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March 1967

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NEUTRON TOTAL AND ABSORPTION
CROSS SECTIONS OF ^{238}Pu

T. E. Young, F. B. Simpson,
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U. S. ATOMIC ENERGY COMMISSION

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National Bureau of Standards, U. S. Department of Commerce
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IN-1026
Issued: March 1967
Physics
TID-4500

CFSTI PRICES

H.C. \$ 3.00; MN .65

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U. S. Atomic Energy Commission Research and Development Report
Issued Under Contract AT(10-1)-1230
Idaho Operations Office

ACKNOWLEDGMENTS

The authors would like to thank R. G. Fluharty, M. S. Moore and J. R. Smith for their encouragement and assistance throughout this measurement. We also wish to express appreciation to H. G. Miller, D. B. Hansen, and D. R. Staples for technical aid with the equipment, and to N. H. Marshall, H. J. Oestreich, and A. L. Dittmer for their work associated with processing of the data. In addition we would like to thank R. G. Nisle for discussions of the effective thermal absorption cross sections, and for use of his computer program to calculate these cross sections.

ABSTRACT

The neutron total cross section of ^{238}Pu has been measured from 0.008 to 6500 eV. These data give single level Breit-Wigner parameters for resonances below 200 eV. The observed total cross section at 2200 m/sec is 588^{+15}_{-25} barns. A value of 532^{+15}_{-25} barns has been calculated for the effective (equivalent $1/v$) thermal absorption cross section. Parameters of individual resonances below 200 eV and average parameters at higher energies give a resonance absorption integral of 164 ± 15 barns, and a value of $(1.10 \pm 0.20) \times 10^{-4}$ for the s-wave neutron strength function ($\bar{\Gamma}_n^0/D$).

SUMMARY

The MTR fast chopper has been used to measure the neutron total cross section of ^{238}Pu from 0.008 to 6500 eV. Samples were prepared by pressing PuO_2 and Al powders into wafers of appropriate size. Analysis of the data by shape fitting required the use of 17 barns for σ_p . The measured total cross section at 2200 m/sec is 588^{+15}_{-25} barns, and the corresponding absorption cross section, calculated from resonance parameters which describe the total cross section from 0.008 to 200 eV is 559^{+15}_{-25} barns. A value of 532^{+15}_{-25} barns was obtained for the effective (equivalent $1/v$) thermal absorption cross section for a Maxwellian flux distribution. Combining the values obtained by area analysis and by shape fitting with the Breit-Wigner single level formula gives the following resonances below 200 eV in ^{238}Pu .

$E_o(\text{eV})$	$\Gamma_\gamma(\text{mV})^a$	$\Gamma_n^o(\text{mV}/(\text{eV})^{1/2})$	$E_o(\text{eV})$	$\Gamma_\gamma(\text{mV})^a$	$\Gamma_n^o(\text{mV}/(\text{eV})^{1/2})$
-10^b	45	5.00	110.0	38^c	0.50
-0.4^b	45	0.540	113.8	38^c	0.97
2.885	38	0.044	118.6	38^c	2.93
9.975	37	0.066	122.5	38^c	2.41
18.562	39	0.81	151.0	38^c	1.2
59.8	38^c	0.20	171.2	38^c	4.9
70.1	38^c	0.30	182.5	38^c	2.3
83.0	38^c	2.10	192.0	38^c	3.8

a. Γ_γ includes any Γ_f which might exist.

b. Postulated to fit total cross section below 2 eV.

c. Assumed values.

These resonances, and average values of parameters above 200 eV, give a resonance absorption integral of 164 ± 15 barns for neutrons of energies greater than 0.5 eV. Resonance parameters, and analysis of

the total resonance cross section up to 5000 eV, give a value of $(1.1 \pm 0.2) \times 10^{-4}$ for the s-wave strength function ($\bar{\Gamma}_n^0/D$). The Γ_n^0 's seem to be described satisfactorily by a chi-squared distribution with one degree of freedom.

CONTENTS

ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
SUMMARY	iv
I. INTRODUCTION	1
II. EXPERIMENTAL DETAILS	2
III. EXPERIMENTAL RESULTS	3
IV. DISCUSSION OF RESULTS	12
V. REFERENCES	13
APPENDIX A - EVIDENCE FOR H ₂ O CONTAMINATION OF THE SAMPLES	15
APPENDIX B - EVIDENCE FOR DISTORTION OF RESONANCE SHAPE BY COUNTING OF NEUTRONS SCATTERED AT THE DETECTORS	17
APPENDIX C - TABULATION OF DATA	19
APPENDIX D - COMPOSITE OF MEASURED NEUTRON TOTAL CROSS SECTION	66
APPENDIX E - CALCULATED NEUTRON ABSORPTION CROSS SECTION BELOW 2 eV	72

FIGURES

1. Total Neutron Cross Section of ²³⁸ Pu From 0.008 to 2 eV	6
2. Total Neutron Cross Section of ²³⁸ Pu From 2 to 6500 eV	9
3a. Number of Resonances Below a Given Energy	10
3b. Integral Distribution of Neutron Widths	10
B-1. Comparison of ³ He Counter Data With BF ₃ Counter Data	18

TABLES

I. Sample Thicknesses and Instrument Resolution	4
II. Breit-Wigner Resonance Parameters From Shape Fitting and Area Analysis	5
III. 2200 m/sec Absorption Cross Section For an Equivalent 1/v Curve	8

Neutron Total and Absorption Cross Sections of ^{238}Pu

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INTRODUCTION

Several reasons exist for studying the low energy neutron cross sections of ^{238}Pu . Its use as the fuel of long-lived power sources makes its various cross sections of considerable interest. These data are important in determining the production of the isotope. The neutron resonance parameters are also of interest in studying its nuclear properties. The value of $(\bar{\Gamma}_n^0/D)$ for this isotope is of particular interest since there is evidence for a maximum in the s-wave strength function near mass number 240⁽¹⁾. The total widths of neutron resonances give some indication of the prominence of the fission components in the neutron reaction. The reduced neutron widths (Γ_n^0 's) also assist in analysis of the fission cross section data⁽²⁾. The total neutron cross section of ^{238}Pu has been measured from 0.008 to 6500 eV at the Materials Testing Reactor (MTR) with the aim of determining the quantities mentioned above. Analysis of the data by fitting experimental points with the single level Breit-Wigner formula and by area analysis of the transmission dips has given resonance parameters up to 200 eV. An effective thermal absorption cross section and the resonance absorption integral have been calculated on the basis of these parameters.

EXPERIMENTAL DETAILS

The MTR fast chopper and special radioactive sample changer which were used in performing these measurements have been described in the literature^(3,4). Samples for the transmission measurements were prepared at the MTR and Lawrence Radiation Laboratory (LRL) using techniques comparable to those described by Berreth⁽⁵⁾. These samples consisted of a mixture of PuO_2 and Al powders compacted at about $5 \times 10^3 \text{ kg/cm}^2$ (70,000 psi) to form wafers of dimensions 2.794 cm x 0.635 cm x 0.152 cm (1.09 in. x 0.25 in. x 0.060 in.). Matched Al powder compacts were pressed for each sample and used as blanks (open) in the transmission measurements. The 2.794 cm x 0.152 cm face of the sample was perpendicular to the neutron beam. BF_3 counters of 2.54 cm diameters were used at the 20 meter flight path for most of the measurements. Some measurements were made at the 45 meter flight path to facilitate analysis of the higher energy resonances. Automatic sample changing devices were used to permit open, sample, and background counting periods to be alternated at 20 minute intervals so the effects of any slowly varying quantities, such as flux from the reactor, would be eliminated. Total counting periods ranged from 16 hours to 3 days. The procedure used to determine background has been described previously⁽⁶⁾.

Four Al plus PuO_2 wafers were used to form samples with thicknesses of 0.288, 0.806, 1.01, 2.30, and 2.52 atoms/kilobarn. The amount of heavy element contamination was determined by analysis of resonances attributable to ^{234}U , ^{239}Pu , and ^{240}Pu at 5.20 eV, 0.297 eV, and 1.055 eV respectively. This analysis indicated 0.20% ^{234}U , 0.54% ^{239}Pu , and 0.04% ^{240}Pu for the initial measurements. Differences in the

transmission of the holders for the blanks and samples and in aluminum content of blanks and samples were corrected for in all calculations. The data were also corrected for oxygen and the heavy elements to give transmission and cross section values due to ^{238}Pu alone.

Transmission measurements were taken at various instrument resolutions as determined by rotor speed, analyzer time-channel width, counter thickness, counter and electronic jitter, and flight path. The energy regions examined, samples used and ranges of instrument resolution are shown in Table I.

EXPERIMENTAL RESULTS

Data from 0.008 eV to 200 eV have been analyzed to give neutron resonance parameters. The data below 2 eV can be described by postulating additional resonances at negative energies. From 2 eV through 200 eV resonance parameters have been obtained by both shape fitting⁽⁷⁾ and area analysis techniques⁽⁸⁾. Between 130 eV and 200 eV the general shape of the cross section curve was fitted with the single level formula, although some cross section peaks may represent more than one resonance. A summary of the Breit-Wigner parameters obtained is given in Table II. (Individual values obtained by shape fitting and area analysis were weighted inversely as the square of their estimated errors to obtain the values of Γ_γ and Γ_n^0 shown in the "weighted average" columns.) All solid lines in the Figures 1 and 2 were obtained from shape-fit parameters in Table II.

Results of total cross section measurements from 0.008 to 2.0 eV are shown in Figure 1. A theoretical curve using the shape fit parameters from Table II is shown as a solid line. At 2200 m/sec the total

TABLE I

Sample Thicknesses and Instrument Resolution

<u>Energy (eV)</u>	<u>n(atoms/kilobarn)</u>	<u>Resolution (μsec/meter)</u>
0.008 - 0.5	2.30, 2.52	2.6
0.5 - 8	0.288, 1.01, 2.30	0.34 - 0.20
8 - 5500	0.288, 1.01, 2.30	0.11 - 0.10
100 - 130	2.30	0.040

TABLE II

Breit-Wigner Resonance Parameters
From Shape Fitting and Area Analysis

Shape Fit ^a			Area Analysis		Weighted Average	
E_o (eV)	Γ_γ^b (mV)	Γ_n^o (mV/(eV) ^{1/2})	Γ_γ (mV)	Γ_n^o (mV/(eV) ^{1/2})	Γ_γ^b (mV)	Γ_n^o (mV/(eV) ^{1/2})
-10	45	5.00	---	-----	45	5.00
- 0.4	45	0.540	---	-----	45	0.540
2.885	40	0.045	30	0.041	38 $\pm$ 2	0.044 $\pm$ 0.002
9.975	45	0.064	27	0.067	37 $\pm$ 6	0.066 $\pm$ 0.004
18.562	45	0.78	33	0.85	39 $\pm$ 6	0.81 $\pm$ 0.06
59.8	38 ^c	0.17	38 ^c	0.22	38 ^c	0.20 $\pm$ 0.03
70.1	38 ^c	0.27	38 ^c	0.33	38 ^c	0.30 $\pm$ 0.04
83.0	38 ^c	2.00	38 ^c	2.18	38 ^c	2.10 $\pm$ 0.21
110.0	38 ^c	0.70	38 ^c	0.38	38 ^c	0.50 $\pm$ 0.15
113.8	38 ^c	1.20	38 ^c	0.85	38 ^c	0.97 $\pm$ 0.20
118.6	38 ^c	3.00	38 ^c	2.80	38 ^c	2.93 $\pm$ 0.50
122.5	38 ^c	2.30	38 ^c	2.46	38 ^c	2.41 $\pm$ 0.40
151.0	38 ^c	1.1	38 ^c	1.2	38 ^c	1.2 $\pm$ 0.3
171.2	38 ^c	5.0	38 ^c	4.9	38 ^c	4.9 $\pm$ 1.2
182.5	38 ^c	2.4	38 ^c	2.3	38 ^c	2.3 $\pm$ 0.6
192.0	38 ^c	3.5	38 ^c	4.0	38 ^c	3.8 $\pm$ 0.9

a - Fit produced using $\sigma_p = 17$ barns.

b - Γ_γ shown includes other partial widths which might occur, specifically Γ_f .

c - Assumed from consideration of Γ_γ 's from analysis of 2.885, 9.975, and 18.562 eV resonances.

Figure 1. Total neutron cross section of ^{238}Pu from 0.008 to 2.0 eV. The Breit-Wigner single level fit is shown as a solid line. The dashed line below the data points indicates the corresponding absorption cross section (including fission). Effective thermal absorption cross sections are 532 barns and 512 barns for pure Maxwellian flux distributions at 20.44°C and 100°C respectively.

neutron cross section is 588 ± 15 barns as determined by least squares fitting the data from 0.008 to 0.070 eV with a third degree polynomial on a plot of $\sigma \sqrt{E}$ vs E . More than 99% of this cross section must be attributed to the negative energy resonances and potential scattering. The non-symmetric error limits result from consideration of the possibility that water was present as a contaminant. This possibility is suggested by the observed cross section between resonances. It was necessary to use a value of 17 barns for the potential scattering cross section to fit these data. Also, when samples were exposed to the atmosphere between measurements there were increases in mass and cross section consistent with pickup of H_2O . This problem is discussed more extensively in the Appendix.

The absorption cross section below one eV as calculated from resonance parameters is shown as a dashed line in Figure 1. These data give a 2200 m/sec absorption cross section value of 559 barns. If a comparison is to be made with integral activation or absorption cross section measurements the quantity usually desired is the 2200 m/sec value of an equivalent $1/v$ cross section. Table III shows this effective absorption cross section for various temperatures assuming a pure Maxwellian flux distribution.

Total neutron cross section data from 2 to 6500 eV obtained at the 20 meter flight path are shown in Figure 2. These data have been corrected for individual resonances in the known contaminants up to 22 eV. Above 22 eV an average cross section has been assumed for the contaminants. The solid line below 200 eV represents the cross section of ^{238}Pu calculated using shape fit parameters from Table II. Verification that the cross section between 100 eV and 200 eV is produced by

TABLE III

2200 m/sec Absorption Cross Section for an Equivalent $1/v$ Curve

Maxwellian Temperature ($^{\circ}\text{C}$)	20.44	50	100	200	300	500
Effective Absorption Cross Section (barns)	532	524	512	490	469	433

Figure 2. Total neutron cross section of ^{238}Pu from 2 to 6500 eV. The solid line up to 200 eV represents the Breit-Wigner single level shape fit parameters from Table II. A dotted line above 200 eV is included to make it easier to follow the general shape of the experimental data.

Figure 3a. Number of resonances below a given energy plotted as a function of neutron energy to determine level spacing, D.

Figure 3b. Integral distribution of neutron widths for resonances below 200 eV. The solid stepped curve shows the observed resonances. Above this is shown a dotted curve which represents the experimental distribution modified by the addition of three small resonances of arbitrary (small) size.

at least eight resonances was obtained by measurements at 45 meters with a resolution of 0.040 $\mu\text{sec}/\text{meter}$. These 45 meter data were also used for area analysis of the eight resonances.

Breit-Wigner single level parameters were obtained for resonances from 2 eV to 200 eV by both area analysis and shape fitting. From 2 eV to 22 eV the total widths were determined independently by the two methods, using multiple sample thicknesses. Above 22 eV a value of 38 mV was assumed for Γ_γ (actually Γ_γ plus Γ_f , if $\Gamma_f \neq 0$) for calculations by both methods. This value is the average of Γ_γ 's obtained for the first three positive energy resonances assuming Γ_f small compared to Γ_γ ⁽²⁾

A value for $(\bar{\Gamma}_n^0/D)$ has been calculated from average resonance parameters below 200 eV, and also from the average resonance cross section $(\sigma_T - \sigma_p)$ from 1000 eV to 5000 eV. The two methods gave $(1.12 \pm 0.20) \times 10^{-4}$ and $(1.08 \pm 0.30) \times 10^{-4}$ respectively. Combining these two values gives $(\bar{\Gamma}_n^0/D) = (1.10 \pm 0.20) \times 10^{-4}$.

Individual resonance parameters below 200 eV and average parameters at higher energies have been used to determine the resonance absorption integral. The weighted averages from Table II yield $\bar{\Gamma}_n^0 = 1.50 \text{ mV}/(\text{eV})^{1/2}$. From Figure 3a a value of 13.5 eV was determined for D. With these average values for resonances above 200 eV the resonance absorption integral for a low energy cut-off of 0.50 eV is 164 ± 15 barns.

In Figure 3b an integral distribution of $(\Gamma_n^0/\bar{\Gamma}_n^0)^{1/2}$ is shown for resonances below 200 eV. The solid line gives the shape expected for a chi-squared distribution with one degree of freedom; and the dashed line shows that expected if two degrees of freedom were the proper value⁽¹³⁾. There is an indication from Figure 3b that some small levels were not observed in the experiment. The dotted line shows a modified experi-

mental distribution of $(\Gamma_n^0/\bar{\Gamma}_n^0)^{1/2}$ produced by adding three small (unobserved) resonances to the data. The addition of these small resonances would change the value of "D" somewhat from that determined in Figure 3a, but would not materially affect the values obtained above for $(\bar{\Gamma}_n^0/D)$ and the resonance integral.

DISCUSSION OF RESULTS

Below 8 eV the present results are in substantial agreement with those reported previously from measurements using a single sample thickness⁽⁹⁾. The effective thermal activation cross section values for Maxwellian flux distributions, derived using the reported fission cross section^(10,11) of 17 barns with the present data, are 20% greater than the subcadmium values reported from integral measurements^(10,12). The calculated value of 164 barns for the resonance absorption integral is considerably lower than an integral measurement of this quantity⁽¹²⁾. Pile activation cross sections values calculated using the above values for the effective thermal activation cross section and the resonance absorption integral are consistent with two integral measurements of this quantity^(10,12) if reasonable ratios (i.e. - 15:1 and 40:1) of thermal to resonance flux are assumed.

Additional evidence for a maximum in the s-wave strength function curve near mass number 240 is given by the value of $(1.10 \pm 0.20) \times 10^{-4}$ for $(\bar{\Gamma}_n^0/D)$ obtained from these data. Although the sampling of resonances is too small to yield a definite answer, it appears that a chi-squared distribution with one degree of freedom ($\nu = 1$) describes the Γ_n^0 's satisfactorily.

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APPENDIX A

EVIDENCE FOR H₂O CONTAMINATION OF THE SAMPLES

The first measurements of ²³⁸Pu cross section were made using a sample prepared at LRL. It was pressed and sealed in its holder in an inert atmosphere. During its use no contamination escaped from the holder, making it difficult to believe that there was any entry of H₂O. However, the measured cross section increased at the rate of about one barn per month. Initial measurements using this sample were made several months after preparation of the sample and the data were fitted using 10 barns potential scattering and a 17 barn constant bias attributed to an unknown contaminant⁽⁹⁾. Linear extrapolation of a series of measurements back to the time of preparation of the sample gave a cross section between resonances consistent with a value of 17 barns for potential scattering. If the increase in measured cross section between resonances was due to H₂O there must have been a pick-up of one molecule of H₂O for every two molecules of PuO₂ in the sample. No mass increase was observed after the measurements, but detectable amounts of FeO₃ and CrO₃ were present near the surface of the sample in contact with the stainless steel holder where the neutron-gamma beam traversed the sample.

The PuO₂ used for preparation of samples at the MTR was baked at 600°C for one hour prior to pressing of the sample wafers. Following this, the samples were stored in a desiccator or doubly sealed sample holders⁽⁵⁾ until the initial measurements were made over the various energy regions. A value of 17 barns for potential scattering was required to fit these data. The 2.30 atoms/kilobarn sample was reweighed and the cross section remeasured after exposure to the atmosphere for several months. The mass gain and the increase in cross section

between resonances indicated a water contaminant. At 2200 m/sec the increase in cross section was about 25% less than one would calculate using the mass increase of the sample and the cross section of water⁽¹¹⁾. A value of 17 barns was used for the potential scattering since the two independently prepared thick samples gave this as the proper initial value of the non-resonance cross section.

APPENDIX B

EVIDENCE FOR DISTORTION OF RESONANCE SHAPE BY COUNTING OF NEUTRONS SCATTERED AT THE DETECTORS.

Examination of Figure 2 of the text shows the experimental points to be higher than the calculated Breit-Wigner curve on the low energy side of the 9.975 and 18.562 eV resonances. This deviation occurs between two and three percent below the resonance energy. It is satisfactorily explained if one assumes that neutrons are scattered within the detector system so that some (scattered) neutrons are detected between one and one-and-a-half percent later in time than they would have been if not scattered. Such scattering would also cause the measured transmission to be too high at the peak of the resonance. Material located 10 to 15 centimeters from the detector, and scattering neutrons back into the detectors, would produce this effect at the proper time. (The dimensions of the detector system are of this magnitude.) A preliminary investigation of this effect has been carried out by measuring the transmission near the 18.562 eV resonance with ^3He detectors. One layer of one inch diameter ^3He detectors was used without shielding to measure the transmission. Figure B-1 shows the results of this measurement compared with the results obtained using ten layers of one inch diameter BF_3 counters with shielding. These results tend to substantiate the explanation given above.

Fig. 1

Figure B-1. Comparison of ^3He counter data with BF_3 counter data near the 18.562 eV Resonance in ^{238}Pu .

APPENDIX C

TABULATION OF DATA

Section	IBM Numbers	Sample 1/n (barns/atom)	Channel Width (μ sec)	Rotor Speed (RPM)	Average Date of Runs
C-1	2202 - 2204 2206 - 2207 2211	435.0	32	233	2/27/66
C-2	2415 - 2417	437.4	16	261	11/16/66
C-3	2273 - 2274 2292 - 2293	3477	1	2982	5/14/66
C-4	2275 - 2276 2294 - 2295	995.1	1	2982	5/14/66
C-5	2218 - 2219	435.0	2	2002	3/11/66
C-6	2334	436.0	2	2065	7/7/66
C-7	2243 - 2245 2247 - 2249	3472	0.5	6022	4/1/66
C-8	2242 - 2244 2246 - 2248	992.1	0.5	6022	4/1/66
C-9	2216 - 2217	435.0	0.5	6025	3/7/66
C-10	2369	437	0.5	7043	8/27/66

C.I Thermal Data — Thick Sample (2/27/66)

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE.
436,600	0,9030	10,97891	44,39	147,08	68060 60017	0,0136	1174	1174	5
468,600	0,9245	9,53064	34,17	109,49	68513 61853	0,0146	1013	1013	5
500,600	0,9502	8,35113	22,22	64,20	67835 62947	0,0156	861	861	5
532,600	0,9532	7,37776	20,84	56,62	67771 63086	0,0166	826	826	5
564,600	0,9474	6,56516	23,49	60,18	67474 62426	0,0176	809	809	5
596,600	0,9523	5,87977	21,27	51,58	66778 62088	0,0186	663	663	5
628,600	0,9554	5,29637	19,83	45,63	66839 61336	0,0196	625	625	5
660,600	0,9461	4,89567	24,12	52,83	67072 61939	0,0206	557	557	5
692,600	0,9561	4,36276	19,54	40,81	65759 61394	0,0216	477	477	5
724,600	0,9523	3,98593	21,28	42,49	66229 61589	0,0226	398	398	5
756,600	0,9466	3,65590	23,88	45,67	66367 61348	0,0236	353	353	5
788,600	0,9085	3,36522	41,74	76,97	65836 58410	0,0246	343	343	5
820,600	0,7171	3,10788	144,64	254,98	65697 46007	0,0256	300	300	5
852,600	0,7103	2,87896	148,80	252,48	65890 45702	0,0266	309	309	5
884,600	0,8827	2,87444	54,25	88,72	66248 57104	0,0276	258	258	5
916,600	0,9289	2,49096	32,06	50,61	65898 59773	0,0286	260	260	5
948,600	0,9482	2,32574	23,13	35,27	64999 60179	0,0296	291	291	5
980,600	0,9427	2,17642	25,65	37,85	64797 59642	0,0306	316	316	5
1012,600	0,9337	2,04104	29,84	42,63	65701 59893	0,0316	302	302	5
1044,600	0,9557	1,91790	19,73	27,32	64047 59795	0,0326	293	293	5
1076,600	0,9477	1,80559	23,37	31,40	64479 59654	0,0336	326	326	5
1108,600	0,9358	1,70285	28,86	37,66	64639 59049	0,0346	306	306	5
1140,600	0,9440	1,60864	25,08	31,81	64250 59200	0,0356	295	295	5
1172,600	0,9439	1,52204	25,12	30,99	63889 58857	0,0366	305	305	5
1204,600	0,9404	1,44225	26,73	32,10	63698 58455	0,0376	266	266	5
1236,600	0,9469	1,36857	23,73	27,77	63589 58747	0,0386	284	284	5
1268,600	0,9386	1,30040	27,55	31,41	63268 57920	0,0396	295	295	5
1300,600	0,9439	1,23720	25,12	27,94	63088 58036	0,0406	260	260	5
1332,600	0,9429	1,17849	25,56	27,75	62965 57741	0,0416	320	320	5
1364,600	0,9126	1,12387	39,79	42,19	63036 55315	0,0426	295	295	5
1396,600	0,9371	1,07296	28,27	29,28	62765 53967	0,0436	225	225	5
1428,600	0,9491	1,02543	22,73	23,02	63011 55516	0,0446	216	216	5
1460,600	0,9280	0,98099	32,50	32,19	62945 56325	0,0456	212	212	5
1492,600	0,9221	0,93938	35,29	34,20	63496 56900	0,0466	205	205	5
1524,600	0,9348	0,90036	29,31	27,82	62132 56550	0,0476	188	188	5
1572,600	0,9239	0,84623	34,44	31,68	62463 612205	0,0491	350	350	10
1620,600	0,9210	0,79685	35,81	31,96	62314 55941	0,0506	137	137	5
1652,600	0,9197	0,76629	36,42	31,88	62034 55615	0,0516	132	132	5
1684,600	0,9067	0,73745	42,59	36,57	62436 55189	0,0526	130	130	5
1732,600	0,9061	0,69716	42,87	35,80	62424 109730	0,0541	236	236	10
1780,600	0,9106	0,66008	40,73	33,09	61621 54690	0,0556	106	106	5
1812,600	0,9097	0,63698	41,15	32,84	61406 54435	0,0566	74	74	5
1860,600	0,8995	0,60453	46,08	35,83	622548 107377	0,0581	205	205	10
1908,600	0,8851	0,57451	53,09	40,24	62265 53664	0,0595	76	76	5
1956,600	0,8938	0,54667	48,85	36,12	622768 106792	0,0610	210	210	10
2004,600	0,8860	0,52080	52,66	38,00	62033 53456	0,0625	100	100	5
2052,600	0,8809	0,49673	55,16	38,88	622868 105184	0,0640	155	155	10
2109,571	0,8757	0,47026	57,76	39,61	62924 81926	0,0658	125	125	7
2152,750	0,8652	0,45159	62,99	42,33	89716 75246	0,0672	174	174	8
2212,600	0,8733	0,42749	58,93	38,53	622562 103534	0,0690	205	205	10
2276,600	0,8613	0,40379	64,96	41,28	623488 102533	0,0710	216	216	10
2324,600	0,8606	0,38728	65,31	40,64	61711 50998	0,0725	114	114	5
2372,600	0,8559	0,37177	67,71	41,29	623204 100732	0,0740	268	268	10
2436,600	0,8432	0,35250	74,20	44,05	623878 98877	0,0760	210	210	10
2500,600	0,8319	0,33469	80,08	46,33	625255 97445	0,0780	227	227	10
2564,600	0,8279	0,31819	82,17	46,35	626388 96647	0,0800	246	246	10
2628,600	0,8183	0,30288	87,24	48,01	628922 96582	0,0820	185	185	10
2692,600	0,8169	0,28866	87,96	47,26	631634 98655	0,0840	179	179	10
2756,600	0,7968	0,27541	98,82	51,86	636845 100850	0,0860	156	156	10
2820,600	0,7887	0,26305	103,27	52,97	63970 105850	0,0880	174	174	10
2884,600	0,7880	0,25151	103,62	51,97	649540 110758	0,0900	171	171	10
2944,600	0,7806	0,23812	107,77	52,59	641756 117843	0,0925	204	204	15
3044,600	0,7762	0,22577	110,22	52,37	64744 129143	0,0950	154	154	10
3108,600	0,7646	0,21657	116,77	54,34	649481 138388	0,0970	124	124	10
3188,600	0,7546	0,20584	122,46	55,56	651820 229071	0,0995	169	169	15
3268,600	0,7459	0,19589	127,54	56,45	653752 168117	0,1020	128	128	10
3348,600	0,7283	0,18664	137,93	59,59	65669 277174	0,1045	182	182	15
3428,600	0,7199	0,17803	142,93	60,31	659207 204721	0,1070	86	86	10
3508,600	0,7066	0,17000	151,07	62,29	64830 337064	0,1095	183	183	15
3604,600	0,7000	0,16107	155,16	62,27	661894 379488	0,1125	192	192	15

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST OPEN	BKGS SAMPLE	NO, PTS AVE.
3700.600	0.6850	0.85282	164.56	64.33	631274 417488	0.1155	176	176	15
3796.600	0.6744	0.14519	171.34	65.29	701907 457261	0.1185	148	148	15
3884.500	0.6632	0.83869	178.67	66.54	656578 420733	0.1212	186	186	12
3978.000	0.6546	0.13225	184.29	67.02	966108 611299	0.1241	264	264	18
4084.600	0.6396	0.82544	194.42	68.86	924153 571427	0.1274	288	288	15
4180.600	0.6315	0.11974	199.98	69.20	985891 601951	0.1304	260	260	15
4276.600	0.6195	0.11443	208.33	70.47	1051192 629687	0.1334	302	302	15
4372.600	0.6097	0.10946	215.26	71.22	1107517 653018	0.1364	313	313	15
4484.600	0.5959	0.10406	225.20	72.65	1569452 904587	0.1399	318	318	20
4596.600	0.5832	0.09905	234.54	73.81	1233484 695897	0.1434	302	302	15
4708.600	0.5707	0.09439	243.96	74.95	1711092 944626	0.1469	365	365	20
4836.600	0.5577	0.08946	254.02	75.98	1777769 958966	0.1509	332	332	20
4948.600	0.5471	0.08546	262.35	76.69	1356589 717874	0.1544	214	214	15
5060.600	0.5365	0.08172	270.83	77.42	1848249 959124	0.1579	325	325	20
5188.600	0.5217	0.07774	283.00	78.91	1851873 934399	0.1619	291	291	20
5316.600	0.5123	0.07404	290.99	79.18	1897090 919861	0.1659	330	330	20
5444.600	0.5006	0.07060	300.97	79.97	1859051 899819	0.1699	234	234	20
5588.600	0.4872	0.06701	312.84	80.98	2292338 1079503	0.1744	317	317	25
5732.600	0.4739	0.06368	324.86	81.98	1838813 842187	0.1789	269	269	20
5876.600	0.4614	0.06060	336.44	82.82	2233795 996073	0.1833	306	306	25
6020.600	0.4490	0.05774	348.28	83.68	1717312 745069	0.1878	227	227	20
6164.600	0.4379	0.05507	359.24	84.30	2075284 877775	0.1923	267	267	25
6324.600	0.4262	0.05232	371.02	84.86	1980107 814970	0.1973	252	252	25
6484.600	0.4138	0.04977	383.80	85.62	1889777 759092	0.2023	210	210	25
6644.600	0.4027	0.04740	395.61	86.13	1756813 683007	0.2073	220	220	25
6804.600	0.3892	0.04520	410.48	87.27	1654828 621593	0.2123	256	256	25
6964.600	0.3772	0.04315	424.08	88.09	1633802 594679	0.2173	305	305	25
7140.600	0.3668	0.04104	436.29	88.39	1818119 643296	0.2228	286	286	30
7316.600	0.3548	0.03909	450.76	89.12	1398736 478592	0.2283	204	204	25
7492.600	0.3449	0.03728	463.01	89.40	1554768 517060	0.2338	289	289	30
7684.600	0.3340	0.03544	477.02	89.80	1407816 453206	0.2398	259	259	30
7876.600	0.3217	0.03373	493.31	90.60	1392381 419221	0.2457	202	202	30
8068.600	0.3114	0.03218	507.49	90.99	1240085 371968	0.2517	199	199	30
8260.600	0.2994	0.03067	524.60	91.87	1124277 324127	0.2577	258	258	30
8468.600	0.2888	0.02918	540.32	92.30	1234417 343137	0.2642	236	236	35
8676.600	0.2776	0.02780	557.42	92.94	922760 246536	0.2707	234	234	30
8884.600	0.2682	0.02651	572.49	93.22	929376 239771	0.2772	229	229	35
9108.600	0.2580	0.02522	589.26	93.59	833276 206772	0.2842	231	231	35
9332.600	0.2483	0.02403	606.00	93.94	789995 188566	0.2912	212	212	35
9556.600	0.2384	0.02292	623.69	94.41	709799 162616	0.2982	224	224	35
9796.600	0.2291	0.02181	641.04	94.66	702784 154648	0.3057	271	271	40
10036.600	0.2202	0.02078	658.33	94.89	524193 110787	0.3131	256	256	35
10276.600	0.2078	0.01982	683.39	96.20	538997 107470	0.3206	227	227	40
10532.600	0.1997	0.01886	700.66	96.24	481512 92204	0.3286	222	222	40
10804.600	0.1910	0.01793	720.12	96.42	460356 84232	0.3371	230	230	45
11076.600	0.1829	0.01706	739.03	96.52	364641 63830	0.3456	186	186	40
11348.600	0.1766	0.01628	754.25	96.15	347909 58760	0.3541	246	246	45
11627.428	0.1676	0.01548	777.11	96.69	277847 44488	0.3628	244	244	42
11914.625	0.1598	0.01474	797.68	96.85	289233 44149	0.3717	222	222	48
12212.600	0.1522	0.01403	818.87	97.00	239387 34799	0.3810	245	245	45
12500.600	0.1443	0.01339	842.07	97.45	233863 32227	0.3900	229	229	45
12804.600	0.1366	0.01276	866.00	97.84	225004 29335	0.3995	270	270	50
13124.600	0.1298	0.01215	888.25	97.91	190572 23588	0.4095	341	341	50
13444.600	0.1220	0.01158	915.25	98.48	157179 18269	0.4195	258	258	50
13780.600	0.1192	0.01102	925.23	97.13	139214 15801	0.4300	278	278	55
14132.600	0.1099	0.01048	960.68	98.34	110163 11515	0.4409	291	291	55
14484.600	0.1018	0.00998	994.07	99.28	98198 9500	0.4519	328	328	55
14836.600	0.0980	0.00951	1010.51	98.53	90644 8438	0.4629	316	316	55
15204.600	0.0906	0.00905	1044.72	99.40	80936 6959	0.4744	345	345	60
15588.600	0.0868	0.00861	1063.33	98.68	64388 5300	0.4864	330	330	60
15972.600	0.0804	0.00820	1096.28	99.29	51634 3937	0.4983	404	404	60
16196.600	0.0775	0.00798	1112.65	99.38	7486 549	0.5053	51	51	10

C.2 Thermal Data — Thick Sample (11/16/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
492.000	0.9415	8.64563	26.39	77.59	15449 14201	0.0168	188	188	2
508.000	0.9355	8.10960	29.18	83.10	15552 14205	0.0173	159	159	2
524.000	0.9269	7.62192	33.19	91.62	15554 14077	0.0179	149	149	2
544.333	0.9168	7.06312	37.99	100.96	23126 20700	0.0186	212	212	3
564.000	0.9388	6.37913	27.61	70.83	15690 14379	0.0193	132	132	2
580.000	0.9345	6.22115	29.65	73.93	15584 14214	0.0198	150	150	2
596.000	0.9278	5.89161	32.77	79.55	15466 14001	0.0203	143	143	2
612.000	0.8871	5.58758	52.41	123.89	15736 13596	0.0209	138	138	2
628.000	1.0258	5.30649	-11.14	-25.66	15531 13567	0.0214	97	97	2
644.000	1.0107	5.04609	-4.64	-10.41	15382 13583	0.0220	99	99	2
660.000	0.9217	4.80440	35.66	78.16	15417 13846	0.0225	112	112	2
676.000	0.9176	4.57966	37.61	80.48	15529 13906	0.0231	91	91	2
692.000	0.9312	4.37033	31.20	65.22	14727 13841	0.0238	94	94	2
708.000	0.9365	4.17504	28.70	58.65	15058 13767	0.0242	88	88	2
724.000	0.9573	3.99254	19.00	38.14	14994 14014	0.0247	91	91	2
740.000	0.9471	3.02176	23.78	46.49	15312 14160	0.0253	73	73	2
756.000	0.9198	3.66170	36.56	69.97	15430 13858	0.0258	84	84	2
772.000	0.9297	3.51150	31.90	59.77	15285 13874	0.0264	89	89	2
791.667	0.9052	3.33920	43.56	79.59	23322 20613	0.0270	93	93	3
812.000	0.8014	3.17406	96.84	172.53	15293 11966	0.0277	65	65	2
828.000	0.6569	3.05257	183.82	321.16	15230 9768	0.0283	61	61	2
848.333	0.6191	2.90800	209.72	357.63	22583 13651	0.0290	118	118	3
871.667	0.7898	2.75439	103.22	171.31	23143 17846	0.0298	103	103	3
892.000	0.9125	2.63025	40.07	64.98	14957 13324	0.0304	71	71	2
912.333	0.9083	2.51431	42.08	66.72	22357 19824	0.0311	92	92	3
935.667	0.9237	2.39048	34.72	53.68	23086 20818	0.0319	116	116	3
960.333	0.9197	2.26929	36.60	55.14	22336 20054	0.0328	121	121	3
983.667	0.9196	2.16287	36.65	53.90	23065 20706	0.0336	133	133	3
1008.333	0.9224	2.05835	35.31	50.66	22288 19997	0.0344	142	142	3
1031.667	0.9175	1.96629	37.67	52.92	22690 20482	0.0352	137	137	3
1060.000	0.9271	1.86258	33.13	45.21	29875 27033	0.0362	200	200	4
1088.333	0.9274	1.76686	32.95	43.79	22047 19979	0.0371	156	156	3
1111.667	0.9124	1.69347	40.11	52.20	22882 20375	0.0379	135	135	3
1140.000	0.9208	1.61034	36.07	44.77	29761 26745	0.0309	165	165	4
1168.333	0.9058	1.53318	43.26	53.56	22063 19511	0.0399	129	129	3
1196.000	0.9309	1.46307	31.31	37.87	29347 26656	0.0408	169	169	4
1223.667	0.9109	1.39766	40.80	48.24	22624 20105	0.0418	123	123	3
1252.000	0.9204	1.33511	36.26	41.90	29373 26367	0.0427	155	155	4
1284.000	0.9150	1.26939	38.87	43.79	29439 26256	0.0438	136	136	4
1316.000	0.9209	1.20841	36.03	39.61	29400 26359	0.0449	155	155	4
1348.000	0.9118	1.15172	40.38	43.33	29203 25794	0.0460	146	146	4
1384.200	0.8859	1.09227	52.98	55.37	36444 30223	0.0472	118	118	5
1420.000	0.9368	1.03789	28.54	29.08	28990 24910	0.0485	118	118	4
1455.800	0.9066	0.98747	42.89	42.62	36822 32010	0.0497	132	132	5
1492.000	0.8887	0.94013	51.63	50.06	29310 25293	0.0509	67	67	4
1528.200	0.9123	0.89612	40.16	38.02	35634 31643	0.0522	109	109	5
1567.800	0.8945	0.85142	48.78	45.01	36687 31966	0.0535	83	83	5
1604.000	0.9014	0.81343	45.40	40.95	28867 25354	0.0547	73	73	4
1640.200	0.8945	0.77792	48.78	43.02	35723 31138	0.0560	79	79	5
1679.800	0.8868	0.74167	52.53	45.24	36495 31542	0.0573	68	68	5
1724.000	0.8822	0.70413	54.82	46.00	43259 37192	0.0588	92	92	6
1768.200	0.8849	0.66937	53.47	43.74	35401 30925	0.0604	87	87	5
1812.000	0.8752	0.63740	58.31	46.55	43063 36714	0.0618	81	81	6
1855.800	0.8639	0.60767	64.00	49.89	36224 30475	0.0633	83	83	5
1900.000	0.8635	0.57972	64.19	48.88	43083 36215	0.0649	73	73	6
1948.000	0.8672	0.55150	62.34	46.30	42562 35912	0.0665	73	73	6
1996.000	0.8660	0.52530	62.92	45.00	42639 35907	0.0681	88	88	6
2044.000	0.8653	0.50092	63.28	44.79	42783 35969	0.0698	99	99	6
2096.143	0.8591	0.47630	66.42	45.84	49571 41334	0.0715	135	135	7
2148.000	0.8429	0.45358	74.75	50.34	43053 35175	0.0733	100	100	6
2199.857	0.8473	0.43249	72.48	47.67	50395 41309	0.0751	92	92	7
2256.143	0.8313	0.41114	80.80	51.81	49795 39944	0.0770	88	88	7
2311.857	0.8357	0.39157	78.49	49.11	50228 40337	0.0789	92	92	7
2368.143	0.8327	0.37317	80.06	48.91	49698 39540	0.0808	94	94	7
2423.857	0.8167	0.35622	88.55	52.85	50684 39245	0.0827	81	81	7
2484.000	0.8190	0.33917	87.36	50.88	57300 44007	0.0848	114	114	8
2548.000	0.8037	0.32235	95.56	54.25	58254 43370	0.0870	81	81	8
2612.000	0.8029	0.30675	96.02	53.18	59191 43554	0.0892	93	93	8
2676.000	0.8009	0.29225	97.11	52.50	60227 44180	0.0913	79	79	8
2740.000	0.7922	0.27876	101.86	53.78	61590 45015	0.0935	82	82	8

