Comitato Nazionale Energia Nucleare

FAST REACTOR CROSS SECTION LIBRARIES UP-DATING: ORIGINAL AND ADJUSTED ENDF/B-III DATA IN BONDARENKO FORMAT

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1. - INTRODUCTION

Du musst versthen!
Aus Eins mach zehn,
Und Zwei lass gehn,
Und Drei mach gleich,
So bist du reich.
Verlier die Vier!
Aus Fünf und Sechs -
So sagt die Hex -
Mach ists vollbracht:
Und Neun ist Eins,
Und Zehn ist Keins.
Das ist das Hexen - Einmaleins! /1/

It is getting more and more difficult for reactor physicists and designers to identify the hidden "sigillum Saturni" in the huge collections of data for neutronics calculations which pile-up year after year. Thus, there is strong necessity of both frequent critical revisions of the work already done and simply defined up-datings, as far as possible in the framework of standard processing procedures.

In this report we will be mainly concerned with revisions and up-datings, based on ENDF/B version 3, of fast reactor neutron cross sections libraries in the so-called "Bondarenko" format /2/.

As a background for the present work a number of basic choices were outlined in a review report /3/, and reference to previous work details can be found in /4/.

To summarize the present situation we can briefly recall:

a) the ENDF/B data and file format were generally adopted at CNEN /3/;

b) it was suggested /3/ a methodology of coupled use of both the ultrafine groups /5/ and the self-shielding factors /2/ philosophies;

c) a number of codes were implemented and in particular the ETOX-1DX /6, 7/ codes system (see paragraph 2), for handling the Bondarenko format;

d) for the best use of the methodology mentioned in b), a common energy group structure was adopted, based on half lethargy widths, for both libraries based or on self-shielding factors or ultrafine groups;

e) cross section adjustments in the energy structure adopted and for the most recent ENDF/B data, were derived for a few relevant isotopes from a correlation with high-accuracy benchmark integral experiments (see paragraph 3);

f) the interfaces previously developed /4/ with neutronics codes are still used, but a new code (1DX) is introduced to process cross section data, beside the PRAVDA code /8/.

2. - USE OF THE ETOX CODE AND THE GENERATION OF MULTIGROUP CROSS SECTIONS.

A number of minor modifications were necessary to run successfully the ETOX-3 code /7/. The modifications are mainly related to the increased dimension of version 3 of ENDF/B with respect to previous versions. In particular, the U-235 resolved resonances data and the number of points for the iron σ_t required special treatment. Other modifications are related to the possibility of dealing with the multilevel Breit-Wigner formalism.

The following ENDF/B version 3 materials were processed: U-234, U-235, U-238, Pu-239, Pu-240, Pu-241, Pu-242, Mo-98, Ta-181, Ta-182, Cu, Mn-55, Fe, Cr, Al-27, Na-23, O-16, C-12, B-10, B-11, Au-197. In the same collection, it was thought necessary to include Fe, Cr, Ni derived from ENDF/B version 1, in view of the unsatisfactory results so far obtain with the corresponding version 3 materials /9/.

Self-shielding factors were generated corresponding to the following values of the potential cross section: .01 b, 10 b, 100 b and 1000 b. Temperature T dependence was introduced considering 3 values of T: 300 K, 900 K and 2100 K.

Both infinite dilution cross sections and self-shielding factors were generated in the multigroup energy structure given in Table I, based on half-lethargy widths. The same multigroup structure was used in all the calculations in which the ultra-

fine group methodology was used as it is indicated in a companion report, dealing with such methodology /10/. The use of this multigroup structure prevents further use of the original ABBN library or KFK data /4/. On the other side, the completness of the ENDF/B files will provide the necessary replacements. Tables for all the materials are given in Appendix I.

3. - ADJUSTED CROSS SECTIONS.

Correlation between integral experimental data and multigroup cross sections has become a routine way to "up-date" neutron cross sections libraries in many leading Fast Reactor Programs abroad (UK, France, Japan). From our side, we used the integral benchmark experiments performed in ZPR-6 Assembly 7 and in SNEAK Assemblies 7A and 7B to adjust some of the previously mentioned materials derived from ENDF/B version 3. In particular K_{eff} and clean reaction rates ratios (^{238}U captures to ^{239}Pu fissions, ^{238}U fissions to ^{239}Pu fissions and ^{235}U fissions to ^{239}Pu fissions) experiments performed in the three assemblies were used to adjust the ^{238}U σ_c, σ_f and σ_{in}, the ^{239}Pu σ_f and fission spectrum, and the ^{235}U fission cross section /11/. The main trends of the adjustments are well justified if compared with recent independent evaluations. Moreover if we consider the following sequence of successive steps:

a) Use of ENDF/B version 1 (released 1970);
b) Adjustments of ENDF/B-1 with ZPR-6 Assembly 7 experimental results (1971-1972) /12, 4/;
c) Use of ENDF/B version 3 (released 1972);
d) Adjustments of ENDF/B-3 with ZPR-6 and SNEAK experimental results (1973) /11/,

we have an increasing number of consistent informations exploit-

ed in an optimal way. In fact, from step a) to b), consistency was gained with a series of highly reliable experiments. However, since the basic data were sometimes rather unsatisfactory (e.g. $^{239}Pu\ \alpha$ and $^{235}U\ \sigma_f$), the adjustments too could be questioned.

With step c) , new and more accurate data were introduced in the basic data collection. It is interesting to note that the data of step b) already indicated, independently, the trends of the new data of step c) /12/. A higher degree of sophistication and, hopefully, of confidence, was reached with step d), when new benchmark integral data were taken into account and using a more accurate set of basic data as a starting point.

Tables for the adjusted isotopes, U-238, Pu-239 and U-235 are given in Appendix II. It has to be kept in mind that the fission spectra, which must be used in connection with the data of Appendixes I and II, are Maxwellion distributions with a temperature T = 1.35 MeV in the case of U-235 and T = 1.41 MeV (adjusted value, unadjusted T = 1.46 MeV) in the case of Pu-239.

4. - INTERFACES

As previously described /4/, the neutron cross section libraries in Bondarenko format are provided in a form suitable to be processed by neutronics calculation codes of general use, via the PRAVDA code /8/.

This capability was preserved with the ENDF/B-3 data (both adjusted and unadjusted). The list of the identification numbers for the isotopes, when used with the PRAVDA code, is given in Table II.

The data are also stored in the format required by the 1DX code /7/. This was done in view of a relevant improvement in the treatment of the elastic moderation, based on the continuous slowing-down theory /13/, which gave rise to a new version of the 1DX code /14/. Since the PRAVDA code did not include any special provision for this problem, which is one of the weak points of the self-shielding method, the 1DX code will probably be used in the future.

5. - CONCLUSIONS.

With the implementation of the ETOX code on the CNEN computer environment, it was possible to generate an up-to-date library for fast reactors calculations. This was the first step in the work in progress of optimal neutron cross sections generation, the next step being the adjustment of the multigroup parameters using a statistical procedure of correlation with integral experiments. Both adjusted and unadjusted cross sections for a large number of materials, were prepared in formats compatible with the interfaces with neutronics codes in use at CNEN. Future work in this field will be devoted to the already announced ENDF/B version 4 data. For what concerns the adjustment procedures, it is thought that in the future the correlation will be applied directly to the nuclear parameters and no more to the multigroup data. This is the so called consistent method /15/, which will give much more confidence to the adjusted data, which in turn will be in the form of a "corrected" data file to be processed by any of the existing multigroup cross section generation procedures.

1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
3.2
2.8
4.0

TABLE I

Group	Lower Energy (eV)	Δu
1	6.06 x 10^6	0.5
2	3.68	"
3	2.23	"
4	1.35	"
5	0.821	"
6	0.498	"
7	0.320	"
8	0.183	"
9	0.111	"
10	67.4 x 10^3	"
11	40.9	"
12	24.8	"
13	15.0	"
14	9.12	"
15	5.53	"
16	3.36	"
17	2.04	"
18	1.23	"
19	748. x 10^0	"
20	454.	"
21	275.	"
22	101.	1.0
23	37.3	1.0
24	13.7	1.0
25	5.04	1.0
26	0.683	2.0
27	Thermal	-

TABLE II

List of elements available in Bondarenko format (number of identification for the data set in the PRAVDA format)

Number of id.	Isotope	Comments	Temperature
1	B-10	ENDF/B version 3	300 K
2	B-11	"	"
3	C-12	"	"
4	O-16	"	"
5	Na-23	"	"
6	Al-27	"	"
7	Mn	"	"
8	Cr	"	"
9	Fe	"	"
10	Cu	"	"
11	Mo	"	"
12	Mo	"	900 K
13	Mo	"	2100 K
14	Ta-181	"	300 K
15	Ta-181	"	900 K
16	Ta-181	"	2100 K
17	Ta-182	"	300 K
18	Ta-182	"	900 K
19	Ta-182	"	2100 K
20	Au-197	"	300 K
21	U-234	"	300 K
22	U-234	"	900 K
23	U-234	"	2100 K
24	U-235	"	300 K
25	U-235	"	900 K
26	U-235	"	2100 K
27	U-238	"	300 K
28	U-238	"	900 K
29	U-238	"	2100 K
30	Pu-239	"	300 K
31	Pu-239	"	900 K
32	Pu-239	"	2100 K
33	Pu-240	"	300 K
34	Pu-240	"	900 K
35	Pu-240	"	2100 K
36	Pu-241	"	300 K

follow TABLE II

[illegible]	Pu-242	ENDF/B version 3	300 K
[illegible]	Pu-242	"	900 K
[illegible]	Pu-242	"	2100 K
[illegible]	U-235-M	Modified ENDFB-3	300 K
41	U-235-M	"	900 K
42	U-235-M	"	2100 K
43	U-238-M	"	300 K
44	U-238-M	"	900 K
45	U-238-M	"	2100 K
46	Pu-239-M	"	300 K
47	Pu-239-M	"	900 K
48	Pu-239-M	"	2100 K
[illegible]	Fe-1	ENDF/B version 1	300 K
[illegible]	Cr-1	"	300 K
51	Ni-1	"	300 K

Note: with this data set, consistent fission spectrum must be given in input to the PRAVDA code (see text).

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APPENDIX I

ENDF/B-III Cross Sections

NOG	SIG TOT	SIG FIS	SC	SIG CAL	SIG TS	SIG EL	V EL	CSI	SIG S EL
1	1.5[illegible]	0.0	0.0	[illegible]	0.1998	[illegible]	[illegible]	0.11150	0.4619
2	1.631[illegible]	0.0	0.0	[illegible]	[illegible]	1.147[illegible]	0.2774	0.14[illegible]20	[illegible]
3	2.022[illegible]	0.0	0.0	[illegible]	[illegible]	1.52[illegible]	0.196[illegible]	0.16280	0.5[illegible]
4	2.07[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	2.521[illegible]	0.0	0.0	[illegible]	[illegible]	2.2050	0.1453	0.17290	0.7623
6	[illegible]	0.0	0.0	[illegible]5767	0.0	3.2061	0.0913	0.18[illegible]60	1.1997
7	4.0179	0.0	0.0	[illegible]	0.0	3.7319	0.0676	0.18860	1.4073
8	4.[illegible]	0.0	0.0	1.3570	0.0	3.5418	0.0676	0.18860	1.3392
9	4.0414	0.0	0.0	1.7351	0.0	3.1063	0.0676	0.18860	1.1715
10	4.[illegible]	0.0	0.0	2.1179	0.0	2.[illegible]313	0.0676	0.18860	1.0301
11	5.097[illegible]	0.0	0.0	2.2016	0.0	2.4955	0.0676	0.18860	0.9411
12	5.84[illegible]	0.0	0.0	3.2904	0.0	2.3509	0.0676	0.18860	0.8864
13	6.4882	0.0	0.0	4.2187	0.0	2.2695	0.0676	0.18860	0.8555
14	7.6780	0.0	0.0	5.4178	0.0	2.2402	0.0676	0.18860	0.8449
15	9.2405	0.0	0.0	7.0207	0.0	2.2198	0.0676	0.18860	0.8372
16	11.2765	0.0	0.0	9.0056	0.0	2.2108	0.0676	0.18860	0.8318
17	13.9065	0.0	0.0	11.6996	0.0	2.2059	0.0676	0.18860	0.8323
18	17.2929	0.0	0.0	15.0896	0.0	2.2033	0.0676	0.18860	0.8310
19	21.6492	0.0	0.0	19.4479	0.0	2.2003	0.0676	0.18860	0.8298
20	27.2445	0.0	0.0	25.0445	0.0	2.2000	0.0676	0.18860	0.8297
21	34.4381	0.0	0.0	32.2381	0.0	2.2000	0.0676	0.18860	0.8297
22	49.6616	0.0	0.0	47.4016	0.0	2.2000	0.0676	0.18860	0.4149
23	80.5394	0.0	0.0	78.3394	0.0	2.2000	0.0676	0.18860	0.4149
24	131.5512	0.0	0.0	129.3512	0.0	2.2000	0.0676	0.18860	0.4149
25	215.7217	0.0	0.0	213.5217	0.0	2.2000	0.0676	0.18860	0.4149
26	468.7842	0.0	0.0	466.5840	0.0	2.2000	0.0676	0.18860	0.2074
27	13658.75	0.0	0.0	13656.55	0.0	2.2000	0.0676	0.18860	0.0470

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.015	0.069	0.058	0.036	0.016	0.007	0.003	0.001	0.000	0.000	0.000	0.0
2	0.010	0.056	0.014	0.007	0.003	0.001	0.000	0.000	0.000	0.0	0.0	0.0
3	0.005	0.030	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.025	0.005	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	[illegible]	[illegible]	0.0	[illegible]	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	[illegible]	0.0	0.0	[illegible]	0.0	0.0	0.0	0.0	0.0	0.
22	0.0	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	[illegible]	0.0	0.0	[illegible]	0.0	0.0	[illegible]	0.0	0.0	0.0	[illegible]
24	0.0	0.0	[illegible]	0.0	[illegible]	[illegible]	0.0	0.0	0.0	[illegible]	0.0	[illegible]
25	0.0	0.0	0.0	0.0	[illegible]	0.0	[illegible]	0.0	0.0	0.0	[illegible]	[illegible]
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.	[illegible]	[illegible]	[illegible]	[illegible]

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA [illegible]

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NOG				
2	1.000	0.995	0.995	0.997
3	1.000	0.992	0.991	0.997
4	1.000	0.990	0.958	0.953
5	1.000	1.000	0.999	0.992
6	1.000	0.999	0.994	0.976
7	1.000	1.000	1.000	0.999
8	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	0.999
12	1.000	1.000	0.999	0.998
13	1.000	1.000	0.999	0.997
14	1.000	1.000	0.998	0.996
15	1.000	1.000	0.998	0.996
16	1.000	1.000	0.998	0.996
17	1.000	0.999	0.997	0.995
18	1.000	0.999	0.997	0.995
19	1.000	0.999	0.997	0.995
20	1.000	0.999	0.995	0.995
21	1.000	0.999	0.996	0.995
22	0.999	0.993	0.984	0.980
23	0.998	0.991	0.982	0.980
24	0.998	0.988	0.981	0.980
25	0.996	0.986	0.980	0.980
26	0.975	0.935	0.923	0.921
27	0.312	0.251	0.243	0.242

TOTAL SELF-SHIELDING FACTORS

NOG				
2	1.000	1.000	0.998	0.990
3	0.997	0.998	0.993	0.969
4	0.998	0.999	0.998	0.993
5	1.001	0.999	0.994	0.973
6	1.001	0.999	0.994	0.980
7	1.001	1.000	1.000	0.999
8	1.001	1.000	1.000	1.000
9	1.001	1.000	1.000	1.000
10	1.001	1.000	1.000	1.000
11	1.001	1.000	1.000	0.999
12	1.001	1.000	0.999	0.998
13	1.000	1.000	0.998	0.996
14	1.000	1.000	0.998	0.995
15	1.000	0.999	0.997	0.994
16	1.000	0.999	0.996	0.993
17	1.000	0.999	0.996	0.993
18	1.000	0.999	0.995	0.992
19	1.000	0.998	0.994	0.991
20	1.000	0.998	0.993	0.991
21	1.000	0.998	0.993	0.991
22	0.998	0.988	0.964	0.951
23	0.997	0.982	0.965	0.961
24	0.995	0.978	0.964	[illegible]

25	0.993	0.973	0.962	0.960
26	0.950	0.877	0.855	0.852
27	0.146	0.112	0.108	0.107

ELASTIC SELF-SHIELDING FACTORS

NOG				
2	1.000	0.995	0.993	0.985
3	1.000	0.997	0.989	0.972
4	1.000	0.991	0.989	0.986
5	1.000	1.000	0.997	0.985
6	1.000	1.000	0.998	0.992
7	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000
12	1.000	1.000	1.000	1.000
13	1.000	1.000	1.000	1.000
14	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	1.000
17	1.000	1.000	1.000	1.000
18	1.000	1.000	1.000	1.000
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000

6-11-3 11.31

NOG	SIG TOT	SIG FIS	NU	SIG CAP	SIG IN	SIG EL	MU EL	CSI	SIG X EL
1	1.4735	0.0	0.0	0.0006	0.2044	1.2657	0.3433	0.11130	0.6047
2	1.5695	0.0	0.0	0.0	0.0539	1.4557	0.2029	0.14650	0.6165
3	1.6035	0.0	0.0	0.0	0.0091	1.5944	0.1299	0.15990	0.5593
4	2.0669	0.0	0.0	0.0	0.0	2.0669	0.0959	0.16610	0.5666
5	2.6752	0.0	0.0	0.0	0.0	2.6752	0.1533	0.15620	0.8355
6	3.1044	0.0	0.0	0.0	0.0	3.1044	0.2103	0.14510	0.9004
7	4.4216	0.0	0.0	0.0	0.0	4.4216	0.1397	0.14890	1.3166
8	3.8783	0.0	0.0	0.0	0.0	3.8783	0.1238	0.16100	1.2499
9	4.1886	0.0	0.0	0.0	0.0	4.1886	0.0812	0.16880	1.4143
10	4.4716	0.0	0.0	0.0	0.0	4.4716	0.0616	0.17240	1.5420
11	4.6936	0.0	0.0	0.0	0.0	4.6936	0.0611	0.17250	1.6195
12	4.9150	0.0	0.0	0.0	0.0	4.9150	0.0611	0.17250	1.6972
13	6.5951	0.0	0.0	0.0017	0.0	6.5934	0.0611	0.17250	2.2750
14	5.0258	0.0	0.0	0.0	0.0	5.0258	0.0611	0.17250	1.7341
15	5.0141	0.0	0.0	0.0	0.0	5.0141	0.0611	0.17250	1.7301
16	5.0221	0.0	0.0	0.0	0.0	5.0220	0.0611	0.17250	1.7328
17	5.0284	0.0	0.0	0.0	0.0	5.0283	0.0611	0.17250	1.7350
18	5.0310	0.0	0.0	0.0	0.0	5.0310	0.0611	0.17250	1.7359
19	5.0332	0.0	0.0	0.0	0.0	5.0332	0.0611	0.17250	1.7367
20	5.0342	0.0	0.0	0.0	0.0	5.0342	0.0611	0.17250	1.7376
21	5.0351	0.0	0.0	0.0	0.0	5.0350	0.0611	0.17250	1.7373
22	5.0356	0.0	0.0	0.0001	0.0	5.0355	0.0611	0.17250	0.8687
23	5.0359	0.0	0.0	0.0001	0.0	5.0358	0.0611	0.17250	0.8688
24	5.0361	0.0	0.0	0.0002	0.0	5.0359	0.0611	0.17250	0.8688
25	5.0362	0.0	0.0	0.0003	0.0	5.0359	0.0611	0.17250	0.8688
26	5.0365	0.0	0.0	0.0006	0.0	5.0359	0.0611	0.17250	0.4344
27	5.0536	0.0	0.0	0.0176	0.0	5.0356	0.0611	0.17250	3.0986

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.038	0.062	0.051	0.020	0.024	0.007	0.001	0.000	0.000	0.000	0.0	0.0
2	0.0	0.014	0.019	0.008	0.005	0.004	0.002	0.001	0.000	0.000	0.0	0.0
3	0.0	0.0	0.004	0.003	0.001	0.000	0.000	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA [illegible]

TEMPERATURE 300. TEMPERATURE [illegible] TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NOG				
1	1.000	0.999	1.010	1.100
2	1.000	0.996	0.987	0.925
3	1.000	0.991	0.976	0.944
4	1.000	0.999	0.979	0.926
5	1.000	1.002	1.019	1.155
6	1.000	0.999	0.991	0.965
7	0.999	0.990	0.935	0.822
8	1.000	1.000	1.000	1.001
9	1.000	1.000	1.000	0.993
10	1.000	1.000	1.000	0.994
11	1.000	1.000	1.000	0.994
12	1.000	1.000	0.998	0.994
13	0.937	0.615	0.217	0.115

TOTAL SELF-SHIELDING FACTORS

NOG				
1	1.005	0.999	0.999	0.989
2	0.992	0.999	0.997	0.975
3	0.998	0.999	0.995	0.968
4	0.998	0.997	0.991	0.960
5	1.001	0.998	0.985	0.936
6	1.001	0.999	0.995	0.981
7	1.000	0.994	0.963	0.906
8	1.001	1.000	1.000	0.998
9	1.001	1.000	1.000	0.999
10	1.001	1.000	1.000	1.000
11	1.001	1.000	1.000	1.000
12	1.001	1.000	1.000	1.000
13	0.971	0.852	0.778	0.772

ELASTIC SELF-SHIELDING FACTORS

NOG				
1	1.000	0.998	0.996	0.988
2	1.000	0.997	0.996	0.985
3	1.000	0.992	0.989	0.974
4	1.000	0.990	0.986	0.968
5	1.000	0.999	0.992	0.967
6	1.000	1.000	0.998	0.990
7	1.000	0.997	0.980	0.946
8	1.000	1.000	1.000	0.999
9	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000
12	1.000	1.000	1.000	1.000
13	0.985	0.907	0.811	0.787

C-3 12.00

NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG N EL
1	1.2522	0.0	0.0	0.0250	0.3148	0.9124	0.2908	0.11950	0.4590
2	1.6614	0.0	0.0	0.0	0.0314	1.6300	0.1827	0.13770	0.6467
3	1.8832	0.0	0.0	0.0	0.0	1.8832	0.0276	0.16370	0.6765
4	1.9326	0.0	0.0	0.0	0.0	1.9326	0.1039	0.15090	0.5833
5	2.4864	0.0	0.0	0.0	0.0	2.4864	0.1265	0.14710	0.7315
6	3.1035	0.0	0.0	0.0	0.0	3.1035	0.1155	0.14900	0.9246
7	3.6117	0.0	0.0	0.0	0.0	3.6117	0.0992	0.15170	1.0958
8	3.9944	0.0	0.0	0.0	0.0	3.9944	0.0851	0.15410	1.2308
9	4.2592	0.0	0.0	0.0	0.0	4.2592	0.0749	0.15580	1.3271
10	4.4357	0.0	0.0	0.0	0.0	4.4357	0.0680	0.15700	1.3924
11	4.5488	0.0	0.0	0.0	0.0	4.5488	0.0635	0.15770	1.4347
12	4.6192	0.0	0.0	0.0	0.0	4.6192	0.0607	0.15820	1.4612
13	4.6615	0.0	0.0	0.0	0.0	4.6615	0.0590	0.15850	1.4773
14	4.6876	0.0	0.0	0.0	0.0	4.6876	0.0579	0.15860	1.4873
15	4.7034	0.0	0.0	0.0	0.0	4.7034	0.0576	0.15870	1.4928
16	4.7128	0.0	0.0	0.0	0.0	4.7128	0.0576	0.15870	1.4958
17	4.7185	0.0	0.0	0.0	0.0	4.7185	0.0575	0.15870	1.4978
18	4.7222	0.0	0.0	0.0	0.0	4.7222	0.0575	0.15870	1.4990
19	4.7242	0.0	0.0	0.0	0.0	4.7242	0.0574	0.15870	1.4997
20	4.7261	0.0	0.0	0.0	0.0	4.7261	0.0573	0.15870	1.5004
21	4.7272	0.0	0.0	0.0	0.0	4.7272	0.0573	0.15870	1.5008
22	4.7281	0.0	0.0	0.0	0.0	4.7281	0.0572	0.15880	0.7506
23	4.7287	0.0	0.0	0.0001	0.0	4.7286	0.0571	0.15880	0.7508
24	4.7290	0.0	0.0	0.0001	0.0	4.7289	0.0570	0.15880	0.7509
25	4.7291	0.0	0.0	0.0002	0.0	4.7289	0.0569	0.15880	0.7510
26	4.7292	0.0	0.0	0.0004	0.0	4.7288	0.0567	0.15880	0.3756
27	4.7408	0.0	0.0	0.0121	0.0	4.7287	0.0562	0.15890	0.0851

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.0	0.027	0.119	0.110	0.057	0.001	0.000	0.000	0.000	0.0	0.0	0.0
2	0.0	0.0	0.0	0.314	0.011	0.003	0.002	0.001	0.000	0.000	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000.,100.,10.,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG				
1	1.000	0.997	0.982	0.821
2	1.000	1.000	1.000	1.000
3	1.000	1.000	1.000	1.000
4	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000
12	1.000	1.000	1.000	1.000
13	1.000	1.000	1.000	1.000
14	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	0.999
17	1.000	1.000	1.000	1.000
18	1.000	1.000	1.000	1.000
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.000	1.000	0.998	0.996

TOTAL SELF-SHIELDING FACTORS

NUG				
1	1.010	0.996	0.972	0.820
2	0.992	0.997	0.979	0.858
3	1.006	0.998	0.981	0.900
4	0.997	0.995	0.979	0.948
5	1.001	1.000	0.995	0.999
6	1.001	1.000	0.999	0.994
7	1.001	1.000	0.999	0.997
8	1.001	1.000	1.000	0.999
9	1.001	1.000	1.000	1.000
10	1.001	1.000	1.000	1.000
11	1.001	1.000	1.000	1.000
12	1.001	1.000	1.000	1.000
13	1.001	1.000	1.000	1.000
14	1.001	1.000	1.000	1.000
15	1.001	1.000	1.000	1.000
16	1.001	1.000	1.000	1.000
17	1.001	1.000	1.000	1.000
18	1.000	1.000	1.000	1.000
19	1.002	1.000	1.000	1.000
20	1.001	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	0.999	1.000	1.000	1.000
23	0.999	1.000	1.000	1.000
24	0.999	1.000	1.000	1.000
25	0.999	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.018	1.001	1.000	1.000

ELASTIC SELF-SHIELDING FACTORS

NUG				
1	1.000	0.997	0.983	0.879
2	1.000	0.997	0.986	0.915
3	1.000	0.997	0.988	0.942
4	1.000	0.990	0.980	0.955
5	1.000	1.000	0.999	0.994
6	1.000	1.000	0.999	0.997
7	1.000	1.000	1.000	0.999
8	1.000	1.000	1.000	0.999
9	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000
12	1.000	1.000	1.000	1.000
13	1.000	1.000	1.000	1.000
14	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	1.000
17	1.000	1.000	1.000	1.000
18	1.000	1.000	1.000	1.000
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000

U-3 16.00

NUG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	1.1043	0.0	0.0	0.3641	0.0126	[illegible]	0.1541	0.10690	0.4202
2	1.8174	0.0	0.0	0.0441	0.0	1.7733	0.2309	0.08163	0.4570
3	1.5703	0.0	0.0	0.0004	0.0	[illegible]	0.1314	0.10976	0.3777
4	[illegible]	0.0	0.0	0.0	0.0	[illegible]	0.1205	0.11110	0.4377
5	4.2002	0.0	0.0	0.0	0.0	4.2002	0.0715	0.11730	0.9850
6	3.1945	0.0	0.0	0.0	0.0	3.1945	0.2735	0.09180	0.5866
7	6.8636	0.0	0.0	0.0	0.0	6.8636	0.0057	0.12560	1.7238
8	3.5440	0.0	0.0	0.0	0.0	3.5440	-.0774	0.13610	0.9647
9	3.5622	0.0	0.0	0.0	0.0	3.5622	-.0148	0.12820	0.9130
10	3.6081	0.0	0.0	0.0	0.0	3.6081	0.0086	0.12520	0.9035
11	3.6451	0.0	0.0	0.0	0.0	3.6451	0.0218	0.12350	0.9007
12	3.6679	0.0	0.0	0.0	0.0	3.6679	0.0298	0.12250	0.8989
13	3.6816	0.0	0.0	0.0	0.0	3.6816	0.0347	0.12190	0.8977
14	3.6900	0.0	0.0	0.0	0.0	3.6900	0.0376	0.12150	0.8970
15	3.6954	0.0	0.0	0.0	0.0	3.6954	0.0394	0.12130	0.8967
16	3.6989	0.0	0.0	0.0	0.0	3.6989	0.0405	0.12120	0.8965
17	3.7010	0.0	0.0	0.0	0.0	3.7010	0.0411	0.12110	0.8964
18	3.7023	0.0	0.0	0.0	0.0	3.7023	0.0415	0.12110	0.8963
19	3.7030	0.0	0.0	0.0	0.0	3.7030	0.0418	0.12100	0.8963
20	3.7034	0.0	0.0	0.0	0.0	3.7034	0.0419	0.12100	0.8963
21	3.7037	0.0	0.0	0.0	0.0	3.7037	0.0420	0.12100	0.8962
22	3.7039	0.0	0.0	0.0	0.0	3.7039	0.0421	0.12100	0.4481
23	3.7040	0.0	0.0	0.0	0.0	3.7039	0.0421	0.12100	0.4481
24	3.7040	0.0	0.0	0.0	0.0	3.7040	0.0421	0.12100	0.4481
25	3.7040	0.0	0.0	0.0	0.0	3.7040	0.0422	0.12100	0.4481
26	3.7039	0.0	0.0	0.0	0.0	3.7039	0.0422	0.12100	0.2240
27	3.7045	0.0	0.0	0.0006	0.0	3.7039	0.0422	0.12100	0.0508

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.0	0.0	0.012	0.027	0.023	0.013	0.005	0.002	0.000	0.000	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000.,100.,10.,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG				
1	1.000	0.999	0.996	0.979
2	1.000	1.000	1.007	1.016
3	0.999	0.991	0.941	0.923
4	1.000	0.996	0.993	0.980
5	1.000	1.000	1.000	1.000
6	1.000	1.000	0.998	0.991
7	1.000	1.002	1.010	1.024

TOTAL SELF-SHIELDING FACTORS

NUG				
1	0.976	1.002	0.992	0.909
2	1.007	0.993	0.955	0.782
3	1.008	0.990	0.908	0.287
4	1.000	0.995	0.977	0.887
5	1.000	0.989	0.927	0.614
6	1.001	0.998	0.988	0.960
7	0.996	0.963	0.822	0.686

ELASTIC SELF-SHIELDING FACTORS

NUG				
1	1.000	0.999	0.996	0.960
2	1.000	0.996	0.975	0.869
3	0.999	0.992	0.950	0.606
4	1.000	0.995	0.985	0.935
5	0.999	0.994	0.981	0.889
6	1.000	0.999	0.994	0.978
7	0.998	0.981	0.900	0.795

