ornl

ORNL/TM-13043

**OAK RIDGE
NATIONAL
LABORATORY**

MARTIN MARIETTA

**Global Shielding Analysis for the
Three-Element Core Advanced
Neutron Source Reactor
Under Normal Operating
Conditions**

**C. O. Slater
J. A. Bucholz**

August 1995

Advanced Neutron Source

**MANAGED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY**

This report has been reproduced directly from the best available copy.

Available to DOE and DOE contractors from the Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831; prices available from (615) 576-8401, FTS 626-8401.

Available to the public from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161.

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

Computational Physics and Engineering Division

**GLOBAL SHIELDING ANALYSIS FOR THE THREE-ELEMENT CORE ADVANCED
NEUTRON SOURCE REACTOR UNDER NORMAL OPERATING CONDITIONS**

C. O. Slater
J. A. Bucholz

Date Published — August 1995

Prepared by the
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37831
managed by
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
for the
U.S. DEPARTMENT OF ENERGY
under contract DE-AC05-84OR21400

MASTER

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

TJ

CONTENTS

LIST OF TABLES	v
LIST OF FIGURES	vii
ABSTRACT	xi
1. INTRODUCTION	1
2. GEOMETRY MODEL DESCRIPTION	1
3. CROSS SECTIONS	1
4. K_{eff} CALCULATIONS AND RESULTS	2
5. FIXED-SOURCE SHIELDING CALCULATIONS AND RESULTS	3
6. SUMMARY	4
7. REFERENCES	4

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Atom Densities for Materials in Various Zones of ANS Core Element 1	5
2 Atom Densities for Materials in Various Zones of ANS Core Element 2	7
3 Atom Densities for Materials in Various Zones of ANS Core Element 3	9
4 Material Compositions for the B ₄ C Zones of the ANS Three-Element Core Model	11
5 Compositions of Other Materials Used in the ANS Three-Element-Core Model	12
6 Volume Fractions of Mixtures in the Core Regions of the ANS Three-Element-Core Model	13
7 Activities for a Radial Traverse Through the Core Midplane	15
8 Activities for a Radial Traverse Through the Midplane of the Upper Fuel Elements	18
9 Activities for a Radial Traverse Through the Midplane of the Lower Fuel Elements	21
10 Activities for a Radial Traverse Through the Bottom B ₄ C Plates of the Upper Fuel Elements	24
11 Activities for a Radial Traverse Through the Top of the Reflector Vessel	27
12 Activities for a Radial Traverse in the Upper Reflector Region 1.21 m Above the Core Midplane	30
13 Activities for a Radial Traverse in the Lower Reflector Region 1.19 m Below the Core Midplane	33
14 Activities for a Radial Traverse Through the Bottom of the Reflector Vessel	36
15 Activities for an Axial Traverse Along the Reactor Centerline	39
16 Activities for an Axial Traverse Along the Side of the Reflector Vessel	44
17 Activities for an Axial Traverse Through the Center of the Lower Fuel Element Annulus	49
18 Activities for an Axial Traverse Through the Center of the Side Reflector Annulus	54

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1	59
2	60
3	61
4	61
5	62
6	62
7	63
8	63
9	64
10	64
11	65
12	66
13	67
14	68
15	69
16	70
17	71
18	72

19	DORT-Calculated Photoneutron-Enhanced Gamma-Ray Dose Rate (mrem/h) Contours	73
20	DORT-Calculated Photoneutron-Enhanced Atomic Displacement (yr ⁻¹) Contours	74
21	DORT-Calculated Nuclear Heating (W/g) That Would Occur in Aluminum Components in the Reactor	75
22	DORT-Calculated Photoneutron-Enhanced Group A (E > 0.1 MeV) Neutron Flux Near-Core Radial Traverses	76
23	DORT-Calculated Photoneutron-Enhanced Group A (E > 0.1 MeV) Neutron Flux Peripheral Radial Traverses	76
24	DORT-Calculated Photoneutron-Enhanced Group B (100 eV < E < 0.1 MeV) Neutron Flux Near-Core Radial Traverses	77
25	DORT-Calculated Photoneutron-Enhanced Group B (100 eV < E < 0.1 MeV) Neutron Flux Peripheral Radial Traverses	77
26	DORT-Calculated Photoneutron-Enhanced Group C (0.625 eV < E < 100 eV) Neutron Flux Near-Core Radial Traverses	78
27	DORT-Calculated Photoneutron-Enhanced Group C (0.625 eV < E < 100 eV) Neutron Flux Peripheral Radial Traverses	78
28	DORT-Calculated Photoneutron-Enhanced Group D (E < 0.625 eV) Neutron Flux Near-Core Radial Traverses	79
29	DORT-Calculated Photoneutron-Enhanced Group D (E < 0.625 eV) Neutron Flux Peripheral Radial Traverses	79
30	DORT-Calculated High-Energy (E > 2.15 MeV) Gamma-Ray Flux Near-Core Radial Traverses	80
31	DORT-Calculated High-Energy (E > 2.15 MeV) Gamma-Ray Flux Peripheral Radial Traverses	80
32	DORT-Calculated Total Gamma-Ray Flux Near-Core Radial Traverses	81
33	DORT-Calculated Photoneutron-Enhanced Total Gamma-Ray Flux Peripheral Radial Traverses	81
34	DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Near-Core Radial Traverses	82
35	DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Peripheral Radial Traverses	82
36	DORT-Calculated Gamma-Ray Dose Rate Near-Core Radial Traverses	83
37	DORT-Calculated Gamma-Ray Dose Rate Peripheral Radial Traverses	83
38	DORT-Calculated Photoneutron-Enhanced Atomic Displacement Near-Core Radial Traverses	84
39	DORT-Calculated Photoneutron-Enhanced Atomic Displacement Peripheral Radial Traverses	84
40	Near-Core Radial Traverses for the DORT-Calculated Nuclear Heating That Would Occur in Aluminum Components in the Reactor	85
41	Peripheral Radial Traverses for the DORT-Calculated Nuclear Heating That Would Occur in Aluminum Components in the Reactor.	85
42	DORT-Calculated Photoneutron-Enhanced Group A (E > 0.1 MeV) Neutron Flux Axial Traverses	86
43	DORT-Calculated Photoneutron-Enhanced Group B (100 eV < E < 0.1 MeV) Neutron Flux Axial Traverses	86

44	DORT-Calculated Photoneutron-Enhanced Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux Axial Traverses	87
45	DORT-Calculated Photoneutron-Enhanced Group D ($E < 0.625 \text{ eV}$) Neutron Flux Axial Traverses	87
46	DORT-Calculated High-Energy ($E > 2.15 \text{ MeV}$) Gamma-Ray Flux Axial Traverses	88
47	DORT-Calculated Total Gamma-Ray Flux Axial Traverses	88
48	DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Axial Traverses	89
49	DORT-Calculated Gamma-Ray Dose Rate Axial Traverses	89
50	DORT-Calculated Photoneutron-Enhanced Atomic Displacement Axial Traverses	90
51	Axial Traverses for the DORT-Calculated Nuclear Heating That Would Occur in Aluminum Components in the Reactor	90
52	DORT-Calculated Photoneutron-Enhanced Group A ($E > 0.1 \text{ MeV}$) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	91
53	DORT-Calculated Photoneutron-Enhanced Group B ($100 \text{ eV} < E < 0.1 \text{ MeV}$) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	91
54	DORT-Calculated Photoneutron-Enhanced Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	92
55	DORT-Calculated Photoneutron-Enhanced Group D ($E < 0.625 \text{ eV}$) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	92
56	DORT-Calculated High-Energy ($E > 2.15 \text{ MeV}$) Gamma-Ray Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	93
57	DORT-Calculated Total Gamma-Ray Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	93
58	DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	94
59	DORT-Calculated Gamma-Ray Dose Rate Radial Traverses in the Light-Water-Filled Vault and Concrete Shield	94

ABSTRACT

Two-dimensional discrete ordinates radiation transport calculations were performed for a model of the three-element core Advanced Neutron Source reactor design under normal operating conditions. The core consists of two concentric upper elements and a lower element radially centered in the annulus between the upper elements. The initial radiation transport calculations were performed with the DORT two-dimensional discrete ordinates radiation transport code using the 39-neutron-group/44-gamma-ray-group ANSL-V cross-section library, an S_6 quadrature, and a P_1 Legendre polynomial expansion of the cross sections to determine the fission neutron source distribution in the core fuel elements. These calculations were limited to neutron groups only. The final radiation transport calculations, also performed with DORT using the 39-neutron-group/44-gamma-ray-group ANSL-V cross-section library, an S_{10} quadrature, and a P_3 Legendre polynomial expansion of the cross sections, produced neutron and gamma-ray fluxes over the full extent of the geometry model. Responses (or activities) at various locations in the model were then obtained by folding the appropriate response functions with the fluxes at those locations. Some comparisons were made with VENTURE-calculated (diffusion theory) 20-group neutron fluxes that were summed into four broad groups. The results were in reasonably good agreement when the effects of photoneutrons were not included, thus verifying the physics model upon which the shielding model was based. Photoneutrons increased the fast-neutron flux levels deep within the D_2O several orders of magnitude. Results are presented as tables of activity values for selected radial and axial traverses, plots of the radial and axial traverse data, and activity contours superimposed on the calculational geometry model. Results are also presented from calculations performed to estimate (1) gamma-ray dose rates within the biological shield and (2) the shielding required to reduce the dose rate outside the shield to acceptable levels. Plots of several activities for radial traverses through the light water (outside the reflector vessel) and the concrete shield are presented.

1. INTRODUCTION

Because of the downgrading of the Advanced Neutron Source (ANS) reactor fuel from 92 wt % ^{235}U to 50 wt % ^{235}U , the basic design has been changed from a two-element core to a three-element core, possibly resulting in significantly different neutron and gamma-ray flux levels in the system. Therefore, a global shielding analysis was performed for the new system to provide reference flux data for localized shielding analyses in addition to calculating integral fluxes and activities at selected locations within the system modeled. In addition, some of the results from the shielding analysis could be used to verify or confirm the physics analyses. The geometry model, the cross sections, and the calculational procedure are described, and tabular and plotted results are presented.

2. GEOMETRY MODEL DESCRIPTION

The geometry model was constructed from one of several models developed for the reactor physics task by L. A. Smith and J. C. Gehin. Each of the three core fuel elements is subdivided into 16 zones with different material compositions. While the boundaries of those regions were retained, the number of fine mesh within the zones for the shielding model was reduced from the number used in the physics model. In addition, the number of D_2O regions was reduced to two, and the number of hafnium/aluminum control rod zones was reduced to three (i.e., each of the two cylindrical annuli that contain hafnium consist of a hafnium zone between two aluminum zones with the hafnium extending from 659 mm below the core midplane to 547 mm above it). A plot of the two-dimensional R-Z geometry model is shown in Fig. 1. The model has been scaled radially by a factor of 2.5 to make the cores and other regions inside the core boundary pressure tube more visible. A more detailed plot of the regions around the cores is shown in Fig. 2. The compositions for materials in the core fuel elements are shown in Tables 1–3. Compositions for the zones containing B_4C (located at the inlet and outlet of each core fuel element) are shown in Table 4. It is noted there that as used in the calculations, most of the materials in Table 4 contained the wrong carbon (C) atom densities. However, as also noted there, the contributions of carbon to the mixture cross sections are masked by the contributions of deuterium, oxygen, and aluminum. Compositions for other materials are shown in Table 5. Atomic densities in Tables 1–3 were calculated using some of the compositions in Table 5 and the material volume fractions shown in Table 6 (these were supplied by J. C. Gehin). Note that because cross sections for zinc were not available in the cross-section library, the atom densities for copper in the mixtures were increased by the corresponding zinc atom densities (e.g., in the Zone 1-01 mixture in Table 1, the copper atom density used in the mixture became $2.5815\text{E}-05$). The U_3Si_2 fuel has a density of 3.5 g/cm^3 and an enrichment of 50%. The reactor has a power rating of 330 MW.

3. CROSS SECTIONS

The data from Tables 1–5 and the ANSL-V 39-neutron-group/44-gamma-ray-group cross section library¹ were used to process and prepare the final cross sections used in the radiation transport calculations. The procedure used to process and prepare the final cross sections has been described by Bucholz.² Resonance self-shielding was performed assuming infinite homogeneous media and temperatures of 350 K for the core materials and 293 K for the remaining materials. Two so-called group-independent cross-section libraries were produced—one with and one without photoneutron production cross sections. The cross-section library without photoneutron production cross sections requires multiple iterations over the 25 thermal-neutron groups for a fixed-source calculation without fission. This is due to the upscatter among the thermal-neutron groups. In the cross-section library with photoneutron production included, the photoneutron production cross sections function like the upscatter cross sections, “transferring” neutrons into higher energy groups. These calculations require

multiple outer iterations over the first 56 energy groups (i.e., over all 39 neutron groups and the first 17 gamma-ray groups). This greatly increases the calculational time.

4. k_{eff} CALCULATIONS AND RESULTS

Two sets of calculations were performed: (1) a neutron-only, coarse-quadrature (S_6), low-order-scattering (P_1), k_{eff} calculation to obtain the neutron source distribution in the core fuel elements and (2) a coupled neutron-gamma-ray, refined-quadrature (S_{10}), higher order scattering (P_3), fixed-source calculation with photoneutron production included to calculate gamma-ray fluxes and to calculate more precise neutron fluxes great distances from the cores. These calculations were performed for beginning-of-cycle core conditions. Both sets of calculations used the 39-neutron-group structure described above (the second set also included the 44-gamma-ray-group structure), and each required several restarts to achieve adequate convergence. The calculations were performed with the DORT two-dimensional discrete ordinates radiation transport code³ using the R-Z geometry option. Many of the input parameters to the code allow the user a range of values and thus innumerable possible input files. For flux extrapolation, the weighted-difference method (theta-weighted method with $\theta = 0.0$) was used here because of past experience with the method and quality of the results achieved. When the method is in error, it tends to give slightly higher (i.e., conservative) flux values, which are preferable when performing shielding calculations.

The k_{eff} calculation was performed for a total of 150 outer iterations. At the end of the iterations, k_{eff} and the fission density were converged to 5×10^{-5} and 7×10^{-5} respectively. Upscatter was converged to 2×10^{-4} , but the maximum flux deviation between inner iterations and the maximum flux deviation between outer iterations were between 4 and 5%. The effects of the flux errors on the fission distribution in the core fuel elements should be small, since the larger errors generally occur in the reflector regions distant from the source. The calculated k_{eff} value of 1.009 compares to a value of 1.005 from the VENTURE diffusion theory code.⁴ While the DORT-calculated k_{eff} was monotonically decreasing over the last 28 outer iterations, it only decreased by 0.0011. It is possible that the DORT and VENTURE k_{eff} values could be in much better agreement after many more outer iterations with DORT. However, the agreement is deemed sufficient already. The fission source for this k_{eff} calculation was normalized to one neutron. Quoted results are obtained by multiplying results obtained for one source neutron by a normalization factor that is related to the reactor power and other fission parameters. For a power of 330 MW, 2.45 neutrons per fission, and 3.1×10^{10} fissions per watt-second, one computes a total neutron source of $2.50635 \times 10^{19} \text{ s}^{-1}$.

Broad-group fluxes (four groups with energy intervals: $E > 0.1 \text{ MeV}$, $100 \text{ eV} < E < 0.1 \text{ MeV}$, $0.625 \text{ eV} < E < 100 \text{ eV}$, and $E < 0.625 \text{ eV}$) from this k_{eff} calculation are plotted in Fig. 3 for a radial traverse in the axial plane where the thermal-neutron flux peaks. As noted on the figure, the fluxes do not include the effects of photoneutron production in the D_2O . Therefore, the fast-neutron fluxes in the D_2O reflector are underpredicted, and the underprediction increases with distance into the reflector. This will be demonstrated later. The peak thermal-neutron flux was $5.89 \times 10^{19} \text{ m}^{-2} \cdot \text{s}^{-1}$ and occurred at a radius of 0.463 m and a height of 2.50 m (where the core midplane is located at about 2.27 m). This compares favorably with that calculated by VENTURE. Twenty-group neutron fluxes calculated by VENTURE for a radial traverse along the axial midplane of the core were collapsed into the four broad groups described above and are compared with the DORT results in Figs. 4-7. The results agree near the core, but the DORT fast-neutron fluxes are up to ten times the VENTURE fluxes at great depths into the D_2O reflector. There is less disagreement for the intermediate-range fluxes, and the thermal-neutron fluxes show good agreement. For the thermal-neutron flux, the DORT results are, in general, slightly higher in the core and a portion of the reflector, and the VENTURE results are slightly higher in the outer portion of the reflector and in the water tank.

5. FIXED-SOURCE SHIELDING CALCULATIONS AND RESULTS

The fixed-source calculations involved upscatter among the thermal-neutron groups and upscatter transfers from gamma-ray groups to fast-neutron groups due to photoneutron production. The solution generally followed Bucholz's procedure² for reducing the computation time required to converge the fluxes. Key fluxes were calculated at 20 locations at the periphery of the geometry model, and these fluxes were compared between outer iterations to determine when convergence was adequate. After the last restart calculation, the maximum key-flux difference was about 0.0001 between the last two outer iterations and about 0.002 between the last outer iteration and the tenth prior iteration. Also, radial traverse plots in the axial midplane for the four broad-group neutron fluxes calculated 100 outer iterations after thermal-neutron flux convergence were indistinguishable from those calculated after an additional 80 iterations. At this point, convergence was thought to be sufficient.

DORT-calculated broad-group neutron fluxes are again compared with VENTURE fluxes in Figs. 8-11. While there is little change in the thermal-neutron flux ($E < 0.625$ eV) from the first calculation, the epithermal neutron fluxes ($E > 0.625$ eV) increased several orders of magnitude near the reflector vessel side boundary (Figs. 8-10). The DORT Group A neutron flux, which initially was as much as ten times higher than the VENTURE flux before photoneutrons were considered, is now as much as 10,000 times higher. The differences decrease with decreasing energy.

Activities such as the four broad-group neutron fluxes, the gamma-ray flux for $E > 2.15$ MeV, the total gamma-ray flux, neutron and gamma-ray dose rates, atomic displacements, and nuclear heating in aluminum were all calculated for the entire spatial mesh and for several radial and axial traverses through the geometry. Activity factors (or response functions) for the neutron and gamma-ray dose rates, the atomic displacement, and nuclear heating in aluminum were obtained from Ref. 2, and appropriate normalizations were applied to obtain absolute quantities having the desired units. Contours of the activities were plotted over the geometry model and are shown in Figs. 12-21. Calculated activities for eight radial traverses are presented in Tables 7-14, while activities for four axial traverses are in Tables 15-18. The activities are generally lower than those calculated for the two-element core design (e.g., 33 to 41% lower in the axial midplane of the reflector vessel).² Radial traverse data for the ten activities are plotted in Figs. 22-41, and the axial traverse data are plotted in Figs. 42-51. Note that there are two radial traverse plots for each activity. One plot gives traverses in planes that pass near or through the core regions, and the other gives traverses in planes that pass through peripheral regions. For the calculational model used, the data presented should be sufficient for one to make a reasonable estimate of the activity levels in any locations of interest within the model.

Since, by comparison, the gamma-ray flux and dose curves were much more slowly decreasing with distance from the core than the neutron flux and dose curves and since the dose rates in the light water outside the reflector vessel were still quite high, a preliminary 2-D scoping calculation was performed to estimate the additional attenuation through the light water and surrounding concrete shield. Starting with the outer surface of the reflector vessel at $R=175$ cm, this preliminary geometry model included 130 cm of light water (outside the reflector vessel), a 10-cm-thick stainless steel concrete vault liner, and 60 cm of ordinary concrete. Outward-directed radial boundary fluxes from the global fixed-source analysis of the core and reflector were used as an internal boundary source (at $R=200$ cm) in this preliminary scoping calculation. The 25 cm of water preceding this internal boundary source served as a reflector. Activities for radial traverses through the water and concrete were plotted for $R \geq 200$ cm and are shown in Figs. 52-59. While the neutron fluxes and dose rates decreased 10 to 12 orders of magnitude between the boundary source location and the outer surface of the concrete, the gamma-ray fluxes and dose rates decreased only about four orders of magnitude. At about 10^7 mrem/h, the gamma-ray dose rate at the outer surface of the concrete in this preliminary model was still very high. Subsequent hand calculations based on the attenuation through 60 cm of

concrete indicated that reducing the dose rate another seven orders of magnitude would require an additional 200 cm of ordinary concrete. (In the actual final design, the stainless steel liner would only have been 6.4 mm thick, but the biological shield, which would have been 244 cm thick, was to have been made of dense barytes concrete containing 35 vol % steel rebar.) Last, it should be noted that none of these results include the effects of neutron and gamma-ray streaming through the array of virtually empty beam tubes penetrating the reflector, the light water, and possibly the concrete shield. Even if the tubes do not completely penetrate a region, fluxes incident on the shield may still be greatly enhanced by the neutrons and gamma rays bypassing the thick D₂O and light water regions by streaming through the tubes.

6. SUMMARY

Neutron and gamma-ray fluxes and activities have been calculated for a global model of the three-element-core ANS reactor for beginning-of-life fuel under normal operating conditions. Calculations were performed with the DORT 2-D discrete ordinates radiation transport code. Initial calculations determined neutron flux levels without any effects due to photoneutron production. These results were compared with similar VENTURE diffusion theory results as a verification for the physics task. The final reference results included the effects of photoneutron production as well as delayed fission-product gamma rays. DORT and VENTURE broad-group fluxes were in good agreement in the core and a portion of the reflector, thus verifying both calculations. Tabular and graphical data for ten neutron and gamma-ray activities were presented. These activities were found to be somewhat lower than those calculated for an earlier two-element core design. Finally, since the gamma-ray dose rate in the light-water-filled concrete vault outside the reflector vessel was high and was slowly attenuated by the light water, a calculation through the water-filled vault and the concrete shield was performed to assess dose levels outside the biological shield. For the geometry model used in the calculation, it was estimated that about 260 cm of concrete would be needed for an operating dose rate of 1.0 mrem/h outside the biological shield. Of course, this result does not include any effects due to neutron and gamma-ray streaming through the virtually empty beam tubes penetrating the heavy water reflector, the surrounding light water, or biological shield.

7. REFERENCES

1. R. Q. Wright, J. P. Renier, and J. A. Bucholz, *ANSL-V: ENDF/B-V Based Multigroup Cross-Section Libraries for Advanced Neutron Source (ANS) Reactor Studies Supplement 1*, ORNL-6618/S1, Oak Ridge National Laboratory, August 1995.
2. J. A. Bucholz, *Initial Global 2-D Shielding Analysis for the ANS Core and Reflector*, ORNL/TM-12672, Oak Ridge National Laboratory, August 1995.
3. W. A. Rhoades and R. L. Childs, "The DORT Two-Dimensional Discrete Ordinates Transport Code," *Nucl. Sci. Eng.* **99**(1), 88-89 (May 1988).
4. D. R. Vondy, T. B. Fowler, and G. W. Cunningham, *VENTURE: A Code Block for Solving Multigroup Neutronics Problems Applying the Finite-Difference Diffusion-Theory Approximation to Neutron Transport—Version II*, ORNL-5062/R1, Oak Ridge National Laboratory, November 1977.

Table 1. Atom Densities for Materials in Various Zones of ANS Core Element 1

Nuclide	Atom Density ($\text{b}^{-1} \cdot \text{cm}^{-1}$)							
	Zone 1-01	Zone 1-02	Zone 1-03	Zone 1-04	Zone 1-05	Zone 1-06	Zone 1-07	Zone 1-08
H	6.5710E-05 ^a	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05
D	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02
O	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02
Mg	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04
Al	2.7470E-02	2.7766E-02	2.7875E-02	2.7966E-02	2.6262E-02	2.7008E-02	2.7266E-02	2.7465E-02
Si	7.3757E-04	6.4384E-04	6.0918E-04	5.8039E-04	1.1207E-03	8.8405E-04	8.0246E-04	7.3945E-04
Cr	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05
Mn	1.0859E-05	1.0895E-05	1.0909E-05	1.0920E-05	1.0709E-05	1.0802E-05	1.0834E-05	1.0858E-05
Fe	6.0047E-05	6.0407E-05	6.0540E-05	6.0650E-05	5.8577E-05	5.9485E-05	5.9798E-05	6.0040E-05
Cu	2.2537E-05	2.2695E-05	2.2754E-05	2.2802E-05	2.1892E-05	2.2291E-05	2.2428E-05	2.2534E-05
U-234	5.1200E-06	4.3522E-06	4.0683E-06	3.8324E-06	8.2586E-06	6.3200E-06	5.6516E-06	5.1354E-06
U-235	4.7531E-04	4.0403E-04	3.7767E-04	3.5578E-04	7.6668E-04	5.8671E-04	5.2466E-04	4.7674E-04
U-236	2.1771E-06	1.8506E-06	1.7299E-06	1.6296E-06	3.5116E-06	2.6873E-06	2.4031E-06	2.1836E-06
U-238	4.6209E-04	3.9279E-04	3.6717E-04	3.4588E-04	7.4534E-04	5.7038E-04	5.1006E-04	4.6347E-04
Zn	3.2777E-06	3.3392E-06	3.3619E-06	3.3807E-06	3.0267E-06	3.1818E-06	3.2352E-06	3.2765E-06

^aRead as 6.5710×10^{-5} .

Table 1. Atom Densities for Materials in Various Zones of ANS Core Element 1 (continued)

Nuclide	Atom Density ($\text{b}^{-1} \cdot \text{cm}^{-1}$)							
	Zone 1-09	Zone 1-10	Zone 1-11	Zone 1-12	Zone 1-13	Zone 1-14	Zone 1-15	Zone 1-16
H	6.5710E-05 ^a	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05
D	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02
O	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02
Mg	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04
Al	2.4194E-02	2.4410E-02	2.4621E-02	2.4897E-02	2.4380E-02	2.4431E-02	2.4665E-02	2.5133E-02
Si	1.7764E-03	1.7079E-03	1.6412E-03	1.5536E-03	1.7176E-03	1.7012E-03	1.6270E-03	1.4786E-03
Cr	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05
Mn	1.0454E-05	1.0480E-05	1.0506E-05	1.0541E-05	1.0477E-05	1.0483E-05	1.0512E-05	1.0570E-05
Fe	5.6062E-05	5.6325E-05	5.6581E-05	5.6917E-05	5.6288E-05	5.6350E-05	5.6635E-05	5.7205E-05
Cu	2.0786E-05	2.0902E-05	2.1014E-05	2.1162E-05	2.0885E-05	2.0913E-05	2.1038E-05	2.1288E-05
U-234	1.3629E-05	1.3069E-05	1.2522E-05	1.1805E-05	1.3148E-05	1.3014E-05	1.2406E-05	1.1190E-05
U-235	1.2653E-03	1.2132E-03	1.1625E-03	1.0959E-03	1.2206E-03	1.2082E-03	1.1517E-03	1.0388E-03
U-236	5.7954E-06	5.5570E-06	5.3245E-06	5.0196E-06	5.5908E-06	5.5337E-06	5.2753E-06	4.7582E-06
U-238	1.2301E-03	1.1795E-03	1.1301E-03	1.0654E-03	1.1866E-03	1.1745E-03	1.1197E-03	1.0099E-03
Zn	2.5971E-06	2.6420E-06	2.6857E-06	2.7431E-06	2.6356E-06	2.6463E-06	2.6950E-06	2.7922E-06

^aRead as 6.5710×10^{-5} .

Table 2. Atom Densities for Materials in Various Zones of ANS Core Element 2

Nuclide	Atom Density ($\text{b}^{-1} \cdot \text{cm}^{-1}$)									
	Zone 2-01	Zone 2-02	Zone 2-03	Zone 2-04	Zone 2-05	Zone 2-06	Zone 2-07	Zone 2-08		
H	6.5710E-05 ^a	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05		
D	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02		
O	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02		
Mg	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04		
Al	2.7219E-02	2.6844E-02	2.7098E-02	2.7723E-02	2.6572E-02	2.6096E-02	2.6556E-02	2.7315E-02		
Si	8.1733E-04	9.3630E-04	8.5565E-04	6.5757E-04	1.0225E-03	1.1734E-03	1.0276E-03	7.8688E-04		
Cr	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05		
Mn	1.0828E-05	1.0781E-05	1.0813E-05	1.0890E-05	1.0748E-05	1.0689E-05	1.0746E-05	1.0840E-05		
Fe	5.9741E-05	5.9285E-05	5.9594E-05	6.0354E-05	5.8954E-05	5.8375E-05	5.8935E-05	5.9858E-05		
Cu	2.2403E-05	2.2202E-05	2.2338E-05	2.2672E-05	2.2057E-05	2.1803E-05	2.2049E-05	2.2454E-05		
U-234	5.7734E-06	6.7480E-06	6.0873E-06	4.4647E-06	7.4540E-06	8.6903E-06	7.4958E-06	5.5239E-06		
U-235	5.3596E-04	6.2644E-04	5.6511E-04	4.1447E-04	6.9198E-04	8.0675E-04	6.9586E-04	5.1281E-04		
U-236	2.4549E-06	2.8693E-06	2.5884E-06	1.8984E-06	3.1695E-06	3.6952E-06	3.1873E-06	2.3488E-06		
U-238	5.2105E-04	6.0901E-04	5.4938E-04	4.0294E-04	6.7273E-04	7.8430E-04	6.7650E-04	4.9854E-04		
Zn	3.2255E-06	3.1475E-06	3.2004E-06	3.3302E-06	3.0911E-06	2.9922E-06	3.0877E-06	3.2454E-06		

^aRead as 6.5710×10^{-5} .

Table 2. Atom Densities for Materials in Various Zones of ANS Core Element 2 (continued)

Nuclide	Atom Density ($\text{b}^{-1} \cdot \text{cm}^{-1}$)							
	Zone 2-09	Zone 2-10	Zone 2-11	Zone 2-12	Zone 2-13	Zone 2-14	Zone 2-15	Zone 2-16
H	6.5710E-05 ^a	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05
D	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02
O	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02
Mg	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04
Al	2.5551E-02	2.4628E-02	2.5571E-02	2.6632E-02	2.6066E-02	2.5507E-02	2.6064E-02	2.6718E-02
Si	1.3463E-03	1.6387E-03	1.3397E-03	1.0035E-03	1.1828E-03	1.3600E-03	1.1835E-03	9.7610E-04
Cr	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05
Mn	1.0621E-05	1.0507E-05	1.0624E-05	1.0755E-05	1.0685E-05	1.0616E-05	1.0685E-05	1.0766E-05
Fe	5.7712E-05	5.6590E-05	5.7737E-05	5.9027E-05	5.8339E-05	5.7659E-05	5.8336E-05	5.9132E-05
Cu	2.1511E-05	2.1018E-05	2.1522E-05	2.2089E-05	2.1787E-05	2.1488E-05	2.1786E-05	2.2135E-05
U-234	1.0106E-05	1.2502E-05	1.0053E-05	7.2986E-06	8.7671E-06	1.0219E-05	8.7733E-06	7.0740E-06
U-235	9.3822E-04	1.1606E-03	9.3322E-04	6.7756E-04	8.1389E-04	9.4869E-04	8.1446E-04	6.5671E-04
U-236	4.2974E-06	5.3161E-06	4.2744E-06	3.1034E-06	3.7279E-06	4.3453E-06	3.7305E-06	3.0079E-06
U-238	9.1212E-04	1.1283E-03	9.0725E-04	6.5870E-04	7.9124E-04	9.2229E-04	7.9179E-04	6.3843E-04
Zn	2.8789E-06	2.6873E-06	2.8832E-06	3.1035E-06	2.9860E-06	2.8699E-06	2.9855E-06	3.1215E-06

^aRead as 6.5710×10^{-5} .

Table 3. Atom Densities for Materials in Various Zones of ANS Core Element 3

Nuclide	Atom Density ($\text{b}^{-1} \cdot \text{cm}^{-1}$)							
	Zone 3-01	Zone 3-02	Zone 3-03	Zone 3-04	Zone 3-05	Zone 3-06	Zone 3-07	Zone 3-08
H	6.5710E-05 ^a	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05
D	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02
O	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02
Mg	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04
Al	2.6741E-02	2.6882E-02	2.7144E-02	2.7774E-02	2.5002E-02	2.5477E-02	2.6161E-02	2.7275E-02
Si	9.6897E-04	9.2422E-04	8.4119E-04	6.4144E-04	1.5201E-03	1.3697E-03	1.1529E-03	7.9963E-04
Cr	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05
Mn	1.0769E-05	1.0786E-05	1.0818E-05	1.0896E-05	1.0554E-05	1.0612E-05	1.0697E-05	1.0835E-05
Fe	5.9160E-05	5.9331E-05	5.9650E-05	6.0416E-05	5.7045E-05	5.7622E-05	5.8454E-05	5.9809E-05
Cu	2.2147E-05	2.2223E-05	2.2363E-05	2.2700E-05	2.1218E-05	2.1472E-05	2.1837E-05	2.2433E-05
U-234	7.0156E-06	6.6490E-06	5.9688E-06	4.3326E-06	1.1531E-05	1.0298E-05	8.5221E-06	5.6284E-06
U-235	6.5128E-04	6.1726E-04	5.5411E-04	4.0221E-04	1.0704E-03	9.5605E-04	7.9114E-04	5.2250E-04
U-236	2.9831E-06	2.8272E-06	2.5380E-06	1.8423E-06	4.9029E-06	4.3790E-06	3.6237E-06	2.3932E-06
U-238	6.3316E-04	6.0008E-04	5.3869E-04	3.9102E-04	1.0406E-03	9.2944E-04	7.6912E-04	5.0797E-04
Zn	3.1261E-06	3.1554E-06	3.2099E-06	3.3407E-06	2.7650E-06	2.8636E-06	3.0056E-06	3.2371E-06

^aRead as 6.5710×10^{-5} .

Table 3. Atom Densities for Materials in Various Zones of ANS Core Element 3 (continued)

Nuclide	Atom Density ($\text{b}^{-1} \cdot \text{cm}^{-1}$)							
	Zone 3-09	Zone 3-10	Zone 3-11	Zone 3-12	Zone 3-13	Zone 3-14	Zone 3-15	Zone 3-16
H	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05	6.5710E-05
D	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02	3.2719E-02
O	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02	1.6392E-02
Mg	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04
Al	2.4243E-02	2.4540E-02	2.5529E-02	2.6915E-02	2.5987E-02	2.6104E-02	2.6575E-02	2.7302E-02
Si	1.7608E-03	1.6667E-03	1.3533E-03	9.1363E-04	1.2079E-03	1.1707E-03	1.0214E-03	7.9085E-04
Cr	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05
Mn	1.0460E-05	1.0497E-05	1.0619E-05	1.0790E-05	1.0675E-05	1.0690E-05	1.0748E-05	1.0838E-05
Fe	5.6122E-05	5.6483E-05	5.7685E-05	5.9372E-05	5.8243E-05	5.8386E-05	5.8958E-05	5.9843E-05
Cu	2.0813E-05	2.0971E-05	2.1500E-05	2.2241E-05	2.1745E-05	2.1807E-05	2.2059E-05	2.2448E-05
U-234	1.3502E-05	1.2731E-05	1.0164E-05	6.5622E-06	8.9732E-06	8.6682E-06	7.4453E-06	5.5564E-06
U-235	1.2534E-03	1.1819E-03	9.4353E-04	6.0920E-04	8.3302E-04	8.0470E-04	6.9117E-04	5.1583E-04
U-236	5.7411E-06	5.4134E-06	4.3217E-06	2.7903E-06	3.8155E-06	3.6858E-06	3.1658E-06	2.3627E-06
U-238	1.2185E-03	1.1490E-03	9.1728E-04	5.9225E-04	8.0984E-04	7.8231E-04	6.7194E-04	5.0147E-04
Zn	2.6073E-06	2.6690E-06	2.8743E-06	3.1624E-06	2.9696E-06	2.9939E-06	3.0918E-06	3.2428E-06

^aRead as 6.5710×10^{-5} .

Table 4. Material Compositions for the B₄C Zones of the ANS Three-Element Core Model

Nuclide	Atom Density (b ⁻¹ ·cm ⁻¹)					
	Fuel Element 1		Fuel Element 2		Fuel Element 3	
	Inlet	Outlet	Inlet	Outlet	Inlet	Outlet
H	6.5027E-05 ^a	6.6280E-05	6.5027E-05	6.6280E-05	6.6280E-05	6.5027E-05
D	3.2383E-02	3.2989E-02	3.2383E-02	3.2989E-02	3.2989E-02	3.2383E-02
O	1.6224E-02	1.6528E-02	1.6224E-02	1.6528E-02	1.6528E-02	1.6224E-02
Mg	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04	1.3410E-04
Al	2.8849E-02	2.8676E-02	2.8950E-02	2.9077E-02	2.9174E-02	2.9066E-02
Si	1.1112E-04	1.1070E-04	1.1136E-04	1.1167E-04	1.1190E-04	1.1164E-04
Cr	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05	1.5730E-05
Mn	1.1029E-05	1.1008E-05	1.1042E-05	1.1058E-05	1.1069E-05	1.1056E-05
Fe	6.1724E-05	6.1514E-05	6.1847E-05	6.2002E-05	6.2119E-05	6.1989E-05
Cu	2.4321E-05	2.4218E-05	2.4381E-05	2.4457E-05	2.4514E-05	2.4450E-05
B-10	3.1414E-04	3.7697E-04	2.7725E-04	2.3104E-04	1.9593E-04	2.3511E-04
B-11	1.2645E-03	1.5174E-03	1.1160E-03	9.2997E-04	7.8863E-04	9.4636E-04
C ^b	3.9465E-04	4.7358E-04	3.4831E-04	2.9025E-04	2.4614E-04	2.9537E-04

^aRead as 6.5027×10^{-5} .

^bBecause of errors in input, the actual carbon densities were: 0.0, 8.6823-4, 0.0, 3.4831-4, 8.3176-4, and 0.0, respectively. Since these atom densities are small compared to the D₂O and Al atom densities, the effect on the composite cross sections should be small.

Note: The last two columns appear to be reversed because the lower density D₂O normally appears at the coolant exit ends of the elements.

Table 5. Compositions of Other Materials Used in the ANS Three-Element-Core Model

Nuclide	Atom Density ($\text{b}^{-1} \cdot \text{cm}^{-1}$)									
	H ₂ O	Cold D ₂ O	Warm D ₂ O	Core D ₂ O	Al-6061	Al-1100	Cold Al+D ₂ O	Warm Al+D ₂ O	Hafnium	U ₃ Si ₂
H	6.6627-2 ^a	1.3260-4	1.3000-4	1.3142-4			6.6280-5	6.5710-5		
D		6.5978-2	6.4766-2	6.5438-2			3.2989-2	3.2719-2		
O	3.3314-2	3.3055-2	3.2448-2	3.2785-2			1.6528-2	1.6392-2		
Mg					6.7050-4		3.3525-4	3.3525-4		
Al					6.8465-2	6.0063-2	2.9233-2	2.9233-2		
Si					3.4812-4	1.4527-4	1.7406-4	1.7406-4		1.9190-2
Cr					7.8649-5		3.9324-5	3.9324-5		
Mn					4.4540-5	7.2466-6	2.2270-5	2.2270-5		
Fe					2.0428-4	7.3059-5	1.0214-4	1.0214-4		
Cu					7.0523-5	1.2478-5	3.5261-5	3.5261-5		
Hf									4.4199-2	
Zn						1.2478-5				
U-234										1.5601-4
U-235										1.4483-2
U-236										6.6337-5
U-238										1.4080-2

^aRead as 6.6627×10^{-2} .

**Table 6. Volume Fractions of Mixtures in the Core Regions of the
ANS Three-Element-Core Model**

Zone	Volume Fractions			
	D ₂ O	Al-6061	Al-1100	U ₃ Si ₂
1-01	5.00000E-01 ^a	2.00000E-01	2.62681E-01	3.28187E-02
1-02	5.00000E-01	2.00000E-01	2.67603E-01	2.78969E-02
1-03	5.00000E-01	2.00000E-01	2.69423E-01	2.60771E-02
1-04	5.00000E-01	2.00000E-01	2.70935E-01	2.45653E-02
1-05	5.00000E-01	2.00000E-01	2.42564E-01	5.29363E-02
1-06	5.00000E-01	2.00000E-01	2.54990E-01	4.05100E-02
1-07	5.00000E-01	2.00000E-01	2.59274E-01	3.62259E-02
1-08	5.00000E-01	2.00000E-01	2.62583E-01	3.29172E-02
1-09	5.00000E-01	2.00000E-01	2.08137E-01	8.73627E-02
1-10	5.00000E-01	2.00000E-01	2.11731E-01	8.37694E-02
1-11	5.00000E-01	2.00000E-01	2.15236E-01	8.02645E-02
1-12	5.00000E-01	2.00000E-01	2.19831E-01	7.56686E-02
1-13	5.00000E-01	2.00000E-01	2.11222E-01	8.42783E-02
1-14	5.00000E-01	2.00000E-01	2.12081E-01	8.34187E-02
1-15	5.00000E-01	2.00000E-01	2.15978E-01	7.95222E-02
1-16	5.00000E-01	2.00000E-01	2.23772E-01	7.17280E-02
2-01	5.00000E-01	2.00000E-01	2.58494E-01	3.70063E-02
2-02	5.00000E-01	2.00000E-01	2.52247E-01	4.32535E-02
2-03	5.00000E-01	2.00000E-01	2.56481E-01	3.90186E-02
2-04	5.00000E-01	2.00000E-01	2.66882E-01	2.86180E-02
2-05	5.00000E-01	2.00000E-01	2.47721E-01	4.77788E-02
2-06	5.00000E-01	2.00000E-01	2.39797E-01	5.57033E-02
2-07	5.00000E-01	2.00000E-01	2.47453E-01	4.80467E-02
2-08	5.00000E-01	2.00000E-01	2.60093E-01	3.54074E-02
2-09	5.00000E-01	2.00000E-01	2.30719E-01	6.47811E-02
2-10	5.00000E-01	2.00000E-01	2.15363E-01	8.01375E-02
2-11	5.00000E-01	2.00000E-01	2.31065E-01	6.44353E-02
2-12	5.00000E-01	2.00000E-01	2.48717E-01	4.67828E-02
2-13	5.00000E-01	2.00000E-01	2.39304E-01	5.61960E-02
2-14	5.00000E-01	2.00000E-01	2.29996E-01	6.55036E-02
2-15	5.00000E-01	2.00000E-01	2.39265E-01	5.62354E-02
2-16	5.00000E-01	2.00000E-01	2.50157E-01	4.53433E-02

^aRead as 5.0×10^{-1} .

**Table 6. Volume Fractions of Mixtures in the Core Regions of the
ANS Three-Element-Core Model (continued)**

Zone	Volume Fractions			
	D ₂ O	Al-6061	Al-1100	U ₃ Si ₂
3-01	5.00000E-01 ^a	2.00000E-01	2.50531E-01	4.49686E-02
3-02	5.00000E-01	2.00000E-01	2.52881E-01	4.26193E-02
3-03	5.00000E-01	2.00000E-01	2.57241E-01	3.82594E-02
3-04	5.00000E-01	2.00000E-01	2.67729E-01	2.77711E-02
3-05	5.00000E-01	2.00000E-01	2.21591E-01	7.39093E-02
3-06	5.00000E-01	2.00000E-01	2.29488E-01	6.60117E-02
3-07	5.00000E-01	2.00000E-01	2.40875E-01	5.46252E-02
3-08	5.00000E-01	2.00000E-01	2.59423E-01	3.60771E-02
3-09	5.00000E-01	2.00000E-01	2.08955E-01	8.65445E-02
3-10	5.00000E-01	2.00000E-01	2.13895E-01	8.16047E-02
3-11	5.00000E-01	2.00000E-01	2.30353E-01	6.51474E-02
3-12	5.00000E-01	2.00000E-01	2.53437E-01	4.20630E-02
3-13	5.00000E-01	2.00000E-01	2.37983E-01	5.75169E-02
3-14	5.00000E-01	2.00000E-01	2.39938E-01	5.55618E-02
3-15	5.00000E-01	2.00000E-01	2.47777E-01	4.77231E-02
3-16	5.00000E-01	2.00000E-01	2.59884E-01	3.56159E-02

^aRead as 5.0×10^{-1} .

Table 7. Activities for a Radial Traverse Through the Core Midplane

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	.00	4.33E+18	1.68E+19	2.28E+18	2.68E+17	9.48E+18	3.84E+19	4.97E+13	9.15E+12	8.72E+00	2.13E+01
11.95	.00	4.41E+18	1.68E+19	2.12E+18	2.53E+17	9.53E+18	3.82E+19	5.03E+13	9.17E+12	8.86E+00	2.14E+01
18.02	.00	4.34E+18	1.67E+19	2.06E+18	2.44E+17	9.96E+18	3.82E+19	4.96E+13	9.44E+12	8.72E+00	2.20E+01
23.64	.00	4.37E+18	1.63E+19	1.78E+18	2.12E+17	1.06E+19	3.84E+19	4.94E+13	9.84E+12	8.72E+00	2.30E+01
28.45	.00	4.46E+18	1.63E+19	1.49E+18	2.61E+17	1.10E+19	3.85E+19	5.01E+13	1.01E+13	8.85E+00	2.37E+01
34.45	.00	4.46E+18	1.72E+19	2.94E+18	6.72E+17	1.04E+19	4.14E+19	5.14E+13	9.92E+12	8.94E+00	2.32E+01
43.97	.00	4.58E+18	1.79E+19	3.63E+18	9.08E+17	1.02E+19	4.29E+19	5.32E+13	9.91E+12	9.20E+00	2.32E+01
55.02	.00	4.91E+18	1.83E+19	3.43E+18	9.55E+17	1.07E+19	4.45E+19	5.65E+13	1.03E+13	9.81E+00	2.41E+01
63.80	.00	5.29E+18	1.84E+19	2.99E+18	9.07E+17	1.18E+19	4.60E+19	6.01E+13	1.11E+13	1.05E+01	2.60E+01
68.55	.00	5.38E+18	1.82E+19	2.71E+18	8.44E+17	1.35E+19	4.85E+19	6.06E+13	1.23E+13	1.06E+01	2.89E+01
72.05	.00	5.47E+18	1.84E+19	2.67E+18	1.46E+18	1.34E+19	4.68E+19	6.17E+13	1.22E+13	1.08E+01	2.88E+01
77.52	.00	5.53E+18	1.95E+19	6.53E+18	4.23E+18	1.07E+19	5.13E+19	6.57E+13	1.06E+13	1.11E+01	2.55E+01
84.50	.00	5.71E+18	2.05E+19	8.31E+18	5.87E+18	9.09E+18	5.11E+19	6.94E+13	9.56E+12	1.16E+01	2.34E+01
91.50	.00	6.03E+18	2.12E+19	9.33E+18	6.92E+18	8.06E+18	5.03E+19	7.37E+13	8.83E+12	1.22E+01	2.19E+01
96.75	.00	6.31E+18	2.17E+19	9.85E+18	7.46E+18	7.45E+18	5.00E+19	7.72E+13	8.40E+12	1.28E+01	2.10E+01
100.25	.00	6.35E+18	2.18E+19	1.01E+19	7.66E+18	7.01E+18	5.04E+19	7.77E+13	8.13E+12	1.29E+01	2.05E+01
102.57	.00	6.32E+18	2.18E+19	1.02E+19	7.89E+18	6.80E+18	5.09E+19	7.76E+13	8.02E+12	1.28E+01	2.03E+01
104.29	.00	6.31E+18	2.19E+19	1.04E+19	8.17E+18	6.67E+18	5.10E+19	7.77E+13	7.94E+12	1.28E+01	2.02E+01
107.68	.00	6.33E+18	2.20E+19	1.08E+19	8.67E+18	6.43E+18	5.11E+19	7.82E+13	7.79E+12	1.29E+01	1.99E+01
112.96	.00	6.43E+18	2.23E+19	1.12E+19	9.34E+18	6.12E+18	5.12E+19	7.97E+13	7.59E+12	1.31E+01	1.96E+01
119.50	.00	6.62E+18	2.26E+19	1.17E+19	1.01E+19	5.82E+18	5.14E+19	8.22E+13	7.41E+12	1.35E+01	1.93E+01
126.50	.00	6.87E+18	2.29E+19	1.21E+19	1.07E+19	5.56E+18	5.15E+19	8.51E+13	7.26E+12	1.40E+01	1.91E+01
133.50	.00	7.13E+18	2.32E+19	1.24E+19	1.12E+19	5.35E+18	5.15E+19	8.81E+13	7.12E+12	1.45E+01	1.90E+01
140.50	.00	7.40E+18	2.34E+19	1.26E+19	1.17E+19	5.16E+18	5.14E+19	9.11E+13	6.99E+12	1.50E+01	1.88E+01
147.00	.00	7.67E+18	2.36E+19	1.27E+19	1.21E+19	5.01E+18	5.13E+19	9.40E+13	6.88E+12	1.55E+01	1.86E+01
153.00	.00	7.98E+18	2.38E+19	1.28E+19	1.23E+19	4.92E+18	5.11E+19	9.73E+13	6.80E+12	1.61E+01	1.85E+01
158.43	.00	8.37E+18	2.40E+19	1.27E+19	1.24E+19	4.87E+18	5.08E+19	1.01E+14	6.76E+12	1.69E+01	1.84E+01
161.43	.00	8.65E+18	2.41E+19	1.27E+19	1.24E+19	4.87E+18	5.06E+19	1.04E+14	6.74E+12	1.75E+01	1.84E+01
163.75	.00	8.78E+18	2.41E+19	1.26E+19	1.24E+19	4.84E+18	5.03E+19	1.06E+14	6.71E+12	1.77E+01	1.83E+01
167.25	.00	8.84E+18	2.41E+19	1.26E+19	1.25E+19	4.80E+18	5.04E+19	1.06E+14	6.70E+12	1.79E+01	1.83E+01
169.57	.00	8.78E+18	2.41E+19	1.27E+19	1.27E+19	4.77E+18	5.08E+19	1.06E+14	6.72E+12	1.77E+01	1.84E+01
172.07	.00	8.71E+18	2.40E+19	1.27E+19	1.31E+19	4.73E+18	5.10E+19	1.05E+14	6.72E+12	1.76E+01	1.85E+01
177.00	.00	8.63E+18	2.39E+19	1.28E+19	1.38E+19	4.67E+18	5.13E+19	1.04E+14	6.71E+12	1.75E+01	1.86E+01
182.75	.00	8.61E+18	2.37E+19	1.28E+19	1.44E+19	4.61E+18	5.14E+19	1.04E+14	6.69E+12	1.75E+01	1.87E+01
188.25	.00	8.61E+18	2.36E+19	1.28E+19	1.51E+19	4.56E+18	5.13E+19	1.05E+14	6.65E+12	1.75E+01	1.88E+01
193.75	.00	8.60E+18	2.34E+19	1.28E+19	1.57E+19	4.49E+18	5.10E+19	1.05E+14	6.59E+12	1.75E+01	1.88E+01
199.25	.00	8.58E+18	2.32E+19	1.27E+19	1.64E+19	4.43E+18	5.05E+19	1.04E+14	6.50E+12	1.74E+01	1.87E+01
204.75	.00	8.55E+18	2.30E+19	1.26E+19	1.72E+19	4.36E+18	4.99E+19	1.04E+14	6.39E+12	1.74E+01	1.87E+01
210.25	.00	8.51E+18	2.28E+19	1.25E+19	1.80E+19	4.29E+18	4.90E+19	1.04E+14	6.26E+12	1.73E+01	1.85E+01
215.50	.00	8.49E+18	2.25E+19	1.24E+19	1.87E+19	4.24E+18	4.81E+19	1.04E+14	6.13E+12	1.72E+01	1.84E+01
220.43	.00	8.54E+18	2.23E+19	1.22E+19	1.92E+19	4.23E+18	4.73E+19	1.05E+14	6.05E+12	1.74E+01	1.84E+01
223.43	.00	8.62E+18	2.22E+19	1.21E+19	1.95E+19	4.24E+18	4.67E+19	1.05E+14	6.01E+12	1.75E+01	1.83E+01
225.75	.00	8.68E+18	2.21E+19	1.21E+19	1.95E+19	4.23E+18	4.59E+19	1.06E+14	5.92E+12	1.77E+01	1.81E+01
229.25	.00	8.65E+18	2.21E+19	1.20E+19	1.96E+19	4.15E+18	4.49E+19	1.06E+14	5.78E+12	1.76E+01	1.79E+01