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
2808.111	0.7802	0.26540	108.57	55.93	72321	52493	0.0959	93	93	9
2879.889	0.7678	0.25233	115.58	58.06	77138	55607	0.0983	73	73	9
2952.111	0.7585	0.24014	120.89	59.24	81795	58684	0.1008	91	91	9
3023.889	0.7471	0.22887	127.51	61.00	88618	62934	0.1032	61	61	9
3100.000	0.7392	0.21777	132.17	61.68	107327	75716	0.1058	114	114	10
3176.111	0.7281	0.20746	138.81	63.22	106317	74098	0.1084	61	61	9
3252.000	0.7185	0.19789	144.58	64.31	130605	90017	0.1110	99	99	10
3332.000	0.7102	0.18850	149.71	65.00	145712	99442	0.1137	118	118	10
3415.909	0.6972	0.17936	157.74	66.80	180777	121319	0.1166	137	137	11
3500.000	0.6887	0.17084	163.13	67.43	183505	121750	0.1195	92	92	10
3584.091	0.6760	0.16292	171.25	69.12	225457	146941	0.1223	123	123	11
3671.909	0.6669	0.15522	177.17	69.80	251285	161673	0.1253	136	136	11
3764.000	0.6545	0.14772	185.43	71.27	303348	191612	0.1285	149	149	12
3860.000	0.6476	0.14046	190.06	71.23	333846	208793	0.1318	146	146	12
3956.000	0.6345	0.13373	198.97	72.76	367847	225433	0.1350	162	162	12
4052.000	0.6256	0.12746	205.13	73.24	398937	241115	0.1383	156	156	12
4152.077	0.6109	0.12139	215.53	75.09	465331	274688	0.1417	186	186	13
4255.923	0.6011	0.11554	222.62	75.67	499890	290382	0.1453	139	139	13
4360.077	0.5887	0.11009	231.77	76.90	526861	299738	0.1488	150	150	13
4468.000	0.5789	0.10483	239.08	77.41	599363	335365	0.1525	201	201	14
4575.923	0.5666	0.09995	248.46	78.55	584757	320271	0.1562	136	136	13
4688.067	0.5555	0.09522	257.16	79.35	696685	374044	0.1600	137	137	15
4807.933	0.5423	0.09053	267.65	80.53	726830	380959	0.1641	146	146	15
4924.000	0.5338	0.08632	274.59	80.67	689712	355792	0.1681	120	120	14
5044.000	0.5211	0.08226	285.09	81.76	802666	404222	0.1722	146	146	16
5172.000	0.5080	0.07824	296.24	82.86	807413	396336	0.1765	132	132	16
5300.000	0.4958	0.07450	306.88	83.76	807758	386915	0.1809	158	158	16
5428.000	0.4859	0.07103	315.71	84.14	807597	379045	0.1853	122	122	16
5564.000	0.4726	0.06760	327.86	85.24	900075	410801	0.1899	135	135	18
5704.059	0.4609	0.06432	338.82	85.93	839178	373466	0.1947	113	113	17
5839.941	0.4478	0.06136	351.39	87.05	832238	359826	0.1993	116	116	17
5984.053	0.4380	0.05844	361.13	87.30	888363	375561	0.2043	145	145	19
6135.947	0.4251	0.05559	374.12	88.20	854377	350539	0.2094	132	132	19
6288.053	0.4140	0.05293	385.69	88.73	819467	327356	0.2146	134	134	19
6439.947	0.4019	0.05046	398.73	89.57	779993	302360	0.2198	151	151	19
6596.000	0.3911	0.04810	410.68	90.07	772787	291426	0.2251	115	115	20
6760.048	0.3787	0.04580	424.69	90.88	749189	273550	0.2307	164	164	21
6927.952	0.3664	0.04360	439.21	91.71	734833	259480	0.2365	136	136	21
7100.000	0.3566	0.04152	451.08	91.91	723333	248518	0.2423	121	121	22
7276.000	0.3438	0.03953	466.96	92.84	662816	219543	0.2484	138	138	22
7456.043	0.3345	0.03769	478.97	92.93	639457	206003	0.2545	133	133	23
7639.956	0.3218	0.03585	495.88	93.90	581738	180242	0.2608	139	139	23
7828.000	0.3125	0.03415	508.80	94.03	576165	173260	0.2672	137	137	24
8020.000	0.3014	0.03254	524.58	94.62	535345	155229	0.2737	147	147	24
8220.000	0.2875	0.03097	545.20	95.95	521399	144171	0.2806	121	121	26
8424.040	0.2800	0.02949	556.85	95.63	468704	126149	0.2875	138	138	25
8631.963	0.2702	0.02809	572.38	95.93	446180	115857	0.2946	123	123	27
8844.000	0.2582	0.02676	592.25	96.88	368401	91378	0.3019	115	115	26
9060.000	0.2479	0.02550	610.02	97.40	346554	82506	0.3092	138	138	28
9284.000	0.2403	0.02428	623.71	97.19	331562	76477	0.3169	153	153	28
9516.000	0.2308	0.02311	641.40	97.51	320182	70896	0.3248	154	154	30
9752.034	0.2233	0.02201	655.72	97.27	266633	57113	0.3329	137	137	29
9991.968	0.2114	0.02096	679.81	98.42	243631	49399	0.3411	137	137	31
10240.032	0.2020	0.01996	699.68	98.85	212926	41194	0.3495	131	131	31
10492.000	0.1942	0.01901	716.83	98.84	198035	36812	0.3581	131	131	32
10751.970	0.1875	0.01810	732.09	98.50	173812	31178	0.3670	158	158	33
11016.030	0.1796	0.01725	751.02	98.63	153315	26315	0.3760	150	150	33
11287.971	0.1728	0.01642	767.85	98.41	138873	22917	0.3853	164	164	35
11568.029	0.1676	0.01564	781.29	97.70	115508	18469	0.3949	150	150	35
11852.000	0.1570	0.01490	809.95	98.86	107721	16120	0.4045	161	161	36
12143.973	0.1483	0.01419	834.91	99.46	98856	13970	0.4145	160	160	37
12444.000	0.1403	0.01351	859.01	99.86	96495	12903	0.4248	172	172	38
12752.026	0.1327	0.01287	883.49	100.23	86274	10905	0.4353	181	181	39
13068.000	0.1296	0.01225	893.81	98.95	75869	9358	0.4461	187	187	40
13391.976	0.1207	0.01167	924.77	99.90	63678	7311	0.4571	189	189	41
13720.024	0.1177	0.01112	935.84	98.68	51743	5782	0.4683	170	170	41
14055.977	0.1079	0.01059	974.08	100.25	43179	4421	0.4798	179	179	43
14404.000	0.1046	0.01009	987.41	99.17	35832	3556	0.4917	189	189	44
14760.022	0.0963	0.00941	1023.45	100.31	35889	3278	0.5038	190	190	45
15124.000	0.0900	0.00915	1053.45	100.76	29477	2512	0.5162	216	216	46
15495.979	0.0873	0.00872	1066.41	99.56	23617	1952	0.5289	213	213	47
15880.020	0.0807	0.00830	1101.07	100.31	19495	1487	0.5420	223	223	49
16167.956	0.0836	0.00801	1085.32	97.11	7616	602	0.5519	102	102	23

C.3 - Medium Energy - Thin Sample (5/14/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. CF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
405.750	0.9910	12.73053	31.34	111.82	63909	62991	0.1603	1308	1304	8
406.750	1.0080	12.63681	-27.66	-98.34	28761	28833	0.1609	496	494	4
407.750	0.9820	12.57490	63.12	223.83	29110	28431	0.1613	554	552	4
408.750	1.0065	12.51345	-22.36	-79.09	28575	28603	0.1617	554	552	4
409.750	0.9871	12.45244	45.32	159.93	28629	28104	0.1621	575	574	4
410.750	0.9862	12.39189	48.32	170.08	28974	28418	0.1625	457	456	4
411.750	0.9899	12.33177	35.37	124.22	28759	28313	0.1629	561	559	4
412.750	1.0041	12.27209	-14.22	-49.81	28596	28557	0.1633	566	564	4
413.750	0.9977	12.21284	8.17	28.56	28613	28390	0.1637	576	574	4
414.750	0.9941	12.15401	20.61	71.84	28691	28366	0.1641	523	521	4
415.750	1.0006	12.09562	-2.16	-7.50	28582	28443	0.1645	576	574	4
416.750	0.9805	12.03764	68.56	237.88	28567	27859	0.1649	564	562	4
417.750	0.9911	11.98000	29.00	103.43	28949	28147	0.1653	496	496	4
418.750	1.0024	11.92293	-8.42	-29.08	28406	28314	0.1657	518	516	4
419.750	0.9873	11.86619	44.33	152.71	28460	27941	0.1661	518	516	4
420.750	1.0090	11.80985	-31.04	-106.67	28416	28510	0.1664	549	547	4
421.750	1.0025	11.75391	-8.55	-29.32	28341	28254	0.1668	445	444	4
422.750	0.9900	11.69837	34.97	119.62	28375	27938	0.1672	580	579	4
423.750	0.9871	11.64322	45.18	154.15	28313	27795	0.1676	539	538	4
424.750	0.9957	11.58846	14.92	50.80	28553	28276	0.1680	486	485	4
425.750	1.0065	11.53409	-22.56	-76.61	28145	28174	0.1684	501	499	4
426.750	0.9967	11.48010	11.45	38.80	28357	28109	0.1688	542	540	4
427.750	0.9842	11.42648	55.32	186.98	28435	27834	0.1692	544	543	4
428.750	0.9932	11.37324	23.71	79.97	28574	28225	0.1696	576	574	4
429.750	0.9864	11.32037	47.73	160.60	28534	27991	0.1700	515	514	4
430.750	0.9866	11.26787	46.81	157.14	28557	28021	0.1704	511	509	4
431.750	0.9870	11.21574	45.35	151.87	28510	27987	0.1708	525	524	4
432.750	1.0046	11.16396	-16.09	-53.77	28307	28282	0.1712	501	500	4
433.750	0.9725	11.11255	96.95	323.17	28808	27860	0.1716	441	439	4
434.750	1.0000	11.06148	0.09	0.31	28217	28059	0.1720	530	528	4
435.750	0.9961	11.01077	13.74	45.58	28401	28129	0.1724	532	531	4
436.750	0.9836	10.96041	57.38	189.26	20552	27929	0.1728	532	531	4
437.750	1.0007	10.91039	-2.41	-7.97	28251	28111	0.1732	503	502	4
438.750	0.9868	10.86071	46.32	152.63	28574	28037	0.1736	405	403	4
439.750	1.0055	10.81137	-19.18	-63.05	28101	28098	0.1740	496	495	4
440.750	0.9823	10.76237	62.21	204.10	28824	20159	0.1744	424	423	4
441.750	0.9882	10.71370	41.10	134.53	28441	27951	0.1748	487	485	4
442.750	0.9801	10.66506	69.89	228.25	28600	27876	0.1752	496	495	4
443.750	0.9904	10.61734	33.56	109.34	28345	27819	0.1756	475	473	4
444.750	0.9952	10.56965	16.58	53.91	28482	28192	0.1759	465	464	4
445.750	1.0093	10.52228	-32.04	-103.94	28155	28260	0.1763	494	492	4
446.750	1.0039	10.47523	-13.58	-43.96	28120	28077	0.1767	535	533	4
447.750	0.9878	10.42849	42.72	137.97	28598	28095	0.1771	455	454	4
448.750	0.9928	10.38206	24.95	80.40	28170	27817	0.1775	458	456	4
449.750	0.9863	10.33595	48.10	154.62	28323	27782	0.1779	455	454	4
450.750	0.9752	10.29014	87.14	279.53	28286	27436	0.1783	523	521	4
451.750	0.9941	10.24463	20.58	65.86	28137	27819	0.1787	479	478	4
452.750	0.9897	10.19942	35.94	114.78	28541	28094	0.1791	520	519	4
453.750	0.9795	10.15452	72.17	229.97	28211	27481	0.1795	451	449	4
454.750	0.9501	10.10991	178.11	566.33	28110	26561	0.1799	479	478	4
455.750	0.9244	10.06559	273.32	867.15	28231	25955	0.1803	446	444	4
456.750	0.9063	10.02156	342.15	1083.15	28251	25464	0.1807	407	406	4
457.750	0.8986	9.97782	371.86	1174.61	28360	25345	0.1811	458	456	4
458.750	0.9172	9.93437	300.69	947.73	28417	25921	0.1815	407	406	4
459.750	0.9396	9.89120	216.74	681.65	28353	26494	0.1819	366	365	4
460.750	0.9761	9.84831	84.17	264.15	28167	27343	0.1823	368	366	4
461.750	0.9795	9.80570	72.12	225.85	28196	27467	0.1827	441	440	4
462.750	0.9717	9.76337	99.71	311.56	28697	27734	0.1831	453	452	4
463.750	0.9891	9.72131	38.13	118.88	28261	27801	0.1835	477	476	4
464.750	0.9929	9.67952	24.87	77.39	28089	27737	0.1839	407	406	4
465.750	0.9828	9.63800	60.37	187.41	28533	27890	0.1843	417	416	4
466.750	0.9990	9.59674	3.56	11.02	28324	28141	0.1846	431	430	4
467.750	0.9921	9.55575	27.59	85.28	28146	27772	0.1850	475	473	4
468.750	1.0053	9.51503	-18.42	-56.83	28200	28196	0.1854	422	420	4
469.750	0.9953	9.47456	16.33	50.26	27973	27690	0.1858	451	449	4
470.750	1.0010	9.43435	-3.62	-11.11	28153	28029	0.1862	388	387	4
471.750	1.0097	9.39439	-33.42	-102.42	28030	28147	0.1866	361	360	4
472.750	0.9841	9.35469	55.78	170.62	28437	27832	0.1870	429	428	4
473.750	1.0104	9.31524	-35.81	-109.29	28056	28193	0.1874	424	423	4
474.750	0.9873	9.27604	44.50	135.54	28427	27913	0.1878	448	447	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
475.750	1.0035	9.23709	-12.26	-37.26	27889	0.1882	383	382	4
476.750	0.9905	9.19838	33.33	101.09	28381	0.1886	439	437	4
477.750	1.0077	9.15991	-26.83	-81.22	27944	0.1890	390	389	4
478.750	1.0033	9.12168	-11.36	-34.32	27898	0.1894	472	471	4
479.750	1.0151	9.08370	-51.94	-156.55	27759	0.1898	395	394	4
480.750	1.0036	9.04595	-12.64	-38.01	28159	0.1902	383	382	4
481.750	0.9878	9.00843	42.70	128.15	28302	0.1906	422	420	4
482.750	0.9898	8.97115	35.54	106.44	28351	0.1910	417	416	4
483.750	0.9900	8.93410	34.93	104.40	28143	0.1914	378	377	4
484.750	0.9870	8.89727	45.44	135.54	28297	0.1918	417	416	4
485.750	1.0015	8.86068	-5.19	-15.45	28042	0.1922	463	461	4
486.750	0.9931	8.82431	24.07	71.49	28202	0.1926	308	307	4
487.750	1.0147	8.78816	-50.87	-150.80	28014	0.1930	451	449	4
488.750	0.9876	8.75224	43.37	128.30	28111	0.1933	414	413	4
489.750	0.9883	8.71653	40.75	120.32	28204	0.1937	405	404	4
490.750	0.9953	8.68104	16.41	48.35	28145	0.1941	376	375	4
491.750	0.9925	8.64577	26.02	76.51	28111	0.1945	386	384	4
492.750	0.9842	8.61072	55.53	162.94	28192	0.1949	441	440	4
493.750	0.9928	8.57587	24.98	73.15	27918	0.1953	381	380	4
494.750	0.9905	8.54124	33.16	96.92	28237	0.1957	378	377	4
495.750	0.9813	8.50682	65.63	191.41	28375	0.1961	414	413	4
496.750	0.9955	8.47260	15.69	45.67	27860	0.1965	373	372	4
497.750	0.9842	8.43859	55.38	160.88	28047	0.1969	427	425	4
498.750	0.9951	8.40479	17.20	49.88	27902	0.1973	424	423	4
499.750	0.9971	8.37119	10.21	29.53	27925	0.1977	390	389	4
500.750	1.0071	8.33778	-24.58	-70.98	27972	0.1981	342	341	4
501.750	0.9963	8.30458	13.02	37.51	28038	0.1985	354	353	4
502.750	0.9878	8.27158	42.69	122.79	28036	0.1989	361	360	4
503.750	0.9821	8.23877	62.94	180.66	28157	0.1993	376	375	4
504.750	0.9910	8.20616	31.39	89.93	28089	0.1997	402	401	4
505.750	1.0015	8.17374	-5.06	-14.46	27785	0.2001	357	356	4
506.750	0.9928	8.14151	25.16	71.78	28154	0.2005	371	370	4
507.750	0.9869	8.10947	46.03	131.07	28022	0.2009	417	416	4
508.750	1.0008	8.07763	-2.85	-8.10	27660	0.2013	393	392	4
509.750	0.9931	8.04596	23.97	67.99	27969	0.2017	386	384	4
510.750	0.9912	8.01449	30.73	87.00	27919	0.2021	429	428	4
511.750	0.9805	7.98320	68.30	192.97	28174	0.2024	451	449	4
512.750	0.9997	7.95209	1.03	2.91	27820	0.2028	357	356	4
513.750	0.9878	7.92116	42.54	119.73	27826	0.2032	405	404	4
514.750	1.0028	7.89041	-9.78	-27.47	27717	0.2036	345	344	4
515.750	1.0087	7.85985	-30.19	-84.63	27675	0.2040	361	360	4
516.750	0.9875	7.82946	43.63	122.08	28045	0.2044	357	356	4
517.750	0.9834	7.79924	58.25	162.68	27828	0.2048	393	392	4
518.750	0.9829	7.76920	59.97	167.15	27839	0.2052	414	413	4
519.750	0.9976	7.73933	8.48	23.58	27819	0.2056	376	375	4
520.750	1.0115	7.70964	-39.64	-110.07	27654	0.2060	342	341	4
521.750	1.0004	7.68011	-1.24	-3.44	27489	0.2064	390	389	4
522.750	0.9905	7.65076	33.14	91.67	28021	0.2068	400	399	4
523.750	1.0193	7.62157	-66.58	-183.82	27305	0.2072	376	375	4
524.750	0.9907	7.59255	32.63	89.92	27706	0.2076	345	344	4
525.750	0.9881	7.56369	41.74	114.79	28150	0.2080	340	339	4
526.750	0.9906	7.53500	32.67	89.67	27868	0.2084	381	380	4
527.750	0.9856	7.50648	50.51	138.39	27884	0.2088	335	334	4
528.750	0.9810	7.47811	66.57	182.04	27981	0.2092	455	454	4
529.750	1.0051	7.44990	-17.78	-48.53	28054	0.2096	313	312	4
530.750	0.9915	7.42186	29.58	80.59	27831	0.2100	381	380	4
531.750	0.9934	7.39397	22.87	62.19	27743	0.2104	393	392	4
532.750	1.0068	7.36624	-23.65	-64.20	27490	0.2108	407	406	4
533.750	1.0040	7.33866	-13.89	-37.64	27578	0.2112	398	396	4
534.750	0.9981	7.31124	6.57	17.76	27791	0.2115	342	341	4
535.750	0.9982	7.28397	6.42	17.34	27622	0.2119	388	387	4
536.750	0.9890	7.25685	38.41	103.47	27618	0.2123	400	399	4
537.750	0.9933	7.22989	23.30	62.65	27725	0.2127	422	420	4
538.750	0.9872	7.20308	44.66	119.86	27971	0.2131	402	401	4
539.750	1.0003	7.17641	-1.01	-2.71	27673	0.2135	414	413	4
540.750	1.0075	7.14989	-25.82	-69.05	27550	0.2139	320	320	4
541.750	1.0030	7.12352	-10.24	-27.34	27484	0.2143	434	432	4
542.750	0.9801	7.09730	69.87	186.13	27857	0.2147	390	389	4
543.750	0.9913	7.07121	30.40	80.84	27639	0.2151	390	389	4
544.750	0.9885	7.04528	40.07	106.37	27893	0.2155	345	344	4
545.750	0.9843	7.01948	54.96	145.62	27817	0.2159	402	401	4
546.750	0.9864	6.99383	47.57	125.80	27993	0.2163	376	375	4
547.750	1.0042	6.96832	-14.62	-38.59	27646	0.2167	381	380	4
548.750	0.9898	6.94294	35.63	93.87	27845	0.2171	316	315	4
549.750	0.9891	6.91771	38.23	100.54	27817	0.2175	357	356	4
550.750	0.9795	6.89261	71.90	188.77	27613	0.2179	335	334	4
551.750	0.9978	6.86765	7.69	20.17	27559	0.2183	390	389	4
552.750	0.9932	6.84282	23.80	62.25	27679	0.2187	381	380	4
553.750	0.9956	6.81813	15.30	39.95	27667	0.2191	369	368	4
554.750	1.0009	6.79357	-3.13	-8.16	27337	0.2195	390	389	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
555.750	0.9955	6.76914	15.61	40.61	27748	27474	0.2199	349	348	4
556.750	0.9871	6.74485	44.99	116.85	27694	27189	0.2203	374	372	4
557.750	1.0013	6.72068	-4.36	-11.31	27370	27255	0.2206	316	315	4
558.750	1.0081	6.69665	-28.09	-72.70	27764	27837	0.2210	369	368	4
559.750	1.0087	6.67274	-30.03	-77.57	27143	27230	0.2214	357	356	4
560.750	0.9958	6.64896	14.50	37.40	27289	27027	0.2218	417	416	4
561.750	0.9891	6.62531	38.20	98.31	27562	27113	0.2222	381	380	4
562.750	0.9849	6.60179	52.77	135.59	27869	27300	0.2226	366	365	4
563.750	0.9876	6.57839	43.33	111.14	27781	27287	0.2230	359	358	4
564.750	0.9869	6.55511	45.91	117.54	27560	27051	0.2234	366	365	4
565.750	1.0088	6.53196	-30.33	-77.52	27163	27252	0.2238	378	377	4
566.750	0.9935	6.50893	22.59	57.63	27761	27432	0.2242	342	341	4
567.750	1.0120	6.48602	-41.33	-105.25	27562	27740	0.2246	361	360	4
568.750	0.9940	6.46323	21.06	53.55	27433	27119	0.2250	378	377	4
569.750	1.0037	6.44056	-12.96	-32.89	27550	27503	0.2254	378	377	4
570.750	0.9854	6.41801	51.10	129.45	27642	27091	0.2258	381	380	4
571.750	0.9864	6.39558	47.50	120.14	27590	27067	0.2262	388	387	4
572.750	0.9866	6.37327	46.92	118.46	27910	27386	0.2266	333	332	4
573.750	1.0000	6.35107	-0.13	-0.34	27484	27336	0.2270	321	320	4
574.750	0.9995	6.32899	1.70	4.28	27413	27251	0.2274	349	348	4
575.750	0.9979	6.30703	7.31	18.36	27567	27359	0.2278	349	348	4
576.750	0.9910	6.28517	31.49	78.93	27629	27231	0.2282	388	387	4
577.750	0.9902	6.26344	34.27	85.76	27279	26865	0.2286	376	375	4
578.750	0.9903	6.24181	33.03	84.53	27462	27044	0.2290	357	356	4
579.750	1.0012	6.22030	-4.08	-10.18	27314	27198	0.2293	383	382	4
580.750	0.9780	6.19889	77.19	192.19	27588	26835	0.2297	352	351	4
581.750	0.9937	6.17760	21.89	54.40	27557	27235	0.2301	376	375	4
582.750	0.9897	6.15642	35.85	88.95	27419	26990	0.2305	352	351	4
583.750	0.9974	6.13534	8.93	22.11	27270	27052	0.2309	436	435	4
584.750	1.0031	6.11438	-10.62	-26.27	27193	27127	0.2313	386	384	4
585.750	1.0084	6.09352	-29.05	-71.71	27256	27335	0.2317	364	363	4
586.750	1.0023	6.07276	-7.93	-19.54	27663	27575	0.2321	318	317	4
587.750	1.0025	6.05212	-8.79	-21.63	27268	27188	0.2325	340	339	4
588.750	0.9947	6.03157	18.38	45.15	27223	26932	0.2329	366	365	4
589.750	0.9855	6.01114	50.75	124.42	27550	27003	0.2333	398	396	4
590.750	0.9978	5.99080	7.59	18.58	27395	27186	0.2337	345	344	4
591.750	0.9922	5.97057	27.39	66.92	27190	26830	0.2341	340	339	4
592.750	0.9795	5.95044	72.02	175.68	27778	27060	0.2345	354	353	4
593.750	1.0199	5.93042	-68.49	-166.78	26819	27203	0.2349	352	351	4
594.750	0.9999	5.91049	0.30	0.73	27071	26921	0.2353	390	389	4
595.750	0.9947	5.89067	18.36	44.57	27493	27199	0.2357	330	329	4
596.750	0.9857	5.87094	50.10	121.38	27483	26942	0.2361	328	327	4
597.750	0.9954	5.85131	15.77	30.62	27258	26985	0.2365	267	267	4
598.750	1.0123	5.83178	-42.52	-102.69	27121	27305	0.2369	371	370	4
599.750	0.9969	5.81235	10.66	25.70	27260	27028	0.2373	325	324	4
600.750	1.0093	5.79302	-32.08	-77.22	27003	27105	0.2377	321	320	4
601.750	1.0049	5.77378	-17.13	-41.17	27349	27333	0.2381	308	308	4
602.750	0.9899	5.75464	35.17	84.36	27490	27064	0.2384	325	324	4
603.750	0.9903	5.73539	33.82	80.99	27040	26632	0.2388	325	324	4
604.750	0.9985	5.71664	5.18	12.38	27068	26879	0.2392	361	360	4
605.750	1.0048	5.69778	-16.79	-40.09	26950	26931	0.2396	340	339	4
606.750	0.9960	5.67901	13.96	33.28	27343	27083	0.2400	294	293	4
607.750	1.0080	5.66034	-27.58	-65.62	27124	27190	0.2404	352	351	4
608.750	0.9877	5.64176	42.93	101.97	27147	26666	0.2408	429	428	4
609.750	1.0045	5.62327	-15.54	-36.84	27209	27260	0.2412	337	336	4
610.750	0.9895	5.60487	36.61	86.67	27418	26981	0.2416	337	336	4
611.750	0.9874	5.58656	44.16	104.37	27110	26620	0.2420	359	358	4
612.750	0.9998	5.56834	0.81	1.91	27366	27206	0.2424	270	269	4
613.750	0.9967	5.55021	11.51	27.12	27293	27052	0.2428	354	353	4
614.750	0.9915	5.53217	29.58	69.57	27257	26876	0.2432	383	382	4
615.750	0.9894	5.51422	37.04	86.99	27016	26581	0.2436	337	336	4
616.750	1.0008	5.49635	-2.80	-6.56	26952	26823	0.2440	299	298	4
617.750	0.9858	5.47857	49.57	116.02	27415	26875	0.2444	354	353	4
618.750	1.0031	5.46087	-10.64	-24.85	26743	26674	0.2448	359	358	4
619.750	0.9844	5.44326	54.66	127.94	27421	26840	0.2452	376	375	4
620.750	0.9861	5.42574	48.60	113.20	27201	26670	0.2456	330	329	4
621.750	0.9914	5.40830	29.96	69.67	27229	26839	0.2460	330	329	4
622.750	0.9880	5.39095	42.00	97.52	26967	26487	0.2464	337	336	4
623.750	1.0034	5.37368	-11.76	-27.25	26945	26874	0.2468	347	346	4
624.750	0.9999	5.35649	0.27	0.62	26975	26806	0.2472	349	348	4
625.750	0.9865	5.33938	47.24	109.17	27122	26581	0.2475	412	411	4
626.750	0.9886	5.32236	39.70	91.60	26908	26415	0.2479	316	315	4
627.750	0.9922	5.30541	27.24	62.74	26840	26422	0.2483	330	329	4
628.750	1.0005	5.28855	-1.80	-4.14	27068	26836	0.2487	294	293	4
629.750	1.0066	5.27177	-23.00	-52.82	26725	26606	0.2491	311	310	4
630.750	0.9910	5.25506	31.35	71.86	27009	26393	0.2495	325	324	4
631.750	0.9896	5.23844	36.27	83.01	26916	26210	0.2499	369	368	4
632.750	0.9991	5.22190	2.99	6.84	26877	26379	0.2503	313	312	4
633.750	0.9956	5.20543	15.18	34.63	26902	26280	0.2507	337	336	4
634.750	0.9891	5.18904	38.14	86.88	27074	26244	0.2511	352	351	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC HOCT E	COUNTS OPEN SAMPLE	FRAC. CF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
635.750	0.9968	5.17273	11.18	25.43	26609 26004	0.2515	306	305	4
636.750	0.9881	5.15650	41.74	94.79	26932 26097	0.2519	357	356	4
637.750	0.9885	5.14034	40.21	91.17	26789 26025	0.2523	357	356	4
638.750	0.9858	5.12425	49.62	112.31	26571 25811	0.2527	304	303	4
639.750	0.9870	5.10825	45.49	102.81	26901 26216	0.2531	347	346	4
640.750	1.0065	5.09232	-22.38	-50.49	26658 26544	0.2535	359	358	4
641.750	0.9906	5.07646	32.97	74.27	26673 26184	0.2539	357	356	4
642.750	0.9801	5.06067	69.72	156.83	27005 26262	0.2543	292	291	4
643.750	0.9727	5.04496	96.12	215.90	27147 26220	0.2547	325	324	4
644.750	0.9977	5.02933	7.87	17.64	26910 26673	0.2551	292	291	4
645.750	0.9838	5.01376	56.63	126.81	27045 26443	0.2555	330	329	4
646.750	0.9966	4.99827	11.73	26.23	26858 26608	0.2559	361	360	4
647.750	0.9896	4.98285	36.31	81.05	26916 26480	0.2562	287	286	4
648.750	0.9925	4.96750	26.20	58.39	26805 26450	0.2566	335	334	4
649.750	0.9810	4.95222	66.60	148.22	27060 26395	0.2570	352	351	4
650.750	1.0089	4.93701	-30.67	-68.14	26574 26658	0.2574	364	363	4
651.750	0.9946	4.92187	18.66	41.39	26850 26556	0.2578	287	286	4
652.750	0.9953	4.90680	16.24	35.98	26711 26437	0.2582	270	269	4
653.750	0.9964	4.89181	12.47	27.58	26677 26433	0.2586	330	329	4
654.750	0.9877	4.87687	42.95	94.86	26900 26422	0.2590	306	305	4
655.750	0.9988	4.86201	4.11	9.07	26827 26647	0.2594	292	291	4
656.750	0.9985	4.84722	5.27	11.60	26750 26562	0.2598	357	356	4
657.750	0.9986	4.83249	4.71	10.34	26752 26565	0.2602	325	324	4
658.750	0.9930	4.81783	24.31	53.35	26756 26424	0.2606	306	305	4
659.750	0.9918	4.80323	28.47	62.40	26709 26345	0.2610	313	312	4
660.750	0.9907	4.78871	32.53	71.18	26911 26514	0.2614	280	279	4
661.750	0.9933	4.77424	23.33	50.99	26464 26142	0.2618	289	288	4
662.750	0.9887	4.75985	39.64	86.48	26744 26296	0.2622	311	310	4
663.750	1.0015	4.74552	-5.07	-11.05	26477 26371	0.2626	282	281	4
664.750	1.0002	4.73125	-0.55	-1.19	26653 26511	0.2630	306	305	4
665.750	0.9942	4.71705	20.27	44.03	26751 26450	0.2634	318	317	4
666.750	1.0039	4.70291	-13.40	-29.06	26368 26325	0.2638	366	365	4
667.750	0.9999	4.68883	0.33	0.72	26567 26420	0.2642	337	336	4
668.750	0.9939	4.67482	21.35	46.15	26530 26224	0.2646	265	264	4
669.750	0.9914	4.66087	30.02	64.82	26807 26431	0.2650	321	320	4
670.750	0.9925	4.64698	26.04	56.13	26570 26228	0.2653	292	291	4
671.750	0.9894	4.63316	37.04	79.72	26708 26281	0.2657	330	329	4
672.750	0.9830	4.61940	59.69	128.30	26888 26286	0.2661	270	269	4
673.750	0.9908	4.60569	32.25	69.22	26713 26322	0.2665	349	348	4
674.750	0.9793	4.59205	72.87	156.14	26866 26166	0.2669	345	344	4
675.750	0.9959	4.57847	14.41	30.83	26500 26246	0.2673	313	312	4
676.750	0.9901	4.56495	34.63	73.98	26478 26073	0.2677	294	293	4
677.750	1.0205	4.55149	-70.62	-150.66	26129 26520	0.2681	296	296	4
678.750	1.0014	4.53809	-4.78	-10.19	26271 26164	0.2685	294	293	4
679.750	1.0095	4.52475	-32.76	-69.69	26248 26352	0.2689	275	274	4
680.750	1.0030	4.51146	-10.38	-22.05	26501 26436	0.2693	345	344	4
681.750	0.9871	4.49824	45.10	95.66	26579 26094	0.2697	308	308	4
682.750	1.0031	4.48507	-10.64	-22.52	26400 26337	0.2701	294	293	4
683.750	1.0068	4.47196	-23.69	-50.09	26529 26565	0.2705	330	329	4
684.750	0.9927	4.45891	25.61	54.08	26423 26086	0.2709	289	288	4
685.750	0.9973	4.44591	9.54	20.12	26182 25965	0.2713	272	271	4
686.750	0.9940	4.43297	20.92	44.04	26373 26072	0.2717	277	276	4
687.750	0.9850	4.42009	52.41	110.20	26525 25986	0.2721	316	315	4
688.750	0.9807	4.40727	67.88	142.50	26691 26033	0.2725	316	315	4
689.750	0.9769	4.39450	81.21	170.25	26644 25887	0.2729	323	322	4
690.750	1.0057	4.38178	-19.63	-41.09	26030 26035	0.2733	342	341	4
691.750	0.9937	4.36912	21.80	45.57	26347 26040	0.2737	301	300	4
692.750	0.9961	4.35652	13.70	28.60	26352 26106	0.2741	304	303	4
693.750	0.9901	4.34397	34.68	72.29	26587 26180	0.2744	323	322	4
694.750	1.0066	4.33147	-22.98	-47.82	26095 26126	0.2748	321	320	4
695.750	0.9832	4.31903	58.74	122.07	24727 24181	0.2752	2321	2314	4
696.750	0.9874	4.30664	43.99	91.29	24213 23775	0.2756	2428	2420	4
697.750	1.0073	4.29430	-25.41	-52.65	23840 23884	0.2760	2372	2365	4
698.750	0.9974	4.28202	8.88	18.38	24333 24139	0.2764	2094	2088	4
699.750	1.0034	4.26979	-11.77	-24.32	24095 24045	0.2768	2263	2257	4
700.750	0.9909	4.25761	31.88	65.78	26216 25836	0.2772	243	243	4
701.750	0.9998	4.24549	0.80	1.66	25958 25812	0.2776	335	334	4
702.750	1.0112	4.23341	-38.73	-79.69	25830 25978	0.2780	282	281	4
703.750	0.9965	4.22139	12.21	25.09	25946 25714	0.2784	340	339	4
704.750	1.0003	4.20942	-0.93	-1.90	25761 25628	0.2788	299	298	4
705.750	1.0199	4.19750	-68.57	-140.48	25630 25995	0.2792	328	327	4
706.750	0.9981	4.18563	6.51	13.32	25576 25390	0.2796	272	271	4
707.750	1.0049	4.17381	-17.17	-35.07	25495 25482	0.2800	313	312	4
708.750	0.9865	4.16204	47.38	96.67	25808 25321	0.2804	282	281	4
709.750	0.9761	4.15032	84.05	171.22	25866 25111	0.2808	294	293	4
710.750	0.9982	4.13865	6.24	12.69	25770 25584	0.2812	267	267	4
711.750	0.9922	4.12703	27.08	55.01	25765 25426	0.2816	260	259	4
712.750	1.0051	4.11546	-17.60	-35.70	25575 25566	0.2820	284	283	4
713.750	0.9859	4.10393	49.36	100.00	26123 25615	0.2824	260	259	4
714.750	0.9973	4.09246	9.32	18.86	25745 25536	0.2828	260	259	4

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST BKG OPEN SAMPLE	NO. PTS AVE,
715.750	0.9868	4.08103	46.23	93.39	25996 25513	0.2832	323 322	4
716.750	0.9775	4.06965	79.29	159.94	26130 25403	0.2835	308 308	4
717.750	0.9900	4.05832	34.93	70.36	26095 25694	0.2839	287 286	4
718.750	0.9846	4.04703	54.12	108.88	26231 25686	0.2843	272 271	4
719.750	0.9948	4.03580	18.18	36.52	26158 25881	0.2847	284 284	4
720.750	0.9822	4.02460	62.29	124.96	26112 25510	0.2851	270 269	4
721.750	0.9845	4.01346	54.40	108.98	26133 25588	0.2855	219 219	4
722.750	0.9999	4.00236	0.47	0.94	26195 26050	0.2859	277 276	4
723.750	0.9872	3.99131	44.70	89.31	26343 25865	0.2863	270 269	4
724.750	0.9980	3.98030	6.99	13.95	26063 25869	0.2867	280 279	4
725.750	1.0028	3.96934	-9.85	-19.62	26053 25985	0.2871	287 286	4
726.750	0.9995	3.95843	1.87	3.72	26133 25977	0.2875	289 288	4
727.750	0.9889	3.94755	38.60	76.84	26307 25875	0.2879	306 305	4
728.750	1.0109	3.93673	-37.82	-75.05	25787 25926	0.2883	272 271	4
729.750	0.9825	3.92595	61.52	121.89	26090 25493	0.2887	284 283	4
730.750	0.9977	3.91521	7.98	15.80	25932 25732	0.2891	275 274	4
731.750	0.9922	3.90451	27.31	53.96	25802 25462	0.2895	282 281	4
732.750	0.9886	3.89387	39.85	78.64	26220 25780	0.2899	267 267	4
733.750	0.9672	3.88326	116.04	228.66	26512 25503	0.2903	263 262	4
734.750	1.0020	3.87270	-6.77	-13.33	25841 25751	0.2907	304 303	4
735.750	0.9999	3.86218	0.34	0.66	25941 25798	0.2911	321 320	4
736.750	0.9936	3.85170	22.29	43.75	26038 25732	0.2915	260 259	4
737.750	0.9882	3.84126	41.18	80.70	26106 25654	0.2919	292 291	4
738.750	1.0016	3.83087	-5.49	-10.76	25718 25615	0.2922	299 298	4
739.750	1.0053	3.82052	-18.33	-35.83	25937 25932	0.2926	335 334	4
740.750	1.0107	3.81021	-37.07	-72.36	25751 25886	0.2930	265 264	4
741.750	0.9968	3.79995	11.01	21.47	25619 25399	0.2934	316 315	4
742.750	1.0005	3.78972	-1.63	-3.18	25877 25745	0.2938	289 288	4
743.750	1.0020	3.77954	-6.82	-13.25	25795 25705	0.2942	313 312	4
744.750	0.9783	3.76939	76.40	148.33	25892 25192	0.2946	306 305	4
745.750	0.9962	3.75929	13.28	25.74	26061 25821	0.2950	282 281	4
746.750	0.9860	3.74923	49.16	95.19	26164 25657	0.2954	260 259	4
747.750	0.9898	3.73921	35.52	68.68	26062 25657	0.2958	258 257	4
748.750	0.9801	3.72923	69.96	135.10	26006 25350	0.2962	294 293	4
749.750	1.0087	3.71929	-30.13	-58.11	25655 25738	0.2966	287 286	4
750.750	0.9854	3.70938	51.01	98.24	26024 25506	0.2970	345 344	4
751.750	0.9802	3.69952	69.53	133.74	26194 25536	0.2974	282 281	4
752.750	0.9978	3.68970	7.79	14.96	25527 25332	0.2978	340 339	4
753.750	1.0001	3.67992	-0.52	-0.99	25732 25596	0.2982	311 310	4
754.750	1.0006	3.67017	-1.93	-3.69	25716 25591	0.2986	270 269	4
755.750	0.9896	3.66046	36.47	69.77	25917 25507	0.2990	318 317	4
756.750	0.9977	3.65080	8.05	15.39	25921 25721	0.2994	248 247	4
757.750	0.9913	3.64117	30.44	58.09	25908 25643	0.2998	234 233	4
758.750	0.9925	3.63158	26.34	50.20	25805 25471	0.3002	280 279	4
759.750	1.0021	3.62202	-7.39	-14.06	25738 25653	0.3006	287 286	4
760.750	1.0046	3.61251	-16.07	-30.54	25823 25802	0.3010	258 257	4
761.750	0.9854	3.60303	51.28	97.33	25699 25186	0.3013	209 200	4
762.750	1.0055	3.59359	-19.12	-36.25	25653 25654	0.3017	272 271	4
763.750	0.9974	3.58418	8.99	17.02	25525 25321	0.3021	292 291	4
764.750	1.0074	3.57482	-25.69	-48.56	25549 25599	0.3025	265 264	4
765.750	1.0086	3.56548	-29.61	-55.90	25518 25596	0.3029	280 279	4
766.750	0.9767	3.55619	81.84	154.34	25877 25138	0.3033	316 315	4
767.750	0.9970	3.54693	10.32	19.44	25390 25178	0.3037	263 262	4
768.750	1.0041	3.53771	-14.07	-26.46	25622 25586	0.3041	275 274	4
769.750	0.9874	3.52852	43.92	82.51	25574 25116	0.3045	239 230	4
770.750	0.9979	3.51937	7.30	13.69	25403 25212	0.3049	294 293	4
771.750	1.0018	3.51026	-6.12	-11.47	25415 25322	0.3053	280 279	4
772.750	1.0172	3.50118	-59.33	-111.01	25272 25568	0.3057	239 238	4
773.750	0.9729	3.49214	95.64	178.72	25806 24970	0.3061	289 288	4
774.750	0.9807	3.48313	67.89	126.71	25866 25228	0.3065	299 298	4
775.750	0.9949	3.47415	17.94	33.44	25768 25497	0.3069	284 284	4
776.750	0.9953	3.46521	16.43	30.58	25639 25380	0.3073	289 288	4
777.750	1.0061	3.45631	-21.05	-39.14	25453 25469	0.3077	284 283	4
778.750	1.0126	3.44744	-43.67	-81.08	25301 25482	0.3081	265 264	4
779.750	1.0036	3.43860	-12.65	-23.45	25320 25276	0.3085	258 257	4
780.750	0.9948	3.42980	18.00	33.34	25687 25416	0.3089	234 233	4
781.750	0.9949	3.42103	17.89	33.08	25651 25381	0.3093	253 252	4
782.750	1.0022	3.41229	-7.53	-13.92	25389 25306	0.3097	258 257	4
783.750	0.9904	3.40359	33.67	62.11	25667 25282	0.3101	219 219	4
784.750	0.9907	3.39492	32.59	60.05	25697 25319	0.3104	253 252	4
785.750	0.9972	3.38629	9.87	18.16	25377 25168	0.3108	251 250	4
786.750	0.9914	3.37768	29.94	55.03	25723 25384	0.3112	325 324	4
787.750	1.0121	3.36911	-41.70	-76.54	25344 25510	0.3116	289 288	4
788.750	0.9912	3.36058	30.88	56.61	25352 24992	0.3120	260 259	4
789.750	0.9788	3.35207	74.42	136.25	25698 25017	0.3124	272 271	4
790.750	1.0141	3.34360	-48.53	-88.75	25114 25330	0.3128	260 259	4
791.750	0.9831	3.33516	59.37	108.42	25386 24821	0.3132	275 274	4
792.750	0.9927	3.32675	25.55	46.60	25448 25125	0.3136	272 271	4
793.750	0.9873	3.31837	44.43	80.93	25589 25127	0.3140	260 259	4
794.750	1.0014	3.31003	-5.00	-9.09	25300 25199	0.3144	243 243	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
795.750	0.9866	3.30171	46.81	85.06	25276	24803	0.3148	275	274	4
796.750	0.9791	3.29343	73.42	133.25	25807	25131	0.3152	229	228	4
797.750	0.9952	3.28518	16.65	30.18	25378	25120	0.3156	275	274	4
798.750	0.9913	3.27696	30.49	55.19	25278	24921	0.3160	253	252	4
799.750	0.9995	3.26877	1.79	3.24	25271	25121	0.3164	260	259	4
800.750	0.9942	3.26061	20.15	36.39	25387	25104	0.3168	272	271	4
801.750	0.9678	3.25248	113.64	204.95	25834	24868	0.3172	267	267	4
802.750	0.9962	3.24438	13.12	23.64	25256	25025	0.3176	277	276	4
803.750	1.0060	3.23631	-20.66	-37.17	25092	25105	0.3180	246	245	4
804.750	0.9729	3.22828	95.61	171.79	25328	24508	0.3184	284	284	4
805.750	0.9804	3.22027	68.66	123.20	25441	24808	0.3188	255	255	4
806.750	0.9961	3.21229	13.42	24.06	25091	24859	0.3192	265	264	4
807.750	0.9817	3.20434	64.22	114.95	25413	24813	0.3195	270	269	4
808.750	1.0065	3.19642	-22.70	-40.58	25079	25106	0.3199	296	296	4
809.750	0.9832	3.18853	58.82	105.03	25599	25033	0.3203	272	271	4
810.750	1.0062	3.18067	-21.42	-38.19	24828	24847	0.3207	282	281	4
811.750	0.9916	3.17284	29.47	52.50	25165	24817	0.3211	284	284	4
812.750	1.0033	3.16504	-11.32	-20.14	25189	25134	0.3215	316	315	4
813.750	1.0034	3.15726	-11.66	-20.72	25076	25024	0.3219	292	291	4
814.750	0.9912	3.14952	30.68	54.46	25297	24939	0.3223	234	233	4
815.750	0.9837	3.14180	57.22	101.42	25311	24763	0.3227	241	240	4
816.750	0.9886	3.13411	39.99	70.80	25195	24772	0.3231	260	259	4
817.750	0.9760	3.12645	84.48	149.38	25502	24755	0.3235	227	226	4
818.750	1.0112	3.11882	-38.77	-68.47	25152	25296	0.3239	239	238	4
819.750	0.9821	3.11121	62.73	110.65	25185	24601	0.3243	308	308	4
820.750	0.9977	3.10364	7.98	14.06	24978	24786	0.3247	275	274	4
821.750	0.9863	3.09609	47.90	84.29	25040	24563	0.3251	275	274	4
822.750	1.0159	3.08857	-54.72	-96.16	24867	25124	0.3255	280	279	4
823.750	0.9995	3.08107	1.62	2.85	24955	24808	0.3259	255	255	4
824.750	0.9804	3.07360	68.92	120.84	25258	24628	0.3263	313	312	4
825.750	0.9898	3.06616	35.68	62.47	25060	24670	0.3267	289	288	4
826.750	0.9821	3.05875	62.90	110.00	25131	24546	0.3271	284	284	4
827.750	0.9906	3.05137	32.79	57.28	25202	24830	0.3275	227	226	4
828.750	0.9864	3.04401	47.75	83.30	25170	24692	0.3279	229	228	4
829.750	0.9810	3.03667	66.61	116.08	24924	24318	0.3282	267	267	4
830.750	0.9860	3.02937	48.85	85.02	24974	24492	0.3286	272	271	4
831.750	0.9777	3.02209	78.28	136.09	24955	24267	0.3290	306	305	4
832.750	0.9711	3.01483	101.84	176.82	25045	24190	0.3294	260	259	4
833.750	0.9785	3.00761	75.71	131.30	25263	24585	0.3298	251	250	4
834.750	0.9604	3.00040	140.56	243.48	25115	23989	0.3302	224	223	4
835.750	0.9819	2.99323	63.41	109.71	24800	24220	0.3306	277	276	4
836.750	0.9630	2.98608	131.21	226.74	25120	24058	0.3310	234	233	4
837.750	0.9599	2.97895	142.43	245.82	24974	23842	0.3314	287	286	4
838.750	0.9714	2.97185	100.86	173.87	24662	23827	0.3318	292	291	4
839.750	0.9442	2.96478	199.75	343.93	25052	23525	0.3322	212	211	4
840.750	0.9518	2.95773	171.78	295.43	24740	23420	0.3326	270	269	4
841.750	0.9362	2.95071	229.15	393.62	24667	22968	0.3330	284	284	4
842.750	0.9205	2.94371	287.99	494.11	24944	22837	0.3334	246	245	4
843.750	0.8947	2.93674	386.81	662.87	24653	21938	0.3338	251	250	4
844.750	0.8690	2.92979	488.27	835.76	24791	21426	0.3342	284	284	4
845.750	0.8501	2.92286	564.58	965.23	24702	20886	0.3346	246	245	4
846.750	0.8122	2.91596	723.28	1235.08	24916	20127	0.3350	210	209	4
847.750	0.8106	2.90909	729.98	1245.06	24698	19912	0.3354	272	271	4
848.750	0.7915	2.90224	812.84	1384.75	24532	19313	0.3358	258	257	4
849.750	0.7681	2.89541	917.26	1560.79	24794	18942	0.3362	248	247	4
850.750	0.7636	2.88861	937.60	1593.54	24562	18655	0.3366	284	284	4
851.750	0.7445	2.88183	1025.94	1741.63	24902	18438	0.3370	229	228	4
852.750	0.7580	2.87507	963.56	1633.82	24734	18646	0.3373	308	308	4
853.750	0.7769	2.86834	877.92	1486.87	24852	19201	0.3377	239	238	4
854.750	0.7958	2.86164	794.14	1343.39	24592	19464	0.3381	289	288	4
855.750	0.8288	2.85495	652.89	1103.16	24704	20363	0.3385	258	257	4
856.750	0.8449	2.84829	586.15	989.24	24762	20807	0.3389	205	204	4
857.750	0.8705	2.84165	482.22	812.88	24811	21480	0.3393	260	259	4
858.750	0.8854	2.83504	423.31	712.76	24908	21933	0.3397	234	233	4
859.750	0.9093	2.82845	330.53	555.89	24498	22156	0.3401	311	310	4
860.750	0.9049	2.82188	347.62	583.94	24785	22305	0.3405	241	240	4
861.750	0.9250	2.81533	271.13	454.93	25016	23014	0.3409	260	259	4
862.750	0.9540	2.80881	163.70	274.35	24642	23381	0.3413	270	269	4
863.750	0.9554	2.80231	158.60	265.50	24730	23499	0.3417	258	257	4
864.750	0.9705	2.79583	104.20	174.23	24403	23554	0.3421	280	279	4
865.750	0.9680	2.78938	113.05	188.81	24727	23806	0.3425	222	221	4
866.750	0.9579	2.78295	149.66	249.67	24702	23533	0.3429	253	252	4
867.750	0.9854	2.77654	51.10	85.14	24297	23812	0.3433	301	300	4
868.750	0.9710	2.77015	102.16	170.04	24559	23719	0.3437	280	279	4
869.750	0.9762	2.76378	83.80	139.32	24646	23928	0.3441	265	264	4
870.750	0.9767	2.75744	81.95	136.09	24346	23645	0.3445	282	281	4
871.750	0.9880	2.75111	41.83	69.38	24291	23870	0.3449	265	264	4
872.750	0.9752	2.74481	87.19	144.45	24542	23805	0.3453	227	226	4
873.750	0.9717	2.73853	99.91	165.33	24585	23754	0.3457	265	264	4
874.750	0.9834	2.73228	58.13	96.08	24403	23868	0.3461	255	255	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. GF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
875,750	0,9969	2,72604	10,86	17,92	24474	24265	0,3464	267	267	4
876,750	0,9919	2,71983	28,44	46,91	24448	24118	0,3468	282	281	4
877,750	0,9697	2,71363	106,92	176,14	24821	23939	0,3472	294	293	4
878,750	0,9755	2,70746	86,33	142,06	24691	23955	0,3476	284	284	4
879,750	0,9734	2,70131	93,88	154,30	24757	23967	0,3480	243	243	4
880,750	0,9856	2,69518	50,38	82,71	24621	24135	0,3484	246	245	4
881,750	0,9849	2,68907	52,90	86,75	24513	24012	0,3488	246	245	4
882,750	0,9844	2,68298	54,55	89,36	24373	23863	0,3492	234	233	4
883,750	0,9831	2,67691	59,19	96,85	24557	24012	0,3496	296	296	4
884,750	0,9832	2,67086	58,96	96,36	24514	23971	0,3500	280	279	4
885,750	0,9780	2,66483	77,32	126,22	24435	23768	0,3504	251	250	4
886,750	0,9917	2,65883	29,03	47,34	24463	24127	0,3508	248	247	4
887,750	0,9841	2,65284	55,76	90,82	24520	23999	0,3512	289	288	4
888,750	0,9777	2,64687	78,49	127,70	24602	23923	0,3516	219	219	4
889,750	0,9953	2,64093	16,44	26,72	24287	24042	0,3520	275	274	4
890,750	0,9979	2,63500	7,40	12,01	24189	24006	0,3524	313	312	4
891,750	0,9869	2,62910	45,77	74,21	24402	23953	0,3528	212	211	4
892,750	0,9773	2,62321	79,76	129,19	24464	23780	0,3532	251	250	4
893,750	0,9823	2,61734	62,14	100,53	24677	24108	0,3536	246	245	4
894,750	0,9763	2,61149	83,51	134,95	24511	23799	0,3540	308	308	4
895,750	0,9958	2,60567	14,55	23,48	24272	24040	0,3544	270	269	4
896,750	0,9872	2,59986	44,65	71,99	24346	23905	0,3548	239	238	4
897,750	0,9836	2,59407	57,66	92,86	24308	23778	0,3551	241	240	4
898,750	0,9956	2,58830	15,32	24,64	24030	23794	0,3555	246	245	4
899,750	0,9975	2,58255	8,84	14,21	24141	23949	0,3559	241	240	4
900,750	0,9916	2,57682	29,33	47,07	24246	23912	0,3563	231	231	4
901,750	1,0113	2,57111	-39,19	-62,83	23785	23924	0,3567	227	226	4
902,750	0,9988	2,56541	4,13	6,61	24154	23994	0,3571	251	250	4
903,750	0,9999	2,55974	0,27	0,44	24104	23971	0,3575	248	247	4
904,750	0,9925	2,55409	26,21	41,89	24178	23866	0,3579	265	264	4
905,750	0,9919	2,54845	28,26	45,12	24142	23816	0,3583	207	207	4
906,750	0,9780	2,54283	77,21	123,12	24397	23732	0,3587	239	238	4
907,750	1,0080	2,53723	-27,88	-44,40	23941	24003	0,3591	251	250	4
908,750	1,0008	2,53165	-2,73	-4,34	23897	23786	0,3595	277	276	4
909,750	0,9952	2,52609	16,60	26,38	23962	23718	0,3599	294	293	4
910,750	0,9869	2,52054	45,83	72,76	24171	23725	0,3603	253	252	4
911,750	0,9895	2,51502	36,82	58,39	24126	23742	0,3607	265	264	4
912,750	0,9705	2,50951	103,94	164,65	24439	23590	0,3611	243	243	4
913,750	1,0023	2,50402	-7,96	-12,60	23977	23902	0,3615	275	274	4
914,750	0,9913	2,49855	30,47	48,16	24088	23749	0,3619	255	255	4
915,750	0,9882	2,49309	41,18	65,02	24018	23607	0,3623	219	219	4

