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INVESTIGATION OF BREMSSTRAHLUNG PRODUCTION IN SPACECRAFT MATERIALS

by W. E. Dance and W. J. Rainwater

Prepared by
LING-TEMCO-VOUGHT INC.
Dallas, Texas
for Langley Research Center

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Issued by Originator as Report No. 0-71100/8R-18

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ABSTRACT

Bremsstrahlung spectra resulting from bombardment of typical spacecraft materials by monoenergetic electrons were experimentally determined in the electron energy range 0.5 to 2.5 MeV. Spectral measurements were made for five angles of electron incidence using a NaI(Tl) spectrometer. Integration of the spectra over all possible angles of incidence, with subsequent conversion of the result to dose, yielded for the case of a spherical shell, the bremsstrahlung dose spectra at each electron energy due to a unit omnidirectional flux of electrons. Types of target materials investigated are: 1) solid alloy slabs, 2) laminated alloys, and 3) ablative materials backed by alloyed honeycomb structures. Slab thicknesses of the alloys Ti 6Al 4V, Al 7075-T6, and Stainless 321 were chosen so as to stop 2.5 MeV electrons. Bremsstrahlung dose values inside spherical shells of the target materials were determined, assuming the omnidirectional electron environment found in synchronous orbits. For electron energies > 0.6 MeV the measured surface dose for 1.5 g/cm^2 of the alloy Al 7075-T6 is 0.24 R/Day. Extrapolation of these results for this material below 0.6 MeV indicates a total dose of approximately twice this value. From a similar extrapolation, total dose for 0.5 g/cm^2 of ablative material (carbon loaded phenolic) backed by 1.21 g/cm^2 stainless honeycomb and 0.69 g/cm^2 aluminum honeycomb is approximately 0.16 R/Day.

INVESTIGATION OF BREMSSTRAHLUNG PRODUCTION IN SPACECRAFT MATERIALS

By W. E. Dance and W. J. Rainwater
LTV Research Center

INTRODUCTION

During flights in certain earth orbits spacecraft are exposed for considerable periods of time to the electrons in the radiation belts. An accurate knowledge of the dose of secondary radiation, or bremsstrahlung, found within a spacecraft due to the electron bombardment of the walls, is required in order to weigh the potential risk of radiation injury to astronauts against the anticipated gains of a particular mission or program. Extensive analytical programs are available for calculating bremsstrahlung production in and attenuation by homogeneous slabs of materials. Experiments at LTV have been carried out which yielded bremsstrahlung cross section values for various pure materials and intensities for thick targets of the same materials. Using these cross section values the Monte Carlo codes of Berger & Seltzer have given, for thick targets, bremsstrahlung intensities which are in close agreement with the values measured at LTV.[1] The experimental techniques utilized in the above-mentioned bremsstrahlung measurements are being applied in the present study to investigate the production of bremsstrahlung in composite materials such as the alloys and ablative materials used in spacecraft construction. The results of these measurements will serve to substantiate calculated dose rates for these types of materials.

It is the objective of the present study to determine, from experimental spectra, the bremsstrahlung dose behind shields of specific composite materials due to an incident omnidirectional beam of electrons. Targets under study consist of alloys, layers of different homogeneous materials, and layers of ablative and honeycomb structures such as those comprising the walls of a typical spacecraft. The effect on the bremsstrahlung yield of dividing homogeneous slabs into multiple layers has been investigated. In addition, the effect of varying the order of layers of different pure materials has been observed.

In making dose determinations in the present work, the space electron spectra used are those given by the Vette Model of the trapped radiation environment.[2]

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[1] Superscripts denote corresponding references, p. 27.

EXPERIMENTAL MEASUREMENTS AND PROCEDURE

In making bremsstrahlung dose determinations at the center of a spherical shell of shielding material due to omnidirectional electrons, the appropriate quantity to be measured at the detector is the number of photons per unit solid angle emitted in a direction which is normal to the plane of the target slab. This geometry is illustrated in Fig. 1. At each bombarding energy the photon yield in a direction perpendicular to the target, due to an incident omnidirectional beam of electrons, may be constructed in the laboratory by varying the angle of incidence ϕ of the beam and performing an integration of the yield over the angle of incidence. From the resulting total spectra the bremsstrahlung dose may then be determined for an assumed space electron spectrum. The general experimental approach employed in the present work to measure the bremsstrahlung yields is described in detail in the literature.[3,4] A summary of this method will be presented here. The laboratory arrangement for measuring the bremsstrahlung yields is shown in the photograph of Fig. 2. A monoenergetic electron beam, provided by a 3-MeV Van de Graaff Accelerator, was directed into a cylindrical target chamber equipped with 5-mil Mylar windows for minimizing the attenuation in the bremsstrahlung radiation. The bremsstrahlung spectrometer was a dual NaI(Tl) crystal anticoincidence arrangement, with a 5.9 cm X 15.2 cm long center crystal surrounded by an anti-Compton annulus 23 cm in diameter and 30 cm long. The detector solid angle was 1.31×10^{-4} sr.

For electron beam current integration the target and target chamber were electrically isolated from the accelerator beam tube. For beam currents greater than 10^{-9} A, a current integrator was used. For determining beam currents in the range 10^{-11} to 10^{-9} A, a Si(Li) detector was used to monitor the electrons scattered by a thin VYNS* film inserted into the beam as it passed through a scattering chamber just upstream from the bremsstrahlung target chamber. As the thickness of the scattering film was approximately 10 $\mu g/cm^2$, the energy loss in the film and spatial spread of the beam on the target in the bremsstrahlung chamber were negligible. Calibration of this beam monitor was carried out at currents in the 10^{-9} A range using the current integrator. Energy calibration of the beam was also carried out by use of the monitor detector to determine the energy

* Union Carbide Plastics Company

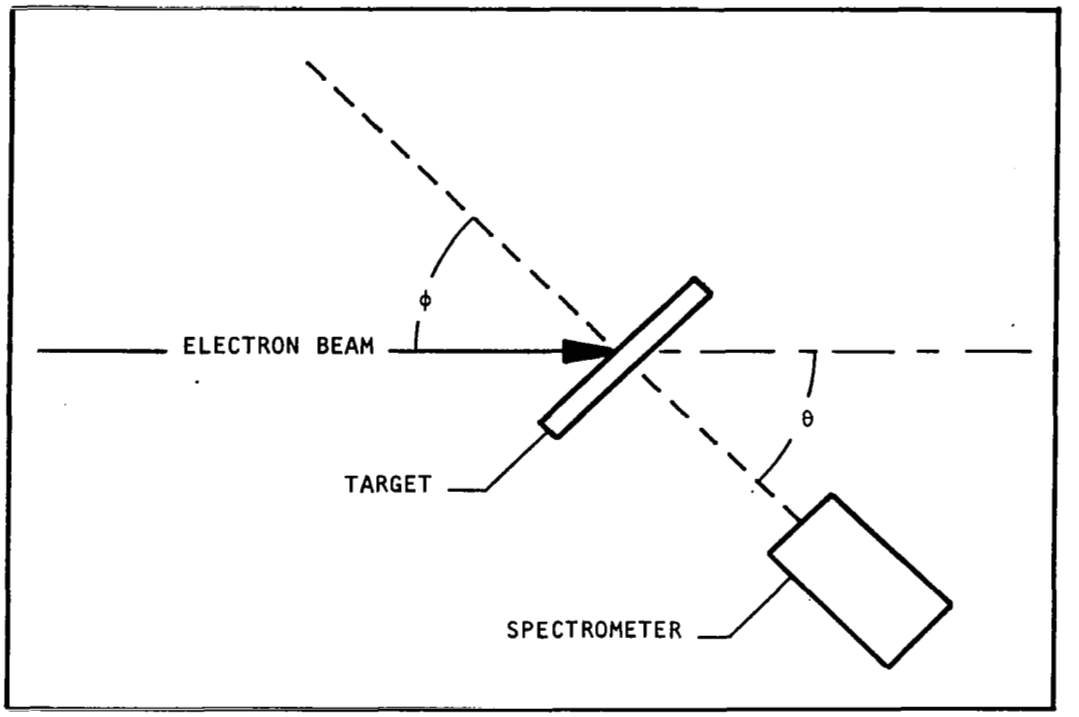

FIGURE 1. Experimental geometry.

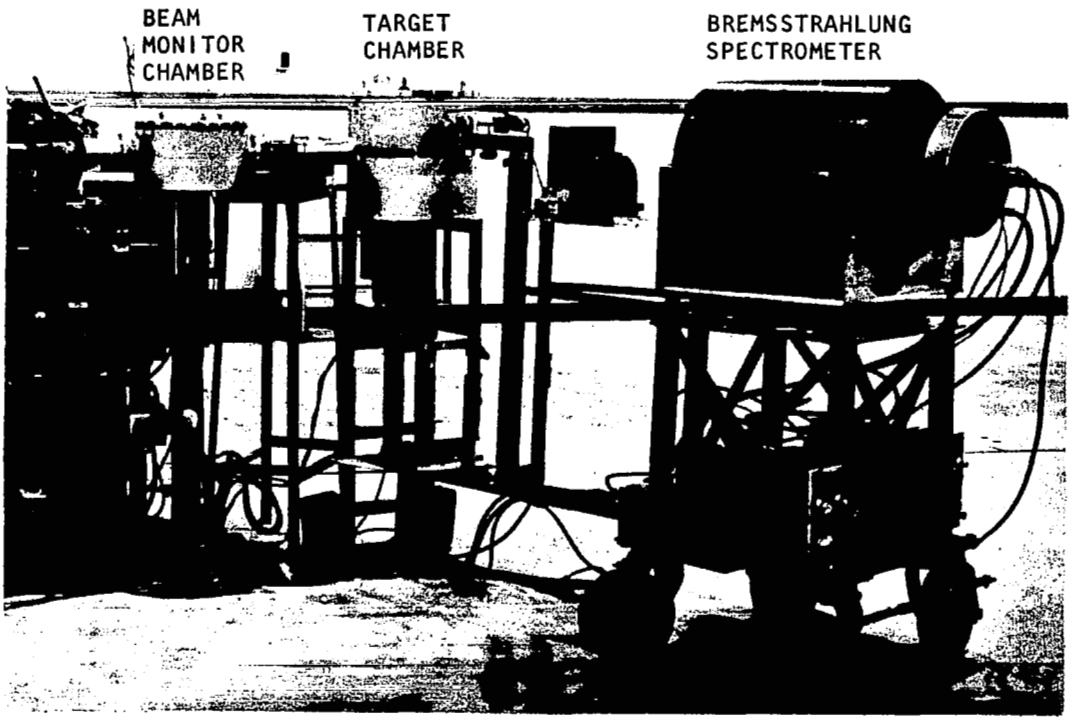

FIGURE 2. Laboratory arrangement for bremsstrahlung measurements.

of the electrons elastically scattered from the VYNS film. Reference to the 625-keV internal conversion line from Cs^{137} and the 482-keV, 972-keV and 1.68-MeV lines from Bi^{207} provided the energy calibration of the Si(Li) detector. The electron beam spot diameter on the target was less than 0.4 cm at all energies for bombardment of the homogeneous targets. For bombarding the nonhomogeneous ablative materials, in order to average the bremsstrahlung yield over the inhomogeneities in the targets, the beam spot size was increased to 1.3 cm in diameter. As a check on this method of averaging, the smaller diameter beam was run on several different areas of the ablators and the resulting pulse height spectra averaged. The two methods were in good agreement.

The characteristic spectrometer response was removed from the bremsstrahlung pulse height spectra by a variation of the iterative technique described elsewhere.[5,6] To remove x-ray background effects caused by multiple scattering of electrons by the target and chamber walls, bremsstrahlung runs were made with a tantalum absorber placed between the target and detector. The resulting background spectrum for a given run was then subtracted from the spectrum taken without the absorber. The geometrical arrangement of target, absorber, and detector was such as to allow only the beam spot to be shielded at the detector aperture.

The targets bombarded in this study, listed in Table I, fall into the following categories: (1) alloys, (2) layers of a given alloy, (3) layers of different alloys, (4) layers of different pure materials, (5) layers of ablative materials and alloy honeycomb wall structures. The total thickness of the targets in categories (1) through (4) was chosen to equal the mean range of electrons in the material for the maximum bombarding energy, which was 2.5 MeV, with the exception of Target No. 2 and No. 4, which have thicknesses equal to 1.5 times the mean range of 2.5 MeV electrons. Thicknesses were determined from the values of the electron range as given by Berger & Seltzer,[7] using the effective atomic number for each material. In the case of the ablative materials, which were backed by alloy honeycomb wall structures, the thickness of the ablative layer was equal to the range of 2.5 MeV electrons for Target No. 12, and equal to the range of 1.0 MeV electrons for Targets 10 and 11. Information regarding the composition of the ablative Targets 10, 11, and 12 was reported by Hendricks, et. al.[8] from an earlier study of bremsstrahlung produced in these materials.

TABLE I

LIST OF TARGETS

TARGET NO.	MATERIAL	THICKNESS (g/cm^2)
1	Ti, 6Al, 4V	1.68
2	Ti, 6Al, 4V	2.34
3	Ti, 6Al, 4V	1.68 (8 layers)
4	Ti, 6Al, 4V	2.34 (8 layers)
6	Stainless Steel 321	1.59
7	Al 7075-T6	1.54
8	Al 7075-T6	1.54 (8 layers)
5-1	Ti (1.42 g/cm^2)/V (.061 g/cm^2)/Al (.096 g/cm^2)	
5-2	Ti (1.42 g/cm^2)/Al (.096 g/cm^2)/V (.061 g/cm^2)	
5-3	Al (.096 g/cm^2)/Ti (1.42 g/cm^2)/V (.061 g/cm^2)	
5-4	Al (.096 g/cm^2)/V (.061 g/cm^2)/Ti (1.42 g/cm^2)	
5-5	V (.061 g/cm^2)/Ti (1.42 g/cm^2)/Al (.096 g/cm^2)	
5-6	V (.061 g/cm^2)/Al (.096 g/cm^2)/Ti (1.42 g/cm^2)	
9	Ti, 6Al, 4V (0.55 g/cm^2)/Al 7075-T6 (0.51 g/cm^2)/ Stainless 321 (0.51 g/cm^2)	
10	Carbon phenolic ablator (0.49 g/cm^2)/Stainless steel honeycomb (1.21 g/cm^2)/aluminum honeycomb (0.69 g/cm^2)	
11	Fiberglass ablator (0.49 g/cm^2)/Stainless steel honeycomb (1.21 g/cm^2)/aluminum honeycomb (0.69 g/cm^2)	
12	Carbon phenolic ablator (1.38 g/cm^2)/Stainless steel honeycomb (1.21 g/cm^2)/aluminum honeycomb (0.69 g/cm^2)	

Electron bombarding energies for Targets 1 through 4, and 6 through 9 (alloys and layers of alloys) were 0.6, 1.0, and 2.5 MeV. In addition, at 2.5 MeV, targets 5-1 through 5-6 were run to observe the effect of varying the order of layers of Ti, Al, and V. Target 12, with the thicker carbon phenolic ablator (1.38 g/cm^2), was run at 2.5 MeV and 1.0 MeV, and Targets 10 and 11, with the lesser thickness of ablative material (0.49 g/cm^2), were run at 1.0 MeV and 0.5 MeV.

The angle of incidence of the electron beam was varied from $\phi = 0°$ to $\phi = 75°$ by rotating the target about its axis by means of a calibrated vernier adjustment. Figure 3 shows four of the homogeneous alloy targets positioned in the scattering chamber. The ablative and honeycomb targets are shown in Fig. 4.

A detailed analysis of the experimental errors in spectral data obtained by the present technique is given in reference 4. The estimated overall error in the present spectral measurements is ±15% in the region of photon energy $0.15E < k < 0.75E$, where E is the bombarding energy, for the alloy targets, and ±20% for the ablative targets. The higher uncertainties for the ablative targets and for the portion of the spectra beyond 0.75E for the alloy targets is due to the increased statistical fluctuation of the data. Photons from the high energy portion of the spectra where the statistics are poor, however, do not contribute significantly to the dose, as the relative photon yield is low in this region. The flux-to-dose conversion at a given electron energy introduces no additional error into the results. Due to the limited number of bombarding energies used in the investigation to date in estimating the shape of the dose-versus-electron energy curves, no error limits have been assigned to the projected total dose estimates which were obtained by integrating over these curves.

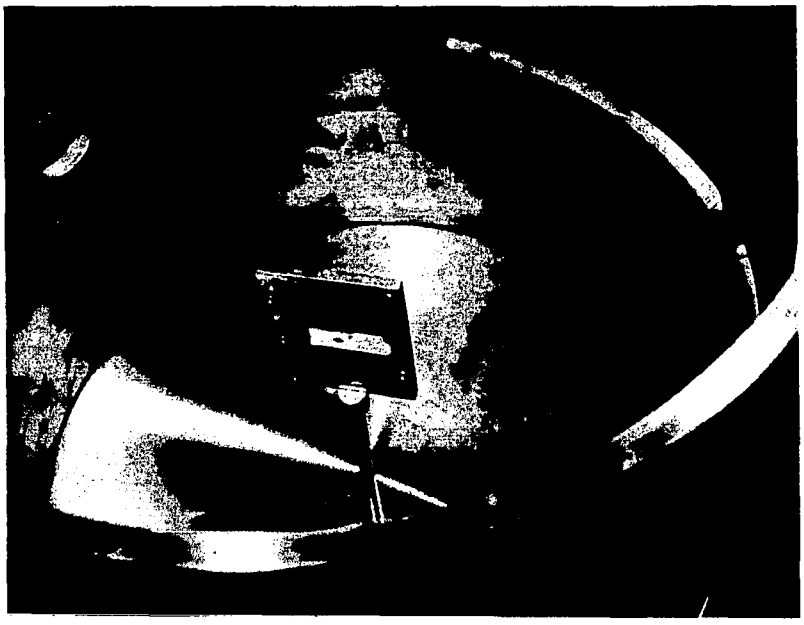

FIGURE 3. Alloy target slabs positioned in scattering chamber.

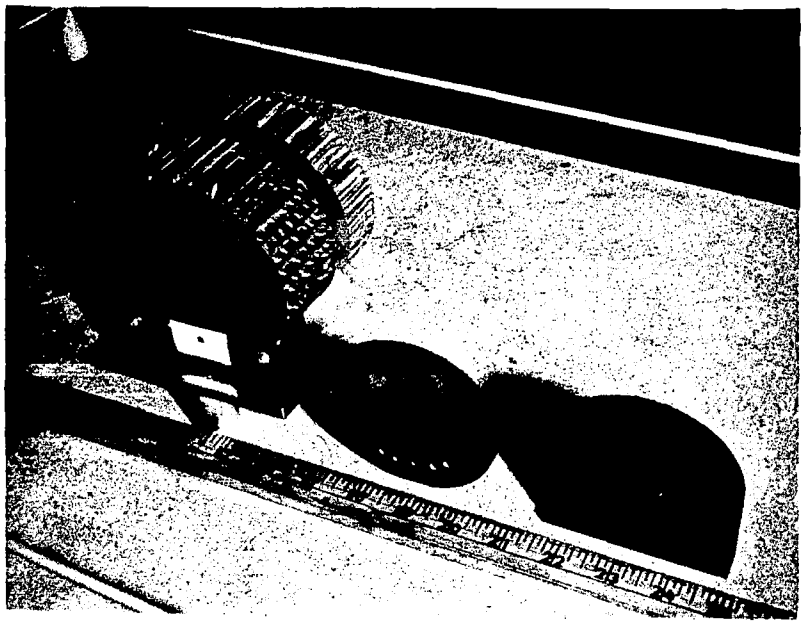

FIGURE 4. Ablative and alloy honeycomb targets. Shown are Target 10 (carbon phenolic, 0.49 g/cm^2 / Stainless honeycomb, 1.21 g/cm^2 / aluminum honeycomb, 0.69 g/cm^2) at the left, the first layer of Target 11 (fiberglass honeycomb reinforced ablator at center), and the first layer of Target 12 (carbon phenolic ablator, 1.38 g/cm^2) at the right.

DATA ANALYSIS

For removal of the effect of the bremsstrahlung spectrometer response on the pulse height spectra, and for performing other operations necessary in obtaining spectral and dose information, a Fortran IV program was written which converts the pulse height data to dose at each value of the bombarding energy. With this program the following operations are applied to the initial pulse height data:

(1) The pulse height spectra differential in photon energy and solid angle are integrated over angle of electron incidence and over the surface of a sphere to give the pulse height spectrum of the bremsstrahlung due to a unit omnidirectional flux of electrons incident on a spherical shell of the target material.

(2) Using the response matrix of the bremsstrahlung spectrometer,a correction factor is computed as a function of photon energy by the method of reference 5, and applied to the pulse height spectrum of (1) above to give the energy spectrum in photons/MeV-electron.

(3) Photon flux-to-dose conversion factors are applied to the bremsstrahlung energy spectrum to yield a dose spectrum.

(4) The dose spectrum is integrated over photon energy to give the specific dose for a given target at the specified bombarding energy, in R/electron/cm^2.

The integration of step (1) above is carried out from the following considerations: The laboratory spectra measured for a given electron energy E in the present geometry (Fig. 1) may be expressed by the function $g(k,\phi,E)$, where k is the photon energy, and ϕ is the electron angle of incidence. The spectrum at the detector due to a unit unidirectional flux is $g(k,\phi,E)\cos\phi$, or that due to electrons striking the projected area of a sphere which is normal to their direction of approach. (A detailed discussion of the concept of unidirectional and omnidirectional flux is given by Evans [9]). Since the omnidirectional flux Φ is equal to the integral of the unidirectional flux n_o taken over the surface of the sphere, or

$$\int_0^{4\pi} n_o \, d\omega = \Phi,$$

the photon spectrum at the center of a sphere due to a unit omnidirectional electron flux is

$$g(k,E) = \int g(k,\phi,E) \cos\phi \, d\omega \, .$$

Since $d\omega = 2\pi \sin\phi \, d\phi$, the solid angle available between ϕ and $\phi + d\phi$,

$$g(k,E) = 2\pi \int_0^{\pi/2} g(k,\phi,E) \sin\phi \cos\phi \, d\phi,$$

which is the result obtained in steps (1) and (2) above.

The specific dose spectrum $D(k,E)$ obtained in step (3) is then

$$D(k,E) = g(k,E)\gamma(k),$$

where $\gamma(k)$ is the flux-to-dose conversion function. The dose contribution for a monoenergetic unit omnidirectional flux of electrons from step (4) is then

$$D(E) = \int g(k,E)\gamma(k)dk$$

The total bremsstrahlung dose at the center of a sphere due to a particular electron environment $\Phi(E)$ is thus

$$D = \int D(E) \, \Phi \, (E) \quad dE.$$

The function $D(E)$ is determined experimentally by measuring the dose for a number of values of E over the energy range of interest.

The flux-to-dose conversion curve used in (3) was taken from Rockwell's shielding Manual[10] and is given in Fig. 5. The space omnidirectional electron spectrum applied to the specific dose values for determination of the total dose as a function of bombarding energy is that of Vette's empirical AE3 Model of the trapped radiation environment, of reference 2, for synchronous equatorial orbits, which lie on the magnetic shell L = 6.6. The altitudes of these orbits are around 19,300 nautical miles. The AE3 spectrum, shown in Fig. 6, gives the differential fluxes averaged over local time, for conditions of solar minimum, and for a value of 1.00 for Vette's magnetic variable B/B_o.

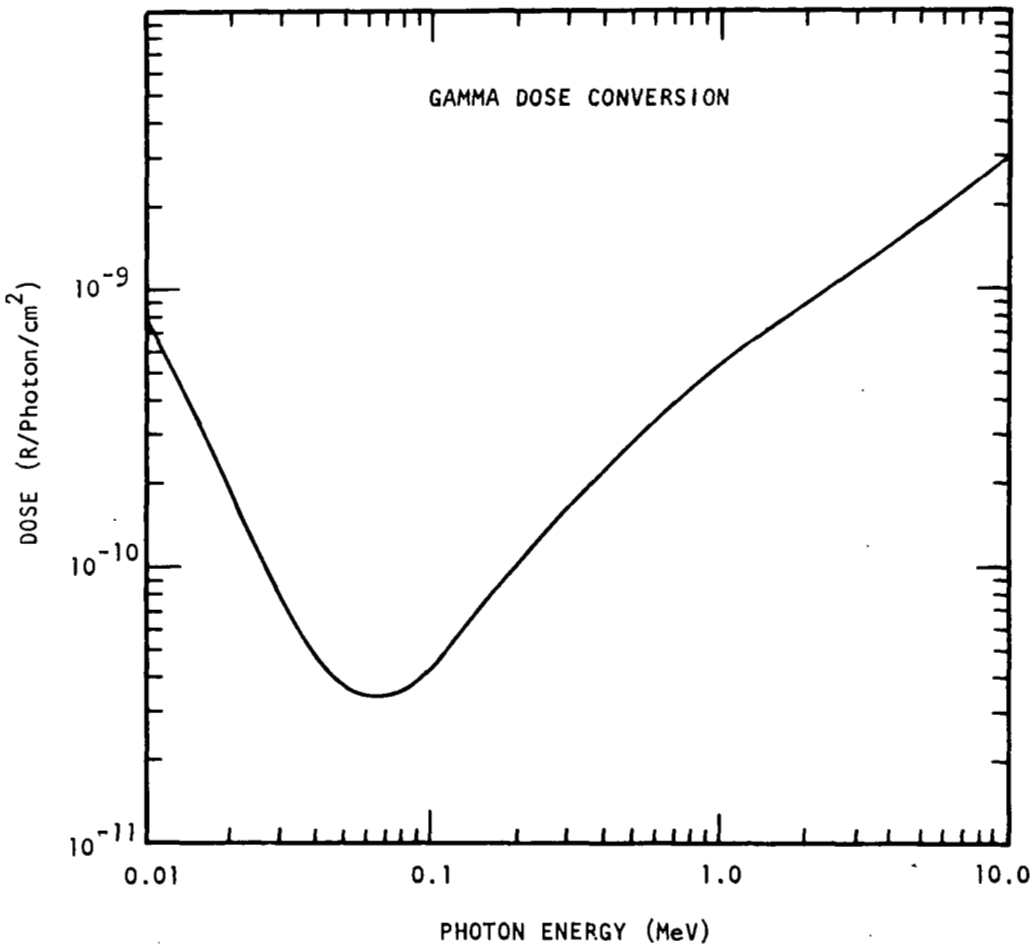

FIGURE 5. Gamma flux-to-dose conversion (reference 11) used in dose determinations.

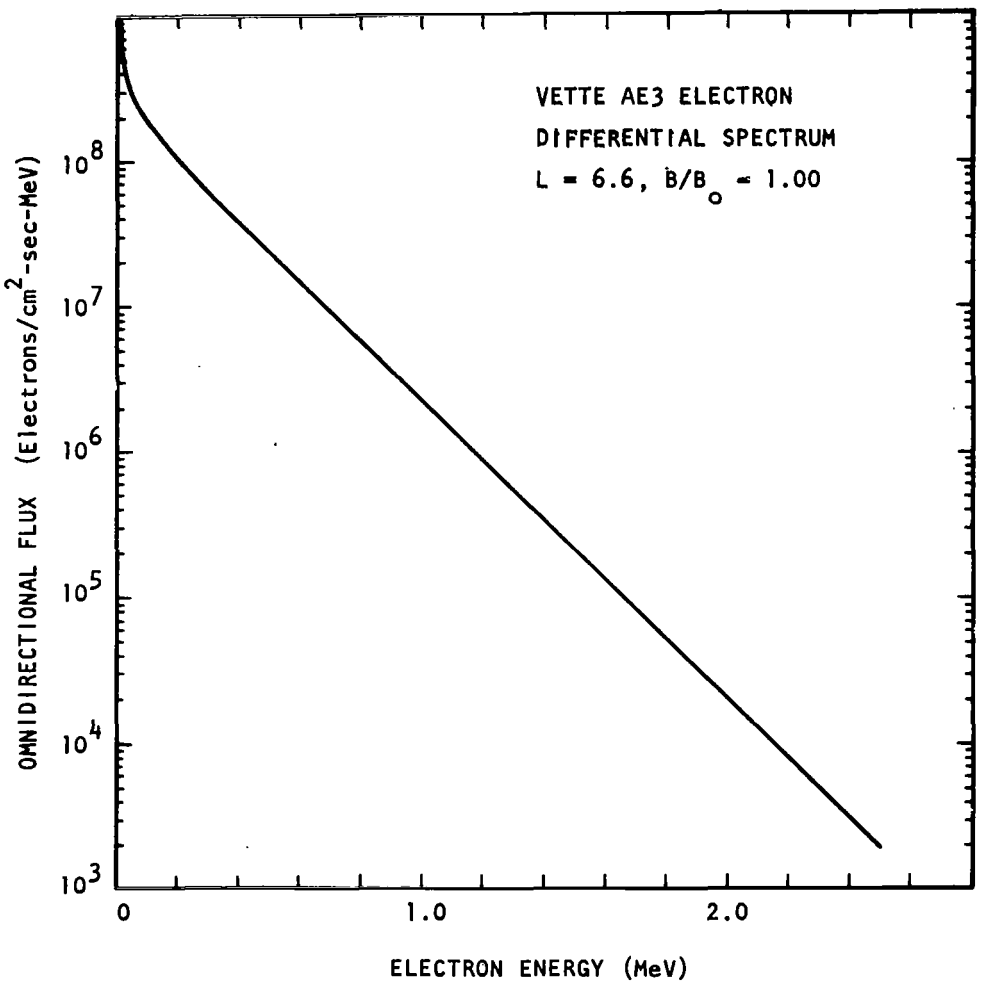

FIGURE 6. Differential electron spectrum from Vette AE3 Model for synchronous orbits (reference 2). The spectrum gives the flux averaged over local time for solar minimum.

RESULTS OF MEASUREMENTS

The computer outputs for the various targets of Table I are given in the Appendix. These results are presented in order of increasing incident energy. The first page of the print-out for each target lists the 3-channel averages for the weighted bremsstrahlung pulse height spectrum obtained for each electron angle of incidence. These are the net normalized spectra (background removed) in units of photons/MeV-sr-electron. The negative values which appear in a few of the pulse height spectra at the largest angles of incidence, particularly for the low-Z ablative materials, are due to the large statistical fluctuations in the data for the low photon yields near the high energy cut-off in the spectra. In this region the yield is of the same order as the background, and hence background subtraction can result in negative values in the net spectra. The column headings on the third line are the values of ϕ, the angle of incidence, in degrees. On the remaining pages, for each target and bombarding energy, are found as a function of the channel number, the spectrometer energy calibration data, the correction factor which is applied to the pulse height data for detector response removal to give energy spectra, the total bremsstrahlung energy spectra (3-channel average) due to a unit omnidirectional electron flux at the center of a sphere, the gamma flux-to-dose conversion factors, the dose spectrum, and the total dose (dose spectrum integrated over photon energy) at the particular electron bombarding energy.

From the appendix then, the energy spectrum for any incident angle may be obtained by multiplying the column giving the pulse height spectrum for that angle by the column of correction factors given in the second part of the table. The bremsstrahlung spectra, integrated over the angle of electron incidence, are shown in Figs. 7 through 10 for the alloys Stainless 321, Ti 6Al 4V, Al 7075-T6, and the carbon phenolic and fiberglass ablative materials (backed by the stainless and aluminum honeycomb wall sections) for the various bombarding energies in the range 0.5 to 2.5 MeV. The spectra for the alloys are typical in shape for all the alloy targets investigated, including those of layered construction, such as Targets 3, 4, 8, and 9. The angular distributions of the photons emitted in a direction normal to the target, showing total counts per coulomb as a function of angle for three targets at various bombarding energies ranging from 0.5 to 2.5 MeV, are shown in Figs. 11 through 13.

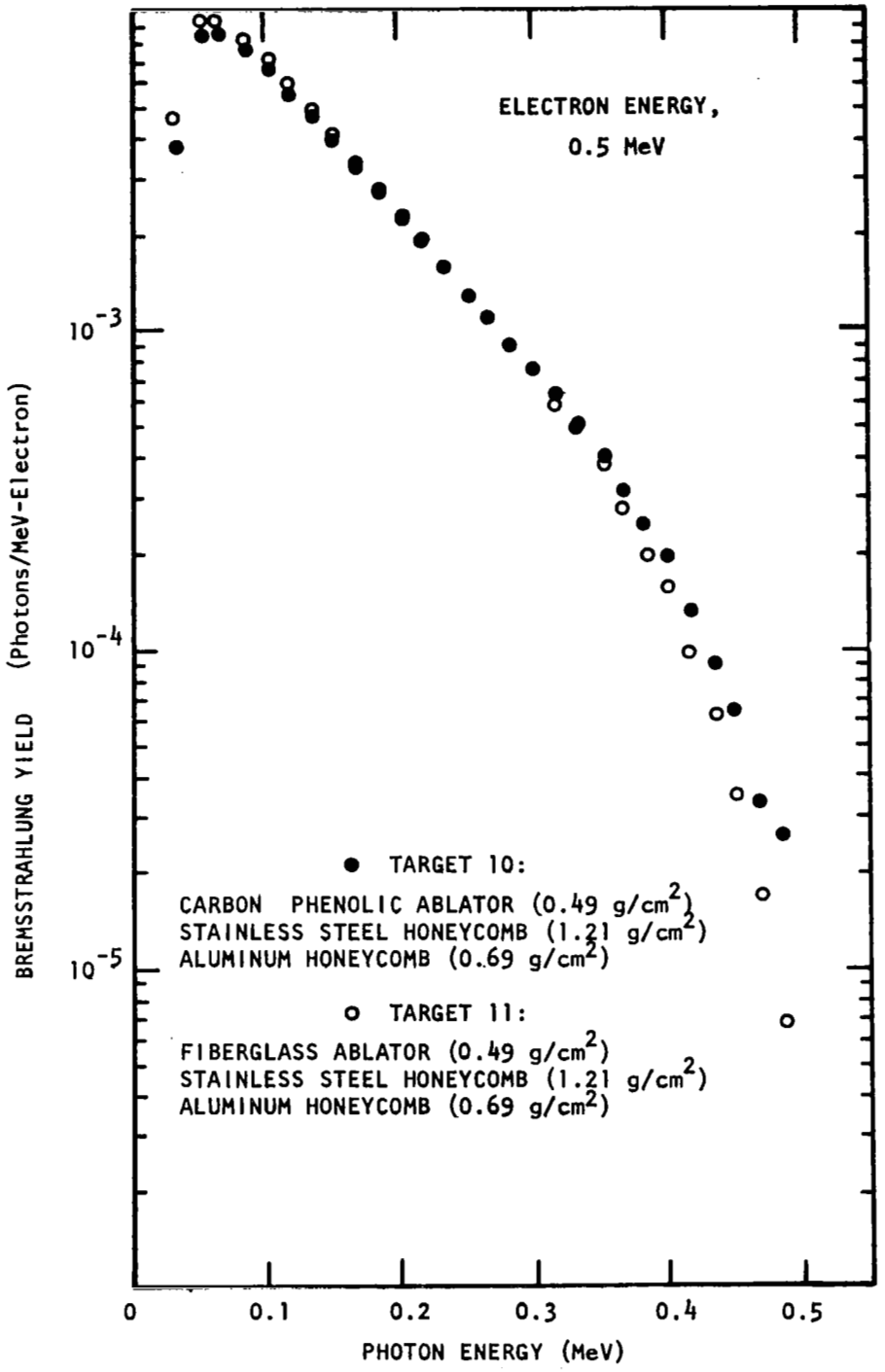

FIGURE 7. Bremsstrahlung spectra from the ablative targets, Nos. 10 and 11, integrated over electron angle of incidence, for 0.5 MeV bombarding energy.

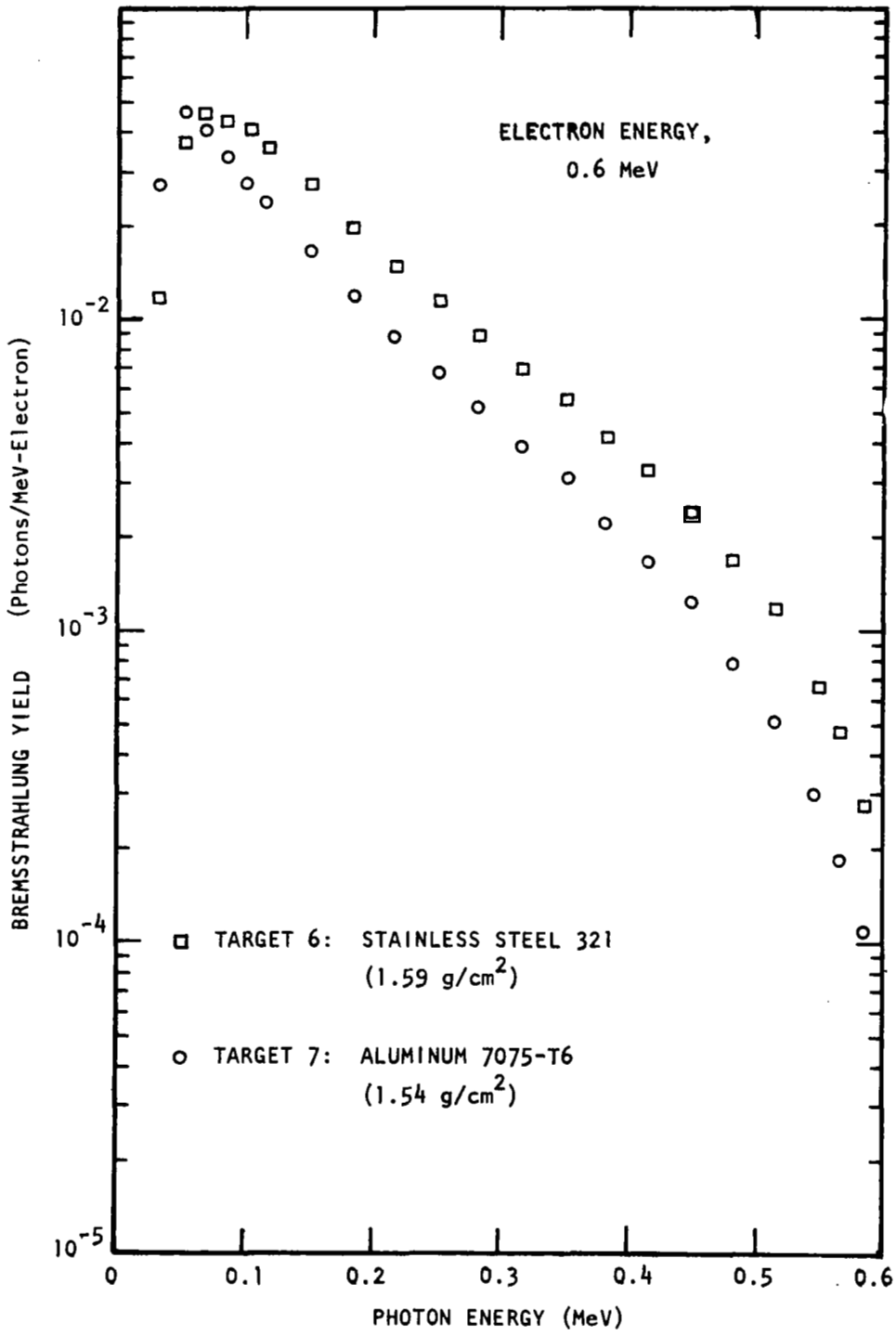

FIGURE 8. Bremsstrahlung spectra from alloy targets, Nos. 6 and 7, integrated over electron angle of incidence, for 0.6 MeV bombarding energy.

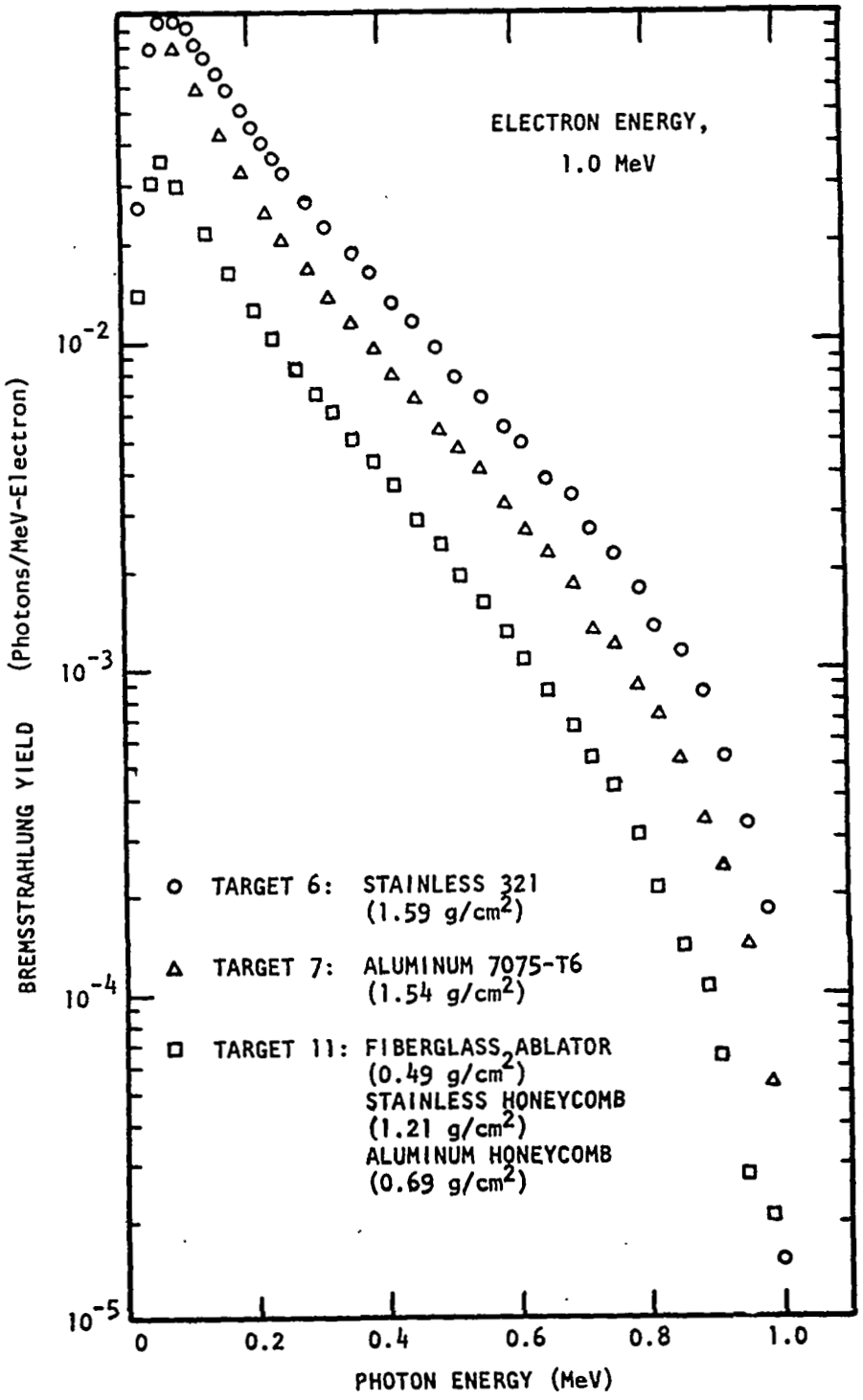

FIGURE 9. Bremsstrahlung spectra from Targets 6, 7, and 11, integrated over electron angle of incidence, for 1.0 MeV bombarding energy.

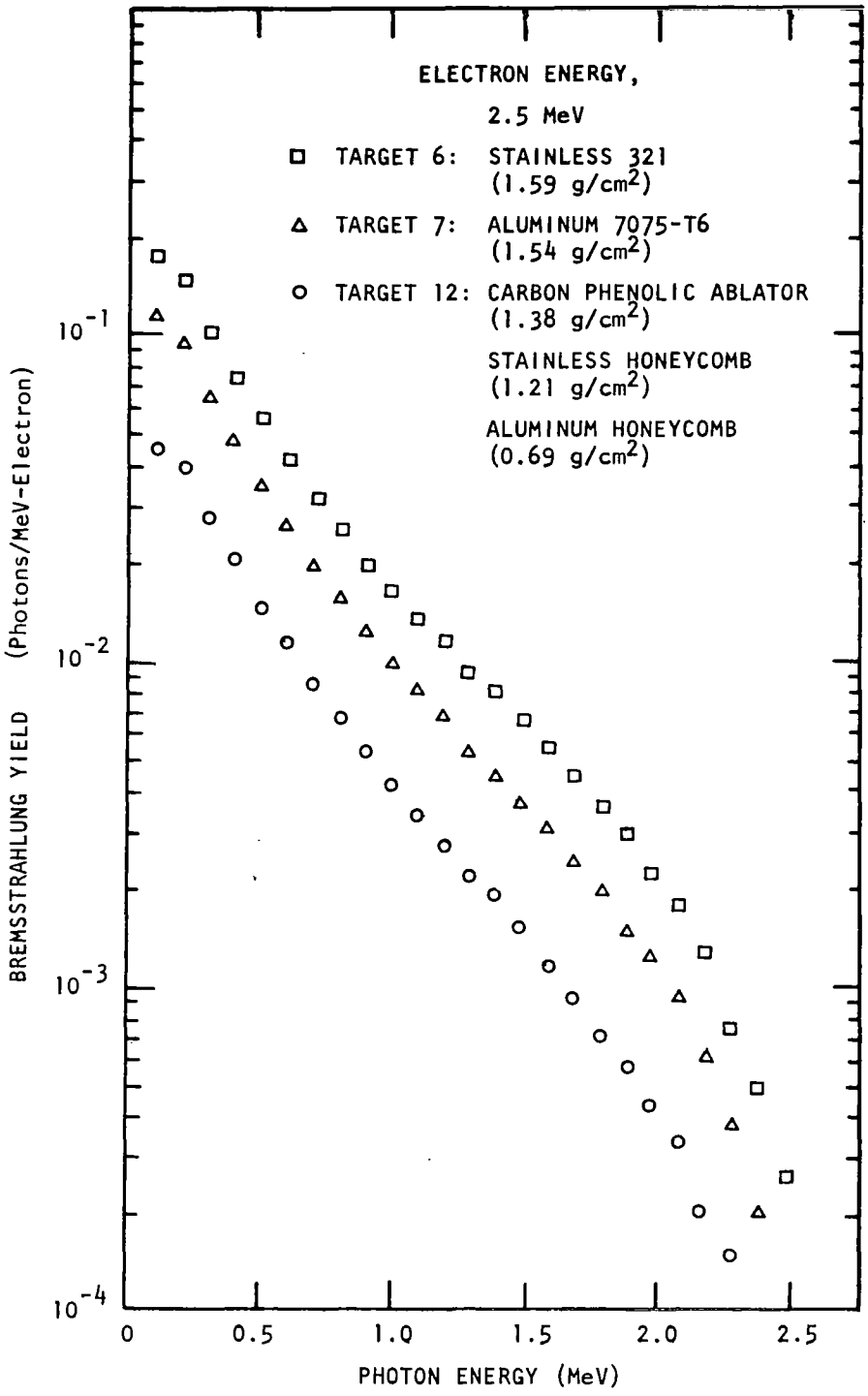

FIGURE 10. Bremsstrahlung spectra from Targets 6, 7, and 12, integrated over electron angle of incidence for 2.5 MeV bombarding energy.

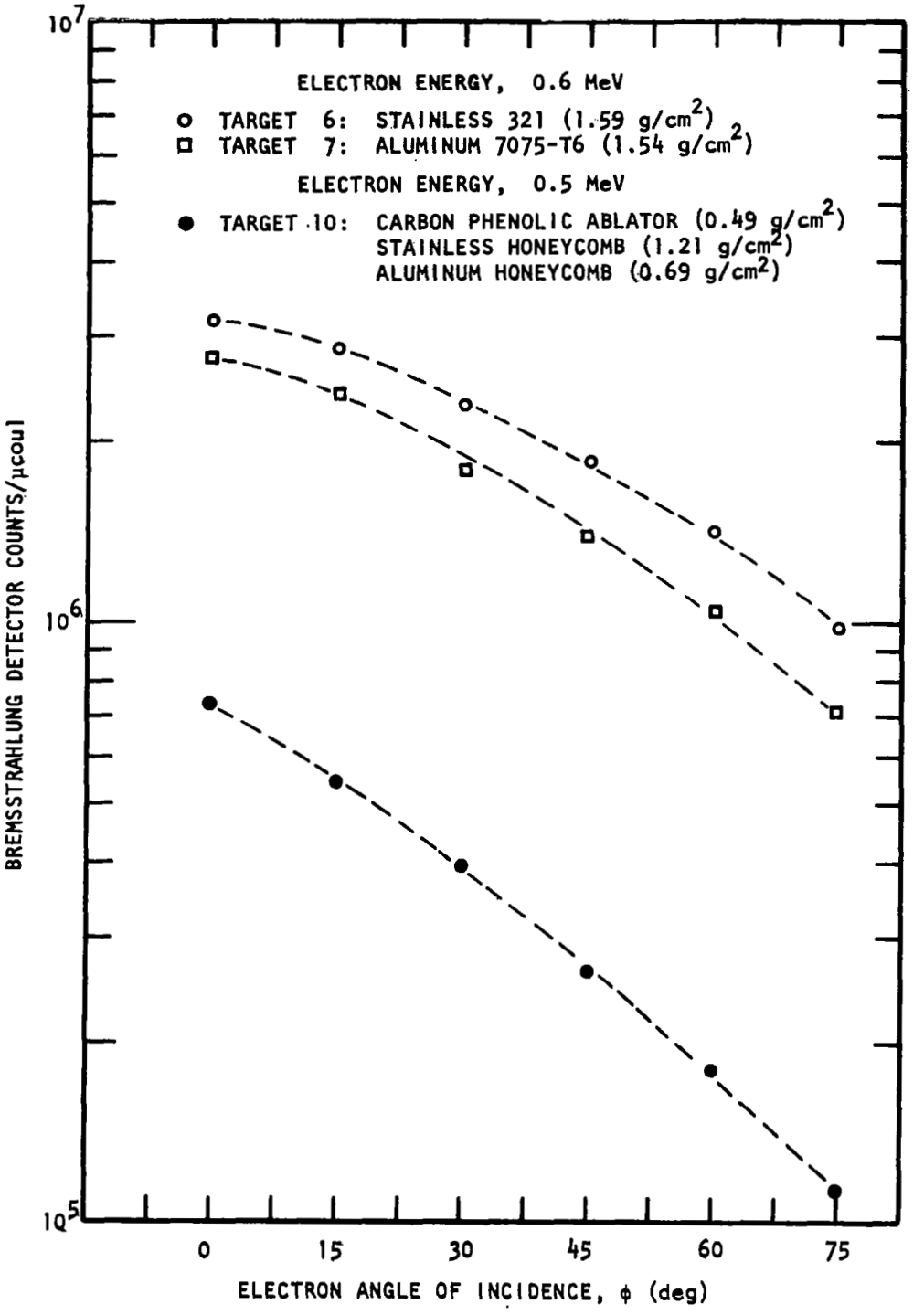

FIGURE 11. Bremsstrahlung yield as a function of electron angle of incidence, from Targets 6 and 7, at 0.6 MeV bombarding energy, and from target 10 at 0.5 MeV bombarding energy.

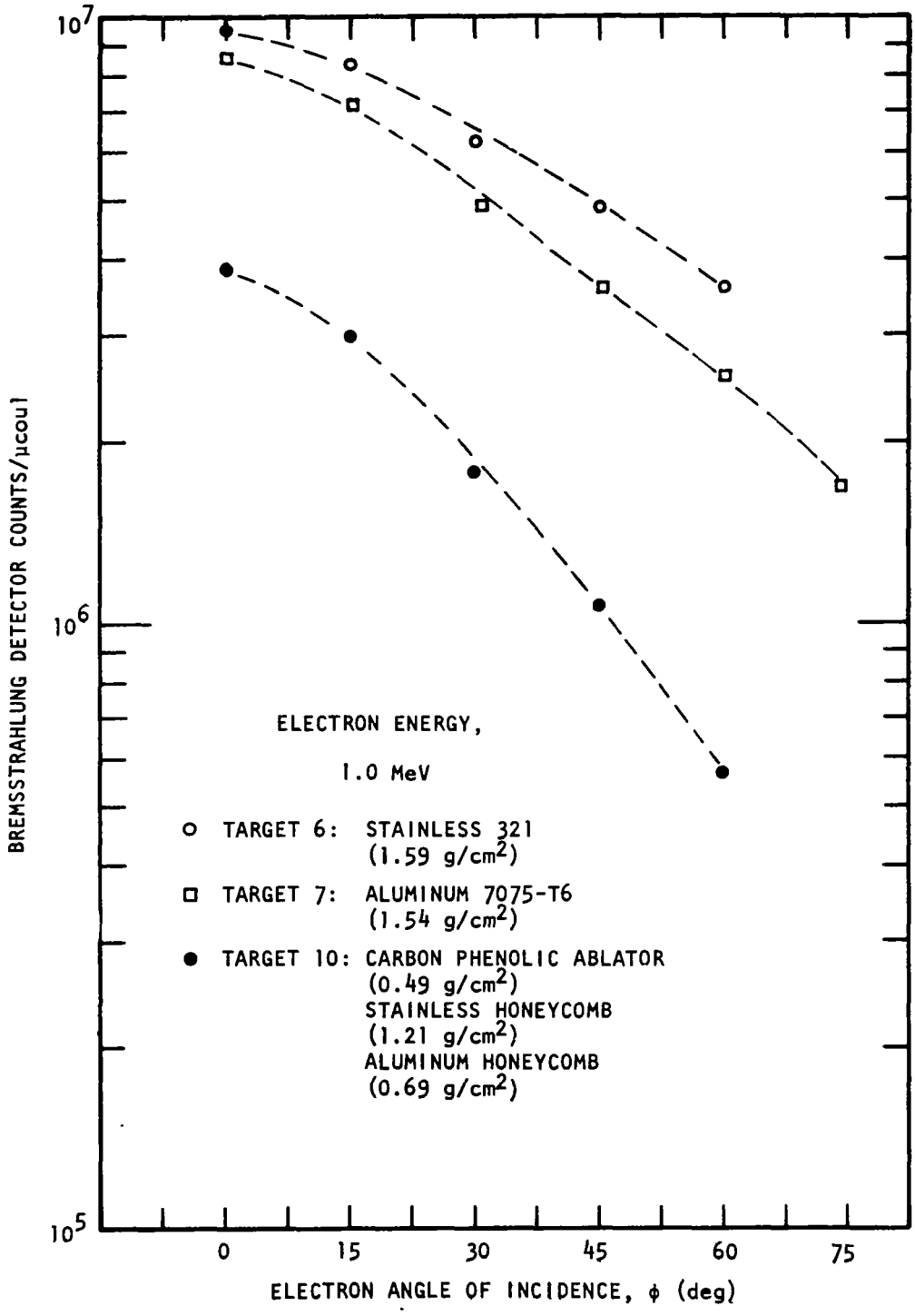

FIGURE 12. Bremsstrahlung yield as a function of electron angle of incidence, from Targets 6, 7, and 10, at 1.0 MeV bombarding energy.

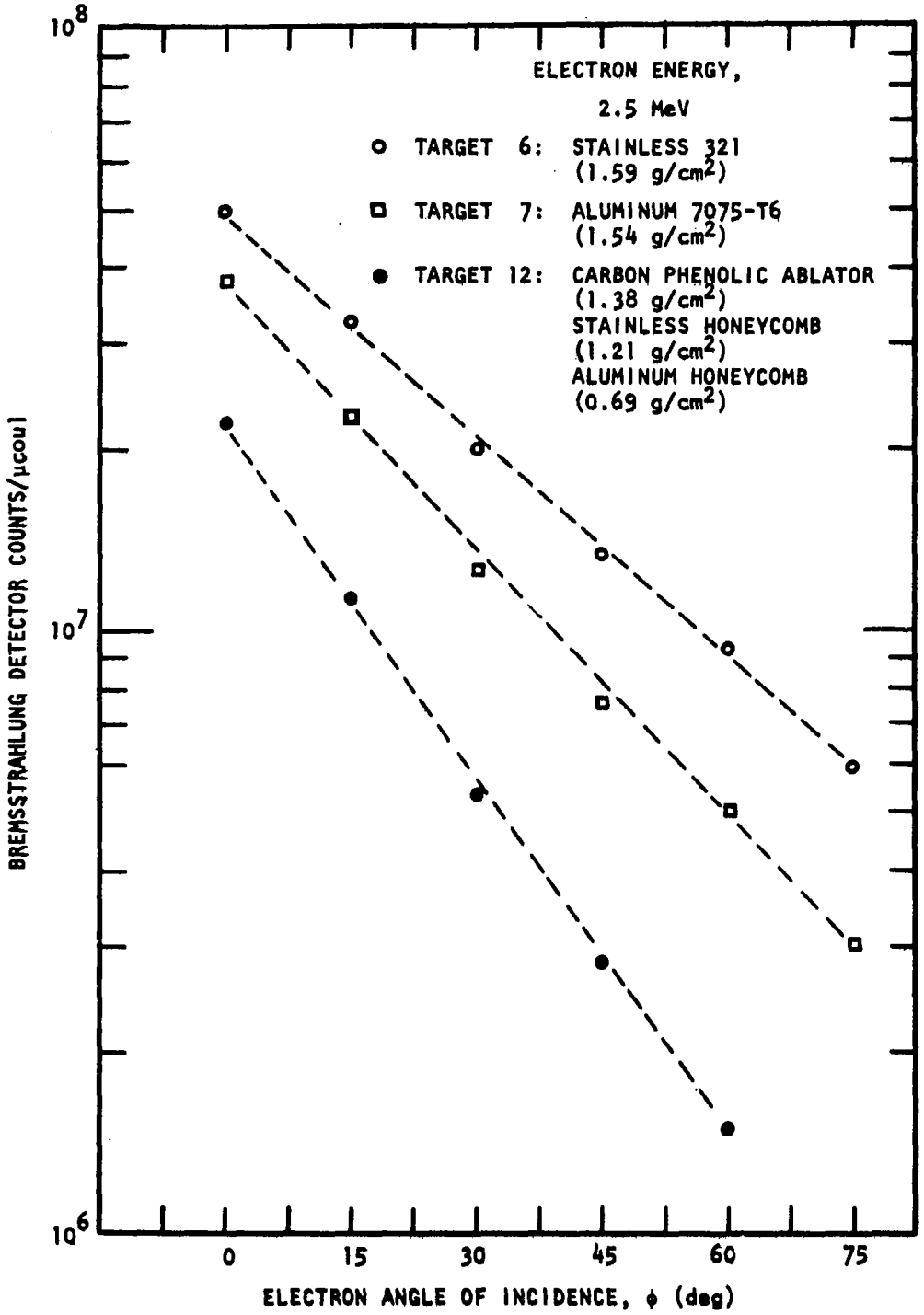

FIGURE 13. Bremsstrahlung yield as a function of electron angle of incidence, from Targets 6, 7, and 12, at 2.5 MeV bombarding energy.

These distributions were obtained by rotating the target and spectrometer through the same angle, i.e. by varying the angle of incidence and holding the detector axis on the normal to the target plane. The targets corresponding to these curves are representative of the lowest effective-Z material, the highest Z, and one intermediate Z-value in the range of atomic numbers of the targets listed in Table I.

To obtain the total dose for a given target resulting from the Vette space electron environment requires knowledge of the bremsstrahlung produced by electrons of energies ranging from a few kilovolts up to approximately 2.5 MeV. As the present investigation is limited to three bombarding energies above 0.6 MeV for the homogeneous targets and alloys, and to two energies above 0.5 MeV for the ablative targets, the dose due to electrons with energy above the minimum bombarding energy will be given for each target, based on the dose at those bombarding energies. The dose per electron/cm^2-vs-bombarding energy from the Appendix is shown for Targets 6, 7, and 10 in Fig. 14. From the present experimental data the exact shape of the dose curve vs. electron energy below 0.5 MeV is not established, as the data is limited to 2 or 3 bombarding energies above 0.5 MeV. However, from the results of previous bremsstrahlung experiments in this laboratory for normal incidence, an estimate of the shape and projection of the curve to lower bombarding energies can be made for the alloy targets. For example, if the experimental power law previously obtained, reference 4, relating the total bremsstrahlung energy emitted in the forward direction to the incident energy for low-Z pure materials is assumed for the alloys of the present study, an estimate of the dose-vs-bombarding energy curve using the Vette AE3 spectrum would be that shown in Fig. 15, for Targets 6, 7, and 10. The solid lines represent the energy range of the present experiment, and the dashed lines are computed from the extrapolated regions of Fig. 14. As can be seen electrons having energies between 0.4 and 0.6 MeV are expected to make the greatest contribution to the dose of electromagnetic radiation for the electrons in Vette's synchronous orbit. At 0.1 MeV and again at 1.6 MeV the dose is seen to be down to approximately 10 to 20% of its peak value, depending on the material of the target. The results shown in Fig. 14 include the maximum and minimum values in the range of dose values obtained for the complete set of targets, from the carbon phenolic target (effective Z $\sim$ 8) to the stainless steel (effective Z $\sim$ 26). The dose values for the remaining targets appear in the Appendix. These values, given

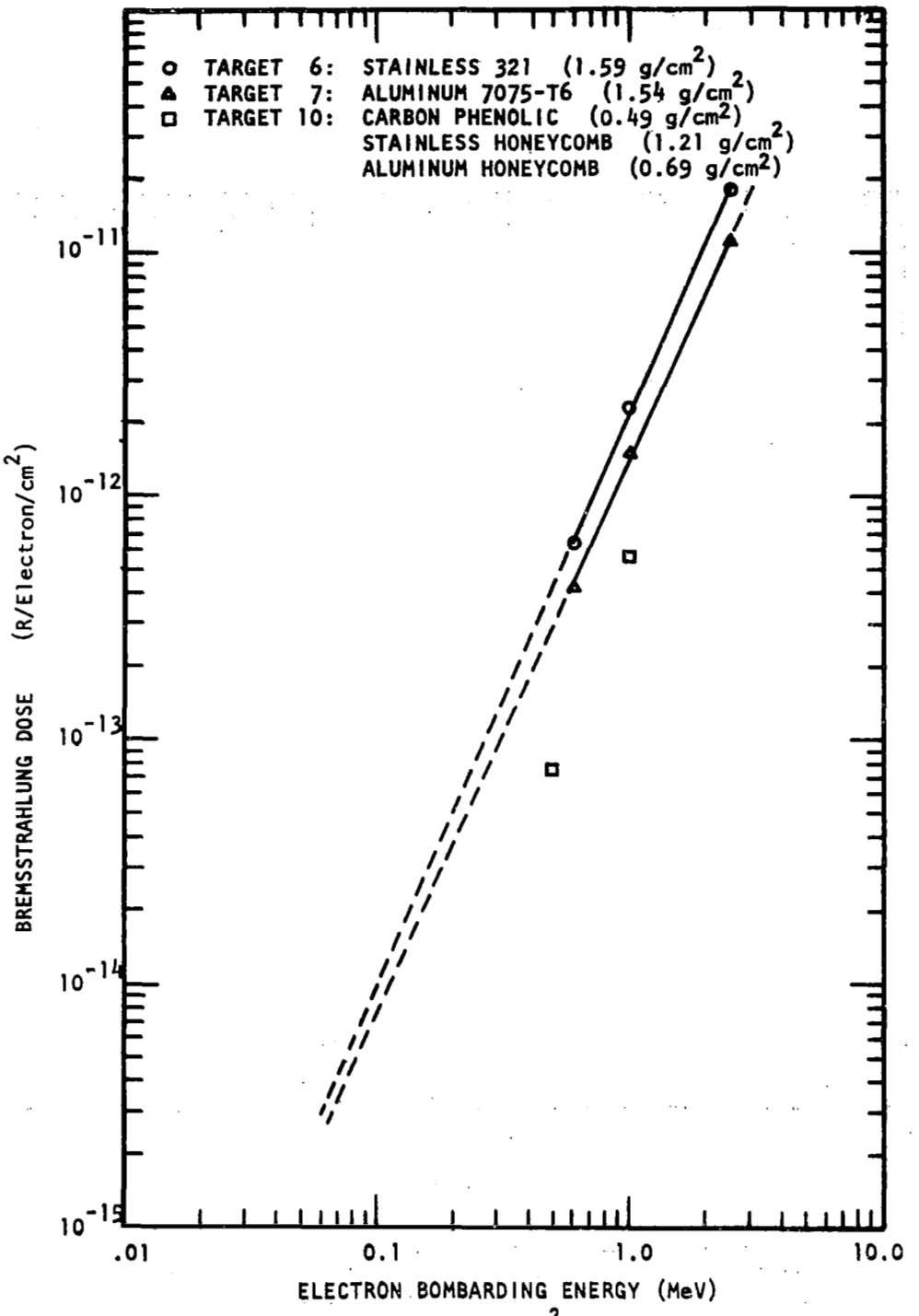

FIGURE 14. Bremsstrahlung dose per electron/cm^2 from Targets 6, 7, and 10 as a function of electron bombarding energy. The dashed lines are the extrapolated portions of the curves, for the energy region outside the energy range of the present measurements. Integration of the bremsstrahlung dose was for E > 35 keV at 0.5 and 0.6 MeV bombarding energies and for E > 123 keV at 2.5 MeV.

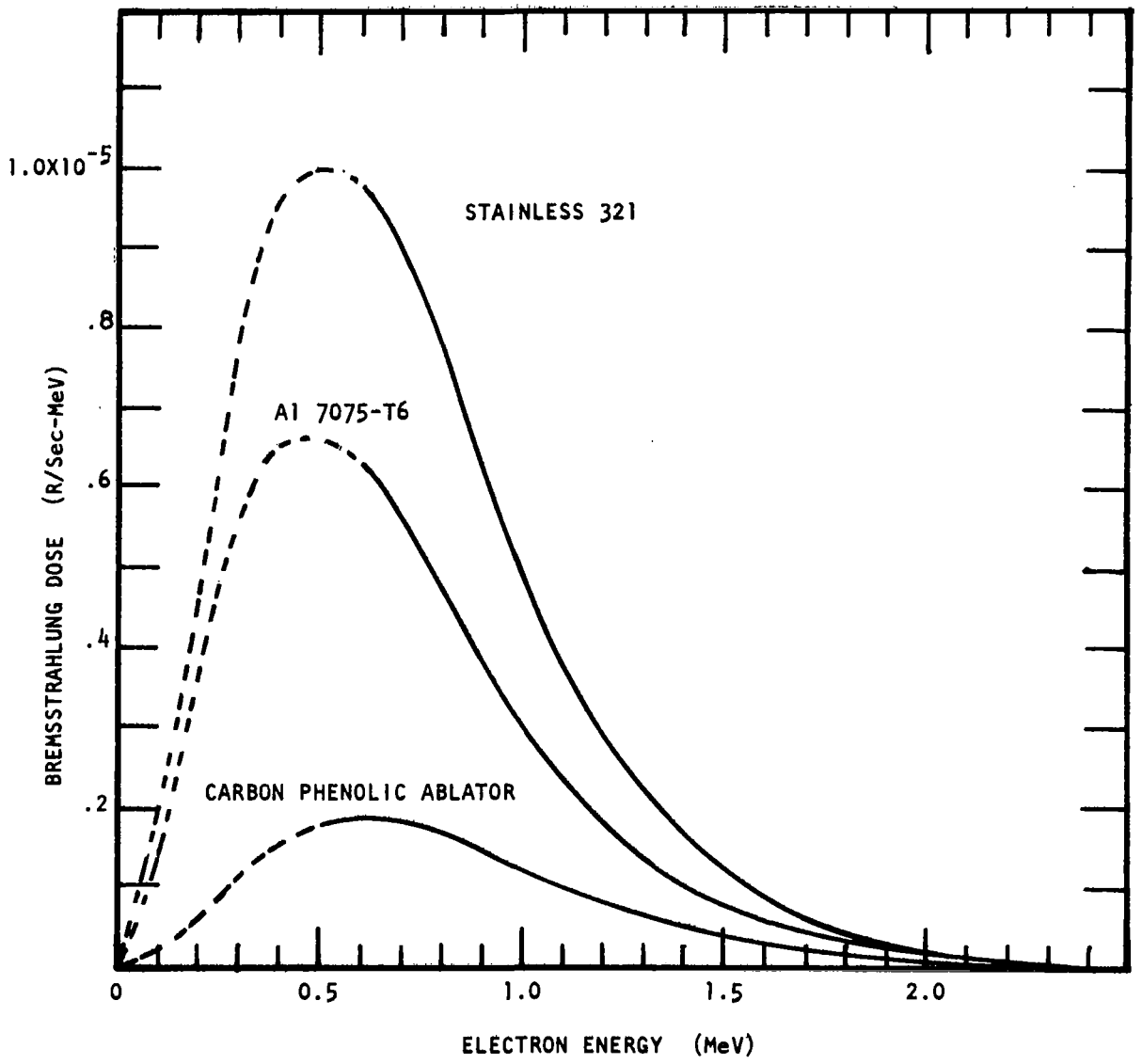

FIGURE 15. Estimated dose curves for Targets 6, 7, and 10 in the electron environment given by the Vette AE3 Model. The dashed portions of the curves are the extrapolations to energies below the range of the present measurements.

in R/electron/cm^2, are thus the dose contributions at the center of a sphere for unit omnidirectional fluxes, of the specified bombarding energies.

By integrating the curves of Fig. 15 over electron energy, an estimate of the dose rate at the center of a spherical shell composed of these materials is obtained. This has been done for most of the targets, and the estimated dose rate values based on the present data and extrapolation to lower energies are listed in Table II for two electron energy increments. The first column of values corresponds to an integration from 0.6 to 2.5 MeV, while the second column corresponds to that from zero to 2.5 MeV. The highest estimated dose rate from the 0-2.5 MeV integration is seen to be 8.6×10^{-6} R/sec or approximately 0.75 R/day for the Stainless, while the lowest is 0.15 R/day for the carbon phenolic ablator backed by the stainless and aluminum honeycombs.

The comparison at 2.5 MeV of the pulse height spectra from targets consisting of layers of pure Ti, Al, and V in thicknesses proportional to their abundance in the alloy Ti 6Al 4V indicated that, within the error limits of the experiment, varying the order of the layers of this target has little effect on the dose at this electron energy. This result might be expected, as in this case the dominant bremsstrahlung-producing layer (and also attenuating layer) is the Ti, and the thickness of the other two layers is only a small fraction of that of the Ti layer. Dose values at 2.5 MeV for the six target configurations varied by about 9%, ranging from 1.44×10^{-11} R/electron/cm^2 to 1.57×10^{-11} R/electron/cm^2.

Comparison of the dose values from the solid targets and targets of equal thickness comprised of eight identical layers of the same material show that, at each of the bombarding energies 0.6, 1.0, and 2.5 MeV, layering has little effect on the bremsstrahlung observed at the detector. From the data in the Appendix it is seen that dose values from the layered targets were 2% to 10% higher than from the solid targets of the same material.

The comparison of the bremsstrahlung from the two ablative materials (Targets 10 and 11) indicates that the contribution to dose at 0.5 MeV bombarding energy is only about 5% greater from the fiberglass ablator than from the carbon phenolic ablator, for equal thicknesses in g/cm^2. At 1.0 MeV bombarding energy the dose from the fiberglass is 12% greater.

TABLE II

BREMSSTRAHLUNG DOSE ESTIMATED FROM EXTRAPOLATION

OF PRESENT EXPERIMENTAL DATA

TARGET NO.	DOSE ($0.6 < E_{el} < 2.5$) R/Day	DOSE ($E_{el} < 2.5$) R/Day
1	0.34	0.68
2	0.34	0.62
3	0.37	0.73
4	0.36	0.70
6	0.39	0.75
7	0.24	0.47
8	0.27	0.53
9	0.35	0.66
10	0.09	0.15
11	0.11	0.16
12	0.10	0.20

CONCLUSIONS

As mentioned earlier, the measurement of absolute bremsstrahlung dose rates depends upon establishing the nature of the dose-vs-bombarding energy curve for the specific materials. The lowest bombarding energy for which bremsstrahlung measurements are reported here, which is 0.6 MeV for the alloy materials and 0.5 MeV for the ablative materials, occurs at an energy slightly greater than the estimated peak in the dose curves (Fig. 15). The estimated bremsstrahlung energy curve, shown in Fig. 16, was obtained by taking as an approximation to the omnidirectional case the total energy radiated in the forward direction as measured previously for normal incidence from targets of pure iron, reference 4, and folding in the Vette AE3 electron spectrum. Based on such approximations and the present alloy data for the limited number of electron energies (denoted by arrows in Fig. 16) the projected total dose for the Stainless Steel in this electron environment is approximately 0.8 R/day. As this value is significant in terms of the dose which might be permissible during extended manned flights, the requirement for additional measurements at energies close to and below the estimated dose peak and at least one energy between 1.0 and 2.0 MeV becomes necessary if one is to substantiate these estimates by direct measurement.