Table 7. Activities for a Radial Traverse Through the Core Midplane (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
231.57	.00	8.51E+18	2.19E+19	1.20E+19	2.00E+19	4.10E+18	4.48E+19	1.05E+14	5.72E+12	1.74E+01	1.78E+01
234.19	.00	8.23E+18	2.17E+19	1.20E+19	2.08E+19	4.04E+18	4.46E+19	1.02E+14	5.66E+12	1.68E+01	1.79E+01
238.28	.00	7.87E+18	2.12E+19	1.20E+19	2.20E+19	3.95E+18	4.42E+19	9.85E+13	5.57E+12	1.61E+01	1.79E+01
242.37	.00	7.56E+18	2.08E+19	1.19E+19	2.30E+19	3.87E+18	4.36E+19	9.55E+13	5.46E+12	1.55E+01	1.79E+01
246.46	.00	7.29E+18	2.04E+19	1.18E+19	2.40E+19	3.80E+18	4.30E+19	9.30E+13	5.36E+12	1.50E+01	1.78E+01
251.00	.00	7.02E+18	1.99E+19	1.16E+19	2.51E+19	3.74E+18	4.24E+19	9.05E+13	5.26E+12	1.45E+01	1.78E+01
256.00	.00	6.73E+18	1.94E+19	1.15E+19	2.62E+19	3.67E+18	4.15E+19	8.78E+13	5.15E+12	1.40E+01	1.78E+01
261.00	.00	6.44E+18	1.88E+19	1.13E+19	2.73E+19	3.61E+18	4.05E+19	8.50E+13	5.01E+12	1.34E+01	1.77E+01
266.00	.00	6.16E+18	1.83E+19	1.11E+19	2.84E+19	3.57E+18	3.95E+19	8.23E+13	4.89E+12	1.29E+01	1.77E+01
271.34	.00	5.92E+18	1.77E+19	1.08E+19	2.95E+19	3.58E+18	3.85E+19	8.00E+13	4.81E+12	1.24E+01	1.77E+01
277.02	.00	5.74E+18	1.70E+19	1.05E+19	3.05E+19	3.64E+18	3.76E+19	7.83E+13	4.77E+12	1.21E+01	1.79E+01
280.43	.00	5.68E+18	1.66E+19	1.03E+19	3.09E+19	3.72E+18	3.70E+19	7.78E+13	4.78E+12	1.20E+01	1.80E+01
282.25	.00	5.69E+18	1.65E+19	1.03E+19	3.10E+19	3.74E+18	3.62E+19	7.79E+13	4.74E+12	1.20E+01	1.79E+01
284.75	.00	5.70E+18	1.65E+19	1.02E+19	3.09E+19	3.75E+18	3.51E+19	7.81E+13	4.65E+12	1.21E+01	1.77E+01
287.00	.00	5.69E+18	1.64E+19	1.01E+19	3.09E+19	3.72E+18	3.43E+19	7.81E+13	4.56E+12	1.21E+01	1.75E+01
289.50	.00	5.59E+18	1.61E+19	1.00E+19	3.14E+19	3.70E+18	3.39E+19	7.71E+13	4.53E+12	1.20E+01	1.75E+01
293.50	.00	5.45E+18	1.58E+19	9.92E+18	3.19E+19	3.63E+18	3.29E+19	7.60E+13	4.40E+12	1.18E+01	1.74E+01
298.50	.00	5.21E+18	1.55E+19	9.83E+18	3.22E+19	3.35E+18	3.16E+19	7.37E+13	4.09E+12	1.13E+01	1.68E+01
306.00	.00	4.48E+18	1.45E+19	9.61E+18	3.44E+19	2.88E+18	3.08E+19	6.65E+13	3.72E+12	9.92E+00	1.64E+01
320.00	.00	3.43E+18	1.25E+19	8.98E+18	3.87E+19	2.40E+18	2.93E+19	5.67E+13	3.30E+12	7.99E+00	1.63E+01
339.50	.00	2.47E+18	1.00E+19	7.98E+18	4.32E+19	2.01E+18	2.72E+19	4.77E+13	2.90E+12	6.31E+00	1.64E+01
362.50	.00	1.69E+18	7.62E+18	6.78E+18	4.71E+19	1.68E+18	2.47E+19	4.02E+13	2.50E+12	4.93E+00	1.63E+01
387.50	.00	1.14E+18	5.58E+18	5.55E+18	4.98E+19	1.42E+18	2.20E+19	3.44E+13	2.17E+12	3.92E+00	1.61E+01
412.50	.00	7.60E+17	4.02E+18	4.43E+18	5.11E+19	1.22E+18	1.95E+19	3.01E+13	1.87E+12	3.21E+00	1.57E+01
437.50	.00	5.06E+17	2.85E+18	3.46E+18	5.15E+19	1.05E+18	1.72E+19	2.68E+13	1.62E+12	2.69E+00	1.52E+01
462.50	.00	3.37E+17	2.00E+18	2.65E+18	5.10E+19	9.04E+17	1.51E+19	2.43E+13	1.40E+12	2.32E+00	1.46E+01
487.50	.00	2.25E+17	1.38E+18	2.00E+18	4.99E+19	7.84E+17	1.32E+19	2.22E+13	1.21E+12	2.04E+00	1.39E+01
512.50	.00	1.50E+17	9.51E+17	1.48E+18	4.84E+19	6.85E+17	1.15E+19	2.05E+13	1.05E+12	1.83E+00	1.32E+01
537.50	.00	1.01E+17	6.50E+17	1.09E+18	4.66E+19	6.01E+17	9.97E+18	1.90E+13	9.08E+11	1.66E+00	1.25E+01
562.50	.00	6.81E+16	4.41E+17	7.89E+17	4.46E+19	5.30E+17	8.66E+18	1.77E+13	7.90E+11	1.53E+00	1.18E+01
587.50	.00	4.61E+16	2.98E+17	5.65E+17	4.25E+19	4.70E+17	7.51E+18	1.66E+13	6.88E+11	1.42E+00	1.11E+01
612.50	.00	3.14E+16	2.01E+17	4.02E+17	4.04E+19	4.17E+17	6.51E+18	1.55E+13	6.01E+11	1.32E+00	1.04E+01
637.50	.00	2.15E+16	1.35E+17	2.83E+17	3.84E+19	3.72E+17	5.65E+18	1.46E+13	5.25E+11	1.23E+00	9.77E+00
662.50	.00	1.47E+16	9.10E+16	1.98E+17	3.64E+19	3.32E+17	4.90E+18	1.37E+13	4.60E+11	1.15E+00	9.17E+00
687.50	.00	1.02E+16	6.12E+16	1.38E+17	3.44E+19	2.98E+17	4.25E+18	1.29E+13	4.03E+11	1.08E+00	8.60E+00
712.50	.00	7.09E+15	4.13E+16	9.55E+16	3.25E+19	2.67E+17	3.69E+18	1.21E+13	3.54E+11	1.02E+00	8.07E+00
737.50	.00	4.97E+15	2.79E+16	6.58E+16	3.08E+19	2.40E+17	3.20E+18	1.14E+13	3.11E+11	9.58E-01	7.57E+00
762.50	.00	3.51E+15	1.89E+16	4.52E+16	2.91E+19	2.16E+17	2.79E+18	1.08E+13	2.74E+11	9.03E-01	7.10E+00
787.50	.00	2.50E+15	1.29E+16	3.10E+16	2.75E+19	1.95E+17	2.43E+18	1.02E+13	2.42E+11	8.51E-01	6.67E+00
812.50	.00	1.80E+15	8.85E+15	2.12E+16	2.60E+19	1.76E+17	2.12E+18	9.60E+12	2.14E+11	8.03E-01	6.27E+00
837.50	.00	1.31E+15	6.13E+15	1.45E+16	2.45E+19	1.59E+17	1.85E+18	9.07E+12	1.90E+11	7.58E-01	5.89E+00
862.50	.00	9.70E+14	4.29E+15	9.97E+15	2.32E+19	1.45E+17	1.62E+18	8.56E+12	1.69E+11	7.15E-01	5.54E+00
887.50	.00	7.27E+14	3.04E+15	6.86E+15	2.19E+19	1.32E+17	1.42E+18	8.09E+12	1.51E+11	6.76E-01	5.21E+00
912.50	.00	5.55E+14	2.19E+15	4.74E+15	2.07E+19	1.20E+17	1.25E+18	7.64E+12	1.35E+11	6.38E-01	4.91E+00

Table 7. Activities for a Radial Traverse Through the Core Midplane (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	.00	4.31E+14	1.61E+15	3.30E+15	1.96E+19	1.10E+17	1.10E+18	7.22E+12	1.21E+11	6.03E-01	4.62E+00
962.50	.00	3.41E+14	1.21E+15	2.32E+15	1.85E+19	1.00E+17	9.76E+17	6.82E+12	1.09E+11	5.70E-01	4.35E+00
987.50	.00	2.75E+14	9.21E+14	1.65E+15	1.75E+19	9.21E+16	8.66E+17	6.45E+12	9.84E+10	5.38E-01	4.10E+00
1012.50	.00	2.26E+14	7.21E+14	1.19E+15	1.65E+19	8.47E+16	7.70E+17	6.09E+12	8.90E+10	5.09E-01	3.87E+00
1037.50	.00	1.90E+14	5.79E+14	8.74E+14	1.56E+19	7.80E+16	6.88E+17	5.76E+12	8.07E+10	4.81E-01	3.64E+00
1062.50	.00	1.62E+14	4.74E+14	6.56E+14	1.47E+19	7.21E+16	6.16E+17	5.44E+12	7.35E+10	4.54E-01	3.43E+00
1087.50	.00	1.41E+14	3.98E+14	5.05E+14	1.39E+19	6.67E+16	5.53E+17	5.13E+12	6.71E+10	4.29E-01	3.24E+00
1112.50	.00	1.23E+14	3.40E+14	3.97E+14	1.31E+19	6.20E+16	4.99E+17	4.85E+12	6.15E+10	4.05E-01	3.05E+00
1137.50	.00	1.10E+14	2.97E+14	3.22E+14	1.24E+19	5.78E+16	4.52E+17	4.57E+12	5.66E+10	3.82E-01	2.88E+00
1162.50	.00	9.94E+13	2.62E+14	2.67E+14	1.17E+19	5.41E+16	4.11E+17	4.31E+12	5.23E+10	3.60E-01	2.71E+00
1187.50	.00	9.08E+13	2.36E+14	2.27E+14	1.10E+19	5.07E+16	3.76E+17	4.07E+12	4.85E+10	3.39E-01	2.55E+00
1212.50	.00	8.34E+13	2.14E+14	1.97E+14	1.04E+19	4.77E+16	3.45E+17	3.83E+12	4.51E+10	3.20E-01	2.40E+00
1237.50	.00	7.75E+13	1.98E+14	1.75E+14	9.77E+18	4.51E+16	3.18E+17	3.60E+12	4.22E+10	3.01E-01	2.26E+00
1262.50	.00	7.22E+13	1.83E+14	1.58E+14	9.18E+18	4.27E+16	2.95E+17	3.39E+12	3.96E+10	2.83E-01	2.12E+00
1287.50	.00	6.81E+13	1.72E+14	1.45E+14	8.62E+18	4.05E+16	2.76E+17	3.18E+12	3.74E+10	2.66E-01	1.99E+00
1312.50	.00	6.43E+13	1.62E+14	1.35E+14	8.09E+18	3.87E+16	2.59E+17	2.98E+12	3.54E+10	2.49E-01	1.87E+00
1337.50	.00	6.14E+13	1.55E+14	1.27E+14	7.57E+18	3.71E+16	2.44E+17	2.79E+12	3.38E+10	2.33E-01	1.75E+00
1362.50	.00	5.88E+13	1.48E+14	1.21E+14	7.08E+18	3.58E+16	2.32E+17	2.61E+12	3.24E+10	2.18E-01	1.64E+00
1387.50	.00	5.69E+13	1.44E+14	1.17E+14	6.60E+18	3.47E+16	2.23E+17	2.44E+12	3.12E+10	2.03E-01	1.53E+00
1412.50	.00	5.53E+13	1.41E+14	1.14E+14	6.15E+18	3.39E+16	2.15E+17	2.27E+12	3.04E+10	1.89E-01	1.43E+00
1437.50	.00	5.43E+13	1.39E+14	1.11E+14	5.71E+18	3.33E+16	2.09E+17	2.10E+12	2.97E+10	1.76E-01	1.33E+00
1462.50	.00	5.38E+13	1.38E+14	1.10E+14	5.28E+18	3.31E+16	2.06E+17	1.95E+12	2.94E+10	1.63E-01	1.24E+00
1487.50	.00	5.39E+13	1.39E+14	1.09E+14	4.87E+18	3.32E+16	2.04E+17	1.80E+12	2.93E+10	1.50E-01	1.15E+00
1512.50	.00	5.45E+13	1.41E+14	1.09E+14	4.48E+18	3.37E+16	2.03E+17	1.65E+12	2.95E+10	1.38E-01	1.06E+00
1537.50	.00	5.58E+13	1.44E+14	1.09E+14	4.09E+18	3.47E+16	2.05E+17	1.51E+12	3.01E+10	1.26E-01	9.77E-01
1562.50	.00	5.78E+13	1.48E+14	1.09E+14	3.72E+18	3.62E+16	2.08E+17	1.37E+12	3.11E+10	1.15E-01	8.98E-01
1587.50	.00	6.06E+13	1.52E+14	1.07E+14	3.36E+18	3.85E+16	2.12E+17	1.24E+12	3.25E+10	1.03E-01	8.22E-01
1612.50	.00	6.43E+13	1.55E+14	1.05E+14	3.01E+18	4.17E+16	2.19E+17	1.11E+12	3.45E+10	9.27E-02	7.49E-01
1637.50	.00	6.86E+13	1.57E+14	1.01E+14	2.67E+18	4.61E+16	2.27E+17	9.85E+11	3.72E+10	8.22E-02	6.81E-01
1662.50	.00	7.34E+13	1.55E+14	9.42E+13	2.34E+18	5.22E+16	2.38E+17	8.62E+11	4.09E+10	7.20E-02	6.16E-01
1687.50	.00	7.74E+13	1.48E+14	8.51E+13	2.01E+18	6.05E+16	2.50E+17	7.43E+11	4.58E+10	6.20E-02	5.56E-01
1712.50	.00	7.86E+13	1.31E+14	7.35E+13	1.70E+18	7.22E+16	2.64E+17	6.27E+11	5.24E+10	5.23E-02	5.03E-01
1737.50	.00	6.77E+13	1.01E+14	5.97E+13	1.38E+18	8.87E+16	2.79E+17	5.09E+11	6.13E+10	4.22E-02	4.53E-01
1762.50	.00	4.28E+13	7.46E+13	5.03E+13	1.16E+18	1.11E+17	2.96E+17	4.29E+11	7.22E+10	3.52E-02	4.31E-01
1787.50	.00	2.03E+13	3.95E+13	3.47E+13	8.01E+17	1.28E+17	3.17E+17	2.96E+11	7.42E+10	2.45E-02	3.55E-01
1812.50	.00	9.34E+12	1.29E+13	1.48E+13	3.03E+17	1.11E+17	2.97E+17	1.12E+11	6.47E+10	9.26E-03	2.22E-01
1837.50	.00	4.72E+12	4.97E+12	5.47E+12	1.17E+17	8.51E+16	2.60E+17	4.32E+10	5.25E+10	3.57E-03	1.52E-01
1862.50	.00	2.50E+12	2.20E+12	2.18E+12	4.60E+16	6.56E+16	2.26E+17	1.70E+10	4.28E+10	1.41E-03	1.14E-01
1887.50	.00	1.37E+12	1.10E+12	9.76E+11	1.87E+16	5.14E+16	1.95E+17	6.90E+09	3.53E+10	5.72E-04	8.98E-02
1912.50	.00	7.65E+11	5.70E+11	4.85E+11	7.51E+15	4.12E+16	1.67E+17	2.78E+09	2.95E+10	2.30E-04	7.33E-02
1937.50	.00	4.33E+11	3.14E+11	2.53E+11	3.27E+15	3.36E+16	1.41E+17	1.21E+09	2.48E+10	1.01E-04	6.10E-02
1962.50	.00	2.46E+11	1.67E+11	1.35E+11	1.30E+15	2.79E+16	1.15E+17	4.83E+08	2.09E+10	4.02E-05	5.10E-02
1987.50	.00	1.33E+11	7.96E+10	5.70E+10	3.99E+14	2.34E+16	8.56E+16	1.49E+08	1.74E+10	1.25E-05	4.20E-02

Table 8. Activities for a Radial Traverse Through the Midplane of the Upper Fuel Elements

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (U/g)
4.35	291.55	1.17E+19	3.39E+19	3.49E+18	1.64E+17	1.19E+19	5.15E+19	1.27E+14	1.20E+13	2.25E+01	2.82E+01
11.95	291.55	1.19E+19	3.38E+19	3.22E+18	1.52E+17	1.21E+19	5.15E+19	1.29E+14	1.21E+13	2.30E+01	2.85E+01
18.02	291.55	1.19E+19	3.37E+19	3.13E+18	1.45E+17	1.27E+19	5.15E+19	1.28E+14	1.25E+13	2.28E+01	2.94E+01
23.64	291.55	1.21E+19	3.32E+19	2.67E+18	1.22E+17	1.37E+19	5.21E+19	1.29E+14	1.31E+13	2.31E+01	3.10E+01
28.45	291.55	1.24E+19	3.32E+19	2.21E+18	1.32E+17	1.42E+19	5.23E+19	1.33E+14	1.35E+13	2.37E+01	3.20E+01
34.45	291.55	1.27E+19	3.48E+19	4.21E+18	3.10E+17	1.28E+19	5.46E+19	1.37E+14	1.28E+13	2.43E+01	3.03E+01
43.97	291.55	1.34E+19	3.63E+19	5.14E+18	4.02E+17	1.21E+19	5.55E+19	1.45E+14	1.25E+13	2.58E+01	2.95E+01
55.02	291.55	1.50E+19	3.68E+19	4.67E+18	3.71E+17	1.23E+19	5.64E+19	1.60E+14	1.26E+13	2.87E+01	3.00E+01
63.80	291.55	1.66E+19	3.68E+19	3.91E+18	3.11E+17	1.31E+19	5.72E+19	1.76E+14	1.32E+13	3.15E+01	3.15E+01
68.55	291.55	1.72E+19	3.64E+19	3.45E+18	2.74E+17	1.45E+19	5.84E+19	1.82E+14	1.42E+13	3.27E+01	3.38E+01
72.05	291.55	1.79E+19	3.68E+19	3.03E+18	3.13E+17	1.45E+19	5.66E+19	1.88E+14	1.42E+13	3.39E+01	3.40E+01
77.52	291.55	1.88E+19	3.86E+19	6.16E+18	6.94E+17	1.24E+19	5.84E+19	1.99E+14	1.32E+13	3.60E+01	3.16E+01
84.50	291.55	2.03E+19	4.02E+19	7.63E+18	8.99E+17	1.12E+19	5.84E+19	2.17E+14	1.25E+13	3.93E+01	3.01E+01
91.50	291.55	2.28E+19	4.10E+19	8.07E+18	9.05E+17	1.04E+19	5.83E+19	2.43E+14	1.21E+13	4.44E+01	2.93E+01
96.75	291.55	2.51E+19	4.12E+19	8.10E+18	8.47E+17	1.01E+19	5.84E+19	2.68E+14	1.20E+13	4.94E+01	2.93E+01
100.25	291.55	2.64E+19	4.12E+19	8.06E+18	8.16E+17	9.99E+18	5.82E+19	2.83E+14	1.21E+13	5.24E+01	2.95E+01
102.57	291.55	2.73E+19	4.13E+19	8.03E+18	7.94E+17	9.99E+18	5.80E+19	2.92E+14	1.21E+13	5.46E+01	2.98E+01
104.29	291.55	2.81E+19	4.13E+19	7.99E+18	7.54E+17	1.00E+19	5.68E+19	3.01E+14	1.22E+13	5.64E+01	3.00E+01
107.68	291.55	2.93E+19	4.14E+19	7.97E+18	6.98E+17	1.00E+19	5.60E+19	3.15E+14	1.23E+13	5.94E+01	3.04E+01
112.96	291.55	3.09E+19	4.17E+19	8.05E+18	6.76E+17	1.01E+19	5.68E+19	3.32E+14	1.26E+13	6.30E+01	3.10E+01
119.50	291.55	3.24E+19	4.20E+19	8.27E+18	7.04E+17	1.00E+19	5.79E+19	3.48E+14	1.28E+13	6.63E+01	3.16E+01
126.50	291.55	3.35E+19	4.25E+19	8.62E+18	7.85E+17	9.99E+18	5.91E+19	3.60E+14	1.29E+13	6.88E+01	3.21E+01
133.50	291.55	3.42E+19	4.29E+19	9.06E+18	9.23E+17	9.94E+18	6.02E+19	3.69E+14	1.31E+13	7.05E+01	3.25E+01
140.50	291.55	3.46E+19	4.33E+19	9.62E+18	1.15E+18	9.85E+18	6.13E+19	3.73E+14	1.32E+13	7.14E+01	3.27E+01
147.00	291.55	3.45E+19	4.38E+19	1.03E+19	1.48E+18	9.68E+18	6.21E+19	3.73E+14	1.31E+13	7.13E+01	3.27E+01
153.00	291.55	3.37E+19	4.42E+19	1.10E+19	1.98E+18	9.37E+18	6.25E+19	3.66E+14	1.29E+13	6.96E+01	3.22E+01
158.43	291.55	3.22E+19	4.46E+19	1.19E+19	2.82E+18	8.84E+18	6.42E+19	3.49E+14	1.25E+13	6.58E+01	3.11E+01
161.43	291.55	3.08E+19	4.49E+19	1.25E+19	3.51E+18	8.44E+18	6.81E+19	3.34E+14	1.22E+13	6.26E+01	3.03E+01
163.75	291.55	2.98E+19	4.51E+19	1.28E+19	3.70E+18	8.15E+18	6.84E+19	3.23E+14	1.19E+13	6.00E+01	2.95E+01
167.25	291.55	2.84E+19	4.53E+19	1.31E+19	3.92E+18	7.77E+18	6.90E+19	3.07E+14	1.15E+13	5.66E+01	2.85E+01
169.57	291.55	2.75E+19	4.54E+19	1.33E+19	4.12E+18	7.59E+18	6.94E+19	2.97E+14	1.13E+13	5.45E+01	2.81E+01
172.07	291.55	2.65E+19	4.57E+19	1.37E+19	4.49E+18	7.46E+18	6.93E+19	2.86E+14	1.11E+13	5.22E+01	2.78E+01
177.00	291.55	2.50E+19	4.60E+19	1.44E+19	5.07E+18	7.25E+18	6.93E+19	2.71E+14	1.09E+13	4.91E+01	2.73E+01
182.75	291.55	2.41E+19	4.62E+19	1.50E+19	5.58E+18	7.10E+18	6.94E+19	2.61E+14	1.08E+13	4.70E+01	2.70E+01
188.25	291.55	2.37E+19	4.63E+19	1.53E+19	5.88E+18	7.01E+18	6.95E+19	2.57E+14	1.07E+13	4.62E+01	2.69E+01
193.75	291.55	2.38E+19	4.63E+19	1.54E+19	6.04E+18	6.98E+18	6.97E+19	2.58E+14	1.07E+13	4.62E+01	2.69E+01
199.25	291.55	2.42E+19	4.62E+19	1.54E+19	6.06E+18	7.00E+18	7.00E+19	2.63E+14	1.08E+13	4.71E+01	2.71E+01
204.75	291.55	2.51E+19	4.60E+19	1.52E+19	5.94E+18	7.03E+18	7.03E+19	2.72E+14	1.09E+13	4.89E+01	2.74E+01
210.25	291.55	2.65E+19	4.57E+19	1.49E+19	5.67E+18	7.21E+18	7.07E+19	2.85E+14	1.11E+13	5.16E+01	2.78E+01
215.50	291.55	2.83E+19	4.53E+19	1.44E+19	5.28E+18	7.39E+18	7.11E+19	3.04E+14	1.13E+13	5.54E+01	2.83E+01
220.43	291.55	3.07E+19	4.47E+19	1.38E+19	4.72E+18	7.60E+18	7.15E+19	3.29E+14	1.15E+13	6.05E+01	2.90E+01
223.43	291.55	3.26E+19	4.42E+19	1.33E+19	4.29E+18	7.77E+18	7.19E+19	3.49E+14	1.17E+13	6.45E+01	2.95E+01
225.75	291.55	3.39E+19	4.40E+19	1.30E+19	4.10E+18	7.97E+18	7.20E+19	3.63E+14	1.20E+13	6.76E+01	3.01E+01
229.25	291.55	3.57E+19	4.37E+19	1.28E+19	3.91E+18	8.39E+18	7.21E+19	3.84E+14	1.25E+13	7.21E+01	3.14E+01

Table 8. Activities for a Radial Traverse Through the Midplane of the Upper Fuel Elements (continued)

Radius (mm)	Elevation (mm)	E>2.2 MeV				Total		Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
		Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
231.57	291.55	3.71E+19	4.36E+19	1.26E+19	3.77E+18	8.70E+18	7.23E+19	3.99E+14	1.29E+13	7.53E+01	3.24E+01
234.19	291.55	3.87E+19	4.32E+19	1.22E+19	3.30E+18	9.05E+18	6.93E+19	4.16E+14	1.32E+13	7.92E+01	3.33E+01
238.28	291.55	4.08E+19	4.27E+19	1.17E+19	2.82E+18	9.52E+18	6.85E+19	4.39E+14	1.38E+13	8.41E+01	3.47E+01
242.37	291.55	4.22E+19	4.23E+19	1.14E+19	2.67E+18	9.85E+18	7.00E+19	4.55E+14	1.43E+13	8.76E+01	3.59E+01
246.46	291.55	4.33E+19	4.18E+19	1.11E+19	2.73E+18	1.01E+19	7.15E+19	4.66E+14	1.46E+13	9.01E+01	3.68E+01
251.00	291.55	4.41E+19	4.13E+19	1.10E+19	3.01E+18	1.03E+19	7.32E+19	4.76E+14	1.49E+13	9.22E+01	3.77E+01
256.00	291.55	4.47E+19	4.07E+19	1.09E+19	3.61E+18	1.04E+19	7.52E+19	4.83E+14	1.52E+13	9.39E+01	3.85E+01
261.00	291.55	4.49E+19	4.01E+19	1.09E+19	4.54E+18	1.04E+19	7.70E+19	4.86E+14	1.54E+13	9.47E+01	3.91E+01
266.00	291.55	4.45E+19	3.94E+19	1.11E+19	5.97E+18	1.03E+19	7.83E+19	4.84E+14	1.54E+13	9.41E+01	3.93E+01
271.34	291.55	4.31E+19	3.85E+19	1.13E+19	8.11E+18	9.96E+18	7.85E+19	4.70E+14	1.51E+13	9.13E+01	3.88E+01
277.02	291.55	3.99E+19	3.75E+19	1.16E+19	1.15E+19	9.24E+18	7.67E+19	4.36E+14	1.40E+13	8.41E+01	3.69E+01
280.43	291.55	3.71E+19	3.69E+19	1.18E+19	1.42E+19	8.62E+18	7.56E+19	4.06E+14	1.31E+13	7.75E+01	3.51E+01
282.25	291.55	3.56E+19	3.66E+19	1.19E+19	1.47E+19	8.23E+18	7.34E+19	3.89E+14	1.24E+13	7.37E+01	3.37E+01
284.75	291.55	3.37E+19	3.64E+19	1.19E+19	1.53E+19	7.69E+18	7.03E+19	3.68E+14	1.16E+13	6.92E+01	3.17E+01
287.00	291.55	3.20E+19	3.62E+19	1.20E+19	1.57E+19	7.24E+18	6.76E+19	3.50E+14	1.09E+13	6.53E+01	3.01E+01
289.50	291.55	3.00E+19	3.57E+19	1.21E+19	1.71E+19	6.90E+18	6.55E+19	3.29E+14	1.03E+13	6.09E+01	2.90E+01
293.50	291.55	2.74E+19	3.50E+19	1.23E+19	1.86E+19	6.33E+18	6.18E+19	3.01E+14	9.45E+12	5.51E+01	2.72E+01
298.50	291.55	2.50E+19	3.45E+19	1.24E+19	1.95E+19	5.57E+18	5.74E+19	2.75E+14	8.36E+12	4.96E+01	2.48E+01
306.00	291.55	2.07E+19	3.31E+19	1.27E+19	2.30E+19	4.70E+18	5.33E+19	2.31E+14	7.26E+12	4.08E+01	2.29E+01
320.00	291.55	1.46E+19	2.92E+19	1.28E+19	3.05E+19	3.79E+18	4.81E+19	1.71E+14	6.07E+12	2.91E+01	2.14E+01
339.50	291.55	9.40E+18	2.36E+19	1.23E+19	3.89E+19	3.05E+18	4.26E+19	1.20E+14	5.00E+12	1.95E+01	2.05E+01
362.50	291.55	5.72E+18	1.78E+19	1.11E+19	4.62E+19	2.44E+18	3.70E+19	8.47E+13	4.07E+12	1.28E+01	1.98E+01
387.50	291.55	3.40E+18	1.28E+19	9.38E+18	5.16E+19	1.96E+18	3.18E+19	6.17E+13	3.31E+12	8.53E+00	1.92E+01
412.50	291.55	2.04E+18	8.92E+18	7.63E+18	5.47E+19	1.60E+18	2.73E+19	4.74E+13	2.71E+12	5.96E+00	1.85E+01
437.50	291.55	1.24E+18	6.12E+18	6.01E+18	5.60E+19	1.32E+18	2.33E+19	3.83E+13	2.24E+12	4.38E+00	1.76E+01
462.50	291.55	7.63E+17	4.14E+18	4.60E+18	5.60E+19	1.10E+18	1.99E+19	3.21E+13	1.86E+12	3.39E+00	1.68E+01
487.50	291.55	4.73E+17	2.77E+18	3.45E+18	5.50E+19	9.26E+17	1.69E+19	2.78E+13	1.55E+12	2.74E+00	1.58E+01
512.50	291.55	2.97E+17	1.84E+18	2.54E+18	5.33E+19	7.88E+17	1.44E+19	2.46E+13	1.30E+12	2.31E+00	1.49E+01
537.50	291.55	1.88E+17	1.21E+18	1.83E+18	5.12E+19	6.76E+17	1.23E+19	2.22E+13	1.10E+12	2.00E+00	1.40E+01
562.50	291.55	1.20E+17	7.97E+17	1.31E+18	4.89E+19	5.83E+17	1.05E+19	2.02E+13	9.32E+11	1.78E+00	1.31E+01
587.50	291.55	7.78E+16	5.21E+17	9.23E+17	4.64E+19	5.03E+17	8.92E+18	1.86E+13	7.91E+11	1.61E+00	1.22E+01
612.50	291.55	5.05E+16	3.40E+17	6.44E+17	4.39E+19	4.36E+17	7.59E+18	1.71E+13	6.72E+11	1.47E+00	1.13E+01
637.50	291.55	3.31E+16	2.22E+17	4.45E+17	4.14E+19	3.81E+17	6.47E+18	1.59E+13	5.74E+11	1.35E+00	1.06E+01
662.50	291.55	2.20E+16	1.44E+17	3.06E+17	3.90E+19	3.38E+17	5.54E+18	1.48E+13	4.96E+11	1.25E+00	9.84E+00
687.50	291.55	1.47E+16	9.43E+16	2.08E+17	3.67E+19	3.03E+17	4.76E+18	1.38E+13	4.32E+11	1.16E+00	9.18E+00
712.50	291.55	9.98E+15	6.17E+16	1.41E+17	3.45E+19	2.72E+17	4.09E+18	1.29E+13	3.78E+11	1.09E+00	8.57E+00
737.50	291.55	6.79E+15	4.05E+16	9.56E+16	3.25E+19	2.45E+17	3.53E+18	1.21E+13	3.31E+11	1.02E+00	8.00E+00
762.50	291.55	4.69E+15	2.67E+16	6.44E+16	3.06E+19	2.21E+17	3.04E+18	1.14E+13	2.91E+11	9.52E-01	7.48E+00
787.50	291.55	3.25E+15	1.77E+16	4.33E+16	2.88E+19	2.00E+17	2.63E+18	1.07E+13	2.56E+11	8.93E-01	6.99E+00
812.50	291.55	2.29E+15	1.19E+16	2.90E+16	2.71E+19	1.81E+17	2.28E+18	1.00E+13	2.26E+11	8.39E-01	6.55E+00
837.50	291.55	1.63E+15	8.01E+15	1.95E+16	2.55E+19	1.64E+17	1.98E+18	9.44E+12	2.00E+11	7.89E-01	6.13E+00
862.50	291.55	1.18E+15	5.46E+15	1.31E+16	2.40E+19	1.49E+17	1.73E+18	8.89E+12	1.77E+11	7.43E-01	5.75E+00
887.50	291.55	8.66E+14	3.78E+15	8.84E+15	2.27E+19	1.36E+17	1.51E+18	8.37E+12	1.58E+11	6.99E-01	5.40E+00
912.50	291.55	6.47E+14	2.65E+15	5.99E+15	2.14E+19	1.23E+17	1.32E+18	7.89E+12	1.41E+11	6.59E-01	5.07E+00

Table 8. Activities for a Radial Traverse Through the Midplane of the Upper Fuel Elements (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	291.55	4.92E+14	1.90E+15	4.08E+15	2.01E+19	1.13E+17	1.16E+18	7.44E+12	1.26E+11	6.21E-01	4.76E+00
962.50	291.55	3.83E+14	1.39E+15	2.81E+15	1.90E+19	1.03E+17	1.02E+18	7.01E+12	1.13E+11	5.86E-01	4.47E+00
987.50	291.55	3.03E+14	1.04E+15	1.96E+15	1.79E+19	9.44E+16	9.01E+17	6.62E+12	1.01E+11	5.52E-01	4.21E+00
1012.50	291.55	2.45E+14	7.96E+14	1.38E+15	1.69E+19	8.66E+16	7.98E+17	6.24E+12	9.15E+10	5.21E-01	3.96E+00
1037.50	291.55	2.03E+14	6.27E+14	9.96E+14	1.60E+19	7.96E+16	7.09E+17	5.89E+12	8.27E+10	4.91E-01	3.73E+00
1062.50	291.55	1.71E+14	5.05E+14	7.32E+14	1.50E+19	7.33E+16	6.33E+17	5.55E+12	7.50E+10	4.64E-01	3.51E+00
1087.50	291.55	1.46E+14	4.17E+14	5.52E+14	1.42E+19	6.77E+16	5.66E+17	5.24E+12	6.83E+10	4.37E-01	3.30E+00
1112.50	291.55	1.28E+14	3.53E+14	4.27E+14	1.34E+19	6.27E+16	5.09E+17	4.94E+12	6.23E+10	4.12E-01	3.11E+00
1137.50	291.55	1.13E+14	3.04E+14	3.40E+14	1.26E+19	5.82E+16	4.59E+17	4.65E+12	5.71E+10	3.89E-01	2.93E+00
1162.50	291.55	1.01E+14	2.67E+14	2.79E+14	1.19E+19	5.41E+16	4.16E+17	4.39E+12	5.25E+10	3.66E-01	2.75E+00
1187.50	291.55	9.16E+13	2.38E+14	2.34E+14	1.12E+19	5.05E+16	3.79E+17	4.13E+12	4.85E+10	3.45E-01	2.59E+00
1212.50	291.55	8.38E+13	2.16E+14	2.02E+14	1.05E+19	4.73E+16	3.47E+17	3.89E+12	4.50E+10	3.24E-01	2.44E+00
1237.50	291.55	7.75E+13	1.97E+14	1.77E+14	9.91E+18	4.45E+16	3.19E+17	3.65E+12	4.19E+10	3.05E-01	2.29E+00
1262.50	291.55	7.21E+13	1.83E+14	1.60E+14	9.31E+18	4.20E+16	2.95E+17	3.43E+12	3.92E+10	2.87E-01	2.15E+00
1287.50	291.55	6.76E+13	1.70E+14	1.46E+14	8.73E+18	3.98E+16	2.75E+17	3.22E+12	3.69E+10	2.69E-01	2.02E+00
1312.50	291.55	6.39E+13	1.61E+14	1.35E+14	8.19E+18	3.79E+16	2.58E+17	3.02E+12	3.49E+10	2.52E-01	1.89E+00
1337.50	291.55	6.08E+13	1.53E+14	1.27E+14	7.66E+18	3.62E+16	2.43E+17	2.83E+12	3.32E+10	2.36E-01	1.77E+00
1362.50	291.55	5.82E+13	1.47E+14	1.21E+14	7.16E+18	3.49E+16	2.31E+17	2.64E+12	3.18E+10	2.20E-01	1.66E+00
1387.50	291.55	5.62E+13	1.42E+14	1.16E+14	6.67E+18	3.38E+16	2.21E+17	2.46E+12	3.07E+10	2.06E-01	1.55E+00
1412.50	291.55	5.47E+13	1.39E+14	1.13E+14	6.21E+18	3.31E+16	2.13E+17	2.29E+12	2.98E+10	1.91E-01	1.44E+00
1437.50	291.55	5.37E+13	1.37E+14	1.11E+14	5.76E+18	3.26E+16	2.08E+17	2.13E+12	2.92E+10	1.77E-01	1.34E+00
1462.50	291.55	5.32E+13	1.37E+14	1.10E+14	5.33E+18	3.24E+16	2.04E+17	1.97E+12	2.89E+10	1.64E-01	1.25E+00
1487.50	291.55	5.33E+13	1.37E+14	1.09E+14	4.91E+18	3.25E+16	2.02E+17	1.81E+12	2.89E+10	1.51E-01	1.16E+00
1512.50	291.55	5.39E+13	1.39E+14	1.09E+14	4.51E+18	3.31E+16	2.02E+17	1.66E+12	2.91E+10	1.39E-01	1.07E+00
1537.50	291.55	5.53E+13	1.42E+14	1.09E+14	4.12E+18	3.41E+16	2.03E+17	1.52E+12	2.97E+10	1.27E-01	9.84E-01
1562.50	291.55	5.73E+13	1.46E+14	1.09E+14	3.75E+18	3.56E+16	2.06E+17	1.38E+12	3.07E+10	1.15E-01	9.03E-01
1587.50	291.55	6.02E+13	1.51E+14	1.07E+14	3.38E+18	3.79E+16	2.11E+17	1.25E+12	3.21E+10	1.04E-01	8.26E-01
1612.50	291.55	6.40E+13	1.55E+14	1.05E+14	3.03E+18	4.11E+16	2.18E+17	1.12E+12	3.42E+10	9.33E-02	7.52E-01
1637.50	291.55	6.84E+13	1.57E+14	1.01E+14	2.68E+18	4.55E+16	2.26E+17	9.89E+11	3.69E+10	8.26E-02	6.83E-01
1662.50	291.55	7.33E+13	1.55E+14	9.48E+13	2.34E+18	5.16E+16	2.37E+17	8.65E+11	4.06E+10	7.23E-02	6.17E-01
1687.50	291.55	7.74E+13	1.48E+14	8.57E+13	2.01E+18	6.00E+16	2.49E+17	7.44E+11	4.55E+10	6.21E-02	5.56E-01
1712.50	291.55	7.88E+13	1.32E+14	7.40E+13	1.70E+18	7.17E+16	2.64E+17	6.26E+11	5.22E+10	5.22E-02	5.02E-01
1737.50	291.55	6.78E+13	1.01E+14	6.01E+13	1.37E+18	8.84E+16	2.78E+17	5.05E+11	6.13E+10	4.18E-02	4.51E-01
1762.50	291.55	4.35E+13	7.49E+13	5.05E+13	1.15E+18	1.10E+17	2.95E+17	4.25E+11	7.18E+10	3.49E-02	4.28E-01
1787.50	291.55	2.08E+13	4.02E+13	3.50E+13	7.88E+17	1.26E+17	3.14E+17	2.91E+11	7.35E+10	2.41E-02	3.50E-01
1812.50	291.55	9.24E+12	1.24E+13	1.46E+13	2.89E+17	1.09E+17	2.94E+17	1.07E+11	6.39E+10	8.84E-03	2.17E-01
1837.50	291.55	4.59E+12	4.53E+12	4.99E+12	1.04E+17	8.34E+16	2.57E+17	3.84E+10	5.18E+10	3.17E-03	1.48E-01
1862.50	291.55	2.38E+12	1.98E+12	1.87E+12	3.91E+16	6.43E+16	2.24E+17	1.44E+10	4.23E+10	1.20E-03	1.11E-01
1887.50	291.55	1.28E+12	9.96E+11	8.41E+11	1.58E+16	5.06E+16	1.94E+17	5.83E+09	3.50E+10	4.84E-04	8.85E-02
1912.50	291.55	7.06E+11	5.16E+11	4.29E+11	6.22E+15	4.06E+16	1.66E+17	2.30E+09	2.93E+10	1.91E-04	7.26E-02
1937.50	291.55	3.94E+11	2.82E+11	2.27E+11	2.79E+15	3.32E+16	1.40E+17	1.03E+09	2.47E+10	8.66E-05	6.06E-02
1962.50	291.55	2.23E+11	1.51E+11	1.20E+11	1.13E+15	2.76E+16	1.14E+17	4.19E+08	2.08E+10	3.48E-05	5.08E-02
1987.50	291.55	1.20E+11	7.06E+10	5.09E+10	3.61E+14	2.32E+16	8.54E+16	1.34E+08	1.73E+10	1.14E-05	4.19E-02

Table 9. Activities for a Radial Traverse Through the Midplane of the Lower Fuel Elements

Radius (mm)	Elevation (mm)					E>2.2 MeV	Total	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
		Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
4.35	-250.00	3.19E+18	1.22E+19	1.63E+18	1.80E+17	7.04E+18	2.93E+19	3.67E+13	6.91E+12	6.51E+00	1.61E+01
11.95	-250.00	3.25E+18	1.22E+19	1.51E+18	1.70E+17	7.10E+18	2.92E+19	3.72E+13	6.94E+12	6.62E+00	1.62E+01
18.02	-250.00	3.24E+18	1.22E+19	1.47E+18	1.62E+17	7.40E+18	2.91E+19	3.69E+13	7.13E+12	6.58E+00	1.66E+01
23.64	-250.00	3.28E+18	1.20E+19	1.26E+18	1.39E+17	7.86E+18	2.92E+19	3.71E+13	7.42E+12	6.63E+00	1.73E+01
28.45	-250.00	3.37E+18	1.20E+19	1.09E+18	1.77E+17	8.20E+18	2.94E+19	3.79E+13	7.67E+12	6.77E+00	1.79E+01
34.45	-250.00	3.42E+18	1.28E+19	2.14E+18	4.46E+17	7.81E+18	3.20E+19	3.93E+13	7.59E+12	6.93E+00	1.77E+01
43.97	-250.00	3.59E+18	1.34E+19	2.64E+18	5.96E+17	7.70E+18	3.33E+19	4.15E+13	7.61E+12	7.29E+00	1.78E+01
55.02	-250.00	3.97E+18	1.39E+19	2.47E+18	6.11E+17	8.04E+18	3.44E+19	4.53E+13	7.90E+12	7.99E+00	1.85E+01
63.80	-250.00	4.35E+18	1.40E+19	2.15E+18	5.70E+17	8.81E+18	3.56E+19	4.88E+13	8.47E+12	8.67E+00	1.98E+01
68.55	-250.00	4.50E+18	1.39E+19	1.92E+18	5.20E+17	9.97E+18	3.71E+19	5.01E+13	9.31E+12	8.91E+00	2.18E+01
72.05	-250.00	4.63E+18	1.43E+19	1.97E+18	9.31E+17	9.87E+18	3.61E+19	5.17E+13	9.26E+12	9.18E+00	2.18E+01
77.52	-250.00	4.81E+18	1.54E+19	4.81E+18	2.62E+18	8.08E+18	4.04E+19	5.58E+13	8.31E+12	9.63E+00	1.98E+01
84.50	-250.00	5.11E+18	1.64E+19	6.12E+18	3.60E+18	6.97E+18	4.05E+19	6.01E+13	7.60E+12	1.03E+01	1.84E+01
91.50	-250.00	5.59E+18	1.71E+19	6.87E+18	4.21E+18	6.27E+18	4.04E+19	6.56E+13	7.15E+12	1.12E+01	1.74E+01
96.75	-250.00	5.98E+18	1.76E+19	7.25E+18	4.51E+18	5.88E+18	4.04E+19	6.99E+13	6.91E+12	1.20E+01	1.69E+01
100.25	-250.00	6.13E+18	1.77E+19	7.38E+18	4.60E+18	5.59E+18	4.08E+19	7.16E+13	6.76E+12	1.23E+01	1.66E+01
102.57	-250.00	6.21E+18	1.78E+19	7.48E+18	4.68E+18	5.45E+18	4.12E+19	7.25E+13	6.70E+12	1.24E+01	1.65E+01
104.29	-250.00	6.31E+18	1.80E+19	7.60E+18	4.79E+18	5.38E+18	4.13E+19	7.35E+13	6.67E+12	1.26E+01	1.65E+01
107.68	-250.00	6.53E+18	1.83E+19	7.81E+18	4.97E+18	5.25E+18	4.15E+19	7.59E+13	6.62E+12	1.31E+01	1.64E+01
112.96	-250.00	6.96E+18	1.88E+19	8.08E+18	5.17E+18	5.09E+18	4.18E+19	8.04E+13	6.56E+12	1.39E+01	1.63E+01
119.50	-250.00	7.60E+18	1.94E+19	8.31E+18	5.32E+18	4.94E+18	4.21E+19	8.70E+13	6.51E+12	1.51E+01	1.63E+01
126.50	-250.00	8.42E+18	2.00E+19	8.46E+18	5.34E+18	4.84E+18	4.24E+19	9.54E+13	6.51E+12	1.66E+01	1.64E+01
133.50	-250.00	9.41E+18	2.06E+19	8.49E+18	5.24E+18	4.80E+18	4.27E+19	1.05E+14	6.55E+12	1.85E+01	1.65E+01
140.50	-250.00	1.06E+19	2.12E+19	8.43E+18	5.01E+18	4.80E+18	4.30E+19	1.17E+14	6.64E+12	2.08E+01	1.67E+01
147.00	-250.00	1.19E+19	2.16E+19	8.28E+18	4.68E+18	4.84E+18	4.33E+19	1.31E+14	6.75E+12	2.34E+01	1.70E+01
153.00	-250.00	1.34E+19	2.19E+19	8.04E+18	4.26E+18	4.91E+18	4.36E+19	1.46E+14	6.89E+12	2.64E+01	1.73E+01
158.43	-250.00	1.52E+19	2.21E+19	7.71E+18	3.76E+18	5.02E+18	4.38E+19	1.64E+14	7.04E+12	3.00E+01	1.77E+01
161.43	-250.00	1.64E+19	2.21E+19	7.48E+18	3.41E+18	5.09E+18	4.40E+19	1.76E+14	7.14E+12	3.25E+01	1.79E+01
163.75	-250.00	1.72E+19	2.21E+19	7.37E+18	3.26E+18	5.18E+18	4.40E+19	1.85E+14	7.28E+12	3.43E+01	1.83E+01
167.25	-250.00	1.83E+19	2.22E+19	7.25E+18	3.11E+18	5.38E+18	4.39E+19	1.97E+14	7.56E+12	3.69E+01	1.90E+01
169.57	-250.00	1.91E+19	2.22E+19	7.16E+18	3.00E+18	5.54E+18	4.40E+19	2.06E+14	7.78E+12	3.88E+01	1.95E+01
172.07	-250.00	2.00E+19	2.22E+19	7.01E+18	2.70E+18	5.71E+18	4.25E+19	2.16E+14	7.97E+12	4.09E+01	1.99E+01
177.00	-250.00	2.15E+19	2.22E+19	6.75E+18	2.30E+18	5.98E+18	4.20E+19	2.32E+14	8.32E+12	4.43E+01	2.08E+01
182.75	-250.00	2.28E+19	2.21E+19	6.54E+18	2.08E+18	6.22E+18	4.28E+19	2.46E+14	8.67E+12	4.74E+01	2.17E+01
188.25	-250.00	2.37E+19	2.20E+19	6.40E+18	2.08E+18	6.38E+18	4.39E+19	2.56E+14	8.94E+12	4.96E+01	2.24E+01
193.75	-250.00	2.44E+19	2.19E+19	6.33E+18	2.26E+18	6.50E+18	4.51E+19	2.64E+14	9.18E+12	5.13E+01	2.30E+01
199.25	-250.00	2.50E+19	2.18E+19	6.32E+18	2.65E+18	6.58E+18	4.64E+19	2.70E+14	9.38E+12	5.27E+01	2.36E+01
204.75	-250.00	2.52E+19	2.16E+19	6.36E+18	3.29E+18	6.59E+18	4.75E+19	2.74E+14	9.51E+12	5.35E+01	2.40E+01
210.25	-250.00	2.50E+19	2.13E+19	6.45E+18	4.30E+18	6.51E+18	4.83E+19	2.72E+14	9.49E+12	5.33E+01	2.42E+01
215.50	-250.00	2.42E+19	2.10E+19	6.58E+18	5.69E+18	6.29E+18	4.83E+19	2.65E+14	9.26E+12	5.16E+01	2.38E+01
220.43	-250.00	2.24E+19	2.07E+19	6.75E+18	7.65E+18	5.88E+18	4.74E+19	2.46E+14	8.66E+12	4.76E+01	2.28E+01
223.43	-250.00	2.08E+19	2.04E+19	6.87E+18	9.18E+18	5.53E+18	4.69E+19	2.29E+14	8.13E+12	4.38E+01	2.18E+01
225.75	-250.00	1.96E+19	2.03E+19	6.93E+18	9.63E+18	5.22E+18	4.51E+19	2.15E+14	7.61E+12	4.09E+01	2.06E+01
229.25	-250.00	1.80E+19	2.02E+19	6.99E+18	1.01E+19	4.76E+18	4.27E+19	1.97E+14	6.87E+12	3.70E+01	1.90E+01

Table 9. Activities for a Radial Traverse Through the Midplane of the Lower Fuel Elements (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
231.57	-250.00	1.69E+19	2.01E+19	7.06E+18	1.06E+19	4.51E+18	4.14E+19	1.86E+14	6.49E+12	3.45E+01	1.82E+01
234.19	-250.00	1.55E+19	1.98E+19	7.16E+18	1.18E+19	4.34E+18	4.04E+19	1.71E+14	6.24E+12	3.15E+01	1.78E+01
238.28	-250.00	1.37E+19	1.93E+19	7.29E+18	1.35E+19	4.11E+18	3.91E+19	1.52E+14	5.90E+12	2.77E+01	1.72E+01
242.37	-250.00	1.23E+19	1.87E+19	7.36E+18	1.50E+19	3.91E+18	3.78E+19	1.37E+14	5.60E+12	2.46E+01	1.68E+01
246.46	-250.00	1.10E+19	1.80E+19	7.39E+18	1.64E+19	3.73E+18	3.67E+19	1.25E+14	5.33E+12	2.21E+01	1.64E+01
251.00	-250.00	9.83E+18	1.73E+19	7.39E+18	1.79E+19	3.54E+18	3.54E+19	1.13E+14	5.05E+12	1.98E+01	1.60E+01
256.00	-250.00	8.73E+18	1.65E+19	7.36E+18	1.94E+19	3.38E+18	3.41E+19	1.02E+14	4.79E+12	1.76E+01	1.57E+01
261.00	-250.00	7.79E+18	1.57E+19	7.29E+18	2.08E+19	3.24E+18	3.29E+19	9.30E+13	4.56E+12	1.58E+01	1.54E+01
266.00	-250.00	6.97E+18	1.48E+19	7.19E+18	2.20E+19	3.13E+18	3.18E+19	8.51E+13	4.36E+12	1.43E+01	1.52E+01
271.34	-250.00	6.23E+18	1.40E+19	7.05E+18	2.33E+19	3.05E+18	3.06E+19	7.79E+13	4.18E+12	1.29E+01	1.50E+01
277.02	-250.00	5.57E+18	1.30E+19	6.88E+18	2.45E+19	3.01E+18	2.95E+19	7.15E+13	4.04E+12	1.17E+01	1.49E+01
280.43	-250.00	5.23E+18	1.25E+19	6.76E+18	2.51E+19	3.01E+18	2.89E+19	6.82E+13	3.97E+12	1.10E+01	1.49E+01
282.25	-250.00	5.11E+18	1.23E+19	6.72E+18	2.53E+19	3.00E+18	2.83E+19	6.70E+13	3.91E+12	1.08E+01	1.47E+01
284.75	-250.00	4.95E+18	1.22E+19	6.69E+18	2.54E+19	2.96E+18	2.74E+19	6.54E+13	3.81E+12	1.05E+01	1.45E+01
287.00	-250.00	4.77E+18	1.19E+19	6.64E+18	2.57E+19	2.93E+18	2.68E+19	6.37E+13	3.74E+12	1.01E+01	1.44E+01
289.50	-250.00	4.55E+18	1.16E+19	6.55E+18	2.62E+19	2.90E+18	2.65E+19	6.15E+13	3.68E+12	9.72E+00	1.44E+01
293.50	-250.00	4.28E+18	1.12E+19	6.46E+18	2.65E+19	2.83E+18	2.54E+19	5.89E+13	3.54E+12	9.22E+00	1.41E+01
298.50	-250.00	3.99E+18	1.09E+19	6.41E+18	2.68E+19	2.65E+18	2.42E+19	5.60E+13	3.30E+12	8.67E+00	1.37E+01
306.00	-250.00	3.40E+18	1.02E+19	6.24E+18	2.83E+19	2.32E+18	2.31E+19	5.04E+13	2.99E+12	7.59E+00	1.33E+01
320.00	-250.00	2.49E+18	8.48E+18	5.76E+18	3.12E+19	1.94E+18	2.15E+19	4.17E+13	2.60E+12	5.93E+00	1.30E+01
339.50	-250.00	1.64E+18	6.49E+18	5.02E+18	3.42E+19	1.61E+18	1.94E+19	3.36E+13	2.21E+12	4.41E+00	1.28E+01
362.50	-250.00	1.03E+18	4.66E+18	4.14E+18	3.66E+19	1.31E+18	1.71E+19	2.74E+13	1.85E+12	3.27E+00	1.24E+01
387.50	-250.00	6.26E+17	3.21E+18	3.27E+18	3.81E+19	1.08E+18	1.50E+19	2.31E+13	1.54E+12	2.51E+00	1.21E+01
412.50	-250.00	3.87E+17	2.18E+18	2.52E+18	3.88E+19	8.97E+17	1.30E+19	2.02E+13	1.30E+12	2.04E+00	1.17E+01
437.50	-250.00	2.42E+17	1.47E+18	1.90E+18	3.87E+19	7.60E+17	1.13E+19	1.82E+13	1.10E+12	1.73E+00	1.12E+01
462.50	-250.00	1.54E+17	9.81E+17	1.40E+18	3.82E+19	6.53E+17	9.86E+18	1.67E+13	9.43E+11	1.52E+00	1.07E+01
487.50	-250.00	9.89E+16	6.52E+17	1.02E+18	3.73E+19	5.67E+17	8.58E+18	1.55E+13	8.12E+11	1.37E+00	1.02E+01
512.50	-250.00	6.44E+16	4.33E+17	7.37E+17	3.62E+19	4.95E+17	7.46E+18	1.46E+13	7.03E+11	1.26E+00	9.72E+00
537.50	-250.00	4.24E+16	2.86E+17	5.25E+17	3.50E+19	4.35E+17	6.49E+18	1.37E+13	6.10E+11	1.17E+00	9.22E+00
562.50	-250.00	2.83E+16	1.90E+17	3.71E+17	3.36E+19	3.83E+17	5.65E+18	1.29E+13	5.31E+11	1.10E+00	8.74E+00
587.50	-250.00	1.91E+16	1.26E+17	2.60E+17	3.22E+19	3.40E+17	4.92E+18	1.23E+13	4.64E+11	1.04E+00	8.27E+00
612.50	-250.00	1.30E+16	8.35E+16	1.81E+17	3.08E+19	3.04E+17	4.29E+18	1.16E+13	4.07E+11	9.79E-01	7.82E+00
637.50	-250.00	8.98E+15	5.56E+16	1.25E+17	2.95E+19	2.73E+17	3.75E+18	1.10E+13	3.59E+11	9.27E-01	7.40E+00
662.50	-250.00	6.25E+15	3.72E+16	8.63E+16	2.81E+19	2.46E+17	3.28E+18	1.05E+13	3.18E+11	8.79E-01	7.00E+00
687.50	-250.00	4.41E+15	2.51E+16	5.94E+16	2.68E+19	2.22E+17	2.87E+18	9.96E+12	2.82E+11	8.35E-01	6.62E+00
712.50	-250.00	3.13E+15	1.69E+16	4.07E+16	2.55E+19	2.01E+17	2.52E+18	9.47E+12	2.51E+11	7.93E-01	6.26E+00
737.50	-250.00	2.25E+15	1.16E+16	2.79E+16	2.43E+19	1.83E+17	2.21E+18	9.00E+12	2.23E+11	7.53E-01	5.92E+00
762.50	-250.00	1.64E+15	7.96E+15	1.91E+16	2.31E+19	1.66E+17	1.95E+18	8.56E+12	2.00E+11	7.16E-01	5.61E+00
787.50	-250.00	1.21E+15	5.55E+15	1.31E+16	2.20E+19	1.52E+17	1.71E+18	8.14E+12	1.79E+11	6.80E-01	5.31E+00
812.50	-250.00	9.06E+14	3.91E+15	9.04E+15	2.09E+19	1.39E+17	1.51E+18	7.74E+12	1.60E+11	6.47E-01	5.02E+00
837.50	-250.00	6.87E+14	2.80E+15	6.25E+15	1.99E+19	1.27E+17	1.34E+18	7.36E+12	1.44E+11	6.15E-01	4.76E+00
862.50	-250.00	5.30E+14	2.04E+15	4.34E+15	1.89E+19	1.16E+17	1.19E+18	6.99E+12	1.30E+11	5.84E-01	4.50E+00
887.50	-250.00	4.16E+14	1.51E+15	3.04E+15	1.80E+19	1.07E+17	1.05E+18	6.65E+12	1.17E+11	5.55E-01	4.27E+00
912.50	-250.00	3.31E+14	1.14E+15	2.15E+15	1.71E+19	9.78E+16	9.35E+17	6.32E+12	1.05E+11	5.27E-01	4.04E+00

