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NEUTRON SCATTERING IN ORIENTED POLYETHYLENE
AT 300, 77, AND 4.2°K

W. R. Myers

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ABSTRACT

The absolute neutron scattering cross sections of oriented polyethylene have been measured at temperatures of 300, 77 and 4.2°K using the MTR phased chopper velocity selector. Incident neutron energies of 30, 40 and 80 meV were used. The target was oriented so that the transverse and longitudinal cross sections could be measured simultaneously in six (three each) separate scattering angles. Data are presented in the form of absolute scattering cross sections and are also shown converted to the amplitude weighted directional frequency spectra. The conversion to frequency spectra includes use of measured Debye-Waller coefficients. Strong singularities are observed at phonon energies of 65, 25, 15.5, 12 and 5.6 meV.

The data for the principle scattering angles are shown in Figures 4 through 9. Data for all the angles at the three temperatures and three incident energies are tabulated in an appendix.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
I. INTRODUCTION	1
II. THEORY	3
III. EXPERIMENT	7
IV. RESULTS AND DISCUSSION	12
REFERENCES	33
APPENDIX	A-1
Definitions	A-1
Table of Listings	A-2

FIGURES

1. X-ray transmission photographs of the polyethylene sample at sample-to-film distances of 5 cm (a) and 3 cm (b). The c axis is vertical	8
2. Plan of the experiment showing the target orientation with respect to the incident beam, and the detector locations	8
3. Typical time-of-flight data showing total and "open frame" counts and the estimated air scattering component	11
4. Longitudinal and transverse cross sections of oriented polyethylene at 300, 77 and 4.2°K, for 30 meV incident energy	13
5. Polyethylene cross sections at 77 and 4.2°K, for 40 meV incident energy	14
6. Polyethylene cross sections at 77 and 4.2°K, for 80 meV incident energy	15
7. Amplitude weighted directional frequency spectra derived from the 30 meV cross sections in the one-phonon approximation. A is the value of the Debye-Waller coefficient used in the transformation	17
8. Amplitude weighted directional spectra derived from the 40 meV cross sections	18

9.	Amplitude weighted directional spectra derived from the 80 meV cross sections	19
10.	Elastic scattering cross sections for oriented polyethylene. The lines show the Debye-Waller coefficients derived from the inelastic data, except the transverse 300°K line	21
11.	Polyethylene frequency spectra at 4.2°K for six angles and three incident energies	22
12.	Neutron time-of-flight diffractometer pattern for the sample in the transverse (hk0) orientation. The scattering angle is 30°	24
13.	Specific heat of polyethylene: — measured and • • • calculated from these data	31
14.	Measured and calculated Debye-Waller coefficients for polyethylene. Closed symbols are longitudinal, open are transverse except ○ is polycrystalline	31

TABLES

1.	Transverse and longitudinal fractions	12
2.	Debye-Waller coefficients	23
3.	Singularities in the polyethylene spectrum	25

NEUTRON SCATTERING IN ORIENTED POLYETHYLENE

AT 300, 77, and 4.2°K

W. R. Myers

I. INTRODUCTION

In the last few years, there have been several measurements of the neutron scattering spectrum of polyethylene⁽¹⁻⁹⁾. The measurements were made for several temperatures from 470 down to 77°K, and on liquid, highly amorphous, highly crystalline and oriented samples. The best definition of the singularities of the vibrational spectrum is achieved at the lower temperatures and for the highly crystalline and oriented targets. Nearly all of the spectra show the two strong frequency limits at 65 and 25 meV that are calculated from the model of an isolated extended molecule^(10,11). All of the spectra show additional structure, however, and progress is being made in explaining that structure by taking into account the intermolecular coupling to calculate the lattice modes. Most of the efforts have been directed toward the perturbation of the crystalline field on the "molecular modes", those with phonon propagation along the c axis, the direction of the molecule in the crystal⁽¹²⁻¹⁴⁾. There have also been calculations of the dispersion relations of the lattice modes (phonon propagation in the a and b axes) based on an idealized crystal⁽¹⁵⁾, and of the phonon frequency spectrum taking into account phonon propagation in all directions⁽¹⁶⁾.

It was recently shown that in order to calculate the neutron scattering spectrum for noncubic incoherent scatterers, one must weight the frequency spectrum by the amplitudes of vibration of all the modes contributing to a particular frequency^(6,7,17). Two calculations have

recently been made of the amplitude weighted directional frequency spectrum of polyethylene^(18,19), and these have been compared to low temperature data. The experimental technique of scattering from uniaxially oriented polymers to determine the polarizations of the low energy vibrations, originally applied to polyethylene⁽⁶⁾, has recently been used to examine polyoxymethylene⁽²⁰⁾ and deuterated polyethylene⁽¹⁹⁾.

We have extended the measurements on normal polyethylene by obtaining the absolute scattering cross sections for the longitudinal and transverse configurations at 4.2°K as well as at 300 and 77°. The data were obtained on the MTR phased chopper velocity selector using three incident energies to cover the entire acoustic region with optimum resolution. We used incident energies of 30 meV to provide good resolution for the small energy transfers, 80 meV to extend the measurements to the higher acoustic limit at 65 meV (525 cm^{-1}) and 40 meV to bridge the other two measurements in the energy transfer range 20-35 meV. The cross sections were measured in six detectors, three on one side of the target to measure the transverse cross section and three on the other side to obtain simultaneously the longitudinal cross section. The detectors were calibrated by a measurement of the elastic scattering cross section of vanadium, corrected for beam attenuation in the target and the vanadium Debye-Waller factor.

The orientation conditions for the polyethylene were not rigorously satisfied for these measurements because all energy transfers are sampled simultaneously for a time-of-flight spectrometer, and k_z has a different direction for each energy. The conditions were optimized however, so that the unwanted component is less than 10% of the total over most of the range of interest.

The cross sections are converted to the amplitude weighted directional frequency spectra in the one-phonon approximation (see eq. 4 below). The Debye-Waller coefficients used in the conversion were determined using both the elastic and inelastic parts of the data. We find reasonable agreement with a recent calculation⁽¹⁹⁾ of the directional spectra; the multiphonon contribution is the major uncertainty in the comparison. Calculation of specific heat from the present data shows fair agreement with measured values⁽²¹⁾ up to about 50°K; the divergence beginning at this temperature arises from the two-phonon contribution to the spectra which is expected to become significant at an energy transfer of about 12 meV⁽²²⁾.

II. THEORY

It has been shown that the incoherent neutron scattering cross section for a lattice of arbitrary geometry should be written in terms of an amplitude weighted directional frequency spectrum. We will attempt to clarify some of the features of this representation and to determine conditions that must be satisfied by the sample in order to measure the true frequency spectrum by neutron scattering.

Let s specify one of the n atoms in the unit cell and α and β specify directions in the lattice. Let $\gamma_{\tilde{j}}^s(\mathbf{q})$ be the eigenvector of the s^{th} atom in the vibrational mode of branch j with phonon wave vector $\mathbf{q}$, and $\hbar\omega_j(\mathbf{q})$ be the energy of that mode. Then the amplitude weighted directional frequency spectrum for the s^{th} atom is defined by:

$$G_s^{\alpha\beta}(\epsilon) = \frac{1}{N} \sum_{j\mathbf{q}} \gamma_{\tilde{j}}^{s\alpha}(\mathbf{q}) \gamma_{\tilde{j}}^{s\beta}(\mathbf{q}) \delta(\epsilon - \hbar\omega_j(\mathbf{q})). \quad (1)$$

N is the number of unit cells in the crystal, the number of values of q .
The total number of normal modes is $3nN$ and the true frequency spectrum:

$$g(\epsilon) = \frac{1}{N} \sum_{j, q} \delta(\epsilon - \hbar \omega_j(q)),$$

will have the normalization:

$$\int_0^\infty g(\epsilon) d\epsilon = 3n.$$

The incoherent scattering cross section is:

$$\frac{d^2\sigma}{d\Omega d\epsilon} = \frac{k_f}{k_i} \sum_s \frac{\sigma_s}{4\pi} e^{-2W_s} \int_{-\infty}^\infty \frac{dt}{2\pi\hbar} e^{(Z_s(t) - \frac{i\epsilon t}{\hbar})},$$

where

$$Z_s(t) = \frac{\hbar^2}{2M_s} \int_{-\infty}^\infty \frac{d\epsilon'}{\epsilon' (e^{\beta\epsilon'} - 1)} e^{-\frac{i\epsilon' t}{\hbar}} \sum_{\alpha\beta} \kappa_\alpha \kappa_\beta G_s^{\alpha\beta}(\epsilon'),$$

and the Debye-Waller factor $\exp(-2W_s)$ is given by:

$$2W_s = Z_s(0) = \frac{\hbar^2}{2M_s} \int_{-\infty}^\infty \frac{d\epsilon}{\epsilon} \coth\left(\frac{\beta\epsilon}{2}\right) \sum_{\alpha\beta} \kappa_\alpha \kappa_\beta G_s^{\alpha\beta}(\epsilon). \quad (2)$$

σ_s is the bound atom incoherent scattering cross section and M_s the mass of the s^{th} atom, k_f and k_i are the final and initial neutron wave vectors, $\kappa = k_f - k_i$, $\epsilon = \hbar^2(k_f^2 - k_i^2)/2m$ is the neutron energy gain, and $\beta = (k_B T)^{-1}$. The cross section is evaluated by expanding $\exp(Z(t))$ in a power series and performing the indicated integrations.

The zero- and one-phonon cross sections are the appropriate orientation averages and sum over atoms of:

$$\sigma(0) = \frac{\sigma_s}{4\pi} e^{-2W_s} \delta(\epsilon), \quad (3)$$

$$\sigma(1) = \frac{\sigma_s}{4\pi} e^{-2W_s} \frac{k_f}{k_i} \frac{\hbar^2}{2M_s} \frac{\sum_{\alpha\beta} \kappa_\alpha \kappa_\beta G_s^{\alpha\beta}(\epsilon)}{\epsilon(e^{\beta\epsilon} - 1)}. \quad (4)$$

To calculate the orientation averages choose a spherical coordinate system in the lattice with z along the c axis and let θ be the angle between κ and c . The quantity that must be evaluated is:

$$\begin{aligned} \sum_{\alpha\beta} \kappa_\alpha \kappa_\beta G_s^{\alpha\beta}(\epsilon) &= \kappa^2 [G_s^{11}(\epsilon) \cos^2\phi \sin^2\theta \\ &+ G_s^{22}(\epsilon) \sin^2\phi \sin^2\theta + G_s^{33}(\epsilon) \cos^2\theta + \text{real cross terms}]. \end{aligned} \quad (5)$$

Written in more conventional notation,

$$\begin{aligned} \sum_{\alpha\beta} \kappa_\alpha \kappa_\beta G_s^{\alpha\beta}(\epsilon) &= \sum_{\alpha\beta} \kappa_\alpha \kappa_\beta \sum_{j\mathbf{q}} \gamma_j^{s\alpha}(\mathbf{q}) \gamma_j^{s\beta}(\mathbf{q}) \delta(\epsilon - \hbar\omega_j(\mathbf{q})) \\ &= \sum_{j\mathbf{q}} \left(\sum_{\alpha\beta} \kappa_\alpha \kappa_\beta \gamma_j^{s\alpha}(\mathbf{q}) \gamma_j^{s\beta}(\mathbf{q}) \right) \delta(\epsilon - \hbar\omega_j(\mathbf{q})) \\ &= \sum_{j\mathbf{q}} (\kappa \cdot \gamma_j^s(\mathbf{q}))^2 \delta(\epsilon - \hbar\omega_j(\mathbf{q})). \end{aligned} \quad (6)$$

Equations (5) and (6) will both be useful in evaluating the cross sections. The orientation averages are easily calculated using equation (5). In writing the cross sections, however, one must make the approximation that $\langle A \exp(B) \rangle = \langle A \rangle \exp \langle B \rangle$; one performs the orientation average of (5) and substitutes that result separately into the Debye-Waller factor and the remainder of the cross section.

For a powder sample the orientation average is:

$$\langle \sum_{\alpha\beta} \kappa_\alpha \kappa_\beta G_s^{\alpha\beta}(\epsilon) \rangle_P = \frac{1}{3} \kappa^2 \sum_{\alpha} G_s^{\alpha\alpha}(\epsilon), \quad (7)$$

and for a uniaxially oriented target in which $\hat{c}$ is the unique direction:

$$\begin{aligned} \langle \sum_{\alpha\beta} \kappa_{\alpha} \kappa_{\beta} G_s^{\alpha\beta}(\epsilon) \rangle_U &= \frac{\kappa^2}{2} (G_s^{11}(\epsilon) + G_s^{22}(\epsilon)) \sin^2 \theta \\ &+ \kappa^2 G_s^{33}(\epsilon) \cos^2 \theta. \end{aligned} \quad (8)$$

In a cubic crystal with one atom per primitive cell, for either a single crystal or a powder, the cross section is:

$$\frac{d^2\sigma}{d\Omega d\epsilon} = \frac{\sigma}{4\pi} \frac{k_f}{k_i} e^{-2W} \frac{\hbar^2 \kappa^2}{6M} \frac{g(\epsilon)}{\epsilon(e^{\beta\epsilon} - 1)},$$

$$2W = \frac{\hbar^2 \kappa^2}{6M} \int_0^\infty \frac{d\epsilon}{\epsilon} \coth\left(\frac{\beta\epsilon}{2}\right) g(\epsilon).$$

If the above approximation is made for the orientation average, these equations also hold for a noncubic polycrystalline sample with one atom per cell. It is not obvious that such simple dependence on the true frequency spectrum exists for any other general cases. It has been shown, however, that the diamond lattice, a face-centered cubic structure with two identical atoms per primitive cell, would have an incoherent cross section given by these equations⁽²³⁾.

In a uniaxially oriented target, such as drawn polyethylene, one of the crystal axes ($\hat{c}$) will be uniquely aligned in a particular direction and the others will have random orientation perpendicular to the unique axis. Using equation (8) and orienting the target so that θ is equal to 0° or 90° we may define⁽⁶⁾ a longitudinal and a transverse (amplitude weighted directional) frequency spectrum:

$$G_s^L(\epsilon) = G_s^{33}(\epsilon),$$

$$G_s^T(\epsilon) = \frac{1}{2} (G_s^{11}(\epsilon) + G_s^{22}(\epsilon)),$$

and the corresponding cross sections:

$$\frac{d^2\sigma_L}{d\Omega d\epsilon} = \sum_s \frac{\sigma_s}{4\pi} e^{-2W_s^L} \left\{ \delta(\epsilon) + \frac{k_f}{k_i} \frac{\hbar^2 \kappa^2}{2M_s} \frac{G_s^L(\epsilon)}{\epsilon(e^{\beta\epsilon} - 1)} \right\}, \quad (9)$$

with a similar equation for the transverse cross section. The longitudinal Debye-Waller coefficient (the transverse is similar) is:

$$2W_s^L/\kappa^2 = \frac{\hbar^2}{2M_s} \int_0^\infty \frac{d\epsilon}{\epsilon} \coth\left(\frac{\beta\epsilon}{2}\right) G_s^L(\epsilon). \quad (10)$$

Because the scattering cross section of hydrogen is approximately four times that for carbon and the mass is less by a factor of 12, we expect that about 99% of the incoherent (direct) scattering in polyethylene will be from the hydrogen nuclei. Then we can approximate equation (9) by:

$$\frac{d^2\sigma_L}{d\Omega d\epsilon} = \frac{40}{\pi} e^{-2W_H^L} \left\{ \delta(\epsilon) + \frac{k_f}{k_i} \frac{\hbar^2 \kappa^2}{2m} \frac{G_H^L(\epsilon)}{\epsilon(e^{\beta\epsilon} - 1)} \right\}$$

barns/eV/steradian/CH₂. $G_H^L(\epsilon)$ is the number of normal mode vibrations in $d\epsilon$ at ϵ weighted by the squares of the $\hat{c}$ -axis components of the hydrogen eigenvectors for those modes. Similarly, the transverse cross section responds only to those modes in which the hydrogen nuclei have motions in the $\hat{a}$ and $\hat{b}$ axes.

III. EXPERIMENT

The target material was hot-drawn Marlex 6009 filament, 0.009" in diameter. The sample orientation was checked by making x-ray transmission photographs, shown in Figure 1. Judging from the width of the Bragg spots, the distribution of $\hat{c}$ -axis directions has a full width at half

(a)

(b)

Figure 1 - X-ray transmission photographs of the polyethylene sample at sample-to-film distances of 5 cm (a) and 3 cm (b). The c axis is vertical.

Figure 2 - Plan of the experiment showing the target orientation with respect to the incident beam, and the detector locations.

maximum less than four degrees. As will be shown below, this angular spread is small when compared with the target orientation conditions required by this type of experiment.

The target was made by wrapping the filament on a steel frame. The resulting net thickness is about .015" giving a transmission of 75% at 30 meV with the target oriented 40° to the incident beam. The assembly and an identical empty frame were mounted in a thin walled aluminum cryostat. A rod extending from the helium exchange gas can out the dewar neck allowed the sample and empty frames to be alternately placed in the neutron beam.

The target was oriented at 40° to the incident beam, as shown in Figure 2. The "longitudinal" detectors were at scattering angles of -70° , -80° , and -90° and the "transverse" were at 80° , 90° , and 100° ; the flight path was, on the average, about 2.4 meters from sample to detector. Each detector bank, except the one at 100° , was composed of three 1" diameter, 18" active length He^3 counters; the 100° detectors were five BF_3 counters with the above dimensions. Although a helium filled flight path was available, it allows measurements on only one side of the target. It was thought more important to measure the transverse and longitudinal cross sections simultaneously than to eliminate air scattering, and previous measurements indicated that air scattering should not be important at angles as large as these⁽²⁴⁾. We found, however, a significant air scattering effect at very low final energies. The effect was very large at final energies less than about 10% of the initial energy. This background is not particularly important to the experiment because there is enough data so that these very low energies can be ignored, and furthermore, a fairly reliable correction

could be made using the inelastic vanadium scattering from the calibration run. Figure 3 is a fairly typical set of data, showing the total counts, the background counts, and the estimated air scattering for the principal longitudinal angle at 40 meV incident energy, at 4.2°K.

The detector banks were calibrated by measuring the scattering cross section of room temperature vanadium in the same geometry. The integrated elastic peaks of the vanadium cross section were corrected for beam attenuation in the target and for the vanadium Debye-Waller factor. The Debye-Waller coefficient was measured by Gläser⁽²⁵⁾ and can be calculated from the spectrum recently measured by Page⁽²⁶⁾.

The orientation conditions can be rigorously satisfied for the transverse measurement by orienting the target with the unique direction normal to the scattering plane, but cannot be satisfied for all energy transfers for the longitudinal configuration. To accomplish the simultaneous measurement of the two configurations, the unique axis was placed in the scattering plane. Because a time-of-flight spectrometer samples all energy transfers at the same "time", and because $\kappa_{\parallel}$ has a different direction for each energy transfer, one must choose an optimum orientation for the energy transfers of interest. Because $\sin^2\theta$ and $\cos^2\theta$ do not change rapidly near $\theta = 0$ and 90° , a high "purity" may be maintained over a wide range of final energies. Table 1 shows $\sin^2\theta$ for the transverse and $\cos^2\theta$ for the longitudinal components for the principal angles at $\pm 80^\circ$.

Background data are obtained by cycling the sample out of the beam in 10 minute cycles. After the background data are subtracted, the net counts are corrected for detector efficiency, beam attenuation in the target, the air scattering component, and are converted to the energy

Figure 3 - Typical time-of-flight data showing total and "open frame" counts and the estimated air scattering component.

Table 1

Transverse and Longitudinal Fractions

ϵ	Transverse			Longitudinal		
	30	40	80	30	40	80
0	1.00	1.00	1.00	.97	.97	.97
10	.99	.99	1.00	1.00	.99	.98
15	.96	.98	1.00	1.00	1.00	.99
20	.91	.96	.99	.98	1.00	.99
25	.80	.92	.99	.92	.99	1.00
30	---	.76	.98	---	.89	1.00
40	---	---	.96	---	---	1.00
50	---	---	.92	---	---	.99
60	---	---	.86	---	---	.96
70	---	---	.76	---	---	.89

cross section. The cross sections are converted to frequency spectra using equation (9) and the two functions are then averaged in 0.5 meV intervals. This nonlinear channel compression averages up to 50 of the 5 μ sec time channels at low final energies. The fractional errors assigned to the averaged points are the RMS values of the errors for the contributing channels.

The target was intentionally made thick to insure good statistics but this leads to multiple scattering problems. The beam loss due to multiple scattering is taken care of by the target self attenuation correction. A measured total cross section for crystalline polyethylene at room temperature⁽²⁷⁾ was used to make this correction.

IV. RESULTS AND DISCUSSION

The differential scattering cross sections for the principal angles, $\pm 80^\circ$, for the 30, 40, and 80 meV incident energies are shown in Figures 4, 5, and 6, respectively; the 300°K cross section was measured at 30 meV only. The corresponding directional frequency spectra are shown in

Figure 4 - Longitudinal and transverse cross sections of oriented polyethylene at 300, 77 and 4.2°K, for the 30 meV incident energy.

Figure 5 - Polyethylene cross sections at 77 and 4.2°K for 40 meV incident energy.

Figure 6 - Polyethylene cross sections at 77 and 4.2°K for 80 meV incident energy.

Figures 7, 8, and 9. The cross sections and frequency spectra for all of the angles are tabulated in the Appendix.

The improvement in the definition of the structure as the temperature is reduced is immediately obvious when one compares the 300°K cross sections to those at lower temperature. Reducing the temperature from 77 to 4.2°K greatly improves the resolution in the small energy transfers. The temperature factor, $e^{\beta\epsilon} - 1$, in the conversion from frequency spectrum to cross section provides an effective resolution improvement; it approaches its asymptotic value of unity at lower energies for lower temperatures, so that the structure rises from a flat continuum instead of appearing as shoulders on a function with large slope. This is best illustrated by comparing the singularity at $\epsilon = 5.6$ meV in the 30 meV longitudinal cross sections for the three temperatures. The multiphonon contribution is strongly reduced in going from 300 to 77°, and this is an important factor in improving the resolution. Neutron energy gain is still quite probable at 77°, however, as can be seen by comparing the energy gain parts of the 77 and 4.2° cross sections, so that the multiphonon contribution is still a significant factor. Again comparing the three temperatures for the 5.6 meV longitudinal event, but this time in the frequency spectra, Figure 7, we observe some improvement in resolution, and attribute this to the reduction of multiphonon events.

The cross sections also illustrate the temperature dependence of the Debye-Waller factors; the elastic cross sections increase as the temperature is reduced. One expects the longitudinal elastic cross sections to be larger than the transverse; that this is true is not well illustrated in Figures 4 and 5. The reason for this is that the energy resolution for the transverse data was about 8% better than for the longitudinal primarily

Figure 7 - Amplitude weighted directional frequency spectra derived from the 30 meV cross sections in the one-phonon approximation. A is the value of the Debye-Waller coefficient used in the transformation.

Figure 8 - Amplitude weighted directional spectra derived from the 40 meV cross sections.

Figure 9 - Amplitude weighted directional spectra derived from the 80 meV cross sections.

because the flight path was somewhat longer. When the cross sections are integrated, however, the longitudinal elastic cross section is found to be higher than the transverse.

In order to transform the cross sections to frequency spectra, one must know the Debye-Waller factors. We have determined the Debye-Waller coefficients from both the elastic and inelastic components of the cross sections. The elastic scattering cross sections were obtained from the data by integrating the areas under the elastic peaks and subtracting an inelastic component determined by linear interpolation across the base of the peak. The results are shown as the points in Figure 10. The lines drawn in Figure 10 represent the coefficients derived from the inelastic data (except the transverse 300°K line). The nine sets of data for each configuration (three incident energies and three angles for each orientation at 77 and 4.2°) were used to derive frequency spectra (equation 9), using several estimates of the Debye-Waller coefficients, which were then plotted on the same graph.

A sample result of this procedure is shown in Figure 11. The uncorrected frequency spectra and an estimated Debye-Waller coefficient were used as input for a computer plotting program, making it easy to try several values. The coefficients which gave the best agreement among the spectra were chosen. This method was used instead of least squares fitting in order not to have to pre-assign weights to the various points. The intercepts at $\kappa^2 = 0$ were determined by least squares fitting the elastic cross section, requiring that all lines have the same intercept. Again, fitting was not used for the intercept; several values were tried and that judged to give the best over-all fit was chosen. Except for the transverse 80 meV cross sections being too

Figure 10 - Elastic scattering cross sections for oriented polyethylene. The lines show the Debye-Waller coefficients derived from the inelastic data, except the transverse 300°K line.

Polyethylene Spectra at 4.2°K

Figure 11 - Polyethylene frequency spectra at 4.2°K for six angles and three incident energies.

large, there is good agreement for all the transverse data. It was thought possible that coherent scattering in the sample might account for some of the discrepancies, so a diffraction pattern was measured for the transverse orientation, using the MTR high pressure diffraction facility. The diffraction pattern for a scattering angle of 30° is shown in Figure 12. The indexed peaks are the only strong reflections observed and these occur at values of κ^2 well below the $25 \text{ \AA}^{-2}$ limit of the velocity selector data.

The inelastic procedure brought all nine transverse spectra into agreement except for what is certainly an energy resolution effect. The longitudinal elastic data looks good, but in fitting the inelastic data it was found that, although the three spectra for each incident energy could be made to agree (see Figure 11), we could not bring all three sets together. The reason for the discrepancy is not known; the disagreement is too large to be due to resolution effects but may be related to the details of the orientation averaging in the multiphonon cross sections. The values of the Debye-Waller coefficients chosen for the longitudinal data are those which bring each set of three spectra into agreement. These values seem to fit the elastic data quite well. The results of these measurements are shown in Table 2 and compared with values measured by Feldkamp and King⁽¹⁹⁾ and calculated by Lynch and Summerfield⁽¹⁹⁾.

Table 2

Debye-Waller Coefficients

	This Data		Lynch et al. ⁽¹⁹⁾	
	Elastic	Inelastic	Elastic	Calculated
Long. 77°K	.0153	.012	.024	.0205
Trans. 77°K	.0209	.018	.027	.0253
Long. 4.2°K	.0116	.008	--	.0177
Trans. 4.2°K	.0127	.012	--	.0198

Figure 12 - Neutron time-of-flight diffractometer pattern for the sample in the transverse (hk0) orientation. The scattering angle is 30° .

The intercept at $\kappa^2 = 0$ of the elastic cross sections that gives the best fit to the data is 145 barns/CH₂. This is 9% lower than the expected value of 160 barns. This may be due to multiple scattering removing neutrons from the beam, although this should be largely compensated by the target thickness correction. The value 160 barns was used in reducing the cross sections to frequency spectra, equation (4), and, to be consistent, M was taken to be the CH₂ mass, 14 amu.

The singularities, determined primarily from the 30 meV data, are summarized in Table 3 where they are compared to values calculated by Tasumi and Krimm⁽¹⁴⁾. The values preceded by + are easily observed in all the angles. Those not so marked range from fairly obvious to very weak. The entries in the table are made only if an event appears in at least two of the 30 meV angles and is indicated in the third. The 40 meV data are used for confirmation of all of the weaker events.

Table 3
Singularities in the Polyethylene Spectrum^(a)
This Data^(b) Calculated⁽¹⁴⁾

Longitudinal			Transverse			Longitudinal		Transverse		Mode
300°	77°	4.2°	300°	77°	4.2°	300°	77°	300°	77°	
---	+65.0	+65.0	---	---	---	69.8	69.8	--	--	5
+24.1	+24.9	+24.9	+24.1	+24.4	+24.7	--	--	25.2	26.0	9
22.1	23.1	23.1	---	---	---	--	--	21.3	22.6	5a(0)
+19.9	19.9	21.1	19.5	20.5	21.0	--	--	--	--	
16.5	16.5	17.7	16.5	---	18.0	--	--	--	--	
14.0	+14.8	+15.0	14.0	+15.5	+15.5	--	--	15.0	17.2	5b(0)
12.0	+12.0	+12.0	12.0	+12.0	+11.8	--	--	13.5	14.0	5b(π)
+ 9.3	9.8	9.5	---	9.1	9.5	--	--	8.8	10.0	5a(π)
4.2	+ 5.6	+ 5.6	---	+ 6.4	5.9	6.3	7.2	--	--	9b(0)
---	---	---	3.2	4.0	4.0	--	--	--	--	

(a) Values are in milli-electron volts, multiply by 8.067 to determine the value in cm⁻¹.

(b) Determined from the 30 meV data, 40 meV for confirmation only, 80 meV to determine ν_5 limit.