NA-3 22.99

NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	NU EL	CSI	SIG R EL
1	1.6997	0.0	0.0	0.0624	0.8976	0.7397	0.6057	0.03480	0.1085
2	1.9830	0.0	0.0	0.0040	0.8776	1.1014	0.5065	0.04350	0.1380
3	2.4900	0.0	0.0	0.0002	0.7032	1.7866	0.4044	0.04540	0.1779
4	2.7009	0.0	0.0	0.0002	0.5177	2.1830	0.3685	0.05550	0.2425
5	3.6807	0.0	0.0	0.0002	0.5100	3.1705	0.3491	0.05720	0.3629
6	4.8441	0.0	0.0	0.0003	0.2406	4.6032	0.1495	0.07670	0.6880
7	3.4525	0.0	0.0	0.0004	0.0019	3.4502	0.0887	0.08010	0.5524
8	4.1980	0.0	0.0	0.0007	0.0	4.1973	0.0773	0.08110	0.6804
9	3.4019	0.0	0.0	0.0018	0.0	3.4001	0.0292	0.08530	0.5799
10	3.5606	0.0	0.0	0.0002	0.0	3.5603	0.0284	0.08530	0.6077
11	5.8435	0.0	0.0	0.0029	0.0	5.8406	0.0258	0.08560	0.9995
12	3.8273	0.0	0.0	0.0027	0.0	3.8246	0.0182	0.08620	0.6546
13	4.1147	0.0	0.0	0.0002	0.0	4.1145	0.0230	0.08580	0.7041
14	4.7631	0.0	0.0	0.0003	0.0	4.7628	0.0240	0.08560	0.8132
15	6.7045	0.0	0.0	0.0015	0.0	6.7031	0.0293	0.08530	1.1430
16	22.5407	0.0	0.0	0.0120	0.0	22.5287	0.0293	0.08530	3.8416
17	135.4947	0.0	0.0	0.1606	0.0	135.3341	0.0293	0.08530	******
18	7.1925	0.0	0.0	0.0265	0.0	7.1659	0.0293	0.08530	1.2219
19	3.7014	0.0	0.0	0.0088	0.0	3.6925	0.0293	0.08530	0.6296
20	3.2684	0.0	0.0	0.0377	0.0	3.2307	0.0293	0.08530	0.5560
21	3.2164	0.0	0.0	0.0070	0.0	3.2094	0.0293	0.08530	0.5471
22	3.1670	0.0	0.0	0.0068	0.0	3.1602	0.0293	0.08530	0.2691
23	3.1517	0.0	0.0	0.0115	0.0	3.1401	0.0293	0.08530	0.2677
24	3.1531	0.0	0.0	0.0131	0.0	3.1350	0.0293	0.08530	0.2673
25	3.1661	0.0	0.0	0.0294	0.0	3.1367	0.0293	0.08530	0.2674
26	3.2498	0.0	0.0	0.0853	0.0	3.1749	0.0293	0.08530	0.1353
27	5.2291	0.0	0.0	1.0959	0.0	4.1331	0.0293	0.08530	0.0322

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.069	0.292	0.251	0.155	0.081	[illegible]	0.012	0.104	0.031	0.000	0.000	0.000
2	0.136	0.274	0.243	0.143	0.058	0.017	0.059	0.004	0.007	0.001	0.000	0.000
3	0.182	0.319	0.046	0.045	0.040	0.027	0.018	0.009	0.013	0.001	0.000	0.000
4	0.179	0.337	0.0	0.0	0.0	0.0	0.0	0.001	0.000	0.000	0.000	0.0
5	0.001	0.350	0.125	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.033	0.151	0.047	0.008	0.001	0.007	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.032	0.000	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=[illegible]

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NOG				
1	1.000	1.000	1.003	1.021
2	1.000	1.000	1.011	1.069
3	1.000	0.998	0.997	0.994
4	1.000	0.994	0.998	1.000
5	1.000	1.000	0.999	0.992
6	1.000	1.000	0.998	0.989
7	1.000	1.000	1.002	1.001
8	1.000	1.000	1.000	0.999
9	0.999	0.987	0.920	0.800
10	1.000	1.000	1.000	0.994
11	0.996	0.890	0.604	0.403
12	0.998	0.977	0.857	0.648
13	1.000	1.000	1.000	0.994
14	1.000	1.000	0.999	0.996
15	1.000	0.999	0.994	0.980
16	0.986	0.895	0.691	0.559
17	0.929	0.706	0.520	0.469
18	0.999	0.991	0.952	0.898
19	1.000	1.000	0.999	0.995
20	1.005	1.005	1.005	1.005
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	0.999	0.997
27	1.000	0.976	0.847	0.650

TOTAL SELF-SHIELDING FACTORS

NOG				
1	0.961	1.002	0.959	0.951
2	1.012	0.999	0.957	[illegible]
3	1.008	0.998	0.991	0.954
4	1.007	0.998	0.987	[illegible]
5	1.004	0.997	0.985	[illegible]
6	0.995	0.989	0.922	0.774
7	1.001	0.997	0.978	[illegible]
8	1.000	0.992	0.946	[illegible]
9	1.000	1.000	0.999	[illegible]
10	0.999	1.000	1.000	1.000
11	0.999	0.919	0.767	0.701
12	0.999	1.000	1.000	[illegible]
13	0.999	1.000	1.000	[illegible]
14	0.999	1.000	0.993	[illegible]

15	0.996	0.997	0.962	[illegible]
16	0.982	0.875	0.675	[illegible]
17	0.845	0.465	0.251	[illegible]
18	0.937	0.974	0.851	[illegible]
19	0.998	1.000	0.952	[illegible]
20	1.000	1.000	1.000	[illegible]
21	1.001	1.000	1.000	[illegible]
22	[illegible]	1.000	1.000	[illegible]
23	0.937	1.000	1.000	[illegible]
24	[illegible]	1.000	1.000	[illegible]
25	0.999	1.000	1.000	[illegible]
26	0.365	1.000	1.000	[illegible]
27	1.008	0.974	0.842	[illegible]

[illegible]

NOG				
1	1.000	0.999	0.974	[illegible]
2	1.000	0.999	0.996	[illegible]
3	1.000	0.998	0.992	[illegible]
4	1.000	0.997	0.991	[illegible]
5	1.000	0.999	0.990	[illegible]
6	0.999	0.995	0.963	[illegible]
7	1.000	0.998	0.994	[illegible]
8	1.000	0.996	0.972	[illegible]
9	1.000	1.000	0.999	[illegible]
10	1.000	1.000	1.000	1.000
11	0.995	0.956	0.840	0.753
12	1.000	1.000	1.000	1.000
13	1.000	1.000	1.000	[illegible]
14	1.000	1.000	0.999	[illegible]
15	1.000	0.999	0.991	0.976
16	0.991	0.933	0.799	0.730
17	0.922	0.674	0.462	0.405
18	0.999	0.989	0.943	0.875
19	1.000	1.000	0.999	[illegible]
20	1.006	1.006	1.006	1.006
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.000	1.000	0.999	0.995

AL-3 26.98

NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	NU EL	CST	SIG * EL
1	1.9059	0.0	0.0	0.0942	0.8114	1.0003	0.5660	0.03250	0.1369
2	2.2481	0.0	0.0	0.0185	0.7510	1.4786	0.5425	0.03430	0.1462
3	2.7681	0.0	0.0	0.0022	0.4917	2.2745	0.4770	0.03920	0.1556
4	3.0309	0.0	0.0	0.0002	0.2976	2.7331	0.3730	0.04690	0.2566
5	3.3173	0.0	0.0	0.0002	0.1013	3.2159	0.3330	0.04990	0.3211
6	3.9418	0.0	0.0	0.0003	0.0	3.9415	[illegible]	0.05693	0.4483
7	4.0175	0.0	0.0	0.0008	0.0	4.0167	0.1348	0.06470	0.5200
8	4.2706	0.0	0.0	0.0008	0.0	4.2700	0.1723	0.06940	0.5929
9	6.2559	0.0	0.0	0.0023	0.0	6.2536	0.0340	0.07190	0.8991
10	6.5883	0.0	0.0	0.0022	0.0	6.5861	0.0253	0.07290	0.9604
11	2.7479	0.0	0.0	0.0016	0.0	2.7461	0.0250	0.07250	0.4036
12	8.6792	0.0	0.0	0.0104	0.0	[illegible]	0.0250	0.07290	1.2645
13	0.8809	0.0	0.0	0.0029	0.0	[illegible]	0.0250	0.07290	0.1241
14	1.3350	0.0	0.0	0.0032	0.0	1.3318	0.0250	0.07250	0.1943
15	1.7436	0.0	0.0	0.0126	0.0	1.7711	0.0250	[illegible]	0.2583
16	1.5020	0.0	0.0	[illegible]	0.0	1.4970	0.0250	[illegible]	0.2144
17	1.5177	0.0	0.0	0.0034	0.0	1.5143	0.0250	0.07290	0.2205
18	1.5314	0.0	[illegible]	[illegible]	[illegible]	[illegible]	0.0250	0.07290	0.2210
19	1.5254	0.0	[illegible]	[illegible]	[illegible]	[illegible]	0.0250	[illegible]	0.2222
20	1.5204	0.0	[illegible]	[illegible]	0.0	[illegible]	0.0250	[illegible]	0.2215
21	1.5175	0.0	[illegible]	[illegible]	0.0	1.5150	0.0250	[illegible]	[illegible]
22	1.5155	0.0	[illegible]	[illegible]	0.0	1.5124	[illegible]	[illegible]	[illegible]
23	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1105
24	1.5276	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.1106
25	1.5421	0.0	[illegible]	[illegible]	[illegible]	1.5121	[illegible]	[illegible]	0.1108
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	2.4365	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

INELASTIC SCATTERING FROM 1 TO 1**

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.040	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.021	[illegible]	[illegible]	0.002	0.001	0.000
2	0.351	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.001	0.000	0.000
3	[illegible]	[illegible]	0.117	[illegible]	[illegible]	[illegible]	0.011	[illegible]	[illegible]	0.002	0.000	0.000
4	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
5	0.0	0.0	[illegible]	[illegible]	[illegible]	0.011	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0
6	0.0	0.0	0.0	0.0	[illegible]	0.0	0.0	[illegible]	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=[illegible]

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG				
1	1.000	0.998	1.001	1.019
2	1.000	0.996	1.001	1.026
3	1.000	0.999	1.010	1.052
4	1.000	0.997	0.994	0.982
5	1.000	0.999	0.994	0.980
6	1.000	1.000	1.001	1.002
7	1.000	1.000	1.001	1.007
8	1.000	1.000	0.999	0.990
9	1.000	0.996	0.971	0.920
10	0.998	0.985	0.903	0.716
11	0.999	0.994	0.954	0.815
12	0.989	0.907	0.645	0.388
13	1.000	1.000	1.000	1.005
14	1.000	1.000	1.000	[illegible]
15	0.997	0.970	0.918	0.573
16	1.000	1.000	1.000	0.999
17	1.000	1.000	1.000	1.001
18	1.000	1.000	1.000	1.000
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	0.999
27	0.999	0.990	0.922	0.684

TOTAL SELF-SHIELDING FACTORS

NUG				
1	1.002	0.999	0.998	0.992
2	0.999	1.000	0.998	0.991
3	1.003	0.998	0.989	[illegible]
4	1.005	0.995	0.991	[illegible]
5	0.995	0.997	0.974	[illegible]
6	0.997	0.995	0.965	[illegible]
7	0.996	0.995	[illegible]	[illegible]
8	0.998	0.993	0.924	[illegible]
9	[illegible]	0.961	0.761	0.414
10	0.993	0.929	0.661	0.376
11	1.001	0.990	0.933	0.762
12	0.977	0.917	0.359	0.344
13	1.002	0.999	0.942	[illegible]

14	1.004	1.000	[illegible]	[illegible]
15	1.000	0.983	0.911	[illegible]
16	1.002	1.000	1.000	1.000
17	1.002	1.000	1.000	1.000
18	1.001	1.000	1.000	1.000
19	1.001	1.000	1.000	1.000
20	1.005	1.000	1.000	1.000
21	1.001	1.000	1.000	1.000
22	0.993	1.001	1.000	1.000
23	0.992	1.001	1.000	1.000
24	0.995	1.001	1.000	1.000
25	0.995	1.000	1.000	1.000
26	0.995	1.000	1.000	1.000
27	1.016	0.995	0.947	[illegible]

ELASTIC SELF-SHIELDING FACTORS

NGG				
1	1.000	0.997	0.996	0.996
2	1.000	0.995	0.994	0.987
3	1.000	0.997	0.991	0.984
4	1.000	0.997	0.992	0.975
5	1.000	0.995	0.984	0.957
6	1.000	0.994	0.983	0.944
7	1.000	0.997	0.981	0.932
8	0.999	0.995	0.962	0.851
9	0.998	0.980	0.875	0.537
10	0.998	0.964	0.805	0.557
11	0.999	0.995	0.963	0.858
12	0.984	0.903	0.535	0.175
13	1.000	1.000	0.996	0.944
14	1.000	1.000	0.996	0.985
15	0.999	0.991	0.947	0.874
16	1.000	1.000	1.000	1.000
17	1.000	1.000	1.000	1.000
18	1.000	1.000	1.000	1.000
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000

MN-3 54.94

NGG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	3.4592	0.0	0.0	0.0512	1.3761	2.0318	0.7095	0.01070	0.0915
2	3.7236	0.0	0.0	0.0102	1.3558	2.3576	0.6284	0.01370	0.0928
3	3.6200	0.0	0.0	0.0020	1.2436	2.3744	0.5180	0.01770	0.0923
4	3.4658	0.0	0.0	0.0026	1.0515	2.4117	0.3441	0.02410	0.1162
5	3.2110	0.0	0.0	0.0033	0.7397	2.4691	0.1184	0.03240	0.1598
6	3.2798	0.0	0.0	0.0040	0.4815	2.7943	0.0590	0.03460	0.1931
7	3.9113	0.0	0.0	0.0063	0.4002	3.5044	0.0627	0.03440	0.2413
8	5.2237	0.0	0.0	0.0097	0.3655	4.8485	0.0521	0.03480	0.3376
9	7.3162	0.0	0.0	0.0144	0.2067	7.0951	0.0388	0.03530	0.5009
10	7.4838	0.0	0.0	0.0210	0.0	7.4623	0.0238	0.03560	0.5351
11	8.9368	0.0	0.0	0.0299	0.0	8.9069	0.0138	0.03620	0.6452
12	14.1868	0.0	0.0	0.0502	0.0	14.1366	0.0122	0.03630	1.0256
13	12.7031	0.0	0.0	0.0767	0.0	12.6264	0.0122	0.03630	0.9160
14	10.2960	0.0	0.0	0.0823	0.0	10.2137	0.0122	0.03630	0.7410
15	45.7171	0.0	0.0	0.0644	0.0	45.6527	0.0122	0.03630	[illegible]
16	13.6481	0.0	0.0	0.0123	0.0	13.6358	0.0122	0.03630	[illegible]
17	271.7339	0.0	0.0	0.3434	0.0	[illegible]	0.0122	0.03630	******
18	42.2615	0.0	0.0	0.1130	0.0	42.1426	0.0122	0.03630	3.0573
19	[illegible]	0.0	0.0	[illegible]	0.0	71.3949	0.0122	0.03630	[illegible]
20	[illegible]	0.0	0.0	[illegible]	0.0	[illegible]	0.0122	0.03630	[illegible]
21	[illegible]	0.0	0.0	[illegible]	0.0	[illegible]	0.0122	0.03630	******
22	[illegible]	0.0	0.0	[illegible]	0.0	[illegible]	0.0122	0.03630	[illegible]
23	[illegible]	0.0	0.0	[illegible]	0.0	[illegible]	0.0122	0.03630	[illegible]
24	2.6227	0.0	0.0	[illegible]	0.0	[illegible]	0.0122	0.03630	[illegible]
25	[illegible]	0.0	0.0	[illegible]	0.0	1.6721	0.0122	0.03630	[illegible]
26	3.4161	0.0	0.0	[illegible]	0.0	[illegible]	0.0122	0.03630	[illegible]
27	[illegible]	0.0	0.0	[illegible]	0.0	1.7554	0.0122	0.03630	[illegible]

INELASTIC SCATTERING FROM [illegible]

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.327	0.21[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.001	0.001
2	0.077	0.336	0.17[illegible]	[illegible]	0.157	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	0.143	0.337	[illegible]	[illegible]	0.10[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.001	0.000	[illegible]
4	0.465	0.275	0.17[illegible]	[illegible]	[illegible]	[illegible]	0.017	[illegible]	[illegible]	[illegible]	0.001	0.001
5	[illegible]	0.20[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.002	0.001	0.001
6	0.244	0.234	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.101	0.259	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.151	0.1[illegible]	[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	0.012	[illegible]	[illegible]	0.002	0.001	0.001
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=[illegible]

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NOG				
1	1.000	0.998	1.001	1.012
2	1.000	0.995	0.993	0.991
3	1.000	0.992	0.992	0.992
4	1.000	0.994	0.994	0.995
5	1.000	1.000	1.000	1.001
6	1.000	1.000	0.995	0.998
7	1.000	1.000	0.997	0.990
8	1.000	1.000	0.997	0.991
9	1.000	0.999	0.996	0.989
10	0.999	0.997	0.992	0.993
11	0.998	0.985	0.943	0.902
12	0.996	0.969	0.901	0.857
13	0.995	0.961	0.864	0.850
14	0.999	0.994	0.967	0.925
15	0.955	0.749	0.460	0.321
16	0.996	0.966	0.863	0.779
17	0.879	0.606	0.451	0.421
18	0.936	0.936	0.999	0.922
19	0.675	0.325	0.196	0.175
20	0.995	0.961	0.871	0.825
21	0.601	0.334	0.251	0.236
22	0.988	0.915	0.764	0.[illegible]
23	1.000	1.000	1.035	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	0.995	0.[illegible]
26	1.000	0.999	0.991	0.965
27	0.947	0.713	0.409	0.[illegible]

TOTAL SELF-SHIELDING FACTORS

NOG				
1	1.001	0.999	0.999	[illegible]
2	1.000	1.000	1.000	1.00[illegible]
3	0.999	1.000	1.000	1.000
4	0.999	1.000	1.000	1.000
5	1.001	1.000	1.000	0.999
6	1.001	1.000	1.000	0.99[illegible]
7	1.001	1.000	0.997	0.990
8	1.001	0.999	0.996	0.987
9	1.000	0.999	0.992	0.981
10	0.946	0.976	0.943	0.740
11	0.933	0.880	0.577	0.170
12	0.955	0.717	0.282	0.041

NODE	SIG TOT	SIG FIS	NO	SIG CAT	SIG IN	SIG EL	NO EL	CSI	SIG R EL
1	3.3862	0.0	0.0	0.0647	1.1997	2.1598	0.5955	0.01576	0.1622
2	3.7019	0.0	0.0	0.0046	1.2677	2.4297	0.4998	0.01940	0.1360
3	3.5882	0.0	0.0	0.0035	0.9217	2.0631	0.4348	0.02180	0.1279
4	3.0894	0.0	0.0	0.0035	0.4736	2.6125	0.3122	0.02670	0.1995
5	2.8202	0.0	0.0	0.0036	0.0247	2.7919	0.1990	0.03110	0.1736
6	3.3445	0.0	0.0	0.0039	0.0023	3.4342	0.2268	0.03020	0.2019
7	3.2961	0.0	0.0	0.0040	0.0	3.2921	0.2311	0.02940	0.1965
8	3.9071	0.0	0.0	0.0040	0.0	3.9031	0.2123	0.03060	0.2386
9	6.2601	0.0	0.0	0.0048	0.0	6.2533	0.2009	0.03100	0.3878
10	6.3776	0.0	0.0	0.0058	0.0	6.3676	0.1656	0.03320	0.4223
11	6.6050	0.0	0.0	0.0155	0.0	6.5996	0.0309	0.03760	0.4956
12	3.3075	0.0	0.0	0.0717	0.0	3.2759	0.0126	0.03430	0.2509
13	3.1176	0.0	0.0	0.0336	0.0	3.0838	0.0126	0.03430	0.2362
14	6.3179	0.0	0.0	0.0319	0.0	6.2960	0.0129	0.03430	0.4819
15	24.6840	0.0	0.0	0.0853	0.0	24.5777	0.0129	0.03830	1.8927
16	25.9163	0.0	0.0	0.0441	0.0	25.8508	0.0129	0.03430	1.9902
17	6.4219	0.0	0.0	0.0256	0.0	9.7465	0.0126	0.03430	0.7504
18	6.0235	0.0	0.0	0.2234	0.0	5.7577	0.0129	0.02630	0.4441
19	6.9642	0.0	0.0	0.0196	0.0	6.9244	0.0125	0.03430	0.3772
20	6.6673	0.0	0.0	0.0231	0.0	6.6263	0.0129	0.03430	0.3942
21	6.5233	0.0	0.0	0.0252	0.0	6.4921	0.0130	0.03430	0.3441
22	6.4491	0.0	0.0	0.0305	0.0	6.4053	0.0126	0.03430	0.1598
23	6.4291	0.0	0.0	0.0345	0.0	6.3864	0.0126	0.03430	0.1672
24	6.4554	0.0	0.0	0.0192	0.0	6.3501	0.0126	0.03430	0.1566
25	6.5179	0.0	0.0	0.1250	0.0	6.3947	0.0126	0.03430	0.1809
26	6.7200	0.0	0.0	0.0776	0.0	6.3627	0.0129	0.03430	0.0842
27	15.3757	0.0	0.0	11.7450	0.0	3.3810	0.2129	0.03430	0.0198

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NODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	1.000	0.997	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
2	1.000	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
3	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
7	1.000	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992
8	1.000	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
9	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
10	0.995	0.986	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
11	0.992	0.936	0.736	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957
12	0.979	0.862	0.499	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915
13	0.976	0.823	0.461	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910
14	0.940	0.921	0.722	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943
15	0.949	0.717	0.399	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934
16	0.995	0.958	0.827	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954
17	0.886	0.632	0.487	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959
18	0.967	0.804	0.566	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964
19	0.722	0.412	0.263	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957
20	0.997	0.976	0.920	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991
21	0.605	0.344	0.265	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252
22	0.981	0.871	0.665	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922
23	1.000	0.999	0.994	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576
24	1.000	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
25	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

42

NODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1	0.999	0.997	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
2	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
3	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
7	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992
8	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
9	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
10	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
11	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957
12	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915	0.915
13	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910	0.910
14	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943	0.943
15	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934
16	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954
17	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959
18	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.964
19	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957
20	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991
21	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.252
22	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922	0.922
23	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576	0.576
24	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
25	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

INELASTIC SCATTERING FROM 1 TO 1XX

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.305
2	0.301	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.004	0.002
3	0.204	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.000	0.000
4	0.000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.000	0.000
5	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
6	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
7	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
8	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
9	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
10	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
11	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
12	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
13	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
14	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
15	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
16	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
17	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
18	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
19	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
20	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
21	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
22	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
23	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
24	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
25	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
26	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0
27	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000,100,10,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG				
1	1.000	0.999	1.008	1.041
2	1.000	0.997	0.997	0.999
3	1.000	0.997	0.996	0.997
4	1.000	0.991	0.990	0.992
5	1.000	1.000	1.000	1.000
6	1.000	0.998	0.987	0.969
7	0.999	0.993	0.958	0.887
8	0.996	0.962	0.822	0.679
9	0.998	0.982	0.914	0.821
10	0.996	0.979	0.895	0.773
11	0.996	0.964	0.854	0.721
12	0.995	0.984	0.928	0.849
13	0.998	0.982	0.911	0.833
14	1.000	0.998	0.986	0.967
15	0.997	0.976	0.929	0.906
16	0.999	0.994	0.976	0.966
17	1.000	0.996	0.977	0.957
18	0.973	0.806	0.453	0.297
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	0.999
26	1.000	1.000	0.998	0.994
27	0.986	0.894	0.635	0.469

TOTAL SELF-SHIELDING FACTORS

NUG				
1	1.052	0.999	0.958	0.993
2	0.998	1.000	1.000	0.999
3	0.999	1.000	0.998	0.991
4	0.998	1.001	0.997	0.991
5	0.998	0.998	0.984	0.934
6	1.000	0.991	0.931	0.859
7	0.997	0.976	0.859	0.767
8	0.996	0.971	0.844	0.695
9	0.993	0.956	0.771	0.579
10	0.985	0.979	0.819	0.749
11	0.973	0.918	0.691	0.546
12	0.994	0.988	0.927	0.741

13	0.998	0.995	0.971	[illegible]
14	0.997	0.992	0.903	[illegible]
15	0.996	0.970	0.914	[illegible]
16	0.999	0.990	[illegible]	[illegible]
17	0.998	0.998	0.943	[illegible]
18	0.997	0.996	0.967	[illegible]
19	0.999	1.000	1.000	[illegible]
20	0.999	1.000	1.000	1.000
21	0.999	1.000	1.000	1.000
22	0.999	1.000	1.000	[illegible]
23	0.999	1.000	1.000	[illegible]
24	0.999	1.000	1.000	[illegible]
25	0.999	1.000	1.000	[illegible]
26	1.000	1.000	1.000	[illegible]
27	0.976	0.854	0.590	[illegible]

ELASTIC SELF-SHIELDING FACTORS

NOG				
1	1.000	0.998	0.997	[illegible]
2	1.000	0.997	0.996	[illegible]
3	1.000	0.997	0.995	0.992
4	1.000	0.990	0.989	0.985
5	1.000	0.999	0.992	0.967
6	0.995	0.991	0.963	0.941
7	0.999	0.983	0.915	[illegible]
8	0.998	0.985	0.919	0.794
9	0.998	0.978	0.874	0.641
10	0.993	0.937	0.696	[illegible]
11	0.967	0.900	0.645	[illegible]
12	0.999	0.996	0.961	[illegible]
13	1.000	0.998	0.985	0.955
14	0.999	0.991	0.943	[illegible]
15	0.998	0.984	0.953	[illegible]
16	0.995	0.995	0.980	0.971
17	0.999	0.994	0.965	0.949
18	1.000	0.999	0.997	0.993
19	1.000	1.000	1.000	0.999
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000

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NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	2.6253	0.0	0.0	0.0714	0.5320	2.0218	0.8124	0.00680	0.0577
2	3.5743	0.0	0.0	0.0247	1.2882	2.2624	0.6776	0.01170	0.0760
3	3.3911	0.0	0.0	0.0059	1.0003	2.3849	0.4560	0.01970	0.1029
4	3.0192	0.0	0.0	0.0	0.6737	2.3372	0.2817	0.02600	0.1213
5	2.6159	0.0	0.0	0.0032	0.4308	2.1819	0.2097	0.02850	0.1246
6	2.7571	0.0	0.0	0.0051	0.0	2.7520	0.0963	0.03260	0.1797
7	3.3221	0.0	0.0	0.0050	0.0	3.3171	0.0770	0.03330	0.2212
8	3.4587	0.0	0.0	0.0061	0.0	3.4526	0.0464	0.03450	0.2379
9	3.3471	0.0	0.0	0.0055	0.0	3.3416	0.0231	0.03530	0.2359
10	5.3739	0.0	0.0	0.0086	0.0	5.3651	0.0123	0.03570	0.3829
11	4.5341	0.0	0.0	0.0377	0.0	[illegible]	0.0120	0.03570	0.3231
12	19.5074	0.0	0.0	0.0214	0.0	[illegible]	0.0120	0.03570	1.3910
13	2.3892	0.0	0.0	[illegible]	0.0	[illegible]	0.0122	0.03570	0.1702
14	4.6593	0.0	0.0	[illegible]	0.0	[illegible]	[illegible]	0.03570	0.3461
15	12.9990	0.0	0.0	0.0271	0.0	[illegible]	0.0120	0.03570	0.9260
16	6.9232	0.0	0.0	[illegible]	0.0	[illegible]	[illegible]	0.03570	[illegible]
17	7.6477	0.0	0.0	[illegible]	0.0	[illegible]	0.0120	0.03570	0.5558
18	9.3740	0.0	[illegible]	[illegible]	0.0	[illegible]	[illegible]	0.03570	[illegible]
19	9.9623	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	10.2212	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.2034
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.052	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0	0.0
2	0.087	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.002	0.001	0.000
3	0.135	0.094	0.135	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.002	0.001	[illegible]
4	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.000	0.0	0.0
5	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.011	0.001	0.000	0.000
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0 [illegible]

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG				
1	1.000	0.999	1.002	1.010
2	1.000	0.999	0.998	0.996
3	1.000	0.999	0.994	0.990
4	1.000	1.000	1.000	0.999
5	1.000	1.000	1.002	1.009
6	1.000	1.000	1.001	1.007
7	1.000	1.000	1.001	1.005
8	1.000	1.000	1.001	0.990
9	1.000	1.000	1.002	1.002
10	1.000	0.999	0.997	0.997
11	0.998	0.981	0.887	0.744
12	0.984	0.894	0.701	0.554
13	0.999	0.989	0.924	0.770
14	0.995	0.987	0.919	0.756
15	0.997	0.975	0.890	0.913
16	0.995	0.995	0.971	0.935
17	1.000	0.993	0.956	0.990
18	1.000	0.998	0.991	0.982
19	0.951	0.700	0.364	0.261
20	1.000	1.000	0.999	0.999
21	1.000	1.000	1.000	0.999
22	1.000	1.000	0.999	0.999
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	0.999	0.999
27	0.994	0.916	0.730	[illegible]

TOTAL SELF-SHIELDING FACTORS

NUG				
1	1.003	1.000	0.999	[illegible]
2	1.006	0.995	0.999	[illegible]
3	1.007	1.003	0.992	[illegible]
4	0.970	0.995	0.977	[illegible]
5	1.025	0.996	0.944	0.727
6	1.039	0.957	0.907	[illegible]
7	0.974	0.991	0.850	[illegible]
8	0.999	0.991	[illegible]	[illegible]
9	0.997	0.965	[illegible]	[illegible]
10	0.994	0.943	0.745	[illegible]
11	0.999	0.995	0.958	[illegible]
12	0.954	0.727	0.435	[illegible]

13	[illegible]	0.998	0.987	0.937
14	0.995	0.991	[illegible]	[illegible]
15	[illegible]	0.964	0.853	[illegible]
16	[illegible]	0.996	[illegible]	[illegible]
17	1.000	1.000	[illegible]	[illegible]
18	1.000	1.000	[illegible]	[illegible]
19	0.995	0.974	0.957	[illegible]
20	1.000	1.000	[illegible]	[illegible]
21	1.000	1.000	[illegible]	[illegible]
22	1.000	1.000	[illegible]	[illegible]
23	1.000	1.000	[illegible]	[illegible]
24	1.000	1.000	1.000	[illegible]
25	1.000	1.000	1.000	[illegible]
26	0.999	1.000	1.000	[illegible]
27	0.992	0.927	[illegible]	[illegible]

[illegible] FACT [illegible]

N. G				
1	1.000	0.999	[illegible]	[illegible]
2	1.000	0.999	[illegible]	[illegible]
3	1.000	0.998	[illegible]	0.975
4	1.000	0.997	0.992	[illegible]
5	1.000	0.996	0.966	[illegible]
6	0.999	0.994	0.952	[illegible]
7	0.999	0.990	0.927	[illegible]
8	0.999	0.990	0.935	[illegible]
9	0.998	0.982	0.867	[illegible]
10	0.997	0.971	0.845	[illegible]
11	1.000	0.999	0.994	[illegible]
12	0.977	0.843	0.592	[illegible]
13	1.000	0.999	0.993	0.967
14	1.000	0.997	0.978	0.940
15	0.993	0.981	0.918	0.802
16	1.000	0.999	0.993	0.985
17	1.000	1.000	0.999	0.997
18	1.000	1.000	0.999	0.999
19	1.010	1.008	1.005	1.004
20	1.000	1.000	1.000	0.999
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.001	1.001	1.001	1.001

