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Neutron Physics Division

THE V(n,xY) REACTION CROSS SECTION FOR INCIDENT NEUTRON ENERGIES BETWEEN 0.2 AND 20.0 MeV

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ABSTRACT

Differential cross sections for the neutron-induced gamma-ray production from natural vanadium have been measured for incident neutron energies between 0.2 and 20.0 MeV. The Oak Ridge 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 and higher resolution in the neutron energy is also presented. The experimental results are compared with the Evaluated Neutron Data Files (ENDF).

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INTRODUCTION

As part of a continuing program¹ 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 natural vanadium. The data are presented in this report in tabular and graphical form and are compared to the current evaluated data file for vanadium (MAT 1196 ENDF/B-IV).²

Two methods of data analysis were employed. The first 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 elsewhere³ 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 800 pulses per second and a pulse width of 12 ns. The total electron beam power was 18 kW.

Neutrons produced at the linac target traversed a 47.35 m flight path and were incident on a thin slab of natural vanadium oriented 45°

with respect to the incident beam. The slab was 30 cm wide by 30 cm high with a thickness of 0.0231 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.

The neutron flux at the sample position was determined in a separate experiment 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, 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 148 points covering the gamma-ray energy range from 0.26 to 10.6 MeV. After correction for self-absorption and neutron self-shielding in the sample, these spectra were normalized to cross sections using the measured neutron flux and sample thickness. A further correction was then applied to the unfolded data. The contribution to the observed cross section at $E_{\gamma} = 0.511$ 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 the correction ranged from on the order of 0.04 mb/sr for $E_n = 1.0-1.5$ MeV to 6 mb/sr for $E_n = 10-12$ MeV.

These results 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 2-20 present the detailed gamma-ray spectra for each incident neutron energy interval. These are compared to cross sections generated from the evaluation (ENDF/B-IV MAT 1196) by averaging over the appropriate 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,^{4,5} 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 $\Delta E_n = 0.1 \text{ MeV}$ at $E_n = 1 \text{ MeV}$ increasing to $\Delta E_n = 1.0 \text{ MeV}$ at $E_n = 20 \text{ MeV}$. 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 Figures 21-24. Two values of the lower cut-off in gamma-ray energy were used, 0.26 and 0.70 MeV. Comparisons are made for the same guantities calculated from the evaluated files.

The data shown in the graphs are given in the tables contained in the last section of the report. The values shown in the graphs 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.

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FIGURE 2











FIGURE 7



FIGURE 8



FIGURE 9

FIGURE 10

FIGURE 12

Section [b/sr/MeV]

Cross

104

Gamma Ray Energy (MeV)

FIGURE 16

FIGURE 17

FIGURE 19

FIGURE 20

DIPPERENTIAL CROSS SECTIONS FOR GAMMA FAY PRODUCTION IN V . THE FIRST SET OF NUMBERS IS THE DOUBLE LIFFERENTIAL CROSS SECTION, WHILE THE SECORE SET IS THE GAMMA BAY PRODUCTION CROSS SECTION FOR THE (SEGARTE DAIMAR BAY SECORE INTERVALS. THIS SECCHD SET BESULTS FROM INTEGRATION OF THE DOUBLY DIPPERENTIAL DATA. THE UNCERTAINTES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DC NOT INCLUDE AN ESTI-MATED 10 PERCENT ERROR IN APSOLUTE SCHMALIZITION.

INCIDENT BRUTBON ENERGY = 0.20 TO 0.60 MBV. ANGLE = 125 CIGREES.

PHOTON ENERGY (NEV)	I-SECTION (B/SR/NEV)	E BROB (B/SB/MEV)	EBOTON ENERGY (BB4)	I-SECTION (B/SB/NEV)	ERBOR (B/SB/MEV)
2.7258-01	8.0058-02	1.633E-C3	2.750E 00	-9.7032-06	1.4268-04
2.8758-01	1.508E-01	1.6312-03	2.810E 00	-1.6442-05	1.4042-04
3.0252-01	2.195E-01	1.536E-03	2.870E 00	-9.549E-06	1.360Z-04
3.175E-01	2.2218-01	1.448E-C3	2.930B 00	3.659E-05	1.45 HB-04
3.3258-01	1.7052-01	1.2902-03	2.990E 00	6.9472-05	1.351B-04
3.475E-01	1.0248-01	1.092E-03	3.0508 00	8.3192-05	1.3812-04
3.6252-01	9.9182-02	9.8082-04	3.110E 00	6.200E-05	1.3978-04
3.775E-01	1.9252-02	9.0452-04	3.180E 00	2.9962-05	1.2948-04
3.9252-01	6.198E-03	1.05/E-C4	3.2005 00	2 0208-05	1 2042-04
4.100E-01	8 6902-05	6 8 74 8-04	3.4208 00	-2.2502-05	1.2832-04
4-5008-01	-1.3038-09	6.558E-C4	3.5002 00	-9.9972-05	1.1492-04
4.700E-01	-2.2282-04	5.964E-04	3.580E 00	-5.9928-05	1.2058-04
10.9001-01	=1.971F=Q4	5 666 7+04	1.6601 00	## 295##05	1,3708-04
5.1008-01	-1.624E-04	5.2 19 E- C4	3.740E 00	-5.194E-05	1.108E-04
5.3002-01	-1./56E-04	4.574 2-04	1.820E 00	7.1522-06	1.1278-04
5.5002-01	-2.6318-04	9.3388-C9	1.900B 00	5.6112-05	1.1602-04
5.700B-01	-3.6442-04	4.4922-04	3.9802 00	7.6482-05 5 5838-05	1.1338-04
5.9002-01	-4.4385-04	4.0145-04	4.060E 00	2 7392-05	1 1112-04
6 3002-01	-3 5868-04	4.7788-04	4.2208.00	-2.8827-06	1.1242-04
6-500E-01	-2.2952-04	4.531E-04	4.300E 00	-2.9852-05	9.9698-05
6.7008-01	- 1. 27 IB-04	4. 190E- C4	4.380E QO	-6.127E-05	8.9598-05
6.900E-01	-7.392E-05	3.838E-04	4.460E 00	-6.0972-05	1.0082-04
7.100E-01	-7.073E-05	3.744 E- C4	4.540E 00	-6.186E-05	1.0842-04
7.300E-01	-5.805E-05	3.701E-C4	4.630E 00	-2,827E-05	8.872E-05
7.5002-01	-5.3378-05	3.383E-04	4.7302 00	2.1682-05	1.037E-04
7.700E-01	8.6492-06	3.5318-04	4.8302 00	7.3472-05	9.776E+05
7.9008-01	4.J268+03	3.3338-04	5 0 20F 00	8.3/85-03	1.0028404
8.100E-01	8.9565-05	3.1382-04	5.1308.00	3.1678+05	A. 9602-04
8.5002-01	7.968E-05	3. 082 E-04	5.2307 00	8.6892-06	1.094E-04
8.7002-01	6.9718-05	2.956E-C4	5.3308 00	-3.804E-06	1.1318-04
8.9002-01	6.8442-05	2.889E-C4	5.430E 00	-2.703E-05	9.894E-05
9.1002-01	6.518E-05	2.8982-04	5.530E 00	-3.837E-05	9.789E-05
9.3002-01	3.5602-05	2.7122-04	5.630E 00	-3.119E-05	1.033E-04
9.500E-01	6.500E-06	2.620E-04	5.7302 00	-6.7922-06	1.01eg-04
9.7002-01	-3.7728-05	2.4972-04	5.830E 00	1.9962-05	1.002B-04
1.000E 00	-8.701E-05	2.3498-04	5.9302 00	4.5782-05	1.0118-04
1 0902 00	-1.1832-04	2.3412-04	6 130P 00	5.9572-05	9.4998+05
1.1202 00	-8.8952-05	2.2908-04	6.230F 00	3.8172-05	9.3348-05
1.160E 00	-8.901E-05	2.177E-04	6.330E 00	1.5262-05	8.907E-05
1.200E 00	-8.3928-05	2.048E-C4	6.4408 00	-6.763E-06	7.1178-05
1.240E 00	-4.433E-03	2.308 E-04	6.560£ 00	-1.609E=03	6.457£÷Ú5
1.280E 00	-1.4898-05	2.500 E-04	6.680E 00	-2.638E-05	5.7478-05
1.320E 00	-1.580E-05	2.716E-C4	6.800E 00	-3.8882-05	4.6572-05
1.360E 00	-1.2648-05	2.8542-04	6.920E 00	-3.1682-05	3.77/8-05
1 4402 00	5 4308-05	2.7242-04	7.0402.00	2 5782-05	2.7635-03
1.4808 00	8.1592-05	2.6578-04	7.2807 00	5.2508-05	1.3568-05
1.5202 00	9.335E-05	2. 4 33 2- 64	7.4002 00	7.3998-05	1.1958-05
1.5602 00	7.0552-05	2.428 ž-C4	7.520E 00	8.480E-05	1.1082-05
1.600B 00	4.3902-05	2.5112-04	7.640E 00	7.821E-05	1.0022-05
1.640E 00	2.4978-06	2.329E-C4	7.760E 00	5.8992-05	8.5708-06
1.680E 00	-1.335E-06	2.4 19 E-04	7.8902 00	3.491E-05	7.200E-06
1.7202 00	-5.402B-06	2.396E-04	8.030E 00	1.6892-05	6.353E-06
1.7508.00	+2.3328-06	2.2026-04	A 2105 00	2 2002-06	3 0038-06
1 6508 00	1.3958-05	2.0228-04	8.4508 CC	6.1818-09	2.9548-06
1.9102 00	-5.569E-08	1.9582-04	8.590E 00	-1.4122-06	2.7518-06
1.970E 00	-5.7382-05	1.8872-04	8.730E 00	-1.306E-06	1.8832-06
2.0302 00	-9.9078-05	1.866E-04	8.8702 00	-9.9962-07	1.7442-06
2.0902 00	-5.486E-05	1.967 E-04	9.0102 00	-3.4482-07	2.0458-06
2.1502 00	2.2842-05	2.0 19 E-04	9.150B 00	3.9652-07	1.8982-06
2.21UB 00	H. 7708-05	7.063 E= 84	9, 3005, 00	6.6728-07	1.9718-06
2.270E 00	7.5408-05	1.852 E-04	9.460E 00	1.1598-06	1.8968-06
2.3302 00	N.USIE-US N 3958-04	1.5727-64	9.0205 00	9 0718-07	2 0208-04
9:4500 0A	-1.1076-03	1.010e-00	9.9001 00 9.9401 00	2.2098502	2.19/8=04
2.510E 00	-1.7412-05	1.4682-04	1.010E 01	-7.3872-08	1.9708-06
2.570E CO	-4.258E-06	1.455 8- 64	1.0262 01	-3.034E-07	1.3678-06
2.630E 00	9.957E-06	1.472E-04	1.0428 01	-4.3592-07	1.5848-06
3.6908 00	6.8298+04	1.0338-00	1,0688 01	1.3508-07	2.0002~00

INTEGRATED CATA

PROTON ENFEG	T INTESVAL	I-SECTION	ERROR	
(#E	₹}	(B/SR)	(B/SB)	
3.000E-01 -	4.000F-C1	1.0762-02	1.1268-04	
4.000E-01 -	5.000E-01	2.4382-05	6.398E-05	
5.0002-01 -	6.0001-01	-7.817E-05	4.6858-05	
6.000E-01 -	7.0001-01	-2.055E-05	4-4648-05	
7.0002-01 -	8.0007-01	-2.5558-06	3.5478-05	
8 0008-01 -	1.0003.00	2 254 8-06	5 6608-05	
1 0007 00 -	1 2001 00	-2 0828-05	0 5012-05	
1 2008 00 -	1 0 0 0 0 00	-5.0112-05	6 1330-05	
1.2005 00 -	1.4002 00	1 32/18-05	5.1236-05	
1.4002 00 -	1.0000 00	1.3245-03	5.1508-05	
1.6002 00 -	1.8001 00	5.2672-07	4.7102-05	
1.800E 00 -	2.0001 00	-2.4082-06	3.9612-05	
2.000E 00 -	2.500E 00	2.871E-06	8.986E-05	
2.500E 00 -	3.0002 00	2.8322-06	7.136E-05	
3.000E 00 -	3.500E 00	1.0262-05	6.4292-05	
3.500B 00 -	4.000E 00	-6.4972-06	5.811E-05	
4.0008 00 -	4.5007 00	-4.4127-06	5.2167-05	
4.500R 00 -	5.0007 00	1 2158-05	0 9532-05	
5 0007 00 -	6 0001 00	7 359 8-06	1 0158-00	
6 0002 00 0	3 0002 00	1,2391-00	1.0138-04	
8.000E 00 -	7.0002 00	1./528-00	0.9/0E-05	
7.000E 00 -	8.0001 00	5.0222-05	1.2985-05	
8.0002 00 -	9.000E 00	2.284E-06	3.170E-06	
9.000E 00 -	1.0002 01	6.660E-07	1.9712-06	

DIPPREENTIAL CEOSS SECTIONS FOR GAMMA BAT PRODUCTION IN V . THE PIEST SET OF NUMBERS IS THE DOUBLY DIPPREENTIAL CEOSS SECTION, WHILE THE SECOND SET IS THE GAMMA HAY PRODUCTION CLOSS SECTION FOR THE ESIGNATED GAMMA BAT EMBEGY INTERVALS. THIS SECOND SET RESULTS FROM INTERNATION OF THE DOUBLY DIPPREENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME OWITS IS THE DATA AND DO NOT INCLUDE AN ESTI-BATED 10 PRECINT EMBOR IN ABSOLUTE NORBALISATION.

INCIDENT NEUTRON ENERGY - 0.60 TO 1.00 HEV. ANGLE - 125 DEGREES.

PROTON ENERGY (BBV)	I-SECTION (B/SR/887)	8 RR OB (B/S B/ 88 V)	PBOTOR BBBBGY (B2V)	I-SECTION (B/SB/MEV)	BBBOB (B/SB/HEV)
2.7258-01	1.2558-01	1.249 E-03	2.7508 00	5.016E-06	6.1338-05
2.8758-01	2.4398-01	1.2682-03	2.8 10E 00	-8.057E-06	6.133E-05
3.025E-01	3.3258-01	1, 184 <u>2</u> - C3	2.870B 00	-2.5002-06	5.9828-05
3.1758-01	3.3298-01	1.044 E-03	2.9308 00	1.0882-05	6.000Z-05
3.3258-01	2.5318-01	8.5902-04	2.9908 00	2.6448-05	6.2188-05
3.4758-01	1.3038+01	6 366 8-04	3 1107 00	3 9692-05	5.918R-05
3.7758-01	2.4588+02	5.7248-64	3,1808 00	3.8038-05	6.0108-05
3.9258-01	9.6658-03	5.555 B-04	3.2608 00	2.4622-05	5.7998-05
4.100B-01	2.441E-03	5.4648-04	3.3408 00	1.330E-05	5.749B-05
8.300B-01	6.8758-04	5.507E-C4	3.4208 00	1.4312-05	5.9458-05
4.5008-01	5.5038-04	5.5158-04	3.500E 00	-7 9068-06	5.92/8-05
4.700B-01	5.8878-04	8.0027-09	3.6608.00	-1.9078-05	5.0818-05
5.100B-01	3.877E-04	3.456E-04	3.740E 00	-2.2402-05	5.2288-05
5.300B-01	1.8775-04	2. 644E- C4	3.8208 00	-1.294E-05	5.4538-05
5,5008-01	5.1078-05	2.246 2-04	3.900B 00	-3.4452-07	5.5888+05
5.7008-01	4.6838-05	2.0932-04	3.9808 00	3 7728-05	5.34/5-05
6.1008-01	2.5668-04	1.9628-04	4.1408 00	5.296E-05	4.5958-05
6.300B-01	2.9298-04	2.049E-C4	4.2208 00	5.558z-05	4.590B-05
6.500B-01	2.457B-04	2.0212-04	4.3002 00	5.029E-05	5.0788-05
6.700E-01	1.558E-04	1.8998-04	4.380E 00	3.6722-05	4.953E-05
6.9008-01	6.474B-05	1.7648+04	4.4602 00	1.6448-05	4.8508-05
7.3008-01	-1.9098-05	1.5712-04	4.6308 00	-2.378E-05	3.9798-05
7.5008-01	-2.9318-06	1.4982-04	4.730B 00	-3.317E-05	4.1988-05
7.700E-01	3.311g-05	1.436E-04	4.8301 00	-2.583E-05	4.777E-05
7.900B-01	8.218E-05	1.387 E-04	4.9308 00	-0.193E-06	4.985B-05
8.100E-01	1.6778-04	1.3748-04	5.030E 00	9.042E-06	4.2308-05
8.5008-01	5.085E-04	1.3518-CA	5.2308 00	3.6512-05	4.4918-05
8.7002-01	9.581E-04	1.2778-04	5.330E 00	3.191E-05	5.0768-05
8.9008-01	1.2928-03	1.2462-04	5.430E 00	2.4812-05	5.2248-05
9.100E-01	1.4988-03	1.2758-04	5.530E 00	2.997E-05	5.1798-05
9.3008-01	1.4988-03	1 252 8-04	5 7 308 00	4.169E-05	5.3578-05
9.7008-01	9.7118-04	1.2278-04	5.8302 00	3.1352-05	5.6178-05
1.000E 00	4.7712-04	1.1432-04	5.930E 00	1.4472-05	5.397B-05
1.040E 00	9.5098-05	1.037 2-04	6.0302 00	5.9852-06	5.148B-05
1.0808 00	-1.6228-05	9.571E-C5	6.130E 00	9.126E-06	4.675B-05
1.1202 00	1.1298-05	9.3432-03	6.330F 00	1 5072-05	4.74362-05
1.2008 00	3.5278-05	8.9958-05	6.990B 00	1.2958-05	3.9318-05
1.2408 00	5.0588-05	9.175E-05	6.560B 00	1.1972-05	3.3228-05
1.2808 00	5.5868-05	1.071E-04	6.680E 00	6.696B-06	2.803B-05
1.320E 00	5.0142-05	1.1328-04	6.800B 00	-1.453B-06	2.4708-05
1 4007 00	4./035-05	1. 1 73 5-04	7.0408 00	-6.9068-06	1.5088-05
1.440B 00	4.283E-05	1. 1 13E-04	7.1602 00	-1.3522-06	1.1095-05
1.480E 00	4.903E-05	1.060 E-04	7.200g 00	3.1342-06	8.757B-06
1.5208 00	7.0598-05	1.024E-C4	7.400B 00	6.326E-06	7.5538-06
1.560E 00	9.0812-05	9.9978-05	7.5208 00	1.1228-05	6.793B-06
1.640E 00	9.7168-05	1.0238-04	7.7608 00	2.7508-05	5.8448-04
1.680E 00	9.0238-05	1.050 E-04	7.8902 00	3.443E-05	4.8178-06
1.720E 00	7.636E-05	1.017E-C4	8.030B 00	3.6972-05	4.1818-06
1.760E 00	5.9128-05	9.5932-05	8.1702 00	3.1582-05	3.5448-06
1.8008 00	4./1/E-05	9.5662-05	8. J TOP 00	9.00222-05	2.7508-06
1.9108 00	3.4188-05	8.826 E-05	8.5902 00	2.7822-06	1.318B-06
1.970E 00 .	1.4098-05	7.970 8-05	8.730E 00	2.6992-07	1.2208-06
2.030B 00	2.097E-05	8.2408-05	8.870B 00	-5.9872-07	1.0818-06
2.090E 00	5.5008-05	8.389 8-05 8.741 8-05	9.0108 00	-6.7682-07	8.4498-07
2.2108 00	A. 8488+05	8.5867-05	9.1008 00	-3.903E-07	0./005-07 6.1118+07
2.2708 00	1.2118-05	7.7962-05	9.4602 00	5.2838-07	5.6148-07
2.3308 00	-2.5448-06	6.9812-05	9.620B 00	6,398E-07	6.888B-07
2.390B 00	2.8498-06	6.513B-05	9.780E 00	8.820E-07	5.67CB-07
2.4508 00	1.7178-05	0.570E-05	9.940B 00	8.4858-07 3 7698-07	5.630B-07
2.5702 00	3.7668-05	6.4018-05	1.0262 01	6.8418-07	6.3528-07
2.6308 00	3.5998-05	6.3658-05	1.042B 01	3.901E-07	7.3641-07
2.690B 00	2.190B-05	6.1828-05	1.058E 01	2.0512-07	8.348B-07

INTEGRATED DATA

PBOTON INERGY INTERVAL (EBV)	B-SECTION (B/SB)	BBBOB (B/SB)
(EEV) 3.000E-01 - 4.000E-01 4.000E-01 - 5.000E-01 5.000E-01 - 6.000E-01 6.000E-01 - 7.000E-01 7.000E-01 - 8.000E-01 1.000E-01 - 1.000E 00 1.200E 00 - 1.400E 00 1.400E 00 - 1.600E 00 1.400E 00 - 1.600E 00 1.400E 00 - 2.500E 00 2.500E 00 - 2.500E 00 3.000E 00 - 2.500E 00 3.00E 00 3.00E 00 - 2.500E 00 3.00E 00 3.00E 00 3.00E	(B/SB) 1.605 R-03 1.081 R-03 1.646 R-05 2.020 R-05 2.020 R-05 2.020 R-05 2.020 R-05 1.850 R-04 1.171 R-05 9.874 R-06 1.302 R-05 1.590 R-05 1.590 R-05 1.434 R-05	BR08 (B/SR) 7.7331=05 5.2078-05 1.94052-05 1.94052-05 1.5088-05 2.5652-05 1.9508-05 2.1088-05 2.1088-05 2.0158-05 3.038-05 3.6308-05
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 6.2922-06\\ 1.2642-05\\ 2.642-05\\ 2.0432-05\\ -9.2642-06\\ 2.6732-05\\ 6.6732-05\\ 1.3542-05\\ 1.2492-05\\ 3.5732+07\\ \end{array}$	3.097E-05 2.964E-05 2.695E-05 2.415E-05 2.216E-05 5.017E-05 3.566E-05 7.917E-06 2.102E-06 6.274E-07

DIFFERENTIAL CROSS SECTIONS FOR GARRA SAY PRODUCTION IN V. THE FIRST SET OF BURBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SHT IS THE GARMA RAY PRODUCTION CROSS SECTION FOR THE LISIGNATED GARMA RAY PRODUCTION CROSS SECTION FOR THE SASELUME OF THE SAKE UNITS AND AND DO NOT INCLUDE AN ESTI-MATED 10 PERCENT ERROR IN ABSOLUTE NOTBALISATION.

INCIDENT NEUTRON ENTROY - 1.00 TO 1.49 MBT. ANGLE - 125 DEGREES.

PHOTOH ENERGY (NEV)	I-SECTION (E/SR/NIV)	EBEOR (B/SR/HZ¥)	EBOTON ENERGY (BEV)	I-SECTION (B/SB/8BV)	52 502 (B/53/45V)
2.7258-01	1.9328-01	2. 9 178- 03	2.750B CO	3.7098-05	5.5338-05
2.8758-01	3.7852-01	2.3732-03	2.8102 00	3.3892-05	5.5998-05
3.0258-01	5.1918-01	2.1112-03	2.8708 00	3.0932-05	5.7318-05
3.1758-01	5.2418-01	1.8852-03	2.9308 00	3.2998-05	5.422R-05
3.0758-01	2.4318-01	1.4292-03	3.0508 00	3.1238-05	5.5838-05
3.6258-01	1. 184E-01	1.3282-03	3.110B 00	3.5478-05	5.5808-05
3.775E-01	4.797E-02	1.264 2-03	3.180E 00	4.8178-05	5.7068-05
3.9252-01	1.672B-02	1.2878-03	3.2608 00	3.9882-05	5.7198-05
4.3002-01	1.5998-03	1.4682-03	3.4202 00	2.573E-05	5.6168-05
4.500B-01	1.4742-03	1. 5798-03	3.5008 00	9.704E-06	5.4902-05
4.700E-01	1.476E-03	1.480 2-03	3.580E 00	-9.0862-06	5.2378-05
4.900E-01	1.3938-03	8.459E-C9	3.740E 00	2.3392-06	5.0718-05
5.300B-01	1.960E-03	5.458E-04	3.820E 00	1.3192-05	5.2868-05
5.5002-01	3.4818-03	4. 140 E- 04	3.900E 00	1.3962-05	5.2078-05
5./00E-01	6.244E=UJ 8 987P=03	3./842-14	3.980E UU	2.2316-05	5.1328-05 4.9138-05
6.100E-01	9.770E-03	3.9282-04	4.140B 00	4.003E-05	4.4378-05
6.300B-01	A. 1908-03	4.425E-C4	4.2202 00	2.2752-05	4.4908-05
6.500E-01	5.513E-03	4.146 B-04	4.300B 00	-2-2778-96	4-5308-05
6.700E-01	3.1348-03	3. 3 58 2- 64	4.360E 00 9.960E 00	1.8928-06	4.8658-05
7.1008-01	6.244E-04	3.2482-04	4.540E 00	2.2732-05	4.8368-05
7.300E-01	1.3218-04	3.195E-04	4.630E 00	2.956E-05	4.5828-05
7.5008-01	-1.0918-04	3.1488-04	4.730E 00 0 830E 00	2.0532-05	4.4598-05
7.9008-01	5.016E-04	2.9978-08	4.9308 00	-4.7168-07	5.0808-05
8.100E-01	2.3578-03	3.014 2-04	5.030E 00	3.401E-06	4.8508-05
8.300E-01	6.765B-03	2.9408-04	5.130R 00	1.7298-05	5.1208-05
8.7002-01	2.578E-02	3.0128-04	5.3308 00	3.8392-05	5.4428-05
8.9008-01	3.657E-02	3. 147 E- C4	5.4308 00	2.9188-05	5.0758-05
9.1002-01	4.2958-02	2.950 2- 04	5.5302 00	2.0972-05	4.8628-05
9.5008-01	3.5818-02	2.3248-64	5.7308 00	-4.0118-06	5.0482-05
9.7008-01	2.6158-02	2. 168 E-04	5.8302 00	-1.7958-05	5.0408-05
1.000E 00	1.281E-02	1.6012-04	5.9308 00	-2.2198-05	4.8428-05
1.040E 00	3.3802-03 6 5258-04	1. 3618~04	6.0308 00	-7.101E-06	4./508-05
1.120E 00	1.1148-04	9.440E-C5	6.230E 00	4.8672-05	4.3648-05
1.1602 00	2.1662-05	8.9182-05	6.330E 00	5.2402-05	4.162E-05
1.2002 00	1.0522-05	8.5612-05	6.440E 00 6 560E 00	4.416E-05	3.9548-05
1.280E 00	3.2602-05	9.6212-05	6.680E 00	3.2518-05	3.1188-05
1.320E 00	5.960E-05	1.004 E- 04	6.800E 00	2.6258-05	2.629B-05
1.360E 00	8.9805-05	1.0192-04	6.9208 00	1.1598-05	2.2338-05
1.4402 00	1.0008-04	1.0018-04	7.1608 00	-2.0918-05	1.3558-05
1.480E 00	1.078E-04	9.507E-05	7.2808 00	-1.0008-05	1.1068-05
1.520B 00	1.2822-04	8.965 E-05	7.400E 00	-5.1388-06	9-2428-06
1.5605 00	9.5848-05	8.7948-05	7.5208 00	1.9288-05	7.4998-06
1.6402 00	5.8988-05	8.801 E-05	7.760B 00	2.0228-05	7.2968-06
1.680E 00	4.2958-05	8.8452- (5	7.890E 00	1.6618-05	7.0428-06
1.720E 00	5.2028-05	8.6458-05	8.0JOE 00 9 1707 00	1.5028-05	6.078E-06
1.800E 00	8.915E-05	8.1338-05	8.3108 00	2.8378-05	4.6788-06
1.850E 00	8.937E-05	7.840 E-05	8.450E 00	3.060E-05	4.2358-06
1.910E 00	5.3858-05	7.6678-05	8.5908 00	2.4718-05	3.3058-06
2.0302 00	1.2968-05	7.3652-05	8.8708 00	9.7238-06	2.0458-06
2.090E 00	2.2258-05	7.340 8- 55	9.010B 00	5.2208-06	1.6998-06
2.150E 00	2.716B-05	7.508 E-05	9.1502 00 9.3007 00	2.0558-06	1.3248-06
2.2708 00	3.050E-05	7.045E-C5	9.460E 00	-6.2422-07	7.1968-07
2.3308 00	2.151E-05	6.494 E-05	9.6202 00	-5.6078-07	7.0658-07
2.390E 00	9.5488-06	6.103B-C5	9.780B 00	-2.3248-07	6.3728-07
2.5102 00	3.4638-06	5.9518-05	1.0 108 01	4.3838-07	4.2682-07
2.570B 00	4.7518-06	5.779B-05	1.026B 01	6.846B-07	3.3668-07
2.630E 00	1.705B-05	5.8502-05	1.042E 01	6.9882-07	5.0782-07
X.0702 00	3.2305-45	3./415-63	1.0365 01	. 0.01/5-07	J.VQ48-07

INTEGRATED CATA

PHOTOB BREAGT INTERVAL (BEV)	I-SECTION (B/SB)	BRBOR (B/SB)
3.0008-01 - 4.0002-01	2.3545-02	1.5228-04
4.0008-01 - 5.000E-01	2.2812-04	1.4062-04
5.000E-01 - 6.000E-C1	4.4108-04	5.1468-05
6.000E-01 - 7.000E-01	5.603E-04	3.915B-05
7.000E-01 - 8.000E-01	2.4338-03	3.1378-05
8.000E-01 - 1.000E 00	5.0048-03	5.3818-05
1.000B 00 - 1.200B 00	3.8798-04	2.1648-05
1.2008 00 - 1.400 00	1.0178-05	1.9098-05
1 8008 00 - 1.6008 00	2 2658-05	1 8778-05
1 6008 00 - 1 8008 00	1 2617-05	1 7348-03
	1.4315-03	1. 5398-05
	1.1035-03	1.5308-05
2.0008 00 - 2.5008 00	A. 2448-00	3.4328-05
2.5008 00 - 3.000¥ 00	1.2782-05	2.0662+05
3.000B 00 - 3.500E 00	1.8342-05	2.827E-05
3.500E CO - 4.00DE CO	2.3358-06	2.5958-05
4.000B 00 - 4.500E 00	7.796E-06	2.340B-05
4.5008 00 - 5.000E 00	6.9838-06	2.3668-05
5.0008 00 - 6.0008 00	1.0688-05	5.0618-05
6.000E 00 - 7.000E CO	3.0068-05	3.5678-05
2 0007 00 - 8 0007 00	2 6678-06	0 7019-04
	3 0168-00	
	2.0105-05	3.0428-00
9.000B 00 - 1.000E 01	4.5892-07	8.7378-97

DIFFENENTIAL CROSS SECTIONS FOR GARMA BAY PRODUCTION IN V. THE FIRST SET OF WURDERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GARMA BAY PRODUCTION CROSS SECTION FOR THE RESEGNATED GARMA BAY BREAGT INTERVALS. THIS SECOND SET RESOLTS FROM INTERCATION OF THE DOUBLY DIFFERENTIAL DATA. THE WURCHTAINETES ARE DIVEN IN THE SAME WURTS AS THE DATA AND DO NOT INCLUDE AN ESTI-MATED 10 PERCENT BREOR IN ABSOLUTE NORMALIZATION.

INCIDENT HEOTRON ENERGY = 1.49 TO 2.01 NEV. ANGLE = 125 DEGREES.