The chief value of experimental data from a specialized situation such as that obtained in the present study for bremsstrahlung production in composite materials lies in its testing of theoretical or analytical methods for calculating such quantities, which are generalized and can be applied to many different materials and geometries. Thus a logical portion of further experimental studies would be a comparison of the present results with those that would be predicted for this case by codes such as those of Berger & Seltzer, reference 1, and by such analytical methods as that reported by Burrell, Wright & Watts.[11]

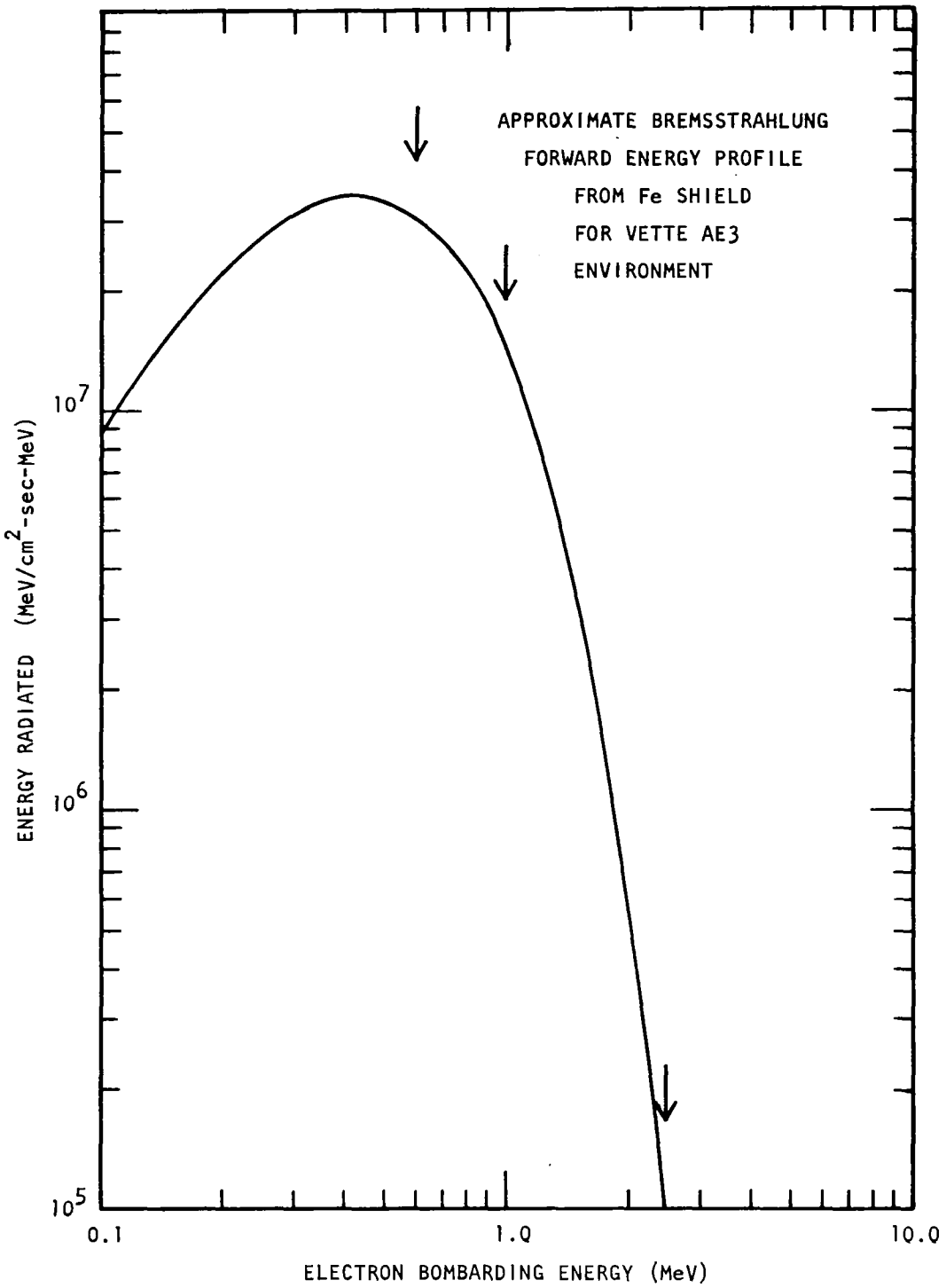

FIGURE 16. Bremsstrahlung energy emitted in the forward direction from pure iron targets, for the case of normal incidence, as a function of electron bombarding energy. The arrows indicate the bombarding energies for which the present measurements are reported for composite materials. Bremsstrahlung data for this curve was taken from reference 4.

REFERENCES

1. M. J. Berger and S. M. Seltzer, "Penetration of Electrons and Associated Bremsstrahlung through Aluminum Targets", NASA SP-169 (ANS-SD-5), p.285 (1968).

2. James I. Vette and Antonio B. Lucero, "Models of the Trapped Radiation Environment, Vol. III, Electrons at Synchronous Altitudes", NASA SP-3024 (1967).

3. William E. Dance and Leo L. Baggerly, "Investigation of Electron Interactions with Matter, Part I", NASA CR-334 (1965).

4. W. E. Dance, D. H. Rester, B. J. Farmer, J. H. Johnson, and L. L. Baggerly, J. App. Phys. 39, 2881 (1968).

5. D. H. Rester and W. E. Dance, "Electron Scattering and Bremsstrahlung Cross Section Measurements", NASA CR-759 (1967).

6. D. H. Rester and W. E. Dance, Phys. Rev. 161, 85 (1967).

7. Martin J. Berger and Stephen M. Seltzer, "Tables of Energy Losses and Ranges of Electrons and Positrons", NASA SP-3012 (1964).

8. H. D. Hendricks, T. G. James, and Larry B. York, "Measurements of Bremsstrahlung Produced by 0.75 and 1.25 MeV Electrons Incident on Typical Apollo Wall Sections", NASA TMX-1140 (1965).

9. Robley D. Evans, "Principles for the Calculation of Radiation Dose Rates in Space Vehicles", Arthur D. Little, Inc., Report 63270-05-01 (1961).

10. Theodore Rockwell III, Editor, Reactor Shielding Design Manual, McGraw-Hill, 1956, p. 19.

11. Martin O. Burrell, J. J. Wright, and John W. Watts, Jr., "The Calculation of Electron and Bremsstrahlung Dose Rates", NASA SP-169 (ANS-SD-5) (1968).

APPENDIX - BREMSSTRAHLUNG SPECTRA AND DOSE DATA

TARGET NO. 10 INCIDENT ELECTRON ENERGY 0.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	2.462E-03	4.193E-03	5.278E-03	7.000E-03	4.527E-03	1.666E-03
10	3.663E-03	6.140E-03	7.815E-03	8.404E-03	5.289E-03	1.916E-03
13	4.059E-03	6.638E-03	8.595E-03	8.008E-03	4.930E-03	1.798E-03
16	3.826E-03	6.299E-03	8.146E-03	6.901E-03	4.125E-03	1.506E-03
19	3.517E-03	5.745E-03	7.409E-03	5.832E-03	3.443E-03	1.255E-03
22	3.103E-03	5.039E-03	6.484E-03	4.777E-03	2.770E-03	9.995E-04
25	2.662E-03	4.341E-03	5.542E-03	3.912E-03	2.252E-03	7.987E-04
28	2.283E-03	3.688E-03	4.744E-03	3.212E-03	1.832E-03	6.367E-04
31	1.953E-03	3.192E-03	4.023E-03	2.600E-03	1.452E-03	5.095E-04
34	1.657E-03	2.682E-03	3.411E-03	2.123E-03	1.164E-03	3.982E-04
37	1.394E-03	2.253E-03	2.860E-03	1.733E-03	9.199E-04	3.090E-04
40	1.199E-03	1.952E-03	2.425E-03	1.399E-03	7.386E-04	2.393E-04
43	9.953E-04	1.673E-03	2.031E-03	1.112E-03	5.726E-04	1.839E-04
46	8.301E-04	1.401E-03	1.696E-03	8.755E-04	4.476E-04	1.414E-04
49	6.939E-04	1.171E-03	1.426E-03	7.049E-04	3.511E-04	1.062E-04
52	5.798E-04	9.806E-04	1.221E-03	5.310E-04	2.596E-04	7.941E-05
55	4.777E-04	8.222E-04	9.853E-04	4.342E-04	1.958E-04	5.972E-05
58	3.864E-04	6.862E-04	8.273E-04	3.214E-04	1.453E-04	4.038E-05
61	3.237E-04	5.422E-04	6.896E-04	2.425E-04	1.090E-04	2.791E-05
64	2.551E-04	4.448E-04	5.641E-04	1.766E-04	7.087E-05	1.831E-05
67	2.005E-04	3.639E-04	4.371E-04	1.249E-04	4.726E-05	1.193E-05
70	1.574E-04	2.879E-04	3.524E-04	8.241E-05	3.180E-05	7.718E-06
73	1.161E-04	2.232E-04	2.977E-04	4.804E-05	1.960E-05	4.784E-06
76	8.315E-05	1.695E-04	2.151E-04	2.228E-05	7.061E-06	2.419E-06
79	6.059E-05	1.209E-04	1.518E-04	8.619E-06	3.816E-06	6.067E-07
82	4.015E-05	8.688E-05	1.068E-04	4.344E-06	1.592E-06	8.463E-07
85	2.188E-05	4.753E-05	6.193E-05	1.119E-06	1.042E-06	2.581E-07
88	1.280E-05	3.213E-05	4.563E-05	8.381E-07	-3.593E-07	1.876E-07
91	5.711E-06	1.472E-05	1.941E-05	3.770E-07	5.034E-07	3.828E-07

TARGET NO. 10 INCIDENT ELECTRON ENERGY 0.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.143E-01	3.803E-03	5.883E-11	2.237E-13
8	4.075E 01	1.167E 00		4.341E-11	
9	4.628E 01	1.089E 00		3.904E-11	
10	5.181E 01	1.034E 00	8.324E-03	3.576E-11	2.976E-13
11	5.735E 01	1.028E 00		3.470E-11	
12	6.288E 01	1.028E 00		3.420E-11	
13	6.841E 01	1.033E 00	8.422E-03	3.420E-11	2.880E-13
14	7.394E 01	1.029E 00		3.463E-11	
15	7.947E 01	1.021E 00		3.524E-11	
16	8.501E 01	1.021E 00	7.470E-03	3.675E-11	2.746E-13
17	9.054E 01	1.021E 00		3.846E-11	
18	9.607E 01	1.021E 00		4.118E-11	
19	1.016E 02	1.021E 00	6.552E-03	4.392E-11	2.877E-13
20	1.071E 02	1.019E 00		4.674E-11	
21	1.127E 02	1.018E 00		4.969E-11	
22	1.182E 02	1.018E 00	5.533E-03	5.279E-11	2.921E-13
23	1.237E 02	1.015E 00		5.600E-11	
24	1.293E 02	1.010E 00		5.927E-11	
25	1.348E 02	1.010E 00	4.604E-03	6.248E-11	2.877E-13
26	1.403E 02	1.011E 00		6.572E-11	
27	1.459E 02	1.011E 00		6.943E-11	
28	1.514E 02	1.012E 00	3.865E-03	7.315E-11	2.827E-13
29	1.569E 02	1.014E 00		7.691E-11	
30	1.625E 02	1.013E 00		8.067E-11	
31	1.680E 02	1.007E 00	3.203E-03	8.444E-11	2.704E-13
32	1.735E 02	1.006E 00		8.816E-11	
33	1.791E 02	1.008E 00		9.187E-11	
34	1.846E 02	1.008E 00	2.663E-03	9.548E-11	2.543E-13
35	1.901E 02	1.008E 00		9.907E-11	
36	1.957E 02	1.007E 00		1.024E-10	
37	2.012E 02	1.007E 00	2.195E-03	1.047E-10	2.298E-13
38	2.067E 02	1.011E 00		1.033E-10	
39	2.123E 02	1.016E 00		1.062E-10	
40	2.178E 02	1.023E 00	1.863E-03	1.153E-10	2.149E-13

TARGET NO. 10 INCIDENT ELECTRON ENERGY 0.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.029E 00		1.213E-10	
42	2.288E 02	1.034E 00		1.252E-10	
43	2.344E 02	1.037E 00	1.551E-03	1.291E-10	2.002E-13
44	2.399E 02	1.038E 00		1.329E-10	
45	2.454E 02	1.040E 00		1.363E-10	
46	2.510E 02	1.043E 00	1.275E-03	1.398E-10	1.783E-13
47	2.565E 02	1.053E 00		1.442E-10	
48	2.620E 02	1.063E 00		1.482E-10	
49	2.676E 02	1.070E 00	1.078E-03	1.515E-10	1.634E-13
50	2.731E 02	1.078E 00		1.549E-10	
51	2.786E 02	1.086E 00		1.582E-10	
52	2.842E 02	1.094E 00	8.984E-04	1.615E-10	1.451E-13
53	2.897E 02	1.103E 00		1.648E-10	
54	2.952E 02	1.108E 00		1.687E-10	
55	3.008E 02	1.114E 00	7.421E-04	1.724E-10	1.279E-13
56	3.063E 02	1.124E 00		1.752E-10	
57	3.118E 02	1.133E 00		1.781E-10	
58	3.174E 02	1.139E 00	6.110E-04	1.814E-10	1.108E-13
59	3.229E 02	1.146E 00		1.847E-10	
60	3.284E 02	1.155E 00		1.881E-10	
61	3.340E 02	1.163E 00	4.994E-04	1.918E-10	9.578E-14
62	3.395E 02	1.170E 00		1.956E-10	
63	3.450E 02	1.174E 00		1.990E-10	
64	3.506E 02	1.177E 00	3.975E-04	2.023E-10	8.042E-14
65	3.561E 02	1.182E 00		2.057E-10	
66	3.616E 02	1.186E 00		2.088E-10	
67	3.672E 02	1.187E 00	3.078E-04	2.116E-10	6.512E-14
68	3.727E 02	1.190E 00		2.146E-10	
69	3.782E 02	1.197E 00		2.179E-10	
70	3.838E 02	1.208E 00	2.415E-04	2.209E-10	5.335E-14
71	3.893E 02	1.221E 00		2.236E-10	
72	3.948E 02	1.235E 00		2.269E-10	
73	4.004E 02	1.248E 00	1.925E-04	2.302E-10	4.432E-14
74	4.059E 02	1.241E 00		2.341E-10	
75	4.114E 02	1.232E 00		2.377E-10	
76	4.169E 02	1.215E 00	1.299E-04	2.405E-10	3.125E-14
77	4.225E 02	1.204E 00		2.435E-10	
78	4.280E 02	1.202E 00		2.468E-10	
79	4.335E 02	1.206E 00	8.845E-05	2.494E-10	2.206E-14
80	4.391E 02	1.214E 00		2.516E-10	

TARGET NO. 10 INCIDENT ELECTRON ENERGY 0.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.226E 00		2.548E-10	
82	4.501E 02	1.237E 00	6.289E-05	2.581E-10	1.623E-14
83	4.557E 02	1.211E 00		2.603E-10	
84	4.612E 02	1.184E 00		2.627E-10	
85	4.667E 02	1.158E 00	3.285E-05	2.660E-10	8.739E-15
86	4.723E 02	1.176E 00		2.691E-10	
87	4.778E 02	1.257E 00		2.719E-10	
88	4.833E 02	1.318E 00	2.586E-05	2.747E-10	7.104E-15
89	4.889E 02	1.366E 00		2.774E-10	
90	4.944E 02	7.700E-01		2.802E-10	
91	4.999E 02	8.943E-03	7.903E-08	2.830E-10	2.236E-17
92	5.055E 02	0.0		2.861E-10	

DOSE= 7.541E-14 R-SQ.CM./ELECTRON

TARGET NO. 11 INCIDENT ELECTRON ENERGY 0.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	2.946E-03	4.885E-03	6.539E-03	8.750E-03	5.268E-03	1.222E-03
10	4.089E-03	6.731E-03	8.870E-03	1.012E-02	5.739E-03	1.669E-03
13	4.358E-03	7.157E-03	9.339E-03	9.560E-03	5.182E-03	1.755E-03
16	4.020E-03	6.752E-03	8.666E-03	8.110E-03	4.292E-03	1.611E-03
19	3.629E-03	6.027E-03	7.761E-03	6.896E-03	3.471E-03	1.417E-03
22	3.134E-03	5.283E-03	6.728E-03	5.637E-03	2.825E-03	1.202E-03
25	2.691E-03	4.543E-03	5.689E-03	4.560E-03	2.239E-03	1.004E-03
28	2.287E-03	3.861E-03	4.890E-03	3.733E-03	1.776E-03	8.311E-04
31	1.920E-03	3.316E-03	4.151E-03	3.004E-03	1.404E-03	6.824E-04
34	1.668E-03	2.808E-03	3.452E-03	2.450E-03	1.105E-03	5.581E-04
37	1.381E-03	2.393E-03	2.969E-03	1.991E-03	8.538E-04	4.610E-04
40	1.190E-03	2.002E-03	2.501E-03	1.592E-03	6.814E-04	3.664E-04
43	9.780E-04	1.682E-03	2.073E-03	1.242E-03	5.233E-04	3.004E-04
46	8.193E-04	1.435E-03	1.744E-03	9.911E-04	3.794E-04	2.400E-04
49	6.760E-04	1.185E-03	1.423E-03	7.755E-04	2.760E-04	1.894E-04
52	5.641E-04	9.731E-04	1.182E-03	5.869E-04	2.041E-04	1.534E-04
55	4.668E-04	8.168E-04	9.942E-04	4.476E-04	1.371E-04	1.175E-04
58	3.592E-04	6.742E-04	7.830E-04	3.085E-04	9.251E-05	9.163E-05
61	2.982E-04	5.539E-04	6.651E-04	2.321E-04	5.851E-05	7.061E-05
64	2.307E-04	4.499E-04	5.207E-04	1.533E-04	3.469E-05	5.437E-05
67	1.687E-04	3.592E-04	3.993E-04	8.549E-05	1.720E-05	4.030E-05
70	1.351E-04	2.718E-04	2.925E-04	4.682E-05	4.917E-06	2.847E-05
73	9.475E-05	2.084E-04	2.471E-04	1.865E-05	2.338E-06	2.060E-05
76	6.320E-05	1.383E-04	1.600E-04	6.113E-06	-1.423E-08	1.465E-05
79	3.764E-05	9.477E-05	1.058E-04	1.744E-06	9.820E-08	7.841E-06
82	2.099E-05	5.636E-05	6.280E-05	1.063E-06	3.401E-07	4.828E-06
85	1.071E-05	3.062E-05	2.713E-05	2.702E-06	5.579E-07	2.881E-06
88	2.875E-06	1.258E-05	1.230E-05	2.557E-06	-1.238E-07	1.139E-06
91	2.019E-06	5.802E-06	5.081E-06	1.759E-06	1.227E-06	4.877E-07

TARGET NO. 11 INCIDENT ELECTRON ENERGY 0.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.220E-01	4.561E-03	5.883E-11	2.683E-13
8	4.075E 01	1.181E 00		4.341E-11	
9	4.628E 01	1.095E 00		3.904E-11	
10	5.181E 01	1.035E 00	9.384E-03	3.576E-11	3.355E-13
11	5.735E 01	1.029E 00		3.470E-11	
12	6.288E 01	1.029E 00		3.420E-11	
13	6.841E 01	1.034E 00	9.299E-03	3.420E-11	3.180E-13
14	7.394E 01	1.030E 00		3.463E-11	
15	7.947E 01	1.022E 00		3.524E-11	
16	8.501E 01	1.021E 00	8.160E-03	3.675E-11	2.999E-13
17	9.054E 01	1.021E 00		3.846E-11	
18	9.607E 01	1.020E 00		4.118E-11	
19	1.016E 02	1.020E 00	7.073E-03	4.392E-11	3.106E-13
20	1.071E 02	1.019E 00		4.674E-11	
21	1.127E 02	1.019E 00		4.969E-11	
22	1.182E 02	1.019E 00	5.978E-03	5.279E-11	3.156E-13
23	1.237E 02	1.016E 00		5.600E-11	
24	1.293E 02	1.010E 00		5.927E-11	
25	1.348E 02	1.009E 00	4.917E-03	6.248E-11	3.072E-13
26	1.403E 02	1.010E 00		6.572E-11	
27	1.459E 02	1.011E 00		6.943E-11	
28	1.514E 02	1.013E 00	4.123E-03	7.315E-11	3.016E-13
29	1.569E 02	1.015E 00		7.691E-11	
30	1.625E 02	1.013E 00		8.067E-11	
31	1.680E 02	1.007E 00	3.400E-03	8.444E-11	2.871E-13
32	1.735E 02	1.005E 00		8.816E-11	
33	1.791E 02	1.006E 00		9.187E-11	
34	1.846E 02	1.007E 00	2.813E-03	9.548E-11	2.686E-13
35	1.901E 02	1.008E 00		9.907E-11	
36	1.957E 02	1.010E 00		1.024E-10	
37	2.012E 02	1.012E 00	2.353E-03	1.047E-10	2.464E-13
38	2.067E 02	1.015E 00		1.033E-10	
39	2.123E 02	1.019E 00		1.062E-10	
40	2.178E 02	1.024E 00	1.964E-03	1.153E-10	2.265E-13

TARGET NO. 11 INCIDENT ELECTRON ENERGY 0.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.028E 00		1.213E-10	
42	2.288E 02	1.032E 00		1.252E-10	
43	2.344E 02	1.035E 00	1.612E-03	1.291E-10	2.081E-13
44	2.399E 02	1.038E 00		1.329E-10	
45	2.454E 02	1.044E 00		1.363E-10	
46	2.510E 02	1.050E 00	1.341E-03	1.398E-10	1.875E-13
47	2.565E 02	1.057E 00		1.442E-10	
48	2.620E 02	1.063E 00		1.482E-10	
49	2.676E 02	1.066E 00	1.093E-03	1.515E-10	1.657E-13
50	2.731E 02	1.073E 00		1.549E-10	
51	2.786E 02	1.082E 00		1.582E-10	
52	2.842E 02	1.092E 00	9.009E-04	1.615E-10	1.455E-13
53	2.897E 02	1.103E 00		1.648E-10	
54	2.952E 02	1.113E 00		1.687E-10	
55	3.008E 02	1.121E 00	7.475E-04	1.724E-10	1.289E-13
56	3.063E 02	1.124E 00		1.752E-10	
57	3.118E 02	1.125E 00		1.781E-10	
58	3.174E 02	1.124E 00	5.757E-04	1.814E-10	1.045E-13
59	3.229E 02	1.134E 00		1.847E-10	
60	3.284E 02	1.154E 00		1.881E-10	
61	3.340E 02	1.168E 00	4.841E-04	1.918E-10	9.283E-14
62	3.395E 02	1.180E 00		1.956E-10	
63	3.450E 02	1.180E 00		1.990E-10	
64	3.506E 02	1.180E 00	3.721E-04	2.023E-10	7.529E-14
65	3.561E 02	1.182E 00		2.057E-10	
66	3.616E 02	1.183E 00		2.088E-10	
67	3.672E 02	1.177E 00	2.717E-04	2.116E-10	5.749E-14
68	3.727E 02	1.172E 00		2.146E-10	
69	3.782E 02	1.168E 00		2.179E-10	
70	3.838E 02	1.176E 00	1.943E-04	2.209E-10	4.291E-14
71	3.893E 02	1.190E 00		2.236E-10	
72	3.948E 02	1.216E 00		2.269E-10	
73	4.004E 02	1.241E 00	1.560E-04	2.302E-10	3.592E-14
74	4.059E 02	1.229E 00		2.341E-10	
75	4.114E 02	1.212E 00		2.377E-10	
76	4.169E 02	1.185E 00	9.520E-05	2.405E-10	2.289E-14
77	4.225E 02	1.171E 00		2.435E-10	
78	4.280E 02	1.175E 00		2.468E-10	
79	4.335E 02	1.175E 00	6.128E-05	2.494E-10	1.528E-14
80	4.391E 02	1.173E 00		2.516E-10	

TARGET NO. 11 INCIDENT ELECTRON ENERGY 0.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.153E 00		2.548E-10	
82	4.501E 02	1.130E 00	3.494E-05	2.581E-10	9.017E-15
83	4.557E 02	1.117E 00		2.603E-10	
84	4.612E 02	1.097E 00		2.627E-10	
85	4.667E 02	1.050E 00	1.646E-05	2.660E-10	4.379E-15
86	4.723E 02	1.007E 00		2.691E-10	
87	4.778E 02	9.704E-01		2.719E-10	
88	4.833E 02	9.664E-01	6.633E-06	2.747E-10	1.822E-15
89	4.889E 02	9.839E-01		2.774E-10	
90	4.944E 02	5.527E-01		2.802E-10	
91	4.999E 02	6.419E-03	2.328E-08	2.830E-10	6.587E-18
92	5.055E 02	0.0		2.861E-10	

DOSE= 7.921E-14 R-SQ.CM./ELECTRON

TARGET NO. 1 INCIDENT ELECTRON ENERGY 0.6 MEV

CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	1.378E-02	2.526E-02	3.561E-02	3.197E-02	2.192E-02	9.034E-03
10	1.912E-02	3.425E-02	4.953E-02	4.426E-02	2.977E-02	1.246E-02
13	1.970E-02	3.536E-02	4.994E-02	4.536E-02	3.066E-02	1.264E-02
16	1.774E-02	3.184E-02	4.600E-02	4.101E-02	2.731E-02	1.140E-02
19	1.585E-02	2.835E-02	4.023E-02	3.569E-02	2.372E-02	9.989E-03
22	1.389E-02	2.475E-02	3.473E-02	3.045E-02	2.043E-02	8.463E-03
25	1.191E-02	2.139E-02	2.953E-02	2.604E-02	1.715E-02	7.184E-03
28	1.022E-02	1.826E-02	2.507E-02	2.243E-02	1.460E-02	5.965E-03
31	8.811E-03	1.588E-02	2.184E-02	1.911E-02	1.243E-02	5.100E-03
34	7.588E-03	1.352E-02	1.844E-02	1.615E-02	1.039E-02	4.296E-03
37	6.560E-03	1.175E-02	1.601E-02	1.397E-02	8.957E-03	3.657E-03
40	5.716E-03	1.025E-02	1.388E-02	1.177E-02	7.672E-03	2.992E-03
43	4.870E-03	8.829E-03	1.184E-02	1.011E-02	6.478E-03	2.650E-03
46	4.362E-03	7.721E-03	1.032E-02	8.675E-03	5.717E-03	2.240E-03
49	3.789E-03	6.666E-03	8.731E-03	7.347E-03	4.729E-03	1.845E-03
52	3.297E-03	5.829E-03	7.776E-03	6.427E-03	4.059E-03	1.613E-03
55	2.826E-03	5.234E-03	6.720E-03	5.530E-03	3.399E-03	1.377E-03
58	2.508E-03	4.374E-03	5.742E-03	4.790E-03	3.009E-03	1.140E-03
61	2.185E-03	3.832E-03	5.224E-03	3.994E-03	2.535E-03	9.653E-04
64	1.844E-03	3.493E-03	4.390E-03	3.549E-03	2.145E-03	8.387E-04
67	1.621E-03	3.026E-03	3.918E-03	3.054E-03	1.763E-03	6.710E-04
70	1.451E-03	2.533E-03	3.332E-03	2.573E-03	1.538E-03	5.842E-04
73	1.231E-03	2.271E-03	2.878E-03	2.161E-03	1.264E-03	4.862E-04
76	1.102E-03	1.874E-03	2.465E-03	1.823E-03	1.089E-03	4.060E-04
79	9.409E-04	1.728E-03	2.168E-03	1.609E-03	8.978E-04	3.236E-04
82	8.186E-04	1.433E-03	1.909E-03	1.368E-03	7.599E-04	2.661E-04
85	6.753E-04	1.175E-03	1.516E-03	1.158E-03	5.980E-04	2.129E-04
88	5.884E-04	1.050E-03	1.340E-03	9.203E-04	5.076E-04	1.725E-04
91	4.681E-04	8.699E-04	1.118E-03	7.303E-04	3.677E-04	1.263E-04
94	3.740E-04	6.924E-04	8.655E-04	5.442E-04	3.225E-04	9.055E-05
97	2.943E-04	6.145E-04	6.590E-04	4.425E-04	2.066E-04	6.639E-05
100	2.374E-04	4.434E-04	5.085E-04	3.027E-04	1.425E-04	4.580E-05
103	1.546E-04	3.234E-04	3.338E-04	1.802E-04	9.529E-05	3.453E-05
106	9.305E-05	2.083E-04	2.106E-04	1.253E-04	5.302E-05	1.399E-05
109	5.558E-05	1.219E-04	1.265E-04	7.668E-05	1.873E-05	5.757E-06

TARGET NO. 1 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.042E-01	2.018E-02	5.883E-11	1.187E-12
8	4.075E 01	1.149E 00		4.341E-11	
9	4.628E 01	1.081E 00		3.904E-11	
10	5.181E 01	1.033E 00	4.751E-02	3.576E-11	1.699E-12
11	5.735E 01	1.026E 00		3.470E-11	
12	6.288E 01	1.025E 00		3.420E-11	
13	6.841E 01	1.030E 00	4.843E-02	3.420E-11	1.656E-12
14	7.394E 01	1.027E 00		3.463E-11	
15	7.947E 01	1.019E 00		3.524E-11	
16	8.501E 01	1.018E 00	4.334E-02	3.675E-11	1.593E-12
17	9.054E 01	1.018E 00		3.846E-11	
18	9.607E 01	1.016E 00		4.118E-11	
19	1.016E 02	1.014E 00	3.778E-02	4.392E-11	1.659E-12
20	1.071E 02	1.014E 00		4.674E-11	
21	1.127E 02	1.014E 00		4.969E-11	
22	1.182E 02	1.014E 00	3.254E-02	5.279E-11	1.718E-12
23	1.237E 02	1.011E 00		5.600E-11	
24	1.293E 02	1.006E 00		5.927E-11	
25	1.348E 02	1.006E 00	2.749E-02	6.248E-11	1.718E-12
26	1.403E 02	1.006E 00		6.572E-11	
27	1.459E 02	1.005E 00		6.943E-11	
28	1.514E 02	1.006E 00	2.346E-02	7.315E-11	1.716E-12
29	1.569E 02	1.010E 00		7.691E-11	
30	1.625E 02	1.010E 00		8.067E-11	
31	1.680E 02	1.006E 00	2.018E-02	8.444E-11	1.704E-12
32	1.735E 02	1.003E 00		8.816E-11	
33	1.791E 02	1.001E 00		9.187E-11	
34	1.846E 02	1.001E 00	1.698E-02	9.548E-11	1.621E-12
35	1.901E 02	1.002E 00		9.907E-11	
36	1.957E 02	1.005E 00		1.024E-10	
37	2.012E 02	1.008E 00	1.479E-02	1.047E-10	1.549E-12
38	2.067E 02	1.010E 00		1.033E-10	
39	2.123E 02	1.013E 00		1.062E-10	
40	2.178E 02	1.017E 00	1.278E-02	1.153E-10	1.474E-12

TARGET NO. 1 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.022E 00		1.213E-10	
42	2.288E 02	1.027E 00		1.252E-10	
43	2.344E 02	1.031E 00	1.109E-02	1.291E-10	1.432E-12
44	2.399E 02	1.035E 00		1.329E-10	
45	2.454E 02	1.043E 00		1.363E-10	
46	2.510E 02	1.051E 00	9.833E-03	1.398E-10	1.374E-12
47	2.565E 02	1.054E 00		1.442E-10	
48	2.620E 02	1.058E 00		1.482E-10	
49	2.676E 02	1.061E 00	8.397E-03	1.515E-10	1.273E-12
50	2.731E 02	1.070E 00		1.549E-10	
51	2.786E 02	1.084E 00		1.582E-10	
52	2.842E 02	1.095E 00	7.595E-03	1.615E-10	1.227E-12
53	2.897E 02	1.106E 00		1.648E-10	
54	2.952E 02	1.111E 00		1.687E-10	
55	3.008E 02	1.117E 00	6.687E-03	1.724E-10	1.153E-12
56	3.063E 02	1.125E 00		1.752E-10	
57	3.118E 02	1.133E 00		1.781E-10	
58	3.174E 02	1.139E 00	5.864E-03	1.814E-10	1.064E-12
59	3.229E 02	1.146E 00		1.847E-10	
60	3.284E 02	1.154E 00		1.881E-10	
61	3.340E 02	1.163E 00	5.192E-03	1.918E-10	9.956E-13
62	3.395E 02	1.172E 00		1.956E-10	
63	3.450E 02	1.180E 00		1.990E-10	
64	3.506E 02	1.187E 00	4.593E-03	2.023E-10	9.292E-13
65	3.561E 02	1.196E 00		2.057E-10	
66	3.616E 02	1.204E 00		2.088E-10	
67	3.672E 02	1.210E 00	4.040E-03	2.116E-10	8.548E-13
68	3.727E 02	1.215E 00		2.146E-10	
69	3.782E 02	1.218E 00		2.179E-10	
70	3.838E 02	1.223E 00	3.483E-03	2.209E-10	7.694E-13
71	3.893E 02	1.229E 00		2.236E-10	
72	3.948E 02	1.234E 00		2.269E-10	
73	4.004E 02	1.239E 00	3.012E-03	2.302E-10	6.936E-13
74	4.059E 02	1.244E 00		2.341E-10	
75	4.114E 02	1.249E 00		2.377E-10	
76	4.169E 02	1.252E 00	2.588E-03	2.405E-10	6.224E-13
77	4.225E 02	1.261E 00		2.435E-10	
78	4.280E 02	1.277E 00		2.468E-10	
79	4.335E 02	1.290E 00	2.329E-03	2.494E-10	5.810E-13
80	4.391E 02	1.300E 00		2.516E-10	

TARGET NO. 1 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.310E 00		2.548E-10	
82	4.501E 02	1.320E 00	2.039E-03	2.581E-10	5.263E-13
83	4.557E 02	1.314E 00		2.603E-10	
84	4.612E 02	1.309E 00		2.627E-10	
85	4.667E 02	1.309E 00	1.646E-03	2.660E-10	4.378E-13
86	4.723E 02	1.316E 00		2.691E-10	
87	4.778E 02	1.335E 00		2.719E-10	
88	4.833E 02	1.348E 00	1.446E-03	2.747E-10	3.970E-13
89	4.889E 02	1.357E 00		2.774E-10	
90	4.944E 02	1.357E 00		2.802E-10	
91	4.999E 02	1.355E 00	1.165E-03	2.830E-10	3.296E-13
92	5.055E 02	1.357E 00		2.861E-10	
93	5.110E 02	1.359E 00		2.892E-10	
94	5.165E 02	1.359E 00	9.153E-04	2.923E-10	2.675E-13
95	5.221E 02	1.364E 00		2.954E-10	
96	5.276E 02	1.377E 00		2.982E-10	
97	5.331E 02	1.386E 00	7.299E-04	3.009E-10	2.196E-13
98	5.387E 02	1.393E 00		3.036E-10	
99	5.442E 02	1.393E 00		3.062E-10	
100	5.497E 02	1.390E 00	5.345E-04	3.089E-10	1.651E-13
101	5.553E 02	1.382E 00		3.117E-10	
102	5.608E 02	1.375E 00		3.146E-10	
103	5.663E 02	1.368E 00	3.477E-04	3.175E-10	1.104E-13
104	5.719E 02	1.369E 00		3.204E-10	
105	5.774E 02	1.386E 00		3.231E-10	
106	5.829E 02	1.416E 00	2.269E-04	3.258E-10	7.393E-14
107	5.885E 02	1.458E 00		3.285E-10	
108	5.940E 02	8.837E-01		3.311E-10	
109	5.995E 02	7.086E-02	6.498E-06	3.338E-10	2.169E-15
110	6.051E 02	0.0		3.368E-10	

DOSE= 5.761E-13 R-SQ.CM./ELECTRON

TARGET NO. 2 INCIDENT ELECTRON ENERGY 0.6 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	9.443E-03	1.720E-02	2.469E-02	2.228E-02	1.534E-02	6.255E-03
10	1.493E-02	2.724E-02	3.874E-02	3.560E-02	2.428E-02	9.743E-03
13	1.662E-02	3.057E-02	4.296E-02	3.920E-02	2.647E-02	1.078E-02
16	1.582E-02	2.935E-02	4.095E-02	3.673E-02	2.477E-02	1.016E-02
19	1.448E-02	2.626E-02	3.720E-02	3.327E-02	2.254E-02	9.041E-03
22	1.270E-02	2.300E-02	3.221E-02	2.909E-02	1.946E-02	7.852E-03
25	1.108E-02	2.042E-02	2.825E-02	2.478E-02	1.679E-02	6.748E-03
28	9.663E-03	1.739E-02	2.427E-02	2.128E-02	1.416E-02	5.674E-03
31	8.370E-03	1.513E-02	2.086E-02	1.833E-02	1.188E-02	4.813E-03
34	7.295E-03	1.316E-02	1.808E-02	1.551E-02	1.030E-02	4.050E-03
37	6.275E-03	1.134E-02	1.502E-02	1.332E-02	8.818E-03	3.455E-03
40	5.479E-03	9.948E-03	1.316E-02	1.159E-02	7.525E-03	2.943E-03
43	4.787E-03	8.593E-03	1.150E-02	9.791E-03	6.345E-03	2.534E-03
46	4.178E-03	7.333E-03	1.010E-02	8.516E-03	5.461E-03	2.121E-03
49	3.627E-03	6.627E-03	8.785E-03	7.423E-03	4.610E-03	1.827E-03
52	3.163E-03	5.640E-03	7.629E-03	6.411E-03	4.033E-03	1.529E-03
55	2.768E-03	4.980E-03	6.685E-03	5.228E-03	3.376E-03	1.304E-03
58	2.459E-03	4.356E-03	5.760E-03	4.695E-03	2.971E-03	1.110E-03
61	2.046E-03	3.716E-03	4.854E-03	4.119E-03	2.475E-03	9.217E-04
64	1.865E-03	3.337E-03	4.336E-03	3.502E-03	2.168E-03	7.764E-04
67	1.569E-03	2.954E-03	3.678E-03	2.944E-03	1.751E-03	6.681E-04
70	1.397E-03	2.445E-03	3.326E-03	2.587E-03	1.473E-03	5.569E-04
73	1.158E-03	2.131E-03	2.684E-03	2.173E-03	1.281E-03	4.707E-04
76	1.039E-03	1.976E-03	2.360E-03	1.870E-03	1.062E-03	3.858E-04
79	8.854E-04	1.634E-03	2.033E-03	1.538E-03	8.560E-04	3.048E-04
82	7.435E-04	1.386E-03	1.718E-03	1.292E-03	7.194E-04	2.570E-04
85	6.776E-04	1.177E-03	1.433E-03	1.055E-03	6.013E-04	1.967E-04
88	5.554E-04	1.011E-03	1.249E-03	8.716E-04	5.050E-04	1.554E-04
91	4.812E-04	8.320E-04	1.012E-03	7.347E-04	3.810E-04	1.165E-04
94	3.721E-04	6.461E-04	8.332E-04	5.409E-04	2.907E-04	9.084E-05
97	2.887E-04	5.468E-04	6.169E-04	4.093E-04	2.096E-04	6.178E-05
100	2.187E-04	4.661E-04	4.875E-04	3.385E-04	1.478E-04	3.974E-05
103	1.500E-04	3.141E-04	3.645E-04	2.134E-04	9.229E-05	2.660E-05
106	9.149E-05	1.902E-04	2.256E-04	1.197E-04	4.563E-05	1.248E-05
109	5.750E-05	1.121E-04	1.267E-04	7.329E-05	3.238E-05	6.347E-06

TARGET NO. 2 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.813E-01	1.346E-02	5.883E-11	7.920E-13
8	4.075E 01	1.108E 00		4.341E-11	
9	4.628E 01	1.058E 00		3.904E-11	
10	5.181E 01	1.023E 00	3.746E-02	3.576E-11	1.339E-12
11	5.735E 01	1.018E 00		3.470E-11	
12	6.288E 01	1.020E 00		3.420E-11	
13	6.841E 01	1.029E 00	4.165E-02	3.420E-11	1.424E-12
14	7.394E 01	1.026E 00		3.463E-11	
15	7.947E 01	1.017E 00		3.524E-11	
16	8.501E 01	1.017E 00	3.893E-02	3.675E-11	1.431E-12
17	9.054E 01	1.018E 00		3.846E-11	
18	9.607E 01	1.018E 00		4.118E-11	
19	1.016E 02	1.017E 00	3.524E-02	4.392E-11	1.548E-12
20	1.071E 02	1.015E 00		4.674E-11	
21	1.127E 02	1.014E 00		4.969E-11	
22	1.182E 02	1.013E 00	3.054E-02	5.279E-11	1.612E-12
23	1.237E 02	1.011E 00		5.600E-11	
24	1.293E 02	1.008E 00		5.927E-11	
25	1.348E 02	1.008E 00	2.636E-02	6.248E-11	1.647E-12
26	1.403E 02	1.009E 00		6.572E-11	
27	1.459E 02	1.007E 00		6.943E-11	
28	1.514E 02	1.007E 00	2.251E-02	7.315E-11	1.646E-12
29	1.569E 02	1.009E 00		7.691E-11	
30	1.625E 02	1.008E 00		8.067E-11	
31	1.680E 02	1.003E 00	1.922E-02	8.444E-11	1.623E-12
32	1.735E 02	1.003E 00		8.816E-11	
33	1.791E 02	1.005E 00		9.187E-11	
34	1.846E 02	1.006E 00	1.658E-02	9.548E-11	1.583E-12
35	1.901E 02	1.005E 00		9.907E-11	
36	1.957E 02	1.003E 00		1.024E-10	
37	2.012E 02	1.002E 00	1.405E-02	1.047E-10	1.471E-12
38	2.067E 02	1.006E 00		1.033E-10	
39	2.123E 02	1.012E 00		1.062E-10	
40	2.178E 02	1.019E 00	1.241E-02	1.153E-10	1.432E-12

TARGET NO. 2 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.025E 00		1.213E-10	
42	2.288E 02	1.029E 00		1.252E-10	
43	2.344E 02	1.032E 00	1.079E-02	1.291E-10	1.392E-12
44	2.399E 02	1.034E 00		1.329E-10	
45	2.454E 02	1.039E 00		1.363E-10	
46	2.510E 02	1.044E 00	9.461E-03	1.398E-10	1.322E-12
47	2.565E 02	1.054E 00		1.442E-10	
48	2.620E 02	1.063E 00		1.482E-10	
49	2.676E 02	1.072E 00	8.454E-03	1.515E-10	1.281E-12
50	2.731E 02	1.080E 00		1.549E-10	
51	2.786E 02	1.089E 00		1.582E-10	
52	2.842E 02	1.096E 00	7.468E-03	1.615E-10	1.206E-12
53	2.897E 02	1.103E 00		1.648E-10	
54	2.952E 02	1.105E 00		1.687E-10	
55	3.008E 02	1.108E 00	6.438E-03	1.724E-10	1.110E-12
56	3.063E 02	1.123E 00		1.752E-10	
57	3.118E 02	1.136E 00		1.781E-10	
58	3.174E 02	1.146E 00	5.843E-03	1.814E-10	1.060E-12
59	3.229E 02	1.152E 00		1.847E-10	
60	3.284E 02	1.153E 00		1.881E-10	
61	3.340E 02	1.160E 00	5.031E-03	1.918E-10	9.649E-13
62	3.395E 02	1.169E 00		1.956E-10	
63	3.450E 02	1.182E 00		1.990E-10	
64	3.506E 02	1.194E 00	4.545E-03	2.023E-10	9.197E-13
65	3.561E 02	1.197E 00		2.057E-10	
66	3.616E 02	1.200E 00		2.088E-10	
67	3.672E 02	1.202E 00	3.871E-03	2.116E-10	8.189E-13
68	3.727E 02	1.209E 00		2.146E-10	
69	3.782E 02	1.221E 00		2.179E-10	
70	3.838E 02	1.228E 00	3.443E-03	2.209E-10	7.605E-13
71	3.893E 02	1.233E 00		2.236E-10	
72	3.948E 02	1.232E 00		2.269E-10	
73	4.004E 02	1.231E 00	2.895E-03	2.302E-10	6.665E-13
74	4.059E 02	1.248E 00		2.341E-10	
75	4.114E 02	1.262E 00		2.377E-10	
76	4.169E 02	1.271E 00	2.609E-03	2.405E-10	6.273E-13
77	4.225E 02	1.276E 00		2.435E-10	
78	4.280E 02	1.276E 00		2.468E-10	
79	4.335E 02	1.278E 00	2.185E-03	2.494E-10	5.450E-13
80	4.391E 02	1.281E 00		2.516E-10	

TARGET NO. 2 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.287E 00		2.548E-10	
82	4.501E 02	1.293E 00	1.864E-03	2.581E-10	4.810E-13
83	4.557E 02	1.299E 00		2.603E-10	
84	4.612E 02	1.305E 00		2.627E-10	
85	4.667E 02	1.312E 00	1.579E-03	2.660E-10	4.201E-13
86	4.723E 02	1.322E 00		2.691E-10	
87	4.778E 02	1.336E 00		2.719E-10	
88	4.833E 02	1.348E 00	1.372E-03	2.747E-10	3.769E-13
89	4.889E 02	1.358E 00		2.774E-10	
90	4.944E 02	1.363E 00		2.802E-10	
91	4.999E 02	1.367E 00	1.134E-03	2.830E-10	3.209E-13
92	5.055E 02	1.365E 00		2.861E-10	
93	5.110E 02	1.362E 00		2.892E-10	
94	5.165E 02	1.355E 00	8.758E-04	2.923E-10	2.560E-13
95	5.221E 02	1.350E 00		2.954E-10	
96	5.276E 02	1.347E 00		2.982E-10	
97	5.331E 02	1.357E 00	6.682E-04	3.009E-10	2.011E-13
98	5.387E 02	1.376E 00		3.036E-10	
99	5.442E 02	1.406E 00		3.062E-10	
100	5.497E 02	1.440E 00	5.636E-04	3.089E-10	1.741E-13
101	5.553E 02	1.439E 00		3.117E-10	
102	5.608E 02	1.434E 00		3.146E-10	
103	5.663E 02	1.424E 00	3.803E-04	3.175E-10	1.207E-13
104	5.719E 02	1.410E 00		3.204E-10	
105	5.774E 02	1.389E 00		3.231E-10	
106	5.829E 02	1.397E 00	2.187E-04	3.258E-10	7.126E-14
107	5.885E 02	1.431E 00		3.285E-10	
108	5.940E 02	8.660E-01		3.311E-10	
109	5.995E 02	6.944E-02	6.473E-06	3.338E-10	2.161E-15
110	6.051E 02	0.0		3.368E-10	

DOSE= 5.406E-13 R-SQ.CM./ELECTRON

TARGET NO. 3 INCIDENT ELECTRON ENERGY 0.6 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
7	1.349E-02	2.491E-02	3.552E-02	3.158E-02	2.162E-02
10	1.910E-02	3.405E-02	4.943E-02	4.439E-02	2.986E-02
13	1.961E-02	3.517E-02	5.074E-02	4.547E-02	3.046E-02
16	1.803E-02	3.223E-02	4.596E-02	4.140E-02	2.731E-02
19	1.598E-02	2.867E-02	4.069E-02	3.615E-02	2.407E-02
22	1.405E-02	2.475E-02	3.550E-02	3.093E-02	2.073E-02
25	1.209E-02	2.118E-02	2.979E-02	2.644E-02	1.748E-02
28	1.027E-02	1.866E-02	2.609E-02	2.242E-02	1.452E-02
31	8.937E-03	1.579E-02	2.220E-02	1.931E-02	1.252E-02
34	7.595E-03	1.372E-02	1.889E-02	1.636E-02	1.058E-02
37	6.681E-03	1.184E-02	1.620E-02	1.412E-02	9.092E-03
40	5.759E-03	1.018E-02	1.431E-02	1.209E-02	7.695E-03
43	5.039E-03	8.986E-03	1.205E-02	1.028E-02	6.433E-03
46	4.321E-03	7.713E-03	1.057E-02	8.940E-03	5.607E-03
49	3.804E-03	6.880E-03	9.091E-03	7.635E-03	4.760E-03
52	3.324E-03	5.909E-03	8.054E-03	6.597E-03	4.078E-03
55	2.854E-03	5.121E-03	6.884E-03	5.622E-03	3.459E-03
58	2.528E-03	4.504E-03	5.871E-03	4.976E-03	2.953E-03
61	2.200E-03	3.915E-03	5.091E-03	4.177E-03	2.546E-03
64	1.919E-03	3.445E-03	4.472E-03	3.593E-03	2.072E-03
67	1.744E-03	2.983E-03	3.826E-03	2.975E-03	1.822E-03
70	1.433E-03	2.598E-03	3.359E-03	2.720E-03	1.558E-03
73	1.265E-03	2.213E-03	2.828E-03	2.268E-03	1.340E-03
76	1.108E-03	1.921E-03	2.515E-03	1.906E-03	1.088E-03
79	9.447E-04	1.657E-03	2.188E-03	1.616E-03	9.099E-04
82	8.334E-04	1.505E-03	1.760E-03	1.362E-03	7.445E-04
85	6.933E-04	1.247E-03	1.559E-03	1.146E-03	5.632E-04
88	5.566E-04	1.043E-03	1.355E-03	9.331E-04	5.088E-04
91	5.100E-04	8.550E-04	1.048E-03	7.619E-04	3.679E-04
94	3.835E-04	7.211E-04	8.336E-04	5.622E-04	2.894E-04
97	3.013E-04	5.633E-04	6.745E-04	4.678E-04	2.016E-04
100	2.582E-04	4.263E-04	5.106E-04	3.366E-04	1.381E-04
103	1.770E-04	3.185E-04	4.060E-04	2.103E-04	9.366E-05
106	1.045E-04	2.036E-04	2.049E-04	1.378E-04	5.853E-05
109	6.394E-05	1.112E-04	1.287E-04	6.828E-05	2.291E-05

TARGET NO. 3 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.026E-01	2.094E-02	5.883E-11	1.232E-12
8	4.075E 01	1.146E 00		4.341E-11	
9	4.628E 01	1.080E 00		3.904E-11	
10	5.181E 01	1.032E 00	4.992E-02	3.576E-11	1.785E-12
11	5.735E 01	1.025E 00		3.470E-11	
12	6.288E 01	1.025E 00		3.420E-11	
13	6.841E 01	1.030E 00	5.107E-02	3.420E-11	1.746E-12
14	7.394E 01	1.026E 00		3.463E-11	
15	7.947E 01	1.018E 00		3.524E-11	
16	8.501E 01	1.017E 00	4.576E-02	3.675E-11	1.682E-12
17	9.054E 01	1.017E 00		3.846E-11	
18	9.607E 01	1.016E 00		4.118E-11	
19	1.016E 02	1.015E 00	4.022E-02	4.392E-11	1.766E-12
20	1.071E 02	1.014E 00		4.674E-11	
21	1.127E 02	1.015E 00		4.969E-11	
22	1.182E 02	1.015E 00	3.478E-02	5.279E-11	1.836E-12
23	1.237E 02	1.011E 00		5.600E-11	
24	1.293E 02	1.005E 00		5.927E-11	
25	1.348E 02	1.004E 00	2.918E-02	6.248E-11	1.823E-12
26	1.403E 02	1.005E 00		6.572E-11	
27	1.459E 02	1.006E 00		6.943E-11	
28	1.514E 02	1.007E 00	2.508E-02	7.315E-11	1.835E-12
29	1.569E 02	1.010E 00		7.691E-11	
30	1.625E 02	1.009E 00		8.067E-11	
31	1.680E 02	1.004E 00	2.141E-02	8.444E-11	1.808E-12
32	1.735E 02	1.002E 00		8.816E-11	
33	1.791E 02	1.002E 00		9.187E-11	
34	1.846E 02	1.002E 00	1.819E-02	9.548E-11	1.737E-12
35	1.901E 02	1.003E 00		9.907E-11	
36	1.957E 02	1.004E 00		1.024E-10	
37	2.012E 02	1.006E 00	1.573E-02	1.047E-10	1.647E-12
38	2.067E 02	1.010E 00		1.033E-10	
39	2.123E 02	1.014E 00		1.062E-10	
40	2.178E 02	1.020E 00	1.376E-02	1.153E-10	1.587E-12

TARGET NO. 3 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.024E 00		1.213E-10	
42	2.288E 02	1.027E 00		1.252E-10	
43	2.344E 02	1.030E 00	1.182E-02	1.291E-10	1.525E-12
44	2.399E 02	1.032E 00		1.329E-10	
45	2.454E 02	1.039E 00		1.363E-10	
46	2.510E 02	1.046E 00	1.045E-02	1.398E-10	1.461E-12
47	2.565E 02	1.054E 00		1.442E-10	
48	2.620E 02	1.062E 00		1.482E-10	
49	2.676E 02	1.068E 00	9.192E-03	1.515E-10	1.393E-12
50	2.731E 02	1.077E 00		1.549E-10	
51	2.786E 02	1.088E 00		1.582E-10	
52	2.842E 02	1.096E 00	8.199E-03	1.615E-10	1.324E-12
53	2.897E 02	1.105E 00		1.648E-10	
54	2.952E 02	1.108E 00		1.687E-10	
55	3.008E 02	1.112E 00	7.105E-03	1.724E-10	1.225E-12
56	3.063E 02	1.124E 00		1.752E-10	
57	3.118E 02	1.134E 00		1.781E-10	
58	3.174E 02	1.143E 00	6.346E-03	1.814E-10	1.151E-12
59	3.229E 02	1.151E 00		1.847E-10	
60	3.284E 02	1.156E 00		1.881E-10	
61	3.340E 02	1.163E 00	5.540E-03	1.918E-10	1.062E-12
62	3.395E 02	1.170E 00		1.956E-10	
63	3.450E 02	1.176E 00		1.990E-10	
64	3.506E 02	1.182E 00	4.845E-03	2.023E-10	9.803E-13
65	3.561E 02	1.188E 00		2.057E-10	
66	3.616E 02	1.194E 00		2.088E-10	
67	3.672E 02	1.200E 00	4.211E-03	2.116E-10	8.910E-13
68	3.727E 02	1.209E 00		2.146E-10	
69	3.782E 02	1.223E 00		2.179E-10	
70	3.838E 02	1.233E 00	3.806E-03	2.209E-10	8.407E-13
71	3.893E 02	1.239E 00		2.236E-10	
72	3.948E 02	1.240E 00		2.269E-10	
73	4.004E 02	1.241E 00	3.244E-03	2.302E-10	7.469E-13
74	4.059E 02	1.249E 00		2.341E-10	
75	4.114E 02	1.257E 00		2.377E-10	
76	4.169E 02	1.261E 00	2.825E-03	2.405E-10	6.794E-13
77	4.225E 02	1.268E 00		2.435E-10	
78	4.280E 02	1.278E 00		2.468E-10	
79	4.335E 02	1.285E 00	2.462E-03	2.494E-10	6.140E-13
80	4.391E 02	1.289E 00		2.516E-10	

TARGET NO. 3 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.292E 00		2.548E-10	
82	4.501E 02	1.295E 00	2.081E-03	2.581E-10	5.371E-13
83	4.557E 02	1.301E 00		2.603E-10	
84	4.612E 02	1.309E 00		2.627E-10	
85	4.667E 02	1.317E 00	1.776E-03	2.660E-10	4.726E-13
86	4.723E 02	1.329E 00		2.691E-10	
87	4.778E 02	1.346E 00		2.719E-10	
88	4.833E 02	1.355E 00	1.550E-03	2.747E-10	4.258E-13
89	4.889E 02	1.359E 00		2.774E-10	
90	4.944E 02	1.354E 00		2.802E-10	
91	4.999E 02	1.347E 00	1.223E-03	2.830E-10	3.461E-13
92	5.055E 02	1.348E 00		2.861E-10	
93	5.110E 02	1.349E 00		2.892E-10	
94	5.165E 02	1.350E 00	9.600E-04	2.923E-10	2.806E-13
95	5.221E 02	1.356E 00		2.954E-10	
96	5.276E 02	1.371E 00		2.982E-10	
97	5.331E 02	1.382E 00	7.785E-04	3.009E-10	2.343E-13
98	5.387E 02	1.391E 00		3.036E-10	
99	5.442E 02	1.393E 00		3.062E-10	
100	5.497E 02	1.394E 00	5.843E-04	3.089E-10	1.805E-13
101	5.553E 02	1.411E 00		3.117E-10	
102	5.608E 02	1.428E 00		3.146E-10	
103	5.663E 02	1.436E 00	4.320E-04	3.175E-10	1.371E-13
104	5.719E 02	1.434E 00		3.204E-10	
105	5.774E 02	1.413E 00		3.231E-10	
106	5.829E 02	1.409E 00	2.486E-04	3.258E-10	8.098E-14
107	5.885E 02	1.422E 00		3.285E-10	
108	5.940E 02	8.574E-01		3.311E-10	
109	5.995E 02	6.875E-02	6.626E-06	3.338E-10	2.212E-15
110	6.051E 02	0.0		3.368E-10	

DOSE= 6.140E-13 R-SQ.CM./ELECTRON

TARGET NO. 4 INCIDENT ELECTRON ENERGY 0.6 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
7	9.926E-03	1.776E-02	2.698E-02	2.366E-02	1.579E-02
10	1.559E-02	2.777E-02	4.224E-02	3.701E-02	2.464E-02
13	1.745E-02	3.096E-02	4.672E-02	4.065E-02	2.724E-02
16	1.656E-02	2.902E-02	4.438E-02	3.818E-02	2.545E-02
19	1.511E-02	2.668E-02	4.003E-02	3.437E-02	2.278E-02
22	1.332E-02	2.331E-02	3.534E-02	2.995E-02	1.983E-02
25	1.147E-02	2.022E-02	2.987E-02	2.596E-02	1.665E-02
28	9.994E-03	1.756E-02	2.630E-02	2.176E-02	1.438E-02
31	8.571E-03	1.519E-02	2.254E-02	1.905E-02	1.225E-02
34	7.497E-03	1.320E-02	1.921E-02	1.617E-02	1.039E-02
37	6.423E-03	1.133E-02	1.634E-02	1.397E-02	8.949E-03
40	5.607E-03	9.937E-03	1.443E-02	1.197E-02	7.671E-03
43	4.953E-03	8.656E-03	1.237E-02	1.003E-02	6.521E-03
46	4.336E-03	7.475E-03	1.084E-02	8.850E-03	5.510E-03
49	3.802E-03	6.536E-03	9.340E-03	7.542E-03	4.725E-03
52	3.301E-03	5.763E-03	8.126E-03	6.563E-03	4.004E-03
55	2.858E-03	4.900E-03	7.130E-03	5.710E-03	3.459E-03
58	2.513E-03	4.359E-03	6.000E-03	4.759E-03	2.930E-03
61	2.194E-03	3.795E-03	5.264E-03	4.194E-03	2.472E-03
64	1.925E-03	3.345E-03	4.562E-03	3.538E-03	2.140E-03
67	1.666E-03	2.861E-03	3.979E-03	3.013E-03	1.834E-03
70	1.465E-03	2.496E-03	3.521E-03	2.588E-03	1.593E-03
73	1.237E-03	2.244E-03	2.957E-03	2.229E-03	1.290E-03
76	1.074E-03	1.882E-03	2.547E-03	1.842E-03	1.017E-03
79	9.675E-04	1.662E-03	2.225E-03	1.604E-03	8.905E-04
82	7.724E-04	1.425E-03	1.892E-03	1.368E-03	7.477E-04
85	6.787E-04	1.232E-03	1.637E-03	1.155E-03	6.049E-04
88	5.701E-04	1.035E-03	1.267E-03	8.842E-04	4.788E-04
91	4.662E-04	8.619E-04	1.035E-03	7.516E-04	4.022E-04
94	3.745E-04	7.058E-04	9.096E-04	5.774E-04	2.773E-04
97	3.140E-04	5.327E-04	7.044E-04	4.093E-04	2.172E-04
100	2.122E-04	4.243E-04	5.151E-04	3.010E-04	1.260E-04
103	1.498E-04	2.971E-04	3.718E-04	2.231E-04	1.000E-04
106	1.163E-04	2.209E-04	2.580E-04	1.427E-04	6.751E-05
109	6.185E-05	1.031E-04	1.410E-04	5.715E-05	2.615E-05

TARGET NO. 4 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.829E-01	1.504E-02	5.883E-11	8.849E-13
8	4.075E 01	1.111E 00		4.341E-11	
9	4.628E 01	1.059E 00		3.904E-11	
10	5.181E 01	1.022E 00	4.126E-02	3.576E-11	1.475E-12
11	5.735E 01	1.018E 00		3.470E-11	
12	6.288E 01	1.021E 00		3.420E-11	
13	6.841E 01	1.030E 00	4.594E-02	3.420E-11	1.571E-12
14	7.394E 01	1.026E 00		3.463E-11	
15	7.947E 01	1.018E 00		3.524E-11	
16	8.501E 01	1.017E 00	4.272E-02	3.675E-11	1.570E-12
17	9.054E 01	1.017E 00		3.846E-11	
18	9.607E 01	1.017E 00		4.118E-11	
19	1.016E 02	1.016E 00	3.852E-02	4.392E-11	1.692E-12
20	1.071E 02	1.015E 00		4.674E-11	
21	1.127E 02	1.015E 00		4.969E-11	
22	1.182E 02	1.017E 00	3.375E-02	5.279E-11	1.782E-12
23	1.237E 02	1.012E 00		5.600E-11	
24	1.293E 02	1.006E 00		5.927E-11	
25	1.348E 02	1.005E 00	2.849E-02	6.248E-11	1.780E-12
26	1.403E 02	1.005E 00		6.572E-11	
27	1.459E 02	1.006E 00		6.943E-11	
28	1.514E 02	1.007E 00	2.462E-02	7.315E-11	1.801E-12
29	1.569E 02	1.010E 00		7.691E-11	
30	1.625E 02	1.010E 00		8.067E-11	
31	1.680E 02	1.005E 00	2.119E-02	8.444E-11	1.790E-12
32	1.735E 02	1.004E 00		8.816E-11	
33	1.791E 02	1.004E 00		9.187E-11	
34	1.846E 02	1.003E 00	1.806E-02	9.548E-11	1.725E-12
35	1.901E 02	1.003E 00		9.907E-11	
36	1.957E 02	1.003E 00		1.024E-10	
37	2.012E 02	1.004E 00	1.551E-02	1.047E-10	1.624E-12
38	2.067E 02	1.008E 00		1.033E-10	
39	2.123E 02	1.013E 00		1.062E-10	
40	2.178E 02	1.020E 00	1.369E-02	1.153E-10	1.579E-12

TARGET NO. 4 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.025E 00		1.213E-10	
42	2.288E 02	1.028E 00		1.252E-10	
43	2.344E 02	1.031E 00	1.180E-02	1.291E-10	1.522E-12
44	2.399E 02	1.033E 00		1.329E-10	
45	2.454E 02	1.040E 00		1.363E-10	
46	2.510E 02	1.047E 00	1.042E-02	1.398E-10	1.457E-12
47	2.565E 02	1.054E 00		1.442E-10	
48	2.620E 02	1.061E 00		1.482E-10	
49	2.676E 02	1.067E 00	9.144E-03	1.515E-10	1.386E-12
50	2.731E 02	1.075E 00		1.549E-10	
51	2.786E 02	1.085E 00		1.582E-10	
52	2.842E 02	1.095E 00	8.135E-03	1.615E-10	1.314E-12
53	2.897E 02	1.105E 00		1.648E-10	
54	2.952E 02	1.114E 00		1.687E-10	
55	3.008E 02	1.122E 00	7.235E-03	1.724E-10	1.247E-12
56	3.063E 02	1.127E 00		1.752E-10	
57	3.118E 02	1.132E 00		1.781E-10	
58	3.174E 02	1.135E 00	6.216E-03	1.814E-10	1.128E-12
59	3.229E 02	1.143E 00		1.847E-10	
60	3.284E 02	1.154E 00		1.881E-10	
61	3.340E 02	1.163E 00	5.548E-03	1.918E-10	1.064E-12
62	3.395E 02	1.173E 00		1.956E-10	
63	3.450E 02	1.178E 00		1.990E-10	
64	3.506E 02	1.184E 00	4.868E-03	2.023E-10	9.850E-13
65	3.561E 02	1.191E 00		2.057E-10	
66	3.616E 02	1.198E 00		2.088E-10	
67	3.672E 02	1.204E 00	4.262E-03	2.116E-10	9.017E-13
68	3.727E 02	1.213E 00		2.146E-10	
69	3.782E 02	1.224E 00		2.179E-10	
70	3.838E 02	1.232E 00	3.804E-03	2.209E-10	8.402E-13
71	3.893E 02	1.240E 00		2.236E-10	
72	3.948E 02	1.243E 00		2.269E-10	
73	4.004E 02	1.246E 00	3.268E-03	2.302E-10	7.524E-13
74	4.059E 02	1.246E 00		2.341E-10	
75	4.114E 02	1.246E 00		2.377E-10	
76	4.169E 02	1.246E 00	2.728E-03	2.405E-10	6.560E-13
77	4.225E 02	1.254E 00		2.435E-10	
78	4.280E 02	1.273E 00		2.468E-10	
79	4.335E 02	1.286E 00	2.468E-03	2.494E-10	6.156E-13
80	4.391E 02	1.295E 00		2.516E-10	

TARGET NO. 4 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.301E 00		2.548E-10	
82	4.501E 02	1.307E 00	2.125E-03	2.581E-10	5.484E-13
83	4.557E 02	1.319E 00		2.603E-10	
84	4.612E 02	1.330E 00		2.627E-10	
85	4.667E 02	1.336E 00	1.849E-03	2.660E-10	4.918E-13
86	4.723E 02	1.334E 00		2.691E-10	
87	4.778E 02	1.320E 00		2.719E-10	
88	4.833E 02	1.318E 00	1.439E-03	2.747E-10	3.952E-13
89	4.889E 02	1.324E 00		2.774E-10	
90	4.944E 02	1.338E 00		2.802E-10	
91	4.999E 02	1.355E 00	1.231E-03	2.830E-10	3.484E-13
92	5.055E 02	1.366E 00		2.861E-10	
93	5.110E 02	1.376E 00		2.892E-10	
94	5.165E 02	1.380E 00	1.007E-03	2.923E-10	2.944E-13
95	5.221E 02	1.381E 00		2.954E-10	
96	5.276E 02	1.378E 00		2.982E-10	
97	5.331E 02	1.373E 00	7.600E-04	3.009E-10	2.287E-13
98	5.387E 02	1.368E 00		3.036E-10	
99	5.442E 02	1.356E 00		3.062E-10	
100	5.497E 02	1.342E 00	5.341E-04	3.089E-10	1.650E-13
101	5.553E 02	1.363E 00		3.117E-10	
102	5.608E 02	1.387E 00		3.146E-10	
103	5.663E 02	1.417E 00	4.114E-04	3.175E-10	1.306E-13
104	5.719E 02	1.454E 00		3.204E-10	
105	5.774E 02	1.505E 00		3.231E-10	
106	5.829E 02	1.533E 00	3.080E-04	3.258E-10	1.003E-13
107	5.885E 02	1.539E 00		3.285E-10	
108	5.940E 02	9.264E-01		3.311E-10	
109	5.995E 02	7.429E-02	7.092E-06	3.338E-10	2.367E-15
110	6.051E 02	0.0		3.368E-10	

CCSE= 5.936E-13 R-SQ.CM./ELECTRON

TARGET NO. 6 INCIDENT ELECTRON ENERGY 0.6 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	8.336E-03	1.537E-02	2.160E-02	2.063E-02	1.446E-02	6.175E-03
10	1.464E-02	2.630E-02	3.862E-02	3.629E-02	2.485E-02	1.023E-02
13	1.745E-02	3.203E-02	4.551E-02	4.323E-02	2.937E-02	1.192E-02
16	1.724E-02	3.175E-02	4.473E-02	4.221E-02	2.867E-02	1.154E-02
19	1.606E-02	2.916E-02	4.146E-02	3.912E-02	2.640E-02	1.062E-02
22	1.452E-02	2.644E-02	3.703E-02	3.529E-02	2.370E-02	9.287E-03
25	1.266E-02	2.275E-02	3.215E-02	3.008E-02	2.037E-02	8.038E-03
28	1.094E-02	2.000E-02	2.769E-02	2.611E-02	1.762E-02	6.899E-03
31	9.625E-03	1.753E-02	2.389E-02	2.209E-02	1.486E-02	5.890E-03
34	8.222E-03	1.507E-02	2.124E-02	1.904E-02	1.269E-02	5.042E-03
37	7.147E-03	1.284E-02	1.789E-02	1.664E-02	1.109E-02	4.300E-03
40	6.246E-03	1.160E-02	1.574E-02	1.428E-02	9.208E-03	3.645E-03
43	5.440E-03	9.858E-03	1.334E-02	1.215E-02	8.035E-03	3.126E-03
46	4.757E-03	8.502E-03	1.178E-02	1.047E-02	6.723E-03	2.648E-03
49	4.093E-03	7.484E-03	1.025E-02	9.027E-03	5.870E-03	2.234E-03
52	3.585E-03	6.544E-03	8.822E-03	7.746E-03	5.035E-03	1.903E-03
55	3.157E-03	5.755E-03	7.788E-03	6.797E-03	4.332E-03	1.604E-03
58	2.790E-03	4.988E-03	6.742E-03	5.910E-03	3.666E-03	1.379E-03
61	2.454E-03	4.498E-03	5.847E-03	5.211E-03	3.192E-03	1.161E-03
64	2.087E-03	3.855E-03	5.200E-03	4.418E-03	2.698E-03	1.027E-03
67	1.843E-03	3.425E-03	4.455E-03	3.625E-03	2.321E-03	8.379E-04
70	1.582E-03	2.951E-03	3.838E-03	3.212E-03	1.957E-03	6.941E-04
73	1.442E-03	2.515E-03	3.303E-03	2.685E-03	1.778E-03	5.917E-04
76	1.249E-03	2.190E-03	3.035E-03	2.345E-03	1.422E-03	5.007E-04
79	1.030E-03	1.902E-03	2.450E-03	1.994E-03	1.169E-03	4.443E-04
82	8.969E-04	1.647E-03	2.103E-03	1.665E-03	1.005E-03	3.381E-04
85	7.731E-04	1.416E-03	1.871E-03	1.393E-03	7.753E-04	2.831E-04
88	6.466E-04	1.175E-03	1.526E-03	1.153E-03	6.601E-04	1.927E-04
91	5.351E-04	9.670E-04	1.227E-03	9.537E-04	4.943E-04	1.552E-04
94	4.346E-04	8.426E-04	9.895E-04	8.367E-04	4.039E-04	1.194E-04
97	3.598E-04	6.725E-04	7.959E-04	6.537E-04	3.269E-04	8.726E-05
100	2.461E-04	5.517E-04	5.904E-04	4.246E-04	1.989E-04	5.431E-05
103	1.879E-04	3.369E-04	4.496E-04	2.976E-04	1.415E-04	3.134E-05
106	1.241E-04	2.160E-04	2.628E-04	1.540E-04	8.703E-05	2.006E-05
109	5.431E-05	1.410E-04	1.736E-04	9.481E-05	4.446E-05	7.272E-06

TARGET NO. 6 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.634E-01	1.190E-02	5.883E-11	7.001E-13
8	4.075E 01	1.075E 00		4.341E-11	
9	4.628E 01	1.036E 00		3.904E-11	
10	5.181E 01	1.010E 00	3.723E-02	3.576E-11	1.331E-12
11	5.735E 01	1.009E 00		3.470E-11	
12	6.288E 01	1.015E 00		3.420E-11	
13	6.841E 01	1.027E 00	4.498E-02	3.420E-11	1.538E-12
14	7.394E 01	1.025E 00		3.463E-11	
15	7.947E 01	1.016E 00		3.524E-11	
16	8.501E 01	1.016E 00	4.361E-02	3.675E-11	1.603E-12
17	9.054E 01	1.017E 00		3.846E-11	
18	9.607E 01	1.016E 00		4.118E-11	
19	1.016E 02	1.015E 00	4.028E-02	4.392E-11	1.769E-12
20	1.071E 02	1.015E 00		4.674E-11	
21	1.127E 02	1.017E 00		4.969E-11	
22	1.182E 02	1.020E 00	3.632E-02	5.279E-11	1.918E-12
23	1.237E 02	1.015E 00		5.600E-11	
24	1.293E 02	1.007E 00		5.927E-11	
25	1.348E 02	1.006E 00	3.085E-02	6.248E-11	1.927E-12
26	1.403E 02	1.006E 00		6.572E-11	
27	1.459E 02	1.008E 00		6.943E-11	
28	1.514E 02	1.009E 00	2.682E-02	7.315E-11	1.962E-12
29	1.569E 02	1.010E 00		7.691E-11	
30	1.625E 02	1.007E 00		8.067E-11	
31	1.680E 02	1.001E 00	2.277E-02	8.444E-11	1.923E-12
32	1.735E 02	1.001E 00		8.816E-11	
33	1.791E 02	1.004E 00		9.187E-11	
34	1.846E 02	1.005E 00	1.984E-02	9.548E-11	1.894E-12
35	1.901E 02	1.006E 00		9.907E-11	
36	1.957E 02	1.006E 00		1.024E-10	
37	2.012E 02	1.006E 00	1.708E-02	1.047E-10	1.789E-12
38	2.067E 02	1.009E 00		1.033E-10	
39	2.123E 02	1.013E 00		1.062E-10	
40	2.178E 02	1.020E 00	1.498E-02	1.153E-10	1.728E-12

TARGET NO. 6 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.025E 00		1.213E-10	
42	2.288E 02	1.029E 00		1.252E-10	
43	2.344E 02	1.031E 00	1.296E-02	1.291E-10	1.672E-12
44	2.399E 02	1.034E 00		1.329E-10	
45	2.454E 02	1.038E 00		1.363E-10	
46	2.510E 02	1.043E 00	1.131E-02	1.398E-10	1.581E-12
47	2.565E 02	1.052E 00		1.442E-10	
48	2.620E 02	1.061E 00		1.482E-10	
49	2.676E 02	1.069E 00	1.006E-02	1.515E-10	1.524E-12
50	2.731E 02	1.076E 00		1.549E-10	
51	2.786E 02	1.082E 00		1.582E-10	
52	2.842E 02	1.091E 00	8.846E-03	1.615E-10	1.429E-12
53	2.897E 02	1.100E 00		1.648E-10	
54	2.952E 02	1.109E 00		1.687E-10	
55	3.008E 02	1.118E 00	7.929E-03	1.724E-10	1.367E-12
56	3.063E 02	1.126E 00		1.752E-10	
57	3.118E 02	1.134E 00		1.781E-10	
58	3.174E 02	1.140E 00	6.988E-03	1.814E-10	1.268E-12
59	3.229E 02	1.149E 00		1.847E-10	
60	3.284E 02	1.160E 00		1.881E-10	
61	3.340E 02	1.169E 00	6.280E-03	1.918E-10	1.204E-12
62	3.395E 02	1.178E 00		1.956E-10	
63	3.450E 02	1.184E 00		1.990E-10	
64	3.506E 02	1.189E 00	5.511E-03	2.023E-10	1.115E-12
65	3.561E 02	1.194E 00		2.057E-10	
66	3.616E 02	1.198E 00		2.088E-10	
67	3.672E 02	1.200E 00	4.736E-03	2.116E-10	1.002E-12
68	3.727E 02	1.205E 00		2.146E-10	
69	3.782E 02	1.212E 00		2.179E-10	
70	3.838E 02	1.220E 00	4.156E-03	2.209E-10	9.179E-13
71	3.893E 02	1.228E 00		2.236E-10	
72	3.948E 02	1.235E 00		2.269E-10	
73	4.004E 02	1.243E 00	3.652E-03	2.302E-10	8.408E-13
74	4.059E 02	1.256E 00		2.341E-10	
75	4.114E 02	1.268E 00		2.377E-10	
76	4.169E 02	1.274E 00	3.265E-03	2.405E-10	7.852E-13
77	4.225E 02	1.277E 00		2.435E-10	
78	4.280E 02	1.276E 00		2.468E-10	
79	4.335E 02	1.278E 00	2.736E-03	2.494E-10	6.825E-13
80	4.391E 02	1.281E 00		2.516E-10	

