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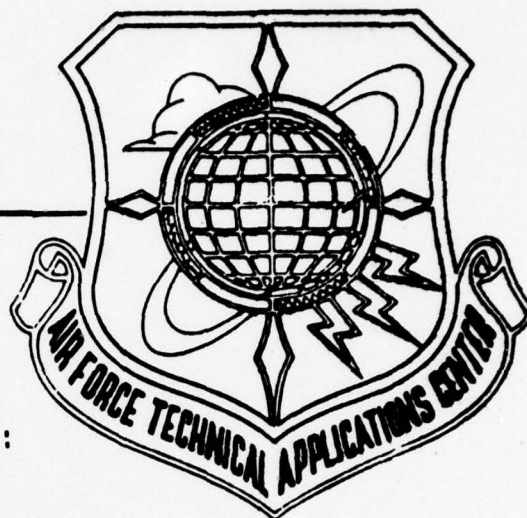
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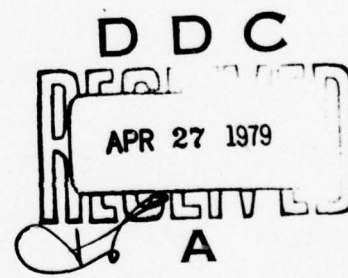
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CALCULATIONAL PROCEDURE FOR
EVALUATING TIME- AND SPATIAL-
DEPENDENT ENERGY DEPOSITION IN
AIR FOR ANISOTROPIC NUCLEAR SOURCES:
VOL. V, DATA FOR LINE BEAM SOURCES



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sulting from neutron capture and inelastic scattering in air. The energy deposition data for line-beam sources and for point isotropic sources were found to compare favorably with similar data reported in the literature. The RENDER procedure was run utilizing energy deposition data from the conical source-data base for a 9-to-10-MeV gamma-ray source and the results of the convolution over source emission direction and time were found to be in good agreement with the input data, indicating that the RENDER procedure performs the time-and-angle convolution correctly.

Volumes II through IV of this report present tabulated data on the time dependent energy deposition in air versus range for neutron and gamma-ray point isotropic sources and for secondary gamma rays generated by point isotropic neutron sources. Also given in Vol. V are curve fit coefficients for use in computing the energy deposition in air vs distance and source emission angle for line beam sources of neutrons and gamma rays. Coefficient data are also given for secondary gamma-ray energy deposition by line beam neutron sources.

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I. INTRODUCTION

This is the fifth volume of a five-volume report which presents the results of an extensive parameter study on gamma-ray, neutron and neutron-produced secondary gamma ray energy deposition in a homogeneous medium of air ($\rho = 1.225 \times 10^{-3} \text{ g/cm}^3$) and describes a computer procedure (RENDER) which was developed to utilize the parametric data when computing the time and spatial distributions of the energy deposition in air for anisotropic nuclear sources.

This volume presents calculated time integrated energy deposition data for line beam gamma-ray and neutron sources emitting radiation in the source energy intervals listed in Table I. The radial and polar angle intervals used in storing the energy deposition data are given in Table II. The geometry used in the energy deposition calculation is shown in Fig. 1. The source radiation (neutron or gamma ray) is emitted from the source point in the direction $\theta = \phi^\circ$. The energy deposition was determined for regions formed by the intersection of the conical surfaces generated by the revolution of the radii R_{i-1} and R_i inclined at polar angles θ_{i-1} and θ_i , respectively about the source axis and the spherical surfaces formed by the revolution of the radii R_{i-1} and R_i about the source point.

The calculational methods used to compute energy deposition data in air for line beam nuclear sources are described in Vol. I of this report.

The time integrated energy deposition data for line-beam sources as a function of radial distance, deposition polar-angle interval and source-energy interval have been curve fitted by a least squares method with the use of the equation

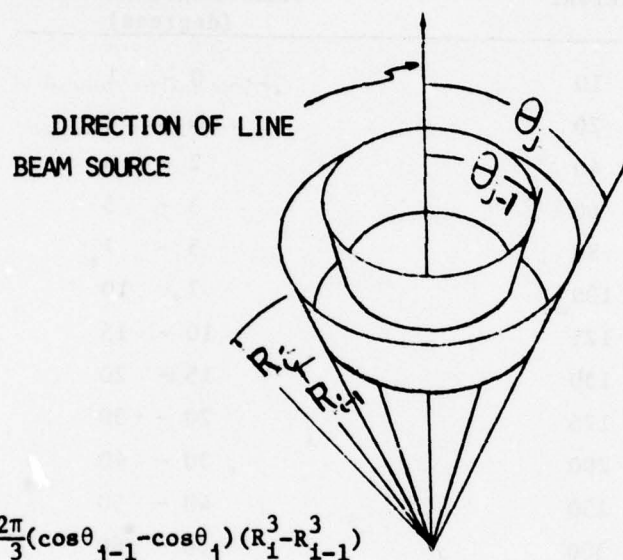
$$ED(\theta_i, \bar{R}_j, E_k) = e^{-A_{1,k}} \bar{R}_j^{B_{1,k}} e^{-C_{1,k}} \bar{R}_j$$

TABLE I. SOURCE ENERGY INTERVAL BOUNDS USED FOR NEUTRON AND
PRIMARY GAMMA-RAY PROBLEMS

<u>Neutron Source Energy Intervals (MeV)</u>	<u>Primary Gamma-Ray Energy Intervals (MeV)</u>
0.001 - 0.00335	9.0 - 10.0
0.00335 - 0.0912	8.0 - 9.0
0.0912 - 0.0248	7.0 - 8.0
0.0248 - 0.0676	6.0 - 7.0
0.0676 - 0.184	5.0 - 6.0
0.184 - 0.303	4.0 - 5.0
0.303 - 0.50	3.0 - 4.0
0.50 - 0.823	2.0 - 3.0
0.823 - 1.353	1.0 - 2.0
1.353 - 1.738	0.5 - 1.0
1.738 - 2.232	0.1 - 0.5
2.232 - 2.865	0.01 - 0.1
2.865 - 3.680	
3.680 - 6.070	
6.070 - 7.790	
7.790 - 10.0	
10.0 - 12.0	
12.0 - 13.5	
13.5 - 15.0	

TABLE II. RADIAL AND ANGLE INTERVALS USED TO DEFINE DEPOSITION GEOMETRY

Radial Interval (m)	Polar Angle Interval (degrees)
0 - 10	0 - 1
10 - 20	1 - 2
20 - 40	2 - 3
40 - 60	3 - 5
60 - 80	5 - 7
80 - 100	7 - 10
100 - 125	10 - 15
125 - 150	15 - 20
150 - 175	20 - 30
175 - 200	30 - 40
200 - 250	40 - 50
250 - 300	50 - 60
300 - 350	60 - 70
350 - 400	70 - 80
400 - 450	80 - 90
450 - 500	90 - 100
500 - 600	100 - 120
600 - 800	120 - 140
800 - 1000	140 - 160
1000 - 1200	160 - 180
1200 - 1500	



$$dV = \frac{2\pi}{3}(\cos\theta_{j-1} - \cos\theta_j)(R_j^3 - R_{j-1}^3)$$

Fig. 1. Energy Deposition Geometry for Line Beam Sources

where i and k are indices denoting the deposition polar angle interval and source energy interval and

$$\bar{R}_j = \left[\frac{1}{2} (R_{j-1}^3 + R_j^3) \right]^{1/3}$$

for R_{j-1} and R_j being the lower and upper bounds of the j th radial interval. Tables III, IV, and V list the parameters A , B and C and the coefficient of determination r^2 as a function of the deposition polar angle and source energy intervals. Values of R^2 close to 1.00 indicate the goodness of the fit to the DEPO-calculated energy deposition data. The energy deposition, $ED(\theta_i, \bar{R}_j, E_k)$, is in units of $\text{keV m}^{-3}/\text{keV}$ of source energy for gamma-ray sources and $\text{keV m}^{-3}/\text{source neutron}$ for neutron and neutron-generated secondary gamma-ray sources.

The time integrated energy deposition data given in Tables III, IV, and V can be converted to air-kerma rate (exposure rate in air, $\rho = 1.225 \times 10^{-3} \text{ g/cm}^3$) by multiplying the energy deposition data with one of the following factors:

<u>Source</u>	<u>Kerma Factor</u>
Gamma Rays	$4.708 \times 10^{-11} \bar{E}_0$
Neutrons	4.708×10^{-11}
Secondary Gamma Rays	4.708×10^{-11}

The units of the resulting air-kerma rate is $\text{rad hr}^{-1}/\text{source particle sec}^{-1}$ and $\bar{E}_0$ is the average source energy within the source energy interval.

