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R. L. Simons and W. N. McElroy

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May 1970

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ABSTRACT

This library of energy-dependent neutron-reaction cross sections exists for use in calculating the integral fluxes and fluences of fast and thermal test reactor environments. Calculations employing these cross sections are used in the analysis of irradiation tests of structural and fuel cladding material for the Liquid Metal Fast Breeder Reactor (LMFBR) Program.

Recent evaluations of cross sections contained in this library and of uncataloged cross sections have been used to update the library to achieve greater consistency and accuracy. The consistency of the 23 new and revised cross sections has been shown by comparing calculated 2200 m/sec cross sections, resonance integrals, and fission-averaged cross sections with measured values and/or previously reported calculated values.

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EVALUATED REFERENCE CROSS SECTION LIBRARY

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INTRODUCTION

Determining the effects of neutron irradiation on reactor
structural and fuel cladding materials requires a knowledge of
both neutron flux intensity and spectrum. The accuracy to
which the flux and spectrum may be determined is directly
related to the accuracy of the neutron-reaction cross section.
In addition, the use of multiple foils for this purpose
requires a consistent set of cross sections in order to yield
consistent fluxes and spectra. Consequently, it is important
to keep an updated library of consistent and accurate evalu-
ated cross sections from currently available data.

A cross section library of this nature has been compiled.
This library has been previously updated by McElroy and Berg[1]
and Barrall and McElroy.[2] This document describes and ref-
erences the most recent changes to this library, which include
8 new cross sections and 15 revised cross sections. Table 1
lists the new and revised cross sections and the source for
each revision and addition. These 23 energy-dependent cross
sections are being used in conjunction with the SAND-II code[1]
to determine integral fluxes and fluences for fast and thermal
test reactor environments[3,4] in which structural and fuel
cladding materials for the Liquid Metal Fast Breeder Reactor
program are being tested.

EVALUATED CROSS SECTIONS

Eleven of the 23 cross sections were adjusted by an
unfolding technique.[10] The spectra used to unfold the cross
sections included the fission spectrum, APFA-III-Godiva,[4]
Experimental Breeder Reactor (EBR-II),[3] and Epithermal
Critical Experiment Laboratory (ECEL) Core 16[11] and
Core 14.[12] The shapes of these spectra had been previously

$^{54}Fe(n,p)^{54}Mn$ Karlsrhue[20] with Hauser-Feshbach[19] threshold

$^{58}Fe(n,\gamma)^{59}Fe$ BNL-325[13] plus data from Hockenbury et al.[15] (See Appendix A.)

$^{58}Ni(n,p)^{58}Co$ McElroy and Berg[1]

$^{59}Co(n,\gamma)^{60}Co$ McElroy and Berg[1]

$^{63}Cu(n,\gamma)^{64}Cu$ McElroy and Berg[1]

$^{197}Au(n,\gamma)^{198}Au$ McElroy and Berg[1]

A tabular listing of interval-averaged cross sections, $\bar{\sigma}_j$, is presented in Appendix B. The interval averaging is defined by:

$$\bar{\sigma}_j = \int_{E_j}^{E_{j+1}} \sigma(E)dE \Bigg/ \int_{E_j}^{E_{j+1}} dE, \quad j = 1,\ldots,620, \qquad (1)$$

where $\sigma(E)$ is the evaluated energy-dependent cross section and E_{j+1} and E_j refer to the upper and lower energy bounds, respectively, for the current SAND-II 620 group structure. The lower energy interval bounds, E_j, are listed in Appendix B along with identifying indices, which correspond to those used for cross sections. Plots of the interval-averaged cross sections versus energy are also shown in Appendix B.

SPECTRAL-AVERAGED CROSS SECTIONS AND RESONANCE INTEGRALS

The consistency and overall correctness of the energy-dependent cross sections for the 23 reactions were checked by calculating the thermal cross sections, resonance integrals, and fission-averaged cross sections using the SAND-II code and comparing these values with previously reported[1,2] and measured values. These results are given in Table 2.

On the assumption that the energy-dependent (n,γ) and (n,f) cross sections have a 1/v dependence in the thermal energy region, the 2200 m/sec cross sections of the (n,γ) and

4

TABLE 2. Spectral-Averaged Cross Sections and Resonance Integrals

Reaction	Thermal Cross Section (Barns)			Resonance Integral (Barns)			Fission-Averaged Cross Section (Millibarns)	
	$\bar{\sigma}_{calc.}$[a]	$\bar{\sigma}_{calc.}$[b]	$\bar{\sigma}_{meas.}$[c]	$\bar{\sigma}_{calc.}$[a]	$\bar{\sigma}_{calc.}$[b]	$\bar{\sigma}_{meas.}$[c]	$\bar{\sigma}_{calc.}$[a]	$\bar{\sigma}_{calc.}$[b]
^{23}Na(n,γ)^{24}Na	0.542	0.540	0.534 ± 0.005	0.288	0.288	0.28 ± 10%	0.219	0.269
^{27}Al(n,α)^{24}Na	-	-	-	-	-	-	0.685	0.663
^{27}Al(n,p)^{27}Mg	-	-	-	-	-	-	4.15	-
^{45}Sc(n,γ)^{46}Sc	-	25.2	25.0 ± 2.0	-	10.1	10.2[e]	-	6.24
^{46}Ti(n,p)^{46}Sc	-	-	-	-	-	-	-	11.3
^{47}Ti(n,p)^{47}Sc	-	-	-	-	-	-	-	17.2
^{48}Ti(n,p)^{48}Sc	-	-	-	-	-	-	-	0.236
^{54}Fe(n,p)^{54}Mn	-	-	-	-	-	-	100.5	76.3
^{56}Fe(n,p)^{56}Mn	-	-	-	-	-	-	0.941	-
^{58}Fe(n,γ)^{59}Fe	-	1.19	1.2 ± 0.1	-	1.38	1.24 ± 28%[f]	-	2.86
^{58}Ni(n,p)^{58}Co	-	-	-	-	-	-	113.0	102.0
^{59}Co(n,α)^{56}Mn	-	-	-	-	-	-	-	0.147
^{59}Co(n,γ)^{60}Co	37.1	36.9	37.2 ± 0.6	68.4	70.0	74.5 ± 7%	3.13	5.32
^{60}Ni(n,p)^{60}Co	-	-	-	-	-	-	-	5.30
^{63}Cu(n,α)^{60}Co	-	-	-	-	-	-	-	0.356
^{63}Cu(n,2n)^{62}Cu	-	-	-	-	-	-	0.0868	-
^{63}Cu(n,γ)^{64}Cu	4.53	4.51	4.51 ± 0.23	4.74	4.64	5.1 ± 10%	11.1	10.9
^{115}In(n,n')^{115m}In	-	-	-	-	-	-	174.0	-
^{197}Au(n,γ)^{198}Au	99.4	99.0	98.8 ± 0.3	1534.0	1585.0	1558.0 ± 4%	97.0	82.8
^{235}U(n,f)F.P.	563.0	560.0	577.1 ± 0.1	291.0	289.0	275.0 ± 4%	1297.0	1230.0
^{237}Np(n,f)F.P.	0.0187	0.0186	0.019 ± 0.003	6.24	6.12	-	1340.0	1293.0
^{238}U(n,f)F.P.	-	-	-	-	-	-	312.0	287.0
^{239}Pu(n,f)F.P.	757.0	754.0	740.4 ± 3.5	347.0	345.6	333.0 ± 5%	1855.0	1762.0

a. Calculated from previously reported cross section (Reference 1)
b. Calculated from new cross sections, this work
c. BNL-325 (Reference 13)
d. AFWL-TR-65-34, Vol. II, Table VI and/or BNL-325
e. Drake (Reference 21)
f. Brune and Jirlow (Reference 14).

(n,f) reactions were calculated by the equation

$$\sigma(2200 \text{ m/sec}) = \frac{2}{\sqrt{\pi}} \cdot \bar{\sigma}, \qquad (2)$$

where $\bar{\sigma}$ is the spectral-averaged cross section defined by

$$\bar{\sigma} = \int_{10^{-10} \text{ MeV}}^{18 \text{ MeV}} \phi(E) \; \sigma(E) \; dE. \qquad (3)$$

$\phi(E)$ is a 20 °C Maxwellian spectrum (normalized to one neutron) and $\sigma(E)$ is the energy-dependent cross section. For the reactions ^{235}U, ^{237}Np, and ^{239}Pu the divergence from the 1/v form in the thermal region introduces some error in the use of Equation (2) and in the comparison of calculated and measured values. In Table 2, the calculated thermal cross sections agree with the measured values within the listed experimental error limits or a small percentage. This indicates that the current energy-dependent cross sections are properly evaluated for the low energy region ($<4 \times 10^{-7}$ MeV).

The resonance integral was calculated using the equation

$$RI = \int_{10^{-10} \text{ MeV}}^{18 \text{ MeV}} \phi(E) e^{-NX\sigma_{CD}(E)} \; dE \qquad (4)$$

where $\phi(E)$ is a 1/E spectrum, $\sigma(E)$ is the energy-dependent cross section, N is the nuclear density of cadmium, X is a cadmium thickness, and $\sigma_{CD}(E)$ is the energy-dependent cadmium total absorption cross section. A cadmium cover thickness of 0.040 in. was used for the calculation. For the (n,γ) and (n,f) reactions, the calculated resonance integrals agree with the measured values within the listed experimental error limits or a small percentage, Table 2. This shows that the major resonances of the current energy-dependent cross sections are properly evaluated for the intermediate energy region (4×10^{-7} MeV $< E \lesssim 1$ MeV). That is, the use of these

cross sections will yield results for infinitely dilute foils
that are in good agreement with available integral
measurements.

The fission averaged cross sections, $\bar{\sigma}^f$, were calculated
using the Watt form of the fission spectrum,[22] $\phi^f(E)$,
in the equation

$$\bar{\sigma}^f = \frac{\int_{10^{-10} \text{ MeV}}^{18 \text{ MeV}} \phi^f(E) \; \sigma(E) \; dE}{\int_{10^{-10} \text{ MeV}}^{18 \text{ MeV}} \phi^f(E) \; dE}. \tag{5}$$

Differences of as much as about 40% (relative to the new
values) between old and new spectral-averaged cross sections
were caused by rather large cross section adjustments result-
ing from the unfolding procedure. These changes established
better overall consistency[3,4] between available differential
and integral data.

The calculated values of $\bar{\sigma}^f$ are not compared individually
with measured values in this report because of uncertainty in
the correct form of the fission spectrum, see Reference 4.
The main purpose here was to show how the cross sections have
changed relative to previous evaluations. Present uncertainty
in the form of $\phi^f(E)$ can introduce an uncertainty of up to
10 to 25% in the calculated values of some $\bar{\sigma}^f$'s. On an abso-
lute basis, therefore, it is best at this time to simply say
that measured and calculated values of $\bar{\sigma}^f$ are in agreement
with in about 10 to 25%, and that this disagreement may be
largely due to uncertainties in $\sigma(E)$ and/or $\sigma^f(E)$.

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APPENDIX A

CALCULATED ^{58}Fe$(n,\gamma)^{59}$Fe CROSS SECTION
USED AS INPUT FOR SAND-II READJUSTMENT

APPENDIX A

CALCULATED $^{58}Fe(n,\gamma)^{59}Fe$ CROSS SECTION
USED AS INPUT FOR SAND-II READJUSTMENT

To date, the only available data on the $^{58}Fe(n,\gamma)^{59}Fe$ reaction is the thermal cross section from BNL-325,[13] a resonance integral measurement by Brune and Jirlow,[14] and resonance energies of seven resonance peaks and two capture areas measured by Hockenbury et al.[15] From these data and some assumptions, an energy-dependent cross section was calculated.

A 1/v cross section, which passed through the recommended 2200 m/sec cross section,[12] below the lowest resonance energy was assumed. The resonance structure was calculated at the seven resonance energies by a doppler-broadened single-level Breit-Wigner expression, which incorporated the technique used by O'Shea.[16] The capture width, Γ_γ, is an average value calculated by Cameron's method.[17] The scattering width, Γ_N, was calculated by a method involving the resonance energy and level spacing described by Blatt and Weiskopf.[18] The resonance parameters are summarized in Table A-1. Above about 20 keV a shape similar to the total $Fe(n,\gamma)$ cross section was assumed.

The energy-dependent cross section calculated from the data referenced above was incorrect through the resonance region by as much as a factor of 5. After readjustment of the energy-dependent cross section by the SAND-II code, the magnitude of the resonance structure was improved. This is shown by the reasonably close agreement between the calculated resonance integral and the resonance integral measured by Brune and Jirlow,[14] Table 2.

TABLE A-1. Resonance Parameters

Resonance Energy (keV)	Γ_n (eV) *	Γ_γ (eV)	$\Gamma_\gamma \sigma_o$ (eV·b)	J	g
0.230	0.9	0.28*	74.1	1/2	1.0
0.359	4.5	0.25	124.0	1/2	1.0
2.82	12.6	0.25	--	1/2	1.0
4.96	16.8	0.25	--	1/2	1.0
6.16	18.8	0.25	--	1/2	1.0
9.29	22.9	0.25	--	1/2	1.0
10.4	24.8	0.25	--	1/2	1.0

---

* *These values are incorrect because of an incorrect choice in average resonance level spacing; however, the difference had a negligible effect on the capture area under the resonance peaks after readjustment in SAND-II analysis.*

APPENDIX B

COMPUTER PLOTTINGS AND TABULATIONS
OF INTERVAL-AVERAGED CROSS SECTIONS
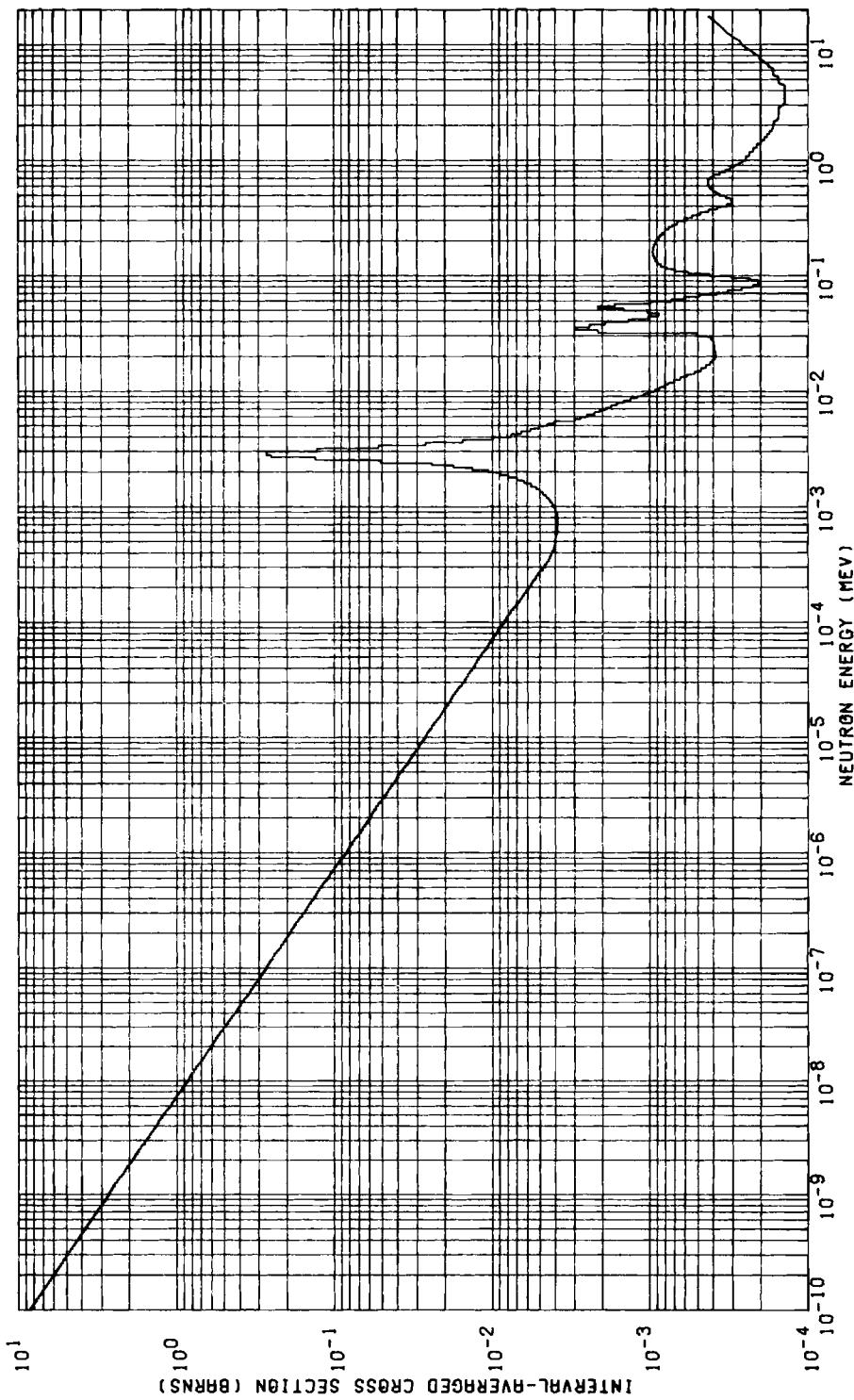
FIGURE B-1. ^{23}Na$(n,\gamma)^{24}$Na

Neg 0694115-5

TABLE B-1

NA23(N,G)NA24

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)
----

(1)	8.409+00	(2)	8.211+00	(3)	8.026+00	(4)	7.854+00	(5)	7.653+00
(6)	7.431+00	(7)	7.228+00	(8)	7.040+00	(9)	6.839+00	(10)	6.628+00
(11)	6.436+00	(12)	6.259+00	(13)	6.097+00	(14)	5.946+00	(15)	5.806+00
(16)	5.676+00	(17)	5.553+00	(18)	5.412+00	(19)	5.255+00	(20)	5.134+00
(21)	5.000+00	(22)	4.836+00	(23)	4.667+00	(24)	4.551+00	(25)	4.426+00
(26)	4.311+00	(27)	4.192+00	(28)	4.070+00	(29)	3.959+00	(30)	3.856+00
(31)	3.761+00	(32)	3.672+00	(33)	3.590+00	(34)	3.512+00	(35)	3.433+00
(36)	3.352+00	(37)	3.277+00	(38)	3.206+00	(39)	3.130+00	(40)	3.048+00
(41)	2.973+00	(42)	2.903+00	(43)	2.838+00	(44)	2.777+00	(45)	2.719+00
(46)	2.667+00	(47)	2.618+00	(48)	2.568+00	(49)	2.519+00	(50)	2.457+00
(51)	2.383+00	(52)	2.309+00	(53)	2.235+00	(54)	2.169+00	(55)	2.110+00
(56)	2.051+00	(57)	1.992+00	(58)	1.933+00	(59)	1.886+00	(60)	1.851+00
(61)	1.816+00	(62)	1.781+00	(63)	1.734+00	(64)	1.685+00	(65)	1.641+00
(66)	1.559+00	(67)	1.533+00	(68)	1.492+00	(69)	1.450+00	(70)	1.408+00
(71)	1.367+00	(72)	1.331+00	(73)	1.300+00	(74)	1.269+00	(75)	1.238+00
(76)	1.207+00	(77)	1.176+00	(78)	1.145+00	(79)	1.114+00	(80)	1.088+00
(81)	1.066+00	(82)	1.044+00	(83)	1.022+00	(84)	9.960-01	(85)	9.666-01
(86)	9.418-01	(87)	9.217-01	(88)	9.016-01	(89)	8.815-01	(90)	8.614-01
(91)	8.436-01	(92)	8.280-01	(93)	8.123-01	(94)	7.967-01	(95)	7.772-01
(96)	7.538-01	(97)	7.303-01	(98)	7.069-01	(99)	6.859-01	(100)	6.672-01
(101)	6.446-01	(102)	6.300-01	(103)	6.113-01	(104)	5.965-01	(105)	5.854-01
(106)	5.744-01	(107)	5.634-01	(108)	5.496-01	(109)	5.330-01	(110)	5.192-01
(111)	5.026-01	(112)	4.650-01	(113)	4.718-01	(114)	4.587-01	(115)	4.455-01
(116)	4.325-01	(117)	4.208-01	(118)	4.111-01	(119)	4.013-01	(120)	3.915-01
(121)	3.818-01	(122)	3.720-01	(123)	3.622-01	(124)	3.525-01	(125)	3.441-01
(126)	3.371-01	(127)	3.301-01	(128)	3.231-01	(129)	3.150-01	(130)	3.057-01
(131)	2.978-01	(132)	2.915-01	(133)	2.851-01	(134)	2.788-01	(135)	2.725-01
(136)	2.666-01	(137)	2.619-01	(138)	2.569-01	(139)	2.520-01	(140)	2.458-01
(141)	2.354-01	(142)	2.310-01	(143)	2.236-01	(144)	2.169-01	(145)	2.110-01
(146)	2.051-01	(147)	1.992-01	(148)	1.933-01	(149)	1.887-01	(150)	1.852-01
(151)	1.817-01	(152)	1.782-01	(153)	1.738-01	(154)	1.686-01	(155)	1.642-01
(156)	1.590-01	(157)	1.534-01	(158)	1.493-01	(159)	1.451-01	(160)	1.469-01
(161)	1.368-01	(162)	1.332-01	(163)	1.301-01	(164)	1.270-01	(165)	1.239-01

TABLE B-1   (CONTINUED)

NA23(N,G)NA24

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(166)	1.208-01	(167)	1.177-01	(168)	1.146-01	(169)	1.115-01	(170)	1.089-01
(171)	1.067-01	(172)	1.045-01	(173)	1.023-01	(174)	9.967-02	(175)	9.672-02
(176)	9.412-02	(177)	9.187-02	(178)	8.962-02	(179)	8.737-02	(180)	8.512-02
(181)	8.323-02	(182)	8.170-02	(183)	8.017-02	(184)	7.804-02	(185)	7.673-02
(186)	7.444-02	(187)	7.214-02	(188)	6.985-02	(189)	6.778-02	(190)	6.594-02
(191)	6.410-02	(192)	6.226-02	(193)	6.042-02	(194)	5.895-02	(195)	5.785-02
(196)	5.675-02	(197)	5.565-02	(198)	5.427-02	(199)	5.262-02	(200)	5.125-02
(201)	4.960-02	(202)	4.785-02	(203)	4.655-02	(204)	4.525-02	(205)	4.395-02
(206)	4.265-02	(207)	4.150-02	(208)	4.050-02	(209)	3.950-02	(210)	3.850-02
(211)	3.750-02	(212)	3.650-02	(213)	3.550-02	(214)	3.450-02	(215)	3.368-02
(216)	3.305-02	(217)	3.242-02	(218)	3.179-02	(219)	3.106-02	(220)	3.022-02
(221)	2.947-02	(222)	2.881-02	(223)	2.815-02	(224)	2.749-02	(225)	2.683-02
(226)	2.625-02	(227)	2.575-02	(228)	2.525-02	(229)	2.475-02	(230)	2.413-02
(231)	2.338-02	(232)	2.262-02	(233)	2.188-02	(234)	2.123-02	(235)	2.069-02
(236)	2.015-02	(237)	1.961-02	(238)	1.907-02	(239)	1.862-02	(240)	1.826-02
(241)	1.790-02	(242)	1.754-02	(243)	1.709-02	(244)	1.655-02	(245)	1.610-02
(246)	1.550-02	(247)	1.500-02	(248)	1.460-02	(249)	1.420-02	(250)	1.380-02
(251)	1.340-02	(252)	1.305-02	(253)	1.275-02	(254)	1.245-02	(255)	1.215-02
(256)	1.185-02	(257)	1.155-02	(258)	1.125-02	(259)	1.095-02	(260)	1.069-02
(261)	1.048-02	(262)	1.027-02	(263)	1.006-02	(264)	9.820-03	(265)	9.540-03
(266)	9.300-03	(267)	9.100-03	(268)	8.960-03	(269)	8.700-03	(270)	8.500-03
(271)	8.317-03	(272)	8.151-03	(273)	7.985-03	(274)	7.819-03	(275)	7.611-03
(276)	7.362-03	(277)	7.113-03	(278)	6.864-03	(279)	6.642-03	(280)	6.446-03
(281)	6.250-03	(282)	6.054-03	(283)	5.858-03	(284)	5.706-03	(285)	5.599-03
(286)	5.492-03	(287)	5.385-03	(288)	5.252-03	(289)	5.091-03	(290)	4.957-03
(291)	4.797-03	(292)	4.622-03	(293)	4.486-03	(294)	4.357-03	(295)	4.274-03
(296)	4.198-03	(297)	4.120-03	(298)	4.040-03	(299)	3.985-03	(300)	3.955-03
(301)	3.927-03	(302)	3.902-03	(303)	3.875-03	(304)	3.845-03	(305)	3.824-03
(306)	3.815-03	(307)	3.815-03	(308)	3.821-03	(309)	3.828-03	(310)	3.842-03
(311)	3.862-03	(312)	3.886-03	(313)	3.914-03	(314)	3.966-03	(315)	4.016-03
(316)	4.082-03	(317)	4.167-03	(318)	4.267-03	(319)	4.382-03	(320)	4.541-03
(321)	4.749-03	(322)	4.977-03	(323)	5.266-03	(324)	5.685-03	(325)	6.260-03
(326)	6.975-03	(327)	7.930-03	(328)	8.965-03	(329)	1.067-02	(330)	1.345-02

TABLE B-1   (CONTINUED)

NA23(N,G)NA24

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(331)	1.775-02	(332)	2.425-02	(333)	5.092-02	(334)	1.321-01	(335)	2.508-01
(336)	2.675-01	(337)	1.275-01	(338)	5.205-02	(339)	2.609-02	(340)	1.525-02
(341)	9.848-03	(342)	7.500-03	(343)	6.500-03	(344)	5.663-03	(345)	4.987-03
(346)	4.427-03	(347)	3.982-03	(348)	2.946-03	(349)	2.711-03	(350)	2.467-03
(351)	2.217-03	(352)	2.040-03	(353)	1.886-03	(354)	1.738-03	(355)	1.588-03
(356)	1.446-03	(357)	1.306-03	(358)	1.181-03	(359)	1.076-03	(360)	9.871-04
(361)	9.157-04	(362)	8.565-04	(363)	8.026-04	(364)	7.528-04	(365)	6.964-04
(366)	6.330-04	(367)	5.734-04	(368)	5.157-04	(369)	4.705-04	(370)	4.378-04
(371)	4.141-04	(372)	4.002-04	(373)	3.856-04	(374)	3.791-04	(375)	3.786-04
(376)	3.895-04	(377)	3.949-04	(378)	3.948-04	(379)	3.961-04	(380)	4.011-04
(381)	4.095-04	(382)	5.052-04	(383)	2.130-03	(384)	2.951-03	(385)	2.378-03
(386)	1.888-03	(387)	1.346-03	(388)	1.010-03	(389)	8.755-04	(390)	1.033-03
(391)	1.474-03	(392)	2.147-03	(393)	1.643-03	(394)	9.778-04	(395)	7.251-04
(396)	6.036-04	(397)	4.809-04	(398)	3.748-04	(399)	3.187-04	(400)	2.598-04
(401)	2.219-04	(402)	2.062-04	(403)	2.030-04	(404)	2.319-04	(405)	3.047-04
(406)	4.206-04	(407)	5.747-04	(408)	6.958-04	(409)	7.833-04	(410)	8.523-04
(411)	8.968-04	(412)	9.204-04	(413)	9.385-04	(414)	9.517-04	(415)	9.538-04
(416)	9.487-04	(417)	9.375-04	(418)	9.192-04	(419)	8.993-04	(420)	8.785-04
(421)	8.553-04	(422)	8.310-04	(423)	7.976-04	(424)	7.536-04	(425)	7.132-04
(426)	6.635-04	(427)	5.983-04	(428)	5.350-04	(429)	4.749-04	(430)	4.207-04
(431)	3.696-04	(432)	3.234-04	(433)	3.008-04	(434)	3.062-04	(435)	3.310-04
(436)	3.606-04	(437)	3.846-04	(438)	4.024-04	(439)	4.170-04	(440)	4.264-04
(441)	4.310-04	(442)	4.256-04	(443)	4.130-04	(444)	3.892-04	(445)	3.584-04
(446)	3.300-04	(447)	3.073-04	(448)	2.899-04	(449)	2.716-04	(450)	2.578-04
(451)	2.458-04	(452)	2.335-04	(453)	2.212-04	(454)	2.088-04	(455)	1.963-04
(456)	1.769-04	(457)	1.806-04	(458)	1.744-04	(459)	1.682-04	(460)	1.654-04
(461)	1.656-04	(462)	1.627-04	(463)	1.564-04	(464)	1.532-04	(465)	1.532-04
(466)	1.531-04	(467)	1.531-04	(468)	1.530-04	(469)	1.530-04	(470)	1.497-04
(471)	1.434-04	(472)	1.402-04	(473)	1.402-04	(474)	1.402-04	(475)	1.403-04
(476)	1.403-04	(477)	1.404-04	(478)	1.405-04	(479)	1.406-04	(480)	1.406-04
(481)	1.407-04	(482)	1.407-04	(483)	1.408-04	(484)	1.408-04	(485)	1.409-04
(486)	1.441-04	(487)	1.504-04	(488)	1.536-04	(489)	1.536-04	(490)	1.536-04
(491)	1.536-04	(492)	1.536-04	(493)	1.536-04	(494)	1.568-04	(495)	1.633-04

TABLE B-1 (CONTINUED)

NA23(N,G)NA24

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(496)	1.665-04	(497)	1.666-04	(498)	1.667-04	(499)	1.667-04	(500)	1.667-04
(501)	1.666-04	(502)	1.668-04	(503)	1.668-04	(504)	1.690-04	(505)	1.732-04
(506)	1.774-04	(507)	1.796-04	(508)	1.796-04	(509)	1.796-04	(510)	1.817-04
(511)	1.859-04	(512)	1.901-04	(513)	1.922-04	(514)	1.937-04	(515)	1.968-04
(516)	1.999-04	(517)	2.031-04	(518)	2.046-04	(519)	2.046-04	(520)	2.045-04
(521)	2.059-04	(522)	2.090-04	(523)	2.120-04	(524)	2.151-04	(525)	2.181-04
(526)	2.209-04	(527)	2.238-04	(528)	2.266-04	(529)	2.293-04	(530)	2.321-04
(531)	2.348-04	(532)	2.377-04	(533)	2.403-04	(534)	2.431-04	(535)	2.457-04
(536)	2.484-04	(537)	2.510-04	(538)	2.536-04	(539)	2.562-04	(540)	2.587-04
(541)	2.607-04	(542)	2.621-04	(543)	2.634-04	(544)	2.648-04	(545)	2.660-04
(546)	2.673-04	(547)	2.685-04	(548)	2.697-04	(549)	2.708-04	(550)	2.719-04
(551)	2.741-04	(552)	2.773-04	(553)	2.806-04	(554)	2.837-04	(555)	2.868-04
(556)	2.899-04	(557)	2.929-04	(558)	2.959-04	(559)	2.988-04	(560)	3.016-04
(561)	3.044-04	(562)	3.071-04	(563)	3.097-04	(564)	3.123-04	(565)	3.149-04
(566)	3.174-04	(567)	3.198-04	(568)	3.222-04	(569)	3.245-04	(570)	3.268-04
(571)	3.289-04	(572)	3.309-04	(573)	3.329-04	(574)	3.348-04	(575)	3.366-04
(576)	3.385-04	(577)	3.403-04	(578)	3.421-04	(579)	3.439-04	(580)	3.457-04
(581)	3.475-04	(582)	3.495-04	(583)	3.515-04	(584)	3.535-04	(585)	3.555-04
(586)	3.575-04	(587)	3.595-04	(588)	3.615-04	(589)	3.636-04	(590)	3.656-04
(591)	3.676-04	(592)	3.693-04	(593)	3.710-04	(594)	3.729-04	(595)	3.746-04
(596)	3.764-04	(597)	3.784-04	(598)	3.803-04	(599)	3.822-04	(600)	3.842-04
(601)	3.862-04	(602)	3.882-04	(603)	3.903-04	(604)	3.924-04	(605)	3.945-04
(606)	3.967-04	(607)	3.989-04	(608)	4.010-04	(609)	4.034-04	(610)	4.056-04
(611)	4.079-04	(612)	4.103-04	(613)	4.126-04	(614)	4.149-04	(615)	4.173-04
(616)	4.196-04	(617)	4.220-04	(618)	4.245-04	(619)	4.269-04	(620)	4.295-04

FIGURE B-2. ^{27}Al$(n,p)^{27}$Mg

Neg 0695120-5

NEUTRON ENERGY (MEV)

INTERVAL-AVERAGED CROSS SECTION (BARNS)

B-6
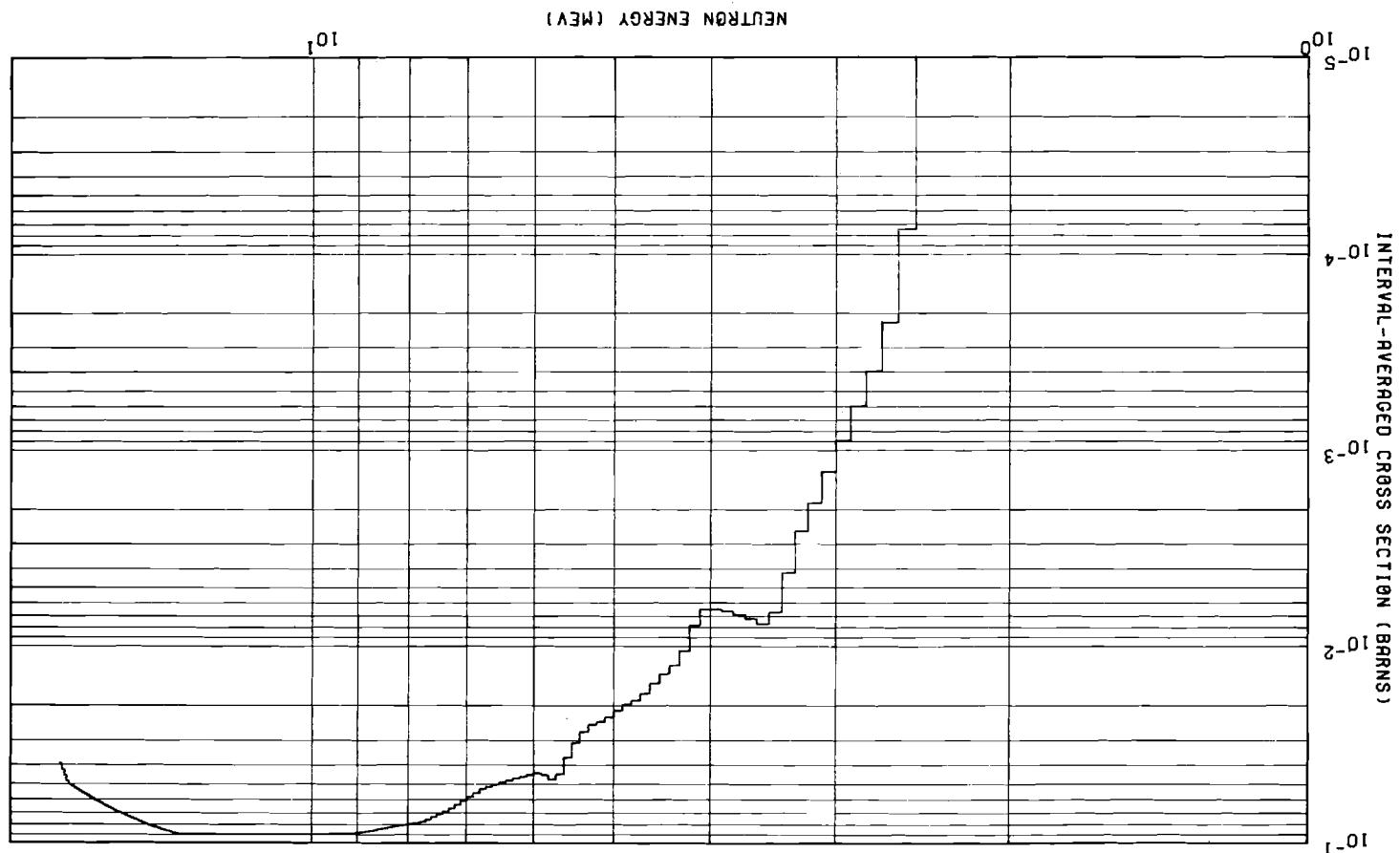
TABLE B-2

AL27(N,P)MG27

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(465)	0.000	(466)	7.500-05	(467)	2.250-04	(468)	4.000-04	(469)	6.000-04
(470)	8.975-04	(471)	1.292-03	(472)	1.860-03	(473)	2.600-03	(474)	4.227-03
(475)	6.742-03	(476)	7.750-03	(477)	7.250-03	(478)	6.875-03	(479)	6.625-03
(480)	6.500-03	(481)	6.500-03	(482)	7.875-03	(483)	1.062-02	(484)	1.262-02
(485)	1.387-02	(486)	1.550-02	(487)	1.750-02	(488)	1.897-02	(489)	1.992-02
(490)	2.130-02	(491)	2.310-02	(492)	2.437-02	(493)	2.512-02	(494)	2.735-02
(495)	3.105-02	(496)	3.687-02	(497)	4.482-02	(498)	4.750-02	(499)	4.490-02
(500)	4.406-02	(501)	4.497-02	(502)	4.589-02	(503)	4.684-02	(504)	4.804-02
(505)	4.928-02	(506)	5.052-02	(507)	5.176-02	(508)	5.319-02	(509)	5.580-02
(510)	5.860-02	(511)	6.140-02	(512)	6.420-02	(513)	6.692-02	(514)	6.920-02
(515)	7.140-02	(516)	7.360-02	(517)	7.580-02	(518)	7.782-02	(519)	7.880-02
(520)	7.960-02	(521)	8.040-02	(522)	8.120-02	(523)	8.202-02	(524)	8.300-02
(525)	8.400-02	(526)	8.500-02	(527)	8.600-02	(528)	8.695-02	(529)	8.760-02
(530)	8.820-02	(531)	8.880-02	(532)	8.940-02	(533)	8.992-02	(534)	9.000-02
(535)	9.000-02	(536)	9.000-02	(537)	9.000-02	(538)	9.000-02	(539)	9.000-02
(540)	9.000-02	(541)	9.000-02	(542)	9.000-02	(543)	9.000-02	(544)	9.000-02
(545)	9.000-02	(546)	9.000-02	(547)	9.000-02	(548)	9.000-02	(549)	9.000-02
(550)	9.000-02	(551)	9.000-02	(552)	9.000-02	(553)	9.000-02	(554)	9.000-02
(555)	9.000-02	(556)	9.000-02	(557)	9.000-02	(558)	9.000-02	(559)	9.000-02
(560)	9.000-02	(561)	9.000-02	(562)	9.000-02	(563)	9.000-02	(564)	9.000-02
(565)	9.000-02	(566)	9.000-02	(567)	9.000-02	(568)	9.000-02	(569)	9.000-02
(570)	9.000-02	(571)	9.000-02	(572)	9.000-02	(573)	9.000-02	(574)	9.000-02
(575)	9.000-02	(576)	8.955-02	(577)	8.865-02	(578)	8.775-02	(579)	8.685-02
(580)	8.595-02	(581)	8.505-02	(582)	8.415-02	(583)	8.325-02	(584)	8.235-02
(585)	8.145-02	(586)	8.048-02	(587)	7.943-02	(588)	7.838-02	(589)	7.733-02
(590)	7.628-02	(591)	7.523-02	(592)	7.418-02	(593)	7.313-02	(594)	7.208-02
(595)	7.103-02	(596)	6.998-02	(597)	6.893-02	(598)	6.788-02	(599)	6.683-02
(600)	6.578-02	(601)	6.473-02	(602)	6.368-02	(603)	6.263-02	(604)	6.158-02
(605)	6.053-02	(606)	5.949-02	(607)	5.846-02	(608)	5.743-02	(609)	5.640-02
(610)	5.537-02	(611)	5.434-02	(612)	5.331-02	(613)	5.228-02	(614)	5.125-02
(615)	5.022-02	(616)	4.820-02	(617)	4.520-02	(618)	4.220-02	(619)	3.920-02
(620)	3.620-02								