2.728-01 2.2082-01 3.735E-03 2.7507 00 1.6042-05 6.622-05 3.032E-01 6.008E-01 1.273E-03 2.8702 00 7.0962-05 6.632E-05 3.123E-01 6.103E-01 2.326E-03 2.9302 00 7.272E-06 6.33E-05 3.123E-01 4.776E-01 2.528E-03 2.9902 00 1.3492-06 6.328E-05 3.473E-01 4.510E-02 2.327E-03 3.1005 00 1.272E-06 6.332E-05 3.973E-01 6.431E-03 2.327E-03 3.4008 00 2.977E-03 6.133E-05 4.300E-01 8.631E-03 2.5061E-03 3.6008 00 4.510E-05 5.1002-05 6.132E-05 4.500E-01 3.175E-03 2.608E-03 3.5002 00 4.614E-05 6.197E-05 5.500E-01 4.504E-03 3.6062 00 -1.075E-03 5.5421E-05 5.500E-01 4.504E-03 4.644E-04 3.9002 01 3.747E-03 5.500E-01 1.658E-02 8.108E-03	PROTON RUBBET (BBV)	I-SECTION (B/SR/UBV)	8 RR OR (B/SB/887)	FBOTOB ENERGY (NEV)	R-SECTION (E/SR/NEV)	BBBOB (B/SR/BEV)
2.8728-01 4.3328-01 3.5912-03 2.8708 00 1.23202-05 5.6322-05 3.0285-01 6.0086-01 3.2738-02 2.9708 00 1.7277-06 6.5472-05 3.3285-01 6.3386-01 2.9282-03 2.9908 00 1.2427-05 6.5462-05 3.4285-01 4.7766-01 2.5628-03 3.0508 00 1.4287-05 6.5462-05 3.6335-01 1.4516-01 2.2498 03 3.1007 00 2.4766-05 6.4352-05 3.6338-01 8.6328-03 3.3778-03 3.6008 00 2.5618-03 3.2008 00 5.698-05 6.1352-05 4.5008-01 8.0338-03 2.5618-03 3.2008 00 8.6088-06 6.6322-05 5.1038-05 4.5008-01 8.0988-06 8.0988-06 8.0988-06 5.3476-05 5.1038-05 5.1008-01 3.2668-02 3.1008 00 8.0988-06 5.3288-05 5.1038-05 5.1008-01 4.6082-02 8.1028-01 3.9008 00 1.32468-05 5.1388-05 5.1008-01 1.6588-02 8.1028-01 3.9008 00 1.32488-05	2.7258-01	2.2048-01	3.735E-03	2.7502 00	1.6992-05	6.5628-05
3. 0282-01 6. 0082-01 3. 2732-03 2. 3702 00 7. 0982-06 6. 3372-05 3. 1732-01 4. 7762-01 2. 5282-03 2. 9902 00 1. 3492-06 6. 5392-05 3. 4732-01 4. 7762-01 2. 5282-03 3. 1002 00 2. 4942 00 1. 1292-06 6. 5322-05 3. 4732-01 4. 5182-01 2. 4922 03 3. 1002 00 2. 49412-05 6. 2522-05 3. 4732-01 2. 10472-03 3. 1002 00 2. 5922-05 5. 3622-05 6. 3522-05 3. 4000 01 2. 5942-05 6. 1378-05 6. 1978-05 6. 1978-05 6. 1978-05 6. 1978-05 4. 5002-01 3. 21782-03 2. 6082-03 3. 5002 00 4. 6142-05 6. 1978-05 5. 3089-05 5. 1002-01 3. 21782-03 3. 6602 00 -1. 0758-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 5002-01 5. 218-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 3089-05 5. 308	2.8758-01	9.335R-01	3.5912-03	2.8108 00	1.2302-05	6.687E-05
3.173E-01 6.138E-01 2.928E-03 2.998E 00 1.342F-06 6.548E-03 3.325E-01 2.921E-01 2.478E-03 3.050E 00 1.342F-05 6.548E-05 3.621E-01 2.478E-03 3.050E 00 1.342F-05 6.548E-05 3.621E-01 2.478E-03 3.100E 00 2.4778E-05 6.352E-05 3.737E-01 6.130E-02 2.371E-03 3.260E 00 3.648E-05 6.137E-05 4.500E-01 8.633E-03 2.371E-03 3.260E 00 3.648E-05 6.103E-05 4.500E-01 3.278E-01 3.500E 00 4.648E-05 6.103E-05 5.103E-05 5.300E-01 4.048E-03 1.948E-03 3.660E 00 1.948E-05 5.248E-05 5.300E-01 1.668E-03 1.158E-03 3.700E 00 1.948E-05 5.248E-05 5.300E-01 1.668E-03 1.988E-04 3.800E 00 2.388E-05 5.208E-05 5.000E-01 1.668E-04 8.642E-04 3.000E 00 2.348E-05 5.218E-05 5.000E-01 1.668E-04 4.000E 00 2.348E-05 5.218E-05 5.208E-05 5.000E-01 1.018E-02 </td <td>3.0258-01</td> <td>6.0048-01</td> <td>3. 2738- 03</td> <td>2.8705 00</td> <td>7.0988-06</td> <td>6.5478-05</td>	3.0258-01	6.0048-01	3. 2738- 03	2.8705 00	7.0988-06	6.5478-05
3.3258-01 *.7768-01 2.538-03 2.9902 00 1.3492-06 6.5362-05 3.4738-01 2.9218-01 2.4078-03 3.1002 00 2.4728-05 6.5322-05 3.7738-01 2.9218-03 3.1002 00 2.4728-05 6.5322-05 3.7738-01 2.9318-03 2.3778-03 3.000 01 5.5582-05 6.1322-05 4.3008-01 3.8318-02 2.66082-03 3.5002 00 6.1082-05 6.1978-05 4.5008-01 3.2738-03 2.6082-03 3.5002 00 6.5082-05 5.5462-05 5.1008-01 4.1028-03 3.6602 00 -0.8322-05 5.3082-05	3.1758-01	6.1338-01	2.926 E-03	2.930E 00	1.7272-06	6.3918-05
3.4758-01 2.9218-01 2.4782-03 3.0502 00 1.1292-05 6.3224-05 3.6218-01 1.4518-01 2.2492-03 3.102 00 1.24418-05 6.5224-05 3.7718-01 6.1308-02 2.2792-03 3.102 00 1.24418-05 6.5224-05 4.1008-01 8.6318-03 2.3712-03 3.2602 00 3.5608-05 6.1352-05 4.5008-01 8.6318-03 2.3712-03 3.2602 00 3.5608-05 6.1352-05 4.5008-01 8.7028-03 2.4448-03 3.5002 00 3.5608-05 6.1038-05 5.7008-01 8.7028-03 1.9712-03 3.5002 00 4.6418-05 6.1038-05 5.5008-01 3.2732-03 2.6448-03 3.5002 00 4.6418-05 6.1038-05 5.5008-01 3.2248-03 1.5158-03 3.7020 00 4.6418-05 5.6198-05 5.5008-01 3.22682-03 1.5158-03 3.7020 00 4.3482-05 5.6198-05 5.5008-01 4.6918-03 8.4438-04 3.9002 00 4.3482-05 5.6198-05 5.5008-01 4.6918-03 8.4438-04 3.9002 00 4.3482-05 5.6198-05 5.5008-01 4.66518-03 8.4438-04 3.9002 00 4.3486-05 5.3288-05 5.5008-01 4.66518-03 8.4438-04 3.9002 00 4.3486-05 5.3288-05 5.5008-01 4.66518-03 8.4438-04 3.9002 00 4.3486-05 5.3288-05 5.5008-01 4.6538-02 8.1182-04 8.6602 00 2.3880-05 5.3288-05 5.9008-01 4.6538-02 8.2998-06 4.6100 00 3.4386-05 5.4288-05 6.9008-01 4.8028-02 8.2998-06 4.6100 00 3.4386-05 5.4488-05 6.9008-01 4.8028-02 8.2998-06 4.6300 00 4.7788-05 5.4488-05 6.9008-01 4.8028-02 8.2988-06 4.7788-05 5.4488-05 6.9008-01 4.5388-04 7.7258-04 4.6300 00 4.7388-05 5.4488-05 6.9008-01 3.53828-04 7.7258-04 4.6300 00 4.7588-05 4.4518-05 7.5008-01 3.53828-04 7.7258-04 4.6300 00 4.7588-05 4.4518-05 7.5008-01 3.5418-02 7.2388-04 4.3000 00 2.5388-05 4.4218-05 7.5008-01 3.5418-02 7.2388-04 4.3000 00 2.5388-05 4.4218-05 7.5008-01 3.5418-02 7.2388-04 5.3300 00 -3.5488-05 4.4518-05 8.5008-01 3.5418-02 7.33788-04 5.3300 00 -3.5488-05 4.4518-05 8.5008-01 3.5418-02 7.33788-04 5.3300 00 -3.5488-05 4.4518-05 8.5008-01 3.5418-02 7.33788-04 5.3300 00 -3.5488-05 4.4218-05 8.5008-01 3.5418-02 7.33788-04 5.3300 00 -3.5488-05 4.4218-05 8.5008-01 3.5418-02 7.33788-04 5.3300 00 -3.5488-05 4.4218-05 8.5008-01 3.5418-02 7.2388-04 5.3300 00 -3.5488-05 4.4218-05 9.5008-01 4.54282-04 4.5429-04 5.33000 00 -3.5488-05 4	3.3258-01	4.776 8-01	2.563B-C3	2.990E 00	1.3492-06	6.5468-05
3.6238-01 1.4518-01 2.2492.03 3.1102 00 2.4418-05 6.2782-05 3.9218-01 2.3998-02 2.3112-03 3.2600 00 2.47782-05 6.2782-05 4.3298.05 3.9218-01 2.3998-02 2.3112-03 3.2600 00 2.47782-05 6.2798-05 4.3008-01 3.6312-03 2.5618-03 3.400 00 5.16082-05 6.4922-05 4.3008-01 3.6308-00 2.5618-03 3.400 00 5.16082-03 6.5968-05 4.9008-01 4.1018-03 2.44818-03 3.400 00 -1.0758-05 5.308-05 5.5008-01 4.0998-03 1.9992-03 3.6600 00 -1.0758-05 5.4082-05 5.5088-05 5.5008-01 3.2688-03 1.5158-03 3.400 00 -1.4758-05 5.4082-05 5.5008-01 3.2688-03 1.5158-03 3.400 00 -1.3758-05 5.4082-05 5.5008-01 1.6508-02 6.1182-04 3.9000 00 1.9488-05 5.408-05 5.5008-05 5.5008-01 1.6508-02 6.1182-04 3.9000 00 1.9488-05 5.5288-05 5.5008-01 1.6508-02 6.1182-04 3.9000 00 2.33858-05 5.3388-05 5.5008-01 1.5228-02 6.1182-04 4.0600 00 2.33858-05 5.3388-05 5.61008-01 1.5228-02 6.1182-04 4.0000 00 2.33858-05 5.3388-05 5.61008-01 1.5228-02 8.4028-04 4.0000 00 2.33882-05 4.5708-05 6.5008-01 1.5228-02 9.4022-04 4.0000 00 2.33882-05 4.5708-05 6.5008-01 1.5228-02 9.4022-04 4.0000 00 2.33882-05 4.5708-05 6.5008-01 1.5228-02 9.4022-04 4.0000 00 2.5388-05 4.4080-05 5.5588-05 4.4080-05 5.5588-05 4.4080-05 5.5588-05 4.4080-05 5.5588-05 5.7008-01 1.5228-02 7.2582-04 4.5000 00 4.5558-05 4.4080-05 5.5588-05 5.7008-01 1.5228-02 7.2582-04 4.5000 00 4.5558-05 4.4588-05 7.5008-01 3.3488-03 7.5282-04 4.5308 00 -7.3588-06 3.4488-05 7.5008-01 3.2488-03 7.3082-04 4.3308 00 -7.3588-05 4.2588-05 7.5008-01 3.2488-02 7.2582-04 4.3080 00 -2.5588-05 4.2588-05 7.5008-01 3.5488-02 7.2582-04 5.3308 00 -7.3588-06 4.2588-05 4.2588-05 7.5008-01 3.5488-02 7.2582-04 5.3308 00 -7.3588-06 4.2588-05 4.2588-05 7.5008-01 3.5488-02 7.2582-04 5.3308 00 -2.5588-05 4.2588-05 4.2588-05 7.5008-01 3.5688-02 7.2582-04 5.3308 00 -2.5588-05 4.2588-05 7.5008-01 7.5588-02 7.2582-04 5.3308 00 -2.5588-05 4.2588-05 7.5008-01 7.5588-02 7.2582-04 5.3308 00 -2.5588-05 4.2588-05 7.5008-01 7.5588-04 7.2588-06 7.328800 7.2588-05 4.2588-05 7.3288-06 7.3288-06 7.3288-06 7.3588-06 7.32888-06 7.3588-06 7.3588-06 7.3588-06 7.3588-	3.4752-01	2.9218-01	2.478E-C3	3.050E 00	1.1292-05	6.362E-05
3.7758-01 6.130E-02 2.229E-C3 3.1800 00 2.970E-05 6.279E-05 4.0279E-05 4.007E-01 2.387E-02 2.377E-03 3.3400 00 3.5567E-05 6.385E-05 4.027E-05 4.007E-01 3.0375E-02 2.377E-03 3.3400 00 3.5567E-05 6.385E-05 4.007E-01 3.0775E-03 3.277E-03 3.3400 00 3.5567E-05 6.187E-05 4.507E-05 5.007E-01 3.0775E-03 3.276E-03 3.3567E 00 4.607E-05 5.107E-05 5.037E-05 5.007E-01 3.2647E-03 1.557E-03 3.7600 00 4.607E-05 5.037E-05 5.307E-01 3.2647E-03 1.557E-03 3.7600 00 4.607E-05 5.307E-05 5.307E-01 3.5647E-03 4.607E-03 3.8600 00 4.607E-05 5.307E-05 5.307E-01 3.5647E-03 1.557E-03 3.7600 00 2.3367E-05 5.3172E-05 5.307E-01 1.557E-03 3.607E 00 2.3367E-05 5.337E-05 5.307E-01 1.557E-03 4.607E-04 4.0507E 00 2.3367E-05 5.337E-05 5.307E-01 1.557E-02 4.107E-04 4.0507E 00 2.3367E-05 5.327E-05 6.3007E-01 1.557E-02 4.297E-04 4.2007E 00 2.3367E-05 5.247E-05 6.3007E-01 1.527E7-02 4.497E-04 4.2007E 00 2.3467E-05 5.2448E-05 5.5047E-01 1.527E7-02 4.497E-04 4.3007E 00 4.2797E-05 5.4449E-05 6.7007E-01 3.527E7-03 4.657E-04 4.3007E 00 4.2797E-05 4.40897E-05 7.307E-01 3.367E-03 4.497E-05 7.2007E-01 3.367E-03 4.497E-03 4.3007E 00 4.517E-05 4.4097E-05 7.307E-01 3.367E-03 4.497E-03 4.3007E 00 4.517E-05 4.4097E-05 7.307E-01 3.367E-03 4.497E-03 4.3007E 00 4.517E-05 4.4097E-05 7.307E-01 3.367E-03 4.497E-05 7.307E-04 4.507E 00 4.517E-05 4.4597E-05 4.45	3.6258-01	1.4518-01	2.249 B- 03	3.1102 00	2.441E-05	6.2528-05
3.928-01 2.398-02 2.348-03 3.4008 00 3.5602-05 6.482-05 6.482-05 4.1007-01 6.238-03 3.2717-03 3.5002 00 3.6402-05 6.482-05 6.482-05 4.7008-01 4.2728-03 3.5002 00 4.6402-05 6.482-05 5.5462-05 5.1007-01 3.2628-03 1.5158-03 3.7002 00 -4.642-06 5.0382-05 5.3007-01 3.5248-03 1.1158-03 3.6202 00 1.9448-05 5.2382-05 5.3007-01 1.5248-03 1.1158-03 3.6002 00 2.3362-05 5.2382-05 5.9007-01 1.6582-02 6.1402-04 3.9001 00 2.3442-05 3.2402-05 6.1007-01 1.5287-03 8.422+04 4.3002 00 2.3442-05 5.2402-05 6.1007-01 1.5287-03 8.422+04 4.3002 00 4.512+05 4.9518-05 7.008-01 3.7722.02 9.402-04 4.5002 00 4.512+05 4.9518-05 7.007-01 3.5282-04 4.5002 00 4.512+05 4.9518-05 5.2408-05 7.007-01 3.5282-04 4.5002 00 -3.5128-05 4.9518-0	3.7758-01	6.130E-02	2.2298-03	3.180E 00	2.9708-05	6.2798-05
1 1 3	3.9258-01	2.3895-02	2.3212-03	3.2608 00	2.8/61-05	6.3458-05
4:5007-01 3.2758-03 2.6007-03 3.5007 00 4.6107-05 5.1087-03 4.7008-01 4.0987-03 1.9992-03 3.6602 00 -4.0762-05 5.0387-05 5.1008-01 3.5248-03 1.5158-03 3.7002 00 -4.0422-06 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0212-05 5.0228-05 5.0228-05 5.0228-05 5.0228-05 5.0228-05 5.0228-05 5.0228-05 5.0228-05 5.002-01 1.0328-02 8.4299 E-04 4.2020 0.2.3442-05 4.7042-05 5.2408-05 6.0242-05 5.2408-05 5.0288-05 6.0028-01 1.0132-02 9.4622-04 4.3002 0.0 2.0292-05 5.1448-03 7.5228-04 4.3002 0.0 2.0292-05 5.1448-03 7.5282-04 4.3002 0.0 -7.3582-05 4.0312-05 4.0412-03 7.5282-04 4.3002 0.2.5142-05 4.0912-05 5.1448-05 5.0512-05 4.0512-05 4.0512-05 4.0512-05 4.0512-05 4.0512-	B. 3008-01	3. A338-03	2.5618-03	3.4208 00	5.1802-05	6.1978+05
a, 7002-01 a, 1002-03 1, 9902-03 3, 9902-03 3, 6002 00 -1, 0762-05 5, 3482-05 5, 1008-01 3, 2668-03 1, 5158-03 3, 7002 00 -4, 6322-06 5, 6188-05 5, 3008-01 3, 2668-03 1, 1518-03 3, 8002 01 1, 948-05 5, 6182-05 5, 7008-01 1, 6588-02 6, 1202-04 3, 9002 00 2, 3468-05 5, 2388-05 5, 0008-01 1, 6588-02 6, 1202-04 4, 2002 00 2, 3468-05 5, 2388-05 6, 1002-01 1, 6588-02 8, 298-04 4, 2002 00 2, 3488-05 5, 2488-05 6, 5002-01 1, 5228-02 9, 4498-04 4, 2002 00 2, 9308-05 5, 2448-05 6, 5002-01 1, 5188-03 8, 6528-04 4, 3002 00 4, 5182-05 4, 4989-05 7, 1002-01 1, 5188-03 8, 6528-04 4, 3002 00 -4, 5182-05 4, 9489-05 7, 3082-05 1, 4489-05 7, 1002-01 1, 3182-04 7, 7258-04 4, 6027 0, 2128-05 1, 2489-05 1, 2489-05 1, 2489-05 1, 2489-05	4.5008-01	3.2758-03	2.608 2-03	3.500E 00	4.614E-05	6.103E-05
a.900E-01 3.260E a.900E-03 3.660E 00 -1.076E-05 5.039E-05 5.100E-01 3.524E-03 1.115E-03 3.820E 00 -1.948E-05 5.821E-05 5.300E-01 1.652E-02 6.120E-04 3.980E 00 2.336E-05 5.232E-05 5.000E-01 1.652E-02 6.120E-04 3.980E 00 2.346E-05 5.232E-05 6.100E-01 1.80EE-02 8.129E-04 4.140E 00 2.344E-05 5.242E-05 6.100E-01 1.522E-02 9.449E-04 4.2200 0.239E-05 4.767E-05 5.242E-05 6.100E-01 1.522E-02 9.4462E-04 4.300E 00 3.478E-05 4.948E-05 6.700E-01 1.534E-04 4.450E 00 4.751E-05 4.951E-05 7.100E-01 1.544E-03 7.258E-04 4.530E 00 -7.348E-04 4.530E 00 -7.438E-04 4.530E 00	A.7008-01	9.1045-03	2.4445-03	3.580B 00	8.909E-06	5.546E-05
5.1002-01 3.2662-03 1.5158-03 3.7002 00 -0.8322-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.8028-05 5.2028-05 5.2028-05 5.2028-05 5.2028-05 5.2028-05 5.2028-05 5.2028-05 5.2028-05 5.2028-05 5.4028-06 4.2020 00 2.9308-05 5.4028-05 5.2028-05 5.2028-05 5.4028-05 5.2028-05 5.4028-05 5.2028-05	9.900E-01	4.094E-03	1.999 Z-03	3.660E 00	-1.076E-05	5.0398-05
5.3008-01 3.5288-03 1.1158-02 3.8202 00 1.9488-05 5.4108-05 5.3008-01 1.668-02 6.1208-04 3.9805 00 2.3368-05 5.2388-05 5.0008-01 1.658-02 6.1208-04 4.1002 00 2.3488-05 5.2388-05 6.1008-01 1.8082-02 8.2998-04 4.1002 00 2.3488-05 4.7678-05 6.3008-01 1.0138-02 9.4022-04 4.3002 00 3.4788-05 5.24088-05 6.3008-01 1.0138-02 9.4022-04 4.3002 00 3.4788-05 4.49205 6.3008-01 1.3188-03 8.0262-04 4.4602 04 4.7768-05 4.9498-05 7.1008-01 3.3288-04 7.7358-04 4.6302 00 -3.558-06 4.5788-05 7.008-01 3.3878-04 7.4642-04 5.0308 00 -4.5488-03 4.9308 00 -4.5488-04 4.6302 00 -4.5488-04 4.6302 0.3488-04 4.6302 4.6488-04 6.6302 0.3488-04 4.6382-04 5.3088-05 4.2418-05 5.3088-06 4.2418-05 5.308 <td>5.100E-01</td> <td>3.268E-03</td> <td>1.5 15 E-03</td> <td>3.740g ÖÖ</td> <td>-4.8322-06</td> <td>5.1898-05</td>	5.100E-01	3.268E-03	1.5 15 E-03	3.740g ÖÖ	-4.8322-06	5.1898-05
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5.0002-01 1.6582-02 6.102-04 3.9602 00 2.3862-05 5.2382-05 6.1002-01 1.8022-02 8.2997-04 4.1002 00 2.3462-05 4.7672-05 6.3002-01 1.0132-02 9.4292-04 4.1002 00 2.3462-05 4.7672-05 6.3002-01 5.7282-03 8.6522-04 4.3002 00 3.4778-05 5.2402-05 6.3002-01 5.7282-03 8.6522-04 4.3002 00 4.7522-05 4.9922-05 7.1002-01 1.38228-04 7.7252-04 4.6302 00 2.5182-05 4.6912-05 7.3002-01 3.3228-04 7.7252-04 4.6302 00 -7.3562-05 4.2912-05 7.3002-01 7.33475-04 7.6642-04 4.7302 00 -4.5362-05 4.2412-05 8.1002-01 3.36175-02 7.2642-04 4.5302 00 -3.4522-05 4.2412-05 8.3002-01 2.3832-02 7.2028-04 5.3302 00 -2.5422-05 4.1002-05 8.3002-01 4.3522-02 7.2828-04 5.3302 00 -2.5422-05 4.1002-05	5.5008-01	6.4518-03	8.0038-04	3.9002 00	1.7968-05	5.8108-05
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7.1008-01 1.588E-03 7.528E-04 4.540E 0 4.540E 0 4.540E 0 4.540E 0 4.541E-05 4.691E-05 7.550E-05 4.691E-05 7.500E-01 -3.377E-04 7.668E-04 4.330E 00 -7.358E-06 4.5578E-05 7.300E-01 -3.377E-04 7.668E-04 4.930E 00 -4.558E-05 4.231E-05 7.372E-04 7.668E-04 4.930E 00 -4.558E-05 4.231E-05 6.231E-05 6.231E-05 6.231E-05 6.231E-05 6.231E-05 6.231E-05 6.231E-05 6.231E-05 6.302E-00 -3.6538E-05 4.340E-05 6.338E-02 7.328E-04 5.330E 0 5.542E-05 4.300E-05 6.302E-05 4.302E-05 4.302E-05 6.300E-05 6.302E-05 4.302E-05 4.302E-05 6.302E-05 4.302E-05 4.302E-05 6.302E-05 4.302E-05 6.302E-05 6.302E-05 6.302E-05 6.302E-05	6.9008-01	3.118E-03	8.0262-04	4.460B 00	4.776E-05	4.9498-05
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8. 1008-01 3.9612-03 7.3702-Ca 5.0302 00 -3.6328-05 4.2612-05 8. 3007-01 1.592-02 7.22847-04 5.1307 00 -7.6487-05 4.1002-05 8. 5007-01 2.5832-02 7.2228-04 5.2302 00 -2.6487-05 4.1002-05 8. 7008-01 6.5427-02 7.3287-04 5.3302 00 4.599-05 4.3102-05 9. 1008-01 7.6768-02 6.9557-C4 5.5302 00 5.0902-05 4.228-05 9. 3007-01 7.6768-02 6.9557-C4 5.6307 00 4.10578-05 4.908-05 9. 7008-01 7.608-02 6.13787-C4 5.6307 00 4.0578-05 4.8082-05 9. 7008-01 6.1082-02 5.2597-C4 5.9302 00 -2.0598-05 4.8082-05 1.0008 00 2.3122-02 5.2597-C4 5.9302 00 -2.0598-05 4.8982-05 1.0008 00 1.0248-03 4.0017-C4 6.1307 00 -2.0598-05 4.2778-05 1.2007 00 -3.4278-04 4.9718-04 6.3308 00 3.2178-05 4.2038-05 1.2008 00	7.9008-01	7.8338-04	7.368 2-04	4.9308 00	-4.5488-05	4.5358-05
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8.7008-01 4.562E-02 7.328E-C4 5.330E 00 4.598E-05 4.310E-05 9.1008-01 7.676E-02 6.955E-C4 5.530E 00 5.0548-05 4.278E-05 9.3008-01 7.676E-02 6.955E-C4 5.530E 00 2.290E-05 4.278E-05 9.3008-01 7.676E-02 6.378E-C4 5.630E 00 2.290E-05 4.598E-05 9.700E-01 4.702B-02 6.078E-04 5.830E 00 2.290E-05 4.598E-05 1.0008 00 2.312E-02 5.259E-C4 5.930E 00 2.237E-05 4.898E-05 1.0008 00 5.604E-03 4.684E-04 6.130E 00 -2.7508-06 4.599E-05 1.0008 00 5.604E-03 4.684E-04 6.130E 00 -2.237E-05 4.898E-05 1.1000 0 -3.330E-05 4.102E-04 6.330E 00 3.237E-05 4.878E-05 1.1000 -6.473E-04 3.971E-04 6.330E 00 3.273E-05 4.2778-05 1.1602 00 -6.473E-04 3.971E-04 6.330E 00 3.247E-05 4.278E-05 1.2002 00 -6.473E-04 3.971E-04 6.330E 00 3.247E-05 4.2178-05 1.2002 00 -6.473E-04 3.971E-04 6.400E 00 3.866E-05 4.115E-05 1.2003 00 -6.6473E-04 4.962E-04 6.640E 00 3.866E-05 4.115E-05 1.3002 00 -6.6432E-04 4.822E-C4 6.680E 00 2.2128-05 3.542E-05 1.320E 00 -2.0148-04 4.759E-04 6.920F 00 2.391E-05 2.432E-05 1.300E 00 -2.0148-04 4.759E-04 7.160E 00 3.4048-05 3.542E-05 1.300E 00 -2.0148-04 4.759E-04 7.400E 00 3.4048-05 3.542E-05 1.300E 00 -2.0148-04 4.759E-04 7.400E 00 3.4048-05 1.403E-05 1.400E 00 1.525E-02 5.202E-04 7.400E 00 3.100E-05 1.600E-05 1.500E 00 1.2048-02 4.762E-04 7.400E 00 3.100E-05 1.600E-05 1.500E 00 1.2048-02 4.762E-04 7.400E 00 3.100E-05 1.288E-05 1.500E 00 1.2048-02 4.762E-04 7.400E 00 4.390E-05 1.288E-05 1.500E 00 1.2048-02 2.201E-04 7.600E 00 1.390E-05 1.288E-05 1.500E 00 1.2475E-02 3.628E-04 7.400E 00 1.259E-05 1.288E-05 1.500E 00 3.265E-02 6.748E-C4 7.400E 00 1.390E-05 1.288E-05 1.500E 00 3.178E-02 2.201E-04 7.600E 00 1.390E-05 1.288E-05 1.500E 00 3.178E-03 3.628E-04 7.498E-04 7.400E 00 1.259E-05 7.768E-06 1.400E 00 3.108E-02 2.201E-04 7.600E 00 1.259E-05 7.768E-06 1.400E 00 3.108E-02 3.208E-00 7.350E 00 1.1857E-05 7.768E-06 1.400E 00 3.177E-02 6.921E-04 7.602E 00 1.259E-05 7.7048E-05 1.500E 00 1.527E-03 8.632E-05 9.300E 00 1.259E-05 7.0028E-05 1.500E 00 1.527E-05 8.637E-05 9.400E 00 7.238E-05 7.0028E-05 2.300E	8.5008-01	2.5838-02	7.202 B-04	5.2308 00	2.2742-05	4.100E-05
0.100-01 7.6678-02 6.5352-02 5.3302 00 5.432-03 4.262-03 9.1008-01 7.6678-02 6.3522-02 5.3302 00 4.062-05 4.2682-05 9.3008-01 7.6082-02 6.3732-04 5.6302 00 4.062-05 4.2682-05 9.3008-01 6.4082-02 6.0732-04 5.8302 00 2.2908-05 4.5682-05 9.0008-01 6.7202-02 5.2592-04 5.8302 00 2.2908-05 4.8982-05 1.0008 00 2.3122-02 5.2592-04 6.0307 00 -2.0592-05 4.8982-05 1.0008 00 1.3202-05 4.0017-06 6.3308 00 3.2178-05 4.2778-05 1.1202 00 -3.3302-05 4.1022-00 6.2302 00 1.6328-05 4.1158-05 1.2007 00 -6.7282-04 4.9672-04 6.9202 00 2.3912-05 2.3528-05 1.2007 00 -1.6828-04 4.9622-04 7.1602 03 1.9728-05 1.0528-02 1.2008 00 -2.25528-03 4.7628-04 7.1602 <td>8.700E-01</td> <td>4.5628-02</td> <td>7.3288-04</td> <td>5.3308 00</td> <td>4.5998-05</td> <td>4.3108-05</td>	8.700E-01	4.5628-02	7.3288-04	5.3308 00	4.5998-05	4.3108-05
9.300-01 7.608-02 6.379-C3 5.300 00 0.1370-05 4.308-05 9.300-01 7.608-02 6.168-04 5.7302 00 2.290-05 4.308-05 9.300-01 4.702-02 5.259-C4 5.9302 00 2.2978-05 4.808-05 1.0008 00 2.3122-02 5.259-C4 5.9302 00 -2.0698-05 4.8982-05 1.0008 00 5.0028-03 4.001-C0 6.1302 00 -2.0598-06 4.5920-05 1.1000 -1.0248-03 4.001-C0 6.1302 00 1.6038-05 4.2778-05 1.2007 0 -1.3302-05 4.1022-00 6.2302 00 1.6638-05 4.1728-05 1.2007 0 -6.4738-04 4.9712-04 6.5607 00 3.8562-03 5.12202 1.2007 0 -6.6798-04 4.992-06 6.5072 0.3128-05 1.3528-05 1.3007 0 -6.6802 0 1.9428-05 2.4328-05 1.3007 0 -6.2558-02	9 1008-01	7 6768-02	6 955 - 04	5.5308 00	5.0902-05	4. 2788-05
9.5002-01 6.4402-02 6.1682-04 5.7302 00 2.2902-05 4.5902-05 9.7002-01 4.7202-02 5.2592-C4 5.9302 00 -2.7502-05 4.8902-05 1.0002 00 5.6002-03 4.6802-00 6.0302 00 -2.2372-05 4.8902-05 1.0002 00 1.0242-03 4.6802-00 6.0302 00 -2.2372-05 4.8902-05 1.0202 00 -3.3302-05 4.1022-04 6.3302 00 -5.9902-05 4.2772-05 1.1202 00 -6.4732-04 3.9712-04 6.3302 00 3.21772-05 4.2032-05 1.2002 00 -6.7252-04 4.1022-04 6.3302 00 3.21772-05 4.2032-05 1.2002 00 -6.7252-04 4.1672-04 6.4002 00 3.8472-05 4.2032-05 1.3202 00 -6.6792-04 4.9927-04 6.4002 00 3.8472-05 4.2032-05 1.3202 00 -6.6792-04 4.9927-04 6.64002 00 3.8472-05 4.2032-05 1.3202 00 -6.6792-04 4.9927-04 6.64002 00 3.8472-05 4.2032-05 1.3202 00 -6.6792-04 4.9927-04 6.64002 00 3.8472-05 3.0532-05 1.3602 00 -2.0148-04 4.9507-06 6.8007 00 1.4922-05 3.0532-05 1.4002 00 -2.0148-04 4.7592-04 7.6007 00 3.1002-05 1.6002-05 1.4002 00 1.5525-02 5.2027-04 7.602 00 3.1002-05 1.6002-05 1.5002 00 1.2552-02 6.7482-04 7.6020 00 -6.5758-07 1.1482-05 1.5002 00 1.2652-02 5.2027-04 7.602 00 -6.5758-07 1.1482-05 1.5002 00 3.9062-02 6.7482-04 7.6020 00 -6.5758-07 1.1482-05 1.5002 00 3.9062-02 6.3082-04 7.6020 00 -6.5758-07 1.1482-05 1.5002 00 3.9062-02 6.3082-04 7.6020 00 -6.5758-07 1.1482-05 1.6002 00 3.9062-02 6.3082-04 7.6020 00 -6.5758-07 1.1482-05 1.6002 00 3.9062-02 5.3082-04 7.6020 00 -2.1282-05 9.7662-06 1.7002 00 3.9062-02 5.3082-04 7.6020 00 2.3912-05 1.6032-05 1.6002 00 3.9062-02 5.3082-04 7.6020 00 2.3928-05 9.7662-06 1.7002 00 1.4929-02 3.2082-04 7.8920 00 2.21282-05 9.7662-06 1.7002 00 1.4929-02 3.2082-04 7.8920 00 2.21282-05 9.7662-06 1.7002 00 1.9272-05 9.1942-04 8.3002 00 2.1282-05 9.76482-06 1.7002 00 1.9272-05 9.1942-04 8.5902 00 2.1282-05 7.5082-06 1.9002 00 1.5272-04 8.9012-05 8.3702 00 1.2392-05 7.5082-06 1.9002 00 1.5272-04 8.9012-05 8.8702 00 2.1282-05 7.00222-05 2.0002 00 1.5272-04 8.9012-05 8.8702 00 2.1282-05 7.00222-05 2.0002 00 1.5272-05 8.3022-05 9.4002 00 2.1382-05 7.00222-05 2.3002 00 5.9578-05 7.0082-05 9.4002 00 2.1382-05 7.00222-06 2.	9.3002-01	7.606E-02	6.379E-C4	5.6302 00	4.1052-05	4.4068-05
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1 1	1.1202 00	-3.3308-05	4.102 2-04	6.2302 00	1.6832-05	4.2778-05
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1.3005 00 1.41070 01 0.5252-01 0.5262 00 1.2070 01 0.2762-05 1.6002-05 1.4007 00 1.55252-02 5.2022-04 7.2070 01 0.30100-05 1.6002-05 1.5507 00 1.5525-02 5.2022-04 7.2070 01 0.3902-05 1.2082-05 1.5507 00 1.2052-02 6.7082-04 7.2070 00 -6.5758-07 1.1482-05 1.5607 00 4.8552-02 7.4982-04 7.2070 00 -6.5758-07 1.1482-05 1.6007 00 5.1172-02 6.9212-00 7.6070 00 1.45972-05 1.0632-05 1.6007 00 5.1172-02 6.9212-00 7.6070 00 1.45972-05 1.0632-05 1.6007 00 1.4582-02 3.6282-00 7.6070 00 1.25972-05 9.7662-06 1.7208 00 1.4582-02 3.6282-00 7.8907 00 1.2592-05 9.7662-06 1.8007 00 1.4582-02 3.6282-00 8.8082-00 1.2582-05 9.7662-06 1.7008 00 1.4578-03 3.6282-00 8.4508 00 1.2032-05 5.1942-06 1.8007 00 1.4582-02 3.6282-00 8.4508 00 2.1328-05 8.2058-06 1.8008 00 9.0758-03 3.22038-00 8.3070 00 1.2032-05 7.5482-06 1.8008 00 9.0758-03 3.2518-00 8.3070 00 1.2032-05 7.5482-06 1.9070 00 6.47182-03 3.6582-C2 8.4508 00 2.1328-05 8.2058-06 1.9070 00 6.47182-03 3.6582-C2 8.7308 00 1.9028-05 7.5482-06 1.9070 00 6.47182-03 8.6482-05 8.7308 00 1.9028-05 7.54082-06 2.0507 00 1.5278-04 8.9018-05 8.8708 00 1.2028-05 7.54082-06 2.0507 00 5.2058-05 8.3622-05 9.1507 00 1.85972-05 5.0018 06 2.1000 5.2058-05 8.3622-05 9.1507 00 1.85972-05 5.0018 06 2.3007 00 5.7742-05 7.7218-05 9.4007 00 1.35972-05 5.0018 06 2.3007 00 5.9578-03 7.00892-05 9.4007 00 7.25982-05 3.8762-06 2.3007 00 5.9578-05 7.00892-05 9.4007 00 7.25972-05 3.8762-06 2.3007 00 5.9578-05 7.00892-05 9.4007 00 7.25972-05 3.8762-06 2.3007 00 5.9578-05 7.00892-05 9.4007 0.29782-05 3.8762-06 2.3007 00 5.9578-05 7.00892-05 9.7608 00 7.25978-05 3.8762-06 2.3007 00 5.9578-05 7.00892-05 9.7608 00 7.20892-07 7.20978-06 2.5007 00 5.9578-05 7.00892-05 9.7608 00 2.9658-07 2.20978-06 2.5007 00 5.7218-05 6.5182-05 1.00262 01 3.4952-07 2.2948-06 2.5007 00 5.7218-05 6.5182-05 1.00428 01 2.49782-07 2.63082 00 5.7218-05 6.51	1.3208 00	-9.2368-04	4.9602-04	6 9 20 7 00	2 3012-05	2./598-05
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1.480E 00	1.5658-02	5.202E-04	7.280E 00	1.3902-05	1.2882-05
1.5602 00 4.8552-02 7.4942-04 7.5202 00 -1.1182-06 1.0902-05 1.6002 00 5.1172-02 6.9212-04 7.6902 00 1.8022-05 1.0632-05 1.6002 00 3.9802-02 5.3022-04 7.6902 00 1.4592-05 1.0632-05 1.6002 00 1.4952-02 3.6242-04 7.8902 00 1.2552-05 9.7662-06 1.7208 00 1.4952-02 3.6242-04 8.0308 00 7.3528-06 9.5342-05 1.7008 00 1.0112-02 2.2018-04 8.1707 00 1.0272-05 8.6432-06 1.8008 00 9.0758-03 1.2512-04 8.4502 00 2.1322-05 7.5482-05 1.9000 0.21728-03 1.2512-04 8.9502 00 2.1322-05 7.5482-05 1.9002 00 2.2182-04 8.9502 00 2.1322-05 7.5482-05 1.9002 00 2.4712-04 9.6782-5 8.7302 01.8022-05 </td <td>1.520E 00</td> <td>3.2862-02</td> <td>6.748E-C4</td> <td>7.400E 00</td> <td>-6.575E-07</td> <td>1.1488-05</td>	1.520E 00	3.2862-02	6.748E-C4	7.400E 00	-6.575E-07	1.1488-05
1.6002 00 3.11/2-02 6.32E-04 7.602 00 1.859E-05 1.063E-05 1.163E-05 1.6602 00 3.960E-02 5.36E-04 7.662 00 1.459E-05 1.063E-05 1.762E-05 1.663E-05 1.762E-05 1.663E-05 1.762E-05 1.762E-05 1.762E-06 7.890E 00 1.259E-05 9.766E-06 1.720E 00 1.459E-02 2.21E-04 8.030E 00 7.359E-06 9.53BE-06 1.760E 00 1.073E-05 2.203E-04 8.310E 00 1.703E-05 8.643E-05 1.850E 00 2.128E-05 8.203E-04 8.310E 00 1.703E-05 8.203E-05 8.302E-05 7.012E-06 2.300E 00 1.527E-04 8.901E-05 8.870E 00 1.8202E-05 7.012E-06 2.300E 00 1.527E-04 8.302E-05 9.3002 00 1.527E-05 8.3042E-05 9.3002 00 1.8202E-05 7.012E-06 2.300E 00 5.205E-05 8.362E-05 9.3002 00 1.3592E-05 3.876E-06 2.210E 00 5.205E-05 8.362E-05 9.3002 00 1.3592E-05 3.876E-06 2.300E 00 5.3774E-05 7.201E-05 9.460E 00 7.210E-06 2.471E-06 7.209E-05 9.3002 00 1.3592E-05 3.876E-06 2.300E 00 5.957E-05 7.008E-05 9.7008 00 2.365E-05 2.471E-06 7.209E-05 9.3002 00 1.3592E-05 3.876E-06 2.300E 00 5.957E-05 7.008E-05 9.7008 00 2.365E-05 2.471E-06 7.209E-05 9.7008 00 2.365E-05 2.471E-06 7.209E-05 9.7008 00 2.365E-05 2.471E-06 7.209E-05 9.7008 00 7.209E-05 7.0282-06 7.209E-05 7.209E-05 9.7008 00 7.209E-05 7.0282-06 7.209E-05 7.209E-07 7.209E-05 7.209E-05 7.2	1.560E 00	4.855E-02	7.4948-04	7.5208 00	-1.118E-06	1.0908-05
1.6000 00 2.4758-02 3.6248-03 7.8900 00 1.258-05 9.7662-05 1.7008 00 1.49802-02 2.6608-04 8.0308 00 7.25802-05 9.7662-05 1.7008 00 1.49802-02 2.6608-04 8.0308 00 7.25802-05 9.1988-06 1.7008 00 1.018-02 2.2018-04 8.1070 00 1.0272-05 9.1988-06 1.8008 00 9.0758-03 2.2038-04 8.3102 00 1.0272-05 8.6328-06 1.8008 00 6.0828-03 1.6528-04 8.4502 00 1.3028-05 7.5488-06 1.9108 00 2.4758-03 1.2518-04 8.5908 00 2.1288-05 7.0128-05 2.0108 00 4.7382-03 1.2518-04 8.5908 00 1.3028-05 7.0128-05 2.0008 00 1.5278-04 8.9018-05 9.1012-05 8.3708 00 1.3028-05 3.00110 00 2.3188-05 4.6158-05 2.1508 00 5.3718-05 9.1508 00 1.3592-05 3	1 6407 00	3 9802-02	5.3211-04 5.309-00	7.7608.00	1.4592-05	1.0638+05
1,720E 00 1,49E-02 2,20E-04 8,030E 00 7,259E-06 9,53E-06 1,53E-06 1,70E 00 1,027E-05 9,194E-06 8,170E 00 1,027E-05 9,194E-06 8,170E 00 1,027E-05 9,194E-06 8,170E 00 1,027E-05 8,643E-06 1,800E 00 9,075E-03 1,251E-04 8,310E 00 1,703E-05 8,643E-06 1,910E 00 2,473E-03 1,251E-04 8,590E 00 2,132E-05 7,544E-06 1,970E 00 2,473E-03 1,251E-04 8,590E 00 2,132E-05 7,544E-06 2,030E 00 1,527E-04 9,678E-05 8,730E 00 1,802E-05 7,012E-06 2,030E 00 1,537E-05 8,041E-05 8,070E 00 1,802E-05 7,012E-06 2,030E 00 1,537E-05 8,343E-05 9,100E 00 1,802E-05 7,012E-06 2,100E 00 6,3734E-05 9,100E 00 1,802E-05 3,00E 00 1,537E-05 3,00E 00 1,537E-05 3,00E 00 1,537E-05 3,00E 00 2,132E-05 3,00E 00 2,132E-05 3,00E 00 2,05E-05 9,300E 00 1,802E-05 3,01E 00 2,05E-05 9,300E 00 1,3592-05 3,01E 00 2,330E 00 5,577E-05 7,069E-05 9,360E 00 2,265E-06 2,471E-06 2,330E 00 5,577E-05 7,069E-05 9,760E 00 2,965E-06 2,471E-06 2,330E 00 5,577E-05 7,069E-05 9,760E 00 2,965E-06 2,471E-06 2,530E 00 5,037E-05 7,069E-05 9,760E 00 2,965E-07 1,842E-06 2,510E 00 5,577E-05 6,513E-05 1,010E 01 1,3095E-07 1,542E-07 2,530E 00 2,572E-05 6,517E-05 1,002E 01 2,977E-07 9,547E-07 2,530E 00 3,721E-05 5,057E-05 1,004E 01 2,972E-07 9,547E-07 2,530E 00 3,002E-05 1,004E 01 2,974E-07 9,547E-07 1,007E-05 1,004E 01 2,974E-07 9,547E-07	1.6808 00	2.4758-02	3.624 2-04	7.8902 00	1.2058-05	9.76E-06
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1.800E 00 9.0758-03 2.2038-04 8.3102 00 1.7038-05 8.6438-06 1.850E 00 6.0488-03 1.652E-C 8.450E 00 2.1288-05 8.2058-06 1.910E 00 2.4758-03 1.2518-04 8.590E 00 2.1288-05 7.5448-06 1.910E 00 6.4718-04 9.6788-C 8.730E 00 1.9028-05 7.0128-06 2.030E 00 1.5278-04 8.901E-05 8.870E 00 1.8028-05 6.3748-06 2.030E 00 1.5278-04 8.901E-05 8.870E 00 1.8028-05 4.6158-06 2.150E 00 6.3658-05 8.3438-C5 9.150E 00 1.8488-05 4.6158-06 2.210E 00 5.2058-05 8.3622-05 9.300E 00 1.3592-05 3.8768-06 2.330E 00 5.2058-05 8.3628-05 9.300E 00 7.2108-06 2.9778-06 2.330E 00 5.9578-05 7.098-05 9.6208 00 2.8658-06 2.4718-06 2.390E 00 5.9578-05 7.0698-05 9.7808 00 2.8968-07 1.8438-06 2.350E 00 5.0698-05 7.0698-05 9.7408 00 2.8968-07 1.8438-06 2.510E 00 5.7218-05 6.6138-05 1.01262 01 2.8978-07 9.5478-07 2.500E 00 5.7218-05 6.6138-05 1.0026 01 2.8958-07 9.5478-07 2.500E 00 5.7218-05 6.6138-05 1.0026 01 2.8958-07 9.5478-07 2.500E 00 5.7218-05 6.5138-05 1.0026 01 2.9978-07 9.5478-07 2.630E 00 5.7218-05 6.5718-05 1.0026 01 2.9978-07 9.0438-07 2.630E 00 5.7218-05 6.5718-05 1.0026 01 2.9978-07 9.5478-07 2.630E 00 3.0048-05 7.0588 01 2.9978-07 9.5478-07 3.630E 00 3.0048-05 7.0588 01 2.9978-07 9.5478-07 3.630E 00 3.0048-05 7.0588 01 2.9978-07 9.5478-07 3.630E 00 3.0048-05 7.0588 01 2.9978-07 9.4438-07 3.630E 00 3.0048-05 6.5778-05 1.00428 01 2.9978-07 9.4438-07 3.630E 00	1.760E 00	1.101E-02	2.211E-04	8.170E 00	1.0272-05	9.194E-06
1.8508 00 6.0882-03 1.2512-04 8.4502 00 2.1282-05 8.2052-06 1.9102 00 2.4752-03 1.2512-04 8.5908 00 2.1322-05 7.5482-06 1.9702 00 6.4712-04 9.6782-05 8.7302 00 1.9022-05 7.0122-06 2.0302 00 1.5278-04 8.9012-05 8.8702 00 1.8202-05 7.0122-06 2.0502 00 6.45712-05 8.3432-05 8.34702 00 1.8372-05 5.00110 06 2.1502 00 6.3578-04 8.3422-05 9.1502 00 1.8482-05 5.00110 06 2.2102 00 5.2052-05 8.3422-05 9.3002 00 1.8482-05 3.8762-06 2.3302 00 5.7742-05 7.7212-05 9.4602 00 7.2102-06 2.4712-06 2.3302 00 5.9578-05 7.0692-05 9.7608 00 2.9652-06 2.4712-06 2.3302 00 5.9578-05 7.0692-05 9.7608 00 2.9652-06 2.4712-06 2.5102 00 5.9578-05 7.0692-05 9.7808 00 2.9652-07 1.8422-06 2.5102 00 5.5778-05 7.0692-05 9.7808 00 2.9962-07 1.8422-06 2.5102 00 5.7212-05 6.5132-05 1.0122 01 3.4952-07 9.5478-07 2.6302 00 5.7212-05 6.5132-05 1.0422 01 2.7972-07 9.4432-07	1.800E 00	9.075B-03	2.203E-04	8.3102 00	1.703E-05	8.643B-06
1.3102 00 6.4712-04 9.6782-05 1.2312-05 8.3308 00 1.0022-05 7.0722-06 2.0302 00 6.4712-04 8.9012-05 8.8702 00 1.2022-05 6.3742-06 2.0302 00 7.3072-05 8.80702 00 1.2072-05 6.3742-06 2.102 00 5.2052-05 8.3427-05 9.1502 00 1.3572-05 8.6152-06 2.2702 00 5.2052-05 8.3622-05 9.1502 00 1.3592-05 3.8762-06 2.3002 00 5.27742-05 7.7212-05 9.4602 00 7.2102-05 2.9718-06 2.3002 00 5.57742-05 7.2092-05 9.4602 00 7.2092-07 2.29978-06 2.3002 00 5.9578-05 7.0082-05 9.7608 00 9.1992-07 2.29978-06 2.55102 00 5.6012-05 6.7932-05 9.7808 00 9.1992-07 2.29978-06 2.55102 00 5.6612-05 6.7932-05 9.7808 00 9.1992-07 2.29978-06 2.55102 00 5.6612-05 6.7932-05 1.0102 01 1.3592-07 1.8428-06 2.55102 00 5.5778-05 6.6132-05 1.00226 01 3.4952-07 9.5478-07 2.6302 00 5.7218-05 6.5132-05 1.00226 01 2.9972-07 9.5478-07 2.6302 00 3.7218-05 6.5718-05 1.00428 01 2.9972-07 9.5478-07 2.6302 00 3.7218-05 6.5718-05 1.00428 01 2.9922-07 9.4038-07 9.4038-07 0.5408-00 0.57218-05 1.00428 01 2.9922-07 9.4038-07 0.5408-07	1.8508 00	0.088 <u>8</u> -03	1.0328-04	8.450E 00	2.1205-05	7 5492-06
2.0302 00 1,527E-04 8.907E-05 8.8702 00 1.820E-05 6.374E-06 2.0302 00 1,527E-04 8.907E-05 8.8702 00 1.820E-05 6.374E-06 2.0302 00 1,327E-05 8.4872 9.102 00 1.820E-05 6.374E-06 2.1502 00 6.352E-05 8.342E-05 9.1502 00 1.877E-05 3.011E 06 2.2102 00 5.205E-05 8.342E-05 9.3002 1.3592E-05 3.876E-06 2.2102 00 5.774E-05 7.212E-05 9.3002 00 1.3592E-05 3.876E-06 2.3002 00 5.255E-05 7.208E-05 9.3002 00 2.997E-06 2.977E-06 2.3002 00 5.957E-05 7.090E-05 9.6208 00 2.896E-07 1.842E-06 2.3002 00 5.957E-05 9.9402 00 2.896E-07 1.842E-06 2.5102 00 5.607E-05 9.9402 00 2.896E-07	1.9702 00	6.8712+04	9.6782-05	8.730E 00	1.902E-05	7.0128-06
2.0008 00 7.8322-05 8.86682-05 9.002 01 1.372-05 5.0010 06 2.1502 00 6.3652-05 8.3432-05 9.1502 00 1.8682-05 3.8762-06 2.2102 00 5.2052-05 8.3622-05 9.3002 00 1.3592-05 3.8762-06 2.3102 00 6.8702-05 7.7212-05 9.4602 00 7.2102-06 2.9978-06 2.3302 00 6.8702-05 7.2092-05 9.6208 00 2.36558-06 2.4712-06 2.3502 00 5.9578-05 7.0692-05 9.7808 00 9.1992-07 2.24978-06 2.5502 00 5.0892-05 7.0692-05 9.7808 00 2.8968-07 1.8428-06 2.5502 00 5.0892-05 7.0692-05 9.4082 00 2.8968-07 1.8428-06 2.5502 00 5.0892-05 7.0692-05 1.0102 01 1.83058-07 1.2182-06 2.5502 00 5.7218-05 6.5132-05 1.0422 01 2.7878-07 9.5478-07 2.6302 00 3.0928-05 6.5778-05 1.0422 01 2.97878-07 9.4038-07	2.030E 00	1.5278-04	8.901E-05	8.8702 00	1.8202-05	6.374B-06
2.1502 00 6.3652-05 8.3432-C5 9.1502 00 1.8482-05 4.6152-06 2.2102 00 5.2052-05 8.3622-05 9.3002 00 1.3592-05 3.8762-06 2.3702 00 5.7742-05 7.7212-05 9.4602 00 7.2102-06 2.9978-06 2.3302 00 5.9778-05 7.2092-C5 9.6208 00 2.9658-06 2.4718-06 2.3902 00 5.9578-05 7.0902-05 9.7608 00 9.1992-07 1.2498-06 2.5102 00 6.6012-05 6.7932-05 9.9408 00 2.8658-07 1.8432-06 2.5102 00 7.5020-05 6.6132-05 1.0122 01 1.43020-07 1.2182-06 2.5002 00 7.5020-05 6.6132-05 1.0422 01 2.9978-07 9.5478-07 2.6302 00 3.0928-05 6.5778-05 1.0422 01 2.9978-07 9.4038-07 2.6302 00 3.0928-05 6.5778-05 1.0422 01 2.9978-07 9.4038-07 2.6302 00 3.0928-05 6.5778-05 1.0422 01 2.9978-07 9.4038-07 2.6302 00 3.0928-05 6.5778-05 1.0422 01 2.9928-07 9.4038-07 2.6302 00 3.0928-05 6.5778-05 1.0422 01 2.9928-07 9.4038-07 2.6302 00 3.0928-05 6.5778-05 1.0422 01 2.9928-07 9.4038-07 2.6302 00 3.0928-05 6.5778-05 1.0428 01 2.9928-07 9.4038-07 2.6302 00 3.9028-05 6.5778-05 1.0428 01 2.9928-07 9.4038-07 2.6302 00 3.9928-05 9.5778-05 1.0428 01 2.9928-07 9.4038-07 2.6302 00 3.0928-05 9.5778-05 1.0428 01 2.9928-07 9.4038-07 2.6302 00 3.0928-05 9.5778-05 1.0428 01 2.9928-07 9.4038-07 2.6302 00 3.9928-07 9.4038-07 2.6302 00 3.9928-07 2.6302 00 3.9928-07 3.6578-07 3.65	2.0908 00	7.833E-05	8.6682-05	9.0 IUE 00	1.937E-05	5.0010 06
2.210E 00 5.710E-05 8.362E-05 9.3002 00 1.3592-05 3.876E-06 2.270E 00 5.770E-05 7.21E-05 9.460E 00 7.210E-06 2.997E-06 2.330E 00 6.870E-05 7.208E-C5 9.620E 00 2.965E-06 2.471E-06 2.390E 00 5.957E-05 7.098E-05 9.780E 00 9.199E-07 1.842E-06 2.450E 00 5.089E-05 7.069E-05 9.940E 00 2.896E-07 1.842E-06 2.570E 00 6.601E-05 6.793E-05 1.010E 01 1.830E-07 1.218E-06 2.570E 00 5.721E-05 6.513E-05 1.042E 01 2.975E-07 9.547E-07 2.630E 00 5.721E-05 6.513E-05 1.042E 01 2.975E-07 9.403E-07	2.150E 00	6.365E-05	8.3432-05	9.150E 00	1.848E-05	4.6158-06
2.3002 00 6.8702-05 7.209E-05 9.6208 00 2.9658-06 2.9718-06 2.3002 00 6.8702-05 7.209E-05 9.6208 00 2.9658-06 2.4718-06 2.3502 00 5.0982-05 7.099E-05 9.7608 00 9.1992-07 2.2949R-06 2.5502 00 5.0982-05 7.069E-05 9.7008 00 2.8968-07 1.842E-06 2.5502 00 5.6012-05 6.793E-05 1.0102 01 1.8308-07 1.2182-06 2.5502 00 7.5002-05 6.615E-05 1.0262 01 3.4952-07 1.2182-06 2.6302 00 3.7028-05 6.5718-05 1.0422 01 2.7878-07 9.4438-07	2.210E 00	5.205E-05	8.3622-05	9.3002 00	1.3592-05	3.8768-06
2.3002 00 5.057E-05 7.090E-05 9.7808 00 9.1992-07 2.744R-06 2.4502 00 5.0892-05 7.069E-05 9.9408 00 2.8962-07 1.842E-06 2.5102 00 6.601E-05 6.793E-05 1.0102 01 1.430E-07 1.218E-06 2.5708 00 7.580E-05 6.615E-05 1.026E 01 3.495E-07 9.5478-07 2.630E 00 3.008E-05 6.577E-05 1.0422 01 2.787E-07 9.403E-07	2.2/08 00	5.//42-05	7 2098-65	9.4005 00 9.6208 00	2-9658+06	2.97/5-06
2.4502 00 5.0892-05 7.0692-05 9.9402 00 2.8962-07 1.8422-06 2.5102 00 6.6012-05 6.7932-05 1.0102 01 1.3030-07 1.2182-06 2.5702 00 7.5002-05 6.6152-05 1.0262 01 3.4952-07 9.5472-07 2.6302 00 5.7212-05 6.5132-05 1.0422 01 2.7872-07 1.0072-06 2.6902 00 3.0002-05 6.5772-05 1.0528 01 2.9922-07 9.4032-07	2.3902 00	5.9578-05	7.090 B-05	9.7808 00	9.199E-07	2.209R-06
2.510E 00 6.601E-05 6.793E-05 1.010E 01 1.430E-07 1.218E-06 2.570E 00 7.580E-05 6.615E-05 1.026E 01 3.495E-07 9.547E-07 2.630E 00 5.721E-05 6.513E-05 1.042E 01 2.787E-07 1.007E-06 2.600E 00 3.008E-05 6.577E-05 1.058E 01 2.992E-07 9.403E-07	2.450E 00	5.0898-05	7.069E-05	9.9408 00	2.896E-07	1.843E-06
2,5708 00 7.5802-05 6,6158-05 1.0262 01 3.4958-07 9.5478-07 2.6308 00 5.7218-05 6.5138-05 1.0428 01 2.7678-07 1.0078-06 2.6008 00 3.0008-05 6.5778-05 1.0588 01 2.9928-07 9.4038-07	2.510E 00	6.601E-05	6.793E-05	1.010E 01	1.4302-07	1.2188-06
2.690E 00 3.000E-05 6.577E-05 1.058E 01 2.992E-07 9.403E-07	2.570B 00	7.580E-05	6,615E-05	1.0262 01	3.495E-07	9.5478-07
	2.6902.00	3.0048-05	6.577 E-05	1.058E 01	2.9928-07	9.403B-07

