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Gamma-Ray Spectral Calculations for Uranium Borehole Logging

University of California

LOS ALAMOS SCIENTIFIC LABORATORY

Post Office Box 1663 Los Alamos, New Mexico 87545

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Gamma-Ray Spectral Calculations for Uranium Borehole Logging

D. A. Close
M. L. Evans
Mahavir Jain

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GAMMA-RAY SPECTRAL CALCULATIONS FOR URANIUM BOREHOLE LOGGING

by

D. A. Close, M. L. Evans, and Mahavir Jain

ABSTRACT

Gamma-ray transport calculations were performed to determine the energy distribution of gamma rays inside a borehole introduced into an infinite medium. The gamma rays from the naturally occurring radioactive isotopes of potassium, thorium, and uranium were uniformly distributed in a sandstone formation (having a porosity of 0.30 and a saturation of 1.0) surrounding the borehole. A sonde was placed coaxially inside the borehole. Parametric studies were done to determine how the borehole radius, borehole fluid, and borehole casing influence the gamma-ray flux inside the sonde.

I. INTRODUCTION

Energy distributions of the gamma rays from the naturally occurring radioactive isotopes of potassium, uranium, and thorium (KUT) in infinite media of sandstone and shale have been presented.¹ Subsequent calculations have determined the gamma-ray spectra when a borehole is introduced into the infinite medium, as indicated in Fig. 1. A NaI detector housed within a sonde is to be placed within the borehole. The sonde effectively removes the borehole fluid from above and below the detector.

Figure 2 shows how the actual borehole geometry of Fig. 1 has been simulated to meet the geometry requirements of the ONE-TRAN discrete ordinates code.² The radii (outside dimension) of the sonde and borehole are denoted by R_s and R_b , respectively. The thicknesses of the sonde wall, borehole casing, and formation are denoted by X_s , X_c , and X_f , respectively. The cylindrical

Fig. 1.
Geometry for an infinite medium
with borehole and probe.

Fig. 2.
Borehole geometry used for the
ONETRAN calculations. The
radius of the sonde, R_s , was
held fixed at 3.334 cm; the
thickness of the sonde wall,
 X_s , was held fixed at 0.732 cm;
the thickness of the formation,
 X_f , was held fixed at 50 cm.
 R_b is the radius of the bore-
hole and X_c is the thickness
of the borehole casing.

geometry option of ONETRAN has been used for these calculations. Gamma-ray fluxes are obtained as a function of the polar angle θ at each of the 15 spatial mesh points indicated in the figure.

The mechanics of performing these calculations are identical to those of the infinite-medium calculations. The many-group ONETRAN discrete ordinates code, as applied to gamma-ray transport problems and described elsewhere,¹ was used. As before, there were 265 groups, each 10 keV wide, covering the energy range from 10 keV to 2660 keV.

TABLE I
BOREHOLE AND SONDE PARAMETERS

Borehole radius	:	3.810, 5.715, 7.938, 10.160, 12.700 cm
Borehole fluid	:	air; pure water
Borehole casing	:	none; 0.318-cm iron, 0.318-cm polyvinylchloride (PVC), 0.794-cm polyvinylchloride (PVC)
Sonde radius	:	3.334 cm
Sonde casing	:	0.732-cm iron
Detector position:		concentric with borehole axis

II. BOREHOLE AND FORMATION PARAMETERS

Table I lists the borehole parameters of interest in uranium well logging. The "standard borehole" is defined to have a radius of 5.715 cm, no borehole fluid, and no borehole casing. The calculations were performed by holding two of these variables fixed at the above values and varying the remaining parameter. For all cases, the sonde radius and the sonde wall thickness were held fixed at the values listed in the table. Additionally, calculations were performed in which the borehole radius was varied and there was water in the borehole but no borehole casing. A NaI detector was not explicitly included in these gamma-ray flux calculations.

The elemental composition of sandstone used in these calculations is shown in Table II. This particular sandstone formation has a porosity of 0.30, a saturation of 1.0, and a dry, nonporous rock density of 2.6460 g/cm^3 . Actual sandstone includes more elements than the nine listed here, notably sodium, phosphorus, sulfur, and titanium. These four elements have been taken into account as described below, thereby eliminating any need to make density corrections to the data.

TABLE II

SANDSTONE ELEMENTAL CONCENTRATIONS ^a

Element	Mass Density (g/cm ³)	Weight Fraction (%)	Atom Fraction (%)
H	0.03357	1.560	23.502
C	0.02562	1.190	1.505
O	1.22543	56.939	54.047
Mg	0.01928	0.896	0.560
Al	0.04690	2.179	1.227
Si	0.68240	31.707	17.145
K	0.02563	1.191	0.463
Ca	0.07500	3.485	1.321
Fe	0.01834	0.852	0.232

^aBulk density = 2.1522 g/cm³; porosity = 0.30; saturation = 1.0; atom density = 0.08534×10^{24} atoms/cm³.

The four elements have been implicitly included in the composition by treating each element as though it were another element of the composition having a substantial concentration but only a slightly different Z. For example, the sodium (Z = 11) concentration has been summed with that of magnesium (Z = 12). Likewise, the density of phosphorus has been added to the density of silicon, that of sulfur added to potassium, and that of titanium to calcium. Since the concentrations of these four elements are small, including them in the sandstone in this manner changes the average Z of the formation slightly, from 7.6650 to 7.6886. Over the energy range ($10 \text{ keV} \leq E_\gamma \leq 2660 \text{ keV}$) of interest the photon

interaction cross sections vary slowly as Z changes by ± 1 . Thus, the interaction of gamma rays with this artificial composition is virtually identical to that of real sandstone. Limiting the number of elements included in sandstone reduces computation time and memory storage requirements. Also, based on results from the infinite-medium calculations,¹ there was no need to treat both sandstone and shale formations and different porosities and saturations of a given formation, since the changes in the gamma-ray flux caused by these variations were small and calculable. This assertion will be verified after the gamma-ray fluxes have been enfolded with the detector response function.

TABLE III
GAMMA-RAY SOURCE SPECTRA FOR POTASSIUM,
THORIUM, AND URANIUM

Potassium		
<u>Energy</u> <u>(keV)</u>	<u>Relative</u> <u>Intensity</u>	<u>Parent</u> <u>Isotope</u>
1461.0	0.9998	K 40
511.0	0.0002	K 40
Thorium Series		
<u>Energy</u> <u>(keV)^a</u>	<u>Relative</u> <u>Intensity</u>	<u>Parent</u> <u>Isotope</u>
2614.5	0.145	Tl 208
1587.9	0.015	Ac 228
968.9	0.073	Ac 228
964.6	0.023	Ac 228
911.1	0.121	Ac 228
860.5	0.017	Tl 208
794.8	0.020	Ac 228
727.3	0.027	Bi 212
583.1	0.125	Tl 208
510.7	0.033	Tl 208
463.0	0.019	Ac 228
338.4	0.050	Ac 228
328.0	0.014	Ac 228
300.1	0.014	Pb 212
270.3	0.016	Ac 228
241.0	0.015	Ra 224

Table III (continued)
Thorium Series

<u>Energy (keV)</u>	<u>Relative Intensity</u>	<u>Parent Isotope</u>
238.6	0.179	Pb 212
209.4	0.019	Ac 228
129.1	0.012	Ac 228
84.4	0.064	Th 228

Uranium Series

<u>Energy (keV)^a</u>	<u>Relative Intensity</u>	<u>Parent Isotope</u>
2448.0	0.008	Bi 214
2204.3	0.026	Bi 214
2118.7	0.006	Bi 214
1847.6	0.011	Bi 214
1764.6	0.081	Bi 214
1729.8	0.016	Bi 214
1661.4	0.006	Bi 214
1583.3	0.004	Bi 214
1509.3	0.011	Bi 214
1408.0	0.013	Bi 214
1401.6	0.007	Bi 214
1385.4	0.004	Bi 214
1377.7	0.021	Bi 214
1281.0	0.007	Bi 214
1238.2	0.030	Bi 214
1155.3	0.008	Bi 214
1120.4	0.073	Bi 214
1001.1	0.004	Pa 234m
934.0	0.015	Bi 214
806.2	0.005	Bi 214
786.0	0.004	Pb 214
768.4	0.023	Bi 214
665.6	0.007	Bi 214
609.4	0.208	Bi 214
352.0	0.177	Pb 214
295.2	0.092	Pb 214
258.8	0.004	Pb 214
241.9	0.037	Pb 214
186.0	0.019	Ra 226
185.7	0.012	U 235
92.8	0.017	Th 234
92.3	0.015	Th 234
63.3	0.028	Th 234

^aBrackets indicate gamma rays whose intensities were summed to obtain the group intensity as required by ONETRAN.

Separate calculations were performed for the gamma-ray spectra from the naturally occurring radioactive isotopes ^{40}K , ^{232}Th , and $^{235,238}\text{U}$.

The gamma-ray lines from these isotopes and their decay series daughters are presented in Table III and shown graphically in Fig. 3. The electron capture and β^+ decay of ^{40}K results in only two gamma rays, the dominant 1461-keV gamma ray and the very weak 511-keV annihilation quantum. The table lists the 20 most intense gamma rays from the thorium series and the 33 most intense gamma rays from the uranium series. These represent 95% of the total thorium intensity and 90% of the total uranium intensity, respectively. The intensities of the lines in each spectrum have been renormalized to unity and are listed in the table.

Fig. 3.
Energies and relative intensities of gamma rays from the decay of potassium, thorium, and uranium.

III. MODEL PARAMETER STUDIES

Initially, calculations were performed to determine the optimum values for the P_n and S_n parameters of the ONETRAN code. Figure 4a shows the variation of the gamma-ray total flux with P_n (Legendre expansion order), and Fig. 4b shows the variation of the gamma-ray total flux with S_n (angular quadrature order). The computer-storage requirements for the polynomial expansions of the cross sections through order ten were so large for the 265 group structure that a few-group structure (twenty-six

Fig. 4.

(a) Variation of the gamma-ray total flux with Legendre expansion order. (b) Variation of the gamma-ray total flux with angular quadrature order.

100-keV-wide energy bins) had to be used to determine the optimum choice of P_n . After the value of P_n was determined, the few-group structure was also used to determine S_n . The source gamma rays had energies in the highest group, 2510-2610 keV, and their origins were uniformly distributed throughout the sandstone formation. The gamma-ray total flux has been plotted only for the highest energy group at the point $R = 1.735$ cm, the mesh point just inside the sonde enclosure.

As indicated in Fig. 4a, there is a small dependence of the gamma-ray total flux on

the Legendre expansion order. The ONETRAN solutions converge for a P_4 cross-section representation. The dependence of the gamma-ray flux on the angular quadrature order, shown in Fig. 4b, indicates the flux oscillates with quadrature order. A quadrature order of eight was arbitrarily chosen, since the true value of the flux was unknown and the variation of flux with quadrature order was small (less than 2%). Also, an S_8 calculation requires less computer time and storage requirements than a higher quadrature order.

Fifteen spatial mesh points were chosen for the problem (see Fig. 2): three inside the sonde enclosure; one in the sonde casing; two in the region of the borehole fluid; one in the borehole casing; and eight in the sandstone formation. The placement of mesh points determines the sensitivity of the solutions to the P_n order of the cross sections and the S_n angular quadrature

order. With too few spatial mesh points, the solutions oscillate significantly, even for high P_n and S_n orders. With an adequate number of spatial mesh points, oscillations in the solutions are minimal and the solutions converge for lower P_n and S_n orders. Furthermore, the mesh points should be about a mean-free-path apart in a material. The 15 spatial mesh points chosen meet the mean-free-path criterion and, combined with a P_4S_8 calculation, minimize the oscillations in the solutions.

The preceding discussion assumed that a NaI detector placed inside the sonde would have a negligible effect on the gamma-ray flux inside the sonde. Two Monte Carlo³ calculations were performed to determine the validity of this assumption. The incident gamma-ray energy for these studies was 609 keV. This is the most intense gamma ray in the uranium series and is more intense than any line in the thorium series. Furthermore, it is relatively low in energy and should be more sensitive to the presence of a NaI detector than a higher-energy gamma ray. The detector was assumed to have a diameter of 5.08 cm and a length of 25.40 cm, which is the largest detector currently envisioned for use down-hole. The number of gamma rays crossing into the cylindrical surface of the detector was tallied in thirteen 50-keV-wide energy bins. These studies assumed a 3.334-cm-radius sonde with a 0.732-cm-thick iron wall; the borehole radius was 5.715 cm and there was no borehole casing or borehole fluid.

The results of this study are shown in Fig. 5. The ratio of the number of gamma rays crossing into the cylindrical surface of the NaI detector to the number of gamma rays for no detector in the borehole is plotted as a function of the gamma-ray energy. If the detector had no effect on the gamma-ray flux, this ratio would be unity for all energies. This limiting value is indicated by the horizontal line.

The errors shown in Fig. 5 were calculated assuming uncorrelated event samples for the two Monte Carlo calculations. However, the two event samples were strongly correlated, especially at high energies. Thus, the errors shown in Fig. 5 are gross

Fig. 5.
The ratio of the number of gamma rays crossing into the cylindrical surface of a NaI detector in a borehole to the number of gamma rays for no detector is plotted as a function of the gamma-ray energy. The horizontal line at 1.00 indicates the ratio expected if the NaI detector had no effect on the gamma-ray flux.

overestimates of the true uncertainty in the relative gamma-ray flux.

There is a negligible effect on gamma rays having energies greater than 200 keV. The presence of the NaI detector reduces the gamma-ray flux for gamma rays having energies less than 200 keV. These results are indicative of the maximum effect a detector can have on the flux, since most detectors placed down-hole will be significantly smaller in size, for example, 2.54 cm x 12.70 cm. From these studies, it is felt that the effect of a NaI detector on the steady-state flux in a borehole can be ignored.

IV. RESULTS

A total of 40 borehole gamma-ray spectral calculations was performed for sandstone. Table IV lists the parameters of each of the case studies, grouped by spectral source type (except for case 40, which was performed subsequent to the completion of the initial series of 13 case studies for each spectral source). Shown in Figs. 6-11 are the gamma-ray total flux spectra at a point just inside the sonde wall ($R = 1.735$ cm) for a representative sample of the 40 cases of Table IV. The sample demonstrates the changes in flux caused by a relatively large change in

TABLE IV
INDEX TO THE PARAMETERS OF THE
BOREHOLE SPECTRAL CALCULATIONS

Case #	Gamma-Ray Source	Borehole		
		Radius (cm)	Fluid	Casing
1	K	3.810	Air	None
2	K	5.715	Air	None
3	K	7.938	Air	None
4	K	10.160	Air	None
5	K	12.700	Air	None
6	K	3.810	Water	None
7	K	5.715	Water	None
8	K	7.938	Water	None
9	K	10.160	Water	None
10	K	12.700	Water	None
11	K	5.715	Air	0.318 cm Iron
12	K	5.715	Air	0.318 cm PVC
13	K	5.715	Air	0.794 cm PVC
14	Th	3.810	Air	None
15	Th	5.715	Air	None
16	Th	7.938	Air	None
17	Th	10.160	Air	None
18	Th	12.700	Air	None
19	Th	3.810	Water	None
20	Th	5.715	Water	None
21	Th	7.938	Water	None
22	Th	10.160	Water	None
23	Th	12.700	Water	None
24	Th	5.715	Air	0.318 cm Iron
25	Th	5.715	Air	0.318 cm PVC
26	Th	5.715	Air	0.794 cm PVC
27	U	3.810	Air	None
28	U	5.715	Air	None
29	U	7.938	Air	None
30	U	10.160	Air	None
31	U	12.700	Air	None
32	U	3.810	Water	None
33	U	5.715	Water	None
34	U	7.938	Water	None
35	U	10.160	Water	None
36	U	12.700	Water	None
37	U	5.715	Air	0.318 cm Iron
38	U	5.715	Air	0.318 cm PVC
39	U	5.715	Air	0.794 cm PVC
40	Th	5.715	Water	0.318 cm PVC

Fig. 6.
Gamma-ray total flux at $R = 1.735$ cm as a function of gamma-ray energy for a potassium spectrum in a sandstone formation having a porosity of 0.30 and a saturation of 1.0. The borehole parameters are: borehole radius = 5.715 cm; borehole fluid = air; borehole casing = none.

Fig. 7.
Gamma-ray total flux at $R = 1.735$ cm as a function of gamma-ray energy for a potassium spectrum in a sandstone formation having a porosity of 0.30 and a saturation of 1.0. The borehole parameters are: borehole radius = 5.715 cm; borehole fluid = water; borehole casing = none.

Fig. 8.
Gamma-ray total flux at $R = 1.735$ cm as a function of gamma-ray energy for a uranium spectrum in a sandstone formation having a porosity of 0.30 and a saturation of 1.0. The borehole parameters are: borehole radius = 5.715 cm; borehole fluid = air; borehole casing = none.

Fig. 9.
Gamma-ray total flux at $R = 1.735$ cm as a function of gamma-ray energy for a uranium spectrum in a sandstone formation having a porosity of 0.30 and a saturation of 1.0. The borehole parameters are borehole radius = 5.715 cm; borehole fluid = air; borehole casing = 0.318 cm iron.

Fig. 10.
Gamma-ray total flux at $R = 1.735$ cm as a function of gamma-ray energy for a thorium spectrum in a sandstone formation having a porosity of 0.30 and a saturation of 1.0. The borehole parameters are borehole radius = 5.715 cm; borehole fluid = air; borehole casing = none.

Fig. 11.
Gamma-ray total flux at $R = 1.735$ cm as a function of gamma-ray energy for a thorium spectrum in a sandstone formation having a porosity of 0.30 and a saturation of 1.0. The borehole parameters are borehole radius = 5.715 cm; borehole fluid = water; borehole casing = 0.318 cm PVC.

borehole parameters. All calculations assumed a "UNIT SOURCE," defined to be one gamma ray per second per cm^3 of the formation. The spectral printouts of the total flux at a point just inside the sonde wall ($R = 1.735$ cm) are given in the Appendix for all 40 case studies. These data allow quantitative comparisons to be made that demonstrate the effects that borehole radius, borehole fluid, and borehole casing have on the gamma-ray flux inside the sonde.

V. DISCUSSION

Interpretation of spectral gamma-ray logs relies on energy-dependent correction factors relating the spectrum obtained in an unknown borehole to that from a calibration test pit. The results of this study provide spectral correction data for changes in borehole parameters (i.e., borehole diameter, fluid, and casing). Previous calculations¹ have determined these correction factors for changes in $\bar{Z}$ and density of the formation caused by variations in formation porosity, fluid saturation, and elemental composition.

Correcting gamma-ray logs for effects caused by varying borehole diameter is an important aspect of gamma-ray logging analysis and interpretation. Figures 12-14 demonstrate these effects at three gamma-ray energies for both air- and water-filled boreholes. A thorium source spectrum was used to obtain the results shown in Figs. 12-14, since that spectrum affords the broadest range of gamma-ray energies compared with the potassium and uranium spectra. The results were obtained with an uncased borehole.

At 2.505 MeV, the total gamma-ray flux decreases very slightly ($\sim 0.5\%$) for air-filled boreholes over the range of borehole diameters studied (i.e., 7.62-25.40 cm). The flux increases about 0.8% at 1.005 MeV and about 3.2% at 0.205 MeV for the same range of borehole diameters. These small variations in total flux are due to slight perturbations in the effective path length of the gamma rays for the different borehole diameters.

The total flux decreases almost linearly with increasing borehole diameter for water-filled boreholes. At the higher

Fig. 12.
Variation in total gamma-ray flux at $E_\gamma = 2.505$ MeV as a function of borehole diameter for both air-filled and water-filled boreholes.

Fig. 13.
Variation in total gamma-ray flux at $E_\gamma = 1.005$ MeV as a function of borehole diameter for both air-filled and water-filled boreholes.

Fig. 14.
Variation in total gamma-ray flux at $E_\gamma = 0.205$ MeV as a function of borehole diameter for both air-filled and water-filled boreholes.

energies the attenuation of the gamma-ray flux increases by about 20% as the borehole diameter increases from 7.62 cm to 25.40 cm. The attenuation is more pronounced at 0.205 MeV, as expected, resulting in a drop in total flux of about 40% over the range of borehole diameters studied.

The gamma-ray total flux for an air-filled, uncased borehole (case 15) is compared

Fig. 15.

Ratios of total flux values as a function of gamma-ray energy comparing the results of cases 20 (water-filled, no casing), 24 (air-filled, 0.318-cm iron casing), 25 (air-filled, 0.318-cm PVC casing), and 26 (air-filled, 0.794-cm PVC casing) to case 15 (air-filled, no casing). The borehole diameter was held constant at 11.43 cm (4.5 inches) and a thorium source spectrum was used.

in Fig. 15 with that for a water-filled, uncased borehole and with those for air-filled boreholes having different casings. The figure shows the total flux ratio between case 15 and each of the cases 20 (water-filled, no casing), 24 (air-filled, 0.318-cm iron casing), 25 (air-filled, 0.318-cm PVC casing), and 26 (air-filled, 0.794-cm PVC casing) as a function of gamma-ray energy. A thorium source spectrum and a constant borehole diameter of 11.43 cm (4.5 inches) was used for each case.

The water-filled, uncased borehole (case 20) is the most attenuating geometry, even more attenuating than the 0.318-cm (1/8 inch)-thick iron casing of case 24. The 0.318-cm-thick polyvinylchloride casing with an air-filled borehole (case 25) is the least attenuating geometry.

The flux ratio (Fig. 15) is highly energy dependent for all comparisons. The general shape of each ratio curve is that resulting from increasing photoelectric absorption at low energies and increasing pair-production absorption at high energies (discernible only for case 24). (See Ref. 1 for a more detailed explanation.) Detailed structure is evident in all curves but is especially obvious for the more highly attenuating geometries. The apparent discontinuities in the ratios are associated with the occurrence of discrete lines in the thorium source spectrum

(see Fig. 3). Since the energy region just above 1 MeV in the flux spectrum of case 15 contains only downscattered radiation, while the region just below 1 MeV contains contributions from both downscattering and the presence of source lines in the region, the two energy regions contain grossly different quantities of flux. As the borehole attenuation increases relative to that of case 15, the additional quantity of flux downscattered into the two regions is very nearly the same owing to the slowly varying energy dependence of the Compton cross section. Therefore, the fractional increase in flux in the two regions is different. On the other hand, the fractional amount of flux removed from the two energy regions by photoelectric absorption and Compton downscattering is roughly the same. The net imbalance in flux caused by these two competing processes results in the discontinuities observed between cases differing in borehole attenuation. Thus, it is clear that simple exponential attenuation calculations that estimate only the amount of flux absorbed and completely ignores the complex initial spectrum and the downscattering of higher energy gamma rays and the subsequent buildup factor cannot adequately describe the changes in spectral shape resulting from varying borehole attenuation. A transport calculation that includes the effects of downscatter and the complexity of the source spectrum is required to obtain accurate results.

The total flux ratio between case 40 (water-filled, 0.318-cm-thick polyvinylchloride casing) and case 20 (water-filled, uncased) is shown in Fig. 16. Also shown in this figure is the total flux ratio between case 40 (water-filled, 0.318-cm-thick polyvinylchloride casing) and case 25 (air-filled, 0.318-cm-thick polyvinylchloride casing). Again, the borehole diameter was held constant at 11.43 cm and a thorium source spectrum was used for the calculations.

The features of these two curves are very similar to those observed earlier in Fig. 15. The inclusion of a 0.318-cm-thick polyvinylchloride casing in case 40 produces little additional attenuation over that observed in case 20 for a water-filled borehole with no casing. On the other hand, a water-filled borehole

Fig. 16.

Ratios of total flux values as a function of gamma-ray energy comparing the results of cases 20 (water-filled, no casing) and 25 (air-filled, 0.318-cm PVC casing) to case 40 (water-filled borehole having a 0.318-cm-thick PVC casing). The borehole diameter was held constant at 11.43 cm (4.5 inches) and a thorium source spectrum was used.

with a 0.318-cm-thick polyvinylchloride casing is significantly more attenuating than an air-filled borehole with the same casing. This was observed before for a water-filled, uncased borehole versus an air-filled, uncased borehole.

VI. CONCLUSIONS AND RECOMMENDATIONS

Parametric studies performed to determine the effects of borehole diameter, fluid, and casing on KUT flux spectra observed in a logging sonde lead to the following conclusions:

- A.) Corrections to the flux spectra observed in air-filled, uncased boreholes having diameters in the range 7.62-25.40 cm (3.0-10.0 inches) are unnecessary above 500 keV if uncertainties in the flux values up to 1% can be tolerated.
- B.) Corrections to the flux spectra observed in water-filled, uncased boreholes having diameters in the range 7.62-25.40 cm (3.0-10.0 inches) vary linearly with borehole diameter to within 2% for energies greater than 100 keV.
- C.) In an 11.43-cm-diameter (4.5 inch), air-filled, uncased borehole, corrections to the flux spectra for water filling are

larger than those for casing the borehole with up to 0.318-cm (1/8 inch) iron.

- D.) Corrections to flux spectra for differences in borehole geometry and compositions are dependent on the distribution of spectral lines in the source. Simple exponential attenuation cannot account for the changes in flux. Hence, transport calculations are necessary to obtain reasonable estimates of spectral flux changes resulting from variations in borehole diameter, borehole fluid, and borehole casing.

VII. FUTURE CALCULATIONS

The gamma-ray fluxes presented in this report are insufficient to be used directly to aid in the interpretation of borehole logging data. They must first be convoluted with a gamma-ray detector response function to yield a calculated spectrum comparable to that measured by a NaI detector placed downhole. In addition to the magnitude of the gamma-ray fluxes, such a calculation needs as input the angular distribution of the gamma rays incident on the detector. These angular fluxes have been written into data files for the cases described above. The files have been saved on magnetic disk and tape in a format described earlier.¹ A subsequent report will present the results of the convolution of these gamma-ray fluxes with a gamma-ray detector response function.

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1. M. Jain, M. L. Evans, and D. A. Close, "Nondestructive Assay Technology for Uranium Resource Evaluation, Infinite Medium Calculations, Final Report," Los Alamos Scientific Laboratory report LA-7713-MS (March 1979).
2. T. R. Hill, "ONETRAN: A Discrete Ordinates Finite Element Code for the Solution of the One-Dimensional Multigroup Transport Equation," Los Alamos Scientific Laboratory report LA-5990-MS (June 1975).

3. E. D. Cashwell, J. R. Neergaard, W. M. Taylor, and G. D. Turner, "MCN: A Neutron Monte Carlo Code," Los Alamos Scientific Laboratory report LA-4751 (January 1972); E. D. Cashwell, J. R. Neergaard, C. J. Everett, R. G. Schrandt, W. M. Taylor, and G. D. Turner, "Monte Carlo Photon Codes: MCG and MCP," Los Alamos Scientific Laboratory report LA-5157-MS (March 1973).

APPENDIX SPECTRAL PRINTOUTS

Included below are computer printouts of the total flux values for each spectrum of the 40 borehole calculations. The data for each spectrum are printed on a single page with descriptive information including case number, source spectrum (K, U, or Th), borehole radius, borehole fluid, and borehole casing. The values of energy listed are the centers of the 10-keV-wide bins used in the ONETRAN calculations. The units for the printouts are identical to those of the spectral plots of Figs. 6-11, that is, MeV for the energy values and gamma rays/cm²/s/0.01 MeV/unit source for the flux values.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 1, K, 3.810CM, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.591E-38	.515	1.554E-01	1.015	5.924E-02	1.515	0.	2.015	0.	2.515	0.
.025	4.233E-31	.525	2.100E-01	1.025	5.891E-02	1.525	0.	2.025	0.	2.525	0.
.035	8.856E-24	.535	1.074E-01	1.035	5.858E-02	1.535	0.	2.035	0.	2.535	0.
.045	2.780E-17	.545	1.051E-01	1.045	5.825E-02	1.545	0.	2.045	0.	2.545	0.
.055	6.292E-15	.555	1.028E-01	1.055	5.795E-02	1.555	0.	2.055	0.	2.555	0.
.065	2.695E-09	.565	1.006E-01	1.065	5.767E-02	1.565	0.	2.065	0.	2.565	0.
.075	5.461E-08	.575	9.851E-02	1.075	5.740E-02	1.575	0.	2.075	0.	2.575	0.
.085	1.687E-07	.585	9.554E-02	1.085	5.714E-02	1.585	0.	2.085	0.	2.585	0.
.095	8.879E-02	.595	9.468E-02	1.095	5.689E-02	1.595	0.	2.095	0.	2.595	0.
.105	2.560E-01	.605	9.291E-02	1.105	5.664E-02	1.605	0.	2.105	0.	2.605	0.
.115	3.843E-01	.615	9.122E-02	1.115	5.638E-02	1.615	0.	2.115	0.	2.615	0.
.125	4.643E-01	.625	8.963E-02	1.125	5.614E-02	1.625	0.	2.125	0.	2.625	0.
.135	5.015E-01	.635	8.812E-02	1.135	5.591E-02	1.635	0.	2.135	0.	2.635	0.
.145	5.100E-01	.645	8.668E-02	1.145	5.567E-02	1.645	0.	2.145	0.	2.645	0.
.155	5.026E-01	.655	8.527E-02	1.155	5.543E-02	1.655	0.	2.155	0.	2.655	0.
.165	4.885E-01	.665	8.392E-02	1.165	5.520E-02	1.665	0.	2.165	0.	2.665	0.
.175	4.717E-01	.675	8.265E-02	1.175	5.504E-02	1.675	0.	2.175	0.	2.675	0.
.185	4.525E-01	.685	8.145E-02	1.185	5.489E-02	1.685	0.	2.185	0.	2.685	0.
.195	4.334E-01	.695	8.028E-02	1.195	5.471E-02	1.695	0.	2.195	0.	2.695	0.
.205	4.165E-01	.705	7.913E-02	1.205	5.454E-02	1.705	0.	2.205	0.	2.705	0.
.215	4.109E-01	.715	7.804E-02	1.215	5.437E-02	1.715	0.	2.215	0.	2.715	0.
.225	4.156E-01	.725	7.700E-02	1.225	5.421E-02	1.725	0.	2.225	0.	2.725	0.
.235	3.854E-01	.735	7.602E-02	1.235	5.404E-02	1.735	0.	2.235	0.	2.735	0.
.245	3.585E-01	.745	7.507E-02	1.245	5.389E-02	1.745	0.	2.245	0.	2.745	0.
.255	3.345E-01	.755	7.413E-02	1.255	5.374E-02	1.755	0.	2.255	0.	2.755	0.
.265	3.129E-01	.765	7.323E-02	1.265	5.359E-02	1.765	0.	2.265	0.	2.765	0.
.275	2.935E-01	.775	7.237E-02	1.275	5.345E-02	1.775	0.	2.275	0.	2.775	0.
.285	2.741E-01	.785	7.156E-02	1.285	5.332E-02	1.785	0.	2.285	0.	2.785	0.
.295	2.603E-01	.795	7.078E-02	1.295	5.319E-02	1.795	0.	2.295	0.	2.795	0.
.305	2.462E-01	.805	7.002E-02	1.305	5.306E-02	1.805	0.	2.305	0.	2.805	0.
.315	2.335E-01	.815	6.929E-02	1.315	5.294E-02	1.815	0.	2.315	0.	2.815	0.
.325	2.220E-01	.825	6.860E-02	1.325	5.282E-02	1.825	0.	2.325	0.	2.825	0.
.335	2.114E-01	.835	6.793E-02	1.335	5.271E-02	1.835	0.	2.335	0.	2.835	0.
.345	2.018E-01	.845	6.730E-02	1.345	5.260E-02	1.845	0.	2.345	0.	2.845	0.
.355	1.929E-01	.855	6.667E-02	1.355	5.249E-02	1.855	0.	2.355	0.	2.855	0.
.365	1.848E-01	.865	6.607E-02	1.365	5.239E-02	1.865	0.	2.365	0.	2.865	0.
.375	1.773E-01	.875	6.550E-02	1.375	5.229E-02	1.875	0.	2.375	0.	2.875	0.
.385	1.703E-01	.885	6.496E-02	1.385	5.219E-02	1.885	0.	2.385	0.	2.885	0.
.395	1.639E-01	.895	6.443E-02	1.395	5.209E-02	1.895	0.	2.395	0.	2.895	0.
.405	1.579E-01	.905	6.389E-02	1.405	5.199E-02	1.905	0.	2.405	0.	2.905	0.
.415	1.525E-01	.915	6.338E-02	1.415	5.189E-02	1.915	0.	2.415	0.	2.915	0.
.425	1.474E-01	.925	6.289E-02	1.425	5.179E-02	1.925	0.	2.425	0.	2.925	0.
.435	1.426E-01	.935	6.242E-02	1.435	5.169E-02	1.935	0.	2.435	0.	2.935	0.
.445	1.382E-01	.945	6.197E-02	1.445	5.159E-02	1.945	0.	2.445	0.	2.945	0.
.455	1.340E-01	.955	6.153E-02	1.455	5.149E-02	1.955	0.	2.455	0.	2.955	0.
.465	1.301E-01	.965	6.111E-02	1.465	5.139E-02	1.965	0.	2.465	0.	2.965	0.
.475	1.265E-01	.975	6.070E-02	1.475	5.129E-02	1.975	0.	2.475	0.	2.975	0.
.485	1.230E-01	.985	6.031E-02	1.485	5.119E-02	1.985	0.	2.485	0.	2.985	0.
.495	1.197E-01	.995	5.994E-02	1.495	5.109E-02	1.995	0.	2.495	0.	2.995	0.
.505	1.167E-01	1.005	5.958E-02	1.505	5.099E-02	2.005	0.	2.505	0.	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 2, K, 5.715CM, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.574E-38	.515	1.564E-01	1.015	5.927E-02	1.515	0.	2.015	0.	2.515	0.
.025	4.091E-31	.525	1.109E-01	1.025	5.893E-02	1.525	0.	2.025	0.	2.525	0.
.035	4.830E-24	.535	1.079E-01	1.035	5.860E-02	1.535	0.	2.035	0.	2.535	0.
.045	2.769E-17	.545	1.055E-01	1.045	5.827E-02	1.545	0.	2.045	0.	2.545	0.
.055	6.304E-15	.555	1.032E-01	1.055	5.797E-02	1.555	0.	2.055	0.	2.555	0.
.065	2.711E-09	.565	1.010E-01	1.065	5.767E-02	1.565	0.	2.065	0.	2.565	0.
.075	5.516E-08	.575	9.890E-02	1.075	5.739E-02	1.575	0.	2.075	0.	2.575	0.
.085	1.710E-07	.585	9.692E-02	1.085	5.712E-02	1.585	0.	2.085	0.	2.585	0.
.095	8.951E-02	.595	9.504E-02	1.095	5.687E-02	1.595	0.	2.095	0.	2.595	0.
.105	2.582E-01	.605	9.324E-02	1.105	5.661E-02	1.605	0.	2.105	0.	2.605	0.
.115	3.923E-01	.615	9.150E-02	1.115	5.635E-02	1.615	0.	2.115	0.	2.615	0.
.125	4.732E-01	.625	8.995E-02	1.125	5.610E-02	1.625	0.	2.125	0.	2.625	0.
.135	5.113E-01	.635	8.843E-02	1.135	5.587E-02	1.635	0.	2.135	0.	2.635	0.
.145	5.199E-01	.645	8.698E-02	1.145	5.564E-02	1.645	0.	2.145	0.	2.645	0.
.155	5.122E-01	.655	8.558E-02	1.155	5.542E-02	1.655	0.	2.155	0.	2.655	0.
.165	4.976E-01	.665	8.421E-02	1.165	5.522E-02	1.665	0.	2.165	0.	2.665	0.
.175	4.804E-01	.675	8.293E-02	1.175	5.502E-02	1.675	0.	2.175	0.	2.675	0.
.185	4.606E-01	.685	8.171E-02	1.185	5.482E-02	1.685	0.	2.185	0.	2.685	0.
.195	4.411E-01	.695	8.053E-02	1.195	5.453E-02	1.695	0.	2.195	0.	2.695	0.
.205	4.239E-01	.705	7.938E-02	1.205	5.446E-02	1.705	0.	2.205	0.	2.705	0.
.215	4.191E-01	.715	7.828E-02	1.215	5.429E-02	1.715	0.	2.215	0.	2.715	0.
.225	4.235E-01	.725	7.723E-02	1.225	5.411E-02	1.725	0.	2.225	0.	2.725	0.
.235	3.931E-01	.735	7.624E-02	1.235	5.394E-02	1.735	0.	2.235	0.	2.735	0.
.245	3.656E-01	.745	7.528E-02	1.245	5.378E-02	1.745	0.	2.245	0.	2.745	0.
.255	3.410E-01	.755	7.433E-02	1.255	5.363E-02	1.755	0.	2.255	0.	2.755	0.
.265	3.187E-01	.765	7.343E-02	1.265	5.348E-02	1.765	0.	2.265	0.	2.765	0.
.275	2.987E-01	.775	7.256E-02	1.275	5.333E-02	1.775	0.	2.275	0.	2.775	0.
.285	2.807E-01	.785	7.174E-02	1.285	5.319E-02	1.785	0.	2.285	0.	2.785	0.
.295	2.644E-01	.795	7.095E-02	1.295	5.306E-02	1.795	0.	2.295	0.	2.795	0.
.305	2.497E-01	.805	7.019E-02	1.305	5.292E-02	1.805	0.	2.305	0.	2.805	0.
.315	2.367E-01	.815	6.945E-02	1.315	5.280E-02	1.815	0.	2.315	0.	2.815	0.
.325	2.249E-01	.825	6.875E-02	1.325	5.269E-02	1.825	0.	2.325	0.	2.825	0.
.335	2.139E-01	.835	6.809E-02	1.335	5.256E-02	1.835	0.	2.335	0.	2.835	0.
.345	2.040E-01	.845	6.743E-02	1.345	5.244E-02	1.845	0.	2.345	0.	2.845	0.
.355	1.949E-01	.855	6.680E-02	1.355	5.233E-02	1.855	0.	2.355	0.	2.855	0.
.365	1.865E-01	.865	6.620E-02	1.365	5.222E-02	1.865	0.	2.365	0.	2.865	0.
.375	1.788E-01	.875	6.562E-02	1.375	5.211E-02	1.875	0.	2.375	0.	2.875	0.
.385	1.717E-01	.885	6.507E-02	1.385	5.201E-02	1.885	0.	2.385	0.	2.885	0.
.395	1.651E-01	.895	6.453E-02	1.395	5.191E-02	1.895	0.	2.395	0.	2.895	0.
.405	1.591E-01	.905	6.399E-02	1.405	5.181E-02	1.905	0.	2.405	0.	2.905	0.
.415	1.535E-01	.915	6.347E-02	1.415	5.170E-02	1.915	0.	2.415	0.	2.915	0.
.425	1.484E-01	.925	6.298E-02	1.425	5.158E-02	1.925	0.	2.425	0.	2.925	0.
.435	1.437E-01	.935	6.250E-02	1.435	5.142E-02	1.935	0.	2.435	0.	2.935	0.
.445	1.390E-01	.945	6.205E-02	1.445	5.115E-02	1.945	0.	2.445	0.	2.945	0.
.455	1.348E-01	.955	6.160E-02	1.455	5.026E-02	1.955	0.	2.455	0.	2.955	0.
.465	1.308E-01	.965	6.116E-02	1.465	5.780E+00	1.965	0.	2.465	0.	2.965	0.
.475	1.271E-01	.975	6.075E-02	1.475	0.	1.975	0.	2.475	0.	2.975	0.
.485	1.236E-01	.985	6.036E-02	1.485	0.	1.985	0.	2.485	0.	2.985	0.
.495	1.203E-01	.995	5.998E-02	1.495	0.	1.995	0.	2.495	0.	2.995	0.
.505	1.172E-01	1.005	5.962E-02	1.505	0.	2.005	0.	2.505	0.	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 3, K, 7.938CM, ATP, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.536E-38	.515	1.569E-01	1.015	5.031E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.	3.515	0.
.025	4.039E-31	.525	1.107E-01	1.025	5.897E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.	3.525	0.
.035	4.789E-24	.535	1.082E-01	1.035	5.851E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.	3.535	0.
.045	2.761E-17	.545	1.058E-01	1.045	5.830E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.	3.545	0.
.055	6.316E-15	.555	1.034E-01	1.055	5.799E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.	3.555	0.
.065	2.718E-09	.565	1.012E-01	1.065	5.759E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.	3.565	0.
.075	5.550E-08	.575	9.914E-02	1.075	5.740E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.	3.575	0.
.085	1.726E-07	.585	9.714E-02	1.085	5.713E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.	3.585	0.
.095	1.943E-02	.595	9.526E-02	1.095	5.687E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.	3.595	0.
.105	2.598E-01	.605	9.348E-02	1.105	5.662E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.	3.605	0.
.115	3.969E-01	.615	9.177E-02	1.115	5.635E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.	3.615	0.
.125	4.782E-01	.625	9.016E-02	1.125	5.610E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.	3.625	0.
.135	5.169E-01	.635	8.866E-02	1.135	5.586E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.	3.635	0.
.145	5.255E-01	.645	8.718E-02	1.145	5.563E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.	3.645	0.
.155	5.177E-01	.655	8.575E-02	1.155	5.541E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.	3.655	0.
.165	5.029E-01	.665	8.440E-02	1.165	5.520E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.	3.665	0.
.175	4.854E-01	.675	8.311E-02	1.175	5.499E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.	3.675	0.
.185	4.654E-01	.685	8.189E-02	1.185	5.479E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.	3.685	0.
.195	4.546E-01	.695	8.071E-02	1.195	5.460E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.	3.695	0.
.205	4.428E-01	.705	7.955E-02	1.205	5.442E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.	3.705	0.
.215	4.324E-01	.715	7.845E-02	1.215	5.425E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.	3.715	0.
.225	4.284E-01	.725	7.740E-02	1.225	5.407E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.	3.725	0.
.235	3.975E-01	.735	7.640E-02	1.235	5.390E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.	3.735	0.
.245	3.966E-01	.745	7.544E-02	1.245	5.373E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.	3.745	0.
.255	3.444E-01	.755	7.448E-02	1.255	5.356E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.	3.755	0.
.265	3.217E-01	.765	7.357E-02	1.265	5.342E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.	3.765	0.
.275	3.013E-01	.775	7.270E-02	1.275	5.327E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.	3.775	0.
.285	2.829E-01	.785	7.188E-02	1.285	5.313E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.	3.785	0.
.295	2.663E-01	.795	7.109E-02	1.295	5.299E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.	3.795	0.
.305	2.514E-01	.805	7.032E-02	1.305	5.286E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.	3.805	0.
.315	2.381E-01	.815	6.959E-02	1.315	5.273E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.	3.815	0.
.325	2.261E-01	.825	6.887E-02	1.325	5.260E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.	3.825	0.
.335	2.150E-01	.835	6.819E-02	1.335	5.249E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.	3.835	0.
.345	2.050E-01	.845	6.755E-02	1.345	5.236E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.	3.845	0.
.355	1.957E-01	.855	6.691E-02	1.355	5.224E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.	3.855	0.
.365	1.873E-01	.865	6.630E-02	1.365	5.213E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.	3.865	0.
.375	1.795E-01	.875	6.572E-02	1.375	5.202E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.	3.875	0.
.385	1.723E-01	.885	6.516E-02	1.385	5.192E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.	3.885	0.
.395	1.657E-01	.895	6.462E-02	1.395	5.181E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.	3.895	0.
.405	1.596E-01	.905	6.408E-02	1.405	5.171E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.	3.905	0.
.415	1.540E-01	.915	6.355E-02	1.415	5.159E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.	3.915	0.
.425	1.488E-01	.925	6.305E-02	1.425	5.147E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.	3.925	0.
.435	1.439E-01	.935	6.257E-02	1.435	5.131E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.	3.935	0.
.445	1.394E-01	.945	6.211E-02	1.445	5.101E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.	3.945	0.
.455	1.352E-01	.955	6.166E-02	1.455	5.075E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.	3.955	0.
.465	1.312E-01	.965	6.122E-02	1.465	5.079E-02	1.965	0.	2.465	0.	2.965	0.	3.465	0.	3.965	0.
.475	1.275E-01	.975	6.081E-02	1.475	0.	1.975	0.	2.475	0.	2.975	0.	3.475	0.	3.975	0.
.485	1.239E-01	.985	6.041E-02	1.485	0.	1.985	0.	2.485	0.	2.985	0.	3.485	0.	3.985	0.
.495	1.206E-01	.995	6.003E-02	1.495	0.	1.995	0.	2.495	0.	2.995	0.	3.495	0.	3.995	0.
.505	1.175E-01	1.005	5.966E-02	1.505	0.	2.005	0.	2.505	0.	3.005	0.				