TABLE III. CURVE FIT COEFFICIENTS FOR ENERGY DEPOSITION
VS RANGE BY LINE BEAM GAMMA RAY SOURCES

Energy Deposition ($\text{keV m}^{-3}/\text{keV}$ of source energy)

SOURCE ENERGY 9.00E 00 - 1.00E 01 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-	1.0	-	-	-
2.0	-	1.0	-	-	-
3.0	-	1.0	-	-	-
4.0	-	1.0	-	-	-
5.0	-	1.0	-	-	-
6.0	-	1.0	-	-	-
7.0	-	1.0	-	-	-
10.0	-	1.0	-	-	-
15.0	-	1.0	-	-	-
20.0	-	1.0	-	-	-
30.0	-	1.0	-	-	-
40.0	-	1.0	-	-	-
50.0	-	1.0	-	-	-
60.0	-	1.0	-	-	-
70.0	-	1.0	-	-	-
80.0	-	1.0	-	-	-
90.0	-	1.0	-	-	-
100.0	-	1.0	-	-	-
120.0	-	1.0	-	-	-
140.0	-	1.0	-	-	-
160.0	-	1.0	-	-	-
180.0	-	1.0	-	-	-

SOURCE ENERGY 8.00E 00 - 9.00E 00 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-	1.0	-	-	-
2.0	-	1.0	-	-	-
3.0	-	1.0	-	-	-
4.0	-	1.0	-	-	-
5.0	-	1.0	-	-	-
6.0	-	1.0	-	-	-
7.0	-	1.0	-	-	-
10.0	-	1.0	-	-	-
15.0	-	1.0	-	-	-
20.0	-	1.0	-	-	-
30.0	-	1.0	-	-	-
40.0	-	1.0	-	-	-
50.0	-	1.0	-	-	-
60.0	-	1.0	-	-	-
70.0	-	1.0	-	-	-
80.0	-	1.0	-	-	-
90.0	-	1.0	-	-	-
100.0	-	1.0	-	-	-
120.0	-	1.0	-	-	-
140.0	-	1.0	-	-	-
160.0	-	1.0	-	-	-
180.0	-	1.0	-	-	-

TABLE III. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{keV}$ of source energy)

SOURCE ENERGY 7.00E 00 - 8.00E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0 - 1.0	-1.61453	-2.07488	.00185	.99928
1.0 - 2.0	-6.32340	-1.76996	.00078	.93378
2.0 - 3.0	-5.99313	-1.90355	.00086	.97725
3.0 - 5.0	-10.52523	-1.13105	.00211	.98648
5.0 - 7.0	-10.45683	-1.26182	.00174	.91447
7.0 - 10.0	-9.85828	-1.47730	.00159	.98845
10.0 - 15.0	-12.93887	-1.00588	.00246	.98178
15.0 - 20.0	-15.12577	-.67508	.00348	.99275
20.0 - 30.0	-15.62516	-.71210	.00387	.99421
30.0 - 40.0	-14.92150	-1.02963	.00367	.99855
40.0 - 50.0	-15.88956	-.89034	.00511	.99798
50.0 - 60.0	-18.57085	-.41270	.00684	.99232
60.0 - 70.0	-16.88673	-.82599	.00654	.99880
70.0 - 80.0	-17.29063	-.75680	.00758	.99632
80.0 - 90.0	-19.08473	-.44583	.00851	.99788
90.0 - 100.0	-19.62418	-.27734	.01072	.99569
100.0 - 120.0	-19.91608	-.23485	.01189	.99806
120.0 - 140.0	-18.55849	-.64599	.00947	.99812
140.0 - 160.0	-26.29880	-1.04575	.01546	.92575
160.0 - 180.0	-16.83810	-1.12779	.00843	.97734

SOURCE ENERGY 6.00E 00 - 7.00E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0 - 1.0	-2.38309	-1.90294	.00227	.99756
1.0 - 2.0	-4.80042	-2.06050	.00030	.97759
2.0 - 3.0	-7.47771	-1.62820	.00138	.97796
3.0 - 5.0	-8.84173	-1.44480	.00170	.96898
5.0 - 7.0	-8.77149	-1.59304	.00125	.98523
7.0 - 10.0	-17.85831	-1.23374	.00055	.92109
10.0 - 15.0	-17.52533	-1.06366	.00022	.96562
15.0 - 20.0	-17.44000	-1.06366	.00022	.96562
20.0 - 30.0	-17.44000	-1.06366	.00022	.96562
30.0 - 40.0	-17.44000	-1.06366	.00022	.96562
40.0 - 50.0	-17.44000	-1.06366	.00022	.96562
50.0 - 60.0	-17.44000	-1.06366	.00022	.96562
60.0 - 70.0	-17.44000	-1.06366	.00022	.96562
70.0 - 80.0	-17.44000	-1.06366	.00022	.96562
80.0 - 90.0	-17.44000	-1.06366	.00022	.96562
90.0 - 100.0	-17.44000	-1.06366	.00022	.96562
100.0 - 120.0	-17.44000	-1.06366	.00022	.96562
120.0 - 140.0	-17.44000	-1.06366	.00022	.96562
140.0 - 160.0	-17.44000	-1.06366	.00022	.96562
160.0 - 180.0	-17.44000	-1.06366	.00022	.96562

TABLE III. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{keV}$ of source energy)

SOURCE ENERGY 5.00E 00 - 6.00E 00 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT	
.0	-	1.0	-1.17040	-2.17234	.00171	.99826
1.0	-	2.0	-6.28665	-1.77324	.00085	.93598
2.0	-	3.0	-6.92961	-1.70296	.00138	.96674
3.0	-	4.0	-9.37788	-1.31503	.00204	.97190
5.0	-	7.0	-9.19481	-1.50111	.00152	.97568
7.0	-	10.0	-10.63778	-1.27132	.00208	.98577
10.0	-	15.0	-12.49068	-1.02191	.00286	.94921
15.0	-	20.0	-12.96586	-1.02922	.00303	.99434
20.0	-	30.0	-12.74737	-1.24221	.00294	.99646
30.0	-	40.0	-14.33475	-1.05459	.00387	.99678
40.0	-	50.0	-15.27230	-.94429	.00499	.99793
50.0	-	60.0	-15.37394	-1.05225	.00497	.99822
60.0	-	70.0	-15.79401	-.98227	.00612	.99821
70.0	-	80.0	-16.83327	-.39076	.00842	.99296
80.0	-	90.0	-16.85590	-.88791	.00704	.99627
90.0	-	100.0	-19.22762	-.30986	.01064	.99330
100.0	-	120.0	-16.74614	-.96728	.00832	.99711
120.0	-	140.0	-19.83728	-.38135	.00937	.98084
140.0	-	160.0	-20.87526	-.08079	.01287	.98450
160.0	-	180.0	-21.24854	-.07652	.01207	.97155

SOURCE ENERGY 4.00E 00 - 5.00E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0	-1.35251	-2.09433	.00238	.99834
1.0	-6.39405	-1.64521	.00188	.97322
2.0	-5.14678	-2.03407	.00108	.97907
3.0	-13.22635	-.45479	.00436	.98073
5.0	-13.89037	-.39186	.00465	.97222
7.0	-12.03440	-.91836	.00329	.95405
10.0	-12.98685	-.83081	.00369	.99589
15.0	-14.23684	-.72083	.00396	.99295
20.0	-13.50491	-1.01001	.00362	.99845
30.0	-13.50518	-1.17783	.00370	.98860
40.0	-16.39047	-.66536	.00572	.99494
50.0	-16.86620	-.65382	.00626	.99408
60.0	-19.25792	-.24138	.00735	.98904
70.0	-17.19453	-.59774	.00913	.98648
80.0	-16.49124	-.93109	.00692	.99698
90.0	-20.81064	-.05883	.00936	.98501
100.0	-20.82613	-.04857	.01101	.99433
120.0	-18.14961	-.67325	.00935	.99495
140.0	-21.16092	-.17101	.01616	.98456
160.0	-23.82805	.80598	.02023	.98415

TABLE III. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{keV}$ of source energy)

SOURCE ENERGY 3.00E 00 - 4.00E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-1.41427	-2.07019	.00286	.99899
2.0	-5.33547	-1.84693	.00191	.97964
3.0	-8.29190	-1.30205	.00302	.99647
4.0	-7.58098	-1.61380	.00204	.98298
5.0	-12.03496	-7.7352	.00389	.90691
10.0	-11.16974	-1.03341	.00350	.99346
15.0	-12.45923	-8.7951	.00394	.99704
20.0	-11.64471	-1.19637	.00326	.99630
30.0	-15.75365	-1.45302	.00533	.99187
40.0	-13.30522	-1.14323	.00410	.99594
50.0	-15.40535	-8.1598	.00530	.99532
60.0	-15.36346	-9.0304	.00564	.99526
70.0	-14.99603	-1.04959	.00618	.99298
80.0	-14.69474	-1.13174	.00785	.99527
90.0	-17.08331	-6.5098	.00886	.90758
100.0	-17.31468	-6.7162	.00886	.99777
120.0	-17.30241	-7.3850	.00875	.99870
140.0	-17.00349	-8.8367	.00879	.99545
160.0	-21.66013	-1.6085	.01294	.99283
180.0	-19.71294	-.41913	.00929	.97635