The strongest events are the 65 meV longitudinally polarized upper limit of $\nu_5^{(28)}$, and the commonly observed primarily transverse upper limit of ν_9 at 25 meV. The latter is predicted to have two limits, due to splitting by the crystalline field, separated by 1 to 1.5 meV, but these are not resolved. There is a strong definitely longitudinal limit at 5.6 meV. This event, if it is to be assigned to any limit derived from a $\hat{q} = q\hat{c}$ model (phonons propagating in the $\hat{c}$ direction only), must belong to $\nu_9^b(0)$, calculated to be at 7.2 meV at 77°. There are strong primarily transverse limits at 15.5 and 12 meV. The latter seems to have no temperature dependence, a property shared only by the 65 meV limit in these data. This limit should probably be associated with $\nu_5^b(\pi)$ which is calculated to have little temperature dependence between 300 and 77°, but which has a predicted energy of about 14 meV. The measured transverse limit at 15.5 meV is probably $\nu_5^b(0)$.

There are several weaker events in the spectra, characterized by shoulders and sudden changes in slope. The small peaks at about 4 and 6 meV are easily seen in the 4.2° transverse cross section. The event at about 9.5 meV appearing in both spectra is very weak, but is evident in all of the angles for both the 30 and 40 meV data. There are three other events observed below 25 meV. The one at 16.5-18 meV and that at 19.5-20.5 correspond to no calculated levels. The event at 23 meV which is seen as a shoulder in the longitudinal spectra corresponds in energy but not in polarization to the calculated $\nu_5^a(0)$; this event is not observed in the transverse spectrum, where it is expected.

Attempts to assign singularities observed in neutron spectra to calculated frequency limits have not been very rewarding. The longitudinal

ν_5 upper limit is well defined at 65 meV; allowing for resolution effects in this and previous^(6,7) measurements, it may be as high as 66.5 meV, but certainly not higher. The frequency limit observed at 25 meV is almost certainly the upper limit of ν_9 , although an event is seen at about 30 meV in many of the spectra and it has been suggested⁽⁸⁾ that it could be the limit of ν_9 and that the 25 meV limit is $\nu_5^a(0)$. An event is seen at $19.5 \pm .6$ meV in all of the spectra which does not correspond closely to any calculated limit; Safford⁽⁹⁾ has suggested that this is $\nu_9^a(0)$. We have observed a weak singularity at 23.1 meV and even though it is seen in the wrong polarization (the event at 19.5 occurs in both), believe this the more likely candidate.

We leave the weak events near 17 and 20 meV unassigned and suggest that the singularity at 15.5 meV, which is quite surely a lower limit, is $\nu_5^b(0)$. The limit at 12 meV we assign to $\nu_5^b(\pi)$. Safford sees these last two events at 14.1 and 11.8 meV, and suggests the first as $\nu_5^b(\pi)$ and leaves the 11.8 meV event unassigned.

The lower frequency limit, $\nu_5^a(\pi)$, is well established through IR measurements⁽²⁹⁾. We would expect it to appear strongly in the neutron spectra since the calculated dispersion curve in this region has very small slope. We observe a very weak event in our spectra at about 9.5 meV; according to the IR measurements, it should occur at 8.9 meV at 300° and at 9.8 meV at 77°K and be polarized in the $\hat{a}$ axis (transverse).

The branch ν_9^b is calculated⁽¹²⁻¹⁴⁾ to maintain a nonzero slope to very small values of q_c so it should not appear very strongly in the neutron spectra. We suggest that the strong longitudinal event at 5.6 meV observed in our spectra and the weak transverse singularities at low energy must belong to modes with $\hat{q}$ not in the $\hat{c}$ axis. Enomoto

and Asahina⁽¹⁵⁾ have calculated six transverse dispersion relations for $\mathbf{q} = (q_a, q_b, 0)$ with the CH_2 group replaced with a mass 14 point. They found several singularities below 15 meV and strong singular behaviour at about 10 to 11 meV. The calculation of $G(\epsilon)$ by Kitagawa and Miyazawa⁽¹⁸⁾, allowing $\mathbf{q}$ to have all directions, shows a lower limit at 6.2 meV in both the longitudinal and transverse configurations. The calculations by Lynch and Summerfield⁽¹⁹⁾ using $\mathbf{q} = q\hat{\mathbf{c}}$ show a weaker limit at 6.2 meV in the longitudinal spectrum. It is interesting that the longitudinal spectrum calculated by Lynch has the shape of the 80 meV spectrum (Figure 9), while that calculated by Kitagawa looks like a composite using the 30 meV spectrum up to $\epsilon = 25$ and the 80 meV data thereafter.

It is evident that more realistic calculations are needed, and that instrumental resolution must be improved considerably to separate the many singularities between 16 and 25 meV.

We do not see the many energy levels between 25 and 65 meV reported by Safford, but the resolution of our 80 meV data is rather coarse. We observe shoulders at about 42 and 48 meV in the transverse spectra. The drop at 65 meV in the transverse spectra is due to the mixing in of about 20% of the longitudinal spectrum at this energy transfer (see Table 1).

We have seen that the elastic cross sections at $\kappa^2 = 0$ are fairly close to what is expected. There are three integral functions of $G(\epsilon)$ and $g(\epsilon)$ that we may employ to further check the measurements. The measured spectra may be used to calculate the Debye-Waller factors, although the acoustic region accounts for only about 40% of the longitudinal and 60% of the transverse coefficient⁽¹⁹⁾. If we make the assumption that the measured $G(\epsilon)$ is a fairly good approximation

to $g(\epsilon)$, we may also check the normalization and calculate the low temperature specific heat.

To calculate the integral functions we use the helium temperature spectra because the resolution should be better and they are less contaminated by multiphonon contributions. The 30 meV data are used from $\epsilon = 4$ to 26 meV and the 80 meV data from 26 to 68 meV. The spectra are assumed parabolic below 4 meV and a linear extrapolation to zero is made from 68 to 70 meV. We ignore the fact that the orientation conditions are not rigorously satisfied and make no attempt here to remove the multiphonon contribution. Indeed, the divergence of the "measured" integral functions from the expected behaviour should provide an estimate of the multiphonon effects⁽³⁰⁾. We also normalize the spectra to a single hydrogen atom (divide by 2 since these spectra were normalized to a CH_2 group, and by 14 since we have used the CH_2 and not the hydrogen mass) in order to compare these results with the calculations of Lynch and Summerfield.

The normalization of $G(\epsilon)$ is the same as that for $g(\epsilon)$ provided that one knows $G_s(\epsilon)$ for all of the nuclei:

$$\sum_{s\alpha} \int_0^\infty G_s^{\alpha\alpha}(\epsilon) d\epsilon = 3n.$$

Since we have measured only hydrogen eigenvectors and only the acoustic branches, we cannot make a direct comparison. The calculated⁽²²⁾ integrals are 0.103 and 0.084 for the transverse and longitudinal components, respectively, in the acoustic region. The measured spectra have areas 0.189 and 0.137. We conclude that about 1/2 of the transverse and about 1/3 of the longitudinal areas in the measured spectra are due to multiphonon effects, even at 4.2°K.

Figure 13 shows the specific heat calculated from the data compared to the specific heat of crystalline polyethylene measured by Wunderlich⁽²¹⁾. To make the calculation from these data, we refer to equations (7) and (8) and note that the powder spectrum is related to the oriented spectra by $G(\epsilon) = (2G_T(\epsilon) + G_L(\epsilon))/3$. The amplitudes agree reasonably well below 50°K, although the "calculated" curve starts out too low and rises too fast. Above 50°K the calculated curve diverges rapidly from the measured. From this very qualitative comparison, one might conclude that the measured spectra have nearly the correct shape and amplitudes below about 12 meV, since $c_V(T)$ is approximately the integral of $g(\epsilon)$ out to $\epsilon = 3kT$, and that multiphonon effects become most important for $\epsilon > 12$ meV.

Figure 14 summarizes the available information on the polyethylene Debye-Waller coefficients. The curves represent the coefficients calculated from these spectra (equation 8) and those calculated by Lynch⁽²²⁾. The points are values measured in two different ways from the present data, values measured by Feldkamp⁽¹⁹⁾, and values calculated from previous experiments on oriented⁽⁷⁾ and polycrystalline⁽³⁾ samples. The values shown as open and closed circles, derived from the inelastic data, are the ones used in reducing the present data to frequency spectra.

The disagreement in the calculated curves is probably explained by the present spectra not accounting for the contributions of the optical modes (low temperature), and containing a large multiphonon contribution to account for the divergence at higher temperatures. The disagreement in the experimental values in this data may be explained by our assuming that multiphonon effects should not affect the fitting of the inelastic data. This results in the inelastically derived values

Figure 13 - Specific heat of polyethylene: — measured and ●●● calculated from these data.

Figure 14 - Measured and calculated Debye-Waller coefficients for polyethylene. Closed symbols are longitudinal, open are transverse except $\odot$ is polycrystalline.

being lower limits on the Debye-Waller coefficients; and they are, in every case, lower than the values derived from the elastic fitting. It is not understood why these values should be less than those measured by Feldkamp; if we were to use his numbers, these spectra, especially the transverse, would disagree much more than could be explained by multiphonon contributions.

We conclude, from the comparison of these data to the expected elastic cross section and the various integral functions, that the cross sections have the correct amplitudes, that the derived frequency spectra are correct to energy transfers of about 12 meV, and that multiphonon effects are very strong even at liquid helium temperature. It would appear, from the specific heat calculations, that $G(\epsilon)$ is a very good approximation to $g(\epsilon)$ for polyethylene. On the other hand, the Debye-Waller coefficients, which should be the easiest parameters to measure, are still in question. We are also presently unable to explain this disagreement in the 30, 40 and 80 meV longitudinal spectra, although this is probably related to the Debye-Waller and multiphonon problems.

While there is certainly strong correlation between calculated and observed singularities, the agreement is not nearly good enough. There are calculations of the frequency spectra⁽¹⁶⁾ which have levels in better agreement with neutron data than that used here, but these are not consistent with the IR measurement of $\nu_5^a(\pi)$. A calculation of $G_H^{\alpha\alpha}(\epsilon)$ for which $\vec{q}$ is allowed to have all directions would be of great value in interpreting the neutron spectra. It is already obvious that the region of phonon energies from 16 to 25 meV is quite complicated, and a major improvement in instrumental resolution is needed.

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APPENDIX

The cross sections and amplitude weighted directional frequency spectra for oriented polyethylene at temperatures of 300, 77 and 4.2°K, for incident energies of 30, 40 and 80 meV, and for scattering angles of -70° , $+80^\circ$, $+90^\circ$ and $+100^\circ$ are tabulated below. The target was oriented at 40° to the incident beam; the arrangement of the experiment is shown in Figure 2. The principal scattering angles are those at $+80^\circ$ (transverse) and -80° (longitudinal), these are identified in the listings as angles 6 and 1, respectively. The degree of true orientation for the data at the principal angles is summarized in Table 1.

The cross sections are in units of barns/eV/ster./CH₂; the frequency spectra in units of eV⁻¹, normalized to the CH₂ mass and cross section.

Definitions

The mnemonic symbols in the listings have the following definitions:

In the Heading:

SIGMA = bound atom incoherent scattering cross section used in the analysis.

MASS = the value of M (equation 9), in amu, used in the analysis.

DWC = the value of the Debye-Waller coefficient, in square Angstroms, used to determine the frequency spectrum.

KT = the sample temperature in eV.

The heading also contains the data identification code, the date of the computation, the incident neutron energy and the scattering angle.

In the Column Titles

ENERGY = neutron final energy in meV.

SIGMA = $\frac{d^2\sigma}{d\Omega d\epsilon}$ (barns/eV/ster./CH₂).

KAP SQ = κ^2 in inverse square Angstroms.

EPS = $\epsilon = \hbar^2(k_f^2 - k_i^2)/2m$ in meV, the neutron energy gain.

Data are assigned to or averaged in 0.5 meV increments.

G(EPS) = the amplitude weighted directional frequency spectrum
derived from the cross section (eV⁻¹).

ERROR = the fractional error, in %, of the cross section or
frequency spectrum due to counting statistics.

NO CHAN = the number of time channels averaged to obtain the
functions at this energy.

Table of Listings

	<u>Page</u>
300°K	
30 meV	
Longitudinal - 70°	A-4
- 80°	A-6
- 90°	A-8
Transverse 80°	A-10
90°	A-12
100°	A-14
77°K	
30 meV	
Longitudinal - 70°	A-16
- 80°	A-18
- 90°	A-20
Transverse 80°	A-22
90°	A-24
100°	A-26

40 meV

Longitudinal	- 70°	A-28
	- 80°	A-30
	- 90°	A-32
Transverse	80°	A-34
	90°	A-36
	100°	A-38

80 meV

Longitudinal	- 70°	A-40
	- 80°	A-43
	- 90°	A-46
Transverse	80°	A-49
	90°	A-52
	100°	A-55

4.2°K

30 meV

Longitudinal	- 70°	A-58
	- 80°	A-60
	- 90°	A-62
Transverse	80°	A-64
	90°	A-66
	100°	A-68

40 meV

Longitudinal	- 70°	A-70
	- 80°	A-72
	- 90°	A-74
Transverse	80°	A-76
	90°	A-78
	100°	A-80

80 meV

Longitudinal	- 70°	A-82
	- 80°	A-85
	- 90°	A-88
Transverse	80°	A-91
	90°	A-94
	100°	A-97

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 300K

SIGMA=159.24 MASS= 14.00 DWC=.04200 KT=.02585

DATA CODE 6970 COMPUTED 080867 INCIDENT ENERGY .0302 ANGLE NO 3 IS 290.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.75	3.172E 01	12.877	-27.5	1.343E 02	0.056	45.
3.19	2.840E 01	12.858	-27.0	1.104E 02	0.033	48.
3.69	3.132E 01	12.855	-26.5	1.082E 02	0.029	39.
4.19	4.238E 01	12.867	-26.0	1.335E 02	0.027	32.
4.69	5.092E 01	12.893	-25.5	1.469E 02	0.024	27.
5.19	5.827E 01	12.930	-25.0	1.545E 02	0.022	23.
5.69	6.179E 01	12.977	-24.5	1.516E 02	0.021	20.
6.19	7.088E 01	13.032	-24.0	1.610E 02	0.019	18.
6.69	7.689E 01	13.095	-23.5	1.619E 02	0.017	16.
7.19	7.775E 01	13.164	-23.0	1.523E 02	0.017	14.
7.69	7.869E 01	13.238	-22.5	1.434E 02	0.017	13.
8.20	7.795E 01	13.320	-22.0	1.321E 02	0.017	12.
8.69	8.211E 01	13.404	-21.5	1.299E 02	0.017	10.
9.18	8.300E 01	13.491	-21.0	1.228E 02	0.016	10.
9.68	8.582E 01	13.584	-20.5	1.184E 02	0.016	9.
10.19	8.721E 01	13.684	-20.0	1.121E 02	0.015	9.
10.71	9.063E 01	13.789	-19.5	1.083E 02	0.015	8.
11.21	9.250E 01	13.893	-19.0	1.032E 02	0.015	7.
11.70	9.731E 01	13.999	-18.5	1.014E 02	0.014	7.
12.19	1.010E 02	14.106	-18.0	9.814E 01	0.015	6.
12.67	1.049E 02	14.214	-17.5	9.536E 01	0.014	6.
13.18	1.085E 02	14.331	-17.0	9.161E 01	0.013	6.
13.67	1.108E 02	14.446	-16.5	8.709E 01	0.014	5.
14.19	1.157E 02	14.571	-16.0	8.423E 01	0.012	6.
14.69	1.198E 02	14.693	-15.5	8.085E 01	0.014	4.
15.17	1.286E 02	14.810	-15.0	8.068E 01	0.012	5.
15.72	1.294E 02	14.949	-14.5	7.451E 01	0.011	5.
16.24	1.358E 02	15.082	-14.0	7.183E 01	0.012	4.
16.73	1.417E 02	15.209	-13.5	6.920E 01	0.012	4.
17.24	1.475E 02	15.343	-13.0	6.606E 01	0.011	4.
17.71	1.513E 02	15.466	-12.5	6.253E 01	0.012	3.
18.19	1.562E 02	15.596	-12.0	5.913E 01	0.010	4.
18.70	1.572E 02	15.733	-11.5	5.419E 01	0.012	3.
19.14	1.605E 02	15.856	-11.0	5.078E 01	0.011	3.
19.69	1.671E 02	16.007	-10.5	4.741E 01	0.009	4.
20.26	1.704E 02	16.166	-10.0	4.294E 01	0.010	3.
20.77	1.770E 02	16.309	-9.5	3.994E 01	0.010	3.
21.21	1.756E 02	16.433	-9.0	3.585E 01	0.012	2.
21.66	1.875E 02	16.563	-8.5	3.435E 01	0.009	3.
22.22	1.946E 02	16.725	-8.0	3.094E 01	0.009	3.
22.70	2.032E 02	16.866	-7.5	2.838E 01	0.011	2.
23.21	2.155E 02	17.013	-7.0	2.610E 01	0.008	3.
23.72	2.360E 02	17.165	-6.5	2.440E 01	0.010	2.
24.15	2.504E 02	17.292	-6.0	2.252E 01	0.009	2.
24.70	2.756E 02	17.456	-5.5	2.040E 01	0.007	3.
25.27	3.070E 02	17.627	-5.0	1.824E 01	0.008	2.

25.74	3.321E 02	17.769	-4.5	1.611E 01	0.008	2.
26.22	3.503E 02	17.916	-4.0	1.348E 01	0.007	2.
26.72	3.662E 02	18.068	-3.5	1.080E 01	0.007	2.
27.23	3.770E 02	18.225	-3.0	8.075E 00	0.007	2.
27.75	3.932E 02	18.387	-2.5	5.708E 00	0.007	2.
28.29	4.447E 02	18.555	-2.0	3.890E 00	0.008	2.
28.71	6.625E 02	18.685	-1.5	3.556E 00	0.009	1.
29.13	1.657E 03	18.819	-1.0	4.265E 00	0.003	2.
29.72	3.609E 03	19.002	-0.5	2.119E 00	0.002	2.
30.16	3.650E 03	19.143	-0.0	1.218E-02	0.003	1.
30.62	2.113E 03	19.289	0.5	8.510E-01	0.003	2.
31.25	6.618E 02	19.489	1.0	1.661E 00	0.005	2.
31.73	4.051E 02	19.644	1.5	2.287E 00	0.008	1.
32.23	3.683E 02	19.803	2.0	3.655E 00	0.006	2.
32.73	3.507E 02	19.966	2.5	5.419E 00	0.009	1.
33.25	3.366E 02	20.134	3.0	7.572E 00	0.006	2.
33.78	3.238E 02	20.307	3.5	1.003E 01	0.009	1.
34.14	3.043E 02	20.425	4.0	1.143E 01	0.009	1.
34.69	2.758E 02	20.606	4.5	1.347E 01	0.007	2.
35.26	2.466E 02	20.791	5.0	1.532E 01	0.010	1.
35.64	2.343E 02	20.918	5.5	1.687E 01	0.010	1.
36.23	2.165E 02	21.113	6.0	1.919E 01	0.007	2.
36.83	1.972E 02	21.313	6.5	2.123E 01	0.011	1.
37.24	1.893E 02	21.450	7.0	2.302E 01	0.011	1.
37.66	1.816E 02	21.590	7.5	2.485E 01	0.011	1.
38.09	1.711E 02	21.732	8.0	2.621E 01	0.011	1.
38.52	1.650E 02	21.877	8.5	2.819E 01	0.012	1.
39.18	1.610E 02	22.100	9.0	3.219E 01	0.008	2.
39.86	1.537E 02	22.329	9.5	3.573E 01	0.012	1.
40.32	2.910E 01	22.486	10.0	7.453E 00	0.029	1.

LONGITUDINAL POLYETHYLENE 300K

6970 3

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 300K

SIGMA=159.24 MASS= 14.00 DWC=.04200 KT=.02585

DATA CODE 6970 COMPUTED 080867 INCIDENT ENERGY .0302 ANGLE NO 1 IS 280.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.44	4.717E 01	14.296	-28.0	2.060E 02	0.256	1.
2.69	3.590E 01	14.344	-27.5	1.477E 02	0.039	61.
3.19	2.460E 01	14.452	-27.0	9.025E 01	0.032	47.
3.69	2.980E 01	14.568	-26.5	9.740E 01	0.028	37.
4.19	4.048E 01	14.692	-26.0	1.205E 02	0.027	31.
4.69	5.028E 01	14.825	-25.5	1.368E 02	0.023	27.
5.19	5.603E 01	14.963	-25.0	1.399E 02	0.022	22.
5.69	6.323E 01	15.105	-24.5	1.455E 02	0.019	20.
6.19	7.104E 01	15.251	-24.0	1.512E 02	0.018	17.
6.69	7.395E 01	15.403	-23.5	1.450E 02	0.017	16.
7.21	7.640E 01	15.560	-23.0	1.396E 02	0.017	14.
7.70	7.828E 01	15.715	-22.5	1.331E 02	0.017	12.
8.20	8.045E 01	15.876	-22.0	1.273E 02	0.016	12.
8.71	8.312E 01	16.039	-21.5	1.225E 02	0.016	10.
9.21	8.376E 01	16.204	-21.0	1.151E 02	0.015	10.
9.70	8.450E 01	16.366	-20.5	1.085E 02	0.016	8.
10.20	8.791E 01	16.534	-20.0	1.053E 02	0.014	9.
10.70	9.463E 01	16.705	-19.5	1.057E 02	0.015	7.
11.18	9.601E 01	16.868	-19.0	1.004E 02	0.014	7.
11.68	9.810E 01	17.043	-18.5	9.562E 01	0.014	7.
12.18	1.017E 02	17.217	-18.0	9.238E 01	0.014	6.
12.68	1.025E 02	17.390	-17.5	8.686E 01	0.013	6.
13.20	1.093E 02	17.575	-17.0	8.608E 01	0.012	6.
13.70	1.142E 02	17.756	-16.5	8.351E 01	0.013	5.
14.19	1.183E 02	17.931	-16.0	8.056E 01	0.012	5.
14.70	1.210E 02	18.116	-15.5	7.633E 01	0.012	5.
15.19	1.259E 02	18.293	-15.0	7.375E 01	0.013	4.
15.70	1.310E 02	18.479	-14.5	7.089E 01	0.011	5.
16.24	1.391E 02	18.676	-14.0	6.915E 01	0.011	4.
16.74	1.402E 02	18.861	-13.5	6.426E 01	0.011	4.
17.20	1.488E 02	19.030	-13.0	6.318E 01	0.012	3.
17.67	1.489E 02	19.207	-12.5	5.826E 01	0.010	4.
18.17	1.574E 02	19.393	-12.0	5.640E 01	0.011	3.
18.69	1.588E 02	19.587	-11.5	5.180E 01	0.010	4.
19.23	1.610E 02	19.790	-11.0	4.734E 01	0.011	3.
19.71	1.646E 02	19.972	-10.5	4.404E 01	0.010	3.
20.21	1.712E 02	20.162	-10.0	4.131E 01	0.010	3.
20.73	1.747E 02	20.360	-9.5	3.771E 01	0.010	3.
21.18	1.835E 02	20.530	-9.0	3.582E 01	0.011	2.
21.64	1.911E 02	20.708	-8.5	3.346E 01	0.009	3.
22.22	1.981E 02	20.929	-8.0	3.006E 01	0.009	3.
22.72	2.094E 02	21.121	-7.5	2.784E 01	0.010	2.
23.23	2.212E 02	21.320	-7.0	2.543E 01	0.008	3.
23.76	2.367E 02	21.525	-6.5	2.316E 01	0.009	2.
24.20	2.576E 02	21.696	-6.0	2.184E 01	0.009	2.
24.65	2.820E 02	21.872	-5.5	2.041E 01	0.008	2.

25.12	3.090E 02	22.053	-5.0	1.876E 01	0.008	2.
25.60	3.303E 02	22.239	-4.5	1.645E 01	0.007	2.
26.09	3.423E 02	22.432	-4.0	1.358E 01	0.007	2.
26.59	3.573E 02	22.630	-3.5	1.091E 01	0.007	2.
27.11	3.703E 02	22.835	-3.0	8.276E 00	0.007	2.
27.65	3.886E 02	23.046	-2.5	5.929E 00	0.006	2.
28.20	4.468E 02	23.264	-2.0	4.159E 00	0.006	2.
28.77	9.155E 02	23.489	-1.5	4.195E 00	0.004	2.
29.21	1.977E 03	23.663	-1.0	4.563E 00	0.004	1.
29.66	2.966E 03	23.841	-0.5	2.136E 00	0.002	2.
30.27	2.519E 03	24.085	-0.0	1.551E-01	0.002	2.
30.74	1.331E 03	24.273	0.5	9.265E-01	0.004	1.
31.23	6.174E 02	24.467	1.0	1.470E 00	0.005	2.
31.72	3.995E 02	24.665	1.5	2.194E 00	0.008	1.
32.23	3.784E 02	24.868	2.0	3.727E 00	0.006	2.
32.75	3.708E 02	25.077	2.5	5.737E 00	0.008	1.
33.10	3.684E 02	25.219	3.0	7.405E 00	0.008	1.
33.64	3.583E 02	25.437	3.5	1.018E 01	0.006	2.
34.20	3.446E 02	25.660	4.0	1.323E 01	0.008	1.
34.58	3.225E 02	25.812	4.5	1.486E 01	0.008	1.
35.15	2.843E 02	26.046	5.0	1.682E 01	0.006	2.
35.74	2.554E 02	26.285	5.5	1.906E 01	0.009	1.
36.15	2.366E 02	26.448	6.0	2.038E 01	0.010	1.
36.56	2.215E 02	26.615	6.5	2.187E 01	0.010	1.
37.19	1.987E 02	26.870	7.0	2.382E 01	0.007	2.
37.83	1.873E 02	27.132	7.5	2.694E 01	0.011	1.
38.27	3.448E 01	27.311	8.0	5.568E 00	0.025	1.

LONGITUDINAL POLYETHYLENE 300K

6970 1

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 300K

SIGMA=159.24 MASS= 14.00 DWC=.04200 KT=.02585

DATA CODE 6970 COMPUTED 080867 INCIDENT ENERGY .0302 ANGLE NO 5 IS 270.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.89	3.229E 01	15.051	-27.5	1.279E 02	0.034	61.
3.19	3.093E 01	16.094	-27.0	1.087E 02	0.030	47.
3.69	3.838E 01	16.337	-26.5	1.209E 02	0.025	38.
4.20	4.483E 01	16.579	-26.0	1.278E 02	0.024	31.
4.69	5.187E 01	16.819	-25.5	1.352E 02	0.022	26.
5.20	5.407E 01	17.060	-25.0	1.291E 02	0.021	23.
5.69	6.333E 01	17.300	-24.5	1.396E 02	0.020	19.
6.19	6.935E 01	17.541	-24.0	1.411E 02	0.018	18.
6.70	7.535E 01	17.783	-23.5	1.421E 02	0.018	15.
7.19	7.686E 01	18.022	-23.0	1.348E 02	0.017	14.
7.70	7.814E 01	18.268	-22.5	1.272E 02	0.017	13.
8.20	8.641E 01	18.510	-22.0	1.311E 02	0.017	11.
8.68	8.777E 01	18.742	-21.5	1.243E 02	0.017	10.
9.18	9.027E 01	18.982	-21.0	1.194E 02	0.016	10.
9.70	8.863E 01	19.230	-20.5	1.092E 02	0.017	9.
10.20	9.480E 01	19.470	-20.0	1.091E 02	0.016	8.
10.70	9.469E 01	19.713	-19.5	1.017E 02	0.016	8.
11.21	1.003E 02	19.958	-19.0	1.006E 02	0.016	7.
11.71	1.010E 02	20.202	-18.5	9.447E 01	0.015	7.
12.22	1.050E 02	20.444	-18.0	9.164E 01	0.016	6.
12.71	1.098E 02	20.682	-17.5	8.942E 01	0.015	6.
13.19	1.127E 02	20.912	-17.0	8.588E 01	0.016	5.
13.69	1.196E 02	21.156	-16.5	8.481E 01	0.014	6.
14.23	1.243E 02	21.415	-16.0	8.163E 01	0.015	5.
14.69	1.295E 02	21.637	-15.5	7.941E 01	0.016	4.
15.18	1.341E 02	21.871	-15.0	7.650E 01	0.013	5.
15.69	1.379E 02	22.117	-14.5	7.279E 01	0.014	4.
16.16	1.483E 02	22.345	-14.0	7.278E 01	0.014	4.
16.66	1.492E 02	22.585	-13.5	6.767E 01	0.013	4.
17.18	1.542E 02	22.835	-13.0	6.422E 01	0.013	4.
17.72	1.601E 02	23.098	-12.5	6.087E 01	0.012	4.
18.22	1.594E 02	23.338	-12.0	5.551E 01	0.014	3.
18.66	1.706E 02	23.551	-11.5	5.489E 01	0.013	3.
19.20	1.750E 02	23.811	-11.0	5.094E 01	0.011	4.
19.76	1.738E 02	24.082	-10.5	4.534E 01	0.013	3.
20.27	1.822E 02	24.324	-10.0	4.292E 01	0.012	3.
20.70	1.866E 02	24.532	-9.5	4.012E 01	0.015	2.
21.15	1.969E 02	24.748	-9.0	3.836E 01	0.012	3.
21.70	1.969E 02	25.016	-8.5	3.371E 01	0.011	3.
22.18	2.106E 02	25.247	-8.0	3.208E 01	0.013	2.
22.68	2.218E 02	25.486	-7.5	2.966E 01	0.010	3.
23.19	2.351E 02	25.733	-7.0	2.730E 01	0.012	2.
23.72	2.488E 02	25.989	-6.5	2.463E 01	0.010	3.
24.27	2.721E 02	26.253	-6.0	2.257E 01	0.011	2.
24.72	2.964E 02	26.471	-5.5	2.100E 01	0.010	2.
25.19	3.230E 02	26.696	-5.0	1.915E 01	0.010	2.