FIGURE B-3. ^{27}Al$(n,\alpha)^{24}$Na

Neg 069S120-7

B-8
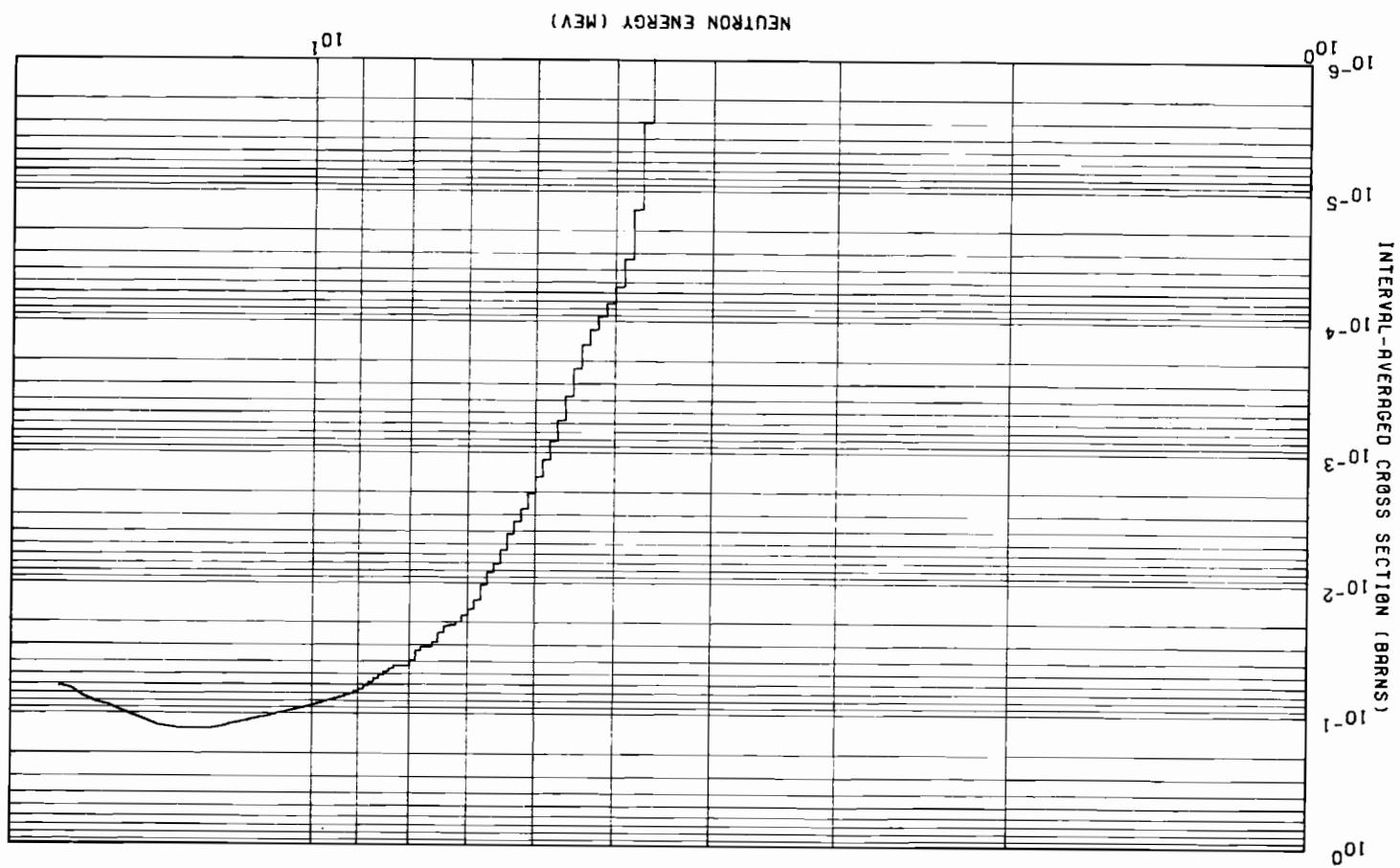
TABLE B-3
AL27(N,A)NA24

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(486)	0.000	(487)	3.049-06	(488)	1.401-05	(489)	3.370-05	(490)	5.507-05
(491)	7.387-05	(492)	9.348-05	(493)	1.168-04	(494)	1.537-04	(495)	2.332-04
(496)	3.783-04	(497)	5.785-04	(498)	8.311-04	(499)	1.152-03	(500)	1.562-03
(501)	2.093-03	(502)	2.730-03	(503)	3.401-03	(504)	4.238-03	(505)	5.646-03
(506)	7.164-03	(507)	8.346-03	(508)	1.049-02	(509)	1.362-02	(510)	1.601-02
(511)	1.800-02	(512)	2.023-02	(513)	2.118-02	(514)	2.160-02	(515)	2.449-02
(516)	2.896-02	(517)	3.124-02	(518)	3.130-02	(519)	3.356-02	(520)	3.949-02
(521)	4.366-02	(522)	4.334-02	(523)	4.333-02	(524)	4.553-02	(525)	4.829-02
(526)	5.141-02	(527)	5.474-02	(528)	5.812-02	(529)	6.160-02	(530)	6.497-02
(531)	6.789-02	(532)	7.049-02	(533)	7.282-02	(534)	7.484-02	(535)	7.672-02
(536)	7.855-02	(537)	8.040-02	(538)	8.228-02	(539)	8.417-02	(540)	8.606-02
(541)	8.796-02	(542)	8.984-02	(543)	9.159-02	(544)	9.321-02	(545)	9.479-02
(546)	9.638-02	(547)	9.798-02	(548)	9.959-02	(549)	1.012-01	(550)	1.029-01
(551)	1.045-01	(552)	1.062-01	(553)	1.077-01	(554)	1.092-01	(555)	1.107-01
(556)	1.124-01	(557)	1.142-01	(558)	1.159-01	(559)	1.174-01	(560)	1.190-01
(561)	1.209-01	(562)	1.229-01	(563)	1.249-01	(564)	1.269-01	(565)	1.287-01
(566)	1.301-01	(567)	1.312-01	(568)	1.319-01	(569)	1.322-01	(570)	1.323-01
(571)	1.323-01	(572)	1.320-01	(573)	1.315-01	(574)	1.307-01	(575)	1.301-01
(576)	1.299-01	(577)	1.296-01	(578)	1.288-01	(579)	1.277-01	(580)	1.266-01
(581)	1.257-01	(582)	1.248-01	(583)	1.233-01	(584)	1.213-01	(585)	1.188-01
(586)	1.182-01	(587)	1.137-01	(588)	1.112-01	(589)	1.091-01	(590)	1.072-01
(591)	1.052-01	(592)	1.032-01	(593)	1.012-01	(594)	9.926-02	(595)	9.729-02
(596)	9.515-02	(597)	9.295-02	(598)	9.083-02	(599)	8.877-02	(600)	8.702-02
(601)	8.577-02	(602)	8.479-02	(603)	8.383-02	(604)	8.288-02	(605)	8.178-02
(606)	8.636-02	(607)	7.881-02	(608)	7.731-02	(609)	7.585-02	(610)	7.420-02
(611)	7.218-02	(612)	7.061-02	(613)	6.791-02	(614)	6.587-02	(615)	6.423-02
(616)	6.331-02	(617)	6.274-02	(618)	6.220-02	(619)	6.170-02	(620)	5.073-02
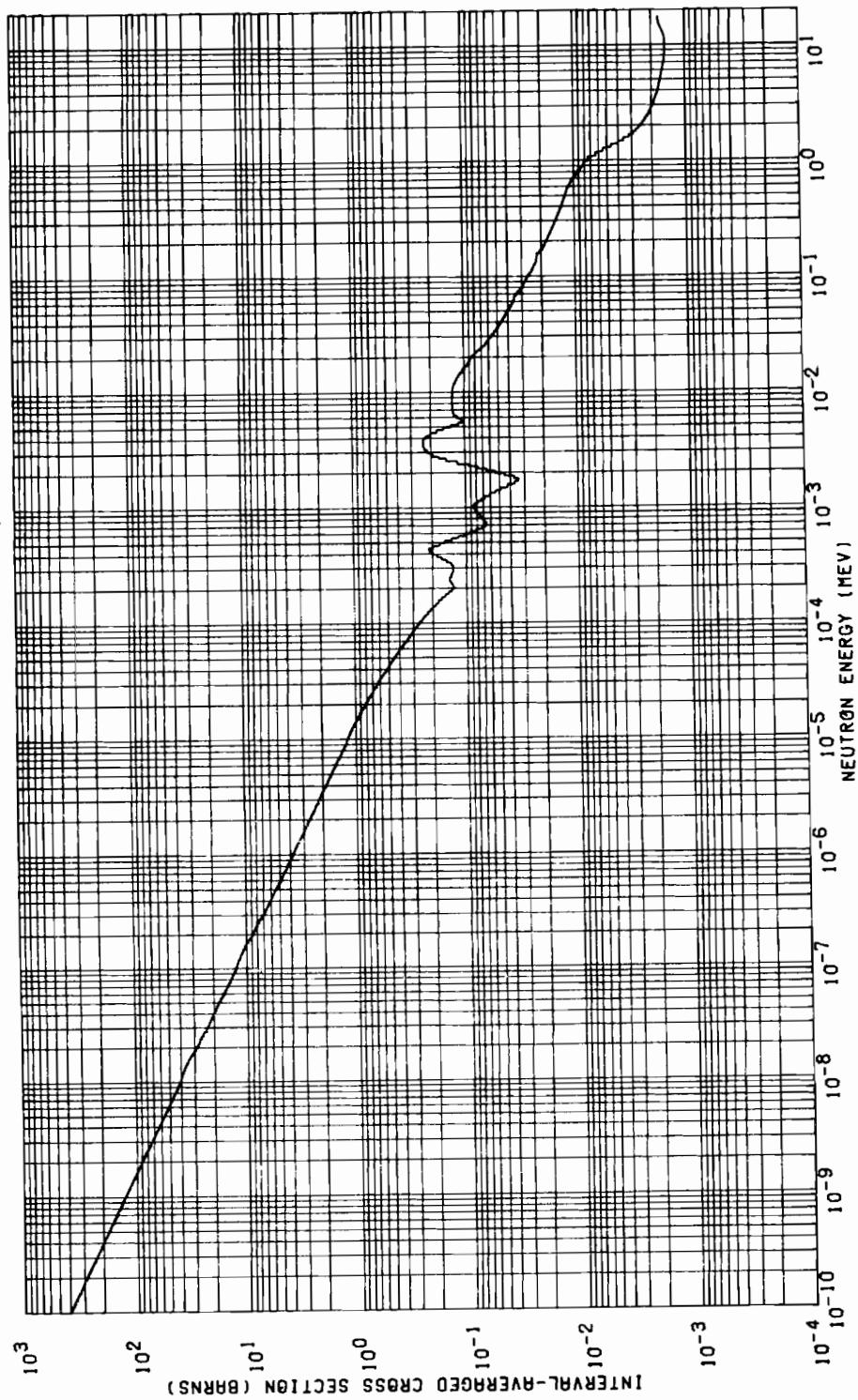
Neg 0694115-4

FIGURE B-4. ^{45}Sc$(n,\gamma)^{46}$Sc

TABLE B-4
SC45(N,G)SC46
INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(1)	3.951+02	(2)	3.858+02	(3)	3.771+02	(4)	3.690+02	(5)	3.596+02
(6)	3.492+02	(7)	3.396+02	(8)	3.308+02	(9)	3.213+02	(10)	3.114+02
(11)	3.024+02	(12)	2.941+02	(13)	2.865+02	(14)	2.794+02	(15)	2.728+02
(16)	2.667+02	(17)	2.609+02	(18)	2.543+02	(19)	2.469+02	(20)	2.412+02
(21)	2.349+02	(22)	2.272+02	(23)	2.202+02	(24)	2.138+02	(25)	2.080+02
(26)	2.026+02	(27)	1.970+02	(28)	1.913+02	(29)	1.860+02	(30)	1.812+02
(31)	1.767+02	(32)	1.725+02	(33)	1.687+02	(34)	1.650+02	(35)	1.613+02
(36)	1.575+02	(37)	1.540+02	(38)	1.507+02	(39)	1.471+02	(40)	1.432+02
(41)	1.397+02	(42)	1.364+02	(43)	1.333+02	(44)	1.305+02	(45)	1.278+02
(46)	1.249+02	(47)	1.220+02	(48)	1.193+02	(49)	1.167+02	(50)	1.137+02
(51)	1.104+02	(52)	1.074+02	(53)	1.046+02	(54)	1.016+02	(55)	9.848+01
(56)	9.563+01	(57)	9.301+01	(58)	9.059+01	(59)	8.835+01	(60)	8.627+01
(61)	8.433+01	(62)	8.252+01	(63)	8.041+01	(64)	7.808+01	(65)	7.628+01
(66)	7.429+01	(67)	7.185+01	(68)	6.964+01	(69)	6.762+01	(70)	6.577+01
(71)	6.406+01	(72)	6.229+01	(73)	6.048+01	(74)	5.882+01	(75)	5.729+01
(76)	5.588+01	(77)	5.456+01	(78)	5.334+01	(79)	5.219+01	(80)	5.101+01
(81)	4.981+01	(82)	4.869+01	(83)	4.764+01	(84)	4.650+01	(85)	4.529+01
(86)	4.418+01	(87)	4.314+01	(88)	4.217+01	(89)	4.126+01	(90)	4.041+01
(91)	3.971+01	(92)	3.914+01	(93)	3.856+01	(94)	3.799+01	(95)	3.727+01
(96)	3.641+01	(97)	3.554+01	(98)	3.468+01	(99)	3.367+01	(100)	3.252+01
(101)	3.137+01	(102)	3.022+01	(103)	2.907+01	(104)	2.820+01	(105)	2.761+01
(106)	2.702+01	(107)	2.643+01	(108)	2.569+01	(109)	2.480+01	(110)	2.406+01
(111)	2.317+01	(112)	2.230+01	(113)	2.173+01	(114)	2.116+01	(115)	2.060+01
(116)	2.003+01	(117)	1.952+01	(118)	1.905+01	(119)	1.858+01	(120)	1.811+01
(121)	1.764+01	(122)	1.717+01	(123)	1.670+01	(124)	1.623+01	(125)	1.583+01
(126)	1.549+01	(127)	1.516+01	(128)	1.482+01	(129)	1.442+01	(130)	1.397+01
(131)	1.361+01	(132)	1.333+01	(133)	1.305+01	(134)	1.277+01	(135)	1.249+01
(136)	1.220+01	(137)	1.208+01	(138)	1.189+01	(139)	1.171+01	(140)	1.148+01
(141)	1.121+01	(142)	1.094+01	(143)	1.066+01	(144)	1.034+01	(145)	9.977+00
(146)	9.612+00	(147)	9.247+00	(148)	8.882+00	(149)	8.620+00	(150)	8.460+00
(151)	8.500+00	(152)	8.140+00	(153)	7.940+00	(154)	7.700+00	(155)	7.500+00
(156)	7.200+00	(157)	6.905+00	(158)	6.698+00	(159)	6.497+00	(160)	6.298+00
(161)	6.100+00	(162)	5.928+00	(163)	5.780+00	(164)	5.633+00	(165)	5.486+00

TABLE B-4   (CONTINUED)

SC45(N,G)SC46

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)
----

(166)	5.338+00	(167)	5.191+00	(168)	5.043+00	(169)	4.895+00	(170)	4.777+00
(171)	4.688+00	(172)	4.599+00	(173)	4.511+00	(174)	4.407+00	(175)	4.289+00
(176)	4.182+00	(177)	4.087+00	(178)	3.992+00	(179)	3.897+00	(180)	3.802+00
(181)	3.719+00	(182)	3.647+00	(183)	3.575+00	(184)	3.504+00	(185)	3.415+00
(186)	3.309+00	(187)	3.202+00	(188)	3.096+00	(189)	3.003+00	(190)	2.924+00
(191)	2.845+00	(192)	2.767+00	(193)	2.688+00	(194)	2.619+00	(195)	2.561+00
(196)	2.502+00	(197)	2.444+00	(198)	2.373+00	(199)	2.307+00	(200)	2.259+00
(201)	2.200+00	(202)	2.132+00	(203)	2.073+00	(204)	2.015+00	(205)	1.956+00
(206)	1.898+00	(207)	1.844+00	(208)	1.795+00	(209)	1.747+00	(210)	1.698+00
(211)	1.655+00	(212)	1.619+00	(213)	1.581+00	(214)	1.545+00	(215)	1.509+00
(216)	1.474+00	(217)	1.438+00	(218)	1.404+00	(219)	1.369+00	(220)	1.330+00
(221)	1.294+00	(222)	1.263+00	(223)	1.232+00	(224)	1.212+00	(225)	1.192+00
(226)	1.170+00	(227)	1.148+00	(228)	1.125+00	(229)	1.102+00	(230)	1.075+00
(231)	1.040+00	(232)	1.007+00	(233)	9.724-01	(234)	9.406-01	(235)	9.111-01
(236)	8.815-01	(237)	8.520-01	(238)	8.224-01	(239)	7.978-01	(240)	7.780-01
(241)	7.583-01	(242)	7.386-01	(243)	7.142-01	(244)	6.892-01	(245)	6.695-01
(246)	6.458-01	(247)	6.186-01	(248)	5.959-01	(249)	5.732-01	(250)	5.505-01
(251)	5.278-01	(252)	5.078-01	(253)	4.905-01	(254)	4.732-01	(255)	4.559-01
(256)	4.398-01	(257)	4.250-01	(258)	4.101-01	(259)	3.952-01	(260)	3.819-01
(261)	3.699-01	(262)	3.580-01	(263)	3.466-01	(264)	3.350-01	(265)	3.219-01
(266)	3.099-01	(267)	2.992-01	(268)	2.885-01	(269)	2.788-01	(270)	2.693-01
(271)	2.592-01	(272)	2.487-01	(273)	2.392-01	(274)	2.307-01	(275)	2.208-01
(276)	2.096-01	(277)	1.978-01	(278)	1.871-01	(279)	1.764-01	(280)	1.650-01
(281)	1.536-01	(282)	1.433-01	(283)	1.339-01	(284)	1.293-01	(285)	1.313-01
(286)	1.357-01	(287)	1.401-01	(288)	1.408-01	(289)	1.360-01	(290)	1.324-01
(291)	1.309-01	(292)	1.321-01	(293)	1.363-01	(294)	1.505-01	(295)	1.663-01
(296)	1.813-01	(297)	2.005-01	(298)	2.119-01	(299)	1.943-01	(300)	1.686-01
(301)	1.523-01	(302)	1.328-01	(303)	1.155-01	(304)	1.020-01	(305)	9.061-02
(306)	8.030-02	(307)	7.111-02	(308)	6.634-02	(309)	6.575-02	(310)	6.840-02
(311)	7.155-02	(312)	7.434-02	(313)	7.711-02	(314)	7.997-02	(315)	8.286-02
(316)	8.502-02	(317)	8.282-02	(318)	7.751-02	(319)	7.241-02	(320)	6.658-02
(321)	6.001-02	(322)	5.352-02	(323)	4.793-02	(324)	4.178-02	(325)	3.607-02
(326)	3.326-02	(327)	3.695-02	(328)	4.484-02	(329)	5.402-02	(330)	6.476-02

TABLE B-4 (CONTINUED)

SC45(N,G)SC46

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(331)	7.713-02	(332)	9.512-02	(333)	1.169-01	(334)	1.475-01	(335)	1.707-01
(336)	1.934-01	(337)	2.170-01	(338)	2.261-01	(339)	2.334-01	(340)	2.333-01
(341)	2.302-01	(342)	2.179-01	(343)	1.973-01	(344)	1.744-01	(345)	1.510-01
(346)	1.290-01	(347)	1.113-01	(348)	1.003-01	(349)	1.066-01	(350)	1.164-01
(351)	1.227-01	(352)	1.260-01	(353)	1.271-01	(354)	1.277-01	(355)	1.282-01
(356)	1.282-01	(357)	1.279-01	(358)	1.275-01	(359)	1.272-01	(360)	1.269-01
(361)	1.264-01	(362)	1.257-01	(363)	1.242-01	(364)	1.219-01	(365)	1.190-01
(366)	1.154-01	(367)	1.114-01	(368)	1.075-01	(369)	1.030-01	(370)	9.780-02
(371)	9.259-02	(372)	8.902-02	(373)	8.698-02	(374)	8.403-02	(375)	8.009-02
(376)	7.616-02	(377)	7.223-02	(378)	6.754-02	(379)	6.409-02	(380)	6.178-02
(381)	5.903-02	(382)	5.591-02	(383)	5.330-02	(384)	5.082-02	(385)	4.898-02
(386)	4.725-02	(387)	4.563-02	(388)	4.411-02	(389)	4.257-02	(390)	4.105-02
(391)	3.971-02	(392)	3.855-02	(393)	3.740-02	(394)	3.625-02	(395)	3.540-02
(396)	3.485-02	(397)	3.431-02	(398)	3.361-02	(399)	3.223-02	(400)	3.063-02
(401)	2.948-02	(402)	2.878-02	(403)	2.807-02	(404)	2.739-02	(405)	2.673-02
(406)	2.599-02	(407)	2.513-02	(408)	2.425-02	(409)	2.372-02	(410)	2.312-02
(411)	2.246-02	(412)	2.187-02	(413)	2.170-02	(414)	2.151-02	(415)	2.043-02
(416)	1.929-02	(417)	1.870-02	(418)	1.820-02	(419)	1.773-02	(420)	1.751-02
(421)	1.690-02	(422)	1.653-02	(423)	1.614-02	(424)	1.568-02	(425)	1.533-02
(426)	1.499-02	(427)	1.455-02	(428)	1.414-02	(429)	1.381-02	(430)	1.348-02
(431)	1.315-02	(432)	1.286-02	(433)	1.261-02	(434)	1.235-02	(435)	1.210-02
(436)	1.187-02	(437)	1.166-02	(438)	1.146-02	(439)	1.125-02	(440)	1.101-02
(441)	1.072-02	(442)	1.044-02	(443)	1.015-02	(444)	9.817-03	(445)	9.441-03
(446)	9.065-03	(447)	8.687-03	(448)	8.333-03	(449)	8.121-03	(450)	7.932-03
(451)	7.310-03	(452)	6.256-03	(453)	5.378-03	(454)	4.559-03	(455)	3.916-03
(456)	3.518-03	(457)	3.138-03	(458)	2.886-03	(459)	2.710-03	(460)	2.568-03
(461)	2.465-03	(462)	2.377-03	(463)	2.299-03	(464)	2.232-03	(465)	2.165-03
(466)	2.101-03	(467)	2.059-03	(468)	2.020-03	(469)	1.981-03	(470)	1.942-03
(471)	1.610-03	(472)	1.887-03	(473)	1.864-03	(474)	1.845-03	(475)	1.826-03
(476)	1.807-03	(477)	1.788-03	(478)	1.770-03	(479)	1.751-03	(480)	1.732-03
(481)	1.718-03	(482)	1.709-03	(483)	1.700-03	(484)	1.690-03	(485)	1.681-03
(486)	1.672-03	(487)	1.663-03	(488)	1.654-03	(489)	1.645-03	(490)	1.636-03
(491)	1.628-03	(492)	1.623-03	(493)	1.617-03	(494)	1.611-03	(495)	1.605-03

TABLE B-4 (CONTINUED)

SC45(N,G)SC46

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(496) 1.600-03	(497) 1.594-03	(498) 1.588-03	(499) 1.582-03	(500) 1.577-03
(501) 1.571-03	(502) 1.565-03	(503) 1.559-03	(504) 1.554-03	(505) 1.548-03
(506) 1.543-03	(507) 1.537-03	(508) 1.532-03	(509) 1.526-03	(510) 1.521-03
(511) 1.517-03	(512) 1.515-03	(513) 1.514-03	(514) 1.512-03	(515) 1.510-03
(516) 1.508-03	(517) 1.506-03	(518) 1.505-03	(519) 1.503-03	(520) 1.501-03
(521) 1.500-03	(522) 1.498-03	(523) 1.497-03	(524) 1.495-03	(525) 1.494-03
(526) 1.493-03	(527) 1.492-03	(528) 1.490-03	(529) 1.489-03	(530) 1.488-03
(531) 1.487-03	(532) 1.486-03	(533) 1.485-03	(534) 1.485-03	(535) 1.484-03
(536) 1.484-03	(537) 1.484-03	(538) 1.484-03	(539) 1.485-03	(540) 1.485-03
(541) 1.486-03	(542) 1.487-03	(543) 1.488-03	(544) 1.489-03	(545) 1.490-03
(546) 1.492-03	(547) 1.493-03	(548) 1.495-03	(549) 1.497-03	(550) 1.499-03
(551) 1.501-03	(552) 1.503-03	(553) 1.506-03	(554) 1.508-03	(555) 1.511-03
(556) 1.514-03	(557) 1.517-03	(558) 1.520-03	(559) 1.523-03	(560) 1.527-03
(561) 1.530-03	(562) 1.533-03	(563) 1.537-03	(564) 1.541-03	(565) 1.545-03
(566) 1.549-03	(567) 1.553-03	(568) 1.558-03	(569) 1.562-03	(570) 1.567-03
(571) 1.571-03	(572) 1.576-03	(573) 1.581-03	(574) 1.586-03	(575) 1.593-03
(576) 1.598-03	(577) 1.604-03	(578) 1.611-03	(579) 1.616-03	(580) 1.622-03
(581) 1.627-03	(582) 1.633-03	(583) 1.638-03	(584) 1.643-03	(585) 1.648-03
(586) 1.653-03	(587) 1.659-03	(588) 1.663-03	(589) 1.668-03	(590) 1.672-03
(591) 1.676-03	(592) 1.680-03	(593) 1.684-03	(594) 1.689-03	(595) 1.692-03
(596) 1.695-03	(597) 1.698-03	(598) 1.702-03	(599) 1.704-03	(600) 1.707-03
(601) 1.709-03	(602) 1.712-03	(603) 1.715-03	(604) 1.717-03	(605) 1.719-03
(606) 1.721-03	(607) 1.723-03	(608) 1.724-03	(609) 1.726-03	(610) 1.727-03
(611) 1.729-03	(612) 1.731-03	(613) 1.731-03	(614) 1.733-03	(615) 1.733-03
(616) 1.735-03	(617) 1.735-03	(618) 1.736-03	(619) 1.735-03	(620) 1.738-03

FIGURE B-5. ^{46}Ti(n,p)^{46}Sc

NEUTRON ENERGY (MEV)
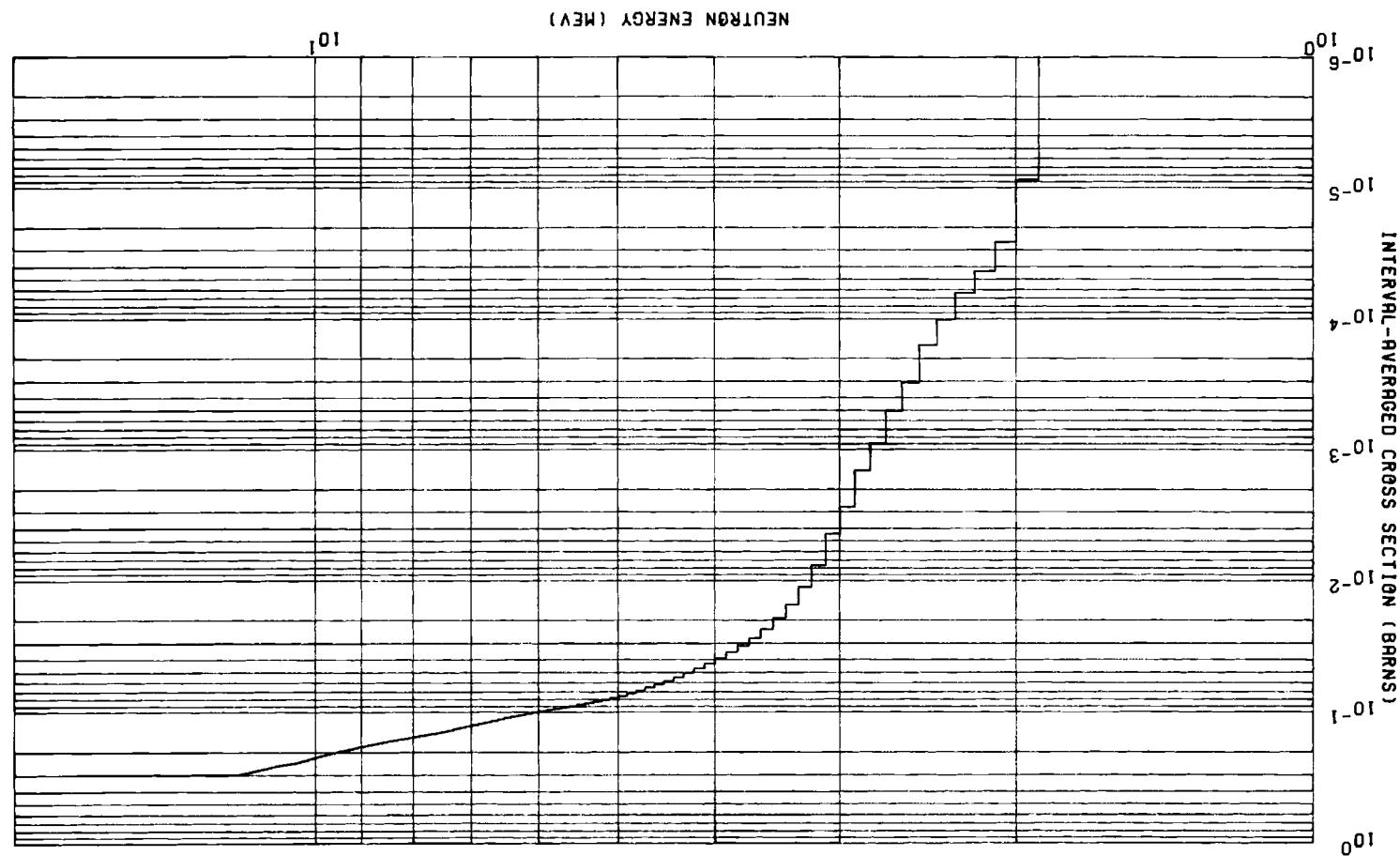
INTERVAL-AVERAGED CROSS SECTION (BARNS)

TABLE B-5

TI46(N,P)SC46

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(459)	0.000	(460)	8.780-06	(461)	2.634-05	(462)	4.390-05	(463)	6.442-05
(464)	1.027-04	(465)	1.598-04	(466)	3.120-04	(467)	5.128-04	(468)	9.095-04
(469)	1.464-03	(470)	2.765-03	(471)	4.458-03	(472)	7.746-03	(473)	1.137-02
(474)	1.541-02	(475)	1.952-02	(476)	2.367-02	(477)	2.775-02	(478)	3.143-02
(479)	3.510-02	(480)	3.913-02	(481)	4.319-02	(482)	4.709-02	(483)	5.096-02
(484)	5.473-02	(485)	5.845-02	(486)	6.190-02	(487)	6.531-02	(488)	6.879-02
(489)	7.225-02	(490)	7.549-02	(491)	7.857-02	(492)	8.096-02	(493)	8.324-02
(494)	8.551-02	(495)	8.777-02	(496)	8.994-02	(497)	9.209-02	(498)	9.424-02
(499)	9.640-02	(500)	9.855-02	(501)	1.007-01	(502)	1.031-01	(503)	1.056-01
(504)	1.080-01	(505)	1.106-01	(506)	1.134-01	(507)	1.164-01	(508)	1.193-01
(509)	1.223-01	(510)	1.252-01	(511)	1.282-01	(512)	1.311-01	(513)	1.341-01
(514)	1.370-01	(515)	1.400-01	(516)	1.427-01	(517)	1.454-01	(518)	1.481-01
(519)	1.508-01	(520)	1.535-01	(521)	1.562-01	(522)	1.586-01	(523)	1.610-01
(524)	1.634-01	(525)	1.659-01	(526)	1.688-01	(527)	1.719-01	(528)	1.749-01
(529)	1.779-01	(530)	1.810-01	(531)	1.842-01	(532)	1.877-01	(533)	1.912-01
(534)	1.947-01	(535)	1.982-01	(536)	2.020-01	(537)	2.060-01	(538)	2.100-01
(539)	2.140-01	(540)	2.180-01	(541)	2.225-01	(542)	2.275-01	(543)	2.325-01
(544)	2.375-01	(545)	2.425-01	(546)	2.465-01	(547)	2.495-01	(548)	2.525-01
(549)	2.555-01	(550)	2.585-01	(551)	2.620-01	(552)	2.660-01	(553)	2.700-01
(554)	2.740-01	(555)	2.780-01	(556)	2.820-01	(557)	2.860-01	(558)	2.900-01
(559)	2.940-01	(560)	2.980-01	(561)	3.000-01	(562)	3.000-01	(563)	3.000-01
(564)	3.000-01	(565)	3.000-01	(566)	3.000-01	(567)	3.000-01	(568)	3.000-01
(569)	3.000-01	(570)	3.000-01	(571)	3.000-01	(572)	3.000-01	(573)	3.000-01
(574)	3.000-01	(575)	3.000-01	(576)	3.000-01	(577)	3.000-01	(578)	3.000-01
(579)	3.000-01	(580)	3.000-01	(581)	3.000-01	(582)	3.000-01	(583)	3.000-01
(584)	3.000-01	(585)	3.000-01	(586)	3.000-01	(587)	3.000-01	(588)	3.000-01
(589)	3.000-01	(590)	3.000-01	(591)	3.000-01	(592)	3.000-01	(593)	3.000-01
(594)	3.000-01	(595)	3.000-01	(596)	3.000-01	(597)	3.000-01	(598)	3.000-01
(599)	3.000-01	(600)	3.000-01	(601)	3.000-01	(602)	3.000-01	(603)	3.000-01
(604)	3.000-01	(605)	3.000-01	(606)	3.000-01	(607)	3.000-01	(608)	3.000-01
(609)	3.000-01	(610)	3.000-01	(611)	3.000-01	(612)	3.000-01	(613)	3.000-01
(614)	3.000-01	(615)	3.000-01	(616)	3.000-01	(617)	3.000-01	(618)	3.000-01
(619)	3.000-01	(620)	3.000-01	(							

FIGURE B-6. ^{47}Ti(n,p)^{47}Sc
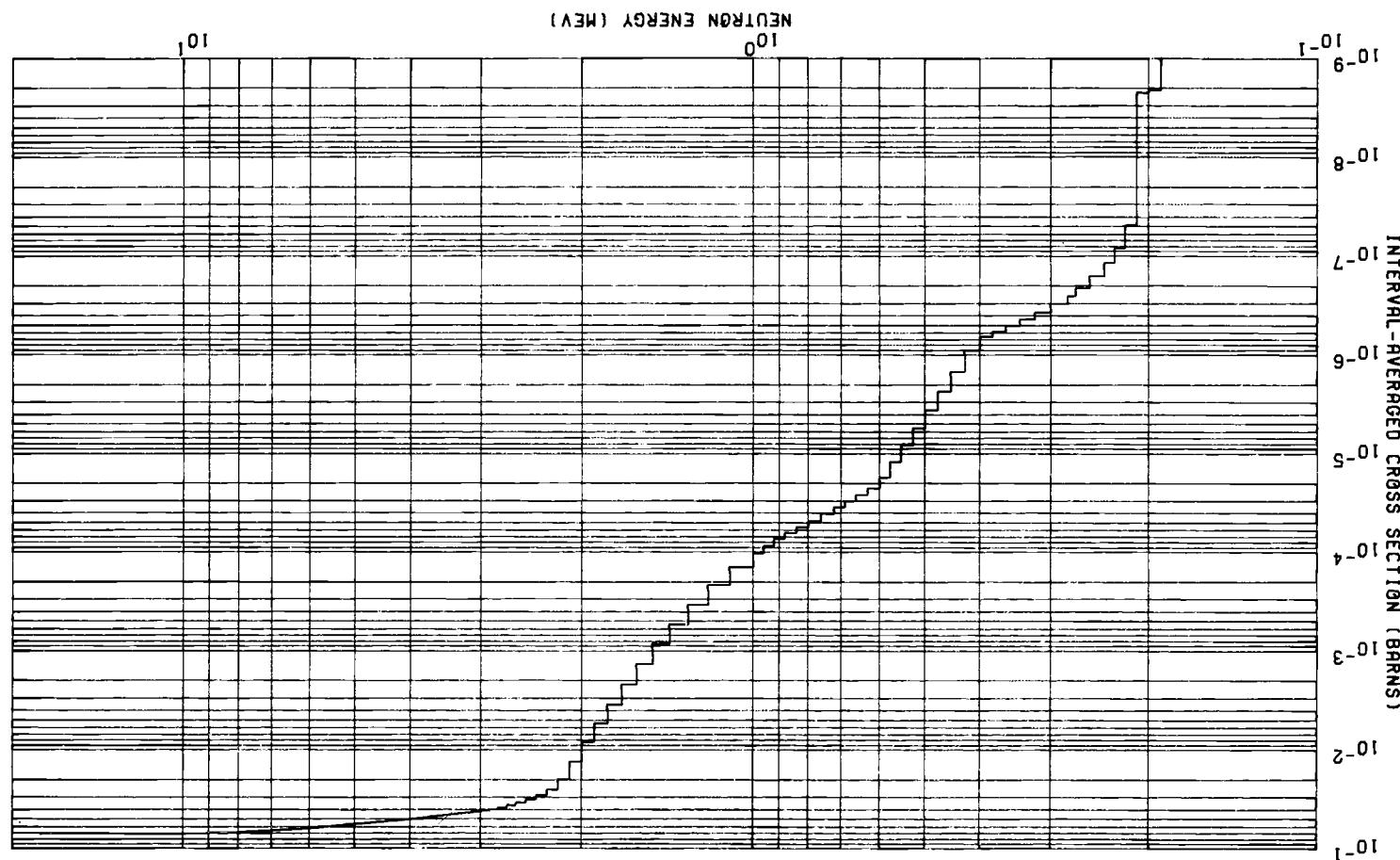
TABLE B-6