INTEGRATED CATA

PROTON ENTRGY INTERVAL (BEV)	I-SECTION (B/SB)	EBROB (B/SR)
3.0002-01 - 4.0002-01	3.0278-02	2.3308-04
4.0008-01 - 5.000E-01	5.0092-04	2.3982-04
5.000E-01 - 6.0001-01	8.280E-04	1.027E-04
6.000E-01 - 7.000E-01	1.0412-03	8.8248-05
7.0008-01 - 8.0008-01	4.5412-05	7.6352-05
8.0002-01 - 1.0002 00	8.9332-03	1.3522-04
1 0000 00 - 1 2000 00	6 270 2-04	8-6287-05
	- 7 3318-05	0 4308-05
1.2008 00 - 1.4002 00	-7.231E-05	9.4245-05
1.400B 00 - 1.600E 00	5.1532-03	1.2062-04
1.600E 00 - 1.800E 00	4.7832-03	7.251E-05
1.800B 00 - 2.000E 00	7.243E-04	2.7592-05
2.000E 00 - 2.500E 00	3.8422-05	3.9438-05
2.5008 00 - 3.000F 00	1.4832-05	3.2842-05
3 0008 00 - 3 6008 00	1 5467-05	3 1557-05
3.000 00 - 3.3000 00	1.5005-05	3.1332-03
3.500E 00 - 4.000E 00	0.7032-06	2.7505-05
4.000 00 - 4.500 DO	1.6352-05	2.5302-05
4.500E 00 - 5.000E 00	-3.2812-06	2.2832-05
5.000x 00 - 6.000x 00	1.750E-05	4.436E-05
6.000E 00 - 7.000E 00	1.9298-05	3.6362-05
7 000 00 - 9 000 00	1 3838-65	1 2517-05
7.0008 00 - 8.0002 00	1.3336-03	
8.000X 00 - 9.000X 00	1.0892-05	7.848E-06
9.0002 00 - 1.0002 UI	8.1432-06	3.1638-06

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DIFFERENTIAL CROSS SECTIONS FOR GANNA BAY PRODUCTION IN V. THE FIRST SET OF WURDEDS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SICCOD SET IS THE GANNA BAY PRODUCTION CROSS SECTION FOR THE LESIGNATED GANNA HAY NUMBER INTERVALS. THIS SECCED SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE DIFFE IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-MATED 10 PERCENT BERGE IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENIRGY = 2.01 TO 2.51 HEV. ANGLE = 125 DEGREES.