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NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	3.8074	0.0	0.0	0.0989	1.5409	2.1677	0.7688	0.00730	0.0671
2	3.7525	0.0	0.0	0.0687	1.5907	2.0931	0.6711	0.01050	0.0631
3	3.2902	0.0	0.0	0.0389	1.3731	1.8782	0.4837	0.01640	0.0676
4	3.1595	0.0	0.0	0.0164	0.7911	2.3520	0.3224	0.02150	0.1012
5	3.4808	0.0	0.0	0.0172	0.2755	3.1932	0.1893	0.02570	0.1644
6	4.0189	0.0	0.0	0.0140	0.0198	3.9851	0.1503	0.02700	0.2150
7	4.6528	0.0	0.0	0.0164	0.0	4.6364	0.1343	0.02750	0.2549
8	4.8380	0.0	0.0	0.0230	0.0	4.8150	0.0685	0.02960	0.2848
9	4.6481	0.0	0.0	0.0270	0.0	4.6210	0.0419	0.03040	0.2812
10	6.5022	0.0	0.0	0.0301	0.0	6.4721	0.0269	0.03090	0.3999
11	7.2712	0.0	0.0	0.0374	0.0	7.2339	0.0179	0.03120	0.4511
12	11.8531	0.0	0.0	0.0547	0.0	11.7985	0.0141	0.03130	0.7347
13	13.4363	0.0	0.0	0.0893	0.0	13.3470	0.0121	0.03140	0.8373
14	15.0342	0.0	0.0	0.1475	0.0	14.8869	0.0109	0.03140	0.9351
15	14.8634	0.0	0.0	0.2100	0.0	14.6533	0.0106	0.03140	0.9207
16	12.7637	0.0	0.0	0.2162	0.0	12.5675	0.0106	0.03140	0.7896
17	31.1669	0.0	0.0	0.5710	0.0	30.5930	0.0106	0.03140	1.9225
18	6.7461	0.0	0.0	0.1122	0.0	6.6757	0.0106	0.03140	0.4169
19	5.5823	0.0	0.0	0.0444	0.0	5.5377	0.0106	0.03140	0.3440
20	15.7030	0.0	0.0	[illegible]	0.0	12.0069	0.0106	0.03140	0.7544
21	6.9219	0.0	0.0	[illegible]	0.0	[illegible]	0.0106	0.03140	0.4322
22	8.2759	0.0	0.0	[illegible]	0.0	7.9995	0.0106	0.03140	0.2514
23	8.3441	0.0	0.0	0.0700	0.0	6.3641	0.0106	0.03140	0.2745
24	9.4024	0.0	0.0	0.1112	0.0	9.2616	0.0106	0.03140	0.2916
25	5.4073	0.0	0.0	0.2032	0.0	3.2041	0.0106	0.03140	0.2577
26	8.1599	0.0	0.0	0.4599	0.0	7.7000	0.0106	0.03140	0.1239
27	21.1643	0.0	0.0	13.4730	0.0	7.6953	0.0106	0.03140	0.0274

INELASTIC SCATTERING FROM 1 TO 1**

I/K*	0	1	2	3	4	5	6	7	8	9	10	11
1	0.623	0.242	0.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.001	0.001
2	0.250	0.[illegible]	0.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.001	0.001
3	0.052	0.[illegible]	0.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.001	0.001	0.000
4	0.012	0.[illegible]	0.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.001	0.000	0.000
5	0.0	0.[illegible]	0.0[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	0.0	0.0	0.0	0.000[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.000	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA [illegible]

TEMPERATURE 300. TEMPERATURE [illegible] TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG				
2	1.000	0.995	0.993	0.991
3	1.000	0.992	0.990	0.988
4	1.000	0.991	0.991	0.995
5	1.000	1.000	0.999	0.997
6	1.000	1.000	1.000	0.999
7	1.000	1.000	0.999	0.995
8	1.000	1.000	1.000	1.001
9	1.000	1.000	1.000	1.000
10	1.000	0.998	0.997	0.995
11	1.000	1.000	1.000	1.000
12	0.997	0.981	0.941	0.920
13	0.991	0.935	0.816	0.758
14	0.978	0.861	0.676	0.602
15	0.954	0.760	0.531	0.440
16	0.956	0.764	0.528	0.446
17	0.886	0.552	0.302	0.229
18	0.981	0.879	0.709	0.631
19	1.000	1.000	1.000	1.000
20	0.719	0.311	0.136	0.097
21	1.000	1.000	1.000	1.000
22	0.978	0.840	0.546	0.419
23	1.000	1.000	0.999	0.997
24	1.000	1.000	0.999	0.996
25	1.001	1.001	1.001	1.001
26	1.000	1.000	0.998	0.995
27	0.986	0.881	0.639	0.515

TOTAL SELF-SHIELDING FACTORS

NUG				
2	1.000	1.000	1.000	0.999
3	0.999	1.001	1.000	0.997
4	0.999	1.000	1.000	0.994
5	1.001	1.000	0.999	0.998
6	1.001	1.000	0.999	0.996
7	1.001	1.000	0.999	0.998
8	1.001	1.000	1.000	1.000
9	1.001	1.000	1.000	1.000
10	0.999	0.982	0.906	0.803
11	0.997	0.964	0.824	0.641
12	0.993	0.942	0.809	0.727

```
13   0.970 0.894 0.620 0.442
14   0.958 0.766 0.527 0.402
15   0.915 0.644 0.367 0.332
16   0.914 0.634 0.410 0.329
17   0.821 0.454 0.291 0.250
18   0.962 0.805 0.652 0.605
19   1.000 0.999 0.996 0.989
20   0.721 0.492 0.425 0.401
21   0.999 1.000 0.999 0.996
22   0.998 0.990 0.976 0.971
23   0.999 1.000 1.000 0.999
24   1.000 1.000 1.000 1.000
25   1.000 1.000 1.000 1.000
26   0.998 1.000 1.000 1.000
27   0.983 0.860 0.642 0.557
```

ELASTIC SELF-SHIELDING FACTORS

```
NUG
  2   1.000 0.995 0.994 0.993
  3   1.000 0.992 0.992 0.992
  4   1.000 0.991 0.989 0.987
  5   1.000 1.000 0.999 0.997
  6   1.000 1.000 0.995 0.995
  7   1.000 1.000 1.000 0.999
  8   1.000 1.000 1.000 1.000
  9   1.000 1.000 1.000 1.000
 10   0.999 0.991 0.969 0.835
 11   0.993 0.982 0.902 0.757
 12   0.996 0.965 0.886 0.424
 13   0.999 0.919 0.747 0.621
 14   0.979 0.863 0.656 0.534
 15   0.995 0.770 0.524 0.299
 16   0.955 0.763 0.520 0.411
 17   0.903 0.615 0.372 0.325
 18   0.981 0.880 0.723 0.552
 19   1.000 1.000 0.999 0.995
 20   0.864 0.651 0.564 0.535
 21   1.000 1.000 0.999 0.995
 22   1.000 1.000 0.998 0.997
 23   1.000 1.000 1.000 1.000
 24   1.000 1.000 1.000 1.000
 25   1.002 1.002 1.002 1.002
 26   1.000 1.000 1.000 1.000
 27   1.001 1.001 1.001 1.001
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[illegible] 47.91
*************************************************************************************************************
* NUG *  SIG TOT  *  SIG FIS  *   NU   *  SIG CAT  *  SIG IN  *  SIG EL  *  MU EL  *   CSI   * SIG R EL *
*************************************************************************************************************
*  1  *   4.1461  *   0.0     *  0.0   *   0.0043  *  1.9344  *   2.2077 * 0.6994 * 0.00620 *  0.0376  *
*  2  *   3.7774  *   0.0     *  0.0   *   0.0133  *  1.7218  *   1.6425 * 0.6018 * 0.00820 *  0.0436  *
*  3  *   4.2820  *   0.0     *  0.0   *   0.3232  *  1.5045  *   2.4523 * 0.5868 * 0.00950 *  0.0455  *
*  4  *   5.1634  *   0.0     *  0.0   *   0.0235  *  1.2196  *   3.9140 * 0.5747 * 0.00980 *  0.0686  *
*  5  *   6.3174  *   0.0     *  0.0   *   0.0334  *  0.4027  *   5.5563 * 0.5334 * 0.00960 *  0.1132  *
*  6  *   7.4509  *   0.0     *  0.0   *   0.0413  *  0.0     *   7.4095 * 0.4575 * 0.01120 *  0.1657  *
*  7  *   8.4107  *   0.0     *  0.0   *   0.0347  *  0.0     *   8.3760 * 0.4333 * 0.01370 *  0.2302  *
*  8  *   8.9116  *   0.0     *  0.0   *   0.0322  *  0.0     *   8.8791 * 0.2324 * 0.01580 *  0.2809  *
*  9  *   9.4494  *   0.0     *  0.0   *   0.0364  *  0.0     *   9.4130 * 0.1622 * 0.01730 *  0.3250  *
* 10  *   9.6105  *   0.0     *  0.0   *   0.0479  *  0.0     *   9.5626 * 0.1139 * 0.01830 *  0.3492  *
* 11  *   8.9263  *   0.0     *  0.0   *   0.0673  *  0.0     *   8.8590 * 0.0740 * 0.01910 *  0.3381  *
* 12  *   8.3140  *   0.0     *  0.0   *   0.0955  *  0.0     *   8.2185 * 0.0471 * 0.01960 *  0.3227  *
* 13  *   7.8549  *   0.0     *  0.0   *   0.1337  *  0.0     *   7.7212 * 0.0304 * 0.02000 *  0.3045  *
* 14  *   7.5571  *   0.0     *  0.0   *   0.1413  *  0.0     *   7.3757 * 0.0201 * 0.02020 *  0.2578  *
* 15  *   7.3640  *   0.0     *  0.0   *   0.2335  *  0.0     *   7.1304 * 0.0146 * 0.02030 *  0.2896  *
* 16  *   9.1426  *   0.0     *  0.0   *   0.3034  *  0.0     *   8.8394 * 0.0113 * 0.02040 *  0.3602  *
* 17  *   9.5462  *   0.0     *  0.0   *   0.4403  *  0.0     *   9.1060 * 0.0093 * 0.02040 *  0.3718  *
* 18  *   6.9073  *   0.0     *  0.0   *   0.2968  *  0.0     *   6.6105 * 0.0081 * 0.02040 *  0.2702  *
* 19  *   6.1958  *   0.0     *  0.0   *   1.1767  *  0.0     *   5.0191 * 0.0073 * 0.02050 *  0.2053  *
* 20  *  29.0959  *   0.0     *  0.0   *   4.5197  *  0.0     *  24.5763 * 0.0069 * 0.02050 *  1.0059  *
* 21  *   6.2506  *   0.0     *  0.0   *   2.3916  *  0.0     *   3.8589 * 0.0069 * 0.02050 *  0.1579  *
* 22  *   3.6802  *   0.0     *  0.0   *   0.0034  *  0.0     *   3.6768 * 0.0069 * 0.02050 *  0.0752  *
* 23  *   3.7817  *   0.0     *  0.0   *   0.0040  *  0.0     *   3.7777 * 0.0069 * 0.02050 *  0.0773  *
* 24  *   3.8238  *   0.0     *  0.0   *   0.0224  *  0.0     *   3.8014 * 0.0069 * 0.02050 *  0.0778  *
* 25  *   5.5049  *   0.0     *  0.0   *   1.6955  *  0.0     *   3.8095 * 0.0069 * 0.02050 *  0.0780  *
* 26  *   3.8325  *   0.0     *  0.0   *   0.0202  *  0.0     *   3.8123 * 0.0065 * 0.02050 *  0.0390  *
* 27  *   4.3464  *   0.0     *  0.0   *   0.5336  *  0.0     *   3.8128 * 0.0069 * 0.02050 *  0.0088  *
*************************************************************************************************************
```

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.004	0.098	0.339	0.507	0.448	0.283	0.145	0.065	0.027	0.011	0.004	0.002
2	0.015	0.207	0.461	0.505	0.365	0.204	0.097	0.041	0.017	0.006	0.002	0.001
3	0.021	0.288	0.521	0.448	0.278	0.141	0.063	0.026	0.010	0.004	0.001	0.001
4	0.002	0.182	0.344	0.321	0.177	0.084	0.036	0.014	0.006	0.002	0.001	0.000
5	0.0	0.004	0.053	0.135	0.095	0.044	0.018	0.007	0.003	0.001	0.000	0.000
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS [illegible]

TEMPERATURE 300. — TEMPERATURE [illegible] — TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

N.G	300.				[illegible]				2100.			
1	1.000	0.993	1.001	1.004	1.000	[illegible]	1.001	1.009	1.000	0.998	1.001	1.009
2	1.000	0.995	0.995	[illegible]	1.000	[illegible]	[illegible]	0.995	1.000	0.995	0.995	0.995
3	1.000	0.992	0.990	[illegible]	1.000	[illegible]	0.990	[illegible]	1.000	0.992	0.990	0.985
4	1.000	0.990	0.995	[illegible]	1.000	[illegible]	[illegible]	[illegible]	1.000	0.990	0.988	0.985
5	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	0.999	[illegible]	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002
11	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002
12	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002
13	1.000	1.000	1.001	1.001	1.000	1.000	1.001	1.001	1.000	1.000	1.001	1.001
14	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	0.990	0.988	0.975	[illegible]	0.990	[illegible]	0.975	0.958	0.990	0.989	0.975	0.958
17	0.973	0.617	0.279	0.153	[illegible]	[illegible]	[illegible]	0.141	0.942	0.735	0.411	0.211
18	0.771	0.396	0.194	[illegible]	[illegible]	0.440	0.217	0.184	0.862	0.489	0.238	0.175
19	0.799	0.364	0.120	0.057	0.863	0.454	0.155	0.071	0.903	0.536	0.195	0.089
20	0.553	0.215	0.079	[illegible]	[illegible]	0.247	[illegible]	0.064	0.654	0.241	0.100	0.067
21	0.793	0.365	0.136	0.086	0.834	0.440	0.160	0.093	0.844	0.515	0.190	0.103
22	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
24	1.000	1.000	0.997	0.984	1.000	1.000	1.000	0.992	1.000	1.000	1.000	0.999
25	0.967	0.768	0.383	0.236	0.975	0.513	0.426	0.224	0.982	0.852	0.481	0.252
26	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
27	0.995	0.994	0.956	0.869	0.999	0.994	0.956	0.869	0.999	0.994	0.956	0.869

TOTAL SELF-SHIELDING FACTORS

N.G	300.				[illegible]				2100.			
1	1.000	1.000	1.000	0.994	1.000	1.000	1.000	0.998	1.000	1.000	1.000	0.998
2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3	0.999	0.999	0.997	0.993	0.999	0.999	0.997	0.993	0.999	0.999	0.997	0.993
4	0.999	0.999	0.998	0.995	0.999	0.999	0.998	0.995	0.999	0.995	0.998	0.995
5	1.001	1.000	0.998	0.993	1.001	1.000	0.998	0.993	1.001	1.000	0.998	0.993
6	1.000	1.000	0.997	0.994	1.000	1.000	0.997	0.994	1.000	1.000	0.997	0.994
7	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
8	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
12	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999

13	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000
14	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	0.995	0.972	0.935	1.000	0.995	0.972	0.938	1.000	0.995	0.972	0.938
17	0.776	0.506	0.387	0.156	0.901	0.521	0.395	0.168	0.847	0.537	0.400	0.212
18	0.808	0.634	0.573	0.321	0.843	0.643	0.575	0.343	0.874	0.658	0.578	0.411
19	0.874	0.713	0.670	0.662	0.910	0.735	0.673	0.662	0.934	0.759	0.678	0.663
20	0.412	0.230	0.177	0.100	0.447	0.235	0.176	0.101	0.491	0.241	0.179	0.103
21	0.803	0.562	0.488	0.317	0.855	0.588	0.492	0.318	0.842	0.621	0.498	0.320
22	0.998	1.000	1.000	[illegible]	0.998	1.000	1.000	0.999	0.994	1.000	1.000	[illegible]
23	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
24	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
25	0.979	0.878	0.755	0.723	0.984	0.895	0.762	0.723	0.988	0.917	0.773	0.725
26	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
27	0.984	0.999	0.990	0.970	0.994	0.999	0.990	0.970	0.984	0.999	0.990	0.970

ELASTIC SELF-SHIELDING FACTORS

NUG												
1	1.000	0.997	0.997	0.995	1.000	0.997	0.997	0.995	1.000	0.997	0.997	0.995
2	1.000	0.995	0.994	0.994	1.000	0.995	0.994	0.994	1.000	0.995	0.994	0.994
3	1.000	0.992	0.989	0.983	1.000	0.992	0.989	0.983	1.000	0.992	0.989	0.981
4	1.000	0.990	0.988	0.981	1.000	0.990	0.988	0.983	1.000	0.990	0.988	0.951
5	1.000	1.000	0.999	0.996	1.000	1.000	0.998	0.994	1.000	1.000	0.998	0.994
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
12	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
13	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	0.996	0.992	0.990	0.984	0.996	0.992	0.990	0.984	0.996	0.992	0.980	0.984
17	0.867	0.613	0.457	0.340	0.859	0.631	0.455	0.336	0.901	0.651	0.473	0.367
18	0.890	0.714	0.626	0.544	0.914	0.732	0.630	0.550	0.934	0.755	0.637	0.566
19	0.958	0.671	0.627	0.617	0.977	[illegible]	0.832	0.819	0.980	0.905	0.830	0.821
20	0.579	0.323	0.234	0.167	0.621	0.350	0.236	0.144	0.664	0.352	0.239	0.141
21	0.965	0.831	0.764	[illegible]	0.961	0.851	0.775	0.673	0.977	0.872	0.743	0.674
22	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

TA-1-1140.95 **

NUG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	5.2290	0.0	0.0	0.0014	2.8515	2.3760	0.8304	0.00180	0.0181
2	6.0429	0.0	0.0	0.0107	3.0030	3.0292	0.9405	0.00180	0.0156
3	6.9366	0.0	0.0	0.0392	3.1266	3.7709	0.8095	0.00210	0.0176
4	7.2146	0.0	0.0	0.0302	3.0787	4.0557	0.7052	0.00330	0.0267
5	7.1051	0.0	0.0	0.1171	2.6896	4.2983	0.5402	0.00510	0.0441
6	6.8835	0.0	0.0	0.1563	1.7537	4.9735	0.3725	0.00700	0.0696
7	6.9944	0.0	0.0	0.2066	0.8795	5.9087	0.2671	0.00820	0.0966
8	7.4442	0.0	0.0	0.2777	0.5156	6.6707	0.1996	0.00890	0.1171
9	8.2783	0.0	0.0	0.3511	0.1624	7.7649	0.1394	0.00960	0.1490
10	9.3245	0.0	0.0	0.4404	0.0	8.8841	0.0881	0.01020	0.1806
11	9.9633	0.0	0.0	0.5959	0.0	9.3674	0.0507	0.01060	0.1983
12	10.6388	0.0	0.0	0.8223	0.0	9.8165	0.0279	0.01080	0.2128
13	11.5403	0.0	0.0	1.1309	0.0	10.4093	0.0141	0.01100	0.2288
14	12.5749	0.0	0.0	1.5752	0.0	10.9997	0.0058	0.01110	0.2438
15	13.5291	0.0	0.0	2.1428	0.0	11.3863	0.0037	0.01110	0.2529
16	14.7782	0.0	0.0	3.0802	0.0	11.6983	0.0037	0.01110	0.2599
17	16.5844	0.0	0.0	4.5859	0.0	11.9985	0.0037	0.01110	0.2665
18	19.2166	0.0	0.0	6.9580	0.0	12.2586	0.0037	0.01110	0.2723
19	23.3184	0.0	0.0	10.3572	0.0	12.9613	0.0037	0.01110	0.2879
20	29.8969	0.0	0.0	14.4041	0.0	15.4928	0.0037	0.01110	0.3442
21	37.9426	0.0	0.0	19.0209	0.0	18.9217	0.0037	0.01110	0.4203
22	68.1052	0.0	0.0	32.2048	0.0	35.9004	0.0037	0.01110	0.3988
23	109.7937	0.0	0.0	56.3979	0.0	53.3958	0.0037	0.01110	0.5931
24	92.8036	0.0	0.0	76.3089	0.0	16.4947	0.0037	0.01110	0.1832
25	90.3794	0.0	0.0	76.3739	0.0	14.0055	0.0037	0.01110	0.1556
26	253.3307	0.0	0.0	231.7261	0.0	21.6046	0.0037	0.01110	0.1200
27	80.8024	0.0	0.0	74.8358	0.0	6.0666	0.0037	0.01110	0.0076

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.144	0.077	0.283	0.614	0.688	0.511	0.311	0.186	0.118	0.068	0.035	0.027
2	0.194	0.707	0.528	0.736	0.621	0.381	0.192	0.085	0.035	0.014	0.005	0.003
3	0.297	0.525	0.663	0.688	0.441	0.263	0.123	0.052	0.021	0.008	0.003	0.002
4	0.559	1.051	0.661	0.381	0.223	0.114	0.050	0.021	0.006	0.001	0.001	0.001
5	0.694	1.110	0.539	0.209	0.081	0.035	0.015	0.006	0.002	0.000	0.000	0.000
6	0.523	0.694	0.273	0.124	0.373	0.035	0.016	0.008	0.002	0.001	0.000	0.000
7	0.185	0.460	0.152	0.341	0.017	0.307	0.003	0.003	0.001	0.001	0.000	0.000
8	0.0	0.228	0.193	0.394	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.022	0.367	0.339	0.321	0.008	0.003	0.001	0.000	0.000	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACT[illegible] TO [illegible]

TEMPERATURE 300. | TEMPERATURE [illegible] | TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG												
1	1.000	0.997	0.993	0.985	1.000	0.997	0.993	0.965	1.000	0.997	0.993	0.945
2	1.000	0.994	0.985	0.971	1.000	0.994	0.986	0.971	1.000	0.994	0.986	0.971
3	1.000	0.992	0.989	0.983	1.000	0.992	0.988	0.983	1.000	0.992	0.988	0.983
4	1.000	0.991	0.990	0.989	1.000	0.991	0.990	0.989	1.000	0.991	0.990	0.989
5	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
6	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
7	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
10	0.995	0.995	0.995	0.959	0.995	0.995	0.995	0.973	0.995	0.995	0.995	0.980
11	1.000	1.000	0.998	0.936	1.000	1.000	1.000	0.962	1.000	1.000	1.000	0.977
12	1.000	0.995	0.967	0.899	1.000	1.000	1.000	0.939	1.000	1.000	1.000	0.962
13	0.999	0.993	0.951	0.838	1.000	1.000	0.996	0.896	1.000	1.000	1.000	0.928
14	0.998	0.981	0.894	0.743	1.000	0.997	0.962	0.816	1.000	1.000	1.000	0.856
15	0.995	0.957	0.796	0.567	0.998	0.985	0.893	0.664	1.000	1.000	0.960	0.697
16	0.999	0.917	0.675	0.421	0.995	0.961	0.790	0.484	0.999	0.986	0.876	0.493
17	0.980	0.861	0.550	0.285	0.990	0.922	0.668	0.322	0.995	0.960	0.761	0.308
18	0.967	0.793	0.446	0.199	0.982	0.864	0.549	0.213	0.990	0.920	0.637	0.190
19	0.946	0.712	0.363	0.158	0.968	0.799	0.446	0.162	0.981	0.863	0.522	0.146
20	0.909	0.605	0.275	0.128	0.943	0.701	0.342	0.140	0.964	0.778	0.409	0.140
21	0.870	0.492	0.173	0.075	0.913	0.600	0.238	0.100	0.938	0.688	0.307	0.129
22	0.710	0.330	0.146	0.099	0.782	0.403	0.182	0.122	0.833	0.472	0.226	0.152
23	0.462	0.192	0.079	0.051	0.516	0.223	0.093	0.058	0.572	0.256	0.109	0.068
24	0.552	0.200	0.079	0.053	0.622	0.231	0.087	0.056	0.672	0.266	0.098	0.062
25	0.414	0.171	0.102	0.085	0.472	0.184	0.104	0.086	0.543	0.207	0.110	0.089
26	0.226	0.083	0.045	0.037	0.244	0.085	0.045	0.037	0.272	0.088	0.045	0.037
27	0.922	0.652	0.401	0.327	0.922	0.652	0.401	0.327	0.922	0.652	0.401	0.327

TOTAL SELF-SHIELDING FACTORS

NUG												
1	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999
2	1.000	0.999	0.997	0.994	1.000	0.999	0.997	0.996	1.000	0.999	0.997	0.994
3	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.999	0.999	0.999	0.998
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000
8	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999
9	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
10	0.999	0.996	0.963	0.866	1.000	0.998	0.971	0.866	1.000	0.998	0.975	0.865
11	0.999	0.991	0.931	0.763	0.999	0.995	0.947	0.784	1.000	0.997	0.956	0.779
12	0.998	0.983	0.890	0.723	0.999	0.991	0.915	0.710	1.000	0.995	0.930	0.695

NOG												
13	0.996	0.969	0.830	0.650	0.998	0.982	0.863	0.625	0.999	0.990	0.884	0.596
14	0.993	0.942	0.745	0.563	0.996	0.965	0.783	0.527	0.998	0.979	0.808	0.482
15	0.986	0.892	0.627	0.449	0.992	0.932	0.663	0.404	0.995	0.956	0.684	0.347
16	0.973	0.814	0.490	0.330	0.984	0.874	0.518	0.286	0.990	0.914	0.527	0.233
17	0.950	0.705	0.353	0.220	0.970	0.786	0.372	0.186	0.981	0.844	0.367	0.147
18	0.913	0.575	0.235	0.129	0.946	0.669	0.245	0.107	0.964	0.744	0.233	0.086
19	0.860	0.450	0.157	0.075	0.908	0.544	0.162	0.064	0.930	0.626	0.151	0.054
20	0.794	0.363	0.141	0.083	0.859	0.443	0.145	0.075	0.900	0.519	0.140	0.064
21	0.765	0.345	0.170	0.128	0.834	0.421	0.182	0.135	0.881	0.497	0.193	0.143
22	0.556	0.251	0.159	0.125	0.639	0.285	0.166	0.128	0.708	0.326	0.179	0.135
23	0.300	0.136	0.084	0.070	0.336	0.148	0.087	0.071	0.379	0.161	0.091	0.073
24	0.379	0.141	0.090	0.079	0.443	0.149	0.091	0.079	0.499	0.163	0.092	0.079
25	0.304	0.182	0.144	0.132	0.336	0.182	0.144	0.132	0.388	0.187	0.144	0.132
26	0.132	0.064	0.047	0.045	0.134	0.063	0.047	0.045	0.140	0.062	0.047	0.045
27	0.861	0.490	0.268	0.222	0.861	0.490	0.268	0.222	0.861	0.490	0.268	0.222

ELASTIC SELF-SHIELDING FACTORS

NOG												
1	1.000	0.997	0.997	0.996	1.000	0.997	0.997	0.996	1.000	0.997	0.997	0.996
2	1.000	0.995	0.992	0.989	1.000	0.995	0.992	0.989	1.000	0.995	0.992	0.989
3	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
7	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
8	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	0.995	0.994	0.992	0.980	0.995	0.995	0.995	0.991	0.995	0.995	0.995	0.995
11	1.000	0.998	0.989	0.965	1.000	1.000	1.000	0.985	1.000	1.000	1.000	0.998
12	0.999	0.995	0.973	0.933	1.000	0.999	0.992	0.963	1.000	1.000	1.000	0.983
13	0.998	0.989	0.944	0.883	1.000	0.996	0.975	0.924	1.000	1.000	0.994	0.951
14	0.997	0.976	0.895	0.810	0.999	0.989	0.940	0.857	1.000	0.996	0.972	0.891
15	0.994	0.952	0.817	0.733	0.997	0.975	0.878	0.750	0.999	0.988	0.925	0.781
16	0.987	0.908	0.704	0.569	0.993	0.946	0.791	0.606	0.996	0.969	0.841	0.623
17	0.975	0.838	0.582	0.422	0.986	0.895	0.645	0.443	0.992	0.934	0.717	0.444
18	0.952	0.732	0.416	0.266	0.972	0.812	0.486	0.272	0.983	0.869	0.554	0.263
19	0.916	0.608	0.282	0.148	0.948	0.702	0.334	0.146	0.966	0.778	0.397	0.138
20	0.874	0.527	0.260	0.172	0.918	0.616	0.299	0.175	0.944	0.694	0.344	0.174
21	0.874	0.575	0.374	0.309	0.913	0.645	0.409	0.321	0.941	0.711	0.445	0.334
22	0.726	0.423	0.298	0.254	0.786	0.456	0.315	0.268	0.831	0.514	0.338	0.284
23	0.439	0.232	0.166	0.145	0.488	0.245	0.170	0.148	0.542	0.262	0.176	0.151
24	0.653	0.428	0.358	0.337	0.702	0.443	0.361	0.338	0.738	0.460	0.366	0.341
25	0.730	0.615	0.572	0.557	0.756	0.621	0.574	0.556	0.786	0.631	0.578	0.561
26	0.387	0.273	0.247	0.244	0.401	0.274	0.247	0.244	0.422	0.276	0.247	0.244
27	1.000	0.998	0.995	0.993	1.000	0.995	0.995	0.993	1.000	0.998	0.995	0.993

[illegible]

NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG [illegible]
1	[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.0109
2	[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	0.00180	0.0142
3	[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	[illegible]	0.00210	0.0156
4	[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	0.7167	[illegible]	0.0212
5	[illegible]	0.0	0.0	[illegible]	3.3058	[illegible]	0.6175	0.00420	0.0366
6	[illegible]	0.0	0.0	[illegible]	[illegible]	[illegible]	0.4748	0.00540	0.0444
7	6.9144	0.0	0.0	3.1724	2.1923	[illegible]	0.3349	0.00730	0.0673
8	7.3292	0.0	0.0	[illegible]	1.2123	5.8326	0.2236	0.00860	0.1004
9	[illegible]	0.0	0.0	2.4122	[illegible]	[illegible]	0.1469	0.00950	0.1322
10	[illegible]	0.0	0.0	[illegible]	0.0528	[illegible]	0.0931	0.01010	0.1482
11	10.1641	0.0	0.0	[illegible]	0.0	[illegible]	0.0544	0.01050	[illegible]
12	11.2991	0.0	0.0	0.9365	0.0	10.3636	0.0304	0.01090	0.2228
13	12.6551	0.0	0.0	1.2591	0.0	11.3370	0.0152	0.01090	0.2499
14	14.7293	0.0	0.0	1.6123	0.0	12.9473	0.0060	0.01100	0.2832
15	16.9576	0.0	0.0	2.7424	0.0	14.2452	0.0037	0.01100	0.3147
16	19.6140	0.0	0.0	3.9610	0.0	15.6531	0.0037	0.01100	0.3458
17	22.9445	0.0	0.0	5.7376	0.0	17.2073	0.0037	0.01100	0.3801
18	27.1909	0.0	0.0	8.2866	0.0	18.9043	0.0037	0.01100	0.4176
19	32.6214	0.0	0.0	11.8913	0.0	20.7302	0.0037	0.01100	0.4580
20	39.5783	0.0	0.0	16.9215	0.0	22.6568	0.0037	0.01100	0.5005
21	48.4994	0.0	0.0	23.8565	0.0	24.6449	0.0037	0.01100	0.5445
22	67.2902	0.0	0.0	39.6613	0.0	27.6289	0.0037	0.01100	0.3052
23	106.1276	0.0	0.0	74.7319	0.0	31.3957	0.0037	0.01100	0.3460
24	104.8028	0.0	0.0	71.9194	0.0	32.8834	0.0037	0.01100	0.3632
25	60.2124	0.0	0.0	34.9108	0.0	25.3016	0.0037	0.01100	0.2795
26	414.9678	0.0	0.0	374.7708	0.0	40.1973	0.0037	0.01100	0.2220
27	*********	0.0	0.0	*********	0.0	40.7823	0.0037	0.01100	0.0610