C.4 Medium Energy —Medium Sample (5/14/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC	COUNTS		FRAC,	FAST BKGS		NO. PTS
				ROOT E	OPEN	SAMPLE	GF OCT	CPEN	SAMPLE	AVE,
405.250	0.9884	12.73053	11.56	41.26	63909	62460	0.1603	1308	1292	8
406.750	0.9866	12.63681	13.41	47.66	28761	28056	0.1609	496	490	4
407.750	0.9787	12.57490	21.38	75.81	29110	28170	0.1613	554	547	4
408.750	1.0038	12.51345	-3.77	-13.34	28575	28360	0.1617	554	547	4
409.750	0.9874	12.45244	12.63	44.57	28629	27948	0.1621	575	569	4
410.750	0.9701	12.39189	30.17	106.19	28974	27790	0.1625	457	452	4
411.750	0.9753	12.33177	24.93	87.53	28759	27730	0.1629	561	554	4
412.750	0.9865	12.27209	13.49	47.25	28596	27890	0.1633	566	559	4
413.750	0.9859	12.21284	14.13	49.37	28613	27885	0.1637	576	569	4
414.750	0.9913	12.15401	8.67	30.21	28691	28106	0.1641	523	516	4
415.750	0.9740	12.09562	26.17	91.01	28582	27497	0.1645	576	569	4
416.750	0.9831	12.03764	16.93	58.72	28567	27711	0.1649	564	557	4
417.750	0.9885	11.98008	11.51	39.84	28549	27793	0.1653	496	490	4
418.750	0.9898	11.92293	10.16	35.10	28406	27659	0.1657	518	512	4
419.750	0.9980	11.86619	2.02	6.96	28460	27949	0.1661	518	512	4
420.750	0.9916	11.80985	8.36	28.74	28416	27755	0.1664	549	543	4
421.750	1.0025	11.75391	-2.46	-8.43	28341	28040	0.1668	445	440	4
422.750	0.9934	11.69837	6.63	22.67	28375	27845	0.1672	580	573	4
423.750	0.9955	11.64322	4.46	15.20	28313	27851	0.1676	539	533	4
424.750	0.9803	11.58846	19.76	67.25	28553	27663	0.1680	486	481	4
425.750	0.9941	11.53409	5.90	20.02	28145	27654	0.1684	501	495	4
426.750	0.9865	11.48010	13.50	45.75	28357	27651	0.1688	542	535	4
427.750	0.9818	11.42648	18.32	61.93	28435	27592	0.1692	544	538	4
428.750	0.9749	11.37324	25.27	85.23	28574	27532	0.1696	576	569	4
429.750	0.9989	11.32037	1.13	3.80	28534	28167	0.1700	515	509	4
430.750	0.9857	11.26787	14.31	48.02	28557	27814	0.1704	511	504	4
431.750	0.9723	11.21574	27.99	93.73	28510	27379	0.1708	525	519	4
432.750	0.9884	11.16396	11.57	38.65	28307	27620	0.1712	501	495	4
433.750	0.9696	11.11255	30.69	102.32	28808	27548	0.1716	441	435	4
434.750	1.0003	11.06148	-0.26	-0.85	28217	27806	0.1720	530	524	4
435.750	0.9910	11.01077	8.96	29.72	28401	27690	0.1724	532	526	4
436.750	0.9804	10.96041	19.69	65.18	28552	27504	0.1728	532	526	4
437.750	0.9902	10.91039	9.84	32.50	28251	27495	0.1732	503	497	4
438.750	0.9844	10.86071	15.66	51.61	28574	27658	0.1736	405	400	4
439.750	0.9898	10.81137	10.20	33.53	28101	27386	0.1740	496	490	4
440.750	0.9846	10.76237	15.44	50.67	28824	27976	0.1744	424	419	4
441.750	0.9772	10.71370	22.97	75.17	28441	27420	0.1748	487	481	4
442.750	0.9748	10.66536	25.43	83.06	28600	27521	0.1752	496	490	4
443.750	0.9826	10.61734	17.45	56.88	28345	27506	0.1755	475	469	4
444.750	0.9867	10.56965	13.32	43.29	28482	27764	0.1759	465	459	4
445.750	0.9980	10.52228	2.01	6.52	28155	27765	0.1763	494	488	4
446.750	1.0010	10.47523	-0.95	-3.09	28120	27819	0.1767	535	528	4
447.750	0.9686	10.42849	31.75	102.52	28598	27380	0.1771	455	450	4
448.750	0.9798	10.38206	20.35	65.58	28170	27283	0.1775	458	452	4
449.750	0.9829	10.33595	17.15	55.15	28323	27520	0.1779	455	450	4
450.750	0.9687	10.29014	31.69	101.66	28286	27086	0.1783	523	517	4
451.750	0.9713	10.24463	28.93	92.59	28137	27017	0.1787	479	474	4
452.750	0.9364	10.19942	65.34	208.68	28541	26421	0.1791	520	514	4
453.750	0.9148	10.15452	88.65	282.51	28211	25511	0.1795	451	445	4
454.750	0.8558	10.10991	155.00	492.83	28110	23780	0.1799	479	474	4
455.750	0.7809	10.06559	246.08	780.72	28231	21794	0.1803	446	440	4
456.750	0.7191	10.02156	328.06	1038.53	28251	20084	0.1807	407	402	4
457.750	0.7060	9.97782	346.47	1094.40	28360	19792	0.1811	458	452	4
458.750	0.7624	9.93437	269.99	650.96	28417	21416	0.1815	407	402	4
459.750	0.8405	9.89120	172.92	543.84	28353	23558	0.1819	366	362	4
460.750	0.9003	9.84831	104.50	327.95	28167	25069	0.1823	458	452	4
461.750	0.9306	9.80570	71.58	224.14	28196	25940	0.1827	441	436	4
462.750	0.9263	9.76337	76.15	237.94	28697	26281	0.1831	453	448	4
463.750	0.9613	9.72131	39.23	122.32	28261	26860	0.1835	477	471	4
464.750	0.9809	9.67952	19.20	59.75	28089	27239	0.1839	407	402	4
465.750	0.9761	9.63800	24.04	74.63	28533	27536	0.1843	417	412	4
466.750	0.9694	9.59674	30.91	95.75	28324	27146	0.1846	431	426	4
467.750	0.9807	9.55575	19.40	59.96	28146	27290	0.1850	475	469	4
468.750	0.9817	9.51503	18.34	56.56	28200	27371	0.1854	422	417	4
469.750	0.9935	9.47456	6.45	19.84	27973	27477	0.1858	451	445	4
470.750	0.9755	9.43435	24.72	75.92	28153	27151	0.1862	388	383	4
471.750	0.9922	9.39439	7.75	23.76	28030	27497	0.1866	361	357	4
472.750	0.9862	9.35469	13.82	42.26	28437	27727	0.1870	429	424	4
473.750	0.9793	9.31524	20.82	63.56	28056	27164	0.1874	424	419	4
474.750	0.9771	9.27604	23.01	70.07	28427	27463	0.1878	448	443	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC, OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
475,750	0,9925	9,23709	7,50	22,80	27889 27367	0,1882	383	378	4
476,750	0,9843	9,19838	15,78	47,87	28381 27618	0,1886	439	433	4
477,750	0,9924	9,15991	7,55	22,85	27944 27419	0,1890	390	386	4
478,750	0,9896	9,12168	10,42	31,48	27898 27295	0,1894	472	467	4
479,750	1,0118	9,08370	-11,64	-35,07	27759 27768	0,1898	395	390	4
480,750	0,9845	9,04595	15,58	46,87	28159 27409	0,1902	383	378	4
481,750	0,9885	9,00843	11,48	34,46	28302 27661	0,1906	422	417	4
482,750	0,9890	8,97115	11,04	33,06	28351 27722	0,1910	417	412	4
483,750	0,9887	8,93410	11,27	33,70	28143 27512	0,1914	378	374	4
484,750	0,9881	8,89727	11,92	35,55	28297 27645	0,1918	417	412	4
485,750	0,9913	8,86068	8,65	25,76	28042 27485	0,1922	463	457	4
486,750	0,9860	8,82431	14,07	41,79	28202 27493	0,1926	308	305	4
487,750	0,9900	8,78816	9,97	29,56	28014 27422	0,1930	451	445	4
488,750	0,9707	8,75224	29,60	87,57	28111 26980	0,1933	414	409	4
489,750	0,9808	8,71653	19,32	57,04	28204 27350	0,1937	405	400	4
490,750	0,9795	8,68104	20,64	60,80	28145 27257	0,1941	376	371	4
491,750	0,9986	8,64577	1,37	4,01	28111 27757	0,1945	386	381	4
492,750	0,9773	8,61072	22,86	67,07	28192 27242	0,1949	441	436	4
493,750	0,9937	8,57587	6,31	18,49	27918 27430	0,1953	381	376	4
494,750	0,9858	8,54124	14,20	41,49	28237 27524	0,1957	378	374	4
495,750	0,9632	8,50682	37,28	108,73	28375 27024	0,1961	414	409	4
496,750	0,9980	8,47260	2,00	5,83	27860 27491	0,1965	373	369	4
497,750	0,9860	8,43859	14,02	40,73	28047 27344	0,1969	427	421	4
498,750	0,9889	8,40479	11,06	32,07	27902 27282	0,1973	424	419	4
499,750	0,9849	8,37119	15,14	43,80	27925 27193	0,1977	390	386	4
500,750	0,9981	8,33778	1,88	5,42	27972 27603	0,1981	342	338	4
501,750	0,9792	8,30458	20,88	60,18	28038 27143	0,1985	354	350	4
502,750	0,9857	8,27158	14,34	41,24	28036 27319	0,1989	361	357	4
503,750	0,9815	8,23877	18,61	53,43	28157 27318	0,1993	376	371	4
504,750	0,9836	8,20616	16,49	47,24	28089 27308	0,1997	402	398	4
505,750	0,9896	8,17374	10,44	29,84	27785 27175	0,2001	357	352	4
506,750	0,9802	8,14151	19,94	56,89	28154 27272	0,2005	371	367	4
507,750	0,9759	8,10947	24,32	69,25	28022 27022	0,2009	417	412	4
508,750	1,0126	8,07763	-12,49	-35,49	27660 27674	0,2013	393	388	4
509,750	0,9714	8,04596	28,85	81,83	27969 26840	0,2017	386	381	4
510,750	0,9866	8,01449	13,40	37,94	27919 27207	0,2021	429	424	4
511,750	0,9751	7,98320	25,14	71,02	28174 27127	0,2024	451	445	4
512,750	0,9867	7,95209	13,31	37,55	27820 27100	0,2028	357	352	4
513,750	0,9882	7,92116	11,82	33,27	27826 27140	0,2032	405	400	4
514,750	0,9876	7,89041	12,42	34,90	27717 27007	0,2036	345	340	4
515,750	0,9826	7,85985	17,45	48,93	27675 26820	0,2040	361	357	4
516,750	0,9779	7,82946	22,27	62,32	28045 27036	0,2044	357	352	4
517,750	0,9792	7,79924	20,91	58,41	27828 26854	0,2048	393	388	4
518,750	0,9809	7,76920	19,23	53,61	27839 26928	0,2052	414	410	4
519,750	0,9856	7,73933	14,46	40,23	27819 27054	0,2056	376	371	4
520,750	0,9953	7,70964	4,70	13,06	27654 27172	0,2060	342	338	4
521,750	0,9847	7,68011	15,33	42,48	27489 26733	0,2064	390	386	4
522,750	0,9625	7,65076	38,08	105,33	28021 26642	0,2068	400	395	4
523,750	1,0010	7,62157	-1,03	-2,84	27305 27009	0,2072	376	371	4
524,750	0,9944	7,59255	5,59	15,42	27706 27228	0,2076	345	340	4
525,750	0,9757	7,56369	24,45	67,26	28150 27145	0,2080	340	336	4
526,750	0,9708	7,53500	29,51	81,02	27868 26743	0,2084	381	376	4
527,750	0,9911	7,50648	8,86	24,26	27884 27322	0,2088	335	331	4
528,750	0,9691	7,47811	31,23	85,39	27981 26808	0,2092	455	450	4
529,750	0,9830	7,44990	17,03	46,50	28054 27264	0,2096	313	309	4
530,750	0,9899	7,42186	10,10	27,52	27831 27237	0,2100	381	376	4
531,750	0,9878	7,39397	12,25	33,31	27743 27092	0,2104	393	388	4
532,750	0,9894	7,36624	10,65	28,90	27490 26888	0,2108	407	402	4
533,750	0,9960	7,33866	3,97	10,77	27578 27156	0,2112	398	393	4
534,750	0,9854	7,31124	14,65	39,62	27791 27074	0,2115	342	338	4
535,750	0,9963	7,28397	3,64	9,83	27622 27209	0,2119	388	383	4
536,750	0,9847	7,25685	15,35	41,36	27618 26887	0,2123	400	395	4
537,750	0,9964	7,22989	3,57	9,61	27725 27312	0,2127	422	417	4
538,750	0,9779	7,20308	22,20	59,57	27971 27044	0,2131	402	398	4
539,750	0,9908	7,17641	9,24	24,76	27673 27106	0,2135	414	410	4
540,750	0,9951	7,14989	4,90	13,10	27550 27104	0,2139	320	317	4
541,750	0,9810	7,12352	19,11	51,01	27484 26655	0,2143	434	429	4
542,750	0,9858	7,09730	14,25	37,97	27857 27150	0,2147	390	386	4
543,750	0,9915	7,07121	8,50	22,60	27639 27093	0,2151	390	386	4
544,750	0,9761	7,04528	24,04	63,81	27893 26918	0,2155	345	340	4
545,750	0,9710	7,01948	29,27	77,56	27817 26705	0,2159	402	398	4
546,750	0,9684	6,99383	31,94	84,47	27993 26802	0,2163	376	371	4
547,750	0,9792	6,96832	20,86	55,08	27646 26766	0,2167	381	376	4
548,750	0,9897	6,94294	10,28	27,08	27845 27247	0,2171	316	312	4
549,750	0,9769	6,91771	23,26	61,18	27817 26867	0,2175	357	352	4
550,750	0,9924	6,89261	7,57	19,86	27613 27093	0,2179	335	331	4
551,750	0,9842	6,86765	15,85	41,55	27559 26816	0,2183	390	386	4
552,750	0,9920	6,84282	7,99	20,91	27679 27147	0,2187	381	376	4
553,750	0,9805	6,81813	19,62	51,24	27667 26820	0,2191	369	364	4
554,750	1,0023	6,79357	-2,28	-5,95	27337 27090	0,2195	390	386	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
555.750	0.9757	6.76914	24.51	63.76	27748	0.2199	349	345	4
556.750	0.9831	6.74485	16.96	44.06	27694	0.2203	374	369	4
557.750	0.9873	6.72068	12.73	33.01	27370	0.2206	316	312	4
558.750	0.9900	6.69665	10.02	25.93	27764	0.2210	369	364	4
559.750	0.9967	6.67274	3.28	8.47	27143	0.2214	357	352	4
560.750	0.9915	6.64896	8.51	21.96	27289	0.2218	417	412	4
561.750	0.9966	6.62531	3.40	8.75	27562	0.2222	381	376	4
562.750	0.9802	6.60179	19.89	51.10	27869	0.2226	366	362	4
563.750	0.9802	6.57839	19.87	50.96	27781	0.2230	359	355	4
564.750	0.9866	6.55511	13.44	34.41	27560	0.2234	366	362	4
565.750	1.0015	6.53196	-1.50	-3.84	27163	0.2238	378	374	4
566.750	0.9760	6.50893	24.18	61.68	27761	0.2242	342	338	4
567.750	0.9791	6.48602	20.98	53.43	27562	0.2246	361	357	4
568.750	1.0029	6.46323	-2.85	-7.25	27433	0.2250	378	374	4
569.750	0.9861	6.44056	13.89	35.26	27550	0.2254	378	374	4
570.750	0.9802	6.41801	19.93	50.49	27642	0.2258	381	376	4
571.750	0.9802	6.39558	19.87	50.25	27590	0.2262	388	383	4
572.750	0.9744	6.37327	25.80	65.14	27910	0.2266	333	329	4
573.750	0.9820	6.35107	18.03	45.44	27484	0.2270	321	317	4
574.750	0.9847	6.32899	15.39	38.72	27413	0.2274	349	345	4
575.750	0.9716	6.30703	28.68	72.04	27567	0.2278	349	345	4
576.750	0.9792	6.28517	20.91	52.43	27629	0.2282	388	383	4
577.750	0.9917	6.26344	8.27	20.70	27279	0.2286	376	371	4
578.750	0.9816	6.24181	18.46	46.11	27462	0.2290	357	352	4
579.750	0.9937	6.22030	6.27	15.65	27314	0.2293	383	379	4
580.750	0.9718	6.19889	28.48	70.92	27588	0.2297	352	348	4
581.750	0.9759	6.17760	24.27	60.31	27557	0.2301	376	371	4
582.750	0.9852	6.15642	14.82	36.77	27419	0.2305	352	348	4
583.750	0.9983	6.13534	1.73	4.29	27270	0.2309	436	431	4
584.750	0.9881	6.11438	11.96	29.58	27193	0.2313	386	381	4
585.750	0.9863	6.09352	13.77	34.00	27256	0.2317	364	360	4
586.750	0.9715	6.07276	28.79	70.95	27663	0.2321	318	314	4
587.750	0.9896	6.05212	10.39	29.55	27268	0.2325	340	336	4
588.750	0.9937	6.03157	6.25	15.36	27223	0.2329	366	362	4
589.750	0.9799	6.01114	20.24	49.62	27550	0.2333	398	393	4
590.750	0.9749	5.99080	25.24	61.78	27395	0.2337	345	340	4
591.750	0.9855	5.97057	14.53	35.51	27190	0.2341	340	336	4
592.750	0.9653	5.95044	35.10	85.63	27778	0.2345	354	350	4
593.750	0.9912	5.93042	8.82	21.49	26819	0.2349	352	348	4
594.750	0.9984	5.91049	1.55	3.77	27071	0.2353	390	386	4
595.750	0.9670	5.89067	33.35	80.94	27493	0.2357	330	326	4
596.750	0.9848	5.87094	15.26	36.97	27483	0.2361	328	324	4
597.750	0.9884	5.85131	11.59	28.04	27258	0.2365	267	264	4
598.750	0.9918	5.83178	8.16	19.71	27121	0.2369	371	367	4
599.750	0.9804	5.81235	19.73	47.57	27260	0.2373	325	321	4
600.750	0.9964	5.79302	3.61	8.68	27003	0.2377	321	317	4
601.750	0.9937	5.77378	6.25	15.01	27349	0.2381	308	305	4
602.750	0.9723	5.75464	27.96	67.07	27490	0.2384	325	321	4
603.750	0.9899	5.73559	10.08	24.14	27040	0.2388	325	321	4
604.750	0.9878	5.71664	12.24	29.27	27068	0.2392	361	357	4
605.750	0.9978	5.69778	2.15	5.13	26950	0.2396	340	336	4
606.750	0.9867	5.67901	13.31	31.71	27343	0.2400	294	290	4
607.750	0.9850	5.66034	15.06	35.84	27124	0.2404	352	348	4
608.750	0.9835	5.64176	16.57	39.36	27147	0.2408	429	424	4
609.750	0.9751	5.62327	25.08	59.46	27289	0.2412	337	333	4
610.750	0.9771	5.60487	23.07	54.61	27418	0.2416	337	333	4
611.750	0.9739	5.58656	26.33	62.23	27110	0.2420	359	355	4
612.750	0.9717	5.56834	28.53	67.32	27366	0.2424	270	267	4
613.750	0.9859	5.55021	14.18	33.40	27293	0.2428	354	350	4
614.750	0.9739	5.53217	26.27	61.78	27257	0.2432	383	379	4
615.750	0.9850	5.51422	15.06	35.37	27016	0.2436	337	333	4
616.750	0.9987	5.49635	1.34	3.15	26952	0.2440	299	295	4
617.750	0.9798	5.47857	20.34	47.61	27415	0.2444	354	350	4
618.750	1.0080	5.46087	-7.92	-18.52	26743	0.2448	359	355	4
619.750	0.9664	5.44326	33.97	79.24	27421	0.2452	376	371	4
620.750	0.9708	5.42574	29.47	68.65	27201	0.2456	330	326	4
621.750	0.9642	5.40830	36.29	84.40	27229	0.2460	330	326	4
622.750	0.9790	5.39095	21.10	49.00	26967	0.2464	337	333	4
623.750	0.9917	5.37368	8.29	19.22	26945	0.2468	347	343	4
624.750	0.9839	5.35649	16.11	37.28	26975	0.2472	349	345	4
625.750	0.9833	5.33938	16.72	38.64	27122	0.2475	412	407	4
626.750	0.9803	5.32236	19.77	45.61	26908	0.2479	316	312	4
627.750	0.9908	5.30541	9.21	21.22	26840	0.2483	330	326	4
628.750	0.9792	5.28855	20.87	47.99	27068	0.2487	294	290	4
629.750	0.9954	5.27177	4.63	10.63	26725	0.2491	311	307	4
630.750	0.9985	5.25506	1.53	3.52	27009	0.2495	325	321	4
631.750	0.9864	5.23844	13.58	31.07	26916	0.2499	369	364	4
632.750	0.9777	5.22190	22.42	51.24	26877	0.2503	313	310	4
633.750	0.9751	5.20543	25.07	57.20	26902	0.2507	337	333	4
634.750	0.9595	5.18904	41.12	93.66	27074	0.2511	352	348	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
635.750	0.9619	5.17273	38.67	87.94	26609	24071	0.2515	306	302	4
636.750	0.9666	5.15650	33.76	76.66	26932	24513	0.2519	357	352	4
637.750	0.9661	5.14034	34.35	77.88	26789	24547	0.2523	357	352	4
638.750	0.9847	5.12425	15.33	34.71	26571	25046	0.2527	304	300	4
639.750	0.9795	5.10825	20.57	46.49	26901	25404	0.2531	347	343	4
640.750	0.9851	5.09232	14.95	33.74	26658	25492	0.2535	359	355	4
641.750	0.9815	5.07646	18.55	41.80	26673	25567	0.2539	357	352	4
642.750	0.9706	5.06067	29.73	66.87	27005	25699	0.2543	292	288	4
643.750	0.9717	5.04496	28.56	64.16	27147	25934	0.2547	325	321	4
644.750	0.9824	5.02933	17.65	39.59	26910	26037	0.2551	292	288	4
645.750	0.9755	5.01376	24.63	55.15	27045	26018	0.2555	330	326	4
646.750	0.9811	4.99827	18.98	42.44	26858	26006	0.2559	361	357	4
647.750	0.9756	4.98285	24.62	54.96	26916	25925	0.2562	287	283	4
648.750	0.9776	4.96750	22.51	50.17	26805	25881	0.2566	335	331	4
649.750	0.9768	4.95222	23.31	51.86	27060	26113	0.2570	352	348	4
650.750	0.9876	4.93701	12.44	27.65	26574	25930	0.2574	364	360	4
651.750	0.9847	4.92187	15.31	33.96	26850	26126	0.2578	287	283	4
652.750	1.0022	4.90680	-2.19	-4.86	26711	26455	0.2582	270	267	4
653.750	0.9895	4.89181	10.51	23.24	26677	26088	0.2586	330	326	4
654.750	0.9825	4.87687	17.53	38.72	26900	26122	0.2590	306	302	4
655.750	0.9859	4.86201	14.11	31.11	26827	26143	0.2594	292	288	4
656.750	0.9847	4.84722	15.31	33.71	26750	26038	0.2598	357	352	4
657.750	0.9867	4.83249	13.34	25.33	26752	26092	0.2602	325	321	4
658.750	0.9841	4.81783	15.98	35.08	26756	26028	0.2606	306	302	4
659.750	0.9758	4.80323	24.38	53.44	26709	25764	0.2610	313	310	4
660.750	0.9838	4.78871	16.30	35.66	26911	26172	0.2614	280	276	4
661.750	0.9997	4.77424	0.28	0.62	26464	26155	0.2618	289	286	4
662.750	0.9780	4.75985	22.18	48.39	26744	25857	0.2622	311	307	4
663.750	1.0062	4.74552	-6.15	-13.39	26477	26339	0.2626	282	279	4
664.750	0.9778	4.73125	22.35	48.62	26653	25765	0.2630	306	302	4
665.750	0.9865	4.71705	13.54	29.42	26751	26090	0.2634	318	314	4
666.750	0.9838	4.70291	16.27	35.28	26368	25647	0.2638	366	362	4
667.750	0.9851	4.68883	14.98	32.44	26567	25874	0.2642	337	333	4
668.750	0.9884	4.67482	11.61	25.10	26530	25926	0.2646	265	262	4
669.750	0.9758	4.66087	24.41	52.70	26807	25862	0.2650	321	317	4
670.750	0.9809	4.64698	19.14	41.26	26570	25770	0.2653	292	288	4
671.750	0.9841	4.63316	15.93	34.28	26708	25988	0.2657	330	326	4
672.750	0.9705	4.61940	29.80	64.05	26888	25801	0.2661	270	267	4
673.750	0.9735	4.60569	26.67	57.24	26713	25713	0.2665	349	345	4
674.750	0.9789	4.59205	21.22	45.47	26866	26003	0.2669	345	340	4
675.750	0.9851	4.57847	14.94	31.97	26500	25811	0.2673	313	310	4
676.750	0.9852	4.56495	14.83	31.68	26478	25793	0.2677	294	290	4
677.750	1.0013	4.55149	-1.28	-2.72	26129	25868	0.2681	296	293	4
678.750	0.9856	4.53809	14.48	30.84	26271	25601	0.2685	294	290	4
679.750	0.9992	4.52475	0.81	1.73	26248	25932	0.2689	275	271	4
680.750	0.9906	4.51146	9.42	20.00	26501	25957	0.2693	345	340	4
681.750	0.9798	4.49824	20.31	43.07	26579	25750	0.2697	308	305	4
682.750	0.9852	4.48507	14.87	31.50	26400	25716	0.2701	294	290	4
683.750	0.9812	4.47196	18.90	39.96	26529	25738	0.2705	330	326	4
684.750	0.9980	4.45891	1.99	4.21	26423	26074	0.2709	289	286	4
685.750	0.9865	4.44591	13.52	28.50	26182	25539	0.2713	272	269	4
686.750	0.9828	4.43297	17.30	36.42	26373	25627	0.2717	277	274	4
687.750	0.9811	4.42009	18.95	39.85	26525	25732	0.2721	316	312	4
688.750	0.9737	4.40727	26.48	55.60	26691	25695	0.2725	316	312	4
689.750	0.9829	4.39450	17.17	35.99	26644	25894	0.2729	323	319	4
690.750	0.9868	4.38178	13.25	27.73	26030	25398	0.2733	342	338	4
691.750	0.9855	4.36912	14.56	30.44	26347	25673	0.2737	301	298	4
692.750	0.9860	4.35652	13.98	29.19	26352	25693	0.2741	304	300	4
693.750	0.9717	4.34397	28.53	59.46	26587	25546	0.2744	323	319	4
694.750	0.9931	4.33147	6.89	14.33	26095	25625	0.2748	321	317	4
695.750	0.9784	4.31903	21.77	45.25	24727	23921	0.2752	2321	2293	4
696.750	0.9689	4.30664	31.45	65.27	24213	23197	0.2756	2428	2399	4
697.750	1.0038	4.29430	-3.79	-7.84	23840	23662	0.2760	2372	2344	4
698.750	0.9867	4.28202	13.37	27.67	24333	23735	0.2764	2094	2069	4
699.750	0.9877	4.26979	12.28	25.38	24095	23533	0.2768	2263	2236	4
700.750	0.9760	4.25761	24.18	49.90	26216	25300	0.2772	243	240	4
701.750	0.9817	4.24549	18.39	37.89	25958	25197	0.2776	335	331	4
702.750	0.9994	4.23341	0.60	1.24	25830	25525	0.2780	282	279	4
703.750	0.9901	4.22139	9.95	20.44	25946	25400	0.2784	340	336	4
704.750	0.9990	4.20942	1.02	2.10	25761	25447	0.2788	299	295	4
705.750	1.0042	4.19750	-4.14	-8.48	25630	25449	0.2792	328	324	4
706.750	0.9793	4.18563	20.76	42.48	25576	24767	0.2796	272	269	4
707.750	0.9891	4.17381	10.95	22.37	25495	24934	0.2800	313	310	4
708.750	0.9774	4.16204	22.69	46.30	25808	24944	0.2804	282	279	4
709.750	0.9854	4.15032	14.60	29.73	25866	25204	0.2808	294	290	4
710.750	0.9804	4.13865	19.68	40.04	25770	24982	0.2812	267	264	4
711.750	0.9778	4.12703	22.38	45.47	25765	24905	0.2816	260	257	4
712.750	0.9949	4.11546	5.13	10.42	25575	25159	0.2820	284	281	4
713.750	0.9827	4.10393	17.36	35.17	26123	25383	0.2824	260	257	4
714.750	0.9864	4.09246	13.65	27.61	25745	25109	0.2828	260	257	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. OF OCT	FAST BKGS OPEN	FAST BKGS SAMPLE	NO. PTS AVE.
715.750	0.9861	4.08103	13.97	28.23	25996	25346	0.2832	323	319	4
716.750	0.9709	4.06965	29.43	59.38	26130	25085	0.2835	308	305	4
717.750	0.9840	4.05832	16.09	32.42	26095	25386	0.2839	287	283	4
718.750	0.9814	4.04703	18.73	37.68	26231	25454	0.2843	272	269	4
719.750	0.9807	4.03580	19.38	38.93	26158	25366	0.2847	284	281	4
720.750	0.9819	4.02460	18.16	36.44	26112	25353	0.2851	270	267	4
721.750	0.9905	4.01346	9.48	18.99	26133	25595	0.2855	219	217	4
722.750	0.9847	4.00236	15.37	30.75	26195	25505	0.2859	277	274	4
723.750	0.9816	3.99131	18.53	37.01	26343	25567	0.2863	270	267	4
724.750	0.9827	3.98030	17.41	34.74	26063	25324	0.2867	280	276	4
725.750	0.9815	3.96934	18.61	37.09	26053	25284	0.2871	287	283	4
726.750	0.9870	3.95843	12.98	25.83	26133	25505	0.2875	289	286	4
727.750	0.9692	3.94755	31.12	61.82	26307	25211	0.2879	306	302	4
728.750	0.9977	3.93673	2.32	4.60	25787	25439	0.2883	272	269	4
729.750	0.9799	3.92595	20.23	40.08	26090	25278	0.2887	284	281	4
730.750	0.9899	3.91521	10.07	19.92	25932	25383	0.2891	275	271	4
731.750	0.9913	3.90451	8.73	17.26	25802	25290	0.2895	282	279	4
732.750	0.9814	3.89387	18.68	36.87	26220	25444	0.2899	267	264	4
733.750	0.9695	3.88326	30.80	60.69	26512	25416	0.2903	263	260	4
734.750	0.9868	3.87270	13.17	25.93	25841	25215	0.2907	304	300	4
735.750	0.9774	3.86218	22.77	44.76	25941	25070	0.2911	321	317	4
736.750	0.9732	3.85170	27.02	53.02	26038	25057	0.2915	260	257	4
737.750	0.9701	3.84126	30.16	59.11	26106	25043	0.2919	292	288	4
738.750	0.9916	3.83087	8.34	16.33	25748	25247	0.2922	299	295	4
739.750	0.9826	3.82052	17.43	34.06	25937	25201	0.2926	335	331	4
740.750	0.9891	3.81021	10.89	21.26	25751	25186	0.2930	265	262	4
741.750	0.9961	3.79995	3.92	7.63	25619	25232	0.2934	316	312	4
742.750	0.9870	3.78972	12.98	25.27	25877	25256	0.2938	289	286	4
743.750	0.9812	3.77954	18.84	36.63	25795	25027	0.2942	313	310	4
744.750	0.9816	3.76939	18.45	35.82	25892	25131	0.2946	306	302	4
745.750	0.9743	3.75929	25.92	50.26	26061	25106	0.2950	282	279	4
746.750	0.9748	3.74923	25.37	49.13	26164	25220	0.2954	260	257	4
747.750	0.9764	3.73921	23.73	45.88	26062	25162	0.2958	258	255	4
748.750	0.9689	3.72923	31.39	60.63	26006	24916	0.2962	294	290	4
749.750	0.9878	3.71929	12.23	23.59	25655	25058	0.2966	287	283	4
750.750	0.9678	3.70938	32.56	62.71	26024	24904	0.2970	345	340	4
751.750	0.9849	3.69952	15.16	29.16	26194	25505	0.2974	282	279	4
752.750	0.9900	3.68970	9.99	19.19	25527	24989	0.2978	340	336	4
753.750	0.9988	3.67992	1.22	2.34	25732	25413	0.2982	311	307	4
754.750	0.9872	3.67017	12.78	24.49	25716	25103	0.2986	270	267	4
755.750	0.9692	3.66046	31.09	59.48	25917	24838	0.2990	318	314	4
756.750	0.9883	3.65080	11.71	22.38	25921	25330	0.2994	248	245	4
757.750	0.9718	3.64117	28.47	54.32	25908	24895	0.2998	234	231	4
758.750	0.9939	3.63158	6.12	11.66	25805	25359	0.3002	280	276	4
759.750	0.9884	3.62202	11.63	22.14	25738	25154	0.3006	287	283	4
760.750	0.9887	3.61251	11.34	21.55	25823	25244	0.3010	258	255	4
761.750	0.9837	3.60303	16.38	31.09	25699	24996	0.3013	289	286	4
762.750	0.9811	3.59359	18.97	35.95	25653	24886	0.3017	272	269	4
763.750	1.0062	3.58418	-6.13	-11.61	25525	25395	0.3021	292	288	4
764.750	0.9965	3.57482	3.44	6.51	25549	25176	0.3025	265	262	4
765.750	0.9893	3.56548	10.67	20.14	25518	24963	0.3029	280	276	4
766.750	0.9752	3.55619	25.02	47.18	25877	24952	0.3033	316	312	4
767.750	0.9901	3.54693	9.90	18.64	25390	24857	0.3037	263	260	4
768.750	0.9826	3.53771	17.42	32.76	25622	24895	0.3041	275	271	4
769.750	0.9859	3.52852	14.14	26.57	25574	24930	0.3045	239	236	4
770.750	0.9904	3.51937	9.58	17.97	25403	24877	0.3049	294	290	4
771.750	1.0003	3.51026	-0.28	-0.53	25415	25137	0.3053	280	276	4
772.750	0.9927	3.50118	7.29	13.64	25272	24807	0.3057	239	236	4
773.750	0.9681	3.49214	32.27	60.31	25806	24702	0.3061	289	286	4
774.750	0.9664	3.48313	34.00	63.46	25866	24717	0.3065	299	295	4
775.750	0.9862	3.47415	13.84	25.80	25768	25127	0.3069	284	281	4
776.750	0.9805	3.46521	19.64	36.57	25639	24856	0.3073	289	286	4
777.750	0.9944	3.45631	5.54	10.30	25453	25028	0.3077	284	281	4
778.750	0.9873	3.44744	12.74	23.65	25301	24696	0.3081	265	262	4
779.750	0.9909	3.43860	9.09	16.86	25320	24808	0.3085	258	255	4
780.750	0.9776	3.42980	22.53	41.73	25687	24830	0.3089	234	231	4
781.750	0.9808	3.42103	19.27	35.64	25651	24877	0.3093	253	250	4
782.750	0.9895	3.41229	10.50	19.40	25389	24840	0.3097	258	255	4
783.750	0.9761	3.40359	24.04	44.36	25667	24773	0.3101	219	217	4
784.750	0.9663	3.39492	34.14	62.90	25697	24552	0.3104	253	250	4
785.750	0.9847	3.38629	15.31	28.17	25377	24710	0.3108	251	248	4
786.750	0.9676	3.37768	32.81	60.31	25723	24610	0.3112	325	321	4
787.750	0.9862	3.36911	13.82	25.36	25344	24714	0.3116	289	286	4
788.750	1.0040	3.36058	-3.94	-7.22	25352	25167	0.3120	260	257	4
789.750	0.9768	3.35207	23.41	42.85	25698	24819	0.3124	272	269	4
790.750	0.9962	3.34360	3.82	6.98	25114	24738	0.3128	260	257	4
791.750	0.9820	3.33516	18.08	33.02	25386	24646	0.3132	275	271	4
792.750	0.9710	3.32675	29.27	53.39	25448	24434	0.3136	272	269	4
793.750	0.9750	3.31837	25.17	45.85	25589	24670	0.3140	260	257	4
794.750	0.9792	3.31003	20.88	37.99	25300	24497	0.3144	243	240	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC FOOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
795.750	0.9790	3.30171	21.16	38.45	25276	0.3148	275	271	4
796.750	0.9731	3.29343	27.16	49.29	25807	0.3152	229	226	4
797.750	0.9890	3.28518	11.00	19.93	25378	0.3156	275	271	4
798.750	0.9885	3.27696	11.49	20.80	25278	0.3160	253	250	4
799.750	0.9736	3.26877	26.60	48.09	25271	0.3164	260	257	4
800.750	0.9884	3.26061	11.58	20.91	25387	0.3168	272	269	4
801.750	0.9569	3.25248	43.80	78.99	25834	0.3172	267	264	4
802.750	0.9798	3.24438	20.32	36.61	25256	0.3176	277	274	4
803.750	0.9888	3.23631	11.22	20.19	25092	0.3180	246	243	4
804.750	0.9899	3.22828	10.13	18.21	25328	0.3184	284	281	4
805.750	0.9733	3.22027	26.92	48.30	25441	0.3188	255	252	4
806.750	0.9836	3.21229	16.48	29.53	25091	0.3192	265	262	4
807.750	0.9747	3.20434	25.46	45.58	25413	0.3195	270	267	4
808.750	0.9913	3.19642	8.69	15.54	25079	0.3199	296	293	4
809.750	0.9662	3.18853	34.17	61.01	25599	0.3203	272	269	4
810.750	0.9967	3.18067	3.32	5.92	24828	0.3207	282	279	4
811.750	0.9742	3.17284	26.05	46.40	25165	0.3211	284	281	4
812.750	0.9717	3.16504	28.58	50.85	25189	0.3215	316	312	4
813.750	0.9792	3.15726	20.89	37.12	25076	0.3219	292	288	4
814.750	0.9752	3.14952	24.96	44.29	25297	0.3223	234	231	4
815.750	0.9711	3.14180	29.16	51.69	25311	0.3227	241	238	4
816.750	0.9627	3.13411	37.81	66.94	25195	0.3231	260	257	4
817.750	0.9671	3.12645	33.24	58.77	25502	0.3235	227	224	4
818.750	0.9699	3.11002	30.46	53.79	25152	0.3239	239	236	4
819.750	0.9711	3.11121	29.21	51.52	25185	0.3243	308	305	4
820.750	0.9795	3.10364	20.65	36.38	24978	0.3247	275	271	4
821.750	0.9558	3.09609	45.02	75.21	25040	0.3251	275	271	4
822.750	0.9780	3.08857	22.11	38.85	24867	0.3255	280	276	4
823.750	0.9780	3.08107	22.14	38.86	24955	0.3259	255	252	4
824.750	0.9704	3.07360	29.92	52.46	25258	0.3263	313	310	4
825.750	0.9680	3.06616	32.40	56.74	25060	0.3267	289	286	4
826.750	0.9622	3.05875	38.36	67.08	25131	0.3271	284	281	4
827.750	0.9419	3.05137	59.53	103.99	25202	0.3275	227	224	4
828.750	0.9564	3.04401	44.34	77.35	25170	0.3279	229	226	4
829.750	0.9533	3.03667	47.60	82.95	24924	0.3282	267	264	4
830.750	0.9437	3.02937	57.66	100.35	24974	0.3286	272	269	4
831.750	0.9565	3.02209	44.25	76.93	24955	0.3290	306	302	4
832.750	0.9428	3.01483	58.64	101.82	25045	0.3294	260	257	4
833.750	0.9270	3.00761	75.45	130.85	25263	0.3298	251	248	4
834.750	0.9178	3.00040	85.38	147.90	25115	0.3302	224	221	4
835.750	0.9141	2.99323	89.36	154.60	24800	0.3306	277	274	4
836.750	0.8883	2.98608	117.89	203.71	25120	0.3310	234	231	4
837.750	0.8825	2.97895	124.42	214.74	24974	0.3314	287	283	4
838.750	0.8862	2.97185	120.20	207.21	24662	0.3318	292	288	4
839.750	0.8524	2.96478	158.86	273.53	25052	0.3322	212	210	4
840.750	0.8160	2.95773	202.34	347.99	24740	0.3326	270	267	4
841.750	0.7856	2.95071	240.14	412.50	24667	0.3330	284	281	4
842.750	0.7206	2.94371	326.10	559.50	24944	0.3334	246	243	4
843.750	0.6917	2.93674	366.70	628.42	24653	0.3338	251	248	4
844.750	0.6304	2.92979	459.14	789.90	24791	0.3342	284	281	4
845.750	0.5821	2.92286	538.38	920.43	24702	0.3346	246	243	4
846.750	0.5219	2.91596	647.05	1104.92	24916	0.3350	210	207	4
847.750	0.4772	2.90909	736.06	1255.42	24698	0.3354	272	269	4
848.750	0.4295	2.90224	840.88	1432.52	24532	0.3358	258	255	4
849.750	0.4014	2.89541	908.23	1545.44	24794	0.3362	248	245	4
850.750	0.3926	2.88861	930.32	1581.16	24562	0.3366	284	281	4
851.750	0.3827	2.88183	955.78	1622.53	21902	0.3370	229	226	4
852.750	0.3965	2.87507	920.52	1560.83	24734	0.3373	308	305	4
853.750	0.4153	2.86834	874.26	1480.66	24852	0.3377	239	236	4
854.750	0.4657	2.86164	760.48	1286.46	24592	0.3381	289	286	4
855.750	0.5146	2.85495	660.98	1116.83	24704	0.3385	258	255	4
856.750	0.5612	2.84829	574.86	970.18	24762	0.3389	205	202	4
857.750	0.6274	2.84165	463.91	782.02	24811	0.3393	260	257	4
858.750	0.6727	2.83504	394.55	664.42	24908	0.3397	234	231	4
859.750	0.7245	2.82845	320.71	539.38	24498	0.3401	311	307	4
860.750	0.7717	2.82188	257.92	433.27	24785	0.3405	241	238	4
861.750	0.7811	2.81533	245.78	412.40	25016	0.3409	260	257	4
862.750	0.8367	2.80881	177.37	297.27	24642	0.3413	270	267	4
863.750	0.8582	2.80231	152.15	254.70	24730	0.3417	258	255	4
864.750	0.8892	2.79583	116.87	195.42	24403	0.3421	280	276	4
865.750	0.8948	2.78938	110.56	184.66	24727	0.3425	222	219	4
866.750	0.9035	2.78295	100.97	168.44	24702	0.3429	253	250	4
867.750	0.9384	2.77654	63.24	105.37	24297	0.3433	301	298	4
868.750	0.9216	2.77015	81.26	135.26	24559	0.3437	280	276	4
869.750	0.9275	2.76378	74.88	124.48	24646	0.3441	265	262	4
870.750	0.9362	2.75744	65.54	108.84	24346	0.3445	282	279	4
871.750	0.9557	2.75111	45.07	74.76	24291	0.3449	265	262	4
872.750	0.9332	2.74481	68.80	113.99	24542	0.3453	227	224	4
873.750	0.9365	2.73853	65.27	108.01	24585	0.3457	265	262	4
874.750	0.9479	2.73228	53.23	87.98	24403	0.3461	255	252	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E.	COUNTS		FRAC. OF OCT	FAST BKGS OPEN	BKGS SAMPLE	NO. PTS AVE.
875,750	0,9597	2,72604	40,94	67,60	24474	23223	0,3464	267	264	4
876,750	0,9639	2,71983	36,57	60,31	24448	23301	0,3468	282	279	4
877,750	0,9462	2,71363	55,00	90,60	24821	23222	0,3472	294	290	4
878,750	0,9558	2,70746	44,98	74,02	24691	23335	0,3476	284	281	4
879,750	0,9397	2,70131	61,90	101,73	24757	23002	0,3480	243	240	4
880,750	0,9542	2,69518	46,60	76,50	24621	23230	0,3484	246	243	4
881,750	0,9576	2,68907	43,16	70,77	24513	23205	0,3488	246	243	4
882,750	0,9663	2,68298	34,10	55,85	24373	23287	0,3492	234	231	4
883,750	0,9586	2,67691	42,04	68,78	24557	23277	0,3496	296	293	4
884,750	0,9624	2,67086	38,14	62,32	24514	23327	0,3500	280	276	4
885,750	0,9611	2,66483	39,48	64,45	24435	23220	0,3504	251	248	4
886,750	0,9551	2,65883	45,72	74,55	24463	23101	0,3508	248	245	4
887,750	0,9586	2,65284	42,03	68,46	24520	23241	0,3512	289	286	4
888,750	0,9837	2,64687	16,33	26,56	24602	23930	0,3516	219	217	4
889,750	0,9682	2,64093	32,20	52,33	24287	23249	0,3520	275	271	4
890,750	0,9703	2,63500	30,01	48,71	24189	23206	0,3524	313	310	4
891,750	0,9638	2,62910	36,70	59,51	24402	23254	0,3528	212	210	4
892,750	0,9687	2,62321	31,60	51,18	24464	23433	0,3532	251	248	4
893,750	0,9634	2,61734	37,07	59,96	24677	23507	0,3536	246	243	4
894,750	0,9617	2,61149	38,87	62,81	24511	23307	0,3540	308	305	4
895,750	0,9806	2,60567	19,50	31,48	24272	23533	0,3544	270	267	4
896,750	0,9588	2,59986	41,83	67,45	24346	23081	0,3548	239	236	4
897,750	0,9716	2,59407	28,69	46,21	24308	23351	0,3551	241	238	4
898,750	0,9794	2,58830	20,68	33,27	24030	23271	0,3555	246	243	4
899,750	0,9810	2,58255	19,12	30,73	24141	23415	0,3559	241	238	4
900,750	0,9795	2,57682	20,58	33,03	24246	23482	0,3563	231	229	4
901,750	0,9945	2,57111	5,52	8,86	23785	23387	0,3567	227	224	4
902,750	0,9858	2,56541	14,25	22,83	24154	23542	0,3571	251	248	4
903,750	0,9793	2,55974	20,82	33,31	24104	23339	0,3575	248	245	4
904,750	0,9789	2,55409	21,17	33,84	24178	23402	0,3579	265	262	4
905,750	0,9725	2,54845	27,76	44,32	24142	23213	0,3583	207	205	4
906,750	0,9711	2,54283	29,15	46,49	24397	23426	0,3587	239	236	4
907,750	0,9908	2,53723	9,23	14,70	23941	23453	0,3591	251	248	4
908,750	0,9762	2,53165	23,95	38,10	23897	23067	0,3595	277	274	4
909,750	0,9799	2,52609	20,22	32,13	23962	23216	0,3599	294	290	4
910,750	0,9756	2,52054	24,58	39,02	24171	23316	0,3603	253	250	4
911,750	0,9717	2,51502	28,56	45,29	24126	23180	0,3607	265	262	4
912,750	0,9560	2,50951	44,73	70,85	24439	23101	0,3611	243	240	4
913,750	0,9981	2,50402	1,94	3,07	23977	23661	0,3615	275	271	4
914,750	0,9765	2,49855	23,65	37,38	24088	23258	0,3619	255	252	4
915,750	0,9773	2,49309	22,82	36,03	24018	23210	0,3623	219	217	4