TI47(N,P)SC47

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(417)	0.000	(418)	2.135-09	(419)	2.247-09	(420)	4.952-08	(421)	8.457-08
(422)	1.192-07	(423)	1.617-07	(424)	2.134-07	(425)	2.561-07	(426)	3.061-07
(427)	3.740-07	(428)	4.420-07	(429)	5.136-07	(430)	5.852-07	(431)	6.570-07
(432)	9.086-07	(433)	1.492-06	(434)	2.379-06	(435)	3.694-06	(436)	5.615-06
(437)	8.368-06	(438)	1.225-05	(439)	1.760-05	(440)	2.265-05	(441)	2.639-05
(442)	3.054-05	(443)	3.513-05	(444)	4.111-05	(445)	4.870-05	(446)	5.650-05
(447)	6.443-05	(448)	7.395-05	(449)	8.732-05	(450)	1.040-04	(451)	1.432-04
(452)	2.184-04	(453)	3.459-04	(454)	5.457-04	(455)	8.592-04	(456)	1.371-03
(457)	2.214-03	(458)	3.547-03	(459)	5.468-03	(460)	8.414-03	(461)	1.333-02
(462)	1.953-02	(463)	2.539-02	(464)	2.888-02	(465)	3.190-02	(466)	3.448-02
(467)	3.652-02	(468)	3.858-02	(469)	4.016-02	(470)	4.121-02	(471)	4.229-02
(472)	4.335-02	(473)	4.430-02	(474)	4.516-02	(475)	4.600-02	(476)	4.684-02
(477)	4.768-02	(478)	4.856-02	(479)	4.943-02	(480)	5.028-02	(481)	5.100-02
(482)	5.102-02	(483)	5.224-02	(484)	5.288-02	(485)	5.354-02	(486)	5.409-02
(487)	5.464-02	(488)	5.519-02	(489)	5.578-02	(490)	5.638-02	(491)	5.697-02
(492)	5.755-02	(493)	5.814-02	(494)	5.874-02	(495)	5.934-02	(496)	5.996-02
(497)	6.004-02	(498)	6.130-02	(499)	6.193-02	(500)	6.248-02	(501)	6.296-02
(502)	6.335-02	(503)	6.374-02	(504)	6.411-02	(505)	6.448-02	(506)	6.464-02
(507)	6.519-02	(508)	6.552-02	(509)	6.585-02	(510)	6.613-02	(511)	6.639-02
(512)	6.663-02	(513)	6.686-02	(514)	6.716-02	(515)	6.746-02	(516)	6.775-02
(517)	6.604-02	(518)	6.832-02	(519)	6.860-02	(520)	6.887-02	(521)	6.907-02
(522)	6.520-02	(523)	6.932-02	(524)	6.945-02	(525)	6.957-02	(526)	6.969-02
(527)	6.960-02	(528)	6.992-02	(529)	7.003-02	(530)	7.014-02	(531)	7.025-02
(532)	7.036-02	(533)	7.047-02	(534)	7.058-02	(535)	7.068-02	(536)	7.078-02
(537)	7.099-02	(538)	7.099-02	(539)	7.109-02	(540)	7.119-02	(541)	7.124-02
(542)	7.124-02	(543)	7.124-02	(544)	7.124-02	(545)	7.124-02	(546)	7.124-02
(547)	7.124-02	(548)	7.124-02	(549)	7.125-02	(550)	7.125-02	(551)	7.125-02
(552)	7.125-02	(553)	7.125-02	(554)	7.125-02	(555)	7.125-02	(556)	7.126-02
(557)	7.126-02	(558)	7.126-02	(559)	7.126-02	(560)	7.126-02	(561)	7.126-02
(562)	7.126-02	(563)	7.127-02	(564)	7.127-02	(565)	7.127-02	(566)	7.127-02
(567)	7.127-02	(568)	7.127-02	(569)	7.128-02	(570)	7.128-02	(571)	7.128-02
(572)	7.128-02	(573)	7.128-02	(574)	7.128-02	(575)	7.128-02	(576)	7.128-02
(577)	7.128-02	(578)	7.128-02	(579)	7.128-02	(580)	7.128-02	(581)	7.128-02

TABLE B-6   (CONTINUED)

TI47(N,P)SC47

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

(582)	7.128-02	(583)	7.128-02	(584)	7.128-02	(585)	7.128-02	(586)	7.128-02
(587)	7.128-02	(588)	7.127-02	(589)	7.128-02	(590)	7.128-02	(591)	7.128-02
(592)	7.128-02	(593)	7.128-02	(594)	7.128-02	(595)	7.128-02	(596)	7.128-02
(597)	7.128-02	(598)	7.128-02	(599)	7.128-02	(600)	7.128-02	(601)	7.128-02
(602)	7.128-02	(603)	7.128-02	(604)	7.128-02	(605)	7.128-02	(606)	7.128-02
(607)	7.128-02	(608)	7.128-02	(609)	7.128-02	(610)	7.128-02	(611)	7.128-02
(612)	7.128-02	(613)	7.128-02	(614)	7.128-02	(615)	7.128-02	(616)	7.128-02
(617)	7.128-02	(618)	7.128-02	(619)	7.128-02	(620)	7.128-02	(	

FIGURE B-7. ^{48}Ti(n,p)^{48}Sc

Neg 0694115-10

B-20
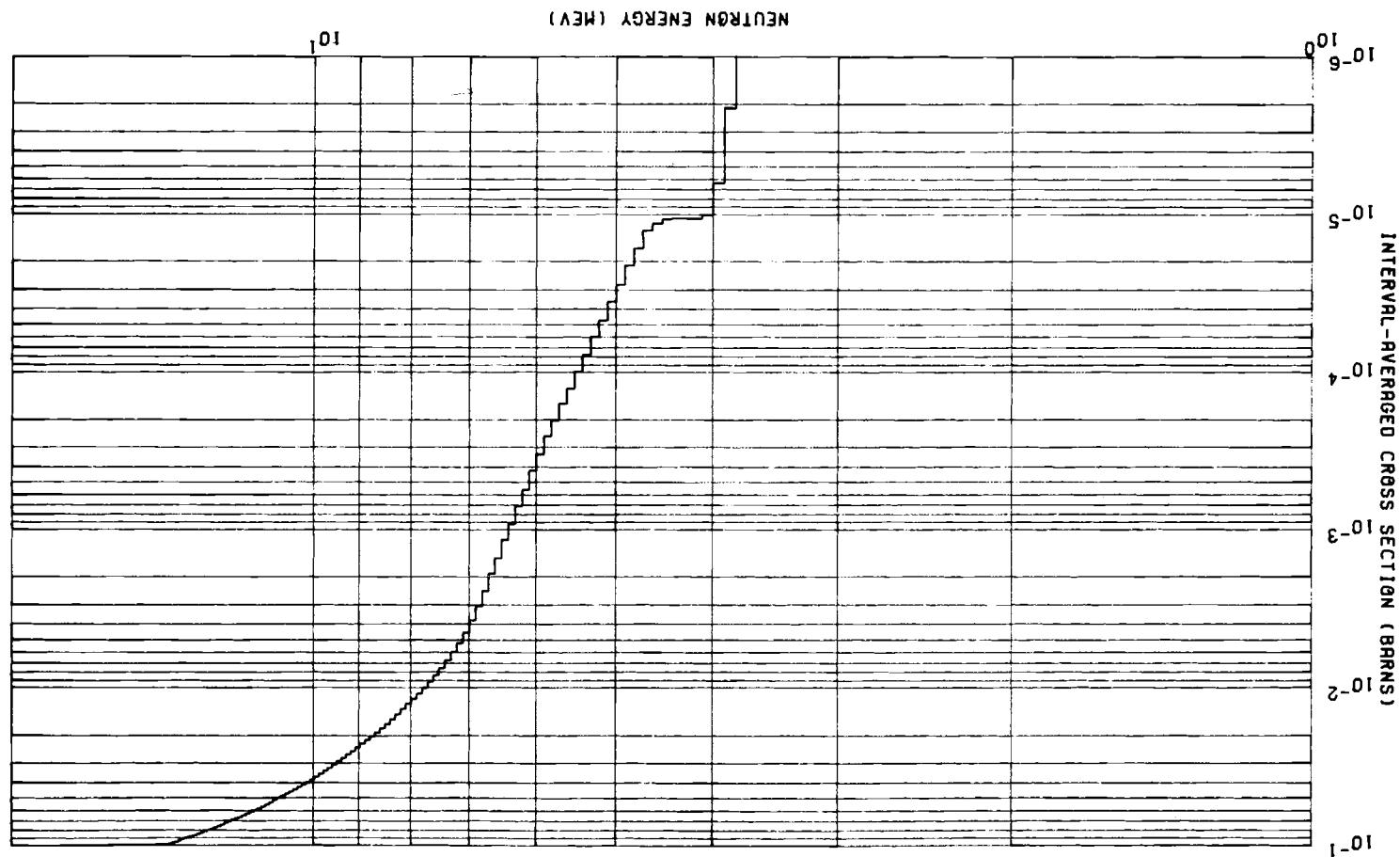
T148(N,P)SC48

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

(478)	0.000	(479)	2.140-06	(480)	6.420-06	(481)	1.016-05	(482)	1.070-05
(483)	1.670-05	(484)	1.070-05	(485)	1.080-05	(486)	1.150-05	(487)	1.274-05
(488)	1.884-05	(489)	2.134-05	(490)	2.813-05	(491)	3.589-05	(492)	4.728-05
(493)	6.015-05	(494)	7.650-05	(495)	9.901-05	(496)	1.273-04	(497)	1.590-04
(498)	2.003-04	(499)	2.551-04	(500)	3.332-04	(501)	4.233-04	(502)	5.581-04
(503)	7.106-04	(504)	9.247-04	(505)	1.167-03	(506)	1.516-03	(507)	1.911-03
(508)	2.474-03	(509)	3.081-03	(510)	3.767-03	(511)	4.511-03	(512)	5.241-03
(513)	5.979-03	(514)	6.757-03	(515)	7.549-03	(516)	8.382-03	(517)	9.225-03
(518)	1.006-02	(519)	1.094-02	(520)	1.177-02	(521)	1.264-02	(522)	1.367-02
(523)	1.474-02	(524)	1.587-02	(525)	1.701-02	(526)	1.809-02	(527)	1.917-02
(528)	2.032-02	(529)	2.149-02	(530)	2.269-02	(531)	2.391-02	(532)	2.521-02
(533)	2.653-02	(534)	2.790-02	(535)	2.929-02	(536)	3.068-02	(537)	3.209-02
(538)	3.357-02	(539)	3.506-02	(540)	3.659-02	(541)	3.810-02	(542)	3.953-02
(543)	4.095-02	(544)	4.242-02	(545)	4.390-02	(546)	4.541-02	(547)	4.691-02
(548)	4.834-02	(549)	4.980-02	(550)	5.146-02	(551)	5.322-02	(552)	5.507-02
(553)	5.675-02	(554)	5.825-02	(555)	5.975-02	(556)	6.125-02	(557)	6.287-02
(558)	6.462-02	(559)	6.612-02	(560)	6.737-02	(561)	6.875-02	(562)	7.025-02
(563)	7.200-02	(564)	7.400-02	(565)	7.575-02	(566)	7.725-02	(567)	7.875-02
(568)	8.025-02	(569)	8.175-02	(570)	8.325-02	(571)	8.475-02	(572)	8.625-02
(573)	8.762-02	(574)	8.887-02	(575)	9.037-02	(576)	9.212-02	(577)	9.387-02
(578)	9.562-02	(579)	9.760-02	(580)	9.800-02	(581)	9.862-02	(582)	9.887-02
(583)	9.925-02	(584)	9.975-02	(585)	9.975-02	(586)	1.000-01	(587)	1.000-01
(588)	1.000-01	(589)	1.000-01	(590)	1.000-01	(591)	1.000-01	(592)	1.000-01
(593)	1.000-01	(594)	1.000-01	(595)	1.000-01	(596)	1.000-01	(597)	1.000-01
(598)	1.000-01	(599)	1.000-01	(600)	1.000-01	(601)	1.000-01	(602)	1.000-01
(603)	1.000-01	(604)	1.000-01	(605)	1.000-01	(606)	1.000-01	(607)	1.000-01
(608)	1.000-01	(609)	1.000-01	(610)	1.000-01	(611)	1.000-01	(612)	1.000-01
(613)	1.000-01	(614)	1.000-01	(615)	1.000-01	(616)	1.000-01	(617)	1.000-01
(618)	1.000-01	(619)	1.000-01	(620)	1.000-01				

FIGURE B-8. ^{54}Fe(n,p)^{54}Mn

Neg 0694116-4

TABLE B-8

FE54(N,P)MN54

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)
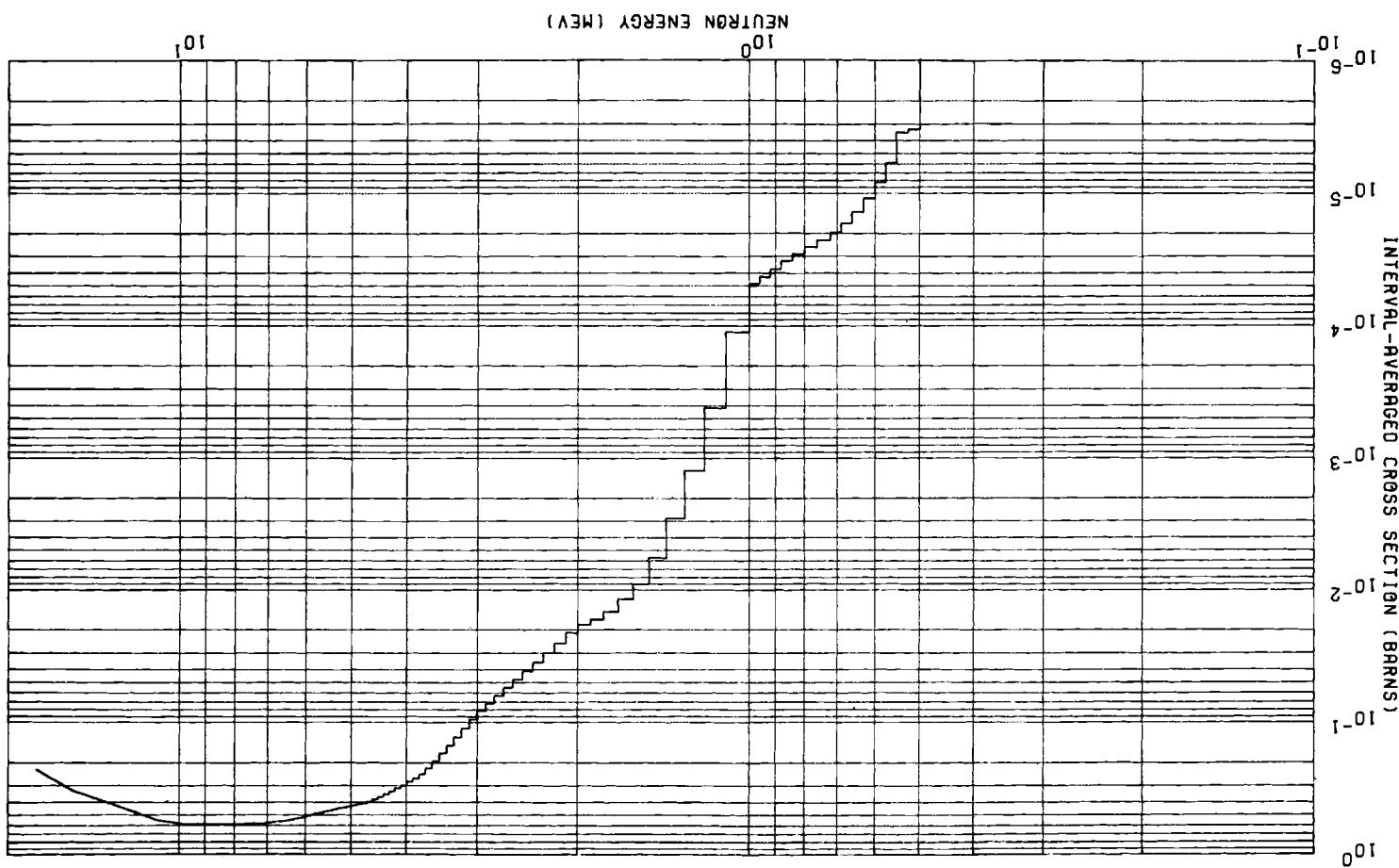
Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(435)	0.000	(436)	3.314-06	(437)	3.480-06	(438)	5.936-06	(439)	8.403-06
(440)	1.110-05	(441)	1.406-05	(442)	1.698-05	(443)	1.989-05	(444)	2.303-05
(445)	2.576-05	(446)	2.898-05	(447)	3.271-05	(448)	3.774-05	(449)	4.308-05
(450)	4.860-05	(451)	1.131-04	(452)	4.217-04	(453)	1.252-03	(454)	2.871-03
(455)	5.747-03	(456)	9.084-03	(457)	1.189-02	(458)	1.473-02	(459)	1.685-02
(460)	1.850-02	(461)	2.127-02	(462)	2.548-02	(463)	3.024-02	(464)	3.555-02
(465)	4.144-02	(466)	4.787-02	(467)	5.506-02	(468)	6.319-02	(469)	7.230-02
(470)	8.246-02	(471)	9.535-02	(472)	1.115-01	(473)	1.297-01	(474)	1.498-01
(475)	1.721-01	(476)	1.964-01	(477)	2.227-01	(478)	2.479-01	(479)	2.667-01
(480)	2.822-01	(481)	2.984-01	(482)	3.149-01	(483)	3.319-01	(484)	3.492-01
(485)	3.667-01	(486)	3.843-01	(487)	3.999-01	(488)	4.109-01	(489)	4.191-01
(490)	4.272-01	(491)	4.351-01	(492)	4.430-01	(493)	4.507-01	(494)	4.591-01
(495)	4.674-01	(496)	4.757-01	(497)	4.840-01	(498)	4.924-01	(499)	5.013-01
(500)	5.111-01	(501)	5.208-01	(502)	5.307-01	(503)	5.398-01	(504)	5.473-01
(505)	5.542-01	(506)	5.597-01	(507)	5.640-01	(508)	5.683-01	(509)	5.728-01
(510)	5.773-01	(511)	5.818-01	(512)	5.857-01	(513)	5.884-01	(514)	5.892-01
(515)	5.699-01	(516)	5.907-01	(517)	5.913-01	(518)	5.920-01	(519)	5.926-01
(520)	5.932-01	(521)	5.939-01	(522)	5.946-01	(523)	5.952-01	(524)	5.959-01
(525)	5.966-01	(526)	5.964-01	(527)	5.955-01	(528)	5.946-01	(529)	5.937-01
(530)	5.928-01	(531)	5.920-01	(532)	5.912-01	(533)	5.904-01	(534)	5.896-01
(535)	5.888-01	(536)	5.881-01	(537)	5.870-01	(538)	5.856-01	(539)	5.840-01
(540)	5.824-01	(541)	5.796-01	(542)	5.756-01	(543)	5.717-01	(544)	5.679-01
(545)	5.641-01	(546)	5.604-01	(547)	5.567-01	(548)	5.531-01	(549)	5.496-01
(550)	5.461-01	(551)	5.406-01	(552)	5.332-01	(553)	5.259-01	(554)	5.188-01
(555)	5.119-01	(556)	5.051-01	(557)	4.985-01	(558)	4.920-01	(559)	4.856-01
(560)	4.794-01	(561)	4.734-01	(562)	4.674-01	(563)	4.616-01	(564)	4.559-01
(565)	4.504-01	(566)	4.449-01	(567)	4.396-01	(568)	4.343-01	(569)	4.292-01
(570)	4.242-01	(571)	4.193-01	(572)	4.144-01	(573)	4.097-01	(574)	4.051-01
(575)	4.005-01	(576)	3.960-01	(577)	3.917-01	(578)	3.874-01	(579)	3.832-01
(580)	3.790-01	(581)	3.750-01	(582)	3.710-01	(583)	3.671-01	(584)	3.633-01
(585)	3.595-01	(586)	3.558-01	(587)	3.522-01	(588)	3.486-01	(589)	3.452-01
(590)	3.417-01	(591)	3.383-01	(592)	3.350-01	(593)	3.318-01	(594)	3.285-01
(595)	3.254-01	(596)	3.213-01	(597)	3.164-01	(598)	3.115-01	(599)	3.068-01

TABLE B-8   (CONTINUED)

FE54(N,P)MN54

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)
----

(600) 3.022-01	(601) 2.976-01	(602) 2.930-01	(603) 2.886-01	(604) 2.843-01
(605) 2.800-01	(606) 2.758-01	(607) 2.717-01	(608) 2.677-01	(609) 2.637-01
(610) 2.599-01	(611) 2.559-01	(612) 2.519-01	(613) 2.479-01	(614) 2.441-01
(615) 2.404-01	(616) 2.368-01	(617) 2.332-01	(618) 2.297-01	(619) 2.263-01
(620) 1.124-01	(			
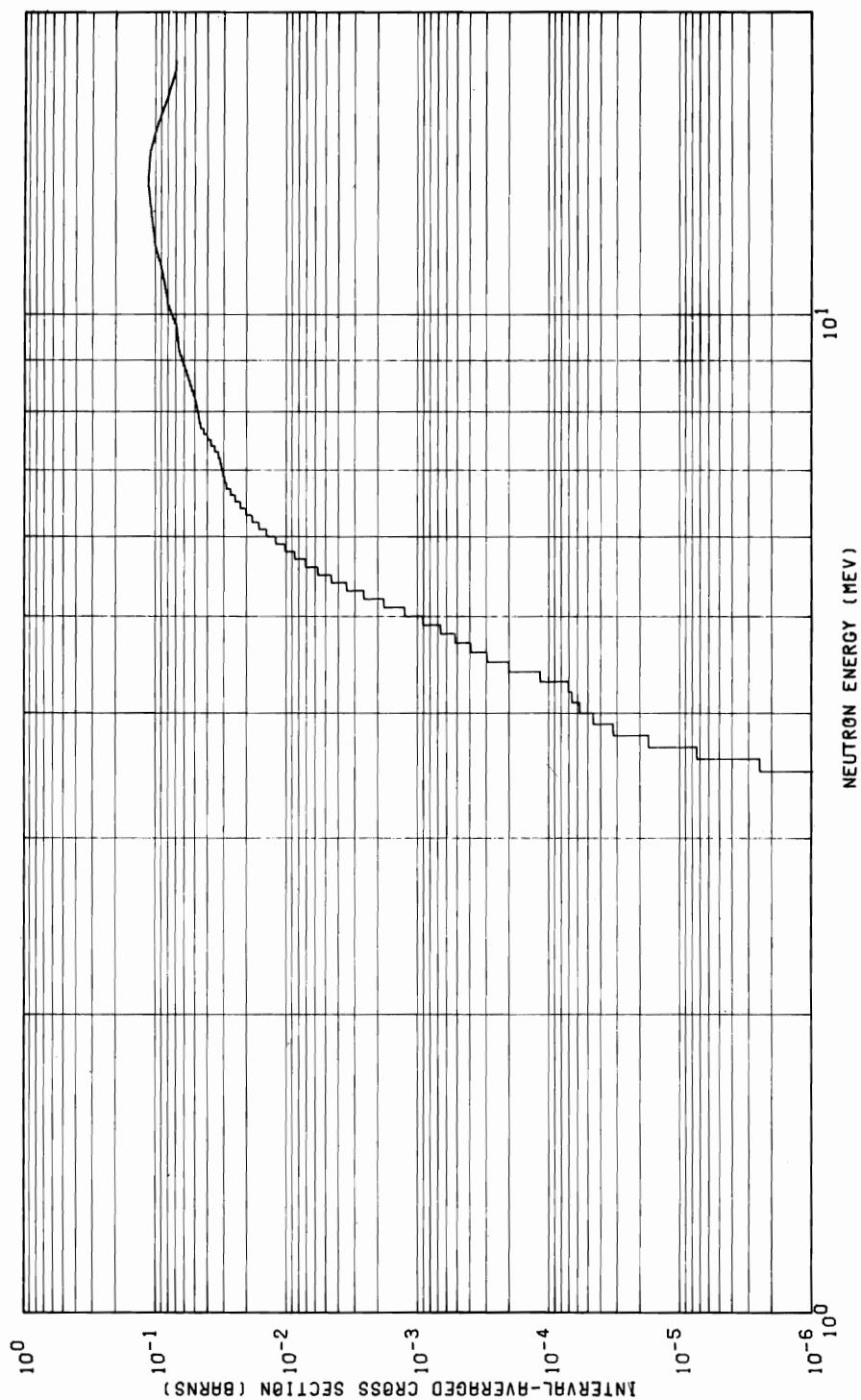
FIGURE B-9. $^{56}Fe(n,p)^{56}Mn$

Neg 0695120-3

TABLE B-9

FE56(N,P)MN56

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

( )		( )		( )		( )		( )	
(475)	0.000	(476)	2.500-06	(477)	7.500-06	(478)	1.750-05	(479)	3.250-05
(480)	4.625-05	(481)	5.875-05	(482)	6.725-05	(483)	7.175-05	(484)	1.180-04
(485)	2.060-04	(486)	3.000-04	(487)	4.000-04	(488)	5.250-04	(489)	6.750-04
(490)	9.225-04	(491)	1.267-03	(492)	1.825-03	(493)	2.595-03	(494)	3.510-03
(495)	4.570-03	(496)	5.800-03	(497)	7.200-03	(498)	8.700-03	(499)	1.030-02
(500)	1.213-02	(501)	1.419-02	(502)	1.624-02	(503)	1.831-02	(504)	2.044-02
(505)	2.258-02	(506)	2.472-02	(507)	2.686-02	(508)	2.883-02	(509)	2.978-02
(510)	3.056-02	(511)	3.134-02	(512)	3.212-02	(513)	3.312-02	(514)	3.542-02
(515)	3.794-02	(516)	4.046-02	(517)	4.298-02	(518)	4.530-02	(519)	4.640-02
(520)	4.730-02	(521)	4.820-02	(522)	4.910-02	(523)	5.009-02	(524)	5.160-02
(525)	5.320-02	(526)	5.480-02	(527)	5.640-02	(528)	5.802-02	(529)	5.980-02
(530)	6.160-02	(531)	6.340-02	(532)	6.520-02	(533)	6.685-02	(534)	6.760-02
(535)	6.620-02	(536)	6.880-02	(537)	6.940-02	(538)	7.020-02	(539)	7.220-02
(540)	7.440-02	(541)	7.660-02	(542)	7.880-02	(543)	8.085-02	(544)	8.200-02
(545)	8.300-02	(546)	8.400-02	(547)	8.500-02	(548)	8.605-02	(549)	8.740-02
(550)	8.860-02	(551)	9.020-02	(552)	9.160-02	(553)	9.305-02	(554)	9.480-02
(555)	9.660-02	(556)	9.840-02	(557)	1.002-01	(558)	1.019-01	(559)	1.028-01
(560)	1.036-01	(561)	1.044-01	(562)	1.052-01	(563)	1.060-01	(564)	1.068-01
(565)	1.076-01	(566)	1.083-01	(567)	1.090-01	(568)	1.097-01	(569)	1.104-01
(570)	1.111-01	(571)	1.118-01	(572)	1.125-01	(573)	1.132-01	(574)	1.139-01
(575)	1.146-01	(576)	1.148-01	(577)	1.143-01	(578)	1.138-01	(579)	1.133-01
(580)	1.128-01	(581)	1.123-01	(582)	1.118-01	(583)	1.113-01	(584)	1.108-01
(585)	1.103-01	(586)	1.093-01	(587)	1.078-01	(588)	1.063-01	(589)	1.048-01
(590)	1.033-01	(591)	1.018-01	(592)	1.003-01	(593)	9.875-02	(594)	9.725-02
(595)	9.575-02	(596)	9.425-02	(597)	9.275-02	(598)	9.125-02	(599)	8.975-02
(600)	8.825-02	(601)	8.675-02	(602)	8.525-02	(603)	8.375-02	(604)	8.225-02
(605)	8.075-02	(606)	7.950-02	(607)	7.850-02	(608)	7.750-02	(609)	7.650-02
(610)	7.550-02	(611)	7.450-02	(612)	7.350-02	(613)	7.250-02	(614)	7.150-02
(615)	7.650-02	(616)	7.000-02	(617)	3.308-18	(618)	-9.369+33	(619)	7.000-02
(620)	7.000-02								
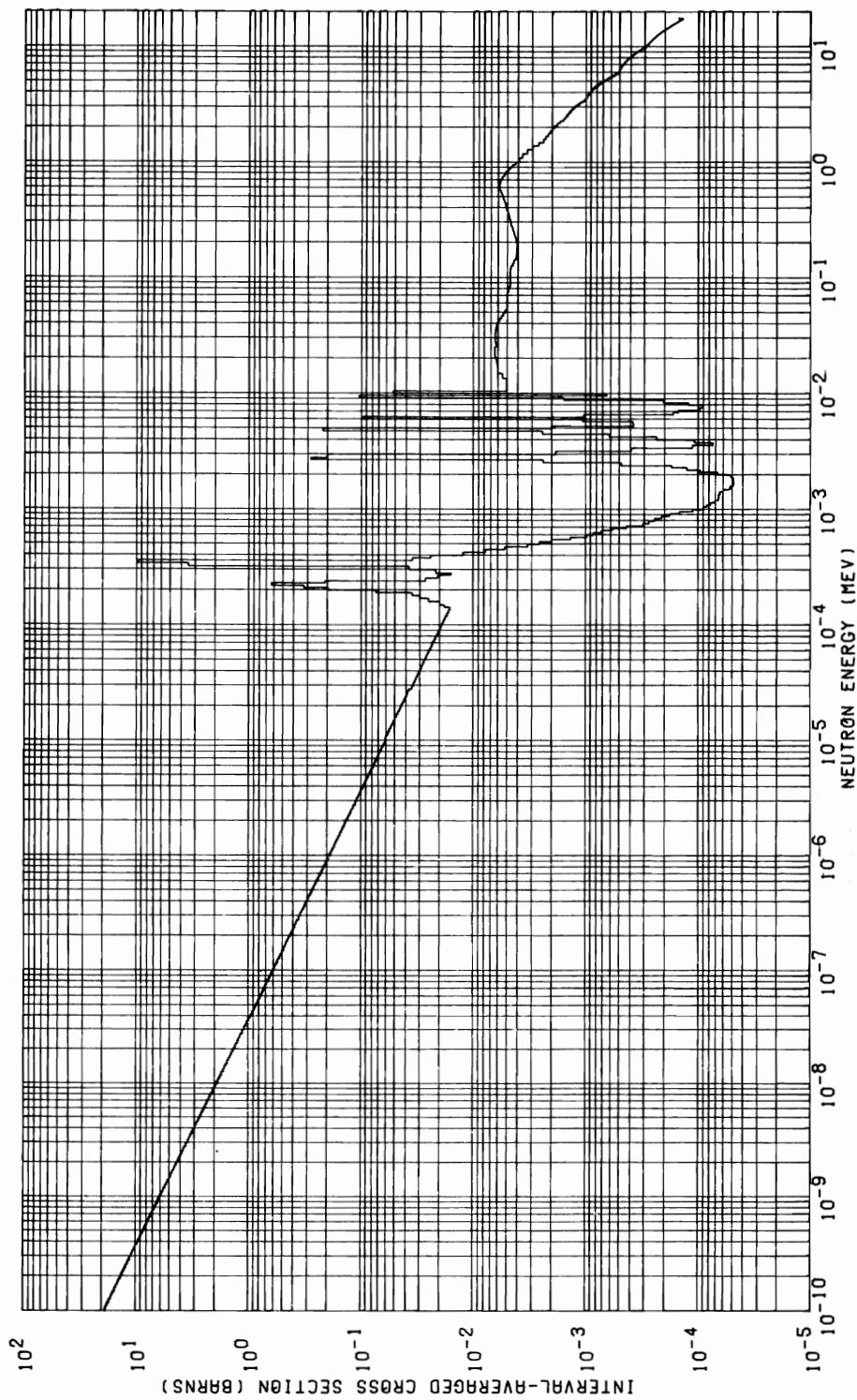
FIGURE B-10. $^{58}Fe(n,\gamma)^{59}Fe$

Neg 0694116-5

FE58(N,G)FE59

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(1)	1.874+01	(2)	1.830+01	(3)	1.789+01	(4)	1.750+01	(5)	1.706+01
(6)	1.656+01	(7)	1.611+01	(8)	1.569+01	(9)	1.524+01	(10)	1.477+01
(11)	1.434+01	(12)	1.395+01	(13)	1.359+01	(14)	1.325+01	(15)	1.294+01
(16)	1.265+01	(17)	1.238+01	(18)	1.206+01	(19)	1.171+01	(20)	1.144+01
(21)	1.114+01	(22)	1.078+01	(23)	1.045+01	(24)	1.014+01	(25)	9.865+00
(26)	9.608+00	(27)	9.343+00	(28)	9.072+00	(29)	8.823+00	(30)	8.594+00
(31)	8.382+00	(32)	8.184+00	(33)	8.000+00	(34)	7.828+00	(35)	7.651+00
(36)	7.471+00	(37)	7.303+00	(38)	7.146+00	(39)	6.975+00	(40)	6.794+00
(41)	6.626+00	(42)	6.470+00	(43)	6.325+00	(44)	6.189+00	(45)	6.061+00
(46)	5.927+00	(47)	5.787+00	(48)	5.657+00	(49)	5.535+00	(50)	5.394+00
(51)	5.238+00	(52)	5.094+00	(53)	4.962+00	(54)	4.820+00	(55)	4.672+00
(56)	4.630+00	(57)	4.412+00	(58)	4.297+00	(59)	4.191+00	(60)	4.092+00
(61)	4.000+00	(62)	3.914+00	(63)	3.814+00	(64)	3.704+00	(65)	3.618+00
(66)	3.524+00	(67)	3.408+00	(68)	3.303+00	(69)	3.207+00	(70)	3.120+00
(71)	3.038+00	(72)	2.955+00	(73)	2.869+00	(74)	2.790+00	(75)	2.718+00
(76)	2.651+00	(77)	2.588+00	(78)	2.530+00	(79)	2.476+00	(80)	2.420+00
(81)	2.363+00	(82)	2.310+00	(83)	2.260+00	(84)	2.206+00	(85)	2.149+00
(86)	2.095+00	(87)	2.046+00	(88)	2.000+00	(89)	1.957+00	(90)	1.917+00
(91)	1.874+00	(92)	1.830+00	(93)	1.789+00	(94)	1.750+00	(95)	1.706+00
(96)	1.656+00	(97)	1.611+00	(98)	1.569+00	(99)	1.524+00	(100)	1.477+00
(101)	1.434+00	(102)	1.395+00	(103)	1.359+00	(104)	1.325+00	(105)	1.294+00
(106)	1.265+00	(107)	1.238+00	(108)	1.206+00	(109)	1.171+00	(110)	1.144+00
(111)	1.114+00	(112)	1.078+00	(113)	1.045+00	(114)	1.014+00	(115)	9.865-01
(116)	9.608-01	(117)	9.343-01	(118)	9.072-01	(119)	8.823-01	(120)	8.594-01
(121)	8.382-01	(122)	8.184-01	(123)	8.000-01	(124)	7.828-01	(125)	7.651-01
(126)	7.471-01	(127)	7.303-01	(128)	7.146-01	(129)	6.975-01	(130)	6.794-01
(131)	6.626-01	(132)	6.470-01	(133)	6.325-01	(134)	6.189-01	(135)	6.061-01
(136)	5.927-01	(137)	5.787-01	(138)	5.657-01	(139)	5.536-01	(140)	5.394-01
(141)	5.238-01	(142)	5.094-01	(143)	4.962-01	(144)	4.820-01	(145)	4.672-01
(146)	4.630-01	(147)	4.412-01	(148)	4.297-01	(149)	4.191-01	(150)	4.092-01
(151)	4.000-01	(152)	3.914-01	(153)	3.814-01	(154)	3.704-01	(155)	3.618-01
(156)	3.524-01	(157)	3.408-01	(158)	3.303-01	(159)	3.207-01	(160)	3.120-01
(161)	3.038-01	(162)	2.955-01	(163)	2.869-01	(164)	2.790-01	(165)	2.718-01

TABLE B-10 (CONTINUED)