SOURCE ENERGY 2.00E 00 - 3.00E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-1.09777	-2.09146	.00374	.99643
2.0	-5.87928	-1.65446	.00310	.97962
3.0	-7.25144	-1.50154	.00327	.97955
4.0	-9.75290	-1.09374	.00397	.97007
5.0	-8.56222	-1.43949	.00304	.99293
10.0	-10.45913	-1.12257	.00384	.99588
15.0	-11.33389	-8.12638	.00510	.99544
20.0	-11.43333	-6.12638	.00498	.99535
30.0	-11.43333	-8.22558	.00483	.99535
40.0	-11.43333	-8.22558	.00483	.99535
50.0	-11.43333	-8.22558	.00483	.99535
60.0	-11.43333	-8.22558	.00483	.99535
70.0	-11.43333	-8.22558	.00483	.99535
80.0	-11.43333	-8.22558	.00483	.99535
90.0	-11.43333	-8.22558	.00483	.99535
100.0	-11.43333	-8.22558	.00483	.99535
120.0	-11.43333	-8.22558	.00483	.99535
140.0	-11.43333	-8.22558	.00483	.99535
160.0	-11.43333	-8.22558	.00483	.99535
180.0	-11.43333	-8.22558	.00483	.99535

TABLE III. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{keV}$ of source energy)

SOURCE ENERGY 1.00E 00 - 2.00E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-1.88207	-1.83160	.00638	.99550
2.0	-6.15557	-1.55195	.00442	.95064
3.0	-6.68954	-1.57096	.00404	.99473
4.0	-7.61911	-1.43174	.00479	.99452
5.0	-8.74499	-1.20968	.00485	.99563
7.0	-10.51921	-1.00387	.00529	.98875
10.0	-10.74390	-1.00209	.00492	.99899
15.0	-12.33465	-.82242	.00584	.99803
20.0	-12.70635	-.88881	.00572	.99940
30.0	-12.41500	-1.07663	.00568	.99768
40.0	-13.64023	-.92274	.00646	.99952
50.0	-14.84865	-.73399	.00754	.99882
60.0	-17.12921	-.24467	.01027	.99190
70.0	-14.29750	-1.03933	.00677	.99821
80.0	-16.27524	-.66829	.00800	.99717
90.0	-15.49397	-.85092	.00832	.99638
100.0	-15.89609	-.78414	.00950	.99117
120.0	-17.14375	-.53206	.01147	.99347
140.0	-16.03120	-.82810	.01049	.99755
160.0	-13.88944	-1.46034	.00697	.99650

SOURCE ENERGY 5.00E-01 - 1.00E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-1.70224	-1.88534	.00706	.99684
2.0	-3.74522	-2.00361	.00489	.98497
3.0	-6.78916	-1.40120	.00749	.98978
4.0	-9.66956	-.83378	.00962	.98304
5.0	-10.30129	-.82406	.00905	.99476
7.0	-13.67237	-.15578	.01097	.98426
10.0	-12.91123	-.18330	.00809	.99017
15.0	-13.44011	-.33411	.00787	.98185
20.0	-16.17589	-.30326	.01026	.99247
30.0	-14.68676	-.68653	.00975	.99730
40.0	-13.04299	-.62446	.00769	.99903
50.0	-14.44376	-.62003	.00914	.99786
60.0	-16.22657	-.22507	.01107	.99339
70.0	-15.89551	-.25949	.01097	.99499
80.0	-15.63342	-.55517	.00945	.99328
90.0	-15.22500	-.55338	.01278	.99375
100.0	-15.51944	-.48653	.01256	.99751
120.0	-16.45744	-.44841	.01152	.99755
140.0	-15.57878	-.93638	.01211	.99485
160.0	-14.66253	-.93023	.01075	.99745

TABLE III. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{keV}$ of source energy)

SOURCE ENERGY 1.00E-01 - 5.00E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-3.032216	-1.36209	.01758	.97862
2.0	-4.002539	-1.95695	.00743	.98767
3.0	-5.003225	-1.87462	.00689	.98974
4.0	-7.795520	-1.32186	.00879	.99643
5.0	-8.64205	-1.17512	.00942	.99857
6.0	-9.009309	-1.15442	.00919	.99857
7.0	-9.36501	-1.16253	.00944	.99906
8.0	-11.28526	-1.75515	.01147	.99808
9.0	-10.62629	-1.08614	.00891	.99680
10.0	-12.17277	-1.71810	.01192	.99336
11.0	-13.91578	-1.31443	.01483	.98573
12.0	-12.97496	-1.73646	.01128	.99926
13.0	-12.52756	-1.90100	.01083	.99926
14.0	-12.80100	-1.93309	.01007	.99829
15.0	-14.43838	-1.51621	.01322	.99914
16.0	-13.30396	-1.81320	.01355	.99931
17.0	-13.95091	-1.70494	.01294	.99887
18.0	-13.42071	-1.89696	.01199	.99502
19.0	-13.24349	-1.96503	.01193	.99915
20.0	-14.60762	-1.45341	.01852	.98436

SOURCE ENERGY 1.00E-02 - 1.00E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	2.644685	-3.05353	.00944	.99030
2.0	3.34433	-1.40389	.00562	.98876
3.0	3.63333	-1.73333	.01010	.99009
4.0	3.68333	-1.73333	.01288	.99428
5.0	3.68333	-1.73333	.01361	.99786
6.0	3.68333	-1.73333	.01443	.99636
7.0	3.68333	-1.73333	.01533	.99612
8.0	3.68333	-1.73333	.01633	.99612
9.0	3.68333	-1.73333	.01733	.99612
10.0	3.68333	-1.73333	.01833	.99612
11.0	3.68333	-1.73333	.01933	.99612
12.0	3.68333	-1.73333	.02033	.99612
13.0	3.68333	-1.73333	.02133	.99612
14.0	3.68333	-1.73333	.02233	.99612
15.0	3.68333	-1.73333	.02333	.99612
16.0	3.68333	-1.73333	.02433	.99612
17.0	3.68333	-1.73333	.02533	.99612
18.0	3.68333	-1.73333	.02633	.99612
19.0	3.68333	-1.73333	.02733	.99612
20.0	3.68333	-1.73333	.02833	.99612

TABLE IV. CURVE FIT COEFFICIENTS FOR ENERGY DEPOSITION
VS RANGE BY LINE BEAM NEUTRON SOURCESEnergy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 1.35E 01 - 1.50E 01 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	1.0	11.79056	-2.36562	.00548	.99698
1.0	2.0	5.24897	-2.06060	.00341	.97034
2.0	3.0	4.91034	-2.04412	.00314	.98280
3.0	5.0	2.31310	-1.53585	.00477	.98539
5.0	7.0	.48599	-1.18921	.00591	.99368
7.0	10.0	-.53407	-1.12414	.00537	.99582
10.0	15.0	-.88263	-1.21437	.00421	.99680
15.0	20.0	-.81347	-.17334	.00729	.85917
20.0	30.0	-2.92079	-1.04224	.00445	.99749
30.0	40.0	-2.99084	-1.17425	.00421	.99634
40.0	50.0	-6.03064	-.67306	.00490	.98771
50.0	60.0	-3.97593	-1.16993	.00400	.99715
60.0	70.0	-4.30739	-1.18327	.00404	.99489
70.0	80.0	-4.98598	-1.11241	.00403	.98518
80.0	90.0	-6.83104	-.81463	.00456	.94894
90.0	100.0	-4.33661	-1.40606	.00322	.97171
100.0	120.0	-9.73293	-.26277	.00577	.96823
120.0	140.0	-6.70316	-.99282	.00414	.98992
140.0	160.0	-17.82844	1.29358	.01022	.95034
160.0	180.0	-11.80315	.04241	.00593	.88055

SOURCE ENERGY 1.20E 01 - 1.35E 01 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	1.0	11.26933	-2.23524	.00617	.99941
1.0	2.0	5.23767	-1.98559	.00397	.95663
2.0	3.0	3.75839	-1.81088	.00424	.98445
3.0	5.0	1.77241	-1.46569	.00497	.99249
5.0	7.0	-1.27108	-.95004	.00570	.99744
7.0	10.0	-.34407	-1.20438	.00523	.99378
10.0	15.0	-.10230	-1.37467	.00484	.99595
15.0	20.0	-1.15953	-1.27707	.00433	.99535
20.0	30.0	-2.33669	-1.21581	.00403	.99623
30.0	40.0	-4.23669	-.93110	.00470	.99718
40.0	50.0	-5.08931	-.90594	.00438	.97062
50.0	60.0	-5.16307	-.94760	.00435	.99463
60.0	70.0	-5.43062	-.91925	.00472	.99487
70.0	80.0	-5.87579	-.83287	.00518	.99406
80.0	90.0	-5.96258	-.92643	.00460	.97527
90.0	100.0	-6.33761	-.95980	.00442	.96958
100.0	120.0	-8.52367	-.51110	.00570	.98806
120.0	140.0	-7.42984	-.83067	.00480	.93919
140.0	160.0	-5.04151	-1.28226	.00384	.98632
160.0	180.0	-15.01999	.69908	.00864	.93689

