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The Th(n,xγ) Reaction Cross Section for Incident Neutron Energies Between 0.3 and 20.0 MeV

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OAK RIDGE NATIONAL LABORATORY
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ABSTRACT

Differential cross sections for the neutron-induced gamma-ray production from thorium have been measured for incident neutron energies between 0.3 and 20.0 MeV. The Oak Ridge Electron Linear Accelerator (ORELA) was used to provide the neutrons and a NaI spectrometer to detect the gamma rays at 125°. The data presented are the double differential cross section, $d^2\sigma/d\Omega dE$, for gamma-ray energies between 0.3 and 10.6 MeV for coarse intervals in incident neutron energy. The integrated yield of gamma rays of energies greater than 300 keV with higher resolution in the neutron energy is also presented.

INTRODUCTION

As part of a continuing program[1] for determining numerical values of gamma-ray production cross sections for neutron-induced reactions, we have measured the absolute differential cross sections for gamma rays produced by neutron interactions with thorium. The resulting data are presented in this report in tabular and graphical form.

Two methods of data analysis were employed. The first method gives the detailed gamma-ray spectra for a series of relatively coarse intervals in incident neutron energy while the second method uses integral quantities to illustrate the detailed behavior of the cross sections as a function of the incident neutron energy. The second approach is used to facilitate comparison of the experimental and evaluated data in the region of the thresholds for the (n,2n) and (n,3n) reactions.

EXPERIMENTAL PROCEDURE

Details of the experimental procedure are given elsewhere[2] and only a brief description will be given here. Neutrons were produced by photonuclear processes due to bremsstrahlung from the impact on a tantalum target of electrons from the Oak Ridge Electron Linear Accelerator (ORELA). The present experiment employed an electron beam energy of 135 MeV with a repetition rate of 1000 pulses per second and a pulse width of 35 ns. The total electron beam power was 30 kW.

Neutrons produced at the linac target traversed a 47.35-m flight path and were incident, after collimation to a beam diameter of 13 cm, on a thin slab of thorium oriented 45° with respect to the incident beam.

The slab was 30 cm wide by 30 cm high with a thickness of 0.004967 atoms/barn. Gamma rays originating in the sample were detected by a heavily shielded 12.5-cm by 12.5-cm NaI detector at 125° with respect to the incident neutron beam. For each event in the detector, data were recorded in a two-parameter array containing gamma-ray pulse height as a function of time-of-flight for the incident neutron. Neutron associated backgrounds were measured as described in Ref. 2 using a lead shadow shield between the sample and NaI detector. Backgrounds due to the natural and/or induced activity of the thorium sample were determined by recording a pulse height distribution during a 200 μsec interval midway between linac pulses.

The neutron flux at the sample position was determined in a separate measurement using calibrated thick organic scintillators. During the course of the gamma-ray measurements the flux was monitored using a small plastic scintillator in the edge of the neutron beam 30 m from the source.

DATA REDUCTION

Two methods of data reduction were employed. In the first method, the pulse-height spectra were integrated over intervals of neutron time-of-flight to form pulse-height spectra for specific incident neutron energy ranges. These intervals ranged in width from 0.5 MeV at energies below 5 MeV to 3 MeV in the range 14 to 20 MeV. The spectra so formed were then unfolded using the code FERD and measured response functions of the NaI detector. The results were the gamma-ray spectra defined by 176 points covering the gamma-ray energy range from 0.30 to 10.6 MeV.

The data were corrected for finite sample effects which include: 1) attenuation of the incident neutron flux in the sample, 2) neutron multiple scattering including neutrons from fission in the sample, and 3) gamma-ray self-absorption. These corrections were calculated using a Monte Carlo technique with the uncorrected data for the gamma-ray production cross sections. The neutron cross sections were generated from the evaluated data (ENDF/B-IV MAT 1296) using the AMPX code system.[4] Photon cross sections were taken from the tables of Ref. 5.

A further correction was then applied to the data. The contribution to the measured cross section at E_γ = 0.511 MeV due to pair production in the sample was analytically removed. This was done by first calculating the pair production probability as a function of gamma-ray energy using a Monte Carlo technique. Implicit in the calculation are the assumptions of uniform gamma-ray production probability within the sample volume intercepted by the beam and the isotropy of emitted gamma rays. The total 0.511-MeV cross section within each neutron energy group was then calculated from the product of the observed gamma-ray cross section and the pair production probability. This cross section was then "smeared" with the detector resolution and subtracted from the original data. The magnitude of this correction ranged from on the order of 0.018 mb/sr for E_n = 1.0-1.5 MeV to 16 mb/sr for E_n = 6-7 MeV.

The resulting cross sections are presented in the first set of figures at the end of this report. Figure 1 is a three-dimensional representation of the data giving cross section versus gamma-ray and incident neutron energy. Figures 2-21 present the detailed gamma-ray spectra for each incident neutron energy interval.

The data described above provide detailed information about the secondary gamma-ray spectra, but because the unfolding technique requires good statistical accuracy the data must be binned over large neutron energy intervals. Therefore, a second type of data reduction, pulse-height weighting,[6,7] was also used. This technique provided only integral information about the secondary gamma spectra (e.g., total yield and average photon energy), but because the demands on statistical accuracy are less it allowed better resolution in the incident neutron energy. In this work the pulse-height weighting analysis was applied to spectra formed by integration over time-of-flight intervals corresponding to ΔE_n = 0.1 MeV at E_n = 1 MeV increasing to ΔE_n = 1.0 MeV at E_n = 20 MeV. The results of this analysis for the total yield and average secondary gamma-ray energy as a function of the incident neutron energy are presented in Figs. 22 and 23. A value of the lower cut-off in gamma-ray energy of 0.3 MeV was used.

The data shown in the figures are listed in the tables contained in the last section of this report. The values shown in the figures and presented in the tables do not include an uncertainty of 10% in overall normalization due mainly to the determination of the incident neutron flux.

ACKNOWLEDGMENTS

We wish to thank J. W. McConnell for help with the electronics, J. G. Craven for aid with the computers, and H. A. Todd and the ORELA staff for operation of the accelerator. W. E. Ford III helped greatly in preparing cross sections from the evaluated data files.

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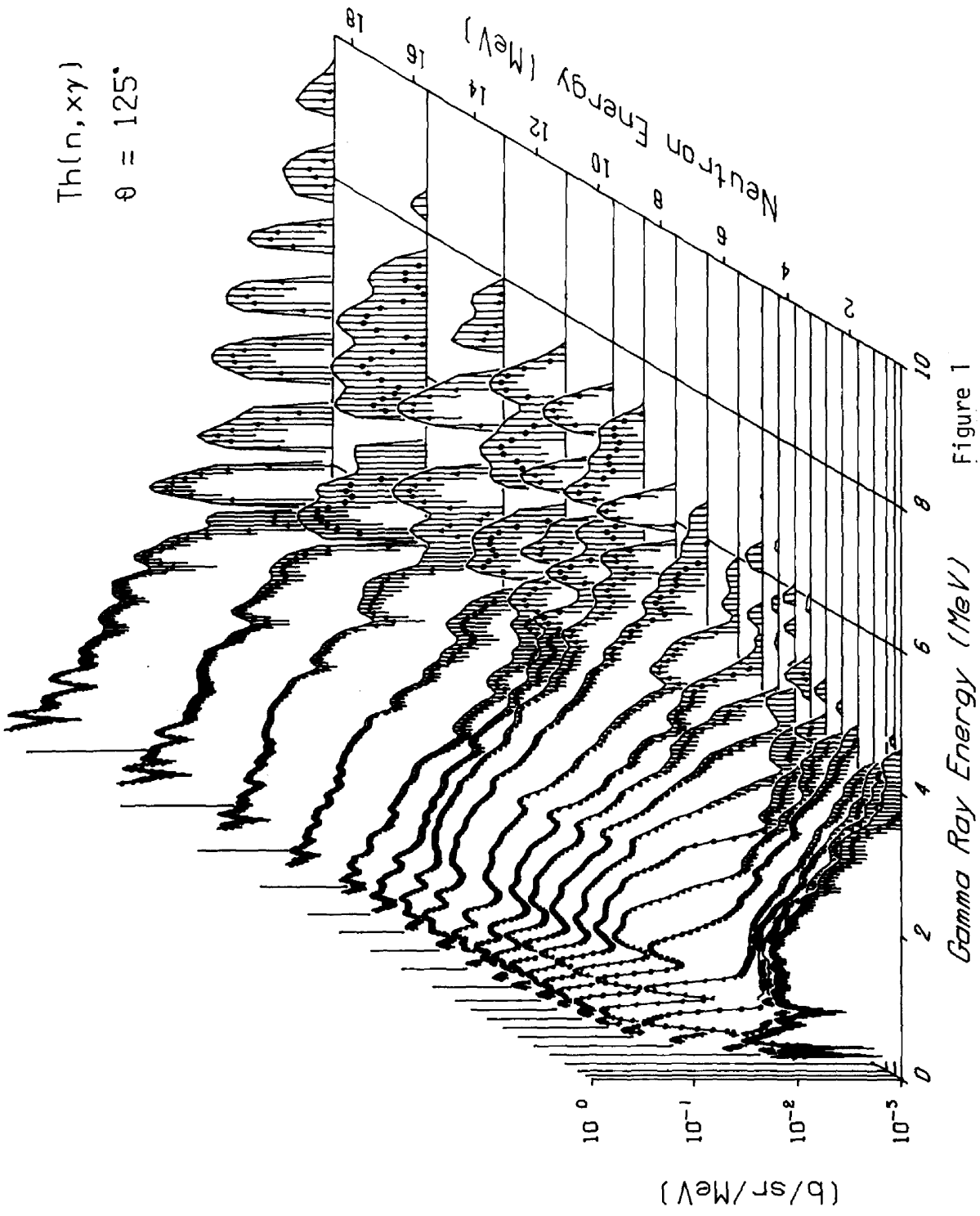


Figure 1

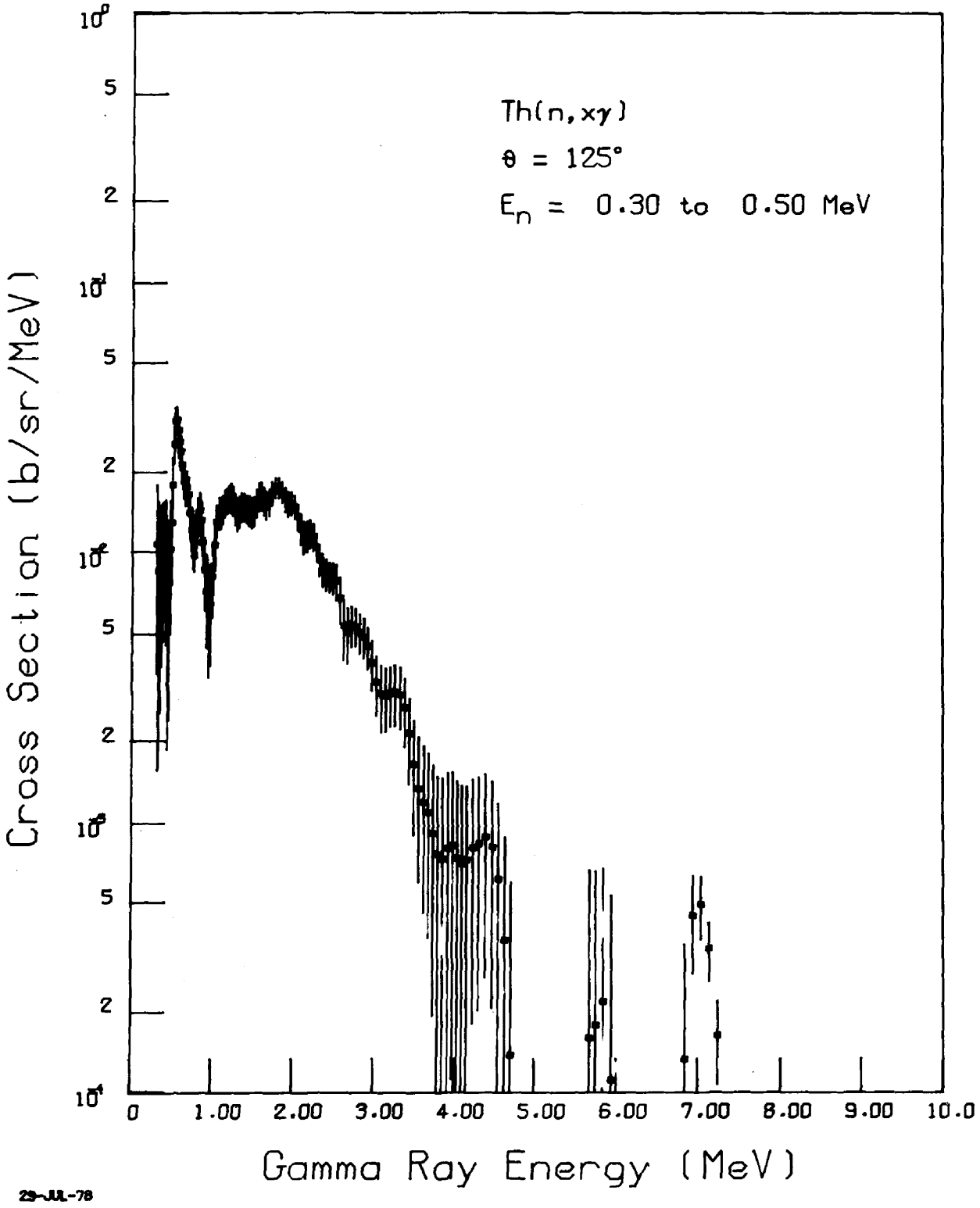
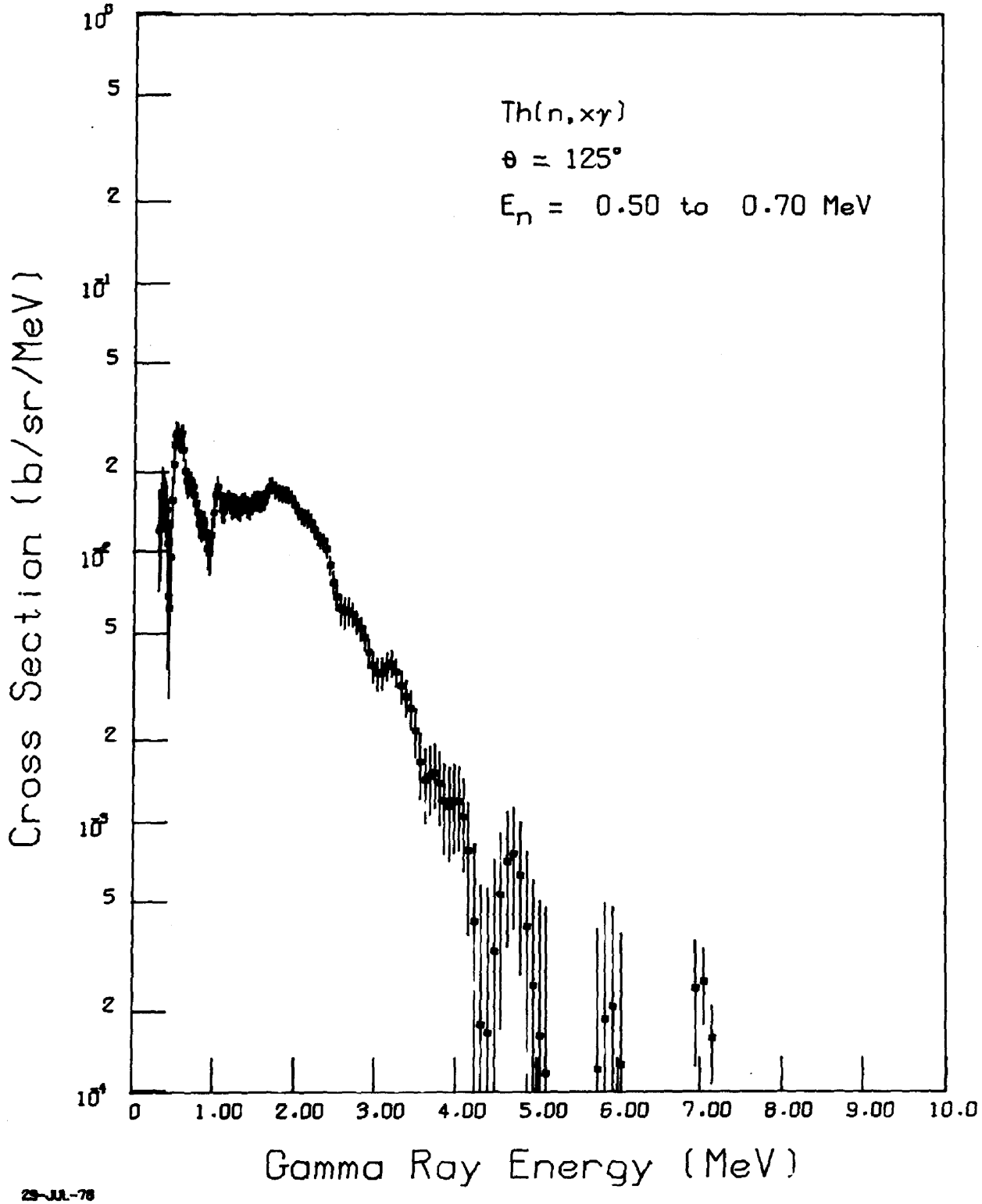

Th(n,xγ)
θ = 125°
E_n = 0.30 to 0.50 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-78

Figure 2


Th(n,xγ)
θ = 125°
E_n = 0.50 to 0.70 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
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1.00
2.00
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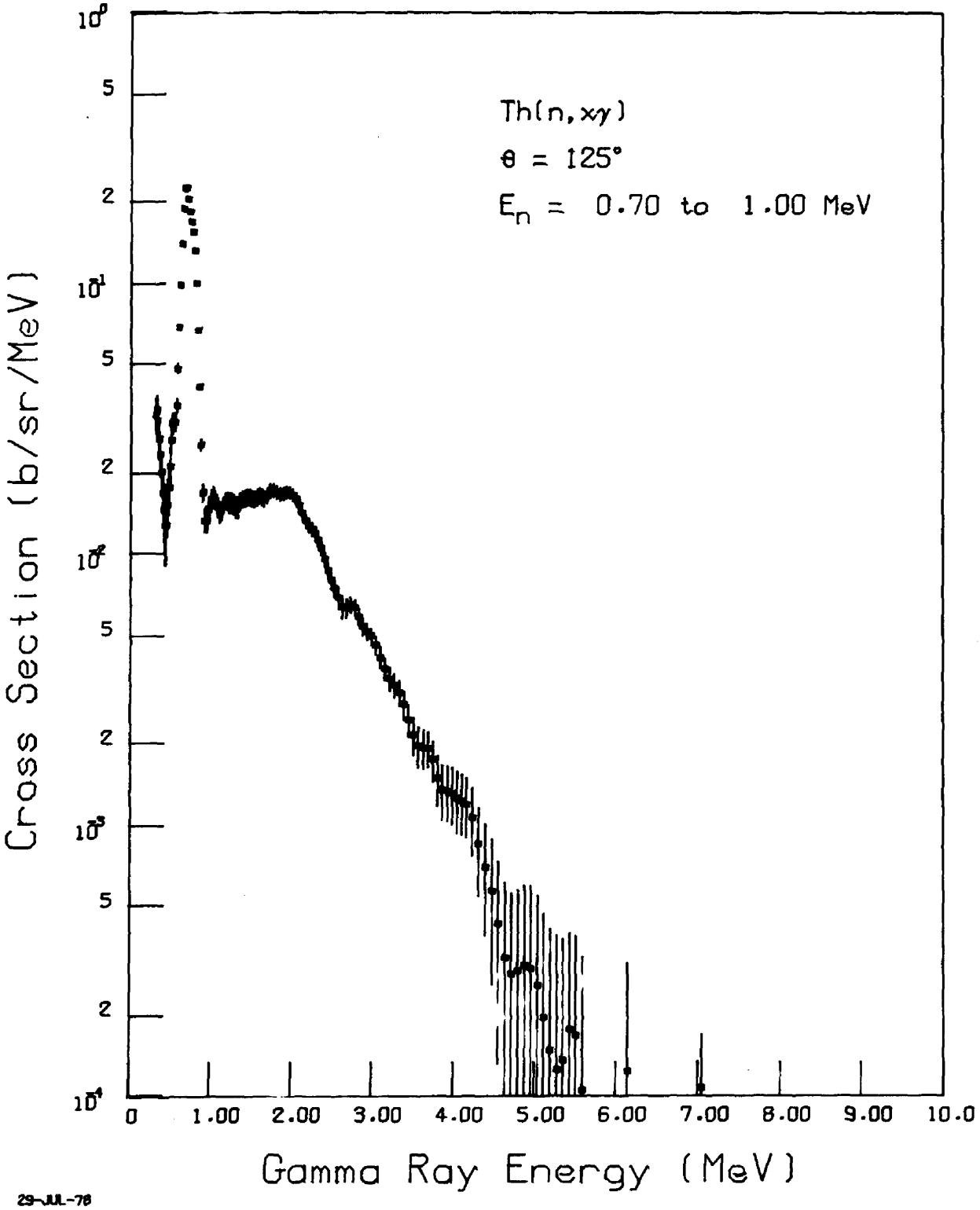
4.00
5.00
6.00
7.00
8.00
9.00
10.0
29-JUL-76

Figure 3


Th(n,xγ)
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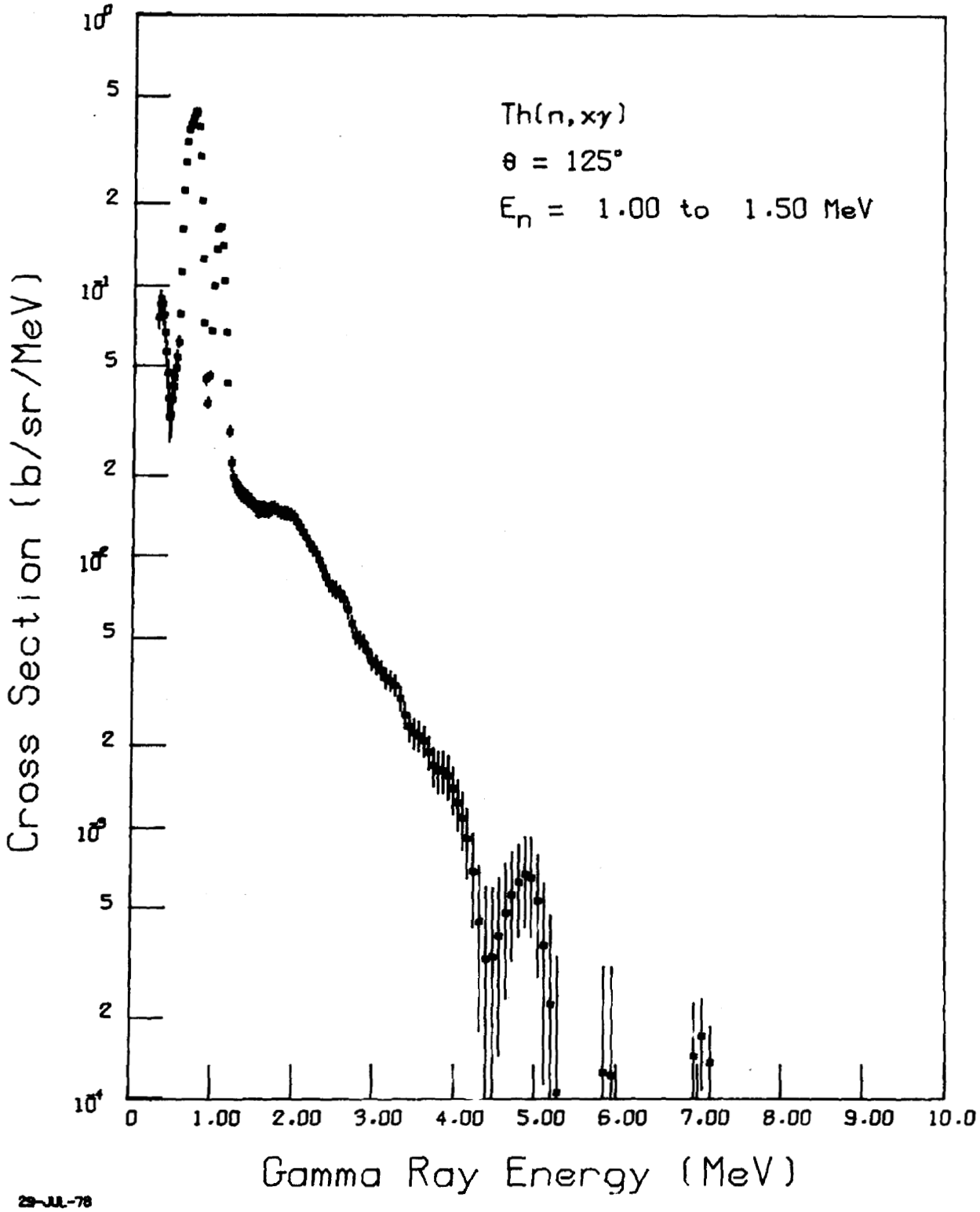
E_n = 0.70 to 1.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 4


Th(n,xγ)
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E_n = 1.00 to 1.50 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 5

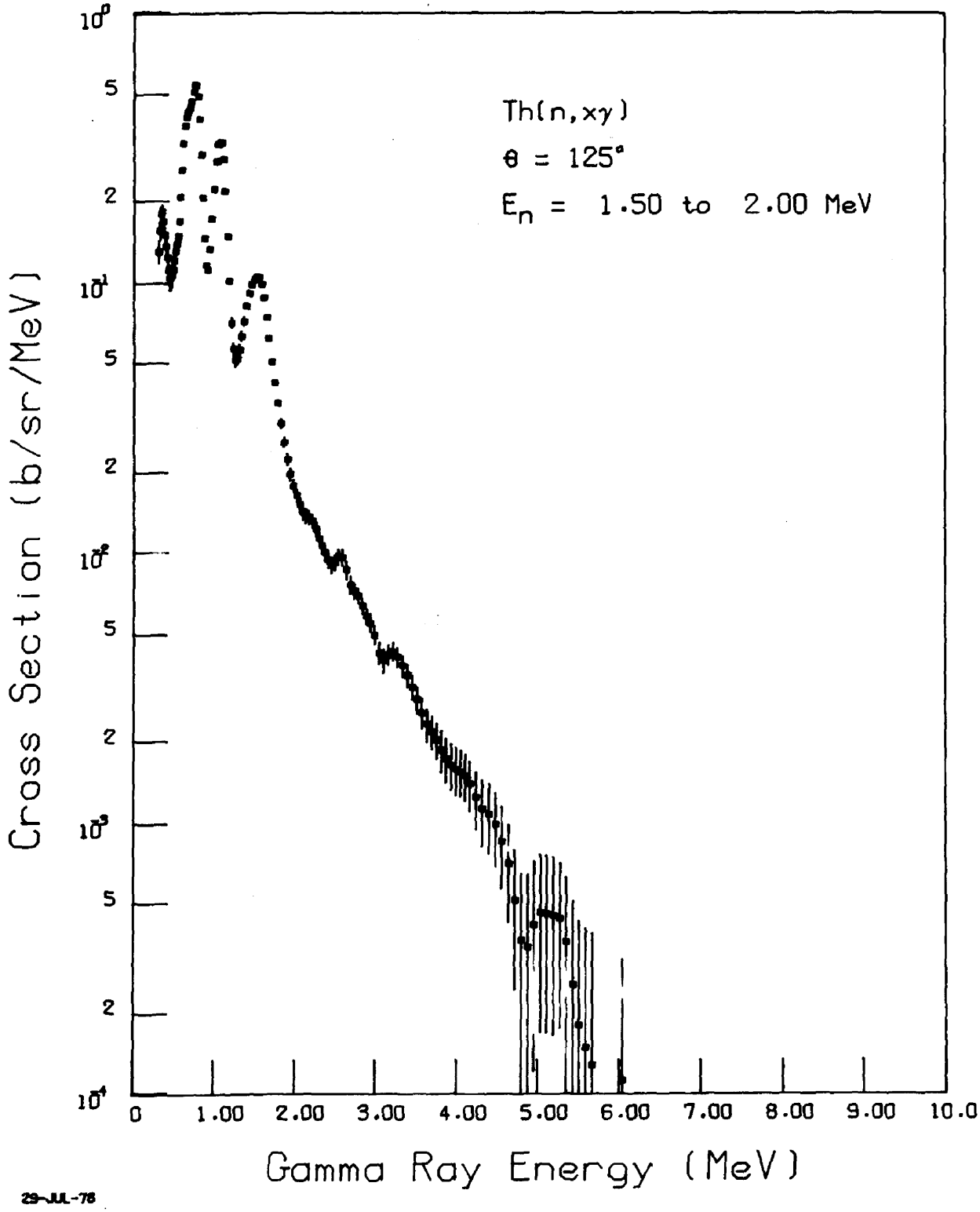

Th(n,xγ)
θ = 125°
E_n = 1.50 to 2.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
0
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.0
29-JUL-76

Figure 6

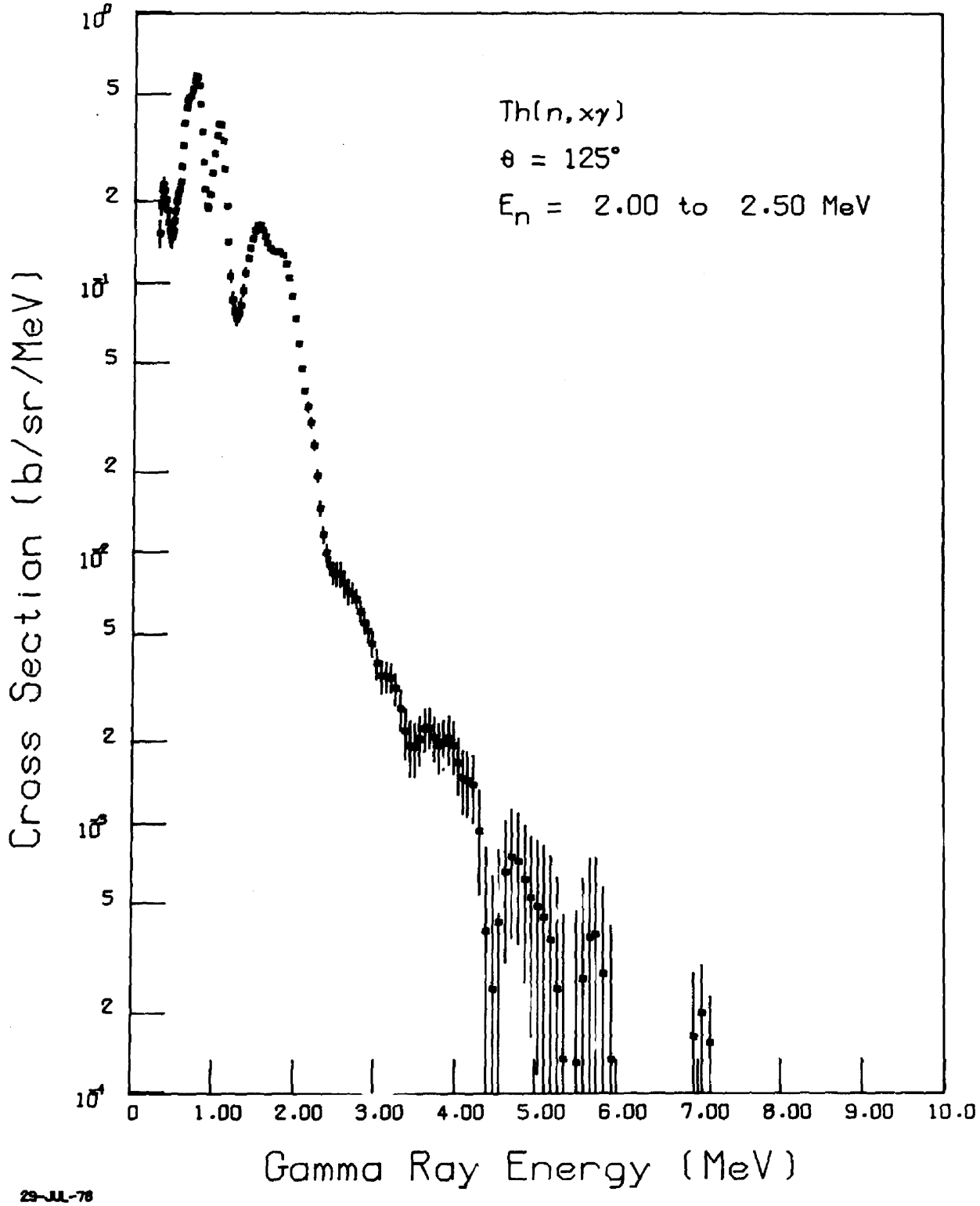
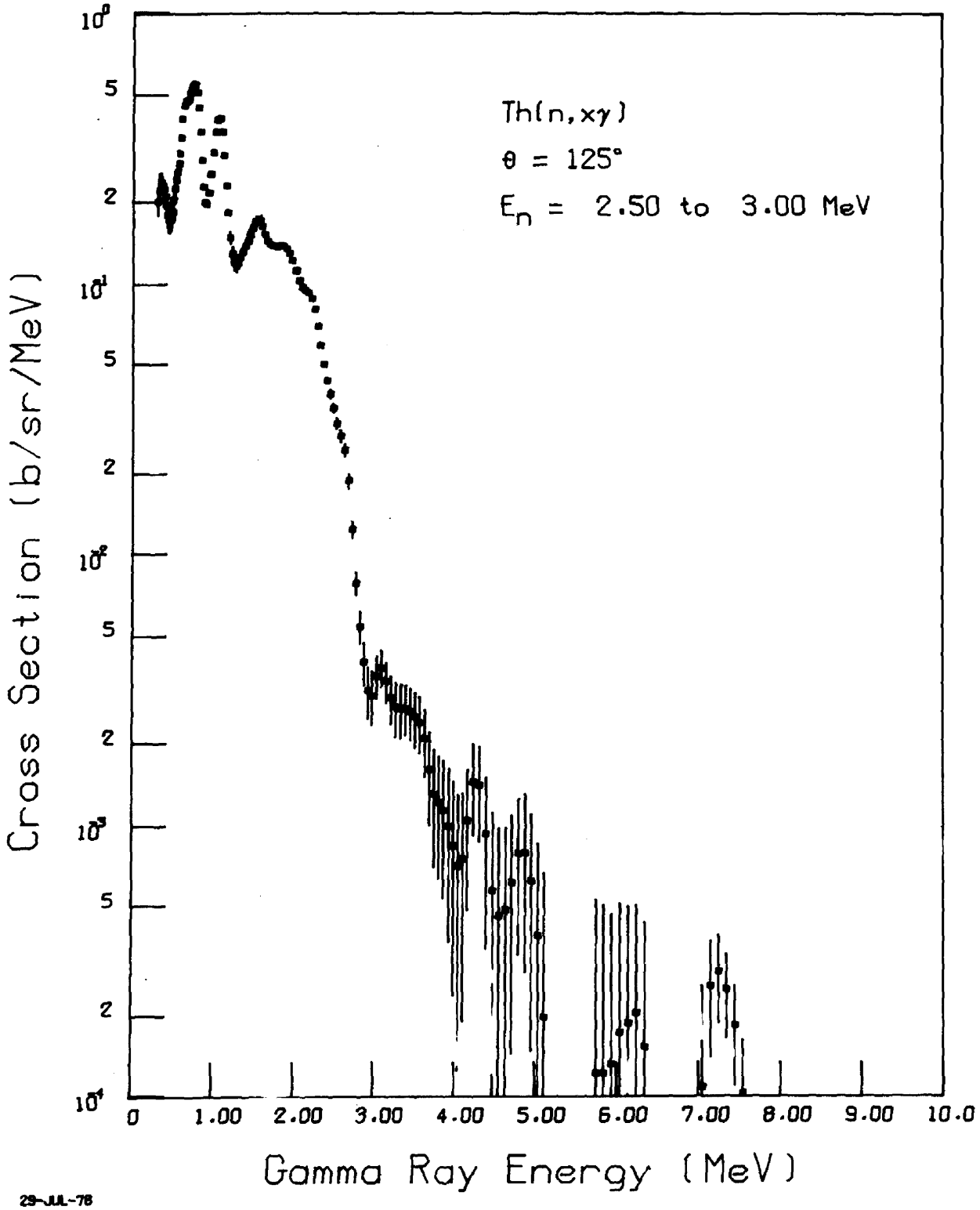

Th(n,xγ)
θ = 125°
E_n = 2.00 to 2.50 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
0
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.0
29-JUL-78

Figure 7


Th(n,xγ)
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E_n = 2.50 to 3.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 8

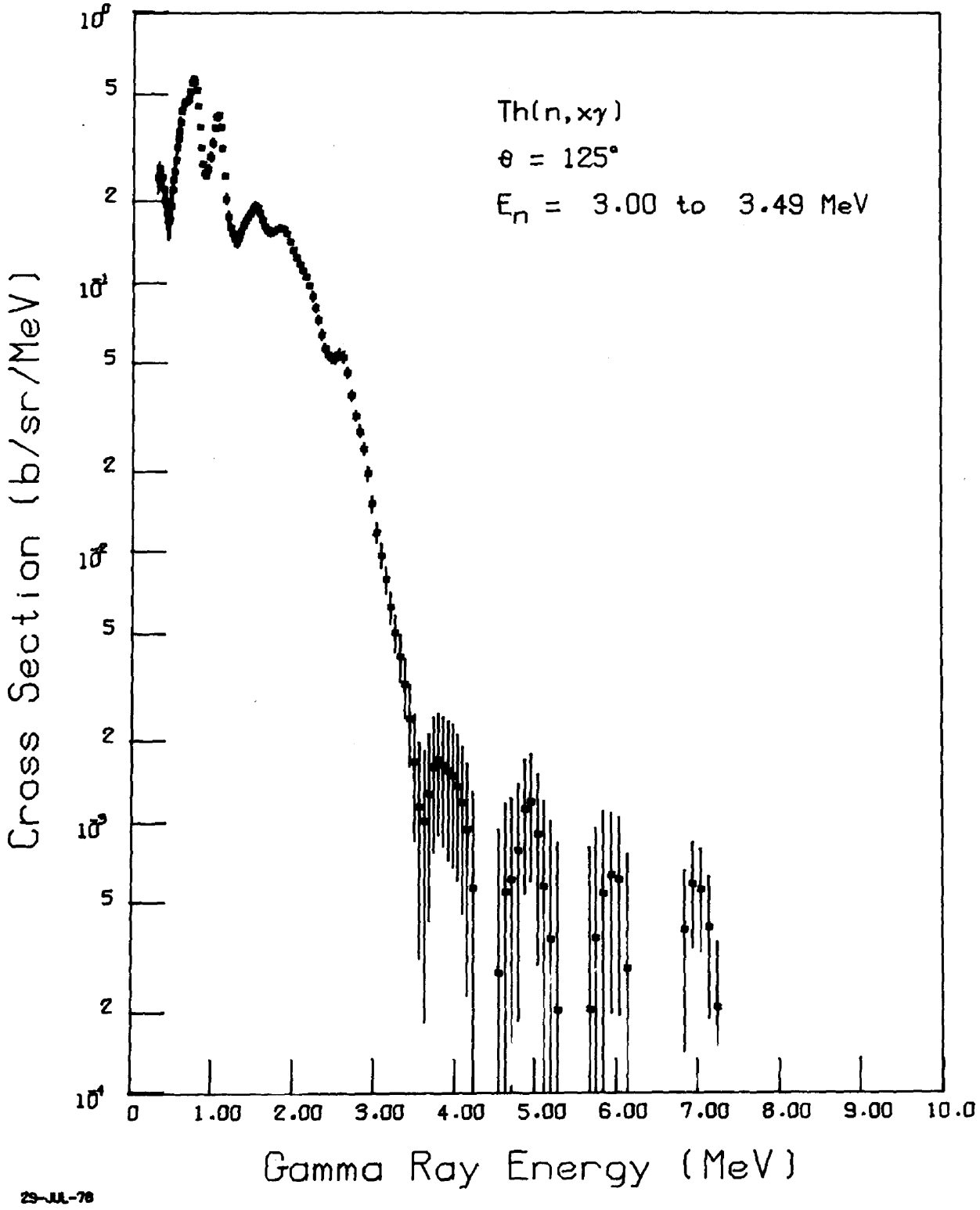

Th(n,xγ)
θ = 125°
E_n = 3.00 to 3.49 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
0
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.0
29-JUL-78