TARGET NO. 6 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY MEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.288E 00		2.548E-10	
82	4.501E 02	1.296E 00	2.358E-03	2.581E-10	6.085E-13
83	4.557E 02	1.307E 00		2.603E-10	
84	4.612E 02	1.318E 00		2.627E-10	
85	4.667E 02	1.326E 00	2.045E-03	2.660E-10	5.440E-13
86	4.723E 02	1.331E 00		2.691E-10	
87	4.778E 02	1.332E 00		2.719E-10	
88	4.833E 02	1.333E 00	1.690E-03	2.747E-10	4.642E-13
89	4.889E 02	1.334E 00		2.774E-10	
90	4.944E 02	1.331E 00		2.802E-10	
91	4.999E 02	1.328E 00	1.358E-03	2.830E-10	3.843E-13
92	5.055E 02	1.350E 00		2.861E-10	
93	5.110E 02	1.372E 00		2.892E-10	
94	5.165E 02	1.390E 00	1.191E-03	2.923E-10	3.481E-13
95	5.221E 02	1.406E 00		2.954E-10	
96	5.276E 02	1.420E 00		2.982E-10	
97	5.331E 02	1.422E 00	9.703E-04	3.009E-10	2.920E-13
98	5.387E 02	1.416E 00		3.036E-10	
99	5.442E 02	1.395E 00		3.062E-10	
100	5.497E 02	1.370E 00	6.585E-04	3.089E-10	2.034E-13
101	5.553E 02	1.381E 00		3.117E-10	
102	5.608E 02	1.394E 00		3.146E-10	
103	5.663E 02	1.400E 00	4.733E-04	3.175E-10	1.503E-13
104	5.719E 02	1.398E 00		3.204E-10	
105	5.774E 02	1.383E 00		3.231E-10	
106	5.829E 02	1.397E 00	2.777E-04	3.258E-10	9.046E-14
107	5.885E 02	1.437E 00		3.285E-10	
108	5.940E 02	8.711E-01		3.311E-10	
109	5.995E 02	6.985E-02	8.405E-06	3.338E-10	2.805E-15
110	6.051E 02	0.0		3.368E-10	

DOSE= 6.385E-13 R-SQ.CM./ELECTRON

TARGET NO. 7 INCIDENT ELECTRON ENERGY 0.6 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	1.837E-02	3.285E-02	4.281E-02	4.109E-02	2.849E-02	1.137E-02
10	1.970E-02	3.463E-02	4.721E-02	4.307E-02	2.917E-02	1.143E-02
13	1.758E-02	3.086E-02	4.161E-02	3.812E-02	2.528E-02	9.992E-03
16	1.505E-02	2.586E-02	3.528E-02	3.175E-02	2.079E-02	8.237E-03
19	1.255E-02	2.201E-02	2.921E-02	2.655E-02	1.764E-02	6.812E-03
22	1.069E-02	1.870E-02	2.478E-02	2.247E-02	1.442E-02	5.672E-03
25	9.062E-03	1.597E-02	2.102E-02	1.871E-02	1.202E-02	4.683E-03
28	7.683E-03	1.330E-02	1.776E-02	1.576E-02	1.010E-02	3.902E-03
31	6.566E-03	1.160E-02	1.518E-02	1.342E-02	8.431E-03	3.233E-03
34	5.847E-03	9.766E-03	1.294E-02	1.125E-02	7.010E-03	2.670E-03
37	4.803E-03	8.696E-03	1.092E-02	9.408E-03	5.961E-03	2.248E-03
40	4.189E-03	7.330E-03	9.388E-03	8.205E-03	5.035E-03	1.901E-03
43	3.700E-03	6.288E-03	8.075E-03	6.905E-03	4.302E-03	1.584E-03
46	3.163E-03	5.593E-03	7.116E-03	5.882E-03	3.619E-03	1.316E-03
49	2.765E-03	4.738E-03	6.091E-03	5.110E-03	3.101E-03	1.140E-03
52	2.400E-03	4.262E-03	5.289E-03	4.282E-03	2.539E-03	9.545E-04
55	2.005E-03	3.551E-03	4.546E-03	3.614E-03	2.251E-03	8.041E-04
58	1.762E-03	3.148E-03	3.869E-03	3.196E-03	1.809E-03	6.710E-04
61	1.528E-03	2.754E-03	3.418E-03	2.714E-03	1.569E-03	5.497E-04
64	1.361E-03	2.355E-03	2.951E-03	2.329E-03	1.380E-03	4.536E-04
67	1.159E-03	2.042E-03	2.541E-03	1.971E-03	1.093E-03	3.723E-04
70	1.005E-03	1.792E-03	2.142E-03	1.658E-03	8.641E-04	3.086E-04
73	8.666E-04	1.526E-03	1.859E-03	1.380E-03	7.310E-04	2.621E-04
76	7.223E-04	1.359E-03	1.582E-03	1.149E-03	6.425E-04	2.118E-04
79	6.347E-04	1.159E-03	1.390E-03	9.813E-04	5.243E-04	1.660E-04
82	5.322E-04	9.856E-04	1.157E-03	8.030E-04	4.051E-04	1.370E-04
85	4.407E-04	7.765E-04	9.400E-04	6.561E-04	3.333E-04	1.029E-04
88	3.299E-04	7.049E-04	7.097E-04	5.310E-04	2.472E-04	7.678E-05
91	3.005E-04	5.318E-04	6.476E-04	3.944E-04	1.783E-04	5.185E-05
94	2.122E-04	4.503E-04	4.920E-04	3.077E-04	1.324E-04	3.936E-05
97	1.679E-04	3.359E-04	3.819E-04	2.804E-04	9.509E-05	2.599E-05
100	1.298E-04	2.628E-04	2.748E-04	1.872E-04	6.102E-05	1.979E-05
103	8.331E-05	1.546E-04	2.023E-04	1.102E-04	3.929E-05	1.158E-05
106	4.102E-05	1.009E-04	1.180E-04	6.992E-05	1.569E-05	4.256E-06
109	2.666E-05	5.869E-05	7.535E-05	4.140E-05	1.031E-05	3.373E-06

TARGET NO. 7 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.458E-01	2.734E-02	5.883E-11	1.609E-12
8	4.075E 01	1.224E 00		4.341E-11	
9	4.628E 01	1.117E 00		3.904E-11	
10	5.181E 01	1.043E 00	4.671E-02	3.576E-11	1.670E-12
11	5.735E 01	1.035E 00		3.470E-11	
12	6.288E 01	1.030E 00		3.420E-11	
13	6.841E 01	1.028E 00	4.056E-02	3.420E-11	1.387E-12
14	7.394E 01	1.024E 00		3.463E-11	
15	7.947E 01	1.019E 00		3.524E-11	
16	8.501E 01	1.017E 00	3.357E-02	3.675E-11	1.234E-12
17	9.054E 01	1.015E 00		3.846E-11	
18	9.607E 01	1.012E 00		4.118E-11	
19	1.016E 02	1.010E 00	2.794E-02	4.392E-11	1.227E-12
20	1.071E 02	1.012E 00		4.674E-11	
21	1.127E 02	1.012E 00		4.969E-11	
22	1.182E 02	1.012E 00	2.357E-02	5.279E-11	1.244E-12
23	1.237E 02	1.010E 00		5.600E-11	
24	1.293E 02	1.006E 00		5.927E-11	
25	1.348E 02	1.006E 00	1.969E-02	6.248E-11	1.230E-12
26	1.403E 02	1.006E 00		6.572E-11	
27	1.459E 02	1.005E 00		6.943E-11	
28	1.514E 02	1.005E 00	1.655E-02	7.315E-11	1.211E-12
29	1.569E 02	1.009E 00		7.691E-11	
30	1.625E 02	1.009E 00		8.067E-11	
31	1.680E 02	1.005E 00	1.408E-02	8.444E-11	1.189E-12
32	1.735E 02	1.003E 00		8.816E-11	
33	1.791E 02	1.004E 00		9.187E-11	
34	1.846E 02	1.004E 00	1.187E-02	9.548E-11	1.134E-12
35	1.901E 02	1.003E 00		9.907E-11	
36	1.957E 02	1.003E 00		1.024E-10	
37	2.012E 02	1.004E 00	1.007E-02	1.047E-10	1.055E-12
38	2.067E 02	1.007E 00		1.033E-10	
39	2.123E 02	1.011E 00		1.062E-10	
40	2.178E 02	1.018E 00	8.764E-03	1.153E-10	1.011E-12

TARGET NO. 7 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.023E 00		1.213E-10	
42	2.288E 02	1.028E 00		1.252E-10	
43	2.344E 02	1.032E 00	7.586E-03	1.291E-10	9.791E-13
44	2.399E 02	1.035E 00		1.329E-10	
45	2.454E 02	1.040E 00		1.363E-10	
46	2.510E 02	1.047E 00	6.646E-03	1.398E-10	9.290E-13
47	2.565E 02	1.056E 00		1.442E-10	
48	2.620E 02	1.064E 00		1.482E-10	
49	2.676E 02	1.071E 00	5.847E-03	1.515E-10	8.861E-13
50	2.731E 02	1.078E 00		1.549E-10	
51	2.786E 02	1.086E 00		1.582E-10	
52	2.842E 02	1.094E 00	5.109E-03	1.615E-10	8.251E-13
53	2.897E 02	1.102E 00		1.648E-10	
54	2.952E 02	1.106E 00		1.687E-10	
55	3.008E 02	1.111E 00	4.425E-03	1.724E-10	7.628E-13
56	3.063E 02	1.121E 00		1.752E-10	
57	3.118E 02	1.131E 00		1.781E-10	
58	3.174E 02	1.138E 00	3.894E-03	1.814E-10	7.065E-13
59	3.229E 02	1.147E 00		1.847E-10	
60	3.284E 02	1.156E 00		1.881E-10	
61	3.340E 02	1.166E 00	3.457E-03	1.918E-10	6.629E-13
62	3.395E 02	1.176E 00		1.956E-10	
63	3.450E 02	1.185E 00		1.990E-10	
64	3.506E 02	1.193E 00	3.053E-03	2.023E-10	6.177E-13
65	3.561E 02	1.199E 00		2.057E-10	
66	3.616E 02	1.204E 00		2.088E-10	
67	3.672E 02	1.206E 00	2.607E-03	2.116E-10	5.516E-13
68	3.727E 02	1.208E 00		2.146E-10	
69	3.782E 02	1.211E 00		2.179E-10	
70	3.838E 02	1.216E 00	2.214E-03	2.209E-10	4.891E-13
71	3.893E 02	1.223E 00		2.236E-10	
72	3.948E 02	1.229E 00		2.269E-10	
73	4.004E 02	1.236E 00	1.916E-03	2.302E-10	4.412E-13
74	4.059E 02	1.247E 00		2.341E-10	
75	4.114E 02	1.257E 00		2.377E-10	
76	4.169E 02	1.263E 00	1.672E-03	2.405E-10	4.022E-13
77	4.225E 02	1.273E 00		2.435E-10	
78	4.280E 02	1.286E 00		2.468E-10	
79	4.335E 02	1.295E 00	1.466E-03	2.494E-10	3.656E-13
80	4.391E 02	1.300E 00		2.516E-10	

TARGET NO. 7 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.303E 00		2.548E-10	
82	4.501E 02	1.305E 00	1.219E-03	2.581E-10	3.145E-13
83	4.557E 02	1.308E 00		2.603E-10	
84	4.612E 02	1.310E 00		2.627E-10	
85	4.667E 02	1.310E 00	9.900E-04	2.660E-10	2.634E-13
86	4.723E 02	1.310E 00		2.691E-10	
87	4.778E 02	1.310E 00		2.719E-10	
88	4.833E 02	1.314E 00	7.896E-04	2.747E-10	2.169E-13
89	4.889E 02	1.321E 00		2.774E-10	
90	4.944E 02	1.329E 00		2.802E-10	
91	4.999E 02	1.337E 00	6.467E-04	2.830E-10	1.830E-13
92	5.055E 02	1.341E 00		2.861E-10	
93	5.110E 02	1.345E 00		2.892E-10	
94	5.165E 02	1.349E 00	5.064E-04	2.923E-10	1.480E-13
95	5.221E 02	1.360E 00		2.954E-10	
96	5.276E 02	1.382E 00		2.982E-10	
97	5.331E 02	1.397E 00	4.166E-04	3.009E-10	1.254E-13
98	5.387E 02	1.404E 00		3.036E-10	
99	5.442E 02	1.399E 00		3.062E-10	
100	5.497E 02	1.390E 00	2.967E-04	3.089E-10	9.165E-14
101	5.553E 02	1.379E 00		3.117E-10	
102	5.608E 02	1.367E 00		3.146E-10	
103	5.663E 02	1.350E 00	1.863E-04	3.175E-10	5.916E-14
104	5.719E 02	1.335E 00		3.204E-10	
105	5.774E 02	1.325E 00		3.231E-10	
106	5.829E 02	1.346E 00	1.085E-04	3.258E-10	3.534E-14
107	5.885E 02	1.396E 00		3.285E-10	
108	5.940E 02	8.476E-01		3.311E-10	
109	5.995E 02	6.797E-02	3.380E-06	3.338E-10	1.128E-15
110	6.051E 02	0.0		3.368E-10	

DCSE= 4.183E-13 R-SQ.CM./ELECTRON

TARGET NO. 8 INCIDENT ELECTRON ENERGY 0.6 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
7	1.866E-02	3.386E-02	4.483E-02	4.159E-02	2.872E-02
10	1.988E-02	3.566E-02	4.805E-02	4.423E-02	2.906E-02
13	1.781E-02	3.168E-02	4.257E-02	3.898E-02	2.520E-02
16	1.504E-02	2.701E-02	3.591E-02	3.210E-02	2.077E-02
19	1.275E-02	2.254E-02	2.990E-02	2.697E-02	1.746E-02
22	1.087E-02	1.921E-02	2.524E-02	2.253E-02	1.452E-02
25	9.026E-03	1.616E-02	2.143E-02	1.900E-02	1.189E-02
28	7.733E-03	1.384E-02	1.809E-02	1.579E-02	9.913E-03
31	6.743E-03	1.175E-02	1.550E-02	1.353E-02	8.289E-03
34	5.699E-03	1.020E-02	1.332E-02	1.136E-02	7.163E-03
37	5.006E-03	8.685E-03	1.109E-02	9.595E-03	5.866E-03
40	4.291E-03	7.433E-03	9.714E-03	8.181E-03	5.044E-03
43	3.618E-03	6.467E-03	8.273E-03	6.905E-03	4.256E-03
46	3.158E-03	5.781E-03	7.215E-03	5.954E-03	3.585E-03
49	2.774E-03	4.892E-03	6.295E-03	5.195E-03	3.038E-03
52	2.405E-03	4.344E-03	5.302E-03	4.333E-03	2.565E-03
55	2.078E-03	3.729E-03	4.579E-03	3.736E-03	2.114E-03
58	1.750E-03	3.139E-03	3.974E-03	3.136E-03	1.862E-03
61	1.560E-03	2.702E-03	3.446E-03	2.693E-03	1.547E-03
64	1.406E-03	2.407E-03	2.935E-03	2.374E-03	1.325E-03
67	1.146E-03	2.104E-03	2.480E-03	1.961E-03	1.099E-03
70	1.053E-03	1.777E-03	2.222E-03	1.713E-03	9.168E-04
73	8.719E-04	1.589E-03	1.949E-03	1.387E-03	7.714E-04
76	7.181E-04	1.307E-03	1.630E-03	1.221E-03	6.093E-04
79	6.121E-04	1.165E-03	1.384E-03	1.014E-03	5.054E-04
82	5.249E-04	9.504E-04	1.110E-03	8.323E-04	3.755E-04
85	4.448E-04	8.013E-04	9.837E-04	6.906E-04	3.091E-04
88	3.716E-04	6.743E-04	7.385E-04	5.353E-04	2.493E-04
91	2.952E-04	5.510E-04	6.231E-04	4.179E-04	1.926E-04
94	2.243E-04	4.236E-04	4.903E-04	3.250E-04	1.279E-04
97	1.699E-04	3.399E-04	3.638E-04	2.404E-04	9.995E-05
100	1.242E-04	2.516E-04	2.868E-04	1.500E-04	6.167E-05
103	8.942E-05	1.732E-04	1.952E-04	1.113E-04	4.077E-05
106	4.300E-05	9.978E-05	1.230E-04	5.873E-05	2.116E-05
109	2.310E-05	5.442E-05	7.190E-05	2.978E-05	2.200E-06

TARGET NO. 8 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.464E-01	2.948E-02	5.883E-11	1.734E-12
8	4.075E 01	1.225E 00		4.341E-11	
9	4.628E 01	1.118E 00		3.904E-11	
10	5.181E 01	1.043E 00	5.008E-02	3.576E-11	1.791E-12
11	5.735E 01	1.035E 00		3.470E-11	
12	6.288E 01	1.030E 00		3.420E-11	
13	6.841E 01	1.028E 00	4.351E-02	3.420E-11	1.488E-12
14	7.394E 01	1.024E 00		3.463E-11	
15	7.947E 01	1.018E 00		3.524E-11	
16	8.501E 01	1.016E 00	3.590E-02	3.675E-11	1.319E-12
17	9.054E 01	1.015E 00		3.846E-11	
18	9.607E 01	1.012E 00		4.118E-11	
19	1.016E 02	1.011E 00	2.990E-02	4.392E-11	1.313E-12
20	1.071E 02	1.012E 00		4.674E-11	
21	1.127E 02	1.012E 00		4.969E-11	
22	1.182E 02	1.012E 00	2.517E-02	5.279E-11	1.329E-12
23	1.237E 02	1.010E 00		5.600E-11	
24	1.293E 02	1.006E 00		5.927E-11	
25	1.348E 02	1.006E 00	2.098E-02	6.248E-11	1.311E-12
26	1.403E 02	1.006E 00		6.572E-11	
27	1.459E 02	1.004E 00		6.943E-11	
28	1.514E 02	1.004E 00	1.760E-02	7.315E-11	1.288E-12
29	1.569E 02	1.007E 00		7.691E-11	
30	1.625E 02	1.007E 00		8.067E-11	
31	1.680E 02	1.003E 00	1.499E-02	8.444E-11	1.266E-12
32	1.735E 02	1.004E 00		8.816E-11	
33	1.791E 02	1.007E 00		9.187E-11	
34	1.846E 02	1.007E 00	1.287E-02	9.548E-11	1.228E-12
35	1.901E 02	1.007E 00		9.907E-11	
36	1.957E 02	1.003E 00		1.024E-10	
37	2.012E 02	1.001E 00	1.072E-02	1.047E-10	1.123E-12
38	2.067E 02	1.005E 00		1.033E-10	
39	2.123E 02	1.011E 00		1.062E-10	
40	2.178E 02	1.018E 00	9.399E-03	1.153E-10	1.084E-12

TARGET NO. 8 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.024E 00		1.213E-10	
42	2.288E 02	1.027E 00		1.252E-10	
43	2.344E 02	1.030E 00	8.085E-03	1.291E-10	1.043E-12
44	2.399E 02	1.033E 00		1.329E-10	
45	2.454E 02	1.040E 00		1.363E-10	
46	2.510E 02	1.047E 00	7.121E-03	1.398E-10	9.955E-13
47	2.565E 02	1.057E 00		1.442E-10	
48	2.620E 02	1.066E 00		1.482E-10	
49	2.676E 02	1.074E 00	6.312E-03	1.515E-10	9.566E-13
50	2.731E 02	1.080E 00		1.549E-10	
51	2.786E 02	1.086E 00		1.582E-10	
52	2.842E 02	1.093E 00	5.449E-03	1.615E-10	8.801E-13
53	2.897E 02	1.100E 00		1.648E-10	
54	2.952E 02	1.106E 00		1.687E-10	
55	3.008E 02	1.113E 00	4.748E-03	1.724E-10	8.184E-13
56	3.063E 02	1.123E 00		1.752E-10	
57	3.118E 02	1.132E 00		1.781E-10	
58	3.174E 02	1.138E 00	4.155E-03	1.814E-10	7.538E-13
59	3.229E 02	1.145E 00		1.847E-10	
60	3.284E 02	1.152E 00		1.881E-10	
61	3.340E 02	1.161E 00	3.640E-03	1.918E-10	6.981E-13
62	3.395E 02	1.172E 00		1.956E-10	
63	3.450E 02	1.183E 00		1.990E-10	
64	3.506E 02	1.194E 00	3.257E-03	2.023E-10	6.590E-13
65	3.561E 02	1.195E 00		2.057E-10	
66	3.616E 02	1.197E 00		2.088E-10	
67	3.672E 02	1.198E 00	2.744E-03	2.116E-10	5.806E-13
68	3.727E 02	1.205E 00		2.146E-10	
69	3.782E 02	1.218E 00		2.179E-10	
70	3.838E 02	1.229E 00	2.453E-03	2.209E-10	5.419E-13
71	3.893E 02	1.239E 00		2.236E-10	
72	3.948E 02	1.245E 00		2.269E-10	
73	4.004E 02	1.251E 00	2.126E-03	2.302E-10	4.896E-13
74	4.059E 02	1.256E 00		2.341E-10	
75	4.114E 02	1.260E 00		2.377E-10	
76	4.169E 02	1.262E 00	1.797E-03	2.405E-10	4.321E-13
77	4.225E 02	1.269E 00		2.435E-10	
78	4.280E 02	1.282E 00		2.468E-10	
79	4.335E 02	1.287E 00	1.554E-03	2.494E-10	3.876E-13
80	4.391E 02	1.287E 00		2.516E-10	

TARGET NO. 8 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.280E 00		2.548E-10	
82	4.501E 02	1.273E 00	1.237E-03	2.581E-10	3.192E-13
83	4.557E 02	1.294E 00		2.603E-10	
84	4.612E 02	1.314E 00		2.627E-10	
85	4.667E 02	1.327E 00	1.098E-03	2.660E-10	2.920E-13
86	4.723E 02	1.332E 00		2.691E-10	
87	4.778E 02	1.325E 00		2.719E-10	
88	4.833E 02	1.325E 00	8.623E-04	2.747E-10	2.368E-13
89	4.889E 02	1.331E 00		2.774E-10	
90	4.944E 02	1.340E 00		2.802E-10	
91	4.999E 02	1.351E 00	7.104E-04	2.830E-10	2.010E-13
92	5.055E 02	1.352E 00		2.861E-10	
93	5.110E 02	1.352E 00		2.892E-10	
94	5.165E 02	1.349E 00	5.412E-04	2.923E-10	1.582E-13
95	5.221E 02	1.350E 00		2.954E-10	
96	5.276E 02	1.357E 00		2.982E-10	
97	5.331E 02	1.362E 00	4.145E-04	3.009E-10	1.247E-13
98	5.387E 02	1.364E 00		3.036E-10	
99	5.442E 02	1.358E 00		3.062E-10	
100	5.497E 02	1.349E 00	2.916E-04	3.089E-10	9.007E-14
101	5.553E 02	1.366E 00		3.117E-10	
102	5.608E 02	1.384E 00		3.146E-10	
103	5.663E 02	1.391E 00	2.098E-04	3.175E-10	6.660E-14
104	5.719E 02	1.388E 00		3.204E-10	
105	5.774E 02	1.366E 00		3.231E-10	
106	5.829E 02	1.357E 00	1.170E-04	3.258E-10	3.813E-14
107	5.885E 02	1.359E 00		3.285E-10	
108	5.940E 02	8.179E-01		3.311E-10	
109	5.995E 02	6.559E-02	2.906E-06	3.338E-10	9.699E-16
110	6.051E 02	0.0		3.368E-10	

DOSE= 4.477E-13 R-SQ.CM./ELECTRON

TARGET NO. 9 INCIDENT ELECTRON ENERGY 0.6 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	1.355E-02	2.443E-02	3.355E-02	3.247E-02	2.341E-02	9.421E-03
10	1.847E-02	3.329E-02	4.678E-02	4.421E-02	3.066E-02	1.230E-02
13	1.891E-02	3.390E-02	4.779E-02	4.507E-02	3.085E-02	1.234E-02
16	1.722E-02	3.068E-02	4.333E-02	4.049E-02	2.746E-02	1.097E-02
19	1.530E-02	2.730E-02	3.816E-02	3.577E-02	2.392E-02	9.593E-03
22	1.339E-02	2.381E-02	3.272E-02	3.071E-02	2.069E-02	8.126E-03
25	1.143E-02	2.036E-02	2.843E-02	2.606E-02	1.731E-02	6.873E-03
28	9.826E-03	1.788E-02	2.403E-02	2.234E-02	1.477E-02	5.678E-03
31	8.413E-03	1.516E-02	2.021E-02	1.889E-02	1.248E-02	4.891E-03
34	7.304E-03	1.297E-02	1.815E-02	1.618E-02	1.065E-02	4.163E-03
37	6.238E-03	1.132E-02	1.526E-02	1.381E-02	9.119E-03	3.515E-03
40	5.460E-03	9.742E-03	1.315E-02	1.176E-02	7.688E-03	2.970E-03
43	4.828E-03	8.495E-03	1.150E-02	1.024E-02	6.630E-03	2.512E-03
46	4.230E-03	7.307E-03	9.687E-03	8.750E-03	5.646E-03	2.170E-03
49	3.654E-03	6.412E-03	8.673E-03	7.594E-03	4.784E-03	1.798E-03
52	3.180E-03	5.491E-03	7.556E-03	6.405E-03	4.001E-03	1.519E-03
55	2.763E-03	4.827E-03	6.374E-03	5.515E-03	3.465E-03	1.317E-03
58	2.402E-03	4.283E-03	5.762E-03	4.895E-03	2.998E-03	1.103E-03
61	2.042E-03	3.661E-03	4.930E-03	4.046E-03	2.499E-03	9.733E-04
64	1.839E-03	3.311E-03	4.133E-03	3.634E-03	2.100E-03	8.031E-04
67	1.581E-03	2.820E-03	3.686E-03	2.933E-03	1.769E-03	6.579E-04
70	1.392E-03	2.470E-03	3.073E-03	2.598E-03	1.550E-03	5.288E-04
73	1.235E-03	2.135E-03	2.709E-03	2.140E-03	1.325E-03	4.605E-04
76	1.022E-03	1.787E-03	2.486E-03	1.918E-03	1.108E-03	3.944E-04
79	8.993E-04	1.533E-03	2.084E-03	1.560E-03	9.604E-04	3.162E-04
82	7.452E-04	1.365E-03	1.737E-03	1.323E-03	7.407E-04	2.597E-04
85	6.333E-04	1.200E-03	1.486E-03	1.120E-03	5.945E-04	2.142E-04
88	5.274E-04	9.929E-04	1.204E-03	1.000E-03	4.717E-04	1.651E-04
91	4.470E-04	7.831E-04	9.806E-04	7.126E-04	3.825E-04	1.117E-04
94	3.700E-04	6.511E-04	7.902E-04	6.163E-04	2.893E-04	8.000E-05
97	2.972E-04	4.807E-04	6.395E-04	4.582E-04	1.987E-04	6.142E-05
100	2.109E-04	4.271E-04	4.626E-04	2.884E-04	1.455E-04	3.915E-05
103	1.511E-04	2.947E-04	3.541E-04	2.217E-04	7.234E-05	2.243E-05
106	9.154E-05	2.031E-04	2.425E-04	1.222E-04	5.397E-05	1.447E-05
109	4.439E-05	1.007E-04	1.177E-04	4.702E-05	2.471E-05	6.028E-06

TARGET NO. 9 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.064E-01	2.022E-02	5.883E-11	1.189E-12
8	4.075E 01	1.153E 00		4.341E-11	
9	4.628E 01	1.083E 00		3.904E-11	
10	5.181E 01	1.033E 00	4.671E-02	3.576E-11	1.670E-12
11	5.735E 01	1.026E 00		3.470E-11	
12	6.288E 01	1.025E 00		3.420E-11	
13	6.841E 01	1.031E 00	4.738E-02	3.420E-11	1.620E-12
14	7.394E 01	1.026E 00		3.463E-11	
15	7.947E 01	1.018E 00		3.524E-11	
16	8.501E 01	1.017E 00	4.207E-02	3.675E-11	1.546E-12
17	9.054E 01	1.016E 00		3.846E-11	
18	9.607E 01	1.015E 00		4.118E-11	
19	1.016E 02	1.015E 00	3.698E-02	4.392E-11	1.624E-12
20	1.071E 02	1.014E 00		4.674E-11	
21	1.127E 02	1.014E 00		4.969E-11	
22	1.182E 02	1.014E 00	3.184E-02	5.279E-11	1.681E-12
23	1.237E 02	1.011E 00		5.600E-11	
24	1.293E 02	1.006E 00		5.927E-11	
25	1.348E 02	1.006E 00	2.695E-02	6.248E-11	1.684E-12
26	1.403E 02	1.007E 00		6.572E-11	
27	1.459E 02	1.008E 00		6.943E-11	
28	1.514E 02	1.009E 00	2.308E-02	7.315E-11	1.689E-12
29	1.569E 02	1.009E 00		7.691E-11	
30	1.625E 02	1.005E 00		8.067E-11	
31	1.680E 02	9.982E-01	1.932E-02	8.444E-11	1.631E-12
32	1.735E 02	9.992E-01		8.816E-11	
33	1.791E 02	1.005E 00		9.187E-11	
34	1.846E 02	1.007E 00	1.691E-02	9.548E-11	1.615E-12
35	1.901E 02	1.008E 00		9.907E-11	
36	1.957E 02	1.007E 00		1.024E-10	
37	2.012E 02	1.006E 00	1.440E-02	1.047E-10	1.508E-12
38	2.067E 02	1.007E 00		1.033E-10	
39	2.123E 02	1.009E 00		1.062E-10	
40	2.178E 02	1.014E 00	1.242E-02	1.153E-10	1.432E-12

TARGET NO. 9 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.022E 00		1.213E-10	
42	2.288E 02	1.032E 00		1.252E-10	
43	2.344E 02	1.036E 00	1.104E-02	1.291E-10	1.424E-12
44	2.399E 02	1.039E 00		1.329E-10	
45	2.454E 02	1.039E 00		1.363E-10	
46	2.510E 02	1.041E 00	9.463E-03	1.398E-10	1.323E-12
47	2.565E 02	1.052E 00		1.442E-10	
48	2.620E 02	1.063E 00		1.482E-10	
49	2.676E 02	1.072E 00	8.486E-03	1.515E-10	1.286E-12
50	2.731E 02	1.079E 00		1.549E-10	
51	2.786E 02	1.084E 00		1.582E-10	
52	2.842E 02	1.091E 00	7.370E-03	1.615E-10	1.190E-12
53	2.897E 02	1.097E 00		1.648E-10	
54	2.952E 02	1.102E 00		1.687E-10	
55	3.008E 02	1.108E 00	6.442E-03	1.724E-10	1.111E-12
56	3.063E 02	1.125E 00		1.752E-10	
57	3.118E 02	1.140E 00		1.781E-10	
58	3.174E 02	1.152E 00	5.927E-03	1.814E-10	1.075E-12
59	3.229E 02	1.158E 00		1.847E-10	
60	3.284E 02	1.157E 00		1.881E-10	
61	3.340E 02	1.161E 00	5.045E-03	1.918E-10	9.674E-13
62	3.395E 02	1.168E 00		1.956E-10	
63	3.450E 02	1.178E 00		1.990E-10	
64	3.506E 02	1.188E 00	4.481E-03	2.023E-10	9.066E-13
65	3.561E 02	1.193E 00		2.057E-10	
66	3.616E 02	1.197E 00		2.088E-10	
67	3.672E 02	1.200E 00	3.838E-03	2.116E-10	8.120E-13
68	3.727E 02	1.205E 00		2.146E-10	
69	3.782E 02	1.212E 00		2.179E-10	
70	3.838E 02	1.220E 00	3.366E-03	2.209E-10	7.435E-13
71	3.893E 02	1.227E 00		2.236E-10	
72	3.948E 02	1.232E 00		2.269E-10	
73	4.004E 02	1.238E 00	2.932E-03	2.302E-10	6.751E-13
74	4.059E 02	1.254E 00		2.341E-10	
75	4.114E 02	1.268E 00		2.377E-10	
76	4.169E 02	1.276E 00	2.652E-03	2.405E-10	6.377E-13
77	4.225E 02	1.282E 00		2.435E-10	
78	4.280E 02	1.283E 00		2.468E-10	
79	4.335E 02	1.284E 00	2.241E-03	2.494E-10	5.589E-13
80	4.391E 02	1.285E 00		2.516E-10	

TARGET NO. 9 INCIDENT ELECTRON ENERGY 0.6 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.287E 00		2.548E-10	
82	4.501E 02	1.289E 00	1.880E-03	2.581E-10	4.851E-13
83	4.557E 02	1.302E 00		2.603E-10	
84	4.612E 02	1.314E 00		2.627E-10	
85	4.667E 02	1.326E 00	1.640E-03	2.660E-10	4.363E-13
86	4.723E 02	1.337E 00		2.691E-10	
87	4.778E 02	1.347E 00		2.719E-10	
88	4.833E 02	1.350E 00	1.391E-03	2.747E-10	3.821E-13
89	4.889E 02	1.348E 00		2.774E-10	
90	4.944E 02	1.336E 00		2.802E-10	
91	4.999E 02	1.321E 00	1.058E-03	2.830E-10	2.994E-13
92	5.055E 02	1.341E 00		2.861E-10	
93	5.110E 02	1.361E 00		2.892E-10	
94	5.165E 02	1.373E 00	8.992E-04	2.923E-10	2.628E-13
95	5.221E 02	1.380E 00		2.954E-10	
96	5.276E 02	1.380E 00		2.982E-10	
97	5.331E 02	1.379E 00	6.873E-04	3.009E-10	2.068E-13
98	5.387E 02	1.377E 00		3.036E-10	
99	5.442E 02	1.369E 00		3.062E-10	
100	5.497E 02	1.361E 00	4.915E-04	3.089E-10	1.518E-13
101	5.553E 02	1.375E 00		3.117E-10	
102	5.608E 02	1.392E 00		3.146E-10	
103	5.663E 02	1.409E 00	3.618E-04	3.175E-10	1.149E-13
104	5.719E 02	1.430E 00		3.204E-10	
105	5.774E 02	1.456E 00		3.231E-10	
106	5.829E 02	1.466E 00	2.446E-04	3.258E-10	7.969E-14
107	5.885E 02	1.461E 00		3.285E-10	
108	5.940E 02	8.776E-01		3.311E-10	
109	5.995E 02	7.037E-02	5.426E-06	3.338E-10	1.811E-15
110	6.051E 02	0.0		3.368E-10	

DOSE= 5.634E-13 R-SQ.CM./ELECTRON

TARGET NO. 1 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	3.205E-02	5.287E-02	7.835E-02	7.039E-02	4.499E-02	1.839E-02
10	4.391E-02	7.313E-02	1.063E-01	9.578E-02	6.066E-02	2.494E-02
13	4.579E-02	7.574E-02	1.102E-01	9.900E-02	6.170E-02	2.550E-02
16	4.296E-02	7.089E-02	1.008E-01	9.009E-02	5.704E-02	2.316E-02
19	3.908E-02	6.461E-02	9.168E-02	8.128E-02	5.050E-02	2.045E-02
22	3.483E-02	5.716E-02	8.143E-02	7.163E-02	4.447E-02	1.803E-02
25	3.064E-02	5.059E-02	7.138E-02	6.275E-02	3.847E-02	1.558E-02
28	2.733E-02	4.430E-02	6.190E-02	5.462E-02	3.388E-02	1.321E-02
31	2.413E-02	3.951E-02	5.421E-02	4.780E-02	2.930E-02	1.180E-02
34	2.133E-02	3.491E-02	4.754E-02	4.155E-02	2.585E-02	1.030E-02
37	1.903E-02	3.064E-02	4.234E-02	3.629E-02	2.209E-02	8.932E-03
40	1.695E-02	2.734E-02	3.740E-02	3.206E-02	1.936E-02	7.784E-03
43	1.506E-02	2.437E-02	3.358E-02	2.848E-02	1.687E-02	6.743E-03
46	1.363E-02	2.186E-02	2.955E-02	2.469E-02	1.508E-02	5.860E-03
49	1.212E-02	1.921E-02	2.611E-02	2.169E-02	1.333E-02	5.102E-03
52	1.090E-02	1.789E-02	2.365E-02	1.954E-02	1.161E-02	4.605E-03
55	9.636E-03	1.612E-02	2.096E-02	1.749E-02	1.021E-02	4.000E-03
58	8.729E-03	1.454E-02	1.934E-02	1.557E-02	9.327E-03	3.607E-03
61	8.106E-03	1.310E-02	1.741E-02	1.397E-02	8.514E-03	3.208E-03
64	7.372E-03	1.194E-02	1.515E-02	1.279E-02	7.297E-03	2.844E-03
67	6.793E-03	1.081E-02	1.405E-02	1.141E-02	6.685E-03	2.507E-03
70	6.004E-03	9.707E-03	1.247E-02	1.030E-02	5.747E-03	2.261E-03
73	5.554E-03	8.709E-03	1.178E-02	9.501E-03	5.236E-03	1.992E-03
76	5.023E-03	8.056E-03	1.014E-02	8.327E-03	4.751E-03	1.854E-03
79	4.691E-03	7.302E-03	9.338E-03	7.365E-03	4.134E-03	1.620E-03
82	4.159E-03	6.729E-03	8.722E-03	6.556E-03	3.620E-03	1.407E-03
85	3.738E-03	6.067E-03	7.585E-03	6.107E-03	3.341E-03	1.205E-03
88	3.427E-03	5.525E-03	7.033E-03	5.597E-03	2.986E-03	1.092E-03
91	3.261E-03	5.157E-03	6.388E-03	4.844E-03	2.602E-03	9.912E-04
94	2.895E-03	4.586E-03	5.963E-03	4.473E-03	2.521E-03	9.499E-04
97	2.673E-03	4.174E-03	5.210E-03	3.969E-03	2.157E-03	8.052E-04
100	2.473E-03	4.015E-03	4.605E-03	3.825E-03	2.010E-03	7.490E-04
103	2.233E-03	3.518E-03	4.303E-03	3.246E-03	1.729E-03	6.217E-04
106	2.063E-03	3.263E-03	3.879E-03	2.946E-03	1.676E-03	5.610E-04
109	1.821E-03	3.019E-03	3.486E-03	2.649E-03	1.458E-03	4.898E-04
112	1.683E-03	2.662E-03	3.311E-03	2.345E-03	1.328E-03	4.561E-04
115	1.517E-03	2.449E-03	3.169E-03	2.270E-03	1.147E-03	3.898E-04
118	1.394E-03	2.278E-03	2.639E-03	1.937E-03	9.351E-04	3.507E-04
121	1.276E-03	2.142E-03	2.523E-03	1.785E-03	8.725E-04	3.061E-04
124	1.100E-03	1.898E-03	2.262E-03	1.619E-03	7.089E-04	2.749E-04
127	1.070E-03	1.680E-03	2.017E-03	1.431E-03	7.289E-04	2.559E-04
130	9.910E-04	1.524E-03	1.757E-03	1.177E-03	6.090E-04	2.142E-04
133	8.947E-04	1.453E-03	1.659E-03	1.008E-03	4.974E-04	1.921E-04
136	7.971E-04	1.332E-03	1.457E-03	9.678E-04	4.648E-04	1.659E-04
139	7.164E-04	1.300E-03	1.327E-03	8.766E-04	3.748E-04	1.469E-04
142	6.137E-04	1.096E-03	1.220E-03	7.187E-04	3.984E-04	1.237E-04
145	5.023E-04	9.425E-04	1.044E-03	6.371E-04	2.599E-04	9.827E-05
148	5.351E-04	9.380E-04	9.144E-04	6.094E-04	2.668E-04	8.321E-05
151	4.210E-04	8.074E-04	8.882E-04	4.876E-04	2.181E-04	7.488E-05
154	4.228E-04	6.256E-04	7.321E-04	4.235E-04	2.254E-04	6.651E-05
157	3.661E-04	5.782E-04	5.947E-04	3.532E-04	1.349E-04	4.183E-05
160	3.102E-04	4.323E-04	5.279E-04	3.049E-04	8.635E-05	4.448E-05
163	2.586E-04	4.408E-04	4.742E-04	2.173E-04	1.042E-04	2.918E-05
166	2.039E-04	3.263E-04	3.945E-04	1.726E-04	8.080E-05	1.980E-05
169	1.702E-04	2.768E-04	2.845E-04	1.328E-04	3.277E-05	1.900E-05
172	1.280E-04	2.139E-04	2.642E-04	9.944E-05	4.166E-05	5.060E-06
175	7.665E-05	1.562E-04	1.693E-04	5.995E-05	1.509E-05	6.032E-06
178	7.408E-05	1.149E-04	1.104E-04	2.954E-05	1.288E-05	7.703E-07

TARGET NO. 1 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.007E-01	4.323E-02	5.883E-11	2.543E-12
8	4.075E 01	1.142E 00		4.341E-11	
9	4.628E 01	1.073E 00		3.904E-11	
10	5.181E 01	1.024E 00	1.003E-01	3.576E-11	3.585E-12
11	5.735E 01	1.018E 00		3.470E-11	
12	6.288E 01	1.018E 00		3.420E-11	
13	6.841E 01	1.023E 00	1.033E-01	3.420E-11	3.534E-12
14	7.394E 01	1.019E 00		3.463E-11	
15	7.947E 01	1.011E 00		3.524E-11	
16	8.501E 01	1.010E 00	9.376E-02	3.675E-11	3.446E-12
17	9.054E 01	1.010E 00		3.846E-11	
18	9.607E 01	1.009E 00		4.118E-11	
19	1.016E 02	1.008E 00	8.445E-02	4.392E-11	3.709E-12
20	1.071E 02	1.008E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.009E 00	7.470E-02	5.279E-11	3.944E-12
23	1.237E 02	1.006E 00		5.600E-11	
24	1.293E 02	1.001E 00		5.927E-11	
25	1.348E 02	1.001E 00	6.487E-02	6.248E-11	4.053E-12
26	1.403E 02	1.001E 00		6.572E-11	
27	1.459E 02	1.001E 00		6.943E-11	
28	1.514E 02	1.001E 00	5.657E-02	7.315E-11	4.138E-12
29	1.569E 02	1.003E 00		7.691E-11	
30	1.625E 02	1.002E 00		8.067E-11	
31	1.680E 02	9.976E-01	4.946E-02	8.444E-11	4.176E-12
32	1.735E 02	9.968E-01		8.816E-11	
33	1.791E 02	9.981E-01		9.187E-11	
34	1.846E 02	9.985E-01	4.342E-02	9.548E-11	4.145E-12
35	1.901E 02	9.987E-01		9.907E-11	
36	1.957E 02	9.986E-01		1.024E-10	
37	2.012E 02	9.988E-01	3.807E-02	1.047E-10	3.986E-12
38	2.067E 02	1.001E 00		1.033E-10	
39	2.123E 02	1.004E 00		1.062E-10	
40	2.178E 02	1.011E 00	3.403E-02	1.153E-10	3.925E-12

TARGET NO. 1 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.017E 00		1.213E-10	
42	2.288E 02	1.025E 00		1.252E-10	
43	2.344E 02	1.028E 00	3.073E-02	1.291E-10	3.966E-12
44	2.399E 02	1.031E 00		1.329E-10	
45	2.454E 02	1.034E 00		1.363E-10	
46	2.510E 02	1.038E 00	2.737E-02	1.398E-10	3.825E-12
47	2.565E 02	1.044E 00		1.442E-10	
48	2.620E 02	1.050E 00		1.482E-10	
49	2.676E 02	1.056E 00	2.452E-02	1.515E-10	3.717E-12
50	2.731E 02	1.065E 00		1.549E-10	
51	2.786E 02	1.077E 00		1.582E-10	
52	2.842E 02	1.087E 00	2.277E-02	1.615E-10	3.677E-12
53	2.897E 02	1.095E 00		1.648E-10	
54	2.952E 02	1.099E 00		1.687E-10	
55	3.008E 02	1.103E 00	2.054E-02	1.724E-10	3.542E-12
56	3.063E 02	1.114E 00		1.752E-10	
57	3.118E 02	1.125E 00		1.781E-10	
58	3.174E 02	1.135E 00	1.918E-02	1.814E-10	3.479E-12
59	3.229E 02	1.144E 00		1.847E-10	
60	3.284E 02	1.152E 00		1.881E-10	
61	3.340E 02	1.159E 00	1.767E-02	1.918E-10	3.389E-12
62	3.395E 02	1.165E 00		1.956E-10	
63	3.450E 02	1.167E 00		1.990E-10	
64	3.506E 02	1.170E 00	1.589E-02	2.023E-10	3.214E-12
65	3.561E 02	1.181E 00		2.057E-10	
66	3.616E 02	1.192E 00		2.088E-10	
67	3.672E 02	1.199E 00	1.481E-02	2.116E-10	3.133E-12
68	3.727E 02	1.203E 00		2.146E-10	
69	3.782E 02	1.202E 00		2.179E-10	
70	3.838E 02	1.209E 00	1.328E-02	2.209E-10	2.933E-12
71	3.893E 02	1.218E 00		2.236E-10	
72	3.948E 02	1.233E 00		2.269E-10	
73	4.004E 02	1.247E 00	1.263E-02	2.302E-10	2.908E-12
74	4.059E 02	1.249E 00		2.341E-10	
75	4.114E 02	1.250E 00		2.377E-10	
76	4.169E 02	1.249E 00	1.124E-02	2.405E-10	2.702E-12
77	4.225E 02	1.252E 00		2.435E-10	
78	4.280E 02	1.259E 00		2.468E-10	
79	4.335E 02	1.265E 00	1.023E-02	2.494E-10	2.552E-12
80	4.391E 02	1.271E 00		2.516E-10	

TARGET NO. 1 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.278E 00		2.548E-10	
82	4.501E 02	1.286E 00	9.419E-03	2.581E-10	2.431E-12
83	4.557E 02	1.290E 00		2.603E-10	
84	4.612E 02	1.295E 00		2.627E-10	
85	4.667E 02	1.301E 00	8.577E-03	2.660E-10	2.282E-12
86	4.723E 02	1.308E 00		2.691E-10	
87	4.778E 02	1.318E 00		2.719E-10	
88	4.833E 02	1.325E 00	7.993E-03	2.747E-10	2.195E-12
89	4.889E 02	1.330E 00		2.774E-10	
90	4.944E 02	1.332E 00		2.802E-10	
91	4.999E 02	1.333E 00	7.231E-03	2.830E-10	2.046E-12
92	5.055E 02	1.348E 00		2.861E-10	
93	5.110E 02	1.361E 00		2.892E-10	
94	5.165E 02	1.367E 00	6.862E-03	2.923E-10	2.006E-12
95	5.221E 02	1.369E 00		2.954E-10	
96	5.276E 02	1.363E 00		2.982E-10	
97	5.331E 02	1.365E 00	6.053E-03	3.009E-10	1.821E-12
98	5.387E 02	1.375E 00		3.036E-10	
99	5.442E 02	1.390E 00		3.062E-10	
100	5.497E 02	1.408E 00	5.805E-03	3.089E-10	1.793E-12
101	5.553E 02	1.403E 00		3.117E-10	
102	5.608E 02	1.397E 00		3.146E-10	
103	5.663E 02	1.396E 00	5.087E-03	3.175E-10	1.615E-12
104	5.719E 02	1.400E 00		3.204E-10	
105	5.774E 02	1.413E 00		3.231E-10	
106	5.829E 02	1.420E 00	4.753E-03	3.258E-10	1.548E-12
107	5.885E 02	1.422E 00		3.285E-10	
108	5.940E 02	1.424E 00		3.311E-10	
109	5.995E 02	1.426E 00	4.281E-03	3.338E-10	1.429E-12
110	6.051E 02	1.433E 00		3.368E-10	
111	6.106E 02	1.441E 00		3.399E-10	
112	6.161E 02	1.454E 00	3.983E-03	3.430E-10	1.366E-12
113	6.216E 02	1.468E 00		3.461E-10	
114	6.272E 02	1.486E 00		3.490E-10	
115	6.327E 02	1.493E 00	3.814E-03	3.517E-10	1.341E-12
116	6.382E 02	1.489E 00		3.544E-10	
117	6.438E 02	1.477E 00		3.570E-10	
118	6.493E 02	1.459E 00	3.213E-03	3.597E-10	1.156E-12
119	6.548E 02	1.477E 00		3.623E-10	
120	6.604E 02	1.499E 00		3.650E-10	

TARGET NO. 1 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.512E 00	3.112E-03	3.676E-10	1.144E-12
122	6.714E 02	1.521E 00		3.703E-10	
123	6.770E 02	1.515E 00		3.729E-10	
124	6.825E 02	1.515E 00	2.759E-03	3.756E-10	1.036E-12
125	6.880E 02	1.523E 00		3.783E-10	
126	6.936E 02	1.532E 00		3.809E-10	
127	6.991E 02	1.542E 00	2.557E-03	3.836E-10	9.807E-13
128	7.046E 02	1.534E 00		3.868E-10	
129	7.102E 02	1.524E 00		3.901E-10	
130	7.157E 02	1.518E 00	2.176E-03	3.934E-10	8.559E-13
131	7.212E 02	1.515E 00		3.967E-10	
132	7.268E 02	1.524E 00		3.998E-10	
133	7.323E 02	1.534E 00	1.989E-03	4.022E-10	7.999E-13
134	7.378E 02	1.547E 00		4.046E-10	
135	7.434E 02	1.559E 00		4.071E-10	
136	7.489E 02	1.571E 00	1.857E-03	4.095E-10	7.603E-13
137	7.544E 02	1.585E 00		4.123E-10	
138	7.600E 02	1.600E 00		4.152E-10	
139	7.655E 02	1.608E 00	1.729E-03	4.181E-10	7.226E-13
140	7.710E 02	1.615E 00		4.209E-10	
141	7.766E 02	1.616E 00		4.237E-10	
142	7.821E 02	1.610E 00	1.532E-03	4.261E-10	6.526E-13
143	7.876E 02	1.594E 00		4.286E-10	
144	7.932E 02	1.575E 00		4.310E-10	
145	7.987E 02	1.555E 00	1.234E-03	4.334E-10	5.349E-13
146	8.042E 02	1.584E 00		4.364E-10	
147	8.097E 02	1.629E 00		4.395E-10	
148	8.153E 02	1.656E 00	1.247E-03	4.426E-10	5.521E-13
149	8.208E 02	1.678E 00		4.457E-10	
150	8.263E 02	1.681E 00		4.486E-10	
151	8.319E 02	1.684E 00	1.105E-03	4.510E-10	4.985E-13
152	8.374E 02	1.686E 00		4.535E-10	
153	8.429E 02	1.687E 00		4.559E-10	
154	8.485E 02	1.685E 00	9.501E-04	4.583E-10	4.354E-13
155	8.540E 02	1.672E 00		4.609E-10	
156	8.595E 02	1.655E 00		4.636E-10	
157	8.651E 02	1.641E 00	7.550E-04	4.662E-10	3.520E-13
158	8.706E 02	1.630E 00		4.689E-10	
159	8.761E 02	1.626E 00		4.715E-10	
160	8.817E 02	1.634E 00	6.230E-04	4.739E-10	2.953E-13

TARGET NO. 1 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.667E 00		4.764E-10	
162	8.927E 02	1.702E 00		4.788E-10	
163	8.983E 02	1.738E 00	5.873E-04	4.812E-10	2.826E-13
164	9.038E 02	1.742E 00		4.840E-10	
165	9.093E 02	1.733E 00		4.869E-10	
166	9.149E 02	1.715E 00	4.583E-04	4.897E-10	2.245E-13
167	9.204E 02	1.696E 00		4.926E-10	
168	9.259E 02	1.665E 00		4.954E-10	
169	9.315E 02	1.653E 00	3.259E-04	4.978E-10	1.642E-13
170	9.370E 02	1.693E 00		5.003E-10	
171	9.425E 02	1.734E 00		5.027E-10	
172	9.481E 02	1.776E 00	2.963E-04	5.051E-10	1.497E-13
173	9.536E 02	1.751E 00		5.077E-10	
174	9.591E 02	1.690E 00		5.104E-10	
175	9.647E 02	1.654E 00	1.753E-04	5.130E-10	8.991E-14
176	9.702E 02	1.624E 00		5.157E-10	
177	9.757E 02	1.634E 00		5.183E-10	
178	9.813E 02	1.651E 00	1.187E-04	5.208E-10	6.181E-14
179	9.868E 02	1.690E 00		5.232E-10	
180	9.923E 02	1.316E 00		5.256E-10	
181	9.978E 02	3.684E-01	1.680E-05	5.281E-10	8.871E-15
182	1.003E 03	0.0		5.305E-10	

DCSF= 2.018E-12 R-SQ.CM./ELECTRON

TARGET NO. 2 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	2.220E-02	3.723E-02	5.092E-02	5.012E-02	3.258E-02	1.249E-02
10	3.464E-02	5.902E-02	8.136E-02	7.723E-02	5.039E-02	1.948E-02
13	3.987E-02	6.716E-02	9.150E-02	8.612E-02	5.651E-02	2.198E-02
16	3.868E-02	6.503E-02	8.814E-02	8.289E-02	5.383E-02	2.072E-02
19	3.581E-02	6.061E-02	8.182E-02	7.592E-02	4.858E-02	1.902E-02
22	3.262E-02	5.454E-02	7.324E-02	6.684E-02	4.374E-02	1.666E-02
25	2.913E-02	4.897E-02	6.678E-02	5.937E-02	3.822E-02	1.466E-02
28	2.599E-02	4.380E-02	5.735E-02	5.209E-02	3.430E-02	1.268E-02
31	2.310E-02	3.881E-02	5.106E-02	4.586E-02	2.934E-02	1.116E-02
34	2.061E-02	3.448E-02	4.602E-02	3.988E-02	2.569E-02	9.806E-03
37	1.842E-02	3.115E-02	3.980E-02	3.523E-02	2.214E-02	8.428E-03
40	1.660E-02	2.675E-02	3.541E-02	3.125E-02	1.982E-02	7.481E-03
43	1.441E-02	2.414E-02	3.108E-02	2.729E-02	1.732E-02	6.383E-03
46	1.308E-02	2.173E-02	2.814E-02	2.443E-02	1.562E-02	5.565E-03
49	1.182E-02	1.926E-02	2.510E-02	2.172E-02	1.356E-02	5.097E-03
52	1.072E-02	1.722E-02	2.235E-02	1.887E-02	1.191E-02	4.448E-03
55	9.583E-03	1.564E-02	2.013E-02	1.667E-02	1.055E-02	4.049E-03
58	8.811E-03	1.427E-02	1.824E-02	1.560E-02	9.166E-03	3.522E-03
61	7.888E-03	1.272E-02	1.658E-02	1.336E-02	8.431E-03	3.071E-03
64	7.205E-03	1.138E-02	1.477E-02	1.230E-02	7.538E-03	2.757E-03
67	6.530E-03	1.070E-02	1.313E-02	1.123E-02	6.579E-03	2.509E-03
70	5.978E-03	9.559E-03	1.195E-02	9.978E-03	5.962E-03	2.209E-03
73	5.330E-03	8.685E-03	1.067E-02	8.968E-03	5.378E-03	2.023E-03
76	4.972E-03	7.951E-03	9.728E-03	8.113E-03	4.774E-03	1.694E-03
79	4.489E-03	7.435E-03	9.000E-03	7.562E-03	4.251E-03	1.519E-03
82	4.225E-03	6.709E-03	8.146E-03	6.685E-03	3.882E-03	1.398E-03
85	3.748E-03	5.893E-03	7.359E-03	5.979E-03	3.455E-03	1.253E-03
88	3.425E-03	5.748E-03	6.637E-03	5.307E-03	3.096E-03	1.112E-03
91	3.078E-03	5.125E-03	6.084E-03	4.816E-03	2.826E-03	9.989E-04
94	2.818E-03	4.468E-03	5.544E-03	4.513E-03	2.535E-03	8.760E-04
97	2.573E-03	4.286E-03	5.219E-03	3.804E-03	2.270E-03	8.237E-04
100	2.358E-03	3.906E-03	4.698E-03	3.453E-03	2.034E-03	6.806E-04
103	2.080E-03	3.438E-03	4.255E-03	3.308E-03	1.793E-03	6.452E-04
106	2.010E-03	3.155E-03	3.576E-03	2.862E-03	1.608E-03	5.832E-04
109	1.760E-03	2.923E-03	3.371E-03	2.643E-03	1.440E-03	5.162E-04
112	1.698E-03	2.755E-03	3.163E-03	2.411E-03	1.255E-03	4.446E-04
115	1.563E-03	2.527E-03	2.786E-03	2.026E-03	1.099E-03	4.053E-04
118	1.389E-03	2.274E-03	2.697E-03	1.867E-03	9.806E-04	3.199E-04
121	1.284E-03	2.041E-03	2.380E-03	1.627E-03	9.418E-04	2.957E-04
124	1.137E-03	1.872E-03	2.035E-03	1.581E-03	8.332E-04	2.523E-04
127	9.948E-04	1.781E-03	1.940E-03	1.294E-03	6.833E-04	2.140E-04
130	9.541E-04	1.414E-03	1.769E-03	1.194E-03	5.991E-04	1.995E-04
133	8.284E-04	1.508E-03	1.536E-03	1.101E-03	5.348E-04	1.729E-04
136	7.997E-04	1.292E-03	1.268E-03	8.896E-04	4.886E-04	1.481E-04
139	7.369E-04	1.125E-03	1.240E-03	8.397E-04	4.074E-04	1.358E-04
142	6.479E-04	1.024E-03	1.059E-03	7.805E-04	3.876E-04	1.211E-04
145	5.360E-04	9.619E-04	1.024E-03	6.491E-04	3.281E-04	9.312E-05
148	4.733E-04	8.403E-04	8.079E-04	5.143E-04	2.752E-04	8.934E-05
151	4.559E-04	6.834E-04	7.285E-04	4.591E-04	2.083E-04	6.432E-05
154	3.913E-04	6.937E-04	6.905E-04	3.566E-04	1.823E-04	4.927E-05
157	3.116E-04	5.592E-04	6.118E-04	3.032E-04	1.161E-04	4.266E-05
160	3.001E-04	5.293E-04	5.106E-04	2.793E-04	1.025E-04	4.412E-05
163	2.530E-04	4.177E-04	4.208E-04	2.076E-04	9.615E-05	2.489E-05
166	1.998E-04	3.510E-04	3.833E-04	1.610E-04	7.544E-05	2.056E-05
169	1.906E-04	2.622E-04	3.240E-04	1.117E-04	4.192E-05	1.447E-05
172	1.076E-04	2.241E-04	2.189E-04	8.714E-05	1.966E-05	9.937E-06
175	8.531E-05	1.566E-04	1.590E-04	6.129E-05	2.495E-05	8.319E-06
178	6.133E-05	1.257E-04	9.959E-05	3.438E-05	1.151E-05	5.051E-06

TARGET NO. 2 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.762E-01	2.872E-02	5.883E-11	1.689E-12
8	4.075E 01	1.098E 00		4.341E-11	
9	4.628E 01	1.047E 00		3.904E-11	
10	5.181E 01	1.011E 00	7.890E-02	3.576E-11	2.821E-12
11	5.735E 01	1.008E 00		3.470E-11	
12	6.288E 01	1.012E 00		3.420E-11	
13	6.841E 01	1.021E 00	8.963E-02	3.420E-11	3.065E-12
14	7.394E 01	1.018E 00		3.463E-11	
15	7.947E 01	1.011E 00		3.524E-11	
16	8.501E 01	1.010E 00	8.519E-02	3.675E-11	3.131E-12
17	9.054E 01	1.011E 00		3.846E-11	
18	9.607E 01	1.010E 00		4.118E-11	
19	1.016E 02	1.009E 00	7.825E-02	4.392E-11	3.437E-12
20	1.071E 02	1.007E 00		4.674E-11	
21	1.127E 02	1.006E 00		4.969E-11	
22	1.182E 02	1.006E 00	6.965E-02	5.279E-11	3.677E-12
23	1.237E 02	1.005E 00		5.600E-11	
24	1.293E 02	1.002E 00		5.927E-11	
25	1.348E 02	1.002E 00	6.199E-02	6.248E-11	3.873E-12
26	1.403E 02	1.003E 00		6.572E-11	
27	1.459E 02	1.002E 00		6.943E-11	
28	1.514E 02	1.002E 00	5.442E-02	7.315E-11	3.981E-12
29	1.569E 02	1.003E 00		7.691E-11	
30	1.625E 02	1.002E 00		8.067E-11	
31	1.680E 02	9.968E-01	4.764E-02	8.444E-11	4.023E-12
32	1.735E 02	9.966E-01		8.816E-11	
33	1.791E 02	9.991E-01		9.187E-11	
34	1.846E 02	9.999E-01	4.225E-02	9.548E-11	4.034E-12
35	1.901E 02	1.000E 00		9.907E-11	
36	1.957E 02	9.994E-01		1.024E-10	
37	2.012E 02	9.993E-01	3.703E-02	1.047E-10	3.877E-12
38	2.067E 02	1.002E 00		1.033E-10	
39	2.123E 02	1.006E 00		1.062E-10	
40	2.178E 02	1.012E 00	3.321E-02	1.153E-10	3.830E-12

TARGET NO. 2 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.016E 00		1.213E-10	
42	2.288E 02	1.019E 00		1.252E-10	
43	2.344E 02	1.023E 00	2.946E-02	1.291E-10	3.802E-12
44	2.399E 02	1.026E 00		1.329E-10	
45	2.454E 02	1.034E 00		1.363E-10	
46	2.510E 02	1.042E 00	2.701E-02	1.398E-10	3.775E-12
47	2.565E 02	1.050E 00		1.442E-10	
48	2.620E 02	1.057E 00		1.482E-10	
49	2.676E 02	1.063E 00	2.447E-02	1.515E-10	3.708E-12
50	2.731E 02	1.069E 00		1.549E-10	
51	2.786E 02	1.075E 00		1.582E-10	
52	2.842E 02	1.082E 00	2.199E-02	1.615E-10	3.551E-12
53	2.897E 02	1.089E 00		1.648E-10	
54	2.952E 02	1.096E 00		1.687E-10	
55	3.008E 02	1.104E 00	2.007E-02	1.724E-10	3.460E-12
56	3.063E 02	1.116E 00		1.752E-10	
57	3.118E 02	1.128E 00		1.781E-10	
58	3.174E 02	1.138E 00	1.878E-02	1.814E-10	3.408E-12
59	3.229E 02	1.144E 00		1.847E-10	
60	3.284E 02	1.147E 00		1.881E-10	
61	3.340E 02	1.153E 00	1.696E-02	1.918E-10	3.252E-12
62	3.395E 02	1.160E 00		1.956E-10	
63	3.450E 02	1.167E 00		1.990E-10	
64	3.506E 02	1.174E 00	1.557E-02	2.023E-10	3.150E-12
65	3.561E 02	1.183E 00		2.057E-10	
66	3.616E 02	1.192E 00		2.088E-10	
67	3.672E 02	1.198E 00	1.435E-02	2.116E-10	3.036E-12
68	3.727E 02	1.204E 00		2.146E-10	
69	3.782E 02	1.208E 00		2.179E-10	
70	3.838E 02	1.213E 00	1.307E-02	2.209E-10	2.888E-12
71	3.893E 02	1.219E 00		2.236E-10	
72	3.948E 02	1.224E 00		2.269E-10	
73	4.004E 02	1.229E 00	1.191E-02	2.302E-10	2.743E-12
74	4.059E 02	1.236E 00		2.341E-10	
75	4.114E 02	1.242E 00		2.377E-10	
76	4.169E 02	1.247E 00	1.093E-02	2.405E-10	2.628E-12
77	4.225E 02	1.255E 00		2.435E-10	
78	4.280E 02	1.268E 00		2.468E-10	
79	4.335E 02	1.277E 00	1.030E-02	2.494E-10	2.570E-12
80	4.391E 02	1.283E 00		2.516E-10	

TARGET NO. 2 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.289E 00		2.548E-10	
82	4.501E 02	1.295E 00	9.437E-03	2.581E-10	2.435E-12
83	4.557E 02	1.296E 00		2.603E-10	
84	4.612E 02	1.297E 00		2.627E-10	
85	4.667E 02	1.300E 00	8.463E-03	2.660E-10	2.251E-12
86	4.723E 02	1.305E 00		2.691E-10	
87	4.778E 02	1.313E 00		2.719E-10	
88	4.833E 02	1.321E 00	7.821E-03	2.747E-10	2.148E-12
89	4.889E 02	1.328E 00		2.774E-10	
90	4.944E 02	1.335E 00		2.802E-10	
91	4.999E 02	1.341E 00	7.204E-03	2.830E-10	2.038E-12
92	5.055E 02	1.348E 00		2.861E-10	
93	5.110E 02	1.354E 00		2.892E-10	
94	5.165E 02	1.359E 00	6.628E-03	2.923E-10	1.937E-12
95	5.221E 02	1.365E 00		2.954E-10	
96	5.276E 02	1.372E 00		2.982E-10	
97	5.331E 02	1.378E 00	6.105E-03	3.009E-10	1.837E-12
98	5.387E 02	1.383E 00		3.036E-10	
99	5.442E 02	1.387E 00		3.062E-10	
100	5.497E 02	1.391E 00	5.556E-03	3.089E-10	1.716E-12
101	5.553E 02	1.399E 00		3.117E-10	
102	5.608E 02	1.407E 00		3.146E-10	
103	5.663E 02	1.409E 00	5.128E-03	3.175E-10	1.628E-12
104	5.719E 02	1.409E 00		3.204E-10	
105	5.774E 02	1.403E 00		3.231E-10	
106	5.829E 02	1.403E 00	4.491E-03	3.258E-10	1.463E-12
107	5.885E 02	1.407E 00		3.285E-10	
108	5.940E 02	1.419E 00		3.311E-10	
109	5.995E 02	1.434E 00	4.225E-03	3.338E-10	1.410E-12
110	6.051E 02	1.447E 00		3.368E-10	
111	6.106E 02	1.460E 00		3.399E-10	
112	6.161E 02	1.467E 00	3.985E-03	3.430E-10	1.367E-12
113	6.216E 02	1.469E 00		3.461E-10	
114	6.272E 02	1.459E 00		3.490E-10	
115	6.327E 02	1.459E 00	3.491E-03	3.517E-10	1.228E-12
116	6.382E 02	1.470E 00		3.544E-10	
117	6.438E 02	1.482E 00		3.570E-10	
118	6.493E 02	1.495E 00	3.289E-03	3.597E-10	1.183E-12
119	6.548E 02	1.499E 00		3.623E-10	
120	6.604E 02	1.502E 00		3.650E-10	

TARGET NO. 2 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.506E 00	2.973E-03	3.676E-10	1.093E-12
122	6.714E 02	1.511E 00		3.703E-10	
123	6.770E 02	1.515E 00		3.729E-10	
124	6.825E 02	1.518E 00	2.702E-03	3.756E-10	1.015E-12
125	6.880E 02	1.520E 00		3.783E-10	
126	6.936E 02	1.520E 00		3.809E-10	
127	6.991E 02	1.520E 00	2.409E-03	3.836E-10	9.241E-13
128	7.046E 02	1.523E 00		3.868E-10	
129	7.102E 02	1.527E 00		3.901E-10	
130	7.157E 02	1.534E 00	2.164E-03	3.934E-10	8.513E-13
131	7.212E 02	1.544E 00		3.967E-10	
132	7.268E 02	1.564E 00		3.998E-10	
133	7.323E 02	1.572E 00	2.042E-03	4.022E-10	8.214E-13
134	7.378E 02	1.563E 00		4.046E-10	
135	7.434E 02	1.548E 00		4.071E-10	
136	7.489E 02	1.529E 00	1.689E-03	4.095E-10	6.917E-13
137	7.544E 02	1.543E 00		4.123E-10	
138	7.600E 02	1.566E 00		4.152E-10	
139	7.655E 02	1.583E 00	1.612E-03	4.181E-10	6.740E-13
140	7.710E 02	1.599E 00		4.209E-10	
141	7.766E 02	1.610E 00		4.237E-10	
142	7.821E 02	1.622E 00	1.484E-03	4.261E-10	6.323E-13
143	7.876E 02	1.637E 00		4.286E-10	
144	7.932E 02	1.648E 00		4.310E-10	
145	7.987E 02	1.656E 00	1.354E-03	4.334E-10	5.870E-13
146	8.042E 02	1.641E 00		4.364E-10	
147	8.097E 02	1.618E 00		4.395E-10	
148	8.153E 02	1.603E 00	1.083E-03	4.426E-10	4.792E-13
149	8.208E 02	1.590E 00		4.457E-10	
150	8.263E 02	1.592E 00		4.486E-10	
151	8.319E 02	1.601E 00	9.331E-04	4.510E-10	4.209E-13
152	8.374E 02	1.625E 00		4.535E-10	
153	8.429E 02	1.648E 00		4.559E-10	
154	8.485E 02	1.670E 00	8.778E-04	4.583E-10	4.023E-13
155	8.540E 02	1.666E 00		4.609E-10	
156	8.595E 02	1.652E 00		4.636E-10	
157	8.651E 02	1.656E 00	7.189E-04	4.662E-10	3.352E-13
158	8.706E 02	1.665E 00		4.689E-10	
159	8.761E 02	1.702E 00		4.715E-10	
160	8.817E 02	1.726E 00	6.735E-04	4.739E-10	3.192E-13

TARGET NO. 2 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.720E 00		4.764E-10	
162	8.927E 02	1.709E 00		4.788E-10	
163	8.983E 02	1.694E 00	5.301E-04	4.812E-10	2.551E-13
164	9.038E 02	1.704E 00		4.840E-10	
165	9.093E 02	1.726E 00		4.869E-10	
166	9.149E 02	1.737E 00	4.577E-04	4.897E-10	2.242E-13
167	9.204E 02	1.746E 00		4.926E-10	
168	9.259E 02	1.738E 00		4.954E-10	
169	9.315E 02	1.726E 00	3.540E-04	4.978E-10	1.763E-13
170	9.370E 02	1.701E 00		5.003E-10	
171	9.425E 02	1.673E 00		5.027E-10	
172	9.481E 02	1.641E 00	2.389E-04	5.051E-10	1.207E-13
173	9.536E 02	1.644E 00		5.077E-10	
174	9.591E 02	1.665E 00		5.104E-10	
175	9.647E 02	1.679E 00	1.816E-04	5.130E-10	9.318E-14
176	9.702E 02	1.691E 00		5.157E-10	
177	9.757E 02	1.683E 00		5.183E-10	
178	9.813E 02	1.700E 00	1.214E-04	5.208E-10	6.324E-14
179	9.868E 02	1.803E 00		5.232E-10	
180	9.923E 02	1.432E 00		5.256E-10	
181	9.978E 02	4.005E-01	2.140E-05	5.281E-10	1.130E-14
182	1.003E 03	0.0		5.305E-10	

DOSE= 1.925E-12 R-SQ.CM./ELECTRON

TARGET NO. 3 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
7	3.090E-02	5.427E-02	7.415E-02	6.884E-02	4.566E-02
10	4.284E-02	7.464E-02	1.005E-01	9.355E-02	6.168E-02
13	4.511E-02	7.861E-02	1.060E-01	9.691E-02	6.348E-02
16	4.156E-02	7.382E-02	9.606E-02	8.961E-02	5.834E-02
19	3.865E-02	6.685E-02	8.840E-02	8.025E-02	5.198E-02
22	3.433E-02	5.901E-02	7.717E-02	7.087E-02	4.586E-02
25	3.012E-02	5.259E-02	6.902E-02	6.104E-02	3.980E-02
28	2.699E-02	4.621E-02	5.965E-02	5.357E-02	3.437E-02
31	2.365E-02	4.119E-02	5.196E-02	4.725E-02	2.964E-02
34	2.094E-02	3.624E-02	4.618E-02	4.141E-02	2.632E-02
37	1.873E-02	3.202E-02	4.070E-02	3.583E-02	2.280E-02
40	1.666E-02	2.839E-02	3.603E-02	3.182E-02	2.002E-02
43	1.472E-02	2.571E-02	3.180E-02	2.809E-02	1.734E-02
46	1.331E-02	2.207E-02	2.801E-02	2.464E-02	1.552E-02
49	1.200E-02	2.033E-02	2.582E-02	2.167E-02	1.360E-02
52	1.065E-02	1.804E-02	2.231E-02	1.940E-02	1.211E-02
55	9.569E-03	1.666E-02	2.052E-02	1.727E-02	1.089E-02
58	8.763E-03	1.516E-02	1.876E-02	1.552E-02	9.615E-03
61	7.947E-03	1.355E-02	1.637E-02	1.418E-02	8.697E-03
64	7.210E-03	1.226E-02	1.502E-02	1.243E-02	7.529E-03
67	6.599E-03	1.142E-02	1.347E-02	1.112E-02	6.855E-03
70	6.046E-03	9.938E-03	1.202E-02	1.001E-02	6.128E-03
73	5.347E-03	9.049E-03	1.089E-02	9.219E-03	5.222E-03
76	4.906E-03	8.285E-03	1.014E-02	8.268E-03	4.864E-03
79	4.504E-03	7.618E-03	9.114E-03	7.310E-03	4.377E-03
82	4.057E-03	7.016E-03	8.275E-03	6.496E-03	3.826E-03
85	3.791E-03	6.207E-03	7.415E-03	6.030E-03	3.580E-03
88	3.456E-03	5.612E-03	6.759E-03	5.330E-03	3.132E-03
91	3.151E-03	5.147E-03	5.999E-03	4.885E-03	2.782E-03
94	2.971E-03	4.824E-03	5.455E-03	4.372E-03	2.509E-03
97	2.591E-03	4.346E-03	5.214E-03	3.873E-03	2.303E-03
100	2.399E-03	3.972E-03	4.667E-03	3.651E-03	1.958E-03
103	2.191E-03	3.779E-03	4.313E-03	3.151E-03	1.790E-03
106	1.956E-03	3.463E-03	3.626E-03	2.783E-03	1.547E-03
109	1.822E-03	3.112E-03	3.499E-03	2.576E-03	1.452E-03
112	1.720E-03	2.837E-03	3.211E-03	2.327E-03	1.250E-03
115	1.560E-03	2.555E-03	2.973E-03	2.185E-03	1.201E-03
118	1.445E-03	2.384E-03	2.629E-03	1.882E-03	1.050E-03
121	1.243E-03	2.100E-03	2.342E-03	1.688E-03	9.615E-04
124	1.103E-03	2.028E-03	2.153E-03	1.583E-03	8.178E-04
127	1.048E-03	1.710E-03	1.989E-03	1.358E-03	7.252E-04
130	9.331E-04	1.633E-03	1.798E-03	1.272E-03	5.673E-04
133	8.280E-04	1.473E-03	1.669E-03	1.115E-03	5.715E-04
136	8.129E-04	1.383E-03	1.367E-03	9.870E-04	4.878E-04
139	7.315E-04	1.156E-03	1.238E-03	8.731E-04	3.717E-04
142	6.476E-04	1.065E-03	1.163E-03	7.574E-04	3.782E-04
145	5.916E-04	9.381E-04	1.011E-03	7.035E-04	3.172E-04
148	5.106E-04	8.856E-04	8.658E-04	5.477E-04	2.685E-04
151	3.988E-04	7.643E-04	7.480E-04	4.882E-04	1.973E-04
154	3.803E-04	6.903E-04	7.007E-04	3.864E-04	1.748E-04
157	3.702E-04	5.466E-04	5.608E-04	3.319E-04	1.630E-04
160	2.705E-04	5.389E-04	4.462E-04	2.149E-04	1.044E-04
163	2.429E-04	4.412E-04	3.974E-04	2.121E-04	1.015E-04
166	1.982E-04	3.423E-04	3.910E-04	1.403E-04	4.693E-05
169	1.493E-04	2.810E-04	2.907E-04	1.327E-04	4.150E-05
172	1.363E-04	2.389E-04	2.262E-04	9.242E-05	1.619E-05
175	9.799E-05	2.009E-04	1.332E-04	6.065E-05	3.276E-05
178	4.976E-05	1.175E-04	9.048E-05	5.039E-05	1.076E-05