C.5 Medium Energy — Thick Sample (3/11/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC, GF OCT	FAST BKGS OPEN SAMPLE	NO. PTS AVE,
18,550	0,9439	6075,81757	25,12	1958,15	131733 121397	0,0050	170120 165867	4
21,550	0,9458	4501,92236	24,22	1625,21	72553 67005	0,0058	64685 63068	2
23,550	0,9385	3769,73422	27,62	1695,63	71160 65207	0,0063	55856 54460	2
25,550	0,9504	3202,65933	22,14	1252,76	68829 63871	0,0068	46635 45469	2
27,550	0,9352	2754,54166	29,16	1530,20	68727 62756	0,0074	38307 37349	2
29,550	0,9435	2394,29459	25,32	1238,76	67136 61848	0,0079	32964 32140	2
31,550	0,9434	2100,36041	25,36	1162,43	69215 63756	0,0084	27958 27259	2
33,550	0,9411	1857,40884	26,40	1137,58	71624 65819	0,0090	24062 23460	2
35,550	0,9426	1654,29648	25,74	1046,75	70888 65241	0,0095	22642 22076	2
37,550	0,9411	1482,76619	26,39	1016,24	72342 66480	0,0100	18986 18511	2
39,550	0,9309	1336,59422	31,14	1138,51	71244 64760	0,0106	17450 17014	2
41,550	0,9322	1211,01773	30,52	1062,08	70001 63721	0,0111	15698 15306	2
43,550	0,9315	1102,34171	30,89	1025,57	68557 62354	0,0116	14559 14199	2
45,550	0,9404	1007,66412	23,06	732,09	68744 63656	0,0122	13076 12943	2
47,550	0,9242	924,68010	34,29	1042,56	69687 62886	0,0127	12384 12074	2
49,550	0,9319	851,54037	30,68	895,27	69862 63572	0,0132	10899 10627	2
51,550	0,9232	786,74722	34,75	974,75	69925 63036	0,0138	10067 9815	2
53,550	0,9171	729,07735	37,63	1016,19	69575 62306	0,0143	9129 8900	2
55,550	0,9241	677,52360	34,35	894,03	69214 62454	0,0148	8645 8429	2
57,550	0,9266	631,25074	33,17	833,43	69814 63165	0,0154	8274 8067	2
59,550	0,9514	589,56137	21,69	526,77	68258 63405	0,0159	7686 7494	2
61,550	0,9535	551,86956	20,71	486,53	68128 63432	0,0164	7096 6919	2
63,550	0,9426	517,68007	25,71	585,04	68194 62767	0,0170	6739 6570	2
65,550	0,9342	486,57206	29,62	653,29	67062 61174	0,0175	6643 6477	2
67,550	0,9191	458,18604	36,68	785,06	65714 58979	0,0180	6169 6015	2
69,550	0,9238	432,21346	34,49	716,94	63009 56837	0,0186	5714 5571	2
71,550	0,9265	408,38829	33,21	671,15	58794 53191	0,0191	5502 5364	2
73,550	0,9328	386,48016	30,26	594,94	54226 49392	0,0196	5207 5077	2
75,550	0,9566	366,28878	19,31	369,59	47238 44124	0,0202	5155 5026	2
77,550	0,9228	347,63937	34,94	651,52	40243 36263	0,0207	4506 4393	2
79,550	0,9121	330,37881	40,00	727,11	40131 35744	0,0212	4504 4391	2
81,550	0,8932	314,37255	49,14	871,27	48936 42681	0,0218	4046 3945	2
83,550	0,8801	299,80195	55,58	961,05	57315 49294	0,0223	3871 3774	2
85,550	0,8992	285,66204	46,20	780,87	61340 53862	0,0228	3816 3721	2
87,550	0,9228	272,75973	34,97	577,56	64184 57833	0,0234	3621 3530	2
89,550	0,9447	260,71221	24,76	399,78	64956 59919	0,0239	3370 3285	2
91,550	0,9331	249,44561	30,14	476,05	66351 60453	0,0244	3163 3084	2
93,550	0,9354	238,89385	29,06	449,22	66061 60336	0,0250	2810 2740	2
95,550	0,9238	220,99773	34,49	521,95	65127 58748	0,0255	3032 2956	2
97,550	0,9003	219,70402	45,71	677,54	66400 58371	0,0261	2464 2402	2
99,550	0,9130	210,96482	39,58	574,84	66690 59459	0,0266	2588 2523	2
101,550	0,9164	202,73685	37,98	540,73	66768 59747	0,0271	2375 2316	2
103,550	0,8901	194,98103	50,63	706,97	66673 57952	0,0277	2390 2330	2
105,550	0,8866	187,66189	52,35	717,08	66805 57838	0,0282	2145 2091	2
107,550	0,8799	180,74726	55,66	748,31	66934 57510	0,0287	2191 2136	2
109,550	0,8708	174,20788	60,16	794,08	67348 57270	0,0293	2005 1955	2
111,550	0,8966	168,01707	47,48	615,49	66448 58176	0,0298	2022 1972	2
113,550	0,9395	162,45049	27,14	345,60	65681 60258	0,0303	2010 1960	2
115,550	0,9371	156,58590	28,25	353,53	65234 59695	0,0309	2138 2085	2
117,550	0,9165	151,30291	37,91	466,33	65020 58193	0,0314	2250 2193	2
119,550	0,9233	146,28284	34,73	420,09	64109 57798	0,0319	2394 2334	2
121,550	0,9387	141,50853	27,53	327,44	62616 57395	0,0325	2367 2308	2
123,550	0,9479	136,96420	23,28	272,46	62202 57574	0,0330	2510 2448	2
125,550	0,9334	132,63530	29,99	345,41	63395 57781	0,0335	2495 2433	2
127,550	0,9047	128,50843	43,56	493,79	64323 56826	0,0341	2664 2597	2
129,550	0,8475	124,57122	72,00	803,62	62528 51744	0,0346	2836 2766	2
131,550	0,7974	120,81222	98,47	1082,31	60886 47411	0,0351	2981 2907	2
133,550	0,8140	117,22082	89,54	969,47	63410 50400	0,0357	2879 2807	2
135,550	0,8525	113,78723	69,43	740,60	65837 54806	0,0362	3142 3064	2
137,550	0,8834	110,50231	53,92	566,80	66482 57352	0,0367	3022 2946	2
139,550	0,9337	107,35762	29,84	309,19	66626 60747	0,0373	3238 3158	2
141,550	0,9570	104,34528	19,14	195,47	66480 62124	0,0378	3171 3092	2
143,550	0,9580	101,45797	18,65	187,83	66500 62212	0,0383	3185 3105	2
145,550	0,9635	98,68886	16,19	160,87	65724 61834	0,0389	3198 3079	2
147,550	0,9665	96,03159	14,84	145,44	65380 61702	0,0394	3265 3183	2
149,550	0,9667	93,48022	14,72	142,28	62829 59312	0,0399	3125 3047	2
151,550	0,9676	91,02919	14,34	136,80	57925 54730	0,0405	2985 2911	2
153,550	0,9492	88,67331	22,66	213,43	57374 53182	0,0410	2947 2873	2
155,550	0,9118	86,40771	40,16	373,54	61003 54316	0,0415	2996 2921	2
157,550	0,8571	84,22785	67,06	615,41	63774 53379	0,0421	3046 2970	2

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST BKGS OPEN SAMPLE	NO. PTS AVE.
159,550	0.8749	82,12945	58,14	526,89	65544 55997	0.0426	2895 2822	2
161,550	0.9203	80,10851	36,12	323,24	67601 60754	0.0431	2800 2730	2
163,550	0.9546	78,16124	20,19	178,50	67631 63047	0.0437	2760 2691	2
165,550	0.9610	76,28413	17,29	151,01	67349 63204	0.0442	2816 2745	2
167,550	0.9541	74,47383	20,43	176,30	67884 63246	0.0447	2621 2556	2
169,550	0.9387	72,72722	27,50	234,53	67918 62260	0.0453	2498 2436	2
171,550	0.9297	71,04133	31,72	267,37	67285 61084	0.0458	2519 2456	2
173,550	0.9243	69,41340	34,22	285,10	66817 60311	0.0463	2352 2293	2
175,550	0.9513	67,84079	21,71	178,82	64757 60158	0.0469	2293 2235	2
177,550	0.9617	66,32102	16,99	138,33	63965 60070	0.0474	2133 2080	2
179,550	0.9600	64,85176	17,78	143,17	65398 61304	0.0480	1968 1919	2
181,550	0.9529	63,43078	21,01	167,30	66846 62199	0.0485	1943 1895	2
183,550	0.9396	62,05600	27,09	213,39	67496 61932	0.0490	1835 1789	2
185,550	0.9204	60,72544	36,09	281,24	67871 61000	0.0496	1629 1589	2
187,550	0.9183	59,43721	37,07	285,79	67603 60622	0.0501	1586 1547	2
189,550	0.9461	58,18955	24,11	183,91	67865 62698	0.0506	1582 1542	2
191,550	0.9608	56,98076	17,37	131,15	67756 63574	0.0512	1489 1452	2
193,550	0.9499	55,80925	22,36	167,08	67899 62982	0.0517	1353 1319	2
195,550	0.9490	54,67350	22,76	168,28	68187 63192	0.0522	1374 1340	2
197,550	0.9544	53,57208	20,29	148,54	68375 63726	0.0528	1246 1215	2
199,550	0.9566	52,50360	19,31	139,94	68126 63637	0.0533	1104 1076	2
201,550	0.9682	51,46677	14,05	100,79	67909 64207	0.0538	1197 1167	2
203,550	0.9732	50,46036	11,83	84,00	67456 64105	0.0544	1092 1064	2
205,550	0.9618	49,48318	16,94	119,15	67989 63856	0.0549	1046 1019	2
207,550	0.9661	48,53411	15,01	104,57	67423 63606	0.0554	1047 1021	2
209,550	0.9650	47,61209	15,51	107,02	67261 63381	0.0560	1148 1119	2
211,550	0.9630	46,71609	16,40	112,12	67535 63509	0.0565	910 887	2
213,550	0.9611	45,84515	17,28	117,00	67638 63478	0.0570	948 925	2
215,550	0.9652	44,99834	15,43	103,50	67673 63781	0.0576	853 831	2
217,550	0.9572	44,17478	19,01	126,37	67591 63181	0.0581	904 881	2
219,550	0.9665	43,37362	14,83	97,65	67309 63526	0.0586	841 820	2
221,550	0.9690	42,59406	13,69	89,35	67410 63788	0.0592	806 786	2
223,550	0.9549	41,83533	20,08	129,90	67973 63382	0.0597	853 832	2
225,550	0.9586	41,09669	18,39	117,92	67822 63488	0.0602	823 802	2
227,550	0.9630	40,37745	16,41	104,24	67831 63786	0.0608	831 810	2
229,550	0.9536	39,67692	20,69	130,32	68449 63737	0.0613	773 754	2
231,550	0.9580	38,99447	18,66	116,55	68273 63870	0.0618	765 745	2
233,550	0.9614	38,32947	17,11	105,90	67761 63619	0.0624	803 783	2
235,550	0.9678	37,68134	14,25	87,49	67947 64213	0.0629	757 738	2
237,550	0.9674	37,04951	14,41	87,69	67621 63882	0.0634	772 752	2
239,550	0.9517	36,43344	21,54	130,00	68158 63343	0.0640	778 759	2
241,550	0.9499	35,83261	22,35	133,77	67951 63033	0.0645	742 723	2
243,550	0.9534	35,24652	20,74	123,12	67867 63189	0.0650	812 792	2
245,550	0.9624	34,67470	16,69	98,29	67931 63835	0.0656	733 714	2
247,550	0.9595	34,11667	17,98	105,04	68236 63936	0.0661	752 733	2
249,550	0.9587	33,57201	18,34	106,26	67708 63389	0.0666	752 733	2
251,550	0.9508	33,04029	21,94	126,10	67767 62921	0.0672	857 835	2
253,550	0.9410	32,52111	26,45	150,81	68042 62526	0.0677	806 786	2
255,550	0.9546	32,01406	20,19	114,25	67545 62968	0.0682	770 751	2
257,550	0.9464	31,51878	23,96	134,50	68171 63004	0.0688	776 756	2
259,550	0.9499	31,03491	22,38	124,68	67918 62998	0.0693	853 832	2
261,550	0.9485	30,56209	23,02	127,25	67926 62913	0.0699	865 843	2
263,550	0.9583	30,10000	18,52	101,63	67756 63407	0.0704	812 792	2
265,550	0.9691	29,64831	13,65	74,31	67164 63562	0.0709	892 870	2
267,550	0.9593	29,20671	18,07	97,67	67612 63338	0.0715	781 761	2
269,550	0.9629	28,77490	16,46	88,27	66760 62764	0.0720	886 863	2
271,550	0.9609	28,35260	17,35	92,36	65185 61167	0.0725	929 906	2
273,550	0.9551	27,93953	19,99	105,64	62302 58107	0.0731	858 836	2
275,550	0.9574	27,53542	18,96	99,48	60535 56593	0.0736	867 845	2
277,550	0.9620	27,14002	16,84	87,72	62753 58953	0.0741	881 859	2
279,550	0.9500	26,75307	22,30	115,34	66485 61680	0.0747	912 889	2
281,550	0.9606	26,37433	17,51	89,90	67177 63013	0.0752	845 824	2
283,550	0.9578	26,00359	18,74	95,56	67459 63098	0.0757	845 824	2
285,550	0.9538	25,64060	20,56	104,09	67896 63242	0.0763	962 938	2
287,550	0.9669	25,28517	14,64	73,60	67770 63990	0.0768	871 849	2
289,550	0.9545	24,93707	20,28	101,27	68027 63404	0.0773	805 785	2
291,550	0.9496	24,59611	22,51	111,64	68077 63126	0.0779	885 863	2
293,550	0.9583	24,26210	18,51	91,17	67873 63519	0.0784	828 807	2
295,550	0.9567	23,93485	19,26	94,21	67503 63065	0.0789	872 850	2
297,550	0.9618	23,61417	16,93	82,28	67886 63762	0.0795	788 768	2
299,550	0.9441	23,29989	25,01	120,71	68357 63023	0.0800	763 743	2
301,550	0.9623	22,99185	16,73	80,21	67674 63586	0.0805	810 790	2
303,550	0.9516	22,68987	21,59	102,84	67559 62752	0.0811	740 722	2
305,550	0.9523	22,39381	21,24	100,51	67655 62691	0.0816	771 752	2
307,550	0.9591	22,10350	18,15	85,33	67716 63056	0.0821	748 729	2
309,550	0.9501	21,81880	22,25	103,95	67850 62881	0.0827	778 758	2
311,550	0.9512	21,53957	21,77	101,03	67304 62512	0.0832	739 720	2
313,550	0.9599	21,26566	17,78	82,01	67004 62812	0.0837	733 714	2
315,550	0.9523	20,99695	21,26	97,42	67065 62371	0.0843	716 698	2
317,550	0.9568	20,73329	19,22	87,52	67091 62690	0.0848	701 684	2

DELAY	TRANS.	ENERGY	X-SEC	X-SEC MOCT E	COUNTS OPEN SAMPLE	FRAC, CF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
319,550	0.9477	20,47458	23,39	105,82	67564 62530	0.0853	687	670	2
321,550	0.9395	20,22067	27,17	122,16	67723 62135	0.0859	648	632	2
323,550	0.9509	19,97146	21,91	97,89	67283 62482	0.0864	635	619	2
325,550	0.9421	19,72682	25,92	115,13	67105 61744	0.0869	611	596	2
327,550	0.9231	19,48666	34,82	153,73	66540 59984	0.0875	654	638	2
329,550	0.8717	19,25085	59,71	261,99	66647 56910	0.0880	625	609	2
331,550	0.7585	19,01930	120,22	524,29	66640 49365	0.0885	557	543	2
333,550	0.5404	18,79190	267,70	1160,45	67022 35372	0.0891	518	505	2
335,550	0.4278	18,56855	369,38	1591,71	66700 27863	0.0896	552	538	2
337,550	0.5657	18,34917	247,84	1061,65	66723 36856	0.0901	589	574	2
339,550	0.7874	18,13364	103,95	442,68	67239 51694	0.0907	579	564	2
341,550	0.8885	17,92190	51,43	217,74	67443 58478	0.0912	558	544	2
343,550	0.9326	17,71384	30,24	127,29	67890 61476	0.0916	553	539	2
345,550	0.9646	17,50938	15,68	65,61	67200 62993	0.0923	508	496	2
347,550	0.9614	17,30844	17,11	71,18	67656 63401	0.0928	474	462	2
349,550	0.9592	17,11094	18,12	74,94	67480 63180	0.0934	556	542	2
351,550	0.9635	16,91681	16,16	66,46	67944 63922	0.0939	478	466	2
353,550	0.9667	16,72595	14,71	60,18	67600 63810	0.0944	443	432	2
355,550	0.9680	16,53831	14,15	57,56	67370 63674	0.0950	449	438	2
357,550	0.9617	16,35381	16,98	68,66	67579 63453	0.0955	427	416	2
359,550	0.9560	16,17238	19,58	78,75	67516 63006	0.0960	378	369	2
361,550	0.9712	15,99395	12,70	50,78	66909 63506	0.0966	392	383	2
363,550	0.9595	15,81846	17,98	71,51	67379 63067	0.0971	389	379	2
365,550	0.9635	15,64584	16,19	64,04	67516 63441	0.0976	432	421	2
367,550	0.9622	15,47604	16,76	65,92	67390 63237	0.0982	425	414	2
369,550	0.9680	15,30898	14,14	55,31	67445 63683	0.0987	414	404	2
371,550	0.9580	15,14461	18,66	72,62	67616 63203	0.0992	376	367	2
373,550	0.9562	14,98287	19,48	75,39	67399 62887	0.0998	396	386	2
375,550	0.9522	14,82371	21,31	82,06	67566 62753	0.1003	406	396	2
377,550	0.9508	14,66708	21,96	84,10	67443 62533	0.1008	395	385	2
379,550	0.9468	14,51291	23,78	90,61	67633 62434	0.1014	368	359	2
381,550	0.9641	14,36116	15,89	60,21	67470 63323	0.1019	407	397	2
383,550	0.9552	14,21178	19,95	75,22	67540 62861	0.1024	349	340	2
385,550	0.9557	14,06472	19,71	73,93	67547 62988	0.1030	326	318	2
387,550	0.9614	13,91993	17,11	63,84	67459 63323	0.1035	356	347	2
389,550	0.9556	13,77736	19,74	73,28	67829 63290	0.1040	350	341	2
391,550	0.9595	13,63698	18,00	66,46	67477 63215	0.1046	374	365	2
393,550	0.9651	13,49872	15,45	56,78	67337 63455	0.1051	318	310	2
395,550	0.9498	13,36256	22,40	81,90	67688 62775	0.1056	365	356	2
397,550	0.9652	13,22845	15,42	56,09	66788 62944	0.1062	382	373	2
399,550	0.9659	13,09635	15,10	54,63	67209 63388	0.1067	370	361	2
401,550	0.9583	12,96622	18,54	66,70	67427 63095	0.1072	332	324	2
403,550	0.9602	12,83801	17,65	63,25	67065 62883	0.1078	351	342	2
405,550	0.9689	12,71170	13,74	48,97	66964 63357	0.1083	422	412	2
407,550	0.9662	12,58725	14,95	53,05	67198 63398	0.1088	364	355	2
409,550	0.9752	12,46461	10,93	38,59	66894 63692	0.1094	316	308	2
411,550	0.9696	12,34376	13,43	47,19	66963 63386	0.1099	421	410	2
413,550	0.9898	12,22465	17,85	62,39	67350 63093	0.1104	353	345	2
415,550	0.9518	12,10726	21,47	74,70	67853 62937	0.1110	390	380	2
417,550	0.9583	11,99156	16,51	64,09	67258 62457	0.1115	407	396	2
419,550	0.9572	11,87750	19,04	65,62	67247 62162	0.1120	409	399	2
421,550	0.9644	11,76507	15,78	54,14	66982 62760	0.1126	357	348	2
423,550	0.9535	11,65422	20,73	70,76	67572 62811	0.1131	416	406	2
425,550	0.9591	11,54493	18,16	61,72	67466 63125	0.1137	415	405	2
427,550	0.9586	11,43717	18,40	62,22	67336 62977	0.1142	413	403	2
429,550	0.9635	11,33092	16,16	54,38	66908 62888	0.1147	397	387	2
431,550	0.9615	11,22614	17,06	57,16	67313 63066	0.1153	402	392	2
433,550	0.9550	11,12280	20,01	66,75	67161 62308	0.1158	436	425	2
435,550	0.9685	11,02089	13,93	46,25	66990 62686	0.1163	420	410	2
437,550	0.9617	10,92037	16,97	56,06	67242 62285	0.1169	447	436	2
439,550	0.9578	10,82121	18,77	61,74	67404 62387	0.1174	451	439	2
441,550	0.9521	10,72341	21,33	69,86	67334 62270	0.1179	466	454	2
443,550	0.9511	10,62692	21,82	71,14	67364 62382	0.1185	422	411	2
445,550	0.9540	10,53173	20,48	66,47	67132 62442	0.1190	412	401	2
447,550	0.9422	10,43781	25,92	83,74	67222 61798	0.1195	461	450	2
449,550	0.9327	10,34514	30,32	97,51	67315 61275	0.1201	418	407	2
451,550	0.8927	10,25371	49,35	158,04	67196 58550	0.1206	454	443	2
453,550	0.8103	10,16347	51,48	291,64	67448 53347	0.1211	448	437	2
455,550	0.6588	10,07443	181,57	576,31	67337 43297	0.1217	521	508	2
457,550	0.5616	9,98655	250,96	793,06	66521 36467	0.1222	517	504	2
459,550	0.6420	9,89981	152,81	606,65	67205 42113	0.1227	445	434	2
461,550	0.8024	9,81420	55,74	299,94	66717 52260	0.1233	469	457	2
463,550	0.8921	9,72970	49,68	154,47	66667 58055	0.1238	471	460	2
465,550	0.9363	9,64628	28,64	88,95	66917 61163	0.1243	544	530	2
467,550	0.9397	9,56393	27,06	83,68	67138 61590	0.1249	505	493	2
469,550	0.9536	9,48263	20,66	63,61	66827 62215	0.1254	494	481	2
471,550	0.9634	9,40236	16,23	49,77	66516 62561	0.1259	519	506	2
473,550	0.9569	9,32311	19,16	58,51	66972 62568	0.1265	513	500	2
475,550	0.9557	9,24486	19,70	59,89	66913 62437	0.1270	529	516	2
477,550	0.9617	9,16758	16,97	51,37	66896 62815	0.1275	555	541	2

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROCT E	COUNTS OPEN SAMPLE	FRAC. CF OCT	FAST BKGS OPEN SAMPLE	NO, PTS AVE,
479.550	0.9623	9.09127	16.70	50.35	66617 62593	0.1281	607 592	2
481.550	0.9588	9.01591	18.30	54.96	66802 62536	0.1286	641 625	2
483.550	0.9500	8.94149	22.29	66.67	67427 62547	0.1291	595 580	2
485.550	0.9636	8.86798	16.11	47.97	66909 62956	0.1297	638 622	2
487.550	0.9599	8.79537	17.79	52.76	66465 62297	0.1302	709 691	2
489.550	0.9574	8.72365	18.94	55.95	66782 62430	0.1307	703 686	2
491.550	0.9555	8.65281	19.80	58.25	66738 62266	0.1313	762 743	2
493.550	0.9668	8.58282	14.71	43.08	66340 62626	0.1318	726 707	2
495.550	0.9669	8.51369	14.64	42.73	66431 62721	0.1323	744 725	2
497.550	0.9546	8.44538	20.23	58.79	67135 62578	0.1329	721 703	2
499.550	0.9574	8.37769	18.92	54.77	66836 62478	0.1334	704 686	2
501.550	0.9684	8.31121	13.99	40.32	66387 62756	0.1339	778 758	2
503.550	0.9602	8.24532	17.66	50.70	66396 62223	0.1345	768 749	2
505.550	0.9584	8.18021	18.49	52.88	66379 62067	0.1350	753 734	2
507.550	0.9501	8.11587	22.28	63.46	67094 62165	0.1355	796 776	2
509.550	0.9578	8.05228	18.74	53.18	66432 62015	0.1361	762 743	2
520.550	0.9557	7.71556	19.70	54.71	662900 616762	0.1390	7997 7797	20
540.550	0.9596	7.15518	17.96	48.03	662714 620827	0.1444	7139 6960	20
560.550	0.9573	6.65371	19.00	49.00	662794 619475	0.1497	6516 6353	20
580.550	0.9589	6.20316	18.27	45.51	659250 617210	0.1550	5793 5648	20
600.550	0.9583	5.79688	18.51	44.56	657592 615260	0.1604	5749 5606	20
620.550	0.9539	5.42924	20.53	47.83	657390 608905	0.1657	5273 5141	20
640.550	0.9576	5.09550	18.83	42.50	652137 587074	0.1711	4723 4605	20
660.550	0.9586	4.79161	18.38	40.24	649452 607719	0.1764	4317 4209	20
680.550	0.9569	4.51411	19.17	40.73	648046 605547	0.1818	4015 3915	20
700.550	0.9570	4.26005	19.12	39.47	642296 600269	0.1871	3567 3478	20
720.550	0.9547	4.02684	20.17	40.48	642238 598768	0.1924	3469 3382	20
740.550	0.9529	3.81227	20.98	40.96	642714 598101	0.1978	3271 3189	20
760.550	0.9537	3.61441	20.64	39.24	639132 595222	0.2031	3142 3064	20
775.550	0.9520	3.47595	21.38	39.86	639187 596750	0.2071	1576 1536	10
785.550	0.9477	3.38801	23.38	43.04	639112 295319	0.2098	1584 1544	10
795.550	0.9465	3.30337	23.90	43.44	637999 293935	0.2125	1571 1531	10
805.550	0.9416	3.22187	26.16	46.96	637685 292122	0.2151	1601 1561	10
815.550	0.9319	3.14334	30.70	54.43	637603 289016	0.2178	1573 1534	10
825.550	0.9108	3.06765	40.66	71.22	635382 280495	0.2205	1535 1497	10
831.550	0.8719	3.02354	59.62	103.66	63140 53761	0.2221	308 300	2
833.550	0.8485	3.00905	71.47	123.98	63264 52416	0.2226	305 298	2
835.550	0.8053	2.99466	94.21	163.03	63165 49671	0.2231	266 260	2
837.550	0.7565	2.98038	121.39	209.56	63322 46778	0.2237	308 300	2
839.550	0.6791	2.96619	168.31	289.88	63342 42006	0.2242	232 226	2
841.550	0.5749	2.95211	240.77	413.69	63094 35423	0.2247	286 279	2
843.550	0.4549	2.93813	342.68	587.39	63280 28107	0.2253	264 258	2
845.550	0.3310	2.92425	481.00	822.54	62647 20246	0.2258	287 280	2
847.550	0.2345	2.91046	630.82	1076.19	63438 14528	0.2264	259 252	2
849.550	0.1703	2.89677	770.10	1310.71	62867 10453	0.2269	255 248	2
851.550	0.1407	2.88318	853.05	1448.47	62961 8651	0.2274	287 280	2
853.550	0.1576	2.86969	803.62	1361.35	62878 9675	0.2280	299 291	2
855.550	0.2217	2.85629	655.28	1107.47	63341 13713	0.2285	267 260	2
857.550	0.3314	2.84298	480.40	810.01	62558 20245	0.2290	293 285	2
859.550	0.4511	2.82976	346.26	582.48	63075 27786	0.2296	327 319	2
861.550	0.5843	2.81664	233.77	392.34	62532 35676	0.2301	326 318	2
863.550	0.6793	2.80361	168.18	281.61	62884 41715	0.2306	268 261	2
865.550	0.7570	2.79067	121.07	202.26	62722 46367	0.2312	228 222	2
867.550	0.7992	2.77782	97.48	162.46	62830 49036	0.2317	280 273	2
869.550	0.8496	2.76505	70.88	117.87	62186 51593	0.2322	284 277	2
871.550	0.8822	2.75230	64.49	106.99	62604 52708	0.2328	295 288	2
873.550	0.8731	2.73979	59.04	97.72	62506 53290	0.2333	260 254	2
875.550	0.8901	2.72729	50.64	83.63	62579 54391	0.2338	234 229	2
877.550	0.9055	2.71487	43.20	71.17	62480 55243	0.2344	260 253	2
879.550	0.9120	2.70254	40.05	65.84	62378 55553	0.2349	257 251	2
885.550	0.9236	2.66604	34.56	56.43	632050 281438	0.2365	1302 1269	10
895.550	0.9330	2.60683	30.18	48.73	631583 283856	0.2392	1342 1308	10
905.550	0.9401	2.54957	26.86	42.89	630790 285297	0.2418	1315 1282	10
915.550	0.9421	2.49418	25.95	40.98	630849 285031	0.2445	1285 1253	10
925.550	0.9436	2.44058	25.25	39.45	6309180 284864	0.2472	1238 1207	10
955.550	0.9490	2.28974	22.79	34.48	632429 1419883	0.2552	5708 5565	50
1005.550	0.9490	2.06769	22.77	32.74	6313495 1402322	0.2505	4047 4726	50
1055.550	0.9478	1.87644	23.32	31.94	6491178 1379785	0.2819	4434 4323	50
1105.550	0.9483	1.71055	23.11	30.23	6469423 1360186	0.2953	3987 3887	50
1155.550	0.9431	1.56572	25.47	31.87	646798 1331835	0.3086	3711 3618	50
1205.550	0.9420	1.43854	25.98	31.16	649343 1304745	0.3220	3605 3515	50
1255.550	0.9410	1.32625	26.47	30.48	6391743 1277423	0.3353	3479 3392	50
1305.550	0.9398	1.22661	27.02	29.92	6362504 1247443	0.3487	3337 3253	50
1355.550	0.9377	1.13779	28.00	29.87	6334505 1205754	0.3620	3322 3239	50
1405.550	0.9271	1.05828	32.95	33.89	6300187 1107714	0.3754	3151 3073	50
1455.550	0.9352	0.98682	29.13	28.94	6267292 1135566	0.3887	3129 3051	50
1505.550	0.9323	0.92236	30.49	29.28	6231243 1116401	0.4021	3196 3116	50
1555.550	0.9255	0.86402	33.70	31.33	6193998 1076506	0.4154	3071 2994	50
1605.550	0.9220	0.81104	35.31	31.80	6154539 1037561	0.4288	2989 2914	50
1655.550	0.9183	0.76280	37.10	32.40	6108781 992496	0.4421	3187 3108	50

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC, OF OCT	FAST BKGS OPEN	FAST BKGS SAMPLE	NO, PTS AVE,
1705.550	0.9150	0.71873	38.64	32.76	1064084	949152	0.4555	2948	2875	50
1755.550	0.9114	0.67837	40.33	33.22	1015853	902505	0.4588	2977	2903	50
1805.550	0.9080	0.64132	41.97	33.61	966268	855007	0.4322	2929	2856	50
1855.550	0.9029	0.60722	44.44	34.63	915973	805634	0.4256	3170	3091	50
1905.550	0.8965	0.57577	47.55	36.08	862417	752815	0.5089	3238	3157	50
1955.550	0.8912	0.54671	50.13	37.06	808628	701341	0.5223	3085	3008	50
2005.550	0.8887	0.51979	51.33	37.01	751675	649695	0.5356	3103	3026	50
2031.550	0.8904	0.50657	50.52	35.96	28650	24798	0.5426	155	151	2