25.67	3.384E 02	26.927	-4.5	1.642E 01	0.010	2.
26.16	3.529E 02	27.164	-4.0	1.364E 01	0.009	2.
26.67	3.533E 02	27.409	-3.5	1.047E 01	0.009	2.
27.19	3.752E 02	27.660	-3.0	8.083E 00	0.009	2.
27.73	3.837E 02	27.919	-2.5	5.593E 00	0.010	2.
28.28	5.039E 02	28.186	-2.0	4.373E 00	0.008	2.
28.70	9.038E 02	28.391	-1.5	4.823E 00	0.008	1.
29.14	1.746E 03	28.602	-1.0	4.549E 00	0.004	2.
29.74	2.455E 03	28.889	-0.5	1.390E 00	0.003	2.
30.20	2.065E 03	29.110	-0.0	5.351E-05	0.005	1.
30.67	1.200E 03	29.337	0.5	6.097E-01	0.005	2.
31.15	5.717E 02	29.569	1.0	1.246E 00	0.009	1.
31.64	3.875E 02	29.807	1.5	1.951E 00	0.008	2.
32.15	3.386E 02	30.050	2.0	3.132E 00	0.012	1.
32.66	3.337E 02	30.300	2.5	4.980E 00	0.008	2.
33.19	3.148E 02	30.554	3.0	6.946E 00	0.012	1.
33.74	3.049E 02	30.816	3.5	9.441E 00	0.009	2.
34.29	2.796E 02	31.084	4.0	1.165E 01	0.013	1.
34.67	2.647E 02	31.266	4.5	1.321E 01	0.013	1.
35.25	2.328E 02	31.545	5.0	1.490E 01	0.010	2.
35.84	2.088E 02	31.831	5.5	1.682E 01	0.014	1.
36.25	2.040E 02	32.026	6.0	1.896E 01	0.014	1.
36.66	1.898E 02	32.224	6.5	2.022E 01	0.015	1.
37.08	1.835E 02	32.426	7.0	2.228E 01	0.015	1.
37.72	1.702E 02	32.735	7.5	2.485E 01	0.011	2.
38.37	3.534E 01	33.052	8.0	6.161E 00	0.035	1.

LONGITUDINAL POLYETHYLENE 300K

6970 5

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 300K

SIGMA=159.24 MASS= 14.00 DWC=.05500 KT=.02585

DATA CODE 6970 COMPUTED 080867 INCIDENT ENERGY .0302 ANGLE NO 6 IS 80.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.70	6.445E 01	14.362	-27.5	3.113E 02	0.048	40.
3.19	7.403E 01	14.451	-27.0	3.257E 02	0.027	48.
3.69	3.519E 01	14.567	-26.5	1.402E 02	0.025	39.
4.19	5.504E 01	14.694	-26.0	1.980E 02	0.024	33.
4.70	6.314E 01	14.827	-25.5	2.080E 02	0.025	27.
5.19	6.772E 01	14.963	-25.0	2.055E 02	0.023	23.
5.70	7.553E 01	15.107	-24.5	2.114E 02	0.021	21.
6.19	8.899E 01	15.252	-24.0	2.307E 02	0.019	17.
6.68	9.605E 01	15.399	-23.5	2.318E 02	0.017	16.
7.19	9.784E 01	15.556	-23.0	2.193E 02	0.016	15.
7.71	9.969E 01	15.716	-22.5	2.078E 02	0.016	13.
8.21	1.032E 02	15.878	-22.0	2.004E 02	0.016	12.
8.70	1.082E 02	16.036	-21.5	1.967E 02	0.016	10.
9.18	1.155E 02	16.194	-21.0	1.965E 02	0.015	10.
9.68	1.191E 02	16.359	-20.5	1.895E 02	0.014	9.
10.19	1.258E 02	16.530	-20.0	1.870E 02	0.013	9.
10.71	1.278E 02	16.706	-19.5	1.773E 02	0.013	8.
11.20	1.384E 02	16.875	-19.0	1.798E 02	0.013	7.
11.69	1.430E 02	17.044	-18.5	1.738E 02	0.012	7.
12.21	1.487E 02	17.226	-18.0	1.685E 02	0.012	7.
12.72	1.550E 02	17.408	-17.5	1.636E 02	0.012	6.
13.23	1.626E 02	17.587	-17.0	1.600E 02	0.011	6.
13.72	1.687E 02	17.762	-16.5	1.551E 02	0.012	5.
14.19	1.765E 02	17.931	-16.0	1.517E 02	0.011	5.
14.69	1.859E 02	18.110	-15.5	1.488E 02	0.011	5.
15.21	1.959E 02	18.300	-15.0	1.451E 02	0.010	5.
15.70	2.059E 02	18.480	-14.5	1.417E 02	0.011	4.
16.16	2.144E 02	18.649	-14.0	1.374E 02	0.010	4.
16.64	2.235E 02	18.825	-13.5	1.329E 02	0.010	4.
17.15	2.273E 02	19.011	-13.0	1.247E 02	0.009	4.
17.67	2.374E 02	19.206	-12.5	1.193E 02	0.009	4.
18.22	2.398E 02	19.411	-12.0	1.096E 02	0.009	4.
18.72	2.579E 02	19.599	-11.5	1.078E 02	0.009	3.
19.17	2.631E 02	19.768	-11.0	1.012E 02	0.009	3.
19.71	2.687E 02	19.973	-10.5	9.322E 01	0.008	4.
20.28	2.737E 02	20.187	-10.0	8.474E 01	0.009	3.
20.69	2.799E 02	20.346	-9.5	7.937E 01	0.010	2.
21.13	2.882E 02	20.511	-9.0	7.434E 01	0.008	3.
21.66	2.901E 02	20.716	-8.5	6.616E 01	0.008	3.
22.22	3.042E 02	20.930	-8.0	6.056E 01	0.008	3.
22.70	3.135E 02	21.114	-7.5	5.512E 01	0.009	2.
23.20	3.243E 02	21.306	-7.0	4.969E 01	0.007	3.
23.71	3.382E 02	21.505	-6.5	4.452E 01	0.008	2.
24.13	3.503E 02	21.669	-6.0	4.029E 01	0.008	2.
24.68	3.693E 02	21.881	-5.5	3.523E 01	0.006	3.
25.24	3.840E 02	22.100	-5.0	2.961E 01	0.008	2.

25.70	3.994E 02	22.282	-4.5	2.533E 01	0.007	2.
26.18	4.125E 02	22.469	-4.0	2.094E 01	0.007	2.
26.67	4.327E 02	22.661	-3.5	1.696E 01	0.007	2.
27.18	4.577E 02	22.860	-3.0	1.321E 01	0.006	2.
27.70	4.843E 02	23.065	-2.5	9.605E 00	0.006	2.
28.23	5.302E 02	23.276	-2.0	6.531E 00	0.006	2.
28.78	7.088E 02	23.493	-1.5	4.471E 00	0.005	2.
29.20	1.228E 03	23.661	-1.0	3.893E 00	0.005	1.
29.64	2.113E 03	23.833	-0.5	2.152E 00	0.003	2.
30.23	2.125E 03	24.068	-0.0	1.528E-01	0.003	2.
30.68	1.218E 03	24.250	0.5	9.219E-01	0.005	1.
31.15	7.010E 02	24.436	1.0	2.025E 00	0.005	2.
31.79	5.328E 02	24.691	1.5	4.408E 00	0.006	2.
32.28	4.871E 02	24.888	2.0	6.909E 00	0.008	1.
32.61	4.655E 02	25.022	2.5	8.924E 00	0.008	1.
33.12	4.363E 02	25.227	3.0	1.236E 01	0.006	2.
33.65	4.130E 02	25.437	3.5	1.633E 01	0.008	1.
34.18	3.852E 02	25.653	4.0	2.047E 01	0.006	2.
34.73	3.655E 02	25.874	4.5	2.529E 01	0.009	1.
35.10	3.465E 02	26.025	5.0	2.821E 01	0.009	1.
35.67	3.286E 02	26.256	5.5	3.359E 01	0.006	2.
36.26	3.097E 02	26.492	6.0	3.907E 01	0.009	1.
36.65	2.982E 02	26.654	6.5	4.295E 01	0.009	1.
37.06	2.842E 02	26.818	7.0	4.649E 01	0.009	1.
37.68	2.696E 02	27.070	7.5	5.289E 01	0.007	2.
38.31	2.550E 02	27.328	8.0	5.941E 01	0.010	1.
38.75	2.465E 02	27.505	8.5	6.411E 01	0.010	1.
39.18	2.390E 02	27.684	9.0	6.918E 01	0.010	1.
39.63	2.345E 02	27.867	9.5	7.532E 01	0.010	1.
40.09	2.226E 02	28.053	10.0	7.913E 01	0.010	1.
40.55	2.189E 02	28.242	10.5	8.592E 01	0.010	1.
41.02	4.153E 01	28.435	11.0	1.796E 01	0.023	1.

TRANSVERSE POLYETHYLENE 300K

6970 6

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 300K

SIGMA=159.24 MASS= 14.00 DWC=.05500 KT=.02585

DATA CODE 6970 COMPUTED 080867 INCIDENT ENERGY .0302 ANGLE NO 2 IS 90.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.83	6.312E 01	15.920	-27.5	2.962E 02	0.059	28.
3.19	6.908E 01	16.093	-27.0	2.982E 02	0.030	49.
3.69	4.406E 01	16.334	-26.5	1.727E 02	0.024	40.
4.19	5.614E 01	16.576	-26.0	1.989E 02	0.025	33.
4.70	6.596E 01	16.820	-25.5	2.139E 02	0.024	20.
5.19	7.201E 01	17.059	-25.0	2.150E 02	0.023	23.
5.69	7.930E 01	17.297	-24.5	2.189E 02	0.021	21.
6.19	8.994E 01	17.537	-24.0	2.304E 02	0.019	18.
6.69	9.629E 01	17.782	-23.5	2.290E 02	0.017	17.
7.19	1.013E 02	18.024	-23.0	2.240E 02	0.017	14.
7.70	1.064E 02	18.267	-22.5	2.198E 02	0.016	14.
8.22	1.085E 02	18.516	-22.0	2.089E 02	0.016	12.
8.72	1.196E 02	18.758	-21.5	2.153E 02	0.015	11.
9.22	1.228E 02	18.999	-21.0	2.068E 02	0.014	10.
9.71	1.263E 02	19.235	-20.5	1.996E 02	0.014	9.
10.21	1.326E 02	19.477	-20.0	1.963E 02	0.013	9.
10.72	1.327E 02	19.722	-19.5	1.838E 02	0.014	8.
11.20	1.447E 02	19.955	-19.0	1.882E 02	0.013	7.
11.68	1.493E 02	20.187	-18.5	1.823E 02	0.013	7.
12.19	1.551E 02	20.433	-18.0	1.770E 02	0.012	7.
12.70	1.670E 02	20.677	-17.5	1.782E 02	0.012	6.
13.20	1.714E 02	20.916	-17.0	1.712E 02	0.012	6.
13.72	1.731E 02	21.170	-16.5	1.610E 02	0.011	6.
14.23	1.898E 02	21.415	-16.0	1.645E 02	0.011	5.
14.72	1.968E 02	21.650	-15.5	1.593E 02	0.011	5.
15.23	2.006E 02	21.898	-15.0	1.509E 02	0.010	5.
15.72	2.084E 02	22.132	-14.5	1.460E 02	0.011	4.
16.17	2.227E 02	22.350	-14.0	1.458E 02	0.010	4.
16.70	2.295E 02	22.607	-13.5	1.385E 02	0.009	5.
17.20	2.349E 02	22.845	-13.0	1.312E 02	0.011	3.
17.65	2.436E 02	23.063	-12.5	1.265E 02	0.009	4.
18.19	2.472E 02	23.322	-12.0	1.172E 02	0.009	4.
18.68	2.576E 02	23.559	-11.5	1.122E 02	0.010	3.
19.19	2.648E 02	23.806	-11.0	1.052E 02	0.008	4.
19.72	2.652E 02	24.062	-10.5	9.537E 01	0.009	3.
20.20	2.732E 02	24.291	-10.0	8.958E 01	0.009	3.
20.69	2.826E 02	24.528	-9.5	8.377E 01	0.009	3.
21.20	2.877E 02	24.774	-9.0	7.643E 01	0.008	3.
21.73	3.025E 02	25.029	-8.5	7.127E 01	0.008	3.
22.18	2.999E 02	25.249	-8.0	6.333E 01	0.010	2.
22.66	3.148E 02	25.476	-7.5	5.898E 01	0.008	3.
23.24	3.251E 02	25.758	-7.0	5.196E 01	0.007	3.
23.75	3.357E 02	26.001	-6.5	4.629E 01	0.009	2.
24.16	3.452E 02	26.202	-6.0	4.177E 01	0.009	2.
24.70	3.600E 02	26.460	-5.5	3.632E 01	0.007	3.
25.25	3.661E 02	26.726	-5.0	2.999E 01	0.008	2.

25.71	3.838E 02	26.946	-4.5	2.597E 01	0.008	2.
26.18	3.936E 02	27.172	-4.0	2.148E 01	0.008	2.
26.66	4.077E 02	27.405	-3.5	1.730E 01	0.007	2.
27.15	4.250E 02	27.643	-3.0	1.341E 01	0.007	2.
27.66	4.375E 02	27.889	-2.5	9.639E 00	0.007	2.
28.19	4.678E 02	28.141	-2.0	6.530E 00	0.006	2.
28.72	5.254E 02	28.401	-1.5	3.942E 00	0.006	2.
29.28	8.221E 02	28.668	-1.0	2.370E 00	0.005	2.
29.70	1.212E 03	28.873	-0.5	1.042E 00	0.005	1.
30.14	1.197E 03	29.083	-0.0	1.113E-01	0.004	2.
30.74	7.243E 02	29.370	0.5	7.409E-01	0.006	2.
31.19	5.081E 02	29.591	1.0	1.786E 00	0.011	1.
31.66	4.960E 02	29.817	1.5	3.838E 00	0.008	2.
32.14	4.676E 02	30.048	2.0	6.363E 00	0.012	1.
32.63	4.029E 02	30.285	2.5	8.651E 00	0.008	2.
33.13	3.675E 02	30.526	3.0	1.159E 01	0.010	1.
33.65	3.562E 02	30.774	3.5	1.567E 01	0.007	2.
34.17	3.413E 02	31.027	4.0	2.006E 01	0.009	1.
34.71	3.279E 02	31.287	4.5	2.509E 01	0.007	2.
35.26	3.136E 02	31.552	5.0	3.046E 01	0.010	1.
35.64	3.137E 02	31.732	5.5	3.538E 01	0.010	1.
36.21	2.936E 02	32.009	6.0	4.084E 01	0.007	2.
36.80	2.775E 02	32.291	6.5	4.702E 01	0.010	1.
37.20	2.718E 02	32.484	7.0	5.218E 01	0.010	1.
37.60	2.605E 02	32.679	7.5	5.640E 01	0.010	1.
38.22	2.519E 02	32.979	8.0	6.486E 01	0.007	2.
38.86	2.415E 02	33.286	8.5	7.333E 01	0.010	1.
39.29	2.346E 02	33.495	9.0	7.921E 01	0.010	1.
39.73	2.297E 02	33.707	9.5	8.601E 01	0.010	1.
40.18	2.272E 02	33.923	10.0	9.412E 01	0.010	1.
40.64	2.146E 02	34.143	10.5	9.809E 01	0.011	1.
41.10	2.095E 02	34.366	11.0	1.055E 02	0.011	1.
41.57	2.028E 02	34.593	11.5	1.123E 02	0.011	1.
42.05	2.016E 02	34.824	12.0	1.225E 02	0.011	1.
42.54	3.728E 01	35.060	12.5	2.481E 01	0.025	1.

TRANSVERSE POLYETHYLENE 300K

6970 2

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 300K

SIGMA=159.24 MASS= 14.00 DWC=.05500 KT=.02585

DATA CODE 6970 COMPUTED 080867 INCIDENT ENERGY .0302 ANGLE NO 4 IS 100.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.76	4.488E 01	17.415	-27.5	2.126E 02	0.039	43.
3.19	5.520E 01	17.736	-27.0	2.369E 02	0.024	49.
3.69	3.727E 01	18.101	-26.5	1.447E 02	0.025	38.
4.19	4.991E 01	18.460	-26.0	1.761E 02	0.023	33.
4.70	5.634E 01	18.817	-25.5	1.822E 02	0.022	27.
5.20	6.308E 01	19.160	-25.0	1.880E 02	0.021	23.
5.70	7.173E 01	19.497	-24.5	1.979E 02	0.019	20.
6.20	8.151E 01	19.832	-24.0	2.091E 02	0.018	18.
6.70	8.916E 01	20.166	-23.5	2.129E 02	0.017	16.
7.20	9.289E 01	20.494	-23.0	2.071E 02	0.017	14.
7.70	9.909E 01	20.818	-22.5	2.067E 02	0.016	13.
8.21	1.039E 02	21.146	-22.0	2.027E 02	0.016	12.
8.70	1.103E 02	21.459	-21.5	2.020E 02	0.016	10.
9.18	1.181E 02	21.768	-21.0	2.033E 02	0.015	10.
9.68	1.179E 02	22.083	-20.5	1.904E 02	0.015	9.
10.19	1.287E 02	22.405	-20.0	1.951E 02	0.014	9.
10.71	1.370E 02	22.730	-19.5	1.944E 02	0.014	8.
11.21	1.405E 02	23.037	-19.0	1.873E 02	0.014	7.
11.70	1.448E 02	23.342	-18.5	1.815E 02	0.014	7.
12.19	1.558E 02	23.641	-18.0	1.835E 02	0.014	6.
12.66	1.564E 02	23.934	-17.5	1.734E 02	0.013	6.
13.17	1.695E 02	24.242	-17.0	1.760E 02	0.012	6.
13.71	1.747E 02	24.568	-16.5	1.691E 02	0.012	6.
14.23	1.783E 02	24.884	-16.0	1.610E 02	0.013	5.
14.73	1.862E 02	25.185	-15.5	1.572E 02	0.012	5.
15.20	1.985E 02	25.470	-15.0	1.570E 02	0.013	4.
15.70	2.063E 02	25.767	-14.5	1.521E 02	0.011	5.
16.22	2.100E 02	26.078	-14.0	1.437E 02	0.012	4.
16.70	2.139E 02	26.367	-13.5	1.361E 02	0.012	4.
17.21	2.184E 02	26.668	-13.0	1.286E 02	0.011	4.
17.74	2.239E 02	26.983	-12.5	1.213E 02	0.011	4.
18.23	2.360E 02	27.269	-12.0	1.181E 02	0.012	3.
18.66	2.385E 02	27.523	-11.5	1.111E 02	0.012	3.
19.18	2.469E 02	27.831	-11.0	1.049E 02	0.010	4.
19.73	2.508E 02	28.151	-10.5	9.647E 01	0.011	3.
20.21	2.559E 02	28.435	-10.0	8.970E 01	0.011	3.
20.72	2.607E 02	28.730	-9.5	8.256E 01	0.011	3.
21.24	2.667E 02	29.035	-9.0	7.564E 01	0.010	3.
21.69	2.758E 02	29.297	-8.5	7.076E 01	0.012	2.
22.16	2.809E 02	29.568	-8.0	6.457E 01	0.010	3.
22.74	2.874E 02	29.904	-7.5	5.723E 01	0.010	3.
23.24	3.000E 02	30.193	-7.0	5.221E 01	0.011	2.
23.65	3.075E 02	30.431	-6.5	4.753E 01	0.011	2.
24.19	3.192E 02	30.737	-6.0	4.191E 01	0.009	3.
24.73	3.226E 02	31.053	-5.5	3.520E 01	0.010	2.
25.19	3.308E 02	31.313	-5.0	3.048E 01	0.010	2.
25.65	3.411E 02	31.580	-4.5	2.604E 01	0.010	2.

26.13	3.497E 02	31.854	-4.0	2.149E 01	0.010	2.
26.62	3.631E 02	32.135	-3.5	1.735E 01	0.009	2.
27.13	3.659E 02	32.424	-3.0	1.300E 01	0.009	2.
27.65	3.845E 02	32.721	-2.5	9.498E 00	0.009	2.
28.19	3.978E 02	33.026	-2.0	6.182E 00	0.009	2.
28.74	4.650E 02	33.339	-1.5	3.810E 00	0.008	2.
29.16	6.241E 02	33.580	-1.0	2.606E 00	0.010	1.
29.60	8.643E 02	33.826	-0.5	1.261E 00	0.006	2.
30.19	8.144E 02	34.163	-0.0	7.412E-02	0.006	2.
30.65	5.475E 02	34.421	0.5	4.388E-01	0.010	1.
31.12	4.118E 02	34.685	1.0	1.403E 00	0.008	2.
31.76	3.542E 02	35.047	1.5	3.518E 00	0.009	2.
32.25	3.376E 02	35.324	2.0	5.823E 00	0.012	1.
32.76	3.296E 02	35.609	2.5	8.961E 00	0.009	2.
33.27	3.114E 02	35.899	3.0	1.230E 01	0.013	1.
33.62	3.066E 02	36.096	3.5	1.515E 01	0.013	1.
34.16	2.962E 02	36.398	4.0	1.984E 01	0.009	2.
34.71	2.802E 02	36.706	4.5	2.460E 01	0.013	1.
35.09	2.700E 02	36.916	5.0	2.803E 01	0.013	1.
35.66	2.621E 02	37.237	5.5	3.440E 01	0.009	2.
36.25	2.541E 02	37.565	6.0	4.143E 01	0.013	1.
36.65	2.444E 02	37.788	6.5	4.569E 01	0.014	1.
37.05	2.399E 02	38.015	7.0	5.116E 01	0.014	1.
37.68	2.278E 02	38.362	7.5	5.863E 01	0.010	2.
38.31	2.188E 02	38.717	8.0	6.734E 01	0.014	1.
38.75	2.123E 02	38.959	8.5	7.328E 01	0.014	1.
39.19	2.037E 02	39.204	9.0	7.860E 01	0.015	1.
39.64	2.055E 02	39.454	9.5	8.837E 01	0.014	1.
40.10	1.960E 02	39.708	10.0	9.367E 01	0.015	1.
40.56	4.422E 01	39.966	10.5	2.344E 01	0.031	1.

TRANSVERSE POLYETHYLENE 300K

6970 4

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00663

DATA CODE 6996 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 3 IS 290.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.66	2.067E 01	12.797	-27.5	9.070E 01	0.067	23.
2.99	1.488E 01	12.779	-27.0	6.107E 01	0.031	53.
3.49	1.844E 01	12.769	-26.5	6.816E 01	0.029	42.
3.99	3.218E 01	12.776	-26.0	1.092E 02	0.025	34.
4.49	4.293E 01	12.798	-25.5	1.344E 02	0.021	29.
4.99	5.318E 01	12.832	-25.0	1.542E 02	0.018	25.
5.50	5.933E 01	12.876	-24.5	1.601E 02	0.017	21.
6.00	5.580E 01	12.928	-24.0	1.405E 02	0.017	19.
6.49	5.578E 01	12.988	-23.5	1.314E 02	0.018	16.
6.99	5.947E 01	13.054	-23.0	1.313E 02	0.016	15.
7.50	5.629E 01	13.130	-22.5	1.163E 02	0.016	14.
8.01	6.110E 01	13.210	-22.0	1.184E 02	0.016	12.
8.51	6.097E 01	13.294	-21.5	1.112E 02	0.016	11.
9.01	6.254E 01	13.381	-21.0	1.074E 02	0.015	10.
9.49	6.313E 01	13.471	-20.5	1.022E 02	0.015	9.
9.99	6.514E 01	13.567	-20.0	9.938E 01	0.014	9.
10.50	6.558E 01	13.669	-19.5	9.409E 01	0.015	8.
11.01	7.037E 01	13.775	-19.0	9.499E 01	0.014	8.
11.53	7.276E 01	13.885	-18.5	9.227E 01	0.014	7.
12.01	7.462E 01	13.990	-18.0	8.936E 01	0.014	6.
12.48	7.587E 01	14.094	-17.5	8.579E 01	0.014	6.
12.97	8.137E 01	14.208	-17.0	8.658E 01	0.013	6.
13.50	8.575E 01	14.331	-16.5	8.548E 01	0.012	6.
14.01	8.790E 01	14.453	-16.0	8.216E 01	0.013	5.
14.50	9.061E 01	14.572	-15.5	7.954E 01	0.012	5.
15.02	9.426E 01	14.699	-15.0	7.735E 01	0.012	5.
15.50	9.531E 01	14.822	-14.5	7.333E 01	0.012	4.
15.96	9.441E 01	14.938	-14.0	6.827E 01	0.012	4.
16.49	9.573E 01	15.076	-13.5	6.424E 01	0.011	5.
16.99	9.707E 01	15.206	-13.0	6.068E 01	0.013	3.
17.45	1.007E 02	15.327	-12.5	5.885E 01	0.011	4.
17.99	1.049E 02	15.472	-12.0	5.646E 01	0.011	4.
18.49	1.047E 02	15.606	-11.5	5.210E 01	0.012	3.
19.01	9.905E 01	15.748	-11.0	4.530E 01	0.011	4.
19.55	9.921E 01	15.897	-10.5	4.138E 01	0.012	3.
20.03	9.938E 01	16.031	-10.0	3.804E 01	0.012	3.
20.53	9.864E 01	16.172	-9.5	3.438E 01	0.012	3.
21.05	9.896E 01	16.319	-9.0	3.115E 01	0.011	3.
21.49	1.013E 02	16.447	-8.5	2.908E 01	0.014	2.
21.95	1.032E 02	16.580	-8.0	2.677E 01	0.011	3.
22.53	1.094E 02	16.746	-7.5	2.482E 01	0.010	3.
23.02	1.164E 02	16.891	-7.0	2.332E 01	0.012	2.
23.53	1.253E 02	17.042	-6.5	2.186E 01	0.009	3.
24.06	1.318E 02	17.199	-6.0	1.970E 01	0.011	2.
24.50	1.409E 02	17.329	-5.5	1.833E 01	0.010	2.
24.95	1.473E 02	17.464	-5.0	1.640E 01	0.010	2.

