100.	1000.	10000.		
23	300.	0.9685	0.9950	0.9975	0.9418	0.9879	0.9901	47	300.	0.8774	0.9246	0.9319	0.9344	0.8809	0.8851
	900.	0.9722	0.9953	0.9973	0.9436	0.9879	0.9895	900.	0.8776	0.9038	0.9122	0.9576	0.8575	0.8608	
	2100.	0.9732	0.9951	0.9968	0.9442	0.9872	0.9887	2100.	0.8793	0.8751	0.8851	0.9833	0.8330	0.8341	
24	300.	0.9042	0.9582	0.9610	0.8501	0.9254	0.9278	48	300.	0.7438	0.8208	0.8457	0.8704	0.7533	0.7666
	900.	0.8969	0.9520	0.9540	0.8312	0.9118	0.9134	900.	0.7629	0.7864	0.8128	0.9398	0.7265	0.7368	
	2100.	0.8902	0.9474	0.9490	0.8152	0.9014	0.9025	2100.	0.7982	0.7279	0.7556	0.9998	0.6841	0.6879	
25	300.	0.9231	0.9719	0.9747	0.8659	0.9450	0.9473	49	300.	0.9957	0.9711	0.9726	1.1220	0.9543	0.9507
	900.	0.9288	0.9742	0.9763	0.8672	0.9464	0.9483	900.	1.0339	0.9596	0.9628	1.1542	0.9484	0.9421	
	2100.	0.9301	0.9749	0.9767	0.8641	0.9456	0.9472	2100.	1.0891	0.9317	0.9405	1.1841	0.9424	0.9303	
26	300.	0.9024	0.9621	0.9610	0.8501	0.9254	0.9278	50	300.	0.3700	0.6394	0.6836	0.2190	0.4007	0.4264
	900.	0.8945	0.9622	0.9612	0.8434	0.9270	0.9294	900.	0.3539	0.5898	0.6582	0.2025	0.3682	0.3979	
	2100.	0.9046	0.9619	0.9645	0.8383	0.9241	0.9262	2100.	0.2471	0.4198	0.4801	0.1284	0.2436	0.2656	
27	300.	0.8863	0.9757	0.9877	0.8631	0.9622	0.9723	51	300.	1.1277	0.9563	0.9547	1.3877	0.9709	0.9485
	900.	0.8998	0.9781	0.9873	0.8676	0.9625	0.9702	900.	1.2074	0.9277	0.9347	1.4149	0.9568	0.9255	
	2100.	0.8994	0.9744	0.9818	0.8541	0.9232	0.9585	2100.	1.2486	0.8120	0.8708	1.4545	0.9295	0.8774	
28	300.	0.8820	0.9578	0.9626	0.7950	0.9092	0.9127	52	300.	0.6097	0.7215	0.7208	0.4123	0.5595	0.5493
	900.	0.8818	0.9523	0.9549	0.7805	0.8968	0.8984	900.	0.6130	0.6752	0.6993	0.4009	0.5420	0.5274	
	2100.	0.8807	0.9556	0.9576	0.7874	0.9020	0.9031	2100.	0.5694	0.5668	0.6162	0.3525	0.4832	0.4587	
29	300.	0.9754	1.0001	1.0007	0.9171	0.9839	0.9845	53	300.	1.1143	1.0486	1.0419	1.7249	1.1562	1.1034
	900.	0.9843	1.0036	1.0041	0.9287	0.9925	0.9931	900.	1.1481	1.0656	1.0597	1.7787	1.1735	1.0904	
	2100.	0.9949	1.0079	1.0085	0.9504	1.0043	1.0051	2100.	1.2104	1.1031	1.0972	1.8748	1.2123	1.0129	
30	300.	0.9094	0.9828	0.9899	0.8384	0.9522	0.9583	54	300.	1.0401	1.0045	1.0017	1.1706	1.0705	1.0473
	900.	0.9321	0.9910	0.9952	0.8543	0.9622	0.9660	900.	1.0441	1.0042	1.0051	1.1747	1.0717	1.0336	
	2100.	0.9495	0.9975	1.0000	0.8691	0.9712	0.9737	2100.	1.0570	1.0417	1.0119	1.1823	1.0746	0.9611	
31	300.	0.9193	0.9770	0.9847	0.9131	0.9722	0.9779	55	300.	0.9518	0.9761	0.9747	0.8966	0.9743	0.9826
	900.	0.9215	0.9724	0.9774	0.8938	0.9608	0.9648	900.	0.9493	0.9738	0.9722	0.8870	0.9665	0.9466	
	2100.	0.9167	0.9661	0.9698	0.8752	0.9478	0.9510	2100.	0.9522	0.9754	0.9740	0.8883	0.9643	0.8986	

Table A-4.5.1

INFINITE DILUTION CROSS SECTION CODE NO = 941

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GROUP	TOTAL	FISSION	NU	CAPTURE	INELASTIC	ELASTIC	MU	ELAS REMOVAL
26	1.49111E 01	3.01720E 00	2.93500E 00	7.61278E-01	0.0	1.11327E 01	2.93420E-02	3.55301E-01
27	1.56109E 01	3.33775E 00	2.93439E 00	8.93589E-01	0.0	1.13796E 01	2.36380E-02	3.70985E-01
28	1.59928E 01	3.55549E 00	2.93392E 00	9.38626E-01	0.0	1.14340E 01	1.89303E-02	3.69865E-01
29	1.63219E 01	3.75426E 00	2.93356E 00	9.45245E-01	0.0	1.14224E 01	1.52072E-02	3.67534E-01
30	1.66934E 01	4.34059E 00	2.93327E 00	9.50723E-01	0.0	1.14021E 01	1.23135E-02	3.64097E-01
31	1.71490E 01	4.66426E 00	2.93305E 00	1.03621E 00	0.0	1.14455E 01	1.01042E-02	3.93396E-01
32	1.79040E 01	5.66829E 00	2.93288E 00	1.65714E 00	0.0	1.20786E 01	5.86700E-03	3.90740E-01
33	1.78584E 01	6.16351E 00	2.93276E 00	1.72759E 00	0.0	1.19673E 01	2.79022E-03	3.87056E-01
34	2.04849E 01	6.42271E 00	2.93256E 00	2.03278E 00	0.0	1.20294E 01	2.79022E-03	3.93222E-01
35	2.20126E 01	7.35669E 00	2.93257E 00	2.45001E 00	0.0	1.22059E 01	2.79022E-03	3.96826E-01
36	2.36755E 01	8.49040E 00	2.93251E 00	2.86136E 00	0.0	1.23237E 01	2.79022E-03	4.05585E-01
37	2.46374E 01	9.59330E 00	2.93246E 00	2.89945E 00	0.0	1.21446E 01	2.79022E-03	3.94934E-01
38	2.49351E 01	9.84159E 00	2.93243E 00	2.69323E 00	0.0	1.18162E 01	2.79022E-03	3.82576E-01
39	2.58957E 01	1.07232E 01	2.93240E 00	3.28324E 00	0.0	1.18893E 01	2.79022E-03	3.94291E-01
40	3.34059E 01	1.55368E 01	2.93238E 00	5.14638E 00	0.0	1.27228E 01	2.79022E-03	4.34317E-01
41	3.88663E 01	1.86447E 01	2.93236E 00	6.91668E 00	0.0	1.32989E 01	2.79022E-03	4.38281E-01
42	4.33303E 01	2.21587E 01	2.93235E 00	7.80463E 00	0.0	1.33675E 01	2.79022E-03	4.27747E-01
43	4.72949E 01	2.63715E 01	2.93234E 00	7.84609E 00	0.0	1.30773E 01	2.79022E-03	4.18372E-01
44	4.75212E 01	2.67425E 01	2.93233E 00	8.09797E 00	0.0	1.26808E 01	2.79022E-03	4.03558E-01
45	4.73282E 01	2.67100E 01	2.93232E 00	8.28421E 00	0.0	1.23340E 01	2.79022E-03	4.03275E-01
46	4.70390E 01	2.67024E 01	2.93232E 00	8.30082E 00	0.0	1.20357E 01	2.79022E-03	3.90270E-01
47	7.32241E 01	4.56280E 01	2.93231E 00	1.21915E 01	0.0	1.54646E 01	2.79022E-03	4.72083E-01
48	7.84351E 01	5.07394E 01	2.93231E 00	1.39525E 01	0.0	1.37431E 01	2.79022E-03	3.79908E-01
49	4.92977E 01	3.33564E 01	2.93231E 00	3.40112E 00	0.0	1.25338E 01	2.79022E-03	4.30959E-01
50	5.29586E 01	3.18050E 01	2.93230E 00	8.38524E 00	0.0	1.27684E 01	2.79022E-03	4.38562E-01
51	1.01596E 02	7.59135E 01	2.93230E 00	1.17219E 01	0.0	1.39602E 01	2.79022E-03	3.86227E-01
52	1.16723E 02	8.48389E 01	2.93230E 00	1.91949E 01	0.0	1.26693E 01	2.79022E-03	3.84963E-01
53	1.42818E 02	6.29687E 01	2.93230E 00	5.93066E 01	0.0	1.90054E 01	2.79022E-03	5.88463E-01
54	4.23841E 02	2.78550E 02	2.93230E 00	1.20436E 02	0.0	2.48539E 01	2.79022E-03	1.77289E 00
55	1.06398E 02	8.28745E 01	2.93230E 00	1.42570E 01	0.0	9.26639E 00	2.79022E-03	3.89283E-01
56	1.90297E 02	1.53874E 02	2.93230E 00	2.56498E 01	0.0	1.07732E 01	2.79022E-03	3.64121E-01
57	3.36371E 02	2.91809E 02	2.93230E 00	3.23148E 01	0.0	1.22464E 01	2.79022E-03	3.52262E-01
58	3.01124E 02	2.75698E 02	2.93230E 00	1.56793E 01	0.0	9.74621E 00	2.79022E-03	4.17590E-01
59	3.80113E 02	2.60384E 02	2.93230E 00	1.11174E 02	0.0	8.55499E 00	2.79022E-03	2.40710E-01
60	5.16167E 02	3.99397E 01	2.93230E 00	3.51611E 00	0.0	8.19094E 00	2.79022E-03	2.79984E-01
61	4.03986E 01	2.91476E 01	2.93230E 00	2.27169E 00	0.0	8.97930E 00	2.79022E-03	2.99333E-01
62	3.78192E 01	2.61343E 01	2.93230E 00	2.26964E 00	0.0	9.41519E 00	2.79022E-03	3.09365E-01
63	3.91119E 01	2.65573E 01	2.93230E 00	2.81545E 00	0.0	9.74678E 00	2.79022E-03	3.27425E-01
64	4.43721E 01	3.01768E 01	2.93230E 00	4.14024E 00	0.0	1.00550E 01	2.79022E-03	3.34494E-01
65	5.23787E 01	3.49975E 01	2.93230E 00	6.11877E 00	0.0	1.12624E 01	2.79022E-03	3.70382E-01
66	6.35037E 01	4.06289E 01	2.93230E 00	1.12059E 01	0.0	1.16889E 01	2.79022E-03	3.86630E-01
67	6.42761E 01	3.76499E 01	2.93230E 00	2.43859E 01	0.0	1.22403E 01	2.79022E-03	4.17896E-01
68	2.54685E 02	1.62368E 02	2.93230E 00	7.91315E 01	0.0	1.31859E 01	2.79022E-03	4.49602E-01
69	1.10602E 03	7.44197E 02	2.93230E 00	3.47634E 02	0.0	1.41847E 01	2.79022E-03	4.46197E-01
70	2.20175E 03	1.54673E 03	2.93230E 00	6.43473E 02	0.0	1.15393E 01	1.20444E-02	3.21634E-01

Table A-4.5.2

SELF-SHIELDING FACTOR TABLES CODE NO = 941

GROUP	T(K)	FF				FC				FE				FT			
		10.	100.	1000.	10000.	10.	100.	1000.	10000.	10.	100.	1000.	10000.	10.	100.	1000.	10000.
26	300.	0.9651	0.9931	0.9992	0.9999	0.9502	0.9911	0.9990	0.9997	0.9880	0.9977	0.9997	1.0000	0.9721	0.9940	0.9993	0.9998
	900.	0.9719	0.9948	0.9994	0.9999	0.9568	0.9927	0.9992	0.9999	0.9903	0.9982	0.9998	1.0000	0.9786	0.9957	0.9995	0.9999
	2100.	0.9750	0.9956	0.9995	0.9999	0.9595	0.9935	0.9993	0.9999	0.9915	0.9985	0.9998	1.0000	0.9820	0.9966	0.9996	1.0001
27	300.	0.9700	0.9930	0.9992	0.9999	0.9675	0.9925	0.9991	0.9999	0.9901	0.9976	0.9997	1.0000	0.9704	0.9928	0.9991	0.9999
	900.	0.9796	0.9954	0.9995	0.9999	0.9784	0.9951	0.9994	0.9999	0.9937	0.9985	0.9998	1.0000	0.9803	0.9954	0.9995	0.9998
	2100.	0.9848	0.9966	0.9986	1.0000	0.9843	0.9965	0.9996	0.9999	0.9957	0.9990	0.9999	1.0000	0.9860	0.9967	0.9996	1.0000
28	300.	0.9613	0.9814	0.9990	0.9999	0.9572	0.9807	0.9989	0.9999	0.9898	0.9976	0.9997	1.0000	0.9667	0.9921	0.9991	0.9998
	900.	0.9735	0.9944	0.9994	0.9999	0.9702	0.9939	0.9993	0.9999	0.9937	0.9986	0.9998	1.0000	0.9782	0.9951	0.9994	1.0001
	2100.	0.9800	0.9959	0.9995	0.9999	0.9767	0.9955	0.9995	0.9999	0.9958	0.9991	0.9999	1.0000	0.9844	0.9966	0.9996	0.9999
29	300.	0.9405	0.9866	0.9985	0.9998	0.9625	0.9901	0.9988	0.9999	0.9885	0.9971	0.9997	1.0000	0.9568	0.9891	0.9987	0.9998
	900.	0.9555	0.9905	0.9989	0.9999	0.9795	0.9944	0.9993	0.9999	0.9927	0.9982	0.9998	1.0000	0.9701	0.9929	0.9992	0.9998
	2100.	0.9643	0.9926	0.9992	0.9999	0.9882	0.9966	0.9996	0.9999	0.9951	0.9988	0.9999	1.0000	0.9782	0.9949	0.9994	0.9998
30	300.	0.9378	0.9839	0.9981	0.9998	0.9532	0.9875	0.9985	0.9999	0.9881	0.9969	0.9996	1.0000	0.9497	0.9863	0.9983	0.9998
	900.	0.9552	0.9883	0.9986	0.9998	0.9751	0.9836	0.9992	0.9999	0.9926	0.9981	0.9998	1.0000	0.9656	0.9909	0.9989	0.9998
	2100.	0.9656	0.9912	0.9990	0.9999	0.9882	0.9970	0.9996	0.9999	0.9953	0.9988	0.9999	1.0000	0.9755	0.9936	0.9992	0.9999
31	300.	0.9258	0.9799	0.9976	0.9997	0.9410	0.9746	0.9969	0.9999	0.9861	0.9959	0.9999	1.0000	0.9405	0.9829	0.9979	0.9998
	900.	0.9473	0.9871	0.9998	1.0003	0.9373	0.9814	0.9982	0.9997	0.9901	0.9971	0.9997	1.0000	0.9568	0.9885	0.9979	0.9998
	2100.	0.9607	0.9912	0.9991	1.0009	0.9497	0.9849	0.9988	0.9999	0.9925	0.9979	0.9998	1.0000	0.9673	0.9917	0.9996	1.0000
32	300.	0.9072	0.9744	0.9969	0.9997	0.9203	0.9743	0.9969	0.9997	0.9783	0.9944	0.9993	0.9999	0.9102	0.9739	0.9967	0.9998
	900.	0.9245	0.9828	0.9982	1.0001	0.9392	0.9851	0.9982	0.9998	0.9865	0.9968	0.9994	0.9998	0.9375	0.98		

Table A-9.5.2 (continued)