Figure 9

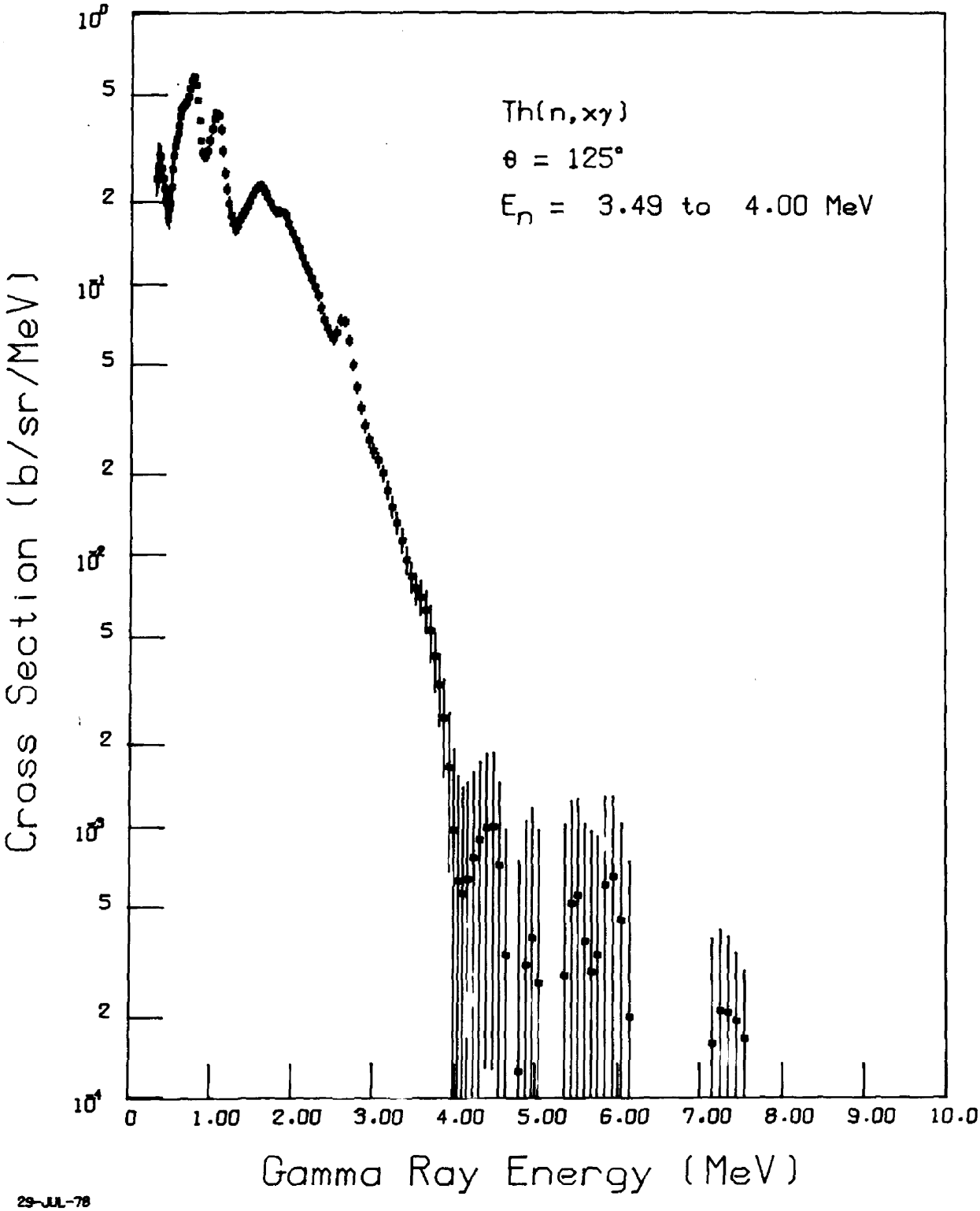
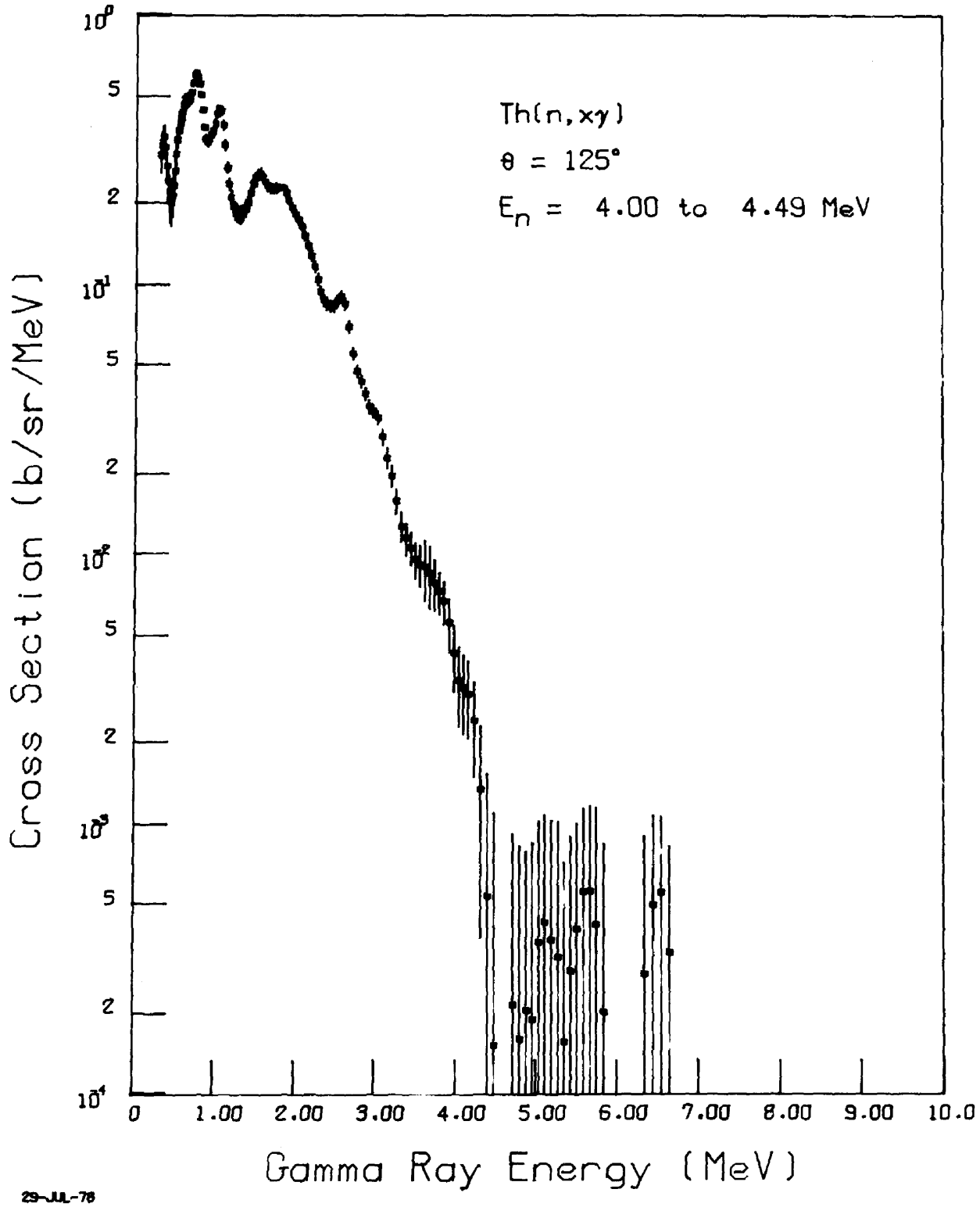

Th(n,xγ)
θ = 125°
E_n = 3.49 to 4.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-78

Figure 10


Th(n,xγ)
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E_n = 4.00 to 4.49 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 11

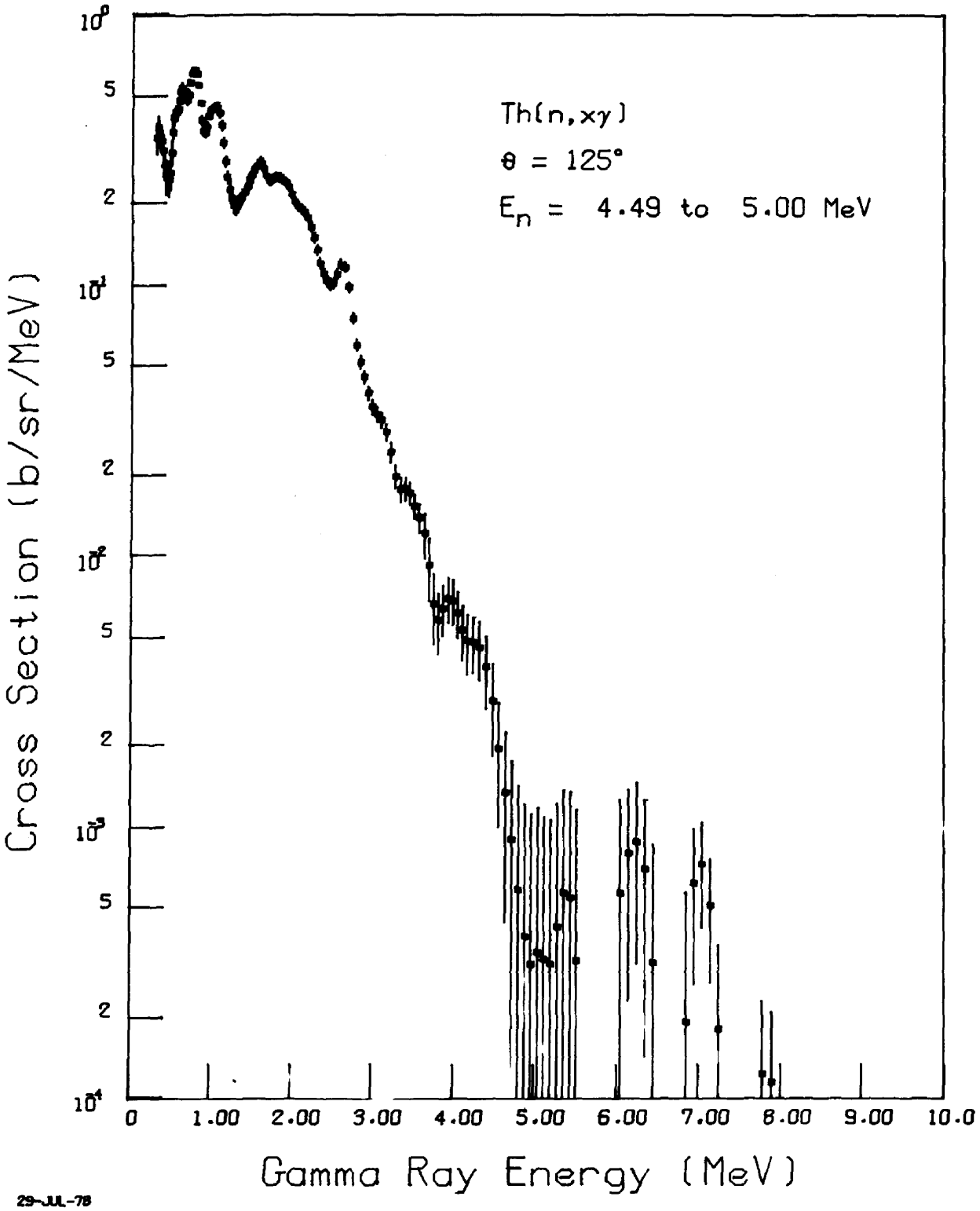
Th(n,xγ)
θ = 125°
E_n = 4.49 to 5.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-78

Figure 12

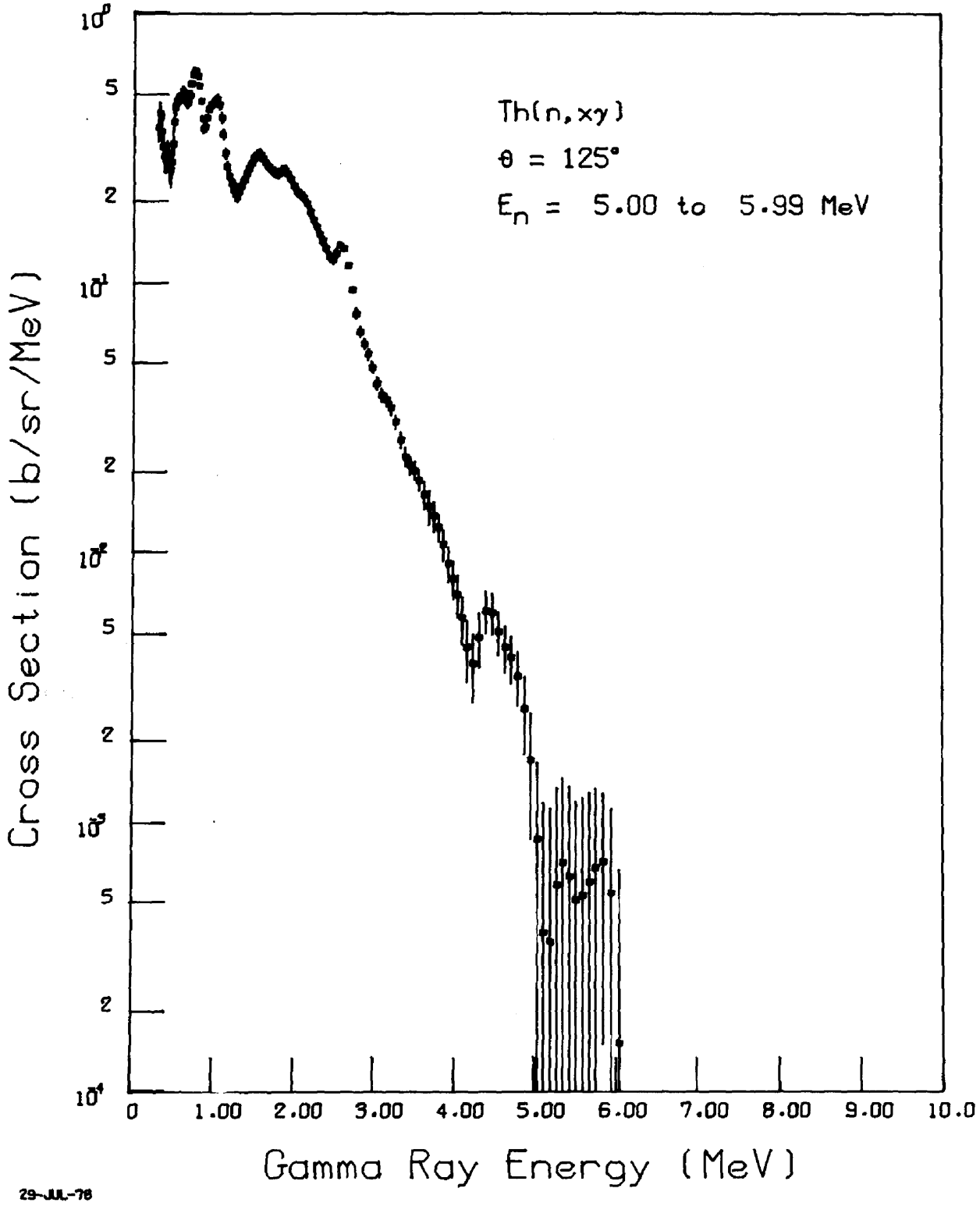
Th(n,xγ)
θ = 125°
E_n = 5.00 to 5.99 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-78

Figure 13

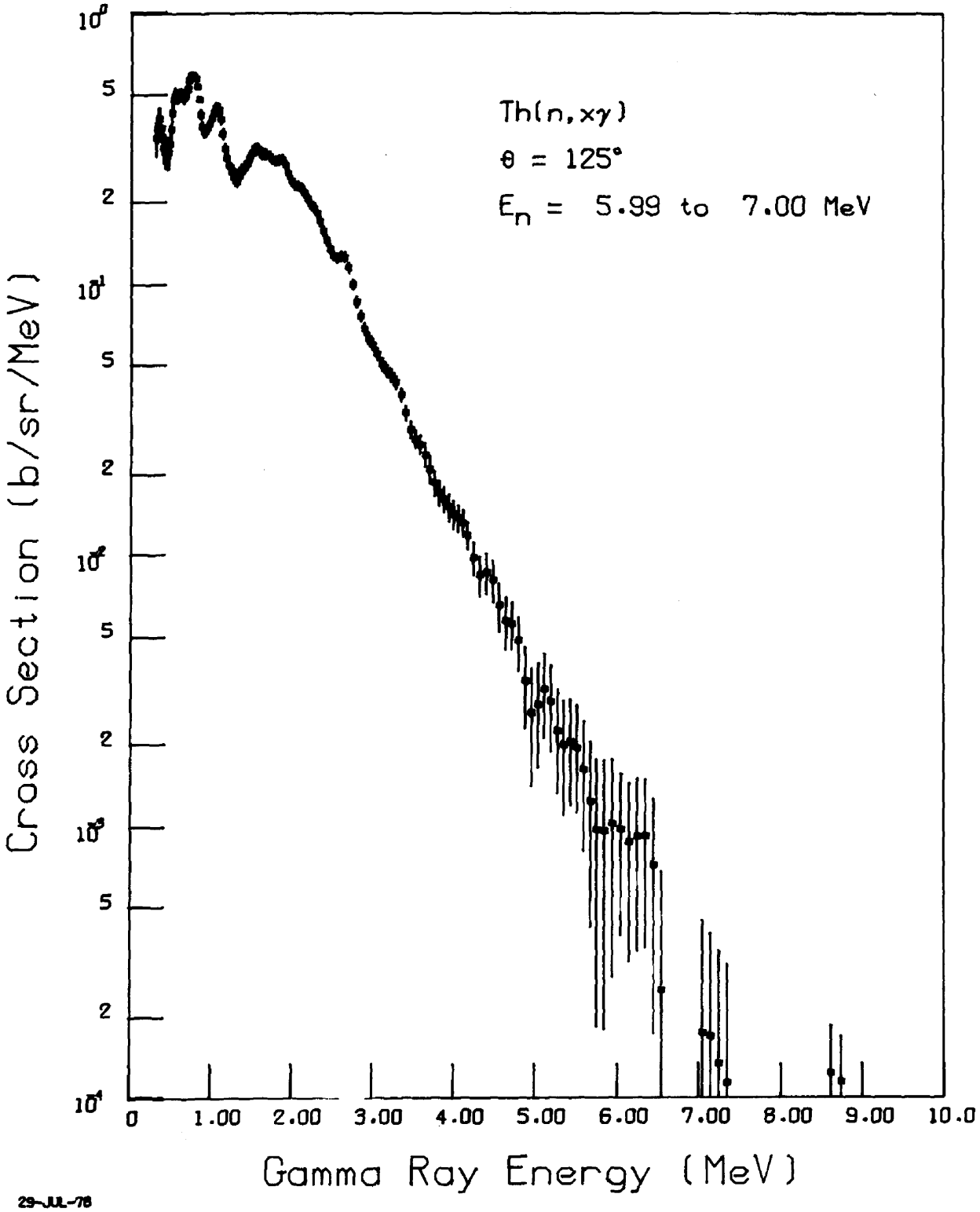
Th(n,xγ)
θ = 125°
E_n = 5.99 to 7.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 14

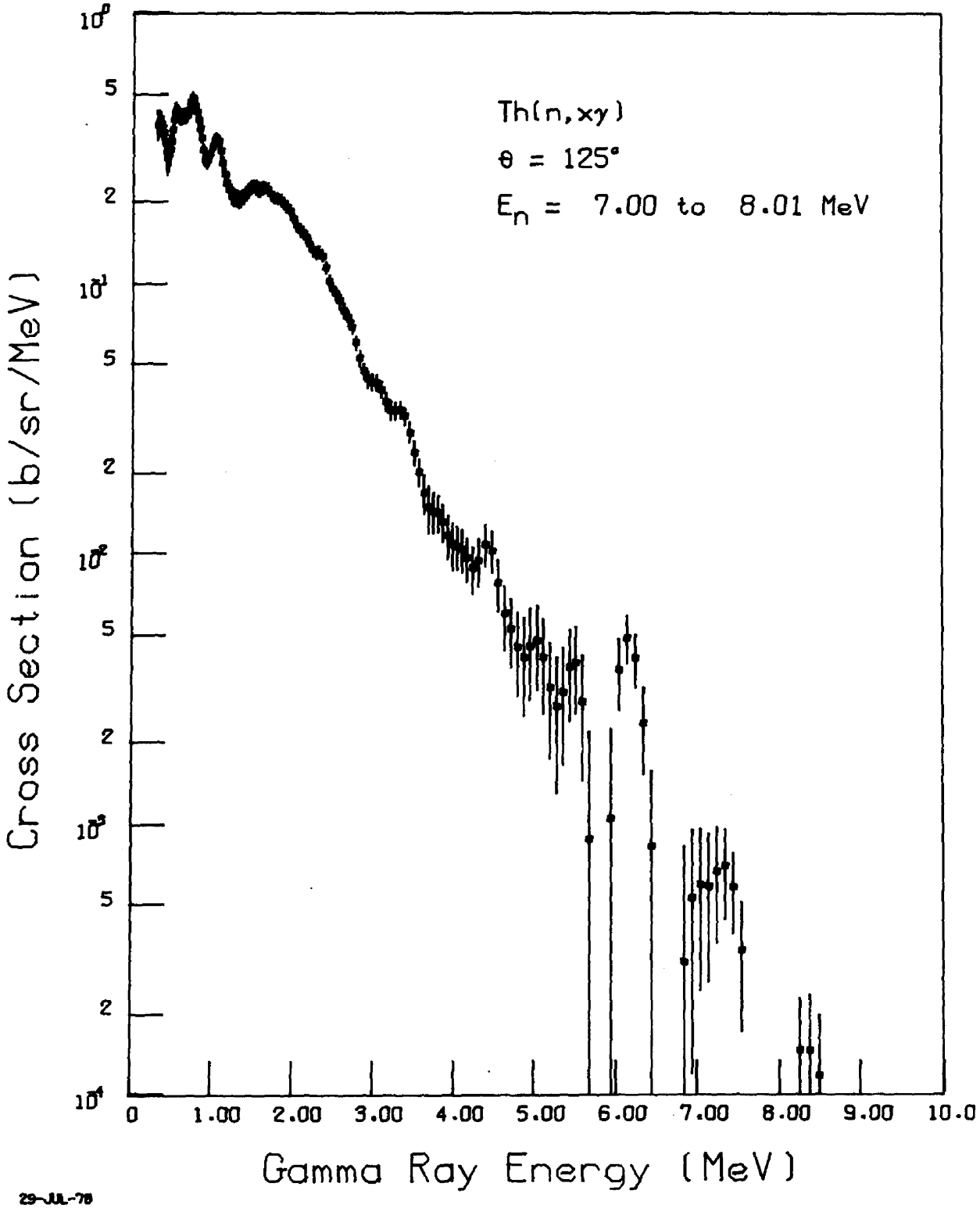
Th(n,xγ)
θ = 125°
E_n = 7.00 to 8.01 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-78

Figure 15

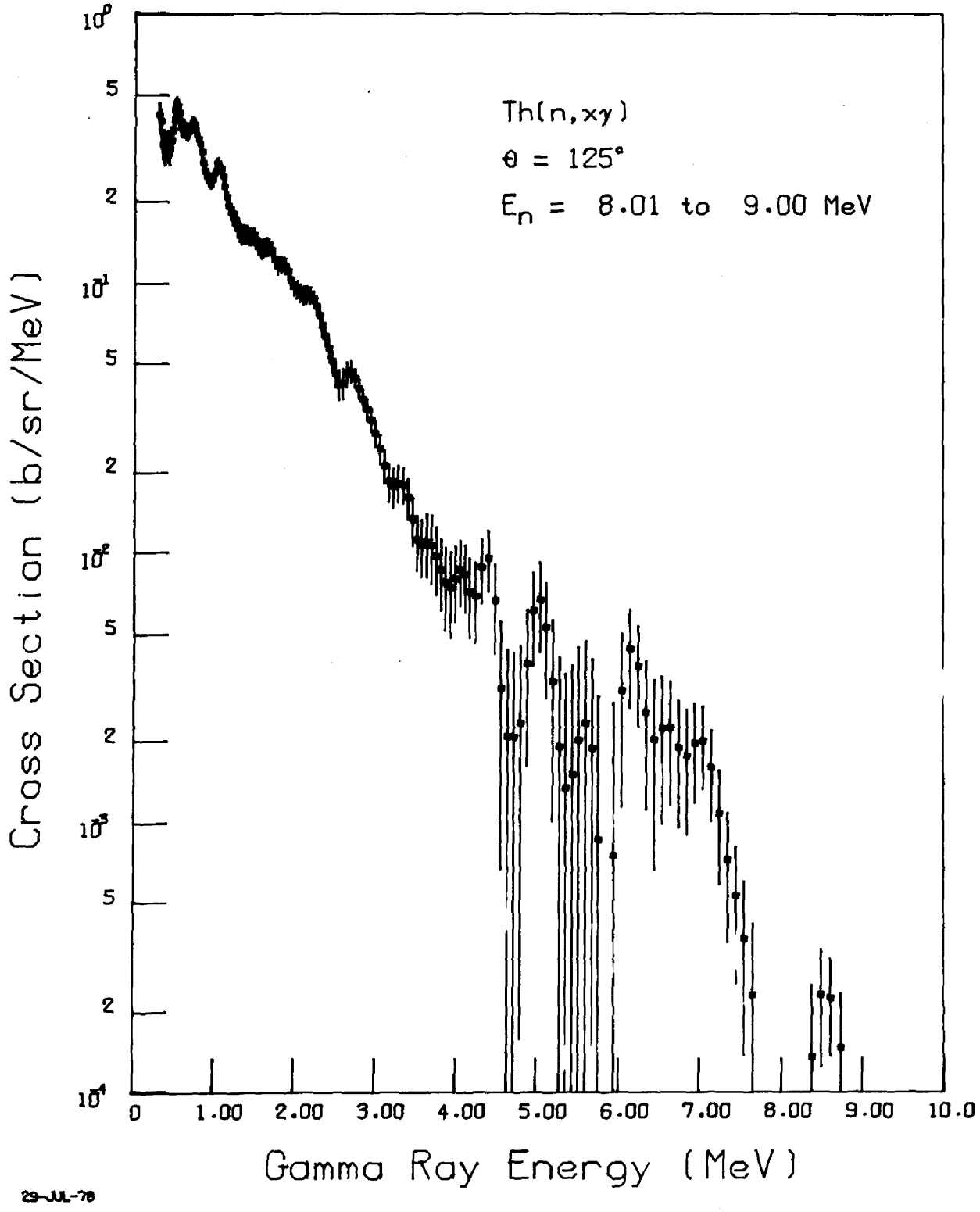
Th(n,xγ)
θ = 125°
E_n = 8.01 to 9.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-78

Figure 16

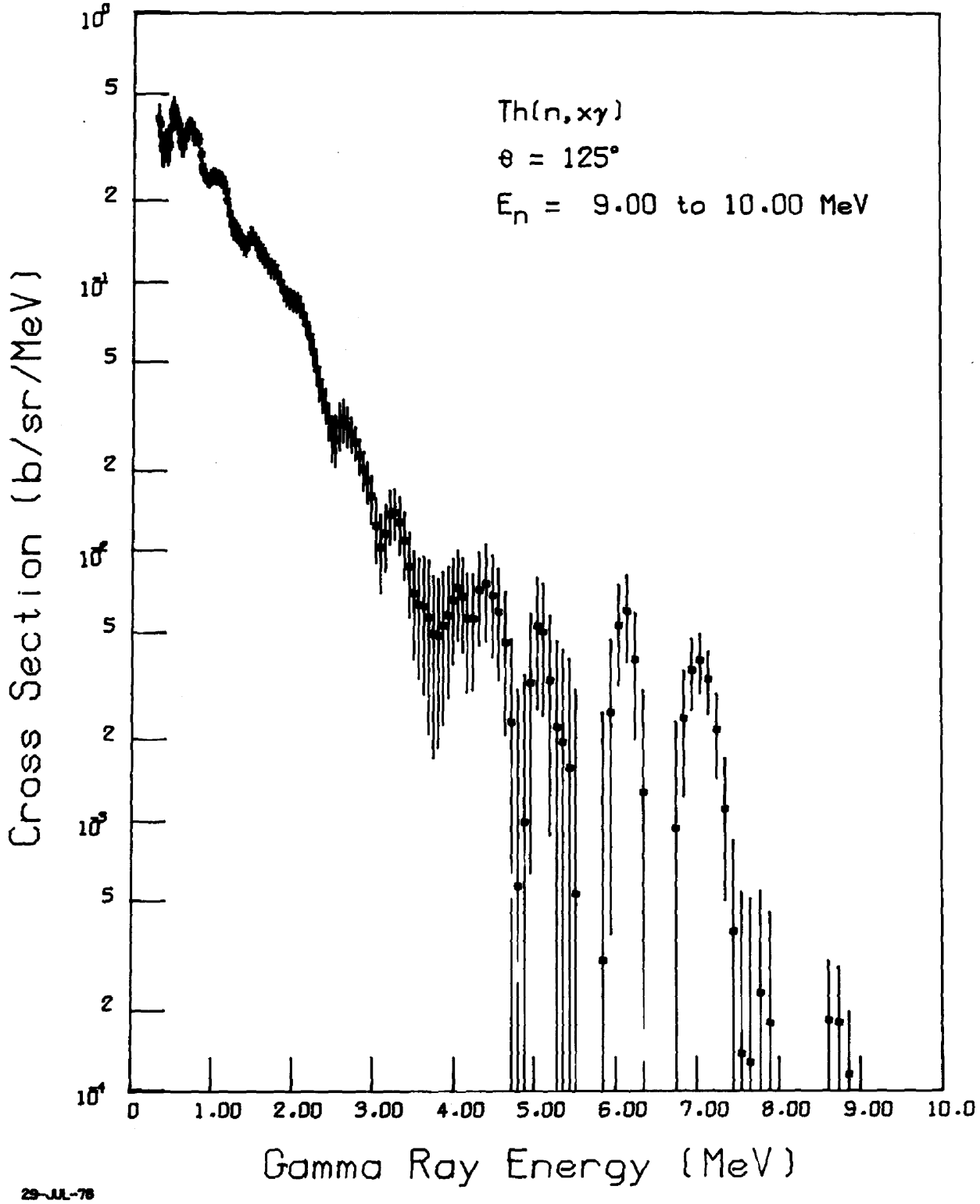
Th(n,xγ)
θ = 125°
E_n = 9.00 to 10.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 17

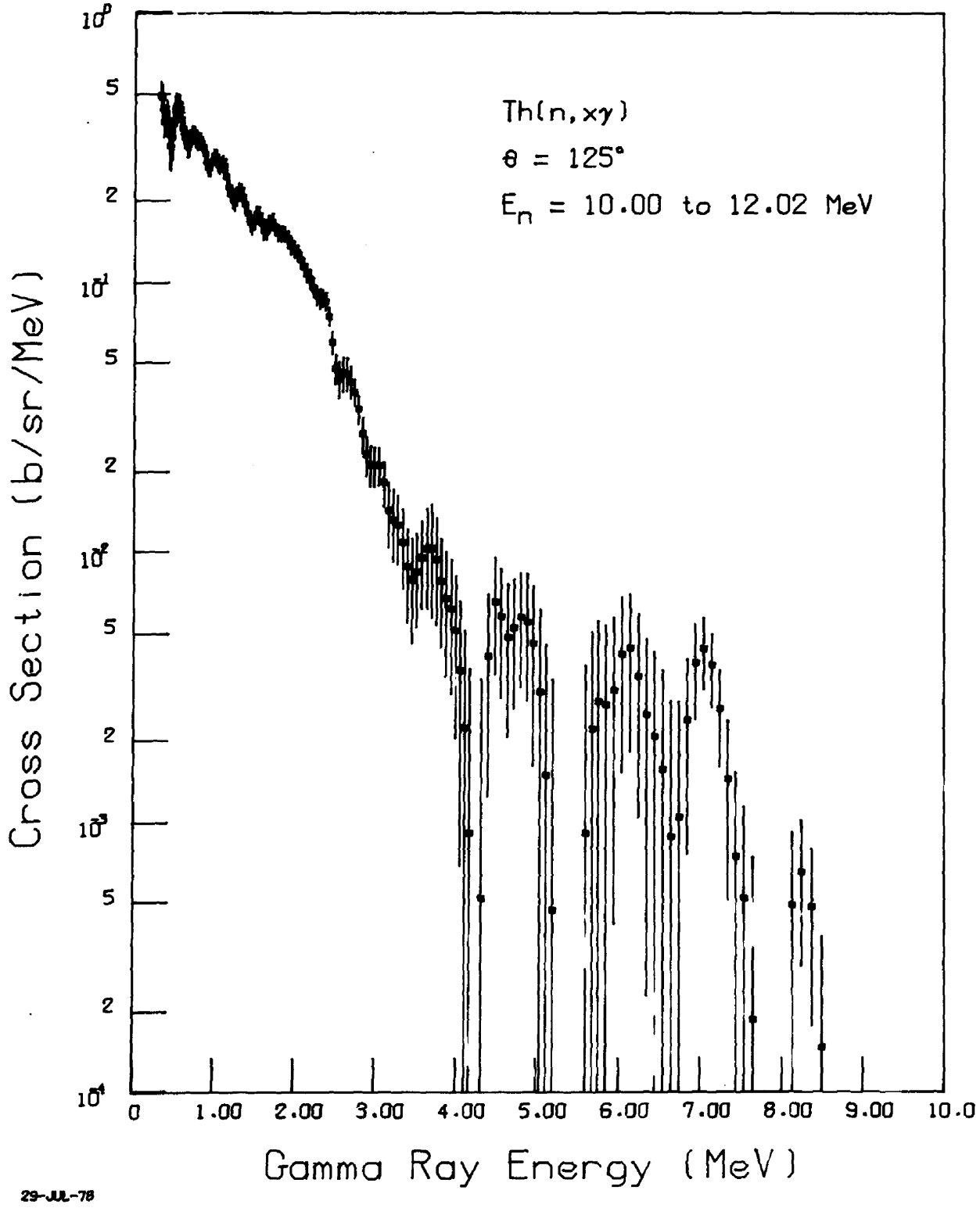
Th(n,xγ)
θ = 125°
E_n = 10.00 to 12.02 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-78

Figure 18

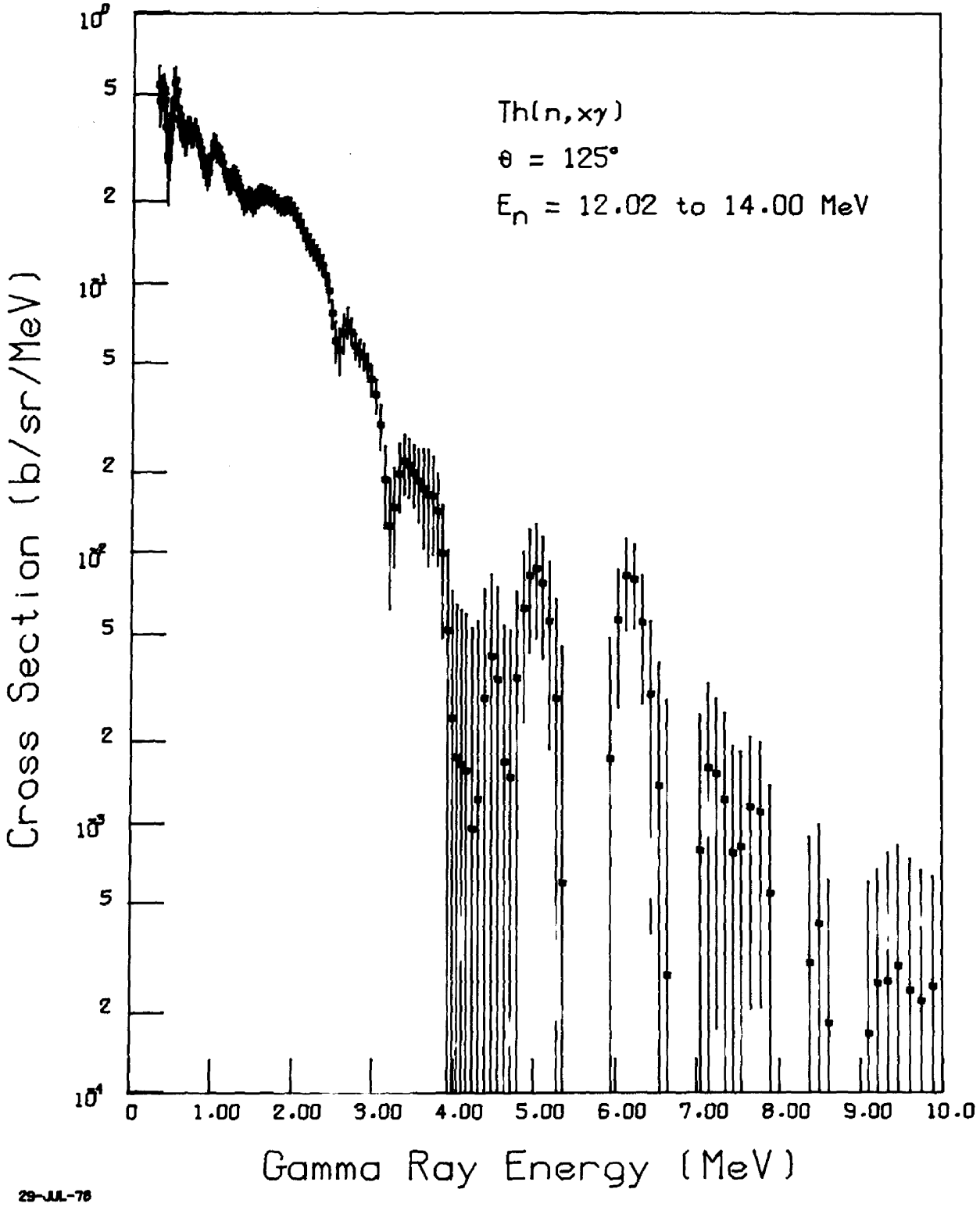
Th(n,xγ)
θ = 125°
E_n = 12.02 to 14.00 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 19