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.169	0.064	0.261	0.606	0.735	0.611	0.419	0.259	0.145	0.072	0.033	0.023
2	0.198	0.195	0.526	0.738	0.626	0.385	0.194	0.082	0.036	0.014	0.005	0.003
3	0.273	0.416	0.711	0.744	0.523	0.286	0.134	0.057	0.023	0.009	0.003	0.002
4	0.481	0.753	0.747	0.623	0.380	0.190	0.084	0.035	0.019	0.005	0.002	0.001
5	0.766	1.190	0.580	0.389	0.212	0.099	0.042	0.017	0.007	0.002	0.001	0.001
6	0.707	1.310	0.572	0.214	0.377	0.034	0.014	0.005	0.002	0.001	0.000	0.000
7	0.431	0.973	0.347	0.213	0.110	0.047	0.013	0.008	0.002	0.000	0.000	0.000
8	0.083	0.670	0.394	0.028	0.019	0.011	0.004	0.002	0.001	0.000	0.000	0.000
9	0.0	0.134	0.333	0.202	0.121	0.023	0.003	0.001	0.000	0.000	0.000	0.0
10	0.0	0.0	0.0	0.0	0.039	0.027	0.014	0.007	0.003	0.001	0.000	0.000
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=[illegible],100,10,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG	300.				900.				2100.			
2	1.000	0.993	0.985	0.969	1.000	0.993	0.985	0.968	1.000	0.994	0.985	0.968
3	1.000	0.992	0.969	0.982	1.000	0.992	0.966	0.992	1.000	0.992	0.966	0.992
4	1.000	0.991	0.989	0.989	1.000	0.991	0.989	0.989	1.000	0.991	0.989	0.989
5	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
6	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
7	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.999
8	1.000	1.000	0.995	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
9	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
10	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
11	1.000	1.000	0.999	0.995	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
12	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
13	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
14	0.993	0.986	0.964	0.933	0.996	0.993	0.982	0.951	0.994	0.994	0.993	0.961
15	0.995	0.958	0.817	0.563	0.999	0.987	0.911	0.755	1.000	1.000	0.976	0.807
16	0.989	0.920	0.714	0.550	0.996	0.964	0.826	0.647	0.999	0.990	0.907	0.703
17	0.980	0.864	0.599	0.439	0.991	0.926	0.719	0.532	0.996	0.965	0.812	0.590
18	0.965	0.789	0.484	0.338	0.981	0.865	0.599	0.422	0.990	0.923	0.696	0.477
19	0.960	0.695	0.379	0.255	0.966	0.740	0.481	0.324	0.990	0.860	0.572	0.375
20	0.903	0.593	0.290	0.191	0.940	0.695	0.373	0.243	0.962	0.776	0.453	0.287
21	0.851	0.490	0.220	0.144	0.902	0.590	0.282	0.180	0.934	0.676	0.347	0.215
22	0.744	0.356	0.149	0.099	0.813	0.435	0.185	0.117	0.863	0.514	0.227	0.138
23	0.573	0.226	0.094	0.063	0.647	0.270	0.107	0.069	0.713	0.322	0.125	0.077
24	0.518	0.197	0.096	0.076	0.581	0.229	0.107	0.085	0.633	0.268	0.123	0.096
25	0.741	0.368	0.219	0.142	0.789	0.400	0.236	0.205	0.832	0.459	0.263	0.227
26	0.354	0.179	0.124	0.113	0.366	0.181	0.125	0.114	0.390	0.186	0.126	0.115
27	0.297	0.152	0.124	0.120	0.298	0.152	0.125	0.121	0.301	0.154	0.126	0.122

TOTAL SELF-SHIELDING FACTORS

NUG	300.				900.				2100.			
2	1.000	0.999	0.998	0.995	1.000	0.999	0.998	0.995	1.000	0.999	0.998	0.995
3	1.000	0.999	0.999	0.998	1.000	0.999	0.999	0.998	1.000	0.999	0.999	0.998
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
11	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
12	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998

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13  1.000 1.000 0.998 0.997        1.000 1.000 0.998 0.997        1.000 1.000 0.998 0.997
14  0.998 0.986 0.944 0.912        0.999 0.991 0.951 0.905        1.000 0.995 0.955 0.896
15  0.987 0.902 0.669 0.525        0.993 0.939 0.702 0.489        0.996 0.961 0.719 0.438
16  0.976 0.841 0.579 0.462        0.987 0.893 0.607 0.429        0.992 0.927 0.617 0.377
17  0.958 0.759 0.490 0.399        0.975 0.826 0.512 0.374        0.984 0.874 0.515 0.327
18  0.929 0.661 0.408 0.340        0.956 0.738 0.425 0.322        0.971 0.798 0.424 0.284
19  0.884 0.556 0.335 0.285        0.925 0.634 0.348 0.274        0.949 0.700 0.346 0.247
20  0.820 0.454 0.274 0.237        0.877 0.524 0.282 0.229        0.914 0.590 0.281 0.212
21  0.739 0.363 0.222 0.194        0.810 0.420 0.227 0.189        0.860 0.478 0.227 0.178
22  0.591 0.258 0.163 0.143        0.674 0.293 0.164 0.140        0.741 0.333 0.164 0.134
23  0.402 0.165 0.107 0.092        0.468 0.177 0.106 0.090        0.536 0.194 0.105 0.087
24  0.412 0.227 0.192 0.186        0.461 0.236 0.193 0.186        0.512 0.250 0.195 0.198
25  0.749 0.536 0.480 0.469        0.786 0.546 0.481 0.470        0.824 0.565 0.485 0.472
26  0.280 0.175 0.131 0.123        0.282 0.175 0.131 0.122        0.289 0.174 0.130 0.122
27  0.055 0.016 0.013 0.013        0.055 0.016 0.013 0.013        0.056 0.016 0.013 0.013

                                   ELASTIC SELF-SHIELDING FACTORS

NOG
 2  1.000 0.995 0.993 0.990        1.000 0.995 0.993 0.990        1.000 0.995 0.993 0.990
 3  1.000 0.992 0.991 0.990        1.000 0.992 0.991 0.990        1.000 0.992 0.991 0.990
 4  1.000 0.991 0.990 0.989        1.000 0.991 0.990 0.989        1.000 0.991 0.990 0.989
 5  1.000 1.000 1.000 1.000        1.000 1.000 1.000 1.000        1.000 1.000 1.000 1.000
 6  1.000 1.000 1.000 1.000        1.000 1.000 1.000 1.000        1.000 1.000 1.000 1.000
 7  1.000 1.000 1.000 0.999        1.000 1.000 1.000 0.999        1.000 1.000 1.000 0.999
 8  1.000 1.000 0.995 0.994        1.000 1.000 0.999 0.998        1.000 1.000 0.999 0.998
 9  1.000 1.000 0.999 0.998        1.000 1.000 0.999 0.998        1.000 1.000 0.999 0.998
10  1.000 1.000 0.999 0.999        1.000 1.000 0.999 0.999        1.000 1.000 0.999 0.999
11  1.000 1.000 1.000 0.999        1.000 1.000 1.000 0.999        1.000 1.000 1.000 0.999
12 ,1.000 1.000 1.000 0.999        1.000 1.000 1.000 0.999        1.000 1.000 1.000 0.999
13  1.000 1.000 0.999 0.999        1.000 1.000 0.999 0.999        1.000 1.000 0.999 0.999
14  0.994 0.989 0.972 0.958        0.994 0.992 0.982 0.967        0.995 0.994 0.988 0.974
15  0.994 0.959 0.850 0.771        0.998 0.979 0.904 0.820        0.999 0.991 0.944 0.855
16  0.989 0.926 0.780 0.697        0.995 0.958 0.841 0.745        0.997 0.977 0.891 0.780
17  0.981 0.879 0.702 0.623        0.990 0.923 0.764 0.666        0.994 0.953 0.818 0.698
18  0.966 0.816 0.623 0.554        0.980 0.873 0.680 0.589        0.988 0.913 0.734 0.617
19  0.943 0.741 0.544 0.492        0.965 0.805 0.597 0.519        0.977 0.857 0.645 0.543
20  0.907 0.660 0.494 0.435        0.939 0.725 0.521 0.458        0.959 0.783 0.560 0.477
21  0.856 0.580 0.433 0.395        0.902 0.641 0.456 0.409        0.931 0.694 0.486 0.421
22  0.759 0.479 0.369 0.345        0.916 0.522 0.342 0.351        0.860 0.570 0.399 0.358
23  0.611 0.381 0.312 0.295        0.666 0.402 0.316 0.298        0.719 0.428 0.322 0.300
24  0.697 0.558 0.526 0.520        0.727 0.568 0.530 0.523        0.751 0.581 0.536 0.529
25  0.996 0.989 0.982 0.979        0.997 0.990 0.982 0.977        0.997 0.990 0.982 0.979
26  0.878 0.840 0.822 0.817        0.880 0.841 0.822 0.817        0.884 0.841 0.822 0.817
27  0.936 0.896 0.893 0.882        0.937 0.897 0.894 0.882        0.943 0.898 0.885 0.883
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AI-1-7196.97
*********************************************************************************************************
*      *           *           *          *            *          *           *          *         *          *
* NOG  * SIG TOT   * SIG FIS   *   NU     *  SIG CAT   * SIG IN   * SIG EL    * MU EL    *  CST    *SIG X EL  *
*      *           *           *          *            *          *           *          *         *          *
*********************************************************************************************************
*      *           *           *          *            *          *           *          *         *          *
*  1   *   5.4366  *    0.0    *   0.0    *    0.0133  *  2.5835  *   2.8398  * 0.7066   * 0.00240 * 0.0288   *
*      *           *           *          *            *          *           *          *         *          *
*  2   *   6.8136  *    0.0    *   0.0    *    0.0165  *  2.7182  *   4.0789  * 0.7437   * 0.00260 * 0.0305   *
*      *           *           *          *            *          *           *          *         *          *
*  3   *   7.1704  *    0.0    *   0.0    *    0.0331  *  2.5947  *   4.5427  * 0.6613   * 0.00350 * 0.0346   *
*      *           *           *          *            *          *           *          *         *          *
*  4   *   6.1647  *    0.0    *   0.0    *    0.0644  *  2.2438  *   3.8565  * 0.4966   * 0.00520 * 0.0398   *
*      *           *           *          *            *          *           *          *         *          *
*  5   *   5.4058  *    0.0    *   0.0    *    0.0853  *  1.7744  *   3.5461  * 0.3165   * 0.00700 * 0.0497   *
*      *           *           *          *            *          *           *          *         *          *
*  6   *   5.8806  *    0.0    *   0.0    *    0.1152  *  1.2723  *   4.4931  * 0.1917   * 0.00830 * 0.0744   *
*      *           *           *          *            *          *           *          *         *          *
*  7   *   6.6459  *    0.0    *   0.0    *    0.1863  *  0.6076  *   5.8520  * 0.1658   * 0.00910 * 0.1068   *
*      *           *           *          *            *          *           *          *         *          *
*  8   *   7.9546  *    0.0    *   0.0    *    0.2534  *  0.4445  *   7.2567  * 0.0444   * 0.00960 * 0.1420   *
*      *           *           *          *            *          *           *          *         *          *
*  9   *   9.2054  *    0.0    *   0.0    *    0.3017  *  0.1775  *   8.7262  * 0.0140   * 0.01010 * 0.1762   *
*      *           *           *          *            *          *           *          *         *          *
* 10   *  10.4443  *    0.0    *   0.0    *    0.3647  *  0.0259  *  10.0537  * 0.0037   * 0.01020 * 0.2052   *
*      *           *           *          *            *          *           *          *         *          *
* 11   *  11.7113  *    0.0    *   0.0    *    0.4676  *  0.0     *  11.2437  * 0.0034   * 0.01020 * 0.2295   *
*      *           *           *          *            *          *           *          *         *          *
* 12   *  12.9038  *    0.0    *   0.0    *    0.6284  *  0.0     *  12.2754  * 0.0034   * 0.01020 * 0.2506   *
*      *           *           *          *            *          *           *          *         *          *
* 13   *  14.0116  *    0.0    *   0.0    *    0.8749  *  0.0     *  13.1366  * 0.0034   * 0.01020 * 0.2682   *
*      *           *           *          *            *          *           *          *         *          *
* 14   *  16.0399  *    0.0    *   0.0    *    1.2473  *  0.0     *  14.7926  * 0.0034   * 0.01020 * 0.3020   *
*      *           *           *          *            *          *           *          *         *          *
* 15   *  22.5350  *    0.0    *   0.0    *    1.7669  *  0.0     *  20.7681  * 0.0034   * 0.01020 * 0.4240   *
*      *           *           *          *            *          *           *          *         *          *
* 16   *  26.4828  *    0.0    *   0.0    *    2.5460  *  0.0     *  23.9368  * 0.0034   * 0.01020 * 0.4886   *
*      *           *           *          *            *          *           *          *         *          *
* 17   *  31.4861  *    0.0    *   0.0    *    3.7507  *  0.0     *  27.7354  * 0.0034   * 0.01020 * 0.5662   *
*      *           *           *          *            *          *           *          *         *          *
* 18   *  37.8622  *    0.0    *   0.0    *    5.5903  *  0.0     *  32.2719  * 0.0034   * 0.01020 * 0.6588   *
*      *           *           *          *            *          *           *          *         *          *
* 19   *  46.0589  *    0.0    *   0.0    *    9.9205  *  0.0     *  36.1384  * 0.0034   * 0.01020 * 0.7377   *
*      *           *           *          *            *          *           *          *         *          *
* 20   *  50.0428  *    0.0    *   0.0    *   13.8072  *  0.0     *  36.2356  * 0.0034   * 0.01020 * 0.7397   *
*      *           *           *          *            *          *           *          *         *          *
* 21   *  47.6747  *    0.0    *   0.0    *   15.8787  *  0.0     *  31.7960  * 0.0034   * 0.01020 * 0.6491   *
*      *           *           *          *            *          *           *          *         *          *
* 22   *  24.6186  *    0.0    *   0.0    *   12.6205  *  0.0     *  11.9981  * 0.0034   * 0.01020 * 0.1225   *
*      *           *           *          *            *          *           *          *         *          *
* 23   *  60.0002  *    0.0    *   0.0    *   37.7064  *  0.0     *  22.2938  * 0.0034   * 0.01020 * 0.2276   *
*      *           *           *          *            *          *           *          *         *          *
* 24   *   8.9337  *    0.0    *   0.0    *    0.6309  *  0.0     *   8.3028  * 0.0034   * 0.01020 * 0.0847   *
*      *           *           *          *            *          *           *          *         *          *
* 25   * 248.1424  *    0.0    *   0.0    *  200.8686  *  0.0     *  47.2738  * 0.0034   * 0.01020 * 0.4825   *
*      *           *           *          *            *          *           *          *         *          *
* 26   * 731.8943  *    0.0    *   0.0    *  655.7776  *  0.0     *  76.1170  * 0.0034   * 0.01020 * 0.3885   *
*      *           *           *          *            *          *           *          *         *          *
* 27   * 353.8306  *    0.0    *   0.0    *  349.4263  *  0.0     *   4.4046  * 0.0034   * 0.01020 * 0.0051   *
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INELASTIC SCATTERING FROM I TO J+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.001	0.045	0.270	0.588	0.674	0.508	0.291	0.140	0.061	0.025	0.010	0.006
2	0.010	0.149	0.485	0.713	0.622	0.389	0.198	0.089	0.037	0.015	0.006	0.003
3	0.040	0.303	0.619	0.670	0.481	0.267	0.126	0.054	0.022	0.008	0.003	0.002
4	0.524	1.083	0.395	0.145	0.061	0.023	0.008	0.003	0.001	0.000	0.000	0.000
5	0.429	0.928	0.342	0.089	0.043	0.024	0.010	0.005	0.003	0.001	0.000	0.0
6	0.243	0.471	0.358	0.099	0.055	0.030	0.013	0.005	0.002	0.000	0.000	0.0
7	0.158	0.243	0.148	0.114	0.060	0.032	0.000	0.000	0.0	0.0	0.0	0.0
8	0.117	0.264	0.020	0.0	0.000	0.021	0.010	0.004	0.002	0.000	0.0	0.0
9	0.0	0.107	0.058	0.012	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.012	0.004	0.003	0.001	0.000	0.000	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA ZERO=1.0E+10

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

N G				
1	1.000	0.997	0.996	0.994
2	1.000	0.995	0.992	0.988
3	1.000	0.994	0.994	0.994
4	1.000	0.991	0.993	0.997
5	1.000	1.000	1.000	1.001
6	1.000	1.000	0.998	0.996
7	1.000	1.000	0.998	0.995
8	1.000	1.000	0.995	0.997
9	1.000	1.000	0.999	0.999
10	1.000	1.000	0.999	0.999
11	1.000	1.000	0.995	0.993
12	1.000	1.000	0.999	0.999
13	1.000	1.000	0.999	0.998
14	0.991	0.972	0.925	0.859
15	0.977	0.855	0.613	0.481
16	0.959	0.773	0.499	0.340
17	0.930	0.674	0.392	0.292
18	0.887	0.570	0.307	0.221
19	0.825	0.454	0.226	0.169
20	0.754	0.384	0.182	0.128
21	0.714	0.334	0.143	0.100
22	0.768	0.358	0.152	0.105
23	0.428	0.163	0.071	0.051
24	1.000	0.996	0.975	0.949
25	0.407	0.155	0.074	0.057
26	0.163	0.080	0.060	0.057
27	0.759	0.438	0.302	0.276

TOTAL SELF-SHIELDING FACTORS

NDG				
1	1.001	0.999	0.998	0.994
2	1.000	0.996	0.996	0.992
3	0.999	1.000	1.000	0.999
4	0.999	1.001	0.999	0.995
5	1.001	1.000	1.000	0.999
6	1.001	1.000	0.998	0.996
7	1.001	1.000	0.999	0.997
8	1.000	1.000	0.998	0.995
9	1.000	1.000	0.999	0.998
10	1.000	1.000	0.998	0.997
11	1.000	1.000	0.994	0.996
12	1.000	1.000	0.999	0.999

13	1.000	1.000	0.999	0.999
14	0.991	0.949	0.895	0.877
15	0.947	0.732	0.516	0.449
16	0.910	0.638	0.445	0.394
17	0.856	0.541	0.378	0.339
18	0.703	0.449	0.317	0.287
19	0.722	0.389	0.274	0.243
20	0.598	0.289	0.180	0.116
21	0.542	0.272	0.186	0.154
22	0.704	0.411	0.327	0.302
23	0.340	0.190	0.146	0.133
24	0.999	0.998	0.988	0.975
25	0.283	0.120	0.076	0.067
26	0.089	0.054	0.045	0.044
27	0.594	0.249	0.157	0.144

ELASTIC SELF-SHIELDING FACTORS

NOG				
1	1.000	0.997	0.995	0.992
2	1.000	0.995	0.992	0.988
3	1.000	0.992	0.992	0.991
4	1.000	0.991	0.989	0.988
5	1.000	1.000	1.000	1.000
6	1.000	1.000	0.998	0.998
7	1.000	1.000	0.999	0.999
8	1.000	1.000	0.999	0.997
9	1.000	1.000	0.999	0.999
10	1.000	1.000	0.999	0.998
11	1.000	1.000	1.000	0.999
12	1.000	1.000	1.000	0.999
13	1.000	1.000	1.000	1.000
14	0.991	0.967	0.927	0.909
15	0.974	0.847	0.665	0.595
16	0.954	0.775	0.584	0.522
17	0.923	0.692	0.505	0.452
18	0.878	0.603	0.432	0.389
19	0.843	0.553	0.396	0.354
20	0.747	0.431	0.282	0.218
21	0.677	0.411	0.295	0.254
22	0.882	0.705	0.642	0.594
23	0.582	0.417	0.357	0.334
24	1.000	0.999	0.995	0.990
25	0.598	0.397	0.314	0.263
26	0.118	0.051	0.041	0.040
27	0.998	0.993	0.988	0.986

U-234 234.04 **

NOG#	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	NU EL	CSI	SIG R EL
1	6.7751	1.7523	3.2800	0.0194	1.4201	3.5828	0.7164	0.00250	0.0170
2	8.0523	1.9104	2.9440	0.0328	2.1098	4.5096	0.7459	0.00220	0.0285
3	8.1973	1.4124	2.7280	0.0570	2.1951	4.5327	0.6498	0.00260	0.0298
4	8.0694	1.4150	2.6910	0.1278	2.0983	4.4293	0.5414	0.00400	0.0390
5	7.9537	1.1650	2.5030	0.3231	1.5798	4.8456	0.4375	0.00480	0.0474
6	8.7438	0.8727	2.4510	0.2876	1.2254	6.3579	0.3284	0.00580	0.0736
7	9.9504	0.2661	2.4190	0.2729	1.4134	8.0139	0.2310	0.00660	0.1062
8	11.0229	0.0670	2.4000	0.2843	1.2966	9.3748	0.1525	0.00730	0.1370
9	11.8451	0.0322	2.3880	0.3240	0.9760	10.5129	0.0985	0.00780	0.1634
10	12.4556	0.0226	2.3810	0.3934	0.6504	11.5492	0.0610	0.00810	0.1878
11	12.9864	0.0185	2.3770	0.4785	0.0492	12.4404	0.0340	0.00830	0.2061
12	13.6900	0.0154	2.3740	0.6257	0.0	13.0489	0.0271	0.00840	0.2188
13	14.5148	0.0129	2.3720	0.8219	0.0	13.6800	0.0164	0.00850	0.2320
14	15.1005	0.0108	2.3710	1.0622	0.0	14.0275	0.0094	0.00850	0.2395
15	15.5821	0.0100	2.3710	1.3349	0.0	14.2372	0.0048	0.00860	0.2443
16	15.8848	0.0077	2.3710	1.6823	0.0	14.1948	0.0029	0.00860	0.2440
17	16.0190	0.0043	2.3700	2.1997	0.0	14.4151	0.0029	0.00860	0.2478
18	16.5145	0.0011	2.3700	3.0378	0.0	15.4756	0.0029	0.00860	0.2660
19	25.4611	0.0	2.3700	3.8524	0.0	21.6087	0.0029	0.00860	0.3714
20	33.1705	0.0	2.3700	5.2928	0.0	27.8777	0.0029	0.00860	0.4792
21	51.7846	0.0	2.3700	8.2305	0.0	43.5560	0.0029	0.00860	0.7487
22	49.9642	0.0	2.3700	16.4660	0.0	33.4982	0.0029	0.00860	0.2879
23	44.8124	0.0	2.3700	22.9365	0.0	21.8760	0.0029	0.00860	0.1880
24	41.1163	0.0	2.3700	24.6372	0.0	16.4791	0.0029	0.00860	0.1416
25	619.4568	0.0	2.3700	519.1836	0.0	100.2732	0.0029	0.00860	0.8618
26	23.5385	0.0	2.3700	14.3793	0.0	9.1592	0.0029	0.00860	0.0904
27	362.9661	0.0	2.3700	347.6311	0.0	15.3352	0.0029	0.00860	0.0149

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.000	0.009	0.088	0.265	0.373	0.325	0.210	0.111	0.052	0.022	0.009	0.006
2	0.002	0.056	0.276	0.531	0.556	0.391	0.214	0.100	0.043	0.017	0.007	0.004
3	0.010	0.127	0.400	0.576	0.497	0.309	0.157	0.070	0.029	0.012	0.004	0.003
4	0.093	0.316	0.671	0.495	0.260	0.145	0.069	0.030	0.012	0.005	0.002	0.001
5	0.595	0.285	0.244	0.233	0.127	0.060	0.023	0.009	0.003	0.001	0.000	0.000
6	0.881	0.331	0.013	0.0	0.0	0.0	0.0	0.000	0.000	0.000	0.0	0.0
7	0.943	0.446	0.015	0.003	0.001	0.000	0.000	0.000	0.0	0.0	0.0	0.0
8	0.715	0.563	0.013	0.005	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.354	0.602	0.014	0.002	0.001	0.001	0.000	0.000	0.000	0.0	0.0	0.0
10	0.0	0.316	0.126	0.008	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.028	0.013	0.005	0.002	0.001	0.000	0.000	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS [illegible] SIGMA ZERO = [illegible]

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NOG	300.				900.				2100.			
1	1.000	0.997	0.993	0.985	1.000	0.997	0.993	0.985	1.000	0.997	0.991	0.985
2	1.000	0.995	0.993	0.992	1.000	0.995	0.993	0.992	1.000	0.995	0.993	0.992
3	1.000	0.993	0.992	0.992	1.000	0.993	0.992	0.992	1.000	0.993	0.992	0.992
4	1.000	0.991	0.992	0.995	1.000	0.991	0.992	0.995	1.000	0.991	0.992	0.995
5	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
6	1.000	1.000	1.001	1.001	1.000	1.000	1.001	1.001	1.000	1.000	1.001	1.001
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
12	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
13	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
14	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
15	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
16	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.995	0.998
18	1.000	0.999	0.997	0.996	1.000	0.999	0.997	0.996	1.000	0.999	0.997	0.996
19	0.906	0.706	0.562	0.523	0.935	0.761	0.603	0.554	0.953	0.808	0.647	0.591
20	0.788	0.415	0.193	0.139	0.851	0.506	0.249	0.180	0.893	0.588	0.312	0.229
21	0.614	0.241	0.103	0.081	0.700	0.301	0.125	0.090	0.771	0.368	0.155	0.107
22	0.590	0.201	0.073	0.052	0.686	0.264	0.090	0.058	0.757	0.333	0.115	0.070
23	0.446	0.138	0.055	0.040	0.543	0.174	0.064	0.044	0.627	0.217	0.076	0.050
24	0.333	0.091	0.038	0.029	0.420	0.109	0.040	0.029	0.503	0.134	0.044	0.030
25	0.106	0.025	0.009	0.006	0.119	0.026	0.009	0.007	0.133	0.027	0.010	0.007
26	0.894	0.677	0.540	0.502	0.969	0.685	0.541	0.502	1.000	0.702	0.542	0.503
27	0.752	0.423	0.277	0.248	0.752	0.423	0.277	0.248	0.752	0.423	0.277	0.248

TOTAL SELF-SHIELDING FACTORS

NOG	300.				900.				2100.			
1	1.000	0.999	0.993	0.984	1.000	0.999	0.993	0.984	1.000	0.999	0.993	0.984
2	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
3	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

13	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
18	1.000	0.999	0.958	0.957	1.000	0.999	0.998	0.997	1.000	0.999	0.998	0.997
19	0.830	0.651	0.596	0.587	0.872	0.678	0.604	0.591	0.903	0.710	0.616	0.597
20	0.664	0.405	0.339	0.327	0.734	0.439	0.347	0.331	0.791	0.479	0.354	0.338
21	0.468	0.250	0.191	0.157	0.542	0.256	0.196	0.166	0.617	0.290	0.204	0.177
22	0.446	0.235	0.182	0.103	0.525	0.252	0.195	0.110	0.597	0.277	0.190	0.115
23	0.379	0.231	0.198	0.191	0.446	0.239	0.200	0.183	0.518	0.252	0.203	0.187
24	0.334	0.244	0.225	0.218	0.377	0.245	0.225	0.217	0.432	0.248	0.225	0.218
25	0.058	0.030	0.023	0.021	0.056	0.029	0.023	0.021	0.057	0.029	0.022	0.021
26	0.886	0.736	0.665	0.640	0.903	0.735	0.665	0.640	0.933	0.731	0.664	0.640
27	0.594	0.246	0.146	0.130	0.594	0.246	0.146	0.130	0.594	0.246	0.146	0.130

ELASTIC SELF-SHIELDING FACTORS

NPG												
1	1.000	0.997	0.994	0.969	1.000	0.997	0.994	0.989	1.000	0.997	0.994	0.989
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.992	0.992	0.992	1.000	0.992	0.992	0.992	1.000	0.992	0.992	0.992
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	0.999	0.995	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.999
8	1.000	1.000	1.000	0.993	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
9	1.000	1.000	1.000	0.993	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
13	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
18	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
19	0.832	0.723	0.642	0.625	0.920	0.756	0.657	0.635	0.941	0.789	0.677	0.649
20	0.769	0.529	0.424	0.403	0.840	0.572	0.441	0.414	0.874	0.618	0.464	0.429
21	0.640	0.359	0.260	0.225	0.705	0.394	0.272	0.235	0.766	0.434	0.299	0.250
22	0.622	0.381	0.296	0.245	0.656	0.411	0.306	0.256	0.741	0.445	0.320	0.267
23	0.643	0.457	0.401	0.378	0.703	0.477	0.407	0.383	0.756	0.507	0.419	0.392
24	0.692	0.577	0.544	0.532	0.732	0.547	0.547	0.534	0.771	0.599	0.551	0.537
25	0.239	0.160	0.135	0.129	0.250	0.150	0.135	0.129	0.261	0.150	0.135	0.126
26	0.995	0.993	0.992	0.936	1.000	0.995	0.994	0.988	1.000	1.000	0.998	0.990
27	0.934	0.976	0.957	0.951	0.994	0.976	0.957	0.951	0.994	0.976	0.957	0.951

NPG	SIG TOT	SIG FIS	NU	SIG CAPT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	6.5644	1.4672	3.5160	0.0131	1.3741	3.7129	0.7415	0.00180	0.0241
2	7.7153	1.0750	3.0360	0.0191	1.8194	4.7972	0.7645	0.00200	0.0280
3	7.6569	1.2357	2.7473	0.0319	1.7831	4.6049	0.6768	0.00280	0.0280
4	6.9138	1.2553	2.6150	0.0576	1.0569	4.9014	0.5045	0.00430	0.0332
5	6.7175	1.2174	2.5190	0.0993	1.4065	3.9944	0.4265	0.00490	0.0393
6	7.2157	1.1455	2.4930	0.1344	1.2174	4.7205	0.4661	0.00530	0.0497
7	8.3625	1.2168	2.4660	0.1759	0.9465	6.0204	0.3116	0.00590	0.0711
8	9.5107	1.3364	2.4490	0.2593	0.6343	7.5207	0.2381	0.00650	0.0984
9	11.0667	1.5111	2.4390	0.3914	0.4880	6.6762	0.1260	0.00750	0.1302
10	11.9904	1.7313	2.4330	0.5354	0.2491	9.4743	0.0688	0.00800	0.1515
11	12.4378	1.9692	2.4290	0.6914	0.0604	10.1268	0.0398	0.00820	0.1669
12	13.7178	2.2444	2.4260	0.8019	0.0207	10.6508	0.0220	0.00840	0.1748
13	14.0866	2.5284	2.4250	0.9011	0.0070	10.6500	0.0111	0.00850	0.1806
14	15.0052	3.0570	2.4240	1.0737	0.0003	10.8742	0.0045	0.00850	0.1858
15	15.6559	3.5612	2.4240	1.1972	0.0	10.9574	0.0024	0.00860	0.1876
16	17.3588	4.6164	2.4230	1.5674	0.0	11.1550	0.0029	0.00860	0.1909
17	18.7473	5.5843	2.4230	1.9504	0.0	11.2126	0.0029	0.00860	0.1919
18	21.9607	7.4740	2.4230	2.9965	0.0	11.4903	0.0029	0.00860	0.1967
19	24.6532	8.7771	2.4230	4.2441	0.0	11.6321	0.0029	0.00860	0.1991
20	30.1884	13.5415	2.4230	4.9812	0.0	11.6657	0.0029	0.00860	0.1997
21	31.0608	14.0526	2.4230	5.5868	0.0	11.4234	0.0029	0.00860	0.1955
22	44.2463	21.5598	2.4230	10.8620	0.0	11.8245	0.0029	0.00860	0.1012
23	62.7262	34.5172	2.4230	15.9377	0.0	12.2712	0.0029	0.00860	0.1050
24	93.8871	51.3414	2.4230	30.1696	0.0	12.3762	0.0029	0.00860	0.1059
25	103.5141	49.8046	2.4230	42.3365	0.0	11.3730	0.0029	0.00860	0.0973
26	54.9453	31.8318	2.4230	10.9266	0.0	12.1869	0.0029	0.00860	0.0521
27	2565.8821	2169.1352	2.4230	381.1487	0.0	15.5940	0.0029	0.00860	0.0191