25,41	1,496E 02	17,603	-4,5	1,396E 01	0,010	2,
26,00	1,559E 02	17,784	-4,0	1,126E 01	0,008	3,
26,61	1,616E 02	17,971	-3,5	8,551E 00	0,009	2,
26,99	1,643E 02	18,088	-3,0	6,950E 00	0,013	1,
27,38	1,731E 02	18,208	-2,5	5,647E 00	0,009	2,
27,91	1,654E 02	18,372	-2,0	3,534E 00	0,011	2,
28,46	1,949E 02	18,542	-1,5	2,218E 00	0,017	2,
29,02	1,443E 03	18,718	-1,0	6,273E 00	0,004	2,
29,60	5,134E 03	18,900	-0,5	4,342E 00	0,001	2,
30,04	6,599E 03	19,041	-0,0	5,778E-02	0,002	1,
30,50	3,778E 03	19,186	0,5	5,212E 00	0,002	2,
30,96	1,536E 03	19,334	1,0	7,884E 00	0,004	1,
31,44	3,558E 02	19,487	1,5	3,770E 00	0,006	2,
31,93	1,163E 02	19,644	2,0	2,510E 00	0,013	1,
32,42	1,077E 02	19,805	2,5	3,806E 00	0,010	2,
32,93	1,010E 02	19,970	3,0	5,343E 00	0,014	1,
33,46	9,290E 01	20,141	3,5	7,027E 00	0,010	2,
33,99	8,127E 01	20,315	4,0	8,428E 00	0,016	1,
34,54	7,972E 01	20,495	4,5	1,104E 01	0,011	2,
35,10	7,285E 01	20,680	5,0	1,315E 01	0,016	1,
35,48	6,349E 01	20,806	5,5	1,354E 01	0,017	1,
35,87	6,182E 01	20,934	6,0	1,548E 01	0,017	1,
36,47	5,259E 01	21,132	6,5	1,655E 01	0,013	2,

LONGITUDINAL POLYETHYLENE 77K

6996 3

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01200 KT=.00663

DATA CODE 6996 COMPUTED 080867 INCIDENT ENERGY ,0300 ANGLE NO 1 IS 280,00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2,59	1,405E 01	14,233	=27,5	7,759E 01	0,081	40,
2,99	1,744E 01	14,316	=27,0	6,524E 01	0,037	52,
3,50	1,760E 01	14,431	=26,5	5,879E 01	0,031	41,
3,99	3,466E 01	14,553	=26,0	1,054E 02	0,026	33,
4,49	4,343E 01	14,681	=25,5	1,813E 02	0,023	28,
4,99	5,790E 01	14,817	=25,0	1,490E 02	0,019	24,
5,49	6,158E 01	14,959	=24,5	1,466E 02	0,018	21,
6,00	6,395E 01	15,105	=24,0	1,416E 02	0,017	18,
6,49	6,338E 01	15,252	=23,5	1,307E 02	0,017	16,
7,00	6,296E 01	15,407	=23,0	1,210E 02	0,016	15,
7,51	6,603E 01	15,567	=22,5	1,184E 02	0,016	13,
7,99	6,705E 01	15,720	=22,0	1,129E 02	0,016	11,
8,48	6,698E 01	15,877	=21,5	1,059E 02	0,015	11,
8,98	6,675E 01	16,042	=21,0	9,897E 01	0,015	10,
9,48	6,900E 01	16,207	=20,5	9,605E 01	0,015	9,
9,99	6,870E 01	16,378	=20,0	8,977E 01	0,015	9,
10,52	7,259E 01	16,555	=19,5	8,885E 01	0,014	8,
11,01	7,122E 01	16,724	=19,0	8,205E 01	0,015	7,
11,51	7,682E 01	16,895	=18,5	8,322E 01	0,014	7,
11,99	7,747E 01	17,065	=18,0	7,899E 01	0,014	6,
12,47	8,223E 01	17,234	=17,5	7,899E 01	0,013	6,
12,98	8,648E 01	17,414	=17,0	7,794E 01	0,012	6,
13,48	9,180E 01	17,590	=16,5	7,772E 01	0,013	5,
14,00	9,387E 01	17,778	=16,0	7,428E 01	0,011	6,
14,51	9,870E 01	17,959	=15,5	7,319E 01	0,013	4,
14,98	1,022E 02	18,132	=15,0	7,116E 01	0,011	5,
15,48	1,046E 02	18,314	=14,5	6,808E 01	0,012	4,
16,01	1,039E 02	18,507	=14,0	6,291E 01	0,010	5,
16,50	1,058E 02	18,687	=13,5	5,979E 01	0,013	3,
16,95	1,044E 02	18,853	=13,0	5,532E 01	0,011	4,
17,48	1,083E 02	19,052	=12,5	5,302E 01	0,011	4,
17,97	1,114E 02	19,234	=12,0	5,061E 01	0,012	3,
18,48	1,094E 02	19,425	=11,5	4,593E 01	0,010	4,
19,01	1,095E 02	19,624	=11,0	4,208E 01	0,011	3,
19,48	1,036E 02	19,803	=10,5	3,674E 01	0,012	3,
19,97	1,083E 02	19,989	=10,0	3,516E 01	0,011	3,
20,48	1,061E 02	20,183	=9,5	3,133E 01	0,011	3,
21,01	1,087E 02	20,386	=9,0	2,892E 01	0,011	3,
21,47	1,127E 02	20,561	=8,5	2,727E 01	0,013	2,
21,95	1,183E 02	20,742	=8,0	2,583E 01	0,010	3,
22,53	1,223E 02	20,969	=7,5	2,326E 01	0,009	3,
23,04	1,304E 02	21,165	=7,0	2,184E 01	0,011	2,
23,46	1,387E 02	21,327	=6,5	2,076E 01	0,011	2,
24,00	1,491E 02	21,537	=6,0	1,907E 01	0,008	3,
24,56	1,611E 02	21,754	=5,5	1,724E 01	0,009	2,
25,02	1,677E 02	21,934	=5,0	1,526E 01	0,009	2,

25,50	1,686E 02	22,120	-4,5	1,276E 01	0,009	2.
25,99	1,761E 02	22,311	-4,0	1,077E 01	0,009	2.
26,49	1,807E 02	22,509	-3,5	8,606E 00	0,008	2.
27,01	1,862E 02	22,712	-3,0	6,577E 00	0,008	2.
27,54	2,010E 02	22,922	-2,5	4,901E 00	0,008	2.
28,09	2,328E 02	23,139	-2,0	3,468E 00	0,007	2.
28,51	4,463E 02	23,306	-1,5	4,146E 00	0,007	1.
28,94	1,789E 03	23,478	-1,0	7,783E 00	0,003	2.
29,54	4,464E 03	23,713	-0,5	4,595E 00	0,002	2.
29,99	4,810E 03	23,894	-0,0	2,089E-03	0,002	1.
30,46	4,044E 03	24,080	0,5	3,742E 00	0,002	2.
30,93	1,510E 03	24,270	1,0	6,164E 00	0,004	1.
31,42	3,766E 02	24,465	1,5	3,307E 00	0,006	2.
31,92	1,319E 02	24,666	2,0	2,400E 00	0,012	1.
32,43	1,210E 02	24,871	2,5	3,647E 00	0,009	2.
32,96	1,163E 02	25,082	3,0	5,298E 00	0,013	1.
33,50	1,100E 02	25,298	3,5	7,227E 00	0,009	2.
34,05	1,002E 02	25,520	4,0	9,082E 00	0,013	1.
34,42	9,767E 01	25,671	4,5	1,080E 01	0,014	1.
35,00	8,730E 01	25,903	5,0	1,272E 01	0,010	2.
35,58	7,750E 01	26,141	5,5	1,464E 01	0,015	1.
35,98	7,091E 01	26,303	6,0	1,577E 01	0,015	1.
36,39	6,322E 01	26,469	6,5	1,645E 01	0,016	1.

LONGITUDINAL POLYETHYLENE 77K

6996 1

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00663

DATA CODE 6996 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 5 IS 270.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.59	1.980E 01	15.909	=27.5	7.453E 01	0.059	39.
2.99	1.830E 01	15.901	=27.0	6.314E 01	0.032	52.
3.49	1.873E 01	16.143	=26.5	5.708E 01	0.030	41.
3.99	2.861E 01	16.383	=26.0	7.904E 01	0.027	33.
4.49	4.266E 01	16.621	=25.5	1.077E 02	0.021	28.
4.98	5.726E 01	16.862	=25.0	1.329E 02	0.017	24.
5.49	6.283E 01	17.104	=24.5	1.345E 02	0.016	21.
5.98	6.074E 01	17.344	=24.0	1.204E 02	0.016	18.
6.49	6.287E 01	17.589	=23.5	1.156E 02	0.015	17.
7.00	6.431E 01	17.833	=23.0	1.099E 02	0.015	14.
7.49	6.350E 01	18.070	=22.5	1.014E 02	0.015	13.
7.99	6.119E 01	18.312	=22.0	9.123E 01	0.015	12.
8.50	6.197E 01	18.557	=21.5	8.638E 01	0.015	11.
9.01	6.194E 01	18.802	=21.0	8.080E 01	0.015	10.
9.51	6.327E 01	19.043	=20.5	7.737E 01	0.015	9.
9.99	6.510E 01	19.275	=20.0	7.486E 01	0.015	8.
10.48	6.427E 01	19.511	=19.5	6.943E 01	0.015	8.
11.01	6.896E 01	19.765	=19.0	6.975E 01	0.013	8.
11.50	7.076E 01	20.002	=18.5	6.727E 01	0.015	6.
11.99	7.147E 01	20.238	=18.0	6.388E 01	0.013	7.
12.51	7.629E 01	20.488	=17.5	6.386E 01	0.013	6.
13.02	7.994E 01	20.735	=17.0	6.271E 01	0.013	6.
13.52	8.465E 01	20.974	=16.5	6.232E 01	0.013	5.
13.99	8.460E 01	21.203	=16.0	5.856E 01	0.013	5.
14.49	9.182E 01	21.445	=15.5	5.954E 01	0.012	5.
15.02	9.549E 01	21.700	=15.0	5.769E 01	0.011	5.
15.52	9.570E 01	21.942	=14.5	5.405E 01	0.012	4.
15.99	9.354E 01	22.167	=14.0	4.954E 01	0.012	4.
16.48	9.531E 01	22.403	=13.5	4.710E 01	0.012	4.
16.99	9.694E 01	22.649	=13.0	4.447E 01	0.011	4.
17.53	9.791E 01	22.908	=12.5	4.149E 01	0.011	4.
18.02	1.018E 02	23.143	=12.0	4.002E 01	0.012	3.
18.45	1.017E 02	23.354	=11.5	3.733E 01	0.012	3.
18.98	9.861E 01	23.609	=11.0	3.320E 01	0.010	4.
19.54	9.745E 01	23.875	=10.5	2.982E 01	0.012	3.
20.03	9.887E 01	24.113	=10.0	2.771E 01	0.011	3.
20.54	1.013E 02	24.360	=9.5	2.581E 01	0.011	3.
20.98	1.019E 02	24.572	=9.0	2.380E 01	0.013	2.
21.44	1.073E 02	24.792	=8.5	2.280E 01	0.010	3.
22.01	1.092E 02	25.066	=8.0	2.053E 01	0.010	3.
22.49	1.137E 02	25.302	=7.5	1.906E 01	0.012	2.
23.00	1.213E 02	25.546	=7.0	1.790E 01	0.009	3.
23.53	1.334E 02	25.799	=6.5	1.712E 01	0.011	2.
23.96	1.433E 02	26.007	=6.0	1.622E 01	0.010	2.
24.52	1.515E 02	26.276	=5.5	1.437E 01	0.008	3.
25.09	1.578E 02	26.553	=5.0	1.223E 01	0.009	2.

25,57	1,600E 02	26,783	-4,5	1,028E 01	0,009	2,
26,06	1,622E 02	27,019	-4,0	8,393E 00	0,009	2,
26,56	1,689E 02	27,262	-3,5	6,768E 00	0,009	2,
27,08	1,782E 02	27,512	-3,0	5,252E 00	0,008	2,
27,48	1,872E 02	27,704	-2,5	4,182E 00	0,012	1,
27,89	1,996E 02	27,901	-2,0	3,173E 00	0,009	2,
28,45	4,964E 02	28,171	-1,5	4,132E 00	0,005	2,
29,02	2,242E 03	28,448	-1,0	7,526E 00	0,002	2,
29,46	4,226E 03	28,661	-0,5	4,647E 00	0,002	1,
29,92	5,296E 03	28,880	-0,0	5,763E-01	0,001	2,
30,54	2,739E 03	29,179	0,5	3,033E 00	0,002	2,
31,02	9,618E 02	29,410	1,0	4,114E 00	0,004	1,
31,51	2,582E 02	29,646	1,5	2,295E 00	0,007	2,
32,01	1,144E 02	29,887	2,0	2,009E 00	0,013	1,
32,52	1,090E 02	30,135	2,5	3,115E 00	0,009	2,
33,05	1,019E 02	30,388	3,0	4,361E 00	0,013	1,
33,41	9,680E 01	30,561	3,5	5,277E 00	0,014	1,
33,95	9,054E 01	30,825	4,0	6,868E 00	0,010	2,
34,51	8,118E 01	31,095	4,5	8,296E 00	0,015	1,
34,90	7,594E 01	31,279	5,0	9,341E 00	0,015	1,
35,48	6,633E 01	31,562	5,5	1,057E 01	0,011	2,
36,08	5,555E 01	31,850	6,0	1,134E 01	0,018	1,
36,49	4,976E 01	32,047	6,5	1,188E 01	0,018	1,
36,90	4,629E 01	32,247	7,0	1,285E 01	0,019	1,
37,33	3,947E 01	32,451	7,5	1,269E 01	0,021	1,
37,98	2,326E 01	32,763	8,0	8,846E 00	0,026	2,

LONGITUDINAL POLYETHYLENE 77K

6996 5

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01800 KT=.00663

DATA CODE 6996 COMPUTED 080867 INCIDENT ENERGY ,0300 ANGLE NO 6 IS 80.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.68	4,117E 01	14,250	-27,5	1,790E 02	0,204	17,
2.99	4,095E 01	14,316	-27,0	1,659E 02	0,032	54,
3.49	4,227E 01	14,430	-26,5	1,566E 02	0,019	42,
3.99	3,524E 01	14,552	-26,0	1,168E 02	0,024	35,
4.50	5,011E 01	14,683	-25,5	1,524E 02	0,022	29,
5.00	6,977E 01	14,819	-25,0	1,959E 02	0,017	25,
5.50	8,047E 01	14,960	-24,5	2,097E 02	0,016	21,
5.99	7,628E 01	15,104	-24,0	1,849E 02	0,016	19,
6.50	7,497E 01	15,255	-23,5	1,691E 02	0,016	17,
7.01	7,559E 01	15,410	-23,0	1,591E 02	0,016	15,
7.50	7,809E 01	15,564	-22,5	1,540E 02	0,015	13,
7.99	7,946E 01	15,718	-22,0	1,471E 02	0,015	12,
8.50	8,204E 01	15,883	-21,5	1,424E 02	0,014	12,
9.01	8,437E 01	16,051	-21,0	1,373E 02	0,014	10,
9.50	8,603E 01	16,211	-20,5	1,318E 02	0,014	9,
9.99	9,407E 01	16,377	-20,0	1,356E 02	0,013	9,
10.49	9,583E 01	16,547	-19,5	1,300E 02	0,013	8,
11.00	1,003E 02	16,722	-19,0	1,278E 02	0,012	8,
11.51	1,098E 02	16,898	-18,5	1,316E 02	0,012	7,
11.99	1,128E 02	17,063	-18,0	1,274E 02	0,012	6,
12.49	1,244E 02	17,239	-17,5	1,322E 02	0,010	7,
13.02	1,300E 02	17,428	-17,0	1,294E 02	0,011	6,
13.50	1,422E 02	17,599	-16,5	1,333E 02	0,011	5,
14.01	1,486E 02	17,781	-16,0	1,307E 02	0,009	6,
14.55	1,553E 02	17,974	-15,5	1,276E 02	0,010	5,
15.01	1,599E 02	18,142	-15,0	1,237E 02	0,010	4,
15.49	1,508E 02	18,318	-14,5	1,095E 02	0,009	5,
16.00	1,436E 02	18,504	-14,0	9,731E 01	0,010	4,
16.47	1,388E 02	18,678	-13,5	8,807E 01	0,010	4,
16.97	1,429E 02	18,861	-13,0	8,454E 01	0,010	4,
17.48	1,500E 02	19,053	-12,5	8,225E 01	0,010	4,
18.02	1,558E 02	19,255	-12,0	7,877E 01	0,009	4,
18.52	1,582E 02	19,440	-11,5	7,405E 01	0,010	3,
18.96	1,578E 02	19,605	-11,0	6,884E 01	0,010	3,
19.49	1,541E 02	19,806	-10,5	6,141E 01	0,009	4,
20.05	1,574E 02	20,017	-10,0	5,692E 01	0,010	3,
20.54	1,566E 02	20,205	-9,5	5,166E 01	0,010	3,
21.06	1,545E 02	20,401	-9,0	4,608E 01	0,009	3,
21.50	1,618E 02	20,570	-8,5	4,408E 01	0,011	2,
21.96	1,645E 02	20,746	-8,0	4,058E 01	0,009	3,
22.52	1,716E 02	20,965	-7,5	3,712E 01	0,008	3,
23.01	1,758E 02	21,154	-7,0	3,367E 01	0,010	2,
23.52	1,815E 02	21,350	-6,5	3,038E 01	0,008	3,
24.05	1,852E 02	21,553	-6,0	2,662E 01	0,009	2,
24.48	1,869E 02	21,721	-5,5	2,344E 01	0,009	2,
24.92	1,889E 02	21,894	-5,0	2,034E 01	0,009	2,

25,49	1,993E 02	22,118	-4,5	1,723E 01	0,007	3,
26,08	2,100E 02	22,349	-4,0	1,403E 01	0,008	2,
26,57	2,180E 02	22,541	-3,5	1,138E 01	0,008	2,
27,07	2,301E 02	22,738	-3,0	8,931E 00	0,008	2,
27,59	2,420E 02	22,942	-2,5	6,517E 00	0,007	2,
27,99	2,506E 02	23,099	-2,0	4,781E 00	0,010	1,
28,39	2,954E 02	23,259	-1,5	3,615E 00	0,007	2,
28,95	1,025E 03	23,479	-1,0	5,055E 00	0,004	2,
29,52	4,146E 03	23,706	-0,5	4,567E 00	0,002	2,
29,96	6,221E 03	23,881	-0,0	5,661E 02	0,002	1,
30,41	4,474E 03	24,060	0,5	3,849E 00	0,002	2,
31,02	1,066E 03	24,306	1,0	5,321E 00	0,004	2,
31,50	2,291E 02	24,495	1,5	2,863E 00	0,011	1,
31,98	1,785E 02	24,689	2,0	4,024E 00	0,009	2,
32,48	1,704E 02	24,888	2,5	6,156E 00	0,012	1,
32,98	1,577E 02	25,092	3,0	8,517E 00	0,008	2,
33,50	1,414E 02	25,301	3,5	1,084E 01	0,012	1,
34,04	1,291E 02	25,516	4,0	1,353E 01	0,009	2,
34,58	1,155E 02	25,735	4,5	1,613E 01	0,013	1,
34,95	1,081E 02	25,885	5,0	1,804E 01	0,014	1,
35,52	1,002E 02	26,115	5,5	2,152E 01	0,010	2,
36,10	9,087E 01	26,350	6,0	2,475E 01	0,015	1,
36,49	8,484E 01	26,510	6,5	2,689E 01	0,015	1,

TRANSVERSE POLYETHYLENE 77K

6996 6

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWO=,01800 KT=,00663

DATA CODE 6996 COMPUTED 080867 INCIDENT ENERGY ,0300 ANGLE NO 2 IS 90,00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2,73	4,940E 01	15,776	-27,5	1,971E 02	0,170	5,
2,99	3,910E 01	15,900	-27,0	1,475E 02	0,045	54,
3,49	4,832E 01	16,142	-26,5	1,638E 02	0,022	44,
4,00	3,465E 01	16,385	-26,0	1,055E 02	0,031	35,
4,50	5,446E 01	16,628	-25,5	1,510E 02	0,025	30,
5,00	7,661E 01	16,870	-25,0	1,961E 02	0,020	25,
5,50	8,561E 01	17,111	-24,5	2,027E 02	0,017	22,
6,00	8,674E 01	17,352	-24,0	1,904E 02	0,017	19,
6,50	8,287E 01	17,592	-23,5	1,689E 02	0,017	17,
7,00	0,449E 01	17,832	-23,0	1,608E 02	0,017	15,
7,50	8,507E 01	18,074	-22,5	1,511E 02	0,016	14,
7,99	8,677E 01	18,313	-22,0	1,443E 02	0,016	12,
8,50	8,918E 01	18,556	-21,5	1,390E 02	0,015	12,
9,00	9,281E 01	18,799	-21,0	1,356E 02	0,015	10,
9,50	9,716E 01	19,039	-20,5	1,333E 02	0,014	10,
10,01	1,017E 02	19,287	-20,0	1,309E 02	0,014	9,
10,51	1,086E 02	19,525	-19,5	1,315E 02	0,013	8,
11,01	1,095E 02	19,767	-19,0	1,246E 02	0,013	8,
11,51	1,179E 02	20,009	-18,5	1,261E 02	0,012	7,
12,01	1,268E 02	20,250	-18,0	1,276E 02	0,012	7,
12,51	1,355E 02	20,489	-17,5	1,283E 02	0,011	6,
12,99	1,445E 02	20,722	-17,0	1,288E 02	0,011	6,
13,51	1,499E 02	20,970	-16,5	1,253E 02	0,010	6,
14,00	1,662E 02	21,210	-16,0	1,305E 02	0,010	5,
14,48	1,696E 02	21,439	-15,5	1,252E 02	0,010	5,
14,98	1,712E 02	21,681	-15,0	1,185E 02	0,010	5,
15,51	1,676E 02	21,936	-14,5	1,082E 02	0,009	5,
16,01	1,588E 02	22,176	-14,0	9,578E 01	0,011	4,
16,47	1,515E 02	22,400	-13,5	8,573E 01	0,011	4,
16,96	1,511E 02	22,634	-13,0	7,978E 01	0,010	4,
17,47	1,634E 02	22,878	-12,5	8,014E 01	0,010	4,
18,00	1,697E 02	23,133	-12,0	7,693E 01	0,009	4,
18,48	1,738E 02	23,366	-11,5	7,306E 01	0,010	3,
18,98	1,680E 02	23,609	-11,0	6,511E 01	0,009	4,
19,51	1,681E 02	23,861	-10,5	5,968E 01	0,010	3,
19,97	1,674E 02	24,086	-10,0	5,475E 01	0,010	3,
20,46	1,687E 02	24,319	-9,5	5,053E 01	0,010	3,
20,96	1,725E 02	24,561	-9,0	4,691E 01	0,009	3,
21,48	1,730E 02	24,812	-8,5	4,233E 01	0,009	3,
22,02	1,706E 02	25,072	-8,0	3,890E 01	0,009	3,
22,48	1,846E 02	25,296	-7,5	3,611E 01	0,010	2,
22,96	1,886E 02	25,528	-7,0	3,278E 01	0,008	3,
23,46	1,958E 02	25,767	-6,5	2,986E 01	0,010	2,
23,97	1,998E 02	26,014	-6,0	2,632E 01	0,008	3,
24,50	1,991E 02	26,269	-5,5	2,222E 01	0,009	2,
24,94	2,067E 02	26,479	-5,0	1,987E 01	0,009	2,

25,50	2,095E 02	26,750	-4,5	1,626E 01	0,007	3,
26,08	2,198E 02	27,030	-4,0	1,323E 01	0,008	2,
26,56	2,310E 02	27,261	-3,5	1,094E 01	0,008	2,
27,05	2,437E 02	27,498	-3,0	8,643E 00	0,008	2,
27,56	2,611E 02	27,742	-2,5	6,505E 00	0,007	2,
28,08	2,744E 02	27,993	-2,0	4,340E 00	0,007	2,
28,61	3,714E 02	28,251	-1,5	3,040E 00	0,006	2,
29,02	9,688E 02	28,449	-1,0	4,110E 00	0,005	1,
29,45	3,120E 03	28,652	-0,5	3,993E 00	0,002	2,
30,02	5,311E 03	28,929	-0,0	5,392E 01	0,001	2,
30,46	3,653E 03	29,142	0,5	3,750E 00	0,003	1,
30,92	1,219E 03	29,361	1,0	4,381E 00	0,004	2,
31,54	2,099E 02	29,659	1,5	2,426E 00	0,015	2,
32,01	1,608E 02	29,889	2,0	3,387E 00	0,027	1,
32,50	1,594E 02	30,124	2,5	5,343E 00	0,017	2,
33,00	1,467E 02	30,364	3,0	7,265E 00	0,019	1,
33,51	1,355E 02	30,610	3,5	9,482E 00	0,010	2,
34,03	1,221E 02	30,862	4,0	1,162E 01	0,014	1,
34,57	1,128E 02	31,120	4,5	1,424E 01	0,010	2,
35,11	1,044E 02	31,383	5,0	1,712E 01	0,015	1,
35,48	1,007E 02	31,562	5,5	1,946E 01	0,015	1,
36,05	9,236E 01	31,837	6,0	2,259E 01	0,011	2,
36,64	8,481E 01	32,118	6,5	2,591E 01	0,016	1,

TRANSVERSE POLYETHYLENE 77K

6996 2

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01800 KT=.00663

DATA CODE 6996 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 4 IS 100.00 DEGREES

ENERGY	SIGMA	KAP SO	EPS	G(EPS)	ERROR	NO CHAN
2,87	2,088E 01	17,242	-27,5	1,138E 02	0,063	21,
2,99	3,418E 01	17,485	-27,0	1,198E 02	0,030	53,
3,49	3,200E 01	17,853	-26,5	1,018E 02	0,023	42,
3,99	3,147E 01	18,215	-26,0	8,904E 01	0,026	35,
4,50	5,068E 01	18,572	-25,5	1,305E 02	0,021	29,
4,99	7,547E 01	18,915	-25,0	1,789E 02	0,016	24,
5,49	8,265E 01	19,257	-24,5	1,809E 02	0,015	22,
5,99	8,187E 01	19,593	-24,0	1,658E 02	0,015	18,
6,49	8,222E 01	19,922	-23,5	1,547E 02	0,015	17,
7,00	8,148E 01	20,257	-23,0	1,426E 02	0,015	15,
7,49	8,679E 01	20,579	-22,5	1,419E 02	0,015	13,
8,00	9,053E 01	20,909	-22,0	1,382E 02	0,014	13,
8,52	9,327E 01	21,240	-21,5	1,330E 02	0,014	11,
9,01	1,004E 02	21,555	-21,0	1,344E 02	0,014	10,
9,50	1,035E 02	21,862	-20,5	1,302E 02	0,014	9,
9,99	1,101E 02	22,175	-20,0	1,302E 02	0,013	9,
10,50	1,162E 02	22,491	-19,5	1,289E 02	0,013	8,
11,01	1,212E 02	22,810	-19,0	1,263E 02	0,012	8,
11,53	1,293E 02	23,128	-18,5	1,263E 02	0,013	7,
12,00	1,356E 02	23,421	-18,0	1,250E 02	0,013	6,
12,47	1,492E 02	23,707	-17,5	1,298E 02	0,012	6,
12,96	1,570E 02	24,009	-17,0	1,285E 02	0,011	6,
13,49	1,691E 02	24,328	-16,5	1,297E 02	0,010	6,
14,00	1,759E 02	24,636	-16,0	1,266E 02	0,011	5,
14,48	1,850E 02	24,930	-15,5	1,251E 02	0,011	5,
15,00	1,822E 02	25,240	-15,0	1,153E 02	0,010	5,
15,48	1,779E 02	25,531	-14,5	1,056E 02	0,012	4,
16,00	1,666E 02	25,836	-14,0	9,232E 01	0,011	5,
16,53	1,625E 02	26,155	-13,5	8,362E 01	0,012	4,
17,03	1,671E 02	26,452	-13,0	8,009E 01	0,011	4,
17,49	1,717E 02	26,722	-12,5	7,705E 01	0,013	3,
17,96	1,755E 02	27,002	-12,0	7,334E 01	0,011	4,
18,53	1,753E 02	27,336	-11,5	6,715E 01	0,011	4,
19,04	1,749E 02	27,640	-11,0	6,167E 01	0,012	3,
19,51	1,737E 02	27,911	-10,5	5,667E 01	0,012	3,
19,98	1,734E 02	28,190	-10,0	5,210E 01	0,012	3,
20,48	1,789E 02	28,480	-9,5	4,908E 01	0,011	3,
20,99	1,816E 02	28,780	-9,0	4,517E 01	0,011	3,
21,53	1,804E 02	29,091	-8,5	4,025E 01	0,011	3,
21,99	1,896E 02	29,358	-8,0	3,831E 01	0,013	2,
22,47	1,919E 02	29,634	-7,5	3,476E 01	0,010	3,
22,96	2,011E 02	29,918	-7,0	3,233E 01	0,012	2,
23,47	2,133E 02	30,211	-6,5	3,002E 01	0,010	3,
23,99	2,141E 02	30,513	-6,0	2,594E 01	0,011	2,
24,42	2,113E 02	30,762	-5,5	2,241E 01	0,011	2,
24,98	2,143E 02	31,083	-5,0	1,877E 01	0,009	3,