Table 9. Activities for a Radial Traverse Through the Midplane of the Lower Fuel Elements (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	-250.00	2.69E+14	8.80E+14	1.54E+15	1.63E+19	8.98E+16	8.33E+17	6.00E+12	9.54E+10	5.01E-01	3.83E+00
962.50	-250.00	2.22E+14	6.95E+14	1.12E+15	1.55E+19	8.26E+16	7.44E+17	5.70E+12	8.65E+10	4.76E-01	3.63E+00
987.50	-250.00	1.87E+14	5.61E+14	8.33E+14	1.47E+19	7.62E+16	6.66E+17	5.41E+12	7.86E+10	4.52E-01	3.43E+00
1012.50	-250.00	1.60E+14	4.62E+14	6.30E+14	1.39E+19	7.03E+16	5.98E+17	5.14E+12	7.16E+10	4.29E-01	3.25E+00
1037.50	-250.00	1.39E+14	3.89E+14	4.88E+14	1.32E+19	6.51E+16	5.39E+17	4.88E+12	6.54E+10	4.07E-01	3.08E+00
1062.50	-250.00	1.22E+14	3.34E+14	3.87E+14	1.25E+19	6.04E+16	4.87E+17	4.63E+12	6.00E+10	3.86E-01	2.92E+00
1087.50	-250.00	1.09E+14	2.91E+14	3.14E+14	1.19E+19	5.62E+16	4.41E+17	4.39E+12	5.51E+10	3.66E-01	2.76E+00
1112.50	-250.00	9.78E+13	2.57E+14	2.61E+14	1.13E+19	5.24E+16	4.01E+17	4.16E+12	5.08E+10	3.47E-01	2.61E+00
1137.50	-250.00	8.90E+13	2.31E+14	2.23E+14	1.07E+19	4.90E+16	3.66E+17	3.94E+12	4.70E+10	3.29E-01	2.47E+00
1162.50	-250.00	8.15E+13	2.09E+14	1.93E+14	1.01E+19	4.59E+16	3.36E+17	3.72E+12	4.36E+10	3.11E-01	2.34E+00
1187.50	-250.00	7.54E+13	1.92E+14	1.71E+14	9.55E+18	4.31E+16	3.09E+17	3.52E+12	4.06E+10	2.94E-01	2.21E+00
1212.50	-250.00	7.00E+13	1.77E+14	1.54E+14	9.02E+18	4.07E+16	2.86E+17	3.33E+12	3.80E+10	2.78E-01	2.08E+00
1237.50	-250.00	6.56E+13	1.65E+14	1.40E+14	8.51E+18	3.84E+16	2.65E+17	3.14E+12	3.57E+10	2.62E-01	1.97E+00
1262.50	-250.00	6.17E+13	1.55E+14	1.30E+14	8.02E+18	3.65E+16	2.48E+17	2.96E+12	3.36E+10	2.47E-01	1.85E+00
1287.50	-250.00	5.85E+13	1.46E+14	1.21E+14	7.55E+18	3.48E+16	2.33E+17	2.79E+12	3.19E+10	2.32E-01	1.74E+00
1312.50	-250.00	5.56E+13	1.39E+14	1.14E+14	7.10E+18	3.33E+16	2.20E+17	2.62E+12	3.03E+10	2.19E-01	1.64E+00
1337.50	-250.00	5.33E+13	1.34E+14	1.09E+14	6.66E+18	3.20E+16	2.09E+17	2.46E+12	2.90E+10	2.05E-01	1.54E+00
1362.50	-250.00	5.13E+13	1.29E+14	1.05E+14	6.24E+18	3.09E+16	2.00E+17	2.30E+12	2.80E+10	1.92E-01	1.45E+00
1387.50	-250.00	4.99E+13	1.26E+14	1.02E+14	5.83E+18	3.01E+16	1.93E+17	2.15E+12	2.71E+10	1.80E-01	1.35E+00
1412.50	-250.00	4.87E+13	1.23E+14	9.97E+13	5.44E+18	2.95E+16	1.87E+17	2.01E+12	2.65E+10	1.67E-01	1.26E+00
1437.50	-250.00	4.80E+13	1.22E+14	9.84E+13	5.05E+18	2.91E+16	1.83E+17	1.86E+12	2.60E+10	1.56E-01	1.18E+00
1462.50	-250.00	4.76E+13	1.22E+14	9.76E+13	4.69E+18	2.90E+16	1.80E+17	1.73E+12	2.58E+10	1.44E-01	1.10E+00
1487.50	-250.00	4.78E+13	1.23E+14	9.74E+13	4.33E+18	2.92E+16	1.79E+17	1.60E+12	2.58E+10	1.33E-01	1.02E+00
1512.50	-250.00	4.85E+13	1.25E+14	9.76E+13	3.98E+18	2.98E+16	1.80E+17	1.47E+12	2.61E+10	1.23E-01	9.43E-01
1537.50	-250.00	4.98E+13	1.28E+14	9.77E+13	3.64E+18	3.07E+16	1.82E+17	1.34E+12	2.67E+10	1.12E-01	8.70E-01
1562.50	-250.00	5.17E+13	1.32E+14	9.77E+13	3.31E+18	3.21E+16	1.85E+17	1.22E+12	2.76E+10	1.02E-01	8.00E-01
1587.50	-250.00	5.43E+13	1.36E+14	9.68E+13	2.99E+18	3.42E+16	1.90E+17	1.10E+12	2.90E+10	9.22E-02	7.33E-01
1612.50	-250.00	5.77E+13	1.39E+14	9.49E+13	2.68E+18	3.71E+16	1.96E+17	9.90E+11	3.08E+10	8.27E-02	6.68E-01
1637.50	-250.00	6.17E+13	1.41E+14	9.13E+13	2.38E+18	4.10E+16	2.04E+17	8.78E+11	3.32E+10	7.33E-02	6.07E-01
1662.50	-250.00	6.60E+13	1.40E+14	8.55E+13	2.08E+18	4.65E+16	2.13E+17	7.69E+11	3.65E+10	6.42E-02	5.50E-01
1687.50	-250.00	6.97E+13	1.33E+14	7.73E+13	1.79E+18	5.39E+16	2.24E+17	6.61E+11	4.09E+10	5.52E-02	4.96E-01
1712.50	-250.00	7.08E+13	1.18E+14	6.68E+13	1.51E+18	6.43E+16	2.37E+17	5.57E+11	4.69E+10	4.65E-02	4.48E-01
1737.50	-250.00	6.09E+13	9.12E+13	5.42E+13	1.22E+18	7.91E+16	2.50E+17	4.49E+11	5.49E+10	3.72E-02	4.02E-01
1762.50	-250.00	3.91E+13	6.75E+13	4.56E+13	1.02E+18	9.87E+16	2.64E+17	3.78E+11	6.42E+10	3.10E-02	3.82E-01
1787.50	-250.00	1.87E+13	3.63E+13	3.16E+13	7.01E+17	1.13E+17	2.81E+17	2.59E+11	6.57E+10	2.14E-02	3.13E-01
1812.50	-250.00	8.26E+12	1.10E+13	1.31E+13	2.57E+17	9.75E+16	2.64E+17	9.49E+10	5.72E+10	7.86E-03	1.94E-01
1837.50	-250.00	4.09E+12	4.00E+12	4.43E+12	9.21E+16	7.47E+16	2.32E+17	3.40E+10	4.65E+10	2.81E-03	1.33E-01
1862.50	-250.00	2.12E+12	1.76E+12	1.65E+12	3.47E+16	5.78E+16	2.02E+17	1.28E+10	3.81E+10	1.07E-03	9.99E-02
1887.50	-250.00	1.14E+12	8.86E+11	7.46E+11	1.40E+16	4.55E+16	1.75E+17	5.18E+09	3.16E+10	4.30E-04	7.97E-02
1912.50	-250.00	6.29E+11	4.62E+11	3.86E+11	5.66E+15	3.66E+16	1.50E+17	2.09E+09	2.65E+10	1.74E-04	6.56E-02
1937.50	-250.00	3.52E+11	2.49E+11	2.02E+11	2.57E+15	3.00E+16	1.27E+17	9.52E+08	2.23E+10	7.96E-05	5.48E-02
1962.50	-250.00	1.99E+11	1.36E+11	1.08E+11	1.05E+15	2.50E+16	1.04E+17	3.88E+08	1.89E+10	3.23E-05	4.60E-02
1987.50	-250.00	1.07E+11	6.20E+10	4.54E+10	3.29E+14	2.11E+16	7.74E+16	1.22E+08	1.57E+10	1.03E-05	3.80E-02

Table 10. Activities for a Radial Traverse Through the Bottom B₄C Plates of the Upper Fuel Elements

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	72.50	7.07E+18	2.30E+19	2.71E+18	2.17E+17	1.03E+19	4.30E+19	7.83E+13	1.02E+13	1.39E+01	2.38E+01
11.95	72.50	7.22E+18	2.29E+19	2.51E+18	2.05E+17	1.04E+19	4.27E+19	7.97E+13	1.02E+13	1.41E+01	2.38E+01
18.02	72.50	7.17E+18	2.28E+19	2.46E+18	2.00E+17	1.09E+19	4.28E+19	7.90E+13	1.05E+13	1.40E+01	2.46E+01
23.64	72.50	7.27E+18	2.25E+19	2.14E+18	1.77E+17	1.16E+19	4.31E+19	7.96E+13	1.09E+13	1.41E+01	2.57E+01
28.45	72.50	7.51E+18	2.24E+19	1.71E+18	1.89E+17	1.21E+19	4.31E+19	8.16E+13	1.13E+13	1.45E+01	2.65E+01
34.45	72.50	7.59E+18	2.35E+19	3.38E+18	4.81E+17	1.11E+19	4.57E+19	8.38E+13	1.08E+13	1.48E+01	2.55E+01
43.97	72.50	7.97E+18	2.45E+19	4.14E+18	6.41E+17	1.08E+19	4.70E+19	8.84E+13	1.07E+13	1.56E+01	2.52E+01
55.02	72.50	8.79E+18	2.49E+19	3.87E+18	6.52E+17	1.11E+19	4.81E+19	9.64E+13	1.10E+13	1.71E+01	2.59E+01
63.80	72.50	9.72E+18	2.50E+19	3.32E+18	6.08E+17	1.18E+19	4.88E+19	1.05E+14	1.15E+13	1.88E+01	2.72E+01
68.55	72.50	1.01E+19	2.49E+19	3.06E+18	5.81E+17	1.31E+19	5.03E+19	1.08E+14	1.24E+13	1.94E+01	2.94E+01
72.05	72.50	1.04E+19	2.50E+19	2.68E+18	7.43E+17	1.30E+19	4.83E+19	1.12E+14	1.23E+13	2.01E+01	2.93E+01
77.52	72.50	1.08E+19	2.65E+19	6.13E+18	2.05E+18	1.08E+19	5.18E+19	1.19E+14	1.11E+13	2.11E+01	2.66E+01
84.50	72.50	1.17E+19	2.76E+19	7.68E+18	2.74E+18	9.62E+18	5.22E+19	1.29E+14	1.04E+13	2.29E+01	2.51E+01
91.50	72.50	1.29E+19	2.84E+19	8.35E+18	2.94E+18	8.81E+18	5.20E+19	1.42E+14	9.93E+12	2.54E+01	2.41E+01
96.75	72.50	1.41E+19	2.87E+19	8.54E+18	2.92E+18	8.39E+18	5.20E+19	1.55E+14	9.70E+12	2.80E+01	2.36E+01
100.25	72.50	1.47E+19	2.88E+19	8.53E+18	2.71E+18	8.06E+18	5.22E+19	1.62E+14	9.57E+12	2.93E+01	2.33E+01
102.57	72.50	1.51E+19	2.89E+19	8.46E+18	2.39E+18	7.94E+18	5.27E+19	1.66E+14	9.58E+12	3.02E+01	2.32E+01
104.29	72.50	1.54E+19	2.90E+19	8.38E+18	1.96E+18	7.82E+18	5.27E+19	1.69E+14	9.56E+12	3.08E+01	2.31E+01
107.68	72.50	1.59E+19	2.91E+19	8.37E+18	1.63E+18	7.66E+18	5.28E+19	1.75E+14	9.54E+12	3.21E+01	2.30E+01
112.96	72.50	1.67E+19	2.93E+19	8.49E+18	1.53E+18	7.46E+18	5.30E+19	1.83E+14	9.51E+12	3.37E+01	2.30E+01
119.50	72.50	1.74E+19	2.95E+19	8.71E+18	1.55E+18	7.26E+18	5.35E+19	1.90E+14	9.47E+12	3.52E+01	2.30E+01
126.50	72.50	1.79E+19	2.98E+19	9.00E+18	1.65E+18	7.08E+18	5.42E+19	1.96E+14	9.46E+12	3.65E+01	2.30E+01
133.50	72.50	1.83E+19	3.00E+19	9.33E+18	1.80E+18	6.94E+18	5.50E+19	2.01E+14	9.46E+12	3.74E+01	2.30E+01
140.50	72.50	1.86E+19	3.03E+19	9.70E+18	2.02E+18	6.81E+18	5.59E+19	2.04E+14	9.48E+12	3.81E+01	2.31E+01
147.00	72.50	1.87E+19	3.05E+19	1.01E+19	2.35E+18	6.69E+18	5.69E+19	2.06E+14	9.48E+12	3.83E+01	2.31E+01
153.00	72.50	1.84E+19	3.07E+19	1.06E+19	2.98E+18	6.52E+18	5.81E+19	2.04E+14	9.43E+12	3.78E+01	2.31E+01
158.43	72.50	1.78E+19	3.09E+19	1.13E+19	4.54E+18	6.28E+18	5.87E+19	1.97E+14	9.18E+12	3.62E+01	2.28E+01
161.43	72.50	1.73E+19	3.10E+19	1.18E+19	6.67E+18	6.15E+18	5.88E+19	1.93E+14	8.97E+12	3.51E+01	2.27E+01
163.75	72.50	1.69E+19	3.11E+19	1.21E+19	7.43E+18	6.04E+18	5.82E+19	1.89E+14	8.76E+12	3.42E+01	2.24E+01
167.25	72.50	1.63E+19	3.11E+19	1.24E+19	8.02E+18	5.88E+18	5.82E+19	1.83E+14	8.55E+12	3.28E+01	2.20E+01
169.57	72.50	1.58E+19	3.12E+19	1.26E+19	8.42E+18	5.81E+18	5.85E+19	1.78E+14	8.48E+12	3.18E+01	2.19E+01
172.07	72.50	1.52E+19	3.12E+19	1.28E+19	9.02E+18	5.72E+18	5.85E+19	1.71E+14	8.39E+12	3.04E+01	2.18E+01
177.00	72.50	1.45E+19	3.12E+19	1.32E+19	9.99E+18	5.60E+18	5.85E+19	1.63E+14	8.26E+12	2.88E+01	2.17E+01
182.75	72.50	1.40E+19	3.11E+19	1.35E+19	1.09E+19	5.50E+18	5.84E+19	1.59E+14	8.17E+12	2.77E+01	2.16E+01
188.25	72.50	1.37E+19	3.10E+19	1.37E+19	1.15E+19	5.42E+18	5.84E+19	1.56E+14	8.10E+12	2.73E+01	2.16E+01
193.75	72.50	1.37E+19	3.09E+19	1.38E+19	1.20E+19	5.37E+18	5.83E+19	1.56E+14	8.05E+12	2.72E+01	2.16E+01
199.25	72.50	1.39E+19	3.08E+19	1.37E+19	1.22E+19	5.35E+18	5.83E+19	1.59E+14	8.04E+12	2.76E+01	2.16E+01
204.75	72.50	1.44E+19	3.06E+19	1.36E+19	1.23E+19	5.37E+18	5.83E+19	1.63E+14	8.06E+12	2.85E+01	2.17E+01
210.25	72.50	1.50E+19	3.04E+19	1.34E+19	1.22E+19	5.42E+18	5.84E+19	1.69E+14	8.13E+12	2.98E+01	2.19E+01
215.50	72.50	1.59E+19	3.01E+19	1.31E+19	1.19E+19	5.50E+18	5.86E+19	1.78E+14	8.24E+12	3.16E+01	2.21E+01
220.43	72.50	1.71E+19	2.98E+19	1.27E+19	1.13E+19	5.60E+18	5.89E+19	1.90E+14	8.36E+12	3.40E+01	2.24E+01
223.43	72.50	1.81E+19	2.96E+19	1.23E+19	1.08E+19	5.69E+18	5.92E+19	2.01E+14	8.49E+12	3.61E+01	2.26E+01
225.75	72.50	1.87E+19	2.95E+19	1.22E+19	1.04E+19	5.76E+18	5.90E+19	2.07E+14	8.58E+12	3.76E+01	2.27E+01
229.25	72.50	1.95E+19	2.94E+19	1.20E+19	9.72E+18	5.88E+18	5.94E+19	2.16E+14	8.81E+12	3.94E+01	2.31E+01

Table 10. Activities for a Radial Traverse Through the Bottom B₄C Plates of the Upper Fuel Elements (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
231.57	72.50	2.00E+19	2.93E+19	1.18E+19	8.84E+18	5.97E+18	6.02E+19	2.21E+14	9.04E+12	4.05E+01	2.35E+01
234.19	72.50	2.06E+19	2.91E+19	1.14E+19	7.14E+18	6.08E+18	6.07E+19	2.26E+14	9.27E+12	4.18E+01	2.37E+01
238.28	72.50	2.14E+19	2.88E+19	1.11E+19	6.01E+18	6.24E+18	6.12E+19	2.35E+14	9.56E+12	4.37E+01	2.41E+01
242.37	72.50	2.20E+19	2.85E+19	1.08E+19	5.63E+18	6.37E+18	6.13E+19	2.41E+14	9.75E+12	4.52E+01	2.46E+01
246.46	72.50	2.24E+19	2.81E+19	1.06E+19	5.56E+18	6.45E+18	6.16E+19	2.45E+14	9.87E+12	4.61E+01	2.48E+01
251.00	72.50	2.26E+19	2.77E+19	1.05E+19	5.67E+18	6.50E+18	6.19E+19	2.48E+14	9.96E+12	4.67E+01	2.51E+01
256.00	72.50	2.27E+19	2.73E+19	1.03E+19	5.99E+18	6.49E+18	6.22E+19	2.49E+14	1.00E+13	4.69E+01	2.52E+01
261.00	72.50	2.25E+19	2.68E+19	1.02E+19	6.54E+18	6.44E+18	6.23E+19	2.48E+14	9.97E+12	4.67E+01	2.53E+01
266.00	72.50	2.22E+19	2.62E+19	1.02E+19	7.40E+18	6.34E+18	6.24E+19	2.44E+14	9.88E+12	4.61E+01	2.52E+01
271.34	72.50	2.14E+19	2.56E+19	1.02E+19	8.96E+18	6.15E+18	6.22E+19	2.36E+14	9.68E+12	4.44E+01	2.50E+01
277.02	72.50	2.00E+19	2.49E+19	1.03E+19	1.26E+19	5.87E+18	5.99E+19	2.23E+14	9.11E+12	4.14E+01	2.44E+01
280.43	72.50	1.90E+19	2.45E+19	1.05E+19	1.76E+19	5.66E+18	5.70E+19	2.14E+14	8.56E+12	3.93E+01	2.43E+01
282.25	72.50	1.85E+19	2.43E+19	1.06E+19	1.90E+19	5.55E+18	5.48E+19	2.09E+14	8.21E+12	3.83E+01	2.38E+01
284.75	72.50	1.78E+19	2.42E+19	1.06E+19	2.00E+19	5.35E+18	5.23E+19	2.02E+14	7.75E+12	3.67E+01	2.30E+01
287.00	72.50	1.71E+19	2.40E+19	1.06E+19	2.07E+19	5.14E+18	5.03E+19	1.94E+14	7.36E+12	3.51E+01	2.22E+01
289.50	72.50	1.60E+19	2.36E+19	1.07E+19	2.21E+19	4.95E+18	4.87E+19	1.83E+14	7.05E+12	3.28E+01	2.18E+01
293.50	72.50	1.48E+19	2.31E+19	1.07E+19	2.37E+19	4.69E+18	4.62E+19	1.71E+14	6.57E+12	3.02E+01	2.10E+01
298.50	72.50	1.36E+19	2.27E+19	1.07E+19	2.47E+19	4.23E+18	4.32E+19	1.58E+14	5.92E+12	2.75E+01	1.97E+01
306.00	72.50	1.12E+19	2.15E+19	1.07E+19	2.78E+19	3.62E+18	4.07E+19	1.34E+14	5.23E+12	2.27E+01	1.87E+01
320.00	72.50	8.02E+18	1.87E+19	1.04E+19	3.41E+19	3.00E+18	3.74E+19	1.03E+14	4.48E+12	1.67E+01	1.82E+01
339.50	72.50	5.30E+18	1.51E+19	9.59E+18	4.10E+19	2.46E+18	3.36E+19	7.71E+13	3.77E+12	1.17E+01	1.80E+01
362.50	72.50	3.31E+18	1.14E+19	8.38E+18	4.67E+19	1.99E+18	2.97E+19	5.80E+13	3.13E+12	8.09E+00	1.77E+01
387.50	72.50	2.05E+18	8.28E+18	6.98E+18	5.08E+19	1.64E+18	2.60E+19	4.54E+13	2.62E+12	5.78E+00	1.74E+01
412.50	72.50	1.27E+18	5.87E+18	5.64E+18	5.31E+19	1.37E+18	2.27E+19	3.71E+13	2.21E+12	4.31E+00	1.70E+01
437.50	72.50	7.98E+17	4.10E+18	4.43E+18	5.39E+19	1.16E+18	1.98E+19	3.16E+13	1.87E+12	3.38E+00	1.64E+01
462.50	72.50	5.05E+17	2.83E+18	3.40E+18	5.37E+19	9.90E+17	1.71E+19	2.76E+13	1.59E+12	2.76E+00	1.57E+01
487.50	72.50	3.23E+17	1.93E+18	2.56E+18	5.27E+19	8.47E+17	1.48E+19	2.47E+13	1.35E+12	2.34E+00	1.49E+01
512.50	72.50	2.08E+17	1.30E+18	1.90E+18	5.11E+19	7.30E+17	1.28E+19	2.24E+13	1.16E+12	2.04E+00	1.41E+01
537.50	72.50	1.35E+17	8.77E+17	1.39E+18	4.92E+19	6.32E+17	1.10E+19	2.05E+13	9.91E+11	1.82E+00	1.33E+01
562.50	72.50	8.88E+16	5.87E+17	1.00E+18	4.71E+19	5.51E+17	9.51E+18	1.90E+13	8.51E+11	1.65E+00	1.25E+01
587.50	72.50	5.87E+16	3.91E+17	7.14E+17	4.48E+19	4.83E+17	8.20E+18	1.76E+13	7.34E+11	1.51E+00	1.17E+01
612.50	72.50	3.92E+16	2.60E+17	5.04E+17	4.25E+19	4.26E+17	7.06E+18	1.64E+13	6.35E+11	1.40E+00	1.10E+01
637.50	72.50	2.63E+16	1.73E+17	3.53E+17	4.03E+19	3.77E+17	6.09E+18	1.54E+13	5.50E+11	1.30E+00	1.03E+01
662.50	72.50	1.78E+16	1.15E+17	2.46E+17	3.81E+19	3.35E+17	5.25E+18	1.44E+13	4.79E+11	1.21E+00	9.60E+00
687.50	72.50	1.21E+16	7.63E+16	1.70E+17	3.60E+19	2.99E+17	4.53E+18	1.35E+13	4.18E+11	1.13E+00	8.98E+00
712.50	72.50	8.35E+15	5.08E+16	1.17E+17	3.39E+19	2.68E+17	3.92E+18	1.27E+13	3.66E+11	1.06E+00	8.41E+00
737.50	72.50	5.76E+15	3.39E+16	7.99E+16	3.20E+19	2.41E+17	3.39E+18	1.19E+13	3.21E+11	9.99E-01	7.87E+00
762.50	72.50	4.04E+15	2.28E+16	5.46E+16	3.02E+19	2.17E+17	2.94E+18	1.12E+13	2.82E+11	9.39E-01	7.37E+00
787.50	72.50	2.84E+15	1.53E+16	3.71E+16	2.85E+19	1.96E+17	2.55E+18	1.06E+13	2.49E+11	8.83E-01	6.91E+00
812.50	72.50	2.03E+15	1.04E+16	2.53E+16	2.69E+19	1.77E+17	2.22E+18	9.95E+12	2.20E+11	8.32E-01	6.48E+00
837.50	72.50	1.46E+15	7.11E+15	1.72E+16	2.54E+19	1.61E+17	1.94E+18	9.38E+12	1.95E+11	7.84E-01	6.08E+00
862.50	72.50	1.07E+15	4.96E+15	1.17E+16	2.39E+19	1.46E+17	1.69E+18	8.84E+12	1.74E+11	7.39E-01	5.71E+00
887.50	72.50	7.95E+14	3.45E+15	7.97E+15	2.26E+19	1.33E+17	1.48E+18	8.34E+12	1.55E+11	6.97E-01	5.37E+00
912.50	72.50	6.03E+14	2.48E+15	5.48E+15	2.13E+19	1.21E+17	1.30E+18	7.87E+12	1.38E+11	6.57E-01	5.05E+00

Table 10. Activities for a Radial Traverse Through the Bottom B₄C Plates of the Upper Fuel Elements (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	72.50	4.62E+14	1.79E+15	3.77E+15	2.01E+19	1.10E+17	1.15E+18	7.43E+12	1.24E+11	6.20E-01	4.75E+00
962.50	72.50	3.64E+14	1.33E+15	2.63E+15	1.90E+19	1.01E+17	1.01E+18	7.01E+12	1.11E+11	5.85E-01	4.47E+00
987.50	72.50	2.90E+14	1.00E+15	1.85E+15	1.79E+19	9.26E+16	8.94E+17	6.62E+12	1.00E+11	5.52E-01	4.21E+00
1012.50	72.50	2.38E+14	7.77E+14	1.32E+15	1.69E+19	8.53E+16	7.94E+17	6.25E+12	9.05E+10	5.22E-01	3.96E+00
1037.50	72.50	1.97E+14	6.17E+14	9.63E+14	1.60E+19	7.89E+16	7.08E+17	5.90E+12	8.22E+10	4.92E-01	3.73E+00
1062.50	72.50	1.69E+14	4.99E+14	7.16E+14	1.51E+19	7.31E+16	6.34E+17	5.57E+12	7.50E+10	4.65E-01	3.51E+00
1087.50	72.50	1.45E+14	4.18E+14	5.44E+14	1.42E+19	6.79E+16	5.69E+17	5.25E+12	6.85E+10	4.38E-01	3.31E+00
1112.50	72.50	1.28E+14	3.54E+14	4.26E+14	1.34E+19	6.32E+16	5.13E+17	4.95E+12	6.29E+10	4.14E-01	3.12E+00
1137.50	72.50	1.13E+14	3.08E+14	3.40E+14	1.27E+19	5.90E+16	4.64E+17	4.67E+12	5.78E+10	3.90E-01	2.94E+00
1162.50	72.50	1.02E+14	2.70E+14	2.81E+14	1.19E+19	5.51E+16	4.22E+17	4.40E+12	5.34E+10	3.68E-01	2.77E+00
1187.50	72.50	9.27E+13	2.43E+14	2.36E+14	1.12E+19	5.17E+16	3.85E+17	4.15E+12	4.95E+10	3.46E-01	2.60E+00
1212.50	72.50	8.55E+13	2.19E+14	2.05E+14	1.06E+19	4.86E+16	3.53E+17	3.90E+12	4.60E+10	3.26E-01	2.45E+00
1237.50	72.50	7.89E+13	2.02E+14	1.80E+14	9.95E+18	4.58E+16	3.25E+17	3.67E+12	4.30E+10	3.07E-01	2.30E+00
1262.50	72.50	7.38E+13	1.87E+14	1.62E+14	9.35E+18	4.33E+16	3.02E+17	3.45E+12	4.03E+10	2.88E-01	2.16E+00
1287.50	72.50	6.91E+13	1.75E+14	1.48E+14	8.78E+18	4.12E+16	2.81E+17	3.24E+12	3.80E+10	2.70E-01	2.03E+00
1312.50	72.50	6.55E+13	1.65E+14	1.38E+14	8.23E+18	3.93E+16	2.63E+17	3.04E+12	3.60E+10	2.53E-01	1.90E+00
1337.50	72.50	6.23E+13	1.57E+14	1.30E+14	7.70E+18	3.76E+16	2.49E+17	2.84E+12	3.43E+10	2.37E-01	1.78E+00
1362.50	72.50	5.98E+13	1.51E+14	1.23E+14	7.20E+18	3.62E+16	2.36E+17	2.66E+12	3.28E+10	2.22E-01	1.67E+00
1387.50	72.50	5.76E+13	1.46E+14	1.19E+14	6.71E+18	3.51E+16	2.26E+17	2.48E+12	3.17E+10	2.07E-01	1.56E+00
1412.50	72.50	5.62E+13	1.43E+14	1.15E+14	6.25E+18	3.43E+16	2.18E+17	2.30E+12	3.08E+10	1.92E-01	1.45E+00
1437.50	72.50	5.50E+13	1.41E+14	1.13E+14	5.80E+18	3.37E+16	2.12E+17	2.14E+12	3.01E+10	1.79E-01	1.35E+00
1462.50	72.50	5.46E+13	1.40E+14	1.11E+14	5.37E+18	3.35E+16	2.08E+17	1.98E+12	2.98E+10	1.65E-01	1.26E+00
1487.50	72.50	5.45E+13	1.41E+14	1.11E+14	4.95E+18	3.36E+16	2.06E+17	1.83E+12	2.97E+10	1.52E-01	1.17E+00
1512.50	72.50	5.52E+13	1.43E+14	1.10E+14	4.54E+18	3.41E+16	2.06E+17	1.68E+12	2.99E+10	1.40E-01	1.08E+00
1537.50	72.50	5.64E+13	1.46E+14	1.10E+14	4.15E+18	3.51E+16	2.07E+17	1.53E+12	3.05E+10	1.28E-01	9.92E-01
1562.50	72.50	5.85E+13	1.49E+14	1.10E+14	3.78E+18	3.66E+16	2.10E+17	1.39E+12	3.14E+10	1.16E-01	9.11E-01
1587.50	72.50	6.13E+13	1.53E+14	1.09E+14	3.41E+18	3.89E+16	2.15E+17	1.26E+12	3.28E+10	1.05E-01	8.33E-01
1612.50	72.50	6.51E+13	1.57E+14	1.06E+14	3.05E+18	4.21E+16	2.22E+17	1.13E+12	3.49E+10	9.41E-02	7.60E-01
1637.50	72.50	6.95E+13	1.59E+14	1.02E+14	2.71E+18	4.66E+16	2.30E+17	9.99E+11	3.76E+10	8.34E-02	6.90E-01
1662.50	72.50	7.43E+13	1.57E+14	9.54E+13	2.37E+18	5.28E+16	2.40E+17	8.74E+11	4.13E+10	7.30E-02	6.25E-01
1687.50	72.50	7.83E+13	1.49E+14	8.62E+13	2.04E+18	6.13E+16	2.53E+17	7.53E+11	4.64E+10	6.29E-02	5.64E-01
1712.50	72.50	7.95E+13	1.33E+14	7.44E+13	1.72E+18	7.33E+16	2.68E+17	6.35E+11	5.31E+10	5.30E-02	5.10E-01
1737.50	72.50	6.85E+13	1.02E+14	6.05E+13	1.40E+18	8.99E+16	2.83E+17	5.16E+11	6.21E+10	4.28E-02	4.60E-01
1762.50	72.50	4.32E+13	7.58E+13	5.10E+13	1.18E+18	1.11E+17	2.98E+17	4.34E+11	7.28E+10	3.56E-02	4.36E-01
1787.50	72.50	2.04E+13	3.94E+13	3.49E+13	8.06E+17	1.30E+17	3.21E+17	2.97E+11	7.49E+10	2.46E-02	3.58E-01
1812.50	72.50	9.71E+12	1.37E+13	1.51E+13	3.13E+17	1.13E+17	3.00E+17	1.15E+11	6.56E+10	9.55E-03	2.27E-01
1837.50	72.50	4.89E+12	5.18E+12	5.69E+12	1.23E+17	8.60E+16	2.63E+17	4.54E+10	5.30E+10	3.76E-03	1.55E-01
1862.50	72.50	2.57E+12	2.27E+12	2.25E+12	4.71E+16	6.63E+16	2.28E+17	1.74E+10	4.33E+10	1.44E-03	1.15E-01
1887.50	72.50	1.40E+12	1.11E+12	9.94E+11	1.93E+16	5.20E+16	1.97E+17	7.14E+09	3.57E+10	5.92E-04	9.09E-02
1912.50	72.50	7.74E+11	5.80E+11	4.90E+11	7.55E+15	4.16E+16	1.69E+17	2.79E+09	2.98E+10	2.31E-04	7.41E-02
1937.50	72.50	4.36E+11	3.13E+11	2.56E+11	3.31E+15	3.40E+16	1.42E+17	1.22E+09	2.51E+10	1.02E-04	6.17E-02
1962.50	72.50	2.48E+11	1.71E+11	1.35E+11	1.29E+15	2.82E+16	1.17E+17	4.79E+08	2.12E+10	3.99E-05	5.16E-02
1987.50	72.50	1.33E+11	7.87E+10	5.77E+10	3.92E+14	2.37E+16	8.65E+16	1.46E+08	1.76E+10	1.23E-05	4.25E-02

Table 11. Activities for a Radial Traverse Through the Top of the Reflector Vessel

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	2310.70	3.00E+13	6.44E+13	4.84E+13	1.34E+17	3.22E+16	9.92E+16	4.98E+10	2.39E+10	4.02E-03	8.80E-02
11.95	2310.70	3.00E+13	6.43E+13	4.82E+13	1.34E+17	3.19E+16	9.89E+16	4.97E+10	2.37E+10	4.02E-03	8.76E-02
18.02	2310.70	3.00E+13	6.40E+13	4.81E+13	1.34E+17	3.19E+16	9.89E+16	4.96E+10	2.37E+10	4.02E-03	8.74E-02
23.64	2310.70	3.00E+13	6.37E+13	4.79E+13	1.34E+17	3.18E+16	9.89E+16	4.96E+10	2.37E+10	4.01E-03	8.73E-02
28.45	2310.70	2.99E+13	6.35E+13	4.77E+13	1.33E+17	3.18E+16	9.90E+16	4.96E+10	2.36E+10	4.01E-03	8.72E-02
34.45	2310.70	2.99E+13	6.32E+13	4.75E+13	1.33E+17	3.17E+16	9.89E+16	4.95E+10	2.36E+10	4.01E-03	8.70E-02
43.97	2310.70	2.98E+13	6.29E+13	4.73E+13	1.33E+17	3.16E+16	9.88E+16	4.96E+10	2.35E+10	4.01E-03	8.69E-02
55.02	2310.70	2.98E+13	6.30E+13	4.73E+13	1.35E+17	3.16E+16	9.87E+16	5.00E+10	2.35E+10	4.04E-03	8.72E-02
63.80	2310.70	2.97E+13	6.33E+13	4.75E+13	1.36E+17	3.17E+16	9.85E+16	5.04E+10	2.35E+10	4.08E-03	8.75E-02
68.55	2310.70	2.96E+13	6.33E+13	4.75E+13	1.36E+17	3.17E+16	9.84E+16	5.06E+10	2.36E+10	4.09E-03	8.76E-02
72.05	2310.70	2.96E+13	6.31E+13	4.73E+13	1.36E+17	3.17E+16	9.85E+16	5.06E+10	2.35E+10	4.10E-03	8.76E-02
77.52	2310.70	2.96E+13	6.27E+13	4.71E+13	1.36E+17	3.17E+16	9.85E+16	5.06E+10	2.35E+10	4.09E-03	8.76E-02
84.50	2310.70	2.95E+13	6.24E+13	4.68E+13	1.37E+17	3.17E+16	9.85E+16	5.07E+10	2.35E+10	4.10E-03	8.76E-02
91.50	2310.70	2.94E+13	6.23E+13	4.67E+13	1.37E+17	3.17E+16	9.85E+16	5.10E+10	2.35E+10	4.13E-03	8.79E-02
96.75	2310.70	2.93E+13	6.22E+13	4.66E+13	1.38E+17	3.17E+16	9.86E+16	5.13E+10	2.35E+10	4.15E-03	8.80E-02
100.25	2310.70	2.93E+13	6.21E+13	4.65E+13	1.39E+17	3.17E+16	9.87E+16	5.14E+10	2.36E+10	4.17E-03	8.82E-02
102.57	2310.70	2.93E+13	6.21E+13	4.65E+13	1.39E+17	3.18E+16	9.88E+16	5.15E+10	2.36E+10	4.17E-03	8.83E-02
104.29	2310.70	2.93E+13	6.19E+13	4.64E+13	1.39E+17	3.18E+16	9.88E+16	5.15E+10	2.36E+10	4.17E-03	8.83E-02
107.68	2310.70	2.92E+13	6.16E+13	4.61E+13	1.39E+17	3.18E+16	9.89E+16	5.15E+10	2.36E+10	4.17E-03	8.82E-02
112.96	2310.70	2.92E+13	6.10E+13	4.57E+13	1.39E+17	3.17E+16	9.89E+16	5.15E+10	2.35E+10	4.17E-03	8.82E-02
119.50	2310.70	2.91E+13	6.05E+13	4.53E+13	1.39E+17	3.17E+16	9.90E+16	5.16E+10	2.35E+10	4.18E-03	8.82E-02
126.50	2310.70	2.90E+13	6.02E+13	4.50E+13	1.40E+17	3.17E+16	9.90E+16	5.19E+10	2.35E+10	4.21E-03	8.84E-02
133.50	2310.70	2.89E+13	5.98E+13	4.47E+13	1.41E+17	3.17E+16	9.90E+16	5.22E+10	2.36E+10	4.23E-03	8.86E-02
140.50	2310.70	2.88E+13	5.96E+13	4.45E+13	1.42E+17	3.18E+16	9.90E+16	5.25E+10	2.36E+10	4.26E-03	8.89E-02
147.00	2310.70	2.87E+13	5.94E+13	4.43E+13	1.42E+17	3.19E+16	9.88E+16	5.29E+10	2.36E+10	4.28E-03	8.92E-02
153.00	2310.70	2.86E+13	5.93E+13	4.43E+13	1.44E+17	3.19E+16	9.87E+16	5.33E+10	2.36E+10	4.32E-03	8.95E-02
158.43	2310.70	2.85E+13	5.94E+13	4.43E+13	1.45E+17	3.19E+16	9.85E+16	5.38E+10	2.36E+10	4.36E-03	8.98E-02
161.43	2310.70	2.85E+13	5.94E+13	4.42E+13	1.46E+17	3.19E+16	9.84E+16	5.41E+10	2.36E+10	4.38E-03	8.99E-02
163.75	2310.70	2.84E+13	5.92E+13	4.41E+13	1.46E+17	3.19E+16	9.82E+16	5.41E+10	2.36E+10	4.39E-03	8.98E-02
167.25	2310.70	2.84E+13	5.91E+13	4.40E+13	1.46E+17	3.19E+16	9.81E+16	5.43E+10	2.35E+10	4.40E-03	8.99E-02
169.57	2310.70	2.83E+13	5.91E+13	4.40E+13	1.47E+17	3.19E+16	9.81E+16	5.44E+10	2.36E+10	4.41E-03	9.00E-02
172.07	2310.70	2.83E+13	5.89E+13	4.38E+13	1.47E+17	3.19E+16	9.81E+16	5.44E+10	2.36E+10	4.41E-03	9.00E-02
177.00	2310.70	2.82E+13	5.83E+13	4.34E+13	1.47E+17	3.19E+16	9.81E+16	5.45E+10	2.36E+10	4.41E-03	9.01E-02
182.75	2310.70	2.81E+13	5.78E+13	4.29E+13	1.47E+17	3.20E+16	9.82E+16	5.46E+10	2.36E+10	4.43E-03	9.02E-02
188.25	2310.70	2.80E+13	5.74E+13	4.26E+13	1.48E+17	3.20E+16	9.82E+16	5.49E+10	2.36E+10	4.45E-03	9.04E-02
193.75	2310.70	2.79E+13	5.70E+13	4.23E+13	1.49E+17	3.21E+16	9.81E+16	5.52E+10	2.36E+10	4.47E-03	9.06E-02
199.25	2310.70	2.78E+13	5.67E+13	4.21E+13	1.50E+17	3.21E+16	9.80E+16	5.55E+10	2.36E+10	4.49E-03	9.08E-02
204.75	2310.70	2.77E+13	5.64E+13	4.18E+13	1.50E+17	3.21E+16	9.78E+16	5.58E+10	2.36E+10	4.52E-03	9.10E-02
210.25	2310.70	2.76E+13	5.61E+13	4.16E+13	1.51E+17	3.21E+16	9.76E+16	5.61E+10	2.36E+10	4.55E-03	9.13E-02
215.50	2310.70	2.74E+13	5.60E+13	4.15E+13	1.53E+17	3.22E+16	9.74E+16	5.66E+10	2.36E+10	4.58E-03	9.15E-02
220.43	2310.70	2.73E+13	5.59E+13	4.14E+13	1.54E+17	3.21E+16	9.71E+16	5.71E+10	2.36E+10	4.62E-03	9.17E-02
223.43	2310.70	2.72E+13	5.59E+13	4.13E+13	1.55E+17	3.20E+16	9.68E+16	5.74E+10	2.35E+10	4.65E-03	9.17E-02
225.75	2310.70	2.72E+13	5.57E+13	4.12E+13	1.55E+17	3.19E+16	9.66E+16	5.75E+10	2.35E+10	4.66E-03	9.16E-02
229.25	2310.70	2.71E+13	5.55E+13	4.10E+13	1.55E+17	3.19E+16	9.64E+16	5.77E+10	2.34E+10	4.67E-03	9.16E-02

Table 11. Activities for a Radial Traverse Through the Top of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
231.57	2310.70	2.70E+13	5.54E+13	4.10E+13	1.56E+17	3.19E+16	9.63E+16	5.78E+10	2.34E+10	4.68E-03	9.17E-02
234.19	2310.70	2.70E+13	5.52E+13	4.08E+13	1.56E+17	3.20E+16	9.63E+16	5.79E+10	2.34E+10	4.68E-03	9.18E-02
238.28	2310.70	2.68E+13	5.47E+13	4.04E+13	1.56E+17	3.20E+16	9.62E+16	5.79E+10	2.35E+10	4.69E-03	9.19E-02
242.37	2310.70	2.67E+13	5.42E+13	4.01E+13	1.56E+17	3.21E+16	9.62E+16	5.80E+10	2.35E+10	4.70E-03	9.20E-02
246.46	2310.70	2.66E+13	5.38E+13	3.98E+13	1.57E+17	3.21E+16	9.61E+16	5.82E+10	2.35E+10	4.71E-03	9.20E-02
251.00	2310.70	2.65E+13	5.34E+13	3.95E+13	1.58E+17	3.20E+16	9.59E+16	5.84E+10	2.34E+10	4.73E-03	9.21E-02
256.00	2310.70	2.63E+13	5.30E+13	3.91E+13	1.58E+17	3.20E+16	9.57E+16	5.87E+10	2.34E+10	4.75E-03	9.22E-02
261.00	2310.70	2.62E+13	5.26E+13	3.89E+13	1.59E+17	3.19E+16	9.54E+16	5.90E+10	2.33E+10	4.78E-03	9.23E-02
266.00	2310.70	2.60E+13	5.23E+13	3.86E+13	1.60E+17	3.19E+16	9.50E+16	5.94E+10	2.33E+10	4.80E-03	9.23E-02
271.34	2310.70	2.58E+13	5.21E+13	3.84E+13	1.61E+17	3.17E+16	9.45E+16	5.98E+10	2.32E+10	4.84E-03	9.23E-02
277.02	2310.70	2.56E+13	5.19E+13	3.83E+13	1.63E+17	3.15E+16	9.38E+16	6.05E+10	2.30E+10	4.89E-03	9.23E-02
280.43	2310.70	2.54E+13	5.18E+13	3.82E+13	1.64E+17	3.14E+16	9.34E+16	6.09E+10	2.29E+10	4.92E-03	9.23E-02
282.25	2310.70	2.54E+13	5.17E+13	3.81E+13	1.65E+17	3.12E+16	9.31E+16	6.10E+10	2.28E+10	4.93E-03	9.21E-02
284.75	2310.70	2.53E+13	5.16E+13	3.81E+13	1.65E+17	3.11E+16	9.26E+16	6.12E+10	2.27E+10	4.95E-03	9.19E-02
287.00	2310.70	2.51E+13	5.16E+13	3.81E+13	1.66E+17	3.10E+16	9.22E+16	6.15E+10	2.26E+10	4.97E-03	9.18E-02
289.50	2310.70	2.51E+13	5.14E+13	3.79E+13	1.66E+17	3.07E+16	9.17E+16	6.16E+10	2.24E+10	4.98E-03	9.15E-02
293.50	2310.70	2.49E+13	5.09E+13	3.75E+13	1.66E+17	3.02E+16	9.09E+16	6.16E+10	2.21E+10	4.98E-03	9.06E-02
298.50	2310.70	2.48E+13	5.04E+13	3.71E+13	1.66E+17	2.98E+16	9.02E+16	6.16E+10	2.18E+10	4.98E-03	8.99E-02
306.00	2310.70	2.45E+13	4.94E+13	3.64E+13	1.66E+17	2.96E+16	8.99E+16	6.16E+10	2.17E+10	4.98E-03	8.96E-02
320.00	2310.70	2.40E+13	4.74E+13	3.49E+13	1.67E+17	2.93E+16	8.93E+16	6.17E+10	2.14E+10	4.99E-03	8.91E-02
339.50	2310.70	2.33E+13	4.53E+13	3.33E+13	1.69E+17	2.89E+16	8.84E+16	6.26E+10	2.12E+10	5.07E-03	8.90E-02
362.50	2310.70	2.25E+13	4.32E+13	3.17E+13	1.73E+17	2.87E+16	8.75E+16	6.40E+10	2.09E+10	5.19E-03	8.93E-02
387.50	2310.70	2.17E+13	4.12E+13	3.01E+13	1.77E+17	2.85E+16	8.65E+16	6.57E+10	2.08E+10	5.32E-03	8.99E-02
412.50	2310.70	2.10E+13	3.93E+13	2.86E+13	1.82E+17	2.84E+16	8.56E+16	6.73E+10	2.07E+10	5.45E-03	9.06E-02
437.50	2310.70	2.03E+13	3.77E+13	2.73E+13	1.86E+17	2.83E+16	8.48E+16	6.89E+10	2.06E+10	5.58E-03	9.13E-02
462.50	2310.70	1.98E+13	3.62E+13	2.60E+13	1.90E+17	2.83E+16	8.41E+16	7.03E+10	2.05E+10	5.70E-03	9.20E-02
487.50	2310.70	1.93E+13	3.49E+13	2.49E+13	1.94E+17	2.83E+16	8.34E+16	7.17E+10	2.04E+10	5.80E-03	9.27E-02
512.50	2310.70	1.89E+13	3.37E+13	2.38E+13	1.97E+17	2.83E+16	8.27E+16	7.28E+10	2.04E+10	5.90E-03	9.33E-02
537.50	2310.70	1.85E+13	3.27E+13	2.29E+13	2.00E+17	2.83E+16	8.20E+16	7.39E+10	2.03E+10	5.98E-03	9.37E-02
562.50	2310.70	1.82E+13	3.17E+13	2.20E+13	2.02E+17	2.82E+16	8.13E+16	7.47E+10	2.02E+10	6.05E-03	9.40E-02
587.50	2310.70	1.79E+13	3.08E+13	2.12E+13	2.04E+17	2.81E+16	8.06E+16	7.54E+10	2.01E+10	6.11E-03	9.42E-02
612.50	2310.70	1.75E+13	3.00E+13	2.05E+13	2.05E+17	2.80E+16	7.99E+16	7.60E+10	2.00E+10	6.15E-03	9.42E-02
637.50	2310.70	1.72E+13	2.93E+13	1.99E+13	2.06E+17	2.79E+16	7.91E+16	7.63E+10	1.99E+10	6.18E-03	9.41E-02
662.50	2310.70	1.70E+13	2.86E+13	1.93E+13	2.07E+17	2.77E+16	7.82E+16	7.66E+10	1.97E+10	6.20E-03	9.39E-02
687.50	2310.70	1.67E+13	2.80E+13	1.87E+13	2.07E+17	2.75E+16	7.74E+16	7.66E+10	1.95E+10	6.20E-03	9.35E-02
712.50	2310.70	1.64E+13	2.74E+13	1.82E+13	2.07E+17	2.73E+16	7.64E+16	7.66E+10	1.94E+10	6.20E-03	9.30E-02
737.50	2310.70	1.61E+13	2.68E+13	1.77E+13	2.06E+17	2.70E+16	7.55E+16	7.63E+10	1.92E+10	6.18E-03	9.24E-02
762.50	2310.70	1.58E+13	2.62E+13	1.73E+13	2.06E+17	2.68E+16	7.45E+16	7.60E+10	1.89E+10	6.15E-03	9.17E-02
787.50	2310.70	1.56E+13	2.57E+13	1.68E+13	2.04E+17	2.65E+16	7.35E+16	7.55E+10	1.87E+10	6.11E-03	9.08E-02
812.50	2310.70	1.53E+13	2.51E+13	1.64E+13	2.03E+17	2.62E+16	7.24E+16	7.49E+10	1.85E+10	6.06E-03	8.99E-02
837.50	2310.70	1.50E+13	2.46E+13	1.60E+13	2.01E+17	2.58E+16	7.13E+16	7.42E+10	1.82E+10	6.00E-03	8.88E-02
862.50	2310.70	1.48E+13	2.41E+13	1.56E+13	1.98E+17	2.55E+16	7.01E+16	7.33E+10	1.80E+10	5.94E-03	8.77E-02
887.50	2310.70	1.45E+13	2.36E+13	1.53E+13	1.96E+17	2.51E+16	6.89E+16	7.24E+10	1.77E+10	5.86E-03	8.64E-02
912.50	2310.70	1.42E+13	2.31E+13	1.49E+13	1.93E+17	2.47E+16	6.77E+16	7.13E+10	1.74E+10	5.77E-03	8.50E-02