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.006	0.011	0.086	0.261	0.398	0.389	0.275	0.155	0.075	0.033	0.013	0.008
2	0.087	0.189	0.251	0.410	0.386	0.257	0.138	0.066	0.029	0.012	0.005	0.003
3	0.436	0.545	0.202	0.236	0.178	0.102	0.049	0.021	0.009	0.003	0.001	0.001
4	0.480	0.741	0.206	0.108	0.064	0.036	0.016	0.007	0.003	0.001	0.000	0.000
5	0.309	0.617	0.343	0.116	0.004	0.004	0.002	0.001	0.000	0.000	0.0	0.0
6	0.478	0.467	0.142	0.088	0.029	0.009	0.003	0.001	0.000	0.000	0.000	0.0
7	0.385	0.401	0.107	0.036	0.011	0.004	0.001	0.000	0.000	0.0	0.0	0.0
8	0.255	0.324	0.074	0.026	0.009	0.003	0.001	0.001	0.000	0.000	0.0	0.0
9	0.120	0.259	0.080	0.023	0.006	0.002	0.000	0.000	0.0	0.0	0.0	0.0
10	0.030	0.125	0.061	0.028	0.003	0.001	0.000	0.000	0.000	0.0	0.0	0.0
11	0.018	0.021	0.005	0.010	0.004	0.001	0.001	0.000	0.000	0.0	0.0	0.0
12	0.004	0.013	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.002	0.003	0.001	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=10000.,100.,10.,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

FISSION SELF-SHIELDING FACTORS

NUG												
1	1.000	0.998	1.000	1.005	1.000	0.998	1.000	1.005	1.000	0.998	1.000	1.005
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.993	0.992	0.993	1.000	0.993	0.992	0.993	1.000	0.993	0.992	0.993
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
12	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994
13	1.000	1.000	1.000	0.982	1.000	1.000	1.000	0.982	1.000	1.000	1.000	0.988
14	1.000	1.000	1.000	0.992	1.000	1.000	1.000	0.992	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	0.979	1.000	1.000	1.000	0.979	1.000	1.000	1.000	1.000
17	1.000	1.000	1.000	0.965	1.000	1.000	1.000	0.965	1.000	1.000	1.000	0.971
18	1.000	1.000	1.000	0.855	1.000	1.000	1.000	0.817	1.000	1.000	1.000	0.831
19	0.998	0.987	0.891	0.687	1.000	1.000	0.962	0.706	1.000	1.000	1.000	0.704
20	0.997	0.975	0.818	0.536	1.000	1.000	0.876	0.505	1.000	1.000	0.917	0.459
21	0.994	0.955	0.778	0.530	0.998	0.988	0.836	0.510	1.000	1.000	0.881	0.471
22	0.981	0.878	0.587	0.322	0.991	0.931	0.614	0.272	0.997	0.973	0.625	0.205
23	0.949	0.775	0.580	0.497	0.963	0.820	0.633	0.544	0.972	0.857	0.679	0.585
24	0.862	0.611	0.428	0.376	0.890	0.659	0.478	0.424	0.913	0.708	0.541	0.491
25	0.806	0.523	0.373	0.335	0.838	0.554	0.392	0.352	0.870	0.593	0.422	0.379
26	0.976	0.878	0.760	0.722	0.977	0.885	0.769	0.730	0.977	0.892	0.781	0.743
27	0.444	0.253	0.208	0.201	0.444	0.253	0.208	0.201	0.444	0.253	0.208	0.201

CAPTURE SELF-SHIELDING FACTORS

NUG												
1	1.000	0.997	0.992	0.983	1.000	0.997	0.992	0.983	1.000	0.997	0.992	0.983
2	1.000	0.995	0.992	0.989	1.000	0.995	0.992	0.989	1.000	0.995	0.992	0.989
3	1.000	0.993	0.994	0.997	1.000	0.993	0.994	0.997	1.000	0.993	0.994	0.997
4	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
8	1.000	1.000	0.997	0.995	1.000	1.000	0.997	0.995	1.000	1.000	0.997	0.995
9	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
10	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
11	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
12	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994
13	1.000	1.000	1.000	0.966	1.000	1.000	1.000	0.977	1.000	1.000	1.000	0.983
14	1.000	1.000	1.000	0.968	1.000	1.000	1.000	0.989	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	0.968	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	0.929	1.000	1.000	1.000	0.979	1.000	1.000	1.000	1.000
17	1.000	1.000	0.987	0.879	1.000	1.000	1.000	0.943	1.000	1.000	1.000	0.980
18	0.999	0.994	0.931	0.755	1.000	1.000	1.000	0.815	1.000	1.000	1.000	0.844

19	0.997	0.976	0.857	0.651	1.000	1.000	0.953	0.701	1.000	1.000	1.000	0.717
20	0.993	0.945	0.743	0.469	0.999	0.992	0.840	0.479	1.000	1.000	0.906	0.489
21	0.988	0.914	0.684	0.444	0.996	0.969	0.784	0.467	1.000	1.000	0.857	0.458
22	0.967	0.809	0.484	0.250	0.984	0.892	0.550	0.234	0.994	0.952	0.598	0.193
23	0.936	0.723	0.507	0.427	0.957	0.791	0.581	0.492	0.970	0.840	0.643	0.546
24	0.840	0.550	0.373	0.329	0.879	0.616	0.432	0.394	0.908	0.678	0.503	0.455
25	0.782	0.439	0.279	0.265	0.832	0.492	0.308	0.269	0.875	0.558	0.355	0.309
26	0.961	0.803	0.633	0.583	0.968	0.832	0.662	0.609	0.970	0.859	0.699	0.644
27	0.445	0.254	0.208	0.202	0.445	0.254	0.208	0.202	0.445	0.254	0.208	0.202

TOTAL SELF-SHIELDING FACTORS

NUG												
1	1.001	0.999	0.997	0.993	1.001	0.999	0.997	0.993	1.001	0.999	0.997	0.993
2	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
3	0.999	1.000	0.999	0.998	0.999	1.000	0.999	0.998	0.999	1.000	0.999	0.998
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.001	1.000	0.999	0.998	1.001	1.000	0.999	0.998	1.001	1.000	0.999	0.998
7	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
8	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
12	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996
13	1.000	0.995	0.937	0.789	1.000	0.996	0.940	0.786	1.000	0.997	0.942	0.785
14	1.000	0.995	0.924	0.749	1.000	0.997	0.929	0.742	1.000	0.997	0.932	0.739
15	0.999	0.994	0.918	0.734	1.000	0.997	0.925	0.729	1.000	0.998	0.929	0.723
16	0.999	0.990	0.868	0.630	1.000	0.996	0.878	0.605	1.000	0.998	0.885	0.588
17	0.998	0.984	0.822	0.566	0.999	0.993	0.832	0.529	1.000	0.997	0.836	0.501
18	0.996	0.965	0.692	0.422	0.999	0.982	0.684	0.365	1.000	0.991	0.673	0.325
19	0.993	0.938	0.599	0.362	0.997	0.964	0.573	0.294	0.999	0.980	0.565	0.254
20	0.988	0.892	0.419	0.236	0.994	0.927	0.362	0.191	0.997	0.951	0.387	0.159
21	0.983	0.865	0.427	0.250	0.990	0.905	0.378	0.205	0.995	0.933	0.322	0.170
22	0.952	0.712	0.231	0.149	0.970	0.782	0.173	0.124	0.981	0.803	0.114	0.105
23	0.913	0.667	0.441	0.383	0.937	0.719	0.474	0.419	0.952	0.763	0.508	0.458
24	0.778	0.487	0.325	0.286	0.821	0.534	0.355	0.310	0.857	0.590	0.405	0.354
25	0.691	0.396	0.286	0.259	0.741	0.417	0.292	0.263	0.791	0.452	0.308	0.275
26	0.961	0.815	0.685	0.647	0.965	0.827	0.691	0.653	0.965	0.843	0.707	0.664
27	0.238	0.105	0.079	0.075	0.238	0.105	0.078	0.075	0.238	0.105	0.078	0.075

ELASTIC SELF-SHIELDING FACTORS

NUG												
1	1.000	0.997	0.995	0.991	1.000	0.997	0.995	0.991	1.000	0.997	0.995	0.991
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
7	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
13	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
14	1.000	1.000	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	0.999	0.998	1.000	1.000	1.000	0.998	1.000	1.000	1.000	1.000
17	1.000	1.000	0.997	0.989	1.000	1.000	1.000	0.995	1.000	1.000	1.000	0.998
18	1.000	0.998	0.999	0.974	1.000	1.000	0.997	0.981	1.000	1.000	1.000	0.985
19	0.999	0.995	0.980	0.942	1.000	0.999	0.990	0.968	1.000	1.000	0.996	0.971
20	0.999	0.991	0.969	0.947	1.000	0.997	0.978	0.949	1.000	1.000	0.985	0.949
21	0.999	0.991	0.973	0.959	0.999	0.996	0.980	0.961	1.000	0.998	0.985	0.962
22	0.995	0.975	0.942	0.924	0.998	0.984	0.948	0.924	0.999	0.990	0.953	0.921
23	0.994	0.977	0.963	0.959	0.996	0.983	0.964	0.964	0.997	0.987	0.973	0.968
24	0.970	0.924	0.900	0.893	0.975	0.932	0.907	0.901	0.980	0.939	0.916	0.911
25	0.979	0.949	0.934	0.930	0.984	0.952	0.935	0.931	0.987	0.957	0.938	0.933
26	0.998	0.995	0.988	0.985	0.998	0.995	0.989	0.986	0.998	0.995	0.989	0.986
27	0.985	0.967	0.959	0.957	0.985	0.967	0.959	0.957	0.985	0.967	0.959	0.957

U2S-3 238.05 **

NOG	SIG TOT	SIG FIS	NU	SIG CAP	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	8.0325	0.5772	3.4950	0.0064	2.1526	5.5961	0.8064	0.00170	0.0250
2	7.7467	0.5465	3.0273	0.0114	2.5960	4.6523	0.7935	0.00160	0.0232
3	7.7315	0.5471	2.7000	0.0272	2.6664	4.4490	0.6951	0.00260	0.0255
4	7.1111	0.4288	2.5913	0.0583	2.4765	3.7446	0.5727	0.00360	0.0271
5	7.1618	0.4273	2.4490	0.1204	2.4685	4.5454	0.4734	0.00450	0.0406
6	8.0551	0.0414	2.4190	0.1253	1.8419	6.0061	0.3753	0.00530	0.0644
7	9.2155	0.0031	2.3400	0.1169	1.4902	7.6124	0.2843	0.00610	0.0923
8	10.4659	0.0031	2.3360	0.1445	1.1207	9.2107	0.2060	0.00670	0.1236
9	11.4497	0.0	2.3320	0.1098	0.8006	10.9293	0.1427	0.00730	0.1530
10	12.4137	0.0	2.3330	0.2155	0.3665	11.8416	0.0918	0.00770	0.1821
11	12.9847	0.0	2.3260	0.3386	0.0712	12.5750	0.0441	0.00810	0.2037
12	13.5300	0.0	2.3240	0.4478	0.0	13.0822	0.0225	0.00830	0.2168
13	14.1825	0.0	2.3220	0.5710	0.0	13.6115	0.0112	0.00840	0.2281
14	14.9115	0.0	2.3210	0.7034	0.0	14.2081	0.0044	0.00840	0.2398
15	16.0429	0.0	2.3210	0.8621	0.0	15.1808	0.0028	0.00850	0.2566
16	17.8254	0.0	2.3200	1.0654	0.0	16.7601	0.0028	0.00850	0.2833
17	19.6016	0.0	2.3200	1.3905	0.0	18.2111	0.0028	0.00850	0.3078
18	21.9368	0.0	2.3200	1.7771	0.0	20.1597	0.0028	0.00850	0.3407
19	23.1469	0.0	2.3200	2.9157	0.0	20.2312	0.0028	0.00850	0.3419
20	20.5064	0.0	2.3200	3.6587	0.0	16.8478	0.0028	0.00850	0.2847
21	19.3517	0.0	2.3200	3.6043	0.0	15.7474	0.0028	0.00850	0.2661
22	74.0623	0.0	2.3200	17.5936	0.0	56.4687	0.0028	0.00850	0.4772
23	36.6973	0.0	2.3200	13.5505	0.0	23.1468	0.0028	0.00850	0.1956
24	181.6779	0.0	2.3190	105.1859	0.0	76.4921	0.0028	0.00850	0.6464
25	145.9097	0.0	2.3190	131.1390	0.0	14.7708	0.0028	0.00850	0.1248
26	9.1614	0.0	2.3190	0.6173	0.0	8.5491	0.0028	0.00850	0.0361
27	18.5963	0.0	2.3190	9.4518	0.0	8.9445	0.0028	0.00840	0.0086

INELASTIC SCATTERING FROM 1 TO 1**

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.000	0.014	0.126	0.402	0.638	0.630	0.459	0.272	0.140	0.066	0.029	0.020
2	0.007	0.119	0.431	0.675	0.612	0.393	0.203	0.092	0.038	0.015	0.006	0.004
3	0.073	0.334	0.636	0.678	0.475	0.260	0.123	0.053	0.021	0.008	0.003	0.002
4	0.286	0.566	0.902	0.749	0.268	0.075	0.021	0.006	0.002	0.001	0.000	0.000
5	0.995	0.467	0.321	0.363	0.200	0.074	0.029	0.012	0.005	0.002	0.001	0.000
6	1.319	0.456	0.009	0.014	0.023	0.013	0.005	0.002	0.001	0.000	0.000	0.000
7	0.983	0.472	0.032	0.002	0.001	0.000	0.000	0.0	0.0	0.0	0.0	0.0
8	0.599	0.480	0.028	0.012	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.283	0.496	0.018	0.003	0.002	0.001	0.000	0.000	0.0	0.0	0.0	0.0
10	0.0	0.235	0.117	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.036	0.021	0.008	0.003	0.001	0.000	0.000	0.000	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000,100,10,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG	300.				900.				2100.			
1	1.000	0.997	0.994	0.989	1.000	0.997	0.994	0.989	1.000	0.997	0.994	0.989
2	1.000	0.994	0.992	0.988	1.000	0.994	0.992	0.988	1.000	0.994	0.992	0.988
3	1.000	0.993	0.995	0.998	1.000	0.993	0.995	0.998	1.000	0.993	0.995	0.998
4	1.000	0.991	0.991	0.994	1.000	0.991	0.991	0.994	1.000	0.991	0.991	0.994
5	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
6	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002
7	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
11	0.995	0.993	0.986	0.976	0.995	0.995	0.992	0.986	0.995	0.995	0.994	0.992
12	0.999	0.989	0.943	0.894	1.000	0.997	0.979	0.947	1.000	1.000	0.998	0.980
13	0.997	0.977	0.904	0.839	0.999	0.990	0.951	0.907	1.000	0.997	0.980	0.951
14	0.994	0.957	0.849	0.769	0.997	0.978	0.910	0.850	0.999	0.989	0.951	0.909
15	0.988	0.920	0.767	0.675	0.994	0.953	0.843	0.767	0.997	0.973	0.899	0.840
16	0.976	0.857	0.665	0.578	0.985	0.906	0.748	0.668	0.990	0.938	0.819	0.745
17	0.957	0.791	0.581	0.490	0.974	0.851	0.661	0.567	0.984	0.894	0.730	0.645
18	0.911	0.657	0.419	0.333	0.941	0.731	0.489	0.384	0.960	0.789	0.556	0.443
19	0.868	0.546	0.304	0.233	0.912	0.675	0.372	0.281	0.939	0.708	0.439	0.339
20	0.835	0.461	0.222	0.163	0.892	0.557	0.280	0.199	0.926	0.640	0.342	0.246
21	0.778	0.409	0.193	0.145	0.841	0.495	0.242	0.175	0.884	0.570	0.296	0.213
22	0.420	0.143	0.061	0.045	0.498	0.174	0.070	0.048	0.569	0.209	0.081	0.053
23	0.436	0.161	0.081	0.069	0.486	0.187	0.088	0.072	0.584	0.224	0.098	0.076
24	0.214	0.060	0.025	0.018	0.264	0.066	0.026	0.018	0.321	0.075	0.026	0.018
25	0.262	0.079	0.033	0.023	0.316	0.086	0.034	0.024	0.380	0.099	0.036	0.024
26	0.997	0.997	0.998	0.999	0.997	0.997	0.998	0.999	0.997	0.997	0.998	0.999
27	0.988	0.909	0.701	0.585	0.988	0.909	0.701	0.585	0.988	0.909	0.701	0.585

TOTAL SELF-SHIELDING FACTORS

NUG	300.				900.				2100.			
1	1.000	0.999	0.997	0.993	1.000	0.999	0.997	0.993	1.000	0.999	0.997	0.993
2	1.000	1.000	0.995	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
3	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
6	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
7	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
8	1.000	1.000	0.995	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	0.996	0.983	0.972	1.000	0.997	0.987	0.975	1.000	0.998	0.990	0.978
12	0.996	0.972	0.898	0.848	0.998	0.982	0.923	0.867	0.999	0.989	0.941	0.883
13	0.993	0.951	0.859	0.812	0.996	0.968	0.889	0.835	0.997	0.979	0.914	0.856
14	0.987	0.917	0.809	0.767	0.992	0.943	0.842	0.791	0.995	0.961	0.872	0.816
15	0.974	0.865	0.747	0.711	0.983	0.900	0.778	0.733	0.989	0.927	0.812	0.759
16	0.957	0.807	0.679	0.632	0.972	0.851	0.713	0.656	0.982	0.888	0.749	0.698
17	0.913	0.726	0.587	0.312	0.939	0.769	0.622	0.390	0.956	0.808	0.656	0.561
18	0.833	0.581	0.438	0.129	0.877	0.621	0.462	0.145	0.906	0.661	0.488	0.163
19	0.788	0.523	0.401	0.232	0.843	0.567	0.426	0.337	0.882	0.614	0.452	0.390
20	0.805	0.556	0.461	0.377	0.861	0.599	0.480	0.429	0.900	0.644	0.506	0.457
21	0.772	0.595	0.527	0.465	0.820	0.621	0.539	0.493	0.859	0.649	0.553	0.516
22	0.306	0.173	0.128	0.052	0.351	0.179	0.129	0.052	0.403	0.188	0.131	0.053
23	0.424	0.304	0.233	0.154	0.463	0.308	0.244	0.156	0.523	0.316	0.236	0.159
24	0.108	0.051	0.037	0.031	0.122	0.049	0.037	0.031	0.147	0.049	0.037	0.0[illegible]
25	0.161	0.083	0.063	0.058	0.181	0.082	0.063	0.058	0.215	0.082	0.063	0.058
26	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999
27	0.991	0.910	0.745	0.674	0.991	0.910	0.745	0.674	0.991	0.910	0.745	0.674

ELASTIC SELF-SHIELDING FACTORS

NUG	300.				900.				2100.			
1	1.000	0.997	0.995	0.992	1.000	0.997	0.995	0.992	1.000	0.997	0.995	0.992
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.992	0.991	0.991	1.000	0.992	0.991	0.991	1.000	0.992	0.991	0.991
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	0.995	0.993	0.989	0.983	0.995	0.994	0.991	0.988	0.995	0.995	0.993	0.991
12	0.998	0.987	0.951	0.925	0.999	0.993	0.970	0.949	1.000	0.996	0.992	0.968
13	0.997	0.975	0.921	0.844	0.998	0.985	0.945	0.918	0.999	0.991	0.964	0.942
14	0.993	0.955	0.878	0.843	0.996	0.970	0.908	0.874	0.998	0.981	0.933	0.903
15	0.987	0.920	0.822	0.785	0.991	0.944	0.855	0.815	0.995	0.961	0.886	0.847
16	0.978	0.881	0.763	0.719	0.986	0.913	0.800	0.755	0.990	0.937	0.835	0.790
17	0.953	0.812	0.681	0.603	0.968	0.849	0.716	0.646	0.978	0.879	0.750	0.691
18	0.905	0.691	0.539	0.430	0.932	0.734	0.567	0.466	0.949	0.772	0.597	0.502
19	0.877	0.646	0.504	0.423	0.912	0.694	0.534	0.469	0.935	0.739	0.566	0.505
20	0.849	0.701	0.584	0.538	0.931	0.744	0.613	0.566	0.951	0.785	0.639	0.593
21	0.874	0.727	0.659	0.627	0.905	0.751	0.672	0.642	0.929	0.777	0.646	0.657
22	0.471	0.257	0.193	[illegible]	0.524	0.278	0.198	0.151	0.566	0.300	0.204	0.155
23	0.630	0.477	0.393	0.325	0.674	0.499	0.395	0.329	0.741	0.507	0.401	0.334
24	0.247	0.110	0.074	[illegible]	0.299	0.115	0.079	0.068	0.335	0.123	0.080	[illegible]
25	0.615	0.516	0.490	0.477	0.642	0.520	0.487	0.477	0.674	0.526	0.488	0.478
26	0.995	0.999	0.997	[illegible]	0.999	0.999	0.999	0.998	0.999	0.999	0.999	0.998
27	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

NOG	SIG TOT	SIG TS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG K EL
1	6.6844	2.0883	3.9650	0.0016	1.3431	4.2538	0.9012	C.00080	0.0116
2	7.3097	1.7033	3.5370	0.0218	2.1674	3.4121	0.8823	C.CC100	0.0113
3	7.7956	1.9455	3.2690	0.0339	2.2213	3.6291	0.8366	0.0C140	0.0110
4	7.1799	2.0082	3.1120	0.0131	1.9146	3.2468	0.7474	0.CC210	0.0139
5	7.2379	1.7517	3.0170	0.0246	1.5706	3.7905	0.6106	0.00330	0.0249
6	8.1271	1.6307	2.9630	0.0759	1.2712	5.1493	0.4797	C.00440	0.0452
7	9.1904	1.5551	2.9510	0.1404	0.5250	6.6703	0.3748	C.00530	0.0704
8	10.2039	1.4932	2.9110	0.1950	0.6307	7.9039	0.2785	0.00610	0.0960
9	11.2009	1.5405	2.8990	0.2277	0.5193	8.9135	0.1974	0.00680	0.1207
10	12.1556	1.6324	2.9010	0.2632	0.4125	9.8413	0.1388	0.CC730	0.1430
11	12.9610	1.7022	2.8870	0.3631	0.3368	10.5589	0.0862	0.0C770	0.1626
12	13.5630	1.7424	2.8840	0.5575	0.3197	10.9434	0.0539	0.00800	0.1747
13	13.6920	1.8179	2.8830	0.7734	0.3049	10.7958	0.0343	0.0081C	0.1760
14	14.5774	1.9767	2.8820	1.0681	0.2776	11.7530	0.0218	C.0C830	0.1858
15	16.0443	2.2495	2.8910	1.5956	0.0287	12.1711	0.0040	C.C084C	0.2046
16	17.5645	2.6580	2.8810	2.2419	0.0	12.6647	0.0028	0.00840	0.2132
17	19.4228	3.2606	2.8800	3.1190	0.0	13.0432	0.0028	0.00840	0.2195
18	21.0334	4.7096	2.8800	3.5525	0.0	12.7714	0.0028	0.00840	0.2149
19	23.9695	6.3173	2.8800	4.6763	0.0	12.9759	0.0028	0.00840	0.2184
20	32.6466	10.3666	2.8800	7.3707	0.0	14.9094	0.0028	0.00840	0.2509
21	35.7292	10.6876	2.8800	9.6959	0.0	15.3457	0.0028	G.00840	0.2583
22	53.7108	18.2277	2.8800	17.0523	0.0	18.4307	0.0028	0.0C840	0.1551
23	113.1682	46.3284	2.8800	43.8226	0.0	23.0172	0.0028	0.00840	0.1937
24	103.2008	49.5487	2.8800	40.6636	0.0	12.9864	0.0028	0.C0840	0.1093
25	129.9206	71.1878	2.8800	48.1714	0.0	10.5614	0.0028	0.00840	0.0809
26	41.3679	23.5742	2.8800	7.1881	0.0	10.6056	0.0028	0.00840	0.0446
27	3697.8582	2747.4270	2.3800	941.2881	0.0	9.1428	G.0028	0.00840	0.0087

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.523	0.043	C.058	0.166	0.226	0.189	0.116	0.058	0.026	0.011	0.004	0.002
2	0.653	0.097	0.229	0.383	0.363	0.239	0.126	0.058	0.024	0.010	0.004	0.002
3	0.717	0.209	0.338	0.384	0.283	0.160	0.076	0.033	0.013	0.005	0.002	0.001
4	0.838	0.413	0.248	0.198	0.117	0.058	0.025	0.010	0.004	0.002	0.001	0.000
5	0.836	0.466	0.243	0.064	0.038	0.015	0.005	0.002	0.001	0.000	0.000	0.000
6	0.686	0.286	0.192	0.072	0.024	0.007	0.002	0.000	0.0	0.0	0.0	0.0
7	0.591	0.158	0.030	0.023	0.013	0.006	0.003	0.001	0.000	0.000	0.0	0.0
8	0.461	0.167	0.001	0.000	0.0	0.0	0.000	0.000	0.000	0.0	0.0	0.0
9	0.339	0.149	0.030	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.266	0.104	0.025	0.012	0.004	0.000	0.000	0.0	0.0	0.0	0.0	0.0
11	0.210	C.122	0.0	0.001	0.002	0.001	0.000	0.000	0.0	0.0	0.0	0.0
12	0.138	0.182	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.041	0.182	0.081	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.058	0.101	0.069	0.042	0.007	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.013	0.009	0.004	0.002	0.000	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.C	0.0	0.0	0.0
20	0.0	0.0	C.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.0
21	C.C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000.,100.,10.,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

FISSION SELF-SHIELDING FACTORS

NUG												
1	1.000	0.998	0.999	1.002	1.000	0.998	0.999	1.002	1.000	0.998	0.999	1.002
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.993	0.992	0.993	1.000	0.993	0.992	0.993	1.000	0.993	0.992	0.993
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
6	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994
13	1.000	0.999	0.980	0.913	1.000	1.000	0.994	0.931	1.000	1.000	1.000	0.942
14	0.999	0.996	0.962	0.884	1.000	1.000	0.984	0.911	1.000	1.000	0.998	0.929
15	0.999	0.989	0.930	0.841	1.000	0.997	0.961	0.864	1.000	1.000	0.983	0.888
16	0.997	0.977	0.887	0.774	0.999	0.990	0.930	0.815	1.000	0.998	0.961	0.847
17	0.995	0.959	0.835	0.713	0.997	0.978	0.885	0.755	0.999	0.990	0.926	0.789
18	0.990	0.929	0.765	0.642	0.995	0.958	0.830	0.696	0.997	0.978	0.886	0.746
19	0.982	0.883	0.679	0.554	0.990	0.925	0.750	0.607	0.994	0.956	0.817	0.661
20	0.968	0.828	0.603	0.475	0.980	0.874	0.651	0.493	0.987	0.912	0.700	0.509
21	0.954	0.790	0.588	0.495	0.967	0.838	0.637	0.527	0.976	0.878	0.688	0.560
22	0.917	0.714	0.532	0.473	0.942	0.763	0.577	0.513	0.960	0.809	0.629	0.543
23	0.822	0.552	0.361	0.300	0.853	0.577	0.374	0.309	0.881	0.612	0.398	0.328
24	0.716	0.387	0.206	0.163	0.757	0.399	0.215	0.169	0.793	0.427	0.227	0.178
25	0.655	0.311	0.190	0.167	0.689	0.325	0.194	0.170	0.728	0.346	0.201	0.175
26	0.995	0.968	0.917	0.896	0.995	0.968	0.917	0.896	0.995	0.969	0.917	0.896
27	0.509	0.372	0.338	0.333	0.509	0.372	0.338	0.333	0.509	0.372	0.338	0.333

CAPTURE SELF-SHIELDING FACTORS

NUG												
1	1.000	0.999	1.004	1.016	1.000	0.999	1.004	1.016	1.000	0.999	1.004	1.016
2	1.000	0.995	0.993	0.991	1.000	0.995	0.993	0.991	1.000	0.995	0.993	0.991
3	1.000	0.993	0.996	1.001	1.000	0.993	0.996	1.001	1.000	0.993	0.996	1.001
4	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993
5	1.000	1.000	0.997	0.993	1.000	1.000	0.997	0.993	1.000	1.000	0.997	0.993
6	1.000	0.999	0.996	0.991	1.000	0.999	0.996	0.991	1.000	0.999	0.996	0.991
7	1.000	1.000	0.998	0.995	1.000	1.000	0.998	0.995	1.000	1.000	0.998	0.995
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
11	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
12	0.994	0.994	0.993	0.992	0.994	0.994	0.993	0.993	0.994	0.994	0.993	0.993
13	1.000	1.000	1.000	0.960	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
14	1.000	0.998	0.978	0.925	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	0.998	0.987	0.933	0.854	1.000	1.000	1.000	0.977	1.000	1.000	1.000	1.000
16	0.996	0.967	0.862	0.757	1.000	0.996	0.971	0.907	1.000	1.000	1.000	1.000
17	0.991	0.933	0.767	0.640	0.997	0.977	0.901	0.804	1.000	1.000	1.000	1.000
18	0.984	0.888	0.669	0.534	0.993	0.948	0.811	0.690	1.000	1.000	1.000	0.942
19	0.972	0.822	0.555	0.421	0.986	0.901	0.697	0.556	0.994	0.951	0.822	0.684
20	0.944	0.741	0.425	0.332	0.969	0.818	0.550	0.396	0.983	0.890	0.670	0.495
21	0.908	0.627	0.356	0.266	0.941	0.729	0.466	0.354	0.959	0.809	0.576	0.451
22	0.841	0.519	0.304	0.250	0.894	0.614	0.384	0.319	0.928	0.695	0.469	0.399
23	0.645	0.284	0.152	0.123	0.724	0.339	0.176	0.139	0.790	0.408	0.213	0.167
24	0.642	0.277	0.133	0.101	0.695	0.306	0.146	0.110	0.743	0.345	0.165	0.125
25	0.637	0.283	0.158	0.133	0.681	0.301	0.162	0.136	0.729	0.328	0.170	0.141
26	0.992	0.952	0.876	0.845	0.992	0.952	0.876	0.845	0.993	0.953	0.876	0.845
27	0.550	0.415	0.379	0.373	0.550	0.415	0.379	0.373	0.550	0.415	0.379	0.373

TOTAL SELF-SHIELDING FACTORS

NUG												
1	1.001	0.999	0.998	0.994	1.001	0.999	0.998	0.994	1.001	0.999	0.998	0.994
2	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
3	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996
13	0.999	0.991	0.927	0.805	0.999	0.994	0.939	0.80	1.000	0.994	0.946	0.804
14	0.998	0.986	0.905	0.778	0.999	0.992	0.925	0.781	1.000	0.996	0.937	0.781
15	0.997	0.972	0.854	0.714	0.998	0.985	0.886	0.719	0.999	0.993	0.908	.713
16	0.994	0.951	0.796	0.657	0.997	0.973	0.836	0.657	0.999	0.986	0.867	0.652
17	0.989	0.917	0.726	0.595	0.994	0.950	0.784	0.590	0.997	0.971	0.804	0.588
18	0.982	0.880	0.671	0.553	0.990	0.922	0.710	0.547	0.994	0.951	0.747	.536
19	0.967	0.816	0.592	0.484	0.981	0.869	0.620	0.478	0.988	0.910	0.650	0.463
20	0.928	0.701	0.454	0.384	0.954	0.760	0.466	0.392	0.970	0.812	0.474	0.333
21	0.889	0.640	0.450	0.382	0.924	0.699	0.469	0.382	0.946	0.756	0.492	0.382
22	0.798	0.521	0.379	0.343	0.853	0.576	0.408	0.362	0.893	0.638	0.446	0.342
23	0.599	0.315	0.194	0.162	0.661	0.333	0.200	0.162	0.723	0.364	0.207	0.164
24	0.554	0.266	0.172	0.151	0.630	0.274	0.174	0.152	0.647	0.288	0.178	0.153
25	0.493	0.226	0.166	0.159	0.529	0.226	0.168	0.158	0.576	0.233	0.167	0.158
26	0.993	0.949	0.872	0.845	0.993	0.949	0.872	0.845	0.993	0.949	0.872	0.845
27	0.317	0.165	0.123	0.117	0.317	0.165	0.123	0.117	0.317	0.165	0.123	0.117