PROTON ENERGY (NEV)	I-SECTION (B/SB/MEV)	E EBOB (B/SB/MEV)	FEOTOR ENERGY (NEV)	1-52C7103 (8/58/887)	ERROR (B/SR/8EV)
1.7758-01	1.0000-01	8.9658 01	9.9508 AA	-1 1878-03	7 74 (
2.8752-01	3.4142-01	4.705E-03	2.8102 00	1.8042-05	7.6688-05
3.0252-01	5.419E-01	4.487E-03	2.8702 00	3.871E-05	7.6498-05
3.175E-01	6.2768-01	4.2722-03	2.9308 00	4.338E-05	7.9748-05
3.3252-01	5.4968-01	4.0072-03	2.990E 00	5.7832-05	7.9098-05
3.4752-01	3.7005-01	3.8282-03	3.0508.00	9.2115-03	7.0945-05
3.7758-01	9.9382-02	3.388 2-03	3. 1602 00	6.7082-05	6.2758-05
3.9252-01	4.412B-02	3.3862-03	3.260E 00	7.6762-06	6.6288-05
4.100E-01	1.964B-02	3.5012-03	3.3402 00	4.0492-06	6.7288-05
4.300E-01	1.1562-02	3.7082-03	3.4202 00	4.4892-05	7.55 HE-05
4.7008-01	A. 77AR-03	3.6338-03	3.580E 00	7.1068-05	7.5028-05
9.900B-01	8.336E-03	3.192 B-03	3.660E 00	4.4452-05	6.190E-05
5.1008=01	7,6068-07	3.6168-03	3.7408 00	2.2048-05	6.0158-05
5.3008-01	6.6918=03	1 965 8=03	3 8702 00	3.3048-05	6.451E-05
5.7008-01	1.2507-02	1.0038-03	3 8808 00	5.9598-05	6 6038 00
5.9002-01	1.850E-02	1.4 16 8-03	4.060E 00	4.2358-05	6.8472-05
6.100E-01	2.1498-02	1.494E-03	4.140E 00	3.9182-06	6.0258-05
6.300E-01	1.950E-02	1.770E-03	4.2208 00	-1.9052-05	5.5608-05
6.300E-01	1.403E=02	1.7672=03	4.300E 00	-J.7892-05	5.6852-05
6.9002-01	4.1802-03	1.5012-03	4.460E 00	-3.9652-05	5. 1778-05
7.100z-01	1.9678-03	1.4372-03	4.540B 00	-6.798E-06	5.345E-05
7.300E-01	9.714E-04	1.4382-03	4.630E 00	4.127E-05	5.1108-05
7.5002-01	7.192B-04	1.4312-03	4.7308 00	7.5152-05	4.9432-05
7.9008-01	9.3538-04	1.4158-03	4.8308 00	3 9212-05	5 1228-05
8.1008-01	9.1238-03	1.3998-03	5.0308 00	J.539E-06	5.0618-05
8.300E-01	1.105B-02	1.371E+C3	5.1308 00	-2.023E-05	5.2538-05
8.500E-01	2.560E-02	1.352 2-03	5.230E 00	-1.9C2E-05	4.7958-05
8.7002-01 9.0002-01	4.0188-02 7.3308-03	1.4048+03	5.3302 00	-5.7802-06	5.4128-05
9.1002-01	9.177E-02	1.3642-03	5.530E 00	1.6102-05	4.7248-05
9.3008-01	9.576E-02	1.3632-03	5.630E 00	2.0672-05	4.5048-05
9.500E-01	8.473E-02	1.336E-03	5.730E 00	2.0992-05	4.4468-05
9.7002-01	6.466E-02	1.3312-03	5.830B 00	2.9712-05	5.0558-05
1.0402 00	9.00AP-03	1. 1638-03	5.9308 00	4.2492-05 5.209P-05	4.8758-05
1.080E 00	1.200E-03	9.670E-C4	6.130B 00	3.6318-05	4.660B-05
1.120E 00	-3.7958-04	1.0012-03	6.230E 00	2.147E-05	4.6758-05
1.160E 00	-1.1962-03	9.448E-04	6.330E 00	1.179z-05	4.2718-05
1.2002 00	-1.7488-03	9.9548-64	6.4408 00	-1.5018-06	4.4138-05
1.2802 00	-1.2468-03	1.3238-03	6.680E 00	-2.2912-05	3.5788-05
1.3208 00	-1.069E-03	1.279E-C3	6.800E 00	-2.2118-05	3.2828-05
1.360E 00	9.3728-04	1.2528-03	6.920B 00	-5.2748-06	2.94#B-05
1.4008 00	7.3148-03	1.3598-03	7.0408 00	1.350E-05	2.4525-05
1.480E 00	3.9568+02	1.4 10 8-03	7.2802 00	2.5092-05	1.0738-05
1.520E 00	6.8812-02	1.6328-03	7.8008 00	1.603#+05	1 750#=05
1,5608 00	9.786E-02	1.8482-C3	7.5208 00	9.2998-06	1.6338+05
1.600E 00	1.0698-01	1.656B-03	7.6402 00	7.6078-06	1.5178-05
1 6002 80	6 A112-02	1.0538=03	7.4907.00	1.4728-03	1.4375-03
1.720E 00	6.213E-02	9.6922-04	8.0302 00	1.4268-05	1.4238-05
1.760E 00	6.946E-02	9.6932-04	8.17CB 00 -	1.1932-05	1.3338-05
1.8002 00	7.2228+02	1.066 2-03	8.310E 00	7.9812-06	1.2608-05
1.9108 00	2.5178-02	A. 0 22 E- 04	8.5907 00	1.7487-06	1.1368-05
1.970B 00	7.050g-03	2.026E-04	8.730E 00	6.6502-07	1.0618-05
2.030E 00	1.4972-03	1.2238-04	8,870E 00	4.302E-06	9.9338-06
2.090E 00	3.961E-04	1.1298-04	9.0102 00	9.786E-06	9.5328-06
2.1508 UD	2.0/48-04	1.094 5-04 5.999 8- CS	9.1305 00	1.49/8+05	0.0425-06 7.7488-06
2.2702 00	2.0032-04	9.2598-05	9.4608 80	1.2038-05	7.3408-06
2.330E 00	1.2358-04	9.034 R- 05	9.6208 00	1.518E-05	5.9672-06
2.390E 00	4.931E-05	8.926E-C5	9.780E 00	8.7492-06	5.5838-06
2.450E 00 2.5108 00	7,8662m05	8,7588=05 8 0138-05	9.9407 00	1.5763-06 1.6688-04	4.9935-06
2.570E 00	7.738E-06	8.3838-05	1.0268 01	0.3792-07	2.4268-06
2.6302 00	-1.1098-05	8.481 2-05	1.042E 01	1.578E-07	2.9728-06
2.6902 00	-2.441E-05	8.029E-C5	1.0582 01	2.2968-07	2.9008-06

INTECRATED CATA

PHOTON ENERGY INTERVAL	I-SECTION	ERROR
(#27)	(B/SR)	(B/SB)
3.0002-01 - 4.0002-C1	3.4178-02	3.7868-09
4.000E-01 - 5.000E-01	1.190E-03	3.5468-04
5.000E-01 - 6.000E-01	1.061E-03	1,8228-04
6.000E-01 - 7.000E-01	1.3432-03	1.6358-04
7.0008-01 - 8.0002-01	1.311E-04	1.4238-04
8.0008-01 - 1.0001 00	1.0852-02	2.7108-04
1.0008 00 - 1.200E 00	8.9272-00	2.0678-04
1.2008 00 - 1.4008 00	-3.004E-05	2.4778-04
1.4008 00 - 1.6008 CO	1.1358-02	3.110B-04
1.6008 00 - 1.8008 00	1.5092-02	2.2548-04
1.8008 00 - 2.000E 00	6.6468-03	1.0178-04
2.0008 00 - 2.5008 00	1.8652-04	5.0328-05
2.500E 00 - 3.000E CO	6.6198-06	\$.012B-05
3.0008 00 - 3.500F 00	2.6018-05	3.5578-05
3.5008 00 - 4.000F 00	2.5848-05	3.3988-05
8.0008 00 - 4.500F 00	-6.4112-06	2.9938-05
4.500E 00 - 5.000E CO	2.2918-05	2.6298-05
5.000E 00 - 6.000E 00	1.0602-05	4.985E-05
6.0008 00 - 7.000E 00	3.8218-06	4.0178-05
7.0008 00 - 8.000E 00	1.5328-05	1.7438-05
8.0008 00 - 9.0008 00	6.3318-06	1.1798-05
9.0008 00 - 1.0007 01	1.3252-05	6.9158-06

DIPPERENTIAL CROSS SECTIONS FOR GAMMA PAT PRODUCTION IN V. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMAA BAY PRODUCTION CROSS SECTION FOR THE LESIGNATED GAMAA BAY ERENGY IFFERENTIS. 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 ESTI-MATED 10 FEBCENT EREOR IN ABSOLUTE NORMALIZATION.

PHOTON ENEBGY (NEV)	X-SECTION (B/SE/NEV)	E ER O B (8/5 5/ 112 V)	FBOTON ENBBGY (HEV)	I-SECTION (B/SR/NEV)	BBBOB (B/SB/BEV)
2.7258-01	1.7142-01	5.9198-03	2.750E 00	1.1892-05	1.003E-04
2.8752-01	3.5682-01	5.642E-03	2.8102 00	2.7322-05	9.81CE-05
3.025E-01	5.238E-01	5.3172-03	2.870E 00	4.3352-05	9.7858-05
3.175E-01	5.668E-01	5.0 14 E-03	2.930E 00	5.386z-05	1.0468-04
3.325E-01	4.689E-01	4.8152-C3	2.9908 00	2.0922-05	9.945E-05
3.475E-C1	3.0842-01	4.526E-C3	3.0502 00	-2.1062-05	9.9768-05
3.6252-01	1.6948-01	3.976 Z-03	3.110E 00	-4.8752-05	9.4842-05
3.775E-01	6.273E-02	3.935E-C3	3.1808 00	-2.3918-05	1.0108-04
3.9258-01	3.9692-02	4.0692-03	3.2002 00	4 2528-05	9 0378-05
B 300P-01	1.5138-02	4. 3172-03	3.4208 00	9.3768-05	9.5088-05
4.500E-01	1.2642-02	4.430E-03	3.500E 00	1.0862-04	9.4048-05
9.700 g-01	1.0908-02	4.346B-C3	3.5802 00	9.6552-05	9.5668-05
4.900E-01	1.079E-02	3.7C4E-03	3.6602 00	7.1132-05	9.3608-05
5.100E-01	1.012E-02	3.004 E-03	3.7402 00	4.9212-05	8.796E-05
5.300E-01	7.673E-03	2.4442-03	3.8202 00	3.2178-05	9.0238-05
5.3008-01	1 1228-03	2.1012-03	3.9002.00	-5 0000-05	8 3669-05
5.9002-01	1.7648-02	1.8758-03	4.060P 00	-4.1272-06	9.2128-05
6.1002-01	2.0652-02	1.891E-03	4.1402 00	-1.035E-05	8.7018-05
6.300E-01	1.7732-02	2.196 E-03	4.220E 00	-2.8332-05	8.2588-05
6.500E-01	1.1492-02	2.292E+C3	4.3002 00	-4.254E-05	8.7288-05
6.7002-01	5.875E-03	2.169 E-03	4.380E 00	-4.2832-05	7.5238-05
6.900E-01	2.580E-03	2.0078-03	4.460B 00	-2.2322-05	6.9642-05
7.100E-01	1.0982-03	1.9152-03	4.5402 00	2 66 28-06	7.4605-05
7.5005-01	2.0508-04	1.9232-03	4.730P 00	5.7078-05	7.5488-05
7.700E-01	3.220E-04	1.8352-03	4.830E 00	4.8692-05	8.3278-05
7.900E-01	1.3958-03	1.8 14 E-03	4.930E 00	2.2102-05	7.4948-05
8.100E-01	4.5928-03	1.805E-03	5.0302 00	1.695E-06	6.902B-05
0.300E-01	1.215E-02	1.7232-03	5.1308 00	-2.440E-05	7.186B-05
8.5002-01	2.6888-02	1.7382-03	5.2308 00	-3.0682-05	7.0328-03
8 9002-01	7 20072-02	1 7478-03	5.4302 00	2.0338-05	7.9458-05
9.1002-01	8.8318-02	1.710E-03	5.5302 00	5.787E-05	6.845E-05
9.300E-01	9.011E-02	1.666E-03	5.6302 00	5.921E-05	7.225E-05
9.500E-01	7.823E-02	1.6912-03	5.730E 00	3.2032-05	6.822E-05
9.7002-01	5.873E-02	1.6788-03	5.8308 00	1.2022-05	6 6 2 2 2 - 05
1.0002 00	2.9928-02	1.5872-03	5.930E 00	6 5102-06	6 7602-05
1.0807 00	2.0498-04	1. 327E-C3	6.130E 00	1.106E-05	6.404E-05
1.120E 00	-1.026E-03	1.350 E-03	6.230E 00	-1.130E-05	5.847E-05
1.160g 00	-1.470E-03	1.283E-03	6.3308 00	-3.200E-05	5.885 2-05
1.200E 00	-2.132E-03	1.3382-03	6.440B 00	-2.3582-05	5.633E-05
1.2402 00	~2.954E-03	1.559E-03	6.560E 00	1./832-05	4.9898-05
1 3258 00	-5 2088-04	1 690 - 03	6 800F 00	4.1322-05 A 1138-05	8 609P+05
1.3602 00	2.455E-03	1.663E-03	6.9202 00	1.4422-05	3.5468-05
1.400E 00	1.047E-02	1.849E-C3	7.0402 00	1.7872-06	3.3388-05
1.4402 00	2.582E+02	1.828E-03	7.160g 00	2.550E-06	2.978E-05
1.480P 00	5.0992-02	1.904 E-03	7.2808 00	3.580E-06	2.666B-05
1.5208 00	8.8198-02	2.2212+03	7.4008 00	4 1608-06	1 9108-05
1.600P 00	1.3108-01	2. 150 2- 03	7.6908 00	1.4262-05	2.0098-05
1.640E 00	1.0892-01	1.7662-03	7.7602 00	2.2452-05	1.8342-05
1.680E 00	8.2958-02	1.426E-03	7.8902 00	2.0532-05	1.65CB-05
1.7208 00	7.6648-02	1.397 E- C3	8.0308 00	7.3578-06	1.5798-05
1.760E 00	8.4822-02	1.380 E-03	8.1702 00	-4.057E-06	1.4738-05
1.8002.00	6.0132-02	1.027 - 03	8.4502 00	1.6858-05	1.4688-05
1.910E 00	2.9072-02	5.777E-04	8.590E 00	3.5492-05	1.5758-05
1.970E 00	1.100E-02	3.641E-C4	8.7302 00	3.586E-05	1.5178-05
2.030E 00	7.127E-03	2.997E-04	8.8701 00	1.573E-05	1.3928-05
2.090B 00	6.247E~03	3.039B-04	9.0108 00	·5·7372-06	1.3458-05
2.150E 00 2.210E 00	1.9302-03	2.4712-64	9.1508 00 9.300P 00	-1.1118-03	1.3438-05
2.2708 00	1.1618-03	1.938 E-04	9.460E 00	1.579E-05	9.9738-06
2.330E 00	1.505E-03	1.7918-04	9.620B 00	2.473E-05	9.4628-06
2.390E 00	1.780E-03	1.651E-04	9.780E 00	2.487E-05	1.0528-05
2.450E 00	1.3708-03	1.475E-04	9.940E 00	1.6722-05	7.1038-06
2.510E 00	0.616E-04	1.3898-04	1.0108 01	1.0322+05 5 7388-04	4.9438-06 3 0208-04
2.5762 00	6.7502-04	1.0118-04	1.0428 01	1.6812-06	9.8388-06
2.6908 00	-9.6162-06	9.6868-65	1.0588 01	1.2402-06	3.7188-06

INCIDENT NEUTRON ENERGY = 2.51 TO 2.98 NEV. ANGLE = 125 DEGREES.

INTEGRATED CATA

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PHOTON	ENE	BGT	INTERV	7 A L	1-SECTION	BBBOB
		(NEA)		(B/SR)	(B/SR)
3.0002-	01	-	4.0001-	-01	2.9872-02	4.4872-04
9.000E-	-01	-	5.000E-	-01	1.433E-03	4.2018-04
5.0008-	-01	-	6.000 F-	-01	1.0692-03	2.3012-04
6.000B-	01	-	7.0COE-	01	1.1602-03	2.1158-04
7.000E-	01	-	8.000E-	01	7.5162-05	1.8772-04
8.0008-	01	+	1.000E	00	1.0378-02	3.4318-04
1.000E	00	-	1.200E	00	6.740 E-04	2.7642-04
1.2008	00	-	1.900E	00	-3.6128-06	3.3068-04
1.400B	00	-	1.6001	00	1.4402-02	4.1778-04
1.6008	00	-	1.8002	00	1.8372-02	3.0938-04
1.800E	00	•	2.0001	00	7.8721-03	1.4608-04
2.000E	00	-	2.5002	CO.	1.5528-03	1.0798-04
2.5002	00	-	3.000 E	00	4.3692-05	5.2721-05
3.000E	00	-	3.5001	00	1.2582-05	9.865B-05
3.500B	00	-	4.000E	00	2.5392-05	4.4962-05
4.0002	00	•	4.500E	CO.	-1.2042-05	4.1238-05
4.500E	00	•	5.0001	00	1.715z-05	3.8611-05
5.000B	00	•	6.000E	00	9.6532-06	7.1488-05
6.000E	00	-	7.000E	00	8.6112-06	5.2728-05
7.0008	00	-	8.000E	00	9.5772-06	2.2402-05
8.0008	00	-	9.0007	00	1.9372-05	1.4828-05
9.0008	õõ.	-	1.0007	Č1	1.0602-05	1.0798-05

DIFFERENTIAL CROSS SECTIONS FOR GAMMA FAT PRODUCTION IN V. THE FIRST SET CF WUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE'SECOND SET IS THE GAMMA BAY PRODUCTION CROSS SECTION FOR THE LISIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET BESULTS FROM INTERGATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTIAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DC NOT INCLUDE AN ESTI-MATED 10 PERCENT ERROR IN AFSOLUTE NOFRALIZATION.

INCIDENT NEUTRON ENERGY = 2.98 TO 3.49 MEV. ANGLE = 125 DEGREES.

PROTON ENERGY (NEV)	I-SECTION (B/SR/MEV)	2 5RC2 (8/SR/82V)	FROTON ENERGY (MEV)	X-SECTION (B/SR/REV)	EBROB (B/SB/MEV)
5 5485 At	1 5000 51		1 1500 00	2 0228403	2 1678-04
2 4762-01	2 0692-01	6 5618-03	2 8 108 00	1 7645-03	1 9828-00
3.0258-01	9.5598-01	6.0812-03	2.870E 00	1.4622-03	1.865E-04
3.175E-01	4.999B-01	5.6C4E-C3	2,9302 00	1.423E-03	1.7782-04
3.3258-01	4.178E-01	5.678E-03	2.9902 00	1.4142-03	1.830E-04
3.4758-01	2.775E-01	5.564 E-03	3.050E 00	1,2272-03	1.820E-04
3.6252-01	1.5388-01	5.093E-C3	3.1108 00	9.300E-04	1.6872-04
3.7752-01	7.691E-02	5.096E-03	3.180E 00	5.881E-04	1.533E-04
3.9252-01	3.956E-02	5.0 12 E- C3	3.260E 00	2.773E-04	1.261E-04
9.100E-01	2.2492-02	5.088E-C3	3.3402 00	1.3482-04	1.1108-04
4.3002-01	1.5702-02	5.508E-03	3.4202 00	9.4798-05	1.1728-04
9.5008-01	1.4055-02	5.355B-93	1.500x 00	1.1048-01	1.3118-04
4.7005-01	1.4208-02	3. 1712-03	3.5002 00	-0 1078-05	0 7102-05
5 1002-01	A AAOP-01	1 8638-63	3.3008 00	-6 3108+05	1.0807-09
5. 2004+01	7.6388 03	3.0728-03	3 8 20 7 00	-7.261F-05	9.2228-05
5.5008-01	8.9782-03	2.6036-93	3.9008 00	-3.492E-05	9.864E-05
5.7006-01	1.2332-02	2.9678-02	3,9802 00	1.9622-05	1.0288-04
5.900E-01	1.756E-02	2.427E-03	4.0602 00	8.3352-05	1.0228-04
6.100E-01	1.9192-02	2.534E-C3	4.140E 00	8.9812-05	9.894E-05
6.3002-01	1.702E-02	2.8822-03	4.220E 00	5.456E-05	1.0558-04
6.500E-01	1.2428-02	2.775E-03	4.3002 00	1.3552-05	1.0578-04
6.700B-01	7.5092-03	2.551E=C3	4.9605 00	~3.9028-06	1.1248-04
8.9002-01	3.8162-03	2.4102-03	4.4602 00	1.2812-05	1.0198-04
7.100E-01	1.5598-03	2.3142-03	4.5408 00	5.7028-05	9.4302-05
7.3002-01	4.5235-04	2.20/5-03	4.6305 00	7 0138-05	1.0395-04
7 7007-01	6. 896P+04	2. 3 16 8+ C3	8.8302 00	7.0018-05	9.7048-05
7.9008-01	2.2548-03	2.2228-03	4.930F 00	7.926 -05	8.4308-05
8.1002-01	5.6132-03	2.156E-C3	5.030E 00	4.5412-03	7.759B-05
8.3008-01	1.3438-02	2.053E-C3	5.130E 00	-2.118E-05	8.5908-05
8.500E-01	2.8602-02	2.0072-03	5.230E 00	-6.750E-05	9.6178-05
8.700E-01	5.102E-02	2.048 2-03	5.330E 00	-6.2902-05	8.959E-05
8.9002-01	7.4822-02	2 - 0 19 2 - C 3	5.430E 00	-4.6342-05	7.735E-05
9.100E-01	9.093E-02	1.927E-03	5.5302 00	-2.8382-05	7.982E-05
9.300E-01	9.313E-02	1.886E-C3	5.630E 00	1.4802-06	8.6222-05
9.5002-01	8.156E-02	1.9402-03	5.730E 00	1.8632-05	8.6312-05
9.7008-01	3 3658-02	1.9522-03	5.6302 00	3.9972-05	8.344 <u>5</u> -03
1.0002 00	1 4978-02	1.0302-03	5.9305 0V	6 3312-05	3 3648-05
1 0907 00	1 0928-02	1 6038-03	6 1302 00	3 8682-05	7 4338-05
1.1208.00	6.0698-03	1.6978-63	6.230E 00	9.794E-06	7.6208-05
1.160B 00	8.1772-04	1.531E-03	6.330E 00	-2.986E-05	7.2318-05
1.200E 00	-1.501E-03	1.594E-03	6.440E 00	-7.522E-05	6.866E-05
1.200R 00	-1.697E-03	1.764E-C3	6.560E 00	-1.012E-04	5.2118-05
1.28CE 00	-1.2282-03	2.011E-03	5.680E OU	-9.9512-05	4.9796-03
1.320E 00	-1.225E-03	1.995E-C3	6.800E 00	-3.7182-05	5.725E-05
1.3602 00	8.8222-04	2.0372-03	6.920E 00	3.365E-05	4.1078-05
1.4002 00	9.3408-03	2.2552-63	7.0401 00	8.3522-05	3.5/58-05
1.4408 00	2.3938-02	2.2405-13	7.1602 00	3.4912-05	3.0/22-05
1.6301 00	9 1608-02	2.504 2-03	7.4008.00	4 2332-05	2.0235-03
1.5602 00	1.2758-01	2.6858-03	7.5208 00	1.5698-05	2.3658-05
1.600E 00	1.3698-01	2.523E-03	7.640F 00	-1.3112-06	1.8118-05
1.640E 00	1.1638-01	2.126E-C3	7.760E 00	-3.358E-06	1.5342-05
1.680E 00	9.07 1E-02	1.738E-C3	7.890E 00	5.412E-06	1.3948-05
1.7202 00	8.345E-02	1.6732-03	8.0302 00	1.7222-05	1.266B-05
1.760E 00	9.025E-02	1.719E-C3	8.170E 00	1.7682-05	1.144E-05
1.800Z CO	8.990E-02	1.904 E-03	8.310E 00	6.387E-06	1.0352-05
1.8502 00	6.629B-02	1.307E-03	8.4502 00	-2.8822-06	1.0122-05
1.9 TUE 00	3.00/2-02	E. 328 E- 04	8.5902 00	-2.1322-06	1.0208-05
2 0308 00	1 3150-02	5 3638-04	8 8702 00	1 2028-05	9.9/CE-06
2.0902 00	1.2982-02	5,3975-04	9.0109.00	1.65020-05	1 1600-05
2.15CR 00	8.8348-03	4.602 E-04	9.150P 00	1.9592-05	1.1002-05
2.2101 00	9.3268-03	3.8992-Cu	9.3008 00	1.8152-05	1.1028-05
· 2.2702 00	2.652E-03	3.521B-04	9.4602 00	1.3708-05	4.15ER-06
2.330E 00	3.104B-03	3.177 8-04	9.6208 00	7.6502-06	9.0112-06
2.390E 00	3.2538-03	2.980E-C4	9.780E 00	3.8922-06	1.078E-05
2.4508 00	2,1862=03	7,971P-04	9.940E 00	4.8805-06	1.0318-05
2.510E 00	9.1982-04	2.832E-Cu	1.010E 01	5.531E-06	6.42JE-06
2.5702 00	5.2712-04	2.683E-C4	1.026E 01	8.2392-06	6.577B-06
2.630E 00	1.031E-03	2.5542-04	1.042E 01	1.0192-05	7.183E-06
2.690E 00	1./08B-03	2.38/2-04	1.0582 01	1.0202-05	8.1362-06

INTEGRÁTED CATA

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PHOTON ENERGY INTERVAL	I-SECTION	ERBOR
(MEV)	(B/SR)	(B/SB)
3.0002-01 - 4.0C0E-01	2.6638-02	5.4082-04
4.000E-01 - 5.000E-01	1.5922-03	5.1712-04
5.000E-01 - 6.000E-C1	1.117E-03	2.8962-09
6.000E-01 - 7.000E-01	1. 197 2-03	2.6348-04
7.0008-01 - 8.000E-C1	1.0862-04	2.2922-04
8.000E-01 - 1.000E 00	1.0862-02	1.9428-04
1.0002 00 - 1.2002 00	1.8962-03	3.3318-04
1.2008 00 - 1.4008 00	-1.2578-05 .	3.8922-04
1.400E 00 - 1.600E CO	1.4902-02	4.8172-04
1.600E 00 - 1.800E 00	1.968F-02	1.761E-04
1.8008 00 - 2.000F 00	8.3142-03	2.0098-04
2.0008 00 - 2.5008 00	3.0678-03	1.9737-04
2.500E 00 - 3.000E 00	6.9078-04	1.1102-04
3.000E 00 - 3.500E 00	2.4847+04	7.0452-05
3.5007 00 - 4.0007 00	-1.2178-05	5 1588-05
4.000E 00 - 4.500E 00	2.0747-05	5.2202-05
8.500F 00 - 5.000F 00	3.0952-05	5 0067-05
5 000 00 - 6 000 00	-6 1618-06	0 4010-05
6 000 00 - 3 000 00	-2 6339-06	6 1308-05
3 000 00 - 4 000 00	3 6008-05	3.7395-05
9 000E 00 - 8.000E 00	3.3702-03	2.375E-05
5.000E 00 - 9.000E 00	1.90/2-00	1.0008-05
9.0002 00 - 1.0002 01	1.1642-05	1.0372-05

DIFFEMENTIAL CROSS SECTIONS FOR GAMMA BAT PRODUCTION IN V. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SICOND SET IS THE GAMMA BAT PRODUCTION CROSS SECTION FOR THE ESSGNATED GAMMA BAT BUBGOT IMPERVALS. THIS SECOND SET RESULTS FREE HERBERATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCRETAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-BATED 10 PERCENT BERGE IN ABSOLUTE MOBBALIZATION.

		-	3 40 80			176	
I BLIDE T	BUIRU	 _	3.49 10	4.00 0674	ADG70 -	163	MEAU 0000+

PROTON BUEBGY (NBV)	I-SECTION (B/SB/BEV)	ERROR (B/SF/REV)	FROTON BUBBGT (SEV)	I-SECTION (E/SR/MEV)	ESBOB (B/SR/BEV)
2.7258-01	1.7568-01	8.3858-03	2.7502 00	6.830E-03	6.763E-04
2.8758-01	3.3898-01	7.7632-03	2.8108 00	8.0602-03	6.901B-04
3.0258-01	4.750B-01	7.3608-03	2.870E 00	9.635E-03	6.708E-04
3.1758-01	5.0168-01	6.866 E-03	2.9302 00	1.1082-02	6.658E-04
3.3258-01	4.1068-01	6.6002-03	2,9908 00	1.2302-02	5.5128-04
3.4758-01	2.7038-01	6.704 E-03	3,0508,00	1 4302-02	5.4522+04
3.0255-01	7.9318-02	5.9688-03	3.140R 00	1.0808-02	5.1108-04
3.9258-01	4.3098-02	6.125E-03	3,2608 00	1.6372-02	4.837E-04
4.100E-01	2.6148-02	6.3872-03	3.3402 00	1.777E-02	4.7C2B-04
4.300B-01	2.073B-02	6.532E-C3	3.420B 00	1.6452-02	4.184B-04
4.500E-01	2.1378-02	6.4032-03	3.5008 00	9 6147-03	3.7098-04
8.700E-01	2.3405-02	5.5C4E-C3	3.660F 00	4.8122-03	2.2802-04
5.1008-01	1.5278-02	4.708E-03	3.7408 00	2.275E-03	2.0C1E-04
5.300B-01	1,2598-02	3.828E-03	3.820E 00	1.036E-03	1.6678-04
5.500E-01	1.275E-02	3.355 E-C3	3.9001 00	4.532B-04	1.4358-04
5.7008-01	1.4758-02	3.188 2-03	3.9802 00	1.9402-04	1.3/08-04
5.9008-01	2.0978-02	3.0472-03	4.1802.00	9.8112-05	1.4162-04
6.300E-01	1.790B-02	3.4452-03	4.2208 00	7.647E-05	1.4538-04
6.5008-01	1.133E-02	3.5352-03	4.300E 00	1.7842-05	1.299E-04
6.700E-01	6.3472-03	3.447E-03	4.380I 00	-1.7042-05	1.2558-04
6.900E-01	4.7428-03	3.199E-03	4.4602 00	~5.6922~05	1.1938-04
7.3008-01	3.7528-03	2.7118-03	4.630R 00	~ 1.068P-04	1.377R-04
7.5008-01	1.945E-03	2.685E-C3	4.730E 00	-8.374E+05	1.160E-04
7.700E-01	5.030B-04	2.7 12 E-03	4.830E 00	-2.5441-05	1.117B-04
7.9008-01	1.163B-03	2.704 E- C3	4.930E 00	4.0702-05	1.1058-04
8.100E-01	4.913E-03	2.6692-03	5.0302 00	9.2738-05	1.0312-04
8.3008-01	2 7798-02	2.30/2-03	5.230P 00	1.1862-04	1.1278-04
8.700E-01	4.851E-02	2.545E-03	5.3302 00	7.0712-05	1.165E-04
8.900E-01	7.031E-02	2.6 18 2-03	5.430B 00	1.811E-05	1.023B-04
9.1008-01	8.4812-02	2.553E-C3	5.530B 00	6.950E-06	1.0328-04
9.3008-01	8.61JE-02	2.446 2-03	5.6302 00	3.0028-00	9.82/5-05
9.7008-01	5.6768-02	2.5312+03	5.830E 00	2.4588-05	1.0618-04
1.000B 00	3.3938-02	2.4 16 E-03	5.930E 00	5.980E-06	9.4958-05
1.040E 00	2.4128-02	2.3092-03	6.030B 00	-1.595E-05	8.902E-05
1.080E 00	2.3138-02	2.029 E- 03	6.130E 00	-3.2028-05	8.7778-05
1.1202 00	1.5958-02	2.0/92-03	6.230E UU	-1.393E-03	1.0398-04
1.2008 00	1.0738-03	1.9568-03	6.4402 00	2.446E-05	8.3498-05
1.240E 00	-2.538B-03	2.273 E-03	6.560E 00	2.6792-05	7.109E-05
1.280E 00	-2.1678-03	2.4898-03	6.6802 00	-4.581E-06	7.8378-05
1.320E 00	-2.801E-04	2.4628-03	6.800E 00	-4.4422-05	6.909B-05
1.4898 90	1 0002-02	2.4002-03	1 0408 00	-5.0002-05	8 7338-05
1.940E 00	2.757B-02	2.634 E-03	7.160E 00	-2.8682-05	4.0378-05
1.480E 00	5.6298-02	2.6 C6 2-03	7.2802 00	1.0828-06	3.969B-05
1.520E 00	9.0138-02	3.0612-03	7.400E 00	2.066 E-05	3.177B-05
1.5602 00	1.3712-01	3.4342-03	7.520E 00	2.9432-05	2.8578+05
1.6408 00	1.4/15-01	2.7978-03	7.8402 00	3.2162-05	2.0052-05
1.6808 00	1.0298-01	2.3671-03	7.8902 00	1.926E-05	1.9518-05
1.720E 00	9.9888-02	2.238E-03	8.030E 00	3.797B=06	1.6912-05
1.760E 00	1.0678-01	2.1832-03	8.170E 00	-3.329E-06	1.5518-05
1.800E 00	1.0148-01	2.3/18-03	0.3102 00 0 0502 00	-3.3938-06	1.5/88-05
1.910E 00	3.364E-02	1.2178-03	8.590E 00	8.9C2E-06	1.1148-05
1.970E 00	1.871E-02	1.066B-C3	8.730E 00	1.706E-05	1.1778-05
2.030E 00	1.9178-02	9,9131-04	8,870E 00	2.011E-05	1.059E-05
2.090E 00	1.9612-02	1.0052-03	9.0 10E 00	1.742E+05	9.760Z-06
2.1508 00	1.43/8-02 8 5958-03	9.0832-04	9.1502 00	5.0582-04	9.1808-06
2.270E 00	6.386E-03	7.8382-04	9.460E 00	3.7692-06	9.030B-06
2.330E 00	5.0378-03	7.697E-C4	9.6208 00	7.344E-06	8.5078-06
2.3902 00	4.792E-03	7.3422-04	9.780E 00	1.0212-05	8.701E-06
2.450E 00	3.3212-03	7.1622-04	9.940E CC	1.1558-05	1.0288-05
2.5108 00	2.1358-03	7.3462-04	1.0268 01	9.30/2-06	5.176E-06
2.6302 00	3.534B-03	7.1C4 E- 04	1.0428 01	5.742E-06	5.7928-06
2.690E 00	5.467E-03	6.752 E-04	1.058E 01	3.7272-06	5.867E-06

INTEGRATED CATA

PROTON ENT	BGY INTERVAL BEV)	B-SECTION (B/SB)	BBBOB (B/SB)
3.0002-01	- 4.0001-0	2.6672-02	6.5212-04
4.000Z-01	- 5.000E-01	2.2682-03	6.2142-04
5.0008-01	- 6.000 E-01	1.483E-03	3.6292-04
6.000E-01	- 7.0001-0	1.2218-03	3.339g-04
7.000E-01	- 8.0001-01	1 2.437E-04	2.745E-04
8.000E-01	- 1.0002 CI	1.015z-02	5.0838-04
1.000g 00	- 1.2002 00) 3.507E-03	4.2022-04
1.200g 00	- 1.4001 00	6.523B-05	4.777E+04
1.400B 00	- 1.6001 00) 1.596E-02	5.866E-04
1.6002 00	- 1.800E CO	2.233E-02	4.9082-04
1.800E 00	- 2.000F 00) 9.343E-03	2.8532-04
2.0008 00	- 2.5002 00) 4.988E-03	4.203E-04
2.500E 00	- 3.000z 00) 3.376E-03	3.4472-04
3.000g 00	- '3.500E 00) 7.70 31- 03	2,4738-04
3.500g 00	- 4.0001 00) 1.8692-03	1.058E-04
4.000E 00	- 4.500E 00) 2.247E-05	6.7532-05 -
4.500g 00	- 5.000E 00) -2.4422-05	5.9382-05
5.000B 00	- 6.000E 00) 4 .9682-05	1.0592-04
6.000E 00	- 7.000E 00) -1.3852-05	7.956E-05
7.0008 00	- 8.000E 00	8.4392-06	3.1288-05
0.0008 09	- 8.0001 M	7.2607-06	1.3202-05
9.000E 00	- 1.0002 0	8.6412-06	9.182Ē-06

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DIFFEBENTIAL CROSS SECTIONE FOR GANNA BAT FRODUCTION IN V. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GANNA RAY PRODUCTION CROSS SECTION FOR THE ESIGNATED GANNA RAY BRODUCTION CROSS SECTION FOR THE ESIGNATED GANNA RAY BUBBET INTERVALS. THIS SECOND SET RESULTS PROM INTERPATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-NATED 10 PERCENT EREOR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY - 4.00 TO 4.50 MEV. ANGLE - 125 DEGREES.