TARGET NO. 3 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.002E-01	4.470E-02	5.883E-11	2.630E-12
8	4.075E 01	1.141E 00		4.341E-11	
9	4.628E 01	1.071E 00		3.904E-11	
10	5.181E 01	1.022E 00	1.035E-01	3.576E-11	3.700E-12
11	5.735E 01	1.017E 00		3.470E-11	
12	6.288E 01	1.017E 00		3.420E-11	
13	6.841E 01	1.023E 00	1.081E-01	3.420E-11	3.697E-12
14	7.394E 01	1.019E 00		3.463E-11	
15	7.947E 01	1.011E 00		3.524E-11	
16	8.501E 01	1.010E 00	9.813E-02	3.675E-11	3.606E-12
17	9.054E 01	1.010E 00		3.846E-11	
18	9.607E 01	1.010E 00		4.118E-11	
19	1.016E 02	1.010E 00	8.876E-02	4.392E-11	3.898E-12
20	1.071E 02	1.008E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.008E 00	7.798E-02	5.279E-11	4.117E-12
23	1.237E 02	1.005E 00		5.600E-11	
24	1.293E 02	1.001E 00		5.927E-11	
25	1.348E 02	1.001E 00	6.795E-02	6.248E-11	4.246E-12
26	1.403E 02	1.001E 00		6.572E-11	
27	1.459E 02	1.001E 00		6.943E-11	
28	1.514E 02	1.001E 00	5.925E-02	7.315E-11	4.334E-12
29	1.569E 02	1.002E 00		7.691E-11	
30	1.625E 02	1.001E 00		8.067E-11	
31	1.680E 02	9.960E-01	5.164E-02	8.444E-11	4.360E-12
32	1.735E 02	9.961E-01		8.816E-11	
33	1.791E 02	9.991E-01		9.187E-11	
34	1.846E 02	1.000E 00	4.579E-02	9.548E-11	4.372E-12
35	1.901E 02	1.000E 00		9.907E-11	
36	1.957E 02	9.990E-01		1.024E-10	
37	2.012E 02	9.985E-01	3.998E-02	1.047E-10	4.186E-12
38	2.067E 02	1.001E 00		1.033E-10	
39	2.123E 02	1.005E 00		1.062E-10	
40	2.178E 02	1.012E 00	3.586E-02	1.153E-10	4.136E-12

TARGET NO. 3 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.018E 00		1.213E-10	
42	2.288E 02	1.024E 00		1.252E-10	
43	2.344E 02	1.027E 00	3.212E-02	1.291E-10	4.146E-12
44	2.399E 02	1.028E 00		1.329E-10	
45	2.454E 02	1.030E 00		1.363E-10	
46	2.510E 02	1.034E 00	2.847E-02	1.398E-10	3.980E-12
47	2.565E 02	1.044E 00		1.442E-10	
48	2.620E 02	1.054E 00		1.482E-10	
49	2.676E 02	1.063E 00	2.631E-02	1.515E-10	3.988E-12
50	2.731E 02	1.069E 00		1.549E-10	
51	2.786E 02	1.074E 00		1.582E-10	
52	2.842E 02	1.081E 00	2.364E-02	1.615E-10	3.818E-12
53	2.897E 02	1.089E 00		1.648E-10	
54	2.952E 02	1.099E 00		1.687E-10	
55	3.008E 02	1.109E 00	2.199E-02	1.724E-10	3.790E-12
56	3.063E 02	1.120E 00		1.752E-10	
57	3.118E 02	1.129E 00		1.781E-10	
58	3.174E 02	1.138E 00	2.035E-02	1.814E-10	3.692E-12
59	3.229E 02	1.145E 00		1.847E-10	
60	3.284E 02	1.151E 00		1.881E-10	
61	3.340E 02	1.157E 00	1.855E-02	1.918E-10	3.557E-12
62	3.395E 02	1.163E 00		1.956E-10	
63	3.450E 02	1.167E 00		1.990E-10	
64	3.506E 02	1.172E 00	1.677E-02	2.023E-10	3.392E-12
65	3.561E 02	1.182E 00		2.057E-10	
66	3.616E 02	1.192E 00		2.088E-10	
67	3.672E 02	1.199E 00	1.553E-02	2.116E-10	3.287E-12
68	3.727E 02	1.204E 00		2.146E-10	
69	3.782E 02	1.206E 00		2.179E-10	
70	3.838E 02	1.210E 00	1.400E-02	2.209E-10	3.092E-12
71	3.893E 02	1.215E 00		2.236E-10	
72	3.948E 02	1.220E 00		2.269E-10	
73	4.004E 02	1.226E 00	1.276E-02	2.302E-10	2.938E-12
74	4.059E 02	1.239E 00		2.341E-10	
75	4.114E 02	1.250E 00		2.377E-10	
76	4.169E 02	1.257E 00	1.200E-02	2.405E-10	2.887E-12
77	4.225E 02	1.263E 00		2.435E-10	
78	4.280E 02	1.268E 00		2.468E-10	
79	4.335E 02	1.271E 00	1.092E-02	2.494E-10	2.723E-12
80	4.391E 02	1.274E 00		2.516E-10	

TARGET NO. 3 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.278E 00		2.548E-10	
82	4.501E 02	1.282E 00	9.883E-03	2.581E-10	2.551E-12
83	4.557E 02	1.292E 00		2.603E-10	
84	4.612E 02	1.302E 00		2.627E-10	
85	4.667E 02	1.310E 00	9.217E-03	2.660E-10	2.452E-12
86	4.723E 02	1.315E 00		2.691E-10	
87	4.778E 02	1.317E 00		2.719E-10	
88	4.833E 02	1.320E 00	8.321E-03	2.747E-10	2.285E-12
89	4.889E 02	1.324E 00		2.774E-10	
90	4.944E 02	1.329E 00		2.802E-10	
91	4.999E 02	1.333E 00	7.585E-03	2.830E-10	2.146E-12
92	5.055E 02	1.341E 00		2.861E-10	
93	5.110E 02	1.349E 00		2.892E-10	
94	5.165E 02	1.356E 00	7.024E-03	2.923E-10	2.053E-12
95	5.221E 02	1.363E 00		2.954E-10	
96	5.276E 02	1.372E 00		2.982E-10	
97	5.331E 02	1.379E 00	6.531E-03	3.009E-10	1.965E-12
98	5.387E 02	1.386E 00		3.036E-10	
99	5.442E 02	1.391E 00		3.062E-10	
100	5.497E 02	1.396E 00	5.991E-03	3.089E-10	1.850E-12
101	5.553E 02	1.403E 00		3.117E-10	
102	5.608E 02	1.409E 00		3.146E-10	
103	5.663E 02	1.409E 00	5.495E-03	3.175E-10	1.745E-12
104	5.719E 02	1.406E 00		3.204E-10	
105	5.774E 02	1.396E 00		3.231E-10	
106	5.829E 02	1.395E 00	4.750E-03	3.258E-10	1.547E-12
107	5.885E 02	1.402E 00		3.285E-10	
108	5.940E 02	1.419E 00		3.311E-10	
109	5.995E 02	1.439E 00	4.581E-03	3.338E-10	1.529E-12
110	6.051E 02	1.443E 00		3.368E-10	
111	6.106E 02	1.447E 00		3.399E-10	
112	6.161E 02	1.455E 00	4.193E-03	3.430E-10	1.438E-12
113	6.216E 02	1.465E 00		3.461E-10	
114	6.272E 02	1.480E 00		3.490E-10	
115	6.327E 02	1.490E 00	3.989E-03	3.517E-10	1.403E-12
116	6.382E 02	1.495E 00		3.544E-10	
117	6.438E 02	1.493E 00		3.570E-10	
118	6.493E 02	1.488E 00	3.536E-03	3.597E-10	1.272E-12
119	6.548E 02	1.487E 00		3.623E-10	
120	6.604E 02	1.487E 00		3.650E-10	

TARGET NO. 3 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.493E 00	3.165E-03	3.676E-10	1.164E-12
122	6.714E 02	1.500E 00		3.703E-10	
123	6.770E 02	1.514E 00		3.729E-10	
124	6.825E 02	1.522E 00	2.968E-03	3.756E-10	1.115E-12
125	6.880E 02	1.523E 00		3.783E-10	
126	6.936E 02	1.521E 00		3.809E-10	
127	6.991E 02	1.518E 00	2.624E-03	3.836E-10	1.007E-12
128	7.046E 02	1.524E 00		3.868E-10	
129	7.102E 02	1.533E 00		3.901E-10	
130	7.157E 02	1.541E 00	2.406E-03	3.934E-10	9.467E-13
131	7.212E 02	1.552E 00		3.967E-10	
132	7.268E 02	1.568E 00		3.998E-10	
133	7.323E 02	1.578E 00	2.256E-03	4.022E-10	9.075E-13
134	7.378E 02	1.578E 00		4.046E-10	
135	7.434E 02	1.574E 00		4.071E-10	
136	7.489E 02	1.567E 00	1.963E-03	4.095E-10	8.040E-13
137	7.544E 02	1.560E 00		4.123E-10	
138	7.600E 02	1.553E 00		4.152E-10	
139	7.655E 02	1.557E 00	1.688E-03	4.181E-10	7.057E-13
140	7.710E 02	1.566E 00		4.209E-10	
141	7.766E 02	1.591E 00		4.237E-10	
142	7.821E 02	1.613E 00	1.611E-03	4.261E-10	6.863E-13
143	7.876E 02	1.629E 00		4.286E-10	
144	7.932E 02	1.639E 00		4.310E-10	
145	7.987E 02	1.645E 00	1.456E-03	4.334E-10	6.309E-13
146	8.042E 02	1.642E 00		4.364E-10	
147	8.097E 02	1.636E 00		4.395E-10	
148	8.153E 02	1.628E 00	1.227E-03	4.426E-10	5.432E-13
149	8.208E 02	1.620E 00		4.457E-10	
150	8.263E 02	1.614E 00		4.486E-10	
151	8.319E 02	1.616E 00	1.033E-03	4.510E-10	4.658E-13
152	8.374E 02	1.635E 00		4.535E-10	
153	8.429E 02	1.655E 00		4.559E-10	
154	8.485E 02	1.677E 00	9.506E-04	4.583E-10	4.357E-13
155	8.540E 02	1.684E 00		4.609E-10	
156	8.595E 02	1.687E 00		4.636E-10	
157	8.651E 02	1.672E 00	7.963E-04	4.662E-10	3.713E-13
158	8.706E 02	1.653E 00		4.689E-10	
159	8.761E 02	1.615E 00		4.715E-10	
160	8.817E 02	1.597E 00	5.908E-04	4.739E-10	2.800E-13

TARGET NO. 3 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.630E 00		4.764E-10	
162	8.927E 02	1.666E 00		4.788E-10	
163	8.983E 02	1.708E 00	5.679E-04	4.812E-10	2.733E-13
164	9.038E 02	1.714E 00		4.840E-10	
165	9.093E 02	1.704E 00		4.869E-10	
166	9.149E 02	1.701E 00	4.478E-04	4.897E-10	2.193E-13
167	9.204E 02	1.701E 00		4.926E-10	
168	9.259E 02	1.712E 00		4.954E-10	
169	9.315E 02	1.721E 00	3.663E-04	4.978E-10	1.823E-13
170	9.370E 02	1.725E 00		5.003E-10	
171	9.425E 02	1.726E 00		5.027E-10	
172	9.481E 02	1.724E 00	2.801E-04	5.051E-10	1.415E-13
173	9.536E 02	1.729E 00		5.077E-10	
174	9.591E 02	1.737E 00		5.104E-10	
175	9.647E 02	1.730E 00	2.064E-04	5.130E-10	1.059E-13
176	9.702E 02	1.720E 00		5.157E-10	
177	9.757E 02	1.673E 00		5.183E-10	
178	9.813E 02	1.674E 00	1.248E-04	5.208E-10	6.498E-14
179	9.868E 02	1.839E 00		5.232E-10	
180	9.923E 02	1.486E 00		5.256E-10	
181	9.978E 02	4.161E-01	2.702E-05	5.281E-10	1.427E-14
182	1.003E 03	0.0		5.305E-10	

DDSE= 2.118E-12 R-SQ.CM./ELECTRON

TARGET NO. 4 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
7	2.258E-02	3.835E-02	5.688E-02	5.052E-02	3.278E-02
10	3.567E-02	6.035E-02	8.825E-02	7.836E-02	5.115E-02
13	4.037E-02	6.879E-02	9.911E-02	8.722E-02	5.729E-02
16	3.823E-02	6.574E-02	9.447E-02	8.354E-02	5.449E-02
19	3.594E-02	6.166E-02	8.754E-02	7.646E-02	4.957E-02
22	3.275E-02	5.575E-02	7.757E-02	6.882E-02	4.428E-02
25	2.913E-02	4.943E-02	6.947E-02	5.964E-02	3.850E-02
28	2.626E-02	4.354E-02	6.091E-02	5.313E-02	3.373E-02
31	2.300E-02	3.905E-02	5.405E-02	4.608E-02	2.957E-02
34	2.048E-02	3.433E-02	4.816E-02	4.011E-02	2.604E-02
37	1.843E-02	3.074E-02	4.192E-02	3.590E-02	2.251E-02
40	1.652E-02	2.742E-02	3.758E-02	3.147E-02	1.987E-02
43	1.456E-02	2.400E-02	3.299E-02	2.746E-02	1.732E-02
46	1.311E-02	2.193E-02	2.948E-02	2.464E-02	1.507E-02
49	1.169E-02	2.007E-02	2.623E-02	2.191E-02	1.334E-02
52	1.061E-02	1.748E-02	2.310E-02	1.935E-02	1.174E-02
55	9.662E-03	1.595E-02	2.133E-02	1.726E-02	1.050E-02
58	8.654E-03	1.485E-02	1.896E-02	1.539E-02	9.684E-03
61	7.801E-03	1.300E-02	1.685E-02	1.392E-02	8.553E-03
64	7.054E-03	1.184E-02	1.559E-02	1.249E-02	7.559E-03
67	6.672E-03	1.104E-02	1.407E-02	1.114E-02	6.889E-03
70	5.996E-03	9.614E-03	1.255E-02	9.976E-03	6.066E-03
73	5.430E-03	8.576E-03	1.163E-02	8.853E-03	5.583E-03
76	4.876E-03	8.289E-03	1.032E-02	8.177E-03	4.888E-03
79	4.333E-03	7.579E-03	9.205E-03	7.418E-03	4.337E-03
82	4.099E-03	6.744E-03	8.639E-03	6.616E-03	3.837E-03
85	3.843E-03	6.099E-03	7.743E-03	5.865E-03	3.337E-03
88	3.399E-03	5.684E-03	7.298E-03	5.252E-03	3.167E-03
91	3.162E-03	5.152E-03	6.368E-03	4.690E-03	2.915E-03
94	2.789E-03	4.743E-03	5.822E-03	4.262E-03	2.445E-03
97	2.512E-03	4.249E-03	5.363E-03	3.744E-03	2.223E-03
100	2.390E-03	4.034E-03	4.658E-03	3.448E-03	2.001E-03
103	2.107E-03	3.757E-03	4.428E-03	3.284E-03	1.790E-03
106	1.940E-03	3.276E-03	3.936E-03	2.890E-03	1.572E-03
109	1.848E-03	3.075E-03	3.644E-03	2.672E-03	1.415E-03
112	1.686E-03	2.633E-03	3.339E-03	2.361E-03	1.359E-03
115	1.489E-03	2.521E-03	3.082E-03	2.107E-03	1.239E-03
118	1.363E-03	2.269E-03	2.802E-03	1.958E-03	9.975E-04
121	1.246E-03	2.133E-03	2.424E-03	1.722E-03	9.320E-04
124	1.105E-03	1.897E-03	2.329E-03	1.507E-03	7.397E-04
127	9.939E-04	1.708E-03	2.022E-03	1.448E-03	7.208E-04
130	8.713E-04	1.495E-03	1.817E-03	1.155E-03	6.129E-04
133	8.576E-04	1.413E-03	1.657E-03	1.038E-03	5.154E-04
136	7.650E-04	1.313E-03	1.497E-03	1.004E-03	5.085E-04
139	7.104E-04	1.167E-03	1.275E-03	8.413E-04	4.103E-04
142	6.411E-04	1.031E-03	1.077E-03	8.049E-04	3.535E-04
145	5.610E-04	9.524E-04	1.009E-03	6.361E-04	3.668E-04
148	4.967E-04	8.332E-04	9.924E-04	5.046E-04	2.892E-04
151	4.304E-04	7.642E-04	8.222E-04	4.726E-04	2.283E-04
154	3.789E-04	6.314E-04	6.322E-04	4.875E-04	1.612E-04
157	3.444E-04	5.459E-04	5.992E-04	3.773E-04	1.671E-04
160	2.565E-04	5.130E-04	4.457E-04	2.754E-04	1.072E-04
163	2.419E-04	5.059E-04	4.542E-04	2.539E-04	8.775E-05
166	2.164E-04	3.303E-04	3.931E-04	1.814E-04	8.237E-05
169	1.662E-04	2.822E-04	3.121E-04	1.009E-04	5.292E-05
172	1.354E-04	2.228E-04	2.227E-04	8.139E-05	4.184E-05
175	9.052E-05	1.449E-04	1.461E-04	5.801E-05	2.381E-05
178	5.961E-05	9.263E-05	1.021E-04	3.438E-05	1.273E-05

TARGET NO. 4 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.773E-01	3.164E-02	5.883E-11	1.862E-12
8	4.075E 01	1.100E 00		4.341E-11	
9	4.628E 01	1.048E 00		3.904E-11	
10	5.181E 01	1.012E 00	8.641E-02	3.576E-11	3.090E-12
11	5.735E 01	1.009E 00		3.470E-11	
12	6.288E 01	1.013E 00		3.420E-11	
13	6.841E 01	1.023E 00	9.794E-02	3.420E-11	3.350E-12
14	7.394E 01	1.019E 00		3.463E-11	
15	7.947E 01	1.010E 00		3.524E-11	
16	8.501E 01	1.009E 00	9.226E-02	3.675E-11	3.391E-12
17	9.054E 01	1.010E 00		3.846E-11	
18	9.607E 01	1.010E 00		4.118E-11	
19	1.016E 02	1.009E 00	8.501E-02	4.392E-11	3.734E-12
20	1.071E 02	1.008E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.010E 00	7.618E-02	5.279E-11	4.022E-12
23	1.237E 02	1.006E 00		5.600E-11	
24	1.293E 02	1.000E 00		5.927E-11	
25	1.348E 02	9.996E-01	6.635E-02	6.248E-11	4.146E-12
26	1.403E 02	1.000E 00		6.572E-11	
27	1.459E 02	1.001E 00		6.943E-11	
28	1.514E 02	1.003E 00	5.875E-02	7.315E-11	4.297E-12
29	1.569E 02	1.004E 00		7.691E-11	
30	1.625E 02	1.002E 00		8.067E-11	
31	1.680E 02	9.973E-01	5.140E-02	8.444E-11	4.340E-12
32	1.735E 02	9.963E-01		8.816E-11	
33	1.791E 02	9.977E-01		9.187E-11	
34	1.846E 02	9.983E-01	4.533E-02	9.548E-11	4.329E-12
35	1.901E 02	9.988E-01		9.907E-11	
36	1.957E 02	9.994E-01		1.024E-10	
37	2.012E 02	1.000E 00	4.005E-02	1.047E-10	4.194E-12
38	2.067E 02	1.003E 00		1.033E-10	
39	2.123E 02	1.007E 00		1.062E-10	
40	2.178E 02	1.013E 00	3.599E-02	1.153E-10	4.152E-12

TARGET NO. 4 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.018E 00		1.213E-10	
42	2.288E 02	1.021E 00		1.252E-10	
43	2.344E 02	1.023E 00	3.178E-02	1.291E-10	4.102E-12
44	2.399E 02	1.025E 00		1.329E-10	
45	2.454E 02	1.032E 00		1.363E-10	
46	2.510E 02	1.039E 00	2.884E-02	1.398E-10	4.031E-12
47	2.565E 02	1.048E 00		1.442E-10	
48	2.620E 02	1.056E 00		1.482E-10	
49	2.676E 02	1.063E 00	2.634E-02	1.515E-10	3.991E-12
50	2.731E 02	1.068E 00		1.549E-10	
51	2.786E 02	1.072E 00		1.582E-10	
52	2.842E 02	1.080E 00	2.358E-02	1.615E-10	3.808E-12
53	2.897E 02	1.088E 00		1.648E-10	
54	2.952E 02	1.099E 00		1.687E-10	
55	3.008E 02	1.109E 00	2.195E-02	1.724E-10	3.783E-12
56	3.063E 02	1.120E 00		1.752E-10	
57	3.118E 02	1.129E 00		1.781E-10	
58	3.174E 02	1.137E 00	2.031E-02	1.814E-10	3.684E-12
59	3.229E 02	1.142E 00		1.847E-10	
60	3.284E 02	1.145E 00		1.881E-10	
61	3.340E 02	1.152E 00	1.832E-02	1.918E-10	3.514E-12
62	3.395E 02	1.159E 00		1.956E-10	
63	3.450E 02	1.167E 00		1.990E-10	
64	3.506E 02	1.176E 00	1.694E-02	2.023E-10	3.427E-12
65	3.561E 02	1.186E 00		2.057E-10	
66	3.616E 02	1.196E 00		2.088E-10	
67	3.672E 02	1.202E 00	1.573E-02	2.116E-10	3.329E-12
68	3.727E 02	1.206E 00		2.146E-10	
69	3.782E 02	1.205E 00		2.179E-10	
70	3.838E 02	1.209E 00	1.405E-02	2.209E-10	3.103E-12
71	3.893E 02	1.215E 00		2.236E-10	
72	3.948E 02	1.223E 00		2.269E-10	
73	4.004E 02	1.233E 00	1.300E-02	2.302E-10	2.993E-12
74	4.059E 02	1.242E 00		2.341E-10	
75	4.114E 02	1.250E 00		2.377E-10	
76	4.169E 02	1.254E 00	1.201E-02	2.405E-10	2.888E-12
77	4.225E 02	1.258E 00		2.435E-10	
78	4.280E 02	1.263E 00		2.468E-10	
79	4.335E 02	1.269E 00	1.092E-02	2.494E-10	2.724E-12
80	4.391E 02	1.274E 00		2.516E-10	

TARGET NO. 4 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.282E 00		2.548E-10	
82	4.501E 02	1.290E 00	1.008E-02	2.581E-10	2.602E-12
83	4.557E 02	1.291E 00		2.603E-10	
84	4.612E 02	1.293E 00		2.627E-10	
85	4.667E 02	1.298E 00	9.052E-03	2.660E-10	2.408E-12
86	4.723E 02	1.306E 00		2.691E-10	
87	4.778E 02	1.321E 00		2.719E-10	
88	4.833E 02	1.332E 00	8.589E-03	2.747E-10	2.359E-12
89	4.889E 02	1.339E 00		2.774E-10	
90	4.944E 02	1.341E 00		2.802E-10	
91	4.999E 02	1.343E 00	7.760E-03	2.830E-10	2.196E-12
92	5.055E 02	1.347E 00		2.861E-10	
93	5.110E 02	1.350E 00		2.892E-10	
94	5.165E 02	1.352E 00	7.017E-03	2.923E-10	2.051E-12
95	5.221E 02	1.355E 00		2.954E-10	
96	5.276E 02	1.359E 00		2.982E-10	
97	5.331E 02	1.364E 00	6.382E-03	3.009E-10	1.920E-12
98	5.387E 02	1.369E 00		3.036E-10	
99	5.442E 02	1.374E 00		3.062E-10	
100	5.497E 02	1.379E 00	5.855E-03	3.089E-10	1.808E-12
101	5.553E 02	1.395E 00		3.117E-10	
102	5.608E 02	1.411E 00		3.146E-10	
103	5.663E 02	1.418E 00	5.620E-03	3.175E-10	1.784E-12
104	5.719E 02	1.421E 00		3.204E-10	
105	5.774E 02	1.413E 00		3.231E-10	
106	5.829E 02	1.412E 00	4.945E-03	3.258E-10	1.611E-12
107	5.885E 02	1.416E 00		3.285E-10	
108	5.940E 02	1.428E 00		3.311E-10	
109	5.995E 02	1.443E 00	4.677E-03	3.338E-10	1.561E-12
110	6.051E 02	1.447E 00		3.368E-10	
111	6.106E 02	1.450E 00		3.399E-10	
112	6.161E 02	1.456E 00	4.260E-03	3.430E-10	1.461E-12
113	6.216E 02	1.463E 00		3.461E-10	
114	6.272E 02	1.472E 00		3.490E-10	
115	6.327E 02	1.480E 00	3.967E-03	3.517E-10	1.395E-12
116	6.382E 02	1.487E 00		3.544E-10	
117	6.438E 02	1.490E 00		3.570E-10	
118	6.493E 02	1.491E 00	3.583E-03	3.597E-10	1.289E-12
119	6.548E 02	1.494E 00		3.623E-10	
120	6.604E 02	1.497E 00		3.650E-10	

TARGET NO. 4 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.500E 00	3.228E-03	3.676E-10	1.187E-12
122	6.714E 02	1.503E 00		3.703E-10	
123	6.770E 02	1.504E 00		3.729E-10	
124	6.825E 02	1.509E 00	2.902E-03	3.756E-10	1.090E-12
125	6.880E 02	1.520E 00		3.783E-10	
126	6.936E 02	1.533E 00		3.809E-10	
127	6.991E 02	1.545E 00	2.721E-03	3.836E-10	1.044E-12
128	7.046E 02	1.535E 00		3.868E-10	
129	7.102E 02	1.521E 00		3.901E-10	
130	7.157E 02	1.513E 00	2.285E-03	3.934E-10	8.988E-13
131	7.212E 02	1.510E 00		3.967E-10	
132	7.268E 02	1.523E 00		3.998E-10	
133	7.323E 02	1.540E 00	2.114E-03	4.022E-10	8.503E-13
134	7.378E 02	1.563E 00		4.046E-10	
135	7.434E 02	1.586E 00		4.071E-10	
136	7.489E 02	1.609E 00	2.066E-03	4.095E-10	8.460E-13
137	7.544E 02	1.601E 00		4.123E-10	
138	7.600E 02	1.585E 00		4.152E-10	
139	7.655E 02	1.576E 00	1.728E-03	4.181E-10	7.223E-13
140	7.710E 02	1.569E 00		4.209E-10	
141	7.766E 02	1.574E 00		4.237E-10	
142	7.821E 02	1.582E 00	1.541E-03	4.261E-10	6.568E-13
143	7.876E 02	1.598E 00		4.286E-10	
144	7.932E 02	1.612E 00		4.310E-10	
145	7.987E 02	1.626E 00	1.428E-03	4.334E-10	6.187E-13
146	8.042E 02	1.634E 00		4.364E-10	
147	8.097E 02	1.641E 00		4.395E-10	
148	8.153E 02	1.644E 00	1.268E-03	4.426E-10	5.612E-13
149	8.208E 02	1.647E 00		4.457E-10	
150	8.263E 02	1.650E 00		4.486E-10	
151	8.319E 02	1.651E 00	1.105E-03	4.510E-10	4.985E-13
152	8.374E 02	1.648E 00		4.535E-10	
153	8.429E 02	1.645E 00		4.559E-10	
154	8.485E 02	1.641E 00	9.287E-04	4.583E-10	4.256E-13
155	8.540E 02	1.658E 00		4.609E-10	
156	8.595E 02	1.683E 00		4.636E-10	
157	8.651E 02	1.678E 00	8.406E-04	4.662E-10	3.919E-13
158	8.706E 02	1.665E 00		4.689E-10	
159	8.761E 02	1.615E 00		4.715E-10	
160	8.817E 02	1.597E 00	6.146E-04	4.739E-10	2.913E-13

TARGET NO. 4 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.653E 00		4.764E-10	
162	8.927E 02	1.718E 00		4.788E-10	
163	8.983E 02	1.791E 00	6.624E-04	4.812E-10	3.188E-13
164	9.038E 02	1.802E 00		4.840E-10	
165	9.093E 02	1.786E 00		4.869E-10	
166	9.149E 02	1.762E 00	5.115E-04	4.897E-10	2.505E-13
167	9.204E 02	1.738E 00		4.926E-10	
168	9.259E 02	1.702E 00		4.954E-10	
169	9.315E 02	1.677E 00	3.595E-04	4.978E-10	1.790E-13
170	9.370E 02	1.682E 00		5.003E-10	
171	9.425E 02	1.686E 00		5.027E-10	
172	9.481E 02	1.689E 00	2.763E-04	5.051E-10	1.396E-13
173	9.536E 02	1.668E 00		5.077E-10	
174	9.591E 02	1.635E 00		5.104E-10	
175	9.647E 02	1.612E 00	1.735E-04	5.130E-10	8.900E-14
176	9.702E 02	1.591E 00		5.157E-10	
177	9.757E 02	1.583E 00		5.183E-10	
178	9.813E 02	1.583E 00	1.103E-04	5.208E-10	5.744E-14
179	9.868E 02	1.617E 00		5.232E-10	
180	9.923E 02	1.257E 00		5.256E-10	
181	9.978E 02	3.520E-01	1.529E-05	5.281E-10	8.076E-15
182	1.003E 03	0.0		5.305E-10	

DOSE= 2.084E-12 R-SQ.CM./ELECTRON

TARGET NO. 6 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	1.937E-02	3.456E-02	4.721E-02	4.710E-02	2.989E-02	1.082E-02
10	3.384E-02	6.102E-02	8.291E-02	8.040E-02	5.122E-02	1.886E-02
13	4.091E-02	7.420E-02	1.008E-01	9.496E-02	6.153E-02	2.315E-02
16	4.171E-02	7.541E-02	1.017E-01	9.545E-02	6.140E-02	2.321E-02
19	3.892E-02	7.051E-02	9.519E-02	8.862E-02	5.725E-02	2.153E-02
22	3.654E-02	6.628E-02	8.755E-02	8.123E-02	5.283E-02	1.961E-02
25	3.286E-02	5.978E-02	7.855E-02	7.256E-02	4.680E-02	1.753E-02
28	2.930E-02	5.296E-02	6.905E-02	6.389E-02	4.085E-02	1.554E-02
31	2.597E-02	4.762E-02	6.219E-02	5.618E-02	3.663E-02	1.350E-02
34	2.335E-02	4.210E-02	5.497E-02	4.936E-02	3.148E-02	1.185E-02
37	2.077E-02	3.694E-02	4.780E-02	4.320E-02	2.759E-02	1.017E-02
40	1.837E-02	3.324E-02	4.270E-02	3.792E-02	2.427E-02	8.962E-03
43	1.627E-02	2.943E-02	3.803E-02	3.356E-02	2.171E-02	7.910E-03
46	1.484E-02	2.633E-02	3.364E-02	2.995E-02	1.869E-02	6.865E-03
49	1.328E-02	2.318E-02	3.010E-02	2.683E-02	1.669E-02	6.171E-03
52	1.180E-02	2.108E-02	2.688E-02	2.350E-02	1.475E-02	5.422E-03
55	1.078E-02	1.913E-02	2.383E-02	2.120E-02	1.313E-02	4.811E-03
58	9.978E-03	1.737E-02	2.132E-02	1.834E-02	1.153E-02	4.311E-03
61	8.925E-03	1.596E-02	1.942E-02	1.662E-02	1.050E-02	3.799E-03
64	8.076E-03	1.429E-02	1.735E-02	1.485E-02	9.283E-03	3.357E-03
67	7.565E-03	1.287E-02	1.589E-02	1.330E-02	8.427E-03	3.025E-03
70	6.675E-03	1.191E-02	1.439E-02	1.204E-02	7.793E-03	2.687E-03
73	5.994E-03	1.063E-02	1.325E-02	1.078E-02	6.758E-03	2.401E-03
76	5.618E-03	9.679E-03	1.174E-02	9.795E-03	5.893E-03	2.069E-03
79	5.051E-03	8.864E-03	1.062E-02	9.102E-03	5.321E-03	1.876E-03
82	4.674E-03	7.817E-03	9.796E-03	8.192E-03	4.712E-03	1.767E-03
85	4.308E-03	7.411E-03	8.722E-03	7.103E-03	4.455E-03	1.561E-03
88	3.846E-03	6.803E-03	8.095E-03	6.457E-03	3.954E-03	1.372E-03
91	3.677E-03	6.298E-03	7.212E-03	5.937E-03	3.511E-03	1.221E-03
94	3.244E-03	5.665E-03	6.467E-03	5.273E-03	3.135E-03	1.109E-03
97	2.988E-03	5.089E-03	6.114E-03	4.871E-03	2.950E-03	9.993E-04
100	2.767E-03	4.835E-03	5.501E-03	4.438E-03	2.576E-03	8.794E-04
103	2.584E-03	4.298E-03	5.217E-03	4.110E-03	2.321E-03	7.751E-04
106	2.319E-03	3.940E-03	4.455E-03	3.402E-03	2.098E-03	7.107E-04
109	2.111E-03	3.541E-03	4.149E-03	3.325E-03	1.778E-03	6.056E-04
112	1.926E-03	3.325E-03	3.834E-03	3.058E-03	1.693E-03	5.520E-04
115	1.804E-03	3.025E-03	3.442E-03	2.668E-03	1.496E-03	4.868E-04
118	1.643E-03	2.619E-03	2.964E-03	2.444E-03	1.268E-03	4.498E-04
121	1.421E-03	2.735E-03	2.908E-03	2.173E-03	1.195E-03	4.129E-04
124	1.313E-03	2.275E-03	2.588E-03	1.998E-03	1.094E-03	3.671E-04
127	1.186E-03	2.213E-03	2.195E-03	1.706E-03	1.058E-03	2.866E-04
130	1.109E-03	1.868E-03	2.081E-03	1.510E-03	8.277E-04	2.537E-04
133	9.984E-04	1.753E-03	1.913E-03	1.270E-03	7.878E-04	2.436E-04
136	9.466E-04	1.610E-03	1.767E-03	1.128E-03	6.111E-04	2.119E-04
139	8.083E-04	1.438E-03	1.439E-03	1.038E-03	5.729E-04	1.994E-04
142	7.386E-04	1.256E-03	1.310E-03	9.318E-04	4.936E-04	1.551E-04
145	7.072E-04	1.043E-03	1.158E-03	8.160E-04	4.306E-04	1.477E-04
148	5.890E-04	1.035E-03	9.911E-04	6.551E-04	3.315E-04	1.229E-04
151	5.165E-04	9.938E-04	9.250E-04	6.213E-04	3.402E-04	9.102E-05
154	4.482E-04	8.289E-04	8.147E-04	5.641E-04	2.574E-04	6.787E-05
157	3.896E-04	6.907E-04	7.317E-04	4.633E-04	2.707E-04	5.610E-05
160	3.529E-04	6.480E-04	6.417E-04	3.387E-04	2.095E-04	4.715E-05
163	2.610E-04	5.421E-04	5.375E-04	3.166E-04	1.195E-04	3.154E-05
166	2.460E-04	4.837E-04	3.865E-04	2.186E-04	9.520E-05	2.842E-05
169	2.160E-04	3.949E-04	3.142E-04	1.778E-04	9.692E-05	2.224E-05
172	1.428E-04	2.632E-04	2.865E-04	1.347E-04	4.913E-05	1.278E-05
175	1.155E-04	2.591E-04	2.562E-04	6.562E-05	4.152E-05	4.755E-06
178	7.435E-05	1.780E-04	1.432E-04	5.533E-05	1.804E-05	6.407E-06

TARGET NO. 6 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.568E-01	2.560E-02	5.883E-11	1.506E-12
8	4.075E 01	1.062E 00		4.341E-11	
9	4.628E 01	1.024E 00		3.904E-11	
10	5.181E 01	9.981E-01	7.956E-02	3.576E-11	2.845E-12
11	5.735E 01	9.983E-01		3.470E-11	
12	6.288E 01	1.005E 00		3.420E-11	
13	6.841E 01	1.017E 00	9.749E-02	3.420E-11	3.334E-12
14	7.394E 01	1.016E 00		3.463E-11	
15	7.947E 01	1.010E 00		3.524E-11	
16	8.501E 01	1.011E 00	9.759E-02	3.675E-11	3.587E-12
17	9.054E 01	1.011E 00		3.846E-11	
18	9.607E 01	1.007E 00		4.118E-11	
19	1.016E 02	1.005E 00	9.050E-02	4.392E-11	3.975E-12
20	1.071E 02	1.006E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.012E 00	8.406E-02	5.279E-11	4.438E-12
23	1.237E 02	1.009E 00		5.600E-11	
24	1.293E 02	1.003E 00		5.927E-11	
25	1.348E 02	1.003E 00	7.454E-02	6.248E-11	4.658E-12
26	1.403E 02	1.002E 00		6.572E-11	
27	1.459E 02	1.001E 00		6.943E-11	
28	1.514E 02	1.000E 00	6.549E-02	7.315E-11	4.790E-12
29	1.569E 02	1.003E 00		7.691E-11	
30	1.625E 02	1.004E 00		8.067E-11	
31	1.680E 02	1.001E 00	5.838E-02	8.444E-11	4.929E-12
32	1.735E 02	9.999E-01		8.816E-11	
33	1.791E 02	1.000E 00		9.187E-11	
34	1.846E 02	9.998E-01	5.124E-02	9.548E-11	4.892E-12
35	1.901E 02	9.992E-01		9.907E-11	
36	1.957E 02	9.979E-01		1.024E-10	
37	2.012E 02	9.973E-01	4.468E-02	1.047E-10	4.678E-12
38	2.067E 02	9.998E-01		1.033E-10	
39	2.123E 02	1.004E 00		1.062E-10	
40	2.178E 02	1.010E 00	4.012E-02	1.153E-10	4.628E-12

TARGET NO. 6 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.017E 00		1.213E-10	
42	2.288E 02	1.024E 00		1.252E-10	
43	2.344E 02	1.027E 00	3.623E-02	1.291E-10	4.676E-12
44	2.399E 02	1.030E 00		1.329E-10	
45	2.454E 02	1.033E 00		1.363E-10	
46	2.510E 02	1.037E 00	3.236E-02	1.398E-10	4.524E-12
47	2.565E 02	1.046E 00		1.442E-10	
48	2.620E 02	1.054E 00		1.482E-10	
49	2.676E 02	1.062E 00	2.960E-02	1.515E-10	4.485E-12
50	2.731E 02	1.069E 00		1.549E-10	
51	2.786E 02	1.076E 00		1.582E-10	
52	2.842E 02	1.085E 00	2.684E-02	1.615E-10	4.334E-12
53	2.897E 02	1.093E 00		1.648E-10	
54	2.952E 02	1.101E 00		1.687E-10	
55	3.008E 02	1.109E 00	2.461E-02	1.724E-10	4.242E-12
56	3.063E 02	1.116E 00		1.752E-10	
57	3.118E 02	1.122E 00		1.781E-10	
58	3.174E 02	1.128E 00	2.221E-02	1.814E-10	4.029E-12
59	3.229E 02	1.137E 00		1.847E-10	
60	3.284E 02	1.148E 00		1.881E-10	
61	3.340E 02	1.156E 00	2.068E-02	1.918E-10	3.965E-12
62	3.395E 02	1.164E 00		1.956E-10	
63	3.450E 02	1.167E 00		1.990E-10	
64	3.506E 02	1.170E 00	1.867E-02	2.023E-10	3.778E-12
65	3.561E 02	1.179E 00		2.057E-10	
66	3.616E 02	1.188E 00		2.088E-10	
67	3.672E 02	1.196E 00	1.732E-02	2.116E-10	3.664E-12
68	3.727E 02	1.204E 00		2.146E-10	
69	3.782E 02	1.212E 00		2.179E-10	
70	3.838E 02	1.219E 00	1.605E-02	2.209E-10	3.544E-12
71	3.893E 02	1.225E 00		2.236E-10	
72	3.948E 02	1.230E 00		2.269E-10	
73	4.004E 02	1.234E 00	1.459E-02	2.302E-10	3.359E-12
74	4.059E 02	1.239E 00		2.341E-10	
75	4.114E 02	1.242E 00		2.377E-10	
76	4.169E 02	1.244E 00	1.318E-02	2.405E-10	3.170E-12
77	4.225E 02	1.251E 00		2.435E-10	
78	4.280E 02	1.262E 00		2.468E-10	
79	4.335E 02	1.269E 00	1.227E-02	2.494E-10	3.060E-12
80	4.391E 02	1.276E 00		2.516E-10	

TARGET NO. 6 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.282E 00		2.548E-10	
82	4.501E 02	1.288E 00	1.126E-02	2.581E-10	2.906E-12
83	4.557E 02	1.293E 00		2.603E-10	
84	4.612E 02	1.298E 00		2.627E-10	
85	4.667E 02	1.303E 00	1.030E-02	2.660E-10	2.739E-12
86	4.723E 02	1.309E 00		2.691E-10	
87	4.778E 02	1.317E 00		2.719E-10	
88	4.833E 02	1.324E 00	9.521E-03	2.747E-10	2.615E-12
89	4.889E 02	1.331E 00		2.774E-10	
90	4.944E 02	1.338E 00		2.802E-10	
91	4.999E 02	1.345E 00	8.785E-03	2.830E-10	2.486E-12
92	5.055E 02	1.344E 00		2.861E-10	
93	5.110E 02	1.344E 00		2.892E-10	
94	5.165E 02	1.346E 00	7.858E-03	2.923E-10	2.297E-12
95	5.221E 02	1.352E 00		2.954E-10	
96	5.276E 02	1.366E 00		2.982E-10	
97	5.331E 02	1.377E 00	7.454E-03	3.009E-10	2.243E-12
98	5.387E 02	1.385E 00		3.036E-10	
99	5.442E 02	1.391E 00		3.062E-10	
100	5.497E 02	1.396E 00	6.862E-03	3.089E-10	2.119E-12
101	5.553E 02	1.407E 00		3.117E-10	
102	5.608E 02	1.417E 00		3.146E-10	
103	5.663E 02	1.420E 00	6.427E-03	3.175E-10	2.041E-12
104	5.719E 02	1.417E 00		3.204E-10	
105	5.774E 02	1.405E 00		3.231E-10	
106	5.829E 02	1.400E 00	5.521E-03	3.258E-10	1.799E-12
107	5.885E 02	1.402E 00		3.285E-10	
108	5.940E 02	1.413E 00		3.311E-10	
109	5.995E 02	1.427E 00	5.174E-03	3.338E-10	1.727E-12
110	6.051E 02	1.443E 00		3.368E-10	
111	6.106E 02	1.459E 00		3.399E-10	
112	6.161E 02	1.469E 00	4.944E-03	3.430E-10	1.696E-12
113	6.216E 02	1.476E 00		3.461E-10	
114	6.272E 02	1.473E 00		3.490E-10	
115	6.327E 02	1.470E 00	4.419E-03	3.517E-10	1.554E-12
116	6.382E 02	1.466E 00		3.544E-10	
117	6.438E 02	1.460E 00		3.570E-10	
118	6.493E 02	1.453E 00	3.845E-03	3.597E-10	1.383E-12
119	6.548E 02	1.477E 00		3.623E-10	
120	6.604E 02	1.505E 00		3.650E-10	

TARGET NO. 6 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.523E 00	3.833E-03	3.676E-10	1.409E-12
122	6.714E 02	1.536E 00		3.703E-10	
123	6.770E 02	1.532E 00		3.729E-10	
124	6.825E 02	1.530E 00	3.433E-03	3.756E-10	1.289E-12
125	6.880E 02	1.529E 00		3.783E-10	
126	6.936E 02	1.528E 00		3.809E-10	
127	6.991E 02	1.527E 00	3.053E-03	3.836E-10	1.171E-12
128	7.046E 02	1.526E 00		3.868E-10	
129	7.102E 02	1.526E 00		3.901E-10	
130	7.157E 02	1.528E 00	2.697E-03	3.934E-10	1.061E-12
131	7.212E 02	1.532E 00		3.967E-10	
132	7.268E 02	1.545E 00		3.998E-10	
133	7.323E 02	1.556E 00	2.492E-03	4.022E-10	1.002E-12
134	7.378E 02	1.564E 00		4.046E-10	
135	7.434E 02	1.570E 00		4.071E-10	
136	7.489E 02	1.574E 00	2.254E-03	4.095E-10	9.231E-13
137	7.544E 02	1.575E 00		4.123E-10	
138	7.600E 02	1.575E 00		4.152E-10	
139	7.655E 02	1.577E 00	1.982E-03	4.181E-10	8.287E-13
140	7.710E 02	1.580E 00		4.209E-10	
141	7.766E 02	1.586E 00		4.237E-10	
142	7.821E 02	1.592E 00	1.779E-03	4.261E-10	7.579E-13
143	7.876E 02	1.598E 00		4.286E-10	
144	7.932E 02	1.600E 00		4.310E-10	
145	7.987E 02	1.599E 00	1.568E-03	4.334E-10	6.796E-13
146	8.042E 02	1.592E 00		4.364E-10	
147	8.097E 02	1.583E 00		4.395E-10	
148	8.153E 02	1.592E 00	1.336E-03	4.426E-10	5.913E-13
149	8.208E 02	1.607E 00		4.457E-10	
150	8.263E 02	1.648E 00		4.486E-10	
151	8.319E 02	1.677E 00	1.325E-03	4.510E-10	5.978E-13
152	8.374E 02	1.682E 00		4.535E-10	
153	8.429E 02	1.681E 00		4.559E-10	
154	8.485E 02	1.675E 00	1.134E-03	4.583E-10	5.197E-13
155	8.540E 02	1.684E 00		4.609E-10	
156	8.595E 02	1.697E 00		4.636E-10	
157	8.651E 02	1.705E 00	1.012E-03	4.662E-10	4.719E-13
158	8.706E 02	1.712E 00		4.689E-10	
159	8.761E 02	1.713E 00		4.715E-10	
160	8.817E 02	1.713E 00	8.591E-04	4.739E-10	4.071E-13

TARGET NO. 6 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.707E 00		4.764E-10	
162	8.927E 02	1.699E 00		4.788E-10	
163	8.983E 02	1.687E 00	6.873E-04	4.812E-10	3.308E-13
164	9.038E 02	1.672E 00		4.840E-10	
165	9.093E 02	1.655E 00		4.869E-10	
166	9.149E 02	1.657E 00	5.285E-04	4.897E-10	2.588E-13
167	9.204E 02	1.663E 00		4.926E-10	
168	9.259E 02	1.695E 00		4.954E-10	
169	9.315E 02	1.716E 00	4.584E-04	4.978E-10	2.282E-13
170	9.370E 02	1.711E 00		5.003E-10	
171	9.425E 02	1.704E 00		5.027E-10	
172	9.481E 02	1.695E 00	3.354E-04	5.051E-10	1.694E-13
173	9.536E 02	1.734E 00		5.077E-10	
174	9.591E 02	1.798E 00		5.104E-10	
175	9.647E 02	1.831E 00	2.955E-04	5.130E-10	1.516E-13
176	9.702E 02	1.856E 00		5.157E-10	
177	9.757E 02	1.814E 00		5.183E-10	
178	9.813E 02	1.757E 00	1.799E-04	5.208E-10	9.370E-14
179	9.868E 02	1.647E 00		5.232E-10	
180	9.923E 02	1.217E 00		5.256E-10	
181	9.978E 02	3.407E-01	1.500E-05	5.281E-10	7.923E-15
182	1.003E 03	0.0		5.305E-10	

DOSE= 2.313E-12 R-SQ.CM./ELECTRON

TARGET NO. 7 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	4.292E-02	7.858E-02	9.569E-02	8.721E-02	5.828E-02	2.176E-02
10	4.749E-02	8.478E-02	1.055E-01	9.448E-02	6.164E-02	2.277E-02
13	4.339E-02	7.851E-02	9.649E-02	8.540E-02	5.505E-02	2.051E-02
16	3.754E-02	6.760E-02	8.214E-02	7.208E-02	4.632E-02	1.719E-02
19	3.290E-02	5.778E-02	6.992E-02	6.080E-02	3.955E-02	1.447E-02
22	2.893E-02	5.133E-02	6.186E-02	5.365E-02	3.399E-02	1.243E-02
25	2.540E-02	4.454E-02	5.320E-02	4.519E-02	2.947E-02	1.054E-02
28	2.227E-02	3.896E-02	4.569E-02	3.882E-02	2.508E-02	9.059E-03
31	1.979E-02	3.440E-02	4.029E-02	3.485E-02	2.142E-02	7.849E-03
34	1.736E-02	3.026E-02	3.529E-02	2.983E-02	1.881E-02	6.669E-03
37	1.530E-02	2.673E-02	3.091E-02	2.574E-02	1.625E-02	5.920E-03
40	1.357E-02	2.333E-02	2.709E-02	2.225E-02	1.404E-02	5.064E-03
43	1.197E-02	2.105E-02	2.377E-02	1.975E-02	1.233E-02	4.339E-03
46	1.077E-02	1.843E-02	2.094E-02	1.748E-02	1.076E-02	3.768E-03
49	9.484E-03	1.667E-02	1.865E-02	1.498E-02	9.399E-03	3.269E-03
52	8.513E-03	1.486E-02	1.676E-02	1.361E-02	8.409E-03	2.914E-03
55	7.680E-03	1.326E-02	1.498E-02	1.219E-02	7.483E-03	2.577E-03
58	6.893E-03	1.222E-02	1.342E-02	1.082E-02	6.507E-03	2.287E-03
61	6.310E-03	1.071E-02	1.242E-02	9.593E-03	5.814E-03	2.004E-03
64	5.767E-03	9.884E-03	1.108E-02	8.634E-03	5.131E-03	1.837E-03
67	5.071E-03	8.856E-03	9.994E-03	7.601E-03	4.598E-03	1.564E-03
70	4.707E-03	8.066E-03	9.014E-03	7.146E-03	4.239E-03	1.404E-03
73	4.224E-03	7.406E-03	7.786E-03	6.133E-03	3.591E-03	1.281E-03
76	3.856E-03	6.572E-03	7.321E-03	5.500E-03	3.165E-03	1.107E-03
79	3.560E-03	6.233E-03	6.612E-03	4.891E-03	2.883E-03	9.337E-04
82	3.338E-03	5.522E-03	5.932E-03	4.540E-03	2.551E-03	8.500E-04
85	2.987E-03	4.977E-03	5.427E-03	3.990E-03	2.245E-03	7.514E-04
88	2.767E-03	4.551E-03	4.707E-03	3.512E-03	1.984E-03	6.678E-04
91	2.403E-03	4.234E-03	4.452E-03	3.304E-03	1.773E-03	5.862E-04
94	2.183E-03	3.860E-03	4.028E-03	2.977E-03	1.584E-03	5.457E-04
97	2.066E-03	3.471E-03	3.627E-03	2.594E-03	1.485E-03	4.620E-04
100	1.921E-03	3.310E-03	3.418E-03	2.388E-03	1.333E-03	4.122E-04
103	1.680E-03	2.909E-03	2.913E-03	2.039E-03	1.082E-03	3.696E-04
106	1.564E-03	2.662E-03	2.574E-03	1.849E-03	1.074E-03	3.232E-04
109	1.416E-03	2.341E-03	2.355E-03	1.708E-03	9.211E-04	2.712E-04
112	1.298E-03	2.220E-03	2.175E-03	1.456E-03	7.862E-04	2.484E-04
115	1.166E-03	2.066E-03	1.950E-03	1.382E-03	6.924E-04	2.066E-04
118	1.062E-03	1.828E-03	1.752E-03	1.225E-03	6.879E-04	1.766E-04
121	9.996E-04	1.781E-03	1.472E-03	1.018E-03	5.739E-04	1.553E-04
124	8.819E-04	1.577E-03	1.375E-03	9.307E-04	4.625E-04	1.486E-04
127	8.102E-04	1.255E-03	1.227E-03	7.610E-04	4.078E-04	1.429E-04
130	6.858E-04	1.106E-03	1.081E-03	6.888E-04	3.387E-04	1.056E-04
133	6.601E-04	1.185E-03	1.070E-03	5.909E-04	2.852E-04	8.945E-05
136	5.893E-04	1.005E-03	9.557E-04	5.527E-04	2.767E-04	7.598E-05
139	5.639E-04	9.213E-04	8.513E-04	5.208E-04	2.414E-04	7.434E-05
142	4.857E-04	8.062E-04	6.723E-04	4.306E-04	1.694E-04	5.295E-05
145	4.150E-04	6.795E-04	6.005E-04	4.136E-04	1.727E-04	5.453E-05
148	3.836E-04	6.578E-04	5.370E-04	3.038E-04	1.408E-04	3.356E-05
151	3.334E-04	6.310E-04	4.794E-04	2.494E-04	1.124E-04	2.332E-05
154	2.718E-04	4.749E-04	3.907E-04	2.451E-04	9.228E-05	1.438E-05
157	2.202E-04	4.167E-04	3.784E-04	1.823E-04	8.313E-05	1.941E-05
160	1.959E-04	3.069E-04	2.949E-04	1.342E-04	4.996E-05	1.556E-05
163	1.546E-04	2.607E-04	2.469E-04	1.074E-04	4.517E-05	1.594E-05
166	1.303E-04	2.632E-04	1.606E-04	9.306E-05	2.880E-05	1.211E-05
169	1.061E-04	1.954E-04	1.652E-04	3.471E-05	1.951E-05	3.578E-06
172	7.910E-05	1.512E-04	9.491E-05	5.302E-05	1.583E-05	2.696E-06
175	3.967E-05	1.030E-04	6.412E-05	3.116E-05	1.437E-05	1.815E-06
178	3.161E-05	6.763E-05	3.358E-05	2.045E-05	8.468E-06	5.135E-06

TARGET NO. 7 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.386E-01	5.881E-02	5.883E-11	3.460E-12
8	4.075E 01	1.211E 00		4.341E-11	
9	4.628E 01	1.107E 00		3.904E-11	
10	5.181E 01	1.036E 00	1.033E-01	3.576E-11	3.693E-12
11	5.735E 01	1.028E 00		3.470E-11	
12	6.288E 01	1.025E 00		3.420E-11	
13	6.841E 01	1.025E 00	9.284E-02	3.420E-11	3.175E-12
14	7.394E 01	1.020E 00		3.463E-11	
15	7.947E 01	1.013E 00		3.524E-11	
16	8.501E 01	1.011E 00	7.779E-02	3.675E-11	2.859E-12
17	9.054E 01	1.008E 00		3.846E-11	
18	9.607E 01	1.003E 00		4.118E-11	
19	1.016E 02	1.001E 00	6.557E-02	4.392E-11	2.880E-12
20	1.071E 02	1.004E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.011E 00	5.820E-02	5.279E-11	3.073E-12
23	1.237E 02	1.008E 00		5.600E-11	
24	1.293E 02	1.002E 00		5.927E-11	
25	1.348E 02	1.000E 00	4.941E-02	6.248E-11	3.088E-12
26	1.403E 02	9.995E-01		6.572E-11	
27	1.459E 02	9.980E-01		6.943E-11	
28	1.514E 02	9.980E-01	4.247E-02	7.315E-11	3.106E-12
29	1.569E 02	1.002E 00		7.691E-11	
30	1.625E 02	1.003E 00		8.067E-11	
31	1.680E 02	1.000E 00	3.752E-02	8.444E-11	3.168E-12
32	1.735E 02	9.996E-01		8.816E-11	
33	1.791E 02	9.998E-01		9.187E-11	
34	1.846E 02	9.999E-01	3.264E-02	9.548E-11	3.116E-12
35	1.901E 02	1.000E 00		9.907E-11	
36	1.957E 02	1.001E 00		1.024E-10	
37	2.012E 02	1.001E 00	2.852E-02	1.047E-10	2.986E-12
38	2.067E 02	1.002E 00		1.033E-10	
39	2.123E 02	1.004E 00		1.062E-10	
40	2.178E 02	1.008E 00	2.499E-02	1.153E-10	2.883E-12

TARGET NO. 7 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.015E 00		1.213E-10	
42	2.288E 02	1.023E 00		1.252E-10	
43	2.344E 02	1.027E 00	2.251E-02	1.291E-10	2.905E-12
44	2.399E 02	1.031E 00		1.329E-10	
45	2.454E 02	1.034E 00		1.363E-10	
46	2.510E 02	1.038E 00	2.003E-02	1.398E-10	2.800E-12
47	2.565E 02	1.044E 00		1.442E-10	
48	2.620E 02	1.050E 00		1.482E-10	
49	2.676E 02	1.056E 00	1.793E-02	1.515E-10	2.717E-12
50	2.731E 02	1.065E 00		1.549E-10	
51	2.786E 02	1.077E 00		1.582E-10	
52	2.842E 02	1.087E 00	1.658E-02	1.615E-10	2.677E-12
53	2.897E 02	1.097E 00		1.648E-10	
54	2.952E 02	1.103E 00		1.687E-10	
55	3.008E 02	1.110E 00	1.513E-02	1.724E-10	2.608E-12
56	3.063E 02	1.118E 00		1.752E-10	
57	3.118E 02	1.126E 00		1.781E-10	
58	3.174E 02	1.133E 00	1.380E-02	1.814E-10	2.503E-12
59	3.229E 02	1.140E 00		1.847E-10	
60	3.284E 02	1.147E 00		1.881E-10	
61	3.340E 02	1.156E 00	1.265E-02	1.918E-10	2.426E-12
62	3.395E 02	1.164E 00		1.956E-10	
63	3.450E 02	1.172E 00		1.990E-10	
64	3.506E 02	1.179E 00	1.163E-02	2.023E-10	2.353E-12
65	3.561E 02	1.184E 00		2.057E-10	
66	3.616E 02	1.189E 00		2.088E-10	
67	3.672E 02	1.194E 00	1.049E-02	2.116E-10	2.219E-12
68	3.727E 02	1.203E 00		2.146E-10	
69	3.782E 02	1.218E 00		2.179E-10	
70	3.838E 02	1.225E 00	9.880E-03	2.209E-10	2.182E-12
71	3.893E 02	1.229E 00		2.236E-10	
72	3.948E 02	1.226E 00		2.269E-10	
73	4.004E 02	1.222E 00	8.618E-03	2.302E-10	1.984E-12
74	4.059E 02	1.232E 00		2.341E-10	
75	4.114E 02	1.241E 00		2.377E-10	
76	4.169E 02	1.247E 00	7.956E-03	2.405E-10	1.913E-12
77	4.225E 02	1.255E 00		2.435E-10	
78	4.280E 02	1.265E 00		2.468E-10	
79	4.335E 02	1.273E 00	7.381E-03	2.494E-10	1.841E-12
80	4.391E 02	1.280E 00		2.516E-10	

TARGET NO. 7 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.288E 00		2.548E-10	
82	4.501E 02	1.296E 00	6.796E-03	2.581E-10	1.754E-12
83	4.557E 02	1.299E 00		2.603E-10	
84	4.612E 02	1.303E 00		2.627E-10	
85	4.667E 02	1.305E 00	6.127E-03	2.660E-10	1.630E-12
86	4.723E 02	1.305E 00		2.691E-10	
87	4.778E 02	1.304E 00		2.719E-10	
88	4.833E 02	1.309E 00	5.457E-03	2.747E-10	1.499E-12
89	4.889E 02	1.319E 00		2.774E-10	
90	4.944E 02	1.334E 00		2.802E-10	
91	4.999E 02	1.350E 00	5.205E-03	2.830E-10	1.473E-12
92	5.055E 02	1.355E 00		2.861E-10	
93	5.110E 02	1.360E 00		2.892E-10	
94	5.165E 02	1.362E 00	4.753E-03	2.923E-10	1.389E-12
95	5.221E 02	1.364E 00		2.954E-10	
96	5.276E 02	1.367E 00		2.982E-10	
97	5.331E 02	1.376E 00	4.319E-03	3.009E-10	1.300E-12
98	5.387E 02	1.390E 00		3.036E-10	
99	5.442E 02	1.408E 00		3.062E-10	
100	5.497E 02	1.428E 00	4.171E-03	3.089E-10	1.288E-12
101	5.553E 02	1.413E 00		3.117E-10	
102	5.608E 02	1.398E 00		3.146E-10	
103	5.663E 02	1.390E 00	3.476E-03	3.175E-10	1.103E-12
104	5.719E 02	1.389E 00		3.204E-10	
105	5.774E 02	1.403E 00		3.231E-10	
106	5.829E 02	1.413E 00	3.227E-03	3.258E-10	1.051E-12
107	5.885E 02	1.419E 00		3.285E-10	
108	5.940E 02	1.425E 00		3.311E-10	
109	5.995E 02	1.431E 00	2.936E-03	3.338E-10	9.799E-13
110	6.051E 02	1.436E 00		3.368E-10	
111	6.106E 02	1.442E 00		3.399E-10	
112	6.161E 02	1.450E 00	2.683E-03	3.430E-10	9.203E-13
113	6.216E 02	1.459E 00		3.461E-10	
114	6.272E 02	1.469E 00		3.490E-10	
115	6.327E 02	1.480E 00	2.499E-03	3.517E-10	8.787E-13
116	6.382E 02	1.492E 00		3.544E-10	
117	6.438E 02	1.501E 00		3.570E-10	
118	6.493E 02	1.508E 00	2.300E-03	3.597E-10	8.274E-13
119	6.548E 02	1.506E 00		3.623E-10	
120	6.604E 02	1.503E 00		3.650E-10	

TARGET NO. 7 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.506E 00	2.012E-03	3.676E-10	7.399E-13
122	6.714E 02	1.510E 00		3.703E-10	
123	6.770E 02	1.519E 00		3.729E-10	
124	6.825E 02	1.521E 00	1.826E-03	3.756E-10	6.857E-13
125	6.880E 02	1.514E 00		3.783E-10	
126	6.936E 02	1.503E 00		3.809E-10	
127	6.991E 02	1.488E 00	1.528E-03	3.836E-10	5.860E-13
128	7.046E 02	1.483E 00		3.868E-10	
129	7.102E 02	1.480E 00		3.901E-10	
130	7.157E 02	1.490E 00	1.334E-03	3.934E-10	5.250E-13
131	7.212E 02	1.505E 00		3.967E-10	
132	7.268E 02	1.543E 00		3.998E-10	
133	7.323E 02	1.571E 00	1.345E-03	4.022E-10	5.411E-13
134	7.378E 02	1.583E 00		4.046E-10	
135	7.434E 02	1.592E 00		4.071E-10	
136	7.489E 02	1.596E 00	1.226E-03	4.095E-10	5.019E-13
137	7.544E 02	1.613E 00		4.123E-10	
138	7.600E 02	1.633E 00		4.152E-10	
139	7.655E 02	1.629E 00	1.144E-03	4.181E-10	4.783E-13
140	7.710E 02	1.619E 00		4.209E-10	
141	7.766E 02	1.581E 00		4.237E-10	
142	7.821E 02	1.562E 00	8.942E-04	4.261E-10	3.810E-13
143	7.876E 02	1.573E 00		4.286E-10	
144	7.932E 02	1.589E 00		4.310E-10	
145	7.987E 02	1.610E 00	8.335E-04	4.334E-10	3.613E-13
146	8.042E 02	1.618E 00		4.364E-10	
147	8.097E 02	1.621E 00		4.395E-10	
148	8.153E 02	1.629E 00	7.280E-04	4.426E-10	3.222E-13
149	8.208E 02	1.637E 00		4.457E-10	
150	8.263E 02	1.655E 00		4.486E-10	
151	8.319E 02	1.666E 00	6.565E-04	4.510E-10	2.961E-13
152	8.374E 02	1.662E 00		4.535E-10	
153	8.429E 02	1.655E 00		4.559E-10	
154	8.485E 02	1.647E 00	5.361E-04	4.583E-10	2.457E-13
155	8.540E 02	1.666E 00		4.609E-10	
156	8.595E 02	1.695E 00		4.636E-10	
157	8.651E 02	1.695E 00	4.833E-04	4.662E-10	2.253E-13
158	8.706E 02	1.688E 00		4.689E-10	
159	8.761E 02	1.642E 00		4.715E-10	
160	8.817E 02	1.613E 00	3.478E-04	4.739E-10	1.648E-13

TARGET NO. 7 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.622E 00		4.764E-10	
162	8.927E 02	1.636E 00		4.788E-10	
163	8.983E 02	1.655E 00	2.982E-04	4.812E-10	1.435E-13
164	9.038E 02	1.670E 00		4.840E-10	
165	9.093E 02	1.684E 00		4.869E-10	
166	9.149E 02	1.687E 00	2.449E-04	4.897E-10	1.199E-13
167	9.204E 02	1.687E 00		4.926E-10	
168	9.259E 02	1.671E 00		4.954E-10	
169	9.315E 02	1.663E 00	1.815E-04	4.978E-10	9.035E-14
170	9.370E 02	1.677E 00		5.003E-10	
171	9.425E 02	1.688E 00		5.027E-10	
172	9.481E 02	1.695E 00	1.413E-04	5.051E-10	7.139E-14
173	9.536E 02	1.676E 00		5.077E-10	
174	9.591E 02	1.641E 00		5.104E-10	
175	9.647E 02	1.615E 00	8.780E-05	5.130E-10	4.505E-14
176	9.702E 02	1.591E 00		5.157E-10	
177	9.757E 02	1.578E 00		5.183E-10	
178	9.813E 02	1.562E 00	5.438E-05	5.208E-10	2.832E-14
179	9.868E 02	1.535E 00		5.232E-10	
180	9.923E 02	1.168E 00		5.256E-10	
181	9.978E 02	3.269E-01	5.914E-06	5.281E-10	3.123E-15
182	1.003E 03	0.0		5.305E-10	

DOSE= 1.511E-12 R-SQ.CM./ELECTRON

TARGET NO. 8 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
7	4.424E-02	7.884E-02	9.575E-02	8.805E-02	5.816E-02
10	4.845E-02	8.535E-02	1.057E-01	9.365E-02	6.144E-02
13	4.477E-02	7.762E-02	9.400E-02	8.455E-02	5.552E-02
16	3.874E-02	6.645E-02	8.064E-02	7.061E-02	4.657E-02
19	3.366E-02	5.775E-02	6.855E-02	6.011E-02	3.954E-02
22	2.925E-02	5.086E-02	6.028E-02	5.261E-02	3.380E-02
25	2.585E-02	4.426E-02	5.162E-02	4.478E-02	2.869E-02
28	2.266E-02	3.845E-02	4.517E-02	3.867E-02	2.463E-02
31	2.008E-02	3.402E-02	3.958E-02	3.336E-02	2.123E-02
34	1.779E-02	2.982E-02	3.476E-02	2.893E-02	1.857E-02
37	1.544E-02	2.588E-02	2.996E-02	2.493E-02	1.601E-02
40	1.368E-02	2.338E-02	2.659E-02	2.180E-02	1.393E-02
43	1.227E-02	2.085E-02	2.357E-02	1.942E-02	1.198E-02
46	1.099E-02	1.830E-02	2.064E-02	1.666E-02	1.064E-02
49	9.782E-03	1.680E-02	1.844E-02	1.516E-02	9.222E-03
52	8.946E-03	1.505E-02	1.650E-02	1.348E-02	8.209E-03
55	8.040E-03	1.324E-02	1.502E-02	1.186E-02	7.364E-03
58	7.173E-03	1.201E-02	1.302E-02	1.087E-02	6.543E-03
61	6.475E-03	1.059E-02	1.199E-02	9.388E-03	5.728E-03
64	5.883E-03	1.002E-02	1.092E-02	8.590E-03	5.007E-03
67	5.418E-03	8.882E-03	9.587E-03	7.545E-03	4.443E-03
70	4.808E-03	8.184E-03	8.656E-03	6.975E-03	3.974E-03
73	4.448E-03	7.530E-03	7.885E-03	6.096E-03	3.459E-03
76	3.972E-03	6.596E-03	7.051E-03	5.493E-03	3.141E-03
79	3.697E-03	6.100E-03	6.463E-03	4.753E-03	2.785E-03
82	3.375E-03	5.685E-03	5.904E-03	4.284E-03	2.596E-03
85	3.104E-03	5.120E-03	5.351E-03	4.041E-03	2.222E-03
88	2.805E-03	4.669E-03	4.719E-03	3.606E-03	1.984E-03
91	2.496E-03	4.270E-03	4.446E-03	3.192E-03	1.813E-03
94	2.374E-03	3.760E-03	3.966E-03	3.060E-03	1.629E-03
97	2.160E-03	3.423E-03	3.456E-03	2.557E-03	1.434E-03
100	1.968E-03	3.197E-03	3.181E-03	2.252E-03	1.334E-03
103	1.650E-03	2.913E-03	2.883E-03	2.006E-03	1.093E-03
106	1.538E-03	2.584E-03	2.655E-03	1.748E-03	9.961E-04
109	1.460E-03	2.324E-03	2.318E-03	1.737E-03	9.079E-04
112	1.355E-03	2.129E-03	2.144E-03	1.529E-03	8.136E-04
115	1.162E-03	1.969E-03	1.825E-03	1.249E-03	6.795E-04
118	1.096E-03	1.826E-03	1.715E-03	1.183E-03	6.370E-04
121	1.036E-03	1.698E-03	1.474E-03	1.131E-03	5.272E-04
124	9.092E-04	1.552E-03	1.267E-03	9.388E-04	4.562E-04
127	7.912E-04	1.279E-03	1.208E-03	7.673E-04	4.349E-04
130	7.590E-04	1.222E-03	1.106E-03	7.389E-04	3.606E-04
133	6.571E-04	1.074E-03	9.608E-04	6.293E-04	3.581E-04
136	6.065E-04	9.679E-04	9.342E-04	5.648E-04	2.851E-04
139	5.184E-04	9.027E-04	7.693E-04	5.565E-04	2.194E-04
142	4.805E-04	8.048E-04	6.395E-04	3.849E-04	2.070E-04
145	3.746E-04	7.065E-04	5.759E-04	3.278E-04	1.565E-04
148	3.471E-04	6.627E-04	4.779E-04	3.183E-04	1.303E-04
151	3.127E-04	4.986E-04	4.439E-04	2.731E-04	1.115E-04
154	2.594E-04	4.655E-04	3.440E-04	2.250E-04	9.957E-05
157	2.723E-04	4.305E-04	3.063E-04	1.911E-04	7.930E-05
160	1.887E-04	3.462E-04	2.577E-04	1.321E-04	5.253E-05
163	1.466E-04	3.135E-04	2.181E-04	1.259E-04	3.699E-05
166	1.492E-04	2.474E-04	1.981E-04	7.726E-05	4.135E-05
169	1.076E-04	1.848E-04	1.487E-04	6.110E-05	2.055E-05
172	1.004E-04	1.091E-04	1.063E-04	4.126E-05	2.394E-05
175	4.826E-05	1.089E-04	6.983E-05	1.915E-05	2.019E-05
178	4.069E-05	6.348E-05	4.202E-05	8.688E-06	2.783E-06

TARGET NO. 8 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.395E-01	6.251E-02	5.883E-11	3.677E-12
8	4.075E 01	1.212E 00		4.341E-11	
9	4.628E 01	1.109E 00		3.904E-11	
10	5.181E 01	1.037E 00	1.092E-01	3.576E-11	3.906E-12
11	5.735E 01	1.029E 00		3.470E-11	
12	6.288E 01	1.025E 00		3.420E-11	
13	6.841E 01	1.024E 00	9.724E-02	3.420E-11	3.325E-12
14	7.394E 01	1.019E 00		3.463E-11	
15	7.947E 01	1.013E 00		3.524E-11	
16	8.501E 01	1.010E 00	8.127E-02	3.675E-11	2.987E-12
17	9.054E 01	1.008E 00		3.846E-11	
18	9.607E 01	1.004E 00		4.118E-11	
19	1.016E 02	1.003E 00	6.891E-02	4.392E-11	3.027E-12
20	1.071E 02	1.005E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.010E 00	6.059E-02	5.279E-11	3.198E-12
23	1.237E 02	1.007E 00		5.600E-11	
24	1.293E 02	1.000E 00		5.927E-11	
25	1.348E 02	9.994E-01	5.138E-02	6.248E-11	3.210E-12
26	1.403E 02	9.993E-01		6.572E-11	
27	1.459E 02	1.000E 00		6.943E-11	
28	1.514E 02	1.001E 00	4.465E-02	7.315E-11	3.266E-12
29	1.569E 02	1.003E 00		7.691E-11	
30	1.625E 02	1.003E 00		8.067E-11	
31	1.680E 02	9.979E-01	3.878E-02	8.444E-11	3.274E-12
32	1.735E 02	9.979E-01		8.816E-11	
33	1.791E 02	1.001E 00		9.187E-11	
34	1.846E 02	1.001E 00	3.401E-02	9.548E-11	3.247E-12
35	1.901E 02	1.000E 00		9.907E-11	
36	1.957E 02	9.975E-01		1.024E-10	
37	2.012E 02	9.959E-01	2.922E-02	1.047E-10	3.059E-12
38	2.067E 02	9.991E-01		1.033E-10	
39	2.123E 02	1.004E 00		1.062E-10	
40	2.178E 02	1.011E 00	2.619E-02	1.153E-10	3.020E-12