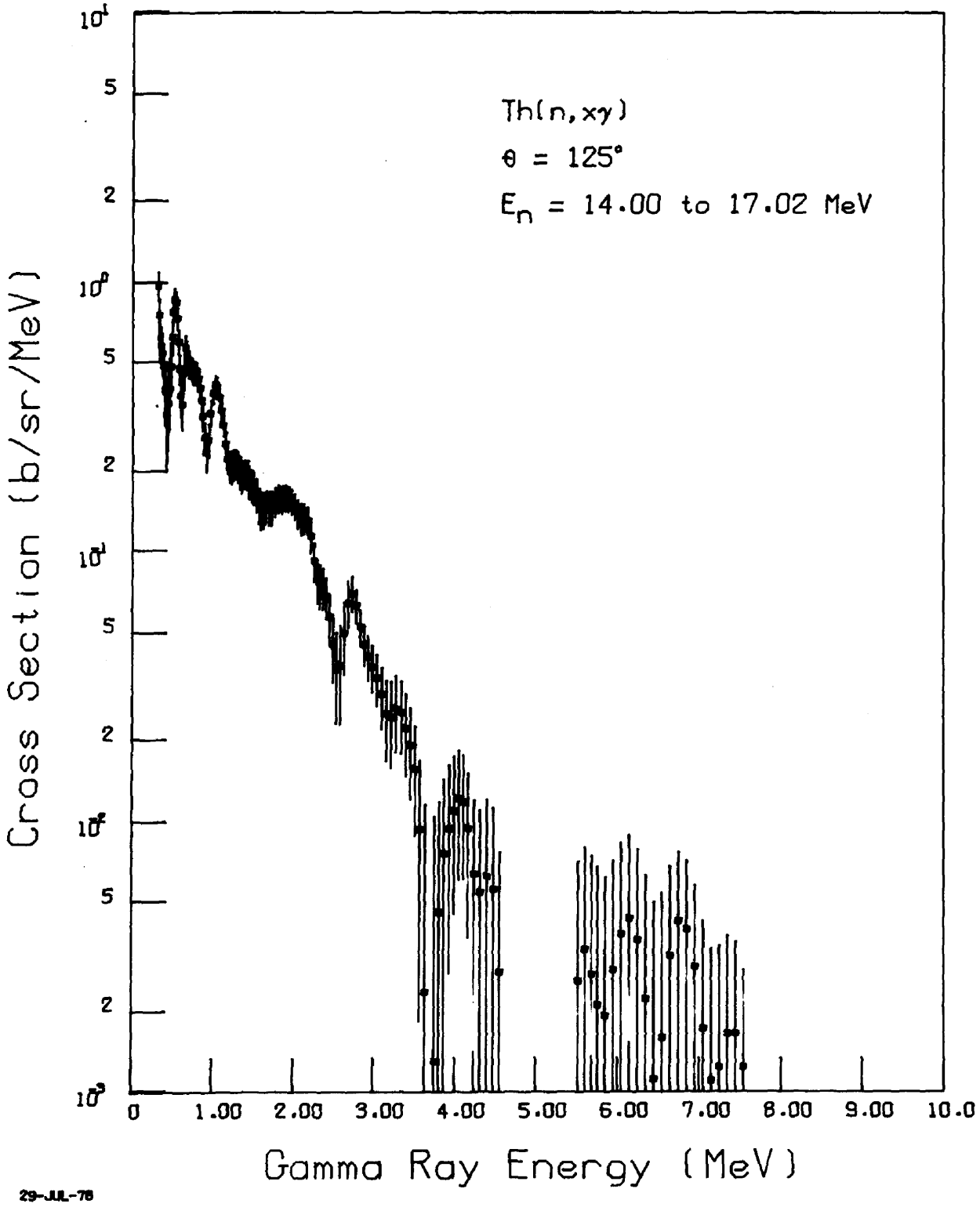
Th(n,xγ)
θ = 125°
E_n = 14.00 to 17.02 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
29-JUL-76

Figure 20

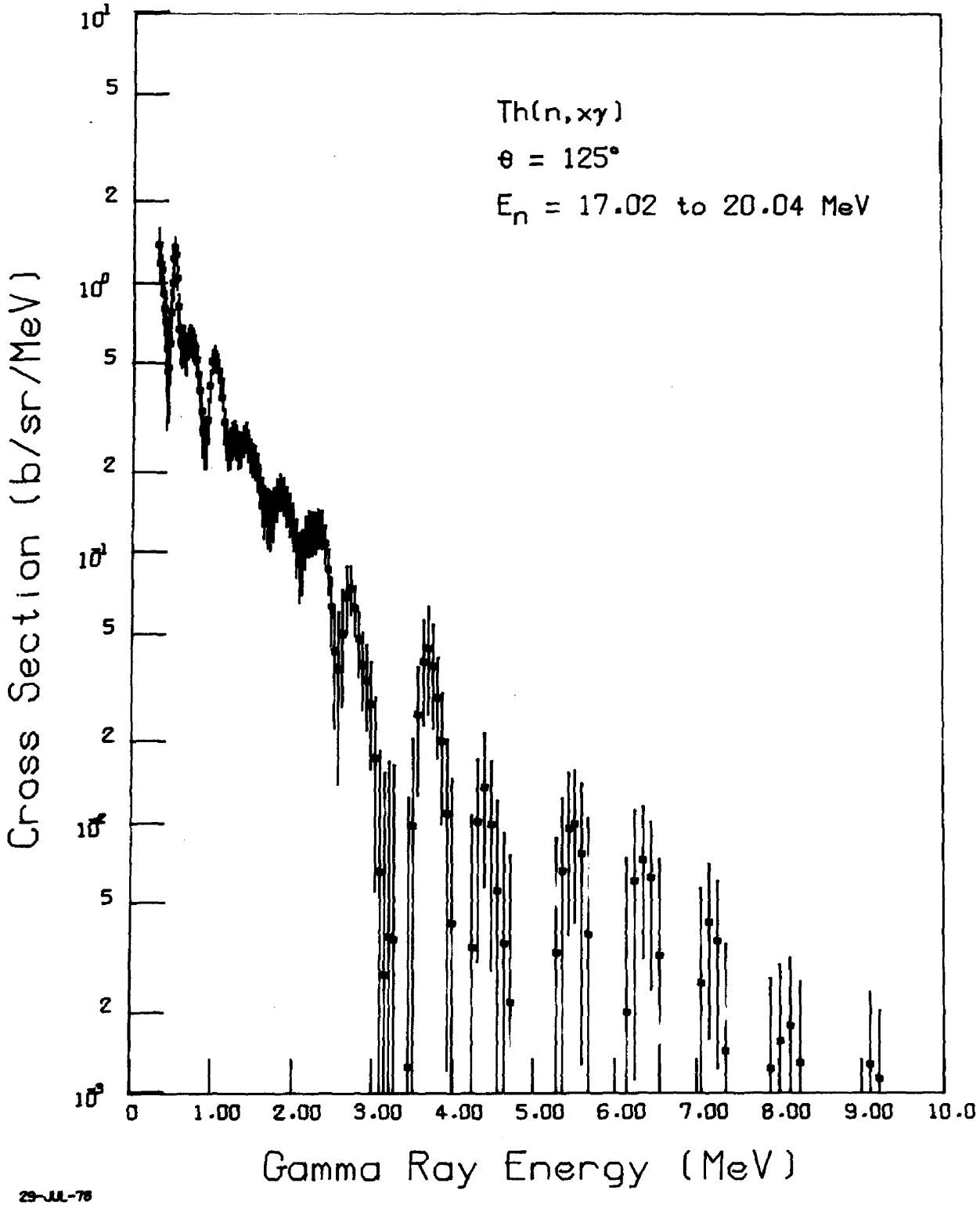
Th(n,xγ)
θ = 125°
E_n = 17.02 to 20.04 MeV
Cross Section (b/sr/MeV)
Gamma Ray Energy (MeV)
0
1.00
2.00
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.0
29-JUL-76

Figure 21

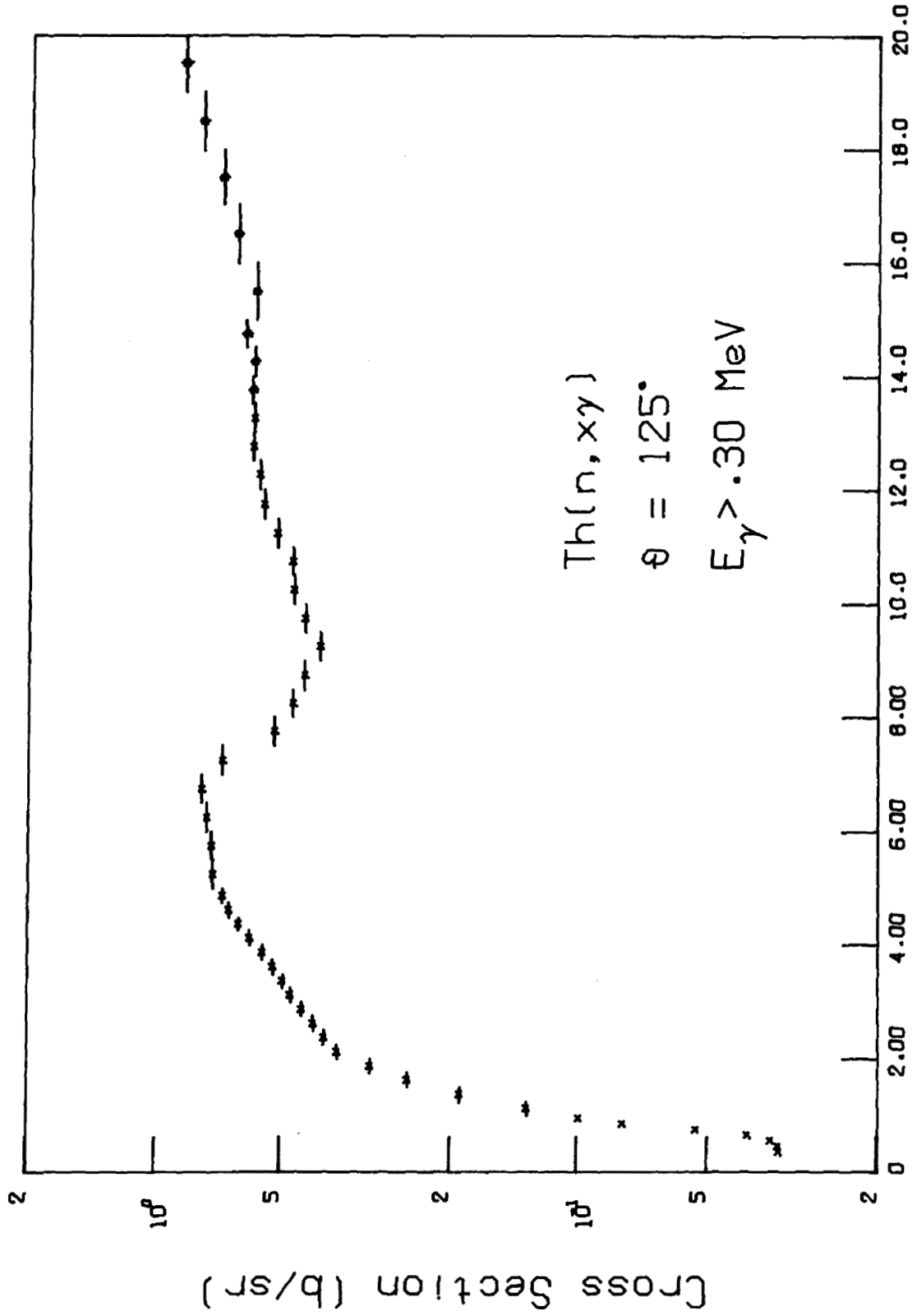
Th(n,xγ)
θ = 125°
E_γ > .30 MeV
Cross Section (b/sr)
Neutron Energy (MeV)
2
5
2
5
2
10^0
10^1
0
2.00
4.00
6.00
8.00
10.0
12.0
14.0
16.0
18.0
20.0

Figure 22

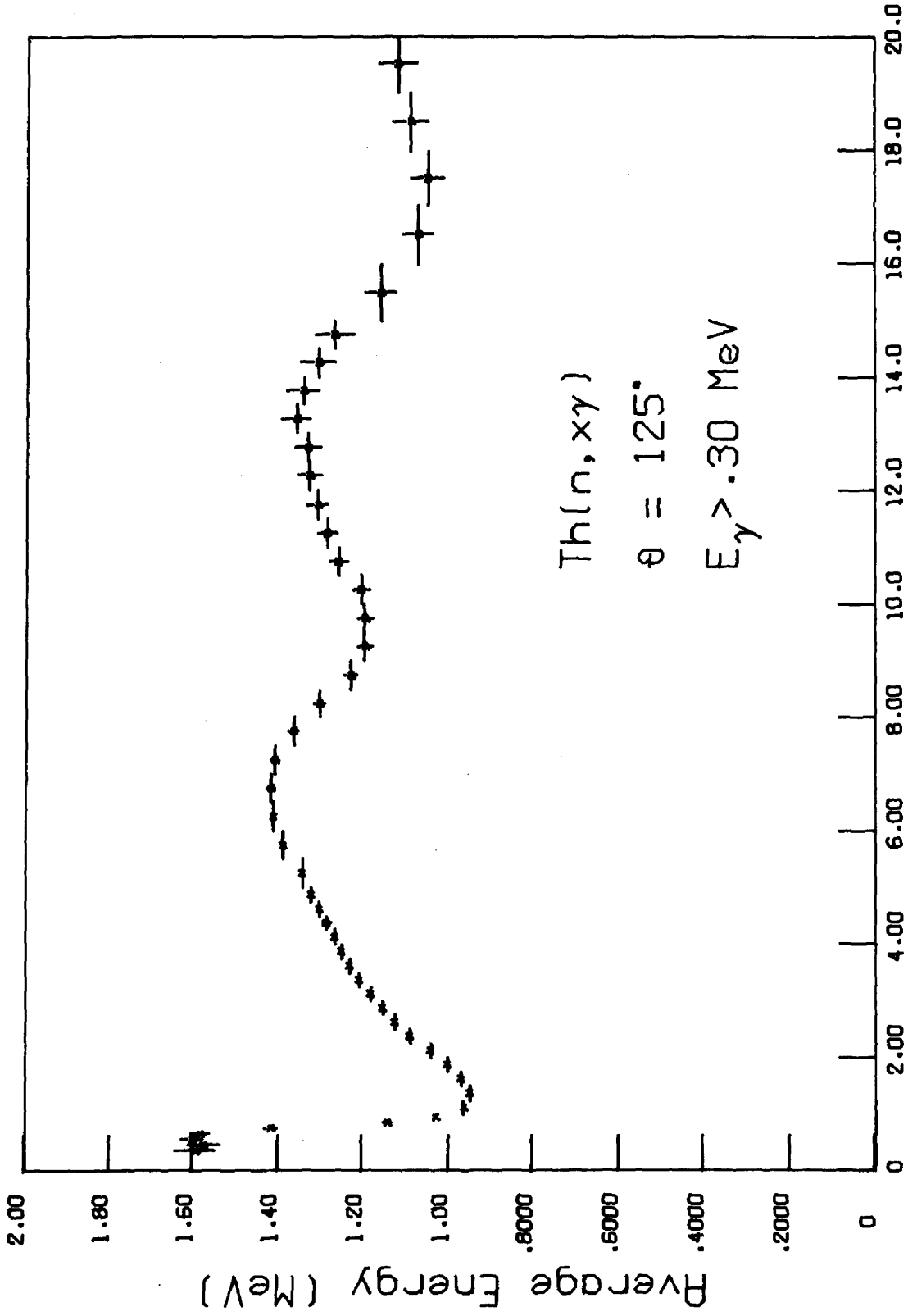
Th(n,xγ)
θ = 125°
E_γ>.30 MeV
Average Energy (MeV)
Neutron Energy (MeV)
2.00
1.80
1.60
1.40
1.20
1.00
.8000
.6000
.4000
.2000
0
2.00
4.00
6.00
8.00
10.0
12.0
14.0
16.0
18.0
20.0

Figure 23

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 0.30 TO 0.50 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	1.073E-02	7.194E-03	1.555E 00	1.600E-02	1.983E-03	4.560E 00	6.134E-04	5.608E-04
3.225E-01	8.535E-03	6.986E-03	1.585E 00	1.607E-02	2.003E-03	4.640E 00	3.654E-04	5.166E-04
3.375E-01	8.263E-03	6.423E-03	1.615E 00	1.538E-02	1.930E-03	4.720E 00	1.367E-04	4.633E-04
3.525E-01	8.646E-03	6.119E-03	1.645E 00	1.489E-02	1.856E-03	4.800E 00	-1.917E-05	-5.692E-04
3.675E-01	9.415E-03	5.675E-03	1.680E 00	1.523E-02	1.813E-03	4.880E 00	-1.200E-04	-5.116E-04
3.825E-01	9.982E-03	5.352E-03	1.720E 00	1.648E-02	1.720E-03	4.960E 00	-1.827E-04	-5.624E-04
3.975E-01	1.048E-02	4.951E-03	1.760E 00	1.728E-02	1.594E-03	5.040E 00	-1.501E-04	-5.643E-04
4.125E-01	1.101E-02	4.695E-03	1.800E 00	1.725E-02	1.556E-03	5.120E 00	-4.676E-05	-5.450E-04
4.275E-01	9.167E-03	4.675E-03	1.840E 00	1.663E-02	1.560E-03	5.200E 00	1.764E-05	4.676E-04
4.425E-01	6.872E-03	5.018E-03	1.880E 00	1.563E-02	1.644E-03	5.280E 00	6.545E-05	5.488E-04
4.575E-01	7.702E-03	5.335E-03	1.920E 00	1.506E-02	1.640E-03	5.360E 00	-2.573E-05	-4.579E-04
4.725E-01	1.026E-02	5.328E-03	1.960E 00	1.514E-02	1.550E-03	5.440E 00	2.210E-05	5.140E-04
4.875E-01	1.285E-02	5.155E-03	2.000E 00	1.471E-02	1.507E-03	5.520E 00	-1.933E-05	-5.366E-04
5.025E-01	1.775E-02	4.640E-03	2.040E 00	1.347E-02	1.516E-03	5.600E 00	3.645E-05	5.007E-04
5.175E-01	2.513E-02	4.101E-03	2.080E 00	1.208E-02	1.570E-03	5.680E 00	1.584E-04	5.075E-04
5.325E-01	3.059E-02	3.717E-03	2.120E 00	1.133E-02	1.592E-03	5.760E 00	1.765E-04	4.797E-04
5.475E-01	3.102E-02	3.472E-03	2.160E 00	1.141E-02	1.561E-03	5.850E 00	2.168E-04	4.557E-04
5.625E-01	2.837E-02	3.447E-03	2.200E 00	1.165E-02	1.473E-03	5.950E 00	1.100E-04	4.268E-04
5.775E-01	2.557E-02	3.629E-03	2.240E 00	1.132E-02	1.377E-03	6.050E 00	-2.273E-05	-4.345E-04
5.925E-01	2.351E-02	3.574E-03	2.280E 00	1.037E-02	1.311E-03	6.150E 00	-2.144E-04	-4.440E-04
6.100E-01	2.106E-02	3.212E-03	2.320E 00	9.287E-03	1.299E-03	6.250E 00	-3.197E-04	-4.057E-04
6.300E-01	1.849E-02	2.865E-03	2.360E 00	8.577E-03	1.269E-03	6.350E 00	-2.583E-04	-3.754E-04
6.500E-01	1.735E-02	2.622E-03	2.400E 00	8.230E-03	1.138E-03	6.450E 00	-2.206E-04	-3.432E-04
6.700E-01	1.736E-02	2.604E-03	2.440E 00	8.059E-03	1.077E-03	6.550E 00	-2.976E-04	-3.075E-04
6.900E-01	1.628E-02	2.652E-03	2.480E 00	7.975E-03	1.113E-03	6.650E 00	-3.663E-04	-2.664E-04
7.100E-01	1.392E-02	2.638E-03	2.525E 00	7.762E-03	1.221E-03	6.750E 00	-2.307E-04	-2.335E-04
7.300E-01	1.203E-02	2.572E-03	2.575E 00	6.687E-03	1.338E-03	6.850E 00	1.315E-04	2.219E-04
7.500E-01	1.109E-02	2.552E-03	2.625E 00	5.287E-03	1.374E-03	6.950E 00	4.500E-04	1.800E-04
7.700E-01	1.088E-02	2.536E-03	2.675E 00	4.987E-03	1.185E-03	7.050E 00	4.946E-04	1.311E-04
7.900E-01	1.186E-02	2.429E-03	2.725E 00	5.331E-03	9.466E-04	7.150E 00	3.398E-04	8.513E-05
8.100E-01	1.352E-02	2.320E-03	2.775E 00	5.293E-03	8.717E-04	7.250E 00	1.617E-04	5.631E-05
8.300E-01	1.432E-02	2.260E-03	2.825E 00	5.022E-03	8.782E-04	7.350E 00	4.621E-05	4.085E-05
8.500E-01	1.313E-02	2.334E-03	2.875E 00	4.820E-03	8.500E-04	7.450E 00	-3.371E-06	-3.957E-05
8.700E-01	1.079E-02	2.489E-03	2.925E 00	4.440E-03	8.193E-04	7.550E 00	-1.086E-05	-3.282E-05
8.900E-01	8.655E-03	2.621E-03	2.975E 00	3.845E-03	8.218E-04	7.660E 00	-9.100E-06	-3.108E-05
9.125E-01	7.104E-03	2.738E-03	3.030E 00	3.273E-03	8.290E-04	7.780E 00	-7.405E-06	-2.820E-05
9.375E-01	6.155E-03	2.756E-03	3.090E 00	2.962E-03	8.317E-04	7.900E 00	-4.665E-07	-2.611E-05
9.625E-01	6.413E-03	2.652E-03	3.150E 00	2.923E-03	7.894E-04	8.020E 00	1.016E-06	2.154E-05
9.875E-01	8.136E-03	2.473E-03	3.210E 00	2.983E-03	7.635E-04	8.140E 00	3.837E-06	2.164E-05
1.012E 00	1.068E-02	2.255E-03	3.270E 00	3.026E-03	7.813E-04	8.260E 00	8.897E-06	2.272E-05
1.037E 00	1.293E-02	2.066E-03	3.330E 00	2.952E-03	7.819E-04	8.380E 00	1.369E-05	1.932E-05
1.063E 00	1.400E-02	1.947E-03	3.390E 00	2.630E-03	7.573E-04	8.500E 00	8.962E-06	1.787E-05
1.087E 00	1.401E-02	1.916E-03	3.450E 00	2.119E-03	7.520E-04	8.620E 00	1.036E-06	1.653E-05
1.112E 00	1.440E-02	1.798E-03	3.510E 00	1.633E-03	7.449E-04	8.740E 00	-6.616E-06	-1.690E-05
1.137E 00	1.510E-02	1.749E-03	3.570E 00	1.328E-03	7.352E-04	8.860E 00	-1.144E-05	-1.422E-05
1.162E 00	1.545E-02	1.714E-03	3.630E 00	1.184E-03	7.286E-04	8.980E 00	-6.141E-06	-1.334E-05
1.188E 00	1.574E-02	1.884E-03	3.690E 00	1.083E-03	7.166E-04	9.100E 00	-1.022E-06	-1.099E-05
1.212E 00	1.588E-02	2.068E-03	3.750E 00	9.068E-04	7.174E-04	9.220E 00	-4.300E-07	-1.318E-05
1.237E 00	1.548E-02	2.022E-03	3.810E 00	7.586E-04	7.198E-04	9.340E 00	1.641E-06	1.211E-05
1.262E 00	1.443E-02	2.005E-03	3.870E 00	7.285E-04	7.247E-04	9.470E 00	4.346E-06	1.046E-05
1.287E 00	1.388E-02	1.978E-03	3.930E 00	7.993E-04	7.186E-04	9.610E 00	6.451E-06	9.833E-06
1.315E 00	1.420E-02	1.947E-03	3.990E 00	8.198E-04	7.089E-04	9.750E 00	9.010E-06	8.223E-06
1.345E 00	1.470E-02	1.861E-03	4.050E 00	7.341E-04	6.784E-04	9.890E 00	9.323E-06	7.486E-06
1.375E 00	1.468E-02	1.783E-03	4.110E 00	6.983E-04	6.577E-04	1.003E 01	8.688E-06	8.578E-06
1.405E 00	1.444E-02	1.781E-03	4.170E 00	7.249E-04	6.298E-04	1.017E 01	8.461E-06	1.059E-05
1.435E 00	1.424E-02	1.888E-03	4.240E 00	8.057E-04	6.281E-04	1.031E 01	7.743E-06	1.279E-05
1.465E 00	1.402E-02	1.853E-03	4.320E 00	8.315E-04	6.333E-04	1.045E 01	7.273E-06	1.391E-05
1.495E 00	1.415E-02	1.823E-03	4.400E 00	8.831E-04	6.195E-04	1.059E 01	7.980E-06	1.443E-05
1.525E 00	1.512E-02	1.890E-03	4.480E 00	8.087E-04	6.054E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	9.376E-04	6.171E-04
4.000E-01 - 5.000E-01	1.005E-03	5.012E-04
5.000E-01 - 6.000E-01	2.648E-03	3.747E-04
6.000E-01 - 7.000E-01	1.810E-03	2.793E-04
7.000E-01 - 8.000E-01	1.198E-03	2.545E-04
8.000E-01 - 1.000E 00	1.906E-03	5.058E-04
1.000E 00 - 1.200E 00	2.806E-03	3.834E-04
1.200E 00 - 1.400E 00	2.945E-03	3.870E-04
1.400E 00 - 1.600E 00	2.976E-03	3.792E-04
1.600E 00 - 1.800E 00	3.214E-03	3.498E-04
1.800E 00 - 2.000E 00	3.137E-03	3.172E-04
2.000E 00 - 2.500E 00	5.239E-03	6.822E-04
2.500E 00 - 3.000E 00	2.672E-03	5.152E-04
3.000E 00 - 3.500E 00	1.409E-03	3.921E-04
3.500E 00 - 4.000E 00	5.038E-04	3.618E-04
4.000E 00 - 4.500E 00	3.958E-04	3.188E-04
4.500E 00 - 5.000E 00	7.904E-05	4.273E-06
5.000E 00 - 6.000E 00	5.152E-05	1.512E-04
6.000E 00 - 7.000E 00	-1.357E-04	2.321E-04
7.000E 00 - 8.000E 00	9.984E-05	1.450E-05
8.000E 00 - 9.000E 00	1.713E-06	8.648E-06
9.000E 00 - 1.000E 01	4.246E-06	3.298E-06

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 0.50 TO 0.70 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	1.203E-02	4.951E-03	1.555E 00	1.537E-02	1.402E-03	4.560E 00	5.371E-04	3.684E-04
3.225E-01	1.224E-02	4.524E-03	1.585E 00	1.543E-02	1.359E-03	4.640E 00	7.119E-04	3.709E-04
3.375E-01	1.374E-02	4.365E-03	1.615E 00	1.558E-02	1.354E-03	4.720E 00	7.582E-04	3.629E-04
3.525E-01	1.650E-02	4.104E-03	1.645E 00	1.632E-02	1.324E-03	4.800E 00	6.308E-04	3.631E-04
3.675E-01	1.600E-02	3.852E-03	1.680E 00	1.756E-02	1.239E-03	4.880E 00	4.063E-04	3.671E-04
3.825E-01	1.529E-02	3.565E-03	1.720E 00	1.778E-02	1.147E-03	4.960E 00	2.465E-04	3.592E-04
3.975E-01	1.437E-02	3.207E-03	1.760E 00	1.701E-02	1.156E-03	5.040E 00	1.606E-04	3.449E-04
4.125E-01	1.073E-02	3.109E-03	1.800E 00	1.670E-02	1.110E-03	5.120E 00	1.165E-04	3.621E-04
4.275E-01	6.792E-03	3.147E-03	1.840E 00	1.653E-02	1.089E-03	5.200E 00	8.041E-05	3.472E-04
4.425E-01	6.153E-03	3.308E-03	1.880E 00	1.639E-02	1.103E-03	5.280E 00	-6.845E-07	-3.425E-04
4.575E-01	9.623E-03	3.450E-03	1.920E 00	1.630E-02	1.088E-03	5.360E 00	-6.771E-05	-3.542E-04
4.725E-01	1.564E-02	3.272E-03	1.960E 00	1.585E-02	1.060E-03	5.440E 00	-1.344E-04	-3.189E-04
4.875E-01	2.129E-02	3.185E-03	2.000E 00	1.500E-02	1.042E-03	5.520E 00	-1.284E-04	-2.921E-04
5.025E-01	2.519E-02	3.089E-03	2.040E 00	1.413E-02	1.023E-03	5.600E 00	-4.342E-05	-2.916E-04
5.175E-01	2.755E-02	2.894E-03	2.080E 00	1.356E-02	1.005E-03	5.680E 00	1.595E-05	2.583E-04
5.325E-01	2.769E-02	2.668E-03	2.120E 00	1.336E-02	9.543E-04	5.760E 00	1.203E-04	2.808E-04
5.475E-01	2.597E-02	2.411E-03	2.160E 00	1.319E-02	1.013E-03	5.850E 00	1.852E-04	3.104E-04
5.625E-01	2.560E-02	2.315E-03	2.200E 00	1.275E-02	1.013E-03	5.950E 00	2.063E-04	2.747E-04
5.775E-01	2.725E-02	2.243E-03	2.240E 00	1.201E-02	9.531E-04	6.050E 00	1.255E-04	2.600E-04
5.925E-01	2.749E-02	2.235E-03	2.280E 00	1.130E-02	8.563E-04	6.150E 00	5.196E-06	2.363E-04
6.100E-01	2.396E-02	2.128E-03	2.320E 00	1.104E-02	7.935E-04	6.250E 00	-4.506E-05	-2.783E-04
6.300E-01	1.998E-02	1.952E-03	2.360E 00	1.094E-02	7.421E-04	6.350E 00	-5.554E-05	-2.391E-04
6.500E-01	1.831E-02	1.764E-03	2.400E 00	1.016E-02	7.200E-04	6.450E 00	-5.268E-05	-1.991E-04
6.700E-01	1.758E-02	1.728E-03	2.440E 00	8.837E-03	7.231E-04	6.550E 00	-1.700E-04	-1.905E-04
6.900E-01	1.793E-02	1.710E-03	2.480E 00	7.647E-03	7.347E-04	6.650E 00	-2.603E-04	-2.026E-04
7.100E-01	1.821E-02	1.648E-03	2.525E 00	6.772E-03	7.608E-04	6.750E 00	-1.899E-04	-1.877E-04
7.300E-01	1.734E-02	1.523E-03	2.575E 00	6.137E-03	8.146E-04	6.850E 00	5.206E-05	1.582E-04
7.500E-01	1.621E-02	1.523E-03	2.625E 00	5.957E-03	8.171E-04	6.950E 00	2.413E-04	1.192E-04
7.700E-01	1.516E-02	1.512E-03	2.675E 00	6.040E-03	7.175E-04	7.050E 00	2.556E-04	8.083E-05
7.900E-01	1.385E-02	1.517E-03	2.725E 00	5.852E-03	6.098E-04	7.150E 00	1.566E-04	5.125E-05
8.100E-01	1.265E-02	1.488E-03	2.775E 00	5.472E-03	5.523E-04	7.250E 00	6.135E-05	3.276E-05
8.300E-01	1.232E-02	1.494E-03	2.825E 00	5.175E-03	5.294E-04	7.350E 00	2.040E-05	2.296E-05
8.500E-01	1.260E-02	1.497E-03	2.875E 00	4.778E-03	5.314E-04	7.450E 00	2.286E-05	1.905E-05
8.700E-01	1.265E-02	1.553E-03	2.925E 00	4.206E-03	5.199E-04	7.550E 00	3.599E-05	1.772E-05
8.900E-01	1.177E-02	1.630E-03	2.975E 00	3.749E-03	5.072E-04	7.660E 00	3.797E-05	1.739E-05
9.125E-01	1.023E-02	1.677E-03	3.030E 00	3.520E-03	5.064E-04	7.780E 00	2.094E-05	1.342E-05
9.375E-01	9.862E-03	1.688E-03	3.090E 00	3.555E-03	5.008E-04	7.900E 00	-1.565E-06	-1.227E-05
9.625E-01	1.154E-02	1.707E-03	3.150E 00	3.767E-03	4.592E-04	8.020E 00	-1.609E-05	-1.046E-05
9.875E-01	1.403E-02	1.707E-03	3.210E 00	3.849E-03	4.384E-04	8.140E 00	-1.884E-05	-9.440E-06
1.012E 00	1.642E-02	1.684E-03	3.270E 00	3.572E-03	4.432E-04	8.260E 00	-1.171E-05	-8.917E-06
1.037E 00	1.753E-02	1.480E-03	3.330E 00	3.159E-03	4.593E-04	8.380E 00	-1.603E-06	-9.097E-06
1.063E 00	1.630E-02	1.491E-03	3.390E 00	2.885E-03	4.516E-04	8.500E 00	8.584E-06	7.888E-06
1.087E 00	1.431E-02	1.481E-03	3.450E 00	2.620E-03	4.406E-04	8.620E 00	1.387E-05	7.225E-06
1.112E 00	1.409E-02	1.367E-03	3.510E 00	2.167E-03	4.540E-04	8.740E 00	1.526E-05	6.740E-06
1.137E 00	1.523E-02	1.274E-03	3.570E 00	1.664E-03	4.588E-04	8.860E 00	1.574E-05	7.619E-06
1.162E 00	1.574E-02	1.252E-03	3.630E 00	1.419E-03	4.426E-04	8.980E 00	1.413E-05	7.085E-06
1.188E 00	1.525E-02	1.483E-03	3.690E 00	1.470E-03	4.214E-04	9.100E 00	1.179E-05	6.933E-06
1.212E 00	1.483E-02	1.652E-03	3.750E 00	1.516E-03	4.080E-04	9.220E 00	6.965E-06	7.734E-06
1.237E 00	1.493E-02	1.575E-03	3.810E 00	1.386E-03	4.280E-04	9.340E 00	2.160E-06	8.074E-06
1.262E 00	1.491E-02	1.484E-03	3.870E 00	1.197E-03	4.410E-04	9.470E 00	-5.451E-07	-7.517E-06
1.287E 00	1.456E-02	1.440E-03	3.930E 00	1.144E-03	4.369E-04	9.610E 00	-2.221E-06	-7.887E-06
1.315E 00	1.450E-02	1.510E-03	3.990E 00	1.187E-03	4.311E-04	9.750E 00	-1.431E-06	-9.188E-06
1.345E 00	1.508E-02	1.436E-03	4.050E 00	1.186E-03	4.122E-04	9.890E 00	-1.608E-07	-7.814E-06
1.375E 00	1.525E-02	1.329E-03	4.110E 00	1.042E-03	3.977E-04	1.003E 01	2.242E-06	7.393E-06
1.405E 00	1.470E-02	1.329E-03	4.170E 00	7.746E-04	3.997E-04	1.017E 01	4.834E-06	8.418E-06
1.435E 00	1.450E-02	1.370E-03	4.240E 00	4.249E-04	4.019E-04	1.031E 01	6.235E-06	1.179E-05
1.465E 00	1.499E-02	1.333E-03	4.320E 00	1.765E-04	4.044E-04	1.045E 01	1.006E-05	1.178E-05
1.495E 00	1.535E-02	1.306E-03	4.400E 00	1.655E-04	4.001E-04	1.059E 01	1.144E-05	1.228E-05
1.525E 00	1.538E-02	1.379E-03	4.480E 00	3.316E-04	3.904E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)			X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01	-	4.000E-01	1.429E-03	4.129E-04
4.000E-01	-	5.000E-01	1.241E-03	3.251E-04
5.000E-01	-	6.000E-01	2.676E-03	2.512E-04
6.000E-01	-	7.000E-01	1.956E-03	1.856E-04
7.000E-01	-	8.000E-01	1.614E-03	1.543E-04
8.000E-01	-	1.000E 00	2.385E-03	3.226E-04
1.000E 00	-	1.200E 00	3.121E-03	2.856E-04
1.200E 00	-	1.400E 00	2.976E-03	2.949E-04
1.400E 00	-	1.600E 00	3.024E-03	2.714E-04
1.600E 00	-	1.800E 00	3.384E-03	2.447E-04
1.800E 00	-	2.000E 00	3.240E-03	2.167E-04
2.000E 00	-	2.500E 00	5.853E-03	4.436E-04
2.500E 00	-	3.000E 00	2.709E-03	3.181E-04
3.000E 00	-	3.500E 00	1.662E-03	2.311E-04
3.500E 00	-	4.000E 00	7.188E-04	2.177E-04
4.000E 00	-	4.500E 00	2.849E-04	2.011E-04
4.500E 00	-	5.000E 00	2.709E-04	1.831E-04
5.000E 00	-	6.000E 00	4.845E-05	5.852E-05
6.000E 00	-	7.000E 00	-3.551E-05	4.886E-05
7.000E 00	-	8.000E 00	6.112E-05	2.452E-05
8.000E 00	-	9.000E 00	2.361E-06	5.919E-09
9.000E 00	-	1.000E 01	2.515E-06	1.300E-06