GROUP	T(K)	FF			FC			FE			FT		
		10.	100.	1000.	10000.	10.	100.	1000.	10000.	10.	100.	1000.	10000.
42	300.	0.6144	0.8089	0.9617	0.9934	0.7088	0.7418	0.9479	0.9941	0.8813	0.9237	0.9831	0.9980
	900.	0.5838	0.8552	0.9756	0.9989	0.6149	0.8311	0.9749	1.0018	0.9034	0.9458	0.9903	0.9998
	2100.	0.7490	0.8911	0.9859	1.0027	0.7088	0.8971	0.9952	1.0115	0.9244	0.9618	0.9960	1.0024
43	300.	0.5308	0.7536	0.9482	0.9939	0.5021	0.7350	0.9482	0.9940	0.9148	0.9437	0.9878	0.9983
	900.	0.5917	0.8104	0.9589	0.9916	0.6129	0.8171	0.9672	0.9946	0.9297	0.9580	0.9913	0.9986
	2100.	0.6508	0.8874	0.9646	0.9879	0.7084	0.8719	0.9767	0.9938	0.9432	0.9671	0.9931	0.9981
44	300.	0.6336	0.8419	0.9738	0.9973	0.5013	0.7524	0.9553	0.9954	0.9548	0.9779	0.9959	0.9998
	900.	0.6872	0.8785	0.9833	1.0007	0.5941	0.8273	0.9744	0.9990	0.9606	0.9837	0.9960	0.9981
	2100.	0.7429	0.9119	0.9911	1.0035	0.6771	0.8841	0.9863	1.0016	0.9659	0.9880	0.9958	0.9969
45	300.	0.4555	0.6716	0.9160	0.9890	0.4237	0.6442	0.9157	0.9889	0.9313	0.9502	0.9865	0.9982
	900.	0.5078	0.7142	0.9357	0.9933	0.4896	0.7024	0.9385	0.9950	0.9400	0.9593	0.9916	1.0005
	2100.	0.5577	0.7546	0.9507	0.9965	0.5512	0.7453	0.9541	1.0008	0.9508	0.9689	0.9976	1.0046
46	300.	0.6477	0.8559	0.9712	0.9967	0.4197	0.5678	0.8531	0.9780	0.8671	0.8794	0.9542	0.9930
	900.	0.6950	0.8873	0.9805	0.9991	0.4860	0.6233	0.8862	0.9819	0.8855	0.8973	0.9687	0.9984
	2100.	0.7367	0.9115	0.9853	0.9988	0.5351	0.6584	0.9013	0.9800	0.8955	0.9078	0.9752	0.9994
47	300.	0.4709	0.6881	0.9232	0.9904	0.3483	0.5611	0.8802	0.9844	0.9081	0.9324	0.9817	0.9976
	900.	0.5101	0.7407	0.9451	0.9949	0.4020	0.6367	0.9205	1.0003	0.9119	0.9389	0.9819	0.9934
	2100.	0.5537	0.7858	0.9596	0.9980	0.4660	0.7072	0.9499	1.0127	0.9198	0.9489	0.9830	0.9915
48	300.	0.4064	0.6425	0.9024	0.9873	0.4388	0.6191	0.9401	0.9938	0.9416	0.9624	0.9902	0.9988
	900.	0.4489	0.6921	0.9186	0.9896	0.5061	0.7588	0.9567	0.9863	0.9503	0.9741	0.9966	1.0028
	2100.	0.4951	0.7358	0.9303	0.9910	0.5661	0.8045	0.9649	0.9812	0.9598	0.9839	0.9947	0.9979
49	300.	0.3495	0.6742	0.9135	0.9885	0.3647	0.6791	0.9077	0.9875	0.9292	0.9494	0.9939	0.9990
	900.	0.3576	0.6938	0.9204	0.9883	0.3746	0.7027	0.9158	0.9881	0.9119	0.9389	0.9819	0.9845
	2100.	0.3696	0.7193	0.9291	0.9886	0.3886	0.7324	0.9276	0.9913	0.9953	1.0002	0.9954	0.9988
50	300.	0.5778	0.8066	0.9596	0.9952	0.4444	0.6887	0.9256	0.9909	0.9837	0.9921	0.9977	0.9997
	900.	0.6003	0.8297	0.9686	0.9986	0.4808	0.7280	0.9397	0.9924	0.9854	0.9955	1.0012	0.9931
	2100.	0.6276	0.8504	0.9751	1.0016	0.5155	0.7573	0.9463	0.9814	0.9851	0.9947	0.9996	1.0012
51	300.	0.5234	0.6827	0.9049	0.9871	0.5407	0.7310	0.9376	0.9925	0.9889	0.9904	0.9972	0.9996
	900.	0.5408	0.6994	0.9107	0.9878	0.5829	0.7690	0.9499	0.9950	0.9840	0.9859	0.9923	0.9943
	2100.	0.5673	0.7210	0.9172	0.9880	0.5383	0.8119	0.9628	0.9986	0.9782	0.9809	0.9869	0.9888
52	300.	0.5248	0.6885	0.9302	0.9923	0.5169	0.6580	0.8997	0.9876	0.9578	0.9794	1.0002	1.0002
	900.	0.5520	0.7156	0.9472	0.9951	0.5648	0.6998	0.9202	0.9906	0.9525	0.9743	0.9949	0.9935
	2100.	0.5910	0.7536	0.9665	0.9981	0.6252	0.7490	0.9394	0.9918	0.9500	0.9716	0.9911	0.9883
53	300.	0.2674	0.4482	0.7238	0.9483	0.1750	0.3425	0.6483	0.9312	0.7610	0.8014	0.8873	0.9778
	900.	0.2788	0.4714	0.7514	0.9480	0.1905	0.3746	0.7047	0.9469	0.7608	0.8079	0.9011	0.9787
	2100.	0.2961	0.5013	0.7761	0.9451	0.2160	0.4271	0.7553	0.9567	0.7641	0.8192	0.9135	0.9781
54	300.	0.3736	0.4654	0.6810	0.9274	0.2706	0.3232	0.5414	0.8950	0.5950	0.6449	0.7756	0.9489
	900.	0.3955	0.4931	0.7200	0.9426	0.2921	0.3522	0.5779	0.9066	0.6021	0.6568	0.7953	0.9539
	2100.	0.4386	0.5405	0.7656	0.9501	0.3324	0.3980	0.6154	0.9026	0.6191	0.6779	0.8165	0.9515
55	300.	0.5581	0.7385	0.9375	0.9923	0.5433	0.6658	1.0038	1.0063	0.9887	1.0137	0.9796	0.9962
	900.	0.5649	0.7484	0.9520	1.0060	0.5606	0.6941	1.1044	1.1121	0.9849	1.0124	0.9829	1.0002
	2100.	0.5783	0.7674	0.9876	1.0438	0.5975	0.7549	1.3283	1.3575	0.9872	1.0199	1.0077	1.0263
56	300.	0.6890	0.8025	0.9739	0.9966	0.5465	0.6430	0.8741	0.9820	0.9764	0.9835	0.9971	0.9997
	900.	0.7093	0.8247	0.9885	1.0000	0.5724	0.6731	0.8970	0.9866	0.9725	0.9800	0.9931	0.9946
	2100.	0.7439	0.8579	1.0048	1.0037	0.6169	0.7186	0.9222	0.9911	0.9714	0.9790	0.9909	0.9913
57	300.	0.6271	0.6824	0.8395	0.9777	0.5629	0.6559	0.8997	0.9896	1.0052	1.0144	1.0164	1.0026
	900.	0.6370	0.6941	0.8468	0.9787	0.5845	0.6919	0.9190	0.9929	1.0003	1.0096	1.0117	0.9971
	2100.	0.6541	0.7128	0.8559	0.9795	0.6208	0.7319	0.9423	0.9964	0.9961	1.0055	1.0073	0.9920
58	300.	0.9215	0.9378	1.0373	1.0084	0.9520	0.9750	0.9279	0.9874	0.9970	0.9999	0.9918	0.9985
	900.	0.9301	0.9459	1.0611	1.0144	0.9373	0.9990	0.9486	1.0155	0.9906	0.9936	0.9862	0.9887
	2100.	0.9441	0.9586	1.0863	1.0222	1.0106	1.0375	0.9792	1.0546	0.9855	0.9884	0.9821	0.9841
59	300.	0.4485	0.5374	0.9782	1.0014	0.3015	0.3939	0.8740	0.9838	0.8288	0.8599	1.0160	1.0046
	900.	0.4573	0.5515	0.9998	1.0017	0.3170	0.4174	0.9138	0.9903	0.8269	0.8595	1.0184	1.0001
	2100.	0.4719	0.5718	1.0149	0.9982	0.3427	0.4521	0.9503	0.9933	0.8305	0.8645	1.0221	0.9969
60	300.	0.9899	0.9835	0.9984	1.0015	0.9882	0.9712	0.9974	1.0026	1.0027	1.0045	1.0004	0.9996
	900.	0.9912	0.9846	0.9992	1.0029	0.9855	0.9741	0.9999	1.0063	0.9955	0.9973	0.9934	0.9984
	2100.	0.9931	0.9861	1.0005	1.0051	0.9915	0.9794	1.0052	1.0131	0.9895	0.9914	0.9875	0.9982
61	300.	1.0010	0.9990	0.9998	1.0006	1.0007	0.9992	0.9998	1.0005	1.0005	1.0003	0.9998	0.9995
	900.	1.0019	1.0000	1.0006	1.0016	1.0026	1.0011	0.9999	1.0024	1.0024	1.0033	0.9937	0.9983
	2100.	1.0030	1.0010	1.0014	1.0026	1.0050	1.0035	1.0039	1.0048	0.9987	0.9985	0.9980	0.9997
62	300.	1.0007	1.0003	1.0000	1.0001	0.9976	0.9988	0.9998	0.9995	0.9997	0.9999	1.0002	1.0000
	900.	1.0016	1.0013	1.0010	1.0011	0.9996	0.9933	0.9933	1.0013	0.9933	0.9936	0.9994	0.9994
	2100.	1.0025	1.0021	1.0018	1.0019	1.0015	1.0027	1.0034	0.9982	0.9985	0.9988	0.9990	0.9989
63	300.	0.9980	0.9986	0.9997	0.9997	0.9916	0.9943	0.9987	0.9989	0.9992	0.9995	0.9999	0.9997
	900.	0.9990	0.9996	0.9996	0.9996	0.9933	0.9960	0.9960	1.0006	0.9934	0.9940	0.9940	0.9991
	2100.	0.9990	0.9990	0.9990	0.9990	0.9953	0.9980	0.9987	1.0027	0.9985	0.9992	0.9992	0.9991
64	300.	0.9709	0.9801	0.9954	0.9982</td								

Table A-4.5.2 (continued)

GROUP	T(K)	FR				GROUP	T(K)	FR			
		10.	100.	1000.	10000.			10.	100.	1000.	10000.
26	300.	0.5590	0.9279	0.9921	0.9991	49	300.	0.5120	0.7253	0.9008	0.9832
	900.	0.5583	0.9284	0.9922	0.9991		900.	0.5027	0.7428	0.9054	0.9856
	2100.	0.5597	0.9292	0.9923	0.9991		2100.	0.2998	0.7619	0.9068	0.9861
27	300.	0.5624	0.9262	0.9917	0.9988	50	300.	0.6879	0.8136	0.9170	0.9861
	900.	0.5650	0.9271	0.9919	0.9988		900.	0.7045	0.8258	0.9167	0.9861
	2100.	0.5653	0.9276	0.9919	0.9988		2100.	0.7419	0.8421	0.9172	0.9862
28	300.	0.5592	0.9263	0.9916	0.9986	51	300.	0.6190	0.6588	0.8601	0.9783
	900.	0.5594	0.9263	0.9916	0.9986		900.	0.6265	0.6609	0.8581	0.9782
	2100.	0.5591	0.9263	0.9916	0.9986		2100.	0.6270	0.6529	0.8548	0.9779
29	300.	0.6213	0.9181	0.9906	0.9985	52	300.	2.0441	1.2472	0.9039	0.9828
	900.	0.6210	0.9182	0.9907	0.9985		900.	1.9457	1.2397	0.8999	0.9825
	2100.	0.6198	0.9182	0.9907	0.9985		2100.	1.8748	1.2404	0.8962	0.9822
30	300.	0.6374	0.8924	0.9873	0.9980	53	300.	0.0865	0.2787	0.6660	0.9447
	900.	0.5611	0.8938	0.9875	0.9980		900.	0.0986	0.3011	0.6797	0.9482
	2100.	0.6420	0.8946	0.9877	0.9981		2100.	0.1188	0.3322	0.6968	0.9521
31	300.	0.7500	0.8997	0.9881	0.9980	54	300.	0.1347	0.1853	0.3798	0.8554
	900.	0.7527	0.9005	0.9883	0.9980		900.	0.1447	0.2005	0.3930	0.8688
	2100.	0.7535	0.9012	0.9884	0.9980		2100.	0.1745	0.2342	0.4075	0.8791
32	300.	0.7591	0.8721	0.9844	0.9974	55	300.	0.2096	0.4876	0.7560	0.9609
	900.	0.7675	0.8748	0.9850	0.9974		900.	0.2178	0.5053	0.7602	0.9615
	2100.	0.7725	0.8764	0.9853	0.9975		2100.	0.2326	0.5349	0.7681	0.9628
33	300.	0.8366	0.8674	0.9834	0.9970	56	300.	1.4518	1.1923	0.7980	0.9662
	900.	0.8440	0.8697	0.9839	0.9970		900.	1.4868	1.2054	0.7969	0.9664
	2100.	0.8481	0.8705	0.9841	0.9970		2100.	1.5445	1.2270	0.7976	0.9667
34	300.	0.6710	0.8102	0.9751	0.9959	57	300.	0.3683	0.3911	0.5196	0.9182
	900.	0.5787	0.8131	0.9759	0.9960		900.	0.3952	0.4003	0.5194	0.9180
	2100.	0.6433	0.8159	0.9766	0.9960		2100.	0.4114	0.4159	0.5200	0.9181
35	300.	0.8490	0.8423	0.9799	0.9962	58	300.	0.6848	0.7890	0.6496	0.9398
	900.	0.8591	0.8433	0.9803	0.9962		900.	0.6684	0.7721	0.6467	0.9386
	2100.	0.8663	0.8437	0.9803	0.9962		2100.	0.6741	0.7742	0.6487	0.9382
36	300.	0.6387	0.7672	0.9685	0.9949	59	300.	2.1553	2.0090	0.9301	0.9693
	900.	0.6437	0.7694	0.9695	0.9950		900.	2.2031	2.0488	0.9332	0.9687
	2100.	0.6518	0.7710	0.9699	0.9951		2100.	2.2770	2.0934	0.9338	0.9676
37	300.	0.6997	0.7616	0.9644	0.9943	60	300.	1.0853	1.1663	1.0185	0.9814
	900.	0.6916	0.7635	0.9666	0.9946		900.	1.0860	1.1691	1.0260	0.9814
	2100.	0.6887	0.7655	0.9680	0.9947		2100.	1.0875	1.1739	1.0347	0.9814
38	300.	0.7365	0.7507	0.9852	0.9945	61	300.	0.9552	1.0145	1.0050	0.9808
	900.	0.7313	0.7475	0.9657	0.9945		900.	0.9553	1.0150	1.0096	0.9809
	2100.	0.7309	0.7446	0.9658	0.9945		2100.	0.9554	1.0148	1.0148	0.9809
39	300.	0.6514	0.6842	0.9535	0.9933	62	300.	0.8883	0.9413	0.9893	0.9795
	900.	0.6919	0.6882	0.9559	0.9935		900.	0.8884	0.9414	0.9923	0.9795
	2100.	0.7276	0.6915	0.9572	0.9937		2100.	0.8885	0.9416	0.9934	0.9795
40	300.	0.8325	0.7430	0.9627	0.9943	63	300.	0.8423	0.8880	0.9739	0.9788
	900.	0.8179	0.7472	0.9648	0.9946		900.	0.8423	0.8880	0.9759	0.9788
	2100.	0.8232	0.7487	0.9655	0.9947		2100.	0.8423	0.8881	0.9781	0.9788
41	300.	0.4743	0.5502	0.9139	0.9881	64	300.	0.4947	0.6630	0.9217	0.9730
	900.	0.4976	0.5670	0.9247	0.9895		900.	0.4946	0.6629	0.9231	0.9730
	2100.	0.5311	0.5826	0.9312	0.9902		2100.	0.4946	0.6629	0.9247	0.9730
42	300.	0.8766	0.7169	0.9523	0.9918	65	300.	0.7979	0.7905	0.9329	0.9733
	900.	0.8690	0.7028	0.9513	0.9918		900.	0.7980	0.7907	0.9337	0.9733
	2100.	0.8456	0.6877	0.9499	0.9927		2100.	0.7981	0.7910	0.9351	0.9733
43	300.	0.8016	0.7093	0.9445	0.9904	66	300.	0.7491	0.7498	0.9062	0.9701
	900.	0.7849	0.7123	0.9469	0.9907		900.	0.7491	0.7499	0.9072	0.9701
	2100.	0.7612	0.7164	0.9491	0.9910		2100.	0.7491	0.7500	0.9083	0.9701
44	300.	0.7126	0.6772	0.9357	0.9890	67	300.	0.5866	0.6011	0.8354	0.9620
	900.	0.7149	0.6841	0.9375	0.9893		900.	0.5866	0.6012	0.8363	0.9620
	2100.	0.7307	0.6909	0.9393	0.9895		2100.	0.5866	0.6012	0.8372	0.9620
45	300.	1.1008	0.8261	0.9545	0.9908	68	300.	0.4038	0.3605	0.5452	0.9115
	900.	1.0680	0.8139	0.9511	0.9905		900.	0.4038	0.3605	0.5460	0.9115
	2100.	1.0041	0.7936	0.9474	0.9901		2100.	0.4038	0.3605	0.5469	0.9115
46	300.	0.4122	0.5457	0.8909	0.9835	69	300.	0.4096	0.3845	0.1847	0.7333
	900.	0.4181	0.5580	0.8930	0.9838		900.	0.4096	0.3845	0.1858	0.7333
	2100.	0.4449	0.5771	0.8965	0.9843		2100.	0.4096	0.3845	0.1869	0.7333
47	300.	0.4892	0.5212	0.8429	0.9771	70	300.	1.0727	1.0621	0.5883	0.6878
	900.	0.4800	0.5294	0.8489	0.9784		900.	1.0727	1.0621	0.5940	0.6878
	2100.	0.4759	0.5424	0.8553	0.9795		2100.	1.0727	1.0621	0.6000	0.6878
48	300.	0.3647	0.5688	0.8454	0.9777						
	900.	0.3401	0.5671	0.8468	0.9784						
	2100.	0.3103	0.5555	0.8461	0.9786						