25,56	2,254E 02	31,413	-4,5	1,582E 01	0,011	2,
26,03	2,324E 02	31,686	-4,0	1,326E 01	0,010	2,
26,52	2,401E 02	31,965	-3,5	1,074E 01	0,010	2,
27,03	2,572E 02	32,253	-3,0	8,605E 00	0,010	2,
27,54	2,672E 02	32,548	-2,5	6,231E 00	0,010	2,
28,08	2,883E 02	32,851	-2,0	4,231E 00	0,009	2,
28,49	3,609E 02	33,083	-1,5	3,342E 00	0,011	1,
28,91	9,758E 02	33,321	-1,0	4,422E 00	0,005	2,
29,48	3,578E 03	33,646	-0,5	3,921E 00	0,002	2,
30,07	4,598E 03	33,980	-0,0	5,152E-01	0,002	2,
30,52	2,493E 03	34,237	0,5	3,066E 00	0,004	1,
30,99	7,211E 02	34,500	1,0	2,848E 00	0,006	2,
31,46	2,100E 02	34,768	1,5	2,126E 00	0,014	1,
31,95	1,772E 02	35,042	2,0	3,294E 00	0,011	2,
32,45	1,686E 02	35,322	2,5	5,051E 00	0,015	1,
32,96	1,518E 02	35,609	3,0	6,858E 00	0,011	2,
33,48	1,424E 02	35,902	3,5	9,169E 00	0,017	1,
34,02	1,273E 02	36,202	4,0	1,126E 01	0,012	2,
34,56	1,167E 02	36,508	4,5	1,382E 01	0,018	1,
34,93	1,120E 02	36,716	5,0	1,589E 01	0,018	1,
35,50	1,027E 02	37,035	5,5	1,886E 01	0,013	2,
36,09	9,392E 01	37,361	6,0	2,191E 01	0,020	1,
36,48	8,975E 01	37,582	6,5	2,441E 01	0,020	1,

TRANSVERSE POLYETHYLENE 77K

6996 4

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01200 KT=.00663

DATA CODE 6916 COMPUTED 070667 INCIDENT ENERGY ,0400 ANGLE NO 3 IS 290,00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3,60	2,797E 00	17,053	-36,5	1,270E 01	0,112	10,
3,99	1,211E 01	17,038	-36,0	5,259E 01	0,041	35,
4,50	1,090E 01	17,026	-35,5	4,418E 01	0,036	29,
5,00	1,214E 01	17,027	-35,0	4,599E 01	0,034	24,
5,49	1,085E 01	17,040	-34,5	3,860E 01	0,034	21,
5,99	1,275E 01	17,063	-34,0	4,274E 01	0,032	19,
6,50	1,763E 01	17,096	-33,5	5,582E 01	0,029	17,
7,01	2,078E 01	17,137	-33,0	6,213E 01	0,027	15,
7,50	2,130E 01	17,185	-32,5	6,056E 01	0,027	13,
8,00	2,250E 01	17,237	-32,0	6,083E 01	0,027	12,
8,49	2,277E 01	17,296	-31,5	5,855E 01	0,027	11,
8,98	2,670E 01	17,360	-31,0	6,548E 01	0,025	10,
9,50	2,766E 01	17,431	-30,5	6,464E 01	0,024	10,
9,99	3,128E 01	17,505	-30,0	6,982E 01	0,025	8,
10,47	3,142E 01	17,579	-29,5	6,713E 01	0,024	8,
10,98	3,343E 01	17,663	-29,0	6,816E 01	0,023	8,
11,50	3,468E 01	17,751	-28,5	6,762E 01	0,023	7,
12,01	3,543E 01	17,842	-28,0	6,600E 01	0,022	7,
12,52	4,012E 01	17,936	-27,5	7,156E 01	0,022	6,
13,02	4,140E 01	18,031	-27,0	7,064E 01	0,021	6,
13,50	4,385E 01	18,125	-26,5	7,181E 01	0,022	5,
13,97	4,843E 01	18,218	-26,0	7,615E 01	0,020	5,
14,45	6,034E 01	18,319	-25,5	9,095E 01	0,017	5,
14,97	7,488E 01	18,427	-25,0	1,080E 02	0,015	5,
15,51	8,089E 01	18,543	-24,5	1,114E 02	0,014	5,
16,02	8,231E 01	18,656	-24,0	1,085E 02	0,015	4,
16,50	8,188E 01	18,763	-23,5	1,036E 02	0,015	4,
17,00	7,983E 01	18,876	-23,0	9,666E 01	0,015	4,
17,52	7,876E 01	18,997	-22,5	9,112E 01	0,015	4,
18,00	7,911E 01	19,109	-22,0	8,776E 01	0,017	3,
18,50	8,090E 01	19,227	-21,5	8,587E 01	0,014	4,
19,02	8,152E 01	19,352	-21,0	8,259E 01	0,016	3,
19,48	8,643E 01	19,465	-20,5	8,400E 01	0,015	3,
19,96	8,865E 01	19,583	-20,0	8,242E 01	0,015	3,
20,45	8,961E 01	19,707	-19,5	7,953E 01	0,015	3,
20,97	9,208E 01	19,837	-19,0	7,789E 01	0,014	3,
21,50	9,173E 01	19,974	-18,5	7,368E 01	0,014	3,
22,06	9,544E 01	20,118	-18,0	7,260E 01	0,013	3,
22,54	1,003E 02	20,243	-17,5	7,278E 01	0,016	2,
23,03	1,032E 02	20,374	-17,0	7,112E 01	0,012	3,
23,54	1,055E 02	20,510	-16,5	6,898E 01	0,015	2,
23,97	1,075E 02	20,623	-16,0	6,718E 01	0,014	2,
24,51	1,063E 02	20,770	-15,5	6,259E 01	0,012	3,
25,07	1,046E 02	20,923	-15,0	5,779E 01	0,014	2,
25,54	1,021E 02	21,051	-14,5	5,347E 01	0,014	2,
26,01	1,037E 02	21,182	-14,0	5,132E 01	0,014	2,

26,50	1,025E 02	21,319	-13,5	4,775E 01	0,014	2.
27,01	1,037E 02	21,461	-13,0	4,528E 01	0,013	2.
27,53	1,052E 02	21,607	-12,5	4,285E 01	0,013	2.
28,06	1,091E 02	21,759	-12,0	4,129E 01	0,013	2.
28,47	1,049E 02	21,876	-11,5	3,743E 01	0,018	1.
28,89	1,078E 02	21,997	-11,0	3,613E 01	0,012	2.
29,47	1,102E 02	22,163	-10,5	3,375E 01	0,012	2.
30,06	1,124E 02	22,335	-10,0	3,123E 01	0,012	2.
30,51	1,140E 02	22,468	-9,5	2,927E 01	0,017	1.
30,98	1,200E 02	22,605	-9,0	2,827E 01	0,011	2.
31,46	1,192E 02	22,746	-8,5	2,561E 01	0,016	1.
31,94	1,287E 02	22,891	-8,0	2,499E 01	0,011	2.
32,44	1,330E 02	23,040	-7,5	2,316E 01	0,015	1.
32,95	1,417E 02	23,193	-7,0	2,185E 01	0,010	2.
33,48	1,488E 02	23,350	-6,5	2,007E 01	0,014	1.
34,01	1,595E 02	23,513	-6,0	1,850E 01	0,009	2.
34,56	1,688E 02	23,679	-5,5	1,653E 01	0,013	1.
34,93	1,756E 02	23,793	-5,0	1,515E 01	0,013	1.
35,51	1,807E 02	23,968	-4,5	1,258E 01	0,009	2.
36,09	1,910E 02	24,148	-4,0	1,032E 01	0,011	1.
36,49	1,913E 02	24,271	-3,5	8,491E 00	0,011	1.
36,90	1,995E 02	24,397	-3,0	7,061E 00	0,011	1.
37,52	1,885E 02	24,590	-2,5	4,448E 00	0,013	2.
38,15	2,859E 02	24,788	-2,0	3,812E 00	0,020	1.
38,58	9,759E 02	24,924	-1,5	7,796E 00	0,008	1.
39,03	2,710E 03	25,063	-1,0	1,051E 01	0,003	1.
39,47	3,584E 03	25,204	-0,5	4,154E 00	0,003	1.
39,93	4,692E 03	25,349	0,0	1,011E 01	0,002	1.
40,39	3,716E 03	25,496	0,5	2,517E 00	0,002	1.
40,86	2,915E 03	25,646	1,0	9,822E 00	0,003	1.
41,34	1,239E 03	25,799	1,5	1,038E 01	0,004	1.
41,83	4,373E 02	25,956	2,0	7,003E 00	0,007	1.
42,33	2,070E 02	26,116	2,5	5,516E 00	0,010	1.
42,84	1,602E 02	26,279	3,0	6,520E 00	0,011	1.
43,35	1,387E 02	26,446	3,5	8,139E 00	0,012	1.
43,88	1,304E 02	26,616	4,0	1,058E 01	0,012	1.
44,41	1,169E 02	26,789	4,5	1,270E 01	0,013	1.
44,96	1,033E 02	26,967	5,0	1,466E 01	0,013	1.
45,51	9,006E 01	27,148	5,5	1,639E 01	0,014	1.
46,08	7,540E 01	27,333	6,0	1,733E 01	0,016	1.
46,65	6,678E 01	27,523	6,5	1,913E 01	0,016	1.
47,24	5,693E 01	27,716	7,0	2,011E 01	0,018	1.
47,83	4,857E 01	27,913	8,0	2,098E 01	0,019	1.
48,44	4,250E 01	28,115	8,5	2,227E 01	0,020	1.
49,06	3,739E 01	28,322	9,0	2,363E 01	0,022	1.

LONGITUDINAL POLYETHYLENE 77K

6916 3

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01200 KT=.00663

DATA CODE 6916 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 1 IS 280.00 DEGREES

ENERGY	SIGMA	KAP SO	EPS	G(EPS)	ERROR	NO CHAN
3.59	7.137E 00	19.003	-36.5	3.019E 01	0.131	25.
4.00	1.112E 01	19.089	-36.0	4.398E 01	0.048	34.
4.50	6.263E 00	19.203	-35.5	2.301E 01	0.042	28.
5.00	1.036E 01	19.323	-35.0	3.562E 01	0.037	24.
5.50	1.205E 01	19.447	-34.5	3.846E 01	0.036	20.
6.00	1.400E 01	19.578	-34.0	4.219E 01	0.033	19.
6.51	1.997E 01	19.716	-33.5	5.648E 01	0.030	16.
7.00	1.980E 01	19.853	-33.0	5.286E 01	0.030	14.
7.49	2.010E 01	19.993	-32.5	5.080E 01	0.029	13.
8.00	2.266E 01	20.140	-32.0	5.426E 01	0.028	12.
8.50	2.458E 01	20.291	-31.5	5.579E 01	0.027	11.
9.01	2.713E 01	20.445	-31.0	5.841E 01	0.027	10.
9.51	3.020E 01	20.599	-30.5	6.192E 01	0.026	9.
10.00	3.244E 01	20.751	-30.0	6.347E 01	0.026	8.
10.49	3.506E 01	20.906	-29.5	6.544E 01	0.024	8.
10.98	3.700E 01	21.064	-29.0	6.600E 01	0.024	7.
11.47	3.836E 01	21.223	-28.5	6.532E 01	0.023	7.
12.00	4.032E 01	21.396	-28.0	6.539E 01	0.022	7.
12.52	4.060E 01	21.568	-27.5	6.280E 01	0.023	6.
12.99	4.274E 01	21.724	-27.0	6.345E 01	0.023	5.
13.48	4.667E 01	21.891	-26.5	6.623E 01	0.020	6.
14.01	5.713E 01	22.069	-26.0	7.743E 01	0.019	5.
14.51	6.969E 01	22.241	-25.5	9.028E 01	0.017	5.
14.99	8.418E 01	22.405	-25.0	1.047E 02	0.016	4.
15.49	9.099E 01	22.579	-24.5	1.083E 02	0.014	5.
16.01	9.050E 01	22.762	-24.0	1.028E 02	0.015	4.
16.51	8.603E 01	22.934	-23.5	9.359E 01	0.015	4.
17.02	8.461E 01	23.115	-23.0	8.792E 01	0.015	4.
17.49	8.727E 01	23.281	-22.5	8.698E 01	0.017	3.
17.98	8.871E 01	23.455	-22.0	8.462E 01	0.014	4.
18.49	9.097E 01	23.638	-21.5	8.288E 01	0.016	3.
18.94	9.205E 01	23.801	-21.0	8.047E 01	0.016	3.
19.49	9.244E 01	24.000	-20.5	7.681E 01	0.013	4.
20.07	9.527E 01	24.209	-20.0	7.502E 01	0.015	3.
20.49	9.924E 01	24.365	-19.5	7.510E 01	0.017	2.
20.94	1.006E 02	24.526	-19.0	7.300E 01	0.014	3.
21.48	1.041E 02	24.727	-18.5	7.167E 01	0.013	3.
22.05	1.072E 02	24.937	-18.0	6.972E 01	0.013	3.
22.54	1.109E 02	25.119	-17.5	6.865E 01	0.015	2.
22.95	1.110E 02	25.270	-17.0	6.581E 01	0.015	2.
23.47	1.145E 02	25.465	-16.5	6.436E 01	0.012	3.
24.01	1.159E 02	25.666	-16.0	6.151E 01	0.014	2.
24.46	1.154E 02	25.833	-15.5	5.835E 01	0.014	2.
24.92	1.100E 02	26.006	-15.0	5.284E 01	0.014	2.
25.39	1.150E 02	26.183	-14.5	5.230E 01	0.013	2.
25.88	1.115E 02	26.367	-14.0	4.788E 01	0.013	2.

26,38	1,125E 02	26,556	-13,5	4,540E 01	0,013	2,
26,89	1,133E 02	26,751	-13,0	4,288E 01	0,013	2,
27,42	1,141E 02	26,952	-12,5	4,026E 01	0,013	2,
27,97	1,180E 02	27,160	-12,0	3,865E 01	0,012	2,
28,53	1,199E 02	27,375	-11,5	3,625E 01	0,012	2,
28,96	1,223E 02	27,540	-11,0	3,468E 01	0,017	1,
29,40	1,207E 02	27,710	-10,5	3,193E 01	0,012	2,
30,01	1,248E 02	27,944	-10,0	2,989E 01	0,011	2,
30,47	1,298E 02	28,123	-9,5	2,870E 01	0,015	1,
30,95	1,296E 02	28,308	-9,0	2,626E 01	0,011	2,
31,44	1,342E 02	28,497	-8,5	2,474E 01	0,015	1,
31,94	1,407E 02	28,692	-8,0	2,339E 01	0,010	2,
32,45	1,462E 02	28,891	-7,5	2,172E 01	0,014	1,
32,98	1,568E 02	29,095	-7,0	2,055E 01	0,009	2,
33,52	1,655E 02	29,305	-6,5	1,891E 01	0,013	1,
33,88	1,794E 02	29,448	-6,0	1,852E 01	0,012	1,
34,44	1,888E 02	29,668	-5,5	1,645E 01	0,008	2,
35,02	1,948E 02	29,892	-5,0	1,399E 01	0,011	1,
35,41	2,042E 02	30,046	-4,5	1,267E 01	0,011	1,
36,01	2,100E 02	30,282	-4,0	1,012E 01	0,008	2,
36,62	2,222E 02	30,523	-3,5	7,897E 00	0,010	1,
37,04	2,293E 02	30,688	-3,0	6,382E 00	0,010	1,
37,46	2,559E 02	30,857	-2,5	5,333E 00	0,010	1,
37,90	3,826E 02	31,028	-2,0	5,605E 00	0,008	1,
38,34	9,063E 02	31,202	-1,5	8,489E 00	0,005	1,
39,01	2,830E 03	31,470	-1,0	8,989E 00	0,002	2,
39,70	4,440E 03	31,745	-0,5	1,416E 00	0,002	1,
40,18	4,032E 03	31,933	-0,0	4,666E-01	0,002	1,
40,66	2,717E 03	32,125	0,5	4,494E 00	0,003	1,
41,15	1,305E 03	32,320	1,0	6,762E 00	0,004	1,
41,64	4,897E 02	32,520	1,5	5,376E 00	0,006	1,
42,15	2,040E 02	32,723	2,0	3,952E 00	0,010	1,
42,67	1,411E 02	32,930	2,5	4,339E 00	0,012	1,
43,19	1,278E 02	33,141	3,0	5,820E 00	0,012	1,
43,73	1,161E 02	33,356	3,5	7,454E 00	0,013	1,
44,28	1,081E 02	33,576	4,5	9,453E 00	0,013	1,
44,83	9,663E 01	33,800	5,0	1,119E 01	0,014	1,
45,40	8,538E 01	34,028	5,5	1,282E 01	0,015	1,
45,98	7,441E 01	34,261	6,0	1,424E 01	0,016	1,
46,57	6,332E 01	34,499	6,5	1,523E 01	0,017	1,
47,17	5,671E 01	34,742	7,0	1,695E 01	0,018	1,
47,78	4,870E 01	34,990	8,0	1,792E 01	0,019	1,
48,40	4,241E 01	35,243	8,5	1,906E 01	0,021	1,
49,04	3,948E 01	35,501	9,0	2,153E 01	0,021	1,

LONGITUDINAL POLYETHYLENE 77K

6916 1

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01200 KT=.00663

DATA CODE 6916 COMPUTED 070667 INCIDENT ENERGY ,0400 ANGLE NO 5 IS 270,00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO.CHAN
3,59	2,039E 01	21,010	-36,5	8,056E 01	0,073	24,
3,99	1,478E 01	21,203	-36,0	5,423E 01	0,056	34,
4,49	1,485E 01	21,446	-35,5	5,055E 01	0,050	28,
5,00	1,838E 01	21,687	-35,0	5,775E 01	0,043	24,
5,50	1,934E 01	21,930	-34,5	5,657E 01	0,040	21,
6,00	2,789E 01	22,171	-34,0	7,657E 01	0,038	18,
6,49	2,157E 01	22,410	-33,5	5,547E 01	0,041	16,
7,00	2,671E 01	22,654	-33,0	6,458E 01	0,037	15,
7,51	2,564E 01	22,900	-32,5	5,858E 01	0,037	13,
8,00	2,016E 01	23,133	-32,0	6,082E 01	0,038	11,
8,48	3,127E 01	23,367	-31,5	6,408E 01	0,035	11,
8,99	3,834E 01	23,611	-31,0	7,452E 01	0,033	10,
9,48	4,180E 01	23,851	-30,5	7,721E 01	0,032	9,
9,99	4,648E 01	24,097	-30,0	8,143E 01	0,029	9,
10,52	4,396E 01	24,348	-29,5	7,333E 01	0,031	8,
11,01	4,171E 01	24,586	-29,0	6,630E 01	0,033	7,
11,50	4,385E 01	24,824	-28,5	6,651E 01	0,031	7,
11,99	4,435E 01	25,060	-28,0	6,421E 01	0,032	6,
12,47	4,692E 01	25,291	-27,5	6,500E 01	0,030	6,
12,90	5,260E 01	25,536	-27,0	6,964E 01	0,028	6,
13,47	5,004E 01	25,774	-26,5	6,328E 01	0,031	5,
14,00	6,231E 01	26,026	-26,0	7,511E 01	0,025	6,
14,50	8,173E 01	26,268	-25,5	9,425E 01	0,025	4,
14,97	9,391E 01	26,497	-25,0	1,038E 02	0,021	5,
15,47	1,024E 02	26,738	-24,5	1,082E 02	0,022	4,
16,00	9,561E 01	26,991	-24,0	9,650E 01	0,020	5,
16,55	9,278E 01	27,256	-23,5	8,913E 01	0,022	4,
17,00	9,788E 01	27,473	-23,0	9,031E 01	0,024	3,
17,47	9,440E 01	27,698	-22,5	8,352E 01	0,021	4,
18,03	9,547E 01	27,967	-22,0	8,037E 01	0,020	4,
18,54	9,638E 01	28,214	-21,5	7,741E 01	0,023	3,
18,99	9,834E 01	28,433	-21,0	7,579E 01	0,022	3,
19,46	9,919E 01	28,661	-20,5	7,318E 01	0,022	3,
19,95	1,061E 02	28,897	-20,0	7,473E 01	0,021	3,
20,46	1,094E 02	29,142	-19,5	7,351E 01	0,020	3,
20,99	1,119E 02	29,397	-19,0	7,149E 01	0,019	3,
21,54	1,119E 02	29,662	-18,5	6,772E 01	0,019	3,
22,02	1,218E 02	29,891	-18,0	7,038E 01	0,022	2,
22,51	1,163E 02	30,127	-17,5	6,397E 01	0,018	3,
23,01	1,206E 02	30,371	-17,0	6,302E 01	0,022	2,
23,43	1,190E 02	30,573	-16,5	5,950E 01	0,021	2,
23,97	1,225E 02	30,833	-16,0	5,786E 01	0,017	3,
24,53	1,195E 02	31,101	-15,5	5,310E 01	0,021	2,
24,99	1,241E 02	31,323	-15,0	5,237E 01	0,020	2,
25,46	1,173E 02	31,551	-14,5	4,686E 01	0,020	2,
25,95	1,195E 02	31,786	-14,0	4,509E 01	0,020	2,

26,45	1,218E 02	32,027	-13,5	4,320E 01	0,019	2,
26,96	1,245E 02	32,276	-13,0	4,139E 01	0,019	2,
27,50	1,278E 02	32,532	-12,5	3,958E 01	0,018	2,
28,04	1,292E 02	32,795	-12,0	3,713E 01	0,018	2,
28,60	1,276E 02	33,067	-11,5	3,385E 01	0,018	2,
29,04	1,337E 02	33,275	-11,0	3,323E 01	0,024	1,
29,48	1,274E 02	33,489	-10,5	2,952E 01	0,017	2,
30,09	1,334E 02	33,782	-10,0	2,799E 01	0,017	2,
30,56	1,390E 02	34,007	-9,5	2,689E 01	0,023	1,
31,04	1,449E 02	34,238	-9,0	2,567E 01	0,016	2,
31,53	1,548E 02	34,474	-8,5	2,494E 01	0,021	1,
32,03	1,572E 02	34,717	-8,0	2,282E 01	0,015	2,
32,54	1,597E 02	34,964	-7,5	2,069E 01	0,020	1,
33,07	1,747E 02	35,218	-7,0	1,994E 01	0,014	2,
33,61	1,857E 02	35,478	-6,5	1,843E 01	0,019	1,
33,97	1,994E 02	35,655	-6,0	1,786E 01	0,018	1,
34,54	2,123E 02	35,926	-5,5	1,600E 01	0,012	2,
35,11	2,139E 02	36,203	-5,0	1,323E 01	0,017	1,
35,50	2,215E 02	36,392	-4,5	1,180E 01	0,016	1,
35,90	2,243E 02	36,584	-4,0	1,011E 01	0,016	1,
36,51	2,364E 02	36,878	-3,5	7,947E 00	0,011	2,
37,14	2,614E 02	37,180	-3,0	6,095E 00	0,016	1,
37,56	3,454E 02	37,385	-2,5	5,956E 00	0,013	1,
38,00	7,428E 02	37,594	-2,0	8,846E 00	0,008	1,
38,44	1,695E 03	37,807	-1,5	1,255E 01	0,005	1,
38,89	2,990E 03	38,024	-1,0	1,149E 01	0,004	1,
39,35	3,890E 03	38,244	-0,5	5,310E 00	0,004	1,
39,81	3,848E 03	38,468	-0,0	4,490E 01	0,003	1,
40,28	2,926E 03	38,696	0,5	7,981E 01	0,004	1,
40,77	1,648E 03	38,929	1,0	3,350E 00	0,005	1,
41,26	6,635E 02	39,165	1,5	3,733E 00	0,008	1,
41,76	2,477E 02	39,406	2,0	2,804E 00	0,014	1,
42,27	1,522E 02	39,651	2,5	2,956E 00	0,017	1,
42,78	1,380E 02	39,901	3,0	4,177E 00	0,018	1,
43,31	1,316E 02	40,155	3,5	5,826E 00	0,019	1,
43,85	1,190E 02	40,414	4,0	7,368E 00	0,019	1,
44,40	1,111E 02	40,678	4,5	9,305E 00	0,020	1,
44,95	9,889E 01	40,947	5,0	1,092E 01	0,021	1,
45,52	8,599E 01	41,221	5,5	1,226E 01	0,023	1,
46,10	7,203E 01	41,500	6,0	1,306E 01	0,025	1,
46,69	6,358E 01	41,784	6,5	1,445E 01	0,026	1,
47,29	5,677E 01	42,074	7,0	1,601E 01	0,027	1,
47,91	4,928E 01	42,370	7,5	1,708E 01	0,029	1,
48,53	4,484E 01	42,671	8,0	1,896E 01	0,031	1,
49,17	3,675E 01	42,979	8,5	1,885E 01	0,034	1,

LONGITUDINAL POLYETHYLENE 77K

6916 5

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01800 KT=.00663

DATA CODE 6916 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 6 IS 80.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.72	3.767E 01	19.030	*36.5	1.762E 02	0.100	6.
3.99	2.736E 01	19.089	*36.0	1.225E 02	0.038	34.
4.49	3.193E 01	19.200	*35.5	1.324E 02	0.026	29.
4.99	2.107E 01	19.320	*35.0	8.121E 01	0.032	25.
5.50	2.297E 01	19.448	*34.5	8.269E 01	0.030	22.
6.00	2.237E 01	19.577	*34.0	7.572E 01	0.036	18.
6.49	2.046E 01	19.710	*33.5	6.509E 01	0.037	17.
6.99	2.152E 01	19.850	*33.0	6.483E 01	0.036	15.
7.50	2.426E 01	19.996	*32.5	6.907E 01	0.033	14.
8.01	2.394E 01	20.144	*32.0	6.456E 01	0.033	12.
8.50	2.884E 01	20.290	*31.5	7.395E 01	0.031	11.
8.99	2.921E 01	20.439	*31.0	7.134E 01	0.031	10.
9.50	3.239E 01	20.595	*30.5	7.526E 01	0.027	10.
9.99	3.447E 01	20.750	*30.0	7.644E 01	0.029	8.
10.50	3.659E 01	20.909	*29.5	7.741E 01	0.025	9.
11.01	3.907E 01	21.072	*29.0	7.885E 01	0.026	7.
11.48	4.051E 01	21.227	*28.5	7.828E 01	0.025	7.
11.99	4.314E 01	21.393	*28.0	7.959E 01	0.024	7.
12.49	4.795E 01	21.559	*27.5	8.468E 01	0.023	6.
12.99	5.251E 01	21.724	*27.0	8.879E 01	0.021	6.
13.51	6.157E 01	21.900	*26.5	9.945E 01	0.019	6.
14.02	7.707E 01	22.072	*26.0	1.191E 02	0.018	5.
14.50	1.039E 02	22.238	*25.5	1.540E 02	0.014	5.
15.01	1.379E 02	22.414	*25.0	1.956E 02	0.012	5.
15.50	1.483E 02	22.582	*24.5	2.019E 02	0.012	4.
16.01	1.472E 02	22.759	*24.0	1.918E 02	0.011	5.
16.54	1.403E 02	22.946	*23.5	1.745E 02	0.012	4.
17.04	1.386E 02	23.122	*23.0	1.652E 02	0.012	4.
17.49	1.362E 02	23.282	*22.5	1.561E 02	0.014	3.
17.96	1.363E 02	23.451	*22.0	1.499E 02	0.012	4.
18.53	1.349E 02	23.652	*21.5	1.412E 02	0.012	4.
19.04	1.377E 02	23.837	*21.0	1.376E 02	0.013	3.
19.50	1.457E 02	24.003	*20.5	1.398E 02	0.012	3.
19.97	1.499E 02	24.175	*20.0	1.377E 02	0.012	3.
20.47	1.514E 02	24.355	*19.5	1.329E 02	0.012	3.
20.98	1.592E 02	24.542	*19.0	1.333E 02	0.011	3.
21.51	1.654E 02	24.737	*18.5	1.317E 02	0.011	3.
22.06	1.779E 02	24.940	*18.0	1.343E 02	0.010	3.
22.53	1.843E 02	25.115	*17.5	1.328E 02	0.012	2.
23.03	1.936E 02	25.290	*17.0	1.328E 02	0.009	3.
23.53	2.042E 02	25.487	*16.5	1.330E 02	0.011	2.
23.95	2.099E 02	25.643	*16.0	1.308E 02	0.011	2.
24.49	2.106E 02	25.844	*15.5	1.239E 02	0.009	3.
25.05	2.027E 02	26.053	*15.0	1.122E 02	0.010	2.
25.51	1.911E 02	26.226	*14.5	1.004E 02	0.011	2.
25.98	1.777E 02	26.404	*14.0	8.835E 01	0.011	2.