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 0.70 TO 1.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	3.250E-02	5.012E-03	1.555E 00	1.602E-02	1.187E-03	4.560E 00	4.296E-04	3.002E-04
3.225E-01	3.424E-02	4.468E-03	1.585E 00	1.628E-02	1.145E-03	4.640E 00	3.211E-04	2.899E-04
3.375E-01	3.114E-02	4.317E-03	1.615E 00	1.606E-02	1.097E-03	4.720E 00	2.795E-04	2.779E-04
3.525E-01	2.687E-02	4.205E-03	1.645E 00	1.581E-02	1.061E-03	4.800E 00	2.887E-04	2.848E-04
3.675E-01	2.317E-02	4.011E-03	1.680E 00	1.626E-02	1.016E-03	4.880E 00	3.013E-04	2.900E-04
3.825E-01	1.996E-02	3.759E-03	1.720E 00	1.703E-02	9.689E-04	4.960E 00	2.958E-04	2.971E-04
3.975E-01	1.674E-02	3.589E-03	1.760E 00	1.710E-02	9.691E-04	5.040E 00	2.551E-04	2.911E-04
4.125E-01	1.451E-02	3.543E-03	1.800E 00	1.680E-02	9.320E-04	5.120E 00	1.942E-04	2.732E-04
4.275E-01	1.264E-02	3.692E-03	1.840E 00	1.651E-02	9.104E-04	5.200E 00	1.464E-04	2.659E-04
4.425E-01	1.275E-02	3.769E-03	1.880E 00	1.659E-02	9.229E-04	5.280E 00	1.237E-04	2.664E-04
4.575E-01	1.514E-02	3.737E-03	1.920E 00	1.675E-02	8.972E-04	5.360E 00	1.345E-04	2.464E-04
4.725E-01	1.760E-02	3.775E-03	1.960E 00	1.663E-02	8.534E-04	5.440E 00	1.754E-04	2.231E-04
4.875E-01	2.101E-02	3.679E-03	2.000E 00	1.629E-02	8.13CE-04	5.520E 00	1.668E-04	2.231E-04
5.025E-01	2.636E-02	3.234E-03	2.040E 00	1.574E-02	7.955E-04	5.600E 00	1.042E-04	2.210E-04
5.175E-01	3.036E-02	2.786E-03	2.080E 00	1.493E-02	8.054E-04	5.680E 00	1.502E-06	2.265E-04
5.325E-01	3.072E-02	2.386E-03	2.120E 00	1.398E-02	8.063E-04	5.760E 00	-6.642E-05	-2.220E-04
5.475E-01	3.054E-02	2.139E-03	2.160E 00	1.312E-02	7.922E-04	5.850E 00	-7.108E-05	-1.802E-04
5.625E-01	3.524E-02	2.032E-03	2.200E 00	1.253E-02	7.498E-04	5.950E 00	-1.329E-05	-1.748E-04
5.775E-01	4.826E-02	2.110E-03	2.240E 00	1.217E-02	7.126E-04	6.050E 00	8.963E-05	1.895E-04
5.925E-01	6.875E-02	2.257E-03	2.280E 00	1.173E-02	6.781E-04	6.150E 00	1.222E-04	1.867E-04
6.100E-01	9.819E-02	2.223E-03	2.320E 00	1.110E-02	6.499E-04	6.250E 00	9.808E-05	1.761E-04
6.300E-01	1.353E-01	2.175E-03	2.360E 00	1.035E-02	6.116E-04	6.350E 00	5.605E-05	1.388E-04
6.500E-01	1.879E-01	2.170E-03	2.400E 00	9.441E-03	5.733E-04	6.450E 00	-2.309E-05	-1.420E-04
6.700E-01	2.234E-01	2.088E-03	2.440E 00	8.553E-03	5.661E-04	6.550E 00	-1.282E-04	-1.353E-04
6.900E-01	2.251E-01	1.947E-03	2.480E 00	7.879E-03	5.662E-04	6.650E 00	-2.063E-04	-1.249E-04
7.100E-01	2.038E-01	1.823E-03	2.525E 00	7.365E-03	5.939E-04	6.750E 00	-1.902E-04	-1.120E-04
7.300E-01	1.825E-01	1.731E-03	2.575E 00	6.784E-03	6.388E-04	6.850E 00	-6.995E-05	-1.014E-04
7.500E-01	1.680E-01	1.696E-03	2.625E 00	6.286E-03	6.224E-04	6.950E 00	5.771E-05	8.867E-05
7.700E-01	1.538E-01	1.593E-03	2.675E 00	6.226E-03	5.516E-04	7.050E 00	1.056E-04	6.219E-05
7.900E-01	1.313E-01	1.485E-03	2.725E 00	6.405E-03	4.540E-04	7.150E 00	9.237E-05	4.212E-05
8.100E-01	9.966E-02	1.426E-03	2.775E 00	6.282E-03	4.184E-04	7.250E 00	6.155E-05	3.140E-05
8.300E-01	6.692E-02	1.361E-03	2.825E 00	5.803E-03	4.232E-04	7.350E 00	4.106E-05	2.383E-05
8.500E-01	4.119E-02	1.222E-03	2.875E 00	5.342E-03	4.047E-04	7.450E 00	3.177E-05	2.140E-05
8.700E-01	2.505E-02	1.234E-03	2.925E 00	5.113E-03	3.803E-04	7.550E 00	2.454E-05	2.007E-05
8.900E-01	1.669E-02	1.294E-03	2.975E 00	4.917E-03	3.745E-04	7.660E 00	1.578E-05	1.691E-05
9.125E-01	1.316E-02	1.298E-03	3.030E 00	4.536E-03	3.699E-04	7.780E 00	6.021E-06	1.300E-05
9.375E-01	1.311E-02	1.281E-03	3.090E 00	4.085E-03	3.729E-04	7.900E 00	-2.197E-07	-1.085E-05
9.625E-01	1.447E-02	1.289E-03	3.150E 00	3.707E-03	3.524E-04	8.020E 00	-2.078E-06	-9.278E-06
9.875E-01	1.575E-02	1.332E-03	3.210E 00	3.413E-03	3.446E-04	8.140E 00	-2.955E-06	-7.652E-06
1.012E 00	1.626E-02	1.290E-03	3.27CE 00	3.233E-03	3.386E-04	8.260E 00	-2.037E-06	-7.116E-06
1.037E 00	1.576E-02	1.260E-03	3.330E 00	3.046E-03	3.447E-04	8.380E 00	-1.130E-06	-5.746E-06
1.063E 00	1.476E-02	1.289E-03	3.390E 00	2.749E-03	3.476E-04	8.500E 00	-1.300E-06	-5.051E-06
1.087E 00	1.413E-02	1.269E-03	3.450E 00	2.414E-03	3.388E-04	8.620E 00	-2.224E-06	-4.215E-06
1.112E 00	1.428E-02	1.150E-03	3.510E 00	2.123E-03	3.403E-04	8.740E 00	-3.358E-06	-4.742E-06
1.137E 00	1.503E-02	1.097E-03	3.570E 00	1.934E-03	3.393E-04	8.860E 00	-1.460E-06	-3.880E-06
1.162E 00	1.562E-02	1.080E-03	3.630E 00	1.908E-03	3.190E-04	8.980E 00	7.831E-07	3.037E-06
1.188E 00	1.559E-02	1.237E-03	3.690E 00	1.896E-03	2.960E-04	9.100E 00	1.463E-06	3.372E-06
1.212E 00	1.532E-02	1.347E-03	3.750E 00	1.724E-03	3.000E-04	9.220E 00	2.778E-06	4.457E-06
1.237E 00	1.526E-02	1.290E-03	3.810E 00	1.471E-03	3.147E-04	9.340E 00	2.019E-06	3.580E-06
1.262E 00	1.509E-02	1.291E-03	3.870E 00	1.335E-03	3.140E-04	9.470E 00	2.449E-06	3.553E-06
1.287E 00	1.472E-02	1.284E-03	3.930E 00	1.329E-03	3.115E-04	9.610E 00	4.452E-06	4.450E-06
1.315E 00	1.467E-02	1.328E-03	3.990E 00	1.307E-03	3.174E-04	9.750E 00	4.027E-06	3.279E-06
1.345E 00	1.533E-02	1.234E-03	4.050E 00	1.242E-03	3.255E-04	9.890E 00	3.198E-06	2.979E-06
1.375E 00	1.586E-02	1.119E-03	4.110E 00	1.213E-03	3.120E-04	1.003E 01	2.267E-06	3.260E-06
1.405E 00	1.596E-02	1.098E-03	4.170E 00	1.182E-03	3.010E-04	1.017E 01	1.916E-06	3.693E-06
1.435E 00	1.601E-02	1.136E-03	4.240E 00	1.054E-03	3.024E-04	1.031E 01	1.292E-06	4.884E-06
1.465E 00	1.607E-02	1.147E-03	4.320E 00	8.432E-04	3.071E-04	1.045E 01	1.747E-06	4.847E-06
1.495E 00	1.590E-02	1.168E-03	4.400E 00	6.927E-04	3.082E-04	1.059E 01	2.103E-06	5.176E-06
1.525E 00	1.580E-02	1.131E-03	4.480E 00	5.663E-04	3.122E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)			X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01	-	4.000E-01	2.680E-03	4.230E-04
4.000E-01	-	5.000E-01	1.611E-03	3.676E-04
5.000E-01	-	6.000E-01	3.942E-03	2.374E-04
6.000E-01	-	7.000E-01	1.744E-02	2.120E-04
7.000E-01	-	8.000E-01	1.677E-02	1.666E-04
8.000E-01	-	1.000E 00	6.423E-03	2.593E-04
1.000E 00	-	1.200E 00	3.035E-03	2.417E-04
1.200E 00	-	1.400E 00	3.046E-03	2.514E-04
1.400E 00	-	1.600E 00	3.201E-03	2.279E-04
1.600E 00	-	1.800E 00	3.309E-03	2.019E-04
1.800E 00	-	2.000E 00	3.321E-03	1.784E-04
2.000E 00	-	2.500E 00	5.985E-03	3.486E-04
2.500E 00	-	3.000E 00	3.026E-03	2.431E-04
3.000E 00	-	3.500E 00	1.676E-03	1.755E-04
3.500E 00	-	4.000E 00	8.321E-04	1.580E-04
4.000E 00	-	4.500E 00	4.860E-04	1.548E-04
4.500E 00	-	5.000E 00	1.636E-04	1.453E-04
5.000E 00	-	6.000E 00	9.076E-05	1.283E-04
6.000E 00	-	7.000E 00	-2.005E-05	1.163E-05
7.000E 00	-	8.000E 00	3.784E-05	2.223E-05
8.000E 00	-	9.000E 00	-1.877E-06	5.183E-06
9.000E 00	-	1.000E 01	2.877E-06	3.624E-06

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 1.00 TO 1.50 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	7.614E-02	7.514E-03	1.555E 00	1.484E-02	1.079E-03	4.560E 00	3.986E-04	2.555E-04
3.225E-01	8.511E-02	6.814E-03	1.585E 00	1.498E-02	9.900E-04	4.640E 00	4.843E-04	2.520E-04
3.375E-01	8.898E-02	6.466E-03	1.615E 00	1.499E-02	9.415E-04	4.720E 00	5.622E-04	2.442E-04
3.525E-01	8.514E-02	6.236E-03	1.645E 00	1.482E-02	9.317E-04	4.800E 00	6.256E-04	2.362E-04
3.675E-01	7.721E-02	5.956E-03	1.680E 00	1.470E-02	9.220E-04	4.880E 00	6.722E-04	2.485E-04
3.825E-01	6.700E-02	5.874E-03	1.720E 00	1.492E-02	8.882E-04	4.960E 00	6.542E-04	2.636E-04
3.975E-01	5.660E-02	5.844E-03	1.760E 00	1.502E-02	8.444E-04	5.040E 00	5.340E-04	2.559E-04
4.125E-01	4.723E-02	5.974E-03	1.800E 00	1.468E-02	8.209E-04	5.120E 00	3.650E-04	2.538E-04
4.275E-01	3.797E-02	6.211E-03	1.840E 00	1.441E-02	7.960E-04	5.200E 00	2.220E-04	2.512E-04
4.425E-01	3.245E-02	6.295E-03	1.880E 00	1.436E-02	7.924E-04	5.280E 00	1.046E-04	2.303E-04
4.575E-01	3.333E-02	6.226E-03	1.920E 00	1.433E-02	7.866E-04	5.360E 00	2.644E-05	2.104E-04
4.725E-01	3.788E-02	6.053E-03	1.960E 00	1.424E-02	7.630E-04	5.440E 00	-5.117E-05	-2.273E-04
4.875E-01	4.233E-02	5.484E-03	2.000E 00	1.387E-02	7.282E-04	5.520E 00	-7.326E-05	-2.130E-04
5.025E-01	4.571E-02	4.571E-03	2.040E 00	1.326E-02	7.099E-04	5.600E 00	-3.279E-05	-2.038E-04
5.175E-01	4.543E-02	3.736E-03	2.080E 00	1.266E-02	7.021E-04	5.680E 00	3.067E-05	1.940E-04
5.325E-01	5.447E-02	3.146E-03	2.120E 00	1.217E-02	6.902E-04	5.760E 00	9.521E-05	1.955E-04
5.475E-01	6.183E-02	2.819E-03	2.160E 00	1.160E-02	6.747E-04	5.850E 00	1.242E-04	1.806E-04
5.625E-01	7.831E-02	2.721E-03	2.200E 00	1.098E-02	6.534E-04	5.950E 00	1.213E-04	1.847E-04
5.775E-01	1.123E-01	2.900E-03	2.240E 00	1.053E-02	6.119E-04	6.050E 00	7.301E-05	1.661E-04
5.925E-01	1.617E-01	3.295E-03	2.280E 00	1.015E-02	5.691E-04	6.150E 00	1.843E-05	1.456E-04
6.100E-01	2.236E-01	3.565E-03	2.320E 00	9.612E-03	5.489E-04	6.250E 00	1.275E-05	1.448E-04
6.300E-01	2.859E-01	3.666E-03	2.360E 00	8.939E-03	5.232E-04	6.350E 00	-6.038E-06	-1.493E-04
6.500E-01	3.393E-01	3.614E-03	2.400E 00	8.301E-03	5.151E-04	6.450E 00	-4.413E-05	-1.389E-04
6.700E-01	3.766E-01	3.404E-03	2.440E 00	7.853E-03	5.055E-04	6.550E 00	-8.468E-05	-1.211E-04
6.900E-01	3.909E-01	3.259E-03	2.480E 00	7.606E-03	5.186E-04	6.650E 00	-8.613E-05	-1.064E-04
7.100E-01	4.005E-01	3.203E-03	2.525E 00	7.474E-03	5.387E-04	6.750E 00	-4.704E-05	-9.115E-05
7.300E-01	4.208E-01	3.095E-03	2.575E 00	7.246E-03	5.326E-04	6.850E 00	5.594E-05	9.087E-05
7.500E-01	4.390E-01	2.969E-03	2.625E 00	6.868E-03	5.110E-04	6.950E 00	1.433E-04	8.100E-05
7.700E-01	4.318E-01	2.789E-03	2.675E 00	6.309E-03	4.654E-04	7.050E 00	1.698E-04	6.332E-05
7.900E-01	3.836E-01	2.659E-03	2.725E 00	5.618E-03	3.922E-04	7.150E 00	1.351E-04	4.863E-05
8.100E-01	2.992E-01	2.462E-03	2.775E 00	5.074E-03	3.743E-04	7.250E 00	7.284E-05	3.388E-05
8.300E-01	2.037E-01	2.077E-03	2.825E 00	4.873E-03	3.784E-04	7.350E 00	1.955E-05	2.370E-05
8.500E-01	1.245E-01	1.742E-03	2.875E 00	4.743E-03	3.616E-04	7.450E 00	-1.123E-05	-2.209E-05
8.700E-01	7.244E-02	1.608E-03	2.925E 00	4.414E-03	3.448E-04	7.550E 00	-2.321E-05	-1.952E-05
8.900E-01	4.503E-02	1.607E-03	2.975E 00	4.085E-03	3.347E-04	7.660E 00	-2.128E-05	-1.683E-05
9.125E-01	3.658E-02	1.584E-03	3.030E 00	3.953E-03	3.269E-04	7.780E 00	-1.082E-05	-1.230E-05
9.375E-01	4.614E-02	1.666E-03	3.090E 00	3.785E-03	3.155E-04	7.900E 00	1.390E-06	1.141E-05
9.625E-01	6.799E-02	2.095E-03	3.150E 00	3.520E-03	3.038E-04	8.020E 00	1.144E-05	1.133E-05
9.875E-01	9.939E-02	2.354E-03	3.210E 00	3.432E-03	2.964E-04	8.140E 00	1.526E-05	1.004E-05
1.012E 00	1.359E-01	2.174E-03	3.270E 00	3.319E-03	2.930E-04	8.260E 00	1.257E-05	7.909E-06
1.037E 00	1.612E-01	2.132E-03	3.330E 00	2.962E-03	2.977E-04	8.380E 00	4.894E-06	7.526E-06
1.063E 00	1.637E-01	2.793E-03	3.390E 00	2.583E-03	2.985E-04	8.500E 00	1.144E-06	7.176E-06
1.087E 00	1.394E-01	2.511E-03	3.450E 00	2.343E-03	2.934E-04	8.620E 00	-9.373E-07	-7.082E-06
1.112E 00	1.034E-01	1.710E-03	3.510E 00	2.221E-03	2.919E-04	8.740E 00	-1.503E-06	-6.094E-06
1.137E 00	6.656E-02	1.275E-03	3.570E 00	2.165E-03	2.849E-04	8.860E 00	-4.081E-07	-5.708E-06
1.162E 00	4.341E-02	1.282E-03	3.630E 00	2.076E-03	2.749E-04	8.980E 00	-4.156E-07	-4.078E-06
1.188E 00	2.865E-02	1.308E-03	3.690E 00	1.880E-03	2.719E-04	9.100E 00	-1.851E-06	-4.698E-06
1.212E 00	2.197E-02	1.354E-03	3.750E 00	1.681E-03	2.816E-04	9.220E 00	-2.397E-06	-3.996E-06
1.237E 00	1.937E-02	1.270E-03	3.810E 00	1.616E-03	2.895E-04	9.340E 00	-2.149E-06	-3.504E-06
1.262E 00	1.834E-02	1.254E-03	3.870E 00	1.618E-03	2.907E-04	9.470E 00	-9.705E-07	-3.127E-06
1.287E 00	1.793E-02	1.231E-03	3.930E 00	1.538E-03	2.865E-04	9.610E 00	3.654E-07	2.584E-06
1.315E 00	1.749E-02	1.240E-03	3.990E 00	1.378E-03	2.776E-04	9.750E 00	1.389E-06	1.912E-06
1.345E 00	1.702E-02	1.150E-03	4.050E 00	1.222E-03	2.662E-04	9.890E 00	2.100E-06	1.784E-06
1.375E 00	1.671E-02	1.029E-03	4.110E 00	1.076E-03	2.629E-04	1.003E 01	2.897E-06	2.079E-06
1.405E 00	1.643E-02	9.969E-04	4.170E 00	9.085E-04	2.649E-04	1.017E 01	3.834E-06	2.427E-06
1.435E 00	1.615E-02	1.054E-03	4.240E 00	6.855E-04	2.615E-04	1.031E 01	4.438E-06	2.863E-06
1.465E 00	1.594E-02	1.026E-03	4.320E 00	4.477E-04	2.715E-04	1.045E 01	4.560E-06	3.052E-06
1.495E 00	1.547E-02	9.718E-04	4.400E 00	3.262E-04	2.778E-04	1.059E 01	4.260E-06	3.144E-06
1.525E 00	1.498E-02	1.037E-03	4.480E 00	3.324E-04	2.660E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	7.763E-03	6.426E-04
4.000E-01 - 5.000E-01	3.964E-03	5.971E-04
5.000E-01 - 6.000E-01	8.256E-03	3.239E-04
6.000E-01 - 7.000E-01	3.229E-02	3.498E-04
7.000E-01 - 8.000E-01	4.186E-02	2.941E-04
8.000E-01 - 1.000E 00	2.124E-02	3.820E-04
1.000E 00 - 1.200E 00	2.103E-02	3.793E-04
1.200E 00 - 1.400E 00	3.651E-03	2.401E-04
1.400E 00 - 1.600E 00	3.099E-03	2.051E-04
1.600E 00 - 1.800E 00	2.975E-03	1.789E-04
1.800E 00 - 2.000E 00	2.865E-03	1.566E-04
2.000E 00 - 2.500E 00	5.222E-03	3.034E-04
2.500E 00 - 3.000E 00	2.836E-03	2.116E-04
3.000E 00 - 3.500E 00	1.599E-03	1.514E-04
3.500E 00 - 4.000E 00	8.991E-04	1.416E-04
4.000E 00 - 4.500E 00	3.561E-04	1.341E-04
4.500E 00 - 5.000E 00	2.782E-04	1.252E-04
5.000E 00 - 6.000E 00	1.221E-04	1.121E-04
6.000E 00 - 7.000E 00	3.433E-06	2.826E-06
7.000E 00 - 8.000E 00	3.270E-05	1.109E-05
8.000E 00 - 9.000E 00	4.668E-06	2.203E-06
9.000E 00 - 1.000E 01	-2.874E-07	1.107E-06

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 1.50 TO 2.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	1.299E-01	1.242E-02	1.555E 00	9.770E-02	2.392E-03	4.560E 00	8.527E-04	2.877E-04
3.225E-01	1.558E-01	1.130E-02	1.585E 00	8.685E-02	2.154E-03	4.640E 00	7.041E-04	2.793E-04
3.375E-01	1.796E-01	1.061E-02	1.615E 00	7.387E-02	1.783E-03	4.720E 00	5.168E-04	2.762E-04
3.525E-01	1.840E-01	9.995E-03	1.645E 00	6.156E-02	1.536E-03	4.800E 00	3.674E-04	2.801E-04
3.675E-01	1.691E-01	9.985E-03	1.680E 00	5.051E-02	1.411E-03	4.880E 00	3.462E-04	2.946E-04
3.825E-01	1.503E-01	9.888E-03	1.720E 00	4.214E-02	1.286E-03	4.960E 00	4.198E-04	3.003E-04
3.975E-01	1.361E-01	9.708E-03	1.760E 00	3.557E-02	1.153E-03	5.040E 00	4.648E-04	2.988E-04
4.125E-01	1.237E-01	9.982E-03	1.800E 00	2.983E-02	1.086E-03	5.120E 00	4.614E-04	2.956E-04
4.275E-01	1.110E-01	1.008E-02	1.840E 00	2.542E-02	1.060E-03	5.200E 00	4.539E-04	2.918E-04
4.425E-01	1.041E-01	1.063E-02	1.880E 00	2.198E-02	1.063E-03	5.280E 00	4.405E-04	2.686E-04
4.575E-01	1.039E-01	1.056E-02	1.920E 00	1.933E-02	1.031E-03	5.360E 00	3.624E-04	2.654E-04
4.725E-01	1.064E-01	1.014E-02	1.960E 00	1.752E-02	9.675E-04	5.440E 00	2.526E-04	2.609E-04
4.875E-01	1.115E-01	9.228E-03	2.000E 00	1.610E-02	8.980E-04	5.520E 00	1.793E-04	2.543E-04
5.025E-01	1.207E-01	7.715E-03	2.040E 00	1.488E-02	8.87CE-04	5.600E 00	1.470E-04	2.600E-04
5.175E-01	1.312E-01	6.375E-03	2.080E 00	1.399E-02	8.902E-04	5.680E 00	1.263E-04	2.650E-04
5.325E-01	1.394E-01	5.433E-03	2.120E 00	1.359E-02	8.587E-04	5.760E 00	8.448E-05	2.321E-04
5.475E-01	1.469E-01	4.964E-03	2.160E 00	1.345E-02	8.102E-04	5.850E 00	9.347E-05	1.957E-04
5.625E-01	1.690E-01	4.757E-03	2.200E 00	1.303E-02	7.781E-04	5.950E 00	9.09TE-05	1.939E-04
5.775E-01	2.075E-01	5.051E-03	2.240E 00	1.218E-02	7.589E-04	6.050E 00	1.110E-04	2.007E-04
5.925E-01	2.618E-01	5.729E-03	2.280E 00	1.122E-02	7.047E-04	6.150E 00	9.178E-05	2.006E-04
6.100E-01	3.270E-01	6.181E-03	2.320E 00	1.050E-02	6.788E-04	6.250E 00	5.319E-05	1.773E-04
6.300E-01	3.800E-01	6.429E-03	2.360E 00	9.949E-03	6.440E-04	6.350E 00	1.558E-06	1.378E-04
6.500E-01	4.105E-01	6.202E-03	2.400E 00	9.329E-03	6.013E-04	6.450E 00	-2.182E-05	-1.350E-04
6.700E-01	4.296E-01	5.566E-03	2.440E 00	8.937E-03	6.081E-04	6.550E 00	-1.294E-05	-1.313E-04
6.900E-01	4.448E-01	5.061E-03	2.480E 00	9.099E-03	6.300E-04	6.650E 00	-1.284E-05	-1.223E-04
7.100E-01	4.712E-01	4.972E-03	2.525E 00	9.602E-03	6.349E-04	6.750E 00	2.483E-06	1.056E-04
7.300E-01	5.109E-01	4.945E-03	2.575E 00	9.551E-03	6.910E-04	6.850E 00	-1.798E-05	-9.151E-05
7.500E-01	5.421E-01	4.744E-03	2.625E 00	8.559E-03	6.873E-04	6.950E 00	-2.473E-05	-8.583E-05
7.700E-01	5.398E-01	4.368E-03	2.675E 00	7.546E-03	5.899E-04	7.050E 00	-1.446E-05	-7.767E-05
7.900E-01	4.912E-01	4.316E-03	2.725E 00	7.157E-03	4.787E-04	7.150E 00	1.545E-05	6.131E-05
8.100E-01	4.017E-01	4.154E-03	2.775E 00	6.877E-03	4.387E-04	7.250E 00	4.756E-05	4.920E-05
8.300E-01	2.964E-01	3.666E-03	2.825E 00	6.320E-03	4.474E-04	7.350E 00	5.241E-05	3.795E-05
8.500E-01	2.054E-01	3.317E-03	2.875E 00	5.796E-03	4.228E-04	7.450E 00	3.789E-05	3.392E-05
8.700E-01	1.451E-01	3.068E-03	2.925E 00	5.431E-03	3.950E-04	7.550E 00	1.818E-05	3.060E-05
8.900E-01	1.154E-01	2.950E-03	2.975E 00	4.909E-03	3.850E-04	7.660E 00	9.576E-06	2.731E-05
9.125E-01	1.108E-01	2.961E-03	3.030E 00	4.224E-03	3.975E-04	7.780E 00	5.991E-06	2.039E-05
9.375E-01	1.325E-01	3.317E-03	3.090E 00	3.952E-03	4.019E-04	7.900E 00	7.710E-06	1.659E-05
9.625E-01	1.713E-01	4.289E-03	3.150E 00	4.156E-03	3.641E-04	8.020E 00	1.124E-05	1.677E-05
9.875E-01	2.215E-01	4.956E-03	3.210E 00	4.275E-03	3.454E-04	8.140E 00	1.599E-05	1.529E-05
1.012E 00	2.809E-01	4.579E-03	3.27CE 00	4.093E-03	3.471E-04	8.260E 00	1.683E-05	1.204E-05
1.037E 00	3.250E-01	4.860E-03	3.330E 00	3.793E-03	3.577E-04	8.380E 00	1.527E-05	1.036E-05
1.063E 00	3.300E-01	5.758E-03	3.390E 00	3.480E-03	3.428E-04	8.500E 00	1.189E-05	9.591E-06
1.087E 00	2.850E-01	5.222E-03	3.450E 00	3.151E-03	3.311E-04	8.620E 00	6.497E-06	9.862E-06
1.112E 00	2.167E-01	3.552E-03	3.510E 00	2.829E-03	3.329E-04	8.740E 00	8.009E-07	8.241E-06
1.137E 00	1.467E-01	2.612E-03	3.570E 00	2.531E-03	3.310E-04	8.860E 00	-3.879E-06	-6.641E-06
1.162E 00	1.005E-01	2.613E-03	3.630E 00	2.304E-03	3.276E-04	8.980E 00	-4.770E-06	-5.631E-06
1.188E 00	7.049E-02	2.960E-03	3.690E 00	2.168E-03	3.153E-04	9.100E 00	-4.539E-06	-5.425E-06
1.212E 00	5.641E-02	3.200E-03	3.750E 00	2.023E-03	3.136E-04	9.220E 00	-2.509E-06	-5.322E-06
1.237E 00	5.134E-02	3.001E-03	3.810E 00	1.857E-03	3.330E-04	9.340E 00	-1.334E-07	-4.486E-06
1.262E 00	5.200E-02	2.789E-03	3.87CE 00	1.715E-03	3.291E-04	9.470E 00	5.797E-07	5.275E-06
1.287E 00	5.630E-02	2.607E-03	3.930E 00	1.625E-03	3.249E-04	9.610E 00	3.249E-06	4.841E-06
1.315E 00	6.317E-02	2.684E-03	3.990E 00	1.573E-03	3.225E-04	9.750E 00	3.959E-06	5.827E-06
1.345E 00	7.156E-02	2.527E-03	4.050E 00	1.544E-03	3.090E-04	9.890E 00	4.711E-06	5.480E-06
1.375E 00	8.159E-02	2.268E-03	4.110E 00	1.487E-03	2.963E-04	1.003E 01	4.870E-06	4.720E-06
1.405E 00	9.145E-02	2.210E-03	4.170E 00	1.387E-03	2.943E-04	1.017E 01	7.600E-06	7.168E-06
1.435E 00	9.812E-02	2.439E-03	4.240E 00	1.237E-03	3.031E-04	1.031E 01	6.944E-06	8.905E-06
1.465E 00	1.021E-01	2.467E-03	4.320E 00	1.125E-03	3.152E-04	1.045E 01	7.816E-06	1.067E-05
1.495E 00	1.046E-01	2.247E-03	4.400E 00	1.074E-03	3.174E-04	1.059E 01	8.622E-06	1.151E-05
1.525E 00	1.039E-01	2.305E-03	4.480E 00	9.839E-04	3.049E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)			X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01	-	4.000E-01	1.589E-02	1.062E-03
4.000E-01	-	5.000E-01	1.117E-02	1.005E-03
5.000E-01	-	6.000E-01	1.711E-02	5.600E-04
6.000E-01	-	7.000E-01	3.981E-02	5.887E-04
7.000E-01	-	8.000E-01	5.103E-02	4.667E-04
8.000E-01	-	1.000E 00	3.929E-02	7.298E-04
1.000E 00	-	1.200E 00	4.383E-02	7.929E-04
1.200E 00	-	1.400E 00	1.280E-02	5.359E-04
1.400E 00	-	1.600E 00	1.963E-02	4.649E-04
1.600E 00	-	1.800E 00	9.830E-03	2.759E-04
1.800E 00	-	2.000E 00	4.276E-03	2.048E-04
2.000E 00	-	2.500E 00	5.924E-03	3.719E-04
2.500E 00	-	3.000E 00	3.586E-03	2.588E-04
3.000E 00	-	3.500E 00	1.927E-03	1.800E-04
3.500E 00	-	4.000E 00	1.028E-03	1.627E-04
4.000E 00	-	4.500E 00	6.312E-04	1.536E-04
4.500E 00	-	5.000E 00	2.755E-04	1.435E-04
5.000E 00	-	6.000E 00	2.562E-04	2.543E-04
6.000E 00	-	7.000E 00	1.686E-05	2.485E-05
7.000E 00	-	8.000E 00	1.893E-05	2.304E-05
8.000E 00	-	9.000E 00	8.176E-06	7.846E-06
9.000E 00	-	1.000E 01	8.930E-07	1.114E-06

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 2.00 TO 2.50 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	1.516E-01	1.727E-02	1.555E 00	1.627E-01	4.530E-03	4.560E 00	4.293E-04	3.655E-04
3.225E-01	1.922E-01	1.537E-02	1.585E 00	1.570E-01	4.140E-03	4.640E 00	6.586E-04	3.564E-04
3.375E-01	2.209E-01	1.447E-02	1.615E 00	1.479E-01	3.618E-03	4.720E 00	7.480E-04	3.761E-04
3.525E-01	2.298E-01	1.392E-02	1.645E 00	1.397E-01	3.292E-03	4.800E 00	7.195E-04	3.671E-04
3.675E-01	2.201E-01	1.331E-02	1.680E 00	1.334E-01	3.027E-03	4.880E 00	6.162E-04	3.619E-04
3.825E-01	2.032E-01	1.316E-02	1.720E 00	1.302E-01	2.770E-03	4.960E 00	5.271E-04	3.663E-04
3.975E-01	1.888E-01	1.266E-02	1.760E 00	1.297E-01	2.606E-03	5.040E 00	4.888E-04	3.730E-04
4.125E-01	1.659E-01	1.269E-02	1.800E 00	1.297E-01	2.512E-03	5.120E 00	4.460E-04	3.758E-04
4.275E-01	1.537E-01	1.311E-02	1.840E 00	1.261E-01	2.364E-03	5.200E 00	3.698E-04	3.853E-04
4.425E-01	1.461E-01	1.335E-02	1.880E 00	1.167E-01	2.294E-03	5.280E 00	2.444E-04	3.821E-04
4.575E-01	1.474E-01	1.360E-02	1.920E 00	1.033E-01	2.107E-03	5.360E 00	1.334E-04	3.248E-04
4.725E-01	1.561E-01	1.344E-02	1.960E 00	8.845E-02	1.875E-03	5.440E 00	7.757E-05	3.246E-04
4.875E-01	1.700E-01	1.237E-02	2.000E 00	7.334E-02	1.623E-03	5.520E 00	1.286E-04	3.428E-04
5.025E-01	1.844E-01	1.097E-02	2.040E 00	5.937E-02	1.475E-03	5.600E 00	2.665E-04	3.573E-04
5.175E-01	2.003E-01	9.855E-03	2.080E 00	4.781E-02	1.396E-03	5.680E 00	3.789E-04	3.601E-04
5.325E-01	2.135E-01	8.681E-03	2.120E 00	3.960E-02	1.345E-03	5.760E 00	3.873E-04	3.528E-04
5.475E-01	2.218E-01	7.752E-03	2.160E 00	3.451E-02	1.224E-03	5.850E 00	2.770E-04	2.981E-04
5.625E-01	2.357E-01	7.222E-03	2.200E 00	3.020E-02	1.075E-03	5.950E 00	1.324E-04	2.834E-04
5.775E-01	2.689E-01	7.491E-03	2.240E 00	2.486E-02	9.839E-04	6.050E 00	1.159E-05	2.970E-04
5.925E-01	3.219E-01	8.203E-03	2.280E 00	1.916E-02	9.404E-04	6.150E 00	-4.324E-05	-2.912E-04
6.100E-01	3.889E-01	8.440E-03	2.320E 00	1.456E-02	8.949E-04	6.250E 00	-6.490E-05	-2.592E-04
6.300E-01	4.434E-01	8.574E-03	2.360E 00	1.163E-02	8.373E-04	6.350E 00	-3.642E-05	-2.244E-04
6.500E-01	4.719E-01	8.288E-03	2.400E 00	9.944E-03	7.516E-04	6.450E 00	1.269E-05	2.044E-04
6.700E-01	4.834E-01	7.708E-03	2.440E 00	8.943E-03	7.263E-04	6.550E 00	4.447E-05	1.831E-04
6.900E-01	4.929E-01	7.258E-03	2.480E 00	8.379E-03	7.785E-04	6.650E 00	3.246E-05	1.577E-04
7.100E-01	5.217E-01	6.899E-03	2.525E 00	8.299E-03	8.443E-04	6.750E 00	2.098E-05	1.406E-04
7.300E-01	5.603E-01	6.680E-03	2.575E 00	8.257E-03	9.025E-04	6.850E 00	7.630E-05	1.315E-04
7.500E-01	5.843E-01	6.648E-03	2.625E 00	7.676E-03	8.575E-04	6.950E 00	1.623E-04	1.165E-04
7.700E-01	5.802E-01	6.330E-03	2.675E 00	7.152E-03	7.607E-04	7.050E 00	1.980E-04	9.904E-05
7.900E-01	5.374E-01	6.194E-03	2.725E 00	7.052E-03	6.075E-04	7.150E 00	1.535E-04	7.437E-05
8.100E-01	4.571E-01	6.010E-03	2.775E 00	6.733E-03	5.325E-04	7.250E 00	8.336E-05	5.855E-05
8.300E-01	3.617E-01	5.410E-03	2.825E 00	6.040E-03	5.206E-04	7.350E 00	4.104E-05	5.142E-05
8.500E-01	2.785E-01	5.009E-03	2.875E 00	5.468E-03	5.081E-04	7.450E 00	2.561E-05	4.981E-05
8.700E-01	2.216E-01	4.771E-03	2.925E 00	5.095E-03	4.905E-04	7.550E 00	2.851E-05	4.530E-05
8.900E-01	1.917E-01	4.802E-03	2.975E 00	4.575E-03	4.976E-04	7.660E 00	9.273E-06	3.417E-05
9.125E-01	1.868E-01	4.821E-03	3.030E 00	3.888E-03	5.097E-04	7.780E 00	-1.422E-05	-2.814E-05
9.375E-01	2.117E-01	5.121E-03	3.090E 00	3.478E-03	4.972E-04	7.900E 00	-1.413E-05	-2.683E-05
9.625E-01	2.536E-01	6.365E-03	3.150E 00	3.480E-03	4.652E-04	8.020E 00	-3.652E-07	-2.230E-05
9.875E-01	3.002E-01	7.457E-03	3.210E 00	3.437E-03	4.380E-04	8.140E 00	2.202E-05	1.876E-05
1.012E 00	3.456E-01	6.994E-03	3.270E 00	3.119E-03	4.279E-04	8.260E 00	3.352E-05	1.868E-05
1.037E 00	3.858E-01	6.921E-03	3.330E 00	2.628E-03	4.565E-04	8.380E 00	2.485E-05	1.367E-05
1.063E 00	3.854E-01	8.555E-03	3.390E 00	2.170E-03	4.633E-04	8.500E 00	1.647E-05	9.924E-06
1.087E 00	3.353E-01	7.853E-03	3.450E 00	1.929E-03	4.561E-04	8.620E 00	6.759E-06	9.753E-06
1.112E 00	2.633E-01	5.741E-03	3.510E 00	1.903E-03	4.344E-04	8.740E 00	3.051E-07	1.172E-05
1.137E 00	1.913E-01	4.522E-03	3.570E 00	2.037E-03	4.263E-04	8.860E 00	3.291E-06	8.417E-06
1.162E 00	1.414E-01	4.541E-03	3.630E 00	2.229E-03	4.050E-04	8.980E 00	2.807E-06	6.615E-06
1.188E 00	1.053E-01	5.412E-03	3.690E 00	2.258E-03	3.863E-04	9.100E 00	1.542E-06	7.090E-06
1.212E 00	8.596E-02	5.911E-03	3.750E 00	2.068E-03	3.915E-04	9.220E 00	-2.172E-08	-6.091E-06
1.237E 00	7.725E-02	5.653E-03	3.810E 00	1.923E-03	4.054E-04	9.340E 00	-1.813E-06	-6.770E-06
1.262E 00	7.451E-02	5.196E-03	3.870E 00	1.970E-03	4.168E-04	9.470E 00	-1.517E-06	-6.634E-06
1.287E 00	7.633E-02	4.857E-03	3.930E 00	2.049E-03	4.297E-04	9.610E 00	3.102E-07	6.340E-06
1.315E 00	8.221E-02	4.958E-03	3.990E 00	1.931E-03	4.243E-04	9.750E 00	7.578E-07	5.023E-06
1.345E 00	9.333E-02	4.679E-03	4.050E 00	1.659E-03	3.985E-04	9.890E 00	8.175E-07	3.965E-06
1.375E 00	1.085E-01	4.222E-03	4.110E 00	1.462E-03	3.878E-04	1.003E 01	1.108E-06	4.132E-06
1.405E 00	1.228E-01	4.047E-03	4.170E 00	1.438E-03	3.904E-04	1.017E 01	7.513E-07	6.018E-06
1.435E 00	1.342E-01	4.427E-03	4.240E 00	1.378E-03	3.872E-04	1.031E 01	6.310E-07	7.834E-06
1.465E 00	1.450E-01	4.450E-03	4.320E 00	9.279E-04	3.910E-04	1.045E 01	1.916E-06	7.247E-06
1.495E 00	1.553E-01	4.134E-03	4.400E 00	3.950E-04	4.156E-04	1.059E 01	2.451E-06	6.923E-06
1.525E 00	1.621E-01	4.352E-03	4.480E 00	2.441E-04	3.944E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)			X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01	-	4.000E-01	2.012E-02	1.443E-03
4.000E-01	-	5.000E-01	1.592E-02	1.299E-03
5.000E-01	-	6.000E-01	2.382E-02	8.463E-04
6.000E-01	-	7.000E-01	4.559E-02	8.050E-04
7.000E-01	-	8.000E-01	5.561E-02	6.549E-04
8.000E-01	-	1.000E 00	5.412E-02	1.112E-03
1.000E 00	-	1.200E 00	5.390E-02	1.262E-03
1.200E 00	-	1.400E 00	1.759E-02	9.960E-04
1.400E 00	-	1.600E 00	2.996E-02	8.632E-04
1.600E 00	-	1.800E 00	2.697E-02	5.949E-04
1.800E 00	-	2.000E 00	2.149E-02	4.288E-04
2.000E 00	-	2.500E 00	1.377E-02	5.291E-04
2.500E 00	-	3.000E 00	3.318E-03	3.280E-04
3.000E 00	-	3.500E 00	1.487E-03	2.316E-04
3.500E 00	-	4.000E 00	1.027E-03	2.061E-04
4.000E 00	-	4.500E 00	5.410E-04	1.984E-04
4.500E 00	-	5.000E 00	3.021E-04	1.832E-04
5.000E 00	-	6.000E 00	2.748E-04	3.445E-04
6.000E 00	-	7.000E 00	2.208E-05	4.039E-05
7.000E 00	-	8.000E 00	5.015E-05	3.410E-05
8.000E 00	-	9.000E 00	1.333E-05	1.025E-05
9.000E 00	-	1.000E 01	1.624E-07	8.937E-07