Table A-5.1 SELF-SHIELDING FACTOR TABLES CODE NO. = 925

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GROUP	T(K)	FF				FC				FE				FT			
		0	10	100	1000	0	10	100	1000	0	10	100	1000	0	10	100	1000
26	300	0.9659	0.9229	0.9964	0.9996	0.9763	0.9830	0.9971	0.9997	0.9950	0.9964	0.9993	0.9999	0.9821	0.9894	0.9978	0.9997
	900	0.9661	0.9870	0.9975	0.9997	0.9797	0.9881	0.9980	0.9998	0.9965	0.9974	0.9993	0.9999	0.9870	0.9927	0.9986	0.9998
	2100	0.9673	0.9885	0.9980	0.9996	0.9787	0.9900	0.9983	0.9998	0.9970	0.9979	0.9996	1.0000	0.9888	0.9943	0.9989	0.9999
27	300	0.9735	0.9806	0.9959	0.9995	0.9789	0.9879	0.9971	0.9997	0.9980	0.9979	0.9993	0.9999	0.9829	0.9894	0.9975	0.9997
	900	0.9833	0.9862	0.9972	0.9997	0.9876	0.9928	0.9983	0.9998	0.9978	0.9990	0.9997	1.0000	0.9891	0.9935	0.9985	0.9998
	2100	0.9878	0.9884	0.9978	0.9998	0.9914	0.9943	0.9987	0.9999	0.9986	0.9994	0.9998	1.0000	0.9931	0.9953	0.9990	0.9999
28	300	0.9367	0.9606	0.9920	0.9981	0.9853	0.9959	0.9925	0.9991	0.9930	0.9946	0.9989	0.9999	0.9711	0.9779	0.9952	0.9995
	900	0.9697	0.9683	0.9940	0.9993	0.9708	0.9674	0.9944	0.9998	0.9954	0.9961	0.9992	0.9999	0.9807	0.9840	0.9967	0.9997
	2100	0.9760	0.9718	0.9949	0.9994	0.9766	0.9705	0.9952	0.9995	0.9967	0.9969	0.9994	0.9999	0.9856	0.9869	0.9975	0.9997
29	300	0.9516	0.9673	0.9924	0.9991	0.9515	0.9674	0.9924	0.9991	0.9913	0.9947	0.9987	0.9998	0.9631	0.9759	0.9940	0.9993
	900	0.9687	0.9784	0.9952	0.9994	0.9682	0.9789	0.9952	0.9994	0.9945	0.9969	0.9992	0.9999	0.9761	0.9846	0.9963	0.9996
	2100	0.9727	0.9841	0.9966	0.9996	0.9692	0.9842	0.9965	0.9996	0.9962	0.9980	0.9995	0.9998	0.9815	0.9893	0.9975	0.9997
30	300	0.9379	0.9492	0.9882	0.9987	0.9444	0.9632	0.9909	0.9989	0.9910	0.9936	0.9984	0.9998	0.9564	0.9687	0.9923	0.9991
	900	0.9599	0.9628	0.9919	0.9991	0.9645	0.9760	0.9942	0.9993	0.9942	0.9957	0.9990	0.9999	0.9716	0.9787	0.9950	0.9994
	2100	0.9691	0.9694	0.9936	0.9993	0.9726	0.9827	0.9959	0.9995	0.9960	0.9968	0.9993	0.9999	0.9791	0.9840	0.9964	0.9996
31	300	0.9224	0.9364	0.9838	0.9981	0.9325	0.9521	0.9861	0.9988	0.9898	0.9928	0.9982	0.9998	0.9462	0.9609	0.9897	0.9988
	900	0.9464	0.9524	0.9885	0.9995	0.9561	0.9678	0.9927	0.9997	0.9933	0.9951	0.9988	0.9999	0.9634	0.9728	0.9931	0.9994
	2100	0.9554	0.9602	0.9904	0.9995	0.9681	0.9749	0.9944	0.9996	0.9952	0.9964	0.9991	0.9999	0.9732	0.9792	0.9948	0.9995
32	300	0.9170	0.9414	0.9840	0.9981	0.9224	0.9524	0.9880	0.9985	0.9900	0.9932	0.9982	0.9998	0.9367	0.9564	0.9879	0.9985
	900	0.9473	0.9622	0.9904	0.9998	0.9537	0.9738	0.9944	0.9999	0.9937	0.9959	0.9990	0.9999	0.9593	0.9723	0.9928	0.9994
	2100	0.9635	0.9730	0.9932	0.9992	1.0002	0.9885	0.9938	0.9967	0.9957	0.9973	0.9993	0.9999	0.9716	0.9808	0.9952	0.9998
33	300	0.8991	0.9356	0.9847	0.9992	0.8863	0.9262	0.9818	0.9978	0.9880	0.9921	0.9981	0.9998	0.9169	0.9441	0.9852	0.9982
	900	0.9356	0.9609	0.9923	0.9998	0.9261	0.9540	0.9895	0.9987	0.9922	0.9951	0.9990	0.9999	0.9441	0.9638	0.9913	0.9991
	2100	0.9570	0.9753	0.9962	0.9994	1.0004	0.9483	0.9689	0.9931	0.9987	0.9947	0.9969	0.9999	0.9755	0.9945	0.9994	0.9994
34	300	0.8764	0.9137	0.9735	0.9968	0.8883	0.9237	0.9791	0.9974	0.9860	0.9901	0.9971	0.9996	0.9007	0.9297	0.9789	0.9973
	900	0.9157	0.9415	0.9820	0.9985	0.9346	0.9569	0.9892	0.9991	0.9913	0.9939	0.9983	0.9998	0.9534	0.9867	0.9986	0.9996
	2100	0.9364	0.9559	0.9861	0.9994	0.9384	0.9735	0.9938	0.9999	0.9942	0.9959	0.9989	0.9999	0.9662	0.9905	0.9992	0.9992
35	300	0.8235	0.8733	0.9605	0.9949	0.8401	0.8865	0.9655	0.9956	0.9792	0.9847	0.9950	0.9994	0.8477	0.8880	0.9634	0.9952
	900	0.8759	0.9121	0.9725	0.9968	0.8939	0.9257	0.9781	0.9975	0.9860	0.9896	0.9965	0.9996	0.8907	0.9214	0.9754	0.9970
	2100	0.9094	0.9361	0.9798	0.9977	0.9266	0.9488	0.9852	0.9986	0.9902	0.9927	0.9976	0.9997	0.9198	0.9429	0.9824	0.9979
36	300	0.8022	0.8569	0.9558	0.9939	0.7918	0.8468	0.9470	0.9930	0.9705	0.9772	0.9919	0.9989	0.8130	0.8590	0.9501	0.9930
	900	0.8621	0.9024	0.9718	0.9978	0.8597	0.8987	0.9660	0.9962	0.9788	0.9841	0.9947	0.9993	0.8639	0.9004	0.9676	0.9961
	2100	0.9033	0.9326	0.9826	1.0004	0.9035	0.9305	0.9768	0.9980	0.9847	0.9887	0.9964	0.9995	0.9024	0.9294	0.9785	0.9981
37	300	0.7655	0.8246	0.9427	0.9919	0.7445	0.8066	0.9292	0.9930	0.9586	0.9659	0.9863	0.9979	0.7659	0.8179	0.9308	0.9895
	900	0.8237	0.8710	0.9603	0.9949	0.8135	0.8618	0.9503	0.9936	0.9690	0.9754	0.9966	0.9996	0.8165	0.8614	0.9506	0.9931
	2100	0.8631	0.9021	0.9712	0.9967	0.8599	0.8984	0.9631	0.9959	0.9766	0.9814	0.9926	0.9990	0.8545	0.8929	0.9633	0.9953
38	300	0.7725	0.8758	0.9712	0.9985	0.7394	0.8066	0.9341	0.9909	0.9709	0.9761	0.9911	0.9987	0.7575	0.8071	0.9222	0.9883
	900	0.8739	0.8830	0.9392	0.9932	0.8140	0.8649	0.9582	0.9955	0.9787	0.9830	0.9943	0.9992	0.8077	0.8517	0.9444	0.9926
	2100	0.9105	0.8634	0.9515	0.9953	0.9173	0.9710	0.9976	0.9990	0.9986	0.9984	0.9993	0.9999	0.8779	0.9571	0.9947	0.9947
39	300	0.6872	0.7569	0.9021	0.9860	0.6838	0.7588	0.9127	0.9878	0.9647	0.9711	0.9894	0.9984	0.6972	0.7562	0.8975	0.9842
	900	0.7639	0.8203	0.9292	0.9911	0.7659	0.8285	0.9431	0.9926	0.9749	0.9797	0.9940	0.9992	0.7584	0.8125	0.9280	0.9903
	2100	0.8197	0.8650	0.9467	0.9943	0.8243	0.8758	0.9610	0.9950	0.9824	0.9882	0.9980	0.9996	0.8082	0.8659	0.9479	0.9937
40	300	0.6776	0.7453	0.8884	0.9835	0.6082	0.6835	0.8465	0.9795	0.9562	0.9625	0.9824	0.9971	0.6535	0.7127	0.8655	0.9775
	900	0.7560	0.8105	0.9177	0.9894	0.7070	0.7693	0.9077	0.9878	0.9661	0.9716	0.9877	0.9982	0.7206	0.7752	0.9024	0.9859
	2100	0.8215	0.8624	0.9387	0.9936	0.7909	0.8386	0.9382	0.9939	0.9748	0.9793	0.9916	0.9996	0.8323	0.9302	0.9914	0.9974
41	300	0.6987	0.7673	0.9223	0.9890	0.6632	0.7342	0.8958	0.9956	0.9733	0.9782	0.9933	0.9990	0.6658	0.7292	0.9527	0.9893
	900	0.7724	0.8277	0.9497	0.9938	0.7721	0.8253	0.9398	0.9900	0.9807	0.9854	0.9972	0.9996	0.7386	0.7952	0.9276	0.9893
	2100	0.8262	0.8708	0.9672	0.9964	0.8449	0.8827	0.9599	0.9990	0.9862	0.9904	0.9994	0.9999	0.7967	0.8453	0.9505	0.9923
42	300	0.6733	0.7445	0.9072	0.9867	0.6552	0.7340	0.8849	0.9929	0.9624	0.9682	0.9920	0.9990	0.6570	0.7186	0.8820	0.9775
	900	0.7414	0.8038	0.9345	0.9901	0.5886	0.6846	0.9259	0.9919	0.9767	0.9820	0.9988	0.9996	0.6454	0.7174	0.8925	0.9837
	2100	0.7945	0.8470	0.9519	0.9914	0.8120	0.8660	0.9432	0.9924	0.9792	0.9850	0.9963	0.9995	0.7560	0.8212	0	

Table A-5.1 (continued)

GROUP	T(K)	FF				FC				FE				FT				
		0,	10,	100,	1000,	0,	10,	100,	1000,	0,	10,	100,	1000,	0,	10,	100,	1000,	
60	300,	0.8076	0.8583	0.9546	0.9995	0.7437	0.8324	0.9570	1.0071	1.0014	0.9990	0.9984	0.9994	0.7650	0.8031	0.9108	0.9901	
	900,	0.8359	0.8891	0.9798	1.0138	0.7849	0.8800	1.0027	1.0412	1.0014	0.9993	0.9986	0.9994	0.7754	0.8259	0.9348	1.0053	
	2100,	0.8798	0.9319	1.0089	1.0311	0.8471	0.9423	1.0530	1.0720	1.0015	0.9999	0.9989	0.9995	0.8037	0.8651	0.9683	1.0211	
61	300,	0.9792	0.9945	1.0028	0.9973	0.9607	0.9713	0.9957	0.9976	0.9983	0.9995	1.0002	0.9998	0.9817	0.9906	0.9995	0.9985	
	900,	0.9867	1.0021	1.0117	1.0061	0.9920	1.0091	1.0448	1.0948	1.0027	0.9984	0.9995	1.0002	0.9998	0.9783	0.9925	1.0037	1.0029
	2100,	1.0053	1.0215	1.0344	1.0293	1.0644	1.1000	1.1666	1.1684	0.9983	0.9993	1.0002	0.9998	0.9678	1.0046	1.0224	1.0229	
62	300,	0.9235	0.9424	0.9831	1.0005	0.6185	0.7209	0.9337	0.9976	1.0096	1.0006	1.0006	1.0001	0.9999	0.7946	0.8249	0.9246	0.9941
	900,	0.9377	0.9563	0.9914	1.0011	0.6654	0.7737	0.9642	1.0075	1.0008	1.0007	1.0001	0.9999	0.8140	0.8456	0.9444	0.9939	
	2100,	0.9537	0.9702	0.9960	1.0000	0.7118	0.8133	0.9663	0.9848	1.0009	1.0007	1.0000	0.9999	0.8446	0.8695	0.9561	0.9870	
63	300,	0.9739	0.9768	0.9888	0.9959	0.9351	0.9421	0.9722	0.9894	0.9976	0.9979	0.9990	0.9996	0.9678	0.9721	0.9874	0.9960	
	900,	0.9816	0.9849	0.9986	1.0062	0.9438	0.9516	0.9840	1.0023	0.9975	0.9978	0.9990	0.9996	0.9649	0.9737	0.9905	0.9998	
	2100,	0.9995	1.0039	1.0208	1.0301	0.9579	0.9672	1.0041	1.0246	0.9974	0.9977	0.9990	0.9996	0.9815	1.0015	1.0127		
64	300,	0.7882	0.7775	0.8224	0.9622	0.8830	0.8880	0.9457	0.9956	0.9829	0.9821	0.9806	0.9930	0.7014	0.7084	0.7240	0.8077	
	900,	0.7998	0.7880	0.8256	0.9582	0.8939	0.8975	0.9473	0.9909	0.9826	0.9818	0.9803	0.9929	0.7223	0.7240	0.8077	0.9577	
	2100,	0.8145	0.8024	0.8273	0.9491	0.9054	0.9071	0.9442	0.9785	0.9822	0.9814	0.9798	0.9927	0.7568	0.7681	0.8167	0.9501	
65	300,	1.0002	0.9997	1.0024	1.0034	1.0015	0.9999	1.0078	1.0109	0.9997	0.9999	0.9993	0.9991	0.9980	0.9977	1.0013	1.0031	
	900,	1.0002	0.9997	1.0024	1.0034	1.0015	0.9998	1.0076	1.0109	0.9997	0.9999	0.9994	0.9991	0.9980	0.9977	1.0012	1.0031	
	2100,	1.0002	0.9996	1.0023	1.0034	1.0015	0.9997	1.0075	1.0109	0.9997	0.9999	0.9994	0.9991	0.9980	0.9977	1.0012	1.0031	
66	300,	0.9928	0.9929	0.9940	0.9954	0.9907	0.9908	0.9923	0.9940	0.9988	0.9988	0.9990	0.9992	0.9913	0.9917	0.9937	0.9957	
	900,	0.9928	0.9929	0.9941	0.9954	0.9907	0.9908	0.9923	0.9940	0.9988	0.9988	0.9990	0.9992	0.9913	0.9917	0.9937	0.9957	
	2100,	0.9928	0.9929	0.9941	0.9954	0.9907	0.9908	0.9923	0.9940	0.9988	0.9988	0.9990	0.9992	0.9913	0.9917	0.9937	0.9957	
67	300,	0.9859	0.9859	0.9864	0.9910	0.9769	0.9769	0.9777	0.9853	0.9987	0.9987	0.9987	0.9992	0.9866	0.9811	0.9841	0.9910	
	900,	0.9859	0.9859	0.9864	0.9911	0.9769	0.9769	0.9777	0.9854	0.9987	0.9987	0.9987	0.9992	0.9806	0.9811	0.9841	0.9911	
	2100,	0.9859	0.9859	0.9864	0.9911	0.9769	0.9769	0.9777	0.9854	0.9987	0.9987	0.9987	0.9992	0.9806	0.9811	0.9841	0.9911	
68	300,	0.9721	0.9720	0.9714	0.9800	0.9425	0.9423	0.9410	0.9585	0.9984	0.9984	0.9983	0.9988	0.9547	0.9557	0.9605	0.9770	
	900,	0.9721	0.9720	0.9714	0.9800	0.9425	0.9423	0.9410	0.9586	0.9984	0.9984	0.9983	0.9988	0.9547	0.9557	0.9605	0.9770	
	2100,	0.9721	0.9720	0.9714	0.9801	0.9425	0.9423	0.9410	0.9586	0.9984	0.9984	0.9983	0.9988	0.9547	0.9557	0.9605	0.9770	
69	300,	0.9826	0.9826	0.9820	0.9798	0.9714	0.9704	0.9663	0.9637	0.9987	0.9987	0.9987	0.9997	0.9997	0.9997	0.9704	0.9709	0.9750
	900,	0.9826	0.9826	0.9820	0.9798	0.9714	0.9704	0.9663	0.9638	0.9987	0.9987	0.9987	0.9997	0.9997	0.9997	0.9704	0.9704	0.9750
	2100,	0.9826	0.9826	0.9820	0.9798	0.9714	0.9704	0.9663	0.9638	0.9987	0.9987	0.9987	0.9997	0.9997	0.9997	0.9704	0.9704	0.9750
70	300,	1.0013	1.0011	1.0013	1.0056	1.0019	1.0018	1.0019	1.0019	1.0086	0.9999	0.9999	0.9995	1.0003	1.0003	1.0003	1.0003	1.0056
	900,	1.0013	1.0011	1.0013	1.0056	1.0019	1.0016	1.0019	1.0084	0.9999	0.9999	0.9999	0.9995	1.0003	1.0003	1.0003	1.0003	1.0056
	2100,	1.0013	1.0011	1.0013	1.0056	1.0019	1.0016	1.0019	1.0084	0.9999	0.9999	0.9999	0.9995	1.0003	1.0003	1.0003	1.0003	1.0056

GROUP	T(K)	FR				GROUP	T(K)	FR			
		0,	10,	100,	1000,			0,	10,	100,	1000,
26	300,	0.0966	0.6196	0.9434	0.9939	49	300,	0.6235	0.6020	0.5711	0.8616
	900,	0.0963	0.6220	0.9439	0.9940		900,	0.6667	0.6433	0.5982	0.8646
	2100,	0.0964	0.6297	0.9455	0.9941		2100,	0.7695	0.7331	0.6397	0.8709
27	300,	0.8709	0.6183	0.9403	0.9933	50	300,	1.0673	1.1142	1.0576	0.9363
	900,	0.8679	0.6182	0.9406	0.9934		900,	1.1092	1.1481	1.0840	0.9345
	2100,	0.8619	0.6222	0.9416	0.9935		2100,	1.0795	1.1153	1.0894	0.9320
28	300,	0.8243	0.5888	0.9311	0.9922	51	300,	0.3716	0.5297	0.8233	0.8884
	900,	0.8232	0.5869	0.9314	0.9922		900,	0.4065	0.5658	0.8730	0.8936
	2100,	0.8183	0.5871	0.9321	0.9923		2100,	0.5092	0.6682	0.9389	0.8995
29	300,	0.8231	0.5716	0.9153	0.9902	52	300,	3.3701	1.9953	1.1346	0.9295
	900,	0.8248	0.5698	0.9157	0.9903		900,	3.5694	1.9070	1.1514	0.9277
	2100,	0.8225	0.5679	0.9161	0.9904		2100,	2.9794	1.4484	1.1899	0.9214
30	300,	0.7608	0.6134	0.9086	0.9894	53	300,	0.3882	0.5145	0.7642	0.8676
	900,	0.7830	0.6117	0.9088	0.9894		900,	0.4680	0.6132	0.8541	0.8752
	2100,	0.7839	0.6069	0.9092	0.9895		2100,	0.6495	0.7902	0.9627	0.8809
31	300,	0.7636	0.6739	0.9014	0.9884	54	300,	0.7978	0.7955	0.9685	0.9246
	900,	0.7657	0.6732	0.9017	0.9885		900,	0.9460	0.9211	0.9955	0.9235
	2100,	0.7654	0.6678	0.9017	0.9885		2100,	1.0679	1.0201	1.0208	0.9224
32	300,	0.8494	0.7581	0.8904	0.9868	55	300,	0.9320	1.1180	1.1712	0.9348
	900,	0.8520	0.7585	0.8902	0.9869		900,	0.9273	1.1369	1.2130	0.9299
	2100,	0.8510	0.7548	0.8901	0.9869		2100,	1.0224	1.2478	1.2849	0.9260
33	300,	0.9231	0.8563	0.8898	0.9863	56	300,	3.6423	2.5940	1.1973	0.8506
	900,	0.9196	0.8563	0.8898	0.9864		900,	3.7256	2.6661	1.238	