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 4, K, 10.16CM, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.500E-38	.515	1.573E-01	1.015	5.934E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.
.025	3.987E-31	.525	1.109E-01	1.025	5.900E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.
.035	4.775E-24	.535	1.083E-01	1.035	5.845E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.
.045	2.756E-17	.545	1.059E-01	1.045	5.832E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.
.055	6.324E-15	.555	1.036E-01	1.055	5.801E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.
.065	2.722E-09	.565	1.014E-01	1.065	5.771E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.
.075	5.572E-08	.575	9.930E-02	1.075	5.742E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.
.085	1.733E-07	.585	9.730E-02	1.085	5.715E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.
.095	9.000E-02	.595	9.542E-02	1.095	5.694E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.
.105	2.609E-01	.605	9.363E-02	1.105	5.672E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.
.115	3.996E-01	.615	9.192E-02	1.115	5.656E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.
.125	4.813E-01	.625	9.031E-02	1.125	5.610E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.
.135	5.203E-01	.635	8.878E-02	1.135	5.586E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.
.145	5.291E-01	.645	8.732E-02	1.145	5.562E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.
.155	5.213E-01	.655	8.589E-02	1.155	5.540E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.
.165	5.062E-01	.665	8.453E-02	1.165	5.519E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.
.175	4.889E-01	.675	8.325E-02	1.175	5.498E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.
.185	4.683E-01	.685	8.202E-02	1.185	5.478E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.
.195	4.484E-01	.695	8.084E-02	1.195	5.459E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.
.205	4.308E-01	.705	7.967E-02	1.205	5.440E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.
.215	4.231E-01	.715	7.857E-02	1.215	5.423E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.
.225	4.315E-01	.725	7.752E-02	1.225	5.405E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.
.235	4.002E-01	.735	7.652E-02	1.235	5.387E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.
.245	3.719E-01	.745	7.555E-02	1.245	5.371E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.
.255	3.464E-01	.755	7.460E-02	1.255	5.355E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.
.265	3.234E-01	.765	7.368E-02	1.265	5.337E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.
.275	3.027E-01	.775	7.281E-02	1.275	5.324E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.
.285	2.842E-01	.785	7.198E-02	1.285	5.309E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.
.295	2.673E-01	.795	7.119E-02	1.295	5.293E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.
.305	2.523E-01	.805	7.042E-02	1.305	5.278E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.
.315	2.389E-01	.815	6.967E-02	1.315	5.269E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.
.325	2.269E-01	.825	6.896E-02	1.325	5.254E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.
.335	2.156E-01	.835	6.828E-02	1.335	5.243E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.
.345	2.055E-01	.845	6.763E-02	1.345	5.231E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.
.355	1.963E-01	.855	6.699E-02	1.355	5.219E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.
.365	1.877E-01	.865	6.638E-02	1.365	5.204E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.
.375	1.799E-01	.875	6.579E-02	1.375	5.197E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.
.385	1.727E-01	.885	6.524E-02	1.385	5.186E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.
.395	1.660E-01	.895	6.469E-02	1.395	5.175E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.
.405	1.599E-01	.905	6.414E-02	1.405	5.165E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.
.415	1.543E-01	.915	6.362E-02	1.415	5.153E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.
.425	1.491E-01	.925	6.311E-02	1.425	5.140E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.
.435	1.442E-01	.935	6.263E-02	1.435	5.124E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.
.445	1.397E-01	.945	6.217E-02	1.445	5.097E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.
.455	1.354E-01	.955	6.171E-02	1.455	5.066E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.
.465	1.314E-01	.965	6.127E-02	1.465	5.077E+00	1.965	0.	2.465	0.	2.965	0.	3.465	0.
.475	1.277E-01	.975	6.085E-02	1.475	7.	1.975	0.	2.475	0.	2.975	0.	3.475	0.
.485	1.241E-01	.985	6.045E-02	1.485	7.	1.985	0.	2.485	0.	2.985	0.	3.485	0.
.495	1.208E-01	.995	6.007E-02	1.495	7.	1.995	0.	2.495	0.	2.995	0.	3.495	0.
.505	1.177E-01	1.005	5.970E-02	1.505	7.	2.005	0.	2.505	0.	3.005	0.	3.505	0.

TOTAL FLUX ENERGY SPECTRUM, MURKHOLE GEOMETRY

CASE 5, K, 12.70CM, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.480E-38	.515	1.575E-01	1.015	5.937E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.	3.515	0.
.025	3.962E-31	.525	1.111E-01	1.025	5.903E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.	3.525	0.
.035	4.765E-24	.535	1.085E-01	1.035	5.868E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.	3.535	0.
.045	2.753E-17	.545	1.061E-01	1.045	5.835E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.	3.545	0.
.055	6.332E-10	.555	1.037E-01	1.055	5.803E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.	3.555	0.
.065	2.725E-09	.565	1.015E-01	1.065	5.773E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.	3.565	0.
.075	5.589E-08	.575	9.944E-02	1.075	5.745E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.	3.575	0.
.085	1.743E-07	.585	9.744E-02	1.085	5.716E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.	3.585	0.
.095	9.014E-02	.595	9.556E-02	1.095	5.690E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.	3.595	0.
.105	2.618E-01	.605	9.376E-02	1.105	5.663E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.	3.605	0.
.115	4.817E-01	.615	9.205E-02	1.115	5.636E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.	3.615	0.
.125	4.837E-01	.625	9.044E-02	1.125	5.610E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.	3.625	0.
.135	5.230E-01	.635	8.891E-02	1.135	5.586E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.	3.635	0.
.145	5.318E-01	.645	8.745E-02	1.145	5.562E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.	3.645	0.
.155	5.238E-01	.655	8.602E-02	1.155	5.540E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.	3.655	0.
.165	5.087E-01	.665	8.466E-02	1.165	5.518E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.	3.665	0.
.175	4.909E-01	.675	8.336E-02	1.175	5.496E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.	3.675	0.
.185	4.706E-01	.685	8.214E-02	1.185	5.477E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.	3.685	0.
.195	4.505E-01	.695	8.095E-02	1.195	5.457E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.	3.695	0.
.205	4.329E-01	.705	7.979E-02	1.205	5.439E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.	3.705	0.
.215	4.272E-01	.715	7.868E-02	1.215	5.421E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.	3.715	0.
.225	4.340E-01	.725	7.763E-02	1.225	5.403E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.	3.725	0.
.235	4.023E-01	.735	7.662E-02	1.235	5.385E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.	3.735	0.
.245	3.737E-01	.745	7.565E-02	1.245	5.368E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.	3.745	0.
.255	3.479E-01	.755	7.469E-02	1.255	5.352E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.	3.755	0.
.265	3.244E-01	.765	7.378E-02	1.265	5.336E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.	3.765	0.
.275	3.038E-01	.775	7.290E-02	1.275	5.321E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.	3.775	0.
.285	2.851E-01	.785	7.207E-02	1.285	5.306E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.	3.785	0.
.295	2.681E-01	.795	7.127E-02	1.295	5.292E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.	3.795	0.
.305	2.530E-01	.805	7.050E-02	1.305	5.278E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.	3.805	0.
.315	2.395E-01	.815	6.976E-02	1.315	5.265E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.	3.815	0.
.325	2.273E-01	.825	6.904E-02	1.325	5.252E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.	3.825	0.
.335	2.161E-01	.835	6.836E-02	1.335	5.239E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.	3.835	0.
.345	2.059E-01	.845	6.771E-02	1.345	5.227E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.	3.845	0.
.355	1.966E-01	.855	6.706E-02	1.355	5.215E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.	3.855	0.
.365	1.881E-01	.865	6.645E-02	1.365	5.203E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.	3.865	0.
.375	1.802E-01	.875	6.586E-02	1.375	5.192E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.	3.875	0.
.385	1.729E-01	.885	6.530E-02	1.385	5.181E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.	3.885	0.
.395	1.663E-01	.895	6.475E-02	1.395	5.170E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.	3.895	0.
.405	1.602E-01	.905	6.420E-02	1.405	5.160E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.	3.905	0.
.415	1.545E-01	.915	6.367E-02	1.415	5.149E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.	3.915	0.
.425	1.493E-01	.925	6.317E-02	1.425	5.139E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.	3.925	0.
.435	1.444E-01	.935	6.268E-02	1.435	5.119E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.	3.935	0.
.445	1.399E-01	.945	6.222E-02	1.445	5.091E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.	3.945	0.
.455	1.356E-01	.955	6.176E-02	1.455	5.002E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.	3.955	0.
.465	1.316E-01	.965	6.131E-02	1.465	5.779E+00	1.965	0.	2.465	0.	2.965	0.	3.465	0.	3.965	0.
.475	1.278E-01	.975	6.089E-02	1.475	0.	1.975	0.	2.475	0.	2.975	0.	3.475	0.	3.975	0.
.485	1.243E-01	.985	6.049E-02	1.485	0.	1.985	0.	2.485	0.	2.985	0.	3.485	0.	3.985	0.
.495	1.210E-01	.995	6.010E-02	1.495	0.	1.995	0.	2.495	0.	2.995	0.	3.495	0.	3.995	0.
.505	1.179E-01	1.005	5.973E-02	1.505	0.	2.005	0.	2.505	0.	3.005	0.				

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 6, K, 3.810CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.502E-38	.515	1.520E-01	1.015	5.845E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.
.025	4.092E-31	.525	1.085E-01	1.025	5.813E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.
.035	4.785E-24	.535	1.060E-01	1.035	5.740E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.
.045	2.726E-17	.545	1.036E-01	1.045	5.707E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.
.055	6.178E-15	.555	1.014E-01	1.055	5.719E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.
.065	2.647E-09	.565	9.923E-02	1.065	5.690E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.
.075	5.370E-08	.575	9.720E-02	1.075	5.663E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.
.085	1.661E-07	.585	9.526E-02	1.085	5.637E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.
.095	8.720E-02	.595	9.343E-02	1.095	5.612E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.
.105	2.517E-01	.605	9.168E-02	1.105	5.588E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.
.115	3.779E-01	.615	9.002E-02	1.115	5.563E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.
.125	4.594E-01	.625	8.845E-02	1.125	5.538E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.
.135	4.935E-01	.635	8.696E-02	1.135	5.514E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.
.145	5.015E-01	.645	8.554E-02	1.145	5.494E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.
.155	4.947E-01	.655	8.415E-02	1.155	5.473E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.
.165	4.808E-01	.665	8.283E-02	1.165	5.453E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.
.175	4.634E-01	.675	8.157E-02	1.175	5.434E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.
.185	4.433E-01	.685	8.038E-02	1.185	5.415E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.
.195	4.264E-01	.695	7.923E-02	1.195	5.397E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.
.205	4.098E-01	.705	7.810E-02	1.205	5.380E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.
.215	4.039E-01	.715	7.702E-02	1.215	5.364E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.
.225	4.066E-01	.725	7.600E-02	1.225	5.347E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.
.235	3.779E-01	.735	7.503E-02	1.235	5.331E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.
.245	3.515E-01	.745	7.409E-02	1.245	5.316E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.
.255	3.280E-01	.755	7.316E-02	1.255	5.301E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.
.265	3.089E-01	.765	7.227E-02	1.265	5.286E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.
.275	2.800E-01	.775	7.142E-02	1.275	5.272E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.
.285	2.710E-01	.785	7.062E-02	1.285	5.259E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.
.295	2.556E-01	.795	6.985E-02	1.295	5.246E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.
.305	2.418E-01	.805	6.911E-02	1.305	5.234E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.
.315	2.294E-01	.815	6.838E-02	1.315	5.222E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.
.325	2.182E-01	.825	6.770E-02	1.325	5.210E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.
.335	2.079E-01	.835	6.704E-02	1.335	5.199E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.
.345	1.985E-01	.845	6.641E-02	1.345	5.188E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.
.355	1.898E-01	.855	6.579E-02	1.355	5.177E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.
.365	1.818E-01	.865	6.520E-02	1.365	5.167E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.
.375	1.745E-01	.875	6.464E-02	1.375	5.157E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.
.385	1.676E-01	.885	6.410E-02	1.385	5.147E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.
.395	1.614E-01	.895	6.358E-02	1.395	5.138E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.
.405	1.566E-01	.905	6.305E-02	1.405	5.128E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.
.415	1.502E-01	.915	6.254E-02	1.415	5.119E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.
.425	1.422E-01	.925	6.206E-02	1.425	5.110E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.
.435	1.405E-01	.935	6.160E-02	1.435	5.101E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.
.445	1.362E-01	.945	6.115E-02	1.445	5.094E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.
.455	1.311E-01	.955	6.071E-02	1.455	5.084E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.
.465	1.263E-01	.965	6.029E-02	1.465	5.074E-02	1.965	0.	2.465	0.	2.965	0.	3.465	0.
.475	1.247E-01	.975	5.989E-02	1.475	5.064E-02	1.975	0.	2.475	0.	2.975	0.	3.475	0.
.485	1.213E-01	.985	5.951E-02	1.485	5.054E-02	1.985	0.	2.485	0.	2.985	0.	3.485	0.
.495	1.181E-01	.995	5.914E-02	1.495	5.044E-02	1.995	0.	2.495	0.	2.995	0.	3.495	0.
.505	1.151E-01	1.005	5.879E-02	1.505	5.034E-02	2.005	0.	2.505	0.	3.005	0.	3.505	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 7, K, 5.715CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.180E-38	.515	1.418E-01	1.015	5.549E-02	1.515	0.	2.015	0.	2.515	0.
.025	3.488E-31	.525	1.039E-01	1.025	5.517E-02	1.525	0.	2.025	0.	2.525	0.
.035	4.368E-24	.535	1.015E-01	1.035	5.495E-02	1.535	0.	2.035	0.	2.535	0.
.045	2.539E-17	.545	9.922E-02	1.045	5.454E-02	1.545	0.	2.045	0.	2.545	0.
.055	5.830E-15	.555	9.705E-02	1.055	5.424E-02	1.555	0.	2.055	0.	2.555	0.
.065	2.498E-09	.565	9.498E-02	1.065	5.396E-02	1.565	0.	2.065	0.	2.565	0.
.075	7.120E-08	.575	9.303E-02	1.075	5.369E-02	1.575	0.	2.075	0.	2.575	0.
.085	1.598E-07	.585	9.116E-02	1.085	5.343E-02	1.585	0.	2.085	0.	2.585	0.
.095	8.243E-02	.595	8.940E-02	1.095	5.319E-02	1.595	0.	2.095	0.	2.595	0.
.105	2.395E-01	.605	8.772E-02	1.105	5.294E-02	1.605	0.	2.105	0.	2.605	0.
.115	3.674E-01	.615	8.612E-02	1.115	5.269E-02	1.615	0.	2.115	0.	2.615	0.
.125	4.425E-01	.625	8.460E-02	1.125	5.245E-02	1.625	0.	2.125	0.	2.625	0.
.135	4.775E-01	.635	8.317E-02	1.135	5.223E-02	1.635	0.	2.135	0.	2.635	0.
.145	4.850E-01	.645	8.180E-02	1.145	5.201E-02	1.645	0.	2.145	0.	2.645	0.
.155	4.776E-01	.655	8.046E-02	1.155	5.180E-02	1.655	0.	2.155	0.	2.655	0.
.165	4.637E-01	.665	7.918E-02	1.165	5.160E-02	1.665	0.	2.165	0.	2.665	0.
.175	4.472E-01	.675	7.797E-02	1.175	5.141E-02	1.675	0.	2.175	0.	2.675	0.
.185	4.285E-01	.685	7.682E-02	1.185	5.123E-02	1.685	0.	2.185	0.	2.685	0.
.195	4.100E-01	.695	7.571E-02	1.195	5.104E-02	1.695	0.	2.195	0.	2.695	0.
.205	3.936E-01	.705	7.461E-02	1.205	5.087E-02	1.705	0.	2.205	0.	2.705	0.
.215	3.846E-01	.715	7.357E-02	1.215	5.071E-02	1.715	0.	2.215	0.	2.715	0.
.225	3.870E-01	.725	7.258E-02	1.225	5.054E-02	1.725	0.	2.225	0.	2.725	0.
.235	3.592E-01	.735	7.164E-02	1.235	5.038E-02	1.735	0.	2.235	0.	2.735	0.
.245	3.345E-01	.745	7.073E-02	1.245	5.022E-02	1.745	0.	2.245	0.	2.745	0.
.255	3.123E-01	.755	6.983E-02	1.255	5.007E-02	1.755	0.	2.255	0.	2.755	0.
.265	2.925E-01	.765	6.897E-02	1.265	4.993E-02	1.765	0.	2.265	0.	2.765	0.
.275	2.746E-01	.775	6.815E-02	1.275	4.978E-02	1.775	0.	2.275	0.	2.775	0.
.285	2.585E-01	.785	6.737E-02	1.285	4.965E-02	1.785	0.	2.285	0.	2.785	0.
.295	2.440E-01	.795	6.662E-02	1.295	4.952E-02	1.795	0.	2.295	0.	2.795	0.
.305	2.309E-01	.805	6.590E-02	1.305	4.939E-02	1.805	0.	2.305	0.	2.805	0.
.315	2.192E-01	.815	6.520E-02	1.315	4.927E-02	1.815	0.	2.315	0.	2.815	0.
.325	2.095E-01	.825	6.452E-02	1.325	4.915E-02	1.825	0.	2.325	0.	2.825	0.
.335	1.997E-01	.835	6.388E-02	1.335	4.903E-02	1.835	0.	2.335	0.	2.835	0.
.345	1.898E-01	.845	6.327E-02	1.345	4.892E-02	1.845	0.	2.345	0.	2.845	0.
.355	1.815E-01	.855	6.267E-02	1.355	4.881E-02	1.855	0.	2.355	0.	2.855	0.
.365	1.739E-01	.865	6.209E-02	1.365	4.870E-02	1.865	0.	2.365	0.	2.865	0.
.375	1.669E-01	.875	6.155E-02	1.375	4.860E-02	1.875	0.	2.375	0.	2.875	0.
.385	1.604E-01	.885	6.102E-02	1.385	4.850E-02	1.885	0.	2.385	0.	2.885	0.
.395	1.544E-01	.895	6.051E-02	1.395	4.840E-02	1.895	0.	2.395	0.	2.895	0.
.405	1.489E-01	.905	5.999E-02	1.405	4.831E-02	1.905	0.	2.405	0.	2.905	0.
.415	1.438E-01	.915	5.950E-02	1.415	4.820E-02	1.915	0.	2.415	0.	2.915	0.
.425	1.390E-01	.925	5.902E-02	1.425	4.809E-02	1.925	0.	2.425	0.	2.925	0.
.435	1.345E-01	.935	5.857E-02	1.435	4.794E-02	1.935	0.	2.435	0.	2.935	0.
.445	1.304E-01	.945	5.814E-02	1.445	4.777E-02	1.945	0.	2.445	0.	2.945	0.
.455	1.266E-01	.955	5.771E-02	1.455	4.769E+00	1.955	0.	2.455	0.	2.955	0.
.465	1.228E-01	.965	5.730E-02	1.465	0.	1.965	0.	2.465	0.	2.965	0.
.475	1.193E-01	.975	5.690E-02	1.475	0.	1.975	0.	2.475	0.	2.975	0.
.485	1.161E-01	.985	5.653E-02	1.485	0.	1.985	0.	2.485	0.	2.985	0.
.495	1.130E-01	.995	5.617E-02	1.495	0.	1.995	0.	2.495	0.	2.995	0.
.505	1.101E-01	1.005	5.582E-02	1.505	0.	2.005	0.	2.505	0.	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 9, K, 7.938CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.309E-09	.515	1.306E-01	1.015	5.199E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.
.025	3.103E-31	.525	9.804E-02	1.025	5.167E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.
.035	3.983E-24	.535	9.579E-02	1.035	5.136E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.
.045	2.336E-17	.545	9.367E-02	1.045	5.105E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.
.055	5.442E-15	.555	9.161E-02	1.055	5.077E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.
.065	3.320E-09	.565	8.965E-02	1.065	5.049E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.
.075	4.812E-08	.575	8.780E-02	1.075	5.021E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.
.085	1.513E-07	.585	8.604E-02	1.085	4.998E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.
.095	7.554E-02	.595	8.437E-02	1.095	4.974E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.
.105	2.51E-01	.605	8.278E-02	1.105	4.950E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.
.115	3.502E-01	.615	8.126E-02	1.115	4.926E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.
.125	4.21E-01	.625	7.982E-02	1.125	4.903E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.
.135	4.537E-01	.635	7.846E-02	1.135	4.880E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.
.145	4.622E-01	.645	7.716E-02	1.145	4.859E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.
.155	4.527E-01	.655	7.589E-02	1.155	4.839E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.
.165	4.391E-01	.665	7.467E-02	1.165	4.819E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.
.175	4.231E-01	.675	7.352E-02	1.175	4.800E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.
.185	4.050E-01	.685	7.242E-02	1.185	4.782E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.
.195	3.871E-01	.695	7.136E-02	1.195	4.764E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.
.205	3.712E-01	.705	7.032E-02	1.205	4.748E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.
.215	3.631E-01	.715	6.932E-02	1.215	4.732E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.
.225	3.609E-01	.725	6.838E-02	1.225	4.715E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.
.235	3.352E-01	.735	6.748E-02	1.235	4.699E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.
.245	3.123E-01	.745	6.661E-02	1.245	4.684E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.
.255	2.918E-01	.755	6.575E-02	1.255	4.669E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.
.265	2.735E-01	.765	6.493E-02	1.265	4.654E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.
.275	2.570E-01	.775	6.415E-02	1.275	4.640E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.
.285	2.421E-01	.785	6.340E-02	1.285	4.627E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.
.295	2.287E-01	.795	6.268E-02	1.295	4.614E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.
.305	2.166E-01	.805	6.199E-02	1.305	4.601E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.
.315	2.057E-01	.815	6.132E-02	1.315	4.588E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.
.325	1.958E-01	.825	6.067E-02	1.325	4.577E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.
.335	1.857E-01	.835	6.006E-02	1.335	4.565E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.
.345	1.765E-01	.845	5.947E-02	1.345	4.554E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.
.355	1.707E-01	.855	5.889E-02	1.355	4.543E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.
.365	1.637E-01	.865	5.834E-02	1.365	4.532E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.
.375	1.572E-01	.875	5.781E-02	1.375	4.522E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.
.385	1.511E-01	.885	5.731E-02	1.385	4.512E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.
.395	1.455E-01	.895	5.682E-02	1.395	4.502E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.
.405	1.403E-01	.905	5.632E-02	1.405	4.492E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.
.415	1.355E-01	.915	5.584E-02	1.415	4.482E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.
.425	1.311E-01	.925	5.539E-02	1.425	4.471E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.
.435	1.259E-01	.935	5.495E-02	1.435	4.460E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.
.445	1.210E-01	.945	5.453E-02	1.445	4.449E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.
.455	1.193E-01	.955	5.412E-02	1.455	4.437E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.
.465	1.194E-01	.965	5.372E-02	1.465	4.426E-02	1.965	0.	2.465	0.	2.965	0.	3.465	0.
.475	1.126E-01	.975	5.334E-02	1.475	4.415E-02	1.975	0.	2.475	0.	2.975	0.	3.475	0.
.485	1.095E-01	.985	5.298E-02	1.485	4.404E-02	1.985	0.	2.485	0.	2.985	0.	3.485	0.
.495	1.066E-01	.995	5.264E-02	1.495	4.393E-02	1.995	0.	2.495	0.	2.995	0.	3.495	0.
.505	1.039E-01	1.005	5.230E-02	1.505	4.382E-02	2.005	0.	2.505	0.	3.005	0.	3.505	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY
CASE 9, K, 10.16CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	6.515E-09	.515	1.200E-01	1.015	4.845E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.	3.515	0.
.025	2.912E-31	.525	9.200E-02	1.025	4.815E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.	3.525	0.
.035	3.647E-24	.535	8.989E-02	1.035	4.785E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.	3.535	0.
.045	2.146E-17	.545	8.770E-02	1.045	4.755E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.	3.545	0.
.055	5.062E-15	.555	8.596E-02	1.055	4.725E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.	3.555	0.
.065	2.142E-09	.565	8.413E-02	1.065	4.702E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.	3.565	0.
.075	4.496E-08	.575	8.239E-02	1.075	4.677E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.	3.575	0.
.085	1.423E-07	.585	8.073E-02	1.085	4.651E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.	3.585	0.
.095	7.064E-02	.595	7.916E-02	1.095	4.630E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.	3.595	0.
.105	2.105E-01	.605	7.766E-02	1.105	4.607E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.	3.605	0.
.115	3.308E-01	.615	7.622E-02	1.115	4.585E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.	3.615	0.
.125	3.974E-01	.625	7.487E-02	1.125	4.561E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.	3.625	0.
.135	4.273E-01	.635	7.358E-02	1.135	4.539E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.	3.635	0.
.145	4.329E-01	.645	7.236E-02	1.145	4.519E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.	3.645	0.
.155	4.254E-01	.655	7.115E-02	1.155	4.499E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.	3.655	0.
.165	4.124E-01	.665	7.001E-02	1.165	4.480E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.	3.665	0.
.175	3.969E-01	.675	6.892E-02	1.175	4.462E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.	3.675	0.
.185	3.797E-01	.685	6.789E-02	1.185	4.444E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.	3.685	0.
.195	3.628E-01	.695	6.688E-02	1.195	4.427E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.	3.695	0.
.205	3.474E-01	.705	6.589E-02	1.205	4.411E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.	3.705	0.
.215	3.388E-01	.715	6.495E-02	1.215	4.396E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.	3.715	0.
.225	3.346E-01	.725	6.406E-02	1.225	4.390E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.	3.725	0.
.235	3.108E-01	.735	6.321E-02	1.235	4.364E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.	3.735	0.
.245	2.898E-01	.745	6.238E-02	1.245	4.349E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.	3.745	0.
.255	2.709E-01	.755	6.157E-02	1.255	4.336E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.	3.755	0.
.265	2.540E-01	.765	6.079E-02	1.265	4.320E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.	3.765	0.
.275	2.390E-01	.775	6.004E-02	1.275	4.306E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.	3.775	0.
.285	2.253E-01	.785	5.933E-02	1.285	4.293E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.	3.785	0.
.295	2.129E-01	.795	5.866E-02	1.295	4.280E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.	3.795	0.
.305	2.018E-01	.805	5.800E-02	1.305	4.268E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.	3.805	0.
.315	1.918E-01	.815	5.736E-02	1.315	4.256E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.	3.815	0.
.325	1.827E-01	.825	5.674E-02	1.325	4.244E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.	3.825	0.
.335	1.743E-01	.835	5.616E-02	1.335	4.233E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.	3.835	0.
.345	1.667E-01	.845	5.559E-02	1.345	4.222E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.	3.845	0.
.355	1.596E-01	.855	5.505E-02	1.355	4.211E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.	3.855	0.
.365	1.531E-01	.865	5.452E-02	1.365	4.200E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.	3.865	0.
.375	1.470E-01	.875	5.402E-02	1.375	4.190E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.	3.875	0.
.385	1.414E-01	.885	5.354E-02	1.385	4.180E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.	3.885	0.
.395	1.362E-01	.895	5.307E-02	1.395	4.171E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.	3.895	0.
.405	1.314E-01	.905	5.260E-02	1.405	4.161E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.	3.905	0.
.415	1.269E-01	.915	5.214E-02	1.415	4.151E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.	3.915	0.
.425	1.228E-01	.925	5.171E-02	1.425	4.141E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.	3.925	0.
.435	1.189E-01	.935	5.129E-02	1.435	4.129E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.	3.935	0.
.445	1.153E-01	.945	5.089E-02	1.445	4.109E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.	3.945	0.
.455	1.118E-01	.955	5.049E-02	1.455	4.091E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.	3.955	0.
.465	1.086E-01	.965	5.012E-02	1.465	4.066E+00	1.965	0.	2.465	0.	2.965	0.	3.465	0.	3.965	0.
.475	1.056E-01	.975	4.975E-02	1.475	0.	1.975	0.	2.475	0.	2.975	0.	3.475	0.	3.975	0.
.485	1.027E-01	.985	4.941E-02	1.485	0.	1.985	0.	2.485	0.	2.985	0.	3.485	0.	3.985	0.
.495	1.000E-01	.995	4.908E-02	1.495	0.	1.995	0.	2.495	0.	2.995	0.	3.495	0.	3.995	0.
.505	9.747E-02	1.005	4.876E-02	1.505	0.	2.005	0.	2.505	0.	3.005	0.				