PROTON ENERGY (NEV)	X-SECTION (B/SE/NEV)	2 88 08 (B/S 5/ 82 V)	EBOTOB ENERGY (MEV)	I-SECTION (D/SR/HEV)	EBBOR (B/SE/BEV)
2.7258-01	2.3988-01	1.040 2-02	2.750E 00	1.2142-02	1.3418-03
2.875B-01	9.246E-01	9.4842-03	2.8 102 00	1.4292-02	1.3668-03
3.0252-01	5.523E-01	8.9562-03	2.870E 00	1.6958-02	1.3358-03
3.175E-01	5.4322-01	8.352E-03	2.9302 00	1.9952-02	1.303E-03
3.3252-01	4.1732-01	8.231E-03	2.9902 00	2.2622-02	1.3118-03
3.4758-01	2.6258-01	8.0792-03	3.050E 00	2.4482-02	1.2948-03
3.6252-01	1.4548-01	7.7132-03	3.1102 00	2.5/82-02	1.2725403
3.//58-01	7.8515-02	7.0/92-03	3 260# 00	3 5567-02	1.0658+03
A. 100P-01	3.5658-02	6.1732-03	3, 3408 00	3.9412-02	1.0132-03
9.3002-01	3.5738-02	7.8478-(1	7.420E 00	9.0328-02	9.6928 -04
4.5002-01	3.8182-02	7.793E-03	3.500E 00	3.7792-02	8.7162-04
4.7002-01	4.0098-02	7.595E-C3	3.580E 00	3.102E-02	7.420E-04
A.9008-01	3,7118+02	6.9131-03	3.6600 00	2.3692-02	5.7198-04
5.1002-01	2.763B-02	6.0182-03 6.1088 63	3.740E 00	1.7898-07	8.58-E+08
5.3002-01	1.6016-02	4 346 P-03	3 8008 00	8.7138.03	3.5170.04
5.7008+01	1.9468-02	3.8538-03	3.9808.00	5.3432-03	3-1248-04
5.900E-01	2.3858-02	3.8592-03	4.060E 00	3.0252-03	2.6128-04
6.100E-01	2.5488-02	3.856 E-03	4.1402 00	1.550E-03	2.1818-04
6.300E-01	2.200E-02	4.3C9E-03	4.220E 00	6.505E-04	1.7378-04
6.500E-01	1.484E-02	4.424E-C3	4.30DE 00	1.7702-04	1.6038-04
6.700E-01	8.023E-03	4.1122-03	4.380Y 00	-6.8142-06	1.5838-04
5.900 E-01	3.9965-03	3.8432-03	4.4608 00	-4.54UE-U5	1.4015-04
7 3008-01	2 1268-03	3.752P-03	4.630E 00	6.1098-05	1.6008-04
7.500E-01	2.7472-03	3.596E-C3	4.730E 00	9.9358-05	1.5488-04
7.7002-01	3.891E-03	3.398E-03	4.830E 00	1.1752-04	1.3318-04
7.900E-01	5.666z=03	J. 335B-63	4.930E 00	1.0902-04	1.3785-04
8.1002-01	9.2948-03	3.3482-C3	5.030E 00	8.5182-05	1.350E-04
0.3002-01	1.7902-02	3.2712-03	5.1302 00	6.088E-05	1.4318-04
8 7002-01	5 5628-02	3. 270 8-03	5 3308 00	-2.8437-05	1 2788-04
8.900R-01	7.5358-02	3.245 E-03	5.430E 00	-1.9718-05	1.1948-04
9.100E-01	8.4802-02	3. 1 13E- C3	5.530E 00	3.471E-05	1.1848-04
9.300E-01	8.110E-02	3.023E-03	5.630E 00	7.1462-05	1.181E-04
9.5002-01	6.7392-02	3.067E-03	5.730E 00	6.8572-05	1.0618-04
1 0002-01	3 1478-02	3.0658-03	5 9302 00	-3.8652-03	1 0092-00
1.0402 00	2.7808-02	3. 134 8- 03	6.0308 00	-1.5017-05	1.0438-04
1.080g 00	3.007E-02	2.673E-03	6.1302 00	-4.279E-05	9.6348-05
1.120E 00	2.0462-02	2.7 37 E-03	6.230B 00	-5.6392-05	9.303B-05
1.160E 00	8.134E-03	2.5682-03	6.330B 00	-3.730E-05	9.2138-05
1.200E 00	2.0032-03	2.646 E-03	6.4402 00 4 F485 48	1.7722-05	8.3528-05
1 2808 00	-1 0202-03	2.0905-03	6.500E 00	9.0507-05	7.6398-05
1.3208 00	-1.3472-03	3.255 8-03	6.600E 00	5.4748-05	6.2248-05
1.360B 00	1.5542-03	3. 183E- C3	6.920E 00	2.4982-06	5.7968-05
1.400g 00	1.0878-02	3.436 2-0 3	7.040B 00	-2.6822-05	5.191E-05
1.0002 00	3.0438-03	3.6698-03	7.1600 00	2.2105-05	4:3568-03
1.480g 00	6.373E-02	3.4678-03	7.7808 00	0.955E-00	3.4962-05
1.5208 00	1 5398-01	4,1412-03 A.345P-C3	2 5208 00	1.3218-05	2.7658-05
1.60CE 00	1.611E-01	3.9972-03	7.640E 00	1.4382-05	2.4498-05
1.640E 00	1.3588-01	3.536E-03	7.760E 00	-1.0472-05	2.012E-05
1.680B 00	1.1206-01	3.136E-03	7.890g 00	-2.2998-05	1.0502-05
1.720g 00	1.094E-01	3.035 E-03	8.0302 00	-1.9278-05	1.765B-05
1.760E 00	1.1058-01	2.9952-03	8.170E 00 9.310E 00	-3.0142+06	1.61/8-05
1.8508 00	6.8668-02	2.3138-03	6.3105 VU	2.3358-05	1.348R-05
1.9102 00	3.717E-02	1.958E+C3	8.5908 00	2.7142-05	1.2688-05
1.970E 00	2.9112-02	1.9132-03	8.730P 00	2.8001-05	1.1988-05
2.030E 00	3.280E-02	1.7782-03	8.870E 00	2.4212-05	1.0728-05
Z.090E 00	3.1/82-02	1.7112-03	9.010E 00	1.6108-05	9.616E-06
2.1502 00	1.0768-01	1.5295 03	9.1006 00 9.1008 00		9.0904-09 8.9388-05
2.270E 00	1.8828-02	1.4678-03	9.460E 00	-2.717E-06	7.4982-06
2.330E 00	1.680E-02	1.403E-03	9.620E 00	1.5902-06	7.3568-06
2.390E 00	1.2118-02	1.3798-03	2.700B 00	5.3358-00	9.4738-06
2.450E 00	7.0328-03	1,3212-03	9.940E 00	8.5682-06	0.9428-06
2.5108 00	3 2102-03	1.3882-03	1.0108 01	9 8367-06	7.3235-00 5.7830-04
2.630E 00	5.9528-01	1.3712-03	1.0428 01	7.9562-06	5.7258-06
2.6008 00	9.6000 03	1.348 2-03	1.030E 01	9.3202-00	5.9878-06

I BTEGRATED CATA

PHOTON ENERG	Y INTERVAL	X-SECTION	EBBOB
(81	(V)	(8/SR)	(B/SB)
3.000g-01 -	4.000E-01	2.7962-02	8.0672-04
4.000B-01 -	5.0001-01	3.7472-03	7.6472-04
5.0008-01 -	6.000E-01	2.1198-03	4.6538-04
6.000E-01 -	7.0002-01	1.4832-03	9.1172-04
7.0002-01 -	8.000E-01	3.9298-04	3.5778-09
8.0002-01 -	1.000E 00	1.0242-02	6.341E-04
1.000E 00 -	1.200E 00	9.146E-03	5.5798-04
1.2002 00 -	1.400E 00	1.7962-09	6.2688-04
1.400E 00 -	1.600E 00	1.7902-02	7.7498-04
1.6002 00 -	1.8001 00	2.3898-02	6.4912-04
1.800R 00 -	2.0002 00	9.9798-03	4.3378-04
2.000E 00 -	2.5002 00	9.9047-03	7.6368-04
2.5008 00 -	3.000E 00	5.9568-03	6.7398-04
3.0008 00 -	3.5001 00	1.6562-02	5.5148-04
3.500R 00 -	4.000F 00	9.3398-03	2.5878-08
4.0008 00 -	4.5002 00	5.2012-09	9.5562-05
4.500R 00 -	5.0007 00	3.9838-05	7.3168-05
5.0008 00 -	6.000 F 00	3.0348-05	1.1938-08
6.000 R 00 -	7.0001 00	1.3838-05	8.2528-05
7.0008 00 -	0.0003 00	6.6532+08	2.9828-04
8.0007.00 -	9 0001 00	1.5108-05	1 3588-05
9 000 8 00 -	1 000 8 01	3 3398-06	8 4908-04
21000B 00 -			0.0108-00

DIFFEBENTIAL CEOSS SECTIONS FOR GAMMA FAY PRODUCTION IN V. THE PIBST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CECSS SECTION FOR THE DESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET RESULTS PECH INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-MATED 10 PERCENT ERROR IN ARESOLDTE RORMALIZATION.

PHOTON ENERGY	I-SECTION	ERROR	FHOTON ENERGY	I-SECTICE	ESBOB
(MEV)	(B/SR/MEV)	(E/SF/MEV)	(MEV)	(E/SR/MEV)	(B/SR/MEV)
2.7258-01	2.232E-01	1.1522-02	2.750E 00	1.434E-02	1.7192-03
2.8752-01	4.058E-01	1.039E-02	2.810E 00	1.7942-02	1.761E-03
3.0252-01	5.462E-01	1.014E-C2	2.8709 00	2.156E-02	1.563E-03
3.1752-01	5.6028-01	9.253E-C3	2.9302 00	2.4012-02	1.63/E-03
3.3258-01	0.4902-01	9.1145-03	2.9908 00	2.02/2-02	1.6346-03
3.4755-01	1 6708-01	9.6038-03	3 1105 00	3 0 208-02	1.5302-03
3.0255-01	9.6372-02	8.1825-03	3,1807 00	3.2415-02	1.5028-03
3.9258-01	6.310E-02	8.110F-03	3.260F 00	3.691F-07	1.4358-03
4.100E-01	4.7772-02	8.171E-03	3.340E 00	4.233E-C2	1.3398-03
4.300E-01	4.378E-02	8.370E-C3	3.420E 00	4.601E-02	1.248E-03
4.500E-01	4.4522-02	8.156 2-03	3.5002 00	4.469E-02	1.2012-03
4.700E-01	4.706E-02	8.043E-C3	3.580E CC	3.8362-02	1.0182-03
4.900E-01	9.898E-02	7.173E-C3	3.660E 00	3.046E-0Z	8.5942-04
5,1002-01	4.4398-02	6.416E-03	3.740E 00	2.4072-02	7.501E-04
5.3002-01	3.406E-02	5.54/E-C3	3.8202 00	2.0058-02	6.3/1E-UN
	2.7145-02	4.0332-03	3.9001 00	1 3108-02	0.0576-04
5.9002-01	3.0125-02	4.223E-03	4.0f0P 00	9.6138-03	4.9402-04
6.100E-01	2.9218-02	4.273E-03	4.140F 00	6.9642-03	3.7758-04
6.300E-01	2.337E-02	4.746E-C3	4.220E 00	5.654E-03	3.5952-04
6.500E-01	1.604E-02	4.658E-C3	4.3COE 00	5.250E-03	3.233E-04
6.700E-01	1.115E-02	4.3C3E-03	4.380% 00	4.779E-03	2.782E-04
5.9002-01	8.453E-03	4.076E-C3	4.460E 00	3.7132-03	2.566E-04
7.100E-01	5.809E-03	3.894 E-03	4.540E 00	2.3721-03	2.3002-04
7.3002-01	3.4732-03	3.996E-03	4.6302 00	1.1802-03	2.08CE-04
7.5002-01	3.4312-03	4.083E-C3	4.730E 00	4.9758-04	1.9018-04
7.7002-01	5.2462-03	3.9521-03	4.8301 00	2.0841-04	1.6555-04
9.900E+01	1.0305-03	3.7205-03	5 0305 00	5 200 2-05	1 2218-00
8.300P-01	1.9652-02	3.5077-03	5.1308.00	6.126F-06	1.2118-04
8.500F-01	3.3872-02	3.4345-63	5.2308 00	2.659E+05	1. 1898-04
8.7002-01	5.243E-02	3.616E-03	5.330E 00	5.610E-C5	1.32CE-04
8.9002-01	6.964E-02	3.699E-03	5.430E 00	4.346E-05	1.209E-04
9.100E-01	7.870E-02	3.448E-C3	5.53CE 00	2.6432+05	1.1792-04
9.3002-01	7.638E-02	3.266E-03	5.630E 00	5.151E-05	1.256E-04
9.500E-01	6.497E-02	3. 4 10 E- C3	5.73CE 00	2.257E-05	1.0828-04
9.7002-01	5.030E-02	3.319E-C3	5.83CE 00	3.488E-05	1.101E-04
1.000E 00	3.343E-02	3.2301-03	5.9302 00	2.9248-05	1.1648-04
1.0402 00	2.8518-02	3.2772-03	6 1305 00	3.380E-05	1.1548-04
1 1208 00	2.9038-02	3 1 19 5-03	6.2308.00	3.5667-05	9.7748-05
1.160E 00	1.7052-02	3.035E-C3	6.330F CO	7.1792-06	9.746E-05
1.200P 00	6.104E-03	3.072E-03	6.440E 00	-4.087E-05	1.054E-04
1.2402 00	9.670E-04	3.262E-C3	6.560E CO	-7.302E+05	9.0762-05
1.28CB 00	-6.4278-04	3.634E-C3	6.68CE 00	-8.618E-05	7.6542-05
1.320g 00	-1.305E-03	3.561E-03	6.800£ 00	-5.865E-US	6.399E-05
1.360E 00	1.410E-03	3.568E-03	6.920E 00	-1.385£-05	6.189E-05
1.400E 00	9.714E-03	3.867E-03	7.040E 00	1.5982-05	5.9638-05
1.4408 00	2.7026-02	3.9172-03	7.160E 00	3.3442-03	5.0022-05
1 5200 00	1 1158-01	4 4 09 5-03	7 4005 00	1 5498-05	3 8278-05
1.5608 00	1.5838-01	4.737E-C3	7.5208 00	1.9566-05	3.5608-05
1.60CE 00	1.6848-01	4.350E-C3	7.6405 00	2.546E-05	3.364E-05
1.6402 00	1.430E-01	3.927E-03	7.760E 00	3.082E-C5	2.7682-05
1.6802 00	1.1602-01	3.544E-C3	7.890E 00	2.288E-05	2.145E-05
1.720E 00	1.096E-01	3.454E-03	8.030E CO	1.262E-05	1.7558-05
1.760E 00	1.1238-01	3.374 E-03	8.170E 00	5.9142-06	1.6278-05
1.800E 00	1.0222-01	3.435E-C3	8.310E 00	4.196E-06	1.478E-05
1.850E 00	6.975E-02	2.828E-03	8.450E 00	1.065E-05	1.386E-05
1.9108 00	3.9366-02	2.2802-03	8.5908 00	2.1042-05	1.2398-05
1.970E UU	3.2/98-02	2.2392-03	0./JUE UG 8 8705 00	2.4022-05	1 2868-05
2.0902 00	3.5978-02	2.1357-03	9.0108 00	9.6981-06	9.40AE-04
2.150E 00	2.996E-02	2.027 2-03	9.150E 00	2.256E-C6	9.1672-06
2.210E 00	2.646E-02	1.9 10 E-03	9.300E UO	-8.5612-07	9.358E-06
2.2708 00	2.7228-02	1.911E-C3	9.4602 00	-5.833E-07	9.631E-06
2.33CE 00	2.544E-02	1.850E-03	9.620E 00	2.959E-06	. 8.277E-06
2.390E 00	2.100E-02	1.8612-03	9.780E CO	5.6152-06	7.6258-06
2.450E 0C	1.6892-02	1.7612-03	9.940E 00	8.053E-06	9.1982-06
2.5102 00	1.277E-02	1.746E-03	1.0 10E 01	8.976E-06	1.7448-06
2.5/0E 00	1.0382-02	1.7922-03	1.0268 01	8./94E-06 5.365T-06	0.7498-06
2.630E 00	1.2618-02	1.662 -03	1.0582 01	3.3805-06	9.3602-00
2.00 V C 00					

INCIDENT NEUTRON ENERGY = 4.50 TO 4.98 MEV. ANGLE = 125 DEGREES.

INTEGRATED CATA

PHOTON ENERG	Y INTERVAL	X-SECTION	ERROR
(88	V)	(B/SR)	(B/SR)
3.000E-01 -	4.000E-C1	2.9952-02	8.8412-04
4.000E-01 -	5.000E-01	4.657E-03	7.988E-04
5.0002-01 -	6.0005-01	3.2522-03	4.9942-04
6.000E-01 -	7.000E-01	1.7582-03	4.415E-04
7.000E-01 -	8.000E-C1	5.1672-04	3.936E-04
8.000E-01 -	1.000 E 00	9.9032-03	6.919E-04
1.000E 00 -	1.200E CC	5.1292-03	6.256E-04
1.200E 00 -	1.400E 00	2.778E-04	6.9972-04
1.400E CO -	1.600E 00	1.7902-02	8.363E-04
1.600E 00 -	1.8008 00	2.458£+02	7.255E-04
1.800E 00 -	2.000E CO	1.045E-02	5.070E-04
2.0002 00 -	2.500E 00	1.340E-02	9.740E-04
2.500E 00 -	3.0COE CO	£.258E-C3	8.521E-04
3.000E 00 -	3.500E 00	1.848E-02	7.100E-04
3.500E 00 -	4.000E 00	1.293E-C2	3.825E-04
4.000E 00 -	4.500E 00	3.120E-03	1.7092-04
4.500E ÒÓ -	5.0CCF CO	3.919E-04	9.2151-05
5.0002 00 -	6.000E 00	3.100E-05	1.211E-04
6.000E 00 -	7.0COE CO	-2.048E-05	9.192E-05
7.000E 00 -	8.000F 00	2.2542-05	3.7732-05
8.000E 00 -	9.0COF 00	1.424E-05	1.3938-05
9.000E 00 -	1.000E 01	3.2428-06	8.8622-06

DIFFEDENTIAL CROSS SECTIONS FOR GAMMA BAY PRODUCTION IN V. THE FIBST SET OF WURBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE LESSG WATED GAMMA RAY EMEDED INTERVALS. THIS SECOND SET BESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-MATED 10 FEBCINT ERBOR IN ABSOLUTE NORMALIZATION.

INCIDENT NE	ITRON ENE	FGY =	4.98	TO	6.00 BEV.	ANGLE =	125	DEGREES.
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PHOTON ENERGY (MEV)	X-SECTION (B/SR/NEV)	EBROR (B/SE/BEV)	FHOTON EREBGY (MEV)	X-SECTION (B/SR/MEV)	EBBOB (B/SR/NEV)
2.725E-01	1.7132-01	1.145E-02	2.750E 00	1.5582-02	1.755B-Ó3
2.8752-01	3.3792-01	1.088 7-02	2,810E 00	1.9432-02	1.805E-03
3.0252-01	4.993E-01	1.021E-C2	2.870E 00	2.363E-02	1.776E-03
3.175E-01	5.569E-01	9.479E-03	2.930E 00	2.7228-02	1.770E-03
3.3252-01	4.815E-01	9.3732-03	2.9908 00	2.9918-02	1.7208-03
3.4/58-01	3.3020-01	9.4002-03	3.0502.00	3.1062-02	1.6072-03
3.7758-01	1. 1762-01	8.5832-03	3.180E 00	3.6662-02	1.565E-03
3.925E-01	7.417E-02	8.536E-03	3.260E 00	4.0812-02	1.538E-03
4.1002-01	5.234E-02	9,0138-03	3.340E 00	4.5428-02	1.451R-03
4.3002-01	4.5238-02	9.174E-C3	3.420E 00	4.8732-02	1.3612-03
4.500E-01	4.8/62-02	8.9/62-63	3.5002 00	4.8222-02	1 1852-03
4.9002-01	6.2208+02	8.1842-03	3.660E 00	3.6291-02	1.0158-03
5.100E-01	6.1308-02	7.2538-63	3,7407 00	2.9168-02	9.3348-04
5.3002-01	5.2122-03	6.054g-C3	3.930E 00	3.3758-92	0.3048.04
5.500E-01	4.097E-02	5.0322-03	3.900E 00	2.0322-02	7.645E-04
5.7002-01	3.4708-02	4.4918-03	3.980E 00	1./398-02	6 3172-04
6.100E=01	3.15Ú2-U2	4.454E-01	4,1407 00	1.2368-02	6.0278-04
6.3008-01	2.0038-02	5.2 19 z - U3	4.22UE UU	1.1882-02	5.603B-04
6.500E-01	2.071E-02	5.252E-C3	4.300E 00	1.2042-02	5.227B-04
6.700E-01	1.6452-02	4.756 E-03	4.380E 00	1.2202-02	4.8822-04
6.900E-01	1.3198-02	4.428E-C3	4.4602 00	1.229E-02	4.6532-04
7.3002-01	6.132E-03	4.308 2-03	4.540E 00	1.0452-02	3.8938-04
7.500g-01	4.915E-03	4.285E-C3	4.7308 00	8.702E-03	3,5678-04
7.700E-01	6.4372-03	4.197E-03	4.830E 00	7.3C4E-03	3.242E-04
7.900E-01	1.006E-02	0.017g-C3	4.930E 00	5.668E-03	2.8152-04
8.100E-01	1.4858-02	3.935E-03	5.030E 00	4.133E-03	2.5908-04
8.5002-01	3 4302-02	3.8332-03	5 2302 00	2 4268-03	2.3032-04
8.7002-01	5.1682-02	3.8652-03	5.330E 00	1.6952-03	1.827E-04
8.900E-01	6.9878-02	3.824E-03	5.430E 00	1.085E-03	1.6678-04
9.100E-01	8.196E-02	3.622E-C3	5.530E 00	6.3178-04	1.5798-04
9.3002-01	8.366E-02	3.4882-03	5.630P 00	2.9572-04	1.3448-04
9 7002-01	6 0972-02	3.5642-03	5.830F 00	2.8242+05	1.0478-04
1.000E 00	4.145E-02	3.637E-03	5.930E 00	5.331E-05	1.031E-04
1.040E 00	3.460E-02	3.642E-C3	6.030E 00	8.724E-05	1.018E-04
1.080g 00	4.053E-02	3.268 2-03	6.130E 00	8.6142-05	9.64CE-05
1.1202 00	4.004E-02	3.277E-03	6.230E 00	3.7812-05	8.6988-05
1.2000 00	2.1158-02	3.076 - 03	6.440# 00	-9.3098-05	6.6888~05
1.240E 00	1.2608-02	3.3632-03	6.560B 00	-1.0822-04	6.982B-05
1.280E 00	7.940E-03	3.813E-C3	6.680F 00	-5.2002-05	6.593E-05
1.320g 00	5.268E-03	3.856 E-03	6.800E 00	2.8922-05	5.775E-05
1.JOUE 00	4.01JE-03	3.880E+C3	5.920E 00	9.5568-05	4.8028-05
1.4400 00	2.5458-02	4.0007-03	7.140% 00	6.504E=05	4.1398-05
1.480g 00	5.808E-02	4.0 16E-C3	7.2802 00	3.0912-05	3.845E-05
1.520E 00	1.1178-01	8-5126-03	7.400g 00	2.0052-05	ð.259B-05
1.560E 00	1.661E-01	4.961E-03	7.520E 00	1.8568-05	2.918E-05
1.600B 00	1.8465-01	4.7032+03	7.6402 00	1.6858-05	2.6928-05
1.6802 00	1.2568-01	3.8117-03	7.890E 00	4.8288-06	1.8998-05
1.720E 00	1.132E-01	3.6512-03	8.030E 00	-7.5292-07	1.4658-05
1.760g 00	1.143E-01	3.565E-03	8.170E 00	-1.218E-06	1.473E-05
1.800E 00	1.062E-01	3.681E-C3	8.310E 00	2.654E-06	1.260E-05
1.850E 00	7.7072~02	2.9582-03	8.450E 00	4.8252-06	1.3062-05
1.9708 00	3.7002-02	2.374 - 03	8.730F 00	1.5051-05	9.4558-06
2.030g 00	3.0015-02	2.361E-03	0.0701 00	1.7362-05	1.1435-05
2.090E 00	3.8128-02	2.327E-C3	9.010B 00	1.190E-05	9.760E-06
2.150E 00	3.304E-02	2.127E-03	9.150E 00	4.005E-06	6.616E-06
J.310E 00	2.0678-02	2.0745.03	9.300E 00	1.1985-07	5.3808-04
2.3308 00	2.6908-02	2.0612-03	9.6207 00	-1.5742-06	5.2118-06
2.3908 00	2.380E-02	1.924E-C3	9.780B 00	3.861E-07	5.422E-06
2.450E 00	1.961E-02	1.9C3E-C3	9.940E 00	3.0272-06	5.4418-06
2.310E 00	1.586E=02	1.860 E-UJ	1.0102 01	5.5802-06	4.8242-06
2.5708 00	1 3138-02	1.7648-03	1.0205 01	3.0755-00	5.0105-00
1.PAOE 00	1.355E-02	1.729E-03	1.0588 01	9.0612-06	5.9892-06

INTEGRATED CATA

PHOTON EN	EBC	SY INTERVAL	I-SECTION	ERROR
	(8)	EV)	(B/SR)	(8/SR)
3.0002-01	- 1	4.0002-0	3.164E-02	9.143E-04
4.000B-01	-	5.000E-0	5.3228-03	8.8082-04
5.0008-01	I →	6.000F-0	9.4372+03	5.4262-04
6.0008-01	-	7.000 -0	2.1657-03	4.8302-04
7.0008-01	-	8.000F-C	7.4647-04	4.2238-04
8 0002-01	-	1.0.00 1.00	1 0838-02	7.4128-04
1 0000 00		1 2001 0	7 1612-03	6 6268-00
1 2008 00	<u> </u>	1 4005 00	1 790 -03	7 0132-00
1 4000 00		1 6000 00	1 9369-03	9 7730 .04
1.4002 00		1.0002 00	1.8382-02	8.7732-04
1.0008 00	-	1.6001 00	2.6248-02	1.1502-04
1.800E 00	- (2.000E CO) 1.161E-02	5.382E-04
2.000B 00	- (2.5001 00	1.455E-02	1.0492-03
2.500E 00	-	3.0007 00	9.3822-03	8.9002-04
3.0008 00	- 1	3.500F 00	2.0212-02	7.5567-04
3.5008 00	- (4.0007 00	1.5182-02	4.698E+04
4.0002 00	-	4.500 . 00	6.340F-03	2.7538-04
4 500P 00	-	5 0001 00	4 2538-03	1 7602-00
5 0000 00		6 000 0 00	1 3778-03	1 6275-04
5.0000 00	-	2.0002.00	1.2772-03	1.0372-04
6.0002 OC	-	1.000E 00	2.301E-00	1.2508-05
7.000E 00	- 1	8.000E 00) 2.979E-05	3.072E-05
8.0002 00	- 1	9.000E 00) 7.634E-06	1.2138-05
9.000E 00	- 1	1.000E 0	1.337E-06	5.880E-06
	PHOTON EN 3.0002-01 4.0002-01 5.0002-01 7.0002-01 7.0002-01 1.0002 00 1.2002 00 1.2002 00 1.8002 00 4.0002 00 4.0002 00 4.0002 00 6.0002 00 6.0002 00 6.0002 00 8.0002 00 8.0002 00 8.0002 00 8.0002 00 9.0002 00 8.0002 00 8.0002 00 8.0002 00 9.0002 00 8.0002 00 8.0002 00 9.0002 00 9.00000 00 9.0002 00 9.0000000000000000000000000000000000	PHOTON EHERG (%1) 3.0002-01 - 4.0002-01 - 5.0002-01 - 7.0002-01 - 7.0002-01 - 1.0002 00 - 1.0002 00 - 1.0002 00 - 1.6002 00 - 2.5002 00 - 3.5002 00 - 4.0002 00 - 4.0002 00 - 6.0002 00 - 6.0002 00 - 8.0002 00 - 8.0002 00 - 8.0002 00 -	PHOTON ENERGY INTERVAL (NEV) 3.0008-01 - 4.0008-0 4.0008-01 - 5.0008-0 5.0008-01 - 5.0008-0 5.0008-01 - 7.008 - 0 7.0008-01 - 7.0008 - 0 1.0008 00 - 1.2008 0 1.0008 00 - 1.2008 0 1.0008 00 - 1.5008 0 1.0008 00 - 1.5008 0 1.6008 00 - 1.5008 0 1.6008 00 - 2.5008 0 2.5008 00 - 3.5008 0 3.5008 00 - 3.5008 0 4.0008 00 - 4.5008 0 4.0008 00 - 4.5008 0 5.0008 00 - 5.0008 0 5.0008 00 - 6.0008 0 5.0008 00 - 6.0008 0 5.0008 00 - 6.0008 0 5.0008 00 - 8.0008 0 5.0008 00 - 9.008 0 5.0008 00 - 9.0008 0 5.0008 00 - 9.008 0 5.0008	PHOTON DEEEGT INTERVAL INTERVAL INTERVAL 3.000E-01 - 0.00E-01 3.164E-02 0.00E-01 5.322E-03 5.000E-01 - 5.000E-01 5.322E-03 5.322E-03 5.000E-01 - 6.000E-01 2.165E-03 7.000E-01 - 7.000E-01 2.165E-03 7.000E-01 - 8.000E-01 7.464E-04 8.000E-01 - 1.000E 0 1.083E-02 1.000E 00 - 1.200E 0 1.636E-02 1.000E 00 - 1.600E 0 1.836E-02 1.600E 00 - 1.600E 0 1.635E-02 1.600E 00 - 1.600E 0 1.836E-02 1.600E 00 - 1.600E 0 1.635E-02 1.600E 00 - 2.500E 0 1.61E-02 2.000E 00 - 2.500E 0 1.61E-02 2.500E 00 - 3.500E 0 2.021E-02 3.000E 00 - 4.500E 0 3.30

DIFFERENTIAL CROSS SECTIONS FOF GAMMA FAT PRODUCTION IN Ψ . THE FIRST SET CF BURBERS IS THE DOUBLT EIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMA RAY PRODUCTION CHOSS SECTION FOR THE LESIGNATED GAMMA RAY ENERGY INFERENTIAL THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERFAINTIES ARE GIVEN IN THE SAME UNITS A THE DATA AND DC NOT INCLUDE AN ESTIMATED 10 PERCENT BEROR IN ARSOLUTE BOFBALLEATION.

