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FUNDAMENTAL DATA ON ENVIRONMENTAL GAMMA-RAY FIELDS IN THE AIR DUE TO SOURCES IN THE GROUND

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Fundamental Data on Environmental Gamma-ray Fields in the Air due to Sources in the Ground

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Abstract- This report documents the extensive results of calculations of gamma-ray fields due to sources distributed in the ground. Air kerma per unit source density at 12 heights up to 300m above the ground was calculated using a Monte Carlo method for monoenergetic plane sources in and on the ground and for natural radionuclides uniformly distributed in the ground. In case of plane sources, calculations were performed for 18 photon energies from 10 keV to 5 MeV and for 22 source depths expressed in mass per unit area ranging from 0 to 200 g/cm^2. For natural nuclides, the whole lines compiled in a recent nuclear data file were taken into account. With respect to kerma in air and fluence of primary photon, the whole calculated results are shown in this report. For double-differential gamma-ray fields, several heights and source depths were selected to demonstrate the features. The calculated data for different soil compositions in energy range up to 100 keV were also shown to give the measure of the effect of soil compositions.

Keywords: Gamma-ray Field, Air Kerma, Fluence, Source in the Ground, Monte Carlo Calculation

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地中線源による空間γ線場の基礎データ

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(1998年1月5日受理)

本レポートは、地中に分布した線源によるγ線場の広範な計算結果をまとめたものである。300mまでの12高度の空気カーマをモンテカルロ法を用いて計算した。線源として、単色エネルギーのγ線を放出する地中及び地表面の平面線源、ならびに地中に一様分布する天然核種を考えた。平面線源では、10 keV～5 MeV の範囲の18種類の単色エネルギー及び0～200 g/cm^2 の範囲の22種類の線源深度を想定した。天然核種に対しては、最近の核データにコンパイルされている全ての放出光子を考慮した計算を行った。これらの計算から得た空気カーマと光子フルエンスに関する結果（単位線源強度で規格化）全てを本レポートに数値で表した。エネルギーと角度の二次微分γ線場に関しては、地上数高度を選びその特徴を図で示した。また、土の組成の影響の程度を明らかにするため、100 keV までのエネルギーで異なる組成を想定した計算を行いこの結果を示した。

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1. INTRODUCTION

The gamma-ray fields due to sources in and on the ground have been studied for a long time theoretically and experimentally. The related studies are reviewed in another paper[1]. Despite the great amount of work carried out so far on this subject, there has been necessity for revising these data as described below.

The energy range considered has not been wide enough to cover the whole radionuclides which could be released into the environment, especially for low energy. Further, detailed data such as double-differential and height dependent gamma ray fields are useful for analyzing measurements and exposure characteristics under various conditions.

The gamma ray fields from natural radionuclides of ^{238}U series, ^{232}Th series, and ^{40}K need to be recalculated as well, because nuclear data for ^{238}U series and ^{232}Th series emitting a number of different photons have been revised[2]. In this paper results for ^{235}U series are presented to allow evaluations of measured photon spectra also in the particular cases that the corresponding photon lines are present.

The purpose of this paper is to present the detailed results of extensive Monte Carlo calculations of the gamma-ray fields at different heights above ground due to:

1) monoenergetic plane sources at various depths in the ground;
2) natural gamma sources uniformly distributed in the ground.

The essential results of this calculation was already given in a separate paper[1].

The plane source geometries have been modeled to give a basis for analyses of measurements and for air kerma calculations related to anthropogenic radionuclides in the soil. The results can be used to describe air kerma rates and the related gamma-ray fields for any environmental radionuclides with any depth distributions in the ground, if the horizontal distribution can be assumed to be uniform. The gamma ray field data for exponentially distributed radionuclides composed on the basis of this calculation are shown in ICRU Report 53[3].

The soil mass per unit area ζ above a source element characterizes the related field in air better than the linear depth of the source element in the ground. Therefore, in this paper calculated quantities are presented in terms of ζ. The results are valid as a good approximation for sources in soils with a large variation range of the density even under actual conditions. In any case it has to be stressed that the results of the presented paper can be applied to depth distributions only if the soil density under *in situ* conditions is used. Densities of dried soil samples would lead to an overestimation of the fluence rate and the air kerma rate in air.

The number of important natural gamma emitters is limited, and the distribution in the ground may, in general, be properly assumed to be uniform. Consequently, it is convenient to give kerma conversion factors for these specific radionuclides in uniform distribution. In this study, kerma conversion factors up to 300 m height for ^{40}K and radionuclides in ^{238}U

series, ^{232}Th series and ^{235}U series were calculated using the recent nuclear data from the 1993 version of JEF (JEF-2.2) [2].

The numerical data on the calculated air kerma and fluence of primary photons per unit source density are shown for the whole calculated cases. The fluence of primary photons necessary to determine nuclide concentrations from *in situ* spectrometry was calculated using numerical integration. Energy and angular distributions of gamma rays are shown for some selected cases to discuss the general features as a function of source depth, source energy and detector height. The complete data of these double-differential fluence are stored in the file of the main frame computer at JAERI.

2. CALCULATIONAL PROCEDURE

An air-over-ground geometry was assumed: homogeneous air and soil were assumed to contact each other through an infinite smooth plane having cut-off boundaries at 2000 m height above the ground and 5 m depth in the ground. Compositions of soil and air assumed in this study are summarized in Table 1. In this report, two different sets of soil compositions were considered in order to analyze the effect of soil compositions on kerma in air. Basically the composition given for Soil 1 in Table 1 was assumed for all calculations, and Soil 2 was utilized to investigate the degree of difference in air kerma due to soil compositions. The soil and air densities were assumed to be constant at 1 g/cm^3 and 0.0012 g/cm^3, respectively.

Homogeneous and isotropic plane-sources were simulated at up to 22 depths in the soil, starting with plane sources on the ground. The maximum depth of the plane sources in soil was chosen either 2 m or in such a way for low source energies that the air kerma at a height of 1m above the ground is smaller by at least three orders of magnitude than that for a surface plane source. In case of natural radionuclides a uniform volume source from the surface down to 200 g/cm^2 was assumed. This depth has already been established as sufficient to represent a uniform half-space source[4]. Monoenergetic gamma rays were emitted from plane sources, while, spectral gamma rays were emitted to simulate natural sources.

The photon transport calculations were carried out using the Monte Carlo program YURI[5] which has been verified through comparisons with various experimental and theoretical data. Three photon interaction processes of photoelectric absorption, Compton scattering and pair production followed by annihilation of two 0.511 MeV gamma rays were considered.

Coherent scattering occurs at considerable rates in the low energy region. However, this does not significantly affect the radiation fields from extended sources, because the photon energy is not altered and the scattering angles are forward-oriented. This has been verified by comparisons with results from MCNP which takes coherent scattering into account[6].

Photons emitted from sources in the ground were detected at 12 different heights up to 300 m above the ground. The statistical accuracy of results depends on the photon energy, source depth and detector height. For all results of the air kerma at 1 m height, the standard deviations were within a few percent. In some cases for detectors at larger heights above ground, the standard deviation exceeded 10%. In these cases the results are not shown in the tables.

3. RESULTS AND DISCUSSION

3.1 Monoenergetic plane source

3.1.1 Air kerma and fluence of primary photons

Tables 2, 3 and 4 give total air kerma, fluence of primary photons, and air kerma of primary photons, respectively. The fluence was calculated by analytical integration, while air kerma was by a Monte Carlo calculations. Zeros in the tables indicate that calculation was not carried out or the statistical accuracy was not sufficient for these cases. Figure 1 shows air kerma at 1m height graphically as a function of energy.

The air kerma from plane sources at small depths in the soil was found to have a local minimum for source energies of the order of 50 keV. This is due to the rapid increase of the energy absorption coefficient of air for decreasing energies below 50 keV. The air kerma starts decreasing again

for decreasing photon energies below 15-20 keV due to the steep increase of photon attenuation by air and soil in this range .

The kerma in air decreases rapidly as a function of source depth for sources just beneath the ground surface. The depth in earth where the air kerma attenuates by half in comparison with that for a surface source is only 0.5 g/cm^2 for 50 keV. Even for gamma rays in the energy range between 100 keV and 5 MeV, a soil slab of a thickness of 1-2 g/cm^2 is enough to decrease the air kerma by a factor of two.

The ratio of total air kerma to the air kerma from direct gamma rays at 1 m is shown in Figure 2. The contribution from scattered gamma rays to the air kerma has a maximum around 100 keV.

The decrease of the kerma and fluence in air above the ground is demonstrated in Tables 5 and 6 respectively for three source depths. The air kerma from the surface plane source decreases rapidly as a function of height above the ground. The air kerma near the ground surface mainly derives from the gamma rays coming from horizontal directions as shown later. The distance which a photon coming from a horizontal direction must travel increases much as the height increases.

When a plane source lies deep in the ground, reduction of air kerma due to height becomes small, because the angular distribution shifts toward lower directions

3.1.2 Energy distribution

Figures 3 - 6 shows the energy distribution of air kerma at 1 m, 50 m, 100 m and 150 m, respectively. Figure 7 gives the average energy of gamma rays at 1 m height as a function of source depth. At 1 m height, below 50 keV the average energy of the photon fluence is nearly the same to the initial energy, even if the source is in the ground, according to small contribution of the scattered radiation especially for lower energy. Even at 100 keV where the contribution from scattered gamma rays is maximal, the average energy is above 75 keV, at least down to a source depth of 50 g/cm^2.

In the region of high source energy, the energy distribution of air kerma due to scattered gamma rays becomes rather flat, and the relative importance of the scattered component decreases with source energy. The shape of the energy spectrum does not alter much according to the source depth, but the portion of the scattered component changes.

As the height increases, the change of energy spectrum becomes small. In fact, the energy spectra are quite similar between 100 m and 150 m height. They do not alter much even if the source depth changes.

3.1.3 Angular distribution

Calculation results for the angular distribution of the air kerma at 1 m, 50 m, 100 m and 150 m above ground are shown in Figures 8 - 11 for plane

sources in the ground. In these figures, the incident directions of photons are expressed as cosines to a normal vector to the ground surface. Generally the gamma rays coming from horizontal directions occupy the dominant part for plane sources at small depths.

This tendency remains even at 50 m height for surface source emitting high energy gamma rays, though the peak shifts towards lower directions. At heights in excess of 100 m, the components from downward direction become dominants in most cases. The angular distribution features are quite similar between 100 m and 150 m.

3.2 Natural radionuclides in the ground

3.2.1 Air kerma and fluence of primary photons

The air kerma per disintegration of the parent nuclide was calculated separately for each nuclide in the ^{238}U series, the ^{232}Th series, the ^{235}U series and also for ^{40}K having no decay chain. All photon lines compiled in the JEF-2.2 file[2] were taken into account in this calculation. The photon intensities for ^{234m}Pa were normalized to the data of Siemon *et al.* [7] who experimentally determined the absolute intensities with extreme care in recent years. Radionuclides which release energy less than one percent of the total energy released from the series were omitted. The summation of the energy released from the omitted nuclides is still less than one per cent for each series.

The calculated kerma conversion factors up to 300 m per disintegration of the parent nuclide are tabulated in Tables 7-10, and illustrated in Figures 12-15. The nuclides in the series were assumed to be in radiation equilibrium; however, the conversion factors for individual nuclides enable one to evaluate air kerma for cases where the radiation equilibrium does not hold. Ninety-eight percent of the air kerma at 1 m from the ^{238}U series is attributed to the only two nuclides ^{214}Bi and ^{214}Pb. In the case of ^{232}Th series, ^{208}Tl and ^{228}Ac contribute to 90% of the total air kerma, ^{212}Pb and ^{212}Bi contribute to 9%.

The air kerma from ^{235}U series has some particular features different from those for ^{238}U series and ^{232}Th series. Several nuclides contribute fairly equally to the total kerma. Energies of emitted gamma rays are relatively lower: most of gamma ray energies are less than 1 MeV. The total kerma per disintegration of the parent nuclide is smaller by some factors of magnitude than that for the other series. Further, the portion of direct air kerma over the total air kerma at 1 m height is about 30% reflecting the emission of low-energy gamma rays, while the portion is almost 50% either for ^{238}U series, ^{232}Th series, and ^{40}K.

Tables 11-13 gives fluence rates of primary photons at 1 m per disintegration of the parent nuclide for dominant gamma lines in ^{238}U series, in ^{232}Th series, in ^{232}U series and for 1.461 MeV gamma rays from ^{40}K.

3.2.2 Representation of the series

It is not convenient to consider such a large number of photon lines to calculate the kerma conversion factors or radiation field in the environment for the ^{238}U and ^{232}Th series, and ^{235}U series. A few tens of dominant photon lines are generally used to simulate the whole gamma rays emitted from a series. The number of gamma lines necessary to represent the whole spectrum properly was examined. For this purpose, the relation between the number of considered gamma lines and the energy released from these lines was investigated.

For the ^{238}U series and as well as for the ^{232}Th series, about 30 dominant lines release 90% of the total energy from the lines, and about 95 lines 98% (Figure 16). On the other hand, about 135 lines are needed to cover 98% of the total emitted energy for the ^{235}U series.

3.2.3 Angular and energy distribution

The angular distribution of the kerma at 1 m is quite similar among ^{238}U series, ^{232}Th series and ^{40}K. It is nearly uniform for lower 2π directions below the horizontal plane with a small reduction of kerma at horizontal directions where photons traveling long distances are attenuated. Figure 17 demonstrate the difference of the angular distribution between ^{235}U series and ^{238}U series. The portion of kerma due to skyshine is larger for the ^{235}U series, because ^{235}U series emit gamma rays at relatively lower energies.

The whole shapes of energy spectra for ^{238}U series and ^{232}Th series obtained here are rather similar to those published so far unless one

pays special attention to fine structures; therefore these data are not shown in this paper. The energy spectrum of photon fluence at 1 m for ^{235}U series is demonstrated in Figure 18, which has seldom been published.

3.3 Effect of soil compositions

To examine the effect of high atomic number elements, air kerma was calculated for Soil 2 which contains one half of the iron oxide content in Soil 1. Air kerma at 1 m for Soil 2 is higher than that for Soil 1 because the absorption by photoelectric effect occurs less frequently.

In order to clarify the effect of soil compositions, total air kerma, fluence of primary photons and air kerma of primary photons for Soil 2 are tabulated in Tables 14,15, and 16, respectively. The difference of air kerma due to soil compositions is shown in Table 17 and in Figure19 The ratio of air kerma for Soil 2 over that for Soil 1 is shown in Table 8 for plane sources at the three energies of 20 keV, 50 keV and 100 keV. For surface plane source, the difference is very small as expected from the geometric relation among the source, detector and ground. As the depth becomes greater the difference of air kerma becomes larger, and the difference by a factor is observed for deep sources.

The difference of air kerma for monoenergetic source uniformly distributed in the ground is also shown in Table 8 with one additional energy of 150 keV. Though the air kerma from plane source at large depth reveals not negligible difference between calculations for Soil 1 and for Soil

2, the air kerma integrated over volume on the assumption of uniform distribution was found to be not very large. The maximum difference is about 25%, and in the energy region more than 150 keV the difference becomes less than 10 %. In case the nuclide concentration decreases with depth, the difference between the two sets of soil compositions is expected to be smaller than those shown here. Therefore, the effect of soil compositions is considered not large for distributed sources in the range of iron element abundance considered here.

4. CONCLUSION

Air kerma and fluence of primary photons per unit source density were calculated and tabulated for monoenergetic plane source in and on the ground and for natural radionuclides uniformly distributed in the ground. The results for plane sources can be used as basic data to investigate the gamma-ray fields from diverse anthropogenic radionuclides distributed in the ground. The kerma conversion factors for natural nuclides were calculated considering all photon lines taken from a recent nuclear data file. Angular and energy distributions of air kerma at several altitudes over wide energy range were illustrated for monoenergetic plane sources, and the general features were discussed. Energy and angular distributions of photon fluence for ^{235}U which have been seldom published were shown. The effect of soil compositions were investigated assuming two kinds of

soil having different iron abundance of 8% and 4%. For uniformly distributed volume source, the maximum difference in air kerma was 25%.

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References

1. Saito, K. and Jacob, P. *Gamma-Ray Fields in the Air Due to Sources in the Ground.* Radiat. Prot. Dosim. 58, 29-45(1995).
2. Nuclear Energy Agency. *JEF-2 Radioactive Decay Data.* JEF Report 13.
3. International Commission on Radiation Units and Measurements. *Gamma-ray spectrometry in the environment.* Bethesda: ICRU Publications; ICRU Report 53(1994).
4. Saito, K., Nagaoka, T., Sakamoto, R., Tsutsumi, M. and Moriuchi, S. *Development of Aerial Gamma Radiation Survey System IV, Simulative Calculation of Field Experiments and Accumulation of Fundamental Data on Environmental Gamma Ray Characteristics.* JAERI-M 85-004(1985).
5. Saito, K. and Moriuchi, S. *Development of a Monte Carlo Code for the Calculation of Gamma Ray Transport in the Natural Environment.* Radiat. Prot. Dosim. 12, 21-28(1985).
6. Saito, K., Petoussi, N., Zankl, M., Veit, R., Jacob, P. and Drexler, G. *Calculation of Organ Doses from Environmental Gamma Rays Using Human Phantoms and Monte Carlo Methods. Part I: Monoenergetic Sources and Natural Radionuclides in the Ground.* GSF-Bericht 12/90(1990).
7. Siemon, K., Esterlund, R.A., Van Aarle, J., Knaack, M., Westmeier, W. and Patzelt, P. *A New Measurement of the Gamma-ray Intensities of ^{234m}Pa Accompanying the Decay of ^{238}U.* Appl. Radiat Isot. 43, 873-880(1992).

Table 1. Compositions of soil and air in weight fraction considered in the calculations.

Soil 1		Soil 2		Air	
Molecule	Abundance	Molecule	Abundance	Element	Abundance
SiO_2	56	SiO_2	56	N	75.5
Al_2O_3	16	Al_2O_3	20	O	23.2
Fe_2O_3	8	Fe_2O_3	4	Ar	1.3
H_2O	20	H_2O	20		

Table 2. Total air kerma at heights of 0.1 - 300 m per unit source intensity for monoenergetic plane sources at different depths in the ground for Soil 1.

HEIGHT = 0.1 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	8.69E-16	7.27E-16	5.58E-16	3.74E-16	2.05E-16	1.16E-16	1.18E-16	1.51E-16	2.41E-16	3.36E-16	5.31E-16	9.07E-16	1.17E-15	1.70E-15	2.28E-15	2.88E-15	3.87E-15	5.58E-15
0.10	1.07E-17	2.93E-17	5.64E-17	7.84E-17	7.94E-17	7.04E-17	7.95E-17	1.08E-16	1.72E-16	2.42E-16	3.80E-16	6.40E-16	8.31E-16	1.19E-15	1.62E-15	2.06E-15	2.77E-15	3.99E-15
0.15	2.42E-18	1.09E-17	3.03E-17	5.42E-17	6.51E-17	6.34E-17	7.36E-17	1.01E-16	1.62E-16	2.26E-16	3.55E-16	5.96E-16	7.72E-16	1.11E-15	1.51E-15	1.92E-15	2.58E-15	3.73E-15
0.20	5.93E-19	4.39E-18	1.73E-17	3.91E-17	5.52E-17	5.84E-17	6.92E-17	9.57E-17	1.54E-16	2.14E-16	3.37E-16	5.65E-16	7.32E-16	1.05E-15	1.43E-15	1.82E-15	2.45E-15	3.55E-15
0.30	4.00E-20	7.94E-19	6.15E-18	2.22E-17	4.18E-17	5.09E-17	6.29E-17	8.80E-17	1.42E-16	1.98E-16	3.10E-16	5.19E-16	6.71E-16	9.72E-16	1.32E-15	1.68E-15	2.25E-15	3.28E-15
0.50	0.0	3.24E-20	9.70E-19	8.32E-18	2.65E-17	4.13E-17	5.42E-17	7.78E-17	1.26E-16	1.76E-16	2.75E-16	4.59E-16	5.94E-16	8.58E-16	1.17E-15	1.49E-15	2.02E-15	2.94E-15
0.70	0.0	0.0	1.69E-19	3.44E-18	1.80E-17	3.49E-17	4.82E-17	7.10E-17	1.15E-16	1.61E-16	2.51E-16	4.20E-16	5.44E-16	7.83E-16	1.08E-15	1.37E-15	1.86E-15	2.71E-15
1.00	0.0	0.0	1.41E-20	1.01E-18	1.07E-17	2.80E-17	4.17E-17	6.33E-17	1.04E-16	1.45E-16	2.26E-16	3.78E-16	4.90E-16	7.07E-16	9.69E-16	1.24E-15	1.69E-15	2.47E-15
1.50	0.0	0.0	0.0	1.45E-19	4.95E-18	2.04E-17	3.39E-17	5.41E-17	9.04E-17	1.27E-16	1.98E-16	3.30E-16	4.29E-16	6.19E-16	8.50E-16	1.09E-15	1.49E-15	2.19E-15
2.00	0.0	0.0	0.0	2.35E-20	2.42E-18	1.55E-17	2.82E-17	4.73E-17	8.07E-17	1.13E-16	1.77E-16	2.95E-16	3.85E-16	5.57E-16	7.65E-16	9.88E-16	1.35E-15	1.99E-15
3.00	0.0	0.0	0.0	7.03E-22	6.40E-19	9.38E-18	2.04E-17	3.75E-17	6.60E-17	9.40E-17	1.47E-16	2.48E-16	3.22E-16	4.68E-16	6.49E-16	8.41E-16	1.16E-15	1.72E-15
5.00	0.0	0.0	0.0	0.0	5.50E-20	3.79E-18	1.16E-17	2.49E-17	4.73E-17	6.90E-17	1.11E-16	1.88E-16	2.47E-16	3.62E-16	5.07E-16	6.62E-16	9.21E-16	1.39E-15
7.00	0.0	0.0	0.0	0.0	5.45E-21	1.63E-18	6.86E-18	1.72E-17	3.54E-17	5.28E-17	8.65E-17	1.50E-16	1.97E-16	2.92E-16	4.14E-16	5.46E-16	7.67E-16	1.16E-15
10.00	0.0	0.0	0.0	0.0	1.57E-22	4.88E-19	3.24E-18	1.01E-17	2.32E-17	3.63E-17	6.19E-17	1.11E-16	1.48E-16	2.23E-16	3.19E-16	4.27E-16	6.10E-16	9.41E-16
15.00	0.0	0.0	0.0	0.0	0.0	7.12E-20	9.78E-19	4.31E-18	1.19E-17	2.02E-17	3.68E-17	6.99E-17	9.60E-17	1.51E-16	2.22E-16	3.02E-16	4.46E-16	7.00E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.09E-20	3.14E-19	1.88E-18	6.26E-18	1.14E-17	2.24E-17	4.56E-17	6.44E-17	1.05E-16	1.61E-16	2.25E-16	3.38E-16	5.45E-16
30.00	0.0	0.0	0.0	0.0	0.0	2.64E-22	2.95E-20	3.65E-19	1.72E-18	3.67E-18	8.50E-18	1.99E-17	3.02E-17	5.35E-17	8.82E-17	1.29E-16	2.07E-16	3.49E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	2.90E-22	1.47E-20	1.32E-19	3.83E-19	1.27E-18	4.00E-18	7.04E-18	1.51E-17	2.90E-17	4.80E-17	8.55E-17	1.62E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.03E-22	1.09E-20	3.90E-20	1.73E-19	8.25E-19	1.69E-18	4.31E-18	1.01E-17	1.88E-17	3.76E-17	8.06E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32E-21	9.05E-21	6.73E-20	1.77E-19	7.10E-19	2.12E-18	4.75E-18	1.18E-17	3.00E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.01E-20	1.48E-19	5.04E-19	1.78E-18	6.31E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.09E-20	2.51E-19	1.36E-18

HEIGHT = 0.5 METER

Source depth (g/cm²)	Air kerma per unit source intensity (Gy per photon/m²)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	3.54E-16	3.55E-16	3.17E-16	2.44E-16	1.49E-16	9.19E-17	9.49E-17	1.22E-16	1.93E-16	2.68E-16	4.25E-16	7.17E-16	9.26E-16	1.33E-15	1.81E-15	2.28E-15	3.09E-15	4.47E-15
0.10	7.94E-18	2.43E-17	5.02E-17	7.33E-17	7.60E-17	6.72E-17	7.58E-17	1.02E-16	1.63E-16	2.27E-16	3.55E-16	5.98E-16	7.74E-16	1.12E-15	1.51E-15	1.92E-15	2.60E-15	3.74E-15
0.15	1.83E-18	9.19E-18	2.73E-17	5.12E-17	6.31E-17	6.13E-17	7.10E-17	9.69E-17	1.54E-16	2.16E-16	3.37E-16	5.66E-16	7.32E-16	1.06E-15	1.44E-15	1.82E-15	2.47E-15	3.55E-15
0.20	4.53E-19	3.73E-18	1.57E-17	3.72E-17	5.37E-17	5.74E-17	6.75E-17	9.25E-17	1.48E-16	2.06E-16	3.24E-16	5.41E-16	7.01E-16	1.01E-15	1.37E-15	1.75E-15	2.37E-15	3.40E-15
0.30	3.14E-20	6.82E-19	5.63E-18	2.13E-17	4.10E-17	5.05E-17	6.17E-17	8.57E-17	1.38E-16	1.92E-16	3.00E-16	5.02E-16	6.49E-16	9.41E-16	1.28E-15	1.63E-15	2.19E-15	3.18E-15
0.50	0.0	2.82E-20	8.93E-19	8.03E-18	2.62E-17	4.13E-17	5.37E-17	7.66E-17	1.24E-16	1.72E-16	2.69E-16	4.49E-16	5.81E-16	8.39E-16	1.15E-15	1.46E-15	1.97E-15	2.88E-15
0.70	0.0	0.0	1.56E-19	3.33E-18	1.78E-17	3.49E-17	4.79E-17	7.00E-17	1.14E-16	1.59E-16	2.47E-16	4.12E-16	5.35E-16	7.70E-16	1.06E-15	1.35E-15	1.83E-15	2.67E-15
1.00	0.0	0.0	1.29E-20	9.75E-19	1.06E-17	2.82E-17	4.15E-17	6.26E-17	1.03E-16	1.43E-16	2.23E-16	3.73E-16	4.84E-16	6.98E-16	9.56E-16	1.22E-15	1.66E-15	2.44E-15
1.50	0.0	0.0	0.0	1.40E-19	4.91E-18	2.04E-17	3.42E-17	5.38E-17	9.01E-17	1.26E-16	1.95E-16	3.27E-16	4.24E-16	6.13E-16	8.41E-16	1.08E-15	1.47E-15	2.17E-15
2.00	0.0	0.0	0.0	2.31E-20	2.40E-18	1.55E-17	2.85E-17	4.70E-17	8.08E-17	1.13E-16	1.76E-16	2.93E-16	3.81E-16	5.51E-16	7.59E-16	9.79E-16	1.34E-15	1.98E-15
3.00	0.0	0.0	0.0	6.85E-22	6.36E-19	9.35E-18	2.07E-17	3.73E-17	6.61E-17	9.37E-17	1.46E-16	2.47E-16	3.21E-16	4.65E-16	6.46E-16	8.37E-16	1.15E-15	1.72E-15
5.00	0.0	0.0	0.0	0.0	5.37E-20	3.78E-18	1.16E-17	2.48E-17	4.76E-17	6.90E-17	1.10E-16	1.88E-16	2.45E-16	3.61E-16	5.04E-16	6.58E-16	9.16E-16	1.38E-15
7.00	0.0	0.0	0.0	0.0	5.10E-21	1.63E-18	6.86E-18	1.72E-17	3.53E-17	5.27E-17	8.61E-17	1.49E-16	1.97E-16	2.91E-16	4.12E-16	5.43E-16	7.64E-16	1.15E-15
10.00	0.0	0.0	0.0	0.0	1.56E-22	4.89E-19	3.23E-18	1.01E-17	2.32E-17	3.63E-17	6.18E-17	1.10E-16	1.47E-16	2.22E-16	3.18E-16	4.26E-16	6.08E-16	9.39E-16
15.00	0.0	0.0	0.0	0.0	0.0	7.08E-20	9.83E-19	4.31E-18	1.19E-17	2.02E-17	3.68E-17	6.99E-17	9.62E-17	1.50E-16	2.22E-16	3.02E-16	4.43E-16	6.99E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.11E-20	3.07E-19	1.91E-18	6.25E-18	1.14E-17	2.24E-17	4.54E-17	6.44E-17	1.05E-16	1.61E-16	2.24E-16	3.36E-16	5.45E-16
30.00	0.0	0.0	0.0	0.0	0.0	2.63E-22	3.06E-20	3.72E-19	1.73E-18	3.65E-18	8.49E-18	1.99E-17	3.02E-17	5.32E-17	8.82E-17	1.29E-16	2.06E-16	3.49E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	2.98E-22	1.43E-20	1.33E-19	3.86E-19	1.24E-18	4.00E-18	7.01E-18	1.50E-17	2.89E-17	4.80E-17	8.53E-17	1.63E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.38E-22	1.00E-20	3.93E-20	1.74E-19	8.33E-19	1.68E-18	4.29E-18	1.00E-17	1.87E-17	3.75E-17	8.07E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32E-21	9.35E-21	6.52E-20	1.76E-19	6.88E-19	2.10E-18	4.75E-18	1.18E-17	2.99E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.97E-20	1.54E-19	4.91E-19	2.33E-18	6.30E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.11E-20	2.53E-19	1.35E-18

HEIGHT = 1.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.82E-16	2.17E-16	2.21E-16	1.88E-16	1.25E-16	8.15E-17	8.52E-17	1.10E-16	1.73E-16	2.40E-16	3.76E-16	6.35E-16	8.19E-16	1.18E-15	1.60E-15	2.03E-15	2.73E-15	3.99E-15
0.10	5.53E-18	1.92E-17	4.33E-17	6.72E-17	7.22E-17	6.42E-17	7.23E-17	9.71E-17	1.53E-16	2.14E-16	3.33E-16	5.60E-16	7.27E-16	1.05E-15	1.42E-15	1.81E-15	2.43E-15	3.52E-15
0.15	1.30E-18	7.37E-18	2.40E-17	4.76E-17	6.05E-17	5.93E-17	6.84E-17	9.28E-17	1.47E-16	2.05E-16	3.19E-16	5.35E-16	6.95E-16	1.00E-15	1.36E-15	1.73E-15	2.33E-15	3.37E-15
0.20	3.25E-19	3.04E-18	1.39E-17	3.49E-17	5.19E-17	5.55E-17	6.52E-17	8.93E-17	1.42E-16	1.98E-16	3.08E-16	5.16E-16	6.70E-16	9.64E-16	1.31E-15	1.67E-15	2.25E-15	3.26E-15
0.30	2.32E-20	5.61E-19	5.04E-18	2.01E-17	3.99E-17	4.92E-17	6.01E-17	8.34E-17	1.33E-16	1.86E-16	2.89E-16	4.84E-16	6.27E-16	9.05E-16	1.23E-15	1.57E-15	2.11E-15	3.08E-15
0.50	0.0	2.35E-20	8.02E-19	7.64E-18	2.56E-17	4.03E-17	5.26E-17	7.50E-17	1.21E-16	1.68E-16	2.61E-16	4.37E-16	5.67E-16	8.16E-16	1.12E-15	1.42E-15	1.92E-15	2.81E-15
0.70	0.0	0.0	1.43E-19	3.18E-18	1.75E-17	3.43E-17	4.71E-17	6.90E-17	1.12E-16	1.56E-16	2.41E-16	4.03E-16	5.23E-16	7.53E-16	1.03E-15	1.32E-15	1.80E-15	2.62E-15
1.00	0.0	0.0	1.19E-20	9.37E-19	1.05E-17	2.77E-17	4.10E-17	6.19E-17	1.01E-16	1.42E-16	2.19E-16	3.66E-16	4.76E-16	6.86E-16	9.41E-16	1.20E-15	1.64E-15	2.40E-15
1.50	0.0	0.0	0.0	1.36E-19	4.84E-18	2.03E-17	3.36E-17	5.33E-17	8.87E-17	1.24E-16	1.94E-16	3.22E-16	4.17E-16	6.04E-16	8.33E-16	1.07E-15	1.46E-15	2.15E-15
2.00	0.0	0.0	0.0	2.20E-20	2.37E-18	1.55E-17	2.80E-17	4.67E-17	7.94E-17	1.11E-16	1.74E-16	2.90E-16	3.76E-16	5.45E-16	7.51E-16	9.69E-16	1.33E-15	1.96E-15
3.00	0.0	0.0	0.0	6.64E-22	6.33E-19	9.35E-18	2.04E-17	3.71E-17	6.52E-17	9.30E-17	1.45E-16	2.44E-16	3.18E-16	4.62E-16	6.40E-16	8.28E-16	1.14E-15	1.70E-15
5.00	0.0	0.0	0.0	0.0	5.31E-20	3.79E-18	1.16E-17	2.47E-17	4.71E-17	6.85E-17	1.09E-16	1.86E-16	2.43E-16	3.58E-16	5.01E-16	6.55E-16	9.11E-16	1.37E-15
7.00	0.0	0.0	0.0	0.0	5.19E-21	1.63E-18	6.87E-18	1.71E-17	3.52E-17	5.24E-17	8.53E-17	1.48E-16	1.95E-16	2.90E-16	4.10E-16	5.42E-16	7.61E-16	1.15E-15
10.00	0.0	0.0	0.0	0.0	1.85E-22	4.91E-19	3.25E-18	1.01E-17	2.31E-17	3.62E-17	6.14E-17	1.09E-16	1.46E-16	2.21E-16	3.17E-16	4.24E-16	6.06E-16	9.35E-16
15.00	0.0	0.0	0.0	0.0	0.0	7.23E-20	9.83E-19	4.35E-18	1.20E-17	2.02E-17	3.67E-17	6.96E-17	9.57E-17	1.50E-16	2.21E-16	3.01E-16	4.42E-16	6.98E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.11E-20	3.10E-19	1.90E-18	6.26E-18	1.13E-17	2.24E-17	4.53E-17	6.41E-17	1.04E-16	1.60E-16	2.23E-16	3.36E-16	5.43E-16
30.00	0.0	0.0	0.0	0.0	0.0	2.63E-22	2.95E-20	3.63E-19	1.74E-18	3.65E-18	8.44E-18	1.98E-17	3.01E-17	5.33E-17	8.79E-17	1.29E-16	2.06E-16	3.48E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.07E-22	1.42E-20	1.35E-19	3.85E-19	1.24E-18	3.99E-18	6.94E-18	1.50E-17	2.88E-17	4.79E-17	8.50E-17	1.62E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.28E-22	9.51E-21	3.94E-20	1.78E-19	8.32E-19	1.66E-18	4.27E-18	1.01E-17	1.86E-17	3.76E-17	8.05E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30E-21	9.22E-21	6.50E-20	1.75E-19	6.87E-19	2.10E-18	4.70E-18	1.20E-17	2.99E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.99E-20	1.48E-19	4.89E-19	1.80E-18	6.30E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.05E-20	2.52E-19	1.36E-18

HEIGHT = 1.5 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.07E-16	1.48E-16	1.69E-16	1.57E-16	1.11E-16	7.53E-17	7.91E-17	1.03E-16	1.61E-16	2.23E-16	3.49E-16	5.86E-16	7.57E-16	1.09E-15	1.47E-15	1.89E-15	2.54E-15	3.69E-15
0.10	3.85E-18	1.53E-17	3.78E-17	6.17E-17	6.84E-17	6.17E-17	6.97E-17	9.31E-17	1.47E-16	2.04E-16	3.17E-16	5.33E-16	6.89E-16	9.94E-16	1.35E-15	1.72E-15	2.32E-15	3.35E-15
0.15	9.29E-19	5.97E-18	2.12E-17	4.42E-17	5.80E-17	5.74E-17	6.63E-17	8.96E-17	1.42E-16	1.97E-16	3.06E-16	5.12E-16	6.63E-16	9.59E-16	1.30E-15	1.66E-15	2.24E-15	3.24E-15
0.20	2.35E-19	2.48E-18	1.24E-17	3.27E-17	4.99E-17	5.38E-17	6.35E-17	8.65E-17	1.37E-16	1.91E-16	2.97E-16	4.96E-16	6.43E-16	9.28E-16	1.26E-15	1.60E-15	2.17E-15	3.14E-15
0.30	1.70E-20	4.63E-19	4.51E-18	1.90E-17	3.86E-17	4.80E-17	5.88E-17	8.13E-17	1.30E-16	1.80E-16	2.80E-16	4.68E-16	6.06E-16	8.77E-16	1.19E-15	1.52E-15	2.05E-15	2.99E-15
0.50	0.0	1.94E-20	7.27E-19	7.29E-18	2.50E-17	3.98E-17	5.19E-17	7.36E-17	1.18E-16	1.64E-16	2.55E-16	4.26E-16	5.52E-16	7.97E-16	1.09E-15	1.39E-15	1.89E-15	2.75E-15
0.70	0.0	0.0	1.29E-19	3.04E-18	1.71E-17	3.39E-17	4.68E-17	6.78E-17	1.10E-16	1.53E-16	2.37E-16	3.95E-16	5.13E-16	7.39E-16	1.01E-15	1.29E-15	1.76E-15	2.57E-15
1.00	0.0	0.0	1.07E-20	8.98E-19	1.03E-17	2.75E-17	4.07E-17	6.12E-17	1.00E-16	1.39E-16	2.16E-16	3.60E-16	4.67E-16	6.75E-16	9.28E-16	1.18E-15	1.62E-15	2.37E-15
1.50	0.0	0.0	0.0	1.31E-19	4.77E-18	2.02E-17	3.34E-17	5.28E-17	8.81E-17	1.23E-16	1.91E-16	3.19E-16	4.12E-16	5.97E-16	8.24E-16	1.06E-15	1.45E-15	2.13E-15
2.00	0.0	0.0	0.0	2.12E-20	2.35E-18	1.54E-17	2.80E-17	4.64E-17	7.87E-17	1.10E-16	1.72E-16	2.87E-16	3.72E-16	5.40E-16	7.44E-16	9.60E-16	1.32E-15	1.94E-15
3.00	0.0	0.0	0.0	6.63E-22	6.24E-19	9.33E-18	2.04E-17	3.69E-17	6.49E-17	9.24E-17	1.44E-16	2.42E-16	3.15E-16	4.58E-16	6.35E-16	8.23E-16	1.13E-15	1.69E-15
5.00	0.0	0.0	0.0	0.0	5.26E-20	3.78E-18	1.16E-17	2.46E-17	4.69E-17	6.82E-17	1.08E-16	1.85E-16	2.41E-16	3.56E-16	4.97E-16	6.52E-16	9.09E-16	1.37E-15
7.00	0.0	0.0	0.0	0.0	5.10E-21	1.63E-18	7.00E-18	1.72E-17	3.50E-17	5.22E-17	8.49E-17	1.48E-16	1.94E-16	2.88E-16	4.08E-16	5.39E-16	7.57E-16	1.15E-15
10.00	0.0	0.0	0.0	0.0	1.83E-22	4.89E-19	3.27E-18	1.02E-17	2.31E-17	3.61E-17	6.10E-17	1.09E-16	1.46E-16	2.20E-16	3.16E-16	4.22E-16	6.03E-16	9.33E-16
15.00	0.0	0.0	0.0	0.0	0.0	7.23E-20	9.90E-19	4.43E-18	1.19E-17	2.00E-17	3.66E-17	6.93E-17	9.50E-17	1.49E-16	2.20E-16	3.00E-16	4.41E-16	6.95E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.13E-20	3.11E-19	1.89E-18	6.29E-18	1.13E-17	2.23E-17	4.51E-17	6.38E-17	1.04E-16	1.60E-16	2.23E-16	3.35E-16	5.42E-16
30.00	0.0	0.0	0.0	0.0	0.0	2.67E-22	2.97E-20	3.67E-19	1.73E-18	3.64E-18	8.39E-18	1.99E-17	2.99E-17	5.31E-17	8.76E-17	1.29E-16	2.06E-16	3.47E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.08E-22	1.48E-20	1.33E-19	3.82E-19	1.23E-18	3.97E-18	7.04E-18	1.50E-17	2.87E-17	4.79E-17	8.49E-17	1.61E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.19E-22	9.69E-21	3.93E-20	1.77E-19	8.19E-19	1.68E-18	4.30E-18	1.00E-17	1.87E-17	3.75E-17	8.03E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.35E-21	9.00E-21	6.47E-20	1.75E-19	6.77E-19	2.08E-18	4.76E-18	1.18E-17	2.99E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.00E-20	1.47E-19	4.89E-19	1.79E-18	6.30E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.06E-20	2.50E-19	1.36E-18

HEIGHT = 2.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	6.65E-17	1.06E-16	1.35E-16	1.35E-16	1.01E-16	7.09E-17	7.49E-17	9.78E-17	1.52E-16	2.11E-16	3.29E-16	5.51E-16	7.14E-16	1.03E-15	1.39E-15	1.78E-15	2.40E-15	3.50E-15
0.10	2.70E-18	1.22E-17	3.32E-17	5.69E-17	6.49E-17	5.95E-17	6.71E-17	8.99E-17	1.41E-16	1.96E-16	3.03E-16	5.10E-16	6.60E-16	9.50E-16	1.30E-15	1.65E-15	2.23E-15	3.22E-15
0.15	6.60E-19	4.83E-18	1.90E-17	4.12E-17	5.55E-17	5.56E-17	6.41E-17	8.68E-17	1.37E-16	1.90E-16	2.94E-16	4.93E-16	6.39E-16	9.22E-16	1.26E-15	1.60E-15	2.16E-15	3.14E-15
0.20	1.70E-19	2.03E-18	1.10E-17	3.06E-17	4.82E-17	5.24E-17	6.15E-17	8.41E-17	1.33E-16	1.85E-16	2.87E-16	4.79E-16	6.20E-16	8.95E-16	1.22E-15	1.56E-15	2.10E-15	3.05E-15
0.30	1.21E-20	3.82E-19	4.05E-18	1.80E-17	3.75E-17	4.70E-17	5.74E-17	7.94E-17	1.26E-16	1.75E-16	2.72E-16	4.55E-16	5.88E-16	8.51E-16	1.16E-15	1.48E-15	2.00E-15	2.91E-15
0.50	0.0	1.68E-20	6.52E-19	6.96E-18	2.45E-17	3.92E-17	5.09E-17	7.24E-17	1.16E-16	1.61E-16	2.50E-16	4.17E-16	5.40E-16	7.79E-16	1.07E-15	1.36E-15	1.84E-15	2.69E-15
0.70	0.0	0.0	1.18E-19	2.92E-18	1.68E-17	3.35E-17	4.60E-17	6.70E-17	1.08E-16	1.50E-16	2.32E-16	3.88E-16	5.04E-16	7.25E-16	9.95E-16	1.28E-15	1.73E-15	2.53E-15
1.00	0.0	0.0	9.58E-21	8.57E-19	1.01E-17	2.72E-17	4.03E-17	6.05E-17	9.86E-17	1.37E-16	2.13E-16	3.55E-16	4.61E-16	6.65E-16	9.11E-16	1.17E-15	1.60E-15	2.34E-15
1.50	0.0	0.0	0.0	1.25E-19	4.71E-18	2.01E-17	3.32E-17	5.25E-17	8.70E-17	1.21E-16	1.88E-16	3.15E-16	4.07E-16	5.90E-16	8.12E-16	1.04E-15	1.43E-15	2.10E-15
2.00	0.0	0.0	0.0	2.03E-20	2.32E-18	1.53E-17	2.78E-17	4.60E-17	7.82E-17	1.09E-16	1.70E-16	2.84E-16	3.68E-16	5.35E-16	7.36E-16	9.50E-16	1.30E-15	1.93E-15
3.00	0.0	0.0	0.0	7.08E-22	6.18E-19	9.33E-18	2.03E-17	3.67E-17	6.45E-17	9.15E-17	1.43E-16	2.40E-16	3.12E-16	4.54E-16	6.33E-16	8.16E-16	1.12E-15	1.68E-15
5.00	0.0	0.0	0.0	0.0	5.35E-20	3.81E-18	1.15E-17	2.46E-17	4.67E-17	6.77E-17	1.08E-16	1.84E-16	2.40E-16	3.53E-16	4.96E-16	6.47E-16	9.03E-16	1.36E-15
7.00	0.0	0.0	0.0	0.0	5.17E-21	1.63E-18	6.83E-18	1.71E-17	3.49E-17	5.19E-17	8.54E-17	1.47E-16	1.93E-16	2.86E-16	4.07E-16	5.35E-16	7.55E-16	1.14E-15
10.00	0.0	0.0	0.0	0.0	1.52E-22	4.91E-19	3.24E-18	1.01E-17	2.30E-17	3.59E-17	6.12E-17	1.08E-16	1.45E-16	2.19E-16	3.15E-16	4.20E-16	6.01E-16	9.30E-16
15.00	0.0	0.0	0.0	0.0	0.0	7.18E-20	9.83E-19	4.33E-18	1.19E-17	2.00E-17	3.64E-17	6.91E-17	9.44E-17	1.49E-16	2.19E-16	2.99E-16	4.38E-16	6.94E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.12E-20	3.18E-19	1.87E-18	6.23E-18	1.13E-17	2.22E-17	4.50E-17	6.35E-17	1.04E-16	1.59E-16	2.22E-16	3.34E-16	5.40E-16
30.00	0.0	0.0	0.0	0.0	0.0	2.65E-22	2.94E-20	3.69E-19	1.75E-18	3.66E-18	8.38E-18	1.98E-17	3.00E-17	5.28E-17	8.73E-17	1.29E-16	2.05E-16	3.46E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	2.91E-22	1.45E-20	1.33E-19	3.87E-19	1.24E-18	3.94E-18	6.92E-18	1.50E-17	2.86E-17	4.77E-17	8.48E-17	1.61E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.16E-22	9.63E-21	3.94E-20	1.79E-19	8.11E-19	1.67E-18	4.28E-18	1.00E-17	1.86E-17	3.74E-17	8.00E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.39E-21	9.25E-21	6.52E-20	1.74E-19	6.76E-19	2.08E-18	4.72E-18	1.17E-17	2.98E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.02E-20	1.46E-19	4.88E-19	1.78E-18	6.28E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.05E-20	2.47E-19	1.36E-18