Table A-8.2 SELF-SHIELDING FACTOR TABLES CODE NO = 928

GROUP	T(K)	FF1					FC					FE				
		0,	1,	10,	100,	1000,	0,	1,	10,	100,	1000,	0,	1,	10,	100,	1000,
23	300,	1.0000	1.0000	1.0000	1.0000	1.0000	0.9005	0.9099	0.9455	0.9879	0.9986	0.8827	0.8964	0.9309	0.9823	0.9978
	900,	1.0000	1.0000	1.0000	1.0000	1.0000	0.9424	0.9490	0.9699	0.9935	0.9991	0.9198	0.9305	0.9540	0.9888	0.9986
	2100,	1.0000	1.0000	1.0000	1.0000	1.0000	0.9638	0.9688	0.9822	0.9963	0.9996	0.9407	0.9499	0.9673	0.9927	0.9995
24	300,	0.9484	1.0000	1.0000	1.0000	1.0000	0.8889	0.8984	0.9371	0.9855	0.9983	0.8730	0.8875	0.9227	0.9789	0.9974
	900,	0.9483	1.0000	1.0000	1.0000	1.0000	0.9337	0.9404	0.9645	0.9925	0.9992	0.9104	0.9211	0.9468	0.9866	0.9984
	2100,	0.9482	1.0000	1.0000	1.0000	1.0000	0.9564	0.9616	0.9782	0.9958	0.9999	0.9314	0.9403	0.9606	0.9908	0.9990
25	300,	1.0000	1.0000	1.0000	1.0000	1.0000	0.8599	0.8715	0.9193	0.9808	0.9977	0.8698	0.8820	0.9174	0.9762	0.9969
	900,	1.0000	1.0000	1.0000	1.0000	1.0000	0.9142	0.9215	0.9518	0.9890	0.9986	0.9075	0.9162	0.9420	0.9845	0.9980
	2100,	1.0000	1.0000	1.0000	1.0000	1.0000	0.9445	0.9493	0.9699	0.9935	0.9993	0.9297	0.9375	0.9571	0.9886	0.9980
26	300,	1.0000	1.0000	1.0000	1.0000	1.0000	0.8350	0.8455	0.8980	0.9744	0.9969	0.8524	0.8622	0.9009	0.9700	0.9961
	900,	1.0000	1.0000	1.0000	1.0000	1.0000	0.8936	0.9006	0.9368	0.9854	0.9982	0.8927	0.9004	0.9302	0.9809	0.9975
	2100,	1.0000	1.0000	1.0000	1.0000	1.0000	0.9275	0.9323	0.9581	0.9910	0.9991	0.9203	0.9267	0.9493	0.9868	0.9981
27	300,	1.0000	1.0000	1.0000	1.0000	1.0000	0.8161	0.8261	0.8871	0.9707	0.9963	0.8330	0.8449	0.8847	0.9615	0.9947
	900,	1.0000	1.0000	1.0000	1.0000	1.0000	0.8796	0.8853	0.9280	0.9827	0.9981	0.8747	0.8839	0.9150	0.9745	0.9969
	2100,	1.0000	1.0000	1.0000	1.0000	1.0000	0.9176	0.9209	0.9517	0.9891	0.9991	0.9038	0.9121	0.9373	0.9836	0.9992
28	300,	1.0000	1.0000	1.0000	1.0000	1.0000	0.7607	0.7743	0.8456	0.9568	0.9944	0.8191	0.8298	0.8730	0.9557	0.9937
	900,	1.0000	1.0000	1.0000	1.0000	1.0000	0.8415	0.8498	0.9001	0.9743	0.9969	0.8620	0.8691	0.9051	0.9707	0.9961
	2100,	1.0000	1.0000	1.0000	1.0000	1.0000	0.8933	0.8985	0.9340	0.9842	0.9983	0.8592	0.8979	0.9282	0.9797	0.9973
29	300,	0,	0.0360	0.0360	0.0360	0.0360	0.7302	0.7605	0.8284	0.9468	0.9927	0.7582	0.8017	0.8435	0.9393	0.9907
	900,	0,	0.0360	0.0360	0.0360	0.0360	0.8255	0.8357	0.8856	0.9677	0.9957	0.8283	0.8409	0.8776	0.9581	0.9942
	2100,	0,	0.0360	0.0360	0.0360	0.0360	0.8725	0.8802	0.9181	0.9784	0.9971	0.8588	0.8691	0.9014	0.9680	0.9942
30	300,	0,	0.0100	0.0100	0.0100	0.0100	0.6252	0.7011	0.7873	0.9307	0.9697	0.6520	0.7659	0.8123	0.9146	0.9845
	900,	0,	0.0100	0.0100	0.0100	0.0100	0.7682	0.7911	0.8582	0.9587	0.9940	0.7684	0.8031	0.8445	0.9365	0.9898
	2100,	0,	0.0100	0.0100	0.0100	0.0100	0.8496	0.8541	0.9047	0.9747	0.9965	0.8196	0.8326	0.8701	0.9522	0.9934
31	300,	0,	0.0100	0.0100	0.0100	0.0100	0.6050	0.6224	0.7051	0.8839	0.9811	0.7019	0.7161	0.7642	0.8873	0.9790
	900,	0,	0.0100	0.0100	0.0100	0.0100	0.6367	0.7104	0.7815	0.9250	0.9894	0.7477	0.7826	0.8026	0.9172	0.9865
	2100,	0,	0.0100	0.0100	0.0100	0.0100	0.7676	0.7794	0.8396	0.9515	0.9945	0.7855	0.7944	0.8383	0.9412	0.9930
32	300,	0,	1.0000	1.0000	1.0000	1.0000	0.5231	0.5047	0.5922	0.8211	0.9597	0.6673	0.6830	0.7323	0.8691	0.9755
	900,	0,	1.0000	1.0000	1.0000	1.0000	0.6163	0.6043	0.6882	0.9825	0.9945	0.7151	0.7262	0.7747	0.9051	0.9846
	2100,	0,	1.0000	1.0000	1.0000	1.0000	0.6923	0.6893	0.7619	0.9203	0.9952	0.7532	0.7628	0.8104	0.9293	0.9889
33	300,	0,	1.0000	1.0000	1.0000	1.0000	0.5346	0.4660	0.5603	0.8070	0.9662	0.6922	0.7025	0.7464	0.8679	0.9729
	900,	0,	1.0000	1.0000	1.0000	1.0000	0.6310	0.5781	0.6669	0.8735	0.9805	0.7354	0.7427	0.7837	0.9022	0.9829
	2100,	0,	1.0000	1.0000	1.0000	1.0000	0.7186	0.6791	0.7553	0.9173	0.9881	0.7752	0.7809	0.8223	0.9276	0.9882
34	300,	0,	1.0000	0.9980	0.9990	0.9990	0.3960	0.3440	0.4281	0.6943	0.9338	0.5025	0.5268	0.5857	0.7465	0.9350
	900,	0,	1.0000	0.9980	0.9980	0.9990	0.4653	0.4223	0.5128	0.7710	0.9331	0.5467	0.5645	0.6230	0.7931	0.9524
	2100,	0,	1.0000	0.9980	0.9980	0.9990	0.5405	0.5050	0.5951	0.8299	0.9639	0.5903	0.6063	0.6675	0.8376	0.9666
35	300,	0,	0.9880	0.9950	0.9970	1.0000	0.3603	0.3328	0.4242	0.6681	0.9168	0.4493	0.4780	0.5395	0.6887	0.9008
	900,	0,	0.9860	0.9930	0.9970	1.0000	0.4255	0.4060	0.4925	0.7415	0.9417	0.4734	0.4998	0.5644	0.7292	0.9274
	2100,	0,	0.9840	0.9910	0.9970	1.0000	0.4911	0.4752	0.5621	0.7949	0.9559	0.5120	0.5295	0.5916	0.7640	0.9446
36	300,	0,	0.9670	1.0000	1.0000	1.0000	0.3422	0.3167	0.3922	0.6449	0.9130	0.6042	0.6054	0.6444	0.7666	0.9344
	900,	0,	0.9930	1.0000	1.0000	1.0000	0.4032	0.3815	0.4709	0.7335	0.9529	0.6302	0.6316	0.6753	0.8123	0.9615
	2100,	0,	0.9900	1.0000	1.0000	1.0000	0.4644	0.4458	0.5445	0.8032	0.9787	0.6530	0.6550	0.7034	0.8468	0.9757
37	300,	0,	0.4800	0.5360	0.9330	0.9930	0.3199	0.3122	0.3865	0.6374	0.9058	0.5781	0.5833	0.6260	0.7442	0.9205
	900,	0,	0.6680	0.7850	0.9700	1.0000	0.3956	0.3914	0.4722	0.7219	0.9395	0.6079	0.6121	0.6542	0.7854	0.9459
	2100,	0,	0.7970	0.9000	1.0000	1.0000	0.4784	0.4749	0.5539	0.7876	0.9598	0.6443	0.6473	0.6890	0.8273	0.9666
38	300,	0,	0.9670	1.0000	1.0000	1.0000	0.1832	0.1872	0.2456	0.4853	0.8416	0.3986	0.3978	0.4430	0.5873	0.8499
	900,	0,	0.9960	1.0000	1.0000	1.0000	0.2269	0.2317	0.3061	0.5810	0.8941	0.4226	0.4233	0.4720	0.6409	0.8925
	2100,	0,	1.0000	1.0000	1.0000	1.0000	0.2756	0.2817	0.3696	0.6444	0.9279	0.4448	0.4479	0.5012	0.6883	0.9164
39	300,	0,	0.7250	0.8510	0.9860	1.0000	0.2191	0.2272	0.2874	0.5343	0.8626	0.6353	0.6424	0.6686	0.7571	0.9136
	900,	0,	0.8530	0.9420	1.0000	1.0000	0.3367	0.3448	0.4237	0.7027	0.9384	0.6803	0.6813	0.7119	0.8278	0.9616
	2100,	0,	0.9500	1.0000	1.0000	1.0000	0.3367	0.3448	0.4237	0.7027	0.9384	0.6803	0.6813	0.7119	0.8278	0.9616
40	300,	0,	1.0000	0.9910	0.9910	0.9990	0.1101	0.1163	0.1498	0.3244	0.7203	0.5243	0.5246	0.5470	0.6264	0.8282
	900,	0,	1.0000	0.9990	0.9990	0.9990	0.1281	0.1357	0.1824	0.4085	0.8036	0.5345	0.5357	0.5610	0.6621	0.8743
	2100,	0,	1.0000	0.9990	0.9990	0.9990	0.1552	0.1640	0.2240	0.5942	0.8621	0.5631	0.5637	0.5930	0.7157	0.9230
41	300,	0,	1.0000	1.0000	1.0000	1.0000	0.0966	0.1005	0.1301	0.2955	0.7228	0.6241	0.6231	0.6368	0.7113	0.8868
	900,	0,	1.0000	1.0000	1.0000	1.0000	0.1138	0.1189	0.1638	0.3911						

Table A-5.2 (continued)

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GROUP	T(K)	FF1				FC				FT					
		0.	1.	10.	100.	1000.	0.	1.	10.	100.	1000.	0.	1.	10.	100.
58	300.	0.0	1.0000	1.0000	1.0000	0.8130	0.8094	0.8370	0.9933	0.9956	1.0166	1.0266	1.0227	1.0004	1.0003
	900.	0.0	1.0000	1.0000	1.0000	0.8164	0.8127	0.8376	1.0034	1.0021	1.0169	1.0264	1.0230	0.9995	1.0000
	2100.	0.0	1.0000	1.0000	1.0000	0.8235	0.8105	0.8747	1.0097	1.0013	1.0179	0.9800	0.9900	0.9985	0.9998
59	300.	0.0	1.0000	1.0000	1.0000	0.9971	0.9918	0.9835	1.0016	1.0013	1.0062	1.0004	1.0015	0.9999	0.9999
	900.	0.0	1.0000	1.0000	1.0000	0.9988	0.9981	0.9927	0.9843	1.0040	1.0023	1.0002	1.0007	1.0015	0.9997
	2100.	0.0	1.0000	1.0000	1.0000	1.0017	0.9951	0.9977	1.0022	1.0007	1.0062	1.0004	0.9993	0.9998	0.9999
60	300.	0.0	1.0000	1.0000	1.0000	1.0000	1.0023	0.9985	1.0008	1.0006	0.9998	0.9998	1.0001	0.9999	0.9999
	900.	0.0	1.0000	1.0000	1.0000	1.0000	1.0038	1.0028	0.9989	1.0017	1.0011	0.9998	0.9997	1.0001	0.9999
	2100.	0.0	1.0000	1.0000	1.0000	1.0000	1.0075	1.0024	1.0027	1.0010	1.0005	0.9998	0.9996	0.9997	0.9999
61	300.	0.0	1.0000	1.0000	1.0000	1.0000	1.0018	1.0017	1.0000	1.0000	1.0003	0.9998	0.9998	0.9999	0.9999
	900.	0.0	1.0000	1.0000	1.0000	1.0000	1.0020	1.0020	1.0006	1.0008	1.0005	0.9998	0.9997	0.9999	1.0000
	2100.	0.0	1.0000	1.0000	1.0000	1.0000	1.0064	1.0017	1.0013	1.0005	1.0002	0.9998	0.9998	0.9998	0.9999
62	300.	0.0	1.0000	1.0000	1.0000	1.0000	1.0003	1.0004	1.0002	1.0001	1.0001	0.9999	0.9998	0.9999	1.0000
	900.	0.0	1.0000	1.0000	1.0000	1.0000	1.0004	1.0006	1.0004	1.0003	1.0002	0.9999	0.9998	0.9999	1.0000
	2100.	0.0	1.0000	1.0000	1.0000	1.0000	1.0054	1.0008	1.0003	1.0001	1.0001	0.9999	0.9998	0.9999	1.0000
63	300.	0.0	1.0000	1.0000	1.0000	1.0000	1.0038	0.9994	0.9995	0.9997	0.9999	0.9999	0.9999	0.9999	1.0000
	900.	0.0	1.0000	1.0000	1.0000	1.0000	0.9995	0.9996	0.9998	1.0000	1.0004	0.9999	0.9999	0.9999	1.0000
	2100.	0.0	1.0000	1.0000	1.0000	1.0000	1.0049	0.9995	0.9996	0.9999	0.9999	0.9999	0.9999	0.9999	1.0000
64	300.	0.0	1.0000	1.0000	1.0000	1.0000	0.9836	0.9775	0.9850	0.9960	0.9988	0.9917	0.9794	0.9862	0.9964
	900.	0.0	1.0000	1.0000	1.0000	1.0000	0.9831	0.9777	0.9851	0.9960	0.9989	0.9917	0.9794	0.9862	0.9963
	2100.	0.0	1.0000	1.0000	1.0000	1.0000	0.9891	0.9775	0.9845	0.9960	0.9989	0.9915	0.9787	0.9855	0.9963
65	300.	0.0	1.0000	1.0000	1.0000	1.0000	0.9978	0.9978	0.9981	0.9994	0.9997	0.9999	0.9999	0.9999	1.0000
	900.	0.0	1.0000	1.0000	1.0000	1.0000	0.9978	0.9978	0.9981	0.9994	0.9997	0.9999	0.9999	0.9999	1.0000
	2100.	0.0	1.0000	1.0000	1.0000	1.0000	0.9978	0.9976	0.9980	0.9994	0.9997	0.9999	0.9999	0.9999	1.0000
66	300.	0.0	0.0	0.0	0.0	0.0	0.9977	0.9977	0.9979	0.9993	0.9996	0.9999	0.9999	0.9999	1.0000
	900.	0.0	0.0	0.0	0.0	0.0	0.9977	0.9977	0.9980	0.9993	0.9996	0.9999	0.9999	0.9999	1.0000
	2100.	0.0	0.0	0.0	0.0	0.0	0.9977	0.9977	0.9978	0.9993	0.9997	0.9999	0.9999	0.9999	1.0000
67	300.	0.0	0.0	0.0	0.0	0.0	0.9978	0.9978	0.9978	0.9993	0.9996	1.0000	1.0000	1.0000	1.0000
	900.	0.0	0.0	0.0	0.0	0.0	0.9978	0.9978	0.9978	0.9992	0.9996	1.0000	1.0000	1.0000	1.0000
	2100.	0.0	0.0	0.0	0.0	0.0	0.9976	0.9976	0.9977	0.9991	0.9996	1.0000	1.0000	1.0000	1.0000
68	300.	0.0	0.0	0.0	0.0	0.0	0.9972	0.9972	0.9973	0.9991	0.9996	1.0000	1.0000	1.0000	1.0000
	900.	0.0	0.0	0.0	0.0	0.0	0.9972	0.9972	0.9973	0.9991	0.9996	1.0000	1.0000	1.0000	1.0000
	2100.	0.0	0.0	0.0	0.0	0.0	0.9972	0.9972	0.9972	0.9991	0.9996	1.0000	1.0000	1.0000	1.0000
69	300.	0.0	0.0	0.0	0.0	0.0	0.9973	0.9970	0.9973	0.9991	0.9996	1.0000	1.0000	1.0000	1.0000
	900.	0.0	0.0	0.0	0.0	0.0	0.9973	0.9970	0.9973	0.9991	0.9996	1.0000	1.0000	1.0000	1.0000
	2100.	0.0	0.0	0.0	0.0	0.0	0.9973	0.9970	0.9972	0.9991	0.9996	1.0000	1.0000	1.0000	1.0000
70	300.	0.0	0.0	0.0	0.0	0.0	0.9969	0.9971	0.9968	0.9989	0.9999	1.0000	1.0000	1.0000	1.0000
	900.	0.0	0.0	0.0	0.0	0.0	0.9969	0.9971	0.9971	0.9988	0.9995	1.0000	1.0000	1.0000	1.0000
	2100.	0.0	0.0	0.0	0.0	0.0	0.9969	0.9971	0.9968	0.9989	0.9995	1.0000	1.0000	1.0000	1.0000

GROUP	T(K)	FT				GROUP	T(K)	FT				GROUP	T(K)	FT						
		0.	1.	10.	100.			0.	1.	10.	100.			0.	1.	10.	100.			
23	300.	0.7934	0.8207	0.8791	0.9664	0.9958	40	300.	0.4587	0.4325	0.4552	0.5356	0.5009	57	300.	0.0378	0.0336	0.0374	0.0588	0.1476
	900.	0.8591	0.8777	0.9175	0.9786	0.9973	900.	0.4555	0.4499	0.4699	0.5801	0.6833	900.	0.0378	0.0336	0.0372	0.0581	0.1793		
	2100.	0.8942	0.9099	0.9399	0.9855	0.9986	2100.	0.4653	0.4608	0.4832	0.6269	0.8999	2100.	0.0373	0.0331	0.0365	0.0586	0.1339		
24	300.	0.7762	0.8120	0.8891	0.9605	0.9948	41	300.	0.7426	0.7445	0.7558	0.8244	0.9528	58	300.	0.9624	0.9524	0.9604	0.9969	0.9987
	900.	0.8460	0.8695	0.9071	0.9746	0.9958	900.	0.7565	0.7591	0.7752	0.8634	0.9705	900.	0.9615	0.9524	0.9607	0.9993	1.0004		
	2100.	0.8918	0.8964	0.9295	0.9822	0.9980	2100.	0.7750	0.7760	0.7965	0.8945	0.9824	2100.	0.9607	0.9517	0.9682	0.9982	1.0000		
25	300.	0.7776	0.8051	0.8620	0.9559	0.9940	42	300.	0.4020	0.4001	0.4266	0.4552	0.6896	59	300.	1.0000	0.9998	0.9999	0.9999	1.0000
	900.	0.8444	0.8593	0.9002	0.9708	0.9962	900.	0.4126	0.4109	0.4336	0.5081	0.7571	900.	0.9999	0.9999	0.9997	1.0001	1.0001		
	2100.	0.8818	0.8938	0.9252	0.9790	0.9958	2100.	0.4402	0.4365	0.4592	0.5499	0.8237	2100.	0.9999	0.9999	0.9999	1.0000	1.0000		
26	300.	0.7615	0.7794	0.8382	0.9448	0.9922	43	300.	0.4540	0.4525	0.4552	0.5167	0.7382	60	300.	0.9999	0.9999	0.9999	0.9999	1.0000
	900.	0.8232	0.8535	0.8810	0.9641	0.9952	900.	0.4555	0.4640	0.4737	0.5453	0.8102	900.	0.9999	0.9999	0.9999	0.9999	1.0000		
	2100.	0.8661	0.8757	0.9111	0.9751	0.9926	2100.	0.4866	0.4852	0.4943	0.5937	0.8720	2100.	0.9999	0.9999	0.9999	0.9999	1.0000		
27	300.	0.7339	0.7584	0.8190	0.9311	0.9896	44	300.	0.3741	0.3710	0.3933	0.4181	0.5306	61	300.	0.9999	0.9999	0.9999	0.9999	1.0000
	900.	0.8020	0.8455	0.8611	0.9229	0.9937	900.	0.3738	0.3711	0.3934	0.4145	0.5306	900.	0.9999	0.9999	0.9999	0.9999	1.0000		

Table A-5.2 (continued)