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 2.50 TO 3.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	2.004E-01	2.218E-02	1.555E 00	1.704E-01	6.007E-03	4.560E 00	4.613E-04	5.119E-04
3.225E-01	2.210E-01	2.041E-02	1.585E 00	1.620E-01	5.528E-03	4.640E 00	4.874E-04	4.906E-04
3.375E-01	2.334E-01	1.960E-02	1.615E 00	1.514E-01	4.904E-03	4.720E 00	6.138E-04	4.717E-04
3.525E-01	2.364E-01	1.885E-02	1.645E 00	1.430E-01	4.457E-03	4.800E 00	7.959E-04	4.563E-04
3.675E-01	2.315E-01	1.790E-02	1.680E 00	1.389E-01	4.192E-03	4.880E 00	7.897E-04	5.066E-04
3.825E-01	2.237E-01	1.714E-02	1.720E 00	1.375E-01	4.179E-03	4.960E 00	6.210E-04	4.759E-04
3.975E-01	2.105E-01	1.662E-02	1.760E 00	1.364E-01	4.161E-03	5.040E 00	3.911E-04	4.653E-04
4.125E-01	1.936E-01	1.631E-02	1.800E 00	1.373E-01	3.967E-03	5.120E 00	1.959E-04	4.672E-04
4.275E-01	1.785E-01	1.714E-02	1.840E 00	1.376E-01	3.808E-03	5.200E 00	3.809E-05	4.542E-04
4.425E-01	1.718E-01	1.771E-02	1.880E 00	1.344E-01	3.877E-03	5.280E 00	-1.302E-04	-4.352E-04
4.575E-01	1.709E-01	1.769E-02	1.920E 00	1.289E-01	3.639E-03	5.360E 00	-1.266E-04	-4.721E-04
4.725E-01	1.731E-01	1.773E-02	1.960E 00	1.208E-01	3.287E-03	5.440E 00	-5.585E-05	-3.930E-04
4.875E-01	1.843E-01	1.680E-02	2.000E 00	1.108E-01	2.964E-03	5.520E 00	3.594E-06	4.144E-04
5.025E-01	2.045E-01	1.514E-02	2.040E 00	1.019E-01	2.805E-03	5.600E 00	7.003E-05	4.465E-04
5.175E-01	2.247E-01	1.357E-02	2.080E 00	9.617E-02	2.704E-03	5.680E 00	7.078E-05	4.271E-04
5.325E-01	2.421E-01	1.182E-02	2.120E 00	9.375E-02	2.612E-03	5.760E 00	1.210E-04	4.103E-04
5.475E-01	2.554E-01	1.064E-02	2.160E 00	9.208E-02	2.445E-03	5.850E 00	1.207E-04	3.859E-04
5.625E-01	2.779E-01	9.719E-03	2.200E 00	8.772E-02	2.283E-03	5.950E 00	1.311E-04	3.355E-04
5.775E-01	3.039E-01	9.685E-03	2.240E 00	7.968E-02	2.175E-03	6.050E 00	1.723E-04	3.415E-04
5.925E-01	3.460E-01	1.054E-02	2.280E 00	6.927E-02	1.998E-03	6.150E 00	1.865E-04	3.138E-04
6.100E-01	4.075E-01	1.118E-02	2.320E 00	5.885E-02	1.836E-03	6.250E 00	2.027E-04	3.049E-04
6.300E-01	4.576E-01	1.116E-02	2.360E 00	5.021E-02	1.650E-03	6.350E 00	1.511E-04	2.872E-04
6.500E-01	4.720E-01	1.103E-02	2.400E 00	4.374E-02	1.495E-03	6.450E 00	3.062E-05	2.642E-04
6.700E-01	4.727E-01	1.011E-02	2.440E 00	3.882E-02	1.368E-03	6.550E 00	-1.587E-04	-2.410E-04
6.900E-01	4.821E-01	9.240E-03	2.480E 00	3.442E-02	1.306E-03	6.650E 00	-3.220E-04	-2.247E-04
7.100E-01	5.105E-01	8.940E-03	2.525E 00	3.014E-02	1.374E-03	6.750E 00	-3.984E-04	-2.180E-04
7.300E-01	5.400E-01	8.929E-03	2.575E 00	2.717E-02	1.505E-03	6.850E 00	-3.516E-04	-1.908E-04
7.500E-01	5.510E-01	8.885E-03	2.625E 00	2.413E-02	1.420E-03	6.950E 00	-1.337E-04	-1.760E-04
7.700E-01	5.434E-01	8.238E-03	2.675E 00	1.859E-02	1.180E-03	7.050E 00	1.071E-04	1.479E-04
7.900E-01	5.107E-01	7.959E-03	2.725E 00	1.228E-02	9.171E-04	7.150E 00	2.551E-04	1.180E-04
8.100E-01	4.458E-01	7.895E-03	2.775E 00	7.779E-03	7.810E-04	7.250E 00	2.889E-04	1.045E-04
8.300E-01	3.622E-01	7.274E-03	2.825E 00	5.370E-03	7.572E-04	7.350E 00	2.469E-04	8.524E-05
8.500E-01	2.843E-01	6.812E-03	2.875E 00	3.980E-03	7.354E-04	7.450E 00	1.819E-04	7.339E-05
8.700E-01	2.283E-01	6.543E-03	2.925E 00	3.131E-03	6.930E-04	7.550E 00	1.017E-04	5.979E-05
8.900E-01	1.993E-01	6.481E-03	2.975E 00	3.008E-03	6.932E-04	7.660E 00	2.610E-05	5.055E-05
9.125E-01	1.955E-01	6.401E-03	3.030E 00	3.546E-03	6.446E-04	7.780E 00	-2.910E-05	-4.604E-05
9.375E-01	2.166E-01	6.761E-03	3.090E 00	3.803E-03	5.991E-04	7.900E 00	-3.628E-05	-3.846E-05
9.625E-01	2.545E-01	8.245E-03	3.150E 00	3.383E-03	6.031E-04	8.020E 00	-1.353E-05	-3.040E-05
9.875E-01	3.053E-01	9.418E-03	3.210E 00	2.939E-03	6.068E-04	8.140E 00	1.389E-06	2.681E-05
1.012E 00	3.624E-01	9.101E-03	3.270E 00	2.726E-03	6.323E-04	8.260E 00	7.321E-06	2.760E-05
1.037E 00	4.023E-01	8.966E-03	3.330E 00	2.680E-03	6.091E-04	8.380E 00	1.332E-05	2.486E-05
1.063E 00	4.063E-01	1.088E-02	3.390E 00	2.697E-03	5.729E-04	8.500E 00	1.559E-05	2.353E-05
1.087E 00	3.625E-01	9.861E-03	3.450E 00	2.608E-03	5.795E-04	8.620E 00	1.456E-05	2.647E-05
1.112E 00	2.960E-01	7.668E-03	3.510E 00	2.494E-03	5.862E-04	8.740E 00	1.021E-05	2.411E-05
1.137E 00	2.284E-01	6.202E-03	3.570E 00	2.391E-03	5.757E-04	8.860E 00	2.409E-06	2.274E-05
1.162E 00	1.816E-01	6.184E-03	3.630E 00	2.072E-03	5.874E-04	8.980E 00	2.579E-07	2.305E-05
1.188E 00	1.473E-01	7.424E-03	3.690E 00	1.593E-03	6.030E-04	9.100E 00	2.679E-07	2.344E-05
1.212E 00	1.283E-01	8.131E-03	3.750E 00	1.295E-03	6.020E-04	9.220E 00	4.695E-06	2.131E-05
1.237E 00	1.191E-01	7.727E-03	3.810E 00	1.209E-03	5.822E-04	9.340E 00	9.284E-06	2.285E-05
1.262E 00	1.164E-01	7.039E-03	3.870E 00	1.126E-03	5.965E-04	9.470E 00	1.405E-05	2.351E-05
1.287E 00	1.191E-01	6.553E-03	3.930E 00	9.908E-04	6.229E-04	9.610E 00	1.811E-05	2.726E-05
1.315E 00	1.243E-01	6.901E-03	3.990E 00	8.375E-04	6.045E-04	9.750E 00	1.539E-05	2.668E-05
1.345E 00	1.303E-01	6.583E-03	4.050E 00	7.047E-04	5.819E-04	9.890E 00	1.869E-05	2.490E-05
1.375E 00	1.369E-01	6.085E-03	4.110E 00	7.497E-04	5.622E-04	1.003E 01	2.043E-05	2.166E-05
1.405E 00	1.436E-01	5.943E-03	4.170E 00	1.039E-03	5.578E-04	1.017E 01	1.823E-05	2.154E-05
1.435E 00	1.510E-01	6.229E-03	4.240E 00	1.443E-03	5.364E-04	1.031E 01	1.201E-05	3.144E-05
1.465E 00	1.603E-01	6.068E-03	4.320E 00	1.404E-03	5.439E-04	1.045E 01	1.896E-05	3.114E-05
1.495E 00	1.690E-01	5.662E-03	4.400E 00	9.234E-04	5.766E-04	1.059E 01	2.162E-05	3.202E-05
1.525E 00	1.730E-01	5.898E-03	4.480E 00	5.712E-04	5.381E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	2.230E-02	1.912E-03
4.000E-01 - 5.000E-01	1.811E-02	1.712E-03
5.000E-01 - 6.000E-01	2.691E-02	1.139E-03
6.000E-01 - 7.000E-01	4.582E-02	1.053E-03
7.000E-01 - 8.000E-01	5.304E-02	8.594E-04
8.000E-01 - 1.000E 00	5.479E-02	1.469E-03
1.000E 00 - 1.200E 00	5.962E-02	1.655E-03
1.200E 00 - 1.400E 00	2.526E-02	1.381E-03
1.400E 00 - 1.600E 00	3.245E-02	1.182E-03
1.600E 00 - 1.800E 00	2.810E-02	8.634E-04
1.800E 00 - 2.000E 00	2.587E-02	7.241E-04
2.000E 00 - 2.500E 00	3.604E-02	1.046E-03
2.500E 00 - 3.000E 00	6.794E-03	5.030E-04
3.000E 00 - 3.500E 00	1.513E-03	3.025E-04
3.500E 00 - 4.000E 00	7.747E-04	2.979E-04
4.000E 00 - 4.500E 00	5.015E-04	2.794E-04
4.500E 00 - 5.000E 00	3.111E-04	2.440E-04
5.000E 00 - 6.000E 00	7.248E-05	2.154E-04
6.000E 00 - 7.000E 00	-6.202E-05	4.854E-05
7.000E 00 - 8.000E 00	1.119E-04	5.006E-05
8.000E 00 - 9.000E 00	6.868E-06	2.134E-05
9.000E 00 - 1.000E 01	1.175E-05	2.425E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 3.00 TO 3.49 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	2.425E-01	2.955E-02	1.555E 00	1.886E-01	7.685E-03	4.560E 00	2.772E-04	6.606E-04
3.225E-01	2.514E-01	2.658E-02	1.585E 00	1.799E-01	7.347E-03	4.640E 00	5.502E-04	6.203E-04
3.375E-01	2.456E-01	2.423E-02	1.615E 00	1.690E-01	6.748E-03	4.720E 00	6.091E-04	6.061E-04
3.525E-01	2.469E-01	2.356E-02	1.645E 00	1.602E-01	6.191E-03	4.800E 00	7.854E-04	6.039E-04
3.675E-01	2.454E-01	2.300E-02	1.680E 00	1.540E-01	5.692E-03	4.880E 00	1.114E-03	5.773E-04
3.825E-01	2.209E-01	2.311E-02	1.720E 00	1.525E-01	5.637E-03	4.960E 00	1.188E-03	5.935E-04
3.975E-01	2.007E-01	2.333E-02	1.760E 00	1.544E-01	5.397E-03	5.040E 00	8.945E-04	6.007E-04
4.125E-01	1.933E-01	2.256E-02	1.800E 00	1.570E-01	5.120E-03	5.120E 00	5.763E-04	6.159E-04
4.275E-01	1.800E-01	2.329E-02	1.840E 00	1.589E-01	4.897E-03	5.200E 00	3.699E-04	6.377E-04
4.425E-01	1.676E-01	2.452E-02	1.880E 00	1.569E-01	4.856E-03	5.280E 00	2.014E-04	6.338E-04
4.575E-01	1.703E-01	2.455E-02	1.920E 00	1.502E-01	4.773E-03	5.360E 00	-9.331E-05	-5.563E-04
4.725E-01	1.913E-01	2.392E-02	1.960E 00	1.404E-01	4.615E-03	5.440E 00	-2.625E-04	-5.038E-04
4.875E-01	2.196E-01	2.199E-02	2.000E 00	1.303E-01	4.255E-03	5.520E 00	-1.943E-04	-5.269E-04
5.025E-01	2.400E-01	2.004E-02	2.040E 00	1.223E-01	4.051E-03	5.600E 00	-2.823E-05	-5.779E-04
5.175E-01	2.567E-01	1.814E-02	2.080E 00	1.158E-01	3.829E-03	5.680E 00	2.035E-04	6.008E-04
5.325E-01	2.833E-01	1.583E-02	2.120E 00	1.096E-01	3.656E-03	5.760E 00	3.711E-04	5.743E-04
5.475E-01	3.154E-01	1.394E-02	2.160E 00	1.039E-01	3.544E-03	5.850E 00	5.448E-04	5.524E-04
5.625E-01	3.409E-01	1.278E-02	2.200E 00	9.675E-02	3.329E-03	5.950E 00	6.338E-04	4.389E-04
5.775E-01	3.639E-01	1.287E-02	2.240E 00	8.789E-02	3.160E-03	6.050E 00	6.111E-04	4.211E-04
5.925E-01	3.932E-01	1.400E-02	2.280E 00	7.983E-02	2.893E-03	6.150E 00	2.864E-04	4.737E-04
6.100E-01	4.304E-01	1.464E-02	2.320E 00	7.204E-02	2.697E-03	6.250E 00	-1.496E-04	-4.634E-04
6.300E-01	4.586E-01	1.428E-02	2.360E 00	6.339E-02	2.589E-03	6.350E 00	-5.009E-04	-4.058E-04
6.500E-01	4.679E-01	1.384E-02	2.400E 00	5.659E-02	2.362E-03	6.450E 00	-6.641E-04	-3.213E-04
6.700E-01	4.698E-01	1.324E-02	2.440E 00	5.347E-02	2.234E-03	6.550E 00	-5.381E-04	-3.434E-04
6.900E-01	4.785E-01	1.212E-02	2.480E 00	5.215E-02	2.293E-03	6.650E 00	-2.507E-04	-2.897E-04
7.100E-01	5.093E-01	1.178E-02	2.525E 00	5.205E-02	2.385E-03	6.750E 00	8.557E-05	2.816E-04
7.300E-01	5.488E-01	1.159E-02	2.575E 00	5.366E-02	2.450E-03	6.850E 00	3.973E-04	2.578E-04
7.500E-01	5.672E-01	1.146E-02	2.625E 00	5.253E-02	2.340E-03	6.950E 00	5.888E-04	2.495E-04
7.700E-01	5.562E-01	1.084E-02	2.675E 00	4.598E-02	2.011E-03	7.050E 00	5.577E-04	2.321E-04
7.900E-01	5.161E-01	1.033E-02	2.725E 00	3.783E-02	1.620E-03	7.150E 00	4.052E-04	2.196E-04
8.100E-01	4.500E-01	1.019E-02	2.775E 00	3.159E-02	1.422E-03	7.250E 00	2.057E-04	1.540E-04
8.300E-01	3.760E-01	9.601E-03	2.825E 00	2.760E-02	1.343E-03	7.350E 00	7.585E-05	1.470E-04
8.500E-01	3.145E-01	8.872E-03	2.875E 00	2.391E-02	1.220E-03	7.450E 00	-1.849E-06	-1.434E-04
8.700E-01	2.735E-01	8.340E-03	2.925E 00	1.938E-02	1.134E-03	7.550E 00	-3.608E-05	-1.496E-04
8.900E-01	2.520E-01	8.235E-03	2.975E 00	1.499E-02	1.078E-03	7.660E 00	-5.019E-05	-1.214E-04
9.125E-01	2.474E-01	8.477E-03	3.030E 00	1.167E-02	1.021E-03	7.780E 00	-5.402E-05	-9.371E-05
9.375E-01	2.614E-01	9.251E-03	3.090E 00	9.584E-03	9.913E-04	7.900E 00	-3.978E-05	-7.031E-05
9.625E-01	2.902E-01	1.053E-02	3.150E 00	7.840E-03	9.091E-04	8.020E 00	-1.752E-05	-5.987E-05
9.875E-01	3.283E-01	1.168E-02	3.210E 00	6.189E-03	8.463E-04	8.140E 00	-6.527E-07	-5.491E-05
1.012E 00	3.736E-01	1.144E-02	3.270E 00	4.981E-03	7.967E-04	8.260E 00	8.923E-06	4.591E-05
1.037E 00	4.099E-01	1.123E-02	3.330E 00	4.081E-03	8.033E-04	8.380E 00	1.656E-05	4.288E-05
1.063E 00	4.160E-01	1.305E-02	3.390E 00	3.211E-03	8.110E-04	8.500E 00	5.939E-06	3.230E-05
1.087E 00	3.763E-01	1.218E-02	3.450E 00	2.402E-03	8.087E-04	8.620E 00	5.163E-06	3.155E-05
1.112E 00	3.129E-01	9.420E-03	3.510E 00	1.664E-03	8.172E-04	8.740E 00	1.165E-05	3.230E-05
1.137E 00	2.463E-01	8.126E-03	3.570E 00	1.134E-03	8.226E-04	8.860E 00	1.767E-05	2.863E-05
1.162E 00	2.022E-01	8.075E-03	3.630E 00	1.007E-03	8.274E-04	8.980E 00	2.415E-05	2.315E-05
1.188E 00	1.733E-01	9.465E-03	3.690E 00	1.275E-03	8.497E-04	9.100E 00	2.802E-05	2.345E-05
1.212E 00	1.587E-01	1.026E-02	3.750E 00	1.605E-03	8.365E-04	9.220E 00	2.929E-05	2.799E-05
1.237E 00	1.507E-01	9.654E-03	3.810E 00	1.699E-03	8.108E-04	9.340E 00	2.334E-05	2.608E-05
1.262E 00	1.448E-01	9.066E-03	3.870E 00	1.623E-03	8.192E-04	9.470E 00	2.167E-05	2.325E-05
1.287E 00	1.427E-01	8.780E-03	3.930E 00	1.537E-03	8.255E-04	9.610E 00	1.517E-05	1.983E-05
1.315E 00	1.452E-01	9.106E-03	3.990E 00	1.482E-03	8.112E-04	9.750E 00	9.332E-06	1.619E-05
1.345E 00	1.530E-01	8.438E-03	4.050E 00	1.355E-03	7.572E-04	9.890E 00	1.010E-05	1.999E-05
1.375E 00	1.623E-01	7.627E-03	4.110E 00	1.179E-03	7.241E-04	1.003E 01	4.149E-06	2.363E-05
1.405E 00	1.691E-01	7.491E-03	4.170E 00	9.387E-04	7.126E-04	1.017E 01	-1.638E-06	-2.881E-05
1.435E 00	1.739E-01	7.840E-03	4.240E 00	5.703E-04	7.226E-04	1.031E 01	-5.967E-06	-3.380E-05
1.465E 00	1.801E-01	7.752E-03	4.320E 00	7.855E-05	7.343E-04	1.045E 01	-6.129E-06	-3.793E-05
1.495E 00	1.865E-01	7.209E-03	4.400E 00	-2.055E-04	-7.211E-04	1.059E 01	1.946E-06	3.959E-05
1.525E 00	1.906E-01	7.369E-03	4.480E 00	-9.278E-05	-7.056E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	2.380E-02	2.488E-03
4.000E-01 - 5.000E-01	1.900E-02	2.331E-03
5.000E-01 - 6.000E-01	3.173E-02	1.512E-03
6.000E-01 - 7.000E-01	4.611E-02	1.362E-03
7.000E-01 - 8.000E-01	5.390E-02	1.120E-03
8.000E-01 - 1.000E 00	6.159E-02	1.901E-03
1.000E 00 - 1.200E 00	6.272E-02	2.072E-03
1.200E 00 - 1.400E 00	3.043E-02	1.772E-03
1.400E 00 - 1.600E 00	3.637E-02	1.507E-03
1.600E 00 - 1.800E 00	3.146E-02	1.162E-03
1.800E 00 - 2.000E 00	3.005E-02	5.540E-04
2.000E 00 - 2.500E 00	4.312E-02	1.550E-03
2.500E 00 - 3.000E 00	1.798E-02	8.500E-04
3.000E 00 - 3.500E 00	3.046E-03	4.359E-04
3.500E 00 - 4.000E 00	7.157E-04	4.128E-04
4.000E 00 - 4.500E 00	2.667E-04	1.611E-04
4.500E 00 - 5.000E 00	3.608E-04	2.828E-04
5.000E 00 - 6.000E 00	2.810E-04	2.196E-04
6.000E 00 - 7.000E 00	-1.468E-05	9.680E-06
7.000E 00 - 8.000E 00	1.022E-04	9.476E-06
8.000E 00 - 9.000E 00	8.474E-06	1.572E-05
9.000E 00 - 1.000E 01	1.875E-05	2.224E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 3.49 TO 4.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	2.433E-01	3.315E-02	1.555E 00	2.268E-01	9.397E-03	4.560E 00	7.144E-04	7.350E-04
3.225E-01	2.594E-01	3.279E-02	1.585E 00	2.233E-01	8.959E-03	4.640E 00	3.346E-04	6.350E-04
3.375E-01	2.980E-01	3.064E-02	1.615E 00	2.155E-01	8.147E-03	4.720E 00	4.546E-05	6.254E-04
3.525E-01	2.951E-01	2.897E-02	1.645E 00	2.062E-01	7.483E-03	4.800E 00	1.246E-04	6.230E-04
3.675E-01	2.674E-01	2.787E-02	1.680E 00	1.965E-01	6.970E-03	4.880E 00	3.076E-04	7.318E-04
3.825E-01	2.460E-01	2.688E-02	1.720E 00	1.872E-01	6.870E-03	4.960E 00	3.878E-04	7.757E-04
3.975E-01	2.230E-01	2.771E-02	1.760E 00	1.822E-01	6.850E-03	5.040E 00	2.651E-04	7.030E-04
4.125E-01	2.030E-01	2.869E-02	1.800E 00	1.830E-01	6.543E-03	5.120E 00	5.760E-05	6.451E-04
4.275E-01	1.972E-01	2.949E-02	1.840E 00	1.835E-01	6.323E-03	5.200E 00	2.305E-05	6.437E-04
4.425E-01	1.942E-01	2.976E-02	1.880E 00	1.764E-01	6.270E-03	5.280E 00	6.481E-05	5.962E-04
4.575E-01	1.885E-01	2.932E-02	1.920E 00	1.638E-01	6.004E-03	5.360E 00	2.815E-04	7.385E-04
4.725E-01	1.975E-01	2.847E-02	1.960E 00	1.524E-01	5.674E-03	5.440E 00	5.176E-04	7.169E-04
4.875E-01	2.282E-01	2.751E-02	2.000E 00	1.429E-01	5.253E-03	5.520E 00	5.573E-04	6.993E-04
5.025E-01	2.647E-01	2.498E-02	2.040E 00	1.331E-01	5.111E-03	5.600E 00	3.763E-04	6.329E-04
5.175E-01	2.967E-01	2.222E-02	2.080E 00	1.235E-01	5.011E-03	5.680E 00	2.895E-04	6.680E-04
5.325E-01	3.225E-01	1.911E-02	2.120E 00	1.162E-01	4.679E-03	5.760E 00	3.347E-04	5.789E-04
5.475E-01	3.410E-01	1.684E-02	2.160E 00	1.103E-01	4.403E-03	5.850E 00	6.049E-04	6.753E-04
5.625E-01	3.573E-01	1.580E-02	2.200E 00	1.036E-01	4.330E-03	5.950E 00	6.505E-04	6.319E-04
5.775E-01	3.821E-01	1.617E-02	2.240E 00	9.677E-02	4.154E-03	6.050E 00	4.490E-04	5.732E-04
5.925E-01	4.136E-01	1.717E-02	2.280E 00	8.947E-02	3.889E-03	6.150E 00	1.987E-04	5.424E-04
6.100E-01	4.405E-01	1.783E-02	2.320E 00	8.055E-02	3.658E-03	6.250E 00	-2.399E-05	-4.877E-04
6.300E-01	4.505E-01	1.799E-02	2.360E 00	7.281E-02	3.382E-03	6.350E 00	-7.630E-05	-4.857E-04
6.500E-01	4.568E-01	1.717E-02	2.400E 00	6.806E-02	3.084E-03	6.450E 00	-2.995E-05	-4.806E-04
6.700E-01	4.685E-01	1.561E-02	2.440E 00	6.446E-02	3.063E-03	6.550E 00	4.214E-05	4.317E-04
6.900E-01	4.892E-01	1.428E-02	2.480E 00	6.232E-02	3.201E-03	6.650E 00	-6.967E-05	-4.029E-04
7.100E-01	5.259E-01	1.403E-02	2.525E 00	6.576E-02	3.231E-03	6.750E 00	-2.521E-04	-3.623E-04
7.300E-01	5.628E-01	1.382E-02	2.575E 00	7.294E-02	3.169E-03	6.850E 00	-2.959E-04	-3.534E-04
7.500E-01	5.832E-01	1.366E-02	2.625E 00	7.157E-02	2.915E-03	6.950E 00	-1.986E-04	-3.030E-04
7.700E-01	5.783E-01	1.303E-02	2.675E 00	6.088E-02	2.520E-03	7.050E 00	1.075E-05	2.740E-04
7.900E-01	5.390E-01	1.236E-02	2.725E 00	4.947E-02	2.086E-03	7.150E 00	1.576E-04	2.269E-04
8.100E-01	4.719E-01	1.196E-02	2.775E 00	4.087E-02	1.867E-03	7.250E 00	2.086E-04	2.055E-04
8.300E-01	3.973E-01	1.122E-02	2.825E 00	3.448E-02	1.814E-03	7.350E 00	2.057E-04	1.831E-04
8.500E-01	3.357E-01	1.079E-02	2.875E 00	2.968E-02	1.667E-03	7.450E 00	1.918E-04	1.491E-04
8.700E-01	3.016E-01	1.074E-02	2.925E 00	2.627E-02	1.565E-03	7.550E 00	1.651E-04	1.286E-04
8.900E-01	2.929E-01	1.065E-02	2.975E 00	2.401E-02	1.460E-03	7.660E 00	9.290E-05	1.015E-04
9.125E-01	2.956E-01	1.045E-02	3.030E 00	2.217E-02	1.396E-03	7.780E 00	9.026E-06	9.203E-05
9.375E-01	3.073E-01	1.101E-02	3.090E 00	1.979E-02	1.360E-03	7.900E 00	-4.385E-05	-8.727E-05
9.625E-01	3.361E-01	1.242E-02	3.150E 00	1.712E-02	1.365E-03	8.020E 00	-2.889E-05	-7.534E-05
9.875E-01	3.717E-01	1.370E-02	3.210E 00	1.490E-02	1.306E-03	8.140E 00	1.856E-06	6.048E-05
1.012E 00	4.043E-01	1.323E-02	3.270E 00	1.305E-02	1.197E-03	8.260E 00	1.073E-05	5.442E-05
1.037E 00	4.254E-01	1.275E-02	3.330E 00	1.121E-02	1.166E-03	8.380E 00	1.995E-06	4.373E-05
1.063E 00	4.175E-01	1.449E-02	3.390E 00	9.510E-03	1.163E-03	8.500E 00	-3.541E-06	-3.110E-05
1.087E 00	3.697E-01	1.351E-02	3.450E 00	8.206E-03	1.081E-03	8.620E 00	5.913E-06	2.891E-05
1.112E 00	3.078E-01	1.094E-02	3.510E 00	7.449E-03	1.017E-03	8.740E 00	1.984E-05	2.676E-05
1.137E 00	2.536E-01	9.548E-03	3.570E 00	6.930E-03	9.939E-04	8.860E 00	2.437E-05	2.370E-05
1.162E 00	2.217E-01	9.391E-03	3.630E 00	6.197E-03	1.125E-03	8.980E 00	1.663E-05	1.671E-05
1.188E 00	1.961E-01	1.137E-02	3.690E 00	5.233E-03	1.276E-03	9.100E 00	7.770E-06	9.631E-06
1.212E 00	1.764E-01	1.268E-02	3.750E 00	4.192E-03	1.112E-03	9.220E 00	2.172E-06	5.546E-06
1.237E 00	1.647E-01	1.204E-02	3.810E 00	3.292E-03	9.871E-04	9.340E 00	7.899E-07	4.291E-06
1.262E 00	1.610E-01	1.125E-02	3.870E 00	2.486E-03	9.908E-04	9.470E 00	5.276E-07	3.312E-06
1.287E 00	1.632E-01	1.058E-02	3.930E 00	1.644E-03	9.735E-04	9.610E 00	8.729E-07	2.401E-06
1.315E 00	1.696E-01	1.084E-02	3.990E 00	9.682E-04	9.463E-04	9.750E 00	1.584E-06	2.400E-06
1.345E 00	1.773E-01	1.013E-02	4.050E 00	6.259E-04	9.032E-04	9.890E 00	2.382E-06	3.240E-06
1.375E 00	1.838E-01	9.268E-03	4.110E 00	5.645E-04	8.277E-04	1.003E 01	3.260E-06	4.038E-06
1.405E 00	1.916E-01	9.113E-03	4.170E 00	6.363E-04	8.114E-04	1.017E 01	4.116E-06	4.850E-06
1.435E 00	2.008E-01	9.507E-03	4.240E 00	7.640E-04	8.086E-04	1.031E 01	4.942E-06	5.785E-06
1.465E 00	2.109E-01	9.407E-03	4.320E 00	8.932E-04	8.277E-04	1.045E 01	5.588E-06	6.447E-06
1.495E 00	2.200E-01	8.773E-03	4.400E 00	9.904E-04	8.63CE-04	1.059E 01	5.916E-06	6.686E-06
1.525E 00	2.257E-01	8.967E-03	4.480E 00	9.929E-04	8.669E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)			X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01	-	4.000E-01	2.638E-02	2.987E-03
4.000E-01	-	5.000E-01	2.049E-02	2.866E-03
5.000E-01	-	6.000E-01	3.439E-02	1.856E-03
6.000E-01	-	7.000E-01	4.611E-02	1.658E-03
7.000E-01	-	8.000E-01	5.572E-02	1.338E-03
8.000E-01	-	1.000E 00	6.882E-02	2.295E-03
1.000E 00	-	1.200E 00	6.487E-02	2.378E-03
1.200E 00	-	1.400E 00	3.447E-02	2.159E-03
1.400E 00	-	1.600E 00	4.307E-02	1.834E-03
1.600E 00	-	1.800E 00	3.894E-02	1.430E-03
1.800E 00	-	2.000E 00	3.361E-02	1.208E-03
2.000E 00	-	2.500E 00	4.768E-02	2.023E-03
2.500E 00	-	3.000E 00	2.381E-02	1.115E-03
3.000E 00	-	3.500E 00	7.113E-03	6.231E-04
3.500E 00	-	4.000E 00	2.136E-03	5.257E-04
4.000E 00	-	4.500E 00	3.983E-04	4.230E-04
4.500E 00	-	5.000E 00	1.707E-04	3.462E-04
5.000E 00	-	6.000E 00	3.449E-04	6.606E-04
6.000E 00	-	7.000E 00	-2.440E-05	1.239E-04
7.000E 00	-	8.000E 00	9.896E-05	1.223E-04
8.000E 00	-	9.000E 00	6.864E-06	2.217E-05
9.000E 00	-	1.000E 01	2.734E-06	4.674E-06