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY
CASE 10, K, 12.70CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.412E-08	.515	1.086E-01	1.015	4.444E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.
.025	2.430E-31	.525	8.504E-02	1.025	4.420E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.
.035	3.297E-24	.535	8.309E-02	1.035	4.391E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.
.045	1.942E-17	.545	8.125E-02	1.045	4.364E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.
.055	4.639E-15	.555	7.946E-02	1.055	4.338E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.
.065	1.946E-09	.565	7.776E-02	1.065	4.313E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.
.075	4.135E-08	.575	7.615E-02	1.075	4.289E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.
.085	1.317E-07	.585	7.461E-02	1.085	4.266E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.
.095	6.409E-02	.595	7.310E-02	1.095	4.244E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.
.105	1.939E-01	.605	7.177E-02	1.105	4.222E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.
.115	3.074E-01	.615	7.044E-02	1.115	4.200E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.
.125	3.688E-01	.625	6.918E-02	1.125	4.179E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.
.135	3.958E-01	.635	6.799E-02	1.135	4.158E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.
.145	4.005E-01	.645	6.689E-02	1.145	4.138E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.
.155	3.931E-01	.655	6.573E-02	1.155	4.120E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.
.165	3.808E-01	.665	6.466E-02	1.165	4.102E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.
.175	3.663E-01	.675	6.365E-02	1.175	4.084E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.
.185	3.501E-01	.685	6.269E-02	1.185	4.067E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.
.195	3.341E-01	.695	6.175E-02	1.195	4.051E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.
.205	3.198E-01	.705	6.083E-02	1.205	4.036E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.
.215	3.111E-01	.715	5.995E-02	1.215	4.021E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.
.225	3.054E-01	.725	5.912E-02	1.225	3.991E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.
.235	2.837E-01	.735	5.832E-02	1.235	3.962E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.
.245	2.667E-01	.745	5.755E-02	1.245	3.935E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.
.255	2.475E-01	.755	5.679E-02	1.255	3.908E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.
.265	2.323E-01	.765	5.606E-02	1.265	3.882E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.
.275	2.186E-01	.775	5.537E-02	1.275	3.855E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.
.285	2.063E-01	.785	5.470E-02	1.285	3.828E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.
.295	1.951E-01	.795	5.407E-02	1.295	3.801E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.
.305	1.850E-01	.805	5.345E-02	1.305	3.886E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.
.315	1.760E-01	.815	5.285E-02	1.315	3.864E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.
.325	1.678E-01	.825	5.227E-02	1.325	3.843E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.
.335	1.602E-01	.835	5.172E-02	1.335	3.823E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.
.345	1.533E-01	.845	5.120E-02	1.345	3.804E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.
.355	1.468E-01	.855	5.068E-02	1.355	3.853E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.
.365	1.409E-01	.865	5.019E-02	1.365	3.833E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.
.375	1.354E-01	.875	4.972E-02	1.375	3.813E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.
.385	1.303E-01	.885	4.927E-02	1.385	3.795E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.
.395	1.255E-01	.895	4.883E-02	1.395	3.775E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.
.405	1.212E-01	.905	4.838E-02	1.405	3.753E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.
.415	1.171E-01	.915	4.795E-02	1.415	3.735E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.
.425	1.133E-01	.925	4.754E-02	1.425	3.715E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.
.435	1.097E-01	.935	4.715E-02	1.435	3.695E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.
.445	1.064E-01	.945	4.677E-02	1.445	3.676E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.
.455	1.032E-01	.955	4.640E-02	1.455	3.656E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.
.465	1.003E-01	.965	4.605E-02	1.465	3.636E-02	1.965	0.	2.465	0.	2.965	0.	3.465	0.
.475	9.752E-02	.975	4.571E-02	1.475	3.616E-02	1.975	0.	2.475	0.	2.975	0.	3.475	0.
.485	9.537E-02	.985	4.538E-02	1.485	3.596E-02	1.985	0.	2.485	0.	2.985	0.	3.485	0.
.495	9.240E-02	.995	4.507E-02	1.495	3.576E-02	1.995	0.	2.495	0.	2.995	0.	3.495	0.
.505	9.005E-02	1.005	4.477E-02	1.505	3.556E-02	2.005	0.	2.505	0.	3.005	0.	3.505	0.

TOTAL FLUX ENERGY SPECTRUM, 80REHOLE GEOMETRY

CASE 11, K, 5.715CM, AIR, 0.32CM FE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	3.626E-13	.515	1.475E-01	1.015	5.601E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.
.025	2.368E-09	.525	1.042E-01	1.025	5.564E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.
.035	1.230E-06	.535	1.019E-01	1.035	5.515E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.
.045	3.177E-04	.545	9.965E-02	1.045	5.504E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.
.055	2.910E-03	.555	9.750E-02	1.055	5.474E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.
.065	1.913E-02	.565	9.545E-02	1.065	5.446E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.
.075	2.827E-02	.575	9.351E-02	1.075	5.413E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.
.085	7.074E-02	.585	9.166E-02	1.085	5.393E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.
.095	1.628E-01	.595	8.991E-02	1.095	5.365E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.
.105	2.597E-01	.605	8.824E-02	1.105	5.343E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.
.115	3.424E-01	.615	8.664E-02	1.115	5.318E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.
.125	4.048E-01	.625	8.514E-02	1.125	5.293E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.
.135	4.379E-01	.635	8.372E-02	1.135	5.270E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.
.145	4.468E-01	.645	8.239E-02	1.145	5.244E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.
.155	4.462E-01	.655	8.101E-02	1.155	5.227E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.
.165	4.373E-01	.665	7.974E-02	1.165	5.207E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.
.175	4.253E-01	.675	7.854E-02	1.175	5.187E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.
.185	4.104E-01	.685	7.739E-02	1.185	5.168E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.
.195	3.950E-01	.695	7.628E-02	1.195	5.149E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.
.205	3.812E-01	.705	7.519E-02	1.205	5.132E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.
.215	3.742E-01	.715	7.415E-02	1.215	5.115E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.
.225	3.790E-01	.725	7.316E-02	1.225	5.094E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.
.235	3.828E-01	.735	7.222E-02	1.235	5.081E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.
.245	3.892E-01	.745	7.131E-02	1.245	5.065E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.
.255	3.981E-01	.755	7.041E-02	1.255	5.050E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.
.265	2.889E-01	.765	6.955E-02	1.265	5.035E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.
.275	2.717E-01	.775	6.875E-02	1.275	5.021E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.
.285	2.561E-01	.785	6.794E-02	1.285	5.007E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.
.295	2.419E-01	.795	6.720E-02	1.295	4.993E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.
.305	2.291E-01	.805	6.647E-02	1.305	4.980E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.
.315	2.177E-01	.815	6.577E-02	1.315	4.967E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.
.325	2.073E-01	.825	6.510E-02	1.325	4.955E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.
.335	1.977E-01	.835	6.446E-02	1.335	4.943E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.
.345	1.889E-01	.845	6.385E-02	1.345	4.932E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.
.355	1.808E-01	.855	6.325E-02	1.355	4.920E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.
.365	1.734E-01	.865	6.267E-02	1.365	4.909E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.
.375	1.665E-01	.875	6.211E-02	1.375	4.899E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.
.385	1.601E-01	.885	6.159E-02	1.385	4.888E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.
.395	1.442E-01	.895	6.107E-02	1.395	4.877E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.
.405	1.468E-01	.905	6.055E-02	1.405	4.867E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.
.415	1.438E-01	.915	6.006E-02	1.415	4.856E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.
.425	1.391E-01	.925	5.958E-02	1.425	4.845E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.
.435	1.347E-01	.935	5.913E-02	1.435	4.834E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.
.445	1.306E-01	.945	5.869E-02	1.445	4.826E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.
.455	1.267E-01	.955	5.825E-02	1.455	4.797E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.
.465	1.231E-01	.965	5.784E-02	1.465	4.707E-02	1.965	0.	2.465	0.	2.965	0.	3.465	0.
.475	1.197E-01	.975	5.744E-02	1.475	0.	1.975	0.	2.475	0.	2.975	0.	3.475	0.
.485	1.165E-01	.985	5.706E-02	1.485	0.	1.985	0.	2.485	0.	2.985	0.	3.485	0.
.495	1.134E-01	.995	5.669E-02	1.495	0.	1.995	0.	2.495	0.	2.995	0.	3.495	0.
.505	1.106E-01	1.005	5.634E-02	1.505	0.	2.005	0.	2.505	0.	3.005	0.	3.505	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY
CASE 12. K, 5.715CM, AIR, 0.32CM PVC

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.503E-10	.515	1.541E-01	1.015	5.864E-02	1.515	0.	2.015	0.	2.515	0.	3.015	0.
.025	6.592E-08	.525	1.094E-01	1.025	5.850E-02	1.525	0.	2.025	0.	2.525	0.	3.025	0.
.035	4.961E-24	.535	1.068E-01	1.035	5.787E-02	1.535	0.	2.035	0.	2.535	0.	3.035	0.
.045	2.777E-17	.545	1.045E-01	1.045	5.765E-02	1.545	0.	2.045	0.	2.545	0.	3.045	0.
.055	6.283E-15	.555	1.022E-01	1.055	5.734E-02	1.555	0.	2.055	0.	2.555	0.	3.055	0.
.065	2.691E-09	.565	9.999E-02	1.065	5.705E-02	1.565	0.	2.065	0.	2.565	0.	3.065	0.
.075	5.461E-08	.575	9.794E-02	1.075	5.677E-02	1.575	0.	2.075	0.	2.575	0.	3.075	0.
.085	1.699E-07	.585	9.597E-02	1.085	5.650E-02	1.585	0.	2.085	0.	2.585	0.	3.085	0.
.095	8.872E-02	.595	9.412E-02	1.095	5.625E-02	1.595	0.	2.095	0.	2.595	0.	3.095	0.
.105	2.595E-01	.605	9.235E-02	1.105	5.599E-02	1.605	0.	2.105	0.	2.605	0.	3.105	0.
.115	3.861E-01	.615	9.067E-02	1.115	5.573E-02	1.615	0.	2.115	0.	2.615	0.	3.115	0.
.125	4.666E-01	.625	8.908E-02	1.125	5.549E-02	1.625	0.	2.125	0.	2.625	0.	3.125	0.
.135	5.037E-01	.635	8.757E-02	1.135	5.525E-02	1.635	0.	2.135	0.	2.635	0.	3.135	0.
.145	5.121E-01	.645	8.614E-02	1.145	5.502E-02	1.645	0.	2.145	0.	2.645	0.	3.145	0.
.155	5.046E-01	.655	8.473E-02	1.155	5.481E-02	1.655	0.	2.155	0.	2.655	0.	3.155	0.
.165	4.903E-01	.665	8.339E-02	1.165	5.450E-02	1.665	0.	2.165	0.	2.665	0.	3.165	0.
.175	4.734E-01	.675	8.212E-02	1.175	5.421E-02	1.675	0.	2.175	0.	2.675	0.	3.175	0.
.185	4.540E-01	.685	8.091E-02	1.185	5.402E-02	1.685	0.	2.185	0.	2.685	0.	3.185	0.
.195	4.347E-01	.695	7.974E-02	1.195	5.384E-02	1.695	0.	2.195	0.	2.695	0.	3.195	0.
.205	4.178E-01	.705	7.860E-02	1.205	5.367E-02	1.705	0.	2.205	0.	2.705	0.	3.205	0.
.215	4.117E-01	.715	7.751E-02	1.215	5.350E-02	1.715	0.	2.215	0.	2.715	0.	3.215	0.
.225	4.161E-01	.725	7.644E-02	1.225	5.333E-02	1.725	0.	2.225	0.	2.725	0.	3.225	0.
.235	3.883E-01	.735	7.549E-02	1.235	5.317E-02	1.735	0.	2.235	0.	2.735	0.	3.235	0.
.245	3.595E-01	.745	7.454E-02	1.245	5.302E-02	1.745	0.	2.245	0.	2.745	0.	3.245	0.
.255	3.344E-01	.755	7.360E-02	1.255	5.287E-02	1.755	0.	2.255	0.	2.755	0.	3.255	0.
.265	3.136E-01	.765	7.270E-02	1.265	5.272E-02	1.765	0.	2.265	0.	2.765	0.	3.265	0.
.275	2.941E-01	.775	7.184E-02	1.275	5.259E-02	1.775	0.	2.275	0.	2.775	0.	3.275	0.
.285	2.765E-01	.785	7.102E-02	1.285	5.244E-02	1.785	0.	2.285	0.	2.785	0.	3.285	0.
.295	2.605E-01	.795	7.024E-02	1.295	5.231E-02	1.795	0.	2.295	0.	2.795	0.	3.295	0.
.305	2.462E-01	.805	6.949E-02	1.305	5.219E-02	1.805	0.	2.305	0.	2.805	0.	3.305	0.
.315	2.334E-01	.815	6.876E-02	1.315	5.206E-02	1.815	0.	2.315	0.	2.815	0.	3.315	0.
.325	2.218E-01	.825	6.806E-02	1.325	5.194E-02	1.825	0.	2.325	0.	2.825	0.	3.325	0.
.335	2.111E-01	.835	6.739E-02	1.335	5.183E-02	1.835	0.	2.335	0.	2.835	0.	3.335	0.
.345	2.014E-01	.845	6.675E-02	1.345	5.172E-02	1.845	0.	2.345	0.	2.845	0.	3.345	0.
.355	1.924E-01	.855	6.613E-02	1.355	5.161E-02	1.855	0.	2.355	0.	2.855	0.	3.355	0.
.365	1.842E-01	.865	6.553E-02	1.365	5.150E-02	1.865	0.	2.365	0.	2.865	0.	3.365	0.
.375	1.767E-01	.875	6.495E-02	1.375	5.140E-02	1.875	0.	2.375	0.	2.875	0.	3.375	0.
.385	1.697E-01	.885	6.440E-02	1.385	5.132E-02	1.885	0.	2.385	0.	2.885	0.	3.385	0.
.395	1.632E-01	.895	6.387E-02	1.395	5.119E-02	1.895	0.	2.395	0.	2.895	0.	3.395	0.
.405	1.573E-01	.905	6.333E-02	1.405	5.104E-02	1.905	0.	2.405	0.	2.905	0.	3.405	0.
.415	1.518E-01	.915	6.282E-02	1.415	5.096E-02	1.915	0.	2.415	0.	2.915	0.	3.415	0.
.425	1.467E-01	.925	6.232E-02	1.425	5.087E-02	1.925	0.	2.425	0.	2.925	0.	3.425	0.
.435	1.420E-01	.935	6.185E-02	1.435	5.079E-02	1.935	0.	2.435	0.	2.935	0.	3.435	0.
.445	1.375E-01	.945	6.140E-02	1.445	5.074E-02	1.945	0.	2.445	0.	2.945	0.	3.445	0.
.455	1.334E-01	.955	6.095E-02	1.455	5.067E-02	1.955	0.	2.455	0.	2.955	0.	3.455	0.
.465	1.295E-01	.965	6.052E-02	1.465	5.064E-02	1.965	0.	2.465	0.	2.965	0.	3.465	0.
.475	1.258E-01	.975	6.011E-02	1.475	5.064E+00	1.975	0.	2.475	0.	2.975	0.	3.475	0.
.485	1.223E-01	.985	5.972E-02	1.485	0.	1.985	0.	2.485	0.	2.985	0.	3.485	0.
.495	1.191E-01	.995	5.934E-02	1.495	0.	1.995	0.	2.495	0.	2.995	0.	3.495	0.
.505	1.160E-01	1.005	5.899E-02	1.505	0.	2.005	0.	2.505	0.	3.005	0.	3.505	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY
CASE 13, K, 5.715CM, AIR, 0.79CM PVC

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	4.806E-11	.515	1.507E-01	1.015	5.766E-02	1.515	0.	2.015	0.	2.515	0.
.025	2.595E-07	.525	1.077E-01	1.025	5.732E-02	1.525	0.	2.025	0.	2.525	0.
.035	6.220E-06	.535	1.032E-01	1.035	5.699E-02	1.535	0.	2.035	0.	2.535	0.
.045	2.817E-17	.545	1.029E-01	1.045	5.671E-02	1.545	0.	2.045	0.	2.545	0.
.055	6.257E-15	.555	1.006E-01	1.055	5.637E-02	1.555	0.	2.055	0.	2.555	0.
.065	2.991E-09	.565	9.846E-02	1.065	5.608E-02	1.565	0.	2.065	0.	2.565	0.
.075	5.384E-08	.575	9.644E-02	1.075	5.580E-02	1.575	0.	2.075	0.	2.575	0.
.085	1.876E-04	.585	9.450E-02	1.085	5.554E-02	1.585	0.	2.085	0.	2.585	0.
.095	8.750E-02	.595	9.268E-02	1.095	5.528E-02	1.595	0.	2.095	0.	2.595	0.
.105	2.215E-01	.605	9.094E-02	1.105	5.503E-02	1.605	0.	2.105	0.	2.605	0.
.115	3.788E-01	.615	8.928E-02	1.115	5.478E-02	1.615	0.	2.115	0.	2.615	0.
.125	4.564E-01	.625	8.771E-02	1.125	5.453E-02	1.625	0.	2.125	0.	2.625	0.
.135	4.925E-01	.635	8.623E-02	1.135	5.430E-02	1.635	0.	2.135	0.	2.635	0.
.145	5.008E-01	.645	8.481E-02	1.145	5.407E-02	1.645	0.	2.145	0.	2.645	0.
.155	4.935E-01	.655	8.342E-02	1.155	5.386E-02	1.655	0.	2.155	0.	2.655	0.
.165	4.797E-01	.665	8.210E-02	1.165	5.365E-02	1.665	0.	2.165	0.	2.665	0.
.175	4.632E-01	.675	8.085E-02	1.175	5.346E-02	1.675	0.	2.175	0.	2.675	0.
.185	4.442E-01	.685	7.967E-02	1.185	5.326E-02	1.685	0.	2.185	0.	2.685	0.
.195	4.254E-01	.695	7.851E-02	1.195	5.308E-02	1.695	0.	2.195	0.	2.695	0.
.205	4.087E-01	.705	7.738E-02	1.205	5.290E-02	1.705	0.	2.205	0.	2.705	0.
.215	4.024E-01	.715	7.631E-02	1.215	5.273E-02	1.715	0.	2.215	0.	2.715	0.
.225	3.955E-01	.725	7.529E-02	1.225	5.256E-02	1.725	0.	2.225	0.	2.725	0.
.235	3.765E-01	.735	7.431E-02	1.235	5.239E-02	1.735	0.	2.235	0.	2.735	0.
.245	3.506E-01	.745	7.337E-02	1.245	5.223E-02	1.745	0.	2.245	0.	2.745	0.
.255	3.272E-01	.755	7.244E-02	1.255	5.208E-02	1.755	0.	2.255	0.	2.755	0.
.265	3.062E-01	.765	7.156E-02	1.265	5.193E-02	1.765	0.	2.265	0.	2.765	0.
.275	2.873E-01	.775	7.071E-02	1.275	5.178E-02	1.775	0.	2.275	0.	2.775	0.
.285	2.703E-01	.785	6.990E-02	1.285	5.164E-02	1.785	0.	2.285	0.	2.785	0.
.295	2.549E-01	.795	6.913E-02	1.295	5.151E-02	1.795	0.	2.295	0.	2.795	0.
.305	2.410E-01	.805	6.839E-02	1.305	5.138E-02	1.805	0.	2.305	0.	2.805	0.
.315	2.286E-01	.815	6.766E-02	1.315	5.125E-02	1.815	0.	2.315	0.	2.815	0.
.325	2.174E-01	.825	6.697E-02	1.325	5.113E-02	1.825	0.	2.325	0.	2.825	0.
.335	2.070E-01	.835	6.631E-02	1.335	5.101E-02	1.835	0.	2.335	0.	2.835	0.
.345	1.976E-01	.845	6.568E-02	1.345	5.090E-02	1.845	0.	2.345	0.	2.845	0.
.355	1.889E-01	.855	6.506E-02	1.355	5.078E-02	1.855	0.	2.355	0.	2.855	0.
.365	1.809E-01	.865	6.447E-02	1.365	5.067E-02	1.865	0.	2.365	0.	2.865	0.
.375	1.736E-01	.875	6.390E-02	1.375	5.057E-02	1.875	0.	2.375	0.	2.875	0.
.385	1.667E-01	.885	6.336E-02	1.385	5.046E-02	1.885	0.	2.385	0.	2.885	0.
.395	1.604E-01	.895	6.283E-02	1.395	5.036E-02	1.895	0.	2.395	0.	2.895	0.
.405	1.546E-01	.905	6.230E-02	1.405	5.026E-02	1.905	0.	2.405	0.	2.905	0.
.415	1.493E-01	.915	6.179E-02	1.415	5.015E-02	1.915	0.	2.415	0.	2.915	0.
.425	1.443E-01	.925	6.130E-02	1.425	5.003E-02	1.925	0.	2.425	0.	2.925	0.
.435	1.396E-01	.935	6.084E-02	1.435	4.991E-02	1.935	0.	2.435	0.	2.935	0.
.445	1.353E-01	.945	6.039E-02	1.445	4.978E-02	1.945	0.	2.445	0.	2.945	0.
.455	1.312E-01	.955	5.994E-02	1.455	4.961E-02	1.955	0.	2.455	0.	2.955	0.
.465	1.274E-01	.965	5.952E-02	1.465	4.946E-02	1.965	0.	2.465	0.	2.965	0.
.475	1.238E-01	.975	5.911E-02	1.475	4.931E-02	1.975	0.	2.475	0.	2.975	0.
.485	1.204E-01	.985	5.872E-02	1.485	4.916E-02	1.985	0.	2.485	0.	2.985	0.
.495	1.172E-01	.995	5.835E-02	1.495	4.901E-02	1.995	0.	2.495	0.	2.995	0.
.505	1.142E-01	1.005	5.800E-02	1.505	4.886E-02	2.005	0.	2.505	0.	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 14, TH, 3.810CM, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.398E-38	.515	3.024E-01	1.015	8.190E-03	1.515	6.006E-03	2.015	4.563E-03	2.515	4.328E-03	3.015	4.328E-03	3.515	4.328E-03
.025	3.496E-31	.525	6.571E-02	1.025	8.107E-03	1.525	5.933E-03	2.025	4.555E-03	2.525	4.325E-03	3.025	4.325E-03	3.525	4.325E-03
.035	4.008E-24	.535	6.460E-02	1.035	8.035E-03	1.535	5.911E-03	2.035	4.548E-03	2.535	4.322E-03	3.035	4.322E-03	3.535	4.322E-03
.045	2.274E-17	.545	6.355E-02	1.045	7.965E-03	1.545	5.900E-03	2.045	4.541E-03	2.545	4.320E-03	3.045	4.320E-03	3.545	4.320E-03
.055	5.218E-15	.555	6.222E-02	1.055	7.897E-03	1.555	5.888E-03	2.055	4.533E-03	2.555	4.317E-03	3.055	4.317E-03	3.555	4.317E-03
.065	2.218E-09	.565	6.131E-02	1.065	7.831E-03	1.565	5.876E-03	2.065	4.525E-03	2.565	4.314E-03	3.065	4.314E-03	3.565	4.314E-03
.075	4.4571E-08	.575	6.034E-02	1.075	7.768E-03	1.575	5.864E-03	2.075	4.518E-03	2.575	4.309E-03	3.075	4.309E-03	3.575	4.309E-03
.085	1.423E-07	.585	4.146E-01	1.085	7.705E-03	1.585	5.852E-03	2.085	4.511E-03	2.585	4.302E-03	3.085	4.302E-03	3.585	4.302E-03
.095	7.310E-02	.595	4.343E-02	1.095	7.642E-03	1.595	5.840E-03	2.095	4.504E-03	2.595	4.297E-03	3.095	4.297E-03	3.595	4.297E-03
.105	2.141E-01	.605	4.275E-02	1.105	7.578E-03	1.605	5.828E-03	2.105	4.497E-03	2.605	4.290E-03	3.105	4.290E-03	3.605	4.290E-03
.115	3.316E-01	.615	4.211E-02	1.115	7.515E-03	1.615	5.816E-03	2.115	4.491E-03	2.615	4.283E-03	3.115	4.283E-03	3.615	4.283E-03
.125	3.999E-01	.625	4.151E-02	1.125	7.451E-03	1.625	5.804E-03	2.125	4.485E-03	2.625	4.276E-03	3.125	4.276E-03	3.625	4.276E-03
.135	4.215E-01	.635	4.095E-02	1.135	7.387E-03	1.635	5.792E-03	2.135	4.479E-03	2.635	4.269E-03	3.135	4.269E-03	3.635	4.269E-03
.145	4.259E-01	.645	4.041E-02	1.145	7.323E-03	1.645	5.780E-03	2.145	4.473E-03	2.645	4.262E-03	3.145	4.262E-03	3.645	4.262E-03
.155	4.177E-01	.655	3.986E-02	1.155	7.259E-03	1.655	5.768E-03	2.155	4.467E-03	2.655	4.255E-03	3.155	4.255E-03	3.655	4.255E-03
.165	4.052E-01	.665	3.937E-02	1.165	7.195E-03	1.665	5.756E-03	2.165	4.461E-03	2.665	4.248E-03	3.165	4.248E-03	3.665	4.248E-03
.175	3.989E-01	.675	3.890E-02	1.175	7.131E-03	1.675	5.744E-03	2.175	4.455E-03	2.675	4.241E-03	3.175	4.241E-03	3.675	4.241E-03
.185	3.869E-01	.685	3.845E-02	1.185	7.067E-03	1.685	5.732E-03	2.185	4.449E-03	2.685	4.234E-03	3.185	4.234E-03	3.685	4.234E-03
.195	3.692E-01	.695	3.802E-02	1.195	7.003E-03	1.695	5.720E-03	2.195	4.443E-03	2.695	4.227E-03	3.195	4.227E-03	3.695	4.227E-03
.205	3.777E-01	.705	3.758E-02	1.205	6.939E-03	1.705	5.708E-03	2.205	4.437E-03	2.705	4.220E-03	3.205	4.220E-03	3.705	4.220E-03
.215	3.350E-01	.715	3.713E-02	1.215	6.875E-03	1.715	5.696E-03	2.215	4.431E-03	2.715	4.213E-03	3.215	4.213E-03	3.715	4.213E-03
.225	3.175E-01	.725	3.670E-02	1.225	6.811E-03	1.725	5.684E-03	2.225	4.425E-03	2.725	4.206E-03	3.225	4.206E-03	3.725	4.206E-03
.235	5.113E-01	.735	3.627E-02	1.235	6.747E-03	1.735	5.672E-03	2.235	4.419E-03	2.735	4.199E-03	3.235	4.199E-03	3.735	4.199E-03
.245	2.538E-01	.745	3.584E-02	1.245	6.683E-03	1.745	5.660E-03	2.245	4.413E-03	2.745	4.192E-03	3.245	4.192E-03	3.745	4.192E-03
.255	2.170E-01	.755	3.540E-02	1.255	6.619E-03	1.755	5.648E-03	2.255	4.407E-03	2.755	4.185E-03	3.255	4.185E-03	3.755	4.185E-03
.265	2.046E-01	.765	3.507E-02	1.265	6.555E-03	1.765	5.636E-03	2.265	4.401E-03	2.765	4.178E-03	3.265	4.178E-03	3.765	4.178E-03
.275	2.163E-01	.775	3.475E-02	1.275	6.491E-03	1.775	5.624E-03	2.275	4.395E-03	2.775	4.171E-03	3.275	4.171E-03	3.775	4.171E-03
.285	1.796E-01	.785	3.442E-02	1.285	6.427E-03	1.785	5.612E-03	2.285	4.389E-03	2.785	4.164E-03	3.285	4.164E-03	3.785	4.164E-03
.295	1.708E-01	.795	3.410E-02	1.295	6.363E-03	1.795	5.600E-03	2.295	4.383E-03	2.795	4.157E-03	3.295	4.157E-03	3.795	4.157E-03
.305	1.853E-01	.805	2.980E-02	1.305	6.299E-03	1.805	5.588E-03	2.305	4.377E-03	2.805	4.150E-03	3.305	4.150E-03	3.805	4.150E-03
.315	1.527E-01	.815	2.955E-02	1.315	6.235E-03	1.815	5.576E-03	2.315	4.371E-03	2.815	4.143E-03	3.315	4.143E-03	3.815	4.143E-03
.325	1.703E-01	.825	2.932E-02	1.325	6.171E-03	1.825	5.564E-03	2.325	4.365E-03	2.825	4.136E-03	3.325	4.136E-03	3.825	4.136E-03
.335	2.254E-01	.835	2.910E-02	1.335	6.107E-03	1.835	5.552E-03	2.335	4.359E-03	2.835	4.129E-03	3.335	4.129E-03	3.835	4.129E-03
.345	1.217E-01	.845	2.888E-02	1.345	6.043E-03	1.845	5.540E-03	2.345	4.353E-03	2.845	4.122E-03	3.345	4.122E-03	3.845	4.122E-03
.355	1.171E-01	.855	2.865E-02	1.355	5.979E-03	1.855	5.528E-03	2.355	4.347E-03	2.855	4.115E-03	3.355	4.115E-03	3.855	4.115E-03
.365	1.130E-01	.865	2.843E-02	1.365	5.915E-03	1.865	5.516E-03	2.365	4.341E-03	2.865	4.108E-03	3.365	4.108E-03	3.865	4.108E-03
.375	1.092E-01	.875	2.820E-02	1.375	5.851E-03	1.875	5.504E-03	2.375	4.335E-03	2.875	4.101E-03	3.375	4.101E-03	3.875	4.101E-03
.385	1.057E-01	.885	2.666E-02	1.385	5.787E-03	1.885	5.492E-03	2.385	4.329E-03	2.885	4.094E-03	3.385	4.094E-03	3.885	4.094E-03
.395	1.024E-01	.895	2.646E-02	1.395	5.723E-03	1.895	5.480E-03	2.395	4.323E-03	2.895	4.087E-03	3.395	4.087E-03	3.895	4.087E-03
.405	9.951E-02	.905	2.626E-02	1.405	5.659E-03	1.905	5.468E-03	2.405	4.317E-03	2.905	4.080E-03	3.405	4.080E-03	3.905	4.080E-03
.415	9.684E-02	.915	5.122E-01	1.415	5.595E-03	1.915	5.456E-03	2.415	4.311E-03	2.915	4.073E-03	3.415	4.073E-03	3.915	4.073E-03
.425	9.433E-02	.925	1.634E-02	1.425	5.531E-03	1.925	5.444E-03	2.425	4.305E-03	2.925	4.066E-03	3.425	4.066E-03	3.925	4.066E-03
.435	9.201E-02	.935	1.621E-02	1.435	5.467E-03	1.935	5.432E-03	2.435	4.299E-03	2.935	4.059E-03	3.435	4.059E-03	3.935	4.059E-03
.445	8.985E-02	.945	1.607E-02	1.445	5.403E-03	1.945	5.420E-03	2.445	4.293E-03	2.945	4.052E-03	3.445	4.052E-03	3.945	4.052E-03
.455	8.776E-02	.955	1.593E-02	1.455	5.339E-03	1.955	5.408E-03	2.455	4.287E-03	2.955	4.045E-03	3.455	4.045E-03	3.955	4.045E-03
.465	1.301E-01	.965	4.172E-01	1.465	5.275E-03	1.965	5.396E-03	2.465	4.281E-03	2.965	4.038E-03	3.465	4.038E-03	3.965	4.038E-03
.475	8.117E-02	.975	8.494E-03	1.475	5.211E-03	1.975	5.384E-03	2.475	4.275E-03	2.975	4.031E-03	3.475	4.031E-03	3.975	4.031E-03
.485	7.951E-02	.985	8.412E-03	1.485	5.147E-03	1.985	5.372E-03	2.485	4.269E-03	2.985	4.024E-03	3.485	4.024E-03	3.985	4.024E-03
.495	7.795E-02	.995	8.332E-03	1.495	5.083E-03	1.995	5.360E-03	2.495	4.263E-03	2.995	4.017E-03	3.495	4.017E-03	3.995	4.017E-03
.505	7.636E-02	1.005	8.255E-03	1.505	5.019E-03	2.005	5.348E-03	2.505	4.257E-03	3.005	4.010E-03	3.505	4.010E-03	4.005	4.010E-03