FR										FR										FR									
GROUP	T(K)	0,	1,	10,	100,	1000,	GROUP	T(K)	0,	1,	10,	100,	1000,	GROUP	T(K)	0,	1,	10,	100,	1000,									
23	300.	0.6109	0.7421	0.9088	0.9836	0.9980	40	300.	0.9319	0.9100	0.9130	0.9870	0.9957	57	300.	0.9278	0.7284	0.2426	0.3445	0.7186									
	900.	0.6350	0.7657	0.9289	0.9889	0.9983		900.	0.9568	0.9320	0.9037	0.9863	0.9972		900.	0.9364	0.7313	0.2364	0.2674	0.6532									
	2100.	0.6509	0.7782	0.9379	0.9912	0.9984		2100.	0.9897	0.9534	0.8880	0.9796	0.9922		2100.	0.9623	0.7202	0.2241	0.1149	0.5743									
24	300.	0.4914	0.5889	0.7586	0.9345	0.9915	41	300.	0.9511	0.9331	0.9021	0.9746	0.9935	58	300.	1.4951	1.5262	1.4658	0.9851	0.9921									
	900.	0.5105	0.6177	0.7830	0.9479	0.9934		900.	1.0106	0.9722	0.8882	0.9710	0.9935		900.	1.4987	1.5298	1.4787	0.9705	0.9927									
	2100.	0.5168	0.6196	0.8022	0.9651	1.0052		2100.	1.0629	1.0390	0.9039	1.0033	1.0297		2100.	1.5076	0.9371	0.8435	0.9743	0.9959									
25	300.	0.5986	0.6611	0.8485	0.9671	0.9957	42	300.	0.7750	0.8165	0.8862	0.9764	0.9937	59	300.	0.9962	1.0423	1.1303	0.9851	0.9874									
	900.	0.6197	0.6773	0.8661	0.9736	0.9944		900.	0.7420	0.8127	0.8833	0.9748	0.9941		900.	0.9965	1.0426	1.1321	0.9738	0.9877									
	2100.	0.6281	0.6889	0.8801	0.9813	0.9980		2100.	0.7064	0.8164	0.8961	0.9923	1.0143		2100.	0.9979	1.0251	0.9351	0.9800	0.9926									
26	300.	0.6426	0.6448	0.8039	0.9519	0.9936	43	300.	0.8444	0.8391	0.8606	0.9660	0.9902	60	300.	0.9166	0.9380	1.0225	0.9812	0.9853									
	900.	0.6707	0.6654	0.8215	0.9562	0.9882		900.	0.9204	0.8988	0.8623	0.9620	0.9900		900.	0.9167	0.9380	1.0231	0.9724	0.9855									
	2100.	0.6872	0.6817	0.8345	0.9612	0.9876		2100.	1.0134	0.9768	0.8699	0.9632	0.9960		2100.	0.9173	0.9377	0.9380	0.9774	0.9893									
27	300.	0.6434	0.6205	0.7798	0.9387	0.9914	44	300.	1.0997	0.9738	0.9266	0.9833	0.9905	61	300.	0.8923	0.9018	0.9721	0.9767	0.9835									
	900.	0.6727	0.6407	0.8023	0.9513	0.9934		900.	0.9690	0.9196	0.9359	0.9877	0.9973		900.	0.8923	0.9018	0.9722	0.9599	0.9837									
	2100.	0.6790	0.6578	0.8262	0.9716	1.0085		2100.	0.8491	0.8571	0.9190	1.0105	1.0387		2100.	0.8923	0.9020	0.9272	0.9738	0.9866									
28	300.	0.6224	0.5536	0.7726	0.9520	0.9940	45	300.	1.1381	1.0954	0.9447	0.9837	0.9936	62	300.	0.8815	0.8857	0.9423	0.9726	0.9820									
	900.	0.6467	0.5734	0.8054	0.9674	0.9951		900.	1.2195	1.1407	0.9545	0.9839	0.9936		900.	0.8815	0.8857	0.9426	0.9672	0.9821									
	2100.	0.6688	0.5905	0.8842	0.9700	0.9903		2100.	1.3168	1.1848	0.9637	0.9767	0.9866		2100.	0.8815	0.8857	0.9154	0.9705	0.9844									
29	300.	0.8008	0.7871	0.9133	0.9921	0.9988	46	300.	0.6209	0.7827	1.0576	1.2445	1.301	63	300.	0.8808	0.8819	0.9257	0.9704	0.9818									
	900.	0.8685	0.8221	0.9434	1.0006	1.0003		900.	0.6190	0.9400	1.2844	1.6551	1.5035		900.	0.8808	0.8819	0.9258	0.9663	0.9817									
	2100.	0.9237	0.8844	0.9455	0.9743	0.9890		2100.	0.8395	1.2712	2.0100	1.8276	4.3267		2100.	0.8807	0.8816	0.9087	0.9588	0.9834									
30	300.	0.6837	0.7248	0.8967	0.9955	0.9996	47	300.	0.6551	0.8364	0.8515	0.9567	0.9887	64	300.	0.6442	0.5291	0.6905	0.9199	0.9752									
	900.	0.7889	0.7360	0.9115	1.0013	1.0014		900.	0.5164	0.7413	0.6335	0.9429	0.9873		900.	0.6442	0.5281	0.6906	0.9167	0.9753									
	2100.	0.8366	0.7535	0.9203	1.0030	1.0003		2100.	0.4402	0.8398	0.7982	0.8906	0.9204		2100.	0.6398	0.5251	0.6794	0.9185	0.9767									
31	300.	0.4077	0.3894	0.4454	0.7042	0.9396	48	300.	0.9463	0.9181	0.7210	0.8968	0.9636	65	300.	0.8556	0.8574	0.8797	0.9600	0.9786									
	900.	0.4278	0.4183	0.4870	0.7643	0.9592		900.	1.0545	0.9760	0.7169	0.8663	0.9533		900.	0.8556	0.8574	0.8797	0.9572	0.9787									
	2100.	0.4511	0.4420	0.5232	0.8021	0.9579		2100.	1.1370	0.9910	0.6910	0.7887	0.9098		2100.	0.8571	0.8571	0.8690	0.9298	0.9798									
32	300.	0.5226	0.5818	0.5781	0.7674	0.9502	49	300.	1.1651	1.1582	0.9696	0.9858	0.9952	66	300.	0.8639	0.8651	0.8773	0.9587	0.9781									
	900.	0.5622	0.6162	0.6079	0.8141	0.9665		900.	1.1653	1.1647	0.9871	0.9790	0.9947		900.	0.8639	0.8650	0.8691	0.9578	0.9790									
	2100.	0.5892	0.6472	0.6371	0.8561	0.9834		2100.	1.1630	1.1809	0.9957	0.9370	0.9659		2100.	0.8639	0.8650	0.8691	0.9578	0.9790									
33	300.	0.8692	0.8972	0.8966	0.9809	0.9963	50	300.	0.0523	0.0709	0.0816	0.3971	0.8713	67	300.	0.8668	0.8664	0.8753	0.9579	0.9784									
	900.	0.9159	0.9302	0.9028	0.9819	0.9967		900.	0.0325	0.0835	0.1003	0.5759	1.7876		900.	0.8666	0.8664	0.8753	0.9560	0.9784									
	2100.	0.9481	0.9692	0.9223	0.9569	1.1019		2100.	0.0118	0.1137	0.1328	0.9257	3.6145		2100.	0.8668	0.8664	0.8664	0.8693	0.9570									
34	300.	0.3169	0.3321	0.3593	0.6072	0.9089	51	300.	1.5159	1.5365	1.0563	0.9661	0.9880	68	300.	0.8592	0.8586	0.8638	0.9531	0.9769									
	900.	0.3496	0.3632	0.3812	0.6404	0.8727		900.	1.5174	1.5291	1.1153	0.9527	0.9848		900.	0.8592	0.8586	0.8638	0.9520	0.9770									
	2100.	0.3855	0.3932	0.4079	0.6628	0.8288		2100.	1.5206	1.4846	1.1360	0.8892	0.9502		2100.	0.8592	0.8586	0.8590	0.9529	0.9776									
35	300.	0.2503	0.2667	0.3382	0.5342	0.9011	52	300.	0.1375	0.1289	0.4368	0.8252	0.9724	69	300.	0.8622	0.8563	0.8633	0.9531	0.9774									
	900.	0.2597	0.2795	0.3489	0.6143	0.8589		900.	0.1309	0.1244	0.4383	0.8303	0.9934		900.	0.8622	0.8563	0.8633	0.9518	0.9774									
	2100.	0.2841	0.2943	0.3648	0.6259	0.8099		2100.	0.1069	0.1094	0.4183	0.8299	1.0609		2100.	0.8624	0.8563	0.8597	0.9525	0.9779									
36	300.	0.8716	0.8358	0.8818	0.9763	0.9950	53	300.	2.2005	2.1264	1.4613	1.0663	1.0024	70	300.	0.8547	0.8596	0.8522	0.9486	0.9760									
	900.	0.9088	0.8656	0.8742	0.9753	0.9951		900.	2.2161	2.1498	1.5252	1.0073	1.0067		900.	0.8624	0.8563	0.8633	0.9474	0.9760									
	2100.	0.9308	0.9033	0.8795	0.9921	1.0141		2100.	2.2501	2.1241	1.6037	0.9458	0.9824		2100.	0.8624	0.8563	0.8597	0.9525	0.9779									
37	300.	0.5854	0.5903	0.7840	0.9610	0.9932	54	300.	1.0612	1.1258	1.1546	0.9868	0.9917	71	300.	0.8592	0.8586	0.8638	0.9531	0.9769									
	900.	0.6118	0.6095	0.7770	0.9606	0.9944		900.	1.0615	1.1263	1.1632	0.9795	0.9916		900.	0.8592	0.8586	0.8590	0.9529	0.9776									
	2100.	0.6529	0.6531	0.7652	0.9546	0.9901		2100.	1.0621	1.0948	1.1477	0.9071	0.9866		2100.	0.8592	0.8586</td												

Table A-5.3 SELF-SHIELDING FACTOR TABLES CODE NO. = 949

PU=239 . . . PAGE 1

GROUP	T(K)	FF				FS				FE				FT			
		0	10	100	1000	0	10	100	1000	0	10	100	1000	0	10	100	1000
26	300	0.9880	0.9732	0.9938	0.9993	0.9244	0.9563	0.9904	0.9989	0.9709	0.9809	0.9955	0.9995	0.9409	0.9600	0.9902	0.9948
	900	1.0049	0.9823	0.9959	0.9995	0.9478	0.9714	0.9941	0.9993	0.9814	0.9876	0.9972	0.9997	0.9616	0.9733	0.9938	0.9993
	2100	1.0141	0.9875	0.9971	0.9997	0.9599	0.9789	0.9958	0.9995	0.9879	0.9935	0.9981	0.9998	0.9746	0.9811	0.9958	0.9995
27	300	0.9446	0.9638	0.9923	0.9991	0.9123	0.9434	0.9873	0.9985	0.9657	0.9792	0.9949	0.9994	0.9272	0.9534	0.9884	0.9986
	900	0.9635	0.9752	0.9950	0.9994	0.9440	0.9632	0.9921	0.9991	0.9784	0.9875	0.9970	0.9997	0.9523	0.9702	0.9929	0.9992
	2100	0.9740	0.9813	0.9963	0.9996	0.9615	0.9740	0.9946	0.9994	0.9858	0.9923	0.9981	0.9998	0.9672	0.9800	0.9954	0.9994
28	300	0.9267	0.9560	0.9900	0.9988	0.8911	0.9282	0.9833	0.9980	0.9561	0.9737	0.9932	0.9992	0.9072	0.9398	0.9842	0.9981
	900	0.9525	0.9727	0.9940	0.9993	0.9293	0.9531	0.9897	0.9982	0.9711	0.9844	0.9960	0.9995	0.9364	0.9611	0.9904	0.9989
	2100	0.9674	0.9821	0.9962	0.9996	0.9512	0.9667	0.9929	0.9992	0.9804	0.9906	0.9975	0.9997	0.9552	0.9740	0.9937	0.9993
29	300	0.8961	0.9275	0.9827	0.9980	0.8688	0.9089	0.9777	0.9973	0.9439	0.9635	0.9897	0.9987	0.8818	0.9188	0.9766	0.9970
	900	0.9314	0.9448	0.9876	0.9986	0.9138	0.9401	0.9865	0.9988	0.9625	0.9768	0.9939	0.9993	0.9164	0.9437	0.9853	0.9982
	2100	0.9513	0.9543	0.9901	0.9989	0.9403	0.9558	0.9906	0.9989	0.9735	0.9844	0.9960	0.9995	0.9381	0.9585	0.9898	0.9988
30	300	0.8662	0.9136	0.9777	0.9973	0.8152	0.8700	0.9658	0.9958	0.8155	0.9420	0.9824	0.9977	0.8323	0.8806	0.9622	0.9950
	900	0.9073	0.9384	0.9851	0.9982	0.8787	0.9138	0.9768	0.9975	0.9401	0.9607	0.9888	0.9986	0.8769	0.9152	0.9754	0.9969
	2100	0.9323	0.9543	0.9895	0.9988	0.9145	0.9377	0.9853	0.9985	0.9526	0.9722	0.9923	0.9991	0.9065	0.9374	0.9827	0.9979
31	300	0.8566	0.8734	0.9685	0.9962	0.8029	0.8703	0.9645	0.9956	0.9218	0.9468	0.9840	0.9980	0.8277	0.8760	0.9614	0.9949
	900	0.8842	0.9080	0.9850	1.0055	0.8708	0.9186	0.9799	0.9985	0.9446	0.9642	0.9900	0.9986	0.8733	0.9122	0.9762	0.9980
	2100	0.9135	0.9283	0.9932	1.0095	0.9088	0.9494	0.9873	0.9999	0.9594	0.9759	0.9934	0.9992	0.9043	0.9351	0.9841	0.9987
32	300	0.8177	0.8682	0.9657	0.9985	0.7415	0.8132	0.9459	0.9931	0.9078	0.9330	0.9789	0.9972	0.8008	0.8493	0.9497	0.9932
	900	0.8709	0.9083	0.9833	1.0051	0.8262	0.8767	0.9668	0.9960	0.9347	0.9547	0.9870	0.9983	0.8508	0.8920	0.9687	0.9969
	2100	0.9040	0.9322	0.9928	1.0098	0.8776	0.9131	0.9773	0.9974	0.9535	0.9691	0.9917	0.9991	0.8873	0.9212	0.9794	0.9990
33	300	0.7858	0.8506	0.9567	0.9945	0.7157	0.8028	0.9419	0.9926	0.9053	0.9320	0.9782	0.9971	0.7757	0.8315	0.9419	0.9920
	900	0.8455	0.8961	0.9788	1.0060	0.8091	0.8744	0.9675	0.9965	0.9321	0.9541	0.9873	0.9988	0.8293	0.8786	0.9645	0.9973
	2100	0.8874	0.9263	0.9910	1.0114	0.8664	0.9155	0.9802	0.9989	0.9506	0.9686	0.9922	0.9995	0.8704	0.9117	0.9772	0.9997
34	300	0.6673	0.7708	0.9243	0.9899	0.6392	0.7410	0.9163	0.9885	0.8726	0.9038	0.9654	0.9950	0.6959	0.7634	0.9074	0.9861
	900	0.7459	0.8208	0.9478	0.9984	0.7357	0.8210	0.9475	0.9931	0.8981	0.9271	0.9769	0.9972	0.7487	0.8114	0.9352	0.9922
	2100	0.7868	0.8546	0.9618	1.0025	0.7947	0.8673	0.9628	0.9949	0.9172	0.9435	0.9837	0.9985	0.7867	0.8460	0.9517	0.9953
35	300	0.7123	0.7952	0.9375	0.9918	0.5868	0.6919	0.8925	0.9853	0.8887	0.9139	0.9689	0.9956	0.7046	0.7657	0.9095	0.9867
	900	0.7870	0.8543	0.9629	1.0002	0.7046	0.7869	0.9293	0.9908	0.9161	0.9371	0.9791	0.9976	0.7661	0.8230	0.9397	0.9928
	2100	0.8417	0.8941	0.9776	1.0044	0.7815	0.8450	0.9503	0.9951	0.9358	0.9528	0.9856	0.9993	0.8162	0.8648	0.9580	0.9966
36	300	0.6533	0.7481	0.9171	0.9889	0.4908	0.5928	0.8385	0.9754	0.8010	0.8348	0.9270	0.9878	0.5902	0.6563	0.8408	0.9721
	900	0.7408	0.8214	0.9526	1.0012	0.6189	0.7082	0.9015	0.9896	0.8443	0.8754	0.9521	0.9934	0.6571	0.7270	0.8942	0.9861
	2100	0.8083	0.8721	0.9720	1.0068	0.7100	0.7813	0.9327	0.9951	0.8769	0.9033	0.9657	0.9956	0.7184	0.7832	0.9249	0.9924
37	300	0.6725	0.7454	0.8963	0.9836	0.4429	0.5459	0.8034	0.9671	0.7950	0.8267	0.9144	0.9845	0.5999	0.6553	0.8408	0.9721
	900	0.7454	0.8004	0.9286	0.9959	0.5542	0.6574	0.8726	0.9791	0.8246	0.8588	0.9393	0.9883	0.6448	0.7038	0.8655	0.9766
	2100	0.7829	0.8412	0.9472	1.0015	0.6409	0.7404	0.9118	0.9844	0.8519	0.8870	0.9560	0.9912	0.6463	0.7500	0.8981	0.9840
38	300	0.4417	0.6541	0.8710	0.9793	0.5166	0.5932	0.8280	0.9723	0.8305	0.8620	0.9336	0.9881	0.5695	0.6324	0.8141	0.9646
	900	0.4994	0.7342	0.9184	0.9924	0.5673	0.7388	0.9027	0.9846	0.8642	0.9064	0.9604	0.9938	0.6523	0.7190	0.8791	0.9809
	2100	0.5346	0.7975	0.9477	0.9982	0.7808	0.8461	0.9458	0.9896	0.8873	0.9405	0.9755	0.9954	0.7213	0.7994	0.9220	0.9882
39	300	0.4530	0.4976	0.7923	0.9650	0.3570	0.4267	0.7247	0.9491	0.7878	0.8071	0.8984	0.9802	0.4937	0.5346	0.7336	0.9422
	900	0.5245	0.5439	0.8385	0.9833	0.4595	0.5210	0.8093	0.9731	0.8164	0.8345	0.9278	0.9904	0.5395	0.5795	0.7952	0.9672
	2100	0.5923	0.5848	0.8687	0.9922	0.5811	0.5924	0.8594	0.9847	0.8242	0.8566	0.9468	0.9952	0.5897	0.6235	0.8394	0.9802
40	300	0.4604	0.5231	0.7903	0.9585	0.3777	0.5355	0.7870	0.9579	0.7719	0.8208	0.8955	0.9974	0.4462	0.5045	0.7155	0.9300
	900	0.5289	0.5899	0.8453	0.9837	0.4859	0.5659	0.8778	0.9763	0.7967	0.8531	0.9268	0.9982	0.4898	0.5601	0.7797	0.9566
	2100	0.5776	0.6395	0.8823	0.9961	0.5733	0.7453	0.9367	0.9860	0.8197	0.8793	0.9305	0.9863	0.5286	0.6072	0.8288	0.9714
41	300	0.5577	0.6450	0.8407	0.9718	0.4547	0.5477	0.8051	0.9655	0.7287	0.7936	0.9733	0.9950	0.6083	0.6670	0.8234	0.9632
	900	0.6355	0.7138	0.8882	0.9855	0.5640	0.6535	0.8779	0.9918	0.8429	0.8906	0.9625	0.9979	0.6580	0.7183	0.8703	0.9785
	2100	0.6993	0.7668	0.9190	0.9926	0.6531	0.7341	0.8929	0.9829	0.8829	0.9329	0.9603	0.9995	0.7075	0.7646	0.9036	0.9867
42	300	0.5031	0.5690	0.7530	0.9478	0.3769	0.4634	0.7289	0.9485	0.7920	0.8164	0.9011	0.9852	0.4675	0.5207	0.7143	0.9415
	900	0.6044	0.6677	0.8339	0.9787	0.4841	0.5739	0.8107	0.9689	0.8354	0.8636	0.9236	0.9965	0.5310	0.5924	0.7916	0.9686
	2100	0.7021	0.7554	0.8897	1.0072	0.5208	0.6271	0.8436	0.9748	0.7679	0.7072	0.8119	0.9467	0.3360	0.3962	0.5949	0.8691
43	300	0.4718	0.5956	0.8604	0.9629	0.2591</											

Table A-5.3 (continued)