26.46	1.750E 02	26.588	-13.5	8.206E 01	0.011	2.
26.96	1.721E 02	26.778	-13.0	7.577E 01	0.011	2.
27.47	1.756E 02	26.973	-12.5	7.233E 01	0.011	2.
28.00	1.819E 02	27.174	-12.0	6.978E 01	0.010	2.
28.55	1.839E 02	27.382	-11.5	6.536E 01	0.010	2.
29.11	1.861E 02	27.596	-11.0	6.088E 01	0.010	2.
29.53	1.881E 02	27.761	-10.5	5.757E 01	0.014	1.
29.98	1.892E 02	27.931	-10.0	5.388E 01	0.010	2.
30.58	1.953E 02	28.163	-9.5	5.019E 01	0.009	2.
31.04	2.021E 02	28.342	-9.0	4.773E 01	0.013	1.
31.51	2.075E 02	28.526	-8.5	4.471E 01	0.009	2.
32.00	2.111E 02	28.714	-8.0	4.121E 01	0.012	1.
32.50	2.180E 02	28.907	-7.5	3.817E 01	0.008	2.
33.00	2.266E 02	29.105	-7.0	3.519E 01	0.011	1.
33.52	2.299E 02	29.308	-6.5	3.127E 01	0.008	2.
34.06	2.357E 02	29.516	-6.0	2.762E 01	0.011	1.
34.42	2.321E 02	29.657	-5.5	2.437E 01	0.011	1.
34.97	2.356E 02	29.875	-5.0	2.060E 01	0.008	2.
35.54	2.458E 02	30.097	-4.5	1.735E 01	0.010	1.
35.92	2.472E 02	30.249	-4.0	1.483E 01	0.010	1.
36.52	2.592E 02	30.482	-3.5	1.170E 01	0.007	2.
37.12	2.719E 02	30.721	-3.0	8.635E 00	0.010	1.
37.53	2.802E 02	30.884	-2.5	6.675E 00	0.009	1.
37.95	3.247E 02	31.050	-2.0	5.448E 00	0.009	1.
38.38	5.675E 02	31.218	-1.5	6.112E 00	0.006	1.
38.81	1.391E 03	31.390	-1.0	8.244E 00	0.004	1.
39.48	3.537E 03	31.654	-0.5	4.301E 00	0.002	2.
40.15	4.106E 03	31.925	-0.0	4.455E 01	0.002	1.
40.62	2.735E 03	32.110	0.5	4.859E 00	0.003	1.
41.09	1.251E 03	32.298	1.0	7.098E 00	0.004	1.
41.57	4.665E 02	32.490	1.5	5.654E 00	0.007	1.
42.06	2.365E 02	32.686	2.0	5.079E 00	0.010	1.
42.56	1.881E 02	32.885	2.5	6.424E 00	0.011	1.
43.06	1.660E 02	33.088	3.0	8.401E 00	0.012	1.
43.58	1.496E 02	33.295	3.5	1.069E 01	0.012	1.
44.10	1.377E 02	33.505	4.0	1.339E 01	0.012	1.
44.64	1.253E 02	33.720	4.5	1.614E 01	0.013	1.
45.18	1.126E 02	33.939	5.0	1.880E 01	0.013	1.
45.73	1.045E 02	34.163	5.5	2.222E 01	0.014	1.
46.30	9.696E 01	34.391	6.5	2.589E 01	0.014	1.
46.87	9.060E 01	34.623	7.0	3.002E 01	0.015	1.
47.46	8.202E 01	34.860	7.5	3.341E 01	0.015	1.
48.05	7.166E 01	35.102	8.0	3.560E 01	0.016	1.
48.66	6.458E 01	35.348	8.5	3.887E 01	0.017	1.

TRANSVERSE POLYETHYLENE 77K

6916 6

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01800 KT=.00663

DATA CODE 6916 COMPUTED 070667 INCIDENT ENERGY ,0400 ANGLE NO 2 IS 90,00 DEGREES

ENERGY	SIGMA	KAP SO	EPS	G(EPS)	ERROR	NO CHAN
4,02	2,147E 01	21,219	-36,0	8,930E 01	0,075	30,
4,49	3,022E 01	21,444	-35,5	1,163E 02	0,036	30,
4,99	2,287E 01	21,686	-35,0	8,208E 01	0,042	25,
5,49	2,143E 01	21,926	-34,5	7,153E 01	0,045	22,
5,99	2,062E 01	22,167	-34,0	6,461E 01	0,052	19,
6,49	2,295E 01	22,406	-33,5	6,766E 01	0,044	17,
7,00	2,712E 01	22,653	-33,0	7,521E 01	0,039	16,
7,50	2,561E 01	22,894	-32,5	6,714E 01	0,041	13,
8,00	2,736E 01	23,134	-32,0	6,798E 01	0,037	13,
8,50	3,031E 01	23,377	-31,5	7,133E 01	0,036	11,
9,01	3,319E 01	23,620	-31,0	7,412E 01	0,033	11,
9,50	3,533E 01	23,860	-30,5	7,513E 01	0,034	9,
9,99	3,806E 01	24,094	-30,0	7,722E 01	0,031	9,
10,48	4,161E 01	24,332	-29,5	8,052E 01	0,029	8,
10,98	4,331E 01	24,573	-29,0	7,996E 01	0,027	8,
11,48	4,568E 01	24,814	-28,5	8,057E 01	0,028	7,
11,98	5,144E 01	25,054	-28,0	8,671E 01	0,024	7,
12,47	5,566E 01	25,292	-27,5	8,974E 01	0,024	6,
12,96	5,806E 01	25,525	-27,0	8,971E 01	0,023	6,
13,47	6,688E 01	25,771	-26,5	9,877E 01	0,020	6,
14,01	7,998E 01	26,032	-26,0	1,126E 02	0,017	6,
14,54	1,103E 02	26,285	-25,5	1,483E 02	0,015	5,
15,04	1,446E 02	26,529	-25,0	1,863E 02	0,012	9,
15,52	1,552E 02	26,758	-24,5	1,919E 02	0,013	4,
16,02	1,554E 02	26,999	-24,0	1,841E 02	0,011	5,
16,54	1,533E 02	27,252	-23,5	1,736E 02	0,012	4,
17,03	1,486E 02	27,487	-23,0	1,613E 02	0,012	4,
17,54	1,474E 02	27,733	-22,5	1,531E 02	0,010	4,
18,00	1,461E 02	27,957	-22,0	1,457E 02	0,014	3,
18,49	1,494E 02	28,190	-21,5	1,428E 02	0,012	4,
18,99	1,495E 02	28,433	-21,0	1,366E 02	0,013	3,
19,52	1,550E 02	28,686	-20,5	1,352E 02	0,011	4,
20,06	1,645E 02	28,949	-20,0	1,365E 02	0,012	3,
20,55	1,628E 02	29,183	-19,5	1,292E 02	0,012	3,
21,05	1,711E 02	29,427	-19,0	1,296E 02	0,011	3,
21,49	1,820E 02	29,636	-18,5	1,324E 02	0,013	2,
21,94	1,861E 02	29,853	-18,0	1,297E 02	0,010	3,
22,49	1,930E 02	30,121	-17,5	1,274E 02	0,010	3,
22,97	2,079E 02	30,353	-17,0	1,308E 02	0,012	2,
23,47	2,163E 02	30,592	-16,5	1,294E 02	0,009	3,
23,98	2,212E 02	30,839	-16,0	1,259E 02	0,011	2,
24,51	2,210E 02	31,095	-15,5	1,185E 02	0,009	3,
25,06	2,121E 02	31,358	-15,0	1,071E 02	0,011	2,
25,51	1,984E 02	31,576	-14,5	9,523E 01	0,011	2,
25,97	1,872E 02	31,799	-14,0	8,517E 01	0,011	2,
26,45	1,830E 02	32,029	-13,5	7,864E 01	0,011	2,

26,94	1,791E 02	32,265	-13,0	7,244E 01	0,011	2,
27,44	1,807E 02	32,507	-12,5	6,853E 01	0,011	2,
27,96	1,896E 02	32,756	-12,0	6,709E 01	0,011	2,
28,49	1,896E 02	33,013	-11,5	6,231E 01	0,010	2,
29,04	1,940E 02	33,277	-11,0	5,883E 01	0,010	2,
29,60	1,896E 02	33,548	-10,5	5,273E 01	0,010	2,
30,04	1,938E 02	33,757	-10,0	5,025E 01	0,014	1,
30,48	1,994E 02	33,971	-9,5	4,795E 01	0,010	2,
31,09	2,035E 02	34,263	-9,0	4,387E 01	0,009	2,
31,55	2,033E 02	34,487	-8,5	4,006E 01	0,013	1,
32,03	2,127E 02	34,717	-8,0	3,801E 01	0,009	2,
32,52	2,146E 02	34,952	-7,5	3,450E 01	0,012	1,
33,02	2,224E 02	35,193	-7,0	3,176E 01	0,009	2,
33,53	2,248E 02	35,439	-6,5	2,820E 01	0,012	1,
34,05	2,353E 02	35,691	-6,0	2,554E 01	0,008	2,
34,58	2,320E 02	35,949	-5,5	2,136E 01	0,011	1,
34,95	2,353E 02	36,124	-5,0	1,917E 01	0,011	1,
35,51	2,435E 02	36,393	-4,5	1,613E 01	0,008	2,
36,07	2,498E 02	36,667	-4,0	1,298E 01	0,011	1,
36,46	2,610E 02	36,854	-3,5	1,123E 01	0,010	1,
36,86	2,661E 02	37,043	-3,0	9,227E 00	0,010	1,
37,46	2,806E 02	37,334	-2,5	6,568E 00	0,007	2,
38,08	3,331E 02	37,632	-2,0	4,613E 00	0,009	1,
38,50	5,887E 02	37,834	-1,5	5,096E 00	0,006	1,
38,92	1,356E 03	38,040	-1,0	6,161E 00	0,004	1,
39,36	2,635E 03	38,250	-0,5	4,365E 00	0,003	1,
40,02	3,365E 03	38,571	-0,0	7,105E 01	0,002	2,
40,71	1,879E 03	38,899	0,5	4,077E 00	0,003	1,
41,17	7,842E 02	39,123	1,0	4,813E 00	0,005	1,
41,64	3,219E 02	39,351	1,5	4,010E 00	0,009	1,
42,12	2,072E 02	39,583	2,0	4,447E 00	0,013	1,
42,61	1,759E 02	39,819	2,5	5,897E 00	0,015	1,
43,11	1,601E 02	40,059	3,0	7,859E 00	0,016	1,
43,62	1,478E 02	40,303	3,5	1,015E 01	0,016	1,
44,13	1,373E 02	40,551	4,0	1,275E 01	0,014	1,
44,66	1,275E 02	40,804	4,5	1,559E 01	0,014	1,
45,19	1,199E 02	41,062	5,0	1,891E 01	0,014	1,
45,74	1,136E 02	41,324	5,5	2,274E 01	0,014	1,
46,29	1,035E 02	41,591	6,0	2,592E 01	0,015	1,
46,85	9,268E 01	41,863	7,0	2,875E 01	0,016	1,
47,43	8,417E 01	42,139	7,5	3,202E 01	0,017	1,
48,01	7,521E 01	42,421	8,0	3,481E 01	0,017	1,
48,61	6,858E 01	42,709	8,5	3,838E 01	0,018	1,
49,22	6,344E 01	43,001	9,0	4,268E 01	0,018	1,

TRANSVERSE POLYETHYLENE 77K:

6916 2

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=199.24 MASS= 14.00 DMC=.01800 KT=.00663

DATA CODE 6916 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 4 IS 100.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO.CHAN
3.69	2.310E 01	23.095	-36.5	9.618E 01	0.094	9.
3.99	2.139E 01	23.319	-36.0	8.453E 01	0.043	34.
4.49	2.355E 01	23.687	-35.5	8.618E 01	0.029	29.
5.00	1.405E 01	24.053	-35.0	4.731E 01	0.040	25.
5.50	1.813E 01	24.410	-34.5	5.683E 01	0.041	21.
5.99	2.318E 01	24.761	-34.0	6.806E 01	0.036	19.
6.49	2.287E 01	25.104	-33.5	6.309E 01	0.038	16.
6.98	2.496E 01	25.441	-33.0	6.492E 01	0.036	15.
7.49	2.856E 01	25.789	-32.5	7.005E 01	0.032	14.
8.00	3.244E 01	26.131	-32.0	7.512E 01	0.031	12.
8.50	3.290E 01	26.460	-31.5	7.233E 01	0.031	11.
8.99	3.664E 01	26.786	-31.0	7.658E 01	0.030	10.
9.50	4.205E 01	27.121	-30.5	8.345E 01	0.027	10.
10.00	4.522E 01	27.445	-30.0	8.553E 01	0.028	8.
10.47	4.579E 01	27.753	-29.5	8.268E 01	0.027	8.
10.98	5.379E 01	28.081	-29.0	9.251E 01	0.023	8.
11.50	5.121E 01	28.409	-28.5	8.406E 01	0.025	7.
12.01	5.660E 01	28.735	-28.0	8.871E 01	0.023	7.
12.51	5.721E 01	29.056	-27.5	8.565E 01	0.024	6.
13.01	6.507E 01	29.369	-27.0	9.328E 01	0.022	6.
13.49	7.200E 01	29.672	-26.5	9.887E 01	0.022	5.
14.00	9.412E 01	29.990	-26.0	1.235E 02	0.017	6.
14.54	1.258E 02	30.325	-25.5	1.577E 02	0.016	5.
15.00	1.528E 02	30.612	-25.0	1.841E 02	0.015	4.
15.49	1.608E 02	30.913	-24.5	1.858E 02	0.013	5.
16.00	1.609E 02	31.227	-24.0	1.780E 02	0.014	4.
16.48	1.561E 02	31.519	-23.5	1.658E 02	0.014	4.
16.97	1.539E 02	31.823	-23.0	1.566E 02	0.014	4.
17.49	1.490E 02	32.140	-22.5	1.451E 02	0.014	4.
18.04	1.586E 02	32.470	-22.0	1.473E 02	0.013	4.
18.54	1.648E 02	32.771	-21.5	1.466E 02	0.015	3.
18.98	1.582E 02	33.039	-21.0	1.354E 02	0.015	3.
19.44	1.621E 02	33.315	-20.5	1.332E 02	0.015	3.
19.99	1.723E 02	33.650	-20.0	1.346E 02	0.012	4.
20.57	1.756E 02	33.998	-19.5	1.303E 02	0.014	3.
21.00	1.872E 02	34.255	-19.0	1.335E 02	0.016	2.
21.45	1.939E 02	34.521	-18.5	1.326E 02	0.013	3.
22.00	1.972E 02	34.849	-18.0	1.280E 02	0.012	3.
22.48	2.054E 02	35.132	-17.5	1.274E 02	0.015	2.
22.97	2.171E 02	35.424	-17.0	1.283E 02	0.011	3.
23.48	2.314E 02	35.725	-16.5	1.299E 02	0.013	2.
24.00	2.325E 02	36.035	-16.0	1.237E 02	0.011	3.
24.55	2.344E 02	36.355	-15.5	1.178E 02	0.013	2.
24.99	2.223E 02	36.619	-15.0	1.065E 02	0.013	2.
25.45	2.035E 02	36.889	-14.5	9.260E 01	0.014	2.
25.93	1.976E 02	37.167	-14.0	8.519E 01	0.014	2.

26,41	1,904E 02	37,451	-13,5	7,750E 01	0,014	2.
26,91	1,858E 02	37,744	-13,0	7,112E 01	0,014	2.
27,43	1,959E 02	38,044	-12,5	7,026E 01	0,013	2.
27,96	1,988E 02	38,353	-12,0	6,646E 01	0,013	2.
28,50	2,041E 02	38,670	-11,5	6,329E 01	0,013	2.
29,06	2,069E 02	38,995	-11,0	5,915E 01	0,013	2.
29,50	1,994E 02	39,245	-10,5	5,339E 01	0,018	1.
29,94	2,033E 02	39,501	-10,0	5,072E 01	0,012	2.
30,54	2,103E 02	39,851	-9,5	4,740E 01	0,012	2.
31,01	2,125E 02	40,119	-9,0	4,409E 01	0,017	1.
31,48	2,160E 02	40,394	-8,5	4,096E 01	0,012	2.
31,97	2,176E 02	40,674	-8,0	3,742E 01	0,016	1.
32,47	2,298E 02	40,961	-7,5	3,548E 01	0,011	2.
32,98	2,276E 02	41,254	-7,0	3,123E 01	0,016	1.
33,50	2,385E 02	41,554	-6,5	2,869E 01	0,011	2.
34,03	2,393E 02	41,860	-6,0	2,484E 01	0,015	1.
34,40	2,398E 02	42,068	-5,5	2,232E 01	0,015	1.
34,96	2,452E 02	42,387	-5,0	1,900E 01	0,010	2.
35,52	2,495E 02	42,712	-4,5	1,565E 01	0,015	1.
35,91	2,542E 02	42,933	-4,0	1,357E 01	0,015	1.
36,51	2,372E 02	43,272	-3,5	9,606E 00	0,015	2.
37,12	2,075E 02	43,618	-3,0	5,876E 00	0,031	1.
37,53	2,071E 02	43,854	-2,5	4,399E 00	0,033	1.
37,95	2,645E 02	44,093	-2,0	3,956E 00	0,025	1.
38,38	5,207E 02	44,336	-1,5	4,991E 00	0,013	1.
38,81	1,251E 03	44,583	-1,0	6,574E 00	0,007	1.
39,48	2,783E 03	44,962	-0,5	3,072E 00	0,003	2.
40,17	2,794E 03	45,349	-0,0	3,156E 01	0,004	1.
40,63	1,647E 03	45,613	0,5	2,757E 00	0,005	1.
41,11	7,027E 02	45,881	1,0	3,707E 00	0,008	1.
41,59	3,003E 02	46,154	1,5	3,369E 00	0,012	1.
42,08	2,028E 02	46,431	2,0	4,023E 00	0,014	1.
42,58	1,824E 02	46,713	2,5	5,755E 00	0,015	1.
43,09	1,593E 02	46,999	3,0	7,454E 00	0,016	1.
43,61	1,500E 02	47,291	3,5	9,912E 00	0,017	1.
44,14	1,361E 02	47,588	4,0	1,226E 01	0,017	1.
44,68	1,251E 02	47,890	4,5	1,495E 01	0,018	1.
45,22	1,168E 02	48,197	5,0	1,812E 01	0,019	1.
45,78	1,080E 02	48,509	6,0	2,138E 01	0,019	1.
46,35	9,955E 01	48,827	6,5	2,478E 01	0,020	1.
46,93	9,115E 01	49,151	7,0	2,822E 01	0,021	1.
47,52	8,138E 01	49,481	7,5	3,104E 01	0,022	1.
48,12	7,499E 01	49,816	8,0	3,496E 01	0,023	1.
48,73	6,609E 01	50,158	8,5	3,741E 01	0,024	1.

TRANSVERSE POLYETHYLENE 77K

6916 -4

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01200 KT=.00663

DATA CODE 6908 COMPUTED 072667 INCIDENT ENERGY .0802 ANGLE NO 3 IS 290.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.29	1.595E 01	34.886	-77.0	1.403E 02	0.478	29.
3.69	9.088E 00	34.762	-76.5	7.568E 01	0.363	39.
4.20	6.290E 00	34.630	-76.0	4.912E 01	0.479	32.
4.70	8.391E 00	34.520	-75.5	6.110E 01	0.249	27.
5.20	7.091E 00	34.429	-75.0	4.928E 01	0.089	23.
5.70	5.696E 00	34.354	-74.5	3.739E 01	0.086	20.
6.20	6.934E 00	34.292	-74.0	4.338E 01	0.068	18.
6.69	7.692E 00	34.243	-73.5	4.620E 01	0.088	15.
7.19	7.395E 00	34.204	-73.0	4.243E 01	0.060	15.
7.71	8.042E 00	34.173	-72.5	4.422E 01	0.058	13.
8.20	7.255E 00	34.153	-72.0	3.836E 01	0.060	11.
8.69	9.280E 00	34.140	-71.5	4.736E 01	0.052	11.
9.20	1.140E 01	34.134	-71.0	5.628E 01	0.049	10.
9.71	9.071E 00	34.135	-70.5	4.323E 01	0.053	9.
10.19	1.164E 01	34.142	-70.0	5.381E 01	0.049	8.
10.68	9.684E 00	34.154	-69.5	4.335E 01	0.051	8.
11.18	1.079E 01	34.172	-69.0	4.693E 01	0.050	7.
11.67	1.536E 01	34.194	-68.5	6.483E 01	0.042	7.
12.19	1.095E 01	34.223	-68.0	4.486E 01	0.046	7.
12.71	1.560E 01	34.256	-67.5	6.208E 01	0.042	6.
13.23	1.850E 01	34.292	-67.0	7.152E 01	0.038	6.
13.72	1.961E 01	34.332	-66.5	7.390E 01	0.039	5.
14.20	2.517E 01	34.373	-66.0	9.253E 01	0.034	5.
14.70	3.345E 01	34.420	-65.5	1.199E 02	0.029	5.
15.22	3.326E 01	34.473	-65.0	1.161E 02	0.028	5.
15.72	3.677E 01	34.526	-64.5	1.252E 02	0.029	4.
16.19	3.640E 01	34.578	-64.0	1.211E 02	0.028	4.
16.67	3.450E 01	34.635	-63.5	1.121E 02	0.028	4.
17.18	3.518E 01	34.698	-63.0	1.116E 02	0.027	4.
17.71	3.362E 01	34.766	-62.5	1.040E 02	0.027	4.
18.19	3.006E 01	34.831	-62.0	9.104E 01	0.033	3.
18.70	3.141E 01	34.901	-61.5	9.291E 01	0.027	4.
19.23	3.015E 01	34.976	-61.0	8.712E 01	0.031	3.
19.70	2.843E 01	35.045	-60.5	8.043E 01	0.032	3.
20.18	2.990E 01	35.119	-60.0	8.278E 01	0.030	3.
20.69	3.126E 01	35.197	-59.5	8.470E 01	0.029	3.
21.21	3.100E 01	35.281	-59.0	8.209E 01	0.028	3.
21.76	2.933E 01	35.370	-58.5	7.584E 01	0.029	3.
22.23	3.145E 01	35.448	-58.0	7.975E 01	0.033	2.
22.71	3.167E 01	35.531	-57.5	7.062E 01	0.026	3.
23.21	3.206E 01	35.618	-57.0	7.797E 01	0.032	2.
23.73	3.127E 01	35.710	-56.5	7.440E 01	0.026	3.
24.26	2.988E 01	35.807	-56.0	6.953E 01	0.032	2.
24.71	3.178E 01	35.888	-55.5	7.261E 01	0.031	2.
25.16	3.107E 01	35.972	-55.0	6.967E 01	0.030	2.
25.63	3.357E 01	36.060	-54.5	7.387E 01	0.029	2.

26,11	3,310E 01	36,152	-54,0	7,142E 01	0,028	2,
26,60	3,356E 01	36,248	-53,5	7,099E 01	0,028	2,
27,11	3,437E 01	36,348	-53,0	7,120E 01	0,027	2,
27,63	3,315E 01	36,452	-52,5	6,726E 01	0,028	2,
28,16	3,522E 01	36,561	-52,0	6,992E 01	0,026	2,
28,72	3,586E 01	36,674	-51,5	6,964E 01	0,026	2,
29,29	3,516E 01	36,793	-51,0	6,673E 01	0,025	2,
29,72	3,665E 01	36,885	-50,5	6,836E 01	0,035	1,
30,17	3,699E 01	36,980	-50,0	6,777E 01	0,024	2,
30,79	3,872E 01	37,111	-49,5	6,922E 01	0,024	2,
31,26	3,727E 01	37,214	-49,0	6,541E 01	0,033	1,
31,74	3,891E 01	37,320	-48,5	6,698E 01	0,023	2,
32,24	4,188E 01	37,429	-48,0	7,070E 01	0,031	1,
32,74	3,930E 01	37,542	-47,5	6,502E 01	0,022	2,
33,26	3,899E 01	37,658	-47,0	6,318E 01	0,031	1,
33,61	4,157E 01	37,738	-46,5	6,642E 01	0,030	1,
34,15	4,158E 01	37,861	-46,0	6,503E 01	0,021	2,
34,70	4,322E 01	37,988	-45,5	6,613E 01	0,029	1,
35,08	4,365E 01	38,076	-45,0	6,579E 01	0,029	1,
35,65	4,446E 01	38,210	-44,5	6,548E 01	0,020	2,
36,24	4,274E 01	38,349	-44,0	6,150E 01	0,029	1,
36,64	4,578E 01	38,444	-43,5	6,482E 01	0,027	1,
37,05	4,773E 01	38,541	-43,0	6,648E 01	0,026	1,
37,68	4,587E 01	38,692	-42,5	6,229E 01	0,019	2,
38,32	4,671E 01	38,847	-42,0	6,182E 01	0,026	1,
38,75	4,681E 01	38,953	-41,5	6,087E 01	0,026	1,
39,20	4,630E 01	39,062	-41,0	5,912E 01	0,026	1,
39,65	4,733E 01	39,173	-40,5	5,933E 01	0,025	1,
40,11	5,010E 01	39,287	-40,0	6,164E 01	0,024	1,
40,57	4,831E 01	39,404	-39,5	5,831E 01	0,024	1,
41,05	4,956E 01	39,523	-39,0	5,865E 01	0,024	1,
41,53	5,232E 01	39,645	-38,5	6,068E 01	0,023	1,
42,02	5,377E 01	39,770	-38,0	6,109E 01	0,023	1,
42,52	5,119E 01	39,897	-37,5	5,695E 01	0,023	1,
43,03	5,334E 01	40,028	-37,0	5,808E 01	0,022	1,
43,55	5,640E 01	40,162	-36,5	6,006E 01	0,022	1,
44,08	5,278E 01	40,299	-36,0	5,496E 01	0,023	1,
44,62	5,454E 01	40,439	-35,5	5,548E 01	0,022	1,
45,17	5,342E 01	40,582	-35,0	5,307E 01	0,022	1,
45,73	5,654E 01	40,729	-34,5	5,480E 01	0,021	1,
46,29	5,723E 01	40,879	-34,0	5,409E 01	0,020	1,
46,87	5,959E 01	41,033	-33,5	5,488E 01	0,020	1,
47,46	6,051E 01	41,191	-32,5	5,426E 01	0,019	1,
48,07	6,124E 01	41,352	-32,0	5,342E 01	0,019	1,
48,68	6,132E 01	41,510	-31,5	5,199E 01	0,019	1,
49,30	6,302E 01	41,687	-31,0	5,189E 01	0,019	1,
49,94	6,269E 01	41,861	-30,5	5,008E 01	0,019	1,
50,59	6,203E 01	42,038	-29,5	4,803E 01	0,019	1,
51,25	7,043E 01	42,220	-29,0	5,279E 01	0,017	1,
51,93	6,812E 01	42,407	-28,5	4,937E 01	0,017	1,
52,62	7,382E 01	42,598	-27,5	5,166E 01	0,017	1,
53,32	7,849E 01	42,795	-27,0	5,295E 01	0,016	1,
54,04	9,138E 01	42,996	-26,0	5,936E 01	0,015	1,
54,77	1,006E 02	43,202	-25,5	6,283E 01	0,014	1,
55,51	1,093E 02	43,413	-24,5	6,543E 01	0,013	1,
56,27	1,155E 02	43,630	-24,0	6,623E 01	0,012	1,
57,05	1,174E 02	43,852	-23,0	6,429E 01	0,012	1,
57,84	1,158E 02	44,080	-22,5	6,044E 01	0,012	1,
58,65	1,151E 02	44,313	-21,5	5,708E 01	0,012	1,
59,48	1,164E 02	44,553	-20,5	5,468E 01	0,012	1,

60.33	1.155E 02	44.799	-20.0	5.125E 01	0.012	1.
61.19	1.205E 02	45.052	-19.0	5.026E 01	0.012	1.
62.07	1.219E 02	45.311	-18.0	4.761E 01	0.011	1.
62.97	1.257E 02	45.577	-17.0	4.572E 01	0.011	1.
63.89	1.269E 02	45.850	-16.5	4.275E 01	0.011	1.
64.83	1.271E 02	46.130	-15.5	3.938E 01	0.011	1.
65.80	1.317E 02	46.418	-14.5	3.720E 01	0.011	1.
66.78	1.363E 02	46.714	-13.5	3.478E 01	0.010	1.
67.78	1.341E 02	47.018	-12.5	3.056E 01	0.010	1.
68.81	1.366E 02	47.330	-11.5	2.739E 01	0.010	1.
69.87	1.434E 02	47.650	-10.5	2.485E 01	0.010	1.
70.94	1.494E 02	47.980	-9.5	2.186E 01	0.009	1.
72.04	1.635E 02	48.318	-8.0	1.962E 01	0.009	1.
73.17	1.806E 02	48.666	-7.0	1.706E 01	0.008	1.
74.32	2.000E 02	49.024	-6.0	1.400E 01	0.008	1.
75.51	2.628E 02	49.392	-4.5	1.259E 01	0.007	1.
76.72	5.054E 02	49.771	-3.5	1.432E 01	0.005	1.
77.96	1.035E 03	50.160	-2.0	1.313E 01	0.003	1.
79.23	1.556E 03	50.560	-1.0	4.032E 00	0.003	1.
80.53	1.552E 03	50.972	0.5	4.910E 01	0.003	1.
81.86	9.877E 02	51.397	1.5	8.863E 00	0.003	1.
83.23	4.066E 02	51.833	3.0	1.337E 01	0.005	1.
84.63	1.483E 02	52.283	4.5	1.158E 01	0.008	1.
86.06	8.357E 01	52.746	6.0	1.279E 01	0.011	1.
87.54	5.912E 01	53.222	7.5	1.593E 01	0.013	1.
89.05	4.327E 01	53.714	9.0	1.921E 01	0.016	1.
90.60	3.216E 01	54.220	10.5	2.251E 01	0.018	1.
92.19	2.618E 01	54.741	12.0	2.804E 01	0.020	1.
93.83	1.935E 01	55.279	13.5	3.104E 01	0.024	1.
95.51	1.552E 01	55.833	15.5	3.674E 01	0.027	1.
97.23	1.130E 01	56.405	17.0	3.908E 01	0.032	1.
99.00	8.896E 00	56.994	19.0	4.468E 01	0.036	1.