ENERGY	FLUX
2.515	4.317E-03
2.525	4.314E-03
2.535	4.311E-03
2.545	4.308E-03
2.555	4.305E-03
2.565	4.302E-03
2.575	4.297E-03
2.585	4.290E-03
2.595	4.275E-03
2.605	4.212E-03
2.615	1.241E+00
2.625	0.
2.635	0.
2.645	0.
2.655	0.
2.665	0.
2.675	0.
2.685	0.
2.695	0.
2.705	0.
2.715	0.
2.725	0.
2.735	0.
2.745	0.
2.755	0.
2.765	0.
2.775	0.
2.785	0.
2.795	0.
2.805	0.
2.815	0.
2.825	0.
2.835	0.
2.845	0.
2.855	0.
2.865	0.
2.875	0.
2.885	0.
2.895	0.
2.905	0.
2.915	0.
2.925	0.
2.935	0.
2.945	0.
2.955	0.
2.965	0.
2.975	0.
2.985	0.
2.995	0.
3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 16, TH, 7.938CH, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.273E-38	.515	3.046E-01	1.015	9.219E-03	1.515	6.010E-03	2.015	4.555E-03	2.515	4.311E-03
.025	3.134E-31	.525	6.596E-02	1.025	8.146E-03	1.525	5.986E-03	2.025	4.547E-03	2.525	4.307E-03
.035	3.949E-24	.535	6.481E-02	1.035	8.070E-03	1.535	5.964E-03	2.035	4.540E-03	2.535	4.305E-03
.045	2.255E-17	.545	6.374E-02	1.045	7.999E-03	1.545	5.941E-03	2.045	4.532E-03	2.545	4.302E-03
.055	5.247E-15	.555	6.268E-02	1.055	7.930E-03	1.555	5.919E-03	2.055	4.524E-03	2.555	4.299E-03
.065	2.234E-09	.565	6.163E-02	1.065	7.864E-03	1.565	5.895E-03	2.065	4.516E-03	2.565	4.295E-03
.075	4.649E-04	.575	6.043E-02	1.075	7.803E-03	1.575	5.863E-03	2.075	4.509E-03	2.575	4.291E-03
.085	1.459E-07	.585	4.148E-01	1.085	7.738E-03	1.585	5.833E-03	2.085	4.501E-03	2.585	4.284E-03
.095	7.385E-02	.595	4.364E-02	1.095	7.677E-03	1.595	5.803E-03	2.095	4.494E-03	2.595	4.269E-03
.105	2.171E-01	.605	4.295E-02	1.105	7.619E-03	1.605	5.780E-03	2.105	4.487E-03	2.605	4.266E-03
.115	3.433E-01	.615	4.230E-02	1.115	7.559E-03	1.615	5.758E-03	2.115	4.481E-03	2.615	4.261E-03
.125	4.131E-01	.625	4.168E-02	1.125	7.499E-03	1.625	5.735E-03	2.125	4.474E-03	2.625	4.255E-03
.135	4.365E-01	.635	4.111E-02	1.135	7.443E-03	1.635	5.712E-03	2.135	4.468E-03	2.635	4.250E-03
.145	4.403E-01	.645	4.055E-02	1.145	7.389E-03	1.645	5.689E-03	2.145	4.462E-03	2.645	4.245E-03
.155	4.306E-01	.655	4.001E-02	1.155	7.335E-03	1.655	5.666E-03	2.155	4.457E-03	2.655	4.240E-03
.165	4.091E-01	.665	3.950E-02	1.165	7.284E-03	1.665	5.643E-03	2.165	4.451E-03	2.665	4.235E-03
.175	3.959E-01	.675	3.901E-02	1.175	7.233E-03	1.675	5.620E-03	2.175	4.446E-03	2.675	4.230E-03
.185	3.784E-01	.685	3.855E-02	1.185	7.184E-03	1.685	5.597E-03	2.185	4.441E-03	2.685	4.225E-03
.195	3.569E-01	.695	3.810E-02	1.195	7.135E-03	1.695	5.574E-03	2.195	4.436E-03	2.695	4.220E-03
.205	3.429E-01	.705	3.765E-02	1.205	7.089E-03	1.705	5.551E-03	2.205	4.431E-03	2.705	4.215E-03
.215	3.241E-01	.715	3.719E-02	1.215	7.046E-03	1.715	5.528E-03	2.215	4.426E-03	2.715	4.210E-03
.225	5.194E-01	.725	3.677E-02	1.225	6.999E-03	1.725	5.505E-03	2.225	4.421E-03	2.725	4.205E-03
.235	5.194E-01	.735	3.630E-02	1.235	6.954E-03	1.735	5.482E-03	2.235	4.415E-03	2.735	4.200E-03
.245	2.593E-01	.745	3.545E-02	1.245	6.910E-03	1.745	5.459E-03	2.245	4.410E-03	2.745	4.195E-03
.255	2.211E-01	.755	3.411E-02	1.255	6.868E-03	1.755	5.436E-03	2.255	4.405E-03	2.755	4.190E-03
.265	2.080E-01	.765	3.278E-02	1.265	6.826E-03	1.765	5.413E-03	2.265	4.399E-03	2.765	4.185E-03
.275	1.826E-01	.775	3.246E-02	1.275	6.785E-03	1.775	5.390E-03	2.275	4.394E-03	2.775	4.180E-03
.285	1.733E-01	.785	3.213E-02	1.285	6.743E-03	1.785	5.367E-03	2.285	4.389E-03	2.785	4.175E-03
.295	1.875E-01	.795	1.040E-01	1.295	6.702E-03	1.795	5.344E-03	2.295	4.384E-03	2.795	4.170E-03
.305	1.546E-01	.805	2.981E-02	1.305	6.662E-03	1.805	5.321E-03	2.305	4.379E-03	2.805	4.165E-03
.315	1.719E-01	.815	2.955E-02	1.315	6.631E-03	1.815	5.298E-03	2.315	4.374E-03	2.815	4.160E-03
.325	2.269E-01	.825	2.931E-02	1.325	6.599E-03	1.825	5.275E-03	2.325	4.369E-03	2.825	4.155E-03
.335	1.231E-01	.835	2.907E-02	1.335	6.567E-03	1.835	5.252E-03	2.335	4.364E-03	2.835	4.150E-03
.345	1.184E-01	.845	2.885E-02	1.345	6.535E-03	1.845	5.229E-03	2.345	4.359E-03	2.845	4.145E-03
.355	1.141E-01	.855	2.861E-02	1.355	6.503E-03	1.855	5.206E-03	2.355	4.354E-03	2.855	4.140E-03
.365	1.102E-01	.865	9.384E-02	1.365	6.471E-03	1.865	5.183E-03	2.365	4.349E-03	2.865	4.135E-03
.375	1.066E-01	.875	2.800E-02	1.375	6.439E-03	1.875	5.160E-03	2.375	4.344E-03	2.875	4.130E-03
.385	1.033E-01	.885	2.661E-02	1.385	6.407E-03	1.885	5.137E-03	2.385	4.339E-03	2.885	4.125E-03
.395	1.003E-01	.895	2.639E-02	1.395	6.375E-03	1.895	5.114E-03	2.395	4.334E-03	2.895	4.120E-03
.405	9.757E-02	.905	2.605E-02	1.405	6.343E-03	1.905	5.091E-03	2.405	4.329E-03	2.905	4.115E-03
.415	9.502E-02	.915	5.121E-01	1.415	6.311E-03	1.915	5.068E-03	2.415	4.324E-03	2.915	4.110E-03
.425	9.262E-02	.925	1.634E-02	1.425	6.279E-03	1.925	5.045E-03	2.425	4.319E-03	2.925	4.105E-03
.435	9.041E-02	.935	1.621E-02	1.435	6.247E-03	1.935	5.022E-03	2.435	4.314E-03	2.935	4.100E-03
.445	8.927E-02	.945	1.606E-02	1.445	6.215E-03	1.945	5.000E-03	2.445	4.309E-03	2.945	4.095E-03
.455	8.813E-02	.955	1.592E-02	1.455	6.183E-03	1.955	4.977E-03	2.455	4.304E-03	2.955	4.090E-03
.465	8.699E-02	.965	1.578E-02	1.465	6.151E-03	1.965	4.954E-03	2.465	4.299E-03	2.965	4.085E-03
.475	8.163E-02	.975	8.535E-03	1.475	6.119E-03	1.975	4.931E-03	2.475	4.294E-03	2.975	4.080E-03
.485	7.992E-02	.985	8.452E-03	1.485	6.087E-03	1.985	4.908E-03	2.485	4.289E-03	2.985	4.075E-03
.495	7.812E-02	.995	8.371E-03	1.495	6.060E-03	1.995	4.885E-03	2.495	4.284E-03	2.995	4.070E-03
.505	7.664E-02	1.005	8.293E-03	1.505	6.034E-03	2.005	4.863E-03	2.505	4.279E-03	3.005	4.065E-03

ENERGY	FLUX
2.515	4.307E-03
2.525	4.304E-03
2.535	4.301E-03
2.545	4.298E-03
2.555	4.295E-03
2.565	4.291E-03
2.575	4.287E-03
2.585	4.280E-03
2.595	4.265E-03
2.605	4.202E-03
2.615	1.241E+00
2.625	0.
2.635	0.
2.645	0.
2.655	0.
2.665	0.
2.675	0.
2.685	0.
2.695	3.
2.705	0.
2.715	0.
2.725	0.
2.735	0.
2.745	5.
2.755	0.
2.765	0.
2.775	0.
2.785	0.
2.795	0.
2.805	0.
2.815	0.
2.825	0.
2.835	0.
2.845	0.
2.855	0.
2.865	0.
2.875	0.
2.885	0.
2.895	0.
2.905	0.
2.915	0.
2.925	3.
2.935	0.
2.945	0.
2.955	0.
2.965	0.
2.975	0.
2.985	0.
2.995	0.
3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 10, TH, 12.70CM, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.225E-30	.515	3.054E-01	1.015	8.242E-03	1.515	6.015E-03	2.015	4.552E-03	2.515	4.304E-03		
.025	3.275E-31	.525	6.610E-02	1.025	8.167E-03	1.525	5.991E-03	2.025	4.645E-03	2.525	4.301E-03		
.035	3.924E-24	.535	6.493E-02	1.035	9.093E-03	1.535	5.988E-03	2.035	4.537E-03	2.535	4.298E-03		
.045	2.245E-17	.545	6.384E-02	1.045	8.022E-03	1.545	5.966E-03	2.045	4.530E-03	2.545	4.295E-03		
.055	5.258E-15	.555	6.277E-02	1.055	7.952E-03	1.555	5.923E-03	2.055	4.521E-03	2.555	4.292E-03		
.065	2.235E-09	.565	6.171E-02	1.065	7.895E-03	1.565	5.896E-03	2.065	4.514E-03	2.565	4.288E-03		
.075	4.678E-04	.575	6.050E-02	1.075	7.821E-03	1.575	5.866E-03	2.075	4.506E-03	2.575	4.284E-03		
.085	1.675E-37	.585	4.148E-01	1.085	7.758E-03	1.585	5.856E-03	2.085	4.498E-03	2.585	4.277E-03		
.095	7.396E-02	.595	4.375E-02	1.095	7.698E-03	1.595	5.131E-03	2.095	4.491E-03	2.595	4.261E-03		
.105	2.184E-01	.605	4.306E-02	1.105	7.637E-03	1.605	5.112E-03	2.105	4.484E-03	2.605	4.198E-03		
.115	3.476E-01	.615	4.240E-02	1.115	7.577E-03	1.615	5.093E-03	2.115	4.477E-03	2.615	1.241E+00		
.125	4.190E-01	.625	4.178E-02	1.125	7.519E-03	1.625	5.074E-03	2.125	4.471E-03	2.625	0.		
.135	4.420E-01	.635	4.120E-02	1.135	7.461E-03	1.635	5.056E-03	2.135	4.465E-03	2.635	0.		
.145	4.451E-01	.645	4.064E-02	1.145	7.406E-03	1.645	5.038E-03	2.145	4.459E-03	2.645	0.		
.155	4.351E-01	.655	4.009E-02	1.155	7.352E-03	1.655	5.021E-03	2.155	4.453E-03	2.655	0.		
.165	4.213E-01	.665	3.957E-02	1.165	7.301E-03	1.665	5.004E-03	2.165	4.447E-03	2.665	0.		
.175	4.129E-01	.675	3.908E-02	1.175	7.250E-03	1.675	4.987E-03	2.175	4.442E-03	2.675	0.		
.185	3.997E-01	.685	3.862E-02	1.185	7.200E-03	1.685	4.970E-03	2.185	4.437E-03	2.685	0.		
.195	3.819E-01	.695	3.816E-02	1.195	7.151E-03	1.695	4.956E-03	2.195	4.432E-03	2.695	0.		
.205	3.699E-01	.705	3.771E-02	1.205	7.104E-03	1.705	4.946E-03	2.205	4.427E-03	2.705	0.		
.215	3.457E-01	.715	3.724E-02	1.215	7.059E-03	1.715	4.938E-03	2.215	4.421E-03	2.715	0.		
.225	3.264E-01	.725	3.675E-02	1.225	7.013E-03	1.725	4.925E-03	2.225	4.416E-03	2.725	0.		
.235	5.213E-01	.735	3.635E-02	1.235	6.968E-03	1.735	4.915E-03	2.235	4.411E-03	2.735	0.		
.245	2.610E-01	.745	3.350E-02	1.245	6.924E-03	1.745	4.876E-03	2.245	4.405E-03	2.745	0.		
.255	2.232E-01	.755	3.315E-02	1.255	6.881E-03	1.755	4.861E-03	2.255	4.400E-03	2.755	0.		
.265	2.098E-01	.765	3.281E-02	1.265	6.839E-03	1.765	4.846E-03	2.265	4.395E-03	2.765	0.		
.275	2.208E-01	.775	3.249E-02	1.275	6.798E-03	1.775	4.832E-03	2.275	4.390E-03	2.775	0.		
.285	1.835E-01	.785	3.216E-02	1.285	6.758E-03	1.785	4.818E-03	2.285	4.385E-03	2.785	0.		
.295	1.741E-01	.795	1.940E-01	1.295	6.719E-03	1.795	4.805E-03	2.295	4.380E-03	2.795	0.		
.305	1.881E-01	.805	2.983E-02	1.305	6.680E-03	1.805	4.791E-03	2.305	4.375E-03	2.805	0.		
.315	1.552E-01	.815	2.957E-02	1.315	6.642E-03	1.815	4.777E-03	2.315	4.371E-03	2.815	0.		
.325	1.724E-01	.825	2.932E-02	1.325	6.606E-03	1.825	4.764E-03	2.325	4.367E-03	2.825	0.		
.335	2.273E-01	.835	2.908E-02	1.335	6.569E-03	1.835	4.751E-03	2.335	4.363E-03	2.835	0.		
.345	1.236E-01	.845	2.883E-02	1.345	6.534E-03	1.845	4.738E-03	2.345	4.359E-03	2.845	0.		
.355	1.188E-01	.855	2.860E-02	1.355	6.499E-03	1.855	4.726E-03	2.355	4.356E-03	2.855	0.		
.365	1.145E-01	.865	9.384E-02	1.365	6.465E-03	1.865	4.714E-03	2.365	4.352E-03	2.865	0.		
.375	1.106E-01	.875	2.600E-02	1.375	6.432E-03	1.875	4.701E-03	2.375	4.349E-03	2.875	0.		
.385	1.070E-01	.885	2.600E-02	1.385	6.399E-03	1.885	4.689E-03	2.385	4.346E-03	2.885	0.		
.395	1.037E-01	.895	2.638E-02	1.395	6.367E-03	1.895	4.677E-03	2.395	4.343E-03	2.895	0.		
.405	1.006E-01	.905	2.604E-02	1.405	6.335E-03	1.905	4.666E-03	2.405	4.340E-03	2.905	0.		
.415	9.785E-02	.915	5.121E-01	1.415	6.304E-03	1.915	4.655E-03	2.415	4.338E-03	2.915	0.		
.425	9.529E-02	.925	1.635E-02	1.425	6.273E-03	1.925	4.644E-03	2.425	4.335E-03	2.925	0.		
.435	9.288E-02	.935	1.621E-02	1.435	6.243E-03	1.935	4.633E-03	2.435	4.332E-03	2.935	0.		
.445	9.065E-02	.945	1.606E-02	1.445	6.213E-03	1.945	4.621E-03	2.445	4.328E-03	2.945	0.		
.455	8.850E-02	.955	1.582E-02	1.455	6.183E-03	1.955	4.610E-03	2.455	4.324E-03	2.955	0.		
.465	1.314E-01	.965	4.172E-01	1.465	6.153E-03	1.965	4.600E-03	2.465	4.321E-03	2.965	0.		
.475	8.183E-02	.975	8.561E-03	1.475	6.124E-03	1.975	4.589E-03	2.475	4.317E-03	2.975	0.		
.485	8.012E-02	.985	8.477E-03	1.485	6.094E-03	1.985	4.579E-03	2.485	4.314E-03	2.985	0.		
.495	7.850E-02	.995	8.396E-03	1.495	6.064E-03	1.995	4.570E-03	2.495	4.310E-03	2.995	0.		
.505	7.686E-02	1.005	8.318E-03	1.505	6.039E-03	2.005	4.561E-03	2.505	4.307E-03	3.005	0.		

TOTAL FLUX ENERGY SPECTRUM, BORE-HOLE GEOMETRY
CASE 19, TH, 3.810CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.223E-30	.515	2.909E-01	1.015	8.105E-03	1.515	5.922E-03	2.015	4.224E-03	2.515	4.293E-03	3.015	4.290E-03	3.515	4.287E-03
.025	3.333E-31	.525	6.453E-02	1.025	8.032E-03	1.525	5.929E-03	2.025	4.217E-03	2.525	4.290E-03	3.025	4.287E-03	3.525	4.287E-03
.035	3.808E-24	.535	6.343E-02	1.035	7.961E-03	1.535	5.907E-03	2.035	4.210E-03	2.535	4.287E-03	3.035	4.287E-03	3.535	4.287E-03
.045	2.198E-17	.545	6.243E-02	1.045	7.891E-03	1.545	5.886E-03	2.045	4.203E-03	2.545	4.284E-03	3.045	4.284E-03	3.545	4.284E-03
.055	5.061E-15	.555	6.138E-02	1.055	7.824E-03	1.555	5.864E-03	2.055	4.195E-03	2.555	4.282E-03	3.055	4.282E-03	3.555	4.282E-03
.065	2.147E-09	.565	6.038E-02	1.065	7.759E-03	1.565	5.841E-03	2.065	4.187E-03	2.565	4.278E-03	3.065	4.278E-03	3.565	4.278E-03
.075	4.441E-08	.575	5.925E-02	1.075	7.695E-03	1.575	5.810E-03	2.075	4.180E-03	2.575	4.274E-03	3.075	4.274E-03	3.575	4.274E-03
.085	1.387E-07	.585	3.917E-01	1.085	7.635E-03	1.585	5.785E-03	2.085	4.173E-03	2.585	4.268E-03	3.085	4.268E-03	3.585	4.268E-03
.095	7.076E-02	.595	4.275E-02	1.095	7.577E-03	1.595	5.766E-03	2.095	4.166E-03	2.595	4.263E-03	3.095	4.263E-03	3.595	4.263E-03
.105	2.061E-01	.605	4.209E-02	1.105	7.518E-03	1.605	5.748E-03	2.105	4.160E-03	2.605	4.259E-03	3.105	4.259E-03	3.605	4.259E-03
.115	3.229E-01	.615	4.145E-02	1.115	7.460E-03	1.615	5.731E-03	2.115	4.153E-03	2.615	4.254E-03	3.115	4.254E-03	3.615	4.254E-03
.125	3.690E-01	.625	4.086E-02	1.125	7.403E-03	1.625	5.714E-03	2.125	4.146E-03	2.625	4.249E-03	3.125	4.249E-03	3.625	4.249E-03
.135	4.135E-01	.635	4.030E-02	1.135	7.347E-03	1.635	5.696E-03	2.135	4.139E-03	2.635	4.244E-03	3.135	4.244E-03	3.635	4.244E-03
.145	4.149E-01	.645	3.977E-02	1.145	7.294E-03	1.645	5.679E-03	2.145	4.132E-03	2.645	4.239E-03	3.145	4.239E-03	3.645	4.239E-03
.155	4.072E-01	.655	3.924E-02	1.155	7.242E-03	1.655	5.662E-03	2.155	4.125E-03	2.655	4.234E-03	3.155	4.234E-03	3.655	4.234E-03
.165	3.957E-01	.665	3.875E-02	1.165	7.192E-03	1.665	5.645E-03	2.165	4.118E-03	2.665	4.229E-03	3.165	4.229E-03	3.665	4.229E-03
.175	3.886E-01	.675	3.826E-02	1.175	7.143E-03	1.675	5.628E-03	2.175	4.111E-03	2.675	4.224E-03	3.175	4.224E-03	3.675	4.224E-03
.185	3.760E-01	.685	3.784E-02	1.185	7.094E-03	1.685	5.611E-03	2.185	4.104E-03	2.685	4.219E-03	3.185	4.219E-03	3.685	4.219E-03
.195	3.598E-01	.695	3.740E-02	1.195	7.045E-03	1.695	5.594E-03	2.195	4.097E-03	2.695	4.214E-03	3.195	4.214E-03	3.695	4.214E-03
.205	3.665E-01	.705	3.697E-02	1.205	7.002E-03	1.705	5.577E-03	2.205	4.090E-03	2.705	4.209E-03	3.205	4.209E-03	3.705	4.209E-03
.215	3.259E-01	.715	3.653E-02	1.215	6.958E-03	1.715	5.560E-03	2.215	4.083E-03	2.715	4.204E-03	3.215	4.204E-03	3.715	4.204E-03
.225	3.088E-01	.725	1.820E-01	1.225	6.914E-03	1.725	5.543E-03	2.225	4.076E-03	2.725	4.200E-03	3.225	4.200E-03	3.725	4.200E-03
.235	4.804E-01	.735	3.321E-02	1.235	6.870E-03	1.735	5.526E-03	2.235	4.069E-03	2.735	4.195E-03	3.235	4.195E-03	3.735	4.195E-03
.245	2.468E-01	.745	3.287E-02	1.245	6.828E-03	1.745	5.509E-03	2.245	4.062E-03	2.745	4.190E-03	3.245	4.190E-03	3.745	4.190E-03
.255	2.120E-01	.755	3.245E-02	1.255	6.787E-03	1.755	5.492E-03	2.255	4.055E-03	2.755	4.185E-03	3.255	4.185E-03	3.755	4.185E-03
.265	1.999E-01	.765	3.223E-02	1.265	6.746E-03	1.765	5.475E-03	2.265	4.048E-03	2.765	4.180E-03	3.265	4.180E-03	3.765	4.180E-03
.275	2.102E-01	.775	3.192E-02	1.275	6.706E-03	1.775	5.458E-03	2.275	4.041E-03	2.775	4.175E-03	3.275	4.175E-03	3.775	4.175E-03
.285	1.757E-01	.785	3.161E-02	1.285	6.669E-03	1.785	5.441E-03	2.285	4.034E-03	2.785	4.170E-03	3.285	4.170E-03	3.785	4.170E-03
.295	1.571E-01	.795	9.969E-02	1.295	6.630E-03	1.795	5.424E-03	2.295	4.027E-03	2.795	4.165E-03	3.295	4.165E-03	3.795	4.165E-03
.305	1.801E-01	.805	2.933E-02	1.305	6.593E-03	1.805	5.407E-03	2.305	4.020E-03	2.805	4.160E-03	3.305	4.160E-03	3.805	4.160E-03
.315	1.498E-01	.815	2.909E-02	1.315	6.556E-03	1.815	5.390E-03	2.315	4.013E-03	2.815	4.155E-03	3.315	4.155E-03	3.815	4.155E-03
.325	1.654E-01	.825	2.886E-02	1.325	6.521E-03	1.825	5.373E-03	2.325	4.006E-03	2.825	4.150E-03	3.325	4.150E-03	3.825	4.150E-03
.335	2.163E-01	.835	2.863E-02	1.335	6.486E-03	1.835	5.356E-03	2.335	4.000E-03	2.835	4.145E-03	3.335	4.145E-03	3.835	4.145E-03
.345	1.194E-01	.845	2.842E-02	1.345	6.451E-03	1.845	5.339E-03	2.345	3.993E-03	2.845	4.140E-03	3.345	4.140E-03	3.845	4.140E-03
.355	1.150E-01	.855	2.819E-02	1.355	6.416E-03	1.855	5.322E-03	2.355	3.986E-03	2.855	4.135E-03	3.355	4.135E-03	3.855	4.135E-03
.365	1.108E-01	.865	9.009E-02	1.365	6.381E-03	1.865	5.305E-03	2.365	3.979E-03	2.865	4.130E-03	3.365	4.130E-03	3.865	4.130E-03
.375	1.072E-01	.875	2.643E-02	1.375	6.346E-03	1.875	5.288E-03	2.375	3.972E-03	2.875	4.125E-03	3.375	4.125E-03	3.875	4.125E-03
.385	1.037E-01	.885	2.624E-02	1.385	6.311E-03	1.885	5.271E-03	2.385	3.965E-03	2.885	4.120E-03	3.385	4.120E-03	3.885	4.120E-03
.395	1.006E-01	.895	2.604E-02	1.395	6.276E-03	1.895	5.254E-03	2.395	3.958E-03	2.895	4.115E-03	3.395	4.115E-03	3.895	4.115E-03
.405	9.771E-02	.905	2.572E-02	1.405	6.241E-03	1.905	5.237E-03	2.405	3.951E-03	2.905	4.110E-03	3.405	4.110E-03	3.905	4.110E-03
.415	9.503E-02	.915	4.875E-01	1.415	6.206E-03	1.915	5.220E-03	2.415	3.944E-03	2.915	4.105E-03	3.415	4.105E-03	3.915	4.105E-03
.425	9.260E-02	.925	1.612E-02	1.425	6.171E-03	1.925	5.203E-03	2.425	3.937E-03	2.925	4.100E-03	3.425	4.100E-03	3.925	4.100E-03
.435	9.030E-02	.935	1.599E-02	1.435	6.136E-03	1.935	5.186E-03	2.435	3.930E-03	2.935	4.095E-03	3.435	4.095E-03	3.935	4.095E-03
.445	8.817E-02	.945	1.585E-02	1.445	6.101E-03	1.945	5.169E-03	2.445	3.923E-03	2.945	4.090E-03	3.445	4.090E-03	3.945	4.090E-03
.455	8.612E-02	.955	1.562E-02	1.455	6.066E-03	1.955	5.152E-03	2.455	3.916E-03	2.955	4.085E-03	3.455	4.085E-03	3.955	4.085E-03
.465	1.262E-01	.965	3.974E-01	1.465	6.031E-03	1.965	5.135E-03	2.465	3.909E-03	2.965	4.080E-03	3.465	4.080E-03	3.965	4.080E-03
.475	7.967E-02	.975	8.415E-03	1.475	6.007E-03	1.975	5.118E-03	2.475	3.902E-03	2.975	4.075E-03	3.475	4.075E-03	3.975	4.075E-03
.485	7.803E-02	.985	8.334E-03	1.485	6.020E-03	1.985	5.101E-03	2.485	3.895E-03	2.985	4.070E-03	3.485	4.070E-03	3.985	4.070E-03
.495	7.646E-02	.995	8.255E-03	1.495	6.001E-03	1.995	5.084E-03	2.495	3.888E-03	2.995	4.065E-03	3.495	4.065E-03	3.995	4.065E-03
.505	7.493E-02	1.005	8.179E-03	1.505	5.975E-03	2.005	5.067E-03	2.505	3.881E-03	3.005	4.060E-03	3.505	4.060E-03	4.005	4.060E-03

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 20, TH, 5.715CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	9.245E-39	.515	2.598E-01	1.015	7.042E-03	1.515	5.738E-03	2.015	4.364E-03	2.515	4.134E-03
.025	3.728E-31	.525	6.054E-02	1.025	7.771E-03	1.525	5.715E-03	2.025	4.378E-03	2.525	4.131E-03
.035	3.998E-24	.535	5.945E-02	1.035	7.701E-03	1.535	5.695E-03	2.035	4.350E-03	2.535	4.126E-03
.045	1.955E-17	.545	5.844E-02	1.045	7.534E-03	1.545	5.674E-03	2.045	4.343E-03	2.545	4.126E-03
.055	4.391E-15	.555	5.744E-02	1.055	7.368E-03	1.555	5.653E-03	2.055	4.335E-03	2.555	4.123E-03
.065	1.935E-09	.565	5.646E-02	1.065	7.205E-03	1.565	5.630E-03	2.065	4.328E-03	2.565	4.120E-03
.075	4.071E-08	.575	5.538E-02	1.075	7.043E-03	1.575	5.601E-03	2.075	4.320E-03	2.575	4.116E-03
.085	1.290E-07	.585	5.438E-02	1.085	7.364E-03	1.585	5.614E-02	2.085	4.313E-03	2.585	4.110E-03
.095	6.363E-02	.595	4.048E-02	1.095	7.327E-03	1.595	4.907E-03	2.095	4.307E-03	2.595	4.097E-03
.105	1.901E-01	.605	3.983E-02	1.105	7.270E-03	1.605	4.890E-03	2.105	4.300E-03	2.605	4.041E-03
.115	3.029E-01	.615	3.921E-02	1.115	7.213E-03	1.615	4.873E-03	2.115	4.294E-03	2.615	4.077E+00
.125	3.650E-01	.625	3.863E-02	1.125	7.157E-03	1.625	4.854E-03	2.125	4.288E-03	2.625	3.
.135	3.855E-01	.635	3.808E-02	1.135	7.103E-03	1.635	4.837E-03	2.135	4.282E-03	2.635	0.
.145	3.890E-01	.645	3.755E-02	1.145	7.051E-03	1.645	4.820E-03	2.145	4.276E-03	2.645	0.
.155	3.815E-01	.655	3.703E-02	1.155	7.000E-03	1.655	4.804E-03	2.155	4.271E-03	2.655	0.
.165	3.704E-01	.665	3.656E-02	1.165	6.952E-03	1.665	4.788E-03	2.165	4.266E-03	2.665	0.
.175	3.626E-01	.675	3.610E-02	1.175	6.904E-03	1.675	4.772E-03	2.175	4.261E-03	2.675	0.
.185	3.497E-01	.685	3.565E-02	1.185	6.856E-03	1.685	4.756E-03	2.185	4.256E-03	2.685	0.
.195	3.337E-01	.695	3.523E-02	1.195	6.811E-03	1.695	4.741E-03	2.195	4.251E-03	2.695	0.
.205	3.357E-01	.705	3.481E-02	1.205	6.767E-03	1.705	4.726E-03	2.205	4.247E-03	2.705	0.
.215	3.009E-01	.715	3.438E-02	1.215	6.724E-03	1.715	4.711E-03	2.215	4.242E-03	2.715	0.
.225	2.845E-01	.725	3.396E-02	1.225	6.680E-03	1.725	4.697E-03	2.225	4.237E-03	2.725	0.
.235	4.157E-01	.735	3.354E-02	1.235	6.638E-03	1.735	4.682E-03	2.235	4.232E-03	2.735	0.
.245	2.279E-01	.745	3.312E-02	1.245	6.596E-03	1.745	4.668E-03	2.245	4.227E-03	2.745	0.
.255	1.988E-01	.755	3.271E-02	1.255	6.554E-03	1.755	4.654E-03	2.255	4.222E-03	2.755	0.
.265	1.874E-01	.765	3.033E-02	1.265	6.516E-03	1.765	4.640E-03	2.265	4.217E-03	2.765	0.
.275	1.932E-01	.775	3.003E-02	1.275	6.477E-03	1.775	4.625E-03	2.275	4.212E-03	2.775	0.
.285	1.648E-01	.785	2.973E-02	1.285	6.439E-03	1.785	4.611E-03	2.285	4.208E-03	2.785	0.
.295	1.567E-01	.795	2.943E-02	1.295	6.402E-03	1.795	4.596E-03	2.295	4.204E-03	2.795	0.
.305	1.652E-01	.805	2.913E-02	1.305	6.366E-03	1.805	4.580E-03	2.305	4.199E-03	2.805	0.
.315	1.402E-01	.815	2.760E-02	1.315	6.330E-03	1.815	4.564E-03	2.315	4.195E-03	2.815	0.
.325	1.514E-01	.825	2.735E-02	1.325	6.295E-03	1.825	4.549E-03	2.325	4.192E-03	2.825	0.
.335	1.893E-01	.835	2.690E-02	1.335	6.261E-03	1.835	4.535E-03	2.335	4.188E-03	2.835	0.
.345	1.128E-01	.845	2.665E-02	1.345	6.227E-03	1.845	4.521E-03	2.345	4.185E-03	2.845	0.
.355	1.086E-01	.855	2.640E-02	1.355	6.195E-03	1.855	4.507E-03	2.355	4.181E-03	2.855	0.
.365	1.047E-01	.865	2.615E-02	1.365	6.163E-03	1.865	4.492E-03	2.365	4.178E-03	2.865	0.
.375	1.011E-01	.875	2.481E-02	1.375	6.133E-03	1.875	4.478E-03	2.375	4.175E-03	2.875	0.
.385	7.780E-02	.885	2.463E-02	1.385	6.100E-03	1.885	4.464E-03	2.385	4.172E-03	2.885	0.
.395	9.478E-02	.895	2.443E-02	1.395	6.070E-03	1.895	4.450E-03	2.395	4.170E-03	2.895	0.
.405	9.201E-02	.905	2.423E-02	1.405	6.040E-03	1.905	4.436E-03	2.405	4.167E-03	2.905	0.
.415	8.944E-02	.915	2.413E-02	1.415	6.011E-03	1.915	4.422E-03	2.415	4.165E-03	2.915	0.
.425	8.707E-02	.925	1.528E-02	1.425	5.982E-03	1.925	4.408E-03	2.425	4.163E-03	2.925	0.
.435	8.404E-02	.935	1.515E-02	1.435	5.953E-03	1.935	4.395E-03	2.435	4.160E-03	2.935	0.
.445	8.277E-02	.945	1.501E-02	1.445	5.925E-03	1.945	4.382E-03	2.445	4.157E-03	2.945	0.
.455	8.079E-02	.955	1.491E-02	1.455	5.897E-03	1.955	4.369E-03	2.455	4.153E-03	2.955	0.
.465	1.121E-01	.965	1.431E-02	1.465	5.845E-03	1.965	4.308E-03	2.465	4.150E-03	2.965	0.
.475	7.477E-02	.975	8.144E-03	1.475	5.842E-03	1.975	4.398E-03	2.475	4.146E-03	2.975	0.
.485	7.317E-02	.985	8.065E-03	1.485	5.814E-03	1.985	4.389E-03	2.485	4.143E-03	2.985	0.
.495	7.147E-02	.995	7.998E-03	1.495	5.787E-03	1.995	4.380E-03	2.495	4.140E-03	2.995	0.
.505	7.016E-02	1.005	7.914E-03	1.505	5.751E-03	2.005	4.372E-03	2.505	4.137E-03	3.005	0.

TOTAL FLUX ENERGY SPECTRA, 30RHHOLE GEOMETRY

CASE 21, I₀ 7.330CM, HATCH, NINE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.012	1.269E-04	.512	2.217E-01	1.015	7.510E-03	1.515	5.479E-03	2.015	4.170E-03	2.515	3.945E-03	3.015	3.945E-03	3.515	3.945E-03
.025	2.314E-01	.525	5.258E-02	1.025	7.443E-03	1.525	5.457E-03	2.025	4.163E-03	2.525	3.942E-03	3.025	3.942E-03	3.525	3.942E-03
.035	2.761E-01	.535	5.485E-02	1.035	7.375E-03	1.535	5.436E-03	2.035	4.156E-03	2.535	3.940E-03	3.035	3.940E-03	3.535	3.940E-03
.045	3.137E-01	.545	5.387E-02	1.045	7.309E-03	1.545	5.416E-03	2.045	4.150E-03	2.545	3.937E-03	3.045	3.937E-03	3.545	3.937E-03
.055	3.437E-01	.555	5.291E-02	1.055	7.245E-03	1.555	5.392E-03	2.055	4.142E-03	2.555	3.935E-03	3.055	3.935E-03	3.555	3.935E-03
.065	3.743E-01	.565	5.198E-02	1.065	7.185E-03	1.565	5.374E-03	2.065	4.135E-03	2.565	3.932E-03	3.065	3.932E-03	3.565	3.932E-03
.075	4.067E-01	.575	5.077E-02	1.075	7.126E-03	1.575	5.346E-03	2.075	4.128E-03	2.575	3.928E-03	3.075	3.928E-03	3.575	3.928E-03
.085	4.417E-01	.585	4.908E-02	1.085	7.069E-03	1.585	5.297E-03	2.085	4.121E-03	2.585	3.923E-03	3.085	3.923E-03	3.585	3.923E-03
.095	4.793E-01	.595	4.775E-02	1.095	7.014E-03	1.595	5.249E-03	2.095	4.114E-03	2.595	3.918E-03	3.095	3.918E-03	3.595	3.918E-03
.105	5.193E-01	.605	4.655E-02	1.105	6.959E-03	1.605	5.200E-03	2.105	4.108E-03	2.605	3.911E-03	3.105	3.911E-03	3.605	3.911E-03
.115	5.617E-01	.615	4.555E-02	1.115	6.903E-03	1.615	5.165E-03	2.115	4.102E-03	2.615	3.906E-03	3.115	3.906E-03	3.615	3.906E-03
.125	6.067E-01	.625	4.475E-02	1.125	6.850E-03	1.625	5.135E-03	2.125	4.096E-03	2.625	3.901E-03	3.125	3.901E-03	3.625	3.901E-03
.135	6.543E-01	.635	4.405E-02	1.135	6.798E-03	1.635	5.105E-03	2.135	4.090E-03	2.635	3.896E-03	3.135	3.896E-03	3.635	3.896E-03
.145	7.047E-01	.645	4.345E-02	1.145	6.747E-03	1.645	5.075E-03	2.145	4.085E-03	2.645	3.891E-03	3.145	3.891E-03	3.645	3.891E-03
.155	7.581E-01	.655	4.295E-02	1.155	6.697E-03	1.655	5.045E-03	2.155	4.079E-03	2.655	3.886E-03	3.155	3.886E-03	3.655	3.886E-03
.165	8.147E-01	.665	4.255E-02	1.165	6.650E-03	1.665	5.015E-03	2.165	4.074E-03	2.665	3.881E-03	3.165	3.881E-03	3.665	3.881E-03
.175	8.747E-01	.675	4.225E-02	1.175	6.605E-03	1.675	4.985E-03	2.175	4.069E-03	2.675	3.876E-03	3.175	3.876E-03	3.675	3.876E-03
.185	9.383E-01	.685	4.205E-02	1.185	6.563E-03	1.685	4.955E-03	2.185	4.065E-03	2.685	3.871E-03	3.185	3.871E-03	3.685	3.871E-03
.195	1.005E-01	.695	4.195E-02	1.195	6.523E-03	1.695	4.925E-03	2.195	4.061E-03	2.695	3.866E-03	3.195	3.866E-03	3.695	3.866E-03
.205	1.083E-01	.705	4.195E-02	1.205	6.485E-03	1.705	4.895E-03	2.205	4.057E-03	2.705	3.861E-03	3.205	3.861E-03	3.705	3.861E-03
.215	1.169E-01	.715	4.195E-02	1.215	6.450E-03	1.715	4.865E-03	2.215	4.053E-03	2.715	3.856E-03	3.215	3.856E-03	3.715	3.856E-03
.225	1.263E-01	.725	4.195E-02	1.225	6.417E-03	1.725	4.835E-03	2.225	4.049E-03	2.725	3.851E-03	3.225	3.851E-03	3.725	3.851E-03
.235	1.365E-01	.735	4.195E-02	1.235	6.386E-03	1.735	4.805E-03	2.235	4.045E-03	2.735	3.846E-03	3.235	3.846E-03	3.735	3.846E-03
.245	1.477E-01	.745	4.195E-02	1.245	6.357E-03	1.745	4.775E-03	2.245	4.041E-03	2.745	3.841E-03	3.245	3.841E-03	3.745	3.841E-03
.255	1.599E-01	.755	4.195E-02	1.255	6.330E-03	1.755	4.745E-03	2.255	4.037E-03	2.755	3.836E-03	3.255	3.836E-03	3.755	3.836E-03
.265	1.731E-01	.765	4.195E-02	1.265	6.305E-03	1.765	4.715E-03	2.265	4.033E-03	2.765	3.831E-03	3.265	3.831E-03	3.765	3.831E-03
.275	1.873E-01	.775	4.195E-02	1.275	6.282E-03	1.775	4.685E-03	2.275	4.029E-03	2.775	3.826E-03	3.275	3.826E-03	3.775	3.826E-03
.285	2.027E-01	.785	4.195E-02	1.285	6.261E-03	1.785	4.655E-03	2.285	4.025E-03	2.785	3.821E-03	3.285	3.821E-03	3.785	3.821E-03
.295	2.193E-01	.795	4.195E-02	1.295	6.242E-03	1.795	4.625E-03	2.295	4.021E-03	2.795	3.816E-03	3.295	3.816E-03	3.795	3.816E-03
.305	2.371E-01	.805	4.195E-02	1.305	6.225E-03	1.805	4.595E-03	2.305	4.017E-03	2.805	3.811E-03	3.305	3.811E-03	3.805	3.811E-03
.315	2.561E-01	.815	4.195E-02	1.315	6.210E-03	1.815	4.565E-03	2.315	4.013E-03	2.815	3.806E-03	3.315	3.806E-03	3.815	3.806E-03
.325	2.763E-01	.825	4.195E-02	1.325	6.196E-03	1.825	4.535E-03	2.325	4.009E-03	2.825	3.801E-03	3.325	3.801E-03	3.825	3.801E-03
.335	2.977E-01	.835	4.195E-02	1.335	6.183E-03	1.835	4.505E-03	2.335	4.005E-03	2.835	3.796E-03	3.335	3.796E-03	3.835	3.796E-03
.345	3.203E-01	.845	4.195E-02	1.345	6.171E-03	1.845	4.475E-03	2.345	4.001E-03	2.845	3.791E-03	3.345	3.791E-03	3.845	3.791E-03
.355	3.441E-01	.855	4.195E-02	1.355	6.160E-03	1.855	4.445E-03	2.355	3.997E-03	2.855	3.786E-03	3.355	3.786E-03	3.855	3.786E-03
.365	3.691E-01	.865	4.195E-02	1.365	6.150E-03	1.865	4.415E-03	2.365	3.992E-03	2.865	3.781E-03	3.365	3.781E-03	3.865	3.781E-03
.375	3.953E-01	.875	4.195E-02	1.375	6.141E-03	1.875	4.385E-03	2.375	3.988E-03	2.875	3.776E-03	3.375	3.776E-03	3.875	3.776E-03
.385	4.227E-01	.885	4.195E-02	1.385	6.133E-03	1.885	4.355E-03	2.385	3.984E-03	2.885	3.771E-03	3.385	3.771E-03	3.885	3.771E-03
.395	4.513E-01	.895	4.195E-02	1.395	6.125E-03	1.895	4.325E-03	2.395	3.980E-03	2.895	3.766E-03	3.395	3.766E-03	3.895	3.766E-03
.405	4.811E-01	.905	4.195E-02	1.405	6.118E-03	1.905	4.295E-03	2.405	3.976E-03	2.905	3.761E-03	3.405	3.761E-03	3.905	3.761E-03
.415	5.121E-01	.915	4.195E-02	1.415	6.112E-03	1.915	4.265E-03	2.415	3.972E-03	2.915	3.756E-03	3.415	3.756E-03	3.915	3.756E-03
.425	5.443E-01	.925	4.195E-02	1.425	6.107E-03	1.925	4.235E-03	2.425	3.968E-03	2.925	3.751E-03	3.425	3.751E-03	3.925	3.751E-03
.435	5.777E-01	.935	4.195E-02	1.435	6.103E-03	1.935	4.205E-03	2.435	3.964E-03	2.935	3.746E-03	3.435	3.746E-03	3.935	3.746E-03
.445	6.123E-01	.945	4.195E-02	1.445	6.100E-03	1.945	4.175E-03	2.445	3.960E-03	2.945	3.741E-03	3.445	3.741E-03	3.945	3.741E-03
.455	6.481E-01	.955	4.195E-02	1.455	6.097E-03	1.955	4.145E-03	2.455	3.956E-03	2.955	3.736E-03	3.455	3.736E-03	3.955	3.736E-03
.465	6.851E-01	.965	4.195E-02	1.465	6.095E-03	1.965	4.115E-03	2.465	3.952E-03	2.965	3.731E-03	3.465	3.731E-03	3.965	3.731E-03
.475	7.233E-01	.975	4.195E-02	1.475	6.093E-03	1.975	4.085E-03	2.475	3.948E-03	2.975	3.726E-03	3.475	3.726E-03	3.975	3.726E-03
.485	7.627E-01	.985	4.195E-02	1.485	6.091E-03	1.985	4.055E-03	2.485	3.944E-03	2.985	3.721E-03	3.485	3.721E-03	3.985	3.721E-03
.495	8.033E-01	.995	4.195E-02	1.495	6.089E-03	1.995	4.025E-03	2.495	3.940E-03	2.995	3.716E-03	3.495	3.716E-03	3.995	3.716E-03
.505	8.451E-01	1.005	4.195E-02	1.505	6.087E-03	2.005	4.000E-03	2.505	3.936E-03	3.005	3.711E-03	3.505	3.711E-03	4.005	3.711E-03