ELASTIC SELF-SHIELDING FACTORS

NUG												
1	1.000	0.997	0.995	0.993	1.000	0.997	0.995	0.993	1.000	0.997	0.995	0.993
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.992	0.991	0.991	1.000	0.992	0.991	0.991	1.000	0.992	0.991	0.991
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
6	1.000	1.000	0.994	0.997	1.000	1.000	0.994	0.997	1.000	1.000	0.994	0.997
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995

13	1.000	0.999	0.994	0.985
14	1.000	0.997	0.986	0.972
15	0.999	0.993	0.975	0.946
16	0.998	0.985	0.945	0.917
17	0.996	0.973	0.916	0.883
18	0.995	0.964	0.905	0.877
19	0.990	0.944	0.876	0.851
20	0.972	0.882	0.796	0.767
21	0.953	0.841	0.766	0.746
22	0.883	0.707	0.620	0.599
23	0.771	0.561	0.478	0.452
24	0.920	0.842	0.806	0.796
25	0.932	0.864	0.840	0.835
26	0.999	0.995	0.988	0.984
27	1.018	1.062	1.083	1.087

1.000	1.000	1.000	0.996
1.000	1.000	0.998	0.990
1.000	0.994	0.969	0.974
0.999	0.994	0.971	0.950
0.998	0.986	0.969	0.919
0.997	0.980	0.945	0.905
0.995	0.964	0.935	0.874
0.984	0.913	0.822	0.793
0.967	0.872	0.789	0.764
0.917	0.749	0.646	0.621
0.819	0.591	0.491	0.462
0.932	0.847	0.807	0.796
0.939	0.866	0.840	0.835
0.999	0.995	0.988	0.984
1.018	1.062	1.083	1.087

1.000	1.000	1.000	1.000
1.000	1.000	1.000	1.000
1.000	1.000	1.000	0.994
1.000	0.999	0.992	0.978
0.999	0.994	0.975	0.951
0.999	0.989	0.960	0.933
0.997	0.978	0.931	0.897
0.990	0.939	0.891	0.801
0.975	0.899	0.816	0.786
0.941	0.786	0.676	0.647
0.860	0.629	0.512	0.479
0.943	0.855	0.816	0.798
0.947	0.870	0.860	0.834
0.999	0.995	0.988	0.984
1.018	1.062	1.083	1.087

NEQN	SIG FIT	SIG FIS	ND	SIG CAL	SIG IN	SIG EL	ND EL	CSI	SIG R EL
1	6.6765	1.7494	3.0110	0.0374	1.1292	3.7902	0.8244	0.00190	0.0237
2	7.8031	1.4037	3.3450	0.0152	1.8331	4.4711	0.7435	0.00170	0.0224
3	7.7635	1.5631	4.1730	0.0131	2.1062	4.0411	0.7254	0.00250	0.0205
4	7.2214	1.5112	3.3450	0.0021	2.0640	3.9741	0.6634	0.00280	0.0207
5	7.2076	1.4128	2.9950	0.1031	2.0289	3.6627	0.5654	0.00350	0.0295
6	7.9257	0.7315	2.9540	0.1440	1.8313	5.4193	0.4550	0.00460	0.0496
7	9.0392	0.2134	2.9240	0.1031	1.3634	7.2794	0.3920	0.00540	0.0793
8	10.1872	0.1129	2.9140	0.1949	1.1678	8.7218	0.2668	0.00610	0.1072
9	11.2304	0.0929	2.9040	0.2339	0.9543	9.9653	0.1921	0.00680	0.1353
10	12.1477	0.0797	2.8990	0.2854	0.6617	11.1205	0.1284	0.00730	0.1629
11	12.9533	0.0872	2.8950	0.3709	0.2173	12.2776	0.0815	0.00770	0.1895
12	13.2379	0.0972	2.8930	0.4839	0.0	12.6569	0.0514	0.00800	0.2018
13	13.9549	0.0971	2.8920	0.6263	0.0	13.2314	0.0331	0.00810	0.2150
14	14.8452	0.0951	2.8910	0.7971	0.0	13.9629	0.0212	0.00820	0.2297
15	15.9662	0.1099	2.8910	0.9826	0.0	14.8738	0.0096	0.00830	0.2476
16	16.7974	0.1279	2.8900	1.2350	0.0	15.4345	0.0030	0.00840	0.2586
17	18.8762	0.1777	2.8900	1.7146	0.0	16.9834	0.0028	0.00840	0.2847
18	22.4692	0.2186	2.8900	2.4808	0.0	19.7896	0.0028	0.00840	0.3317
19	26.5641	0.3615	2.8900	3.9917	0.0	22.2109	0.0028	0.00840	0.3723
20	20.3943	0.0693	2.8900	4.2115	0.0	16.0735	0.0028	0.00840	0.2694
21	36.9667	0.0806	2.8900	7.8884	0.0	28.9977	0.0028	0.00840	0.4860
22	45.8267	0.1486	2.8900	16.2777	0.0	29.4003	0.0028	0.00840	0.2464
23	176.7698	0.6037	2.8900	75.2889	0.0	100.8771	0.0028	0.00840	0.8454
24	31.0686	0.1826	2.8900	20.7762	0.0	10.1098	0.0028	0.00840	0.0847
25	11.9199	0.0307	2.8900	0.5895	0.0	11.3297	0.0028	0.00840	0.0949
26	4455.4375	0.7849	2.8900	4106.5117	0.0	348.1465	0.0028	0.00840	1.4587
27	1019.6565	0.2021	2.8900	1017.0010	0.0	3.4937	0.0028	0.00840	0.0833

13	1.000	0.999	0.994	0.985	1.000	1.000	1.000	0.996	1.000	1.000	[illegible]	1.000
14	1.000	0.997	0.986	0.972	1.000	1.000	0.996	0.990	1.000	1.000	1.000	1.000
15	0.999	0.993	0.965	0.946	1.000	0.993	0.994	0.974	1.000	1.000	1.000	0.994
16	0.998	0.985	0.965	0.917	0.999	0.994	0.973	0.950	1.000	0.999	0.992	0.978
17	0.996	0.973	0.916	0.883	0.998	0.986	0.964	0.919	0.999	0.994	0.975	0.951
18	0.995	0.964	0.905	0.877	0.997	0.980	0.935	0.905	0.999	0.989	0.960	0.933
19	0.990	0.944	0.878	0.851	0.995	0.964	0.905	0.874	0.997	0.978	0.931	0.897
20	0.972	0.882	0.796	0.767	0.983	0.913	0.822	0.783	0.990	0.939	0.851	0.801
21	0.953	0.841	0.766	0.746	0.967	0.872	0.784	0.764	0.975	0.899	0.816	0.786
22	0.883	0.707	0.620	0.599	0.917	0.743	0.646	0.621	0.941	0.786	0.676	0.647
23	0.771	0.561	0.479	0.452	0.819	0.591	0.491	0.462	0.860	0.629	0.512	0.475
24	0.920	0.842	0.806	0.794	0.932	0.847	0.807	0.796	0.943	0.855	0.816	0.798
25	0.932	0.864	0.840	0.835	0.939	0.866	0.840	0.835	0.947	0.870	0.840	0.834
26	0.999	0.995	0.988	0.984	0.999	0.995	0.988	0.994	0.999	0.995	0.988	0.984
27	1.018	1.062	1.083	1.087	1.018	1.062	1.083	1.087	1.018	1.062	1.083	1.087

[illegible]

NEG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	6.6765	1.7499	3.6110	[illegible]	1.1292	3.7902	0.8244	0.00150	0.0237
2	7.4031	1.4837	3.3450	[illegible]	1.8331	4.4711	0.7435	0.00170	0.0224
3	7.7635	1.5631	4.1730	[illegible]	2.1062	4.0411	0.7254	0.00230	0.0205
4	7.2214	1.5112	[illegible]	[illegible]	2.0690	3.5741	0.6639	0.00280	0.0202
5	7.2076	1.4129	[illegible]	[illegible]	2.0287	3.6627	0.5859	0.00350	0.0255
6	7.9257	0.7315	2.9540	[illegible]	1.6313	5.4193	0.4550	0.00460	0.0496
7	9.0392	0.2134	[illegible]	0.1631	1.3634	7.2794	0.3520	0.00540	0.0743
8	10.1872	0.1129	2.9140	0.1349	1.1678	8.7215	0.2668	0.00610	0.1072
9	11.2364	0.0929	2.9040	0.2239	0.9543	9.9653	0.1921	0.00680	0.1353
10	12.1477	0.0797	2.8990	0.2359	0.6017	11.1205	0.1284	0.00730	0.1629
11	12.9533	0.0872	2.8950	0.3709	0.2173	12.2778	0.0815	0.00770	0.1895
12	13.2379	0.0972	2.8930	0.4839	0.0	12.6569	0.0514	0.00800	0.2018
13	13.9549	0.0971	2.8920	0.6263	0.0	13.2314	0.0331	0.00810	0.2150
14	14.8452	0.0951	2.8910	0.7971	0.0	13.9629	0.0212	0.00820	0.2297
15	15.9662	0.1099	2.8910	0.9826	0.0	14.8738	0.0096	0.00830	0.2476
16	16.7974	0.1279	2.8900	1.2350	0.0	15.4345	0.0030	0.00840	0.2586
17	18.8762	0.1777	2.8900	1.7146	0.0	16.9839	0.0028	0.00840	0.2847
18	22.4692	0.2188	2.8900	2.4608	0.0	19.7896	0.0028	0.00840	0.3317
19	26.5641	0.3615	2.8900	3.9917	0.0	22.2109	0.0028	0.00840	0.3723
20	20.3543	0.0693	2.8900	4.2115	0.0	16.0735	0.0028	0.00840	0.2694
21	36.9667	0.0806	2.8900	7.8884	0.0	28.9977	0.0028	0.00840	0.4860
22	45.8267	0.1486	2.8900	16.2777	0.0	29.4003	0.0028	0.00840	0.2464
23	176.7698	0.6037	2.8900	75.2889	0.0	100.8771	0.0028	0.00840	0.8454
24	31.0686	0.1826	2.8900	20.7762	0.0	10.1098	0.0028	0.00840	0.0847
25	11.9199	0.0007	2.8900	0.5895	0.0	11.3297	0.0028	0.00840	0.0949
26	4455.4375	0.7849	2.8900	4106.5117	0.0	348.1465	0.0028	0.00840	1.4587
27	1015.6565	0.2021	2.8900	1017.0010	0.0	3.4537	0.0028	0.00840	0.0033

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.000	0.008	0.070	0.212	0.313	0.290	0.202	0.117	0.062	0.031	0.016	0.015
2	0.003	0.065	0.270	0.464	0.448	0.299	0.159	0.073	0.031	0.012	0.005	0.003
3	0.471	0.511	0.410	0.306	0.200	0.114	0.055	0.024	0.010	0.004	0.001	0.001
4	1.021	0.531	0.333	0.139	0.027	0.012	0.005	0.001	0.000	0.000	0.0	0.0
5	1.219	0.366	0.187	0.158	0.061	0.025	0.009	0.003	0.001	0.000	0.000	0.000
6	1.231	0.327	0.016	0.031	0.016	0.008	0.003	0.000	0.000	0.0	0.0	0.0
7	0.981	0.397	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.672	0.489	0.005	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.340	0.613	0.000	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.411	0.239	0.011	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.115	0.063	0.024	0.009	0.004	0.002	0.001	0.000	0.000	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA [illegible],100,10,.01

TEMPERATURE 300. | TEMPERATURE 900. | TEMPERATURE 2100.

FISSION SELF-SHIELDING FACTORS

NOG	300.				900.				2100.			
1	1.000	0.993	0.998	1.000	1.000	0.998	0.938	1.000	1.000	0.998	0.998	1.000
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.993	0.992	0.992	1.000	0.993	0.992	0.992	1.000	0.993	0.994	0.992
4	1.000	0.991	0.989	0.989	1.000	0.991	0.989	0.989	1.000	0.991	0.989	0.989
5	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
6	1.000	1.001	1.005	1.010	1.000	1.001	1.005	1.010	1.000	1.001	1.005	1.010
7	1.000	1.001	1.006	1.012	1.000	1.001	1.006	1.012	1.000	1.001	1.006	1.012
8	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002
9	1.000	1.000	1.001	1.001	1.000	1.000	1.001	1.001	1.000	1.000	1.001	1.001
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
12	0.996	0.990	0.957	0.911	0.997	0.995	0.952	0.950	0.997	0.997	0.998	0.971
13	0.995	0.990	0.945	0.891	1.000	0.995	0.974	0.935	1.000	1.000	0.989	0.959
14	0.993	0.985	0.928	0.869	0.994	0.993	0.961	0.918	1.000	0.997	0.974	0.946
15	0.995	0.961	0.865	0.793	0.997	0.979	0.918	0.864	0.999	0.990	0.954	0.914
16	0.991	0.938	0.814	0.740	0.995	0.965	0.879	0.819	0.998	0.981	0.927	0.882
17	0.942	0.739	0.565	0.523	0.968	0.830	0.604	0.553	0.985	0.851	0.659	0.593
18	0.949	0.759	0.537	0.452	0.964	0.821	0.511	0.517	0.971	0.865	0.678	0.585
19	0.849	0.544	0.347	0.307	0.892	0.621	0.403	0.347	0.909	0.680	0.461	0.392
20	0.941	0.778	0.645	0.617	0.983	0.849	0.702	0.655	1.000	0.950	0.777	0.704
21	0.765	0.491	0.317	0.267	0.837	0.567	0.358	0.290	0.876	0.623	0.403	0.321
22	0.577	0.203	0.077	0.055	0.669	0.264	0.098	0.066	0.739	0.337	0.127	0.084
23	0.304	0.089	0.037	0.027	0.382	0.108	0.040	0.028	0.461	0.135	0.046	0.030
24	0.436	0.124	0.050	0.038	0.537	0.154	0.055	0.039	0.624	0.194	0.063	0.042
25	1.000	0.999	0.996	0.993	1.000	0.999	0.996	0.993	1.000	0.999	0.996	0.993
26	0.077	0.023	0.010	0.008	0.079	0.023	0.010	0.008	0.081	0.023	0.010	0.008
27	0.632	0.415	0.366	0.359	0.632	0.415	0.366	0.359	0.632	0.415	0.366	0.359

CAPTURE SELF-SHIELDING FACTORS

NOG	300.				900.				2100.			
1	1.000	0.997	0.994	0.988	1.000	0.997	0.994	0.988	1.000	0.997	0.994	0.988
2	1.000	0.994	0.992	0.988	1.000	0.994	0.992	0.988	1.000	0.994	0.992	0.988
3	1.000	0.993	0.994	0.997	1.000	0.993	0.994	0.997	1.000	0.993	0.994	0.997
4	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993
5	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
6	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
7	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
11	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
12	0.996	0.989	0.954	0.909	0.997	0.996	0.987	0.962	0.997	0.997	0.997	0.994
13	0.998	0.983	0.923	0.864	0.999	0.995	0.970	0.934	1.000	1.000	0.998	0.980
14	0.996	0.966	0.871	0.797	0.998	0.985	0.934	0.885	1.000	0.996	0.977	0.949
15	0.991	0.933	0.791	0.702	0.996	0.965	0.873	0.805	0.998	0.983	0.934	0.890
16	0.984	0.896	0.728	0.645	0.990	0.936	0.804	0.736	0.994	0.961	0.873	0.815
17	0.969	0.833	0.647	0.577	0.982	0.886	0.719	0.644	0.991	0.924	0.783	0.711
18	0.935	0.713	0.475	0.396	0.957	0.789	0.556	0.443	0.969	0.843	0.632	0.536

19	0.879	0.552	0.304	0.236	0.922	0.649	0.374	0.283	0.945	0.726	0.448	0.343
20	0.881	0.556	0.289	0.219	0.923	0.656	0.365	0.270	0.951	0.736	0.445	0.334
21	0.728	0.370	0.164	0.119	0.794	0.455	0.212	0.145	0.841	0.528	0.264	0.178
22	0.567	0.199	0.076	0.055	0.659	0.262	0.096	0.065	0.730	0.329	0.124	0.082
23	0.291	0.085	0.035	0.026	0.366	0.102	0.038	0.027	0.444	0.127	0.043	0.028
24	0.439	0.128	0.056	0.046	0.540	0.159	0.061	0.048	0.676	0.199	0.069	0.051
25	0.999	0.992	0.962	0.931	0.999	0.992	0.962	0.931	0.999	0.992	0.962	0.931
26	0.076	0.022	0.009	0.007	0.077	0.022	0.009	0.007	0.080	0.022	0.009	0.007
27	0.632	0.416	0.367	0.361	0.632	0.416	0.367	0.361	0.637	0.416	0.367	0.361

TOTAL SELF-SHIELDING FACTORS

NOG												
1	1.000	0.999	0.998	0.994	1.000	0.999	0.998	0.994	1.000	0.999	0.998	0.994
2	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
3	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999
6	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
7	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.997	0.979	0.913	0.859	0.999	0.988	0.937	0.878	0.999	0.993	0.955	0.894
13	0.995	0.962	0.877	0.825	0.997	0.977	0.909	0.852	0.998	0.987	0.935	0.876
14	0.990	0.935	0.830	0.782	0.995	0.959	0.868	0.813	0.997	0.974	0.903	0.865
15	0.981	0.892	0.771	0.728	0.989	0.927	0.811	0.758	0.993	0.951	0.852	0.794
16	0.971	0.857	0.740	0.704	0.982	0.895	0.776	0.732	0.989	0.926	0.813	0.763
17	0.944	0.785	0.657	0.574	0.963	0.830	0.694	0.635	0.976	0.868	0.731	0.677
18	0.872	0.640	0.497	0.369	0.909	0.693	0.532	0.456	0.933	0.741	0.570	0.505
19	0.813	0.520	0.386	0.229	0.870	0.578	0.412	0.269	0.906	0.637	0.443	0.351
20	0.824	0.593	0.432	0.364	0.870	0.640	0.504	0.413	0.905	0.688	0.532	0.467
21	0.579	0.356	0.266	0.163	0.642	0.396	0.277	0.174	0.659	0.419	0.291	0.205
22	0.490	0.289	0.242	0.224	0.562	0.309	0.247	0.229	0.627	0.336	0.254	0.235
23	0.179	0.087	0.060	0.040	0.214	0.089	0.060	0.040	0.265	0.093	0.060	0.040
24	0.420	0.288	0.253	0.201	0.495	0.291	0.252	0.231	0.554	0.299	0.252	0.202
25	0.999	0.997	0.988	0.974	0.999	0.997	0.986	0.974	0.999	0.997	0.988	0.974
26	0.034	0.010	0.005	0.005	0.033	0.010	0.006	0.005	0.037	0.009	0.006	0.005
27	0.438	0.251	0.221	0.219	0.438	0.251	0.221	0.218	0.438	0.251	0.221	0.218

ELASTIC SELF-SHIELDING FACTORS

NOG												
1	1.000	0.997	0.996	0.993	1.000	0.997	0.996	0.993	1.000	0.997	0.996	0.993
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990
4	1.000	0.991	0.990	0.989	1.000	0.991	0.990	0.989	1.000	0.991	0.990	0.989
5	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
6	1.000	1.000	0.998	0.996	1.000	1.000	0.996	0.976	1.000	1.000	0.998	0.996
7	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.995	0.987	[illegible]	[illegible]	0.996	0.992	0.976	0.960	0.996	0.995	0.987	0.978

13	0.998	0.992	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.999	0.995	0.978	0.963
14	0.995	0.966	[illegible]	[illegible]	0.997	[illegible]	[illegible]	[illegible]	0.999	0.988	0.955	0.93[illegible]
15	0.990	0.939	0.849	0.811	0.995	[illegible]	[illegible]	[illegible]	0.997	0.975	0.918	0.886
16	0.985	0.915	0.817	0.742	0.991	0.942	[illegible]	0.815	0.994	0.960	0.885	0.848
17	0.971	0.863	0.746	0.695	0.981	0.897	0.764	0.736	0.989	0.924	0.819	0.773
18	0.927	0.746	0.601	0.533	0.949	0.792	0.640	0.590	0.963	0.831	0.680	0.621
19	0.897	0.663	0.505	0.425	0.931	0.722	0.543	0.464	0.950	0.772	0.583	0.510
20	0.899	0.726	0.613	0.564	0.927	0.764	0.643	0.531	0.948	0.800	0.671	0.622
21	0.707	0.472	0.371	0.311	0.762	0.505	0.437	0.325	0.808	0.541	0.406	0.348
22	0.675	0.469	0.394	0.370	0.731	0.494	[illegible]	0.330	0.776	0.531	0.421	0.392
23	0.347	0.170	0.118	0.096	[illegible]	0.143	0.121	0.097	0.478	0.203	0.127	0.100
24	0.867	0.734	0.743	0.674	[illegible]	0.735	0.744	0.675	0.910	0.804	0.746	0.677
25	1.000	0.999	0.994	0.990	1.000	0.999	0.994	0.993	1.000	0.999	0.994	0.990
26	0.121	0.073	0.059	0.055	0.121	0.073	0.059	0.055	0.126	0.074	0.059	0.055
27	0.958	0.904	0.883	0.880	0.955	0.904	0.884	0.881	0.958	0.905	0.884	0.881

PJ-241241.05

NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CST	SIG R EL
1	6.6925	1.8953	3.5770	0.0293	1.5696	3.1984	0.8626	0.00120	0.0156
2	7.6605	1.6451	3.5330	0.0466	2.0331	4.1357	0.8349	0.00140	0.0166
3	7.7294	1.5767	3.3950	0.0638	2.0577	4.0252	0.7598	0.00200	0.0178
4	7.3251	1.7496	3.1880	0.0955	1.5762	3.8955	0.6946	0.00260	0.0199
5	7.9216	1.5947	3.0880	0.1063	1.8202	4.4006	0.6252	0.00310	0.0276
6	9.0873	1.5016	3.0280	0.1006	2.1094	5.3762	0.5564	0.00370	0.0399
7	10.1969	1.5946	2.9920	0.1147	1.9498	6.5457	0.4575	0.00450	0.0594
8	11.2679	1.8041	2.9700	0.1617	1.2784	8.0237	0.3451	0.00550	0.0880
9	12.2706	2.0439	2.9570	0.2902	0.7231	9.2228	0.2455	0.00630	0.1165
10	13.1567	2.2963	2.9480	0.4601	0.4255	9.9668	0.1702	0.00690	0.1386
11	13.7167	2.4489	2.9440	0.5767	0.1633	10.5279	0.1128	0.00740	0.1563
12	14.0735	2.6261	2.9410	0.5677	0.0002	10.8795	0.0697	0.00780	0.1694
13	15.1198	3.1619	2.9390	0.6994	0.0	11.2585	0.0385	0.00800	0.1812
14	15.3703	3.3450	2.9380	0.7475	0.0	11.2777	0.0196	0.00820	0.1851
15	16.3629	3.9969	2.9370	0.9048	0.0	11.4611	0.0082	0.00830	0.1903
16	18.2120	5.2456	2.9370	1.2077	0.0	11.7587	0.0029	0.00830	0.1962
17	20.2616	6.7218	2.9360	1.5729	0.0	11.9670	0.0028	0.00830	0.1997
18	21.9176	8.0791	2.9360	1.9218	0.0	11.9167	0.0028	0.00830	0.1989
19	25.1135	10.3619	2.9360	2.6503	0.0	12.1013	0.0028	0.00830	0.2020
20	33.5943	15.5689	2.9360	4.8596	0.0	13.1658	0.0028	0.00830	0.2198
21	45.3289	25.1802	2.9360	6.4107	0.0	13.7381	0.0028	0.00830	0.2293
22	50.5169	31.4659	2.9360	6.5071	0.0	12.5439	0.0028	0.00830	0.1047
23	60.4985	41.9803	2.9360	6.5809	0.0	11.9373	0.0028	0.00830	0.0996
24	148.7165	110.1697	2.9360	24.0136	0.0	14.5332	0.0028	0.00830	0.1213
25	243.1451	209.3141	2.9360	23.4512	0.0	10.3797	0.0028	0.00830	0.0866
26	92.6829	63.3957	2.9360	19.5237	0.0	9.7635	0.0028	0.00830	0.0407
27	5226.2617	3637.0044	2.9360	1577.6980	0.0	11.5698	0.0028	0.00830	0.0109

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.0	0.004	0.054	0.189	0.305	0.352	0.383	0.366	0.274	0.162	0.081	0.061
2	0.001	0.039	0.220	0.465	0.513	0.377	0.223	0.121	0.064	0.031	0.014	0.010
3	0.363	0.303	0.287	0.389	0.341	0.204	0.103	0.046	0.019	0.007	0.003	0.002
4	0.757	0.472	0.167	0.087	0.047	0.026	0.012	0.005	0.002	0.001	0.000	0.000
5	0.981	0.674	0.101	0.036	0.016	0.007	0.002	0.001	0.000	0.000	0.0	0.0
6	0.867	0.991	0.197	0.037	0.012	0.005	0.000	0.000	0.0	0.0	0.0	0.0
7	0.614	0.872	0.357	0.080	0.015	0.005	0.002	0.001	0.000	0.000	0.0	0.0
8	0.403	0.498	0.217	0.096	0.044	0.016	0.004	0.001	0.000	0.000	0.0	0.0
9	0.227	0.399	0.057	0.026	0.011	0.002	0.001	0.0	0.0	0.0	0.0	0.0
10	0.028	0.259	0.132	0.000	0.004	0.001	0.000	0.000	0.000	0.0	0.0	0.0
11	0.0	0.020	0.077	0.035	0.018	0.009	0.003	0.001	0.000	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000.,100.,10.,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

FISSION SELF-SHIELDING FACTORS

NDG				
1	1.000	0.998	0.999	1.002
2	1.000	0.995	0.994	0.994
3	1.000	0.993	0.992	0.993
4	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.001
6	1.000	1.000	1.000	1.000
7	1.000	1.000	0.999	0.999
8	1.000	1.000	0.999	0.994
9	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	0.999
11	0.995	0.995	0.992	0.991
12	1.000	1.000	0.994	0.909
13	1.000	1.000	0.992	0.941
14	1.000	1.000	0.989	0.911
15	1.000	1.000	0.978	0.886
16	0.999	0.994	0.946	0.829
17	0.998	0.984	0.900	0.757
18	0.996	0.968	0.847	0.668
19	0.992	0.940	0.769	0.602
20	0.992	0.878	0.630	0.446
21	0.949	0.820	0.519	0.310
22	0.958	0.783	0.481	0.272
23	0.940	0.735	0.460	0.294
24	0.773	0.492	0.326	0.208
25	0.901	0.685	0.527	0.408
26	0.823	0.632	0.560	0.547
27	0.415	0.246	0.186	0.176

CAPTURE SELF-SHIELDING FACTORS

NDG				
1	1.000	0.997	0.995	0.990
2	1.000	0.995	0.993	0.990
3	1.000	0.993	0.993	0.994
4	1.000	0.991	0.990	0.990
5	1.000	1.000	1.001	1.001
6	1.000	1.000	1.000	1.000
7	1.000	1.000	0.999	0.998
8	1.000	1.000	0.998	0.996
9	1.000	1.000	0.998	0.996
10	1.000	1.000	0.999	0.998
11	0.994	0.994	0.992	0.956
12	1.000	1.000	0.997	0.913
13	1.000	1.000	0.995	0.895
14	1.000	1.000	0.992	0.914
15	1.000	1.000	0.979	0.891
16	0.999	0.995	0.946	0.830
17	0.998	0.982	0.894	0.750
18	0.995	0.962	0.831	0.678
19	0.990	0.928	0.749	0.571
20	0.979	0.859	0.594	0.414
21	0.959	0.776	0.458	0.284
22	0.936	0.702	0.385	0.285
23	0.909	0.645	0.359	0.213
24	0.685	0.385	0.254	0.224
25	0.799	0.545	0.415	0.385
26	0.658	0.358	0.264	0.244
27	0.394	0.229	0.172	0.163

TOTAL SELF-SHIELDING FACTORS

NDG				
1	1.000	0.999	0.998	0.996
2	1.000	1.000	0.999	0.998
3	0.999	1.000	1.000	1.000
4	0.999	1.000	1.000	1.000
5	1.000	1.000	0.996	0.997
6	1.000	1.000	0.999	0.997
7	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.999
10	1.000	1.000	1.000	0.999
11	1.000	0.996	0.997	0.987
12	0.999	0.992	0.989	0.925
13	0.996	0.990	0.984	0.875
14	0.995	0.990	0.989	0.927
15	0.998	0.986	0.975	0.894
16	0.997	0.975	0.943	0.837
17	0.995	0.957	0.894	0.732
18	0.992	0.935	0.849	0.681
19	0.986	0.892	0.769	0.624
20	0.985	0.782	0.626	0.434
21	0.937	0.665	0.454	0.271
22	0.915	0.617	0.419	0.340
23	0.890	0.582	0.446	0.345
24	0.651	0.360	0.291	0.305
25	0.809	0.478	0.283	0.244
26	0.700	0.526	0.462	0.474
27	0.235	0.095	0.030	0.027

ELASTIC SELF-SHIELDING FACTORS

NDG				
1	1.000	0.997	0.995	0.993
2	1.000	0.995	0.994	0.994
3	1.000	0.992	0.992	0.991
4	1.000	0.991	0.990	0.990
5	1.000	1.000	0.999	0.999
6	1.000	1.000	0.999	0.999
7	1.000	1.000	0.999	0.999
8	1.000	1.000	0.999	0.999
9	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	1.000
11	0.995	0.995	0.995	0.995
12	1.000	1.000	0.999	0.999

13	1.000	1.000	0.998	0.988
14	1.000	1.000	0.998	0.991
15	1.000	0.999	0.995	0.987
16	1.000	0.998	0.988	0.975
17	0.999	0.995	0.980	0.962
18	0.999	0.993	0.973	0.957
19	0.998	0.987	0.959	0.941
20	0.993	0.960	0.904	0.875
21	0.987	0.932	0.862	0.830
22	0.988	0.948	0.907	0.888
23	0.991	0.969	0.949	0.940
24	0.931	0.870	0.847	0.842
25	0.974	0.941	0.919	0.914
26	0.989	0.982	0.982	0.982
27	1.006	1.031	1.043	1.044