TARGET NO. 8 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.018E 00		1.213E-10	
42	2.288E 02	1.026E 00		1.252E-10	
43	2.344E 02	1.028E 00	2.355E-02	1.291E-10	3.040E-12
44	2.399E 02	1.030E 00		1.329E-10	
45	2.454E 02	1.030E 00		1.363E-10	
46	2.510E 02	1.032E 00	2.067E-02	1.398E-10	2.889E-12
47	2.565E 02	1.042E 00		1.442E-10	
48	2.620E 02	1.053E 00		1.482E-10	
49	2.676E 02	1.062E 00	1.908E-02	1.515E-10	2.892E-12
50	2.731E 02	1.071E 00		1.549E-10	
51	2.786E 02	1.079E 00		1.582E-10	
52	2.842E 02	1.088E 00	1.747E-02	1.615E-10	2.821E-12
53	2.897E 02	1.097E 00		1.648E-10	
54	2.952E 02	1.103E 00		1.687E-10	
55	3.008E 02	1.110E 00	1.592E-02	1.724E-10	2.744E-12
56	3.063E 02	1.119E 00		1.752E-10	
57	3.118E 02	1.128E 00		1.781E-10	
58	3.174E 02	1.134E 00	1.453E-02	1.814E-10	2.637E-12
59	3.229E 02	1.139E 00		1.847E-10	
60	3.284E 02	1.143E 00		1.881E-10	
61	3.340E 02	1.151E 00	1.310E-02	1.918E-10	2.511E-12
62	3.395E 02	1.161E 00		1.956E-10	
63	3.450E 02	1.173E 00		1.990E-10	
64	3.506E 02	1.185E 00	1.229E-02	2.023E-10	2.486E-12
65	3.561E 02	1.187E 00		2.057E-10	
66	3.616E 02	1.190E 00		2.088E-10	
67	3.672E 02	1.192E 00	1.093E-02	2.116E-10	2.313E-12
68	3.727E 02	1.198E 00		2.146E-10	
69	3.782E 02	1.209E 00		2.179E-10	
70	3.838E 02	1.217E 00	1.016E-02	2.209E-10	2.243E-12
71	3.893E 02	1.225E 00		2.236E-10	
72	3.948E 02	1.231E 00		2.269E-10	
73	4.004E 02	1.236E 00	9.243E-03	2.302E-10	2.128E-12
74	4.059E 02	1.241E 00		2.341E-10	
75	4.114E 02	1.245E 00		2.377E-10	
76	4.169E 02	1.247E 00	8.341E-03	2.405E-10	2.006E-12
77	4.225E 02	1.250E 00		2.435E-10	
78	4.280E 02	1.256E 00		2.468E-10	
79	4.335E 02	1.263E 00	7.605E-03	2.494E-10	1.897E-12
80	4.391E 02	1.271E 00		2.516E-10	

TARGET NO. 8 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.282E 00		2.548E-10	
82	4.501E 02	1.294E 00	7.143E-03	2.581E-10	1.843E-12
83	4.557E 02	1.301E 00		2.603E-10	
84	4.612E 02	1.308E 00		2.627E-10	
85	4.667E 02	1.313E 00	6.575E-03	2.660E-10	1.749E-12
86	4.723E 02	1.316E 00		2.691E-10	
87	4.778E 02	1.316E 00		2.719E-10	
88	4.833E 02	1.320E 00	5.910E-03	2.747E-10	1.623E-12
89	4.889E 02	1.327E 00		2.774E-10	
90	4.944E 02	1.337E 00		2.802E-10	
91	4.999E 02	1.348E 00	5.507E-03	2.830E-10	1.558E-12
92	5.055E 02	1.359E 00		2.861E-10	
93	5.110E 02	1.369E 00		2.892E-10	
94	5.165E 02	1.373E 00	5.123E-03	2.923E-10	1.497E-12
95	5.221E 02	1.373E 00		2.954E-10	
96	5.276E 02	1.366E 00		2.982E-10	
97	5.331E 02	1.366E 00	4.450E-03	3.009E-10	1.339E-12
98	5.387E 02	1.373E 00		3.036E-10	
99	5.442E 02	1.385E 00		3.062E-10	
100	5.497E 02	1.398E 00	4.157E-03	3.089E-10	1.284E-12
101	5.553E 02	1.397E 00		3.117E-10	
102	5.608E 02	1.395E 00		3.146E-10	
103	5.663E 02	1.394E 00	3.667E-03	3.175E-10	1.164E-12
104	5.719E 02	1.396E 00		3.204E-10	
105	5.774E 02	1.402E 00		3.231E-10	
106	5.829E 02	1.410E 00	3.340E-03	3.258E-10	1.088E-12
107	5.885E 02	1.420E 00		3.285E-10	
108	5.940E 02	1.434E 00		3.311E-10	
109	5.995E 02	1.451E 00	3.163E-03	3.338E-10	1.056E-12
110	6.051E 02	1.461E 00		3.368E-10	
111	6.106E 02	1.468E 00		3.399E-10	
112	6.161E 02	1.468E 00	2.903E-03	3.430E-10	9.956E-13
113	6.216E 02	1.462E 00		3.461E-10	
114	6.272E 02	1.442E 00		3.490E-10	
115	6.327E 02	1.439E 00	2.433E-03	3.517E-10	8.556E-13
116	6.382E 02	1.455E 00		3.544E-10	
117	6.438E 02	1.478E 00		3.570E-10	
118	6.493E 02	1.504E 00	2.387E-03	3.597E-10	8.586E-13
119	6.548E 02	1.515E 00		3.623E-10	
120	6.604E 02	1.523E 00		3.650E-10	

TARGET NO. 8 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.524E 00	2.181E-03	3.676E-10	8.020E-13
122	6.714E 02	1.522E 00		3.703E-10	
123	6.770E 02	1.509E 00		3.729E-10	
124	6.825E 02	1.500E 00	1.859E-03	3.756E-10	6.983E-13
125	6.880E 02	1.496E 00		3.783E-10	
126	6.936E 02	1.493E 00		3.809E-10	
127	6.991E 02	1.492E 00	1.629E-03	3.836E-10	6.249E-13
128	7.046E 02	1.513E 00		3.868E-10	
129	7.102E 02	1.537E 00		3.901E-10	
130	7.157E 02	1.549E 00	1.568E-03	3.934E-10	6.169E-13
131	7.212E 02	1.557E 00		3.967E-10	
132	7.268E 02	1.555E 00		3.998E-10	
133	7.323E 02	1.559E 00	1.392E-03	4.022E-10	5.599E-13
134	7.378E 02	1.571E 00		4.046E-10	
135	7.434E 02	1.585E 00		4.071E-10	
136	7.489E 02	1.600E 00	1.299E-03	4.095E-10	5.321E-13
137	7.544E 02	1.609E 00		4.123E-10	
138	7.600E 02	1.617E 00		4.152E-10	
139	7.655E 02	1.612E 00	1.154E-03	4.181E-10	4.826E-13
140	7.710E 02	1.604E 00		4.209E-10	
141	7.766E 02	1.581E 00		4.237E-10	
142	7.821E 02	1.566E 00	9.297E-04	4.261E-10	3.962E-13
143	7.876E 02	1.563E 00		4.286E-10	
144	7.932E 02	1.562E 00		4.310E-10	
145	7.987E 02	1.562E 00	7.921E-04	4.334E-10	3.433E-13
146	8.042E 02	1.582E 00		4.364E-10	
147	8.097E 02	1.609E 00		4.395E-10	
148	8.153E 02	1.624E 00	7.394E-04	4.426E-10	3.272E-13
149	8.208E 02	1.635E 00		4.457E-10	
150	8.263E 02	1.635E 00		4.486E-10	
151	8.319E 02	1.637E 00	6.367E-04	4.510E-10	2.872E-13
152	8.374E 02	1.641E 00		4.535E-10	
153	8.429E 02	1.646E 00		4.559E-10	
154	8.485E 02	1.651E 00	5.485E-04	4.583E-10	2.514E-13
155	8.540E 02	1.673E 00		4.609E-10	
156	8.595E 02	1.701E 00		4.636E-10	
157	8.651E 02	1.699E 00	4.981E-04	4.662E-10	2.322E-13
158	8.706E 02	1.691E 00		4.689E-10	
159	8.761E 02	1.644E 00		4.715E-10	
160	8.817E 02	1.617E 00	3.622E-04	4.739E-10	1.716E-13

TARGET NO. 8 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE.SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.635E 00		4.764E-10	
162	8.927E 02	1.660E 00		4.788E-10	
163	8.983E 02	1.693E 00	3.284E-04	4.812E-10	1.580E-13
164	9.038E 02	1.721E 00		4.840E-10	
165	9.093E 02	1.745E 00		4.869E-10	
166	9.149E 02	1.749E 00	2.820E-04	4.897E-10	1.381E-13
167	9.204E 02	1.747E 00		4.926E-10	
168	9.259E 02	1.712E 00		4.954E-10	
169	9.315E 02	1.683E 00	1.981E-04	4.978E-10	9.861E-14
170	9.370E 02	1.672E 00		5.003E-10	
171	9.425E 02	1.660E 00		5.027E-10	
172	9.481E 02	1.647E 00	1.402E-04	5.051E-10	7.084E-14
173	9.536E 02	1.647E 00		5.077E-10	
174	9.591E 02	1.653E 00		5.104E-10	
175	9.647E 02	1.633E 00	9.726E-05	5.130E-10	4.990E-14
176	9.702E 02	1.605E 00		5.157E-10	
177	9.757E 02	1.512E 00		5.183E-10	
178	9.813E 02	1.424E 00	4.643E-05	5.208E-10	2.418E-14
179	9.868E 02	1.352E 00		5.232E-10	
180	9.923E 02	1.006E 00		5.256E-10	
181	9.978E 02	2.817E-01	4.084E-06	5.281E-10	2.157E-15
182	1.003E 03	0.0		5.305E-10	

DOSE= 1.583E-12 R-SQ.CM./ELECTRON

TARGET NO. 9 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	3.038E-02	5.570E-02	7.468E-02	7.109E-02	4.489E-02	1.790E-02
10	4.279E-02	7.684E-02	1.065E-01	9.646E-02	6.227E-02	2.467E-02
13	4.446E-02	8.125E-02	1.105E-01	9.957E-02	6.420E-02	2.543E-02
16	4.230E-02	7.539E-02	1.008E-01	9.125E-02	5.885E-02	2.304E-02
19	3.782E-02	6.756E-02	8.933E-02	8.088E-02	5.209E-02	2.041E-02
22	3.402E-02	6.108E-02	8.078E-02	7.242E-02	4.556E-02	1.795E-02
25	2.991E-02	5.432E-02	7.069E-02	6.267E-02	3.990E-02	1.574E-02
28	2.657E-02	4.746E-02	6.215E-02	5.441E-02	3.487E-02	1.345E-02
31	2.375E-02	4.224E-02	5.396E-02	4.705E-02	3.040E-02	1.165E-02
34	2.121E-02	3.759E-02	4.899E-02	4.269E-02	2.661E-02	1.030E-02
37	1.856E-02	3.307E-02	4.307E-02	3.621E-02	2.311E-02	8.931E-03
40	1.643E-02	2.888E-02	3.739E-02	3.155E-02	2.012E-02	7.837E-03
43	1.456E-02	2.599E-02	3.351E-02	2.754E-02	1.765E-02	6.648E-03
46	1.333E-02	2.318E-02	2.933E-02	2.474E-02	1.545E-02	6.009E-03
49	1.187E-02	2.055E-02	2.586E-02	2.204E-02	1.396E-02	5.229E-03
52	1.048E-02	1.857E-02	2.347E-02	1.938E-02	1.213E-02	4.589E-03
55	9.722E-03	1.709E-02	2.126E-02	1.741E-02	1.084E-02	4.200E-03
58	8.685E-03	1.548E-02	1.883E-02	1.560E-02	9.564E-03	3.598E-03
61	7.991E-03	1.379E-02	1.690E-02	1.391E-02	8.483E-03	3.246E-03
64	7.121E-03	1.253E-02	1.522E-02	1.271E-02	7.494E-03	2.913E-03
67	6.505E-03	1.166E-02	1.345E-02	1.134E-02	6.964E-03	2.545E-03
70	5.925E-03	1.019E-02	1.274E-02	1.001E-02	6.240E-03	2.233E-03
73	5.322E-03	9.283E-03	1.165E-02	9.012E-03	5.474E-03	1.973E-03
76	4.980E-03	8.400E-03	1.015E-02	8.116E-03	4.841E-03	1.861E-03
79	4.412E-03	7.978E-03	9.405E-03	7.594E-03	4.434E-03	1.570E-03
82	4.046E-03	7.003E-03	8.626E-03	6.666E-03	3.931E-03	1.537E-03
85	3.758E-03	6.596E-03	7.630E-03	5.957E-03	3.468E-03	1.356E-03
88	3.376E-03	5.883E-03	6.899E-03	5.303E-03	3.192E-03	1.134E-03
91	3.042E-03	5.522E-03	6.522E-03	5.179E-03	3.030E-03	1.082E-03
94	2.865E-03	4.968E-03	5.635E-03	4.274E-03	2.474E-03	9.153E-04
97	2.587E-03	4.536E-03	5.029E-03	3.907E-03	2.301E-03	8.376E-04
100	2.410E-03	4.017E-03	4.552E-03	3.529E-03	2.051E-03	7.272E-04
103	2.174E-03	3.826E-03	4.393E-03	3.099E-03	1.813E-03	6.973E-04
106	1.980E-03	3.279E-03	3.759E-03	2.777E-03	1.625E-03	6.027E-04
109	1.821E-03	3.223E-03	3.525E-03	2.765E-03	1.576E-03	5.362E-04
112	1.691E-03	2.886E-03	3.202E-03	2.411E-03	1.349E-03	4.455E-04
115	1.549E-03	2.641E-03	2.943E-03	2.093E-03	1.074E-03	4.269E-04
118	1.421E-03	2.458E-03	2.552E-03	1.905E-03	1.082E-03	3.664E-04
121	1.267E-03	2.167E-03	2.429E-03	1.695E-03	9.286E-04	3.416E-04
124	1.139E-03	1.964E-03	2.249E-03	1.459E-03	8.269E-04	2.612E-04
127	1.045E-03	1.708E-03	1.952E-03	1.410E-03	7.789E-04	2.337E-04
130	9.463E-04	1.659E-03	1.871E-03	1.183E-03	6.337E-04	2.056E-04
133	8.533E-04	1.591E-03	1.547E-03	1.121E-03	5.513E-04	1.734E-04
136	8.136E-04	1.277E-03	1.429E-03	9.304E-04	4.920E-04	1.824E-04
139	6.760E-04	1.191E-03	1.196E-03	7.748E-04	4.248E-04	1.572E-04
142	6.281E-04	1.103E-03	1.079E-03	7.668E-04	3.547E-04	1.124E-04
145	5.800E-04	9.789E-04	9.690E-04	6.273E-04	3.218E-04	1.115E-04
148	5.484E-04	7.992E-04	8.186E-04	6.797E-04	2.813E-04	9.394E-05
151	4.157E-04	7.196E-04	7.262E-04	4.655E-04	2.234E-04	7.880E-05
154	4.230E-04	6.400E-04	6.736E-04	3.445E-04	1.696E-04	6.135E-05
157	3.405E-04	5.622E-04	5.569E-04	3.562E-04	1.815E-04	4.429E-05
160	2.924E-04	4.566E-04	4.049E-04	2.550E-04	1.315E-04	3.590E-05
163	2.500E-04	4.315E-04	3.609E-04	2.214E-04	7.582E-05	2.605E-05
166	2.098E-04	3.439E-04	3.346E-04	1.811E-04	7.115E-05	2.627E-05
169	1.555E-04	3.317E-04	2.872E-04	1.120E-04	4.868E-05	2.133E-05
172	1.202E-04	2.257E-04	1.630E-04	7.139E-05	2.521E-05	1.162E-05
175	7.347E-05	2.104E-04	1.024E-04	5.480E-05	3.163E-05	1.152E-05
178	6.878E-05	1.272E-04	7.069E-05	5.466E-05	1.312E-05	4.870E-06

TARGET NO. 9 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.980E-01	4.269E-02	5.883E-11	2.511E-12
8	4.075E 01	1.138E 00		4.341E-11	
9	4.628E 01	1.071E 00		3.904E-11	
10	5.181E 01	1.024E 00	1.015E-01	3.576E-11	3.630E-12
11	5.735E 01	1.018E 00		3.470E-11	
12	6.288E 01	1.018E 00		3.420E-11	
13	6.841E 01	1.024E 00	1.053E-01	3.420E-11	3.600E-12
14	7.394E 01	1.020E 00		3.463E-11	
15	7.947E 01	1.013E 00		3.524E-11	
16	8.501E 01	1.011E 00	9.548E-02	3.675E-11	3.509E-12
17	9.054E 01	1.010E 00		3.846E-11	
18	9.607E 01	1.006E 00		4.118E-11	
19	1.016E 02	1.004E 00	8.416E-02	4.392E-11	3.696E-12
20	1.071E 02	1.005E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.010E 00	7.581E-02	5.279E-11	4.002E-12
23	1.237E 02	1.008E 00		5.600E-11	
24	1.293E 02	1.002E 00		5.927E-11	
25	1.348E 02	1.001E 00	6.571E-02	6.248E-11	4.105E-12
26	1.403E 02	1.001E 00		6.572E-11	
27	1.459E 02	1.001E 00		6.943E-11	
28	1.514E 02	1.001E 00	5.742E-02	7.315E-11	4.200E-12
29	1.569E 02	1.002E 00		7.691E-11	
30	1.625E 02	9.991E-01		8.067E-11	
31	1.680E 02	9.931E-01	4.968E-02	8.444E-11	4.195E-12
32	1.735E 02	9.954E-01		8.816E-11	
33	1.791E 02	1.002E 00		9.187E-11	
34	1.846E 02	1.005E 00	4.510E-02	9.548E-11	4.306E-12
35	1.901E 02	1.006E 00		9.907E-11	
36	1.957E 02	1.003E 00		1.024E-10	
37	2.012E 02	1.001E 00	3.900E-02	1.047E-10	4.083E-12
38	2.067E 02	1.001E 00		1.033E-10	
39	2.123E 02	1.003E 00		1.062E-10	
40	2.178E 02	1.007E 00	3.420E-02	1.153E-10	3.945E-12

TARGET NO. 9 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.013E 00		1.213E-10	
42	2.288E 02	1.021E 00		1.252E-10	
43	2.344E 02	1.025E 00	3.077E-02	1.291E-10	3.971E-12
44	2.399E 02	1.028E 00		1.329E-10	
45	2.454E 02	1.033E 00		1.363E-10	
46	2.510E 02	1.038E 00	2.769E-02	1.398E-10	3.870E-12
47	2.565E 02	1.046E 00		1.442E-10	
48	2.620E 02	1.053E 00		1.482E-10	
49	2.676E 02	1.060E 00	2.511E-02	1.515E-10	3.805E-12
50	2.731E 02	1.067E 00		1.549E-10	
51	2.786E 02	1.074E 00		1.582E-10	
52	2.842E 02	1.083E 00	2.282E-02	1.615E-10	3.686E-12
53	2.897E 02	1.093E 00		1.648E-10	
54	2.952E 02	1.104E 00		1.687E-10	
55	3.008E 02	1.114E 00	2.127E-02	1.724E-10	3.667E-12
56	3.063E 02	1.121E 00		1.752E-10	
57	3.118E 02	1.128E 00		1.781E-10	
58	3.174E 02	1.133E 00	1.926E-02	1.814E-10	3.494E-12
59	3.229E 02	1.139E 00		1.847E-10	
60	3.284E 02	1.145E 00		1.881E-10	
61	3.340E 02	1.152E 00	1.752E-02	1.918E-10	3.360E-12
62	3.395E 02	1.160E 00		1.956E-10	
63	3.450E 02	1.167E 00		1.990E-10	
64	3.506E 02	1.175E 00	1.612E-02	2.023E-10	3.261E-12
65	3.561E 02	1.183E 00		2.057E-10	
66	3.616E 02	1.191E 00		2.088E-10	
67	3.672E 02	1.197E 00	1.482E-02	2.116E-10	3.137E-12
68	3.727E 02	1.203E 00		2.146E-10	
69	3.782E 02	1.209E 00		2.179E-10	
70	3.838E 02	1.215E 00	1.359E-02	2.209E-10	3.002E-12
71	3.893E 02	1.222E 00		2.236E-10	
72	3.948E 02	1.228E 00		2.269E-10	
73	4.004E 02	1.235E 00	1.245E-02	2.302E-10	2.867E-12
74	4.059E 02	1.238E 00		2.341E-10	
75	4.114E 02	1.241E 00		2.377E-10	
76	4.169E 02	1.243E 00	1.121E-02	2.405E-10	2.696E-12
77	4.225E 02	1.252E 00		2.435E-10	
78	4.280E 02	1.268E 00		2.468E-10	
79	4.335E 02	1.277E 00	1.065E-02	2.494E-10	2.656E-12
80	4.391E 02	1.283E 00		2.516E-10	

TARGET NO. 9 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.287E 00		2.548E-10	
82	4.501E 02	1.290E 00	9.657E-03	2.581E-10	2.492E-12
83	4.557E 02	1.294E 00		2.603E-10	
84	4.612E 02	1.297E 00		2.627E-10	
85	4.667E 02	1.300E 00	8.749E-03	2.660E-10	2.328E-12
86	4.723E 02	1.302E 00		2.691E-10	
87	4.778E 02	1.303E 00		2.719E-10	
88	4.833E 02	1.314E 00	7.938E-03	2.747E-10	2.180E-12
89	4.889E 02	1.332E 00		2.774E-10	
90	4.944E 02	1.359E 00		2.802E-10	
91	4.999E 02	1.387E 00	7.960E-03	2.830E-10	2.252E-12
92	5.055E 02	1.372E 00		2.861E-10	
93	5.110E 02	1.357E 00		2.892E-10	
94	5.165E 02	1.347E 00	6.626E-03	2.923E-10	1.936E-12
95	5.221E 02	1.345E 00		2.954E-10	
96	5.276E 02	1.355E 00		2.982E-10	
97	5.331E 02	1.363E 00	6.096E-03	3.009E-10	1.834E-12
98	5.387E 02	1.370E 00		3.036E-10	
99	5.442E 02	1.375E 00		3.062E-10	
100	5.497E 02	1.378E 00	5.543E-03	3.089E-10	1.712E-12
101	5.553E 02	1.391E 00		3.117E-10	
102	5.608E 02	1.404E 00		3.146E-10	
103	5.663E 02	1.408E 00	5.228E-03	3.175E-10	1.660E-12
104	5.719E 02	1.407E 00		3.204E-10	
105	5.774E 02	1.396E 00		3.231E-10	
106	5.829E 02	1.398E 00	4.549E-03	3.258E-10	1.482E-12
107	5.885E 02	1.413E 00		3.285E-10	
108	5.940E 02	1.441E 00		3.311E-10	
109	5.995E 02	1.474E 00	4.611E-03	3.338E-10	1.539E-12
110	6.051E 02	1.472E 00		3.368E-10	
111	6.106E 02	1.467E 00		3.399E-10	
112	6.161E 02	1.463E 00	4.062E-03	3.430E-10	1.393E-12
113	6.216E 02	1.459E 00		3.461E-10	
114	6.272E 02	1.455E 00		3.490E-10	
115	6.327E 02	1.458E 00	3.602E-03	3.517E-10	1.267E-12
116	6.382E 02	1.468E 00		3.544E-10	
117	6.438E 02	1.477E 00		3.570E-10	
118	6.493E 02	1.487E 00	3.347E-03	3.597E-10	1.204E-12
119	6.548E 02	1.494E 00		3.623E-10	
120	6.604E 02	1.501E 00		3.650E-10	

TARGET NO. 9 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.505E 00	3.062E-03	3.676E-10	1.126E-12
122	6.714E 02	1.508E 00		3.703E-10	
123	6.770E 02	1.507E 00		3.729E-10	
124	6.825E 02	1.509E 00	2.742E-03	3.756E-10	1.030E-12
125	6.880E 02	1.514E 00		3.783E-10	
126	6.936E 02	1.521E 00		3.809E-10	
127	6.991E 02	1.529E 00	2.517E-03	3.836E-10	9.653E-13
128	7.046E 02	1.539E 00		3.868E-10	
129	7.102E 02	1.549E 00		3.901E-10	
130	7.157E 02	1.555E 00	2.315E-03	3.934E-10	9.109E-13
131	7.212E 02	1.561E 00		3.967E-10	
132	7.268E 02	1.566E 00		3.998E-10	
133	7.323E 02	1.570E 00	2.089E-03	4.022E-10	8.403E-13
134	7.378E 02	1.570E 00		4.046E-10	
135	7.434E 02	1.568E 00		4.071E-10	
136	7.489E 02	1.563E 00	1.824E-03	4.095E-10	7.469E-13
137	7.544E 02	1.555E 00		4.123E-10	
138	7.600E 02	1.546E 00		4.152E-10	
139	7.655E 02	1.549E 00	1.552E-03	4.181E-10	6.487E-13
140	7.710E 02	1.555E 00		4.209E-10	
141	7.766E 02	1.578E 00		4.237E-10	
142	7.821E 02	1.597E 00	1.464E-03	4.261E-10	6.237E-13
143	7.876E 02	1.609E 00		4.286E-10	
144	7.932E 02	1.618E 00		4.310E-10	
145	7.987E 02	1.625E 00	1.314E-03	4.334E-10	5.693E-13
146	8.042E 02	1.646E 00		4.364E-10	
147	8.097E 02	1.671E 00		4.395E-10	
148	8.153E 02	1.672E 00	1.224E-03	4.426E-10	5.416E-13
149	8.208E 02	1.667E 00		4.457E-10	
150	8.263E 02	1.635E 00		4.486E-10	
151	8.319E 02	1.614E 00	9.573E-04	4.510E-10	4.318E-13
152	8.374E 02	1.614E 00		4.535E-10	
153	8.429E 02	1.621E 00		4.559E-10	
154	8.485E 02	1.632E 00	8.338E-04	4.583E-10	3.822E-13
155	8.540E 02	1.662E 00		4.609E-10	
156	8.595E 02	1.700E 00		4.636E-10	
157	8.651E 02	1.702E 00	7.804E-04	4.662E-10	3.638E-13
158	8.706E 02	1.694E 00		4.689E-10	
159	8.761E 02	1.641E 00		4.715E-10	
160	8.817E 02	1.607E 00	5.585E-04	4.739E-10	2.647E-13

TARGET NO. 9 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.617E 00		4.764E-10	
162	8.927E 02	1.634E 00		4.788E-10	
163	8.983E 02	1.659E 00	4.946E-04	4.812E-10	2.380E-13
164	9.038E 02	1.693E 00		4.840E-10	
165	9.093E 02	1.730E 00		4.869E-10	
166	9.149E 02	1.760E 00	4.520E-04	4.897E-10	2.214E-13
167	9.204E 02	1.788E 00		4.926E-10	
168	9.259E 02	1.804E 00		4.954E-10	
169	9.315E 02	1.797E 00	3.726E-04	4.978E-10	1.855E-13
170	9.370E 02	1.728E 00		5.003E-10	
171	9.425E 02	1.649E 00		5.027E-10	
172	9.481E 02	1.561E 00	2.032E-04	5.051E-10	1.026E-13
173	9.536E 02	1.562E 00		5.077E-10	
174	9.591E 02	1.613E 00		5.104E-10	
175	9.647E 02	1.659E 00	1.700E-04	5.130E-10	8.721E-14
176	9.702E 02	1.704E 00		5.157E-10	
177	9.757E 02	1.732E 00		5.183E-10	
178	9.813E 02	1.755E 00	1.255E-04	5.208E-10	6.538E-14
179	9.868E 02	1.762E 00		5.232E-10	
180	9.923E 02	1.357E 00		5.256E-10	
181	9.978E 02	3.800E-01	1.578E-05	5.281E-10	8.333E-15
182	1.003E 03	0.0		5.305E-10	

DOSE= 2.035E-12 R-SQ.CM./ELECTRON

TARGET NO. 10 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	7.811E-03	1.725E-02	1.886E-02	1.350E-02	1.239E-02	3.606E-03
10	1.218E-02	2.487E-02	2.697E-02	1.942E-02	1.498E-02	4.362E-03
13	1.451E-02	2.734E-02	3.006E-02	2.175E-02	1.455E-02	4.261E-03
16	1.489E-02	2.651E-02	2.889E-02	2.110E-02	1.288E-02	3.710E-03
19	1.432E-02	2.511E-02	2.692E-02	1.968E-02	1.127E-02	3.271E-03
22	1.316E-02	2.249E-02	2.430E-02	1.775E-02	9.699E-03	2.770E-03
25	1.207E-02	2.006E-02	2.158E-02	1.559E-02	8.149E-03	2.317E-03
28	1.102E-02	1.801E-02	1.934E-02	1.378E-02	6.938E-03	1.992E-03
31	9.846E-03	1.592E-02	1.684E-02	1.203E-02	5.959E-03	1.664E-03
34	8.922E-03	1.456E-02	1.494E-02	1.069E-02	5.090E-03	1.417E-03
37	7.922E-03	1.281E-02	1.322E-02	9.310E-03	4.332E-03	1.188E-03
40	7.188E-03	1.154E-02	1.182E-02	8.244E-03	3.734E-03	1.017E-03
43	6.636E-03	1.044E-02	1.038E-02	7.272E-03	3.238E-03	8.428E-04
46	5.793E-03	9.234E-03	9.276E-03	6.425E-03	2.792E-03	7.189E-04
49	5.273E-03	8.329E-03	8.353E-03	5.759E-03	2.373E-03	6.218E-04
52	4.702E-03	7.538E-03	7.402E-03	5.053E-03	2.014E-03	5.155E-04
55	4.321E-03	6.792E-03	6.546E-03	4.429E-03	1.772E-03	4.469E-04
58	3.916E-03	6.015E-03	6.005E-03	3.952E-03	1.495E-03	3.767E-04
61	3.487E-03	5.538E-03	5.333E-03	3.489E-03	1.319E-03	3.175E-04
64	3.176E-03	5.044E-03	4.815E-03	3.130E-03	1.114E-03	2.637E-04
67	2.894E-03	4.545E-03	4.424E-03	2.808E-03	9.851E-04	2.242E-04
70	2.668E-03	4.072E-03	3.883E-03	2.466E-03	8.262E-04	1.936E-04
73	2.455E-03	3.698E-03	3.528E-03	2.213E-03	7.202E-04	1.713E-04
76	2.179E-03	3.442E-03	3.250E-03	2.041E-03	6.450E-04	1.370E-04
79	2.023E-03	3.081E-03	2.887E-03	1.778E-03	5.431E-04	1.180E-04
82	1.814E-03	2.716E-03	2.570E-03	1.561E-03	4.790E-04	9.958E-05
85	1.625E-03	2.594E-03	2.367E-03	1.433E-03	3.844E-04	8.091E-05
88	1.486E-03	2.329E-03	2.103E-03	1.246E-03	3.377E-04	7.191E-05
91	1.372E-03	2.099E-03	1.950E-03	1.125E-03	2.850E-04	5.655E-05
94	1.245E-03	1.996E-03	1.679E-03	9.913E-04	2.403E-04	4.694E-05
97	1.162E-03	1.736E-03	1.574E-03	9.400E-04	2.045E-04	4.188E-05
100	9.938E-04	1.559E-03	1.422E-03	8.477E-04	1.776E-04	3.288E-05
103	9.786E-04	1.422E-03	1.245E-03	6.794E-04	1.510E-04	2.672E-05
106	8.278E-04	1.282E-03	1.150E-03	6.009E-04	1.283E-04	2.238E-05
109	7.795E-04	1.225E-03	1.025E-03	5.720E-04	1.107E-04	1.884E-05
112	6.721E-04	1.035E-03	9.173E-04	4.944E-04	9.161E-05	1.557E-05
115	6.501E-04	9.313E-04	8.014E-04	4.510E-04	7.893E-05	1.043E-05
118	5.773E-04	8.755E-04	7.349E-04	3.813E-04	6.086E-05	9.880E-06
121	5.249E-04	7.562E-04	6.321E-04	3.247E-04	4.953E-05	7.605E-06
124	4.864E-04	7.192E-04	5.772E-04	2.944E-04	3.893E-05	6.599E-06
127	3.997E-04	6.141E-04	4.952E-04	2.497E-04	3.243E-05	4.432E-06
130	3.678E-04	5.282E-04	4.471E-04	2.556E-04	2.187E-05	2.806E-06
133	3.274E-04	4.865E-04	3.972E-04	2.050E-04	2.129E-05	1.524E-06
136	2.928E-04	4.584E-04	3.793E-04	1.673E-04	1.518E-05	2.185E-06
139	2.781E-04	3.990E-04	3.064E-04	1.586E-04	9.658E-06	6.579E-07
142	2.431E-04	3.432E-04	2.804E-04	1.219E-04	8.182E-06	7.981E-07
145	2.114E-04	2.874E-04	2.247E-04	1.136E-04	2.429E-06	4.083E-07
148	1.673E-04	2.620E-04	1.933E-04	9.570E-05	2.587E-06	9.552E-08
151	1.644E-04	2.282E-04	1.712E-04	8.851E-05	2.379E-06	1.849E-08
154	1.333E-04	1.928E-04	1.506E-04	6.749E-05	1.550E-06	4.761E-07
157	1.120E-04	1.861E-04	1.370E-04	5.404E-05	1.086E-06	2.403E-07
160	9.085E-05	1.530E-04	1.043E-04	4.384E-05	6.715E-07	1.772E-07
163	7.179E-05	1.220E-04	9.364E-05	2.671E-05	1.074E-06	-5.392E-08
166	5.934E-05	1.102E-04	7.786E-05	2.063E-05	-7.420E-07	2.542E-07
169	4.838E-05	7.898E-05	5.136E-05	1.958E-05	1.293E-06	9.244E-09
172	3.202E-05	6.028E-05	2.458E-05	1.758E-05	8.788E-07	1.849E-08
175	2.536E-05	-2.498E-06	9.642E-05	1.351E-05	-9.244E-07	-5.854E-08
178	1.653E-05	-7.230E-07	2.022E-05	7.313E-06	8.539E-07	-3.574E-07

TARGET NO. 10 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.937E-01	1.033E-02	5.883E-11	6.080E-13
8	4.075E 01	1.129E 00		4.341E-11	
9	4.628E 01	1.060E 00		3.904E-11	
10	5.181E 01	1.012E 00	2.442E-02	3.576E-11	8.733E-13
11	5.735E 01	1.009E 00		3.470E-11	
12	6.288E 01	1.011E 00		3.420E-11	
13	6.841E 01	1.019E 00	2.673E-02	3.420E-11	9.142E-13
14	7.394E 01	1.016E 00		3.463E-11	
15	7.947E 01	1.009E 00		3.524E-11	
16	8.501E 01	1.009E 00	2.525E-02	3.675E-11	9.279E-13
17	9.054E 01	1.009E 00		3.846E-11	
18	9.607E 01	1.010E 00		4.118E-11	
19	1.016E 02	1.010E 00	2.345E-02	4.392E-11	1.030E-12
20	1.071E 02	1.009E 00		4.674E-11	
21	1.127E 02	1.009E 00		4.969E-11	
22	1.182E 02	1.009E 00	2.096E-02	5.279E-11	1.107E-12
23	1.237E 02	1.006E 00		5.600E-11	
24	1.293E 02	9.998E-01		5.927E-11	
25	1.348E 02	9.996E-01	1.828E-02	6.248E-11	1.143E-12
26	1.403E 02	1.001E 00		6.572E-11	
27	1.459E 02	1.003E 00		6.943E-11	
28	1.514E 02	1.005E 00	1.633E-02	7.315E-11	1.195E-12
29	1.569E 02	1.005E 00		7.691E-11	
30	1.625E 02	1.002E 00		8.067E-11	
31	1.680E 02	9.952E-01	1.412E-02	8.444E-11	1.193E-12
32	1.735E 02	9.956E-01		8.816E-11	
33	1.791E 02	9.999E-01		9.187E-11	
34	1.846E 02	1.001E 00	1.264E-02	9.548E-11	1.207E-12
35	1.901E 02	1.002E 00		9.907E-11	
36	1.957E 02	9.997E-01		1.024E-10	
37	2.012E 02	9.986E-01	1.104E-02	1.047E-10	1.156E-12
38	2.067E 02	1.001E 00		1.033E-10	
39	2.123E 02	1.006E 00		1.062E-10	
40	2.178E 02	1.013E 00	9.969E-03	1.153E-10	1.150E-12

TARGET NO. 10 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.020E 00		1.213E-10	
42	2.288E 02	1.026E 00		1.252E-10	
43	2.344E 02	1.029E 00	8.979E-03	1.291E-10	1.159E-12
44	2.399E 02	1.031E 00		1.329E-10	
45	2.454E 02	1.034E 00		1.363E-10	
46	2.510E 02	1.037E 00	7.994E-03	1.398E-10	1.117E-12
47	2.565E 02	1.047E 00		1.442E-10	
48	2.620E 02	1.057E 00		1.482E-10	
49	2.676E 02	1.066E 00	7.347E-03	1.515E-10	1.113E-12
50	2.731E 02	1.073E 00		1.549E-10	
51	2.786E 02	1.079E 00		1.582E-10	
52	2.842E 02	1.087E 00	6.622E-03	1.615E-10	1.069E-12
53	2.897E 02	1.094E 00		1.648E-10	
54	2.952E 02	1.100E 00		1.687E-10	
55	3.008E 02	1.107E 00	5.996E-03	1.724E-10	1.034E-12
56	3.063E 02	1.117E 00		1.752E-10	
57	3.118E 02	1.126E 00		1.781E-10	
58	3.174E 02	1.134E 00	5.497E-03	1.814E-10	9.973E-13
59	3.229E 02	1.141E 00		1.847E-10	
60	3.284E 02	1.147E 00		1.881E-10	
61	3.340E 02	1.155E 00	4.998E-03	1.918E-10	9.584E-13
62	3.395E 02	1.162E 00		1.956E-10	
63	3.450E 02	1.169E 00		1.990E-10	
64	3.506E 02	1.176E 00	4.572E-03	2.023E-10	9.251E-13
65	3.561E 02	1.187E 00		2.057E-10	
66	3.616E 02	1.197E 00		2.088E-10	
67	3.672E 02	1.203E 00	4.232E-03	2.116E-10	8.953E-13
68	3.727E 02	1.206E 00		2.146E-10	
69	3.782E 02	1.206E 00		2.179E-10	
70	3.838E 02	1.209E 00	3.756E-03	2.209E-10	8.297E-13
71	3.893E 02	1.214E 00		2.236E-10	
72	3.948E 02	1.223E 00		2.269E-10	
73	4.004E 02	1.232E 00	3.459E-03	2.302E-10	7.965E-13
74	4.059E 02	1.246E 00		2.341E-10	
75	4.114E 02	1.258E 00		2.377E-10	
76	4.169E 02	1.265E 00	3.256E-03	2.405E-10	7.831E-13
77	4.225E 02	1.270E 00		2.435E-10	
78	4.280E 02	1.272E 00		2.468E-10	
79	4.335E 02	1.272E 00	2.904E-03	2.494E-10	7.243E-13
80	4.391E 02	1.272E 00		2.516E-10	

TARGET NO. 10 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.273E 00		2.548E-10	
82	4.501E 02	1.274E 00	2.572E-03	2.581E-10	6.637E-13
83	4.557E 02	1.288E 00		2.603E-10	
84	4.612E 02	1.301E 00		2.627E-10	
85	4.667E 02	1.312E 00	2.428E-03	2.660E-10	6.459E-13
86	4.723E 02	1.318E 00		2.691E-10	
87	4.778E 02	1.318E 00		2.719E-10	
88	4.833E 02	1.322E 00	2.175E-03	2.747E-10	5.974E-13
89	4.889E 02	1.328E 00		2.774E-10	
90	4.944E 02	1.337E 00		2.802E-10	
91	4.999E 02	1.347E 00	2.013E-03	2.830E-10	5.696E-13
92	5.055E 02	1.349E 00		2.861E-10	
93	5.110E 02	1.352E 00		2.892E-10	
94	5.165E 02	1.356E 00	1.809E-03	2.923E-10	5.288E-13
95	5.221E 02	1.363E 00		2.954E-10	
96	5.276E 02	1.377E 00		2.982E-10	
97	5.331E 02	1.387E 00	1.696E-03	3.009E-10	5.103E-13
98	5.387E 02	1.395E 00		3.036E-10	
99	5.442E 02	1.399E 00		3.062E-10	
100	5.497E 02	1.401E 00	1.530E-03	3.089E-10	4.726E-13
101	5.553E 02	1.398E 00		3.117E-10	
102	5.608E 02	1.395E 00		3.146E-10	
103	5.663E 02	1.394E 00	1.338E-03	3.175E-10	4.247E-13
104	5.719E 02	1.395E 00		3.204E-10	
105	5.774E 02	1.401E 00		3.231E-10	
106	5.829E 02	1.411E 00	1.213E-03	3.258E-10	3.951E-13
107	5.885E 02	1.424E 00		3.285E-10	
108	5.940E 02	1.444E 00		3.311E-10	
109	5.995E 02	1.466E 00	1.167E-03	3.338E-10	3.895E-13
110	6.051E 02	1.459E 00		3.368E-10	
111	6.106E 02	1.451E 00		3.399E-10	
112	6.161E 02	1.448E 00	9.996E-04	3.430E-10	3.429E-13
113	6.216E 02	1.449E 00		3.461E-10	
114	6.272E 02	1.457E 00		3.490E-10	
115	6.327E 02	1.467E 00	9.105E-04	3.517E-10	3.202E-13
116	6.382E 02	1.480E 00		3.544E-10	
117	6.438E 02	1.490E 00		3.570E-10	
118	6.493E 02	1.498E 00	8.359E-04	3.597E-10	3.007E-13
119	6.548E 02	1.492E 00		3.623E-10	
120	6.604E 02	1.485E 00		3.650E-10	

TARGET NO. 10 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.489E 00	7.180E-04	3.676E-10	2.640E-13
122	6.714E 02	1.497E 00		3.703E-10	
123	6.770E 02	1.519E 00		3.729E-10	
124	6.825E 02	1.528E 00	6.786E-04	3.756E-10	2.549E-13
125	6.880E 02	1.523E 00		3.783E-10	
126	6.936E 02	1.510E 00		3.809E-10	
127	6.991E 02	1.493E 00	5.626E-04	3.836E-10	2.158E-13
128	7.046E 02	1.506E 00		3.868E-10	
129	7.102E 02	1.525E 00		3.901E-10	
130	7.157E 02	1.534E 00	5.258E-04	3.934E-10	2.069E-13
131	7.212E 02	1.542E 00		3.967E-10	
132	7.268E 02	1.542E 00		3.998E-10	
133	7.323E 02	1.549E 00	4.670E-04	4.022E-10	1.878E-13
134	7.378E 02	1.564E 00		4.046E-10	
135	7.434E 02	1.581E 00		4.071E-10	
136	7.489E 02	1.599E 00	4.391E-04	4.095E-10	1.798E-13
137	7.544E 02	1.603E 00		4.123E-10	
138	7.600E 02	1.604E 00		4.152E-10	
139	7.655E 02	1.598E 00	3.809E-04	4.181E-10	1.592E-13
140	7.710E 02	1.591E 00		4.209E-10	
141	7.766E 02	1.577E 00		4.237E-10	
142	7.821E 02	1.569E 00	3.145E-04	4.261E-10	1.340E-13
143	7.876E 02	1.571E 00		4.286E-10	
144	7.932E 02	1.573E 00		4.310E-10	
145	7.987E 02	1.574E 00	2.717E-04	4.334E-10	1.178E-13
146	8.042E 02	1.578E 00		4.364E-10	
147	8.097E 02	1.584E 00		4.395E-10	
148	8.153E 02	1.596E 00	2.375E-04	4.426E-10	1.051E-13
149	8.208E 02	1.611E 00		4.457E-10	
150	8.263E 02	1.639E 00		4.486E-10	
151	8.319E 02	1.658E 00	2.226E-04	4.510E-10	1.004E-13
152	8.374E 02	1.657E 00		4.535E-10	
153	8.429E 02	1.652E 00		4.559E-10	
154	8.485E 02	1.645E 00	1.845E-04	4.583E-10	8.454E-14
155	8.540E 02	1.668E 00		4.609E-10	
156	8.595E 02	1.702E 00		4.636E-10	
157	8.651E 02	1.713E 00	1.721E-04	4.662E-10	8.026E-14
158	8.706E 02	1.719E 00		4.689E-10	
159	8.761E 02	1.695E 00		4.715E-10	
160	8.817E 02	1.676E 00	1.341E-04	4.739E-10	6.357E-14

TARGET NO. 10 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.668E 00		4.764E-10	
162	8.927E 02	1.663E 00		4.788E-10	
163	8.983E 02	1.661E 00	1.066E-04	4.812E-10	5.129E-14
164	9.038E 02	1.685E 00		4.840E-10	
165	9.093E 02	1.722E 00		4.869E-10	
166	9.149E 02	1.741E 00	9.410E-05	4.897E-10	4.608E-14
167	9.204E 02	1.755E 00		4.926E-10	
168	9.259E 02	1.740E 00		4.954E-10	
169	9.315E 02	1.721E 00	6.920E-05	4.978E-10	3.445E-14
170	9.370E 02	1.693E 00		5.003E-10	
171	9.425E 02	1.654E 00		5.027E-10	
172	9.481E 02	1.604E 00	4.329E-05	5.051E-10	2.187E-14
173	9.536E 02	1.548E 00		5.077E-10	
174	9.591E 02	1.490E 00		5.104E-10	
175	9.647E 02	1.443E 00	2.307E-05	5.130E-10	1.184E-14
176	9.702E 02	1.398E 00		5.157E-10	
177	9.757E 02	1.372E 00		5.183E-10	
178	9.813E 02	1.344E 00	1.287E-05	5.208E-10	6.700E-15
179	9.868E 02	1.309E 00		5.232E-10	
180	9.923E 02	9.908E-01		5.256E-10	
181	9.978E 02	2.774E-01	1.263E-06	5.281E-10	6.671E-16
182	1.003E 03	0.0		5.305E-10	

DOSE= 5.530E-13 R-SQ.CM./ELECTRON

TARGET NC. 11 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	1.248E-02	1.695E-02	2.961E-02	2.011E-02	1.487E-02	5.114E-03
10	1.780E-02	2.558E-02	3.689E-02	2.722E-02	1.725E-02	6.057E-03
13	1.926E-02	2.883E-02	3.767E-02	2.943E-02	1.658E-02	5.816E-03
16	1.876E-02	2.837E-02	3.437E-02	2.775E-02	1.463E-02	5.153E-03
19	1.771E-02	2.695E-02	3.112E-02	2.542E-02	1.264E-02	4.455E-03
22	1.601E-02	2.470E-02	2.724E-02	2.270E-02	1.089E-02	3.821E-03
25	1.435E-02	2.243E-02	2.390E-02	1.990E-02	9.304E-03	3.213E-03
28	1.275E-02	1.997E-02	2.079E-02	1.747E-02	7.849E-03	2.683E-03
31	1.146E-02	1.785E-02	1.836E-02	1.535E-02	6.822E-03	2.320E-03
34	1.019E-02	1.591E-02	1.593E-02	1.345E-02	5.752E-03	2.005E-03
37	9.203E-03	1.456E-02	1.416E-02	1.169E-02	4.962E-03	1.692E-03
40	8.245E-03	1.295E-02	1.263E-02	1.045E-02	4.198E-03	1.459E-03
43	7.336E-03	1.173E-02	1.088E-02	9.113E-03	3.691E-03	1.269E-03
46	6.612E-03	1.052E-02	9.793E-03	8.056E-03	3.171E-03	1.075E-03
49	6.041E-03	9.387E-03	8.501E-03	7.091E-03	2.771E-03	9.250E-04
52	5.441E-03	8.435E-03	7.760E-03	6.414E-03	2.494E-03	7.893E-04
55	4.879E-03	7.661E-03	6.659E-03	5.636E-03	2.105E-03	6.723E-04
58	4.442E-03	6.931E-03	6.041E-03	5.062E-03	1.843E-03	5.729E-04
61	4.010E-03	6.237E-03	5.236E-03	4.560E-03	1.592E-03	5.149E-04
64	3.529E-03	5.697E-03	4.734E-03	3.927E-03	1.361E-03	4.282E-04
67	3.364E-03	5.074E-03	4.306E-03	3.659E-03	1.164E-03	3.783E-04
70	2.993E-03	4.625E-03	3.773E-03	3.121E-03	1.000E-03	3.245E-04
73	2.687E-03	4.304E-03	3.439E-03	2.871E-03	8.816E-04	2.710E-04
76	2.519E-03	3.946E-03	3.008E-03	2.583E-03	8.154E-04	2.291E-04
79	2.235E-03	3.522E-03	2.674E-03	2.171E-03	6.822E-04	2.044E-04
82	2.029E-03	3.164E-03	2.380E-03	1.994E-03	5.438E-04	1.635E-04
85	1.821E-03	2.886E-03	2.175E-03	1.822E-03	4.846E-04	1.594E-04
88	1.735E-03	2.641E-03	1.919E-03	1.605E-03	4.093E-04	1.249E-04
91	1.534E-03	2.411E-03	1.692E-03	1.372E-03	3.527E-04	1.042E-04
94	1.450E-03	2.187E-03	1.481E-03	1.200E-03	3.109E-04	9.133E-05
97	1.285E-03	2.001E-03	1.357E-03	1.100E-03	2.577E-04	7.509E-05
100	1.151E-03	1.795E-03	1.157E-03	1.002E-03	2.320E-04	6.089E-05
103	1.058E-03	1.625E-03	1.064E-03	8.687E-04	1.914E-04	5.318E-05
106	9.373E-04	1.494E-03	9.044E-04	7.684E-04	1.710E-04	4.270E-05
109	8.629E-04	1.401E-03	8.266E-04	6.743E-04	1.417E-04	3.432E-05
112	7.634E-04	1.192E-03	7.084E-04	6.227E-04	1.199E-04	2.847E-05
115	6.884E-04	1.168E-03	5.994E-04	5.404E-04	9.436E-05	2.470E-05
118	6.079E-04	1.033E-03	5.416E-04	4.536E-04	8.360E-05	2.147E-05
121	5.658E-04	8.792E-04	4.384E-04	4.178E-04	6.222E-05	1.371E-05
124	5.223E-04	8.104E-04	4.092E-04	3.659E-04	4.572E-05	1.189E-05
127	4.553E-04	7.882E-04	3.128E-04	3.056E-04	4.095E-05	1.108E-05
130	4.161E-04	6.665E-04	2.813E-04	2.734E-04	3.084E-05	7.036E-06
133	3.691E-04	5.505E-04	2.408E-04	2.526E-04	2.120E-05	5.662E-06
136	3.409E-04	5.751E-04	2.103E-04	2.002E-04	1.629E-05	3.696E-06
139	2.888E-04	4.795E-04	1.714E-04	1.714E-04	1.144E-05	3.516E-06
142	2.356E-04	4.051E-04	1.468E-04	1.497E-04	9.555E-06	2.008E-06
145	2.317E-04	3.696E-04	1.061E-04	1.297E-04	6.262E-06	1.219E-06
148	1.847E-04	3.350E-04	6.831E-05	9.087E-05	4.625E-06	1.323E-06
151	1.643E-04	2.916E-04	4.644E-05	8.708E-05	1.087E-06	-3.530E-07
154	1.477E-04	2.395E-04	3.384E-05	5.750E-05	4.205E-07	8.184E-07
157	1.121E-04	1.917E-04	2.532E-05	5.097E-05	7.051E-07	4.358E-07
160	1.045E-04	1.737E-04	1.862E-05	4.547E-05	4.205E-07	-7.494E-08
163	8.098E-05	1.564E-04	1.182E-05	2.591E-05	-2.264E-07	3.076E-07
166	6.723E-05	1.269E-04	2.662E-06	2.169E-05	-8.151E-07	1.775E-08
169	4.978E-05	7.927E-05	4.437E-06	1.010E-05	-7.957E-07	-3.589E-07
172	3.276E-05	5.791E-05	-5.860E-07	1.512E-05	-8.539E-07	-7.494E-08
175	2.513E-05	6.028E-05	2.763E-06	7.888E-06	1.960E-06	-2.721E-07
178	1.036E-05	4.379E-05	-6.865E-07	7.888E-06	-1.216E-06	6.961E-07

TARGET NO. 11 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	6.054E-01	1.438E-02	5.883E-11	8.461E-13
8	4.075E 01	1.150E 00		4.341E-11	
9	4.628E 01	1.072E 00		3.904E-11	
10	5.181E 01	1.018E 00	3.146E-02	3.576E-11	1.125E-12
11	5.735E 01	1.014E 00		3.470E-11	
12	6.288E 01	1.015E 00		3.420E-11	
13	6.841E 01	1.021E 00	3.297E-02	3.420E-11	1.128E-12
14	7.394E 01	1.018E 00		3.463E-11	
15	7.947E 01	1.010E 00		3.524E-11	
16	8.501E 01	1.010E 00	3.037E-02	3.675E-11	1.116E-12
17	9.054E 01	1.010E 00		3.846E-11	
18	9.607E 01	1.010E 00		4.118E-11	
19	1.016E 02	1.010E 00	2.770E-02	4.392E-11	1.216E-12
20	1.071E 02	1.009E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.009E 00	2.456E-02	5.279E-11	1.297E-12
23	1.237E 02	1.006E 00		5.600E-11	
24	1.293E 02	1.002E 00		5.927E-11	
25	1.348E 02	1.002E 00	2.146E-02	6.248E-11	1.341E-12
26	1.403E 02	1.002E 00		6.572E-11	
27	1.459E 02	1.001E 00		6.943E-11	
28	1.514E 02	1.001E 00	1.873E-02	7.315E-11	1.370E-12
29	1.569E 02	1.004E 00		7.691E-11	
30	1.625E 02	1.004E 00		8.067E-11	
31	1.680E 02	9.999E-01	1.652E-02	8.444E-11	1.395E-12
32	1.735E 02	9.981E-01		8.816E-11	
33	1.791E 02	9.975E-01		9.187E-11	
34	1.846E 02	9.976E-01	1.440E-02	9.548E-11	1.375E-12
35	1.901E 02	9.980E-01		9.907E-11	
36	1.957E 02	1.000E 00		1.024E-10	
37	2.012E 02	1.002E 00	1.281E-02	1.047E-10	1.342E-12
38	2.067E 02	1.005E 00		1.033E-10	
39	2.123E 02	1.009E 00		1.062E-10	
40	2.178E 02	1.015E 00	1.150E-02	1.153E-10	1.326E-12

TARGET NO. 11 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.020E 00		1.213E-10	
42	2.288E 02	1.024E 00		1.252E-10	
43	2.344E 02	1.027E 00	1.022E-02	1.291E-10	1.319E-12
44	2.399E 02	1.030E 00		1.329E-10	
45	2.454E 02	1.036E 00		1.363E-10	
46	2.510E 02	1.041E 00	9.218E-03	1.398E-10	1.289E-12
47	2.565E 02	1.047E 00		1.442E-10	
48	2.620E 02	1.053E 00		1.482E-10	
49	2.676E 02	1.060E 00	8.265E-03	1.515E-10	1.253E-12
50	2.731E 02	1.070E 00		1.549E-10	
51	2.786E 02	1.084E 00		1.582E-10	
52	2.842E 02	1.093E 00	7.702E-03	1.615E-10	1.244E-12
53	2.897E 02	1.101E 00		1.648E-10	
54	2.952E 02	1.103E 00		1.687E-10	
55	3.008E 02	1.105E 00	6.827E-03	1.724E-10	1.177E-12
56	3.063E 02	1.117E 00		1.752E-10	
57	3.118E 02	1.129E 00		1.781E-10	
58	3.174E 02	1.139E 00	6.333E-03	1.814E-10	1.149E-12
59	3.229E 02	1.146E 00		1.847E-10	
60	3.284E 02	1.152E 00		1.881E-10	
61	3.340E 02	1.157E 00	5.712E-03	1.918E-10	1.095E-12
62	3.395E 02	1.163E 00		1.956E-10	
63	3.450E 02	1.166E 00		1.990E-10	
64	3.506E 02	1.170E 00	5.116E-03	2.023E-10	1.035E-12
65	3.561E 02	1.184E 00		2.057E-10	
66	3.616E 02	1.196E 00		2.088E-10	
67	3.672E 02	1.205E 00	4.795E-03	2.116E-10	1.015E-12
68	3.727E 02	1.208E 00		2.146E-10	
69	3.782E 02	1.205E 00		2.179E-10	
70	3.838E 02	1.209E 00	4.225E-03	2.209E-10	9.332E-13
71	3.893E 02	1.217E 00		2.236E-10	
72	3.948E 02	1.230E 00		2.269E-10	
73	4.004E 02	1.244E 00	3.966E-03	2.302E-10	9.131E-13
74	4.059E 02	1.254E 00		2.341E-10	
75	4.114E 02	1.262E 00		2.377E-10	
76	4.169E 02	1.266E 00	3.640E-03	2.405E-10	8.752E-13
77	4.225E 02	1.266E 00		2.435E-10	
78	4.280E 02	1.264E 00		2.468E-10	
79	4.335E 02	1.265E 00	3.174E-03	2.494E-10	7.916E-13
80	4.391E 02	1.266E 00		2.516E-10	

TARGET NO. 11 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.272E 00		2.548E-10	
82	4.501E 02	1.278E 00	2.863E-03	2.581E-10	7.388E-13
83	4.557E 02	1.292E 00		2.603E-10	
84	4.612E 02	1.305E 00		2.627E-10	
85	4.667E 02	1.316E 00	2.685E-03	2.660E-10	7.142E-13
86	4.723E 02	1.324E 00		2.691E-10	
87	4.778E 02	1.330E 00		2.719E-10	
88	4.833E 02	1.333E 00	2.433E-03	2.747E-10	6.682E-13
89	4.889E 02	1.336E 00		2.774E-10	
90	4.944E 02	1.336E 00		2.802E-10	
91	4.999E 02	1.336E 00	2.148E-03	2.830E-10	6.079E-13
92	5.055E 02	1.342E 00		2.861E-10	
93	5.110E 02	1.348E 00		2.892E-10	
94	5.165E 02	1.354E 00	1.944E-03	2.923E-10	5.682E-13
95	5.221E 02	1.362E 00		2.954E-10	
96	5.276E 02	1.374E 00		2.982E-10	
97	5.331E 02	1.382E 00	1.796E-03	3.009E-10	5.405E-13
98	5.387E 02	1.388E 00		3.036E-10	
99	5.442E 02	1.390E 00		3.062E-10	
100	5.497E 02	1.391E 00	1.605E-03	3.089E-10	4.956E-13
101	5.553E 02	1.398E 00		3.117E-10	
102	5.608E 02	1.404E 00		3.146E-10	
103	5.663E 02	1.408E 00	1.455E-03	3.175E-10	4.619E-13
104	5.719E 02	1.411E 00		3.204E-10	
105	5.774E 02	1.413E 00		3.231E-10	
106	5.829E 02	1.418E 00	1.297E-03	3.258E-10	4.225E-13
107	5.885E 02	1.425E 00		3.285E-10	
108	5.940E 02	1.438E 00		3.311E-10	
109	5.995E 02	1.453E 00	1.206E-03	3.338E-10	4.024E-13
110	6.051E 02	1.452E 00		3.368E-10	
111	6.106E 02	1.450E 00		3.399E-10	
112	6.161E 02	1.453E 00	1.054E-03	3.430E-10	3.614E-13
113	6.216E 02	1.458E 00		3.461E-10	
114	6.272E 02	1.468E 00		3.490E-10	
115	6.327E 02	1.477E 00	9.604E-04	3.517E-10	3.378E-13
116	6.382E 02	1.485E 00		3.544E-10	
117	6.438E 02	1.488E 00		3.570E-10	
118	6.493E 02	1.489E 00	8.498E-04	3.597E-10	3.056E-13
119	6.548E 02	1.485E 00		3.623E-10	
120	6.604E 02	1.480E 00		3.650E-10	

TARGET NO. 11 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.484E 00	7.299E-04	3.676E-10	2.683E-13
122	6.714E 02	1.491E 00		3.703E-10	
123	6.770E 02	1.508E 00		3.729E-10	
124	6.825E 02	1.520E 00	6.775E-04	3.756E-10	2.545E-13
125	6.880E 02	1.526E 00		3.783E-10	
126	6.936E 02	1.527E 00		3.809E-10	
127	6.991E 02	1.526E 00	5.930E-04	3.836E-10	2.274E-13
128	7.046E 02	1.530E 00		3.868E-10	
129	7.102E 02	1.535E 00		3.901E-10	
130	7.157E 02	1.533E 00	5.208E-04	3.934E-10	2.049E-13
131	7.212E 02	1.531E 00		3.967E-10	
132	7.268E 02	1.527E 00		3.998E-10	
133	7.323E 02	1.534E 00	4.490E-04	4.022E-10	1.806E-13
134	7.378E 02	1.556E 00		4.046E-10	
135	7.434E 02	1.581E 00		4.071E-10	
136	7.489E 02	1.607E 00	4.313E-04	4.095E-10	1.766E-13
137	7.544E 02	1.603E 00		4.123E-10	
138	7.600E 02	1.592E 00		4.152E-10	
139	7.655E 02	1.583E 00	3.547E-04	4.181E-10	1.483E-13
140	7.710E 02	1.575E 00		4.209E-10	
141	7.766E 02	1.574E 00		4.237E-10	
142	7.821E 02	1.580E 00	3.002E-04	4.261E-10	1.279E-13
143	7.876E 02	1.597E 00		4.286E-10	
144	7.932E 02	1.612E 00		4.310E-10	
145	7.987E 02	1.627E 00	2.689E-04	4.334E-10	1.166E-13
146	8.042E 02	1.614E 00		4.364E-10	
147	8.097E 02	1.594E 00		4.395E-10	
148	8.153E 02	1.587E 00	2.083E-04	4.426E-10	9.218E-14
149	8.208E 02	1.584E 00		4.457E-10	
150	8.263E 02	1.606E 00		4.486E-10	
151	8.319E 02	1.618E 00	1.819E-04	4.510E-10	8.204E-14
152	8.374E 02	1.612E 00		4.535E-10	
153	8.429E 02	1.599E 00		4.559E-10	
154	8.485E 02	1.579E 00	1.403E-04	4.583E-10	6.432E-14
155	8.540E 02	1.571E 00		4.609E-10	
156	8.595E 02	1.568E 00		4.636E-10	
157	8.651E 02	1.585E 00	1.132E-04	4.662E-10	5.276E-14
158	8.706E 02	1.607E 00		4.689E-10	
159	8.761E 02	1.662E 00		4.715E-10	
160	8.817E 02	1.702E 00	1.082E-04	4.739E-10	5.126E-14

TARGET NO. 11 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.709E 00		4.764E-10	
162	8.927E 02	1.708E 00		4.788E-10	
163	8.983E 02	1.697E 00	8.442E-05	4.812E-10	4.063E-14
164	9.038E 02	1.696E 00		4.840E-10	
165	9.093E 02	1.699E 00		4.869E-10	
166	9.149E 02	1.667E 00	6.453E-05	4.897E-10	3.160E-14
167	9.204E 02	1.626E 00		4.926E-10	
168	9.259E 02	1.529E 00		4.954E-10	
169	9.315E 02	1.457E 00	3.601E-05	4.978E-10	1.793E-14
170	9.370E 02	1.455E 00		5.003E-10	
171	9.425E 02	1.469E 00		5.027E-10	
172	9.481E 02	1.502E 00	2.831E-05	5.051E-10	1.430E-14
173	9.536E 02	1.612E 00		5.077E-10	
174	9.591E 02	1.762E 00		5.104E-10	
175	9.647E 02	1.853E 00	3.299E-05	5.130E-10	1.693E-14
176	9.702E 02	1.929E 00		5.157E-10	
177	9.757E 02	1.885E 00		5.183E-10	
178	9.813E 02	1.850E 00	2.093E-05	5.208E-10	1.090E-14
179	9.868E 02	1.845E 00		5.232E-10	
180	9.923E 02	1.415E 00		5.256E-10	
181	9.978E 02	3.961E-01	2.670E-06	5.281E-10	1.410E-15
182	1.003E 03	0.0		5.305E-10	

DOSE= 6.255E-13 R-SQ.CM./ELECTRON

TARGET NO. 12 INCIDENT ELECTRON ENERGY 1.0 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
7	9.429E-03	1.452E-02	1.889E-02	1.373E-02	9.488E-03	3.110E-03
10	1.368E-02	2.127E-02	2.725E-02	1.973E-02	1.312E-02	4.408E-03
13	1.510E-02	2.394E-02	2.946E-02	2.164E-02	1.391E-02	4.684E-03
16	1.481E-02	2.353E-02	2.821E-02	2.079E-02	1.316E-02	4.454E-03
19	1.411E-02	2.235E-02	2.645E-02	1.940E-02	1.202E-02	4.004E-03
22	1.282E-02	2.042E-02	2.386E-02	1.747E-02	1.053E-02	3.508E-03
25	1.159E-02	1.847E-02	2.099E-02	1.529E-02	9.127E-03	3.051E-03
28	1.041E-02	1.668E-02	1.880E-02	1.343E-02	7.908E-03	2.624E-03
31	9.223E-03	1.481E-02	1.650E-02	1.203E-02	6.962E-03	2.269E-03
34	8.356E-03	1.341E-02	1.472E-02	1.052E-02	6.005E-03	1.982E-03
37	7.440E-03	1.198E-02	1.315E-02	9.144E-03	5.216E-03	1.701E-03
40	6.800E-03	1.096E-02	1.160E-02	8.150E-03	4.591E-03	1.473E-03
43	6.031E-03	9.885E-03	3.167E-02	7.184E-03	4.043E-03	1.266E-03
46	5.386E-03	8.695E-03	9.235E-03	6.355E-03	3.487E-03	1.131E-03
49	4.805E-03	7.814E-03	8.422E-03	5.603E-03	3.038E-03	9.680E-04
52	4.466E-03	7.041E-03	7.356E-03	4.932E-03	2.659E-03	8.417E-04
55	4.010E-03	6.375E-03	6.622E-03	4.422E-03	2.355E-03	7.257E-04
58	3.646E-03	5.739E-03	5.898E-03	3.928E-03	2.090E-03	6.407E-04
61	3.281E-03	5.298E-03	5.304E-03	3.427E-03	1.842E-03	5.429E-04
64	3.030E-03	4.775E-03	4.791E-03	3.168E-03	1.603E-03	4.782E-04
67	2.773E-03	4.352E-03	4.361E-03	2.772E-03	1.429E-03	4.312E-04
70	2.458E-03	4.016E-03	3.840E-03	2.437E-03	1.238E-03	3.655E-04
73	2.234E-03	3.541E-03	3.461E-03	2.215E-03	1.114E-03	3.275E-04
76	2.037E-03	3.287E-03	3.167E-03	1.953E-03	9.786E-04	2.751E-04
79	1.878E-03	2.981E-03	2.841E-03	1.726E-03	8.556E-04	2.447E-04
82	1.675E-03	2.673E-03	2.581E-03	1.569E-03	7.482E-04	2.174E-04
85	1.531E-03	2.347E-03	2.294E-03	1.380E-03	6.578E-04	1.936E-04
88	1.377E-03	2.165E-03	2.035E-03	1.233E-03	5.755E-04	1.673E-04
91	1.281E-03	1.936E-03	1.846E-03	1.113E-03	5.049E-04	1.477E-04
94	1.125E-03	1.765E-03	1.725E-03	9.626E-04	4.475E-04	1.255E-04
97	1.047E-03	1.602E-03	1.508E-03	9.142E-04	4.056E-04	1.107E-04
100	9.726E-04	1.533E-03	1.375E-03	7.780E-04	3.598E-04	8.901E-05
103	8.393E-04	1.381E-03	1.195E-03	6.687E-04	3.204E-04	8.505E-05
106	7.906E-04	1.257E-03	1.118E-03	6.161E-04	2.610E-04	7.095E-05
109	7.128E-04	1.123E-03	9.691E-04	5.240E-04	2.251E-04	6.283E-05
112	6.742E-04	1.022E-03	8.826E-04	4.855E-04	2.084E-04	5.409E-05
115	5.968E-04	9.129E-04	8.260E-04	4.180E-04	1.744E-04	4.566E-05
118	5.327E-04	8.142E-04	7.265E-04	3.666E-04	1.493E-04	3.817E-05
121	4.635E-04	7.645E-04	6.100E-04	3.076E-04	1.336E-04	3.190E-05
124	4.237E-04	6.855E-04	6.034E-04	2.795E-04	1.135E-04	2.541E-05
127	3.720E-04	6.060E-04	5.200E-04	2.414E-04	9.366E-05	2.696E-05
130	3.383E-04	4.979E-04	4.232E-04	2.093E-04	7.903E-05	2.049E-05
133	3.028E-04	4.629E-04	3.658E-04	1.935E-04	6.237E-05	1.770E-05
136	2.721E-04	4.363E-04	3.365E-04	1.677E-04	5.705E-05	1.625E-05
139	2.516E-04	3.748E-04	3.207E-04	1.548E-04	4.854E-05	1.145E-05
142	1.975E-04	3.084E-04	2.609E-04	1.214E-04	3.924E-05	8.272E-06
145	1.821E-04	3.058E-04	2.315E-04	1.045E-04	3.746E-05	7.003E-06
148	1.603E-04	2.634E-04	1.926E-04	8.241E-05	3.506E-05	6.386E-06
151	1.252E-04	2.526E-04	1.896E-04	7.682E-05	2.388E-05	5.366E-06
154	1.257E-04	1.867E-04	1.458E-04	6.534E-05	2.030E-05	4.628E-06
157	1.053E-04	1.646E-04	1.148E-04	4.743E-05	9.197E-06	2.735E-06
160	8.469E-05	1.344E-04	1.034E-04	3.205E-05	1.352E-05	2.375E-06
163	5.530E-05	1.230E-04	9.707E-05	2.695E-05	8.094E-06	2.574E-06
166	5.493E-05	1.086E-04	7.555E-05	2.426E-05	5.793E-06	1.995E-06
169	4.272E-05	7.401E-05	5.015E-05	1.103E-05	8.320E-06	2.169E-06
172	3.205E-05	6.057E-05	4.241E-05	1.206E-05	3.682E-06	1.239E-06
175	2.413E-05	4.188E-05	2.880E-05	1.036E-05	3.558E-06	5.382E-07
178	1.380E-05	3.161E-05	1.457E-05	6.255E-06	1.850E-06	3.328E-07

TARGET NO. 12 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	2.022E 00	0.0		0.0	
2	7.554E 00	0.0		0.0	
3	1.309E 01	0.0		5.741E-11	
4	1.862E 01	0.0		1.603E-10	
5	2.415E 01	0.0		1.399E-10	
6	2.968E 01	0.0		7.851E-11	
7	3.522E 01	5.876E-01	9.548E-03	5.883E-11	5.617E-13
8	4.075E 01	1.118E 00		4.341E-11	
9	4.628E 01	1.055E 00		3.904E-11	
10	5.181E 01	1.011E 00	2.357E-02	3.576E-11	8.427E-13
11	5.735E 01	1.007E 00		3.470E-11	
12	6.288E 01	1.009E 00		3.420E-11	
13	6.841E 01	1.016E 00	2.582E-02	3.420E-11	8.829E-13
14	7.394E 01	1.013E 00		3.463E-11	
15	7.947E 01	1.007E 00		3.524E-11	
16	8.501E 01	1.007E 00	2.462E-02	3.675E-11	9.048E-13
17	9.054E 01	1.008E 00		3.846E-11	
18	9.607E 01	1.009E 00		4.118E-11	
19	1.016E 02	1.009E 00	2.306E-02	4.392E-11	1.013E-12
20	1.071E 02	1.008E 00		4.674E-11	
21	1.127E 02	1.008E 00		4.969E-11	
22	1.182E 02	1.009E 00	2.073E-02	5.279E-11	1.094E-12
23	1.237E 02	1.005E 00		5.600E-11	
24	1.293E 02	9.987E-01		5.927E-11	
25	1.348E 02	9.981E-01	1.811E-02	6.248E-11	1.131E-12
26	1.403E 02	9.985E-01		6.572E-11	
27	1.459E 02	9.999E-01		6.943E-11	
28	1.514E 02	1.001E 00	1.612E-02	7.315E-11	1.179E-12
29	1.569E 02	1.003E 00		7.691E-11	
30	1.625E 02	1.001E 00		8.067E-11	
31	1.680E 02	9.961E-01	1.419E-02	8.444E-11	1.198E-12
32	1.735E 02	9.951E-01		8.816E-11	
33	1.791E 02	9.963E-01		9.187E-11	
34	1.846E 02	9.942E-01	1.256E-02	9.548E-11	1.199E-12
35	1.901E 02	9.913E-01		9.907E-11	
36	1.957E 02	9.803E-01		1.024E-10	
37	2.012E 02	9.671E-01	1.078E-02	1.047E-10	1.129E-12
38	2.067E 02	9.462E-01		1.033E-10	
39	2.123E 02	9.381E-01		1.062E-10	
40	2.178E 02	9.488E-01	9.439E-03	1.153E-10	1.089E-12

TARGET NO. 12 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	2.233E 02	1.045E 00		1.213E-10	
42	2.288E 02	1.198E 00		1.252E-10	
43	2.344E 02	1.223E 00	1.762E-02	1.291E-10	2.274E-12
44	2.399E 02	1.215E 00		1.329E-10	
45	2.454E 02	1.058E 00		1.363E-10	
46	2.510E 02	9.311E-01	7.277E-03	1.398E-10	1.017E-12
47	2.565E 02	9.525E-01		1.442E-10	
48	2.620E 02	9.790E-01		1.482E-10	
49	2.676E 02	1.015E 00	7.082E-03	1.515E-10	1.073E-12
50	2.731E 02	1.042E 00		1.549E-10	
51	2.786E 02	1.062E 00		1.582E-10	
52	2.842E 02	1.078E 00	6.663E-03	1.615E-10	1.076E-12
53	2.897E 02	1.091E 00		1.648E-10	
54	2.952E 02	1.101E 00		1.687E-10	
55	3.008E 02	1.110E 00	6.160E-03	1.724E-10	1.062E-12
56	3.063E 02	1.119E 00		1.752E-10	
57	3.118E 02	1.127E 00		1.781E-10	
58	3.174E 02	1.134E 00	5.619E-03	1.814E-10	1.019E-12
59	3.229E 02	1.140E 00		1.847E-10	
60	3.284E 02	1.146E 00		1.881E-10	
61	3.340E 02	1.154E 00	5.114E-03	1.918E-10	9.808E-13
62	3.395E 02	1.162E 00		1.956E-10	
63	3.450E 02	1.172E 00		1.990E-10	
64	3.506E 02	1.181E 00	4.737E-03	2.023E-10	9.584E-13
65	3.561E 02	1.190E 00		2.057E-10	
66	3.616E 02	1.198E 00		2.088E-10	
67	3.672E 02	1.203E 00	4.346E-03	2.116E-10	9.196E-13
68	3.727E 02	1.207E 00		2.146E-10	
69	3.782E 02	1.208E 00		2.179E-10	
70	3.838E 02	1.213E 00	3.888E-03	2.209E-10	8.587E-13
71	3.893E 02	1.218E 00		2.236E-10	
72	3.948E 02	1.225E 00		2.269E-10	
73	4.004E 02	1.233E 00	3.553E-03	2.302E-10	8.180E-13
74	4.059E 02	1.242E 00		2.341E-10	
75	4.114E 02	1.251E 00		2.377E-10	
76	4.169E 02	1.256E 00	3.273E-03	2.405E-10	7.871E-13
77	4.225E 02	1.261E 00		2.435E-10	
78	4.280E 02	1.268E 00		2.468E-10	
79	4.335E 02	1.273E 00	2.974E-03	2.494E-10	7.418E-13
80	4.391E 02	1.279E 00		2.516E-10	