HEIGHT = 5.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	6.13E-18	2.17E-17	4.85E-17	7.15E-17	6.99E-17	5.71E-17	6.21E-17	8.14E-17	1.26E-16	1.72E-16	2.66E-16	4.44E-16	5.73E-16	8.30E-16	1.13E-15	1.45E-15	1.95E-15	2.86E-15
0.10	3.57E-19	3.44E-18	1.53E-17	3.68E-17	5.07E-17	5.07E-17	5.80E-17	7.76E-17	1.20E-16	1.65E-16	2.55E-16	4.26E-16	5.51E-16	7.93E-16	1.08E-15	1.38E-15	1.87E-15	2.74E-15
0.15	9.16E-20	1.43E-18	9.13E-18	2.77E-17	4.46E-17	4.82E-17	5.62E-17	7.60E-17	1.18E-16	1.62E-16	2.51E-16	4.17E-16	5.40E-16	7.78E-16	1.06E-15	1.35E-15	1.84E-15	2.69E-15
0.20	2.42E-20	6.18E-19	5.53E-18	2.11E-17	3.95E-17	4.62E-17	5.46E-17	7.43E-17	1.16E-16	1.59E-16	2.47E-16	4.09E-16	5.30E-16	7.63E-16	1.04E-15	1.33E-15	1.81E-15	2.65E-15
0.30	2.00E-21	1.23E-19	2.15E-18	1.27E-17	3.15E-17	4.22E-17	5.18E-17	7.14E-17	1.12E-16	1.54E-16	2.38E-16	3.95E-16	5.10E-16	7.37E-16	1.00E-15	1.29E-15	1.75E-15	2.57E-15
0.50	0.0	5.56E-21	3.57E-19	5.11E-18	2.12E-17	3.59E-17	4.70E-17	6.64E-17	1.05E-16	1.45E-16	2.24E-16	3.71E-16	4.79E-16	6.92E-16	9.45E-16	1.21E-15	1.65E-15	2.42E-15
0.70	0.0	0.0	6.62E-20	2.19E-18	1.48E-17	3.12E-17	4.29E-17	6.22E-17	9.91E-17	1.37E-16	2.11E-16	3.51E-16	4.53E-16	6.55E-16	8.97E-16	1.15E-15	1.57E-15	2.31E-15
1.00	0.0	0.0	5.55E-21	6.62E-19	9.05E-18	2.58E-17	3.80E-17	5.68E-17	9.19E-17	1.27E-16	1.96E-16	3.26E-16	4.22E-16	6.09E-16	8.34E-16	1.08E-15	1.47E-15	2.16E-15
1.50	0.0	0.0	0.0	9.67E-20	4.28E-18	1.92E-17	3.17E-17	4.98E-17	8.22E-17	1.14E-16	1.76E-16	2.93E-16	3.81E-16	5.49E-16	7.55E-16	9.76E-16	1.34E-15	1.98E-15
2.00	0.0	0.0	0.0	1.67E-20	2.14E-18	1.47E-17	2.69E-17	4.43E-17	7.43E-17	1.04E-16	1.60E-16	2.67E-16	3.48E-16	5.03E-16	6.93E-16	8.95E-16	1.23E-15	1.83E-15
3.00	0.0	0.0	0.0	5.77E-22	5.72E-19	9.01E-18	1.98E-17	3.57E-17	6.21E-17	8.77E-17	1.37E-16	2.29E-16	2.98E-16	4.33E-16	6.01E-16	7.80E-16	1.08E-15	1.61E-15
5.00	0.0	0.0	0.0	0.0	5.26E-20	3.70E-18	1.14E-17	2.41E-17	4.53E-17	6.57E-17	1.04E-16	1.77E-16	2.32E-16	3.40E-16	4.77E-16	6.24E-16	8.70E-16	1.32E-15
7.00	0.0	0.0	0.0	0.0	5.02E-21	1.61E-18	6.77E-18	1.68E-17	3.40E-17	5.07E-17	8.22E-17	1.42E-16	1.87E-16	2.77E-16	3.93E-16	5.20E-16	7.32E-16	1.11E-15
10.00	0.0	0.0	0.0	0.0	1.37E-22	4.80E-19	3.23E-18	9.95E-18	2.26E-17	3.51E-17	5.99E-17	1.06E-16	1.41E-16	2.13E-16	3.06E-16	4.10E-16	5.88E-16	9.07E-16
15.00	0.0	0.0	0.0	0.0	0.0	6.96E-20	9.73E-19	4.27E-18	1.17E-17	1.96E-17	3.56E-17	6.76E-17	9.24E-17	1.45E-16	2.14E-16	2.93E-16	4.31E-16	6.80E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.09E-20	3.12E-19	1.85E-18	6.15E-18	1.12E-17	2.17E-17	4.39E-17	6.26E-17	1.02E-16	1.56E-16	2.19E-16	3.27E-16	5.32E-16
30.00	0.0	0.0	0.0	0.0	0.0	2.69E-22	3.07E-20	3.68E-19	1.69E-18	3.61E-18	8.19E-18	1.93E-17	2.96E-17	5.21E-17	8.58E-17	1.26E-16	2.01E-16	3.41E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.28E-22	1.52E-20	1.34E-19	3.80E-19	1.22E-18	3.84E-18	6.80E-18	1.47E-17	2.83E-17	4.70E-17	8.38E-17	1.59E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.66E-22	9.40E-21	3.98E-20	1.73E-19	7.85E-19	1.64E-18	4.20E-18	9.91E-18	1.84E-17	3.71E-17	7.93E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26E-21	9.30E-21	6.84E-20	1.75E-19	6.92E-19	2.07E-18	4.61E-18	1.16E-17	2.94E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.15E-20	1.46E-19	4.87E-19	1.77E-18	6.24E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.09E-20	2.48E-19	1.33E-18

HEIGHT = 10.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.97E-19	2.46E-18	1.30E-17	3.37E-17	4.71E-17	4.62E-17	5.23E-17	6.89E-17	1.06E-16	1.43E-16	2.19E-16	3.63E-16	4.67E-16	6.79E-16	9.24E-16	1.19E-15	1.62E-15	2.37E-15
0.10	1.34E-20	4.57E-19	4.81E-18	1.94E-17	3.65E-17	4.22E-17	4.97E-17	6.68E-17	1.02E-16	1.40E-16	2.13E-16	3.53E-16	4.57E-16	6.56E-16	9.00E-16	1.15E-15	1.58E-15	2.32E-15
0.15	3.03E-21	2.06E-19	2.96E-18	1.51E-17	3.28E-17	4.05E-17	4.85E-17	6.59E-17	1.01E-16	1.38E-16	2.10E-16	3.49E-16	4.51E-16	6.48E-16	8.89E-16	1.14E-15	1.56E-15	2.30E-15
0.20	1.08E-21	8.93E-20	1.86E-18	1.18E-17	2.95E-17	3.91E-17	4.74E-17	6.48E-17	9.99E-17	1.36E-16	2.08E-16	3.44E-16	4.45E-16	6.41E-16	8.76E-16	1.13E-15	1.54E-15	2.27E-15
0.30	0.0	1.91E-20	7.45E-19	7.43E-18	2.41E-17	3.63E-17	4.55E-17	6.27E-17	9.72E-17	1.33E-16	2.02E-16	3.36E-16	4.34E-16	6.25E-16	8.57E-16	1.10E-15	1.51E-15	2.23E-15
0.50	0.0	8.82E-22	1.28E-19	3.12E-18	1.67E-17	3.15E-17	4.20E-17	5.92E-17	9.25E-17	1.27E-16	1.94E-16	3.21E-16	4.15E-16	5.99E-16	8.20E-16	1.06E-15	1.45E-15	2.14E-15
0.70	0.0	0.0	2.43E-20	1.36E-18	1.19E-17	2.78E-17	3.89E-17	5.61E-17	8.85E-17	1.21E-16	1.85E-16	3.08E-16	3.98E-16	5.74E-16	7.86E-16	1.02E-15	1.39E-15	2.06E-15
1.00	0.0	0.0	0.0	4.23E-19	7.44E-18	2.33E-17	3.49E-17	5.20E-17	8.31E-17	1.14E-16	1.75E-16	2.90E-16	3.75E-16	5.42E-16	7.44E-16	9.62E-16	1.32E-15	1.96E-15
1.50	0.0	0.0	0.0	6.23E-20	3.57E-18	1.76E-17	2.96E-17	4.63E-17	7.54E-17	1.04E-16	1.60E-16	2.66E-16	3.44E-16	4.97E-16	6.85E-16	8.88E-16	1.22E-15	1.81E-15
2.00	0.0	0.0	0.0	1.09E-20	1.79E-18	1.36E-17	2.53E-17	4.14E-17	6.91E-17	9.55E-17	1.47E-16	2.45E-16	3.17E-16	4.59E-16	6.37E-16	8.23E-16	1.14E-15	1.69E-15
3.00	0.0	0.0	0.0	4.69E-22	4.90E-19	8.49E-18	1.88E-17	3.37E-17	5.82E-17	8.19E-17	1.27E-16	2.12E-16	2.76E-16	4.01E-16	5.59E-16	7.27E-16	1.00E-15	1.51E-15
5.00	0.0	0.0	0.0	0.0	4.31E-20	3.50E-18	1.10E-17	2.31E-17	4.31E-17	6.22E-17	9.82E-17	1.67E-16	2.18E-16	3.21E-16	4.51E-16	5.91E-16	8.26E-16	1.25E-15
7.00	0.0	0.0	0.0	0.0	4.13E-21	1.53E-18	6.55E-18	1.61E-17	3.25E-17	4.83E-17	7.80E-17	1.35E-16	1.78E-16	2.63E-16	3.74E-16	4.97E-16	7.00E-16	1.06E-15
10.00	0.0	0.0	0.0	0.0	1.31E-22	4.62E-19	3.12E-18	9.61E-18	2.17E-17	3.36E-17	5.69E-17	1.01E-16	1.35E-16	2.04E-16	2.94E-16	3.94E-16	5.65E-16	8.78E-16
15.00	0.0	0.0	0.0	0.0	0.0	6.81E-20	9.52E-19	4.16E-18	1.13E-17	1.89E-17	3.43E-17	6.46E-17	8.86E-17	1.40E-16	2.07E-16	2.84E-16	4.17E-16	6.60E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.09E-20	3.11E-19	1.81E-18	5.95E-18	1.07E-17	2.10E-17	4.21E-17	6.03E-17	9.79E-17	1.51E-16	2.12E-16	3.18E-16	5.18E-16
30.00	0.0	0.0	0.0	0.0	0.0	2.79E-22	2.94E-20	3.55E-19	1.65E-18	3.47E-18	7.93E-18	1.87E-17	2.84E-17	5.04E-17	8.29E-17	1.23E-16	1.96E-16	3.34E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.08E-22	1.40E-20	1.28E-19	3.66E-19	1.19E-18	3.74E-18	6.54E-18	1.42E-17	2.73E-17	4.56E-17	8.22E-17	1.56E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.40E-22	9.00E-21	3.61E-20	1.66E-19	7.51E-19	1.59E-18	4.06E-18	9.54E-18	1.79E-17	3.64E-17	7.76E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.34E-21	8.34E-21	6.32E-20	1.72E-19	6.75E-19	2.01E-18	4.53E-18	1.14E-17	2.90E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.84E-20	1.41E-19	4.81E-19	1.71E-18	6.05E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.84E-20	2.48E-19	1.31E-18

HEIGHT = 50.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	5.21E-19	6.57E-18	1.78E-17	2.57E-17	3.67E-17	5.52E-17	7.33E-17	1.09E-16	1.78E-16	2.29E-16	3.35E-16	4.67E-16	6.09E-16	8.53E-16	1.30E-15
0.10	0.0	0.0	0.0	3.42E-19	5.48E-18	1.69E-17	2.47E-17	3.59E-17	5.42E-17	7.23E-17	1.08E-16	1.76E-16	2.28E-16	3.30E-16	4.62E-16	6.03E-16	8.52E-16	1.29E-15
0.15	0.0	0.0	0.0	2.85E-19	5.10E-18	1.65E-17	2.44E-17	3.56E-17	5.38E-17	7.18E-17	1.07E-16	1.75E-16	2.27E-16	3.29E-16	4.60E-16	6.00E-16	8.48E-16	1.29E-15
0.20	0.0	0.0	0.0	2.31E-19	4.72E-18	1.59E-17	2.40E-17	3.53E-17	5.36E-17	7.13E-17	1.07E-16	1.74E-16	2.26E-16	3.27E-16	4.57E-16	5.98E-16	8.44E-16	1.28E-15
0.30	0.0	0.0	0.0	1.59E-19	4.07E-18	1.51E-17	2.32E-17	3.44E-17	5.27E-17	7.04E-17	1.05E-16	1.72E-16	2.23E-16	3.24E-16	4.53E-16	5.92E-16	8.36E-16	1.27E-15
0.50	0.0	0.0	0.0	7.53E-20	3.01E-18	1.36E-17	2.19E-17	3.31E-17	5.14E-17	6.89E-17	1.03E-16	1.68E-16	2.18E-16	3.18E-16	4.45E-16	5.82E-16	8.22E-16	1.25E-15
0.70	0.0	0.0	0.0	3.96E-20	2.27E-18	1.22E-17	2.07E-17	3.20E-17	5.00E-17	6.71E-17	1.01E-16	1.64E-16	2.14E-16	3.12E-16	4.37E-16	5.71E-16	8.08E-16	1.23E-15
1.00	0.0	0.0	0.0	1.14E-20	1.51E-18	1.06E-17	1.90E-17	3.02E-17	4.80E-17	6.46E-17	9.78E-17	1.59E-16	2.08E-16	3.03E-16	4.25E-16	5.55E-16	7.89E-16	1.20E-15
1.50	0.0	0.0	0.0	1.62E-21	7.87E-19	8.34E-18	1.66E-17	2.76E-17	4.48E-17	6.10E-17	9.25E-17	1.51E-16	1.97E-16	2.89E-16	4.06E-16	5.33E-16	7.59E-16	1.15E-15
2.00	0.0	0.0	0.0	2.59E-22	4.12E-19	6.69E-18	1.45E-17	2.52E-17	4.19E-17	5.74E-17	8.73E-17	1.44E-16	1.88E-16	2.76E-16	3.89E-16	5.10E-16	7.29E-16	1.11E-15
3.00	0.0	0.0	0.0	0.0	1.21E-19	4.33E-18	1.12E-17	2.13E-17	3.67E-17	5.11E-17	7.82E-17	1.31E-16	1.71E-16	2.52E-16	3.57E-16	4.72E-16	6.71E-16	1.03E-15
5.00	0.0	0.0	0.0	0.0	9.85E-21	1.88E-18	6.79E-18	1.51E-17	2.82E-17	4.04E-17	6.34E-17	1.08E-16	1.43E-16	2.13E-16	3.06E-16	4.06E-16	5.82E-16	9.06E-16
7.00	0.0	0.0	0.0	0.0	1.00E-21	8.43E-19	4.16E-18	1.08E-17	2.19E-17	3.24E-17	5.24E-17	9.05E-17	1.21E-16	1.82E-16	2.63E-16	3.54E-16	5.11E-16	8.00E-16
10.00	0.0	0.0	0.0	0.0	6.47E-23	2.62E-19	2.01E-18	6.53E-18	1.50E-17	2.31E-17	3.89E-17	6.98E-17	9.45E-17	1.46E-16	2.14E-16	2.92E-16	4.27E-16	6.80E-16
15.00	0.0	0.0	0.0	0.0	0.0	4.03E-20	6.37E-19	2.87E-18	7.96E-18	1.32E-17	2.40E-17	4.61E-17	6.45E-17	1.02E-16	1.56E-16	2.17E-16	3.25E-16	5.28E-16
20.00	0.0	0.0	0.0	0.0	0.0	7.12E-21	1.99E-19	1.28E-18	4.18E-18	7.56E-18	1.48E-17	3.07E-17	4.44E-17	7.36E-17	1.16E-16	1.65E-16	2.54E-16	4.22E-16
30.00	0.0	0.0	0.0	0.0	0.0	1.94E-22	2.02E-20	2.51E-19	1.20E-18	2.46E-18	5.73E-18	1.37E-17	2.12E-17	3.85E-17	6.53E-17	9.78E-17	1.60E-16	2.78E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.92E-22	1.01E-20	8.93E-20	2.58E-19	8.57E-19	2.81E-18	5.07E-18	1.10E-17	2.19E-17	3.74E-17	6.81E-17	1.32E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.85E-22	7.45E-21	2.69E-20	1.23E-19	5.78E-19	1.21E-18	3.27E-18	7.61E-18	1.48E-17	3.07E-17	6.71E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.86E-22	6.63E-21	4.90E-20	1.34E-19	4.93E-19	1.59E-18	3.86E-18	9.73E-18	2.54E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.32E-20	1.17E-19	3.90E-19	1.42E-18	5.31E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.96E-20	2.05E-19	1.14E-18

HEIGHT = 100.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	8.42E-19	6.49E-18	1.20E-17	1.95E-17	3.07E-17	4.18E-17	6.21E-17	1.03E-16	1.35E-16	2.01E-16	2.87E-16	3.84E-16	5.54E-16	8.66E-16
0.10	0.0	0.0	0.0	0.0	7.16E-19	6.11E-18	1.18E-17	1.92E-17	3.06E-17	4.14E-17	6.15E-17	1.02E-16	1.34E-16	1.99E-16	2.86E-16	3.82E-16	5.51E-16	8.63E-16
0.15	0.0	0.0	0.0	0.0	6.75E-19	5.95E-18	1.16E-17	1.91E-17	3.03E-17	4.11E-17	6.12E-17	1.02E-16	1.33E-16	1.98E-16	2.85E-16	3.81E-16	5.48E-16	8.60E-16
0.20	0.0	0.0	0.0	0.0	6.24E-19	5.80E-18	1.14E-17	1.89E-17	3.01E-17	4.09E-17	6.09E-17	1.02E-16	1.33E-16	1.98E-16	2.84E-16	3.79E-16	5.47E-16	8.58E-16
0.30	0.0	0.0	0.0	0.0	5.51E-19	5.51E-18	1.10E-17	1.85E-17	2.97E-17	4.03E-17	6.02E-17	1.00E-16	1.31E-16	1.96E-16	2.81E-16	3.77E-16	5.43E-16	8.53E-16
0.50	0.0	0.0	0.0	0.0	4.19E-19	5.01E-18	1.05E-17	1.79E-17	2.90E-17	3.94E-17	5.93E-17	9.86E-17	1.29E-16	1.94E-16	2.77E-16	3.72E-16	5.37E-16	8.42E-16
0.70	0.0	0.0	0.0	0.0	3.20E-19	4.58E-18	9.92E-18	1.72E-17	2.83E-17	3.85E-17	5.82E-17	9.68E-17	1.27E-16	1.90E-16	2.73E-16	3.67E-16	5.30E-16	8.31E-16
1.00	0.0	0.0	0.0	0.0	2.18E-19	4.00E-18	9.12E-18	1.64E-17	2.73E-17	3.73E-17	5.65E-17	9.44E-17	1.24E-16	1.86E-16	2.67E-16	3.59E-16	5.21E-16	8.18E-16
1.50	0.0	0.0	0.0	0.0	1.17E-19	3.18E-18	8.01E-18	1.51E-17	2.55E-17	3.53E-17	5.40E-17	9.01E-17	1.19E-16	1.79E-16	2.58E-16	3.47E-16	5.04E-16	7.95E-16
2.00	0.0	0.0	0.0	0.0	6.19E-20	2.57E-18	7.02E-18	1.39E-17	2.41E-17	3.34E-17	5.14E-17	8.64E-17	1.14E-16	1.72E-16	2.50E-16	3.36E-16	4.89E-16	7.72E-16
3.00	0.0	0.0	0.0	0.0	1.88E-20	1.70E-18	5.47E-18	1.17E-17	2.12E-17	3.00E-17	4.67E-17	7.95E-17	1.06E-16	1.59E-16	2.33E-16	3.16E-16	4.61E-16	7.29E-16
5.00	0.0	0.0	0.0	0.0	1.66E-21	7.58E-19	3.37E-18	8.39E-18	1.65E-17	2.41E-17	3.87E-17	6.73E-17	9.02E-17	1.38E-16	2.03E-16	2.79E-16	4.10E-16	6.54E-16
7.00	0.0	0.0	0.0	0.0	0.0	3.49E-19	2.10E-18	6.03E-18	1.28E-17	1.94E-17	3.19E-17	5.72E-17	7.77E-17	1.20E-16	1.79E-16	2.48E-16	3.68E-16	5.91E-16
10.00	0.0	0.0	0.0	0.0	0.0	1.09E-19	1.03E-18	3.72E-18	8.89E-18	1.40E-17	2.42E-17	4.48E-17	6.17E-17	9.79E-17	1.49E-16	2.09E-16	3.13E-16	5.16E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.74E-20	3.24E-19	1.64E-18	4.74E-18	8.15E-18	1.52E-17	3.04E-17	4.26E-17	7.04E-17	1.10E-16	1.58E-16	2.45E-16	4.10E-16
20.00	0.0	0.0	0.0	0.0	0.0	2.84E-21	1.05E-19	7.39E-19	2.51E-18	4.66E-18	9.50E-18	2.03E-17	2.98E-17	5.11E-17	8.33E-17	1.22E-16	1.95E-16	3.34E-16
30.00	0.0	0.0	0.0	0.0	0.0	0.0	1.07E-20	1.48E-19	7.17E-19	1.55E-18	3.66E-18	9.20E-18	1.44E-17	2.73E-17	4.78E-17	7.39E-17	1.24E-16	2.25E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.46E-22	5.31E-21	5.79E-20	1.65E-19	5.47E-19	1.87E-18	3.43E-18	7.97E-18	1.62E-17	2.85E-17	5.39E-17	1.09E-16
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.45E-21	1.60E-20	7.48E-20	4.02E-19	8.03E-19	2.30E-18	5.73E-18	1.15E-17	2.43E-17	5.53E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.89E-21	3.40E-20	8.58E-20	3.70E-19	1.20E-18	3.00E-18	7.70E-18	2.11E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.90E-20	9.59E-20	3.06E-19	1.16E-18	4.46E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.84E-20	1.75E-19	9.84E-19

HEIGHT = 150.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	1.24E-19	2.35E-18	5.61E-18	1.03E-17	1.75E-17	2.44E-17	3.76E-17	6.45E-17	8.52E-17	1.31E-16	1.93E-16	2.65E-16	3.92E-16	6.34E-16
0.10	0.0	0.0	0.0	0.0	1.09E-19	2.30E-18	5.47E-18	1.01E-17	1.73E-17	2.40E-17	3.73E-17	6.38E-17	8.50E-17	1.30E-16	1.93E-16	2.63E-16	3.91E-16	6.33E-16
0.15	0.0	0.0	0.0	0.0	9.27E-20	2.26E-18	5.40E-18	1.00E-17	1.71E-17	2.39E-17	3.71E-17	6.35E-17	8.47E-17	1.30E-16	1.92E-16	2.63E-16	3.90E-16	6.31E-16
0.20	0.0	0.0	0.0	0.0	8.70E-20	2.16E-18	5.37E-18	9.91E-18	1.71E-17	2.38E-17	3.69E-17	6.32E-17	8.44E-17	1.30E-16	1.91E-16	2.62E-16	3.89E-16	6.29E-16
0.30	0.0	0.0	0.0	0.0	7.70E-20	2.04E-18	5.13E-18	9.76E-18	1.68E-17	2.35E-17	3.65E-17	6.26E-17	8.36E-17	1.29E-16	1.90E-16	2.60E-16	3.88E-16	6.26E-16
0.50	0.0	0.0	0.0	0.0	6.06E-20	1.85E-18	4.88E-18	9.41E-18	1.64E-17	2.30E-17	3.60E-17	6.16E-17	8.25E-17	1.27E-16	1.87E-16	2.57E-16	3.83E-16	6.19E-16
0.70	0.0	0.0	0.0	0.0	4.67E-20	1.68E-18	4.62E-18	9.09E-18	1.60E-17	2.25E-17	3.54E-17	6.04E-17	8.12E-17	1.25E-16	1.85E-16	2.55E-16	3.80E-16	6.12E-16
1.00	0.0	0.0	0.0	0.0	3.21E-20	1.47E-18	4.25E-18	8.64E-18	1.55E-17	2.18E-17	3.43E-17	5.90E-17	7.94E-17	1.23E-16	1.81E-16	2.49E-16	3.74E-16	6.03E-16
1.50	0.0	0.0	0.0	0.0	1.68E-20	1.18E-18	3.77E-18	7.94E-18	1.46E-17	2.07E-17	3.28E-17	5.68E-17	7.66E-17	1.19E-16	1.76E-16	2.42E-16	3.63E-16	5.90E-16
2.00	0.0	0.0	0.0	0.0	9.76E-21	9.57E-19	3.31E-18	7.30E-18	1.36E-17	1.96E-17	3.14E-17	5.47E-17	7.40E-17	1.14E-16	1.70E-16	2.35E-16	3.52E-16	5.75E-16
3.00	0.0	0.0	0.0	0.0	3.03E-21	6.34E-19	2.60E-18	6.21E-18	1.21E-17	1.76E-17	2.84E-17	5.05E-17	6.86E-17	1.07E-16	1.60E-16	2.22E-16	3.36E-16	5.47E-16
5.00	0.0	0.0	0.0	0.0	0.0	2.91E-19	1.61E-18	4.47E-18	9.47E-18	1.42E-17	2.37E-17	4.30E-17	5.91E-17	9.33E-17	1.42E-16	2.00E-16	3.01E-16	4.98E-16
7.00	0.0	0.0	0.0	0.0	0.0	1.33E-19	9.98E-19	3.24E-18	7.34E-18	1.15E-17	1.96E-17	3.66E-17	5.10E-17	8.13E-17	1.27E-16	1.79E-16	2.73E-16	4.55E-16
10.00	0.0	0.0	0.0	0.0	0.0	4.20E-20	4.96E-19	2.01E-18	5.06E-18	8.30E-18	1.49E-17	2.87E-17	4.08E-17	6.71E-17	1.07E-16	1.52E-16	2.35E-16	4.01E-16
15.00	0.0	0.0	0.0	0.0	0.0	6.61E-21	1.61E-19	8.91E-19	2.71E-18	4.84E-18	9.41E-18	1.97E-17	2.86E-17	4.89E-17	7.92E-17	1.18E-16	1.87E-16	3.25E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.07E-21	5.42E-20	3.96E-19	1.46E-18	2.81E-18	5.86E-18	1.31E-17	2.02E-17	3.58E-17	6.01E-17	9.14E-17	1.50E-16	2.67E-16
30.00	0.0	0.0	0.0	0.0	0.0	0.0	4.73E-21	7.81E-20	4.06E-19	9.26E-19	2.30E-18	5.94E-18	9.74E-18	1.92E-17	3.50E-17	5.59E-17	9.67E-17	1.82E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.34E-23	2.63E-21	3.29E-20	9.72E-20	3.42E-19	1.26E-18	2.27E-18	5.60E-18	1.19E-17	2.19E-17	4.31E-17	9.03E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.97E-21	1.08E-20	4.76E-20	2.52E-19	5.48E-19	1.61E-18	4.21E-18	8.78E-18	1.96E-17	4.61E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.80E-21	2.25E-20	5.92E-20	2.58E-19	9.03E-19	2.32E-18	6.36E-18	1.77E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26E-20	6.54E-20	2.36E-19	9.34E-19	3.74E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.27E-20	1.40E-19	8.21E-19

HEIGHT = 200.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	0.0	8.32E-19	2.51E-18	5.33E-18	9.84E-18	1.43E-17	2.28E-17	4.09E-17	5.59E-17	8.89E-17	1.35E-16	1.89E-16	2.89E-16	4.82E-16
0.10	0.0	0.0	0.0	0.0	0.0	7.76E-19	2.44E-18	5.19E-18	9.80E-18	1.40E-17	2.26E-17	4.07E-17	5.57E-17	8.80E-17	1.34E-16	1.89E-16	2.89E-16	4.84E-16
0.15	0.0	0.0	0.0	0.0	0.0	7.59E-19	2.40E-18	5.14E-18	9.70E-18	1.41E-17	2.25E-17	4.05E-17	5.56E-17	8.77E-17	1.34E-16	1.89E-16	2.89E-16	4.82E-16
0.20	0.0	0.0	0.0	0.0	0.0	7.50E-19	2.37E-18	5.09E-18	9.64E-18	1.40E-17	2.24E-17	4.04E-17	5.54E-17	8.75E-17	1.33E-16	1.88E-16	2.88E-16	4.81E-16
0.30	0.0	0.0	0.0	0.0	0.0	7.41E-19	2.30E-18	5.04E-18	9.46E-18	1.37E-17	2.22E-17	4.01E-17	5.50E-17	8.67E-17	1.33E-16	1.88E-16	2.87E-16	4.79E-16
0.50	0.0	0.0	0.0	0.0	0.0	6.67E-19	2.19E-18	4.85E-18	9.19E-18	1.34E-17	2.18E-17	3.94E-17	5.41E-17	8.57E-17	1.31E-16	1.85E-16	2.84E-16	4.74E-16
0.70	0.0	0.0	0.0	0.0	0.0	6.17E-19	2.08E-18	4.70E-18	8.96E-18	1.31E-17	2.14E-17	3.86E-17	5.33E-17	8.46E-17	1.29E-16	1.83E-16	2.82E-16	4.69E-16
1.00	0.0	0.0	0.0	0.0	0.0	5.36E-19	1.92E-18	4.43E-18	8.66E-18	1.27E-17	2.08E-17	3.76E-17	5.23E-17	8.29E-17	1.28E-16	1.80E-16	2.78E-16	4.63E-16
1.50	0.0	0.0	0.0	0.0	0.0	4.33E-19	1.73E-18	4.05E-18	8.17E-18	1.20E-17	1.99E-17	3.63E-17	5.05E-17	8.01E-17	1.25E-16	1.75E-16	2.70E-16	4.54E-16
2.00	0.0	0.0	0.0	0.0	0.0	3.50E-19	1.51E-18	3.77E-18	7.62E-18	1.15E-17	1.91E-17	3.50E-17	4.89E-17	7.75E-17	1.21E-16	1.70E-16	2.64E-16	4.43E-16
3.00	0.0	0.0	0.0	0.0	0.0	2.35E-19	1.17E-18	3.23E-18	6.75E-18	1.03E-17	1.73E-17	3.22E-17	4.53E-17	7.32E-17	1.15E-16	1.61E-16	2.52E-16	4.23E-16
5.00	0.0	0.0	0.0	0.0	0.0	1.06E-19	7.24E-19	2.33E-18	5.33E-18	8.26E-18	1.44E-17	2.76E-17	3.90E-17	6.38E-17	1.01E-16	1.45E-16	2.28E-16	3.88E-16
7.00	0.0	0.0	0.0	0.0	0.0	5.13E-20	4.62E-19	1.67E-18	4.16E-18	6.70E-18	1.19E-17	2.37E-17	3.39E-17	5.60E-17	8.98E-17	1.31E-16	2.07E-16	3.56E-16
10.00	0.0	0.0	0.0	0.0	0.0	1.70E-20	2.31E-19	1.03E-18	2.85E-18	4.90E-18	9.08E-18	1.85E-17	2.71E-17	4.65E-17	7.62E-17	1.13E-16	1.80E-16	3.15E-16
15.00	0.0	0.0	0.0	0.0	0.0	2.95E-21	7.36E-20	4.68E-19	1.53E-18	2.84E-18	5.62E-18	1.26E-17	1.90E-17	3.42E-17	5.75E-17	8.75E-17	1.45E-16	2.59E-16
20.00	0.0	0.0	0.0	0.0	0.0	3.99E-22	2.36E-20	2.04E-19	8.02E-19	1.63E-18	3.51E-18	8.49E-18	1.32E-17	2.51E-17	4.39E-17	6.84E-17	1.17E-16	2.15E-16
30.00	0.0	0.0	0.0	0.0	0.0	0.0	2.45E-21	4.22E-20	2.31E-19	5.24E-19	1.40E-18	3.85E-18	6.50E-18	1.36E-17	2.57E-17	4.22E-17	7.60E-17	1.48E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.49E-23	1.61E-21	1.66E-20	5.75E-20	1.99E-19	7.82E-19	1.57E-18	3.91E-18	8.82E-18	1.67E-17	3.41E-17	7.45E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.47E-21	2.83E-20	1.62E-19	3.77E-19	1.13E-18	3.09E-18	6.80E-18	1.57E-17	3.84E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.63E-21	1.48E-20	3.81E-20	1.75E-19	6.57E-19	1.74E-18	5.06E-18	1.46E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.24E-21	4.68E-20	1.77E-19	7.49E-19	3.17E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.33E-20	1.09E-19	7.02E-19

HEIGHT = 300.0 METER

Source depth (g/cm²)	Air kerma per unit source intensity (Gy per photon/m²)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	0.0	1.08E-19	4.93E-19	1.32E-18	2.92E-18	4.61E-18	8.27E-18	1.67E-17	2.42E-17	4.19E-17	6.94E-17	1.03E-16	1.68E-16	2.99E-16
0.10	0.0	0.0	0.0	0.0	0.0	1.02E-19	4.77E-19	1.27E-18	2.88E-18	4.49E-18	8.20E-18	1.65E-17	2.41E-17	4.19E-17	6.90E-17	1.03E-16	1.68E-16	2.99E-16
0.15	0.0	0.0	0.0	0.0	0.0	9.91E-20	4.78E-19	1.25E-18	2.86E-18	4.49E-18	8.18E-18	1.65E-17	2.41E-17	4.19E-17	6.88E-17	1.02E-16	1.67E-16	2.98E-16
0.20	0.0	0.0	0.0	0.0	0.0	9.47E-20	4.64E-19	1.24E-18	2.84E-18	4.49E-18	8.15E-18	1.64E-17	2.40E-17	4.18E-17	6.86E-17	1.02E-16	1.67E-16	2.97E-16
0.30	0.0	0.0	0.0	0.0	0.0	9.02E-20	4.39E-19	1.22E-18	2.82E-18	4.44E-18	8.06E-18	1.62E-17	2.38E-17	4.15E-17	6.81E-17	1.02E-16	1.66E-16	2.96E-16
0.50	0.0	0.0	0.0	0.0	0.0	8.01E-20	4.19E-19	1.19E-18	2.74E-18	4.35E-18	7.91E-18	1.60E-17	2.35E-17	4.08E-17	6.75E-17	1.00E-16	1.64E-16	2.93E-16
0.70	0.0	0.0	0.0	0.0	0.0	7.70E-20	4.01E-19	1.14E-18	2.68E-18	4.23E-18	7.78E-18	1.56E-17	2.30E-17	4.02E-17	6.67E-17	9.93E-17	1.63E-16	2.90E-16
1.00	0.0	0.0	0.0	0.0	0.0	6.76E-20	3.78E-19	1.09E-18	2.58E-18	4.11E-18	7.58E-18	1.52E-17	2.26E-17	3.95E-17	6.57E-17	9.77E-17	1.61E-16	2.87E-16
1.50	0.0	0.0	0.0	0.0	0.0	5.47E-20	3.36E-19	9.99E-19	2.44E-18	3.88E-18	7.12E-18	1.47E-17	2.18E-17	3.82E-17	6.37E-17	9.53E-17	1.58E-16	2.82E-16
2.00	0.0	0.0	0.0	0.0	0.0	4.42E-20	3.03E-19	9.31E-19	2.29E-18	3.70E-18	6.90E-18	1.43E-17	2.11E-17	3.69E-17	6.18E-17	9.29E-17	1.55E-16	2.77E-16
3.00	0.0	0.0	0.0	0.0	0.0	3.00E-20	2.42E-19	7.90E-19	2.02E-18	3.31E-18	6.28E-18	1.33E-17	1.95E-17	3.48E-17	5.87E-17	8.83E-17	1.48E-16	2.65E-16
5.00	0.0	0.0	0.0	0.0	0.0	1.39E-20	1.55E-19	5.69E-19	1.58E-18	2.68E-18	5.22E-18	1.13E-17	1.69E-17	3.04E-17	5.29E-17	8.05E-17	1.35E-16	2.46E-16
7.00	0.0	0.0	0.0	0.0	0.0	6.48E-21	9.39E-20	4.09E-19	1.20E-18	2.15E-18	4.33E-18	9.62E-18	1.47E-17	2.69E-17	4.75E-17	7.30E-17	1.24E-16	2.28E-16
10.00	0.0	0.0	0.0	0.0	0.0	2.16E-21	4.90E-20	2.60E-19	8.31E-19	1.55E-18	3.22E-18	7.65E-18	1.18E-17	2.23E-17	4.01E-17	6.31E-17	1.09E-16	2.03E-16
15.00	0.0	0.0	0.0	0.0	0.0	0.0	1.66E-20	1.19E-19	4.63E-19	9.16E-19	2.02E-18	5.16E-18	8.27E-18	1.65E-17	3.04E-17	4.94E-17	8.78E-17	1.69E-16
20.00	0.0	0.0	0.0	0.0	0.0	0.0	5.14E-21	5.06E-20	2.41E-19	5.11E-19	1.28E-18	3.51E-18	5.83E-18	1.22E-17	2.36E-17	3.92E-17	7.15E-17	1.42E-16
30.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06E-20	6.99E-20	1.66E-19	4.89E-19	1.57E-18	2.79E-18	6.59E-18	1.40E-17	2.45E-17	4.72E-17	9.94E-17
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.00E-21	1.85E-20	7.24E-20	3.16E-19	6.62E-19	1.87E-18	4.81E-18	9.78E-18	2.16E-17	5.08E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.94E-21	1.10E-20	6.29E-20	1.67E-19	5.66E-19	1.73E-18	4.05E-18	9.97E-18	2.64E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.97E-21	1.98E-20	8.67E-20	3.66E-19	1.14E-18	3.28E-18	1.03E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.50E-21	2.81E-20	1.04E-19	4.92E-19	2.26E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.44E-20	7.03E-20	4.94E-19

Table 3. Fluence of primary photons at heights of 0.1 - 300 m per unit source intensity for monoenergetic plane sources at different depths in the ground for Soil 1.

HEIGHT = 0.1 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²) Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.17E+00	1.43E+00	1.75E+00	2.12E+00	2.52E+00	2.76E+00	2.82E+00	2.88E+00	2.93E+00	2.98E+00	3.04E+00	3.14E+00	3.20E+00	3.30E+00	3.40E+00	3.48E+00	3.59E+00	3.72E+00
0.10	1.43E-02	5.67E-02	1.72E-01	4.21E-01	8.74E-01	1.38E+00	1.58E+00	1.71E+00	1.80E+00	1.85E+00	1.93E+00	2.02E+00	2.09E+00	2.18E+00	2.28E+00	2.36E+00	2.46E+00	2.58E+00
0.15	3.23E-03	2.11E-02	9.17E-02	2.88E-01	7.01E-01	1.20E+00	1.40E+00	1.53E+00	1.62E+00	1.67E+00	1.74E+00	1.84E+00	1.90E+00	2.00E+00	2.09E+00	2.17E+00	2.28E+00	2.40E+00
0.20	7.89E-04	8.44E-03	5.21E-02	2.07E-01	5.85E-01	1.07E+00	1.26E+00	1.40E+00	1.49E+00	1.54E+00	1.61E+00	1.71E+00	1.77E+00	1.86E+00	1.96E+00	2.04E+00	2.14E+00	2.26E+00
0.30	5.35E-05	1.52E-03	1.86E-02	1.16E-01	4.31E-01	8.86E-01	1.08E+00	1.21E+00	1.30E+00	1.35E+00	1.42E+00	1.52E+00	1.58E+00	1.68E+00	1.77E+00	1.85E+00	1.95E+00	2.07E+00
0.50	0.0	6.13E-05	2.88E-03	4.28E-02	2.63E-01	6.67E-01	8.51E-01	9.81E-01	1.07E+00	1.12E+00	1.19E+00	1.28E+00	1.34E+00	1.43E+00	1.53E+00	1.60E+00	1.71E+00	1.82E+00
0.70	0.0	0.0	5.06E-04	1.75E-02	1.74E-01	5.32E-01	7.07E-01	8.32E-01	9.14E-01	9.63E-01	1.03E+00	1.13E+00	1.18E+00	1.27E+00	1.37E+00	1.44E+00	1.55E+00	1.66E+00
1.00	0.0	0.0	4.16E-05	5.06E-03	1.00E-01	4.00E-01	5.61E-01	6.79E-01	7.58E-01	8.05E-01	8.71E-01	9.63E-01	1.02E+00	1.11E+00	1.20E+00	1.28E+00	1.38E+00	1.49E+00
1.50	0.0	0.0	0.0	7.28E-04	4.45E-02	2.68E-01	4.09E-01	5.16E-01	5.90E-01	6.33E-01	6.95E-01	7.83E-01	8.36E-01	9.23E-01	1.01E+00	1.09E+00	1.18E+00	1.30E+00
2.00	0.0	0.0	0.0	1.15E-04	2.12E-02	1.90E-01	3.12E-01	4.10E-01	4.78E-01	5.18E-01	5.77E-01	6.60E-01	7.12E-01	7.95E-01	8.81E-01	9.54E-01	1.05E+00	1.16E+00
3.00	0.0	0.0	0.0	3.26E-06	5.37E-03	1.03E-01	1.96E-01	2.76E-01	3.35E-01	3.71E-01	4.23E-01	4.98E-01	5.46E-01	6.23E-01	7.04E-01	7.74E-01	8.65E-01	9.73E-01
5.00	0.0	0.0	0.0	0.0	4.27E-04	3.59E-02	8.93E-02	1.44E-01	1.87E-01	2.15E-01	2.56E-01	3.18E-01	3.58E-01	4.25E-01	4.97E-01	5.60E-01	6.45E-01	7.45E-01
7.00	0.0	0.0	0.0	0.0	3.88E-05	1.39E-02	4.48E-02	8.20E-02	1.14E-01	1.35E-01	1.67E-01	2.19E-01	2.53E-01	3.11E-01	3.75E-01	4.32E-01	5.10E-01	6.04E-01
10.00	0.0	0.0	0.0	0.0	1.20E-06	3.70E-03	1.74E-02	3.83E-02	5.83E-02	7.25E-02	9.55E-02	1.34E-01	1.60E-01	2.07E-01	2.61E-01	3.10E-01	3.79E-01	4.65E-01
15.00	0.0	0.0	0.0	0.0	0.0	4.66E-04	4.09E-03	1.21E-02	2.14E-02	2.88E-02	4.16E-02	6.51E-02	8.26E-02	1.16E-01	1.56E-01	1.94E-01	2.50E-01	3.23E-01
20.00	0.0	0.0	0.0	0.0	0.0	6.45E-05	1.05E-03	4.13E-03	8.50E-03	1.23E-02	1.95E-02	3.39E-02	4.55E-02	6.87E-02	9.85E-02	1.29E-01	1.74E-01	2.36E-01
30.00	0.0	0.0	0.0	0.0	0.0	1.42E-06	7.76E-05	5.46E-04	1.50E-03	2.51E-03	4.77E-03	1.02E-02	1.53E-02	2.67E-02	4.34E-02	6.19E-02	9.22E-02	1.37E-01
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.46E-07	1.20E-05	5.89E-05	1.31E-04	3.55E-04	1.15E-03	2.11E-03	4.91E-03	1.01E-02	1.71E-02	3.05E-02	5.37E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.06E-07	2.66E-06	7.89E-06	3.02E-05	1.46E-04	3.31E-04	1.02E-03	2.64E-03	5.27E-03	1.13E-02	2.34E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32E-07	8.49E-07	7.49E-06	2.31E-05	1.08E-04	3.95E-04	1.00E-03	2.78E-03	7.37E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.97E-06	1.92E-05	7.32E-05	3.12E-04	1.23E-03
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.87E-06	3.83E-05	2.24E-04

HEIGHT = 0.5 METER

Fluence per unit source intensity (photons/m^2 per photon/m^2)

Source depth (g/cm^2)	Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	4.72E-01	6.87E-01	9.77E-01	1.33E+00	1.72E+00	1.96E+00	2.02E+00	2.07E+00	2.13E+00	2.17E+00	2.24E+00	2.34E+00	2.40E+00	2.50E+00	2.59E+00	2.68E+00	2.78E+00	2.91E+00
0.10	1.06E-02	4.65E-02	1.51E-01	3.87E-01	8.18E-01	1.28E+00	1.44E+00	1.55E+00	1.63E+00	1.68E+00	1.75E+00	1.85E+00	1.91E+00	2.01E+00	2.10E+00	2.18E+00	2.29E+00	2.41E+00
0.15	2.44E-03	1.76E-02	8.21E-02	2.68E-01	6.65E-01	1.12E+00	1.30E+00	1.42E+00	1.50E+00	1.55E+00	1.62E+00	1.72E+00	1.78E+00	1.87E+00	1.97E+00	2.05E+00	2.15E+00	2.27E+00
0.20	6.03E-04	7.11E-03	4.70E-02	1.94E-01	5.58E-01	1.01E+00	1.19E+00	1.31E+00	1.39E+00	1.44E+00	1.51E+00	1.61E+00	1.67E+00	1.77E+00	1.86E+00	1.94E+00	2.04E+00	2.16E+00
0.30	4.14E-05	1.29E-03	1.70E-02	1.10E-01	4.14E-01	8.49E-01	1.03E+00	1.15E+00	1.23E+00	1.28E+00	1.35E+00	1.45E+00	1.51E+00	1.60E+00	1.70E+00	1.78E+00	1.88E+00	2.00E+00
0.50	0.0	5.27E-05	2.65E-03	4.09E-02	2.55E-01	6.46E-01	8.22E-01	9.45E-01	1.03E+00	1.07E+00	1.14E+00	1.24E+00	1.30E+00	1.39E+00	1.48E+00	1.56E+00	1.66E+00	1.78E+00
0.70	0.0	0.0	4.66E-04	1.68E-02	1.69E-01	5.18E-01	6.86E-01	8.06E-01	8.86E-01	9.34E-01	1.00E+00	1.10E+00	1.15E+00	1.24E+00	1.34E+00	1.41E+00	1.51E+00	1.63E+00
1.00	0.0	0.0	3.85E-05	4.85E-03	9.79E-02	3.91E-01	5.47E-01	6.62E-01	7.39E-01	7.85E-01	8.50E-01	9.42E-01	9.98E-01	1.09E+00	1.18E+00	1.25E+00	1.35E+00	1.47E+00
1.50	0.0	0.0	0.0	7.01E-04	4.36E-02	2.63E-01	4.00E-01	5.06E-01	5.77E-01	6.21E-01	6.82E-01	7.69E-01	8.23E-01	9.09E-01	9.97E-01	1.07E+00	1.17E+00	1.28E+00
2.00	0.0	0.0	0.0	1.10E-04	2.08E-02	1.86E-01	3.06E-01	4.02E-01	4.69E-01	5.10E-01	5.68E-01	6.51E-01	7.02E-01	7.85E-01	8.70E-01	9.43E-01	1.04E+00	1.15E+00
3.00	0.0	0.0	0.0	3.15E-06	5.27E-03	1.01E-01	1.93E-01	2.72E-01	3.30E-01	3.65E-01	4.17E-01	4.92E-01	5.39E-01	6.17E-01	6.97E-01	7.67E-01	8.58E-01	9.66E-01
5.00	0.0	0.0	0.0	0.0	4.20E-04	3.54E-02	8.82E-02	1.42E-01	1.85E-01	2.12E-01	2.53E-01	3.15E-01	3.55E-01	4.22E-01	4.94E-01	5.57E-01	6.41E-01	7.41E-01
7.00	0.0	0.0	0.0	0.0	3.82E-05	1.37E-02	4.43E-02	8.11E-02	1.12E-01	1.33E-01	1.66E-01	2.17E-01	2.51E-01	3.09E-01	3.73E-01	4.30E-01	5.07E-01	6.01E-01
10.00	0.0	0.0	0.0	0.0	1.18E-06	3.66E-03	1.73E-02	3.79E-02	5.78E-02	7.18E-02	9.47E-02	1.33E-01	1.59E-01	2.06E-01	2.60E-01	3.09E-01	3.77E-01	4.63E-01
15.00	0.0	0.0	0.0	0.0	0.0	4.62E-04	4.05E-03	1.20E-02	2.12E-02	2.85E-02	4.13E-02	6.47E-02	8.21E-02	1.15E-01	1.55E-01	1.94E-01	2.49E-01	3.22E-01
20.00	0.0	0.0	0.0	0.0	0.0	6.38E-05	1.03E-03	4.10E-03	8.43E-03	1.22E-02	1.93E-02	3.37E-02	4.52E-02	6.84E-02	9.81E-02	1.28E-01	1.74E-01	2.35E-01
30.00	0.0	0.0	0.0	0.0	0.0	1.40E-06	7.69E-05	5.41E-04	1.49E-03	2.50E-03	4.74E-03	1.02E-02	1.52E-02	2.66E-02	4.32E-02	6.17E-02	9.20E-02	1.36E-01
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.41E-07	1.19E-05	5.85E-05	1.31E-04	3.53E-04	1.14E-03	2.10E-03	4.89E-03	1.01E-02	1.70E-02	3.04E-02	5.36E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.04E-07	2.64E-06	7.84E-06	3.00E-05	1.45E-04	3.29E-04	1.01E-03	2.63E-03	5.25E-03	1.12E-02	2.33E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.31E-07	8.44E-07	7.46E-06	2.30E-05	1.07E-04	3.93E-04	1.00E-03	2.78E-03	7.36E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.96E-06	1.92E-05	7.30E-05	3.11E-04	1.23E-03
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.86E-06	3.82E-05	2.24E-04