TOTAL FLUX ENERGY SPECTRUM, FOREHOLE GEOMETRY
CASE 22, TH, 10.16CM, 4ATERN, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	5.253E-09	0.515	1.931E-01	1.015	7.162E-03	1.515	5.210E-03	2.015	3.971E-03	2.515	3.733E-03		
0.025	2.913E-31	0.525	5.132E-02	1.025	7.047E-03	1.525	5.190E-03	2.025	3.964E-03	2.525	3.730E-03		
0.035	2.594E-24	0.535	5.034E-02	1.035	7.032E-03	1.535	5.169E-03	2.035	3.958E-03	2.535	3.748E-03		
0.045	1.932E-17	0.545	4.941E-02	1.045	6.969E-03	1.545	5.150E-03	2.045	3.951E-03	2.545	3.745E-03		
0.055	3.571E-15	0.555	4.849E-02	1.055	6.904E-03	1.555	5.130E-03	2.055	3.944E-03	2.555	3.743E-03		
0.065	3.507E-09	0.565	4.761E-02	1.065	6.850E-03	1.565	5.110E-03	2.065	3.937E-03	2.565	3.740E-03		
0.075	3.232E-04	0.575	4.687E-02	1.075	6.793E-03	1.575	5.084E-03	2.075	3.930E-03	2.575	3.736E-03		
0.085	1.954E-07	0.585	4.613E-02	1.085	6.738E-03	1.585	5.064E-03	2.085	3.923E-03	2.585	3.731E-03		
0.095	4.760E-02	0.595	3.503E-02	1.095	6.685E-03	1.595	5.042E-03	2.095	3.917E-03	2.595	3.721E-03		
0.105	1.541E-01	0.605	3.444E-02	1.105	6.633E-03	1.605	5.022E-03	2.105	3.911E-03	2.605	3.676E-03		
0.115	2.526E-01	0.615	3.388E-02	1.115	6.579E-03	1.615	4.966E-03	2.115	3.905E-03	2.615	8.436E-01		
0.125	3.040E-01	0.625	3.335E-02	1.125	6.528E-03	1.625	4.949E-03	2.125	3.899E-03	2.625	0.		
0.135	3.209E-01	0.635	3.284E-02	1.135	6.478E-03	1.635	4.933E-03	2.135	3.893E-03	2.635	0.		
0.145	3.234E-01	0.645	3.235E-02	1.145	6.430E-03	1.645	4.917E-03	2.145	3.887E-03	2.645	0.		
0.155	3.172E-01	0.655	3.189E-02	1.155	6.383E-03	1.655	4.902E-03	2.155	3.883E-03	2.655	0.		
0.165	3.073E-01	0.665	3.144E-02	1.165	6.338E-03	1.665	4.887E-03	2.165	3.878E-03	2.665	0.		
0.175	2.995E-01	0.675	3.102E-02	1.175	6.293E-03	1.675	4.872E-03	2.175	3.873E-03	2.675	0.		
0.185	2.933E-01	0.685	3.061E-02	1.185	6.250E-03	1.685	4.857E-03	2.185	3.869E-03	2.685	0.		
0.195	2.730E-01	0.695	3.022E-02	1.195	6.207E-03	1.695	4.842E-03	2.195	3.864E-03	2.695	0.		
0.205	2.685E-01	0.705	2.983E-02	1.205	6.167E-03	1.705	4.827E-03	2.205	3.860E-03	2.705	0.		
0.215	2.642E-01	0.715	2.944E-02	1.215	6.127E-03	1.715	4.812E-03	2.215	3.855E-03	2.715	0.		
0.225	2.601E-01	0.725	2.905E-02	1.225	6.087E-03	1.725	4.797E-03	2.225	3.851E-03	2.725	0.		
0.235	2.561E-01	0.735	2.869E-02	1.235	6.047E-03	1.735	4.782E-03	2.235	3.846E-03	2.735	0.		
0.245	1.560E-01	0.745	2.834E-02	1.245	6.008E-03	1.745	4.767E-03	2.245	3.842E-03	2.745	0.		
0.255	1.559E-01	0.755	2.800E-02	1.255	5.971E-03	1.755	4.752E-03	2.255	3.837E-03	2.755	0.		
0.265	1.567E-01	0.765	2.767E-02	1.265	5.934E-03	1.765	4.737E-03	2.265	3.832E-03	2.765	0.		
0.275	1.567E-01	0.775	2.732E-02	1.275	5.898E-03	1.775	4.722E-03	2.275	3.828E-03	2.775	0.		
0.285	1.561E-01	0.785	2.699E-02	1.285	5.862E-03	1.785	4.707E-03	2.285	3.824E-03	2.785	0.		
0.295	1.539E-01	0.795	2.667E-02	1.295	5.828E-03	1.795	4.692E-03	2.295	3.819E-03	2.795	0.		
0.305	1.539E-01	0.805	2.636E-02	1.305	5.794E-03	1.805	4.677E-03	2.305	3.815E-03	2.805	0.		
0.315	1.514E-01	0.815	2.606E-02	1.315	5.761E-03	1.815	4.662E-03	2.315	3.812E-03	2.815	0.		
0.325	1.522E-01	0.825	2.576E-02	1.325	5.728E-03	1.825	4.647E-03	2.325	3.808E-03	2.825	0.		
0.335	1.509E-01	0.835	2.546E-02	1.335	5.697E-03	1.835	4.632E-03	2.335	3.805E-03	2.835	0.		
0.345	9.542E-02	0.845	2.516E-02	1.345	5.665E-03	1.845	4.617E-03	2.345	3.801E-03	2.845	0.		
0.355	9.274E-02	0.855	2.486E-02	1.355	5.633E-03	1.855	4.602E-03	2.355	3.798E-03	2.855	0.		
0.365	8.933E-02	0.865	2.456E-02	1.365	5.600E-03	1.865	4.587E-03	2.365	3.795E-03	2.865	0.		
0.375	8.630E-02	0.875	2.426E-02	1.375	5.567E-03	1.875	4.572E-03	2.375	3.792E-03	2.875	0.		
0.385	8.340E-02	0.885	2.396E-02	1.385	5.534E-03	1.885	4.557E-03	2.385	3.790E-03	2.885	0.		
0.395	8.076E-02	0.895	2.366E-02	1.395	5.501E-03	1.895	4.542E-03	2.395	3.787E-03	2.895	0.		
0.405	7.832E-02	0.905	2.336E-02	1.405	5.469E-03	1.905	4.527E-03	2.405	3.785E-03	2.905	0.		
0.415	7.603E-02	0.915	2.306E-02	1.415	5.436E-03	1.915	4.512E-03	2.415	3.783E-03	2.915	0.		
0.425	7.395E-02	0.925	2.276E-02	1.425	5.403E-03	1.925	4.497E-03	2.425	3.781E-03	2.925	0.		
0.435	7.196E-02	0.935	2.246E-02	1.435	5.370E-03	1.935	4.482E-03	2.435	3.778E-03	2.935	0.		
0.445	7.011E-02	0.945	2.216E-02	1.445	5.337E-03	1.945	4.467E-03	2.445	3.775E-03	2.945	0.		
0.455	6.833E-02	0.955	2.186E-02	1.455	5.304E-03	1.955	4.452E-03	2.455	3.771E-03	2.955	0.		
0.465	6.661E-02	0.965	2.156E-02	1.465	5.271E-03	1.965	4.437E-03	2.465	3.768E-03	2.965	0.		
0.475	6.493E-02	0.975	2.126E-02	1.475	5.238E-03	1.975	4.422E-03	2.475	3.765E-03	2.975	0.		
0.485	6.331E-02	0.985	2.096E-02	1.485	5.205E-03	1.985	4.407E-03	2.485	3.762E-03	2.985	0.		
0.495	6.167E-02	0.995	2.066E-02	1.495	5.172E-03	1.995	4.392E-03	2.495	3.759E-03	2.995	0.		
0.505	5.991E-02	1.005	2.036E-02	1.505	5.139E-03	2.005	4.377E-03	2.505	3.756E-03	3.005	0.		

TOTAL FLUX ENERGY SPECTRUM, 4JREHOLE GEOMETRY

CASE 23, TH, 12.70CM, MATFR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.05	1.245E-04	0.15	1.645E-01	1.015	6.755E-03	1.515	4.900E-03	2.015	3.741E-03	2.515	3.532E-03
0.07	1.723E-01	0.25	4.631E-02	1.035	6.691E-03	1.525	4.881E-03	2.025	3.735E-03	2.525	3.529E-03
0.09	2.230E-04	0.35	4.539E-02	1.055	6.630E-03	1.535	4.862E-03	2.035	3.728E-03	2.535	3.527E-03
0.11	1.733E-01	0.45	4.452E-02	1.075	6.570E-03	1.545	4.843E-03	2.045	3.722E-03	2.545	3.524E-03
0.13	3.223E-05	0.55	4.357E-02	1.095	6.513E-03	1.555	4.824E-03	2.055	3.715E-03	2.555	3.522E-03
0.15	1.303E-04	0.65	4.264E-02	1.115	6.457E-03	1.565	4.805E-03	2.065	3.708E-03	2.565	3.519E-03
0.17	2.901E-04	0.75	4.178E-02	1.135	6.404E-03	1.575	4.781E-03	2.075	3.702E-03	2.575	3.516E-03
0.19	4.741E-04	0.85	4.092E-02	1.155	6.352E-03	1.585	4.762E-02	2.085	3.695E-03	2.585	3.512E-03
0.21	4.277E-02	0.95	4.194E-02	1.175	6.302E-03	1.595	4.722E-03	2.095	3.689E-03	2.595	3.510E-03
0.23	1.463E-01	1.05	3.349E-02	1.195	6.252E-03	1.605	4.709E-03	2.105	3.683E-03	2.605	3.502E-03
0.25	2.251E-01	1.15	3.040E-02	1.215	6.201E-03	1.615	4.193E-03	2.115	3.677E-03	2.615	3.462E-03
0.27	2.706E-01	1.25	2.943E-02	1.235	6.152E-03	1.625	4.178E-03	2.125	3.672E-03	2.625	0.
0.29	2.881E-01	1.35	2.846E-02	1.255	6.105E-03	1.635	4.162E-03	2.135	3.667E-03	2.635	0.
0.31	2.321E-01	1.45	2.749E-02	1.275	6.059E-03	1.645	4.147E-03	2.145	3.662E-03	2.645	0.
0.33	2.733E-01	1.55	2.652E-02	1.295	6.015E-03	1.655	4.133E-03	2.155	3.657E-03	2.655	0.
0.35	2.542E-01	1.65	2.554E-02	1.315	5.972E-03	1.665	4.119E-03	2.165	3.652E-03	2.665	0.
0.37	2.442E-01	1.75	2.457E-02	1.335	5.930E-03	1.675	4.105E-03	2.175	3.647E-03	2.675	0.
0.39	2.343E-01	1.85	2.360E-02	1.355	5.888E-03	1.685	4.091E-03	2.185	3.643E-03	2.685	0.
0.41	2.244E-01	1.95	2.263E-02	1.375	5.846E-03	1.695	4.077E-03	2.195	3.639E-03	2.695	0.
0.43	2.145E-01	2.05	2.166E-02	1.395	5.804E-03	1.705	4.064E-03	2.205	3.635E-03	2.705	0.
0.45	2.046E-01	2.15	2.069E-02	1.415	5.762E-03	1.715	4.051E-03	2.215	3.630E-03	2.715	0.
0.47	1.947E-01	2.25	1.972E-02	1.435	5.720E-03	1.725	4.038E-03	2.225	3.626E-03	2.725	0.
0.49	1.848E-01	2.35	1.875E-02	1.455	5.678E-03	1.735	4.025E-03	2.235	3.622E-03	2.735	0.
0.51	1.749E-01	2.45	1.778E-02	1.475	5.636E-03	1.745	4.012E-03	2.245	3.617E-03	2.745	0.
0.53	1.650E-01	2.55	1.681E-02	1.495	5.594E-03	1.755	3.999E-03	2.255	3.613E-03	2.755	0.
0.55	1.551E-01	2.65	1.584E-02	1.515	5.552E-03	1.765	3.987E-03	2.265	3.608E-03	2.765	0.
0.57	1.452E-01	2.75	1.487E-02	1.535	5.510E-03	1.775	3.975E-03	2.275	3.604E-03	2.775	0.
0.59	1.353E-01	2.85	1.390E-02	1.555	5.468E-03	1.785	3.962E-03	2.285	3.600E-03	2.785	0.
0.61	1.254E-01	2.95	1.293E-02	1.575	5.426E-03	1.795	3.950E-03	2.295	3.596E-03	2.795	0.
0.63	1.155E-01	3.05	1.196E-02	1.595	5.384E-03	1.805	3.941E-03	2.305	3.592E-03	2.805	0.
0.65	1.056E-01	3.15	1.099E-02	1.615	5.342E-03	1.815	3.929E-03	2.315	3.588E-03	2.815	0.
0.67	957E-02	3.25	1.002E-02	1.635	5.300E-03	1.825	3.918E-03	2.325	3.585E-03	2.825	0.
0.69	858E-02	3.35	905E-03	1.655	5.258E-03	1.835	3.907E-03	2.335	3.582E-03	2.835	0.
0.71	759E-02	3.45	808E-03	1.675	5.216E-03	1.845	3.897E-03	2.345	3.578E-03	2.845	0.
0.73	660E-02	3.55	711E-03	1.695	5.174E-03	1.855	3.886E-03	2.355	3.575E-03	2.855	0.
0.75	561E-02	3.65	614E-03	1.715	5.132E-03	1.865	3.876E-03	2.365	3.572E-03	2.865	0.
0.77	462E-02	3.75	517E-03	1.735	5.090E-03	1.875	3.866E-03	2.375	3.570E-03	2.875	0.
0.79	363E-02	3.85	420E-03	1.755	5.048E-03	1.885	3.855E-03	2.385	3.567E-03	2.885	0.
0.81	264E-02	3.95	323E-03	1.775	5.006E-03	1.895	3.845E-03	2.395	3.565E-03	2.895	0.
0.83	165E-02	4.05	226E-03	1.795	4.964E-03	1.905	3.836E-03	2.405	3.563E-03	2.905	0.
0.85	66E-02	4.15	129E-03	1.815	4.922E-03	1.915	3.826E-03	2.415	3.560E-03	2.915	0.
0.87	16E-02	4.25	32E-03	1.835	4.880E-03	1.925	3.816E-03	2.425	3.558E-03	2.925	0.
0.89	1E-02	4.35	2E-03	1.855	4.838E-03	1.935	3.805E-03	2.435	3.556E-03	2.935	0.
0.91	0.	4.45	1E-03	1.875	4.796E-03	1.945	3.795E-03	2.445	3.553E-03	2.945	0.
0.93	0.	4.55	0.	1.895	4.754E-03	1.955	3.786E-03	2.455	3.549E-03	2.955	0.
0.95	0.	4.65	0.	1.915	4.712E-03	1.965	3.776E-03	2.465	3.546E-03	2.965	0.
0.97	0.	4.75	0.	1.935	4.670E-03	1.975	3.767E-03	2.475	3.543E-03	2.975	0.
0.99	0.	4.85	0.	1.955	4.628E-03	1.985	3.757E-03	2.485	3.540E-03	2.985	0.
1.01	0.	4.95	0.	1.975	4.586E-03	1.995	3.748E-03	2.495	3.537E-03	2.995	0.
1.03	0.	5.05	0.	2.005	4.544E-03	2.005	3.748E-03	2.505	3.534E-03	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, FOREHOLE GEOMETRY
CASE 24, T4, 5.715CM, AIR, 0.32CM FE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	4.170E-13	.015	2.708E-01	1.015	7.876E-03	1.515	5.739E-03	2.015	4.367E-03	2.515	4.126E-03
.025	2.373E-07	.025	6.100E-02	1.025	7.805E-03	1.525	5.737E-03	2.025	4.360E-03	2.525	4.123E-03
.035	1.075E-06	.035	5.925E-02	1.035	7.735E-03	1.535	5.715E-03	2.035	4.353E-03	2.535	4.120E-03
.045	1.216E-04	.045	5.793E-02	1.045	7.667E-03	1.545	5.693E-03	2.045	4.345E-03	2.545	4.117E-03
.055	2.732E-03	.055	5.743E-02	1.055	7.601E-03	1.555	5.672E-03	2.055	4.338E-03	2.555	4.114E-03
.065	1.621E-02	.065	5.690E-02	1.065	7.538E-03	1.565	5.648E-03	2.065	4.330E-03	2.565	4.110E-03
.075	2.600E-02	.075	5.617E-02	1.075	7.477E-03	1.575	5.617E-03	2.075	4.323E-03	2.575	4.105E-03
.085	4.321E-02	.085	5.531E-02	1.085	7.417E-03	1.585	5.587E-03	2.085	4.315E-03	2.585	4.098E-03
.095	1.304E-01	.095	5.479E-02	1.095	7.360E-03	1.595	5.566E-03	2.095	4.308E-03	2.595	4.091E-03
.105	2.113E-01	.105	5.401E-02	1.105	7.303E-03	1.605	5.546E-03	2.105	4.302E-03	2.605	4.085E-03
.115	2.317E-01	.115	5.323E-02	1.115	7.245E-03	1.615	5.526E-03	2.115	4.295E-03	2.615	4.080E-03
.125	3.335E-01	.125	5.245E-02	1.125	7.187E-03	1.625	5.506E-03	2.125	4.289E-03	2.625	4.075E-03
.135	3.521E-01	.135	5.167E-02	1.135	7.129E-03	1.635	5.486E-03	2.135	4.283E-03	2.635	4.070E-03
.145	3.593E-01	.145	5.089E-02	1.145	7.071E-03	1.645	5.466E-03	2.145	4.277E-03	2.645	4.065E-03
.155	3.665E-01	.155	5.011E-02	1.155	7.013E-03	1.655	5.446E-03	2.155	4.271E-03	2.655	4.060E-03
.165	3.737E-01	.165	4.933E-02	1.165	6.955E-03	1.665	5.426E-03	2.165	4.265E-03	2.665	4.055E-03
.175	3.809E-01	.175	4.855E-02	1.175	6.897E-03	1.675	5.406E-03	2.175	4.259E-03	2.675	4.050E-03
.185	3.881E-01	.185	4.777E-02	1.185	6.839E-03	1.685	5.386E-03	2.185	4.253E-03	2.685	4.045E-03
.195	3.953E-01	.195	4.699E-02	1.195	6.781E-03	1.695	5.366E-03	2.195	4.247E-03	2.695	4.040E-03
.205	3.271E-01	.205	4.621E-02	1.205	6.723E-03	1.705	5.346E-03	2.205	4.241E-03	2.705	4.035E-03
.215	2.942E-01	.215	4.543E-02	1.215	6.665E-03	1.715	5.326E-03	2.215	4.235E-03	2.715	4.030E-03
.225	2.789E-01	.225	4.465E-02	1.225	6.607E-03	1.725	5.306E-03	2.225	4.229E-03	2.725	4.025E-03
.235	4.123E-01	.235	4.387E-02	1.235	6.549E-03	1.735	5.286E-03	2.235	4.223E-03	2.735	4.020E-03
.245	2.522E-01	.245	4.309E-02	1.245	6.491E-03	1.745	5.266E-03	2.245	4.217E-03	2.745	4.015E-03
.255	1.755E-01	.255	4.231E-02	1.255	6.433E-03	1.755	5.246E-03	2.255	4.211E-03	2.755	4.010E-03
.265	1.956E-01	.265	4.153E-02	1.265	6.375E-03	1.765	5.226E-03	2.265	4.205E-03	2.765	4.005E-03
.275	1.923E-01	.275	4.075E-02	1.275	6.317E-03	1.775	5.206E-03	2.275	4.199E-03	2.775	4.000E-03
.285	1.539E-01	.285	4.000E-02	1.285	6.259E-03	1.785	5.186E-03	2.285	4.193E-03	2.785	3.995E-03
.295	1.539E-01	.295	3.922E-02	1.295	6.201E-03	1.795	5.166E-03	2.295	4.187E-03	2.795	3.990E-03
.305	1.560E-01	.305	3.844E-02	1.305	6.143E-03	1.805	5.146E-03	2.305	4.181E-03	2.805	3.985E-03
.315	1.334E-01	.315	3.766E-02	1.315	6.085E-03	1.815	5.126E-03	2.315	4.175E-03	2.815	3.980E-03
.325	1.217E-01	.325	3.688E-02	1.325	6.027E-03	1.825	5.106E-03	2.325	4.169E-03	2.825	3.975E-03
.335	1.212E-01	.335	3.610E-02	1.335	5.969E-03	1.835	5.086E-03	2.335	4.163E-03	2.835	3.970E-03
.345	1.212E-01	.345	3.532E-02	1.345	5.911E-03	1.845	5.066E-03	2.345	4.157E-03	2.845	3.965E-03
.355	1.088E-01	.355	3.454E-02	1.355	5.853E-03	1.855	5.046E-03	2.355	4.151E-03	2.855	3.960E-03
.365	1.050E-01	.365	3.376E-02	1.365	5.795E-03	1.865	5.026E-03	2.365	4.145E-03	2.865	3.955E-03
.375	1.015E-01	.375	3.298E-02	1.375	5.737E-03	1.875	5.006E-03	2.375	4.139E-03	2.875	3.950E-03
.385	9.812E-02	.385	3.220E-02	1.385	5.679E-03	1.885	4.986E-03	2.385	4.133E-03	2.885	3.945E-03
.395	9.331E-02	.395	3.142E-02	1.395	5.621E-03	1.895	4.966E-03	2.395	4.127E-03	2.895	3.940E-03
.405	9.237E-02	.405	3.064E-02	1.405	5.563E-03	1.905	4.946E-03	2.405	4.121E-03	2.905	3.935E-03
.415	9.017E-02	.415	2.986E-02	1.415	5.505E-03	1.915	4.926E-03	2.415	4.115E-03	2.915	3.930E-03
.425	9.705E-02	.425	2.908E-02	1.425	5.447E-03	1.925	4.906E-03	2.425	4.109E-03	2.925	3.925E-03
.435	9.555E-02	.435	2.830E-02	1.435	5.389E-03	1.935	4.886E-03	2.435	4.103E-03	2.935	3.920E-03
.445	9.535E-02	.445	2.752E-02	1.445	5.331E-03	1.945	4.866E-03	2.445	4.097E-03	2.945	3.915E-03
.455	1.137E-02	.455	2.674E-02	1.455	5.273E-03	1.955	4.846E-03	2.455	4.091E-03	2.955	3.910E-03
.465	1.143E-01	.465	2.596E-02	1.465	5.215E-03	1.965	4.826E-03	2.465	4.085E-03	2.965	3.905E-03
.475	7.759E-02	.475	2.518E-02	1.475	5.157E-03	1.975	4.806E-03	2.475	4.079E-03	2.975	3.900E-03
.485	7.110E-02	.485	2.440E-02	1.485	5.099E-03	1.985	4.786E-03	2.485	4.073E-03	2.985	3.895E-03
.495	7.251E-02	.495	2.362E-02	1.495	5.041E-03	1.995	4.766E-03	2.495	4.067E-03	2.995	3.890E-03
.505	7.107E-02	.505	2.284E-02	1.505	5.083E-03	2.005	4.746E-03	2.505	4.061E-03	3.005	3.885E-03

TOTAL FLUX ENERGY SPECTRUM, JUKEMULÉ GEOMETRY

CASE 2b, Td, 5.715C4, AIR, 0.32CM PVC

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.847E-10	.515	2.956E-01	1.015	8.142E-03	1.515	5.961E-03	2.015	4.223E-03	2.515	4.283E-03	3.015	4.280E-03	3.515	4.280E-03
.025	6.747E-08	.525	6.475E-02	1.025	8.069E-03	1.525	5.939E-03	2.025	4.216E-03	2.525	4.280E-03	3.025	4.280E-03	3.525	4.280E-03
.035	9.072E-24	.535	6.393E-02	1.035	7.996E-03	1.535	5.916E-03	2.035	4.508E-03	2.535	4.278E-03	3.035	4.278E-03	3.535	4.278E-03
.045	2.250E-17	.545	6.277E-02	1.045	7.926E-03	1.545	5.894E-03	2.045	4.501E-03	2.545	4.275E-03	3.045	4.275E-03	3.545	4.275E-03
.055	1.170E-15	.555	6.172E-02	1.055	7.859E-03	1.555	5.872E-03	2.055	4.493E-03	2.555	4.272E-03	3.055	4.272E-03	3.555	4.272E-03
.065	2.133E-03	.565	6.069E-02	1.065	7.792E-03	1.565	5.849E-03	2.065	4.485E-03	2.565	4.269E-03	3.065	4.269E-03	3.565	4.269E-03
.075	4.524E-04	.575	5.952E-02	1.075	7.729E-03	1.575	5.817E-03	2.075	4.478E-03	2.575	4.266E-03	3.075	4.266E-03	3.575	4.266E-03
.085	1.417E-07	.585	5.839E-01	1.085	7.668E-03	1.585	5.792E-03	2.085	4.471E-03	2.585	4.263E-03	3.085	4.263E-03	3.585	4.263E-03
.095	7.233E-02	.595	4.304E-02	1.095	7.605E-03	1.595	5.767E-03	2.095	4.464E-03	2.595	4.259E-03	3.095	4.259E-03	3.595	4.259E-03
.105	2.117E-01	.605	4.235E-02	1.105	7.549E-03	1.605	5.742E-03	2.105	4.457E-03	2.605	4.256E-03	3.105	4.256E-03	3.605	4.256E-03
.115	3.314E-01	.615	4.172E-02	1.115	7.490E-03	1.615	5.715E-03	2.115	4.450E-03	2.615	4.253E-03	3.115	4.253E-03	3.615	4.253E-03
.125	3.992E-01	.625	4.111E-02	1.125	7.432E-03	1.625	5.688E-03	2.125	4.444E-03	2.625	4.250E-03	3.125	4.250E-03	3.625	4.250E-03
.135	4.216E-01	.635	4.054E-02	1.135	7.376E-03	1.635	5.665E-03	2.135	4.438E-03	2.635	4.247E-03	3.135	4.247E-03	3.635	4.247E-03
.145	4.253E-01	.645	4.000E-02	1.145	7.322E-03	1.645	5.643E-03	2.145	4.432E-03	2.645	4.244E-03	3.145	4.244E-03	3.645	4.244E-03
.155	4.164E-01	.655	3.945E-02	1.155	7.270E-03	1.655	5.621E-03	2.155	4.426E-03	2.655	4.241E-03	3.155	4.241E-03	3.655	4.241E-03
.165	4.045E-01	.665	3.890E-02	1.165	7.219E-03	1.665	5.599E-03	2.165	4.420E-03	2.665	4.238E-03	3.165	4.238E-03	3.665	4.238E-03
.175	3.964E-01	.675	3.834E-02	1.175	7.169E-03	1.675	5.577E-03	2.175	4.414E-03	2.675	4.235E-03	3.175	4.235E-03	3.675	4.235E-03
.185	3.937E-01	.685	3.779E-02	1.185	7.119E-03	1.685	5.555E-03	2.185	4.408E-03	2.685	4.232E-03	3.185	4.232E-03	3.685	4.232E-03
.195	3.870E-01	.695	3.724E-02	1.195	7.070E-03	1.695	5.533E-03	2.195	4.402E-03	2.695	4.229E-03	3.195	4.229E-03	3.695	4.229E-03
.205	3.769E-01	.705	3.669E-02	1.205	7.021E-03	1.705	5.511E-03	2.205	4.396E-03	2.705	4.226E-03	3.205	4.226E-03	3.705	4.226E-03
.215	3.635E-01	.715	3.614E-02	1.215	6.972E-03	1.715	5.489E-03	2.215	4.390E-03	2.715	4.223E-03	3.215	4.223E-03	3.715	4.223E-03
.225	3.462E-01	.725	3.559E-02	1.225	6.923E-03	1.725	5.467E-03	2.225	4.384E-03	2.725	4.220E-03	3.225	4.220E-03	3.725	4.220E-03
.235	3.493E-01	.735	3.504E-02	1.235	6.874E-03	1.735	5.445E-03	2.235	4.378E-03	2.735	4.217E-03	3.235	4.217E-03	3.735	4.217E-03
.245	2.513E-01	.745	3.449E-02	1.245	6.825E-03	1.745	5.423E-03	2.245	4.372E-03	2.745	4.214E-03	3.245	4.214E-03	3.745	4.214E-03
.255	2.152E-01	.755	3.394E-02	1.255	6.776E-03	1.755	5.401E-03	2.255	4.366E-03	2.755	4.211E-03	3.255	4.211E-03	3.755	4.211E-03
.265	2.036E-01	.765	3.234E-02	1.265	6.727E-03	1.765	5.379E-03	2.265	4.360E-03	2.765	4.208E-03	3.265	4.208E-03	3.765	4.208E-03
.275	2.134E-01	.775	3.203E-02	1.275	6.678E-03	1.775	5.357E-03	2.275	4.354E-03	2.775	4.205E-03	3.275	4.205E-03	3.775	4.205E-03
.285	1.735E-01	.785	3.171E-02	1.285	6.629E-03	1.785	5.335E-03	2.285	4.348E-03	2.785	4.202E-03	3.285	4.202E-03	3.785	4.202E-03
.295	1.577E-01	.795	3.140E-02	1.295	6.580E-03	1.795	5.313E-03	2.295	4.342E-03	2.795	4.199E-03	3.295	4.199E-03	3.795	4.199E-03
.305	1.327E-01	.805	2.942E-02	1.305	6.531E-03	1.805	5.291E-03	2.305	4.336E-03	2.805	4.196E-03	3.305	4.196E-03	3.805	4.196E-03
.315	1.235E-01	.815	2.942E-02	1.315	6.482E-03	1.815	5.269E-03	2.315	4.330E-03	2.815	4.193E-03	3.315	4.193E-03	3.815	4.193E-03
.325	1.076E-01	.825	2.893E-02	1.325	6.433E-03	1.825	5.247E-03	2.325	4.324E-03	2.825	4.190E-03	3.325	4.190E-03	3.825	4.190E-03
.335	2.191E-01	.835	2.844E-02	1.335	6.384E-03	1.835	5.225E-03	2.335	4.318E-03	2.835	4.187E-03	3.335	4.187E-03	3.835	4.187E-03
.345	1.213E-01	.845	2.848E-02	1.345	6.335E-03	1.845	5.203E-03	2.345	4.312E-03	2.845	4.184E-03	3.345	4.184E-03	3.845	4.184E-03
.355	1.154E-01	.855	2.809E-02	1.355	6.286E-03	1.855	5.181E-03	2.355	4.306E-03	2.855	4.181E-03	3.355	4.181E-03	3.855	4.181E-03
.365	1.122E-01	.865	2.824E-02	1.365	6.237E-03	1.865	5.159E-03	2.365	4.300E-03	2.865	4.178E-03	3.365	4.178E-03	3.865	4.178E-03
.375	1.084E-01	.875	2.667E-02	1.375	6.188E-03	1.875	5.137E-03	2.375	4.294E-03	2.875	4.175E-03	3.375	4.175E-03	3.875	4.175E-03
.385	1.049E-01	.885	2.627E-02	1.385	6.139E-03	1.885	5.115E-03	2.385	4.288E-03	2.885	4.172E-03	3.385	4.172E-03	3.885	4.172E-03
.395	1.017E-01	.895	2.606E-02	1.395	6.090E-03	1.895	5.093E-03	2.395	4.282E-03	2.895	4.169E-03	3.395	4.169E-03	3.895	4.169E-03
.405	9.871E-02	.905	2.573E-02	1.405	6.041E-03	1.905	5.071E-03	2.405	4.276E-03	2.905	4.166E-03	3.405	4.166E-03	3.905	4.166E-03
.415	9.599E-02	.915	4.916E-01	1.415	6.245E-03	1.915	5.049E-03	2.415	4.270E-03	2.915	4.163E-03	3.415	4.163E-03	3.915	4.163E-03
.425	9.349E-02	.925	1.613E-02	1.425	6.214E-03	1.925	5.027E-03	2.425	4.264E-03	2.925	4.160E-03	3.425	4.160E-03	3.925	4.160E-03
.435	9.114E-02	.935	1.602E-02	1.435	6.165E-03	1.935	5.005E-03	2.435	4.258E-03	2.935	4.157E-03	3.435	4.157E-03	3.935	4.157E-03
.445	8.559E-02	.945	1.558E-02	1.445	6.116E-03	1.945	4.983E-03	2.445	4.252E-03	2.945	4.154E-03	3.445	4.154E-03	3.945	4.154E-03
.455	8.087E-02	.955	1.506E-02	1.455	6.067E-03	1.955	4.961E-03	2.455	4.246E-03	2.955	4.151E-03	3.455	4.151E-03	3.955	4.151E-03
.465	1.274E-01	.965	4.037E-01	1.465	6.018E-03	1.965	4.939E-03	2.465	4.240E-03	2.965	4.148E-03	3.465	4.148E-03	3.965	4.148E-03
.475	9.034E-02	.975	8.455E-03	1.475	6.069E-03	1.975	4.917E-03	2.475	4.234E-03	2.975	4.145E-03	3.475	4.145E-03	3.975	4.145E-03
.485	7.067E-02	.985	8.374E-03	1.485	6.040E-03	1.985	4.895E-03	2.485	4.228E-03	2.985	4.142E-03	3.485	4.142E-03	3.985	4.142E-03
.495	7.707E-02	.995	8.294E-03	1.495	6.011E-03	1.995	4.873E-03	2.495	4.222E-03	2.995	4.139E-03	3.495	4.139E-03	3.995	4.139E-03
.505	7.544E-02	1.005	8.217E-03	1.505	5.985E-03	2.005	4.851E-03	2.505	4.216E-03	3.005	4.136E-03	3.505	4.136E-03	4.005	4.136E-03