C.6 Medium Energy — Thick Sample (7/7/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC	COUNTS	FRAC.	FAST	BKGS	NO.	PTS
				ROCT E	OPEN SAMPLE	CF OCT	OPEN SAMPLE		AVE.	
21.000	0.9275	4740.82538	32.82	2259.93	122992 111373	0.0058	141724 138181		5	
31.000	0.9176	2175.55045	37.50	1748.90	131540 117851	0.0085	62505 60943		5	
41.000	0.9185	1243.72635	37.08	1307.55	134322 120461	0.0113	34308 33450		5	
51.000	0.9146	803.80777	38.93	1103.72	132662 118469	0.0140	23303 22721		5	
61.000	0.9204	561.86617	36.16	857.24	132217 118824	0.0168	16608 16193		5	
71.000	0.9057	414.73993	43.20	679.86	114613 101354	0.0195	11916 11618		5	
81.000	0.8830	318.65630	54.24	968.27	95422 82275	0.0223	8939 8715		5	
91.000	0.9107	252.46999	40.81	648.51	128557 114312	0.0251	6394 6234		5	
101.000	0.8842	204.95089	53.66	768.15	130396 112582	0.0278	4846 4725		5	
111.000	0.8852	169.68823	53.16	692.51	130520 112818	0.0306	4456 4344		5	
121.000	0.9141	142.79790	39.17	468.08	124683 111287	0.0333	5329 5196		5	
131.000	0.8314	121.82880	80.52	888.70	124045 100703	0.0361	5899 5752		5	
141.000	0.9117	103.16091	40.29	413.20	130251 115955	0.0388	6072 5920		5	
151.000	0.9308	91.69352	31.27	299.39	121237 110191	0.0416	5549 5411		5	
161.000	0.8913	80.65676	50.20	450.88	131161 114146	0.0443	5231 5100		5	
171.000	0.9258	71.49906	33.64	284.45	131607 118968	0.0471	4247 4140		5	
181.000	0.9364	63.81685	28.65	228.87	130108 118967	0.0498	3238 3157		5	
191.000	0.9319	57.30939	30.75	232.81	133398 121388	0.0526	2589 2524		5	
201.000	0.9437	51.74882	25.26	181.74	133233 122774	0.0553	2025 1975		5	
211.000	0.9448	46.95995	24.77	169.71	132721 122442	0.0581	1755 1711		5	
221.000	0.9439	42.80633	25.18	164.72	133305 122865	0.0608	1676 1634		5	
231.000	0.9356	39.18037	29.04	181.76	134149 122554	0.0636	1606 1566		5	
241.000	0.9467	35.99635	23.91	143.43	133117 123050	0.0664	1595 1555		5	
251.000	0.9335	33.18525	30.01	172.88	133757 121924	0.0691	1648 1607		5	
261.000	0.9373	30.69103	28.23	156.37	133906 122560	0.0719	1753 1710		5	
271.000	0.9398	28.46780	27.07	144.43	127277 116802	0.0746	1862 1815		5	
281.000	0.9354	26.47768	29.11	149.80	130593 119286	0.0774	1762 1718		5	
291.000	0.9378	24.68917	28.01	139.17	133318 122083	0.0801	1584 1545		5	
301.000	0.9378	23.07595	28.02	134.61	133225 121933	0.0829	1368 1333		5	
311.000	0.9398	21.61582	27.08	125.92	132137 121049	0.0856	1421 1385		5	
321.000	0.9295	20.29002	31.88	143.58	132876 120614	0.0884	1187 1157		5	
331.000	0.7125	19.08256	147.84	645.80	130945 91107	0.0911	1102 1075		5	
341.000	0.7907	17.97976	102.43	434.32	132497 102076	0.0939	947 923		5	
351.000	0.9444	16.96986	24.94	102.76	132868 122440	0.0966	828 807		5	
361.000	0.9424	16.04272	25.87	103.61	132701 122039	0.0994	770 751		5	
371.000	0.9399	15.18954	27.04	105.37	132852 121799	0.1021	740 721		5	
381.000	0.9373	14.40266	28.24	107.19	132763 121286	0.1049	729 711		5	
391.000	0.9393	13.67537	27.30	100.95	132752 121744	0.1077	700 683		5	
401.000	0.9447	13.00181	24.82	89.51	132239 121975	0.1104	767 748		5	
411.000	0.9380	12.37682	27.91	98.19	132197 121027	0.1132	712 694		5	
421.000	0.9434	11.79583	25.39	87.21	132556 121444	0.1159	814 793		5	
431.000	0.9424	11.25481	25.87	86.79	131920 120995	0.1187	879 857		5	
441.000	0.9350	10.75017	29.31	96.10	132203 119772	0.1214	927 904		5	
451.000	0.8475	10.27873	72.17	231.38	131519 108768	0.1242	1076 1049		5	
461.000	0.7435	9.83763	129.26	405.43	131028 95089	0.1269	1157 1128		5	
471.000	0.9330	9.42414	38.22	92.78	131375 119662	0.1297	1324 1290		5	
481.000	0.9382	9.03654	27.84	83.69	130715 119725	0.1324	1427 1392		5	
491.000	0.9369	8.67221	28.43	83.72	131202 120015	0.1352	1531 1493		5	
501.000	0.9360	8.32946	28.84	83.22	131567 120208	0.1379	1573 1533		5	
511.000	0.9409	8.00665	26.55	75.14	130979 119998	0.1407	1530 1492		5	
521.000	0.9384	7.70224	27.73	76.95	130291 118933	0.1434	1419 1383		5	
531.000	0.9388	7.41487	27.56	75.04	130322 119416	0.1462	1423 1387		5	
541.000	0.9424	7.14329	25.87	69.14	129825 119435	0.1490	1249 1218		5	
551.000	0.9314	6.88635	31.01	81.38	131039 119142	0.1517	1193 1163		5	
561.000	0.9331	6.64304	30.22	77.88	130827 119168	0.1545	1209 1178		5	
571.000	0.9467	6.41240	23.88	60.46	129398 119590	0.1572	1150 1121		5	
581.000	0.9364	6.19356	28.64	71.27	130049 118882	0.1600	1157 1128		5	
591.000	0.9429	5.98574	25.63	62.71	129017 118746	0.1627	1139 1111		5	
601.000	0.9413	5.78820	26.40	63.52	129294 118762	0.1655	1053 1026		5	
611.000	0.9370	5.60028	28.36	67.12	129303 118159	0.1682	983 958		5	
621.000	0.9376	5.42137	28.12	65.48	128877 117364	0.1710	994 969		5	
631.000	0.9619	5.25090	16.96	38.85	127932 107439	0.1737	912 889		5	
641.000	0.9284	5.08834	32.42	73.13	128440 107431	0.1765	889 867		5	
651.000	0.9341	4.93322	29.71	65.99	128319 116628	0.1792	787 767		5	
661.000	0.9363	4.78508	28.71	62.80	128220 117121	0.1820	757 738		5	
671.000	0.9345	4.64352	29.54	63.66	128289 117025	0.1847	764 745		5	
681.000	0.9351	4.50815	29.26	62.12	127579 116476	0.1875	733 715		5	
691.000	0.9323	4.37861	30.57	63.96	127805 116340	0.1903	718 700		5	
701.000	0.9408	4.25458	26.62	54.91	125369 115165	0.1930	699 682		5	
711.000	0.9447	4.13574	24.82	50.47	124212 114575	0.1958	645 629		5	

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROCT E	COUNTS OPEN SAMPLE	FRAC. CF OCT	FAST CPEN	BKGS SAMPLE	NO, PTS AVE,
721.000	0.9337	4.02181	29.90	59.95	126314 115171	0.1985	688	671	5
731.000	0.9381	3.91253	27.85	55.10	125772 115215	0.2013	617	601	5
741.000	0.9398	3.80764	27.09	52.85	126101 115719	0.2040	669	652	5
751.000	0.9327	3.70692	30.39	58.51	126095 114841	0.2068	639	623	5
761.000	0.9397	3.61013	27.10	51.50	125620 115272	0.2095	629	613	5
771.000	0.9321	3.51709	30.65	57.48	125681 114394	0.2123	608	593	5
781.000	0.9304	3.42760	31.48	58.27	125574 114080	0.2150	575	561	5
791.000	0.9263	3.34149	33.39	61.03	125306 113339	0.2178	568	554	5
801.000	0.9298	3.25857	31.72	57.26	124969 113466	0.2205	604	589	5
811.000	0.9171	3.17871	37.73	67.27	124342 111351	0.2233	548	534	5
821.000	0.9070	3.10175	42.55	74.94	124092 109906	0.2260	605	590	5
831.000	0.8586	3.02754	66.48	115.67	123628 103649	0.2288	513	500	5
841.000	0.5785	2.95597	238.66	410.32	123402 69710	0.2316	498	485	5
851.000	0.1825	2.88691	741.73	1260.27	124043 22108	0.2343	514	501	5
861.000	0.5371	2.82024	271.10	455.27	122943 64470	0.2371	500	488	5
871.000	0.8279	2.75585	82.36	136.72	123542 99868	0.2398	510	498	5
881.000	0.8935	2.69365	49.11	80.60	122307 106702	0.2426	495	483	5
891.000	0.9144	2.63352	39.03	63.34	122560 109421	0.2453	507	494	5
901.000	0.9136	2.57539	39.42	63.26	122174 108978	0.2481	494	482	5
911.000	0.9207	2.51916	36.02	57.17	122105 109768	0.2508	474	462	5
921.000	0.9237	2.46475	34.60	54.31	121361 109454	0.2536	495	483	5
931.000	0.9257	2.41209	33.68	52.31	121125 109468	0.2563	432	421	5
941.000	0.9292	2.36109	82.04	45.83	120700 109568	0.2591	399	389	5
951.000	0.9245	2.31170	34.23	52.05	120562 108820	0.2618	424	414	5
961.000	0.9339	2.26384	29.84	44.89	120000 109409	0.2646	444	433	5
971.000	0.9278	2.21745	32.69	48.68	120237 108907	0.2673	389	379	5
981.000	0.9328	2.17247	30.34	44.72	119415 108745	0.2701	362	353	5
1011.000	0.9297	2.04546	31.80	45.48	592534 537776	0.2784	1763	1719	25
1061.000	0.9268	1.85721	33.17	45.20	584951 529188	0.2921	1556	1517	25
1111.000	0.9289	1.69381	32.15	41.84	573878 520329	0.3059	1460	1423	25
1161.000	0.9301	1.55106	31.62	39.38	564908 512751	0.3197	1222	1192	25
1211.000	0.9268	1.42562	33.16	39.59	553087 500139	0.3334	1272	1240	25
1261.000	0.9242	1.31481	34.37	39.41	542458 488947	0.3472	1288	1256	25
1311.000	0.9175	1.21643	37.56	41.43	531530 474892	0.3610	1333	1300	25
1361.000	0.9191	1.12869	36.79	39.09	520317 458981	0.3747	1282	1250	25
1411.000	0.9101	1.05012	41.10	42.11	504904 422131	0.3885	1321	1288	25
1461.000	0.9170	0.97947	37.77	37.38	493453 435203	0.4023	1210	1179	25
1511.000	0.9141	0.91572	39.17	37.48	476039 423295	0.4160	1167	1138	25
1561.000	0.9073	0.85800	42.42	39.29	463728 409877	0.4298	1205	1175	25
1611.000	0.9045	0.80557	43.78	39.29	445233 392461	0.4436	1280	1248	25
1661.000	0.8986	0.75780	46.65	40.61	429509 376165	0.4573	1187	1157	25
1711.000	0.8986	0.71416	46.63	39.40	410830 359835	0.4711	1030	1004	25
1761.000	0.8910	0.67418	50.31	41.31	392502 340836	0.4849	1116	1088	25
1811.000	0.8908	0.63746	50.45	40.28	371972 322816	0.4986	1172	1143	25
1861.000	0.8815	0.60367	55.02	42.75	352320 302468	0.5124	1216	1185	25
1911.000	0.8798	0.57249	55.83	42.24	329856 282536	0.5262	1187	1157	25
1961.000	0.8771	0.54367	57.21	42.18	307928 262786	0.5399	1166	1137	25
2009.000	0.8739	0.51800	58.76	42.29	264571 224828	0.5531	1147	1118	23

C.7 High Energy — Thin Sample (4/1/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE,
291.570	0.9738	24.59274	92.05	456.47	20949 20290	0.2340	421	420	8
292.320	0.9817	24.46671	63.92	316.16	10400 10154	0.2346	214	213	4
292.820	0.9805	24.38322	68.34	337.44	10342 10085	0.2350	258	257	4
293.320	0.9830	24.30016	59.32	292.44	10340 10109	0.2354	212	211	4
293.820	1.0021	24.21753	-7.35	-36.15	10360 10326	0.2358	168	167	4
294.320	0.9946	24.13532	18.63	91.53	10366 10254	0.2362	195	194	4
294.820	0.9770	24.05352	-80.60	-395.29	10382 10088	0.2366	192	191	4
295.320	1.0087	23.97214	-30.10	-147.38	10258 10291	0.2370	226	226	4
295.820	0.9978	23.89117	7.59	37.09	10200 10122	0.2374	220	219	4
296.320	1.0052	23.81062	-18.15	-88.57	10310 10307	0.2378	192	192	4
296.820	0.9916	23.73046	29.17	142.08	10208 10067	0.2382	205	205	4
297.320	1.0251	23.65072	-86.16	-419.01	9881 10074	0.2386	229	228	4
297.820	1.0056	23.57137	-19.44	-94.39	10121 10122	0.2391	246	245	4
298.320	1.0129	23.49242	-44.54	-215.90	10096 10171	0.2395	261	261	4
298.820	0.9870	23.41387	45.46	219.97	10105 9919	0.2399	244	243	4
299.320	1.0050	23.33571	-17.48	-84.42	10060 10056	0.2403	203	202	4
299.820	0.9800	23.25795	70.23	338.69	10386 10123	0.2407	200	200	4
300.320	0.9940	23.18057	20.86	100.43	10004 9890	0.2411	246	246	4
300.820	0.9819	23.10357	63.49	305.18	10400 10156	0.2415	156	156	4
301.320	0.9712	23.02696	101.58	487.45	10229 9880	0.2419	196	195	4
301.820	0.9698	22.95073	106.53	510.36	10120 9761	0.2423	205	205	4
302.320	0.9950	22.87488	17.36	83.05	10322 10214	0.2427	244	243	4
302.820	1.0103	22.79940	-35.67	-170.33	10015 10063	0.2431	164	163	4
303.320	0.9995	22.72430	1.81	8.64	9988 9928	0.2435	195	195	4
303.820	0.9938	22.64956	21.49	102.27	10137 10020	0.2439	193	193	4
304.320	0.9948	22.57520	17.94	85.22	10096 9989	0.2443	188	187	4
304.820	0.9847	22.50120	53.54	253.98	10106 9897	0.2447	202	202	4
305.320	0.9962	22.42756	13.13	62.17	10041 9948	0.2451	228	227	4
305.820	0.9665	22.35429	118.08	558.28	10280 9881	0.2455	207	207	4
306.320	0.9827	22.28137	60.58	285.98	10042 9814	0.2459	203	203	4
306.820	1.0167	22.20881	-57.34	-270.22	9778 9886	0.2463	230	229	4
307.320	0.9943	22.13660	19.90	93.61	10029 9916	0.2467	191	190	4
307.820	1.0121	22.06474	-41.68	-195.79	9997 10062	0.2471	188	188	4
308.320	0.9942	21.99324	20.05	94.02	9958 9846	0.2475	198	198	4
308.820	1.0041	21.92208	-14.20	-66.48	10057 10043	0.2479	157	157	4
309.320	1.0163	21.85126	-55.97	-261.64	9945 10051	0.2483	157	157	4
309.820	0.9948	21.78079	17.93	83.66	9991 9886	0.2487	186	185	4
310.320	0.9858	21.71066	49.68	231.48	10113 9915	0.2491	159	159	4
310.820	0.9930	21.64087	24.55	114.18	9921 9797	0.2495	172	171	4
311.320	1.0184	21.57141	-63.18	-293.42	9747 9872	0.2499	194	193	4
311.820	0.9631	21.50229	130.50	605.14	9957 9538	0.2503	240	239	4
312.320	0.9939	21.43349	21.31	98.64	9812 9699	0.2507	218	218	4
312.820	0.9966	21.36503	11.72	54.18	9748 9662	0.2511	191	191	4
313.320	0.9555	21.29690	157.87	728.55	9912 9420	0.2515	192	191	4
313.820	0.9935	21.22909	22.47	103.51	9717 9602	0.2519	229	228	4
314.320	0.9877	21.16160	43.06	198.09	9826 9652	0.2523	181	181	4
314.820	0.9867	21.09444	46.55	213.82	9750 9567	0.2527	168	167	4
315.320	0.9965	21.02759	12.13	55.63	9677 9590	0.2531	184	184	4
315.820	0.9734	20.96106	93.48	428.00	9907 9591	0.2535	206	206	4
316.320	0.9827	20.89485	60.59	276.98	9857 9634	0.2539	196	196	4
316.820	1.0025	20.82895	-8.50	-38.80	9642 9613	0.2543	162	162	4
317.320	0.9827	20.76336	60.39	275.16	9963 9738	0.2547	138	138	4
317.820	1.0179	20.69808	-61.73	-280.86	9820 9942	0.2551	226	226	4
318.320	1.0097	20.63311	-33.44	-151.88	9717 9758	0.2555	155	154	4
318.820	0.9899	20.56844	35.34	160.27	9660 9511	0.2559	170	170	4
319.320	1.0002	20.50408	-0.79	-3.57	9719 9668	0.2563	202	201	4
319.820	0.9915	20.44002	29.47	133.22	9911 9774	0.2567	145	145	4
320.320	0.9857	20.37626	49.95	225.46	9856 9662	0.2571	172	172	4
320.820	0.9920	20.31279	27.77	125.17	9775 9644	0.2575	185	185	4
321.320	1.0085	20.24963	-29.51	-132.79	9718 9748	0.2579	182	181	4
321.820	0.9937	20.18675	21.79	97.91	9781 9667	0.2583	187	187	4
322.320	0.9802	20.12417	69.45	311.54	9840 9592	0.2587	219	218	4
322.820	1.0016	20.06188	-5.53	-24.75	9735 9697	0.2591	165	165	4
323.320	1.0183	19.99988	-63.09	-282.13	9528 9650	0.2595	156	155	4
323.820	0.9905	19.93817	33.20	148.23	9587 9444	0.2599	195	194	4
324.320	0.9885	19.87674	39.96	178.17	9690 9527	0.2603	175	175	4
324.820	0.9881	19.81559	41.38	184.22	9636 9470	0.2607	202	201	4
325.320	0.9883	19.75473	40.78	181.26	9760 9593	0.2611	173	172	4
325.820	0.9889	19.69414	38.88	172.56	9661 9502	0.2615	153	153	4
326.320	0.9747	19.63384	88.99	394.31	9634 9339	0.2619	187	187	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC, OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE,
326,820	0.9859	19.57381	49.42	218.63	9563 9376	0.2623	199	199	4
327,320	0.9818	19.51405	63.67	281.26	9585 9360	0.2627	153	152	4
327,820	0.9799	19.45457	70.39	310.48	9609 9364	0.2631	119	119	4
328,320	0.9695	19.39536	107.42	473.09	9622 9277	0.2635	178	177	4
328,820	0.9712	19.33642	101.50	446.33	9619 9291	0.2639	131	131	4
329,320	0.9815	19.27775	64.74	284.23	9581 9353	0.2643	142	141	4
329,820	1.0100	19.21934	-34.46	151.07	9476 9519	0.2647	117	116	4
330,320	0.9936	19.16120	22.17	97.03	9434 9323	0.2651	141	141	4
330,820	0.9612	19.10333	137.17	599.55	9673 9248	0.2655	158	158	4
331,320	0.9704	19.04571	104.25	454.96	9553 9219	0.2659	153	153	4
331,820	0.9578	18.98836	149.48	651.38	9665 9207	0.2663	163	162	4
332,320	0.9752	18.93126	87.10	378.97	9538 9251	0.2667	173	173	4
332,820	0.9468	18.87442	189.51	823.34	9488 8935	0.2671	132	131	4
333,320	0.9086	18.81784	332.55	1442.58	9418 8511	0.2675	127	126	4
333,820	0.8405	18.76151	602.80	2611.00	9502 7943	0.2679	154	153	4
334,320	0.7612	18.70544	946.88	4095.22	9309 7047	0.2683	163	162	4
334,820	0.6379	18.64961	1560.18	6737.68	9581 6078	0.2687	146	146	4
335,320	0.5645	18.59403	1984.41	8556.93	9516 5342	0.2692	112	112	4
335,820	0.5936	18.53871	1809.96	7793.05	9305 5493	0.2696	203	202	4
336,320	0.6306	18.48363	1600.19	6879.61	9451 5927	0.2700	139	139	4
336,820	0.7342	18.42879	1072.19	4602.76	9469 6914	0.2704	161	160	4
337,320	0.8399	18.37420	605.59	2595.87	9434 7880	0.2708	117	116	4
337,820	0.9106	18.31985	324.92	1390.71	9327 8447	0.2712	176	175	4
338,320	0.9468	18.26574	189.69	810.69	9385 8838	0.2716	127	127	4
338,820	0.9514	18.21187	172.94	738.02	9384 8879	0.2720	200	199	4
339,320	0.9659	18.15824	120.45	513.26	9494 9120	0.2724	136	136	4
339,820	0.9672	18.10484	115.73	492.43	9663 9296	0.2728	132	131	4
340,320	0.9857	18.05168	50.07	212.73	9254 9072	0.2732	134	134	4
340,820	0.9794	17.99875	72.24	306.49	9386 9142	0.2736	122	121	4
341,320	1.0028	17.94606	-9.66	-40.91	9373 9348	0.2740	142	141	4
341,820	0.9941	17.89360	20.56	86.97	9552 9444	0.2744	112	112	4
342,320	1.0075	17.84136	-25.87	-109.29	9330 9348	0.2748	153	153	4
342,820	0.9714	17.78936	100.83	425.27	9418 9098	0.2752	151	150	4
343,320	0.9713	17.73758	101.07	425.68	9469 9146	0.2756	174	173	4
343,820	1.0090	17.68603	-31.20	-131.20	9371 9404	0.2760	139	139	4
344,320	1.0075	17.63470	-25.99	-109.14	9337 9355	0.2764	132	131	4
344,820	1.0009	17.58359	-3.08	-12.92	9314 9270	0.2768	170	170	4
345,320	0.9760	17.53271	84.41	353.42	9356 9081	0.2772	139	138	4
345,820	1.0106	17.48205	-36.47	-152.49	9269 9315	0.2776	151	151	4
346,320	0.9948	17.43161	18.04	75.31	9358 9258	0.2780	149	148	4
346,820	1.0030	17.38138	-10.30	-42.95	9466 9442	0.2784	117	117	4
347,320	0.9847	17.33137	53.41	222.35	9424 9229	0.2788	134	134	4
347,820	1.0147	17.28158	-50.65	-210.55	9405 9492	0.2792	134	134	4
348,320	1.0157	17.23200	-54.06	-224.42	9227 9321	0.2796	93	93	4
348,820	0.9804	17.18264	68.56	284.19	9289 9057	0.2800	132	132	4
349,320	0.9841	17.13348	55.54	229.91	9360 9161	0.2804	102	102	4
349,820	1.0158	17.08454	-54.32	-224.93	9073 9166	0.2808	132	132	4
350,320	1.0060	17.03581	-20.80	-85.85	9368 9373	0.2812	144	143	4
350,820	0.9927	16.98728	25.41	104.72	9291 9173	0.2816	117	117	4
351,320	1.0157	16.93896	-54.08	-222.60	9084 9177	0.2820	125	124	4
351,820	1.0089	16.89085	-30.59	-125.74	9123 9153	0.2824	161	161	4
352,320	1.0228	16.84294	-78.29	-321.29	8984 9139	0.2828	149	148	4
352,820	1.0003	16.79524	-0.87	-3.56	9200 9153	0.2832	113	112	4
353,320	0.9936	16.74774	22.43	91.80	9196 9087	0.2836	149	148	4
353,820	0.9724	16.70044	96.99	396.35	9192 8890	0.2840	120	119	4
354,320	0.9990	16.65333	3.33	13.58	9133 9075	0.2844	136	136	4
354,820	0.9973	16.60643	9.40	38.32	9159 9085	0.2848	140	139	4
355,320	1.0175	16.55973	-60.31	-245.42	9080 9189	0.2852	117	117	4
355,820	0.9704	16.51322	104.31	423.88	9303 8978	0.2856	120	119	4
356,320	0.9952	16.46691	16.65	67.56	9189 9095	0.2860	132	132	4
356,820	0.9983	16.42079	5.95	24.10	9141 9076	0.2864	112	112	4
357,320	0.9772	16.37487	79.86	323.15	9279 9019	0.2868	88	88	4
357,820	1.0160	16.32914	-54.93	-221.95	9073 9168	0.2872	132	132	4
358,320	1.0104	16.28360	-35.81	-144.49	9029 9073	0.2876	110	109	4
358,820	1.0001	16.23825	-0.33	-1.32	9037 8988	0.2880	105	105	4
359,320	0.9779	16.19309	77.64	312.44	9210 8957	0.2884	74	73	4
359,820	0.9904	16.14812	33.55	134.84	9087 8950	0.2888	128	127	4
360,320	0.9801	16.10333	69.81	280.16	9118 8887	0.2892	108	107	4
360,820	0.9994	16.05874	2.06	8.25	9005 8950	0.2896	93	93	4
361,320	0.9798	16.01432	70.88	283.66	9000 8770	0.2900	104	103	4
361,820	0.9989	15.97009	3.82	15.25	9138 9079	0.2904	132	132	4
362,320	0.9991	15.92604	3.19	12.72	9023 8965	0.2908	103	103	4
362,820	1.0115	15.88218	-39.78	-158.54	9048 9102	0.2912	113	113	4
363,320	0.9844	15.83850	54.47	216.77	9050 8861	0.2916	145	144	4
363,820	1.0114	15.79499	-39.21	-155.84	8893 8945	0.2920	122	122	4
364,320	0.9935	15.75167	22.46	89.14	9039 8932	0.2924	127	126	4
364,820	0.9847	15.70852	53.52	212.14	8966 8781	0.2928	108	108	4
365,320	0.9693	15.66555	108.22	428.32	9136 8807	0.2932	110	110	4
365,820	0.9565	15.62276	154.36	610.12	9197 8749	0.2936	98	98	4
366,320	1.0046	15.58014	-16.03	-63.29	8877 8869	0.2940	113	112	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS		FRAC, OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE,
366.820	0.9853	15.53769	51.40	202.60	9049	8867	0.2944	88	88	4
367.320	0.9876	15.49542	43.47	171.12	8959	8799	0.2948	110	110	4
367.820	0.9878	15.45332	42.55	167.28	8959	8802	0.2952	132	132	4
368.320	0.9858	15.41139	49.79	195.46	8856	8682	0.2956	111	110	4
368.820	1.0216	15.36964	-73.99	-290.08	8817	8958	0.2960	108	108	4
369.320	0.9789	15.32805	73.96	289.56	8992	8754	0.2964	96	95	4
369.820	0.9832	15.28663	58.96	230.52	9104	8902	0.2968	81	80	4
370.320	0.9878	15.24538	42.43	165.68	9006	8848	0.2972	88	88	4
370.820	1.0081	15.20429	-28.12	-109.64	8826	8849	0.2976	95	95	4
371.320	0.9903	15.16337	33.68	131.15	8972	8837	0.2980	96	95	4
371.820	1.0050	15.12262	-17.17	-66.76	8901	8896	0.2984	120	119	4
372.320	0.9799	15.08203	70.43	273.52	8862	8636	0.2988	91	90	4
372.820	0.9967	15.04160	11.45	44.40	8815	8738	0.2993	86	86	4
373.320	0.9883	15.00134	40.89	158.39	8962	8808	0.2997	111	110	4
373.820	0.9746	14.96124	89.32	345.49	8952	8677	0.3001	123	122	4
374.320	0.9938	14.92129	21.58	83.35	8815	8713	0.3005	125	125	4
374.820	0.9883	14.88151	40.91	157.83	8895	8742	0.3009	108	108	4
375.320	0.9754	14.84189	86.44	332.99	8978	8709	0.3013	54	54	4
375.820	0.9704	14.80242	104.26	401.13	8875	8565	0.3017	144	144	4
376.320	0.9909	14.76311	31.72	121.88	8800	8672	0.3021	128	127	4
376.820	0.9804	14.72396	68.75	263.79	8911	8686	0.3025	71	71	4
377.320	0.9843	14.68496	54.85	210.20	8891	8703	0.3029	79	79	4
377.820	0.9909	14.64612	31.70	121.33	8758	8631	0.3033	69	69	4
378.320	1.0028	14.60743	-9.59	-36.67	8751	8727	0.3037	106	106	4
378.820	0.9894	14.56890	36.86	140.70	8851	8710	0.3041	120	120	4
379.320	0.9934	14.53052	22.82	86.97	8877	8771	0.3045	71	71	4
379.820	1.0017	14.49229	-5.85	-22.25	8601	8568	0.3049	86	86	4
380.320	0.9800	14.45421	70.23	267.01	8763	8540	0.3053	105	105	4
380.820	0.9862	14.41627	48.10	182.63	8745	8577	0.3057	101	101	4
381.320	1.0071	14.37849	-24.66	-93.51	8667	8681	0.3061	113	113	4
381.820	0.9972	14.34086	9.62	36.42	8755	8683	0.3065	86	86	4
382.320	1.0022	14.30337	-7.64	-28.88	8653	8624	0.3069	86	86	4
382.820	0.9968	14.26604	11.20	42.31	8515	8441	0.3073	110	110	4
383.320	0.9827	14.22884	60.72	229.03	8731	8532	0.3077	108	108	4
383.820	0.9870	14.19180	45.24	170.44	8769	8608	0.3081	125	125	4
384.320	0.9859	14.15489	49.42	185.94	8724	8554	0.3085	101	100	4
384.820	0.9778	14.11813	77.94	292.86	8647	8409	0.3089	91	90	4
385.320	1.0056	14.08152	-19.23	-72.15	8671	8672	0.3093	79	78	4
385.820	0.9796	14.04504	71.43	267.70	8736	8511	0.3097	103	102	4
386.320	0.9879	14.00871	42.41	158.73	8557	8407	0.3101	108	108	4
386.820	0.9931	13.97252	24.07	89.96	8528	8423	0.3105	106	105	4
387.320	0.9903	13.93647	33.90	126.57	8754	8621	0.3109	123	123	4
387.820	0.9971	13.90056	10.12	37.73	8550	8479	0.3113	91	91	4
388.320	0.9952	13.86478	16.82	62.64	8512	8425	0.3117	91	91	4
388.820	0.9892	13.82915	37.55	139.63	8577	8438	0.3121	84	84	4
389.320	0.9747	13.79365	88.85	330.00	8743	8475	0.3125	91	91	4
389.820	0.9989	13.75829	3.89	14.42	8714	8656	0.3129	86	86	4
390.320	1.0082	13.72306	-28.33	-104.95	8552	8576	0.3133	108	108	4
390.820	0.9819	13.68797	63.37	234.46	8615	8413	0.3137	78	78	4
391.320	0.9896	13.65301	36.29	134.09	8439	8306	0.3141	135	134	4
391.820	0.9820	13.61819	63.07	232.74	8616	8414	0.3145	86	86	4
392.320	1.0022	13.58350	-7.62	-28.08	8436	8408	0.3149	118	117	4
392.820	0.9935	13.54894	22.68	83.50	8553	8451	0.3153	125	125	4
393.320	0.9855	13.51452	50.78	186.69	8518	8349	0.3157	69	69	4
393.820	0.9772	13.48022	80.20	294.46	8539	8298	0.3161	69	69	4
394.320	0.9914	13.44606	30.15	110.54	8442	8323	0.3165	147	147	4
394.820	0.9708	13.41202	102.95	377.03	8471	8179	0.3169	132	131	4
395.320	0.9780	13.37812	77.07	281.89	8591	8357	0.3173	115	115	4
395.820	0.9902	13.34434	34.25	125.10	8518	8388	0.3177	83	83	4
396.320	0.9751	13.31069	87.38	318.78	8575	8317	0.3181	76	76	4
396.820	0.9854	13.27717	51.13	186.29	8488	8319	0.3185	87	86	4
397.320	0.9895	13.24377	36.70	133.54	8390	8256	0.3189	123	123	4
397.820	0.9842	13.21050	55.22	200.72	8465	8286	0.3193	96	96	4
398.320	1.0006	13.17736	-2.15	-7.80	8377	8336	0.3197	81	81	4
398.820	1.0241	13.14434	-82.74	-299.96	8390	8546	0.3201	86	86	4
399.320	0.9779	13.11144	77.47	280.51	8460	8229	0.3205	76	76	4
399.820	1.0060	13.07867	-20.59	-74.47	8306	8310	0.3209	103	103	4
400.320	1.0044	13.04602	-15.17	-54.80	8416	8407	0.3213	79	79	4
400.820	0.9963	13.01349	12.91	46.55	8405	8328	0.3217	98	98	4
401.320	0.9780	12.98108	77.31	278.54	8348	8120	0.3221	67	67	4
401.820	1.0064	12.94880	-22.05	-79.33	8325	8333	0.3225	64	64	4
402.320	1.0064	12.91663	-22.00	-79.08	8314	8322	0.3229	81	81	4
402.820	1.0039	12.88459	-13.41	-48.14	8180	8167	0.3233	96	96	4
403.320	0.9911	12.85266	31.10	111.51	8419	8294	0.3237	86	86	4
403.820	0.9764	12.82085	82.70	296.11	8353	8112	0.3241	87	86	4
404.320	0.9803	12.78916	69.05	246.95	8527	8313	0.3245	64	64	4
404.820	1.0246	12.75759	-84.19	-300.70	8294	8452	0.3249	94	93	4
405.320	0.9877	12.72613	42.98	153.31	8235	8089	0.3253	98	98	4
405.820	1.0189	12.69479	-65.05	-231.78	8141	8250	0.3257	96	96	4
406.320	0.9959	12.66357	14.42	51.33	8186	8108	0.3261	123	123	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
406.820	0.9586	12.63246	146.62	521.13	8446 8052	0.3265	96	95	4
407.320	1.0113	12.60147	-38.84	-137.89	8150 8197	0.3269	79	79	4
407.820	1.0025	12.57059	-8.62	-30.55	8167 8143	0.3273	118	117	4
408.320	0.9867	12.53982	46.61	165.06	8176 8023	0.3277	50	49	4
408.820	0.9972	12.50916	9.82	34.74	8221 8153	0.3281	81	81	4
409.320	0.9918	12.47862	28.73	101.48	8170 8058	0.3285	96	96	4
409.820	0.9800	12.44819	70.21	247.70	8162 7955	0.3289	91	91	4
410.320	1.0097	12.41787	-33.56	-118.26	8149 8183	0.3294	94	94	4
410.820	1.0158	12.38766	-54.27	-190.99	8030 8112	0.3298	103	103	4
411.320	0.9766	12.35756	82.02	288.32	8237 8001	0.3302	81	81	4
411.820	0.9803	12.32758	68.94	242.06	8231 8025	0.3306	79	79	4
412.320	0.9832	12.29770	58.73	205.95	8215 8033	0.3310	71	71	4
412.820	1.0067	12.26792	-23.20	-81.27	8053 8062	0.3314	82	81	4
413.320	1.0131	12.23826	-45.11	-157.81	8097 8158	0.3318	94	93	4
413.820	0.9817	12.20871	64.00	223.62	8232 8038	0.3322	101	101	4
414.320	1.0142	12.17926	-48.98	-170.94	8040 8109	0.3326	103	103	4
414.820	1.0070	12.14991	-24.22	-84.42	8045 8057	0.3330	81	81	4
415.320	0.9904	12.12068	33.31	115.97	8177 8055	0.3334	79	78	4
415.820	0.9987	12.09155	4.40	15.30	8126 8071	0.3338	118	118	4
416.320	1.0104	12.06252	-35.74	-124.12	8006 8044	0.3342	101	101	4
416.820	0.9834	12.03360	57.93	200.97	8139 7960	0.3346	86	86	4
417.320	0.9931	12.00478	24.01	83.20	8047 7947	0.3350	152	152	4
417.820	0.9792	11.97606	73.04	252.76	8172 7957	0.3354	59	59	4
418.320	1.0034	11.94745	-11.65	-40.28	8167 8146	0.3358	72	71	4
418.820	0.9990	11.91894	3.58	12.37	8039 7986	0.3362	113	113	4
419.320	1.0118	11.89053	-40.62	-140.05	7955 8004	0.3366	69	69	4
419.820	0.9909	11.86223	31.62	108.02	8137 8010	0.3370	88	88	4
420.320	0.9802	11.83402	69.28	238.33	8081 7876	0.3374	84	83	4
420.820	1.0111	11.80592	-38.32	-131.65	8000 8044	0.3378	94	93	4
421.320	0.9758	11.77791	84.93	291.49	8069 7830	0.3382	145	144	4
421.820	1.0049	11.75001	-17.04	-58.42	8009 8004	0.3386	96	96	4
422.320	1.0263	11.72220	-90.07	-308.37	7945 8109	0.3390	86	86	4
422.820	0.9878	11.69450	42.44	145.12	8049 7907	0.3394	93	93	4
423.320	0.9913	11.66689	30.21	103.18	7982 7869	0.3398	113	113	4
423.820	0.9980	11.63937	6.88	23.48	7890 7831	0.3402	103	103	4
424.320	0.9839	11.61196	56.35	192.02	7957 7786	0.3406	101	101	4
424.820	0.9948	11.58464	17.93	61.03	7961 7877	0.3410	86	86	4
425.320	1.0036	11.55742	-12.43	-42.26	7916 7901	0.3414	62	62	4
425.820	0.9713	11.53030	100.93	342.73	8163 7886	0.3418	86	86	4
426.320	0.9896	11.50327	36.39	123.42	7923 7798	0.3422	103	103	4
426.820	0.9852	11.47633	51.76	175.34	7894 7734	0.3426	88	88	4
427.320	0.9952	11.44949	16.56	56.03	7869 7789	0.3430	106	106	4
427.820	0.9832	11.42274	58.71	198.43	7845 7671	0.3434	140	140	4
428.320	0.9699	11.39609	106.14	358.33	8097 7810	0.3438	64	64	4
428.820	1.0015	11.36953	-5.27	-17.78	7742 7712	0.3442	101	101	4
429.320	1.0122	11.34306	-42.07	-141.70	7836 7888	0.3446	101	100	4
429.820	0.9908	11.31669	31.90	107.32	7839 7725	0.3450	101	100	4
430.320	1.0008	11.29040	-2.67	-8.96	7803 7766	0.3454	101	101	4
430.820	0.9753	11.26421	86.75	291.17	7965 7726	0.3458	106	105	4
431.320	0.9938	11.23811	21.74	72.88	7882 7790	0.3462	69	69	4
431.820	1.0381	11.21210	-129.75	-434.45	7675 7923	0.3466	86	86	4
432.320	0.9959	11.18618	14.37	48.05	7882 7807	0.3470	77	76	4
432.820	1.0242	11.16035	-82.87	-276.85	7655 7797	0.3474	89	88	4
433.320	1.0182	11.13461	-62.42	-208.28	7729 7826	0.3478	79	79	4
433.820	0.9933	11.10896	23.34	77.79	7757 7662	0.3482	93	93	4
434.320	0.9598	11.08340	142.24	473.55	7926 7565	0.3486	91	90	4
434.820	1.0103	11.05792	-35.48	-117.98	7659 7694	0.3490	91	91	4
435.320	0.9961	11.03253	13.42	44.58	7563 7491	0.3494	128	127	4
435.820	0.9903	11.00724	33.03	112.23	7767 7648	0.3498	99	99	4
436.320	1.0084	10.98202	-28.95	-95.94	7653 7673	0.3502	94	94	4
436.820	0.9985	10.95690	5.25	17.39	7742 7687	0.3506	67	67	4
437.320	1.0123	10.93186	-42.34	-139.99	7675 7725	0.3510	81	81	4
437.820	0.9761	10.90690	83.94	277.23	7778 7549	0.3514	62	62	4
438.320	1.0030	10.88203	-10.48	-34.58	7671 7651	0.3518	108	107	4
438.820	0.9724	10.85725	97.03	319.73	7778 7520	0.3522	67	67	4
439.320	0.9647	10.83255	124.87	411.00	7757 7441	0.3526	74	74	4
439.820	0.9927	10.80793	25.27	83.08	7709 7610	0.3530	93	93	4
440.320	0.9999	10.78340	0.23	0.75	7785 7741	0.3534	116	115	4
440.820	0.9528	10.75895	167.72	550.15	7771 7363	0.3538	108	108	4
441.320	0.9916	10.73459	29.15	95.51	7697 7591	0.3542	89	88	4
441.820	0.9930	10.71030	24.39	79.82	7698 7602	0.3546	77	76	4
442.320	1.0529	10.68610	-178.77	-584.40	7379 7726	0.3550	106	106	4
442.820	1.0089	10.66199	-30.60	-99.92	7649 7674	0.3554	59	59	4
443.320	1.0125	10.63795	-43.02	-140.31	7551 7604	0.3558	96	95	4
443.820	0.9899	10.61399	35.24	114.81	7726 7606	0.3562	69	69	4
444.320	1.0177	10.59012	-60.77	-197.75	7408 7497	0.3566	103	103	4
444.820	0.9768	10.56632	81.33	264.37	7686 7467	0.3570	91	91	4
445.320	0.9918	10.54261	28.68	93.14	7593 7489	0.3574	74	74	4
445.820	1.0109	10.51898	-37.50	-121.62	7583 7624	0.3578	81	81	4
446.320	1.0101	10.49542	-34.98	-113.34	7447 7481	0.3582	93	93	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST BKGS OPEN SAMPLE	NO. PTS AVE,
446.820	1.0264	10.47194	-90.59	-293.15	7432 7587	0.3586	79 79	4
447.320	1.0058	10.44855	-20.15	-65.14	7509 7511	0.3590	101 101	4
447.820	0.9748	10.42523	88.69	286.35	7666 7432	0.3595	91 91	4
448.320	0.9789	10.40199	74.12	239.04	7531 7332	0.3599	89 89	4
448.820	0.9958	10.37882	14.69	47.33	7527 7454	0.3603	96 96	4
449.320	0.9979	10.35574	7.42	23.86	7616 7558	0.3607	79 79	4
449.820	0.9977	10.33273	7.96	25.58	7663 7604	0.3611	76 76	4
450.320	0.9759	10.30980	84.77	272.19	7531 7309	0.3615	103 103	4
450.820	0.9799	10.28694	70.57	226.33	7485 7295	0.3619	57 57	4
451.320	1.0094	10.26416	-32.52	-104.19	7482 7511	0.3623	67 67	4
451.820	0.9926	10.24145	25.90	82.87	7400 7305	0.3627	84 84	4
452.320	0.9945	10.21883	19.25	61.54	7425 7343	0.3631	96 96	4
452.820	1.0043	10.19627	-15.01	-47.93	7234 7226	0.3635	45 44	4
453.320	0.9826	10.17379	61.09	194.84	7476 7305	0.3639	79 79	4
453.820	0.9852	10.15138	51.75	164.88	7431 7281	0.3643	91 91	4
454.320	0.9792	10.12905	72.97	232.25	7336 7144	0.3647	67 67	4
454.820	0.9903	10.10679	33.91	107.81	7309 7199	0.3651	109 108	4
455.320	0.9923	10.08461	26.92	85.50	7237 7142	0.3655	106 106	4
455.820	0.9356	10.06250	231.12	733.13	7391 6877	0.3659	74 74	4
456.320	0.9361	10.04046	229.17	726.17	7306 6802	0.3663	81 81	4
456.820	0.8934	10.01849	391.15	1238.07	7325 6508	0.3667	62 62	4
457.320	0.8902	9.99660	403.58	1276.01	7371 6526	0.3671	82 81	4
457.820	0.9004	9.97477	363.89	1149.27	7267 6508	0.3675	101 100	4
458.320	0.9001	9.95302	365.14	1151.97	7253 6493	0.3679	106 105	4
458.820	0.9022	9.93134	357.02	1125.11	7327 6575	0.3683	72 71	4
459.320	0.9051	9.90973	345.90	1088.87	7382 6645	0.3687	103 103	4
459.820	0.9249	9.88819	271.01	852.22	7388 6796	0.3691	91 91	4
460.320	0.9469	9.86672	189.29	594.59	7302 6877	0.3695	111 110	4
460.820	0.9675	9.84532	114.62	359.64	7286 7011	0.3699	86 86	4
461.320	0.9654	9.82399	122.08	382.63	7476 7178	0.3703	57 57	4
461.820	0.9744	9.80273	89.98	281.72	7255 7031	0.3707	123 122	4
462.320	0.9870	9.78154	45.44	142.12	7188 7056	0.3711	96 96	4
462.820	0.9906	9.76042	32.60	101.86	7284 7176	0.3715	89 89	4
463.320	1.0014	9.73936	-4.81	-15.02	7155 7126	0.3719	79 79	4
463.820	0.9772	9.71837	80.19	249.99	7325 7119	0.3723	72 71	4
464.320	0.9792	9.69745	72.79	226.68	7322 7131	0.3727	59 59	4
464.820	0.9900	9.67660	34.96	108.74	7144 7034	0.3731	77 76	4
465.320	0.9880	9.65582	41.92	130.25	7216 7091	0.3735	42 42	4
465.820	0.9980	9.63510	7.08	21.97	7222 7168	0.3739	81 81	4
466.320	1.0016	9.61445	-5.48	-16.99	7135 7107	0.3743	94 94	4
466.820	0.9924	9.59387	26.55	82.23	7163 7070	0.3747	74 74	4
467.320	0.9709	9.57335	102.43	316.92	7244 6995	0.3751	62 62	4
467.820	1.0068	9.55289	-23.40	-72.34	7157 7166	0.3755	91 91	4
468.320	0.9746	9.53251	89.39	275.99	7148 6929	0.3759	81 81	4
468.820	1.0030	9.51218	-10.46	-32.26	7266 7248	0.3763	76 76	4
469.320	1.0209	9.49193	-71.93	-221.59	7080 7189	0.3767	115 115	4
469.820	0.9889	9.47174	38.57	118.70	7061 6945	0.3771	94 93	4
470.320	1.0097	9.45161	-33.63	-103.40	7172 7202	0.3775	74 74	4
470.820	0.9899	9.43154	35.29	108.37	7194 7083	0.3779	96 96	4
471.320	0.9668	9.41154	117.06	359.11	7263 6984	0.3783	106 106	4
471.820	0.9822	9.39161	62.42	191.30	7392 7221	0.3787	86 86	4
472.320	0.9732	9.37173	94.18	288.32	7133 6904	0.3791	70 69	4
472.820	1.0038	9.35192	-13.10	-40.07	7003 6992	0.3795	71 71	4
473.320	0.9880	9.33217	41.83	127.79	7027 6905	0.3799	76 76	4
473.820	0.9905	9.31249	5.37	16.38	7077 7028	0.3803	86 86	4
474.320	1.0001	9.29287	-0.31	-0.93	7163 7124	0.3807	86 86	4
474.820	1.0089	9.27330	-30.83	-93.87	7050 7074	0.3811	111 110	4
475.320	0.9972	9.25301	9.76	29.70	7043 6985	0.3815	108 108	4
475.820	0.9705	9.23437	104.05	316.18	7166 6917	0.3819	74 74	4
476.320	1.0065	9.21499	-22.60	-68.62	7057 7065	0.3823	79 79	4
476.820	0.9871	9.19568	45.20	137.06	7157 7026	0.3827	115 115	4
477.320	1.0035	9.17642	-12.10	-36.65	6970 6956	0.3831	84 84	4
477.820	0.9917	9.15723	29.00	87.77	7027 6931	0.3835	96 96	4
478.320	0.9929	9.13809	24.57	74.26	6982 6895	0.3839	81 81	4
478.820	0.9948	9.11902	18.14	54.77	6944 6871	0.3843	126 125	4
479.320	1.0292	9.10000	-99.74	-300.89	6889 7052	0.3847	45 45	4
479.820	0.9897	9.08105	36.04	108.60	7074 6963	0.3851	101 101	4
480.320	1.0272	9.06215	-93.23	-280.65	6938 7088	0.3855	77 77	4
480.820	0.9911	9.04331	31.08	93.45	7052 6951	0.3859	98 98	4
481.320	1.0082	9.02453	-28.34	-85.13	6960 6975	0.3863	74 74	4
481.820	1.0044	9.00581	-15.11	-45.34	6811 6804	0.3867	116 115	4
482.320	1.0082	8.98715	-28.41	-85.18	6782 6801	0.3871	89 89	4
482.820	0.9767	8.96855	81.72	244.74	6961 6762	0.3875	87 86	4
483.320	1.0100	8.95000	-34.58	-103.45	6861 6892	0.3879	62 62	4
483.820	0.9793	8.93151	72.52	216.73	7104 6920	0.3883	64 64	4
484.320	1.0104	8.91308	-35.94	-107.30	6966 7001	0.3887	59 59	4
484.820	0.9966	8.89470	11.99	35.75	6929 6867	0.3891	69 69	4
485.320	0.9837	8.87639	56.89	169.51	6985 6834	0.3896	79 79	4
485.820	0.9795	8.85812	71.83	213.80	6909 6731	0.3900	79 79	4
486.320	0.9773	8.83992	79.77	237.17	7039 6841	0.3904	59 59	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. OF UCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE,
486.820	1.0126	8.82177	-43.32	-128.66	6872	6921	0.3908	79	79	4
487.320	1.0072	8.80368	-25.00	-74.19	6862	6874	0.3912	69	69	4
487.820	1.0144	8.78564	-49.61	-147.04	6724	6784	0.3916	87	86	4
488.320	1.0016	8.76766	-5.47	-16.20	6863	6837	0.3920	79	79	4
488.820	1.0357	8.74973	-121.65	-359.84	6708	6906	0.3924	54	54	4
489.320	1.0017	8.73186	-5.82	-17.21	6814	6788	0.3928	89	89	4
489.820	1.0212	8.71404	-72.90	-215.21	6691	6796	0.3932	69	69	4
490.320	1.0037	8.69628	-12.91	-38.06	6734	6722	0.3936	74	74	4
490.820	0.9925	8.67857	26.16	77.07	6803	6715	0.3940	72	72	4
491.320	0.9941	8.66091	20.58	60.57	6773	6697	0.3944	79	78	4
491.820	1.0211	8.64331	-72.38	-212.80	6738	6843	0.3948	84	84	4
492.320	1.0159	8.62576	-54.71	-160.70	6733	6803	0.3952	86	86	4
492.820	1.0201	8.60827	-69.01	-202.47	6728	6825	0.3956	86	86	4
493.320	1.0092	8.59083	-31.82	-93.28	6660	6685	0.3960	96	96	4
493.820	0.9687	8.57344	110.49	323.51	6767	6515	0.3964	101	101	4
494.320	1.0026	8.55611	-8.96	-26.21	6587	6568	0.3968	62	62	4
494.820	0.9476	8.53882	186.79	545.82	6920	6522	0.3972	74	74	4
495.320	1.0220	8.52159	-75.61	-220.71	6732	6843	0.3976	72	72	4
495.820	1.0106	8.50442	-36.45	-106.29	6700	6734	0.3980	62	62	4
496.320	1.0059	8.48729	-20.58	-59.95	6712	6715	0.3984	87	86	4
496.820	0.9788	8.47021	74.38	216.48	6709	6531	0.3988	108	108	4
497.320	1.0236	8.45319	-80.89	-239.07	6690	6811	0.3992	79	79	4
497.820	1.0132	8.43622	-46.54	-132.28	6657	6700	0.3996	86	86	4
498.320	0.9688	8.41930	110.11	319.50	6736	6490	0.4000	106	106	4
498.820	1.0049	8.40243	-16.88	-48.94	6576	6573	0.4004	52	52	4
499.320	1.0123	8.38561	-42.35	-122.64	6662	6707	0.4008	59	59	4
499.820	0.9883	8.36884	40.93	118.41	6628	6514	0.4012	79	79	4
500.320	0.9803	8.35212	69.07	199.60	6725	6556	0.4016	77	77	4
500.820	0.9754	8.33545	86.55	249.88	6674	6474	0.4020	79	78	4
501.320	1.0070	8.31883	-24.11	-69.55	6542	6551	0.4024	84	84	4
501.820	0.9485	8.30227	183.63	529.11	6726	6344	0.4028	72	72	4
502.320	0.9829	8.28575	59.92	172.48	6683	6533	0.4032	45	44	4
502.820	1.0161	8.26928	-55.28	-158.97	6617	6687	0.4036	79	79	4
503.320	1.0057	8.25285	-19.64	-56.42	6495	6497	0.4040	79	79	4
503.820	0.9909	8.23648	31.66	90.85	6471	6377	0.4044	94	93	4
504.320	1.0174	8.22016	-59.93	-171.83	6484	6561	0.4048	94	93	4
504.820	0.9663	8.20388	119.02	340.91	6525	6271	0.4052	91	91	4
505.320	0.9884	8.18766	40.57	116.08	6681	6568	0.4056	67	67	4
505.820	1.0388	8.17148	-132.09	-377.60	6376	6587	0.4060	91	91	4
506.320	0.9841	8.15535	55.51	158.53	6564	6425	0.4064	72	71	4
506.820	1.0070	8.13926	-24.34	-69.45	6477	6487	0.4068	82	81	4
507.320	1.0170	8.12323	-58.59	-166.98	6495	6565	0.4072	82	81	4
507.820	1.0019	8.10724	-6.52	-18.57	6461	6438	0.4076	71	71	4
508.320	0.9898	8.09130	35.67	101.47	6542	6440	0.4080	40	40	4
508.820	0.9751	8.07540	87.59	248.91	6583	6384	0.4084	84	84	4
509.320	1.0139	8.05956	-47.86	-135.86	6465	6515	0.4088	67	67	4
509.820	0.9850	8.04375	52.52	148.96	6534	6401	0.4092	91	91	4
510.320	0.9842	8.02800	55.17	156.31	6568	6425	0.4096	96	96	4
510.820	0.9943	8.01229	19.86	56.23	6486	6414	0.4100	71	71	4
511.320	1.0124	7.99663	-42.78	-120.98	6365	6405	0.4104	81	81	4
511.820	0.9968	7.98101	11.15	31.49	6495	6439	0.4108	79	79	4
512.320	0.9879	7.96544	42.40	119.67	6413	6300	0.4112	69	69	4
512.820	0.9685	7.94992	111.02	313.04	6555	6314	0.4116	52	52	4
513.320	0.9915	7.93444	29.70	83.65	6420	6331	0.4120	94	93	4
513.820	0.9859	7.91900	49.39	138.97	6403	6278	0.4124	106	106	4
514.320	0.9821	7.90361	62.54	175.81	6416	6267	0.4128	104	103	4
514.820	0.9798	7.88827	70.88	199.08	6386	6222	0.4132	60	60	4
515.320	1.0229	7.87297	-78.45	-220.13	6264	6372	0.4136	123	123	4
515.820	0.9959	7.85771	14.18	39.75	6319	6256	0.4140	89	89	4
516.320	0.9968	7.84250	10.97	30.72	6226	6172	0.4144	86	86	4
516.820	0.9931	7.82734	24.11	67.46	6280	6202	0.4148	64	64	4
517.320	0.9576	7.81221	150.19	419.77	6570	6256	0.4152	79	79	4
517.820	0.9562	7.79713	155.29	433.61	6322	6012	0.4156	101	101	4
518.320	1.0033	7.78210	-11.47	-31.99	6283	6264	0.4160	77	76	4
518.820	0.9992	7.76710	2.93	8.15	6273	6233	0.4164	55	55	4
519.320	1.0049	7.75216	-17.08	-47.56	6294	6290	0.4168	69	69	4
519.820	1.0229	7.73725	-78.42	-218.14	6244	6351	0.4172	96	96	4
520.320	0.9850	7.72239	52.55	146.02	6253	6125	0.4176	62	62	4
520.820	0.9712	7.70757	101.23	281.04	6368	6151	0.4180	69	69	4
521.320	0.9894	7.69279	37.07	102.81	6233	6133	0.4184	74	74	4
521.820	0.9913	7.67805	30.37	84.14	6239	6150	0.4188	76	76	4
522.320	0.9932	7.66336	23.59	65.32	6303	6226	0.4192	62	61	4
522.820	1.0141	7.64871	-48.64	-134.52	6143	6196	0.4196	72	71	4
523.320	0.9909	7.63410	31.67	87.51	6209	6115	0.4201	74	74	4
523.820	1.0029	7.61953	-9.92	-27.39	6100	6084	0.4205	99	98	4
524.320	0.9910	7.60501	31.42	86.66	6203	6114	0.4209	72	72	4
524.820	0.9898	7.59052	35.47	97.73	6223	6127	0.4213	54	54	4
525.320	1.0100	7.57608	-34.41	-94.70	6191	6215	0.4217	87	86	4
525.820	0.9817	7.56168	64.16	176.42	6178	6031	0.4221	64	64	4
526.320	0.9979	7.54732	7.14	19.62	6125	6075	0.4225	45	44	4