FE58(N,6)FE59

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(166)	2.651-01	(167)	2.588-01	(168)	2.530-01	(169)	2.476-01	(170)	2.420-01
(171)	2.363-01	(172)	2.310-01	(173)	2.260-01	(174)	2.206-01	(175)	2.149-01
(176)	2.095-01	(177)	2.046-01	(178)	2.000-01	(179)	1.957-01	(180)	1.917-01
(181)	1.874-01	(182)	1.830-01	(183)	1.789-01	(184)	1.750-01	(185)	1.706-01
(186)	1.656-01	(187)	1.611-01	(188)	1.569-01	(189)	1.524-01	(190)	1.477-01
(191)	1.434-01	(192)	1.395-01	(193)	1.359-01	(194)	1.325-01	(195)	1.294-01
(196)	1.265-01	(197)	1.238-01	(198)	1.206-01	(199)	1.171-01	(200)	1.144-01
(201)	1.114-01	(202)	1.078-01	(203)	1.045-01	(204)	1.014-01	(205)	9.865-02
(206)	9.608-02	(207)	9.343-02	(208)	9.072-02	(209)	8.823-02	(210)	8.594-02
(211)	8.382-02	(212)	8.184-02	(213)	8.000-02	(214)	7.828-02	(215)	7.651-02
(216)	7.471-02	(217)	7.303-02	(218)	7.146-02	(219)	6.975-02	(220)	6.794-02
(221)	6.626-02	(222)	6.470-02	(223)	6.325-02	(224)	6.189-02	(225)	6.061-02
(226)	5.960-02	(227)	5.910-02	(228)	5.774-02	(229)	5.647-02	(230)	5.528-02
(231)	5.363-02	(232)	5.212-02	(233)	5.073-02	(234)	4.945-02	(235)	4.788-02
(236)	4.645-02	(237)	4.514-02	(238)	4.393-02	(239)	4.282-02	(240)	4.179-02
(241)	4.083-02	(242)	3.993-02	(243)	3.909-02	(244)	3.792-02	(245)	3.685-02
(246)	3.496-02	(247)	3.385-02	(248)	3.284-02	(249)	3.192-02	(250)	3.107-02
(251)	3.028-02	(252)	2.937-02	(253)	2.855-02	(254)	2.779-02	(255)	2.708-02
(256)	2.643-02	(257)	2.582-02	(258)	2.525-02	(259)	2.472-02	(260)	2.413-02
(261)	2.357-02	(262)	2.305-02	(263)	2.257-02	(264)	2.197-02	(265)	2.141-02
(266)	2.069-02	(267)	2.041-02	(268)	1.997-02	(269)	1.954-02	(270)	1.915-02
(271)	1.809-02	(272)	1.826-02	(273)	1.786-02	(274)	1.748-02	(275)	1.696-02
(276)	1.648-02	(277)	1.604-02	(278)	1.800-02	(279)	2.000-02	(280)	2.500-02
(281)	3.000-02	(282)	3.500-02	(283)	7.392-02	(284)	1.984-01	(285)	3.245-01
(286)	6.313-01	(287)	2.071-01	(288)	2.632-02	(289)	2.047-02	(290)	1.561-02
(291)	2.163-02	(292)	3.757-02	(293)	3.442+00	(294)	9.740+00	(295)	3.451-02
(296)	2.359-02	(297)	1.219-02	(298)	7.653-03	(299)	5.126-03	(300)	3.202-03
(301)	2.533-03	(302)	1.979-03	(303)	1.332-03	(304)	9.525-04	(305)	8.373-04
(306)	7.053-04	(307)	5.080-04	(308)	4.253-04	(309)	3.013-04	(310)	2.661-04
(311)	2.388-04	(312)	2.076-04	(313)	1.766-04	(314)	1.441-04	(315)	1.096-04
(316)	8.845-05	(317)	8.249-05	(318)	7.594-05	(319)	6.914-05	(320)	6.528-05
(321)	6.470-05	(322)	6.533-05	(323)	5.900-05	(324)	5.125-05	(325)	4.824-05
(326)	4.668-05	(327)	4.906-05	(328)	5.084-05	(329)	6.734-05	(330)	9.683-05

TABLE B-10 (CONTINUED)

FE58(N,G)FE59

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

(331)	1.263-04	(332)	1.732-04	(333)	4.849-04	(334)	2.393-03	(335)	2.829-01
(336)	1.989-01	(337)	1.806-03	(338)	3.855-04	(339)	1.108-04	(340)	7.298-05
(341)	1.082-04	(342)	2.344-04	(343)	6.158-04	(344)	2.431-03	(345)	2.218-01
(346)	1.987-03	(347)	3.694-04	(348)	3.792-04	(349)	1.061-03	(350)	9.738-02
(351)	1.019-03	(352)	1.643-04	(353)	1.485-04	(354)	9.539-05	(355)	8.972-05
(356)	1.227-04	(357)	2.046-04	(358)	1.569-03	(359)	1.049-01	(360)	6.381-04
(361)	5.218-02	(362)	4.994-03	(363)	5.027-03	(364)	5.058-03	(365)	5.063-03
(366)	5.045-03	(367)	5.501-03	(368)	5.488-03	(369)	6.061-03	(370)	6.067-03
(371)	6.121-03	(372)	6.186-03	(373)	6.219-03	(374)	6.349-03	(375)	6.451-03
(376)	6.490-03	(377)	6.502-03	(378)	6.370-03	(379)	6.191-03	(380)	6.313-03
(381)	6.381-03	(382)	6.380-03	(383)	6.346-03	(384)	6.285-03	(385)	6.195-03
(386)	6.121-03	(387)	5.967-03	(388)	5.761-03	(389)	5.573-03	(390)	5.364-03
(391)	5.173-03	(392)	5.005-03	(393)	4.980-03	(394)	4.983-03	(395)	4.983-03
(396)	4.977-03	(397)	4.963-03	(398)	4.943-03	(399)	4.905-03	(400)	4.832-03
(401)	4.749-03	(402)	4.655-03	(403)	4.651-03	(404)	4.692-03	(405)	4.721-03
(406)	4.709-03	(407)	4.700-03	(408)	4.679-03	(409)	4.642-03	(410)	4.561-03
(411)	4.438-03	(412)	4.308-03	(413)	4.169-03	(414)	4.088-03	(415)	4.064-03
(416)	4.048-03	(417)	4.025-03	(418)	4.040-03	(419)	4.117-03	(420)	4.184-03
(421)	4.244-03	(422)	4.310-03	(423)	4.371-03	(424)	4.444-03	(425)	4.535-03
(426)	4.624-03	(427)	4.711-03	(428)	4.799-03	(429)	4.890-03	(430)	4.973-03
(431)	5.068-03	(432)	5.154-03	(433)	5.229-03	(434)	5.334-03	(435)	5.435-03
(436)	5.537-03	(437)	5.646-03	(438)	5.755-03	(439)	5.863-03	(440)	5.895-03
(441)	5.835-03	(442)	5.739-03	(443)	5.633-03	(444)	5.499-03	(445)	5.307-03
(446)	5.109-03	(447)	4.891-03	(448)	4.673-03	(449)	4.442-03	(450)	4.205-03
(451)	3.930-03	(452)	3.619-03	(453)	3.291-03	(454)	2.945-03	(455)	2.592-03
(456)	2.355-03	(457)	2.250-03	(458)	2.141-03	(459)	2.048-03	(460)	1.974-03
(461)	1.481-03	(462)	1.780-03	(463)	1.666-03	(464)	1.558-03	(465)	1.509-03
(466)	1.462-03	(467)	1.416-03	(468)	1.373-03	(469)	1.329-03	(470)	1.283-03
(471)	1.236-03	(472)	1.187-03	(473)	1.136-03	(474)	1.081-03	(475)	1.026-03
(476)	9.502-04	(477)	9.731-04	(478)	9.569-04	(479)	9.390-04	(480)	9.210-04
(481)	9.048-04	(482)	8.875-04	(483)	8.694-04	(484)	8.505-04	(485)	8.306-04
(486)	8.076-04	(487)	7.849-04	(488)	7.623-04	(489)	7.388-04	(490)	7.152-04
(491)	6.916-04	(492)	6.680-04	(493)	6.442-04	(494)	6.251-04	(495)	6.063-04

TABLE B-10 (CONTINUED)

FE58(N,G)FE59

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)
----

(496) 5.875-04	(497) 5.692-04	(498) 5.509-04	(499) 5.329-04	(500) 5.160-04
(501) 5.059-04	(502) 5.030-04	(503) 4.995-04	(504) 4.948-04	(505) 4.902-04
(506) 4.856-04	(507) 4.809-04	(508) 4.764-04	(509) 4.719-04	(510) 4.673-04
(511) 4.627-04	(512) 4.582-04	(513) 4.539-04	(514) 4.483-04	(515) 4.426-04
(516) 4.369-04	(517) 4.309-04	(518) 4.249-04	(519) 4.187-04	(520) 4.127-04
(521) 4.067-04	(522) 4.006-04	(523) 3.944-04	(524) 3.884-04	(525) 3.824-04
(526) 3.764-04	(527) 3.702-04	(528) 3.642-04	(529) 3.582-04	(530) 3.521-04
(531) 3.460-04	(532) 3.400-04	(533) 3.339-04	(534) 3.279-04	(535) 3.217-04
(536) 3.157-04	(537) 3.097-04	(538) 3.037-04	(539) 2.975-04	(540) 2.915-04
(541) 2.874-04	(542) 2.851-04	(543) 2.830-04	(544) 2.807-04	(545) 2.784-04
(546) 2.763-04	(547) 2.740-04	(548) 2.719-04	(549) 2.696-04	(550) 2.673-04
(551) 2.651-04	(552) 2.628-04	(553) 2.607-04	(554) 2.584-04	(555) 2.561-04
(556) 2.540-04	(557) 2.517-04	(558) 2.495-04	(559) 2.472-04	(560) 2.449-04
(561) 2.428-04	(562) 2.405-04	(563) 2.383-04	(564) 2.360-04	(565) 2.337-04
(566) 2.316-04	(567) 2.293-04	(568) 2.272-04	(569) 2.248-04	(570) 2.225-04
(571) 2.204-04	(572) 2.181-04	(573) 2.159-04	(574) 2.136-04	(575) 2.113-04
(576) 2.092-04	(577) 2.069-04	(578) 2.048-04	(579) 2.025-04	(580) 2.001-04
(581) 1.980-04	(582) 1.957-04	(583) 1.936-04	(584) 1.913-04	(585) 1.890-04
(586) 1.868-04	(587) 1.845-04	(588) 1.824-04	(589) 1.801-04	(590) 1.778-04
(591) 1.759-04	(592) 1.743-04	(593) 1.727-04	(594) 1.710-04	(595) 1.694-04
(596) 1.677-04	(597) 1.661-04	(598) 1.645-04	(599) 1.628-04	(600) 1.612-04
(601) 1.595-04	(602) 1.579-04	(603) 1.563-04	(604) 1.546-04	(605) 1.530-04
(606) 1.513-04	(607) 1.497-04	(608) 1.480-04	(609) 1.464-04	(610) 1.448-04
(611) 1.432-04	(612) 1.416-04	(613) 1.400-04	(614) 1.384-04	(615) 1.369-04
(616) 1.350-04	(617) 1.350-04	(618) 1.367-04	(619) 1.492-04	(620) 1.289-04
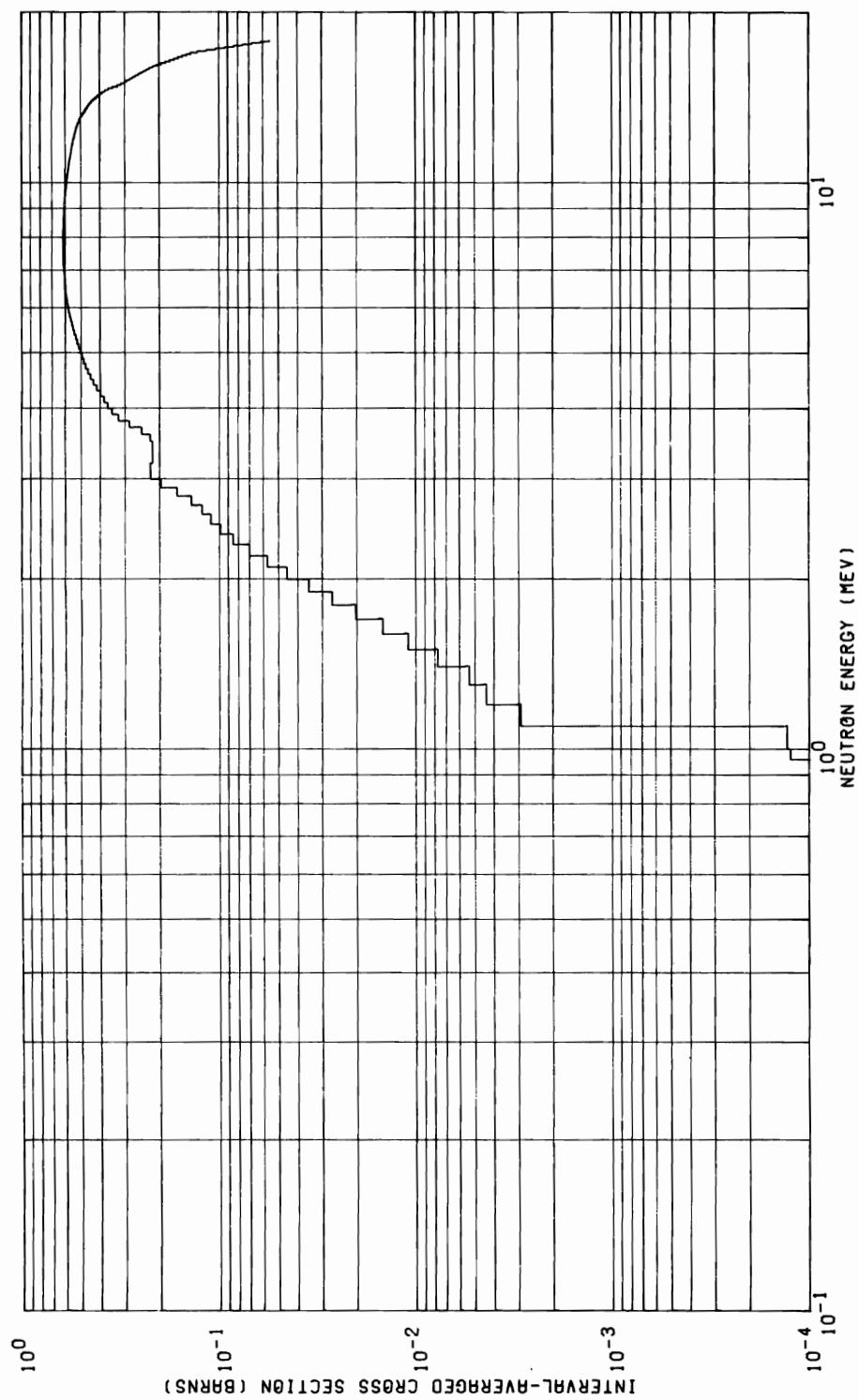
FIGURE B-11. $^{58}Ni(n,p)^{58}Co$

Neg 0694116-6

TABLE B-11

NI58(N,P)CO58

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(449)	0.000	(450)	1.251-04	(451)	1.304-04	(452)	2.949-03	(453)	4.414-03
(454)	5.389-03	(455)	7.802-03	(456)	1.101-02	(457)	1.485-02	(458)	2.042-02
(459)	2.693-02	(460)	3.526-02	(461)	4.555-02	(462)	5.730-02	(463)	7.074-02
(464)	8.551-02	(465)	9.886-02	(466)	1.108-01	(467)	1.228-01	(468)	1.391-01
(469)	1.646-01	(470)	1.983-01	(471)	2.237-01	(472)	2.250-01	(473)	2.186-01
(474)	2.187-01	(475)	2.183-01	(476)	2.236-01	(477)	2.479-01	(478)	2.861-01
(479)	3.241-01	(480)	3.501-01	(481)	3.676-01	(482)	3.841-01	(483)	4.008-01
(484)	4.180-01	(485)	4.338-01	(486)	4.485-01	(487)	4.622-01	(488)	4.746-01
(489)	4.855-01	(490)	4.948-01	(491)	5.048-01	(492)	5.153-01	(493)	5.244-01
(494)	5.334-01	(495)	5.421-01	(496)	5.505-01	(497)	5.581-01	(498)	5.653-01
(499)	5.722-01	(500)	5.792-01	(501)	5.849-01	(502)	5.895-01	(503)	5.940-01
(504)	5.979-01	(505)	6.007-01	(506)	6.026-01	(507)	6.044-01	(508)	6.060-01
(509)	6.075-01	(510)	6.090-01	(511)	6.107-01	(512)	6.127-01	(513)	6.148-01
(514)	6.160-01	(515)	6.167-01	(516)	6.170-01	(517)	6.170-01	(518)	6.171-01
(519)	6.174-01	(520)	6.179-01	(521)	6.179-01	(522)	6.175-01	(523)	6.164-01
(524)	6.145-01	(525)	6.132-01	(526)	6.123-01	(527)	6.112-01	(528)	6.098-01
(529)	6.067-01	(530)	6.079-01	(531)	6.068-01	(532)	6.055-01	(533)	6.039-01
(534)	6.021-01	(535)	6.003-01	(536)	5.985-01	(537)	5.965-01	(538)	5.945-01
(539)	5.925-01	(540)	5.904-01	(541)	5.885-01	(542)	5.867-01	(543)	5.846-01
(544)	5.823-01	(545)	5.801-01	(546)	5.778-01	(547)	5.757-01	(548)	5.738-01
(549)	5.718-01	(550)	5.695-01	(551)	5.668-01	(552)	5.635-01	(553)	5.607-01
(554)	5.584-01	(555)	5.564-01	(556)	5.546-01	(557)	5.518-01	(558)	5.480-01
(559)	5.448-01	(560)	5.420-01	(561)	5.390-01	(562)	5.357-01	(563)	5.325-01
(564)	5.295-01	(565)	5.262-01	(566)	5.227-01	(567)	5.186-01	(568)	5.138-01
(569)	5.093-01	(570)	5.051-01	(571)	4.996-01	(572)	4.929-01	(573)	4.868-01
(574)	4.810-01	(575)	4.746-01	(576)	4.674-01	(577)	4.603-01	(578)	4.531-01
(579)	4.442-01	(580)	4.395-01	(581)	4.311-01	(582)	4.210-01	(583)	4.109-01
(584)	4.008-01	(585)	3.889-01	(586)	3.754-01	(587)	3.601-01	(588)	3.432-01
(589)	3.253-01	(590)	3.104-01	(591)	3.001-01	(592)	2.903-01	(593)	2.808-01
(594)	2.718-01	(595)	2.631-01	(596)	2.547-01	(597)	2.466-01	(598)	2.389-01
(599)	2.314-01	(600)	2.242-01	(601)	2.152-01	(602)	2.046-01	(603)	1.946-01
(604)	1.851-01	(605)	1.762-01	(606)	1.677-01	(607)	1.597-01	(608)	1.521-01
(609)	1.449-01	(610)	1.381-01	(611)	1.278-01	(612)	1.147-01	(613)	1.030-01
(614)	9.264-02	(615)	8.334-02	(616)	7.502-02	(617)	6.757-02	(618)	6.089-02
(619)	5.490-02	(620)	2.607-02	(							
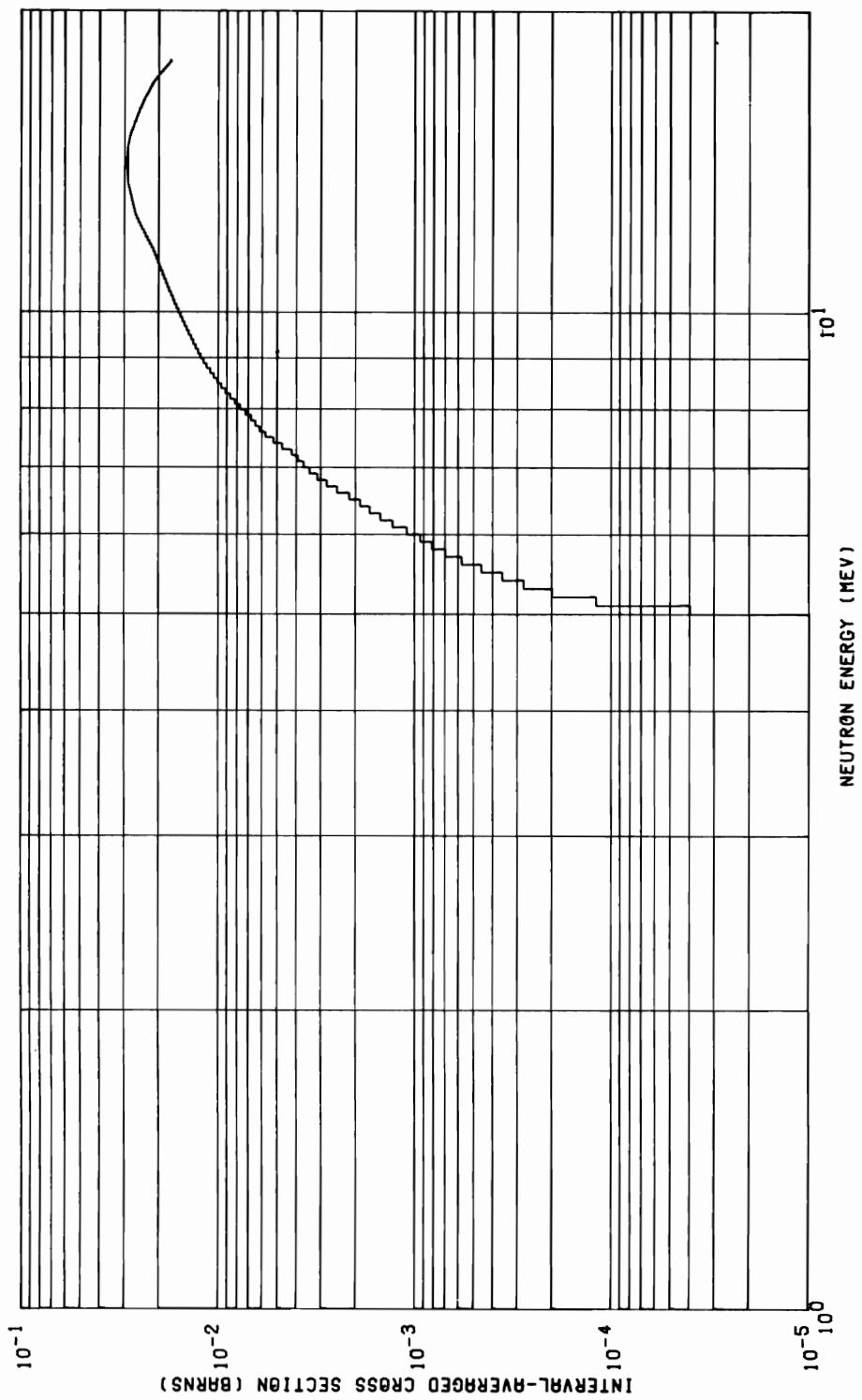
NEUTRON ENERGY (MEV)

INTERVAL-AVERAGED CROSS SECTION (BARNS)

FIGURE B-12. ^{59}Co(n,α) ^{56}Mn

Neg 0694115-1

CO59(N,A)MN56

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(490)	0.000	(491)	4.000-05	(492)	1.200-04	(493)	2.000-04	(494)	2.800-04
(495)	3.600-04	(496)	4.600-04	(497)	5.800-04	(498)	7.000-04	(499)	8.200-04
(500)	9.400-04	(501)	1.100-03	(502)	1.300-03	(503)	1.500-03	(504)	1.700-03
(505)	1.900-03	(506)	2.162-03	(507)	2.487-03	(508)	2.812-03	(509)	3.137-03
(510)	3.429-03	(511)	3.686-03	(512)	3.943-03	(513)	4.235-03	(514)	4.733-03
(515)	5.250-03	(516)	5.750-03	(517)	6.160-03	(518)	6.480-03	(519)	6.820-03
(520)	7.277-03	(521)	7.754-03	(522)	8.231-03	(523)	8.708-03	(524)	9.185-03
(525)	9.662-03	(526)	1.012-02	(527)	1.056-02	(528)	1.100-02	(529)	1.144-02
(530)	1.188-02	(531)	1.228-02	(532)	1.265-02	(533)	1.301-02	(534)	1.338-02
(535)	1.374-02	(536)	1.411-02	(537)	1.447-02	(538)	1.484-02	(539)	1.521-02
(540)	1.557-02	(541)	1.594-02	(542)	1.630-02	(543)	1.667-02	(544)	1.703-02
(545)	1.740-02	(546)	1.776-02	(547)	1.813-02	(548)	1.849-02	(549)	1.886-02
(550)	1.922-02	(551)	1.959-02	(552)	1.996-02	(553)	2.032-02	(554)	2.069-02
(555)	2.105-02	(556)	2.142-02	(557)	2.186-02	(558)	2.238-02	(559)	2.291-02
(560)	2.343-02	(561)	2.395-02	(562)	2.447-02	(563)	2.499-02	(564)	2.552-02
(565)	2.604-02	(566)	2.644-02	(567)	2.672-02	(568)	2.700-02	(569)	2.726-02
(570)	2.751-02	(571)	2.777-02	(572)	2.802-02	(573)	2.827-02	(574)	2.852-02
(575)	2.877-02	(576)	2.893-02	(577)	2.899-02	(578)	2.904-02	(579)	2.909-02
(580)	2.910-02	(581)	2.910-02	(582)	2.910-02	(583)	2.909-02	(584)	2.902-02
(585)	2.894-02	(586)	2.881-02	(587)	2.863-02	(588)	2.845-02	(589)	2.827-02
(590)	2.809-02	(591)	2.784-02	(592)	2.752-02	(593)	2.720-02	(594)	2.688-02
(595)	2.650-02	(596)	2.624-02	(597)	2.592-02	(598)	2.560-02	(599)	2.528-02
(600)	2.496-02	(601)	2.462-02	(602)	2.426-02	(603)	2.390-02	(604)	2.354-02
(605)	2.318-02	(606)	2.282-02	(607)	2.246-02	(608)	2.210-02	(609)	2.174-02
(610)	2.138-02	(611)	2.096-02	(612)	2.048-02	(613)	2.000-02	(614)	1.952-02
(615)	1.904-02	(616)	1.858-02	(617)	1.814-02	(618)	1.771-02	(619)	1.737-02
(620)	1.703-02	(							
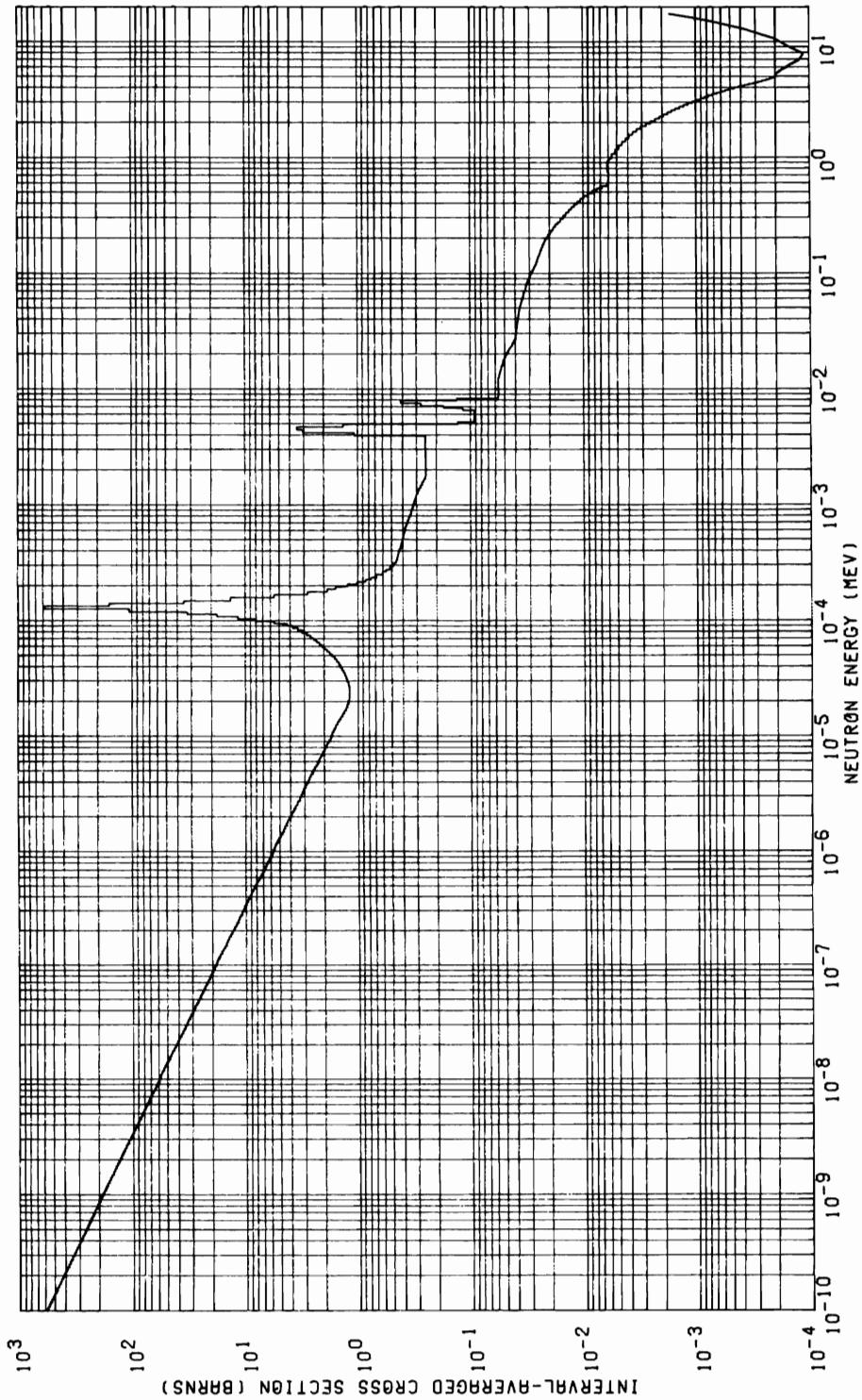
FIGURE B-13. $^{59}Co(n,\gamma)^{60}Co$

Neg 0694116-1

TABLE B-13
CO59(N,G)CO60

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

(1)	5.759+02	(2)	5.623+02	(3)	5.497+02	(4)	5.379+02	(5)	5.241+02
(6)	5.089+02	(7)	4.950+02	(8)	4.821+02	(9)	4.683+02	(10)	4.539+02
(11)	4.408+02	(12)	4.287+02	(13)	4.175+02	(14)	4.072+02	(15)	3.976+02
(16)	3.887+02	(17)	3.803+02	(18)	3.706+02	(19)	3.599+02	(20)	3.516+02
(21)	3.424+02	(22)	3.312+02	(23)	3.210+02	(24)	3.117+02	(25)	3.031+02
(26)	2.952+02	(27)	2.871+02	(28)	2.788+02	(29)	2.711+02	(30)	2.641+02
(31)	2.575+02	(32)	2.515+02	(33)	2.458+02	(34)	2.405+02	(35)	2.351+02
(36)	2.296+02	(37)	2.244+02	(38)	2.196+02	(39)	2.143+02	(40)	2.088+02
(41)	2.036+02	(42)	1.988+02	(43)	1.943+02	(44)	1.902+02	(45)	1.862+02
(46)	1.821+02	(47)	1.778+02	(48)	1.738+02	(49)	1.701+02	(50)	1.657+02
(51)	1.609+02	(52)	1.565+02	(53)	1.525+02	(54)	1.481+02	(55)	1.435+02
(56)	1.394+02	(57)	1.356+02	(58)	1.320+02	(59)	1.288+02	(60)	1.257+02
(61)	1.229+02	(62)	1.203+02	(63)	1.172+02	(64)	1.138+02	(65)	1.112+02
(66)	1.063+02	(67)	1.047+02	(68)	1.015+02	(69)	9.856+01	(70)	9.585+01
(71)	9.336+01	(72)	9.078+01	(73)	8.815+01	(74)	8.573+01	(75)	8.351+01
(76)	8.144+01	(77)	7.953+01	(78)	7.774+01	(79)	7.607+01	(80)	7.435+01
(81)	7.260+01	(82)	7.096+01	(83)	6.944+01	(84)	6.778+01	(85)	6.602+01
(86)	6.439+01	(87)	6.287+01	(88)	6.146+01	(89)	6.014+01	(90)	5.889+01
(91)	5.778+01	(92)	5.674+01	(93)	5.570+01	(94)	5.466+01	(95)	5.336+01
(96)	5.180+01	(97)	5.024+01	(98)	4.868+01	(99)	4.725+01	(100)	4.595+01
(101)	4.465+01	(102)	4.335+01	(103)	4.205+01	(104)	4.096+01	(105)	4.008+01
(106)	3.920+01	(107)	3.832+01	(108)	3.724+01	(109)	3.622+01	(110)	3.545+01
(111)	3.452+01	(112)	3.344+01	(113)	3.252+01	(114)	3.160+01	(115)	3.068+01
(116)	2.976+01	(117)	2.891+01	(118)	2.814+01	(119)	2.736+01	(120)	2.659+01
(121)	2.591+01	(122)	2.534+01	(123)	2.476+01	(124)	2.419+01	(125)	2.361+01
(126)	2.304+01	(127)	2.247+01	(128)	2.194+01	(129)	2.146+01	(130)	2.092+01
(131)	2.041+01	(132)	1.993+01	(133)	1.946+01	(134)	1.905+01	(135)	1.865+01
(136)	1.828+01	(137)	1.793+01	(138)	1.759+01	(139)	1.724+01	(140)	1.681+01
(141)	1.629+01	(142)	1.578+01	(143)	1.526+01	(144)	1.480+01	(145)	1.440+01
(146)	1.400+01	(147)	1.360+01	(148)	1.320+01	(149)	1.285+01	(150)	1.256+01
(151)	1.227+01	(152)	1.198+01	(153)	1.163+01	(154)	1.130+01	(155)	1.105+01
(156)	1.075+01	(157)	1.041+01	(158)	1.014+01	(159)	9.865+00	(160)	9.591+00
(161)	9.317+00	(162)	9.057+00	(163)	8.812+00	(164)	8.567+00	(165)	8.322+00

TABLE B-13 (CONTINUED)

CO59(N,G)CO60

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(166)	8.106+00	(167)	7.919+00	(168)	7.731+00	(169)	7.544+00	(170)	7.364+00
(171)	7.193+00	(172)	7.022+00	(173)	6.860+00	(174)	6.704+00	(175)	6.528+00
(176)	6.358+00	(177)	6.194+00	(178)	6.034+00	(179)	5.898+00	(180)	5.766+00
(181)	5.646+00	(182)	5.538+00	(183)	5.430+00	(184)	5.322+00	(185)	5.187+00
(186)	5.025+00	(187)	4.863+00	(188)	4.701+00	(189)	4.558+00	(190)	4.434+00
(191)	4.310+00	(192)	4.186+00	(193)	4.062+00	(194)	3.955+00	(195)	3.865+00
(196)	3.775+00	(197)	3.685+00	(198)	3.575+00	(199)	3.470+00	(200)	3.390+00
(201)	3.294+00	(202)	3.187+00	(203)	3.101+00	(204)	3.015+00	(205)	2.929+00
(206)	2.843+00	(207)	2.762+00	(208)	2.687+00	(209)	2.612+00	(210)	2.537+00
(211)	2.470+00	(212)	2.410+00	(213)	2.350+00	(214)	2.290+00	(215)	2.234+00
(216)	2.184+00	(217)	2.132+00	(218)	2.083+00	(219)	2.034+00	(220)	1.978+00
(221)	1.926+00	(222)	1.878+00	(223)	1.831+00	(224)	1.790+00	(225)	1.750+00
(226)	1.713+00	(227)	1.678+00	(228)	1.644+00	(229)	1.609+00	(230)	1.566+00
(231)	1.514+00	(232)	1.463+00	(233)	1.411+00	(234)	1.361+00	(235)	1.313+00
(236)	1.268+00	(237)	1.239+00	(238)	1.213+00	(239)	1.196+00	(240)	1.187+00
(241)	1.181+00	(242)	1.183+00	(243)	1.188+00	(244)	1.194+00	(245)	1.201+00
(246)	1.218+00	(247)	1.245+00	(248)	1.275+00	(249)	1.306+00	(250)	1.345+00
(251)	1.385+00	(252)	1.431+00	(253)	1.482+00	(254)	1.543+00	(255)	1.614+00
(256)	1.696+00	(257)	1.789+00	(258)	1.881+00	(259)	1.974+00	(260)	2.081+00
(261)	2.201+00	(262)	2.327+00	(263)	2.461+00	(264)	2.636+00	(265)	2.866+00
(266)	3.128+00	(267)	3.424+00	(268)	3.777+00	(269)	4.259+00	(270)	5.540+00
(271)	8.116+00	(272)	1.167+01	(273)	1.788+01	(274)	3.276+01	(275)	1.055+02
(276)	5.898+02	(277)	1.563+02	(278)	3.443+01	(279)	1.336+01	(280)	5.471+00
(281)	2.761+00	(282)	1.849+00	(283)	1.558+00	(284)	1.225+00	(285)	1.006+00
(286)	8.462-01	(287)	7.524-01	(288)	6.755-01	(289)	5.976-01	(290)	5.530-01
(291)	5.126-01	(292)	4.781-01	(293)	4.544-01	(294)	4.429-01	(295)	4.358-01
(296)	4.308-01	(297)	4.233-01	(298)	4.142-01	(299)	4.077-01	(300)	4.012-01
(301)	3.952-01	(302)	3.906-01	(303)	3.860-01	(304)	3.814-01	(305)	3.772-01
(306)	3.726-01	(307)	3.667-01	(308)	3.604-01	(309)	3.552-01	(310)	3.482-01
(311)	3.406-01	(312)	3.333-01	(313)	3.285-01	(314)	3.245-01	(315)	3.207-01
(316)	3.163-01	(317)	3.114-01	(318)	3.062-01	(319)	3.017-01	(320)	2.964-01
(321)	2.695-01	(322)	2.816-01	(323)	2.740-01	(324)	2.653-01	(325)	2.564-01
(326)	2.485-01	(327)	2.465-01	(328)	2.472-01	(329)	2.477-01	(330)	2.480-01