TABLE IV. (continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 1.00E 01 - 1.20E 01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
160.0	9.50477	-1.77753	.00889	.99262
140.0	4.94407	-2.07079	.00332	.97861
120.0	3.71430	-1.81282	.00433	.99103
100.0	.35750	-1.22063	.00556	.99123
80.0	.89430	-1.19589	.00426	.98372
60.0	.76286	-1.13851	.00350	.99278
40.0	.50710	-1.38870	.00393	.99764
20.0	.00566	-1.98829	.00465	.99708
0.0	.10167	-1.08819	.00430	.99533
180.0	.57215	-1.72849	.00482	.99507
160.0	.04027	-1.36928	.00318	.99651
140.0	.69386	-1.72613	.00368	.99610
120.0	.47028	-1.72164	.00491	.99506
100.0	.82422	-1.33614	.00324	.99343
80.0	.19553	-1.93609	.00425	.99579
60.0	.33953	-1.27023	.00370	.99261
40.0	.70311	-1.08878	.00412	.99699
20.0	.07767	-1.44337	.00533	.99352
0.0	.44630	-1.70296	.00988	.89352
180.0	.39287	1.24770	.00818	.84094

SOURCE ENERGY 7.79E 00 - 1.00E 01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
160.0	9.81065	-2.00746	.00576	.99941
140.0	2.00381	-1.11111	.00461	.98011
120.0	.00381	-1.11111	.00461	.98537
100.0	.00381	-1.11111	.00461	.99093
80.0	.00381	-1.11111	.00461	.99620
60.0	.00381	-1.11111	.00461	.99384
40.0	.00381	-1.11111	.00461	.99791
20.0	.00381	-1.11111	.00461	.99474
0.0	.00381	-1.11111	.00461	.99500
180.0	.00381	-1.11111	.00461	.99105
160.0	.00381	-1.11111	.00461	.98619
140.0	.00381	-1.11111	.00461	.99073
120.0	.00381	-1.11111	.00461	.99537
100.0	.00381	-1.11111	.00461	.99857
80.0	.00381	-1.11111	.00461	.91453
60.0	.00381	-1.11111	.00461	.96151

TABLE IV. (continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 6.07E 00 - 7.79E 00 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0	1.0	9.65566	-2.06928	.00573	.99923
1.0	2.0	2.67321	-1.65162	.00407	.98132
2.0	3.0	1.93732	-1.60498	.00392	.99543
3.0	4.0	1.50255	-1.68339	.00308	.99013
4.0	5.0	1.25967	-1.34234	.00439	.99030
5.0	6.0	1.07681	-1.91882	.00468	.99269
6.0	7.0	1.45742	-1.32007	.00327	.99039
7.0	8.0	2.71213	-1.13751	.00343	.99268
8.0	9.0	4.19859	-1.97515	.00363	.99801
9.0	10.0	4.53146	-1.01323	.00363	.99410
10.0	11.0	4.75028	-1.05681	.00372	.98750
11.0	12.0	5.62108	-.96514	.00385	.99058
12.0	13.0	6.74248	-.78724	.00439	.98500
13.0	14.0	7.24486	-.67830	.00506	.99424
14.0	15.0	6.00192	-.99202	.00433	.99422
15.0	16.0	6.52033	-.86041	.00510	.99743
16.0	17.0	9.28097	-.44102	.00520	.98775
17.0	18.0	5.63826	-1.20913	.00379	.97940
18.0		5.46267	-1.32420	.00291	.96574
19.0		33.83385	4.32862	.01414	.66800

SOURCE ENERGY 3.68E 00 - 6.07E 00 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0	1.0	10.24768	-2.28521	.00546	.99968
1.0	2.0	.42734	-.90669	.01045	.93806
2.0	3.0	.83625	-1.01547	.00722	.98757
3.0	4.0	2.44093	-.85204	.00563	.98227
4.0	5.0	1.81207	-1.26789	.00465	.99622
5.0	6.0	2.08412	-1.06633	.00504	.98469
6.0	7.0	1.44124	-1.28495	.00448	.99637
7.0	8.0	2.94264	-1.06650	.00495	.99514
8.0	9.0	3.17787	-1.00991	.00487	.99924
9.0	10.0	4.19452	-1.03878	.00468	.99704
10.0	11.0	4.36390	-1.09848	.00433	.99562
11.0	12.0	5.61831	-.88945	.00490	.99841
12.0	13.0	7.28311	-.59596	.00578	.99508
13.0	14.0	7.71212	-.53747	.00597	.97943
14.0	15.0	9.95613	-.97069	.00480	.99054
15.0	16.0	5.29219	-1.11981	.00451	.99657
16.0	17.0	5.63841	-1.06937	.00479	.99656
17.0	18.0	5.63120	-1.06628	.00517	.99715
18.0		4.14783	-1.39563	.00433	.99333
19.0		6.66942	-.82944	.00610	.99104

TABLE IV. (continued)

Energy Deposition (keV m⁻³/source neutron)

SOURCE ENERGY 2.86E 00 - 3.68E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	7.62988	-1.52476	.01206	.98276
2.0	4.70281	-2.26303	.00348	.98845
3.0	-1.07127	-1.12680	.00559	.98448
4.0	-1.41983	-1.26311	.00517	.95450
5.0	-1.53204	-1.64832	.00480	.98579
7.0	-1.34241	-1.38332	.00455	.99275
10.0	-2.74287	-1.08543	.00608	.99146
15.0	-6.42196	-.39121	.00714	.98103
20.0	-2.97897	-1.24325	.00487	.99485
30.0	-6.13328	-.71616	.00556	.99561
40.0	-5.45148	-.91443	.00537	.99788
50.0	-4.44931	-1.17142	.00468	.99726
60.0	-3.19228	-.84086	.00559	.99609
70.0	-3.20857	-.88564	.00539	.99691
80.0	-3.64122	-1.11142	.00506	.99461
90.0	-5.07182	-1.16894	.00455	.99808
100.0	-6.28082	-.89211	.00581	.99614
110.0	-8.28827	-.71418	.00601	.99798
120.0	-10.99218	-.52487	.00639	.99482
130.0	-15.29530	-1.27995	.00376	.98055

SOURCE ENERGY 2.23E 00 - 2.86E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	8.88444	-2.14909	.00589	.99911
2.0	2.20516	-1.86056	.00402	.96268
3.0	3.56422	-1.58624	.00519	.99083
4.0	-1.86616	-.97368	.00668	.99665
5.0	-1.43666	-1.27017	.00483	.99348
7.0	-1.13666	-.90274	.00580	.99632
10.0	-1.36666	-.45342	.00601	.99056
15.0	-1.43666	-1.13968	.00490	.99578
20.0	-1.43666	-1.06511	.00417	.99220
30.0	-1.43666	-.88109	.00496	.99778
40.0	-1.43666	-.64935	.00568	.99669
50.0	-1.43666	-.64935	.00601	.99749
60.0	-1.43666	-.64935	.00592	.99793
70.0	-1.43666	-.64935	.00597	.99853
80.0	-1.43666	-.64935	.00641	.99687
90.0	-1.43666	-.64935	.00641	.99716
100.0	-1.43666	-.64935	.00549	.99871
110.0	-1.43666	-.64935	.00630	.99148
120.0	-1.43666	-.64935	.00623	.99148
130.0	-1.43666	-.64935	.01069	.98850

TABLE IV. (continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 1.74E 00 - 2.23E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	8.85550	-2.22050	.00725	.99880
2.0	1.35221	-1.63654	.00570	.98506
3.0	-1.11340	-1.17079	.00774	.97927
4.0	-2.00894	-1.01988	.00871	.97269
5.0	-2.49455	-1.07597	.00711	.98337
7.0	-2.35355	-1.20675	.00590	.99290
10.0	-3.61162	-1.03153	.00573	.99809
15.0	-4.38563	-.91607	.00591	.99230
20.0	-5.27712	-.82465	.00592	.99920
30.0	-4.30696	-1.13267	.00483	.99798
40.0	-5.45819	-.90914	.00608	.99707
50.0	-5.83288	-.89287	.00603	.99533
60.0	-6.12784	-.83027	.00671	.99699
70.0	-7.20898	-.64755	.00683	.99921
80.0	-6.11864	-.91861	.00631	.98911
90.0	-8.45932	-.45857	.00701	.99476
100.0	-6.66268	-.85588	.00640	.99831
110.0	-7.10023	-.70346	.00821	.99266
120.0	-8.34345	-.42631	.00957	.98384
140.0	-9.06915	-.37819	.00892	.98346

SOURCE ENERGY 1.35E 00 - 1.74E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	4.96710	-.99660	.02005	.96106
2.0	-1.51000	-.77627	.01474	.93406
3.0	-.35406	-1.40667	.00747	.98221
4.0	-.72300	-1.41930	.00666	.99373
5.0	-1.25430	-1.45140	.00536	.99589
7.0	-1.76625	-1.37001	.00577	.99761
10.0	-1.17863	-1.18098	.00567	.99307
15.0	-.73934	-.12039	.01094	.97035
20.0	-4.36633	-1.02480	.00622	.99864
30.0	-6.27733	-.57925	.00885	.99217
40.0	-5.77247	-.82469	.00684	.99839
50.0	-6.35641	-.77162	.00666	.99892
60.0	-6.12641	-.43125	.00763	.99658
70.0	-7.35888	-.55632	.00797	.99864
80.0	-6.24688	-.88404	.00706	.98880
90.0	-8.35553	-.35553	.00942	.98758
100.0	-7.72343	-.71764	.00743	.99714
110.0	-11.58222	-.17555	.00961	.98114
120.0	-6.57233	-.96451	.00662	.99264
140.0	-10.04838	-.12053	.01046	.97478