GROUP	T(K)	FF				FC				FE				FT			
		0.	10.	100.	1000.	0.	10.	100.	1000.	0.	10.	100.	1000.	0.	10.	100.	1000.
60	300,	0.9895	0.9901	0.9973	0.9987	0.9896	0.9901	0.9972	0.9986	0.9994	0.9994	0.9998	0.9999	0.9933	0.9940	0.9984	0.9993
	900,	0.9955	0.9961	1.0003	1.0047	1.0024	1.0029	1.0101	1.0115	0.9994	0.9798	0.9801	0.9801	0.9932	0.9870	0.9914	0.9923
	2100,	1.0521	1.0527	1.0559	1.0614	1.0090	1.0095	1.0166	1.0180	0.9994	0.9679	0.9683	0.9684	0.9933	1.0050	1.0094	1.0103
61	300,	0.9944	0.9943	0.9969	0.9990	0.9891	0.9889	0.9941	0.9980	0.9994	0.9994	0.9997	0.9999	0.9936	0.9958	0.9979	0.9993
	900,	1.0000	0.9999	1.0026	1.0046	0.9999	0.9997	1.0049	1.0088	0.9994	0.9802	0.9805	0.9807	0.9956	0.9899	0.9920	0.9934
	2100,	1.0532	1.0531	1.0558	1.0579	1.0055	1.0054	1.0104	1.0144	0.9994	0.9688	0.9690	0.9693	0.9935	1.0087	1.0108	1.0123
62	300,	0.9850	0.9849	0.9902	0.9974	0.9778	0.9776	0.9853	0.9961	0.9993	0.9993	0.9995	0.9999	0.9869	0.9877	0.9928	0.9982
	900,	0.9898	0.9897	0.9950	1.0022	0.9861	0.9859	0.9936	1.0044	0.9993	0.9806	0.9808	0.9812	0.9868	0.9832	0.9863	0.9937
	2100,	1.0346	1.0344	1.0395	1.0469	0.9908	0.9906	0.9979	1.0089	0.9993	0.9694	0.9697	0.9700	0.9870	1.0015	1.0065	1.0120
63	300,	0.9829	0.9827	0.9850	0.9964	0.9734	0.9731	0.9768	0.9944	0.9989	0.9989	0.9991	0.9998	0.9820	0.9829	0.9874	0.9971
	900,	0.9868	0.9866	0.9890	1.0003	0.9793	0.9790	0.9827	1.0003	0.9989	0.9807	0.9809	0.9816	0.9819	0.9797	0.9842	0.9939
	2100,	1.0235	1.0233	1.0255	1.0369	0.9831	0.9828	0.9861	1.0037	0.9989	0.9698	0.9700	0.9707	0.9822	0.9966	1.0011	1.0109
64	300,	0.9673	0.9678	0.9690	0.9922	0.9473	0.9480	0.9499	0.9814	0.9862	0.9868	0.9888	0.9971	0.9559	0.9579	0.9653	0.9915
	900,	0.9705	0.9710	0.9722	0.9955	0.9514	0.9521	0.9540	0.9916	0.9859	0.9695	0.9715	0.9799	0.9557	0.9560	0.9634	0.9896
	2100,	0.9992	0.9997	1.0008	1.0239	0.9549	0.9556	0.9574	0.9946	0.9858	0.9594	0.9613	0.9696	0.9564	0.9709	0.9782	1.0042
65	300,	0.9711	0.9704	0.9624	0.9891	0.9587	0.9577	0.9646	0.9845	0.9976	0.9975	0.9969	0.9991	0.9580	0.9591	0.9584	0.9886
	900,	0.9711	0.9704	0.9625	0.9891	0.9588	0.9578	0.9646	0.9845	0.9976	0.9975	0.9969	0.9991	0.9580	0.9592	0.9585	0.9887
	2100,	0.9711	0.9706	0.9635	0.9891	0.9589	0.9581	0.9679	0.9845	0.9976	0.9976	0.9970	0.9991	0.9580	0.9594	0.9594	0.9887
66	300,	0.9492	0.9490	0.9396	0.9741	0.9245	0.9243	0.9105	0.9614	0.9949	0.9949	0.9939	0.9974	0.9157	0.9178	0.9201	0.9691
	900,	0.9492	0.9490	0.9397	0.9741	0.9245	0.9243	0.9106	0.9614	0.9949	0.9949	0.9939	0.9974	0.9157	0.9178	0.9209	0.9691
	2100,	0.9492	0.9490	0.9404	0.9741	0.9245	0.9243	0.9117	0.9614	0.9949	0.9949	0.9940	0.9974	0.9157	0.9178	0.9209	0.9691
67	300,	0.9073	0.9068	0.8970	0.9234	0.8938	0.8932	0.8820	0.9121	0.9883	0.9882	0.9870	0.9904	0.8479	0.8494	0.8538	0.9087
	900,	0.9073	0.9068	0.8970	0.9235	0.8938	0.8932	0.8822	0.9122	0.9883	0.9882	0.9870	0.9904	0.8479	0.8494	0.8540	0.9088
	2100,	0.9073	0.9068	0.8970	0.9235	0.8938	0.8932	0.8822	0.9122	0.9883	0.9882	0.9870	0.9904	0.8479	0.8494	0.8540	0.9088
68	300,	0.7814	0.7808	0.7736	0.7107	0.7446	0.7440	0.7357	0.6623	0.9626	0.9625	0.9613	0.9505	0.6427	0.6435	0.6482	0.6478
	900,	0.7814	0.7808	0.7736	0.7109	0.7446	0.7440	0.7357	0.6625	0.9626	0.9625	0.9613	0.9505	0.6427	0.6435	0.6482	0.6479
	2100,	0.7814	0.7808	0.7736	0.7110	0.7446	0.7440	0.7357	0.6627	0.9626	0.9625	0.9613	0.9505	0.6427	0.6435	0.6482	0.6480
69	300,	0.9218	0.9250	0.9228	0.7611	0.9212	0.9245	0.9223	0.7593	1.0346	1.0412	1.0426	1.1254	0.8537	0.8589	0.8583	0.7245
	900,	0.9218	0.9250	0.9228	0.7621	0.9212	0.9245	0.9223	0.7603	1.0346	1.0412	1.0426	1.1249	0.8537	0.8589	0.8583	0.7251
	2100,	0.9218	0.9250	0.9228	0.7631	0.9212	0.9245	0.9223	0.7612	1.0346	1.0412	1.0426	1.1244	0.8537	0.8589	0.8583	0.7258
70	300,	0.9326	0.9415	0.9421	0.9526	0.9308	0.9397	0.9403	0.9511	0.9725	0.9804	0.9806	0.9845	0.8529	0.8721	0.8746	0.8986
	900,	0.9326	0.9415	0.9421	0.9524	0.9308	0.9397	0.9403	0.9508	0.9725	0.9804	0.9806	0.9844	0.8529	0.8721	0.8746	0.8985
	2100,	0.9326	0.9415	0.9421	0.9523	0.9308	0.9397	0.9403	0.9508	0.9725	0.9804	0.9806	0.9844	0.8529	0.8721	0.8746	0.8984

GROUP	T(K)	FR				GROUP	T(K)	FR			
		0.	10.	100.	1000.			0.	10.	100.	1000.
26	300,	0.1171	0.7046	0.9575	0.9954	49	300,	1.7556	1.6651	1.0194	0.9107
	900,	0.1173	0.7066	0.9587	0.9955		900,	1.8317	1.7239	1.0775	0.9002
	2100,	0.1176	0.7082	0.9596	0.9957		2100,	1.8912	1.7593	1.1013	0.8892
27	300,	0.7830	0.6823	0.9535	0.9947	50	300,	2.5877	1.9094	1.3026	0.9654
	900,	0.7924	0.6826	0.9545	0.9948		900,	2.0478	1.7933	1.3532	0.9600
	2100,	0.7970	0.6828	0.9549	0.9949		2100,	1.7518	1.6812	1.4114	0.9555
28	300,	0.8187	0.6666	0.9433	0.9934	51	300,	1.4955	1.2523	1.1819	0.9907
	900,	0.8301	0.6660	0.9455	0.9937		900,	1.6014	1.3015	1.2065	0.9904
	2100,	0.8383	0.6613	0.9467	0.9939		2100,	1.4722	1.2678	1.2161	0.9885
29	300,	0.7314	0.6196	0.9272	0.9915	52	300,	0.3650	0.3549	0.8364	0.9258
	900,	0.7392	0.6179	0.9291	0.9918		900,	0.3899	0.3871	0.8314	0.9202
	2100,	0.7417	0.6156	0.9301	0.9919		2100,	0.4035	0.4022	0.8479	0.9091
30	300,	0.7811	0.5989	0.9085	0.9887	53	300,	0.3792	0.3792	0.8418	0.9150
	900,	0.7994	0.6057	0.9135	0.9895		900,	0.3813	0.3817	0.8443	0.9082
	2100,	0.8144	0.6096	0.9161	0.9899		2100,	0.3998	0.3931	0.8424	0.9007
31	300,	0.6699	0.6141	0.9095	0.9891	54	300,	2.2864	1.8243	0.8045	0.8174
	900,	0.6874	0.6235	0.9144	0.9899		900,	2.3304	1.8843	0.8487	0.8089
	2100,	0.7010	0.6291	0.9167	0.9902		2100,	2.3900	1.9792	0.9238	0.8053
32	300,	0.7555	0.6784	0.8971	0.9865	55	300,	1.5740	1.4023	0.8882	0.7572
	900,	0.7789	0.6922	0.9045	0.9882		900,	1.6353	1.4697	0.9571	0.7484
	2100,	0.7916	0.7022	0.9093	0.9889		2100,	1.7445	1.5829	1.0423	0.7369
33	300,	0.8611	0.7188	0.8943	0.9864	56	300,	0.0150	0.0274	0.1343	0.4732
	900,	0.8764	0.7304	0.8964	0.9870		900,	0.0162	0.0293	0.1438	0.4973
	2100,	0.8893	0.7372	0.8973	0.9872						

Table A-1.4 SELF-SHIELDING FACTOR TABLES CODE NO = 940

PU-EDO . . . PAGE 1

GROUP	T(K)	FF				FC				FE				FT			
		0	100	1000	10000	0	100	1000	10000	0	100	1000	10000	0	100	1000	10000
23	300	0.8831	0.9887	0.9987	0.9999	0.8965	0.9888	0.9987	0.9999	0.9143	0.9869	0.9984	0.9998	0.8530	0.9750	0.9969	0.9999
	900	0.9166	0.9937	0.9993	0.9999	0.9315	0.9937	0.9993	0.9999	0.9429	0.9924	0.9991	0.9999	0.9013	0.9852	0.9982	0.9999
	2100	0.9316	0.9957	0.9993	0.9999	0.9475	0.9959	0.9995	0.9999	0.9577	0.9949	0.9994	0.9999	0.9239	0.9702	0.9989	0.9999
24	300	0.8903	0.9862	0.9984	0.9998	0.8928	0.9870	0.9985	0.9998	0.8952	0.9823	0.9978	0.9998	0.8183	0.9668	0.9957	0.9998
	900	0.9344	0.9925	0.9991	0.9999	0.9343	0.9928	0.9992	0.9999	0.9305	0.9891	0.9947	0.9999	0.8802	0.9794	0.9975	1.0000
	2100	0.9389	0.9954	0.9995	0.9999	0.9344	0.9954	0.9995	0.9999	0.9300	0.9923	0.9991	0.9999	0.9136	0.9858	0.9983	1.0002
25	300	0.9202	0.9896	0.9988	0.9999	0.8928	0.9859	0.9984	0.9998	0.9031	0.9825	0.9978	0.9998	0.8300	0.9668	0.9957	0.9995
	900	0.9613	0.9956	0.9995	1.0000	0.9368	0.9923	0.9991	0.9999	0.9385	0.9897	0.9988	0.9999	0.8864	0.9800	0.9976	0.9995
	2100	0.9794	0.9976	1.0002	1.0005	0.9350	0.9955	0.9998	1.0003	0.9588	0.9934	0.9992	0.9999	0.9197	0.9869	0.9984	0.9997
26	300	0.8691	0.9800	0.9976	0.9998	0.8719	0.9812	0.9978	0.9998	0.8887	0.9780	0.9972	0.9997	0.8141	0.9588	0.9945	0.9997
	900	0.9272	0.9901	0.9989	1.0000	0.9243	0.9898	0.9988	0.9998	0.9244	0.9870	0.9984	0.9999	0.8694	0.9748	0.9969	0.9999
	2100	0.9575	0.9949	1.0000	1.0006	0.9503	0.9939	0.9999	1.0002	0.9465	0.9922	0.9997	1.0006	0.9039	0.9838	0.9986	1.0005
27	300	0.8595	0.9751	0.9969	0.9998	0.8452	0.9759	0.9971	0.9997	0.8639	0.9716	0.9963	0.9996	0.7834	0.9475	0.9927	0.9993
	900	0.9274	0.9884	0.9987	1.0000	0.9061	0.9871	0.9988	1.0002	0.9064	0.9830	0.9981	1.0000	0.8434	0.9677	0.9960	0.9998
	2100	0.9662	0.9954	0.9998	1.0004	0.9359	0.9924	0.9999	1.0008	0.9306	0.9890	0.9992	1.0004	0.8795	0.9784	0.9977	1.0001
28	300	0.8184	0.9675	0.9959	0.9997	0.7932	0.9635	0.9954	0.9995	0.8276	0.9590	0.9944	0.9994	0.7319	0.9260	0.9890	0.9988
	900	0.9000	0.9828	0.9974	0.9992	0.8710	0.9794	0.9970	0.9992	0.8742	0.9741	0.9965	0.9994	0.7984	0.9523	0.9933	0.9993
	2100	0.9440	0.9867	0.9977	0.9987	0.9152	0.9865	0.9976	0.9989	0.9044	0.9820	0.9972	0.9993	0.8425	0.9668	0.9921	0.9987
29	300	0.7362	0.9487	0.9933	0.9992	0.7412	0.9516	0.9938	0.9993	0.8369	0.9600	0.9944	0.9994	0.7373	0.9264	0.9889	0.9991
	900	0.8218	0.9694	0.9956	0.9988	0.8314	0.9731	0.9970	1.0000	0.8801	0.9751	0.9968	0.9997	0.8010	0.9530	0.9936	0.9993
	2100	0.8701	0.9791	0.9968	0.9989	0.8856	0.9843	0.9991	1.0009	0.9119	0.9848	0.9987	1.0005	0.8480	0.9695	0.9967	1.0000
30	300	0.7034	0.9292	0.9988	0.9998	0.7144	0.9375	0.9914	0.9991	0.7872	0.9342	0.9897	0.9989	0.6681	0.8872	0.9801	0.9979
	900	0.7991	0.9589	0.9942	0.9990	0.8087	0.9649	0.9955	0.9999	0.8337	0.9563	0.9938	0.9994	0.7517	0.9224	0.9881	0.9986
	2100	0.8643	0.9757	0.9964	0.9993	0.8735	0.9802	0.9978	0.9999	0.8694	0.9709	0.9968	1.0003	0.7982	0.9464	0.9931	0.9998
31	300	0.6231	0.9034	0.9859	0.9985	0.6669	0.9158	0.9874	0.9986	0.7367	0.9138	0.9849	0.9983	0.6496	0.8576	0.9713	0.9967
	900	0.7316	0.9407	0.9916	0.9987	0.7720	0.9684	0.9927	0.9991	0.8024	0.9390	0.9905	0.9990	0.7166	0.8959	0.9818	0.9977
	2100	0.8043	0.9613	0.9949	0.9993	0.8393	0.9666	0.9957	0.9998	0.8371	0.9560	0.9937	0.9994	0.7621	0.9228	0.9878	0.9992
32	300	0.5602	0.8805	0.9816	0.9984	0.5399	0.8771	0.9816	0.9982	0.7582	0.9153	0.9857	0.9985	0.6520	0.8523	0.9713	0.9968
	900	0.6485	0.9245	0.9891	0.9987	0.6293	0.9233	0.9857	0.9991	0.7399	0.9415	0.9912	0.9993	0.7000	0.8930	0.9823	0.9980
	2100	0.7220	0.9514	0.9926	0.9985	0.7012	0.9503	0.9940	0.9998	0.8307	0.9576	0.9932	0.9983	0.7348	0.9206	0.9873	0.9979
33	300	0.4481	0.8663	0.9817	0.9985	0.3447	0.7792	0.9646	0.9960	0.7882	0.9187	0.9857	0.9984	0.6911	0.8520	0.9697	0.9966
	900	0.5879	0.9276	0.9905	0.9984	0.4541	0.8572	0.9797	0.9977	0.8209	0.9435	0.9914	0.9991	0.7268	0.8919	0.9815	0.9979
	2100	0.7200	0.9651	0.9946	0.9997	0.5542	0.9052	0.9873	0.9983	0.8515	0.9625	0.9968	1.0018	0.7597	0.9231	0.9902	1.0007
34	300	0.2161	0.5583	0.9012	0.9898	0.2799	0.7008	0.9411	0.9932	0.6085	0.8103	0.9573	0.9950	0.4778	0.6998	0.9167	0.9897
	900	0.2560	0.6538	0.9356	0.9988	0.3718	0.7893	0.9645	0.9960	0.6494	0.8541	0.9726	0.9970	0.5239	0.7551	0.9453	0.9936
	2100	0.3193	0.7360	0.9569	0.9960	0.4713	0.8530	0.9779	0.9976	0.6910	0.8905	0.9827	0.9990	0.5660	0.8061	0.8639	0.9967
35	300	0.2173	0.6158	0.9159	0.9908	0.2569	0.6751	0.9338	0.9922	0.6123	0.7956	0.9483	0.9932	0.4804	0.6830	0.8995	0.9863
	900	0.2820	0.7144	0.9474	0.9944	0.3522	0.7744	0.9602	0.9955	0.6355	0.8380	0.9636	0.9957	0.5303	0.7388	0.9306	0.9915
	2100	0.3568	0.7895	0.9659	0.9966	0.4491	0.8440	0.9750	0.9971	0.6934	0.8742	0.9767	0.9991	0.5719	0.7890	0.9528	0.9959
36	300	0.3810	0.8192	0.9677	0.9958	0.2251	0.6171	0.9061	0.9982	0.5301	0.7245	0.9169	0.9987	0.4024	0.6042	0.8509	0.9779
	900	0.5018	0.8826	0.9807	0.9971	0.2961	0.7115	0.9339	0.9929	0.5616	0.7723	0.9428	0.9928	0.4375	0.6562	0.8939	0.9858
	2100	0.5969	0.9193	0.9871	0.9973	0.3778	0.7847	0.9608	0.9962	0.5957	0.8184	0.9363	0.9988	0.4741	0.7108	0.9270	0.9938
37	300	0.2267	0.5897	0.9032	0.9885	0.2048	0.5784	0.9006	0.9882	0.5891	0.7685	0.9417	0.9929	0.4565	0.6294	0.8812	0.9844
	900	0.2912	0.6870	0.9363	0.9890	0.2719	0.6804	0.9369	0.9911	0.6180	0.8180	0.9625	0.9950	0.4837	0.6865	0.9217	0.9899
	2100	0.3573	0.7538	0.9466	0.9809	0.3430	0.7528	0.9513	0.9987	0.6400	0.8519	0.9682	0.9986	0.5080	0.7351	0.9000	0.9864
38	300	0.1847	0.4829	0.8229	0.9731	0.1457	0.4785	0.8530	0.9810	0.4348	0.6368	0.8829	0.9839	0.3013	0.4751	0.7830	0.9666
	900	0.2376	0.5612	0.8765	0.9828	0.1953	0.5904	0.9073	0.9901	0.4670	0.6996	0.9223	0.9908	0.3251	0.5351	0.8485	0.9801
	2100	0.2986	0.6338	0.9140	0.9888	0.2619	0.6906	0.9447	0.9990	0.5043	0.7605	0.9499	0.9965	0.3499	0.6027	0.8962	0.9874
39	300	0.1103	0.4285	0.8401	0.9811	0.1699	0.5012	0.8433	0.9772	0.5504	0.6550	0.8298	0.9731	0.4091	0.5628	0.7804	0.9594
	900	0.1339	0.5432	0.9013	0.9921	0.2219	0.6063	0.9098	1.0046	0.5579	0.6579	0.7254	0.9126	0.4284	0.6003	0.8380	0.9819
	2100	0.1668	0.6459	0.9396	0.9999	0.2802	0.6978	0.9640	1.0329	0.6355	0.7627	0.7627	0.9425	0.4521	0.6584	0.8843	0.9981
40	300	0.1824	0.5562	0.8973</td													

Table A-5.4 (continued)