PHOTON ENERGY	I-SECTION	ERCR	FEOTON ENERGY	X-SECTION	ERROR
(HEV)	(E/SR/NEV)	(B/SE/MEV)	(#EV)	(B/SR/82V)	{B/SB/82¥}
2.7252-01	1.7682~01	1.250 E- C2	2.750B 00	1.618E-02	1.948E-03
2.8752-01	3.414E-01	1.138 2-02	2.8102 00	1.9208-02	2.04/8-03
3.0258-01	4.9032-01	1.0722+02	2 9309 00	2.5608-02	1.9197-03
3.1/56-01	5. 3035-01	1.0118-02	2.9907 00	2.8522-02	1.9178-03
3.4758-01	3.2728-01	1.018 2-02	3.050E 00	2.9642-02	1.8902-03
3.6258-01	2.0138-01	9.510E-C3	3.110E 00	3.1132-02	1.8272-03
3.7752-01	1.2218-01	9.289E+03	3.1801 00	3.416E-02	1.745E-03
3.9252-01	8.2792-02	9.411E-C3	3.260E 00	3.910E-02	1.7082-03
4.100E-01	6.202E-02	1.006E-C2	3.340E 00	4.3992-02	1.641E-03
4.300E-01	5.346E-02	1.015E-02	3.420E 00	4.7122-02	1.5938-03
4.5008-01	5.8532-02	9.693E-C3	3.5002 00	4.7732-02	1.5088-03
4.7008-01	6.4048-02	9.4031-03	3.5002.00	3 7/08-02	1.4106-03
5 1002-01	6 0078-02	0.574E-03	3 7602 00	2.9812-02	1.2558-03
5.300P-01	5.2468-02	7.197 1-03	3.820E 00	2.3618-02	1.1548-03
5.5008-01	9.361E-02	5.8402-03	3.9008 00	2.0472-02	1. 1028-03
5.70CE-01	3.793E-02	5.2418-03	3.9801 00	1.867E-02	1.030E-03
5.900E-01	3.421E-02	5.084 2-03	4.0602 00	1.6522-02	9.863E-04
6.100E-01	3.0952-02	5.2C5E-C3	4.140B 00	1.526E-02	9.5638-04
6.3008-01	2.685E-02	5.6832-03	4.220E 00	1.568E-02	9.5028-04
6.5008-01	2.1978-02	5.644 E-03	4.300E 00	1.6442-02	9.1568-04
6.7008-01	1.768E-02	5.3302-03	4.3808 00	1.6692-02	8.757E-04
6.900E-01	1.4138-02	4.9322-03	4.460E 00	1.6608-02	8.2672-04
7.1005-01	0 7028-02	4.0232-03	4.5406 00	1.0122-02	7.9172-04
7.5008+01	8.3698-03	4.900 2-03	4.7307 00	1.3582-02	6.9938-00
7.7008-01	9.9218-03	4.764 2-03	4.830E 00	1.353E-02	6.32CE-04
7.9002-01	1.285E-02	4.5698-03	4.930E CO	1.3432-02	5.5682-04
8.100E-01	1.656E-02	4.5272-03	5.030E 00	1.248E-02	5.23CE-04
8.3002-01	2.270E-02	4.382E-C3	5.130E 00	1.124E-02	5.059E-04
8.500E-01	3.400E-02	4.275E-C3	5.230P 00	1.004E-02	4.771E-04
8.7002-01	5.100E-02	4.3092-03	5.330E 00	8.650E-03	4.271E-04
8.9008-01	6.910E-02	4.192E-03	5.4302 00	7.3012-03	3.781B-04
9.1002-01	0.0002-02	4.0352-03	5.5302.00	0.32/2-03 5 3778-03	3.3/48-04
9.5002-01	7 3982-02	A 0808-C3	5 7302 00	A 2168-03	2 8788-04
9.7002-01	6.1138-02	4.1018-03	5.8307 00	3.1877-03	2.5938-04
1.000E 00	4.545E-02	4.300 P-C3	5,9308 00	2.5042-03	2.2428-04
1.040E 00	4.307E-02	4.023E-03	6.030E 00	2.0312-03	2.030B-04
1.0802 00	5.0468-02	3.671E-03	6.130E 00	1.5992-03	1.771E-04
1.120E 00	9.995E-02	3.669E-03	6.230E 00	1.2262-03	1.636E-04
1.160E 00	3.917E-02	3.485 E-03	6.330E 00	9.515E-04	1.4658-04
1.2002 00	2.6108-02	3.728E-03	6.440E 00	7.181E-04	1.2912-04
1.240E 00	1.9238-02	3.9932-03	6.5602 00	5.018E-04	1.1398-04
1.2802 00	1.3835-02	4.4302-03	6.6802 00	3.0005-04	7 9738-05
1 3608 00	1.2755-02	0 2015-03	6 9205 00	3 8945-05	6 8952-05
1.400P 00	1.711E-02	4.674 E-03	7.0407 00	1.8062-05	5.1958-06
1.440E 00	3.1168-02	4.528E-C3	7.160E 00	2.3258-05	5.5118-05
1.480E 00	6.506E-02	4.6 17 E-03	7.280E 00	1.4252-05	4.379E-05
1.520E 00	1.2228-01	5.170E-03	7.400E 00	-2.043E-05	3.167E-05
1.560E 00	1.7948-01	5.632E-C3	7.5202 00	-4.085E-05	3.0418-05
1.600E 00	2.0018-01	5.339E-03	7.6402 00	-2.9032-05	2.681E-05
1.6402 00	1.764E-01	4.623E-C3	7.7608 00	1.9292-06	2.4062-05
1.680E 00	1.4195-01	4.1228-03	7.8908 00	3.1391-05	2.1588-05
1.7602 00	1.2818-01	4.0425-03	A. 170P 00	3.8442+05	1.7198-05
1.8002 00	1.190E-01	4.2749-03	8. 3 10P 00	3. 1428-05	1.6858-05
1.850E 00	8.724E-02	3.4758-03	8.450E 00	2.5672-05	1.6938-05
1.9102 00	5.3048-02	2.995E-03	8.5908 00	1.5972-05	1.727E-05
1.9702 00	4.258E-02	2.696E-03	8.730E 00	8.1842-06	1.762E-05
2.0302 00	4.1962-02	2.6 18 E- C3	8.9708 00	4.6492-06	1.573E-05
2.090E 00	3.886E-02	2.5502-(3	9,0108 00	1.0812-05	1.6608-05
2.1508 00	J.4168-02	2.487E-03	9.150E 00	1.5862-05	1.777E-05
2.2108 00	3.2028-02	2.4288-03	9.3008 00	1.05/2-05	1.4908-05
2.3308 00	3.0702-02	2.3148-03	9.6207.00	1.5922-05	1.7892-05
2.3902 00	2.6748-07	2.2672-03	9.7802 00	1.2378-05	1.2598+05
2.450B 00	2.2788-02	2.199 E-03	9.9402 00	7.127E-06	6.925E-06
2.510B 00	1.9298-02.	2. 171E-C3	1.0 102 01	6.356E-06	4.7602-06
2.570E 00	1.6258-02	2. 126 E- C3	1.0268 01	5.9812-06	4.592 <u>8</u> -06
2.630E 00	1.465E-02	2.0422-03	1.042E 01	5.256E-06	5.310E-06
2.690E 00	1.472E-02	1.9162-03	1.0588 01	9.338E-06	4.8892-06

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INCIDENT NEUTRON ENERGY = 6.00 TO 7.01 NEV. ANGLE = 125 DEGREES.

INTEGRATED CATA

PHOTON ENERGY	INTEFVAL	I-SECTION	ERROR
(#EV)	(B/SB)	(B/SR)
3.000E-01 -	4.000I-01	3.1032-02	9.8498-04
4.000E-01 -	5.000E-01	6.313E-03	9.644 <u>8-0</u> 4
5.0002-01 -	6.000E-01	4.643E-03	6.362E-04
6.000E-01 -	7.000 E-01	2.231E-03	5.367E-04
7.000g-01 -	8.0001-01	1.0212-03	4.816E-04
8.000g-01 -	1.000 E 00	1.0822-02	6.419E-04
1.0002 00 -	1.200E 00	8.7902-03	7.5148-04
1.200E 00 -	1.4007 00	3.2298-03	8.4822-04
1.4002 00 -	1.6007 00	2.0268-02	9.9918-00
1.6002 00 -	1.8002 00	2.928 2-02	8.6012-04
1.8007 00 -	2.0008 00	1.3238-02	6.1398-04
2.0008 00 -	2.5001 00	1.5978-02	1.1942-03
2.5008 00 -	3.0001 00	9.7398-03	1.0028-03
3.0008 00 -	3.5001 00	1.4388-69	0.5708-00
3.5007 00 -	B 0008 00	1 5078-02	6 2038-00
4 000F 00 -	4 500 B 00	8 1348-02	0.2035-04
* 5007 00 -		0.1342-03	4.0122-04
4.3008 00 -	5.0002 00	7.0782-03	3.3538-04
5.000E 00 -	6.0001 00	6.9182-03	3.663E+04
6.000E 00 -	7.0002 00	7.4302-04	1.24 1E-04
7,0002 00 -	8.0001 00	1.8452-06	3.4572-05
0.000E 00 -	9.0002 00	1.2158 05	1,7078=05
9.000E 00 -	1.0002 01	1.4671-05	1.3202-05

DIFFERENTIAL CROSS SECTIONS FOR GANNA BAY PRODUCTION IN V. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GANNA RAY PRODUCTION CROSS SECTION FOR THE DESIGNATED GANA RAY ENDERTIANT THIS SECOND SET HESULTS FREE INTERATION OF THE COBLIT DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-NATED 10 PERCENT BEROR IN AESOLUTE MORMALIZATION.

INCIDENT BEGTRON ENERGY = 7.01 TO 7.97 NEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (NEV)	X-SECTION (B/SR/MEV)	ERBOR (E/SR/REV)	EHOTON ENERGY (NEV)	I-SECTION (E/SE/MEV)	EBSOB (B/SR/HEV)
2.7258-01	1.9902-01	1.369 E-02	2.7502 00	2.176E-02	2.3C2E-03
2.8752-01	3.5958-01	1.257 E-02	2.8 10B 00	2.426E-02	2-383z-03
3.0252-01	4.7972-01	1.196E-C2	2.8702 00	2.706E-02	2.3168-03
3.1758-01	4.942E-01	1.126E-C2	2.930E 00	2.921E-02	2.261E-03
3.3252-01	4.068E-01	1.134 E-02	2.9908 00	3.6772-02	2.1818-03
3.4758-01	2.788E-01	1.141E-C2	3.050B GO	3.2558-02	2.1318-03
3.6252-01	1.7242-01	1.060 E-02	3.110E 00	3.4892-02	2.0838-03
3.7758-01	1.1028-01	1.0492-02	3.180B 00	3.8002-02	2.0492-03
3.925E-01	7.953E-02	1.0412-02	3.260E 00	4.1772-02	2.0162-03
4.100E-01	6.112E-02	1.0862-02	3.3402 00	4.301E-02	1.9/45-03
4-3005-01	5.5057-02	1.0078-02	3 5000 00	a 6001-02	1.7978-03
0.3000-01	8 0542-02	1.0937-02	3.5808.00	4.1887-02	1.7158-03
4.3008-01	8.3528+02	1.0528-52	3.6602 60	3.5124-02	1.6262-03
5.100E-01	7.1678-02	9.730 8=03	3,3008 00	2.0597 02	1:34 18-03
5.300E-01	5.447E-02	A. a 87 E- C3	3.8208 00	2.348E-02	1.4468-03
5.5008-01	4.1942-02	£ 9268+C3	2.0008 80	£.0435-01	1.9295405
5.7002-01	3.544E-02	6.1282-03	3.980E 00	1.8612-02	1.356E-03
5.900B-01	3.153E-02	5.775E-C3	4.060E 00	1.6882-02	1.3168-03
6.100E-01	2.802E-02	5.909E-03	4.1402 00	1.3992-02	1.2508-03
6.3008-01	2:2010-01	6.5052-03	4 100 00	1 7049-07	1 2158-03
6 700P-01	1.8782-02	6.083F-03	4. 360F 00	1.8312-02	1.1738-03
6.900E-01	1.388E-02	5.8412-(3	4.4602 00	1.8612-02	1.1768-03
7.1002-01	9.606E-03	5.743E-C3	4.540E 00	1.8242-02	1.1938-03
7.300E-01	7.8352-03	5.652E-03	4.6301 00	1.726B-02	1.101E-03
7.500E-01	8.162E+03	5.448E-C3	4.730E 00	1.674E-02	1.0448-03
7.7002-01	9.751E-03	5.156 E-03	4.8302 00	1.6962-02	9.7278-00
7,900B-01	1.306E-02	4.971E-03	4.930E 00	1.6228-02	9.470E-04
8.100E-01	1.856E-02	4.9452-03	5.030E 00	1.5208-02	9.3558-04
8.300E-01	2.6846-02	4.86/2-03	5.1308 00	1 2158-02	9.4368-04
9 7008-01	5 4278-02	4.0232-03	5 3308 00	1 1078-02	8.0058-04
8.9UDR-01	5.9952-07	4.7177-03	5.430B 00	9.6408-03	7.6818-09
9.100E-01	7.963E-02	4.674E-C3	5.530B 00	9.168E-03	7.1698-04
9.300E-01	7.9678-02	4.607E-03	5.630E 00	8.788E-03	6.662E-04
9.500B-01	7.1072-02	4.713E-03	5.7308 00	8.2488-03	6.491E-04
9.700E-01	5.893E-02	4.763E-03	5.830g 00	8.046E-03	5.9898-04
1.000E 00	4.591E-02	5.030E-03	5.930E 00	8.237E-03	5.488E-04
1.0402 00	4.0288+02	4.725B-03	6.030B 00	8.340E-03	5.0192-04
1.0808 00	5.7748-02	4.3482-13	6.1308 00	3 5208-03	4.3958-04
1 1600 00	0 1052-02	4.3/32-03	6 3308 00	6 5778-03	3.8328-04
1.2008 00	2.9098-02	4.177F-C3	6.4402 00	5.3398-03	3,3168-08
1.240E 00	1.9695-02	4.5402-03	6.5602 00	4.244E-03	2.9588-04
1.280E 00	1.5062-02	5.087E-C3	6.680E 00	3.4698-03	2.5708-04
1.320E 00	1.5802-02	5.096 E-03	6.800E 00	2.863E-03	2.1045-04
1.3602 00	1.872B-02	4.949E-03	6.9202 00	2.314E-03	1.7878-04
1.4002 00	2.4068-02	5.4862-03	7.040E 00	1.7258-03	1.4258-04
1.4408 00	4.00/E-02	5.331E-V3	7.1601 00	6 275 8-00	8 99 38-04
1 5 202 00	1 3932-01	5 0 20 1 - 63	7 4005 00	3.4007-04	7 116FANS
1 5609 00	1.9552-01	6. 3 38 P-03	7.5208.00	2.1457+04	6. 3708-05
1.600E 00	2.109E-01	6.1232-C3	7.6408 00	1.5342-04	5.5718-05
1.640E 00	1.8152-01	5.611B-03	7.760E 00	1.005E-04	4,841B-05
1.680E 00	1.455E-01	4.821E-03	7,8902 00	4.8992-05	4.0558-05
1.720E 00	1.3198-01	4.613E-03	8.030E 00	1.9152-05	3.9358-05
1.760P 00	1.3048-01	4.561E-03	8.1701 00	1.440E-05	3.456B-05
1.800E 00	1.200E-01	4.7412-03	8.3102 00	1.6452-05	2.8598-05
1.8508 00	5 8008-02	3.8212-03	8.450E 00	2.4912-05	2.5326-05
1.9702 00	4.400R-02	3. 3658-03	8.730E 00	3.2048-05	2.2578-05
2.0302 00	4.288E-02	3. 165 E-03	8.8708 00	2.1072-05	1.947E-05
2.090E 00	4.120B-02	3.200 B-03	9.0 10B 00	9.0222-06	1.6748-05
2.150E 00	3.8518-02	3.0638-03	9.150R 00	5.0578-06	1.5438-05
2.2108 00	3.8522-02	2.923E-03	9.300£ 00	5.7042-06	1.4468-05
2.270E 00	3.6798-02	2.7532-03	9.460B 00	5.9392-06	1.2438-05
2.330E 00	3.600E-02	2,759E-C3	9.6202 00	5.6522-06	1.1598-05
2.39VE 00	3.1862=07	1.0848-04 2.6848-04	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3.VZ12-V6	1.1825-05
2.5108 00	2.5108-02	2.4927-03	1.0107 01	1.5338-05	1.3868-05
2.570B 00	2.2828-02	Z. 431E-03	1.026E 01	2.009E-05	1.0378-05
2.630E 00	2.139E-02	2.355E-C3	1.042E 01	2.287B-05	1.1368-05
2.690E 00	2.0098-02	3. 276 2-03	1.0382 01	1.9492-05	1.3088-05

INTEGRATED DATA

PB0109 Deficit interve 1-Scitton 2-Scitton Deficit 3.0002-01 4.0002-01 2.797E-02 1.102E-03 4.0002-01 5.0002-01 6.9302-03 1.092E-03 5.0002-01 6.0002-01 6.9302-03 7.417E-04 6.0002-01 7.0007-01 7.183E-03 6.2062E-03 7.0002-01 8.0002E-01 5.738E-04 8.0002E-01 1.0002 00 1.033E-02 9.7338-04 1.0002 00 1.2002 00 3.772E-03 9.7938-04 1.2002 00 1.6002 00 2.279F-02 1.402F-03 9.4938-04 1.6002 00 1.3302F-02 9.738-04 1.4002F-03 1.402F-03 1.402F-03 1.6002 00 1.6002 00 2.279F-02 1.402F-03 1.402F-03 1.6002 00 1.3302F-02 7.212E-04 1.405F-03 1.405F-03 2.0002 00 2.2002 1.437E-02 1.435E-03 3.0002 00 1.3002F-02
(HEV) (H/SH) (H/SH) (H/SH) 3.000E-01 - 4.000E-01 2.'777E-02 1.102E-03 4.000E-01 - 5.000E-01 6.930E-03 7.417E-04 5.000E-01 - 6.000E-01 2.632E-03 7.417E-04 6.000E-01 - 7.000F-01 7.163Z-03 4.206B-04 7.000E-01 - 8.000E-01 9.775E-04 5.396E-04 8.000E-01 - 8.000Z-01 9.775E-04 5.396E-04 1.000E 00 1.72ZE-03 9.733E-04 1.000E 00 3.772E-04 5.396F-04 1.000E 01 3.772E-03 9.793E-04 1.200Z 00 -1.202E 00 3.722E-03 9.793E-04 1.400Z 00 -3.722E-03 9.793E-04 1.400E-03 1.600Z 00 - 1.600Z 00 3.272F-02 1.402E-03 1.600Z 00 - 1.300ZE-02 - 2.122E-04 1.402E-03 1.392E-02 1.600Z 00 - 2.000ZE 00 1.330ZE-02 - 2.122E-03
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1.200 00 - 1.400 00 3.7722-03 9.7938-04 1.400 00 - 1.600 00 2.2797-02 1.1402-03 1.600 00 - 1.600 00 2.2797-02 1.1402-03 1.600 00 - 2.000 00 1.3902-02 7.2128-04 2.000 00 - 2.500 00 1.3902-02 1.4358-03 2.500 00 - 3.500 00 1.2262-02 1.4558-03 3.000 00 - 3.500 00 1.2262-02 1.6668-03 3.000 00 - 3.500 00 2.0418-02 1.0008-03
1,4002 00 - 1,6002 00 2,2792-02 1,1402-03 1,6002 00 - 1,8002 C0 3,0112-02 9,9798-04 1,8002 00 - 2,0002 00 1,3902-02 7,2128-04 2,0002 00 - 2,5002 C0 1,8272-02 1,4358-03 2,5002 00 - 3,5002 C0 1,2262-02 1,1668-03 3,0008 00 - 3,5002 C0 2,0418-02 1,0008-03
1.6002 00 - 1.8002 C0 3.0112-02 9.9798-04 1.8002 00 - 2.0002 00 1.3902-02 7.2122-04 2.0002 00 - 2.5002 00 1.8378-03 2.5002 00 - 3.5002 00 1.2262-02 1.8358-03 3.0008 00 - 3.5002 00 1.2262-02 1.0008-03
1.800E 00 - 2.000E 00 1.390E-02 7.212E-04 2.000E 00 - 2.500E 00 1.827E-02 1.435E-03 2.500E 00 - 3.000E 00 1.226E-02 1.166E-03 3.000E 00 - 3.500E 00 2.0418-02 1.000E-03
2.0002 00 - 2.5002 00 1.8278-02 1.4358-03 2.5002 00 - 3.0002 00 1.2268-02 1.1668-03 3.0008 00 - 3.5002 00 2.0418-02 1.0008-03
2.5008 00 - 3.0008 00 1.2268-02 1.1668-03 3.0008 00 - 3.5008 C0 2.0418-02 1.0008-03
3.000E 00 - 3.500E CO 2.041E-02 1.000E-03
3.5008 00 - 4.0008 00 1.4912-02 7.7378-04
4.0008 00 - 4.5008 00 8.6598-03 6.2288-09
4.500E 00 - 5.000E 00 8.488E-03 5.201E-04
5.0008 00 - 6.000E CO 1.0978-02 7.9508-08
6.000E 00 - 7.000E 00 5.114E-03 3.230E-04
7.0002 00 - 8.0002 00 9.8912-09 7.9928-05
8.0008 00 - 9.0008 00 2.2518-05 2.6608-05
9.000E 00 - 1.000E 01 5.997E-06 1.335E-05

DIPPERENTIAL CROSS SECTIONS FOR GAMMA FAT PEODUCTION IN V. THE PIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMAA BAT PRODUCTION CROSS SECTION FOR THE ISIGNATED GAMMA HAT BREEGT INTERVALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE DOUBLY DIPPERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DC NOT INCLUDE AN ESTI-RATED TO PERCENT ERROR IN ABSOLUTE NOFBALISATION.

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INCIDENT NEUTRON ENERGY - 7.97 TO 9.01 HEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (NEV)	X-SECTION (B/SE/BEV)	E BROR (B/SR/MBV)	FBOTON ENERGY (REV)	I-SECTION (B/SR/MEV)	ERROR (B/SR/MEV)
2.7258-01	2.416B-01	1.5528-02	2.750E CO	2.7722-02	2.7002-03
2.0758-01	3.940E-01	1.462E-C2	2.810E 00	3.094E-02	2.8108-03
3.0252-01	4.867E-01	1.3732-02	2.870E 00	3.420E-02	2.6928-03
3.1758-01	4.6478-01	1.234B-C2	2.930B 00	3.6348-02	2.5678-03
3.3258-01	3.3685-01	1.2322-02	2.9902 00	3.7782-02	2.5638-03
3.6258-01	1.8422+01	1. 1918+02	3.1108 00	3.9662-02	2.5878-03
3.7758+01	9.7108-02	1. 174 2-02	3, 1802 00	4.166F-02	2.4862-03
3.9258-01	7.475B-02	1.190E-C2	3.260E 00	4.586E-02	2.4378-03
4.1008-01	6.339B-02	1.2332-02	3.340E 00	5.0732-02	2.391E-03
4.300E-01	6.376B-02	1.2302-02	3.420E 00	5.322E-02	2.201E-03
4.500E-01	1.5668-02	1.24/2-02	3.5008 00	5.1982-02	2.15/8-03
4.7002-01	9.0218-02	1 205 8-02	3.5002 00	3 9098-02	1 9236-03
5.100E-01	7.3618-02	1.122 2- 02	3.740E 00	3.206E-02	1.907E-03
5.300E-01	5.331E-02	9.483E-03	3.8202 00	2.7362-02	1.78CE-03
5.500B-01	4.2182-02	7.4732-03	3.900E 00	2.426E-02	1.7328-03
5.7002-01	3.854E-02	E. 5198-C3	3.9802 00	2.097E-02	1.7102-03
5.900E-01	3.6288-02	6.227E-03	4.0602.00	1.8702-02	1.6418-03
6.300E-01	7.647E-02	6.8012-03	4.2205 00	1.9257-02	1.5818-03
6.500B-01	2.068E-02	6.8392-03	4.3001 00	2.0458-02	1.578E-03
6.700E-01	1.6562-02	6.430E-C3	4.380E 00	2.103E-02	1.483E-03
6.900E-01	1.374E-02	6.098 E~03	4.460E 00	2.0432-02	1.443E-03
7.100E-01	1.140E-02	6.124 E-03	4.540E 00	1.9572-02	1.458B-03
7.3002-01	9.1398-03	6.196E-C3	4.6302 00	1.9102-02	1.4308-03
7.7002-01	8.3508-03	6.095E~C3	4.8308 00	1.6198-02	1.320E-03
7.900E-01	1.2642-02	5.9178-03	4.9302 00	1.500E-02	1.3288-03
8.1002-01	1.9192-02	5.642E-03	5.030E 00	1.447E-02	1.3C5E-03
8.300E-01	2.755E-02	5.484E-C3	5.130E 00	1.362E-02	1.292E-03
0.500E-01	9.0072-02	5.3722-03	5.230E 00	1.3002-02	1.289E-03
8.700E-01	5.7642-02	5.4332~03	5.330E 00	1.2822~02	1.254E-03
9.1002-01	8.4962-02	5.1238~03	5.5302 00	1.3652-02	1.154E-03
9.3002-01	8.212E-02	5. 1622~03	5.630E 00	1.3862-02	1.1128-03
9.500E+01	6.999E-02	5.381E-C3	5.730E 00	1.285E-02	1.0868-03
9.7002-01	5.586E-02	5.415E-03	5.830E 00	1.1392-02	1.077E-03
1.000E 00	4.551E-02	5.663E~03	5.930E 00	1.0172-02	1.006E-03
1.0408 00	5.5998-02	5.428E~03	6.0302 00 6 1302 00	9.5392-03	9.2718-04
1.120E 00	6.3308+02	4.8218-03	6.230E 00	1.039E-02	8.344E-04
1.160B 00	4.669E-02	4.376E-03	6.330E 00	1.0582-02	7.706E-04
1.200E 00	3.116E-02	4.547E-C3	6.440E 00	1.015E-02	6.940B-04
1.24 CE 00	2.2488-02	5.0302-03	6.560E 00	9.3202-03	6.2108-04
1.28CB 00	1.798E-02	5.6512-03	6.680E 00	0.091E-03	5.771B-04
1.3208 00	1.4005-02	5.615 2-03	6 9 20 F 00	6 0032-03	0.6188-04
1.400E 00	2.8538-02	5.8592-03	7.040E 00	5.5122-03	3.993B-04
1.4408 00	5.2518-02	5.649 E-C3	7.160B 00	5.155E-03	3.481E-04
1.4802 00	9.598E-02	5.707E-03	7.2802 00	4.6862-03	2.9578-04
1.5208 00	1.6218-01	6.644 E-03	7.4002 00	4.024E-03	2.4898-04
1.560E 00	2.2038-01	7.060E+C3	7.5200 00	3.3352-03	1 9178-04
1.6402 00	1.9438-01	6.126E-C1	7.760E 00	2.072E-03	1.577B-04
1.680E 00	1.533E-01	5.355E-C3	7.890E 00	1.3552-03	1.2508-04
1.720B 00	1.3712-01	5.137 E-03	8.030E 00	7.626E-04	9.5348-05
1.760E 00	1.340E-01	5.2118-02	8.170B 00	4.706E-04	8.7098-05
1.800E 00	1.2012-01	5.460 E-03	8.3102 00	3.5382-04	7.3858-05
1 9107 00	5 3982-02	3.858P+C3	8.5908.00	1.1182-04	4.2518-05
1.9702 00	4.646E-02	3.8252-03	8.7302 00	4.0992-05	3.74 1E-05
2.030E 00	4.6522-02	3.687E-C3	8.870E 00	2.274E-05	3.2672-05
2.0902 00	4.391E-02	3.584E-C3	9.010E 00	2.5022-05	2.984E-05
2.150E 00	3.962E-01	3.3632-03	9.150E 00	2.8042-05	2.4138-05
2.210E 00	3.876E-02	3.396E-C3	9.3002 00	2.0/38-05	2.0008-05
2.3308 00	4.10/2-02	3.1402-03	9.6202 00	-7.6372-06	1.9882-05
2.3908 00	3.8388-02	2.939B-C3	9.7802 00	-1.0448-05	1.7198-05
2.4502 00	3.4308-02	2.9308-03	9.940F 00	-2.6C1E-06	1.5198-05
2.5102 00	3.038E-02	2.8932-03	1.0108 01	8.5132-06	1.076E-05
2.570E 00	2.694E-02	2.932E-C3	1.026E 01	1.7422-05	9.5068-06
2.630E 00	2.564E-02	2.7992-03	1.0422 01	2.2442-05	1.1898-05
2.0905 00	4.0145-02	¥.0CJE-03	1.0305 01	A.13/6-03	

ISTEGRATED LATA

PROTON PRPRO	* *******	T-SPCTTON	FRROR
100103 20200			10.000
(6)	(V)	(8/58)	(8/24)
3.000E-01 -	4.000E-C1	2.5432-02	1.2262-03
4.000£-01 -	3.0001-01	1.6/62-03	1.232E-03
5.0002-01 -	6.000E-01	4.880E-03	8.184E+04
6.000E-01 -	7.0002-01	2.192E-03	6.505E-04
7.0008-01 -	8.0002-01	9.8942-04	6.0942-04
8.0008-01 -	1.000 # 00	1.1202-02	1.0802-03
1 0008 00 -	1.2001 00	1.1038-02	9.8328-04
1 3008 00 -	1 4001 00	3 9687-03	1.0882-03
1.2005 00 -	1 6 0 0 2 0 0	2 6618-03	1 2568-03
1.4002 00 -	1.0002 00	2.0312-02	1.2305-03
1.600E 00 -	1.800E 00	3.166E-02	1.1148-03
1.8002 00 -	2.000E 00	1.344E-02	8.364E-04
2.0002 00 -	2.500E 00	2.014E-02	1.630E-03
2.500E 00 -	3.0002 00	1.5182-02	1.3692-03
3.000E 00 -	3.5001 00	2.2882-02	1.2102-03
3.5002 00 -	4.0001 00	1.6948-02	9.4032-04
9.0002 00 -	4.5001 00	9.8652-03	7.8002-04
4.5008 00 -	5.0000 00	8.7022+03	6.890E-04
6 0007 00 -	6 0.00 1 00	1 778 1-02	1.1718-03
5.0002 00 -	3 0 0 0 1 00	0 7068-03	6 7402-00
6.0002 00 -	1.0002 00	8.7952-03	6.740E-04
7.000E 00 -	8.000E 00	3.4162-03	2.3082-04
8.000E 00 -	9.0002 00	2.4852-04	5.745E-05
9.0008 00 -	1.000 2 01	6.8632-06	2.071E-05

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DIFFERENTIAL CROSS SECTIONS FOR GAMMA BAT PRODUCTION IN V. THE FIRST SHT OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA BAT PRODUCTION CROSS SUITION FOR THE SECOND SET INTENALS. THIS SECOND SET RESULTS FROM INTEGRATION OF THE COUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-MATED 10 FERCHT EBROB IN ABSOLUTE NOBHALIZATION.