Table 11. Activities for a Radial Traverse Through the Top of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	2310.70	1.39E+13	2.26E+13	1.45E+13	1.90E+17	2.42E+16	6.64E+16	7.02E+10	1.71E+10	5.68E-03	8.36E-02
962.50	2310.70	1.36E+13	2.21E+13	1.42E+13	1.86E+17	2.38E+16	6.51E+16	6.89E+10	1.67E+10	5.58E-03	8.20E-02
987.50	2310.70	1.33E+13	2.15E+13	1.38E+13	1.83E+17	2.33E+16	6.37E+16	6.76E+10	1.64E+10	5.47E-03	8.04E-02
1012.50	2310.70	1.30E+13	2.10E+13	1.35E+13	1.79E+17	2.28E+16	6.23E+16	6.62E+10	1.60E+10	5.36E-03	7.87E-02
1037.50	2310.70	1.27E+13	2.05E+13	1.31E+13	1.75E+17	2.22E+16	6.08E+16	6.47E+10	1.56E+10	5.24E-03	7.69E-02
1062.50	2310.70	1.24E+13	2.00E+13	1.28E+13	1.71E+17	2.17E+16	5.93E+16	6.32E+10	1.53E+10	5.11E-03	7.50E-02
1087.50	2310.70	1.21E+13	1.94E+13	1.24E+13	1.67E+17	2.11E+16	5.78E+16	6.16E+10	1.49E+10	4.98E-03	7.31E-02
1112.50	2310.70	1.17E+13	1.89E+13	1.21E+13	1.62E+17	2.06E+16	5.62E+16	5.99E+10	1.45E+10	4.85E-03	7.11E-02
1137.50	2310.70	1.14E+13	1.84E+13	1.18E+13	1.57E+17	2.00E+16	5.46E+16	5.82E+10	1.41E+10	4.71E-03	6.91E-02
1162.50	2310.70	1.11E+13	1.78E+13	1.14E+13	1.52E+17	1.94E+16	5.30E+16	5.64E+10	1.36E+10	4.56E-03	6.70E-02
1187.50	2310.70	1.07E+13	1.73E+13	1.11E+13	1.48E+17	1.87E+16	5.14E+16	5.45E+10	1.32E+10	4.42E-03	6.48E-02
1212.50	2310.70	1.04E+13	1.68E+13	1.07E+13	1.42E+17	1.81E+16	4.98E+16	5.27E+10	1.28E+10	4.26E-03	6.26E-02
1237.50	2310.70	1.00E+13	1.62E+13	1.04E+13	1.37E+17	1.75E+16	4.81E+16	5.08E+10	1.23E+10	4.11E-03	6.04E-02
1262.50	2310.70	9.66E+12	1.57E+13	1.01E+13	1.32E+17	1.68E+16	4.64E+16	4.88E+10	1.19E+10	3.95E-03	5.82E-02
1287.50	2310.70	9.32E+12	1.51E+13	9.75E+12	1.27E+17	1.62E+16	4.48E+16	4.68E+10	1.14E+10	3.79E-03	5.59E-02
1312.50	2310.70	8.97E+12	1.46E+13	9.41E+12	1.21E+17	1.56E+16	4.31E+16	4.48E+10	1.10E+10	3.63E-03	5.36E-02
1337.50	2310.70	8.62E+12	1.41E+13	9.11E+12	1.16E+17	1.49E+16	4.14E+16	4.28E+10	1.05E+10	3.47E-03	5.13E-02
1362.50	2310.70	8.28E+12	1.36E+13	8.79E+12	1.10E+17	1.42E+16	3.98E+16	4.08E+10	1.01E+10	3.30E-03	4.90E-02
1387.50	2310.70	7.94E+12	1.31E+13	8.49E+12	1.05E+17	1.36E+16	3.81E+16	3.87E+10	9.63E+09	3.13E-03	4.66E-02
1412.50	2310.70	7.60E+12	1.26E+13	8.17E+12	9.91E+16	1.29E+16	3.65E+16	3.67E+10	9.19E+09	2.97E-03	4.43E-02
1437.50	2310.70	7.28E+12	1.21E+13	7.88E+12	9.35E+16	1.23E+16	3.49E+16	3.46E+10	8.74E+09	2.80E-03	4.20E-02
1462.50	2310.70	6.95E+12	1.16E+13	7.56E+12	8.79E+16	1.17E+16	3.33E+16	3.25E+10	8.31E+09	2.63E-03	3.97E-02
1487.50	2310.70	6.64E+12	1.11E+13	7.26E+12	8.24E+16	1.10E+16	3.17E+16	3.05E+10	7.87E+09	2.47E-03	3.74E-02
1512.50	2310.70	6.33E+12	1.06E+13	6.93E+12	7.68E+16	1.04E+16	3.02E+16	2.84E+10	7.45E+09	2.30E-03	3.51E-02
1537.50	2310.70	6.03E+12	1.02E+13	6.60E+12	7.13E+16	9.80E+15	2.87E+16	2.64E+10	7.04E+09	2.13E-03	3.29E-02
1562.50	2310.70	5.73E+12	9.64E+12	6.24E+12	6.58E+16	9.21E+15	2.73E+16	2.44E+10	6.63E+09	1.97E-03	3.07E-02
1587.50	2310.70	5.43E+12	9.11E+12	5.86E+12	6.05E+16	8.64E+15	2.58E+16	2.24E+10	6.24E+09	1.81E-03	2.86E-02
1612.50	2310.70	5.13E+12	8.53E+12	5.44E+12	5.52E+16	8.09E+15	2.45E+16	2.04E+10	5.86E+09	1.65E-03	2.65E-02
1637.50	2310.70	4.79E+12	7.88E+12	5.00E+12	5.01E+16	7.57E+15	2.31E+16	1.85E+10	5.49E+09	1.50E-03	2.44E-02
1662.50	2310.70	4.43E+12	7.15E+12	4.50E+12	4.52E+16	7.06E+15	2.18E+16	1.67E+10	5.14E+09	1.36E-03	2.25E-02
1687.50	2310.70	4.00E+12	6.29E+12	3.99E+12	4.06E+16	6.58E+15	2.05E+16	1.50E+10	4.79E+09	1.22E-03	2.06E-02
1712.50	2310.70	3.45E+12	5.32E+12	3.45E+12	3.63E+16	6.10E+15	1.91E+16	1.34E+10	4.43E+09	1.09E-03	1.88E-02
1737.50	2310.70	2.70E+12	4.25E+12	2.93E+12	3.26E+16	5.59E+15	1.75E+16	1.21E+10	4.03E+09	9.80E-04	1.70E-02
1762.50	2310.70	1.82E+12	3.42E+12	2.60E+12	3.09E+16	4.83E+15	1.56E+16	1.14E+10	3.41E+09	9.31E-04	1.50E-02
1787.50	2310.70	8.99E+11	1.80E+12	1.71E+12	2.09E+16	4.48E+15	1.51E+16	7.74E+09	2.96E+09	6.39E-04	1.17E-02
1812.50	2310.70	3.88E+11	5.46E+11	6.70E+11	7.49E+15	3.90E+15	1.43E+16	2.77E+09	2.62E+09	2.30E-04	7.98E-03
1837.50	2310.70	1.93E+11	1.92E+11	2.22E+11	2.65E+15	3.19E+15	1.30E+16	9.81E+08	2.26E+09	8.09E-05	6.08E-03
1862.50	2310.70	1.00E+11	8.58E+10	8.40E+10	1.19E+15	2.67E+15	1.17E+16	4.41E+08	1.98E+09	3.68E-05	5.10E-03
1887.50	2310.70	5.41E+10	4.34E+10	3.83E+10	5.33E+14	2.27E+15	1.05E+16	1.97E+08	1.75E+09	1.63E-05	4.38E-03
1912.50	2310.70	2.99E+10	2.25E+10	1.92E+10	2.60E+14	1.95E+15	9.19E+15	9.61E+07	1.54E+09	8.04E-06	3.82E-03
1937.50	2310.70	1.68E+10	1.23E+10	1.02E+10	1.23E+14	1.69E+15	7.90E+15	4.56E+07	1.35E+09	3.78E-06	3.33E-03
1962.50	2310.70	9.55E+09	6.64E+09	5.36E+09	5.68E+13	1.47E+15	6.56E+15	2.11E+07	1.18E+09	1.77E-06	2.89E-03
1987.50	2310.70	5.13E+09	3.13E+09	2.33E+09	1.74E+13	1.28E+15	4.96E+15	6.49E+06	1.01E+09	5.40E-07	2.45E-03

Table 12. Activities for a Radial Traverse in the Upper Reflector Region 1.21 m Above the Core Midplane

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	1210.50	1.47E+15	5.37E+15	1.00E+16	5.45E+18	6.31E+17	2.09E+18	2.03E+12	4.79E+11	1.69E-01	2.38E+00
11.95	1210.50	1.47E+15	5.39E+15	1.00E+16	5.43E+18	6.44E+17	2.10E+18	2.03E+12	4.87E+11	1.68E-01	2.40E+00
18.02	1210.50	1.46E+15	5.33E+15	9.91E+15	5.46E+18	6.19E+17	2.09E+18	2.04E+12	4.72E+11	1.69E-01	2.37E+00
23.64	1210.50	1.46E+15	5.28E+15	9.80E+15	5.48E+18	6.11E+17	2.08E+18	2.04E+12	4.67E+11	1.70E-01	2.36E+00
28.45	1210.50	1.45E+15	5.27E+15	9.77E+15	5.48E+18	6.17E+17	2.08E+18	2.04E+12	4.71E+11	1.70E-01	2.37E+00
34.45	1210.50	1.44E+15	5.22E+15	9.64E+15	5.51E+18	5.94E+17	2.08E+18	2.05E+12	4.58E+11	1.71E-01	2.34E+00
43.97	1210.50	1.43E+15	5.16E+15	9.51E+15	5.55E+18	5.82E+17	2.07E+18	2.07E+12	4.50E+11	1.72E-01	2.33E+00
55.02	1210.50	1.43E+15	5.17E+15	9.54E+15	5.55E+18	6.02E+17	2.07E+18	2.07E+12	4.62E+11	1.72E-01	2.36E+00
63.80	1210.50	1.43E+15	5.21E+15	9.67E+15	5.52E+18	6.32E+17	2.08E+18	2.06E+12	4.79E+11	1.71E-01	2.40E+00
68.55	1210.50	1.43E+15	5.19E+15	9.62E+15	5.53E+18	6.34E+17	2.07E+18	2.06E+12	4.80E+11	1.71E-01	2.40E+00
72.05	1210.50	1.42E+15	5.17E+15	9.57E+15	5.55E+18	6.23E+17	2.06E+18	2.07E+12	4.73E+11	1.72E-01	2.39E+00
77.52	1210.50	1.41E+15	5.10E+15	9.41E+15	5.60E+18	5.98E+17	2.06E+18	2.09E+12	4.58E+11	1.73E-01	2.36E+00
84.50	1210.50	1.40E+15	5.01E+15	9.20E+15	5.67E+18	5.83E+17	2.05E+18	2.11E+12	4.49E+11	1.76E-01	2.36E+00
91.50	1210.50	1.38E+15	4.97E+15	9.11E+15	5.69E+18	5.88E+17	2.04E+18	2.12E+12	4.52E+11	1.76E-01	2.37E+00
96.75	1210.50	1.38E+15	4.96E+15	9.10E+15	5.69E+18	5.99E+17	2.04E+18	2.12E+12	4.58E+11	1.76E-01	2.38E+00
100.25	1210.50	1.37E+15	4.95E+15	9.08E+15	5.69E+18	5.90E+17	2.04E+18	2.12E+12	4.52E+11	1.76E-01	2.37E+00
102.57	1210.50	1.37E+15	4.94E+15	9.05E+15	5.71E+18	5.77E+17	2.04E+18	2.13E+12	4.45E+11	1.77E-01	2.36E+00
104.29	1210.50	1.36E+15	4.90E+15	8.96E+15	5.74E+18	5.68E+17	2.04E+18	2.14E+12	4.39E+11	1.78E-01	2.35E+00
107.68	1210.50	1.35E+15	4.84E+15	8.81E+15	5.79E+18	5.53E+17	2.03E+18	2.15E+12	4.30E+11	1.79E-01	2.34E+00
112.96	1210.50	1.33E+15	4.75E+15	8.60E+15	5.84E+18	5.35E+17	2.02E+18	2.17E+12	4.19E+11	1.81E-01	2.33E+00
119.50	1210.50	1.31E+15	4.66E+15	8.39E+15	5.90E+18	5.20E+17	2.01E+18	2.19E+12	4.10E+11	1.83E-01	2.31E+00
126.50	1210.50	1.30E+15	4.58E+15	8.21E+15	5.94E+18	5.10E+17	1.99E+18	2.21E+12	4.03E+11	1.85E-01	2.31E+00
133.50	1210.50	1.28E+15	4.52E+15	8.07E+15	5.98E+18	5.04E+17	1.98E+18	2.23E+12	3.99E+11	1.86E-01	2.31E+00
140.50	1210.50	1.27E+15	4.46E+15	7.96E+15	6.02E+18	5.02E+17	1.96E+18	2.24E+12	3.97E+11	1.87E-01	2.31E+00
147.00	1210.50	1.26E+15	4.43E+15	7.88E+15	6.04E+18	5.05E+17	1.95E+18	2.25E+12	3.98E+11	1.88E-01	2.32E+00
153.00	1210.50	1.25E+15	4.40E+15	7.84E+15	6.06E+18	5.14E+17	1.94E+18	2.25E+12	4.02E+11	1.88E-01	2.33E+00
158.43	1210.50	1.25E+15	4.39E+15	7.84E+15	6.06E+18	5.26E+17	1.93E+18	2.25E+12	4.09E+11	1.88E-01	2.35E+00
161.43	1210.50	1.25E+15	4.39E+15	7.84E+15	6.05E+18	5.35E+17	1.93E+18	2.25E+12	4.14E+11	1.87E-01	2.36E+00
163.75	1210.50	1.24E+15	4.39E+15	7.83E+15	6.04E+18	5.40E+17	1.91E+18	2.25E+12	4.16E+11	1.87E-01	2.36E+00
167.25	1210.50	1.24E+15	4.38E+15	7.82E+15	6.04E+18	5.36E+17	1.89E+18	2.25E+12	4.13E+11	1.87E-01	2.35E+00
169.57	1210.50	1.24E+15	4.37E+15	7.80E+15	6.06E+18	5.26E+17	1.89E+18	2.25E+12	4.07E+11	1.87E-01	2.34E+00
172.07	1210.50	1.23E+15	4.32E+15	7.70E+15	6.10E+18	5.18E+17	1.89E+18	2.27E+12	4.02E+11	1.89E-01	2.34E+00
177.00	1210.50	1.22E+15	4.25E+15	7.52E+15	6.15E+18	5.03E+17	1.88E+18	2.29E+12	3.93E+11	1.91E-01	2.33E+00
182.75	1210.50	1.21E+15	4.17E+15	7.35E+15	6.20E+18	4.92E+17	1.87E+18	2.30E+12	3.86E+11	1.92E-01	2.32E+00
188.25	1210.50	1.19E+15	4.11E+15	7.21E+15	6.24E+18	4.86E+17	1.86E+18	2.32E+12	3.81E+11	1.93E-01	2.32E+00
193.75	1210.50	1.18E+15	4.05E+15	7.09E+15	6.27E+18	4.83E+17	1.85E+18	2.33E+12	3.79E+11	1.94E-01	2.32E+00
199.25	1210.50	1.18E+15	4.00E+15	6.99E+15	6.30E+18	4.83E+17	1.84E+18	2.34E+12	3.79E+11	1.95E-01	2.33E+00
204.75	1210.50	1.17E+15	3.96E+15	6.90E+15	6.32E+18	4.86E+17	1.83E+18	2.35E+12	3.80E+11	1.96E-01	2.33E+00
210.25	1210.50	1.16E+15	3.92E+15	6.82E+15	6.34E+18	4.91E+17	1.83E+18	2.35E+12	3.82E+11	1.96E-01	2.35E+00
215.50	1210.50	1.15E+15	3.89E+15	6.78E+15	6.35E+18	4.99E+17	1.82E+18	2.36E+12	3.86E+11	1.97E-01	2.36E+00
220.43	1210.50	1.15E+15	3.87E+15	6.75E+15	6.35E+18	5.09E+17	1.81E+18	2.36E+12	3.91E+11	1.96E-01	2.37E+00
223.43	1210.50	1.14E+15	3.86E+15	6.74E+15	6.33E+18	5.16E+17	1.80E+18	2.35E+12	3.95E+11	1.96E-01	2.37E+00
225.75	1210.50	1.14E+15	3.85E+15	6.73E+15	6.33E+18	5.20E+17	1.78E+18	2.35E+12	3.96E+11	1.95E-01	2.37E+00
229.25	1210.50	1.13E+15	3.84E+15	6.72E+15	6.33E+18	5.15E+17	1.75E+18	2.35E+12	3.92E+11	1.95E-01	2.36E+00

Table 12. Activities for a Radial Traverse in the Upper Reflector Region 1.21 m Above the Core Midplane (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
231.57	1210.50	1.13E+15	3.83E+15	6.69E+15	6.35E+18	5.06E+17	1.75E+18	2.36E+12	3.86E+11	1.96E-01	2.36E+00
234.19	1210.50	1.12E+15	3.78E+15	6.60E+15	6.39E+18	4.97E+17	1.74E+18	2.37E+12	3.81E+11	1.97E-01	2.35E+00
238.28	1210.50	1.11E+15	3.72E+15	6.45E+15	6.44E+18	4.86E+17	1.73E+18	2.39E+12	3.74E+11	1.99E-01	2.35E+00
242.37	1210.50	1.10E+15	3.66E+15	6.32E+15	6.48E+18	4.78E+17	1.72E+18	2.40E+12	3.68E+11	2.00E-01	2.34E+00
246.46	1210.50	1.09E+15	3.60E+15	6.21E+15	6.51E+18	4.72E+17	1.71E+18	2.42E+12	3.64E+11	2.01E-01	2.34E+00
251.00	1210.50	1.08E+15	3.54E+15	6.09E+15	6.54E+18	4.68E+17	1.70E+18	2.43E+12	3.61E+11	2.02E-01	2.34E+00
256.00	1210.50	1.06E+15	3.48E+15	5.97E+15	6.57E+18	4.66E+17	1.69E+18	2.44E+12	3.60E+11	2.03E-01	2.34E+00
261.00	1210.50	1.05E+15	3.42E+15	5.86E+15	6.60E+18	4.67E+17	1.68E+18	2.45E+12	3.60E+11	2.04E-01	2.35E+00
266.00	1210.50	1.04E+15	3.37E+15	5.77E+15	6.62E+18	4.71E+17	1.67E+18	2.46E+12	3.62E+11	2.05E-01	2.36E+00
271.34	1210.50	1.02E+15	3.32E+15	5.69E+15	6.64E+18	4.79E+17	1.66E+18	2.46E+12	3.65E+11	2.05E-01	2.37E+00
277.02	1210.50	1.01E+15	3.28E+15	5.64E+15	6.64E+18	4.92E+17	1.65E+18	2.46E+12	3.72E+11	2.05E-01	2.39E+00
280.43	1210.50	9.95E+14	3.26E+15	5.62E+15	6.63E+18	5.01E+17	1.64E+18	2.46E+12	3.78E+11	2.04E-01	2.40E+00
282.25	1210.50	9.90E+14	3.26E+15	5.61E+15	6.62E+18	5.07E+17	1.63E+18	2.46E+12	3.80E+11	2.03E-01	2.40E+00
284.75	1210.50	9.83E+14	3.25E+15	5.60E+15	6.62E+18	5.10E+17	1.60E+18	2.46E+12	3.80E+11	2.03E-01	2.40E+00
287.00	1210.50	9.76E+14	3.23E+15	5.56E+15	6.63E+18	5.09E+17	1.59E+18	2.46E+12	3.79E+11	2.04E-01	2.40E+00
289.50	1210.50	9.65E+14	3.19E+15	5.50E+15	6.64E+18	5.09E+17	1.59E+18	2.46E+12	3.79E+11	2.04E-01	2.40E+00
293.50	1210.50	9.48E+14	3.16E+15	5.45E+15	6.64E+18	5.04E+17	1.56E+18	2.46E+12	3.74E+11	2.04E-01	2.39E+00
298.50	1210.50	9.32E+14	3.15E+15	5.42E+15	6.66E+18	4.73E+17	1.51E+18	2.47E+12	3.53E+11	2.04E-01	2.34E+00
306.00	1210.50	8.94E+14	3.00E+15	5.12E+15	6.80E+18	4.10E+17	1.45E+18	2.52E+12	3.14E+11	2.09E-01	2.28E+00
320.00	1210.50	8.14E+14	2.70E+15	4.50E+15	7.07E+18	3.41E+17	1.37E+18	2.62E+12	2.70E+11	2.18E-01	2.23E+00
339.50	1210.50	7.15E+14	2.36E+15	3.82E+15	7.35E+18	2.89E+17	1.29E+18	2.72E+12	2.35E+11	2.27E-01	2.21E+00
362.50	1210.50	6.18E+14	2.02E+15	3.18E+15	7.63E+18	2.46E+17	1.20E+18	2.82E+12	2.06E+11	2.36E-01	2.20E+00
387.50	1210.50	5.31E+14	1.72E+15	2.62E+15	7.87E+18	2.14E+17	1.11E+18	2.91E+12	1.82E+11	2.43E-01	2.20E+00
412.50	1210.50	4.60E+14	1.46E+15	2.16E+15	8.07E+18	1.87E+17	1.03E+18	2.98E+12	1.63E+11	2.49E-01	2.19E+00
437.50	1210.50	4.00E+14	1.25E+15	1.79E+15	8.22E+18	1.65E+17	9.53E+17	3.04E+12	1.46E+11	2.54E-01	2.18E+00
462.50	1210.50	3.49E+14	1.07E+15	1.49E+15	8.34E+18	1.47E+17	8.79E+17	3.08E+12	1.31E+11	2.57E-01	2.17E+00
487.50	1210.50	3.06E+14	9.27E+14	1.25E+15	8.41E+18	1.31E+17	8.10E+17	3.11E+12	1.18E+11	2.59E-01	2.15E+00
512.50	1210.50	2.70E+14	8.05E+14	1.05E+15	8.45E+18	1.17E+17	7.46E+17	3.12E+12	1.07E+11	2.61E-01	2.14E+00
537.50	1210.50	2.40E+14	7.01E+14	8.83E+14	8.47E+18	1.06E+17	6.88E+17	3.13E+12	9.72E+10	2.61E-01	2.11E+00
562.50	1210.50	2.14E+14	6.17E+14	7.48E+14	8.45E+18	9.63E+16	6.35E+17	3.12E+12	8.90E+10	2.61E-01	2.09E+00
587.50	1210.50	1.92E+14	5.44E+14	6.37E+14	8.41E+18	8.82E+16	5.87E+17	3.11E+12	8.17E+10	2.59E-01	2.06E+00
612.50	1210.50	1.73E+14	4.84E+14	5.46E+14	8.35E+18	8.13E+16	5.43E+17	3.08E+12	7.54E+10	2.57E-01	2.03E+00
637.50	1210.50	1.57E+14	4.32E+14	4.71E+14	8.27E+18	7.53E+16	5.04E+17	3.05E+12	6.98E+10	2.55E-01	2.00E+00
662.50	1210.50	1.43E+14	3.88E+14	4.08E+14	8.17E+18	7.00E+16	4.68E+17	3.02E+12	6.48E+10	2.52E-01	1.97E+00
687.50	1210.50	1.31E+14	3.51E+14	3.57E+14	8.06E+18	6.52E+16	4.34E+17	2.97E+12	6.03E+10	2.48E-01	1.93E+00
712.50	1210.50	1.20E+14	3.17E+14	3.13E+14	7.93E+18	6.09E+16	4.04E+17	2.92E+12	5.62E+10	2.44E-01	1.89E+00
737.50	1210.50	1.10E+14	2.89E+14	2.77E+14	7.79E+18	5.70E+16	3.76E+17	2.87E+12	5.24E+10	2.40E-01	1.85E+00
762.50	1210.50	1.02E+14	2.64E+14	2.47E+14	7.63E+18	5.33E+16	3.49E+17	2.82E+12	4.89E+10	2.35E-01	1.81E+00
787.50	1210.50	9.39E+13	2.42E+14	2.21E+14	7.47E+18	4.99E+16	3.25E+17	2.76E+12	4.57E+10	2.30E-01	1.76E+00
812.50	1210.50	8.69E+13	2.22E+14	1.99E+14	7.30E+18	4.67E+16	3.03E+17	2.69E+12	4.27E+10	2.25E-01	1.72E+00
837.50	1210.50	8.05E+13	2.05E+14	1.80E+14	7.12E+18	4.38E+16	2.82E+17	2.63E+12	3.99E+10	2.19E-01	1.67E+00
862.50	1210.50	7.49E+13	1.89E+14	1.64E+14	6.94E+18	4.11E+16	2.63E+17	2.56E+12	3.73E+10	2.14E-01	1.62E+00
887.50	1210.50	6.97E+13	1.76E+14	1.49E+14	6.75E+18	3.86E+16	2.46E+17	2.49E+12	3.50E+10	2.08E-01	1.58E+00
912.50	1210.50	6.51E+13	1.63E+14	1.38E+14	6.56E+18	3.64E+16	2.30E+17	2.42E+12	3.28E+10	2.02E-01	1.53E+00

Table 12. Activities for a Radial Traverse in the Upper Reflector Region 1.21 m Above the Core Midplane (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	1210.50	6.10E+13	1.52E+14	1.26E+14	6.37E+18	3.43E+16	2.15E+17	2.35E+12	3.09E+10	1.96E-01	1.48E+00
962.50	1210.50	5.71E+13	1.42E+14	1.18E+14	6.17E+18	3.25E+16	2.01E+17	2.28E+12	2.91E+10	1.90E-01	1.43E+00
987.50	1210.50	5.38E+13	1.33E+14	1.09E+14	5.97E+18	3.08E+16	1.89E+17	2.20E+12	2.75E+10	1.84E-01	1.39E+00
1012.50	1210.50	5.06E+13	1.25E+14	1.02E+14	5.77E+18	2.92E+16	1.78E+17	2.13E+12	2.59E+10	1.78E-01	1.34E+00
1037.50	1210.50	4.77E+13	1.17E+14	9.47E+13	5.57E+18	2.76E+16	1.67E+17	2.06E+12	2.45E+10	1.72E-01	1.29E+00
1062.50	1210.50	4.50E+13	1.11E+14	8.92E+13	5.37E+18	2.62E+16	1.57E+17	1.98E+12	2.31E+10	1.65E-01	1.24E+00
1087.50	1210.50	4.27E+13	1.04E+14	8.37E+13	5.17E+18	2.49E+16	1.48E+17	1.91E+12	2.19E+10	1.59E-01	1.20E+00
1112.50	1210.50	4.04E+13	9.89E+13	7.91E+13	4.97E+18	2.37E+16	1.40E+17	1.83E+12	2.08E+10	1.53E-01	1.15E+00
1137.50	1210.50	3.84E+13	9.38E+13	7.48E+13	4.77E+18	2.26E+16	1.33E+17	1.76E+12	1.98E+10	1.47E-01	1.10E+00
1162.50	1210.50	3.65E+13	8.92E+13	7.11E+13	4.58E+18	2.15E+16	1.26E+17	1.69E+12	1.88E+10	1.41E-01	1.06E+00
1187.50	1210.50	3.49E+13	8.50E+13	6.77E+13	4.38E+18	2.06E+16	1.20E+17	1.62E+12	1.80E+10	1.35E-01	1.01E+00
1212.50	1210.50	3.33E+13	8.14E+13	6.47E+13	4.19E+18	1.97E+16	1.15E+17	1.54E+12	1.72E+10	1.29E-01	9.66E-01
1237.50	1210.50	3.20E+13	7.80E+13	6.21E+13	4.00E+18	1.90E+16	1.10E+17	1.47E+12	1.65E+10	1.23E-01	9.22E-01
1262.50	1210.50	3.08E+13	7.52E+13	5.97E+13	3.81E+18	1.83E+16	1.06E+17	1.40E+12	1.59E+10	1.17E-01	8.79E-01
1287.50	1210.50	2.97E+13	7.26E+13	5.78E+13	3.62E+18	1.76E+16	1.02E+17	1.33E+12	1.54E+10	1.11E-01	8.36E-01
1312.50	1210.50	2.87E+13	7.05E+13	5.61E+13	3.43E+18	1.71E+16	9.94E+16	1.27E+12	1.49E+10	1.06E-01	7.94E-01
1337.50	1210.50	2.79E+13	6.87E+13	5.49E+13	3.25E+18	1.67E+16	9.68E+16	1.20E+12	1.45E+10	1.00E-01	7.53E-01
1362.50	1210.50	2.72E+13	6.74E+13	5.37E+13	3.07E+18	1.63E+16	9.49E+16	1.13E+12	1.42E+10	9.45E-02	7.12E-01
1387.50	1210.50	2.67E+13	6.64E+13	5.32E+13	2.89E+18	1.60E+16	9.34E+16	1.07E+12	1.39E+10	8.90E-02	6.72E-01
1412.50	1210.50	2.63E+13	6.60E+13	5.26E+13	2.71E+18	1.58E+16	9.24E+16	1.00E+12	1.38E+10	8.35E-02	6.33E-01
1437.50	1210.50	2.62E+13	6.59E+13	5.26E+13	2.54E+18	1.57E+16	9.20E+16	9.37E+11	1.37E+10	7.82E-02	5.94E-01
1462.50	1210.50	2.62E+13	6.64E+13	5.26E+13	2.37E+18	1.58E+16	9.22E+16	8.73E+11	1.37E+10	7.29E-02	5.56E-01
1487.50	1210.50	2.64E+13	6.73E+13	5.30E+13	2.20E+18	1.60E+16	9.29E+16	8.11E+11	1.39E+10	6.77E-02	5.20E-01
1512.50	1210.50	2.69E+13	6.87E+13	5.32E+13	2.03E+18	1.63E+16	9.42E+16	7.50E+11	1.41E+10	6.26E-02	4.84E-01
1537.50	1210.50	2.76E+13	7.06E+13	5.37E+13	1.87E+18	1.69E+16	9.61E+16	6.89E+11	1.45E+10	5.75E-02	4.48E-01
1562.50	1210.50	2.87E+13	7.27E+13	5.37E+13	1.71E+18	1.77E+16	9.85E+16	6.30E+11	1.51E+10	5.26E-02	4.14E-01
1587.50	1210.50	3.01E+13	7.50E+13	5.35E+13	1.55E+18	1.88E+16	1.02E+17	5.71E+11	1.58E+10	4.77E-02	3.81E-01
1612.50	1210.50	3.19E+13	7.68E+13	5.24E+13	1.39E+18	2.03E+16	1.05E+17	5.13E+11	1.68E+10	4.29E-02	3.49E-01
1637.50	1210.50	3.40E+13	7.79E+13	5.05E+13	1.24E+18	2.24E+16	1.10E+17	4.56E+11	1.81E+10	3.81E-02	3.18E-01
1662.50	1210.50	3.62E+13	7.69E+13	4.73E+13	1.08E+18	2.52E+16	1.15E+17	4.00E+11	1.98E+10	3.34E-02	2.88E-01
1687.50	1210.50	3.80E+13	7.32E+13	4.28E+13	9.33E+17	2.90E+16	1.21E+17	3.44E+11	2.21E+10	2.87E-02	2.60E-01
1712.50	1210.50	3.85E+13	6.49E+13	3.69E+13	7.86E+17	3.44E+16	1.28E+17	2.90E+11	2.52E+10	2.42E-02	2.35E-01
1737.50	1210.50	3.30E+13	5.02E+13	3.00E+13	6.33E+17	4.21E+16	1.34E+17	2.34E+11	2.94E+10	1.94E-02	2.11E-01
1762.50	1210.50	2.15E+13	3.69E+13	2.51E+13	5.34E+17	5.24E+16	1.41E+17	1.97E+11	3.41E+10	1.62E-02	2.00E-01
1787.50	1210.50	1.03E+13	2.00E+13	1.74E+13	3.64E+17	5.91E+16	1.50E+17	1.34E+11	3.47E+10	1.11E-02	1.64E-01
1812.50	1210.50	4.42E+12	5.79E+12	7.10E+12	1.33E+17	5.13E+16	1.41E+17	4.92E+10	3.04E+10	4.08E-03	1.03E-01
1837.50	1210.50	2.17E+12	2.03E+12	2.29E+12	4.75E+16	3.97E+16	1.25E+17	1.75E+10	2.49E+10	1.45E-03	7.07E-02
1862.50	1210.50	1.11E+12	9.03E+11	8.19E+11	3.18E+16	3.10E+16	1.09E+17	6.63E+09	2.06E+10	5.51E-04	5.38E-02
1887.50	1210.50	5.95E+11	4.61E+11	3.82E+11	7.59E+15	2.46E+16	9.53E+16	2.81E+09	1.72E+10	2.33E-04	4.35E-02
1912.50	1210.50	3.25E+11	2.38E+11	2.00E+11	3.18E+15	2.00E+16	8.21E+16	1.18E+09	1.45E+10	9.76E-05	3.60E-02
1937.50	1210.50	1.81E+11	1.28E+11	1.03E+11	1.52E+15	1.65E+16	6.95E+16	5.61E+08	1.23E+10	4.69E-05	3.03E-02
1962.50	1210.50	1.02E+11	6.95E+10	5.54E+10	6.34E+14	1.38E+16	5.70E+16	2.35E+08	1.05E+10	1.96E-05	2.56E-02
1987.50	1210.50	5.43E+10	3.16E+10	2.31E+10	2.06E+14	1.17E+16	4.28E+16	7.66E+07	8.75E+09	6.44E-06	2.12E-02

Table 13. Activities for a Radial Traverse in the Lower Reflector Region 1.19 m Below the Core Midplane

Radius (mm)	Elevation (mm)					E>2.2 MeV	Total	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
		Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
4.35	-1190.00	6.45E+14	2.17E+15	3.61E+15	2.54E+18	2.97E+17	9.88E+17	9.44E+11	2.26E+11	7.84E-02	1.12E+00
11.95	-1190.00	6.44E+14	2.17E+15	3.61E+15	2.53E+18	3.04E+17	9.92E+17	9.41E+11	2.30E+11	7.80E-02	1.12E+00
18.02	-1190.00	6.42E+14	2.15E+15	3.56E+15	2.54E+18	2.93E+17	9.88E+17	9.46E+11	2.24E+11	7.86E-02	1.11E+00
23.64	-1190.00	6.39E+14	2.13E+15	3.52E+15	2.55E+18	2.90E+17	9.85E+17	9.49E+11	2.22E+11	7.89E-02	1.11E+00
28.45	-1190.00	6.37E+14	2.13E+15	3.51E+15	2.55E+18	2.92E+17	9.87E+17	9.49E+11	2.23E+11	7.89E-02	1.11E+00
34.45	-1190.00	6.34E+14	2.11E+15	3.47E+15	2.56E+18	2.83E+17	9.85E+17	9.55E+11	2.18E+11	7.94E-02	1.10E+00
43.97	-1190.00	6.30E+14	2.08E+15	3.42E+15	2.59E+18	2.77E+17	9.82E+17	9.63E+11	2.14E+11	8.02E-02	1.10E+00
55.02	-1190.00	6.26E+14	2.09E+15	3.42E+15	2.59E+18	2.87E+17	9.83E+17	9.63E+11	2.20E+11	8.00E-02	1.11E+00
63.80	-1190.00	6.23E+14	2.10E+15	3.46E+15	2.58E+18	2.99E+17	9.82E+17	9.59E+11	2.27E+11	7.95E-02	1.13E+00
68.55	-1190.00	6.21E+14	2.09E+15	3.44E+15	2.58E+18	3.00E+17	9.76E+17	9.61E+11	2.27E+11	7.96E-02	1.13E+00
72.05	-1190.00	6.18E+14	2.08E+15	3.43E+15	2.59E+18	2.94E+17	9.73E+17	9.64E+11	2.23E+11	8.00E-02	1.12E+00
77.52	-1190.00	6.13E+14	2.06E+15	3.37E+15	2.62E+18	2.81E+17	9.68E+17	9.73E+11	2.16E+11	8.09E-02	1.11E+00
84.50	-1190.00	6.06E+14	2.02E+15	3.30E+15	2.65E+18	2.73E+17	9.60E+17	9.86E+11	2.10E+11	8.21E-02	1.10E+00
91.50	-1190.00	5.99E+14	2.01E+15	3.27E+15	2.66E+18	2.74E+17	9.56E+17	9.91E+11	2.11E+11	8.24E-02	1.11E+00
96.75	-1190.00	5.95E+14	2.00E+15	3.26E+15	2.66E+18	2.79E+17	9.51E+17	9.91E+11	2.13E+11	8.23E-02	1.11E+00
100.25	-1190.00	5.92E+14	2.00E+15	3.25E+15	2.67E+18	2.74E+17	9.50E+17	9.92E+11	2.10E+11	8.24E-02	1.11E+00
102.57	-1190.00	5.90E+14	1.99E+15	3.24E+15	2.68E+18	2.67E+17	9.52E+17	9.96E+11	2.06E+11	8.27E-02	1.10E+00
104.29	-1190.00	5.88E+14	1.98E+15	3.21E+15	2.69E+18	2.63E+17	9.50E+17	1.00E+12	2.04E+11	8.33E-02	1.10E+00
107.68	-1190.00	5.83E+14	1.96E+15	3.16E+15	2.72E+18	2.56E+17	9.47E+17	1.01E+12	2.00E+11	8.41E-02	1.09E+00
112.96	-1190.00	5.76E+14	1.92E+15	3.08E+15	2.75E+18	2.48E+17	9.43E+17	1.02E+12	1.95E+11	8.51E-02	1.09E+00
119.50	-1190.00	5.69E+14	1.89E+15	3.01E+15	2.78E+18	2.42E+17	9.38E+17	1.03E+12	1.91E+11	8.61E-02	1.09E+00
126.50	-1190.00	5.62E+14	1.86E+15	2.94E+15	2.80E+18	2.38E+17	9.33E+17	1.04E+12	1.88E+11	8.70E-02	1.09E+00
133.50	-1190.00	5.57E+14	1.83E+15	2.89E+15	2.83E+18	2.36E+17	9.29E+17	1.05E+12	1.87E+11	8.77E-02	1.09E+00
140.50	-1190.00	5.53E+14	1.81E+15	2.85E+15	2.85E+18	2.37E+17	9.25E+17	1.06E+12	1.87E+11	8.83E-02	1.09E+00
147.00	-1190.00	5.50E+14	1.80E+15	2.82E+15	2.86E+18	2.39E+17	9.22E+17	1.06E+12	1.88E+11	8.88E-02	1.10E+00
153.00	-1190.00	5.48E+14	1.79E+15	2.81E+15	2.88E+18	2.43E+17	9.18E+17	1.07E+12	1.91E+11	8.91E-02	1.11E+00
158.43	-1190.00	5.46E+14	1.78E+15	2.80E+15	2.88E+18	2.49E+17	9.15E+17	1.07E+12	1.94E+11	8.91E-02	1.11E+00
161.43	-1190.00	5.45E+14	1.78E+15	2.80E+15	2.88E+18	2.53E+17	9.13E+17	1.07E+12	1.96E+11	8.89E-02	1.12E+00
163.75	-1190.00	5.44E+14	1.78E+15	2.80E+15	2.87E+18	2.56E+17	9.05E+17	1.07E+12	1.97E+11	8.87E-02	1.12E+00
167.25	-1190.00	5.43E+14	1.78E+15	2.80E+15	2.88E+18	2.55E+17	8.99E+17	1.07E+12	1.96E+11	8.88E-02	1.12E+00
169.57	-1190.00	5.42E+14	1.77E+15	2.79E+15	2.89E+18	2.51E+17	9.00E+17	1.07E+12	1.94E+11	8.91E-02	1.12E+00
172.07	-1190.00	5.40E+14	1.76E+15	2.75E+15	2.91E+18	2.47E+17	8.99E+17	1.08E+12	1.91E+11	8.99E-02	1.11E+00
177.00	-1190.00	5.36E+14	1.73E+15	2.69E+15	2.94E+18	2.41E+17	8.97E+17	1.09E+12	1.88E+11	9.09E-02	1.11E+00
182.75	-1190.00	5.31E+14	1.70E+15	2.63E+15	2.96E+18	2.37E+17	8.93E+17	1.10E+12	1.85E+11	9.18E-02	1.11E+00
188.25	-1190.00	5.27E+14	1.68E+15	2.58E+15	2.99E+18	2.34E+17	8.89E+17	1.11E+12	1.83E+11	9.26E-02	1.11E+00
193.75	-1190.00	5.23E+14	1.66E+15	2.54E+15	3.01E+18	2.32E+17	8.84E+17	1.12E+12	1.82E+11	9.32E-02	1.11E+00
199.25	-1190.00	5.20E+14	1.64E+15	2.50E+15	3.03E+18	2.32E+17	8.80E+17	1.12E+12	1.81E+11	9.38E-02	1.12E+00
204.75	-1190.00	5.17E+14	1.62E+15	2.47E+15	3.04E+18	2.32E+17	8.75E+17	1.13E+12	1.81E+11	9.42E-02	1.12E+00
210.25	-1190.00	5.14E+14	1.60E+15	2.44E+15	3.06E+18	2.34E+17	8.70E+17	1.13E+12	1.82E+11	9.46E-02	1.13E+00
215.50	-1190.00	5.11E+14	1.59E+15	2.43E+15	3.07E+18	2.38E+17	8.66E+17	1.14E+12	1.84E+11	9.49E-02	1.13E+00
220.43	-1190.00	5.09E+14	1.58E+15	2.42E+15	3.07E+18	2.43E+17	8.62E+17	1.14E+12	1.87E+11	9.49E-02	1.14E+00
223.43	-1190.00	5.07E+14	1.58E+15	2.41E+15	3.07E+18	2.47E+17	8.59E+17	1.14E+12	1.89E+11	9.46E-02	1.14E+00
225.75	-1190.00	5.05E+14	1.57E+15	2.41E+15	3.07E+18	2.49E+17	8.49E+17	1.14E+12	1.90E+11	9.45E-02	1.14E+00
229.25	-1190.00	5.04E+14	1.57E+15	2.40E+15	3.07E+18	2.47E+17	8.38E+17	1.14E+12	1.88E+11	9.45E-02	1.14E+00

Table 13. Activities for a Radial Traverse in the Lower Reflector Region 1.19 m Below the Core Midplane (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
231.57	-1190.00	5.02E+14	1.57E+15	2.39E+15	3.08E+18	2.43E+17	8.36E+17	1.14E+12	1.85E+11	9.49E-02	1.14E+00
234.19	-1190.00	5.00E+14	1.55E+15	2.36E+15	3.10E+18	2.39E+17	8.33E+17	1.15E+12	1.83E+11	9.57E-02	1.14E+00
238.28	-1190.00	4.96E+14	1.53E+15	2.31E+15	3.13E+18	2.34E+17	8.28E+17	1.16E+12	1.80E+11	9.67E-02	1.13E+00
242.37	-1190.00	4.91E+14	1.50E+15	2.27E+15	3.15E+18	2.30E+17	8.23E+17	1.17E+12	1.77E+11	9.75E-02	1.13E+00
246.46	-1190.00	4.87E+14	1.48E+15	2.22E+15	3.17E+18	2.27E+17	8.18E+17	1.18E+12	1.75E+11	9.81E-02	1.13E+00
251.00	-1190.00	4.82E+14	1.46E+15	2.18E+15	3.19E+18	2.25E+17	8.13E+17	1.18E+12	1.74E+11	9.87E-02	1.14E+00
256.00	-1190.00	4.77E+14	1.43E+15	2.14E+15	3.21E+18	2.25E+17	8.08E+17	1.19E+12	1.73E+11	9.94E-02	1.14E+00
261.00	-1190.00	4.71E+14	1.41E+15	2.10E+15	3.23E+18	2.25E+17	8.03E+17	1.20E+12	1.73E+11	9.99E-02	1.14E+00
266.00	-1190.00	4.66E+14	1.39E+15	2.06E+15	3.25E+18	2.28E+17	7.99E+17	1.20E+12	1.74E+11	1.00E-01	1.15E+00
271.34	-1190.00	4.59E+14	1.37E+15	2.04E+15	3.27E+18	2.32E+17	7.96E+17	1.21E+12	1.76E+11	1.01E-01	1.16E+00
277.02	-1190.00	4.51E+14	1.35E+15	2.01E+15	3.27E+18	2.38E+17	7.92E+17	1.21E+12	1.80E+11	1.01E-01	1.17E+00
280.43	-1190.00	4.46E+14	1.34E+15	2.01E+15	3.27E+18	2.43E+17	7.90E+17	1.21E+12	1.83E+11	1.00E-01	1.17E+00
282.25	-1190.00	4.44E+14	1.34E+15	2.00E+15	3.27E+18	2.46E+17	7.83E+17	1.21E+12	1.84E+11	1.00E-01	1.18E+00
284.75	-1190.00	4.41E+14	1.33E+15	2.00E+15	3.27E+18	2.48E+17	7.72E+17	1.21E+12	1.84E+11	1.00E-01	1.18E+00
287.00	-1190.00	4.38E+14	1.32E+15	1.99E+15	3.28E+18	2.47E+17	7.66E+17	1.21E+12	1.84E+11	1.01E-01	1.18E+00
289.50	-1190.00	4.32E+14	1.31E+15	1.96E+15	3.28E+18	2.47E+17	7.63E+17	1.22E+12	1.84E+11	1.01E-01	1.18E+00
293.50	-1190.00	4.25E+14	1.30E+15	1.94E+15	3.29E+18	2.45E+17	7.50E+17	1.22E+12	1.81E+11	1.01E-01	1.17E+00
298.50	-1190.00	4.18E+14	1.29E+15	1.94E+15	3.30E+18	2.30E+17	7.29E+17	1.22E+12	1.72E+11	1.01E-01	1.15E+00
306.00	-1190.00	4.03E+14	1.24E+15	1.83E+15	3.37E+18	2.01E+17	7.02E+17	1.25E+12	1.53E+11	1.04E-01	1.12E+00
320.00	-1190.00	3.69E+14	1.13E+15	1.62E+15	3.52E+18	1.67E+17	6.62E+17	1.30E+12	1.32E+11	1.09E-01	1.10E+00
339.50	-1190.00	3.26E+14	9.92E+14	1.39E+15	3.69E+18	1.42E+17	6.23E+17	1.36E+12	1.15E+11	1.14E-01	1.10E+00
362.50	-1190.00	2.83E+14	8.59E+14	1.17E+15	3.85E+18	1.22E+17	5.82E+17	1.42E+12	1.01E+11	1.19E-01	1.10E+00
387.50	-1190.00	2.43E+14	7.36E+14	9.69E+14	4.01E+18	1.06E+17	5.40E+17	1.48E+12	8.98E+10	1.24E-01	1.11E+00
412.50	-1190.00	2.10E+14	6.32E+14	8.08E+14	4.14E+18	9.28E+16	5.00E+17	1.53E+12	8.00E+10	1.28E-01	1.11E+00
437.50	-1190.00	1.83E+14	5.46E+14	6.77E+14	4.25E+18	8.20E+16	4.62E+17	1.57E+12	7.18E+10	1.31E-01	1.12E+00
462.50	-1190.00	1.61E+14	4.73E+14	5.69E+14	4.34E+18	7.31E+16	4.27E+17	1.60E+12	6.48E+10	1.34E-01	1.12E+00
487.50	-1190.00	1.43E+14	4.13E+14	4.83E+14	4.41E+18	6.58E+16	3.95E+17	1.63E+12	5.89E+10	1.36E-01	1.12E+00
512.50	-1190.00	1.27E+14	3.63E+14	4.10E+14	4.46E+18	5.97E+16	3.66E+17	1.65E+12	5.38E+10	1.37E-01	1.12E+00
537.50	-1190.00	1.14E+14	3.21E+14	3.51E+14	4.50E+18	5.45E+16	3.40E+17	1.66E+12	4.94E+10	1.39E-01	1.12E+00
562.50	-1190.00	1.03E+14	2.85E+14	3.03E+14	4.52E+18	5.00E+16	3.16E+17	1.67E+12	4.55E+10	1.39E-01	1.11E+00
587.50	-1190.00	9.34E+13	2.55E+14	2.62E+14	4.53E+18	4.62E+16	2.93E+17	1.67E+12	4.20E+10	1.40E-01	1.10E+00
612.50	-1190.00	8.52E+13	2.30E+14	2.30E+14	4.52E+18	4.28E+16	2.73E+17	1.67E+12	3.90E+10	1.39E-01	1.10E+00
637.50	-1190.00	7.80E+13	2.08E+14	2.02E+14	4.51E+18	3.98E+16	2.54E+17	1.66E+12	3.63E+10	1.39E-01	1.09E+00
662.50	-1190.00	7.18E+13	1.90E+14	1.79E+14	4.48E+18	3.71E+16	2.37E+17	1.65E+12	3.39E+10	1.38E-01	1.07E+00
687.50	-1190.00	6.63E+13	1.73E+14	1.59E+14	4.45E+18	3.48E+16	2.22E+17	1.64E+12	3.17E+10	1.37E-01	1.06E+00
712.50	-1190.00	6.14E+13	1.59E+14	1.44E+14	4.41E+18	3.26E+16	2.07E+17	1.63E+12	2.96E+10	1.36E-01	1.05E+00
737.50	-1190.00	5.71E+13	1.47E+14	1.30E+14	4.35E+18	3.07E+16	1.94E+17	1.61E+12	2.78E+10	1.34E-01	1.03E+00
762.50	-1190.00	5.31E+13	1.36E+14	1.18E+14	4.29E+18	2.89E+16	1.82E+17	1.58E+12	2.61E+10	1.32E-01	1.01E+00
787.50	-1190.00	4.98E+13	1.26E+14	1.08E+14	4.23E+18	2.73E+16	1.70E+17	1.56E+12	2.46E+10	1.30E-01	9.94E-01
812.50	-1190.00	4.66E+13	1.18E+14	9.93E+13	4.16E+18	2.58E+16	1.60E+17	1.53E+12	2.31E+10	1.28E-01	9.75E-01
837.50	-1190.00	4.37E+13	1.10E+14	9.16E+13	4.08E+18	2.44E+16	1.50E+17	1.51E+12	2.18E+10	1.26E-01	9.55E-01
862.50	-1190.00	4.12E+13	1.03E+14	8.51E+13	4.00E+18	2.31E+16	1.41E+17	1.48E+12	2.06E+10	1.23E-01	9.34E-01
887.50	-1190.00	3.88E+13	9.65E+13	7.92E+13	3.91E+18	2.20E+16	1.33E+17	1.44E+12	1.95E+10	1.21E-01	9.12E-01
912.50	-1190.00	3.67E+13	9.09E+13	7.40E+13	3.82E+18	2.09E+16	1.25E+17	1.41E+12	1.85E+10	1.18E-01	8.89E-01