TABLE IV. (continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 8.23E-01 - 1.35E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
110.0	9.22130	-2.53636	.00706	.99632
111.0	1.35400	-1.71072	.00902	.98016
112.0	1.82245	-1.93562	.00473	.96398
113.0	-1.73177	-1.20638	.00897	.99166
114.0	-4.07281	-1.77945	.00930	.98801
115.0	-7.04072	-1.09878	.01295	.98521
116.0	-3.81513	-1.00995	.00745	.99822
117.0	-5.18058	-1.80677	.00760	.99705
118.0	-5.42355	-1.84476	.00735	.99461
119.0	-3.37570	-1.06663	.01105	.97371
120.0	-5.86109	-1.95632	.00732	.99871
121.0	-9.92652	-1.02133	.00950	.98894
122.0	-7.08720	-1.64723	.00822	.99700
123.0	-5.69876	-1.99297	.00726	.99745
124.0	-8.59618	-1.35914	.00941	.99210
125.0	-7.18905	-1.73385	.00801	.98844
126.0	-6.32001	-1.98006	.00686	.99608
127.0	-7.20748	-1.78885	.00785	.99878
128.0	-7.45221	-1.63943	.01001	.98134
129.0	-8.13768	-1.46846	.01121	.98887

SOURCE ENERGY 5.00E-01 - 8.23E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
110.0	8.10226	-2.31653	.00842	.99833
111.0	1.11111	-1.11111	.00000	.90278
112.0	1.11111	-1.11111	.00000	.98638
113.0	1.11111	-1.11111	.00000	.99189
114.0	1.11111	-1.11111	.00000	.99333
115.0	1.11111	-1.11111	.00000	.99444
116.0	1.11111	-1.11111	.00000	.99555
117.0	1.11111	-1.11111	.00000	.99666
118.0	1.11111	-1.11111	.00000	.99777
119.0	1.11111	-1.11111	.00000	.99888
120.0	1.11111	-1.11111	.00000	.99999
121.0	1.11111	-1.11111	.00000	.99999
122.0	1.11111	-1.11111	.00000	.99999
123.0	1.11111	-1.11111	.00000	.99999
124.0	1.11111	-1.11111	.00000	.99999
125.0	1.11111	-1.11111	.00000	.99999
126.0	1.11111	-1.11111	.00000	.99999
127.0	1.11111	-1.11111	.00000	.99999
128.0	1.11111	-1.11111	.00000	.99999
129.0	1.11111	-1.11111	.00000	.99999

TABLE IV. (continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 3.03E-01 - 5.00E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	7.52582	-2.13664	.01755	.98578
2.0	1.88214	-1.89804	.01244	.98582
3.0	-1.51368	-1.53086	.01231	.98578
4.0	-1.26233	-1.39963	.01204	.98555
5.0	-1.06239	-1.28777	.01198	.99110
6.0	-0.86264	-1.06170	.01181	.99158
7.0	-0.66297	-0.80493	.01517	.99554
8.0	-0.46293	-0.66500	.01482	.99335
9.0	-0.26243	-0.39075	.01572	.98834
10.0	-0.06268	-0.95015	.01100	.99811
11.0	-0.13217	-1.06713	.01000	.99970
12.0	-0.59536	-0.72486	.01193	.99870
13.0	-0.05497	-0.41395	.01353	.99767
14.0	-0.23980	-0.94446	.01023	.99943
15.0	-0.18905	-0.62290	.01365	.99495
16.0	-0.30641	-0.74524	.01131	.99863
17.0	-0.67571	-0.51651	.01498	.99899
18.0	-0.22888	-0.58020	.01200	.99897
19.0	-0.92014	-0.88343	.01113	.99729
20.0	-0.59524	-0.50291	.01357	.99797

SOURCE ENERGY 1.84E-01 - 3.03E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	6.80886	-2.03420	.01921	.98021
2.0	1.64045	-2.08370	.00901	.96412
3.0	-1.91540	-1.53681	.01277	.97493
4.0	-2.29808	-1.32234	.01145	.99125
5.0	-2.97592	-1.27070	.01169	.99007
6.0	-4.84877	-0.83961	.01327	.99659
7.0	-5.61868	-0.74283	.01320	.99796
8.0	-7.30209	-0.39280	.01440	.99162
9.0	-6.80263	-0.61180	.01288	.99867
10.0	-6.17215	-0.81022	.01255	.99595
11.0	-7.88458	-0.46542	.01360	.99779
12.0	-7.65064	-0.51643	.01464	.99707
13.0	-7.86075	-0.53154	.01439	.99827
14.0	-8.43747	-0.37344	.01579	.99692
15.0	-7.79740	-0.61135	.01365	.99811
16.0	-8.31590	-0.48315	.01475	.99731
17.0	-9.90362	-0.05213	.01842	.98629
18.0	-9.68670	-0.12415	.01849	.97769
19.0	-6.83643	-0.99729	.01182	.99736
20.0	-10.85096	-0.50668	.01883	.99250

TABLE IV. (continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)SOURCE ENERGY $6.76\text{E-}02 - 1.84\text{E-}01$ (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
160.0	7.43626	-2.48994	.01422	.99911
140.0	7.43626	-2.07323	.00955	.97967
120.0	7.43626	-1.67257	.01261	.98563
100.0	7.43626	-1.67432	.02112	.97438
80.0	7.43626	-1.63655	.01836	.99421
60.0	7.43626	-1.04497	.01606	.99637
40.0	7.43626	-1.02896	.01451	.99753
20.0	7.43626	-.81304	.01559	.99506
0.0	7.43626	-.75076	.01533	.99358
180.0	7.43626	-.51062	.01692	.99840
160.0	7.43626	-.55352	.01585	.99852
140.0	7.43626	-.61165	.01623	.99820
120.0	7.43626	-.21503	.01887	.99592
100.0	7.43626	-.45704	.01713	.99808
80.0	7.43626	-.70191	.01404	.99931
60.0	7.43626	-.13723	.02052	.99618
40.0	7.43626	-.10553	.02063	.99115
20.0	7.43626	-.61467	.01610	.99871
0.0	7.43626	-.91009	.01331	.99826
180.0	7.43626	.05380	.02307	.98697

SOURCE ENERGY $2.48\text{E-}02 - 6.76\text{E-}02$ (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
160.0	4.00064	1.121	.03373	.97330
140.0	4.00064	1.121	.03373	.95999
120.0	4.00064	1.121	.03373	.98755
100.0	4.00064	1.121	.03373	.99017
80.0	4.00064	1.121	.03373	.99535
60.0	4.00064	1.121	.03373	.99901
40.0	4.00064	1.121	.03373	.99999
20.0	4.00064	1.121	.03373	.99999
0.0	4.00064	1.121	.03373	.99999
180.0	4.00064	1.121	.03373	.99999
160.0	4.00064	1.121	.03373	.99999
140.0	4.00064	1.121	.03373	.99999
120.0	4.00064	1.121	.03373	.99999
100.0	4.00064	1.121	.03373	.99999
80.0	4.00064	1.121	.03373	.99999
60.0	4.00064	1.121	.03373	.99999
40.0	4.00064	1.121	.03373	.99999
20.0	4.00064	1.121	.03373	.99999
0.0	4.00064	1.121	.03373	.99999
180.0	4.00064	1.121	.03373	.99999

TABLE IV. (continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 9.12E-03 - 2.48E-02 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	1.0	5.35965	-2.30466	.02635	.99500
1.0	2.0	-1.85438	-1.64396	.01955	.98306
2.0	2.0	-1.34637	-1.96747	.01621	.99312
3.0	3.0	-2.75576	-1.70917	.01718	.99292
5.0	5.0	-3.66294	-1.48930	.01883	.98952
7.0	7.0	-6.22184	-.91990	.02106	.99490
10.0	10.0	-6.51298	-.86439	.02324	.99792
15.0	15.0	-6.03601	-1.09921	.02033	.99705
20.0	20.0	-7.88687	-.62199	.02333	.99524
30.0	30.0	-7.88324	-.78534	.02048	.99069
40.0	40.0	-7.89514	-.80678	.02118	.99771
50.0	50.0	-8.46468	-.74310	.02062	.99931
60.0	60.0	-8.84180	-.65306	.02205	.99897
70.0	70.0	-7.88852	-.99113	.01964	.99647
80.0	80.0	-8.96107	-.60782	.02487	.99613
90.0	90.0	-8.71496	-.78568	.02232	.99917
100.0	100.0	-9.03000	-.71197	.02344	.99684
120.0	120.0	-9.87680	-.50897	.02513	.99759
140.0	140.0	-9.42088	-.71241	.02202	.99724
160.0	160.0	-9.60334	-.74575	.02095	.99578