INCIDENT NEUTRON ENERGY = 9.01 TO 9.98 NEV. ANGLE = 125 DEGREES.

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PHOTON BREBGY (NEV)	I-SECTION (B/SR/MEV)	E BROB (B/SB/BEV)	PBOTOB EBERGY (NEV)	I-SECTION (B/SE/HEV)	BBBOB (B/SB/HEV)
2.7258-01	2.5132-01	1.7 16 2-02	2.7502 00	2.9432-02	3.1058-03
2.8752-01	4.0068-01	1.5412-02	2.8 IVE ÚÚ	3. 100E-02	3. 1762-03
3.0252-01	4.822E-01	1.437B-02	2.870E 00	3.397E-02	3.085E-03
3.1758-01 3.3368-01	4.4532-01	1.3132-02	2.9302 00	3.6182-02	2.996E-03
3.4752+01	2 1122-01	1.34/2-02	2.9908 00	3.7018-02	3.0088-03
3.6252-01	1.2902-01	1.295 2-02	3. 1 108 00	4.1472-02	2.9762-03
3.7758-01	8.321E-02	1.333E-C2	3.180E 00	4.601z-02	2.7928-03
3.9252-01	6.4522-02	1.352 E-C2	3.260E 00	5.0002-02	2.7622-03
4.1002-01	6.296E-02	1.320E-02	3.340E 00	5.1682-02	2.7C52-03
4.3002-01	7.16/E-02 9.0702-02	1.3262+02	3.4208 00	5.355E-02	2.6338-03
G./UUR-UI	1.1022-01	1.3138-02	3.5000 00	9.7772-02	2.4845-03
4.900E-01	1.0278-01	1.284E-C2	3.660E 00	3.7762-02	2.2848-03
5.100E-01	7.161E-02	1.242E-02	3.7402 00	3.0972-02	2.2428-03
5.300E-01	4.4568-02	1.0452-02	3.820B 00	2.8518-02	2.1308-03
5.5002+01	3.4448-02	8.2022-03	3.9002 00	2.7282-02	2.0248-03
5.900E-01	3.2392-02	0.0478+03	B.060E 00	2.4398-03	1 9012-03
6.100E-01	2.864E-02	6.9912-03	4.140E 00	2.3072-02	1.8978-03
6.300E-01	2.257E-02	7.741E-03	4.220E 00	2.3282-02	1.8902-03
6.500E-01	1.657E-02	7.6842-C3	4.3COE 00	2.460E-02	1.8398-03
6 9002-01	1.3202-02	7.3362-03	4.3802 00	2.5062-02	1.774B-03
7.100E-01	1.1568-02	6.8087-03	4.580F 00	2.3576-02	1.7728-03
7.3002-01	1.C87E-02	6.8592-03	4.630E 00	2.0732-02	1.705B-03
7.500E-01	1.0762-02	6.787E-C3	4.730E 00	1.903E-02	1.6918-03
7.7002-01	1.137E-02	G. 4 06 E-03	4.830E 00	1.791E-02	1.6478-03
7.900E-01 9 100P-01	1.3825-02	6.110E-03	4.9308 00	1.7252-02	1.6348-03
8.3002-01	2.8828-02	5.8092-03	5.1307 00	1.5898-02	1 5728-03
8.500E-01	4.2872-02	5.737E-C3	5.230E 00	1.4298-02	1.5748-03
8.700E-01	6.0518-02	5.959 E-C3	5.330E 00	1.2502-02	1.5298-03
8.900E-01	7.6958-02	6.116E-03	5.4302 00	1.1398-02	1.5458-03
9.3002-01	8.4352+02	5.6318-03	5.5308 00	1.1188-02	1.5038-03
9.500 E-01	6.7818-02	5.055 z-03	5.7308 00	1.1158-02	1.4008+03
9.700E-01	5.509E-02	5.946Z-C3	5.830E 00	1.1592-02	1.3628-03
1.000E 00	4.8058-02	5.9962-03	5.9302 00	1.2392-02	1.291E-03
1.040E 00	6.1138-02	5.8832-03	6.030E 00	1.2832-02	1.2678-03
1.1208 00	6.4492-02	5. 1227-03	6.2308.00	1.1238-02	1.1758-03
1.160E 00	3.970E-02	5.1752-03	6.330E 00	9.9298-03	1.1248-03
1.200E 00	2.3732-02	5.2642-03	6.4401 00	8.4812-03	1.0348-03
1.240E 00	1.5742-02	5.723E-03	6.560E CO	7.7042-03	9.5928-04
1.3202 00	1.6738-02	6.454Z-CJ	6.680E 00 6 8008 00	8.010E-03	9.3128-04
1.360E 00	1.9448-02	5.975E-03	6.920B 00	9.3492-03	7.9558-04
1.400E 00	3.186E-02	6.287E-C3	7.040E 00	9.0908-03	7.2678-04
1.4402 00	5.3912-02	6.079E-C3	7.160E 00	7.717E-03	6.791E-04
1.480E 00	9.5192-02	6.564E-03	7.280E 00	6.3488-03	6.3648-04
1.520E 00	7 1928-01	7.6832-03	7.4008.00	5.J05E-03	5.8/85-04
1.600g 00	2.2795-01	7.1248-63	7.640g 00	4.5758-03	9.9528-04
1.640E 00	1.9042-01	6.243E-03	7.760B 00	4.6102-03	4.4608-04
1.680E 00	1.4972-01	5.6902-03	7.890B 00	4.3072-03	3.8958-04
1.7208 00	1.3318-01	5.5188-03	8.0302 00	3.7392-03	3.5008-04
1.800E 00	1.1438-01	5.4518-03	8.3102 00	2.5878-03	2.6098-04
1.850E 00	8.3982-02	4. 4228- 63	8.450E 00	2.067B-03	2.1588-04
1.910E 00	5.448E-02	4.259E-03	8.590E 00	1.5932-03	1.8428-04
1.970E 00	4.658E-02	4.068E-03	8.730E 00	1.1328-03	1.5878-04
2.0302.00	4.601E-02 4.2158-02	3.8242-03	8.8702 00 9.0107 00	1.835E-04	9.6528+04
2.150g 00	3. A94E-02	3.0022-03	9.150E 00	3.5948-04	8.1588-05
2.210E 00	3.833B-02	3.6482-03	9.300E 00	1.8732-04	7.3768-05
2.270E 00	3.8188-02	3.628E-03	9.460E 00	8.3632-05	5.4402-05
2.330E 00	J.7122-02	3.668E-C3	9.620E 00	4.290E-05	3.7098-05
2.3902 00	3.5212-02	3. 330 2-03	3.780E VQ	1.4452-05	3.5708-05
2.510B 00	3,1778-02	3.2751-03	1.0108 01	1.2932-05	2.3198-05
2.570E 00	2.879Z-02	3.361E-03	1.026E 01	1.564E-05	1.3885-05
2.630E 00	2.8682+02	3.218E-03	1.0428 01	1.3322-05	1.5158-05
2.07UL UU	4.7305-02	J. UO2 5- VJ	1.V20E VI	1.0146703	7.2105-U3

TETEGBATED CATA

PHOTON ENEEGT	INTERVAL	1-SECTION	BBBOB
(024	,	(0/36)	(0/30)
3.000B-01 ÷	4 10 00 E-0 1	2.3752-02	1.3412-03
4.0002-01 -	5.0COE-01	8.746E-03	1.3108-03
5.0002-01 -	6.000 E-01	4.341E-03	9.027E-04
6.0002-01 -	7.000E-C1	1.861E-03	7.3738-04
7.000E-01 -	8.0002-01	1. 173E-03	6.600E-04
8.000E=01 *	1.0001 00	1.1298-02	1.1798-03
1.000E 00 -	1.200E 00	1.1212-02	1.084B-03
1.2008 00 -	1.400E 00	3.6558-03	1.2058-03
1.4008 00 -	1.6001 00	2.6472-02	1.3798-03
1.600E 00 -	1.8COE 00	3.079E-02	1.1628-03
1.800E 00 -	2.000 # 00	1.3282-02	8.7438-04
2.0001 00 -	2.5002 00	1.9398-02	1.8908-03
2.5008 00 -	1.000 # 00	1.5772-02	1.5728-03
1.0008 00 -	3.5007 00	2.3798-02	1.3908-03
3.5008 00 -	00 T 000	1.7452-02	1.1098-03
4.0008 00 -	.500E CD	1.2058-02	9.2448-04
A.5008 00 -	5.0007 00	9.6322-03	8.4082-04
5 0008 00 -	5.000P 00	1.2758-02	1.0698-03
6 0007 00 -	7.0007 00	9.6287-03	1.0168-03
7.0007.00 -	A.0007 00	5.6658-03	5-4828-04
A 0000 00 -	0.001 00	1.9928-03	2.1528-04
9 000# 00 -	1.0001 01	1.4828-08	5.6718-05
2.VVV4 VV -		*******	

DIFFERENTIAL CROSS SECTIONS FOR GAMMA FAY PRODUCTION IN V. THE FIRST SET OF RUMBERS IS THE DOUBLE DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAT PRODUCTION CROSS SECTION FOR THE LESIGNATED GAMMA BAY ENERGY INTERVALS. THIS SECOND SET BESULTS FROM INTERNATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTAINTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-RATED TO PERCENT BEBOR IN APSOLUTE NOFBALIZATION.

INCIDENT NEUTRON ENERGY = 9.98 TO 12.03 MEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (REV)	X-SECTION (E/SE/MEV)	ERROR (B/SR/NEV)	FROTON ENERGY (NEV)	I-SECTION (B/SB/MEV)	ERBOR (B/SB/MEV)
3 7358-01	3 3378-01	1 760 8-03	2 7508 00	3 1867-02	3 3608-03
2.7258-01	3.6608-01	1.6221-02	2.8101 00	3.3852-02	3.3148-03
3.0258-01	4.3748-01	1.555 E-02	2.8702 00	3.6212-02	3.323E-03
3.1758-01	4.0642-01	1.449E-C2	2.930E CC	3.8842-02	3.3288-03
3.325B-01	3.093E-01	1.4952-02	2.990E 00	4.173E-02	3.237E-03
3.4758-01	2.0798-01	1.4938-02	3.050B 00	9.3722+02	3.1628-03
3.0258-01	8.810R-02	1.5712-02	3. 1608 00	4.7632-02	3.09CE-03
3.9258-01	6.856E-02	1.568 E-02	3.260E 00	5.2752-02	3.055E-03
4.100E-01	6.012B-02	1.6C7E-C2	3.340E 00	5.435E-02	2.9252-03
4.300E-01	5.928E-02	1.6242-02	3.4201 00	5.5352-02	2.9082-03
4.7008-01	1.0608-01	1.5618-02	3.5802 00	5.2948-02	2.5828-03
4.900E-01	1.0372-01	1.547E-02	3.660E 00	4.558E-02	2.534E-03
5.1002-01	7.529B-02	1.480E-C2	3.740E 00	3.8282-02	2.462E-03
5.300E+01	4.620E-02	1.2412-02	3.8202 00	3.2058-02	2.395E-03
5.500E-01	3.36/2-02	9.5532-03	3.9008 00	2.8002-02	2.3002-03
5.9002-01	3.4938-02	7.679E-03	4.060£ 00	2.5482-02	2.225E-03
6.100E-01	2.903B-02	8.1122-03	4.140E 00	2.3952-02	2.140E-03
6.300E-01	2.0862-02	9.186I-C3	4.220E 00	2.439E-02	2.101E-03
6.500E-01	1.5132-02	9.0981-03	4.300E UU	2.556E-02	2.070E-03
6.900E-01	1.0808-02	8.148E-C3	4.460E 00	2.545E-02	1.941E-03
7.100E-01	8.1468-03	7.898E-03	4.540E 00	2.4132-02	1.956E-03
7.300E-01	5.4328-03	7.807E-C3	4.630E 00	2.275g-02	1.881E-03
7.500E-01	5.161E-03	7.7872-03	4.7301 00	2.2128-02	1.8238-03
7.7002-01	8.0062-03 1 2552-02	7.4378-03	4.830E 00	2.1302-02	1.7838-03
8.100E-01	1.8152-02	6.723E-03	5.030E 00	1.950E-02	1.723E-03
8.300E-01	2.6548-02	6.4112-03	5.130B 00	1.949E-02	1,771E-03
8.500E-01	3.943E-02	6.290 E-03	5,230E 00	1.675E-02	1.7828-03
8.700E-01	5.5308-02	6.327E-03	5.330E 00	1.7902-02	1.71CE-03
9.1002-01	7.6558-02	6.1332-03	5.5302 00	1.7528-02	1.6298-03
9.300E-01	7.5488-02	6.0C5E-C3	5.630E 00	1.6072-02	1.5982-03
9.500E-01	6.7072-02	6.058E-C3	5.730E 00	1.5222-02	1.6258-03
9.700E-01	5.652E-02	6.215E-03	5.830E 00	1.488E-02	1.55CB-03
1.0402 00	7 0188-02	6.2682-03	5.930E 00	1.2782-02	1.4672-03
1.080E 00	8.5518-02	5.8082-03	6.130E 00	1.198E-02	1.328E-03
1.120E 00	7.441E-02	5.741E+C3	6.230E 00	1.1332-02	1.326E-03
1.160E 00	5.297E-02	5.263 E-03	6.330E 00	1.0892-02	1.3C3E-03
1.2002 00	3.3558-02	5.4538-03	6.4402 00 6.5608 00	1.1198-02	1.2228-03
1.260E 00	1.4962-02	6.354 E-03	6.680E 00	1.1998-02	1.0902-03
1.320E 00	1.7162-02	6.233E-C3	6.800B 00	1.097E-02	1.0848-03
1.360E 00	2.080E-02	6.285 E-03	6.920E 00	9.8152-03	1.001E-03
1.4002 00	2.956E-02 5.256P-02	6.7422-03	7.0408 00	8.794E-03 7 5578-03	9.2528-04
1.4802 00	1.0118=01	6.6022-03	7. 2001 00	n.210P-03	8.4648-04
1.5202 00	1.7428-01	7.5332-03	7. 4 COB 00	5.526E-03	7.836B-04
1.560E 00	2.356E-01	7.9382-03	7.520E 00	5.7462-03	7.806E-04
1.600E 00	2.4378-01	7.429E-03	7.640E 00	6.276E-03	7.521E-04
1.6802 00	1.6392-01	5.8098-03	7.8905 00	6.151P-03	6.6532-04
1.720E 00	1.450E-01	5.857E-03	8.030E 00	5.483E-03	6.746E-04
1.760E 00	1.359E-01	5.954 E- C3	8.170E 00	4.327E-03	6.3268-04
1.800E 00	1.1978-01	6.0178-03	8.310E 00	3.400E-03	5.677E-04
1.9102 00	5.6902-02	4.4822-03	8.4505 00	3.3912-03	5.8442-04
1.970E 00	4.5652-02	4.531E-03	8.730E 00	3.3402-03	5.046B-04
2.030E 00	4,286E-02	4.4462-(3	8.870E 00	3.0622-03	5.254E-04
2.090E 00	3.948E-02	4.326E-03	9.010E 00	2.694E-03	5.4848-04
2.1502 00	3.669E-02	4.1142-03 9.967 PA 03	9.150E 00 9.300P 00	2.235E-03	4.8/58-04
2.270E 00	4.0228-02	3.782E-03	9.460E 00	1.6592-03	5.665E-04
2.330E 00	3.9258-02	3.726E-C3	9.6202 00	1.285E-03	4.8022-04
2.3902 00	3.7872-02	3.675E-C3	9.780E 00	7.3582-04	3.9492-04
2.450E 00	1.5938-02	3.6052-03	9.940E 00	4.6851-04	5.5588-04
2.5708 00	3.0998-02	3.5112-03	1.0262 01	5.5878-04	3.1092-04
2.6302 00	3.0908-02	3.413E-03	1.0428 01	5.9502-04	2.676E-04
2.690E 00	3.068E-02	3.3C6E-C3	1.05AB C1	3.953E-04	3.2422-04

INTEGRATED DATA

PROTOP B	HERG	A THERE AL	1-SECTION	BUBOB
	(82	₹)	(B/SR)	(B/SR)
3.000E-0)1 -	4.000E-C1	2.255E-02	1.5142-03
4.000E-0)1 ~	5.000E-01	8,1601-03	1.5988+03
5.ÚÙÚE=U	1 -	5.0002-01	4.486E-03	1.048E-03
6.000E-0	1 -	7.0002-01	1.765Z-03	8.6152-04
7.0002-0)1 -	8.0002-01	7.902E-04	7.599E-04
8.0002-0)1 -	1.000£ 00	1.0712-02	1.2592-03
1.000E 0	0 -	1.200F 00	1.318E-02	1.162E-03
1.200E 0	io -	1.4001 00	4.0572-03	1.2372-03
1.400E 0	- Ó	1.600E 00	2.8102-02	1.4328-03
1.600E 0	0 -	1.800 E 00	3.3152-02	1.232E-03
1.800E 0	0 -	2.0001 00	1.3722-02	9.5282-04
2.0002 0	- 01	2.500# 00	1.9302-02	1.9692-03
2.5008 0	- 00	3.UCDE 00	1.6938-02	1.6778-03
3.000E 0	0 -	3.500# 00	2.5212-02	1.510E-03
3.5008 0	0 -	4.0007 CO	1.9682-02	1.2368-03
4.000E 0	0 -	4.5001 00	1.260 8-02	1.0038-01
0.5002 0	0 -	5.0007 00	1.0968-02	9.1638-04
5-0008 0	in -	6.0001 00	1.7008-02	1.6548-03
6.0007 0	0 -	7.0001 00	1.1348-02	1 1978-03
2 0007 0	in -	8 0001 00	6 4978-03	7 7967-04
0000		0.0001 00	3 6108-03	6 7660-00
0.0002 0		9.0001 00	3.010E+03	5.765E-04
9.0008 0	- 00	1.0001 01	1.4912-03	4.866E-04

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DIFPERENTIAL CROSS SECTIONS FOR GAMMA BAT PRODUCTION IN V. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAT PRODUCTION CROSS SECTION FOR THE CESSIONTED GAMMA BAT ERESCITIETEWALS. TRIS SECCHO SET RESULTS FROM INTEGRATION OF THE COUBLY DIFFERENTIAL DATA. THE UNCERTAINTES ARE GIVEN IN THE SARE UNITS AS THE DATA AND DO NOT INCLUDE AN ESTI-MATED TO FERCENT EBBOR IN ABSOLUTE NOBRALIZATION.

INCIDENT NEUTRON ENERGY = 12.03 TO 14.02 MEV. ANGLE = 125 DEGREES.

PHOTON ENEBGY (MEV)	I-SECTION (B/SE/MEV)	E RR OR (E/S B/ RE V)	FHOTOP ENERGY (NEV)	I-SECTION (E/SR/NEV)	EBSOD (b/sb/eev)
2.7252-01	1.3412-01	1.9712-02	2.7501 00	2.7212-02	3.555E-03
2.8752-01	2.2532-01	1.050 8-02	2.8 10E 00	2.7372-02	3.7592-03
3.0252-01	3.016E-01	1.767E-02	2.8708 00	2.8762-0Z	3.8018-03
3.1/52-01	3.0922-01	1.6502-02	2.9302 00	3.4652+02	3.5218-03
3.475E-01	1.6892-01	1.732E-02	3.050E 00	3.6232-02	3.5142-03
3.6252-01	1.036E-01	1.8222-02	3. 1 10E 00	3.8982-02	3.451E-03
3.775E-01	6.193E-02	1.076E-C2	3.1802 00	4.0992-02	3.2858-03
3.9252-01	4.1512-02	1.9252-02	3.2602 00	4.1932-02	3.3732-03
4.3002-01	4.3798-02	1.911E-C2	3.420E 00	4.8792-02	3.2868-03
4.5002-01	5.8698-02	1.960 E-02	3.500E 00	4.8132-02	3.177E-03
4.7008-01	0.2558-02	1-954 E- C2	3.580B 00	4.403E-02	3.0662-03
4.900E-01	9.0978-02	1.7848-02	3.660E 00 3.740P 00	3.5178-02	2.7558-03
5.300B-01	4.704E-02	1.384E-C2	3.820E 00	2.7632-02	2.8138-03
5.5008-01	3.2892-02	1. 180 E-C2	3.900E 00	2.4502-02	2.796B-03
5.7008-01	2.4998-02	1.0672-02	3.980E 00	2.465E-02	2.6212-03
5.9002-01	1,7552-02	1.0428-52	4.0608 00	2.2/98-02	2.5698-03
6.3008-01	8.8282-03	1. 174 2-02	4.220E 00	1.9492-02	2.497E-03
6.500 E-01	8.621E-03	1. 1548- 62	4.3COE 00	1.906E-02	2.5238-03
6.700E-01	9-395E-03	1:0618-03	4.3801 00	1.950E-02	2.442E-03
6.9002-01 7 1008-01	1.0398-02	9.8968-03	4.4608 00 0 5002 00	1.9792-02	2.3508-64
7.3008-01	7.278E-03	9.2292-03	4.630E 00	1.764E+02	2.3588-03
7.500E-01	2.3392-03	9.120E-C3	4.730E 00	1.9382-02	2.271B-03
7.7002-01	-3.6262-05	9,2462-03	4.830E 00	2.0442-02	2.2238-03
7.9002-01	2.4692-03	8.8742-03	4.9302 00	2.0852-02	2.2548-03
8.3002-01	1.7618-02	7.6192-03	5.1302 00	1.9985-02	2.2038-03
8.500E-01	2.999E-02	7,266 E-03	5.2302 00	1.8312-02	2.2478-03
8.7002-01	9.5278-02	7. 141E-C3	5.3308 00	1.553E-02	2.2128-03
8.900E-01	5.8602-02	7.2472-03	5.4302 00	1.3142-02	2.2212-03
9.3002-01	6.290E-02	7.0911-03	5.630E 00	1.2662-02	2.0348-03
9.500E-01	5.606E-02	7.076 2-03	5.730E 00	1.196E-02	2.049E-03
9.700E-01	9.958E-02	7.0692-03	5.830E 00	1.237E-02	2.0622-03
1.000E 00	4.902E-02	7.154 2-03	5.930E 00	1.4472-02	1.9638-03
1.0802.00	8.6542-02	6.2088-03	6.130E 00	1.5688-02	1.8298-03
1.12CE 00	7.451E-02	6,2422-03	6.230E 00	1.396E-02	1.8592-03
1.160E 00	5.061E-02	5.870E-03	6.330E 00	1.2182-02	1.797E-03
1.2002 00	3.1648-02	5.999E-C3	6.4402 00 6.5608 00	1.0872-02	1.6938-03
1.2808 00	1.3268+02	7.1548-03	6.680E 00	9.8872-03	1.616E-03
1.320E 00	1.267E-02	6.568E-03	6.800E 00	1.0162-02	1.5578-03
1.36CE 00	1.6068-02	6.694E-03	6.9202 00	1.059E-02	1.4342-03
1.4002 00	2.6922-02	7.385E-C3	7.0402 00	9.8/28-03	1.3548-03
1.4802 00	8.671E-02	7.0631-03	7.2802 00	6.792E-03	1.3042-03
1.520E 00	1.4972-01	7.777E-C3	7.4 CO2 00	5.9342-03	1.2268-03
1.560E 00	2.0602-01	8, 135 E-03	7.520E 00	5.3972-03	1.222B-03
1.600E 00	2.1908-01	7,500E-CJ	7.6402 00 7 TAON 60	5.1002-03	1.2082-03
1.6802 00	1.4738-01	6.020 E+03	7.8908 00	5.3212-03	1.145E-03
1.720E 00	1.2348-01	3.375 63	8.0308.00	5.3558-03	1.2282-03
1.760E 00	1,1472-01	5.8082-03	8.1702 00	4.896E-U3	1.1338 02
1.8002 00	1.0308-01	5.7418-03	8.3108 00 8 4508 CO	3.8702-03	1.0558+03
1.9108 00	4.4682-02	5.0722-03	8.5901 00	2.691E-03	1.222B-03
1.9702 00	3.9092-02	4.5112-03	8.7308 00	2.9862-03	1.0948-03
2.030B 00	3.742E-02	4.515E-C3	8.8702 00	3.1142-03	1.2848-03
2.0908 00	J.4382-02	4.6C1E-03	9.0 ICE 00	1.006E-03	1.4288-03
2.2102 00	3.4242-02	4.366 I-03	9.3008 00	2.2132-03	1.1238-01
2.2708 00	1.551E-02	4.222E-03	9.4602 00	1.8708-03	1.6398-0:
2.330E UU	3.3152.02	4,1507-71	2+6208 00	1.7902-03	1.3228-03
2.390g 00 2.450g 00	J.1198-02	3.940 E-03	9.780E 00 9.780E 00	1.0031-03	1, 1457-0
2.5102 00	2.3938-02	3,8931-03	1.0102 01	1.6272-03	1.5258-0
2.570E 00	2.2698-02	3.6 14 E-03	1.0268 01	1.4558-02	9.733R-0
2.630E 00	2.1908-02	3.7898-03	1.0428 01	1.3418-03	B.9268-0
2.69CE 00	2.463E-02	J. 6282-C3	1.0582 01	A*5945-04	1.0078+0

INTEGRATED DATA

PHOTON ENERG	Y INTEBVAL	1-SECTION	EBBOB
(82	∀)	(8/SB)	(E/SR)
3.0008-01 -	4.000E-01	1.7072-02	1.7852-03
4.000E-01 -	5.000E-C1	6.2492-03	1.9125-03
5.000E-01 -	6.0001-01	3.8922-03	1.260E-03
6.0008-01 -	7.000E-01	9.806E-04	1.0898-03
7.0008-01 -	8.0007-01	4.540E-04	9.2108-04
8.0008-01 -	1.000F 00	8.828E-03	1.4638-03
1.0008 00 -	1.2007 00	1.3021-02	1.2668-03
1.2008 00 -	1.4007 00	3.0892-03	1.3418-03
1.4002 00 -	1 6001 00	2.4567-02	1.5088-03
1 6007 00 -	1 8007 00	2 9308-02	1 2838-03
1.8008 00 -	3.0001.00	1 135 8-02	1 0088-03
7.8008 00 -	2.0002.00	1.6518-02	1 1338-03
2.0008 00 -	2.5002 00	1.0315-02	2.1325-03
2.500E 00 -	3.0002 00	1.3432-02	1.65/2-03
3.000E 00 -	3.500E 00	2.1332-02	1.6758-03
3.5002 00 -	4.0002 00	1.711E-02	1.4278-03
4.000E 00 -	4.500E 00	1.0158-02	1.2518-03
4.500E 00 -	5.000F 00	9.730E-03	1.141E-03
5.000E 00 -	6.0001 00	1.509E-02	2.123E-03
6.000E 00 -	7.0001 00	1.1872-02	1.6782-03
7.0002 00 -	8.0001 CO	6.3522-03	1.2398-03
B.0008 00 -	9.0001 00	3.5837-01	1.1892-01
9 000 8 00 -	1 0 0 0 1 0 1	2 0928-03	1 3888-03
3.0005 00 -	1.0002 01	1.0715-03	1.3408-03

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DIFFERENTIAL CROSS SECTIONS POF GAMMA FAT PEODUCTION IN V. THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA RAY PRODUCTION CROSS SECTION FOR THE LESIGNATED GAMMA RAY ENERGY INTERVALS. THIS SECOND SET DESULTS FROM INTEGRATION OF THE DOUBLY DIFFERENTIAL DATA. THE UNCERTIANTIES ARE GIVEN IN THE SAME UNITS AS THE DATA AND DC NOT INCLUDE AN ESTI-MATED 10 PERCENT ERBOR IN ABSOLUTE BOFMALIZATION.

INCIDENT NEUTRON ENERGY = 14.02 TO 17.04 NEV. ANGLE = 125 CEGREES.