Table 13. Activities for a Radial Traverse in the Lower Reflector Region 1.19 m Below the Core Midplane (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	-1190.00	3.47E+13	8.56E+13	6.94E+13	3.73E+18	1.99E+16	1.18E+17	1.38E+12	1.75E+10	1.15E-01	8.67E-01
962.50	-1190.00	3.29E+13	8.10E+13	6.52E+13	3.63E+18	1.89E+16	1.12E+17	1.34E+12	1.67E+10	1.12E-01	8.43E-01
987.50	-1190.00	3.12E+13	7.66E+13	6.15E+13	3.54E+18	1.81E+16	1.06E+17	1.30E+12	1.58E+10	1.09E-01	8.19E-01
1012.50	-1190.00	2.97E+13	7.28E+13	5.81E+13	3.43E+18	1.72E+16	1.01E+17	1.27E+12	1.51E+10	1.06E-01	7.95E-01
1037.50	-1190.00	2.83E+13	6.90E+13	5.50E+13	3.33E+18	1.65E+16	9.55E+16	1.23E+12	1.44E+10	1.03E-01	7.71E-01
1062.50	-1190.00	2.70E+13	6.59E+13	5.23E+13	3.23E+18	1.58E+16	9.09E+16	1.19E+12	1.37E+10	9.94E-02	7.46E-01
1087.50	-1190.00	2.58E+13	6.26E+13	4.97E+13	3.12E+18	1.51E+16	8.66E+16	1.15E+12	1.31E+10	9.61E-02	7.21E-01
1112.50	-1190.00	2.47E+13	6.00E+13	4.75E+13	3.01E+18	1.45E+16	8.27E+16	1.11E+12	1.25E+10	9.28E-02	6.96E-01
1137.50	-1190.00	2.36E+13	5.73E+13	4.53E+13	2.91E+18	1.39E+16	7.91E+16	1.07E+12	1.20E+10	8.95E-02	6.71E-01
1162.50	-1190.00	2.27E+13	5.51E+13	4.36E+13	2.80E+18	1.33E+16	7.59E+16	1.03E+12	1.15E+10	8.62E-02	6.46E-01
1187.50	-1190.00	2.18E+13	5.28E+13	4.18E+13	2.69E+18	1.28E+16	7.29E+16	9.92E+11	1.11E+10	8.28E-02	6.21E-01
1212.50	-1190.00	2.10E+13	5.10E+13	4.04E+13	2.58E+18	1.24E+16	7.03E+16	9.52E+11	1.07E+10	7.95E-02	5.96E-01
1237.50	-1190.00	2.02E+13	4.92E+13	3.90E+13	2.47E+18	1.20E+16	6.80E+16	9.12E+11	1.03E+10	7.61E-02	5.71E-01
1262.50	-1190.00	1.96E+13	4.77E+13	3.79E+13	2.36E+18	1.16E+16	6.60E+16	8.72E+11	1.00E+10	7.28E-02	5.46E-01
1287.50	-1190.00	1.90E+13	4.64E+13	3.68E+13	2.25E+18	1.13E+16	6.42E+16	8.32E+11	9.74E+09	6.94E-02	5.21E-01
1312.50	-1190.00	1.85E+13	4.53E+13	3.61E+13	2.15E+18	1.10E+16	6.28E+16	7.91E+11	9.50E+09	6.61E-02	4.97E-01
1337.50	-1190.00	1.81E+13	4.44E+13	3.54E+13	2.04E+18	1.07E+16	6.16E+16	7.52E+11	9.31E+09	6.27E-02	4.73E-01
1362.50	-1190.00	1.77E+13	4.38E+13	3.50E+13	1.93E+18	1.05E+16	6.08E+16	7.12E+11	9.16E+09	5.94E-02	4.48E-01
1387.50	-1190.00	1.75E+13	4.34E+13	3.47E+13	1.82E+18	1.04E+16	6.02E+16	6.72E+11	9.05E+09	5.61E-02	4.25E-01
1412.50	-1190.00	1.73E+13	4.33E+13	3.46E+13	1.72E+18	1.03E+16	5.99E+16	6.33E+11	8.99E+09	5.28E-02	4.01E-01
1437.50	-1190.00	1.73E+13	4.34E+13	3.46E+13	1.61E+18	1.03E+16	6.00E+16	5.94E+11	8.99E+09	4.96E-02	3.78E-01
1462.50	-1190.00	1.73E+13	4.39E+13	3.48E+13	1.50E+18	1.04E+16	6.04E+16	5.55E+11	9.05E+09	4.63E-02	3.55E-01
1487.50	-1190.00	1.75E+13	4.46E+13	3.50E+13	1.40E+18	1.05E+16	6.11E+16	5.17E+11	9.16E+09	4.31E-02	3.32E-01
1512.50	-1190.00	1.79E+13	4.57E+13	3.54E+13	1.30E+18	1.08E+16	6.21E+16	4.79E+11	9.36E+09	4.00E-02	3.10E-01
1537.50	-1190.00	1.84E+13	4.69E+13	3.56E+13	1.20E+18	1.12E+16	6.35E+16	4.41E+11	9.63E+09	3.68E-02	2.88E-01
1562.50	-1190.00	1.91E+13	4.84E+13	3.58E+13	1.09E+18	1.17E+16	6.53E+16	4.04E+11	1.00E+10	3.37E-02	2.66E-01
1587.50	-1190.00	2.01E+13	4.98E+13	3.56E+13	9.93E+17	1.25E+16	6.74E+16	3.67E+11	1.05E+10	3.06E-02	2.45E-01
1612.50	-1190.00	2.12E+13	5.11E+13	3.50E+13	8.94E+17	1.34E+16	6.99E+16	3.30E+11	1.12E+10	2.75E-02	2.25E-01
1637.50	-1190.00	2.26E+13	5.17E+13	3.36E+13	7.95E+17	1.48E+16	7.28E+16	2.94E+11	1.20E+10	2.45E-02	2.05E-01
1662.50	-1190.00	2.40E+13	5.11E+13	3.16E+13	6.98E+17	1.66E+16	7.61E+16	2.58E+11	1.31E+10	2.15E-02	1.86E-01
1687.50	-1190.00	2.51E+13	4.85E+13	2.85E+13	6.01E+17	1.91E+16	7.99E+16	2.22E+11	1.46E+10	1.85E-02	1.69E-01
1712.50	-1190.00	2.54E+13	4.31E+13	2.47E+13	5.07E+17	2.25E+16	8.43E+16	1.87E+11	1.66E+10	1.56E-02	1.53E-01
1737.50	-1190.00	2.18E+13	3.32E+13	2.00E+13	4.09E+17	2.76E+16	8.84E+16	1.51E+11	1.93E+10	1.25E-02	1.37E-01
1762.50	-1190.00	1.42E+13	2.45E+13	1.67E+13	3.45E+17	3.42E+16	9.30E+16	1.27E+11	2.23E+10	1.04E-02	1.30E-01
1787.50	-1190.00	6.86E+12	1.33E+13	1.16E+13	2.35E+17	3.84E+16	9.81E+16	8.67E+10	2.27E+10	7.17E-03	1.06E-01
1812.50	-1190.00	2.89E+12	3.77E+12	4.70E+12	8.61E+16	3.34E+16	9.28E+16	3.18E+10	1.99E+10	2.63E-03	6.68E-02
1837.50	-1190.00	1.42E+12	1.30E+12	1.48E+12	3.06E+16	2.60E+16	8.24E+16	1.13E+10	1.64E+10	9.34E-04	4.63E-02
1862.50	-1190.00	7.22E+11	5.88E+11	5.24E+11	1.16E+16	2.04E+16	7.25E+16	4.28E+09	1.36E+10	3.55E-04	3.55E-02
1887.50	-1190.00	3.88E+11	3.00E+11	2.48E+11	4.99E+15	1.63E+16	6.33E+16	1.85E+09	1.14E+10	1.53E-04	2.88E-02
1912.50	-1190.00	2.11E+11	1.54E+11	1.30E+11	2.13E+15	1.32E+16	5.46E+16	7.88E+08	9.66E+09	6.54E-05	2.40E-02
1937.50	-1190.00	1.18E+11	8.38E+10	6.77E+10	1.02E+15	1.10E+16	4.63E+16	3.78E+08	8.24E+09	3.16E-05	2.03E-02
1962.50	-1190.00	6.59E+10	4.49E+10	3.58E+10	4.32E+14	9.23E+15	3.81E+16	1.60E+08	7.02E+09	1.33E-05	1.72E-02
1987.50	-1190.00	3.55E+10	2.09E+10	1.53E+10	1.41E+14	7.84E+15	2.86E+16	5.23E+07	5.88E+09	4.39E-06	1.43E-02

Table 14. Activities for a Radial Traverse Through the Bottom of the Reflector Vessel

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	-2038.70	2.85E+13	6.04E+13	4.47E+13	1.26E+17	3.05E+16	9.47E+16	4.69E+10	2.27E+10	3.79E-03	8.33E-02
11.95	-2038.70	2.84E+13	6.02E+13	4.45E+13	1.26E+17	3.02E+16	9.44E+16	4.68E+10	2.25E+10	3.79E-03	8.28E-02
18.02	-2038.70	2.84E+13	5.99E+13	4.43E+13	1.26E+17	3.02E+16	9.45E+16	4.67E+10	2.25E+10	3.78E-03	8.27E-02
23.64	-2038.70	2.84E+13	5.97E+13	4.42E+13	1.26E+17	3.02E+16	9.45E+16	4.67E+10	2.25E+10	3.78E-03	8.26E-02
28.45	-2038.70	2.83E+13	5.95E+13	4.40E+13	1.26E+17	3.01E+16	9.46E+16	4.67E+10	2.24E+10	3.78E-03	8.26E-02
34.45	-2038.70	2.83E+13	5.91E+13	4.38E+13	1.25E+17	3.00E+16	9.45E+16	4.66E+10	2.24E+10	3.77E-03	8.23E-02
43.97	-2038.70	2.82E+13	5.87E+13	4.35E+13	1.25E+17	3.00E+16	9.44E+16	4.66E+10	2.23E+10	3.77E-03	8.22E-02
55.02	-2038.70	2.81E+13	5.89E+13	4.36E+13	1.26E+17	3.00E+16	9.42E+16	4.70E+10	2.23E+10	3.80E-03	8.24E-02
63.80	-2038.70	2.81E+13	5.92E+13	4.38E+13	1.28E+17	3.00E+16	9.41E+16	4.74E+10	2.23E+10	3.84E-03	8.27E-02
68.55	-2038.70	2.81E+13	5.93E+13	4.38E+13	1.28E+17	3.01E+16	9.41E+16	4.77E+10	2.24E+10	3.86E-03	8.30E-02
72.05	-2038.70	2.81E+13	5.91E+13	4.37E+13	1.28E+17	3.01E+16	9.41E+16	4.77E+10	2.24E+10	3.86E-03	8.30E-02
77.52	-2038.70	2.80E+13	5.87E+13	4.33E+13	1.28E+17	3.00E+16	9.41E+16	4.76E+10	2.23E+10	3.85E-03	8.28E-02
84.50	-2038.70	2.79E+13	5.83E+13	4.31E+13	1.28E+17	3.00E+16	9.41E+16	4.76E+10	2.23E+10	3.86E-03	8.29E-02
91.50	-2038.70	2.78E+13	5.82E+13	4.30E+13	1.29E+17	3.01E+16	9.41E+16	4.80E+10	2.23E+10	3.88E-03	8.31E-02
96.75	-2038.70	2.78E+13	5.82E+13	4.30E+13	1.30E+17	3.01E+16	9.42E+16	4.83E+10	2.24E+10	3.91E-03	8.33E-02
100.25	-2038.70	2.78E+13	5.81E+13	4.29E+13	1.30E+17	3.01E+16	9.43E+16	4.84E+10	2.24E+10	3.92E-03	8.35E-02
102.57	-2038.70	2.77E+13	5.81E+13	4.29E+13	1.31E+17	3.02E+16	9.44E+16	4.85E+10	2.24E+10	3.93E-03	8.36E-02
104.29	-2038.70	2.77E+13	5.80E+13	4.28E+13	1.31E+17	3.02E+16	9.45E+16	4.85E+10	2.24E+10	3.93E-03	8.36E-02
107.68	-2038.70	2.76E+13	5.76E+13	4.25E+13	1.30E+17	3.02E+16	9.45E+16	4.84E+10	2.24E+10	3.92E-03	8.35E-02
112.96	-2038.70	2.76E+13	5.70E+13	4.20E+13	1.30E+17	3.01E+16	9.45E+16	4.83E+10	2.23E+10	3.92E-03	8.33E-02
119.50	-2038.70	2.75E+13	5.65E+13	4.16E+13	1.31E+17	3.00E+16	9.45E+16	4.85E+10	2.23E+10	3.93E-03	8.33E-02
126.50	-2038.70	2.74E+13	5.61E+13	4.13E+13	1.31E+17	3.00E+16	9.45E+16	4.87E+10	2.23E+10	3.95E-03	8.35E-02
133.50	-2038.70	2.73E+13	5.58E+13	4.10E+13	1.32E+17	3.01E+16	9.45E+16	4.90E+10	2.23E+10	3.97E-03	8.37E-02
140.50	-2038.70	2.72E+13	5.55E+13	4.08E+13	1.33E+17	3.01E+16	9.44E+16	4.93E+10	2.23E+10	4.00E-03	8.39E-02
147.00	-2038.70	2.71E+13	5.54E+13	4.06E+13	1.34E+17	3.02E+16	9.43E+16	4.96E+10	2.24E+10	4.02E-03	8.42E-02
153.00	-2038.70	2.70E+13	5.54E+13	4.06E+13	1.35E+17	3.02E+16	9.41E+16	5.01E+10	2.24E+10	4.06E-03	8.45E-02
158.43	-2038.70	2.69E+13	5.55E+13	4.07E+13	1.36E+17	3.03E+16	9.40E+16	5.06E+10	2.24E+10	4.10E-03	8.49E-02
161.43	-2038.70	2.69E+13	5.55E+13	4.07E+13	1.37E+17	3.03E+16	9.39E+16	5.09E+10	2.24E+10	4.12E-03	8.50E-02
163.75	-2038.70	2.69E+13	5.54E+13	4.06E+13	1.37E+17	3.02E+16	9.37E+16	5.10E+10	2.23E+10	4.13E-03	8.49E-02
167.25	-2038.70	2.68E+13	5.53E+13	4.05E+13	1.38E+17	3.02E+16	9.36E+16	5.11E+10	2.23E+10	4.14E-03	8.50E-02
169.57	-2038.70	2.68E+13	5.52E+13	4.05E+13	1.38E+17	3.02E+16	9.36E+16	5.13E+10	2.24E+10	4.15E-03	8.51E-02
172.07	-2038.70	2.67E+13	5.50E+13	4.03E+13	1.38E+17	3.03E+16	9.36E+16	5.12E+10	2.24E+10	4.15E-03	8.51E-02
177.00	-2038.70	2.66E+13	5.44E+13	3.98E+13	1.38E+17	3.03E+16	9.36E+16	5.12E+10	2.24E+10	4.15E-03	8.51E-02
182.75	-2038.70	2.66E+13	5.39E+13	3.94E+13	1.38E+17	3.03E+16	9.36E+16	5.13E+10	2.24E+10	4.16E-03	8.52E-02
188.25	-2038.70	2.65E+13	5.35E+13	3.91E+13	1.39E+17	3.03E+16	9.36E+16	5.16E+10	2.24E+10	4.18E-03	8.54E-02
193.75	-2038.70	2.64E+13	5.32E+13	3.88E+13	1.40E+17	3.04E+16	9.36E+16	5.19E+10	2.24E+10	4.20E-03	8.56E-02
199.25	-2038.70	2.63E+13	5.28E+13	3.86E+13	1.41E+17	3.04E+16	9.35E+16	5.21E+10	2.24E+10	4.23E-03	8.58E-02
204.75	-2038.70	2.61E+13	5.26E+13	3.83E+13	1.41E+17	3.04E+16	9.33E+16	5.25E+10	2.24E+10	4.25E-03	8.60E-02
210.25	-2038.70	2.60E+13	5.23E+13	3.81E+13	1.42E+17	3.05E+16	9.31E+16	5.28E+10	2.24E+10	4.28E-03	8.62E-02
215.50	-2038.70	2.59E+13	5.22E+13	3.81E+13	1.44E+17	3.05E+16	9.29E+16	5.33E+10	2.24E+10	4.31E-03	8.65E-02
220.43	-2038.70	2.58E+13	5.22E+13	3.80E+13	1.45E+17	3.04E+16	9.26E+16	5.38E+10	2.24E+10	4.36E-03	8.67E-02
223.43	-2038.70	2.58E+13	5.22E+13	3.80E+13	1.46E+17	3.04E+16	9.23E+16	5.41E+10	2.23E+10	4.38E-03	8.68E-02
225.75	-2038.70	2.57E+13	5.20E+13	3.79E+13	1.46E+17	3.02E+16	9.21E+16	5.42E+10	2.22E+10	4.39E-03	8.66E-02
229.25	-2038.70	2.56E+13	5.19E+13	3.78E+13	1.47E+17	3.02E+16	9.19E+16	5.44E+10	2.22E+10	4.41E-03	8.67E-02

Table 14. Activities for a Radial Traverse Through the Bottom of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
231.57	-2038.70	2.56E+13	5.18E+13	3.77E+13	1.47E+17	3.03E+16	9.18E+16	5.46E+10	2.22E+10	4.42E-03	8.68E-02
234.19	-2038.70	2.55E+13	5.15E+13	3.75E+13	1.47E+17	3.03E+16	9.18E+16	5.46E+10	2.22E+10	4.42E-03	8.69E-02
238.28	-2038.70	2.54E+13	5.11E+13	3.72E+13	1.47E+17	3.04E+16	9.18E+16	5.46E+10	2.23E+10	4.42E-03	8.70E-02
242.37	-2038.70	2.53E+13	5.06E+13	3.68E+13	1.48E+17	3.04E+16	9.18E+16	5.47E+10	2.23E+10	4.43E-03	8.71E-02
246.46	-2038.70	2.52E+13	5.02E+13	3.65E+13	1.48E+17	3.04E+16	9.17E+16	5.49E+10	2.23E+10	4.44E-03	8.71E-02
251.00	-2038.70	2.50E+13	4.98E+13	3.62E+13	1.49E+17	3.04E+16	9.15E+16	5.51E+10	2.22E+10	4.46E-03	8.72E-02
256.00	-2038.70	2.49E+13	4.94E+13	3.59E+13	1.49E+17	3.03E+16	9.12E+16	5.54E+10	2.22E+10	4.48E-03	8.72E-02
261.00	-2038.70	2.47E+13	4.90E+13	3.56E+13	1.50E+17	3.03E+16	9.10E+16	5.57E+10	2.21E+10	4.51E-03	8.73E-02
266.00	-2038.70	2.45E+13	4.87E+13	3.54E+13	1.51E+17	3.02E+16	9.06E+16	5.60E+10	2.21E+10	4.53E-03	8.73E-02
271.34	-2038.70	2.43E+13	4.84E+13	3.52E+13	1.52E+17	3.01E+16	9.01E+16	5.64E+10	2.20E+10	4.57E-03	8.73E-02
277.02	-2038.70	2.41E+13	4.83E+13	3.52E+13	1.54E+17	2.99E+16	8.94E+16	5.71E+10	2.18E+10	4.62E-03	8.74E-02
280.43	-2038.70	2.40E+13	4.82E+13	3.51E+13	1.55E+17	2.98E+16	8.91E+16	5.76E+10	2.17E+10	4.66E-03	8.74E-02
282.25	-2038.70	2.40E+13	4.82E+13	3.51E+13	1.56E+17	2.96E+16	8.88E+16	5.78E+10	2.16E+10	4.67E-03	8.72E-02
284.75	-2038.70	2.39E+13	4.81E+13	3.50E+13	1.57E+17	2.95E+16	8.83E+16	5.80E+10	2.15E+10	4.69E-03	8.71E-02
287.00	-2038.70	2.38E+13	4.81E+13	3.50E+13	1.57E+17	2.94E+16	8.80E+16	5.83E+10	2.14E+10	4.72E-03	8.71E-02
289.50	-2038.70	2.37E+13	4.80E+13	3.49E+13	1.58E+17	2.92E+16	8.75E+16	5.84E+10	2.13E+10	4.73E-03	8.67E-02
293.50	-2038.70	2.35E+13	4.75E+13	3.46E+13	1.58E+17	2.86E+16	8.67E+16	5.84E+10	2.09E+10	4.73E-03	8.59E-02
298.50	-2038.70	2.34E+13	4.69E+13	3.42E+13	1.58E+17	2.82E+16	8.60E+16	5.84E+10	2.07E+10	4.73E-03	8.52E-02
306.00	-2038.70	2.31E+13	4.59E+13	3.34E+13	1.57E+17	2.81E+16	8.57E+16	5.83E+10	2.05E+10	4.72E-03	8.49E-02
320.00	-2038.70	2.26E+13	4.39E+13	3.20E+13	1.58E+17	2.78E+16	8.51E+16	5.84E+10	2.03E+10	4.73E-03	8.44E-02
339.50	-2038.70	2.18E+13	4.19E+13	3.05E+13	1.60E+17	2.75E+16	8.44E+16	5.93E+10	2.01E+10	4.80E-03	8.44E-02
362.50	-2038.70	2.11E+13	3.98E+13	2.90E+13	1.64E+17	2.72E+16	8.34E+16	6.07E+10	1.99E+10	4.92E-03	8.47E-02
387.50	-2038.70	2.03E+13	3.79E+13	2.75E+13	1.68E+17	2.70E+16	8.25E+16	6.23E+10	1.97E+10	5.05E-03	8.53E-02
412.50	-2038.70	1.96E+13	3.62E+13	2.62E+13	1.72E+17	2.69E+16	8.16E+16	6.38E+10	1.96E+10	5.17E-03	8.60E-02
437.50	-2038.70	1.90E+13	3.46E+13	2.49E+13	1.77E+17	2.69E+16	8.08E+16	6.53E+10	1.95E+10	5.30E-03	8.67E-02
462.50	-2038.70	1.85E+13	3.32E+13	2.37E+13	1.80E+17	2.69E+16	8.01E+16	6.67E+10	1.94E+10	5.41E-03	8.73E-02
487.50	-2038.70	1.81E+13	3.20E+13	2.27E+13	1.84E+17	2.69E+16	7.94E+16	6.80E+10	1.94E+10	5.51E-03	8.80E-02
512.50	-2038.70	1.77E+13	3.09E+13	2.17E+13	1.87E+17	2.68E+16	7.88E+16	6.91E+10	1.93E+10	5.60E-03	8.85E-02
537.50	-2038.70	1.73E+13	2.99E+13	2.09E+13	1.90E+17	2.68E+16	7.81E+16	7.01E+10	1.93E+10	5.68E-03	8.89E-02
562.50	-2038.70	1.70E+13	2.90E+13	2.01E+13	1.92E+17	2.68E+16	7.74E+16	7.09E+10	1.92E+10	5.75E-03	8.92E-02
587.50	-2038.70	1.67E+13	2.82E+13	1.94E+13	1.93E+17	2.67E+16	7.67E+16	7.16E+10	1.91E+10	5.80E-03	8.93E-02
612.50	-2038.70	1.64E+13	2.75E+13	1.87E+13	1.95E+17	2.65E+16	7.59E+16	7.21E+10	1.90E+10	5.84E-03	8.93E-02
637.50	-2038.70	1.61E+13	2.68E+13	1.81E+13	1.96E+17	2.64E+16	7.51E+16	7.24E+10	1.88E+10	5.87E-03	8.92E-02
662.50	-2038.70	1.58E+13	2.61E+13	1.75E+13	1.96E+17	2.62E+16	7.43E+16	7.26E+10	1.87E+10	5.88E-03	8.90E-02
687.50	-2038.70	1.55E+13	2.56E+13	1.70E+13	1.96E+17	2.61E+16	7.35E+16	7.26E+10	1.85E+10	5.88E-03	8.86E-02
712.50	-2038.70	1.53E+13	2.50E+13	1.65E+13	1.96E+17	2.58E+16	7.26E+16	7.25E+10	1.83E+10	5.88E-03	8.81E-02
737.50	-2038.70	1.50E+13	2.45E+13	1.61E+13	1.96E+17	2.56E+16	7.17E+16	7.23E+10	1.81E+10	5.86E-03	8.75E-02
762.50	-2038.70	1.48E+13	2.39E+13	1.57E+13	1.95E+17	2.53E+16	7.07E+16	7.19E+10	1.79E+10	5.83E-03	8.68E-02
787.50	-2038.70	1.45E+13	2.35E+13	1.53E+13	1.93E+17	2.51E+16	6.97E+16	7.15E+10	1.77E+10	5.79E-03	8.60E-02
812.50	-2038.70	1.43E+13	2.29E+13	1.49E+13	1.92E+17	2.48E+16	6.87E+16	7.09E+10	1.75E+10	5.74E-03	8.50E-02
837.50	-2038.70	1.40E+13	2.25E+13	1.46E+13	1.90E+17	2.44E+16	6.76E+16	7.01E+10	1.72E+10	5.68E-03	8.40E-02
862.50	-2038.70	1.37E+13	2.20E+13	1.42E+13	1.87E+17	2.41E+16	6.65E+16	6.93E+10	1.70E+10	5.61E-03	8.29E-02
887.50	-2038.70	1.35E+13	2.15E+13	1.39E+13	1.85E+17	2.37E+16	6.53E+16	6.84E+10	1.67E+10	5.54E-03	8.16E-02
912.50	-2038.70	1.32E+13	2.10E+13	1.35E+13	1.82E+17	2.33E+16	6.41E+16	6.74E+10	1.64E+10	5.46E-03	8.03E-02

Table 14. Activities for a Radial Traverse Through the Bottom of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
937.50	-2038.70	1.29E+13	2.06E+13	1.32E+13	1.79E+17	2.29E+16	6.28E+16	6.62E+10	1.61E+10	5.37E-03	7.89E-02
962.50	-2038.70	1.26E+13	2.01E+13	1.28E+13	1.76E+17	2.24E+16	6.15E+16	6.50E+10	1.58E+10	5.27E-03	7.74E-02
987.50	-2038.70	1.23E+13	1.97E+13	1.25E+13	1.72E+17	2.19E+16	6.02E+16	6.38E+10	1.54E+10	5.16E-03	7.58E-02
1012.50	-2038.70	1.21E+13	1.91E+13	1.22E+13	1.69E+17	2.15E+16	5.88E+16	6.24E+10	1.51E+10	5.05E-03	7.42E-02
1037.50	-2038.70	1.18E+13	1.87E+13	1.19E+13	1.65E+17	2.09E+16	5.74E+16	6.10E+10	1.47E+10	4.94E-03	7.24E-02
1062.50	-2038.70	1.15E+13	1.81E+13	1.16E+13	1.61E+17	2.04E+16	5.60E+16	5.95E+10	1.44E+10	4.82E-03	7.06E-02
1087.50	-2038.70	1.11E+13	1.77E+13	1.13E+13	1.57E+17	1.99E+16	5.45E+16	5.79E+10	1.40E+10	4.69E-03	6.88E-02
1112.50	-2038.70	1.08E+13	1.72E+13	1.09E+13	1.52E+17	1.93E+16	5.31E+16	5.63E+10	1.36E+10	4.56E-03	6.69E-02
1137.50	-2038.70	1.05E+13	1.67E+13	1.06E+13	1.48E+17	1.88E+16	5.15E+16	5.47E+10	1.32E+10	4.43E-03	6.49E-02
1162.50	-2038.70	1.02E+13	1.62E+13	1.03E+13	1.43E+17	1.82E+16	5.00E+16	5.30E+10	1.28E+10	4.29E-03	6.29E-02
1187.50	-2038.70	9.89E+12	1.57E+13	1.00E+13	1.39E+17	1.76E+16	4.85E+16	5.12E+10	1.24E+10	4.15E-03	6.09E-02
1212.50	-2038.70	9.55E+12	1.52E+13	9.70E+12	1.34E+17	1.70E+16	4.69E+16	4.94E+10	1.20E+10	4.00E-03	5.88E-02
1237.50	-2038.70	9.24E+12	1.47E+13	9.38E+12	1.29E+17	1.64E+16	4.53E+16	4.76E+10	1.16E+10	3.86E-03	5.67E-02
1262.50	-2038.70	8.90E+12	1.42E+13	9.10E+12	1.24E+17	1.58E+16	4.37E+16	4.57E+10	1.11E+10	3.70E-03	5.45E-02
1287.50	-2038.70	8.59E+12	1.38E+13	8.79E+12	1.19E+17	1.52E+16	4.21E+16	4.39E+10	1.07E+10	3.55E-03	5.24E-02
1312.50	-2038.70	8.25E+12	1.32E+13	8.51E+12	1.13E+17	1.46E+16	4.06E+16	4.20E+10	1.03E+10	3.40E-03	5.02E-02
1337.50	-2038.70	7.95E+12	1.28E+13	8.21E+12	1.08E+17	1.40E+16	3.90E+16	4.00E+10	9.87E+09	3.24E-03	4.80E-02
1362.50	-2038.70	7.61E+12	1.23E+13	7.94E+12	1.03E+17	1.33E+16	3.74E+16	3.81E+10	9.44E+09	3.09E-03	4.58E-02
1387.50	-2038.70	7.32E+12	1.19E+13	7.65E+12	9.78E+16	1.27E+16	3.58E+16	3.62E+10	9.02E+09	2.93E-03	4.36E-02
1412.50	-2038.70	6.99E+12	1.14E+13	7.38E+12	9.25E+16	1.21E+16	3.43E+16	3.42E+10	8.59E+09	2.77E-03	4.14E-02
1437.50	-2038.70	6.71E+12	1.10E+13	7.10E+12	8.72E+16	1.15E+16	3.28E+16	3.22E+10	8.18E+09	2.61E-03	3.92E-02
1462.50	-2038.70	6.39E+12	1.05E+13	6.83E+12	8.19E+16	1.09E+16	3.13E+16	3.03E+10	7.76E+09	2.45E-03	3.70E-02
1487.50	-2038.70	6.12E+12	1.01E+13	6.55E+12	7.66E+16	1.03E+16	2.98E+16	2.83E+10	7.35E+09	2.30E-03	3.49E-02
1512.50	-2038.70	5.82E+12	9.64E+12	6.27E+12	7.14E+16	9.71E+15	2.83E+16	2.64E+10	6.96E+09	2.14E-03	3.27E-02
1537.50	-2038.70	5.56E+12	9.21E+12	5.97E+12	6.62E+16	9.14E+15	2.69E+16	2.45E+10	6.56E+09	1.98E-03	3.06E-02
1562.50	-2038.70	5.27E+12	8.75E+12	5.65E+12	6.11E+16	8.59E+15	2.56E+16	2.26E+10	6.18E+09	1.83E-03	2.86E-02
1587.50	-2038.70	5.01E+12	8.27E+12	5.31E+12	5.60E+16	8.05E+15	2.42E+16	2.07E+10	5.81E+09	1.68E-03	2.65E-02
1612.50	-2038.70	4.72E+12	7.76E+12	4.93E+12	5.11E+16	7.53E+15	2.29E+16	1.89E+10	5.46E+09	1.53E-03	2.46E-02
1637.50	-2038.70	4.43E+12	7.17E+12	4.53E+12	4.63E+16	7.04E+15	2.17E+16	1.71E+10	5.11E+09	1.39E-03	2.27E-02
1662.50	-2038.70	4.09E+12	6.51E+12	4.08E+12	4.17E+16	6.57E+15	2.04E+16	1.54E+10	4.78E+09	1.25E-03	2.08E-02
1687.50	-2038.70	3.70E+12	5.74E+12	3.62E+12	3.75E+16	6.11E+15	1.92E+16	1.39E+10	4.46E+09	1.12E-03	1.91E-02
1712.50	-2038.70	3.19E+12	4.85E+12	3.12E+12	3.34E+16	5.67E+15	1.79E+16	1.24E+10	4.12E+09	1.00E-03	1.74E-02
1737.50	-2038.70	2.50E+12	3.87E+12	2.67E+12	3.01E+16	5.19E+15	1.64E+16	1.11E+10	3.75E+09	9.03E-04	1.57E-02
1762.50	-2038.70	1.69E+12	3.13E+12	2.36E+12	2.85E+16	4.47E+15	1.46E+16	1.05E+10	3.16E+09	8.58E-04	1.39E-02
1787.50	-2038.70	8.35E+11	1.66E+12	1.56E+12	1.93E+16	4.15E+15	1.41E+16	7.13E+09	2.75E+09	5.89E-04	1.09E-02
1812.50	-2038.70	3.60E+11	5.01E+11	6.10E+11	6.91E+15	3.62E+15	1.34E+16	2.55E+09	2.44E+09	2.12E-04	7.43E-03
1837.50	-2038.70	1.77E+11	1.71E+11	1.97E+11	2.47E+15	2.98E+15	1.23E+16	9.11E+08	2.12E+09	7.51E-05	5.69E-03
1862.50	-2038.70	9.14E+10	7.61E+10	7.34E+10	1.09E+15	2.50E+15	1.11E+16	4.04E+08	1.86E+09	3.37E-05	4.78E-03
1887.50	-2038.70	4.92E+10	3.88E+10	3.33E+10	4.93E+14	2.13E+15	9.90E+15	1.82E+08	1.64E+09	1.51E-05	4.11E-03
1912.50	-2038.70	2.72E+10	1.99E+10	1.70E+10	2.33E+14	1.83E+15	8.70E+15	8.61E+07	1.45E+09	7.21E-06	3.59E-03
1937.50	-2038.70	1.52E+10	1.11E+10	9.14E+09	1.40E+14	1.58E+15	7.48E+15	4.09E+07	1.27E+09	3.39E-06	3.13E-03
1962.50	-2038.70	8.64E+09	5.85E+09	4.79E+09	4.85E+13	1.38E+15	6.21E+15	1.80E+07	1.11E+09	1.51E-06	2.72E-03
1987.50	-2038.70	4.66E+09	2.83E+09	2.11E+09	1.52E+13	1.20E+15	4.70E+15	5.64E+06	9.48E+08	4.69E-07	2.30E-03

Table 15. Activities for an Axial Traverse Along the Reactor Centerline

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	-2256.80	2.06E+11	1.38E+11	1.15E+11	5.43E+14	9.21E+15	3.19E+16	2.03E+08	6.93E+09	1.70E-05	1.71E-02
4.35	-2216.80	4.80E+11	4.09E+11	4.03E+11	2.12E+15	1.17E+16	4.66E+16	7.87E+08	8.89E+09	6.55E-05	2.23E-02
4.35	-2176.80	1.11E+12	1.23E+12	1.41E+12	7.33E+15	1.51E+16	5.87E+16	2.71E+09	1.11E+10	2.26E-04	2.89E-02
4.35	-2136.80	2.63E+12	4.26E+12	5.22E+12	2.17E+16	1.98E+16	7.07E+16	8.02E+09	1.38E+10	6.66E-04	3.86E-02
4.35	-2096.80	7.01E+12	1.74E+13	1.94E+13	7.10E+16	2.49E+16	8.09E+16	2.63E+10	1.68E+10	2.17E-03	5.65E-02
4.35	-2064.10	1.91E+13	4.83E+13	3.87E+13	1.18E+17	2.70E+16	8.47E+16	4.39E+10	1.97E+10	3.55E-03	7.40E-02
4.35	-2038.70	2.85E+13	6.04E+13	4.47E+13	1.26E+17	3.05E+16	9.47E+16	4.69E+10	2.27E+10	3.79E-03	8.33E-02
4.35	-2010.80	4.02E+13	7.94E+13	5.57E+13	1.51E+17	3.00E+16	1.01E+17	5.60E+10	2.28E+10	4.61E-03	8.92E-02
4.35	-1980.40	5.09E+13	1.07E+14	7.29E+13	1.88E+17	3.22E+16	1.10E+17	7.00E+10	2.47E+10	5.80E-03	1.02E-01
4.35	-1950.00	5.92E+13	1.31E+14	8.96E+13	2.26E+17	3.54E+16	1.19E+17	8.39E+10	2.70E+10	6.97E-03	1.16E-01
4.35	-1919.60	6.71E+13	1.54E+14	1.07E+14	2.66E+17	3.88E+16	1.29E+17	9.89E+10	2.96E+10	8.22E-03	1.32E-01
4.35	-1889.20	7.47E+13	1.75E+14	1.23E+14	3.08E+17	4.27E+16	1.40E+17	1.14E+11	3.25E+10	9.50E-03	1.48E-01
4.35	-1858.80	8.27E+13	1.97E+14	1.40E+14	3.51E+17	4.70E+16	1.53E+17	1.31E+11	3.56E+10	1.08E-02	1.65E-01
4.35	-1828.40	9.11E+13	2.18E+14	1.57E+14	3.97E+17	5.17E+16	1.66E+17	1.47E+11	3.90E+10	1.22E-02	1.84E-01
4.35	-1798.00	1.00E+14	2.41E+14	1.74E+14	4.45E+17	5.67E+16	1.81E+17	1.65E+11	4.28E+10	1.37E-02	2.04E-01
4.35	-1767.60	1.10E+14	2.65E+14	1.92E+14	4.95E+17	6.22E+16	1.98E+17	1.84E+11	4.68E+10	1.53E-02	2.25E-01
4.35	-1737.20	1.20E+14	2.90E+14	2.11E+14	5.49E+17	6.81E+16	2.15E+17	2.04E+11	5.12E+10	1.69E-02	2.47E-01
4.35	-1706.80	1.31E+14	3.16E+14	2.32E+14	6.05E+17	7.44E+16	2.34E+17	2.25E+11	5.59E+10	1.87E-02	2.71E-01
4.35	-1676.40	1.43E+14	3.45E+14	2.53E+14	6.65E+17	8.12E+16	2.55E+17	2.47E+11	6.09E+10	2.05E-02	2.97E-01
4.35	-1646.00	1.56E+14	3.76E+14	2.77E+14	7.28E+17	8.85E+16	2.77E+17	2.70E+11	6.63E+10	2.25E-02	3.25E-01
4.35	-1615.60	1.70E+14	4.10E+14	3.04E+14	7.96E+17	9.63E+16	3.01E+17	2.96E+11	7.21E+10	2.45E-02	3.54E-01
4.35	-1585.20	1.85E+14	4.46E+14	3.33E+14	8.69E+17	1.05E+17	3.28E+17	3.22E+11	7.84E+10	2.68E-02	3.85E-01
4.35	-1554.80	2.01E+14	4.86E+14	3.67E+14	9.46E+17	1.14E+17	3.56E+17	3.51E+11	8.52E+10	2.92E-02	4.19E-01
4.35	-1524.40	2.18E+14	5.29E+14	4.06E+14	1.03E+18	1.24E+17	3.87E+17	3.82E+11	9.26E+10	3.17E-02	4.56E-01
4.35	-1494.00	2.37E+14	5.78E+14	4.52E+14	1.12E+18	1.34E+17	4.20E+17	4.15E+11	1.00E+11	3.45E-02	4.95E-01
4.35	-1463.60	2.58E+14	6.32E+14	5.09E+14	1.21E+18	1.46E+17	4.57E+17	4.51E+11	1.09E+11	3.74E-02	5.37E-01
4.35	-1433.20	2.81E+14	6.93E+14	5.80E+14	1.32E+18	1.58E+17	4.97E+17	4.89E+11	1.18E+11	4.06E-02	5.83E-01
4.35	-1402.80	3.06E+14	7.64E+14	6.72E+14	1.43E+18	1.71E+17	5.40E+17	5.31E+11	1.28E+11	4.41E-02	6.32E-01
4.35	-1372.40	3.35E+14	8.49E+14	7.93E+14	1.55E+18	1.85E+17	5.87E+17	5.76E+11	1.39E+11	4.79E-02	6.85E-01
4.35	-1342.00	3.67E+14	9.51E+14	9.59E+14	1.68E+18	2.01E+17	6.39E+17	6.25E+11	1.51E+11	5.19E-02	7.43E-01
4.35	-1311.60	4.05E+14	1.08E+15	1.19E+15	1.83E+18	2.17E+17	6.96E+17	6.79E+11	1.63E+11	5.63E-02	8.06E-01
4.35	-1281.20	4.48E+14	1.24E+15	1.51E+15	1.98E+18	2.35E+17	7.58E+17	7.37E+11	1.77E+11	6.12E-02	8.74E-01
4.35	-1250.80	5.01E+14	1.46E+15	1.97E+15	2.15E+18	2.54E+17	8.27E+17	8.00E+11	1.92E+11	6.64E-02	9.48E-01
4.35	-1220.40	5.65E+14	1.76E+15	2.64E+15	2.34E+18	2.75E+17	9.03E+17	8.69E+11	2.08E+11	7.21E-02	1.03E+00
4.35	-1190.00	6.45E+14	2.17E+15	3.61E+15	2.54E+18	2.97E+17	9.88E+17	9.44E+11	2.26E+11	7.84E-02	1.12E+00
4.35	-1159.60	7.49E+14	2.76E+15	5.01E+15	2.75E+18	3.22E+17	1.08E+18	1.03E+12	2.46E+11	8.53E-02	1.21E+00
4.35	-1129.20	8.87E+14	3.61E+15	7.04E+15	2.99E+18	3.48E+17	1.19E+18	1.12E+12	2.67E+11	9.28E-02	1.32E+00
4.35	-1098.80	1.07E+15	4.87E+15	1.00E+16	3.25E+18	3.77E+17	1.31E+18	1.22E+12	2.90E+11	1.01E-01	1.43E+00
4.35	-1068.40	1.33E+15	6.72E+15	1.43E+16	3.53E+18	4.10E+17	1.44E+18	1.32E+12	3.17E+11	1.10E-01	1.56E+00
4.35	-1038.00	1.70E+15	9.47E+15	2.04E+16	3.83E+18	4.47E+17	1.60E+18	1.44E+12	3.48E+11	1.20E-01	1.69E+00
4.35	-1007.60	2.24E+15	1.36E+16	2.92E+16	4.15E+18	4.90E+17	1.79E+18	1.57E+12	3.83E+11	1.31E-01	1.85E+00
4.35	-977.20	3.02E+15	1.97E+16	4.16E+16	4.49E+18	5.38E+17	2.00E+18	1.71E+12	4.23E+11	1.43E-01	2.02E+00
4.35	-946.80	4.17E+15	2.88E+16	5.90E+16	4.85E+18	5.89E+17	2.25E+18	1.87E+12	4.67E+11	1.56E-01	2.20E+00
4.35	-916.40	5.90E+15	4.24E+16	8.31E+16	5.21E+18	6.39E+17	2.54E+18	2.04E+12	5.14E+11	1.71E-01	2.39E+00

Table 15. Activities for an Axial Traverse Along the Reactor Centerline (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	-886.00	8.50E+15	6.25E+16	1.16E+17	5.57E+18	6.89E+17	2.86E+18	2.22E+12	5.62E+11	1.88E-01	2.59E+00
4.35	-855.60	1.24E+16	9.19E+16	1.59E+17	5.91E+18	7.42E+17	3.24E+18	2.42E+12	6.18E+11	2.07E-01	2.79E+00
4.35	-825.20	1.83E+16	1.35E+17	2.15E+17	6.19E+18	8.07E+17	3.71E+18	2.63E+12	6.87E+11	2.29E-01	3.01E+00
4.35	-794.80	2.70E+16	1.95E+17	2.83E+17	6.37E+18	8.93E+17	4.28E+18	2.84E+12	7.77E+11	2.54E-01	3.25E+00
4.35	-764.40	4.00E+16	2.80E+17	3.59E+17	6.35E+18	1.00E+18	4.95E+18	3.03E+12	8.89E+11	2.83E-01	3.50E+00
4.35	-734.00	5.91E+16	3.96E+17	4.35E+17	6.06E+18	1.13E+18	5.74E+18	3.19E+12	1.03E+12	3.16E-01	3.75E+00
4.35	-703.60	8.72E+16	5.51E+17	4.83E+17	5.23E+18	1.31E+18	6.59E+18	3.25E+12	1.21E+12	3.51E-01	3.98E+00
4.35	-673.20	1.28E+17	7.46E+17	4.37E+17	3.47E+18	1.62E+18	7.36E+18	3.06E+12	1.50E+12	3.85E-01	4.24E+00
4.35	-645.00	1.86E+17	9.83E+17	3.00E+17	1.50E+18	2.48E+18	9.09E+18	2.93E+12	2.20E+12	4.48E-01	5.43E+00
4.35	-621.75	2.55E+17	1.28E+18	2.75E+17	7.25E+17	2.62E+18	9.65E+18	3.42E+12	2.38E+12	5.69E-01	5.65E+00
4.35	-601.25	3.31E+17	1.62E+18	2.95E+17	3.81E+17	2.66E+18	9.92E+18	4.18E+12	2.44E+12	7.18E-01	5.72E+00
4.35	-580.75	4.25E+17	2.02E+18	3.37E+17	2.22E+17	2.78E+18	1.05E+19	5.22E+12	2.57E+12	9.07E-01	5.99E+00
4.35	-560.25	5.41E+17	2.50E+18	3.96E+17	1.52E+17	2.95E+18	1.12E+19	6.52E+12	2.75E+12	1.14E+00	6.38E+00
4.35	-539.75	6.76E+17	3.03E+18	4.64E+17	1.24E+17	3.15E+18	1.21E+19	8.06E+12	2.95E+12	1.41E+00	6.85E+00
4.35	-519.25	8.40E+17	3.65E+18	5.44E+17	1.16E+17	3.37E+18	1.31E+19	9.92E+12	3.18E+12	1.74E+00	7.38E+00
4.35	-504.00	9.95E+17	4.17E+18	6.09E+17	1.15E+17	3.57E+18	1.40E+19	1.17E+13	3.39E+12	2.06E+00	7.86E+00
4.35	-494.00	1.10E+18	4.54E+18	6.55E+17	1.17E+17	3.70E+18	1.46E+19	1.29E+13	3.53E+12	2.29E+00	8.20E+00
4.35	-484.00	1.22E+18	4.93E+18	7.02E+17	1.19E+17	3.84E+18	1.53E+19	1.42E+13	3.68E+12	2.53E+00	8.55E+00
4.35	-474.00	1.33E+18	5.32E+18	7.49E+17	1.21E+17	3.99E+18	1.59E+19	1.55E+13	3.83E+12	2.75E+00	8.89E+00
4.35	-466.50	1.42E+18	5.64E+18	7.85E+17	1.22E+17	4.09E+18	1.64E+19	1.64E+13	3.93E+12	2.92E+00	9.14E+00
4.35	-461.50	1.47E+18	5.84E+18	8.10E+17	1.22E+17	4.15E+18	1.67E+19	1.70E+13	3.99E+12	3.02E+00	9.28E+00
4.35	-454.00	1.55E+18	6.15E+18	8.48E+17	1.24E+17	4.24E+18	1.71E+19	1.80E+13	4.09E+12	3.18E+00	9.50E+00
4.35	-444.00	1.67E+18	6.56E+18	8.98E+17	1.26E+17	4.37E+18	1.77E+19	1.92E+13	4.23E+12	3.40E+00	9.83E+00
4.35	-433.33	1.79E+18	6.98E+18	9.50E+17	1.27E+17	4.52E+18	1.84E+19	2.06E+13	4.39E+12	3.65E+00	1.02E+01
4.35	-420.13	1.94E+18	7.50E+18	1.01E+18	1.29E+17	4.73E+18	1.94E+19	2.24E+13	4.61E+12	3.98E+00	1.07E+01
4.35	-405.05	2.11E+18	8.07E+18	1.08E+18	1.31E+17	4.96E+18	2.05E+19	2.43E+13	4.85E+12	4.32E+00	1.13E+01
4.35	-389.95	2.26E+18	8.62E+18	1.15E+18	1.34E+17	5.18E+18	2.14E+19	2.60E+13	5.07E+12	4.62E+00	1.18E+01
4.35	-374.85	2.40E+18	9.14E+18	1.21E+18	1.38E+17	5.40E+18	2.24E+19	2.76E+13	5.29E+12	4.91E+00	1.23E+01
4.35	-359.75	2.53E+18	9.64E+18	1.28E+18	1.43E+17	5.62E+18	2.33E+19	2.91E+13	5.51E+12	5.17E+00	1.28E+01
4.35	-344.65	2.66E+18	1.01E+19	1.34E+18	1.48E+17	5.83E+18	2.42E+19	3.05E+13	5.72E+12	5.41E+00	1.33E+01
4.35	-329.55	2.77E+18	1.05E+19	1.39E+18	1.53E+17	6.05E+18	2.51E+19	3.17E+13	5.93E+12	5.64E+00	1.38E+01
4.35	-314.45	2.87E+18	1.09E+19	1.44E+18	1.58E+17	6.25E+18	2.60E+19	3.29E+13	6.14E+12	5.84E+00	1.43E+01
4.35	-299.35	2.96E+18	1.13E+19	1.49E+18	1.63E+17	6.45E+18	2.69E+19	3.39E+13	6.33E+12	6.03E+00	1.47E+01
4.35	-283.44	3.05E+18	1.16E+19	1.54E+18	1.69E+17	6.66E+18	2.77E+19	3.50E+13	6.54E+12	6.21E+00	1.52E+01
4.35	-266.72	3.13E+18	1.20E+19	1.59E+18	1.74E+17	6.86E+18	2.85E+19	3.59E+13	6.73E+12	6.37E+00	1.57E+01
4.35	-250.00	3.19E+18	1.22E+19	1.63E+18	1.80E+17	7.04E+18	2.93E+19	3.67E+13	6.91E+12	6.51E+00	1.61E+01
4.35	-233.28	3.25E+18	1.25E+19	1.66E+18	1.86E+17	7.21E+18	3.00E+19	3.73E+13	7.08E+12	6.62E+00	1.65E+01
4.35	-216.56	3.30E+18	1.27E+19	1.69E+18	1.91E+17	7.38E+18	3.07E+19	3.79E+13	7.24E+12	6.72E+00	1.68E+01
4.35	-199.84	3.33E+18	1.28E+19	1.72E+18	1.97E+17	7.54E+18	3.13E+19	3.83E+13	7.40E+12	6.80E+00	1.72E+01
4.35	-183.12	3.36E+18	1.30E+19	1.75E+18	2.03E+17	7.70E+18	3.20E+19	3.86E+13	7.55E+12	6.86E+00	1.75E+01
4.35	-166.40	3.37E+18	1.31E+19	1.78E+18	2.09E+17	7.85E+18	3.25E+19	3.89E+13	7.69E+12	6.90E+00	1.79E+01
4.35	-149.68	3.38E+18	1.32E+19	1.80E+18	2.15E+17	8.00E+18	3.31E+19	3.90E+13	7.83E+12	6.92E+00	1.82E+01
4.35	-132.96	3.39E+18	1.33E+19	1.83E+18	2.22E+17	8.16E+18	3.37E+19	3.91E+13	7.97E+12	6.94E+00	1.85E+01
4.35	-116.24	3.39E+18	1.34E+19	1.86E+18	2.29E+17	8.33E+18	3.43E+19	3.93E+13	8.12E+12	6.97E+00	1.89E+01

Table 15. Activities for an Axial Traverse Along the Reactor Centerline (continued)