CO59(N,G)CO60

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(331)	2.482-01	(332)	2.483-01	(333)	2.484-01	(334)	2.485-01	(335)	2.488-01
(336)	2.494-01	(337)	2.500-01	(338)	2.504-01	(339)	2.505-01	(340)	2.505-01
(341)	2.506-01	(342)	1.070+00	(343)	3.061+00	(344)	3.470+00	(345)	1.326+00
(346)	1.277-01	(347)	9.130-02	(348)	9.140-02	(349)	9.145-02	(350)	9.155-02
(351)	9.186-02	(352)	1.166-01	(353)	1.724-01	(354)	2.757-01	(355)	4.145-01
(356)	1.298-01	(357)	5.614-02	(358)	5.634-02	(359)	5.659-02	(360)	5.665-02
(361)	5.695-02	(362)	5.702-02	(363)	5.702-02	(364)	5.658-02	(365)	5.592-02
(366)	5.513-02	(367)	5.434-02	(368)	5.352-02	(369)	5.266-02	(370)	5.169-02
(371)	5.066-02	(372)	4.959-02	(373)	4.851-02	(374)	4.732-02	(375)	4.612-02
(376)	4.493-02	(377)	4.371-02	(378)	4.240-02	(379)	4.092-02	(380)	3.966-02
(381)	3.920-02	(382)	3.882-02	(383)	3.856-02	(384)	3.827-02	(385)	3.799-02
(386)	3.766-02	(387)	3.737-02	(388)	3.710-02	(389)	3.675-02	(390)	3.640-02
(391)	3.599-02	(392)	3.551-02	(393)	3.504-02	(394)	3.458-02	(395)	3.410-02
(396)	3.363-02	(397)	3.321-02	(398)	3.275-02	(399)	3.225-02	(400)	3.178-02
(401)	3.132-02	(402)	3.088-02	(403)	3.032-02	(404)	2.964-02	(405)	2.902-02
(406)	2.845-02	(407)	2.775-02	(408)	2.706-02	(409)	2.647-02	(410)	2.590-02
(411)	2.556-02	(412)	2.483-02	(413)	2.432-02	(414)	2.380-02	(415)	2.326-02
(416)	2.263-02	(417)	2.205-02	(418)	2.150-02	(419)	2.083-02	(420)	2.021-02
(421)	1.960-02	(422)	1.896-02	(423)	1.828-02	(424)	1.755-02	(425)	1.672-02
(426)	1.585-02	(427)	1.491-02	(428)	1.412-02	(429)	1.337-02	(430)	1.266-02
(431)	1.192-02	(432)	1.120-02	(433)	1.053-02	(434)	9.736-03	(435)	8.929-03
(436)	8.171-03	(437)	7.448-03	(438)	6.719-03	(439)	6.073-03	(440)	5.931-03
(441)	5.894-03	(442)	5.916-03	(443)	5.939-03	(444)	5.960-03	(445)	6.059-03
(446)	6.087-03	(447)	6.079-03	(448)	6.030-03	(449)	5.930-03	(450)	5.794-03
(451)	5.523-03	(452)	5.112-03	(453)	4.739-03	(454)	4.429-03	(455)	4.130-03
(456)	3.854-03	(457)	3.567-03	(458)	3.293-03	(459)	3.018-03	(460)	2.717-03
(461)	2.474-03	(462)	2.258-03	(463)	2.072-03	(464)	1.905-03	(465)	1.747-03
(466)	1.615-03	(467)	1.495-03	(468)	1.371-03	(469)	1.259-03	(470)	1.153-03
(471)	1.057-03	(472)	9.729-04	(473)	8.914-04	(474)	8.247-04	(475)	7.593-04
(476)	6.980-04	(477)	6.404-04	(478)	5.846-04	(479)	5.396-04	(480)	4.963-04
(481)	4.517-04	(482)	4.090-04	(483)	3.686-04	(484)	3.344-04	(485)	3.020-04
(486)	2.763-04	(487)	2.550-04	(488)	2.344-04	(489)	2.203-04	(490)	2.071-04
(491)	1.990-04	(492)	1.981-04	(493)	1.967-04	(494)	1.928-04	(495)	1.888-04

CO59(N,G)CO60

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(496)	1.847-04	(497)	1.805-04	(498)	1.764-04	(499)	1.719-04	(500)	1.668-04
(501)	1.620-04	(502)	1.573-04	(503)	1.527-04	(504)	1.488-04	(505)	1.448-04
(506)	1.408-04	(507)	1.369-04	(508)	1.328-04	(509)	1.288-04	(510)	1.248-04
(511)	1.220-04	(512)	1.205-04	(513)	1.189-04	(514)	1.178-04	(515)	1.167-04
(516)	1.157-04	(517)	1.149-04	(518)	1.140-04	(519)	1.131-04	(520)	1.122-04
(521)	1.134-04	(522)	1.165-04	(523)	1.197-04	(524)	1.228-04	(525)	1.260-04
(526)	1.291-04	(527)	1.323-04	(528)	1.355-04	(529)	1.386-04	(530)	1.418-04
(531)	1.449-04	(532)	1.481-04	(533)	1.513-04	(534)	1.544-04	(535)	1.576-04
(536)	1.608-04	(537)	1.640-04	(538)	1.672-04	(539)	1.704-04	(540)	1.736-04
(541)	1.768-04	(542)	1.800-04	(543)	1.832-04	(544)	1.865-04	(545)	1.897-04
(546)	1.930-04	(547)	1.962-04	(548)	1.995-04	(549)	2.028-04	(550)	2.061-04
(551)	2.113-04	(552)	2.182-04	(553)	2.252-04	(554)	2.322-04	(555)	2.392-04
(556)	2.463-04	(557)	2.534-04	(558)	2.605-04	(559)	2.677-04	(560)	2.748-04
(561)	2.821-04	(562)	2.893-04	(563)	2.967-04	(564)	3.040-04	(565)	3.115-04
(566)	3.190-04	(567)	3.265-04	(568)	3.342-04	(569)	3.419-04	(570)	3.497-04
(571)	3.596-04	(572)	3.718-04	(573)	3.841-04	(574)	3.967-04	(575)	4.090-04
(576)	4.218-04	(577)	4.348-04	(578)	4.475-04	(579)	4.608-04	(580)	4.743-04
(581)	4.888-04	(582)	5.043-04	(583)	5.205-04	(584)	5.365-04	(585)	5.531-04
(586)	5.696-04	(587)	5.869-04	(588)	6.040-04	(589)	6.218-04	(590)	6.396-04
(591)	6.586-04	(592)	6.784-04	(593)	6.981-04	(594)	7.187-04	(595)	7.397-04
(596)	7.638-04	(597)	7.910-04	(598)	8.183-04	(599)	8.466-04	(600)	8.754-04
(601)	9.061-04	(602)	9.392-04	(603)	9.729-04	(604)	1.007-03	(605)	1.042-03
(606)	1.079-03	(607)	1.119-03	(608)	1.159-03	(609)	1.200-03	(610)	1.241-03
(611)	1.285-03	(612)	1.331-03	(613)	1.377-03	(614)	1.425-03	(615)	1.472-03
(616)	1.525-03	(617)	1.584-03	(618)	1.641-03	(619)	1.695-03	(620)	1.774-03
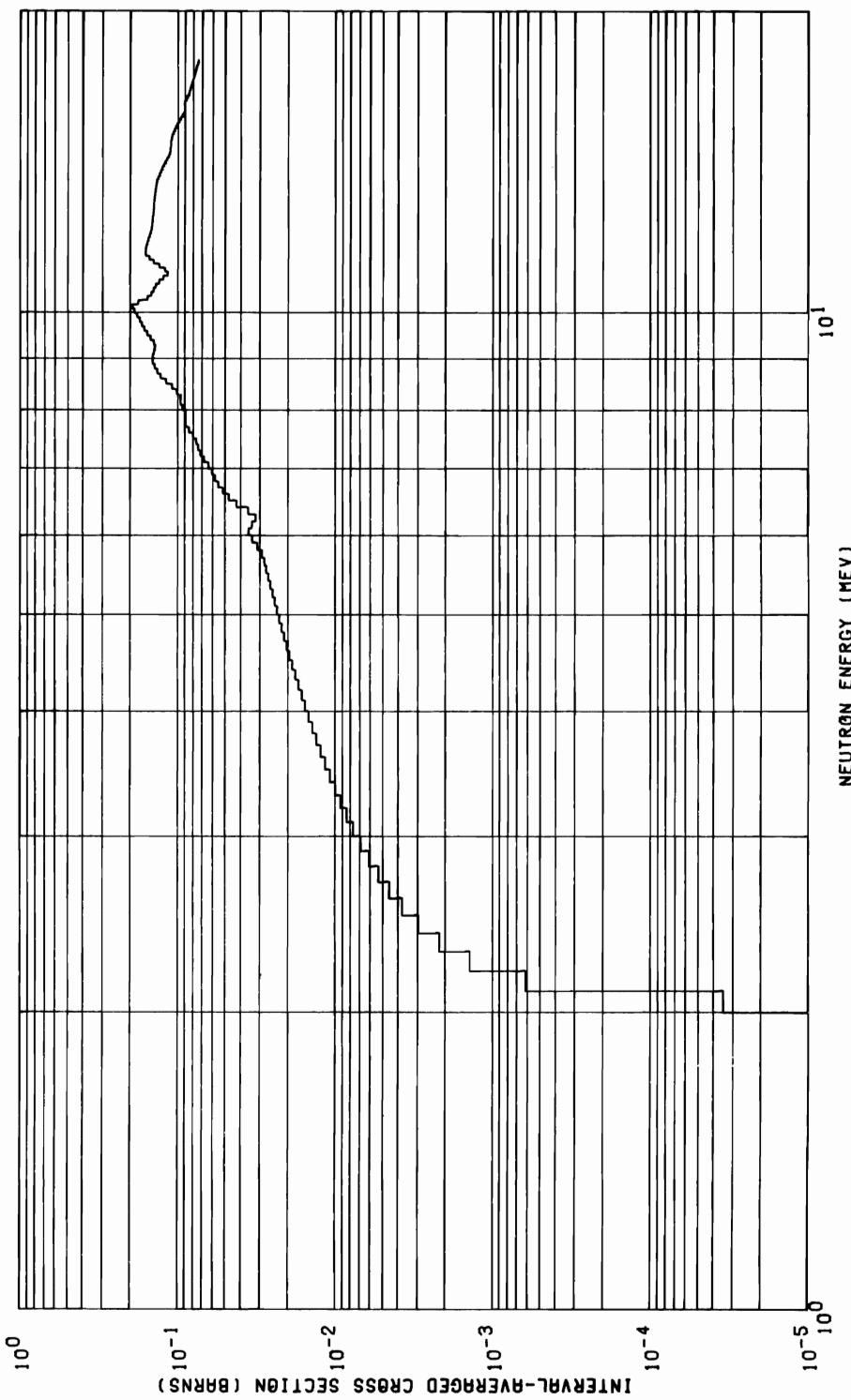
FIGURE B-14. $^{60}Ni(n,p)^{60}Co$

Neg 0694115-3

B-41

TABLE xB-14

NI60(N,P)CO60

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

Idx	σ	Idx	σ	Idx	σ	Idx	σ	Idx	σ
(460)	0.000	(461)	3.462-05	(462)	6.154-04	(463)	1.393-03	(464)	2.180-03
(465)	2.966-03	(466)	3.753-03	(467)	4.539-03	(468)	5.326-03	(469)	6.112-03
(470)	6.699-03	(471)	7.685-03	(472)	8.472-03	(473)	9.258-03	(474)	1.004-02
(475)	1.083-02	(476)	1.162-02	(477)	1.240-02	(478)	1.319-02	(479)	1.398-02
(480)	1.476-02	(481)	1.555-02	(482)	1.634-02	(483)	1.712-02	(484)	1.791-02
(485)	1.870-02	(486)	1.948-02	(487)	2.027-02	(488)	2.106-02	(489)	2.184-02
(490)	2.263-02	(491)	2.342-02	(492)	2.420-02	(493)	2.499-02	(494)	2.578-02
(495)	2.650-02	(496)	2.735-02	(497)	2.813-02	(498)	2.906-02	(499)	3.125-02
(500)	3.375-02	(501)	3.543-02	(502)	3.371-02	(503)	3.180-02	(504)	3.567-02
(505)	4.232-02	(506)	4.750-02	(507)	5.167-02	(508)	5.540-02	(509)	5.788-02
(510)	6.032-02	(511)	6.396-02	(512)	6.819-02	(513)	7.202-02	(514)	7.420-02
(515)	7.621-02	(516)	8.000-02	(517)	8.500-02	(518)	8.877-02	(519)	8.900-02
(520)	8.970-02	(521)	9.328-02	(522)	9.568-02	(523)	9.593-02	(524)	1.017-01
(525)	1.086-01	(526)	1.184-01	(527)	1.286-01	(528)	1.347-01	(529)	1.394-01
(530)	1.438-01	(531)	1.433-01	(532)	1.412-01	(533)	1.391-01	(534)	1.417-01
(535)	1.490-01	(536)	1.563-01	(537)	1.627-01	(538)	1.682-01	(539)	1.741-01
(540)	1.809-01	(541)	1.678-01	(542)	1.933-01	(543)	1.772-01	(544)	1.546-01
(545)	1.457-01	(546)	1.416-01	(547)	1.371-01	(548)	1.300-01	(549)	1.222-01
(550)	1.147-01	(551)	1.199-01	(552)	1.313-01	(553)	1.425-01	(554)	1.516-01
(555)	1.594-01	(556)	1.602-01	(557)	1.575-01	(558)	1.549-01	(559)	1.523-01
(560)	1.497-01	(561)	1.471-01	(562)	1.455-01	(563)	1.446-01	(564)	1.438-01
(565)	1.429-01	(566)	1.420-01	(567)	1.412-01	(568)	1.410-01	(569)	1.409-01
(570)	1.493-01	(571)	1.395-01	(572)	1.387-01	(573)	1.379-01	(574)	1.369-01
(575)	1.359-01	(576)	1.346-01	(577)	1.322-01	(578)	1.296-01	(579)	1.271-01
(580)	1.245-01	(581)	1.220-01	(582)	1.192-01	(583)	1.165-01	(584)	1.137-01
(585)	1.117-01	(586)	1.112-01	(587)	1.107-01	(588)	1.102-01	(589)	1.097-01
(590)	1.092-01	(591)	1.079-01	(592)	1.061-01	(593)	1.042-01	(594)	1.023-01
(595)	1.001-01	(596)	9.776-02	(597)	9.541-02	(598)	9.306-02	(599)	9.076-02
(600)	9.023-02	(601)	9.057-02	(602)	9.086-02	(603)	8.976-02	(604)	8.800-02
(605)	8.624-02	(606)	8.474-02	(607)	8.379-02	(608)	8.285-02	(609)	8.192-02
(610)	8.049-02	(611)	8.005-02	(612)	7.912-02	(613)	7.819-02	(614)	7.740-02
(615)	7.605-02	(616)	7.589-02	(617)	7.514-02	(618)	7.439-02	(619)	7.363-02
(620)	7.288-02								
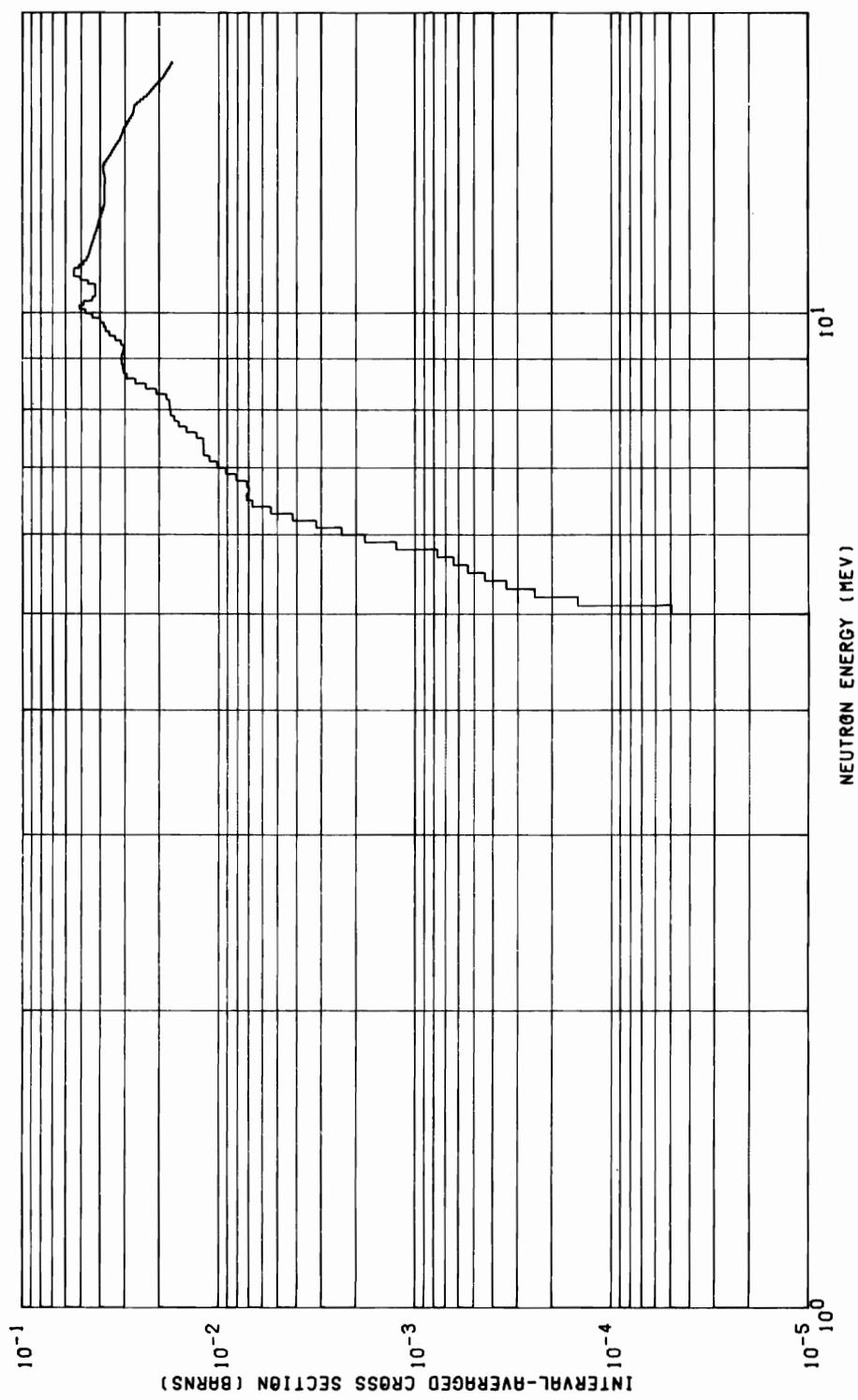
Figure B-15. $^{63}Cu(n,\alpha)^{60}Co$

Neg 0694115-2

TABLE B-15

CU63(N,A)CO60

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(490)	0.000	(491)	5.000-05	(492)	1.492-04	(493)	2.477-04	(494)	3.462-04
(495)	4.447-04	(496)	5.432-04	(497)	6.417-04	(498)	7.771-04	(499)	1.255-03
(500)	1.815-03	(501)	2.378-03	(502)	3.200-03	(503)	4.207-03	(504)	5.433-03
(505)	6.759-03	(506)	7.200-03	(507)	7.033-03	(508)	7.162-03	(509)	8.148-03
(510)	9.186-03	(511)	1.017-02	(512)	1.113-02	(513)	1.192-02	(514)	1.200-02
(515)	1.201-02	(516)	1.297-02	(517)	1.460-02	(518)	1.603-02	(519)	1.687-02
(520)	1.756-02	(521)	1.772-02	(522)	1.787-02	(523)	1.841-02	(524)	2.081-02
(525)	2.356-02	(526)	2.654-02	(527)	2.947-02	(528)	3.049-02	(529)	3.086-02
(530)	3.120-02	(531)	3.103-02	(532)	3.070-02	(533)	3.037-02	(534)	3.138-02
(535)	3.375-02	(536)	3.612-02	(537)	3.769-02	(538)	3.846-02	(539)	4.020-02
(540)	4.394-02	(541)	4.774-02	(542)	5.115-02	(543)	4.842-02	(544)	4.378-02
(545)	4.249-02	(546)	4.235-02	(547)	4.257-02	(548)	4.614-02	(549)	5.051-02
(550)	5.474-02	(551)	5.419-02	(552)	5.133-02	(553)	4.850-02	(554)	4.694-02
(555)	4.599-02	(556)	4.528-02	(557)	4.467-02	(558)	4.406-02	(559)	4.346-02
(560)	4.285-02	(561)	4.224-02	(562)	4.170-02	(563)	4.120-02	(564)	4.070-02
(565)	4.020-02	(566)	3.970-02	(567)	3.920-02	(568)	3.868-02	(569)	3.820-02
(570)	3.812-02	(571)	3.815-02	(572)	3.818-02	(573)	3.817-02	(574)	3.805-02
(575)	3.792-02	(576)	3.786-02	(577)	3.808-02	(578)	3.834-02	(579)	3.859-02
(580)	3.885-02	(581)	3.895-02	(582)	3.818-02	(583)	3.726-02	(584)	3.634-02
(585)	3.549-02	(586)	3.476-02	(587)	3.405-02	(588)	3.333-02	(589)	3.261-02
(590)	3.189-02	(591)	3.138-02	(592)	3.101-02	(593)	3.064-02	(594)	3.026-02
(595)	2.973-02	(596)	2.914-02	(597)	2.855-02	(598)	2.796-02	(599)	2.739-02
(600)	2.711-02	(601)	2.697-02	(602)	2.682-02	(603)	2.608-02	(604)	2.505-02
(605)	2.402-02	(606)	2.314-02	(607)	2.257-02	(608)	2.201-02	(609)	2.145-02
(610)	2.045-02	(611)	2.033-02	(612)	1.977-02	(613)	1.922-02	(614)	1.884-02
(615)	1.852-02	(616)	1.820-02	(617)	1.787-02	(618)	1.755-02	(619)	1.723-02
(620)	1.691-02								
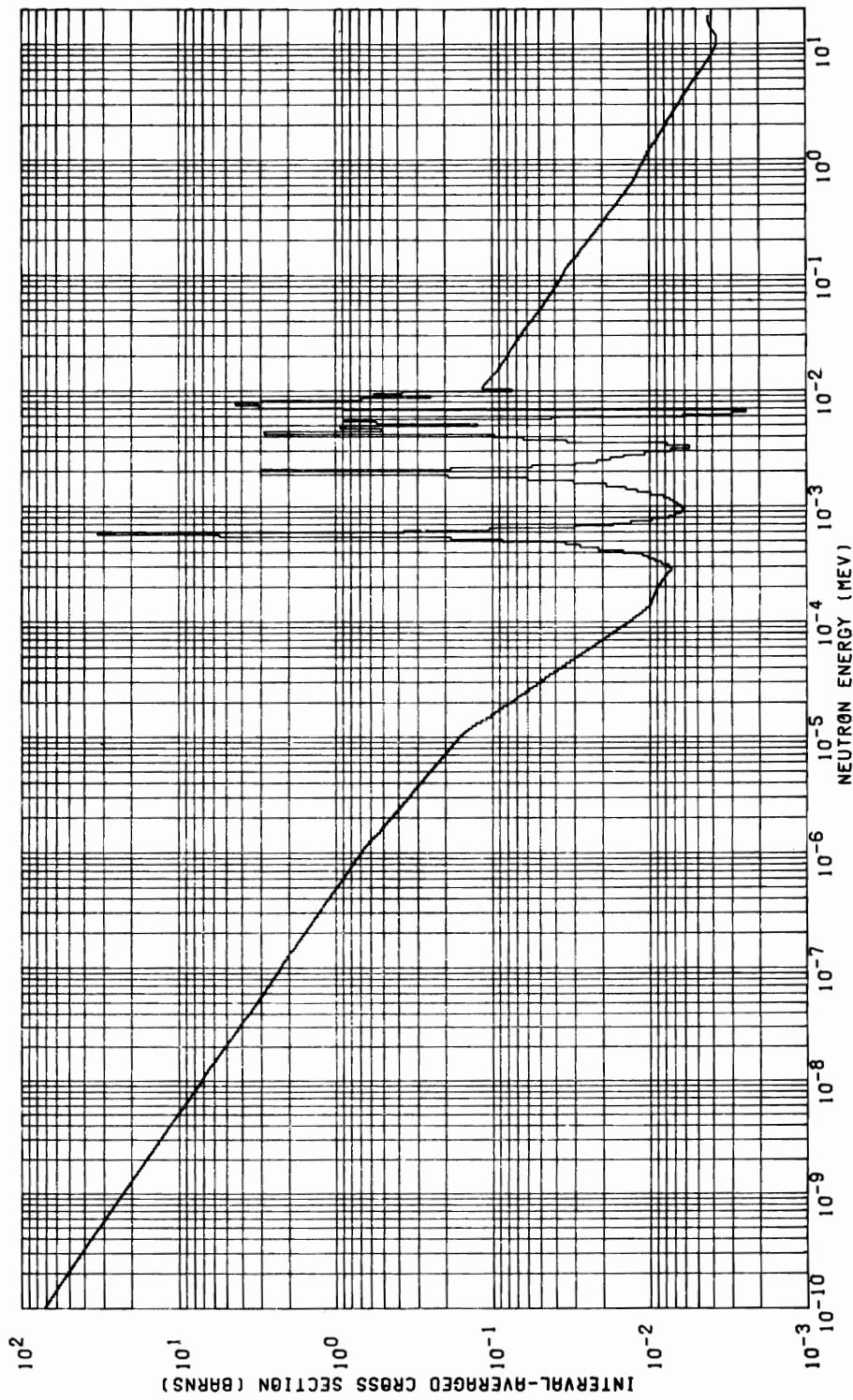
FIGURE B-16. $^{63}Cu(n,\gamma)^{64}Cu$

Neg 0694115-8

TABLE B-16

CU63(N,G)CU64

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

	1)		2)		3)		4)		5)
(1)	7.112+01	(2)	6.945+01	(3)	6.769+01	(4)	6.643+01	(5)	6.473+01
(6)	6.285+01	(7)	6.113+01	(8)	5.954+01	(9)	5.784+01	(10)	5.606+01
(11)	5.443+01	(12)	5.294+01	(13)	5.156+01	(14)	5.029+01	(15)	4.911+01
(16)	4.800+01	(17)	4.697+01	(18)	4.577+01	(19)	4.444+01	(20)	4.342+01
(21)	4.229+01	(22)	4.090+01	(23)	3.964+01	(24)	3.849+01	(25)	3.743+01
(26)	3.646+01	(27)	3.545+01	(28)	3.443+01	(29)	3.348+01	(30)	3.261+01
(31)	3.181+01	(32)	3.106+01	(33)	3.036+01	(34)	2.971+01	(35)	2.904+01
(36)	2.835+01	(37)	2.771+01	(38)	2.712+01	(39)	2.647+01	(40)	2.578+01
(41)	2.515+01	(42)	2.455+01	(43)	2.400+01	(44)	2.349+01	(45)	2.300+01
(46)	2.249+01	(47)	2.196+01	(48)	2.147+01	(49)	2.101+01	(50)	2.047+01
(51)	1.988+01	(52)	1.933+01	(53)	1.883+01	(54)	1.829+01	(55)	1.773+01
(56)	1.721+01	(57)	1.674+01	(58)	1.631+01	(59)	1.590+01	(60)	1.553+01
(61)	1.518+01	(62)	1.485+01	(63)	1.447+01	(64)	1.405+01	(65)	1.373+01
(66)	1.337+01	(67)	1.293+01	(68)	1.254+01	(69)	1.217+01	(70)	1.184+01
(71)	1.153+01	(72)	1.121+01	(73)	1.089+01	(74)	1.059+01	(75)	1.031+01
(76)	1.006+01	(77)	9.821+00	(78)	9.601+00	(79)	9.394+00	(80)	9.182+00
(81)	8.900+00	(82)	8.764+00	(83)	8.576+00	(84)	8.371+00	(85)	8.153+00
(86)	7.952+00	(87)	7.764+00	(88)	7.590+00	(89)	7.427+00	(90)	7.273+00
(91)	7.133+00	(92)	6.999+00	(93)	6.865+00	(94)	6.731+00	(95)	6.563+00
(96)	6.362+00	(97)	6.161+00	(98)	5.960+00	(99)	5.782+00	(100)	5.626+00
(101)	5.470+00	(102)	5.314+00	(103)	5.158+00	(104)	5.023+00	(105)	4.909+00
(106)	4.795+00	(107)	4.681+00	(108)	4.541+00	(109)	4.412+00	(110)	4.315+00
(111)	4.198+00	(112)	4.065+00	(113)	3.955+00	(114)	3.845+00	(115)	3.735+00
(116)	3.625+00	(117)	3.522+00	(118)	3.427+00	(119)	3.332+00	(120)	3.237+00
(121)	3.154+00	(122)	3.083+00	(123)	3.012+00	(124)	2.941+00	(125)	2.873+00
(126)	2.808+00	(127)	2.744+00	(128)	2.682+00	(129)	2.620+00	(130)	2.550+00
(131)	2.454+00	(132)	2.422+00	(133)	2.362+00	(134)	2.316+00	(135)	2.272+00
(136)	2.229+00	(137)	2.187+00	(138)	2.145+00	(139)	2.103+00	(140)	2.050+00
(141)	1.957+00	(142)	1.924+00	(143)	1.861+00	(144)	1.804+00	(145)	1.753+00
(146)	1.702+00	(147)	1.651+00	(148)	1.600+00	(149)	1.558+00	(150)	1.525+00
(151)	1.491+00	(152)	1.458+00	(153)	1.417+00	(154)	1.377+00	(155)	1.346+00
(156)	1.310+00	(157)	1.267+00	(158)	1.232+00	(159)	1.197+00	(160)	1.162+00
(161)	1.127+00	(162)	1.095+00	(163)	1.065+00	(164)	1.034+00	(165)	1.004+00

TABLE B-16 (CONTINUED)

CU63(N,G)CU64

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(166)	9.779-01	(167)	9.556-01	(168)	9.334-01	(169)	9.111-01	(170)	8.901-01
(171)	8.703-01	(172)	8.505-01	(173)	8.314-01	(174)	8.116-01	(175)	7.892-01
(176)	7.692-01	(177)	7.516-01	(178)	7.340-01	(179)	7.168-01	(180)	6.996-01
(181)	6.830-01	(182)	6.669-01	(183)	6.509-01	(184)	6.348-01	(185)	6.148-01
(186)	5.907-01	(187)	5.866-01	(188)	5.425-01	(189)	5.216-01	(190)	5.038-01
(191)	4.860-01	(192)	4.882-01	(193)	4.504-01	(194)	4.357-01	(195)	4.242-01
(196)	4.127-01	(197)	4.012-01	(198)	3.871-01	(199)	3.738-01	(200)	3.635-01
(201)	3.512-01	(202)	3.574-01	(203)	3.262-01	(204)	3.150-01	(205)	3.038-01
(206)	2.926-01	(207)	2.823-01	(208)	2.729-01	(209)	2.636-01	(210)	2.542-01
(211)	2.462-01	(212)	2.396-01	(213)	2.329-01	(214)	2.263-01	(215)	2.198-01
(216)	2.133-01	(217)	2.069-01	(218)	2.008-01	(219)	1.953-01	(220)	1.891-01
(221)	1.834-01	(222)	1.782-01	(223)	1.731-01	(224)	1.686-01	(225)	1.642-01
(226)	1.591-01	(227)	1.534-01	(228)	1.476-01	(229)	1.419-01	(230)	1.347-01
(231)	1.261-01	(232)	1.174-01	(233)	1.088-01	(234)	1.017-01	(235)	9.616-02
(236)	9.060-02	(237)	8.504-02	(238)	7.948-02	(239)	7.507-02	(240)	7.181-02
(241)	6.855-02	(242)	6.529-02	(243)	6.131-02	(244)	5.775-02	(245)	5.510-02
(246)	5.192-02	(247)	4.849-02	(248)	4.587-02	(249)	4.325-02	(250)	4.063-02
(251)	3.801-02	(252)	3.572-02	(253)	3.377-02	(254)	3.182-02	(255)	2.987-02
(256)	2.824-02	(257)	2.691-02	(258)	2.559-02	(259)	2.426-02	(260)	2.307-02
(261)	2.200-02	(262)	2.094-02	(263)	1.993-02	(264)	1.899-02	(265)	1.793-02
(266)	1.699-02	(267)	1.617-02	(268)	1.536-02	(269)	1.465-02	(270)	1.395-02
(271)	1.331-02	(272)	1.274-02	(273)	1.216-02	(274)	1.159-02	(275)	1.104-02
(276)	1.051-02	(277)	1.001-02	(278)	9.791-03	(279)	9.637-03	(280)	9.462-03
(281)	9.227-03	(282)	9.112-03	(283)	8.937-03	(284)	8.762-03	(285)	8.587-03
(286)	8.412-03	(287)	8.237-03	(288)	8.019-03	(289)	7.756-03	(290)	7.537-03
(291)	7.275-03	(292)	7.550-03	(293)	8.450-03	(294)	9.350-03	(295)	1.025-02
(296)	1.115-02	(297)	1.485-02	(298)	2.135-02	(299)	2.785-02	(300)	3.435-02
(301)	8.663-02	(302)	1.847-01	(303)	5.523+00	(304)	3.286+01	(305)	3.628-01
(306)	1.028-01	(307)	2.965-02	(308)	1.688-02	(309)	1.308-02	(310)	9.560-03
(311)	7.420-03	(312)	6.840-03	(313)	6.275-03	(314)	6.160-03	(315)	6.120-03
(316)	6.300-03	(317)	6.700-03	(318)	7.100-03	(319)	7.500-03	(320)	8.087-03
(321)	9.900-03	(322)	1.206-02	(323)	1.422-02	(324)	1.895-02	(325)	3.040-02
(326)	5.590-02	(327)	1.918-01	(328)	3.011+00	(329)	3.004+00	(330)	1.816-01

TABLE B-16 (CONTINUED)

CU63(N,G)CU64

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

( )		( )		( )		( )		( )	
(331)	5.530-02	(332)	2.935-02	(333)	2.140-02	(334)	1.760-02	(335)	1.443-02
(336)	1.063-02	(337)	7.240-03	(338)	5.520-03	(339)	7.759-03	(340)	3.375-02
(341)	6.370-02	(342)	9.739-02	(343)	2.854+00	(344)	5.014-01	(345)	9.343-01
(346)	1.231-01	(347)	5.485-01	(348)	8.894-01	(349)	4.163-02	(350)	6.050-03
(351)	2.947-03	(352)	2.400-03	(353)	8.880-01	(354)	3.069+00	(355)	4.348+00
(356)	2.949+00	(357)	6.754-01	(358)	2.452-01	(359)	5.691-01	(360)	3.721-01
(361)	7.396-02	(362)	1.160-01	(363)	1.128-01	(364)	1.096-01	(365)	1.062-01
(366)	1.023-01	(367)	9.858-02	(368)	9.481-02	(369)	9.148-02	(370)	8.875-02
(371)	8.615-02	(372)	8.364-02	(373)	8.105-02	(374)	7.927-02	(375)	7.797-02
(376)	7.656-02	(377)	7.511-02	(378)	7.305-02	(379)	7.097-02	(380)	6.952-02
(381)	6.754-02	(382)	6.520-02	(383)	6.339-02	(384)	6.150-02	(385)	5.954-02
(386)	5.762-02	(387)	5.574-02	(388)	5.398-02	(389)	5.228-02	(390)	5.052-02
(391)	4.913-02	(392)	4.809-02	(393)	4.704-02	(394)	4.595-02	(395)	4.491-02
(396)	4.392-02	(397)	4.289-02	(398)	4.192-02	(399)	4.103-02	(400)	3.996-02
(401)	3.890-02	(402)	3.804-02	(403)	3.721-02	(404)	3.656-02	(405)	3.590-02
(406)	3.525-02	(407)	3.470-02	(408)	3.412-02	(409)	3.349-02	(410)	3.262-02
(411)	3.151-02	(412)	3.038-02	(413)	2.921-02	(414)	2.821-02	(415)	2.736-02
(416)	2.651-02	(417)	2.564-02	(418)	2.476-02	(419)	2.407-02	(420)	2.352-02
(421)	2.296-02	(422)	2.240-02	(423)	2.167-02	(424)	2.097-02	(425)	2.046-02
(426)	1.982-02	(427)	1.908-02	(428)	1.852-02	(429)	1.794-02	(430)	1.736-02
(431)	1.678-02	(432)	1.625-02	(433)	1.576-02	(434)	1.529-02	(435)	1.482-02
(436)	1.440-02	(437)	1.407-02	(438)	1.372-02	(439)	1.338-02	(440)	1.306-02
(441)	1.277-02	(442)	1.247-02	(443)	1.219-02	(444)	1.201-02	(445)	1.176-02
(446)	1.155-02	(447)	1.136-02	(448)	1.117-02	(449)	1.101-02	(450)	1.084-02
(451)	1.057-02	(452)	1.022-02	(453)	9.866-03	(454)	9.497-03	(455)	9.119-03
(456)	8.822-03	(457)	8.605-03	(458)	8.384-03	(459)	8.180-03	(460)	7.975-03
(461)	7.405-03	(462)	7.063-03	(463)	7.511-03	(464)	7.355-03	(465)	7.196-03
(466)	7.058-03	(467)	6.938-03	(468)	6.818-03	(469)	6.695-03	(470)	6.570-03
(471)	6.405-03	(472)	6.382-03	(473)	6.298-03	(474)	6.214-03	(475)	6.129-03
(476)	6.044-03	(477)	5.957-03	(478)	5.871-03	(479)	5.786-03	(480)	5.700-03
(481)	5.628-03	(482)	5.571-03	(483)	5.512-03	(484)	5.454-03	(485)	5.395-03
(486)	5.337-03	(487)	5.278-03	(488)	5.219-03	(489)	5.159-03	(490)	5.098-03
(491)	5.045-03	(492)	4.998-03	(493)	4.952-03	(494)	4.902-03	(495)	4.854-03

TABLE B-16 (CONTINUED)

CU63(N,G)CU64

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(496)	4.804-03	(497)	4.755-03	(498)	4.706-03	(499)	4.658-03	(500)	4.609-03
(501)	4.569-03	(502)	4.536-03	(503)	4.502-03	(504)	4.471-03	(505)	4.438-03
(506)	4.406-03	(507)	4.373-03	(508)	4.341-03	(509)	4.308-03	(510)	4.276-03
(511)	4.246-03	(512)	4.220-03	(513)	4.194-03	(514)	4.167-03	(515)	4.141-03
(516)	4.115-03	(517)	4.089-03	(518)	4.064-03	(519)	4.039-03	(520)	4.014-03
(521)	3.990-03	(522)	3.970-03	(523)	3.949-03	(524)	3.928-03	(525)	3.907-03
(526)	3.887-03	(527)	3.867-03	(528)	3.847-03	(529)	3.827-03	(530)	3.808-03
(531)	3.790-03	(532)	3.775-03	(533)	3.761-03	(534)	3.746-03	(535)	3.732-03
(536)	3.719-03	(537)	3.706-03	(538)	3.693-03	(539)	3.681-03	(540)	3.669-03
(541)	3.662-03	(542)	3.658-03	(543)	3.655-03	(544)	3.653-03	(545)	3.651-03
(546)	3.650-03	(547)	3.650-03	(548)	3.651-03	(549)	3.652-03	(550)	3.654-03
(551)	3.656-03	(552)	3.660-03	(553)	3.664-03	(554)	3.669-03	(555)	3.675-03
(556)	3.682-03	(557)	3.689-03	(558)	3.698-03	(559)	3.707-03	(560)	3.717-03
(561)	3.728-03	(562)	3.739-03	(563)	3.751-03	(564)	3.764-03	(565)	3.777-03
(566)	3.791-03	(567)	3.806-03	(568)	3.821-03	(569)	3.836-03	(570)	3.852-03
(571)	3.868-03	(572)	3.884-03	(573)	3.900-03	(574)	3.916-03	(575)	3.932-03
(576)	3.948-03	(577)	3.964-03	(578)	3.979-03	(579)	3.994-03	(580)	4.008-03
(581)	4.022-03	(582)	4.035-03	(583)	4.048-03	(584)	4.059-03	(585)	4.070-03
(586)	4.080-03	(587)	4.089-03	(588)	4.097-03	(589)	4.104-03	(590)	4.110-03
(591)	4.118-03	(592)	4.131-03	(593)	4.142-03	(594)	4.150-03	(595)	4.160-03
(596)	4.168-03	(597)	4.174-03	(598)	4.180-03	(599)	4.185-03	(600)	4.188-03
(601)	4.192-03	(602)	4.195-03	(603)	4.195-03	(604)	4.196-03	(605)	4.196-03
(606)	4.194-03	(607)	4.193-03	(608)	4.191-03	(609)	4.187-03	(610)	4.184-03
(611)	4.180-03	(612)	4.174-03	(613)	4.170-03	(614)	4.166-03	(615)	4.159-03
(616)	4.154-03	(617)	4.148-03	(618)	4.139-03	(619)	4.132-03	(620)	4.124-03