C.8 High Energy — Medium Sample (4/1/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC FOOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE.	
291.427	0.9600	24.61693	40.49	200.91	16753	15903	0.2341	344	340	6
292.070	0.9876	24.50861	12.42	61.50	10297	10054	0.2346	209	207	4
292.570	0.9628	24.42491	37.61	185.89	10444	9943	0.2350	217	214	4
293.070	0.9685	24.34164	31.73	156.56	10298	9862	0.2354	253	250	4
293.570	0.9878	24.25879	12.24	60.26	10372	10130	0.2358	180	178	4
294.070	0.9932	24.17637	6.76	33.25	10282	10098	0.2362	192	190	4
294.570	0.9757	24.09437	24.44	119.94	10413	10045	0.2366	175	173	4
295.070	0.9666	24.01278	33.71	165.16	10294	9838	0.2370	209	207	4
295.570	0.9863	23.93161	13.72	67.11	10285	10030	0.2374	251	248	4
296.070	0.9944	23.85084	5.61	27.40	10206	10034	0.2378	175	173	4
296.570	0.9735	23.77049	26.69	130.13	10222	9839	0.2382	246	243	4
297.070	0.9898	23.69054	10.22	49.75	10080	9864	0.2386	178	176	4
297.570	1.0095	23.61099	-9.34	45.40	9993	9975	0.2390	241	239	4
298.070	0.9940	23.53185	6.02	29.22	10069	9896	0.2394	276	273	4
298.570	0.9820	23.45310	17.99	87.14	10179	9884	0.2399	222	219	4
299.070	0.9876	23.37474	12.40	59.95	10190	9951	0.2403	241	238	4
299.570	0.9642	23.29678	36.24	174.94	10240	9762	0.2407	203	200	4
300.070	1.0059	23.21921	-5.81	27.99	10003	9948	0.2411	203	200	4
300.570	0.9676	23.14202	32.71	157.35	10310	9863	0.2415	222	219	4
301.070	0.9730	23.06522	27.22	130.72	10266	9876	0.2419	174	172	4
301.570	0.9742	22.98880	25.96	124.46	10148	9775	0.2423	191	188	4
302.070	0.9674	22.91276	32.94	157.66	10318	9868	0.2427	208	205	4
302.570	0.9908	22.83709	9.22	44.07	9993	9788	0.2431	212	209	4
303.070	0.9946	22.76180	5.36	25.55	10025	9858	0.2435	183	181	4
303.570	0.9718	22.68688	28.44	135.48	10108	9711	0.2439	205	203	4
304.070	0.9749	22.61233	25.24	120.04	10165	9795	0.2443	164	162	4
304.570	0.9805	22.53815	19.52	92.67	10101	9787	0.2447	195	193	4
305.070	0.9784	22.46433	21.66	102.66	10044	9707	0.2451	259	256	4
305.570	0.9844	22.39088	15.62	73.90	10218	9930	0.2455	179	176	4
306.070	0.9821	22.31778	17.96	84.83	10118	9800	0.2459	235	232	4
306.570	0.9869	22.24504	13.10	61.78	9959	9689	0.2463	201	199	4
307.070	0.9936	22.17266	6.40	30.15	9903	9701	0.2467	215	213	4
307.570	0.9789	22.10063	21.14	99.40	10113	9764	0.2471	171	169	4
308.070	1.0010	22.02895	-0.98	4.58	9821	9703	0.2475	213	210	4
308.570	0.9897	21.95761	10.32	48.35	10026	9799	0.2479	189	186	4
309.070	0.9909	21.88663	9.09	42.55	9981	9771	0.2483	145	143	4
309.570	0.9849	21.81598	15.11	70.56	10036	9769	0.2487	157	155	4
310.070	0.9901	21.74568	9.90	46.17	10128	9912	0.2491	171	169	4
310.570	0.9729	21.67572	27.27	126.98	9875	9499	0.2495	174	172	4
311.070	0.9960	21.60610	3.99	18.54	9780	9631	0.2499	191	189	4
311.570	0.9768	21.53681	23.27	108.00	9790	9456	0.2503	221	218	4
312.070	0.9668	21.46785	33.48	155.13	9982	9542	0.2507	223	220	4
312.570	0.9641	21.39922	36.26	167.74	9837	9378	0.2511	199	196	4
313.070	0.9800	21.33092	20.09	92.80	9881	9574	0.2515	206	204	4
313.570	0.9802	21.26295	19.90	91.77	9569	9274	0.2519	221	219	4
314.070	0.9702	21.19530	30.02	138.21	9989	9583	0.2523	169	167	4
314.570	0.9800	21.12798	20.04	92.14	9753	9451	0.2527	216	213	4
315.070	0.9892	21.06097	10.80	49.55	9695	9482	0.2531	148	146	4
315.570	0.9751	20.99429	25.01	114.61	9756	9407	0.2535	197	194	4
316.070	0.9510	20.92792	49.89	228.22	9956	9362	0.2539	194	192	4
316.570	0.9796	20.86186	20.46	93.43	9671	9368	0.2543	180	187	4
317.070	0.9849	20.79612	15.07	68.71	9881	9623	0.2547	145	144	4
317.570	0.9685	20.73068	31.83	144.93	9749	9336	0.2551	214	212	4
318.070	0.9781	20.66556	22.01	100.04	9880	9556	0.2555	143	141	4
318.570	1.0131	20.60074	-12.96	58.83	9605	9623	0.2559	199	197	4
319.070	0.9938	20.53622	6.17	27.95	9746	9577	0.2563	170	168	4
319.570	0.9579	20.47201	42.67	193.07	9852	9332	0.2567	160	158	4
320.070	0.9649	20.40810	35.45	160.15	9918	9463	0.2571	167	165	4
320.570	1.0023	20.34449	-2.28	10.28	9669	9582	0.2575	204	202	4
321.070	0.9551	20.28117	45.57	205.21	9900	9350	0.2579	148	146	4
321.570	0.9875	20.21815	12.53	56.35	9719	9490	0.2583	207	204	4
322.070	0.9657	20.15543	34.64	155.92	9762	9322	0.2587	200	197	4
322.570	0.9763	20.09299	23.81	106.74	9776	9438	0.2591	189	187	4
323.070	0.9921	20.03085	7.84	35.08	9635	9452	0.2595	160	158	4
323.570	1.0034	19.96899	-3.38	15.10	9497	9423	0.2599	180	178	4
324.070	1.0051	19.90742	-5.03	22.45	9578	9519	0.2603	190	188	4
324.570	0.9732	19.84613	26.99	120.24	9769	9401	0.2607	165	163	4
325.070	0.9680	19.78512	32.25	143.45	9680	9266	0.2611	199	197	4
325.570	0.9769	19.72440	23.21	103.08	9764	9432	0.2615	165	163	4
326.070	0.9891	19.66395	10.84	48.07	9629	9418	0.2619	161	159	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN	COUNTS SAMPLE	FRAC. OF OCT.	FAST OPEN	BKGS SAMPLE	NO. PTS AVE.
326.570	0.9580	19.60379	42.63	188.77	9641	9132	0.2623	192	190	4
327.070	0.9886	19.54390	11.41	50.43	9575	9359	0.2627	167	165	4
327.570	0.9773	19.48428	22.79	100.62	9474	9156	0.2631	158	156	4
328.070	0.9696	19.42493	30.64	135.03	9683	9283	0.2635	156	154	4
328.570	0.9720	19.36586	28.24	124.28	9596	9223	0.2640	141	139	4
329.070	0.9488	19.30705	52.19	229.31	9574	8982	0.2644	159	157	4
329.570	0.9686	19.24851	31.72	139.17	9586	9181	0.2648	100	99	4
330.070	0.9515	19.19024	49.35	216.18	9472	8912	0.2652	134	132	4
330.570	0.9489	19.13223	52.10	227.90	9656	9056	0.2656	156	154	4
331.070	0.9236	19.07449	78.96	344.86	9573	8742	0.2660	144	142	4
331.570	0.9376	19.01700	64.01	279.13	9450	8761	0.2664	156	154	4
332.070	0.8925	18.95978	112.98	491.95	9649	8515	0.2668	200	198	4
332.570	0.8735	18.90281	134.26	583.73	9523	8225	0.2672	144	142	4
333.070	0.8205	18.84610	196.40	852.62	9347	7584	0.2676	122	121	4
333.570	0.6836	18.78965	377.75	1637.45	9537	6446	0.2680	144	142	4
334.070	0.5698	18.73344	558.50	2417.31	9492	5348	0.2684	136	135	4
334.570	0.3925	18.67749	928.67	4013.47	9430	3660	0.2688	168	166	4
335.070	0.2928	18.62179	1219.59	5262.89	9559	2767	0.2692	127	125	4
335.570	0.2497	18.56634	1377.65	5536.09	9301	2296	0.2696	169	167	4
336.070	0.2837	18.51114	1250.95	5382.16	9516	2669	0.2700	175	173	4
336.570	0.4165	18.45610	869.77	3736.57	9376	3861	0.2704	137	135	4
337.070	0.5773	18.40146	545.54	2340.21	9569	5462	0.2708	117	115	4
337.570	0.7484	18.34699	287.74	1232.50	9246	6842	0.2712	188	186	4
338.070	0.8241	18.29276	192.08	821.53	9418	7674	0.2716	137	135	4
338.570	0.8724	18.23877	135.58	579.03	9358	8072	0.2720	157	155	4
339.070	0.8989	18.18502	105.82	451.27	9418	8371	0.2724	165	163	4
339.570	0.9485	18.13151	52.53	223.68	9550	8955	0.2728	134	132	4
340.070	0.9470	18.07823	54.04	229.78	9515	8905	0.2732	139	137	4
340.570	0.9780	18.02519	22.14	93.99	9316	9007	0.2736	115	113	4
341.070	0.9802	17.97238	19.88	84.28	9314	9026	0.2740	154	152	4
341.570	0.9572	17.91980	43.40	183.72	9505	8993	0.2744	102	101	4
342.070	0.9766	17.86745	23.46	99.17	9419	9091	0.2748	132	130	4
342.570	0.9616	17.81533	38.84	163.94	9418	8946	0.2752	151	149	4
343.070	0.9888	17.76344	11.14	46.95	9433	9208	0.2756	195	193	4
343.570	0.9726	17.71177	27.62	116.25	9393	9008	0.2760	129	128	4
344.070	0.9699	17.66033	30.39	127.70	9394	8983	0.2764	144	142	4
344.570	1.0054	17.60912	-5.38	-22.59	9318	9240	0.2768	134	133	4
345.070	0.9853	17.55813	14.67	61.49	9355	9093	0.2772	161	159	4
345.570	0.9699	17.50735	30.31	126.82	9333	8932	0.2776	144	142	4
346.070	0.9881	17.45680	11.85	49.51	9357	9125	0.2780	146	144	4
346.570	0.9899	17.40647	10.08	42.04	9364	9152	0.2784	156	154	4
347.070	0.9754	17.35635	24.71	102.95	9378	9035	0.2788	108	106	4
347.570	0.9888	17.30645	11.17	46.46	9412	9195	0.2792	137	135	4
348.070	0.9761	17.25676	23.99	99.67	9316	8987	0.2796	119	118	4
348.570	0.9761	17.20729	24.07	99.84	9202	8878	0.2800	118	116	4
349.070	0.9704	17.15803	29.89	123.79	9399	9016	0.2804	100	99	4
349.570	0.9755	17.10898	24.66	101.99	9192	8865	0.2808	130	128	4
350.070	0.9791	17.06015	20.94	86.49	9266	8970	0.2812	115	113	4
350.570	0.9848	17.01152	15.23	62.83	9336	9090	0.2816	158	157	4
351.070	1.0074	16.96310	-7.29	-30.02	9137	9100	0.2820	125	123	4
351.570	1.0129	16.91488	-12.75	-52.43	9082	9096	0.2824	132	131	4
352.070	1.0248	16.86687	-24.36	-100.04	9034	9154	0.2828	144	142	4
352.570	0.9992	16.81906	0.80	3.27	9054	8945	0.2832	151	149	4
353.070	0.9549	16.77146	45.87	187.83	9343	8821	0.2836	115	114	4
353.570	0.9903	16.72406	9.65	39.47	9139	8948	0.2840	139	137	4
354.070	0.9937	16.67686	6.26	25.58	9126	8966	0.2844	112	111	4
354.570	0.9864	16.62986	13.61	55.51	9135	8905	0.2848	173	171	4
355.070	0.9931	16.58306	6.86	27.93	9143	8978	0.2852	100	99	4
355.570	0.9904	16.53645	9.60	39.05	9178	8987	0.2856	130	128	4
356.070	0.9727	16.49004	27.51	111.71	9206	8854	0.2860	130	128	4
356.570	0.9796	16.44383	20.46	82.98	9176	8887	0.2864	105	104	4
357.070	0.9707	16.39781	29.53	119.60	9270	8897	0.2868	117	116	4
357.570	0.9598	16.35198	40.70	164.60	9198	8725	0.2872	113	112	4
358.070	1.0024	16.30638	-2.39	-9.63	8974	8894	0.2876	93	92	4
358.570	0.9768	16.26090	23.29	93.92	9081	8770	0.2881	124	123	4
359.070	0.9936	16.21565	6.42	25.87	9121	8955	0.2885	95	94	4
359.570	0.9759	16.17058	24.21	97.34	9068	8745	0.2889	113	112	4
360.070	1.0053	16.12570	-5.28	-21.22	9057	9002	0.2893	108	107	4
360.570	0.9927	16.08101	7.25	29.09	9145	8975	0.2897	83	82	4
361.070	0.9967	16.03651	3.29	13.18	8975	8843	0.2901	142	140	4
361.570	0.9799	15.99218	20.17	80.67	9146	8855	0.2905	96	95	4
362.070	0.9886	15.94805	11.34	45.31	8997	8793	0.2909	115	114	4
362.570	0.9674	15.90409	32.89	131.18	9125	8726	0.2913	113	112	4
363.070	0.9827	15.86032	17.34	69.06	9059	8795	0.2917	135	134	4
363.570	0.9827	15.81672	17.36	69.06	8945	8688	0.2921	113	111	4
364.070	1.0008	15.77331	-0.83	-3.31	8939	8842	0.2925	108	106	4
364.570	0.9735	15.73007	26.68	105.83	8998	8657	0.2929	159	157	4
365.070	0.9843	15.68701	15.67	62.06	9100	8852	0.2933	96	95	4
365.570	0.9749	15.64413	25.25	99.89	9151	8816	0.2937	86	85	4
366.070	0.9936	15.60143	6.39	25.24	8996	8832	0.2941	120	119	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE,
366.570	0.9870	15.55889	12.97	51.18	9009 8787	0.2945	83	82	4
367.070	0.9669	15.51654	33.42	131.64	9017 8615	0.2949	93	92	4
367.570	0.9642	15.47435	36.20	142.40	9078 8649	0.2953	135	133	4
368.070	1.0035	15.43234	-3.43	-13.48	8737 8664	0.2957	137	135	4
368.570	0.9985	15.39049	1.49	5.83	8795 8676	0.2961	106	104	4
369.070	0.9684	15.34882	31.90	124.96	9017 8629	0.2965	96	95	4
369.570	0.9970	15.30732	-2.98	11.65	8949 8818	0.2969	74	73	4
370.070	0.9758	15.26598	24.37	95.24	9156 8830	0.2973	91	90	4
370.570	1.0051	15.22482	-5.03	-19.62	8781 8723	0.2977	86	85	4
371.070	0.9973	15.18381	2.71	10.56	8945 8818	0.2981	113	111	4
371.570	0.9733	15.14298	26.89	104.62	8916 8578	0.2985	93	92	4
372.070	0.9758	15.10231	24.29	94.38	8969 8651	0.2989	110	109	4
372.570	0.9947	15.06180	5.25	20.38	8753 8607	0.2993	88	87	4
373.070	0.9555	15.02145	45.23	175.29	8914 8416	0.2997	113	112	4
373.570	0.9638	14.98127	36.66	141.88	8988 8562	0.3001	111	109	4
374.070	0.9839	14.94125	16.10	62.25	8769 8527	0.3005	128	126	4
374.570	0.9676	14.90138	32.72	126.30	8940 8549	0.3009	120	119	4
375.070	0.9819	14.86168	18.17	70.05	8896 8633	0.3013	56	56	4
375.570	0.9747	14.82213	25.47	98.06	8965 8636	0.3017	103	102	4
376.070	0.9761	14.78275	23.99	92.23	8839 8526	0.3021	154	152	4
376.570	0.9714	14.74352	28.81	110.63	8941 8583	0.3025	88	87	4
377.070	0.9914	14.70444	8.54	32.75	8763 8586	0.3029	84	83	4
377.570	0.9551	14.66552	45.62	174.69	8855 8357	0.3033	76	75	4
378.070	0.9656	14.62676	34.73	132.83	8771 8369	0.3037	96	95	4
378.570	0.9880	14.58815	11.96	45.69	8865 8655	0.3041	103	102	4
379.070	0.9851	14.54969	14.93	56.94	8847 8612	0.3045	81	80	4
379.570	1.0083	14.51138	-8.18	-31.17	8598 8564	0.3049	84	83	4
380.070	0.9797	14.47323	20.40	77.62	8787 8505	0.3053	88	87	4
380.570	0.9869	14.43522	13.14	49.94	8712 8493	0.3057	128	126	4
381.070	0.9793	14.39737	20.75	78.73	8782 8494	0.3061	96	95	4
381.570	0.9926	14.35966	7.42	28.12	8620 8448	0.3065	88	87	4
382.070	0.9939	14.32210	6.08	23.03	8771 8605	0.3069	86	85	4
382.570	1.0087	14.28469	-8.57	-32.41	8523 8485	0.3073	108	107	4
383.070	0.9732	14.24742	27.02	101.98	8692 8354	0.3077	103	102	4
383.570	0.9734	14.21030	26.73	100.78	8737 8402	0.3081	140	138	4
384.070	0.9644	14.17333	35.96	135.37	8789 8375	0.3085	89	87	4
384.570	0.9768	14.13650	23.33	87.73	8657 8356	0.3089	91	90	4
385.070	0.9729	14.09981	27.25	102.32	8636 8304	0.3093	93	92	4
385.570	0.9763	14.06326	23.78	89.19	8663 8360	0.3097	76	75	4
386.070	0.9528	14.02686	47.97	179.66	8774 8264	0.3101	125	123	4
386.570	0.9933	13.99060	6.68	24.98	8398 8246	0.3105	111	109	4
387.070	0.9749	13.95448	25.29	94.46	8675 8361	0.3109	130	129	4
387.570	0.9697	13.91849	30.52	113.86	8648 8292	0.3113	89	88	4
388.070	0.9753	13.88265	24.79	92.37	8418 8118	0.3117	91	90	4
388.570	0.9831	13.84695	16.88	62.80	8608 8367	0.3122	96	95	4
389.070	0.9551	13.81138	45.58	169.38	8725 8240	0.3126	74	73	4
389.570	0.9665	13.77595	33.81	125.48	8693 8307	0.3130	79	78	4
390.070	0.9608	13.74066	39.71	147.21	8734 8297	0.3134	108	107	4
390.570	0.9825	13.70550	17.52	64.87	8489 8247	0.3138	79	78	4
391.070	1.0011	13.67047	-1.12	-4.13	8493 8407	0.3142	113	112	4
391.570	0.9930	13.63558	6.93	25.60	8558 8402	0.3146	120	119	4
392.070	0.9763	13.60083	23.84	87.92	8500 8205	0.3150	101	100	4
392.570	0.9680	13.56620	32.32	119.05	8526 8160	0.3154	125	124	4
393.070	0.9889	13.53171	11.03	40.59	8549 8359	0.3158	91	90	4
393.570	0.9920	13.49735	7.98	29.31	8547 8383	0.3162	76	76	4
394.070	0.9983	13.46312	1.73	6.36	8482 8372	0.3166	104	103	4
394.570	0.9933	13.42902	6.64	24.34	8451 8300	0.3170	110	109	4
395.070	0.9729	13.39505	27.33	100.02	8498 8174	0.3174	149	147	4
395.570	0.9718	13.36121	28.38	103.72	8631 8294	0.3178	78	77	4
396.070	0.9906	13.32750	9.42	34.40	8530 8354	0.3182	88	87	4
396.570	0.9904	13.29391	9.58	34.91	8473 8297	0.3186	113	112	4
397.070	0.9554	13.26045	45.36	165.17	8580 8104	0.3190	99	98	4
397.570	0.9780	13.22712	22.08	80.30	8323 8048	0.3194	98	97	4
398.070	1.0132	13.19391	-12.99	-47.18	8412 8427	0.3198	91	90	4
398.570	1.0042	13.16083	-4.14	-15.03	8390 8331	0.3202	79	78	4
399.070	0.9955	13.12787	4.52	16.37	8416 8283	0.3206	79	78	4
399.570	0.9881	13.09504	11.88	42.98	8275 8084	0.3210	106	105	4
400.070	0.9780	13.06233	22.09	79.84	8451 8172	0.3214	84	83	4
400.570	0.9758	13.02974	24.29	87.69	8400 8105	0.3218	86	85	4
401.070	0.9856	12.99727	14.44	52.04	8293 8081	0.3222	86	85	4
401.570	0.9786	12.96493	21.50	77.42	8420 8147	0.3226	59	59	4
402.070	0.9796	12.93270	20.50	73.72	8375 8111	0.3230	77	76	4
402.570	0.9834	12.90059	16.65	59.79	8294 8064	0.3234	101	100	4
403.070	0.9924	12.86861	7.58	27.18	8257 8102	0.3238	86	85	4
403.570	0.9888	12.83674	11.20	40.12	8325 8139	0.3242	91	90	4
404.070	0.9740	12.80499	26.15	93.58	8485 8172	0.3246	59	59	4
404.570	0.9817	12.77336	18.38	65.71	8361 8115	0.3250	84	83	4
405.070	0.9997	12.74185	0.33	1.18	8232 8137	0.3254	91	90	4
405.570	0.9636	12.71045	36.84	131.34	8272 7881	0.3258	103	102	4
406.070	1.0042	12.67917	-4.13	-14.72	8095 8037	0.3262	116	114	4

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN SAMPLE	FRAC, OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE,
406.570	0.9644	12.64800	36.02	128.09	8441 8045	0.3266	89	87	4
407.070	0.9666	12.61695	33.72	119.79	8239 7874	0.3270	101	99	4
407.570	1.0104	12.58601	-10.28	-36.47	8083 8075	0.3274	91	90	4
408.070	1.0023	12.55519	-2.30	-8.14	8213 8135	0.3278	81	80	4
408.570	0.9872	12.52448	12.84	45.43	8200 8003	0.3282	74	73	4
409.070	0.9806	12.49388	19.47	68.84	8132 7885	0.3286	96	95	4
409.570	0.9826	12.46339	17.42	61.51	8228 7993	0.3290	86	85	4
410.070	1.0010	12.43302	-0.96	-3.39	8194 8109	0.3294	106	105	4
410.570	1.0364	12.40275	-35.51	-125.07	7877 8071	0.3298	79	78	4
411.070	0.9751	12.37260	25.08	88.22	8331 8031	0.3302	86	85	4
411.570	0.9754	12.34256	24.73	86.87	8232 7935	0.3306	96	95	4
412.070	0.9964	12.31262	3.62	12.72	8205 8082	0.3310	59	59	4
412.570	0.9903	12.28280	9.73	34.09	8060 7890	0.3314	94	92	4
413.070	0.9980	12.25308	2.03	7.11	8119 8010	0.3318	82	81	4
413.570	0.9897	12.22347	10.32	36.09	8238 8060	0.3322	106	105	4
414.070	0.9806	12.19397	19.45	67.91	8049 7802	0.3326	101	100	4
414.570	1.0087	12.16457	-8.64	-30.12	8040 8015	0.3330	81	80	4
415.070	0.9619	12.13528	38.52	134.20	8174 7765	0.3334	74	73	4
415.570	0.9756	12.10610	24.56	85.45	8094 7800	0.3338	116	114	4
416.070	0.9823	12.07702	17.77	61.75	8111 7867	0.3342	103	102	4
416.570	0.9881	12.04804	11.88	41.23	8036 7837	0.3346	86	85	4
417.070	0.9618	12.01917	38.65	134.00	8065 7650	0.3350	138	136	4
417.570	0.9750	11.99041	25.12	87.00	8155 7835	0.3354	86	85	4
418.070	0.9860	11.96175	14.02	48.49	8180 7937	0.3358	67	66	4
418.570	0.9739	11.93318	26.24	90.65	8077 7737	0.3363	94	93	4
419.070	0.9841	11.90473	15.97	55.09	8078 7821	0.3367	81	80	4
419.570	1.0057	11.87637	-5.67	-19.53	7954 7872	0.3371	91	90	4
420.070	0.9703	11.84811	29.89	102.00	8001 7001	0.3375	01	00	4
420.570	0.9870	11.81996	13.04	44.82	8007 7775	0.3379	91	90	4
421.070	0.9760	11.79190	24.11	82.78	8090 7783	0.3383	128	127	4
421.570	0.9995	11.76395	0.47	1.63	7942 7833	0.3387	125	124	4
422.070	0.9778	11.73609	22.29	76.36	8085 7728	0.3391	82	81	4
422.570	0.9625	11.70834	37.97	129.94	8066 7665	0.3395	84	83	4
423.070	0.9859	11.68068	14.14	48.33	7863 7658	0.3399	113	112	4
423.570	0.9629	11.65312	37.53	128.13	8053 7662	0.3403	103	102	4
424.070	0.9935	11.62566	6.49	22.14	7919 7774	0.3407	98	97	4
424.570	0.9672	11.59829	33.09	112.71	7966 7614	0.3411	98	97	4
425.070	1.0196	11.57102	-19.26	-65.52	7819 7878	0.3415	74	73	4
425.570	0.9594	11.54385	41.14	139.78	8120 7700	0.3419	74	73	4
426.070	0.9737	11.51677	26.51	89.98	8012 7711	0.3423	77	76	4
426.570	0.9828	11.48979	17.20	58.31	7941 7714	0.3427	101	99	4
427.070	0.9679	11.46290	32.44	109.82	7853 7512	0.3431	121	119	4
427.570	0.9823	11.43610	17.73	59.96	7859 7630	0.3435	118	117	4
428.070	0.9659	11.40940	34.42	116.25	8092 7725	0.3439	88	87	4
428.570	0.9923	11.38280	7.63	25.74	7895 7744	0.3443	94	93	4
429.070	0.9917	11.35628	8.23	27.74	7768 7614	0.3447	89	88	4
429.570	1.0003	11.32986	-0.28	-0.95	7868 7778	0.3451	103	102	4
430.070	0.9656	11.30353	14.21	47.77	7794 7603	0.3455	108	107	4
430.570	0.9823	11.27730	17.77	59.07	7050 7619	0.3459	101	100	4
431.070	0.9762	11.25115	23.93	80.28	7887 7607	0.3463	74	73	4
431.570	0.9874	11.22510	12.61	42.25	7752 7561	0.3467	91	90	4
432.070	0.9740	11.19913	26.14	87.48	7832 7534	0.3471	81	80	4
432.570	1.0146	11.17326	-14.40	-48.12	7674 7687	0.3475	84	83	4
433.070	0.9925	11.14747	7.47	24.94	7727 7565	0.3479	89	88	4
433.570	0.9977	11.12177	2.25	7.51	7774 7652	0.3483	67	66	4
434.070	0.9764	11.09617	23.76	79.14	7822 7530	0.3487	83	82	4
434.570	0.9866	11.07065	13.41	44.63	7750 7535	0.3491	115	114	4
435.070	1.0056	11.04522	-5.56	-18.47	7626 7552	0.3495	111	110	4
435.570	0.9802	11.01987	19.87	65.97	7774 7495	0.3499	125	124	4
436.070	0.9894	10.99462	10.58	35.10	7659 7451	0.3503	89	88	4
436.570	1.0033	10.96945	-3.30	-10.93	7648 7540	0.3507	74	73	4
437.070	0.9711	10.94436	29.11	96.31	7852 7492	0.3511	52	51	4
437.570	0.9921	10.91937	7.86	25.98	7635 7445	0.3515	83	82	4
438.070	1.0052	10.89446	-5.18	-17.08	7659 7568	0.3519	74	73	4
438.570	0.9613	10.86963	39.18	129.18	7777 7350	0.3523	103	102	4
439.070	0.9606	10.84489	39.91	131.43	7735 7308	0.3527	64	64	4
439.570	0.9910	10.82023	8.99	29.56	7792 7600	0.3531	84	83	4
440.070	0.9767	10.79566	23.36	76.76	7766 7472	0.3535	116	114	4
440.570	0.9516	10.77117	49.27	161.71	7805 7320	0.3539	108	107	4
441.070	0.9820	10.74676	18.04	59.13	7625 7383	0.3543	101	100	4
441.570	0.9640	10.72244	36.37	119.09	7665 7285	0.3547	89	88	4
442.070	1.0000	10.69819	-0.03	-0.10	7545 7446	0.3551	106	105	4
442.570	1.0072	10.67403	-7.10	-23.21	7563 7515	0.3555	57	56	4
443.070	0.9498	10.64996	51.17	166.98	7656 7180	0.3559	64	64	4
443.570	0.9742	10.62596	26.00	84.75	7600 7311	0.3563	96	95	4
444.070	0.9943	10.60205	5.72	18.62	7472 7338	0.3567	96	95	4
444.570	0.9682	10.57821	32.11	104.42	7609 7278	0.3571	96	95	4
445.070	0.9797	10.55446	20.37	66.17	7598 7354	0.3575	86	85	4
445.570	0.9817	10.53078	18.33	59.50	7623 7394	0.3579	60	59	4
446.070	1.0241	10.50719	-23.63	-76.60	7537 7627	0.3583	91	90	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROCT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO, PTS AVE,
446.570	0.9998	10.48367	0.24	0.77	7446 7358	0.3587	91	90	4
447.070	0.9940	10.46024	5.98	19.36	7470 7339	0.3591	99	98	4
447.570	0.9865	10.43688	13.46	43.49	7596 7407	0.3595	81	80	4
448.070	0.9690	10.41360	31.24	100.81	7584 7265	0.3599	101	100	4
448.570	0.9823	10.39040	17.73	57.16	7539 7321	0.3604	94	93	4
449.070	0.9775	10.36727	22.61	72.79	7574 7318	0.3608	77	76	4
449.570	0.9837	10.34422	16.36	52.62	7649 7437	0.3612	79	78	4
450.070	0.9815	10.32125	18.53	59.52	7625 7398	0.3616	81	80	4
450.570	0.9684	10.29836	31.90	102.37	7557 7234	0.3620	98	97	4
451.070	0.9756	10.27554	24.57	78.78	7323 7063	0.3624	57	57	4
451.570	0.9740	10.25280	26.15	83.72	7457 7180	0.3628	74	73	4
452.070	0.9806	10.23013	19.49	62.33	7428 7200	0.3632	81	80	4
452.570	1.0050	10.20754	-4.91	-15.70	7353 7305	0.3636	69	68	4
453.070	0.9658	10.18502	34.54	110.24	7358 7025	0.3640	69	68	4
453.570	0.9429	10.16258	58.40	186.18	7493 6984	0.3644	84	83	4
454.070	0.9574	10.14021	43.20	137.56	7302 6911	0.3648	101	100	4
454.570	0.9120	10.11791	91.46	290.94	7337 6615	0.3652	87	86	4
455.070	0.9044	10.09569	99.80	317.10	7241 6473	0.3656	104	102	4
455.570	0.8277	10.07354	187.82	596.13	7385 6042	0.3660	69	68	4
456.070	0.7862	10.05147	238.83	757.20	7263 5645	0.3664	84	83	4
456.570	0.7341	10.02947	306.98	972.20	7341 5327	0.3668	74	73	4
457.070	0.6714	10.00753	395.56	1251.35	7350 4878	0.3672	84	83	4
457.570	0.6575	9.98568	416.36	1315.70	7234 4702	0.3676	69	69	4
458.070	0.6424	9.96389	439.44	1387.12	7347 4666	0.3680	111	109	4
458.570	0.6966	9.94217	358.96	1131.85	7290 5020	0.3684	89	87	4
459.070	0.7310	9.92053	311.13	979.96	7348 5310	0.3688	94	93	4
459.570	0.7737	9.89895	254.80	801.67	7411 5668	0.3692	89	88	4
460.070	0.8182	9.87745	199.23	626.15	7321 5922	0.3696	103	102	4
460.570	0.8818	9.85601	124.95	392.27	7321 6382	0.3700	106	104	4
461.070	0.8940	9.83465	111.28	348.96	7444 6579	0.3704	57	56	4
461.570	0.9246	9.81335	77.83	243.80	7327 6697	0.3708	89	88	4
462.070	0.9642	9.79213	36.16	113.14	7128 6794	0.3712	115	114	4
462.570	0.9701	9.77097	30.10	94.10	7329 7030	0.3716	98	97	4
463.070	0.9793	9.74988	20.80	64.94	7164 6935	0.3720	86	85	4
463.570	0.9665	9.72886	33.88	105.67	7268 6944	0.3724	64	64	4
464.070	0.9532	9.70791	47.59	148.28	7322 6900	0.3728	59	59	4
464.570	0.9776	9.68702	22.53	70.11	7229 6987	0.3732	79	78	4
465.070	0.9792	9.66620	20.90	64.97	7159 6930	0.3736	62	61	4
465.570	0.9670	9.64545	33.31	103.44	7271 6951	0.3740	60	59	4
466.070	0.9978	9.62477	2.17	6.72	7099 7004	0.3744	101	100	4
466.570	0.9516	9.60415	49.24	152.59	7224 6797	0.3748	84	83	4
467.070	0.9891	9.58360	10.84	33.55	7154 6996	0.3752	55	54	4
467.570	0.9720	9.56311	28.21	87.24	7256 6973	0.3756	84	83	4
468.070	0.9781	9.54269	21.97	67.88	7119 6885	0.3760	74	73	4
468.570	0.9875	9.52234	12.50	38.57	7167 6997	0.3764	81	80	4
469.070	0.9742	9.50205	25.93	79.92	7237 6971	0.3768	91	90	4
469.570	0.9867	9.48182	13.26	40.83	7039 6867	0.3772	113	112	4
470.070	0.9662	9.46166	34.12	104.96	7138 6819	0.3776	84	83	4
470.570	0.9714	9.44157	28.80	88.50	7167 6883	0.3780	79	78	4
471.070	0.9644	9.42153	36.02	110.55	7209 6874	0.3784	123	122	4
471.570	0.9414	9.40157	59.98	183.90	7332 6824	0.3788	74	73	4
472.070	0.9599	9.38166	40.68	124.60	7236 6867	0.3792	96	95	4
472.570	0.9814	9.36182	18.66	57.09	7200 6986	0.3796	47	47	4
473.070	1.0221	9.34204	-21.67	-66.24	6824 6895	0.3800	81	80	4
473.570	0.9858	9.32232	14.22	43.43	7066 6887	0.3804	81	80	4
474.070	0.9667	9.30267	33.62	102.53	7247 6927	0.3808	79	78	4
474.570	0.9896	9.28308	14.39	43.84	7019 6836	0.3812	116	114	4
475.070	0.9683	9.26355	32.01	97.43	7101 6798	0.3816	111	110	4
475.570	0.9747	9.24408	25.44	77.34	7073 6816	0.3820	69	68	4
476.070	0.9776	9.22467	22.50	68.33	7053 6817	0.3824	89	88	4
476.570	0.9382	9.20533	63.32	192.11	7220 6697	0.3828	96	95	4
477.070	0.9917	9.18604	8.24	24.97	6979 6844	0.3832	111	109	4
477.570	0.9673	9.16682	33.03	100.01	6994 6689	0.3836	77	76	4
478.070	0.9885	9.14765	11.48	34.72	6992 6833	0.3840	86	85	4
478.570	1.0019	9.12855	-1.90	-5.73	6997 6931	0.3844	126	124	4
479.070	0.9968	9.10950	3.22	9.73	6892 6792	0.3849	71	71	4
479.570	0.9713	9.09052	28.93	87.24	7069 6789	0.3853	82	81	4
480.070	0.9782	9.07159	21.89	65.93	6967 6738	0.3857	94	93	4
480.570	0.9749	9.05272	25.24	75.93	6990 6738	0.3861	72	71	4
481.070	0.9728	9.03392	27.41	82.40	7077 6807	0.3865	74	75	4
481.570	1.0045	9.01517	-4.48	-13.45	6796 6749	0.3869	113	112	4
482.070	1.0217	8.99647	-21.29	-63.87	6764 6833	0.3873	98	97	4
482.570	0.9832	8.97784	16.81	50.37	6933 6739	0.3877	101	100	4
483.070	1.0017	8.95927	-1.70	-5.10	6894 6828	0.3881	60	59	4
483.570	0.9664	8.94075	33.95	101.50	7086 6771	0.3885	47	47	4
484.070	1.0039	8.92229	-3.86	-11.52	6997 6945	0.3889	69	68	4
484.570	0.9808	8.90388	19.20	57.29	6935 6726	0.3893	59	59	4
485.070	0.9757	8.88554	24.38	72.67	6922 6678	0.3897	84	83	4
485.570	0.9787	8.86725	21.43	63.81	6896 6673	0.3901	96	95	4
486.070	0.9791	8.84901	20.98	62.40	7007 6783	0.3905	50	49	4