2

P1-242242.23 **

NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG R EL
1	6.6155	1.7664	3.4420	0.3346	1.4625	3.1526	0.4876	0.00090	0.0127
2	7.4205	1.7570	3.4410	0.0067	1.9752	3.6096	0.6587	0.00120	0.0125
3	7.3396	1.5970	3.2140	0.0271	1.9610	3.7542	0.7683	0.00190	0.0159
4	6.9742	1.3566	3.3591	0.0416	1.6528	3.9251	0.6500	0.00280	0.0222
5	7.1541	1.3580	2.9590	0.0555	1.1846	4.5324	0.5391	0.00380	0.0349
6	7.7103	0.5153	2.9000	0.1061	1.2249	5.8437	0.4036	0.00500	0.0580
7	8.5473	0.1321	2.8640	0.1152	1.1274	7.1693	0.3122	0.00570	0.0821
8	9.5466	0.0495	2.8420	0.1236	0.9261	8.4472	0.2386	0.00630	0.1071
9	10.6704	0.0423	2.8240	0.1411	0.6759	9.8216	0.1770	0.00690	0.1354
10	11.8541	0.0294	2.8200	0.1648	0.4336	11.2116	0.1166	0.00740	0.1656
11	13.1263	0.0374	2.8160	0.3015	0.0964	12.6915	0.0745	0.00770	0.1956
12	14.4751	0.0456	2.8130	0.4145	0.0	14.0150	0.0465	0.00790	0.2226
13	15.9067	0.0540	2.8110	0.5041	0.0	15.3496	0.0268	0.00810	0.2468
14	17.2965	0.0533	2.8100	0.6516	0.0	16.5919	0.0079	0.00830	0.2742
15	19.1572	0.0	2.8090	0.4546	0.0	18.4026	0.0028	0.00830	0.3040
16	21.6932	0.0	2.8090	1.1331	0.0	20.5501	0.0028	0.00830	0.3413
17	24.8872	0.0	2.8080	1.5792	0.0	23.3080	0.0028	0.00830	0.3872
18	28.9750	0.0	2.8080	2.2935	0.0	26.6815	0.0028	0.00830	0.4432
19	34.2064	0.0	2.8080	3.4163	0.0	30.7901	0.0028	0.00830	0.5114
20	40.9117	0.0	2.8080	5.1487	0.0	35.7630	0.0028	0.00830	0.5940
21	53.3206	0.0	2.8080	8.7361	0.0	44.5845	0.0028	0.00830	0.7406
22	29.6070	0.0	2.8080	9.8075	0.0	19.7995	0.0028	0.00830	0.1644
23	97.0522	0.0	2.8080	34.1368	0.0	62.9154	0.0028	0.00830	0.9225
24	12.3886	0.0	2.8080	2.4640	0.0	9.9246	0.0028	0.00830	0.0824
25	12.0913	0.0	2.8080	0.4298	0.0	11.6614	0.0028	0.00830	0.0969
26	582.9810	0.0	2.8080	532.2349	0.0	50.7461	0.0028	0.00830	0.2107
27	73.6175	0.0	2.8080	65.2890	0.0	8.3285	0.0028	0.00830	0.0078

3

INELASTIC SCATTERING FROM I TO I+K

IA	0	1	2	3	4	5	6	7	8	9	10	11
1	0.699	0.056	0.034	0.119	0.201	0.214	0.167	0.104	0.055	0.026	0.011	0.008
2	0.835	0.099	0.152	0.271	0.266	0.180	0.096	0.044	0.019	0.007	0.003	0.002
3	0.924	0.290	0.190	0.208	0.163	0.096	0.047	0.020	0.008	0.003	0.001	0.001
4	0.665	0.236	0.195	0.201	0.160	0.106	0.050	0.021	0.008	0.003	0.001	0.001
5	0.630	0.202	0.127	0.124	0.048	0.024	0.017	0.009	0.004	0.002	0.001	0.001
6	0.860	0.270	0.000	0.039	0.034	0.013	0.005	0.002	0.001	0.000	0.000	0.0
7	0.791	0.332	0.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.529	0.393	0.003	0.001	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.235	0.421	0.015	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.252	0.157	0.024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.057	0.034	0.034	0.000	0.000	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=[illegible]

CAPTURE SELF-SHIELDING FACTORS

N.G	TEMPERATURE 300.				TEMPERATURE 900.				TEMPERATURE 2100.			
1	1.000	0.997	0.995	0.991	1.000	0.997	0.995	0.991	1.000	0.997	0.995	0.991
2	1.000	0.995	0.993	0.991	1.000	0.995	0.993	0.991	1.000	0.995	0.993	0.991
3	1.000	0.993	0.995	0.999	1.000	0.993	0.995	0.999	1.000	0.993	0.995	0.999
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
11	1.000	1.000	0.999	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
12	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
13	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
14	0.992	0.979	0.950	0.933	0.993	0.986	0.966	0.953	0.994	0.990	0.979	0.971
15	0.983	0.894	0.727	0.646	0.991	0.936	0.812	0.739	0.995	0.964	0.885	0.832
16	0.966	0.816	0.599	0.508	0.980	0.877	0.694	0.606	0.988	0.921	0.781	0.705
17	0.936	0.713	0.466	0.378	0.960	0.792	0.559	0.465	0.974	0.852	0.650	0.558
18	0.891	0.598	0.345	0.269	0.928	0.686	0.426	0.339	0.951	0.759	0.511	0.417
19	0.829	0.481	0.248	0.187	0.880	0.571	0.314	0.238	0.915	0.650	0.383	0.297
20	0.749	0.374	0.176	0.130	0.815	0.456	0.223	0.164	0.862	0.534	0.277	0.206
21	0.666	0.287	0.117	0.085	0.734	0.357	0.147	0.101	0.780	0.423	0.185	0.123
22	0.616	0.235	0.093	0.067	0.711	0.302	0.119	0.081	0.783	0.370	0.146	0.098
23	0.318	0.109	0.047	0.037	0.374	0.130	0.053	0.040	0.431	0.154	0.062	0.044
24	0.857	0.444	0.182	0.127	0.905	0.541	0.226	0.152	0.934	0.626	0.279	0.185
25	0.999	0.991	0.958	0.925	0.999	0.991	0.958	0.925	0.999	0.991	0.958	0.925
26	0.135	0.052	0.031	0.027	0.146	0.053	0.031	0.027	0.165	0.055	0.031	0.027
27	0.931	0.680	0.438	0.370	0.931	0.680	0.438	0.370	0.931	0.680	0.438	0.370

TOTAL SELF-SHIELDING FACTORS

N.G	TEMPERATURE 300.				TEMPERATURE 900.				TEMPERATURE 2100.			
1	1.000	0.999	0.998	0.996	1.000	0.999	0.998	0.996	1.000	0.999	0.998	0.996
2	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
3	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999
6	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
7	1.000	1.000	0.995	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
11	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
12	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
13	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
14	0.994	0.969	0.941	0.934	0.996	0.977	0.949	0.938	0.998	0.983	0.958	0.946
15	0.954	0.790	0.648	0.610	0.970	0.838	0.685	0.636	0.980	0.879	0.730	0.673
16	0.920	0.704	0.570	0.540	0.945	0.756	0.599	0.559	0.962	0.806	0.639	0.588
17	0.866	0.611	0.494	0.471	0.904	0.661	0.515	0.484	0.931	0.713	0.546	0.505
18	0.792	0.517	0.422	0.404	0.843	0.561	0.436	0.413	0.883	0.610	0.458	0.427

19	0.649	0.430	0.356	0.343	0.761	0.464	0.365	0.348	0.812	0.506	0.379	0.356
20	0.595	0.354	0.297	0.287	0.661	0.378	0.302	0.290	0.721	0.409	0.311	0.295
21	0.484	0.270	0.199	0.124	0.544	0.288	0.203	0.128	0.603	0.311	0.211	0.140
22	0.599	0.415	0.365	0.335	0.659	0.435	0.371	0.342	0.730	0.458	0.378	0.352
23	0.224	0.133	0.100	0.079	0.243	0.137	0.101	0.079	0.278	0.142	0.102	0.075
24	0.947	0.846	0.813	0.806	0.963	0.863	0.815	0.807	0.974	0.881	0.819	0.808
25	0.999	0.998	0.991	0.985	0.999	0.998	0.991	0.985	0.999	0.998	0.991	0.985
26	0.081	0.043	0.033	0.031	0.080	0.043	0.033	0.031	0.081	0.042	0.033	0.031
27	0.883	0.542	0.327	0.284	0.883	0.542	0.327	0.284	0.883	0.542	0.327	0.284

ELASTIC SELF-SHIELDING FACTORS

NGG												
1	1.000	0.997	0.996	0.994	1.000	0.997	0.996	0.994	1.000	0.997	0.996	0.994
2	1.000	0.995	0.994	0.994	1.000	0.995	0.994	0.994	1.000	0.995	0.994	0.994
3	1.000	0.992	0.992	0.992	1.000	0.992	0.992	0.992	1.000	0.992	0.992	0.992
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
6	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
11	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
12	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
13	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
14	0.992	0.976	0.953	0.944	0.993	0.982	0.961	0.952	0.993	0.986	0.965	0.960
15	0.976	0.870	0.736	0.691	0.995	0.905	0.771	0.724	0.990	0.932	0.822	0.774
16	0.957	0.803	0.657	0.615	0.971	0.847	0.697	0.648	0.980	0.843	0.741	0.689
17	0.925	0.724	0.577	0.541	0.949	0.772	0.612	0.566	0.963	0.816	0.652	0.600
18	0.878	0.636	0.500	0.470	0.911	0.695	0.527	0.488	0.935	0.743	0.561	0.514
19	0.813	0.547	0.429	0.404	0.855	0.592	0.449	0.417	0.892	0.639	0.475	0.436
20	0.732	0.463	0.365	0.340	0.736	0.500	0.374	0.354	0.840	0.542	0.397	0.367
21	0.632	0.376	0.277	0.225	0.689	0.404	0.248	0.234	0.740	0.447	0.303	0.248
22	0.785	0.616	0.556	0.531	0.932	0.640	0.566	0.541	0.869	0.667	0.577	0.552
23	0.354	0.214	0.166	0.143	0.393	0.221	0.165	0.144	0.438	0.232	0.171	0.146
24	1.000	0.998	0.996	0.994	1.000	0.999	0.996	0.994	1.000	0.998	0.996	0.994
25	1.000	0.999	0.997	0.995	1.000	0.999	0.997	0.995	1.000	0.999	0.997	0.995
26	0.275	0.204	0.184	0.179	0.254	0.205	0.184	0.179	0.249	0.206	0.184	0.180
27	1.000	0.997	0.993	0.990	1.000	0.997	0.993	0.993	1.000	0.997	0.994	0.990

NGG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG K EL
1	2.3356	0.0	0.0	0.0312	0.0	2.3043	0.8051	0.00660	0.0640
2	2.7190	0.0	0.0	0.0023	0.3298	2.3869	0.6573	0.01200	0.0824
3	3.2637	0.0	0.0	0.0008	0.9949	2.2640	0.4227	0.02040	0.1011
4	2.8988	0.0	0.0	0.0014	0.6754	2.2214	0.2565	0.02620	0.1163
5	2.4918	0.0	0.0	0.0029	0.2822	2.2069	0.2293	0.02720	0.1201
6	2.8619	0.0	0.0	0.0044	0.0	2.8574	0.1748	0.02910	0.1664
7	3.4754	0.0	0.0	0.0053	0.0	3.4701	0.1144	0.03130	0.2170
8	3.2034	0.0	0.0	0.0054	0.0	3.1980	0.0820	0.03240	0.2072
9	4.9570	0.0	0.0	0.0053	0.0	4.9516	0.0562	0.03330	0.3298
10	5.3595	0.0	0.0	0.0057	0.0	5.3537	0.0387	0.03390	0.3633
11	4.5308	0.0	0.0	0.0068	0.0	4.5240	0.0281	0.03430	0.3104
12	15.8603	0.0	0.0	0.0289	0.0	15.8314	0.0216	0.03450	1.0933
13	1.9797	0.0	0.0	0.0188	0.0	1.9610	0.0177	0.03470	0.1360
14	5.4223	0.0	0.0	0.0237	0.0	5.3987	0.0153	0.03480	0.3752
15	12.1397	0.0	0.0	0.0623	0.0	12.0774	0.0139	0.03480	0.8406
16	5.6034	0.0	0.0	0.0182	0.0	5.5851	0.0130	0.03480	0.3891
17	5.7403	0.0	0.0	0.0080	0.0	5.7323	0.0125	0.03490	0.3996
18	7.4932	0.0	0.0	0.0136	0.0	7.4796	0.0122	0.03490	0.5215
19	9.2983	0.0	0.0	0.1806	0.0	9.1177	0.0120	0.03490	0.6359
20	10.2394	0.0	0.0	0.0168	0.0	10.2226	0.0119	0.03490	0.7130
21	10.8948	0.0	0.0	0.0272	0.0	10.8677	0.0118	0.03490	0.7580
22	11.3777	0.0	0.0	0.0316	0.0	11.3461	0.0117	0.03490	0.3957
23	11.4274	0.0	0.0	0.0550	0.0	11.3723	0.0117	0.03490	0.3967
24	11.4004	0.0	0.0	0.0824	0.0	11.3180	0.0117	0.03490	0.3948
25	11.3703	0.0	0.0	0.1337	0.0	11.2366	0.0117	0.03490	0.3919
26	11.4979	0.0	0.0	0.2969	0.0	11.2011	0.0117	0.03490	0.1953
27	3.9235	0.0	0.0	0.3593	0.0	3.5643	0.0056	0.01670	0.0067

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.142	0.039	0.045	0.053	0.024	0.022	0.003	0.001	0.001	0.000	0.000
3	0.103	0.565	0.099	0.072	0.069	0.041	0.024	0.011	0.005	0.003	0.002	0.002
4	0.0	0.371	0.276	0.028	0.0	0.0	0.000	0.001	0.000	0.000	0.000	0.000
5	0.0	0.0	0.106	0.084	0.050	0.023	0.010	0.004	0.002	0.001	0.000	0.001
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS [illegible] SIGMA [illegible]

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

N\G				
1	[illegible]	[illegible]	[illegible]	[illegible]
2	1.000	0.994	[illegible]	[illegible]
3	1.000	[illegible]	0.997	[illegible]
4	1.000	[illegible]	[illegible]	[illegible]
5	1.000	1.000	1.001	[illegible]
6	1.000	[illegible]	[illegible]	[illegible]
7	1.000	1.000	1.001	[illegible]
8	1.000	1.000	1.000	[illegible]
9	1.000	1.000	1.000	[illegible]
10	1.000	1.000	[illegible]	[illegible]
11	1.000	1.000	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	1.325
13	1.000	1.004	1.042	1.355
14	1.000	0.996	0.974	[illegible]
15	[illegible]	0.992	0.961	0.927
16	1.000	0.999	0.997	[illegible]
17	1.000	1.000	1.002	1.067
18	1.000	1.001	1.003	[illegible]
19	[illegible]	[illegible]	0.471	0.781
20	1.000	1.000	1.000	[illegible]
21	1.000	1.000	0.999	[illegible]
22	1.000	1.000	0.999	0.999
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	0.992	0.925	0.552	0.001

TOTAL SELF-SHIELDING FACTORS

N\G				
1	1.001	0.999	0.996	0.954
2	1.000	1.000	1.000	1.000
3	0.999	1.000	0.999	0.996
4	0.999	1.000	0.998	0.989
5	0.999	1.000	0.994	0.964
6	1.001	0.998	0.985	0.943
7	1.001	0.997	0.973	0.877
8	1.000	0.992	0.946	0.544
9	0.997	0.970	0.832	0.308
10	0.996	0.955	0.805	0.395
11	1.001	0.998	0.983	0.947
12	0.967	0.774	0.422	0.351
13	1.001	0.989	0.901	0.162
14	1.000	0.993	0.958	0.894
15	0.996	0.965	0.840	0.716
16	1.001	0.999	0.993	[illegible]
17	1.001	0.999	0.995	[illegible]
18	1.000	[illegible]	[illegible]	[illegible]

19	1.000	0.999	0.994	0.990
20	1.000	1.000	0.999	0.999
21	1.000	1.000	1.000	1.000
22	0.999	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	0.999	1.000	1.000	1.000
25	0.999	1.000	1.000	1.000
26	0.999	1.000	1.000	1.000
27	1.013	0.856	0.282	0.0

ELASTIC SELF-SHIELDING FACTORS

NOG				
1	1.000	0.997	0.996	0.992
2	1.000	0.995	0.994	0.994
3	1.000	0.997	0.996	0.995
4	1.000	0.996	0.994	0.991
5	1.000	1.000	0.997	0.984
6	1.000	0.999	0.993	0.969
7	1.000	0.998	0.987	0.941
8	1.000	0.996	0.972	0.841
9	0.998	0.985	0.908	0.665
10	0.998	0.978	0.887	0.690
11	1.000	0.999	0.992	0.973
12	0.983	0.875	0.611	0.261
13	0.999	0.994	0.950	0.430
14	1.000	0.997	0.979	0.843
15	0.998	0.982	0.915	0.842
16	1.000	0.999	0.996	0.990
17	1.000	1.000	0.997	0.993
18	1.000	1.000	0.998	0.995
19	1.000	1.000	1.000	0.999
20	1.000	1.000	1.000	0.999
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	0.992	0.926	0.556	0.361

NOG	SIG TOT	SIG FIS	NU	SIG CAT	SIG IN	SIG EL	NU EL	CSI	SIG N EL
1	2.0347	0.0	0.0	0.0184	0.0	2.0044	0.7316	0.01126	0.0976
2	2.5249	0.0	0.0	0.0082	0.0	2.5219	0.7345	0.00980	0.0712
3	2.8511	0.0	0.0	0.0029	0.1377	2.7513	0.5224	0.01410	0.1093
4	3.1500	0.0	0.0	0.0029	0.4438	2.7032	0.2140	0.02810	0.1409
5	2.8075	0.0	0.0	0.0334	0.0	2.8044	0.1980	0.03040	0.1707
6	2.8084	0.0	0.0	0.0034	0.0	2.8044	0.2203	0.02980	0.1658
7	3.1701	0.0	0.0	0.0034	0.0	3.1662	0.2106	0.02720	0.1847
8	2.7671	0.0	0.0	0.0040	0.0	2.7641	0.2118	0.02940	0.1653
9	5.2283	0.0	0.0	0.0056	0.0	5.2227	0.2004	0.03030	0.3170
10	4.5328	0.0	0.0	0.0054	0.0	4.5277	0.0419	0.00650	0.0592
11	5.7142	0.0	0.0	0.0045	0.0	5.7097	0.0	0.0	0.0
12	2.9980	0.0	0.0	0.0059	0.0	2.9921	0.0	0.0	0.0
13	3.0113	0.0	0.0	0.0089	0.0	3.0024	0.0	0.0	0.0
14	6.4688	0.0	0.0	0.0150	0.0	6.4538	0.0	0.0	0.0
15	17.4925	0.0	0.0	0.1232	0.0	17.3696	0.0	0.0	0.0
16	18.7687	0.0	0.0	0.1435	0.0	18.6253	0.0	0.0	0.0
17	6.5219	0.0	0.0	0.1389	0.0	6.3830	0.0	0.0	0.0
18	4.5432	0.0	0.0	0.1614	0.0	4.3818	0.0	0.0	0.0
19	4.4276	0.0	0.0	0.1240	0.0	4.3036	0.0	0.0	0.0
20	4.4224	0.0	0.0	0.1230	0.0	4.2994	0.0	0.0	0.0
21	4.4205	0.0	0.0	0.1268	0.0	4.2937	0.0	0.0	0.0
22	4.4212	0.0	0.0	0.1395	0.0	4.2817	0.0	0.0	0.0
23	4.4286	0.0	0.0	0.1659	0.0	4.2627	0.0	0.0	0.0
24	4.3932	0.0	0.0	0.1362	0.0	4.2570	0.0	0.0	0.0
25	4.3878	0.0	0.0	0.1716	0.0	4.2162	0.0	0.0	0.0
26	4.5224	0.0	0.0	0.3741	0.0	4.1483	0.0	0.0	0.0
27	13.7029	0.0	0.0	11.0293	0.0	2.6736	0.0	0.0	0.0

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.045	0.089	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.169	0.139	0.071	0.034	0.016	0.008	0.003	0.002	0.001	0.001
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA O=(10.0,100.,10.,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG				
1	1.000	0.999	1.007	1.036
2	1.000	0.995	0.994	0.995
3	1.000	0.992	0.992	0.992
4	1.000	0.991	0.990	0.990
5	1.000	1.000	0.999	0.995
6	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	1.000
8	1.000	1.000	0.999	0.996
9	1.000	1.001	1.004	1.024
10	1.000	0.997	0.981	0.966
11	1.000	1.001	1.006	1.031
12	1.000	1.000	1.000	1.002
13	1.000	1.000	1.000	1.000
14	1.000	0.996	0.977	0.964
15	0.999	0.994	0.974	0.955
16	1.000	0.999	0.995	0.992
17	1.000	1.001	1.004	1.010
18	1.000	1.000	1.000	0.999
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	1.000
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	0.999	0.998
25	1.000	1.000	1.000	1.000
26	1.000	1.000	0.999	0.997
27	0.988	0.906	0.662	0.485

TOTAL SELF-SHIELDING FACTORS

NUG				
1	1.001	0.999	0.998	0.995
2	1.000	1.000	1.000	0.999
3	0.999	1.000	0.996	0.983
4	0.999	1.000	0.995	0.977
5	1.001	1.000	0.999	0.994
6	1.001	1.000	0.999	0.995
7	1.001	0.992	0.939	0.730
8	1.001	0.997	0.979	0.911
9	0.998	0.978	0.865	0.626
10	0.994	0.941	0.684	0.341
11	0.989	0.903	0.603	0.269
12	1.001	0.996	0.971	0.884
13	1.002	0.999	0.993	0.970
14	0.999	0.986	0.916	0.810
15	1.000	0.994	0.972	0.952
16	0.999	0.988	0.943	0.903
17	1.000	0.993	0.960	0.913
18	1.001	1.000	1.000	0.999

NODE									
1	1.000	0.997	0.996	0.993					
2	1.000	0.995	0.994	0.993					
3	1.000	0.999	0.999	0.994					
4	1.000	0.992	0.989	0.982					
5	1.000	1.000	0.999	0.997					
6	1.000	0.997	0.996	0.993					
7	1.000	0.999	0.996	0.995					
8	1.000	0.999	0.989	0.983					
9	0.999	0.999	0.989	0.979					
10	0.997	0.970	0.919	0.920					
11	0.994	0.969	0.754	0.954					
12	1.000	0.999	0.985	0.938					
13	1.000	1.000	0.997	0.985					
14	0.999	0.993	0.954	0.854					
15	1.000	0.997	0.948	0.978					
16	0.999	0.996	0.972	0.954					
17	1.000	0.996	0.979	0.951					
18	1.000	1.000	1.000	1.000					
19	1.000	1.000	1.000	1.000					
20	1.000	1.000	1.000	1.000					
21	1.002	1.000	1.000	1.000					
22	1.000	1.000	1.000	1.000					
23	1.000	1.000	1.000	1.000					
24	0.997	1.000	1.000	1.000					
25	1.001	1.000	1.000	1.000					
26	0.997	1.000	1.000	1.000					
27	0.988	0.978	0.631	0.502					

ELASTIC SELF-SHIELDING FACTORS

INELASTIC SCATTERING FROM J TO J+K

J/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.0	0.006	0.044	0.113	0.140	0.111	0.085	0.062	0.014	0.005	0.002	0.534
2	0.001	0.068	0.369	0.263	0.171	0.097	0.040	0.016	0.006	0.002	0.001	0.163
3	0.0	0.196	0.436	0.152	0.087	0.047	0.024	0.012	0.005	0.003	0.001	0.001
4	0.0	0.001	0.156	0.106	0.053	0.027	0.011	0.005	0.001	0.000	0.000	0.000
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000.,100.,10.,.01

TEMPERATURE 300. TEMPERATURE 900. TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG			
2	1.000	0.995	0.993 0.991
3	1.000	0.992	0.991 0.988
4	1.000	0.991	0.990 0.989
5	1.000	1.000	0.999 0.994
6	1.000	1.000	1.000 1.000
7	1.000	1.000	1.000 0.999
8	1.000	1.000	1.000 1.001
9	1.000	1.000	1.002 1.004
10	1.000	0.999	0.995 0.993
11	1.000	1.002	1.004 0.996
12	1.000	0.997	0.985 0.970
13	0.999	0.992	0.979 0.973
14	0.998	0.987	0.952 0.930
15	1.000	0.999	0.996 0.994
16	1.000	1.002	1.006 1.009
17	1.000	1.001	1.004 1.006
18	1.000	1.000	0.999 0.996
19	1.000	1.000	1.000 0.999
20	1.000	1.000	0.999 0.998
21	1.000	1.000	1.000 1.000
22	1.000	1.000	0.999 0.999
23	1.000	1.000	1.000 1.000
24	1.000	1.000	1.000 1.000
25	1.000	1.000	1.000 1.000
26	1.000	1.000	0.998 0.997
27	0.987	0.911	0.770 0.720

TOTAL SELF-SHIELDING FACTORS

NUG			
2	1.000	1.000	1.000 0.999
3	0.999	1.000	1.000 1.000
4	0.999	1.000	1.000 0.999
5	1.001	0.999	0.992 0.962
6	1.001	0.999	0.988 0.943
7	1.000	0.996	0.974 0.902
8	1.000	0.991	0.934 0.791
9	0.996	0.962	0.776 0.604
10	0.998	0.974	0.851 0.607
11	0.989	0.904	0.668 0.475
12	0.992	0.935	0.780 0.678
13	0.953	0.749	0.540 0.485
14	0.980	0.850	0.564 0.453
15	0.999	0.987	0.941 0.903
16	0.999	0.992	0.970 0.958
17	1.000	0.999	0.995 0.993
18	1.000	1.000	1.000 1.000

ELASTIC SELF-SHIELDING FACTORS

19	1.000	1.000	1.000	1.000
20	1.000	1.000	0.999	0.999
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	0.999	1.000	1.000	1.000
27	0.990	0.918	0.807	0.761

NUG				
2	1.000	0.995	0.994	0.993
3	1.000	0.992	0.992	0.992
4	1.000	0.991	0.990	0.989
5	1.000	0.999	0.956	0.781
6	1.000	0.999	0.994	0.972
7	1.000	0.998	0.997	0.992
8	1.000	0.995	0.967	0.897
9	0.998	0.981	0.879	0.629
10	0.999	0.987	0.920	0.736
11	0.994	0.949	0.785	0.614
12	0.996	0.966	0.867	0.790
13	0.976	0.856	0.686	0.628
14	0.990	0.923	0.749	0.650
15	0.999	0.991	0.966	0.946
16	0.994	0.996	0.985	0.979
17	1.000	0.999	0.992	0.996
18	1.000	1.000	1.000	1.000
19	1.000	1.000	1.000	1.000
20	1.000	1.000	1.000	0.999
21	1.000	1.000	1.000	1.000
22	1.000	1.000	1.000	1.000
23	1.000	1.000	1.000	1.000
24	1.000	1.000	1.000	1.000
25	1.000	1.000	1.000	1.000
26	1.000	1.000	1.000	1.000
27	1.000	1.000	1.000	1.000

APPENDIX II

ENDF/B-III Modified Cross Sections

U-2458235.04 **

NOG	SIG TOT	SIG PIS	NU	SIG LAT	SIG IN	SIG EL	MU EL	CSI	SIG W EL
1	[illegible]	1.4672	[illegible]	[illegible]	1.3741	[illegible]	[illegible]	[illegible]	0.0241
2	[illegible]	1.0792	[illegible]	[illegible]	1.0194	[illegible]	[illegible]	[illegible]	0.0280
3	[illegible]	1.2567	[illegible]	[illegible]	1.1833	[illegible]	[illegible]	[illegible]	0.0280
4	[illegible]	1.2479	[illegible]	[illegible]	1.0669	[illegible]	[illegible]	[illegible]	0.0442
5	[illegible]	1.2230	[illegible]	[illegible]	1.4365	[illegible]	[illegible]	[illegible]	0.0393
6	[illegible]	1.1127	[illegible]	[illegible]	1.2174	[illegible]	[illegible]	[illegible]	0.0497
7	[illegible]	1.1578	[illegible]	[illegible]	0.9465	[illegible]	[illegible]	[illegible]	0.0711
8	[illegible]	1.3193	[illegible]	[illegible]	0.8943	[illegible]	[illegible]	[illegible]	0.0984
9	[illegible]	1.4450	[illegible]	[illegible]	0.4480	[illegible]	[illegible]	[illegible]	0.1302
10	[illegible]	1.7268	[illegible]	[illegible]	0.2491	[illegible]	[illegible]	[illegible]	0.1515
11	[illegible]	1.9160	[illegible]	[illegible]	0.0804	[illegible]	[illegible]	[illegible]	0.1669
12	[illegible]	2.1342	[illegible]	[illegible]	0.0207	[illegible]	[illegible]	[illegible]	0.1788
13	[illegible]	2.4475	[illegible]	[illegible]	0.0073	[illegible]	[illegible]	[illegible]	0.1808
14	[illegible]	2.9960	[illegible]	[illegible]	0.0003	[illegible]	[illegible]	[illegible]	0.1858
15	[illegible]	3.6733	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1876
16	[illegible]	4.5730	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1909
17	[illegible]	5005.5156	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1919
18	[illegible]	3007.4841	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1967
19	[illegible]	8.7771	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1991
20	[illegible]	13.5415	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1997
21	[illegible]	14.0526	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1955
22	[illegible]	21.5598	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1012
23	[illegible]	34.5172	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1050
24	[illegible]	51.3414	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.1059
25	[illegible]	49.8046	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.0973
26	[illegible]	31.8318	[illegible]	[illegible]	0.0	[illegible]	[illegible]	[illegible]	0.0521
27	2565.8621	2169.1392	[illegible]	381.1497	0.0	[illegible]	[illegible]	[illegible]	0.0151

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.006	0.011	0.088	0.261	0.398	0.389	0.275	0.155	0.075	0.033	0.013	0.008
2	0.087	0.189	0.251	0.410	0.346	0.257	0.138	0.066	0.029	0.012	0.005	0.003
3	0.436	0.545	0.202	0.236	0.178	0.102	0.049	0.021	0.009	0.003	0.001	0.001
4	0.480	0.741	0.206	0.108	0.069	0.036	0.016	0.007	0.003	0.001	0.000	0.000
5	0.309	0.617	0.349	0.116	0.008	0.004	0.002	0.001	0.000	0.000	0.0	0.0
6	0.478	0.467	0.141	0.063	0.029	0.009	0.003	0.001	0.000	0.000	0.000	0.0
7	0.385	0.401	0.107	0.036	0.011	0.004	0.001	0.000	0.000	0.0	0.0	0.0
8	0.255	0.324	0.074	0.025	0.009	0.003	0.001	0.001	0.000	0.000	0.0	0.0
9	0.120	0.259	0.080	0.023	0.009	0.002	0.000	0.000	0.0	0.0	0.0	0.0
10	0.030	0.125	0.061	0.028	0.003	0.001	0.000	0.000	0.000	0.0	0.0	0.0
11	0.018	0.021	0.005	0.010	0.004	0.001	0.001	0.000	0.000	0.0	0.0	0.0
12	0.004	0.013	0.004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.002	0.003	0.001	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.000	0.000	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0=1000,100,10,.01

GROUP	TEMPERATURE 300.				TEMPERATURE 900.				TEMPERATURE 2100.			
FISSION SELF-SHIELDING FACTORS												
1	1.000	0.998	1.000	1.000	1.000	0.998	1.000	1.000	1.000	0.998	1.000	1.000
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.993	0.992	0.992	1.000	0.993	0.992	0.992	1.000	0.993	0.992	0.992
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
12	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994
13	1.000	1.000	1.000	0.986	1.000	1.000	1.000	0.977	1.000	1.000	1.000	0.983
14	1.000	1.000	1.000	0.984	1.000	1.000	1.000	0.984	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	0.969	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	0.929	1.000	1.000	1.000	0.979	1.000	1.000	1.000	1.000
17	1.000	1.000	0.987	0.879	1.000	1.000	1.000	0.943	1.000	1.000	1.000	0.980
18	0.999	0.994	0.931	0.755	1.000	1.000	1.000	0.815	1.000	1.000	1.000	0.844
CAPTURE SELF-SHIELDING FACTORS												
1	1.000	0.997	0.992	0.983	1.000	0.997	0.992	0.983	1.000	0.997	0.992	0.983
2	1.000	0.995	0.992	0.989	1.000	0.995	0.992	0.989	1.000	0.995	0.992	0.989
3	1.000	0.993	0.994	0.997	1.000	0.993	0.994	0.997	1.000	0.993	0.994	0.997
4	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
8	1.000	1.000	0.997	0.995	1.000	1.000	0.997	0.995	1.000	1.000	0.997	0.995
9	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
10	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
11	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
12	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994
13	1.000	1.000	1.000	0.966	1.000	1.000	1.000	0.977	1.000	1.000	1.000	0.983
14	1.000	1.000	1.000	0.984	1.000	1.000	1.000	0.984	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	0.969	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	0.929	1.000	1.000	1.000	0.979	1.000	1.000	1.000	1.000
17	1.000	1.000	0.987	0.879	1.000	1.000	1.000	0.943	1.000	1.000	1.000	0.980
18	0.999	0.994	0.931	0.755	1.000	1.000	1.000	0.815	1.000	1.000	1.000	0.844