NEUTRON ENERGY (MEV)

INTERVAL-AVERAGED CROSS SECTION (BARNS)
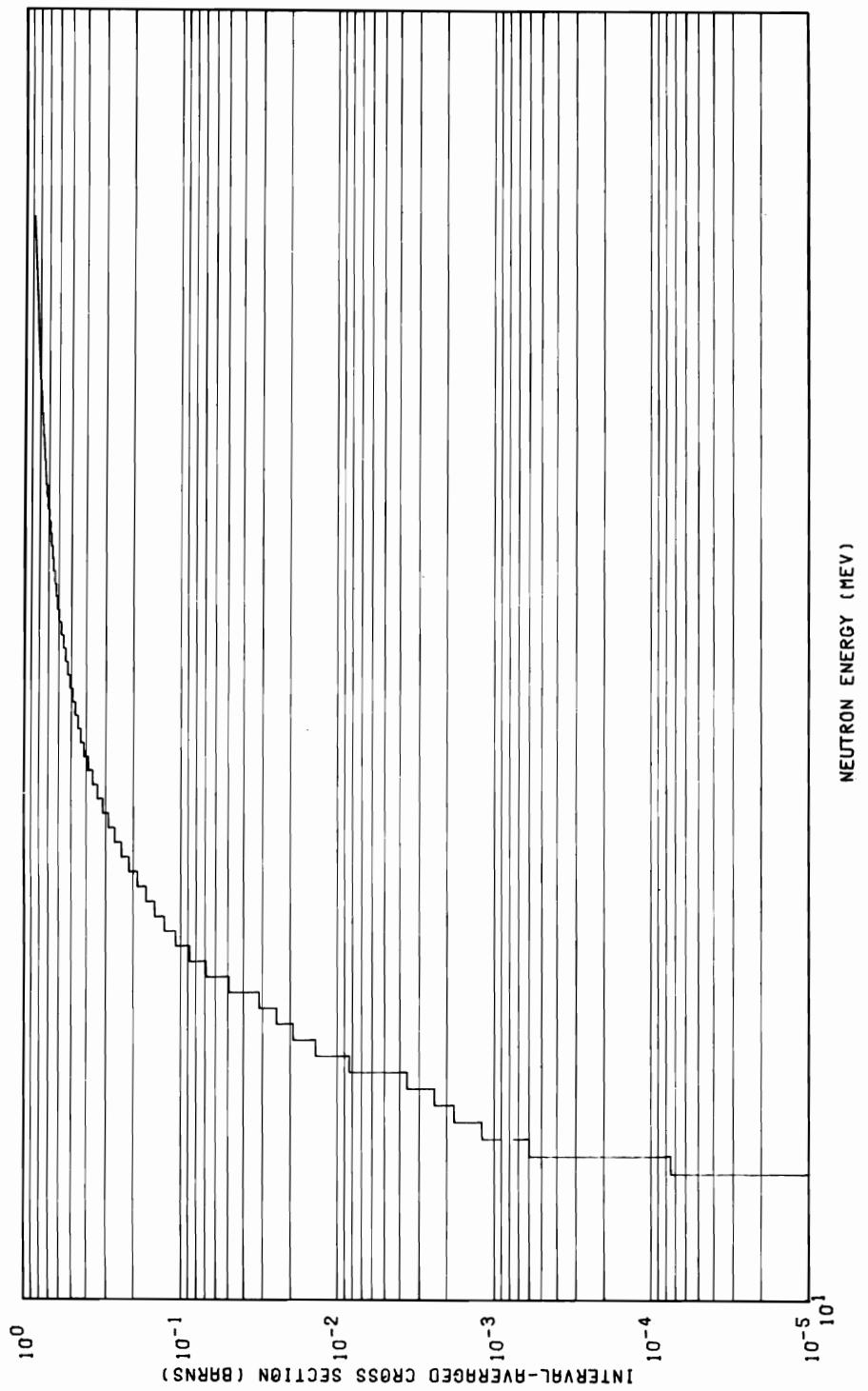
Neg 0695120-6

FIGURE B-17. $^{63}Cu(n,2n)^{62}Cu$

TABLE B-17

CU63(N,2N)CU62

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)
----

(547)	0.000	(548)	7.499-05	(549)	6.000-04	(550)	1.200-03	(551)	1.800-03
(552)	2.400-03	(553)	3.600-03	(554)	8.400-03	(555)	1.380-02	(556)	1.920-02
(557)	2.460-02	(558)	3.176-02	(559)	4.947-02	(560)	6.893-02	(561)	8.840-02
(562)	1.079-01	(563)	1.273-01	(564)	1.468-01	(565)	1.663-01	(566)	1.885-01
(567)	2.136-01	(568)	2.387-01	(569)	2.638-01	(570)	2.889-01	(571)	3.140-01
(572)	3.391-01	(573)	3.642-01	(574)	3.893-01	(575)	4.144-01	(576)	4.359-01
(577)	4.538-01	(578)	4.717-01	(579)	4.896-01	(580)	5.075-01	(581)	5.254-01
(582)	5.433-01	(583)	5.612-01	(584)	5.791-01	(585)	5.970-01	(586)	6.121-01
(587)	6.243-01	(588)	6.365-01	(589)	6.487-01	(590)	6.609-01	(591)	6.731-01
(592)	6.853-01	(593)	6.975-01	(594)	7.097-01	(595)	7.219-01	(596)	7.322-01
(597)	7.407-01	(598)	7.492-01	(599)	7.577-01	(600)	7.662-01	(601)	7.747-01
(602)	7.832-01	(603)	7.917-01	(604)	8.002-01	(605)	8.087-01	(606)	8.154-01
(607)	8.203-01	(608)	8.252-01	(609)	8.301-01	(610)	8.350-01	(611)	8.399-01
(612)	8.448-01	(613)	8.497-01	(614)	8.546-01	(615)	8.595-01	(616)	8.650-01
(617)	3.442-20	(618)	1.000+00	(619)	8.770-01	(620)	8.830-01	( )	
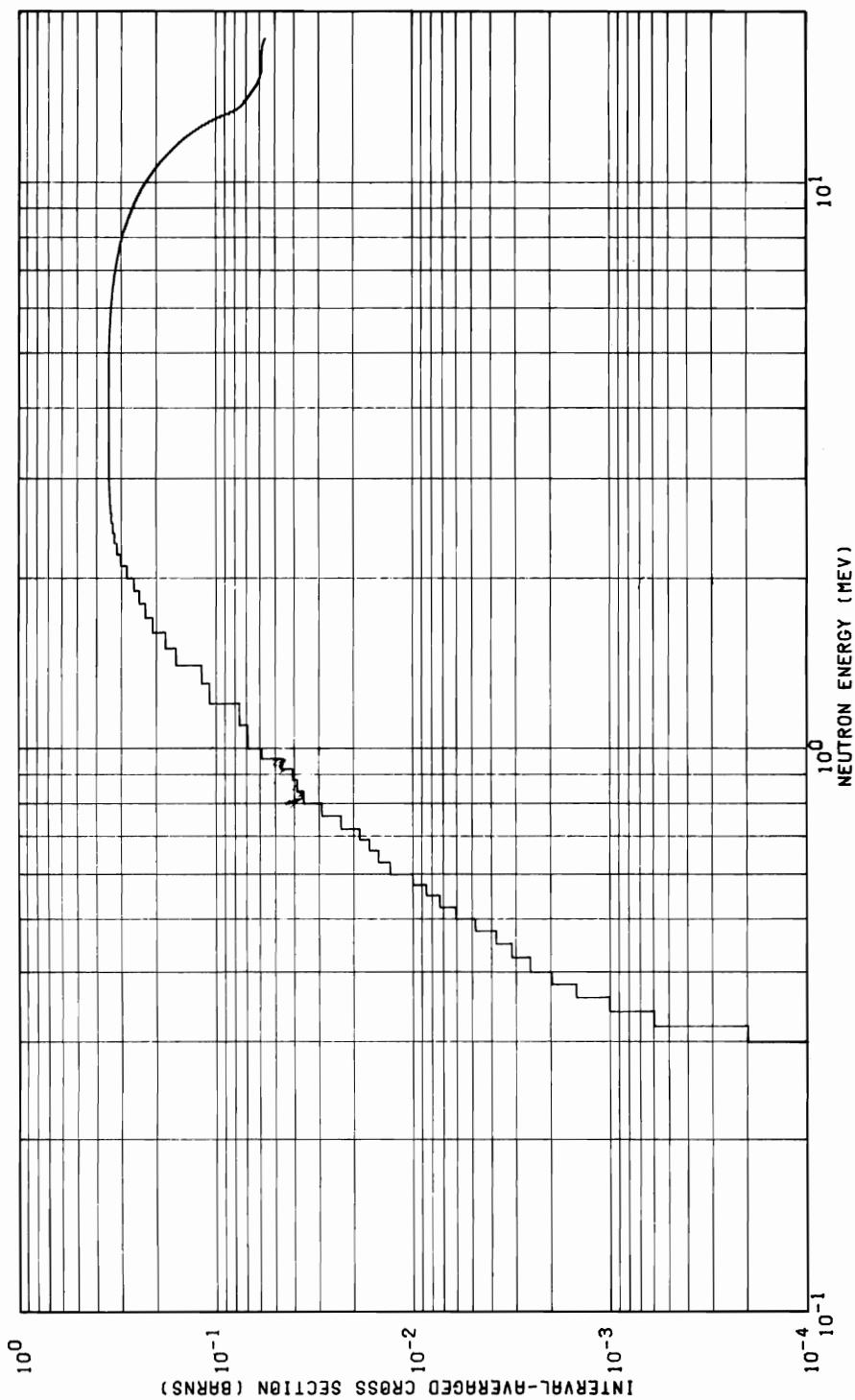
FIGURE B-18. $^{115}In(n,n')^{115m}In$

Neg 0695120-1

TABLE B-18

IN115(N,N')IN115M

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(426)	0.000	(427)	2.000-04	(428)	6.000-04	(429)	1.013-03	(430)	1.500-03
(431)	2.000-03	(432)	2.562-03	(433)	3.187-03	(434)	3.825-03	(435)	4.875-03
(436)	6.125-03	(437)	7.375-03	(438)	8.625-03	(439)	1.008-02	(440)	1.315-02
(441)	1.510-02	(442)	1.675-02	(443)	1.881-02	(444)	2.341-02	(445)	2.930-02
(446)	3.625-02	(447)	3.900-02	(448)	4.100-02	(449)	4.650-02	(450)	5.900-02
(451)	6.945-02	(452)	7.661-02	(453)	1.089-01	(454)	1.190-01	(455)	1.599-01
(456)	1.809-01	(457)	2.103-01	(458)	2.293-01	(459)	2.460-01	(460)	2.614-01
(461)	2.837-01	(462)	3.040-01	(463)	3.188-01	(464)	3.268-01	(465)	3.336-01
(466)	3.390-01	(467)	3.425-01	(468)	3.450-01	(469)	3.467-01	(470)	3.482-01
(471)	3.493-01	(472)	3.499-01	(473)	3.504-01	(474)	3.507-01	(475)	3.509-01
(476)	3.510-01	(477)	3.510-01	(478)	3.510-01	(479)	3.509-01	(480)	3.508-01
(481)	3.507-01	(482)	3.504-01	(483)	3.501-01	(484)	3.498-01	(485)	3.495-01
(486)	3.493-01	(487)	3.490-01	(488)	3.487-01	(489)	3.484-01	(490)	3.481-01
(491)	3.477-01	(492)	3.471-01	(493)	3.465-01	(494)	3.459-01	(495)	3.453-01
(496)	3.445-01	(497)	3.435-01	(498)	3.425-01	(499)	3.413-01	(500)	3.401-01
(501)	3.387-01	(502)	3.372-01	(503)	3.357-01	(504)	3.341-01	(505)	3.326-01
(506)	3.308-01	(507)	3.289-01	(508)	3.269-01	(509)	3.249-01	(510)	3.230-01
(511)	3.208-01	(512)	3.184-01	(513)	3.160-01	(514)	3.136-01	(515)	3.112-01
(516)	3.068-01	(517)	3.064-01	(518)	3.040-01	(519)	3.017-01	(520)	2.993-01
(521)	2.969-01	(522)	2.943-01	(523)	2.908-01	(524)	2.871-01	(525)	2.834-01
(526)	2.799-01	(527)	2.766-01	(528)	2.733-01	(529)	2.700-01	(530)	2.667-01
(531)	2.632-01	(532)	2.596-01	(533)	2.560-01	(534)	2.524-01	(535)	2.488-01
(536)	2.451-01	(537)	2.413-01	(538)	2.375-01	(539)	2.337-01	(540)	2.299-01
(541)	2.259-01	(542)	2.216-01	(543)	2.174-01	(544)	2.131-01	(545)	2.089-01
(546)	2.046-01	(547)	2.004-01	(548)	1.961-01	(549)	1.919-01	(550)	1.876-01
(551)	1.834-01	(552)	1.791-01	(553)	1.749-01	(554)	1.706-01	(555)	1.664-01
(556)	1.621-01	(557)	1.579-01	(558)	1.536-01	(559)	1.494-01	(560)	1.451-01
(561)	1.407-01	(562)	1.361-01	(563)	1.315-01	(564)	1.269-01	(565)	1.243-01
(566)	1.177-01	(567)	1.131-01	(568)	1.085-01	(569)	1.039-01	(570)	9.930-02
(571)	9.464-02	(572)	8.991-02	(573)	8.518-02	(574)	8.057-02	(575)	7.796-02
(576)	7.620-02	(577)	7.460-02	(578)	7.305-02	(579)	7.180-02	(580)	7.060-02
(581)	6.950-02	(582)	6.850-02	(583)	6.750-02	(584)	6.650-02	(585)	6.550-02
(586)	6.455-02	(587)	6.376-02	(588)	6.294-02	(589)	6.211-02	(590)	6.146-02

TABLE B-18 (CONTINUED)

IN115(N,N')IN115M

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)
----

(591)	6.097-02	(592)	6.049-02	(593)	6.002-02	(594)	5.970-02	(595)	5.940-02
(596)	5.910-02	(597)	5.880-02	(598)	5.857-02	(599)	5.873-02	(600)	5.897-02
(601)	5.916-02	(602)	5.911-02	(603)	5.901-02	(604)	5.892-02	(605)	5.883-02
(606)	5.873-02	(607)	5.864-02	(608)	5.854-02	(609)	5.845-02	(610)	5.836-02
(611)	5.826-02	(612)	5.817-02	(613)	5.808-02	(614)	5.793-02	(615)	5.764-02
(616)	5.734-02	(617)	5.704-02	(618)	5.675-02	(619)	5.645-02	(620)	5.615-02
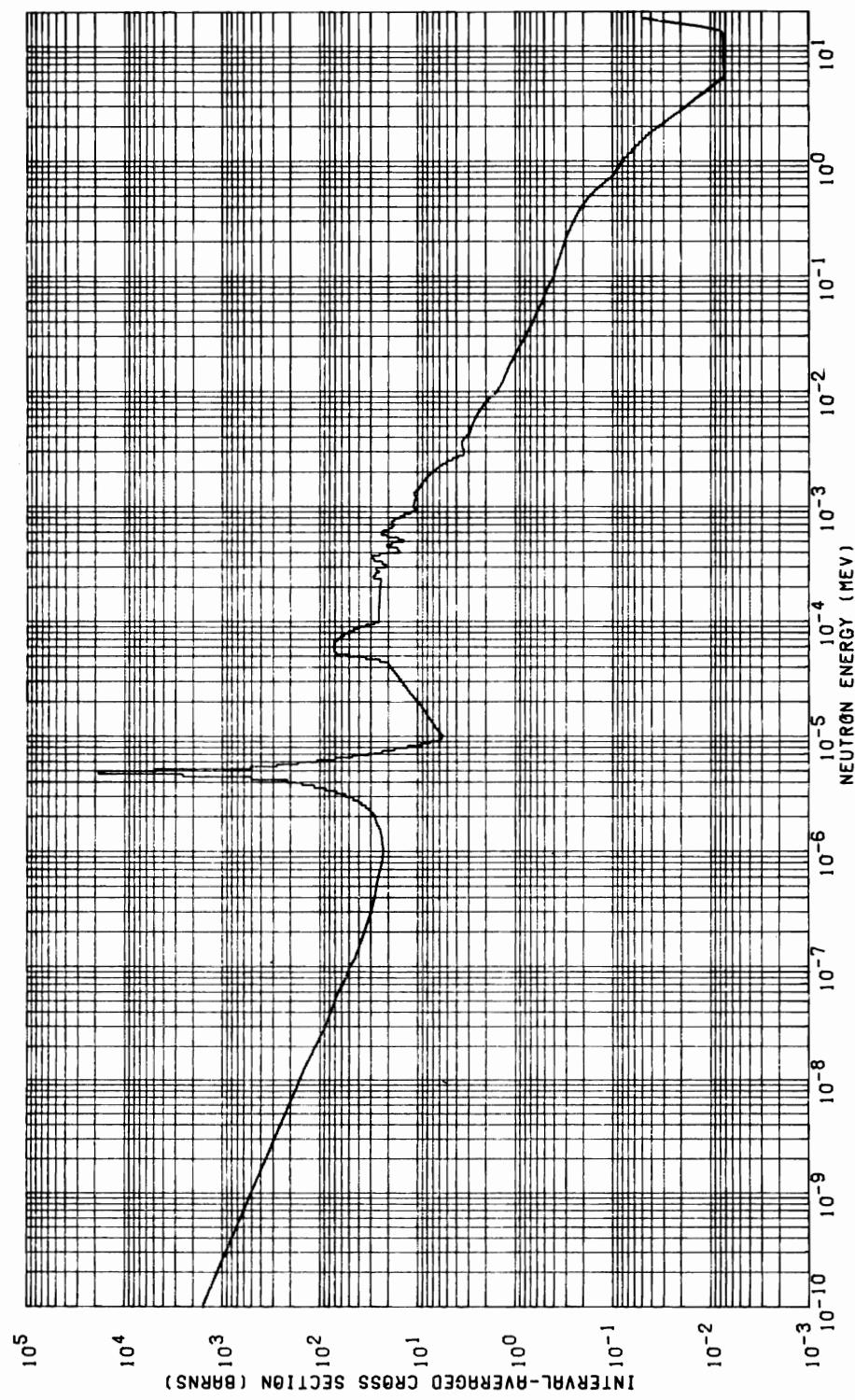
FIGURE B-19. ^{197}Au(n,γ)^{198}Au

Neg 0694115-6

B-55

TABLE B-19

AU197(N,G)AU198

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

(1) 1.586+03	(2) 1.549+03	(3) 1.514+03	(4) 1.482+03	(5) 1.444+03
(6) 1.402+03	(7) 1.364+03	(8) 1.328+03	(9) 1.290+03	(10) 1.250+03
(11) 1.214+03	(12) 1.181+03	(13) 1.150+03	(14) 1.122+03	(15) 1.095+03
(16) 1.071+03	(17) 1.048+03	(18) 1.021+03	(19) 9.913+02	(20) 9.685+02
(21) 9.432+02	(22) 9.123+02	(23) 8.842+02	(24) 8.585+02	(25) 8.350+02
(26) 8.133+02	(27) 7.908+02	(28) 7.679+02	(29) 7.468+02	(30) 7.274+02
(31) 7.095+02	(32) 6.928+02	(33) 6.772+02	(34) 6.626+02	(35) 6.476+02
(36) 6.324+02	(37) 6.182+02	(38) 6.049+02	(39) 5.904+02	(40) 5.751+02
(41) 5.609+02	(42) 5.477+02	(43) 5.354+02	(44) 5.238+02	(45) 5.130+02
(46) 5.017+02	(47) 4.899+02	(48) 4.788+02	(49) 4.685+02	(50) 4.566+02
(51) 4.433+02	(52) 4.312+02	(53) 4.200+02	(54) 4.080+02	(55) 3.954+02
(56) 3.839+02	(57) 3.734+02	(58) 3.637+02	(59) 3.547+02	(60) 3.464+02
(61) 3.386+02	(62) 3.313+02	(63) 3.229+02	(64) 3.135+02	(65) 3.063+02
(66) 2.973+02	(67) 2.885+02	(68) 2.796+02	(69) 2.715+02	(70) 2.640+02
(71) 2.572+02	(72) 2.501+02	(73) 2.424+02	(74) 2.362+02	(75) 2.300+02
(76) 2.244+02	(77) 2.191+02	(78) 2.141+02	(79) 2.095+02	(80) 2.048+02
(81) 2.000+02	(82) 1.955+02	(83) 1.913+02	(84) 1.867+02	(85) 1.819+02
(86) 1.774+02	(87) 1.732+02	(88) 1.693+02	(89) 1.657+02	(90) 1.622+02
(91) 1.589+02	(92) 1.555+02	(93) 1.523+02	(94) 1.494+02	(95) 1.457+02
(96) 1.413+02	(97) 1.371+02	(98) 1.331+02	(99) 1.288+02	(100) 1.245+02
(101) 1.205+02	(102) 1.170+02	(103) 1.136+02	(104) 1.106+02	(105) 1.076+02
(106) 1.047+02	(107) 1.021+02	(108) 9.967+01	(109) 9.500+01	(110) 9.300+01
(111) 9.025+01	(112) 8.715+01	(113) 8.459+01	(114) 8.235+01	(115) 8.025+01
(116) 7.845+01	(117) 7.655+01	(118) 7.457+01	(119) 7.272+01	(120) 7.107+01
(121) 6.952+01	(122) 6.807+01	(123) 6.672+01	(124) 6.547+01	(125) 6.402+01
(126) 6.260+01	(127) 6.051+01	(128) 5.807+01	(129) 5.713+01	(130) 5.548+01
(131) 5.411+01	(132) 5.271+01	(133) 5.102+01	(134) 5.071+01	(135) 5.014+01
(136) 4.858+01	(137) 4.697+01	(138) 4.560+01	(139) 4.425+01	(140) 4.303+01
(141) 4.200+01	(142) 4.099+01	(143) 4.010+01	(144) 3.914+01	(145) 3.812+01
(146) 3.722+01	(147) 3.640+01	(148) 3.562+01	(149) 3.492+01	(150) 3.427+01
(151) 3.365+01	(152) 3.305+01	(153) 3.237+01	(154) 3.163+01	(155) 3.104+01
(156) 3.045+01	(157) 2.977+01	(158) 2.915+01	(159) 2.860+01	(160) 2.811+01
(161) 2.769+01	(162) 2.729+01	(163) 2.695+01	(164) 2.669+01	(165) 2.643+01

TABLE B-19 (CONTINUED)

AU197(N,G)AU198

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

( )	value	( )	value	( )	value	( )	value	( )	value
(166)	2.616+01	(167)	2.590+01	(168)	2.564+01	(169)	2.538+01	(170)	2.509+01
(171)	2.478+01	(172)	2.446+01	(173)	2.415+01	(174)	2.378+01	(175)	2.336+01
(176)	2.303+01	(177)	2.279+01	(178)	2.258+01	(179)	2.253+01	(180)	2.251+01
(181)	2.259+01	(182)	2.276+01	(183)	2.294+01	(184)	2.311+01	(185)	2.327+01
(186)	2.342+01	(187)	2.359+01	(188)	2.388+01	(189)	2.427+01	(190)	2.499+01
(191)	2.598+01	(192)	2.673+01	(193)	2.724+01	(194)	2.775+01	(195)	2.875+01
(196)	3.025+01	(197)	3.175+01	(198)	3.437+01	(199)	3.796+01	(200)	4.090+01
(201)	4.597+01	(202)	5.492+01	(203)	6.800+01	(204)	8.782+01	(205)	1.155+02
(206)	1.533+02	(207)	2.174+02	(208)	5.088+02	(209)	2.567+03	(210)	1.868+04
(211)	4.752+03	(212)	5.090+02	(213)	2.746+02	(214)	1.671+02	(215)	1.058+02
(216)	6.897+01	(217)	4.624+01	(218)	3.172+01	(219)	2.298+01	(220)	1.707+01
(221)	1.256+01	(222)	9.219+00	(223)	7.490+00	(224)	5.938+00	(225)	5.658+00
(226)	5.603+00	(227)	5.062+00	(228)	6.129+00	(229)	6.396+00	(230)	6.682+00
(231)	6.990+00	(232)	7.292+00	(233)	7.595+00	(234)	7.938+00	(235)	8.314+00
(236)	8.745+00	(237)	9.177+00	(238)	9.611+00	(239)	1.016+01	(240)	1.065+01
(241)	1.114+01	(242)	1.164+01	(243)	1.221+01	(244)	1.283+01	(245)	1.341+01
(246)	1.405+01	(247)	1.485+01	(248)	1.568+01	(249)	1.654+01	(250)	1.739+01
(251)	1.822+01	(252)	1.911+01	(253)	2.004+01	(254)	2.464+01	(255)	3.434+01
(256)	5.209+01	(257)	6.897+01	(258)	7.161+01	(259)	7.184+01	(260)	7.212+01
(261)	7.247+01	(262)	7.055+01	(263)	6.643+01	(264)	6.163+01	(265)	5.608+01
(266)	5.046+01	(267)	4.487+01	(268)	3.922+01	(269)	3.349+01	(270)	2.772+01
(271)	2.447+01	(272)	2.489+01	(273)	2.488+01	(274)	2.484+01	(275)	2.476+01
(276)	2.463+01	(277)	2.454+01	(278)	2.446+01	(279)	2.439+01	(280)	2.432+01
(281)	2.421+01	(282)	2.410+01	(283)	2.401+01	(284)	2.389+01	(285)	2.378+01
(286)	2.500+01	(287)	2.357+01	(288)	2.847+01	(289)	2.702+01	(290)	2.456+01
(291)	2.643+01	(292)	2.118+01	(293)	2.317+01	(294)	2.818+01	(295)	2.940+01
(296)	2.425+01	(297)	1.528+01	(298)	1.610+01	(299)	2.073+01	(300)	1.833+01
(301)	1.855+01	(302)	1.588+01	(303)	2.062+01	(304)	2.361+01	(305)	2.272+01
(306)	1.908+01	(307)	1.616+01	(308)	1.758+01	(309)	1.841+01	(310)	1.730+01
(311)	1.436+01	(312)	1.360+01	(313)	1.165+01	(314)	1.012+01	(315)	1.085+01
(316)	1.109+01	(317)	1.097+01	(318)	1.074+01	(319)	1.048+01	(320)	1.045+01
(321)	1.066+01	(322)	1.039+01	(323)	9.717+00	(324)	9.294+00	(325)	8.849+00
(326)	8.633+00	(327)	7.677+00	(328)	7.398+00	(329)	6.923+00	(330)	6.456+00

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TABLE B-19 (CONTINUED)

AU197(N,G)AU198

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(331)	6.000+00	(332)	5.551+00	(333)	5.008+00	(334)	4.573+00	(335)	3.846+00
(336)	3.360+00	(337)	3.401+00	(338)	3.492+00	(339)	3.533+00	(340)	3.506+00
(341)	3.385+00	(342)	3.177+00	(343)	2.939+00	(344)	2.873+00	(345)	2.814+00
(346)	2.757+00	(347)	2.697+00	(348)	2.635+00	(349)	2.572+00	(350)	2.504+00
(351)	2.431+00	(352)	2.356+00	(353)	2.282+00	(354)	2.193+00	(355)	2.095+00
(356)	1.998+00	(357)	1.899+00	(358)	1.798+00	(359)	1.699+00	(360)	1.604+00
(361)	1.532+00	(362)	1.480+00	(363)	1.434+00	(364)	1.390+00	(365)	1.348+00
(366)	1.308+00	(367)	1.270+00	(368)	1.236+00	(369)	1.197+00	(370)	1.159+00
(371)	1.123+00	(372)	1.085+00	(373)	1.045+00	(374)	1.013+00	(375)	9.885-01
(376)	9.642-01	(377)	9.398-01	(378)	9.096-01	(379)	8.747-01	(380)	8.455-01
(381)	8.115-01	(382)	7.766-01	(383)	7.503-01	(384)	7.248-01	(385)	6.995-01
(386)	6.742-01	(387)	6.528-01	(388)	6.354-01	(389)	6.179-01	(390)	6.007-01
(391)	5.841-01	(392)	5.677-01	(393)	5.513-01	(394)	5.352-01	(395)	5.222-01
(396)	5.124-01	(397)	5.023-01	(398)	4.926-01	(399)	4.813-01	(400)	4.683-01
(401)	4.553-01	(402)	4.423-01	(403)	4.294-01	(404)	4.176-01	(405)	4.057-01
(406)	3.967-01	(407)	3.912-01	(408)	3.859-01	(409)	3.806-01	(410)	3.730-01
(411)	3.640-01	(412)	3.567-01	(413)	3.493-01	(414)	3.406-01	(415)	3.322-01
(416)	3.259-01	(417)	3.190-01	(418)	3.121-01	(419)	3.061-01	(420)	2.997-01
(421)	2.936-01	(422)	2.879-01	(423)	2.805-01	(424)	2.718-01	(425)	2.658-01
(426)	2.583-01	(427)	2.489-01	(428)	2.404-01	(429)	2.316-01	(430)	2.237-01
(431)	2.157-01	(432)	2.062-01	(433)	1.952-01	(434)	1.857-01	(435)	1.779-01
(436)	1.694-01	(437)	1.604-01	(438)	1.519-01	(439)	1.438-01	(440)	1.355-01
(441)	1.271-01	(442)	1.189-01	(443)	1.113-01	(444)	1.026-01	(445)	9.694-02
(446)	9.342-02	(447)	9.038-02	(448)	8.725-02	(449)	8.431-02	(450)	8.165-02
(451)	7.703-02	(452)	7.007-02	(453)	6.357-02	(454)	5.823-02	(455)	5.337-02
(456)	4.915-02	(457)	4.587-02	(458)	4.276-02	(459)	3.924-02	(460)	3.606-02
(461)	3.316-02	(462)	3.077-02	(463)	2.874-02	(464)	2.692-02	(465)	2.521-02
(466)	2.356-02	(467)	2.209-02	(468)	2.072-02	(469)	1.956-02	(470)	1.845-02
(471)	1.757-02	(472)	1.689-02	(473)	1.621-02	(474)	1.548-02	(475)	1.477-02
(476)	1.413-02	(477)	1.355-02	(478)	1.297-02	(479)	1.238-02	(480)	1.179-02
(481)	1.132-02	(482)	1.096-02	(483)	1.061-02	(484)	1.025-02	(485)	9.885-03
(486)	9.527-03	(487)	9.225-03	(488)	8.932-03	(489)	8.655-03	(490)	8.382-03
(491)	8.124-03	(492)	7.883-03	(493)	7.642-03	(494)	7.483-03	(495)	7.326-03

TABLE B-19 (CONTINUED)

AU197(N,G)AU198

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(496) 7.257-03	(497) 7.277-03	(498) 7.302-03	(499) 7.324-03	(500) 7.344-03
(501) 7.304-03	(502) 7.391-03	(503) 7.411-03	(504) 7.405-03	(505) 7.404-03
(506) 7.411-03	(507) 7.416-03	(508) 7.423-03	(509) 7.431-03	(510) 7.446-03
(511) 7.456-03	(512) 7.466-03	(513) 7.476-03	(514) 7.492-03	(515) 7.502-03
(516) 7.509-03	(517) 7.506-03	(518) 7.508-03	(519) 7.505-03	(520) 7.502-03
(521) 7.499-03	(522) 7.502-03	(523) 7.499-03	(524) 7.496-03	(525) 7.493-03
(526) 7.496-03	(527) 7.493-03	(528) 7.491-03	(529) 7.489-03	(530) 7.492-03
(531) 7.490-03	(532) 7.488-03	(533) 7.486-03	(534) 7.490-03	(535) 7.489-03
(536) 7.487-03	(537) 7.486-03	(538) 7.491-03	(539) 7.490-03	(540) 7.489-03
(541) 7.489-03	(542) 7.494-03	(543) 7.494-03	(544) 7.495-03	(545) 7.495-03
(546) 7.501-03	(547) 7.502-03	(548) 7.503-03	(549) 7.505-03	(550) 7.513-03
(551) 7.515-03	(552) 7.517-03	(553) 7.519-03	(554) 7.528-03	(555) 7.531-03
(556) 7.535-03	(557) 7.538-03	(558) 7.548-03	(559) 7.552-03	(560) 7.557-03
(561) 7.562-03	(562) 7.573-03	(563) 7.579-03	(564) 7.585-03	(565) 7.591-03
(566) 7.603-03	(567) 7.610-03	(568) 7.618-03	(569) 7.625-03	(570) 7.640-03
(571) 7.648-03	(572) 7.658-03	(573) 7.668-03	(574) 7.685-03	(575) 7.696-03
(576) 7.765-03	(577) 7.953-03	(578) 8.123-03	(579) 8.296-03	(580) 8.470-03
(581) 8.713-03	(582) 9.025-03	(583) 9.340-03	(584) 9.659-03	(585) 9.982-03
(586) 1.058-02	(587) 1.084-02	(588) 1.132-02	(589) 1.180-02	(590) 1.228-02
(591) 1.288-02	(592) 1.359-02	(593) 1.430-02	(594) 1.503-02	(595) 1.576-02
(596) 1.658-02	(597) 1.748-02	(598) 1.839-02	(599) 1.931-02	(600) 2.025-02
(601) 2.123-02	(602) 2.226-02	(603) 2.331-02	(604) 2.437-02	(605) 2.544-02
(606) 2.670-02	(607) 2.814-02	(608) 2.960-02	(609) 3.107-02	(610) 3.257-02
(611) 3.412-02	(612) 3.574-02	(613) 3.737-02	(614) 3.904-02	(615) 4.072-02
(616) 4.264-02	(617) 4.478-02	(618) 4.694-02	(619) 4.909-02	(620) 5.128-02
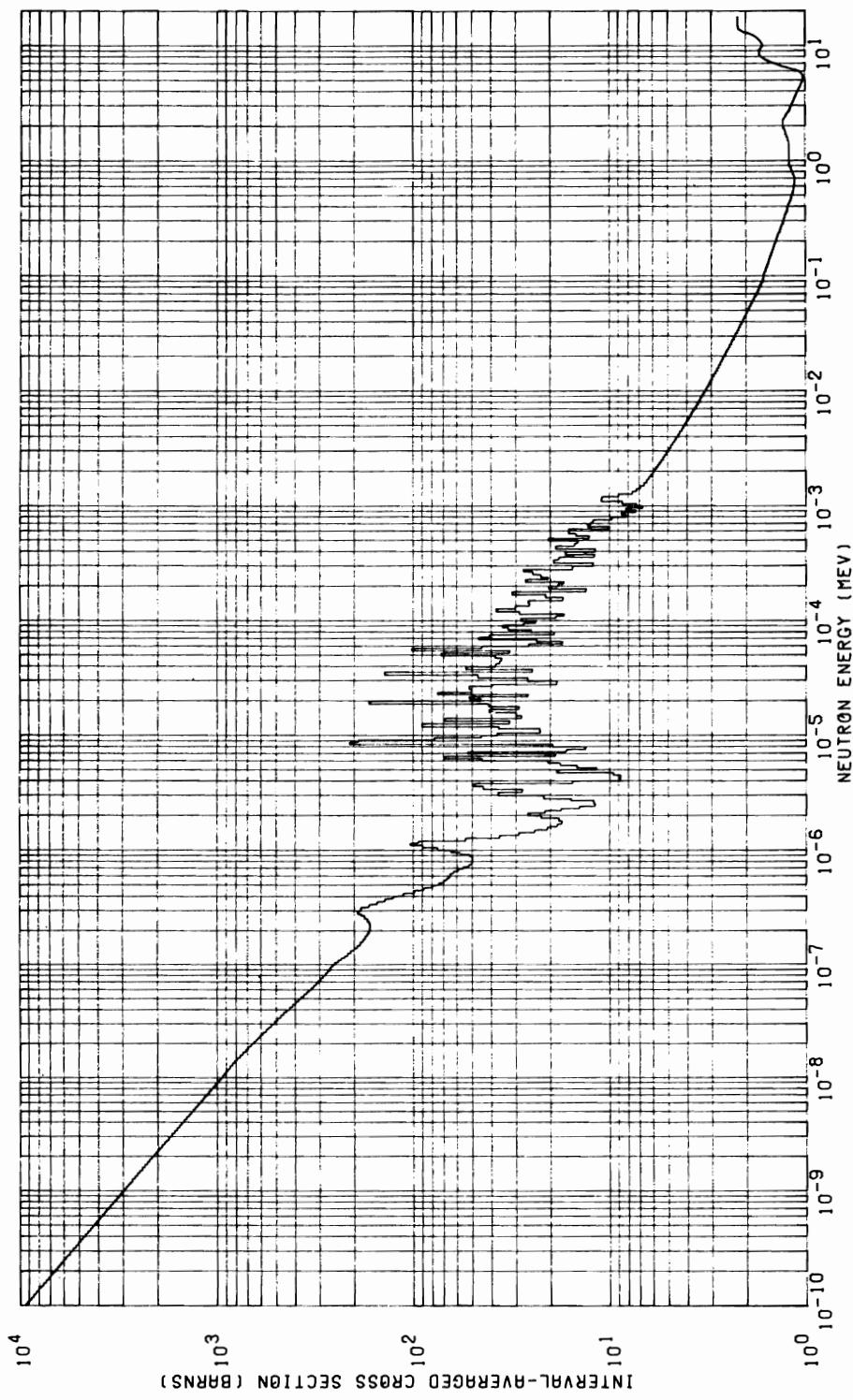
FIGURE B-20. $^{235}U(n,f)$ F.P.