SOURCE ENERGY 3.35E-03 - 9.12E-03 (MEV)

ANGLE (DEG)		A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	1.0	7.35574	-3.38484	.01534	.95778
1.0	2.0	-1.20790	-2.06728	.02164	.98391
2.0	2.0	-1.21169	-2.29598	.01583	.95962
3.0	3.0	-3.95152	-1.63501	.02006	.98513
5.0	5.0	-4.69443	-1.49769	.01967	.97072
7.0	7.0	-5.48689	-1.27093	.02283	.99145
10.0	10.0	-7.52082	-.73204	.02866	.99147
15.0	15.0	-7.94633	-.69574	.02692	.99257
20.0	20.0	-7.39079	-1.01873	.02213	.99741
30.0	30.0	-7.86859	-1.02839	.02087	.99662
40.0	40.0	-8.94595	-.73657	.02384	.99866
50.0	50.0	-8.69645	-.85078	.02266	.99847
60.0	60.0	-9.89769	-.61033	.02375	.99675
70.0	70.0	-9.48117	-.70360	.02427	.99700
80.0	80.0	-9.61577	-.75102	.02355	.99749
90.0	90.0	-9.31783	-.89691	.02190	.99909
100.0	100.0	-9.39635	-.88162	.02235	.99948
120.0	120.0	-10.59871	-.44247	.02820	.98861
140.0	140.0	-11.33757	-.35170	.02783	.99570
160.0	160.0	-10.99609	-.37323	.03047	.98728

TABLE IV. (continued)

Energy Denosition (keV m⁻³/source neutron)

SOURCE ENERGY 1.00E-03 - 3.35E-03 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
0.0	4.110661	-2.52256	.03012	.99781
1.0	-3.01635	-1.77615	.03265	.97478
2.0	-4.82241	-1.26912	.03438	.99025
3.0	-4.75477	-1.54329	.02435	.99132
4.0	-6.20932	-1.18098	.02920	.99205
5.0	-7.06406	-1.08133	.02789	.99705
6.0	-6.98916	-1.23949	.02582	.99778
7.0	-8.40852	-.92405	.02528	.99854
8.0	-8.53149	-.96768	.02417	.99917
9.0	-8.97996	-.91987	.02414	.99795
10.0	-9.15976	-.96143	.02321	.99890
11.0	-11.30252	-.30461	.03146	.99453
12.0	-10.13361	-.77175	.02526	.99716
13.0	-10.51014	-.68648	.02640	.99878
14.0	-10.30033	-.75672	.02688	.99870
15.0	-10.88196	-.66406	.02612	.99896
16.0	-10.93105	-.63006	.02652	.99747
17.0	-11.89036	-.37191	.03149	.99701
18.0	-10.86911	-.80451	.02382	.99882
19.0	-11.28620	-.69302	.02500	.99600

TABLE V. CURVE FIT COEFFICIENTS FOR SECONDARY GAMMA-RAY ENERGY DEPOSITION
VS RANGE BY LINE BEAM NEUTRON SOURCES

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 1.35E 01 - 1.50E 01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	17.95058	-5.06201	.00061	.90930
2.0	10.34301	-3.77223	.00105	.84083
3.0	-3.22689	-1.33355	.00146	.61311
4.0	-2.36154	-2.21193	.00180	.84140
5.0	-6.80270	-.41572	.00530	.86447
7.0	-2.26787	-1.22284	.00429	.98544
10.0	-1.17026	-1.63323	.00250	.94884
15.0	-4.88169	-.90584	.00378	.95883
20.0	-2.77269	-1.35445	.00311	.99290
30.0	-3.35790	-1.30136	.00329	.99467
40.0	-5.50339	-.95667	.00340	.98662
50.0	-6.02387	-.87309	.00382	.99430
60.0	-6.31066	-.84846	.00424	.98414
70.0	-6.04042	-.95256	.00401	.98097
80.0	-9.83301	-.23498	.00523	.92590
90.0	-8.96184	-.44098	.00488	.98332
100.0	-9.61474	-.26388	.00614	.96013
110.0	-4.17250	-1.48226	.00313	.97478
120.0	-10.34341	-.15806	.00645	.94203
140.0	-28.46542	3.36884	.01203	.76698

SOURCE ENERGY 1.20E 01 - 1.35E 01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	-3.31018	-.64065	.00913	.76355
2.0	-20.21802	2.77789	.01559	.83778
3.0	-20.99356	2.21162	.00887	.67106
4.0	-.46695	-1.42776	.00383	.97570
5.0	-13.94145	.92178	.00671	.80983
7.0	-16.61588	1.52025	.00834	.85388
10.0	-4.26579	-.95616	.00405	.95045
15.0	-4.68618	-.86490	.00446	.98941
20.0	-5.91406	-.71212	.00443	.97588
30.0	-6.05777	-.74058	.00435	.98300
40.0	-9.26711	-.17787	.00541	.94134
50.0	-6.81645	-.67839	.00453	.98134
60.0	-3.24639	-1.50155	.00267	.98355
70.0	-6.18267	-.88692	.00399	.98693
80.0	-11.98244	-.21144	.00600	.94545
90.0	-4.19675	-1.35171	.00347	.97149
100.0	-4.11207	-1.40088	.00321	.99570
120.0	-6.80384	-.91511	.00415	.99291
140.0	-6.50814	-1.00248	.00433	.95858
160.0	-4.83062	-1.59547	.00204	.80235

TABLE V. (Continued)

Energy Deposition (keV m^{-3} /source neutron)

SOURCE ENERGY 1.00E 01 - 1.20E 01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
15.22325	15.22325	-4.76831	-.00367	.77188
17.55548	17.55548	-3.09977	-.00320	.88106
11.24074	11.24074	-4.18977	-.00135	.89533
14.73153	14.73153	-1.32255	-.00517	.96756
14.14404	14.14404	-2.29255	.00990	.94188
19.77605	19.77605	-1.19776	.01062	.81116
13.16623	13.16623	-1.05150	.00432	.98929
17.54673	17.54673	-2.25405	.00544	.98181
18.01597	18.01597	-1.27914	.00515	.96555
14.79952	14.79952	-1.04448	.00343	.98303
18.39648	18.39648	-1.41113	.00257	.96956
18.09801	18.09801	-1.43379	.00502	.94279
18.98673	18.98673	-1.35186	.00469	.93092
18.92501	18.92501	-1.41886	.00284	.95931
18.79718	18.79718	-1.41886	.00459	.88058
25.59816	25.59816	2.99889	.01205	.75052
13.34499	13.34499	-1.61056	.00276	.98192
17.25489	17.25489	-1.80749	.00451	.98694
16.04448	16.04448	-1.14463	.00323	.94238
21.83496	21.83496	2.26553	.01128	.90403

SOURCE ENERGY 7.79E 00 - 1.00E 01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
15.22325	15.22325	5.54770	.04020	.88032
17.55548	17.55548	8.33770	.00000	.88032
11.24074	11.24074	7.77111	.00000	.88032
14.73153	14.73153	7.77111	.00000	.88032
14.14404	14.14404	7.77111	.00000	.88032
19.77605	19.77605	7.77111	.00000	.88032
13.16623	13.16623	7.77111	.00000	.88032
17.54673	17.54673	7.77111	.00000	.88032
18.01597	18.01597	7.77111	.00000	.88032
14.79952	14.79952	7.77111	.00000	.88032
18.39648	18.39648	7.77111	.00000	.88032
18.09801	18.09801	7.77111	.00000	.88032
18.98673	18.98673	7.77111	.00000	.88032
18.92501	18.92501	7.77111	.00000	.88032
18.79718	18.79718	7.77111	.00000	.88032
25.59816	25.59816	7.77111	.00000	.88032
13.34499	13.34499	7.77111	.00000	.88032
17.25489	17.25489	7.77111	.00000	.88032
16.04448	16.04448	7.77111	.00000	.88032
21.83496	21.83496	7.77111	.00000	.88032

TABLE V. (Continued)

Energy Deposition (keV m^{-3} /source neutron)

SOURCE ENERGY 6.07E 00 - 7.79E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0	-3.45900	-3.31823	.01446	.80771
1.0	-6.83959	-3.03398	.00141	.70259
2.0	-3.07880	-2.13132	.00002	.54957
3.0	-4.47054	-1.24705	.00283	.48911
4.0	.77737	-1.91803	.00306	.95204
5.0	-5.08988	-.90922	.00409	.79396
10.0	-1.06649	-1.74924	.00221	.92643
15.0	-3.39483	-1.37453	.00266	.94844
20.0	-3.38127	-1.39797	.00301	.98431
30.0	-11.99734	.24837	.00593	.90839
40.0	-14.82586	.80592	.00748	.85279
50.0	-6.57749	-1.01772	.00315	.95641
60.0	-12.75872	.14160	.00533	.90282
70.0	-6.40718	-1.06417	.00396	.96820
80.0	-6.85888	-1.04045	.00399	.94628
90.0	-15.05737	.47537	.00536	.80981
100.0	-8.16040	-.92280	.00339	.86607
120.0	-21.68275	1.96972	.01025	.79512
140.0	-13.03274	-.12624	.00460	.81856
160.0	-18.98087	.79591	.00514	.57583