TOTAL FLUX ENERGY SPECTRUM 1, 3 JREHOLE GEOMETRY

CASE 26, 14, 5.71504, AIR, J.79CM PVC

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.05	4.579E-11	0.15	2.844E-01	1.015	8.049E-03	1.515	5.890E-03	2.015	4.471E-03	2.515	4.233E-03
0.06	2.323E-07	0.16	5.355E-02	1.025	7.975E-03	1.525	5.867E-03	2.025	4.463E-03	2.525	4.230E-03
0.07	6.307E-06	0.17	2.245E-02	1.035	7.704E-03	1.535	5.845E-03	2.035	4.456E-03	2.535	4.227E-03
0.08	2.219E-17	0.18	6.140E-02	1.045	7.435E-03	1.545	5.823E-03	2.045	4.449E-03	2.545	4.224E-03
0.09	5.053E-15	0.19	1.403E-02	1.055	7.168E-03	1.555	5.802E-03	2.055	4.441E-03	2.555	4.221E-03
0.09	2.135E-04	0.20	5.935E-02	1.065	7.703E-03	1.565	5.779E-03	2.065	4.433E-03	2.565	4.218E-03
0.095	4.631E-04	0.205	5.820E-02	1.075	7.540E-03	1.575	5.747E-03	2.075	4.426E-03	2.575	4.215E-03
0.09	1.372E-07	0.21	3.709E-01	1.085	7.501E-03	1.585	5.745E-02	2.085	4.419E-03	2.585	4.212E-03
0.095	7.030E-02	0.215	4.224E-02	1.095	7.520E-03	1.595	5.029E-03	2.095	4.412E-03	2.595	4.209E-03
0.10	2.056E-01	0.22	4.157E-02	1.105	7.562E-03	1.605	5.011E-03	2.105	4.405E-03	2.605	4.206E-03
0.105	3.201E-01	0.225	4.094E-02	1.115	7.603E-03	1.615	4.993E-03	2.115	4.398E-03	2.615	4.203E-03
0.11	3.361E-01	0.23	4.034E-02	1.125	7.346E-03	1.625	4.975E-03	2.125	4.392E-03	2.625	4.200E-03
0.115	4.070E-01	0.235	3.977E-02	1.135	7.291E-03	1.635	4.957E-03	2.135	4.386E-03	2.635	4.197E-03
0.12	4.111E-01	0.24	3.924E-02	1.145	7.237E-03	1.645	4.940E-03	2.145	4.380E-03	2.645	4.194E-03
0.125	4.033E-01	0.245	3.871E-02	1.155	7.185E-03	1.655	4.923E-03	2.155	4.375E-03	2.655	4.191E-03
0.13	3.917E-01	0.25	3.820E-02	1.165	7.135E-03	1.665	4.907E-03	2.165	4.369E-03	2.665	4.188E-03
0.135	3.843E-01	0.255	3.773E-02	1.175	7.086E-03	1.675	4.890E-03	2.175	4.364E-03	2.675	4.185E-03
0.14	3.715E-01	0.26	3.723E-02	1.185	7.038E-03	1.685	4.874E-03	2.185	4.359E-03	2.685	4.182E-03
0.145	3.551E-01	0.265	3.684E-02	1.195	6.991E-03	1.695	4.858E-03	2.195	4.355E-03	2.695	4.179E-03
0.15	3.605E-01	0.27	3.640E-02	1.205	6.945E-03	1.705	4.843E-03	2.205	4.350E-03	2.705	4.176E-03
0.155	3.214E-01	0.275	3.595E-02	1.215	6.901E-03	1.715	4.829E-03	2.215	4.345E-03	2.715	4.173E-03
0.16	3.940E-01	0.28	3.552E-02	1.225	6.856E-03	1.725	4.815E-03	2.225	4.340E-03	2.725	4.170E-03
0.165	4.578E-01	0.285	3.510E-02	1.235	6.813E-03	1.735	4.799E-03	2.235	4.335E-03	2.735	4.167E-03
0.17	2.435E-01	0.29	3.468E-02	1.245	6.770E-03	1.745	4.783E-03	2.245	4.330E-03	2.745	4.164E-03
0.175	2.102E-01	0.295	3.426E-02	1.255	6.729E-03	1.755	4.768E-03	2.255	4.324E-03	2.755	4.161E-03
0.18	1.931E-01	0.3	3.384E-02	1.265	6.688E-03	1.765	4.754E-03	2.265	4.319E-03	2.765	4.158E-03
0.185	2.053E-01	0.305	3.343E-02	1.275	6.648E-03	1.775	4.741E-03	2.275	4.314E-03	2.775	4.155E-03
0.19	1.743E-01	0.31	3.303E-02	1.285	6.610E-03	1.785	4.727E-03	2.285	4.309E-03	2.785	4.152E-03
0.195	1.554E-01	0.315	3.264E-02	1.295	6.572E-03	1.795	4.714E-03	2.295	4.305E-03	2.795	4.149E-03
0.2	1.793E-01	0.32	2.894E-02	1.305	6.534E-03	1.805	4.701E-03	2.305	4.301E-03	2.805	4.146E-03
0.205	2.083E-01	0.325	2.895E-02	1.315	6.498E-03	1.815	4.688E-03	2.315	4.297E-03	2.815	4.143E-03
0.21	1.822E-01	0.33	2.895E-02	1.325	6.462E-03	1.825	4.675E-03	2.325	4.293E-03	2.825	4.140E-03
0.215	2.083E-01	0.335	2.895E-02	1.335	6.427E-03	1.835	4.662E-03	2.335	4.289E-03	2.835	4.137E-03
0.22	1.184E-01	0.34	2.792E-02	1.345	6.393E-03	1.845	4.650E-03	2.345	4.285E-03	2.845	4.134E-03
0.225	1.133E-01	0.345	2.767E-02	1.355	6.359E-03	1.855	4.638E-03	2.355	4.282E-03	2.855	4.131E-03
0.23	1.094E-01	0.35	2.767E-02	1.365	6.326E-03	1.865	4.626E-03	2.365	4.279E-03	2.865	4.128E-03
0.235	1.061E-01	0.355	2.767E-02	1.375	6.294E-03	1.875	4.614E-03	2.375	4.276E-03	2.875	4.125E-03
0.24	1.027E-01	0.36	2.593E-02	1.385	6.262E-03	1.885	4.603E-03	2.385	4.273E-03	2.885	4.122E-03
0.245	9.953E-02	0.365	2.593E-02	1.395	6.231E-03	1.895	4.591E-03	2.395	4.270E-03	2.895	4.119E-03
0.25	9.664E-02	0.37	2.521E-02	1.405	6.200E-03	1.905	4.580E-03	2.405	4.267E-03	2.905	4.116E-03
0.255	9.394E-02	0.375	2.521E-02	1.415	6.170E-03	1.915	4.569E-03	2.415	4.265E-03	2.915	4.113E-03
0.26	9.122E-02	0.38	1.507E-02	1.425	6.140E-03	1.925	4.559E-03	2.425	4.263E-03	2.925	4.110E-03
0.265	8.920E-02	0.385	1.507E-02	1.435	6.111E-03	1.935	4.548E-03	2.435	4.260E-03	2.935	4.107E-03
0.27	8.735E-02	0.39	1.507E-02	1.445	6.082E-03	1.945	4.537E-03	2.445	4.256E-03	2.945	4.104E-03
0.275	8.551E-02	0.395	1.507E-02	1.455	6.053E-03	1.955	4.527E-03	2.455	4.252E-03	2.955	4.101E-03
0.28	8.368E-02	0.4	1.507E-02	1.465	6.024E-03	1.965	4.516E-03	2.465	4.249E-03	2.965	4.098E-03
0.285	8.184E-02	0.405	1.507E-02	1.475	5.996E-03	1.975	4.506E-03	2.475	4.245E-03	2.975	4.095E-03
0.29	7.998E-02	0.41	1.507E-02	1.485	5.968E-03	1.985	4.496E-03	2.485	4.242E-03	2.985	4.092E-03
0.295	7.813E-02	0.415	1.507E-02	1.495	5.939E-03	1.995	4.487E-03	2.495	4.239E-03	2.995	4.089E-03
0.3	7.628E-02	0.42	1.507E-02	1.505	5.911E-03	2.005	4.478E-03	2.505	4.236E-03	3.005	4.086E-03

TOTAL FLUX ENERGY SPECTRUM, BUREAU GEOMETRY

CASE 27. U. J. BILBY, AIR, NUN:

[illegible]

CASE 26, U. 5.715C4, A12, NÜNE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	1.250E-33	0.515	1.210E-01	1.015	1.986E-02	1.515	6.855E-03	2.015	1.401E-03	2.515	0.	3.015	0.	3.515	0.
0.025	3.242E-31	0.525	7.023E-02	1.025	1.975E-02	1.525	6.839E-03	2.025	1.400E-03	2.525	0.	3.025	0.	3.525	0.
0.035	3.802E-34	0.535	0.904E-02	1.035	1.964E-02	1.535	6.824E-03	2.035	1.399E-03	2.535	0.	3.035	0.	3.535	0.
0.045	2.136E-17	0.545	6.792E-02	1.045	1.953E-02	1.545	6.810E-03	2.045	1.398E-03	2.545	0.	3.045	0.	3.545	0.
0.055	5.106E-15	0.555	6.683E-02	1.055	1.943E-02	1.555	6.796E-03	2.055	1.396E-03	2.555	0.	3.055	0.	3.555	0.
0.065	2.120E-09	0.565	6.573E-02	1.065	1.934E-02	1.565	6.781E-03	2.065	1.395E-03	2.565	0.	3.065	0.	3.565	0.
0.075	4.590E-04	0.575	6.474E-02	1.075	1.924E-02	1.575	6.764E-03	2.075	1.393E-03	2.575	0.	3.075	0.	3.575	0.
0.085	1.447E-17	0.585	6.375E-02	1.085	1.915E-02	1.585	6.748E-03	2.085	1.391E-03	2.585	0.	3.085	0.	3.585	0.
0.095	7.339E-12	0.595	6.276E-02	1.095	1.906E-02	1.595	6.732E-03	2.095	1.389E-03	2.595	0.	3.095	0.	3.595	0.
0.105	2.193E-01	0.605	6.198E-01	1.105	1.897E-02	1.605	6.716E-03	2.105	1.387E-03	2.605	0.	3.105	0.	3.605	0.
0.115	3.403E-01	0.615	3.650E-02	1.115	1.879E-02	1.615	6.693E-03	2.115	1.385E-03	2.615	0.	3.115	0.	3.615	0.
0.125	4.365E-01	0.625	3.531E-02	1.125	3.625E-01	1.625	6.671E-03	2.125	1.383E-03	2.625	0.	3.125	0.	3.625	0.
0.135	4.362E-01	0.635	3.535E-02	1.135	1.896E-02	1.635	6.650E-03	2.135	1.381E-03	2.635	0.	3.135	0.	3.635	0.
0.145	4.472E-01	0.645	3.482E-02	1.145	1.889E-02	1.645	6.649E-03	2.145	1.379E-03	2.645	0.	3.145	0.	3.645	0.
0.155	4.493E-01	0.655	3.425E-02	1.155	5.227E-02	1.655	6.647E-03	2.155	1.377E-03	2.655	0.	3.155	0.	3.655	0.
0.165	4.270E-01	0.665	3.562E-02	1.165	1.326E-02	1.665	6.647E-02	2.165	1.375E-03	2.665	0.	3.165	0.	3.665	0.
0.175	4.096E-01	0.675	3.258E-02	1.175	1.321E-02	1.675	6.647E-02	2.175	1.373E-03	2.675	0.	3.175	0.	3.675	0.
0.185	4.213E-01	0.685	3.174E-02	1.185	1.315E-02	1.685	6.647E-02	2.185	1.371E-03	2.685	0.	3.185	0.	3.685	0.
0.195	3.557E-01	0.695	3.171E-02	1.195	1.309E-02	1.695	6.647E-02	2.195	1.369E-03	2.695	0.	3.195	0.	3.695	0.
0.205	3.464E-01	0.705	3.130E-02	1.205	1.304E-02	1.705	6.647E-02	2.205	1.367E-03	2.705	0.	3.205	0.	3.705	0.
0.215	3.421E-01	0.715	3.090E-02	1.215	1.298E-02	1.715	6.647E-02	2.215	1.365E-03	2.715	0.	3.215	0.	3.715	0.
0.225	3.177E-01	0.725	3.022E-02	1.225	1.290E-02	1.725	6.647E-02	2.225	1.363E-03	2.725	0.	3.225	0.	3.725	0.
0.235	3.311E-01	0.735	3.015E-02	1.235	1.284E-02	1.735	6.647E-02	2.235	1.361E-03	2.735	0.	3.235	0.	3.735	0.
0.245	3.232E-01	0.745	2.981E-02	1.245	1.044E-02	1.745	5.405E-03	2.245	2.568E-04	2.745	0.	3.245	0.	3.745	0.
0.255	2.529E-01	0.755	2.943E-02	1.255	1.106E-02	1.755	5.345E-03	2.255	2.562E-04	2.755	0.	3.255	0.	3.755	0.
0.265	2.431E-01	0.765	1.997E-01	1.265	1.095E-02	1.765	5.355E-01	2.265	2.560E-04	2.765	0.	3.265	0.	3.765	0.
0.275	2.311E-01	0.775	2.777E-02	1.275	1.091E-02	1.775	1.917E-03	2.275	2.557E-04	2.775	0.	3.275	0.	3.775	0.
0.285	2.211E-01	0.785	2.685E-02	1.285	4.737E-02	1.785	1.913E-03	2.285	2.555E-04	2.785	0.	3.285	0.	3.785	0.
0.295	3.317E-01	0.795	2.573E-02	1.295	1.043E-02	1.795	1.910E-03	2.295	2.553E-04	2.795	0.	3.295	0.	3.795	0.
0.305	1.795E-01	0.805	4.365E-02	1.305	1.039E-02	1.805	1.906E-03	2.305	2.552E-04	2.805	0.	3.305	0.	3.805	0.
0.315	1.742E-01	0.815	2.477E-02	1.315	1.036E-02	1.815	1.902E-03	2.315	2.550E-04	2.815	0.	3.315	0.	3.815	0.
0.325	1.596E-01	0.825	2.543E-02	1.325	1.032E-02	1.825	1.897E-03	2.325	2.548E-04	2.825	0.	3.325	0.	3.825	0.
0.335	1.595E-01	0.835	2.430E-02	1.335	1.029E-02	1.835	1.887E-03	2.335	2.547E-04	2.835	0.	3.335	0.	3.835	0.
0.345	1.594E-01	0.845	2.366E-02	1.345	1.025E-02	1.845	1.876E-03	2.345	2.546E-04	2.845	0.	3.345	0.	3.845	0.
0.355	4.013E-01	0.855	2.386E-02	1.355	1.022E-02	1.855	1.437E-03	2.355	2.544E-04	2.855	0.	3.355	0.	3.855	0.
0.365	1.079E-01	0.865	2.366E-02	1.365	1.017E-02	1.865	1.434E-03	2.365	2.544E-04	2.865	0.	3.365	0.	3.865	0.
0.375	1.061E-01	0.875	2.346E-02	1.375	1.253E-01	1.875	1.431E-03	2.375	2.541E-04	2.875	0.	3.375	0.	3.875	0.
0.385	1.606E-01	0.885	2.327E-02	1.385	3.102E-02	1.885	1.429E-03	2.385	2.540E-04	2.885	0.	3.385	0.	3.885	0.
0.395	9.727E-02	0.895	2.309E-02	1.395	8.723E-03	1.895	1.426E-03	2.395	2.538E-04	2.895	0.	3.395	0.	3.895	0.
0.405	2.272E-02	0.905	2.290E-02	1.405	1.501E-01	1.905	1.424E-03	2.405	2.536E-04	2.905	0.	3.405	0.	3.905	0.
0.415	4.431E-02	0.915	2.272E-02	1.415	7.026E-03	1.915	1.422E-03	2.415	2.535E-04	2.915	0.	3.415	0.	3.915	0.
0.425	1.145E-02	0.925	2.253E-02	1.425	7.602E-03	1.925	1.419E-03	2.425	2.532E-04	2.925	0.	3.425	0.	3.925	0.
0.435	8.573E-02	0.935	1.435E-02	1.435	7.779E-03	1.935	1.417E-03	2.435	2.530E-04	2.935	0.	3.435	0.	3.935	0.
0.445	4.459E-02	0.945	2.103E-02	1.445	7.555E-03	1.945	1.415E-03	2.445	2.528E-04	2.945	0.	3.445	0.	3.945	0.
0.455	3.252E-02	0.955	2.093E-02	1.455	7.532E-03	1.955	1.413E-03	2.455	2.526E-04	2.955	0.	3.455	0.	3.955	0.
0.465	8.052E-02	0.965	2.073E-02	1.465	7.509E-03	1.965	1.411E-03	2.465	2.524E-04	2.965	0.	3.465	0.	3.965	0.
0.475	7.134E-02	0.975	2.064E-02	1.475	7.485E-03	1.975	1.408E-03	2.475	2.522E-04	2.975	0.	3.475	0.	3.975	0.
0.485	7.715E-02	0.985	2.051E-02	1.485	7.460E-03	1.985	1.406E-03	2.485	2.520E-04	2.985	0.	3.485	0.	3.985	0.
0.495	7.559E-02	0.995	2.038E-02	1.495	7.429E-03	1.995	1.405E-03	2.495	2.518E-04	2.995	0.	3.495	0.	3.995	0.
0.505	7.399E-02	1.005	3.753E-02	1.505	7.154E-02	2.005	1.403E-03	2.505	2.516E-04	3.005	0.	3.505	0.	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, JUNEHOLE GEOMETRY

CASE 29, U, 7.938C4, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.223E-34	.515	1.214E-01	1.015	1.987E-02	1.515	6.850E-03	2.015	1.400E-03	2.515	0.	3.015	0.	3.515	0.	4.015	0.	4.515	0.
.025	3.203E-31	.525	7.032E-02	1.025	1.976E-02	1.525	6.834E-03	2.025	1.398E-03	2.525	0.	3.025	0.	3.525	0.	4.025	0.	4.525	0.
.035	3.777E-24	.535	6.911E-02	1.035	1.964E-02	1.535	6.818E-03	2.035	1.397E-03	2.535	0.	3.035	0.	3.535	0.	4.035	0.	4.535	0.
.045	2.135E-17	.545	6.792E-02	1.045	1.954E-02	1.545	6.804E-03	2.045	1.396E-03	2.545	0.	3.045	0.	3.545	0.	4.045	0.	4.545	0.
.055	5.201E-14	.555	6.688E-02	1.055	1.943E-02	1.555	6.789E-03	2.055	1.394E-03	2.555	0.	3.055	0.	3.555	0.	4.055	0.	4.555	0.
.065	2.127E-09	.565	6.592E-02	1.065	1.933E-02	1.565	6.774E-03	2.065	1.393E-03	2.565	0.	3.065	0.	3.565	0.	4.065	0.	4.565	0.
.075	4.621E-04	.575	6.490E-02	1.075	1.924E-02	1.575	6.757E-03	2.075	1.391E-03	2.575	0.	3.075	0.	3.575	0.	4.075	0.	4.575	0.
.085	1.464E-07	.585	6.376E-02	1.085	1.914E-02	1.585	6.737E-03	2.085	1.390E-03	2.585	0.	3.085	0.	3.585	0.	4.085	0.	4.585	0.
.095	7.033E-02	.595	6.245E-02	1.095	1.905E-02	1.595	6.718E-03	2.095	1.388E-03	2.595	0.	3.095	0.	3.595	0.	4.095	0.	4.595	0.
.105	2.207E-01	.605	6.092E-01	1.105	1.895E-02	1.605	6.545E-03	2.105	1.383E-03	2.605	0.	3.105	0.	3.605	0.	4.105	0.	4.605	0.
.115	3.444E-01	.615	3.657E-02	1.115	1.878E-02	1.615	6.521E-03	2.115	1.380E-03	2.615	0.	3.115	0.	3.615	0.	4.115	0.	4.615	0.
.125	4.055E-01	.625	3.573E-02	1.125	3.625E-01	1.625	6.509E-03	2.125	1.378E-03	2.625	0.	3.125	0.	3.625	0.	4.125	0.	4.625	0.
.135	4.424E-01	.635	3.542E-02	1.135	1.396E-02	1.635	6.496E-03	2.135	1.376E-03	2.635	0.	3.135	0.	3.635	0.	4.135	0.	4.635	0.
.145	4.231E-01	.645	3.498E-02	1.145	1.389E-02	1.645	6.484E-03	2.145	1.375E-03	2.645	0.	3.145	0.	3.645	0.	4.145	0.	4.645	0.
.155	4.308E-01	.655	3.435E-02	1.155	1.389E-02	1.655	6.476E-03	2.155	1.374E-03	2.655	0.	3.155	0.	3.655	0.	4.155	0.	4.655	0.
.165	4.313E-01	.665	3.358E-02	1.165	1.320E-02	1.665	6.469E-03	2.165	1.373E-03	2.665	0.	3.165	0.	3.665	0.	4.165	0.	4.665	0.
.175	4.138E-01	.675	3.264E-02	1.175	1.320E-02	1.675	6.465E-03	2.175	1.372E-03	2.675	0.	3.175	0.	3.675	0.	4.175	0.	4.675	0.
.185	4.259E-01	.685	3.220E-02	1.185	1.315E-02	1.685	6.461E-03	2.185	1.371E-03	2.685	0.	3.185	0.	3.685	0.	4.185	0.	4.685	0.
.195	3.525E-01	.695	3.177E-02	1.195	1.309E-02	1.695	6.458E-03	2.195	1.370E-03	2.695	0.	3.195	0.	3.695	0.	4.195	0.	4.695	0.
.205	3.595E-01	.705	3.135E-02	1.205	1.303E-02	1.705	6.455E-03	2.205	1.369E-03	2.705	0.	3.205	0.	3.705	0.	4.205	0.	4.705	0.
.215	3.348E-01	.715	3.095E-02	1.215	1.298E-02	1.715	6.452E-03	2.215	1.368E-03	2.715	0.	3.215	0.	3.715	0.	4.215	0.	4.715	0.
.225	3.033E-01	.725	3.057E-02	1.225	1.290E-02	1.725	6.449E-03	2.225	1.367E-03	2.725	0.	3.225	0.	3.725	0.	4.225	0.	4.725	0.
.235	3.033E-01	.735	3.020E-02	1.235	1.282E-02	1.735	6.446E-03	2.235	1.366E-03	2.735	0.	3.235	0.	3.735	0.	4.235	0.	4.735	0.
.245	3.311E-01	.745	2.985E-02	1.245	1.274E-02	1.745	6.443E-03	2.245	1.365E-03	2.745	0.	3.245	0.	3.745	0.	4.245	0.	4.745	0.
.255	2.344E-01	.755	2.947E-02	1.255	1.266E-02	1.755	6.440E-03	2.255	1.364E-03	2.755	0.	3.255	0.	3.755	0.	4.255	0.	4.755	0.
.265	2.444E-01	.765	2.912E-01	1.265	1.258E-02	1.765	6.437E-03	2.265	1.363E-03	2.765	0.	3.265	0.	3.765	0.	4.265	0.	4.765	0.
.275	2.422E-01	.775	2.870E-02	1.275	1.250E-02	1.775	6.434E-03	2.275	1.362E-03	2.775	0.	3.275	0.	3.775	0.	4.275	0.	4.775	0.
.285	2.210E-01	.785	2.830E-02	1.285	1.242E-02	1.785	6.431E-03	2.285	1.361E-03	2.785	0.	3.285	0.	3.785	0.	4.285	0.	4.785	0.
.295	3.225E-01	.795	2.792E-02	1.295	1.234E-02	1.795	6.428E-03	2.295	1.360E-03	2.795	0.	3.295	0.	3.795	0.	4.295	0.	4.795	0.
.305	1.302E-01	.805	2.756E-02	1.305	1.226E-02	1.805	6.425E-03	2.305	1.359E-03	2.805	0.	3.305	0.	3.805	0.	4.305	0.	4.805	0.
.315	1.228E-01	.815	2.721E-02	1.315	1.218E-02	1.815	6.422E-03	2.315	1.358E-03	2.815	0.	3.315	0.	3.815	0.	4.315	0.	4.815	0.
.325	1.061E-01	.825	2.686E-02	1.325	1.210E-02	1.825	6.419E-03	2.325	1.357E-03	2.825	0.	3.325	0.	3.825	0.	4.325	0.	4.825	0.
.335	1.599E-01	.835	2.652E-02	1.335	1.202E-02	1.835	6.416E-03	2.335	1.356E-03	2.835	0.	3.335	0.	3.835	0.	4.335	0.	4.835	0.
.345	1.337E-01	.845	2.618E-02	1.345	1.194E-02	1.845	6.413E-03	2.345	1.355E-03	2.845	0.	3.345	0.	3.845	0.	4.345	0.	4.845	0.
.355	4.316E-01	.855	2.584E-02	1.355	1.186E-02	1.855	6.410E-03	2.355	1.354E-03	2.855	0.	3.355	0.	3.855	0.	4.355	0.	4.855	0.
.365	1.822E-01	.865	2.550E-02	1.365	1.178E-02	1.865	6.407E-03	2.365	1.353E-03	2.865	0.	3.365	0.	3.865	0.	4.365	0.	4.865	0.
.375	1.944E-01	.875	2.516E-02	1.375	1.170E-02	1.875	6.404E-03	2.375	1.352E-03	2.875	0.	3.375	0.	3.875	0.	4.375	0.	4.875	0.
.385	1.008E-01	.885	2.482E-02	1.385	1.162E-02	1.885	6.401E-03	2.385	1.351E-03	2.885	0.	3.385	0.	3.885	0.	4.385	0.	4.885	0.
.395	7.754E-02	.895	2.448E-02	1.395	1.154E-02	1.895	6.398E-03	2.395	1.350E-03	2.895	0.	3.395	0.	3.895	0.	4.395	0.	4.895	0.
.405	4.957E-02	.905	2.414E-02	1.405	1.146E-02	1.905	6.395E-03	2.405	1.349E-03	2.905	0.	3.405	0.	3.905	0.	4.405	0.	4.905	0.
.415	4.163E-02	.915	2.380E-02	1.415	1.138E-02	1.915	6.392E-03	2.415	1.348E-03	2.915	0.	3.415	0.	3.915	0.	4.415	0.	4.915	0.
.425	8.931E-02	.925	2.346E-02	1.425	1.130E-02	1.925	6.389E-03	2.425	1.347E-03	2.925	0.	3.425	0.	3.925	0.	4.425	0.	4.925	0.
.435	8.674E-02	.935	2.312E-02	1.435	1.122E-02	1.935	6.386E-03	2.435	1.346E-03	2.935	0.	3.435	0.	3.935	0.	4.435	0.	4.935	0.
.445	8.075E-02	.945	2.278E-02	1.445	1.114E-02	1.945	6.383E-03	2.445	1.345E-03	2.945	0.	3.445	0.	3.945	0.	4.445	0.	4.945	0.
.455	3.270E-02	.955	2.244E-02	1.455	1.106E-02	1.955	6.380E-03	2.455	1.344E-03	2.955	0.	3.455	0.	3.955	0.	4.455	0.	4.955	0.
.465	3.073E-02	.965	2.210E-02	1.465	1.098E-02	1.965	6.377E-03	2.465	1.343E-03	2.965	0.	3.465	0.	3.965	0.	4.465	0.	4.965	0.
.475	7.930E-02	.975	2.176E-02	1.475	1.090E-02	1.975	6.374E-03	2.475	1.342E-03	2.975	0.	3.475	0.	3.975	0.	4.475	0.	4.975	0.
.485	7.740E-02	.985	2.142E-02	1.485	1.082E-02	1.985	6.371E-03	2.485	1.341E-03	2.985	0.	3.485	0.	3.985	0.	4.485	0.	4.985	0.
.495	7.572E-02	.995	2.108E-02	1.495	1.074E-02	1.995	6.368E-03	2.495	1.340E-03	2.995	0.	3.495	0.	3.995	0.	4.495	0.	4.995	0.
.505	7.422E-02	1.005	2.074E-02	1.505	1.066E-02	2.005	6.365E-03	2.505	1.339E-03	3.005	0.								

TOTAL FLUX ENERGY SPECTRUM, BOREHOLE GEOMETRY

CASE 30, J, 10.16CM, AIR, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.195E-33	.515	1.215E-01	1.015	1.994E-02	1.515	6.847E-03	2.015	1.399E-03	2.515	0.
.025	3.169E-31	.525	7.039E-02	1.025	1.976E-02	1.525	6.831E-03	2.025	1.376E-03	2.525	0.
.035	3.769E-24	.535	5.917E-02	1.035	1.955E-02	1.535	6.815E-03	2.035	1.356E-03	2.535	0.
.045	2.132E-17	.545	6.804E-02	1.045	1.934E-02	1.545	6.800E-03	2.045	1.335E-03	2.545	0.
.055	5.210E-15	.555	6.692E-02	1.055	1.913E-02	1.555	6.786E-03	2.055	1.314E-03	2.555	0.
.065	2.130E-09	.565	6.586E-02	1.065	1.893E-02	1.565	6.770E-03	2.065	1.293E-03	2.565	0.
.075	6.640E-08	.575	6.481E-02	1.075	1.872E-02	1.575	6.753E-03	2.075	1.272E-03	2.575	0.
.085	1.472E-07	.585	6.378E-02	1.085	1.851E-02	1.585	6.736E-03	2.085	1.251E-03	2.585	0.
.095	7.031E-02	.595	6.274E-02	1.095	1.830E-02	1.595	6.719E-03	2.095	1.230E-03	2.595	0.
.105	2.215E-01	.605	6.169E-02	1.105	1.809E-02	1.605	6.702E-03	2.105	1.209E-03	2.605	0.
.115	3.465E-01	.615	3.662E-01	1.115	1.788E-02	1.615	6.685E-03	2.115	1.188E-03	2.615	0.
.125	4.124E-21	.625	3.603E-02	1.125	3.625E-01	1.625	6.668E-03	2.125	1.167E-03	2.625	0.
.135	4.577E-01	.635	3.547E-02	1.135	1.386E-02	1.635	6.651E-03	2.135	1.146E-03	2.635	0.
.145	4.564E-01	.645	3.493E-02	1.145	1.365E-02	1.645	6.634E-03	2.145	1.125E-03	2.645	0.
.155	4.547E-01	.655	3.439E-02	1.155	1.344E-02	1.655	6.617E-03	2.155	1.104E-03	2.655	0.
.165	4.547E-01	.665	3.385E-02	1.165	1.323E-02	1.665	6.600E-03	2.165	1.083E-03	2.665	0.
.175	4.162E-01	.675	3.328E-02	1.175	1.302E-02	1.675	6.583E-03	2.175	1.062E-03	2.675	0.
.185	4.232E-01	.685	3.274E-02	1.185	1.281E-02	1.685	6.566E-03	2.185	1.041E-03	2.685	0.
.195	3.712E-01	.695	3.218E-02	1.195	1.260E-02	1.695	6.549E-03	2.195	1.020E-03	2.695	0.
.205	3.313E-01	.705	3.161E-02	1.205	1.239E-02	1.705	6.532E-03	2.205	1.000E-03	2.705	0.
.215	3.355E-01	.715	3.099E-02	1.215	1.218E-02	1.715	6.515E-03	2.215	9.79E-04	2.715	0.
.225	3.217E-01	.725	3.060E-02	1.225	1.197E-02	1.725	6.498E-03	2.225	9.58E-04	2.725	0.
.235	3.046E-01	.735	3.024E-02	1.235	1.176E-02	1.735	6.481E-03	2.235	9.37E-04	2.735	0.
.245	3.321E-01	.745	2.988E-02	1.245	1.155E-02	1.745	6.464E-03	2.245	9.16E-04	2.745	0.
.255	2.656E-01	.755	2.950E-02	1.255	1.134E-02	1.755	6.447E-03	2.255	8.95E-04	2.755	0.
.265	2.492E-01	.765	1.098E-01	1.265	1.113E-02	1.765	6.430E-03	2.265	8.74E-04	2.765	0.
.275	2.323E-01	.775	2.673E-02	1.275	1.092E-02	1.775	6.413E-03	2.275	8.53E-04	2.775	0.
.285	2.215E-01	.785	4.073E-02	1.285	1.071E-02	1.785	6.396E-03	2.285	8.32E-04	2.785	0.
.295	3.530E-01	.795	2.579E-02	1.295	1.050E-02	1.795	6.379E-03	2.295	8.11E-04	2.795	0.
.305	1.508E-01	.805	4.374E-02	1.305	1.029E-02	1.805	6.362E-03	2.305	7.90E-04	2.805	0.
.315	1.732E-01	.815	2.483E-02	1.315	1.008E-02	1.815	6.345E-03	2.315	7.69E-04	2.815	0.
.325	1.664E-01	.825	2.459E-02	1.325	9.87E-03	1.825	6.328E-03	2.325	7.48E-04	2.825	0.
.335	1.501E-01	.835	2.436E-02	1.335	9.66E-03	1.835	6.311E-03	2.335	7.27E-04	2.835	0.
.345	1.533E-01	.845	2.413E-02	1.345	9.45E-03	1.845	6.294E-03	2.345	7.06E-04	2.845	0.
.355	4.818E-01	.855	2.391E-02	1.355	9.24E-03	1.855	6.277E-03	2.355	6.85E-04	2.855	0.
.365	1.094E-01	.865	2.371E-02	1.365	9.03E-03	1.865	6.260E-03	2.365	6.64E-04	2.865	0.
.375	1.046E-01	.875	2.351E-02	1.375	8.82E-03	1.875	6.243E-03	2.375	6.43E-04	2.875	0.
.385	1.010E-01	.885	2.331E-02	1.385	8.61E-03	1.885	6.226E-03	2.385	6.22E-04	2.885	0.
.395	9.721E-02	.895	2.311E-02	1.395	8.40E-03	1.895	6.209E-03	2.395	6.01E-04	2.895	0.
.405	9.473E-02	.905	2.291E-02	1.405	8.19E-03	1.905	6.192E-03	2.405	5.80E-04	2.905	0.
.415	9.193E-02	.915	2.271E-02	1.415	7.98E-03	1.915	6.175E-03	2.415	5.59E-04	2.915	0.
.425	8.943E-02	.925	2.251E-02	1.425	7.77E-03	1.925	6.158E-03	2.425	5.38E-04	2.925	0.
.435	8.708E-02	.935	2.231E-02	1.435	7.56E-03	1.935	6.141E-03	2.435	5.17E-04	2.935	0.
.445	8.489E-02	.945	2.211E-02	1.445	7.35E-03	1.945	6.124E-03	2.445	4.96E-04	2.945	0.
.455	8.282E-02	.955	2.191E-02	1.455	7.14E-03	1.955	6.107E-03	2.455	4.75E-04	2.955	0.
.465	8.040E-02	.965	2.171E-02	1.465	6.93E-03	1.965	6.090E-03	2.465	4.54E-04	2.965	0.
.475	7.741E-02	.975	2.151E-02	1.475	6.72E-03	1.975	6.073E-03	2.475	4.33E-04	2.975	0.
.485	7.441E-02	.985	2.131E-02	1.485	6.51E-03	1.985	6.056E-03	2.485	4.12E-04	2.985	0.
.495	7.282E-02	.995	2.111E-02	1.495	6.30E-03	1.995	6.039E-03	2.495	3.91E-04	2.995	0.
.505	7.143E-02	1.005	3.754E-02	1.505	6.09E-03	2.005	6.022E-03	2.505	3.70E-04	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, 3 JUNKHULE GEOMETRY
 CASE 32, J, 3.81JUM, 4ATLX, NONE