PU=240 . . . PAGE 2

GROUP	T(K)	FF				FC				FE				FT			
		0	100	1000	10000	0	100	1000	10000	0	100	1000	10000	0	100	1000	10000
60	300,	0.9488	0.9823	0.9967	0.9983	0.9313	0.9762	0.9953	0.9977	0.9853	0.9949	0.9991	0.9993	0.9392	0.9874	0.9978	0.9990
	900,	0.9492	0.9829	0.9971	0.9988	0.9318	0.9770	0.9962	0.9983	0.9852	0.9950	0.9991	0.9993	0.9391	0.9874	0.9978	0.9990
	2100,	0.9630	0.9973	1.0113	1.0129	0.9332	0.9793	0.9979	1.0000	0.9851	0.9950	0.9990	0.9993	0.9153	0.9554	0.9929	0.9978
61	300,	0.9164	0.9477	0.9915	0.9970	0.9035	0.9397	0.9902	0.9966	0.9724	0.9829	0.9972	0.9990	0.9151	0.9554	0.9929	0.9978
	900,	0.9173	0.9489	0.9926	0.9981	0.9045	0.9410	0.9914	0.9979	0.9724	0.9829	0.9972	0.9990	0.9140	0.9552	0.9928	0.9978
	2100,	0.9258	0.9580	1.0017	1.0073	0.9067	0.9439	0.9942	1.0000	0.9721	0.9829	0.9972	0.9990	0.9140	0.9552	0.9928	0.9978
62	300,	0.8562	0.8362	0.9693	0.9936	0.8482	0.8271	0.9673	0.9932	0.9388	0.9304	0.9871	0.9973	0.8190	0.8371	0.9677	0.9939
	900,	0.8583	0.8386	0.9722	0.9967	0.8505	0.8296	0.9707	0.9963	0.9385	0.9303	0.9870	0.9973	0.8182	0.8366	0.9675	0.9938
	2100,	0.8652	0.8459	0.9808	1.0058	0.8521	0.8347	0.9771	1.0034	0.9375	0.9295	0.9868	0.9972	0.8157	0.8350	0.9670	0.9938
63	300,	0.7005	0.5714	0.8240	0.9682	0.6969	0.5662	0.8117	0.9678	0.8154	0.7532	0.8869	0.9808	0.5959	0.5378	0.7683	0.9584
	900,	0.7069	0.5769	0.8232	0.9838	0.7034	0.5718	0.8211	0.9836	0.8115	0.7299	0.8839	0.9802	0.5959	0.5378	0.7683	0.9584
	2100,	0.7212	0.5858	0.8339	1.0192	0.7173	0.5830	0.8414	1.0189	0.8120	0.7208	0.8764	0.9787	0.5716	0.5257	0.7550	0.9584
64	300,	0.1064	0.0922	0.0665	0.1957	0.1063	0.0921	0.0664	0.1956	0.1402	0.1256	0.1014	0.2347	0.0501	0.0481	0.0503	0.1058
	900,	0.1151	0.0995	0.0701	0.2088	0.1149	0.0994	0.0700	0.2086	0.1527	0.1364	0.1076	0.2538	0.0528	0.0508	0.0532	0.1141
	2100,	0.1364	0.1176	0.0793	0.2310	0.1363	0.1173	0.0791	0.2309	0.1843	0.1637	0.1238	0.2922	0.0607	0.0585	0.0611	0.1385
65	300,	0.5220	0.5257	0.5596	1.1653	0.5211	0.5248	0.5689	1.1658	0.4156	0.4200	0.4988	1.2117	0.3548	0.3614	0.4130	0.9154
	900,	0.5449	0.5493	0.6115	1.1415	0.5441	0.5485	0.6108	1.1513	0.3307	0.3347	0.3931	1.1588	0.2853	0.3293	0.7965	0.9154
	2100,	0.5991	0.6054	0.6779	1.19365	0.5983	0.6046	0.6772	1.1938	0.2455	0.2492	0.2937	1.0837	0.2021	0.2057	0.2328	0.6551
66	300,	0.9627	0.9623	0.9619	0.9997	0.9621	0.9615	0.9612	0.9997	0.9238	0.9229	0.9223	0.9995	0.9113	0.9200	0.9447	0.9973
	900,	0.9706	0.9701	0.9696	1.0056	0.9701	0.9696	0.9690	1.0056	0.9219	0.9209	0.9201	0.9927	0.9092	0.9180	0.9431	0.9937
	2100,	0.9876	0.9871	0.9862	1.0203	0.9867	0.9862	0.9853	1.0202	0.9182	0.9172	0.9158	0.9827	0.9046	0.9136	0.9394	0.9883
67	300,	0.9915	0.9920	0.9924	0.9994	0.9915	0.9921	0.9926	0.9995	0.9861	0.9835	0.9799	0.9988	0.9778	0.9817	0.9891	0.9990
	900,	0.9941	0.9946	0.9951	1.0014	0.9943	0.9948	0.9954	1.0015	0.9853	0.9846	0.9793	0.9958	0.9772	0.9813	0.9888	0.9981
	2100,	1.0003	1.0009	1.0014	1.0069	0.9998	1.0004	1.0010	1.0064	0.9835	0.9830	0.9980	1.0016	0.9759	0.9803	0.9882	0.9968
68	300,	1.0011	1.0007	0.9991	1.0000	1.0011	1.0007	0.9990	1.0000	0.9974	0.9983	1.0021	0.9999	0.9982	0.9989	0.9986	1.0000
	900,	1.0011	1.0007	0.9990	1.0000	1.0011	1.0007	0.9990	1.0000	0.9974	0.9983	1.0022	1.0007	0.9982	0.9989	0.9986	1.0000
	2100,	1.0011	1.0006	0.9990	1.0000	1.0011	1.0010	1.0003	1.0000	0.9960	0.9964	0.9991	1.0003	1.0006	1.0007	1.0002	0.9999
69	300,	1.0011	1.0010	1.0002	1.0000	1.0011	1.0010	1.0003	1.0001	0.9960	0.9964	0.9991	0.9996	1.0006	1.0007	1.0002	1.0001
	900,	1.0011	1.0010	1.0002	1.0000	1.0011	1.0010	1.0002	1.0000	0.9960	0.9964	0.9991	0.9996	1.0006	1.0007	1.0002	1.0000
	2100,	1.0003	1.0003	1.0001	1.0000	1.0004	1.0004	1.0002	1.0000	0.9963	0.9965	0.9983	0.9996	1.0003	1.0003	1.0002	1.0000
70	300,	1.0003	1.0003	1.0001	1.0000	1.0004	1.0004	1.0004	1.0000	0.9963	0.9965	0.9983	0.9996	1.0003	1.0003	1.0002	1.0000
	900,	1.0003	1.0003	1.0001	1.0000	1.0004	1.0004	1.0002	1.0000	0.9963	0.9965	0.9983	0.9996	1.0003	1.0003	1.0002	1.0000
	2100,	1.0003	1.0003	1.0001	1.0000	1.0004	1.0004	1.0004	1.0000	0.9963	0.9965	0.9983	0.9996	1.0003	1.0003	1.0002	1.0000

GROUP	T(K)	FR				FR					
		0	100	1000	10000	0	100	1000	10000		
23	300,	0.3842	0.9709	0.9965	0.9995	47	300,	1.4450	0.9498	0.9858	0.9940
	900,	0.3944	0.9770	0.9973	0.9996		900,	1.4745	0.9426	0.9846	0.9939
	2100,	0.3993	0.9794	0.9976	0.9996		2100,	1.5119	0.9363	0.9836	0.9939
24	300,	0.4859	0.9671	0.9959	0.9993	48	300,	1.8581	0.8850	0.9529	0.9850
	900,	0.5040	0.9740	0.9969	0.9994		900,	1.8991	0.8814	0.9415	0.9837
	2100,	0.5150	0.9780	0.9974	0.9995		2100,	1.9924	0.8801	0.9274	0.9827
25	300,	0.6430	0.9648	0.9958	0.9992	49	300,	1.0127	0.9835	0.9945	0.9957
	900,	0.6672	0.9736	0.9966	0.9994		900,	1.0125	0.9852	0.9946	0.9958
	2100,	0.6822	0.9780	0.9974	0.9994		2100,	1.0046	0.9884	0.9947	0.9958
26	300,	0.7101	0.9528	0.9941	0.9989	50	300,	0.9478	0.7762	0.9253	0.9777
	900,	0.7360	0.9618	0.9953	0.9990		900,	0.9563	0.7438	0.9062	0.9760
	2100,	0.7524	0.9665	0.9959	0.9991		2100,	0.9778	0.8885	0.8844	0.9746
27	300,	0.6155	0.8918	0.9841	0.9977	51	300,	1.2869	0.9938	0.9940	0.9938
	900,	0.6405	0.9114	0.9879	0.9981		900,	1.2877	0.9980	0.9944	0.9938
	2100,	0.6491	0.9230	0.9900	0.9984		2100,	1.2895	1.0067	0.9948	0.9938
28	300,	0.8120	0.9486	0.9922	0.9985	52	300,	0.5573	0.9724	0.9908	0.9927
	900,	0.8473	0.9638	0.9948	0.9987		900,	0.5537	0.9752	0.9910	0.9927
	2100,	0.8887	0.9743	0.9963	0.9989		2100,	0.5403	0.9811	0.9912	0.9927
29	300,	0.8398	0.9880	0.9983	0.9990	53	300,	1.8920	0.9735	0.9866	0.9912
	900,	0.8741	0.9905	0.9985	0.9991		900,	1.9241	0.9751	0.9859	0.9912
	2100,	0.9076	0.9919	0.9986	0.9991		2100,	2.0035	0.9826	0.9855	0.9912
30	300,	0.8336	0.9407	0.9903	0.9981	54	300,	0.9890	0.9901	0.9918	0.9918
	900,	0.8738	0.9635	0.9945	0.9986		900,	0.9894	0.9946	0.9921	0.9918
	2100,	0.9108	0.9782	0.9967	0.9988		2100,	0.9893	1.0041	0.9924	0.9918
31	300,	0.7099	0.9213	0.9883	0.9979	55	300,	0.8431	0.9558	0.9910	

Table A-5.5 SELF-SHIELDING FACTOR TABLES CODE NO = 941

PU=243 ..., PAGE 1

GROUP	T(K)	FF					FC					FE				
		0	10	100	1000	10000	0	10	100	1000	10000	0	10	100	1000	10000
26	300,	0.9223	0.9651	0.9931	0.9992	0.9999	0.8691	0.9302	0.9911	0.9990	0.9999	0.9792	0.9880	0.9977	0.9997	1.0000
	900,	0.9314	0.9719	0.9948	0.9994	0.9999	0.8772	0.9368	0.9927	0.9992	0.9999	0.9760	0.9903	0.9982	0.9998	1.0000
	2100,	0.9343	0.9750	0.9956	0.9995	0.9999	0.8791	0.9395	0.9935	0.9993	0.9999	0.9775	0.9915	0.9985	0.9998	1.0000
27	300,	0.9223	0.9700	0.9930	0.9992	0.9999	0.9494	0.9675	0.9925	0.9991	0.9999	0.9837	0.9901	0.9976	0.9997	1.0000
	900,	0.9680	0.9796	0.9954	0.9995	0.9999	0.9669	0.9784	0.9951	0.9994	0.9999	0.9893	0.9937	0.9985	0.9998	1.0000
	2100,	0.9767	0.9848	0.9966	0.9996	1.0000	0.9765	0.9883	0.9965	0.9996	0.9999	0.9925	0.9957	0.9990	0.9999	1.0000
28	300,	0.9458	0.9613	0.9914	0.9990	0.9999	0.9464	0.9572	0.9907	0.9989	0.9999	0.9864	0.9898	0.9976	0.9997	1.0000
	900,	0.9647	0.9735	0.9944	0.9994	0.9999	0.9646	0.9702	0.9939	0.9993	0.9999	0.9903	0.9937	0.9986	0.9998	1.0000
	2100,	0.9750	0.9800	0.9959	0.9995	0.9999	0.9752	0.9767	0.9955	0.9995	0.9999	0.9934	0.9958	0.9991	0.9999	1.0000
29	300,	0.9224	0.9405	0.9866	0.9985	0.9998	0.9319	0.9625	0.9901	0.9988	0.9999	0.9822	0.9885	0.9971	0.9997	1.0000
	900,	0.9473	0.9555	0.9903	0.9989	0.9999	0.9582	0.9795	0.9944	0.9993	0.9999	0.9884	0.9927	0.9982	0.9998	1.0000
	2100,	0.9617	0.9663	0.9926	0.9992	0.9999	0.9719	0.9882	0.9966	0.9996	1.0000	0.9921	0.9951	0.9988	0.9999	1.0000
30	300,	0.9145	0.9378	0.9839	0.9981	0.9998	0.9061	0.9532	0.9875	0.9985	0.9999	0.9803	0.9881	0.9969	0.9998	1.0000
	900,	0.9423	0.9552	0.9885	0.9986	0.9999	0.9388	0.9751	0.9936	0.9992	1.0000	0.9863	0.9926	0.9981	0.9998	1.0000
	2100,	0.9589	0.9656	0.9912	0.9990	0.9999	0.9583	0.9882	0.9970	0.9996	1.0000	0.9907	0.9953	0.9988	0.9999	1.0000
31	300,	0.8924	0.9258	0.9799	0.9976	0.9997	0.8820	0.9140	0.9746	0.9969	0.9996	0.9807	0.9861	0.9959	0.9995	0.9999
	900,	0.9233	0.9473	0.9871	0.9998	1.0013	0.9170	0.9373	0.9816	0.9982	1.0002	0.9864	0.9901	0.9971	0.9997	1.0000
	2100,	0.9433	0.9607	0.9712	1.0009	1.0021	0.9359	0.9497	0.9849	0.9988	1.0003	0.9900	0.9925	0.9979	0.9998	1.0000
32	300,	0.8661	0.9072	0.9744	0.9969	0.9997	0.8569	0.9023	0.9743	0.9969	0.9997	0.9682	0.9783	0.9944	0.9993	0.9999
	900,	0.9045	0.9345	0.9828	0.9982	1.0001	0.9086	0.9392	0.9851	0.9982	1.0000	0.9791	0.9865	0.9968	0.9994	0.9996
	2100,	0.9289	0.9512	0.9876	0.9989	1.0003	0.9370	0.9588	0.9904	0.9999	1.0000	0.9907	0.9953	0.9988	0.9999	1.0000
33	300,	0.8689	0.9149	0.9801	0.9976	0.9998	0.8336	0.8785	0.9605	0.9952	0.9994	0.9737	0.9811	0.9943	0.9993	0.9999
	900,	0.9179	0.9500	0.9918	1.0008	1.0019	0.8945	0.9226	0.9742	0.9975	1.0002	0.9840	0.9888	0.9969	0.9998	1.0002
	2100,	0.9460	0.9691	0.9976	1.0023	1.0029	0.9272	0.9453	0.9808	0.9986	1.0007	0.9899	0.9930	0.9983	1.0005	1.0005
34	300,	0.7653	0.8294	0.9388	0.9921	0.9990	0.7769	0.8450	0.9523	0.9941	0.9993	0.9499	0.9635	0.9884	0.9985	0.9998
	900,	0.8222	0.8724	0.9531	0.9938	0.9998	0.8491	0.8990	0.9699	0.9964	0.9996	0.9755	0.9926	0.9990	0.9998	0.9998
	2100,	0.8564	0.8970	0.9604	0.9939	0.9990	0.8890	0.9277	0.9782	0.9973	0.9995	0.9748	0.9826	0.9949	0.9993	0.9999
35	300,	0.8012	0.8603	0.9615	0.9951	0.9995	0.8040	0.8643	0.9613	0.9950	0.9995	0.9623	0.9724	0.9915	0.9986	0.9999
	900,	0.8647	0.9079	0.9784	0.9989	1.0016	0.8752	0.9169	0.9789	0.9981	1.0006	0.9739	0.9815	0.9949	0.9993	0.9999
	2100,	0.9032	0.9361	0.9884	1.0017	1.0034	0.9109	0.9423	0.9871	0.9998	1.0014	0.9806	0.9865	0.9965	0.9994	0.9998
36	300,	0.6961	0.7779	0.9157	0.9889	0.9986	0.6524	0.7400	0.8993	0.9865	0.9984	0.9344	0.9485	0.9788	0.9970	0.9997
	900,	0.7491	0.8205	0.9321	0.9932	0.9987	0.7222	0.7987	0.9237	0.9899	0.9985	0.9477	0.9603	0.9844	0.9979	0.9997
	2100,	0.7864	0.8480	0.9411	0.9922	0.9985	0.7691	0.8531	0.9366	0.9917	0.9984	0.9574	0.9684	0.9985	0.9999	0.9999
37	300,	0.6488	0.7388	0.8986	0.9856	0.9998	0.5955	0.6893	0.8741	0.9819	0.9979	0.9050	0.9226	0.9664	0.9949	0.9998
	900,	0.7142	0.7967	0.9267	0.9932	1.0022	0.6823	0.7691	0.9130	0.9903	1.0007	0.9250	0.9417	0.9770	0.9974	1.0003
	2100,	0.7654	0.8397	0.9451	0.9930	1.0048	0.7425	0.8211	0.9347	0.9949	1.0026	0.9404	0.9558	0.9835	0.9990	1.0010
38	300,	0.6393	0.7179	0.8872	0.9837	0.9982	0.6771	0.7548	0.9151	0.9881	0.9988	0.9247	0.9359	0.9771	0.9966	0.9997
	900,	0.7308	0.7943	0.9213	0.9891	0.9984	0.7863	0.8431	0.9502	0.9928	0.9985	0.9454	0.9575	0.9854	0.9976	0.9994
	2100,	0.7987	0.8477	0.9416	0.9918	0.9984	0.8530	0.9390	0.9670	0.9952	0.9998	0.9689	0.9900	0.9980	0.9991	0.9991
39	300,	0.6494	0.7192	0.8685	0.9805	0.9977	0.5900	0.6654	0.8624	0.9773	0.9977	0.8817	0.8998	0.9542	0.9920	0.9992
	900,	0.7364	0.7859	0.8999	0.9856	0.9976	0.7034	0.7653	0.9161	0.9856	0.9969	0.9091	0.9247	0.9699	0.9948	0.9990
	2100,	0.7933	0.8362	0.9188	0.9830	0.9971	0.7701	0.8232	0.9454	0.9980	0.9956	0.9271	0.9415	0.9802	0.9966	0.9991
40	300,	0.6318	0.7195	0.8955	0.9836	0.9983	0.5524	0.6550	0.8410	0.9760	0.9972	0.9491	0.9572	0.9794	0.9967	0.9996
	900,	0.6891	0.7720	0.9252	0.9906	1.0009	0.6447	0.7422	0.8863	0.9845	0.9954	0.9675	0.9859	0.9983	1.0002	1.0002
	2100,	0.7308	0.8093	0.9462	0.9954	1.0029	0.7046	0.7953	0.9130	0.9999	1.0063	0.9745	0.9949	0.9990	0.9993	0.9995
41	300,	0.5378	0.6182	0.8289	0.9723	0.9970	0.4064	0.4973	0.7571	0.9951	0.9952	0.8416	0.8622	0.9342	0.9874	0.9987
	900,	0.6042	0.6837	0.8709	0.9812	0.9983	0.4881	0.5835	0.8228	0.9688	0.9938	0.8614	0.8834	0.9539	0.9914	0.9982
	2100,	0.6651	0.7396	0.9006	0.9839	0.9981	0.5566	0.6485	0.8622	0.9715	0.9952	0.9016	0.9244	0.9618	0.9960	0.9995
42	300,	0.5359	0.6144	0.8089	0.9617	0.9954	0.4954	0.5831	0.8086	0.9478	0.9941	0.9157	0.9238	0.9416	0.9874	0.9980
	900,	0.6860	0.8383	0.8952	0.9736	0.9988	0.5373	0.6149	0.8149	0.9749	1.0018	0.8897	0.9034	0.9456	0.9903	0.9998
	2100,	0.6793	0.7490	0.8911	0.9859	1.0027	0.6320	0.7086	0.8971	0.9952	1.0112	0.9102	0.9244	0.9618	0.9960	0.9994
43	300,	0.4409	0.5308	0.7636	0.9482	0.9939	0.4140	0.5021	0.7350	0.9482	0.9940	0.9068	0.9148	0.9457	0.9878	0.9985
	900,	0.5024	0.5917	0.8104	0.9589	0.9916	0.5219	0.6129	0.8171	0.9672	0.9946	0.9211	0.9297	0.9580	0.9913	0.9986
	2100,	0.5671	0.6508	0.8474	0.9646	0.9879	0.6254	0.7084	0.8729	0.9767	0.9938	0.9345	0.9432	0.9671	0.9931	0.9981
44	300,	0.3554	0.6336	0.8419	0.9736	0.9987	0.3625	0.4197								