PROTON ENERGY (NBV)	I-SECTION (B/SR/NEV)	EFROR (B/SR/NEV)	EHOTON ENERGY (MEV)	X-SECTION (B/SR/MEV)	EBROR (B/SR/MEV)
2.7258-01	1.4438-01	2.201E-C2	2.750E 00	1.5308-02	3.1568-03
2.8752-01	1.8328-01	2.090E-02	2.810E 00	1.8612-02	3.0438-03
3.025E-01	2.104B-01	1.9842-02	2.870E 00	2.08 IE-02	3.0598-03
3.1752-01	2.0658-01	1.927B-C2	2.930B 00	2.116E-02	3.011E-03
3.325E-01	1.770E-01	1.989E-C2	2.9902 CO	1.945E-02	2.9832-03
3.4758-01	1.362E-01	2.006 E-02	3.050E 00	1.8502-02	3.1548-03
3.6252-01	9.319E-02	2.0992-02	3.110B 00	2.0782-02	3,192B-03
3.7758-01	5.8292-02	2.2102-02	3.1602 00	2.4212-02	2.9435-43
3.9258-01	3 0352-02	2.3402-12	3 3000 00	2 3708-02	2.9118-03
4.300E-01	3.5788-02	2.399 8-02	3.420E 00	2.6781-02	2.777E-03
4.500E-01	3.055E-02	2. 4 22 E- C2	3.500E 00	2.6782-02	2.6832-03
4.700E-01	4.379E-02	2.3C7E-C2	3.580E 00	2.306E-02	2.596B-03
9.900E-01	6.7128-02	2.052E-02	3.6607 00	1.9248-02	2.549B-03
5.1008-01	7.6222-02	1.790E-C2	3.740E 00	1.6462-02	2.4162-03
5.3008-01	6.761E-02	1.5432-02	3.8202 00	1.3261-02	2.3315-03
5 7008-01	0 3702-02	1.1437+(7	3.9808 00	1.0068-02	2.0138-03
5.9008-01	3.5338-03	1.120 0-02	4.0601 00	1.151E-02	2.3228-03
6.100E-01	3.020E-02	1. 160 E- C2	4.140E 00	1.1522-02	2.210E-03
6.300E-01	2.880E-02	1.333E-C2	4.220E 00	1.136E-02	2.1918-03
6.500B-01	2.870E-02	1.364 E-02	4.300E 00	1.377E-02	2.2458-03
6.700E-01	2.8662-02	1.316E-C2	4.380E 00	1.6382-02	2.1718-03
6.900E-01	2.7108-02	1.1938-02	4.460 <u>F</u> 00	1.3462-02	2.1958-03
7 2008-01	1 8002-02	1.0778-02	4.5405 00	1 1158-02	2 1258-03
7.5002-01	1.8412-02	1.055 2-02	4.7302 00	9.964E-03	2.1478-03
7.700B-01	2.668B-02	1.0C2E-C2	4.8302 00	7.543E-03	2.1218-03
7.900E-01	3.9658-02	9.042E-C3	4.930E 00	6.7052-03	2.1128-03
8.100E-01	5.1938-02	8.586 E-03	5.030E 00	7.856E-03	1.95EB-C3
8.3002-01	6.2358-02	8.498E-C3	5.1308 00	7.9762-03 9.0008-03	2.0498-03
8 7008-01	A AAAF-02	8 304 8-03	5.3308.00	9.0367-03	1.9098-03
8.9008-01	1.0302-01	E. 295E-C3	5.4308 00	9.3432-03	1.8948-03
9.100E-01	1.0972-01	7.551E-C3	5.5302 00	7.776E-03	1.8768-03
9.300E-01	1.040E-01	7.099E-C3	5.630E 00	6.4302-03	1.9468-03
9.500E-01	8.768E-02	7.010E-C3	5.7302 00	6.260E-03	1.9078-03
9.700Z-01	6.869E-02	7.3478-03	5.8302 00	6.3372-03	1.0102-03
1.0002.00	5 1228-02	7.0925-03	6 0 30 2 00	7 9775-03	1 7742-03
1.080E 00	6.257E-02	6.681E-03	6.1302 00	8.641E-03	1.7918-03
1.120E 00	5.982E-02	6.580E-C3	6.230E 00	8.208E-03	1.7252-03
1.160E 00	4.121E-02	6.161E-03	6.330E 00	7.1162-03	1.677E-03
1.200E 00	2.519E-02	E.2362-C3	6.440E 00	5.6072-03	1.6102-03
1.2408 00	1.7908-02	· 0.2002-63	6.5002 00	3.8//2-03	1.3492-03
1.320P 00	1.7128-02	6.8642-03	6.8002 00	4.2812-03	1.4148-03
1.360E 00	2.239E-02	6.476E-03	6.920E 00	6.0722-03	1.3458-03
1.400B 00	2.730B-02	7.027E-03	7.040E 00	6.753E-03	1.271E-03
1.440E 00	9.0088-02	6.560E-C3	7.1602 00	5.7502-03	1.159E-03
1.6A08 00	A 5078-03	5.9951-03	7.2802 00	3.9162-03	1.0908-03
1.5202.00	1.2998-01	6.8177-03	7.5208.00	2.0129-03	1.0538-03
1.600E 00	1.352E-01	6.6312-03	7.6401 00	2.401E-03	1.0128-03
1.6402 00	1. 1442-01	6.399E-C3	7.760E 00	2.8642-03	9.9228-04
1.680E 00	8.876E-02	5.8 19 E-03	7.890Z 00	2.932E-03	9.8618-04
1.7202 00	7.4748-02	5.658E-03	8.0302 00	2.516E-03	9.639E-04
1.750E 00	6.9138-02	5.8428-13	8.1/CE 00	1.8492-03	9.4882-04
1 8502 00	A A798-02	4.9837-03	8.4508.00	1.5452-03	9.2708-04
1.9102 00	2.816E-02	4.5758-03	8.59CB 00	1.6122-03	8.7758-04
1.970E 0C	2.486E-02	4.426E-03	8.730E 00	1.1842-03	8.155E-04
2.0308 00	2.6208-02	4.155E-C3	8.870E 00	8.5892-04	8.881E-04
2.090E 00	2.6568-02	4.3152-03	9.010E 00	1.1142-03	8.700E-04
2.1508 00	2.3046-02	4.1242-03	9.1502 00 9.3008 00	2.1128-03	7.7728-04
2.27CE 00	2.3178-02	3.8382-03	9.460T 00	1.7318-03	8.693E-04
2.3302 00	2.1692-02	3.4892-03	9.620E 00	7.931E-04	7.015E-04
2.390E 00	1.743E-02	3.547 E-C3	9.780E CO	1.8512-05	6.714E-04
3.450B 00	1.4748-02	3.590 E-03	9.940E 00	7.448E-05	8.467E-04
2.3102 00	1.0428-02	3.0//2-63	1.0108 01	5.6452-04 8.628F-04	4.6878-04
2.6308 00	1.043E-02	3.5112-03	1.0422 01	9.9058-04	4.2448-04
2.690E 00	1.2298-02	3. 185E- ¢3	1.058R 01	7.9958-04	4.8452-04

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IBTEGRATED CATA

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PROTON ENERGY INTERVAL	X-SECTION	ERROR
(827)	(B/SR)	(B/SR)
	• • •	• • •
3.000E-01 - 4.000E-C1	1.2792-02	2.085E-03
4.000E-01 - 5.0002-01	4.319E-03	2.3228-03
5.0002-01 - 6.0002-01	5.526E-03	1.378E-03
6.000E-01 - 7.000E-01	2.8712-03	1.2792-03
7.0002-01 - 8.0002-01	2.515E-03	1.0308-03
8.000E-01 - 1.000E 00	1.607E-02	1.5742-03
1.0002 00 - 1.2002 00	1.0178-02	1.3438-03
1.2008 00 - 1.4008 00	1.8848-03	1.3162-03
1.4007 00 - 1.6007 CO	1.6738-02	1.3038-03
1.600F 00 - 1.800F 00	1.7768-02	1.1967-03
1.8007 00 + 2.0007 00	2.0412-03	9 5162-04
2 0008 00 - 2 5008 00	1.0708-02	1 0078-03
2.0000 00 - 2.0002 00	1.0702-02	1.5475-03
	1.0132-03	1.0322-03
3.0008 00 - 3.5002 00	1.1092-02	1.4882-03
3.5008 00 - 4.0002 00	8.2218-03	1.2382-03
4.000Z 00 - 4,500I 00	6.6032-03	1.1142-03
4.5002 00 - 5.0002 CO	4.7212-03	1.0672-03
5.000E 00 - 6.000E 00	7.5732-03	1.914E-03
6.000E 00 - 7.000E 00	5.9252-03	1.576E-03
7.0002 00 - 8.0002 00	3.5132-03	1.0692-03
8.000E 00 - 9.000E CO	1.0958-03	8.9918-04
9.0007 00 - 1.0001 01	1.0887-03	7.7247-04
	1.0001-03	

DIFFERENTIAL CROSS SECTIONS FOR GAMMA BAY PRODUCTION IN V . THE FIRST SET OF NUMBERS IS THE DOUBLY DIFFERENTIAL CROSS SECTION, WHILE THE SECOND SET IS THE GAMMA BAY PRODUCTION CROSS SECTION FOR THE LESIGNATE CAMBA BAY ENDERING TWENALS. 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 ESTI-MATED 10 FIRCHNT ERBOR IN ABSOLUTE NORMALIZATION.

INCIDENT NEUTRON ENERGY = 17.04 TO 20.06 NEV. ANGLE = 125 DEGREES.

PHOTON ENERGY (NEV)	X-SECTION (B/SE/MEV)	E 8808 (E/S R/ ME V)	FBOTON ENERGY (HIV)	I-SECTION (B/SB/MEV)	BBBOD (B/SR/BEV)
2.7258-01	1.519E-01	2.8 19 2-02	2.750E 00	1.5732-02	3.516E-03
2.0758-01	1.7082-01	2.684 E-02	2.8 10E 00	1.346E-02	3.528E-03
3.0258-01	1.9062-01	2.540E-C2	2.870E 00	1.3662-02	3.5688-03
3.1758-01	1.9182-01	2.4482-02	2.9302 00	1.6132-02	3.4835-03
3.4758-01	1.2398-01	2.5007-02	3.050E 00	1.5962-02	3.4528-03
3.6252-01	8.526E-02	2.6921-02	3.110E 00	1.4852-02	3.2928-03
3.775E-01	5.8388-02	2.951E-C2	3.180E 00	1.5778-02	3.2602-03
3.9252-01	3.990E-02	3.1302-02	3.260E 00	1.8972-02	3.4445-03
4.100E-01	2.0498-02	3.2682-02	3.3408 00	1.8805-02	3.5048-03
4.5002-01	1.9898-02	3.262E+02	3.5002 00	1.3302-02	3.171E-03
8.7008-01	6.5518 02	2.9478-62	3.580E 00	1.481E-02	2.9602-03
4.900E-01	1.077E-01	2.686 E-C2	3.660E 00	1.4672-02	2.9498-03
5,1008-01	1.1728-01	2.3222-02	3.740F 00	1.2398-02	3.1268-03
5.300E-01	9.6192-01	1.8345-02	3.9008 00	1.0782=02	2.9338.03
5.7002-01	6.039E-02	1.617 2-02	3.9802 00	1.1478-02	2.7802-03
5.900E-01	4.8272-02	1. \$ 777- 67	4.0608 00	9.965E-03	2.6985-03
6.100E-01	3.479E-02	1.554 E-02	4.140E 00	7.0812-03	2.5450-03
6.300E-01	2.860E-02	1.8728-02	4.220E 00	5.5138-03	2.5322-03
6.700E-01	5.1602-02	1.7658-02	4.3602 00	6.0102-03	2.5298-03
6.9002-01	6.0132-02	1.570E-C2	4.460E.00	5.814E-03	2.5128-03
7.100E-01	5.741E-02	1.452E-C2	4.540E 00	6.7C0E-03	2.450E-03
7.300E-01	5.037E-02	1.433E-02	4.630E 00	8.1572-03	2.302E-03
7.5008-01	4.8268-02	1.3058-02	4.7308 00	5 5558-03	2.3108-03
7.9002-01	7.0788-02	1. 2628-02	4.9302 00	4.4502-03	2.2458+03
8.100E-01	8.702E-02	1.208 8-02	5.030E 00	4.774E-03	2.1228-03
8.3002-01	1.008E-01	1.084 2-02	5.1302 00	9.727E-03	2.102E-03
8.5008-01	1.142E-01	1.045E-C2	5.230E 00	4.340B-03	2.1338-03
8.7002-01	1.3098-01	1.0612-02	5.3308 00	2 9032-03	2.0402-03
9.100E-01	1.5238-01	9.4528-02	5.530B 00	2.6202-03	2.0648-03
9.300E-01	1.4282-01	9.252E-03	5.630E 00	3.9302-03	2.03EE-03
9.5008-01	1.2178-01	9.3088-03	5.730B 00	5.3932-03	2.004B-03
9.700E-01	9.8282-02	9.2942-03	5.8301 00	5.5262-03	1.9858-03
1.0002 00	5.8708-02	9.400E-03	6.030E 00	3.3638+03	1.8658-03
1.080E 00	6.3192-02	8.594E-03	6.1302 00	1.3862-03	1.88CE-03
1.120E 00	6.157E-02	7.738E-03	6.230g 00	-1.8402-04	1.811B-03
1.160E 00	4.275E-02	7.615E-C3	6.330E 00	1.0022-04	1.690B-03
1.200E 00	2.4798-02	7.717E-03	6.440E 00	2.1912-03	1.6012-03
1.2808 00	1.8168-02	8.106F-C3	6.680E 00	6.017E-03	1.5578-03
1.320E 00	2.3282-02	8.506 2-03	6.800x 00	5.543E-03	1.3998-03
1.360B 00	3.3542-02	6.182E-C3	6.920E 00	3.364E-03	1.2818-03
1.4002 00	4.768E-02	7.544 2-03	7.040E 00	8.4591-04	1.2478-03
1.4402 00	5.184E-02 7 030P-02	6.869E-03	7.1602.00	- 3.2302-04	1.1548+03
1.520E 00	8.9582-02	7.686E-03	7.400E 00	1.2682-03	9.983E-04
1.560E 00	1.018E-01	8.190E-03	7.520B 00	1.907E-03	9.496E-04
1.000E 00	1.0008-01	8.186E-Ç3	7.640B 00	1.6932-03	8.9105-04
1.640E 00	8.5652-02	7,7761-03	7.7602 00	1.0032.03	9.6249=04
1.6802 00	7.184E-02 6.405E-02	7.1342-03	7.890E 00 8.030F 00	7.4618-04	7.9558-04
1.760E 00	5.7918-02	7.243E-03	8. 1707 00	1.145E-03	7.791E-04
1.800E 00	5.032B-02	6.728E-C3	8.310E 00	1.1828-03	7.3898-04
1.850E 00	4.0712-02	5.657B-03	8.450E 00	1.000E-03	7.00CE-04
1.9108 00	3.3288-02	5.1032-03	8.590E 00 8.730E 00	9.630E-04 8 8892-04	0.3878-04 6 3558-04
2.0302 00	3.4938-02	4.975E-03	8.870E 00	5.2918-04	5.8752-04
2.0908 00	3.431E-0?	5.0882-C3	9.010B 00	2.524B-04	5.2558-04
2.150E 00	2.7892-02	5.153E-C3	9.150E 00	3.1321-04	4.8688-04
2.210E 00	2.3412-02	4.999E-03	9.3001 00	5,4878-04	4.546B-04
2.2708 00	2.4008-02	4.4415-63	9.4008 00	3.4105~04	4.4305-04
2.3908 00	2.406E-02	4.185 2-03	9.7808 00	2.5458-04	3.511E-04
2.450E 00	2.000B-02	4.5C8E-C3	9.940B 00	2.8568-04	3.5368-04
2.5105 00	1.9307-07	4.4 19 E-Q3	1.0 10E 01	2.9082-04	2.6898-04
2.570E 00	1.8268-02	4,142E-C3	1.0285 01	2.0508.94	1,9378-04
2.6308 00	1.7438-02	4.1992-LJ 1.8588-01	1.0422 01	2.2302404	1.9215-04

INTEGRATED CATA

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PHOTON ENERGY INTERVAL	I-SECTION	EBBOB
(8EV)	(B/SR)	(B/SB)
3.0008-01 - 4.0001-01	1. 1888-02	2.6788-03
4.000E-01 - 5.000E-01	9.3622-03	3.096B-03
5.0008-01 - 6.0007-01	7.9457-03	1.8748-03
6.0008-01 - 7.000F-C1	4.2388-03	1.7828-03
7 0002-01 - 8 0002-01	5.6567-03	1 3658-03
P 0008-01 - 1 0001 00	2 3058-02	2 0178-03
1 0008 00 - 1 1008 00	8 8008403	2.01/6-03
1.0008 00 - 1.2002 00	1.100 02	1.0030+03
1.2008 00 - 1.400E 00	5.082E-03	1.6028-03
1.400g 00 - 1.600g 00	1.613E-02	1.5118-03
1.600E 00 - 1.800E 00	1.4152-02	1.4692-03
1.800E 00 - 2.000E 00	7.3272-03	1.081E-03
2.000E 00 - 2.500E CO	1.325E-02	2.346E-03
2.5008 00 - 3.0008 00	8.1772-03	1.8918-03
3.0008 00 - 3.5008 00	8.1958-03	1.6798-03
3 5007 00 - 0 0007 00	6 389 2-03	1 0038-03
5.5005 00 - 0.5001 00	3 4018-03	1 2038-03
	3.4416-03	1.2936-03
4.5002 00 - 5.0002 00	3.2202-03	1.1405-03
5.0008 00 - 6.000P 00	9.261E-0J	2.0452-03
6.000E 00 - 7.000E 00	3.0352-03	1.6038-03
7.0002 00 - 8.0002 00	8.632 Z-04	9.8242-04
8.000E 00 - 9.000E 00	8.9292-04	6.8592-04
9.000E 00 - 1.0COE 01	3.7888-04	4.110E-04
	$\begin{array}{c} \text{PHOTOF EWERGT INTERVAL}\\ \textbf{(BET)} \\ \hline \\ \textbf{3.000E-01} & \textbf{4.000F-01} \\ \textbf{4.000E-01} & \textbf{5.000E-01} \\ \textbf{5.000E-01} & \textbf{-5.000E-01} \\ \textbf{5.000E-01} & \textbf{-7.000E-01} \\ \textbf{6.000E-01} & \textbf{-7.000E-01} \\ \textbf{6.000E-01} & \textbf{-7.000E-01} \\ \textbf{6.000E-01} & \textbf{-1.400E-00} \\ \textbf{1.200E-00} & \textbf{-1.400E-00} \\ \textbf{1.200E-00} & \textbf{-1.400E-00} \\ \textbf{1.400E-00} & \textbf{-1.400E-00} \\ \textbf{1.600E-00} & \textbf{-1.500E-00} \\ \textbf{3.500E-00} & \textbf{-3.500E-00} \\ \textbf{3.500E-00} & \textbf{-4.500E-00} \\ \textbf{3.500E-00} & \textbf{-5.000E-00} \\ \textbf{5.000E-00} & \textbf{-7.000E-00} \\ \textbf{5.000E-00} & \textbf{-7.000E-00} \\ \textbf{5.000E-00} & \textbf{-9.000E-00} \\ \textbf{5.000E-00} & \textbf{-9.00E-00} \\ \textbf{5.00E-00} & \textbf{-9.00E-00} \\ \textbf{5.00E-00-00-00} \\ 5.00E-00-00-00-00-00-00-00-00-00-00-00-00-$	PHOTON ENERGY INTERVAL (BY) I-SECTION (B/SR) 3.000E-01 - 4.000H-01 1.388E-02 4.000E-01 - 5.000E-01 3.462E-03 5.000E-01 - 6.000E-01 7.945E-03 6.000E-01 - 7.000E-01 4.238E-03 7.000E-01 - 7.000E-01 5.65E-03 8.000E-01 - 7.000E-01 5.65E-03 1.000E 00 - 1.200E 00 1.100E-02 1.200E 00 - 1.200E 00 1.002E-02 1.200E 00 - 1.400E 00 1.613E-02 1.400E 00 - 1.600E 00 1.613E-02 1.600E 00 - 1.800E 00 1.613E-02 1.600E 00 - 2.500E 00 1.325E-02 1.800E 00 - 3.500E 00 6.177E-03 2.500E 00 - 3.500E 00 6.125E-02 3.500E 00 - 3.500E 00 3.225E-02 3.500E 00 - 3.500E 00 8.17E-03 4.000E 00 - 4.500E 00 3.220E-03 5.000E 00 - 4.500E 00 3.220E-03 5.000E 00 - 5.000E 00 3.220E-03 5.000E 00 - 7.000E 00 3.23E-02 5.000E 00 - 7.000E 00 3.23E-02 5.000E 00 - 7.000E 00 3.23E-02 5.000E 00 - 7.000E 00 8.632E-03

TOTAL SECONDARY GAMMA RAY YIELE AND AVERAGE SECONDARY GAMMA RAY ENERGY PRON V AS A FUNCTION OF THE INCIDENT NEUTRON ENERGY. THESE DATA RESULT FROM A PULSE HEIGHT WEIGHTING ANALYSIS POG PULSE HEIGHTS GREATER THAN 0.260 MEV. UNCERTAIN-TIES ARE GIVEN IN PARENTHIESES IN THE SAME UNITS AS THE DATA. THE UNCERTAINTIES IN TOTAL YIELD DO NOT INCLUDE A 10 FERCENT FROM IN ABSOLUTE NOFMALIZATION. THE ANGLE IS 125 DEGREES.

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INC.NT. ENERGY (MEV)	ENERGY SPREAD (MEV)	SPCONDARY PHOTON VIPLD (B/SR)	AVERAGE ENERGY (HEV)	INC.NT. ENERGY ENERGY SPREAD (NEV) (NEV)	SECONDARY PHOTON VIELD (B/SR)	AVERAGE ENERGY (NEV)
0.150	0.101	-0.273E-02(0.757E-03)	0.122E 01(0.493E 00)	5.230 0.504	0.193E 00(0.997E-03)	0.175E 01(0.113E-01)
0.251	0.100	-0.499E-03 (0.231E-03)	0.665E 00(0.76EE 00)	5.740 0.516	0.208E 00(0.106E-02)	0.184E C1(0.116E-01)
0.350	0.100	0.1402-01(0.1432-03)	0.331E 00(0.142E-01)	6.255 0.514	0.214E 00(0.109E-C2)	0.151E 01(0.121E-01)
0.451	0.101	0.227E-01(0.133E-03)	0,315E 00(0.748E-02)	6.759 0.495	0.233E 00(0.117E-02)	0.1978 01(0.1238-01)
0.551	0.099	0.2382-01(0.1102-03)	0.329E 00(0.515E-02)	7.235 0.457	0.245E 00(0.129E-02)	0.2C8E 01(0.135E-01)
0.649	0.097	0.241E-01(0.105E-03)	0.330E 00(0.445E-02)	7.716 0.504	0.238E 00(0.127E-02)	0.2152 01(0.1412-01)
0.746	0.096	0.2282-01(0.9822-04)	0.329E 00(0.405E-02)	8.246 0.557	0.263E 00(0.138E-C2)	0.224E 01 (0.145E-01)
0.845	0,101	0.275E-01(0.112E-03)	0.325E OC(0.321E-02)	8.768 0.489	0.276E 00(0.156E-02)	0.234E 01(0.161E-01)
0.947	0.103	0.257E-01(0.116E-03)	0.351E 00(0.344E-02)	9.244 0.463	0.267E 00(0.157E-02)	0.238B 01(C.170E-01)
1.126	0.255	0.437E-01(0.158E-03)	0.393E 00(0.24 3E-02)	9.725 0.500	0.284E 00(0.170E-02)	0.245E 01(0.179E-01)
1.374	0.240	0.4822-01(0.1952-03)	0.412E 00(0.265E-02)	10.246 0.541	0.292E 00(0.186E-02)	0.253E 01(0.194E-01)
1.618	0.250	0.571E-01(0.239E-03)	0.487E 00(0.297E-02)	10.766 0.499	0.292E 00(0.197E-02)	0.258E 01(0.209E-01)
1.875	0.264	0.8282-01(0.331E-03)	0.738E 00(0.407E-02)	11.237 0.444	0.295E 00(0.218E-02)	0.264E 01(0.237E-01)
2.122	0.231	0.9332-01(0.3892-03)	0.8522 00(0.486E-02)	11.744 0.569	0.299E 00 (0.224E-02)	0.269E 01(0.242E-01)
2.375	0.274	0.943E-01(0.415E-03)	0.917E 00(0.549E-02)	12.283 0.508	0.276E 00(0.239E-02)	0.276B C1(0.285E-01)
2.631	0.240	0.9892-01(0.4702-03)	0.966E 00(0.627E-02)	12.751 0.430	0.256E 00(0.269E-02)	0.279E C1(0.348E-01)
2.864	0.227	0.9832-01(0.5252-03)	0.988E 00(0.711E-02)	13.251 0.569	0.239B 00(0.255E-02)	0.272E C1(0.345E-01)
3.120	0.284	0.986E-01(0.559E-03)	0.104E 01(0.78 1E-02)	13.777 0.483	0.214E 00(0.287E-02)	0.270E 01(0.429E-01)
3.378	0.233	0.102E 00 (0.650E-03)	0.109E 01(0.906E-02)	14.274 0.510	0.195E 00(0.306E-02)	0.258E G1 (0.481E-01)
3.623	0.258	0.114E 00 (0.694E-03)	0.121E 01(0.951E-02)	14.798 0.538	0.183E 00(0.316E-02)	0.2441 01(0.502B-01)
3.878	.0.250	0.131E 00(0.785E-03)	0.138E 01(0.105E-01)	15.500 0.866	0.172E 00(0.297E-02)	0.2238 01(0.4578-01)
4.120	0.235	0.151E 00 (0.892E-03)	0.1502 01(0.113E-01)	16.487 1.109	0.151E 00(0.289E-02)	0.2C4E 01 (0.461E-01)
4.366	0.257	0.164E 00 (0.968E-03)	0.157E 01(0.118E-01)	17.565 1.046	0.158E 00 (0.331E-02)	0.186E GI(0.4728-01)
4.611	0.232	0.174E 00 (0.101E-02)	0.162E 01(0.120E-01)	18.562 0.948	0.164E 00 (0.389E-C2)	0.183E C1(0.530E-01)
4.852	0.251	0.180E DO (0.104E-02)	0.167E 01 (0.123E-01)	19.548 1.025	0.185E 00(0.430E-02)	0.179E C1 (0.508E-01)

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TOTAL SECONDARY GAMMA RAY YIELD AND AVERAGE SECONDARY GAMMA RAY ENERGY FROM V AS A FUNCTION OF THE INCIDENT NEUTRON ENERGY. THESE DATA RESULT FROM A PULSE HEIGHT WEIGHTING ANALYSIS FOR PULSE HEIGHTS GREATER THAN 0.700 MEV. UNCERTAIN-TIES ARE GIVEN IN PARENTHIESES IN THE SAME UNITS AS THE DATA. THE UNCERTAINTIES IN TOTAL VIELD DO NOT INCLUDE A 10 FERCENT ERROR IN ABSOLUTE NORMALIZATION. THE ANGLE 51 252 DEGREES.

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	INC.NT. ENERGY	ENERGY SPREAD	SECCNDARY PHOTON VIELD (E/SR)	AVERAGE ENERGY (MEV)	INC.NT. ENERGY (MPR)	EN ERGY SPREAD	SECONDARY PHOTON VIELD (E/SB)	AVERAGE ENERGY (BEV)
	(0.54)	(124)			(12.1)	(1151)	•	
	0, 150	0.101	-0.138E-02(0.465E-03)	0.201E 01(0.983E 00)	5.230	0.504	0.136E 00 (0.722E-03)	0.233E 01(0.158E-01)
	0.251	0.100	-0.2807-C3(0.151E-03)	0.774E 001 0.133E 011	5.740	0.516	0.150E 00! C.776E-C3)	0.2418 01 (0.1582-01)
	0.350	0.100	-0.1955-04 (0.808E-04)	-0.171E 02(-0.716E 02)	6.255	0.514	0.156E 001 C.B23E-03)	0.247E 01 (0.164E-0 1)
	0.451	0.101	-0.2603-04(0.6568-04)	-0.308E 01/-0.988E 011	6.759	0.495	0.172E 00 (C.888E-03)	0.254E C1(0.165E-01)
	0.551	0.099	0.1237-03(0.4442-04)	0.4128 01(0.1758 01)	7.235	0.457	0.186E 001 (.985E-03)	0.262E C1(0.174E-01)
	0.649	0.097	0.1042-03(0.3848-04)	0.510E 01(0.211E 01)	7.716	0.504	0.181E 001 (.994E-03)	0.271E 01 (0.185E-01)
	0.746	0.096	0.1232-03(0.3088-04)	0.383E 01(0.116E 01)	8.246	0.557	0.203E 001 C. 107E-021	0.280E 01(C.185E-01)
	0.845	0.101	0.9822-04(0.2872-04)	0.507E 01(0.166E 01)	8.768	0.489	0.217E 001 9.119E-02)	0.287E C1 (0.197E-01)
`	0.947	0.103	0.3992-03(0.2952-04)	0.137E 014 0.905E-011	9.244	0.463	0.209E 001 0.121E-02)	0.254E 01 (0.213E-01)
	1, 126	0.255	0.4685-02(0.4258-04)	0.102E C1(0.179E+01)	9.725	0.500	0.225E 00(0.132E-02)	0.3COE 01(0.221E-01)
	1.374	0.240	0.662E-02(0.55EE-04)	0.100P G1(0.145P-01)	10.246	0.541	0.233E 004 0.141E-02)	0.3C7E 014 0.231E-011
	1.618	0.250	0.115E-01(0.802E-04)	0.113P 61(0.1178-01)	10.766	0.499	0.234E 00(0.149E-02)	0.312E 01 (0.248E-01)
	1.875	0.264	0.3188-01(0.1688-03)	0.141E CIC 0. 103E-011	11.237	0.444	0.239E 00 (0.171E-02)	0.317E C1(0.281E-01)
	2. 122	0.231	0.4268-01(0.2238-03)	0.1478 C1(0.1068-01)	11.744	0.569	0.2458 00(0.1773-02)	0.320E C1(0.284E-01)
	2.375	0.274	0.4682-01(0.2492-03)	0.150P 01(0.110P-01)	12.283	0.508	0.228E 00(0.185E-02)	0.325E 01(0.325E-01)
	2.631	0.240	0.521E-01(0.305E-03)	0.153E 01(0.122E-01)	12.751	0.430	0.217E 00().2023-02)	0.324E 01(0.377E-01)
	2.864	0.227	0.535E-01(0.330E-03)	0.154E 01(0.130E-01)	13.251	0.569	0.198E 00(D.196E-02)	0.320E 011 C.390E-01)
	3, 120	0.284	0.569P-01(0.362P-03)	0.155E 01(0.134E-01)	13.777	0.483	0.179E 00(0.213E-02)	0.316E 014 0.469E-011
	3.378	0.233	C_617E-01(0.415E-03)	0.159E 01(0.145E-01)	14.274	0.510	0.160E 0C().222E-02)	0.365E 01(0.531E-01)
	3.623	0.258	0.7148-01/ 0.4538-03)	0.172E 01(0.147E-01)	14.798	0.538	0.144E OC(D.241E-02)	0.259E 01(0.613E-01)
	3.878	0.250	0.855E-01(0.527E-03)	0.1938 01(0.1568-01)	15.500	0.866	0.136E 00 (D.207E-02)	0.2701 011 0.515E-01)
	4.120	0.235	0.101E 00(0.631E-03)	0.207E 01(0. 168E-0 1)	16.487	1.109	0.119E 00 (D. 202E-02)	0.248E 01(0.530E-01)
	4.366	0.257	0.11CF 00(0.686E-03)	0.2162 01(0.1732-01)	17.565	1.046	0.123E 00(0.232E-02)	0.227E C1(0.550E-01)
	4.611	0.232	0.1188 00 (0.7148-03)	0.222P 01(0.176E-01)	18.562	0.948	0.131E 00 (0.283E-02)	0.219E 01(0.610E-01)
	4.852	0.251	0.124E 00 (0.741E-03)	0.226E 01(0.175E-01)	19.548	1.025	0.142E 00(0.296E-02)	0.2198 01(0.594E-01)

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