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS		FRAC. OF OCT	FAST BKGS	NO. PTS	
					OPEN	SAMPLE		OPEN	SAMPLE	AVE.
486.570	0.9877	8.83084	12.30	36.57	6951	6788	0.3909	74	73	4
487.070	0.9841	8.81272	15.89	47.18	6865	6680	0.3913	74	73	4
487.570	1.0067	8.79465	-6.61	-19.61	6718	6686	0.3917	94	93	4
488.070	1.0059	8.77664	-5.85	-17.32	6781	6745	0.3921	74	73	4
488.570	0.9507	8.75869	50.24	148.70	6858	6447	0.3925	50	49	4
489.070	0.9592	8.74079	41.33	122.18	6815	6463	0.3929	87	85	4
489.570	1.0028	8.72294	-2.75	-8.12	6643	6586	0.3933	69	68	4
490.070	1.0024	8.70515	-2.43	-7.17	6792	6732	0.3937	67	66	4
490.570	0.9938	8.68742	6.21	18.32	6808	6690	0.3941	89	88	4
491.070	0.9853	8.66973	14.68	43.22	6756	6582	0.3945	50	49	4
491.570	0.9787	8.65211	21.37	62.85	6711	6494	0.3949	116	114	4
492.070	0.9784	8.63453	21.73	63.84	6721	6502	0.3953	74	73	4
492.570	0.9904	8.61701	9.58	28.13	6754	6614	0.3957	64	63	4
493.070	0.9961	8.59954	3.91	11.46	6668	6567	0.3961	113	112	4
493.570	0.9667	8.58213	33.65	98.59	6753	6455	0.3965	104	102	4
494.070	1.0149	8.56477	-14.67	-42.92	6648	6671	0.3969	67	66	4
494.570	0.9767	8.54746	23.37	68.32	6767	6535	0.3973	82	81	4
495.070	1.0086	8.53020	-8.52	-24.88	6797	6779	0.3977	69	69	4
495.570	1.0105	8.51300	-10.35	-30.20	6721	6716	0.3981	62	61	4
496.070	0.9783	8.49585	21.76	63.42	6692	6474	0.3985	84	83	4
496.570	0.9852	8.47875	14.78	43.05	6788	6613	0.3989	99	98	4
497.070	0.9786	8.46170	21.52	62.59	6705	6488	0.3993	79	78	4
497.570	0.9596	8.44470	40.43	116.95	6635	6296	0.3997	89	88	4
498.070	0.9821	8.42775	17.90	51.96	6704	6510	0.4001	99	98	4
498.570	0.9857	8.41086	14.26	41.35	6614	6446	0.4005	74	73	4
499.070	0.9788	8.39401	21.28	61.66	6659	6444	0.4009	52	52	4
499.570	0.9933	8.37722	6.70	19.40	6622	6503	0.4013	84	83	4
500.070	0.9780	8.36047	22.06	63.78	6753	6530	0.4017	77	76	4
500.570	1.0041	8.34378	-4.07	-11.77	6614	6566	0.4021	55	54	4
501.070	0.9645	8.32714	35.91	103.61	6624	6316	0.4025	101	100	4
501.570	1.0107	8.31054	-10.59	-30.54	6621	6616	0.4029	77	76	4
502.070	0.9526	8.29400	48.19	138.78	6755	6361	0.4033	40	39	4
502.570	0.9889	8.27750	11.07	31.85	6561	6414	0.4037	77	76	4
503.070	0.9859	8.26106	14.06	40.42	6620	6453	0.4041	82	81	4
503.570	1.0133	8.24466	-13.16	-37.80	6438	6449	0.4045	87	85	4
504.070	0.9874	8.22831	12.54	35.97	6533	6377	0.4049	89	88	4
504.570	0.9940	8.21201	6.02	17.25	6443	6330	0.4053	106	105	4
505.070	0.9751	8.19576	24.99	71.56	6640	6400	0.4057	64	64	4
505.570	0.9930	8.17956	6.98	19.96	6451	6332	0.4061	84	83	4
506.070	0.9866	8.16341	13.37	38.19	6519	6357	0.4065	76	76	4
506.570	1.0026	8.14730	-2.57	-7.33	6465	6406	0.4069	91	90	4
507.070	0.9856	8.13124	14.45	41.21	6577	6406	0.4073	74	73	4
507.570	1.0031	8.11523	-3.10	-8.82	6454	6397	0.4077	54	54	4
508.070	0.9897	8.09926	10.30	29.31	6521	6377	0.4081	76	75	4
508.570	0.9763	8.08334	23.84	67.79	6559	6327	0.4086	55	54	4
509.070	0.9779	8.06747	22.16	62.93	6496	6276	0.4090	81	80	4
509.570	0.9847	8.05165	15.28	43.36	6508	6331	0.4094	79	78	4
510.070	0.9825	8.03587	17.58	49.84	6625	6429	0.4098	96	95	4
510.570	0.9976	8.02014	2.41	6.83	6436	6341	0.4102	59	59	4
511.070	1.0035	8.00446	-3.48	-9.85	6459	6402	0.4106	91	90	4
511.570	0.9456	7.98882	55.59	157.12	6462	6034	0.4110	79	78	4
512.070	0.9805	7.97322	19.52	55.11	6456	6251	0.4114	76	76	4
512.570	0.9923	7.95767	7.67	21.63	6485	6353	0.4118	54	54	4
513.070	0.9834	7.94217	16.62	46.83	6440	6252	0.4122	84	83	4
513.570	0.9755	7.92672	24.62	69.30	6388	6151	0.4126	108	107	4
514.070	0.9727	7.91130	27.46	77.23	6483	6223	0.4130	104	102	4
514.570	1.0106	7.89594	-10.52	-29.55	6295	6278	0.4134	84	83	4
515.070	0.9856	7.88061	14.43	40.51	6360	6184	0.4138	89	88	4
515.570	1.0211	7.86534	-20.73	-58.12	6245	6290	0.4142	108	107	4
516.070	1.0032	7.85010	-3.21	-9.00	6284	6217	0.4146	74	73	4
516.570	0.9976	7.83491	2.36	6.61	6319	6215	0.4150	84	83	4
517.070	0.9858	7.81977	14.23	39.80	6347	6167	0.4154	65	64	4
517.570	0.9556	7.80467	45.06	125.89	6436	6060	0.4158	104	102	4
518.070	0.9738	7.78961	26.32	73.45	6354	6099	0.4162	77	76	4
518.570	1.0145	7.77459	-14.33	-39.94	6276	6278	0.4166	84	83	4
519.070	0.9999	7.75962	0.08	0.22	6262	6176	0.4170	33	32	4
519.570	0.9894	7.74470	10.57	29.41	6279	6130	0.4174	108	107	4
520.070	0.9759	7.72981	24.26	67.46	6271	6039	0.4178	59	59	4
520.570	0.9964	7.71497	3.63	10.07	6267	6164	0.4182	79	78	4
521.070	0.9686	7.70017	31.70	87.96	6296	6021	0.4186	69	69	4
521.570	0.9548	7.68542	45.89	127.21	6273	5915	0.4190	62	61	4
522.070	0.9655	7.67070	34.82	96.45	6281	5990	0.4194	64	63	4
522.570	0.9605	7.65603	40.04	110.79	6248	5928	0.4198	76	76	4
523.070	1.0056	7.64140	-5.59	-15.46	6175	6135	0.4202	84	83	4
523.570	0.9919	7.62681	8.04	22.22	6133	6011	0.4206	87	86	4
524.070	1.0123	7.61227	-12.15	-33.52	6112	6114	0.4210	81	80	4
524.570	0.9620	7.59776	38.48	106.06	6275	5966	0.4214	50	49	4
525.070	0.9728	7.58330	27.35	75.31	6098	5863	0.4218	99	98	4
525.570	0.9509	7.56888	50.03	137.63	6254	5878	0.4222	45	44	4
526.070	0.9913	7.55450	8.69	23.87	6138	6014	0.4226	54	54	4

C.9 High Energy — Thick Sample (3/7/66)

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC, OF OCT	FAST BKGS OPEN SAMPLE	NO, PTS AVE,
14.940	0.9635	9366.80237	16.19	1567.08	13471 12669	0.0120	7427 7242	2
15.440	0.9539	8769.96704	20.55	1524.43	12169 11330	0.0124	7450 7264	2
15.940	0.9617	8228.40991	16.99	1540.95	12054 11316	0.0128	6733 6565	2
16.440	0.9508	7735.50964	21.96	1531.32	12080 11212	0.0133	6080 5928	2
16.940	0.9303	7285.60712	31.44	2483.60	12173 11055	0.0137	5633 5492	2
17.440	0.9420	6873.84283	25.98	2154.00	12781 11755	0.0141	4581 4467	2
17.940	0.9497	6496.02496	22.47	1510.93	12316 11418	0.0145	4527 4414	2
18.440	0.9457	6148.52191	24.28	1503.89	11625 10733	0.0149	4713 4596	2
18.940	0.9299	5828.17535	31.63	2414.73	12178 11056	0.0153	3827 3732	2
19.440	0.9659	5532.22760	15.07	1121.13	11948 11268	0.0157	4200 4095	2
19.940	0.9601	5258.26233	17.72	1285.15	11988 11237	0.0161	4614 4499	2
20.440	0.9628	5004.15527	16.49	1166.77	13756 12932	0.0165	3092 3015	2
20.940	0.9401	4768.03247	26.85	1553.95	12779 11731	0.0169	3854 3758	2
21.440	0.9529	4548.23602	20.97	1414.49	12612 11735	0.0173	3626 3535	2
21.940	0.9512	4343.29480	21.75	1433.41	13224 12282	0.0177	2841 2770	2
22.440	0.9564	4151.89966	19.39	1249.31	12932 12076	0.0181	2818 2747	2
22.940	0.9380	3972.88257	27.86	1756.01	13924 12752	0.0185	2004 1954	2
23.440	0.9664	3805.19873	14.86	916.73	13373 12619	0.0189	2123 2069	2
23.940	0.9478	3647.91126	23.33	1409.35	13042 12069	0.0193	2614 2549	2
24.440	0.9446	3500.17816	24.78	1465.94	13499 12451	0.0197	2247 2191	2
24.940	0.9426	3361.24106	25.71	1490.49	13864 12760	0.0201	1983 1933	2
25.440	0.9379	3230.41519	27.89	1585.03	13532 12393	0.0205	2200 2145	2
25.940	0.9482	3107.08130	23.14	1290.00	13523 12520	0.0209	1944 1895	2
26.440	0.9474	2990.67801	23.48	1284.19	12851 11889	0.0213	2220 2164	2
26.940	0.9338	2880.69562	29.78	1598.60	13389 12208	0.0217	1738 1695	2
27.440	0.9523	2776.67047	21.24	1119.39	12734 11841	0.0221	1862 1815	2
27.940	0.9531	2678.17993	20.88	1080.44	12333 11478	0.0225	1779 1735	2
28.440	0.9464	2584.83823	23.98	1219.25	11341 10480	0.0229	2189 2134	2
28.940	0.9318	2496.29266	30.70	1534.10	11370 10346	0.0233	1798 1753	2
29.440	0.9280	2412.22015	32.51	1596.68	11114 10071	0.0237	1876 1829	2
29.940	0.9062	2332.32443	42.84	2069.06	11543 10214	0.0241	1498 1461	2
30.440	0.9475	2256.33334	23.47	1114.87	10873 10059	0.0245	1852 1806	2
30.940	0.9327	2183.99649	30.31	1416.41	11747 10698	0.0249	1331 1298	2
31.440	0.9201	2115.08331	36.23	1666.31	12390 11131	0.0253	1036 1010	2
31.940	0.9475	2049.38113	23.45	1061.65	12254 11338	0.0257	1291 1258	2
32.440	0.9150	1986.69351	38.65	1722.94	13289 11872	0.0261	749 730	2
32.940	0.9294	1926.83876	31.84	1397.46	12756 11577	0.0265	1226 1196	2
33.440	0.9480	1869.64876	23.25	1005.26	12989 12023	0.0270	1049 1023	2
33.940	0.9352	1814.96764	29.16	1242.36	14094 12869	0.0274	459 448	2
34.440	0.9416	1762.65079	26.16	1098.19	13429 12348	0.0278	761 742	2
34.940	0.9295	1712.56381	31.80	1316.00	13298 12070	0.0282	897 875	2
35.440	0.9238	1664.58177	34.49	1407.36	13401 12087	0.0286	853 832	2
35.940	0.9341	1618.58836	29.67	1193.84	13838 12621	0.0290	412 401	2
36.440	0.9362	1574.47519	28.66	1137.18	13242 12106	0.0294	981 956	2
36.940	0.9369	1532.14114	28.31	1105.49	13190 12067	0.0298	834 813	2
37.440	0.9242	1491.49184	34.29	1324.19	13667 12334	0.0302	688 671	2
37.940	0.9466	1452.43903	23.86	909.21	13410 12395	0.0306	654 638	2
38.440	0.9314	1414.90018	30.90	1162.29	13386 12175	0.0310	881 859	2
38.940	0.9557	1378.79807	19.70	731.41	13025 12155	0.0314	903 881	2
39.440	0.9333	1344.06027	30.03	1100.90	13116 11953	0.0318	795 775	2
39.940	0.9410	1310.61894	26.45	957.67	13150 12082	0.0322	881 859	2
40.440	0.9184	1278.41031	37.02	1323.79	13159 11801	0.0326	1026 1000	2
40.940	0.9480	1247.37456	23.24	820.71	12863 11906	0.0330	881 859	2
41.440	0.9263	1217.45541	33.32	1162.65	12696 11483	0.0334	997 972	2
41.940	0.9159	1188.59995	38.21	1217.77	12171 10885	0.0338	1210 1180	2
42.440	0.9387	1160.75833	27.52	937.47	12056 11051	0.0342	1085 1058	2
42.940	0.9390	1133.88361	27.37	921.68	11599 10639	0.0346	1330 1297	2
43.440	0.9680	1107.93153	14.14	470.73	11358 10735	0.0350	1126 1098	2
43.940	0.9497	1082.86035	22.47	739.46	11687 10837	0.0354	1096 1069	2
44.440	0.9286	1058.63063	32.21	1047.88	11586 10505	0.0358	1430 1394	2
44.940	0.9455	1035.20514	24.36	783.85	12254 11314	0.0362	1237 1206	2
45.440	0.9438	1012.54868	25.15	800.19	12007 11066	0.0366	1556 1517	2
45.940	0.9312	990.62795	31.02	976.23	12587 11445	0.0370	1284 1252	2
46.440	0.9428	969.41143	25.63	797.95	12285 11309	0.0374	1661 1619	2
46.940	0.9497	948.86928	22.45	691.46	12153 11270	0.0378	1686 1643	2
47.440	0.9358	928.97322	28.88	880.18	12501 11423	0.0382	1510 1472	2
47.940	0.9268	909.69646	33.05	996.72	12393 11216	0.0386	1557 1518	2
48.440	0.9456	891.01352	24.31	725.71	12041 11112	0.0390	1796 1751	2

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. CF OCT	FAST BKGS CPEN SAMPLE	NO. PTS AVE.
48,940	0,9175	872,90028	37,46	1106,69	12261 10984	0,0394	1651 1610	2
49,440	0,9416	855,33380	26,17	765,35	12236 11251	0,0398	1596 1556	2
49,940	0,9327	838,29231	30,30	877,31	12389 11284	0,0403	1570 1531	2
50,440	0,9415	821,75509	26,23	751,80	11917 10956	0,0407	1810 1765	2
50,940	0,9462	805,70244	24,08	683,37	12184 11257	0,0411	1654 1613	2
51,440	0,9245	790,11560	34,16	960,21	12281 11086	0,0415	1531 1493	2
51,940	0,9639	774,97674	15,99	445,14	11915 11215	0,0419	1621 1580	2
52,440	0,9480	760,26884	23,25	640,96	12010 11117	0,0423	1562 1522	2
52,940	0,9211	745,97570	35,75	976,37	12378 11133	0,0427	1470 1434	2
53,440	0,8964	732,08189	47,58	1287,46	12214 10690	0,0431	1559 1520	2
53,940	0,9382	718,57263	27,76	744,15	11766 10772	0,0435	1669 1627	2
54,440	0,9089	705,43390	41,57	1104,00	12174 10804	0,0439	1493 1456	2
54,940	0,9063	692,65224	42,77	1125,73	12062 10675	0,0443	1484 1447	2
55,440	0,9132	680,21486	39,52	1030,76	12210 10887	0,0447	1369 1335	2
55,940	0,9316	668,10947	30,84	797,11	12108 11014	0,0451	1355 1321	2
56,440	0,9405	656,32439	26,67	683,25	12147 11156	0,0455	1317 1284	2
56,940	0,9143	644,84840	38,96	989,39	12289 10972	0,0459	1253 1221	2
57,440	0,9290	633,67080	32,04	806,51	12166 11036	0,0463	1265 1233	2
57,940	0,9399	622,78131	26,94	672,42	12028 11040	0,0467	1191 1161	2
58,440	0,9430	612,17014	25,55	632,19	11955 11008	0,0471	1117 1089	2
58,940	0,9411	601,82787	26,41	647,98	11836 10876	0,0475	1216 1186	2
59,440	0,9614	591,74549	17,12	416,39	11415 10717	0,0479	1320 1287	2
59,940	0,9379	581,91437	27,88	672,65	11687 10703	0,0483	1080 1053	2
60,440	0,9552	572,32623	19,93	476,88	11430 10661	0,0487	1161 1132	2
60,940	0,9420	562,97311	26,00	616,90	11883 10930	0,0491	966 942	2
61,440	0,9500	553,84743	22,33	525,46	11630 10786	0,0495	994 969	2
61,940	0,9362	544,94184	28,66	669,13	11976 10946	0,0499	889 866	2
62,440	0,9444	536,24934	29,58	683,89	11767 10774	0,0503	870 848	2
62,940	0,9373	527,76317	28,17	647,07	11771 10773	0,0507	748 729	2
63,440	0,9643	519,47686	15,80	360,19	11535 10861	0,0511	798 778	2
63,940	0,9498	511,38419	22,39	506,30	11482 10646	0,0515	870 849	2
64,440	0,9306	503,47916	31,29	702,11	11745 10673	0,0519	740 721	2
64,940	0,9378	495,75601	27,92	621,75	11483 10516	0,0523	801 781	2
65,440	0,9410	488,20922	26,45	584,41	11655 10709	0,0527	703 685	2
65,940	0,9334	480,83345	29,97	657,29	11403 10393	0,0531	679 662	2
66,440	0,8925	473,62357	49,48	1076,93	11619 10126	0,0536	671 655	2
66,940	0,8910	466,57469	50,21	1084,51	11362 9885	0,0540	689 672	2
67,440	0,9008	459,68193	45,45	974,38	11383 10012	0,0544	598 583	2
67,940	0,9464	452,94083	23,95	509,72	11154 10308	0,0548	618 603	2
68,440	0,9422	446,34693	25,88	546,82	11305 10402	0,0552	525 512	2
68,940	0,9460	439,89598	24,15	506,50	10998 10195	0,0556	617 602	2
69,440	0,9415	433,58389	26,22	546,01	10904 10025	0,0560	632 616	2
69,940	0,9207	427,40667	35,95	743,29	11012 9900	0,0564	577 562	2
70,440	0,9102	421,36054	40,92	839,96	11198 9953	0,0568	469 457	2
70,940	0,9263	415,44180	33,31	678,92	10962 9915	0,0572	525 512	2
71,440	0,9052	409,64689	43,31	876,57	11019 9740	0,0576	501 489	2
71,940	0,9486	403,97239	22,96	461,46	10686 9888	0,0580	405 395	2
72,440	0,9610	398,41490	17,32	345,76	10831 10163	0,0584	301 294	2
72,940	0,9521	392,97140	21,05	423,21	10566 9821	0,0588	453 441	2
73,440	0,9582	387,63878	18,58	365,73	10414 9744	0,0592	527 514	2
73,940	0,9548	382,41389	20,13	393,75	10144 9497	0,0596	447 436	2
74,440	0,9642	374,77243	15,87	307,19	18923 17816	0,0602	965 941	4
75,440	0,9753	367,35774	10,89	208,74	8794 8375	0,0608	457 446	2
75,940	0,9413	362,53619	26,31	500,98	8268 7596	0,0612	478 466	2
76,440	0,9564	357,80895	19,39	366,77	7552 7053	0,0616	454 443	2
76,940	0,9597	353,17357	17,91	336,51	6473 6066	0,0620	415 405	2
77,440	0,9684	346,30758	13,97	259,91	10178 9625	0,0626	757 738	4
78,440	0,9347	339,79531	29,36	541,13	4293 3918	0,0632	369 360	2
78,940	0,9050	335,50447	43,40	795,04	4203 3714	0,0636	399 389	2
79,440	0,9070	331,29439	42,48	773,18	4580 4056	0,0640	378 368	2
79,940	0,8603	327,16306	65,44	1183,67	5543 4657	0,0644	405 395	2
80,440	0,8402	323,10854	75,72	1361,12	6498 5331	0,0648	353 344	2
80,940	0,8561	319,12891	67,61	1207,78	7412 6196	0,0652	334 326	2
81,440	0,9164	315,22237	37,97	674,09	7956 7115	0,0656	363 354	2
81,940	0,9245	311,38711	34,15	602,55	8801 7945	0,0660	365 356	2
82,440	0,9070	307,62143	42,46	744,79	9216 8162	0,0664	335 327	2
82,940	0,8766	303,92366	57,30	998,99	9573 8194	0,0668	412 402	2
83,440	0,8655	300,29214	62,85	1089,12	9602 8115	0,0673	447 436	2
83,940	0,8750	296,72533	58,08	1000,53	9936 8485	0,0677	409 399	2
84,440	0,8823	293,22169	54,47	932,79	10032 8643	0,0681	389 379	2
84,940	0,8661	289,77975	62,55	1064,70	10138 8573	0,0685	480 468	2
85,440	0,8442	286,39806	73,70	1247,19	10626 8755	0,0689	340 332	2
85,940	0,8878	283,07522	51,79	871,40	10288 8918	0,0693	384 374	2
86,440	0,9218	279,80988	35,44	592,77	10469 9423	0,0697	512 499	2
86,940	0,9488	276,60070	22,85	379,97	10698 9912	0,0701	403 393	2
87,440	0,9672	271,88948	14,53	239,57	21307 20123	0,0707	1022 997	4
88,440	0,9704	267,29762	13,06	213,60	10777 10212	0,0713	479 467	2
88,940	0,9732	264,30069	11,81	191,97	10702 10170	0,0717	485 473	2
89,440	0,9644	261,35389	15,79	255,23	10646 10026	0,0721	515 502	2
89,940	0,9377	258,45610	27,97	449,72	11063 10130	0,0725	459 448	2

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST CPEN	BKGS SAMPLE	NO. PTS AVE.
90.440	0.9364	255.60624	28.60	457.20	10747 9826	0.0729	524	511	2
90.940	0.9000	252.80325	45.83	728.66	10985 9654	0.0733	428	417	2
91.440	0.9325	250.04612	30.39	480.51	10602 9654	0.0737	510	497	2
91.940	0.9318	247.33385	30.71	482.94	10735 9768	0.0741	552	538	2
92.440	0.9413	244.66547	26.30	411.44	10793 9920	0.0745	598	583	2
92.940	0.9316	242.04004	30.82	479.48	11065 10066	0.0749	461	449	2
93.440	0.9486	239.45665	22.97	355.38	10809 10012	0.0753	543	529	2
93.940	0.9485	236.91439	22.99	353.86	10942 10134	0.0757	515	502	2
94.690	0.9597	233.17626	17.91	273.49	21761 20392	0.0763	1069	1042	4
95.440	0.9664	229.52590	14.88	225.41	10821 10211	0.0769	430	419	2
95.940	0.9604	227.13974	17.57	264.84	10747 10079	0.0773	439	428	2
96.440	0.9284	224.79060	32.31	484.45	10701 9702	0.0777	501	489	2
96.940	0.8554	222.47772	67.94	1013.32	11110 9280	0.0781	469	457	2
97.440	0.8460	220.20035	72.74	1079.41	10988 9077	0.0785	458	447	2
97.940	0.8612	217.95777	65.00	959.64	11081 9319	0.0789	431	420	2
98.440	0.9004	215.74928	45.65	670.58	10884 9569	0.0793	464	452	2
98.940	0.9317	213.57418	30.78	449.75	10751 9781	0.0797	517	504	2
99.440	0.9329	211.43181	30.23	439.54	10856 9889	0.0801	504	492	2
99.940	0.9414	209.32151	26.29	380.36	10953 10069	0.0806	441	430	2
100.440	0.9412	207.24265	26.37	379.61	10941 10056	0.0810	398	388	2
100.940	0.9438	205.19461	25.17	360.49	10667 9831	0.0814	546	532	2
101.440	0.9313	203.17678	30.96	441.33	10835 9853	0.0818	435	424	2
101.940	0.9268	201.18857	33.05	468.74	10762 9740	0.0822	458	446	2
102.440	0.9304	199.22939	31.39	443.07	10791 9803	0.0826	451	439	2
102.940	0.9251	197.29870	33.87	475.76	10784 9742	0.0830	458	446	2
103.440	0.8805	195.39594	55.34	773.51	10999 9458	0.0834	400	390	2
103.940	0.8394	193.52057	76.16	1059.52	10766 8824	0.0838	412	401	2
104.440	0.8206	191.67207	86.00	1190.63	10898 8733	0.0842	447	436	2
104.940	0.8864	189.84993	52.46	722.79	10750 9305	0.0846	388	378	2
105.440	0.8931	188.05365	49.20	674.68	10810 9427	0.0850	450	439	2
105.940	0.8987	186.28274	46.47	634.25	10894 9560	0.0854	413	403	2
106.440	0.8690	184.53673	61.10	830.01	10818 9179	0.0858	388	378	2
106.940	0.8419	182.81516	74.87	1012.31	10825 8899	0.0862	472	460	2
107.440	0.8770	181.11756	57.09	768.38	10768 9221	0.0866	376	367	2
107.940	0.9063	179.44350	42.81	573.52	10476 9271	0.0870	435	424	2
108.440	0.9272	177.79254	32.89	438.49	10386 9403	0.0874	528	515	2
108.940	0.9040	176.16426	43.90	582.73	10762 9500	0.0878	407	397	2
109.440	0.8768	174.55825	57.20	755.77	10731 9187	0.0882	414	404	2
109.940	0.8414	172.97410	75.11	987.88	10821 8891	0.0886	374	364	2
110.440	0.7973	171.41142	98.56	1290.38	10786 8397	0.0890	383	374	2
110.940	0.8263	169.86982	82.98	1081.55	10829 8738	0.0894	385	375	2
111.440	0.8777	168.34892	56.76	736.47	10848 9297	0.0898	331	323	2
111.940	0.9148	166.84836	38.72	500.11	10811 9657	0.0902	318	310	2
112.440	0.9596	165.36777	17.92	230.48	10696 10023	0.0906	399	389	2
112.940	0.9400	163.90881	26.94	344.86	10750 9867	0.0910	373	364	2
113.440	0.9414	162.46511	26.27	334.86	10824 9950	0.0914	334	326	2
113.940	0.9650	161.04236	15.49	196.56	10668 10053	0.0918	384	375	2
114.440	0.9725	159.63821	12.13	153.24	10688 10150	0.0922	310	303	2
115.190	0.9666	157.56618	14.78	185.56	12124 20048	0.0928	691	674	4
115.940	0.9627	155.53422	16.53	206.12	10505 9875	0.0934	318	310	2
116.440	0.9077	154.20134	42.14	523.29	10729 9509	0.0939	270	263	2
116.940	0.8978	152.88553	46.89	579.83	10560 9258	0.0943	300	292	2
117.440	0.8784	151.58648	56.41	694.55	10343 8871	0.0947	327	318	2
117.940	0.8765	150.30392	57.35	703.07	10482 8971	0.0951	268	261	2
118.440	0.9151	149.03757	38.61	471.36	10370 9266	0.0955	308	300	2
118.940	0.9171	147.78715	37.62	457.39	10493 9397	0.0959	312	304	2
119.440	0.9365	146.55241	28.52	345.24	10781 9860	0.0963	244	237	2
119.940	0.9591	145.33308	18.15	218.76	10320 9665	0.0967	283	276	2
120.440	0.9728	144.12889	11.98	143.86	10304 9788	0.0971	226	220	2
120.940	0.9594	142.93968	18.01	215.33	10248 9602	0.0975	263	256	2
121.440	0.9563	141.76500	19.43	231.30	10021 9358	0.0979	309	301	2
121.940	0.9315	140.60481	30.86	365.88	10137 9221	0.0983	324	316	2
122.440	0.9485	139.45880	23.01	271.71	9906 9175	0.0987	292	285	2
122.940	0.9520	138.32674	21.38	251.50	9792 9103	0.0991	285	278	2
123.440	0.9696	137.20841	13.43	157.33	9594 9084	0.0995	296	289	2
123.940	0.9634	136.10359	16.22	189.27	9648 9077	0.0999	240	234	2
124.440	0.9595	135.01205	19.82	230.33	9536 8097	0.1003	262	255	2
124.940	0.9626	133.93360	16.56	191.69	9456 8889	0.1007	251	245	2
125.440	0.9362	132.86802	28.66	330.31	9470 8658	0.1011	308	300	2
125.940	0.9527	131.81510	21.10	242.23	9184 8544	0.1015	277	270	2
126.440	0.9526	130.77465	21.14	241.74	9334 8683	0.1019	261	255	2
126.940	0.9626	129.74647	16.58	188.82	9418 8853	0.1023	310	303	2
127.440	0.9518	128.73037	21.50	243.97	9452 8785	0.1027	293	285	2
127.940	0.9530	127.72616	20.94	236.67	9704 9030	0.1031	219	213	2
128.440	0.9518	126.73366	21.47	241.73	9762 9073	0.1035	247	240	2
128.940	0.9206	125.75267	36.01	403.82	9800 8809	0.1039	267	260	2
129.440	0.8738	124.78304	58.66	655.27	10085 8605	0.1043	265	258	2
129.940	0.8225	123.82457	85.02	946.09	10000 8031	0.1047	330	322	2
130.440	0.7820	122.87711	106.94	1185.47	10000 7637	0.1051	247	241	2
130.940	0.7524	121.94048	123.77	1366.74	10159 7463	0.1055	265	259	2

DELAY	TRANS.	ENERGY	X=SEC	X=SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST OPEN	BKGS SAMPLE	NO. PTS AVE,
131.440	0.7728	121.01451	112.11	1233.31	10404 7851	0.1059	226	220	2
131.940	0.7744	120.09906	111.22	1218.91	10404 7867	0.1063	240	234	2
132.440	0.7353	119.19395	133.76	1460.32	10298 7394	0.1067	247	241	2
132.940	0.7429	118.29904	129.26	1405.86	10499 7617	0.1071	289	282	2
133.440	0.8163	117.41416	88.29	956.74	10393 8284	0.1076	240	234	2
133.940	0.8741	116.53918	58.53	631.84	10385 8864	0.1080	265	259	2
134.440	0.8806	115.67395	55.30	594.73	10278 8838	0.1084	292	284	2
134.940	0.8486	114.81831	71.39	764.98	10341 8570	0.1088	264	258	2
135.440	0.8165	113.97213	88.20	941.65	10383 8278	0.1092	277	270	2
135.940	0.8230	113.13527	84.74	901.29	10424 8377	0.1096	259	252	2
136.440	0.8766	112.30760	57.29	607.11	10163 8700	0.1100	267	260	2
136.940	0.8729	111.48897	59.15	624.56	10303 8781	0.1104	285	278	2
137.440	0.8532	110.67927	69.06	726.56	10241 8532	0.1108	280	273	2
137.940	0.8711	109.87835	60.02	629.20	10187 8665	0.1112	237	231	2
138.440	0.8775	109.08609	56.84	593.62	10315 8836	0.1116	278	271	2
138.940	0.9217	108.30237	35.48	369.21	10450 9405	0.1120	251	245	2
139.440	0.9537	107.52707	20.63	213.95	10391 9677	0.1124	293	285	2
140.190	0.9661	106.37963	15.00	154.73	20275 19127	0.1130	598	583	4
141.190	0.9568	104.87807	19.21	196.75	20750 19387	0.1138	579	565	4
142.190	0.9678	103.40807	14.22	144.62	20788 19647	0.1146	568	553	4
143.190	0.9710	101.96877	12.79	129.15	20216 19166	0.1154	642	626	4
144.190	0.9726	100.55931	12.09	121.23	20368 19344	0.1162	597	583	4
145.190	0.9537	99.17887	20.60	205.20	20555 19143	0.1170	568	554	4
146.190	0.9606	97.82666	17.50	173.10	20794 19505	0.1178	369	360	4
147.190	0.9589	96.50192	18.26	179.38	20314 19021	0.1186	594	579	4
148.190	0.9621	95.20391	16.80	163.94	20257 19032	0.1194	613	598	4
149.190	0.9403	93.93190	26.83	250.38	20563 18922	0.1202	630	614	4
150.190	0.9717	92.68523	12.47	120.03	20278 19242	0.1211	600	585	4
151.190	0.9527	91.46321	21.08	201.56	20221 18812	0.1219	662	646	4
152.190	0.9582	90.26519	18.55	176.26	20246 18945	0.1227	726	708	4
153.190	0.9650	89.09057	15.50	146.34	20334 19161	0.1235	671	654	4
154.190	0.9679	87.93872	14.19	133.03	20580 19452	0.1243	654	637	4
155.190	0.9638	86.80907	16.02	149.24	20592 19381	0.1251	677	660	4
155.940	0.9518	85.97605	21.47	199.07	10402 9665	0.1257	352	343	2
156.440	0.9428	85.42735	25.64	237.01	10154 9348	0.1261	344	336	2
156.940	0.9296	84.88389	31.76	292.64	10025 9100	0.1265	390	381	2
157.440	0.8518	84.34559	69.77	640.75	10331 8593	0.1269	323	315	2
157.940	0.7632	83.81240	117.57	1076.33	10276 7656	0.1273	357	348	2
158.440	0.6765	83.28428	170.01	1551.49	10165 6715	0.1277	349	340	2
158.940	0.7116	82.76108	147.98	1346.18	9850 6845	0.1281	419	409	2
159.440	0.8075	82.24282	92.99	843.33	9881 7792	0.1285	436	425	2
159.940	0.8608	81.72941	65.20	589.43	10190 8565	0.1289	407	397	2
160.440	0.9206	81.22080	35.98	324.27	10055 9036	0.1293	410	400	2
160.940	0.9498	80.71692	22.39	201.18	10055 9327	0.1297	437	426	2
161.440	0.9598	80.21771	17.87	160.01	9993 9366	0.1301	455	443	2
162.490	0.9601	78.98977	17.72	157.51	39880 37382	0.1311	1638	1597	8
164.490	0.9776	77.08291	9.85	86.52	39392 37605	0.1327	1905	1858	8
166.490	0.9688	75.24428	13.79	119.61	39311 37190	0.1344	2092	2040	8
168.490	0.9621	73.47065	16.81	144.06	39294 36917	0.1360	2030	1980	8
169.940	0.9492	72.39379	22.70	193.16	9935 9206	0.1370	495	482	2
170.440	0.9589	71.96967	18.24	154.78	9921 9290	0.1374	468	457	2
170.940	0.9362	71.54926	28.69	242.64	10029 9168	0.1378	519	506	2
171.440	0.9029	71.13253	44.44	374.83	9932 8757	0.1382	488	476	2
171.940	0.8937	70.71942	48.86	410.92	9729 8491	0.1386	511	498	2
172.440	0.8454	70.30991	73.04	612.41	9857 8138	0.1390	455	443	2
172.940	0.8460	69.90394	72.76	608.33	9794 8091	0.1394	500	487	2
173.440	0.8916	69.50148	49.92	416.13	9859 8584	0.1398	487	475	2
173.940	0.9422	69.10248	25.90	215.30	9744 8965	0.1402	509	496	2
174.440	0.9440	68.70691	25.06	207.71	9693 8935	0.1406	528	515	2
174.940	0.9601	68.31472	17.72	146.48	9682 9077	0.1410	525	512	2
175.440	0.9595	67.92589	17.97	148.13	9746 9132	0.1414	473	461	2
176.490	0.9760	66.96820	10.57	86.50	38585 36774	0.1424	2066	2014	8
178.490	0.9564	65.47750	19.38	156.79	38784 36223	0.1440	1900	1853	8
180.490	0.9653	64.03602	15.37	122.98	38743 36520	0.1456	1859	1812	8
182.490	0.9589	62.64162	18.26	144.55	38678 36217	0.1472	1777	1732	8
183.940	0.9630	61.79313	16.40	128.91	9624 9050	0.1483	475	464	2
184.440	0.9413	61.45855	26.29	206.13	9809 9017	0.1487	392	382	2
184.940	0.9223	61.12669	35.18	275.07	9892 8905	0.1491	380	370	2
185.440	0.9374	60.79750	28.12	219.26	9607 8794	0.1495	401	391	2
185.940	0.9054	60.47097	43.24	336.28	9747 8618	0.1499	396	386	2
186.440	0.8695	60.14705	60.83	471.74	9608 8158	0.1503	381	371	2
186.940	0.8770	59.82574	57.11	441.73	9523 8155	0.1507	423	412	2
187.440	0.8600	59.50699	65.58	505.92	9712 8157	0.1511	400	390	2
187.940	0.9137	59.19079	39.26	302.03	9581 8548	0.1515	415	405	2
188.440	0.9208	58.87709	35.91	275.58	9836 8844	0.1519	401	391	2
188.940	0.9508	58.56589	21.95	167.95	9652 8961	0.1523	424	413	2
189.440	0.9605	58.25714	17.55	133.93	9622 9024	0.1527	425	414	2
191.490	0.9606	56.89756	17.47	131.81	76482 71745	0.1545	3175	3096	16
195.490	0.9600	54.59531	17.76	131.24	76245 71476	0.1577	3035	2959	16
199.490	0.9622	52.43001	16.75	121.31	75575 71012	0.1610	3015	2940	16

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS OPEN SAMPLE	FRAC. OF OCT	FAST BKGS OPEN SAMPLE	NO. PTS AVE.
203.690	0.9680	50.39102	14.17	100.56	74925 70821	0.1642	3058 2981	16
207.690	0.9634	48.46870	16.22	112.90	74427 70020	0.1674	2684 2617	16
211.690	0.9594	46.65432	18.02	123.06	73721 69069	0.1706	2685 2618	16
215.690	0.9531	44.93995	20.90	140.11	73300 68221	0.1738	2410 2350	16
219.690	0.9585	43.31836	18.44	121.37	73186 68501	0.1771	2300 2242	16
223.690	0.9634	41.78298	16.21	104.77	73008 68686	0.1803	2109 2056	16
227.690	0.9575	40.32781	18.88	119.93	72581 67866	0.1835	2067 2016	16
231.690	0.9693	38.94736	13.57	84.69	71657 67825	0.1867	1990 1940	16
235.690	0.9618	37.63659	16.96	104.04	71418 67074	0.1900	1960 1911	16
239.690	0.9529	36.39089	20.98	126.56	71172 66228	0.1932	1838 1792	16
243.690	0.9590	35.20604	18.19	107.93	70864 66366	0.1964	1747 1704	16
247.690	0.9670	34.07812	14.58	85.12	70030 66132	0.1996	1729 1685	16
251.690	0.9538	33.00355	20.60	118.32	69796 65006	0.2029	1709 1666	16
255.690	0.9352	31.97901	29.15	164.86	69761 63707	0.2061	1546 1507	16
259.690	0.9543	31.00146	20.34	113.26	69057 64355	0.2093	1544 1506	16
263.690	0.9683	30.06805	14.03	76.93	68264 64546	0.2125	1611 1571	16
267.690	0.9637	29.17617	16.08	86.87	67709 63719	0.2158	1486 1449	16
271.690	0.9585	28.32339	18.42	98.02	67594 63271	0.2190	1436 1400	16
275.690	0.9594	27.50746	18.03	94.58	66904 62681	0.2222	1450 1414	16
279.690	0.9605	26.72629	17.54	90.68	66294 62180	0.2254	1429 1393	16
283.690	0.9625	25.97793	16.61	84.68	66124 62153	0.2287	1355 1321	16
287.690	0.9507	25.26056	22.01	110.61	65629 60927	0.2319	1407 1371	16
291.690	0.9628	24.57251	16.50	81.81	64752 60879	0.2351	1393 1358	16
295.690	0.9638	23.91219	16.05	78.48	64155 60380	0.2383	1381 1346	16
299.690	0.9553	23.27813	19.87	95.89	64050 59752	0.2416	1294 1262	16
303.690	0.9557	22.66896	19.73	93.94	63596 59290	0.2448	1262 1230	16
307.690	0.9593	22.08339	18.08	84.95	63266 59000	0.2480	1186 1157	16
311.690	0.9594	21.52023	18.03	83.63	62626 58664	0.2512	1056 1029	16
315.690	0.9555	20.97833	19.79	90.64	61480 57370	0.2544	1094 1067	16
319.690	0.9433	20.45665	25.39	114.85	61635 56780	0.2577	1113 1085	16
323.690	0.9506	19.95419	22.04	98.43	61105 56728	0.2609	1103 1075	16
327.690	0.9410	19.47001	26.47	116.81	60121 55248	0.2641	1047 1021	16
329.690	0.9069	19.20537	42.52	186.34	7646 6772	0.2659	103 100	2
330.440	0.8981	19.14729	46.77	204.67	7574 6642	0.2663	126 123	2
330.940	0.8773	19.08948	56.96	248.88	7606 6516	0.2667	101 99	2
331.440	0.8880	19.03193	51.66	225.35	7366 6388	0.2671	120 117	2
331.940	0.8394	18.97463	76.18	331.84	7422 6084	0.2675	110 107	2
332.440	0.8120	18.91760	90.59	394.02	7442 5901	0.2679	120 117	2
332.940	0.7132	18.86082	147.02	638.47	7494 5220	0.2683	125 122	2
333.440	0.5960	18.80430	225.10	976.13	7484 4356	0.2688	111 108	2
333.940	0.4599	18.74803	337.88	1462.97	7697 3457	0.2692	106 104	2
334.440	0.3048	18.69208	516.82	2234.43	7528 2240	0.2696	101 99	2
334.940	0.1823	18.63625	740.42	3196.35	7465 1329	0.2700	119 116	2
335.440	0.1260	18.58073	901.12	3884.30	7623 937	0.2704	110 107	2
335.940	0.1380	18.52547	861.43	3707.71	7427 1001	0.2708	152 148	2
336.440	0.1916	18.47044	718.88	3089.53	7609 1423	0.2712	129 122	2
336.940	0.3175	18.41567	499.08	2141.72	7439 2306	0.2716	111 109	2
337.440	0.5035	18.36113	298.52	1279.14	7282 3580	0.2720	106 104	2
337.940	0.6216	18.30684	206.84	884.98	7553 4584	0.2724	100 98	2
338.440	0.7519	18.25279	124.02	529.87	7474 5488	0.2728	100 98	2
338.940	0.7993	18.19897	97.47	415.82	7527 5874	0.2732	111 109	2
339.440	0.8714	18.14540	59.88	255.08	7359 6261	0.2736	103 100	2
339.940	0.8851	18.09206	53.08	225.79	7482 6465	0.2740	125 122	2
340.440	0.8765	18.03896	57.36	243.64	7527 6440	0.2744	124 120	2
340.940	0.9063	17.98609	42.79	181.49	7343 6496	0.2748	125 122	2
341.440	0.9064	17.93345	42.74	180.99	7509 6643	0.2752	97 94	2
341.940	0.9354	17.88104	29.03	122.77	7428 6778	0.2756	100 98	2
342.440	0.9484	17.82888	23.04	97.29	7429 6868	0.2760	92 89	2
342.940	0.9375	17.77691	28.06	118.30	7407 6760	0.2764	103 100	2
343.440	0.9612	17.72519	17.23	72.54	7390 6899	0.2768	95 93	2
344.690	0.9627	17.59686	16.55	69.44	29587 27654	0.2778	356 348	8
347.690	0.9571	17.29451	19.08	79.35	58770 54813	0.2802	845 824	16
351.690	0.9605	16.90334	17.53	72.08	58369 54740	0.2835	862 841	16
355.690	0.9559	16.52530	19.62	79.77	57915 54052	0.2867	810 789	16
359.690	0.9579	16.15979	18.72	75.26	57313 53590	0.2899	760 741	16
363.690	0.9690	15.80629	13.72	54.55	56892 53777	0.2931	658 641	16
367.690	0.9528	15.46425	21.05	82.78	56547 52542	0.2964	699 682	16
371.690	0.9584	15.13320	18.50	71.96	55711 52093	0.2996	668 651	16
375.690	0.9640	14.81267	15.95	61.40	55477 52166	0.3028	710 692	16
379.690	0.9684	14.50221	13.99	53.26	54933 51848	0.3060	644 628	16
383.690	0.9630	14.20141	16.38	61.72	54459 51104	0.3093	643 627	16
387.690	0.9568	13.90988	19.23	71.71	54567 50968	0.3125	629 613	16
391.690	0.9597	13.62723	17.91	66.10	53672 50292	0.3157	657 641	16
395.690	0.9588	13.35311	18.31	66.91	53458 50047	0.3189	647 631	16
399.690	0.9654	13.08718	15.31	55.40	52913 49880	0.3222	633 617	16
403.690	0.9637	12.82911	16.10	57.67	52394 49303	0.3254	545 531	16
407.690	0.9636	12.57860	16.12	57.16	51956 48886	0.3286	613 598	16
411.690	0.9505	12.33536	22.10	77.61	51627 47905	0.3318	614 598	16
415.690	0.9559	12.09911	19.61	68.22	51529 47956	0.3350	604 589	16
419.690	0.9613	11.86958	17.15	59.07	50829 47246	0.3383	563 549	16