Neg 0694116-3

TABLE B-20

U235(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)
----

(1)	9.354+03	(2)	9.134+03	(3)	8.929+03	(4)	8.737+03	(5)	8.514+03
(6)	8.267+03	(7)	8.040+03	(8)	7.831+03	(9)	7.607+03	(10)	7.373+03
(11)	7.159+03	(12)	6.963+03	(13)	6.782+03	(14)	6.615+03	(15)	6.459+03
(16)	6.314+03	(17)	6.178+03	(18)	6.020+03	(19)	5.846+03	(20)	5.711+03
(21)	5.562+03	(22)	5.379+03	(23)	5.214+03	(24)	5.062+03	(25)	4.924+03
(26)	4.796+03	(27)	4.663+03	(28)	4.528+03	(29)	4.404+03	(30)	4.289+03
(31)	4.183+03	(32)	4.085+03	(33)	3.993+03	(34)	3.907+03	(35)	3.819+03
(36)	3.729+03	(37)	3.645+03	(38)	3.567+03	(39)	3.482+03	(40)	3.391+03
(41)	3.307+03	(42)	3.229+03	(43)	3.157+03	(44)	3.089+03	(45)	3.025+03
(46)	2.958+03	(47)	2.889+03	(48)	2.824+03	(49)	2.763+03	(50)	2.692+03
(51)	2.614+03	(52)	2.543+03	(53)	2.476+03	(54)	2.406+03	(55)	2.332+03
(56)	2.264+03	(57)	2.202+03	(58)	2.145+03	(59)	2.092+03	(60)	2.042+03
(61)	1.997+03	(62)	1.954+03	(63)	1.904+03	(64)	1.849+03	(65)	1.806+03
(66)	1.759+03	(67)	1.701+03	(68)	1.649+03	(69)	1.601+03	(70)	1.557+03
(71)	1.517+03	(72)	1.475+03	(73)	1.432+03	(74)	1.393+03	(75)	1.356+03
(76)	1.323+03	(77)	1.292+03	(78)	1.263+03	(79)	1.236+03	(80)	1.208+03
(81)	1.179+03	(82)	1.153+03	(83)	1.128+03	(84)	1.101+03	(85)	1.072+03
(86)	1.046+03	(87)	1.021+03	(88)	9.983+02	(89)	9.768+02	(90)	9.567+02
(91)	9.379+02	(92)	9.197+02	(93)	9.015+02	(94)	8.833+02	(95)	8.608+02
(96)	8.370+02	(97)	8.142+02	(98)	7.914+02	(99)	7.670+02	(100)	7.410+02
(101)	7.155+02	(102)	6.930+02	(103)	6.710+02	(104)	6.505+02	(105)	6.330+02
(106)	6.172+02	(107)	6.022+02	(108)	5.839+02	(109)	5.640+02	(110)	5.482+02
(111)	5.315+02	(112)	5.105+02	(113)	4.914+02	(114)	4.746+02	(115)	4.589+02
(116)	4.436+02	(117)	4.280+02	(118)	4.125+02	(119)	3.985+02	(120)	3.855+02
(121)	3.731+02	(122)	3.614+02	(123)	3.506+02	(124)	3.409+02	(125)	3.312+02
(126)	3.217+02	(127)	3.130+02	(128)	3.050+02	(129)	2.972+02	(130)	2.490+02
(131)	2.811+02	(132)	2.737+02	(133)	2.680+02	(134)	2.635+02	(135)	2.593+02
(136)	2.520+02	(137)	2.420+02	(138)	2.329+02	(139)	2.246+02	(140)	2.164+02
(141)	2.063+02	(142)	2.008+02	(143)	1.936+02	(144)	1.867+02	(145)	1.807+02
(146)	1.760+02	(147)	1.720+02	(148)	1.685+02	(149)	1.668+02	(150)	1.664+02
(151)	1.663+02	(152)	1.684+02	(153)	1.716+02	(154)	1.782+02	(155)	1.847+02
(156)	1.527+02	(157)	1.858+02	(158)	1.641+02	(159)	1.524+02	(160)	1.392+02
(161)	1.264+02	(162)	1.125+02	(163)	9.850+01	(164)	8.800+01	(165)	8.000+01

TABLE B-20 (CONTINUED)

U235(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(166) 7.400+01	(167) 7.000+01	(168) 6.725+01	(169) 6.575+01	(170) 6.466+01
(171) 6.226+01	(172) 5.890+01	(173) 5.554+01	(174) 5.175+01	(175) 5.030+01
(176) 5.007+01	(177) 5.026+01	(178) 5.139+01	(179) 5.753+01	(180) 6.451+01
(181) 7.541+01	(182) 9.022+01	(183) 1.041+02	(184) 9.413+01	(185) 5.402+01
(186) 3.631+01	(187) 2.895+01	(188) 2.406+01	(189) 2.075+01	(190) 1.850+01
(191) 1.750+01	(192) 1.830+01	(193) 2.263+01	(194) 2.625+01	(195) 2.133+01
(196) 1.760+01	(197) 1.420+01	(198) 1.185+01	(199) 1.207+01	(200) 1.590+01
(201) 2.185+01	(202) 3.727+01	(203) 2.775+01	(204) 4.442+01	(205) 5.004+01
(206) 1.545+01	(207) 8.800+00	(208) 8.800+00	(209) 9.640+00	(210) 1.877+01
(211) 1.169+01	(212) 1.483+01	(213) 1.800+01	(214) 2.078+01	(215) 4.500+01
(216) 7.025+01	(217) 1.884+01	(218) 5.312+01	(219) 1.659+01	(220) 1.320+01
(221) 1.967+01	(222) 2.130+02	(223) 1.896+02	(224) 7.765+01	(225) 4.498+01
(226) 3.712+01	(227) 2.252+01	(228) 2.285+01	(229) 3.703+01	(230) 9.087+01
(231) 3.231+01	(232) 7.012+01	(233) 2.803+01	(234) 3.014+01	(235) 4.122+01
(236) 2.892+01	(237) 4.143+01	(238) 1.693+02	(239) 4.519+01	(240) 5.217+01
(241) 2.600+01	(242) 7.560+01	(243) 4.997+01	(244) 5.185+01	(245) 3.950+01
(246) 1.852+01	(247) 2.640+01	(248) 4.712+01	(249) 1.409+02	(250) 2.467+01
(251) 5.438+01	(252) 3.787+01	(253) 3.623+01	(254) 3.560+01	(255) 3.856+01
(256) 7.272+01	(257) 3.221+01	(258) 1.025+02	(259) 4.467+01	(260) 2.575+01
(261) 1.739+01	(262) 2.381+01	(263) 4.675+01	(264) 4.094+01	(265) 1.913+01
(266) 2.541+01	(267) 3.318+01	(268) 3.521+01	(269) 2.748+01	(270) 2.385+01
(271) 2.845+01	(272) 1.876+01	(273) 1.709+01	(274) 2.907+01	(275) 3.812+01
(276) 3.013+01	(277) 2.560+01	(278) 2.602+01	(279) 1.723+01	(280) 2.140+01
(281) 3.166+01	(282) 1.314+01	(283) 2.063+01	(284) 1.825+01	(285) 1.716+01
(286) 2.700+01	(287) 2.060+01	(288) 2.258+01	(289) 2.477+01	(290) 2.769+01
(291) 1.546+01	(292) 1.212+01	(293) 1.944+01	(294) 1.816+01	(295) 1.190+01
(296) 1.658+01	(297) 1.182+01	(298) 1.900+01	(299) 1.503+01	(300) 1.458+01
(301) 2.064+01	(302) 1.267+01	(303) 1.494+01	(304) 1.627+01	(305) 1.615+01
(306) 9.991+00	(307) 1.302+01	(308) 1.243+01	(309) 1.213+01	(310) 9.694+00
(311) 8.221+00	(312) 8.729+00	(313) 7.311+00	(314) 8.290+00	(315) 6.720+00
(316) 7.312+00	(317) 8.687+00	(318) 1.110+01	(319) 1.096+01	(320) 8.961+00
(321) 7.623+00	(322) 7.269+00	(323) 6.914+00	(324) 6.619+00	(325) 6.438+00
(326) 6.278+00	(327) 6.129+00	(328) 6.061+00	(329) 5.878+00	(330) 5.764+00

TABLE B-20 (CONTINUED)

U235(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(index)	value	(index)	value	(index)	value	(index)	value	(index)	value
(331)	5.653+00	(332)	5.558+00	(333)	5.445+00	(334)	5.321+00	(335)	5.221+00
(336)	5.117+00	(337)	4.984+00	(338)	4.861+00	(339)	4.751+00	(340)	4.647+00
(341)	4.557+00	(342)	4.461+00	(343)	4.361+00	(344)	4.270+00	(345)	4.190+00
(346)	4.115+00	(347)	4.044+00	(348)	3.975+00	(349)	3.911+00	(350)	3.843+00
(351)	3.782+00	(352)	3.722+00	(353)	3.663+00	(354)	3.595+00	(355)	3.529+00
(356)	3.468+00	(357)	3.415+00	(358)	3.364+00	(359)	3.315+00	(360)	3.266+00
(361)	3.215+00	(362)	3.165+00	(363)	3.118+00	(364)	3.076+00	(365)	3.025+00
(366)	2.967+00	(367)	2.912+00	(368)	2.864+00	(369)	2.812+00	(370)	2.756+00
(371)	2.705+00	(372)	2.656+00	(373)	2.614+00	(374)	2.573+00	(375)	2.534+00
(376)	2.497+00	(377)	2.463+00	(378)	2.423+00	(379)	2.381+00	(380)	2.348+00
(381)	2.311+00	(382)	2.265+00	(383)	2.221+00	(384)	2.184+00	(385)	2.150+00
(386)	2.114+00	(387)	2.076+00	(388)	2.040+00	(389)	2.007+00	(390)	1.975+00
(391)	1.947+00	(392)	1.924+00	(393)	1.899+00	(394)	1.873+00	(395)	1.845+00
(396)	1.817+00	(397)	1.790+00	(398)	1.768+00	(399)	1.744+00	(400)	1.722+00
(401)	1.701+00	(402)	1.679+00	(403)	1.656+00	(404)	1.644+00	(405)	1.636+00
(406)	1.625+00	(407)	1.610+00	(408)	1.595+00	(409)	1.578+00	(410)	1.559+00
(411)	1.541+00	(412)	1.524+00	(413)	1.508+00	(414)	1.491+00	(415)	1.472+00
(416)	1.454+00	(417)	1.437+00	(418)	1.421+00	(419)	1.406+00	(420)	1.392+00
(421)	1.379+00	(422)	1.366+00	(423)	1.350+00	(424)	1.332+00	(425)	1.318+00
(426)	1.302+00	(427)	1.285+00	(428)	1.272+00	(429)	1.256+00	(430)	1.240+00
(431)	1.229+00	(432)	1.217+00	(433)	1.199+00	(434)	1.185+00	(435)	1.174+00
(436)	1.164+00	(437)	1.155+00	(438)	1.148+00	(439)	1.144+00	(440)	1.139+00
(441)	1.134+00	(442)	1.132+00	(443)	1.139+00	(444)	1.150+00	(445)	1.164+00
(446)	1.179+00	(447)	1.194+00	(448)	1.207+00	(449)	1.214+00	(450)	1.218+00
(451)	1.220+00	(452)	1.220+00	(453)	1.220+00	(454)	1.221+00	(455)	1.227+00
(456)	1.238+00	(457)	1.253+00	(458)	1.268+00	(459)	1.283+00	(460)	1.299+00
(461)	1.310+00	(462)	1.310+00	(463)	1.305+00	(464)	1.285+00	(465)	1.264+00
(466)	1.245+00	(467)	1.225+00	(468)	1.208+00	(469)	1.197+00	(470)	1.186+00
(471)	1.176+00	(472)	1.167+00	(473)	1.157+00	(474)	1.148+00	(475)	1.140+00
(476)	1.131+00	(477)	1.123+00	(478)	1.115+00	(479)	1.107+00	(480)	1.099+00
(481)	1.092+00	(482)	1.084+00	(483)	1.077+00	(484)	1.070+00	(485)	1.063+00
(486)	1.050+00	(487)	1.050+00	(488)	1.044+00	(489)	1.038+00	(490)	1.032+00
(491)	1.030+00	(492)	1.030+00	(493)	1.030+00	(494)	1.030+00	(495)	1.030+00

TABLE B-20 (CONTINUED)

U235(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(496) 1.036+00	(497) 1.047+00	(498) 1.057+00	(499) 1.067+00	(500) 1.078+00
(501) 1.089+00	(502) 1.122+00	(503) 1.161+00	(504) 1.201+00	(505) 1.241+00
(506) 1.280+00	(507) 1.320+00	(508) 1.356+00	(509) 1.389+00	(510) 1.421+00
(511) 1.453+00	(512) 1.486+00	(513) 1.518+00	(514) 1.551+00	(515) 1.578+00
(516) 1.597+00	(517) 1.616+00	(518) 1.635+00	(519) 1.655+00	(520) 1.674+00
(521) 1.693+00	(522) 1.712+00	(523) 1.721+00	(524) 1.722+00	(525) 1.723+00
(526) 1.724+00	(527) 1.725+00	(528) 1.727+00	(529) 1.728+00	(530) 1.729+00
(531) 1.729+00	(532) 1.721+00	(533) 1.711+00	(534) 1.702+00	(535) 1.692+00
(536) 1.683+00	(537) 1.673+00	(538) 1.664+00	(539) 1.654+00	(540) 1.645+00
(541) 1.643+00	(542) 1.649+00	(543) 1.655+00	(544) 1.661+00	(545) 1.667+00
(546) 1.673+00	(547) 1.680+00	(548) 1.687+00	(549) 1.692+00	(550) 1.697+00
(551) 1.704+00	(552) 1.712+00	(553) 1.720+00	(554) 1.728+00	(555) 1.736+00
(556) 1.745+00	(557) 1.755+00	(558) 1.765+00	(559) 1.775+00	(560) 1.785+00
(561) 1.797+00	(562) 1.812+00	(563) 1.827+00	(564) 1.842+00	(565) 1.860+00
(566) 1.880+00	(567) 1.902+00	(568) 1.925+00	(569) 1.945+00	(570) 1.962+00
(571) 1.996+00	(572) 2.045+00	(573) 2.078+00	(574) 2.094+00	(575) 2.111+00
(576) 2.127+00	(577) 2.143+00	(578) 2.159+00	(579) 2.176+00	(580) 2.192+00
(581) 2.201+00	(582) 2.203+00	(583) 2.205+00	(584) 2.207+00	(585) 2.209+00
(586) 2.211+00	(587) 2.213+00	(588) 2.215+00	(589) 2.217+00	(590) 2.219+00
(591) 2.220+00	(592) 2.220+00	(593) 2.220+00	(594) 2.220+00	(595) 2.220+00
(596) 2.220+00	(597) 2.220+00	(598) 2.220+00	(599) 2.220+00	(600) 2.220+00
(601) 2.220+00	(602) 2.220+00	(603) 2.220+00	(604) 2.220+00	(605) 2.220+00
(606) 2.220+00	(607) 2.220+00	(608) 2.220+00	(609) 2.220+00	(610) 2.220+00
(611) 2.220+00	(612) 2.220+00	(613) 2.220+00	(614) 2.220+00	(615) 2.220+00
(616) 2.220+00	(617) 2.220+00	(618) 2.220+00	(619) 2.220+00	(620) 2.220+00
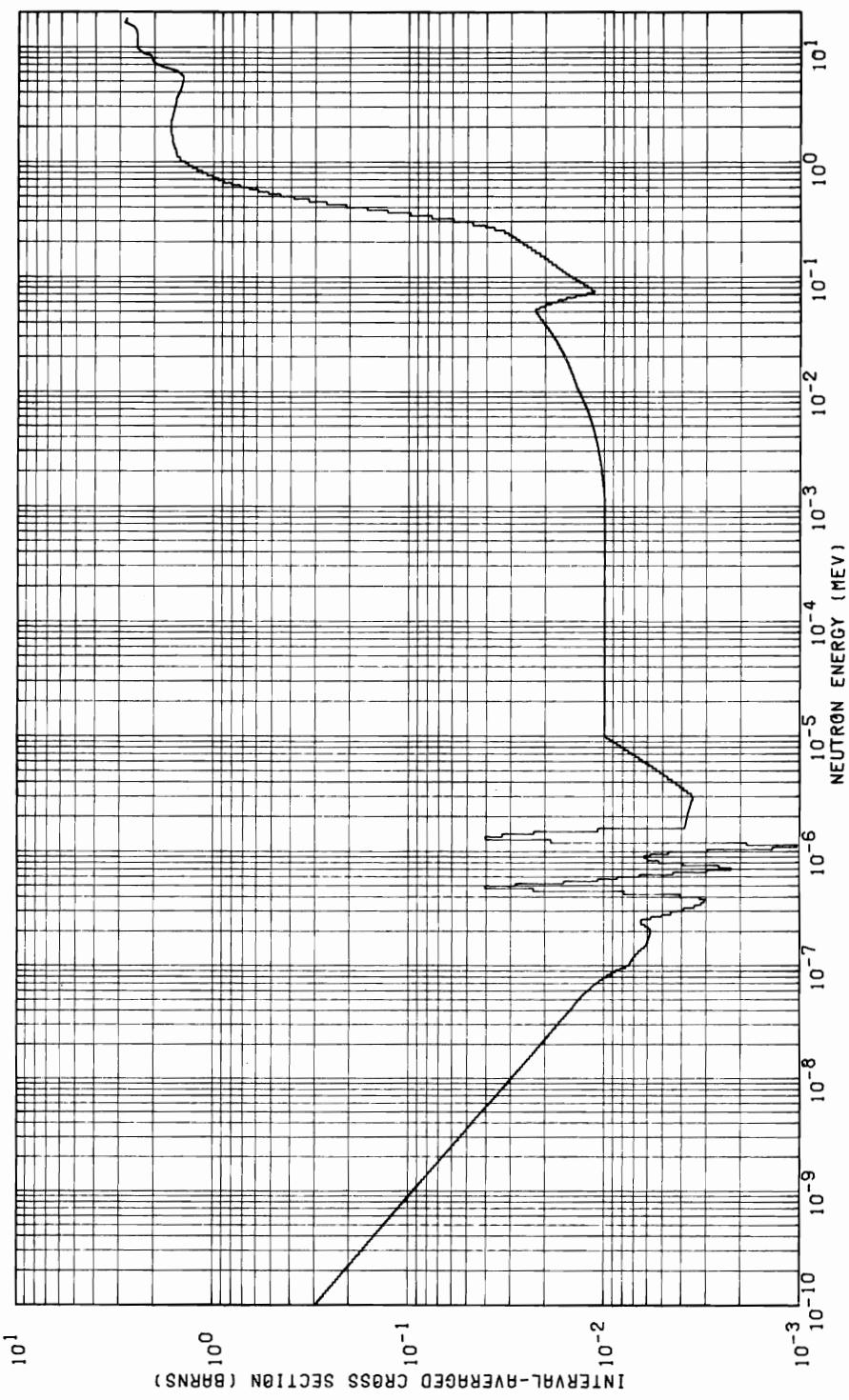
FIGURE B-21. ^{237}Np(n,f)F.P.

Neg 0695120-4

B-65

TABLE B-21
NP237(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(1)		(2)		(3)		(4)		(5)	
(1)	2.963-01	(2)	2.894-01	(3)	2.829-01	(4)	2.768-01	(5)	2.697-01
(6)	2.619-01	(7)	2.547-01	(8)	2.481-01	(9)	2.410-01	(10)	2.336-01
(11)	2.268-01	(12)	2.206-01	(13)	2.149-01	(14)	2.095-01	(15)	2.046-01
(16)	2.000-01	(17)	1.957-01	(18)	1.907-01	(19)	1.852-01	(20)	1.809-01
(21)	1.762-01	(22)	1.704-01	(23)	1.652-01	(24)	1.604-01	(25)	1.560-01
(26)	1.519-01	(27)	1.477-01	(28)	1.434-01	(29)	1.395-01	(30)	1.359-01
(31)	1.325-01	(32)	1.294-01	(33)	1.265-01	(34)	1.238-01	(35)	1.210-01
(36)	1.181-01	(37)	1.155-01	(38)	1.130-01	(39)	1.103-01	(40)	1.074-01
(41)	1.048-01	(42)	1.023-01	(43)	1.000-01	(44)	9.785-02	(45)	9.584-02
(46)	9.371-02	(47)	9.151-02	(48)	8.945-02	(49)	8.752-02	(50)	8.529-02
(51)	8.282-02	(52)	8.055-02	(53)	7.845-02	(54)	7.621-02	(55)	7.386-02
(56)	7.172-02	(57)	6.975-02	(58)	6.794-02	(59)	6.626-02	(60)	6.470-02
(61)	6.325-02	(62)	6.189-02	(63)	6.031-02	(64)	5.856-02	(65)	5.721-02
(66)	5.572-02	(67)	5.369-02	(68)	5.223-02	(69)	5.071-02	(70)	4.932-02
(71)	4.804-02	(72)	4.672-02	(73)	4.536-02	(74)	4.412-02	(75)	4.297-02
(76)	4.191-02	(77)	4.092-02	(78)	4.000-02	(79)	3.914-02	(80)	3.826-02
(81)	3.736-02	(82)	3.652-02	(83)	3.573-02	(84)	3.488-02	(85)	3.397-02
(86)	3.313-02	(87)	3.235-02	(88)	3.162-02	(89)	3.094-02	(90)	3.031-02
(91)	2.964-02	(92)	2.891-02	(93)	2.825-02	(94)	2.765-02	(95)	2.695-02
(96)	2.617-02	(97)	2.547-02	(98)	2.482-02	(99)	2.410-02	(100)	2.335-02
(101)	2.268-02	(102)	2.208-02	(103)	2.151-02	(104)	2.098-02	(105)	2.049-02
(106)	2.001-02	(107)	1.960-02	(108)	1.911-02	(109)	1.858-02	(110)	1.815-02
(111)	1.770-02	(112)	1.713-02	(113)	1.660-02	(114)	1.611-02	(115)	1.567-02
(116)	1.522-02	(117)	1.479-02	(118)	1.438-02	(119)	1.401-02	(120)	1.367-02
(121)	1.336-02	(122)	1.309-02	(123)	1.276-02	(124)	1.239-02	(125)	1.203-02
(126)	1.168-02	(127)	1.133-02	(128)	1.097-02	(129)	1.056-02	(130)	1.009-02
(131)	9.619-03	(132)	9.148-03	(133)	8.678-03	(134)	8.207-03	(135)	7.735-03
(136)	7.440-03	(137)	7.320-03	(138)	7.200-03	(139)	7.080-03	(140)	6.927-03
(141)	6.700-03	(142)	6.460-03	(143)	6.220-03	(144)	6.060-03	(145)	5.980-03
(146)	5.902-03	(147)	5.840-03	(148)	5.780-03	(149)	5.825-03	(150)	5.950-03
(151)	6.225-03	(152)	6.500-03	(153)	6.437-03	(154)	5.750-03	(155)	5.078-03
(156)	4.540-03	(157)	3.920-03	(158)	3.439-03	(159)	3.175-03	(160)	3.081-03
(161)	3.260-03	(162)	4.125-03	(163)	7.955-03	(164)	2.326-02	(165)	4.102-02

TABLE B-21 (CONTINUED)

NP237(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(166)	2.815-02	(167)	1.603-02	(168)	1.072-02	(169)	8.542-03	(170)	6.543-03
(171)	4.411-03	(172)	2.968-03	(173)	2.227-03	(174)	2.607-03	(175)	4.000-03
(176)	5.296-03	(177)	6.064-03	(178)	6.240-03	(179)	5.786-03	(180)	4.651-03
(181)	2.963-03	(182)	1.375-03	(183)	1.025-03	(184)	1.887-03	(185)	1.891-02
(186)	4.097-02	(187)	3.300-02	(188)	2.271-02	(189)	1.071-02	(190)	3.837-03
(191)	3.812-03	(192)	3.787-03	(193)	3.762-03	(194)	3.737-03	(195)	3.712-03
(196)	3.687-03	(197)	3.662-03	(198)	3.631-03	(199)	3.594-03	(200)	3.562-03
(201)	3.525-03	(202)	3.593-03	(203)	3.779-03	(204)	3.964-03	(205)	4.150-03
(206)	4.336-03	(207)	4.545-03	(208)	4.777-03	(209)	5.009-03	(210)	5.241-03
(211)	5.473-03	(212)	5.705-03	(213)	5.937-03	(214)	6.170-03	(215)	6.425-03
(216)	6.704-03	(217)	6.982-03	(218)	7.261-03	(219)	7.586-03	(220)	7.957-03
(221)	8.329-03	(222)	8.700-03	(223)	9.071-03	(224)	9.443-03	(225)	9.814-03
(226)	1.000-02	(227)	1.000-02	(228)	1.000-02	(229)	1.000-02	(230)	1.000-02
(231)	1.000-02	(232)	1.000-02	(233)	1.000-02	(234)	1.000-02	(235)	1.000-02
(236)	1.000-02	(237)	1.000-02	(238)	1.000-02	(239)	1.000-02	(240)	1.000-02
(241)	1.000-02	(242)	1.000-02	(243)	1.000-02	(244)	1.000-02	(245)	1.000-02
(246)	1.000-02	(247)	1.000-02	(248)	1.000-02	(249)	1.000-02	(250)	1.000-02
(251)	1.000-02	(252)	1.000-02	(253)	1.000-02	(254)	1.000-02	(255)	1.000-02
(256)	1.000-02	(257)	1.000-02	(258)	1.000-02	(259)	1.000-02	(260)	1.000-02
(261)	1.000-02	(262)	1.000-02	(263)	1.000-02	(264)	1.000-02	(265)	1.000-02
(266)	1.000-02	(267)	1.000-02	(268)	1.000-02	(269)	1.000-02	(270)	1.000-02
(271)	1.000-02	(272)	1.000-02	(273)	1.000-02	(274)	1.000-02	(275)	1.000-02
(276)	1.000-02	(277)	1.000-02	(278)	1.000-02	(279)	1.000-02	(280)	1.000-02
(281)	1.000-02	(282)	1.000-02	(283)	1.000-02	(284)	1.000-02	(285)	1.000-02
(286)	1.000-02	(287)	1.000-02	(288)	1.000-02	(289)	1.000-02	(290)	1.000-02
(291)	1.000-02	(292)	1.000-02	(293)	1.000-02	(294)	1.000-02	(295)	1.000-02
(296)	1.000-02	(297)	1.000-02	(298)	1.000-02	(299)	1.000-02	(300)	1.000-02
(301)	1.000-02	(302)	1.000-02	(303)	1.000-02	(304)	1.000-02	(305)	1.000-02
(306)	1.000-02	(307)	1.000-02	(308)	1.000-02	(309)	1.000-02	(310)	1.000-02
(311)	1.000-02	(312)	1.000-02	(313)	1.000-02	(314)	1.000-02	(315)	1.000-02
(316)	1.001-02	(317)	1.003-02	(318)	1.005-02	(319)	1.007-02	(320)	1.009-02
(321)	1.012-02	(322)	1.015-02	(323)	1.018-02	(324)	1.022-02	(325)	1.026-02
(326)	1.030-02	(327)	1.034-02	(328)	1.038-02	(329)	1.042-02	(330)	1.046-02

TABLE B-21 (CONTINUED)

NP237(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(331) 1.050-02	(332) 1.054-02	(333) 1.059-02	(334) 1.065-02	(335) 1.070-02
(336) 1.076-02	(337) 1.084-02	(338) 1.092-02	(339) 1.100-02	(340) 1.108-02
(341) 1.116-02	(342) 1.125-02	(343) 1.135-02	(344) 1.145-02	(345) 1.155-02
(346) 1.165-02	(347) 1.175-02	(348) 1.185-02	(349) 1.195-02	(350) 1.206-02
(351) 1.218-02	(352) 1.230-02	(353) 1.242-02	(354) 1.256-02	(355) 1.272-02
(356) 1.288-02	(357) 1.304-02	(358) 1.320-02	(359) 1.336-02	(360) 1.352-02
(361) 1.370-02	(362) 1.390-02	(363) 1.406-02	(364) 1.417-02	(365) 1.431-02
(366) 1.448-02	(367) 1.465-02	(368) 1.482-02	(369) 1.501-02	(370) 1.524-02
(371) 1.546-02	(372) 1.569-02	(373) 1.591-02	(374) 1.614-02	(375) 1.636-02
(376) 1.659-02	(377) 1.681-02	(378) 1.709-02	(379) 1.743-02	(380) 1.771-02
(381) 1.805-02	(382) 1.850-02	(383) 1.895-02	(384) 1.940-02	(385) 1.985-02
(386) 2.030-02	(387) 2.081-02	(388) 2.137-02	(389) 2.193-02	(390) 2.249-02
(391) 2.271-02	(392) 2.150-02	(393) 2.014-02	(394) 1.877-02	(395) 1.727-02
(396) 1.564-02	(397) 1.400-02	(398) 1.236-02	(399) 1.123-02	(400) 1.174-02
(401) 1.233-02	(402) 1.293-02	(403) 1.352-02	(404) 1.411-02	(405) 1.470-02
(406) 1.530-02	(407) 1.590-02	(408) 1.650-02	(409) 1.710-02	(410) 1.785-02
(411) 1.875-02	(412) 1.965-02	(413) 2.055-02	(414) 2.160-02	(415) 2.280-02
(416) 2.400-02	(417) 2.520-02	(418) 2.640-02	(419) 2.760-02	(420) 2.880-02
(421) 3.000-02	(422) 3.120-02	(423) 3.287-02	(424) 3.700-02	(425) 4.115-02
(426) 4.760-02	(427) 6.000-02	(428) 7.735-02	(429) 9.940-02	(430) 1.301-01
(431) 1.650-01	(432) 2.110-01	(433) 2.670-01	(434) 3.280-01	(435) 3.920-01
(436) 4.595-01	(437) 5.306-01	(438) 6.018-01	(439) 6.729-01	(440) 7.512-01
(441) 8.366-01	(442) 9.226-01	(443) 1.012+00	(444) 1.118+00	(445) 1.232+00
(446) 1.336+00	(447) 1.425+00	(448) 1.498+00	(449) 1.553+00	(450) 1.589+00
(451) 1.567+00	(452) 1.580+00	(453) 1.625+00	(454) 1.690+00	(455) 1.668+00
(456) 1.675+00	(457) 1.721+00	(458) 1.690+00	(459) 1.725+00	(460) 1.715+00
(461) 1.655+00	(462) 1.642+00	(463) 1.712+00	(464) 1.715+00	(465) 1.700+00
(466) 1.700+00	(467) 1.700+00	(468) 1.651+00	(469) 1.617+00	(470) 1.690+00
(471) 1.702+00	(472) 1.660+00	(473) 1.595+00	(474) 1.530+00	(475) 1.464+00
(476) 1.492+00	(477) 1.564+00	(478) 1.600+00	(479) 1.575+00	(480) 1.525+00
(481) 1.487+00	(482) 1.461+00	(483) 1.439+00	(484) 1.385+00	(485) 1.400+00
(486) 1.376+00	(487) 1.409+00	(488) 1.449+00	(489) 1.409+00	(490) 1.359+00
(491) 1.324+00	(492) 1.532+00	(493) 1.406+00	(494) 1.416+00	(495) 1.423+00

TABLE B-21 (CONTINUED)

NP237(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(496)	1.341+00	(497)	1.370+00	(498)	1.423+00	(499)	1.469+00	(500)	1.557+00
(501)	1.561+00	(502)	1.706+00	(503)	1.761+00	(504)	1.802+00	(505)	1.843+00
(506)	1.901+00	(507)	1.865+00	(508)	1.845+00	(509)	1.942+00	(510)	1.960+00
(511)	1.957+00	(512)	1.953+00	(513)	1.945+00	(514)	1.935+00	(515)	1.928+00
(516)	1.923+00	(517)	1.927+00	(518)	1.942+00	(519)	1.981+00	(520)	2.044+00
(521)	2.090+00	(522)	2.120+00	(523)	2.144+00	(524)	2.136+00	(525)	2.122+00
(526)	2.147+00	(527)	2.212+00	(528)	2.271+00	(529)	2.300+00	(530)	2.323+00
(531)	2.345+00	(532)	2.365+00	(533)	2.385+00	(534)	2.403+00	(535)	2.421+00
(536)	2.437+00	(537)	2.451+00	(538)	2.464+00	(539)	2.469+00	(540)	2.473+00
(541)	2.475+00	(542)	2.475+00	(543)	2.475+00	(544)	2.475+00	(545)	2.475+00
(546)	2.474+00	(547)	2.472+00	(548)	2.470+00	(549)	2.468+00	(550)	2.466+00
(551)	2.464+00	(552)	2.461+00	(553)	2.458+00	(554)	2.455+00	(555)	2.452+00
(556)	2.452+00	(557)	2.456+00	(558)	2.460+00	(559)	2.464+00	(560)	2.468+00
(561)	2.470+00	(562)	2.471+00	(563)	2.472+00	(564)	2.473+00	(565)	2.474+00
(566)	2.475+00	(567)	2.475+00	(568)	2.475+00	(569)	2.475+00	(570)	2.475+00
(571)	2.476+00	(572)	2.479+00	(573)	2.481+00	(574)	2.484+00	(575)	2.487+00
(576)	2.490+00	(577)	2.495+00	(578)	2.499+00	(579)	2.503+00	(580)	2.508+00
(581)	2.513+00	(582)	2.520+00	(583)	2.527+00	(584)	2.534+00	(585)	2.541+00
(586)	2.548+00	(587)	2.555+00	(588)	2.562+00	(589)	2.569+00	(590)	2.576+00
(591)	2.590+00	(592)	2.610+00	(593)	2.630+00	(594)	2.649+00	(595)	2.667+00
(596)	2.686+00	(597)	2.705+00	(598)	2.723+00	(599)	2.742+00	(600)	2.761+00
(601)	2.785+00	(602)	2.815+00	(603)	2.843+00	(604)	2.860+00	(605)	2.866+00
(606)	2.852+00	(607)	2.831+00	(608)	2.810+00	(609)	2.791+00	(610)	2.788+00
(611)	2.787+00	(612)	2.787+00	(613)	2.787+00	(614)	2.787+00	(615)	2.786+00
(616)	2.786+00	(617)	2.786+00	(618)	2.786+00	(619)	2.785+00	(620)	2.785+00
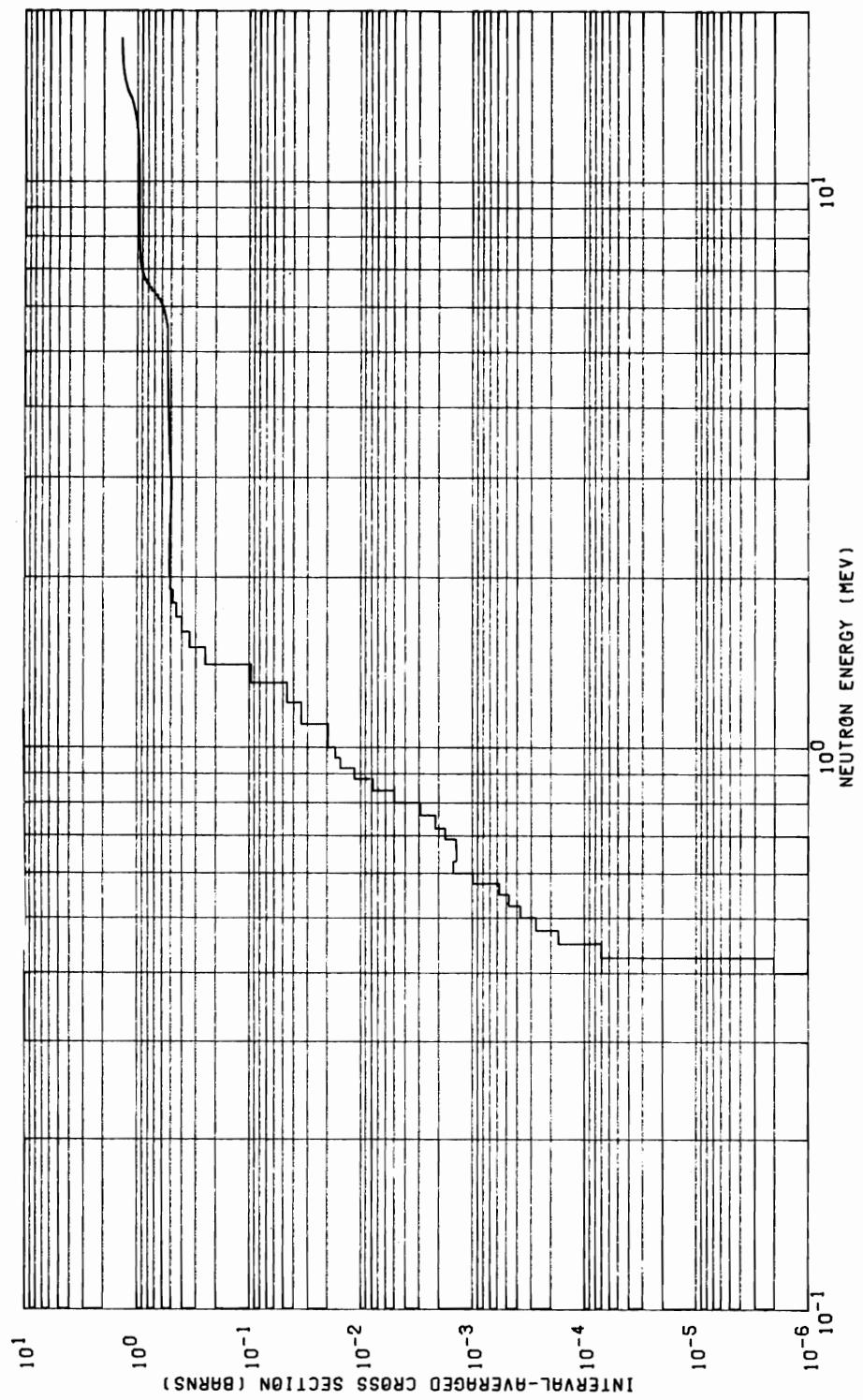
FIGURE B-22. $^{238}U(n,f)$F.P.