HEIGHT = 1.0 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00	
0.0	2.42E-01	4.14E-01	6.71E-01	1.01E+00	1.38E+00	1.62E+00	1.68E+00	1.73E+00	1.79E+00	1.83E+00	1.90E+00	2.00E+00	2.06E+00	2.15E+00	2.25E+00	2.33E+00	2.44E+00	2.57E+00	
0.10	7.35E-03	3.64E-02	1.30E-01	3.51E-01	7.57E-01	1.17E+00	1.31E+00	1.41E+00	1.48E+00	1.53E+00	1.60E+00	1.69E+00	1.76E+00	1.85E+00	1.94E+00	2.03E+00	2.13E+00	2.25E+00	
0.15	1.73E-03	1.41E-02	7.16E-02	2.46E-01	6.24E-01	1.05E+00	1.20E+00	1.31E+00	1.38E+00	1.43E+00	1.50E+00	1.59E+00	1.65E+00	1.75E+00	1.84E+00	1.92E+00	2.03E+00	2.15E+00	
0.20	4.32E-04	5.75E-03	4.14E-02	1.80E-01	5.27E-01	9.51E-01	1.11E+00	1.22E+00	1.30E+00	1.34E+00	1.41E+00	1.51E+00	1.57E+00	1.66E+00	1.76E+00	1.84E+00	1.94E+00	2.06E+00	
0.30	3.01E-05	1.06E-03	1.51E-02	1.03E-01	3.96E-01	8.08E-01	9.74E-01	1.09E+00	1.16E+00	1.21E+00	1.28E+00	1.38E+00	1.44E+00	1.53E+00	1.63E+00	1.70E+00	1.81E+00	1.93E+00	
0.50	0.0	4.37E-05	2.38E-03	3.85E-02	2.46E-01	6.21E-01	7.87E-01	9.03E-01	9.81E-01	1.03E+00	1.10E+00	1.19E+00	1.25E+00	1.34E+00	1.44E+00	1.51E+00	1.61E+00	1.73E+00	
0.70	0.0	0.0	4.21E-04	1.59E-02	1.64E-01	5.01E-01	6.62E-01	7.76E-01	8.54E-01	9.00E-01	9.67E-01	1.06E+00	1.12E+00	1.21E+00	1.30E+00	1.38E+00	1.48E+00	1.60E+00	
1.00	0.0	0.0	3.49E-05	4.61E-03	9.51E-02	3.80E-01	5.31E-01	6.41E-01	7.16E-01	7.62E-01	8.26E-01	9.17E-01	9.73E-01	1.06E+00	1.15E+00	1.23E+00	1.33E+00	1.44E+00	
1.50	0.0	0.0	0.0	6.68E-04	4.24E-02	2.57E-01	3.90E-01	4.93E-01	5.63E-01	6.05E-01	6.66E-01	7.53E-01	8.06E-01	8.92E-01	9.80E-01	1.05E+00	1.15E+00	1.27E+00	
2.00	0.0	0.0	0.0	1.06E-04	2.03E-02	1.83E-01	3.00E-01	3.93E-01	4.59E-01	4.99E-01	5.56E-01	6.39E-01	6.90E-01	7.73E-01	8.58E-01	9.31E-01	1.03E+00	1.14E+00	
3.00	0.0	0.0	0.0	3.01E-06	5.15E-03	9.97E-02	1.89E-01	2.67E-01	3.24E-01	3.59E-01	4.10E-01	4.85E-01	5.32E-01	6.09E-01	6.89E-01	7.59E-01	8.50E-01	9.57E-01	
5.00	0.0	0.0	0.0	0.0	4.11E-04	3.49E-02	8.68E-02	1.40E-01	1.82E-01	2.09E-01	2.50E-01	3.11E-01	3.51E-01	4.18E-01	4.89E-01	5.52E-01	6.36E-01	7.37E-01	
7.00	0.0	0.0	0.0	0.0	3.74E-05	1.35E-02	4.37E-02	7.99E-02	1.11E-01	1.32E-01	1.64E-01	2.15E-01	2.48E-01	3.06E-01	3.70E-01	4.27E-01	5.04E-01	5.98E-01	
10.00	0.0	0.0	0.0	0.0	1.16E-06	3.60E-03	1.70E-02	3.74E-02	5.71E-02	7.10E-02	9.38E-02	1.32E-01	1.58E-01	2.05E-01	2.58E-01	3.07E-01	3.75E-01	4.61E-01	
15.00	0.0	0.0	0.0	0.0	0.0	4.56E-04	4.00E-03	1.18E-02	2.10E-02	2.82E-02	4.10E-02	6.42E-02	8.15E-02	1.14E-01	1.54E-01	1.93E-01	2.48E-01	3.21E-01	
20.00	0.0	0.0	0.0	0.0	0.0	6.30E-05	1.02E-03	4.05E-03	8.34E-03	1.21E-02	1.92E-02	3.34E-02	4.49E-02	6.80E-02	9.76E-02	1.28E-01	1.73E-01	2.35E-01	
30.00	0.0	0.0	0.0	0.0	0.0	1.38E-06	7.60E-05	5.36E-04	1.48E-03	2.47E-03	4.70E-03	1.01E-02	1.51E-02	2.65E-02	4.30E-02	6.15E-02	9.17E-02	1.36E-01	
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.35E-07	1.18E-05	5.80E-05	1.29E-04	3.50E-04	1.13E-03	2.09E-03	4.86E-03	1.00E-02	1.70E-02	3.03E-02	5.34E-02	
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.01E-07	2.62E-06	7.78E-06	2.98E-05	1.44E-04	3.28E-04	1.01E-03	2.62E-03	5.24E-03	1.12E-02	2.35E-02	
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30E-07	8.38E-07	7.41E-06	2.28E-05	1.07E-04	3.92E-04	9.99E-04	2.77E-03	7.34E-03	
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.94E-06	1.91E-05	7.28E-05	3.10E-04	1.25E-03	
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.84E-06	3.81E-05	2.23E-04	

HEIGHT = 1.5 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.41E-01	2.80E-01	5.07E-01	8.23E-01	1.19E+00	1.42E+00	1.48E+00	1.53E+00	1.59E+00	1.63E+00	1.70E+00	1.80E+00	1.86E+00	1.95E+00	2.05E+00	2.13E+00	2.24E+00	2.36E+00
0.10	5.12E-03	2.88E-02	1.12E-01	3.19E-01	7.05E-01	1.09E+00	1.21E+00	1.30E+00	1.37E+00	1.41E+00	1.48E+00	1.58E+00	1.64E+00	1.73E+00	1.83E+00	1.91E+00	2.01E+00	2.14E+00
0.15	1.23E-03	1.13E-02	6.26E-02	2.27E-01	5.87E-01	9.82E-01	1.12E+00	1.22E+00	1.28E+00	1.33E+00	1.40E+00	1.50E+00	1.56E+00	1.65E+00	1.74E+00	1.83E+00	1.93E+00	2.05E+00
0.20	3.10E-04	4.66E-03	3.66E-02	1.67E-01	5.00E-01	8.98E-01	1.05E+00	1.14E+00	1.22E+00	1.26E+00	1.33E+00	1.43E+00	1.49E+00	1.58E+00	1.68E+00	1.76E+00	1.86E+00	1.98E+00
0.30	2.19E-05	8.69E-04	1.35E-02	9.61E-02	3.78E-01	7.70E-01	9.24E-01	1.03E+00	1.10E+00	1.15E+00	1.22E+00	1.31E+00	1.37E+00	1.47E+00	1.56E+00	1.64E+00	1.74E+00	1.86E+00
0.50	0.0	3.62E-05	2.14E-03	3.63E-02	2.37E-01	5.98E-01	7.56E-01	8.65E-01	9.40E-01	9.87E-01	1.05E+00	1.15E+00	1.21E+00	1.30E+00	1.39E+00	1.47E+00	1.57E+00	1.69E+00
0.70	0.0	0.0	3.81E-04	1.51E-02	1.58E-01	4.85E-01	6.39E-01	7.48E-01	8.23E-01	8.69E-01	9.35E-01	1.03E+00	1.09E+00	1.18E+00	1.27E+00	1.35E+00	1.44E+00	1.56E+00
1.00	0.0	0.0	3.17E-05	4.38E-03	9.23E-02	3.69E-01	5.15E-01	6.22E-01	6.95E-01	7.40E-01	8.03E-01	8.94E-01	9.49E-01	1.04E+00	1.13E+00	1.20E+00	1.30E+00	1.42E+00
1.50	0.0	0.0	0.0	6.37E-04	4.13E-02	2.51E-01	3.81E-01	4.80E-01	5.49E-01	5.91E-01	6.51E-01	7.38E-01	7.91E-01	8.76E-01	9.63E-01	1.04E+00	1.14E+00	1.25E+00
2.00	0.0	0.0	0.0	1.01E-04	1.98E-02	1.79E-01	2.93E-01	3.84E-01	4.49E-01	4.88E-01	5.45E-01	6.27E-01	6.78E-01	7.61E-01	8.45E-01	9.18E-01	1.01E+00	1.12E+00
3.00	0.0	0.0	0.0	2.88E-06	5.04E-03	9.78E-02	1.86E-01	2.62E-01	3.18E-01	3.53E-01	4.03E-01	4.78E-01	5.25E-01	6.01E-01	6.81E-01	7.51E-01	8.41E-01	9.49E-01
5.00	0.0	0.0	0.0	0.0	4.02E-04	3.43E-02	8.54E-02	1.38E-01	1.79E-01	2.06E-01	2.46E-01	3.08E-01	3.47E-01	4.14E-01	4.85E-01	5.48E-01	6.31E-01	7.32E-01
7.00	0.0	0.0	0.0	0.0	3.66E-05	1.33E-02	4.30E-02	7.88E-02	1.09E-01	1.30E-01	1.62E-01	2.12E-01	2.46E-01	3.04E-01	3.67E-01	4.24E-01	5.01E-01	5.95E-01
10.00	0.0	0.0	0.0	0.0	1.14E-06	3.56E-03	1.68E-02	3.69E-02	5.64E-02	7.02E-02	9.28E-02	1.30E-01	1.56E-01	2.03E-01	2.56E-01	3.05E-01	3.73E-01	4.59E-01
15.00	0.0	0.0	0.0	0.0	0.0	4.50E-04	3.95E-03	1.17E-02	2.08E-02	2.79E-02	4.06E-02	6.37E-02	8.09E-02	1.14E-01	1.53E-01	1.92E-01	2.47E-01	3.19E-01
20.00	0.0	0.0	0.0	0.0	0.0	6.22E-05	1.01E-03	4.01E-03	8.25E-03	1.20E-02	1.90E-02	3.32E-02	4.46E-02	6.76E-02	9.71E-02	1.27E-01	1.72E-01	2.34E-01
30.00	0.0	0.0	0.0	0.0	0.0	1.37E-06	7.52E-05	5.30E-04	1.46E-03	2.45E-03	4.67E-03	1.00E-02	1.50E-02	2.63E-02	4.28E-02	6.12E-02	9.13E-02	1.36E-01
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.30E-07	1.17E-05	5.75E-05	1.28E-04	3.48E-04	1.12E-03	2.08E-03	4.84E-03	9.98E-03	1.69E-02	3.03E-02	5.33E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.98E-07	2.60E-06	7.72E-06	2.96E-05	1.44E-04	3.26E-04	1.00E-03	2.61E-03	5.22E-03	1.12E-02	2.32E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.29E-07	8.32E-07	7.37E-06	2.27E-05	1.06E-04	3.91E-04	9.95E-04	2.76E-03	7.33E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.93E-06	1.90E-05	7.26E-05	3.10E-04	1.22E-03
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.82E-06	3.80E-05	2.23E-04

HEIGHT = 2.0 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	8.72E-02	1.99E-01	4.00E-01	6.98E-01	1.06E+00	1.28E+00	1.34E+00	1.39E+00	1.45E+00	1.49E+00	1.56E+00	1.66E+00	1.72E+00	1.81E+00	1.90E+00	1.99E+00	2.09E+00	2.22E+00
0.10	3.59E-03	2.28E-02	9.70E-02	2.91E-01	6.59E-01	1.02E+00	1.13E+00	1.21E+00	1.27E+00	1.32E+00	1.39E+00	1.48E+00	1.54E+00	1.64E+00	1.73E+00	1.81E+00	1.92E+00	2.04E+00
0.15	8.73E-04	9.09E-03	5.49E-02	2.09E-01	5.54E-01	9.25E-01	1.05E+00	1.14E+00	1.21E+00	1.25E+00	1.32E+00	1.42E+00	1.48E+00	1.57E+00	1.66E+00	1.74E+00	1.85E+00	1.97E+00
0.20	2.23E-04	3.79E-03	3.23E-02	1.55E-01	4.75E-01	8.51E-01	9.87E-01	1.08E+00	1.15E+00	1.19E+00	1.26E+00	1.36E+00	1.42E+00	1.51E+00	1.60E+00	1.69E+00	1.79E+00	1.91E+00
0.30	1.60E-05	7.13E-04	1.20E-02	9.00E-02	3.61E-01	7.36E-01	8.81E-01	9.79E-01	1.05E+00	1.10E+00	1.16E+00	1.26E+00	1.32E+00	1.41E+00	1.50E+00	1.58E+00	1.69E+00	1.81E+00
0.50	0.0	3.00E-05	1.93E-03	3.43E-02	2.28E-01	5.77E-01	7.26E-01	8.30E-01	9.03E-01	9.49E-01	1.02E+00	1.11E+00	1.17E+00	1.26E+00	1.35E+00	1.43E+00	1.53E+00	1.65E+00
0.70	0.0	0.0	3.44E-04	1.43E-02	1.53E-01	4.70E-01	6.18E-01	7.23E-01	7.95E-01	8.40E-01	9.06E-01	9.98E-01	1.05E+00	1.14E+00	1.23E+00	1.31E+00	1.41E+00	1.53E+00
1.00	0.0	0.0	2.88E-05	4.17E-03	8.96E-02	3.59E-01	5.01E-01	6.04E-01	6.75E-01	7.19E-01	7.82E-01	8.72E-01	9.27E-01	1.02E+00	1.10E+00	1.18E+00	1.28E+00	1.40E+00
1.50	0.0	0.0	0.0	6.07E-04	4.02E-02	2.45E-01	3.72E-01	4.68E-01	5.36E-01	5.77E-01	6.37E-01	7.23E-01	7.75E-01	8.60E-01	9.47E-01	1.02E+00	1.12E+00	1.23E+00
2.00	0.0	0.0	0.0	9.62E-05	1.93E-02	1.75E-01	2.87E-01	3.76E-01	4.39E-01	4.78E-01	5.35E-01	6.17E-01	6.67E-01	7.49E-01	8.33E-01	9.06E-01	1.00E+00	1.11E+00
3.00	0.0	0.0	0.0	2.75E-06	4.92E-03	9.60E-02	1.82E-01	2.57E-01	3.12E-01	3.46E-01	3.97E-01	4.71E-01	5.17E-01	5.94E-01	6.73E-01	7.43E-01	8.33E-01	9.41E-01
5.00	0.0	0.0	0.0	0.0	3.94E-04	3.38E-02	8.41E-02	1.36E-01	1.77E-01	2.03E-01	2.43E-01	3.04E-01	3.44E-01	4.10E-01	4.80E-01	5.43E-01	6.27E-01	7.27E-01
7.00	0.0	0.0	0.0	0.0	3.59E-05	1.31E-02	4.24E-02	7.77E-02	1.08E-01	1.28E-01	1.60E-01	2.10E-01	2.44E-01	3.01E-01	3.64E-01	4.21E-01	4.98E-01	5.92E-01
10.00	0.0	0.0	0.0	0.0	1.11E-06	3.50E-03	1.66E-02	3.65E-02	5.57E-02	6.94E-02	9.18E-02	1.29E-01	1.55E-01	2.02E-01	2.54E-01	3.03E-01	3.71E-01	4.56E-01
15.00	0.0	0.0	0.0	0.0	0.0	4.44E-04	3.91E-03	1.16E-02	2.06E-02	2.77E-02	4.02E-02	6.31E-02	8.03E-02	1.13E-01	1.52E-01	1.91E-01	2.46E-01	3.18E-01
20.00	0.0	0.0	0.0	0.0	0.0	6.14E-05	9.99E-04	3.96E-03	8.17E-03	1.18E-02	1.88E-02	3.30E-02	4.43E-02	6.72E-02	9.66E-02	1.27E-01	1.72E-01	2.33E-01
30.00	0.0	0.0	0.0	0.0	0.0	1.35E-06	7.43E-05	5.25E-04	1.45E-03	2.43E-03	4.63E-03	9.97E-03	1.49E-02	2.62E-02	4.26E-02	6.10E-02	9.10E-02	1.35E-01
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.24E-07	1.16E-05	5.69E-05	1.27E-04	3.45E-04	1.12E-03	2.06E-03	4.82E-03	9.94E-03	1.68E-02	3.02E-02	5.32E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.95E-07	2.57E-06	7.66E-06	2.94E-05	1.43E-04	3.24E-04	1.00E-03	2.60E-03	5.20E-03	1.11E-02	2.32E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.28E-07	8.27E-07	7.33E-06	2.26E-05	1.06E-04	3.89E-04	9.92E-04	2.76E-03	7.31E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.92E-06	1.90E-05	7.24E-05	3.09E-04	1.22E-03
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.81E-06	3.80E-05	2.23E-04

HEIGHT = 5.0 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	7.92E-03	3.91E-02	1.38E-01	3.46E-01	6.48E-01	8.56E-01	9.14E-01	9.62E-01	1.01E+00	1.05E+00	1.12E+00	1.21E+00	1.27E+00	1.36E+00	1.46E+00	1.54E+00	1.64E+00	1.77E+00
0.10	4.62E-04	6.11E-03	4.35E-02	1.78E-01	4.68E-01	7.39E-01	8.23E-01	8.84E-01	9.39E-01	9.81E-01	1.05E+00	1.14E+00	1.20E+00	1.29E+00	1.38E+00	1.46E+00	1.56E+00	1.69E+00
0.15	1.20E-04	2.58E-03	2.59E-02	1.33E-01	4.07E-01	6.92E-01	7.84E-01	8.50E-01	9.07E-01	9.49E-01	1.01E+00	1.11E+00	1.16E+00	1.25E+00	1.35E+00	1.43E+00	1.53E+00	1.65E+00
0.20	3.21E-05	1.12E-03	1.58E-02	1.02E-01	3.57E-01	6.50E-01	7.49E-01	8.18E-01	8.77E-01	9.19E-01	9.83E-01	1.08E+00	1.13E+00	1.22E+00	1.32E+00	1.40E+00	1.50E+00	1.62E+00
0.30	2.43E-06	2.22E-04	6.13E-03	6.14E-02	2.81E-01	5.79E-01	6.87E-01	7.62E-01	8.23E-01	8.65E-01	9.28E-01	1.02E+00	1.08E+00	1.17E+00	1.26E+00	1.34E+00	1.44E+00	1.56E+00
0.50	0.0	9.87E-06	1.03E-03	2.44E-02	1.84E-01	4.71E-01	5.88E-01	6.70E-01	7.33E-01	7.75E-01	8.37E-01	9.28E-01	9.84E-01	1.07E+00	1.16E+00	1.24E+00	1.34E+00	1.46E+00
0.70	0.0	0.0	1.89E-04	1.04E-02	1.26E-01	3.92E-01	5.12E-01	5.97E-01	6.60E-01	7.01E-01	7.63E-01	8.52E-01	9.07E-01	9.94E-01	1.08E+00	1.16E+00	1.26E+00	1.38E+00
1.00	0.0	0.0	1.61E-05	3.08E-03	7.52E-02	3.07E-01	4.25E-01	5.11E-01	5.73E-01	6.14E-01	6.74E-01	7.60E-01	8.14E-01	8.99E-01	9.87E-01	1.06E+00	1.16E+00	1.28E+00
1.50	0.0	0.0	0.0	4.56E-04	3.44E-02	2.14E-01	3.23E-01	4.06E-01	4.66E-01	5.05E-01	5.62E-01	6.44E-01	6.95E-01	7.78E-01	8.63E-01	9.37E-01	1.03E+00	1.15E+00
2.00	0.0	0.0	0.0	7.30E-05	1.66E-02	1.54E-01	2.52E-01	3.31E-01	3.88E-01	4.24E-01	4.78E-01	5.57E-01	6.06E-01	6.86E-01	7.69E-01	8.40E-01	9.34E-01	1.05E+00
3.00	0.0	0.0	0.0	2.11E-06	4.29E-03	8.60E-02	1.63E-01	2.30E-01	2.81E-01	3.13E-01	3.61E-01	4.32E-01	4.78E-01	5.52E-01	6.30E-01	6.98E-01	7.88E-01	8.95E-01
5.00	0.0	0.0	0.0	0.0	3.46E-04	3.07E-02	7.65E-02	1.24E-01	1.62E-01	1.87E-01	2.25E-01	2.84E-01	3.22E-01	3.87E-01	4.56E-01	5.18E-01	6.00E-01	7.00E-01
7.00	0.0	0.0	0.0	0.0	3.17E-05	1.20E-02	3.89E-02	7.14E-02	9.97E-02	1.19E-01	1.49E-01	1.98E-01	2.30E-01	2.86E-01	3.48E-01	4.04E-01	4.80E-01	5.73E-01
10.00	0.0	0.0	0.0	0.0	9.88E-07	3.22E-03	1.53E-02	3.38E-02	5.18E-02	6.49E-02	8.63E-02	1.22E-01	1.48E-01	1.93E-01	2.45E-01	2.93E-01	3.60E-01	4.44E-01
15.00	0.0	0.0	0.0	0.0	0.0	4.10E-04	3.63E-03	1.08E-02	1.93E-02	2.60E-02	3.80E-02	6.02E-02	7.69E-02	1.09E-01	1.47E-01	1.85E-01	2.40E-01	3.11E-01
20.00	0.0	0.0	0.0	0.0	0.0	5.69E-05	9.31E-04	3.71E-03	7.68E-03	1.12E-02	1.79E-02	3.15E-02	4.26E-02	6.48E-02	9.37E-02	1.23E-01	1.68E-01	2.28E-01
30.00	0.0	0.0	0.0	0.0	0.0	1.25E-06	6.95E-05	4.93E-04	1.37E-03	2.30E-03	4.41E-03	9.57E-03	1.44E-02	2.54E-02	4.15E-02	5.95E-02	8.91E-02	1.33E-01
50.00	0.0	0.0	0.0	0.0	0.0	0.0	4.91E-07	1.09E-05	5.39E-05	1.21E-04	3.30E-04	1.08E-03	2.00E-03	4.68E-03	9.70E-03	1.65E-02	2.96E-02	5.24E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.79E-07	2.44E-06	7.29E-06	2.82E-05	1.38E-04	3.14E-04	9.74E-04	2.54E-03	5.10E-03	1.09E-02	2.28E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.22E-07	7.93E-07	7.08E-06	2.19E-05	1.03E-04	3.81E-04	9.74E-04	2.71E-03	7.22E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.85E-06	1.86E-05	7.11E-05	3.04E-04	1.21E-03
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.71E-06	3.74E-05	2.20E-04

HEIGHT = 10.0 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	2.55E-04	4.27E-03	3.56E-02	1.52E-01	3.82E-01	5.61E-01	6.14E-01	6.57E-01	7.04E-01	7.42E-01	8.02E-01	8.92E-01	9.47E-01	1.03E+00	1.13E+00	1.20E+00	1.31E+00	1.43E+00
0.10	1.81E-05	7.99E-04	1.31E-02	8.84E-02	2.99E-01	5.06E-01	5.71E-01	6.20E-01	6.69E-01	7.07E-01	7.66E-01	8.55E-01	9.10E-01	9.97E-01	1.09E+00	1.16E+00	1.27E+00	1.39E+00
0.15	4.98E-06	3.55E-04	8.17E-03	6.87E-02	2.66E-01	4.81E-01	5.51E-01	6.03E-01	6.52E-01	6.90E-01	7.50E-01	8.38E-01	8.93E-01	9.79E-01	1.07E+00	1.15E+00	1.25E+00	1.37E+00
0.20	1.39E-06	1.60E-04	5.14E-03	5.38E-02	2.39E-01	4.59E-01	5.32E-01	5.86E-01	6.37E-01	6.75E-01	7.34E-01	8.22E-01	8.76E-01	9.62E-01	1.05E+00	1.13E+00	1.23E+00	1.35E+00
0.30	0.0	3.35E-05	2.09E-03	3.38E-02	1.94E-01	4.18E-01	4.98E-01	5.56E-01	6.07E-01	6.45E-01	7.04E-01	7.91E-01	8.45E-01	9.31E-01	1.02E+00	1.10E+00	1.20E+00	1.32E+00
0.50	0.0	1.58E-06	3.73E-04	1.40E-02	1.32E-01	3.52E-01	4.39E-01	5.02E-01	5.55E-01	5.93E-01	6.50E-01	7.36E-01	7.89E-01	8.74E-01	9.61E-01	1.04E+00	1.14E+00	1.26E+00
0.70	0.0	0.0	7.04E-05	6.14E-03	9.29E-02	3.00E-01	3.91E-01	4.57E-01	5.10E-01	5.47E-01	6.04E-01	6.88E-01	7.40E-01	8.24E-01	9.10E-01	9.86E-01	1.08E+00	1.20E+00
1.00	0.0	0.0	0.0	1.88E-03	5.67E-02	2.41E-01	3.32E-01	4.00E-01	4.53E-01	4.89E-01	5.45E-01	6.26E-01	6.77E-01	7.59E-01	8.44E-01	9.18E-01	1.01E+00	1.13E+00
1.50	0.0	0.0	0.0	2.85E-04	2.65E-02	1.72E-01	2.59E-01	3.26E-01	3.78E-01	4.13E-01	4.65E-01	5.43E-01	5.92E-01	6.71E-01	7.53E-01	8.26E-01	9.19E-01	1.03E+00
2.00	0.0	0.0	0.0	4.61E-05	1.30E-02	1.26E-01	2.07E-01	2.71E-01	3.20E-01	3.53E-01	4.03E-01	4.77E-01	5.24E-01	6.00E-01	6.80E-01	7.51E-01	8.42E-01	9.53E-01
3.00	0.0	0.0	0.0	1.35E-06	3.42E-03	7.19E-02	1.37E-01	1.93E-01	2.37E-01	2.66E-01	3.11E-01	3.78E-01	4.21E-01	4.93E-01	5.68E-01	6.35E-01	7.22E-01	8.29E-01
5.00	0.0	0.0	0.0	0.0	2.80E-04	2.61E-02	6.55E-02	1.06E-01	1.40E-01	1.63E-01	1.98E-01	2.54E-01	2.90E-01	3.52E-01	4.19E-01	4.79E-01	5.60E-01	6.59E-01
7.00	0.0	0.0	0.0	0.0	2.59E-05	1.04E-02	3.37E-02	6.22E-02	8.75E-02	1.05E-01	1.33E-01	1.79E-01	2.10E-01	2.64E-01	3.23E-01	3.78E-01	4.52E-01	5.44E-01
10.00	0.0	0.0	0.0	0.0	8.10E-07	2.80E-03	1.34E-02	2.98E-02	4.60E-02	5.80E-02	7.80E-02	1.12E-01	1.36E-01	1.79E-01	2.29E-01	2.76E-01	3.42E-01	4.25E-01
15.00	0.0	0.0	0.0	0.0	0.0	3.59E-04	3.21E-03	9.60E-03	1.73E-02	2.35E-02	3.47E-02	5.56E-02	7.15E-02	1.02E-01	1.39E-01	1.76E-01	2.29E-01	3.00E-01
20.00	0.0	0.0	0.0	0.0	0.0	5.01E-05	8.27E-04	3.32E-03	6.93E-03	1.02E-02	1.64E-02	2.93E-02	3.98E-02	6.12E-02	8.90E-02	1.18E-01	1.61E-01	2.21E-01
30.00	0.0	0.0	0.0	0.0	0.0	1.11E-06	6.21E-05	4.44E-04	1.24E-03	2.11E-03	4.07E-03	8.95E-03	1.35E-02	2.41E-02	3.96E-02	5.71E-02	8.61E-02	1.29E-01
50.00	0.0	0.0	0.0	0.0	0.0	0.0	4.41E-07	9.88E-06	4.93E-05	1.11E-04	3.06E-04	1.01E-03	1.89E-03	4.46E-03	9.31E-03	1.59E-02	2.87E-02	5.11E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.53E-07	2.24E-06	6.73E-06	2.62E-05	1.30E-04	2.97E-04	9.30E-04	2.45E-03	4.93E-03	1.06E-02	2.23E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.13E-07	7.40E-07	6.68E-06	2.08E-05	9.88E-05	3.67E-04	9.43E-04	2.64E-03	7.07E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.73E-06	1.79E-05	6.90E-05	2.97E-04	1.18E-03
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.54E-06	3.65E-05	2.16E-04

HEIGHT = 50.0 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	1.76E-03	3.11E-02	8.83E-02	1.11E-01	1.31E-01	1.55E-01	1.76E-01	2.10E-01	2.67E-01	3.04E-01	3.66E-01	4.35E-01	4.98E-01	5.82E-01	6.89E-01
0.10	0.0	0.0	0.0	1.20E-03	2.68E-02	8.35E-02	1.07E-01	1.27E-01	1.51E-01	1.72E-01	2.06E-01	2.62E-01	2.99E-01	3.60E-01	4.29E-01	4.91E-01	5.75E-01	6.82E-01
0.15	0.0	0.0	0.0	9.89E-04	2.49E-02	8.12E-02	1.05E-01	1.26E-01	1.49E-01	1.69E-01	2.04E-01	2.59E-01	2.96E-01	3.58E-01	4.26E-01	4.88E-01	5.72E-01	6.78E-01
0.20	0.0	0.0	0.0	8.18E-04	2.32E-02	7.90E-02	1.03E-01	1.24E-01	1.47E-01	1.68E-01	2.02E-01	2.57E-01	2.94E-01	3.55E-01	4.23E-01	4.85E-01	5.68E-01	6.75E-01
0.30	0.0	0.0	0.0	5.62E-04	2.01E-02	7.49E-02	9.91E-02	1.20E-01	1.44E-01	1.64E-01	1.97E-01	2.52E-01	2.89E-01	3.50E-01	4.17E-01	4.79E-01	5.62E-01	6.68E-01
0.50	0.0	0.0	0.0	2.67E-04	1.51E-02	6.72E-02	9.21E-02	1.14E-01	1.37E-01	1.56E-01	1.89E-01	2.43E-01	2.79E-01	3.39E-01	4.06E-01	4.67E-01	5.49E-01	6.54E-01
0.70	0.0	0.0	0.0	1.28E-04	1.15E-02	6.05E-02	8.56E-02	1.07E-01	1.31E-01	1.50E-01	1.82E-01	2.35E-01	2.70E-01	3.29E-01	3.95E-01	4.55E-01	5.37E-01	6.41E-01
1.00	0.0	0.0	0.0	4.34E-05	7.62E-03	5.17E-02	7.69E-02	9.87E-02	1.21E-01	1.40E-01	1.71E-01	2.22E-01	2.57E-01	3.15E-01	3.79E-01	4.39E-01	5.19E-01	6.22E-01
1.50	0.0	0.0	0.0	7.34E-06	3.93E-03	4.01E-02	6.46E-02	8.61E-02	1.08E-01	1.25E-01	1.55E-01	2.04E-01	2.37E-01	2.93E-01	3.55E-01	4.14E-01	4.92E-01	5.93E-01
2.00	0.0	0.0	0.0	1.28E-06	2.06E-03	3.14E-02	5.45E-02	7.54E-02	9.61E-02	1.13E-01	1.41E-01	1.87E-01	2.19E-01	2.73E-01	3.34E-01	3.90E-01	4.67E-01	5.66E-01
3.00	0.0	0.0	0.0	0.0	5.89E-04	1.94E-02	3.91E-02	5.82E-02	7.68E-02	9.15E-02	1.17E-01	1.59E-01	1.88E-01	2.38E-01	2.96E-01	3.49E-01	4.23E-01	5.17E-01
5.00	0.0	0.0	0.0	0.0	5.29E-05	7.83E-03	2.08E-02	3.55E-02	5.01E-02	6.17E-02	8.18E-02	1.17E-01	1.41E-01	1.85E-01	2.36E-01	2.84E-01	3.52E-01	4.39E-01
7.00	0.0	0.0	0.0	0.0	5.12E-06	3.29E-03	1.14E-02	2.21E-02	3.34E-02	4.24E-02	5.84E-02	8.71E-02	1.08E-01	1.46E-01	1.91E-01	2.35E-01	2.97E-01	3.78E-01
10.00	0.0	0.0	0.0	0.0	1.67E-07	9.40E-04	4.82E-03	1.13E-02	1.87E-02	2.49E-02	3.62E-02	5.76E-02	7.39E-02	1.05E-01	1.43E-01	1.80E-01	2.35E-01	3.08E-01
15.00	0.0	0.0	0.0	0.0	0.0	1.27E-04	1.22E-03	3.87E-03	7.46E-03	1.07E-02	1.71E-02	3.03E-02	4.10E-02	6.27E-02	9.10E-02	1.20E-01	1.65E-01	2.26E-01
20.00	0.0	0.0	0.0	0.0	0.0	1.82E-05	3.26E-04	1.39E-03	3.11E-03	4.80E-03	8.39E-03	1.65E-02	2.36E-02	3.88E-02	6.00E-02	8.29E-02	1.19E-01	1.71E-01
30.00	0.0	0.0	0.0	0.0	0.0	4.15E-07	2.54E-05	1.94E-04	5.82E-04	1.04E-03	2.17E-03	5.25E-03	8.35E-03	1.59E-02	2.77E-02	4.17E-02	6.57E-02	1.03E-01
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.87E-07	4.49E-06	2.40E-05	5.73E-05	1.70E-04	6.18E-04	1.21E-03	3.05E-03	6.73E-03	1.20E-02	2.26E-02	4.20E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17E-07	1.11E-06	3.53E-06	1.48E-05	8.07E-05	1.94E-04	6.48E-04	1.80E-03	3.78E-03	8.51E-03	1.86E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.01E-08	4.25E-07	4.22E-06	1.38E-05	6.98E-05	2.74E-04	7.33E-04	2.14E-03	5.97E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.95E-06	1.36E-05	5.42E-05	2.43E-04	1.01E-03	
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.38E-06	3.01E-05	1.85E-04	

HEIGHT = 100.0 METER

Fluence per unit source intensity (photons/m^2 per photon/m^2)

Source depth (g/cm^2)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	2.87E-03	1.70E-02	2.49E-02	3.28E-02	4.31E-02	5.26E-02	7.01E-02	1.02E-01	1.25E-01	1.65E-01	2.14E-01	2.61E-01	3.27E-01	4.16E-01
0.10	0.0	0.0	0.0	0.0	2.52E-03	1.63E-02	2.41E-02	3.20E-02	4.22E-02	5.16E-02	6.89E-02	1.00E-01	1.23E-01	1.64E-01	2.12E-01	2.58E-01	3.25E-01	4.13E-01
0.15	0.0	0.0	0.0	0.0	2.37E-03	1.59E-02	2.37E-02	3.16E-02	4.18E-02	5.11E-02	6.83E-02	9.96E-02	1.22E-01	1.63E-01	2.11E-01	2.57E-01	3.23E-01	4.11E-01
0.20	0.0	0.0	0.0	0.0	2.22E-03	1.55E-02	2.34E-02	3.13E-02	4.13E-02	5.06E-02	6.78E-02	9.89E-02	1.21E-01	1.62E-01	2.10E-01	2.56E-01	3.22E-01	4.10E-01
0.30	0.0	0.0	0.0	0.0	1.95E-03	1.48E-02	2.27E-02	3.05E-02	4.05E-02	4.97E-02	6.66E-02	9.75E-02	1.20E-01	1.60E-01	2.07E-01	2.54E-01	3.19E-01	4.07E-01
0.50	0.0	0.0	0.0	0.0	1.52E-03	1.35E-02	2.13E-02	2.91E-02	3.89E-02	4.79E-02	6.45E-02	9.47E-02	1.17E-01	1.56E-01	2.03E-01	2.49E-01	3.14E-01	4.01E-01
0.70	0.0	0.0	0.0	0.0	1.18E-03	1.24E-02	2.00E-02	2.78E-02	3.74E-02	4.61E-02	6.24E-02	9.20E-02	1.13E-01	1.52E-01	1.99E-01	2.44E-01	3.09E-01	3.95E-01
1.00	0.0	0.0	0.0	0.0	8.11E-04	1.08E-02	1.83E-02	2.59E-02	3.52E-02	4.37E-02	5.93E-02	8.81E-02	1.09E-01	1.47E-01	1.93E-01	2.38E-01	3.01E-01	3.87E-01
1.50	0.0	0.0	0.0	0.0	4.38E-04	8.62E-03	1.57E-02	2.30E-02	3.19E-02	3.99E-02	5.47E-02	8.21E-02	1.02E-01	1.39E-01	1.83E-01	2.27E-01	2.89E-01	3.73E-01
2.00	0.0	0.0	0.0	0.0	2.38E-04	6.91E-03	1.35E-02	2.05E-02	2.89E-02	3.64E-02	5.04E-02	7.66E-02	9.59E-02	1.31E-01	1.74E-01	2.17E-01	2.78E-01	3.60E-01
3.00	0.0	0.0	0.0	0.0	7.18E-05	4.47E-03	1.01E-02	1.64E-02	2.38E-02	3.05E-02	4.30E-02	6.67E-02	8.45E-02	1.18E-01	1.58E-01	1.98E-01	2.57E-01	3.36E-01
5.00	0.0	0.0	0.0	0.0	6.90E-06	1.91E-03	5.67E-03	1.05E-02	1.63E-02	2.15E-02	3.15E-02	5.10E-02	6.61E-02	9.49E-02	1.31E-01	1.67E-01	2.21E-01	2.94E-01
7.00	0.0	0.0	0.0	0.0	0.0	8.38E-04	3.24E-03	6.80E-03	1.12E-02	1.53E-02	2.33E-02	3.94E-02	5.21E-02	7.71E-02	1.09E-01	1.42E-01	1.91E-01	2.60E-01
10.00	0.0	0.0	0.0	0.0	0.0	2.50E-04	1.43E-03	3.61E-03	6.55E-03	9.33E-03	1.50E-02	2.70E-02	3.70E-02	5.72E-02	8.41E-02	1.12E-01	1.56E-01	2.17E-01
15.00	0.0	0.0	0.0	0.0	0.0	3.52E-05	3.79E-04	1.30E-03	2.74E-03	4.21E-03	7.40E-03	1.48E-02	2.14E-02	3.56E-02	5.57E-02	7.78E-02	1.13E-01	1.65E-01
20.00	0.0	0.0	0.0	0.0	0.0	5.19E-06	1.04E-04	4.81E-04	1.18E-03	1.95E-03	3.74E-03	8.31E-03	1.27E-02	2.27E-02	3.76E-02	5.49E-02	8.35E-02	1.27E-01
30.00	0.0	0.0	0.0	0.0	0.0	0.0	8.44E-06	6.98E-05	2.29E-04	4.38E-04	1.01E-03	2.74E-03	4.64E-03	9.59E-03	1.79E-02	2.85E-02	4.75E-02	7.88E-02
50.00	0.0	0.0	0.0	0.0	0.0	0.0	6.44E-08	1.68E-06	9.88E-06	2.52E-05	8.21E-05	3.36E-04	6.98E-04	1.91E-03	4.52E-03	8.47E-03	1.69E-02	3.31E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.67E-07	1.58E-06	7.32E-06	4.47E-05	1.14E-04	4.14E-04	1.23E-03	2.72E-03	6.46E-03	1.49E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.13E-07	2.38E-06	8.27E-06	4.53E-05	1.91E-04	5.36E-04	1.65E-03	4.84E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.29E-06	9.56E-06	4.02E-05	1.90E-04	8.29E-04
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.27E-06	2.37E-05	1.55E-04

HEIGHT = 150.0 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	3.26E-04	3.96E-03	6.68E-03	9.77E-03	1.42E-02	1.86E-02	2.74E-02	4.53E-02	5.92E-02	8.61E-02	1.20E-01	1.56E-01	2.08E-01	2.81E-01
0.10	0.0	0.0	0.0	0.0	2.88E-04	3.79E-03	6.49E-03	9.56E-03	1.39E-02	1.83E-02	2.70E-02	4.47E-02	5.85E-02	8.52E-02	1.19E-01	1.54E-01	2.06E-01	2.80E-01
0.15	0.0	0.0	0.0	0.0	2.72E-04	3.71E-03	6.40E-03	9.45E-03	1.38E-02	1.81E-02	2.68E-02	4.44E-02	5.82E-02	8.47E-02	1.19E-01	1.54E-01	2.06E-01	2.79E-01
0.20	0.0	0.0	0.0	0.0	2.55E-04	3.63E-03	6.31E-03	9.35E-03	1.37E-02	1.80E-02	2.66E-02	4.41E-02	5.78E-02	8.43E-02	1.18E-01	1.53E-01	2.05E-01	2.78E-01
0.30	0.0	0.0	0.0	0.0	2.26E-04	3.48E-03	6.13E-03	9.15E-03	1.34E-02	1.77E-02	2.62E-02	4.35E-02	5.71E-02	8.34E-02	1.17E-01	1.52E-01	2.03E-01	2.76E-01
0.50	0.0	0.0	0.0	0.0	1.78E-04	3.20E-03	5.79E-03	8.76E-03	1.29E-02	1.71E-02	2.54E-02	4.24E-02	5.58E-02	8.17E-02	1.15E-01	1.49E-01	2.00E-01	2.73E-01
0.70	0.0	0.0	0.0	0.0	1.40E-04	2.94E-03	5.47E-03	8.39E-03	1.25E-02	1.65E-02	2.47E-02	4.14E-02	5.45E-02	8.01E-02	1.13E-01	1.47E-01	1.98E-01	2.69E-01
1.00	0.0	0.0	0.0	0.0	9.77E-05	2.59E-03	5.03E-03	7.86E-03	1.18E-02	1.57E-02	2.36E-02	3.98E-02	5.26E-02	7.77E-02	1.10E-01	1.43E-01	1.93E-01	2.64E-01
1.50	0.0	0.0	0.0	0.0	5.39E-05	2.10E-03	4.37E-03	7.06E-03	1.08E-02	1.44E-02	2.19E-02	3.73E-02	4.97E-02	7.38E-02	1.05E-01	1.38E-01	1.87E-01	2.56E-01
2.00	0.0	0.0	0.0	0.0	2.99E-05	1.70E-03	3.80E-03	6.35E-03	9.83E-03	1.33E-02	2.04E-02	3.51E-02	4.69E-02	7.02E-02	1.01E-01	1.32E-01	1.80E-01	2.49E-01
3.00	0.0	0.0	0.0	0.0	9.30E-06	1.12E-03	2.88E-03	5.13E-03	8.21E-03	1.13E-02	1.76E-02	3.09E-02	4.18E-02	6.35E-02	9.23E-02	1.23E-01	1.68E-01	2.34E-01
5.00	0.0	0.0	0.0	0.0	0.0	4.98E-04	1.67E-03	3.37E-03	5.75E-03	8.14E-03	1.32E-02	2.41E-02	3.34E-02	5.23E-02	7.78E-02	1.05E-01	1.47E-01	2.09E-01
7.00	0.0	0.0	0.0	0.0	0.0	2.23E-04	9.73E-04	2.23E-03	4.05E-03	5.91E-03	9.92E-03	1.90E-02	2.68E-02	4.32E-02	6.59E-02	9.06E-02	1.29E-01	1.87E-01
10.00	0.0	0.0	0.0	0.0	0.0	6.86E-05	4.40E-04	1.22E-03	2.42E-03	3.69E-03	6.53E-03	1.33E-02	1.94E-02	3.27E-02	5.17E-02	7.30E-02	1.07E-01	1.59E-01
15.00	0.0	0.0	0.0	0.0	0.0	9.98E-06	1.21E-04	4.51E-04	1.04E-03	1.71E-03	3.32E-03	7.49E-03	1.15E-02	2.09E-02	3.51E-02	5.17E-02	7.95E-02	1.23E-01
20.00	0.0	0.0	0.0	0.0	0.0	1.50E-06	3.39E-05	1.71E-04	4.57E-04	8.09E-04	1.71E-03	4.29E-03	6.94E-03	1.35E-02	2.41E-02	3.71E-02	5.98E-02	9.63E-02
30.00	0.0	0.0	0.0	0.0	0.0	0.0	2.83E-06	2.55E-05	9.18E-05	1.88E-04	4.74E-04	1.45E-03	2.62E-03	5.87E-03	1.18E-02	1.97E-02	3.48E-02	6.09E-02
50.00	0.0	0.0	0.0	0.0	0.0	0.0	2.23E-08	6.37E-07	4.09E-06	1.11E-05	3.99E-05	1.84E-04	4.06E-04	1.21E-03	3.06E-03	6.03E-03	1.27E-02	2.62E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.97E-07	7.14E-07	3.62E-06	2.49E-05	6.77E-05	2.66E-04	8.48E-04	1.97E-03	4.93E-03	1.20E-02
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.07E-07	1.35E-06	4.97E-06	2.95E-05	1.33E-04	3.93E-04	1.27E-03	3.94E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.49E-07	6.75E-06	2.98E-05	1.48E-04	6.82E-04
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.45E-06	1.86E-05	1.27E-04

HEIGHT = 200.0 METER

Fluence per unit source intensity (photons/m² per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	0.0	1.00E-03	1.95E-03	3.15E-03	5.05E-03	7.11E-03	1.16E-02	2.16E-02	3.02E-02	4.78E-02	7.20E-02	9.84E-02	1.40E-01	2.01E-01
0.10	0.0	0.0	0.0	0.0	0.0	9.61E-04	1.89E-03	3.09E-03	4.96E-03	6.99E-03	1.14E-02	2.14E-02	2.98E-02	4.73E-02	7.15E-02	9.77E-02	1.39E-01	1.99E-01
0.15	0.0	0.0	0.0	0.0	0.0	9.42E-04	1.87E-03	3.06E-03	4.92E-03	6.94E-03	1.13E-02	2.12E-02	2.96E-02	4.71E-02	7.12E-02	9.73E-02	1.38E-01	1.99E-01
0.20	0.0	0.0	0.0	0.0	0.0	9.22E-04	1.84E-03	3.02E-03	4.88E-03	6.88E-03	1.13E-02	2.11E-02	2.95E-02	4.69E-02	7.09E-02	9.70E-02	1.38E-01	1.98E-01
0.30	0.0	0.0	0.0	0.0	0.0	8.86E-04	1.79E-03	2.96E-03	4.79E-03	6.77E-03	1.11E-02	2.08E-02	2.92E-02	4.65E-02	7.03E-02	9.63E-02	1.37E-01	1.97E-01
0.50	0.0	0.0	0.0	0.0	0.0	8.16E-04	1.70E-03	2.84E-03	4.63E-03	6.56E-03	1.08E-02	2.04E-02	2.85E-02	4.56E-02	6.91E-02	9.48E-02	1.35E-01	1.95E-01
0.70	0.0	0.0	0.0	0.0	0.0	7.52E-04	1.61E-03	2.73E-03	4.47E-03	6.35E-03	1.05E-02	1.99E-02	2.79E-02	4.47E-02	6.80E-02	9.35E-02	1.33E-01	1.93E-01
1.00	0.0	0.0	0.0	0.0	0.0	6.66E-04	1.48E-03	2.56E-03	4.24E-03	6.06E-03	1.00E-02	1.92E-02	2.70E-02	4.35E-02	6.63E-02	9.14E-02	1.31E-01	1.90E-01
1.50	0.0	0.0	0.0	0.0	0.0	5.44E-04	1.30E-03	2.31E-03	3.89E-03	5.60E-03	9.37E-03	1.81E-02	2.56E-02	4.15E-02	6.37E-02	8.81E-02	1.27E-01	1.84E-01
2.00	0.0	0.0	0.0	0.0	0.0	4.44E-04	1.14E-03	2.09E-03	3.56E-03	5.17E-03	8.73E-03	1.70E-02	2.42E-02	3.96E-02	6.11E-02	8.50E-02	1.23E-01	1.79E-01
3.00	0.0	0.0	0.0	0.0	0.0	2.98E-04	8.69E-04	1.70E-03	3.00E-03	4.42E-03	7.60E-03	1.51E-02	2.18E-02	3.61E-02	5.64E-02	7.91E-02	1.15E-01	1.70E-01
5.00	0.0	0.0	0.0	0.0	0.0	1.35E-04	5.12E-04	1.14E-03	2.13E-03	3.23E-03	5.77E-03	1.20E-02	1.76E-02	3.00E-02	4.81E-02	6.86E-02	1.02E-01	1.53E-01
7.00	0.0	0.0	0.0	0.0	0.0	6.15E-05	3.04E-04	7.64E-04	1.52E-03	2.38E-03	4.40E-03	9.49E-03	1.43E-02	2.51E-02	4.11E-02	5.97E-02	9.03E-02	1.38E-01
10.00	0.0	0.0	0.0	0.0	0.0	1.93E-05	1.40E-04	4.23E-04	9.22E-04	1.51E-03	2.94E-03	6.75E-03	1.05E-02	1.92E-02	3.27E-02	4.87E-02	7.57E-02	1.19E-01
15.00	0.0	0.0	0.0	0.0	0.0	2.87E-06	3.92E-05	1.60E-04	4.06E-04	7.14E-04	1.52E-03	3.88E-03	6.34E-03	1.25E-02	2.26E-02	3.50E-02	5.70E-02	9.31E-02
20.00	0.0	0.0	0.0	0.0	0.0	4.40E-07	1.12E-05	6.17E-05	1.81E-04	3.43E-04	7.98E-04	2.25E-03	3.88E-03	8.21E-03	1.57E-02	2.55E-02	4.34E-02	7.59E-02
30.00	0.0	0.0	0.0	0.0	0.0	0.0	9.57E-07	9.44E-06	3.72E-05	8.13E-05	2.26E-04	7.81E-04	1.49E-03	3.64E-03	7.84E-03	1.38E-02	2.57E-02	4.75E-02
50.00	0.0	0.0	0.0	0.0	0.0	0.0	7.73E-09	2.42E-07	1.70E-06	4.96E-06	1.96E-05	1.01E-04	2.38E-04	7.66E-04	2.08E-03	4.31E-03	9.58E-03	2.09E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.23E-07	1.80E-06	1.39E-05	4.02E-05	1.71E-04	5.85E-04	1.43E-03	3.77E-03	9.64E-03
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.41E-08	7.63E-07	2.99E-06	1.93E-05	9.28E-05	2.88E-04	9.86E-04	3.21E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.61E-07	4.77E-06	2.21E-05	1.16E-04	5.61E-04
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.83E-06	1.47E-05	1.05E-04

HEIGHT = 300.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	0.0	7.29E-05	1.88E-04	3.72E-04	7.23E-04	1.17E-03	2.31E-03	5.50E-03	8.70E-03	1.63E-02	2.85E-02	4.33E-02	6.88E-02	1.11E-01
0.10	0.0	0.0	0.0	0.0	0.0	7.01E-05	1.83E-04	3.65E-04	7.11E-04	1.15E-03	2.28E-03	5.44E-03	8.62E-03	1.62E-02	2.83E-02	4.30E-02	6.84E-02	1.10E-01
0.15	0.0	0.0	0.0	0.0	0.0	6.87E-05	1.81E-04	3.61E-04	7.05E-04	1.14E-03	2.27E-03	5.41E-03	8.57E-03	1.61E-02	2.82E-02	4.29E-02	6.82E-02	1.10E-01
0.20	0.0	0.0	0.0	0.0	0.0	6.74E-05	1.79E-04	3.58E-04	7.00E-04	1.13E-03	2.25E-03	5.38E-03	8.53E-03	1.61E-02	2.81E-02	4.27E-02	6.80E-02	1.09E-01
0.30	0.0	0.0	0.0	0.0	0.0	6.48E-05	1.74E-04	3.51E-04	6.88E-04	1.12E-03	2.22E-03	5.32E-03	8.44E-03	1.59E-02	2.79E-02	4.24E-02	6.76E-02	1.09E-01
0.50	0.0	0.0	0.0	0.0	0.0	6.00E-05	1.65E-04	3.37E-04	6.66E-04	1.09E-03	2.16E-03	5.20E-03	8.28E-03	1.57E-02	2.74E-02	4.19E-02	6.68E-02	1.08E-01
0.70	0.0	0.0	0.0	0.0	0.0	5.55E-05	1.57E-04	3.24E-04	6.44E-04	1.05E-03	2.11E-03	5.09E-03	8.11E-03	1.54E-02	2.70E-02	4.13E-02	6.61E-02	1.07E-01
1.00	0.0	0.0	0.0	0.0	0.0	4.94E-05	1.45E-04	3.06E-04	6.13E-04	1.01E-03	2.03E-03	4.92E-03	7.87E-03	1.50E-02	2.65E-02	4.05E-02	6.50E-02	1.05E-01
1.50	0.0	0.0	0.0	0.0	0.0	4.07E-05	1.28E-04	2.78E-04	5.65E-04	9.34E-04	1.90E-03	4.66E-03	7.49E-03	1.44E-02	2.55E-02	3.92E-02	6.31E-02	1.03E-01
2.00	0.0	0.0	0.0	0.0	0.0	3.35E-05	1.12E-04	2.52E-04	5.21E-04	8.67E-04	1.78E-03	4.41E-03	7.12E-03	1.38E-02	2.46E-02	3.80E-02	6.14E-02	1.00E-01
3.00	0.0	0.0	0.0	0.0	0.0	2.28E-05	8.71E-05	2.08E-04	4.42E-04	7.47E-04	1.56E-03	3.95E-03	6.45E-03	1.26E-02	2.28E-02	3.56E-02	5.80E-02	9.57E-02
5.00	0.0	0.0	0.0	0.0	0.0	1.06E-05	5.24E-05	1.41E-04	3.20E-04	5.56E-04	1.20E-03	3.17E-03	5.29E-03	1.07E-02	1.97E-02	3.13E-02	5.20E-02	8.71E-02
7.00	0.0	0.0	0.0	0.0	0.0	4.95E-06	3.17E-05	9.63E-05	2.32E-04	4.15E-04	9.30E-04	2.55E-03	4.35E-03	9.02E-03	1.71E-02	2.75E-02	4.66E-02	7.94E-02
10.00	0.0	0.0	0.0	0.0	0.0	1.59E-06	1.49E-05	5.44E-05	1.43E-04	2.68E-04	6.34E-04	1.85E-03	3.25E-03	7.04E-03	1.38E-02	2.28E-02	3.96E-02	6.93E-02
15.00	0.0	0.0	0.0	0.0	0.0	0.0	4.32E-06	2.12E-05	6.48E-05	1.31E-04	3.37E-04	1.09E-03	2.01E-03	4.68E-03	9.74E-03	1.68E-02	3.05E-02	5.55E-02
20.00	0.0	0.0	0.0	0.0	0.0	0.0	1.27E-06	8.36E-06	2.96E-05	6.40E-05	1.80E-04	6.45E-04	1.26E-03	3.13E-03	6.91E-03	1.24E-02	2.36E-02	4.47E-02
30.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.33E-06	6.28E-06	1.57E-05	5.27E-05	2.31E-04	4.99E-04	1.43E-03	3.54E-03	6.90E-03	1.43E-02	2.95E-02
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.00E-07	9.99E-07	4.76E-06	3.11E-05	8.26E-05	3.13E-04	9.76E-04	2.24E-03	5.53E-03	1.34E-02
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.67E-08	4.50E-07	4.40E-06	1.43E-05	7.15E-05	2.81E-04	7.56E-04	2.22E-03	6.30E-03
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.47E-07	1.09E-06	8.24E-06	4.55E-05	1.56E-04	5.93E-04	2.13E-03
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.46E-07	2.39E-06	1.22E-05	7.13E-05	3.81E-04
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02E-06	9.11E-06	7.21E-05

Table 4. Air kerma of primary photons at heights of 0.1 - 300 m per unit source intensity for monoenergetic plane sources at different depths in the ground for Soil 1.