Table A-5.5 (continued)

PU=241 ..., PAGE 2

GROUP	T(K)	FF					FC					FE				
		0	10	100	1000	10000	0	10	100	1000	10000	0	10	100	1000	10000
60	300,	0.9910	0.9899	0.9835	0.9984	1.0015	0.9840	0.9822	0.9712	0.9974	1.0026	1.0024	1.0027	2.0045	1.0004	0.999
	900,	0.9923	0.9912	0.9846	0.9992	1.0029	0.9874	0.9853	0.9741	0.9999	1.0063	1.0025	0.9955	0.9973	0.9934	0.9924
	2100,	0.9943	0.9931	0.9861	1.0006	1.0051	0.9936	0.9915	0.9794	1.0052	1.0131	1.0025	0.9895	0.9914	0.9875	0.9862
61	300,	1.0012	1.0010	0.9990	0.9998	1.0006	1.0008	1.0007	0.9992	0.9998	1.0005	0.9996	0.9997	1.0003	1.0001	0.9998
	900,	1.0022	1.0019	1.0000	1.0006	1.0016	1.0028	1.0026	1.0011	1.0016	1.0024	0.9996	0.9933	0.9938	0.9937	0.9934
	2100,	1.0032	1.0030	1.0010	1.0014	1.0026	1.0052	1.0050	1.0035	1.0039	1.0044	0.9996	0.9879	0.9885	0.9884	0.9880
62	300,	1.0007	1.0007	1.0003	1.0000	1.0001	0.9974	0.9976	0.9988	0.9998	0.9995	0.9993	0.9994	0.9997	0.9999	0.9999
	900,	1.0017	1.0016	1.0013	1.0010	1.0011	0.9992	0.9994	1.0006	1.0017	1.0013	0.9993	0.9933	0.9936	0.9939	0.9938
	2100,	1.0023	1.0023	1.0018	1.0018	1.0019	1.0013	1.0015	1.0027	1.0038	1.0034	0.9993	0.9882	0.9868	0.9889	0.9888
63	300,	0.9979	0.9980	0.9982	0.9987	0.9997	0.9914	0.9916	0.9943	0.9987	0.9989	0.9992	0.9992	0.9995	0.9999	0.9999
	900,	0.9989	0.9990	0.9996	1.0007	1.0007	0.9907	0.9931	0.9933	0.9960	1.0005	1.0004	0.9992	0.9934	0.9936	0.9940
	2100,	0.9997	0.9998	1.0004	1.0016	1.0015	0.9951	0.9953	0.9980	1.0027	1.0026	0.9992	0.9885	0.9888	0.9892	0.9892
64	300,	0.9692	0.9707	0.9801	0.9954	0.9982	0.9500	0.9525	0.9669	0.9922	0.9968	0.9753	0.9769	0.9847	0.9965	0.9988
	900,	0.9702	0.9719	0.9811	0.9965	0.9993	0.9515	0.9540	0.9684	0.9939	0.9984	0.9752	0.9715	0.9793	0.9911	0.9934
	2100,	0.9711	0.9728	0.9820	0.9975	1.0002	0.9525	0.9561	0.9704	0.9962	1.0005	0.9751	0.9670	0.9748	0.9867	0.9889
65	300,	0.9947	0.9946	0.9943	0.9984	0.9993	0.9842	0.9842	0.9834	0.9950	0.9981	0.9987	0.9987	0.9986	0.9996	0.9998
	900,	0.9947	0.9946	0.9943	0.9984	0.9993	0.9842	0.9841	0.9834	0.9951	0.9980	0.9987	0.9987	0.9986	0.9996	0.9998
	2100,	0.9947	0.9946	0.9943	0.9984	0.9993	0.9842	0.9841	0.9834	0.9952	0.9980	0.9987	0.9987	0.9986	0.9996	0.9998
66	300,	0.9909	0.9909	0.9909	0.9968	0.9990	0.9727	0.9729	0.9728	0.9904	0.9969	0.9979	0.9979	0.9993	0.9998	0.9998
	900,	0.9909	0.9909	0.9909	0.9968	0.9990	0.9727	0.9729	0.9728	0.9905	0.9969	0.9979	0.9979	0.9993	0.9998	0.9998
	2100,	0.9909	0.9909	0.9909	0.9969	0.9990	0.9727	0.9729	0.9728	0.9907	0.9969	0.9979	0.9979	0.9993	0.9998	0.9998
67	300,	0.9567	0.9570	0.9586	0.9986	0.9982	0.9963	0.9321	0.9331	0.9355	0.9754	0.9942	0.9953	0.9953	0.9955	0.9996
	900,	0.9567	0.9570	0.9586	0.9986	0.9983	0.9963	0.9321	0.9331	0.9355	0.9758	0.9942	0.9953	0.9953	0.9955	0.9996
	2100,	0.9567	0.9570	0.9586	0.9986	0.9983	0.9963	0.9326	0.9321	0.9355	0.9758	0.9942	0.9953	0.9953	0.9955	0.9996
68	300,	0.8392	0.8377	0.8236	0.8964	0.9818	0.8393	0.8378	0.8237	0.8966	0.9818	0.9875	0.9874	0.9863	0.9922	0.9987
	900,	0.8392	0.8377	0.8236	0.8964	0.9818	0.8393	0.8378	0.8237	0.8969	0.9818	0.9875	0.9874	0.9863	0.9922	0.9987
	2100,	0.8392	0.8377	0.8236	0.8964	0.9818	0.8393	0.8378	0.8237	0.8971	0.9818	0.9875	0.9874	0.9863	0.9922	0.9987
69	300,	0.8065	0.8056	0.7938	0.7312	0.9367	0.8214	0.8206	0.8095	0.7520	0.9424	0.9998	0.9998	0.9997	0.9999	1.0006
	900,	0.8065	0.8056	0.7938	0.7316	0.9367	0.8214	0.8206	0.8095	0.7525	0.9424	0.9998	0.9998	0.9997	0.9999	1.0006
	2100,	0.8065	0.8056	0.7938	0.7318	0.9367	0.8214	0.8206	0.8095	0.7529	0.9424	0.9998	0.9998	0.9997	0.9999	1.0006
70	300,	0.9967	0.9967	0.9970	1.0085	1.0098	0.9971	0.9972	0.9977	1.0202	1.0202	1.0022	1.0023	1.0033	1.0522	1.0250
	900,	0.9967	0.9967	0.9970	1.0084	1.0098	0.9971	0.9972	0.9977	1.0199	1.0194	1.0022	1.0023	1.0033	1.0516	1.0250
	2100,	0.9967	0.9967	0.9970	1.0082	1.0098	0.9971	0.9972	0.9977	1.0196	1.0194	1.0022	1.0023	1.0033	1.0509	1.0250

GROUP	T(K)	FT					GROUP	T(K)	FT					GROUP	T(K)	FT				
		0	10	100	1000	10000			0	10	100	1000	10000			0	10	100	1000	10000
26	300,	0.9460	0.9721	0.9940	0.9993	0.9998	41	300,	0.4733	0.5342	0.7451	0.9497	0.9944	56	300,	0.5259	0.5416	0.6542	0.8792	0.9832
	900,	0.9454	0.9786	0.9957	0.9995	0.9999	900,	0.5124	0.5832	0.8005	0.9652	0.9955	900,	0.5356	0.5530	0.6736	0.9188	0.9487		
	2100,	0.9458	0.9820	0.9966	0.9996	1.0001	2100,	0.5543	0.6312	0.8419	0.9731	0.9943	2100,	0.5577	0.5748	0.7093	0.9463	0.9896		
27	300,	0.9527	0.9704	0.9928	0.9991	0.9999	42	300,	0.4762	0.5350	0.7331	0.9374	0.9924	57	300,	0.4245	0.4322	0.5216	0.7773	0.9692
	900,	0.9683	0.9803	0.9954	0.9995	0.9998	900,	0.5187	0.5888	0.7950	0.9612	0.9975	900,	0.4287	0.4397	0.5304	0.7899	0.9717		
	2100,	0.9777	0.9860	0.9967	0.9996	1.0000	2100,	0.5712	0.6489	0.8471	0.9779	1.0026	2100,	0.4386	0.4503	0.5479	0.8070	0.9741		
28	300,	0.9516	0.9667	0.9923	0.9991	0.9998	43	300,	0.4713	0.5237	0.7101	0.9269	0.9910	58	300,	0.8485	0.8593	0.9116	0.9621	0.9946
	900,	0.9685	0.9782	0.9951	0.9994	1.0001	900,	0.5110	0.5723	0.7665	0.9468	0.9916	900,	0.8482	0.8620	0.9111	0.9622	0.9946		
	2100,	0.9779	0.9844	0.9966	0.9996	0.9999	2100,	0.6037	0.6720	0.7615	0.9528	0.9949	2100,	0.8481	0.8621	0.9111	0.9624	0.9946		
29	300,	0.9359	0.9564	0.9891	0.9987	0.9998	44	300,	0.5187	0.5720	0.7615	0.9528	0.9949	59	300,	0.2578	0.2578	0.3158	0.7748	0.9592
	900,	0.9565	0.9701	0.9929	0.9992	0.9998	900,	0.5591	0.6178	0.8121	0.9675	0.9977	900,	0.2525	0.2578	0.3200	0.8100	0.9662		
	2100,	0.9569	0.9702	0.9929	0.9992	0.9999	2100,	0.6037	0.6698	0.8265	0.9783	0.9998	2100,	0.2614	0.3264	0.3935	0.8459	0.9731		
30	300,	0.9256	0.9497	0.9863	0.9983	0.9998	45	300,	0.4078	0.4480	0.6167	0.8835	0.9843	60	300,	0.9796	0.9808	0.9817	0.9980	1.0012
	900,	0.9487	0.9656	0.9909	0.9989	0.9998	900,	0.4328	0.4772	0.5963	0.9107	0.9903	900,	0.9795	0.9804	0.9815	0.9977	1.0015		
	2100,	0.9630	0.9755	0.9992	0.9999	1.0001	2100,	0.4702	0.5170	0.6921	0.9921	0.9995	2100,	0.9791	0.9817	0.9822	0.9982	1.0027		
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Table A-5.5 (continued)

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FH					FR					FR										
GROUP	T(K)	0	10	100	1000	10000	GROUP	T(K)	0	10	100	1000	10000	GROUP	T(K)	0	10	100	1000	10000
26	300.	0.0810	0.5590	0.9279	0.9921	0.9991	41	300.	0.4145	0.4743	0.5502	0.9139	0.9881	56	300.	1.4736	1.4518	1.4823	0.7980	0.74652
	900.	0.0809	0.5583	0.9264	0.9922	0.9991		900.	0.4372	0.4976	0.5670	0.9247	0.9895		900.	1.5130	1.4868	1.2054	0.7969	0.6664
	2100.	0.0806	0.5597	0.9292	0.9923	0.9991		2100.	0.4721	0.5311	0.5826	0.9312	0.9902		2100.	1.5791	1.5245	1.2270	0.7976	0.72657
27	300.	0.8412	0.5654	0.9262	0.9917	0.9988	42	300.	0.8290	0.8766	0.7169	0.9523	0.9918	57	300.	0.3926	0.3863	0.3911	0.5196	0.7182
	900.	0.8446	0.5650	0.9271	0.9919	0.9988		900.	0.8166	0.8690	0.7028	0.9513	0.9916		900.	0.4014	0.3952	0.4003	0.5194	0.9180
	2100.	0.8458	0.5653	0.9276	0.9919	0.9988		2100.	0.7882	0.8456	0.6877	0.9499	0.9917		2100.	0.4379	0.4114	0.4359	0.5200	0.9181
28	300.	0.8543	0.5923	0.9263	0.9916	0.9986	43	300.	0.7647	0.8016	0.7693	0.9445	0.9904	58	300.	0.5712	0.6848	0.7890	0.6496	0.7398
	900.	0.8704	0.5914	0.9263	0.9916	0.9986		900.	0.7166	0.7849	0.7123	0.9669	0.9907		900.	0.6546	0.6684	0.7721	0.6467	0.7386
	2100.	0.8740	0.5910	0.9264	0.9916	0.9986		2100.	0.6860	0.7812	0.7164	0.9491	0.9910		2100.	0.6603	0.6741	0.7742	0.6487	0.7382
29	300.	0.8590	0.6213	0.9181	0.9906	0.9985	44	300.	0.6606	0.7126	0.6772	0.9357	0.9890	59	300.	2.1583	2.1553	2.0090	0.9301	0.7693
	900.	0.8760	0.6210	0.9182	0.9907	0.9985		900.	0.6389	0.7249	0.6841	0.9375	0.9893		900.	2.2065	2.2031	2.0468	0.9332	0.7667
	2100.	0.8603	0.6198	0.9182	0.9907	0.9985		2100.	0.6880	0.7307	0.6809	0.9393	0.9895		2100.	2.2855	2.2770	2.0934	0.9338	0.7676
30	300.	0.7737	0.6374	0.8924	0.9873	0.9980	45	300.	1.1032	1.1008	0.8261	0.9545	0.9908	60	300.	1.0742	1.0853	1.1663	1.0185	0.9814
	900.	0.7780	0.6411	0.8938	0.9875	0.9980		900.	1.0638	1.0580	0.8139	0.9511	0.9905		900.	1.0747	1.0860	1.1891	1.0260	0.9814
	2100.	0.7797	0.6420	0.8946	0.9872	0.9981		2100.	0.9777	1.0041	0.7936	0.9474	0.9901		2100.	1.0757	1.0875	1.1739	1.0247	0.9814
31	300.	0.7935	0.7500	0.8997	0.9881	0.9980	46	300.	0.3094	0.4122	0.5457	0.8909	0.9835	61	300.	0.9468	0.9552	1.0145	1.0050	0.9808
	900.	0.7897	0.7527	0.9005	0.9883	0.9980		900.	0.3166	0.4181	0.5580	0.8930	0.9838		900.	0.9488	0.9553	1.0150	1.0096	0.9809
	2100.	0.7854	0.7533	0.9112	0.9884	0.9980		2100.	0.3452	0.4449	0.5771	0.8765	0.9843		2100.	0.9489	0.9554	1.0158	1.0148	0.9809
32	300.	0.8423	0.7591	0.6721	0.9844	0.9974	47	300.	0.7134	0.4592	0.5212	0.8429	0.9771	62	300.	0.8833	0.8885	0.9413	0.9891	0.7979
	900.	0.8518	0.7675	0.8748	0.9850	0.9974		900.	0.6428	0.4800	0.5294	0.8489	0.9784		900.	0.8833	0.8884	0.9414	0.9921	0.7979
	2100.	0.8365	0.7725	0.8764	0.9853	0.9975		2100.	0.5233	0.4759	0.5624	0.8553	0.9795		2100.	0.8833	0.8882	0.9416	0.9924	0.7979
33	300.	0.9162	0.8356	0.8874	0.9834	0.9970	48	300.	0.2748	0.3547	0.5568	0.8354	0.9777	63	300.	0.8387	0.8423	0.8880	0.9734	0.7978
	900.	0.9192	0.8440	0.8697	0.9839	0.9970		900.	0.2570	0.3401	0.5671	0.8468	0.9784		900.	0.8386	0.8423	0.8880	0.9759	0.7978
	2100.	0.9204	0.8481	0.8705	0.9841	0.9970		2100.	0.2361	0.3102	0.5255	0.8461	0.9786		2100.	0.8386	0.8423	0.8881	0.8781	0.7978
34	300.	0.6194	0.6710	0.8102	0.9751	0.9959	49	300.	0.1125	0.3120	0.7253	0.9008	0.9852	64	300.	0.4634	0.4947	0.6630	0.9217	0.7970
	900.	0.6346	0.6787	0.8131	0.9759	0.9960		900.	0.1076	0.3027	0.7428	0.9034	0.9856		900.	0.4653	0.4946	0.6629	0.9231	0.7970
	2100.	0.6379	0.6833	0.8359	0.9766	0.9960		2100.	0.1058	0.2998	0.7619	0.9068	0.9861		2100.	0.4653	0.4946	0.6629	0.9247	0.7970
35	300.	0.8384	0.8499	0.8423	0.9799	0.9982	50	300.	0.6755	0.6879	0.8136	0.9170	0.9861	65	300.	0.7980	0.7979	0.7905	0.9325	0.7973
	900.	0.8468	0.8591	0.8453	0.9803	0.9982		900.	0.6919	0.7045	0.8258	0.9167	0.9861		900.	0.7980	0.7980	0.7907	0.9337	0.7973
	2100.	0.8572	0.8663	0.8457	0.9805	0.9982		2100.	0.7355	0.7419	0.8421	0.9172	0.9862		2100.	0.7980	0.7981	0.7910	0.9351	0.7973
36	300.	0.5742	0.6387	0.7672	0.9685	0.9949	51	300.	0.6027	0.6190	0.6388	0.8601	0.9783	66	300.	0.7479	0.7491	0.7498	0.9062	0.9701
	900.	0.5826	0.6433	0.7694	0.9695	0.9950		900.	0.6127	0.6265	0.6609	0.8581	0.9782		900.	0.7479	0.7491	0.7499	0.9072	0.9701
	2100.	0.5958	0.6518	0.7710	0.9692	0.9951		2100.	0.6193	0.6270	0.6529	0.8548	0.9779		2100.	0.7479	0.7491	0.7500	0.9083	0.9701
37	300.	0.5984	0.6997	0.7616	0.9544	0.9943	52	300.	2.3471	2.0841	1.2472	0.9039	0.9828	67	300.	0.5842	0.5866	0.6011	0.8354	0.9620
	900.	0.5897	0.6911	0.7635	0.9666	0.9946		900.	2.1868	1.9457	1.2397	0.8999	0.9825		900.	0.5842	0.5866	0.6012	0.8363	0.9620
	2100.	0.5930	0.6887	0.7655	0.9680	0.9947		2100.	2.0529	1.8748	1.2904	0.8962	0.9822		2100.	0.5842	0.5866	0.6012	0.8372	0.9620
38	300.	0.6979	0.7265	0.7507	0.9652	0.9945	53	300.	0.0568	0.0565	0.2878	0.6660	0.9447	68	300.	0.4082	0.4038	0.3605	0.5452	0.9115
	900.	0.7081	0.7313	0.7475	0.9657	0.9945		900.	0.0655	0.0986	0.3011	0.6797	0.9482		900.	0.4082	0.4038	0.3605	0.5460	0.9115
	2100.	0.7087	0.7309	0.7446	0.9658	0.9945		2100.	0.0812	0.1188	0.3322	0.6568	0.9521		2100.	0.4082	0.4038	0.3605	0.5469	0.9115
39	300.	0.6189	0.6514	0.6842	0.9535	0.9933	54	300.	0.1198	0.1347	0.1853	0.3798	0.8554	69	300.	0.4119	0.4096	0.3845	0.1847	0.7333
	900.	0.6708	0.6919	0.6882	0.9559	0.9935		900.	0.1300	0.1447	0.2005	0.3930	0.8668		900.	0.4119	0.4096	0.3845	0.1858	0.7333
	2100.	0.7238	0.7276	0.6915	0.9572	0.9937		2100.	0.1588	0.1745	0.2342	0.4075	0.8791		2100.	0.4119	0.4096	0.3845	0.1869	0.7333
40	300.	0.7126	0.8325	0.7430	0.9627	0.9945	55	300.	0.1688	0.2096	0.4876	0.7560	0.9609	70	300.	1.0737	1.0727	1.0621	1.0583	0.6878
	900.	0.6623	0.8179	0.7472	0.9648	0.9946		900.	0.1755	0.2178	0.5053	0.7602	0.9615		900.	1.0737	1.0727	1.0621	1.0584	0.6878
	2100.	0.6589	0.8232	0.7487	0.9655	0.9947		2100.	0.1877	0.2326	0.5349	0.7681	0.9628		2100.	1.0737	1.0727	1.0621	1.0600	0.6878