19	0.997	0.976	0.857	0.651	1.000	1.000	0.953	0.701	1.000	1.000	1.000	0.717
20	0.993	0.945	0.743	0.469	0.999	0.992	0.840	0.479	1.000	1.000	0.906	0.459
21	0.988	0.914	0.684	0.444	0.996	0.969	0.784	0.467	1.000	1.000	0.857	0.458
22	0.967	0.809	0.484	0.250	0.984	0.892	0.550	0.234	0.994	0.952	0.590	0.193
23	0.936	0.723	0.407	0.427	0.957	0.791	0.581	0.492	0.970	0.860	0.643	0.546
24	0.840	0.550	0.373	0.329	0.879	0.616	0.432	0.384	0.908	0.678	0.503	0.455
25	0.782	0.439	0.279	0.245	0.832	0.492	0.308	0.269	0.875	0.558	0.355	0.309
26	0.961	0.803	0.633	0.583	0.968	0.832	0.662	0.609	0.970	0.859	0.699	0.644
27	0.445	0.254	0.208	0.202	0.445	0.254	0.208	0.202	0.445	0.254	0.208	0.202

TOTAL SELF-SHIELDING FACTORS

NOG												
1	1.001	0.999	0.997	0.993	1.001	0.999	0.997	0.993	1.001	0.999	0.997	0.993
2	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
3	0.999	1.000	0.999	0.998	0.999	1.000	0.999	0.998	0.999	1.000	0.999	0.998
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.001	1.000	0.999	0.998	1.001	1.000	0.999	0.998	1.001	1.000	0.999	0.998
7	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
8	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996	1.000	1.000	0.998	0.996
9	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
12	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996
13	1.000	0.995	0.937	0.784	1.000	0.996	0.960	0.786	1.000	0.997	0.942	0.785
14	1.000	0.995	0.924	0.749	1.000	0.997	0.929	0.742	1.000	0.997	0.932	0.739
15	0.999	0.994	0.918	0.736	1.000	0.997	0.925	0.729	1.000	0.998	0.929	0.723
16	0.999	0.990	0.869	0.633	1.000	0.996	0.878	0.605	1.000	0.998	0.881	0.588
17	0.999	0.984	0.822	0.566	0.999	0.993	0.832	0.529	1.000	0.997	0.836	0.501
18	0.996	0.965	0.692	0.422	0.999	0.982	0.684	0.385	1.000	0.991	0.673	0.325
19	0.993	0.938	0.593	0.362	0.997	0.964	0.573	0.299	0.999	0.980	0.545	0.254
20	0.988	0.892	0.419	0.238	0.994	0.927	0.382	0.191	0.997	0.951	0.307	0.159
21	0.983	0.865	0.427	0.250	0.990	0.905	0.376	0.205	0.995	0.933	0.322	0.170
22	0.952	0.712	0.231	0.149	0.970	0.762	0.173	0.124	0.981	0.803	0.114	0.105
23	0.913	0.667	0.441	0.385	0.937	0.719	0.474	0.419	0.952	0.763	0.508	0.456
24	0.778	0.487	0.325	0.288	0.821	0.534	0.355	0.310	0.857	0.590	0.405	0.354
25	0.691	0.398	0.206	0.254	0.741	0.417	0.294	0.263	0.791	0.452	0.308	0.275
26	0.961	0.815	0.695	0.643	0.965	0.827	0.693	0.653	0.969	0.843	0.707	0.664
27	0.238	0.105	0.078	0.075	0.238	0.105	0.078	0.075	0.238	0.105	0.078	0.075

ELASTIC SELF-SHIELDING FACTORS

NOG												
1	1.000	0.997	0.995	0.991	1.000	0.997	0.995	0.991	1.000	0.997	0.995	0.991
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990	1.000	0.992	0.991	0.990
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
7	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
8	1.000	1.000	0.999	0.994	1.000	1.000	0.999	0.994	1.000	1.000	0.999	0.994
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995

13	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
14	1.000	1.000	1.000	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
15	1.000	1.000	1.000	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	0.999	0.998	1.000	1.000	1.000	0.998	1.000	1.000	1.000	1.000
17	1.000	1.000	0.997	0.989	1.000	1.000	1.000	0.995	1.000	1.000	1.000	0.995
18	1.000	0.998	0.949	0.974	1.000	1.000	0.997	0.981	1.000	1.000	1.000	0.985
19	0.999	0.995	0.980	0.962	1.000	0.999	0.990	0.968	1.000	1.000	0.996	0.971
20	0.999	0.991	0.969	0.947	1.000	0.997	0.979	0.949	1.000	1.000	0.985	0.949
21	0.999	0.991	0.973	0.959	0.999	0.996	0.980	0.961	1.000	0.998	0.985	0.962
22	0.995	0.975	0.942	0.924	0.998	0.984	0.946	0.924	0.999	0.993	0.953	0.921
23	0.994	0.977	0.963	0.959	0.996	0.981	0.969	0.964	0.997	0.987	0.973	0.964
24	0.970	0.924	0.900	0.893	0.975	0.932	0.907	0.901	0.980	0.939	0.916	0.911
25	0.974	0.949	0.934	0.930	0.983	0.952	0.933	0.931	0.987	0.957	0.938	0.933
26	0.998	0.995	0.986	0.985	0.998	0.995	0.983	0.986	0.998	0.995	0.989	0.986
27	0.985	0.967	0.959	0.957	0.985	0.967	0.959	0.957	0.985	0.967	0.959	0.957

U2R-3M238.05 **

NDG	SIG TOT	SIG FIS	NG	SIG CAT	SIG IN	SIG EL	MU EL	CST	SIG R EL
1	6.5912	0.8555	3.4450	0.0064	2.1003	3.5961	0.8064	0.00170	0.0250
2	7.5034	0.5655	3.0270	0.0118	2.3344	4.5923	0.7935	0.00180	0.0232
3	7.4733	0.5682	2.7600	0.0272	2.3670	4.4908	0.6951	0.00260	0.0255
4	6.9302	0.4268	2.5910	0.0633	2.6956	3.7446	0.5121	0.00360	0.0271
5	7.1616	0.0270	2.4940	0.1208	2.4685	4.5454	0.4734	0.00450	0.0406
6	8.0561	0.0013	2.4190	0.1268	1.8419	6.0661	0.3753	0.00530	0.0644
7	9.2195	0.0001	2.3800	0.1168	1.4902	7.6124	0.2843	0.00610	0.0923
8	10.4659	0.0001	2.3560	0.1345	1.1207	9.2107	0.2080	0.00670	0.1236
9	11.4825	0.0	2.3420	0.1526	0.8006	10.5293	0.1427	0.00730	0.1530
10	12.4076	0.0	2.3330	0.2094	0.3665	11.8316	0.0918	0.00770	0.1821
11	12.9766	0.0	2.3280	0.3304	0.0712	12.5750	0.0441	0.00810	0.2037
12	13.5160	0.0	2.3240	0.4357	0.0	13.0822	0.0225	0.00830	0.2168
13	14.1543	0.0	2.3220	0.5427	0.0	13.6115	0.0112	0.00840	0.2281
14	14.8813	0.0	2.3210	0.6732	0.0	14.2081	0.0044	0.00840	0.2398
15	16.0398	0.0	2.3210	0.8590	0.0	15.1808	0.0029	0.00850	0.2566
16	16.0419	0.0	2.3200	1.0644	0.0	16.7601	0.0028	0.00850	0.2833
17	19.6016	0.0	2.3200	1.3905	0.0	18.2111	0.0028	0.00850	0.3078
18	21.9368	0.0	2.3200	1.7771	0.0	20.1597	0.0028	0.00850	0.3407
19	23.1469	0.0	2.3200	2.9157	0.0	20.2312	0.0028	0.00850	0.3419
20	20.5064	0.0	2.3200	3.0587	0.0	16.4478	0.0028	0.00850	0.2847
21	19.3517	0.0	2.3200	3.6043	0.0	15.7474	0.0028	0.00850	0.2661
22	74.0623	0.0	2.3200	17.5936	0.0	56.4687	0.0028	0.00850	0.4772
23	36.6973	0.0	2.3200	13.5505	0.0	23.1468	0.0028	0.00850	0.1956
24	181.6779	0.0	2.3190	105.1859	0.0	76.4921	0.0028	0.00850	0.6464
25	145.9097	0.0	2.3190	131.1390	0.0	14.7708	0.0028	0.00850	0.1248
26	9.1614	0.0	2.3190	0.6123	0.0	8.5491	0.0028	0.00850	0.0361
27	18.5963	0.0	2.3190	9.6518	0.0	8.9445	0.0028	0.00840	0.0086

INELASTIC SCATTERING FROM I TO I**

I/K	C	1	2	3	4	5	6	7	8	9	10	11
1	0.000	0.014	0.123	0.392	0.622	0.615	0.447	0.266	0.157	0.064	0.028	0.019
2	0.006	0.107	0.348	0.607	0.551	0.454	0.183	0.163	0.135	0.014	0.005	0.003
3	0.065	0.297	0.564	0.601	0.422	0.231	0.109	0.047	0.019	0.007	0.003	0.002
4	0.268	0.530	0.845	0.702	0.251	0.071	0.020	0.006	0.002	0.001	0.000	0.000
5	0.995	0.467	0.321	0.364	0.200	0.074	0.029	0.012	0.005	0.002	0.001	0.000
6	1.319	0.456	0.009	0.014	0.023	0.013	0.005	0.002	0.001	0.003	0.000	0.000
7	0.583	0.472	0.032	0.002	0.031	0.000	0.000	0.0	0.0	0.0	0.0	0.0
8	0.595	0.460	0.028	0.012	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.283	0.494	0.018	0.003	0.002	0.001	0.000	0.000	0.0	0.0	0.0	0.0
10	0.0	0.235	0.117	0.014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.036	0.021	0.008	[illegible]	0.001	0.000	0.000	0.000	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	0.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA 0 = 1000,100,10,.01

TEMPERATURE 300. | TEMPERATURE 900. | TEMPERATURE 2100.

CAPTURE SELF-SHIELDING FACTORS

NUG	300				900				2100			
1	1.000	0.997	0.994	[illegible]	1.000	0.997	0.996	0.989	1.000	0.997	0.994	0.989
2	1.000	0.994	0.992	[illegible]	1.000	0.996	0.992	0.988	1.000	0.994	0.992	0.988
3	1.000	0.993	0.995	0.998	1.000	[illegible]	[illegible]	0.998	1.000	0.993	0.995	0.998
4	1.000	0.991	0.991	[illegible]	1.000	0.991	0.991	0.994	1.000	0.991	0.991	0.994
5	1.000	1.000	0.999	[illegible]	1.000	1.000	[illegible]	0.996	1.000	1.000	0.999	0.998
6	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002	1.000	1.000	1.001	1.002
7	1.000	1.000	1.000	[illegible]	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
8	1.000	1.000	0.999	0.998	1.000	1.000	[illegible]	0.995	1.000	1.000	0.995	0.998
9	1.000	1.000	0.999	[illegible]	1.000	1.000	[illegible]	[illegible]	1.000	1.000	0.999	0.998
10	1.000	1.000	0.999	[illegible]	1.000	1.000	[illegible]	[illegible]	1.000	1.000	0.999	0.998
11	0.995	0.993	0.985	0.976	0.995	0.995	0.992	0.986	0.995	0.995	0.994	0.992
12	0.999	0.989	0.961	[illegible]	1.000	0.997	0.975	0.947	1.000	1.000	0.998	0.980
13	0.997	0.977	0.904	[illegible]	0.998	0.990	0.951	0.937	1.000	0.997	0.980	0.951
14	0.994	0.957	0.865	[illegible]	0.997	[illegible]	[illegible]	0.850	0.999	0.989	0.951	0.909
15	0.988	0.920	0.767	0.675	0.994	[illegible]	[illegible]	0.767	0.997	0.973	0.899	0.840
16	0.976	0.857	0.665	[illegible]	0.985	[illegible]	0.743	0.658	0.990	0.918	0.815	0.745
17	0.957	0.791	0.581	[illegible]	0.974	[illegible]	[illegible]	0.567	0.984	0.894	0.730	0.645
18	0.911	0.657	[illegible]	[illegible]	0.961	0.731	[illegible]	0.344	0.960	0.789	0.556	0.443
19	0.868	0.546	0.404	[illegible]	0.912	0.635	0.372	0.281	0.939	0.708	0.439	0.339
20	0.935	0.461	0.222	[illegible]	0.892	0.557	0.240	0.159	0.926	0.640	0.342	0.246
21	0.778	0.409	0.193	0.145	0.941	0.495	0.242	0.175	0.884	0.570	0.296	0.213
22	0.420	0.143	0.061	0.045	0.498	0.174	0.070	0.044	0.569	0.209	0.081	0.051
23	0.406	0.161	0.081	[illegible]	0.486	0.187	0.088	0.072	0.584	0.224	0.098	0.076
24	0.214	0.060	0.025	0.018	0.264	0.065	0.026	0.018	0.321	0.075	0.026	0.018
25	0.252	0.075	0.033	0.023	0.316	0.095	0.034	0.024	0.360	0.099	0.036	0.024
26	0.997	0.997	0.998	0.993	0.997	0.997	0.998	0.999	0.997	0.997	0.998	0.999
27	0.988	0.909	0.701	0.585	[illegible]	[illegible]	0.701	0.585	0.988	0.909	0.701	0.585

TOTAL SELF-SHIELDING FACTORS

NUG	300				900				2100			
1	1.000	0.999	0.997	0.993	1.000	0.999	0.997	0.993	1.000	0.999	0.997	0.993
2	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
3	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999
4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
5	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
6	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
7	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
8	1.000	1.000	0.999	0.993	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.993	1.000	1.000	1.000	0.999
11	1.000	0.996	0.983	0.972	1.000	0.997	0.987	0.975	1.000	0.998	0.990	0.978
12	0.996	0.972	0.898	0.846	0.998	0.982	0.923	0.867	0.999	0.995	0.941	0.883
13	0.993	0.951	0.859	0.812	0.996	0.965	0.889	0.835	0.997	0.979	0.914	0.856
14	0.987	0.917	0.809	0.767	0.992	0.943	0.842	0.791	0.995	0.961	0.872	0.816
15	0.974	0.865	0.747	0.711	0.983	0.900	0.775	0.733	0.989	0.927	0.812	0.759
16	0.957	0.807	0.679	0.632	0.972	0.851	0.713	0.666	0.982	0.888	0.749	0.698
17	0.913	0.726	0.597	0.312	0.939	0.769	0.622	0.390	0.956	0.808	0.656	0.561
18	0.833	0.581	0.438	0.129	0.877	0.621	0.462	0.145	0.906	0.651	0.488	0.163

NUG	300				900				2100			
19	0.788	0.523	0.401	0.232	0.843	0.567	0.426	0.337	0.882	0.614	0.452	0.370
20	0.805	0.556	0.461	0.377	0.861	0.599	0.480	0.429	0.900	0.644	0.503	0.457
21	0.772	0.595	0.527	0.465	0.820	0.621	0.559	0.493	0.859	0.649	0.553	0.516
22	0.306	0.173	0.128	0.052	0.351	0.179	0.129	0.052	0.403	0.188	0.131	0.053
23	0.424	0.304	0.233	0.154	0.463	0.309	0.236	0.156	0.523	0.316	0.246	0.155
24	0.108	0.051	0.037	0.031	0.122	0.049	0.037	0.031	0.147	0.049	0.037	0.041
25	0.161	0.083	0.063	0.059	0.141	0.082	0.063	0.058	0.215	0.082	0.061	0.059
26	0.998	1.000	1.000	[illegible]	0.998	1.000	1.000	0.999	0.998	1.000	1.000	[illegible]
27	0.991	0.910	0.745	0.674	0.991	0.910	0.745	0.674	0.991	0.910	0.745	0.674

ELASTIC SELF-SHIELDING FACTORS

NUG	300				900				2100			
1	1.000	0.997	0.995	0.992	1.000	0.997	0.995	0.992	1.000	0.997	0.995	0.992
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	[illegible]
3	1.000	0.992	0.991	0.991	1.000	0.992	0.991	0.991	1.000	0.992	0.991	[illegible]
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	[illegible]
5	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	[illegible]
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	[illegible]
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	[illegible]
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	[illegible]
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	0.995	0.993	0.958	[illegible]	0.995	0.994	0.991	0.986	0.995	0.995	0.993	[illegible]
12	0.998	0.987	0.951	0.925	[illegible]	[illegible]	[illegible]	[illegible]	1.000	[illegible]	[illegible]	[illegible]
13	0.997	0.975	0.921	[illegible]	0.998	0.955	[illegible]	0.918	0.999	0.991	0.964	0.942
14	0.993	0.955	0.874	[illegible]	0.996	[illegible]	0.906	[illegible]	0.994	0.991	0.933	[illegible]
15	0.987	0.920	0.822	[illegible]	0.991	0.946	0.855	0.815	0.995	0.961	0.888	0.867
16	0.978	0.881	0.753	0.719	0.986	0.913	[illegible]	0.755	0.990	0.947	0.835	0.792
17	0.953	0.812	[illegible]	[illegible]	0.964	0.849	0.716	0.646	0.978	0.875	0.750	0.691
18	0.905	0.691	[illegible]	[illegible]	[illegible]	0.734	[illegible]	[illegible]	[illegible]	0.772	0.557	0.532
19	0.877	0.646	[illegible]	[illegible]	0.912	[illegible]	[illegible]	[illegible]	0.945	0.735	0.566	[illegible]
20	0.899	0.701	[illegible]	[illegible]	0.931	0.744	[illegible]	[illegible]	0.951	0.745	0.639	0.593
21	0.874	0.727	[illegible]	[illegible]	0.905	0.751	[illegible]	[illegible]	[illegible]	0.777	[illegible]	0.657
22	0.471	0.262	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.151	0.556	0.309	0.204	0.155
23	0.630	0.477	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.741	0.567	0.431	0.334
24	0.247	0.110	0.075	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	0.615	0.516	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.477	[illegible]	[illegible]	0.488	0.476
26	[illegible]	0.999	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	1.000	1.000	1.000	[illegible]	1.000	1.000	[illegible]	[illegible]	1.000	1.000	1.000	1.000

NEG	SIG TOT	SIG ELS	NU	SIG CAT	SIG IN	SIG EL	MU EL	CSI	SIG N EL
1	6.6368	2.2555	3.9650	0.0016	1.3431	3.2538	0.9612	0.00080	0.0116
2	7.8097	1.7663	3.5370	0.0018	2.1874	3.9121	0.8823	0.00100	0.0113
3	7.7996	1.4453	3.2690	0.0039	2.2213	3.6271	0.8366	0.00140	0.0110
4	7.1799	2.0082	3.1120	0.0133	1.9146	3.2468	0.7474	0.00210	0.0139
5	7.2379	1.7517	3.0170	0.0246	1.6706	3.7509	0.6106	0.00330	0.0249
6	5.0773	1.5369	2.9630	0.0759	1.2712	5.1493	0.4727	0.00440	0.0452
7	9.1665	1.5311	2.9310	0.1404	0.8250	6.6703	0.3748	0.00530	0.0704
8	10.1869	1.4762	2.9110	0.1960	0.6307	7.8839	0.2785	0.00610	0.0960
9	11.2069	1.5465	2.8990	0.2277	0.5193	8.9135	0.1974	0.00680	0.1207
10	12.1534	1.6304	2.8910	0.2692	0.4125	9.8413	0.1388	0.00730	0.1430
11	12.9380	1.6791	2.8870	0.3631	0.3368	10.5589	0.0862	0.00770	0.1628
12	13.5450	1.7244	2.8840	0.5575	0.3197	10.9434	0.0539	0.00800	0.1747
13	13.7189	1.8448	2.8830	0.7734	0.3049	10.7958	0.0343	0.00810	0.1760
14	14.5743	1.9756	2.8820	1.0681	0.2776	11.2530	0.0218	0.00830	0.1858
15	16.0325	2.2372	2.8810	1.5956	0.0287	12.1711	0.0040	0.00840	0.2046
16	17.5406	2.6341	2.8810	2.2419	0.0	12.6647	0.0028	0.00840	0.2132
17	19.3778	3.2156	2.8800	3.1190	0.0	13.0432	0.0028	0.00840	0.2195
18	21.0710	4.7472	2.8800	3.5525	0.0	12.7714	0.0028	0.00840	0.2149
19	23.9695	6.3173	2.8800	4.6763	0.0	12.9759	0.0028	0.00840	0.2184
20	32.6466	10.3666	2.8800	7.3707	0.0	14.9094	0.0028	0.00840	0.2509
21	35.7292	10.6876	2.8800	9.6959	0.0	15.3457	0.0028	0.00840	0.2583
22	53.7106	18.2277	2.8800	17.0523	0.0	18.4307	0.0028	0.00840	0.1551
23	113.1682	46.3284	2.8800	43.8226	0.0	23.0172	0.0028	0.00840	0.1937
24	103.2006	49.5467	2.8800	40.6636	0.0	12.9884	0.0028	0.00840	0.1093
25	129.9206	71.1978	2.8800	48.1714	0.0	10.5614	0.0028	0.00840	0.0889
26	41.3679	23.5742	2.8800	7.1981	0.0	10.6056	0.0028	0.00840	0.0446
27	3697.8592	2747.4270	2.8800	941.2831	0.0	9.1428	0.0028	0.00840	0.0087

INELASTIC SCATTERING FROM I TO I+K

I/K	0	1	2	3	4	5	6	7	8	9	10	11
1	0.523	0.043	0.053	0.166	0.226	0.189	0.116	0.058	0.026	0.011	0.004	0.002
2	0.653	0.097	0.229	0.383	0.363	0.239	0.126	0.058	0.024	0.010	0.004	0.002
3	0.717	0.209	0.338	0.384	0.283	0.160	0.076	0.033	0.013	0.005	0.002	0.001
4	0.838	0.413	0.248	0.198	0.117	0.058	0.025	0.010	0.004	0.002	0.001	0.000
5	0.836	0.466	0.243	0.064	0.038	0.015	0.005	0.002	0.001	0.000	0.000	0.000
6	0.686	0.286	0.192	0.072	0.024	0.007	0.002	0.000	0.0	0.0	0.0	0.0
7	0.591	0.158	0.030	0.023	0.013	0.006	0.003	0.001	0.000	0.000	0.0	0.0
8	0.461	0.167	0.001	0.000	0.0	0.0	0.000	0.000	0.000	0.0	0.0	0.0
9	0.339	0.149	0.030	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.266	0.104	0.025	0.012	0.004	0.000	0.000	0.0	0.0	0.0	0.0	0.0
11	0.210	0.122	0.0	0.001	0.002	0.001	0.000	0.000	0.0	0.0	0.0	0.0
12	0.138	0.182	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.041	0.182	0.081	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.055	0.101	0.069	0.042	0.007	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.013	0.009	0.004	0.002	0.000	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-SHIELDING FACTORS CORRESPONDING TO SIGMA ZERO(BARNS)

NUG	TEMPERATURE 300.				TEMPERATURE 900.				TEMPERATURE 2100.			
	FISSION SELF-SHIELDING FACTORS											
1	1.000	0.996	0.994	1.002	1.000	0.998	0.999	1.002	1.000	0.998	0.999	1.002
2	1.000	0.995	0.994	0.994	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.993	0.992	0.994	1.000	0.993	0.992	0.993	1.000	0.993	0.992	0.993
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
6	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001	1.000	1.000	1.000	1.001
7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994	0.995	0.995	0.995	0.994
13	1.000	0.999	0.980	0.913	1.000	1.000	0.994	0.931	1.000	1.000	1.000	0.942
14	0.995	0.986	0.962	0.904	1.000	1.000	0.984	0.911	1.000	1.000	0.998	0.929
15	0.989	0.989	0.930	0.831	1.000	0.997	0.961	0.864	1.000	1.000	0.993	0.888
16	0.997	0.977	0.867	0.774	0.999	0.990	0.940	0.815	1.000	0.998	0.961	0.847
17	0.995	0.959	0.835	0.713	0.997	0.976	0.893	0.755	0.999	0.990	0.926	0.789
18	0.990	0.929	0.765	0.642	0.995	0.956	0.836	0.696	0.997	0.979	0.885	0.746
19	0.982	0.883	0.679	0.554	0.990	0.925	0.750	0.607	0.994	0.956	0.817	0.661
20	0.968	0.828	0.603	0.475	0.980	0.874	0.651	0.493	0.987	0.912	0.700	0.509
21	0.954	0.790	0.588	0.465	0.967	0.838	0.637	0.527	0.976	0.878	0.688	0.560
22	0.917	0.714	0.532	0.471	0.942	0.763	0.577	0.513	0.960	0.809	0.629	0.563
23	0.822	0.552	0.361	0.300	0.853	0.577	0.474	0.309	0.891	0.612	0.498	0.428
24	0.716	0.377	0.206	0.183	0.757	0.399	0.215	0.169	0.833	0.427	0.227	0.178
25	0.655	0.311	0.190	0.167	0.689	0.325	0.184	0.170	0.779	0.346	0.201	0.175
26	0.995	0.968	0.917	0.896	0.995	0.968	0.917	0.896	0.995	0.968	0.917	0.896
27	0.509	0.372	0.338	0.333	0.509	0.372	0.338	0.333	0.509	0.372	0.338	0.333
	CAPTURE SELF-SHIELDING FACTORS											
1	1.000	0.999	1.004	1.016	1.000	0.999	1.004	1.016	1.000	0.999	1.004	1.016
2	1.000	0.995	0.993	0.991	1.000	0.995	0.993	0.991	1.000	0.995	0.993	0.991
3	1.000	0.993	0.996	1.001	1.000	0.993	0.996	1.001	1.000	0.993	0.996	1.001
4	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993	1.000	0.991	0.991	0.993
5	1.000	1.000	0.997	0.993	1.000	1.000	0.997	0.993	1.000	1.000	0.997	0.993
6	1.000	0.999	0.996	0.991	1.000	0.999	0.996	0.991	1.000	0.996	0.996	0.991
7	1.000	1.000	0.998	0.995	1.000	1.000	0.998	0.995	1.000	1.000	0.998	0.995
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	0.998	0.994	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
11	1.000	1.000	0.998	0.998	1.000	1.000	0.998	0.998	1.000	1.000	0.998	0.998
12	0.994	0.994	0.994	0.992	0.994	0.994	0.994	0.992	0.994	0.994	0.994	0.992
13	1.000	1.000	1.000	0.992	1.000	1.000	1.000	0.992	1.000	1.000	1.000	1.000
14	1.000	0.995	0.997	0.992	1.000	1.000	1.000	0.992	1.000	1.000	1.000	1.000
15	0.998	0.997	0.994	0.994	1.000	1.000	1.000	0.997	1.000	1.000	1.000	1.000
16	0.996	0.997	0.997	0.997	1.000	0.996	0.997	0.997	1.000	1.000	1.000	1.000
17	0.991	0.993	0.997	0.994	0.997	0.997	0.997	0.994	1.000	1.000	1.000	0.992
18	0.994	0.995	0.996	0.994	0.994	0.994	0.996	0.994	0.999	0.999	1.000	0.992

NUG												
19	0.972	0.822	0.555	0.421	0.986	0.901	0.697	0.556	0.994	0.951	0.822	0.689
20	0.944	0.721	0.428	0.302	0.969	0.818	0.550	0.396	0.983	0.890	0.670	0.495
21	0.908	0.627	0.358	0.266	0.941	0.729	0.466	0.354	0.959	0.809	0.576	0.451
22	0.841	0.519	0.304	0.250	0.894	0.614	0.384	0.319	0.928	0.695	0.469	0.399
23	0.645	0.284	0.152	0.123	0.724	0.339	0.176	0.139	0.790	0.408	0.213	0.167
24	0.642	0.277	0.133	0.101	0.695	0.306	0.146	0.110	0.743	0.335	0.165	0.125
25	0.637	0.283	0.158	0.133	0.681	0.301	0.162	0.136	0.729	0.328	0.170	0.141
26	0.992	0.952	0.876	0.845	0.992	0.952	0.876	0.845	0.993	0.953	0.876	0.845
27	0.550	0.415	0.379	0.373	0.550	0.415	0.379	0.373	0.550	0.415	0.379	0.373
	TOTAL SELF-SHIELDING FACTORS											
1	1.001	0.999	0.998	0.994	1.001	0.999	0.998	0.994	1.001	0.999	0.998	0.994
2	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
3	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999
4	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000
5	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999	1.001	1.000	1.000	0.999
6	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997	1.000	1.000	0.999	0.997
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
9	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996	1.000	1.000	0.999	0.996
13	0.999	0.991	0.927	0.805	0.999	0.994	0.939	0.805	1.000	0.996	0.946	0.804
14	0.998	0.986	0.905	0.778	0.999	0.992	0.925	0.781	1.000	0.996	0.937	0.781
15	0.997	0.972	0.854	0.714	0.998	0.985	0.886	0.715	0.999	0.993	0.908	0.713
16	0.994	0.951	0.796	0.657	0.997	0.973	0.838	0.657	0.999	0.986	0.867	0.652
17	0.989	0.917	0.726	0.595	0.994	0.950	0.769	0.590	0.997	0.971	0.806	0.580
18	0.982	0.880	0.671	0.553	0.990	0.922	0.710	0.547	0.994	0.951	0.747	0.536
19	0.967	0.816	0.592	0.489	0.981	0.869	0.620	0.478	0.988	0.910	0.650	0.463
20	0.928	0.701	0.459	0.368	0.954	0.760	0.466	0.352	0.970	0.812	0.474	0.339
21	0.889	0.640	0.450	0.382	0.924	0.699	0.469	0.382	0.946	0.756	0.492	0.382
22	0.798	0.521	0.379	0.343	0.853	0.578	0.408	0.362	0.893	0.638	0.446	0.392
23	0.599	0.315	0.198	0.162	0.661	0.333	0.200	0.162	0.723	0.364	0.207	0.164
24	0.554	0.266	0.172	0.151	0.600	0.274	0.174	0.152	0.647	0.288	0.178	0.155
25	0.493	0.226	0.168	0.159	0.529	0.229	0.168	0.158	0.576	0.233	0.167	0.158
26	0.993	0.949	0.872	0.845	0.993	0.949	0.872	0.845	0.993	0.949	0.872	0.845
27	0.317	0.165	0.123	0.117	0.317	0.165	0.123	0.117	0.317	0.165	0.123	0.117
	ELASTIC SELF-SHIELDING FACTORS											
1	1.000	0.997	0.995	0.993	1.000	0.997	0.995	0.993	1.000	0.997	0.995	0.993
2	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993	1.000	0.995	0.994	0.993
3	1.000	0.992	0.991	0.991	1.000	0.992	0.991	0.991	1.000	0.992	0.991	0.991
4	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990	1.000	0.991	0.990	0.990
5	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
6	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997	1.000	1.000	0.998	0.997
7	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998	1.000	1.000	0.999	0.998
8	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999	1.000	1.000	0.999	0.999
9	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
10	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999	1.000	1.000	1.000	0.999
11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
12	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995