DELAY	TRANS.	ENERGY	X-SEC	X-SEC ROOT E	COUNTS		FRAC, OF OCT	FAST BKGS		NO, PTS AVE,
					OPEN	SAMPLE		OPEN	SAMPLE	
423.690	0.9670	11.64652	14.59	49.79	50055	47179	0.3415	540	527	16
427.690	0.9525	11.42969	21.19	71.63	49496	45994	0.3447	578	564	16
431.690	0.9601	11.21886	17.73	59.38	49423	46214	0.3479	527	513	16
435.690	0.9520	11.01381	21.39	70.98	49381	45414	0.3512	492	480	16
439.690	0.9549	10.81432	20.09	66.05	48681	44946	0.3544	520	507	16
443.690	0.9584	10.62021	18.49	60.25	47990	44780	0.3576	544	530	16
447.690	0.9427	10.43128	25.65	82.83	47725	43892	0.3608	501	489	16
451.690	0.9362	10.24735	28.66	91.75	47034	42979	0.3641	524	511	16
453.940	0.8928	10.14602	49.34	157.17	5795	5050	0.3659	57	56	2
454.440	0.8197	10.12370	86.50	275.23	5934	4747	0.3663	73	71	2
454.940	0.7793	10.10146	108.45	344.70	5701	4336	0.3667	89	87	2
455.440	0.7055	10.07930	151.75	481.77	5819	4007	0.3671	83	81	2
455.940	0.6184	10.05720	209.05	662.96	5824	3515	0.3675	64	63	2
456.440	0.5040	10.03518	298.08	944.27	5854	2879	0.3679	55	53	2
456.940	0.4523	10.01323	345.14	1092.15	5957	2629	0.3683	42	41	2
457.440	0.3953	9.99135	403.77	1276.28	5759	2222	0.3687	63	62	2
457.940	0.3964	9.96955	402.49	1270.85	5793	2241	0.3691	69	68	2
458.440	0.3862	9.94781	413.87	1305.34	5869	2212	0.3695	86	84	2
458.940	0.4813	9.92615	318.10	1002.20	5807	2728	0.3699	70	69	2
459.440	0.5502	9.90455	259.91	817.98	5791	3110	0.3703	62	60	2
459.940	0.6389	9.88303	194.88	612.64	5779	3604	0.3707	48	47	2
460.440	0.7167	9.86158	144.89	455.01	5689	3980	0.3711	77	75	2
460.940	0.7846	9.84020	105.54	331.06	5824	4460	0.3715	52	51	2
461.440	0.8131	9.81008	80.08	281.96	5831	4628	0.3719	55	53	2
461.940	0.8861	9.79764	52.58	164.59	5657	4893	0.3723	69	68	2
462.440	0.8870	9.77646	52.15	163.07	5746	4975	0.3727	99	96	2
462.940	0.9172	9.75536	37.59	117.42	5781	5176	0.3731	62	60	2
463.440	0.9202	9.73432	36.20	112.94	5716	5134	0.3739	81	79	2
463.940	0.9123	9.71335	39.94	124.49	5818	5181	0.3739	57	56	2
464.440	0.9283	9.69244	32.36	100.73	5658	5127	0.3743	86	84	2
464.940	0.9394	9.67161	27.17	84.51	5576	5113	0.3747	64	63	2
465.440	0.9312	9.65084	31.01	96.34	5791	5264	0.3751	58	57	2
467.690	0.9517	9.55821	21.54	66.58	45243	42034	0.3770	478	466	16
471.690	0.9648	9.39678	15.60	47.81	44719	42121	0.3802	533	519	16
475.690	0.9653	9.23942	15.37	46.72	44185	41641	0.3834	506	493	16
479.690	0.9651	9.08597	15.45	46.57	43652	41133	0.3866	590	575	16
483.690	0.9659	8.93631	15.08	45.09	43645	41162	0.3899	551	538	16
487.690	0.9612	8.79032	17.21	51.04	43228	40572	0.3931	482	470	16
491.690	0.9635	8.64788	16.19	47.62	42747	40215	0.3963	591	576	16
495.690	0.9686	8.50888	13.87	40.44	42268	39979	0.3995	517	504	16
499.690	0.9617	8.37320	16.98	49.12	41733	39187	0.4028	547	533	16
503.690	0.9550	8.24073	20.04	57.51	41464	38645	0.4060	581	566	16
506.561	0.9706	8.14757	13.00	37.10	18247	17275	0.4083	255	248	7

C.10 Total Cross Section from 100 eV to 200 eV Using 45-Meter Data
and Sample 1/n of 437 barns/atom.

E_n (eV)	Trans.	σ_T (barns)	E_n (eV)	Trans.	σ_T (barns)
100.30	0.975	11.0	113.89	0.670	174.8
100.61	0.939	27.4	114.26	0.695	159.1
100.92	0.949	22.9	114.64	0.764	117.1
101.23	0.942	26.1	115.02	0.928	32.6
101.54	0.999	0.4	115.40	0.844	74.3
101.86	0.849	71.7	115.78	0.919	36.7
102.18	0.945	24.7	116.16	0.930	31.7
102.49	0.904	45.5	116.55	0.889	51.6
102.81	0.993	3.1	116.94	0.917	37.8
103.14	0.909	41.6	117.33	0.952	21.5
103.46	0.978	9.7	117.72	0.920	36.4
103.78	0.962	17.0	118.11	0.789	103.6
104.11	0.895	48.1	118.51	0.672	173.9
104.44	0.957	19.2	118.91	0.520	285.4
104.76	0.969	14.2	119.31	0.522	284.0
105.09	0.889	51.4	119.71	0.632	276.2
105.43	1.000	0.0	120.11	0.827	83.0
105.76	1.019	-8.2	120.52	0.795	100.1
106.10	0.975	11.0	120.92	0.848	72.1
106.43	0.894	48.9	121.33	0.817	88.3
106.77	0.972	15.8	121.75	0.901	45.4
107.11	0.892	49.8	122.16	0.692	160.8
107.45	0.878	56.8	122.57	0.579	238.6
107.79	0.937	28.4	122.99	0.523	283.2
108.14	0.921	35.8	123.41	0.716	146.0
108.49	0.925	34.1	123.84	0.700	155.6
108.83	0.982	8.0	124.26	1.015	-6.5
109.18	0.851	70.4	124.69	0.900	45.9
109.54	0.862	65.1	125.12	0.917	37.8
109.89	0.803	96.1	125.55	0.914	39.3
110.24	0.762	118.9	125.98	0.874	59.0
110.60	0.814	89.6	126.42	0.834	79.3
110.96	0.828	82.2	126.86	0.849	71.7
111.32	0.896	48.1	127.30	0.982	10.4
111.68	0.947	23.8	127.74	0.943	25.7
112.04	0.905	43.7	128.18	0.949	22.8
112.41	0.923	35.0	128.63	0.964	16.0
112.78	0.858	66.9	129.08	0.926	33.6
113.15	0.894	48.9	129.53	0.852	69.9
113.52	0.762	118.9	129.99	1.009	-3.9

E_n (eV)	Trans.	σ_T (barns)	E_n (eV)	Trans.	σ_T (barns)
130.4	0.978	9.7	150.9	0.929	32.1
130.9	0.955	20.1	151.5	0.659	181.7
131.4	0.897	47.6	152.0	0.726	144.6
131.8	0.884	53.7	152.6	0.818	87.8
132.3	0.877	57.2	153.2	0.980	8.8
132.8	0.873	58.5	153.8	0.963	16.5
133.2	0.943	25.6	154.4	0.946	24.2
133.7	0.895	48.5	155.0	1.028	-12.1
134.2	0.940	27.0	155.6	0.945	24.7
134.7	0.910	41.2	156.2	1.013	-5.6
135.1	0.909	41.7	156.8	0.908	42.2
135.6	0.969	13.8	157.4	0.997	1.3
136.1	0.875	58.5	158.0	0.945	24.7
136.6	0.958	18.7	158.6	0.890	50.8
137.1	0.962	16.9	159.2	0.900	46.0
137.6	0.893	49.4	159.8	0.970	13.3
138.1	0.917	37.8	160.4	0.933	30.2
138.6	0.975	11.0	161.1	1.068	-28.3
139.1	0.896	48.0	161.7	0.935	29.4
139.6	0.902	44.1	162.3	0.013	-5.7
140.1	0.939	27.5	163.0	0.952	21.5
140.6	0.828	82.6	163.6	0.970	13.3
141.1	0.839	76.9	164.2	0.980	8.8
141.7	1.032	13.7	164.9	0.949	22.8
142.2	0.965	15.6	165.6	1.034	-14.6
142.7	0.944	25.2	166.2	0.957	18.8
143.2	0.910	41.1	166.9	0.972	12.2
143.7	0.952	21.9	167.5	0.860	66.0
144.3	1.010	-4.4	168.2	0.890	50.7
144.8	0.842	75.1	168.9	0.917	38.0
145.3	0.872	59.4	169.6	0.916	38.9
145.9	0.947	19.4	170.2	0.822	85.6
146.4	0.973	12.0	170.9	0.718	144.6
147.0	0.979	9.2	171.6	0.675	171.7
147.5	0.955	20.1	172.3	0.620	208.8
148.1	0.955	20.1	173.0	0.796	99.6
148.6	0.997	13.1	173.7	0.930	31.9
149.2	0.959	18.3	174.4	0.928	32.8
149.8	0.940	27.0	175.1	1.080	-33.6
150.3	0.852	69.9	175.8	0.872	59.8

E_n (eV)	Trans.	σ_T (barns)	E_n (eV)	Trans.	σ_T (barns)
176.5	0.998	0.9	187.9	0.954	20.5
177.3	0.926	33.6	188.7	0.931	31.4
178.0	0.864	65.1	189.5	0.917	38.0
178.7	0.943	25.8	190.3	0.830	81.2
179.5	0.989	4.8	191.1	0.832	80.4
180.2	0.917	38.0	191.9	0.790	103.1
181.0	0.932	30.6	192.7	0.744	128.9
181.7	0.807	93.5	193.5	0.682	167.7
182.5	0.805	94.8	194.4	0.854	69.0
183.2	0.780	108.3	195.2	0.903	43.7
184.0	0.679	169.5	196.1	0.872	59.8
184.8	0.769	114.4	196.9	0.871	60.3
185.5	0.958	18.8	197.8	0.947	23.6
186.3	0.920	36.3	198.6	0.983	7.4
187.1	0.952	21.4	199.5	0.939	27.5

APPENDIX D

COMPOSITE OF MEASURED NEUTRON TOTAL CROSS SECTION

The table on the following pages is composed of experimental points from Appendix C which were used to prepare Figures 1 and 2 of the text. The section of Appendix C from which each point is obtained is indicated in the third column, following neutron energy and total cross section. The instrument resolutions were 0.21 $\mu\text{sec}/\text{meter}$ for the 2.885 eV resonance, 0.11 $\mu\text{sec}/\text{meter}$ for the 9.975 eV resonance, and 0.10 $\mu\text{sec}/\text{meter}$ for the resonances at 18.562 eV and higher energies.

Appendix D

Compilation of Total Neutron Cross Sections Used in Figures 1 and 2

E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C
0.00820	1096.28	C.1	0.05774	348.28	C.1	0.40379	64.96	C.1
0.00861	1063.33	C.1	0.06060	336.44	C.1	0.42749	58.93	C.1
0.00905	1044.72	C.1	0.06368	324.86	C.1	0.45159	62.99	C.1
0.00951	1010.51	C.1	0.06701	312.84	C.1	0.47026	57.76	C.1
0.00998	994.07	C.1	0.07060	300.97	C.1	0.49673	55.16	C.1
0.01048	960.68	C.1	0.07404	290.99	C.1	0.51979	51.33	C.5
0.01102	925.23	C.1	0.07774	283.00	C.1	0.54671	50.13	C.5
0.01158	915.25	C.1	0.08172	270.83	C.1	0.57577	47.55	C.5
0.01215	888.25	C.1	0.08546	262.35	C.1	0.60722	44.44	C.5
0.01276	866.00	C.1	0.08946	254.02	C.1	0.64132	41.97	C.5
0.01339	842.07	C.1	0.09439	243.96	C.1	0.67837	40.33	C.5
0.01403	818.87	C.1	0.09905	234.54	C.1	0.71873	38.64	C.5
0.01474	797.68	C.1	0.10406	225.20	C.1	0.76280	37.10	C.5
0.01548	777.11	C.1	0.10946	215.26	C.1	0.81104	35.31	C.5
0.01625	754.25	C.1	0.11443	208.33	C.1	0.86402	33.70	C.5
0.01706	739.03	C.1	0.11974	199.98	C.1	0.92236	30.49	C.5
0.01793	720.12	C.1	0.12544	194.42	C.1	0.98682	29.13	C.5
0.01886	700.66	C.1	0.13225	184.29	C.1	1.0583	32.95	C.5
0.01982	683.39	C.1	0.13869	178.67	C.1	1.1378	28.00	C.5
0.02078	658.33	C.1	0.14519	171.34	C.1	1.2266	27.02	C.5
0.02181	641.04	C.1	0.15282	164.51	C.1	1.3262	26.47	C.5
0.02292	623.69	C.1	0.16107	155.16	C.1	1.4385	25.98	C.5
0.02403	606.00	C.1	0.17000	151.07	C.1	1.5657	25.47	C.5
0.02522	589.26	C.1	0.17803	142.93	C.1	1.7106	23.11	C.5
0.02651	572.49	C.1	0.18664	137.93	C.1	1.8764	23.32	C.5
0.02780	557.42	C.1	0.19589	127.54	C.1	2.0677	22.77	C.5
0.02918	540.32	C.1	0.20584	122.46	C.1	2.2897	22.79	C.5
0.03067	524.60	C.1	0.21657	116.77	C.1	2.4406	25.25	C.5
0.03215	507.49	C.1	0.22577	110.22	C.1	2.4942	25.95	C.5
0.03373	493.31	C.1	0.23812	107.77	C.1	2.5496	26.86	C.5
0.03544	477.02	C.1	0.25151	103.62	C.1	2.6068	30.18	C.5
0.03728	463.01	C.1	0.26305	103.27	C.1	2.6660	34.56	C.5
0.03909	450.76	C.1	0.27541	98.82	C.1	2.7025	40.05	C.5
0.04104	436.29	C.1	0.28866	87.96	C.1	2.7149	43.20	C.5
0.04315	424.08	C.1	0.30288	87.24	C.1	2.7273	50.64	C.5
0.04520	410.48	C.1	0.31819	82.17	C.1	2.7398	59.04	C.5
0.04740	395.61	C.1	0.33469	80.08	C.1	2.7524	64.49	C.5
0.04977	383.80	C.1	0.35250	74.20	C.1	2.7650	70.88	C.5
0.05232	371.02	C.1	0.37177	67.71	C.1	2.7778	97.48	C.5
0.05507	359.24	C.1	0.38728	65.31	C.1	2.7907	121.07	C.5

E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C
2.8023	152.15	C.4	4.2600	19.12	C.5	10.030	306.98	C.8
2.8088	177.37	C.4	4.5141	19.17	C.5	10.052	238.83	C.8
2.8153	245.78	C.4	4.7916	18.38	C.5	10.074	187.82	C.8
2.8219	257.98	C.4	5.0955	18.83	C.5	10.079	151.75	C.9
2.8284	320.71	C.4	5.4292	20.53	C.5	10.101	108.45	C.9
2.8350	394.55	C.4	5.7968	18.51	C.5	10.124	86.50	C.9
2.8416	482.22	C.3	6.2032	18.27	C.5	10.146	49.34	C.9
2.8483	586.15	C.3	6.6537	19.00	C.5	10.247	28.66	C.9
2.8550	652.89	C.3	7.1552	17.96	C.5	10.431	25.65	C.9
2.8616	794.14	C.3	7.7156	19.70	C.5	10.620	18.49	C.9
2.8683	877.92	C.3	8.2407	20.04	C.9	10.814	20.09	C.9
2.8751	965.56	C.3	8.3732	16.98	C.9	11.014	21.39	C.9
2.8818	1025.94	C.3	8.5089	13.87	C.9	11.219	17.73	C.9
2.8886	937.60	C.3	8.6479	16.19	C.9	11.430	21.19	C.9
2.8954	917.26	C.3	8.7903	17.21	C.9	11.646	14.59	C.9
2.9022	812.84	C.3	8.9363	15.08	C.9	11.870	17.15	C.9
2.9091	729.98	C.3	9.0860	15.45	C.9	12.099	19.61	C.9
2.9160	723.28	C.3	9.2394	15.37	C.9	12.335	22.10	C.9
2.9229	564.58	C.3	9.3968	15.60	C.9	12.578	16.12	C.9
2.9298	459.14	C.4	9.5582	21.54	C.9	12.829	16.10	C.9
2.9367	366.70	C.4	9.6508	31.01	C.9	13.087	15.31	C.9
2.9437	326.10	C.4	9.6716	27.17	C.9	13.353	18.31	C.9
2.9507	240.14	C.4	9.6924	32.36	C.9	13.627	17.91	C.9
2.9577	202.34	C.4	9.7134	39.94	C.9	13.910	19.23	C.9
2.9648	158.86	C.4	9.7343	36.20	C.9	14.201	16.38	C.9
2.9804	121.39	C.5	9.7554	37.57	C.9	14.502	13.99	C.9
2.9947	94.21	C.5	9.7765	52.15	C.9	14.813	15.95	C.9
3.0090	71.47	C.5	9.7976	52.58	C.9	15.133	18.50	C.9
3.0235	59.62	C.5	9.8189	89.98	C.9	15.464	21.05	C.9
3.0676	40.66	C.5	9.8402	105.54	C.9	15.806	13.72	C.9
3.1433	30.70	C.5	9.8560	124.95	C.8	16.160	18.72	C.9
3.2219	26.16	C.5	9.8774	199.23	C.8	16.525	19.62	C.9
3.3034	23.90	C.5	9.8990	254.80	C.8	16.903	17.53	C.9
3.3880	23.38	C.5	9.9205	311.13	C.8	17.294	19.08	C.9
3.4760	21.38	C.5	9.9422	358.96	C.8	17.597	16.56	C.9
3.6144	20.64	C.5	9.9639	439.44	C.8	17.725	17.23	C.9
3.8123	20.98	C.5	9.9857	416.36	C.8	17.777	28.06	C.9
4.0268	20.17	C.5	10.008	395.56	C.8	17.829	23.04	C.9

E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C
17.881	29.03	C.9	28.323	18.42	C.9	69.102	25.90	C.9
17.933	42.74	C.9	29.176	16.08	C.9	69.501	49.92	C.9
17.986	42.79	C.9	30.068	14.03	C.9	69.90	72.76	C.9
18.039	57.36	C.9	31.001	20.34	C.9	70.310	73.04	C.9
18.092	53.08	C.9	31.979	29.15	C.9	70.719	48.86	C.9
18.145	59.88	C.9	33.004	20.60	C.9	71.132	44.44	C.9
18.198	97.47	C.9	34.078	14.58	C.9	71.549	28.69	C.9
18.239	135.58	C.8	35.206	18.19	C.9	71.970	18.24	C.9
18.293	192.08	C.8	36.391	20.98	C.9	72.394	22.70	C.9
18.374	605.59	C.7	37.637	16.96	C.9	73.471	16.81	C.9
18.429	1072.19	C.7	38.947	13.57	C.9	75.244	13.79	C.9
18.484	1600.19	C.7	40.328	18.88	C.9	77.083	9.85	C.9
18.539	1809.96	C.7	41.783	16.21	C.9	78.990	17.72	C.9
18.594	1984.41	C.7	43.318	18.44	C.9	80.218	17.87	C.9
18.650	1560.18	C.7	44.940	20.90	C.9	80.717	22.39	C.9
18.705	946.88	C.7	46.654	18.02	C.9	81.221	35.98	C.9
18.762	602.80	C.7	48.469	16.22	C.9	81.729	65.20	C.9
18.790	377.75	C.8	50.391	14.17	C.9	82.243	92.99	C.9
18.846	196.40	C.8	52.430	16.75	C.9	82.761	147.98	C.9
18.903	134.26	C.8	54.595	17.76	C.9	83.284	170.01	C.9
18.918	90.59	C.9	56.897	17.47	C.9	83.812	117.57	C.9
18.975	76.18	C.9	58.257	17.55	C.9	84.346	69.77	C.9
19.032	51.66	C.9	58.566	21.95	C.9	84.884	31.76	C.9
19.090	56.96	C.9	58.877	35.91	C.9	85.427	25.64	C.9
19.147	46.77	C.9	59.191	39.26	C.9	85.976	21.47	C.9
19.205	42.52	C.9	59.507	65.58	C.9	86.809	16.02	C.9
19.470	26.47	C.9	59.826	57.11	C.9	87.939	14.19	C.9
19.954	22.04	C.9	60.147	60.83	C.9	89.091	15.50	C.9
20.457	25.39	C.9	60.471	43.24	C.9	90.265	18.55	C.9
20.978	19.79	C.9	60.798	28.12	C.9	91.463	21.08	C.9
21.520	18.03	C.9	61.127	35.18	C.9	92.685	12.47	C.9
22.083	18.08	C.9	61.459	26.29	C.9	93.932	25.83	C.9
22.669	19.73	C.9	61.793	16.40	C.9	95.204	16.80	C.9
23.278	19.87	C.9	62.642	18.26	C.9	96.502	18.26	C.9
23.912	16.05	C.9	64.036	15.37	C.9	97.827	17.50	C.9
24.573	16.50	C.9	65.478	19.38	C.9	99.179	20.60	C.9
25.261	22.01	C.9	66.968	10.57	C.9	100.56	12.09	C.9
25.978	16.61	C.9	67.926	17.97	C.9	101.97	12.79	C.9
26.726	17.54	C.9	68.315	17.72	C.9	103.41	14.22	C.9
27.507	18.03	C.9	68.707	25.06	C.9	104.88	19.21	C.9

E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C
106.38	15.00	C.9	145.33	18.15	C.9	211.43	30.23	C.9
107.53	20.63	C.9	146.55	28.52	C.9	213.57	30.78	C.9
108.30	35.48	C.9	147.79	37.62	C.9	215.75	45.65	C.9
109.09	56.84	C.9	149.04	38.61	C.9	217.96	65.00	C.9
109.88	60.02	C.9	150.30	57.35	C.9	220.20	72.74	C.9
110.68	96.06	C.9	151.59	56.41	C.9	222.48	67.94	C.9
111.49	59.15	C.9	152.89	46.89	C.9	224.79	32.31	C.9
112.31	57.29	C.9	154.20	42.14	C.9	227.14	17.57	C.9
113.14	84.74	C.9	155.53	16.53	C.9	229.53	14.88	C.9
113.97	88.20	C.9	157.57	14.78	C.9	233.18	17.91	C.9
114.82	71.39	C.9	159.64	12.13	C.9	236.91	22.99	C.9
115.67	55.30	C.9	161.04	15.49	C.9	239.46	22.97	C.9
116.54	58.53	C.9	162.47	26.27	C.9	242.04	30.82	C.9
117.41	88.29	C.9	163.91	26.94	C.9	244.67	26.30	C.9
118.30	129.26	C.9	165.37	17.92	C.9	247.33	30.71	C.9
119.19	133.76	C.9	166.85	38.72	C.9	250.05	30.39	C.9
120.10	111.22	C.9	168.35	56.76	C.9	252.80	45.83	C.9
121.01	112.11	C.9	169.87	82.98	C.9	255.61	78.60	C.9
121.94	123.77	C.9	171.41	98.56	C.9	258.46	27.97	C.9
122.88	106.94	C.9	172.97	75.11	C.9	261.35	15.79	C.9
123.82	85.02	C.9	174.56	57.20	C.9	264.30	11.81	C.9
124.78	58.66	C.9	176.16	43.90	C.9	267.30	13.06	C.9
125.75	36.01	C.9	177.79	32.89	C.9	271.89	14.53	C.9
126.73	21.47	C.9	179.44	42.81	C.9	276.60	22.85	C.9
127.73	20.94	C.9	181.12	57.09	C.9	279.81	35.44	C.9
128.73	21.50	C.9	182.82	74.87	C.9	283.08	51.79	C.9
129.75	16.58	C.9	184.54	61.10	C.9	286.40	73.70	C.9
130.77	21.14	C.9	186.28	46.47	C.9	289.78	62.55	C.9
131.82	21.10	C.9	188.05	49.20	C.9	293.22	54.47	C.9
132.87	28.66	C.9	189.85	52.46	C.9	296.73	58.08	C.9
133.93	16.56	C.9	191.67	86.00	C.9	300.29	62.85	C.9
135.01	19.82	C.9	193.52	76.16	C.9	303.92	57.30	C.9
136.10	16.22	C.9	195.40	55.34	C.9	307.62	42.46	C.9
137.21	13.43	C.9	197.30	33.87	C.9	311.39	34.15	C.9
138.33	21.38	C.9	199.23	31.39	C.9	315.22	37.97	C.9
139.46	23.01	C.9	201.19	33.05	C.9	319.13	67.61	C.9
140.60	30.86	C.9	203.18	30.96	C.9	323.11	75.72	C.9
141.76	19.43	C.9	205.19	25.17	C.9	327.16	65.44	C.9
142.94	18.01	C.9	207.24	26.37	C.9	331.29	42.48	C.9
144.13	11.98	C.9	209.32	26.29	C.9	335.50	43.40	C.9

E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C	E_n (eV)	σ_T (barns)	Ref. App. C
339.80	29.36	C.9	633.67	32.04	C.9	1491.5	34.29	C.9
346.39	13.97	C.9	644.85	38.96	C.9	1532.1	28.34	C.9
353.17	17.91	C.9	656.32	26.67	C.9	1574.5	28.66	C.9
357.81	19.39	C.9	668.11	30.84	C.9	1618.6	29.67	C.9
362.54	26.31	C.9	680.21	39.52	C.9	1664.6	34.49	C.9
367.36	10.89	C.9	692.65	42.77	C.9	1712.6	31.80	C.9
374.77	15.87	C.9	705.43	41.57	C.9	1762.7	26.16	C.9
382.41	20.13	C.9	718.57	27.76	C.9	1815.0	29.16	C.9
387.63	18.58	C.9	732.08	47.58	C.9	1869.6	23.25	C.9
392.97	21.35	C.9	745.98	35.75	C.9	1926.8	31.84	C.9
398.41	17.32	C.9	760.27	23.25	C.9	1986.7	38.65	C.9
403.97	22.96	C.9	774.98	15.99	C.9	2049.4	23.45	C.9
409.65	43.31	C.9	790.12	34.16	C.9	2115.1	36.23	C.9
415.44	33.31	C.9	805.70	24.08	C.9	2184.0	30.31	C.9
421.36	40.92	C.9	821.76	26.23	C.9	2256.3	23.47	C.9
427.41	35.95	C.9	838.29	30.30	C.9	2332.3	42.84	C.9
433.58	26.22	C.9	855.33	26.17	C.9	2412.2	32.51	C.9
439.90	24.15	C.9	872.90	37.46	C.9	2496.3	30.70	C.9
446.35	25.88	C.9	891.01	24.31	C.9	2584.8	23.98	C.9
452.94	23.95	C.9	909.70	33.05	C.9	2678.2	20.88	C.9
459.68	45.45	C.9	928.97	28.88	C.9	2776.7	21.24	C.9
466.57	50.21	C.9	948.87	22.45	C.9	2880.7	29.78	C.9
473.62	49.48	C.9	969.41	25.63	C.9	2990.7	23.48	C.9
480.83	29.97	C.9	990.63	31.02	C.9	3107.1	23.14	C.9
488.21	26.45	C.9	1012.6	25.15	C.9	3230.4	27.89	C.9
495.76	27.92	C.9	1035.2	24.36	C.9	3361.2	25.71	C.9
503.48	31.29	C.9	1058.6	32.21	C.9	3500.2	24.78	C.9
511.38	22.39	C.9	1082.9	22.47	C.9	3647.9	23.33	C.9
519.48	15.80	C.9	1107.9	14.14	C.9	3805.2	14.86	C.9
527.76	28.17	C.9	1133.9	27.37	C.9	3972.9	27.86	C.9
536.25	29.52	C.9	1160.8	27.52	C.9	4151.9	19.39	C.9
544.94	28.66	C.9	1188.6	38.21	C.9	4343.3	21.75	C.9
553.85	22.33	C.9	1217.5	33.32	C.9	4548.2	20.97	C.9
562.97	26.00	C.9	1247.4	23.24	C.9	4768.0	26.85	C.9
572.33	19.93	C.9	1278.4	37.02	C.9	5004.2	16.49	C.9
581.91	27.88	C.9	1310.6	26.45	C.9	5258.3	17.72	C.9
591.75	17.12	C.9	1344.1	30.03	C.9	5532.2	15.07	C.9
601.83	26.41	C.9	1387.8	19.70	C.9	5828.2	31.63	C.9
612.17	25.55	C.9	1414.9	30.90	C.9	6148.5	24.28	C.9
622.78	26.94	C.9	1452.4	23.86	C.9	6496.0	22.47	C.9

APPENDIX E

Calculated Neutron Absorption Cross Section (0.002 to 2.0eV)

ENERGY	SIG.	SIG. X ROOT E	ENERGY	SIG.	SIG. X ROOT E
0.002	2220.4	99.3	0.122	170.8	59.6
0.004	1554.9	98.3	0.124	168.1	59.2
0.006	1257.3	97.4	0.126	165.6	58.8
0.008	1078.4	96.5	0.128	163.1	58.3
0.010	955.4	95.5	0.130	160.6	57.9
0.012	863.9	94.6	0.132	158.2	57.5
0.014	792.2	93.7	0.134	155.9	57.1
0.016	734.1	92.9	0.136	153.6	56.7
0.018	685.7	92.0	0.138	151.4	56.3
0.020	644.4	91.1	0.140	149.3	55.9
0.022	608.7	90.3	0.142	147.2	55.5
0.024	577.5	89.5	0.144	145.1	55.1
0.026	549.7	88.6	0.146	143.1	54.7
0.028	524.9	87.8	0.148	141.1	54.3
0.030	502.5	87.0	0.150	139.2	53.9
0.032	482.1	86.2	0.152	137.3	53.5
0.034	463.5	85.5	0.154	135.4	53.2
0.036	446.4	84.7	0.156	133.6	52.8
0.038	430.7	84.0	0.158	131.9	52.4
0.040	416.0	83.2	0.160	130.1	52.1
0.042	402.4	82.5	0.162	128.4	51.7
0.044	389.7	81.7	0.164	126.8	51.3
0.046	377.8	81.0	0.166	125.2	51.0
0.048	366.6	80.3	0.168	123.6	50.6
0.050	356.1	79.6	0.170	122.0	50.3
0.052	346.2	78.9	0.172	120.5	50.0
0.054	336.8	78.3	0.174	119.0	49.6
0.056	327.9	77.6	0.176	117.5	49.3
0.058	319.5	76.9	0.178	116.1	49.0
0.060	311.4	76.3	0.180	114.7	48.6
0.062	303.8	75.6	0.182	113.3	48.3
0.064	296.5	75.0	0.184	111.9	48.0
0.066	289.5	74.4	0.186	110.6	47.7
0.068	282.9	73.8	0.188	109.3	47.4
0.070	276.5	73.2	0.190	108.0	47.1
0.072	270.4	72.6	0.192	106.7	46.8
0.074	264.5	72.0	0.194	105.5	46.5
0.076	258.9	71.4	0.196	104.3	46.2
0.078	253.5	70.8	0.198	103.1	45.9
0.080	248.2	70.2	0.200	101.9	45.6
0.082	243.2	69.6	0.202	100.7	45.3
0.084	238.4	69.1	0.204	99.6	45.0
0.086	233.7	68.5	0.206	98.5	44.7
0.088	229.2	68.0	0.208	97.4	44.4
0.090	224.8	67.4	0.210	96.3	44.1
0.092	220.6	66.9	0.212	95.3	43.9
0.094	216.5	66.4	0.214	94.2	43.6
0.096	212.6	65.9	0.216	93.2	43.3
0.098	208.8	65.4	0.218	92.2	43.0
0.100	205.1	64.8	0.220	91.2	42.8
0.102	201.5	64.3	0.222	90.2	42.5
0.104	198.0	63.9	0.224	89.3	42.3
0.106	194.6	63.4	0.226	88.3	42.0
0.108	191.3	62.9	0.228	87.4	41.7
0.110	188.1	62.4	0.230	86.5	41.5
0.112	185.0	61.9	0.232	85.6	41.2
0.114	182.0	61.5	0.234	84.7	41.0
0.116	179.1	61.0	0.236	83.9	40.7
0.118	176.2	60.5	0.238	83.0	40.5
0.120	173.5	60.1	0.240	82.2	40.3

ENERGY	SIG.	SIG. X-ROOT E	ENERGY	SIG.	SIG. X ROOT E
0,242	81,3	40,0	0,382	44,5	27,5
0,244	80,5	39,8	0,384	44,2	27,4
0,246	79,7	39,5	0,386	43,9	27,3
0,248	78,9	39,3	0,388	43,5	27,1
0,250	78,2	39,1	0,390	43,2	27,0
0,252	77,4	38,8	0,392	42,9	26,9
0,254	76,6	38,6	0,394	42,6	26,7
0,256	75,9	38,4	0,396	42,3	26,6
0,258	75,2	38,2	0,398	42,0	26,5
0,260	74,4	38,0	0,400	41,7	26,4
0,262	73,7	37,7	0,402	41,4	26,2
0,264	73,0	37,5	0,404	41,1	26,1
0,266	72,3	37,3	0,406	40,8	26,0
0,268	71,6	37,1	0,408	40,5	25,9
0,270	71,0	36,9	0,410	40,2	25,8
0,272	70,3	36,7	0,412	39,9	25,6
0,274	69,7	36,5	0,414	39,7	25,5
0,276	69,0	36,3	0,416	39,4	25,4
0,278	68,4	36,1	0,418	39,1	25,3
0,280	67,8	35,9	0,420	38,8	25,2
0,282	67,1	35,7	0,422	38,6	25,1
0,284	66,5	35,5	0,424	38,3	24,9
0,286	65,9	35,3	0,426	38,0	24,8
0,288	65,3	35,1	0,428	37,8	24,7
0,290	64,7	34,9	0,430	37,5	24,6
0,292	64,2	34,7	0,432	37,3	24,5
0,294	63,6	34,5	0,434	37,0	24,4
0,296	63,0	34,3	0,436	36,8	24,3
0,298	62,5	34,1	0,438	36,5	24,2
0,300	61,9	33,9	0,440	36,3	24,1
0,302	61,4	33,7	0,442	36,0	24,0
0,304	60,9	33,6	0,444	35,8	23,9
0,306	60,3	33,4	0,446	35,6	23,7
0,308	59,8	33,2	0,448	35,3	23,6
0,310	59,3	33,0	0,450	35,1	23,5
0,312	58,8	32,8	0,452	34,9	23,4
0,314	58,3	32,7	0,454	34,6	23,3
0,316	57,8	32,5	0,456	34,4	23,2
0,318	57,3	32,3	0,458	34,2	23,1
0,320	56,8	32,2	0,460	34,0	23,0
0,322	56,4	32,0	0,462	33,7	22,9
0,324	55,9	31,8	0,464	33,5	22,8
0,326	55,4	31,7	0,466	33,3	22,7
0,328	55,0	31,5	0,468	33,1	22,6
0,330	54,5	31,3	0,470	32,9	22,5
0,332	54,1	31,2	0,472	32,7	22,4
0,334	53,6	31,0	0,474	32,5	22,4
0,336	53,2	30,8	0,476	32,3	22,3
0,338	52,8	30,7	0,478	32,1	22,2
0,340	52,4	30,5	0,480	31,9	22,1
0,342	51,9	30,4	0,482	31,7	22,0
0,344	51,5	30,2	0,484	31,5	21,9
0,346	51,1	30,1	0,486	31,3	21,8
0,348	50,7	29,9	0,488	31,1	21,7
0,350	50,3	29,8	0,490	30,9	21,6
0,352	49,9	29,6	0,492	30,7	21,5
0,354	49,5	29,5	0,494	30,5	21,4
0,356	49,1	29,3	0,496	30,3	21,3
0,358	48,8	29,2	0,498	30,1	21,3
0,360	48,4	29,0	0,500	29,9	21,2
0,362	48,0	28,9	0,500	29,9	21,2
0,364	47,6	28,7	0,510	29,1	20,7
0,366	47,3	28,6	0,520	28,2	20,3
0,368	46,9	28,5	0,530	27,4	19,9
0,370	46,6	28,3	0,540	26,6	19,5
0,372	46,2	28,2	0,550	25,9	19,2
0,374	45,9	28,1	0,560	25,1	18,8
0,376	45,5	27,9	0,570	24,4	18,5
0,378	45,2	27,8	0,580	23,8	18,1
0,380	44,8	27,6	0,590	23,2	17,8

ENERGY	SIG,	SIG, X ROOT E	ENERGY	SIG,	SIG, X ROOT E
0.600	22.5	17.5	1.300	6.3	7.2
0.610	22.0	17.2	1.310	6.3	7.2
0.620	21.4	16.8	1.320	6.2	7.1
0.630	20.9	16.6	1.330	6.1	7.0
0.640	20.3	16.3	1.340	6.0	7.0
0.650	19.8	16.0	1.350	6.0	6.9
0.660	19.4	15.7	1.360	5.9	6.9
0.670	18.9	15.5	1.370	5.8	6.8
0.680	18.4	15.2	1.380	5.8	6.8
0.690	18.0	15.0	1.390	5.7	6.7
0.700	17.6	14.7	1.400	5.6	6.7
0.710	17.2	14.5	1.410	5.6	6.6
0.720	16.8	14.3	1.420	5.5	6.6
0.730	16.4	14.0	1.430	5.5	6.5
0.740	16.1	13.8	1.440	5.4	6.5
0.750	15.7	13.6	1.450	5.4	6.4
0.760	15.4	13.4	1.460	5.3	6.4
0.770	15.0	13.2	1.470	5.2	6.4
0.780	14.7	13.0	1.480	5.2	6.3
0.790	14.4	12.8	1.490	5.1	6.3
0.800	14.1	12.6	1.500	5.1	6.2
0.810	13.8	12.5	1.510	5.0	6.2
0.820	13.6	12.3	1.520	5.0	6.2
0.830	13.3	12.1	1.530	5.0	6.1
0.840	13.0	11.9	1.540	4.9	6.1
0.850	12.8	11.8	1.550	4.9	6.1
0.860	12.5	11.6	1.560	4.8	6.0
0.870	12.3	11.5	1.570	4.8	6.0
0.880	12.1	11.3	1.580	4.7	6.0
0.890	11.8	11.2	1.590	4.7	5.9
0.900	11.6	11.0	1.600	4.7	5.9
0.910	11.4	10.9	1.610	4.6	5.9
0.920	11.2	10.7	1.620	4.6	5.8
0.930	11.0	10.6	1.630	4.5	5.8
0.940	10.8	10.5	1.640	4.5	5.8
0.950	10.6	10.3	1.650	4.5	5.8
0.960	10.4	10.2	1.660	4.4	5.7
0.970	10.2	10.1	1.670	4.4	5.7
0.980	10.1	10.0	1.680	4.4	5.7
0.990	9.9	9.9	1.690	4.3	5.7
1.000	9.7	9.7	1.700	4.3	5.6
1.010	9.6	9.6	1.710	4.3	5.6
1.020	9.4	9.5	1.720	4.3	5.6
1.030	9.3	9.4	1.730	4.2	5.6
1.040	9.1	9.3	1.740	4.2	5.6
1.050	9.0	9.2	1.750	4.2	5.5
1.060	8.8	9.1	1.760	4.2	5.5
1.070	8.7	9.0	1.770	4.1	5.5
1.080	8.6	8.9	1.780	4.1	5.5
1.090	8.4	8.8	1.790	4.1	5.5
1.100	8.3	8.7	1.800	4.1	5.5
1.110	8.2	8.6	1.810	4.0	5.4
1.120	8.1	8.5	1.820	4.0	5.4
1.130	7.9	8.5	1.830	4.0	5.4
1.140	7.8	8.4	1.840	4.0	5.4
1.150	7.7	8.3	1.850	4.0	5.4
1.160	7.6	8.2	1.860	4.0	5.4
1.170	7.5	8.1	1.870	3.9	5.4
1.180	7.4	8.0	1.880	3.9	5.4
1.190	7.3	8.0	1.890	3.9	5.4
1.200	7.2	7.9	1.900	3.9	5.4
1.210	7.1	7.8	1.910	3.9	5.4
1.220	7.0	7.7	1.920	3.9	5.4
1.230	6.9	7.7	1.930	3.9	5.4
1.240	6.8	7.6	1.940	3.9	5.4
1.250	6.7	7.5	1.950	3.8	5.4
1.260	6.7	7.5	1.960	3.8	5.4
1.270	6.6	7.4	1.970	3.8	5.4
1.280	6.5	7.3	1.980	3.8	5.4
1.290	6.4	7.3	1.990	3.8	5.4