HEIGHT = 0.1 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	8.60E-16	7.12E-16	5.42E-16	3.55E-16	1.81E-16	8.83E-17	8.35E-17	1.06E-16	1.74E-16	2.53E-16	4.20E-16	7.50E-16	9.93E-16	1.47E-15	2.03E-15	2.61E-15	3.54E-15	5.19E-15
0.10	1.05E-17	2.83E-17	5.33E-17	7.04E-17	6.28E-17	4.42E-17	4.67E-17	6.29E-17	1.07E-16	1.58E-16	2.65E-16	4.83E-16	6.46E-16	9.73E-16	1.36E-15	1.77E-15	2.43E-15	3.60E-15
0.15	2.37E-18	1.05E-17	2.85E-17	4.82E-17	5.04E-17	3.83E-17	4.13E-17	5.62E-17	9.63E-17	1.42E-16	2.40E-16	4.40E-16	5.89E-16	8.91E-16	1.25E-15	1.63E-15	2.25E-15	3.35E-15
0.20	5.79E-19	4.21E-18	1.62E-17	3.47E-17	4.20E-17	3.42E-17	3.74E-17	5.14E-17	8.85E-17	1.31E-16	2.22E-16	4.08E-16	5.48E-16	8.32E-16	1.17E-15	1.53E-15	2.11E-15	3.16E-15
0.30	3.93E-20	7.56E-19	5.78E-18	1.94E-17	3.09E-17	2.84E-17	3.19E-17	4.46E-17	7.74E-17	1.15E-16	1.96E-16	3.63E-16	4.90E-16	7.47E-16	1.06E-15	1.38E-15	1.92E-15	2.89E-15
0.50	0.0	3.05E-20	8.94E-19	7.17E-18	1.89E-17	2.14E-17	2.52E-17	3.60E-17	6.34E-17	9.50E-17	1.64E-16	3.06E-16	4.15E-16	6.39E-16	9.13E-16	1.20E-15	1.68E-15	2.55E-15
0.70	0.0	0.0	1.57E-19	2.93E-18	1.25E-17	1.70E-17	2.09E-17	3.06E-17	5.44E-17	8.20E-17	1.42E-16	2.69E-16	3.67E-16	5.69E-16	8.18E-16	1.08E-15	1.53E-15	2.32E-15
1.00	0.0	0.0	1.29E-20	8.46E-19	7.20E-18	1.28E-17	1.66E-17	2.49E-17	4.51E-17	6.85E-17	1.20E-16	2.30E-16	3.16E-16	4.94E-16	7.17E-16	9.55E-16	1.36E-15	2.08E-15
1.50	0.0	0.0	0.0	1.22E-19	3.20E-18	8.59E-18	1.21E-17	1.90E-17	3.51E-17	5.39E-17	9.59E-17	1.87E-16	2.59E-16	4.12E-16	6.05E-16	8.13E-16	1.17E-15	1.81E-15
2.00	0.0	0.0	0.0	1.92E-20	1.52E-18	6.07E-18	9.22E-18	1.50E-17	2.84E-17	4.41E-17	7.96E-17	1.58E-16	2.21E-16	3.55E-16	5.27E-16	7.14E-16	1.03E-15	1.62E-15
3.00	0.0	0.0	0.0	5.46E-22	3.86E-19	3.30E-18	5.79E-18	1.01E-17	1.99E-17	3.15E-17	5.83E-17	1.19E-16	1.69E-16	2.78E-16	4.21E-16	5.79E-16	8.53E-16	1.36E-15
5.00	0.0	0.0	0.0	0.0	3.06E-20	1.15E-18	2.64E-18	5.29E-18	1.11E-17	1.83E-17	3.53E-17	7.59E-17	1.11E-16	1.90E-16	2.97E-16	4.20E-16	6.36E-16	1.04E-15
7.00	0.0	0.0	0.0	0.0	2.79E-21	4.45E-19	1.33E-18	3.01E-18	6.76E-18	1.15E-17	2.31E-17	5.22E-17	7.83E-17	1.39E-16	2.24E-16	3.24E-16	5.03E-16	8.44E-16
10.00	0.0	0.0	0.0	0.0	8.62E-23	1.18E-19	5.15E-19	1.41E-18	3.47E-18	6.17E-18	1.32E-17	3.19E-17	4.97E-17	9.26E-17	1.56E-16	2.32E-16	3.74E-16	6.49E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.49E-20	1.21E-19	4.44E-19	1.27E-18	2.45E-18	5.74E-18	1.55E-17	2.56E-17	5.17E-17	9.31E-17	1.45E-16	2.47E-16	4.51E-16
20.00	0.0	0.0	0.0	0.0	0.0	2.06E-21	3.09E-20	1.52E-19	5.05E-19	1.05E-18	2.69E-18	8.09E-18	1.41E-17	3.07E-17	5.89E-17	9.64E-17	1.72E-16	3.30E-16
30.00	0.0	0.0	0.0	0.0	0.0	4.53E-23	2.29E-21	2.00E-20	8.94E-20	2.14E-19	6.58E-19	2.44E-18	4.73E-18	1.19E-17	2.59E-17	4.64E-17	9.10E-17	1.91E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.61E-23	4.42E-22	3.51E-21	1.12E-20	4.89E-20	2.73E-19	6.53E-19	2.19E-18	6.04E-18	1.28E-17	3.01E-17	7.50E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12E-23	1.58E-22	6.72E-22	4.17E-21	3.49E-20	1.02E-19	4.54E-19	1.58E-18	3.94E-18	1.11E-17	3.26E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12E-23	1.17E-22	1.79E-21	7.15E-21	4.80E-20	2.36E-19	7.52E-19	2.74E-18	1.03E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32E-21	1.15E-20	5.48E-20	3.08E-19	1.72E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.40E-21	3.78E-20	3.13E-19

HEIGHT = 0.5 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	3.47E-16	3.42E-16	3.03E-16	2.23E-16	1.24E-16	6.27E-17	5.98E-17	7.61E-17	1.27E-16	1.85E-16	3.09E-16	5.59E-16	7.44E-16	1.11E-15	1.55E-15	2.00E-15	2.75E-15	4.07E-15
0.10	7.80E-18	2.32E-17	4.70E-17	6.48E-17	5.87E-17	4.08E-17	4.26E-17	5.70E-17	9.71E-17	1.43E-16	2.42E-16	4.42E-16	5.92E-16	8.95E-16	1.26E-15	1.63E-15	2.26E-15	3.37E-15
0.15	1.79E-18	8.77E-18	2.55E-17	4.49E-17	4.77E-17	3.60E-17	3.84E-17	5.20E-17	8.91E-17	1.32E-16	2.23E-16	4.10E-16	5.50E-16	8.35E-16	1.18E-15	1.53E-15	2.12E-15	3.17E-15
0.20	4.43E-19	3.54E-18	1.46E-17	3.25E-17	4.00E-17	3.24E-17	3.52E-17	4.81E-17	8.28E-17	1.23E-16	2.09E-16	3.85E-16	5.18E-16	7.88E-16	1.11E-15	1.45E-15	2.02E-15	3.02E-15
0.30	3.04E-20	6.44E-19	5.26E-18	1.84E-17	2.98E-17	2.72E-17	3.04E-17	4.23E-17	7.35E-17	1.09E-16	1.87E-16	3.47E-16	4.68E-16	7.16E-16	1.02E-15	1.33E-15	1.86E-15	2.80E-15
0.50	0.0	2.63E-20	8.22E-19	6.84E-18	1.83E-17	2.07E-17	2.43E-17	3.47E-17	6.11E-17	9.15E-17	1.58E-16	2.96E-16	4.02E-16	6.20E-16	8.87E-16	1.17E-15	1.64E-15	2.49E-15
0.70	0.0	0.0	1.45E-19	2.81E-18	1.21E-17	1.66E-17	2.03E-17	2.96E-17	5.27E-17	7.95E-17	1.38E-16	2.62E-16	3.57E-16	5.55E-16	7.99E-16	1.06E-15	1.49E-15	2.28E-15
1.00	0.0	0.0	1.20E-20	8.13E-19	7.03E-18	1.25E-17	1.62E-17	2.43E-17	4.40E-17	6.68E-17	1.17E-16	2.25E-16	3.09E-16	4.85E-16	7.04E-16	9.39E-16	1.33E-15	2.05E-15
1.50	0.0	0.0	0.0	1.17E-19	3.13E-18	8.42E-18	1.18E-17	1.86E-17	3.44E-17	5.28E-17	9.41E-17	1.84E-16	2.55E-16	4.06E-16	5.96E-16	8.02E-16	1.15E-15	1.79E-15
2.00	0.0	0.0	0.0	1.85E-20	1.49E-18	5.97E-18	9.06E-18	1.48E-17	2.79E-17	4.34E-17	7.83E-17	1.55E-16	2.17E-16	3.50E-16	5.21E-16	7.07E-16	1.03E-15	1.61E-15
3.00	0.0	0.0	0.0	5.27E-22	3.79E-19	3.25E-18	5.70E-18	9.99E-18	1.96E-17	3.11E-17	5.75E-17	1.18E-16	1.67E-16	2.75E-16	4.17E-16	5.74E-16	8.46E-16	1.35E-15
5.00	0.0	0.0	0.0	0.0	3.01E-20	1.13E-18	2.61E-18	5.22E-18	1.10E-17	1.80E-17	3.49E-17	7.52E-17	1.10E-16	1.88E-16	2.95E-16	4.17E-16	6.32E-16	1.04E-15
7.00	0.0	0.0	0.0	0.0	2.74E-21	4.40E-19	1.31E-18	2.98E-18	6.69E-18	1.14E-17	2.29E-17	5.17E-17	7.77E-17	1.38E-16	2.23E-16	3.22E-16	5.00E-16	8.40E-16
10.00	0.0	0.0	0.0	0.0	8.49E-23	1.17E-19	5.10E-19	1.39E-18	3.44E-18	6.12E-18	1.31E-17	3.17E-17	4.93E-17	9.20E-17	1.55E-16	2.31E-16	3.72E-16	6.47E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.48E-20	1.20E-19	4.40E-19	1.26E-18	2.43E-18	5.70E-18	1.54E-17	2.54E-17	5.14E-17	9.27E-17	1.45E-16	2.46E-16	4.50E-16
20.00	0.0	0.0	0.0	0.0	0.0	2.04E-21	3.06E-20	1.50E-19	5.01E-19	1.04E-18	2.67E-18	8.04E-18	1.40E-17	3.05E-17	5.87E-17	9.61E-17	1.72E-16	3.29E-16
30.00	0.0	0.0	0.0	0.0	0.0	4.49E-23	2.27E-21	1.99E-20	8.87E-20	2.13E-19	6.54E-19	2.43E-18	4.71E-18	1.19E-17	2.58E-17	4.62E-17	9.07E-17	1.91E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.60E-23	4.38E-22	3.48E-21	1.11E-20	4.87E-20	2.72E-19	6.51E-19	2.18E-18	6.02E-18	1.27E-17	3.00E-17	7.49E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.12E-23	1.57E-22	6.68E-22	4.14E-21	3.47E-20	1.02E-19	4.53E-19	1.57E-18	3.93E-18	1.11E-17	3.26E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.11E-23	1.16E-22	1.78E-21	7.12E-21	4.79E-20	2.35E-19	7.50E-19	2.74E-18	1.03E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32E-21	1.15E-20	5.47E-20	3.07E-19	1.72E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.39E-21	3.77E-20	3.13E-19

HEIGHT = 1.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.77E-16	2.06E-16	2.08E-16	1.68E-16	9.93E-17	5.17E-17	4.97E-17	6.36E-17	1.06E-16	1.56E-16	2.62E-16	4.77E-16	6.37E-16	9.60E-16	1.35E-15	1.75E-15	2.40E-15	3.59E-15
0.10	5.40E-18	1.82E-17	4.03E-17	5.87E-17	5.44E-17	3.75E-17	3.88E-17	5.17E-17	8.81E-17	1.30E-16	2.20E-16	4.05E-16	5.44E-16	8.25E-16	1.16E-15	1.52E-15	2.10E-15	3.15E-15
0.15	1.27E-18	7.02E-18	2.22E-17	4.12E-17	4.48E-17	3.35E-17	3.55E-17	4.79E-17	8.20E-17	1.21E-16	2.06E-16	3.80E-16	5.12E-16	7.80E-16	1.10E-15	1.44E-15	2.00E-15	3.00E-15
0.20	3.17E-19	2.87E-18	1.29E-17	3.01E-17	3.79E-17	3.05E-17	3.29E-17	4.48E-17	7.71E-17	1.14E-16	1.95E-16	3.61E-16	4.87E-16	7.42E-16	1.05E-15	1.38E-15	1.92E-15	2.88E-15
0.30	2.21E-20	5.28E-19	4.68E-18	1.72E-17	2.84E-17	2.59E-17	2.88E-17	3.99E-17	6.93E-17	1.03E-16	1.77E-16	3.29E-16	4.45E-16	6.83E-16	9.72E-16	1.28E-15	1.78E-15	2.69E-15
0.50	0.0	2.18E-20	7.39E-19	6.45E-18	1.76E-17	1.99E-17	2.33E-17	3.31E-17	5.84E-17	8.76E-17	1.51E-16	2.84E-16	3.87E-16	5.99E-16	8.58E-16	1.13E-15	1.59E-15	2.42E-15
0.70	0.0	0.0	1.31E-19	2.66E-18	1.17E-17	1.60E-17	1.96E-17	2.85E-17	5.08E-17	7.66E-17	1.33E-16	2.53E-16	3.46E-16	5.39E-16	7.78E-16	1.03E-15	1.46E-15	2.23E-15
1.00	0.0	0.0	1.08E-20	7.72E-19	6.82E-18	1.22E-17	1.57E-17	2.36E-17	4.26E-17	6.48E-17	1.14E-16	2.19E-16	3.01E-16	4.74E-16	6.89E-16	9.20E-16	1.31E-15	2.02E-15
1.50	0.0	0.0	0.0	1.12E-19	3.05E-18	8.22E-18	1.15E-17	1.81E-17	3.35E-17	5.16E-17	9.19E-17	1.80E-16	2.50E-16	3.98E-16	5.86E-16	7.90E-16	1.14E-15	1.77E-15
2.00	0.0	0.0	0.0	1.76E-20	1.45E-18	5.84E-18	8.86E-18	1.44E-17	2.73E-17	4.25E-17	7.67E-17	1.52E-16	2.14E-16	3.45E-16	5.13E-16	6.97E-16	1.01E-15	1.59E-15
3.00	0.0	0.0	0.0	5.04E-22	3.70E-19	3.19E-18	5.59E-18	9.80E-18	1.93E-17	3.06E-17	5.65E-17	1.16E-16	1.65E-16	2.72E-16	4.12E-16	5.68E-16	8.38E-16	1.34E-15
5.00	0.0	0.0	0.0	0.0	2.95E-20	1.12E-18	2.57E-18	5.14E-18	1.08E-17	1.78E-17	3.44E-17	7.43E-17	1.09E-16	1.87E-16	2.93E-16	4.13E-16	6.27E-16	1.03E-15
7.00	0.0	0.0	0.0	0.0	2.68E-21	4.33E-19	1.29E-18	2.93E-18	6.60E-18	1.12E-17	2.26E-17	5.12E-17	7.69E-17	1.37E-16	2.21E-16	3.19E-16	4.97E-16	8.36E-16
10.00	0.0	0.0	0.0	0.0	8.32E-23	1.15E-19	5.03E-19	1.37E-18	3.39E-18	6.05E-18	1.29E-17	3.14E-17	4.89E-17	9.14E-17	1.54E-16	2.30E-16	3.70E-16	6.44E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.46E-20	1.18E-19	4.35E-19	1.25E-18	2.40E-18	5.65E-18	1.53E-17	2.53E-17	5.11E-17	9.22E-17	1.44E-16	2.45E-16	4.48E-16
20.00	0.0	0.0	0.0	0.0	0.0	2.02E-21	3.03E-20	1.49E-19	4.96E-19	1.03E-18	2.65E-18	7.98E-18	1.39E-17	3.03E-17	5.84E-17	9.56E-17	1.71E-16	3.28E-16
30.00	0.0	0.0	0.0	0.0	0.0	4.43E-23	2.25E-21	1.97E-20	8.79E-20	2.11E-19	6.49E-19	2.41E-18	4.68E-18	1.18E-17	2.57E-17	4.60E-17	9.04E-17	1.90E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.58E-23	4.34E-22	3.45E-21	1.10E-20	4.83E-20	2.70E-19	6.47E-19	2.17E-18	5.99E-18	1.27E-17	2.99E-17	7.47E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.10E-23	1.56E-22	6.62E-22	4.11E-21	3.45E-20	1.02E-19	4.51E-19	1.57E-18	3.92E-18	1.10E-17	3.25E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.10E-23	1.16E-22	1.77E-21	7.08E-21	4.77E-20	2.34E-19	7.48E-19	2.73E-18	1.03E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.31E-21	1.14E-20	5.45E-20	3.06E-19	1.71E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.37E-21	3.76E-20	3.12E-19

HEIGHT = 1.5 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.03E-16	1.39E-16	1.57E-16	1.38E-16	8.54E-17	4.54E-17	4.38E-17	5.63E-17	9.45E-17	1.39E-16	2.34E-16	4.29E-16	5.75E-16	8.70E-16	1.22E-15	1.60E-15	2.21E-15	3.30E-15
0.10	3.76E-18	1.43E-17	3.48E-17	5.34E-17	5.06E-17	3.48E-17	3.58E-17	4.77E-17	8.12E-17	1.20E-16	2.04E-16	3.77E-16	5.07E-16	7.72E-16	1.09E-15	1.43E-15	1.98E-15	2.99E-15
0.15	9.00E-19	5.63E-18	1.94E-17	3.80E-17	4.21E-17	3.14E-17	3.31E-17	4.46E-17	7.64E-17	1.13E-16	1.93E-16	3.57E-16	4.82E-16	7.36E-16	1.04E-15	1.37E-15	1.90E-15	2.87E-15
0.20	2.28E-19	2.33E-18	1.13E-17	2.79E-17	3.59E-17	2.88E-17	3.09E-17	4.20E-17	7.23E-17	1.07E-16	1.84E-16	3.41E-16	4.61E-16	7.05E-16	1.00E-15	1.32E-15	1.83E-15	2.77E-15
0.30	1.61E-20	4.33E-19	4.17E-18	1.61E-17	2.71E-17	2.46E-17	2.73E-17	3.78E-17	6.57E-17	9.80E-17	1.68E-16	3.14E-16	4.26E-16	6.54E-16	9.33E-16	1.23E-15	1.72E-15	2.60E-15
0.50	0.0	1.81E-20	6.65E-19	6.08E-18	1.70E-17	1.91E-17	2.23E-17	3.18E-17	5.60E-17	8.40E-17	1.45E-16	2.74E-16	3.74E-16	5.79E-16	8.32E-16	1.10E-15	1.55E-15	2.36E-15
0.70	0.0	0.0	1.18E-19	2.52E-18	1.14E-17	1.55E-17	1.89E-17	2.75E-17	4.90E-17	7.40E-17	1.29E-16	2.45E-16	3.36E-16	5.24E-16	7.58E-16	1.01E-15	1.42E-15	2.18E-15
1.00	0.0	0.0	9.84E-21	7.34E-19	6.62E-18	1.18E-17	1.52E-17	2.28E-17	4.14E-17	6.30E-17	1.11E-16	2.13E-16	2.94E-16	4.63E-16	6.74E-16	9.02E-16	1.29E-15	1.98E-15
1.50	0.0	0.0	0.0	1.07E-19	2.97E-18	8.03E-18	1.13E-17	1.76E-17	3.27E-17	5.03E-17	8.98E-17	1.76E-16	2.45E-16	3.91E-16	5.76E-16	7.77E-16	1.12E-15	1.74E-15
2.00	0.0	0.0	0.0	1.69E-20	1.42E-18	5.72E-18	8.66E-18	1.41E-17	2.67E-17	4.16E-17	7.52E-17	1.50E-16	2.10E-16	3.39E-16	5.06E-16	6.88E-16	9.99E-16	1.57E-15
3.00	0.0	0.0	0.0	4.82E-22	3.62E-19	3.13E-18	5.49E-18	9.62E-18	1.89E-17	3.00E-17	5.56E-17	1.14E-16	1.63E-16	2.68E-16	4.07E-16	5.62E-16	8.30E-16	1.33E-15
5.00	0.0	0.0	0.0	0.0	2.89E-20	1.10E-18	2.53E-18	5.06E-18	1.07E-17	1.75E-17	3.40E-17	7.34E-17	1.08E-16	1.85E-16	2.90E-16	4.10E-16	6.23E-16	1.02E-15
7.00	0.0	0.0	0.0	0.0	2.63E-21	4.27E-19	1.27E-18	2.89E-18	6.51E-18	1.11E-17	2.23E-17	5.07E-17	7.62E-17	1.36E-16	2.19E-16	3.17E-16	4.94E-16	8.31E-16
10.00	0.0	0.0	0.0	0.0	8.16E-23	1.14E-19	4.97E-19	1.36E-18	3.35E-18	5.98E-18	1.28E-17	3.11E-17	4.85E-17	9.07E-17	1.53E-16	2.29E-16	3.68E-16	6.41E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.44E-20	1.17E-19	4.30E-19	1.24E-18	2.38E-18	5.60E-18	1.52E-17	2.51E-17	5.07E-17	9.16E-17	1.43E-16	2.44E-16	4.46E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.99E-21	2.99E-20	1.47E-19	4.91E-19	1.02E-18	2.62E-18	7.92E-18	1.38E-17	3.02E-17	5.81E-17	9.52E-17	1.70E-16	3.27E-16
30.00	0.0	0.0	0.0	0.0	0.0	4.38E-23	2.22E-21	1.95E-20	8.70E-20	2.09E-19	6.43E-19	2.40E-18	4.65E-18	1.18E-17	2.56E-17	4.58E-17	9.01E-17	1.89E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.57E-23	4.30E-22	3.42E-21	1.09E-20	4.79E-20	2.69E-19	6.43E-19	2.16E-18	5.97E-18	1.27E-17	2.98E-17	7.45E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09E-23	1.54E-22	6.57E-22	4.08E-21	3.43E-20	1.01E-19	4.49E-19	1.56E-18	3.91E-18	1.10E-17	3.24E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.10E-23	1.15E-22	1.76E-21	7.04E-21	4.75E-20	2.34E-19	7.45E-19	2.73E-18	1.02E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.31E-21	1.14E-20	5.44E-20	3.05E-19	1.71E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.36E-21	3.75E-20	3.12E-19

HEIGHT = 2.0 METER

Source depth (g/cm²)	Air kerma per unit source intensity (Gy per photon/m²)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	6.40E-17	9.92E-17	1.24E-16	1.17E-16	7.57E-17	4.10E-17	3.97E-17	5.12E-17	8.62E-17	1.27E-16	2.15E-16	3.95E-16	5.32E-16	8.07E-16	1.14E-15	1.49E-15	2.07E-15	3.11E-15
0.10	2.64E-18	1.14E-17	3.01E-17	4.88E-17	4.73E-17	3.25E-17	3.34E-17	4.44E-17	7.58E-17	1.12E-16	1.91E-16	3.54E-16	4.78E-16	7.30E-16	1.03E-15	1.36E-15	1.89E-15	2.85E-15
0.15	6.41E-19	4.53E-18	1.70E-17	3.50E-17	3.98E-17	2.96E-17	3.11E-17	4.19E-17	7.18E-17	1.07E-16	1.82E-16	3.38E-16	4.57E-16	7.00E-16	9.95E-16	1.31E-15	1.82E-15	2.76E-15
0.20	1.64E-19	1.89E-18	1.00E-17	2.59E-17	3.41E-17	2.73E-17	2.92E-17	3.96E-17	6.83E-17	1.02E-16	1.74E-16	3.24E-16	4.39E-16	6.74E-16	9.59E-16	1.26E-15	1.76E-15	2.67E-15
0.30	1.17E-20	3.55E-19	3.72E-18	1.51E-17	2.59E-17	2.36E-17	2.60E-17	3.59E-17	6.25E-17	9.33E-17	1.60E-16	3.01E-16	4.08E-16	6.29E-16	8.99E-16	1.19E-15	1.66E-15	2.53E-15
0.50	0.0	1.50E-20	5.99E-19	5.74E-18	1.64E-17	1.85E-17	2.15E-17	3.05E-17	5.37E-17	8.08E-17	1.40E-16	2.65E-16	3.61E-16	5.61E-16	8.08E-16	1.07E-15	1.51E-15	2.31E-15
0.70	0.0	0.0	1.07E-19	2.39E-18	1.10E-17	1.50E-17	1.83E-17	2.65E-17	4.73E-17	7.15E-17	1.25E-16	2.38E-16	3.27E-16	5.10E-16	7.39E-16	9.83E-16	1.39E-15	2.14E-15
1.00	0.0	0.0	8.93E-21	6.98E-19	6.43E-18	1.15E-17	1.48E-17	2.22E-17	4.02E-17	6.12E-17	1.08E-16	2.08E-16	2.87E-16	4.53E-16	6.60E-16	8.84E-16	1.26E-15	1.95E-15
1.50	0.0	0.0	0.0	1.02E-19	2.89E-18	7.85E-18	1.10E-17	1.72E-17	3.19E-17	4.91E-17	8.79E-17	1.72E-16	2.40E-16	3.84E-16	5.67E-16	7.65E-16	1.10E-15	1.72E-15
2.00	0.0	0.0	0.0	1.61E-20	1.38E-18	5.60E-18	8.48E-18	1.38E-17	2.61E-17	4.07E-17	7.38E-17	1.47E-16	2.07E-16	3.34E-16	4.99E-16	6.79E-16	9.87E-16	1.55E-15
3.00	0.0	0.0	0.0	4.61E-22	3.53E-19	3.07E-18	5.39E-18	9.44E-18	1.86E-17	2.95E-17	5.47E-17	1.12E-16	1.60E-16	2.65E-16	4.03E-16	5.56E-16	8.22E-16	1.31E-15
5.00	0.0	0.0	0.0	0.0	2.83E-20	1.08E-18	2.49E-18	4.98E-18	1.05E-17	1.73E-17	3.35E-17	7.26E-17	1.06E-16	1.83E-16	2.87E-16	4.07E-16	6.18E-16	1.02E-15
7.00	0.0	0.0	0.0	0.0	2.58E-21	4.20E-19	1.25E-18	2.85E-18	6.43E-18	1.09E-17	2.21E-17	5.02E-17	7.55E-17	1.34E-16	2.18E-16	3.15E-16	4.91E-16	8.27E-16
10.00	0.0	0.0	0.0	0.0	8.00E-23	1.12E-19	4.90E-19	1.34E-18	3.31E-18	5.91E-18	1.27E-17	3.08E-17	4.81E-17	9.00E-17	1.52E-16	2.27E-16	3.66E-16	6.38E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.42E-20	1.16E-19	4.25E-19	1.22E-18	2.35E-18	5.54E-18	1.51E-17	2.49E-17	5.04E-17	9.11E-17	1.43E-16	2.43E-16	4.45E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.97E-21	2.95E-20	1.45E-19	4.86E-19	1.01E-18	2.60E-18	7.87E-18	1.37E-17	3.00E-17	5.78E-17	9.48E-17	1.69E-16	3.26E-16
30.00	0.0	0.0	0.0	0.0	0.0	4.32E-23	2.20E-21	1.93E-20	8.62E-20	2.07E-19	6.38E-19	2.38E-18	4.62E-18	1.17E-17	2.55E-17	4.56E-17	8.98E-17	1.89E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.55E-23	4.25E-22	3.39E-21	1.08E-20	4.76E-20	2.67E-19	6.40E-19	2.15E-18	5.94E-18	1.26E-17	2.98E-17	7.43E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.08E-23	1.53E-22	6.52E-22	4.06E-21	3.41E-20	1.00E-19	4.46E-19	1.56E-18	3.89E-18	1.10E-17	3.24E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09E-23	1.14E-22	1.75E-21	7.01E-21	4.73E-20	2.33E-19	7.43E-19	2.72E-18	1.02E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.30E-21	1.14E-20	5.42E-20	3.05E-19	1.71E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.35E-21	3.75E-20	3.11E-19

HEIGHT = 5.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	5.81E-18	1.95E-17	4.28E-17	5.79E-17	4.65E-17	2.74E-17	2.70E-17	3.53E-17	6.03E-17	8.97E-17	1.54E-16	2.89E-16	3.94E-16	6.08E-16	8.71E-16	1.15E-15	1.62E-15	2.47E-15
0.10	3.39E-19	3.05E-18	1.35E-17	2.98E-17	3.36E-17	2.36E-17	2.43E-17	3.25E-17	5.59E-17	8.35E-17	1.44E-16	2.72E-16	3.71E-16	5.74E-16	8.26E-16	1.09E-15	1.54E-15	2.36E-15
0.15	8.82E-20	1.29E-18	8.05E-18	2.23E-17	2.92E-17	2.21E-17	2.32E-17	3.12E-17	5.40E-17	8.08E-17	1.40E-16	2.64E-16	3.61E-16	5.60E-16	8.06E-16	1.07E-15	1.51E-15	2.31E-15
0.20	2.36E-20	5.59E-19	4.90E-18	1.70E-17	2.56E-17	2.08E-17	2.21E-17	3.01E-17	5.22E-17	7.82E-17	1.36E-16	2.57E-16	3.51E-16	5.46E-16	7.87E-16	1.05E-15	1.48E-15	2.27E-15
0.30	1.78E-21	1.11E-19	1.90E-18	1.03E-17	2.02E-17	1.85E-17	2.03E-17	2.80E-17	4.89E-17	7.36E-17	1.28E-16	2.44E-16	3.34E-16	5.21E-16	7.53E-16	1.00E-15	1.42E-15	2.18E-15
0.50	0.0	4.92E-21	3.21E-19	4.08E-18	1.32E-17	1.51E-17	1.74E-17	2.46E-17	4.36E-17	6.59E-17	1.15E-16	2.22E-16	3.05E-16	4.78E-16	6.96E-16	9.29E-16	1.32E-15	2.04E-15
0.70	0.0	0.0	5.86E-20	1.73E-18	9.05E-18	1.26E-17	1.51E-17	2.19E-17	3.93E-17	5.97E-17	1.05E-16	2.03E-16	2.81E-16	4.44E-16	6.48E-16	8.69E-16	1.24E-15	1.93E-15
1.00	0.0	0.0	5.00E-21	5.16E-19	5.40E-18	9.82E-18	1.26E-17	1.88E-17	3.41E-17	5.23E-17	9.29E-17	1.81E-16	2.52E-16	4.01E-16	5.90E-16	7.96E-16	1.15E-15	1.78E-15
1.50	0.0	0.0	0.0	7.64E-20	2.47E-18	6.84E-18	9.54E-18	1.49E-17	2.77E-17	4.30E-17	7.74E-17	1.54E-16	2.15E-16	3.47E-16	5.16E-16	7.02E-16	1.02E-15	1.60E-15
2.00	0.0	0.0	0.0	1.22E-20	1.19E-18	4.94E-18	7.46E-18	1.21E-17	2.31E-17	3.61E-17	6.59E-17	1.33E-16	1.88E-16	3.06E-16	4.60E-16	6.29E-16	9.22E-16	1.46E-15
3.00	0.0	0.0	0.0	3.53E-22	3.08E-19	2.75E-18	4.82E-18	8.45E-18	1.67E-17	2.66E-17	4.98E-17	1.03E-16	1.48E-16	2.46E-16	3.77E-16	5.23E-16	7.77E-16	1.25E-15
5.00	0.0	0.0	0.0	0.0	2.49E-20	9.81E-19	2.26E-18	4.54E-18	9.62E-18	1.59E-17	3.10E-17	6.77E-17	9.98E-17	1.72E-16	2.73E-16	3.88E-16	5.92E-16	9.78E-16
7.00	0.0	0.0	0.0	0.0	2.28E-21	3.84E-19	1.15E-18	2.62E-18	5.93E-18	1.01E-17	2.06E-17	4.72E-17	7.13E-17	1.28E-16	2.08E-16	3.02E-16	4.73E-16	8.01E-16
10.00	0.0	0.0	0.0	0.0	7.10E-23	1.03E-19	4.52E-19	1.24E-18	3.08E-18	5.52E-18	1.19E-17	2.92E-17	4.57E-17	8.61E-17	1.46E-16	2.19E-16	3.55E-16	6.21E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.31E-20	1.07E-19	3.96E-19	1.15E-18	2.22E-18	5.24E-18	1.44E-17	2.38E-17	4.85E-17	8.81E-17	1.38E-16	2.36E-16	4.35E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.82E-21	2.75E-20	1.36E-19	4.57E-19	9.51E-19	2.47E-18	7.52E-18	1.32E-17	2.89E-17	5.60E-17	9.22E-17	1.65E-16	3.19E-16
30.00	0.0	0.0	0.0	0.0	0.0	4.02E-23	2.05E-21	1.81E-20	8.14E-20	1.96E-19	6.09E-19	2.28E-18	4.46E-18	1.13E-17	2.48E-17	4.46E-17	8.79E-17	1.86E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.45E-23	4.01E-22	3.21E-21	1.03E-20	4.55E-20	2.57E-19	6.18E-19	2.09E-18	5.80E-18	1.23E-17	2.92E-17	7.32E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.02E-23	1.45E-22	6.21E-22	3.88E-21	3.29E-20	9.72E-20	4.34E-19	1.52E-18	3.82E-18	1.08E-17	3.19E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.04E-23	1.09E-22	1.69E-21	6.79E-21	4.60E-20	2.28E-19	7.29E-19	2.68E-18	1.01E-17
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.27E-21	1.11E-20	5.32E-20	3.00E-19	1.69E-18	
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.27E-21	3.69E-20	3.08E-19	

HEIGHT = 10.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	1.87E-19	2.13E-18	1.10E-17	2.54E-17	2.74E-17	1.80E-17	1.81E-17	2.41E-17	4.19E-17	6.32E-17	1.11E-16	2.13E-16	2.93E-16	4.61E-16	6.73E-16	9.01E-16	1.29E-15	2.00E-15
0.10	1.33E-20	3.98E-19	4.07E-18	1.48E-17	2.14E-17	1.62E-17	1.69E-17	2.28E-17	3.98E-17	6.02E-17	1.06E-16	2.04E-16	2.82E-16	4.45E-16	6.50E-16	8.73E-16	1.25E-15	1.94E-15
0.15	3.66E-21	1.77E-19	2.54E-18	1.15E-17	1.91E-17	1.54E-17	1.63E-17	2.21E-17	3.88E-17	5.88E-17	1.03E-16	2.00E-16	2.77E-16	4.37E-16	6.39E-16	8.59E-16	1.23E-15	1.92E-15
0.20	1.02E-21	7.98E-20	1.60E-18	9.01E-18	1.71E-17	1.47E-17	1.57E-17	2.15E-17	3.79E-17	5.74E-17	1.01E-16	1.96E-16	2.72E-16	4.29E-16	6.29E-16	8.46E-16	1.21E-15	1.89E-15
0.30	0.0	1.67E-20	6.50E-19	5.65E-18	1.39E-17	1.34E-17	1.47E-17	2.04E-17	3.61E-17	5.49E-17	9.71E-17	1.89E-16	2.62E-16	4.15E-16	6.10E-16	8.21E-16	1.18E-15	1.84E-15
0.50	0.0	7.88E-22	1.16E-19	2.35E-18	9.49E-18	1.13E-17	1.30E-17	1.85E-17	3.30E-17	5.05E-17	8.97E-17	1.76E-16	2.45E-16	3.90E-16	5.75E-16	7.77E-16	1.12E-15	1.76E-15
0.70	0.0	0.0	2.18E-20	1.03E-18	6.67E-18	9.61E-18	1.16E-17	1.68E-17	3.03E-17	4.66E-17	8.33E-17	1.64E-16	2.29E-16	3.68E-16	5.45E-16	7.38E-16	1.07E-15	1.68E-15
1.00	0.0	0.0	0.0	3.14E-19	4.07E-18	7.71E-18	9.83E-18	1.47E-17	2.70E-17	4.17E-17	7.51E-17	1.50E-16	2.10E-16	3.39E-16	5.05E-16	6.88E-16	1.00E-15	1.58E-15
1.50	0.0	0.0	0.0	4.77E-20	1.91E-18	5.51E-18	7.67E-18	1.20E-17	2.25E-17	3.52E-17	6.42E-17	1.30E-16	1.83E-16	2.99E-16	4.51E-16	6.18E-16	9.07E-16	1.44E-15
2.00	0.0	0.0	0.0	7.72E-21	9.36E-19	4.05E-18	6.11E-18	9.95E-18	1.91E-17	3.01E-17	5.56E-17	1.14E-16	1.62E-16	2.68E-16	4.07E-16	5.62E-16	8.31E-16	1.33E-15
3.00	0.0	0.0	0.0	2.27E-22	2.45E-19	2.30E-18	4.04E-18	7.09E-18	1.41E-17	2.27E-17	4.29E-17	9.03E-17	1.30E-16	2.20E-16	3.40E-16	4.75E-16	7.13E-16	1.16E-15
5.00	0.0	0.0	0.0	0.0	2.01E-20	8.37E-19	1.94E-18	3.90E-18	8.33E-18	1.39E-17	2.74E-17	6.06E-17	8.99E-17	1.57E-16	2.51E-16	3.59E-16	5.52E-16	9.20E-16
7.00	0.0	0.0	0.0	0.0	1.86E-21	3.31E-19	9.97E-19	2.28E-18	5.21E-18	8.96E-18	1.84E-17	4.27E-17	6.50E-17	1.18E-16	1.93E-16	2.83E-16	4.46E-16	7.60E-16
10.00	0.0	0.0	0.0	0.0	5.82E-23	8.97E-20	3.96E-19	1.09E-18	2.74E-18	4.94E-18	1.08E-17	2.67E-17	4.22E-17	8.01E-17	1.37E-16	2.07E-16	3.37E-16	5.94E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.15E-20	9.48E-20	3.52E-19	1.03E-18	2.00E-18	4.78E-18	1.33E-17	2.22E-17	4.55E-17	8.33E-17	1.32E-16	2.26E-16	4.19E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.60E-21	2.45E-20	1.22E-19	4.12E-19	8.65E-19	2.27E-18	6.99E-18	1.23E-17	2.73E-17	5.32E-17	8.81E-17	1.59E-16	3.09E-16
30.00	0.0	0.0	0.0	0.0	0.0	3.55E-23	1.84E-21	1.63E-20	7.39E-20	1.79E-19	5.62E-19	2.14E-18	4.19E-18	1.07E-17	2.37E-17	4.28E-17	8.50E-17	1.80E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.30E-23	3.63E-22	2.93E-21	9.48E-21	4.23E-20	2.42E-19	5.85E-19	1.99E-18	5.57E-18	1.19E-17	2.83E-17	7.14E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.29E-24	1.33E-22	5.73E-22	3.62E-21	3.10E-20	9.21E-20	4.15E-19	1.46E-18	3.69E-18	1.05E-17	3.12E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.59E-24	1.02E-22	1.59E-21	6.45E-21	4.41E-20	2.19E-19	7.06E-19	2.61E-18	9.87E-18
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.22E-21	1.07E-20	5.17E-20	2.93E-19	1.65E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.15E-21	3.60E-20	3.02E-19

HEIGHT = 50.0 METER

Air kerma per unit source intensity (Gy per photon/m²)

Source depth (g/cm²)	Energy (MeV)																
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	2.94E-19	2.23E-18	2.82E-18	3.28E-18	4.82E-18	9.23E-18	1.49E-17	2.90E-17	6.37E-17	9.42E-17	1.63E-16	2.60E-16	3.73E-16	5.74E-16	9.63E-16
0.10	0.0	0.0	0.0	2.00E-19	1.92E-18	2.67E-18	3.16E-18	4.68E-18	9.00E-18	1.46E-17	2.84E-17	6.25E-17	9.25E-17	1.61E-16	2.56E-16	3.68E-16	5.67E-16	9.53E-16
0.15	0.0	0.0	0.0	1.66E-19	1.79E-18	2.60E-18	3.10E-18	4.61E-18	8.89E-18	1.44E-17	2.81E-17	6.19E-17	9.18E-17	1.60E-16	2.55E-16	3.66E-16	5.64E-16	9.48E-16
0.20	0.0	0.0	0.0	1.37E-19	1.66E-18	2.53E-18	3.04E-18	4.54E-18	8.78E-18	1.43E-17	2.78E-17	6.13E-17	9.10E-17	1.58E-16	2.53E-16	3.63E-16	5.61E-16	9.43E-16
0.30	0.0	0.0	0.0	9.40E-20	1.44E-18	2.40E-18	2.93E-18	4.41E-18	8.56E-18	1.39E-17	2.72E-17	6.02E-17	8.94E-17	1.56E-16	2.49E-16	3.58E-16	5.54E-16	9.33E-16
0.50	0.0	0.0	0.0	4.47E-20	1.09E-18	2.15E-18	2.72E-18	4.17E-18	8.15E-18	1.33E-17	2.61E-17	5.80E-17	8.64E-17	1.51E-16	2.43E-16	3.49E-16	5.42E-16	9.14E-16
0.70	0.0	0.0	0.0	2.15E-20	8.23E-19	1.94E-18	2.53E-18	3.94E-18	7.76E-18	1.27E-17	2.51E-17	5.60E-17	8.36E-17	1.47E-16	2.36E-16	3.41E-16	5.30E-16	8.95E-16
1.00	0.0	0.0	0.0	7.26E-21	5.47E-19	1.66E-18	2.27E-18	3.63E-18	7.22E-18	1.19E-17	2.36E-17	5.31E-17	7.95E-17	1.40E-16	2.27E-16	3.29E-16	5.12E-16	8.69E-16
1.50	0.0	0.0	0.0	1.23E-21	2.82E-19	1.29E-18	1.91E-18	3.16E-18	6.42E-18	1.07E-17	2.14E-17	4.86E-17	7.33E-17	1.31E-16	2.13E-16	3.10E-16	4.86E-16	8.28E-16
2.00	0.0	0.0	0.0	2.14E-22	1.48E-19	1.00E-18	1.61E-18	2.77E-18	5.72E-18	9.59E-18	1.94E-17	4.47E-17	6.78E-17	1.22E-16	2.00E-16	2.92E-16	4.61E-16	7.90E-16
3.00	0.0	0.0	0.0	0.0	4.23E-20	6.22E-19	1.16E-18	2.14E-18	4.57E-18	7.80E-18	1.61E-17	3.79E-17	5.82E-17	1.06E-16	1.77E-16	2.62E-16	4.17E-16	7.23E-16
5.00	0.0	0.0	0.0	0.0	3.80E-21	2.51E-19	6.16E-19	1.30E-18	2.98E-18	5.25E-18	1.13E-17	2.78E-17	4.37E-17	8.26E-17	1.41E-16	2.13E-16	3.47E-16	6.14E-16
7.00	0.0	0.0	0.0	0.0	3.67E-22	1.05E-19	3.38E-19	8.13E-19	1.99E-18	3.61E-18	8.06E-18	2.08E-17	3.34E-17	6.52E-17	1.14E-16	1.76E-16	2.93E-16	5.29E-16
10.00	0.0	0.0	0.0	0.0	1.20E-23	3.01E-20	1.43E-19	4.14E-19	1.11E-18	2.12E-18	4.99E-18	1.37E-17	2.29E-17	4.67E-17	8.54E-17	1.35E-16	2.32E-16	4.31E-16
15.00	0.0	0.0	0.0	0.0	0.0	4.06E-21	3.61E-20	1.42E-19	4.44E-19	9.12E-19	2.36E-18	7.22E-18	1.27E-17	2.80E-17	5.45E-17	9.01E-17	1.63E-16	3.17E-16
20.00	0.0	0.0	0.0	0.0	0.0	5.82E-22	9.64E-21	5.10E-20	1.85E-19	4.09E-19	1.16E-18	3.94E-18	7.31E-18	1.73E-17	3.59E-17	6.20E-17	1.18E-16	2.39E-16
30.00	0.0	0.0	0.0	0.0	0.0	1.33E-23	7.52E-22	7.11E-21	3.46E-20	8.85E-20	3.00E-19	1.25E-18	2.58E-18	7.08E-18	1.66E-17	3.12E-17	6.48E-17	1.44E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.53E-24	1.65E-22	1.43E-21	4.88E-21	2.34E-20	1.47E-19	3.75E-19	1.36E-18	4.03E-18	8.97E-18	2.23E-17	5.87E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.30E-24	6.62E-23	3.01E-22	2.05E-21	1.93E-20	6.01E-20	2.89E-19	1.08E-18	2.83E-18	8.39E-18	2.60E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.11E-24	5.87E-23	1.01E-21	4.28E-21	3.11E-20	1.64E-19	5.49E-19	2.11E-18	8.34E-18
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.72E-22	8.11E-21	4.06E-20	2.40E-19	1.41E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.28E-21	2.97E-20	2.59E-19