SOURCE ENERGY 3.68E 00 - 6.07E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0	6.14822	-3.45149	.00167	.67939
1.0	.62709	-2.79535	.00051	.61237
2.0	9.20331	-4.41967	.00318	.86928
3.0	-19.22043	1.30584	.00762	.72013
4.0	-6.44142	-1.12156	.00301	.71850
5.0	-15.66614	-.83330	.00778	.75778
10.0	-8.13581	-.71248	.00416	.89514
15.0	-22.55695	-1.89721	.00187	.90027
20.0	-12.87175	.16231	.00559	.94897
30.0	-15.86309	-.80629	.00731	.77048
40.0	-8.45208	-.99867	.00222	.88127
50.0	-10.48694	-.42336	.00447	.93735
60.0	-9.56655	-.68269	.00407	.91913
70.0	-8.21473	-1.16382	.00228	.91368
80.0	-5.49991	-1.63906	.00182	.92915
90.0	-20.97855	1.39247	.00720	.85063
100.0	-18.55608	-.91033	.00680	.79364
120.0	-9.90320	-.83663	.00316	.88845
140.0	-10.36172	-.91269	.00223	.86920
160.0	-33.33015	3.47907	.00973	.65827

TABLE V. (Continued)

Energy Deposition (keV m⁻³/source neutron)

SOURCE ENERGY 2.86E 00 - 3.68E 00 (MEV)

ANGLE (DEG)	COEFFICIENT A	COEFFICIENT B	COEFFICIENT C	CORRELATION COEFFICIENT
160.0	29.44418	-8.73186	-.01118	.86613
140.0	15.33544	-6.39423	-.01041	.881849
120.0	9.92035	-3.11154	.00230	.81612
100.0	7.92035	-1.11154	.00375	.72771
80.0	3.32416	1.00344	.00706	.65827
60.0	1.92035	1.75207	.00428	.64814
40.0	1.63345	-1.92272	.00797	.67596
20.0	1.63345	-1.05772	.00093	.80093
0.0	1.63345	-1.05772	.00044	.800831
160.0	1.16.97344	-.41602	.00375	.60722
140.0	1.11.81569	-.52241	.00263	.93700
120.0	1.10.81569	-.92241	.00414	.76056
100.0	1.10.81569	-.92241	.00114	.86093
80.0	1.10.81569	-.92241	.00886	.78084
60.0	1.10.81569	-.92241	.00110	.77016
40.0	1.10.81569	-.92241	.00342	.76265
20.0	1.10.81569	-.92241	.00187	.95915
0.0	1.10.81569	-.92241	.01002	.71477
160.0	1.10.81569	-.92241	.00677	.84191
140.0	1.10.81569	-.92241	.00906	.70187

SOURCE ENERGY 2.23E 00 - 2.86E 00 (MEV)

ANGLE (DEG)	COEFFICIENT A	COEFFICIENT B	COEFFICIENT C	CORRELATION COEFFICIENT
160.0	4.46554	-3.41394	.00154	.75423
140.0	3.41394	-2.01078	.00094	.62817
120.0	3.41394	-1.41394	.00062	.60000
100.0	3.41394	-1.41394	.00033	.70000
80.0	3.41394	-1.41394	.00013	.62222
60.0	3.41394	-1.41394	.00013	.67162
40.0	3.41394	-1.41394	.00019	.82222
20.0	3.41394	-1.41394	.00033	.66394
0.0	3.41394	-1.41394	.00033	.74279
160.0	3.41394	-1.41394	.00033	.57548
140.0	3.41394	-1.41394	.00033	.47149
120.0	3.41394	-1.41394	.00033	.62435
100.0	3.41394	-1.41394	.00033	.50019
80.0	3.41394	-1.41394	.00033	.73707
60.0	3.41394	-1.41394	.00033	.77136
40.0	3.41394	-1.41394	.00033	.71373
20.0	3.41394	-1.41394	.00033	.62817
0.0	3.41394	-1.41394	.00033	.32494

TABLE V. (Continued)

Energy Deposition (keV m⁻³/source neutron)

SOURCE ENERGY 1.74E 00 - 2.23E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	4.46554	-3.41394	.00154	.75423
2.0	-26.10715	-2.01078	.00943	.62817
3.0	-33.54559	-3.24033	.00759	.66373
4.0	-22.92374	-3.00348	.00374	.40791
5.0	-41.65070	4.39700	.00690	.60679
6.0	-20.71843	2.54439	.00509	.40123
7.0	-20.84123	1.09024	.00402	.51257
8.0	-48.16158	6.29468	.01207	.78057
9.0	-26.63837	2.26709	.00660	.77262
10.0	-24.67165	1.96197	.00647	.82481
11.0	-21.87308	1.35033	.00507	.65999
12.0	-20.15964	1.69286	.00636	.73197
13.0	-20.66045	2.85351	.00898	.59640
14.0	-22.42644	1.95705	.00753	.79854
15.0	-21.60052	1.39659	.00621	.77317
16.0	-20.38554	1.11604	.00549	.62269
17.0	-19.29689	1.90587	.00542	.69866
18.0	-33.73405	3.63645	.00954	.85936
19.0	-35.12605	1.98834	.00710	.77178
20.0	-40.82001	4.85590	.01121	.71991

SOURCE ENERGY 1.35E 00 - 1.74E 00. (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	4.46554	-3.41394	.00154	.75423
2.0	-28.17532	-2.37616	.00753	.37809
3.0	-33.54559	-3.24033	.00759	.66373
4.0	-22.92374	-3.00348	.00374	.40791
5.0	-41.65070	4.39700	.00690	.60679
6.0	-20.71843	2.54439	.01013	.73399
7.0	-20.84123	1.96197	.00506	.36987
8.0	-48.16158	6.29468	.00638	.75661
9.0	-26.63837	2.26709	.00379	.41399
10.0	-24.67165	1.96197	.00764	.87511
11.0	-21.87308	1.35033	.00866	.86149
12.0	-20.15964	1.69286	.00747	.73386
13.0	-20.66045	2.85351	.00648	.63370
14.0	-22.42644	1.95705	.00879	.87826
15.0	-21.60052	1.39659	.00685	.70331
16.0	-20.38554	1.11604	.00891	.63731
17.0	-19.29689	1.90587	.01141	.79383
18.0	-33.73405	3.63645	.00896	.89382
19.0	-35.12605	1.98834	.00372	.78589
20.0	-40.82001	4.85590	.00876	.64312

TABLE V. (Continued)

Energy Deposition (keV m⁻³/source neutron)

SOURCE ENERGY 8.23E-01 - 1.35E 00 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0 - 1.0	4.46554	-3.41394	.00154	.75423
1.0 - 2.0	-28.17532	2.37616	.00753	.37809
2.0 - 3.0	-22.13576	1.09621	.00349	.57486
3.0 - 4.0	-21.40623	.60074	.00069	.31964
4.0 - 5.0	-37.63358	4.22060	.00946	.47206
5.0 - 6.0	-21.82706	1.34535	.00545	.63393
6.0 - 7.0	-30.16907	3.13810	.00963	.76154
7.0 - 8.0	-16.77814	.36677	.00371	.52847
8.0 - 9.0	-30.83749	3.11984	.00793	.47876
9.0 - 10.0	-23.42879	1.67592	.00551	.54119
10.0 - 11.0	-24.60034	1.97868	.00670	.69992
11.0 - 12.0	-24.13455	1.92711	.00689	.80062
12.0 - 13.0	-28.89185	2.89925	.00895	.74856
13.0 - 14.0	-24.52106	2.03788	.00751	.68580
14.0 - 15.0	-29.47966	2.94109	.00880	.83245
15.0 - 16.0	-22.99457	1.69457	.00667	.76825
16.0 - 17.0	-19.63179	1.10521	.00637	.86189
17.0 - 18.0	-19.25984	.92028	.00557	.91289
18.0 - 19.0	-12.03422	.55204	.00247	.66136
19.0 - 20.0	-32.14824	3.22826	.00832	.50046

SOURCE ENERGY 5.00E-01 - 8.23E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
.0 - 1.0	4.46554	-3.41394	.00154	.75423
1.0 - 2.0	-34.50897	2.73052	.00188	.60890
2.0 - 3.0	-27.07457	2.54396	.01071	.70479
3.0 - 4.0	-98.20851	15.59061	.02803	.90735
4.0 - 5.0	-13.69677	8.37769	.00133	.25354
5.0 - 6.0	-62.70663	8.85714	.01315	.83138
6.0 - 7.0	-22.10934	1.24549	.00376	.32692
7.0 - 8.0	-40.20674	5.16198	.01273	.77899
8.0 - 9.0	-24.73386	1.93884	.00642	.51583
9.0 - 10.0	-29.77634	2.99811	.00880	.73289
10.0 - 11.0	-27.45418	2.65436	.00855	.72588
11.0 - 12.0	-16.94618	.51874	.00452	.60666
12.0 - 13.0	-14.95028	.17257	.00422	.83234
13.0 - 14.0	-33.32523	1.93274	.00810	.85439
14.0 - 15.0	-22.20171	1.58069	.00688	.48866
15.0 - 16.0	-19.32800	1.06988	.00631	.92922
16.0 - 17.0	-23.06357	1.82226	.00794	.83396
17.0 - 18.0	-18.81754	.96024	.00620	.96198
18.0 - 19.0	-25.27235	-2.21116	.00879	.83218
19.0 - 20.0	-8.89604	-1.36177	.00006	.61403