Radius (mm)	Elevation (mm)	E>2.2 MeV				Total		Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
		Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
4.35	-99.52	3.40E+18	1.36E+19	1.90E+18	2.38E+17	8.50E+18	3.48E+19	3.95E+13	8.27E+12	7.00E+00	1.92E+01
4.35	-82.80	3.41E+18	1.38E+19	1.94E+18	2.47E+17	8.64E+18	3.53E+19	3.97E+13	8.39E+12	7.01E+00	1.95E+01
4.35	-66.08	3.45E+18	1.41E+19	1.99E+18	2.57E+17	8.78E+18	3.58E+19	4.01E+13	8.50E+12	7.07E+00	1.98E+01
4.35	-53.54	3.52E+18	1.44E+19	2.03E+18	2.64E+17	8.89E+18	3.61E+19	4.10E+13	8.60E+12	7.21E+00	2.00E+01
4.35	-45.18	3.60E+18	1.46E+19	2.06E+18	2.67E+17	9.00E+18	3.65E+19	4.18E+13	8.70E+12	7.37E+00	2.02E+01
4.35	-38.50	3.68E+18	1.49E+19	2.08E+18	2.68E+17	9.11E+18	3.69E+19	4.27E+13	8.79E+12	7.53E+00	2.04E+01
4.35	-33.50	3.75E+18	1.51E+19	2.11E+18	2.69E+17	9.17E+18	3.71E+19	4.34E+13	8.86E+12	7.67E+00	2.06E+01
4.35	-28.00	3.82E+18	1.53E+19	2.13E+18	2.71E+17	9.24E+18	3.74E+19	4.43E+13	8.92E+12	7.81E+00	2.08E+01
4.35	-20.00	3.94E+18	1.57E+19	2.18E+18	2.72E+17	9.33E+18	3.77E+19	4.55E+13	9.00E+12	8.03E+00	2.10E+01
4.35	-10.00	4.12E+18	1.62E+19	2.23E+18	2.71E+17	9.41E+18	3.81E+19	4.74E+13	9.08E+12	8.35E+00	2.12E+01
4.35	.00	4.33E+18	1.68E+19	2.28E+18	2.68E+17	9.48E+18	3.84E+19	4.97E+13	9.15E+12	8.72E+00	2.13E+01
4.35	10.00	4.58E+18	1.75E+19	2.33E+18	2.63E+17	9.56E+18	3.88E+19	5.23E+13	9.24E+12	9.17E+00	2.15E+01
4.35	20.00	4.88E+18	1.82E+19	2.39E+18	2.58E+17	9.65E+18	3.93E+19	5.54E+13	9.35E+12	9.72E+00	2.18E+01
4.35	30.00	5.22E+18	1.90E+19	2.45E+18	2.52E+17	9.77E+18	4.00E+19	5.89E+13	9.48E+12	1.04E+01	2.21E+01
4.35	40.00	5.61E+18	1.99E+19	2.51E+18	2.45E+17	9.91E+18	4.07E+19	6.31E+13	9.65E+12	1.11E+01	2.25E+01
4.35	50.00	6.05E+18	2.08E+19	2.57E+18	2.37E+17	1.01E+19	4.15E+19	6.77E+13	9.83E+12	1.20E+01	2.30E+01
4.35	60.00	6.52E+18	2.17E+19	2.63E+18	2.28E+17	1.02E+19	4.23E+19	7.26E+13	1.00E+13	1.29E+01	2.34E+01
4.35	67.50	6.88E+18	2.25E+19	2.67E+18	2.21E+17	1.03E+19	4.28E+19	7.63E+13	1.01E+13	1.35E+01	2.37E+01
4.35	72.50	7.07E+18	2.30E+19	2.71E+18	2.17E+17	1.03E+19	4.30E+19	7.83E+13	1.02E+13	1.39E+01	2.38E+01
4.35	80.00	7.40E+18	2.37E+19	2.76E+18	2.11E+17	1.04E+19	4.33E+19	8.17E+13	1.02E+13	1.44E+01	2.39E+01
4.35	90.42	7.88E+18	2.48E+19	2.83E+18	2.01E+17	1.05E+19	4.40E+19	8.67E+13	1.03E+13	1.53E+01	2.43E+01
4.35	101.10	8.39E+18	2.58E+19	2.90E+18	1.93E+17	1.06E+19	4.50E+19	9.20E+13	1.05E+13	1.63E+01	2.47E+01
4.35	111.57	8.86E+18	2.68E+19	2.96E+18	1.85E+17	1.08E+19	4.59E+19	9.69E+13	1.07E+13	1.72E+01	2.52E+01
4.35	125.16	9.41E+18	2.80E+19	3.04E+18	1.78E+17	1.10E+19	4.69E+19	1.03E+14	1.10E+13	1.83E+01	2.58E+01
4.35	141.88	9.99E+18	2.94E+19	3.14E+18	1.71E+17	1.12E+19	4.80E+19	1.09E+14	1.12E+13	1.94E+01	2.64E+01
4.35	158.60	1.05E+19	3.06E+19	3.23E+18	1.67E+17	1.14E+19	4.90E+19	1.14E+14	1.14E+13	2.03E+01	2.69E+01
4.35	175.32	1.09E+19	3.17E+19	3.31E+18	1.65E+17	1.16E+19	4.99E+19	1.18E+14	1.16E+13	2.10E+01	2.74E+01
4.35	192.04	1.12E+19	3.25E+19	3.38E+18	1.65E+17	1.17E+19	5.07E+19	1.21E+14	1.18E+13	2.16E+01	2.78E+01
4.35	208.76	1.14E+19	3.32E+19	3.44E+18	1.64E+17	1.19E+19	5.13E+19	1.24E+14	1.19E+13	2.21E+01	2.81E+01
4.35	225.48	1.16E+19	3.38E+19	3.48E+18	1.65E+17	1.19E+19	5.17E+19	1.26E+14	1.20E+13	2.24E+01	2.84E+01
4.35	242.20	1.17E+19	3.41E+19	3.51E+18	1.65E+17	1.20E+19	5.20E+19	1.27E+14	1.21E+13	2.26E+01	2.85E+01
4.35	258.92	1.18E+19	3.42E+19	3.52E+18	1.65E+17	1.20E+19	5.20E+19	1.28E+14	1.21E+13	2.27E+01	2.85E+01
4.35	275.64	1.17E+19	3.41E+19	3.51E+18	1.65E+17	1.20E+19	5.19E+19	1.27E+14	1.20E+13	2.27E+01	2.84E+01
4.35	291.55	1.17E+19	3.39E+19	3.49E+18	1.64E+17	1.19E+19	5.15E+19	1.27E+14	1.20E+13	2.25E+01	2.82E+01
4.35	306.65	1.15E+19	3.35E+19	3.45E+18	1.64E+17	1.18E+19	5.10E+19	1.25E+14	1.19E+13	2.23E+01	2.80E+01
4.35	321.75	1.14E+19	3.30E+19	3.40E+18	1.63E+17	1.16E+19	5.04E+19	1.23E+14	1.17E+13	2.19E+01	2.76E+01
4.35	336.85	1.11E+19	3.23E+19	3.33E+18	1.63E+17	1.15E+19	4.96E+19	1.21E+14	1.15E+13	2.15E+01	2.72E+01
4.35	351.95	1.09E+19	3.15E+19	3.26E+18	1.64E+17	1.13E+19	4.86E+19	1.18E+14	1.13E+13	2.10E+01	2.67E+01
4.35	367.05	1.05E+19	3.05E+19	3.17E+18	1.67E+17	1.11E+19	4.76E+19	1.14E+14	1.11E+13	2.03E+01	2.61E+01
4.35	382.15	1.01E+19	2.93E+19	3.06E+18	1.73E+17	1.08E+19	4.65E+19	1.10E+14	1.08E+13	1.95E+01	2.56E+01
4.35	397.25	9.64E+18	2.80E+19	2.96E+18	1.84E+17	1.06E+19	4.53E+19	1.05E+14	1.06E+13	1.86E+01	2.50E+01
4.35	412.33	9.08E+18	2.66E+19	2.84E+18	2.04E+17	1.04E+19	4.40E+19	9.89E+13	1.03E+13	1.76E+01	2.43E+01
4.35	425.08	8.57E+18	2.52E+19	2.73E+18	2.34E+17	1.01E+19	4.28E+19	9.34E+13	1.00E+13	1.66E+01	2.36E+01
4.35	438.15	8.03E+18	2.38E+19	2.63E+18	2.82E+17	9.87E+18	4.16E+19	8.77E+13	9.76E+12	1.56E+01	2.30E+01

Table 15. Activities for an Axial Traverse Along the Reactor Centerline (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	453.83	7.30E+18	2.20E+19	2.51E+18	3.78E+17	9.54E+18	4.00E+19	8.00E+13	9.40E+12	1.42E+01	2.21E+01
4.35	466.65	6.66E+18	2.05E+19	2.43E+18	5.09E+17	9.31E+18	3.87E+19	7.32E+13	9.12E+12	1.30E+01	2.15E+01
4.35	477.07	6.12E+18	1.92E+19	2.36E+18	6.68E+17	9.16E+18	3.78E+19	6.76E+13	8.93E+12	1.19E+01	2.10E+01
4.35	487.75	5.56E+18	1.78E+19	2.32E+18	9.31E+17	9.07E+18	3.71E+19	6.18E+13	8.78E+12	1.09E+01	2.07E+01
4.35	495.50	5.18E+18	1.68E+19	2.32E+18	1.24E+18	9.07E+18	3.68E+19	5.80E+13	8.72E+12	1.02E+01	2.06E+01
4.35	500.50	4.95E+18	1.62E+19	2.34E+18	1.53E+18	9.08E+18	3.67E+19	5.57E+13	8.70E+12	9.81E+00	2.06E+01
4.35	508.00	4.56E+18	1.52E+19	2.42E+18	2.03E+18	9.02E+18	3.65E+19	5.19E+13	8.62E+12	9.09E+00	2.05E+01
4.35	520.00	3.96E+18	1.38E+19	2.60E+18	3.10E+18	9.05E+18	3.63E+19	4.60E+13	8.52E+12	7.95E+00	2.05E+01
4.35	537.00	3.21E+18	1.21E+19	3.12E+18	5.39E+18	8.53E+18	3.46E+19	3.92E+13	7.89E+12	6.55E+00	1.95E+01
4.35	560.00	2.42E+18	1.03E+19	4.51E+18	1.06E+19	5.59E+18	2.94E+19	3.35E+13	5.55E+12	5.19E+00	1.52E+01
4.35	585.50	1.78E+18	8.40E+18	5.22E+18	1.58E+19	4.49E+18	2.73E+19	2.89E+13	4.58E+12	4.12E+00	1.41E+01
4.35	610.50	1.30E+18	6.70E+18	5.11E+18	1.90E+19	3.88E+18	2.47E+19	2.48E+13	3.95E+12	3.28E+00	1.33E+01
4.35	635.50	9.39E+17	5.23E+18	4.65E+18	2.09E+19	3.50E+18	2.21E+19	2.12E+13	3.49E+12	2.62E+00	1.27E+01
4.35	660.50	6.74E+17	4.02E+18	4.06E+18	2.20E+19	3.15E+18	1.95E+19	1.83E+13	3.08E+12	2.11E+00	1.20E+01
4.35	685.50	4.82E+17	3.06E+18	3.43E+18	2.23E+19	2.83E+18	1.71E+19	1.59E+13	2.72E+12	1.72E+00	1.13E+01
4.35	710.50	3.43E+17	2.29E+18	2.83E+18	2.22E+19	2.59E+18	1.51E+19	1.39E+13	2.43E+12	1.42E+00	1.06E+01
4.35	735.50	2.43E+17	1.70E+18	2.28E+18	2.16E+19	2.42E+18	1.33E+19	1.22E+13	2.21E+12	1.19E+00	9.97E+00
4.35	760.50	1.73E+17	1.25E+18	1.82E+18	2.08E+19	2.30E+18	1.19E+19	1.08E+13	2.04E+12	1.01E+00	9.41E+00
4.35	785.50	1.23E+17	9.19E+17	1.43E+18	1.98E+19	2.19E+18	1.06E+19	9.60E+12	1.89E+12	8.75E-01	8.86E+00
4.35	810.50	8.79E+16	6.69E+17	1.11E+18	1.87E+19	2.07E+18	9.52E+18	8.59E+12	1.75E+12	7.64E-01	8.30E+00
4.35	835.50	6.30E+16	4.86E+17	8.53E+17	1.76E+19	1.94E+18	8.52E+18	7.72E+12	1.61E+12	6.74E-01	7.73E+00
4.35	860.50	4.55E+16	3.51E+17	6.51E+17	1.64E+19	1.80E+18	7.63E+18	6.96E+12	1.48E+12	6.00E-01	7.17E+00
4.35	885.50	3.30E+16	2.53E+17	4.93E+17	1.52E+19	1.67E+18	6.85E+18	6.30E+12	1.35E+12	5.37E-01	6.63E+00
4.35	910.50	2.41E+16	1.82E+17	3.71E+17	1.41E+19	1.54E+18	6.15E+18	5.71E+12	1.24E+12	4.84E-01	6.12E+00
4.35	935.50	1.77E+16	1.31E+17	2.77E+17	1.31E+19	1.42E+18	5.55E+18	5.19E+12	1.14E+12	4.37E-01	5.64E+00
4.35	960.50	1.31E+16	9.44E+16	2.06E+17	1.21E+19	1.32E+18	5.01E+18	4.73E+12	1.04E+12	3.97E-01	5.21E+00
4.35	985.50	9.82E+15	6.81E+16	1.53E+17	1.12E+19	1.22E+18	4.55E+18	4.32E+12	9.60E+11	3.61E-01	4.80E+00
4.35	1010.50	7.45E+15	4.93E+16	1.13E+17	1.03E+19	1.13E+18	4.13E+18	3.95E+12	8.85E+11	3.29E-01	4.43E+00
4.35	1035.50	5.72E+15	3.59E+16	8.32E+16	9.50E+18	1.05E+18	3.77E+18	3.62E+12	8.18E+11	3.01E-01	4.10E+00
4.35	1060.50	4.47E+15	2.63E+16	6.12E+16	8.76E+18	9.78E+17	3.45E+18	3.32E+12	7.56E+11	2.76E-01	3.79E+00
4.35	1085.50	3.56E+15	1.95E+16	4.50E+16	8.08E+18	9.09E+17	3.16E+18	3.05E+12	7.00E+11	2.53E-01	3.50E+00
4.35	1110.50	2.88E+15	1.46E+16	3.31E+16	7.46E+18	8.45E+17	2.90E+18	2.80E+12	6.48E+11	2.33E-01	3.24E+00
4.35	1135.50	2.37E+15	1.11E+16	2.44E+16	6.89E+18	7.85E+17	2.67E+18	2.58E+12	6.01E+11	2.15E-01	3.00E+00
4.35	1160.50	1.99E+15	8.54E+15	1.80E+16	6.37E+18	7.30E+17	2.45E+18	2.38E+12	5.57E+11	1.98E-01	2.77E+00
4.35	1185.50	1.70E+15	6.71E+15	1.34E+16	5.89E+18	6.79E+17	2.26E+18	2.20E+12	5.17E+11	1.83E-01	2.57E+00
4.35	1210.50	1.47E+15	5.37E+15	1.00E+16	5.45E+18	6.31E+17	2.09E+18	2.03E+12	4.79E+11	1.69E-01	2.38E+00
4.35	1235.50	1.30E+15	4.39E+15	7.58E+15	5.05E+18	5.87E+17	1.93E+18	1.88E+12	4.45E+11	1.56E-01	2.21E+00
4.35	1260.50	1.15E+15	3.66E+15	5.79E+15	4.69E+18	5.46E+17	1.79E+18	1.74E+12	4.14E+11	1.45E-01	2.05E+00
4.35	1285.50	1.03E+15	3.10E+15	4.49E+15	4.35E+18	5.09E+17	1.66E+18	1.62E+12	3.85E+11	1.34E-01	1.91E+00
4.35	1310.50	9.34E+14	2.68E+15	3.54E+15	4.04E+18	4.74E+17	1.54E+18	1.50E+12	3.58E+11	1.25E-01	1.77E+00
4.35	1335.50	8.51E+14	2.35E+15	2.84E+15	3.76E+18	4.43E+17	1.43E+18	1.40E+12	3.34E+11	1.16E-01	1.65E+00
4.35	1360.50	7.79E+14	2.09E+15	2.32E+15	3.49E+18	4.13E+17	1.33E+18	1.30E+12	3.11E+11	1.08E-01	1.54E+00
4.35	1385.50	7.17E+14	1.87E+15	2.32E+15	3.25E+18	3.86E+17	1.23E+18	1.21E+12	2.91E+11	1.00E-01	1.43E+00
4.35	1410.50	6.62E+14	1.70E+15	1.63E+15	3.03E+18	3.60E+17	1.15E+18	1.13E+12	2.71E+11	9.35E-02	1.34E+00

Table 15. Activities for an Axial Traverse Along the Reactor Centerline (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
4.35	1435.50	6.13E+14	1.55E+15	1.41E+15	2.83E+18	3.37E+17	1.07E+18	1.05E+12	2.53E+11	8.71E-02	1.25E+00
4.35	1460.50	5.69E+14	1.42E+15	1.23E+15	2.64E+18	3.15E+17	9.98E+17	9.79E+11	2.37E+11	8.13E-02	1.17E+00
4.35	1485.50	5.29E+14	1.31E+15	1.09E+15	2.46E+18	2.95E+17	9.31E+17	9.13E+11	2.21E+11	7.59E-02	1.09E+00
4.35	1510.50	4.92E+14	1.21E+15	9.77E+14	2.30E+18	2.76E+17	8.69E+17	8.53E+11	2.07E+11	7.08E-02	1.02E+00
4.35	1535.50	4.59E+14	1.12E+15	8.84E+14	2.15E+18	2.58E+17	8.12E+17	7.97E+11	1.94E+11	6.62E-02	9.51E-01
4.35	1560.50	4.29E+14	1.04E+15	8.06E+14	2.01E+18	2.42E+17	7.58E+17	7.45E+11	1.81E+11	6.18E-02	8.90E-01
4.35	1585.50	4.00E+14	9.71E+14	7.39E+14	1.88E+18	2.27E+17	7.08E+17	6.96E+11	1.70E+11	5.78E-02	8.32E-01
4.35	1610.50	3.74E+14	9.05E+14	6.81E+14	1.75E+18	2.12E+17	6.62E+17	6.51E+11	1.59E+11	5.41E-02	7.79E-01
4.35	1635.50	3.50E+14	8.45E+14	6.30E+14	1.64E+18	1.99E+17	6.19E+17	6.09E+11	1.49E+11	5.06E-02	7.29E-01
4.35	1660.50	3.27E+14	7.89E+14	5.84E+14	1.53E+18	1.86E+17	5.79E+17	5.70E+11	1.39E+11	4.73E-02	6.82E-01
4.35	1685.50	3.06E+14	7.37E+14	5.43E+14	1.44E+18	1.74E+17	5.41E+17	5.33E+11	1.30E+11	4.42E-02	6.38E-01
4.35	1710.50	2.86E+14	6.89E+14	5.06E+14	1.34E+18	1.63E+17	5.06E+17	4.98E+11	1.22E+11	4.14E-02	5.97E-01
4.35	1735.50	2.68E+14	6.45E+14	4.72E+14	1.25E+18	1.53E+17	4.73E+17	4.66E+11	1.14E+11	3.87E-02	5.58E-01
4.35	1760.50	2.51E+14	6.03E+14	4.40E+14	1.17E+18	1.43E+17	4.43E+17	4.35E+11	1.07E+11	3.62E-02	5.22E-01
4.35	1785.50	2.34E+14	5.64E+14	4.11E+14	1.10E+18	1.33E+17	4.14E+17	4.07E+11	9.97E+10	3.38E-02	4.88E-01
4.35	1810.50	2.19E+14	5.27E+14	3.84E+14	1.02E+18	1.25E+17	3.87E+17	3.80E+11	9.32E+10	3.16E-02	4.56E-01
4.35	1835.50	2.05E+14	4.93E+14	3.58E+14	9.55E+17	1.17E+17	3.62E+17	3.55E+11	8.71E+10	2.94E-02	4.26E-01
4.35	1860.50	1.92E+14	4.60E+14	3.35E+14	8.90E+17	1.09E+17	3.38E+17	3.31E+11	8.14E+10	2.75E-02	3.98E-01
4.35	1885.50	1.79E+14	4.30E+14	3.13E+14	8.29E+17	1.02E+17	3.16E+17	3.08E+11	7.60E+10	2.56E-02	3.71E-01
4.35	1910.50	1.67E+14	4.01E+14	2.92E+14	7.71E+17	9.48E+16	2.95E+17	2.86E+11	7.10E+10	2.38E-02	3.45E-01
4.35	1935.50	1.56E+14	3.75E+14	2.72E+14	7.16E+17	8.84E+16	2.76E+17	2.66E+11	6.62E+10	2.21E-02	3.22E-01
4.35	1960.50	1.45E+14	3.49E+14	2.53E+14	6.64E+17	8.23E+16	2.57E+17	2.47E+11	6.17E+10	2.05E-02	2.99E-01
4.35	1985.50	1.35E+14	3.25E+14	2.36E+14	6.14E+17	7.66E+16	2.40E+17	2.28E+11	5.75E+10	1.89E-02	2.78E-01
4.35	2010.50	1.26E+14	3.02E+14	2.19E+14	5.67E+17	7.12E+16	2.24E+17	2.10E+11	5.35E+10	1.75E-02	2.57E-01
4.35	2035.50	1.17E+14	2.81E+14	2.03E+14	5.22E+17	6.62E+16	2.09E+17	1.94E+11	4.98E+10	1.61E-02	2.38E-01
4.35	2060.50	1.08E+14	2.60E+14	1.88E+14	4.78E+17	6.14E+16	1.95E+17	1.78E+11	4.62E+10	1.48E-02	2.20E-01
4.35	2085.50	1.00E+14	2.41E+14	1.73E+14	4.37E+17	5.69E+16	1.82E+17	1.62E+11	4.29E+10	1.35E-02	2.02E-01
4.35	2110.50	9.29E+13	2.22E+14	1.58E+14	3.97E+17	5.27E+16	1.69E+17	1.47E+11	3.98E+10	1.22E-02	1.86E-01
4.35	2135.50	8.57E+13	2.03E+14	1.44E+14	3.59E+17	4.88E+16	1.58E+17	1.33E+11	3.69E+10	1.11E-02	1.70E-01
4.35	2160.50	7.89E+13	1.85E+14	1.30E+14	3.22E+17	4.51E+16	1.47E+17	1.20E+11	3.42E+10	9.94E-03	1.55E-01
4.35	2185.50	7.23E+13	1.66E+14	1.16E+14	2.86E+17	4.18E+16	1.38E+17	1.06E+11	3.18E+10	8.84E-03	1.41E-01
4.35	2210.50	6.57E+13	1.48E+14	1.01E+14	2.52E+17	3.86E+16	1.29E+17	9.38E+10	2.94E+10	7.79E-03	1.28E-01
4.35	2235.50	5.88E+13	1.27E+14	8.70E+13	2.19E+17	3.59E+16	1.21E+17	8.14E+10	2.74E+10	6.75E-03	1.16E-01
4.35	2260.50	5.12E+13	1.06E+14	7.28E+13	1.88E+17	3.33E+16	1.13E+17	6.97E+10	2.55E+10	5.78E-03	1.04E-01
4.35	2285.50	4.14E+13	8.19E+13	5.83E+13	1.56E+17	3.16E+16	1.06E+17	5.80E+10	2.40E+10	4.77E-03	9.32E-02
4.35	2310.70	3.00E+13	6.44E+13	4.84E+13	1.34E+17	2.22E+16	9.92E+16	4.98E+10	2.39E+10	4.02E-03	8.80E-02
4.35	2336.10	2.04E+13	5.24E+13	4.26E+13	1.27E+17	2.84E+16	8.83E+16	4.70E+10	2.07E+10	3.80E-03	7.83E-02
4.35	2360.80	9.62E+12	2.52E+13	2.68E+13	8.84E+16	2.68E+16	8.47E+16	3.27E+10	1.82E+10	2.70E-03	6.37E-02
4.35	2384.80	4.76E+12	8.83E+12	1.10E+13	3.88E+16	2.38E+16	7.89E+16	1.44E+10	1.63E+10	1.19E-03	4.84E-02
4.35	2408.80	2.56E+12	3.45E+12	4.23E+12	1.73E+16	2.01E+16	6.41E+16	6.41E+09	1.43E+10	5.31E-04	3.87E-02
4.35	2432.80	1.41E+12	1.45E+12	1.65E+12	7.31E+15	1.70E+16	6.24E+16	2.71E+09	1.24E+10	2.26E-04	3.21E-02
4.35	2456.80	8.01E+11	6.97E+11	6.92E+11	3.23E+15	1.45E+16	5.41E+16	1.20E+09	1.08E+10	9.97E-05	2.73E-02
4.35	2480.80	4.62E+11	3.55E+11	3.15E+11	1.26E+15	1.24E+16	4.52E+16	4.69E+08	9.34E+09	3.93E-05	2.32E-02
4.35	2504.90	2.53E+11	1.60E+11	1.25E+11	3.76E+14	1.06E+16	3.42E+16	1.42E+08	7.90E+09	1.19E-05	1.95E-02

Table 16. Activities for an Axial Traverse Along the Side of the Reflector Vessel

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV	Total	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
						Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
1762.50	-2256.80	9.07E+09	5.99E+09	4.58E+09	5.78E+13	1.36E+15	5.29E+15	2.14E+07	1.06E+09	1.78E-06	2.58E-03
1762.50	-2216.80	2.27E+10	1.65E+10	1.48E+10	2.07E+14	1.71E+15	7.61E+15	7.64E+07	1.34E+09	6.39E-06	3.31E-03
1762.50	-2176.80	5.74E+10	4.93E+10	4.54E+10	6.42E+14	2.17E+15	9.55E+15	2.37E+08	1.64E+09	1.97E-05	4.15E-03
1762.50	-2136.80	1.48E+11	1.61E+11	1.95E+11	2.30E+15	2.85E+15	1.15E+16	8.50E+08	2.02E+09	7.04E-05	5.42E-03
1762.50	-2096.80	4.70E+11	9.90E+11	1.03E+12	1.40E+16	3.62E+15	1.29E+16	5.15E+09	2.43E+09	4.26E-04	8.94E-03
1762.50	-2064.10	1.15E+12	2.54E+12	2.05E+12	2.61E+16	4.09E+15	1.34E+16	9.64E+09	2.83E+09	7.87E-04	1.26E-02
1762.50	-2038.70	1.69E+12	3.13E+12	2.36E+12	2.85E+16	4.47E+15	1.46E+16	1.05E+10	3.16E+09	8.58E-04	1.39E-02
1762.50	-2010.80	2.29E+12	3.78E+12	2.72E+12	3.22E+16	4.88E+15	1.62E+16	1.19E+10	3.47E+09	9.74E-04	1.55E-02
1762.50	-1980.40	2.88E+12	4.77E+12	3.26E+12	3.84E+16	5.45E+15	1.78E+16	1.42E+10	3.85E+09	1.17E-03	1.78E-02
1762.50	-1950.00	3.24E+12	5.58E+12	3.82E+12	4.59E+16	6.02E+15	1.94E+16	1.70E+10	4.21E+09	1.39E-03	2.03E-02
1762.50	-1919.60	3.53E+12	6.32E+12	4.35E+12	5.39E+16	6.66E+15	2.10E+16	1.99E+10	4.61E+09	1.63E-03	2.30E-02
1762.50	-1889.20	3.77E+12	6.84E+12	4.78E+12	6.22E+16	7.33E+15	2.27E+16	2.30E+10	5.04E+09	1.89E-03	2.59E-02
1762.50	-1858.80	4.03E+12	7.40E+12	5.23E+12	7.09E+16	8.06E+15	2.45E+16	2.62E+10	5.49E+09	2.15E-03	2.90E-02
1762.50	-1828.40	4.28E+12	7.82E+12	5.56E+12	8.00E+16	8.84E+15	2.64E+16	2.95E+10	5.98E+09	2.42E-03	3.21E-02
1762.50	-1798.00	4.56E+12	8.36E+12	5.96E+12	8.92E+16	9.65E+15	2.85E+16	3.30E+10	6.49E+09	2.70E-03	3.54E-02
1762.50	-1767.60	4.86E+12	8.78E+12	6.26E+12	9.87E+16	1.05E+16	3.06E+16	3.65E+10	7.03E+09	2.99E-03	3.88E-02
1762.50	-1737.20	5.19E+12	9.37E+12	6.66E+12	1.09E+17	1.14E+16	3.29E+16	4.01E+10	7.60E+09	3.29E-03	4.23E-02
1762.50	-1706.80	5.53E+12	9.86E+12	6.98E+12	1.19E+17	1.23E+16	3.53E+16	4.38E+10	8.20E+09	3.59E-03	4.60E-02
1762.50	-1676.40	5.90E+12	1.05E+13	7.41E+12	1.29E+17	1.33E+16	3.77E+16	4.76E+10	8.81E+09	3.91E-03	4.98E-02
1762.50	-1646.00	6.28E+12	1.11E+13	7.77E+12	1.40E+17	1.43E+16	4.03E+16	5.16E+10	9.45E+09	4.23E-03	5.37E-02
1762.50	-1615.60	6.69E+12	1.18E+13	8.25E+12	1.51E+17	1.54E+16	4.30E+16	5.56E+10	1.01E+10	4.56E-03	5.77E-02
1762.50	-1585.20	7.10E+12	1.24E+13	8.66E+12	1.62E+17	1.64E+16	4.58E+16	5.98E+10	1.08E+10	4.90E-03	6.19E-02
1762.50	-1554.80	7.55E+12	1.32E+13	9.18E+12	1.73E+17	1.75E+16	4.88E+16	6.41E+10	1.15E+10	5.26E-03	6.62E-02
1762.50	-1524.40	8.00E+12	1.39E+13	9.64E+12	1.85E+17	1.87E+16	5.18E+16	6.85E+10	1.23E+10	5.62E-03	7.06E-02
1762.50	-1496.00	8.48E+12	1.48E+13	1.02E+13	1.98E+17	1.99E+16	5.49E+16	7.30E+10	1.30E+10	5.99E-03	7.52E-02
1762.50	-1463.60	8.97E+12	1.55E+13	1.07E+13	2.11E+17	2.11E+16	5.82E+16	7.78E+10	1.38E+10	6.38E-03	7.99E-02
1762.50	-1433.20	9.48E+12	1.65E+13	1.13E+13	2.24E+17	2.24E+16	6.16E+16	8.26E+10	1.47E+10	6.78E-03	8.48E-02
1762.50	-1402.80	1.00E+13	1.73E+13	1.19E+13	2.37E+17	2.37E+16	6.51E+16	8.76E+10	1.55E+10	7.19E-03	8.99E-02
1762.50	-1372.40	1.06E+13	1.83E+13	1.26E+13	2.51E+17	2.51E+16	6.87E+16	9.28E+10	1.64E+10	7.61E-03	9.51E-02
1762.50	-1342.00	1.11E+13	1.92E+13	1.32E+13	2.66E+17	2.65E+16	7.24E+16	9.81E+10	1.73E+10	8.05E-03	1.00E-01
1762.50	-1311.60	1.17E+13	2.03E+13	1.39E+13	2.81E+17	2.79E+16	7.63E+16	1.04E+11	1.82E+10	8.50E-03	1.06E-01
1762.50	-1281.20	1.23E+13	2.12E+13	1.45E+13	2.96E+17	2.94E+16	8.03E+16	1.09E+11	1.92E+10	8.97E-03	1.12E-01
1762.50	-1250.80	1.29E+13	2.23E+13	1.53E+13	3.12E+17	3.10E+16	8.44E+16	1.15E+11	2.02E+10	9.44E-03	1.18E-01
1762.50	-1220.40	1.36E+13	2.34E+13	1.60E+13	3.28E+17	3.26E+16	8.86E+16	1.21E+11	2.12E+10	9.94E-03	1.24E-01
1762.50	-1190.00	1.42E+13	2.45E+13	1.67E+13	3.45E+17	3.42E+16	9.30E+16	1.27E+11	2.23E+10	1.04E-02	1.30E-01
1762.50	-1159.60	1.49E+13	2.57E+13	1.75E+13	3.62E+17	3.59E+16	9.75E+16	1.34E+11	2.34E+10	1.10E-02	1.36E-01
1762.50	-1129.20	1.56E+13	2.69E+13	1.83E+13	3.80E+17	3.76E+16	1.02E+17	1.40E+11	2.45E+10	1.15E-02	1.43E-01
1762.50	-1098.80	1.63E+13	2.81E+13	1.91E+13	3.98E+17	3.94E+16	1.07E+17	1.47E+11	2.56E+10	1.21E-02	1.50E-01
1762.50	-1068.40	1.71E+13	2.93E+13	2.00E+13	4.17E+17	4.12E+16	1.12E+17	1.54E+11	2.68E+10	1.26E-02	1.57E-01
1762.50	-1038.00	1.78E+13	3.06E+13	2.08E+13	4.36E+17	4.31E+16	1.17E+17	1.61E+11	2.80E+10	1.32E-02	1.64E-01
1762.50	-1007.60	1.86E+13	3.19E+13	2.17E+13	4.56E+17	4.50E+16	1.22E+17	1.68E+11	2.93E+10	1.38E-02	1.71E-01
1762.50	-977.20	1.94E+13	3.32E+13	2.26E+13	4.76E+17	4.70E+16	1.27E+17	1.76E+11	3.05E+10	1.44E-02	1.79E-01
1762.50	-946.80	2.02E+13	3.46E+13	2.35E+13	4.97E+17	4.90E+16	1.32E+17	1.83E+11	3.18E+10	1.50E-02	1.87E-01
1762.50	-916.40	2.10E+13	3.60E+13	2.45E+13	5.18E+17	5.11E+16	1.38E+17	1.91E+11	3.32E+10	1.57E-02	1.95E-01

Table 16. Activities for an Axial Traverse Along the Side of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
1762.50	-886.00	2.18E+13	3.74E+13	2.54E+13	5.39E+17	5.32E+16	1.43E+17	1.99E+11	3.45E+10	1.63E-02	2.03E-01
1762.50	-855.60	2.27E+13	3.89E+13	2.64E+13	5.61E+17	5.53E+16	1.49E+17	2.07E+11	3.59E+10	1.70E-02	2.11E-01
1762.50	-825.20	2.36E+13	4.03E+13	2.73E+13	5.84E+17	5.75E+16	1.55E+17	2.16E+11	3.73E+10	1.77E-02	2.19E-01
1762.50	-794.80	2.45E+13	4.19E+13	2.84E+13	6.07E+17	5.98E+16	1.61E+17	2.24E+11	3.88E+10	1.84E-02	2.28E-01
1762.50	-764.40	2.54E+13	4.34E+13	2.94E+13	6.30E+17	6.20E+16	1.67E+17	2.33E+11	4.02E+10	1.91E-02	2.36E-01
1762.50	-734.00	2.63E+13	4.49E+13	3.04E+13	6.53E+17	6.43E+16	1.73E+17	2.41E+11	4.17E+10	1.98E-02	2.45E-01
1762.50	-703.60	2.71E+13	4.64E+13	3.14E+13	6.77E+17	6.67E+16	1.79E+17	2.50E+11	4.32E+10	2.05E-02	2.54E-01
1762.50	-673.20	2.80E+13	4.79E+13	3.24E+13	7.02E+17	6.90E+16	1.85E+17	2.59E+11	4.47E+10	2.13E-02	2.63E-01
1762.50	-645.00	2.88E+13	4.93E+13	3.33E+13	7.25E+17	7.10E+16	1.91E+17	2.68E+11	4.61E+10	2.20E-02	2.71E-01
1762.50	-621.75	2.96E+13	5.05E+13	3.42E+13	7.44E+17	7.26E+16	1.95E+17	2.75E+11	4.72E+10	2.25E-02	2.78E-01
1762.50	-601.25	2.99E+13	5.15E+13	3.48E+13	7.62E+17	7.42E+16	2.00E+17	2.81E+11	4.82E+10	2.31E-02	2.85E-01
1762.50	-580.75	3.05E+13	5.25E+13	3.55E+13	7.79E+17	7.58E+16	2.04E+17	2.88E+11	4.93E+10	2.36E-02	2.91E-01
1762.50	-560.25	3.11E+13	5.35E+13	3.61E+13	7.97E+17	7.75E+16	2.08E+17	2.94E+11	5.04E+10	2.41E-02	2.98E-01
1762.50	-539.75	3.16E+13	5.45E+13	3.68E+13	8.15E+17	7.92E+16	2.13E+17	3.01E+11	5.15E+10	2.47E-02	3.04E-01
1762.50	-519.25	3.21E+13	5.54E+13	3.75E+13	8.33E+17	8.06E+16	2.16E+17	3.08E+11	5.25E+10	2.52E-02	3.11E-01
1762.50	-504.00	3.23E+13	5.62E+13	3.80E+13	8.47E+17	8.14E+16	2.19E+17	3.13E+11	5.31E+10	2.56E-02	3.16E-01
1762.50	-494.00	3.24E+13	5.66E+13	3.83E+13	8.56E+17	8.20E+16	2.21E+17	3.16E+11	5.36E+10	2.59E-02	3.19E-01
1762.50	-484.00	3.27E+13	5.71E+13	3.87E+13	8.65E+17	8.27E+16	2.22E+17	3.19E+11	5.41E+10	2.62E-02	3.22E-01
1762.50	-474.00	3.28E+13	5.76E+13	3.90E+13	8.73E+17	8.32E+16	2.24E+17	3.22E+11	5.45E+10	2.64E-02	3.25E-01
1762.50	-466.50	3.30E+13	5.80E+13	3.93E+13	8.79E+17	8.35E+16	2.25E+17	3.25E+11	5.48E+10	2.66E-02	3.26E-01
1762.50	-461.50	3.32E+13	5.84E+13	3.95E+13	8.83E+17	8.38E+16	2.26E+17	3.26E+11	5.49E+10	2.67E-02	3.28E-01
1762.50	-454.00	3.34E+13	5.86E+13	3.97E+13	8.89E+17	8.45E+16	2.28E+17	3.28E+11	5.54E+10	2.69E-02	3.30E-01
1762.50	-444.00	3.37E+13	5.89E+13	3.98E+13	8.96E+17	8.55E+16	2.30E+17	3.31E+11	5.59E+10	2.71E-02	3.33E-01
1762.50	-433.33	3.41E+13	5.96E+13	4.03E+13	9.04E+17	8.65E+16	2.32E+17	3.34E+11	5.65E+10	2.73E-02	3.36E-01
1762.50	-420.13	3.46E+13	5.99E+13	4.05E+13	9.13E+17	8.76E+16	2.35E+17	3.37E+11	5.71E+10	2.76E-02	3.40E-01
1762.50	-405.05	3.51E+13	6.07E+13	4.11E+13	9.23E+17	8.87E+16	2.38E+17	3.41E+11	5.78E+10	2.79E-02	3.44E-01
1762.50	-389.95	3.55E+13	6.13E+13	4.15E+13	9.33E+17	8.97E+16	2.41E+17	3.45E+11	5.84E+10	2.82E-02	3.47E-01
1762.50	-374.85	3.59E+13	6.21E+13	4.20E+13	9.44E+17	9.07E+16	2.43E+17	3.48E+11	5.91E+10	2.86E-02	3.51E-01
1762.50	-359.75	3.63E+13	6.27E+13	4.24E+13	9.54E+17	9.17E+16	2.46E+17	3.52E+11	5.97E+10	2.89E-02	3.55E-01
1762.50	-344.65	3.67E+13	6.34E+13	4.29E+13	9.64E+17	9.26E+16	2.48E+17	3.56E+11	6.03E+10	2.92E-02	3.59E-01
1762.50	-329.55	3.70E+13	6.40E+13	4.33E+13	9.74E+17	9.36E+16	2.51E+17	3.60E+11	6.10E+10	2.95E-02	3.62E-01
1762.50	-314.45	3.75E+13	6.48E+13	4.38E+13	9.84E+17	9.46E+16	2.54E+17	3.63E+11	6.16E+10	2.98E-02	3.66E-01
1762.50	-299.35	3.78E+13	6.53E+13	4.42E+13	9.94E+17	9.56E+16	2.56E+17	3.67E+11	6.22E+10	3.01E-02	3.70E-01
1762.50	-283.44	3.83E+13	6.61E+13	4.47E+13	1.00E+18	9.66E+16	2.59E+17	3.71E+11	6.29E+10	3.04E-02	3.74E-01
1762.50	-266.72	3.87E+13	6.67E+13	4.50E+13	1.01E+18	9.77E+16	2.62E+17	3.75E+11	6.35E+10	3.07E-02	3.78E-01
1762.50	-250.00	3.91E+13	6.75E+13	4.56E+13	1.02E+18	9.87E+16	2.64E+17	3.78E+11	6.42E+10	3.10E-02	3.82E-01
1762.50	-233.28	3.95E+13	6.80E+13	4.59E+13	1.04E+18	9.98E+16	2.67E+17	3.82E+11	6.49E+10	3.13E-02	3.85E-01
1762.50	-216.56	3.99E+13	6.88E+13	4.64E+13	1.05E+18	1.01E+17	2.70E+17	3.86E+11	6.55E+10	3.16E-02	3.89E-01
1762.50	-199.84	4.02E+13	6.93E+13	4.67E+13	1.06E+18	1.02E+17	2.72E+17	3.90E+11	6.61E+10	3.19E-02	3.93E-01
1762.50	-183.12	4.06E+13	7.00E+13	4.72E+13	1.07E+18	1.03E+17	2.75E+17	3.93E+11	6.68E+10	3.22E-02	3.97E-01
1762.50	-166.40	4.09E+13	7.04E+13	4.75E+13	1.07E+18	1.04E+17	2.77E+17	3.97E+11	6.74E+10	3.25E-02	4.00E-01
1762.50	-149.68	4.13E+13	7.11E+13	4.79E+13	1.08E+18	1.05E+17	2.80E+17	4.00E+11	6.80E+10	3.28E-02	4.04E-01
1762.50	-132.96	4.16E+13	7.15E+13	4.82E+13	1.09E+18	1.06E+17	2.82E+17	4.04E+11	6.86E+10	3.31E-02	4.07E-01
1762.50	-116.24	4.19E+13	7.21E+13	4.86E+13	1.10E+18	1.07E+17	2.84E+17	4.08E+11	6.92E+10	3.34E-02	4.11E-01

Table 16. Activities for an Axial Traverse Along the Side of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
1762.50	-99.52	4.21E+13	7.24E+13	4.88E+13	1.11E+18	1.07E+17	2.87E+17	4.11E+11	6.98E+10	3.37E-02	4.14E-01
1762.50	-82.80	4.23E+13	7.29E+13	4.91E+13	1.12E+18	1.08E+17	2.89E+17	4.15E+11	7.03E+10	3.40E-02	4.18E-01
1762.50	-66.08	4.24E+13	7.33E+13	4.94E+13	1.13E+18	1.09E+17	2.90E+17	4.18E+11	7.08E+10	3.43E-02	4.21E-01
1762.50	-53.54	4.24E+13	7.36E+13	4.95E+13	1.14E+18	1.09E+17	2.91E+17	4.21E+11	7.10E+10	3.45E-02	4.23E-01
1762.50	-45.18	4.23E+13	7.40E+13	4.98E+13	1.14E+18	1.09E+17	2.91E+17	4.23E+11	7.11E+10	3.46E-02	4.25E-01
1762.50	-38.50	4.23E+13	7.42E+13	4.99E+13	1.15E+18	1.09E+17	2.91E+17	4.24E+11	7.11E+10	3.47E-02	4.25E-01
1762.50	-33.50	4.22E+13	7.43E+13	5.00E+13	1.15E+18	1.09E+17	2.92E+17	4.24E+11	7.12E+10	3.48E-02	4.26E-01
1762.50	-28.00	4.24E+13	7.43E+13	5.01E+13	1.15E+18	1.09E+17	2.93E+17	4.25E+11	7.14E+10	3.49E-02	4.27E-01
1762.50	-20.00	4.26E+13	7.44E+13	5.01E+13	1.16E+18	1.10E+17	2.94E+17	4.27E+11	7.17E+10	3.50E-02	4.29E-01
1762.50	-10.00	4.27E+13	7.45E+13	5.02E+13	1.16E+18	1.10E+17	2.95E+17	4.28E+11	7.20E+10	3.51E-02	4.30E-01
1762.50	.00	4.28E+13	7.46E+13	5.03E+13	1.16E+18	1.11E+17	2.96E+17	4.29E+11	7.22E+10	3.52E-02	4.31E-01
1762.50	10.00	4.29E+13	7.48E+13	5.04E+13	1.17E+18	1.11E+17	2.96E+17	4.30E+11	7.24E+10	3.53E-02	4.32E-01
1762.50	20.00	4.30E+13	7.50E+13	5.05E+13	1.17E+18	1.11E+17	2.97E+17	4.31E+11	7.25E+10	3.53E-02	4.33E-01
1762.50	30.00	4.31E+13	7.51E+13	5.06E+13	1.17E+18	1.11E+17	2.98E+17	4.32E+11	7.27E+10	3.54E-02	4.34E-01
1762.50	40.00	4.32E+13	7.52E+13	5.07E+13	1.17E+18	1.12E+17	2.98E+17	4.33E+11	7.28E+10	3.55E-02	4.35E-01
1762.50	50.00	4.32E+13	7.53E+13	5.08E+13	1.17E+18	1.12E+17	2.99E+17	4.34E+11	7.29E+10	3.55E-02	4.36E-01
1762.50	60.00	4.32E+13	7.56E+13	5.09E+13	1.18E+18	1.12E+17	2.98E+17	4.34E+11	7.29E+10	3.56E-02	4.36E-01
1762.50	67.50	4.32E+13	7.57E+13	5.10E+13	1.18E+18	1.11E+17	2.98E+17	4.34E+11	7.28E+10	3.56E-02	4.36E-01
1762.50	72.50	4.32E+13	7.58E+13	5.10E+13	1.18E+18	1.11E+17	2.98E+17	4.34E+11	7.28E+10	3.56E-02	4.36E-01
1762.50	80.00	4.34E+13	7.57E+13	5.10E+13	1.18E+18	1.12E+17	2.99E+17	4.35E+11	7.30E+10	3.56E-02	4.36E-01
1762.50	90.42	4.35E+13	7.57E+13	5.11E+13	1.18E+18	1.12E+17	3.00E+17	4.35E+11	7.31E+10	3.56E-02	4.37E-01
1762.50	101.10	4.37E+13	7.58E+13	5.11E+13	1.18E+18	1.12E+17	3.00E+17	4.35E+11	7.32E+10	3.56E-02	4.37E-01
1762.50	111.57	4.38E+13	7.59E+13	5.12E+13	1.18E+18	1.12E+17	3.00E+17	4.34E+11	7.32E+10	3.56E-02	4.37E-01
1762.50	125.16	4.40E+13	7.59E+13	5.11E+13	1.17E+18	1.13E+17	3.01E+17	4.34E+11	7.33E+10	3.56E-02	4.37E-01
1762.50	141.88	4.42E+13	7.59E+13	5.11E+13	1.17E+18	1.13E+17	3.01E+17	4.33E+11	7.33E+10	3.55E-02	4.36E-01
1762.50	158.60	4.42E+13	7.60E+13	5.11E+13	1.17E+18	1.13E+17	3.00E+17	4.32E+11	7.32E+10	3.54E-02	4.36E-01
1762.50	175.32	4.42E+13	7.59E+13	5.11E+13	1.17E+18	1.13E+17	3.00E+17	4.32E+11	7.31E+10	3.54E-02	4.35E-01
1762.50	192.04	4.42E+13	7.59E+13	5.11E+13	1.17E+18	1.12E+17	2.99E+17	4.31E+11	7.29E+10	3.53E-02	4.34E-01
1762.50	208.76	4.41E+13	7.58E+13	5.10E+13	1.17E+18	1.12E+17	2.99E+17	4.30E+11	7.28E+10	3.53E-02	4.33E-01
1762.50	225.48	4.40E+13	7.57E+13	5.10E+13	1.16E+18	1.12E+17	2.98E+17	4.30E+11	7.26E+10	3.52E-02	4.32E-01
1762.50	242.20	4.39E+13	7.55E+13	5.09E+13	1.16E+18	1.12E+17	2.97E+17	4.29E+11	7.24E+10	3.51E-02	4.31E-01
1762.50	258.92	4.38E+13	7.53E+13	5.08E+13	1.16E+18	1.11E+17	2.97E+17	4.28E+11	7.22E+10	3.51E-02	4.30E-01
1762.50	275.64	4.36E+13	7.50E+13	5.06E+13	1.15E+18	1.11E+17	2.96E+17	4.26E+11	7.20E+10	3.50E-02	4.29E-01
1762.50	291.55	4.35E+13	7.49E+13	5.05E+13	1.15E+18	1.10E+17	2.95E+17	4.25E+11	7.18E+10	3.49E-02	4.28E-01
1762.50	306.65	4.33E+13	7.46E+13	5.03E+13	1.15E+18	1.10E+17	2.94E+17	4.24E+11	7.15E+10	3.48E-02	4.27E-01
1762.50	321.75	4.32E+13	7.44E+13	5.02E+13	1.14E+18	1.10E+17	2.93E+17	4.23E+11	7.13E+10	3.46E-02	4.25E-01
1762.50	336.85	4.30E+13	7.40E+13	5.00E+13	1.14E+18	1.09E+17	2.92E+17	4.21E+11	7.10E+10	3.45E-02	4.24E-01
1762.50	351.95	4.28E+13	7.39E+13	4.98E+13	1.14E+18	1.09E+17	2.90E+17	4.20E+11	7.08E+10	3.44E-02	4.22E-01
1762.50	367.05	4.26E+13	7.34E+13	4.95E+13	1.13E+18	1.08E+17	2.89E+17	4.18E+11	7.05E+10	3.42E-02	4.20E-01
1762.50	382.15	4.25E+13	7.32E+13	4.94E+13	1.13E+18	1.08E+17	2.88E+17	4.16E+11	7.02E+10	3.41E-02	4.18E-01
1762.50	397.25	4.22E+13	7.27E+13	4.91E+13	1.12E+18	1.07E+17	2.87E+17	4.14E+11	6.99E+10	3.39E-02	4.16E-01
1762.50	412.33	4.20E+13	7.25E+13	4.89E+13	1.12E+18	1.07E+17	2.85E+17	4.12E+11	6.95E+10	3.38E-02	4.14E-01
1762.50	425.08	4.17E+13	7.21E+13	4.87E+13	1.11E+18	1.06E+17	2.84E+17	4.10E+11	6.91E+10	3.36E-02	4.12E-01
1762.50	438.15	4.16E+13	7.19E+13	4.85E+13	1.11E+18	1.06E+17	2.83E+17	4.08E+11	6.89E+10	3.34E-02	4.11E-01

Table 16. Activities for an Axial Traverse Along the Side of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	E>2.2 MeV				Total		Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
		Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
1762.50	453.83	4.12E+13	7.12E+13	4.81E+13	1.10E+18	1.05E+17	2.81E+17	4.06E+11	6.84E+10	3.32E-02	4.08E-01
1762.50	466.65	4.09E+13	7.10E+13	4.79E+13	1.09E+18	1.04E+17	2.79E+17	4.03E+11	6.80E+10	3.31E-02	4.06E-01
1762.50	477.07	4.07E+13	7.07E+13	4.77E+13	1.09E+18	1.04E+17	2.77E+17	4.02E+11	6.76E+10	3.29E-02	4.04E-01
1762.50	487.75	4.04E+13	7.05E+13	4.76E+13	1.08E+18	1.03E+17	2.75E+17	3.99E+11	6.71E+10	3.27E-02	4.01E-01
1762.50	495.50	4.02E+13	7.07E+13	4.76E+13	1.08E+18	1.02E+17	2.74E+17	3.98E+11	6.68E+10	3.26E-02	3.99E-01
1762.50	500.50	4.01E+13	7.03E+13	4.74E+13	1.07E+18	1.02E+17	2.73E+17	3.96E+11	6.66E+10	3.25E-02	3.98E-01
1762.50	508.00	4.01E+13	6.99E+13	4.72E+13	1.07E+18	1.02E+17	2.73E+17	3.95E+11	6.65E+10	3.24E-02	3.97E-01
1762.50	520.00	4.02E+13	6.94E+13	4.68E+13	1.06E+18	1.02E+17	2.72E+17	3.92E+11	6.63E+10	3.21E-02	3.95E-01
1762.50	537.00	4.01E+13	6.88E+13	4.64E+13	1.05E+18	1.01E+17	2.70E+17	3.87E+11	6.58E+10	3.17E-02	3.91E-01
1762.50	560.00	3.99E+13	6.81E+13	4.59E+13	1.03E+18	1.00E+17	2.67E+17	3.81E+11	6.50E+10	3.12E-02	3.85E-01
1762.50	585.50	3.94E+13	6.72E+13	4.52E+13	1.01E+18	9.87E+16	2.63E+17	3.74E+11	6.39E+10	3.07E-02	3.78E-01
1762.50	610.50	3.88E+13	6.62E+13	4.46E+13	9.94E+17	9.70E+16	2.59E+17	3.67E+11	6.28E+10	3.01E-02	3.71E-01
1762.50	635.50	3.82E+13	6.52E+13	4.39E+13	9.76E+17	9.52E+16	2.54E+17	3.61E+11	6.17E+10	2.96E-02	3.65E-01
1762.50	660.50	3.76E+13	6.41E+13	4.32E+13	9.58E+17	9.34E+16	2.50E+17	3.54E+11	6.05E+10	2.90E-02	3.58E-01
1762.50	685.50	3.69E+13	6.30E+13	4.25E+13	9.40E+17	9.16E+16	2.45E+17	3.47E+11	5.94E+10	2.85E-02	3.51E-01
1762.50	710.50	3.62E+13	6.18E+13	4.17E+13	9.21E+17	8.98E+16	2.40E+17	3.40E+11	5.82E+10	2.79E-02	3.44E-01
1762.50	735.50	3.55E+13	6.06E+13	4.09E+13	9.02E+17	8.80E+16	2.35E+17	3.33E+11	5.70E+10	2.73E-02	3.37E-01
1762.50	760.50	3.48E+13	5.94E+13	4.01E+13	8.83E+17	8.61E+16	2.30E+17	3.26E+11	5.58E+10	2.68E-02	3.30E-01
1762.50	785.50	3.40E+13	5.82E+13	3.93E+13	8.64E+17	8.42E+16	2.26E+17	3.19E+11	5.46E+10	2.62E-02	3.23E-01
1762.50	810.50	3.33E+13	5.69E+13	3.85E+13	8.44E+17	8.24E+16	2.21E+17	3.12E+11	5.34E+10	2.56E-02	3.16E-01
1762.50	835.50	3.25E+13	5.57E+13	3.76E+13	8.25E+17	8.04E+16	2.16E+17	3.05E+11	5.22E+10	2.50E-02	3.08E-01
1762.50	860.50	3.18E+13	5.44E+13	3.68E+13	8.05E+17	7.85E+16	2.10E+17	2.97E+11	5.09E+10	2.44E-02	3.01E-01
1762.50	885.50	3.10E+13	5.31E+13	3.59E+13	7.85E+17	7.66E+16	2.05E+17	2.90E+11	4.97E+10	2.38E-02	2.94E-01
1762.50	910.50	3.03E+13	5.18E+13	3.51E+13	7.65E+17	7.47E+16	2.00E+17	2.83E+11	4.85E+10	2.32E-02	2.86E-01
1762.50	935.50	2.95E+13	5.06E+13	3.42E+13	7.46E+17	7.28E+16	1.95E+17	2.75E+11	4.72E+10	2.26E-02	2.79E-01
1762.50	960.50	2.88E+13	4.93E+13	3.34E+13	7.26E+17	7.09E+16	1.90E+17	2.68E+11	4.60E+10	2.20E-02	2.71E-01
1762.50	985.50	2.80E+13	4.81E+13	3.25E+13	7.06E+17	6.89E+16	1.85E+17	2.61E+11	4.48E+10	2.14E-02	2.64E-01
1762.50	1010.50	2.73E+13	4.68E+13	3.17E+13	6.86E+17	6.71E+16	1.80E+17	2.53E+11	4.36E+10	2.08E-02	2.57E-01
1762.50	1035.50	2.65E+13	4.56E+13	3.09E+13	6.66E+17	6.52E+16	1.75E+17	2.46E+11	4.23E+10	2.02E-02	2.49E-01
1762.50	1060.50	2.58E+13	4.43E+13	3.00E+13	6.47E+17	6.33E+16	1.70E+17	2.39E+11	4.11E+10	1.96E-02	2.42E-01
1762.50	1085.50	2.51E+13	4.31E+13	2.92E+13	6.27E+17	6.14E+16	1.65E+17	2.32E+11	3.99E+10	1.90E-02	2.35E-01
1762.50	1110.50	2.43E+13	4.18E+13	2.84E+13	6.08E+17	5.96E+16	1.60E+17	2.25E+11	3.87E+10	1.84E-02	2.28E-01
1762.50	1135.50	2.36E+13	4.06E+13	2.76E+13	5.89E+17	5.77E+16	1.56E+17	2.18E+11	3.75E+10	1.78E-02	2.21E-01
1762.50	1160.50	2.29E+13	3.93E+13	2.67E+13	5.70E+17	5.59E+16	1.51E+17	2.11E+11	3.64E+10	1.73E-02	2.14E-01
1762.50	1185.50	2.22E+13	3.82E+13	2.59E+13	5.52E+17	5.41E+16	1.46E+17	2.04E+11	3.52E+10	1.67E-02	2.07E-01
1762.50	1210.50	2.15E+13	3.69E+13	2.51E+13	5.34E+17	5.24E+16	1.41E+17	1.97E+11	3.41E+10	1.62E-02	2.00E-01
1762.50	1235.50	2.08E+13	3.58E+13	2.43E+13	5.16E+17	5.06E+16	1.37E+17	1.90E+11	3.29E+10	1.56E-02	1.93E-01
1762.50	1260.50	2.01E+13	3.46E+13	2.35E+13	4.98E+17	4.89E+16	1.32E+17	1.84E+11	3.18E+10	1.51E-02	1.87E-01
1762.50	1285.50	1.94E+13	3.35E+13	2.28E+13	4.80E+17	4.72E+16	1.28E+17	1.77E+11	3.07E+10	1.46E-02	1.80E-01
1762.50	1310.50	1.87E+13	3.23E+13	2.20E+13	4.63E+17	4.56E+16	1.23E+17	1.71E+11	2.97E+10	1.40E-02	1.74E-01
1762.50	1335.50	1.81E+13	3.13E+13	2.13E+13	4.47E+17	4.39E+16	1.19E+17	1.65E+11	2.86E+10	1.35E-02	1.68E-01
1762.50	1360.50	1.74E+13	3.01E+13	2.05E+13	4.30E+17	4.23E+16	1.15E+17	1.59E+11	2.76E+10	1.30E-02	1.62E-01
1762.50	1385.50	1.68E+13	2.91E+13	1.99E+13	4.14E+17	4.08E+16	1.11E+17	1.53E+11	2.66E+10	1.25E-02	1.56E-01
1762.50	1410.50	1.62E+13	2.80E+13	1.91E+13	3.98E+17	3.92E+16	1.07E+17	1.47E+11	2.56E+10	1.21E-02	1.50E-01