HEIGHT = 100.0 METER

Source depth (g/cm²)	Air kerma per unit source intensity (Gy per photon/m²)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	2.06E-19	5.46E-19	7.35E-19	1.20E-18	2.56E-18	4.48E-18	9.66E-18	2.43E-17	3.86E-17	7.38E-17	1.28E-16	1.95E-16	3.23E-16	5.82E-16
0.10	0.0	0.0	0.0	0.0	1.81E-19	5.21E-19	7.13E-19	1.18E-18	2.51E-18	4.39E-18	9.50E-18	2.39E-17	3.81E-17	7.30E-17	1.27E-16	1.94E-16	3.20E-16	5.77E-16
0.15	0.0	0.0	0.0	0.0	1.70E-19	5.09E-19	7.02E-19	1.16E-18	2.49E-18	4.35E-18	9.43E-18	2.38E-17	3.78E-17	7.25E-17	1.26E-16	1.93E-16	3.19E-16	5.75E-16
0.20	0.0	0.0	0.0	0.0	1.59E-19	4.97E-19	6.91E-19	1.15E-18	2.46E-18	4.31E-18	9.35E-18	2.36E-17	3.76E-17	7.21E-17	1.25E-16	1.92E-16	3.17E-16	5.73E-16
0.30	0.0	0.0	0.0	0.0	1.40E-19	4.75E-19	6.70E-19	1.12E-18	2.41E-18	4.23E-18	9.19E-18	2.33E-17	3.71E-17	7.13E-17	1.24E-16	1.90E-16	3.15E-16	5.69E-16
0.50	0.0	0.0	0.0	0.0	1.09E-19	4.33E-19	6.30E-19	1.07E-18	2.32E-18	4.08E-18	8.89E-18	2.26E-17	3.61E-17	6.96E-17	1.21E-16	1.86E-16	3.09E-16	5.60E-16
0.70	0.0	0.0	0.0	0.0	8.46E-20	3.96E-19	5.93E-19	1.02E-18	2.22E-18	3.93E-18	8.60E-18	2.20E-17	3.52E-17	6.80E-17	1.19E-16	1.83E-16	3.04E-16	5.52E-16
1.00	0.0	0.0	0.0	0.0	5.82E-20	3.45E-19	5.41E-19	9.51E-19	2.09E-18	3.72E-18	8.18E-18	2.10E-17	3.38E-17	6.57E-17	1.15E-16	1.78E-16	2.97E-16	5.40E-16
1.50	0.0	0.0	0.0	0.0	3.14E-20	2.76E-19	4.65E-19	8.46E-19	1.90E-18	3.39E-18	7.54E-18	1.96E-17	3.17E-17	6.20E-17	1.10E-16	1.70E-16	2.85E-16	5.21E-16
2.00	0.0	0.0	0.0	0.0	1.71E-20	2.21E-19	4.00E-19	7.54E-19	1.72E-18	3.10E-18	6.95E-18	1.83E-17	2.97E-17	5.86E-17	1.04E-16	1.62E-16	2.74E-16	5.03E-16
3.00	0.0	0.0	0.0	0.0	5.15E-21	1.43E-19	2.98E-19	6.01E-19	1.41E-18	2.59E-18	5.93E-18	1.59E-17	2.62E-17	5.25E-17	9.46E-17	1.49E-16	2.53E-16	4.69E-16
5.00	0.0	0.0	0.0	0.0	4.95E-22	6.13E-20	1.68E-19	3.85E-19	9.68E-19	1.83E-18	4.34E-18	1.22E-17	2.05E-17	4.23E-17	7.83E-17	1.25E-16	2.18E-16	4.11E-16
7.00	0.0	0.0	0.0	0.0	0.0	2.68E-20	9.57E-20	2.50E-19	6.69E-19	1.30E-18	3.21E-18	9.40E-18	1.61E-17	3.44E-17	6.53E-17	1.06E-16	1.89E-16	3.63E-16
10.00	0.0	0.0	0.0	0.0	0.0	8.00E-21	4.22E-20	1.33E-19	3.90E-19	7.94E-19	2.07E-18	6.45E-18	1.15E-17	2.55E-17	5.03E-17	8.42E-17	1.54E-16	3.04E-16
15.00	0.0	0.0	0.0	0.0	0.0	1.13E-21	1.12E-20	4.77E-20	1.63E-19	3.58E-19	1.02E-18	3.54E-18	6.62E-18	1.59E-17	3.33E-17	5.82E-17	1.12E-16	2.30E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.66E-22	3.08E-21	1.77E-20	7.00E-20	1.66E-19	5.16E-19	1.98E-18	3.92E-18	1.01E-17	2.25E-17	4.11E-17	8.24E-17	1.78E-16
30.00	0.0	0.0	0.0	0.0	0.0	0.0	2.49E-22	2.56E-21	1.36E-20	3.73E-20	1.39E-19	6.55E-19	1.44E-18	4.28E-18	1.07E-17	2.13E-17	4.69E-17	1.10E-16
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.90E-24	6.19E-23	5.88E-22	2.14E-21	1.13E-20	8.01E-20	2.16E-19	8.54E-19	2.71E-18	6.34E-18	1.67E-17	4.63E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.78E-23	1.35E-22	1.01E-21	1.07E-20	3.54E-20	1.85E-19	7.38E-19	2.04E-18	6.37E-18	2.08E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.94E-23	5.68E-22	2.56E-21	2.02E-20	1.14E-19	4.01E-19	1.63E-18	6.77E-18
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.75E-22	5.72E-21	3.01E-20	1.87E-19	1.16E-18
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.45E-21	2.34E-20	2.14E-19

HEIGHT = 150.0 METER

Source depth (g/cm²)	Air kerma per unit source intensity (Gy per photon/m²)																
	Energy (MeV)																
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	2.34E-20	1.27E-19	1.98E-19	3.59E-19	8.44E-19	1.58E-18	3.78E-18	1.08E-17	1.84E-17	3.84E-17	7.20E-17	1.16E-16	2.05E-16	3.93E-16
0.10	0.0	0.0	0.0	0.0	2.07E-20	1.22E-19	1.92E-19	3.51E-19	8.28E-19	1.56E-18	3.73E-18	1.07E-17	1.81E-17	3.80E-17	7.13E-17	1.16E-16	2.03E-16	3.91E-16
0.15	0.0	0.0	0.0	0.0	1.95E-20	1.19E-19	1.89E-19	3.47E-19	8.21E-19	1.54E-18	3.70E-18	1.06E-17	1.80E-17	3.78E-17	7.10E-17	1.15E-16	2.03E-16	3.90E-16
0.20	0.0	0.0	0.0	0.0	1.83E-20	1.16E-19	1.87E-19	3.43E-19	8.13E-19	1.53E-18	3.67E-18	1.05E-17	1.79E-17	3.76E-17	7.07E-17	1.15E-16	2.02E-16	3.88E-16
0.30	0.0	0.0	0.0	0.0	1.62E-20	1.12E-19	1.81E-19	3.36E-19	7.98E-19	1.50E-18	3.62E-18	1.04E-17	1.77E-17	3.72E-17	7.01E-17	1.14E-16	2.01E-16	3.86E-16
0.50	0.0	0.0	0.0	0.0	1.28E-20	1.02E-19	1.71E-19	3.22E-19	7.69E-19	1.45E-18	3.51E-18	1.01E-17	1.73E-17	3.65E-17	6.88E-17	1.12E-16	1.98E-16	3.81E-16
0.70	0.0	0.0	0.0	0.0	1.00E-20	9.41E-20	1.62E-19	3.08E-19	7.42E-19	1.41E-18	3.41E-18	9.87E-18	1.69E-17	3.57E-17	6.76E-17	1.10E-16	1.95E-16	3.76E-16
1.00	0.0	0.0	0.0	0.0	7.01E-21	8.28E-20	1.49E-19	2.89E-19	7.02E-19	1.34E-18	3.26E-18	9.50E-18	1.63E-17	3.47E-17	6.58E-17	1.07E-16	1.91E-16	3.69E-16
1.50	0.0	0.0	0.0	0.0	3.87E-21	6.71E-20	1.29E-19	2.59E-19	6.41E-19	1.23E-18	3.02E-18	8.91E-18	1.54E-17	3.29E-17	6.29E-17	1.03E-16	1.84E-16	3.58E-16
2.00	0.0	0.0	0.0	0.0	2.15E-21	5.45E-20	1.12E-19	2.33E-19	5.85E-19	1.13E-18	2.81E-18	8.36E-18	1.45E-17	3.13E-17	6.02E-17	9.92E-17	1.78E-16	3.48E-16
3.00	0.0	0.0	0.0	0.0	6.68E-22	3.60E-20	8.51E-20	1.88E-19	4.88E-19	9.60E-19	2.42E-18	7.38E-18	1.29E-17	2.83E-17	5.52E-17	9.17E-17	1.66E-16	3.27E-16
5.00	0.0	0.0	0.0	0.0	0.0	1.59E-20	4.93E-20	1.24E-19	3.42E-19	6.93E-19	1.82E-18	5.76E-18	1.03E-17	2.33E-17	4.66E-17	7.87E-17	1.45E-16	2.92E-16
7.00	0.0	0.0	0.0	0.0	0.0	7.15E-21	2.88E-20	8.20E-20	2.41E-19	5.03E-19	1.37E-18	4.53E-18	8.29E-18	1.93E-17	3.94E-17	6.79E-17	1.28E-16	2.61E-16
10.00	0.0	0.0	0.0	0.0	0.0	2.20E-21	1.30E-20	4.47E-20	1.44E-19	3.14E-19	9.01E-19	3.17E-18	6.01E-18	1.46E-17	3.10E-17	5.47E-17	1.06E-16	2.22E-16
15.00	0.0	0.0	0.0	0.0	0.0	3.20E-22	3.57E-21	1.66E-20	6.20E-20	1.46E-19	4.57E-19	1.79E-18	3.57E-18	9.31E-18	2.10E-17	3.87E-17	7.85E-17	1.72E-16
20.00	0.0	0.0	0.0	0.0	0.0	4.81E-23	1.00E-21	6.27E-21	2.72E-20	6.89E-20	2.36E-19	1.02E-18	2.15E-18	6.03E-18	1.44E-17	2.78E-17	5.90E-17	1.35E-16
30.00	0.0	0.0	0.0	0.0	0.0	0.0	8.36E-23	9.38E-22	5.46E-21	1.60E-20	6.54E-20	3.47E-19	8.11E-19	2.62E-18	7.06E-18	1.48E-17	3.43E-17	8.51E-17
50.00	0.0	0.0	0.0	0.0	0.0	0.0	6.58E-25	2.34E-23	2.43E-22	9.48E-22	5.51E-21	4.38E-20	1.26E-19	5.39E-19	1.83E-18	4.51E-18	1.25E-17	3.66E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17E-23	6.08E-23	5.00E-22	5.95E-21	2.10E-20	1.18E-19	5.07E-19	1.47E-18	4.86E-18	1.67E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.48E-23	3.21E-22	1.54E-21	1.32E-20	7.95E-20	2.94E-19	1.26E-18	5.50E-18
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.79E-22	4.04E-21	2.23E-20	1.46E-19	9.53E-19
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.83E-21	1.84E-20	1.77E-19

HEIGHT = 200.0 METER

Source depth (g/cm²)	Air kerma per unit source intensity (Gy per photon/m²)																	
	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	0.0	3.21E-20	5.76E-20	1.16E-19	3.00E-19	6.05E-19	1.60E-18	5.16E-18	9.34E-18	2.13E-17	4.31E-17	7.37E-17	1.38E-16	2.80E-16
0.10	0.0	0.0	0.0	0.0	0.0	3.08E-20	5.60E-20	1.13E-19	2.95E-19	5.95E-19	1.57E-18	5.10E-18	9.24E-18	2.11E-17	4.27E-17	7.32E-17	1.37E-16	2.79E-16
0.15	0.0	0.0	0.0	0.0	0.0	3.01E-20	5.53E-20	1.12E-19	2.93E-19	5.91E-19	1.56E-18	5.06E-18	9.19E-18	2.10E-17	4.26E-17	7.29E-17	1.36E-16	2.78E-16
0.20	0.0	0.0	0.0	0.0	0.0	2.95E-20	5.45E-20	1.11E-19	2.90E-19	5.86E-19	1.55E-18	5.04E-18	9.14E-18	2.09E-17	4.24E-17	7.26E-17	1.36E-16	2.77E-16
0.30	0.0	0.0	0.0	0.0	0.0	2.83E-20	5.31E-20	1.09E-19	2.85E-19	5.77E-19	1.53E-18	4.97E-18	9.04E-18	2.07E-17	4.20E-17	7.21E-17	1.35E-16	2.75E-16
0.50	0.0	0.0	0.0	0.0	0.0	2.61E-20	5.03E-20	1.04E-19	2.75E-19	5.58E-19	1.49E-18	4.86E-18	8.84E-18	2.03E-17	4.14E-17	7.10E-17	1.33E-16	2.72E-16
0.70	0.0	0.0	0.0	0.0	0.0	2.41E-20	4.76E-20	1.00E-19	2.66E-19	5.41E-19	1.45E-18	4.74E-18	8.65E-18	2.00E-17	4.07E-17	7.00E-17	1.31E-16	2.69E-16
1.00	0.0	0.0	0.0	0.0	0.0	2.13E-20	4.39E-20	9.42E-20	2.52E-19	5.16E-19	1.39E-18	4.57E-18	8.37E-18	1.94E-17	3.97E-17	6.85E-17	1.29E-16	2.65E-16
1.50	0.0	0.0	0.0	0.0	0.0	1.74E-20	3.84E-20	8.50E-20	2.31E-19	4.76E-19	1.29E-18	4.31E-18	7.93E-18	1.85E-17	3.81E-17	6.60E-17	1.25E-16	2.58E-16
2.00	0.0	0.0	0.0	0.0	0.0	1.42E-20	3.35E-20	7.67E-20	2.12E-19	4.40E-19	1.21E-18	4.06E-18	7.51E-18	1.77E-17	3.66E-17	6.36E-17	1.21E-16	2.51E-16
3.00	0.0	0.0	0.0	0.0	0.0	9.52E-21	2.57E-20	6.26E-20	1.78E-19	3.76E-19	1.05E-18	3.61E-18	6.74E-18	1.61E-17	3.37E-17	5.92E-17	1.14E-16	2.38E-16
5.00	0.0	0.0	0.0	0.0	0.0	4.31E-21	1.51E-20	4.18E-20	1.27E-19	2.75E-19	7.96E-19	2.85E-18	5.45E-18	1.34E-17	2.88E-17	5.14E-17	1.00E-16	2.14E-16
7.00	0.0	0.0	0.0	0.0	0.0	1.97E-21	8.97E-21	2.81E-20	9.05E-20	2.02E-19	6.06E-19	2.27E-18	4.42E-18	1.12E-17	2.46E-17	4.47E-17	8.91E-17	1.93E-16
10.00	0.0	0.0	0.0	0.0	0.0	6.17E-22	4.13E-21	1.55E-20	5.49E-20	1.28E-19	4.05E-19	1.61E-18	3.25E-18	8.58E-18	1.96E-17	3.65E-17	7.47E-17	1.66E-16
15.00	0.0	0.0	0.0	0.0	0.0	9.19E-23	1.16E-21	5.88E-21	2.42E-20	6.08E-20	2.10E-19	9.25E-19	1.96E-18	5.57E-18	1.35E-17	2.62E-17	5.63E-17	1.30E-16
20.00	0.0	0.0	0.0	0.0	0.0	1.41E-23	3.32E-22	2.26E-21	1.08E-20	2.92E-20	1.10E-19	5.37E-19	1.20E-18	3.66E-18	9.41E-18	1.91E-17	4.28E-17	1.03E-16
30.00	0.0	0.0	0.0	0.0	0.0	0.0	2.83E-23	3.47E-22	2.21E-21	6.92E-21	3.12E-20	1.86E-19	4.63E-19	1.62E-18	4.69E-18	1.03E-17	2.53E-17	6.64E-17
50.00	0.0	0.0	0.0	0.0	0.0	0.0	2.29E-25	8.88E-24	1.01E-22	4.22E-22	2.70E-21	2.41E-20	7.36E-20	3.42E-19	1.25E-18	3.23E-18	9.45E-18	2.92E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.75E-23	2.48E-22	3.33E-21	1.24E-20	7.63E-20	3.50E-19	1.07E-18	3.71E-18	1.35E-17
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.47E-24	1.82E-22	9.27E-22	8.60E-21	5.55E-20	2.16E-19	9.73E-19	4.48E-18
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.50E-22	2.86E-21	1.66E-20	1.15E-19	7.84E-19
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.37E-21	1.45E-20	1.47E-19

HEIGHT = 300.0 METER

Source depth (g/cm²)	Air kerma per unit source intensity (Gy per photon/m²) — Energy (MeV)																
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.0	0.0	0.0	0.0	0.0	0.0	2.33E-21	5.55E-21	1.37E-20	4.30E-20	9.95E-20	3.19E-19	1.31E-18	2.70E-18	7.29E-18	1.70E-17	3.24E-17	6.78E-17	1.55E-16
0.10	0.0	0.0	0.0	0.0	0.0	2.24E-21	5.41E-21	1.34E-20	4.23E-20	9.80E-20	3.15E-19	1.30E-18	2.67E-18	7.23E-18	1.69E-17	3.22E-17	6.75E-17	1.54E-16
0.15	0.0	0.0	0.0	0.0	0.0	2.20E-21	5.34E-21	1.33E-20	4.20E-20	9.73E-20	3.13E-19	1.29E-18	2.66E-18	7.20E-18	1.68E-17	3.21E-17	6.73E-17	1.53E-16
0.20	0.0	0.0	0.0	0.0	0.0	2.16E-21	5.28E-21	1.31E-20	4.16E-20	9.66E-20	3.11E-19	1.28E-18	2.64E-18	7.17E-18	1.68E-17	3.20E-17	6.71E-17	1.53E-16
0.30	0.0	0.0	0.0	0.0	0.0	2.08E-21	5.14E-21	1.29E-20	4.09E-20	9.51E-20	3.07E-19	1.27E-18	2.62E-18	7.11E-18	1.67E-17	3.18E-17	6.67E-17	1.52E-16
0.50	0.0	0.0	0.0	0.0	0.0	1.92E-21	4.88E-21	1.24E-20	3.96E-20	9.23E-20	2.99E-19	1.24E-18	2.56E-18	6.98E-18	1.64E-17	3.14E-17	6.59E-17	1.51E-16
0.70	0.0	0.0	0.0	0.0	0.0	1.78E-21	4.64E-21	1.19E-20	3.83E-20	8.96E-20	2.91E-19	1.22E-18	2.51E-18	6.87E-18	1.62E-17	3.10E-17	6.52E-17	1.49E-16
1.00	0.0	0.0	0.0	0.0	0.0	1.58E-21	4.29E-21	1.12E-20	3.65E-20	8.57E-20	2.80E-19	1.18E-18	2.44E-18	6.69E-18	1.58E-17	3.03E-17	6.41E-17	1.47E-16
1.50	0.0	0.0	0.0	0.0	0.0	1.30E-21	3.78E-21	1.02E-20	3.36E-20	7.95E-20	2.62E-19	1.11E-18	2.32E-18	6.41E-18	1.52E-17	2.94E-17	6.23E-17	1.44E-16
2.00	0.0	0.0	0.0	0.0	0.0	1.07E-21	3.32E-21	9.25E-21	3.10E-20	7.38E-20	2.45E-19	1.05E-18	2.21E-18	6.14E-18	1.47E-17	2.84E-17	6.06E-17	1.40E-16
3.00	0.0	0.0	0.0	0.0	0.0	7.30E-22	2.58E-21	7.62E-21	2.63E-20	6.36E-20	2.15E-19	9.42E-19	2.00E-18	5.64E-18	1.36E-17	2.66E-17	5.73E-17	1.34E-16
5.00	0.0	0.0	0.0	0.0	0.0	3.39E-22	1.55E-21	5.19E-21	1.90E-20	4.74E-20	1.66E-19	7.57E-19	1.64E-18	4.76E-18	1.18E-17	2.34E-17	5.13E-17	1.22E-16
7.00	0.0	0.0	0.0	0.0	0.0	1.58E-22	9.36E-22	3.54E-21	1.38E-20	3.53E-20	1.28E-19	6.10E-19	1.35E-18	4.03E-18	1.02E-17	2.06E-17	4.60E-17	1.11E-16
10.00	0.0	0.0	0.0	0.0	0.0	5.10E-23	4.42E-22	2.00E-21	8.52E-21	2.28E-20	8.74E-20	4.42E-19	1.01E-18	3.14E-18	8.26E-18	1.71E-17	3.91E-17	9.68E-17
15.00	0.0	0.0	0.0	0.0	0.0	0.0	1.28E-22	7.80E-22	3.86E-21	1.11E-20	4.65E-20	2.60E-19	6.24E-19	2.09E-18	5.82E-18	1.25E-17	3.01E-17	7.75E-17
20.00	0.0	0.0	0.0	0.0	0.0	0.0	3.75E-23	3.07E-22	1.76E-21	5.45E-21	2.49E-20	1.54E-19	3.90E-19	1.40E-18	4.14E-18	9.29E-18	2.32E-17	6.25E-17
30.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.86E-23	3.73E-22	1.34E-21	7.27E-21	5.51E-20	1.55E-19	6.38E-19	2.12E-18	5.17E-18	1.41E-17	4.12E-17
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.78E-23	8.50E-23	6.56E-22	7.43E-21	2.56E-20	1.40E-19	5.84E-19	1.68E-18	5.45E-18	1.87E-17
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.68E-24	6.20E-23	1.05E-21	4.43E-21	3.19E-20	1.68E-19	5.66E-19	2.19E-18	8.80E-18
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.88E-23	3.38E-22	3.68E-21	2.72E-20	1.17E-19	5.85E-19	2.98E-18
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.10E-22	1.43E-21	9.17E-21	7.03E-20	5.32E-19
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.66E-22	8.99E-21	1.01E-19

Table 5. Height dependency of air kerma per unit source intensity for monoenergetic plane sources at three different depths in the ground.

(a) Source depth = 0 g/cm^2

Air kerma per unit source intensity (Gy per photon/m^2)

Height(m)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.10	8.69E-16	7.27E-16	5.58E-16	3.74E-16	2.05E-16	1.16E-16	1.18E-16	1.51E-16	2.41E-16	3.36E-16	5.31E-16	9.07E-16	1.17E-15	1.70E-15	2.28E-15	2.88E-15	3.87E-15	5.58E-15
0.50	3.54E-16	3.55E-16	3.17E-16	2.44E-16	1.49E-16	9.19E-17	9.49E-17	1.22E-16	1.93E-16	2.68E-16	4.25E-16	7.17E-16	9.26E-16	1.33E-15	1.81E-15	2.28E-15	3.09E-15	4.47E-15
1.00	1.82E-16	2.17E-16	2.21E-16	1.88E-16	1.25E-16	8.15E-17	8.52E-17	1.10E-16	1.73E-16	2.40E-16	3.76E-16	6.35E-16	8.19E-16	1.18E-15	1.60E-15	2.03E-15	2.73E-15	3.99E-15
1.50	1.07E-16	1.48E-16	1.69E-16	1.57E-16	1.11E-16	7.53E-17	7.91E-17	1.03E-16	1.61E-16	2.23E-16	3.49E-16	5.86E-16	7.57E-16	1.09E-15	1.47E-15	1.89E-15	2.54E-15	3.69E-15
2.00	6.65E-17	1.06E-16	1.35E-16	1.35E-16	1.01E-16	7.09E-17	7.49E-17	9.78E-17	1.52E-16	2.11E-16	3.29E-16	5.51E-16	7.14E-16	1.03E-15	1.39E-15	1.78E-15	2.40E-15	3.50E-15
5.00	6.13E-18	2.17E-17	4.85E-17	7.15E-17	6.99E-17	5.71E-17	6.21E-17	8.14E-17	1.26E-16	1.72E-16	2.66E-16	4.44E-16	5.73E-16	8.30E-16	1.13E-15	1.45E-15	1.95E-15	2.86E-15
10.00	1.97E-19	2.46E-18	1.30E-17	3.37E-17	4.71E-17	4.62E-17	5.23E-17	6.89E-17	1.06E-16	1.43E-16	2.19E-16	3.63E-16	4.67E-16	6.79E-16	9.24E-16	1.19E-15	1.62E-15	2.37E-15
50.00	0.0	0.0	0.0	5.21E-19	6.57E-18	1.78E-17	2.57E-17	3.67E-17	5.52E-17	7.33E-17	1.09E-16	1.78E-16	2.29E-16	3.35E-16	4.67E-16	6.09E-16	8.53E-16	1.30E-15
100.00	0.0	0.0	0.0	0.0	8.42E-19	6.49E-18	1.20E-17	1.95E-17	3.07E-17	4.18E-17	6.21E-17	1.03E-16	1.35E-16	2.01E-16	2.87E-16	3.84E-16	5.54E-16	8.66E-16
150.00	0.0	0.0	0.0	0.0	1.24E-19	2.35E-18	5.61E-18	1.03E-17	1.75E-17	2.44E-17	3.76E-17	6.45E-17	8.52E-17	1.31E-16	1.93E-16	2.65E-16	3.92E-16	6.34E-16
200.00	0.0	0.0	0.0	0.0	0.0	8.32E-19	2.51E-18	5.33E-18	9.84E-18	1.43E-17	2.28E-17	4.09E-17	5.59E-17	8.89E-17	1.35E-16	1.89E-16	2.89E-16	4.82E-16
300.00	0.0	0.0	0.0	0.0	0.0	1.08E-19	4.93E-19	1.32E-18	2.92E-18	4.61E-18	8.27E-18	1.67E-17	2.42E-17	4.19E-17	6.94E-17	1.03E-16	1.68E-16	2.99E-16

(b) Source depth = 1 g/cm^2

Air kerma per unit source intensity (Gy per photon/m^2)

Height(m)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.10	0.0	0.0	1.41E-20	1.01E-18	1.07E-17	2.80E-17	4.17E-17	6.33E-17	1.04E-16	1.45E-16	2.26E-16	3.78E-16	4.90E-16	7.07E-16	9.69E-16	1.24E-15	1.69E-15	2.47E-15
0.50	0.0	0.0	1.29E-20	9.75E-19	1.06E-17	2.82E-17	4.15E-17	6.26E-17	1.03E-16	1.43E-16	2.23E-16	3.73E-16	4.84E-16	6.98E-16	9.56E-16	1.22E-15	1.66E-15	2.44E-15
1.00	0.0	0.0	1.19E-20	9.37E-19	1.05E-17	2.77E-17	4.10E-17	6.19E-17	1.01E-16	1.42E-16	2.19E-16	3.66E-16	4.76E-16	6.86E-16	9.41E-16	1.20E-15	1.64E-15	2.40E-15
1.50	0.0	0.0	1.07E-20	8.98E-19	1.03E-17	2.75E-17	4.07E-17	6.12E-17	1.00E-16	1.39E-16	2.16E-16	3.60E-16	4.67E-16	6.75E-16	9.28E-16	1.18E-15	1.62E-15	2.37E-15
2.00	0.0	0.0	9.58E-21	8.57E-19	1.01E-17	2.72E-17	4.03E-17	6.05E-17	9.86E-17	1.37E-16	2.13E-16	3.55E-16	4.61E-16	6.65E-16	9.11E-16	1.17E-15	1.60E-15	2.34E-15
5.00	0.0	0.0	5.55E-21	6.62E-19	9.05E-18	2.58E-17	3.80E-17	5.68E-17	9.19E-17	1.27E-16	1.96E-16	3.26E-16	4.22E-16	6.09E-16	8.34E-16	1.08E-15	1.47E-15	2.16E-15
10.00	0.0	0.0	0.0	4.23E-19	7.44E-18	2.33E-17	3.49E-17	5.20E-17	8.31E-17	1.14E-16	1.75E-16	2.90E-16	3.75E-16	5.42E-16	7.44E-16	9.62E-16	1.32E-15	1.96E-15
50.00	0.0	0.0	0.0	1.14E-20	1.51E-18	1.06E-17	1.90E-17	3.02E-17	4.80E-17	6.46E-17	9.78E-17	1.59E-16	2.08E-16	3.03E-16	4.25E-16	5.55E-16	7.89E-16	1.20E-15
100.00	0.0	0.0	0.0	0.0	2.18E-19	4.00E-18	9.12E-18	1.64E-17	2.73E-17	3.73E-17	5.65E-17	9.44E-17	1.24E-16	1.86E-16	2.67E-16	3.59E-16	5.21E-16	8.18E-16
150.00	0.0	0.0	0.0	0.0	3.21E-20	1.47E-18	4.25E-18	8.64E-18	1.55E-17	2.18E-17	3.43E-17	5.90E-17	7.94E-17	1.23E-16	1.81E-16	2.49E-16	3.74E-16	6.03E-16
200.00	0.0	0.0	0.0	0.0	0.0	5.36E-19	1.92E-18	4.43E-18	8.66E-18	1.27E-17	2.08E-17	3.76E-17	5.23E-17	8.29E-17	1.28E-16	1.80E-16	2.78E-16	4.63E-16
300.00	0.0	0.0	0.0	0.0	0.0	6.76E-20	3.78E-19	1.09E-18	2.58E-18	4.11E-18	7.58E-18	1.52E-17	2.26E-17	3.95E-17	6.57E-17	9.77E-17	1.61E-16	2.87E-16

(c) Source depth = 10 g/cm^2

Air kerma per unit source intensity (Gy per photon/m^2)

Height (m)	Energy (MeV)																	
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00
0.10	0.0	0.0	0.0	0.0	1.57E-22	4.88E-19	3.24E-18	1.01E-17	2.32E-17	3.63E-17	6.19E-17	1.11E-16	1.48E-16	2.23E-16	3.19E-16	4.27E-16	6.10E-16	9.41E-16
0.50	0.0	0.0	0.0	0.0	1.56E-22	4.89E-19	3.23E-18	1.01E-17	2.32E-17	3.63E-17	6.18E-17	1.10E-16	1.47E-16	2.22E-16	3.18E-16	4.26E-16	6.08E-16	9.39E-16
1.00	0.0	0.0	0.0	0.0	1.85E-22	4.91E-19	3.25E-18	1.01E-17	2.31E-17	3.62E-17	6.14E-17	1.09E-16	1.46E-16	2.21E-16	3.17E-16	4.24E-16	6.06E-16	9.35E-16
1.50	0.0	0.0	0.0	0.0	1.83E-22	4.89E-19	3.27E-18	1.02E-17	2.31E-17	3.61E-17	6.10E-17	1.09E-16	1.46E-16	2.20E-16	3.16E-16	4.22E-16	6.03E-16	9.33E-16
2.00	0.0	0.0	0.0	0.0	1.52E-22	4.91E-19	3.24E-18	1.01E-17	2.30E-17	3.59E-17	6.12E-17	1.08E-16	1.45E-16	2.19E-16	3.15E-16	4.20E-16	6.01E-16	9.30E-16
5.00	0.0	0.0	0.0	0.0	1.37E-22	4.80E-19	3.23E-18	9.95E-18	2.26E-17	3.51E-17	5.99E-17	1.06E-16	1.41E-16	2.13E-16	3.06E-16	4.10E-16	5.88E-16	9.07E-16
10.00	0.0	0.0	0.0	0.0	1.31E-22	4.62E-19	3.12E-18	9.61E-18	2.17E-17	3.36E-17	5.69E-17	1.01E-16	1.35E-16	2.04E-16	2.94E-16	3.94E-16	5.65E-16	8.78E-16
50.00	0.0	0.0	0.0	0.0	6.47E-23	2.62E-19	2.01E-18	6.53E-18	1.50E-17	2.31E-17	3.89E-17	6.98E-17	9.45E-17	1.46E-16	2.14E-16	2.92E-16	4.27E-16	6.80E-16
100.00	0.0	0.0	0.0	0.0	0.0	1.09E-19	1.03E-18	3.72E-18	8.89E-18	1.40E-17	2.42E-17	4.48E-17	6.17E-17	9.79E-17	1.49E-16	2.09E-16	3.13E-16	5.16E-16
150.00	0.0	0.0	0.0	0.0	0.0	4.20E-20	4.96E-19	2.01E-18	5.06E-18	8.30E-18	1.49E-17	2.87E-17	4.08E-17	6.71E-17	1.07E-16	1.52E-16	2.35E-16	4.01E-16
200.00	0.0	0.0	0.0	0.0	0.0	1.70E-20	2.31E-19	1.03E-18	2.85E-18	4.90E-18	9.08E-18	1.85E-17	2.71E-17	4.65E-17	7.62E-17	1.13E-16	1.80E-16	3.15E-16
300.00	0.0	0.0	0.0	0.0	0.0	2.16E-21	4.90E-20	2.60E-19	8.31E-19	1.55E-18	3.22E-18	7.65E-18	1.18E-17	2.23E-17	4.01E-17	6.31E-17	1.09E-16	2.03E-16

Table 6. Height dependency of fluence of primary photons per unit source intensity for monoenergetic plane sources at three different depths in the ground.

(a) Source depth = 0 g/cm^2

Height (m)	Fluence per unit source intensity (photons/m^2 per photon/m^2) Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00	
0.10	1.17E+00	1.43E+00	1.75E+00	2.12E+00	2.52E+00	2.76E+00	2.82E+00	2.88E+00	2.93E+00	2.98E+00	3.04E+00	3.14E+00	3.20E+00	3.30E+00	3.40E+00	3.48E+00	3.59E+00	3.72E+00	
0.50	4.72E-01	6.87E-01	9.77E-01	1.33E+00	1.72E+00	1.96E+00	2.02E+00	2.07E+00	2.13E+00	2.17E+00	2.24E+00	2.34E+00	2.40E+00	2.50E+00	2.59E+00	2.68E+00	2.78E+00	2.91E+00	
1.00	2.42E-01	4.14E-01	6.71E-01	1.01E+00	1.38E+00	1.62E+00	1.68E+00	1.73E+00	1.79E+00	1.83E+00	1.90E+00	2.00E+00	2.06E+00	2.15E+00	2.25E+00	2.33E+00	2.44E+00	2.57E+00	
1.50	1.41E-01	2.80E-01	5.07E-01	8.23E-01	1.19E+00	1.42E+00	1.48E+00	1.53E+00	1.59E+00	1.63E+00	1.70E+00	1.80E+00	1.86E+00	1.95E+00	2.05E+00	2.13E+00	2.24E+00	2.36E+00	
2.00	8.72E-02	1.99E-01	4.00E-01	6.98E-01	1.06E+00	1.28E+00	1.34E+00	1.39E+00	1.45E+00	1.49E+00	1.56E+00	1.66E+00	1.72E+00	1.81E+00	1.90E+00	1.99E+00	2.09E+00	2.22E+00	
5.00	7.92E-03	3.91E-02	1.38E-01	3.46E-01	6.48E-01	8.56E-01	9.14E-01	9.62E-01	1.01E+00	1.05E+00	1.12E+00	1.21E+00	1.27E+00	1.36E+00	1.46E+00	1.54E+00	1.64E+00	1.77E+00	
10.00	2.55E-04	4.27E-03	3.56E-02	1.52E-01	3.82E-01	5.61E-01	6.14E-01	6.57E-01	7.04E-01	7.42E-01	8.02E-01	8.92E-01	9.47E-01	1.03E+00	1.13E+00	1.20E+00	1.31E+00	1.43E+00	
50.00	0.0	0.0	0.0	1.76E-03	3.11E-02	8.83E-02	1.11E-01	1.31E-01	1.55E-01	1.76E-01	2.10E-01	2.67E-01	3.04E-01	3.66E-01	4.35E-01	4.98E-01	5.82E-01	6.89E-01	
100.00	0.0	0.0	0.0	0.0	2.87E-03	1.70E-02	2.49E-02	3.28E-02	4.31E-02	5.26E-02	7.01E-02	1.02E-01	1.25E-01	1.65E-01	2.14E-01	2.61E-01	3.27E-01	4.16E-01	
150.00	0.0	0.0	0.0	0.0	3.26E-04	3.96E-03	6.68E-03	9.77E-03	1.42E-02	1.86E-02	2.74E-02	4.53E-02	5.92E-02	8.61E-02	1.20E-01	1.56E-01	2.08E-01	2.81E-01	
200.00	0.0	0.0	0.0	0.0	0.0	1.00E-03	1.95E-03	3.15E-03	5.05E-03	7.11E-03	1.16E-02	2.16E-02	3.02E-02	4.78E-02	7.20E-02	9.84E-02	1.40E-01	2.01E-01	
300.00	0.0	0.0	0.0	0.0	0.0	7.29E-05	1.88E-04	3.72E-04	7.23E-04	1.17E-03	2.31E-03	5.50E-03	8.70E-03	1.63E-02	2.85E-02	4.33E-02	6.88E-02	1.11E-01	

(b) Source depth = 1 g/cm^2

Height(m)	Fluence per unit source intensity (photons/m^2 per photon/m^2) Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00	
0.10	0.0	0.0	4.16E-05	5.06E-03	1.00E-01	4.00E-01	5.61E-01	6.79E-01	7.58E-01	8.05E-01	8.71E-01	9.63E-01	1.02E+00	1.11E+00	1.20E+00	1.28E+00	1.38E+00	1.49E+00	
0.50	0.0	0.0	3.85E-05	4.85E-03	9.79E-02	3.91E-01	5.47E-01	6.62E-01	7.39E-01	7.85E-01	8.50E-01	9.42E-01	9.98E-01	1.09E+00	1.18E+00	1.25E+00	1.35E+00	1.47E+00	
1.00	0.0	0.0	3.49E-05	4.61E-03	9.51E-02	3.80E-01	5.31E-01	6.41E-01	7.16E-01	7.62E-01	8.26E-01	9.17E-01	9.73E-01	1.06E+00	1.15E+00	1.23E+00	1.33E+00	1.44E+00	
1.50	0.0	0.0	3.17E-05	4.38E-03	9.23E-02	3.69E-01	5.15E-01	6.22E-01	6.95E-01	7.40E-01	8.03E-01	8.94E-01	9.49E-01	1.04E+00	1.13E+00	1.20E+00	1.30E+00	1.42E+00	
2.00	0.0	0.0	2.88E-05	4.17E-03	8.96E-02	3.59E-01	5.01E-01	6.04E-01	6.75E-01	7.19E-01	7.82E-01	8.72E-01	9.27E-01	1.02E+00	1.10E+00	1.18E+00	1.28E+00	1.40E+00	
5.00	0.0	0.0	1.61E-05	3.08E-03	7.52E-02	3.07E-01	4.25E-01	5.11E-01	5.73E-01	6.14E-01	6.74E-01	7.60E-01	8.14E-01	8.99E-01	9.87E-01	1.06E+00	1.16E+00	1.28E+00	
10.00	0.0	0.0	0.0	1.88E-03	5.67E-02	2.41E-01	3.32E-01	4.00E-01	4.53E-01	4.89E-01	5.45E-01	6.26E-01	6.77E-01	7.59E-01	8.44E-01	9.18E-01	1.01E+00	1.13E+00	
50.00	0.0	0.0	0.0	4.34E-05	7.62E-03	5.17E-02	7.69E-02	9.87E-02	1.21E-01	1.40E-01	1.71E-01	2.22E-01	2.57E-01	3.15E-01	3.79E-01	4.39E-01	5.19E-01	6.22E-01	
100.00	0.0	0.0	0.0	0.0	8.11E-04	1.08E-02	1.83E-02	2.59E-02	3.52E-02	4.37E-02	5.93E-02	8.81E-02	1.09E-01	1.47E-01	1.93E-01	2.38E-01	3.01E-01	3.87E-01	
150.00	0.0	0.0	0.0	0.0	9.77E-05	2.59E-03	5.03E-03	7.86E-03	1.18E-02	1.57E-02	2.36E-02	3.98E-02	5.26E-02	7.77E-02	1.10E-01	1.43E-01	1.93E-01	2.64E-01	
200.00	0.0	0.0	0.0	0.0	0.0	6.66E-04	1.48E-03	2.56E-03	4.24E-03	6.06E-03	1.00E-02	1.92E-02	2.70E-02	4.35E-02	6.63E-02	9.14E-02	1.31E-01	1.90E-01	
300.00	0.0	0.0	0.0	0.0	0.0	4.94E-05	1.45E-04	3.06E-04	6.13E-04	1.01E-03	2.03E-03	4.92E-03	7.87E-03	1.50E-02	2.65E-02	4.05E-02	6.50E-02	1.05E-01	

(c) Source depth = 10 g/cm^2

Height(m)	Fluence per unit source intensity (photons/m^2 per photon/m^2) Energy (MeV)																		
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01	1.50E-01	2.00E-01	3.00E-01	5.00E-01	6.62E-01	1.00E+00	1.46E+00	2.00E+00	3.00E+00	5.00E+00	
0.10	0.0	0.0	0.0	0.0	1.20E-06	3.70E-03	1.74E-02	3.83E-02	5.83E-02	7.25E-02	9.55E-02	1.34E-01	1.60E-01	2.07E-01	2.61E-01	3.10E-01	3.79E-01	4.65E-01	
0.50	0.0	0.0	0.0	0.0	1.18E-06	3.66E-03	1.73E-02	3.79E-02	5.78E-02	7.18E-02	9.47E-02	1.33E-01	1.59E-01	2.06E-01	2.60E-01	3.09E-01	3.77E-01	4.63E-01	
1.00	0.0	0.0	0.0	0.0	1.16E-06	3.60E-03	1.70E-02	3.74E-02	5.71E-02	7.10E-02	9.38E-02	1.32E-01	1.58E-01	2.05E-01	2.58E-01	3.07E-01	3.75E-01	4.61E-01	
1.50	0.0	0.0	0.0	0.0	1.14E-06	3.56E-03	1.68E-02	3.69E-02	5.64E-02	7.02E-02	9.28E-02	1.30E-01	1.56E-01	2.03E-01	2.56E-01	3.05E-01	3.73E-01	4.59E-01	
2.00	0.0	0.0	0.0	0.0	1.11E-06	3.50E-03	1.66E-02	3.65E-02	5.57E-02	6.94E-02	9.18E-02	1.29E-01	1.55E-01	2.02E-01	2.54E-01	3.03E-01	3.71E-01	4.56E-01	
5.00	0.0	0.0	0.0	0.0	9.88E-07	3.22E-03	1.53E-02	3.38E-02	5.18E-02	6.49E-02	8.63E-02	1.22E-01	1.48E-01	1.93E-01	2.45E-01	2.93E-01	3.60E-01	4.44E-01	
10.00	0.0	0.0	0.0	0.0	8.10E-07	2.80E-03	1.34E-02	2.98E-02	4.60E-02	5.80E-02	7.80E-02	1.12E-01	1.36E-01	1.79E-01	2.29E-01	2.76E-01	3.42E-01	4.25E-01	
50.00	0.0	0.0	0.0	0.0	1.67E-07	9.40E-04	4.82E-03	1.13E-02	1.87E-02	2.49E-02	3.62E-02	5.76E-02	7.39E-02	1.05E-01	1.43E-01	1.80E-01	2.35E-01	3.08E-01	
100.00	0.0	0.0	0.0	0.0	0.0	2.50E-04	1.43E-03	3.61E-03	6.55E-03	9.33E-03	1.50E-02	2.70E-02	3.70E-02	5.72E-02	8.41E-02	1.12E-01	1.56E-01	2.17E-01	
150.00	0.0	0.0	0.0	0.0	0.0	6.86E-05	4.40E-04	1.22E-03	2.42E-03	3.69E-03	6.53E-03	1.33E-02	1.94E-02	3.27E-02	5.17E-02	7.30E-02	1.07E-01	1.59E-01	
200.00	0.0	0.0	0.0	0.0	0.0	1.93E-05	1.40E-04	4.23E-04	9.22E-04	1.51E-03	2.94E-03	6.75E-03	1.05E-02	1.92E-02	3.27E-02	4.87E-02	7.57E-02	1.19E-01	
300.00	0.0	0.0	0.0	0.0	0.0	1.59E-06	1.49E-05	5.44E-05	1.43E-04	2.68E-04	6.34E-04	1.85E-03	3.25E-03	7.04E-03	1.38E-02	2.28E-02	3.96E-02	6.93E-02	

Table 7. Air kerma rate at heights up to 1000 m per disintegration rate of the parent nuclide per unit soil weight(nGy/h per Bq/kg) for radionuclides in ^{238}U series uniformly distributed in the ground.

U-238 series								
Height (m)	U-238	Th-234	Pa-234m	Pa-234	U-234	Th-230		
0.00	8.08E-05	1.01E-03	4.34E-03	4.61E-04	9.49E-05	1.02E-04		
1.00	4.33E-05	9.47E-04	4.30E-03	4.49E-04	5.14E-05	6.90E-05		
2.00	2.93E-05	9.26E-04	4.15E-03	4.39E-04	3.66E-05	6.08E-05		
3.00	2.21E-05	8.96E-04	4.08E-03	4.35E-04	2.89E-05	5.37E-05		
5.00	1.53E-05	8.69E-04	4.01E-03	4.24E-04	2.12E-05	4.77E-05		
10.00	7.91E-06	8.04E-04	3.78E-03	3.96E-04	1.33E-05	4.17E-05		
20.00	5.83E-06	7.21E-04	3.36E-03	3.53E-04	9.57E-06	3.65E-05		
50.00	3.59E-06	4.92E-04	2.55E-03	2.66E-04	6.24E-06	2.51E-05		
100.00	1.92E-06	2.68E-04	1.72E-03	1.80E-04	3.72E-06	1.31E-05		
150.00		1.34E-04	1.15E-03	1.20E-04	1.85E-06	9.30E-06		
200.00		6.27E-05	8.18E-04	8.24E-05		4.00E-06		
300.00		1.50E-05	4.05E-04	3.87E-05				
400.00		3.92E-06	1.92E-04	1.86E-05				
500.00			9.44E-05	8.68E-06				
700.00			2.45E-05	1.77E-06				
1000.00								
Height (m)	Ra-226	Rn-222	Pb-214	Bi-214	Tl-210	Pb-210		Total
0.00	1.28E-03	9.11E-05	5.56E-02	4.12E-01	1.53E-04	3.04E-04		4.76E-01
1.00	1.25E-03	8.78E-05	5.46E-02	4.01E-01	1.51E-04	2.07E-04		4.63E-01
2.00	1.24E-03	8.63E-05	5.37E-02	3.95E-01	1.48E-04	1.73E-04		4.56E-01
3.00	1.21E-03	8.51E-05	5.24E-02	3.89E-01	1.46E-04	1.54E-04		4.49E-01
5.00	1.18E-03	8.25E-05	5.10E-02	3.80E-01	1.41E-04	1.41E-04		4.38E-01
10.00	1.12E-03	7.77E-05	4.82E-02	3.59E-01	1.36E-04	1.13E-04		4.14E-01
20.00	9.90E-04	7.04E-05	4.25E-02	3.23E-01	1.22E-04	9.20E-05		3.71E-01
50.00	7.16E-04	5.12E-05	3.11E-02	2.48E-01	9.29E-05	5.04E-05		2.84E-01
100.00	4.19E-04	3.29E-05	1.93E-02	1.72E-01	6.30E-05	1.90E-05		1.94E-01
150.00	2.45E-04	2.14E-05	1.20E-02	1.22E-01	4.36E-05	5.48E-06		1.35E-01
200.00	1.38E-04	1.35E-05	7.36E-03	8.74E-02	2.98E-05			9.59E-02
300.00	4.43E-05	5.52E-06	2.75E-03	4.53E-02	1.48E-05			4.86E-02
400.00	1.33E-05	2.25E-06	1.06E-03	2.43E-02	8.01E-06			2.56E-02
500.00	4.43E-06	8.93E-07	3.91E-04	1.29E-02	4.54E-06			1.34E-02
700.00			5.20E-05	3.69E-03				3.77E-03
1000.00				6.24E-04				6.24E-04

Table 8. Air kerma rate at heights up to 1000 m per disintegration rate of the parent nuclide per unit soil weight(nGy/h per Bq/kg) for radionuclides in ^{232}Th series uniformly distributed in the ground.