TARGET NO. 12 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	4.446E 02	1.287E 00		2.548E-10	
82	4.501E 02	1.296E 00	2.724E-03	2.581E-10	7.029E-13
83	4.557E 02	1.297E 00		2.603E-10	
84	4.612E 02	1.300E 00		2.627E-10	
85	4.667E 02	1.302E 00	2.426E-03	2.660E-10	6.453E-13
86	4.723E 02	1.306E 00		2.691E-10	
87	4.778E 02	1.312E 00		2.719E-10	
88	4.833E 02	1.318E 00	2.201E-03	2.747E-10	6.045E-13
89	4.889E 02	1.326E 00		2.774E-10	
90	4.944E 02	1.333E 00		2.802E-10	
91	4.999E 02	1.340E 00	2.017E-03	2.830E-10	5.708E-13
92	5.055E 02	1.346E 00		2.861E-10	
93	5.110E 02	1.353E 00		2.892E-10	
94	5.165E 02	1.358E 00	1.842E-03	2.923E-10	5.384E-13
95	5.221E 02	1.364E 00		2.954E-10	
96	5.276E 02	1.372E 00		2.982E-10	
97	5.331E 02	1.381E 00	1.700E-03	3.009E-10	5.116E-13
98	5.387E 02	1.390E 00		3.036E-10	
99	5.442E 02	1.399E 00		3.062E-10	
100	5.497E 02	1.407E 00	1.570E-03	3.089E-10	4.850E-13
101	5.553E 02	1.403E 00		3.117E-10	
102	5.608E 02	1.399E 00		3.146E-10	
103	5.663E 02	1.399E 00	1.371E-03	3.175E-10	4.354E-13
104	5.719E 02	1.405E 00		3.204E-10	
105	5.774E 02	1.420E 00		3.231E-10	
106	5.829E 02	1.427E 00	1.278E-03	3.258E-10	4.163E-13
107	5.885E 02	1.426E 00		3.285E-10	
108	5.940E 02	1.422E 00		3.311E-10	
109	5.995E 02	1.417E 00	1.109E-03	3.338E-10	3.702E-13
110	6.051E 02	1.432E 00		3.368E-10	
111	6.106E 02	1.449E 00		3.399E-10	
112	6.161E 02	1.462E 00	1.051E-03	3.430E-10	3.605E-13
113	6.216E 02	1.473E 00		3.461E-10	
114	6.272E 02	1.477E 00		3.490E-10	
115	6.327E 02	1.481E 00	9.516E-04	3.517E-10	3.347E-13
116	6.382E 02	1.485E 00		3.544E-10	
117	6.438E 02	1.486E 00		3.570E-10	
118	6.493E 02	1.484E 00	8.404E-04	3.597E-10	3.022E-13
119	6.548E 02	1.481E 00		3.623E-10	
120	6.604E 02	1.479E 00		3.650E-10	

TARGET NO. 12 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	6.659E 02	1.487E 00	7.354E-04	3.676E-10	2.704E-13
122	6.714E 02	1.499E 00		3.703E-10	
123	6.770E 02	1.525E 00		3.729E-10	
124	6.825E 02	1.541E 00	7.053E-04	3.756E-10	2.649E-13
125	6.880E 02	1.546E 00		3.783E-10	
126	6.936E 02	1.545E 00		3.809E-10	
127	6.991E 02	1.540E 00	6.132E-04	3.836E-10	2.352E-13
128	7.046E 02	1.525E 00		3.868E-10	
129	7.102E 02	1.508E 00		3.901E-10	
130	7.157E 02	1.498E 00	5.002E-04	3.934E-10	1.968E-13
131	7.212E 02	1.493E 00		3.967E-10	
132	7.268E 02	1.504E 00		3.998E-10	
133	7.323E 02	1.519E 00	4.524E-04	4.022E-10	1.819E-13
134	7.378E 02	1.538E 00		4.046E-10	
135	7.434E 02	1.559E 00		4.071E-10	
136	7.489E 02	1.580E 00	4.296E-04	4.095E-10	1.759E-13
137	7.544E 02	1.601E 00		4.123E-10	
138	7.600E 02	1.622E 00		4.152E-10	
139	7.655E 02	1.618E 00	3.990E-04	4.181E-10	1.668E-13
140	7.710E 02	1.607E 00		4.209E-10	
141	7.766E 02	1.565E 00		4.237E-10	
142	7.821E 02	1.546E 00	3.072E-04	4.261E-10	1.309E-13
143	7.876E 02	1.564E 00		4.286E-10	
144	7.932E 02	1.587E 00		4.310E-10	
145	7.987E 02	1.615E 00	2.952E-04	4.334E-10	1.280E-13
146	8.042E 02	1.617E 00		4.364E-10	
147	8.097E 02	1.611E 00		4.395E-10	
148	8.153E 02	1.622E 00	2.510E-04	4.426E-10	1.111E-13
149	8.208E 02	1.638E 00		4.457E-10	
150	8.263E 02	1.682E 00		4.486E-10	
151	8.319E 02	1.707E 00	2.432E-04	4.510E-10	1.097E-13
152	8.374E 02	1.698E 00		4.535E-10	
153	8.429E 02	1.679E 00		4.559E-10	
154	8.485E 02	1.651E 00	1.889E-04	4.583E-10	8.658E-14
155	8.540E 02	1.628E 00		4.609E-10	
156	8.595E 02	1.608E 00		4.636E-10	
157	8.651E 02	1.597E 00	1.454E-04	4.662E-10	6.780E-14
158	8.706E 02	1.590E 00		4.689E-10	
159	8.761E 02	1.599E 00		4.715E-10	
160	8.817E 02	1.614E 00	1.232E-04	4.739E-10	5.838E-14

TARGET NO. 12 INCIDENT ELECTRON ENERGY 1.0 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
161	8.872E 02	1.642E 00		4.764E-10	
162	8.927E 02	1.672E 00		4.788E-10	
163	8.983E 02	1.703E 00	1.120E-04	4.812E-10	5.392E-14
164	9.038E 02	1.737E 00		4.840E-10	
165	9.093E 02	1.771E 00		4.869E-10	
166	9.149E 02	1.763E 00	9.857E-05	4.897E-10	4.827E-14
167	9.204E 02	1.745E 00		4.926E-10	
168	9.259E 02	1.663E 00		4.954E-10	
169	9.315E 02	1.609E 00	6.152E-05	4.978E-10	3.062E-14
170	9.370E 02	1.629E 00		5.003E-10	
171	9.425E 02	1.658E 00		5.027E-10	
172	9.481E 02	1.695E 00	5.281E-05	5.051E-10	2.668E-14
173	9.536E 02	1.712E 00		5.077E-10	
174	9.591E 02	1.718E 00		5.104E-10	
175	9.647E 02	1.708E 00	3.839E-05	5.130E-10	1.969E-14
176	9.702E 02	1.695E 00		5.157E-10	
177	9.757E 02	1.643E 00		5.183E-10	
178	9.813E 02	1.638E 00	2.262E-05	5.208E-10	1.178E-14
179	9.868E 02	1.791E 00		5.232E-10	
180	9.923E 02	1.445E 00		5.256E-10	
181	9.978E 02	4.044E-01	4.754E-06	5.281E-10	2.510E-15
182	1.003E 03	0.0		5.305E-10	

DOSE= 5.707E-13 R-SQ.CM./ELECTRON

TARGET NO. 1 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
6	9.522E-02	1.721E-01	1.908E-01	1.554E-01	9.035E-02	3.120E-02
9	9.196E-02	1.582E-01	1.706E-01	1.379E-01	8.518E-02	2.951E-02
12	7.518E-02	1.244E-01	1.342E-01	1.077E-01	6.530E-02	2.272E-02
15	6.067E-02	9.857E-02	1.067E-01	8.343E-02	5.022E-02	1.742E-02
18	4.995E-02	7.963E-02	8.469E-02	6.616E-02	3.918E-02	1.342E-02
21	4.116E-02	6.573E-02	6.924E-02	5.347E-02	3.091E-02	1.054E-02
24	3.375E-02	5.437E-02	5.626E-02	4.355E-02	2.493E-02	8.421E-03
27	2.850E-02	4.649E-02	4.654E-02	3.476E-02	2.044E-02	6.629E-03
30	2.495E-02	3.815E-02	3.889E-02	2.908E-02	1.622E-02	5.292E-03
33	2.096E-02	3.351E-02	3.344E-02	2.437E-02	1.352E-02	4.501E-03
36	1.787E-02	2.799E-02	2.773E-02	2.055E-02	1.119E-02	3.570E-03
39	1.569E-02	2.491E-02	2.372E-02	1.733E-02	9.349E-03	2.977E-03
42	1.380E-02	2.132E-02	1.995E-02	1.453E-02	7.933E-03	2.526E-03
45	1.192E-02	1.847E-02	1.760E-02	1.221E-02	6.600E-03	2.155E-03
48	1.064E-02	1.650E-02	1.533E-02	1.063E-02	5.820E-03	1.808E-03
51	9.075E-03	1.377E-02	1.364E-02	9.414E-03	5.008E-03	1.538E-03
54	8.459E-03	1.233E-02	1.188E-02	8.043E-03	4.212E-03	1.300E-03
57	7.419E-03	1.089E-02	1.043E-02	7.028E-03	3.511E-03	1.143E-03
60	6.732E-03	9.884E-03	9.056E-03	6.507E-03	3.184E-03	9.992E-04
63	6.079E-03	9.154E-03	8.056E-03	5.604E-03	2.774E-03	8.875E-04
66	5.597E-03	7.754E-03	7.108E-03	4.799E-03	2.356E-03	7.728E-04
69	4.932E-03	7.404E-03	6.385E-03	4.046E-03	2.039E-03	6.462E-04
72	4.496E-03	6.446E-03	5.871E-03	3.768E-03	1.778E-03	5.512E-04
75	4.152E-03	5.578E-03	5.131E-03	3.271E-03	1.530E-03	5.176E-04
78	3.688E-03	5.173E-03	4.673E-03	2.900E-03	1.306E-03	4.066E-04
81	3.395E-03	4.663E-03	4.097E-03	2.677E-03	1.242E-03	3.710E-04
84	3.211E-03	4.304E-03	3.531E-03	2.163E-03	1.026E-03	3.060E-04
87	2.848E-03	4.005E-03	3.186E-03	1.948E-03	8.573E-04	2.748E-04
90	2.569E-03	3.375E-03	2.828E-03	1.794E-03	8.451E-04	2.384E-04
93	2.345E-03	3.284E-03	2.503E-03	1.544E-03	7.123E-04	1.980E-04
96	2.040E-03	2.857E-03	2.344E-03	1.428E-03	6.209E-04	1.439E-04
99	1.882E-03	2.538E-03	1.980E-03	1.209E-03	5.011E-04	1.255E-04
102	1.699E-03	2.297E-03	1.774E-03	1.114E-03	4.089E-04	1.294E-04
105	1.546E-03	2.015E-03	1.550E-03	8.601E-04	3.616E-04	1.061E-04
108	1.423E-03	1.957E-03	1.409E-03	7.774E-04	3.060E-04	7.690E-05
111	1.257E-03	1.700E-03	1.156E-03	6.141E-04	2.760E-04	6.333E-05
114	1.055E-03	1.492E-03	1.117E-03	5.579E-04	1.855E-04	4.904E-05
117	1.027E-03	1.195E-03	9.517E-04	4.173E-04	1.657E-04	3.914E-05
120	9.161E-04	1.197E-03	7.539E-04	3.839E-04	1.284E-04	2.794E-05
123	8.236E-04	8.304E-04	6.060E-04	3.057E-04	1.256E-04	2.085E-05
126	5.892E-04	7.800E-04	6.288E-04	2.410E-04	9.620E-05	1.882E-05
129	6.058E-04	6.469E-04	4.602E-04	2.454E-04	5.226E-05	1.153E-05
132	4.909E-04	5.927E-04	2.884E-04	1.469E-04	3.549E-05	1.193E-05
135	4.756E-04	4.969E-04	2.534E-04	1.246E-04	3.834E-05	5.990E-06
138	3.465E-04	4.392E-04	2.208E-04	8.766E-05	1.779E-05	4.351E-06
141	2.753E-04	3.174E-04	1.587E-04	5.640E-05	1.485E-05	3.405E-06
144	2.044E-04	2.645E-04	1.093E-04	6.185E-05	1.054E-05	8.703E-07
147	1.634E-04	1.340E-04	7.389E-05	2.249E-05	2.936E-06	1.293E-06
150	1.110E-04	9.521E-05	4.919E-05	3.374E-07	1.468E-06	2.535E-08
153	3.434E-05	6.347E-05	3.520E-05	5.960E-06	1.761E-07	0.0

TARGET NO. 1 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.470E-01		4.623E-11	
6	1.225E 02	9.058E-01	1.559E-01	5.526E-11	8.616E-12
7	1.388E 02	9.890E-01		6.482E-11	
8	1.552E 02	9.769E-01		7.572E-11	
9	1.715E 02	9.857E-01	1.546E-01	8.682E-11	1.342E-11
10	1.879E 02	9.869E-01		9.762E-11	
11	2.042E 02	9.894E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.230E-01	1.194E-10	1.469E-11
13	2.369E 02	1.011E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.042E 00	1.006E-01	1.528E-10	1.536E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.088E 00		1.732E-10	
18	3.187E 02	1.106E 00	8.492E-02	1.822E-10	1.547E-11
19	3.350E 02	1.127E 00		1.925E-10	
20	3.513E 02	1.150E 00		2.028E-10	
21	3.677E 02	1.166E 00	7.266E-02	2.118E-10	1.539E-11
22	3.840E 02	1.183E 00		2.210E-10	
23	4.004E 02	1.201E 00		2.303E-10	
24	4.167E 02	1.213E 00	6.164E-02	2.404E-10	1.482E-11
25	4.331E 02	1.228E 00		2.492E-10	
26	4.494E 02	1.246E 00		2.577E-10	
27	4.658E 02	1.259E 00	5.272E-02	2.655E-10	1.400E-11
28	4.821E 02	1.273E 00		2.741E-10	
29	4.985E 02	1.290E 00		2.822E-10	
30	5.148E 02	1.303E 00	4.524E-02	2.913E-10	1.318E-11
31	5.312E 02	1.318E 00		3.000E-10	
32	5.475E 02	1.336E 00		3.078E-10	
33	5.639E 02	1.349E 00	3.994E-02	3.162E-10	1.263E-11
34	5.802E 02	1.361E 00		3.245E-10	
35	5.966E 02	1.370E 00		3.324E-10	
36	6.129E 02	1.381E 00	3.411E-02	3.412E-10	1.164E-11
37	6.293E 02	1.393E 00		3.500E-10	
38	6.456E 02	1.412E 00		3.579E-10	
39	6.620E 02	1.424E 00	3.020E-02	3.657E-10	1.105E-11
40	6.783E 02	1.434E 00		3.736E-10	

TARGET NO. 1 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.444E 00		3.814E-10	
42	7.110E 02	1.452E 00	2.612E-02	3.906E-10	1.020E-11
43	7.273E 02	1.460E 00		4.000E-10	
44	7.437E 02	1.468E 00		4.072E-10	
45	7.600E 02	1.479E 00	2.288E-02	4.152E-10	9.501E-12
46	7.764E 02	1.493E 00		4.236E-10	
47	7.927E 02	1.508E 00		4.308E-10	
48	8.091E 02	1.522E 00	2.067E-02	4.391E-10	9.078E-12
49	8.254E 02	1.534E 00		4.482E-10	
50	8.418E 02	1.543E 00		4.554E-10	
51	8.581E 02	1.554E 00	1.832E-02	4.629E-10	8.480E-12
52	8.745E 02	1.565E 00		4.707E-10	
53	8.908E 02	1.578E 00		4.780E-10	
54	9.072E 02	1.590E 00	1.639E-02	4.857E-10	7.960E-12
55	9.235E 02	1.602E 00		4.942E-10	
56	9.399E 02	1.609E 00		5.015E-10	
57	9.562E 02	1.620E 00	1.457E-02	5.090E-10	7.416E-12
58	9.726E 02	1.636E 00		5.168E-10	
59	9.889E 02	1.652E 00		5.241E-10	
60	1.005E 03	1.667E 00	1.348E-02	5.313E-10	7.164E-12
61	1.022E 03	1.683E 00		5.385E-10	
62	1.038E 03	1.698E 00		5.457E-10	
63	1.054E 03	1.711E 00	1.232E-02	5.529E-10	6.810E-12
64	1.071E 03	1.719E 00		5.601E-10	
65	1.087E 03	1.722E 00		5.668E-10	
66	1.103E 03	1.726E 00	1.079E-02	5.735E-10	6.188E-12
67	1.120E 03	1.741E 00		5.807E-10	
68	1.136E 03	1.754E 00		5.874E-10	
69	1.152E 03	1.767E 00	9.848E-03	5.941E-10	5.850E-12
70	1.169E 03	1.787E 00		6.012E-10	
71	1.185E 03	1.807E 00		6.080E-10	
72	1.201E 03	1.825E 00	9.182E-03	6.145E-10	5.643E-12
73	1.218E 03	1.832E 00		6.204E-10	
74	1.234E 03	1.836E 00		6.267E-10	
75	1.250E 03	1.838E 00	8.106E-03	6.332E-10	5.132E-12
76	1.267E 03	1.857E 00		6.391E-10	
77	1.283E 03	1.872E 00		6.449E-10	
78	1.300E 03	1.884E 00	7.459E-03	6.508E-10	4.854E-12
79	1.316E 03	1.907E 00		6.567E-10	
80	1.332E 03	1.928E 00		6.629E-10	

TARGET NO. 2 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	9.391E-02	1.564E-01	1.844E-01	1.473E-01	8.562E-02
9	9.071E-02	1.412E-01	1.672E-01	1.308E-01	8.265E-02
12	7.383E-02	1.147E-01	1.324E-01	1.027E-01	6.307E-02
15	6.039E-02	9.138E-02	1.053E-01	8.060E-02	4.915E-02
18	4.924E-02	7.383E-02	8.385E-02	6.382E-02	3.849E-02
21	4.068E-02	6.075E-02	6.794E-02	5.114E-02	3.017E-02
24	3.451E-02	5.099E-02	5.600E-02	4.122E-02	2.414E-02
27	2.884E-02	4.177E-02	4.655E-02	3.346E-02	1.969E-02
30	2.513E-02	3.601E-02	3.885E-02	2.791E-02	1.584E-02
33	2.128E-02	3.069E-02	3.250E-02	2.293E-02	1.335E-02
36	1.810E-02	2.608E-02	2.739E-02	1.932E-02	1.084E-02
39	1.623E-02	2.281E-02	2.337E-02	1.629E-02	9.052E-03
42	1.380E-02	1.976E-02	2.068E-02	1.403E-02	7.583E-03
45	1.226E-02	1.738E-02	1.741E-02	1.231E-02	6.389E-03
48	1.064E-02	1.530E-02	1.527E-02	1.028E-02	5.468E-03
51	9.707E-03	1.310E-02	1.338E-02	8.832E-03	4.796E-03
54	8.520E-03	1.221E-02	1.152E-02	7.642E-03	4.013E-03
57	7.604E-03	1.021E-02	1.038E-02	6.607E-03	3.498E-03
60	6.894E-03	9.098E-03	8.937E-03	5.870E-03	3.040E-03
63	6.008E-03	8.217E-03	8.109E-03	5.059E-03	2.637E-03
66	5.614E-03	7.362E-03	7.136E-03	4.437E-03	2.303E-03
69	5.061E-03	6.762E-03	6.304E-03	4.173E-03	1.996E-03
72	4.687E-03	6.109E-03	5.483E-03	3.452E-03	1.775E-03
75	4.191E-03	5.523E-03	4.948E-03	3.242E-03	1.519E-03
78	3.833E-03	5.062E-03	4.503E-03	2.688E-03	1.309E-03
81	3.601E-03	4.386E-03	3.948E-03	2.511E-03	1.184E-03
84	3.181E-03	3.932E-03	3.820E-03	2.196E-03	1.016E-03
87	2.785E-03	3.570E-03	3.257E-03	1.888E-03	9.932E-04
90	2.582E-03	3.265E-03	2.774E-03	1.664E-03	7.869E-04
93	2.384E-03	3.204E-03	2.579E-03	1.413E-03	7.031E-04
96	2.180E-03	2.682E-03	2.236E-03	1.262E-03	5.771E-04
99	1.972E-03	2.548E-03	2.041E-03	1.133E-03	4.728E-04
102	1.712E-03	2.210E-03	1.905E-03	9.580E-04	4.148E-04
105	1.497E-03	1.876E-03	1.635E-03	7.736E-04	3.206E-04
108	1.456E-03	1.704E-03	1.371E-03	7.827E-04	2.857E-04
111	1.269E-03	1.615E-03	1.330E-03	6.247E-04	2.421E-04
114	1.114E-03	1.352E-03	1.022E-03	5.488E-04	1.833E-04
117	1.037E-03	1.252E-03	9.144E-04	4.876E-04	1.533E-04
120	8.697E-04	1.076E-03	6.622E-04	3.880E-04	1.436E-04
123	7.844E-04	8.722E-04	6.780E-04	2.466E-04	8.705E-05
126	7.063E-04	8.214E-04	5.350E-04	2.124E-04	8.521E-05
129	6.519E-04	4.718E-04	4.272E-04	2.145E-04	7.507E-05
132	5.556E-04	5.688E-04	3.996E-04	1.527E-04	4.282E-05
135	4.585E-04	4.609E-04	3.170E-04	1.267E-04	3.417E-05
138	3.473E-04	3.501E-04	1.871E-04	9.908E-05	2.419E-05
141	3.361E-04	3.148E-04	1.566E-04	7.361E-05	1.696E-05
144	1.989E-04	2.604E-04	1.146E-04	4.780E-05	1.131E-05
147	1.487E-04	1.236E-04	8.630E-05	1.985E-05	2.826E-06
150	1.216E-04	8.247E-05	5.431E-05	1.985E-05	-1.244E-06
153	6.188E-05	3.772E-05	2.232E-05	5.623E-06	8.479E-08

TARGET NO. 2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.468E-01		4.623E-11	
6	1.225E 02	9.050E-01	1.568E-01	5.526E-11	8.663E-12
7	1.388E 02	9.882E-01		6.482E-11	
8	1.552E 02	9.762E-01		7.572E-11	
9	1.715E 02	9.849E-01	1.561E-01	8.682E-11	1.355E-11
10	1.879E 02	9.863E-01		9.762E-11	
11	2.042E 02	9.889E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.252E-01	1.194E-10	1.495E-11
13	2.369E 02	1.011E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.043E 00	1.032E-01	1.528E-10	1.577E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.107E 00	8.725E-02	1.822E-10	1.590E-11
19	3.350E 02	1.128E 00		1.925E-10	
20	3.513E 02	1.150E 00		2.028E-10	
21	3.677E 02	1.164E 00	7.404E-02	2.118E-10	1.569E-11
22	3.840E 02	1.182E 00		2.210E-10	
23	4.004E 02	1.201E 00		2.303E-10	
24	4.167E 02	1.214E 00	6.329E-02	2.404E-10	1.521E-11
25	4.331E 02	1.229E 00		2.492E-10	
26	4.494E 02	1.245E 00		2.577E-10	
27	4.658E 02	1.257E 00	5.386E-02	2.655E-10	1.430E-11
28	4.821E 02	1.273E 00		2.741E-10	
29	4.985E 02	1.293E 00		2.822E-10	
30	5.148E 02	1.306E 00	4.686E-02	2.913E-10	1.365E-11
31	5.312E 02	1.320E 00		3.000E-10	
32	5.475E 02	1.334E 00		3.078E-10	
33	5.639E 02	1.345E 00	4.041E-02	3.162E-10	1.278E-11
34	5.802E 02	1.357E 00		3.245E-10	
35	5.966E 02	1.369E 00		3.324E-10	
36	6.129E 02	1.381E 00	3.483E-02	3.412E-10	1.189E-11
37	6.293E 02	1.393E 00		3.500E-10	
38	6.456E 02	1.409E 00		3.579E-10	
39	6.620E 02	1.421E 00	3.067E-02	3.657E-10	1.122E-11
40	6.783E 02	1.432E 00		3.736E-10	

TARGET NO. 2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.446E 00		3.814E-10	
42	7.110E 02	1.456E 00	2.720E-02	3.906E-10	1.062E-11
43	7.273E 02	1.465E 00		4.000E-10	
44	7.437E 02	1.474E 00		4.072E-10	
45	7.600E 02	1.484E 00	2.391E-02	4.152E-10	9.930E-12
46	7.764E 02	1.496E 00		4.236E-10	
47	7.927E 02	1.506E 00		4.308E-10	
48	8.091E 02	1.518E 00	2.110E-02	4.391E-10	9.264E-12
49	8.254E 02	1.530E 00		4.482E-10	
50	8.418E 02	1.542E 00		4.554E-10	
51	8.581E 02	1.554E 00	1.883E-02	4.629E-10	8.714E-12
52	8.745E 02	1.567E 00		4.707E-10	
53	8.908E 02	1.579E 00		4.780E-10	
54	9.072E 02	1.592E 00	1.686E-02	4.857E-10	8.190E-12
55	9.235E 02	1.604E 00		4.942E-10	
56	9.399E 02	1.614E 00		5.015E-10	
57	9.562E 02	1.625E 00	1.503E-02	5.090E-10	7.652E-12
58	9.726E 02	1.638E 00		5.168E-10	
59	9.889E 02	1.647E 00		5.241E-10	
60	1.005E 03	1.659E 00	1.349E-02	5.313E-10	7.170E-12
61	1.022E 03	1.673E 00		5.385E-10	
62	1.038E 03	1.686E 00		5.457E-10	
63	1.054E 03	1.698E 00	1.225E-02	5.529E-10	6.772E-12
64	1.071E 03	1.711E 00		5.601E-10	
65	1.087E 03	1.720E 00		5.668E-10	
66	1.103E 03	1.729E 00	1.106E-02	5.735E-10	6.345E-12
67	1.120E 03	1.748E 00		5.807E-10	
68	1.136E 03	1.766E 00		5.874E-10	
69	1.152E 03	1.783E 00	1.032E-02	5.941E-10	6.128E-12
70	1.169E 03	1.791E 00		6.012E-10	
71	1.185E 03	1.795E 00		6.080E-10	
72	1.201E 03	1.799E 00	9.105E-03	6.145E-10	5.595E-12
73	1.218E 03	1.819E 00		6.204E-10	
74	1.234E 03	1.839E 00		6.267E-10	
75	1.250E 03	1.857E 00	8.506E-03	6.332E-10	5.386E-12
76	1.267E 03	1.868E 00		6.391E-10	
77	1.283E 03	1.876E 00		6.449E-10	
78	1.300E 03	1.881E 00	7.639E-03	6.508E-10	4.972E-12
79	1.316E 03	1.899E 00		6.567E-10	
80	1.332E 03	1.914E 00		6.629E-10	

TARGET NO. 2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.925E 00	7.016E-03	6.694E-10	4.697E-12
82	1.365E 03	1.946E 00		6.754E-10	
83	1.381E 03	1.967E 00		6.813E-10	
84	1.398E 03	1.987E 00	6.571E-03	6.871E-10	4.515E-12
85	1.414E 03	1.996E 00		6.975E-10	
86	1.430E 03	2.003E 00		7.073E-10	
87	1.447E 03	2.009E 00	5.863E-03	7.145E-10	4.189E-12
88	1.463E 03	2.014E 00		7.202E-10	
89	1.479E 03	2.019E 00		7.256E-10	
90	1.496E 03	2.022E 00	5.159E-03	7.315E-10	3.774E-12
91	1.512E 03	2.047E 00		7.373E-10	
92	1.528E 03	2.078E 00		7.434E-10	
93	1.545E 03	2.102E 00	4.930E-03	7.499E-10	3.697E-12
94	1.561E 03	2.105E 00		7.560E-10	
95	1.577E 03	2.100E 00		7.620E-10	
96	1.594E 03	2.098E 00	4.260E-03	7.685E-10	3.274E-12
97	1.610E 03	2.116E 00		7.746E-10	
98	1.626E 03	2.145E 00		7.805E-10	
99	1.643E 03	2.168E 00	3.998E-03	7.864E-10	3.144E-12
100	1.659E 03	2.188E 00		7.927E-10	
101	1.676E 03	2.205E 00		7.992E-10	
102	1.692E 03	2.215E 00	3.615E-03	8.051E-10	2.910E-12
103	1.708E 03	2.214E 00		8.106E-10	
104	1.725E 03	2.202E 00		8.159E-10	
105	1.741E 03	2.203E 00	3.020E-03	8.198E-10	2.476E-12
106	1.757E 03	2.222E 00		8.246E-10	
107	1.774E 03	2.262E 00		8.305E-10	
108	1.790E 03	2.297E 00	2.870E-03	8.364E-10	2.400E-12
109	1.806E 03	2.331E 00		8.425E-10	
110	1.823E 03	2.365E 00		8.491E-10	
111	1.839E 03	2.380E 00	2.689E-03	8.545E-10	2.298E-12
112	1.855E 03	2.379E 00		8.595E-10	
113	1.872E 03	2.353E 00		8.641E-10	
114	1.888E 03	2.357E 00	2.186E-03	8.687E-10	1.899E-12
115	1.904E 03	2.380E 00		8.734E-10	
116	1.921E 03	2.435E 00		8.786E-10	
117	1.937E 03	2.467E 00	2.067E-03	8.839E-10	1.827E-12
118	1.953E 03	2.481E 00		8.892E-10	
119	1.970E 03	2.460E 00		8.951E-10	
120	1.986E 03	2.451E 00	1.657E-03	8.997E-10	1.491E-12

TARGET NO. 2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.451E 00		9.038E-10	
122	2.019E 03	2.460E 00		9.090E-10	
123	2.035E 03	2.484E 00	1.401E-03	9.138E-10	1.281E-12
124	2.052E 03	2.518E 00		9.184E-10	
125	2.068E 03	2.563E 00		9.230E-10	
126	2.084E 03	2.583E 00	1.271E-03	9.268E-10	1.178E-12
127	2.101E 03	2.581E 00		9.302E-10	
128	2.117E 03	2.536E 00		9.361E-10	
129	2.133E 03	2.534E 00	9.812E-04	9.416E-10	9.239E-13
130	2.150E 03	2.574E 00		9.469E-10	
131	2.166E 03	2.661E 00		9.515E-10	
132	2.182E 03	2.726E 00	9.632E-04	9.534E-10	9.184E-13
133	2.199E 03	2.761E 00		9.521E-10	
134	2.215E 03	2.772E 00		9.634E-10	
135	2.231E 03	2.762E 00	7.907E-04	9.728E-10	7.691E-13
136	2.248E 03	2.724E 00		9.774E-10	
137	2.264E 03	2.644E 00		9.819E-10	
138	2.280E 03	2.608E 00	5.277E-04	2.916E-09	1.539E-12
139	2.297E 03	2.675E 00		8.772E-09	
140	2.313E 03	2.785E 00		5.266E-09	
141	2.329E 03	2.881E 00	5.028E-04	1.012E-09	5.087E-13
142	2.346E 03	2.910E 00		1.018E-09	
143	2.362E 03	2.913E 00		1.025E-09	
144	2.378E 03	2.896E 00	3.625E-04	1.031E-09	3.738E-13
145	2.395E 03	2.835E 00		1.038E-09	
146	2.411E 03	2.725E 00		1.049E-09	
147	2.428E 03	2.634E 00	1.927E-04	1.061E-09	2.044E-13
148	2.444E 03	2.774E 00		1.068E-09	
149	2.460E 03	2.973E 00		1.074E-09	
150	2.477E 03	3.196E 00	1.653E-04	1.081E-09	1.786E-13
151	2.493E 03	3.316E 00		1.087E-09	
152	2.509E 03	2.120E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.524E-11 R-SQ.CM./ELECTRON

TARGET NO. 3 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	9.500E-02	1.657E-01	1.960E-01	1.626E-01	8.764E-02
9	9.305E-02	1.527E-01	1.761E-01	1.436E-01	8.514E-02
12	7.442E-02	1.218E-01	1.385E-01	1.113E-01	6.528E-02
15	6.052E-02	9.746E-02	1.081E-01	8.722E-02	5.051E-02
18	4.910E-02	7.842E-02	8.742E-02	6.906E-02	3.897E-02
21	4.156E-02	6.413E-02	7.048E-02	5.557E-02	3.095E-02
24	3.482E-02	5.288E-02	5.776E-02	4.403E-02	2.482E-02
27	2.890E-02	4.445E-02	4.813E-02	3.670E-02	2.038E-02
30	2.491E-02	3.826E-02	4.005E-02	2.970E-02	1.653E-02
33	2.069E-02	3.253E-02	3.442E-02	2.522E-02	1.344E-02
36	1.792E-02	2.745E-02	2.910E-02	2.096E-02	1.114E-02
39	1.568E-02	2.335E-02	2.460E-02	1.766E-02	9.414E-03
42	1.390E-02	2.054E-02	2.058E-02	1.502E-02	8.064E-03
45	1.230E-02	1.797E-02	1.809E-02	1.280E-02	6.795E-03
48	1.088E-02	1.612E-02	1.596E-02	1.084E-02	5.729E-03
51	9.415E-03	1.346E-02	1.343E-02	9.519E-03	4.807E-03
54	8.116E-03	1.237E-02	1.193E-02	8.259E-03	4.147E-03
57	7.620E-03	1.111E-02	1.063E-02	7.357E-03	3.649E-03
60	6.851E-03	9.513E-03	9.605E-03	6.325E-03	3.062E-03
63	5.951E-03	8.507E-03	8.250E-03	5.575E-03	2.678E-03
66	5.402E-03	8.031E-03	7.052E-03	4.910E-03	2.355E-03
69	4.838E-03	7.079E-03	6.428E-03	4.269E-03	2.061E-03
72	4.667E-03	6.591E-03	6.101E-03	4.135E-03	1.812E-03
75	4.187E-03	5.626E-03	5.486E-03	3.537E-03	1.542E-03
78	3.689E-03	5.151E-03	4.786E-03	3.071E-03	1.397E-03
81	3.330E-03	4.625E-03	4.100E-03	2.776E-03	1.160E-03
84	3.038E-03	4.100E-03	3.781E-03	2.410E-03	1.049E-03
87	2.830E-03	4.019E-03	3.262E-03	2.059E-03	8.615E-04
90	2.482E-03	3.401E-03	2.892E-03	1.935E-03	8.161E-04
93	2.256E-03	3.213E-03	2.466E-03	1.568E-03	6.942E-04
96	2.055E-03	2.814E-03	2.362E-03	1.477E-03	6.060E-04
99	1.898E-03	2.393E-03	2.249E-03	1.286E-03	5.327E-04
102	1.655E-03	2.102E-03	1.699E-03	1.007E-03	4.547E-04
105	1.596E-03	1.968E-03	1.681E-03	9.167E-04	3.980E-04
108	1.457E-03	1.895E-03	1.364E-03	7.804E-04	2.803E-04
111	1.228E-03	1.650E-03	1.083E-03	6.228E-04	2.750E-04
114	1.148E-03	1.420E-03	1.014E-03	6.666E-04	1.955E-04
117	1.030E-03	1.337E-03	9.370E-04	4.472E-04	1.587E-04
120	8.722E-04	1.198E-03	7.672E-04	3.803E-04	1.570E-04
123	8.139E-04	9.759E-04	6.482E-04	2.932E-04	1.113E-04
126	7.156E-04	8.016E-04	6.513E-04	2.620E-04	8.393E-05
129	5.743E-04	7.362E-04	4.713E-04	2.303E-04	6.755E-05
132	5.083E-04	5.788E-04	2.935E-04	1.428E-04	5.248E-05
135	4.342E-04	5.114E-04	2.801E-04	1.335E-04	3.145E-05
138	3.130E-04	3.682E-04	2.058E-04	8.074E-05	2.987E-05
141	2.899E-04	2.950E-04	1.780E-04	6.832E-05	2.689E-05
144	2.360E-04	2.904E-04	1.476E-04	5.279E-05	4.557E-06
147	1.723E-04	1.487E-04	1.061E-04	1.863E-05	1.042E-05
150	1.144E-04	8.879E-05	4.573E-05	1.553E-05	8.934E-08
153	6.090E-05	4.605E-05	1.155E-05	6.211E-06	6.046E-06

TARGET NO. 3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.470E-01		4.623E-11	
6	1.225E 02	9.055E-01	1.669E-01	5.526E-11	9.224E-12
7	1.388E 02	9.889E-01		6.482E-11	
8	1.552E 02	9.770E-01		7.572E-11	
9	1.715E 02	9.860E-01	1.663E-01	8.682E-11	1.444E-11
10	1.879E 02	9.872E-01		9.762E-11	
11	2.042E 02	9.894E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.321E-01	1.194E-10	1.577E-11
13	2.369E 02	1.011E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.042E 00	1.081E-01	1.528E-10	1.651E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.107E 00	9.147E-02	1.822E-10	1.667E-11
19	3.350E 02	1.128E 00		1.925E-10	
20	3.513E 02	1.150E 00		2.028E-10	
21	3.677E 02	1.166E 00	7.791E-02	2.118E-10	1.650E-11
22	3.840E 02	1.182E 00		2.210E-10	
23	4.004E 02	1.200E 00		2.303E-10	
24	4.167E 02	1.212E 00	6.569E-02	2.404E-10	1.579E-11
25	4.331E 02	1.227E 00		2.492E-10	
26	4.494E 02	1.246E 00		2.577E-10	
27	4.658E 02	1.260E 00	5.689E-02	2.655E-10	1.510E-11
28	4.821E 02	1.275E 00		2.741E-10	
29	4.985E 02	1.292E 00		2.822E-10	
30	5.148E 02	1.305E 00	4.886E-02	2.913E-10	1.423E-11
31	5.312E 02	1.318E 00		3.000E-10	
32	5.475E 02	1.335E 00		3.078E-10	
33	5.639E 02	1.348E 00	4.267E-02	3.162E-10	1.349E-11
34	5.802E 02	1.360E 00		3.245E-10	
35	5.966E 02	1.372E 00		3.324E-10	
36	6.129E 02	1.383E 00	3.681E-02	3.412E-10	1.256E-11
37	6.293E 02	1.395E 00		3.500E-10	
38	6.456E 02	1.410E 00		3.579E-10	
39	6.620E 02	1.421E 00	3.206E-02	3.657E-10	1.173E-11
40	6.783E 02	1.431E 00		3.736E-10	

TARGET NO. 3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.443E 00		3.814E-10	
42	7.110E 02	1.453E 00	2.806E-02	3.906E-10	1.096E-11
43	7.273E 02	1.462E 00		4.000E-10	
44	7.437E 02	1.472E 00		4.072E-10	
45	7.600E 02	1.484E 00	2.482E-02	4.152E-10	1.031E-11
46	7.764E 02	1.497E 00		4.236E-10	
47	7.927E 02	1.511E 00		4.308E-10	
48	8.091E 02	1.523E 00	2.218E-02	4.391E-10	9.740E-12
49	8.254E 02	1.533E 00		4.482E-10	
50	8.418E 02	1.536E 00		4.554E-10	
51	8.581E 02	1.544E 00	1.915E-02	4.629E-10	8.863E-12
52	8.745E 02	1.557E 00		4.707E-10	
53	8.908E 02	1.572E 00		4.780E-10	
54	9.072E 02	1.587E 00	1.738E-02	4.857E-10	8.442E-12
55	9.235E 02	1.604E 00		4.942E-10	
56	9.399E 02	1.621E 00		5.015E-10	
57	9.562E 02	1.635E 00	1.603E-02	5.090E-10	8.157E-12
58	9.726E 02	1.646E 00		5.168E-10	
59	9.889E 02	1.654E 00		5.241E-10	
60	1.005E 03	1.662E 00	1.423E-02	5.313E-10	7.560E-12
61	1.022E 03	1.674E 00		5.385E-10	
62	1.038E 03	1.683E 00		5.457E-10	
63	1.054E 03	1.693E 00	1.268E-02	5.529E-10	7.012E-12
64	1.071E 03	1.709E 00		5.601E-10	
65	1.087E 03	1.720E 00		5.668E-10	
66	1.103E 03	1.730E 00	1.151E-02	5.735E-10	6.601E-12
67	1.120E 03	1.740E 00		5.807E-10	
68	1.136E 03	1.745E 00		5.874E-10	
69	1.152E 03	1.751E 00	1.035E-02	5.941E-10	6.147E-12
70	1.169E 03	1.783E 00		6.012E-10	
71	1.185E 03	1.818E 00		6.080E-10	
72	1.201E 03	1.852E 00	1.032E-02	6.145E-10	6.340E-12
73	1.218E 03	1.851E 00		6.204E-10	
74	1.234E 03	1.851E 00		6.267E-10	
75	1.250E 03	1.850E 00	8.991E-03	6.332E-10	5.693E-12
76	1.267E 03	1.866E 00		6.391E-10	
77	1.283E 03	1.880E 00		6.449E-10	
78	1.300E 03	1.890E 00	8.134E-03	6.508E-10	5.294E-12
79	1.316E 03	1.904E 00		6.567E-10	
80	1.332E 03	1.914E 00		6.629E-10	

TARGET NO. 3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.919E 00	7.258E-03	6.694E-10	4.858E-12
82	1.365E 03	1.939E 00		6.754E-10	
83	1.381E 03	1.958E 00		6.813E-10	
84	1.398E 03	1.974E 00	6.701E-03	6.871E-10	4.605E-12
85	1.414E 03	1.987E 00		6.975E-10	
86	1.430E 03	1.998E 00		7.073E-10	
87	1.447E 03	2.008E 00	6.066E-03	7.145E-10	4.334E-12
88	1.463E 03	2.023E 00		7.202E-10	
89	1.479E 03	2.040E 00		7.256E-10	
90	1.496E 03	2.051E 00	5.541E-03	7.315E-10	4.053E-12
91	1.512E 03	2.055E 00		7.373E-10	
92	1.528E 03	2.055E 00		7.434E-10	
93	1.545E 03	2.056E 00	4.830E-03	7.499E-10	3.622E-12
94	1.561E 03	2.077E 00		7.560E-10	
95	1.577E 03	2.107E 00		7.620E-10	
96	1.594E 03	2.133E 00	4.606E-03	7.685E-10	3.539E-12
97	1.610E 03	2.157E 00		7.746E-10	
98	1.626E 03	2.179E 00		7.805E-10	
99	1.643E 03	2.190E 00	4.247E-03	7.864E-10	3.340E-12
100	1.659E 03	2.176E 00		7.927E-10	
101	1.676E 03	2.145E 00		7.992E-10	
102	1.692E 03	2.137E 00	3.369E-03	8.051E-10	2.712E-12
103	1.708E 03	2.165E 00		8.106E-10	
104	1.725E 03	2.231E 00		8.159E-10	
105	1.741E 03	2.274E 00	3.386E-03	8.198E-10	2.776E-12
106	1.757E 03	2.298E 00		8.246E-10	
107	1.774E 03	2.300E 00		8.305E-10	
108	1.790E 03	2.299E 00	2.943E-03	8.364E-10	2.461E-12
109	1.806E 03	2.293E 00		8.425E-10	
110	1.823E 03	2.281E 00		8.491E-10	
111	1.839E 03	2.290E 00	2.454E-03	8.545E-10	2.097E-12
112	1.855E 03	2.315E 00		8.595E-10	
113	1.872E 03	2.369E 00		8.641E-10	
114	1.888E 03	2.405E 00	2.373E-03	8.687E-10	2.061E-12
115	1.904E 03	2.428E 00		8.734E-10	
116	1.921E 03	2.429E 00		8.786E-10	
117	1.937E 03	2.439E 00	2.067E-03	8.839E-10	1.827E-12
118	1.953E 03	2.453E 00		8.892E-10	
119	1.970E 03	2.472E 00		8.951E-10	
120	1.986E 03	2.483E 00	1.814E-03	8.997E-10	1.632E-12

TARGET NO. 3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.487E 00		9.038E-10	
122	2.019E 03	2.473E 00		9.090E-10	
123	2.035E 03	2.485E 00	1.498E-03	9.138E-10	1.369E-12
124	2.052E 03	2.517E 00		9.184E-10	
125	2.068E 03	2.577E 00		9.230E-10	
126	2.084E 03	2.620E 00	1.413E-03	9.268E-10	1.310E-12
127	2.101E 03	2.650E 00		9.302E-10	
128	2.117E 03	2.661E 00		9.361E-10	
129	2.133E 03	2.652E 00	1.173E-03	9.416E-10	1.105E-12
130	2.150E 03	2.625E 00		9.469E-10	
131	2.166E 03	2.549E 00		9.515E-10	
132	2.182E 03	2.528E 00	8.074E-04	9.534E-10	7.698E-13
133	2.199E 03	2.577E 00		9.521E-10	
134	2.215E 03	2.684E 00		9.634E-10	
135	2.231E 03	2.750E 00	7.796E-04	9.728E-10	7.584E-13
136	2.248E 03	2.741E 00		9.774E-10	
137	2.264E 03	2.662E 00		9.819E-10	
138	2.280E 03	2.615E 00	5.300E-04	2.916E-09	1.545E-12
139	2.297E 03	2.656E 00		8.772E-09	
140	2.313E 03	2.727E 00		5.266E-09	
141	2.329E 03	2.806E 00	4.857E-04	1.012E-09	4.914E-13
142	2.346E 03	2.889E 00		1.018E-09	
143	2.362E 03	2.988E 00		1.025E-09	
144	2.378E 03	3.061E 00	4.406E-04	1.031E-09	4.545E-13
145	2.395E 03	3.015E 00		1.038E-09	
146	2.411E 03	2.930E 00		1.049E-09	
147	2.428E 03	2.842E 00	2.517E-04	1.061E-09	2.671E-13
148	2.444E 03	2.842E 00		1.068E-09	
149	2.460E 03	2.824E 00		1.074E-09	
150	2.477E 03	2.813E 00	1.367E-04	1.081E-09	1.477E-13
151	2.493E 03	2.995E 00		1.087E-09	
152	2.509E 03	1.935E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.595E-11 R-SQ.CM./ELECTRON

TARGET NO. 4 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	9.875E-02	1.632E-01	1.875E-01	1.526E-01	8.551E-02
9	9.661E-02	1.493E-01	1.638E-01	1.363E-01	8.267E-02
12	7.898E-02	1.207E-01	1.296E-01	1.058E-01	6.395E-02
15	6.397E-02	9.630E-02	1.025E-01	8.291E-02	4.963E-02
18	5.244E-02	7.696E-02	8.276E-02	6.599E-02	3.829E-02
21	4.367E-02	6.470E-02	6.692E-02	5.275E-02	3.065E-02
24	3.656E-02	5.355E-02	5.509E-02	4.290E-02	2.413E-02
27	3.111E-02	4.494E-02	4.558E-02	3.475E-02	1.961E-02
30	2.594E-02	3.767E-02	3.813E-02	2.856E-02	1.603E-02
33	2.217E-02	3.254E-02	3.190E-02	2.401E-02	1.302E-02
36	1.950E-02	2.782E-02	2.718E-02	2.041E-02	1.090E-02
39	1.666E-02	2.363E-02	2.314E-02	1.692E-02	9.085E-03
42	1.452E-02	2.105E-02	2.011E-02	1.471E-02	7.845E-03
45	1.265E-02	1.791E-02	1.744E-02	1.252E-02	6.498E-03
48	1.131E-02	1.588E-02	1.476E-02	1.053E-02	5.466E-03
51	9.920E-03	1.427E-02	1.316E-02	9.244E-03	4.669E-03
54	9.158E-03	1.225E-02	1.126E-02	7.749E-03	4.139E-03
57	7.821E-03	1.102E-02	1.004E-02	6.960E-03	3.506E-03
60	7.088E-03	1.000E-02	8.878E-03	6.033E-03	2.946E-03
63	6.593E-03	8.804E-03	7.714E-03	5.218E-03	2.669E-03
66	5.923E-03	7.860E-03	6.715E-03	4.617E-03	2.371E-03
69	5.391E-03	7.248E-03	6.214E-03	4.051E-03	2.005E-03
72	4.867E-03	6.285E-03	5.486E-03	3.668E-03	1.755E-03
75	4.387E-03	5.853E-03	4.703E-03	3.318E-03	1.536E-03
78	3.934E-03	5.240E-03	4.275E-03	2.946E-03	1.349E-03
81	3.648E-03	4.835E-03	3.833E-03	2.456E-03	1.226E-03
84	3.336E-03	4.279E-03	3.351E-03	2.191E-03	9.619E-04
87	3.104E-03	3.875E-03	3.136E-03	1.955E-03	8.841E-04
90	2.690E-03	3.508E-03	2.784E-03	1.654E-03	7.758E-04
93	2.490E-03	3.106E-03	2.406E-03	1.388E-03	6.836E-04
96	2.314E-03	2.818E-03	2.368E-03	1.312E-03	5.514E-04
99	2.196E-03	2.691E-03	2.053E-03	1.162E-03	4.655E-04
102	1.933E-03	2.420E-03	1.810E-03	1.004E-03	4.308E-04
105	1.836E-03	2.056E-03	1.572E-03	9.726E-04	3.388E-04
108	1.539E-03	1.907E-03	1.433E-03	7.795E-04	3.484E-04
111	1.333E-03	1.581E-03	1.048E-03	6.761E-04	2.380E-04
114	1.269E-03	1.347E-03	1.133E-03	5.873E-04	2.105E-04
117	1.050E-03	1.321E-03	8.401E-04	4.492E-04	1.844E-04
120	1.058E-03	1.133E-03	8.049E-04	4.326E-04	1.417E-04
123	9.018E-04	1.001E-03	6.117E-04	3.036E-04	1.077E-04
126	7.652E-04	9.354E-04	5.501E-04	2.906E-04	8.999E-05
129	6.280E-04	6.926E-04	4.443E-04	2.364E-04	9.311E-05
132	6.160E-04	6.807E-04	4.063E-04	1.383E-04	4.439E-05
135	5.166E-04	5.161E-04	2.479E-04	1.167E-04	4.707E-05
138	3.606E-04	4.149E-04	2.693E-04	8.441E-05	1.783E-05
141	3.050E-04	2.788E-04	1.755E-04	6.300E-05	6.060E-06
144	2.574E-04	2.213E-04	7.891E-05	3.597E-05	1.324E-05
147	1.976E-04	1.761E-04	7.519E-05	1.193E-05	7.443E-06
150	1.171E-04	1.020E-04	7.846E-05	2.106E-05	3.030E-06
153	5.266E-05	8.805E-05	1.508E-05	8.948E-06	3.030E-06

TARGET NO. 4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.470E-01		4.623E-11	
6	1.225E 02	9.056E-01	1.610E-01	5.526E-11	8.894E-12
7	1.388E 02	9.887E-01		6.482E-11	
8	1.552E 02	9.764E-01		7.572E-11	
9	1.715E 02	9.847E-01	1.591E-01	8.682E-11	1.382E-11
10	1.879E 02	9.862E-01		9.762E-11	
11	2.042E 02	9.890E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.275E-01	1.194E-10	1.523E-11
13	2.369E 02	1.011E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.042E 00	1.047E-01	1.528E-10	1.600E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.088E 00		1.732E-10	
18	3.187E 02	1.106E 00	8.867E-02	1.822E-10	1.616E-11
19	3.350E 02	1.127E 00		1.925E-10	
20	3.513E 02	1.150E 00		2.028E-10	
21	3.677E 02	1.166E 00	7.590E-02	2.118E-10	1.608E-11
22	3.840E 02	1.183E 00		2.210E-10	
23	4.004E 02	1.201E 00		2.303E-10	
24	4.167E 02	1.213E 00	6.451E-02	2.404E-10	1.551E-11
25	4.331E 02	1.228E 00		2.492E-10	
26	4.494E 02	1.246E 00		2.577E-10	
27	4.658E 02	1.259E 00	5.518E-02	2.655E-10	1.465E-11
28	4.821E 02	1.274E 00		2.741E-10	
29	4.985E 02	1.292E 00		2.822E-10	
30	5.148E 02	1.304E 00	4.743E-02	2.913E-10	1.382E-11
31	5.312E 02	1.317E 00		3.000E-10	
32	5.475E 02	1.332E 00		3.078E-10	
33	5.639E 02	1.344E 00	4.110E-02	3.162E-10	1.300E-11
34	5.802E 02	1.357E 00		3.245E-10	
35	5.966E 02	1.373E 00		3.324E-10	
36	6.129E 02	1.386E 00	3.610E-02	3.412E-10	1.232E-11
37	6.293E 02	1.397E 00		3.500E-10	
38	6.456E 02	1.407E 00		3.579E-10	
39	6.620E 02	1.418E 00	3.112E-02	3.657E-10	1.138E-11
40	6.783E 02	1.429E 00		3.736E-10	

TARGET NO. 4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.447E 00		3.814E-10	
42	7.110E 02	1.460E 00	2.797E-02	3.906E-10	1.092E-11
43	7.273E 02	1.469E 00		4.000E-10	
44	7.437E 02	1.475E 00		4.072E-10	
45	7.600E 02	1.483E 00	2.429E-02	4.152E-10	1.008E-11
46	7.764E 02	1.494E 00		4.236E-10	
47	7.927E 02	1.502E 00		4.308E-10	
48	8.091E 02	1.513E 00	2.123E-02	4.391E-10	9.323E-12
49	8.254E 02	1.528E 00		4.482E-10	
50	8.418E 02	1.545E 00		4.554E-10	
51	8.581E 02	1.559E 00	1.931E-02	4.629E-10	8.939E-12
52	8.745E 02	1.569E 00		4.707E-10	
53	8.908E 02	1.575E 00		4.780E-10	
54	9.072E 02	1.585E 00	1.693E-02	4.857E-10	8.225E-12
55	9.235E 02	1.599E 00		4.942E-10	
56	9.399E 02	1.613E 00		5.015E-10	
57	9.562E 02	1.627E 00	1.539E-02	5.090E-10	7.832E-12
58	9.726E 02	1.641E 00		5.168E-10	
59	9.889E 02	1.651E 00		5.241E-10	
60	1.005E 03	1.662E 00	1.385E-02	5.313E-10	7.357E-12
61	1.022E 03	1.675E 00		5.385E-10	
62	1.038E 03	1.686E 00		5.457E-10	
63	1.054E 03	1.697E 00	1.246E-02	5.529E-10	6.891E-12
64	1.071E 03	1.710E 00		5.601E-10	
65	1.087E 03	1.718E 00		5.668E-10	
66	1.103E 03	1.727E 00	1.122E-02	5.735E-10	6.432E-12
67	1.120E 03	1.745E 00		5.807E-10	
68	1.136E 03	1.761E 00		5.874E-10	
69	1.152E 03	1.776E 00	1.040E-02	5.941E-10	6.175E-12
70	1.169E 03	1.789E 00		6.012E-10	
71	1.185E 03	1.799E 00		6.080E-10	
72	1.201E 03	1.808E 00	9.373E-03	6.145E-10	5.760E-12
73	1.218E 03	1.822E 00		6.204E-10	
74	1.234E 03	1.835E 00		6.267E-10	
75	1.250E 03	1.846E 00	8.541E-03	6.332E-10	5.408E-12
76	1.267E 03	1.862E 00		6.391E-10	
77	1.283E 03	1.876E 00		6.449E-10	
78	1.300E 03	1.888E 00	7.823E-03	6.508E-10	5.091E-12
79	1.316E 03	1.905E 00		6.567E-10	
80	1.332E 03	1.920E 00		6.629E-10	

TARGET NO. 4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.932E 00	7.142E-03	6.694E-10	4.781E-12
82	1.365E 03	1.938E 00		6.754E-10	
83	1.381E 03	1.943E 00		6.813E-10	
84	1.398E 03	1.946E 00	6.296E-03	6.871E-10	4.326E-12
85	1.414E 03	1.970E 00		6.975E-10	
86	1.430E 03	1.997E 00		7.073E-10	
87	1.447E 03	2.020E 00	5.987E-03	7.145E-10	4.278E-12
88	1.463E 03	2.029E 00		7.202E-10	
89	1.479E 03	2.034E 00		7.256E-10	
90	1.496E 03	2.036E 00	5.303E-03	7.315E-10	3.879E-12
91	1.512E 03	2.038E 00		7.373E-10	
92	1.528E 03	2.041E 00		7.434E-10	
93	1.545E 03	2.043E 00	4.649E-03	7.499E-10	3.486E-12
94	1.561E 03	2.066E 00		7.560E-10	
95	1.577E 03	2.098E 00		7.620E-10	
96	1.594E 03	2.123E 00	4.495E-03	7.685E-10	3.454E-12
97	1.610E 03	2.141E 00		7.746E-10	
98	1.626E 03	2.154E 00		7.805E-10	
99	1.643E 03	2.165E 00	4.132E-03	7.864E-10	3.249E-12
100	1.659E 03	2.176E 00		7.927E-10	
101	1.676E 03	2.186E 00		7.992E-10	
102	1.692E 03	2.199E 00	3.719E-03	8.051E-10	2.994E-12
103	1.708E 03	2.214E 00		8.106E-10	
104	1.725E 03	2.232E 00		8.159E-10	
105	1.741E 03	2.253E 00	3.383E-03	8.198E-10	2.773E-12
106	1.757E 03	2.279E 00		8.246E-10	
107	1.774E 03	2.311E 00		8.305E-10	
108	1.790E 03	2.322E 00	3.101E-03	8.364E-10	2.594E-12
109	1.806E 03	2.312E 00		8.425E-10	
110	1.823E 03	2.272E 00		8.491E-10	
111	1.839E 03	2.268E 00	2.419E-03	8.545E-10	2.067E-12
112	1.855E 03	2.293E 00		8.595E-10	
113	1.872E 03	2.366E 00		8.641E-10	
114	1.888E 03	2.406E 00	2.405E-03	8.687E-10	2.089E-12
115	1.904E 03	2.421E 00		8.734E-10	
116	1.921E 03	2.394E 00		8.786E-10	
117	1.937E 03	2.399E 00	1.989E-03	8.839E-10	1.758E-12
118	1.953E 03	2.426E 00		8.892E-10	
119	1.970E 03	2.492E 00		8.951E-10	
120	1.986E 03	2.522E 00	1.927E-03	8.997E-10	1.734E-12

TARGET NO. 4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.526E 00		9.038E-10	
122	2.019E 03	2.480E 00		9.090E-10	
123	2.035E 03	2.475E 00	1.510E-03	9.138E-10	1.380E-12
124	2.052E 03	2.500E 00		9.184E-10	
125	2.068E 03	2.569E 00		9.230E-10	
126	2.084E 03	2.608E 00	1.443E-03	9.268E-10	1.337E-12
127	2.101E 03	2.624E 00		9.302E-10	
128	2.117E 03	2.599E 00		9.361E-10	
129	2.133E 03	2.599E 00	1.154E-03	9.416E-10	1.087E-12
130	2.150E 03	2.624E 00		9.469E-10	
131	2.166E 03	2.674E 00		9.515E-10	
132	2.182E 03	2.703E 00	1.024E-03	9.534E-10	9.764E-13
133	2.199E 03	2.703E 00		9.521E-10	
134	2.215E 03	2.666E 00		9.634E-10	
135	2.231E 03	2.655E 00	7.562E-04	9.728E-10	7.356E-13
136	2.248E 03	2.689E 00		9.774E-10	
137	2.264E 03	2.749E 00		9.819E-10	
138	2.280E 03	2.791E 00	6.480E-04	2.916E-09	1.890E-12
139	2.297E 03	2.792E 00		8.772E-09	
140	2.313E 03	2.750E 00		5.266E-09	
141	2.329E 03	2.709E 00	4.388E-04	1.012E-09	4.440E-13
142	2.346E 03	2.700E 00		1.018E-09	
143	2.362E 03	2.670E 00		1.025E-09	
144	2.378E 03	2.654E 00	2.957E-04	1.031E-09	3.050E-13
145	2.395E 03	2.720E 00		1.038E-09	
146	2.411E 03	2.793E 00		1.049E-09	
147	2.428E 03	2.882E 00	2.436E-04	1.061E-09	2.585E-13
148	2.444E 03	3.032E 00		1.068E-09	
149	2.460E 03	3.239E 00		1.074E-09	
150	2.477E 03	3.468E 00	2.206E-04	1.081E-09	2.384E-13
151	2.493E 03	3.599E 00		1.087E-09	
152	2.509E 03	2.301E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.557E-11 R-SQ.CM./ELECTRON

TARGET NO. 5-1 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
6	9.177E-02	1.463E-01	1.801E-01	1.550E-01	9.526E-02	3.240E-02
9	9.363E-02	1.511E-01	1.733E-01	1.448E-01	8.759E-02	3.069E-02
12	7.590E-02	1.220E-01	1.382E-01	1.128E-01	6.734E-02	2.368E-02
15	6.067E-02	9.839E-02	1.092E-01	8.842E-02	5.164E-02	1.798E-02
18	4.987E-02	7.842E-02	8.660E-02	6.884E-02	3.990E-02	1.407E-02
21	4.191E-02	6.536E-02	6.965E-02	5.636E-02	3.174E-02	1.097E-02
24	3.505E-02	5.437E-02	5.773E-02	4.501E-02	2.566E-02	8.802E-03
27	2.924E-02	4.477E-02	4.825E-02	3.653E-02	2.057E-02	6.895E-03
30	2.502E-02	3.740E-02	4.018E-02	3.001E-02	1.698E-02	5.589E-03
33	2.126E-02	3.272E-02	3.422E-02	2.499E-02	1.382E-02	4.630E-03
36	1.805E-02	2.756E-02	2.820E-02	2.101E-02	1.142E-02	3.754E-03
39	1.593E-02	2.334E-02	2.414E-02	1.774E-02	9.827E-03	3.192E-03
42	1.370E-02	2.077E-02	2.103E-02	1.539E-02	8.254E-03	2.666E-03
45	1.249E-02	1.813E-02	1.802E-02	1.305E-02	6.789E-03	2.234E-03
48	1.075E-02	1.573E-02	1.568E-02	1.112E-02	5.994E-03	1.879E-03
51	9.628E-03	1.393E-02	1.310E-02	9.785E-03	4.988E-03	1.672E-03
54	8.489E-03	1.185E-02	1.216E-02	8.284E-03	4.331E-03	1.352E-03
57	7.592E-03	1.086E-02	1.069E-02	7.331E-03	3.717E-03	1.228E-03
60	6.689E-03	9.969E-03	9.522E-03	6.455E-03	3.217E-03	1.060E-03
63	5.888E-03	8.505E-03	8.409E-03	5.539E-03	2.809E-03	8.850E-04
66	5.549E-03	7.793E-03	7.024E-03	4.855E-03	2.605E-03	7.602E-04
69	5.178E-03	7.172E-03	6.597E-03	4.370E-03	2.051E-03	6.925E-04
72	4.473E-03	6.260E-03	5.707E-03	3.871E-03	1.895E-03	5.682E-04
75	4.196E-03	5.856E-03	5.073E-03	3.362E-03	1.557E-03	5.036E-04
78	3.728E-03	5.077E-03	4.580E-03	2.890E-03	1.457E-03	4.562E-04
81	3.580E-03	4.645E-03	4.323E-03	2.735E-03	1.336E-03	3.591E-04
84	2.930E-03	4.205E-03	3.816E-03	2.482E-03	1.106E-03	3.339E-04
87	2.753E-03	3.879E-03	3.491E-03	1.916E-03	1.043E-03	2.898E-04
90	2.580E-03	3.413E-03	3.026E-03	1.676E-03	7.425E-04	2.615E-04
93	2.299E-03	3.011E-03	2.634E-03	1.614E-03	6.613E-04	2.091E-04
96	2.024E-03	2.753E-03	2.347E-03	1.367E-03	6.266E-04	1.925E-04
99	1.927E-03	2.674E-03	2.087E-03	1.216E-03	5.024E-04	1.606E-04
102	1.818E-03	2.186E-03	1.974E-03	1.138E-03	4.351E-04	1.382E-04
105	1.471E-03	1.880E-03	1.569E-03	9.427E-04	4.347E-04	1.024E-04
108	1.401E-03	1.773E-03	1.357E-03	6.725E-04	3.175E-04	5.144E-05
111	1.193E-03	1.524E-03	1.175E-03	7.393E-04	2.777E-04	8.626E-05
114	1.210E-03	1.417E-03	1.025E-03	5.002E-04	2.266E-04	4.959E-05
117	9.792E-04	1.237E-03	8.099E-04	5.157E-04	1.726E-04	4.198E-05
120	9.058E-04	1.081E-03	8.084E-04	3.532E-04	1.460E-04	4.279E-05
123	7.822E-04	8.513E-04	6.285E-04	2.772E-04	1.149E-04	3.334E-05
126	6.067E-04	7.683E-04	4.730E-04	2.709E-04	8.311E-05	2.236E-05
129	5.784E-04	6.660E-04	3.356E-04	2.066E-04	7.583E-05	1.695E-05
132	5.027E-04	6.421E-04	3.247E-04	1.792E-04	5.121E-05	9.708E-06
135	3.430E-04	4.027E-04	2.379E-04	1.243E-04	4.039E-05	9.198E-06
138	3.183E-04	3.676E-04	2.015E-04	7.926E-05	2.779E-05	5.859E-06
141	2.871E-04	2.683E-04	1.906E-04	6.222E-05	1.115E-05	4.358E-06
144	2.260E-04	2.099E-04	8.801E-05	2.754E-05	1.244E-05	2.886E-06
147	1.314E-04	1.547E-04	6.960E-05	2.259E-05	5.574E-06	1.953E-06
150	9.954E-05	9.361E-05	2.912E-05	5.399E-06	2.746E-06	3.877E-06
153	6.110E-05	3.369E-05	2.548E-05	1.486E-07	2.746E-06	5.099E-07

TARGET NO. 5-1 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.456E-01		4.623E-11	
6	1.225E 02	9.004E-01	1.492E-01	5.526E-11	8.245E-12
7	1.388E 02	9.851E-01		6.482E-11	
8	1.552E 02	9.756E-01		7.572E-11	
9	1.715E 02	9.874E-01	1.574E-01	8.682E-11	1.367E-11
10	1.879E 02	9.881E-01		9.762E-11	
11	2.042E 02	9.895E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.261E-01	1.194E-10	1.506E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.024E 00		1.416E-10	
15	2.696E 02	1.043E 00	1.034E-01	1.528E-10	1.580E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.088E 00		1.732E-10	
18	3.187E 02	1.105E 00	8.642E-02	1.822E-10	1.574E-11
19	3.350E 02	1.127E 00		1.925E-10	
20	3.513E 02	1.150E 00		2.028E-10	
21	3.677E 02	1.166E 00	7.422E-02	2.118E-10	1.572E-11
22	3.840E 02	1.183E 00		2.210E-10	
23	4.004E 02	1.202E 00		2.303E-10	
24	4.167E 02	1.215E 00	6.326E-02	2.404E-10	1.521E-11
25	4.331E 02	1.229E 00		2.492E-10	
26	4.494E 02	1.246E 00		2.577E-10	
27	4.658E 02	1.259E 00	5.377E-02	2.655E-10	1.427E-11
28	4.821E 02	1.274E 00		2.741E-10	
29	4.985E 02	1.291E 00		2.822E-10	
30	5.148E 02	1.305E 00	4.630E-02	2.913E-10	1.349E-11
31	5.312E 02	1.319E 00		3.000E-10	
32	5.475E 02	1.336E 00		3.078E-10	
33	5.639E 02	1.348E 00	4.045E-02	3.162E-10	1.279E-11
34	5.802E 02	1.360E 00		3.245E-10	
35	5.966E 02	1.370E 00		3.324E-10	
36	6.129E 02	1.380E 00	3.453E-02	3.412E-10	1.178E-11
37	6.293E 02	1.392E 00		3.500E-10	
38	6.456E 02	1.408E 00		3.579E-10	
39	6.620E 02	1.420E 00	3.034E-02	3.657E-10	1.110E-11
40	6.783E 02	1.432E 00		3.736E-10	

TARGET NO. 5-1 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.447E 00		3.814E-10	
42	7.110E 02	1.458E 00	2.703E-02	3.906E-10	1.056E-11
43	7.273E 02	1.467E 00		4.000E-10	
44	7.437E 02	1.474E 00		4.072E-10	
45	7.600E 02	1.484E 00	2.360E-02	4.152E-10	9.799E-12
46	7.764E 02	1.496E 00		4.236E-10	
47	7.927E 02	1.508E 00		4.308E-10	
48	8.091E 02	1.520E 00	2.091E-02	4.391E-10	9.181E-12
49	8.254E 02	1.531E 00		4.482E-10	
50	8.418E 02	1.540E 00		4.554E-10	
51	8.581E 02	1.551E 00	1.844E-02	4.629E-10	8.534E-12
52	8.745E 02	1.563E 00		4.707E-10	
53	8.908E 02	1.575E 00		4.780E-10	
54	9.072E 02	1.588E 00	1.653E-02	4.857E-10	8.030E-12
55	9.235E 02	1.602E 00		4.942E-10	
56	9.399E 02	1.616E 00		5.015E-10	
57	9.562E 02	1.630E 00	1.507E-02	5.090E-10	7.670E-12
58	9.726E 02	1.645E 00		5.168E-10	
59	9.889E 02	1.659E 00		5.241E-10	
60	1.005E 03	1.672E 00	1.375E-02	5.313E-10	7.306E-12
61	1.022E 03	1.682E 00		5.385E-10	
62	1.038E 03	1.687E 00		5.457E-10	
63	1.054E 03	1.694E 00	1.209E-02	5.529E-10	6.687E-12
64	1.071E 03	1.708E 00		5.601E-10	
65	1.087E 03	1.717E 00		5.668E-10	
66	1.103E 03	1.727E 00	1.091E-02	5.735E-10	6.256E-12
67	1.120E 03	1.747E 00		5.807E-10	
68	1.136E 03	1.767E 00		5.874E-10	
69	1.152E 03	1.786E 00	1.023E-02	5.941E-10	6.076E-12
70	1.169E 03	1.795E 00		6.012E-10	
71	1.185E 03	1.801E 00		6.080E-10	
72	1.201E 03	1.806E 00	9.062E-03	6.145E-10	5.569E-12
73	1.218E 03	1.823E 00		6.204E-10	
74	1.234E 03	1.837E 00		6.267E-10	
75	1.250E 03	1.850E 00	8.293E-03	6.332E-10	5.251E-12
76	1.267E 03	1.860E 00		6.391E-10	
77	1.283E 03	1.865E 00		6.449E-10	
78	1.300E 03	1.866E 00	7.414E-03	6.508E-10	4.825E-12
79	1.316E 03	1.900E 00		6.567E-10	
80	1.332E 03	1.932E 00		6.629E-10	

TARGET NO. 5-1 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.962E 00	7.269E-03	6.694E-10	4.866E-12
82	1.365E 03	1.968E 00		6.754E-10	
83	1.381E 03	1.972E 00		6.813E-10	
84	1.398E 03	1.977E 00	6.450E-03	6.871E-10	4.432E-12
85	1.414E 03	1.991E 00		6.975E-10	
86	1.430E 03	2.007E 00		7.073E-10	
87	1.447E 03	2.020E 00	5.860E-03	7.145E-10	4.187E-12
88	1.463E 03	2.025E 00		7.202E-10	
89	1.479E 03	2.028E 00		7.256E-10	
90	1.496E 03	2.028E 00	5.090E-03	7.315E-10	3.723E-12
91	1.512E 03	2.044E 00		7.373E-10	
92	1.528E 03	2.063E 00		7.434E-10	
93	1.545E 03	2.077E 00	4.661E-03	7.499E-10	3.496E-12
94	1.561E 03	2.089E 00		7.560E-10	
95	1.577E 03	2.100E 00		7.620E-10	
96	1.594E 03	2.109E 00	4.221E-03	7.685E-10	3.244E-12
97	1.610E 03	2.128E 00		7.746E-10	
98	1.626E 03	2.151E 00		7.805E-10	
99	1.643E 03	2.173E 00	3.953E-03	7.864E-10	3.108E-12
100	1.659E 03	2.197E 00		7.927E-10	
101	1.676E 03	2.224E 00		7.992E-10	
102	1.692E 03	2.242E 00	3.675E-03	8.051E-10	2.958E-12
103	1.708E 03	2.246E 00		8.106E-10	
104	1.725E 03	2.235E 00		8.159E-10	
105	1.741E 03	2.231E 00	3.049E-03	8.198E-10	2.500E-12
106	1.757E 03	2.233E 00		8.246E-10	
107	1.774E 03	2.244E 00		8.305E-10	
108	1.790E 03	2.261E 00	2.640E-03	8.364E-10	2.208E-12
109	1.806E 03	2.289E 00		8.425E-10	
110	1.823E 03	2.331E 00		8.491E-10	
111	1.839E 03	2.358E 00	2.489E-03	8.545E-10	2.126E-12
112	1.855E 03	2.377E 00		8.595E-10	
113	1.872E 03	2.381E 00		8.641E-10	
114	1.888E 03	2.389E 00	2.162E-03	8.687E-10	1.878E-12
115	1.904E 03	2.398E 00		8.734E-10	
116	1.921E 03	2.406E 00		8.786E-10	
117	1.937E 03	2.427E 00	1.878E-03	8.839E-10	1.660E-12
118	1.953E 03	2.456E 00		8.892E-10	
119	1.970E 03	2.497E 00		8.951E-10	
120	1.986E 03	2.519E 00	1.714E-03	8.997E-10	1.542E-12

TARGET NO. 5-1 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.526E 00		9.038E-10	
122	2.019E 03	2.501E 00		9.090E-10	
123	2.035E 03	2.494E 00	1.352E-03	9.138E-10	1.236E-12
124	2.052E 03	2.501E 00		9.184E-10	
125	2.068E 03	2.518E 00		9.230E-10	
126	2.084E 03	2.532E 00	1.141E-03	9.268E-10	1.057E-12
127	2.101E 03	2.545E 00		9.302E-10	
128	2.117E 03	2.544E 00		9.361E-10	
129	2.133E 03	2.576E 00	9.528E-04	9.416E-10	8.972E-13
130	2.150E 03	2.637E 00		9.469E-10	
131	2.166E 03	2.741E 00		9.515E-10	
132	2.182E 03	2.785E 00	9.368E-04	9.534E-10	8.931E-13
133	2.199E 03	2.754E 00		9.521E-10	
134	2.215E 03	2.636E 00		9.634E-10	
135	2.231E 03	2.567E 00	5.904E-04	9.728E-10	5.743E-13
136	2.248E 03	2.588E 00		9.774E-10	
137	2.264E 03	2.655E 00		9.819E-10	
138	2.280E 03	2.728E 00	5.272E-04	2.916E-09	1.537E-12
139	2.297E 03	2.800E 00		8.772E-09	
140	2.313E 03	2.871E 00		5.266E-09	
141	2.329E 03	2.913E 00	4.607E-04	1.012E-09	4.661E-13
142	2.346E 03	2.877E 00		1.018E-09	
143	2.362E 03	2.794E 00		1.025E-09	
144	2.378E 03	2.725E 00	2.797E-04	1.031E-09	2.885E-13
145	2.395E 03	2.764E 00		1.038E-09	
146	2.411E 03	2.818E 00		1.049E-09	
147	2.428E 03	2.875E 00	2.070E-04	1.061E-09	2.196E-13
148	2.444E 03	2.908E 00		1.068E-09	
149	2.460E 03	2.911E 00		1.074E-09	
150	2.477E 03	2.918E 00	1.189E-04	1.081E-09	1.285E-13
151	2.493E 03	3.144E 00		1.087E-09	
152	2.509E 03	2.041E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.510E-11 R-SQ.CM./ELECTRON