LONGITUDINAL POLYETHYLENE 77K

6908 3

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01200 KT=.00663

DATA CODE 6908 COMPUTED 072667 INCIDENT ENERGY ,0802 ANGLE NO 1 IS 280,00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3,20	1,443E 01	37,517	-77,0	1,248E 02	0,681	44,
3,69	1,086E 01	37,555	-76,5	8,632E 01	0,423	38,
4,19	1,071E 01	37,607	-76,0	7,964E 01	0,137	31,
4,69	7,644E 00	37,670	-75,5	5,302E 01	0,147	26,
5,19	6,059E 00	37,743	-75,0	4,001E 01	0,102	23,
5,69	2,675E 00	37,822	-74,5	1,653E 01	0,144	19,
6,19	7,094E 00	37,910	-74,0	4,177E 01	0,074	18,
6,69	5,893E 00	38,004	-73,5	3,316E 01	0,076	15,
7,19	5,622E 00	38,102	-73,0	3,032E 01	0,065	14,
7,70	6,586E 00	38,208	-72,5	3,397E 01	0,060	13,
8,21	8,781E 00	38,316	-72,0	4,349E 01	0,056	11,
8,69	7,550E 00	38,424	-71,5	3,605E 01	0,056	10,
9,19	9,539E 00	38,540	-71,0	4,401E 01	0,051	10,
9,70	7,328E 00	38,662	-70,5	3,254E 01	0,056	9,
10,20	1,030E 01	38,784	-70,0	4,427E 01	0,048	8,
10,71	9,993E 00	38,911	-69,5	4,164E 01	0,049	8,
11,21	1,121E 01	39,041	-69,0	4,512E 01	0,047	7,
11,72	9,744E 00	39,173	-68,5	3,807E 01	0,048	7,
12,23	1,146E 01	39,307	-68,0	4,315E 01	0,047	6,
12,72	1,267E 01	39,440	-67,5	4,651E 01	0,045	6,
13,20	1,706E 01	39,571	-67,0	6,105E 01	0,041	5,
13,71	1,999E 01	39,712	-66,5	6,947E 01	0,034	6,
14,24	2,849E 01	39,863	-66,0	9,622E 01	0,030	5,
14,71	2,880E 01	39,995	-65,5	9,494E 01	0,033	4,
15,19	3,273E 01	40,136	-65,0	1,052E 02	0,027	5,
15,71	3,412E 01	40,284	-64,5	1,068E 02	0,029	4,
16,18	3,692E 01	40,425	-64,0	1,128E 02	0,027	4,
16,68	3,249E 01	40,573	-63,5	9,684E 01	0,028	4,
17,20	3,303E 01	40,729	-63,0	9,587E 01	0,027	4,
17,68	3,152E 01	40,873	-62,5	8,944E 01	0,031	3,
18,18	2,886E 01	41,025	-62,0	7,995E 01	0,028	4,
18,69	2,945E 01	41,184	-61,5	7,961E 01	0,031	3,
19,15	3,159E 01	41,327	-61,0	8,362E 01	0,029	3,
19,63	2,908E 01	41,476	-60,5	7,529E 01	0,030	3,
20,13	3,099E 01	41,633	-60,0	7,842E 01	0,028	3,
20,65	2,805E 01	41,796	-59,5	6,934E 01	0,029	3,
21,18	2,943E 01	41,967	-59,0	7,100E 01	0,028	3,
21,74	2,885E 01	42,145	-58,5	6,795E 01	0,027	3,
22,22	3,037E 01	42,300	-58,0	7,005E 01	0,032	2,
22,72	2,880E 01	42,462	-57,5	6,498E 01	0,027	3,
23,24	2,938E 01	42,629	-57,0	6,486E 01	0,031	2,
23,66	3,047E 01	42,768	-56,5	6,607E 01	0,031	2,
24,21	3,027E 01	42,949	-56,0	6,414E 01	0,025	3,
24,78	3,149E 01	43,136	-55,5	6,514E 01	0,029	2,
25,24	2,909E 01	43,291	-55,0	5,899E 01	0,031	2,
25,73	3,182E 01	43,452	-54,5	6,325E 01	0,028	2,

26,22	3,106E 01	43,618	-54,0	6,051E 01	0,029	2,
26,73	3,040E 01	43,789	-53,5	5,794E 01	0,028	2,
27,26	3,209E 01	43,966	-53,0	5,989E 01	0,027	2,
27,80	3,214E 01	44,149	-52,5	5,868E 01	0,026	2,
28,21	3,128E 01	44,291	-52,0	5,616E 01	0,037	1,
28,64	3,382E 01	44,436	-51,5	5,969E 01	0,025	2,
29,22	3,394E 01	44,635	-51,0	5,851E 01	0,025	2,
29,67	3,430E 01	44,789	-50,5	5,806E 01	0,035	1,
30,13	3,569E 01	44,948	-50,0	5,933E 01	0,024	2,
30,75	3,524E 01	45,165	-49,5	5,711E 01	0,023	2,
31,24	3,768E 01	45,333	-49,0	5,987E 01	0,032	1,
31,73	3,621E 01	45,506	-48,5	5,641E 01	0,023	2,
32,24	3,742E 01	45,683	-48,0	5,713E 01	0,031	1,
32,76	3,903E 01	45,866	-47,5	5,834E 01	0,021	2,
33,29	4,053E 01	46,053	-47,0	5,933E 01	0,029	1,
33,66	3,981E 01	46,180	-46,5	5,744E 01	0,030	1,
34,21	3,821E 01	46,377	-46,0	5,394E 01	0,021	2,
34,78	3,873E 01	46,578	-45,5	5,344E 01	0,029	1,
35,17	4,130E 01	46,715	-45,0	5,611E 01	0,028	1,
35,56	4,052E 01	46,855	-44,5	5,419E 01	0,028	1,
36,16	4,198E 01	47,070	-44,0	5,480E 01	0,019	2,
36,78	4,181E 01	47,291	-43,5	5,325E 01	0,027	1,
37,20	4,418E 01	47,442	-43,0	5,533E 01	0,026	1,
37,63	4,512E 01	47,596	-42,5	5,553E 01	0,025	1,
38,06	4,564E 01	47,753	-42,0	5,520E 01	0,025	1,
38,51	4,605E 01	47,913	-41,5	5,471E 01	0,025	1,
39,19	4,654E 01	48,159	-41,0	5,377E 01	0,017	2,
39,88	4,739E 01	48,412	-40,5	5,324E 01	0,024	1,
40,36	5,017E 01	48,584	-40,0	5,528E 01	0,023	1,
40,84	4,900E 01	48,761	-39,5	5,292E 01	0,023	1,
41,34	4,897E 01	48,941	-39,0	5,183E 01	0,023	1,
41,84	4,981E 01	49,124	-38,5	5,163E 01	0,023	1,
42,35	4,985E 01	49,311	-38,0	5,058E 01	0,022	1,
42,87	5,328E 01	49,502	-37,5	5,290E 01	0,021	1,
43,40	5,463E 01	49,697	-37,0	5,304E 01	0,021	1,
43,94	5,122E 01	49,896	-36,5	4,861E 01	0,022	1,
44,49	5,500E 01	50,099	-35,5	5,098E 01	0,020	1,
45,05	5,497E 01	50,306	-35,0	4,974E 01	0,020	1,
45,62	5,735E 01	50,510	-34,5	5,062E 01	0,020	1,
46,20	5,883E 01	50,734	-34,0	5,062E 01	0,019	1,
46,79	5,622E 01	50,955	-33,5	4,712E 01	0,019	1,
47,40	5,928E 01	51,180	-33,0	4,836E 01	0,019	1,
48,01	6,100E 01	51,410	-32,0	4,846E 01	0,018	1,
48,64	5,920E 01	51,645	-31,5	4,564E 01	0,018	1,
49,28	6,152E 01	51,886	-31,0	4,604E 01	0,018	1,
49,94	6,524E 01	52,131	-30,5	4,735E 01	0,017	1,
50,60	6,397E 01	52,382	-29,5	4,497E 01	0,017	1,
51,28	6,832E 01	52,638	-29,0	4,647E 01	0,017	1,
51,98	7,102E 01	52,900	-28,0	4,668E 01	0,016	1,
52,69	7,461E 01	53,168	-27,5	4,732E 01	0,016	1,
53,41	8,369E 01	53,442	-27,0	5,115E 01	0,014	1,
54,15	9,552E 01	53,723	-26,0	5,616E 01	0,013	1,
54,90	1,038E 02	54,009	-25,5	5,862E 01	0,013	1,
55,67	1,119E 02	54,302	-24,5	6,057E 01	0,012	1,
56,45	1,145E 02	54,602	-23,5	5,924E 01	0,012	1,
57,26	1,124E 02	54,909	-23,0	5,551E 01	0,012	1,
58,07	1,114E 02	55,223	-22,0	5,235E 01	0,012	1,
58,91	1,109E 02	55,544	-21,5	4,944E 01	0,012	1,
59,77	1,108E 02	55,873	-20,5	4,670E 01	0,012	1,
60,64	1,117E 02	56,210	-19,5	4,436E 01	0,011	1,

61.53	1.113E 02	56.554	-18.5	4.146E 01	0.011	1.
62.45	1.168E 02	56.907	-18.0	4.061E 01	0.011	1.
63.38	1.218E 02	57.269	-17.0	3.928E 01	0.010	1.
64.33	1.215E 02	57.640	-16.0	3.612E 01	0.010	1.
65.31	1.238E 02	58.019	-15.0	3.368E 01	0.010	1.
66.31	1.275E 02	58.408	-14.0	3.144E 01	0.010	1.
67.33	1.305E 02	58.807	-13.0	2.883E 01	0.010	1.
68.38	1.306E 02	59.216	-12.0	2.551E 01	0.010	1.
69.45	1.345E 02	59.635	-11.0	2.281E 01	0.009	1.
70.54	1.423E 02	60.065	-9.5	2.051E 01	0.009	1.
71.66	1.569E 02	60.506	-8.5	1.869E 01	0.008	1.
72.81	1.717E 02	60.958	-7.5	1.626E 01	0.008	1.
73.99	1.888E 02	61.422	-6.0	1.347E 01	0.008	1.
75.19	2.394E 02	61.898	-5.0	1.188E 01	0.008	1.
76.43	4.356E 02	62.387	-4.0	1.320E 01	0.005	1.
77.69	8.421E 02	62.889	-2.5	1.219E 01	0.004	1.
78.99	1.216E 03	63.404	-1.0	4.458E 00	0.003	1.
80.32	1.188E 03	63.933	-0.0	4.547E 02	0.003	1.
81.68	7.540E 02	64.477	1.5	4.969E 00	0.003	1.
83.08	3.170E 02	65.035	3.0	8.729E 00	0.005	1.
84.52	1.262E 02	65.609	4.5	8.684E 00	0.008	1.
85.99	7.402E 01	66.200	6.0	1.027E 01	0.011	1.
87.50	5.287E 01	66.806	7.5	1.318E 01	0.013	1.
89.05	3.952E 01	67.430	9.0	1.648E 01	0.015	1.
90.64	2.822E 01	68.072	10.5	1.880E 01	0.018	1.
92.28	2.106E 01	68.732	12.0	2.173E 01	0.020	1.
93.96	1.592E 01	69.412	14.0	2.488E 01	0.025	1.
95.69	1.294E 01	70.111	15.5	3.017E 01	0.026	1.
97.46	1.900E 00	70.832	17.5	6.545E 00	0.088	1.

LONGITUDINAL POLYETHYLENE 77K

6908 1

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01200 KT=.00663

DATA CODE 6908 COMPUTED 072667 INCIDENT ENERGY .0802 ANGLE NO 5 IS 270,00 DEGREES

ENERGY	SIGMA	KAP SO	EPS	G(EPS)	ERROR	NO CHAN
3,21	9,001E 00	40,201	-77,0	7,437E 01	0,421	43,
3,69	1,149E 01	40,433	-76,5	8,781E 01	0,428	38,
4,19	5,273E 00	40,675	-76,0	3,732E 01	0,289	31,
4,69	4,309E 00	40,918	-75,5	2,901E 01	0,106	27,
5,20	2,355E 00	41,160	-75,0	1,438E 01	0,136	22,
5,69	3,056E 00	41,400	-74,5	1,809E 01	0,103	20,
6,19	5,050E 00	41,640	-74,0	2,832E 01	0,068	17,
6,70	4,177E 00	41,883	-73,5	2,226E 01	0,066	16,
7,21	3,663E 00	42,130	-73,0	1,875E 01	0,066	14,
7,70	5,478E 00	42,368	-72,5	2,601E 01	0,059	12,
8,18	1,983E 00	42,600	-72,0	9,368E 00	0,065	11,
8,69	3,187E 00	42,842	-71,5	1,446E 01	0,058	11,
9,21	3,707E 00	43,095	-71,0	1,612E 01	0,057	10,
9,70	4,872E 00	43,330	-70,5	2,045E 01	0,058	8,
10,20	5,583E 00	43,571	-70,0	2,261E 01	0,052	9,
10,70	6,243E 00	43,813	-69,5	2,449E 01	0,055	7,
11,17	7,134E 00	44,041	-69,0	2,713E 01	0,051	7,
11,68	7,720E 00	44,285	-68,5	2,847E 01	0,049	7,
12,18	8,857E 00	44,526	-68,0	3,159E 01	0,048	6,
12,67	1,090E 01	44,762	-67,5	3,775E 01	0,044	6,
13,19	1,376E 01	45,013	-67,0	4,622E 01	0,039	6,
13,70	1,963E 01	45,257	-66,5	6,410E 01	0,036	5,
14,18	1,983E 01	45,491	-66,0	6,299E 01	0,036	5,
14,70	2,681E 01	45,738	-65,5	8,279E 01	0,030	5,
15,18	2,873E 01	45,972	-65,0	8,643E 01	0,032	4,
15,69	2,939E 01	46,218	-64,5	8,616E 01	0,027	5,
16,23	2,847E 01	46,476	-64,0	8,116E 01	0,030	4,
16,73	2,801E 01	46,717	-63,5	7,788E 01	0,030	4,
17,25	2,837E 01	46,969	-63,0	7,687E 01	0,029	4,
17,73	2,605E 01	47,199	-62,5	6,891E 01	0,034	3,
18,22	2,428E 01	47,439	-62,0	6,271E 01	0,030	4,
18,74	2,795E 01	47,690	-61,5	7,040E 01	0,032	3,
19,21	2,547E 01	47,913	-61,0	6,282E 01	0,032	3,
19,69	2,592E 01	48,144	-60,5	6,251E 01	0,032	3,
20,19	2,748E 01	48,385	-60,0	6,475E 01	0,030	3,
20,70	2,701E 01	48,635	-59,5	6,217E 01	0,030	3,
21,24	2,531E 01	48,894	-59,0	5,688E 01	0,031	3,
21,71	2,625E 01	49,118	-58,5	5,775E 01	0,036	2,
22,19	2,635E 01	49,349	-58,0	5,678E 01	0,028	3,
22,68	2,603E 01	49,588	-57,5	5,489E 01	0,035	2,
23,20	2,590E 01	49,836	-57,0	5,342E 01	0,028	3,
23,73	2,591E 01	50,091	-56,5	5,224E 01	0,034	2,
24,16	2,549E 01	50,302	-56,0	5,042E 01	0,034	2,
24,61	2,670E 01	50,519	-55,5	5,184E 01	0,032	2,
25,20	2,625E 01	50,799	-55,0	4,976E 01	0,026	3,
25,80	2,675E 01	51,089	-54,5	4,944E 01	0,031	2,

26,29	2,724E 01	51,328	*54,0	4,930E 01	0,031	2,
26,80	2,739E 01	51,574	*53,5	4,855E 01	0,030	2,
27,20	2,932E 01	51,764	*53,0	5,115E 01	0,041	1,
27,60	2,703E 01	51,957	*52,5	4,642E 01	0,030	2,
28,15	2,851E 01	52,222	*52,0	4,788E 01	0,029	2,
28,71	2,925E 01	52,495	*51,5	4,797E 01	0,028	2,
29,30	3,048E 01	52,777	*51,0	4,884E 01	0,027	2,
29,75	3,097E 01	52,993	*50,5	4,874E 01	0,038	1,
30,21	3,065E 01	53,215	*50,0	4,737E 01	0,026	2,
30,68	2,988E 01	53,441	*49,5	4,531E 01	0,037	1,
31,16	3,323E 01	53,674	*49,0	4,942E 01	0,025	2,
31,65	3,077E 01	53,911	*48,5	4,489E 01	0,036	1,
32,16	3,265E 01	54,155	*48,0	4,670E 01	0,025	2,
32,67	3,556E 01	54,404	*47,5	4,982E 01	0,033	1,
33,20	3,260E 01	54,660	*47,0	4,472E 01	0,024	2,
33,75	3,354E 01	54,921	*46,5	4,504E 01	0,033	1,
34,12	3,568E 01	55,099	*46,0	4,722E 01	0,032	1,
34,68	3,504E 01	55,372	*45,5	4,535E 01	0,023	2,
35,26	3,441E 01	55,651	*45,0	4,353E 01	0,032	1,
35,65	3,595E 01	55,841	*44,5	4,477E 01	0,030	1,
36,06	3,685E 01	56,034	*44,0	4,518E 01	0,031	1,
36,67	3,747E 01	56,330	*43,5	4,481E 01	0,021	2,
37,30	3,725E 01	56,634	*43,0	4,347E 01	0,030	1,
37,73	3,681E 01	56,841	*42,5	4,223E 01	0,029	1,
38,17	3,980E 01	57,051	*42,0	4,488E 01	0,028	1,
38,61	3,990E 01	57,265	*41,5	4,420E 01	0,028	1,
39,06	4,056E 01	57,483	*41,0	4,413E 01	0,028	1,
39,52	3,986E 01	57,705	*40,5	4,258E 01	0,028	1,
39,99	4,123E 01	57,931	*40,0	4,321E 01	0,027	1,
40,47	4,254E 01	58,160	*39,5	4,373E 01	0,027	1,
41,20	4,289E 01	58,513	*39,0	4,281E 01	0,019	2,
41,95	4,424E 01	58,875	*38,5	4,282E 01	0,026	1,
42,46	4,428E 01	59,122	*37,5	4,197E 01	0,026	1,
42,98	4,534E 01	59,373	*37,0	4,206E 01	0,025	1,
43,52	4,671E 01	59,629	*36,5	4,239E 01	0,024	1,
44,06	4,842E 01	59,890	*36,0	4,295E 01	0,023	1,
44,61	4,925E 01	60,156	*35,5	4,269E 01	0,023	1,
45,17	4,880E 01	60,427	*35,0	4,130E 01	0,023	1,
45,74	4,943E 01	60,702	*34,5	4,083E 01	0,022	1,
46,33	5,066E 01	60,984	*34,0	4,080E 01	0,022	1,
46,92	5,003E 01	61,270	*33,5	3,926E 01	0,022	1,
47,53	5,463E 01	61,562	*32,5	4,174E 01	0,021	1,
48,14	5,263E 01	61,860	*32,0	3,913E 01	0,021	1,
48,77	5,545E 01	62,164	*31,5	4,006E 01	0,020	1,
49,42	5,579E 01	62,474	*31,0	3,914E 01	0,020	1,
50,07	5,403E 01	62,790	*30,0	3,678E 01	0,020	1,
50,74	5,841E 01	63,112	*29,5	3,853E 01	0,019	1,
51,42	5,982E 01	63,441	*29,0	3,819E 01	0,019	1,
52,12	6,467E 01	63,776	*28,0	3,991E 01	0,018	1,
52,83	7,237E 01	64,118	*27,5	4,311E 01	0,017	1,
53,55	7,905E 01	64,467	*26,5	4,539E 01	0,016	1,
54,29	8,731E 01	64,824	*26,0	4,824E 01	0,015	1,
55,05	9,380E 01	65,188	*25,0	4,979E 01	0,014	1,
55,82	9,614E 01	65,559	*24,5	4,892E 01	0,014	1,
56,61	9,924E 01	65,939	*23,5	4,831E 01	0,014	1,
57,41	9,556E 01	66,326	*23,0	4,439E 01	0,014	1,
58,23	9,601E 01	66,722	*22,0	4,245E 01	0,014	1,
59,07	9,874E 01	67,127	*21,0	4,143E 01	0,013	1,
59,93	9,846E 01	67,540	*20,5	3,908E 01	0,013	1,
60,80	9,732E 01	67,962	*19,5	3,639E 01	0,013	1,

61,70	9,878E 01	68,394	-18,5	3,464E 01	0,013	1.
62,61	1,003E 02	68,835	-17,5	3,282E 01	0,013	1.
63,55	1,004E 02	69,286	-16,5	3,051E 01	0,013	1.
64,51	1,049E 02	69,747	-15,5	2,937E 01	0,012	1.
65,49	1,048E 02	70,219	-14,5	2,682E 01	0,012	1.
66,49	1,078E 02	70,702	-13,5	2,499E 01	0,012	1.
67,51	1,079E 02	71,196	-12,5	2,238E 01	0,011	1.
68,56	1,127E 02	71,701	-11,5	2,063E 01	0,011	1.
69,63	1,149E 02	72,218	-10,5	1,824E 01	0,011	1.
70,73	1,241E 02	72,747	-9,5	1,669E 01	0,010	1.
71,86	1,354E 02	73,289	-8,5	1,497E 01	0,010	1.
73,01	1,482E 02	73,844	-7,0	1,295E 01	0,010	1.
74,19	1,687E 02	74,413	-6,0	1,100E 01	0,009	1.
75,40	2,360E 02	74,995	-5,0	1,054E 01	0,007	1.
76,63	4,285E 02	75,592	-3,5	1,136E 01	0,005	1.
77,90	7,000E 02	76,203	-2,5	8,345E 00	0,004	1.
79,20	8,651E 02	76,830	-1,0	2,116E 00	0,004	1.
80,54	7,176E 02	77,473	0,5	2,175E 01	0,004	1.
81,90	4,063E 02	78,132	1,5	3,492E 00	0,005	1.
83,31	1,702E 02	78,808	3,0	5,393E 00	0,008	1.
84,74	8,030E 01	79,501	4,5	6,080E 00	0,012	1.
86,22	5,298E 01	80,213	6,0	7,914E 00	0,014	1.
87,74	3,707E 01	80,943	7,5	9,824E 00	0,017	1.
89,29	2,799E 01	81,693	9,0	1,232E 01	0,020	1.
90,89	2,140E 01	82,462	10,5	1,498E 01	0,022	1.
92,53	1,536E 01	83,253	12,5	1,660E 01	0,027	1.
94,21	1,180E 01	84,065	14,0	1,928E 01	0,032	1.
95,95	9,236E 00	84,900	15,5	2,251E 01	0,036	1.
97,73	1,895E 00	85,758	17,5	6,824E 00	0,090	1.

LONGITUDINAL POLYETHYLENE 77K

6908 5

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DMC=.01800 KT=.00663

DATA CODE 6908 COMPUTED 072667 INCIDENT ENERGY .0802 ANGLE NO 6 IS 80.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO.CHAN
3.32	*9.797E-01	37.524	-77.0	*1.029E 01	1.272	24.
3.69	1.022E 01	37.555	-76.5	1.024E 02	0.361	39.
4.19	8.998E 00	37.607	-76.0	8.350E 01	0.610	32.
4.69	9.644E 00	37.670	-75.5	8.478E 01	0.339	27.
5.20	6.084E 00	37.743	-75.0	5.016E 01	0.100	24.
5.70	6.445E 00	37.824	-74.5	5.030E 01	0.085	20.
6.20	8.059E 00	37.911	-74.0	6.012E 01	0.072	18.
6.70	9.620E 00	38.004	-73.5	6.821E 01	0.063	16.
7.19	7.195E 00	38.102	-73.0	4.890E 01	0.063	14.
7.69	5.776E 00	38.204	-72.5	3.739E 01	0.061	13.
8.19	7.052E 00	38.313	-72.0	4.417E 01	0.054	12.
8.70	1.219E 01	38.428	-71.5	7.338E 01	0.047	11.
9.21	1.435E 01	38.545	-71.0	8.325E 01	0.046	10.
9.71	1.422E 01	38.664	-70.5	7.968E 01	0.051	9.
10.19	1.589E 01	38.781	-70.0	8.622E 01	0.049	8.
10.68	1.180E 01	38.903	-69.5	6.217E 01	0.057	8.
11.20	9.853E 00	39.037	-69.0	5.024E 01	0.056	8.
11.72	9.435E 00	39.174	-68.5	4.655E 01	0.059	7.
12.21	9.033E 00	39.302	-68.0	4.335E 01	0.062	6.
12.69	9.977E 00	39.431	-67.5	4.657E 01	0.060	6.
13.19	9.705E 00	39.569	-67.0	4.400E 01	0.057	6.
13.68	1.299E 01	39.704	-66.5	5.744E 01	0.055	5.
14.20	1.459E 01	39.850	-66.0	6.280E 01	0.046	6.
14.74	1.536E 01	40.005	-65.5	6.417E 01	0.047	5.
15.21	1.760E 01	40.141	-65.0	7.183E 01	0.049	4.
15.71	1.784E 01	40.285	-64.5	7.102E 01	0.042	5.
16.23	1.818E 01	40.438	-64.0	7.059E 01	0.045	4.
16.71	1.914E 01	40.581	-63.5	7.263E 01	0.043	4.
17.21	1.739E 01	40.733	-63.0	6.450E 01	0.045	4.
17.74	1.838E 01	40.893	-62.5	6.646E 01	0.042	4.
18.22	1.840E 01	41.040	-62.0	6.502E 01	0.050	3.
18.73	2.052E 01	41.194	-61.5	7.097E 01	0.038	4.
19.25	2.277E 01	41.356	-61.0	7.688E 01	0.041	3.
19.72	2.081E 01	41.502	-60.5	6.888E 01	0.043	3.
20.20	2.145E 01	41.654	-60.0	6.948E 01	0.041	3.
20.70	2.199E 01	41.812	-59.5	6.974E 01	0.040	3.
21.22	2.231E 01	41.978	-59.0	6.918E 01	0.039	3.
21.76	2.472E 01	42.151	-58.5	7.495E 01	0.036	3.
22.23	2.483E 01	42.301	-58.0	7.381E 01	0.044	2.
22.71	2.629E 01	42.457	-57.5	7.659E 01	0.034	3.
23.20	2.536E 01	42.618	-57.0	7.243E 01	0.042	2.
23.72	2.841E 01	42.786	-56.5	7.940E 01	0.031	3.
24.25	3.023E 01	42.960	-56.0	8.271E 01	0.037	2.
24.68	3.012E 01	43.105	-55.5	8.099E 01	0.036	2.
25.13	2.904E 01	43.254	-55.0	7.672E 01	0.037	2.
25.71	3.196E 01	43.447	-54.5	8.248E 01	0.027	3.