Th-232 series								
Height (m)	Th-232	Ra-228	Ac-228	Th-228	Ra-224	Rn-220		
0.00	8.63E-05	1.16E-04	2.24E-01	3.72E-04	2.16E-03	1.77E-04		
1.00	4.78E-05	5.45E-05	2.21E-01	3.44E-04	2.14E-03	1.73E-04		
2.00	3.68E-05	3.40E-05	2.18E-01	3.25E-04	2.06E-03	1.70E-04		
3.00	2.83E-05	2.12E-05	2.15E-01	3.16E-04	2.03E-03	1.67E-04		
5.00	2.19E-05	1.10E-05	2.06E-01	3.06E-04	1.98E-03	1.64E-04		
10.00	1.67E-05		1.96E-01	2.75E-04	1.88E-03	1.61E-04		
20.00	1.44E-05		1.73E-01	2.52E-04	1.66E-03	1.36E-04		
50.00	1.00E-05		1.33E-01	1.75E-04	1.20E-03	1.00E-04		
100.00	4.97E-06		8.84E-02	1.02E-04	7.33E-04	6.41E-05		
150.00	2.33E-06		6.01E-02	6.01E-05	4.39E-04	4.09E-05		
200.00			4.17E-02	3.50E-05	2.61E-04	2.73E-05		
300.00			1.98E-02	9.97E-06	8.54E-05	1.11E-05		
400.00			9.76E-03	2.89E-06	2.94E-05	4.72E-06		
500.00			4.87E-03		9.66E-06	1.80E-06		
700.00			1.22E-03			3.14E-07		
1000.00								
Height (m)	Pb-212	Bi-212	Tl-208					Total
0.00	2.88E-02	2.78E-02	3.32E-01					6.15E-01
1.00	2.77E-02	2.72E-02	3.26E-01					6.04E-01
2.00	2.73E-02	2.69E-02	3.21E-01					5.95E-01
3.00	2.69E-02	2.63E-02	3.18E-01					5.88E-01
5.00	2.62E-02	2.61E-02	3.11E-01					5.71E-01
10.00	2.44E-02	2.39E-02	2.93E-01					5.39E-01
20.00	2.15E-02	2.16E-02	2.65E-01					4.83E-01
50.00	1.59E-02	1.64E-02	2.09E-01					3.75E-01
100.00	9.50E-03	1.11E-02	1.51E-01					2.60E-01
150.00	5.56E-03	7.75E-03	1.10E-01					1.83E-01
200.00	3.27E-03	5.38E-03	8.29E-02					1.33E-01
300.00	1.09E-03	2.60E-03	4.72E-02					7.07E-02
400.00	3.63E-04	1.27E-03	2.77E-02					3.91E-02
500.00	1.07E-04	6.23E-04	1.61E-02					2.17E-02
700.00		1.58E-04	6.19E-03					7.56E-03
1000.00			1.42E-03					1.42E-03

Table 9. Air kerma rate at heights up to 1000 m per disintegration rate of the parent nuclide per unit soil weight(nGy/h per Bq/kg) for ^{40}K uniformly distributed in the ground.

K-40	
Height (m)	K-40
0.00	4.23E-02
1.00	4.17E-02
2.00	4.10E-02
3.00	4.04E-02
5.00	3.96E-02
10.00	3.70E-02
20.00	3.37E-02
50.00	2.60E-02
100.00	1.81E-02
150.00	1.27E-02
200.00	9.11E-03
300.00	4.81E-03
400.00	2.55E-03
500.00	1.42E-03
700.00	3.86E-04
1000.00	6.01E-05

Table 10. Air kerma rate at heights up to 1000 m per disintegration rate of the parent nuclide per unit soil weight(nGy/h per Bq/kg) for radionuclides in ^{235}U series uniformly distributed in the ground.

U-235 series								
Height (m)	U-235	Th-231	Pa-231	Ac-227	Th-227	Fr-223		
0.00	3.13E-02	2.13E-03	7.27E-03	4.85E-05	2.16E-02	1.19E-04		
1.00	3.06E-02	1.80E-03	6.89E-03	3.54E-05	2.10E-02	1.15E-04		
2.00	3.00E-02	1.61E-03	6.68E-03	2.99E-05	2.05E-02	1.11E-04		
3.00	2.95E-02	1.56E-03	6.52E-03	2.80E-05	2.02E-02	1.09E-04		
5.00	2.87E-02	1.44E-03	6.24E-03	2.43E-05	1.95E-02	1.07E-04		
10.00	2.68E-02	1.27E-03	5.80E-03	2.15E-05	1.85E-02	1.01E-04		
20.00	2.38E-02	1.09E-03	5.08E-03	1.91E-05	1.63E-02	8.60E-05		
50.00	1.72E-02	7.31E-04	3.67E-03	1.39E-05	1.18E-02	6.05E-05		
100.00	1.01E-02	4.01E-04	2.32E-03	7.71E-06	7.13E-03	3.56E-05		
150.00	5.96E-03	2.04E-04	1.38E-03	4.28E-06	4.30E-03	2.11E-05		
200.00	3.36E-03	9.76E-05	8.49E-04	2.43E-06	2.56E-03	1.21E-05		
300.00	1.07E-03	2.52E-05	3.02E-04	6.15E-07	9.11E-04	4.59E-06		
400.00	3.42E-04		1.15E-04		3.12E-04			
500.00	9.25E-05		4.07E-05		1.07E-04			
700.00								
1000.00								
Height (m)	Ra-223	Rn-219	Po-215	Pb-211	Bi-211	Tl-207		Total
0.00	2.46E-02	1.28E-02	5.33E-05	1.73E-02	1.11E-02	5.76E-04		1.28E-01
1.00	2.39E-02	1.25E-02	5.11E-05	1.70E-02	1.08E-02	5.67E-04		1.25E-01
2.00	2.34E-02	1.23E-02	5.06E-05	1.67E-02	1.06E-02	5.61E-04		1.22E-01
3.00	2.30E-02	1.20E-02	5.12E-05	1.65E-02	1.05E-02	5.44E-04		1.20E-01
5.00	2.25E-02	1.18E-02	4.76E-05	1.58E-02	1.01E-02	5.33E-04		1.16E-01
10.00	2.10E-02	1.10E-02	4.42E-05	1.50E-02	9.55E-03	5.07E-04		1.09E-01
20.00	1.87E-02	9.75E-03	3.98E-05	1.32E-02	8.52E-03	4.62E-04		9.70E-02
50.00	1.34E-02	7.11E-03	2.96E-05	9.97E-03	6.19E-03	3.43E-04		7.05E-02
100.00	8.09E-03	4.44E-03	1.85E-05	6.33E-03	3.82E-03	2.26E-04		4.29E-02
150.00	4.79E-03	2.73E-03	1.21E-05	4.25E-03	2.36E-03	1.52E-04		2.61E-02
200.00	2.76E-03	1.67E-03	7.66E-06	2.83E-03	1.52E-03	1.07E-04		1.57E-02
300.00	9.25E-04	6.47E-04	3.10E-06	1.24E-03	5.50E-04	5.06E-05		5.72E-03
400.00	3.14E-04	2.04E-04	1.11E-06	5.47E-04	1.86E-04	2.37E-05		2.04E-03
500.00	1.04E-04	7.58E-05		2.26E-04	7.29E-05	1.04E-05		7.29E-04
700.00				4.54E-05				4.54E-05
1000.00								

Table 11. Unscattered fluence rate at 1 m height per disintegration rate of the parent nuclide per unit soil weight for radionuclides in ^{238}U series uniformly distributed in the ground.

Nuclide	Energy (MeV)	Photon emission rate (1/s per Bq)	Fluence rate per activity (photons/m^2s per Bq/kg)
^{238}U series			
^{226}Ra	0.186	0.033	1.18
^{214}Pb	0.242	0.075	2.98
"	0.295	0.192	8.28
"	0.352	0.369	17.1
^{214}Bi	0.609	0.469	27.5
"	0.665	0.0158	0.965
"	0.768	0.0497	3.25
"	0.934	0.0319	2.29
^{234m}Pa	1.001	0.00589	0.630
^{214}Bi	1.120	0.155	12.2
"	1.238	0.0610	5.07
"	1.378	0.0410	3.61
"	1.402	0.0138	1.23
"	1.408	0.0250	2.23
"	1.509	0.0220	2.03
"	1.730	0.0300	2.98
"	1.765	0.162	16.2
"	1.847	0.0216	2.22
"	2.119	0.0125	1.38
"	2.204	0.0524	5.92
"	2.448	0.0162	1.93

Table 12. Unscattered fluence rate at 1 m height per disintegration rate of the parent nuclide per unit soil weight for radionuclides in ^{232}Th series and for ^{40}K uniformly distributed in the ground.

Nuclide	Energy (MeV)	Photon emission rate (1/s per Bq)	Fluence rate per activity (photons/m^{2}s per Bq/kg)
^{232}Th series			
^{228}Ac	0.209	0.0455	1.72
^{212}Pb	0.239	0.434	17.3
^{224}Ra	0.241	0.0397	1.58
^{228}Ac	0.338	0.120	5.47
"	0.463	0.0464	2.41
^{208}Tl	0.511	0.0809	4.38
"	0.583	0.306	17.6
^{212}Bi	0.727	0.0675	4.30
^{228}Ac	0.795	0.0484	3.22
^{208}Tl	0.860	0.0453	3.13
^{228}Ac	0.911	0.290	20.6
"	0.965	0.0545	3.98
"	0.969	0.175	12.8
"	1.588	0.0371	3.52
^{212}Bi	1.621	0.0149	1.43
^{228}Ac	1.630	0.0195	1.87
^{208}Tl	2.615	0.359	44.2
^{40}K	1.461	0.107	9.71

Table 13. Unscattered fluence rate at 1 m height per disintegration rate of the parent nuclide per unit soil weight for radionuclides in ^{235}U series uniformly distributed in the ground.

Nuclide	Energy (MeV)	Photon emission rate (1/s per Bq)	Fluence rate per activity (photons/m^2s per Bq/kg)
^{235}U series			
^{235}U	0.144	0.110	3.57
"	0.163	0.0508	1.74
"	0.186	0.572	20.7
"	0.205	0.0511	1.92
^{227}Th	0.236	0.114	4.53
"	0.256	0.0730	2.98
^{223}Ra	0.269	0.136	5.66
^{211}Bi	0.351	0.130	5.99
^{219}Rn	0.402	0.0647	3.16
^{211}Pb	0.832	0.0381	2.59

Table 14. Total air kerma at heights of 0.1 - 300 m per unit source intensity for monoenergetic plane sources at different depths in the ground for Soil 2.

HEIGHT = 0.1 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	8.69E-16	7.27E-16	5.59E-16	3.75E-16	2.07E-16	1.19E-16	1.20E-16	1.54E-16
0.10	1.88E-17	4.37E-17	7.40E-17	9.34E-17	8.82E-17	7.50E-17	8.36E-17	1.12E-16
0.15	5.29E-18	1.87E-17	4.32E-17	6.74E-17	7.38E-17	6.82E-17	7.78E-17	1.05E-16
0.20	1.61E-18	8.58E-18	2.66E-17	5.08E-17	6.36E-17	6.32E-17	7.35E-17	9.94E-17
0.30	1.67E-19	2.04E-18	1.11E-17	3.11E-17	4.97E-17	5.57E-17	6.70E-17	9.16E-17
0.50	0.0	1.39E-19	2.33E-18	1.35E-17	3.34E-17	4.61E-17	5.84E-17	8.14E-17
0.70	0.0	0.0	5.45E-19	6.38E-18	2.39E-17	3.97E-17	5.25E-17	7.46E-17
1.00	0.0	0.0	6.90E-20	2.28E-18	1.53E-17	3.27E-17	4.59E-17	6.70E-17
1.50	0.0	0.0	0.0	4.67E-19	7.91E-18	2.47E-17	3.82E-17	5.78E-17
2.00	0.0	0.0	0.0	1.01E-19	4.31E-18	1.94E-17	3.24E-17	5.11E-17
3.00	0.0	0.0	0.0	5.69E-21	1.42E-18	1.25E-17	2.42E-17	4.12E-17
5.00	0.0	0.0	0.0	0.0	1.78E-19	5.64E-18	1.45E-17	2.81E-17
7.00	0.0	0.0	0.0	0.0	2.63E-20	2.71E-18	9.04E-18	1.99E-17
10.00	0.0	0.0	0.0	0.0	0.0	9.53E-19	4.59E-18	1.22E-17
15.00	0.0	0.0	0.0	0.0	0.0	1.76E-19	1.54E-18	5.52E-18
20.00	0.0	0.0	0.0	0.0	0.0	3.50E-20	5.45E-19	2.51E-18
30.00	0.0	0.0	0.0	0.0	0.0	1.43E-21	6.41E-20	5.26E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.50E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.17E-21
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 0.5 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	3.54E-16	3.55E-16	3.18E-16	2.44E-16	1.50E-16	9.40E-17	9.78E-17	1.25E-16
0.10	1.38E-17	3.58E-17	6.53E-17	8.66E-17	8.36E-17	7.12E-17	7.96E-17	1.06E-16
0.15	3.98E-18	1.57E-17	3.87E-17	6.34E-17	7.09E-17	6.57E-17	7.50E-17	1.01E-16
0.20	1.22E-18	7.24E-18	2.40E-17	4.81E-17	6.16E-17	6.17E-17	7.14E-17	9.62E-17
0.30	1.29E-19	1.73E-18	1.01E-17	2.97E-17	4.85E-17	5.50E-17	6.56E-17	8.94E-17
0.50	0.0	1.20E-19	2.13E-18	1.29E-17	3.28E-17	4.59E-17	5.77E-17	8.02E-17
0.70	0.0	0.0	5.04E-19	6.17E-18	2.35E-17	3.95E-17	5.20E-17	7.38E-17
1.00	0.0	0.0	6.41E-20	2.20E-18	1.51E-17	3.27E-17	4.56E-17	6.64E-17
1.50	0.0	0.0	0.0	4.50E-19	7.84E-18	2.46E-17	3.80E-17	5.75E-17
2.00	0.0	0.0	0.0	9.84E-20	4.29E-18	1.94E-17	3.23E-17	5.08E-17
3.00	0.0	0.0	0.0	5.59E-21	1.41E-18	1.24E-17	2.44E-17	4.10E-17
5.00	0.0	0.0	0.0	0.0	1.76E-19	5.65E-18	1.47E-17	2.81E-17
7.00	0.0	0.0	0.0	0.0	2.56E-20	2.71E-18	9.06E-18	1.99E-17
10.00	0.0	0.0	0.0	0.0	0.0	9.52E-19	4.62E-18	1.22E-17
15.00	0.0	0.0	0.0	0.0	0.0	1.76E-19	1.55E-18	5.52E-18
20.00	0.0	0.0	0.0	0.0	0.0	3.52E-20	5.49E-19	2.53E-18
30.00	0.0	0.0	0.0	0.0	0.0	1.43E-21	6.37E-20	5.39E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.47E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.19E-21
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 1.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	1.82E-16	2.17E-16	2.22E-16	1.89E-16	1.26E-16	8.36E-17	8.76E-17	1.13E-16
0.10	9.51E-18	2.80E-17	5.58E-17	7.87E-17	7.89E-17	6.78E-17	7.57E-17	1.00E-16
0.15	2.79E-18	1.25E-17	3.37E-17	5.86E-17	6.76E-17	6.30E-17	7.20E-17	9.61E-17
0.20	8.72E-19	5.85E-18	2.12E-17	4.47E-17	5.92E-17	5.95E-17	6.89E-17	9.26E-17
0.30	9.52E-20	1.42E-18	9.03E-18	2.79E-17	4.71E-17	5.35E-17	6.40E-17	8.68E-17
0.50	0.0	9.97E-20	1.92E-18	1.23E-17	3.21E-17	4.49E-17	5.65E-17	7.86E-17
0.70	0.0	0.0	4.56E-19	5.89E-18	2.30E-17	3.88E-17	5.12E-17	7.26E-17
1.00	0.0	0.0	5.92E-20	2.10E-18	1.48E-17	3.22E-17	4.51E-17	6.57E-17
1.50	0.0	0.0	0.0	4.31E-19	7.71E-18	2.45E-17	3.77E-17	5.70E-17
2.00	0.0	0.0	0.0	9.48E-20	4.23E-18	1.93E-17	3.21E-17	5.05E-17
3.00	0.0	0.0	0.0	5.40E-21	1.39E-18	1.24E-17	2.41E-17	4.08E-17
5.00	0.0	0.0	0.0	0.0	1.75E-19	5.62E-18	1.46E-17	2.80E-17
7.00	0.0	0.0	0.0	0.0	2.57E-20	2.71E-18	9.05E-18	1.99E-17
10.00	0.0	0.0	0.0	0.0	0.0	9.49E-19	4.59E-18	1.22E-17
15.00	0.0	0.0	0.0	0.0	0.0	1.80E-19	1.55E-18	5.51E-18
20.00	0.0	0.0	0.0	0.0	0.0	3.56E-20	5.47E-19	2.52E-18
30.00	0.0	0.0	0.0	0.0	0.0	1.65E-21	6.41E-20	5.28E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.43E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.24E-21
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 1.5 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	1.07E-16	1.48E-16	1.70E-16	1.57E-16	1.12E-16	7.72E-17	8.17E-17	1.06E-16
0.10	6.59E-18	2.21E-17	4.82E-17	7.18E-17	7.46E-17	6.52E-17	7.29E-17	9.60E-17
0.15	1.98E-18	1.00E-17	2.95E-17	5.40E-17	6.48E-17	6.10E-17	6.96E-17	9.26E-17
0.20	6.28E-19	4.75E-18	1.87E-17	4.17E-17	5.68E-17	5.77E-17	6.70E-17	8.96E-17
0.30	6.97E-20	1.17E-18	8.06E-18	2.63E-17	4.54E-17	5.22E-17	6.25E-17	8.47E-17
0.50	0.0	8.41E-20	1.73E-18	1.17E-17	3.12E-17	4.43E-17	5.58E-17	7.72E-17
0.70	0.0	0.0	4.13E-19	5.60E-18	2.26E-17	3.84E-17	5.07E-17	7.16E-17
1.00	0.0	0.0	5.35E-20	2.01E-18	1.46E-17	3.20E-17	4.47E-17	6.49E-17
1.50	0.0	0.0	0.0	4.13E-19	7.60E-18	2.43E-17	3.74E-17	5.66E-17
2.00	0.0	0.0	0.0	9.19E-20	4.17E-18	1.91E-17	3.19E-17	5.01E-17
3.00	0.0	0.0	0.0	5.27E-21	1.37E-18	1.23E-17	2.40E-17	4.05E-17
5.00	0.0	0.0	0.0	0.0	1.71E-19	5.61E-18	1.45E-17	2.79E-17
7.00	0.0	0.0	0.0	0.0	2.51E-20	2.70E-18	9.04E-18	1.98E-17
10.00	0.0	0.0	0.0	0.0	0.0	9.47E-19	4.62E-18	1.22E-17
15.00	0.0	0.0	0.0	0.0	0.0	1.78E-19	1.54E-18	5.51E-18
20.00	0.0	0.0	0.0	0.0	0.0	3.51E-20	5.55E-19	2.51E-18
30.00	0.0	0.0	0.0	0.0	0.0	1.40E-21	6.50E-20	5.32E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.37E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.21E-21
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 2.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	6.65E-17	1.06E-16	1.35E-16	1.36E-16	1.02E-16	7.27E-17	7.74E-17	1.00E-16
0.10	4.62E-18	1.75E-17	4.20E-17	6.58E-17	7.05E-17	6.27E-17	7.03E-17	9.28E-17
0.15	1.40E-18	8.05E-18	2.61E-17	5.00E-17	6.16E-17	5.90E-17	6.74E-17	8.98E-17
0.20	4.48E-19	3.85E-18	1.65E-17	3.89E-17	5.46E-17	5.60E-17	6.50E-17	8.72E-17
0.30	5.03E-20	9.57E-19	7.19E-18	2.47E-17	4.39E-17	5.10E-17	6.11E-17	8.27E-17
0.50	0.0	7.07E-20	1.57E-18	1.11E-17	3.04E-17	4.34E-17	5.47E-17	7.58E-17
0.70	0.0	0.0	3.73E-19	5.35E-18	2.21E-17	3.79E-17	4.99E-17	7.05E-17
1.00	0.0	0.0	4.88E-20	1.94E-18	1.43E-17	3.16E-17	4.42E-17	6.42E-17
1.50	0.0	0.0	0.0	3.95E-19	7.48E-18	2.42E-17	3.71E-17	5.61E-17
2.00	0.0	0.0	0.0	8.78E-20	4.12E-18	1.90E-17	3.17E-17	4.98E-17
3.00	0.0	0.0	0.0	5.14E-21	1.36E-18	1.23E-17	2.39E-17	4.04E-17
5.00	0.0	0.0	0.0	0.0	1.69E-19	5.63E-18	1.45E-17	2.79E-17
7.00	0.0	0.0	0.0	0.0	2.48E-20	2.70E-18	9.01E-18	1.98E-17
10.00	0.0	0.0	0.0	0.0	0.0	9.49E-19	4.59E-18	1.21E-17
15.00	0.0	0.0	0.0	0.0	0.0	1.77E-19	1.53E-18	5.50E-18
20.00	0.0	0.0	0.0	0.0	0.0	3.45E-20	5.42E-19	2.50E-18
30.00	0.0	0.0	0.0	0.0	0.0	1.40E-21	6.57E-20	5.31E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.44E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.26E-21
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 5.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	6.13E-18	2.17E-17	4.85E-17	7.18E-17	7.07E-17	5.87E-17	6.44E-17	8.41E-17
0.10	5.84E-19	4.74E-18	1.88E-17	4.16E-17	5.42E-17	5.31E-17	6.07E-17	7.99E-17
0.15	1.89E-19	2.32E-18	1.23E-17	3.29E-17	4.88E-17	5.08E-17	5.91E-17	7.83E-17
0.20	6.34E-20	1.14E-18	8.12E-18	2.62E-17	4.40E-17	4.89E-17	5.76E-17	7.68E-17
0.30	7.12E-21	3.02E-19	3.71E-18	1.72E-17	3.64E-17	4.54E-17	5.50E-17	7.41E-17
0.50	0.0	2.25E-20	8.43E-19	8.02E-18	2.60E-17	3.95E-17	5.03E-17	6.93E-17
0.70	0.0	0.0	2.04E-19	3.97E-18	1.92E-17	3.50E-17	4.65E-17	6.54E-17
1.00	0.0	0.0	2.80E-20	1.47E-18	1.27E-17	2.96E-17	4.17E-17	6.02E-17
1.50	0.0	0.0	0.0	3.06E-19	6.73E-18	2.30E-17	3.58E-17	5.33E-17
2.00	0.0	0.0	0.0	6.94E-20	3.75E-18	1.82E-17	3.06E-17	4.78E-17
3.00	0.0	0.0	0.0	4.11E-21	1.26E-18	1.19E-17	2.33E-17	3.90E-17
5.00	0.0	0.0	0.0	0.0	1.58E-19	5.49E-18	1.42E-17	2.72E-17
7.00	0.0	0.0	0.0	0.0	2.40E-20	2.63E-18	8.87E-18	1.94E-17
10.00	0.0	0.0	0.0	0.0	0.0	9.31E-19	4.51E-18	1.19E-17
15.00	0.0	0.0	0.0	0.0	0.0	1.75E-19	1.51E-18	5.40E-18
20.00	0.0	0.0	0.0	0.0	0.0	3.37E-20	5.41E-19	2.46E-18
30.00	0.0	0.0	0.0	0.0	0.0	1.44E-21	6.44E-20	5.32E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.52E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.18E-21
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 10.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per $photon/m^2$)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	1.98E-19	2.46E-18	1.31E-17	3.39E-17	4.76E-17	4.77E-17	5.43E-17	7.11E-17
0.10	2.08E-20	6.15E-19	5.79E-18	2.16E-17	3.87E-17	4.41E-17	5.20E-17	6.92E-17
0.15	5.74E-21	3.25E-19	3.94E-18	1.77E-17	3.55E-17	4.26E-17	5.08E-17	6.83E-17
0.20	2.54E-21	1.64E-19	2.65E-18	1.44E-17	3.24E-17	4.13E-17	4.99E-17	6.73E-17
0.30	0.0	4.65E-20	1.27E-18	9.86E-18	2.74E-17	3.88E-17	4.81E-17	6.54E-17
0.50	0.0	3.21E-21	3.01E-19	4.79E-18	2.02E-17	3.45E-17	4.48E-17	6.20E-17
0.70	0.0	0.0	7.50E-20	2.43E-18	1.52E-17	3.10E-17	4.18E-17	5.90E-17
1.00	0.0	0.0	0.0	9.24E-19	1.03E-17	2.66E-17	3.80E-17	5.51E-17
1.50	0.0	0.0	0.0	1.95E-19	5.56E-18	2.10E-17	3.27E-17	4.93E-17
2.00	0.0	0.0	0.0	4.48E-20	3.12E-18	1.67E-17	2.85E-17	4.45E-17
3.00	0.0	0.0	0.0	2.68E-21	1.06E-18	1.10E-17	2.19E-17	3.69E-17
5.00	0.0	0.0	0.0	0.0	1.38E-19	5.13E-18	1.35E-17	2.60E-17
7.00	0.0	0.0	0.0	0.0	1.99E-20	2.49E-18	8.48E-18	1.86E-17
10.00	0.0	0.0	0.0	0.0	0.0	8.84E-19	4.36E-18	1.15E-17
15.00	0.0	0.0	0.0	0.0	0.0	1.66E-19	1.47E-18	5.25E-18
20.00	0.0	0.0	0.0	0.0	0.0	3.32E-20	5.18E-19	2.39E-18
30.00	0.0	0.0	0.0	0.0	0.0	1.36E-21	6.30E-20	5.06E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.34E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.09E-21
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 50.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per $photon/m^2$)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	5.23E-19	6.60E-18	1.83E-17	2.66E-17	3.76E-17
0.10	0.0	0.0	0.0	3.75E-19	5.71E-18	1.75E-17	2.57E-17	3.70E-17
0.15	0.0	0.0	0.0	3.20E-19	5.40E-18	1.71E-17	2.54E-17	3.67E-17
0.20	0.0	0.0	0.0	2.75E-19	5.07E-18	1.67E-17	2.50E-17	3.64E-17
0.30	0.0	0.0	0.0	2.02E-19	4.48E-18	1.60E-17	2.44E-17	3.57E-17
0.50	0.0	0.0	0.0	1.08E-19	3.50E-18	1.46E-17	2.32E-17	3.46E-17
0.70	0.0	0.0	0.0	6.29E-20	2.79E-18	1.33E-17	2.21E-17	3.34E-17
1.00	0.0	0.0	0.0	2.95E-20	2.00E-18	1.18E-17	2.05E-17	3.17E-17
1.50	0.0	0.0	0.0	5.37E-21	1.16E-18	9.64E-18	1.81E-17	2.92E-17
2.00	0.0	0.0	0.0	1.34E-21	6.88E-19	7.99E-18	1.61E-17	2.69E-17
3.00	0.0	0.0	0.0	0.0	2.48E-19	5.46E-18	1.28E-17	2.29E-17
5.00	0.0	0.0	0.0	0.0	3.39E-20	2.66E-18	8.17E-18	1.66E-17
7.00	0.0	0.0	0.0	0.0	4.61E-21	1.33E-18	5.30E-18	1.22E-17
10.00	0.0	0.0	0.0	0.0	0.0	4.84E-19	2.79E-18	7.67E-18
15.00	0.0	0.0	0.0	0.0	0.0	9.30E-20	9.56E-19	3.57E-18
20.00	0.0	0.0	0.0	0.0	0.0	1.81E-20	3.38E-19	1.65E-18
30.00	0.0	0.0	0.0	0.0	0.0	7.88E-22	4.15E-20	3.53E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.62E-20
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.62E-22
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 100.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	8.51E-19	6.65E-18	1.24E-17	1.99E-17
0.10	0.0	0.0	0.0	0.0	7.46E-19	6.32E-18	1.22E-17	1.98E-17
0.15	0.0	0.0	0.0	0.0	7.03E-19	6.14E-18	1.20E-17	1.96E-17
0.20	0.0	0.0	0.0	0.0	6.69E-19	6.04E-18	1.18E-17	1.94E-17
0.30	0.0	0.0	0.0	0.0	5.95E-19	5.80E-18	1.15E-17	1.90E-17
0.50	0.0	0.0	0.0	0.0	4.84E-19	5.33E-18	1.10E-17	1.84E-17
0.70	0.0	0.0	0.0	0.0	3.89E-19	4.93E-18	1.05E-17	1.78E-17
1.00	0.0	0.0	0.0	0.0	2.79E-19	4.39E-18	9.79E-18	1.71E-17
1.50	0.0	0.0	0.0	0.0	1.71E-19	3.62E-18	8.68E-18	1.57E-17
2.00	0.0	0.0	0.0	0.0	1.02E-19	3.01E-18	7.73E-18	1.47E-17
3.00	0.0	0.0	0.0	0.0	3.75E-20	2.10E-18	6.20E-18	1.25E-17
5.00	0.0	0.0	0.0	0.0	5.45E-21	1.06E-18	3.99E-18	9.19E-18
7.00	0.0	0.0	0.0	0.0	0.0	5.40E-19	2.65E-18	6.74E-18
10.00	0.0	0.0	0.0	0.0	0.0	1.99E-19	1.37E-18	4.27E-18
15.00	0.0	0.0	0.0	0.0	0.0	3.92E-20	4.87E-19	1.97E-18
20.00	0.0	0.0	0.0	0.0	0.0	8.11E-21	1.72E-19	9.30E-19
30.00	0.0	0.0	0.0	0.0	0.0	0.0	2.21E-20	2.03E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.91E-21
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 150.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	1.18E-19	2.42E-18	5.78E-18	1.05E-17
0.10	0.0	0.0	0.0	0.0	1.13E-19	2.33E-18	5.57E-18	1.04E-17
0.15	0.0	0.0	0.0	0.0	9.77E-20	2.27E-18	5.50E-18	1.03E-17
0.20	0.0	0.0	0.0	0.0	9.28E-20	2.20E-18	5.46E-18	1.02E-17
0.30	0.0	0.0	0.0	0.0	8.32E-20	2.11E-18	5.33E-18	1.00E-17
0.50	0.0	0.0	0.0	0.0	6.90E-20	1.94E-18	5.09E-18	9.74E-18
0.70	0.0	0.0	0.0	0.0	5.59E-20	1.81E-18	4.85E-18	9.40E-18
1.00	0.0	0.0	0.0	0.0	4.13E-20	1.61E-18	4.52E-18	8.97E-18
1.50	0.0	0.0	0.0	0.0	2.52E-20	1.36E-18	4.01E-18	8.28E-18
2.00	0.0	0.0	0.0	0.0	1.50E-20	1.13E-18	3.58E-18	7.69E-18
3.00	0.0	0.0	0.0	0.0	5.99E-21	7.96E-19	2.90E-18	6.62E-18
5.00	0.0	0.0	0.0	0.0	0.0	4.06E-19	1.88E-18	4.90E-18
7.00	0.0	0.0	0.0	0.0	0.0	2.04E-19	1.23E-18	3.59E-18
10.00	0.0	0.0	0.0	0.0	0.0	7.44E-20	6.56E-19	2.30E-18
15.00	0.0	0.0	0.0	0.0	0.0	1.50E-20	2.35E-19	1.06E-18
20.00	0.0	0.0	0.0	0.0	0.0	2.92E-21	8.17E-20	4.90E-19
30.00	0.0	0.0	0.0	0.0	0.0	0.0	1.03E-20	1.07E-19
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.14E-21
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 200.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	0.0	8.50E-19	2.52E-18	5.40E-18
0.10	0.0	0.0	0.0	0.0	0.0	8.48E-19	2.55E-18	5.28E-18
0.15	0.0	0.0	0.0	0.0	0.0	8.21E-19	2.51E-18	5.22E-18
0.20	0.0	0.0	0.0	0.0	0.0	8.02E-19	2.50E-18	5.20E-18
0.30	0.0	0.0	0.0	0.0	0.0	7.81E-19	2.39E-18	5.12E-18
0.50	0.0	0.0	0.0	0.0	0.0	6.94E-19	2.28E-18	4.95E-18
0.70	0.0	0.0	0.0	0.0	0.0	6.55E-19	2.18E-18	4.82E-18
1.00	0.0	0.0	0.0	0.0	0.0	5.87E-19	2.06E-18	4.59E-18
1.50	0.0	0.0	0.0	0.0	0.0	4.83E-19	1.84E-18	4.24E-18
2.00	0.0	0.0	0.0	0.0	0.0	4.07E-19	1.65E-18	3.95E-18
3.00	0.0	0.0	0.0	0.0	0.0	2.87E-19	1.32E-18	3.42E-18
5.00	0.0	0.0	0.0	0.0	0.0	1.47E-19	8.56E-19	2.53E-18
7.00	0.0	0.0	0.0	0.0	0.0	7.64E-20	5.67E-19	1.84E-18
10.00	0.0	0.0	0.0	0.0	0.0	2.91E-20	3.02E-19	1.17E-18
15.00	0.0	0.0	0.0	0.0	0.0	6.07E-21	1.08E-19	5.50E-19
20.00	0.0	0.0	0.0	0.0	0.0	1.26E-21	3.83E-20	2.47E-19
30.00	0.0	0.0	0.0	0.0	0.0	0.0	5.73E-21	5.50E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.50E-21
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 300.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	0.0	1.15E-19	4.90E-19	1.35E-18
0.10	0.0	0.0	0.0	0.0	0.0	9.97E-20	4.75E-19	1.32E-18
0.15	0.0	0.0	0.0	0.0	0.0	9.84E-20	4.74E-19	1.31E-18
0.20	0.0	0.0	0.0	0.0	0.0	9.92E-20	4.64E-19	1.30E-18
0.30	0.0	0.0	0.0	0.0	0.0	9.74E-20	4.43E-19	1.27E-18
0.50	0.0	0.0	0.0	0.0	0.0	8.75E-20	4.29E-19	1.23E-18
0.70	0.0	0.0	0.0	0.0	0.0	8.06E-20	4.19E-19	1.18E-18
1.00	0.0	0.0	0.0	0.0	0.0	7.30E-20	3.91E-19	1.13E-18
1.50	0.0	0.0	0.0	0.0	0.0	6.26E-20	3.55E-19	1.05E-18
2.00	0.0	0.0	0.0	0.0	0.0	5.19E-20	3.21E-19	9.78E-19
3.00	0.0	0.0	0.0	0.0	0.0	3.70E-20	2.59E-19	8.31E-19
5.00	0.0	0.0	0.0	0.0	0.0	1.86E-20	1.78E-19	6.22E-19
7.00	0.0	0.0	0.0	0.0	0.0	9.83E-21	1.16E-19	4.53E-19
10.00	0.0	0.0	0.0	0.0	0.0	3.26E-21	6.33E-20	2.90E-19
15.00	0.0	0.0	0.0	0.0	0.0	0.0	2.08E-20	1.34E-19
20.00	0.0	0.0	0.0	0.0	0.0	0.0	8.05E-21	6.16E-20
30.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.32E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 15. Fluence of primary photons at heights of 0.1 - 300 m per unit source intensity for monoenergetic plane sources at different depths in the ground for Soil 2.

HEIGHT = 0.1 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²) Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	1.17E+00	1.43E+00	1.75E+00	2.12E+00	2.52E+00	2.76E+00	2.82E+00	2.88E+00
0.10	2.52E-02	8.42E-02	2.25E-01	5.00E-01	9.64E-01	1.44E+00	1.61E+00	1.73E+00
0.15	7.05E-03	3.60E-02	1.30E-01	3.57E-01	7.88E-01	1.26E+00	1.43E+00	1.54E+00
0.20	2.13E-03	1.65E-02	8.02E-02	2.67E-01	6.67E-01	1.13E+00	1.30E+00	1.41E+00
0.30	2.21E-04	3.86E-03	3.33E-02	1.62E-01	5.07E-01	9.44E-01	1.11E+00	1.23E+00
0.50	0.0	2.62E-04	6.91E-03	6.87E-02	3.26E-01	7.22E-01	8.84E-01	9.95E-01
0.70	0.0	0.0	1.62E-03	3.22E-02	2.26E-01	5.84E-01	7.38E-01	8.45E-01
1.00	0.0	0.0	2.04E-04	1.13E-02	1.40E-01	4.47E-01	5.90E-01	6.92E-01
1.50	0.0	0.0	0.0	2.25E-03	6.92E-02	3.08E-01	4.35E-01	5.28E-01
2.00	0.0	0.0	0.0	4.87E-04	3.66E-02	2.24E-01	3.36E-01	4.20E-01
3.00	0.0	0.0	0.0	2.61E-05	1.14E-02	1.28E-01	2.15E-01	2.85E-01
5.00	0.0	0.0	0.0	0.0	1.35E-03	4.89E-02	1.02E-01	1.50E-01
7.00	0.0	0.0	0.0	0.0	1.82E-04	2.07E-02	5.29E-02	8.67E-02
10.00	0.0	0.0	0.0	0.0	1.02E-05	6.30E-03	2.17E-02	4.11E-02
15.00	0.0	0.0	0.0	0.0	0.0	9.89E-04	5.53E-03	1.33E-02
20.00	0.0	0.0	0.0	0.0	0.0	1.69E-04	1.53E-03	4.68E-03
30.00	0.0	0.0	0.0	0.0	0.0	5.72E-06	1.34E-04	6.49E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.30E-06	1.58E-05
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.44E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 0.5 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²) Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	4.72E-01	6.87E-01	9.77E-01	1.33E+00	1.72E+00	1.96E+00	2.02E+00	2.07E+00
0.10	1.84E-02	6.83E-02	1.96E-01	4.56E-01	8.95E-01	1.32E+00	1.47E+00	1.56E+00
0.15	5.28E-03	2.98E-02	1.16E-01	3.31E-01	7.42E-01	1.17E+00	1.33E+00	1.43E+00
0.20	1.62E-03	1.38E-02	7.19E-02	2.50E-01	6.34E-01	1.06E+00	1.22E+00	1.32E+00
0.30	1.70E-04	3.27E-03	3.02E-02	1.52E-01	4.86E-01	9.02E-01	1.06E+00	1.16E+00
0.50	0.0	2.25E-04	6.33E-03	6.53E-02	3.16E-01	6.98E-01	8.52E-01	9.57E-01
0.70	0.0	0.0	1.49E-03	3.07E-02	2.20E-01	5.67E-01	7.16E-01	8.18E-01
1.00	0.0	0.0	1.88E-04	1.08E-02	1.36E-01	4.36E-01	5.75E-01	6.74E-01
1.50	0.0	0.0	0.0	2.16E-03	6.76E-02	3.02E-01	4.26E-01	5.16E-01
2.00	0.0	0.0	0.0	4.69E-04	3.58E-02	2.20E-01	3.30E-01	4.13E-01
3.00	0.0	0.0	0.0	2.52E-05	1.12E-02	1.26E-01	2.12E-01	2.81E-01
5.00	0.0	0.0	0.0	0.0	1.33E-03	4.83E-02	1.00E-01	1.49E-01
7.00	0.0	0.0	0.0	0.0	1.79E-04	2.05E-02	5.23E-02	8.57E-02
10.00	0.0	0.0	0.0	0.0	1.00E-05	6.23E-03	2.14E-02	4.07E-02
15.00	0.0	0.0	0.0	0.0	0.0	9.78E-04	5.47E-03	1.32E-02
20.00	0.0	0.0	0.0	0.0	0.0	1.68E-04	1.52E-03	4.63E-03
30.00	0.0	0.0	0.0	0.0	0.0	5.66E-06	1.33E-04	6.44E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.29E-06	1.57E-05
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.41E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 1.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	2.42E-01	4.14E-01	6.71E-01	1.01E+00	1.38E+00	1.62E+00	1.68E+00	1.73E+00
0.10	1.26E-02	5.30E-02	1.67E-01	4.10E-01	8.22E-01	1.21E+00	1.33E+00	1.42E+00
0.15	3.70E-03	2.36E-02	1.00E-01	3.02E-01	6.92E-01	1.09E+00	1.22E+00	1.31E+00
0.20	1.15E-03	1.11E-02	6.29E-02	2.30E-01	5.96E-01	9.96E-01	1.14E+00	1.23E+00
0.30	1.23E-04	2.67E-03	2.67E-02	1.42E-01	4.61E-01	8.55E-01	1.00E+00	1.10E+00
0.50	0.0	1.86E-04	5.67E-03	6.13E-02	3.03E-01	6.69E-01	8.15E-01	9.14E-01
0.70	0.0	0.0	1.34E-03	2.90E-02	2.12E-01	5.47E-01	6.89E-01	7.88E-01
1.00	0.0	0.0	1.70E-04	1.03E-02	1.32E-01	4.23E-01	5.58E-01	6.52E-01
1.50	0.0	0.0	0.0	2.06E-03	6.57E-02	2.95E-01	4.15E-01	5.03E-01
2.00	0.0	0.0	0.0	4.47E-04	3.49E-02	2.15E-01	3.22E-01	4.03E-01
3.00	0.0	0.0	0.0	2.41E-05	1.09E-02	1.23E-01	2.07E-01	2.75E-01
5.00	0.0	0.0	0.0	0.0	1.30E-03	4.75E-02	9.88E-02	1.46E-01
7.00	0.0	0.0	0.0	0.0	1.75E-04	2.02E-02	5.15E-02	8.45E-02
10.00	0.0	0.0	0.0	0.0	9.80E-06	6.14E-03	2.11E-02	4.02E-02
15.00	0.0	0.0	0.0	0.0	0.0	9.65E-04	5.41E-03	1.31E-02
20.00	0.0	0.0	0.0	0.0	0.0	1.66E-04	1.50E-03	4.58E-03
30.00	0.0	0.0	0.0	0.0	0.0	5.59E-06	1.31E-04	6.37E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.27E-06	1.55E-05
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.37E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 1.5 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	1.41E-01	2.80E-01	5.07E-01	8.23E-01	1.19E+00	1.42E+00	1.48E+00	1.53E+00
0.10	8.69E-03	4.14E-02	1.43E-01	3.70E-01	7.61E-01	1.12E+00	1.23E+00	1.30E+00
0.15	2.60E-03	1.88E-02	8.70E-02	2.76E-01	6.48E-01	1.02E+00	1.14E+00	1.22E+00
0.20	8.20E-04	8.92E-03	5.51E-02	2.12E-01	5.62E-01	9.37E-01	1.06E+00	1.15E+00
0.30	8.89E-05	2.18E-03	2.37E-02	1.32E-01	4.39E-01	8.13E-01	9.47E-01	1.04E+00
0.50	0.0	1.53E-04	5.08E-03	5.77E-02	2.91E-01	6.43E-01	7.81E-01	8.75E-01
0.70	0.0	0.0	1.21E-03	2.74E-02	2.04E-01	5.29E-01	6.65E-01	7.59E-01
1.00	0.0	0.0	1.54E-04	9.74E-03	1.28E-01	4.11E-01	5.41E-01	6.32E-01
1.50	0.0	0.0	0.0	1.96E-03	6.39E-02	2.88E-01	4.05E-01	4.90E-01
2.00	0.0	0.0	0.0	4.26E-04	3.40E-02	2.10E-01	3.15E-01	3.94E-01
3.00	0.0	0.0	0.0	2.30E-05	1.06E-02	1.21E-01	2.03E-01	2.70E-01
5.00	0.0	0.0	0.0	0.0	1.27E-03	4.67E-02	9.72E-02	1.44E-01
7.00	0.0	0.0	0.0	0.0	1.72E-04	1.99E-02	5.08E-02	8.32E-02
10.00	0.0	0.0	0.0	0.0	9.60E-06	6.05E-03	2.09E-02	3.97E-02
15.00	0.0	0.0	0.0	0.0	0.0	9.52E-04	5.34E-03	1.29E-02
20.00	0.0	0.0	0.0	0.0	0.0	1.63E-04	1.48E-03	4.53E-03
30.00	0.0	0.0	0.0	0.0	0.0	5.52E-06	1.30E-04	6.31E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.26E-06	1.54E-05
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.33E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 2.0 METER

Source depth (g/cm^2)	Fluence per unit source intensity ($photons/m^2$ per $photon/m^2$)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	8.72E-02	1.99E-01	4.00E-01	6.98E-01	1.06E+00	1.28E+00	1.34E+00	1.39E+00
0.10	6.04E-03	3.26E-02	1.23E-01	3.36E-01	7.08E-01	1.04E+00	1.14E+00	1.21E+00
0.15	1.84E-03	1.50E-02	7.58E-02	2.53E-01	6.08E-01	9.56E-01	1.07E+00	1.15E+00
0.20	5.86E-04	7.20E-03	4.84E-02	1.96E-01	5.31E-01	8.86E-01	1.01E+00	1.09E+00
0.30	6.44E-05	1.78E-03	2.10E-02	1.23E-01	4.18E-01	7.75E-01	9.01E-01	9.87E-01
0.50	0.0	1.27E-04	4.56E-03	5.42E-02	2.79E-01	6.18E-01	7.50E-01	8.40E-01
0.70	0.0	0.0	1.09E-03	2.59E-02	1.97E-01	5.11E-01	6.42E-01	7.32E-01
1.00	0.0	0.0	1.40E-04	9.24E-03	1.24E-01	3.99E-01	5.25E-01	6.13E-01
1.50	0.0	0.0	0.0	1.86E-03	6.21E-02	2.80E-01	3.95E-01	4.78E-01
2.00	0.0	0.0	0.0	4.07E-04	3.31E-02	2.06E-01	3.08E-01	3.85E-01
3.00	0.0	0.0	0.0	2.20E-05	1.04E-02	1.19E-01	2.00E-01	2.65E-01
5.00	0.0	0.0	0.0	0.0	1.24E-03	4.59E-02	9.57E-02	1.42E-01
7.00	0.0	0.0	0.0	0.0	1.68E-04	1.96E-02	5.00E-02	8.21E-02
10.00	0.0	0.0	0.0	0.0	9.41E-06	5.97E-03	2.06E-02	3.91E-02
15.00	0.0	0.0	0.0	0.0	0.0	9.39E-04	5.27E-03	1.27E-02
20.00	0.0	0.0	0.0	0.0	0.0	1.61E-04	1.46E-03	4.48E-03
30.00	0.0	0.0	0.0	0.0	0.0	5.45E-06	1.28E-04	6.24E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.25E-06	1.52E-05
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.28E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 5.0 METER