ENERGY	FLUX	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	1.475E-34	1.172E-01	1.015	1.960E-02	1.515	6.789E-03	2.015	1.391E-03	2.515	0.
.025	3.195E-31	5.373E-02	1.025	1.949E-02	1.525	6.774E-03	2.025	1.390E-03	2.525	0.
.035	3.713E-29	5.763E-02	1.035	1.938E-02	1.535	6.759E-03	2.035	1.389E-03	2.535	0.
.045	2.075E-17	6.650E-02	1.045	1.928E-02	1.545	6.746E-03	2.045	1.388E-03	2.545	0.
.055	2.531E-15	6.250E-02	1.055	1.918E-02	1.555	6.732E-03	2.055	1.386E-03	2.555	0.
.065	2.040E-04	6.665E-02	1.065	1.908E-02	1.565	6.718E-03	2.065	1.385E-03	2.565	0.
.075	4.410E-03	6.375E-02	1.075	1.898E-02	1.575	6.702E-03	2.075	1.384E-03	2.575	0.
.085	1.383E-07	6.255E-02	1.085	1.888E-02	1.585	6.689E-03	2.085	1.382E-03	2.585	0.
.095	2.740E-02	6.131E-02	1.095	1.878E-02	1.595	6.673E-03	2.095	1.380E-03	2.595	0.
.105	2.112E-01	6.005E-02	1.105	1.868E-02	1.605	6.641E-03	2.105	1.376E-03	2.605	0.
.115	3.233E-01	5.879E-02	1.115	1.858E-02	1.615	6.670E-03	2.115	4.430E-02	2.615	0.
.125	3.555E-01	5.753E-02	1.125	3.466E-01	1.625	6.458E-03	2.125	1.162E-03	2.625	0.
.135	4.151E-01	5.627E-02	1.135	1.379E-02	1.635	6.447E-03	2.135	1.161E-03	2.635	0.
.145	4.262E-01	5.501E-02	1.145	1.372E-02	1.645	6.436E-03	2.145	1.160E-03	2.645	0.
.155	4.077E-01	5.375E-02	1.155	5.037E-02	1.655	6.422E-03	2.155	1.159E-03	2.655	0.
.165	3.672E-01	5.250E-02	1.165	1.310E-02	1.665	6.408E-02	2.165	1.157E-03	2.665	0.
.175	3.671E-01	5.125E-02	1.175	1.305E-02	1.675	6.377E-03	2.175	1.154E-03	2.675	0.
.185	3.473E-01	5.000E-02	1.185	1.299E-02	1.685	6.127E-03	2.185	1.140E-03	2.685	0.
.195	3.513E-01	4.875E-02	1.195	1.294E-02	1.695	6.117E-03	2.195	1.139E-03	2.695	0.
.205	3.315E-01	4.750E-02	1.205	1.289E-02	1.705	6.106E-03	2.205	1.930E-01	2.705	0.
.215	3.345E-01	4.625E-02	1.215	1.283E-02	1.715	6.087E-03	2.215	2.554E-04	2.715	0.
.225	3.345E-01	4.500E-02	1.225	1.277E-02	1.725	1.054E-01	2.225	2.552E-04	2.725	0.
.235	3.345E-01	4.375E-02	1.235	1.271E-02	1.735	5.381E-03	2.235	2.550E-04	2.735	0.
.245	3.145E-01	4.250E-02	1.245	1.092E-02	1.745	5.362E-03	2.245	2.548E-04	2.745	0.
.255	2.945E-01	4.125E-02	1.255	1.087E-02	1.755	5.304E-03	2.255	2.546E-04	2.755	0.
.265	2.945E-01	4.000E-02	1.265	1.081E-02	1.765	5.162E-01	2.265	2.543E-04	2.765	0.
.275	2.745E-01	3.875E-02	1.275	1.075E-02	1.775	1.901E-03	2.275	2.541E-04	2.775	0.
.285	2.745E-01	3.750E-02	1.285	4.569E-02	1.785	1.898E-03	2.285	2.539E-04	2.785	0.
.295	2.545E-01	3.625E-02	1.295	1.032E-02	1.795	1.894E-03	2.295	2.537E-04	2.795	0.
.305	2.545E-01	3.500E-02	1.305	1.026E-02	1.805	1.891E-03	2.305	2.536E-04	2.805	0.
.315	2.345E-01	3.375E-02	1.315	1.021E-02	1.815	1.887E-03	2.315	2.534E-04	2.815	0.
.325	2.145E-01	3.250E-02	1.325	1.015E-02	1.825	1.882E-03	2.325	2.532E-04	2.825	0.
.335	1.945E-01	3.125E-02	1.335	1.010E-02	1.835	1.877E-03	2.335	2.530E-04	2.835	0.
.345	1.745E-01	3.000E-02	1.345	1.004E-02	1.845	7.346E-02	2.345	2.528E-04	2.845	0.
.355	1.545E-01	2.875E-02	1.355	1.000E-02	1.855	1.825E-03	2.355	2.526E-04	2.855	0.
.365	1.345E-01	2.750E-02	1.365	9.99E-03	1.865	1.820E-03	2.365	2.524E-04	2.865	0.
.375	1.145E-01	2.625E-02	1.375	1.206E-01	1.875	1.815E-03	2.375	2.522E-04	2.875	0.
.385	9.45E-02	2.500E-02	1.385	3.002E-02	1.885	1.810E-03	2.385	2.520E-04	2.885	0.
.395	7.45E-02	2.375E-02	1.395	6.531E-03	1.895	1.805E-03	2.395	2.518E-04	2.895	0.
.405	5.45E-02	2.250E-02	1.405	1.156E-01	1.905	1.800E-03	2.405	2.516E-04	2.905	0.
.415	3.45E-02	2.125E-02	1.415	7.546E-03	1.915	1.795E-03	2.415	2.514E-04	2.915	0.
.425	1.45E-02	2.000E-02	1.425	7.523E-03	1.925	1.790E-03	2.425	2.512E-04	2.925	0.
.435	8.45E-02	1.875E-02	1.435	7.500E-03	1.935	1.785E-03	2.435	2.510E-04	2.935	0.
.445	6.45E-02	1.750E-02	1.445	7.479E-03	1.945	1.780E-03	2.445	2.508E-04	2.945	0.
.455	4.45E-02	1.625E-02	1.455	7.457E-03	1.955	1.775E-03	2.455	2.506E-04	2.955	0.
.465	2.45E-02	1.500E-02	1.465	7.436E-03	1.965	1.770E-03	2.465	2.504E-04	2.965	0.
.475	7.713E-02	1.375E-02	1.475	7.415E-03	1.975	1.765E-03	2.475	2.502E-04	2.975	0.
.485	7.545E-02	1.250E-02	1.485	7.394E-03	1.985	1.760E-03	2.485	2.500E-04	2.985	0.
.495	7.197E-02	1.125E-02	1.495	7.373E-03	1.995	1.755E-03	2.495	2.498E-04	2.995	0.
.505	6.245E-02	1.000E-02	1.505	6.892E-02	2.005	1.750E-03	2.505	2.496E-04	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, JURECHULE GEOMETRY
CASE 33, U, 5.719C9, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX		
0.15	3.038E-39	0.15	1.073E-01	1.015	1.857E-02	1.515	6.472E-03	2.015	1.334E-03	2.515	0.
0.25	2.570E-31	0.25	6.439E-02	1.025	1.846E-02	1.525	6.457E-03	2.025	1.332E-03	2.525	0.
0.35	3.817E-24	0.35	8.325E-02	1.035	1.836E-02	1.535	6.442E-03	2.035	1.331E-03	2.535	0.
0.45	1.335E-17	0.45	6.219E-02	1.045	1.825E-02	1.545	6.429E-03	2.045	1.330E-03	2.545	0.
0.55	4.034E-15	0.55	9.114E-02	1.055	1.816E-02	1.555	6.415E-03	2.055	1.329E-03	2.555	0.
0.65	1.832E-09	0.65	8.011E-02	1.065	1.806E-02	1.565	6.401E-03	2.065	1.327E-03	2.565	0.
0.75	4.010E-08	0.75	5.920E-02	1.075	1.797E-02	1.575	6.385E-03	2.075	1.326E-03	2.575	0.
0.85	1.297E-08	0.85	5.824E-02	1.085	1.788E-02	1.585	6.369E-02	2.085	1.324E-03	2.585	0.
0.95	8.204E-02	0.95	5.738E-02	1.095	1.780E-02	1.595	6.352E-03	2.095	1.323E-03	2.595	0.
1.05	1.417E-01	1.05	5.648E-02	1.105	1.770E-02	1.605	6.174E-03	2.105	1.319E-03	2.605	0.
1.15	3.350E-01	1.15	3.412E-02	1.115	1.758E-02	1.615	6.163E-03	2.115	3.925E-02	2.615	0.
1.25	3.634E-01	1.25	3.356E-02	1.125	2.995E-01	1.625	6.151E-03	2.125	1.114E-03	2.625	0.
1.35	3.318E-01	1.35	3.303E-02	1.135	1.303E-02	1.635	6.140E-03	2.135	1.113E-03	2.635	0.
1.45	4.000E-01	1.45	3.254E-02	1.145	1.303E-02	1.645	6.129E-03	2.145	1.112E-03	2.645	0.
1.55	3.955E-01	1.55	3.202E-02	1.155	1.303E-02	1.655	6.115E-03	2.155	1.111E-03	2.655	0.
1.65	3.331E-01	1.65	4.847E-02	1.165	1.249E-02	1.665	3.768E-02	2.165	1.110E-03	2.665	0.
1.75	3.887E-01	1.75	3.043E-02	1.175	1.240E-02	1.675	5.844E-02	2.175	1.109E-03	2.675	0.
1.85	3.782E-01	1.85	3.043E-02	1.185	1.239E-02	1.685	5.834E-03	2.185	1.106E-03	2.685	0.
1.95	3.459E-01	1.95	2.983E-02	1.195	1.229E-02	1.695	5.824E-03	2.195	1.094E-03	2.695	0.
2.05	3.038E-01	2.05	2.923E-02	1.205	1.224E-02	1.705	5.813E-03	2.205	1.711E-01	2.705	0.
2.15	2.995E-01	2.15	2.885E-02	1.215	1.211E-02	1.715	5.795E-03	2.215	2.436E-04	2.715	0.
2.25	2.334E-01	2.25	2.849E-02	1.225	1.211E-02	1.725	5.724E-02	2.225	2.431E-04	2.725	0.
2.35	2.885E-01	2.35	2.815E-02	1.235	1.308E-01	1.735	5.124E-03	2.235	2.441E-04	2.735	0.
2.45	2.847E-01	2.45	2.733E-02	1.245	1.039E-02	1.745	5.107E-03	2.245	2.449E-04	2.745	0.
2.55	2.383E-01	2.55	2.740E-02	1.255	1.035E-02	1.755	5.055E-03	2.255	2.445E-04	2.755	0.
2.65	2.177E-01	2.65	3.942E-02	1.265	1.031E-02	1.765	4.515E-01	2.265	2.445E-04	2.765	0.
2.75	2.087E-01	2.75	2.443E-02	1.275	1.026E-02	1.775	1.821E-03	2.275	2.443E-04	2.775	0.
2.85	1.971E-01	2.85	3.583E-02	1.285	9.817E-03	1.785	1.818E-03	2.285	2.441E-04	2.785	0.
2.95	1.831E-01	2.95	3.303E-02	1.295	9.817E-03	1.795	1.814E-03	2.295	2.439E-04	2.795	0.
3.05	1.759E-01	3.05	2.317E-02	1.305	9.732E-03	1.805	1.811E-03	2.305	2.437E-04	2.805	0.
3.15	1.645E-01	3.15	2.295E-02	1.315	9.732E-03	1.815	1.807E-03	2.315	2.436E-04	2.815	0.
3.25	1.533E-01	3.25	2.279E-02	1.325	9.713E-03	1.825	1.802E-03	2.325	2.434E-04	2.825	0.
3.35	1.434E-01	3.35	2.253E-02	1.335	9.696E-03	1.835	1.793E-03	2.335	2.432E-04	2.835	0.
3.45	1.384E-01	3.45	2.232E-02	1.345	9.686E-03	1.845	6.453E-02	2.345	2.431E-04	2.845	0.
3.55	3.702E-01	3.55	2.232E-02	1.355	9.511E-03	1.855	1.367E-03	2.355	2.430E-04	2.855	0.
3.65	3.942E-02	3.65	2.217E-02	1.365	9.505E-03	1.865	1.365E-03	2.365	2.428E-04	2.865	0.
3.75	3.592E-02	3.75	2.113E-02	1.375	8.221E-03	1.875	1.360E-03	2.375	2.427E-04	2.875	0.
3.85	3.828E-02	3.85	2.117E-02	1.385	8.221E-03	1.885	1.358E-03	2.385	2.426E-04	2.885	0.
3.95	3.584E-02	3.95	2.158E-02	1.395	8.221E-03	1.895	1.355E-03	2.395	2.424E-04	2.895	0.
4.05	3.494E-02	4.05	2.143E-02	1.405	1.001E-01	1.905	1.353E-03	2.405	2.424E-04	2.905	0.
4.15	3.442E-02	4.15	2.143E-02	1.415	7.198E-03	1.915	1.353E-03	2.415	2.419E-04	2.915	0.
4.25	8.203E-02	4.25	2.143E-02	1.425	7.198E-03	1.925	1.351E-03	2.425	2.412E-04	2.925	0.
4.35	7.732E-02	4.35	1.971E-02	1.435	7.198E-03	1.935	1.349E-03	2.435	2.378E-04	2.935	0.
4.45	7.732E-02	4.45	1.971E-02	1.445	7.198E-03	1.945	1.347E-03	2.445	5.619E-02	2.945	0.
4.55	7.732E-02	4.55	1.971E-02	1.455	7.198E-03	1.955	1.344E-03	2.455	2.995	0.	
4.65	7.732E-02	4.65	1.971E-02	1.465	7.198E-03	1.965	1.344E-03	2.465	2.965	0.	
4.75	7.732E-02	4.75	1.971E-02	1.475	7.198E-03	1.975	1.340E-03	2.475	2.975	0.	
4.85	7.732E-02	4.85	1.971E-02	1.485	7.198E-03	1.985	1.338E-03	2.485	2.985	0.	
4.95	7.732E-02	4.95	1.971E-02	1.495	7.198E-03	1.995	1.337E-03	2.495	2.995	0.	
5.05	7.732E-02	5.05	1.971E-02	1.505	7.198E-03	2.005	1.335E-03	2.505	3.005	0.	

TOTAL FLUX ENERGY SPECTRUM, BUR-HOLE GEOMETRY

CASE 34, U, 7.93824, ATEN, NJRE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	1.259E-09	0.515	9.655E-02	1.015	1.737E-02	1.515	5.100E-03	2.015	1.245E-03	2.515	0.
0.025	2.304E-09	0.525	5.730E-02	1.025	1.726E-02	1.525	6.085E-03	2.025	1.246E-03	2.525	0.
0.035	2.945E-09	0.535	7.320E-02	1.035	1.716E-02	1.535	6.071E-03	2.035	1.246E-03	2.535	0.
0.045	1.571E-17	0.545	5.718E-02	1.045	1.706E-02	1.545	6.057E-03	2.045	1.246E-03	2.545	0.
0.055	4.152E-15	0.555	5.617E-02	1.055	1.696E-02	1.555	6.044E-03	2.055	1.246E-03	2.555	0.
0.065	1.500E-09	0.565	5.521E-02	1.065	1.686E-02	1.565	6.030E-03	2.065	1.246E-03	2.565	0.
0.075	3.701E-03	0.575	5.430E-02	1.075	1.676E-02	1.575	6.015E-03	2.075	1.246E-03	2.575	0.
0.085	1.168E-07	0.585	5.338E-02	1.085	1.666E-02	1.585	5.999E-03	2.085	1.246E-03	2.585	0.
0.095	5.504E-02	0.595	5.242E-02	1.095	1.656E-02	1.595	5.982E-03	2.095	1.246E-03	2.595	0.
0.105	1.750E-01	0.605	4.149E-01	1.105	1.646E-02	1.605	5.965E-03	2.105	1.246E-03	2.605	0.
0.115	2.504E-01	0.615	3.820E-02	1.115	1.636E-02	1.615	5.948E-03	2.115	1.246E-03	2.615	0.
0.125	3.347E-01	0.625	3.147E-02	1.125	1.626E-02	1.625	5.931E-03	2.125	1.246E-03	2.625	0.
0.135	3.802E-01	0.635	3.097E-02	1.135	1.616E-02	1.635	5.914E-03	2.135	1.246E-03	2.635	0.
0.145	3.607E-01	0.645	3.048E-02	1.145	1.606E-02	1.645	5.897E-03	2.145	1.246E-03	2.645	0.
0.155	3.022E-01	0.655	3.000E-02	1.155	1.596E-02	1.655	5.880E-03	2.155	1.246E-03	2.655	0.
0.165	3.476E-01	0.665	4.296E-02	1.165	1.586E-02	1.665	5.863E-03	2.165	1.246E-03	2.665	0.
0.175	3.337E-01	0.675	2.855E-02	1.175	1.576E-02	1.675	5.846E-03	2.175	1.246E-03	2.675	0.
0.185	3.337E-01	0.685	2.815E-02	1.185	1.566E-02	1.685	5.829E-03	2.185	1.246E-03	2.685	0.
0.195	2.973E-01	0.695	2.776E-02	1.195	1.556E-02	1.695	5.812E-03	2.195	1.246E-03	2.695	0.
0.205	2.813E-01	0.705	2.736E-02	1.205	1.546E-02	1.705	5.795E-03	2.205	1.246E-03	2.705	0.
0.215	2.653E-01	0.715	2.696E-02	1.215	1.536E-02	1.715	5.778E-03	2.215	1.246E-03	2.715	0.
0.225	2.577E-01	0.725	2.656E-02	1.225	1.526E-02	1.725	5.761E-03	2.225	1.246E-03	2.725	0.
0.235	2.493E-01	0.735	2.616E-02	1.235	1.516E-02	1.735	5.744E-03	2.235	1.246E-03	2.735	0.
0.245	2.523E-01	0.745	2.602E-02	1.245	1.506E-02	1.745	5.727E-03	2.245	1.246E-03	2.745	0.
0.255	2.125E-01	0.755	2.576E-02	1.255	1.496E-02	1.755	5.710E-03	2.255	1.246E-03	2.755	0.
0.265	1.911E-01	0.765	2.550E-02	1.265	1.486E-02	1.765	5.693E-03	2.265	1.246E-03	2.765	0.
0.275	1.831E-01	0.775	2.533E-02	1.275	1.476E-02	1.775	5.676E-03	2.275	1.246E-03	2.775	0.
0.285	1.743E-01	0.785	3.210E-02	1.285	1.466E-02	1.785	5.659E-03	2.285	1.246E-03	2.785	0.
0.295	2.436E-01	0.795	2.258E-02	1.295	1.456E-02	1.795	5.642E-03	2.295	1.246E-03	2.795	0.
0.305	1.432E-01	0.805	3.364E-02	1.305	1.446E-02	1.805	5.625E-03	2.305	1.246E-03	2.805	0.
0.315	1.420E-01	0.815	2.175E-02	1.315	1.436E-02	1.815	5.608E-03	2.315	1.246E-03	2.815	0.
0.325	1.354E-01	0.825	2.153E-02	1.325	1.426E-02	1.825	5.591E-03	2.325	1.246E-03	2.825	0.
0.335	1.311E-01	0.835	2.132E-02	1.335	1.416E-02	1.835	5.574E-03	2.335	1.246E-03	2.835	0.
0.345	1.280E-01	0.845	2.112E-02	1.345	1.406E-02	1.845	5.557E-03	2.345	1.246E-03	2.845	0.
0.355	1.275E-01	0.855	2.092E-02	1.355	1.396E-02	1.855	5.540E-03	2.355	1.246E-03	2.855	0.
0.365	9.232E-02	0.865	2.073E-02	1.365	1.386E-02	1.865	5.523E-03	2.365	1.246E-03	2.865	0.
0.375	9.405E-02	0.875	2.055E-02	1.375	1.376E-02	1.875	5.506E-03	2.375	1.246E-03	2.875	0.
0.385	8.503E-02	0.885	2.037E-02	1.385	1.366E-02	1.885	5.489E-03	2.385	1.246E-03	2.885	0.
0.395	8.321E-02	0.895	2.020E-02	1.395	1.356E-02	1.895	5.472E-03	2.395	1.246E-03	2.895	0.
0.405	8.087E-02	0.905	2.003E-02	1.405	1.346E-02	1.905	5.455E-03	2.405	1.246E-03	2.905	0.
0.415	7.825E-02	0.915	1.995E-02	1.415	1.336E-02	1.915	5.438E-03	2.415	1.246E-03	2.915	0.
0.425	7.607E-02	0.925	1.970E-02	1.425	1.326E-02	1.925	5.421E-03	2.425	1.246E-03	2.925	0.
0.435	7.400E-02	0.935	1.952E-02	1.435	1.316E-02	1.935	5.404E-03	2.435	1.246E-03	2.935	0.
0.445	7.209E-02	0.945	1.934E-02	1.445	1.306E-02	1.945	5.387E-03	2.445	1.246E-03	2.945	0.
0.455	7.036E-02	0.955	1.916E-02	1.455	1.296E-02	1.955	5.370E-03	2.455	1.246E-03	2.955	0.
0.465	5.856E-02	0.965	1.898E-02	1.465	1.286E-02	1.965	5.353E-03	2.465	1.246E-03	2.965	0.
0.475	6.597E-02	0.975	1.880E-02	1.475	1.276E-02	1.975	5.336E-03	2.475	1.246E-03	2.975	0.
0.485	5.546E-02	0.985	1.744E-02	1.485	1.266E-02	1.985	5.319E-03	2.485	1.246E-03	2.985	0.
0.495	5.471E-02	0.995	1.782E-02	1.495	1.256E-02	1.995	5.302E-03	2.495	1.246E-03	2.995	0.
0.505	5.270E-02	1.005	2.907E-02	1.505	1.246E-02	2.005	1.246E-03	2.505	1.246E-03	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BURE-HOLE GEOMETRY

CASE 35, U, 10.15CM, WATER, NONE

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	0.2125E-09	0.015	8.713E-02	1.015	1.617E-02	1.515	5.727E-03	2.015	1.197E-03	2.515	0.
0.020	2.020E-11	0.020	5.432E-02	1.025	1.607E-02	1.525	5.712E-03	2.025	1.195E-03	2.525	0.
0.030	2.000E-24	0.030	5.328E-02	1.035	1.597E-02	1.535	5.698E-03	2.035	1.194E-03	2.535	0.
0.040	1.531E-17	0.040	5.230E-02	1.045	1.587E-02	1.545	5.685E-03	2.045	1.193E-03	2.545	0.
0.050	3.724E-15	0.050	5.134E-02	1.055	1.578E-02	1.555	5.672E-03	2.055	1.192E-03	2.555	0.
0.060	1.206E-09	0.060	5.036E-02	1.065	1.568E-02	1.565	5.659E-03	2.065	1.190E-03	2.565	0.
0.070	3.333E-09	0.070	4.938E-02	1.075	1.558E-02	1.575	5.646E-03	2.075	1.189E-03	2.575	0.
0.085	1.030E-07	0.085	4.840E-02	1.085	1.548E-02	1.585	5.633E-03	2.085	1.188E-03	2.585	0.
0.095	4.955E-02	0.095	4.742E-02	1.095	1.538E-02	1.595	5.620E-03	2.095	1.186E-03	2.595	0.
0.105	1.575E-01	0.105	4.644E-02	1.105	1.528E-02	1.605	5.607E-03	2.105	1.185E-03	2.605	0.
0.115	2.555E-01	0.115	2.985E-02	1.115	1.518E-02	1.615	5.594E-03	2.115	1.183E-03	2.615	0.
0.125	3.055E-01	0.125	2.895E-02	1.125	1.508E-02	1.625	5.581E-03	2.125	1.182E-03	2.625	0.
0.135	3.285E-01	0.135	2.805E-02	1.135	1.498E-02	1.635	5.568E-03	2.135	1.180E-03	2.635	0.
0.145	3.335E-01	0.145	2.715E-02	1.145	1.488E-02	1.645	5.555E-03	2.145	1.179E-03	2.645	0.
0.155	3.235E-01	0.155	2.625E-02	1.155	1.478E-02	1.655	5.542E-03	2.155	1.177E-03	2.655	0.
0.165	3.155E-01	0.165	2.535E-02	1.165	1.468E-02	1.665	5.529E-03	2.165	1.176E-03	2.665	0.
0.175	3.055E-01	0.175	2.445E-02	1.175	1.458E-02	1.675	5.516E-03	2.175	1.174E-03	2.675	0.
0.185	2.935E-01	0.185	2.355E-02	1.185	1.448E-02	1.685	5.503E-03	2.185	1.173E-03	2.685	0.
0.195	2.795E-01	0.195	2.265E-02	1.195	1.438E-02	1.695	5.490E-03	2.195	1.171E-03	2.695	0.
0.205	2.655E-01	0.205	2.175E-02	1.205	1.428E-02	1.705	5.477E-03	2.205	1.169E-03	2.705	0.
0.215	2.445E-01	0.215	2.085E-02	1.215	1.418E-02	1.715	5.464E-03	2.215	1.168E-03	2.715	0.
0.225	2.327E-01	0.225	2.000E-02	1.225	1.408E-02	1.725	5.451E-03	2.225	1.166E-03	2.725	0.
0.235	2.200E-01	0.235	1.915E-02	1.235	1.398E-02	1.735	5.438E-03	2.235	1.165E-03	2.735	0.
0.245	2.231E-01	0.245	1.830E-02	1.245	1.388E-02	1.745	5.425E-03	2.245	1.163E-03	2.745	0.
0.255	1.916E-01	0.255	1.745E-02	1.255	1.378E-02	1.755	5.412E-03	2.255	1.162E-03	2.755	0.
0.265	1.745E-01	0.265	1.660E-02	1.265	1.368E-02	1.765	5.399E-03	2.265	1.160E-03	2.765	0.
0.275	1.648E-01	0.275	1.575E-02	1.275	1.358E-02	1.775	5.386E-03	2.275	1.159E-03	2.775	0.
0.285	1.614E-01	0.285	1.490E-02	1.285	1.348E-02	1.785	5.373E-03	2.285	1.157E-03	2.785	0.
0.295	2.065E-01	0.295	1.405E-02	1.295	1.338E-02	1.795	5.360E-03	2.295	1.156E-03	2.795	0.
0.305	1.345E-01	0.305	1.320E-02	1.305	1.328E-02	1.805	5.347E-03	2.305	1.154E-03	2.805	0.
0.315	1.235E-01	0.315	1.235E-02	1.315	1.318E-02	1.815	5.334E-03	2.315	1.153E-03	2.815	0.
0.325	1.235E-01	0.325	1.150E-02	1.325	1.308E-02	1.825	5.321E-03	2.325	1.151E-03	2.825	0.
0.335	1.135E-01	0.335	1.065E-02	1.335	1.298E-02	1.835	5.308E-03	2.335	1.150E-03	2.835	0.
0.345	1.141E-01	0.345	9.80E-03	1.345	1.288E-02	1.845	5.295E-03	2.345	1.148E-03	2.845	0.
0.355	2.405E-01	0.355	8.95E-03	1.355	1.278E-02	1.855	5.282E-03	2.355	1.147E-03	2.855	0.
0.365	3.215E-02	0.365	8.10E-03	1.365	1.268E-02	1.865	5.269E-03	2.365	1.145E-03	2.865	0.
0.375	9.821E-02	0.375	7.25E-03	1.375	1.258E-02	1.875	5.256E-03	2.375	1.144E-03	2.875	0.
0.385	7.931E-02	0.385	6.40E-03	1.385	1.248E-02	1.885	5.243E-03	2.385	1.142E-03	2.885	0.
0.395	7.672E-02	0.395	5.55E-03	1.395	1.238E-02	1.895	5.230E-03	2.395	1.141E-03	2.895	0.
0.405	7.443E-02	0.405	4.70E-03	1.405	1.228E-02	1.905	5.217E-03	2.405	1.139E-03	2.905	0.
0.415	7.212E-02	0.415	3.85E-03	1.415	1.218E-02	1.915	5.204E-03	2.415	1.138E-03	2.915	0.
0.425	7.006E-02	0.425	3.00E-03	1.425	1.208E-02	1.925	5.191E-03	2.425	1.136E-03	2.925	0.
0.435	6.812E-02	0.435	2.15E-03	1.435	1.198E-02	1.935	5.178E-03	2.435	1.135E-03	2.935	0.
0.445	6.632E-02	0.445	1.30E-03	1.445	1.188E-02	1.945	5.165E-03	2.445	1.134E-03	2.945	0.
0.455	6.451E-02	0.455	4.45E-04	1.455	1.178E-02	1.955	5.152E-03	2.455	1.132E-03	2.955	0.
0.465	6.270E-02	0.465	3.60E-04	1.465	1.168E-02	1.965	5.139E-03	2.465	1.131E-03	2.965	0.
0.475	6.090E-02	0.475	2.75E-04	1.475	1.158E-02	1.975	5.126E-03	2.475	1.129E-03	2.975	0.
0.485	5.910E-02	0.485	1.90E-04	1.485	1.148E-02	1.985	5.113E-03	2.485	1.128E-03	2.985	0.
0.495	5.730E-02	0.495	1.05E-04	1.495	1.138E-02	1.995	5.100E-03	2.495	1.126E-03	2.995	0.
0.505	5.550E-02	0.505	2.20E-05	1.505	1.128E-02	2.005	5.087E-03	2.505	1.125E-03	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, BUREAU GEOMETRY
CASE 36, U. 12.70CM, WATER 9.19

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	1.230E-03	0.015	7.720E-02	1.015	1.483E-02	1.515	5.305E-03	2.015	1.118E-03	2.515	0.	3.015	0.
0.020	1.747E-03	0.020	4.895E-02	1.025	1.476E-02	1.525	5.291E-03	2.025	1.117E-03	2.525	0.	3.025	0.
0.030	2.253E-03	0.030	4.743E-02	1.035	1.468E-02	1.535	5.278E-03	2.035	1.116E-03	2.535	0.	3.035	0.
0.045	1.303E-03	0.045	4.604E-02	1.045	1.455E-02	1.545	5.265E-03	2.045	1.115E-03	2.545	0.	3.045	0.
0.055	1.230E-03	0.055	4.504E-02	1.055	1.446E-02	1.555	5.252E-03	2.055	1.114E-03	2.555	0.	3.055	0.
0.065	1.111E-03	0.065	4.423E-02	1.065	1.437E-02	1.565	5.240E-03	2.065	1.113E-03	2.565	0.	3.065	0.
0.075	1.071E-03	0.075	4.342E-02	1.075	1.429E-02	1.575	5.228E-03	2.075	1.112E-03	2.575	0.	3.075	0.
0.085	1.031E-03	0.085	4.261E-02	1.085	1.421E-02	1.585	5.216E-03	2.085	1.111E-03	2.585	0.	3.085	0.
0.095	1.000E-03	0.095	4.180E-02	1.095	1.413E-02	1.595	5.204E-03	2.095	1.110E-03	2.595	0.	3.095	0.
0.105	1.000E-03	0.105	4.100E-02	1.105	1.405E-02	1.605	5.192E-03	2.105	1.109E-03	2.605	0.	3.105	0.
0.115	2.000E-03	0.115	2.741E-02	1.115	1.397E-02	1.615	5.180E-03	2.115	1.108E-03	2.615	0.	3.115	0.
0.125	2.732E-03	0.125	2.660E-02	1.125	1.389E-02	1.625	5.168E-03	2.125	1.107E-03	2.625	0.	3.125	0.
0.135	2.727E-03	0.135	2.579E-02	1.135	1.381E-02	1.635	5.156E-03	2.135	1.106E-03	2.635	0.	3.135	0.
0.145	2.960E-03	0.145	2.498E-02	1.145	1.373E-02	1.645	5.144E-03	2.145	1.105E-03	2.645	0.	3.145	0.
0.155	2.911E-03	0.155	2.417E-02	1.155	1.365E-02	1.655	5.132E-03	2.155	1.104E-03	2.655	0.	3.155	0.
0.165	2.747E-03	0.165	2.336E-02	1.165	1.357E-02	1.665	5.120E-03	2.165	1.103E-03	2.665	0.	3.165	0.
0.175	2.582E-03	0.175	2.255E-02	1.175	1.349E-02	1.675	5.108E-03	2.175	1.102E-03	2.675	0.	3.175	0.
0.185	2.323E-03	0.185	2.174E-02	1.185	1.341E-02	1.685	5.096E-03	2.185	1.101E-03	2.685	0.	3.185	0.
0.195	2.341E-03	0.195	2.093E-02	1.195	1.333E-02	1.695	5.084E-03	2.195	1.100E-03	2.695	0.	3.195	0.
0.205	2.250E-03	0.205	2.012E-02	1.205	1.325E-02	1.705	5.072E-03	2.205	1.099E-03	2.705	0.	3.205	0.
0.215	2.159E-03	0.215	1.931E-02	1.215	1.317E-02	1.715	5.060E-03	2.215	1.098E-03	2.715	0.	3.215	0.
0.225	2.068E-03	0.225	1.850E-02	1.225	1.309E-02	1.725	5.048E-03	2.225	1.097E-03	2.725	0.	3.225	0.
0.235	1.977E-03	0.235	1.769E-02	1.235	1.301E-02	1.735	5.036E-03	2.235	1.096E-03	2.735	0.	3.235	0.
0.245	1.886E-03	0.245	1.688E-02	1.245	1.293E-02	1.745	5.024E-03	2.245	1.095E-03	2.745	0.	3.245	0.
0.255	1.795E-03	0.255	1.607E-02	1.255	1.285E-02	1.755	5.012E-03	2.255	1.094E-03	2.755	0.	3.255	0.
0.265	1.704E-03	0.265	1.526E-02	1.265	1.277E-02	1.765	5.000E-03	2.265	1.093E-03	2.765	0.	3.265	0.
0.275	1.613E-03	0.275	1.445E-02	1.275	1.269E-02	1.775	4.988E-03	2.275	1.092E-03	2.775	0.	3.275	0.
0.285	1.522E-03	0.285	1.364E-02	1.285	1.261E-02	1.785	4.976E-03	2.285	1.091E-03	2.785	0.	3.285	0.
0.295	1.431E-03	0.295	1.283E-02	1.295	1.253E-02	1.795	4.964E-03	2.295	1.090E-03	2.795	0.	3.295	0.
0.305	1.340E-03	0.305	1.202E-02	1.305	1.245E-02	1.805	4.952E-03	2.305	1.089E-03	2.805	0.	3.305	0.
0.315	1.249E-03	0.315	1.121E-02	1.315	1.237E-02	1.815	4.940E-03	2.315	1.088E-03	2.815	0.	3.315	0.
0.325	1.158E-03	0.325	1.040E-02	1.325	1.229E-02	1.825	4.928E-03	2.325	1.087E-03	2.825	0.	3.325	0.
0.335	1.067E-03	0.335	9.59E-03	1.335	1.221E-02	1.835	4.916E-03	2.335	1.086E-03	2.835	0.	3.335	0.
0.345	1.000E-03	0.345	8.78E-03	1.345	1.213E-02	1.845	4.904E-03	2.345	1.085E-03	2.845	0.	3.345	0.
0.355	1.000E-03	0.355	7.97E-03	1.355	1.205E-02	1.855	4.892E-03	2.355	1.084E-03	2.855	0.	3.355	0.
0.365	7.714E-02	0.365	1.774E-02	1.365	1.197E-02	1.865	4.880E-03	2.365	1.083E-03	2.865	0.	3.365	0.
0.375	7.440E-02	0.375	1.757E-02	1.375	1.189E-02	1.875	4.868E-03	2.375	1.082E-03	2.875	0.	3.375	0.
0.385	7.132E-02	0.385	1.740E-02	1.385	1.181E-02	1.885	4.856E-03	2.385	1.081E-03	2.885	0.	3.385	0.
0.395	6.842E-02	0.395	1.723E-02	1.395	1.173E-02	1.895	4.844E-03	2.395	1.080E-03	2.895	0.	3.395	0.
0.405	6.572E-02	0.405	1.706E-02	1.405	1.165E-02	1.905	4.832E-03	2.405	1.079E-03	2.905	0.	3.405	0.
0.415	6.326E-02	0.415	1.689E-02	1.415	1.157E-02	1.915	4.820E-03	2.415	1.078E-03	2.915	0.	3.415	0.
0.425	6.091E-02	0.425	1.672E-02	1.425	1.149E-02	1.925	4.808E-03	2.425	1.077E-03	2.925	0.	3.425	0.
0.435	5.866E-02	0.435	1.655E-02	1.435	1.141E-02	1.935	4.796E-03	2.435	1.076E-03	2.935	0.	3.435	0.
0.445	5.641E-02	0.445	1.638E-02	1.445	1.133E-02	1.945	4.784E-03	2.445	1.075E-03	2.945	0.	3.445	0.
0.455	5.416E-02	0.455	1.621E-02	1.455	1.125E-02	1.955	4.772E-03	2.455	1.074E-03	2.955	0.	3.455	0.
0.465	5.191E-02	0.465	1.604E-02	1.465	1.117E-02	1.965	4.760E-03	2.465	1.073E-03	2.965	0.	3.465	0.
0.475	4.966E-02	0.475	1.587E-02	1.475	1.109E-02	1.975	4.748E-03	2.475	1.072E-03	2.975	0.	3.475	0.
0.485	4.741E-02	0.485	1.570E-02	1.485	1.101E-02	1.985	4.736E-03	2.485	1.071E-03	2.985	0.	3.485	0.
0.495	4.516E-02	0.495	1.553E-02	1.495	1.093E-02	1.995	4.724E-03	2.495	1.070E-03	2.995	0.	3.495	0.
0.505	4.291E-02	0.505	1.536E-02	1.505	1.085E-02	2.005	4.712E-03	2.505	1.069E-03	3.005	0.	3.505	0.