TARGET NO. 5-2 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	9.298E-02	1.491E-01	1.730E-01	1.461E-01	9.387E-02
9	9.369E-02	1.528E-01	1.669E-01	1.374E-01	8.588E-02
12	7.623E-02	1.230E-01	1.320E-01	1.068E-01	6.636E-02
15	6.237E-02	9.842E-02	1.043E-01	8.306E-02	5.116E-02
18	5.058E-02	7.892E-02	8.305E-02	6.569E-02	3.971E-02
21	4.280E-02	6.610E-02	6.710E-02	5.230E-02	3.146E-02
24	3.473E-02	5.366E-02	5.530E-02	4.264E-02	2.539E-02
27	2.969E-02	4.520E-02	4.622E-02	3.399E-02	2.005E-02
30	2.519E-02	3.743E-02	3.838E-02	2.869E-02	1.648E-02
33	2.201E-02	3.217E-02	3.234E-02	2.385E-02	1.343E-02
36	1.835E-02	2.814E-02	2.736E-02	1.991E-02	1.132E-02
39	1.604E-02	2.395E-02	2.333E-02	1.713E-02	9.308E-03
42	1.422E-02	2.101E-02	2.002E-02	1.378E-02	7.999E-03
45	1.232E-02	1.829E-02	1.789E-02	1.238E-02	6.770E-03
48	1.082E-02	1.625E-02	1.519E-02	1.047E-02	5.592E-03
51	9.617E-03	1.367E-02	1.347E-02	8.908E-03	5.021E-03
54	8.242E-03	1.211E-02	1.138E-02	7.712E-03	4.282E-03
57	7.677E-03	1.142E-02	1.022E-02	7.336E-03	3.787E-03
60	6.934E-03	9.840E-03	8.839E-03	6.148E-03	3.275E-03
63	6.332E-03	8.603E-03	7.909E-03	5.473E-03	2.888E-03
66	5.756E-03	7.920E-03	6.914E-03	4.669E-03	2.373E-03
69	4.989E-03	6.941E-03	6.256E-03	3.932E-03	2.124E-03
72	4.497E-03	6.376E-03	5.504E-03	3.562E-03	1.824E-03
75	4.023E-03	5.628E-03	4.946E-03	3.215E-03	1.649E-03
78	3.739E-03	5.234E-03	4.562E-03	2.901E-03	1.429E-03
81	3.572E-03	4.869E-03	3.817E-03	2.519E-03	1.223E-03
84	3.075E-03	4.399E-03	3.699E-03	2.220E-03	9.705E-04
87	2.856E-03	3.560E-03	2.963E-03	2.055E-03	9.715E-04
90	2.570E-03	3.398E-03	2.875E-03	1.809E-03	8.670E-04
93	2.311E-03	2.999E-03	2.549E-03	1.550E-03	7.269E-04
96	2.151E-03	2.889E-03	2.250E-03	1.362E-03	5.753E-04
99	1.857E-03	2.727E-03	1.984E-03	1.124E-03	5.296E-04
102	1.741E-03	2.173E-03	1.799E-03	9.521E-04	4.292E-04
105	1.529E-03	1.970E-03	1.588E-03	8.907E-04	3.641E-04
108	1.435E-03	1.870E-03	1.353E-03	7.496E-04	3.304E-04
111	1.298E-03	1.600E-03	1.076E-03	6.392E-04	2.493E-04
114	1.140E-03	1.463E-03	1.029E-03	4.912E-04	1.770E-04
117	9.927E-04	1.279E-03	8.806E-04	4.144E-04	1.593E-04
120	9.961E-04	1.089E-03	7.274E-04	4.181E-04	1.521E-04
123	8.054E-04	8.700E-04	5.531E-04	2.834E-04	1.217E-04
126	6.781E-04	8.208E-04	5.062E-04	2.899E-04	8.821E-05
129	6.407E-04	6.767E-04	4.316E-04	2.292E-04	6.789E-05
132	5.825E-04	4.622E-04	3.820E-04	1.632E-04	3.971E-05
135	4.167E-04	3.937E-04	2.188E-04	8.284E-05	4.883E-05
138	3.438E-04	3.439E-04	2.071E-04	7.344E-05	2.470E-05
141	2.799E-04	2.595E-04	1.351E-04	2.600E-05	1.930E-05
144	1.863E-04	1.779E-04	1.242E-04	4.011E-05	1.620E-05
147	1.501E-04	1.465E-04	2.600E-05	1.881E-05	5.480E-06
150	7.096E-05	8.518E-05	4.730E-05	1.175E-05	1.350E-06
153	5.176E-05	3.762E-05	1.470E-05	0.0	4.130E-06

TARGET NO. 5-2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.456E-01		4.623E-11	
6	1.225E 02	9.006E-01	1.540E-01	5.526E-11	8.512E-12
7	1.388E 02	9.853E-01		6.482E-11	
8	1.552E 02	9.757E-01		7.572E-11	
9	1.715E 02	9.875E-01	1.622E-01	8.682E-11	1.408E-11
10	1.879E 02	9.881E-01		9.762E-11	
11	2.042E 02	9.894E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.295E-01	1.194E-10	1.547E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.043E 00	1.062E-01	1.528E-10	1.622E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.106E 00	8.936E-02	1.822E-10	1.628E-11
19	3.350E 02	1.127E 00		1.925E-10	
20	3.513E 02	1.150E 00		2.028E-10	
21	3.677E 02	1.166E 00	7.629E-02	2.118E-10	1.616E-11
22	3.840E 02	1.183E 00		2.210E-10	
23	4.004E 02	1.201E 00		2.303E-10	
24	4.167E 02	1.214E 00	6.479E-02	2.404E-10	1.557E-11
25	4.331E 02	1.228E 00		2.492E-10	
26	4.494E 02	1.245E 00		2.577E-10	
27	4.658E 02	1.258E 00	5.507E-02	2.655E-10	1.462E-11
28	4.821E 02	1.273E 00		2.741E-10	
29	4.985E 02	1.292E 00		2.822E-10	
30	5.148E 02	1.305E 00	4.763E-02	2.913E-10	1.388E-11
31	5.312E 02	1.319E 00		3.000E-10	
32	5.475E 02	1.333E 00		3.078E-10	
33	5.639E 02	1.345E 00	4.129E-02	3.162E-10	1.306E-11
34	5.802E 02	1.358E 00		3.245E-10	
35	5.966E 02	1.372E 00		3.324E-10	
36	6.129E 02	1.384E 00	3.597E-02	3.412E-10	1.228E-11
37	6.293E 02	1.396E 00		3.500E-10	
38	6.456E 02	1.411E 00		3.579E-10	
39	6.620E 02	1.422E 00	3.149E-02	3.657E-10	1.152E-11
40	6.783E 02	1.432E 00		3.736E-10	

TARGET NO. 5-2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.440E 00		3.814E-10	
42	7.110E 02	1.450E 00	2.731E-02	3.906E-10	1.067E-11
43	7.273E 02	1.461E 00		4.000E-10	
44	7.437E 02	1.476E 00		4.072E-10	
45	7.600E 02	1.490E 00	2.470E-02	4.152E-10	1.026E-11
46	7.764E 02	1.501E 00		4.236E-10	
47	7.927E 02	1.508E 00		4.308E-10	
48	8.091E 02	1.518E 00	2.153E-02	4.391E-10	9.453E-12
49	8.254E 02	1.530E 00		4.482E-10	
50	8.418E 02	1.543E 00		4.554E-10	
51	8.581E 02	1.554E 00	1.917E-02	4.629E-10	8.875E-12
52	8.745E 02	1.563E 00		4.707E-10	
53	8.908E 02	1.566E 00		4.780E-10	
54	9.072E 02	1.576E 00	1.674E-02	4.857E-10	8.131E-12
55	9.235E 02	1.598E 00		4.942E-10	
56	9.399E 02	1.627E 00		5.015E-10	
57	9.562E 02	1.648E 00	1.613E-02	5.090E-10	8.212E-12
58	9.726E 02	1.655E 00		5.168E-10	
59	9.889E 02	1.655E 00		5.241E-10	
60	1.005E 03	1.658E 00	1.398E-02	5.313E-10	7.425E-12
61	1.022E 03	1.674E 00		5.385E-10	
62	1.038E 03	1.691E 00		5.457E-10	
63	1.054E 03	1.707E 00	1.279E-02	5.529E-10	7.074E-12
64	1.071E 03	1.719E 00		5.601E-10	
65	1.087E 03	1.727E 00		5.668E-10	
66	1.103E 03	1.734E 00	1.138E-02	5.735E-10	6.524E-12
67	1.120E 03	1.746E 00		5.807E-10	
68	1.136E 03	1.754E 00		5.874E-10	
69	1.152E 03	1.762E 00	1.015E-02	5.941E-10	6.029E-12
70	1.169E 03	1.781E 00		6.012E-10	
71	1.185E 03	1.796E 00		6.080E-10	
72	1.201E 03	1.809E 00	9.317E-03	6.145E-10	5.725E-12
73	1.218E 03	1.823E 00		6.204E-10	
74	1.234E 03	1.834E 00		6.267E-10	
75	1.250E 03	1.844E 00	8.508E-03	6.332E-10	5.387E-12
76	1.267E 03	1.866E 00		6.391E-10	
77	1.283E 03	1.887E 00		6.449E-10	
78	1.300E 03	1.908E 00	8.038E-03	6.508E-10	5.231E-12
79	1.316E 03	1.915E 00		6.567E-10	
80	1.332E 03	1.921E 00		6.629E-10	

TARGET NO. 5-2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.924E 00	7.138E-03	6.694E-10	4.778E-12
82	1.365E 03	1.945E 00		6.754E-10	
83	1.381E 03	1.966E 00		6.813E-10	
84	1.398E 03	1.985E 00	6.629E-03	6.871E-10	4.555E-12
85	1.414E 03	1.986E 00		6.975E-10	
86	1.430E 03	1.983E 00		7.073E-10	
87	1.447E 03	1.979E 00	5.722E-03	7.145E-10	4.089E-12
88	1.463E 03	2.008E 00		7.202E-10	
89	1.479E 03	2.042E 00		7.256E-10	
90	1.496E 03	2.069E 00	5.547E-03	7.315E-10	4.058E-12
91	1.512E 03	2.076E 00		7.373E-10	
92	1.528E 03	2.076E 00		7.434E-10	
93	1.545E 03	2.077E 00	4.871E-03	7.499E-10	3.653E-12
94	1.561E 03	2.090E 00		7.560E-10	
95	1.577E 03	2.108E 00		7.620E-10	
96	1.594E 03	2.124E 00	4.467E-03	7.685E-10	3.433E-12
97	1.610E 03	2.141E 00		7.746E-10	
98	1.626E 03	2.158E 00		7.805E-10	
99	1.643E 03	2.168E 00	4.044E-03	7.864E-10	3.180E-12
100	1.659E 03	2.174E 00		7.927E-10	
101	1.676E 03	2.175E 00		7.992E-10	
102	1.692E 03	2.181E 00	3.491E-03	8.051E-10	2.811E-12
103	1.708E 03	2.198E 00		8.106E-10	
104	1.725E 03	2.226E 00		8.159E-10	
105	1.741E 03	2.251E 00	3.228E-03	8.198E-10	2.647E-12
106	1.757E 03	2.278E 00		8.246E-10	
107	1.774E 03	2.306E 00		8.305E-10	
108	1.790E 03	2.322E 00	2.966E-03	8.364E-10	2.480E-12
109	1.806E 03	2.327E 00		8.425E-10	
110	1.823E 03	2.316E 00		8.491E-10	
111	1.839E 03	2.317E 00	2.469E-03	8.545E-10	2.109E-12
112	1.855E 03	2.328E 00		8.595E-10	
113	1.872E 03	2.354E 00		8.641E-10	
114	1.888E 03	2.375E 00	2.213E-03	8.687E-10	1.922E-12
115	1.904E 03	2.393E 00		8.734E-10	
116	1.921E 03	2.403E 00		8.786E-10	
117	1.937E 03	2.429E 00	1.956E-03	8.839E-10	1.729E-12
118	1.953E 03	2.466E 00		8.892E-10	
119	1.970E 03	2.521E 00		8.951E-10	
120	1.986E 03	2.538E 00	1.841E-03	8.997E-10	1.656E-12

TARGET NO. 5-2 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.528E 00		9.038E-10	
122	2.019E 03	2.460E 00		9.090E-10	
123	2.035E 03	2.444E 00	1.358E-03	9.138E-10	1.241E-12
124	2.052E 03	2.466E 00		9.184E-10	
125	2.068E 03	2.545E 00		9.230E-10	
126	2.084E 03	2.604E 00	1.323E-03	9.268E-10	1.226E-12
127	2.101E 03	2.647E 00		9.302E-10	
128	2.117E 03	2.665E 00		9.361E-10	
129	2.133E 03	2.686E 00	1.149E-03	9.416E-10	1.082E-12
130	2.150E 03	2.697E 00		9.469E-10	
131	2.166E 03	2.697E 00		9.515E-10	
132	2.182E 03	2.682E 00	8.962E-04	9.534E-10	8.545E-13
133	2.199E 03	2.648E 00		9.521E-10	
134	2.215E 03	2.571E 00		9.634E-10	
135	2.231E 03	2.544E 00	5.875E-04	9.728E-10	5.715E-13
136	2.248E 03	2.604E 00		9.774E-10	
137	2.264E 03	2.714E 00		9.819E-10	
138	2.280E 03	2.792E 00	5.525E-04	2.916E-09	1.611E-12
139	2.297E 03	2.789E 00		8.772E-09	
140	2.313E 03	2.722E 00		5.266E-09	
141	2.329E 03	2.682E 00	3.647E-04	1.012E-09	3.690E-13
142	2.346E 03	2.759E 00		1.018E-09	
143	2.362E 03	2.879E 00		1.025E-09	
144	2.378E 03	2.971E 00	3.274E-04	1.031E-09	3.377E-13
145	2.395E 03	2.905E 00		1.038E-09	
146	2.411E 03	2.754E 00		1.049E-09	
147	2.428E 03	2.614E 00	1.594E-04	1.061E-09	1.691E-13
148	2.444E 03	2.739E 00		1.068E-09	
149	2.460E 03	2.924E 00		1.074E-09	
150	2.477E 03	3.136E 00	1.327E-04	1.081E-09	1.433E-13
151	2.493E 03	3.272E 00		1.087E-09	
152	2.509E 03	2.097E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.557E-11 R-SQ.CM./ELECTRON

TARGET NO. 5-3 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	8.579E-02	1.464E-01	1.739E-01	1.362E-01	8.954E-02
9	8.741E-02	1.508E-01	1.657E-01	1.285E-01	8.157E-02
12	7.130E-02	1.202E-01	1.309E-01	1.002E-01	6.281E-02
15	5.695E-02	9.592E-02	1.031E-01	7.714E-02	4.802E-02
18	4.628E-02	7.792E-02	8.194E-02	6.126E-02	3.761E-02
21	3.900E-02	6.371E-02	6.675E-02	4.854E-02	2.938E-02
24	3.276E-02	5.301E-02	5.423E-02	3.955E-02	2.312E-02
27	2.717E-02	4.429E-02	4.523E-02	3.214E-02	1.887E-02
30	2.343E-02	3.674E-02	3.753E-02	2.619E-02	1.510E-02
33	1.983E-02	3.148E-02	3.151E-02	2.199E-02	1.253E-02
36	1.737E-02	2.733E-02	2.665E-02	1.832E-02	1.056E-02
39	1.506E-02	2.343E-02	2.252E-02	1.553E-02	8.739E-03
42	1.315E-02	2.041E-02	1.901E-02	1.327E-02	7.239E-03
45	1.145E-02	1.760E-02	1.694E-02	1.124E-02	6.259E-03
48	1.011E-02	1.588E-02	1.456E-02	9.703E-03	5.241E-03
51	8.880E-03	1.351E-02	1.281E-02	8.195E-03	4.553E-03
54	7.862E-03	1.195E-02	1.096E-02	7.067E-03	3.934E-03
57	7.003E-03	1.089E-02	9.715E-03	6.278E-03	3.243E-03
60	6.283E-03	9.924E-03	8.298E-03	5.555E-03	2.858E-03
63	5.681E-03	8.578E-03	7.674E-03	4.630E-03	2.503E-03
66	5.228E-03	7.527E-03	6.507E-03	4.422E-03	2.197E-03
69	4.523E-03	6.883E-03	5.985E-03	3.726E-03	1.898E-03
72	4.040E-03	6.130E-03	5.206E-03	3.203E-03	1.614E-03
75	3.719E-03	5.511E-03	4.963E-03	3.002E-03	1.460E-03
78	3.343E-03	5.015E-03	4.163E-03	2.628E-03	1.295E-03
81	3.107E-03	4.664E-03	3.637E-03	2.292E-03	1.127E-03
84	2.882E-03	4.098E-03	3.446E-03	2.014E-03	9.493E-04
87	2.670E-03	3.706E-03	2.780E-03	1.696E-03	8.252E-04
90	2.286E-03	3.220E-03	2.772E-03	1.551E-03	7.260E-04
93	1.983E-03	2.758E-03	2.204E-03	1.338E-03	5.640E-04
96	1.855E-03	2.668E-03	2.018E-03	1.088E-03	4.245E-04
99	1.807E-03	2.296E-03	1.890E-03	9.835E-04	4.525E-04
102	1.536E-03	1.981E-03	1.606E-03	8.346E-04	3.358E-04
105	1.360E-03	1.862E-03	1.373E-03	7.495E-04	2.678E-04
108	1.275E-03	1.605E-03	1.192E-03	5.626E-04	2.693E-04
111	1.203E-03	1.463E-03	1.119E-03	4.871E-04	2.160E-04
114	1.006E-03	1.332E-03	9.409E-04	4.648E-04	1.703E-04
117	9.033E-04	9.982E-04	6.889E-04	3.633E-04	1.210E-04
120	7.645E-04	1.036E-03	6.812E-04	3.073E-04	1.027E-04
123	6.115E-04	8.698E-04	5.863E-04	2.548E-04	7.728E-05
126	5.417E-04	7.464E-04	4.036E-04	1.881E-04	4.724E-05
129	4.448E-04	6.104E-04	3.283E-04	1.399E-04	4.724E-05
132	4.518E-04	4.692E-04	2.417E-04	1.107E-04	3.682E-05
135	3.093E-04	4.039E-04	1.658E-04	5.570E-05	2.165E-05
138	2.169E-04	3.452E-04	1.423E-04	2.915E-05	1.532E-05
141	2.437E-04	1.737E-04	1.016E-04	3.743E-05	5.209E-06
144	1.461E-04	1.362E-04	2.755E-05	1.127E-05	-1.113E-06
147	7.960E-05	1.160E-04	1.388E-05	4.535E-06	1.340E-06
150	5.004E-05	4.973E-05	2.378E-05	2.202E-05	-1.037E-06
153	1.484E-05	2.331E-05	-2.964E-06	0.0	5.058E-06

TARGET NO. 5-3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.458E-01		4.623E-11	
6	1.225E 02	9.013E-01	1.487E-01	5.526E-11	8.219E-12
7	1.388E 02	9.860E-01		6.482E-11	
8	1.552E 02	9.764E-01		7.572E-11	
9	1.715E 02	9.881E-01	1.564E-01	8.682E-11	1.358E-11
10	1.879E 02	9.888E-01		9.762E-11	
11	2.042E 02	9.902E-01		1.039E-10	
12	2.206E 02	1.002E 00	1.247E-01	1.194E-10	1.489E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.042E 00	1.014E-01	1.528E-10	1.548E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.090E 00		1.732E-10	
18	3.187E 02	1.108E 00	8.588E-02	1.822E-10	1.565E-11
19	3.350E 02	1.129E 00		1.925E-10	
20	3.513E 02	1.151E 00		2.028E-10	
21	3.677E 02	1.166E 00	7.280E-02	2.118E-10	1.542E-11
22	3.840E 02	1.183E 00		2.210E-10	
23	4.004E 02	1.202E 00		2.303E-10	
24	4.167E 02	1.214E 00	6.176E-02	2.404E-10	1.485E-11
25	4.331E 02	1.230E 00		2.492E-10	
26	4.494E 02	1.248E 00		2.577E-10	
27	4.658E 02	1.261E 00	5.295E-02	2.655E-10	1.406E-11
28	4.821E 02	1.276E 00		2.741E-10	
29	4.985E 02	1.292E 00		2.822E-10	
30	5.148E 02	1.305E 00	4.512E-02	2.913E-10	1.314E-11
31	5.312E 02	1.318E 00		3.000E-10	
32	5.475E 02	1.334E 00		3.078E-10	
33	5.639E 02	1.347E 00	3.921E-02	3.162E-10	1.240E-11
34	5.802E 02	1.359E 00		3.245E-10	
35	5.966E 02	1.374E 00		3.324E-10	
36	6.129E 02	1.387E 00	3.429E-02	3.412E-10	1.170E-11
37	6.293E 02	1.399E 00		3.500E-10	
38	6.456E 02	1.413E 00		3.579E-10	
39	6.620E 02	1.423E 00	2.982E-02	3.657E-10	1.091E-11
40	6.783E 02	1.433E 00		3.736E-10	

TARGET NO. 5-3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.444E 00		3.814E-10	
42	7.110E 02	1.454E 00	2.598E-02	3.906E-10	1.015E-11
43	7.273E 02	1.464E 00		4.000E-10	
44	7.437E 02	1.475E 00		4.072E-10	
45	7.600E 02	1.487E 00	2.306E-02	4.152E-10	9.577E-12
46	7.764E 02	1.500E 00		4.236E-10	
47	7.927E 02	1.512E 00		4.308E-10	
48	8.091E 02	1.525E 00	2.053E-02	4.391E-10	9.014E-12
49	8.254E 02	1.536E 00		4.482E-10	
50	8.418E 02	1.546E 00		4.554E-10	
51	8.581E 02	1.556E 00	1.809E-02	4.629E-10	8.373E-12
52	8.745E 02	1.568E 00		4.707E-10	
53	8.908E 02	1.578E 00		4.780E-10	
54	9.072E 02	1.590E 00	1.603E-02	4.857E-10	7.786E-12
55	9.235E 02	1.604E 00		4.942E-10	
56	9.399E 02	1.618E 00		5.015E-10	
57	9.562E 02	1.632E 00	1.455E-02	5.090E-10	7.405E-12
58	9.726E 02	1.646E 00		5.168E-10	
59	9.889E 02	1.656E 00		5.241E-10	
60	1.005E 03	1.668E 00	1.311E-02	5.313E-10	6.968E-12
61	1.022E 03	1.681E 00		5.385E-10	
62	1.038E 03	1.691E 00		5.457E-10	
63	1.054E 03	1.702E 00	1.178E-02	5.529E-10	6.516E-12
64	1.071E 03	1.718E 00		5.601E-10	
65	1.087E 03	1.731E 00		5.668E-10	
66	1.103E 03	1.743E 00	1.074E-02	5.735E-10	6.158E-12
67	1.120E 03	1.757E 00		5.807E-10	
68	1.136E 03	1.770E 00		5.874E-10	
69	1.152E 03	1.781E 00	9.737E-03	5.941E-10	5.784E-12
70	1.169E 03	1.790E 00		6.012E-10	
71	1.185E 03	1.792E 00		6.080E-10	
72	1.201E 03	1.794E 00	8.555E-03	6.145E-10	5.257E-12
73	1.218E 03	1.825E 00		6.204E-10	
74	1.234E 03	1.856E 00		6.267E-10	
75	1.250E 03	1.886E 00	8.341E-03	6.332E-10	5.281E-12
76	1.267E 03	1.889E 00		6.391E-10	
77	1.283E 03	1.890E 00		6.449E-10	
78	1.300E 03	1.889E 00	7.315E-03	6.508E-10	4.761E-12
79	1.316E 03	1.908E 00		6.567E-10	
80	1.332E 03	1.924E 00		6.629E-10	

NO. 5-3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY MEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.937E 00	6.690E-03	6.694E-10	4.479E-12
82	1.365E 03	1.959E 00		6.754E-10	
83	1.381E 03	1.981E 00		6.813E-10	
84	1.398E 03	2.001E 00	6.224E-03	6.871E-10	4.277E-12
85	1.414E 03	2.001E 00		6.975E-10	
86	1.430E 03	1.998E 00		7.073E-10	
87	1.447E 03	1.994E 00	5.324E-03	7.145E-10	3.804E-12
88	1.463E 03	2.024E 00		7.202E-10	
89	1.479E 03	2.061E 00		7.256E-10	
90	1.496E 03	2.091E 00	5.116E-03	7.315E-10	3.742E-12
91	1.512E 03	2.085E 00		7.373E-10	
92	1.528E 03	2.068E 00		7.434E-10	
93	1.545E 03	2.052E 00	4.172E-03	7.499E-10	3.129E-12
94	1.561E 03	2.062E 00		7.560E-10	
95	1.577E 03	2.085E 00		7.620E-10	
96	1.594E 03	2.104E 00	3.817E-03	7.685E-10	2.933E-12
97	1.610E 03	2.137E 00		7.746E-10	
98	1.626E 03	2.177E 00		7.805E-10	
99	1.643E 03	2.202E 00	3.692E-03	7.864E-10	2.903E-12
100	1.659E 03	2.206E 00		7.927E-10	
101	1.676E 03	2.193E 00		7.992E-10	
102	1.692E 03	2.191E 00	3.095E-03	8.051E-10	2.492E-12
103	1.708E 03	2.204E 00		8.106E-10	
104	1.725E 03	2.231E 00		8.159E-10	
105	1.741E 03	2.250E 00	2.813E-03	8.198E-10	2.306E-12
106	1.757E 03	2.262E 00		8.246E-10	
107	1.774E 03	2.267E 00		8.305E-10	
108	1.790E 03	2.281E 00	2.458E-03	8.364E-10	2.056E-12
109	1.806E 03	2.305E 00		8.425E-10	
110	1.823E 03	2.345E 00		8.491E-10	
111	1.839E 03	2.379E 00	2.324E-03	8.545E-10	1.986E-12
112	1.855E 03	2.410E 00		8.595E-10	
113	1.872E 03	2.437E 00		8.641E-10	
114	1.888E 03	2.440E 00	2.086E-03	8.687E-10	1.812E-12
115	1.904E 03	2.421E 00		8.734E-10	
116	1.921E 03	2.359E 00		8.786E-10	
117	1.937E 03	2.352E 00	1.545E-03	8.839E-10	1.365E-12
118	1.953E 03	2.382E 00		8.892E-10	
119	1.970E 03	2.477E 00		8.951E-10	
120	1.986E 03	2.541E 00	1.573E-03	8.997E-10	1.416E-12

TARGET NO. 5-3 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.582E 00		9.038E-10	
122	2.019E 03	2.586E 00		9.090E-10	
123	2.035E 03	2.584E 00	1.334E-03	9.138E-10	1.219E-12
124	2.052E 03	2.576E 00		9.184E-10	
125	2.068E 03	2.547E 00		9.230E-10	
126	2.084E 03	2.540E 00	1.014E-03	9.268E-10	9.402E-13
127	2.101E 03	2.549E 00		9.302E-10	
128	2.117E 03	2.577E 00		9.361E-10	
129	2.133E 03	2.609E 00	8.470E-04	9.416E-10	7.976E-13
130	2.150E 03	2.645E 00		9.469E-10	
131	2.166E 03	2.678E 00		9.515E-10	
132	2.182E 03	2.694E 00	7.030E-04	9.534E-10	6.702E-13
133	2.199E 03	2.686E 00		9.521E-10	
134	2.215E 03	2.637E 00		9.634E-10	
135	2.231E 03	2.618E 00	4.871E-04	9.728E-10	4.739E-13
136	2.248E 03	2.651E 00		9.774E-10	
137	2.264E 03	2.708E 00		9.819E-10	
138	2.280E 03	2.765E 00	4.039E-04	2.916E-09	1.178E-12
139	2.297E 03	2.813E 00		8.772E-09	
140	2.313E 03	2.846E 00		5.266E-09	
141	2.329E 03	2.845E 00	2.988E-04	1.012E-09	3.024E-13
142	2.346E 03	2.759E 00		1.018E-09	
143	2.362E 03	2.569E 00		1.025E-09	
144	2.378E 03	2.402E 00	1.300E-04	1.031E-09	1.341E-13
145	2.395E 03	2.452E 00		1.038E-09	
146	2.411E 03	2.517E 00		1.049E-09	
147	2.428E 03	2.616E 00	9.699E-05	1.061E-09	1.029E-13
148	2.444E 03	2.862E 00		1.068E-09	
149	2.460E 03	3.180E 00		1.074E-09	
150	2.477E 03	3.487E 00	1.017E-04	1.081E-09	1.099E-13
151	2.493E 03	3.292E 00		1.087E-09	
152	2.509E 03	2.019E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.461E-11 R-SQ.CM./ELECTRON

TARGET NO. 5-4 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	9.172E-02	1.468E-01	1.762E-01	1.441E-01	9.401E-02
9	9.302E-02	1.482E-01	1.672E-01	1.329E-01	8.514E-02
12	7.446E-02	1.192E-01	1.310E-01	1.040E-01	6.508E-02
15	6.071E-02	9.605E-02	1.038E-01	7.965E-02	5.019E-02
18	4.901E-02	7.612E-02	8.253E-02	6.382E-02	3.907E-02
21	4.201E-02	6.299E-02	6.882E-02	5.101E-02	3.047E-02
24	3.480E-02	5.329E-02	5.487E-02	4.089E-02	2.448E-02
27	2.895E-02	4.359E-02	4.514E-02	3.304E-02	1.944E-02
30	2.487E-02	3.662E-02	3.793E-02	2.761E-02	1.592E-02
33	2.117E-02	3.135E-02	3.145E-02	2.282E-02	1.324E-02
36	1.779E-02	2.666E-02	2.638E-02	1.919E-02	1.086E-02
39	1.567E-02	2.351E-02	2.286E-02	1.627E-02	9.068E-03
42	1.368E-02	1.975E-02	1.981E-02	1.370E-02	7.833E-03
45	1.194E-02	1.773E-02	1.671E-02	1.179E-02	6.526E-03
48	1.036E-02	1.538E-02	1.467E-02	1.023E-02	5.543E-03
51	9.135E-03	1.323E-02	1.246E-02	8.820E-03	4.640E-03
54	8.338E-03	1.202E-02	1.106E-02	7.745E-03	3.920E-03
57	7.368E-03	1.056E-02	9.987E-03	6.524E-03	3.449E-03
60	6.344E-03	9.529E-03	8.620E-03	5.763E-03	3.072E-03
63	6.053E-03	8.332E-03	7.524E-03	5.183E-03	2.572E-03
66	5.408E-03	7.518E-03	6.727E-03	4.416E-03	2.282E-03
69	4.826E-03	6.710E-03	5.900E-03	3.719E-03	1.998E-03
72	4.362E-03	5.645E-03	5.458E-03	3.324E-03	1.777E-03
75	3.948E-03	5.546E-03	4.986E-03	3.129E-03	1.467E-03
78	3.640E-03	5.100E-03	4.069E-03	2.564E-03	1.326E-03
81	3.247E-03	4.483E-03	3.672E-03	2.193E-03	1.142E-03
84	2.814E-03	4.202E-03	3.469E-03	2.260E-03	9.682E-04
87	2.640E-03	3.646E-03	2.881E-03	1.963E-03	8.282E-04
90	2.345E-03	3.216E-03	2.722E-03	1.571E-03	6.842E-04
93	2.118E-03	3.030E-03	2.340E-03	1.436E-03	6.302E-04
96	2.010E-03	2.445E-03	2.218E-03	1.275E-03	5.361E-04
99	1.755E-03	2.378E-03	1.815E-03	9.986E-04	4.173E-04
102	1.566E-03	1.997E-03	1.636E-03	8.388E-04	4.160E-04
105	1.447E-03	1.988E-03	1.314E-03	7.793E-04	3.402E-04
108	1.258E-03	1.633E-03	1.195E-03	6.511E-04	2.472E-04
111	1.171E-03	1.453E-03	1.214E-03	4.762E-04	2.180E-04
114	9.654E-04	1.165E-03	9.927E-04	4.333E-04	2.080E-04
117	9.778E-04	1.174E-03	8.046E-04	3.842E-04	1.515E-04
120	7.192E-04	1.061E-03	5.954E-04	3.781E-04	1.092E-04
123	6.972E-04	8.426E-04	5.151E-04	2.244E-04	6.756E-05
126	6.449E-04	6.929E-04	4.629E-04	1.993E-04	5.708E-05
129	5.154E-04	5.269E-04	3.382E-04	1.282E-04	4.295E-05
132	3.738E-04	5.286E-04	3.174E-04	1.354E-04	3.712E-05
135	3.134E-04	3.362E-04	2.226E-04	7.402E-05	1.600E-05
138	2.137E-04	2.974E-04	1.080E-04	4.680E-05	1.204E-05
141	2.097E-04	2.641E-04	9.439E-05	2.002E-05	4.039E-06
144	1.337E-04	1.702E-04	6.604E-05	2.203E-05	6.600E-06
147	8.677E-05	1.016E-04	1.407E-05	1.008E-05	1.320E-06
150	5.600E-05	5.604E-05	2.079E-05	1.469E-07	1.584E-07
153	2.051E-05	1.014E-05	1.407E-05	1.469E-07	1.399E-06

TARGET NO. 5-4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.461E-01		4.623E-11	
6	1.225E 02	9.026E-01	1.541E-01	5.526E-11	8.517E-12
7	1.388E 02	9.869E-01		6.482E-11	
8	1.552E 02	9.766E-01		7.572E-11	
9	1.715E 02	9.876E-01	1.596E-01	8.682E-11	1.386E-11
10	1.879E 02	9.884E-01		9.762E-11	
11	2.042E 02	9.899E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.270E-01	1.194E-10	1.516E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.024E 00		1.416E-10	
15	2.696E 02	1.043E 00	1.038E-01	1.528E-10	1.586E-11
16	2.860E 02	1.066E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.107E 00	8.749E-02	1.822E-10	1.594E-11
19	3.350E 02	1.128E 00		1.925E-10	
20	3.513E 02	1.152E 00		2.028E-10	
21	3.677E 02	1.168E 00	7.532E-02	2.118E-10	1.596E-11
22	3.840E 02	1.185E 00		2.210E-10	
23	4.004E 02	1.203E 00		2.303E-10	
24	4.167E 02	1.215E 00	6.353E-02	2.404E-10	1.527E-11
25	4.331E 02	1.229E 00		2.492E-10	
26	4.494E 02	1.245E 00		2.577E-10	
27	4.658E 02	1.258E 00	5.351E-02	2.655E-10	1.421E-11
28	4.821E 02	1.273E 00		2.741E-10	
29	4.985E 02	1.294E 00		2.822E-10	
30	5.148E 02	1.308E 00	4.659E-02	2.913E-10	1.357E-11
31	5.312E 02	1.322E 00		3.000E-10	
32	5.475E 02	1.335E 00		3.078E-10	
33	5.639E 02	1.347E 00	4.010E-02	3.162E-10	1.268E-11
34	5.802E 02	1.358E 00		3.245E-10	
35	5.966E 02	1.370E 00		3.324E-10	
36	6.129E 02	1.382E 00	3.451E-02	3.412E-10	1.178E-11
37	6.293E 02	1.395E 00		3.500E-10	
38	6.456E 02	1.413E 00		3.579E-10	
39	6.620E 02	1.426E 00	3.066E-02	3.657E-10	1.121E-11
40	6.783E 02	1.437E 00		3.736E-10	

TARGET NO. 5-4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.448E 00		3.814E-10	
42	7.110E 02	1.457E 00	2.680E-02	3.906E-10	1.047E-11
43	7.273E 02	1.466E 00		4.000E-10	
44	7.437E 02	1.474E 00		4.072E-10	
45	7.600E 02	1.485E 00	2.348E-02	4.152E-10	9.750E-12
46	7.764E 02	1.498E 00		4.236E-10	
47	7.927E 02	1.512E 00		4.308E-10	
48	8.091E 02	1.525E 00	2.092E-02	4.391E-10	9.186E-12
49	8.254E 02	1.535E 00		4.482E-10	
50	8.418E 02	1.540E 00		4.554E-10	
51	8.581E 02	1.550E 00	1.820E-02	4.629E-10	8.426E-12
52	8.745E 02	1.564E 00		4.707E-10	
53	8.908E 02	1.581E 00		4.780E-10	
54	9.072E 02	1.597E 00	1.662E-02	4.857E-10	8.072E-12
55	9.235E 02	1.611E 00		4.942E-10	
56	9.399E 02	1.621E 00		5.015E-10	
57	9.562E 02	1.632E 00	1.490E-02	5.090E-10	7.585E-12
58	9.726E 02	1.645E 00		5.168E-10	
59	9.889E 02	1.655E 00		5.241E-10	
60	1.005E 03	1.667E 00	1.339E-02	5.313E-10	7.115E-12
61	1.022E 03	1.681E 00		5.385E-10	
62	1.038E 03	1.693E 00		5.457E-10	
63	1.054E 03	1.706E 00	1.210E-02	5.529E-10	6.688E-12
64	1.071E 03	1.721E 00		5.601E-10	
65	1.087E 03	1.733E 00		5.668E-10	
66	1.103E 03	1.744E 00	1.094E-02	5.735E-10	6.272E-12
67	1.120E 03	1.754E 00		5.807E-10	
68	1.136E 03	1.759E 00		5.874E-10	
69	1.152E 03	1.765E 00	9.670E-03	5.941E-10	5.745E-12
70	1.169E 03	1.782E 00		6.012E-10	
71	1.185E 03	1.794E 00		6.080E-10	
72	1.201E 03	1.806E 00	8.824E-03	6.145E-10	5.422E-12
73	1.218E 03	1.833E 00		6.204E-10	
74	1.234E 03	1.861E 00		6.267E-10	
75	1.250E 03	1.890E 00	8.523E-03	6.332E-10	5.397E-12
76	1.267E 03	1.889E 00		6.391E-10	
77	1.283E 03	1.886E 00		6.449E-10	
78	1.300E 03	1.880E 00	7.305E-03	6.508E-10	4.754E-12
79	1.316E 03	1.894E 00		6.567E-10	
80	1.332E 03	1.902E 00		6.629E-10	

TARGET NO. 5-4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.345E 03	1.905E 00	6.512E-03	6.694E-10	4.359E-12
82	1.365E 03	1.944E 00		6.754E-10	
83	1.381E 03	1.984E 00		6.813E-10	
84	1.398E 03	2.023E 00	6.511E-03	6.871E-10	4.474E-12
85	1.414E 03	2.023E 00		6.975E-10	
86	1.430E 03	2.016E 00		7.073E-10	
87	1.447E 03	2.011E 00	5.584E-03	7.145E-10	3.990E-12
88	1.463E 03	2.019E 00		7.202E-10	
89	1.479E 03	2.029E 00		7.256E-10	
90	1.496E 03	2.036E 00	4.950E-03	7.315E-10	3.621E-12
91	1.512E 03	2.056E 00		7.373E-10	
92	1.528E 03	2.080E 00		7.434E-10	
93	1.545E 03	2.100E 00	4.610E-03	7.499E-10	3.457E-12
94	1.561E 03	2.117E 00		7.560E-10	
95	1.577E 03	2.133E 00		7.620E-10	
96	1.594E 03	2.144E 00	4.184E-03	7.685E-10	3.216E-12
97	1.610E 03	2.147E 00		7.746E-10	
98	1.626E 03	2.145E 00		7.805E-10	
99	1.643E 03	2.144E 00	3.552E-03	7.864E-10	2.793E-12
100	1.659E 03	2.155E 00		7.927E-10	
101	1.676E 03	2.177E 00		7.992E-10	
102	1.692E 03	2.197E 00	3.202E-03	8.051E-10	2.578E-12
103	1.708E 03	2.222E 00		8.106E-10	
104	1.725E 03	2.251E 00		8.159E-10	
105	1.741E 03	2.269E 00	2.956E-03	8.198E-10	2.423E-12
106	1.757E 03	2.276E 00		8.246E-10	
107	1.774E 03	2.272E 00		8.305E-10	
108	1.790E 03	2.280E 00	2.518E-03	8.364E-10	2.106E-12
109	1.806E 03	2.303E 00		8.425E-10	
110	1.823E 03	2.344E 00		8.491E-10	
111	1.839E 03	2.368E 00	2.358E-03	8.545E-10	2.015E-12
112	1.855E 03	2.379E 00		8.595E-10	
113	1.872E 03	2.369E 00		8.641E-10	
114	1.888E 03	2.379E 00	1.990E-03	8.687E-10	1.728E-12
115	1.904E 03	2.403E 00		8.734E-10	
116	1.921E 03	2.450E 00		8.786E-10	
117	1.937E 03	2.483E 00	1.860E-03	8.839E-10	1.644E-12
118	1.953E 03	2.507E 00		8.892E-10	
119	1.970E 03	2.510E 00		8.951E-10	
120	1.986E 03	2.507E 00	1.556E-03	8.997E-10	1.400E-12

TARGET NO. 5-4 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.498E 00		9.038E-10	
122	2.019E 03	2.472E 00		9.090E-10	
123	2.035E 03	2.481E 00	1.209E-03	9.138E-10	1.105E-12
124	2.052E 03	2.514E 00		9.184E-10	
125	2.068E 03	2.584E 00		9.230E-10	
126	2.084E 03	2.613E 00	1.113E-03	9.268E-10	1.032E-12
127	2.101E 03	2.608E 00		9.302E-10	
128	2.117E 03	2.537E 00		9.361E-10	
129	2.133E 03	2.532E 00	7.974E-04	9.416E-10	7.509E-13
130	2.150E 03	2.593E 00		9.469E-10	
131	2.166E 03	2.744E 00		9.515E-10	
132	2.182E 03	2.826E 00	8.274E-04	9.534E-10	7.888E-13
133	2.199E 03	2.821E 00		9.521E-10	
134	2.215E 03	2.719E 00		9.634E-10	
135	2.231E 03	2.634E 00	5.119E-04	9.728E-10	4.980E-13
136	2.248E 03	2.591E 00		9.774E-10	
137	2.264E 03	2.538E 00		9.819E-10	
138	2.280E 03	2.530E 00	3.337E-04	2.916E-09	9.730E-13
139	2.297E 03	2.618E 00		8.772E-09	
140	2.313E 03	2.741E 00		5.266E-09	
141	2.329E 03	2.851E 00	3.118E-04	1.012E-09	3.155E-13
142	2.346E 03	2.902E 00		1.018E-09	
143	2.362E 03	2.930E 00		1.025E-09	
144	2.378E 03	2.923E 00	2.231E-04	1.031E-09	2.301E-13
145	2.395E 03	2.823E 00		1.038E-09	
146	2.411E 03	2.625E 00		1.049E-09	
147	2.428E 03	2.436E 00	9.058E-05	1.061E-09	9.610E-14
148	2.444E 03	2.543E 00		1.068E-09	
149	2.460E 03	2.686E 00		1.074E-09	
150	2.477E 03	2.845E 00	6.589E-05	1.081E-09	7.120E-14
151	2.493E 03	2.950E 00		1.087E-09	
152	2.509E 03	1.886E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DCSE= 1.494E-11 R-SQ.CM./ELECTRON

TARGET NO. 5-5 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	8.751E-02	1.640E-01	1.835E-01	1.521E-01	9.749E-02
9	9.070E-02	1.561E-01	1.728E-01	1.407E-01	8.817E-02
12	7.390E-02	1.251E-01	1.362E-01	1.096E-01	6.839E-02
15	5.966E-02	9.936E-02	1.081E-01	8.411E-02	5.258E-02
18	4.839E-02	8.073E-02	8.489E-02	6.654E-02	4.079E-02
21	4.030E-02	6.605E-02	6.935E-02	5.406E-02	3.246E-02
24	3.363E-02	5.446E-02	5.720E-02	4.356E-02	2.562E-02
27	2.846E-02	4.534E-02	4.633E-02	3.476E-02	2.071E-02
30	2.416E-02	3.868E-02	3.994E-02	2.901E-02	1.693E-02
33	2.049E-02	3.262E-02	3.319E-02	2.392E-02	1.390E-02
36	1.767E-02	2.742E-02	2.833E-02	1.990E-02	1.150E-02
39	1.553E-02	2.376E-02	2.423E-02	1.736E-02	9.505E-03
42	1.354E-02	2.108E-02	2.040E-02	1.444E-02	7.973E-03
45	1.170E-02	1.828E-02	1.778E-02	1.260E-02	6.938E-03
48	1.031E-02	1.591E-02	1.544E-02	1.046E-02	5.871E-03
51	9.236E-03	1.403E-02	1.299E-02	9.596E-03	4.990E-03
54	8.078E-03	1.240E-02	1.165E-02	7.885E-03	4.428E-03
57	7.267E-03	1.119E-02	1.007E-02	7.258E-03	3.780E-03
60	6.574E-03	9.833E-03	9.204E-03	6.332E-03	3.244E-03
63	5.947E-03	8.484E-03	8.226E-03	5.433E-03	2.765E-03
66	5.368E-03	7.788E-03	7.165E-03	4.737E-03	2.513E-03
69	4.878E-03	6.987E-03	6.544E-03	4.274E-03	2.151E-03
72	4.403E-03	6.514E-03	5.603E-03	3.840E-03	1.910E-03
75	3.943E-03	5.696E-03	5.019E-03	3.317E-03	1.695E-03
78	3.572E-03	4.993E-03	4.640E-03	2.811E-03	1.455E-03
81	3.236E-03	4.922E-03	4.044E-03	2.485E-03	1.302E-03
84	3.028E-03	4.286E-03	3.496E-03	2.325E-03	1.100E-03
87	2.710E-03	3.636E-03	3.279E-03	1.912E-03	9.481E-04
90	2.485E-03	3.513E-03	2.796E-03	1.766E-03	7.846E-04
93	2.324E-03	3.104E-03	2.643E-03	1.609E-03	7.086E-04
96	1.947E-03	2.771E-03	2.265E-03	1.334E-03	5.917E-04
99	1.899E-03	2.444E-03	1.962E-03	1.179E-03	4.707E-04
102	1.655E-03	2.212E-03	1.694E-03	1.077E-03	4.669E-04
105	1.422E-03	1.936E-03	1.676E-03	8.336E-04	3.831E-04
108	1.311E-03	1.953E-03	1.387E-03	7.102E-04	3.268E-04
111	1.225E-03	1.495E-03	1.255E-03	6.579E-04	2.554E-04
114	1.067E-03	1.363E-03	1.017E-03	4.579E-04	1.994E-04
117	9.406E-04	1.145E-03	7.800E-04	4.075E-04	2.144E-04
120	8.289E-04	9.769E-04	7.421E-04	3.552E-04	1.311E-04
123	6.418E-04	8.168E-04	6.090E-04	2.832E-04	1.089E-04
126	6.615E-04	8.268E-04	4.419E-04	2.624E-04	7.925E-05
129	4.387E-04	6.305E-04	4.766E-04	1.624E-04	4.918E-05
132	4.914E-04	5.029E-04	3.190E-04	1.443E-04	5.308E-05
135	3.954E-04	4.955E-04	2.478E-04	1.257E-04	1.843E-05
138	2.692E-04	3.658E-04	1.601E-04	8.440E-05	1.802E-05
141	2.467E-04	2.648E-04	1.354E-04	6.421E-05	2.218E-05
144	1.815E-04	1.538E-04	1.122E-04	3.411E-05	5.627E-06
147	1.249E-04	1.044E-04	7.708E-05	1.819E-05	1.469E-06
150	7.693E-05	6.283E-05	1.565E-05	7.094E-06	1.403E-05
153	3.840E-05	4.529E-05	1.973E-05	6.821E-06	1.663E-07

TARGET NO. 5-5 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.464E-01		4.623E-11	
6	1.225E 02	9.033E-01	1.621E-01	5.526E-11	8.958E-12
7	1.388E 02	9.873E-01		6.482E-11	
8	1.552E 02	9.765E-01		7.572E-11	
9	1.715E 02	9.868E-01	1.659E-01	8.682E-11	1.441E-11
10	1.879E 02	9.879E-01		9.762E-11	
11	2.042E 02	9.899E-01		1.039E-10	
12	2.206E 02	1.002E 00	1.326E-01	1.194E-10	1.584E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.042E 00	1.080E-01	1.528E-10	1.650E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.106E 00	9.075E-02	1.822E-10	1.653E-11
19	3.350E 02	1.127E 00		1.925E-10	
20	3.513E 02	1.151E 00		2.028E-10	
21	3.677E 02	1.167E 00	7.786E-02	2.118E-10	1.649E-11
22	3.840E 02	1.184E 00		2.210E-10	
23	4.004E 02	1.202E 00		2.303E-10	
24	4.167E 02	1.215E 00	6.601E-02	2.404E-10	1.587E-11
25	4.331E 02	1.229E 00		2.492E-10	
26	4.494E 02	1.244E 00		2.577E-10	
27	4.658E 02	1.256E 00	5.549E-02	2.655E-10	1.473E-11
28	4.821E 02	1.272E 00		2.741E-10	
29	4.985E 02	1.294E 00		2.822E-10	
30	5.148E 02	1.309E 00	4.886E-02	2.913E-10	1.423E-11
31	5.312E 02	1.322E 00		3.000E-10	
32	5.475E 02	1.334E 00		3.078E-10	
33	5.639E 02	1.345E 00	4.173E-02	3.162E-10	1.320E-11
34	5.802E 02	1.356E 00		3.245E-10	
35	5.966E 02	1.370E 00		3.324E-10	
36	6.129E 02	1.382E 00	3.609E-02	3.412E-10	1.232E-11
37	6.293E 02	1.395E 00		3.500E-10	
38	6.456E 02	1.412E 00		3.579E-10	
39	6.620E 02	1.425E 00	3.198E-02	3.657E-10	1.170E-11
40	6.783E 02	1.435E 00		3.736E-10	

TARGET NO. 5-5 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.443E 00		3.814E-10	
42	7.110E 02	1.452E 00	2.772E-02	3.906E-10	1.083E-11
43	7.273E 02	1.462E 00		4.000E-10	
44	7.437E 02	1.475E 00		4.072E-10	
45	7.600E 02	1.487E 00	2.470E-02	4.152E-10	1.025E-11
46	7.764E 02	1.498E 00		4.236E-10	
47	7.927E 02	1.506E 00		4.308E-10	
48	8.091E 02	1.516E 00	2.157E-02	4.391E-10	9.472E-12
49	8.254E 02	1.529E 00		4.482E-10	
50	8.418E 02	1.543E 00		4.554E-10	
51	8.581E 02	1.555E 00	1.935E-02	4.629E-10	8.959E-12
52	8.745E 02	1.567E 00		4.707E-10	
53	8.908E 02	1.576E 00		4.780E-10	
54	9.072E 02	1.588E 00	1.721E-02	4.857E-10	8.359E-12
55	9.235E 02	1.602E 00		4.942E-10	
56	9.399E 02	1.616E 00		5.015E-10	
57	9.562E 02	1.630E 00	1.570E-02	5.090E-10	7.991E-12
58	9.726E 02	1.645E 00		5.168E-10	
59	9.889E 02	1.658E 00		5.241E-10	
60	1.005E 03	1.670E 00	1.426E-02	5.313E-10	7.575E-12
61	1.022E 03	1.681E 00		5.385E-10	
62	1.038E 03	1.688E 00		5.457E-10	
63	1.054E 03	1.697E 00	1.266E-02	5.529E-10	6.998E-12
64	1.071E 03	1.712E 00		5.601E-10	
65	1.087E 03	1.723E 00		5.668E-10	
66	1.103E 03	1.734E 00	1.150E-02	5.735E-10	6.595E-12
67	1.120E 03	1.750E 00		5.807E-10	
68	1.136E 03	1.765E 00		5.874E-10	
69	1.152E 03	1.780E 00	1.061E-02	5.941E-10	6.305E-12
70	1.169E 03	1.795E 00		6.012E-10	
71	1.185E 03	1.809E 00		6.080E-10	
72	1.201E 03	1.823E 00	9.692E-03	6.145E-10	5.956E-12
73	1.218E 03	1.834E 00		6.204E-10	
74	1.234E 03	1.843E 00		6.267E-10	
75	1.250E 03	1.851E 00	8.679E-03	6.332E-10	5.495E-12
76	1.267E 03	1.864E 00		6.391E-10	
77	1.283E 03	1.874E 00		6.449E-10	
78	1.300E 03	1.879E 00	7.799E-03	6.508E-10	5.076E-12
79	1.316E 03	1.904E 00		6.567E-10	
80	1.332E 03	1.926E 00		6.629E-10	

TARGET NO. 5-5 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
82	1.365E 03	1.958E 00		6.754E-10	
83	1.381E 03	1.970E 00		6.813E-10	
84	1.398E 03	1.980E 00	6.607E-03	6.871E-10	4.540E-12
85	1.414E 03	1.988E 00		6.975E-10	
86	1.430E 03	1.993E 00		7.073E-10	
87	1.447E 03	1.995E 00	5.829E-03	7.145E-10	4.165E-12
88	1.463E 03	2.011E 00		7.202E-10	
89	1.479E 03	2.029E 00		7.256E-10	
90	1.496E 03	2.044E 00	5.366E-03	7.315E-10	3.925E-12
91	1.512E 03	2.069E 00		7.373E-10	
92	1.528E 03	2.096E 00		7.434E-10	
93	1.545E 03	2.119E 00	5.099E-03	7.499E-10	3.824E-12
94	1.561E 03	2.120E 00		7.560E-10	
95	1.577E 03	2.112E 00		7.620E-10	
96	1.594E 03	2.107E 00	4.335E-03	7.685E-10	3.332E-12
97	1.610E 03	2.116E 00		7.746E-10	
98	1.626E 03	2.132E 00		7.805E-10	
99	1.643E 03	2.145E 00	3.881E-03	7.864E-10	3.052E-12
100	1.659E 03	2.166E 00		7.927E-10	
101	1.676E 03	2.192E 00		7.992E-10	
102	1.692E 03	2.211E 00	3.590E-03	8.051E-10	2.890E-12
103	1.708E 03	2.226E 00		8.106E-10	
104	1.725E 03	2.237E 00		8.159E-10	
105	1.741E 03	2.251E 00	3.213E-03	8.198E-10	2.634E-12
106	1.757E 03	2.272E 00		8.246E-10	
107	1.774E 03	2.300E 00		8.305E-10	
108	1.790E 03	2.324E 00	2.957E-03	8.364E-10	2.473E-12
109	1.806E 03	2.344E 00		8.425E-10	
110	1.823E 03	2.359E 00		8.491E-10	
111	1.839E 03	2.367E 00	2.596E-03	8.545E-10	2.218E-12
112	1.855E 03	2.369E 00		8.595E-10	
113	1.872E 03	2.359E 00		8.641E-10	
114	1.888E 03	2.361E 00	2.119E-03	8.687E-10	1.841E-12
115	1.904E 03	2.370E 00		8.734E-10	
116	1.921E 03	2.388E 00		8.786E-10	
117	1.937E 03	2.413E 00	1.839E-03	8.839E-10	1.626E-12
118	1.953E 03	2.440E 00		8.892E-10	
119	1.970E 03	2.472E 00		8.951E-10	
120	1.986E 03	2.489E 00	1.642E-03	8.997E-10	1.478E-12

TARGET NO. 5-5 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.496E 00		9.038E-10	
122	2.019E 03	2.478E 00		9.090E-10	
123	2.035E 03	2.487E 00	1.336E-03	9.138E-10	1.221E-12
124	2.052E 03	2.517E 00		9.184E-10	
125	2.068E 03	2.576E 00		9.230E-10	
126	2.084E 03	2.609E 00	1.243E-03	9.268E-10	1.152E-12
127	2.101E 03	2.623E 00		9.302E-10	
128	2.117E 03	2.598E 00		9.361E-10	
129	2.133E 03	2.591E 00	9.804E-04	9.416E-10	9.232E-13
130	2.150E 03	2.601E 00		9.469E-10	
131	2.166E 03	2.621E 00		9.515E-10	
132	2.182E 03	2.652E 00	8.252E-04	9.534E-10	7.867E-13
133	2.199E 03	2.695E 00		9.521E-10	
134	2.215E 03	2.750E 00		9.634E-10	
135	2.231E 03	2.775E 00	7.201E-04	9.728E-10	7.005E-13
136	2.248E 03	2.753E 00		9.774E-10	
137	2.264E 03	2.680E 00		9.819E-10	
138	2.280E 03	2.642E 00	4.782E-04	2.916E-09	1.394E-12
139	2.297E 03	2.694E 00		8.772E-09	
140	2.313E 03	2.783E 00		5.266E-09	
141	2.329E 03	2.853E 00	4.195E-04	1.012E-09	4.245E-13
142	2.346E 03	2.849E 00		1.018E-09	
143	2.362E 03	2.797E 00		1.025E-09	
144	2.378E 03	2.748E 00	2.637E-04	1.031E-09	2.720E-13
145	2.395E 03	2.773E 00		1.038E-09	
146	2.411E 03	2.794E 00		1.049E-09	
147	2.428E 03	2.812E 00	1.774E-04	1.061E-09	1.882E-13
148	2.444E 03	2.817E 00		1.068E-09	
149	2.460E 03	2.767E 00		1.074E-09	
150	2.477E 03	2.726E 00	8.917E-05	1.081E-09	9.636E-14
151	2.493E 03	3.089E 00		1.087E-09	
152	2.509E 03	2.044E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.573E-11 R-SQ.CM./ELECTRON

TARGET NO. 5-6 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
6	9.733E-02	1.602E-01	1.801E-01	1.516E-01	9.760E-02	3.277E-02
9	9.578E-02	1.525E-01	1.673E-01	1.391E-01	8.717E-02	3.070E-02
12	7.833E-02	1.225E-01	1.314E-01	1.072E-01	6.695E-02	2.376E-02
15	6.240E-02	9.658E-02	1.028E-01	8.306E-02	5.095E-02	1.801E-02
18	5.063E-02	7.908E-02	8.249E-02	6.530E-02	4.035E-02	1.397E-02
21	4.147E-02	6.400E-02	6.665E-02	5.294E-02	3.185E-02	1.109E-02
24	3.503E-02	5.324E-02	5.543E-02	4.236E-02	2.544E-02	8.722E-03
27	2.936E-02	4.438E-02	4.487E-02	3.444E-02	2.031E-02	6.853E-03
30	2.528E-02	3.749E-02	3.765E-02	2.770E-02	1.665E-02	5.648E-03
33	2.126E-02	3.174E-02	3.183E-02	2.386E-02	1.351E-02	4.590E-03
36	1.843E-02	2.755E-02	2.656E-02	1.993E-02	1.130E-02	3.796E-03
39	1.598E-02	2.383E-02	2.265E-02	1.645E-02	9.537E-03	3.142E-03
42	1.347E-02	2.082E-02	1.941E-02	1.400E-02	8.000E-03	2.595E-03
45	1.241E-02	1.782E-02	1.671E-02	1.215E-02	6.692E-03	2.154E-03
48	1.064E-02	1.552E-02	1.478E-02	1.037E-02	5.692E-03	1.838E-03
51	9.260E-03	1.373E-02	1.298E-02	8.961E-03	4.907E-03	1.583E-03
54	8.157E-03	1.174E-02	1.060E-02	7.551E-03	4.292E-03	1.347E-03
57	7.444E-03	1.073E-02	1.023E-02	6.830E-03	3.569E-03	1.222E-03
60	6.526E-03	9.340E-03	8.662E-03	5.969E-03	3.044E-03	1.068E-03
63	6.170E-03	8.568E-03	7.594E-03	5.235E-03	2.799E-03	8.920E-04
66	5.379E-03	7.677E-03	6.456E-03	4.453E-03	2.349E-03	7.308E-04
69	4.918E-03	6.960E-03	6.196E-03	3.949E-03	2.045E-03	6.379E-04
72	4.430E-03	6.049E-03	5.278E-03	3.624E-03	1.890E-03	5.633E-04
75	3.856E-03	5.481E-03	4.847E-03	3.154E-03	1.578E-03	4.834E-04
78	3.628E-03	5.032E-03	4.184E-03	2.653E-03	1.316E-03	4.254E-04
81	3.451E-03	4.429E-03	3.655E-03	2.304E-03	1.262E-03	3.727E-04
84	2.922E-03	3.976E-03	3.323E-03	2.009E-03	1.089E-03	3.090E-04
87	2.742E-03	3.499E-03	2.997E-03	1.726E-03	8.647E-04	2.668E-04
90	2.496E-03	3.281E-03	2.562E-03	1.709E-03	7.854E-04	2.333E-04
93	2.193E-03	2.904E-03	2.400E-03	1.436E-03	6.630E-04	1.924E-04
96	2.127E-03	2.514E-03	2.183E-03	1.105E-03	5.803E-04	1.553E-04
99	1.841E-03	2.409E-03	1.949E-03	1.028E-03	4.805E-04	1.294E-04
102	1.701E-03	2.169E-03	1.549E-03	9.533E-04	4.696E-04	1.117E-04
105	1.473E-03	1.774E-03	1.436E-03	7.988E-04	3.270E-04	9.208E-05
108	1.294E-03	1.626E-03	1.055E-03	6.675E-04	3.492E-04	7.434E-05
111	1.083E-03	1.525E-03	1.072E-03	5.642E-04	2.714E-04	6.242E-05
114	9.193E-04	1.221E-03	9.253E-04	4.256E-04	1.800E-04	6.043E-05
117	9.138E-04	1.170E-03	6.996E-04	3.650E-04	1.753E-04	3.886E-05
120	8.439E-04	1.074E-03	5.694E-04	2.971E-04	1.537E-04	3.153E-05
123	7.080E-04	8.331E-04	5.900E-04	2.574E-04	1.044E-04	2.014E-05
126	5.963E-04	6.600E-04	3.803E-04	2.098E-04	7.626E-05	1.550E-05
129	4.602E-04	7.420E-04	3.619E-04	1.144E-04	5.948E-05	9.178E-06
132	3.836E-04	4.794E-04	2.215E-04	1.316E-04	4.496E-05	1.195E-05
135	3.518E-04	4.549E-04	2.103E-04	8.967E-05	4.882E-05	5.792E-06
138	3.383E-04	3.012E-04	1.777E-04	6.035E-05	1.799E-05	2.406E-06
141	2.000E-04	2.174E-04	9.031E-05	6.021E-05	2.056E-05	1.931E-06
144	2.047E-04	1.575E-04	8.692E-05	1.584E-05	1.285E-05	1.037E-06
147	1.116E-04	1.079E-04	4.749E-05	1.584E-05	7.708E-06	1.008E-06
150	6.513E-05	6.052E-05	2.184E-05	8.901E-06	2.569E-06	9.511E-07
153	4.187E-05	2.703E-05	1.103E-05	0.0	2.569E-06	9.511E-07

TARGET NO. 5-6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.467E-01		4.623E-11	
6	1.225E 02	9.046E-01	1.526E-01	5.526E-11	8.433E-12
7	1.388E 02	9.884E-01		6.482E-11	
8	1.552E 02	9.772E-01		7.572E-11	
9	1.715E 02	9.871E-01	1.546E-01	8.682E-11	1.342E-11
10	1.879E 02	9.882E-01		9.762E-11	
11	2.042E 02	9.904E-01		1.039E-10	
12	2.206E 02	1.002E 00	1.231E-01	1.194E-10	1.469E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.042E 00	9.957E-02	1.528E-10	1.521E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.090E 00		1.732E-10	
18	3.187E 02	1.108E 00	8.466E-02	1.822E-10	1.542E-11
19	3.350E 02	1.129E 00		1.925E-10	
20	3.513E 02	1.151E 00		2.028E-10	
21	3.677E 02	1.166E 00	7.184E-02	2.118E-10	1.522E-11
22	3.840E 02	1.183E 00		2.210E-10	
23	4.004E 02	1.203E 00		2.303E-10	
24	4.167E 02	1.216E 00	6.132E-02	2.404E-10	1.474E-11
25	4.331E 02	1.231E 00		2.492E-10	
26	4.494E 02	1.246E 00		2.577E-10	
27	4.658E 02	1.259E 00	5.172E-02	2.655E-10	1.373E-11
28	4.821E 02	1.274E 00		2.741E-10	
29	4.985E 02	1.293E 00		2.822E-10	
30	5.148E 02	1.306E 00	4.454E-02	2.913E-10	1.298E-11
31	5.312E 02	1.320E 00		3.000E-10	
32	5.475E 02	1.335E 00		3.078E-10	
33	5.639E 02	1.348E 00	3.877E-02	3.162E-10	1.226E-11
34	5.802E 02	1.360E 00		3.245E-10	
35	5.966E 02	1.374E 00		3.324E-10	
36	6.129E 02	1.386E 00	3.366E-02	3.412E-10	1.149E-11
37	6.293E 02	1.398E 00		3.500E-10	
38	6.456E 02	1.412E 00		3.579E-10	
39	6.620E 02	1.424E 00	2.932E-02	3.657E-10	1.072E-11
40	6.783E 02	1.434E 00		3.736E-10	

TARGET NO. 5-6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.446E 00		3.814E-10	
42	7.110E 02	1.456E 00	2.562E-02	3.906E-10	1.001E-11
43	7.273E 02	1.465E 00		4.000E-10	
44	7.437E 02	1.475E 00		4.072E-10	
45	7.600E 02	1.486E 00	2.257E-02	4.152E-10	9.371E-12
46	7.764E 02	1.498E 00		4.236E-10	
47	7.927E 02	1.510E 00		4.308E-10	
48	8.091E 02	1.522E 00	2.002E-02	4.391E-10	8.793E-12
49	8.254E 02	1.536E 00		4.482E-10	
50	8.418E 02	1.551E 00		4.554E-10	
51	8.581E 02	1.563E 00	1.795E-02	4.629E-10	8.309E-12
52	8.745E 02	1.570E 00		4.707E-10	
53	8.908E 02	1.568E 00		4.780E-10	
54	9.072E 02	1.576E 00	1.531E-02	4.857E-10	7.436E-12
55	9.235E 02	1.597E 00		4.942E-10	
56	9.399E 02	1.625E 00		5.015E-10	
57	9.562E 02	1.646E 00	1.464E-02	5.090E-10	7.451E-12
58	9.726E 02	1.655E 00		5.168E-10	
59	9.889E 02	1.654E 00		5.241E-10	
60	1.005E 03	1.659E 00	1.274E-02	5.313E-10	6.767E-12
61	1.022E 03	1.678E 00		5.385E-10	
62	1.038E 03	1.699E 00		5.457E-10	
63	1.054E 03	1.716E 00	1.181E-02	5.529E-10	6.532E-12
64	1.071E 03	1.723E 00		5.601E-10	
65	1.087E 03	1.720E 00		5.668E-10	
66	1.103E 03	1.721E 00	1.020E-02	5.735E-10	5.848E-12
67	1.120E 03	1.744E 00		5.807E-10	
68	1.136E 03	1.768E 00		5.874E-10	
69	1.152E 03	1.790E 00	9.687E-03	5.941E-10	5.755E-12
70	1.169E 03	1.802E 00		6.012E-10	
71	1.185E 03	1.811E 00		6.080E-10	
72	1.201E 03	1.820E 00	8.713E-03	6.145E-10	5.354E-12
73	1.218E 03	1.835E 00		6.204E-10	
74	1.234E 03	1.849E 00		6.267E-10	
75	1.250E 03	1.862E 00	7.914E-03	6.332E-10	5.011E-12
76	1.267E 03	1.873E 00		6.391E-10	
77	1.283E 03	1.881E 00		6.449E-10	
78	1.300E 03	1.885E 00	7.034E-03	6.508E-10	4.578E-12
79	1.316E 03	1.906E 00		6.567E-10	
80	1.332E 03	1.924E 00		6.629E-10	

TARGET NO. 5-6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.938E 00	6.453E-03	6.694E-10	4.320E-12
82	1.365E 03	1.952E 00		6.754E-10	
83	1.381E 03	1.964E 00		6.813E-10	
84	1.398E 03	1.974E 00	5.807E-03	6.871E-10	3.990E-12
85	1.414E 03	1.983E 00		6.975E-10	
86	1.430E 03	1.990E 00		7.073E-10	
87	1.447E 03	1.995E 00	5.166E-03	7.145E-10	3.691E-12
88	1.463E 03	2.019E 00		7.202E-10	
89	1.479E 03	2.045E 00		7.256E-10	
90	1.496E 03	2.067E 00	4.898E-03	7.315E-10	3.583E-12
91	1.512E 03	2.079E 00		7.373E-10	
92	1.528E 03	2.087E 00		7.434E-10	
93	1.545E 03	2.093E 00	4.385E-03	7.499E-10	3.288E-12
94	1.561E 03	2.098E 00		7.560E-10	
95	1.577E 03	2.102E 00		7.620E-10	
96	1.594E 03	2.108E 00	3.854E-03	7.685E-10	2.962E-12
97	1.610E 03	2.127E 00		7.746E-10	
98	1.626E 03	2.156E 00		7.805E-10	
99	1.643E 03	2.178E 00	3.604E-03	7.864E-10	2.835E-12
100	1.659E 03	2.197E 00		7.927E-10	
101	1.676E 03	2.215E 00		7.992E-10	
102	1.692E 03	2.229E 00	3.252E-03	8.051E-10	2.618E-12
103	1.708E 03	2.237E 00		8.106E-10	
104	1.725E 03	2.239E 00		8.159E-10	
105	1.741E 03	2.242E 00	2.775E-03	8.198E-10	2.275E-12
106	1.757E 03	2.246E 00		8.246E-10	
107	1.774E 03	2.253E 00		8.305E-10	
108	1.790E 03	2.271E 00	2.389E-03	8.364E-10	1.998E-12
109	1.806E 03	2.303E 00		8.425E-10	
110	1.823E 03	2.356E 00		8.491E-10	
111	1.839E 03	2.381E 00	2.275E-03	8.545E-10	1.944E-12
112	1.855E 03	2.386E 00		8.595E-10	
113	1.872E 03	2.357E 00		8.641E-10	
114	1.888E 03	2.352E 00	1.818E-03	8.687E-10	1.579E-12
115	1.904E 03	2.361E 00		8.734E-10	
116	1.921E 03	2.395E 00		8.786E-10	
117	1.937E 03	2.426E 00	1.650E-03	8.839E-10	1.458E-12
118	1.953E 03	2.455E 00		8.892E-10	
119	1.970E 03	2.481E 00		8.951E-10	
120	1.986E 03	2.507E 00	1.484E-03	8.997E-10	1.335E-12

TARGET NO. 5-6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.535E 00		9.038E-10	
122	2.019E 03	2.564E 00		9.090E-10	
123	2.035E 03	2.571E 00	1.304E-03	9.138E-10	1.192E-12
124	2.052E 03	2.559E 00		9.184E-10	
125	2.068E 03	2.502E 00		9.230E-10	
126	2.084E 03	2.494E 00	9.566E-04	9.268E-10	8.867E-13
127	2.101E 03	2.526E 00		9.302E-10	
128	2.117E 03	2.618E 00		9.361E-10	
129	2.133E 03	2.662E 00	9.105E-04	9.416E-10	8.574E-13
130	2.150E 03	2.660E 00		9.469E-10	
131	2.166E 03	2.578E 00		9.515E-10	
132	2.182E 03	2.552E 00	6.356E-04	9.534E-10	6.060E-13
133	2.199E 03	2.600E 00		9.521E-10	
134	2.215E 03	2.714E 00		9.634E-10	
135	2.231E 03	2.798E 00	6.292E-04	9.728E-10	6.121E-13
136	2.248E 03	2.824E 00		9.774E-10	
137	2.264E 03	2.810E 00		9.819E-10	
138	2.280E 03	2.784E 00	4.684E-04	2.916E-09	1.366E-12
139	2.297E 03	2.749E 00		8.772E-09	
140	2.313E 03	2.681E 00		5.266E-09	
141	2.329E 03	2.641E 00	2.985E-04	1.012E-09	3.020E-13
142	2.346E 03	2.702E 00		1.018E-09	
143	2.362E 03	2.788E 00		1.025E-09	
144	2.378E 03	2.864E 00	2.471E-04	1.031E-09	2.548E-13
145	2.395E 03	2.874E 00		1.038E-09	
146	2.411E 03	2.843E 00		1.049E-09	
147	2.428E 03	2.801E 00	1.500E-04	1.061E-09	1.591E-13
148	2.444E 03	2.813E 00		1.068E-09	
149	2.460E 03	2.790E 00		1.074E-09	
150	2.477E 03	2.769E 00	7.945E-05	1.081E-09	8.586E-14
151	2.493E 03	2.967E 00		1.087E-09	
152	2.509E 03	1.922E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.441E-11 R-SQ.CM./ELECTRON