Source depth (g/cm^2)	Fluence per unit source intensity ($photons/m^2$ per $photon/m^2$)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	7.92E-03	3.91E-02	1.38E-01	3.46E-01	6.48E-01	8.56E-01	9.14E-01	9.62E-01
0.10	7.53E-04	8.47E-03	5.36E-02	2.01E-01	4.95E-01	7.51E-01	8.29E-01	8.86E-01
0.15	2.45E-04	4.15E-03	3.49E-02	1.58E-01	4.39E-01	7.08E-01	7.92E-01	8.53E-01
0.20	8.18E-05	2.07E-03	2.31E-02	1.26E-01	3.93E-01	6.70E-01	7.59E-01	8.22E-01
0.30	9.54E-06	5.40E-04	1.05E-02	8.23E-02	3.20E-01	6.03E-01	6.99E-01	7.67E-01
0.50	0.0	4.08E-05	2.40E-03	3.79E-02	2.23E-01	5.00E-01	6.04E-01	6.76E-01
0.70	0.0	0.0	5.89E-04	1.85E-02	1.61E-01	4.24E-01	5.29E-01	6.04E-01
1.00	0.0	0.0	7.74E-05	6.76E-03	1.03E-01	3.38E-01	4.43E-01	5.18E-01
1.50	0.0	0.0	0.0	1.39E-03	5.26E-02	2.43E-01	3.41E-01	4.14E-01
2.00	0.0	0.0	0.0	3.06E-04	2.84E-02	1.81E-01	2.70E-01	3.38E-01
3.00	0.0	0.0	0.0	1.68E-05	9.01E-03	1.06E-01	1.78E-01	2.37E-01
5.00	0.0	0.0	0.0	0.0	1.09E-03	4.16E-02	8.68E-02	1.29E-01
7.00	0.0	0.0	0.0	0.0	1.48E-04	1.78E-02	4.58E-02	7.54E-02
10.00	0.0	0.0	0.0	0.0	8.33E-06	5.48E-03	1.90E-02	3.62E-02
15.00	0.0	0.0	0.0	0.0	0.0	8.67E-04	4.89E-03	1.19E-02
20.00	0.0	0.0	0.0	0.0	0.0	1.49E-04	1.36E-03	4.19E-03
30.00	0.0	0.0	0.0	0.0	0.0	5.06E-06	1.20E-04	5.86E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.17E-06	1.43E-05
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.04E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 10.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	4.27E-03	3.56E-02	1.52E-01	3.82E-01	5.61E-01	6.14E-01	6.57E-01
0.10	0.0	1.08E-03	1.58E-02	9.79E-02	3.12E-01	5.12E-01	5.73E-01	6.21E-01
0.15	0.0	5.55E-04	1.07E-02	7.96E-02	2.84E-01	4.90E-01	5.55E-01	6.04E-01
0.20	0.0	2.88E-04	7.34E-03	6.51E-02	2.59E-01	4.69E-01	5.37E-01	5.88E-01
0.30	0.0	7.92E-05	3.50E-03	4.43E-02	2.17E-01	4.32E-01	5.05E-01	5.58E-01
0.50	0.0	6.39E-06	8.47E-04	2.15E-02	1.57E-01	3.71E-01	4.49E-01	5.06E-01
0.70	0.0	0.0	2.15E-04	1.08E-02	1.17E-01	3.21E-01	4.02E-01	4.61E-01
1.00	0.0	0.0	0.0	4.05E-03	7.66E-02	2.63E-01	3.45E-01	4.05E-01
1.50	0.0	0.0	0.0	8.56E-04	4.02E-02	1.94E-01	2.73E-01	3.32E-01
2.00	0.0	0.0	0.0	1.92E-04	2.20E-02	1.47E-01	2.20E-01	2.77E-01
3.00	0.0	0.0	0.0	1.07E-05	7.12E-03	8.80E-02	1.49E-01	1.98E-01
5.00	0.0	0.0	0.0	0.0	8.76E-04	3.53E-02	7.42E-02	1.11E-01
7.00	0.0	0.0	0.0	0.0	1.20E-04	1.53E-02	3.96E-02	6.56E-02
10.00	0.0	0.0	0.0	0.0	6.81E-06	4.75E-03	1.66E-02	3.19E-02
15.00	0.0	0.0	0.0	0.0	0.0	7.58E-04	4.32E-03	1.06E-02
20.00	0.0	0.0	0.0	0.0	0.0	1.31E-04	1.21E-03	3.75E-03
30.00	0.0	0.0	0.0	0.0	0.0	4.47E-06	1.07E-04	5.27E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.05E-06	1.30E-05
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.67E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 50.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	1.76E-03	3.11E-02	8.83E-02	1.11E-01	1.31E-01
0.10	0.0	0.0	0.0	1.29E-03	2.76E-02	8.41E-02	1.07E-01	1.27E-01
0.15	0.0	0.0	0.0	1.11E-03	2.60E-02	8.21E-02	1.05E-01	1.26E-01
0.20	0.0	0.0	0.0	9.49E-04	2.45E-02	8.01E-02	1.03E-01	1.24E-01
0.30	0.0	0.0	0.0	7.01E-04	2.17E-02	7.64E-02	9.99E-02	1.21E-01
0.50	0.0	0.0	0.0	3.84E-04	1.72E-02	6.95E-02	9.33E-02	1.14E-01
0.70	0.0	0.0	0.0	2.12E-04	1.37E-02	6.33E-02	8.72E-02	1.08E-01
1.00	0.0	0.0	0.0	8.81E-05	9.79E-03	5.51E-02	7.89E-02	9.96E-02
1.50	0.0	0.0	0.0	2.08E-05	5.66E-03	4.40E-02	6.70E-02	8.72E-02
2.00	0.0	0.0	0.0	5.03E-06	3.32E-03	3.54E-02	5.72E-02	7.66E-02
3.00	0.0	0.0	0.0	0.0	1.18E-03	2.31E-02	4.19E-02	5.95E-02
5.00	0.0	0.0	0.0	0.0	1.60E-04	1.03E-02	2.32E-02	3.67E-02
7.00	0.0	0.0	0.0	0.0	2.31E-05	4.76E-03	1.32E-02	2.32E-02
10.00	0.0	0.0	0.0	0.0	1.37E-06	1.56E-03	5.90E-03	1.20E-02
15.00	0.0	0.0	0.0	0.0	0.0	2.63E-04	1.63E-03	4.24E-03
20.00	0.0	0.0	0.0	0.0	0.0	4.70E-05	4.73E-04	1.56E-03
30.00	0.0	0.0	0.0	0.0	0.0	1.66E-06	4.35E-05	2.30E-04
50.00	0.0	0.0	0.0	0.0	0.0	0.0	4.43E-07	5.88E-06
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.70E-07
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 100.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	2.87E-03	1.70E-02	2.49E-02	3.28E-02
0.10	0.0	0.0	0.0	0.0	2.58E-03	1.64E-02	2.42E-02	3.20E-02
0.15	0.0	0.0	0.0	0.0	2.45E-03	1.60E-02	2.38E-02	3.17E-02
0.20	0.0	0.0	0.0	0.0	2.33E-03	1.57E-02	2.35E-02	3.13E-02
0.30	0.0	0.0	0.0	0.0	2.10E-03	1.51E-02	2.28E-02	3.06E-02
0.50	0.0	0.0	0.0	0.0	1.70E-03	1.39E-02	2.15E-02	2.92E-02
0.70	0.0	0.0	0.0	0.0	1.39E-03	1.29E-02	2.04E-02	2.79E-02
1.00	0.0	0.0	0.0	0.0	1.02E-03	1.14E-02	1.87E-02	2.61E-02
1.50	0.0	0.0	0.0	0.0	6.16E-04	9.36E-03	1.62E-02	2.33E-02
2.00	0.0	0.0	0.0	0.0	3.74E-04	7.71E-03	1.41E-02	2.08E-02
3.00	0.0	0.0	0.0	0.0	1.39E-04	5.25E-03	1.07E-02	1.67E-02
5.00	0.0	0.0	0.0	0.0	2.03E-05	2.48E-03	6.28E-03	1.08E-02
7.00	0.0	0.0	0.0	0.0	0.0	1.19E-03	3.72E-03	7.11E-03
10.00	0.0	0.0	0.0	0.0	0.0	4.09E-04	1.73E-03	3.84E-03
15.00	0.0	0.0	0.0	0.0	0.0	7.22E-05	5.01E-04	1.42E-03
20.00	0.0	0.0	0.0	0.0	0.0	1.33E-05	1.50E-04	5.40E-04
30.00	0.0	0.0	0.0	0.0	0.0	0.0	1.44E-05	8.25E-05
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.52E-07	2.20E-06
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 150.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	3.26E-04	3.96E-03	6.68E-03	9.77E-03
0.10	0.0	0.0	0.0	0.0	2.95E-04	3.81E-03	6.51E-03	9.56E-03
0.15	0.0	0.0	0.0	0.0	2.81E-04	3.74E-03	6.42E-03	9.46E-03
0.20	0.0	0.0	0.0	0.0	2.67E-04	3.67E-03	6.34E-03	9.36E-03
0.30	0.0	0.0	0.0	0.0	2.42E-04	3.54E-03	6.17E-03	9.17E-03
0.50	0.0	0.0	0.0	0.0	1.99E-04	3.28E-03	5.85E-03	8.79E-03
0.70	0.0	0.0	0.0	0.0	1.63E-04	3.05E-03	5.55E-03	8.43E-03
1.00	0.0	0.0	0.0	0.0	1.22E-04	2.73E-03	5.13E-03	7.91E-03
1.50	0.0	0.0	0.0	0.0	7.50E-05	2.27E-03	4.50E-03	7.13E-03
2.00	0.0	0.0	0.0	0.0	4.63E-05	1.88E-03	3.95E-03	6.43E-03
3.00	0.0	0.0	0.0	0.0	1.78E-05	1.31E-03	3.05E-03	5.23E-03
5.00	0.0	0.0	0.0	0.0	0.0	6.39E-04	1.84E-03	3.48E-03
7.00	0.0	0.0	0.0	0.0	0.0	3.15E-04	1.11E-03	2.33E-03
10.00	0.0	0.0	0.0	0.0	0.0	1.11E-04	5.31E-04	1.29E-03
15.00	0.0	0.0	0.0	0.0	0.0	2.03E-05	1.59E-04	4.92E-04
20.00	0.0	0.0	0.0	0.0	0.0	3.81E-06	4.86E-05	1.91E-04
30.00	0.0	0.0	0.0	0.0	0.0	0.0	4.79E-06	3.01E-05
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.23E-08	8.32E-07
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 200.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	0.0	1.00E-03	1.95E-03	3.15E-03
0.10	0.0	0.0	0.0	0.0	0.0	9.66E-04	1.90E-03	3.09E-03
0.15	0.0	0.0	0.0	0.0	0.0	9.49E-04	1.88E-03	3.06E-03
0.20	0.0	0.0	0.0	0.0	0.0	9.32E-04	1.85E-03	3.03E-03
0.30	0.0	0.0	0.0	0.0	0.0	8.99E-04	1.81E-03	2.97E-03
0.50	0.0	0.0	0.0	0.0	0.0	8.37E-04	1.72E-03	2.85E-03
0.70	0.0	0.0	0.0	0.0	0.0	7.79E-04	1.63E-03	2.74E-03
1.00	0.0	0.0	0.0	0.0	0.0	7.00E-04	1.51E-03	2.58E-03
1.50	0.0	0.0	0.0	0.0	0.0	5.86E-04	1.34E-03	2.34E-03
2.00	0.0	0.0	0.0	0.0	0.0	4.91E-04	1.18E-03	2.11E-03
3.00	0.0	0.0	0.0	0.0	0.0	3.45E-04	9.20E-04	1.73E-03
5.00	0.0	0.0	0.0	0.0	0.0	1.72E-04	5.62E-04	1.17E-03
7.00	0.0	0.0	0.0	0.0	0.0	8.61E-05	3.45E-04	7.96E-04
10.00	0.0	0.0	0.0	0.0	0.0	3.10E-05	1.68E-04	4.48E-04
15.00	0.0	0.0	0.0	0.0	0.0	5.78E-06	5.14E-05	1.74E-04
20.00	0.0	0.0	0.0	0.0	0.0	1.11E-06	1.60E-05	6.89E-05
30.00	0.0	0.0	0.0	0.0	0.0	0.0	1.61E-06	1.11E-05
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.81E-08	3.16E-07
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 300.0 METER

Source depth (g/cm²)	Fluence per unit source intensity (photons/m² per photon/m²)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	0.0	7.29E-05	1.88E-04	3.72E-04
0.10	0.0	0.0	0.0	0.0	0.0	7.04E-05	1.84E-04	3.65E-04
0.15	0.0	0.0	0.0	0.0	0.0	6.92E-05	1.81E-04	3.62E-04
0.20	0.0	0.0	0.0	0.0	0.0	6.81E-05	1.79E-04	3.58E-04
0.30	0.0	0.0	0.0	0.0	0.0	6.58E-05	1.75E-04	3.51E-04
0.50	0.0	0.0	0.0	0.0	0.0	6.14E-05	1.67E-04	3.38E-04
0.70	0.0	0.0	0.0	0.0	0.0	5.74E-05	1.59E-04	3.26E-04
1.00	0.0	0.0	0.0	0.0	0.0	5.18E-05	1.48E-04	3.08E-04
1.50	0.0	0.0	0.0	0.0	0.0	4.37E-05	1.31E-04	2.80E-04
2.00	0.0	0.0	0.0	0.0	0.0	3.69E-05	1.17E-04	2.55E-04
3.00	0.0	0.0	0.0	0.0	0.0	2.63E-05	9.20E-05	2.11E-04
5.00	0.0	0.0	0.0	0.0	0.0	1.34E-05	5.74E-05	1.45E-04
7.00	0.0	0.0	0.0	0.0	0.0	6.86E-06	3.59E-05	1.00E-04
10.00	0.0	0.0	0.0	0.0	0.0	2.53E-06	1.78E-05	5.76E-05
15.00	0.0	0.0	0.0	0.0	0.0	0.0	5.63E-06	2.31E-05
20.00	0.0	0.0	0.0	0.0	0.0	0.0	1.79E-06	9.32E-06
30.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.56E-06
50.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 16. Air kerma of primary photons at heights of 0.1 - 300 m per unit source intensity for monoenergetic plane sources at different depths in the ground for Soil 2.

HEIGHT = 0.1 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	8.60E-16	7.12E-16	5.42E-16	3.55E-16	1.81E-16	8.83E-17	8.35E-17	1.06E-16
0.10	1.85E-17	4.20E-17	6.98E-17	8.37E-17	6.92E-17	4.61E-17	4.77E-17	6.34E-17
0.15	5.18E-18	1.80E-17	4.05E-17	5.98E-17	5.66E-17	4.02E-17	4.23E-17	5.67E-17
0.20	1.57E-18	8.22E-18	2.49E-17	4.47E-17	4.79E-17	3.61E-17	3.84E-17	5.19E-17
0.30	1.62E-19	1.93E-18	1.03E-17	2.71E-17	3.64E-17	3.02E-17	3.29E-17	4.51E-17
0.50	0.0	1.31E-19	2.15E-18	1.15E-17	2.34E-17	2.31E-17	2.61E-17	3.65E-17
0.70	0.0	0.0	5.02E-19	5.38E-18	1.62E-17	1.87E-17	2.18E-17	3.10E-17
1.00	0.0	0.0	6.33E-20	1.89E-18	1.00E-17	1.43E-17	1.75E-17	2.54E-17
1.50	0.0	0.0	0.0	3.76E-19	4.97E-18	9.87E-18	1.29E-17	1.94E-17
2.00	0.0	0.0	0.0	8.15E-20	2.63E-18	7.17E-18	9.92E-18	1.54E-17
3.00	0.0	0.0	0.0	4.37E-21	8.16E-19	4.09E-18	6.36E-18	1.05E-17
5.00	0.0	0.0	0.0	0.0	9.68E-20	1.57E-18	3.01E-18	5.53E-18
7.00	0.0	0.0	0.0	0.0	1.31E-20	6.64E-19	1.57E-18	3.18E-18
10.00	0.0	0.0	0.0	0.0	7.29E-22	2.02E-19	6.41E-19	1.51E-18
15.00	0.0	0.0	0.0	0.0	0.0	3.17E-20	1.64E-19	4.90E-19
20.00	0.0	0.0	0.0	0.0	0.0	5.43E-21	4.53E-20	1.72E-19
30.00	0.0	0.0	0.0	0.0	0.0	1.83E-22	3.96E-21	2.38E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.84E-23	5.80E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.63E-23
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 0.5 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	3.47E-16	3.42E-16	3.03E-16	2.23E-16	1.24E-16	6.27E-17	5.98E-17	7.61E-17
0.10	1.35E-17	3.40E-17	6.10E-17	7.64E-17	6.42E-17	4.23E-17	4.34E-17	5.74E-17
0.15	3.88E-18	1.48E-17	3.59E-17	5.54E-17	5.33E-17	3.76E-17	3.92E-17	5.24E-17
0.20	1.19E-18	6.88E-18	2.23E-17	4.18E-17	4.55E-17	3.40E-17	3.60E-17	4.85E-17
0.30	1.25E-19	1.63E-18	9.37E-18	2.55E-17	3.49E-17	2.89E-17	3.13E-17	4.28E-17
0.50	0.0	1.12E-19	1.96E-18	1.09E-17	2.27E-17	2.23E-17	2.52E-17	3.51E-17
0.70	0.0	0.0	4.61E-19	5.14E-18	1.58E-17	1.81E-17	2.12E-17	3.01E-17
1.00	0.0	0.0	5.84E-20	1.81E-18	9.78E-18	1.40E-17	1.70E-17	2.47E-17
1.50	0.0	0.0	0.0	3.62E-19	4.85E-18	9.67E-18	1.26E-17	1.90E-17
2.00	0.0	0.0	0.0	7.85E-20	2.57E-18	7.04E-18	9.74E-18	1.51E-17
3.00	0.0	0.0	0.0	4.22E-21	8.01E-19	4.03E-18	6.26E-18	1.03E-17
5.00	0.0	0.0	0.0	0.0	9.51E-20	1.54E-18	2.97E-18	5.46E-18
7.00	0.0	0.0	0.0	0.0	1.28E-20	6.56E-19	1.55E-18	3.15E-18
10.00	0.0	0.0	0.0	0.0	7.18E-22	1.99E-19	6.34E-19	1.49E-18
15.00	0.0	0.0	0.0	0.0	0.0	3.13E-20	1.62E-19	4.85E-19
20.00	0.0	0.0	0.0	0.0	0.0	5.37E-21	4.49E-20	1.70E-19
30.00	0.0	0.0	0.0	0.0	0.0	1.81E-22	3.92E-21	2.36E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.81E-23	5.76E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.62E-23
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 1.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	1.77E-16	2.06E-16	2.08E-16	1.68E-16	9.93E-17	5.17E-17	4.97E-17	6.36E-17
0.10	9.25E-18	2.64E-17	5.18E-17	6.86E-17	5.90E-17	3.86E-17	3.94E-17	5.20E-17
0.15	2.72E-18	1.18E-17	3.11E-17	5.05E-17	4.97E-17	3.49E-17	3.62E-17	4.82E-17
0.20	8.45E-19	5.52E-18	1.95E-17	3.85E-17	4.28E-17	3.19E-17	3.36E-17	4.51E-17
0.30	9.02E-20	1.33E-18	8.30E-18	2.37E-17	3.31E-17	2.74E-17	2.96E-17	4.03E-17
0.50	0.0	9.26E-20	1.76E-18	1.03E-17	2.17E-17	2.14E-17	2.41E-17	3.36E-17
0.70	0.0	0.0	4.16E-19	4.85E-18	1.52E-17	1.75E-17	2.04E-17	2.89E-17
1.00	0.0	0.0	5.29E-20	1.72E-18	9.47E-18	1.36E-17	1.65E-17	2.40E-17
1.50	0.0	0.0	0.0	3.44E-19	4.72E-18	9.43E-18	1.23E-17	1.85E-17
2.00	0.0	0.0	0.0	7.48E-20	2.50E-18	6.88E-18	9.52E-18	1.48E-17
3.00	0.0	0.0	0.0	4.03E-21	7.82E-19	3.95E-18	6.14E-18	1.01E-17
5.00	0.0	0.0	0.0	0.0	9.31E-20	1.52E-18	2.92E-18	5.37E-18
7.00	0.0	0.0	0.0	0.0	1.26E-20	6.46E-19	1.52E-18	3.10E-18
10.00	0.0	0.0	0.0	0.0	7.03E-22	1.97E-19	6.25E-19	1.48E-18
15.00	0.0	0.0	0.0	0.0	0.0	3.09E-20	1.60E-19	4.79E-19
20.00	0.0	0.0	0.0	0.0	0.0	5.30E-21	4.43E-20	1.68E-19
30.00	0.0	0.0	0.0	0.0	0.0	1.79E-22	3.88E-21	2.34E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.77E-23	5.70E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.60E-23
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 1.5 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	1.03E-16	1.39E-16	1.57E-16	1.38E-16	8.54E-17	4.54E-17	4.38E-17	5.63E-17
0.10	6.38E-18	2.06E-17	4.43E-17	6.19E-17	5.46E-17	3.57E-17	3.63E-17	4.79E-17
0.15	1.91E-18	9.37E-18	2.70E-17	4.62E-17	4.65E-17	3.26E-17	3.37E-17	4.48E-17
0.20	6.02E-19	4.44E-18	1.71E-17	3.55E-17	4.04E-17	3.00E-17	3.15E-17	4.23E-17
0.30	6.53E-20	1.08E-18	7.36E-18	2.21E-17	3.15E-17	2.60E-17	2.80E-17	3.81E-17
0.50	0.0	7.65E-20	1.58E-18	9.65E-18	2.09E-17	2.06E-17	2.31E-17	3.21E-17
0.70	0.0	0.0	3.75E-19	4.59E-18	1.47E-17	1.69E-17	1.96E-17	2.79E-17
1.00	0.0	0.0	4.79E-20	1.63E-18	9.18E-18	1.32E-17	1.60E-17	2.32E-17
1.50	0.0	0.0	0.0	3.27E-19	4.59E-18	9.20E-18	1.20E-17	1.80E-17
2.00	0.0	0.0	0.0	7.14E-20	2.44E-18	6.73E-18	9.31E-18	1.45E-17
3.00	0.0	0.0	0.0	3.85E-21	7.64E-19	3.88E-18	6.02E-18	9.93E-18
5.00	0.0	0.0	0.0	0.0	9.11E-20	1.49E-18	2.88E-18	5.29E-18
7.00	0.0	0.0	0.0	0.0	1.23E-20	6.36E-19	1.50E-18	3.06E-18
10.00	0.0	0.0	0.0	0.0	6.89E-22	1.94E-19	6.17E-19	1.46E-18
15.00	0.0	0.0	0.0	0.0	0.0	3.05E-20	1.58E-19	4.74E-19
20.00	0.0	0.0	0.0	0.0	0.0	5.23E-21	4.38E-20	1.66E-19
30.00	0.0	0.0	0.0	0.0	0.0	1.77E-22	3.83E-21	2.32E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.73E-23	5.65E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.59E-23
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 2.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	6.40E-17	9.92E-17	1.24E-16	1.17E-16	7.57E-17	4.10E-17	3.97E-17	5.12E-17
0.10	4.43E-18	1.62E-17	3.81E-17	5.62E-17	5.08E-17	3.33E-17	3.38E-17	4.46E-17
0.15	1.35E-18	7.49E-18	2.35E-17	4.24E-17	4.37E-17	3.06E-17	3.16E-17	4.21E-17
0.20	4.30E-19	3.59E-18	1.50E-17	3.28E-17	3.81E-17	2.84E-17	2.97E-17	3.99E-17
0.30	4.73E-20	8.86E-19	6.53E-18	2.06E-17	3.00E-17	2.48E-17	2.66E-17	3.62E-17
0.50	0.0	6.32E-20	1.42E-18	9.08E-18	2.01E-17	1.98E-17	2.22E-17	3.08E-17
0.70	0.0	0.0	3.38E-19	4.33E-18	1.42E-17	1.64E-17	1.90E-17	2.69E-17
1.00	0.0	0.0	4.34E-20	1.55E-18	8.89E-18	1.28E-17	1.55E-17	2.25E-17
1.50	0.0	0.0	0.0	3.12E-19	4.46E-18	8.98E-18	1.17E-17	1.76E-17
2.00	0.0	0.0	0.0	6.81E-20	2.38E-18	6.58E-18	9.10E-18	1.42E-17
3.00	0.0	0.0	0.0	3.68E-21	7.45E-19	3.80E-18	5.90E-18	9.74E-18
5.00	0.0	0.0	0.0	0.0	8.91E-20	1.47E-18	2.83E-18	5.20E-18
7.00	0.0	0.0	0.0	0.0	1.21E-20	6.26E-19	1.48E-18	3.01E-18
10.00	0.0	0.0	0.0	0.0	6.76E-22	1.91E-19	6.08E-19	1.44E-18
15.00	0.0	0.0	0.0	0.0	0.0	3.01E-20	1.56E-19	4.68E-19
20.00	0.0	0.0	0.0	0.0	0.0	5.17E-21	4.33E-20	1.65E-19
30.00	0.0	0.0	0.0	0.0	0.0	1.74E-22	3.79E-21	2.29E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.69E-23	5.59E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.57E-23
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 5.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	5.81E-18	1.95E-17	4.28E-17	5.79E-17	4.65E-17	2.74E-17	2.70E-17	3.53E-17
0.10	5.52E-19	4.22E-18	1.66E-17	3.36E-17	3.55E-17	2.41E-17	2.45E-17	3.25E-17
0.15	1.80E-19	2.07E-18	1.08E-17	2.64E-17	3.15E-17	2.27E-17	2.34E-17	3.13E-17
0.20	6.01E-20	1.03E-18	7.17E-18	2.11E-17	2.82E-17	2.14E-17	2.24E-17	3.02E-17
0.30	7.00E-21	2.69E-19	3.27E-18	1.38E-17	2.30E-17	1.93E-17	2.07E-17	2.82E-17
0.50	0.0	2.04E-20	7.45E-19	6.35E-18	1.60E-17	1.60E-17	1.79E-17	2.48E-17
0.70	0.0	0.0	1.83E-19	3.10E-18	1.15E-17	1.36E-17	1.57E-17	2.22E-17
1.00	0.0	0.0	2.40E-20	1.13E-18	7.39E-18	1.08E-17	1.31E-17	1.90E-17
1.50	0.0	0.0	0.0	2.32E-19	3.78E-18	7.78E-18	1.01E-17	1.52E-17
2.00	0.0	0.0	0.0	5.13E-20	2.04E-18	5.78E-18	7.99E-18	1.24E-17
3.00	0.0	0.0	0.0	2.80E-21	6.47E-19	3.39E-18	5.27E-18	8.71E-18
5.00	0.0	0.0	0.0	0.0	7.82E-20	1.33E-18	2.57E-18	4.74E-18
7.00	0.0	0.0	0.0	0.0	1.06E-20	5.71E-19	1.35E-18	2.77E-18
10.00	0.0	0.0	0.0	0.0	5.98E-22	1.75E-19	5.61E-19	1.33E-18
15.00	0.0	0.0	0.0	0.0	0.0	2.77E-20	1.45E-19	4.36E-19
20.00	0.0	0.0	0.0	0.0	0.0	4.78E-21	4.03E-20	1.54E-19
30.00	0.0	0.0	0.0	0.0	0.0	1.62E-22	3.54E-21	2.15E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.45E-23	5.27E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.48E-23
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 10.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	2.13E-18	1.10E-17	2.54E-17	2.74E-17	1.80E-17	1.81E-17	2.41E-17
0.10	0.0	5.39E-19	4.91E-18	1.64E-17	2.24E-17	1.64E-17	1.70E-17	2.28E-17
0.15	0.0	2.77E-19	3.33E-18	1.33E-17	2.04E-17	1.57E-17	1.64E-17	2.22E-17
0.20	0.0	1.44E-19	2.28E-18	1.09E-17	1.86E-17	1.50E-17	1.59E-17	2.16E-17
0.30	3.12E-22	3.95E-20	1.09E-18	7.42E-18	1.56E-17	1.38E-17	1.49E-17	2.05E-17
0.50	0.0	3.18E-21	2.63E-19	3.59E-18	1.13E-17	1.19E-17	1.33E-17	1.86E-17
0.70	0.0	0.0	6.68E-20	1.81E-18	8.36E-18	1.03E-17	1.19E-17	1.69E-17
1.00	0.0	0.0	0.0	6.78E-19	5.50E-18	8.42E-18	1.02E-17	1.49E-17
1.50	0.0	0.0	0.0	1.43E-19	2.89E-18	6.21E-18	8.07E-18	1.22E-17
2.00	0.0	0.0	0.0	3.21E-20	1.58E-18	4.70E-18	6.51E-18	1.02E-17
3.00	0.0	0.0	0.0	1.79E-21	5.11E-19	2.82E-18	4.39E-18	7.29E-18
5.00	0.0	0.0	0.0	0.0	6.29E-20	1.13E-18	2.19E-18	4.06E-18
7.00	0.0	0.0	0.0	0.0	8.64E-21	4.91E-19	1.17E-18	2.41E-18
10.00	0.0	0.0	0.0	0.0	4.89E-22	1.52E-19	4.91E-19	1.17E-18
15.00	0.0	0.0	0.0	0.0	0.0	2.43E-20	1.28E-19	3.88E-19
20.00	0.0	0.0	0.0	0.0	0.0	4.20E-21	3.58E-20	1.38E-19
30.00	0.0	0.0	0.0	0.0	0.0	1.43E-22	3.16E-21	1.94E-20
50.00	0.0	0.0	0.0	0.0	0.0	0.0	3.10E-23	4.77E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.35E-23
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 50.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	2.94E-19	2.23E-18	2.82E-18	3.28E-18	4.82E-18
0.10	0.0	0.0	0.0	2.16E-19	1.98E-18	2.69E-18	3.16E-18	4.68E-18
0.15	0.0	0.0	0.0	1.85E-19	1.86E-18	2.63E-18	3.11E-18	4.62E-18
0.20	0.0	0.0	0.0	1.59E-19	1.76E-18	2.57E-18	3.06E-18	4.55E-18
0.30	0.0	0.0	0.0	1.17E-19	1.56E-18	2.45E-18	2.95E-18	4.43E-18
0.50	0.0	0.0	0.0	6.43E-20	1.24E-18	2.22E-18	2.76E-18	4.19E-18
0.70	0.0	0.0	0.0	3.55E-20	9.84E-19	2.03E-18	2.58E-18	3.96E-18
1.00	0.0	0.0	0.0	1.47E-20	7.03E-19	1.76E-18	2.33E-18	3.66E-18
1.50	0.0	0.0	0.0	3.48E-21	4.07E-19	1.41E-18	1.98E-18	3.20E-18
2.00	0.0	0.0	0.0	8.42E-22	2.38E-19	1.13E-18	1.69E-18	2.81E-18
3.00	0.0	0.0	0.0	0.0	8.44E-20	7.41E-19	1.24E-18	2.18E-18
5.00	0.0	0.0	0.0	0.0	1.15E-20	3.30E-19	6.87E-19	1.35E-18
7.00	0.0	0.0	0.0	0.0	1.66E-21	1.52E-19	3.91E-19	8.53E-19
10.00	0.0	0.0	0.0	0.0	9.85E-23	5.00E-20	1.74E-19	4.42E-19
15.00	0.0	0.0	0.0	0.0	0.0	8.43E-21	4.82E-20	1.56E-19
20.00	0.0	0.0	0.0	0.0	0.0	1.50E-21	1.40E-20	5.74E-20
30.00	0.0	0.0	0.0	0.0	0.0	5.30E-23	1.29E-21	8.43E-21
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.31E-23	2.16E-22
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.23E-24
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 100.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	2.06E-19	5.46E-19	7.35E-19	1.20E-18
0.10	0.0	0.0	0.0	0.0	1.86E-19	5.24E-19	7.14E-19	1.18E-18
0.15	0.0	0.0	0.0	0.0	1.76E-19	5.13E-19	7.04E-19	1.16E-18
0.20	0.0	0.0	0.0	0.0	1.67E-19	5.03E-19	6.94E-19	1.15E-18
0.30	0.0	0.0	0.0	0.0	1.51E-19	4.83E-19	6.74E-19	1.12E-18
0.50	0.0	0.0	0.0	0.0	1.22E-19	4.46E-19	6.37E-19	1.07E-18
0.70	0.0	0.0	0.0	0.0	9.96E-20	4.11E-19	6.02E-19	1.03E-18
1.00	0.0	0.0	0.0	0.0	7.33E-20	3.65E-19	5.53E-19	9.57E-19
1.50	0.0	0.0	0.0	0.0	4.42E-20	3.00E-19	4.80E-19	8.55E-19
2.00	0.0	0.0	0.0	0.0	2.68E-20	2.47E-19	4.18E-19	7.65E-19
3.00	0.0	0.0	0.0	0.0	1.00E-20	1.68E-19	3.17E-19	6.13E-19
5.00	0.0	0.0	0.0	0.0	1.46E-21	7.93E-20	1.86E-19	3.98E-19
7.00	0.0	0.0	0.0	0.0	0.0	3.82E-20	1.10E-19	2.61E-19
10.00	0.0	0.0	0.0	0.0	0.0	1.31E-20	5.11E-20	1.41E-19
15.00	0.0	0.0	0.0	0.0	0.0	2.31E-21	1.48E-20	5.21E-20
20.00	0.0	0.0	0.0	0.0	0.0	4.25E-22	4.44E-21	1.98E-20
30.00	0.0	0.0	0.0	0.0	0.0	0.0	4.24E-22	3.03E-21
50.00	0.0	0.0	0.0	0.0	0.0	0.0	4.49E-24	8.09E-23
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 150.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	2.34E-20	1.27E-19	1.98E-19	3.59E-19
0.10	0.0	0.0	0.0	0.0	2.12E-20	1.22E-19	1.92E-19	3.51E-19
0.15	0.0	0.0	0.0	0.0	2.02E-20	1.20E-19	1.90E-19	3.48E-19
0.20	0.0	0.0	0.0	0.0	1.92E-20	1.18E-19	1.87E-19	3.44E-19
0.30	0.0	0.0	0.0	0.0	1.74E-20	1.13E-19	1.82E-19	3.37E-19
0.50	0.0	0.0	0.0	0.0	1.43E-20	1.05E-19	1.73E-19	3.23E-19
0.70	0.0	0.0	0.0	0.0	1.17E-20	9.76E-20	1.64E-19	3.09E-19
1.00	0.0	0.0	0.0	0.0	8.75E-21	8.73E-20	1.52E-19	2.90E-19
1.50	0.0	0.0	0.0	0.0	5.38E-21	7.25E-20	1.33E-19	2.62E-19
2.00	0.0	0.0	0.0	0.0	3.32E-21	6.04E-20	1.17E-19	2.36E-19
3.00	0.0	0.0	0.0	0.0	1.28E-21	4.19E-20	9.03E-20	1.92E-19
5.00	0.0	0.0	0.0	0.0	0.0	2.04E-20	5.43E-20	1.28E-19
7.00	0.0	0.0	0.0	0.0	0.0	1.01E-20	3.29E-20	8.56E-20
10.00	0.0	0.0	0.0	0.0	0.0	3.56E-21	1.57E-20	4.74E-20
15.00	0.0	0.0	0.0	0.0	0.0	6.48E-22	4.69E-21	1.80E-20
20.00	0.0	0.0	0.0	0.0	0.0	1.22E-22	1.44E-21	7.02E-21
30.00	0.0	0.0	0.0	0.0	0.0	0.0	1.42E-22	1.11E-21
50.00	0.0	0.0	0.0	0.0	0.0	0.0	1.54E-24	3.05E-23
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 200.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	0.0	3.21E-20	5.76E-20	1.16E-19
0.10	0.0	0.0	0.0	0.0	0.0	3.09E-20	5.61E-20	1.13E-19
0.15	0.0	0.0	0.0	0.0	0.0	3.04E-20	5.54E-20	1.12E-19
0.20	0.0	0.0	0.0	0.0	0.0	2.98E-20	5.47E-20	1.11E-19
0.30	0.0	0.0	0.0	0.0	0.0	2.88E-20	5.34E-20	1.09E-19
0.50	0.0	0.0	0.0	0.0	0.0	2.68E-20	5.07E-20	1.05E-19
0.70	0.0	0.0	0.0	0.0	0.0	2.49E-20	4.83E-20	1.01E-19
1.00	0.0	0.0	0.0	0.0	0.0	2.24E-20	4.47E-20	9.47E-20
1.50	0.0	0.0	0.0	0.0	0.0	1.88E-20	3.95E-20	8.57E-20
2.00	0.0	0.0	0.0	0.0	0.0	1.57E-20	3.49E-20	7.76E-20
3.00	0.0	0.0	0.0	0.0	0.0	1.10E-20	2.72E-20	6.37E-20
5.00	0.0	0.0	0.0	0.0	0.0	5.49E-21	1.66E-20	4.31E-20
7.00	0.0	0.0	0.0	0.0	0.0	2.76E-21	1.02E-20	2.92E-20
10.00	0.0	0.0	0.0	0.0	0.0	9.92E-22	4.96E-21	1.64E-20
15.00	0.0	0.0	0.0	0.0	0.0	1.85E-22	1.52E-21	6.40E-21
20.00	0.0	0.0	0.0	0.0	0.0	3.54E-23	4.73E-22	2.53E-21
30.00	0.0	0.0	0.0	0.0	0.0	0.0	4.77E-23	4.08E-22
50.00	0.0	0.0	0.0	0.0	0.0	0.0	5.35E-25	1.16E-23
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEIGHT = 300.0 METER

Source depth (g/cm^2)	Air kerma per unit source intensity (Gy per photon/m^2)							
	Energy (MeV)							
	1.00E-02	1.20E-02	1.50E-02	2.00E-02	3.00E-02	5.00E-02	7.00E-02	1.00E-01
0.0	0.0	0.0	0.0	0.0	0.0	2.33E-21	5.55E-21	1.37E-20
0.10	0.0	0.0	0.0	0.0	0.0	2.25E-21	5.42E-21	1.34E-20
0.15	0.0	0.0	0.0	0.0	0.0	2.22E-21	5.36E-21	1.33E-20
0.20	0.0	0.0	0.0	0.0	0.0	2.18E-21	5.30E-21	1.32E-20
0.30	0.0	0.0	0.0	0.0	0.0	2.11E-21	5.17E-21	1.29E-20
0.50	0.0	0.0	0.0	0.0	0.0	1.97E-21	4.93E-21	1.24E-20
0.70	0.0	0.0	0.0	0.0	0.0	1.84E-21	4.70E-21	1.20E-20
1.00	0.0	0.0	0.0	0.0	0.0	1.66E-21	4.37E-21	1.13E-20
1.50	0.0	0.0	0.0	0.0	0.0	1.40E-21	3.88E-21	1.03E-20
2.00	0.0	0.0	0.0	0.0	0.0	1.18E-21	3.45E-21	9.36E-21
3.00	0.0	0.0	0.0	0.0	0.0	8.41E-22	2.72E-21	7.75E-21
5.00	0.0	0.0	0.0	0.0	0.0	4.29E-22	1.70E-21	5.33E-21
7.00	0.0	0.0	0.0	0.0	0.0	2.20E-22	1.06E-21	3.68E-21
10.00	0.0	0.0	0.0	0.0	0.0	8.11E-23	5.27E-22	2.11E-21
15.00	0.0	0.0	0.0	0.0	0.0	0.0	1.66E-22	8.47E-22
20.00	0.0	0.0	0.0	0.0	0.0	0.0	5.31E-23	3.42E-22
30.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.71E-23
50.00	0.0	0.0	0.0	0.0	0.0	0.0	6.49E-26	0.0
70.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
200.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 17. Change of air kerma at 1 m height due to soil compositions. Ratios of air kerma for Soil 2 over that for Soil 1 are shown for plane source in the ground.

Source depth (g/cm^2)	Ratio of air kerma (Soil 2 / Soil 1)			
	20 keV	50 keV	100 keV	150 keV
0.0	1.00	1.03	1.02	-
0.1	1.17	1.06	1.03	-
0.5	1.61	1.11	1.05	-
1.0	2.24	1.16	1.06	-
5.0		1.48	1.13	-
10.0		1.93	1.21	-
Uniform	1.26	1.24	1.14	1.08

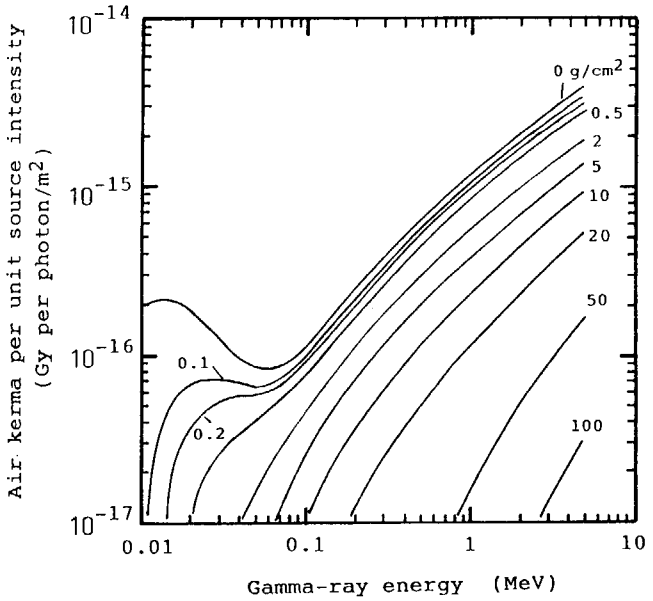

Figure 1. Total air kerma at 1 m height per unit source intensity for monoenergetic plane sources at different depths in the ground for Soil 1.

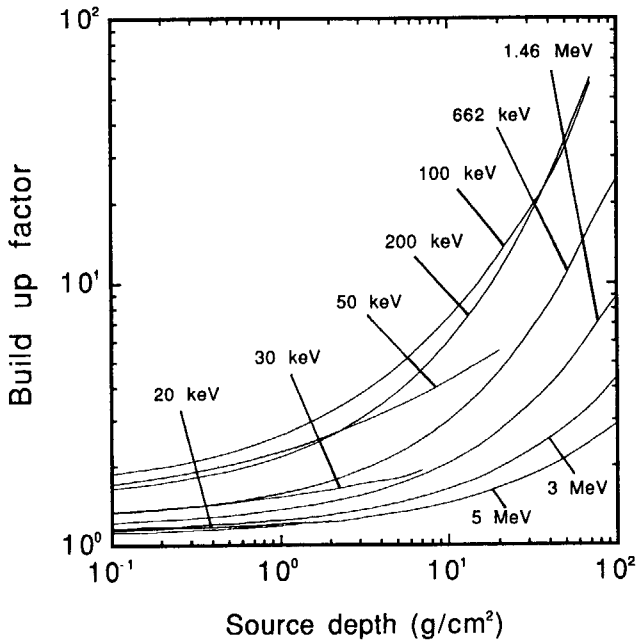

Figure 2. Ratio of the total air kerma to the direct air kerma at 1m height for monoenergetic plane source in the ground. The source energies are shown in the figure.

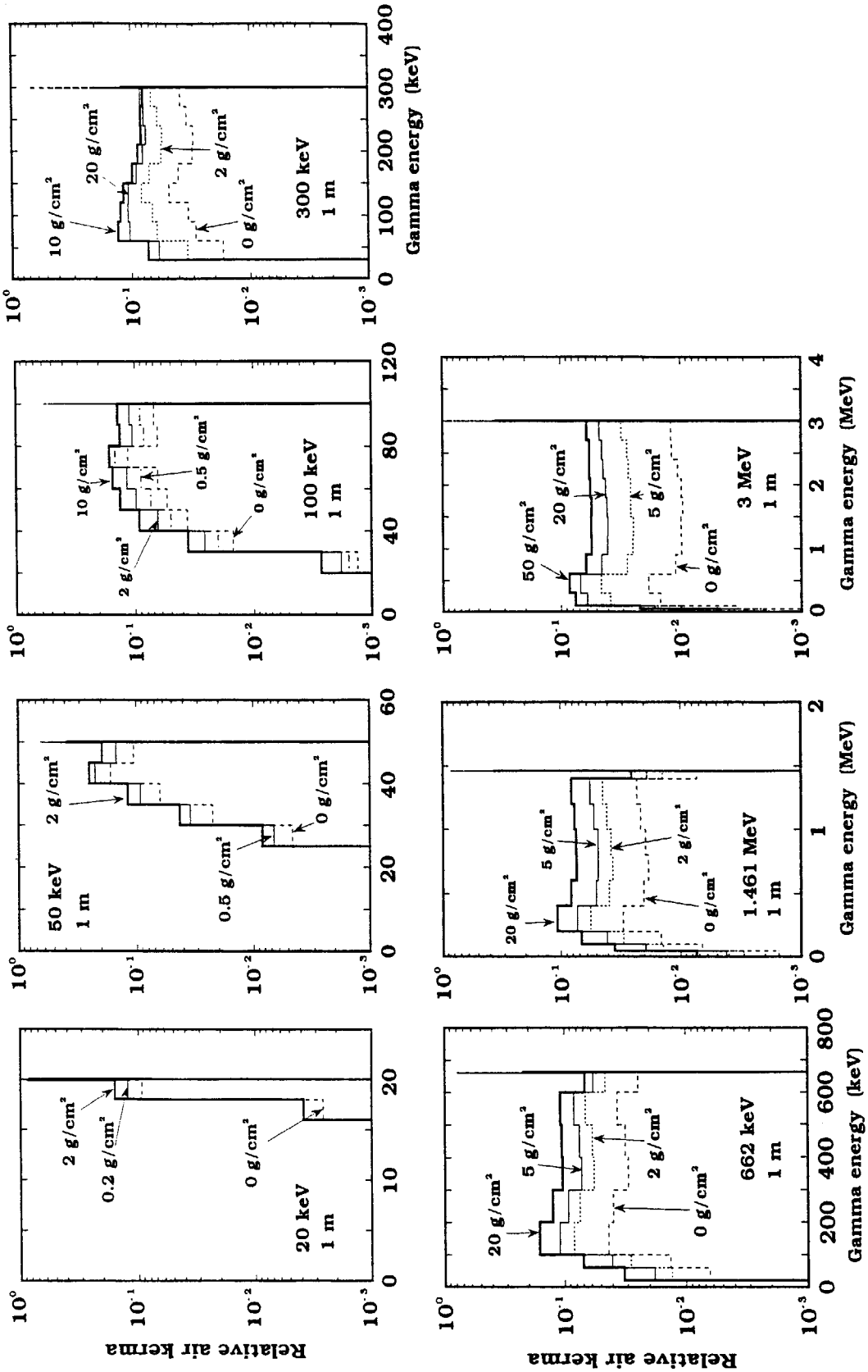

Figure 3. Energy distribution of air kerma at a height of 1 m for monoenergetic plane sources in the ground. The total air kerma is normalized to unity for each case.

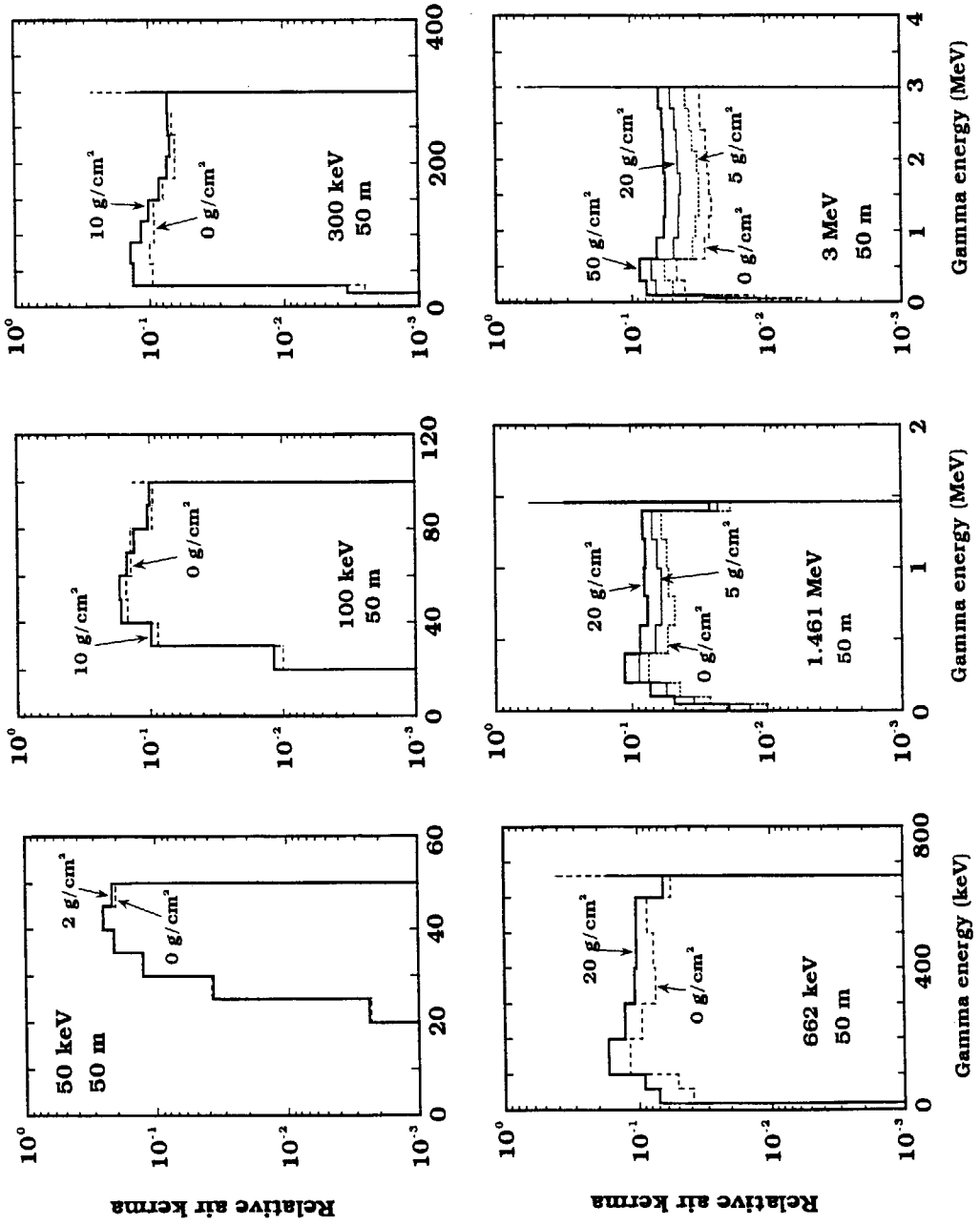

Figure 4. Energy distribution of air kerma at a height of 50 m for monoenergetic plane sources in the ground. The total air kerma is normalized to unity for each case.