TOTAL FLUX ENERGY SPECTRUM FOR CASE 37, U. 5.715CM, AIR, 0.32CM IRON

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
.015	2.293E-13	.515	1.113E-01	1.015	1.859E-02	1.515	6.800E-03	2.015	1.330E-03	2.515	0.
.025	1.164E-09	.525	6.306E-02	1.025	1.847E-02	1.525	6.464E-03	2.025	1.328E-03	2.525	0.
.035	5.801E-07	.535	6.020E-02	1.035	1.836E-02	1.535	6.449E-03	2.035	1.327E-03	2.535	0.
.045	7.058E-05	.545	6.105E-02	1.045	1.826E-02	1.545	6.434E-03	2.045	1.325E-03	2.545	0.
.055	1.469E-03	.555	6.039E-02	1.055	1.816E-02	1.555	6.420E-03	2.055	1.324E-03	2.555	0.
.065	9.064E-03	.565	5.916E-02	1.065	1.805E-02	1.565	6.405E-03	2.065	1.322E-03	2.565	0.
.075	1.223E-02	.575	5.825E-02	1.075	1.797E-02	1.575	6.387E-03	2.075	1.321E-03	2.575	0.
.085	2.039E-02	.585	5.732E-02	1.085	1.788E-02	1.585	6.370E-03	2.085	1.319E-03	2.585	0.
.095	7.385E-02	.595	5.613E-02	1.095	1.779E-02	1.595	6.353E-03	2.095	1.317E-03	2.595	0.
.105	1.495E-01	.605	5.534E-01	1.105	1.769E-02	1.605	6.336E-03	2.105	1.315E-03	2.605	0.
.115	2.099E-01	.615	3.305E-02	1.115	1.759E-02	1.615	6.319E-03	2.115	1.313E-03	2.615	0.
.125	2.547E-01	.625	3.305E-02	1.125	1.753E-02	1.625	6.307E-03	2.125	1.311E-03	2.625	0.
.135	2.827E-01	.635	3.305E-02	1.135	1.743E-02	1.635	6.290E-03	2.135	1.309E-03	2.635	0.
.145	2.975E-01	.645	3.209E-02	1.145	1.735E-02	1.645	6.276E-03	2.145	1.307E-03	2.645	0.
.155	3.041E-01	.655	3.161E-02	1.155	1.725E-02	1.655	6.265E-03	2.155	1.305E-03	2.655	0.
.165	2.979E-01	.665	4.818E-02	1.165	1.716E-02	1.665	6.254E-03	2.165	1.303E-03	2.665	0.
.175	2.922E-01	.675	3.012E-02	1.175	1.704E-02	1.675	6.244E-03	2.175	1.301E-03	2.675	0.
.185	3.070E-01	.685	2.972E-02	1.185	1.693E-02	1.685	6.234E-03	2.185	1.299E-03	2.685	0.
.195	2.706E-01	.695	2.934E-02	1.195	1.683E-02	1.695	6.224E-03	2.195	1.297E-03	2.695	0.
.205	2.603E-01	.705	2.897E-02	1.205	1.673E-02	1.705	6.214E-03	2.205	1.295E-03	2.705	0.
.215	2.534E-01	.715	2.861E-02	1.215	1.663E-02	1.715	6.204E-03	2.215	1.293E-03	2.715	0.
.225	2.459E-01	.725	2.827E-02	1.225	1.653E-02	1.725	6.194E-03	2.225	1.291E-03	2.725	0.
.235	2.351E-01	.735	2.794E-02	1.235	1.643E-02	1.735	6.184E-03	2.235	1.289E-03	2.735	0.
.245	2.535E-01	.745	2.762E-02	1.245	1.633E-02	1.745	6.174E-03	2.245	1.287E-03	2.745	0.
.255	2.089E-01	.755	2.727E-02	1.255	1.623E-02	1.755	6.164E-03	2.255	1.285E-03	2.755	0.
.265	1.954E-01	.765	2.693E-02	1.265	1.613E-02	1.765	6.154E-03	2.265	1.283E-03	2.765	0.
.275	1.873E-01	.775	2.661E-02	1.275	1.603E-02	1.775	6.144E-03	2.275	1.281E-03	2.775	0.
.285	1.795E-01	.785	3.581E-02	1.285	1.593E-02	1.785	6.134E-03	2.285	1.279E-03	2.785	0.
.295	2.736E-01	.795	2.598E-02	1.295	1.583E-02	1.795	6.124E-03	2.295	1.277E-03	2.795	0.
.305	1.491E-01	.805	3.813E-02	1.305	1.573E-02	1.805	6.114E-03	2.305	1.275E-03	2.805	0.
.315	1.439E-01	.815	2.312E-02	1.315	1.563E-02	1.815	6.104E-03	2.315	1.273E-03	2.815	0.
.325	1.390E-01	.825	2.283E-02	1.325	1.553E-02	1.825	6.094E-03	2.325	1.271E-03	2.825	0.
.335	1.345E-01	.835	2.258E-02	1.335	1.543E-02	1.835	6.084E-03	2.335	1.269E-03	2.835	0.
.345	1.297E-01	.845	2.238E-02	1.345	1.533E-02	1.845	6.074E-03	2.345	1.267E-03	2.845	0.
.355	3.702E-01	.855	2.228E-02	1.355	1.523E-02	1.855	6.064E-03	2.355	1.265E-03	2.855	0.
.365	9.339E-02	.865	2.203E-02	1.365	1.513E-02	1.865	6.054E-03	2.365	1.263E-03	2.865	0.
.375	3.049E-02	.875	2.193E-02	1.375	1.503E-02	1.875	6.044E-03	2.375	1.261E-03	2.875	0.
.385	8.775E-02	.885	2.173E-02	1.385	1.493E-02	1.885	6.034E-03	2.385	1.259E-03	2.885	0.
.395	8.526E-02	.895	2.156E-02	1.395	1.483E-02	1.895	6.024E-03	2.395	1.257E-03	2.895	0.
.405	8.296E-02	.905	2.138E-02	1.405	1.473E-02	1.905	6.014E-03	2.405	1.255E-03	2.905	0.
.415	9.082E-02	.915	2.121E-02	1.415	1.463E-02	1.915	6.004E-03	2.415	1.253E-03	2.915	0.
.425	7.884E-02	.925	2.103E-02	1.425	1.453E-02	1.925	5.994E-03	2.425	1.251E-03	2.925	0.
.435	7.621E-02	.935	2.085E-02	1.435	1.443E-02	1.935	5.984E-03	2.435	1.249E-03	2.935	0.
.445	7.354E-02	.945	1.971E-02	1.445	1.433E-02	1.945	5.974E-03	2.445	1.247E-03	2.945	0.
.455	7.095E-02	.955	1.957E-02	1.455	1.423E-02	1.955	5.964E-03	2.455	1.245E-03	2.955	0.
.465	7.198E-02	.965	1.944E-02	1.465	1.413E-02	1.965	5.954E-03	2.465	1.243E-03	2.965	0.
.475	7.032E-02	.975	1.931E-02	1.475	1.403E-02	1.975	5.944E-03	2.475	1.241E-03	2.975	0.
.485	6.911E-02	.985	1.918E-02	1.485	1.393E-02	1.985	5.934E-03	2.485	1.239E-03	2.985	0.
.495	6.777E-02	.995	1.906E-02	1.495	1.383E-02	1.995	5.924E-03	2.495	1.237E-03	2.995	0.
.505	6.655E-02	1.005	3.692E-02	1.505	6.096E-02	2.005	1.331E-03	2.505	1.331E-03	3.005	0.

TOTAL FLUX ENERGY SPECTRUM, 40-140 KEV GEOMETRY
CASE 38, U, 5.715CM, AIR, 0.32CM PVC

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	1.945E-10	0.215	1.190E-01	1.015	1.965E-02	1.515	6.789E-03	2.015	1.390E-03	2.515	0.	3.015	0.	3.515	0.
0.025	0.733E-03	0.525	6.923E-02	1.025	1.932E-02	1.525	6.773E-03	2.025	1.380E-03	2.525	0.	3.025	0.	3.525	0.
0.035	3.355E-24	0.535	6.346E-02	1.035	1.942E-02	1.535	6.759E-03	2.035	1.387E-03	2.535	0.	3.035	0.	3.535	0.
0.045	2.338E-17	0.545	6.693E-02	1.045	1.932E-02	1.545	6.746E-03	2.045	1.386E-03	2.545	0.	3.045	0.	3.545	0.
0.055	5.333E-15	0.555	5.535E-02	1.055	1.922E-02	1.555	6.730E-03	2.055	1.384E-03	2.555	0.	3.055	0.	3.555	0.
0.065	2.597E-09	0.565	6.401E-02	1.065	1.912E-02	1.565	6.715E-03	2.065	1.383E-03	2.565	0.	3.065	0.	3.565	0.
0.075	4.912E-08	0.575	5.301E-02	1.075	1.902E-02	1.575	6.698E-03	2.075	1.381E-03	2.575	0.	3.075	0.	3.575	0.
0.085	1.21E-07	0.585	6.279E-02	1.085	1.893E-02	1.585	6.680E-03	2.085	1.380E-03	2.585	0.	3.085	0.	3.585	0.
0.095	6.321E-02	0.595	6.121E-02	1.095	1.884E-02	1.595	6.669E-03	2.095	1.378E-03	2.595	0.	3.095	0.	3.595	0.
0.105	2.152E-01	0.605	6.386E-01	1.105	1.874E-02	1.605	6.677E-03	2.105	1.373E-03	2.605	0.	3.105	0.	3.605	0.
0.115	3.325E-01	0.615	3.610E-02	1.115	1.858E-02	1.615	6.465E-03	2.115	4.42E-02	2.615	0.	3.115	0.	3.615	0.
0.125	3.959E-01	0.625	3.610E-02	1.125	1.849E-02	1.625	6.453E-03	2.125	1.100E-03	2.625	0.	3.125	0.	3.625	0.
0.135	4.72E-01	0.635	3.525E-02	1.135	1.831E-02	1.635	6.441E-03	2.135	1.159E-03	2.635	0.	3.135	0.	3.635	0.
0.145	4.373E-01	0.645	3.497E-02	1.145	1.817E-02	1.645	6.429E-03	2.145	1.158E-03	2.645	0.	3.145	0.	3.645	0.
0.155	4.353E-01	0.655	3.444E-02	1.155	1.806E-02	1.655	6.415E-03	2.155	1.157E-03	2.655	0.	3.155	0.	3.655	0.
0.165	4.174E-01	0.665	5.461E-02	1.165	1.791E-02	1.665	4.290E-02	2.165	1.156E-03	2.665	0.	3.165	0.	3.665	0.
0.175	4.005E-01	0.675	3.223E-02	1.175	1.780E-02	1.675	6.130E-03	2.175	1.155E-03	2.675	0.	3.175	0.	3.675	0.
0.185	4.115E-01	0.685	3.179E-02	1.185	1.767E-02	1.685	6.119E-03	2.185	1.151E-03	2.685	0.	3.185	0.	3.685	0.
0.195	3.373E-01	0.695	3.137E-02	1.195	1.755E-02	1.695	6.109E-03	2.195	1.137E-03	2.695	0.	3.195	0.	3.695	0.
0.205	3.392E-01	0.705	4.095E-02	1.205	1.745E-02	1.705	6.097E-03	2.205	1.939E-01	2.705	0.	3.205	0.	3.705	0.
0.215	3.251E-01	0.715	3.095E-02	1.215	1.735E-02	1.715	6.077E-03	2.215	2.500E-04	2.715	0.	3.215	0.	3.715	0.
0.225	3.111E-01	0.725	3.018E-02	1.225	1.727E-02	1.725	5.059E-01	2.225	2.548E-04	2.725	0.	3.225	0.	3.725	0.
0.235	2.969E-01	0.735	2.983E-02	1.235	1.720E-02	1.735	5.372E-03	2.235	2.548E-04	2.735	0.	3.235	0.	3.735	0.
0.245	2.826E-01	0.745	2.947E-02	1.245	1.710E-02	1.745	5.353E-03	2.245	2.544E-04	2.745	0.	3.245	0.	3.745	0.
0.255	2.684E-01	0.755	1.098E-01	1.255	1.699E-02	1.755	5.293E-03	2.255	2.541E-04	2.755	0.	3.255	0.	3.755	0.
0.265	2.541E-01	0.765	2.637E-02	1.265	1.687E-02	1.765	5.192E-01	2.265	2.539E-04	2.765	0.	3.265	0.	3.765	0.
0.275	2.398E-01	0.775	3.975E-02	1.275	1.680E-02	1.775	1.900E-03	2.275	2.537E-04	2.775	0.	3.275	0.	3.775	0.
0.285	2.255E-01	0.785	4.595E-02	1.285	1.673E-02	1.785	1.897E-03	2.285	2.535E-04	2.785	0.	3.285	0.	3.785	0.
0.295	2.154E-01	0.795	1.029E-02	1.295	1.665E-02	1.795	1.893E-03	2.295	2.533E-04	2.795	0.	3.295	0.	3.795	0.
0.305	2.061E-01	0.805	2.545E-02	1.305	1.658E-02	1.805	1.889E-03	2.305	2.531E-04	2.805	0.	3.305	0.	3.805	0.
0.315	1.964E-01	0.815	4.201E-02	1.315	1.651E-02	1.815	1.885E-03	2.315	2.529E-04	2.815	0.	3.315	0.	3.815	0.
0.325	1.871E-01	0.825	2.421E-02	1.325	1.644E-02	1.825	1.881E-03	2.325	2.528E-04	2.825	0.	3.325	0.	3.825	0.
0.335	1.756E-01	0.835	2.427E-02	1.335	1.637E-02	1.835	1.877E-03	2.335	2.526E-04	2.835	0.	3.335	0.	3.835	0.
0.345	1.607E-01	0.845	2.392E-02	1.345	1.631E-02	1.845	1.873E-03	2.345	2.525E-04	2.845	0.	3.345	0.	3.845	0.
0.355	1.577E-01	0.855	2.351E-02	1.355	1.625E-02	1.855	1.869E-03	2.355	2.523E-04	2.855	0.	3.355	0.	3.855	0.
0.365	1.454E-01	0.865	2.343E-02	1.365	1.619E-02	1.865	1.865E-03	2.365	2.522E-04	2.865	0.	3.365	0.	3.865	0.
0.375	1.325E-01	0.875	2.343E-02	1.375	1.613E-02	1.875	1.861E-03	2.375	2.520E-04	2.875	0.	3.375	0.	3.875	0.
0.385	1.225E-01	0.885	2.302E-02	1.385	1.607E-02	1.885	1.857E-03	2.385	2.519E-04	2.885	0.	3.385	0.	3.885	0.
0.395	1.107E-01	0.895	2.284E-02	1.395	1.601E-02	1.895	1.853E-03	2.395	2.517E-04	2.895	0.	3.395	0.	3.895	0.
0.405	1.005E-01	0.905	2.265E-02	1.405	1.595E-02	1.905	1.849E-03	2.405	2.515E-04	2.905	0.	3.405	0.	3.905	0.
0.415	9.031E-02	0.915	2.247E-02	1.415	1.589E-02	1.915	1.845E-03	2.415	2.513E-04	2.915	0.	3.415	0.	3.915	0.
0.425	8.031E-02	0.925	2.228E-02	1.425	1.583E-02	1.925	1.841E-03	2.425	2.511E-04	2.925	0.	3.425	0.	3.925	0.
0.435	7.057E-02	0.935	2.095E-02	1.435	1.577E-02	1.935	1.837E-03	2.435	2.509E-04	2.935	0.	3.435	0.	3.935	0.
0.445	6.141E-02	0.945	2.075E-02	1.445	1.571E-02	1.945	1.833E-03	2.445	2.508E-04	2.945	0.	3.445	0.	3.945	0.
0.455	5.251E-02	0.955	2.075E-02	1.455	1.565E-02	1.955	1.829E-03	2.455	2.506E-04	2.955	0.	3.455	0.	3.955	0.
0.465	4.391E-02	0.965	2.062E-02	1.465	1.559E-02	1.965	1.825E-03	2.465	2.504E-04	2.965	0.	3.465	0.	3.965	0.
0.475	3.551E-02	0.975	2.049E-02	1.475	1.553E-02	1.975	1.821E-03	2.475	2.502E-04	2.975	0.	3.475	0.	3.975	0.
0.485	2.731E-02	0.985	2.035E-02	1.485	1.547E-02	1.985	1.817E-03	2.485	2.500E-04	2.985	0.	3.485	0.	3.985	0.
0.495	1.941E-02	0.995	2.021E-02	1.495	1.541E-02	1.995	1.813E-03	2.495	2.498E-04	2.995	0.	3.495	0.	3.995	0.
0.505	1.191E-02	1.005	2.007E-02	1.505	1.535E-02	2.005	1.809E-03	2.505	2.496E-04	3.005	0.	3.505	0.	4.005	0.

TOTAL FLUX ENERGY SPECTRUM, BUREAU GEOMETRY

CASE 39, J, 5.715CM, AIR, 0.79CM PVC

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	4.509E-11	0.515	1.159E-02	1.015	1.931E-02	1.515	6.687E-03	2.015	1.371E-03	2.515	0.	3.015	0.	3.515	0.
0.025	2.322E-07	0.525	0.770E-02	1.025	1.920E-02	1.525	6.672E-03	2.025	1.370E-03	2.525	0.	3.025	0.	3.525	0.
0.035	5.249E-06	0.535	6.653E-02	1.035	1.909E-02	1.535	6.657E-03	2.035	1.369E-03	2.535	0.	3.035	0.	3.535	0.
0.045	2.133E-17	0.545	6.543E-02	1.045	1.898E-02	1.545	6.643E-03	2.045	1.367E-03	2.545	0.	3.045	0.	3.545	0.
0.055	5.942E-15	0.555	6.433E-02	1.055	1.889E-02	1.555	6.629E-03	2.055	1.365E-03	2.555	0.	3.055	0.	3.555	0.
0.065	4.259E-09	0.565	6.312E-02	1.065	1.879E-02	1.565	6.614E-03	2.065	1.364E-03	2.565	0.	3.065	0.	3.565	0.
0.075	4.473E-08	0.575	6.213E-02	1.075	1.869E-02	1.575	6.597E-03	2.075	1.363E-03	2.575	0.	3.075	0.	3.575	0.
0.085	1.674E-07	0.585	6.112E-02	1.085	1.860E-02	1.585	6.581E-03	2.085	1.361E-03	2.585	0.	3.085	0.	3.585	0.
0.095	6.782E-02	0.595	6.017E-02	1.095	1.851E-02	1.595	6.565E-03	2.095	1.360E-03	2.595	0.	3.095	0.	3.595	0.
0.105	2.691E-01	0.605	5.924E-02	1.105	1.841E-02	1.605	6.549E-03	2.105	1.358E-03	2.605	0.	3.105	0.	3.605	0.
0.115	3.213E-01	0.615	5.839E-02	1.115	1.832E-02	1.615	6.533E-03	2.115	1.356E-03	2.615	0.	3.115	0.	3.615	0.
0.125	3.931E-01	0.625	5.751E-02	1.125	1.823E-02	1.625	6.517E-03	2.125	1.354E-03	2.625	0.	3.125	0.	3.625	0.
0.135	4.131E-01	0.635	5.664E-02	1.135	1.814E-02	1.635	6.501E-03	2.135	1.352E-03	2.635	0.	3.135	0.	3.635	0.
0.145	4.228E-01	0.645	5.578E-02	1.145	1.805E-02	1.645	6.485E-03	2.145	1.350E-03	2.645	0.	3.145	0.	3.645	0.
0.155	4.230E-01	0.655	5.493E-02	1.155	1.796E-02	1.655	6.469E-03	2.155	1.348E-03	2.655	0.	3.155	0.	3.655	0.
0.165	4.034E-01	0.665	5.408E-02	1.165	1.787E-02	1.665	6.453E-03	2.165	1.346E-03	2.665	0.	3.165	0.	3.665	0.
0.175	3.875E-01	0.675	5.324E-02	1.175	1.778E-02	1.675	6.437E-03	2.175	1.344E-03	2.675	0.	3.175	0.	3.675	0.
0.185	3.967E-01	0.685	5.241E-02	1.185	1.769E-02	1.685	6.421E-03	2.185	1.342E-03	2.685	0.	3.185	0.	3.685	0.
0.195	3.455E-01	0.695	5.158E-02	1.195	1.760E-02	1.695	6.405E-03	2.195	1.340E-03	2.695	0.	3.195	0.	3.695	0.
0.205	3.286E-01	0.705	5.075E-02	1.205	1.751E-02	1.705	6.389E-03	2.205	1.338E-03	2.705	0.	3.205	0.	3.705	0.
0.215	3.150E-01	0.715	5.003E-02	1.215	1.742E-02	1.715	6.373E-03	2.215	1.336E-03	2.715	0.	3.215	0.	3.715	0.
0.225	3.015E-01	0.725	4.936E-02	1.225	1.733E-02	1.725	6.357E-03	2.225	1.334E-03	2.725	0.	3.225	0.	3.725	0.
0.235	2.858E-01	0.735	4.875E-02	1.235	1.724E-02	1.735	6.341E-03	2.235	1.332E-03	2.735	0.	3.235	0.	3.735	0.
0.245	3.052E-01	0.745	4.819E-02	1.245	1.715E-02	1.745	6.325E-03	2.245	1.330E-03	2.745	0.	3.245	0.	3.745	0.
0.255	2.676E-01	0.755	4.768E-02	1.255	1.706E-02	1.755	6.309E-03	2.255	1.328E-03	2.755	0.	3.255	0.	3.755	0.
0.265	2.314E-01	0.765	4.722E-02	1.265	1.697E-02	1.765	6.293E-03	2.265	1.326E-03	2.765	0.	3.265	0.	3.765	0.
0.275	2.200E-01	0.775	4.681E-02	1.275	1.688E-02	1.775	6.277E-03	2.275	1.324E-03	2.775	0.	3.275	0.	3.775	0.
0.285	2.096E-01	0.785	4.644E-02	1.285	1.679E-02	1.785	6.261E-03	2.285	1.322E-03	2.785	0.	3.285	0.	3.785	0.
0.295	3.217E-01	0.795	4.611E-02	1.295	1.670E-02	1.795	6.245E-03	2.295	1.320E-03	2.795	0.	3.295	0.	3.795	0.
0.305	1.717E-01	0.805	4.582E-02	1.305	1.661E-02	1.805	6.229E-03	2.305	1.318E-03	2.805	0.	3.305	0.	3.805	0.
0.315	1.564E-01	0.815	4.557E-02	1.315	1.652E-02	1.815	6.213E-03	2.315	1.316E-03	2.815	0.	3.315	0.	3.815	0.
0.325	1.594E-01	0.825	4.536E-02	1.325	1.643E-02	1.825	6.197E-03	2.325	1.314E-03	2.825	0.	3.325	0.	3.825	0.
0.335	1.525E-01	0.835	4.519E-02	1.335	1.634E-02	1.835	6.181E-03	2.335	1.312E-03	2.835	0.	3.335	0.	3.835	0.
0.345	1.467E-01	0.845	4.506E-02	1.345	1.625E-02	1.845	6.165E-03	2.345	1.310E-03	2.845	0.	3.345	0.	3.845	0.
0.355	4.260E-01	0.855	4.496E-02	1.355	1.616E-02	1.855	6.149E-03	2.355	1.308E-03	2.855	0.	3.355	0.	3.855	0.
0.365	1.942E-01	0.865	4.491E-02	1.365	1.607E-02	1.865	6.133E-03	2.365	1.306E-03	2.865	0.	3.365	0.	3.865	0.
0.375	1.305E-01	0.875	4.491E-02	1.375	1.598E-02	1.875	6.117E-03	2.375	1.304E-03	2.875	0.	3.375	0.	3.875	0.
0.385	9.711E-02	0.885	4.496E-02	1.385	1.589E-02	1.885	6.101E-03	2.385	1.302E-03	2.885	0.	3.385	0.	3.885	0.
0.395	9.401E-02	0.895	4.496E-02	1.395	1.580E-02	1.895	6.085E-03	2.395	1.300E-03	2.895	0.	3.395	0.	3.895	0.
0.405	9.115E-02	0.905	4.496E-02	1.405	1.571E-02	1.905	6.069E-03	2.405	1.298E-03	2.905	0.	3.405	0.	3.905	0.
0.415	3.555E-02	0.915	4.496E-02	1.415	1.562E-02	1.915	6.053E-03	2.415	1.296E-03	2.915	0.	3.415	0.	3.915	0.
0.425	8.099E-02	0.925	4.496E-02	1.425	1.553E-02	1.925	6.037E-03	2.425	1.294E-03	2.925	0.	3.425	0.	3.925	0.
0.435	3.331E-02	0.935	4.496E-02	1.435	1.544E-02	1.935	6.021E-03	2.435	1.292E-03	2.935	0.	3.435	0.	3.935	0.
0.445	3.171E-02	0.945	4.496E-02	1.445	1.535E-02	1.945	6.005E-03	2.445	1.290E-03	2.945	0.	3.445	0.	3.945	0.
0.455	7.971E-02	0.955	4.496E-02	1.455	1.526E-02	1.955	5.989E-03	2.455	1.288E-03	2.955	0.	3.455	0.	3.955	0.
0.465	7.633E-02	0.965	4.496E-02	1.465	1.517E-02	1.965	5.973E-03	2.465	1.286E-03	2.965	0.	3.465	0.	3.965	0.
0.475	7.440E-02	0.975	4.496E-02	1.475	1.508E-02	1.975	5.957E-03	2.475	1.284E-03	2.975	0.	3.475	0.	3.975	0.
0.485	7.249E-02	0.985	4.496E-02	1.485	1.499E-02	1.985	5.941E-03	2.485	1.282E-03	2.985	0.	3.485	0.	3.985	0.
0.495	7.059E-02	0.995	4.496E-02	1.495	1.490E-02	1.995	5.925E-03	2.495	1.280E-03	2.995	0.	3.495	0.	3.995	0.
0.505	7.143E-02	1.005	4.496E-02	1.505	1.481E-02	2.005	5.909E-03	2.505	1.278E-03	3.005	0.	3.505	0.	4.005	0.

TOTAL FLUX ENERGY SPECTRUM, BURR-HOLE GEOMETRY
CASE 40, T4, 5.715CN, WATER, 0.32CM PVC

ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX	ENERGY	FLUX
0.015	3.110E-30	0.519	2.547E-01	1.015	7.922E-03	1.515	5.724E-03	2.015	4.353E-03	2.515	4.123E-03		
0.025	2.355E-31	0.529	6.026E-02	1.025	7.755E-03	1.525	5.701E-03	2.025	4.345E-03	2.525	4.120E-03		
0.035	3.459E-24	0.535	5.018E-02	1.035	7.662E-03	1.535	5.680E-03	2.035	4.338E-03	2.535	4.117E-03		
0.045	1.271E-17	0.545	5.571E-02	1.045	7.614E-03	1.545	5.659E-03	2.045	4.331E-03	2.545	4.114E-03		
0.055	4.601E-15	0.555	5.713E-02	1.055	7.549E-03	1.555	5.638E-03	2.055	4.324E-03	2.555	4.112E-03		
0.065	1.335E-09	0.565	5.620E-02	1.065	7.485E-03	1.565	5.615E-03	2.065	4.318E-03	2.565	4.108E-03		
0.075	3.055E-03	0.575	5.512E-02	1.075	7.425E-03	1.575	5.586E-03	2.075	4.309E-03	2.575	4.105E-03		
0.085	1.290E-07	0.585	3.193E-01	1.085	7.366E-03	1.585	5.566E-03	2.085	4.295E-03	2.585	4.098E-03		
0.095	0.449E-02	0.595	4.032E-02	1.095	7.309E-03	1.595	5.545E-03	2.095	4.289E-03	2.595	4.085E-03		
0.105	1.691E-01	0.605	3.957E-02	1.105	7.252E-03	1.605	5.524E-03	2.105	4.282E-03	2.605	4.069E+00		
0.115	2.997E-01	0.615	3.905E-02	1.115	7.195E-03	1.615	5.503E-03	2.115	4.276E-03	2.625	0.		
0.125	3.611E-01	0.625	3.848E-02	1.125	7.135E-03	1.625	5.482E-03	2.125	4.271E-03	2.635	0.		
0.135	3.115E-01	0.635	3.793E-02	1.135	7.085E-03	1.635	5.461E-03	2.135	4.265E-03	2.645	0.		
0.145	3.653E-01	0.645	3.741E-02	1.145	7.033E-03	1.645	5.440E-03	2.145	4.260E-03	2.655	0.		
0.155	3.781E-01	0.655	3.690E-02	1.155	6.981E-03	1.655	5.419E-03	2.155	4.254E-03	2.665	0.		
0.165	3.573E-01	0.665	3.641E-02	1.165	6.936E-03	1.665	5.398E-03	2.165	4.249E-03	2.675	0.		
0.175	3.597E-01	0.675	3.595E-02	1.175	6.891E-03	1.675	5.377E-03	2.175	4.244E-03	2.685	0.		
0.185	3.470E-01	0.685	3.552E-02	1.185	6.846E-03	1.685	5.356E-03	2.185	4.240E-03	2.695	0.		
0.195	3.311E-01	0.695	3.509E-02	1.195	6.794E-03	1.695	5.335E-03	2.195	4.235E-03	2.705	0.		
0.205	3.323E-01	0.705	3.467E-02	1.205	6.749E-03	1.705	5.314E-03	2.205	4.230E-03	2.715	0.		
0.215	2.985E-01	0.715	3.424E-02	1.215	6.707E-03	1.715	5.293E-03	2.215	4.225E-03	2.725	0.		
0.225	2.824E-01	0.725	3.382E-02	1.225	6.665E-03	1.725	5.272E-03	2.225	4.220E-03	2.735	0.		
0.235	2.406E-01	0.735	3.341E-02	1.235	6.623E-03	1.735	5.251E-03	2.235	4.215E-03	2.745	0.		
0.245	2.261E-01	0.745	3.300E-02	1.245	6.581E-03	1.745	5.230E-03	2.245	4.210E-03	2.755	0.		
0.255	1.975E-01	0.755	3.259E-02	1.255	6.539E-03	1.755	5.209E-03	2.255	4.205E-03	2.765	0.		
0.265	1.853E-01	0.765	3.218E-02	1.265	6.500E-03	1.765	5.188E-03	2.265	4.200E-03	2.775	0.		
0.275	1.919E-01	0.775	3.177E-02	1.275	6.461E-03	1.775	5.167E-03	2.275	4.195E-03	2.785	0.		
0.285	1.839E-01	0.785	3.136E-02	1.285	6.423E-03	1.785	5.146E-03	2.285	4.190E-03	2.795	0.		
0.295	1.559E-01	0.795	3.095E-02	1.295	6.385E-03	1.795	5.125E-03	2.295	4.185E-03	2.805	0.		
0.305	1.641E-01	0.805	3.054E-02	1.305	6.350E-03	1.805	5.104E-03	2.305	4.180E-03	2.815	0.		
0.315	1.395E-01	0.815	2.725E-02	1.315	6.315E-03	1.815	5.083E-03	2.315	4.175E-03	2.825	0.		
0.325	1.335E-01	0.825	2.701E-02	1.325	6.279E-03	1.825	5.062E-03	2.325	4.170E-03	2.835	0.		
0.335	1.375E-01	0.835	2.679E-02	1.335	6.243E-03	1.835	5.041E-03	2.335	4.165E-03	2.845	0.		
0.345	1.121E-01	0.845	2.658E-02	1.345	6.212E-03	1.845	5.020E-03	2.345	4.160E-03	2.855	0.		
0.355	1.081E-01	0.855	2.635E-02	1.355	6.179E-03	1.855	5.000E-03	2.355	4.155E-03	2.865	0.		
0.365	1.042E-01	0.865	2.613E-02	1.365	6.147E-03	1.865	4.979E-03	2.365	4.150E-03	2.875	0.		
0.375	1.037E-01	0.875	2.591E-02	1.375	6.115E-03	1.875	4.958E-03	2.375	4.145E-03	2.885	0.		
0.385	9.737E-02	0.885	2.569E-02	1.385	6.083E-03	1.885	4.937E-03	2.385	4.140E-03	2.895	0.		
0.395	3.637E-02	0.895	2.547E-02	1.395	6.051E-03	1.895	4.916E-03	2.395	4.135E-03	2.905	0.		
0.405	3.160E-02	0.905	2.525E-02	1.405	6.020E-03	1.905	4.895E-03	2.405	4.130E-03	2.915	0.		
0.415	8.905E-02	0.915	2.503E-02	1.415	5.999E-03	1.915	4.874E-03	2.415	4.125E-03	2.925	0.		
0.425	3.569E-02	0.925	2.481E-02	1.425	5.968E-03	1.925	4.853E-03	2.425	4.120E-03	2.935	0.		
0.435	3.441E-02	0.935	2.459E-02	1.435	5.937E-03	1.935	4.832E-03	2.435	4.115E-03	2.945	0.		
0.445	3.241E-02	0.945	2.437E-02	1.445	5.906E-03	1.945	4.811E-03	2.445	4.110E-03	2.955	0.		
0.455	3.043E-02	0.955	2.415E-02	1.455	5.875E-03	1.955	4.790E-03	2.455	4.105E-03	2.965	0.		
0.465	1.111E-01	0.965	2.393E-02	1.465	5.844E-03	1.965	4.769E-03	2.465	4.100E-03	2.975	0.		
0.475	7.445E-02	0.975	2.371E-02	1.475	5.813E-03	1.975	4.748E-03	2.475	4.095E-03	2.985	0.		
0.485	7.135E-02	0.985	2.349E-02	1.485	5.782E-03	1.985	4.727E-03	2.485	4.090E-03	2.995	0.		
0.495	7.135E-02	0.995	2.327E-02	1.495	5.751E-03	1.995	4.706E-03	2.495	4.085E-03	3.005	0.		
0.505	5.415E-02	1.005	2.305E-02	1.505	5.720E-03	2.005	4.685E-03						