TARGET NO. 6 INCIDENT ENERGY 2.5 MEV

CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
6	1.111E-01	1.842E-01	2.014E-01	1.727E-01	1.112E-01	4.255E-02
9	1.132E-01	1.833E-01	1.940E-01	1.619E-01	1.025E-01	3.888E-02
12	9.358E-02	1.474E-01	1.542E-01	1.281E-01	7.998E-02	2.971E-02
15	7.654E-02	1.204E-01	1.223E-01	9.974E-02	6.196E-02	2.279E-02
18	6.174E-02	9.458E-02	9.641E-02	7.878E-02	4.904E-02	1.791E-02
21	5.159E-02	7.920E-02	7.980E-02	6.311E-02	3.850E-02	1.404E-02
24	4.346E-02	6.567E-02	6.470E-02	5.150E-02	3.082E-02	1.122E-02
27	3.645E-02	5.508E-02	5.363E-02	4.197E-02	2.531E-02	8.912E-03
30	3.063E-02	4.620E-02	4.528E-02	3.511E-02	2.041E-02	7.124E-03
33	2.653E-02	3.960E-02	3.805E-02	2.884E-02	1.664E-02	5.807E-03
36	2.255E-02	3.383E-02	3.249E-02	2.482E-02	1.398E-02	4.841E-03
39	1.997E-02	2.902E-02	2.809E-02	2.098E-02	1.176E-02	4.044E-03
42	1.710E-02	2.546E-02	2.380E-02	1.742E-02	1.000E-02	3.452E-03
45	1.548E-02	2.148E-02	2.053E-02	1.524E-02	8.520E-03	2.842E-03
48	1.384E-02	1.902E-02	1.805E-02	1.314E-02	7.329E-03	2.514E-03
51	1.204E-02	1.747E-02	1.555E-02	1.148E-02	6.323E-03	2.134E-03
54	1.095E-02	1.459E-02	1.360E-02	9.981E-03	5.317E-03	1.786E-03
57	9.284E-03	1.354E-02	1.240E-02	8.552E-03	4.511E-03	1.595E-03
60	8.410E-03	1.212E-02	1.092E-02	7.408E-03	4.092E-03	1.392E-03
63	7.841E-03	1.067E-02	9.601E-03	6.579E-03	3.472E-03	1.125E-03
66	6.900E-03	1.005E-02	8.387E-03	5.858E-03	3.209E-03	9.967E-04
69	6.478E-03	8.560E-03	8.037E-03	5.122E-03	2.747E-03	9.100E-04
72	5.787E-03	7.923E-03	6.982E-03	4.765E-03	2.409E-03	7.846E-04
75	5.213E-03	6.914E-03	5.971E-03	4.039E-03	2.179E-03	6.748E-04
78	4.970E-03	6.401E-03	5.338E-03	3.618E-03	1.854E-03	6.017E-04
81	4.265E-03	5.762E-03	4.948E-03	3.468E-03	1.622E-03	5.031E-04
84	4.078E-03	5.406E-03	4.445E-03	2.990E-03	1.429E-03	4.721E-04
87	3.849E-03	4.787E-03	3.695E-03	2.531E-03	1.307E-03	3.958E-04
90	3.190E-03	4.417E-03	3.316E-03	2.346E-03	1.159E-03	3.283E-04
93	3.040E-03	4.053E-03	3.109E-03	1.972E-03	1.045E-03	3.071E-04
96	2.698E-03	3.654E-03	2.825E-03	1.703E-03	9.354E-04	2.694E-04
99	2.700E-03	3.176E-03	2.698E-03	1.579E-03	7.079E-04	2.153E-04
102	2.202E-03	3.014E-03	2.316E-03	1.296E-03	6.195E-04	1.670E-04
105	2.078E-03	2.447E-03	1.860E-03	1.165E-03	5.495E-04	1.698E-04
108	1.869E-03	2.324E-03	1.774E-03	9.087E-04	5.017E-04	1.279E-04
111	1.794E-03	1.933E-03	1.549E-03	8.999E-04	4.343E-04	9.226E-05
114	1.613E-03	1.808E-03	1.349E-03	7.774E-04	3.502E-04	9.777E-05
117	1.380E-03	1.497E-03	1.097E-03	6.850E-04	2.441E-04	9.030E-05
120	1.254E-03	1.187E-03	1.073E-03	6.002E-04	2.289E-04	6.498E-05
123	1.141E-03	1.283E-03	9.032E-04	4.822E-04	1.996E-04	4.582E-05
126	9.633E-04	1.185E-03	6.810E-04	4.130E-04	1.593E-04	3.169E-05
129	8.151E-04	8.247E-04	6.046E-04	3.667E-04	1.106E-04	2.747E-05
132	7.314E-04	8.116E-04	5.578E-04	2.202E-04	8.257E-05	1.831E-05
135	6.947E-04	5.985E-04	4.558E-04	2.112E-04	5.146E-05	1.314E-05
138	5.423E-04	4.276E-04	3.200E-04	1.323E-04	4.476E-05	1.437E-05
141	4.714E-04	3.663E-04	2.928E-04	8.440E-05	2.541E-05	6.590E-06
144	3.657E-04	2.840E-04	1.836E-04	7.681E-05	1.475E-05	6.629E-06
147	2.501E-04	2.759E-04	8.362E-05	2.437E-05	1.488E-05	3.256E-06
150	2.298E-04	1.293E-04	5.272E-05	3.503E-05	1.264E-05	2.605E-06
153	1.024E-04	8.888E-05	2.039E-05	3.134E-05	1.686E-05	1.302E-06

TARGET NO. 6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.455E-01		4.623E-11	
6	1.225E 02	9.001E-01	1.735E-01	5.526E-11	9.587E-12
7	1.388E 02	9.845E-01		6.482E-11	
8	1.552E 02	9.747E-01		7.572E-11	
9	1.715E 02	9.859E-01	1.818E-01	8.682E-11	1.579E-11
10	1.879E 02	9.868E-01		9.762E-11	
11	2.042E 02	9.885E-01		1.039E-10	
12	2.206E 02	1.001E 00	1.466E-01	1.194E-10	1.750E-11
13	2.369E 02	1.011E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.042E 00	1.209E-01	1.528E-10	1.847E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.087E 00		1.732E-10	
18	3.187E 02	1.104E 00	1.012E-01	1.822E-10	1.843E-11
19	3.350E 02	1.126E 00		1.925E-10	
20	3.513E 02	1.149E 00		2.028E-10	
21	3.677E 02	1.165E 00	8.700E-02	2.118E-10	1.843E-11
22	3.840E 02	1.182E 00		2.210E-10	
23	4.004E 02	1.200E 00		2.303E-10	
24	4.167E 02	1.212E 00	7.391E-02	2.404E-10	1.777E-11
25	4.331E 02	1.227E 00		2.492E-10	
26	4.494E 02	1.244E 00		2.577E-10	
27	4.658E 02	1.257E 00	6.330E-02	2.655E-10	1.680E-11
28	4.821E 02	1.273E 00		2.741E-10	
29	4.985E 02	1.291E 00		2.822E-10	
30	5.148E 02	1.304E 00	5.473E-02	2.913E-10	1.594E-11
31	5.312E 02	1.317E 00		3.000E-10	
32	5.475E 02	1.330E 00		3.078E-10	
33	5.639E 02	1.341E 00	4.713E-02	3.162E-10	1.490E-11
34	5.802E 02	1.354E 00		3.245E-10	
35	5.966E 02	1.369E 00		3.324E-10	
36	6.129E 02	1.382E 00	4.139E-02	3.412E-10	1.412E-11
37	6.293E 02	1.395E 00		3.500E-10	
38	6.456E 02	1.410E 00		3.579E-10	
39	6.620E 02	1.421E 00	3.646E-02	3.657E-10	1.333E-11
40	6.783E 02	1.431E 00		3.736E-10	

TARGET NO. 6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.441E 00		3.814E-10	
42	7.110E 02	1.449E 00	3.164E-02	3.906E-10	1.236E-11
43	7.273E 02	1.458E 00		4.000E-10	
44	7.437E 02	1.466E 00		4.072E-10	
45	7.600E 02	1.477E 00	2.782E-02	4.152E-10	1.155E-11
46	7.764E 02	1.490E 00		4.236E-10	
47	7.927E 02	1.503E 00		4.308E-10	
48	8.091E 02	1.516E 00	2.502E-02	4.391E-10	1.099E-11
49	8.254E 02	1.530E 00		4.482E-10	
50	8.418E 02	1.543E 00		4.554E-10	
51	8.581E 02	1.554E 00	2.249E-02	4.629E-10	1.041E-11
52	8.745E 02	1.564E 00		4.707E-10	
53	8.908E 02	1.570E 00		4.780E-10	
54	9.072E 02	1.580E 00	1.972E-02	4.857E-10	9.580E-12
55	9.235E 02	1.594E 00		4.942E-10	
56	9.399E 02	1.608E 00		5.015E-10	
57	9.562E 02	1.622E 00	1.796E-02	5.090E-10	9.142E-12
58	9.726E 02	1.636E 00		5.168E-10	
59	9.889E 02	1.647E 00		5.241E-10	
60	1.005E 03	1.658E 00	1.627E-02	5.313E-10	8.643E-12
61	1.022E 03	1.670E 00		5.385E-10	
62	1.038E 03	1.678E 00		5.457E-10	
63	1.054E 03	1.688E 00	1.459E-02	5.529E-10	8.069E-12
64	1.071E 03	1.704E 00		5.601E-10	
65	1.087E 03	1.718E 00		5.668E-10	
66	1.103E 03	1.730E 00	1.346E-02	5.735E-10	7.721E-12
67	1.120E 03	1.745E 00		5.807E-10	
68	1.136E 03	1.757E 00		5.874E-10	
69	1.152E 03	1.770E 00	1.238E-02	5.941E-10	7.352E-12
70	1.169E 03	1.787E 00		6.012E-10	
71	1.185E 03	1.805E 00		6.080E-10	
72	1.201E 03	1.821E 00	1.144E-02	6.145E-10	7.031E-12
73	1.218E 03	1.825E 00		6.204E-10	
74	1.234E 03	1.825E 00		6.267E-10	
75	1.250E 03	1.822E 00	9.943E-03	6.332E-10	6.296E-12
76	1.267E 03	1.844E 00		6.391E-10	
77	1.283E 03	1.862E 00		6.449E-10	
78	1.300E 03	1.875E 00	9.251E-03	6.508E-10	6.021E-12
79	1.316E 03	1.896E 00		6.567E-10	
80	1.332E 03	1.914E 00		6.629E-10	

TARGET NO. 6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.929E 00	8.662E-03	6.694E-10	5.799E-12
82	1.365E 03	1.947E 00		6.754E-10	
83	1.381E 03	1.965E 00		6.813E-10	
84	1.398E 03	1.984E 00	8.068E-03	6.871E-10	5.544E-12
85	1.414E 03	1.986E 00		6.975E-10	
86	1.430E 03	1.985E 00		7.073E-10	
87	1.447E 03	1.984E 00	7.025E-03	7.145E-10	5.020E-12
88	1.463E 03	1.998E 00		7.202E-10	
89	1.479E 03	2.015E 00		7.256E-10	
90	1.496E 03	2.027E 00	6.444E-03	7.315E-10	4.714E-12
91	1.512E 03	2.046E 00		7.373E-10	
92	1.528E 03	2.065E 00		7.434E-10	
93	1.545E 03	2.080E 00	6.015E-03	7.499E-10	4.511E-12
94	1.561E 03	2.090E 00		7.560E-10	
95	1.577E 03	2.098E 00		7.620E-10	
96	1.594E 03	2.107E 00	5.438E-03	7.685E-10	4.180E-12
97	1.610E 03	2.127E 00		7.746E-10	
98	1.626E 03	2.153E 00		7.805E-10	
99	1.643E 03	2.172E 00	5.099E-03	7.864E-10	4.010E-12
100	1.659E 03	2.184E 00		7.927E-10	
101	1.676E 03	2.189E 00		7.992E-10	
102	1.692E 03	2.193E 00	4.462E-03	8.051E-10	3.592E-12
103	1.708E 03	2.195E 00		8.106E-10	
104	1.725E 03	2.195E 00		8.159E-10	
105	1.741E 03	2.203E 00	3.828E-03	8.198E-10	3.139E-12
106	1.757E 03	2.222E 00		8.246E-10	
107	1.774E 03	2.254E 00		8.305E-10	
108	1.790E 03	2.280E 00	3.574E-03	8.364E-10	2.989E-12
109	1.806E 03	2.302E 00		8.425E-10	
110	1.823E 03	2.321E 00		8.491E-10	
111	1.839E 03	2.340E 00	3.271E-03	8.545E-10	2.795E-12
112	1.855E 03	2.362E 00		8.595E-10	
113	1.872E 03	2.387E 00		8.641E-10	
114	1.888E 03	2.399E 00	2.977E-03	8.687E-10	2.586E-12
115	1.904E 03	2.401E 00		8.734E-10	
116	1.921E 03	2.381E 00		8.786E-10	
117	1.937E 03	2.381E 00	2.451E-03	8.839E-10	2.166E-12
118	1.953E 03	2.393E 00		8.892E-10	
119	1.970E 03	2.424E 00		8.951E-10	
120	1.986E 03	2.458E 00	2.248E-03	8.997E-10	2.023E-12

TARGET NO. 6 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.494E 00		9.038E-10	
122	2.019E 03	2.536E 00		9.090E-10	
123	2.035E 03	2.565E 00	2.119E-03	9.138E-10	1.936E-12
124	2.052E 03	2.584E 00		9.184E-10	
125	2.068E 03	2.583E 00		9.230E-10	
126	2.084E 03	2.580E 00	1.786E-03	9.268E-10	1.655E-12
127	2.101E 03	2.575E 00		9.302E-10	
128	2.117E 03	2.559E 00		9.361E-10	
129	2.133E 03	2.564E 00	1.433E-03	9.416E-10	1.350E-12
130	2.150E 03	2.590E 00		9.469E-10	
131	2.166E 03	2.635E 00		9.515E-10	
132	2.182E 03	2.676E 00	1.286E-03	9.534E-10	1.226E-12
133	2.199E 03	2.712E 00		9.521E-10	
134	2.215E 03	2.745E 00		9.634E-10	
135	2.231E 03	2.756E 00	1.095E-03	9.728E-10	1.065E-12
136	2.248E 03	2.732E 00		9.774E-10	
137	2.264E 03	2.668E 00		9.819E-10	
138	2.280E 03	2.636E 00	7.544E-04	2.916E-09	2.200E-12
139	2.297E 03	2.682E 00		8.772E-09	
140	2.313E 03	2.755E 00		5.266E-09	
141	2.329E 03	2.821E 00	6.698E-04	1.012E-09	6.777E-13
142	2.346E 03	2.849E 00		1.018E-09	
143	2.362E 03	2.857E 00		1.025E-09	
144	2.378E 03	2.855E 00	4.999E-04	1.031E-09	5.156E-13
145	2.395E 03	2.844E 00		1.038E-09	
146	2.411E 03	2.811E 00		1.049E-09	
147	2.428E 03	2.793E 00	3.255E-04	1.061E-09	3.453E-13
148	2.444E 03	2.902E 00		1.068E-09	
149	2.460E 03	3.054E 00		1.074E-09	
150	2.477E 03	3.243E 00	2.638E-04	1.081E-09	2.851E-13
151	2.493E 03	3.550E 00		1.087E-09	
152	2.509E 03	2.319E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.818E-11 R-SQ.CM./ELECTRON

TARGET NO. 7 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
6	8.483E-02	1.282E-01	1.382E-01	1.062E-01	6.530E-02	2.378E-02
9	8.450E-02	1.252E-01	1.303E-01	9.795E-02	5.930E-02	2.110E-02
12	6.913E-02	1.008E-01	1.030E-01	7.549E-02	4.523E-02	1.601E-02
15	5.626E-02	8.073E-02	8.135E-02	5.899E-02	3.456E-02	1.200E-02
18	4.609E-02	6.446E-02	6.504E-02	4.637E-02	2.701E-02	9.280E-03
21	3.828E-02	5.421E-02	5.331E-02	3.741E-02	2.156E-02	7.255E-03
24	3.190E-02	4.422E-02	4.353E-02	3.016E-02	1.707E-02	5.692E-03
27	2.686E-02	3.675E-02	3.514E-02	2.436E-02	1.374E-02	4.488E-03
30	2.328E-02	3.112E-02	2.972E-02	1.991E-02	1.119E-02	3.588E-03
33	2.014E-02	2.678E-02	2.470E-02	1.656E-02	9.086E-03	2.873E-03
36	1.671E-02	2.239E-02	2.156E-02	1.405E-02	7.528E-03	2.374E-03
39	1.471E-02	1.919E-02	1.814E-02	1.188E-02	6.319E-03	1.952E-03
42	1.285E-02	1.725E-02	1.512E-02	9.963E-03	5.283E-03	1.592E-03
45	1.136E-02	1.476E-02	1.332E-02	8.288E-03	4.302E-03	1.318E-03
48	9.985E-03	1.238E-02	1.180E-02	7.205E-03	3.687E-03	1.132E-03
51	8.735E-03	1.122E-02	1.018E-02	6.188E-03	3.168E-03	1.021E-03
54	7.768E-03	1.012E-02	8.664E-03	5.367E-03	2.666E-03	8.270E-04
57	7.015E-03	8.872E-03	7.526E-03	4.682E-03	2.246E-03	6.620E-04
60	6.247E-03	7.565E-03	6.868E-03	4.119E-03	2.008E-03	5.943E-04
63	5.566E-03	6.853E-03	5.875E-03	3.335E-03	1.750E-03	4.935E-04
66	5.039E-03	6.384E-03	5.226E-03	3.276E-03	1.477E-03	4.436E-04
69	4.498E-03	5.536E-03	4.624E-03	2.656E-03	1.285E-03	3.652E-04
72	4.367E-03	5.193E-03	4.136E-03	2.373E-03	1.179E-03	3.325E-04
75	3.779E-03	4.544E-03	4.041E-03	2.225E-03	9.843E-04	2.864E-04
78	3.408E-03	4.323E-03	3.220E-03	1.771E-03	8.138E-04	2.244E-04
81	2.984E-03	3.715E-03	2.915E-03	1.666E-03	6.976E-04	1.915E-04
84	2.755E-03	3.479E-03	2.528E-03	1.426E-03	6.092E-04	1.646E-04
87	2.648E-03	3.102E-03	2.471E-03	1.237E-03	5.548E-04	1.398E-04
90	2.320E-03	2.653E-03	1.992E-03	1.130E-03	4.948E-04	1.284E-04
93	1.964E-03	2.507E-03	1.914E-03	9.035E-04	3.809E-04	1.041E-04
96	2.015E-03	2.114E-03	1.648E-03	8.959E-04	3.362E-04	7.935E-05
99	1.650E-03	1.941E-03	1.455E-03	6.869E-04	2.906E-04	7.728E-05
102	1.507E-03	1.749E-03	1.377E-03	5.324E-04	2.483E-04	4.616E-05
105	1.400E-03	1.532E-03	1.113E-03	4.841E-04	1.905E-04	4.616E-05
108	1.281E-03	1.419E-03	9.578E-04	4.228E-04	1.987E-04	4.248E-05
111	1.153E-03	1.300E-03	7.598E-04	3.593E-04	1.189E-04	3.082E-05
114	9.528E-04	1.039E-03	7.090E-04	3.362E-04	1.182E-04	2.523E-05
117	9.852E-04	1.002E-03	6.659E-04	2.503E-04	9.897E-05	1.822E-05
120	7.764E-04	8.651E-04	5.478E-04	2.145E-04	8.142E-05	1.630E-05
123	6.632E-04	7.620E-04	4.253E-04	2.067E-04	6.611E-05	1.434E-05
126	6.186E-04	6.431E-04	4.001E-04	1.519E-04	3.336E-05	1.019E-05
129	5.045E-04	5.647E-04	3.049E-04	1.305E-04	3.094E-05	1.019E-05
132	4.493E-04	4.258E-04	2.555E-04	7.204E-05	2.364E-05	7.940E-06
135	3.196E-04	3.356E-04	2.310E-04	5.710E-05	1.249E-05	1.589E-06
138	2.634E-04	2.558E-04	1.557E-04	5.334E-05	1.357E-05	3.022E-06
141	2.193E-04	2.115E-04	1.140E-04	3.393E-05	1.038E-05	1.170E-06
144	1.340E-04	1.883E-04	7.348E-05	1.327E-05	4.224E-06	1.522E-06
147	1.375E-04	9.550E-05	4.893E-05	1.597E-05	4.101E-06	3.974E-07
150	8.858E-05	7.510E-05	3.013E-05	3.655E-06	1.087E-06	1.125E-06
153	2.896E-05	5.908E-05	2.980E-05	5.536E-06	6.213E-06	1.500E-06

TARGET NO. 7 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.462E-01		4.623E-11	
6	1.225E 02	9.028E-01	1.135E-01	5.526E-11	6.271E-12
7	1.388E 02	9.869E-01		6.482E-11	
8	1.552E 02	9.764E-01		7.572E-11	
9	1.715E 02	9.870E-01	1.168E-01	8.682E-11	1.014E-11
10	1.879E 02	9.879E-01		9.762E-11	
11	2.042E 02	9.896E-01		1.039E-10	
12	2.206E 02	1.001E 00	9.305E-02	1.194E-10	1.111E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.043E 00	7.629E-02	1.528E-10	1.166E-11
16	2.860E 02	1.065E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.106E 00	6.432E-02	1.822E-10	1.172E-11
19	3.350E 02	1.128E 00		1.925E-10	
20	3.513E 02	1.152E 00		2.028E-10	
21	3.677E 02	1.168E 00	5.555E-02	2.118E-10	1.177E-11
22	3.840E 02	1.185E 00		2.210E-10	
23	4.004E 02	1.203E 00		2.303E-10	
24	4.167E 02	1.215E 00	4.688E-02	2.404E-10	1.127E-11
25	4.331E 02	1.229E 00		2.492E-10	
26	4.494E 02	1.245E 00		2.577E-10	
27	4.658E 02	1.258E 00	3.956E-02	2.655E-10	1.050E-11
28	4.821E 02	1.273E 00		2.741E-10	
29	4.985E 02	1.293E 00		2.822E-10	
30	5.148E 02	1.307E 00	3.439E-02	2.913E-10	1.002E-11
31	5.312E 02	1.321E 00		3.000E-10	
32	5.475E 02	1.335E 00		3.078E-10	
33	5.639E 02	1.346E 00	2.969E-02	3.162E-10	9.387E-12
34	5.802E 02	1.359E 00		3.245E-10	
35	5.966E 02	1.374E 00		3.324E-10	
36	6.129E 02	1.386E 00	2.590E-02	3.412E-10	8.839E-12
37	6.293E 02	1.398E 00		3.500E-10	
38	6.456E 02	1.413E 00		3.579E-10	
39	6.620E 02	1.424E 00	2.261E-02	3.657E-10	8.269E-12
40	6.783E 02	1.435E 00		3.736E-10	

TARGET NO. 7 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.447E 00		3.814E-10	
42	7.110E 02	1.457E 00	1.974E-02	3.906E-10	7.711E-12
43	7.273E 02	1.465E 00		4.000E-10	
44	7.437E 02	1.473E 00		4.072E-10	
45	7.600E 02	1.483E 00	1.720E-02	4.152E-10	7.142E-12
46	7.764E 02	1.495E 00		4.236E-10	
47	7.927E 02	1.507E 00		4.308E-10	
48	8.091E 02	1.520E 00	1.528E-02	4.391E-10	6.710E-12
49	8.254E 02	1.533E 00		4.482E-10	
50	8.418E 02	1.546E 00		4.554E-10	
51	8.581E 02	1.558E 00	1.369E-02	4.629E-10	6.339E-12
52	8.745E 02	1.570E 00		4.707E-10	
53	8.908E 02	1.581E 00		4.780E-10	
54	9.072E 02	1.592E 00	1.216E-02	4.857E-10	5.907E-12
55	9.235E 02	1.605E 00		4.942E-10	
56	9.399E 02	1.614E 00		5.015E-10	
57	9.562E 02	1.625E 00	1.082E-02	5.090E-10	5.507E-12
58	9.726E 02	1.641E 00		5.168E-10	
59	9.889E 02	1.656E 00		5.241E-10	
60	1.005E 03	1.669E 00	9.843E-03	5.313E-10	5.230E-12
61	1.022E 03	1.677E 00		5.385E-10	
62	1.038E 03	1.678E 00		5.457E-10	
63	1.054E 03	1.684E 00	8.580E-03	5.529E-10	4.744E-12
64	1.071E 03	1.708E 00		5.601E-10	
65	1.087E 03	1.734E 00		5.668E-10	
66	1.103E 03	1.754E 00	8.184E-03	5.735E-10	4.693E-12
67	1.120E 03	1.757E 00		5.807E-10	
68	1.136E 03	1.753E 00		5.874E-10	
69	1.152E 03	1.750E 00	7.050E-03	5.941E-10	4.188E-12
70	1.169E 03	1.775E 00		6.012E-10	
71	1.185E 03	1.800E 00		6.080E-10	
72	1.201E 03	1.823E 00	6.744E-03	6.145E-10	4.144E-12
73	1.218E 03	1.843E 00		6.204E-10	
74	1.234E 03	1.865E 00		6.267E-10	
75	1.250E 03	1.888E 00	6.366E-03	6.332E-10	4.031E-12
76	1.267E 03	1.884E 00		6.391E-10	
77	1.283E 03	1.877E 00		6.449E-10	
78	1.300E 03	1.868E 00	5.366E-03	6.508E-10	3.493E-12
79	1.316E 03	1.891E 00		6.567E-10	
80	1.332E 03	1.910E 00		6.629E-10	

TARGET NO. 7 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.923E 00	4.914E-03	6.694E-10	3.290E-12
82	1.365E 03	1.937E 00		6.754E-10	
83	1.381E 03	1.951E 00		6.813E-10	
84	1.398E 03	1.961E 00	4.472E-03	6.871E-10	3.073E-12
85	1.414E 03	1.988E 00		6.975E-10	
86	1.430E 03	2.017E 00		7.073E-10	
87	1.447E 03	2.044E 00	4.305E-03	7.145E-10	3.076E-12
88	1.463E 03	2.043E 00		7.202E-10	
89	1.479E 03	2.036E 00		7.256E-10	
90	1.496E 03	2.029E 00	3.664E-03	7.315E-10	2.680E-12
91	1.512E 03	2.041E 00		7.373E-10	
92	1.528E 03	2.059E 00		7.434E-10	
93	1.545E 03	2.074E 00	3.337E-03	7.499E-10	2.502E-12
94	1.561E 03	2.096E 00		7.560E-10	
95	1.577E 03	2.119E 00		7.620E-10	
96	1.594E 03	2.135E 00	3.103E-03	7.685E-10	2.385E-12
97	1.610E 03	2.141E 00		7.746E-10	
98	1.626E 03	2.140E 00		7.805E-10	
99	1.643E 03	2.142E 00	2.676E-03	7.864E-10	2.104E-12
100	1.659E 03	2.157E 00		7.927E-10	
101	1.676E 03	2.183E 00		7.992E-10	
102	1.692E 03	2.200E 00	2.443E-03	8.051E-10	1.967E-12
103	1.708E 03	2.210E 00		8.106E-10	
104	1.725E 03	2.214E 00		8.159E-10	
105	1.741E 03	2.225E 00	2.131E-03	8.198E-10	1.747E-12
106	1.757E 03	2.249E 00		8.246E-10	
107	1.774E 03	2.287E 00		8.305E-10	
108	1.790E 03	2.310E 00	1.998E-03	8.364E-10	1.671E-12
109	1.806E 03	2.321E 00		8.425E-10	
110	1.823E 03	2.314E 00		8.491E-10	
111	1.839E 03	2.313E 00	1.690E-03	8.545E-10	1.444E-12
112	1.855E 03	2.316E 00		8.595E-10	
113	1.872E 03	2.327E 00		8.641E-10	
114	1.888E 03	2.354E 00	1.496E-03	8.687E-10	1.300E-12
115	1.904E 03	2.391E 00		8.734E-10	
116	1.921E 03	2.446E 00		8.786E-10	
117	1.937E 03	2.479E 00	1.462E-03	8.839E-10	1.292E-12
118	1.953E 03	2.495E 00		8.892E-10	
119	1.970E 03	2.478E 00		8.951E-10	
120	1.986E 03	2.475E 00	1.215E-03	8.997E-10	1.093E-12

TARGET NO. 7 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.480E 00		9.038E-10	
122	2.019E 03	2.494E 00		9.090E-10	
123	2.035E 03	2.515E 00	1.052E-03	9.138E-10	9.617E-13
124	2.052E 03	2.540E 00		9.184E-10	
125	2.068E 03	2.565E 00		9.230E-10	
126	2.084E 03	2.588E 00	9.266E-04	9.268E-10	8.588E-13
127	2.101E 03	2.610E 00		9.302E-10	
128	2.117E 03	2.627E 00		9.361E-10	
129	2.133E 03	2.639E 00	7.842E-04	9.416E-10	7.384E-13
130	2.150E 03	2.645E 00		9.469E-10	
131	2.166E 03	2.632E 00		9.515E-10	
132	2.182E 03	2.630E 00	6.100E-04	9.534E-10	5.816E-13
133	2.199E 03	2.643E 00		9.521E-10	
134	2.215E 03	2.658E 00		9.634E-10	
135	2.231E 03	2.675E 00	4.905E-04	9.728E-10	4.772E-13
136	2.248E 03	2.693E 00		9.774E-10	
137	2.264E 03	2.699E 00		9.819E-10	
138	2.280E 03	2.714E 00	3.840E-04	2.916E-09	1.120E-12
139	2.297E 03	2.749E 00		8.772E-09	
140	2.313E 03	2.782E 00		5.266E-09	
141	2.329E 03	2.805E 00	3.080E-04	1.012E-09	3.116E-13
142	2.346E 03	2.800E 00		1.018E-09	
143	2.362E 03	2.764E 00		1.025E-09	
144	2.378E 03	2.735E 00	2.061E-04	1.031E-09	2.126E-13
145	2.395E 03	2.773E 00		1.038E-09	
146	2.411E 03	2.815E 00		1.049E-09	
147	2.428E 03	2.861E 00	1.540E-04	1.061E-09	1.634E-13
148	2.444E 03	2.929E 00		1.068E-09	
149	2.460E 03	3.003E 00		1.074E-09	
150	2.477E 03	3.120E 00	1.079E-04	1.081E-09	1.166E-13
151	2.493E 03	3.606E 00		1.087E-09	
152	2.509E 03	2.403E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.108E-11 R-SQ.CM./ELECTRON

TARGET NO. 8 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	8.211E-02	1.272E-01	1.354E-01	1.086E-01	6.346E-02
9	8.126E-02	1.246E-01	1.274E-01	9.951E-02	5.755E-02
12	6.694E-02	1.009E-01	1.006E-01	7.770E-02	4.393E-02
15	5.422E-02	8.023E-02	7.908E-02	6.029E-02	3.367E-02
18	4.321E-02	6.457E-02	6.229E-02	4.693E-02	2.609E-02
21	3.627E-02	5.295E-02	5.081E-02	3.818E-02	2.088E-02
24	3.059E-02	4.421E-02	4.161E-02	3.048E-02	1.674E-02
27	2.546E-02	3.673E-02	3.470E-02	2.503E-02	1.321E-02
30	2.149E-02	3.159E-02	2.852E-02	2.073E-02	1.090E-02
33	1.877E-02	2.630E-02	2.440E-02	1.688E-02	8.873E-03
36	1.596E-02	2.248E-02	2.022E-02	1.443E-02	7.242E-03
39	1.400E-02	1.942E-02	1.762E-02	1.190E-02	6.132E-03
42	1.216E-02	1.707E-02	1.473E-02	1.031E-02	5.135E-03
45	1.071E-02	1.462E-02	1.298E-02	8.712E-03	4.192E-03
48	9.608E-03	1.286E-02	1.090E-02	7.556E-03	3.668E-03
51	8.251E-03	1.159E-02	9.881E-03	6.540E-03	2.989E-03
54	7.366E-03	1.010E-02	8.341E-03	5.629E-03	2.585E-03
57	6.518E-03	8.797E-03	7.288E-03	4.683E-03	2.308E-03
60	6.087E-03	7.732E-03	6.585E-03	4.105E-03	1.884E-03
63	5.132E-03	7.042E-03	5.606E-03	3.600E-03	1.684E-03
66	4.624E-03	6.310E-03	5.164E-03	3.170E-03	1.456E-03
69	4.225E-03	5.543E-03	4.473E-03	2.653E-03	1.230E-03
72	3.783E-03	5.181E-03	4.013E-03	2.498E-03	1.074E-03
75	3.638E-03	4.715E-03	3.644E-03	2.129E-03	9.805E-04
78	3.222E-03	4.107E-03	3.202E-03	1.885E-03	8.121E-04
81	2.764E-03	3.850E-03	2.736E-03	1.639E-03	6.681E-04
84	2.668E-03	3.108E-03	2.598E-03	1.405E-03	6.160E-04
87	2.398E-03	3.112E-03	2.381E-03	1.323E-03	5.480E-04
90	2.194E-03	2.914E-03	2.108E-03	1.036E-03	4.149E-04
93	1.959E-03	2.318E-03	1.774E-03	8.573E-04	4.098E-04
96	1.762E-03	2.218E-03	1.622E-03	8.313E-04	2.935E-04
99	1.512E-03	1.908E-03	1.224E-03	6.995E-04	2.627E-04
102	1.538E-03	1.743E-03	1.195E-03	5.984E-04	2.605E-04
105	1.315E-03	1.610E-03	1.131E-03	4.825E-04	2.269E-04
108	1.072E-03	1.362E-03	8.485E-04	4.657E-04	1.553E-04
111	1.043E-03	1.154E-03	6.832E-04	3.642E-04	1.571E-04
114	8.795E-04	1.104E-03	7.022E-04	3.620E-04	1.378E-04
117	8.244E-04	9.514E-04	5.397E-04	2.837E-04	8.858E-05
120	7.196E-04	9.117E-04	5.218E-04	1.920E-04	6.376E-05
123	5.985E-04	7.577E-04	4.376E-04	1.708E-04	6.052E-05
126	5.937E-04	5.563E-04	3.321E-04	1.409E-04	5.515E-05
129	4.468E-04	5.523E-04	3.029E-04	1.065E-04	1.800E-05
132	3.457E-04	3.877E-04	2.161E-04	8.045E-05	2.404E-05
135	3.661E-04	3.132E-04	1.796E-04	7.066E-05	1.361E-05
138	3.136E-04	2.796E-04	9.911E-05	5.894E-05	1.665E-05
141	1.586E-04	1.624E-04	1.096E-04	2.813E-05	3.235E-06
144	1.636E-04	1.445E-04	5.883E-05	1.824E-05	5.247E-06
147	7.067E-05	1.097E-04	5.062E-05	1.152E-05	5.185E-06
150	5.274E-05	7.361E-05	4.470E-05	3.459E-06	3.235E-06
153	2.558E-05	2.379E-05	5.755E-06	4.993E-06	-9.126E-07

TARGET NO. 8 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.463E-01		4.623E-11	
6	1.225E 02	9.032E-01	1.187E-01	5.526E-11	6.560E-12
7	1.388E 02	9.872E-01		6.482E-11	
8	1.552E 02	9.765E-01		7.572E-11	
9	1.715E 02	9.868E-01	1.218E-01	8.682E-11	1.057E-11
10	1.879E 02	9.879E-01		9.762E-11	
11	2.042E 02	9.900E-01		1.039E-10	
12	2.206E 02	1.002E 00	9.763E-02	1.194E-10	1.166E-11
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.024E 00		1.416E-10	
15	2.696E 02	1.043E 00	7.966E-02	1.528E-10	1.217E-11
16	2.860E 02	1.066E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.105E 00	6.645E-02	1.822E-10	1.211E-11
19	3.350E 02	1.127E 00		1.925E-10	
20	3.513E 02	1.151E 00		2.028E-10	
21	3.677E 02	1.167E 00	5.723E-02	2.118E-10	1.212E-11
22	3.840E 02	1.184E 00		2.210E-10	
23	4.004E 02	1.202E 00		2.303E-10	
24	4.167E 02	1.215E 00	4.863E-02	2.404E-10	1.169E-11
25	4.331E 02	1.230E 00		2.492E-10	
26	4.494E 02	1.247E 00		2.577E-10	
27	4.658E 02	1.260E 00	4.152E-02	2.655E-10	1.102E-11
28	4.821E 02	1.276E 00		2.741E-10	
29	4.985E 02	1.294E 00		2.822E-10	
30	5.148E 02	1.308E 00	3.594E-02	2.913E-10	1.047E-11
31	5.312E 02	1.321E 00		3.000E-10	
32	5.475E 02	1.335E 00		3.078E-10	
33	5.639E 02	1.347E 00	3.095E-02	3.162E-10	9.786E-12
34	5.802E 02	1.359E 00		3.245E-10	
35	5.966E 02	1.372E 00		3.324E-10	
36	6.129E 02	1.384E 00	2.674E-02	3.412E-10	9.126E-12
37	6.293E 02	1.397E 00		3.500E-10	
38	6.456E 02	1.413E 00		3.579E-10	
39	6.620E 02	1.425E 00	2.356E-02	3.657E-10	8.616E-12
40	6.783E 02	1.436E 00		3.736E-10	

TARGET NO. 8 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.448E 00		3.814E-10	
42	7.110E 02	1.458E 00	2.063E-02	3.906E-10	8.059E-12
43	7.273E 02	1.467E 00		4.000E-10	
44	7.437E 02	1.475E 00		4.072E-10	
45	7.600E 02	1.485E 00	1.804E-02	4.152E-10	7.492E-12
46	7.764E 02	1.497E 00		4.236E-10	
47	7.927E 02	1.508E 00		4.308E-10	
48	8.091E 02	1.521E 00	1.600E-02	4.391E-10	7.024E-12
49	8.254E 02	1.535E 00		4.482E-10	
50	8.418E 02	1.551E 00		4.554E-10	
51	8.581E 02	1.564E 00	1.445E-02	4.629E-10	6.691E-12
52	8.745E 02	1.575E 00		4.707E-10	
53	8.908E 02	1.584E 00		4.780E-10	
54	9.072E 02	1.594E 00	1.270E-02	4.857E-10	6.170E-12
55	9.235E 02	1.606E 00		4.942E-10	
56	9.399E 02	1.614E 00		5.015E-10	
57	9.562E 02	1.625E 00	1.122E-02	5.090E-10	5.711E-12
58	9.726E 02	1.641E 00		5.168E-10	
59	9.889E 02	1.655E 00		5.241E-10	
60	1.005E 03	1.668E 00	1.019E-02	5.313E-10	5.411E-12
61	1.022E 03	1.680E 00		5.385E-10	
62	1.038E 03	1.688E 00		5.457E-10	
63	1.054E 03	1.697E 00	9.068E-03	5.529E-10	5.013E-12
64	1.071E 03	1.716E 00		5.601E-10	
65	1.087E 03	1.734E 00		5.668E-10	
66	1.103E 03	1.749E 00	8.381E-03	5.735E-10	4.806E-12
67	1.120E 03	1.754E 00		5.807E-10	
68	1.136E 03	1.753E 00		5.874E-10	
69	1.152E 03	1.754E 00	7.277E-03	5.941E-10	4.323E-12
70	1.169E 03	1.779E 00		6.012E-10	
71	1.185E 03	1.802E 00		6.080E-10	
72	1.201E 03	1.824E 00	6.912E-03	6.145E-10	4.248E-12
73	1.218E 03	1.840E 00		6.204E-10	
74	1.234E 03	1.857E 00		6.267E-10	
75	1.250E 03	1.874E 00	6.415E-03	6.332E-10	4.062E-12
76	1.267E 03	1.881E 00		6.391E-10	
77	1.283E 03	1.887E 00		6.449E-10	
78	1.300E 03	1.890E 00	5.654E-03	6.508E-10	3.680E-12
79	1.316E 03	1.904E 00		6.567E-10	
80	1.332E 03	1.914E 00		6.629E-10	

TARGET NO. 8 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.919E 00	5.029E-03	6.694E-10	3.367E-12
82	1.365E 03	1.933E 00		6.754E-10	
83	1.381E 03	1.946E 00		6.813E-10	
84	1.398E 03	1.955E 00	4.562E-03	6.871E-10	3.135E-12
85	1.414E 03	1.987E 00		6.975E-10	
86	1.430E 03	2.022E 00		7.073E-10	
87	1.447E 03	2.055E 00	4.498E-03	7.145E-10	3.214E-12
88	1.463E 03	2.062E 00		7.202E-10	
89	1.479E 03	2.063E 00		7.256E-10	
90	1.496E 03	2.064E 00	3.931E-03	7.315E-10	2.875E-12
91	1.512E 03	2.060E 00		7.373E-10	
92	1.528E 03	2.054E 00		7.434E-10	
93	1.545E 03	2.051E 00	3.298E-03	7.499E-10	2.473E-12
94	1.561E 03	2.079E 00		7.560E-10	
95	1.577E 03	2.120E 00		7.620E-10	
96	1.594E 03	2.145E 00	3.159E-03	7.685E-10	2.428E-12
97	1.610E 03	2.139E 00		7.746E-10	
98	1.626E 03	2.114E 00		7.805E-10	
99	1.643E 03	2.101E 00	2.555E-03	7.864E-10	2.009E-12
100	1.659E 03	2.127E 00		7.927E-10	
101	1.676E 03	2.182E 00		7.992E-10	
102	1.692E 03	2.225E 00	2.547E-03	8.051E-10	2.051E-12
103	1.708E 03	2.257E 00		8.106E-10	
104	1.725E 03	2.280E 00		8.159E-10	
105	1.741E 03	2.292E 00	2.346E-03	8.198E-10	1.924E-12
106	1.757E 03	2.290E 00		8.246E-10	
107	1.774E 03	2.269E 00		8.305E-10	
108	1.790E 03	2.258E 00	1.890E-03	8.364E-10	1.580E-12
109	1.806E 03	2.253E 00		8.425E-10	
110	1.823E 03	2.259E 00		8.491E-10	
111	1 839E 03	2.284E 00	1.631E-03	8.545E-10	1.393E-12
112	1.855E 03	2.330E 00		8.595E-10	
113	1.872E 03	2.409E 00		8.641E-10	
114	1.888E 03	2.449E 00	1.672E-03	8.687E-10	1.452E-12
115	1.904E 03	2.461E 00		8.734E-10	
116	1.921E 03	2.423E 00		8.786E-10	
117	1.937E 03	2.415E 00	1.346E-03	8.839E-10	1.190E-12
118	1.953E 03	2.424E 00		8.892E-10	
119	1.970E 03	2.464E 00		8.951E-10	
120	1.986E 03	2.496E 00	1.229E-03	8.997E-10	1.106E-12

TARGET NO. 8 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.523E 00		9.038E-10	
122	2.019E 03	2.536E 00		9.090E-10	
123	2.035E 03	2.546E 00	1.061E-03	9.138E-10	9.699E-13
124	2.052E 03	2.552E 00		9.184E-10	
125	2.068E 03	2.542E 00		9.230E-10	
126	2.084E 03	2.551E 00	8.590E-04	9.268E-10	7.962E-13
127	2.101E 03	2.577E 00		9.302E-10	
128	2.117E 03	2.624E 00		9.361E-10	
129	2.133E 03	2.645E 00	7.542E-04	9.416E-10	7.102E-13
130	2.150E 03	2.639E 00		9.469E-10	
131	2.166E 03	2.579E 00		9.515E-10	
132	2.182E 03	2.561E 00	5.403E-04	9.534E-10	5.151E-13
133	2.199E 03	2.596E 00		9.521E-10	
134	2.215E 03	2.676E 00		9.634E-10	
135	2.231E 03	2.746E 00	5.002E-04	9.728E-10	4.866E-13
136	2.248E 03	2.794E 00		9.774E-10	
137	2.264E 03	2.828E 00		9.819E-10	
138	2.280E 03	2.831E 00	4.070E-04	2.916E-09	1.187E-12
139	2.297E 03	2.778E 00		8.772E-09	
140	2.313E 03	2.660E 00		5.266E-09	
141	2.329E 03	2.577E 00	2.350E-04	1.012E-09	2.377E-13
142	2.346E 03	2.631E 00		1.018E-09	
143	2.362E 03	2.715E 00		1.025E-09	
144	2.378E 03	2.796E 00	1.993E-04	1.031E-09	2.056E-13
145	2.395E 03	2.830E 00		1.038E-09	
146	2.411E 03	2.837E 00		1.049E-09	
147	2.428E 03	2.852E 00	1.399E-04	1.061E-09	1.484E-13
148	2.444E 03	2.985E 00		1.068E-09	
149	2.460E 03	3.172E 00		1.074E-09	
150	2.477E 03	3.360E 00	1.178E-04	1.081E-09	1.273E-13
151	2.493E 03	3.251E 00		1.087E-09	
152	2.509E 03	2.017E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.149E-11 R-SQ.CM./ELECTRON

TARGET NO. 9 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0
6	9.105E-02	1.453E-01	1.601E-01	1.418E-01	8.778E-02
9	9.202E-02	1.455E-01	1.520E-01	1.334E-01	8.049E-02
12	7.551E-02	1.167E-01	1.198E-01	1.047E-01	6.235E-02
15	6.122E-02	9.405E-02	9.480E-02	8.239E-02	4.851E-02
18	4.968E-02	7.498E-02	7.575E-02	6.551E-02	3.814E-02
21	4.273E-02	6.316E-02	6.208E-02	5.218E-02	3.033E-02
24	3.557E-02	5.210E-02	5.116E-02	4.231E-02	2.443E-02
27	3.029E-02	4.326E-02	4.222E-02	3.481E-02	1.985E-02
30	2.534E-02	3.654E-02	3.504E-02	2.810E-02	1.602E-02
33	2.182E-02	3.160E-02	2.989E-02	2.401E-02	1.317E-02
36	1.866E-02	2.666E-02	2.570E-02	2.014E-02	1.086E-02
39	1.615E-02	2.283E-02	2.181E-02	1.730E-02	9.221E-03
42	1.408E-02	1.997E-02	1.886E-02	1.444E-02	7.891E-03
45	1.243E-02	1.771E-02	1.599E-02	1.256E-02	6.620E-03
48	1.072E-02	1.541E-02	1.378E-02	1.065E-02	5.606E-03
51	9.473E-03	1.361E-02	1.230E-02	9.018E-03	4.922E-03
54	8.737E-03	1.201E-02	1.091E-02	8.353E-03	4.152E-03
57	7.952E-03	1.063E-02	9.576E-03	6.975E-03	3.606E-03
60	7.171E-03	9.149E-03	8.307E-03	6.140E-03	3.128E-03
63	6.458E-03	8.844E-03	7.108E-03	5.175E-03	2.671E-03
66	5.663E-03	7.796E-03	6.477E-03	4.650E-03	2.468E-03
69	5.062E-03	6.644E-03	6.084E-03	4.444E-03	2.179E-03
72	4.628E-03	5.941E-03	5.095E-03	4.083E-03	1.892E-03
75	4.434E-03	5.709E-03	4.563E-03	3.296E-03	1.591E-03
78	3.967E-03	5.429E-03	4.137E-03	2.900E-03	1.448E-03
81	3.515E-03	4.566E-03	3.732E-03	2.630E-03	1.313E-03
84	3.316E-03	4.061E-03	3.295E-03	2.477E-03	1.159E-03
87	2.796E-03	3.862E-03	3.074E-03	2.112E-03	9.505E-04
90	2.626E-03	3.433E-03	2.908E-03	1.865E-03	8.227E-04
93	2.371E-03	3.124E-03	2.369E-03	1.706E-03	6.748E-04
96	2.114E-03	2.721E-03	2.133E-03	1.489E-03	6.332E-04
99	2.041E-03	2.406E-03	1.872E-03	1.264E-03	5.482E-04
102	1.839E-03	2.294E-03	1.759E-03	1.054E-03	5.095E-04
105	1.631E-03	2.044E-03	1.422E-03	1.026E-03	4.272E-04
108	1.502E-03	1.711E-03	1.324E-03	8.839E-04	3.493E-04
111	1.344E-03	1.456E-03	1.095E-03	6.692E-04	2.928E-04
114	1.248E-03	1.368E-03	9.277E-04	6.785E-04	2.447E-04
117	1.069E-03	1.311E-03	8.108E-04	5.355E-04	2.262E-04
120	1.014E-03	1.066E-03	6.841E-04	4.411E-04	1.539E-04
123	8.687E-04	8.497E-04	5.770E-04	3.813E-04	1.394E-04
126	6.953E-04	7.054E-04	5.823E-04	2.862E-04	1.140E-04
129	6.217E-04	6.982E-04	4.551E-04	2.096E-04	7.697E-05
132	5.625E-04	5.384E-04	3.148E-04	1.690E-04	7.530E-05
135	5.236E-04	4.536E-04	2.635E-04	1.631E-04	4.574E-05
138	4.308E-04	4.729E-04	2.039E-04	1.102E-04	3.115E-05
141	3.316E-04	2.713E-04	1.617E-04	7.159E-05	3.291E-05
144	2.299E-04	2.237E-04	1.076E-04	7.729E-05	1.433E-05
147	1.479E-04	1.644E-04	7.228E-05	1.727E-05	8.496E-06
150	1.081E-04	1.264E-04	5.876E-05	1.140E-05	8.496E-06
153	6.500E-05	4.913E-05	2.766E-05	2.867E-05	3.002E-06

TARGET NO. 9 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.456E-01		4.623E-11	
6	1.225E 02	9.006E-01	1.466E-01	5.526E-11	8.103E-12
7	1.388E 02	9.850E-01		6.482E-11	
8	1.552E 02	9.750E-01		7.572E-11	
9	1.715E 02	9.862E-01	1.531E-01	8.682E-11	1.329E-11
10	1.879E 02	9.869E-01		9.762E-11	
11	2.042E 02	9.884E-01		1.039E-10	
12	2.206E 02	1.000E 00	1.225E-01	1.194E-10	1.463E-11
13	2.369E 02	1.010E 00		1.308E-10	
14	2.533E 02	1.022E 00		1.416E-10	
15	2.696E 02	1.042E 00	1.011E-01	1.528E-10	1.544E-11
16	2.860E 02	1.064E 00		1.626E-10	
17	3.023E 02	1.088E 00		1.732E-10	
18	3.187E 02	1.105E 00	8.536E-02	1.822E-10	1.555E-11
19	3.350E 02	1.126E 00		1.925E-10	
20	3.513E 02	1.150E 00		2.028E-10	
21	3.677E 02	1.165E 00	7.344E-02	2.118E-10	1.556E-11
22	3.840E 02	1.182E 00		2.210E-10	
23	4.004E 02	1.200E 00		2.303E-10	
24	4.167E 02	1.213E 00	6.254E-02	2.404E-10	1.503E-11
25	4.331E 02	1.228E 00		2.492E-10	
26	4.494E 02	1.246E 00		2.577E-10	
27	4.658E 02	1.259E 00	5.359E-02	2.655E-10	1.423E-11
28	4.821E 02	1.273E 00		2.741E-10	
29	4.985E 02	1.289E 00		2.822E-10	
30	5.148E 02	1.301E 00	4.557E-02	2.913E-10	1.328E-11
31	5.312E 02	1.315E 00		3.000E-10	
32	5.475E 02	1.333E 00		3.078E-10	
33	5.639E 02	1.346E 00	4.015E-02	3.162E-10	1.270E-11
34	5.802E 02	1.358E 00		3.245E-10	
35	5.966E 02	1.370E 00		3.324E-10	
36	6.129E 02	1.382E 00	3.483E-02	3.412E-10	1.189E-11
37	6.293E 02	1.394E 00		3.500E-10	
38	6.456E 02	1.409E 00		3.579E-10	
39	6.620E 02	1.421E 00	3.060E-02	3.657E-10	1.119E-11
40	6.783E 02	1.431E 00		3.736E-10	

TARGET NO. 9 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.443E 00		3.814E-10	
42	7.110E 02	1.453E 00	2.685E-02	3.906E-10	1.049E-11
43	7.273E 02	1.462E 00		4.000E-10	
44	7.437E 02	1.472E 00		4.072E-10	
45	7.600E 02	1.483E 00	2.366E-02	4.152E-10	9.823E-12
46	7.764E 02	1.494E 00		4.236E-10	
47	7.927E 02	1.502E 00		4.308E-10	
48	8.091E 02	1.512E 00	2.068E-02	4.391E-10	9.082E-12
49	8.254E 02	1.524E 00		4.482E-10	
50	8.418E 02	1.535E 00		4.554E-10	
51	8.581E 02	1.548E 00	1.855E-02	4.629E-10	8.585E-12
52	8.745E 02	1.563E 00		4.707E-10	
53	8.908E 02	1.581E 00		4.780E-10	
54	9.072E 02	1.597E 00	1.708E-02	4.857E-10	8.298E-12
55	9.235E 02	1.608E 00		4.942E-10	
56	9.399E 02	1.616E 00		5.015E-10	
57	9.562E 02	1.625E 00	1.512E-02	5.090E-10	7.696E-12
58	9.726E 02	1.636E 00		5.168E-10	
59	9.889E 02	1.645E 00		5.241E-10	
60	1.005E 03	1.654E 00	1.344E-02	5.313E-10	7.140E-12
61	1.022E 03	1.668E 00		5.385E-10	
62	1.038E 03	1.677E 00		5.457E-10	
63	1.054E 03	1.687E 00	1.206E-02	5.529E-10	6.669E-12
64	1.071E 03	1.703E 00		5.601E-10	
65	1.087E 03	1.715E 00		5.668E-10	
66	1.103E 03	1.728E 00	1.111E-02	5.735E-10	6.369E-12
67	1.120E 03	1.746E 00		5.807E-10	
68	1.136E 03	1.765E 00		5.874E-10	
69	1.152E 03	1.783E 00	1.044E-02	5.941E-10	6.205E-12
70	1.169E 03	1.793E 00		6.012E-10	
71	1.185E 03	1.801E 00		6.080E-10	
72	1.201E 03	1.808E 00	9.347E-03	6.145E-10	5.744E-12
73	1.218E 03	1.819E 00		6.204E-10	
74	1.234E 03	1.828E 00		6.267E-10	
75	1.250E 03	1.834E 00	8.394E-03	6.332E-10	5.315E-12
76	1.267E 03	1.857E 00		6.391E-10	
77	1.283E 03	1.877E 00		6.449E-10	
78	1.300E 03	1.896E 00	7.890E-03	6.508E-10	5.135E-12
79	1.316E 03	1.906E 00		6.567E-10	
80	1.332E 03	1.913E 00		6.629E-10	

TARGET NO. 9 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.918E 00	7.081E-03	6.694E-10	4.740E-12
82	1.365E 03	1.937E 00		6.754E-10	
83	1.381E 03	1.957E 00		6.813E-10	
84	1.398E 03	1.974E 00	6.602E-03	6.871E-10	4.536E-12
85	1.414E 03	1.985E 00		6.975E-10	
86	1.430E 03	1.994E 00		7.073E-10	
87	1.447E 03	2.002E 00	5.974E-03	7.145E-10	4.269E-12
88	1.463E 03	2.022E 00		7.202E-10	
89	1.479E 03	2.043E 00		7.256E-10	
90	1.496E 03	2.061E 00	5.579E-03	7.315E-10	4.081E-12
91	1.512E 03	2.067E 00		7.373E-10	
92	1.528E 03	2.068E 00		7.434E-10	
93	1.545E 03	2.070E 00	4.884E-03	7.499E-10	3.662E-12
94	1.561E 03	2.082E 00		7.560E-10	
95	1.577E 03	2.098E 00		7.620E-10	
96	1.594E 03	2.109E 00	4.423E-03	7.685E-10	3.399E-12
97	1.610E 03	2.119E 00		7.746E-10	
98	1.626E 03	2.128E 00		7.805E-10	
99	1.643E 03	2.138E 00	3.954E-03	7.864E-10	3.109E-12
100	1.659E 03	2.160E 00		7.927E-10	
101	1.676E 03	2.191E 00		7.992E-10	
102	1.692E 03	2.214E 00	3.735E-03	8.051E-10	3.007E-12
103	1.708E 03	2.230E 00		8.106E-10	
104	1.725E 03	2.240E 00		8.159E-10	
105	1.741E 03	2.253E 00	3.336E-03	8.198E-10	2.735E-12
106	1.757E 03	2.270E 00		8.246E-10	
107	1.774E 03	2.292E 00		8.305E-10	
108	1.790E 03	2.302E 00	2.992E-03	8.364E-10	2.503E-12
109	1.806E 03	2.301E 00		8.425E-10	
110	1.823E 03	2.282E 00		8.491E-10	
111	1.839E 03	2.285E 00	2.456E-03	8.545E-10	2.099E-12
112	1.855E 03	2.306E 00		8.595E-10	
113	1.872E 03	2.357E 00		8.641E-10	
114	1.888E 03	2.397E 00	2.363E-03	8.687E-10	2.052E-12
115	1.904E 03	2.429E 00		8.734E-10	
116	1.921E 03	2.447E 00		8.786E-10	
117	1.937E 03	2.460E 00	2.128E-03	8.839E-10	1.881E-12
118	1.953E 03	2.467E 00		8.892E-10	
119	1.970E 03	2.461E 00		8.951E-10	
120	1.986E 03	2.463E 00	1.771E-03	8.997E-10	1.594E-12

TARGET NO. 9 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.470E 00		9.038E-10	
122	2.019E 03	2.480E 00		9.090E-10	
123	2.035E 03	2.498E 00	1.513E-03	9.138E-10	1.382E-12
124	2.052E 03	2.521E 00		9.184E-10	
125	2.068E 03	2.547E 00		9.230E-10	
126	2.084E 03	2.571E 00	1.332E-03	9.268E-10	1.235E-12
127	2.101E 03	2.593E 00		9.302E-10	
128	2.117E 03	2.608E 00		9.361E-10	
129	2.133E 03	2.615E 00	1.131E-03	9.416E-10	1.065E-12
130	2.150E 03	2.615E 00		9.469E-10	
131	2.166E 03	2.589E 00		9.515E-10	
132	2.182E 03	2.588E 00	8.834E-04	9.534E-10	8.423E-13
133	2.199E 03	2.618E 00		9.521E-10	
134	2.215E 03	2.669E 00		9.634E-10	
135	2.231E 03	2.721E 00	7.995E-04	9.728E-10	7.778E-13
136	2.248E 03	2.770E 00		9.774E-10	
137	2.264E 03	2.823E 00		9.819E-10	
138	2.280E 03	2.850E 00	7.016E-04	2.916E-09	2.046E-12
139	2.297E 03	2.825E 00		8.772E-09	
140	2.313E 03	2.761E 00		5.266E-09	
141	2.329E 03	2.718E 00	4.683E-04	1.012E-09	4.738E-13
142	2.346E 03	2.759E 00		1.018E-09	
143	2.362E 03	2.821E 00		1.025E-09	
144	2.378E 03	2.866E 00	3.760E-04	1.031E-09	3.878E-13
145	2.395E 03	2.821E 00		1.038E-09	
146	2.411E 03	2.713E 00		1.049E-09	
147	2.428E 03	2.623E 00	2.040E-04	1.061E-09	2.165E-13
148	2.444E 03	2.794E 00		1.068E-09	
149	2.460E 03	3.044E 00		1.074E-09	
150	2.477E 03	3.342E 00	2.008E-04	1.081E-09	2.170E-13
151	2.493E 03	3.648E 00		1.087E-09	
152	2.509E 03	2.380E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 1.519E-11 R-SQ.CM./ELECTRON

TARGET NO. 12 INCIDENT ELECTRON ENERGY 2.5 MEV
CH. NET PULSE HEIGHT SPECTRUM MULTIPLIED BY 2 PI SIN(PHI) COS(PHI).

	7.5	15.0	30.0	45.0	60.0	75.0
6	4.031E-02	6.183E-02	5.753E-02	3.803E-02	1.996E-02	5.970E-03
9	4.334E-02	6.296E-02	5.637E-02	3.650E-02	1.871E-02	5.483E-03
12	3.581E-02	5.158E-02	4.506E-02	2.856E-02	1.441E-02	4.137E-03
15	2.983E-02	4.130E-02	3.589E-02	2.225E-02	1.093E-02	3.109E-03
18	2.418E-02	3.386E-02	2.837E-02	1.778E-02	8.421E-03	2.366E-03
21	2.053E-02	2.825E-02	2.336E-02	1.403E-02	6.674E-03	1.813E-03
24	1.720E-02	2.332E-02	1.913E-02	1.140E-02	5.249E-03	1.413E-03
27	1.455E-02	1.939E-02	1.584E-02	9.080E-03	4.138E-03	1.102E-03
30	1.226E-02	1.639E-02	1.308E-02	7.296E-03	3.332E-03	8.737E-04
33	1.059E-02	1.413E-02	1.097E-02	6.185E-03	2.709E-03	6.909E-04
36	9.410E-03	1.201E-02	9.365E-03	5.065E-03	2.205E-03	5.552E-04
39	7.995E-03	1.060E-02	7.766E-03	4.232E-03	1.765E-03	4.459E-04
42	6.957E-03	8.974E-03	6.701E-03	3.589E-03	1.419E-03	3.561E-04
45	6.190E-03	7.742E-03	5.709E-03	3.017E-03	1.188E-03	2.996E-04
48	5.424E-03	7.004E-03	4.933E-03	2.491E-03	9.807E-04	2.444E-04
51	4.728E-03	6.065E-03	4.222E-03	2.140E-03	8.154E-04	1.935E-04
54	4.285E-03	5.332E-03	3.712E-03	1.820E-03	6.750E-04	1.700E-04
57	3.812E-03	4.720E-03	3.224E-03	1.524E-03	5.902E-04	1.371E-04
60	3.441E-03	4.134E-03	2.759E-03	1.286E-03	5.020E-04	1.111E-04
63	3.058E-03	3.691E-03	2.398E-03	1.135E-03	4.365E-04	1.006E-04
66	2.684E-03	3.365E-03	2.129E-03	1.006E-03	3.522E-04	7.863E-05
69	2.483E-03	2.908E-03	1.941E-03	8.641E-04	2.995E-04	7.074E-05
72	2.186E-03	2.681E-03	1.687E-03	7.448E-04	2.453E-04	5.465E-05
75	2.025E-03	2.366E-03	1.517E-03	6.226E-04	2.193E-04	4.448E-05
78	1.723E-03	2.137E-03	1.273E-03	5.356E-04	1.856E-04	3.936E-05
81	1.593E-03	1.953E-03	1.106E-03	4.458E-04	1.581E-04	3.145E-05
84	1.544E-03	1.727E-03	1.041E-03	4.045E-04	1.240E-04	2.629E-05
87	1.310E-03	1.557E-03	8.825E-04	3.339E-04	1.148E-04	2.504E-05
90	1.222E-03	1.413E-03	7.851E-04	2.889E-04	9.558E-05	1.620E-05
93	1.095E-03	1.189E-03	6.504E-04	2.697E-04	7.517E-05	1.648E-05
96	9.594E-04	1.097E-03	5.399E-04	2.214E-04	6.640E-05	1.184E-05
99	8.724E-04	9.850E-04	4.667E-04	1.881E-04	4.923E-05	1.043E-05
102	7.920E-04	8.109E-04	4.465E-04	1.457E-04	3.875E-05	7.067E-06
105	7.040E-04	7.571E-04	3.822E-04	1.262E-04	3.304E-05	6.343E-06
108	6.302E-04	6.361E-04	2.849E-04	1.082E-04	3.223E-05	4.472E-06
111	5.897E-04	5.481E-04	2.403E-04	9.069E-05	2.203E-05	3.334E-06
114	4.887E-04	4.845E-04	2.195E-04	7.258E-05	1.971E-05	4.168E-06
117	4.308E-04	4.250E-04	1.739E-04	5.146E-05	1.500E-05	2.201E-06
120	3.721E-04	3.763E-04	1.433E-04	5.193E-05	1.248E-05	2.024E-06
123	3.052E-04	2.714E-04	1.066E-04	4.095E-05	1.093E-05	1.897E-06
126	2.880E-04	2.831E-04	1.067E-04	2.814E-05	6.656E-06	1.305E-06
129	2.081E-04	1.950E-04	7.665E-05	2.126E-05	4.072E-06	1.644E-06
132	1.879E-04	1.684E-04	6.323E-05	1.346E-05	4.594E-06	7.892E-07
135	1.233E-04	1.300E-04	4.414E-05	1.465E-05	3.497E-06	8.649E-07
138	1.198E-04	1.245E-04	3.662E-05	1.226E-05	2.297E-06	5.262E-07
141	9.068E-05	7.425E-05	2.218E-05	7.053E-06	2.027E-06	3.439E-07
144	5.073E-05	5.155E-05	2.022E-05	7.600E-06	1.453E-06	3.491E-07
147	4.064E-05	5.107E-05	8.591E-06	3.492E-06	1.436E-06	0.0
150	1.955E-05	2.081E-05	7.694E-06	2.328E-06	3.044E-07	5.113E-08
153	7.724E-06	1.849E-05	3.876E-06	1.164E-06	-2.699E-07	2.682E-07

TARGET NO. 12 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
1	4.074E 01	0.0		4.342E-11	
2	5.709E 01	0.0		3.475E-11	
3	7.343E 01	0.0		3.458E-11	
4	8.978E 01	0.0		3.814E-11	
5	1.061E 02	2.447E-01		4.623E-11	
6	1.225E 02	8.973E-01	4.464E-02	5.526E-11	2.467E-12
7	1.388E 02	9.826E-01		6.482E-11	
8	1.552E 02	9.743E-01		7.572E-11	
9	1.715E 02	9.871E-01	4.849E-02	8.682E-11	4.210E-12
10	1.879E 02	9.878E-01		9.762E-11	
11	2.042E 02	9.891E-01		1.039E-10	
12	2.206E 02	1.002E 00	3.931E-02	1.194E-10	4.694E-12
13	2.369E 02	1.012E 00		1.308E-10	
14	2.533E 02	1.023E 00		1.416E-10	
15	2.696E 02	1.043E 00	3.246E-02	1.528E-10	4.959E-12
16	2.860E 02	1.066E 00		1.626E-10	
17	3.023E 02	1.089E 00		1.732E-10	
18	3.187E 02	1.107E 00	2.754E-02	1.822E-10	5.017E-12
19	3.350E 02	1.129E 00		1.925E-10	
20	3.513E 02	1.152E 00		2.028E-10	
21	3.677E 02	1.168E 00	2.376E-02	2.118E-10	5.034E-12
22	3.840E 02	1.185E 00		2.210E-10	
23	4.004E 02	1.204E 00		2.303E-10	
24	4.167E 02	1.217E 00	2.025E-02	2.404E-10	4.867E-12
25	4.331E 02	1.232E 00		2.492E-10	
26	4.494E 02	1.248E 00		2.577E-10	
27	4.658E 02	1.261E 00	1.722E-02	2.655E-10	4.572E-12
28	4.821E 02	1.276E 00		2.741E-10	
29	4.985E 02	1.294E 00		2.822E-10	
30	5.148E 02	1.306E 00	1.474E-02	2.913E-10	4.294E-12
31	5.312E 02	1.320E 00		3.000E-10	
32	5.475E 02	1.337E 00		3.078E-10	
33	5.639E 02	1.351E 00	1.291E-02	3.162E-10	4.081E-12
34	5.802E 02	1.364E 00		3.245E-10	
35	5.966E 02	1.378E 00		3.324E-10	
36	6.129E 02	1.390E 00	1.125E-02	3.412E-10	3.840E-12
37	6.293E 02	1.402E 00		3.500E-10	
38	6.456E 02	1.416E 00		3.579E-10	
39	6.620E 02	1.427E 00	9.766E-03	3.657E-10	3.572E-12
40	6.783E 02	1.438E 00		3.736E-10	

TARGET NO. 12 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
41	6.947E 02	1.450E 00		3.814E-10	
42	7.110E 02	1.460E 00	8.505E-03	3.906E-10	3.322E-12
43	7.273E 02	1.469E 00		4.000E-10	
44	7.437E 02	1.477E 00		4.072E-10	
45	7.600E 02	1.489E 00	7.437E-03	4.152E-10	3.088E-12
46	7.764E 02	1.502E 00		4.236E-10	
47	7.927E 02	1.516E 00		4.308E-10	
48	8.091E 02	1.529E 00	6.625E-03	4.391E-10	2.909E-12
49	8.254E 02	1.540E 00		4.482E-10	
50	8.418E 02	1.548E 00		4.554E-10	
51	8.581E 02	1.559E 00	5.807E-03	4.629E-10	2.688E-12
52	8.745E 02	1.572E 00		4.707E-10	
53	8.908E 02	1.587E 00		4.780E-10	
54	9.072E 02	1.601E 00	5.223E-03	4.857E-10	2.537E-12
55	9.235E 02	1.615E 00		4.942E-10	
56	9.399E 02	1.626E 00		5.015E-10	
57	9.562E 02	1.638E 00	4.655E-03	5.090E-10	2.369E-12
58	9.726E 02	1.649E 00		5.168E-10	
59	9.889E 02	1.656E 00		5.241E-10	
60	1.005E 03	1.666E 00	4.106E-03	5.313E-10	2.181E-12
61	1.022E 03	1.681E 00		5.385E-10	
62	1.038E 03	1.694E 00		5.457E-10	
63	1.054E 03	1.708E 00	3.714E-03	5.529E-10	2.054E-12
64	1.071E 03	1.723E 00		5.601E-10	
65	1.087E 03	1.735E 00		5.668E-10	
66	1.103E 03	1.747E 00	3.371E-03	5.735E-10	1.933E-12
67	1.120E 03	1.761E 00		5.807E-10	
68	1.136E 03	1.773E 00		5.874E-10	
69	1.152E 03	1.785E 00	3.058E-03	5.941E-10	1.817E-12
70	1.169E 03	1.800E 00		6.012E-10	
71	1.185E 03	1.812E 00		6.080E-10	
72	1.201E 03	1.824E 00	2.760E-03	6.145E-10	1.696E-12
73	1.218E 03	1.841E 00		6.204E-10	
74	1.234E 03	1.857E 00		6.267E-10	
75	1.250E 03	1.873E 00	2.519E-03	6.332E-10	1.595E-12
76	1.267E 03	1.880E 00		6.391E-10	
77	1.283E 03	1.883E 00		6.449E-10	
78	1.300E 03	1.883E 00	2.191E-03	6.508E-10	1.426E-12
79	1.316E 03	1.902E 00		6.567E-10	
80	1.332E 03	1.917E 00		6.629E-10	

TARGET NO. 12 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
81	1.349E 03	1.927E 00	1.992E-03	6.694E-10	1.334E-12
82	1.365E 03	1.955E 00		6.754E-10	
83	1.381E 03	1.983E 00		6.813E-10	
84	1.398E 03	2.010E 00	1.901E-03	6.871E-10	1.307E-12
85	1.414E 03	2.012E 00		6.975E-10	
86	1.430E 03	2.011E 00		7.073E-10	
87	1.447E 03	2.010E 00	1.648E-03	7.145E-10	1.178E-12
88	1.463E 03	2.031E 00		7.202E-10	
89	1.479E 03	2.056E 00		7.256E-10	
90	1.496E 03	2.076E 00	1.528E-03	7.315E-10	1.118E-12
91	1.512E 03	2.082E 00		7.373E-10	
92	1.528E 03	2.084E 00		7.434E-10	
93	1.545E 03	2.085E 00	1.318E-03	7.499E-10	9.886E-13
94	1.561E 03	2.094E 00		7.560E-10	
95	1.577E 03	2.107E 00		7.620E-10	
96	1.594E 03	2.117E 00	1.168E-03	7.685E-10	8.973E-13
97	1.610E 03	2.133E 00		7.746E-10	
98	1.626E 03	2.153E 00		7.805E-10	
99	1.643E 03	2.165E 00	1.052E-03	7.864E-10	8.271E-13
100	1.659E 03	2.177E 00		7.927E-10	
101	1.676E 03	2.188E 00		7.992E-10	
102	1.692E 03	2.202E 00	9.294E-04	8.051E-10	7.482E-13
103	1.708E 03	2.226E 00		8.106E-10	
104	1.725E 03	2.259E 00		8.159E-10	
105	1.741E 03	2.279E 00	8.581E-04	8.198E-10	7.035E-13
106	1.757E 03	2.286E 00		8.246E-10	
107	1.774E 03	2.279E 00		8.305E-10	
108	1.790E 03	2.280E 00	7.151E-04	8.364E-10	5.981E-13
109	1.806E 03	2.291E 00		8.425E-10	
110	1.823E 03	2.315E 00		8.491E-10	
111	1.839E 03	2.337E 00	6.366E-04	8.545E-10	5.439E-13
112	1.855E 03	2.360E 00		8.595E-10	
113	1.872E 03	2.383E 00		8.641E-10	
114	1.888E 03	2.400E 00	5.677E-04	8.687E-10	4.932E-13
115	1.904E 03	2.411E 00		8.734E-10	
116	1.921E 03	2.411E 00		8.786E-10	
117	1.937E 03	2.427E 00	4.813E-04	8.839E-10	4.254E-13
118	1.953E 03	2.454E 00		8.892E-10	
119	1.970E 03	2.499E 00		8.951E-10	
120	1.986E 03	2.511E 00	4.351E-04	8.997E-10	3.914E-13

TARGET NO. 12 INCIDENT ELECTRON ENERGY 2.5 MEV

CHANNEL	ENERGY KEV	CORR.FACT.	ENGY.SPEC. PHOTONS/MEV -ELECTRON	FX.TO DOSE R/PHOTON/ SQ.CM.	DOSE SPEC R-SQ CM./ MEV-ELEC.
121	2.002E 03	2.499E 00		9.038E-10	
122	2.019E 03	2.436E 00		9.090E-10	
123	2.035E 03	2.439E 00	3.224E-04	9.138E-10	2.946E-13
124	2.052E 03	2.491E 00		9.184E-10	
125	2.068E 03	2.627E 00		9.230E-10	
126	2.084E 03	2.688E 00	3.415E-04	9.268E-10	3.165E-13
127	2.101E 03	2.687E 00		9.302E-10	
128	2.117E 03	2.581E 00		9.361E-10	
129	2.133E 03	2.533E 00	2.284E-04	9.416E-10	2.150E-13
130	2.150E 03	2.543E 00		9.469E-10	
131	2.166E 03	2.614E 00		9.515E-10	
132	2.182E 03	2.654E 00	2.039E-04	9.534E-10	1.944E-13
133	2.199E 03	2.655E 00		9.521E-10	
134	2.215E 03	2.598E 00		9.634E-10	
135	2.231E 03	2.594E 00	1.469E-04	9.728E-10	1.429E-13
136	2.248E 03	2.678E 00		9.774E-10	
137	2.264E 03	2.828E 00		9.819E-10	
138	2.280E 03	2.925E 00	1.523E-04	2.916E-09	4.442E-13
139	2.297E 03	2.892E 00		8.772E-09	
140	2.313E 03	2.777E 00		5.266E-09	
141	2.329E 03	2.676E 00	9.026E-05	1.012E-09	9.132E-14
142	2.346E 03	2.672E 00		1.018E-09	
143	2.362E 03	2.676E 00		1.025E-09	
144	2.378E 03	2.704E 00	6.475E-05	1.031E-09	6.678E-14
145	2.395E 03	2.808E 00		1.038E-09	
146	2.411E 03	2.935E 00		1.049E-09	
147	2.428E 03	3.045E 00	5.552E-05	1.061E-09	5.891E-14
148	2.444E 03	3.081E 00		1.068E-09	
149	2.460E 03	2.882E 00		1.074E-09	
150	2.477E 03	2.764E 00	2.519E-05	1.081E-09	2.722E-14
151	2.493E 03	3.087E 00		1.087E-09	
152	2.509E 03	2.032E 00		0.0	
153	2.526E 03	0.0	0.0	0.0	0.0
154	2.542E 03	0.0		0.0	

DOSE= 4.641E-12 R-SQ.CM./ELECTRON