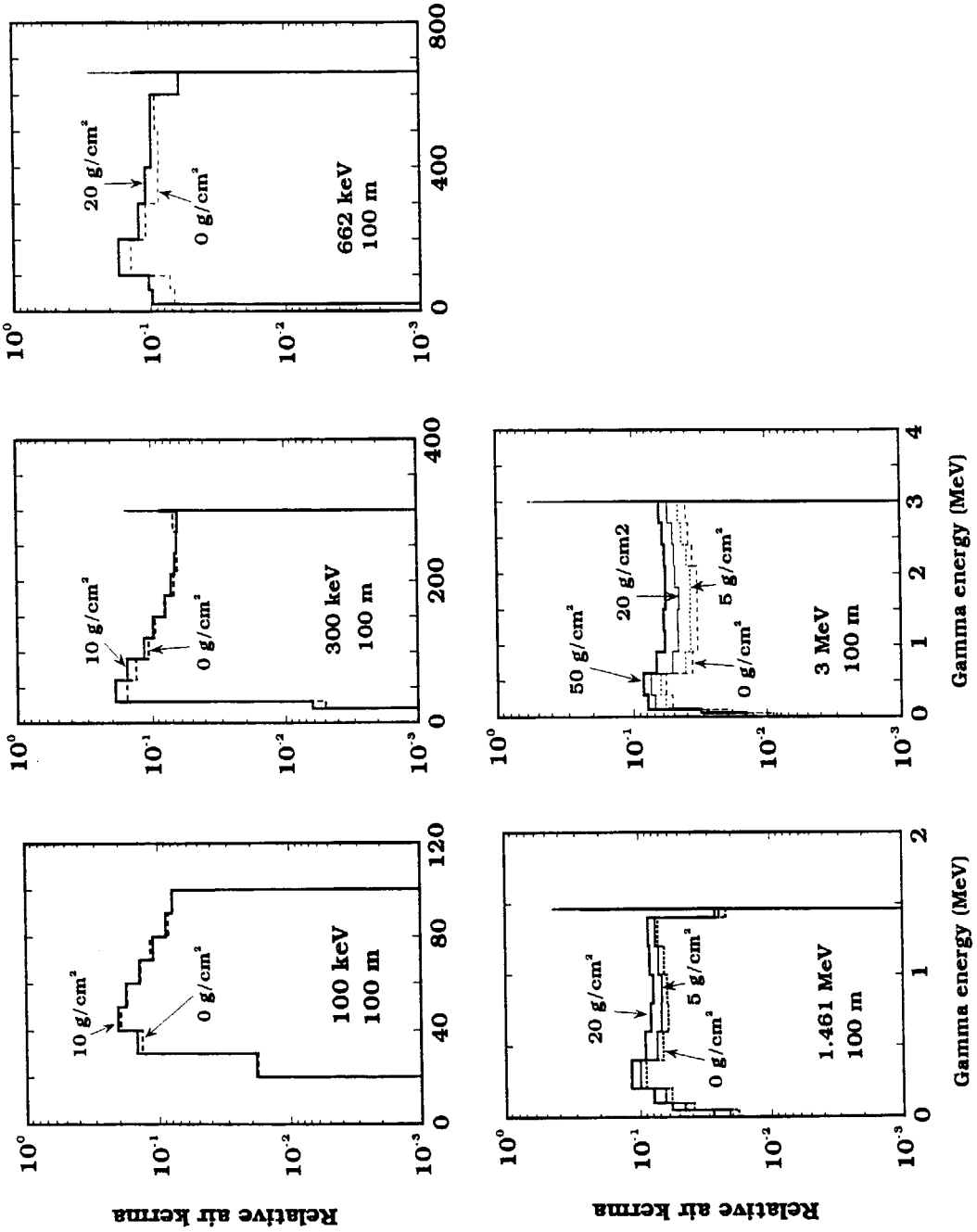

Figure 5. Energy distribution of air kerma at a height of 100 m for monoenergetic plane sources in the ground. The total air kerma is normalized to unity for each case.

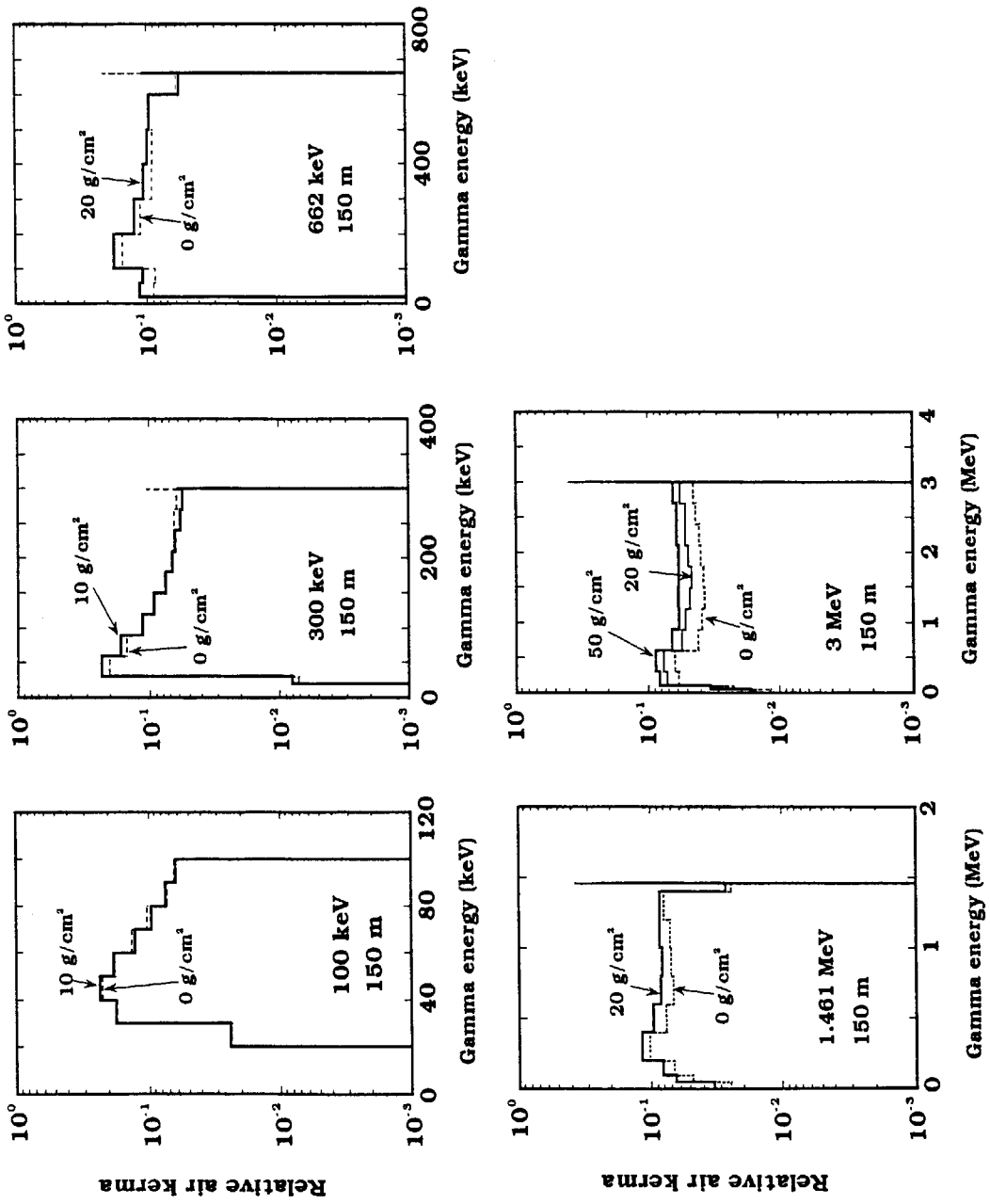

Figure 6. Energy distribution of air kerma at a height of 150 m for monoenergetic plane sources in the ground. The total air kerma is normalized to unity for each case.

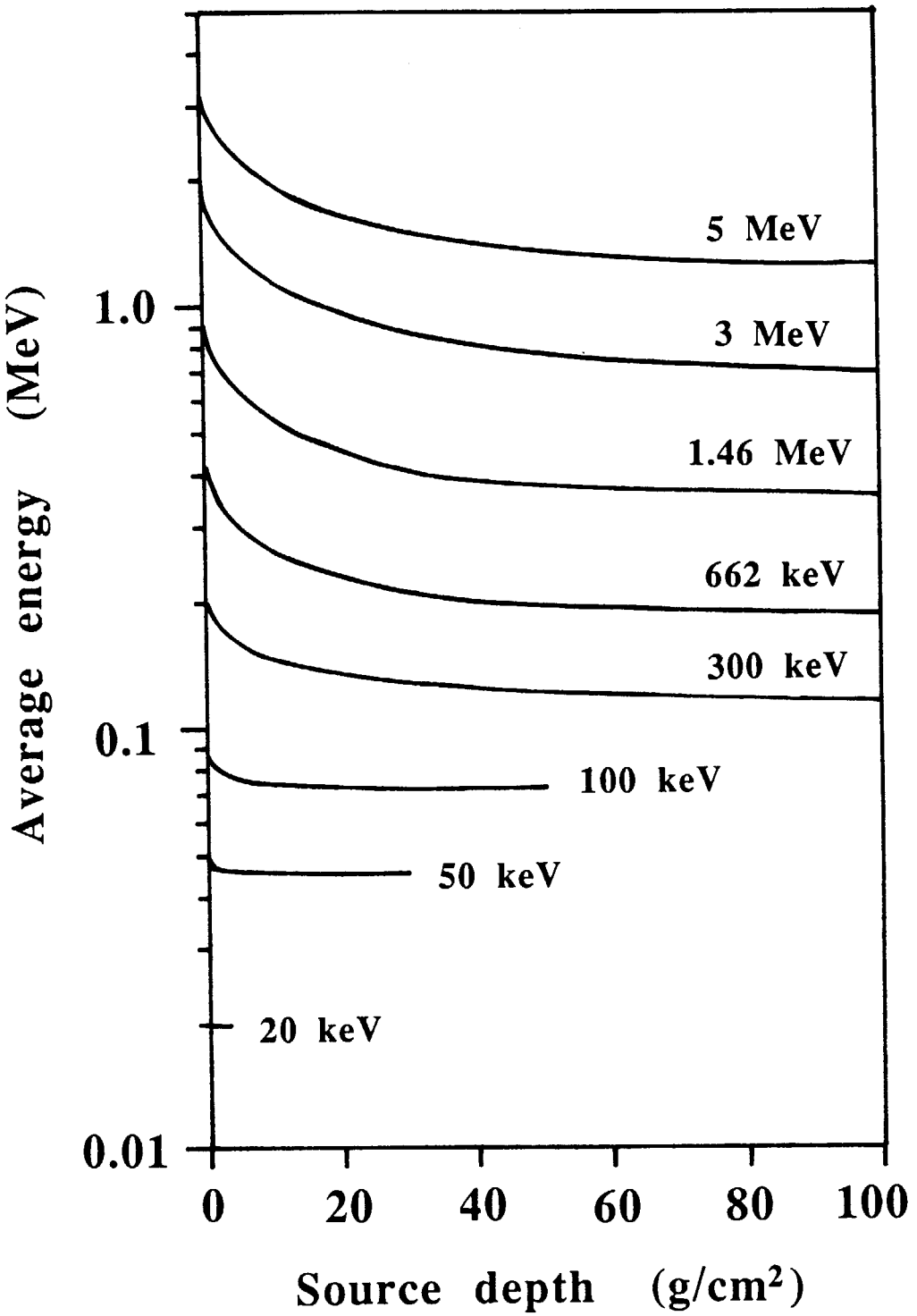

Figure 7. Average energy of photon fluence at 1m for monoenergetic plane source in the ground as a function of source depth.

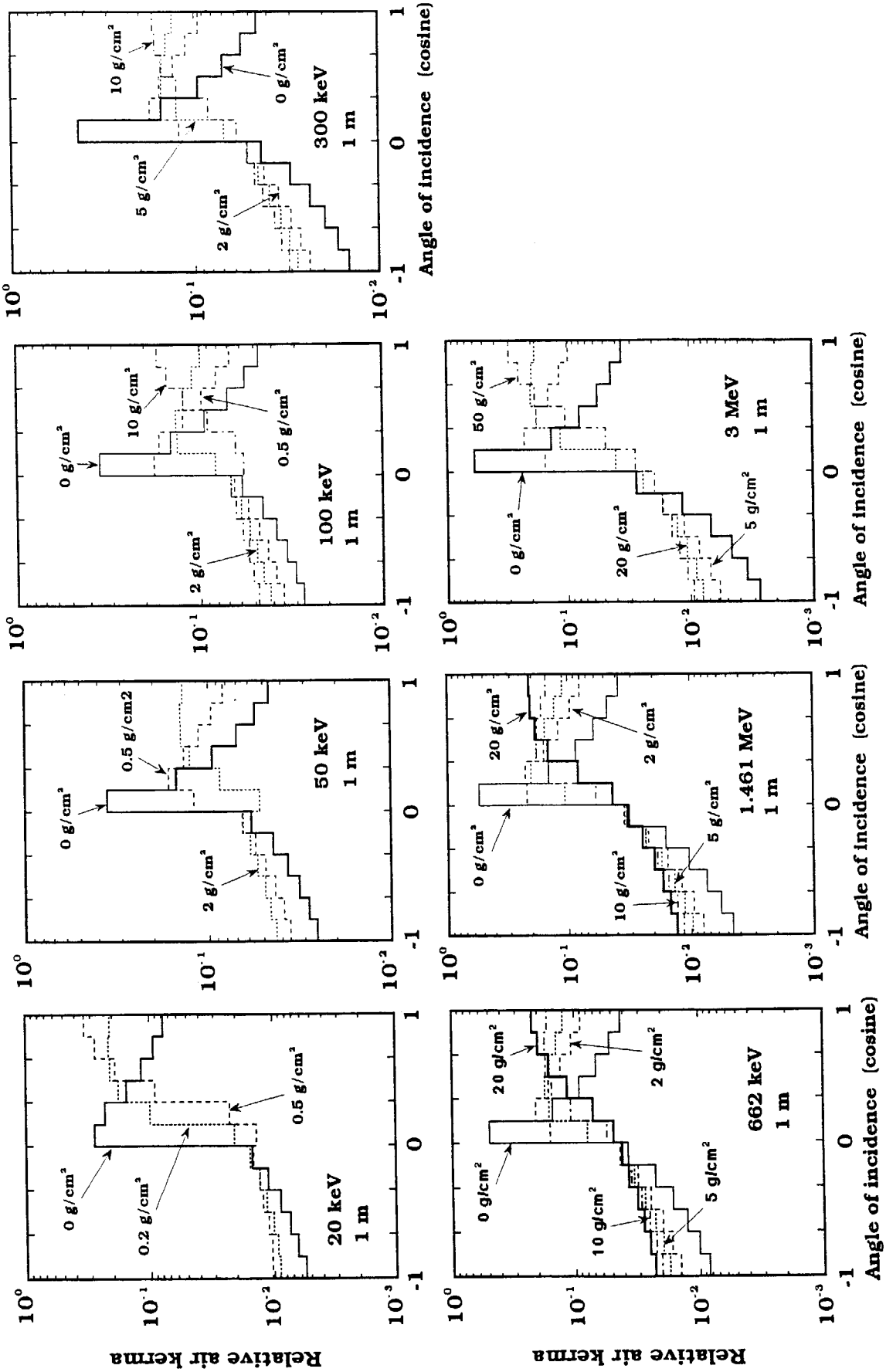

Figure 8. Angular distribution of air kerma at 1 m above ground for monoenergetic plane source in the ground. The total air kerma is normalized to unity for each case.

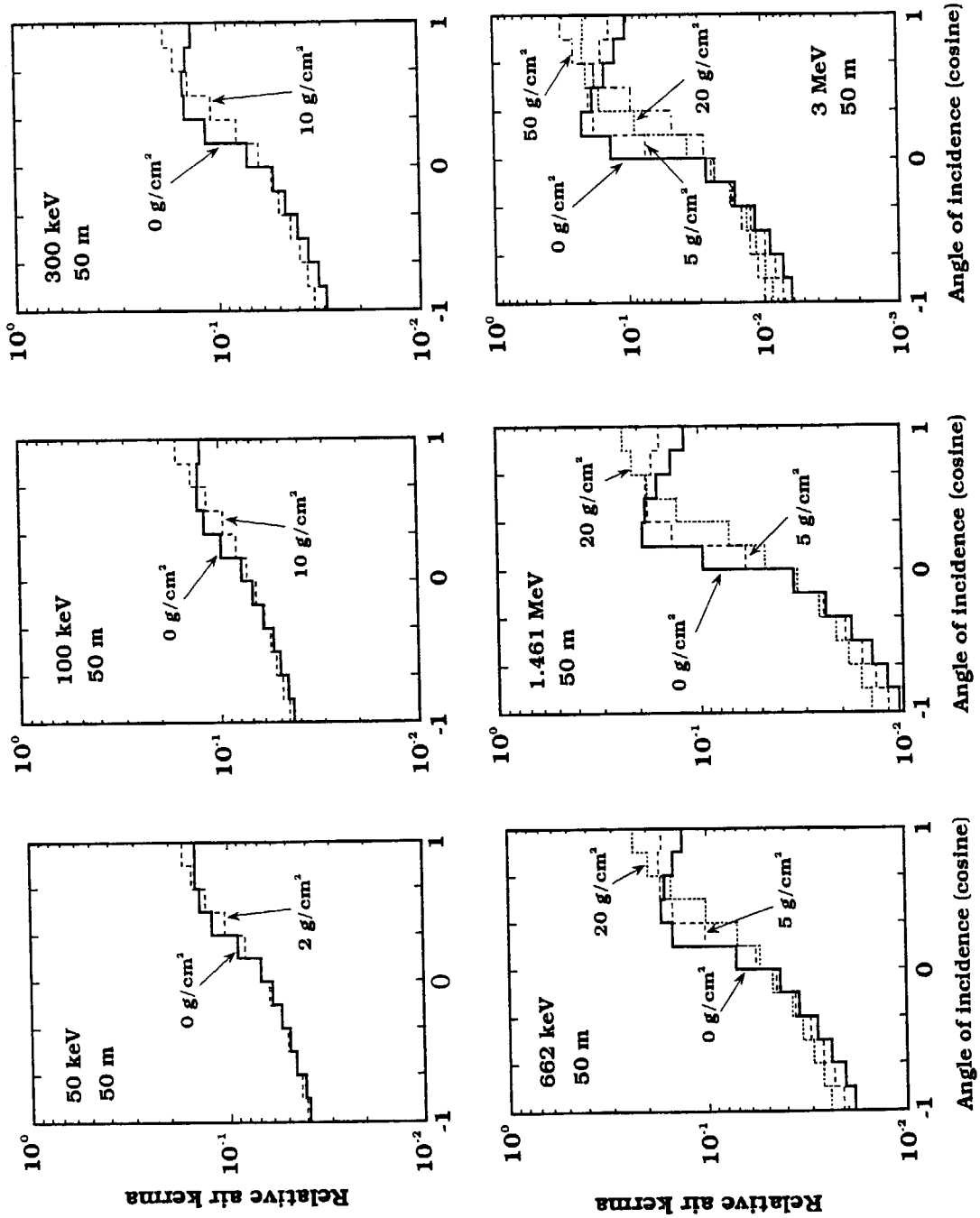

Figure 9. Angular distribution of air kerma at 50 m above ground for monoenergetic plane source in the ground. The total air kerma is normalized to unity for each case.

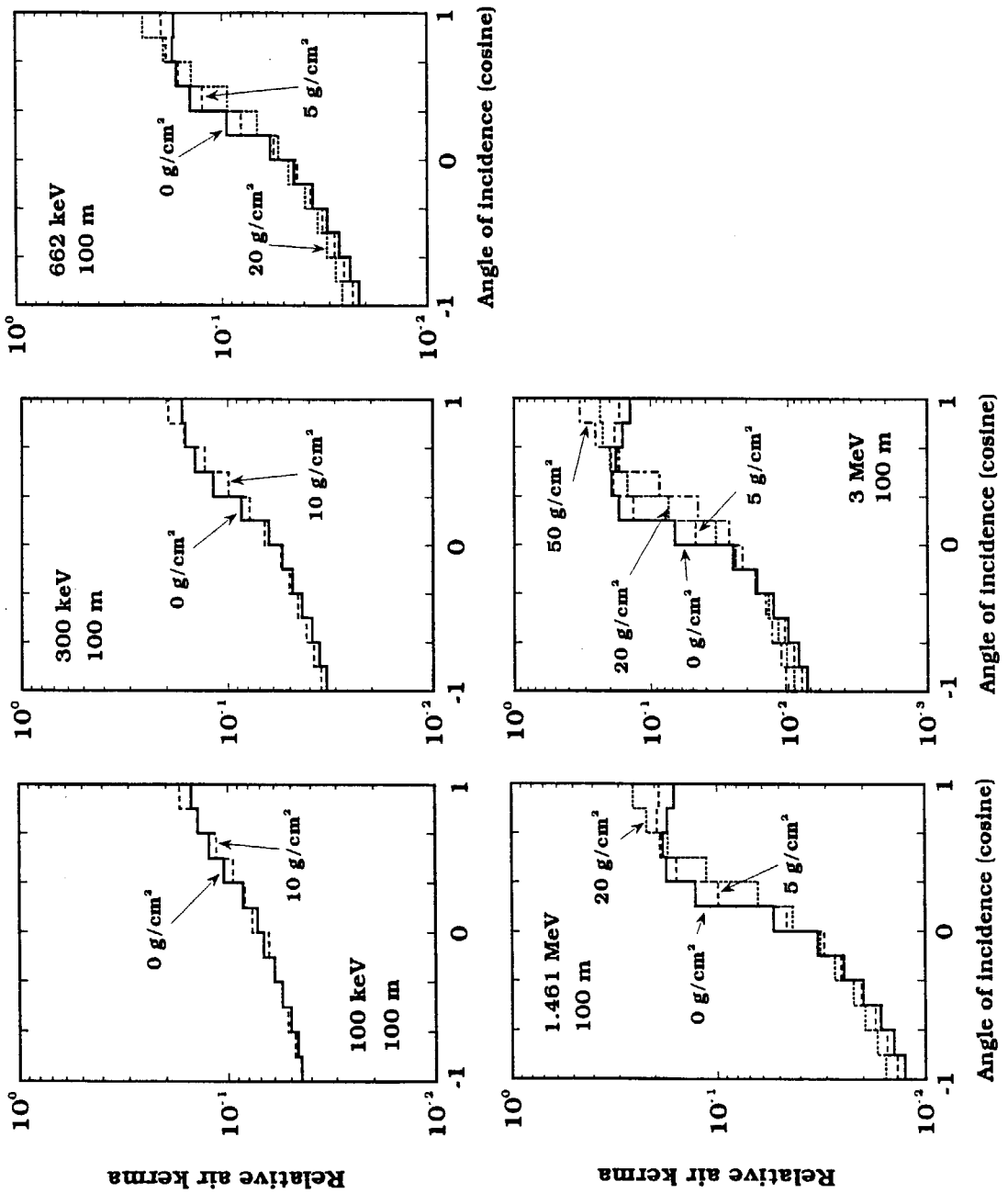

Figure 10. Angular distribution of air kerma at 100 m above ground for monoenergetic plane source in the ground. The total air kerma is normalized to unity for each case.

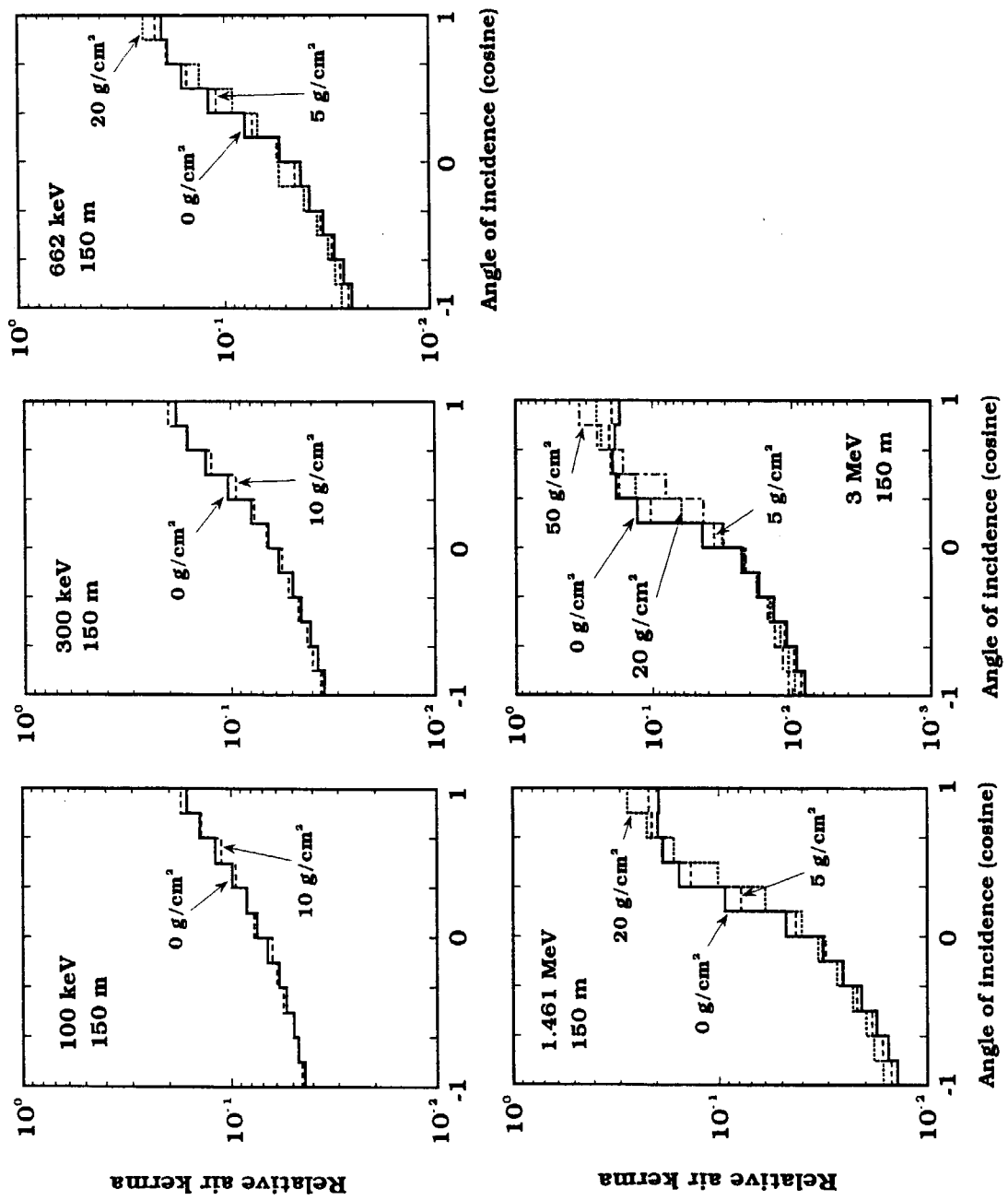

Figure 11. Angular distribution of air kerma at 150 m above ground for monoenergetic plane source in the ground. The total air kerma is normalized to unity for each case.

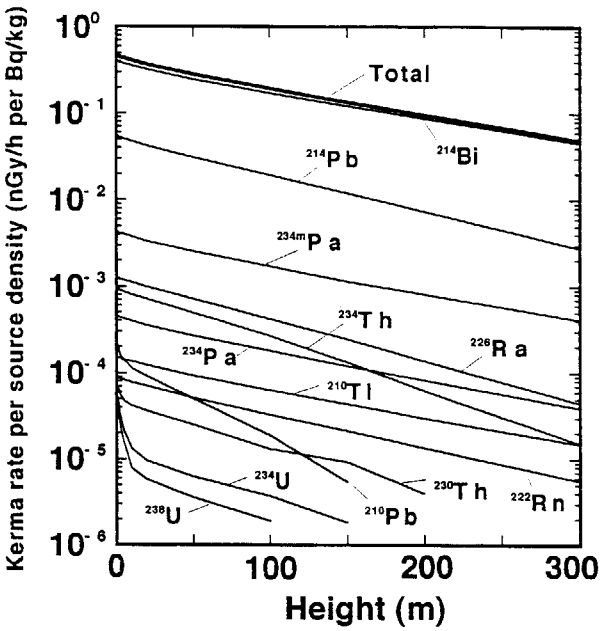

Figure 12. Height dependence of air kerma rate per density of the parent nuclides for natural sources uniformly distributed in the ground for ^{238}U series.

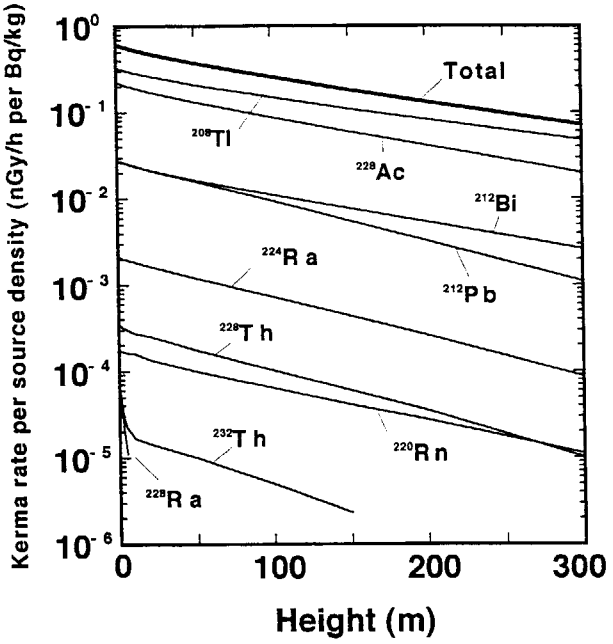

Figure 13. Height dependence of air kerma rate per density of the parent nuclides for natural sources uniformly distributed in the ground for ^{232}Th series.

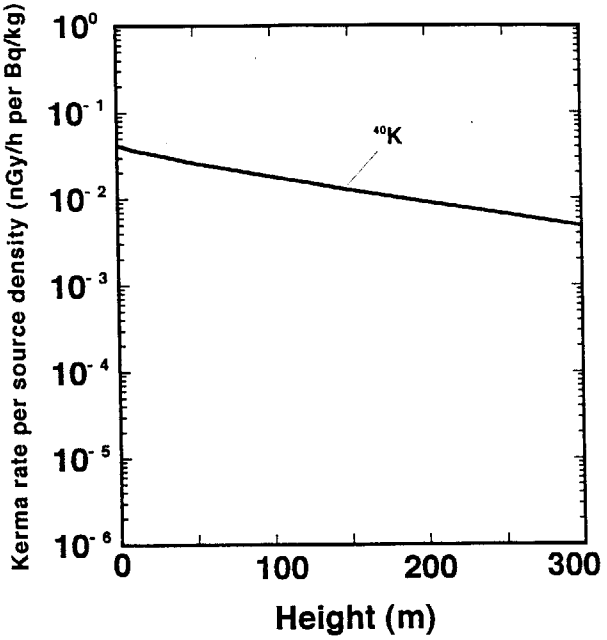

Figure 14. Height dependence of air kerma rate per density of the parent nuclides for natural sources uniformly distributed in the ground for ^{40}K.

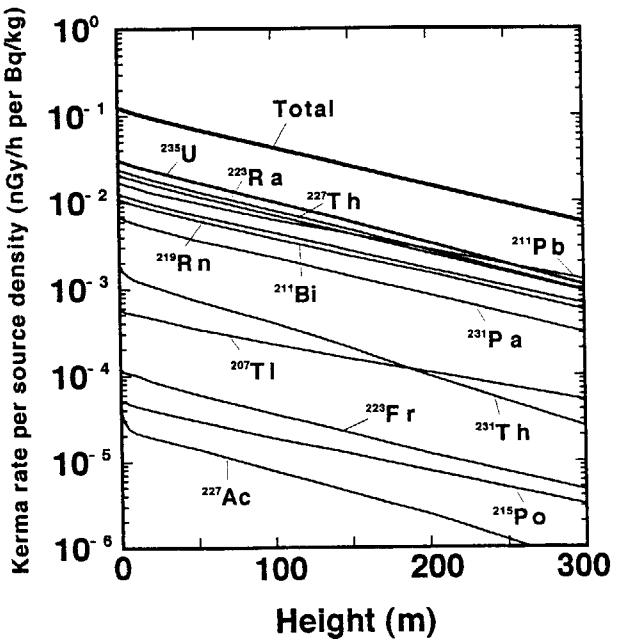

Figure 15. Height dependence of air kerma rate per density of the parent nuclides for natural sources uniformly distributed in the ground ^{235}U series.

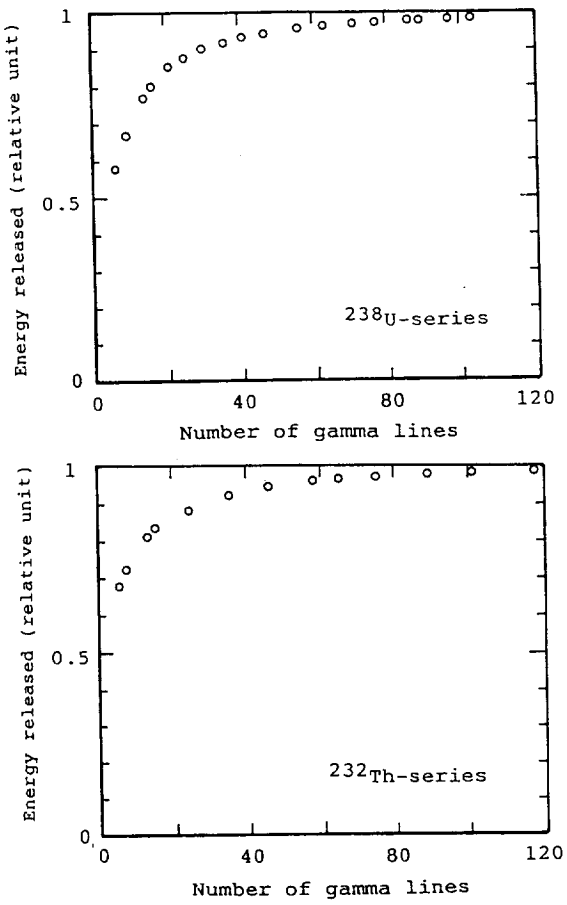

Figure 16. The relation between the number of gamma lines and the energy released from these lines for ^{235}U series and ^{232}Th series.

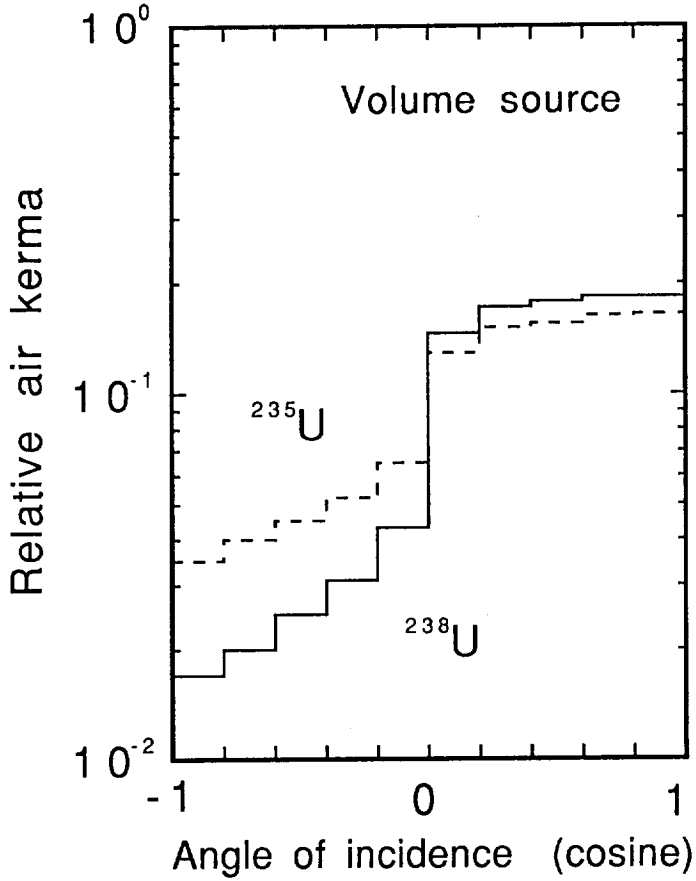

Figure 17. Angular distribution of air kerma at 1 m for ^{235}U series and ^{238}U series. The total air kerma is normalized to unity.

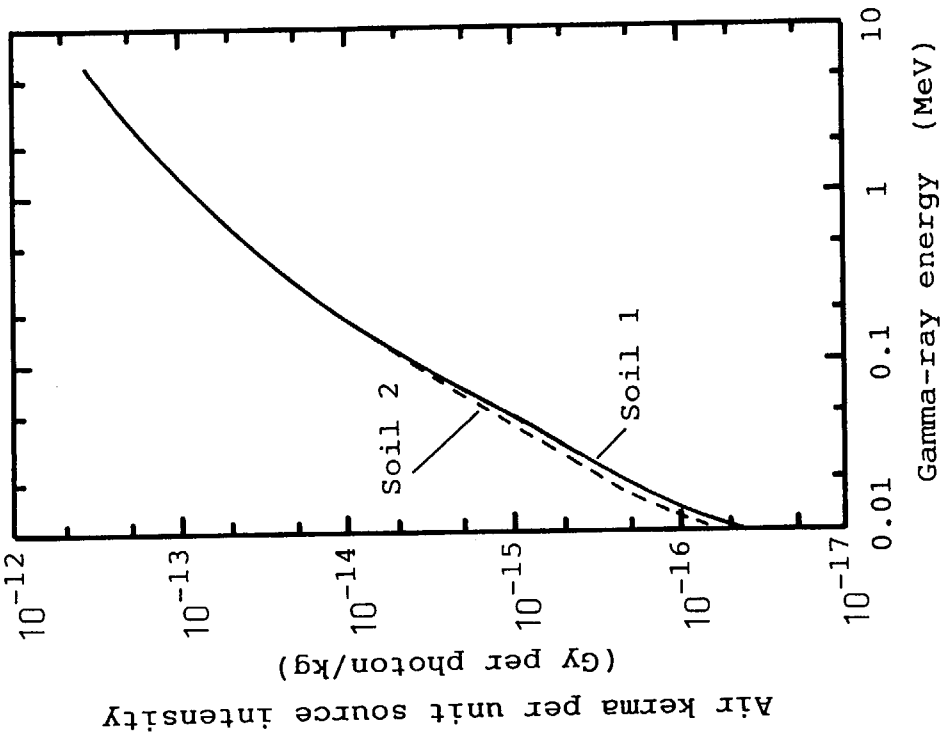

Figure 19. Comparison of air kerma at 1 m between Soil 1 and Soil 2 for uniformly distributed monoenergetic source.

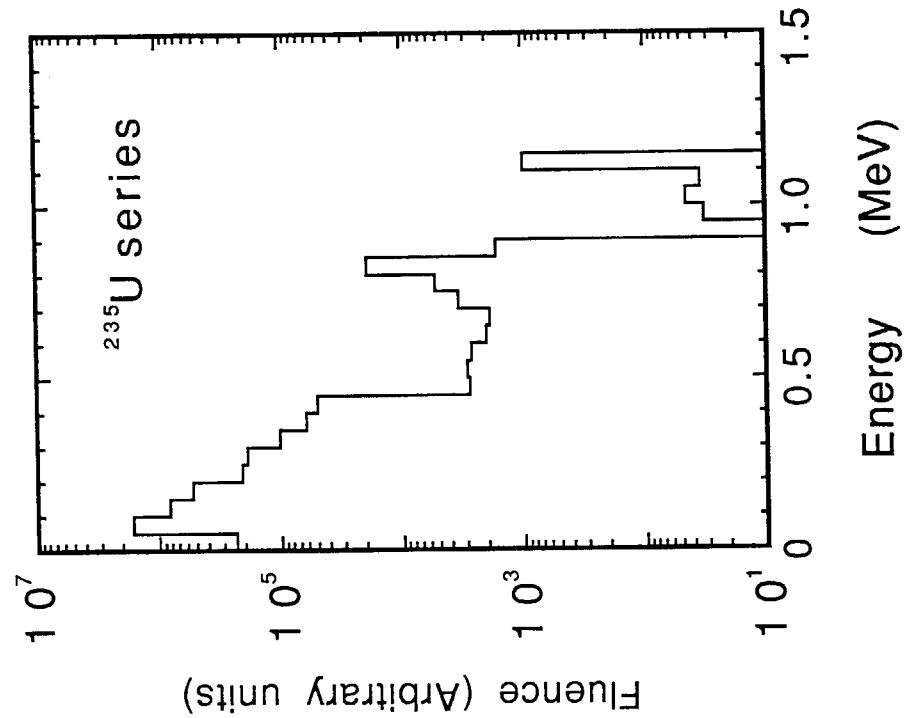

Figure 18. Energy distribution of air kerma at 1 m for 235U series.

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国際単位系（SI）と換算表

表1　SI基本単位および補助単位

量	名称	記号
長さ	メートル	m
質量	キログラム	kg
時間	秒	s
電流	アンペア	A
熱力学温度	ケルビン	K
物質量	モル	mol
光度	カンデラ	cd
平面角	ラジアン	rad
立体角	ステラジアン	sr

表2　SIと併用される単位

名称	記号
分，時，日	min，h，d
度，分，秒	°，′，″
リットル	l，L
トン	t
電子ボルト	eV
原子質量単位	u

1 eV=1.60218×10^{-19}J

1 u=1.66054×10^{-27}kg

表3　固有の名称をもつSI組立単位

量	名称	記号	他のSI単位による表現
周波数	ヘルツ	Hz	s^{-1}
力	ニュートン	N	$m\cdot kg/s^2$
圧力，応力	パスカル	Pa	N/m^2
エネルギー，仕事，熱量	ジュール	J	N·m
工率，放射束	ワット	W	J/s
電気量，電荷	クーロン	C	A·s
電位，電圧，起電力	ボルト	V	W/A
静電容量	ファラド	F	C/V
電気抵抗	オーム	Ω	V/A
コンダクタンス	ジーメンス	S	A/V
磁束	ウェーバ	Wb	V·s
磁束密度	テスラ	T	Wb/m^2
インダクタンス	ヘンリー	H	Wb/A
セルシウス温度	セルシウス度	℃	
光束	ルーメン	lm	cd·sr
照度	ルクス	lx	lm/m^2
放射能	ベクレル	Bq	s^{-1}
吸収線量	グレイ	Gy	J/kg
線量等量	シーベルト	Sv	J/kg

表4　SIと共に暫定的に維持される単位

名称	記号
オングストローム	Å
バーン	b
バール	bar
ガル	Gal
キュリー	Ci
レントゲン	R
ラド	rad
レム	rem

1 Å=0.1nm=10^{-10}m

1 b=100fm^2=10^{-28}m^2

1 bar=0.1MPa=10^{5}Pa

1 Gal=1cm/s^2=10^{-2}m/s^2

1 Ci=3.7×10^{10}Bq

1 R=2.58×10^{-4}C/kg

1 rad=1cGy=10^{-2}Gy

1 rem=1cSv=10^{-2}Sv

表5　SI接頭語

倍数	接頭語	記号
10^{18}	エクサ	E
10^{15}	ペタ	P
10^{12}	テラ	T
10^{9}	ギガ	G
10^{6}	メガ	M
10^{3}	キロ	k
10^{2}	ヘクト	h
10^{1}	デカ	da
10^{-1}	デシ	d
10^{-2}	センチ	c
10^{-3}	ミリ	m
10^{-6}	マイクロ	μ
10^{-9}	ナノ	n
10^{-12}	ピコ	p
10^{-15}	フェムト	f
10^{-18}	アト	a

（注）

1．表1－5は「国際単位系」第5版，国際度量衡局1985年刊行による。ただし，1 eVおよび1 uの値はCODATAの1986年推奨値によった。

2．表4には海里，ノット，アール，ヘクタールも含まれているが日常の単位なのでここでは省略した。

3．barは，JISでは流体の圧力を表わす場合に限り表2のカテゴリーに分類されている。

4．EC閣僚理事会指令ではbar，barnおよび「血圧の単位」mmHgを表2のカテゴリーに入れている。

換算表

力	N(=10^{5}dyn)	kgf	lbf
	1	0.101972	0.224809
	9.80665	1	2.20462
	4.44822	0.453592	1

粘度　1 Pa·s(N·s/m^2)=10 P(ポアズ)(g/(cm·s))

動粘度　1 m^2/s=10^{4}St(ストークス)(cm^2/s)

圧力	MPa(=10bar)	kgf/cm^2	atm	mmHg(Torr)	lbf/in^2(psi)
	1	10.1972	9.86923	7.50062×10^3	145.038
	0.0980665	1	0.967841	735.559	14.2233
	0.101325	1.03323	1	760	14.6959
	1.33322×10^{-4}	1.35951×10^{-3}	1.31579×10^{-3}	1	1.93368×10^{-2}
	6.89476×10^{-3}	7.03070×10^{-2}	6.80460×10^{-2}	51.7149	1

エネルギー・仕事・熱量	J(=10^7 erg)	kgf·m	kW·h	cal(計量法)	Btu	ft·lbf	eV
	1	0.101972	2.77778×10^{-7}	0.238889	9.47813×10^{-4}	0.737562	6.24150×10^{18}
	9.80665	1	2.72407×10^{-6}	2.34270	9.29487×10^{-3}	7.23301	6.12082×10^{19}
	3.6×10^6	3.67098×10^5	1	8.59999×10^5	3412.13	2.65522×10^6	2.24694×10^{25}
	4.18605	0.426858	1.16279×10^{-6}	1	3.96759×10^{-3}	3.08747	2.61272×10^{19}
	1055.06	107.586	2.93072×10^{-4}	252.042	1	778.172	6.58515×10^{21}
	1.35582	0.138255	3.76616×10^{-7}	0.323890	1.28506×10^{-3}	1	8.46233×10^{18}
	1.60218×10^{-19}	1.63377×10^{-20}	4.45050×10^{-26}	3.82743×10^{-20}	1.51857×10^{-22}	1.18171×10^{-19}	1

1 cal=4.18605J（計量法）

=4.184J（熱化学）

=4.1855J（15℃）

=4.1868J（国際蒸気表）

仕事率　1 PS(仏馬力)

=75 kgf·m/s

=735.499W

放射能	Bq	Ci
	1	2.70270×10^{-11}
	3.7×10^{10}	1

吸収線量	Gy	rad
	1	100
	0.01	1

照射線量	C/kg	R
	1	3876
	2.58×10^{-4}	1

線量当量	Sv	rem
	1	100
	0.01	1

（86年12月26日現在）

FUNDAMENTAL DATA ON ENVIRONMENTAL GAMMA-RAY FIELDS IN THE AIR DUE TO SOURCES IN THE GROUND