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. *THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE* UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 4.00 TO 4.49 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	3.008E-01	4.261E-02	1.555E 00	2.559E-01	1.188E-02	4.560E 00	1.615E-05	7.696E-04
3.225E-01	3.279E-01	3.842E-02	1.585E 00	2.497E-01	1.110E-02	4.640E 00	9.008E-05	6.848E-04
3.375E-01	3.502E-01	3.589E-02	1.615E 00	2.387E-01	1.041E-02	4.720E 00	2.142E-04	6.970E-04
3.525E-01	3.536E-01	3.480E-02	1.645E 00	2.300E-01	9.915E-03	4.800E 00	1.591E-04	6.684E-04
3.675E-01	3.211E-01	3.335E-02	1.680E 00	2.259E-01	9.385E-03	4.880E 00	2.042E-04	5.835E-04
3.825E-01	2.738E-01	3.333E-02	1.720E 00	2.250E-01	9.116E-03	4.960E 00	1.878E-04	6.534E-04
3.975E-01	2.398E-01	3.406E-02	1.760E 00	2.260E-01	8.554E-03	5.040E 00	3.631E-04	6.560E-04
4.125E-01	2.198E-01	3.479E-02	1.800E 00	2.289E-01	7.967E-03	5.120E 00	4.318E-04	6.480E-04
4.275E-01	2.031E-01	3.491E-02	1.840E 00	2.277E-01	7.846E-03	5.200E 00	3.724E-04	6.495E-04
4.425E-01	1.956E-01	3.627E-02	1.880E 00	2.177E-01	7.738E-03	5.280E 00	3.202E-04	6.890E-04
4.575E-01	2.117E-01	3.518E-02	1.920E 00	2.046E-01	7.310E-03	5.360E 00	1.550E-04	5.592E-04
4.725E-01	2.323E-01	3.429E-02	1.960E 00	1.920E-01	7.032E-03	5.440E 00	2.845E-04	6.129E-04
4.875E-01	2.631E-01	3.256E-02	2.000E 00	1.809E-01	6.696E-03	5.520E 00	4.078E-04	5.842E-04
5.025E-01	3.044E-01	3.042E-02	2.040E 00	1.725E-01	6.396E-03	5.600E 00	5.604E-04	5.727E-04
5.175E-01	3.432E-01	2.768E-02	2.080E 00	1.627E-01	6.262E-03	5.680E 00	5.629E-04	5.974E-04
5.325E-01	3.721E-01	2.396E-02	2.120E 00	1.504E-01	6.185E-03	5.760E 00	4.223E-04	7.169E-04
5.475E-01	3.945E-01	2.074E-02	2.160E 00	1.381E-01	5.816E-03	5.850E 00	2.008E-04	6.427E-04
5.625E-01	4.138E-01	1.867E-02	2.200E 00	1.270E-01	5.434E-03	5.950E 00	-7.388E-06	-5.614E-04
5.775E-01	4.351E-01	1.934E-02	2.240E 00	1.157E-01	5.251E-03	6.050E 00	-2.041E-04	-5.032E-04
5.925E-01	4.614E-01	2.109E-02	2.280E 00	1.037E-01	5.121E-03	6.150E 00	-2.105E-04	-5.306E-04
6.100E-01	4.867E-01	2.110E-02	2.320E 00	9.312E-02	4.693E-03	6.250E 00	-5.354E-05	-5.974E-04
6.300E-01	4.882E-01	2.070E-02	2.360E 00	8.685E-02	4.245E-03	6.350E 00	2.774E-04	6.189E-04
6.500E-01	4.792E-01	2.102E-02	2.400E 00	8.403E-02	3.921E-03	6.450E 00	4.992E-04	5.678E-04
6.700E-01	4.883E-01	1.867E-02	2.440E 00	8.242E-02	3.802E-03	6.550E 00	5.548E-04	5.032E-04
6.900E-01	5.154E-01	1.686E-02	2.480E 00	8.247E-02	3.832E-03	6.650E 00	3.337E-04	4.878E-04
7.100E-01	5.592E-01	1.632E-02	2.525E 00	8.641E-02	3.982E-03	6.750E 00	7.224E-06	4.358E-04
7.300E-01	6.006E-01	1.602E-02	2.575E 00	9.031E-02	4.284E-03	6.850E 00	-1.929E-04	-4.416E-04
7.500E-01	6.110E-01	1.601E-02	2.625E 00	8.411E-02	4.029E-03	6.950E 00	-2.311E-04	-4.027E-04
7.700E-01	5.899E-01	1.573E-02	2.675E 00	6.914E-02	3.450E-03	7.050E 00	-1.671E-04	-3.396E-04
7.900E-01	5.519E-01	1.478E-02	2.725E 00	5.502E-02	2.850E-03	7.150E 00	-8.270E-05	-2.533E-04
8.100E-01	5.029E-01	1.454E-02	2.775E 00	4.731E-02	2.489E-03	7.250E 00	-6.338E-06	-2.118E-04
8.300E-01	4.418E-01	1.357E-02	2.825E 00	4.336E-02	2.344E-03	7.350E 00	2.698E-05	1.766E-04
8.500E-01	3.811E-01	1.265E-02	2.875E 00	3.905E-02	2.186E-03	7.450E 00	6.114E-05	1.676E-04
8.700E-01	3.436E-01	1.239E-02	2.925E 00	3.527E-02	2.076E-03	7.550E 00	7.529E-05	1.278E-04
8.900E-01	3.353E-01	1.238E-02	2.975E 00	3.377E-02	1.959E-03	7.660E 00	6.003E-05	1.131E-04
9.125E-01	3.443E-01	1.241E-02	3.030E 00	3.189E-02	1.900E-03	7.780E 00	1.945E-05	9.807E-05
9.375E-01	3.564E-01	1.301E-02	3.090E 00	2.706E-02	1.912E-03	7.900E 00	1.023E-06	8.824E-05
9.625E-01	3.698E-01	1.455E-02	3.150E 00	2.255E-02	1.982E-03	8.020E 00	-1.999E-05	-8.286E-05
9.875E-01	3.943E-01	1.610E-02	3.210E 00	1.939E-02	1.856E-03	8.140E 00	-2.314E-05	-8.031E-05
1.012E 00	4.283E-01	1.563E-02	3.270E 00	1.569E-02	1.692E-03	8.260E 00	-2.059E-05	-6.867E-05
1.037E 00	4.495E-01	1.516E-02	3.330E 00	1.262E-02	1.636E-03	8.380E 00	-1.411E-05	-6.199E-05
1.063E 00	4.380E-01	1.708E-02	3.390E 00	1.139E-02	1.591E-03	8.500E 00	1.636E-05	6.027E-05
1.087E 00	3.887E-01	1.611E-02	3.450E 00	1.050E-02	1.498E-03	8.620E 00	4.060E-05	5.414E-05
1.112E 00	3.265E-01	1.334E-02	3.510E 00	9.514E-03	1.457E-03	8.740E 00	5.213E-05	4.724E-05
1.137E 00	2.697E-01	1.171E-02	3.570E 00	9.089E-03	1.632E-03	8.860E 00	4.366E-05	3.958E-05
1.162E 00	2.345E-01	1.148E-02	3.630E 00	8.929E-03	2.274E-03	8.980E 00	2.371E-05	3.559E-05
1.188E 00	2.087E-01	1.355E-02	3.690E 00	8.470E-03	2.266E-03	9.100E 00	1.152E-05	2.954E-05
1.212E 00	1.930E-01	1.496E-02	3.750E 00	7.799E-03	1.702E-03	9.220E 00	4.596E-06	2.342E-05
1.237E 00	1.859E-01	1.453E-02	3.810E 00	7.224E-03	1.294E-03	9.340E 00	7.585E-06	1.876E-05
1.262E 00	1.832E-01	1.399E-02	3.870E 00	6.629E-03	1.236E-03	9.470E 00	1.236E-05	1.525E-05
1.287E 00	1.809E-01	1.328E-02	3.930E 00	5.540E-03	1.268E-03	9.610E 00	1.030E-05	1.045E-05
1.315E 00	1.793E-01	1.349E-02	3.990E 00	4.263E-03	1.210E-03	9.750E 00	7.729E-06	7.730E-06
1.345E 00	1.825E-01	1.256E-02	4.050E 00	3.395E-03	1.126E-03	9.890E 00	7.072E-06	6.990E-06
1.375E 00	1.892E-01	1.126E-02	4.110E 00	3.178E-03	1.050E-03	1.003E 01	5.994E-06	5.747E-06
1.405E 00	2.006E-01	1.098E-02	4.170E 00	3.027E-03	9.860E-04	1.017E 01	4.353E-06	5.726E-06
1.435E 00	2.178E-01	1.165E-02	4.240E 00	2.404E-03	9.368E-04	1.031E 01	3.935E-06	6.634E-06
1.465E 00	2.357E-01	1.136E-02	4.320E 00	1.332E-03	9.578E-04	1.045E 01	4.496E-06	7.674E-06
1.495E 00	2.480E-01	1.067E-02	4.400E 00	5.369E-04	9.913E-04	1.059E 01	5.415E-06	8.110E-06
1.525E 00	2.547E-01	1.130E-02	4.480E 00	1.513E-04	9.456E-04			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	3.133E-02	3.617E-03
4.000E-01 - 5.000E-01	2.259E-02	3.445E-03
5.000E-01 - 6.000E-01	3.940E-02	2.273E-03
6.000E-01 - 7.000E-01	4.915E-02	1.966E-03
7.000E-01 - 8.000E-01	5.821E-02	1.579E-03
8.000E-01 - 1.000E 00	7.677E-02	2.710E-03
1.000E 00 - 1.200E 00	6.857E-02	2.848E-03
1.200E 00 - 1.400E 00	3.711E-02	2.646E-03
1.400E 00 - 1.600E 00	4.790E-02	2.262E-03
1.600E 00 - 1.800E 00	4.572E-02	1.855E-03
1.800E 00 - 2.000E 00	4.191E-02	1.492E-03
2.000E 00 - 2.500E 00	5.956E-02	2.571E-03
2.500E 00 - 3.000E 00	2.919E-02	1.484E-03
3.000E 00 - 3.500E 00	9.255E-03	8.737E-04
3.500E 00 - 4.000E 00	3.776E-03	6.072E-04
4.000E 00 - 4.500E 00	1.010E-03	5.015E-04
4.500E 00 - 5.000E 00	7.367E-05	3.418E-04
5.000E 00 - 6.000E 00	3.288E-04	5.208E-04
6.000E 00 - 7.000E 00	7.897E-05	9.917E-06
7.000E 00 - 8.000E 00	-4.650E-07	6.361E-07
8.000E 00 - 9.000E 00	1.188E-05	4.802E-06
9.000E 00 - 1.000E 01	9.112E-06	1.586E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 4.49 TO 5.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	3.473E-01	4.648E-02	1.555E 00	2.813E-01	1.273E-02	4.560E 00	1.925E-03	9.346E-04
3.225E-01	3.771E-01	4.137E-02	1.585E 00	2.805E-01	1.204E-02	4.640E 00	1.336E-03	8.942E-04
3.375E-01	3.677E-01	3.844E-02	1.615E 00	2.681E-01	1.135E-02	4.720E 00	8.954E-04	8.561E-04
3.525E-01	3.503E-01	3.875E-02	1.645E 00	2.516E-01	1.075E-02	4.800E 00	5.868E-04	8.294E-04
3.675E-01	3.384E-01	3.559E-02	1.680E 00	2.417E-01	1.017E-02	4.880E 00	3.952E-04	8.191E-04
3.825E-01	3.120E-01	3.501E-02	1.720E 00	2.440E-01	9.962E-03	4.960E 00	3.134E-04	7.995E-04
3.975E-01	2.759E-01	3.401E-02	1.760E 00	2.477E-01	9.685E-03	5.040E 00	3.453E-04	8.291E-04
4.125E-01	2.523E-01	3.577E-02	1.800E 00	2.472E-01	8.998E-03	5.120E 00	3.250E-04	7.576E-04
4.275E-01	2.484E-01	3.577E-02	1.840E 00	2.422E-01	8.934E-03	5.200E 00	3.130E-04	7.470E-04
4.425E-01	2.489E-01	3.602E-02	1.880E 00	2.365E-01	8.902E-03	5.280E 00	4.301E-04	7.843E-04
4.575E-01	2.439E-01	3.538E-02	1.920E 00	2.285E-01	8.507E-03	5.360E 00	5.706E-04	7.966E-04
4.725E-01	2.583E-01	3.576E-02	1.960E 00	2.152E-01	8.045E-03	5.440E 00	5.505E-04	7.992E-04
4.875E-01	3.071E-01	3.357E-02	2.000E 00	2.022E-01	7.452E-03	5.520E 00	3.218E-04	8.324E-04
5.025E-01	3.680E-01	3.085E-02	2.040E 00	1.943E-01	7.200E-03	5.600E 00	-1.119E-04	-7.511E-04
5.175E-01	4.143E-01	2.849E-02	2.080E 00	1.898E-01	7.280E-03	5.680E 00	-3.839E-04	-6.612E-04
5.325E-01	4.348E-01	2.537E-02	2.120E 00	1.850E-01	6.979E-03	5.760E 00	-5.265E-04	-7.178E-04
5.475E-01	4.373E-01	2.256E-02	2.160E 00	1.763E-01	6.441E-03	5.850E 00	-3.516E-04	-6.954E-04
5.625E-01	4.479E-01	2.059E-02	2.200E 00	1.626E-01	6.117E-03	5.950E 00	9.710E-05	6.938E-04
5.775E-01	4.807E-01	2.012E-02	2.240E 00	1.478E-01	5.960E-03	6.050E 00	5.692E-04	6.915E-04
5.925E-01	5.174E-01	2.135E-02	2.280E 00	1.330E-01	5.603E-03	6.150E 00	8.009E-04	5.738E-04
6.100E-01	5.358E-01	2.221E-02	2.320E 00	1.190E-01	5.263E-03	6.250E 00	8.823E-04	5.730E-04
6.300E-01	5.221E-01	2.187E-02	2.360E 00	1.090E-01	5.066E-03	6.350E 00	6.987E-04	5.571E-04
6.500E-01	4.945E-01	2.115E-02	2.400E 00	1.027E-01	4.586E-03	6.450E 00	3.163E-04	5.438E-04
6.700E-01	4.819E-01	1.957E-02	2.440E 00	9.910E-02	4.313E-03	6.550E 00	-1.501E-04	-4.924E-04
6.900E-01	5.042E-01	1.798E-02	2.480E 00	1.003E-01	4.359E-03	6.650E 00	-3.680E-04	-4.205E-04
7.100E-01	5.581E-01	1.764E-02	2.525E 00	1.087E-01	4.588E-03	6.750E 00	-2.547E-04	-3.862E-04
7.300E-01	6.063E-01	1.704E-02	2.575E 00	1.184E-01	4.786E-03	6.850E 00	1.902E-04	3.836E-04
7.500E-01	6.245E-01	1.694E-02	2.625E 00	1.157E-01	4.503E-03	6.950E 00	6.219E-04	3.611E-04
7.700E-01	6.243E-01	1.657E-02	2.675E 00	9.746E-02	3.887E-03	7.050E 00	7.291E-04	3.087E-04
7.900E-01	6.029E-01	1.580E-02	2.725E 00	7.499E-02	3.234E-03	7.150E 00	5.104E-04	2.471E-04
8.100E-01	5.461E-01	1.555E-02	2.775E 00	5.968E-02	2.929E-03	7.250E 00	1.790E-04	1.879E-04
8.300E-01	4.678E-01	1.491E-02	2.825E 00	5.150E-02	2.738E-03	7.350E 00	-1.964E-05	-1.672E-04
8.500E-01	4.018E-01	1.417E-02	2.875E 00	4.536E-02	2.497E-03	7.450E 00	-4.389E-05	-1.595E-04
8.700E-01	3.679E-01	1.337E-02	2.925E 00	3.954E-02	2.424E-03	7.550E 00	1.955E-05	1.644E-04
8.900E-01	3.631E-01	1.330E-02	2.975E 00	3.528E-02	2.307E-03	7.660E 00	9.611E-05	1.463E-04
9.125E-01	3.823E-01	1.349E-02	3.030E 00	3.313E-02	2.206E-03	7.780E 00	1.222E-04	1.068E-04
9.375E-01	4.182E-01	1.390E-02	3.090E 00	3.156E-02	2.095E-03	7.900E 00	1.135E-04	9.435E-05
9.625E-01	4.438E-01	1.595E-02	3.150E 00	2.843E-02	2.102E-03	8.020E 00	8.963E-05	8.935E-05
9.875E-01	4.501E-01	1.787E-02	3.210E 00	2.394E-02	2.065E-03	8.140E 00	7.660E-05	9.085E-05
1.012E 00	4.526E-01	1.721E-02	3.270E 00	1.955E-02	1.954E-03	8.260E 00	6.185E-05	7.673E-05
1.037E 00	4.516E-01	1.643E-02	3.330E 00	1.744E-02	1.895E-03	8.380E 00	4.729E-05	6.917E-05
1.063E 00	4.303E-01	1.838E-02	3.390E 00	1.753E-02	1.754E-03	8.500E 00	2.581E-05	5.902E-05
1.087E 00	3.861E-01	1.754E-02	3.450E 00	1.695E-02	1.659E-03	8.620E 00	4.421E-06	6.409E-05
1.112E 00	3.337E-01	1.419E-02	3.510E 00	1.518E-02	1.628E-03	8.740E 00	7.040E-06	6.022E-05
1.137E 00	2.830E-01	1.257E-02	3.570E 00	1.376E-02	1.768E-03	8.860E 00	1.978E-05	5.671E-05
1.162E 00	2.489E-01	1.256E-02	3.630E 00	1.201E-02	2.323E-03	8.980E 00	4.205E-05	5.211E-05
1.188E 00	2.230E-01	1.492E-02	3.690E 00	9.182E-03	2.456E-03	9.100E 00	5.224E-05	4.467E-05
1.212E 00	2.064E-01	1.631E-02	3.750E 00	6.598E-03	1.955E-03	9.220E 00	4.775E-05	4.331E-05
1.237E 00	1.969E-01	1.545E-02	3.810E 00	5.788E-03	1.509E-03	9.340E 00	4.250E-05	4.212E-05
1.262E 00	1.938E-01	1.469E-02	3.870E 00	6.382E-03	1.367E-03	9.470E 00	3.352E-05	3.713E-05
1.287E 00	1.969E-01	1.414E-02	3.930E 00	6.932E-03	1.344E-03	9.610E 00	2.328E-05	2.830E-05
1.315E 00	2.036E-01	1.447E-02	3.990E 00	6.815E-03	1.316E-03	9.750E 00	1.519E-05	2.457E-05
1.345E 00	2.105E-01	1.372E-02	4.050E 00	6.139E-03	1.244E-03	9.890E 00	1.009E-05	2.206E-05
1.375E 00	2.182E-01	1.268E-02	4.110E 00	5.287E-03	1.226E-03	1.003E 01	4.938E-06	2.306E-05
1.405E 00	2.298E-01	1.222E-02	4.170E 00	4.829E-03	1.223E-03	1.017E 01	-1.175E-05	-3.719E-05
1.435E 00	2.428E-01	1.272E-02	4.240E 00	4.791E-03	1.145E-03	1.031E 01	-1.873E-05	-4.558E-05
1.465E 00	2.542E-01	1.263E-02	4.320E 00	4.575E-03	1.153E-03	1.045E 01	-1.650E-05	-4.935E-05
1.495E 00	2.640E-01	1.214E-02	4.400E 00	3.869E-03	1.181E-03	1.059E 01	-1.083E-05	-4.804E-05
1.525E 00	2.738E-01	1.259E-02	4.480E 00	2.891E-03	1.094E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	3.419E-02	3.881E-03
4.000E-01 - 5.000E-01	2.649E-02	3.514E-03
5.000E-01 - 6.000E-01	4.473E-02	2.383E-03
6.000E-01 - 7.000E-01	5.077E-02	2.055E-03
7.000E-01 - 8.000E-01	6.024E-02	1.680E-03
8.000E-01 - 1.000E 00	8.533E-02	2.953E-03
1.000E 00 - 1.200E 00	7.023E-02	3.091E-03
1.200E 00 - 1.400E 00	4.111E-02	2.860E-03
1.400E 00 - 1.600E 00	5.251E-02	2.492E-03
1.600E 00 - 1.800E 00	4.989E-02	2.040E-03
1.800E 00 - 2.000E 00	4.591E-02	1.707E-03
2.000E 00 - 2.500E 00	7.279E-02	2.915E-03
2.500E 00 - 3.000E 00	3.734E-02	1.695E-03
3.000E 00 - 3.500E 00	1.164E-02	9.764E-04
3.500E 00 - 4.000E 00	4.515E-03	8.811E-04
4.000E 00 - 4.500E 00	2.345E-03	5.924E-04
4.500E 00 - 5.000E 00	4.899E-04	4.323E-04
5.000E 00 - 6.000E 00	1.215E-04	2.616E-04
6.000E 00 - 7.000E 00	3.275E-04	2.405E-04
7.000E 00 - 8.000E 00	1.797E-04	1.038E-04
8.000E 00 - 9.000E 00	3.934E-05	6.867E-05
9.000E 00 - 1.000E 01	3.059E-05	3.425E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 5.00 TO 5.99 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	3.759E-01	4.502E-02	1.555E 00	2.971E-01	1.362E-02	4.560E 00	5.047E-03	9.392E-04
3.225E-01	4.247E-01	4.024E-02	1.585E 00	2.956E-01	1.302E-02	4.640E 00	4.417E-03	8.816E-04
3.375E-01	4.127E-01	3.955E-02	1.615E 00	2.892E-01	1.237E-02	4.720E 00	4.044E-03	8.217E-04
3.525E-01	3.605E-01	3.922E-02	1.645E 00	2.785E-01	1.172E-02	4.800E 00	3.455E-03	7.892E-04
3.675E-01	3.156E-01	3.748E-02	1.680E 00	2.680E-01	1.093E-02	4.880E 00	2.609E-03	8.411E-04
3.825E-01	2.912E-01	3.664E-02	1.720E 00	2.614E-01	1.072E-02	4.960E 00	1.689E-03	8.326E-04
3.975E-01	2.880E-01	3.606E-02	1.760E 00	2.538E-01	1.031E-02	5.040E 00	8.591E-04	8.023E-04
4.125E-01	2.978E-01	3.528E-02	1.800E 00	2.513E-01	9.678E-03	5.120E 00	3.861E-04	7.867E-04
4.275E-01	2.914E-01	3.637E-02	1.840E 00	2.577E-01	9.184E-03	5.200E 00	3.595E-04	7.654E-04
4.425E-01	2.688E-01	3.774E-02	1.880E 00	2.597E-01	9.137E-03	5.280E 00	5.851E-04	7.590E-04
4.575E-01	2.616E-01	3.831E-02	1.920E 00	2.521E-01	8.928E-03	5.360E 00	7.078E-04	7.501E-04
4.725E-01	2.809E-01	3.771E-02	1.960E 00	2.411E-01	8.507E-03	5.440E 00	6.260E-04	7.246E-04
4.875E-01	3.280E-01	3.635E-02	2.000E 00	2.279E-01	8.020E-03	5.520E 00	5.088E-04	6.781E-04
5.025E-01	3.955E-01	3.431E-02	2.040E 00	2.161E-01	7.866E-03	5.600E 00	5.342E-04	6.990E-04
5.175E-01	4.501E-01	3.097E-02	2.080E 00	2.104E-01	7.760E-03	5.680E 00	5.992E-04	6.839E-04
5.325E-01	4.743E-01	2.670E-02	2.120E 00	2.055E-01	7.411E-03	5.760E 00	6.767E-04	6.480E-04
5.475E-01	4.813E-01	2.281E-02	2.160E 00	1.952E-01	7.020E-03	5.850E 00	7.122E-04	5.644E-04
5.625E-01	4.794E-01	2.031E-02	2.200E 00	1.820E-01	6.677E-03	5.950E 00	5.435E-04	5.689E-04
5.775E-01	4.783E-01	2.104E-02	2.240E 00	1.703E-01	6.235E-03	6.050E 00	1.505E-04	5.155E-04
5.925E-01	4.907E-01	2.302E-02	2.280E 00	1.602E-01	5.803E-03	6.150E 00	-7.560E-05	-4.090E-04
6.100E-01	5.104E-01	2.347E-02	2.320E 00	1.506E-01	5.522E-03	6.250E 00	-1.853E-04	-4.279E-04
6.300E-01	5.030E-01	2.306E-02	2.360E 00	1.418E-01	5.229E-03	6.350E 00	-1.154E-04	-4.459E-04
6.500E-01	4.710E-01	2.229E-02	2.400E 00	1.327E-01	4.740E-03	6.450E 00	4.112E-05	4.516E-04
6.700E-01	4.625E-01	2.036E-02	2.440E 00	1.241E-01	4.652E-03	6.550E 00	4.423E-05	3.332E-04
6.900E-01	4.933E-01	1.848E-02	2.480E 00	1.209E-01	4.816E-03	6.650E 00	1.122E-05	2.968E-04
7.100E-01	5.455E-01	1.820E-02	2.525E 00	1.275E-01	4.747E-03	6.750E 00	-1.042E-05	-3.091E-04
7.300E-01	5.913E-01	1.763E-02	2.575E 00	1.374E-01	4.776E-03	6.850E 00	-1.491E-05	-3.231E-04
7.500E-01	6.119E-01	1.757E-02	2.625E 00	1.335E-01	4.471E-03	6.950E 00	-8.124E-06	-2.793E-04
7.700E-01	6.076E-01	1.684E-02	2.675E 00	1.150E-01	3.814E-03	7.050E 00	3.157E-05	2.398E-04
7.900E-01	5.645E-01	1.577E-02	2.725E 00	9.307E-02	3.138E-03	7.150E 00	6.725E-05	2.067E-04
8.100E-01	5.380E-01	1.505E-02	2.775E 00	7.599E-02	2.848E-03	7.250E 00	8.787E-05	1.929E-04
8.300E-01	4.692E-01	1.431E-02	2.825E 00	6.522E-02	2.780E-03	7.350E 00	4.838E-05	1.709E-04
8.500E-01	4.043E-01	1.405E-02	2.875E 00	5.882E-02	2.595E-03	7.450E 00	2.346E-05	1.432E-04
8.700E-01	3.722E-01	1.376E-02	2.925E 00	5.388E-02	2.445E-03	7.550E 00	1.244E-05	1.219E-04
8.900E-01	3.767E-01	1.370E-02	2.975E 00	4.825E-02	2.314E-03	7.660E 00	2.925E-05	1.166E-04
9.125E-01	4.062E-01	1.321E-02	3.030E 00	4.204E-02	2.256E-03	7.780E 00	4.065E-05	1.022E-04
9.375E-01	4.388E-01	1.314E-02	3.090E 00	3.810E-02	2.161E-03	7.900E 00	1.582E-05	7.910E-05
9.625E-01	4.550E-01	1.534E-02	3.150E 00	3.648E-02	2.088E-03	8.020E 00	-7.732E-06	-6.414E-05
9.875E-01	4.631E-01	1.732E-02	3.210E 00	3.400E-02	2.012E-03	8.140E 00	-7.615E-06	-6.477E-05
1.012E 00	4.741E-01	1.722E-02	3.270E 00	3.013E-02	1.852E-03	8.260E 00	2.734E-05	6.268E-05
1.037E 00	4.774E-01	1.692E-02	3.330E 00	2.583E-02	1.810E-03	8.380E 00	5.884E-05	5.594E-05
1.063E 00	4.559E-01	1.908E-02	3.390E 00	2.243E-02	1.784E-03	8.500E 00	6.379E-05	4.425E-05
1.087E 00	4.083E-01	1.839E-02	3.450E 00	2.088E-02	1.693E-03	8.620E 00	4.787E-05	3.734E-05
1.112E 00	3.521E-01	1.481E-02	3.510E 00	2.000E-02	1.572E-03	8.740E 00	2.806E-05	3.696E-05
1.137E 00	2.998E-01	1.280E-02	3.570E 00	1.835E-02	1.615E-03	8.860E 00	2.222E-05	3.650E-05
1.162E 00	2.680E-01	1.265E-02	3.630E 00	1.621E-02	1.992E-03	8.980E 00	1.836E-05	3.801E-05
1.188E 00	2.463E-01	1.566E-02	3.690E 00	1.462E-02	2.149E-03	9.100E 00	2.265E-05	2.867E-05
1.212E 00	2.328E-01	1.763E-02	3.750E 00	1.353E-02	1.750E-03	9.220E 00	1.665E-05	2.993E-05
1.237E 00	2.232E-01	1.682E-02	3.810E 00	1.227E-02	1.442E-03	9.340E 00	9.662E-06	3.383E-05
1.262E 00	2.160E-01	1.601E-02	3.870E 00	1.059E-02	1.409E-03	9.470E 00	1.676E-05	4.187E-05
1.287E 00	2.140E-01	1.525E-02	3.930E 00	9.004E-03	1.356E-03	9.610E 00	1.764E-05	3.602E-05
1.315E 00	2.180E-01	1.530E-02	3.990E 00	7.880E-03	1.298E-03	9.750E 00	1.897E-05	3.234E-05
1.345E 00	2.272E-01	1.427E-02	4.050E 00	6.918E-03	1.251E-03	9.890E 00	2.101E-05	2.926E-05
1.375E 00	2.399E-01	1.285E-02	4.110E 00	5.68CE-03	1.175E-03	1.003E 01	1.922E-05	2.913E-05
1.405E 00	2.535E-01	1.233E-02	4.170E 00	4.424E-03	1.151E-03	1.017E 01	1.927E-05	3.229E-05
1.435E 00	2.651E-01	1.321E-02	4.240E 00	3.839E-03	1.103E-03	1.031E 01	1.815E-05	4.285E-05
1.465E 00	2.768E-01	1.326E-02	4.320E 00	4.816E-03	1.114E-03	1.045E 01	2.529E-05	4.448E-05
1.495E 00	2.882E-01	1.262E-02	4.400E 00	6.053E-03	1.094E-03	1.059E 01	2.883E-05	4.668E-05
1.525E 00	2.951E-01	1.314E-02	4.480E 00	5.95CE-03	1.062E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)			X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01	-	4.000E-01	3.560E-02	3.940E-03
4.000E-01	-	5.000E-01	2.928E-02	3.680E-03
5.000E-01	-	6.000E-01	4.685E-02	2.511E-03
6.000E-01	-	7.000E-01	4.881E-02	2.153E-03
7.000E-01	-	8.000E-01	5.875E-02	1.720E-03
8.000E-01	-	1.000E 00	8.731E-02	2.891E-03
1.000E 00	-	1.200E 00	7.454E-02	3.183E-03
1.200E 00	-	1.400E 00	4.522E-02	3.035E-03
1.400E 00	-	1.600E 00	5.662E-02	2.616E-03
1.600E 00	-	1.800E 00	5.340E-02	2.199E-03
1.800E 00	-	2.000E 00	5.010E-02	1.785E-03
2.000E 00	-	2.500E 00	8.493E-02	3.109E-03
2.500E 00	-	3.000E 00	4.544E-02	1.698E-03
3.000E 00	-	3.500E 00	1.541E-02	9.715E-04
3.500E 00	-	4.000E 00	6.787E-03	8.173E-04
4.000E 00	-	4.500E 00	2.714E-03	5.691E-04
4.500E 00	-	5.000E 00	1.813E-03	4.293E-04
5.000E 00	-	6.000E 00	5.936E-04	6.966E-04
6.000E 00	-	7.000E 00	-1.417E-05	6.301E-05
7.000E 00	-	8.000E 00	3.670E-05	1.373E-04
8.000E 00	-	9.000E 00	2.959E-05	2.243E-05
9.000E 00	-	1.000E 01	1.780E-05	3.320E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 5.99 TO 7.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	3.442E-01	5.069E-02	1.555E 00	3.056E-01	1.523E-02	4.560E 00	6.480E-03	1.350E-03
3.225E-01	3.735E-01	4.441E-02	1.585E 00	3.017E-01	1.457E-02	4.640E 00	5.691E-03	1.268E-03
3.375E-01	4.040E-01	4.197E-02	1.615E 00	3.004E-01	1.341E-02	4.720E 00	5.533E-03	1.128E-03
3.525E-01	4.067E-01	4.050E-02	1.645E 00	2.988E-01	1.244E-02	4.800E 00	4.777E-03	1.094E-03
3.675E-01	3.758E-01	4.056E-02	1.680E 00	2.935E-01	1.178E-02	4.880E 00	3.416E-03	1.155E-03
3.825E-01	3.436E-01	4.121E-02	1.720E 00	2.858E-01	1.152E-02	4.960E 00	2.594E-03	1.202E-03
3.975E-01	3.163E-01	3.946E-02	1.760E 00	2.812E-01	1.104E-02	5.040E 00	2.799E-03	1.177E-03
4.125E-01	3.042E-01	3.899E-02	1.800E 00	2.835E-01	1.081E-02	5.120E 00	3.183E-03	1.109E-03
4.275E-01	3.059E-01	3.991E-02	1.840E 00	2.847E-01	1.032E-02	5.200E 00	2.872E-03	1.020E-03
4.425E-01	3.027E-01	4.123E-02	1.880E 00	2.729E-01	1.009E-02	5.280E 00	2.242E-03	9.360E-04
4.575E-01	3.044E-01	4.149E-02	1.920E 00	2.539E-01	9.860E-03	5.360E 00	1.989E-03	9.021E-04
4.725E-01	3.288E-01	4.120E-02	1.960E 00	2.392E-01	9.642E-03	5.440E 00	2.043E-03	8.689E-04
4.875E-01	3.731E-01	4.025E-02	2.000E 00	2.312E-01	9.310E-03	5.520E 00	1.932E-03	8.322E-04
5.025E-01	4.286E-01	3.869E-02	2.040E 00	2.273E-01	8.922E-03	5.600E 00	1.613E-03	8.133E-04
5.175E-01	4.789E-01	3.571E-02	2.080E 00	2.226E-01	8.557E-03	5.680E 00	1.231E-03	8.107E-04
5.325E-01	5.015E-01	3.074E-02	2.120E 00	2.144E-01	8.086E-03	5.760E 00	9.678E-04	7.875E-04
5.475E-01	4.976E-01	2.566E-02	2.160E 00	2.040E-01	7.800E-03	5.850E 00	9.545E-04	7.787E-04
5.625E-01	4.887E-01	2.242E-02	2.200E 00	1.949E-01	7.603E-03	5.950E 00	1.017E-03	7.441E-04
5.775E-01	4.893E-01	2.293E-02	2.240E 00	1.884E-01	7.513E-03	6.050E 00	9.727E-04	5.812E-04
5.925E-01	4.954E-01	2.515E-02	2.280E 00	1.805E-01	7.242E-03	6.150E 00	8.727E-04	5.604E-04
6.100E-01	4.989E-01	2.601E-02	2.320E 00	1.689E-01	6.649E-03	6.250E 00	9.121E-04	5.704E-04
6.300E-01	4.931E-01	2.589E-02	2.360E 00	1.562E-01	6.145E-03	6.350E 00	9.179E-04	5.648E-04
6.500E-01	4.841E-01	2.404E-02	2.400E 00	1.440E-01	5.599E-03	6.450E 00	7.160E-04	5.460E-04
6.700E-01	4.933E-01	2.204E-02	2.440E 00	1.334E-01	5.212E-03	6.550E 00	2.487E-04	4.294E-04
6.900E-01	5.247E-01	2.018E-02	2.480E 00	1.260E-01	5.142E-03	6.650E 00	-1.543E-04	-3.792E-04
7.100E-01	5.640E-01	1.992E-02	2.525E 00	1.232E-01	5.236E-03	6.750E 00	-3.071E-04	-3.654E-04
7.300E-01	5.903E-01	1.974E-02	2.575E 00	1.250E-01	5.306E-03	6.850E 00	-1.717E-04	-3.742E-04
7.500E-01	5.939E-01	1.952E-02	2.625E 00	1.243E-01	4.997E-03	6.950E 00	2.490E-05	3.377E-04
7.700E-01	5.867E-01	1.888E-02	2.675E 00	1.142E-01	4.498E-03	7.050E 00	1.729E-04	2.757E-04
7.900E-01	5.717E-01	1.746E-02	2.725E 00	9.864E-02	3.846E-03	7.150E 00	1.683E-04	2.315E-04
8.100E-01	5.353E-01	1.671E-02	2.775E 00	8.536E-02	3.532E-03	7.250E 00	1.325E-04	2.145E-04
8.300E-01	4.786E-01	1.607E-02	2.825E 00	7.546E-02	3.382E-03	7.350E 00	1.125E-04	1.973E-04
8.500E-01	4.203E-01	1.529E-02	2.875E 00	6.751E-02	3.171E-03	7.450E 00	9.197E-05	1.756E-04
8.700E-01	3.790E-01	1.466E-02	2.925E 00	6.251E-02	3.029E-03	7.550E 00	6.061E-05	1.504E-04
8.900E-01	3.619E-01	1.462E-02	2.975E 00	5.938E-02	2.904E-03	7.660E 00	2.117E-05	1.344E-04
9.125E-01	3.637E-01	1.440E-02	3.030E 00	5.501E-02	2.851E-03	7.780E 00	-2.811E-05	-1.144E-04
9.375E-01	3.740E-01	1.498E-02	3.090E 00	5.030E-02	2.691E-03	7.900E 00	-6.083E-05	-1.044E-04
9.625E-01	3.878E-01	1.687E-02	3.150E 00	4.769E-02	2.563E-03	8.020E 00	-7.998E-05	-8.352E-05
9.875E-01	4.066E-01	1.874E-02	3.210E 00	4.564E-02	2.539E-03	8.140E 00	-8.355E-05	-8.166E-05
1.012E 00	4.286E-01	1.896E-02	3.270E 00	4.294E-02	2.387E-03	8.260E 00	-4.366E-05	-7.229E-05
1.037E 00	4.443E-01	1.883E-02	3.330E 00	3.869E-02	2.279E-03	8.380E 00	1.883E-05	6.459E-05
1.063E 00	4.396E-01	2.041E-02	3.390E 00	3.329E-02	2.283E-03	8.500E 00	8.468E-05	5.471E-05
1.087E 00	4.032E-01	1.919E-02	3.450E 00	2.888E-02	2.172E-03	8.620E 00	1.221E-04	6.147E-05
1.112E 00	3.545E-01	1.617E-02	3.510E 00	2.666E-02	2.077E-03	8.740E 00	1.137E-04	5.457E-05
1.137E 00	3.127E-01	1.473E-02	3.570E 00	2.530E-02	2.017E-03	8.860E 00	7.644E-05	4.116E-05
1.162E 00	2.885E-01	1.462E-02	3.630E 00	2.320E-02	2.324E-03	8.980E 00	3.856E-05	3.412E-05
1.188E 00	2.704E-01	1.745E-02	3.690E 00	2.056E-02	2.421E-03	9.100E 00	7.811E-06	3.244E-05
1.212E 00	2.599E-01	1.918E-02	3.750E 00	1.825E-02	2.037E-03	9.220E 00	-1.467E-05	-3.073E-05
1.237E 00	2.533E-01	1.843E-02	3.810E 00	1.690E-02	1.818E-03	9.340E 00	-2.679E-05	-2.932E-05
1.262E 00	2.471E-01	1.791E-02	3.870E 00	1.597E-02	1.767E-03	9.470E 00	-2.907E-05	-3.129E-05
1.287E 00	2.445E-01	1.735E-02	3.930E 00	1.490E-02	1.804E-03	9.610E 00	-2.584E-05	-3.438E-05
1.315E 00	2.468E-01	1.753E-02	3.990E 00	1.400E-02	1.772E-03	9.750E 00	-2.151E-05	-3.704E-05
1.345E 00	2.583E-01	1.612E-02	4.050E 00	1.358E-02	1.595E-03	9.890E 00	-6.485E-06	-3.292E-05
1.375E 00	2.664E-01	1.436E-02	4.110E 00	1.301E-02	1.512E-03	1.003E 01	2.350E-05	3.315E-05
1.405E 00	2.754E-01	1.402E-02	4.170E 00	1.176E-02	1.413E-03	1.017E 01	5.230E-05	3.638E-05
1.435E 00	2.881E-01	1.500E-02	4.240E 00	9.699E-03	1.381E-03	1.031E 01	7.469E-05	4.672E-05
1.465E 00	3.028E-01	1.493E-02	4.320E 00	8.361E-03	1.455E-03	1.045E 01	8.683E-05	5.199E-05
1.495E 00	3.118E-01	1.401E-02	4.400E 00	8.539E-03	1.499E-03	1.059E 01	8.337E-05	5.499E-05
1.525E 00	3.112E-01	1.454E-02	4.480E 00	8.020E-03	1.462E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	3.691E-02	4.294E-03
4.000E-01 - 5.000E-01	3.243E-02	4.038E-03
5.000E-01 - 6.000E-01	4.862E-02	2.823E-03
6.000E-01 - 7.000E-01	4.989E-02	2.364E-03
7.000E-01 - 8.000E-01	5.807E-02	1.911E-03
8.000E-01 - 1.000E 00	8.184E-02	3.171E-03
1.000E 00 - 1.200E 00	7.353E-02	3.504E-03
1.200E 00 - 1.400E 00	5.108E-02	3.399E-03
1.400E 00 - 1.600E 00	6.017E-02	2.932E-03
1.600E 00 - 1.800E 00	5.806E-02	2.368E-03
1.800E 00 - 2.000E 00	5.236E-02	1.998E-03
2.000E 00 - 2.500E 00	9.104E-02	3.564E-03
2.500E 00 - 3.000E 00	4.679E-02	1.996E-03
3.000E 00 - 3.500E 00	2.109E-02	1.228E-03
3.500E 00 - 4.000E 00	9.732E-03	1.004E-03
4.000E 00 - 4.500E 00	5.198E-03	7.409E-04
4.500E 00 - 5.000E 00	2.434E-03	6.046E-04
5.000E 00 - 6.000E 00	1.868E-03	8.917E-04
6.000E 00 - 7.000E 00	4.027E-04	2.418E-04
7.000E 00 - 8.000E 00	6.157E-05	1.096E-04
8.000E 00 - 9.000E 00	3.140E-05	1.075E-05
9.000E 00 - 1.000E 01	-1.376E-05	2.050E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 7.00 TO 8.01 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	3.649E-01	4.792E-02	1.555E 00	2.224E-01	1.328E-02	4.560E 00	7.714E-03	1.737E-03
3.225E-01	3.940E-01	4.313E-02	1.585E 00	2.220E-01	1.299E-02	4.640E 00	5.944E-03	1.638E-03
3.375E-01	3.901E-01	4.031E-02	1.615E 00	2.231E-01	1.215E-02	4.720E 00	5.226E-03	1.519E-03
3.525E-01	3.896E-01	3.888E-02	1.645E 00	2.247E-01	1.120E-02	4.800E 00	4.460E-03	1.537E-03
3.675E-01	3.766E-01	3.872E-02	1.680E 00	2.231E-01	1.035E-02	4.880E 00	4.109E-03	1.642E-03
3.825E-01	3.590E-01	3.857E-02	1.720E 00	2.138E-01	1.021E-02	4.960E 00	4.504E-03	1.693E-03
3.975E-01	3.312E-01	3.904E-02	1.760E 00	2.056E-01	1.002E-02	5.040E 00	4.729E-03	1.665E-03
4.125E-01	3.014E-01	4.020E-02	1.800E 00	2.044E-01	9.540E-03	5.120E 00	4.100E-03	1.594E-03
4.275E-01	2.891E-01	4.057E-02	1.840E 00	2.016E-01	9.349E-03	5.200E 00	3.168E-03	1.452E-03
4.425E-01	2.966E-01	4.119E-02	1.880E 00	1.953E-01	9.542E-03	5.280E 00	2.689E-03	1.418E-03
4.575E-01	3.099E-01	4.044E-02	1.920E 00	1.902E-01	9.037E-03	5.360E 00	3.053E-03	1.420E-03
4.725E-01	3.344E-01	4.147E-02	1.960E 00	1.839E-01	8.497E-03	5.440E 00	3.776E-03	1.420E-03
4.875E-01	3.700E-01	4.009E-02	2.000E 00	1.731E-01	8.245E-03	5.520E 00	3.903E-03	1.395E-03
5.025E-01	4.033E-01	3.816E-02	2.040E 00	1.623E-01	8.255E-03	5.600E 00	2.798E-03	1.379E-03
5.175E-01	4.276E-01	3.453E-02	2.080E 00	1.563E-01	8.100E-03	5.680E 00	8.726E-04	1.306E-03
5.325E-01	4.381E-01	2.926E-02	2.120E 00	1.528E-01	7.741E-03	5.760E 00	-7.657E-04	-1.232E-03
5.475E-01	4.321E-01	2.522E-02	2.160E 00	1.472E-01	7.515E-03	5.850E 00	-9.689E-04	-1.207E-03
5.625E-01	4.189E-01	2.229E-02	2.200E 00	1.388E-01	7.400E-03	5.950E 00	1.040E-03	1.180E-03
5.775E-01	4.114E-01	2.229E-02	2.240E 00	1.316E-01	7.368E-03	6.050E 00	3.685E-03	1.098E-03
5.925E-01	4.118E-01	2.409E-02	2.280E 00	1.291E-01	6.97CE-03	6.150E 00	4.849E-03	9.946E-04
6.100E-01	4.150E-01	2.518E-02	2.320E 00	1.295E-01	6.37CE-03	6.250E 00	4.045E-03	9.133E-04
6.300E-01	4.168E-01	2.565E-02	2.360E 00	1.252E-01	5.611E-03	6.350E 00	2.329E-03	8.292E-04
6.500E-01	4.160E-01	2.416E-02	2.400E 00	1.132E-01	5.289E-03	6.450E 00	8.195E-04	7.397E-04
6.700E-01	4.185E-01	2.158E-02	2.440E 00	1.011E-01	5.210E-03	6.550E 00	-8.375E-06	-6.573E-04
6.900E-01	4.358E-01	1.945E-02	2.480E 00	9.472E-02	5.11EE-03	6.650E 00	-2.418E-04	-5.964E-04
7.100E-01	4.673E-01	1.904E-02	2.525E 00	9.121E-02	5.090E-03	6.750E 00	-4.300E-05	-5.568E-04
7.300E-01	4.858E-01	1.965E-02	2.575E 00	8.536E-02	5.257E-03	6.850E 00	3.090E-04	5.124E-04
7.500E-01	4.763E-01	1.937E-02	2.625E 00	7.874E-02	5.214E-03	6.950E 00	5.317E-04	4.132E-04
7.700E-01	4.547E-01	1.837E-02	2.675E 00	7.393E-02	4.553E-03	7.050E 00	5.929E-04	3.540E-04
7.900E-01	4.297E-01	1.704E-02	2.725E 00	6.822E-02	3.769E-03	7.150E 00	5.855E-04	3.291E-04
8.100E-01	4.004E-01	1.633E-02	2.775E 00	6.012E-02	3.594E-03	7.250E 00	6.628E-04	3.054E-04
8.300E-01	3.722E-01	1.518E-02	2.825E 00	5.269E-02	3.498E-03	7.350E 00	6.940E-04	2.576E-04
8.500E-01	3.429E-01	1.447E-02	2.875E 00	4.726E-02	3.235E-03	7.450E 00	5.797E-04	1.929E-04
8.700E-01	3.095E-01	1.412E-02	2.925E 00	4.396E-02	3.179E-03	7.550E 00	3.396E-04	1.712E-04
8.900E-01	2.640E-01	1.417E-02	2.975E 00	4.299E-02	3.054E-03	7.660E 00	6.477E-05	1.630E-04
9.125E-01	2.774E-01	1.406E-02	3.030E 00	4.267E-02	2.935E-03	7.780E 00	-9.846E-05	-1.387E-04
9.375E-01	2.857E-01	1.424E-02	3.090E 00	4.034E-02	2.825E-03	7.900E 00	-1.018E-04	-1.075E-04
9.625E-01	3.002E-01	1.528E-02	3.150E 00	3.636E-02	2.790E-03	8.020E 00	-2.048E-05	-9.591E-05
9.875E-01	3.194E-01	1.659E-02	3.210E 00	3.370E-02	2.849E-03	8.140E 00	7.479E-05	9.447E-05
1.012E 00	3.364E-01	1.616E-02	3.270E 00	3.350E-02	2.626E-03	8.260E 00	1.443E-04	8.223E-05
1.037E 00	3.443E-01	1.557E-02	3.330E 00	3.379E-02	2.438E-03	8.380E 00	1.443E-04	8.866E-05
1.063E 00	3.348E-01	1.746E-02	3.390E 00	3.195E-02	2.397E-03	8.500E 00	1.161E-04	7.960E-05
1.087E 00	3.065E-01	1.701E-02	3.450E 00	2.774E-02	2.399E-03	8.620E 00	7.414E-05	8.959E-05
1.112E 00	2.763E-01	1.439E-02	3.510E 00	2.340E-02	2.382E-03	8.740E 00	3.305E-05	7.494E-05
1.137E 00	2.508E-01	1.336E-02	3.570E 00	1.992E-02	2.370E-03	8.860E 00	4.135E-05	7.703E-05
1.162E 00	2.337E-01	1.345E-02	3.630E 00	1.672E-02	2.801E-03	8.980E 00	4.149E-05	6.926E-05
1.188E 00	2.202E-01	1.559E-02	3.690E 00	1.470E-02	2.932E-03	9.100E 00	5.692E-05	6.927E-05
1.212E 00	2.119E-01	1.725E-02	3.750E 00	1.422E-02	2.506E-03	9.220E 00	6.612E-05	6.962E-05
1.237E 00	2.076E-01	1.633E-02	3.810E 00	1.405E-02	2.230E-03	9.340E 00	5.851E-05	7.320E-05
1.262E 00	2.064E-01	1.511E-02	3.870E 00	1.303E-02	2.124E-03	9.470E 00	5.093E-05	6.726E-05
1.287E 00	2.060E-01	1.430E-02	3.930E 00	1.162E-02	2.180E-03	9.610E 00	4.758E-05	5.339E-05
1.315E 00	2.046E-01	1.474E-02	3.990E 00	1.076E-02	2.200E-03	9.750E 00	4.244E-05	4.809E-05
1.345E 00	2.048E-01	1.367E-02	4.050E 00	1.061E-02	2.007E-03	9.890E 00	2.113E-05	3.170E-05
1.375E 00	2.084E-01	1.261E-02	4.110E 00	1.032E-02	1.903E-03	1.003E 01	1.239E-05	3.873E-05
1.405E 00	2.141E-01	1.271E-02	4.170E 00	9.573E-03	1.808E-03	1.017E 01	-7.016E-06	-5.036E-05
1.435E 00	2.200E-01	1.297E-02	4.240E 00	8.772E-03	1.787E-03	1.031E 01	-1.622E-05	-6.173E-05
1.465E 00	2.262E-01	1.274E-02	4.320E 00	9.406E-03	1.953E-03	1.045E 01	-1.359E-05	-6.537E-05
1.495E 00	2.281E-01	1.215E-02	4.400E 00	1.080E-02	1.952E-03	1.059E 01	6.337E-06	5.442E-05
1.525E 00	2.254E-01	1.264E-02	4.480E 00	1.020E-02	1.846E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	3.773E-02	4.107E-03
4.000E-01 - 5.000E-01	3.211E-02	4.050E-03
5.000E-01 - 6.000E-01	4.216E-02	2.743E-03
6.000E-01 - 7.000E-01	4.206E-02	2.321E-03
7.000E-01 - 8.000E-01	4.624E-02	1.872E-03
8.000E-01 - 1.000E 00	6.379E-02	2.987E-03
1.000E 00 - 1.200E 00	5.756E-02	3.072E-03
1.200E 00 - 1.400E 00	4.147E-02	2.928E-03
1.400E 00 - 1.600E 00	4.462E-02	2.558E-03
1.600E 00 - 1.800E 00	4.322E-02	2.118E-03
1.800E 00 - 2.000E 00	3.843E-02	1.814E-03
2.000E 00 - 2.500E 00	6.669E-02	3.403E-03
2.500E 00 - 3.000E 00	3.223E-02	2.023E-03
3.000E 00 - 3.500E 00	1.730E-02	1.323E-03
3.500E 00 - 4.000E 00	7.610E-03	1.211E-03
4.000E 00 - 4.500E 00	4.985E-03	9.533E-04
4.500E 00 - 5.000E 00	2.745E-03	8.176E-04
5.000E 00 - 6.000E 00	2.275E-03	9.211E-04
6.000E 00 - 7.000E 00	1.619E-03	3.739E-04
7.000E 00 - 8.000E 00	3.266E-04	1.456E-04
8.000E 00 - 9.000E 00	7.803E-05	7.114E-05
9.000E 00 - 1.000E 01	4.704E-05	5.773E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 8.01 TO 9.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	4.191E-01	4.779E-02	1.555E 00	1.322E-01	1.056E-02	4.560E 00	3.099E-03	2.439E-03
3.225E-01	3.584E-01	4.198E-02	1.585E 00	1.332E-01	1.054E-02	4.640E 00	2.066E-03	2.286E-03
3.375E-01	3.625E-01	4.032E-02	1.615E 00	1.347E-01	1.035E-02	4.720E 00	2.066E-03	2.179E-03
3.525E-01	3.257E-01	3.979E-02	1.645E 00	1.351E-01	9.775E-03	4.800E 00	2.316E-03	2.160E-03
3.675E-01	3.091E-01	3.864E-02	1.680E 00	1.312E-01	9.038E-03	4.880E 00	3.853E-03	2.255E-03
3.825E-01	3.120E-01	3.864E-02	1.720E 00	1.210E-01	9.025E-03	4.960E 00	6.047E-03	2.310E-03
3.975E-01	3.245E-01	3.947E-02	1.760E 00	1.144E-01	8.848E-03	5.040E 00	6.654E-03	2.468E-03
4.125E-01	3.275E-01	4.082E-02	1.800E 00	1.155E-01	8.107E-03	5.120E 00	5.256E-03	2.429E-03
4.275E-01	3.141E-01	4.193E-02	1.840E 00	1.151E-01	7.691E-03	5.200E 00	3.296E-03	2.300E-03
4.425E-01	3.146E-01	4.307E-02	1.880E 00	1.093E-01	7.705E-03	5.280E 00	1.895E-03	2.177E-03
4.575E-01	3.384E-01	4.248E-02	1.920E 00	1.012E-01	7.549E-03	5.360E 00	1.332E-03	2.202E-03
4.725E-01	3.704E-01	4.122E-02	1.960E 00	9.596E-02	7.375E-03	5.440E 00	1.493E-03	2.308E-03
4.875E-01	4.050E-01	3.738E-02	2.000E 00	9.324E-02	7.053E-03	5.520E 00	2.009E-03	2.420E-03
5.025E-01	4.408E-01	3.411E-02	2.040E 00	9.044E-02	7.016E-03	5.600E 00	2.320E-03	2.332E-03
5.175E-01	4.616E-01	3.104E-02	2.080E 00	8.889E-02	7.072E-03	5.680E 00	1.878E-03	2.118E-03
5.325E-01	4.589E-01	2.776E-02	2.120E 00	8.952E-02	6.789E-03	5.760E 00	8.587E-04	2.061E-03
5.475E-01	4.267E-01	2.436E-02	2.160E 00	8.932E-02	6.438E-03	5.850E 00	-7.162E-05	-2.038E-03
5.625E-01	3.947E-01	2.228E-02	2.200E 00	8.636E-02	6.418E-03	5.950E 00	7.507E-04	1.996E-03
5.775E-01	3.754E-01	2.289E-02	2.240E 00	8.123E-02	6.606E-03	6.050E 00	3.050E-03	1.930E-03
5.925E-01	3.712E-01	2.455E-02	2.280E 00	7.490E-02	6.703E-03	6.150E 00	4.366E-03	1.748E-03
6.100E-01	3.696E-01	2.453E-02	2.320E 00	6.859E-02	6.214E-03	6.250E 00	3.766E-03	1.536E-03
6.300E-01	3.636E-01	2.496E-02	2.360E 00	6.279E-02	5.314E-03	6.350E 00	2.521E-03	1.423E-03
6.500E-01	3.590E-01	2.356E-02	2.400E 00	5.661E-02	4.916E-03	6.450E 00	2.008E-03	1.352E-03
6.700E-01	3.636E-01	2.126E-02	2.440E 00	5.064E-02	4.775E-03	6.550E 00	2.214E-03	1.243E-03
6.900E-01	3.796E-01	1.912E-02	2.480E 00	4.535E-02	4.965E-03	6.650E 00	2.228E-03	1.084E-03
7.100E-01	3.928E-01	1.906E-02	2.525E 00	4.163E-02	5.515E-03	6.750E 00	1.871E-03	9.308E-04
7.300E-01	3.865E-01	1.936E-02	2.575E 00	4.220E-02	5.624E-03	6.850E 00	1.744E-03	8.600E-04
7.500E-01	3.701E-01	1.943E-02	2.625E 00	4.560E-02	5.114E-03	6.950E 00	1.948E-03	7.890E-04
7.700E-01	3.537E-01	1.825E-02	2.675E 00	4.649E-02	4.438E-03	7.050E 00	1.983E-03	6.802E-04
7.900E-01	3.410E-01	1.717E-02	2.725E 00	4.395E-02	3.751E-03	7.150E 00	1.576E-03	5.879E-04
8.100E-01	3.272E-01	1.596E-02	2.775E 00	4.002E-02	3.424E-03	7.250E 00	1.063E-03	4.853E-04
8.300E-01	3.049E-01	1.499E-02	2.825E 00	3.644E-02	3.313E-03	7.350E 00	7.155E-04	3.618E-04
8.500E-01	2.777E-01	1.473E-02	2.875E 00	3.366E-02	3.233E-03	7.450E 00	5.289E-04	2.804E-04
8.700E-01	2.586E-01	1.386E-02	2.925E 00	3.074E-02	3.114E-03	7.550E 00	3.683E-04	2.337E-04
8.900E-01	2.483E-01	1.347E-02	2.975E 00	2.737E-02	3.094E-03	7.660E 00	2.275E-04	1.923E-04
9.125E-01	2.412E-01	1.373E-02	3.030E 00	2.396E-02	3.102E-03	7.780E 00	8.745E-05	1.665E-04
9.375E-01	2.371E-01	1.398E-02	3.090E 00	2.072E-02	3.073E-03	7.900E 00	-3.009E-05	-1.518E-04
9.625E-01	2.411E-01	1.451E-02	3.150E 00	1.811E-02	3.015E-03	8.020E 00	-9.801E-05	-1.261E-04
9.875E-01	2.572E-01	1.518E-02	3.210E 00	1.741E-02	3.000E-03	8.140E 00	-1.043E-04	-1.124E-04
1.012E 00	2.747E-01	1.424E-02	3.270E 00	1.799E-02	2.849E-03	8.260E 00	-8.966E-06	-1.170E-04
1.037E 00	2.770E-01	1.387E-02	3.330E 00	1.773E-02	2.795E-03	8.380E 00	1.337E-04	1.153E-04
1.063E 00	2.653E-01	1.489E-02	3.390E 00	1.586E-02	2.815E-03	8.500E 00	2.287E-04	1.073E-04
1.087E 00	2.470E-01	1.450E-02	3.450E 00	1.315E-02	2.720E-03	8.620E 00	2.225E-04	8.870E-05
1.112E 00	2.270E-01	1.262E-02	3.510E 00	1.101E-02	2.615E-03	8.740E 00	1.448E-04	8.740E-05
1.137E 00	2.063E-01	1.175E-02	3.570E 00	1.052E-02	2.596E-03	8.860E 00	4.985E-05	8.820E-05
1.162E 00	1.919E-01	1.167E-02	3.630E 00	1.085E-02	2.923E-03	8.980E 00	-1.169E-06	-8.718E-05
1.188E 00	1.820E-01	1.266E-02	3.690E 00	1.061E-02	3.104E-03	9.100E 00	-2.569E-05	-6.680E-05
1.212E 00	1.754E-01	1.391E-02	3.750E 00	9.618E-03	2.773E-03	9.220E 00	-2.840E-05	-6.282E-05
1.237E 00	1.687E-01	1.358E-02	3.810E 00	8.563E-03	2.567E-03	9.340E 00	-2.640E-05	-6.640E-05
1.262E 00	1.599E-01	1.330E-02	3.870E 00	7.678E-03	2.646E-03	9.470E 00	-1.846E-05	-6.398E-05
1.287E 00	1.532E-01	1.274E-02	3.930E 00	7.380E-03	2.642E-03	9.610E 00	-4.842E-06	-5.317E-05
1.315E 00	1.469E-01	1.252E-02	3.990E 00	7.952E-03	2.524E-03	9.750E 00	1.553E-05	4.760E-05
1.345E 00	1.504E-01	1.185E-02	4.050E 00	8.626E-03	2.381E-03	9.890E 00	3.527E-05	5.208E-05
1.375E 00	1.497E-01	1.147E-02	4.110E 00	8.226E-03	2.347E-03	1.003E 01	5.306E-05	5.688E-05
1.405E 00	1.475E-01	1.131E-02	4.170E 00	7.086E-03	2.347E-03	1.017E 01	7.741E-05	5.892E-05
1.435E 00	1.472E-01	1.108E-02	4.240E 00	6.814E-03	2.282E-03	1.031E 01	1.053E-04	6.445E-05
1.465E 00	1.478E-01	1.048E-02	4.320E 00	8.748E-03	2.393E-03	1.045E 01	1.127E-04	7.809E-05
1.495E 00	1.431E-01	9.996E-03	4.400E 00	9.517E-03	2.491E-03	1.059E 01	1.081E-04	8.393E-05
1.525E 00	1.359E-01	1.032E-02	4.480E 00	6.583E-03	2.443E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)			X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01	-	4.000E-01	3.512E-02	4.107E-03
4.000E-01	-	5.000E-01	3.483E-02	4.078E-03
5.000E-01	-	6.000E-01	4.171E-02	2.630E-03
6.000E-01	-	7.000E-01	3.670E-02	2.272E-03
7.000E-01	-	8.000E-01	3.686E-02	1.865E-03
8.000E-01	-	1.000E 00	5.277E-02	2.893E-03
1.000E 00	-	1.200E 00	4.675E-02	2.656E-03
1.200E 00	-	1.400E 00	3.142E-02	2.524E-03
1.400E 00	-	1.600E 00	2.813E-02	2.115E-03
1.600E 00	-	1.800E 00	2.506E-02	1.847E-03
1.800E 00	-	2.000E 00	2.104E-02	1.516E-03
2.000E 00	-	2.500E 00	3.723E-02	3.071E-03
2.500E 00	-	3.000E 00	1.941E-02	2.030E-03
3.000E 00	-	3.500E 00	8.936E-03	1.455E-03
3.500E 00	-	4.000E 00	4.664E-03	1.361E-03
4.000E 00	-	4.500E 00	4.026E-03	1.195E-03
4.500E 00	-	5.000E 00	1.667E-03	1.140E-03
5.000E 00	-	6.000E 00	2.231E-03	1.782E-03
6.000E 00	-	7.000E 00	2.564E-03	1.289E-03
7.000E 00	-	8.000E 00	6.529E-04	2.849E-04
8.000E 00	-	9.000E 00	7.175E-05	1.657E-05
9.000E 00	-	1.000E 01	-4.107E-06	2.647E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 9.00 TO 10.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	3.956E-01	5.471E-02	1.555E 00	1.333E-01	1.093E-02	4.560E 00	5.917E-03	2.649E-03
3.225E-01	3.856E-01	4.684E-02	1.585E 00	1.289E-01	1.051E-02	4.640E 00	4.541E-03	2.483E-03
3.375E-01	3.478E-01	4.295E-02	1.615E 00	1.257E-01	1.020E-02	4.720E 00	2.310E-03	2.382E-03
3.525E-01	3.112E-01	4.295E-02	1.645E 00	1.217E-01	1.009E-02	4.800E 00	5.718E-04	2.481E-03
3.675E-01	3.077E-01	4.134E-02	1.680E 00	1.158E-01	9.721E-03	4.880E 00	9.897E-04	2.472E-03
3.825E-01	3.185E-01	4.126E-02	1.720E 00	1.110E-01	9.024E-03	4.960E 00	3.240E-03	2.610E-03
3.975E-01	3.251E-01	4.191E-02	1.760E 00	1.096E-01	8.762E-03	5.040E 00	5.257E-03	2.694E-03
4.125E-01	3.235E-01	4.290E-02	1.800E 00	1.063E-01	8.179E-03	5.120E 00	4.983E-03	2.569E-03
4.275E-01	3.151E-01	4.591E-02	1.840E 00	9.859E-02	8.043E-03	5.200E 00	3.296E-03	2.426E-03
4.425E-01	3.245E-01	4.517E-02	1.880E 00	9.185E-02	7.780E-03	5.280E 00	2.210E-03	2.402E-03
4.575E-01	3.736E-01	4.445E-02	1.920E 00	8.801E-02	7.444E-03	5.360E 00	1.948E-03	2.332E-03
4.725E-01	4.280E-01	4.102E-02	1.960E 00	8.531E-02	7.403E-03	5.440E 00	1.564E-03	2.396E-03
4.875E-01	4.449E-01	3.959E-02	2.000E 00	8.381E-02	7.210E-03	5.520E 00	5.347E-04	2.516E-03
5.025E-01	4.321E-01	3.866E-02	2.040E 00	8.288E-02	7.008E-03	5.600E 00	-4.496E-04	-2.491E-03
5.175E-01	4.145E-01	3.516E-02	2.080E 00	7.992E-02	7.058E-03	5.680E 00	-7.417E-04	-2.391E-03
5.325E-01	3.977E-01	3.019E-02	2.120E 00	7.502E-02	6.823E-03	5.760E 00	-5.136E-04	-2.300E-03
5.475E-01	3.786E-01	2.662E-02	2.160E 00	6.926E-02	6.502E-03	5.850E 00	3.040E-04	2.189E-03
5.625E-01	3.567E-01	2.475E-02	2.200E 00	6.236E-02	6.473E-03	5.950E 00	2.517E-03	2.142E-03
5.775E-01	3.328E-01	2.491E-02	2.240E 00	5.459E-02	6.362E-03	6.050E 00	5.280E-03	2.156E-03
5.925E-01	3.153E-01	2.652E-02	2.280E 00	4.715E-02	6.096E-03	6.150E 00	5.942E-03	2.149E-03
6.100E-01	3.157E-01	2.763E-02	2.320E 00	4.137E-02	5.895E-03	6.250E 00	3.904E-03	1.936E-03
6.300E-01	3.388E-01	2.695E-02	2.360E 00	3.780E-02	5.675E-03	6.350E 00	1.267E-03	1.756E-03
6.500E-01	3.611E-01	2.497E-02	2.400E 00	3.456E-02	5.237E-03	6.450E 00	-2.674E-04	-1.629E-03
6.700E-01	3.750E-01	2.370E-02	2.440E 00	3.036E-02	4.957E-03	6.550E 00	-6.221E-04	-1.556E-03
6.900E-01	3.652E-01	2.142E-02	2.480E 00	2.644E-02	5.269E-03	6.650E 00	-1.529E-04	-1.597E-03
7.100E-01	3.443E-01	1.980E-02	2.525E 00	2.595E-02	5.781E-03	6.750E 00	9.345E-04	1.389E-03
7.300E-01	3.625E-01	2.006E-02	2.575E 00	2.946E-02	5.993E-03	6.850E 00	2.386E-03	1.177E-03
7.500E-01	3.414E-01	2.034E-02	2.625E 00	3.082E-02	5.741E-03	6.950E 00	3.618E-03	1.097E-03
7.700E-01	3.411E-01	1.880E-02	2.675E 00	2.908E-02	5.089E-03	7.050E 00	3.914E-03	9.931E-04
7.900E-01	3.467E-01	1.736E-02	2.725E 00	2.708E-02	4.173E-03	7.150E 00	3.303E-03	8.820E-04
8.100E-01	3.309E-01	1.679E-02	2.775E 00	2.505E-02	3.606E-03	7.250E 00	2.168E-03	7.574E-04
8.300E-01	2.956E-01	1.613E-02	2.825E 00	2.233E-02	3.422E-03	7.350E 00	1.100E-03	6.004E-04
8.500E-01	2.654E-01	1.606E-02	2.875E 00	1.991E-02	3.409E-03	7.450E 00	3.876E-04	4.521E-04
8.700E-01	2.535E-01	1.593E-02	2.925E 00	1.818E-02	3.262E-03	7.550E 00	1.366E-04	4.036E-04
8.900E-01	2.477E-01	1.517E-02	2.975E 00	1.580E-02	3.299E-03	7.660E 00	1.263E-04	3.874E-04
9.125E-01	2.378E-01	1.429E-02	3.030E 00	1.227E-02	3.372E-03	7.780E 00	2.305E-04	3.183E-04
9.375E-01	2.369E-01	1.443E-02	3.090E 00	1.026E-02	3.376E-03	7.900E 00	1.782E-04	2.768E-04
9.625E-01	2.434E-01	1.553E-02	3.150E 00	1.152E-02	3.251E-03	8.020E 00	-4.449E-06	-2.357E-04
9.875E-01	2.468E-01	1.602E-02	3.210E 00	1.354E-02	3.145E-03	8.140E 00	-1.450E-04	-2.140E-04
1.012E 00	2.461E-01	1.515E-02	3.270E 00	1.391E-02	2.998E-03	8.260E 00	-1.733E-04	-1.922E-04
1.037E 00	2.443E-01	1.460E-02	3.330E 00	1.275E-02	3.127E-03	8.380E 00	-8.865E-05	-1.651E-04
1.063E 00	2.428E-01	1.527E-02	3.390E 00	1.082E-02	3.091E-03	8.500E 00	7.326E-05	1.285E-04
1.087E 00	2.395E-01	1.509E-02	3.450E 00	8.653E-03	3.056E-03	8.620E 00	1.821E-04	1.204E-04
1.112E 00	2.310E-01	1.334E-02	3.510E 00	6.930E-03	3.027E-03	8.740E 00	1.786E-04	1.085E-04
1.137E 00	2.162E-01	1.273E-02	3.570E 00	6.315E-03	3.008E-03	8.860E 00	1.135E-04	8.210E-05
1.162E 00	1.985E-01	1.257E-02	3.630E 00	6.229E-03	3.330E-03	8.980E 00	5.158E-05	5.394E-05
1.188E 00	1.778E-01	1.419E-02	3.690E 00	5.650E-03	3.575E-03	9.100E 00	2.583E-05	4.172E-05
1.212E 00	1.630E-01	1.578E-02	3.750E 00	4.886E-03	3.199E-03	9.220E 00	2.060E-05	3.740E-05
1.237E 00	1.567E-01	1.458E-02	3.810E 00	4.840E-03	3.003E-03	9.340E 00	1.789E-05	3.124E-05
1.262E 00	1.536E-01	1.322E-02	3.870E 00	5.274E-03	3.037E-03	9.470E 00	1.624E-05	2.458E-05
1.287E 00	1.507E-01	1.251E-02	3.930E 00	5.760E-03	2.940E-03	9.610E 00	1.863E-05	2.232E-05
1.315E 00	1.471E-01	1.250E-02	3.990E 00	6.583E-03	2.827E-03	9.750E 00	2.229E-05	2.588E-05
1.345E 00	1.419E-01	1.177E-02	4.050E 00	7.293E-03	2.708E-03	9.890E 00	2.344E-05	3.110E-05
1.375E 00	1.351E-01	1.131E-02	4.110E 00	6.776E-03	2.637E-03	1.003E 01	2.388E-05	3.667E-05
1.405E 00	1.337E-01	1.115E-02	4.170E 00	5.579E-03	2.625E-03	1.017E 01	2.730E-05	4.316E-05
1.435E 00	1.407E-01	1.074E-02	4.240E 00	5.593E-03	2.599E-03	1.031E 01	3.023E-05	5.262E-05
1.465E 00	1.486E-01	1.065E-02	4.320E 00	7.141E-03	2.756E-03	1.045E 01	3.353E-05	5.880E-05
1.495E 00	1.480E-01	1.050E-02	4.400E 00	7.533E-03	2.979E-03	1.059E 01	3.727E-05	5.973E-05
1.525E 00	1.410E-01	1.058E-02	4.480E 00	6.783E-03	2.796E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	3.433E-02	4.471E-03
4.000E-01 - 5.000E-01	3.695E-02	4.292E-03
5.000E-01 - 6.000E-01	3.724E-02	2.905E-03
6.000E-01 - 7.000E-01	3.553E-02	2.492E-03
7.000E-01 - 8.000E-01	3.546E-02	1.930E-03
8.000E-01 - 1.000E 00	5.197E-02	3.107E-03
1.000E 00 - 1.200E 00	4.490E-02	2.823E-03
1.200E 00 - 1.400E 00	2.969E-02	2.577E-03
1.400E 00 - 1.600E 00	2.790E-02	2.140E-03
1.600E 00 - 1.800E 00	2.303E-02	1.876E-03
1.800E 00 - 2.000E 00	1.833E-02	1.535E-03
2.000E 00 - 2.500E 00	2.735E-02	3.080E-03
2.500E 00 - 3.000E 00	1.219E-02	2.188E-03
3.000E 00 - 3.500E 00	5.777E-03	1.586E-03
3.500E 00 - 4.000E 00	2.870E-03	1.559E-03
4.000E 00 - 4.500E 00	3.350E-03	1.371E-03
4.500E 00 - 5.000E 00	1.540E-03	1.261E-03
5.000E 00 - 6.000E 00	1.727E-03	1.252E-03
6.000E 00 - 7.000E 00	2.218E-03	6.875E-04
7.000E 00 - 8.000E 00	1.164E-03	5.215E-04
8.000E 00 - 9.000E 00	1.948E-05	2.942E-05
9.000E 00 - 1.000E 01	2.182E-05	3.128E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 10.00 TO 12.02 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	4.926E-01	6.176E-02	1.555E 00	1.642E-01	1.379E-02	4.560E 00	5.754E-03	2.923E-03
3.225E-01	4.841E-01	5.698E-02	1.585E 00	1.547E-01	1.326E-02	4.640E 00	4.821E-03	2.785E-03
3.375E-01	4.403E-01	5.172E-02	1.615E 00	1.550E-01	1.297E-02	4.720E 00	5.223E-03	2.619E-03
3.525E-01	3.921E-01	4.998E-02	1.645E 00	1.622E-01	1.229E-02	4.800E 00	5.709E-03	2.594E-03
3.675E-01	4.030E-01	4.935E-02	1.680E 00	1.661E-01	1.127E-02	4.880E 00	5.508E-03	2.745E-03
3.825E-01	4.226E-01	4.953E-02	1.720E 00	1.590E-01	1.116E-02	4.960E 00	4.559E-03	2.961E-03
3.975E-01	3.672E-01	5.181E-02	1.760E 00	1.514E-01	1.065E-02	5.040E 00	3.018E-03	3.068E-03
4.125E-01	3.457E-01	5.363E-02	1.800E 00	1.503E-01	9.631E-03	5.120E 00	1.487E-03	3.020E-03
4.275E-01	3.174E-01	5.764E-02	1.840E 00	1.497E-01	9.364E-03	5.200E 00	4.701E-04	2.873E-03
4.425E-01	3.156E-01	5.923E-02	1.880E 00	1.433E-01	9.496E-03	5.280E 00	9.123E-05	2.707E-03
4.575E-01	3.424E-01	5.820E-02	1.920E 00	1.350E-01	9.536E-03	5.360E 00	-9.176E-05	-2.677E-03
4.725E-01	3.90CE-01	5.523E-02	1.960E 00	1.313E-01	9.125E-03	5.440E 00	-2.606E-04	-2.748E-03
4.875E-01	4.347E-01	5.170E-02	2.000E 00	1.279E-01	8.827E-03	5.520E 00	-3.729E-05	-2.851E-03
5.025E-01	4.513E-01	4.879E-02	2.040E 00	1.203E-01	8.833E-03	5.600E 00	9.047E-04	2.885E-03
5.175E-01	4.549E-01	4.439E-02	2.080E 00	1.127E-01	8.885E-03	5.680E 00	2.195E-03	2.848E-03
5.325E-01	4.570E-01	3.759E-02	2.120E 00	1.075E-01	8.423E-03	5.760E 00	2.781E-03	2.746E-03
5.475E-01	4.358E-01	3.172E-02	2.160E 00	1.020E-01	8.074E-03	5.850E 00	2.701E-03	2.629E-03
5.625E-01	4.012E-01	2.930E-02	2.200E 00	9.460E-02	7.649E-03	5.950E 00	3.049E-03	2.635E-03
5.775E-01	3.705E-01	2.955E-02	2.240E 00	8.817E-02	7.507E-03	6.050E 00	4.160E-03	2.659E-03
5.925E-01	3.579E-01	3.085E-02	2.280E 00	8.571E-02	7.117E-03	6.150E 00	4.379E-03	2.584E-03
6.100E-01	3.441E-01	3.311E-02	2.320E 00	8.644E-02	6.620E-03	6.250E 00	3.432E-03	2.409E-03
6.300E-01	3.236E-01	3.481E-02	2.360E 00	8.430E-02	6.116E-03	6.350E 00	2.480E-03	2.258E-03
6.500E-01	3.207E-01	3.301E-02	2.400E 00	7.414E-02	5.706E-03	6.450E 00	2.066E-03	2.175E-03
6.700E-01	3.339E-01	2.890E-02	2.440E 00	5.940E-02	5.668E-03	6.550E 00	1.561E-03	2.063E-03
6.900E-01	3.488E-01	2.674E-02	2.480E 00	4.763E-02	6.088E-03	6.650E 00	8.740E-04	1.907E-03
7.100E-01	3.518E-01	2.424E-02	2.525E 00	4.352E-02	6.772E-03	6.750E 00	1.080E-03	1.745E-03
7.300E-01	3.392E-01	2.449E-02	2.575E 00	4.559E-02	6.801E-03	6.850E 00	2.368E-03	1.619E-03
7.500E-01	3.303E-01	2.479E-02	2.625E 00	4.554E-02	6.596E-03	6.950E 00	3.868E-03	1.505E-03
7.700E-01	3.313E-01	2.273E-02	2.675E 00	4.245E-02	5.854E-03	7.050E 00	4.375E-03	1.328E-03
7.900E-01	3.309E-01	2.193E-02	2.725E 00	3.900E-02	4.613E-03	7.150E 00	3.774E-03	1.163E-03
8.100E-01	3.238E-01	2.092E-02	2.775E 00	3.360E-02	4.136E-03	7.250E 00	2.606E-03	1.027E-03
8.300E-01	3.136E-01	1.946E-02	2.825E 00	2.724E-02	4.235E-03	7.350E 00	1.431E-03	9.239E-04
8.500E-01	2.967E-01	1.836E-02	2.875E 00	2.276E-02	3.897E-03	7.450E 00	7.414E-04	7.843E-04
8.700E-01	2.775E-01	1.779E-02	2.925E 00	2.082E-02	3.663E-03	7.550E 00	5.191E-04	6.170E-04
8.900E-01	2.645E-01	1.751E-02	2.975E 00	2.074E-02	3.552E-03	7.660E 00	1.842E-04	5.532E-04
9.125E-01	2.642E-01	1.746E-02	3.030E 00	2.082E-02	3.492E-03	7.780E 00	-1.778E-04	-4.851E-04
9.375E-01	2.773E-01	1.755E-02	3.090E 00	1.799E-02	3.482E-03	7.900E 00	-2.619E-04	-4.690E-04
9.625E-01	2.911E-01	1.781E-02	3.150E 00	1.416E-02	3.890E-03	8.020E 00	2.987E-07	3.987E-04
9.875E-01	2.897E-01	1.870E-02	3.210E 00	1.300E-02	3.938E-03	8.140E 00	4.900E-04	4.208E-04
1.012E 00	2.745E-01	1.807E-02	3.270E 00	1.251E-02	3.648E-03	8.260E 00	6.503E-04	3.622E-04
1.037E 00	2.687E-01	1.784E-02	3.330E 00	1.078E-02	3.578E-03	8.380E 00	4.810E-04	3.081E-04
1.063E 00	2.732E-01	1.826E-02	3.390E 00	8.767E-03	3.363E-03	8.500E 00	1.450E-04	2.323E-04
1.087E 00	2.654E-01	1.748E-02	3.450E 00	7.853E-03	3.343E-03	8.620E 00	-6.634E-05	-2.737E-04
1.112E 00	2.438E-01	1.521E-02	3.510E 00	8.426E-03	3.249E-03	8.740E 00	-6.823E-05	-2.750E-04
1.137E 00	2.222E-01	1.450E-02	3.570E 00	9.518E-03	3.447E-03	8.860E 00	-5.320E-05	-2.503E-04
1.162E 00	2.102E-01	1.444E-02	3.630E 00	1.025E-02	4.208E-03	8.980E 00	-3.992E-05	-1.963E-04
1.188E 00	2.019E-01	1.635E-02	3.690E 00	1.029E-02	4.657E-03	9.100E 00	-6.945E-05	-1.575E-04
1.212E 00	2.005E-01	1.814E-02	3.750E 00	9.317E-03	4.029E-03	9.220E 00	-8.935E-05	-1.469E-04
1.237E 00	2.072E-01	1.704E-02	3.810E 00	7.760E-03	3.406E-03	9.340E 00	-1.079E-04	-1.751E-04
1.262E 00	2.143E-01	1.627E-02	3.870E 00	6.690E-03	3.284E-03	9.470E 00	-4.435E-05	-1.462E-04
1.287E 00	2.137E-01	1.586E-02	3.930E 00	6.128E-03	3.199E-03	9.610E 00	6.576E-06	1.163E-04
1.315E 00	2.053E-01	1.575E-02	3.990E 00	5.086E-03	3.063E-03	9.750E 00	5.002E-05	1.007E-04
1.345E 00	1.925E-01	1.461E-02	4.050E 00	3.629E-03	2.950E-03	9.890E 00	8.913E-05	1.083E-04
1.375E 00	1.778E-01	1.340E-02	4.110E 00	2.230E-03	2.865E-03	1.003E 01	1.049E-04	1.058E-04
1.405E 00	1.650E-01	1.308E-02	4.170E 00	9.090E-04	2.758E-03	1.017E 01	1.352E-04	1.140E-04
1.435E 00	1.612E-01	1.358E-02	4.240E 00	-3.452E-04	-2.783E-03	1.031E 01	1.602E-04	1.357E-04
1.465E 00	1.682E-01	1.308E-02	4.320E 00	5.203E-04	2.871E-03	1.045E 01	1.672E-04	1.534E-04
1.495E 00	1.768E-01	1.232E-02	4.400E 00	4.100E-03	2.873E-03	1.059E 01	1.626E-04	1.605E-04
1.525E 00	1.756E-01	1.282E-02	4.480E 00	6.478E-03	3.006E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	4.359E-02	5.316E-03
4.000E-01 - 5.000E-01	3.642E-02	5.544E-03
5.000E-01 - 6.000E-01	4.172E-02	3.537E-03
6.000E-01 - 7.000E-01	3.341E-02	3.127E-03
7.000E-01 - 8.000E-01	3.364E-02	2.366E-03
8.000E-01 - 1.000E 00	5.757E-02	3.666E-03
1.00CE 00 - 1.200E 00	4.901E-02	3.304E-03
1.200E 00 - 1.400E 00	3.985E-02	3.122E-03
1.400E 00 - 1.600E 00	3.331E-02	2.632E-03
1.600E 00 - 1.800E 00	3.158E-02	2.279E-03
1.800E 00 - 2.000E 00	2.795E-02	1.870E-03
2.000E 00 - 2.500E 00	4.504E-02	3.645E-03
2.500E 00 - 3.000E 00	1.709E-02	2.503E-03
3.000E 00 - 3.500E 00	6.511E-03	1.788E-03
3.500E 00 - 4.000E 00	4.149E-03	1.827E-03
4.000E 00 - 4.500E 00	1.225E-03	1.014E-03
4.500E 00 - 5.000E 00	2.643E-03	1.390E-03
5.000E 00 - 6.000E 00	1.430E-03	1.475E-03
6.000E 00 - 7.000E 00	2.617E-03	2.091E-03
7.000E 00 - 8.000E 00	1.307E-03	5.403E-04
8.000E 00 - 9.000E 00	1.921E-04	7.830E-05
9.000E 00 - 1.000E 01	-1.579E-05	3.563E-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 12.02 TO 14.00 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	5.401E-01	9.781E-02	1.555E 00	2.070E-01	1.995E-02	4.560E 00	3.393E-03	4.079E-03
3.225E-01	4.671E-01	9.033E-02	1.585E 00	2.112E-01	1.919E-02	4.640E 00	1.678E-03	3.703E-03
3.375E-01	4.738E-01	8.082E-02	1.615E 00	2.113E-01	1.810E-02	4.720E 00	1.467E-03	3.652E-03
3.525E-01	5.073E-01	7.674E-02	1.645E 00	2.110E-01	1.715E-02	4.800E 00	3.428E-03	3.734E-03
3.675E-01	5.193E-01	7.334E-02	1.680E 00	2.091E-01	1.664E-02	4.880E 00	6.199E-03	3.878E-03
3.825E-01	4.723E-01	7.696E-02	1.720E 00	2.058E-01	1.636E-02	4.960E 00	8.185E-03	4.002E-03
3.975E-01	3.749E-01	8.054E-02	1.760E 00	2.014E-01	1.569E-02	5.040E 00	8.733E-03	4.006E-03
4.125E-01	2.937E-01	8.612E-02	1.800E 00	1.951E-01	1.534E-02	5.120E 00	7.685E-03	3.713E-03
4.275E-01	2.821E-01	9.097E-02	1.840E 00	1.902E-01	1.452E-02	5.200E 00	5.526E-03	3.685E-03
4.425E-01	3.306E-01	9.352E-02	1.880E 00	1.908E-01	1.462E-02	5.280E 00	2.865E-03	3.841E-03
4.575E-01	3.747E-01	8.532E-02	1.920E 00	1.927E-01	1.396E-02	5.360E 00	5.993E-04	3.895E-03
4.725E-01	4.059E-01	7.925E-02	1.960E 00	1.909E-01	1.364E-02	5.440E 00	-2.620E-04	-3.548E-03
4.875E-01	4.706E-01	7.482E-02	2.000E 00	1.827E-01	1.391E-02	5.520E 00	-4.775E-04	-3.376E-03
5.025E-01	5.488E-01	6.993E-02	2.040E 00	1.729E-01	1.405E-02	5.600E 00	-9.805E-04	-3.424E-03
5.175E-01	5.661E-01	6.344E-02	2.080E 00	1.647E-01	1.373E-02	5.680E 00	-1.728E-03	-3.459E-03
5.325E-01	5.118E-01	5.697E-02	2.120E 00	1.551E-01	1.347E-02	5.760E 00	-2.165E-03	-3.324E-03
5.475E-01	4.411E-01	5.165E-02	2.160E 00	1.448E-01	1.348E-02	5.850E 00	-1.242E-03	-3.333E-03
5.625E-01	3.966E-01	4.699E-02	2.200E 00	1.373E-01	1.282E-02	5.950E 00	1.721E-03	3.051E-03
5.775E-01	3.816E-01	4.410E-02	2.240E 00	1.314E-01	1.160E-02	6.050E 00	5.636E-03	3.009E-03
5.925E-01	3.801E-01	4.816E-02	2.280E 00	1.256E-01	1.099E-02	6.150E 00	8.154E-03	3.085E-03
6.100E-01	3.705E-01	5.200E-02	2.320E 00	1.205E-01	1.079E-02	6.250E 00	7.882E-03	2.755E-03
6.300E-01	3.452E-01	5.240E-02	2.360E 00	1.152E-01	1.017E-02	6.350E 00	5.477E-03	2.766E-03
6.500E-01	3.446E-01	5.015E-02	2.400E 00	1.059E-01	9.365E-03	6.450E 00	2.974E-03	2.591E-03
6.700E-01	3.686E-01	4.256E-02	2.440E 00	9.267E-02	8.971E-03	6.550E 00	1.365E-03	2.514E-03
6.900E-01	3.693E-01	3.802E-02	2.480E 00	7.656E-02	9.662E-03	6.650E 00	2.728E-04	2.550E-03
7.100E-01	3.509E-01	3.611E-02	2.525E 00	6.062E-02	1.085E-02	6.750E 00	-8.641E-04	-2.173E-03
7.300E-01	3.510E-01	3.543E-02	2.575E 00	5.633E-02	1.128E-02	6.850E 00	-1.130E-03	-1.978E-03
7.500E-01	3.681E-01	3.554E-02	2.625E 00	6.512E-02	1.100E-02	6.950E 00	-3.845E-04	-1.825E-03
7.700E-01	3.682E-01	3.403E-02	2.675E 00	7.069E-02	9.476E-03	7.050E 00	7.877E-04	1.729E-03
7.900E-01	3.452E-01	3.321E-02	2.725E 00	6.568E-02	7.853E-03	7.150E 00	1.590E-03	1.692E-03
8.100E-01	3.228E-01	3.166E-02	2.775E 00	5.801E-02	6.835E-03	7.250E 00	1.516E-03	1.346E-03
8.300E-01	3.093E-01	2.967E-02	2.825E 00	5.489E-02	6.469E-03	7.350E 00	1.213E-03	1.330E-03
8.500E-01	2.901E-01	2.846E-02	2.875E 00	5.308E-02	6.327E-03	7.450E 00	7.716E-04	1.147E-03
8.700E-01	2.697E-01	2.758E-02	2.925E 00	4.866E-02	6.005E-03	7.550E 00	8.137E-04	1.017E-03
8.900E-01	2.556E-01	2.754E-02	2.975E 00	4.330E-02	5.696E-03	7.660E 00	1.142E-03	9.402E-04
9.125E-01	2.476E-01	2.824E-02	3.030E 00	3.797E-02	5.717E-03	7.780E 00	1.091E-03	8.874E-04
9.375E-01	2.556E-01	2.787E-02	3.090E 00	2.948E-02	5.873E-03	7.900E 00	5.449E-04	8.248E-04
9.625E-01	2.932E-01	2.806E-02	3.150E 00	1.846E-02	6.320E-03	8.020E 00	-9.053E-05	-7.134E-04
9.875E-01	3.280E-01	2.796E-02	3.210E 00	1.248E-02	6.367E-03	8.140E 00	-3.220E-04	-6.461E-04
1.012E 00	3.210E-01	2.691E-02	3.270E 00	1.468E-02	5.587E-03	8.260E 00	-9.295E-05	-5.902E-04
1.037E 00	3.022E-01	2.583E-02	3.330E 00	1.953E-02	5.675E-03	8.380E 00	3.013E-04	5.796E-04
1.063E 00	2.975E-01	2.512E-02	3.390E 00	2.164E-02	5.513E-03	8.500E 00	4.220E-04	5.581E-04
1.087E 00	2.921E-01	2.487E-02	3.450E 00	2.101E-02	5.325E-03	8.620E 00	1.807E-04	4.324E-04
1.112E 00	2.759E-01	2.328E-02	3.510E 00	1.974E-02	5.224E-03	8.740E 00	-2.554E-07	-4.186E-04
1.137E 00	2.556E-01	2.177E-02	3.570E 00	1.842E-02	5.644E-03	8.860E 00	-1.078E-04	-4.592E-04
1.162E 00	2.408E-01	2.105E-02	3.630E 00	1.717E-02	6.953E-03	8.980E 00	-1.030E-04	-4.812E-04
1.188E 00	2.328E-01	2.311E-02	3.690E 00	1.635E-02	7.582E-03	9.100E 00	1.651E-04	4.365E-04
1.212E 00	2.372E-01	2.550E-02	3.750E 00	1.613E-02	6.474E-03	9.220E 00	2.560E-04	4.170E-04
1.237E 00	2.455E-01	2.486E-02	3.810E 00	1.421E-02	5.373E-03	9.340E 00	2.586E-04	5.145E-04
1.262E 00	2.438E-01	2.561E-02	3.870E 00	9.905E-03	5.154E-03	9.470E 00	2.943E-04	5.289E-04
1.287E 00	2.348E-01	2.564E-02	3.930E 00	5.123E-03	5.083E-03	9.610E 00	2.403E-04	4.920E-04
1.315E 00	2.240E-01	2.461E-02	3.990E 00	2.446E-03	4.759E-03	9.750E 00	2.186E-04	4.466E-04
1.345E 00	2.091E-01	2.312E-02	4.050E 00	1.750E-03	4.667E-03	9.890E 00	2.489E-04	3.854E-04
1.375E 00	1.979E-01	2.143E-02	4.110E 00	1.636E-03	4.492E-03	1.003E 01	2.564E-04	3.147E-04
1.405E 00	2.001E-01	1.926E-02	4.170E 00	1.558E-03	4.380E-03	1.017E 01	2.265E-04	4.171E-04
1.435E 00	2.062E-01	1.954E-02	4.240E 00	9.502E-04	4.336E-03	1.031E 01	2.287E-04	5.027E-04
1.465E 00	2.018E-01	1.960E-02	4.320E 00	1.224E-03	4.361E-03	1.045E 01	2.782E-04	5.716E-04
1.495E 00	1.948E-01	1.984E-02	4.400E 00	2.884E-03	4.427E-03	1.059E 01	3.344E-04	5.742E-04
1.525E 00	1.994E-01	2.016E-02	4.480E 00	4.122E-03	4.129E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	4.865E-02	8.254E-03
4.000E-01 - 5.000E-01	3.677E-02	8.413E-03
5.000E-01 - 6.000E-01	4.569E-02	5.360E-03
6.000E-01 - 7.000E-01	3.593E-02	4.695E-03
7.000E-01 - 8.000E-01	3.569E-02	3.486E-03
8.000E-01 - 1.000E 00	5.705E-02	5.700E-03
1.000E 00 - 1.200E 00	5.544E-02	4.799E-03
1.200E 00 - 1.400E 00	4.496E-02	4.806E-03
1.400E 00 - 1.600E 00	4.064E-02	3.934E-03
1.600E 00 - 1.800E 00	4.125E-02	3.314E-03
1.800E 00 - 2.000E 00	3.816E-02	2.852E-03
2.000E 00 - 2.500E 00	6.532E-02	5.844E-03
2.500E 00 - 3.000E 00	2.885E-02	4.096E-03
3.000E 00 - 3.500E 00	1.094E-02	2.912E-03
3.500E 00 - 4.000E 00	6.727E-03	2.937E-03
4.000E 00 - 4.500E 00	9.904E-04	2.208E-03
4.500E 00 - 5.000E 00	2.021E-03	1.925E-03
5.000E 00 - 6.000E 00	1.639E-03	8.060E-05
6.000E 00 - 7.000E 00	2.930E-03	1.361E-03
7.000E 00 - 8.000E 00	1.003E-03	1.099E-03
8.000E 00 - 9.000E 00	2.601E-05	1.578E-04
9.000E 00 - 1.000E 01	2.300E-04	4.240E-04