Table 16. Activities for an Axial Traverse Along the Side of the Reflector Vessel (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
1762.50	1435.50	1.56E+13	2.71E+13	1.85E+13	3.83E+17	3.77E+16	1.03E+17	1.41E+11	2.46E+10	1.16E-02	1.44E-01
1762.50	1460.50	1.50E+13	2.60E+13	1.77E+13	3.68E+17	3.63E+16	9.87E+16	1.36E+11	2.37E+10	1.11E-02	1.38E-01
1762.50	1485.50	1.44E+13	2.51E+13	1.71E+13	3.53E+17	3.49E+16	9.49E+16	1.30E+11	2.27E+10	1.07E-02	1.33E-01
1762.50	1510.50	1.39E+13	2.40E+13	1.64E+13	3.39E+17	3.35E+16	9.12E+16	1.25E+11	2.18E+10	1.03E-02	1.28E-01
1762.50	1535.50	1.33E+13	2.32E+13	1.59E+13	3.24E+17	3.21E+16	8.76E+16	1.20E+11	2.10E+10	9.83E-03	1.22E-01
1762.50	1560.50	1.28E+13	2.22E+13	1.52E+13	3.11E+17	3.08E+16	8.40E+16	1.15E+11	2.01E+10	9.41E-03	1.17E-01
1762.50	1585.50	1.23E+13	2.14E+13	1.46E+13	2.97E+17	2.95E+16	8.06E+16	1.10E+11	1.93E+10	9.01E-03	1.12E-01
1762.50	1610.50	1.18E+13	2.05E+13	1.40E+13	2.84E+17	2.82E+16	7.72E+16	1.05E+11	1.84E+10	8.61E-03	1.07E-01
1762.50	1635.50	1.13E+13	1.96E+13	1.35E+13	2.72E+17	2.70E+16	7.40E+16	1.00E+11	1.77E+10	8.23E-03	1.03E-01
1762.50	1660.50	1.08E+13	1.88E+13	1.29E+13	2.59E+17	2.58E+16	7.08E+16	9.57E+10	1.69E+10	7.85E-03	9.80E-02
1762.50	1685.50	1.03E+13	1.80E+13	1.24E+13	2.47E+17	2.46E+16	6.77E+16	9.13E+10	1.61E+10	7.49E-03	9.35E-02
1762.50	1710.50	9.89E+12	1.72E+13	1.19E+13	2.35E+17	2.35E+16	6.47E+16	8.69E+10	1.54E+10	7.13E-03	8.92E-02
1762.50	1735.50	9.44E+12	1.65E+13	1.14E+13	2.24E+17	2.24E+16	6.17E+16	8.27E+10	1.47E+10	6.78E-03	8.49E-02
1762.50	1760.50	9.01E+12	1.58E+13	1.09E+13	2.13E+17	2.13E+16	5.89E+16	7.85E+10	1.40E+10	6.44E-03	8.08E-02
1762.50	1785.50	8.59E+12	1.51E+13	1.04E+13	2.02E+17	2.03E+16	5.61E+16	7.45E+10	1.33E+10	6.11E-03	7.67E-02
1762.50	1810.50	8.20E+12	1.44E+13	9.98E+12	1.91E+17	1.92E+16	5.34E+16	7.06E+10	1.27E+10	5.79E-03	7.28E-02
1762.50	1835.50	7.80E+12	1.38E+13	9.54E+12	1.81E+17	1.82E+16	5.08E+16	6.68E+10	1.20E+10	5.48E-03	6.90E-02
1762.50	1860.50	7.43E+12	1.31E+13	9.14E+12	1.71E+17	1.73E+16	4.83E+16	6.30E+10	1.14E+10	5.17E-03	6.52E-02
1762.50	1885.50	7.07E+12	1.25E+13	8.72E+12	1.61E+17	1.63E+16	4.58E+16	5.94E+10	1.08E+10	4.87E-03	6.16E-02
1762.50	1910.50	6.71E+12	1.19E+13	8.38E+12	1.51E+17	1.54E+16	4.35E+16	5.58E+10	1.02E+10	4.58E-03	5.81E-02
1762.50	1935.50	6.38E+12	1.14E+13	7.98E+12	1.42E+17	1.45E+16	4.12E+16	5.24E+10	9.64E+09	4.30E-03	5.46E-02
1762.50	1960.50	6.05E+12	1.08E+13	7.69E+12	1.33E+17	1.37E+16	3.90E+16	4.90E+10	9.09E+09	4.02E-03	5.13E-02
1762.50	1985.50	5.75E+12	1.04E+13	7.31E+12	1.24E+17	1.29E+16	3.68E+16	4.57E+10	8.56E+09	3.75E-03	4.80E-02
1762.50	2010.50	5.45E+12	9.87E+12	7.04E+12	1.15E+17	1.20E+16	3.48E+16	4.24E+10	8.05E+09	3.48E-03	4.48E-02
1762.50	2035.50	5.17E+12	9.44E+12	6.69E+12	1.06E+17	1.13E+16	3.28E+16	3.93E+10	7.55E+09	3.22E-03	4.18E-02
1762.50	2060.50	4.91E+12	8.99E+12	6.44E+12	9.80E+16	1.05E+16	3.09E+16	3.62E+10	7.08E+09	2.97E-03	3.88E-02
1762.50	2085.50	4.67E+12	8.60E+12	6.10E+12	8.99E+16	9.80E+15	2.91E+16	3.32E+10	6.62E+09	2.72E-03	3.59E-02
1762.50	2110.50	4.44E+12	8.17E+12	5.82E+12	8.19E+16	9.11E+15	2.74E+16	3.03E+10	6.19E+09	2.48E-03	3.30E-02
1762.50	2135.50	4.22E+12	7.78E+12	5.48E+12	7.41E+16	8.45E+15	2.57E+16	2.74E+10	5.77E+09	2.25E-03	3.03E-02
1762.50	2160.50	4.02E+12	7.33E+12	5.14E+12	6.66E+16	7.83E+15	2.42E+16	2.46E+10	5.39E+09	2.02E-03	2.77E-02
1762.50	2185.50	3.80E+12	6.87E+12	4.76E+12	5.93E+16	7.24E+15	2.27E+16	2.19E+10	5.02E+09	1.80E-03	2.52E-02
1762.50	2210.50	3.58E+12	6.29E+12	4.32E+12	5.23E+16	6.69E+15	2.13E+16	1.93E+10	4.67E+09	1.58E-03	2.28E-02
1762.50	2235.50	3.31E+12	5.66E+12	3.86E+12	4.56E+16	6.18E+15	1.99E+16	1.68E+10	4.34E+09	1.38E-03	2.06E-02
1762.50	2260.50	2.95E+12	4.85E+12	3.37E+12	3.94E+16	5.70E+15	1.86E+16	1.46E+10	4.03E+09	1.19E-03	1.85E-02
1762.50	2285.50	2.41E+12	4.04E+12	2.92E+12	3.43E+16	5.21E+15	1.72E+16	1.27E+10	3.70E+09	1.03E-03	1.65E-02
1762.50	2310.70	1.82E+12	3.42E+12	2.60E+12	3.09E+16	4.83E+15	1.56E+16	1.14E+10	3.41E+09	9.31E-04	1.50E-02
1762.50	2336.10	1.25E+12	2.83E+12	2.28E+12	2.86E+16	4.42E+15	1.43E+16	1.05E+10	3.05E+09	8.62E-04	1.36E-02
1762.50	2360.80	6.41E+11	1.43E+12	1.41E+12	1.83E+16	4.08E+15	1.39E+16	6.76E+09	2.71E+09	5.59E-04	1.06E-02
1762.50	2384.80	2.93E+11	4.35E+11	5.38E+11	6.27E+15	3.56E+15	1.30E+16	2.32E+09	2.43E+09	1.92E-04	7.26E-03
1762.50	2408.80	1.53E+11	1.55E+11	1.83E+11	2.38E+15	3.00E+15	1.17E+16	8.79E+08	2.14E+09	7.26E-05	5.72E-03
1762.50	2432.80	8.20E+10	7.19E+10	7.24E+10	1.04E+15	2.56E+15	1.04E+16	3.83E+08	1.89E+09	3.19E-05	4.82E-03
1762.50	2456.80	4.61E+10	3.59E+10	3.20E+10	4.59E+14	2.19E+15	9.03E+15	1.70E+08	1.66E+09	1.41E-05	4.14E-03
1762.50	2480.80	2.60E+10	1.96E+10	1.64E+10	2.02E+14	1.89E+15	7.55E+15	7.48E+07	1.44E+09	6.26E-06	3.56E-03
1762.50	2504.90	1.42E+10	8.77E+09	6.73E+09	5.89E+13	1.63E+15	5.77E+15	2.19E+07	1.23E+09	1.81E-06	3.00E-03

Table 17. Activities for an Axial Traverse Through the Center of the Lower Fuel Element Annulus

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
193.75	-2256.80	1.86E+11	1.33E+11	1.14E+11	7.75E+14	9.02E+15	3.12E+16	2.88E+08	6.73E+09	2.40E-05	1.67E-02
193.75	-2216.80	4.37E+11	3.91E+11	3.93E+11	2.79E+15	1.16E+16	4.57E+16	1.03E+09	8.71E+09	8.61E-05	2.20E-02
193.75	-2176.80	9.99E+11	1.11E+12	1.29E+12	9.19E+15	1.53E+16	5.78E+16	3.40E+09	1.10E+10	2.82E-04	2.90E-02
193.75	-2136.80	2.43E+12	3.83E+12	4.69E+12	2.47E+16	2.04E+16	7.02E+16	9.13E+09	1.39E+10	7.57E-04	3.94E-02
193.75	-2096.80	6.49E+12	1.59E+13	1.74E+13	8.07E+16	2.52E+16	7.96E+16	2.98E+10	1.68E+10	2.47E-03	5.85E-02
193.75	-2064.10	1.77E+13	4.26E+13	3.38E+13	1.31E+17	2.75E+16	8.40E+16	4.86E+10	1.98E+10	3.94E-03	7.71E-02
193.75	-2038.70	2.64E+13	5.32E+13	3.88E+13	1.40E+17	3.04E+16	9.36E+16	5.19E+10	2.24E+10	4.20E-03	8.56E-02
193.75	-2010.80	3.75E+13	7.12E+13	4.90E+13	1.72E+17	2.76E+16	9.91E+16	6.38E+10	2.12E+10	5.28E-03	9.00E-02
193.75	-1980.40	4.72E+13	9.73E+13	6.51E+13	2.22E+17	2.84E+16	1.06E+17	8.22E+10	2.21E+10	6.87E-03	1.03E-01
193.75	-1950.00	5.38E+13	1.19E+14	8.03E+13	2.70E+17	3.00E+16	1.13E+17	1.00E+11	2.34E+10	8.35E-03	1.18E-01
193.75	-1919.60	6.00E+13	1.38E+14	9.52E+13	3.19E+17	3.22E+16	1.22E+17	1.18E+11	2.51E+10	9.90E-03	1.33E-01
193.75	-1889.20	6.62E+13	1.56E+14	1.10E+14	3.71E+17	3.48E+16	1.31E+17	1.37E+11	2.72E+10	1.15E-02	1.49E-01
193.75	-1858.80	7.27E+13	1.74E+14	1.24E+14	4.24E+17	3.79E+16	1.41E+17	1.57E+11	2.96E+10	1.31E-02	1.67E-01
193.75	-1828.40	7.96E+13	1.92E+14	1.38E+14	4.80E+17	4.14E+16	1.53E+17	1.78E+11	3.22E+10	1.49E-02	1.86E-01
193.75	-1798.00	8.71E+13	2.11E+14	1.53E+14	5.39E+17	4.52E+16	1.65E+17	2.00E+11	3.51E+10	1.67E-02	2.06E-01
193.75	-1767.60	9.52E+13	2.31E+14	1.68E+14	6.01E+17	4.93E+16	1.79E+17	2.23E+11	3.82E+10	1.86E-02	2.27E-01
193.75	-1737.20	1.04E+14	2.52E+14	1.84E+14	6.65E+17	5.38E+16	1.94E+17	2.47E+11	4.16E+10	2.06E-02	2.50E-01
193.75	-1706.80	1.13E+14	2.75E+14	2.01E+14	7.34E+17	5.86E+16	2.11E+17	2.72E+11	4.52E+10	2.27E-02	2.74E-01
193.75	-1676.40	1.23E+14	2.99E+14	2.19E+14	8.06E+17	6.37E+16	2.29E+17	2.99E+11	4.91E+10	2.49E-02	3.00E-01
193.75	-1646.00	1.34E+14	3.26E+14	2.39E+14	8.82E+17	6.93E+16	2.48E+17	3.27E+11	5.34E+10	2.73E-02	3.27E-01
193.75	-1615.60	1.46E+14	3.54E+14	2.61E+14	9.64E+17	7.52E+16	2.69E+17	3.57E+11	5.80E+10	2.98E-02	3.57E-01
193.75	-1585.20	1.58E+14	3.85E+14	2.86E+14	1.05E+18	8.16E+16	2.92E+17	3.89E+11	6.29E+10	3.25E-02	3.88E-01
193.75	-1554.80	1.72E+14	4.18E+14	3.13E+14	1.14E+18	8.85E+16	3.17E+17	4.23E+11	6.82E+10	3.54E-02	4.22E-01
193.75	-1524.40	1.87E+14	4.55E+14	3.44E+14	1.24E+18	9.60E+16	3.44E+17	4.60E+11	7.40E+10	3.84E-02	4.58E-01
193.75	-1494.00	2.03E+14	4.95E+14	3.80E+14	1.35E+18	1.04E+17	3.73E+17	4.99E+11	8.02E+10	4.17E-02	4.97E-01
193.75	-1463.60	2.20E+14	5.40E+14	4.24E+14	1.46E+18	1.13E+17	4.05E+17	5.42E+11	8.69E+10	4.52E-02	5.38E-01
193.75	-1433.20	2.39E+14	5.90E+14	4.77E+14	1.58E+18	1.22E+17	4.40E+17	5.87E+11	9.41E+10	4.90E-02	5.83E-01
193.75	-1402.80	2.60E+14	6.47E+14	5.44E+14	1.72E+18	1.32E+17	4.79E+17	6.36E+11	1.02E+11	5.31E-02	6.32E-01
193.75	-1372.40	2.83E+14	7.14E+14	6.30E+14	1.86E+18	1.43E+17	5.20E+17	6.89E+11	1.11E+11	5.75E-02	6.85E-01
193.75	-1342.00	3.10E+14	7.93E+14	7.46E+14	2.01E+18	1.55E+17	5.67E+17	7.46E+11	1.20E+11	6.23E-02	7.42E-01
193.75	-1311.60	3.40E+14	8.89E+14	9.04E+14	2.18E+18	1.68E+17	6.18E+17	8.08E+11	1.30E+11	6.75E-02	8.04E-01
193.75	-1281.20	3.74E+14	1.01E+15	1.13E+15	2.36E+18	1.82E+17	6.75E+17	8.76E+11	1.42E+11	7.31E-02	8.72E-01
193.75	-1250.80	4.15E+14	1.16E+15	1.44E+15	2.56E+18	1.98E+17	7.38E+17	9.49E+11	1.54E+11	7.92E-02	9.47E-01
193.75	-1220.40	4.63E+14	1.37E+15	1.89E+15	2.77E+18	2.14E+17	8.08E+17	1.03E+12	1.68E+11	8.59E-02	1.03E+00
193.75	-1190.00	5.23E+14	1.66E+15	2.54E+15	3.01E+18	2.32E+17	8.84E+17	1.12E+12	1.82E+11	9.32E-02	1.11E+00
193.75	-1159.60	5.99E+14	2.06E+15	3.49E+15	3.26E+18	2.51E+17	9.70E+17	1.21E+12	1.98E+11	1.01E-01	1.21E+00
193.75	-1129.20	6.97E+14	2.63E+15	4.88E+15	3.54E+18	2.71E+17	1.07E+18	1.32E+12	2.15E+11	1.10E-01	1.31E+00
193.75	-1098.80	8.29E+14	3.46E+15	6.91E+15	3.84E+18	2.94E+17	1.17E+18	1.43E+12	2.33E+11	1.19E-01	1.43E+00
193.75	-1068.40	1.01E+15	4.69E+15	9.88E+15	4.18E+18	3.17E+17	1.29E+18	1.56E+12	2.54E+11	1.30E-01	1.55E+00
193.75	-1038.00	1.26E+15	6.53E+15	1.42E+16	4.54E+18	3.43E+17	1.43E+18	1.70E+12	2.77E+11	1.42E-01	1.68E+00
193.75	-1007.60	1.62E+15	9.29E+15	2.05E+16	4.93E+18	3.72E+17	1.59E+18	1.85E+12	3.02E+11	1.54E-01	1.83E+00
193.75	-977.20	2.15E+15	1.35E+16	2.97E+16	5.36E+18	4.03E+17	1.77E+18	2.02E+12	3.30E+11	1.69E-01	1.99E+00
193.75	-946.80	2.93E+15	1.98E+16	4.29E+16	5.82E+18	4.36E+17	1.98E+18	2.21E+12	3.61E+11	1.85E-01	2.17E+00
193.75	-916.40	4.09E+15	2.93E+16	6.18E+16	6.32E+18	4.73E+17	2.22E+18	2.41E+12	3.96E+11	2.02E-01	2.37E+00

Table 17. Activities for an Axial Traverse Through the Center of the Lower Fuel Element Annulus (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
193.75	-886.00	5.86E+15	4.38E+16	8.87E+16	6.86E+18	5.14E+17	2.51E+18	2.65E+12	4.36E+11	2.23E-01	2.58E+00
193.75	-855.60	8.57E+15	6.58E+16	1.27E+17	7.43E+18	5.59E+17	2.84E+18	2.91E+12	4.81E+11	2.46E-01	2.81E+00
193.75	-825.20	1.28E+16	9.90E+16	1.80E+17	8.03E+18	6.07E+17	3.22E+18	3.22E+12	5.32E+11	2.74E-01	3.07E+00
193.75	-794.80	1.93E+16	1.49E+17	2.54E+17	8.66E+18	6.60E+17	3.68E+18	3.57E+12	5.90E+11	3.07E-01	3.34E+00
193.75	-764.40	2.96E+16	2.25E+17	3.55E+17	9.31E+18	7.18E+17	4.21E+18	3.99E+12	6.56E+11	3.49E-01	3.63E+00
193.75	-734.00	4.62E+16	3.38E+17	4.92E+17	9.95E+18	7.82E+17	4.84E+18	4.50E+12	7.32E+11	4.04E-01	3.95E+00
193.75	-703.60	7.29E+16	5.08E+17	6.75E+17	1.06E+19	8.54E+17	5.59E+18	5.15E+12	8.22E+11	4.80E-01	4.30E+00
193.75	-673.20	1.17E+17	7.61E+17	9.15E+17	1.12E+19	9.35E+17	6.47E+18	6.01E+12	9.26E+11	5.88E-01	4.66E+00
193.75	-645.00	1.87E+17	1.12E+18	1.21E+18	1.17E+19	1.03E+18	7.47E+18	7.15E+12	1.05E+12	7.47E-01	5.05E+00
193.75	-621.75	2.86E+17	1.54E+18	1.51E+18	1.20E+19	1.11E+18	8.46E+18	8.54E+12	1.17E+12	9.55E-01	5.39E+00
193.75	-601.25	4.20E+17	2.05E+18	1.83E+18	1.22E+19	1.19E+18	9.45E+18	1.03E+13	1.29E+12	1.23E+00	5.72E+00
193.75	-580.75	6.28E+17	2.70E+18	2.18E+18	1.22E+19	1.29E+18	1.06E+19	1.27E+13	1.43E+12	1.64E+00	6.05E+00
193.75	-560.25	9.56E+17	3.53E+18	2.56E+18	1.21E+19	1.39E+18	1.18E+19	1.63E+13	1.60E+12	2.28E+00	6.40E+00
193.75	-539.75	1.47E+18	4.60E+18	2.95E+18	1.15E+19	1.53E+18	1.32E+19	2.18E+13	1.80E+12	3.27E+00	6.77E+00
193.75	-519.25	2.31E+18	5.93E+18	3.31E+18	1.04E+19	1.69E+18	1.47E+19	3.01E+13	2.04E+12	4.83E+00	7.11E+00
193.75	-504.00	3.33E+18	6.99E+18	3.50E+18	9.35E+18	1.94E+18	1.62E+19	4.04E+13	2.35E+12	6.76E+00	7.63E+00
193.75	-494.00	4.16E+18	7.65E+18	3.58E+18	8.52E+18	2.10E+18	1.77E+19	4.87E+13	2.62E+12	8.37E+00	8.08E+00
193.75	-484.00	5.20E+18	8.36E+18	3.63E+18	7.45E+18	2.28E+18	1.94E+19	5.91E+13	2.94E+12	1.04E+01	8.63E+00
193.75	-474.00	6.55E+18	9.10E+18	3.62E+18	5.78E+18	2.49E+18	2.16E+19	7.28E+13	3.37E+12	1.32E+01	9.29E+00
193.75	-466.50	8.07E+18	9.68E+18	3.49E+18	3.36E+18	2.77E+18	2.43E+19	8.82E+13	3.93E+12	1.65E+01	1.01E+01
193.75	-461.50	9.41E+18	1.01E+19	3.46E+18	2.20E+18	3.01E+18	2.51E+19	1.02E+14	4.29E+12	1.95E+01	1.08E+01
193.75	-454.00	1.17E+19	1.07E+19	3.49E+18	1.74E+18	3.55E+18	2.51E+19	1.28E+14	4.94E+12	2.49E+01	1.24E+01
193.75	-444.00	1.39E+19	1.15E+19	3.56E+18	1.50E+18	3.99E+18	2.72E+19	1.51E+14	5.57E+12	2.97E+01	1.40E+01
193.75	-433.33	1.52E+19	1.24E+19	3.65E+18	1.36E+18	4.23E+18	2.86E+19	1.65E+14	5.91E+12	3.25E+01	1.48E+01
193.75	-420.13	1.67E+19	1.34E+19	3.76E+18	1.20E+18	4.50E+18	3.00E+19	1.81E+14	6.27E+12	3.54E+01	1.57E+01
193.75	-405.05	1.79E+19	1.45E+19	3.93E+18	1.17E+18	4.72E+18	3.13E+19	1.93E+14	6.57E+12	3.77E+01	1.65E+01
193.75	-389.95	1.89E+19	1.55E+19	4.12E+18	1.18E+18	4.93E+18	3.27E+19	2.03E+14	6.86E+12	3.97E+01	1.72E+01
193.75	-374.85	1.98E+19	1.64E+19	4.33E+18	1.20E+18	5.13E+18	3.40E+19	2.13E+14	7.14E+12	4.16E+01	1.79E+01
193.75	-359.75	2.06E+19	1.73E+19	4.54E+18	1.24E+18	5.33E+18	3.54E+19	2.22E+14	7.42E+12	4.34E+01	1.86E+01
193.75	-344.65	2.14E+19	1.81E+19	4.75E+18	1.29E+18	5.53E+18	3.67E+19	2.31E+14	7.70E+12	4.50E+01	1.93E+01
193.75	-329.55	2.22E+19	1.88E+19	4.97E+18	1.34E+18	5.73E+18	3.81E+19	2.39E+14	7.98E+12	4.66E+01	2.00E+01
193.75	-314.45	2.28E+19	1.95E+19	5.20E+18	1.42E+18	5.92E+18	3.94E+19	2.46E+14	8.26E+12	4.80E+01	2.07E+01
193.75	-299.35	2.34E+19	2.02E+19	5.48E+18	1.57E+18	6.10E+18	4.10E+19	2.52E+14	8.54E+12	4.92E+01	2.14E+01
193.75	-283.44	2.34E+19	2.09E+19	5.84E+18	1.97E+18	6.15E+18	4.22E+19	2.52E+14	8.65E+12	4.90E+01	2.17E+01
193.75	-266.72	2.39E+19	2.14E+19	6.11E+18	2.15E+18	6.32E+18	4.37E+19	2.58E+14	8.91E+12	5.01E+01	2.24E+01
193.75	-250.00	2.44E+19	2.19E+19	6.33E+18	2.26E+18	6.50E+18	4.51E+19	2.64E+14	9.18E+12	5.13E+01	2.30E+01
193.75	-233.28	2.50E+19	2.24E+19	6.53E+18	2.34E+18	6.68E+18	4.64E+19	2.71E+14	9.44E+12	5.26E+01	2.37E+01
193.75	-216.56	2.56E+19	2.28E+19	6.71E+18	2.42E+18	6.86E+18	4.76E+19	2.77E+14	9.69E+12	5.38E+01	2.43E+01
193.75	-199.84	2.61E+19	2.31E+19	6.89E+18	2.51E+18	7.03E+18	4.88E+19	2.83E+14	9.93E+12	5.50E+01	2.49E+01
193.75	-183.12	2.66E+19	2.33E+19	7.07E+18	2.59E+18	7.19E+18	5.00E+19	2.88E+14	1.02E+13	5.61E+01	2.55E+01
193.75	-166.40	2.70E+19	2.35E+19	7.25E+18	2.69E+18	7.35E+18	5.12E+19	2.93E+14	1.04E+13	5.70E+01	2.61E+01
193.75	-149.68	2.73E+19	2.36E+19	7.45E+18	2.81E+18	7.50E+18	5.23E+19	2.96E+14	1.06E+13	5.78E+01	2.66E+01
193.75	-132.96	2.73E+19	2.36E+19	7.70E+18	3.02E+18	7.61E+18	5.34E+19	2.97E+14	1.08E+13	5.81E+01	2.70E+01
193.75	-116.24	2.67E+19	2.36E+19	8.05E+18	3.49E+18	7.55E+18	5.40E+19	2.91E+14	1.08E+13	5.66E+01	2.70E+01

Table 17. Activities for an Axial Traverse Through the Center of the Lower Fuel Element Annulus (continued)

Radius (mm)	Elevation (mm)					E>2.2 MeV	Total	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
		Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
193.75	-99.52	2.62E+19	2.34E+19	8.35E+18	3.74E+18	7.59E+18	5.46E+19	2.87E+14	1.08E+13	5.60E+01	2.71E+01
193.75	-82.80	2.55E+19	2.32E+19	8.67E+18	3.91E+18	7.57E+18	5.47E+19	2.80E+14	1.08E+13	5.47E+01	2.71E+01
193.75	-66.08	2.40E+19	2.30E+19	9.02E+18	4.05E+18	7.41E+18	5.40E+19	2.65E+14	1.06E+13	5.17E+01	2.65E+01
193.75	-53.54	2.18E+19	2.28E+19	9.34E+18	4.14E+18	7.04E+18	5.26E+19	2.42E+14	1.01E+13	4.71E+01	2.52E+01
193.75	-45.18	1.89E+19	2.27E+19	9.58E+18	4.14E+18	6.45E+18	5.17E+19	2.10E+14	9.35E+12	4.03E+01	2.32E+01
193.75	-38.50	1.58E+19	2.26E+19	9.77E+18	4.11E+18	5.68E+18	5.53E+19	1.75E+14	8.60E+12	3.28E+01	2.12E+01
193.75	-33.50	1.39E+19	2.27E+19	1.02E+19	5.67E+18	5.31E+18	5.55E+19	1.55E+14	8.10E+12	2.85E+01	2.03E+01
193.75	-28.00	1.22E+19	2.28E+19	1.10E+19	9.30E+18	5.01E+18	5.37E+19	1.38E+14	7.54E+12	2.48E+01	1.97E+01
193.75	-20.00	1.04E+19	2.29E+19	1.18E+19	1.23E+19	4.73E+18	5.19E+19	1.22E+14	7.02E+12	2.11E+01	1.91E+01
193.75	-10.00	9.22E+18	2.31E+19	1.24E+19	1.45E+19	4.57E+18	5.12E+19	1.10E+14	6.72E+12	1.87E+01	1.88E+01
193.75	.00	8.60E+18	2.34E+19	1.28E+19	1.57E+19	4.49E+18	5.10E+19	1.05E+14	6.59E+12	1.75E+01	1.88E+01
193.75	10.00	8.41E+18	2.39E+19	1.31E+19	1.63E+19	4.49E+18	5.12E+19	1.03E+14	6.56E+12	1.71E+01	1.89E+01
193.75	20.00	8.59E+18	2.46E+19	1.33E+19	1.64E+19	4.52E+18	5.18E+19	1.05E+14	6.63E+12	1.74E+01	1.90E+01
193.75	30.00	9.05E+18	2.55E+19	1.35E+19	1.61E+19	4.60E+18	5.26E+19	1.10E+14	6.76E+12	1.83E+01	1.93E+01
193.75	40.00	9.76E+18	2.65E+19	1.36E+19	1.54E+19	4.71E+18	5.38E+19	1.17E+14	6.97E+12	1.96E+01	1.96E+01
193.75	50.00	1.07E+19	2.77E+19	1.37E+19	1.45E+19	4.86E+18	5.51E+19	1.26E+14	7.24E+12	2.13E+01	2.01E+01
193.75	60.00	1.19E+19	2.91E+19	1.37E+19	1.34E+19	5.07E+18	5.66E+19	1.38E+14	7.57E+12	2.36E+01	2.07E+01
193.75	67.50	1.30E+19	3.01E+19	1.37E+19	1.26E+19	5.31E+18	5.77E+19	1.50E+14	7.92E+12	2.60E+01	2.14E+01
193.75	72.50	1.37E+19	3.09E+19	1.38E+19	1.20E+19	5.37E+18	5.83E+19	1.56E+14	8.05E+12	2.72E+01	2.16E+01
193.75	80.00	1.47E+19	3.21E+19	1.38E+19	1.10E+19	5.48E+18	5.93E+19	1.66E+14	8.28E+12	2.90E+01	2.19E+01
193.75	90.42	1.62E+19	3.36E+19	1.38E+19	9.95E+18	5.71E+18	6.09E+19	1.81E+14	8.68E+12	3.19E+01	2.27E+01
193.75	101.10	1.76E+19	3.52E+19	1.39E+19	9.04E+18	5.98E+18	6.25E+19	1.95E+14	9.09E+12	3.46E+01	2.35E+01
193.75	111.57	1.88E+19	3.68E+19	1.40E+19	8.29E+18	6.19E+18	6.37E+19	2.07E+14	9.42E+12	3.69E+01	2.42E+01
193.75	125.16	2.01E+19	3.85E+19	1.42E+19	7.54E+18	6.45E+18	6.53E+19	2.20E+14	9.82E+12	3.94E+01	2.50E+01
193.75	141.88	2.13E+19	4.05E+19	1.44E+19	6.92E+18	6.64E+18	6.67E+19	2.32E+14	1.01E+13	4.17E+01	2.56E+01
193.75	158.60	2.22E+19	4.22E+19	1.46E+19	6.52E+18	6.78E+18	6.77E+19	2.42E+14	1.04E+13	4.34E+01	2.61E+01
193.75	175.32	2.29E+19	4.36E+19	1.48E+19	6.27E+18	6.88E+18	6.86E+19	2.49E+14	1.05E+13	4.46E+01	2.65E+01
193.75	192.04	2.34E+19	4.47E+19	1.50E+19	6.12E+18	6.96E+18	6.93E+19	2.54E+14	1.07E+13	4.55E+01	2.68E+01
193.75	208.76	2.37E+19	4.56E+19	1.52E+19	6.04E+18	7.01E+18	6.98E+19	2.57E+14	1.07E+13	4.62E+01	2.70E+01
193.75	225.48	2.40E+19	4.62E+19	1.54E+19	6.00E+18	7.05E+18	7.02E+19	2.60E+14	1.08E+13	4.66E+01	2.71E+01
193.75	242.20	2.41E+19	4.66E+19	1.55E+19	5.99E+18	7.06E+18	7.04E+19	2.61E+14	1.08E+13	4.68E+01	2.72E+01
193.75	258.92	2.41E+19	4.67E+19	1.55E+19	6.00E+18	7.06E+18	7.04E+19	2.61E+14	1.08E+13	4.69E+01	2.72E+01
193.75	275.64	2.40E+19	4.66E+19	1.55E+19	6.02E+18	7.03E+18	7.02E+19	2.60E+14	1.08E+13	4.67E+01	2.71E+01
193.75	291.55	2.38E+19	4.63E+19	1.54E+19	6.04E+18	6.98E+18	6.97E+19	2.58E+14	1.07E+13	4.62E+01	2.69E+01
193.75	306.65	2.35E+19	4.58E+19	1.53E+19	6.06E+18	6.92E+18	6.92E+19	2.55E+14	1.06E+13	4.58E+01	2.67E+01
193.75	321.75	2.32E+19	4.51E+19	1.51E+19	6.08E+18	6.85E+18	6.85E+19	2.52E+14	1.05E+13	4.52E+01	2.64E+01
193.75	336.85	2.28E+19	4.42E+19	1.49E+19	6.11E+18	6.76E+18	6.76E+19	2.48E+14	1.04E+13	4.44E+01	2.61E+01
193.75	351.95	2.23E+19	4.31E+19	1.46E+19	6.16E+18	6.66E+18	6.66E+19	2.43E+14	1.02E+13	4.35E+01	2.57E+01
193.75	367.05	2.18E+19	4.19E+19	1.43E+19	6.24E+18	6.54E+18	6.55E+19	2.37E+14	1.00E+13	4.25E+01	2.52E+01
193.75	382.15	2.11E+19	4.04E+19	1.39E+19	6.38E+18	6.40E+18	6.42E+19	2.30E+14	9.80E+12	4.12E+01	2.47E+01
193.75	397.25	2.03E+19	3.87E+19	1.36E+19	6.24E+18	6.24E+18	6.27E+19	2.21E+14	9.54E+12	3.97E+01	2.41E+01
193.75	412.33	1.93E+19	3.69E+19	1.32E+19	6.97E+18	6.06E+18	6.10E+19	2.11E+14	9.23E+12	3.78E+01	2.35E+01
193.75	425.08	1.83E+19	3.51E+19	1.29E+19	7.42E+18	5.84E+18	5.92E+19	2.00E+14	8.89E+12	3.58E+01	2.27E+01
193.75	438.15	1.71E+19	3.31E+19	1.25E+19	8.03E+18	5.62E+18	5.73E+19	1.88E+14	8.53E+12	3.35E+01	2.20E+01

Table 17. Activities for an Axial Traverse Through the Center of the Lower Fuel Element Annulus (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
193.75	453.83	1.56E+19	3.07E+19	1.20E+19	8.98E+18	5.33E+18	5.48E+19	1.72E+14	8.05E+12	3.07E+01	2.10E+01
193.75	466.65	1.41E+19	2.85E+19	1.17E+19	1.01E+19	5.01E+18	5.21E+19	1.57E+14	7.54E+12	2.78E+01	2.00E+01
193.75	477.07	1.27E+19	2.66E+19	1.13E+19	1.12E+19	4.75E+18	4.99E+19	1.44E+14	7.10E+12	2.52E+01	1.92E+01
193.75	487.75	1.13E+19	2.46E+19	1.10E+19	1.26E+19	4.50E+18	4.74E+19	1.29E+14	6.64E+12	2.24E+01	1.84E+01
193.75	495.50	1.02E+19	2.31E+19	1.07E+19	1.39E+19	4.36E+18	4.56E+19	1.19E+14	6.34E+12	2.06E+01	1.80E+01
193.75	500.50	9.56E+18	2.21E+19	1.05E+19	1.48E+19	4.27E+18	4.45E+19	1.12E+14	6.16E+12	1.93E+01	1.77E+01
193.75	508.00	8.41E+18	2.07E+19	1.03E+19	1.61E+19	4.02E+18	4.26E+19	1.01E+14	5.78E+12	1.70E+01	1.71E+01
193.75	520.00	6.87E+18	1.84E+19	9.83E+18	1.82E+19	3.69E+18	3.96E+19	8.52E+13	5.23E+12	1.41E+01	1.62E+01
193.75	537.00	5.15E+18	1.55E+19	9.15E+18	2.09E+19	3.36E+18	3.56E+19	6.81E+13	4.60E+12	1.08E+01	1.53E+01
193.75	560.00	3.52E+18	1.22E+19	8.17E+18	2.38E+19	3.01E+18	3.12E+19	5.16E+13	3.96E+12	7.76E+00	1.45E+01
193.75	585.50	2.35E+18	9.24E+18	7.03E+18	2.61E+19	2.74E+18	2.78E+19	3.95E+13	3.45E+12	5.58E+00	1.38E+01
193.75	610.50	1.57E+18	6.92E+18	5.93E+18	2.74E+19	2.52E+18	2.38E+19	3.10E+13	3.03E+12	4.09E+00	1.31E+01
193.75	635.50	1.05E+18	5.12E+18	4.90E+18	2.79E+19	2.35E+18	2.08E+19	2.50E+13	2.70E+12	3.08E+00	1.25E+01
193.75	660.50	7.08E+17	3.76E+18	3.98E+18	2.78E+19	2.21E+18	1.83E+19	2.07E+13	2.43E+12	2.38E+00	1.18E+01
193.75	685.50	4.78E+17	2.74E+18	3.19E+18	2.72E+19	2.08E+18	1.60E+19	1.74E+13	2.20E+12	1.88E+00	1.12E+01
193.75	710.50	3.23E+17	1.98E+18	2.52E+18	2.63E+19	1.95E+18	1.41E+19	1.49E+13	1.99E+12	1.52E+00	1.05E+01
193.75	735.50	2.19E+17	1.43E+18	1.97E+18	2.51E+19	1.83E+18	1.24E+19	1.30E+13	1.81E+12	1.26E+00	9.83E+00
193.75	760.50	1.50E+17	1.02E+18	1.52E+18	2.38E+19	1.71E+18	1.10E+19	1.14E+13	1.64E+12	1.07E+00	9.17E+00
193.75	785.50	1.03E+17	7.30E+17	1.17E+18	2.25E+19	1.60E+18	9.73E+18	1.02E+13	1.49E+12	9.19E-01	8.53E+00
193.75	810.50	7.12E+16	5.21E+17	8.87E+17	2.10E+19	1.49E+18	8.64E+18	9.12E+12	1.36E+12	8.05E-01	7.92E+00
193.75	835.50	4.97E+16	3.70E+17	6.70E+17	1.96E+19	1.39E+18	7.68E+18	8.22E+12	1.24E+12	7.13E-01	7.33E+00
193.75	860.50	3.49E+16	2.63E+17	5.02E+17	1.83E+19	1.29E+18	6.84E+18	7.44E+12	1.13E+12	6.38E-01	6.78E+00
193.75	885.50	2.47E+16	1.87E+17	3.74E+17	1.70E+19	1.19E+18	6.11E+18	6.77E+12	1.03E+12	5.75E-01	6.26E+00
193.75	910.50	1.77E+16	1.33E+17	2.78E+17	1.57E+19	1.11E+18	5.47E+18	6.17E+12	9.46E+11	5.21E-01	5.78E+00
193.75	935.50	1.28E+16	9.45E+16	2.05E+17	1.46E+19	1.03E+18	4.92E+18	5.64E+12	8.67E+11	4.74E-01	5.33E+00
193.75	960.50	9.44E+15	6.74E+16	1.51E+17	1.35E+19	9.58E+17	4.44E+18	5.17E+12	7.99E+11	4.33E-01	4.93E+00
193.75	985.50	7.07E+15	4.83E+16	1.11E+17	1.25E+19	8.95E+17	4.03E+18	4.74E+12	7.39E+11	3.97E-01	4.56E+00
193.75	1010.50	5.39E+15	3.49E+16	8.11E+16	1.15E+19	8.37E+17	3.67E+18	4.36E+12	6.85E+11	3.65E-01	4.23E+00
193.75	1035.50	4.18E+15	2.53E+16	5.93E+16	1.07E+19	7.84E+17	3.35E+18	4.01E+12	6.36E+11	3.35E-01	3.92E+00
193.75	1060.50	3.31E+15	1.86E+16	4.33E+16	9.86E+18	7.33E+17	3.06E+18	3.70E+12	5.91E+11	3.09E-01	3.63E+00
193.75	1085.50	2.67E+15	1.38E+16	3.17E+16	9.13E+18	6.86E+17	2.81E+18	3.41E+12	5.49E+11	2.85E-01	3.37E+00
193.75	1110.50	2.19E+15	1.04E+16	2.32E+16	8.46E+18	6.40E+17	2.58E+18	3.16E+12	5.10E+11	2.64E-01	3.13E+00
193.75	1135.50	1.83E+15	7.99E+15	1.71E+16	7.84E+18	5.97E+17	2.37E+18	2.92E+12	4.73E+11	2.44E-01	2.90E+00
193.75	1160.50	1.56E+15	6.24E+15	1.26E+16	7.27E+18	5.56E+17	2.18E+18	2.71E+12	4.39E+11	2.26E-01	2.69E+00
193.75	1185.50	1.35E+15	4.98E+15	9.42E+15	6.75E+18	5.18E+17	2.01E+18	2.51E+12	4.08E+11	2.09E-01	2.50E+00
193.75	1210.50	1.18E+15	4.05E+15	7.09E+15	6.27E+18	4.83E+17	1.85E+18	2.33E+12	3.79E+11	1.94E-01	2.32E+00
193.75	1235.50	1.05E+15	3.37E+15	5.40E+15	5.83E+18	4.50E+17	1.71E+18	2.16E+12	3.53E+11	1.81E-01	2.16E+00
193.75	1260.50	9.42E+14	2.85E+15	4.17E+15	5.42E+18	4.20E+17	1.58E+18	2.01E+12	3.28E+11	1.68E-01	2.01E+00
193.75	1285.50	8.52E+14	2.46E+15	3.28E+15	5.05E+18	3.92E+17	1.47E+18	1.87E+12	3.06E+11	1.56E-01	1.87E+00
193.75	1310.50	7.75E+14	2.15E+15	2.62E+15	4.70E+18	3.67E+17	1.36E+18	1.74E+12	2.85E+11	1.46E-01	1.75E+00
193.75	1335.50	7.10E+14	1.91E+15	2.13E+15	4.38E+18	3.42E+17	1.26E+18	1.63E+12	2.66E+11	1.36E-01	1.63E+00
193.75	1360.50	6.53E+14	1.71E+15	1.77E+15	4.09E+18	3.20E+17	1.17E+18	1.52E+12	2.48E+11	1.27E-01	1.52E+00
193.75	1385.50	6.03E+14	1.55E+15	1.50E+15	3.82E+18	2.99E+17	1.09E+18	1.42E+12	2.32E+11	1.18E-01	1.42E+00
193.75	1410.50	5.58E+14	1.41E+15	1.29E+15	3.57E+18	2.80E+17	1.02E+18	1.32E+12	2.16E+11	1.10E-01	1.32E+00

Table 17. Activities for an Axial Traverse Through the Center of the Lower Fuel Element Annulus (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
193.75	1435.50	5.18E+14	1.30E+15	1.13E+15	3.33E+18	2.61E+17	9.46E+17	1.24E+12	2.02E+11	1.03E-01	1.24E+00
193.75	1460.50	4.82E+14	1.20E+15	9.99E+14	3.12E+18	2.45E+17	8.82E+17	1.16E+12	1.89E+11	9.64E-02	1.16E+00
193.75	1485.50	4.49E+14	1.11E+15	8.95E+14	2.92E+18	2.29E+17	8.22E+17	1.08E+12	1.77E+11	9.02E-02	1.08E+00
193.75	1510.50	4.19E+14	1.03E+15	8.10E+14	2.73E+18	2.14E+17	7.67E+17	1.01E+12	1.65E+11	8.44E-02	1.01E+00
193.75	1535.50	3.91E+14	9.55E+14	7.39E+14	2.55E+18	2.00E+17	7.16E+17	9.47E+11	1.54E+11	7.90E-02	9.47E-01
193.75	1560.50	3.65E+14	8.89E+14	6.78E+14	2.39E+18	1.88E+17	6.69E+17	8.86E+11	1.44E+11	7.40E-02	8.87E-01
193.75	1585.50	3.41E+14	8.30E+14	6.25E+14	2.24E+18	1.76E+17	6.25E+17	8.30E+11	1.35E+11	6.93E-02	8.30E-01
193.75	1610.50	3.19E+14	7.75E+14	5.78E+14	2.10E+18	1.65E+17	5.84E+17	7.78E+11	1.27E+11	6.49E-02	7.78E-01
193.75	1635.50	2.99E+14	7.24E+14	5.37E+14	1.97E+18	1.54E+17	5.46E+17	7.29E+11	1.19E+11	6.08E-02	7.28E-01
193.75	1660.50	2.80E+14	6.77E+14	4.99E+14	1.84E+18	1.44E+17	5.11E+17	6.82E+11	1.11E+11	5.70E-02	6.82E-01
193.75	1685.50	2.62E+14	6.33E+14	4.65E+14	1.73E+18	1.35E+17	4.78E+17	6.39E+11	1.04E+11	5.34E-02	6.39E-01
193.75	1710.50	2.45E+14	5.93E+14	4.34E+14	1.62E+18	1.27E+17	4.47E+17	5.99E+11	9.73E+10	5.00E-02	5.98E-01
193.75	1735.50	2.30E+14	5.55E+14	4.05E+14	1.51E+18	1.19E+17	4.19E+17	5.61E+11	9.11E+10	4.68E-02	5.60E-01
193.75	1760.50	2.15E+14	5.19E+14	3.79E+14	1.42E+18	1.11E+17	3.92E+17	5.25E+11	8.53E+10	4.38E-02	5.24E-01
193.75	1785.50	2.01E+14	4.86E+14	3.54E+14	1.32E+18	1.04E+17	3.67E+17	4.91E+11	7.99E+10	4.10E-02	4.91E-01
193.75	1810.50	1.88E+14	4.55E+14	3.31E+14	1.24E+18	9.73E+16	3.43E+17	4.59E+11	7.48E+10	3.83E-02	4.59E-01
193.75	1835.50	1.76E+14	4.25E+14	3.10E+14	1.16E+18	9.11E+16	3.21E+17	4.28E+11	6.99E+10	3.58E-02	4.29E-01
193.75	1860.50	1.65E+14	3.98E+14	2.89E+14	1.08E+18	8.52E+16	3.01E+17	4.00E+11	6.54E+10	3.34E-02	4.01E-01
193.75	1885.50	1.54E+14	3.72E+14	2.71E+14	1.01E+18	7.96E+16	2.82E+17	3.73E+11	6.12E+10	3.11E-02	3.74E-01
193.75	1910.50	1.44E+14	3.48E+14	2.53E+14	9.36E+17	7.44E+16	2.64E+17	3.47E+11	5.72E+10	2.89E-02	3.47E-01
193.75	1935.50	1.34E+14	3.25E+14	2.36E+14	8.69E+17	6.95E+16	2.47E+17	3.22E+11	5.35E+10	2.69E-02	3.25E-01
193.75	1960.50	1.25E+14	3.03E+14	2.20E+14	8.06E+17	6.49E+16	2.31E+17	2.99E+11	4.99E+10	2.49E-02	3.02E-01
193.75	1985.50	1.17E+14	2.83E+14	2.06E+14	7.46E+17	6.05E+16	2.16E+17	2.76E+11	4.66E+10	2.31E-02	2.81E-01
193.75	2010.50	1.09E+14	2.64E+14	1.91E+14	6.88E+17	5.64E+16	2.02E+17	2.55E+11	4.35E+10	2.13E-02	2.60E-01
193.75	2035.50	1.01E+14	2.45E+14	1.78E+14	6.33E+17	5.26E+16	1.89E+17	2.35E+11	4.06E+10	1.96E-02	2.41E-01
193.75	2060.50	9.43E+13	2.28E+14	1.65E+14	5.80E+17	4.90E+16	1.77E+17	2.15E+11	3.79E+10	1.80E-02	2.22E-01
193.75	2085.50	8.77E+13	2.12E+14	1.52E+14	5.29E+17	4.56E+16	1.66E+17	1.96E+11	3.53E+10	1.64E-02	2.05E-01
193.75	2110.50	8.14E+13	1.96E+14	1.40E+14	4.81E+17	4.24E+16	1.56E+17	1.78E+11	3.30E+10	1.49E-02	1.88E-01
193.75	2135.50	7.55E+13	1.80E+14	1.28E+14	4.33E+17	3.95E+16	1.46E+17	1.61E+11	3.07E+10	1.34E-02	1.72E-01
193.75	2160.50	7.00E+13	1.65E+14	1.16E+14	3.88E+17	3.68E+16	1.37E+17	1.44E+11	2.87E+10	1.20E-02	1.57E-01
193.75	2185.50	6.46E+13	1.49E+14	1.03E+14	3.44E+17	3.45E+16	1.29E+17	1.28E+11	2.69E+10	1.07E-02	1.43E-01
193.75	2210.50	5.94E+13	1.33E+14	9.08E+13	3.02E+17	3.25E+16	1.22E+17	1.12E+11	2.54E+10	9.35E-03	1.29E-01
193.75	2235.50	5.39E+13	1.16E+14	7.80E+13	2.60E+17	3.10E+16	1.15E+17	9.66E+10	2.41E+10	8.06E-03	1.17E-01
193.75	2260.50	4.78E+13	9.64E+13	6.50E+13	2.20E+17	2.98E+16	1.10E+17	8.16E+10	2.31E+10	6.81E-03	1.05E-01
193.75	2285.50	3.88E+13	7.36E+13	5.14E+13	1.78E+17	2.93E+16	1.04E+17	6.60E+10	2.24E+10	5.45E-03	9.43E-02
193.75	2310.70	2.79E+13	5.70E+13	4.23E+13	1.49E+17	3.21E+16	9.81E+16	5.52E+10	2.36E+10	4.47E-03	9.06E-02
193.75	2336.10	1.90E+13	4.66E+13	3.76E+13	1.41E+17	2.90E+16	8.78E+16	5.21E+10	2.09E+10	4.22E-03	8.18E-02
193.75	2360.80	9.02E+12	2.32E+13	2.42E+13	1.00E+17	2.75E+16	8.41E+16	3.71E+10	1.84E+10	3.07E-03	6.68E-02
193.75	2384.80	4.40E+12	7.95E+12	9.87E+12	4.44E+16	2.46E+16	7.86E+16	1.64E+10	1.65E+10	1.36E-03	5.00E-02
193.75	2408.80	2.31E+12	3.05E+12	3.81E+12	2.06E+16	2.06E+16	7.02E+16	7.49E+09	1.43E+10	6.19E-04	3.94E-02
193.75	2432.80	1.27E+12	1.33E+12	1.52E+12	9.13E+15	1.72E+16	6.17E+16	3.38E+09	1.23E+10	3.22E-04	3.22E-02
193.75	2456.80	7.18E+11	6.51E+11	6.63E+11	4.11E+15	1.45E+16	5.32E+16	1.53E+09	1.06E+10	1.26E-04	2.70E-02
193.75	2480.80	4.16E+11	3.40E+11	3.07E+11	1.69E+15	1.23E+16	4.44E+16	6.26E+08	9.14E+09	5.24E-05	2.28E-02
193.75	2504.90	2.27E+11	1.50E+11	1.23E+11	4.90E+14	1.05E+16	3.35E+16	1.83E+08	7.70E+09	1.53E-05	1.90E-02

Table 18. Activities for an Axial Traverse Through the Center of the Side Reflector Annulus