TABLE V. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)

SOURCE ENERGY 3.03E-01 - 5.00E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	4.46554	-3.41394	.00154	.75423
1.0	34.50897	2.73052	.00188	.60890
1.0	###	15.90916	.02707	.68732
1.0	###	2.30284	.00704	.64065
1.0	###	2.25727	.00317	.59034
1.0	12.78729	5.75677	.01458	.86055
1.0	43.71947	3.41333	.00981	.83642
1.0	31.83612	.87962	.00581	.66995
1.0	18.72096	-.41235	.00320	.71984
1.0	11.82998	3.88250	.01166	.79221
1.0	33.01544	1.97802	.00854	.74813
1.0	23.27522	1.23339	.00659	.64112
1.0	20.26778	1.00448	.00498	.93069
1.0	13.21315	1.34345	.00760	.88939
1.0	20.95857	1.43448	.00708	.77929
1.0	20.90898	1.64558	.00779	.94269
1.0	24.90311	2.34146	.00999	.94804
1.0	26.08461	2.49932	.00980	.72445
1.0	22.65967	1.75272	.00789	.90953
1.0	25.98244	2.44616	.00892	.70073

SOURCE ENERGY 1.84E-01 - 3.03E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	4.46554	-3.41394	.00154	.75423
1.0	61.19792	9.20379	.01998	.71429
1.0	41.57230	5.90655	.02465	.82560
1.0	21.65240	1.77401	.01459	.74486
1.0	17.20084	1.58608	.01846	.92466
1.0	24.55721	4.07751	.00867	.74105
1.0	38.36430	4.93221	.01409	.88943
1.0	27.50607	2.67159	.00886	.69062
1.0	40.46304	3.38628	.01071	.89729
1.0	37.64941	3.70063	.01293	.78550
1.0	30.96471	3.46885	.01086	.91807
1.0	23.81146	1.10390	.00875	.85584
1.0	22.97946	1.90830	.00855	.95311
1.0	18.81827	.99160	.00625	.75803
1.0	14.44563	2.27904	.00628	.98223
1.0	12.77850	1.13036	.00480	.95394
1.0	12.22890	1.20264	.00481	.98652
1.0	18.55672	1.98525	.00671	.89802
1.0	22.70496	1.70315	.00775	.73146
1.0	28.08653	2.63827	.00872	.73659

TABLE V. (Continued)

Energy Deposition (keV m⁻³/source neutron)

SOURCE ENERGY 6.76E-02 - 1.84E-01 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	4.46554	-3.41394	.00154	.75423
2.0	-61.19792	9.20379	.01998	.71429
3.0	-86.01190	13.03695	.02246	.73926
4.0	-47.32378	5.74001	.01099	.39280
5.0	-21.06335	1.16398	.00610	.61696
7.0	-42.29265	5.89385	.01805	.93141
10.0	-37.31929	4.62258	.01337	.91760
15.0	-38.10509	4.85130	.01386	.84768
20.0	-31.22289	3.58961	.01153	.89115
30.0	-46.40845	6.57670	.01732	.77016
40.0	-16.05611	5.59832	.00619	.94083
50.0	-24.82520	2.33927	.00961	.90365
60.0	-26.10579	2.64557	.01011	.79953
70.0	-23.09556	2.21436	.00953	.73159
80.0	-22.11258	1.64444	.00729	.82416
90.0	-22.86324	1.94246	.00901	.81713
100.0	-20.34341	1.41454	.00794	.95364
120.0	-20.80930	1.56408	.00882	.92786
140.0	-20.46495	1.40048	.00816	.83716
160.0	-20.64233	1.46568	.00905	.87600

SOURCE ENERGY 2.48E-02 - 6.76E-02 (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	4.46554	-3.41394	.00154	.75423
2.0	.00000	.00000	.00000	.00000
3.0	-21.98152	1.53361	.01015	.94054
4.0	-4.65197	-1.63424	.00485	.76321
5.0	-5.47458	-1.71742	.00275	.68273
7.0	-7.16936	-1.01734	.00487	.83584
10.0	-11.93536	-.35143	.00418	.74316
15.0	-21.93401	1.58056	.00723	.69988
20.0	-23.50273	2.12444	.01012	.88780
30.0	-11.53024	-.25824	.00503	.87656
40.0	-17.18474	.85596	.00679	.97381
50.0	-17.09656	.75681	.00635	.83224
60.0	-31.34081	3.63002	.01220	.85426
70.0	-26.75693	2.72692	.01042	.84056
80.0	-10.46989	-.52063	.00443	.96651
90.0	-18.72450	1.17162	.00814	.95550
100.0	-13.94316	2.12220	.00619	.98278
120.0	-20.88278	1.51412	.00803	.92861
140.0	-15.43890	1.42391	.00602	.93404
160.0	-22.91200	1.83549	.00913	.92385

TABLE V. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)SOURCE ENERGY $9.12\text{E-}03 - 2.48\text{E-}02$ (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
0.0	4.46554	-3.41394	.00154	.75423
1.0	.00000	.00000	.00000	.00000
2.0	20.65964	-6.56056	-.00371	.79566
3.0	-20.86427	1.08827	-.00581	.53886
4.0	-23.66350	-7.52646	-.00913	.55210
5.0	-12.58731	.15974	.00782	.93191
6.0	-6.37105	-1.18181	.00500	.93467
7.0	-21.93141	1.52125	.00751	.70395
8.0	-16.83829	.76508	.00695	.79805
9.0	-10.31653	-.42058	.00539	.98243
10.0	-15.79934	.53117	.00607	.86859
11.0	-18.81157	1.24799	.00845	.91156
12.0	-18.31667	1.13757	.00793	.87009
13.0	-21.11227	1.66876	.00902	.87775
14.0	-15.56351	.53980	.00643	.95450
15.0	-16.19551	.54912	.00584	.94873
16.0	-10.98364	-.43866	.00454	.96494
17.0	-10.71503	-.43266	.00493	.97866
18.0	-14.92907	.37117	.00668	.91328
19.0	-25.37582	2.57116	.01275	.89385

SOURCE ENERGY $3.35\text{E-}03 - 9.12\text{E-}03$ (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
0.0	.00000	.00000	.00000	.00000
1.0	.00000	.00000	.00000	.00000
2.0	9.50574	-5.67868	-.01435	.29503
3.0	-19.17706	.61687	-.00397	.22689
4.0	7.78242	-4.50800	-.00345	.80169
5.0	-20.44333	1.01590	.00580	.67875
6.0	-19.05994	.86853	.00478	.49603
7.0	-41.36818	5.41337	.01459	.79698
8.0	31.18539	3.62249	.01237	.73343
9.0	-17.69029	.96547	.00733	.85584
10.0	-13.45643	.10750	.00603	.92201
11.0	-16.30634	.77890	.00779	.88445
12.0	-14.59481	.37573	.00649	.95312
13.0	-13.67910	.19805	.00625	.95729
14.0	-11.17625	-.27155	.00569	.94939
15.0	-11.32698	-.31458	.00503	.95759
16.0	-22.56802	2.09818	.01072	.81686
17.0	-16.81409	1.26400	.00899	.92119
18.0	-22.50847	1.38485	.00983	.82379
19.0	-9.47987	-.80493	.00393	.83238

TABLE V. (Continued)

Energy Deposition ($\text{keV m}^{-3}/\text{source neutron}$)SOURCE ENERGY $1.00\text{E-}03 - 3.35\text{E-}03$ (MEV)

ANGLE (DEG)	A COEFFICIENT	B COEFFICIENT	C COEFFICIENT	CORRELATION COEFFICIENT
1.0	.000000	.000000	.000000	.000000
2.0	.000000	.000000	.000000	.000000
3.0	60.53656	-13.55165	.01036	.96338
5.0	-34.31738	3.77088	.00997	.60126
7.0	-1.86019	-2.53350	.00062	.67299
10.0	-41.77502	5.33335	.01470	.63014
15.0	-19.09186	1.11117	.00747	.83735
20.0	-29.75911	3.32322	.01309	.93059
30.0	-13.43199	.05162	.00540	.86176
40.0	-15.63466	.68455	.00819	.96700
50.0	-17.98080	1.03363	.00757	.92100
60.0	-20.31837	1.69077	.01011	.79859
70.0	-13.07743	.08307	.00580	.97395
80.0	-24.37440	2.38223	.01090	.76151
90.0	-10.52716	.37133	.00568	.98533
100.0	-15.56141	.60683	.00763	.97096
120.0	-14.58447	.40398	.00714	.93692
140.0	-13.11725	.04665	.00585	.96889
160.0	-15.61076	.59656	.00774	.92894
180.0	-30.17975	3.26878	.01060	.70183

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