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 14.00 TO 17.02 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	9.623E-01	1.230E-01	1.555E 00	1.472E-01	2.306E-02	4.560E 00	2.771E-03	4.896E-03
3.225E-01	7.469E-01	1.112E-01	1.585E 00	1.408E-01	2.295E-02	4.640E 00	6.773E-04	4.237E-03
3.375E-01	6.152E-01	1.067E-01	1.615E 00	1.419E-01	2.213E-02	4.720E 00	1.970E-04	4.392E-03
3.525E-01	5.783E-01	1.016E-01	1.645E 00	1.453E-01	2.100E-02	4.800E 00	4.571E-04	4.323E-03
3.675E-01	5.439E-01	1.012E-01	1.680E 00	1.440E-01	2.067E-02	4.880E 00	6.763E-04	4.447E-03
3.825E-01	4.845E-01	1.038E-01	1.720E 00	1.439E-01	2.133E-02	4.960E 00	4.006E-04	4.607E-03
3.975E-01	3.956E-01	1.058E-01	1.760E 00	1.514E-01	1.956E-02	5.040E 00	2.434E-04	4.602E-03
4.125E-01	3.208E-01	1.162E-01	1.800E 00	1.556E-01	1.893E-02	5.120E 00	-7.171E-05	-4.252E-03
4.275E-01	3.158E-01	1.201E-01	1.840E 00	1.550E-01	1.873E-02	5.200E 00	-3.796E-04	-4.260E-03
4.425E-01	3.567E-01	1.226E-01	1.880E 00	1.567E-01	1.818E-02	5.280E 00	-1.166E-03	-4.393E-03
4.575E-01	4.023E-01	1.204E-01	1.920E 00	1.555E-01	1.728E-02	5.360E 00	-7.501E-04	-4.388E-03
4.725E-01	4.670E-01	1.102E-01	1.960E 00	1.514E-01	1.680E-02	5.440E 00	6.750E-04	4.378E-03
4.875E-01	6.285E-01	9.893E-02	2.000E 00	1.455E-01	1.639E-02	5.520E 00	2.566E-03	4.520E-03
5.025E-01	7.758E-01	8.911E-02	2.040E 00	1.370E-01	1.715E-02	5.600E 00	3.357E-03	4.569E-03
5.175E-01	8.591E-01	8.393E-02	2.080E 00	1.306E-01	1.785E-02	5.680E 00	2.705E-03	4.694E-03
5.325E-01	8.367E-01	7.510E-02	2.120E 00	1.314E-01	1.697E-02	5.760E 00	2.090E-03	4.672E-03
5.475E-01	7.277E-01	6.645E-02	2.160E 00	1.291E-01	1.580E-02	5.850E 00	1.904E-03	4.289E-03
5.625E-01	5.944E-01	6.115E-02	2.200E 00	1.128E-01	1.548E-02	5.950E 00	2.819E-03	4.311E-03
5.775E-01	4.734E-01	6.121E-02	2.240E 00	9.120E-02	1.514E-02	6.050E 00	3.830E-03	4.453E-03
5.925E-01	3.765E-01	6.604E-02	2.280E 00	7.809E-02	1.493E-02	6.150E 00	4.358E-03	4.490E-03
6.100E-01	3.481E-01	7.107E-02	2.320E 00	7.444E-02	1.434E-02	6.250E 00	3.623E-03	4.214E-03
6.300E-01	4.637E-01	7.186E-02	2.360E 00	7.320E-02	1.313E-02	6.350E 00	2.202E-03	4.071E-03
6.500E-01	5.690E-01	6.320E-02	2.400E 00	6.748E-02	1.218E-02	6.450E 00	1.100E-03	3.887E-03
6.700E-01	5.835E-01	5.932E-02	2.440E 00	5.659E-02	1.217E-02	6.550E 00	1.575E-03	3.836E-03
6.900E-01	4.917E-01	5.540E-02	2.480E 00	4.457E-02	1.235E-02	6.650E 00	3.185E-03	3.611E-03
7.100E-01	4.825E-01	4.943E-02	2.525E 00	3.630E-02	1.365E-02	6.750E 00	4.265E-03	3.407E-03
7.300E-01	4.727E-01	4.801E-02	2.575E 00	3.764E-02	1.515E-02	6.850E 00	3.975E-03	3.150E-03
7.500E-01	4.601E-01	4.684E-02	2.625E 00	4.946E-02	1.498E-02	6.950E 00	2.902E-03	2.884E-03
7.700E-01	4.615E-01	4.652E-02	2.675E 00	6.433E-02	1.314E-02	7.050E 00	1.709E-03	2.555E-03
7.900E-01	4.570E-01	4.414E-02	2.725E 00	6.962E-02	1.068E-02	7.150E 00	1.093E-03	2.286E-03
8.100E-01	4.336E-01	4.189E-02	2.775E 00	6.257E-02	9.098E-03	7.250E 00	1.224E-03	2.241E-03
8.300E-01	4.008E-01	4.056E-02	2.825E 00	5.208E-02	8.150E-03	7.350E 00	1.643E-03	2.137E-03
8.500E-01	3.610E-01	3.901E-02	2.875E 00	4.477E-02	7.692E-03	7.450E 00	1.645E-03	1.937E-03
8.700E-01	3.145E-01	3.697E-02	2.925E 00	4.028E-02	7.800E-03	7.550E 00	1.222E-03	1.600E-03
8.900E-01	2.628E-01	3.609E-02	2.975E 00	3.702E-02	7.536E-03	7.660E 00	5.660E-04	1.450E-03
9.125E-01	2.301E-01	3.644E-02	3.030E 00	3.369E-02	7.431E-03	7.780E 00	-3.119E-04	-1.346E-03
9.375E-01	2.576E-01	3.699E-02	3.090E 00	2.931E-02	7.730E-03	7.900E 00	-5.153E-04	-1.368E-03
9.625E-01	3.244E-01	3.651E-02	3.150E 00	2.478E-02	8.306E-03	8.020E 00	-4.099E-04	-1.227E-03
9.875E-01	3.838E-01	3.500E-02	3.210E 00	2.413E-02	8.599E-03	8.140E 00	-1.191E-04	-1.043E-03
1.012E 00	4.141E-01	3.292E-02	3.270E 00	2.594E-02	8.245E-03	8.260E 00	2.969E-04	9.036E-04
1.037E 00	4.075E-01	3.042E-02	3.330E 00	2.524E-02	7.640E-03	8.380E 00	5.774E-04	8.642E-04
1.063E 00	3.716E-01	3.017E-02	3.390E 00	2.198E-02	7.567E-03	8.500E 00	4.889E-04	8.200E-04
1.087E 00	3.312E-01	3.031E-02	3.450E 00	1.900E-02	7.082E-03	8.620E 00	2.288E-04	6.712E-04
1.112E 00	2.917E-01	2.710E-02	3.510E 00	1.554E-02	6.806E-03	8.740E 00	1.554E-05	5.826E-04
1.137E 00	2.488E-01	2.585E-02	3.570E 00	9.225E-03	7.423E-03	8.860E 00	2.106E-05	5.348E-04
1.162E 00	2.191E-01	2.603E-02	3.630E 00	2.333E-03	9.140E-03	8.980E 00	1.536E-04	5.074E-04
1.188E 00	2.052E-01	2.767E-02	3.690E 00	-3.138E-04	-1.043E-02	9.100E 00	9.558E-05	4.771E-04
1.212E 00	2.034E-01	2.901E-02	3.750E 00	1.287E-03	9.130E-03	9.220E 00	1.100E-04	5.255E-04
1.237E 00	2.077E-01	2.779E-02	3.810E 00	4.584E-03	7.255E-03	9.340E 00	7.793E-05	4.972E-04
1.262E 00	2.096E-01	2.794E-02	3.870E 00	7.603E-03	6.796E-03	9.470E 00	4.948E-05	5.144E-04
1.287E 00	2.052E-01	2.823E-02	3.930E 00	9.393E-03	6.683E-03	9.610E 00	2.594E-04	5.052E-04
1.315E 00	1.946E-01	2.813E-02	3.990E 00	1.089E-02	6.424E-03	9.750E 00	1.996E-04	4.684E-04
1.345E 00	1.882E-01	2.648E-02	4.050E 00	1.216E-02	6.180E-03	9.890E 00	1.839E-04	4.092E-04
1.375E 00	1.920E-01	2.445E-02	4.110E 00	1.182E-02	5.780E-03	1.003E 01	2.055E-04	3.810E-04
1.405E 00	1.901E-01	2.463E-02	4.170E 00	9.365E-03	5.700E-03	1.017E 01	9.438E-05	4.914E-04
1.435E 00	1.800E-01	2.624E-02	4.240E 00	6.349E-03	5.563E-03	1.031E 01	5.557E-05	5.805E-04
1.465E 00	1.748E-01	2.486E-02	4.320E 00	5.426E-03	5.511E-03	1.045E 01	1.155E-04	6.443E-04
1.495E 00	1.709E-01	2.352E-02	4.400E 00	6.242E-03	5.795E-03	1.059E 01	3.301E-04	5.188E-04
1.525E 00	1.611E-01	2.314E-02	4.480E 00	5.590E-03	5.620E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	6.312E-02	1.078E-02
4.000E-01 - 5.000E-01	4.324E-02	1.133E-02
5.000E-01 - 6.000E-01	6.593E-02	7.096E-03
6.000E-01 - 7.000E-01	4.855E-02	6.409E-03
7.000E-01 - 8.000E-01	4.665E-02	4.707E-03
8.000E-01 - 1.000E 00	6.540E-02	7.515E-03
1.000E 00 - 1.200E 00	6.218E-02	5.761E-03
1.200E 00 - 1.400E 00	3.981E-02	5.437E-03
1.400E 00 - 1.600E 00	3.302E-02	4.811E-03
1.600E 00 - 1.800E 00	2.930E-02	4.135E-03
1.800E 00 - 2.000E 00	3.079E-02	3.547E-03
2.000E 00 - 2.500E 00	4.793E-02	7.436E-03
2.500E 00 - 3.000E 00	2.472E-02	5.395E-03
3.000E 00 - 3.500E 00	1.258E-02	3.895E-03
3.500E 00 - 4.000E 00	3.072E-03	2.691E-03
4.000E 00 - 4.500E 00	4.017E-03	2.875E-03
4.500E 00 - 5.000E 00	5.113E-04	2.258E-03
5.000E 00 - 6.000E 00	1.214E-03	1.613E-03
6.000E 00 - 7.000E 00	3.098E-03	3.799E-03
7.000E 00 - 8.000E 00	8.071E-04	1.059E-03
8.000E 00 - 9.000E 00	1.607E-04	3.354E-04
9.000E 00 - 1.000E 01	1.450E-04	4.816E-04