Neg 0694116-2

B-70

TABLE B-22

U238(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(431)	0.000	(432)	2.026-06	(433)	7.092-05	(434)	1.722-04	(435)	2.735-04
(436)	3.748-04	(437)	4.761-04	(438)	5.792-04	(439)	1.003-03	(440)	1.489-03
(441)	1.381-03	(442)	1.401-03	(443)	1.759-03	(444)	2.160-03	(445)	2.948-03
(446)	5.036-03	(447)	7.818-03	(448)	1.142-02	(449)	1.536-02	(450)	1.694-02
(451)	1.973-02	(452)	3.430-02	(453)	4.610-02	(454)	9.656-02	(455)	2.479-01
(456)	3.412-01	(457)	4.012-01	(458)	4.482-01	(459)	4.817-01	(460)	5.072-01
(461)	5.165-01	(462)	5.185-01	(463)	5.160-01	(464)	5.120-01	(465)	5.090-01
(466)	5.050-01	(467)	5.010-01	(468)	4.980-01	(469)	4.955-01	(470)	4.975-01
(471)	5.025-01	(472)	5.070-01	(473)	5.120-01	(474)	5.160-01	(475)	5.185-01
(476)	5.215-01	(477)	5.240-01	(478)	5.260-01	(479)	5.282-01	(480)	5.307-01
(481)	5.327-01	(482)	5.342-01	(483)	5.350-01	(484)	5.350-01	(485)	5.355-01
(486)	5.365-01	(487)	5.377-01	(488)	5.392-01	(489)	5.400-01	(490)	5.400-01
(491)	5.400-01	(492)	5.400-01	(493)	5.400-01	(494)	5.400-01	(495)	5.400-01
(496)	5.435-01	(497)	5.510-01	(498)	5.610-01	(499)	5.720-01	(500)	5.860-01
(501)	6.035-01	(502)	6.245-01	(503)	6.560-01	(504)	7.000-01	(505)	7.460-01
(506)	7.860-01	(507)	8.275-01	(508)	8.625-01	(509)	8.875-01	(510)	9.070-01
(511)	9.220-01	(512)	9.360-01	(513)	9.460-01	(514)	9.530-01	(515)	9.565-01
(516)	9.586-01	(517)	9.618-01	(518)	9.648-01	(519)	9.670-01	(520)	9.690-01
(521)	9.700-01	(522)	9.700-01	(523)	9.700-01	(524)	9.700-01	(525)	9.700-01
(526)	9.700-01	(527)	9.700-01	(528)	9.700-01	(529)	9.700-01	(530)	9.700-01
(531)	9.700-01	(532)	9.700-01	(533)	9.700-01	(534)	9.700-01	(535)	9.700-01
(536)	9.700-01	(537)	9.700-01	(538)	9.700-01	(539)	9.700-01	(540)	9.700-01
(541)	9.700-01	(542)	9.700-01	(543)	9.700-01	(544)	9.700-01	(545)	9.700-01
(546)	9.700-01	(547)	9.700-01	(548)	9.700-01	(549)	9.700-01	(550)	9.700-01
(551)	9.710-01	(552)	9.730-01	(553)	9.750-01	(554)	9.770-01	(555)	9.790-01
(556)	9.810-01	(557)	9.830-01	(558)	9.852-01	(559)	9.890-01	(560)	9.930-01
(561)	9.966-01	(562)	9.998-01	(563)	1.003+00	(564)	1.008+00	(565)	1.013+00
(566)	1.017+00	(567)	1.021+00	(568)	1.025+00	(569)	1.031+00	(570)	1.037+00
(571)	1.044+00	(572)	1.052+00	(573)	1.060+00	(574)	1.068+00	(575)	1.076+00
(576)	1.085+00	(577)	1.096+00	(578)	1.107+00	(579)	1.116+00	(580)	1.125+00
(581)	1.141+00	(582)	1.162+00	(583)	1.183+00	(584)	1.201+00	(585)	1.218+00
(586)	1.234+00	(587)	1.247+00	(588)	1.261+00	(589)	1.272+00	(590)	1.283+00
(591)	1.293+00	(592)	1.302+00	(593)	1.311+00	(594)	1.318+00	(595)	1.325+00

TABLE B-22   (CONTINUED)
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U238(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)
----

(596)	1.332+00	(597)	1.337+00	(598)	1.343+00	(599)	1.349+00	(600)	1.354+00
(601)	1.359+00	(602)	1.364+00	(603)	1.368+00	(604)	1.370+00	(605)	1.372+00
(606)	1.374+00	(607)	1.376+00	(608)	1.378+00	(609)	1.379+00	(610)	1.380+00
(611)	1.381+00	(612)	1.382+00	(613)	1.382+00	(614)	1.382+00	(615)	1.383+00
(616)	1.383+00	(617)	1.382+00	(618)	1.382+00	(619)	1.382+00	(620)	1.381+00
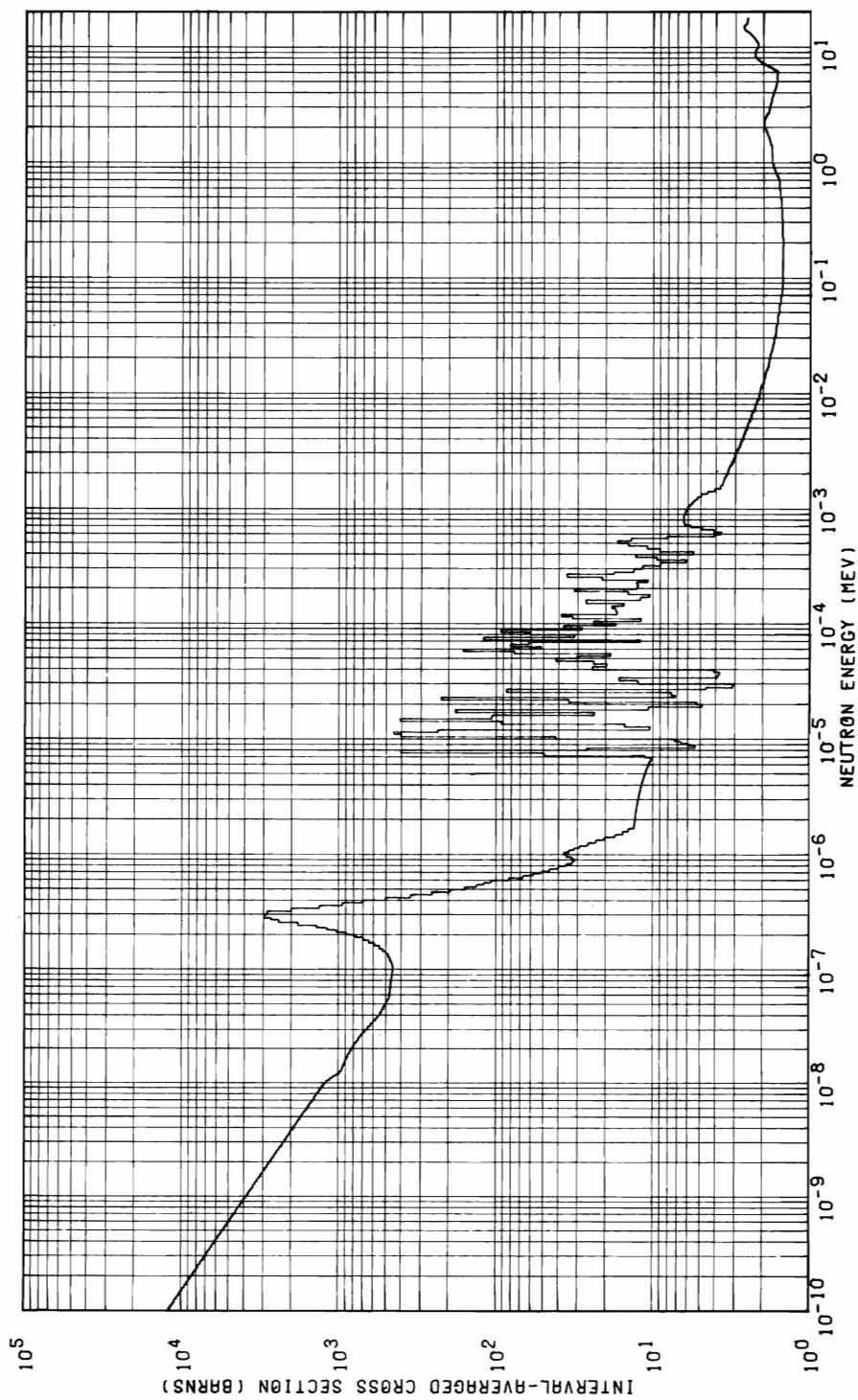
FIGURE B-23. $^{239}Pu(n,f)F.P.$

Neg 0695120-2

B-73

TABLE B-23

PU239(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)
----

(1)	1.205+04	(2)	1.177+04	(3)	1.150+04	(4)	1.126+04	(5)	1.097+04
(6)	1.065+04	(7)	1.036+04	(8)	1.009+04	(9)	9.801+03	(10)	9.499+03
(11)	9.223+03	(12)	8.970+03	(13)	8.737+03	(14)	8.521+03	(15)	8.321+03
(16)	8.134+03	(17)	7.959+03	(18)	7.756+03	(19)	7.531+03	(20)	7.357+03
(21)	7.165+03	(22)	6.930+03	(23)	6.717+03	(24)	6.522+03	(25)	6.343+03
(26)	6.178+03	(27)	6.008+03	(28)	5.833+03	(29)	5.673+03	(30)	5.526+03
(31)	5.389+03	(32)	5.263+03	(33)	5.144+03	(34)	5.034+03	(35)	4.920+03
(36)	4.804+03	(37)	4.696+03	(38)	4.595+03	(39)	4.485+03	(40)	4.369+03
(41)	4.261+03	(42)	4.160+03	(43)	4.067+03	(44)	3.979+03	(45)	3.897+03
(46)	3.811+03	(47)	3.721+03	(48)	3.638+03	(49)	3.559+03	(50)	3.468+03
(51)	3.368+03	(52)	3.276+03	(53)	3.190+03	(54)	3.099+03	(55)	3.004+03
(56)	2.917+03	(57)	2.837+03	(58)	2.763+03	(59)	2.695+03	(60)	2.631+03
(61)	2.572+03	(62)	2.517+03	(63)	2.453+03	(64)	2.381+03	(65)	2.327+03
(66)	2.266+03	(67)	2.191+03	(68)	2.124+03	(69)	2.062+03	(70)	2.006+03
(71)	1.954+03	(72)	1.900+03	(73)	1.845+03	(74)	1.794+03	(75)	1.747+03
(76)	1.704+03	(77)	1.664+03	(78)	1.627+03	(79)	1.592+03	(80)	1.556+03
(81)	1.519+03	(82)	1.485+03	(83)	1.453+03	(84)	1.418+03	(85)	1.381+03
(86)	1.347+03	(87)	1.316+03	(88)	1.286+03	(89)	1.258+03	(90)	1.232+03
(91)	1.167+03	(92)	1.128+03	(93)	1.075+03	(94)	1.026+03	(95)	9.790+02
(96)	9.456+02	(97)	9.310+02	(98)	9.173+02	(99)	9.013+02	(100)	8.830+02
(101)	8.647+02	(102)	8.464+02	(103)	8.261+02	(104)	8.110+02	(105)	7.950+02
(106)	7.790+02	(107)	7.630+02	(108)	7.431+02	(109)	7.200+02	(110)	7.010+02
(111)	6.702+02	(112)	6.502+02	(113)	6.246+02	(114)	5.994+02	(115)	5.768+02
(116)	5.584+02	(117)	5.433+02	(118)	5.300+02	(119)	5.167+02	(120)	5.050+02
(121)	4.950+02	(122)	4.850+02	(123)	4.760+02	(124)	4.713+02	(125)	4.696+02
(126)	4.679+02	(127)	4.661+02	(128)	4.644+02	(129)	4.623+02	(130)	4.599+02
(131)	4.576+02	(132)	4.552+02	(133)	4.529+02	(134)	4.505+02	(135)	4.482+02
(136)	4.490+02	(137)	4.530+02	(138)	4.580+02	(139)	4.640+02	(140)	4.719+02
(141)	4.828+02	(142)	4.981+02	(143)	5.219+02	(144)	5.525+02	(145)	5.925+02
(146)	6.425+02	(147)	6.975+02	(148)	7.825+02	(149)	8.975+02	(150)	1.035+03
(151)	1.192+03	(152)	1.384+03	(153)	1.824+03	(154)	2.420+03	(155)	2.712+03
(156)	2.998+03	(157)	2.840+03	(158)	1.978+03	(159)	1.314+03	(160)	9.388+02
(161)	6.987+02	(162)	4.978+02	(163)	3.460+02	(164)	2.520+02	(165)	1.940+02

PU239(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(166)	1.565+02	(167)	1.315+02	(168)	1.187+02	(169)	1.062+02	(170)	8.200+01
(171)	6.656+01	(172)	5.744+01	(173)	5.117+01	(174)	4.512+01	(175)	3.950+01
(176)	3.532+01	(177)	3.237+01	(178)	3.139+01	(179)	3.256+01	(180)	3.559+01
(181)	3.670+01	(182)	3.410+01	(183)	3.150+01	(184)	2.890+01	(185)	2.572+01
(186)	2.275+01	(187)	2.005+01	(188)	1.735+01	(189)	1.540+01	(190)	1.420+01
(191)	1.314+01	(192)	1.294+01	(193)	1.289+01	(194)	1.283+01	(195)	1.277+01
(196)	1.271+01	(197)	1.266+01	(198)	1.259+01	(199)	1.250+01	(200)	1.243+01
(201)	1.234+01	(202)	1.223+01	(203)	1.211+01	(204)	1.200+01	(205)	1.189+01
(206)	1.177+01	(207)	1.164+01	(208)	1.150+01	(209)	1.136+01	(210)	1.121+01
(211)	1.107+01	(212)	1.093+01	(213)	1.079+01	(214)	1.064+01	(215)	1.049+01
(216)	1.031+01	(217)	1.014+01	(218)	1.134+01	(219)	4.987+01	(220)	4.055+02
(221)	2.611+01	(222)	5.325+00	(223)	5.975+00	(224)	6.625+00	(225)	7.275+00
(226)	4.202+01	(227)	4.057+02	(228)	4.483+02	(229)	2.325+02	(230)	1.037+01
(231)	1.514+01	(232)	9.333+01	(233)	4.083+02	(234)	1.056+02	(235)	2.331+01
(236)	1.823+02	(237)	1.054+01	(238)	4.825+00	(239)	5.250+00	(240)	3.459+01
(241)	2.243+02	(242)	7.113+00	(243)	7.642+00	(244)	8.633+01	(245)	4.549+00
(246)	3.072+00	(247)	1.250+01	(248)	1.650+01	(249)	3.845+00	(250)	3.757+00
(251)	4.100+00	(252)	2.437+01	(253)	1.949+01	(254)	2.402+01	(255)	4.191+01
(256)	3.004+01	(257)	1.844+01	(258)	7.715+01	(259)	1.630+02	(260)	5.121+01
(261)	8.142+01	(262)	6.128+01	(263)	1.193+01	(264)	1.206+02	(265)	3.128+01
(266)	6.088+01	(267)	9.387+01	(268)	2.809+01	(269)	3.750+01	(270)	1.715+01
(271)	2.399+01	(272)	1.182+01	(273)	3.271+01	(274)	3.850+01	(275)	1.679+01
(276)	1.721+01	(277)	1.833+01	(278)	1.531+01	(279)	2.686+01	(280)	1.187+01
(281)	1.041+01	(282)	1.448+01	(283)	3.183+01	(284)	1.255+01	(285)	1.230+01
(286)	1.270+01	(287)	1.068+01	(288)	2.128+01	(289)	3.561+01	(290)	1.758+01
(291)	1.312+01	(292)	1.157+01	(293)	8.873+00	(294)	6.090+00	(295)	9.544+00
(296)	1.300+01	(297)	5.484+00	(298)	9.103+00	(299)	1.094+01	(300)	1.451+01
(301)	1.692+01	(302)	1.370+01	(303)	8.080+00	(304)	4.049+00	(305)	3.668+00
(306)	4.142+00	(307)	4.900+00	(308)	5.820+00	(309)	6.302+00	(310)	6.420+00
(311)	6.375+00	(312)	6.325+00	(313)	6.270+00	(314)	6.185+00	(315)	6.095+00
(316)	5.975+00	(317)	5.810+00	(318)	5.630+00	(319)	5.450+00	(320)	5.225+00
(321)	4.940+00	(322)	4.606+00	(323)	4.269+00	(324)	3.850+00	(325)	3.350+00
(326)	2.950+00	(327)	2.767+00	(328)	2.708+00	(329)	2.777+00	(330)	2.932+00

PU239(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES (BARNS)

(331)	3.087+00	(332)	3.242+00	(333)	3.429+00	(334)	3.562+00	(335)	3.640+00
(336)	3.638+00	(337)	3.578+00	(338)	3.478+00	(339)	3.396+00	(340)	3.318+00
(341)	3.239+00	(342)	3.166+00	(343)	3.097+00	(344)	3.028+00	(345)	2.959+00
(346)	2.912+00	(347)	2.886+00	(348)	2.859+00	(349)	2.833+00	(350)	2.727+00
(351)	2.541+00	(352)	2.355+00	(353)	2.162+00	(354)	1.920+00	(355)	1.903+00
(356)	1.994+00	(357)	2.084+00	(358)	2.171+00	(359)	2.235+00	(360)	2.295+00
(361)	2.306+00	(362)	2.269+00	(363)	2.232+00	(364)	2.197+00	(365)	2.159+00
(366)	2.118+00	(367)	2.077+00	(368)	2.039+00	(369)	1.997+00	(370)	1.950+00
(371)	1.910+00	(372)	1.880+00	(373)	1.849+00	(374)	1.822+00	(375)	1.801+00
(376)	1.780+00	(377)	1.762+00	(378)	1.741+00	(379)	1.736+00	(380)	1.737+00
(381)	1.738+00	(382)	1.740+00	(383)	1.742+00	(384)	1.744+00	(385)	1.745+00
(386)	1.747+00	(387)	1.749+00	(388)	1.751+00	(389)	1.753+00	(390)	1.756+00
(391)	1.758+00	(392)	1.760+00	(393)	1.762+00	(394)	1.764+00	(395)	1.767+00
(396)	1.769+00	(397)	1.772+00	(398)	1.774+00	(399)	1.777+00	(400)	1.781+00
(401)	1.784+00	(402)	1.788+00	(403)	1.791+00	(404)	1.795+00	(405)	1.798+00
(406)	1.785+00	(407)	1.755+00	(408)	1.732+00	(409)	1.717+00	(410)	1.698+00
(411)	1.673+00	(412)	1.646+00	(413)	1.619+00	(414)	1.592+00	(415)	1.570+00
(416)	1.556+00	(417)	1.551+00	(418)	1.549+00	(419)	1.548+00	(420)	1.550+00
(421)	1.554+00	(422)	1.560+00	(423)	1.570+00	(424)	1.585+00	(425)	1.600+00
(426)	1.623+00	(427)	1.649+00	(428)	1.663+00	(429)	1.669+00	(430)	1.668+00
(431)	1.664+00	(432)	1.659+00	(433)	1.652+00	(434)	1.644+00	(435)	1.638+00
(436)	1.635+00	(437)	1.632+00	(438)	1.623+00	(439)	1.605+00	(440)	1.598+00
(441)	1.594+00	(442)	1.593+00	(443)	1.609+00	(444)	1.629+00	(445)	1.658+00
(446)	1.688+00	(447)	1.713+00	(448)	1.735+00	(449)	1.751+00	(450)	1.764+00
(451)	1.775+00	(452)	1.780+00	(453)	1.782+00	(454)	1.792+00	(455)	1.810+00
(456)	1.833+00	(457)	1.861+00	(458)	1.893+00	(459)	1.926+00	(460)	1.958+00
(461)	1.981+00	(462)	1.986+00	(463)	1.984+00	(464)	1.960+00	(465)	1.935+00
(466)	1.905+00	(467)	1.875+00	(468)	1.849+00	(469)	1.837+00	(470)	1.826+00
(471)	1.815+00	(472)	1.802+00	(473)	1.790+00	(474)	1.778+00	(475)	1.770+00
(476)	1.761+00	(477)	1.752+00	(478)	1.741+00	(479)	1.728+00	(480)	1.715+00
(481)	1.703+00	(482)	1.692+00	(483)	1.683+00	(484)	1.673+00	(485)	1.664+00
(486)	1.656+00	(487)	1.650+00	(488)	1.644+00	(489)	1.638+00	(490)	1.632+00
(491)	1.630+00	(492)	1.630+00	(493)	1.630+00	(494)	1.630+00	(495)	1.630+00

TABLE B-23   (CONTINUED)

PU239(N,F)FP

INTERVAL-AVERAGED CROSS SECTION VALUES   (BARNS)

Index	Value	Index	Value	Index	Value	Index	Value	Index	Value
(496)	1.628+00	(497)	1.624+00	(498)	1.621+00	(499)	1.618+00	(500)	1.614+00
(501)	1.612+00	(502)	1.639+00	(503)	1.676+00	(504)	1.712+00	(505)	1.749+00
(506)	1.785+00	(507)	1.822+00	(508)	1.858+00	(509)	1.895+00	(510)	1.932+00
(511)	1.968+00	(512)	2.005+00	(513)	2.041+00	(514)	2.078+00	(515)	2.109+00
(516)	2.131+00	(517)	2.152+00	(518)	2.174+00	(519)	2.196+00	(520)	2.218+00
(521)	2.239+00	(522)	2.261+00	(523)	2.270+00	(524)	2.270+00	(525)	2.270+00
(526)	2.270+00	(527)	2.270+00	(528)	2.270+00	(529)	2.270+00	(530)	2.270+00
(531)	2.272+00	(532)	2.287+00	(533)	2.304+00	(534)	2.321+00	(535)	2.337+00
(536)	2.354+00	(537)	2.371+00	(538)	2.388+00	(539)	2.405+00	(540)	2.422+00
(541)	2.430+00	(542)	2.430+00	(543)	2.430+00	(544)	2.430+00	(545)	2.430+00
(546)	2.430+00	(547)	2.430+00	(548)	2.430+00	(549)	2.430+00	(550)	2.430+00
(551)	2.430+00	(552)	2.430+00	(553)	2.430+00	(554)	2.430+00	(555)	2.430+00
(556)	2.430+00	(557)	2.430+00	(558)	2.430+00	(559)	2.430+00	(560)	2.430+00
(561)	2.430+00	(562)	2.430+00	(563)	2.430+00	(564)	2.430+00	(565)	2.430+00
(566)	2.430+00	(567)	2.430+00	(568)	2.430+00	(569)	2.430+00	(570)	2.430+00
(571)	2.435+00	(572)	2.445+00	(573)	2.456+00	(574)	2.477+00	(575)	2.499+00
(576)	2.522+00	(577)	2.546+00	(578)	2.569+00	(579)	2.590+00	(580)	2.610+00
(581)	2.626+00	(582)	2.638+00	(583)	2.649+00	(584)	2.654+00	(585)	2.658+00
(586)	2.662+00	(587)	2.666+00	(588)	2.670+00	(589)	2.672+00	(590)	2.674+00
(591)	2.674+00	(592)	2.672+00	(593)	2.668+00	(594)	2.650+00	(595)	2.630+00
(596)	2.610+00	(597)	2.589+00	(598)	2.569+00	(599)	2.555+00	(600)	2.542+00
(601)	2.533+00	(602)	2.529+00	(603)	2.525+00	(604)	2.524+00	(605)	2.522+00
(606)	2.521+00	(607)	2.519+00	(608)	2.518+00	(609)	2.516+00	(610)	2.515+00
(611)	2.514+00	(612)	2.512+00	(613)	2.511+00	(614)	2.509+00	(615)	2.508+00
(616)	2.506+00	(617)	2.505+00	(618)	2.504+00	(619)	2.502+00	(620)	2.501+00

TABLE B-24

INTERVAL LOWER BOUND ENERGY VALUES (MEV)

(1) 1.000-10	(2) 1.050-10	(3) 1.100-10	(4) 1.150-10	(5) 1.200-10
(6) 1.275-10	(7) 1.350-10	(8) 1.425-10	(9) 1.500-10	(10) 1.600-10
(11) 1.700-10	(12) 1.800-10	(13) 1.900-10	(14) 2.000-10	(15) 2.100-10
(16) 2.200-10	(17) 2.300-10	(18) 2.400-10	(19) 2.550-10	(20) 2.700-10
(21) 2.800-10	(22) 3.000-10	(23) 3.200-10	(24) 3.400-10	(25) 3.600-10
(26) 3.800-10	(27) 4.000-10	(28) 4.250-10	(29) 4.500-10	(30) 4.750-10
(31) 5.000-10	(32) 5.250-10	(33) 5.500-10	(34) 5.750-10	(35) 6.000-10
(36) 6.300-10	(37) 6.600-10	(38) 6.900-10	(39) 7.200-10	(40) 7.600-10
(41) 8.000-10	(42) 8.400-10	(43) 8.800-10	(44) 9.200-10	(45) 9.600-10
(46) 1.000-09	(47) 1.050-09	(48) 1.100-09	(49) 1.150-09	(50) 1.200-09
(51) 1.275-09	(52) 1.350-09	(53) 1.425-09	(54) 1.500-09	(55) 1.600-09
(56) 1.700-09	(57) 1.800-09	(58) 1.900-09	(59) 2.000-09	(60) 2.100-09
(61) 2.200-09	(62) 2.300-09	(63) 2.400-09	(64) 2.550-09	(65) 2.700-09
(66) 2.800-09	(67) 3.000-09	(68) 3.200-09	(69) 3.400-09	(70) 3.600-09
(71) 3.800-09	(72) 4.000-09	(73) 4.250-09	(74) 4.500-09	(75) 4.750-09
(76) 5.000-09	(77) 5.250-09	(78) 5.500-09	(79) 5.750-09	(80) 6.000-09
(81) 6.300-09	(82) 6.600-09	(83) 6.900-09	(84) 7.200-09	(85) 7.600-09
(86) 8.000-09	(87) 8.400-09	(88) 8.800-09	(89) 9.200-09	(90) 9.600-09
(91) 1.000-08	(92) 1.050-08	(93) 1.100-08	(94) 1.150-08	(95) 1.200-08
(96) 1.275-08	(97) 1.350-08	(98) 1.425-08	(99) 1.500-08	(100) 1.600-08
(101) 1.700-08	(102) 1.800-08	(103) 1.900-08	(104) 2.000-08	(105) 2.100-08
(106) 2.200-08	(107) 2.300-08	(108) 2.400-08	(109) 2.550-08	(110) 2.700-08
(111) 2.800-08	(112) 3.000-08	(113) 3.200-08	(114) 3.400-08	(115) 3.600-08
(116) 3.800-08	(117) 4.000-08	(118) 4.250-08	(119) 4.500-08	(120) 4.750-08
(121) 5.000-08	(122) 5.250-08	(123) 5.500-08	(124) 5.750-08	(125) 6.000-08
(126) 6.300-08	(127) 6.600-08	(128) 6.900-08	(129) 7.200-08	(130) 7.600-08
(131) 8.000-08	(132) 8.400-08	(133) 8.800-08	(134) 9.200-08	(135) 9.600-08
(136) 1.000-07	(137) 1.050-07	(138) 1.100-07	(139) 1.150-07	(140) 1.200-07
(141) 1.275-07	(142) 1.350-07	(143) 1.425-07	(144) 1.500-07	(145) 1.600-07
(146) 1.700-07	(147) 1.800-07	(148) 1.900-07	(149) 2.000-07	(150) 2.100-07
(151) 2.200-07	(152) 2.300-07	(153) 2.400-07	(154) 2.550-07	(155) 2.700-07
(156) 2.800-07	(157) 3.000-07	(158) 3.200-07	(159) 3.400-07	(160) 3.600-07
(161) 3.800-07	(162) 4.000-07	(163) 4.250-07	(164) 4.500-07	(165) 4.750-07

TABLE B-24   (CONTINUED)

INTERVAL LOWER BOUND ENERGY VALUES (MEV)

(166)	5.000-07	(167)	5.250-07	(168)	5.500-07	(169)	5.750-07	(170)	6.000-07
(171)	6.300-07	(172)	6.600-07	(173)	6.900-07	(174)	7.200-07	(175)	7.600-07
(176)	8.000-07	(177)	8.400-07	(178)	8.800-07	(179)	9.200-07	(180)	9.600-07
(181)	1.000-06	(182)	1.050-06	(183)	1.100-06	(184)	1.150-06	(185)	1.200-06
(186)	1.275-06	(187)	1.350-06	(188)	1.425-06	(189)	1.500-06	(190)	1.600-06
(191)	1.700-06	(192)	1.800-06	(193)	1.900-06	(194)	2.000-06	(195)	2.100-06
(196)	2.200-06	(197)	2.300-06	(198)	2.400-06	(199)	2.550-06	(200)	2.700-06
(201)	2.800-06	(202)	3.000-06	(203)	3.200-06	(204)	3.400-06	(205)	3.600-06
(206)	3.800-06	(207)	4.000-06	(208)	4.250-06	(209)	4.500-06	(210)	4.750-06
(211)	5.000-06	(212)	5.250-06	(213)	5.500-06	(214)	5.750-06	(215)	6.000-06
(216)	6.300-06	(217)	6.600-06	(218)	6.900-06	(219)	7.200-06	(220)	7.600-06
(221)	8.000-06	(222)	8.400-06	(223)	8.800-06	(224)	9.200-06	(225)	9.600-06
(226)	1.000-05	(227)	1.050-05	(228)	1.100-05	(229)	1.150-05	(230)	1.200-05
(231)	1.275-05	(232)	1.350-05	(233)	1.425-05	(234)	1.500-05	(235)	1.600-05
(236)	1.700-05	(237)	1.800-05	(238)	1.900-05	(239)	2.000-05	(240)	2.100-05
(241)	2.200-05	(242)	2.300-05	(243)	2.400-05	(244)	2.550-05	(245)	2.700-05
(246)	2.800-05	(247)	3.000-05	(248)	3.200-05	(249)	3.400-05	(250)	3.600-05
(251)	3.800-05	(252)	4.000-05	(253)	4.250-05	(254)	4.500-05	(255)	4.750-05
(256)	5.000-05	(257)	5.250-05	(258)	5.500-05	(259)	5.750-05	(260)	6.000-05
(261)	6.300-05	(262)	6.600-05	(263)	6.900-05	(264)	7.200-05	(265)	7.600-05
(266)	8.000-05	(267)	8.400-05	(268)	8.800-05	(269)	9.200-05	(270)	9.600-05
(271)	1.000-04	(272)	1.050-04	(273)	1.100-04	(274)	1.150-04	(275)	1.200-04
(276)	1.275-04	(277)	1.350-04	(278)	1.425-04	(279)	1.500-04	(280)	1.600-04
(281)	1.700-04	(282)	1.800-04	(283)	1.900-04	(284)	2.000-04	(285)	2.100-04
(286)	2.200-04	(287)	2.300-04	(288)	2.400-04	(289)	2.550-04	(290)	2.700-04
(291)	2.800-04	(292)	3.000-04	(293)	3.200-04	(294)	3.400-04	(295)	3.600-04
(296)	3.800-04	(297)	4.000-04	(298)	4.250-04	(299)	4.500-04	(300)	4.750-04
(301)	5.000-04	(302)	5.250-04	(303)	5.500-04	(304)	5.750-04	(305)	6.000-04
(306)	6.300-04	(307)	6.600-04	(308)	6.900-04	(309)	7.200-04	(310)	7.600-04
(311)	8.000-04	(312)	8.400-04	(313)	8.800-04	(314)	9.200-04	(315)	9.600-04
(316)	1.000-03	(317)	1.050-03	(318)	1.100-03	(319)	1.150-03	(320)	1.200-03
(321)	1.275-03	(322)	1.350-03	(323)	1.425-03	(324)	1.500-03	(325)	1.600-03
(326)	1.700-03	(327)	1.800-03	(328)	1.900-03	(329)	2.000-03	(330)	2.100-03

TABLE B-24 (CONTINUED)

INTERVAL LOWER BOUND ENERGY VALUES (MEV)

(331)	2.200-03	(332)	2.300-03	(333)	2.400-03	(334)	2.550-03	(335)	2.700-03
(336)	2.800-03	(337)	3.000-03	(338)	3.200-03	(339)	3.400-03	(340)	3.600-03
(341)	3.800-03	(342)	4.000-03	(343)	4.250-03	(344)	4.500-03	(345)	4.750-03
(346)	5.000-03	(347)	5.250-03	(348)	5.500-03	(349)	5.750-03	(350)	6.000-03
(351)	6.300-03	(352)	6.600-03	(353)	6.900-03	(354)	7.200-03	(355)	7.600-03
(356)	8.000-03	(357)	8.400-03	(358)	8.800-03	(359)	9.200-03	(360)	9.600-03
(361)	1.000-02	(362)	1.050-02	(363)	1.100-02	(364)	1.150-02	(365)	1.200-02
(366)	1.275-02	(367)	1.350-02	(368)	1.425-02	(369)	1.500-02	(370)	1.600-02
(371)	1.700-02	(372)	1.800-02	(373)	1.900-02	(374)	2.000-02	(375)	2.100-02
(376)	2.200-02	(377)	2.300-02	(378)	2.400-02	(379)	2.550-02	(380)	2.700-02
(381)	2.600-02	(382)	3.000-02	(383)	3.200-02	(384)	3.400-02	(385)	3.600-02
(386)	3.600-02	(387)	4.000-02	(388)	4.250-02	(389)	4.500-02	(390)	4.750-02
(391)	5.000-02	(392)	5.250-02	(393)	5.500-02	(394)	5.750-02	(395)	6.000-02
(396)	6.300-02	(397)	6.600-02	(398)	6.900-02	(399)	7.200-02	(400)	7.600-02
(401)	8.000-02	(402)	8.400-02	(403)	8.800-02	(404)	9.200-02	(405)	9.600-02
(406)	1.000-01	(407)	1.050-01	(408)	1.100-01	(409)	1.150-01	(410)	1.200-01
(411)	1.275-01	(412)	1.350-01	(413)	1.425-01	(414)	1.500-01	(415)	1.600-01
(416)	1.700-01	(417)	1.800-01	(418)	1.900-01	(419)	2.000-01	(420)	2.100-01
(421)	2.200-01	(422)	2.300-01	(423)	2.400-01	(424)	2.550-01	(425)	2.700-01
(426)	2.800-01	(427)	3.000-01	(428)	3.200-01	(429)	3.400-01	(430)	3.600-01
(431)	3.800-01	(432)	4.000-01	(433)	4.250-01	(434)	4.500-01	(435)	4.750-01
(436)	5.000-01	(437)	5.250-01	(438)	5.500-01	(439)	5.750-01	(440)	6.000-01
(441)	6.300-01	(442)	6.600-01	(443)	6.900-01	(444)	7.200-01	(445)	7.600-01
(446)	8.000-01	(447)	8.400-01	(448)	8.800-01	(449)	9.200-01	(450)	9.600-01
(451)	1.000+00	(452)	1.100+00	(453)	1.200+00	(454)	1.300+00	(455)	1.400+00
(456)	1.500+00	(457)	1.600+00	(458)	1.700+00	(459)	1.800+00	(460)	1.900+00
(461)	2.000+00	(462)	2.100+00	(463)	2.200+00	(464)	2.300+00	(465)	2.400+00
(466)	2.500+00	(467)	2.600+00	(468)	2.700+00	(469)	2.800+00	(470)	2.900+00
(471)	3.000+00	(472)	3.100+00	(473)	3.200+00	(474)	3.300+00	(475)	3.400+00
(476)	3.500+00	(477)	3.600+00	(478)	3.700+00	(479)	3.800+00	(480)	3.900+00
(481)	4.000+00	(482)	4.100+00	(483)	4.200+00	(484)	4.300+00	(485)	4.400+00
(486)	4.500+00	(487)	4.600+00	(488)	4.700+00	(489)	4.800+00	(490)	4.900+00
(491)	5.000+00	(492)	5.100+00	(493)	5.200+00	(494)	5.300+00	(495)	5.400+00

TABLE B-24 (CONTINUED)

INTERVAL LOWER BOUND ENERGY VALUES (MEV)

(496)	5.500+00	(497)	5.600+00	(498)	5.700+00	(499)	5.800+00	(500)	5.900+00
(501)	6.000+00	(502)	6.100+00	(503)	6.200+00	(504)	6.300+00	(505)	6.400+00
(506)	6.500+00	(507)	6.600+00	(508)	6.700+00	(509)	6.800+00	(510)	6.900+00
(511)	7.000+00	(512)	7.100+00	(513)	7.200+00	(514)	7.300+00	(515)	7.400+00
(516)	7.500+00	(517)	7.600+00	(518)	7.700+00	(519)	7.800+00	(520)	7.900+00
(521)	8.000+00	(522)	8.100+00	(523)	8.200+00	(524)	8.300+00	(525)	8.400+00
(526)	8.500+00	(527)	8.600+00	(528)	8.700+00	(529)	8.800+00	(530)	8.900+00
(531)	9.000+00	(532)	9.100+00	(533)	9.200+00	(534)	9.300+00	(535)	9.400+00
(536)	9.500+00	(537)	9.600+00	(538)	9.700+00	(539)	9.800+00	(540)	9.900+00
(541)	1.000+01	(542)	1.010+01	(543)	1.020+01	(544)	1.030+01	(545)	1.040+01
(546)	1.050+01	(547)	1.060+01	(548)	1.070+01	(549)	1.080+01	(550)	1.090+01
(551)	1.100+01	(552)	1.110+01	(553)	1.120+01	(554)	1.130+01	(555)	1.140+01
(556)	1.150+01	(557)	1.160+01	(558)	1.170+01	(559)	1.180+01	(560)	1.190+01
(561)	1.200+01	(562)	1.210+01	(563)	1.220+01	(564)	1.230+01	(565)	1.240+01
(566)	1.250+01	(567)	1.260+01	(568)	1.270+01	(569)	1.280+01	(570)	1.290+01
(571)	1.300+01	(572)	1.310+01	(573)	1.320+01	(574)	1.330+01	(575)	1.340+01
(576)	1.350+01	(577)	1.360+01	(578)	1.370+01	(579)	1.380+01	(580)	1.390+01
(581)	1.400+01	(582)	1.410+01	(583)	1.420+01	(584)	1.430+01	(585)	1.440+01
(586)	1.450+01	(587)	1.460+01	(588)	1.470+01	(589)	1.480+01	(590)	1.490+01
(591)	1.500+01	(592)	1.510+01	(593)	1.520+01	(594)	1.530+01	(595)	1.540+01
(596)	1.550+01	(597)	1.560+01	(598)	1.570+01	(599)	1.580+01	(600)	1.590+01
(601)	1.600+01	(602)	1.610+01	(603)	1.620+01	(604)	1.630+01	(605)	1.640+01
(606)	1.650+01	(607)	1.660+01	(608)	1.670+01	(609)	1.680+01	(610)	1.690+01
(611)	1.700+01	(612)	1.710+01	(613)	1.720+01	(614)	1.730+01	(615)	1.740+01
(616)	1.750+01	(617)	1.760+01	(618)	1.770+01	(619)	1.780+01	(620)	1.790+01

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