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
1037.50	-2256.80	4.89E+10	3.13E+10	2.25E+10	3.35E+14	6.13E+15	2.12E+16	1.24E+08	4.51E+09	1.03E-05	1.11E-02
1037.50	-2216.80	1.27E+11	9.05E+10	7.91E+10	1.17E+15	8.08E+15	3.08E+16	4.32E+08	5.91E+09	3.63E-05	1.47E-02
1037.50	-2176.80	3.34E+11	2.77E+11	2.29E+11	3.78E+15	1.10E+16	3.96E+16	1.40E+09	7.68E+09	1.15E-04	1.96E-02
1037.50	-2136.80	9.21E+11	9.73E+11	1.23E+12	1.46E+16	1.56E+16	4.90E+16	5.41E+09	1.01E+10	4.51E-04	2.79E-02
1037.50	-2096.80	3.12E+12	6.41E+12	6.17E+12	8.97E+16	2.05E+16	5.66E+16	3.31E+10	1.28E+10	2.73E-03	5.09E-02
1037.50	-2064.10	7.87E+12	1.52E+13	1.07E+13	1.55E+17	2.28E+16	5.89E+16	5.72E+10	1.52E+10	4.64E-03	7.13E-02
1037.50	-2038.70	1.18E+13	1.87E+13	1.19E+13	1.65E+17	2.09E+16	5.74E+16	6.10E+10	1.47E+10	4.94E-03	7.24E-02
1037.50	-2010.80	1.63E+13	2.48E+13	1.46E+13	2.14E+17	1.54E+16	5.33E+16	7.92E+10	1.15E+10	6.55E-03	7.57E-02
1037.50	-1980.40	1.83E+13	3.19E+13	1.84E+13	2.93E+17	1.27E+16	5.05E+16	1.08E+11	9.88E+09	9.02E-03	8.91E-02
1037.50	-1950.00	1.76E+13	3.52E+13	2.14E+13	3.68E+17	1.08E+16	4.78E+16	1.36E+11	8.67E+09	1.13E-02	1.03E-01
1037.50	-1919.60	1.64E+13	3.63E+13	2.35E+13	4.45E+17	9.49E+15	4.55E+16	1.64E+11	7.81E+09	1.37E-02	1.18E-01
1037.50	-1889.20	1.53E+13	3.60E+13	2.48E+13	5.23E+17	8.58E+15	4.36E+16	1.93E+11	7.20E+09	1.61E-02	1.34E-01
1037.50	-1858.80	1.44E+13	3.52E+13	2.54E+13	6.04E+17	7.99E+15	4.22E+16	2.23E+11	6.79E+09	1.86E-02	1.50E-01
1037.50	-1828.40	1.37E+13	3.43E+13	2.57E+13	6.86E+17	7.61E+15	4.12E+16	2.53E+11	6.53E+09	2.11E-02	1.68E-01
1037.50	-1798.00	1.33E+13	3.34E+13	2.57E+13	7.70E+17	7.40E+15	4.07E+16	2.84E+11	6.37E+09	2.37E-02	1.86E-01
1037.50	-1767.60	1.31E+13	3.29E+13	2.58E+13	8.56E+17	7.31E+15	4.05E+16	3.16E+11	6.31E+09	2.64E-02	2.05E-01
1037.50	-1737.20	1.31E+13	3.27E+13	2.58E+13	9.45E+17	7.32E+15	4.06E+16	3.49E+11	6.33E+09	2.91E-02	2.24E-01
1037.50	-1706.80	1.32E+13	3.28E+13	2.60E+13	1.04E+18	7.41E+15	4.11E+16	3.83E+11	6.40E+09	3.19E-02	2.45E-01
1037.50	-1676.40	1.34E+13	3.32E+13	2.64E+13	1.13E+18	7.57E+15	4.20E+16	4.18E+11	6.53E+09	3.49E-02	2.66E-01
1037.50	-1646.00	1.37E+13	3.38E+13	2.69E+13	1.23E+18	7.79E+15	4.31E+16	4.54E+11	6.71E+09	3.79E-02	2.88E-01
1037.50	-1615.60	1.42E+13	3.47E+13	2.76E+13	1.33E+18	8.06E+15	4.45E+16	4.92E+11	6.94E+09	4.11E-02	3.11E-01
1037.50	-1585.20	1.47E+13	3.59E+13	2.86E+13	1.44E+18	8.37E+15	4.62E+16	5.31E+11	7.21E+09	4.43E-02	3.36E-01
1037.50	-1554.80	1.53E+13	3.73E+13	2.96E+13	1.55E+18	8.74E+15	4.82E+16	5.72E+11	7.51E+09	4.78E-02	3.61E-01
1037.50	-1524.40	1.60E+13	3.89E+13	3.09E+13	1.67E+18	9.14E+15	5.05E+16	6.15E+11	7.86E+09	5.13E-02	3.87E-01
1037.50	-1494.00	1.67E+13	4.07E+13	3.22E+13	1.79E+18	9.59E+15	5.31E+16	6.59E+11	8.25E+09	5.50E-02	4.15E-01
1037.50	-1463.60	1.75E+13	4.27E+13	3.38E+13	1.91E+18	1.01E+16	5.59E+16	7.05E+11	8.67E+09	5.89E-02	4.43E-01
1037.50	-1433.20	1.84E+13	4.48E+13	3.55E+13	2.04E+18	1.06E+16	5.90E+16	7.54E+11	9.14E+09	6.29E-02	4.73E-01
1037.50	-1402.80	1.94E+13	4.72E+13	3.74E+13	2.18E+18	1.12E+16	6.24E+16	8.04E+11	9.64E+09	6.71E-02	5.05E-01
1037.50	-1372.40	2.04E+13	4.97E+13	3.94E+13	2.32E+18	1.18E+16	6.62E+16	8.57E+11	1.02E+10	7.15E-02	5.38E-01
1037.50	-1342.00	2.16E+13	5.25E+13	4.16E+13	2.47E+18	1.25E+16	7.02E+16	9.12E+11	1.08E+10	7.62E-02	5.72E-01
1037.50	-1311.60	2.27E+13	5.54E+13	4.39E+13	2.63E+18	1.32E+16	7.46E+16	9.70E+11	1.14E+10	8.10E-02	6.08E-01
1037.50	-1281.20	2.40E+13	5.85E+13	4.64E+13	2.79E+18	1.40E+16	7.93E+16	1.03E+12	1.21E+10	8.60E-02	6.46E-01
1037.50	-1250.80	2.54E+13	6.18E+13	4.91E+13	2.97E+18	1.47E+16	8.43E+16	1.09E+12	1.28E+10	9.13E-02	6.86E-01
1037.50	-1220.40	2.68E+13	6.54E+13	5.20E+13	3.14E+18	1.56E+16	8.97E+16	1.16E+12	1.36E+10	9.68E-02	7.27E-01
1037.50	-1190.00	2.83E+13	6.90E+13	5.50E+13	3.33E+18	1.65E+16	9.55E+16	1.23E+12	1.44E+10	1.03E-01	7.71E-01
1037.50	-1159.60	2.99E+13	7.32E+13	5.84E+13	3.53E+18	1.74E+16	1.02E+17	1.30E+12	1.52E+10	1.09E-01	8.16E-01
1037.50	-1129.20	3.16E+13	7.72E+13	6.18E+13	3.73E+18	1.84E+16	1.08E+17	1.38E+12	1.61E+10	1.15E-01	8.63E-01
1037.50	-1098.80	3.33E+13	8.19E+13	6.58E+13	3.95E+18	1.94E+16	1.15E+17	1.46E+12	1.71E+10	1.22E-01	9.13E-01
1037.50	-1068.40	3.52E+13	8.64E+13	6.96E+13	4.17E+18	2.05E+16	1.23E+17	1.54E+12	1.81E+10	1.28E-01	9.65E-01
1037.50	-1038.00	3.72E+13	9.16E+13	7.43E+13	4.40E+18	2.16E+16	1.31E+17	1.62E+12	1.91E+10	1.36E-01	1.02E+00
1037.50	-1007.60	3.93E+13	9.68E+13	7.89E+13	4.64E+18	2.28E+16	1.40E+17	1.71E+12	2.03E+10	1.43E-01	1.07E+00
1037.50	-977.20	4.15E+13	1.03E+14	8.43E+13	4.90E+18	2.40E+16	1.49E+17	1.81E+12	2.14E+10	1.51E-01	1.13E+00
1037.50	-946.80	4.38E+13	1.08E+14	8.97E+13	5.16E+18	2.53E+16	1.58E+17	1.90E+12	2.27E+10	1.59E-01	1.19E+00
1037.50	-916.40	4.62E+13	1.15E+14	9.61E+13	5.43E+18	2.66E+16	1.69E+17	2.00E+12	2.40E+10	1.67E-01	1.26E+00

Table 18. Activities for an Axial Traverse Through the Center of the Side Reflector Annulus (continued)

Radius (mm)	Elevation (mm)					E>2.2 MeV	Total	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
		Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)	Gamma-Ray Flux (/m**2.s)				
1037.50	-886.00	4.88E+13	1.22E+14	1.03E+14	5.72E+18	2.80E+16	1.80E+17	2.11E+12	2.53E+10	1.76E-01	1.32E+00
1037.50	-855.60	5.15E+13	1.29E+14	1.10E+14	6.01E+18	2.94E+16	1.91E+17	2.22E+12	2.67E+10	1.85E-01	1.39E+00
1037.50	-825.20	5.43E+13	1.36E+14	1.18E+14	6.31E+18	3.08E+16	2.03E+17	2.33E+12	2.82E+10	1.94E-01	1.46E+00
1037.50	-794.80	5.73E+13	1.45E+14	1.28E+14	6.62E+18	3.23E+16	2.16E+17	2.44E+12	2.97E+10	2.04E-01	1.54E+00
1037.50	-764.40	6.04E+13	1.53E+14	1.38E+14	6.95E+18	3.38E+16	2.29E+17	2.56E+12	3.12E+10	2.14E-01	1.61E+00
1037.50	-734.00	6.38E+13	1.63E+14	1.49E+14	7.28E+18	3.54E+16	2.43E+17	2.69E+12	3.29E+10	2.24E-01	1.69E+00
1037.50	-703.60	6.74E+13	1.73E+14	1.61E+14	7.62E+18	3.71E+16	2.58E+17	2.81E+12	3.46E+10	2.35E-01	1.77E+00
1037.50	-673.20	7.12E+13	1.84E+14	1.75E+14	7.97E+18	3.89E+16	2.73E+17	2.94E+12	3.65E+10	2.45E-01	1.85E+00
1037.50	-645.00	7.50E+13	1.94E+14	1.89E+14	8.30E+18	4.07E+16	2.89E+17	3.06E+12	3.84E+10	2.56E-01	1.93E+00
1037.50	-621.75	7.83E+13	2.04E+14	2.02E+14	8.58E+18	4.23E+16	3.02E+17	3.17E+12	4.00E+10	2.64E-01	1.99E+00
1037.50	-601.25	8.12E+13	2.12E+14	2.13E+14	8.83E+18	4.36E+16	3.14E+17	3.26E+12	4.13E+10	2.72E-01	2.05E+00
1037.50	-580.75	8.42E+13	2.21E+14	2.26E+14	9.08E+18	4.48E+16	3.26E+17	3.35E+12	4.27E+10	2.80E-01	2.11E+00
1037.50	-560.25	8.71E+13	2.30E+14	2.39E+14	9.34E+18	4.60E+16	3.38E+17	3.44E+12	4.40E+10	2.88E-01	2.17E+00
1037.50	-539.75	9.01E+13	2.40E+14	2.53E+14	9.59E+18	4.71E+16	3.51E+17	3.54E+12	4.52E+10	2.95E-01	2.23E+00
1037.50	-519.25	9.31E+13	2.49E+14	2.68E+14	9.85E+18	4.82E+16	3.63E+17	3.63E+12	4.65E+10	3.03E-01	2.29E+00
1037.50	-504.00	9.55E+13	2.57E+14	2.79E+14	1.00E+19	4.92E+16	3.72E+17	3.71E+12	4.76E+10	3.09E-01	2.33E+00
1037.50	-494.00	9.70E+13	2.62E+14	2.87E+14	1.02E+19	4.98E+16	3.79E+17	3.75E+12	4.83E+10	3.13E-01	2.36E+00
1037.50	-484.00	9.87E+13	2.67E+14	2.95E+14	1.03E+19	5.04E+16	3.85E+17	3.80E+12	4.90E+10	3.17E-01	2.39E+00
1037.50	-474.00	1.00E+14	2.72E+14	3.02E+14	1.04E+19	5.11E+16	3.92E+17	3.85E+12	4.97E+10	3.21E-01	2.42E+00
1037.50	-466.50	1.01E+14	2.76E+14	3.08E+14	1.05E+19	5.17E+16	3.97E+17	3.88E+12	5.03E+10	3.24E-01	2.45E+00
1037.50	-461.50	1.03E+14	2.81E+14	3.15E+14	1.06E+19	5.20E+16	4.00E+17	3.91E+12	5.06E+10	3.26E-01	2.46E+00
1037.50	-454.00	1.04E+14	2.82E+14	3.17E+14	1.07E+19	5.25E+16	4.05E+17	3.94E+12	5.12E+10	3.29E-01	2.48E+00
1037.50	-444.00	1.05E+14	2.88E+14	3.25E+14	1.08E+19	5.32E+16	4.11E+17	3.99E+12	5.19E+10	3.33E-01	2.51E+00
1037.50	-433.33	1.07E+14	2.92E+14	3.31E+14	1.09E+19	5.40E+16	4.19E+17	4.04E+12	5.27E+10	3.37E-01	2.55E+00
1037.50	-420.13	1.09E+14	2.98E+14	3.40E+14	1.11E+19	5.50E+16	4.27E+17	4.10E+12	5.38E+10	3.42E-01	2.59E+00
1037.50	-405.05	1.12E+14	3.06E+14	3.52E+14	1.13E+19	5.61E+16	4.38E+17	4.17E+12	5.49E+10	3.48E-01	2.63E+00
1037.50	-389.95	1.14E+14	3.13E+14	3.62E+14	1.15E+19	5.71E+16	4.48E+17	4.24E+12	5.61E+10	3.54E-01	2.68E+00
1037.50	-374.85	1.17E+14	3.22E+14	3.75E+14	1.17E+19	5.82E+16	4.58E+17	4.31E+12	5.72E+10	3.60E-01	2.72E+00
1037.50	-359.75	1.20E+14	3.28E+14	3.86E+14	1.19E+19	5.92E+16	4.68E+17	4.38E+12	5.83E+10	3.66E-01	2.77E+00
1037.50	-344.65	1.22E+14	3.37E+14	3.99E+14	1.21E+19	6.01E+16	4.78E+17	4.45E+12	5.94E+10	3.72E-01	2.81E+00
1037.50	-329.55	1.25E+14	3.45E+14	4.12E+14	1.23E+19	6.10E+16	4.88E+17	4.52E+12	6.04E+10	3.78E-01	2.86E+00
1037.50	-314.45	1.28E+14	3.53E+14	4.24E+14	1.24E+19	6.19E+16	4.98E+17	4.59E+12	6.15E+10	3.83E-01	2.90E+00
1037.50	-299.35	1.30E+14	3.61E+14	4.39E+14	1.26E+19	6.28E+16	5.08E+17	4.66E+12	6.25E+10	3.89E-01	2.94E+00
1037.50	-283.44	1.33E+14	3.70E+14	4.53E+14	1.28E+19	6.36E+16	5.18E+17	4.73E+12	6.35E+10	3.95E-01	2.99E+00
1037.50	-266.72	1.36E+14	3.79E+14	4.70E+14	1.30E+19	6.44E+16	5.29E+17	4.81E+12	6.45E+10	4.01E-01	3.03E+00
1037.50	-250.00	1.39E+14	3.89E+14	4.88E+14	1.32E+19	6.51E+16	5.39E+17	4.88E+12	6.54E+10	4.07E-01	3.08E+00
1037.50	-233.28	1.41E+14	3.99E+14	5.06E+14	1.34E+19	6.57E+16	5.49E+17	4.95E+12	6.63E+10	4.13E-01	3.13E+00
1037.50	-216.56	1.44E+14	4.10E+14	5.26E+14	1.36E+19	6.62E+16	5.58E+17	5.02E+12	6.70E+10	4.19E-01	3.17E+00
1037.50	-199.84	1.47E+14	4.20E+14	5.46E+14	1.38E+19	6.67E+16	5.68E+17	5.09E+12	6.78E+10	4.25E-01	3.21E+00
1037.50	-183.12	1.50E+14	4.32E+14	5.69E+14	1.40E+19	6.72E+16	5.78E+17	5.16E+12	6.86E+10	4.30E-01	3.25E+00
1037.50	-166.40	1.53E+14	4.43E+14	5.91E+14	1.42E+19	6.79E+16	5.87E+17	5.22E+12	6.95E+10	4.36E-01	3.30E+00
1037.50	-149.68	1.57E+14	4.56E+14	6.16E+14	1.43E+19	6.88E+16	5.98E+17	5.29E+12	7.06E+10	4.41E-01	3.34E+00
1037.50	-132.96	1.61E+14	4.69E+14	6.42E+14	1.45E+19	6.99E+16	6.09E+17	5.35E+12	7.18E+10	4.46E-01	3.38E+00
1037.50	-116.24	1.64E+14	4.82E+14	6.69E+14	1.47E+19	7.12E+16	6.20E+17	5.41E+12	7.31E+10	4.51E-01	3.42E+00

Table 18. Activities for an Axial Traverse Through the Center of the Side Reflector Annulus (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
1037.50	-99.52	1.69E+14	4.97E+14	6.99E+14	1.48E+19	7.27E+16	6.32E+17	5.47E+12	7.46E+10	4.56E-01	3.45E+00
1037.50	-82.80	1.73E+14	5.11E+14	7.28E+14	1.50E+19	7.43E+16	6.44E+17	5.52E+12	7.62E+10	4.61E-01	3.49E+00
1037.50	-66.08	1.78E+14	5.26E+14	7.61E+14	1.51E+19	7.57E+16	6.55E+17	5.57E+12	7.77E+10	4.65E-01	3.53E+00
1037.50	-53.54	1.81E+14	5.40E+14	7.87E+14	1.52E+19	7.67E+16	6.63E+17	5.61E+12	7.87E+10	4.69E-01	3.55E+00
1037.50	-45.18	1.82E+14	5.46E+14	8.01E+14	1.53E+19	7.71E+16	6.68E+17	5.64E+12	7.91E+10	4.71E-01	3.57E+00
1037.50	-38.50	1.84E+14	5.52E+14	8.15E+14	1.53E+19	7.73E+16	6.71E+17	5.66E+12	7.94E+10	4.72E-01	3.58E+00
1037.50	-33.50	1.84E+14	5.54E+14	8.21E+14	1.54E+19	7.74E+16	6.74E+17	5.67E+12	7.96E+10	4.73E-01	3.59E+00
1037.50	-28.00	1.86E+14	5.62E+14	8.32E+14	1.54E+19	7.75E+16	6.76E+17	5.69E+12	7.98E+10	4.75E-01	3.60E+00
1037.50	-20.00	1.87E+14	5.65E+14	8.44E+14	1.55E+19	7.77E+16	6.80E+17	5.71E+12	8.01E+10	4.76E-01	3.61E+00
1037.50	-10.00	1.88E+14	5.72E+14	8.59E+14	1.55E+19	7.79E+16	6.84E+17	5.73E+12	8.04E+10	4.79E-01	3.63E+00
1037.50	.00	1.90E+14	5.79E+14	8.74E+14	1.56E+19	7.80E+16	6.88E+17	5.76E+12	8.07E+10	4.81E-01	3.64E+00
1037.50	10.00	1.91E+14	5.84E+14	8.88E+14	1.57E+19	7.82E+16	6.91E+17	5.78E+12	8.10E+10	4.82E-01	3.66E+00
1037.50	20.00	1.93E+14	5.91E+14	9.03E+14	1.57E+19	7.83E+16	6.94E+17	5.80E+12	8.12E+10	4.84E-01	3.67E+00
1037.50	30.00	1.93E+14	5.95E+14	9.15E+14	1.58E+19	7.83E+16	6.97E+17	5.82E+12	8.14E+10	4.86E-01	3.68E+00
1037.50	40.00	1.95E+14	6.02E+14	9.28E+14	1.58E+19	7.84E+16	7.00E+17	5.84E+12	8.16E+10	4.88E-01	3.70E+00
1037.50	50.00	1.96E+14	6.06E+14	9.40E+14	1.59E+19	7.86E+16	7.03E+17	5.86E+12	8.18E+10	4.89E-01	3.71E+00
1037.50	60.00	1.97E+14	6.11E+14	9.51E+14	1.59E+19	7.87E+16	7.06E+17	5.88E+12	8.20E+10	4.91E-01	3.72E+00
1037.50	67.50	1.98E+14	6.16E+14	9.60E+14	1.60E+19	7.88E+16	7.07E+17	5.89E+12	8.21E+10	4.92E-01	3.73E+00
1037.50	72.50	1.97E+14	6.17E+14	9.63E+14	1.60E+19	7.89E+16	7.08E+17	5.90E+12	8.22E+10	4.92E-01	3.73E+00
1037.50	80.00	1.99E+14	6.15E+14	9.68E+14	1.60E+19	7.91E+16	7.10E+17	5.91E+12	8.24E+10	4.93E-01	3.74E+00
1037.50	90.42	1.99E+14	6.23E+14	9.74E+14	1.60E+19	7.92E+16	7.12E+17	5.92E+12	8.26E+10	4.94E-01	3.75E+00
1037.50	101.10	2.00E+14	6.22E+14	9.81E+14	1.61E+19	7.92E+16	7.13E+17	5.93E+12	8.26E+10	4.95E-01	3.75E+00
1037.50	111.57	2.00E+14	6.25E+14	9.86E+14	1.61E+19	7.91E+16	7.14E+17	5.94E+12	8.26E+10	4.96E-01	3.76E+00
1037.50	125.16	2.00E+14	6.27E+14	9.88E+14	1.61E+19	7.88E+16	7.15E+17	5.95E+12	8.25E+10	4.97E-01	3.77E+00
1037.50	141.88	2.01E+14	6.26E+14	9.96E+14	1.62E+19	7.84E+16	7.15E+17	5.96E+12	8.22E+10	4.98E-01	3.77E+00
1037.50	158.60	2.01E+14	6.29E+14	9.98E+14	1.62E+19	7.81E+16	7.15E+17	5.97E+12	8.20E+10	4.98E-01	3.77E+00
1037.50	175.32	2.02E+14	6.30E+14	1.00E+15	1.62E+19	7.79E+16	7.15E+17	5.97E+12	8.19E+10	4.99E-01	3.78E+00
1037.50	192.04	2.02E+14	6.32E+14	1.01E+15	1.62E+19	7.80E+16	7.16E+17	5.97E+12	8.20E+10	4.99E-01	3.78E+00
1037.50	208.76	2.03E+14	6.32E+14	1.01E+15	1.62E+19	7.82E+16	7.16E+17	5.97E+12	8.22E+10	4.98E-01	3.77E+00
1037.50	225.48	2.03E+14	6.33E+14	1.01E+15	1.61E+19	7.87E+16	7.16E+17	5.96E+12	8.25E+10	4.97E-01	3.77E+00
1037.50	242.20	2.04E+14	6.32E+14	1.01E+15	1.61E+19	7.92E+16	7.16E+17	5.95E+12	8.28E+10	4.96E-01	3.76E+00
1037.50	258.92	2.04E+14	6.32E+14	1.00E+15	1.61E+19	7.97E+16	7.15E+17	5.93E+12	8.30E+10	4.95E-01	3.75E+00
1037.50	275.64	2.04E+14	6.29E+14	1.00E+15	1.60E+19	7.98E+16	7.13E+17	5.91E+12	8.30E+10	4.93E-01	3.74E+00
1037.50	291.55	2.03E+14	6.27E+14	9.96E+14	1.60E+19	7.96E+16	7.09E+17	5.89E+12	8.27E+10	4.91E-01	3.73E+00
1037.50	306.65	2.01E+14	6.22E+14	9.89E+14	1.59E+19	7.91E+16	7.05E+17	5.86E+12	8.22E+10	4.89E-01	3.71E+00
1037.50	321.75	2.00E+14	6.18E+14	9.80E+14	1.58E+19	7.83E+16	6.99E+17	5.83E+12	8.14E+10	4.87E-01	3.69E+00
1037.50	336.85	1.98E+14	6.12E+14	9.70E+14	1.57E+19	7.73E+16	6.92E+17	5.80E+12	8.05E+10	4.84E-01	3.67E+00
1037.50	351.95	1.95E+14	6.07E+14	9.58E+14	1.56E+19	7.63E+16	6.85E+17	5.77E+12	7.95E+10	4.82E-01	3.65E+00
1037.50	367.05	1.93E+14	5.98E+14	9.44E+14	1.55E+19	7.54E+16	6.77E+17	5.73E+12	7.85E+10	4.79E-01	3.62E+00
1037.50	382.15	1.91E+14	5.92E+14	9.30E+14	1.54E+19	7.46E+16	6.70E+17	5.69E+12	7.77E+10	4.75E-01	3.60E+00
1037.50	397.25	1.89E+14	5.83E+14	9.13E+14	1.53E+19	7.40E+16	6.62E+17	5.65E+12	7.69E+10	4.72E-01	3.57E+00
1037.50	412.33	1.86E+14	5.75E+14	8.95E+14	1.52E+19	7.35E+16	6.54E+17	5.60E+12	7.62E+10	4.68E-01	3.54E+00
1037.50	425.08	1.84E+14	5.68E+14	8.80E+14	1.51E+19	7.31E+16	6.48E+17	5.56E+12	7.57E+10	4.65E-01	3.52E+00
1037.50	438.15	1.81E+14	5.58E+14	8.61E+14	1.50E+19	7.27E+16	6.41E+17	5.52E+12	7.50E+10	4.61E-01	3.49E+00

Table 18. Activities for an Axial Traverse Through the Center of the Side Reflector Annulus (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
1037.50	453.83	1.79E+14	5.50E+14	8.40E+14	1.48E+19	7.21E+16	6.32E+17	5.47E+12	7.42E+10	4.56E-01	3.45E+00
1037.50	466.65	1.77E+14	5.39E+14	8.21E+14	1.47E+19	7.15E+16	6.24E+17	5.42E+12	7.35E+10	4.53E-01	3.43E+00
1037.50	477.07	1.75E+14	5.34E+14	8.03E+14	1.46E+19	7.10E+16	6.18E+17	5.38E+12	7.29E+10	4.49E-01	3.40E+00
1037.50	487.75	1.73E+14	5.23E+14	7.86E+14	1.45E+19	7.05E+16	6.11E+17	5.34E+12	7.23E+10	4.46E-01	3.37E+00
1037.50	495.50	1.71E+14	5.16E+14	7.71E+14	1.44E+19	7.01E+16	6.06E+17	5.31E+12	7.18E+10	4.43E-01	3.36E+00
1037.50	500.50	1.70E+14	5.15E+14	7.62E+14	1.43E+19	6.99E+16	6.03E+17	5.29E+12	7.15E+10	4.42E-01	3.34E+00
1037.50	508.00	1.69E+14	5.07E+14	7.47E+14	1.43E+19	6.96E+16	5.98E+17	5.26E+12	7.11E+10	4.39E-01	3.32E+00
1037.50	520.00	1.66E+14	4.94E+14	7.22E+14	1.41E+19	6.91E+16	5.90E+17	5.21E+12	7.04E+10	4.35E-01	3.29E+00
1037.50	537.00	1.62E+14	4.79E+14	6.86E+14	1.39E+19	6.86E+16	5.79E+17	5.14E+12	6.96E+10	4.29E-01	3.25E+00
1037.50	560.00	1.57E+14	4.56E+14	6.39E+14	1.37E+19	6.79E+16	5.63E+17	5.04E+12	6.84E+10	4.21E-01	3.18E+00
1037.50	585.50	1.51E+14	4.33E+14	5.89E+14	1.33E+19	6.67E+16	5.45E+17	4.92E+12	6.67E+10	4.11E-01	3.11E+00
1037.50	610.50	1.44E+14	4.10E+14	5.42E+14	1.30E+19	6.52E+16	5.26E+17	4.81E+12	6.48E+10	4.01E-01	3.04E+00
1037.50	635.50	1.38E+14	3.87E+14	4.97E+14	1.27E+19	6.33E+16	5.06E+17	4.69E+12	6.27E+10	3.91E-01	2.96E+00
1037.50	660.50	1.31E+14	3.65E+14	4.56E+14	1.24E+19	6.12E+16	4.86E+17	4.56E+12	6.04E+10	3.81E-01	2.88E+00
1037.50	685.50	1.25E+14	3.44E+14	4.17E+14	1.20E+19	5.90E+16	4.65E+17	4.44E+12	5.80E+10	3.71E-01	2.80E+00
1037.50	710.50	1.18E+14	3.24E+14	3.82E+14	1.17E+19	5.70E+16	4.45E+17	4.32E+12	5.58E+10	3.60E-01	2.72E+00
1037.50	735.50	1.13E+14	3.05E+14	3.49E+14	1.14E+19	5.51E+16	4.25E+17	4.19E+12	5.37E+10	3.50E-01	2.64E+00
1037.50	760.50	1.07E+14	2.88E+14	3.20E+14	1.10E+19	5.33E+16	4.07E+17	4.06E+12	5.17E+10	3.39E-01	2.56E+00
1037.50	785.50	1.02E+14	2.72E+14	2.92E+14	1.07E+19	5.17E+16	3.89E+17	3.94E+12	4.98E+10	3.29E-01	2.48E+00
1037.50	810.50	9.74E+13	2.57E+14	2.69E+14	1.03E+19	5.01E+16	3.71E+17	3.81E+12	4.80E+10	3.18E-01	2.40E+00
1037.50	835.50	9.31E+13	2.43E+14	2.46E+14	9.99E+18	4.87E+16	3.55E+17	3.69E+12	4.64E+10	3.08E-01	2.32E+00
1037.50	860.50	8.91E+13	2.31E+14	2.28E+14	9.66E+18	4.73E+16	3.39E+17	3.56E+12	4.47E+10	2.97E-01	2.24E+00
1037.50	885.50	8.52E+13	2.19E+14	2.10E+14	9.33E+18	4.59E+16	3.23E+17	3.44E+12	4.31E+10	2.87E-01	2.16E+00
1037.50	910.50	8.15E+13	2.08E+14	1.95E+14	9.00E+18	4.44E+16	3.08E+17	3.32E+12	4.15E+10	2.77E-01	2.09E+00
1037.50	935.50	7.79E+13	1.98E+14	1.81E+14	8.68E+18	4.29E+16	2.94E+17	3.20E+12	3.98E+10	2.67E-01	2.01E+00
1037.50	960.50	7.45E+13	1.88E+14	1.69E+14	8.36E+18	4.14E+16	2.79E+17	3.08E+12	3.82E+10	2.57E-01	1.94E+00
1037.50	985.50	7.12E+13	1.79E+14	1.58E+14	8.05E+18	3.98E+16	2.66E+17	2.97E+12	3.66E+10	2.48E-01	1.87E+00
1037.50	1010.50	6.80E+13	1.71E+14	1.48E+14	7.74E+18	3.83E+16	2.52E+17	2.86E+12	3.50E+10	2.38E-01	1.80E+00
1037.50	1035.50	6.50E+13	1.63E+14	1.39E+14	7.45E+18	3.68E+16	2.40E+17	2.75E+12	3.35E+10	2.29E-01	1.73E+00
1037.50	1060.50	6.21E+13	1.55E+14	1.31E+14	7.15E+18	3.53E+16	2.28E+17	2.64E+12	3.20E+10	2.20E-01	1.66E+00
1037.50	1085.50	5.94E+13	1.48E+14	1.24E+14	6.87E+18	3.39E+16	2.16E+17	2.54E+12	3.06E+10	2.12E-01	1.59E+00
1037.50	1110.50	5.69E+13	1.41E+14	1.17E+14	6.60E+18	3.26E+16	2.05E+17	2.43E+12	2.93E+10	2.03E-01	1.53E+00
1037.50	1135.50	5.44E+13	1.35E+14	1.11E+14	6.33E+18	3.13E+16	1.95E+17	2.33E+12	2.80E+10	1.95E-01	1.47E+00
1037.50	1160.50	5.21E+13	1.29E+14	1.05E+14	6.07E+18	3.00E+16	1.85E+17	2.24E+12	2.68E+10	1.87E-01	1.41E+00
1037.50	1185.50	4.98E+13	1.23E+14	1.00E+14	5.82E+18	2.88E+16	1.76E+17	2.15E+12	2.56E+10	1.79E-01	1.35E+00
1037.50	1210.50	4.77E+13	1.17E+14	9.47E+13	5.57E+18	2.76E+16	1.67E+17	2.06E+12	2.45E+10	1.72E-01	1.29E+00
1037.50	1235.50	4.56E+13	1.12E+14	9.06E+13	5.34E+18	2.65E+16	1.58E+17	1.97E+12	2.34E+10	1.64E-01	1.24E+00
1037.50	1260.50	4.37E+13	1.07E+14	8.58E+13	5.11E+18	2.54E+16	1.50E+17	1.88E+12	2.23E+10	1.57E-01	1.18E+00
1037.50	1285.50	4.18E+13	1.02E+14	8.22E+13	4.89E+18	2.42E+16	1.43E+17	1.80E+12	2.12E+10	1.50E-01	1.13E+00
1037.50	1310.50	4.00E+13	9.78E+13	7.80E+13	4.67E+18	2.31E+16	1.35E+17	1.72E+12	2.03E+10	1.44E-01	1.08E+00
1037.50	1335.50	3.82E+13	9.35E+13	7.48E+13	4.47E+18	2.21E+16	1.29E+17	1.65E+12	1.93E+10	1.38E-01	1.03E+00
1037.50	1360.50	3.66E+13	8.93E+13	7.10E+13	4.27E+18	2.12E+16	1.22E+17	1.57E+12	1.84E+10	1.31E-01	9.87E-01
1037.50	1385.50	3.50E+13	8.54E+13	6.81E+13	4.08E+18	2.03E+16	1.16E+17	1.50E+12	1.76E+10	1.26E-01	9.43E-01
1037.50	1410.50	3.36E+13	8.17E+13	6.47E+13	3.89E+18	1.94E+16	1.10E+17	1.44E+12	1.68E+10	1.20E-01	9.00E-01

Table 18. Activities for an Axial Traverse Through the Center of the Side Reflector Annulus (continued)

Radius (mm)	Elevation (mm)	Group A Flux (/m**2.s)	Group B Flux (/m**2.s)	Group C Flux (/m**2.s)	Group D Flux (/m**2.s)	E>2.2 MeV Gamma-Ray Flux (/m**2.s)	Total Gamma-Ray Flux (/m**2.s)	Neutron Dose Rate (mrem/h)	Gamma-Ray Dose Rate (mrem/h)	Atomic Displace- ment (/yr)	Al Nuclear Heating (W/g)
1037.50	1435.50	3.21E+13	7.81E+13	6.20E+13	3.71E+18	1.86E+16	1.05E+17	1.37E+12	1.61E+10	1.14E-01	8.59E-01
1037.50	1460.50	3.07E+13	7.47E+13	5.90E+13	3.54E+18	1.78E+16	9.96E+16	1.31E+12	1.53E+10	1.09E-01	8.19E-01
1037.50	1485.50	2.94E+13	7.13E+13	5.65E+13	3.38E+18	1.70E+16	9.47E+16	1.25E+12	1.46E+10	1.04E-01	7.81E-01
1037.50	1510.50	2.81E+13	6.83E+13	5.39E+13	3.22E+18	1.63E+16	9.01E+16	1.19E+12	1.40E+10	9.90E-02	7.44E-01
1037.50	1535.50	2.70E+13	6.52E+13	5.15E+13	3.06E+18	1.56E+16	8.57E+16	1.13E+12	1.33E+10	9.43E-02	7.09E-01
1037.50	1560.50	2.58E+13	6.24E+13	4.93E+13	2.91E+18	1.49E+16	8.15E+16	1.08E+12	1.27E+10	8.97E-02	6.75E-01
1037.50	1585.50	2.47E+13	5.96E+13	4.71E+13	2.77E+18	1.42E+16	7.76E+16	1.02E+12	1.21E+10	8.54E-02	6.42E-01
1037.50	1610.50	2.36E+13	5.71E+13	4.50E+13	2.63E+18	1.36E+16	7.39E+16	9.72E+11	1.16E+10	8.11E-02	6.10E-01
1037.50	1635.50	2.26E+13	5.45E+13	4.31E+13	2.50E+18	1.30E+16	7.05E+16	9.23E+11	1.11E+10	7.71E-02	5.80E-01
1037.50	1660.50	2.16E+13	5.23E+13	4.12E+13	2.38E+18	1.24E+16	6.72E+16	8.76E+11	1.06E+10	7.32E-02	5.50E-01
1037.50	1685.50	2.07E+13	4.99E+13	3.95E+13	2.25E+18	1.18E+16	6.42E+16	8.31E+11	1.01E+10	6.94E-02	5.22E-01
1037.50	1710.50	1.98E+13	4.80E+13	3.79E+13	2.14E+18	1.13E+16	6.13E+16	7.88E+11	9.67E+09	6.57E-02	4.95E-01
1037.50	1735.50	1.90E+13	4.59E+13	3.64E+13	2.02E+18	1.08E+16	5.87E+16	7.46E+11	9.26E+09	6.22E-02	4.69E-01
1037.50	1760.50	1.82E+13	4.42E+13	3.49E+13	1.91E+18	1.04E+16	5.62E+16	7.05E+11	8.88E+09	5.89E-02	4.44E-01
1037.50	1785.50	1.75E+13	4.25E+13	3.37E+13	1.81E+18	9.98E+15	5.40E+16	6.66E+11	8.52E+09	5.56E-02	4.19E-01
1037.50	1810.50	1.69E+13	4.10E+13	3.25E+13	1.70E+18	9.59E+15	5.19E+16	6.28E+11	8.20E+09	5.24E-02	3.96E-01
1037.50	1835.50	1.63E+13	3.96E+13	3.14E+13	1.60E+18	9.24E+15	5.01E+16	5.92E+11	7.90E+09	4.94E-02	3.74E-01
1037.50	1860.50	1.58E+13	3.84E+13	3.05E+13	1.51E+18	8.92E+15	4.84E+16	5.57E+11	7.64E+09	4.65E-02	3.52E-01
1037.50	1885.50	1.53E+13	3.74E+13	2.97E+13	1.42E+18	8.63E+15	4.70E+16	5.22E+11	7.40E+09	4.36E-02	3.31E-01
1037.50	1910.50	1.49E+13	3.65E+13	2.90E+13	1.33E+18	8.38E+15	4.57E+16	4.89E+11	7.20E+09	4.09E-02	3.11E-01
1037.50	1935.50	1.45E+13	3.58E+13	2.84E+13	1.24E+18	8.17E+15	4.47E+16	4.57E+11	7.02E+09	3.82E-02	2.91E-01
1037.50	1960.50	1.43E+13	3.52E+13	2.81E+13	1.16E+18	8.00E+15	4.38E+16	4.26E+11	6.89E+09	3.56E-02	2.72E-01
1037.50	1985.50	1.41E+13	3.50E+13	2.77E+13	1.07E+18	7.88E+15	4.32E+16	3.96E+11	6.79E+09	3.31E-02	2.54E-01
1037.50	2010.50	1.40E+13	3.49E+13	2.76E+13	9.94E+17	7.80E+15	4.28E+16	3.67E+11	6.72E+09	3.06E-02	2.36E-01
1037.50	2035.50	1.40E+13	3.51E+13	2.75E+13	9.17E+17	7.79E+15	4.27E+16	3.38E+11	6.71E+09	2.82E-02	2.19E-01
1037.50	2060.50	1.41E+13	3.54E+13	2.75E+13	8.41E+17	7.83E+15	4.28E+16	3.10E+11	6.74E+09	2.59E-02	2.03E-01
1037.50	2085.50	1.44E+13	3.61E+13	2.74E+13	7.68E+17	7.96E+15	4.32E+16	2.83E+11	6.84E+09	2.37E-02	1.87E-01
1037.50	2110.50	1.48E+13	3.68E+13	2.74E+13	6.96E+17	8.20E+15	4.38E+16	2.57E+11	7.00E+09	2.14E-02	1.71E-01
1037.50	2135.50	1.54E+13	3.77E+13	2.71E+13	6.25E+17	8.56E+15	4.48E+16	2.31E+11	7.26E+09	1.93E-02	1.56E-01
1037.50	2160.50	1.62E+13	3.84E+13	2.65E+13	5.56E+17	9.09E+15	4.60E+16	2.05E+11	7.62E+09	1.71E-02	1.42E-01
1037.50	2185.50	1.72E+13	3.88E+13	2.55E+13	4.87E+17	9.85E+15	4.76E+16	1.80E+11	8.13E+09	1.50E-02	1.28E-01
1037.50	2210.50	1.83E+13	3.84E+13	2.40E+13	4.20E+17	1.09E+16	4.96E+16	1.55E+11	8.82E+09	1.30E-02	1.15E-01
1037.50	2235.50	1.92E+13	3.67E+13	2.19E+13	3.54E+17	1.23E+16	5.18E+16	1.31E+11	9.75E+09	1.09E-02	1.02E-01
1037.50	2260.50	1.95E+13	3.30E+13	1.91E+13	2.89E+17	1.43E+16	5.45E+16	1.07E+11	1.10E+10	8.90E-03	9.09E-02
1037.50	2285.50	1.73E+13	2.63E+13	1.56E+13	2.20E+17	1.69E+16	5.70E+16	8.15E+10	1.25E+10	6.72E-03	7.95E-02
1037.50	2310.70	1.27E+13	2.05E+13	1.31E+13	1.75E+17	2.22E+16	6.08E+16	6.47E+10	1.56E+10	5.24E-03	7.69E-02
1037.50	2336.10	8.56E+12	1.70E+13	1.20E+13	1.65E+17	2.42E+16	6.22E+16	6.08E+10	1.62E+10	4.93E-03	7.57E-02
1037.50	2360.80	4.26E+12	9.24E+12	8.28E+12	1.67E+17	2.34E+16	6.13E+16	4.29E+10	1.45E+10	3.54E-03	6.08E-02
1037.50	2384.80	1.87E+12	2.69E+12	3.41E+12	4.55E+16	2.05E+16	5.70E+16	1.68E+10	1.28E+10	1.40E-03	4.10E-02
1037.50	2408.80	9.38E+11	9.35E+11	1.11E+12	1.69E+16	1.64E+16	5.03E+16	6.24E+09	1.07E+10	5.13E-04	2.97E-02
1037.50	2432.80	4.91E+11	4.15E+11	3.92E+11	6.81E+15	1.32E+16	4.36E+16	2.52E+09	8.95E+09	2.10E-04	2.33E-02
1037.50	2456.80	2.69E+11	2.13E+11	1.79E+11	2.91E+15	1.07E+16	3.71E+16	1.08E+09	7.51E+09	8.90E-05	1.90E-02
1037.50	2480.80	1.49E+11	1.10E+11	9.14E+10	1.15E+15	8.80E+15	3.06E+16	4.25E+08	6.32E+09	3.55E-05	1.57E-02
1037.50	2504.90	7.99E+10	5.04E+10	3.80E+10	3.69E+14	7.35E+15	2.32E+16	1.37E+08	5.26E+09	1.14E-05	1.29E-02

Fig. 1. Calculational Geometry Model for the Three-Element-Core ANS Reactor as Used in the Global Shielding Analysis. (Radial dimensions here have been scaled by a factor of 2.5 so the core could be illustrated more clearly. In reality, the aluminum reflector vessel extends from $R=1.75$ m to $R=1.775$ m.)

Fig. 2. Near-Core Details of the Calculational Geometry Model for the Three-Element-Core ANS Reactor as Used in the Global Shielding Analysis. (Radial dimensions have been scaled by a factor of 2.5 so the core could be illustrated more clearly. In reality, the core pressure boundary tube only extends out to $R = 0.301$ m.)

Fig. 3. DORT Broad-Group Neutron Fluxes for a Radial Traverse in the Core Axial Midplane for the Case With No Photoneutrons.

Fig. 4. Comparison of DORT and VENTURE Group A ($E > 0.1 \text{ MeV}$) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case Without Photoneutrons.

Fig. 5. Comparison of DORT and VENTURE Group B ($100 \text{ eV} < E < 0.1 \text{ MeV}$) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case Without Photoneutrons.

Fig. 6. Comparison of DORT and VENTURE Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case Without Photoneutrons.

Fig. 7. Comparison of DORT and VENTURE Group D ($E < 0.625 \text{ eV}$) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case Without Photoneutrons.

Fig. 8. Comparison of DORT and VENTURE Group A ($E > 0.1 \text{ MeV}$) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case With Photoneutrons. (Note that the VENTURE calculation did not account for photoneutrons).

Fig. 9. Comparison of DORT and VENTURE Group B ($100 \text{ eV} < E < 0.1 \text{ MeV}$) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case With Photoneutrons. (Note that the VENTURE calculation did not account for photoneutrons).

Fig. 10. Comparison of DORT and VENTURE Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case With Photoneutrons. (Note that the VENTURE calculation did not account for photoneutrons).

Fig. 11. Comparison of DORT and VENTURE Group D ($E < 0.625$ eV) Neutron Flux for a Radial Traverse in the Core Axial Midplane for the DORT Case With Photoneutrons. (Note that the VENTURE calculation did not account for photoneutrons).

Fig. 12. DORT-Calculated Photoneutron-Enhanced Group A ($E > 0.1$ MeV) Neutron Flux ($\text{m}^{-2}\cdot\text{s}^{-1}$) Contours.

Fig. 13. DORT-Calculated Photoneutron-Enhanced Group B ($100 \text{ eV} < E < 0.1 \text{ MeV}$) Neutron Flux ($\text{m}^{-2} \cdot \text{s}^{-1}$) Contours.

Fig. 14. DORT-Calculated Photoneutron-Enhanced Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux ($\text{m}^{-2} \cdot \text{s}^{-1}$) Contours.

Fig. 15. DORT-Calculated Photoneutron-Enhanced Group D ($E < 0.625$ eV) Neutron Flux ($\text{m}^{-2}\cdot\text{s}^{-1}$) Contours.

Fig. 16. DORT-Calculated High-Energy ($E > 2.15$ MeV) Gamma-Ray Flux ($\text{m}^{-2} \cdot \text{s}^{-1}$) Contours.

Fig. 17. DORT-Calculated Total Gamma-Ray Flux ($\text{m}^{-2} \cdot \text{s}^{-1}$) Contours.

Fig. 18. DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate (mrem/h) Contours.

Fig. 19. DORT-Calculated Photoneutron-Enhanced Gamma-Ray Dose Rate (mrem/h) Contours.

Fig. 20. DORT-Calculated Photoneutron-Enhanced Atomic Displacement (yr^{-1}) Contours. (Shown here for each location is the number of displacements per atom per year that would occur in a small iron test specimen placed at that specific location. This has nothing to do with any radiation damage or atomic displacement in any of the aluminum components in the core or the reflector vessel.)

Fig. 21. DORT-Calculated Nuclear Heating (W/g) That Would Occur in Aluminum Components in the Reactor.

Fig. 22. DORT-Calculated Photoneutron-Enhanced Group A ($E > 0.1$ MeV) Neutron Flux Near-Core Radial Traverses.

Fig. 23. DORT-Calculated Photoneutron-Enhanced Group A ($E > 0.1$ MeV) Neutron Flux Peripheral Radial Traverses.

Fig. 24. DORT-Calculated Photoneutron-Enhanced Group B ($100 \text{ eV} < E < 0.1 \text{ MeV}$) Neutron Flux Near-Core Radial Traverses.

Fig. 25. DORT-Calculated Photoneutron-Enhanced Group B ($100 \text{ eV} < E < 0.1 \text{ MeV}$) Neutron Flux Peripheral Radial Traverses.

Fig. 26. DORT-Calculated Photoneutron-Enhanced Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux Near-Core Radial Traverses.

Fig. 27. DORT-Calculated Photoneutron-Enhanced Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux Peripheral Radial Traverses.

Fig. 28. DORT-Calculated Photoneutron-Enhanced Group D ($E < 0.625 \text{ eV}$) Neutron Flux Near-Core Radial Traverses.

Fig. 29. DORT-Calculated Photoneutron-Enhanced Group D ($E < 0.625 \text{ eV}$) Neutron Flux Peripheral Radial Traverses.

Fig. 30. DORT-Calculated High-Energy ($E > 2.15$ MeV) Gamma-Ray Flux Near-Core Radial Traverses.

Fig. 31. DORT-Calculated High-Energy ($E > 2.15$ MeV) Gamma-Ray Flux Peripheral Radial Traverses.

Fig. 32. DORT-Calculated Total Gamma-Ray Flux Near-Core Radial Traverses.

Fig. 33. DORT-Calculated Photoneutron-Enhanced Total Gamma-Ray Flux Peripheral Radial Traverses.

Fig. 34. DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Near-Core Radial Traverses.

Fig. 35. DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Peripheral Radial Traverses.

Fig. 36. DORT-Calculated Gamma-Ray Dose Rate Near-Core Radial Traverses.

Fig. 37. DORT-Calculated Gamma-Ray Dose Rate Peripheral Radial Traverses.

Fig. 38. DORT-Calculated Photoneutron-Enhanced Atomic Displacement Near-Core Radial Traverses. (Shown here for each location is the number of displacements per atom per year that would occur in a small iron test specimen placed at that specific location. This has nothing to do with any radiation damage or atomic displacement in any of the aluminum components in the core or the reflector vessel.)

Fig. 39. DORT-Calculated Photoneutron-Enhanced Atomic Displacement Peripheral Radial Traverses. (Shown here for each location is the number of displacements per atom per year that would occur in a small iron test specimen placed at that specific location. This has nothing to do with any radiation damage or atomic displacement in any of the aluminum components in the core or the reflector vessel.)

Fig. 40. Near-Core Radial Traverses for the DORT-Calculated Nuclear Heating That Would Occur in Aluminum Components in the Reactor.

Fig. 41. Peripheral Radial Traverses for the DORT-Calculated Nuclear Heating That Would Occur in Aluminum Components in the Reactor.

Fig. 42. DORT-Calculated Photoneutron-Enhanced Group A ($E > 0.1$ MeV) Neutron Flux Axial Traverses.

Fig. 43. DORT-Calculated Photoneutron-Enhanced Group B ($100 \text{ eV} < E < 0.1 \text{ MeV}$) Neutron Flux Axial Traverses.

Fig. 44. DORT-Calculated Photoneutron-Enhanced Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux Axial Traverses.

Fig. 45. DORT-Calculated Photoneutron-Enhanced Group D ($E < 0.625 \text{ eV}$) Neutron Flux Axial Traverses.

Fig. 46. DORT-Calculated High-Energy ($E > 2.15$ MeV) Gamma-Ray Flux Axial Traverses.

Fig. 47. DORT-Calculated Total Gamma-Ray Flux Axial Traverses.

Fig. 48. DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Axial Traverses.

Fig. 49. DORT-Calculated Gamma-Ray Dose Rate Axial Traverses.

Fig. 50. DORT-Calculated Photoneutron-Enhanced Atomic Displacement Axial Traverses. (Shown here for each location is the number of displacements per atom per year that would occur in a small iron test specimen placed at that specific location. This has nothing to do with any radiation damage or atomic displacement in any of the aluminum components in the core or the reflector vessel.)

Fig. 51. Axial Traverses for the DORT-Calculated Nuclear Heating That Would Occur in Aluminum Components in the Reactor.

Fig. 52. DORT-Calculated Photoneutron-Enhanced Group A ($E > 0.1$ MeV) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 53. DORT-Calculated Photoneutron-Enhanced Group B ($100 \text{ eV} < E < 0.1$ MeV) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 54. DORT-Calculated Photoneutron-Enhanced Group C ($0.625 \text{ eV} < E < 100 \text{ eV}$) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 55. DORT-Calculated Photoneutron-Enhanced Group D ($E < 0.625 \text{ eV}$) Neutron Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 56. DORT-Calculated High-Energy ($E > 2.15$ MeV) Gamma-Ray Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 57. DORT-Calculated Total Gamma-Ray Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 56. DORT-Calculated High-Energy ($E > 2.15$ MeV) Gamma-Ray Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 57. DORT-Calculated Total Gamma-Ray Flux Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 58. DORT-Calculated Photoneutron-Enhanced Neutron Dose Rate Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

Fig. 59. DORT-Calculated Gamma-Ray Dose Rate Radial Traverses in the Light-Water-Filled Vault and Concrete Shield.

INTERNAL DISTRIBUTION

1-5.	J. A. Bucholz	21.	C. D. West
6.	F. X. Gallmeier	22.	ORNL Patent Office
7.	D. T. Ingersoll	23.	Central Research Library
8-11.	R. L. Johnson	24.	Document Reference Section
12.	T. J. McManamy	25.	Y-12 Technical Library
13.	J. V. Pace III	26-27.	Laboratory Records Dept.
14.	D. L. Selby	28.	Laboratory Records (RC)
15-19.	C. O. Slater		
20.	B. A. Worley		

EXTERNAL DISTRIBUTION

- 29. D. D. Carlson, U.S. Nuclear Regulatory Commission, T10G6, Washington, DC 20555
- 30. U.S. Department of Energy, Oak Ridge Operations, FEDC, MS 8218, P.O. Box 2009, Oak Ridge, TN 37831-8218
- 31-32. Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831