DIFFERENTIAL CROSS SECTIONS FOR GAMMA RAY PRODUCTION IN TH. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTIMATED 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 17.02 TO 20.04 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)	PHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
3.075E-01	1.384E 00	2.063E-01	1.555E 00	1.991E-01	3.325E-02	4.560E 00	5.565E-03	6.476E-03
3.225E-01	1.173E 00	1.864E-01	1.585E 00	1.771E-01	3.372E-02	4.640E 00	3.560E-03	5.631E-03
3.375E-01	1.170E 00	1.678E-01	1.615E 00	1.566E-01	3.262E-02	4.720E 00	2.159E-03	5.424E-03
3.525E-01	1.106E 00	1.617E-01	1.645E 00	1.438E-01	3.268E-02	4.800E 00	1.212E-04	5.622E-03
3.675E-01	9.055E-01	1.567E-01	1.680E 00	1.369E-01	3.442E-02	4.880E 00	-2.108E-03	-6.174E-03
3.825E-01	7.977E-01	1.604E-01	1.720E 00	1.346E-01	3.453E-02	4.960E 00	-3.135E-03	-6.124E-03
3.975E-01	7.150E-01	1.639E-01	1.760E 00	1.411E-01	3.247E-02	5.040E 00	-2.376E-03	-6.280E-03
4.125E-01	5.701E-01	1.755E-01	1.800E 00	1.579E-01	2.929E-02	5.120E 00	-8.066E-04	-5.666E-03
4.275E-01	4.669E-01	1.858E-01	1.840E 00	1.683E-01	2.705E-02	5.200E 00	7.816E-04	5.777E-03
4.425E-01	4.835E-01	1.833E-01	1.880E 00	1.622E-01	2.630E-02	5.280E 00	3.288E-03	5.471E-03
4.575E-01	5.968E-01	1.795E-01	1.920E 00	1.489E-01	2.612E-02	5.360E 00	6.598E-03	5.722E-03
4.725E-01	7.743E-01	1.633E-01	1.960E 00	1.392E-01	2.607E-02	5.440E 00	9.486E-03	5.712E-03
4.875E-01	9.936E-01	1.487E-01	2.000E 00	1.261E-01	2.596E-02	5.520E 00	9.904E-03	5.711E-03
5.025E-01	1.220E 00	1.403E-01	2.040E 00	1.060E-01	2.664E-02	5.600E 00	7.629E-03	6.374E-03
5.175E-01	1.387E 00	1.277E-01	2.080E 00	9.096E-02	2.690E-02	5.680E 00	3.842E-03	6.485E-03
5.325E-01	1.269E 00	1.142E-01	2.120E 00	9.528E-02	2.636E-02	5.760E 00	5.475E-05	6.168E-03
5.475E-01	1.038E 00	1.039E-01	2.160E 00	1.109E-01	2.534E-02	5.850E 00	-3.521E-03	-5.482E-03
5.625E-01	8.125E-01	9.483E-02	2.200E 00	1.191E-01	2.366E-02	5.950E 00	-4.221E-03	-4.843E-03
5.775E-01	6.690E-01	9.475E-02	2.240E 00	1.179E-01	2.215E-02	6.050E 00	-2.084E-03	-5.342E-03
5.925E-01	5.587E-01	1.030E-01	2.280E 00	1.187E-01	2.106E-02	6.150E 00	1.983E-03	5.396E-03
6.100E-01	5.838E-01	1.060E-01	2.320E 00	1.235E-01	2.118E-02	6.250E 00	6.077E-03	4.977E-03
6.300E-01	5.911E-01	1.045E-01	2.360E 00	1.224E-01	2.045E-02	6.350E 00	7.243E-03	4.159E-03
6.500E-01	5.524E-01	9.811E-02	2.400E 00	1.081E-01	1.819E-02	6.450E 00	6.221E-03	3.855E-03
6.700E-01	5.414E-01	9.127E-02	2.440E 00	8.588E-02	1.714E-02	6.550E 00	3.203E-03	4.142E-03
6.900E-01	5.870E-01	8.153E-02	2.480E 00	6.268E-02	1.803E-02	6.650E 00	-5.427E-04	-4.022E-03
7.100E-01	6.255E-01	7.493E-02	2.525E 00	4.295E-02	2.081E-02	6.750E 00	-3.199E-03	-3.672E-03
7.300E-01	6.039E-01	7.517E-02	2.575E 00	3.706E-02	2.332E-02	6.850E 00	-3.083E-03	-3.150E-03
7.500E-01	5.890E-01	7.945E-02	2.625E 00	4.972E-02	2.306E-02	6.950E 00	-6.084E-04	-3.115E-03
7.700E-01	5.690E-01	7.420E-02	2.675E 00	6.880E-02	1.959E-02	7.050E 00	2.541E-03	3.158E-03
7.900E-01	5.161E-01	6.884E-02	2.725E 00	7.334E-02	1.537E-02	7.150E 00	4.269E-03	2.714E-03
8.100E-01	4.533E-01	6.846E-02	2.775E 00	6.187E-02	1.333E-02	7.250E 00	3.636E-03	2.430E-03
8.300E-01	3.952E-01	6.485E-02	2.825E 00	4.719E-02	1.299E-02	7.350E 00	1.408E-03	2.141E-03
8.500E-01	3.311E-01	6.128E-02	2.875E 00	3.830E-02	1.244E-02	7.450E 00	-1.364E-05	-1.939E-03
8.700E-01	2.813E-01	5.883E-02	2.925E 00	3.354E-02	1.185E-02	7.550E 00	-6.493E-04	-1.850E-03
8.900E-01	2.567E-01	5.626E-02	2.975E 00	2.743E-02	1.183E-02	7.660E 00	-5.960E-04	-1.874E-03
9.125E-01	2.578E-01	5.689E-02	3.030E 00	1.732E-02	1.183E-02	7.780E 00	6.398E-04	1.692E-03
9.375E-01	3.091E-01	5.954E-02	3.090E 00	6.585E-03	1.189E-02	7.900E 00	1.224E-03	1.434E-03
9.625E-01	4.141E-01	5.761E-02	3.150E 00	2.732E-03	1.261E-02	8.020E 00	1.537E-03	1.431E-03
9.875E-01	5.099E-01	5.327E-02	3.210E 00	3.781E-03	1.314E-02	8.140E 00	1.764E-03	1.391E-03
1.012E 00	5.346E-01	4.935E-02	3.270E 00	3.703E-03	1.269E-02	8.260E 00	1.279E-03	1.307E-03
1.037E 00	5.087E-01	4.647E-02	3.330E 00	9.835E-04	1.189E-02	8.380E 00	5.028E-04	1.296E-03
1.063E 00	4.714E-01	4.418E-02	3.390E 00	-6.047E-04	-1.140E-02	8.500E 00	-3.771E-04	-1.262E-03
1.087E 00	4.315E-01	4.338E-02	3.450E 00	1.240E-03	1.112E-02	8.620E 00	-9.908E-04	-1.137E-03
1.112E 00	3.740E-01	4.015E-02	3.510E 00	9.746E-03	1.066E-02	8.740E 00	-9.474E-04	-1.152E-03
1.137E 00	3.016E-01	3.857E-02	3.570E 00	2.515E-02	1.265E-02	8.860E 00	-1.558E-04	-1.072E-03
1.162E 00	2.555E-01	3.715E-02	3.630E 00	3.942E-02	1.674E-02	8.980E 00	7.092E-04	1.186E-03
1.188E 00	2.392E-01	3.970E-02	3.690E 00	4.406E-02	1.919E-02	9.100E 00	1.270E-03	1.071E-03
1.212E 00	2.450E-01	4.339E-02	3.750E 00	3.807E-02	1.601E-02	9.220E 00	1.122E-03	9.056E-04
1.237E 00	2.611E-01	4.212E-02	3.810E 00	2.879E-02	1.175E-02	9.340E 00	7.954E-04	9.206E-04
1.262E 00	2.676E-01	4.000E-02	3.870E 00	1.995E-02	1.019E-02	9.470E 00	4.602E-04	8.051E-04
1.287E 00	2.576E-01	3.882E-02	3.930E 00	1.080E-02	9.599E-03	9.610E 00	4.115E-04	6.393E-04
1.315E 00	2.404E-01	3.841E-02	3.990E 00	4.241E-03	1.038E-02	9.750E 00	4.486E-04	4.751E-04
1.345E 00	2.397E-01	3.696E-02	4.050E 00	-8.905E-04	-9.860E-03	9.890E 00	3.715E-04	4.451E-04
1.375E 00	2.591E-01	3.479E-02	4.110E 00	-2.216E-03	-8.736E-03	1.003E 01	2.535E-04	3.876E-04
1.405E 00	2.674E-01	3.433E-02	4.170E 00	-1.314E-03	-7.885E-03	1.017E 01	1.702E-04	3.819E-04
1.435E 00	2.495E-01	3.417E-02	4.240E 00	3.457E-03	7.204E-03	1.031E 01	1.292E-04	3.987E-04
1.465E 00	2.286E-01	3.278E-02	4.320E 00	1.010E-02	7.078E-03	1.045E 01	1.726E-04	4.587E-04
1.495E 00	2.207E-01	3.183E-02	4.400E 00	1.359E-02	7.858E-03	1.059E 01	2.407E-04	4.887E-04
1.525E 00	2.161E-01	3.185E-02	4.480E 00	9.837E-03	7.040E-03			

INTEGRATED DATA

PHOTON ENERGY INTERVAL (MEV)	X-SECTION (B/SR)	ERROR (B/SR)
3.000E-01 - 4.000E-01	1.053E-01	1.724E-02
4.000E-01 - 5.000E-01	6.747E-02	1.709E-02
5.000E-01 - 6.000E-01	9.843E-02	1.096E-02
6.000E-01 - 7.000E-01	5.733E-02	9.626E-03
7.000E-01 - 8.000E-01	5.797E-02	7.464E-03
8.000E-01 - 1.000E 00	7.165E-02	1.187E-02
1.000E 00 - 1.200E 00	7.784E-02	8.479E-03
1.200E 00 - 1.400E 00	5.062E-02	7.750E-03
1.400E 00 - 1.600E 00	4.403E-02	6.614E-03
1.600E 00 - 1.800E 00	2.864E-02	6.612E-03
1.800E 00 - 2.000E 00	3.052E-02	5.319E-03
2.000E 00 - 2.500E 00	5.286E-02	1.121E-02
2.500E 00 - 3.000E 00	2.403E-02	8.227E-03
3.000E 00 - 3.500E 00	2.309E-03	4.517E-03
3.500E 00 - 4.000E 00	1.303E-02	6.597E-03
4.000E 00 - 4.500E 00	2.585E-03	6.962E-04
4.500E 00 - 5.000E 00	6.767E-04	9.637E-04
5.000E 00 - 6.000E 00	2.312E-03	1.745E-03
6.000E 00 - 7.000E 00	1.526E-03	4.723E-04
7.000E 00 - 8.000E 00	1.324E-03	8.401E-04
8.000E 00 - 9.000E 00	3.061E-04	1.017E-04
9.000E 00 - 1.000E 01	6.653E-04	7.397E-04

TOTAL SECONDARY GAMMA RAY YIELD AND AVERAGE SECONDARY GAMMA RAY ENERGY FROM TH AS A FUNCTION OF THE INCIDENT NEUTRON ENERGY. THESE DATA RESULT FROM A PULSE HEIGHT WEIGHTING ANALYSIS FOR PULSE HEIGHTS GREATER THAN 0.300 MEV. UNCERTAINTIES ARE GIVEN IN PARENTHESES IN THE SAME UNITS AS THE DATA. THE UNCERTAINTIES IN TOTAL YIELD DO NOT INCLUDE A 10 PERCENT ERROR IN ABSOLUTE NORMALIZATION. THE ANGLE IS 125 DEGREES.

INC.NT. ENERGY (MEV)	ENERGY SPREAD (MEV)	SECONDARY PHOTON YIELD (B/SR)	AVERAGE ENERGY (MEV)	INC.NT. ENERGY (MEV)	ENERGY SPREAD (MEV)	SECONDARY PHOTON YIELD (B/SR)	AVERAGE ENERGY (MEV)
0.351	0.100	0.338E-01(0.763E-03)	0.159E 01(0.492E-01)	5.751	0.485	0.734E 00(0.398E-02)	0.139E 01(0.944E-02)
0.451	0.101	0.340E-01(0.628E-03)	0.157E 01(0.401E-01)	6.251	0.513	0.754E 00(0.409E-02)	0.141E 01(0.959E-02)
0.552	0.099	0.354E-01(0.456E-03)	0.160E 01(0.277E-01)	6.755	0.495	0.780E 00(0.440E-02)	0.142E 01(0.100E-01)
0.650	0.098	0.4CCE-01(0.436E-03)	0.158E 01(0.233E-01)	7.254	0.505	0.696E 00(0.447E-02)	0.141E 01(0.113E-01)
0.751	0.102	0.528E-01(0.427E-03)	0.142E 01(0.157E-01)	7.761	0.508	0.525E 00(0.405E-02)	0.137E 01(0.133E-01)
0.850	0.095	0.781E-01(0.478E-03)	0.114E 01(0.100E-01)	8.251	0.474	0.476E 00(0.434E-02)	0.130E 01(0.153E-01)
0.949	0.104	0.993E-01(0.523E-03)	0.103E 01(0.780E-02)	8.747	0.517	0.448E 00(0.453E-02)	0.123E 01(0.165E-01)
1.122	0.243	0.131E 00(0.526E-03)	0.962E 00(0.531E-02)	9.254	0.497	0.410E 00(0.465E-02)	0.120E 01(0.181E-01)
1.370	0.254	0.189E CC(0.699E-03)	0.947E 00(0.458E-02)	9.753	0.502	0.447E 00(0.534E-02)	0.120E 01(0.192E-01)
1.623	0.251	0.251E C0(0.901E-03)	0.967E 00(0.447E-02)	10.256	0.503	0.474E 00(0.628E-02)	0.121E 01(0.213E-01)
1.874	0.251	0.308E 00(0.113E-02)	0.1C0E 01(0.471E-02)	10.756	0.499	0.478E 00(0.672E-02)	0.126E 01(0.233E-01)
2.122	0.246	0.368E 00(0.132E-02)	0.104E 01(0.485E-02)	11.250	0.489	0.520E 00(0.771E-02)	0.129E 01(0.249E-01)
2.373	0.256	0.395E 00(0.145E-02)	0.109E 01(0.524E-02)	11.756	0.523	0.560E 00(0.875E-02)	0.131E 01(0.264E-01)
2.631	0.259	0.426E CC(0.174E-02)	0.112E 01(0.609E-02)	12.271	0.507	0.574E 00(0.984E-02)	0.133E 01(0.292E-01)
2.881	0.240	0.448E C0(0.210E-02)	0.115E 01(0.701E-02)	12.767	0.485	0.597E 00(0.116E-01)	0.133E 01(0.332E-01)
3.123	0.245	0.476E 00(0.238E-02)	0.118E C1(0.762E-02)	13.266	0.513	0.595E 00(0.124E-01)	0.136E 01(0.364E-01)
3.369	0.246	0.496E 00(0.273E-02)	0.121E 01(0.851E-02)	13.764	0.482	0.601E 00(0.143E-01)	0.134E 01(0.411E-01)
3.621	0.258	0.525E 00(0.296E-02)	0.123E 01(0.883E-02)	14.260	0.509	0.596E 00(0.155E-01)	0.131E 01(0.437E-01)
3.876	0.250	0.555E CC(0.326E-02)	0.125E 01(0.936E-02)	14.749	0.469	0.622E 00(0.176E-01)	0.127E 01(0.474E-01)
4.129	0.256	0.595E C0(0.364E-02)	0.126E 01(0.976E-02)	15.487	1.009	0.590E 00(0.144E-01)	0.116E 01(0.380E-01)
4.374	0.236	0.633E 00(0.394E-02)	0.128E 01(0.103E-01)	16.507	1.032	0.653E 00(0.163E-01)	0.107E 01(0.371E-01)
4.620	0.256	0.666E 00(0.392E-02)	0.130E 01(0.977E-02)	17.500	0.954	0.706E 00(0.202E-01)	0.105E 01(0.419E-01)
4.875	0.252	0.692E 00(0.410E-02)	0.132E 01(0.994E-02)	18.495	1.037	0.786E 00(0.227E-01)	0.109E 01(0.431E-01)
5.255	0.506	0.729E CC(0.374E-02)	0.134E 01(0.869E-02)	19.526	1.023	0.869E 00(0.274E-01)	0.112E 01(0.477E-01)

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