26,31	3,260E 01	43,648	-54,0	8,220E 01	0,033	2,
26,81	2,053E 01	43,814	-53,5	5,062E 01	0,055	2,
27,31	3,157E 01	43,986	-53,0	7,654E 01	0,033	2,
27,71	3,349E 01	44,118	-52,5	7,996E 01	0,044	1,
28,11	3,322E 01	44,255	-52,0	7,810E 01	0,031	2,
28,65	3,667E 01	44,441	-51,5	8,444E 01	0,029	2,
29,21	3,851E 01	44,634	-51,0	8,678E 01	0,027	2,
29,79	3,982E 01	44,833	-50,5	8,775E 01	0,027	2,
30,24	3,995E 01	44,986	-50,0	8,657E 01	0,037	1,
30,69	4,330E 01	45,144	-49,5	9,219E 01	0,025	2,
31,16	4,231E 01	45,306	-49,0	8,851E 01	0,036	1,
31,64	4,813E 01	45,472	-48,5	9,886E 01	0,023	2,
32,12	4,806E 01	45,642	-48,0	9,693E 01	0,032	1,
32,62	4,881E 01	45,818	-47,5	9,663E 01	0,022	2,
33,13	4,884E 01	45,997	-47,0	9,482E 01	0,031	1,
33,66	5,455E 01	46,181	-46,5	1,038E 02	0,020	2,
34,19	5,405E 01	46,370	-46,0	1,008E 02	0,029	1,
34,74	5,581E 01	46,565	-45,5	1,020E 02	0,020	2,
35,30	5,701E 01	46,764	-45,0	1,020E 02	0,027	1,
35,69	5,816E 01	46,900	-44,5	1,025E 02	0,026	1,
36,07	5,978E 01	47,039	-44,0	1,039E 02	0,026	1,
36,67	6,028E 01	47,252	-43,5	1,024E 02	0,018	2,
37,28	6,232E 01	47,470	-43,0	1,034E 02	0,025	1,
37,69	6,588E 01	47,619	-42,5	1,076E 02	0,024	1,
38,11	7,035E 01	47,771	-42,0	1,131E 02	0,022	1,
38,54	7,260E 01	47,926	-41,5	1,148E 02	0,022	1,
39,20	7,396E 01	48,164	-41,0	1,140E 02	0,015	2,
39,87	8,066E 01	48,408	-40,5	1,212E 02	0,020	1,
40,33	7,835E 01	48,574	-40,0	1,157E 02	0,020	1,
40,80	8,001E 01	48,744	-39,5	1,160E 02	0,020	1,
41,27	8,468E 01	48,918	-39,0	1,205E 02	0,019	1,
41,76	8,211E 01	49,095	-38,5	1,146E 02	0,019	1,
42,25	8,752E 01	49,275	-38,0	1,199E 02	0,018	1,
42,75	9,054E 01	49,458	-37,5	1,215E 02	0,018	1,
43,26	9,175E 01	49,646	-37,0	1,207E 02	0,018	1,
43,78	9,015E 01	49,837	-36,5	1,162E 02	0,018	1,
44,30	9,179E 01	50,032	-36,0	1,158E 02	0,017	1,
44,84	9,490E 01	50,230	-35,5	1,171E 02	0,017	1,
45,39	9,440E 01	50,433	-35,0	1,139E 02	0,017	1,
45,95	9,632E 01	50,640	-34,5	1,134E 02	0,016	1,
46,52	1,011E 02	50,851	-33,5	1,164E 02	0,016	1,
47,09	9,963E 01	51,067	-33,0	1,119E 02	0,016	1,
47,68	1,034E 02	51,287	-32,5	1,132E 02	0,016	1,
48,28	1,077E 02	51,511	-32,0	1,150E 02	0,015	1,
48,90	1,104E 02	51,740	-31,5	1,148E 02	0,015	1,
49,52	1,085E 02	51,974	-30,5	1,097E 02	0,015	1,
50,16	1,097E 02	52,213	-30,0	1,078E 02	0,014	1,
50,80	1,142E 02	52,457	-29,5	1,090E 02	0,014	1,
51,46	1,144E 02	52,706	-28,5	1,059E 02	0,014	1,
52,14	1,231E 02	52,961	-28,0	1,103E 02	0,013	1,
52,82	1,303E 02	53,221	-27,5	1,129E 02	0,013	1,
53,52	1,443E 02	53,486	-26,5	1,208E 02	0,012	1,
54,24	1,685E 02	53,758	-26,0	1,361E 02	0,011	1,
54,97	1,948E 02	54,035	-25,0	1,516E 02	0,010	1,
55,71	2,093E 02	54,319	-24,5	1,565E 02	0,010	1,
56,47	2,255E 02	54,609	-23,5	1,618E 02	0,009	1,
57,25	2,252E 02	54,905	-23,0	1,547E 02	0,009	1,
58,04	2,207E 02	55,208	-22,0	1,447E 02	0,009	1,
58,84	2,234E 02	55,518	-21,5	1,395E 02	0,009	1,
59,67	2,246E 02	55,835	-20,5	1,332E 02	0,009	1,

60.51	2.298E 02	56.159	-19.5	1.290E 02	0.009	1.
61.37	2.404E 02	56.491	-19.0	1.272E 02	0.008	1.
62.25	2.486E 02	56.830	-18.0	1.234E 02	0.008	1.
63.14	2.603E 02	57.178	-17.0	1.206E 02	0.008	1.
64.06	2.645E 02	57.533	-16.0	1.138E 02	0.008	1.
65.00	2.648E 02	57.897	-15.0	1.050E 02	0.008	1.
65.95	2.650E 02	58.270	-14.0	9.606E 01	0.008	1.
66.93	2.525E 02	58.652	-13.5	8.285E 01	0.008	1.
67.93	2.543E 02	59.043	-12.5	7.467E 01	0.008	1.
68.96	2.595E 02	59.443	-11.0	6.720E 01	0.007	1.
70.00	2.691E 02	59.853	-10.0	6.035E 01	0.007	1.
71.07	2.773E 02	60.274	-9.0	5.261E 01	0.007	1.
72.17	2.836E 02	60.704	-8.0	4.418E 01	0.007	1.
73.29	2.964E 02	61.146	-7.0	3.637E 01	0.007	1.
74.43	3.072E 02	61.599	-6.0	2.801E 01	0.006	1.
75.61	3.501E 02	62.063	-4.5	2.171E 01	0.006	1.
76.81	5.496E 02	62.539	-3.5	2.001E 01	0.005	1.
78.04	1.051E 03	63.027	-2.0	1.680E 01	0.003	1.
79.30	1.550E 03	63.529	-1.0	4.665E 00	0.003	1.
80.59	1.516E 03	64.043	0.5	9.604E -01	0.003	1.
81.92	1.020E 03	64.571	1.5	1.351E 01	0.003	1.
83.27	5.117E 02	65.112	3.0	2.404E 01	0.005	1.
84.66	2.418E 02	65.669	4.5	2.669E 01	0.007	1.
86.09	1.485E 02	66.240	6.0	3.199E 01	0.009	1.
87.55	1.131E 02	66.827	7.5	4.287E 01	0.011	1.
89.05	8.540E 01	67.430	9.0	5.337E 01	0.012	1.
90.59	6.775E 01	68.050	10.5	6.685E 01	0.013	1.
92.17	5.499E 01	68.686	12.0	8.319E 01	0.013	1.
93.78	4.012E 01	69.341	13.5	9.113E 01	0.017	1.
95.45	3.228E 01	70.014	15.0	1.085E 02	0.018	1.
97.16	2.383E 01	70.707	17.0	1.174E 02	0.022	1.
98.91	1.824E 01	71.419	18.5	1.309E 02	0.025	1.

TRANSVERSE POLYETHYLENE 77K

6908 6

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DWC=.01800 KT=.00663

DATA CODE 6908 COMPUTED 072667 INCIDENT ENERGY .0802 ANGLE NO 2 IS 90.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO.CHAN
3.38	3.357E 01	40.284	-77.0	3.433E 02	0.468	13.
3.69	1.515E 01	40.436	-76.5	1.479E 02	0.879	40.
4.19	1.413E 01	40.676	-76.0	1.298E 02	0.183	32.
4.69	1.230E 01	40.915	-75.5	1.044E 02	0.287	28.
5.19	7.737E 00	41.159	-75.0	6.247E 01	0.130	24.
5.70	5.411E 00	41.402	-74.5	4.095E 01	0.131	21.
6.20	7.006E 00	41.644	-74.0	5.010E 01	0.203	18.
6.69	6.279E 00	41.881	-73.5	4.324E 01	0.093	16.
7.20	6.862E 00	42.124	-73.0	4.520E 01	0.088	15.
7.70	1.246E 01	42.367	-72.5	7.890E 01	0.064	13.
8.20	5.464E 00	42.606	-72.0	3.290E 01	0.075	12.
8.70	1.469E 01	42.847	-71.5	8.608E 01	0.058	11.
9.19	1.663E 01	43.087	-71.0	9.368E 01	0.056	10.
9.68	1.620E 01	43.322	-70.5	8.845E 01	0.059	9.
10.18	1.773E 01	43.563	-70.0	9.343E 01	0.055	9.
10.69	1.280E 01	43.808	-69.5	6.536E 01	0.066	8.
11.20	1.271E 01	44.056	-69.0	6.286E 01	0.064	8.
11.72	1.290E 01	44.304	-68.5	6.180E 01	0.066	7.
12.20	1.495E 01	44.534	-68.0	6.957E 01	0.062	6.
12.70	1.180E 01	44.778	-67.5	5.339E 01	0.065	7.
13.20	1.271E 01	45.017	-67.0	5.595E 01	0.071	5.
13.68	1.522E 01	45.249	-66.5	6.514E 01	0.059	6.
14.19	1.908E 01	45.493	-66.0	7.956E 01	0.054	5.
14.67	1.777E 01	45.727	-65.5	7.228E 01	0.056	5.
15.18	1.766E 01	45.974	-65.0	7.004E 01	0.054	5.
15.72	2.017E 01	46.234	-64.5	7.787E 01	0.048	5.
16.23	2.067E 01	46.479	-64.0	7.784E 01	0.051	4.
16.71	2.190E 01	46.708	-63.5	8.071E 01	0.049	4.
17.20	2.099E 01	46.946	-63.0	7.544E 01	0.049	4.
17.72	2.359E 01	47.196	-62.5	8.295E 01	0.045	4.
18.19	2.450E 01	47.423	-62.0	8.423E 01	0.050	3.
18.68	2.483E 01	47.661	-61.5	8.351E 01	0.042	4.
19.19	2.279E 01	47.907	-61.0	7.494E 01	0.049	3.
19.65	2.173E 01	48.127	-60.5	7.007E 01	0.051	3.
20.20	2.538E 01	48.393	-60.0	7.990E 01	0.038	4.
20.78	2.669E 01	48.670	-59.5	8.195E 01	0.042	3.
21.20	2.927E 01	48.876	-59.0	8.831E 01	0.048	2.
21.64	2.756E 01	49.088	-58.5	8.164E 01	0.040	3.
22.19	2.851E 01	49.351	-58.0	8.259E 01	0.038	3.
22.66	2.835E 01	49.578	-57.5	8.057E 01	0.046	2.
23.15	3.058E 01	49.813	-57.0	8.518E 01	0.035	3.
23.65	3.233E 01	50.054	-56.5	8.832E 01	0.041	2.
24.17	3.259E 01	50.305	-56.0	8.720E 01	0.033	3.
24.70	3.522E 01	50.562	-55.5	9.227E 01	0.038	2.
25.15	3.361E 01	50.775	-55.0	8.653E 01	0.038	2.
25.71	3.537E 01	51.050	-54.5	8.907E 01	0.030	3.

26,30	3,492E 01	51,333	+54,0	8,600E 01	0,036	2.
26,79	3,655E 01	51,567	+53,5	8,838E 01	0,035	2.
27,29	3,717E 01	51,807	+53,0	8,816E 01	0,034	2.
27,80	3,671E 01	52,054	+52,5	8,542E 01	0,034	2.
28,19	4,090E 01	52,244	+52,0	9,375E 01	0,043	1.
28,60	4,300E 01	52,439	+51,5	9,707E 01	0,029	2.
29,15	4,359E 01	52,704	+51,0	9,643E 01	0,029	2.
29,71	4,683E 01	52,977	+50,5	1,014E 02	0,027	2.
30,30	4,741E 01	53,258	+50,0	1,005E 02	0,027	2.
30,74	5,361E 01	53,474	+49,5	1,118E 02	0,034	1.
31,20	4,942E 01	53,695	+49,0	1,013E 02	0,025	2.
31,67	5,399E 01	53,921	+48,5	1,088E 02	0,033	1.
32,15	5,558E 01	54,153	+48,0	1,100E 02	0,023	2.
32,64	5,633E 01	54,389	+47,5	1,095E 02	0,031	1.
33,15	5,711E 01	54,631	+47,0	1,090E 02	0,022	2.
33,66	5,955E 01	54,879	+46,5	1,116E 02	0,030	1.
34,19	6,312E 01	55,132	+46,0	1,160E 02	0,020	2.
34,72	6,663E 01	55,391	+45,5	1,200E 02	0,027	1.
35,09	6,382E 01	55,568	+45,0	1,134E 02	0,028	1.
35,65	6,812E 01	55,838	+44,5	1,186E 02	0,019	2.
36,22	6,845E 01	56,114	+44,0	1,167E 02	0,026	1.
36,61	6,811E 01	56,302	+43,5	1,145E 02	0,026	1.
37,21	7,525E 01	56,590	+43,0	1,238E 02	0,017	2.
37,82	7,859E 01	56,884	+42,5	1,264E 02	0,023	1.
38,24	7,930E 01	57,085	+42,0	1,256E 02	0,023	1.
38,66	7,879E 01	57,288	+41,5	1,228E 02	0,023	1.
39,09	8,470E 01	57,496	+41,0	1,300E 02	0,021	1.
39,53	8,437E 01	57,706	+40,5	1,274E 02	0,021	1.
40,20	8,719E 01	58,030	+40,0	1,283E 02	0,015	2.
40,88	9,227E 01	58,360	+39,5	1,324E 02	0,020	1.
41,35	9,345E 01	58,586	+39,0	1,317E 02	0,019	1.
41,83	9,398E 01	58,815	+38,5	1,301E 02	0,019	1.
42,31	9,519E 01	59,048	+38,0	1,294E 02	0,019	1.
42,80	9,854E 01	59,286	+37,5	1,314E 02	0,018	1.
43,30	9,667E 01	59,527	+37,0	1,265E 02	0,018	1.
43,81	9,743E 01	59,773	+36,5	1,250E 02	0,018	1.
44,33	1,052E 02	60,023	+36,0	1,323E 02	0,017	1.
44,86	1,033E 02	60,278	+35,5	1,272E 02	0,017	1.
45,40	1,089E 02	60,537	+35,0	1,312E 02	0,017	1.
45,95	1,084E 02	60,801	+34,5	1,278E 02	0,017	1.
46,50	1,103E 02	61,070	+33,5	1,271E 02	0,016	1.
47,07	1,146E 02	61,344	+33,0	1,291E 02	0,016	1.
47,65	1,121E 02	61,622	+32,5	1,233E 02	0,016	1.
48,24	1,153E 02	61,906	+32,0	1,237E 02	0,015	1.
48,84	1,172E 02	62,196	+31,5	1,226E 02	0,015	1.
49,45	1,204E 02	62,490	+30,5	1,227E 02	0,015	1.
50,07	1,196E 02	62,790	+30,0	1,187E 02	0,015	1.
50,71	1,247E 02	63,096	+29,5	1,203E 02	0,014	1.
51,36	1,276E 02	63,408	+29,0	1,196E 02	0,014	1.
52,01	1,308E 02	63,726	+28,0	1,189E 02	0,014	1.
52,69	1,386E 02	64,050	+27,5	1,221E 02	0,013	1.
53,37	1,526E 02	64,380	+27,0	1,301E 02	0,012	1.
54,07	1,736E 02	64,716	+26,0	1,431E 02	0,011	1.
54,78	1,932E 02	65,060	+25,5	1,537E 02	0,011	1.
55,51	2,099E 02	65,410	+24,5	1,609E 02	0,010	1.
56,25	2,218E 02	65,767	+24,0	1,635E 02	0,010	1.
57,01	2,210E 02	66,132	+23,0	1,563E 02	0,010	1.
57,78	2,233E 02	66,503	+22,5	1,512E 02	0,009	1.
58,56	2,197E 02	66,883	+21,5	1,422E 02	0,009	1.
59,37	2,174E 02	67,270	+21,0	1,340E 02	0,009	1.

60,19	2,223E 02	67,665	-20,0	1,301E 02	0,009	1.
61,02	2,275E 02	68,069	-19,0	1,260E 02	0,009	1.
61,88	2,359E 02	68,481	-18,5	1,231E 02	0,009	1.
62,75	2,437E 02	68,901	-17,5	1,193E 02	0,009	1.
63,64	2,495E 02	69,331	-16,5	1,140E 02	0,008	1.
64,55	2,499E 02	69,770	-15,5	1,059E 02	0,008	1.
65,48	2,434E 02	70,218	-14,5	9,497E 01	0,008	1.
66,43	2,435E 02	70,676	-14,0	8,671E 01	0,008	1.
67,41	2,389E 02	71,144	-13,0	7,687E 01	0,008	1.
68,40	2,388E 02	71,623	-12,0	6,855E 01	0,008	1.
69,41	2,434E 02	72,112	-11,0	6,139E 01	0,008	1.
70,45	2,459E 02	72,612	-9,5	5,344E 01	0,008	1.
71,51	2,522E 02	73,123	-8,5	4,607E 01	0,008	1.
72,60	2,600E 02	73,646	-7,5	3,863E 01	0,007	1.
73,71	2,595E 02	74,181	-6,5	2,998E 01	0,007	1.
74,84	2,698E 02	74,728	-5,5	2,271E 01	0,007	1.
76,00	2,986E 02	75,289	-4,0	1,657E 01	0,007	1.
77,19	4,224E 02	75,862	-3,0	1,299E 01	0,005	1.
78,41	6,781E 02	76,449	-2,0	8,007E 00	0,004	1.
79,66	0,872E 02	77,049	-0,5	1,049E 00	0,004	1.
80,93	8,190E 02	77,665	0,5	1,947E 00	0,004	1.
82,24	5,276E 02	78,295	2,0	1,069E 01	0,005	1.
83,58	2,791E 02	78,940	3,5	1,718E 01	0,007	1.
84,95	1,589E 02	79,602	5,0	2,158E 01	0,011	1.
86,36	1,162E 02	80,280	6,0	2,976E 01	0,014	1.
87,80	9,045E 01	80,975	7,5	3,987E 01	0,015	1.
89,28	7,411E 01	81,687	9,0	5,306E 01	0,015	1.
90,80	5,941E 01	82,418	10,5	6,645E 01	0,015	1.
92,35	4,652E 01	83,167	12,0	7,911E 01	0,016	1.
93,94	3,617E 01	83,936	13,5	9,173E 01	0,019	1.
95,58	2,904E 01	84,725	15,5	1,084E 02	0,022	1.
97,26	2,209E 01	85,534	17,0	1,202E 02	0,026	1.
98,99	1,653E 01	86,365	19,0	1,304E 02	0,030	1.

TRANSVERSE POLYETHYLENE 77K

6908 2

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 77K

SIGMA=159,24 MASS= 14,00 DMC=.01800 KT=.00663

DATA CODE 6908 COMPUTED 072667 INCIDENT ENERGY .0802 ANGLE NO 4 IS 100.00 DEGREES

ENERGY	SIGMA	KAP SO	EPS	G(EPS)	ERROR	NO.CHAN
3,30	9,247E 00	42,967	-77,0	9,395E 01	0,286	27,
3,69	9,216E 00	43,314	-76,5	8,873E 01	0,357	39,
4,19	5,353E 00	43,746	-76,0	4,799E 01	0,548	32,
4,69	9,902E 00	44,165	-75,5	8,288E 01	0,119	27,
5,19	6,471E 00	44,572	-75,0	5,064E 01	0,123	23,
5,70	4,180E 00	44,979	-74,5	3,124E 01	0,149	21,
6,20	4,725E 00	45,373	-74,0	3,362E 01	0,158	17,
6,69	7,461E 00	45,754	-73,5	5,048E 01	0,090	16,
7,20	5,962E 00	46,148	-73,0	3,836E 01	0,087	15,
7,70	7,258E 00	46,524	-72,5	4,485E 01	0,080	12,
8,19	6,796E 00	46,889	-72,0	4,054E 01	0,085	12,
8,70	1,123E 01	47,268	-71,5	6,427E 01	0,065	11,
9,21	1,309E 01	47,642	-71,0	7,229E 01	0,060	10,
9,71	1,047E 01	48,006	-70,5	5,604E 01	0,072	9,
10,19	1,172E 01	48,354	-70,0	6,070E 01	0,068	8,
10,68	1,131E 01	48,704	-69,5	5,666E 01	0,071	8,
11,18	1,279E 01	49,053	-69,0	6,225E 01	0,068	7,
11,67	1,287E 01	49,398	-68,5	6,076E 01	0,064	7,
12,19	1,259E 01	49,764	-68,0	5,765E 01	0,065	7,
12,71	1,460E 01	50,124	-67,5	6,498E 01	0,065	6,
13,22	1,453E 01	50,475	-67,0	6,280E 01	0,063	6,
13,71	2,048E 01	50,814	-66,5	8,626E 01	0,055	5,
14,18	2,075E 01	51,137	-66,0	8,520E 01	0,054	5,
14,68	2,045E 01	51,475	-65,5	8,192E 01	0,054	5,
15,21	2,455E 01	51,830	-65,0	9,597E 01	0,047	5,
15,70	2,739E 01	52,163	-64,5	1,044E 02	0,047	4,
16,16	2,742E 01	52,473	-64,0	1,022E 02	0,047	4,
16,65	2,626E 01	52,795	-63,5	9,569E 01	0,047	4,
17,15	2,844E 01	53,130	-63,0	1,013E 02	0,045	4,
17,68	2,907E 01	53,480	-62,5	1,011E 02	0,043	4,
18,23	3,129E 01	53,844	-62,0	1,061E 02	0,041	4,
18,74	2,992E 01	54,175	-61,5	9,932E 01	0,047	3,
19,19	3,277E 01	54,470	-61,0	1,067E 02	0,045	3,
19,65	2,717E 01	54,774	-60,5	8,671E 01	0,050	3,
20,14	3,055E 01	55,088	-60,0	9,554E 01	0,045	3,
20,64	3,497E 01	55,414	-59,5	1,071E 02	0,041	3,
21,16	3,605E 01	55,750	-59,0	1,081E 02	0,039	3,
21,70	3,436E 01	56,098	-58,5	1,008E 02	0,040	3,
22,17	3,465E 01	56,397	-58,0	9,976E 01	0,049	2,
22,65	3,982E 01	56,706	-57,5	1,126E 02	0,035	3,
23,15	3,624E 01	57,024	-57,0	1,004E 02	0,046	2,
23,66	3,633E 01	57,352	-56,5	9,872E 01	0,037	3,
24,19	3,865E 01	57,689	-56,0	1,029E 02	0,043	2,
24,63	3,875E 01	57,967	-55,5	1,015E 02	0,042	2,
25,20	3,853E 01	58,324	-55,0	9,875E 01	0,034	3,
25,78	4,250E 01	58,692	-54,5	1,066E 02	0,039	2,

26,26	4,473E 01	58,995	-54,0	1,102E 02	0,038	2,
26,76	4,258E 01	59,307	-53,5	1,030E 02	0,038	2,
27,27	4,549E 01	59,626	-53,0	1,080E 02	0,036	2,
27,79	4,807E 01	59,954	-52,5	1,120E 02	0,035	2,
28,20	4,533E 01	60,205	-52,0	1,041E 02	0,050	1,
28,61	4,897E 01	60,463	-51,5	1,107E 02	0,033	2,
29,17	5,374E 01	60,813	-51,0	1,191E 02	0,032	2,
29,75	5,490E 01	61,174	-50,5	1,192E 02	0,031	2,
30,20	5,099E 01	61,450	-50,0	1,089E 02	0,045	1,
30,66	5,849E 01	61,733	-49,5	1,229E 02	0,029	2,
31,29	5,954E 01	62,119	-49,0	1,224E 02	0,028	2,
31,77	6,209E 01	62,416	-48,5	1,255E 02	0,038	1,
32,26	6,562E 01	62,720	-48,0	1,303E 02	0,026	2,
32,77	6,596E 01	63,029	-47,5	1,287E 02	0,036	1,
33,11	7,253E 01	63,240	-47,0	1,398E 02	0,034	1,
33,64	6,880E 01	63,561	-46,5	1,302E 02	0,025	2,
34,17	7,091E 01	63,889	-46,0	1,317E 02	0,034	1,
34,72	6,983E 01	64,226	-45,5	1,272E 02	0,024	2,
35,29	7,681E 01	64,569	-45,0	1,372E 02	0,032	1,
35,67	7,866E 01	64,802	-44,5	1,386E 02	0,032	1,
36,06	7,486E 01	65,039	-44,0	1,301E 02	0,032	1,
36,66	7,833E 01	65,402	-43,5	1,333E 02	0,022	2,
37,27	7,839E 01	65,772	-43,0	1,306E 02	0,031	1,
37,69	8,391E 01	66,024	-42,5	1,377E 02	0,029	1,
38,11	9,023E 01	66,280	-42,0	1,499E 02	0,028	1,
38,54	8,697E 01	66,540	-41,5	1,385E 02	0,028	1,
39,21	9,012E 01	66,939	-41,0	1,402E 02	0,020	2,
39,88	9,768E 01	67,345	-40,5	1,483E 02	0,026	1,
40,34	9,796E 01	67,623	-40,0	1,463E 02	0,026	1,
40,81	9,772E 01	67,904	-39,5	1,435E 02	0,026	1,
41,29	9,763E 01	68,190	-39,0	1,409E 02	0,026	1,
41,78	1,041E 02	68,481	-38,5	1,477E 02	0,025	1,
42,27	1,020E 02	68,777	-38,0	1,420E 02	0,025	1,
42,78	1,057E 02	69,078	-37,5	1,444E 02	0,024	1,
43,29	1,019E 02	69,384	-37,0	1,367E 02	0,024	1,
43,81	1,069E 02	69,695	-36,5	1,406E 02	0,024	1,
44,34	1,084E 02	70,011	-36,0	1,398E 02	0,023	1,
44,89	1,120E 02	70,333	-35,5	1,415E 02	0,023	1,
45,44	1,086E 02	70,660	-35,0	1,343E 02	0,023	1,
46,00	1,125E 02	70,993	-34,0	1,362E 02	0,022	1,
46,57	1,174E 02	71,332	-33,5	1,390E 02	0,022	1,
47,15	1,186E 02	71,676	-33,0	1,373E 02	0,021	1,
47,75	1,193E 02	72,027	-32,5	1,348E 02	0,021	1,
48,35	1,199E 02	72,384	-32,0	1,322E 02	0,021	1,
48,97	1,238E 02	72,748	-31,0	1,332E 02	0,020	1,
49,60	1,237E 02	73,118	-30,5	1,296E 02	0,020	1,
50,24	1,241E 02	73,495	-30,0	1,266E 02	0,020	1,
50,89	1,277E 02	73,879	-29,5	1,267E 02	0,020	1,
51,56	1,337E 02	74,269	-28,5	1,288E 02	0,019	1,
52,24	1,356E 02	74,667	-28,0	1,267E 02	0,019	1,
52,93	1,522E 02	75,073	-27,5	1,379E 02	0,018	1,
53,64	1,611E 02	75,486	-26,5	1,413E 02	0,017	1,
54,36	1,798E 02	75,907	-26,0	1,523E 02	0,016	1,
55,09	1,966E 02	76,336	-25,0	1,607E 02	0,015	1,
55,84	2,043E 02	76,773	-24,5	1,608E 02	0,015	1,
56,61	2,122E 02	77,219	-23,5	1,605E 02	0,014	1,
57,39	2,145E 02	77,674	-23,0	1,556E 02	0,014	1,
58,19	2,149E 02	78,137	-22,0	1,491E 02	0,014	1,
59,00	2,148E 02	78,610	-21,0	1,422E 02	0,014	1,
59,84	2,171E 02	79,092	-20,5	1,366E 02	0,014	1,

60,69	2,212E 02	79,583	-19,5	1,320E 02	0,013	1.
61,55	2,314E 02	80,085	-18,5	1,303E 02	0,013	1.
62,44	2,371E 02	80,597	-18,0	1,255E 02	0,013	1.
63,35	2,480E 02	81,119	-17,0	1,227E 02	0,012	1.
64,27	2,485E 02	81,653	-16,0	1,142E 02	0,012	1.
65,22	2,486E 02	82,197	-15,0	1,053E 02	0,012	1.
66,19	2,421E 02	82,753	-14,0	9,380E 01	0,012	1.
67,18	2,373E 02	83,321	-13,0	8,323E 01	0,012	1.
68,19	2,423E 02	83,900	-12,0	7,597E 01	0,012	1.
69,22	2,474E 02	84,493	-11,0	6,828E 01	0,012	1.
70,28	2,399E 02	85,098	-10,0	5,717E 01	0,012	1.
71,36	2,515E 02	85,716	-9,0	5,045E 01	0,011	1.
72,47	2,553E 02	86,348	-7,5	4,173E 01	0,011	1.
73,61	2,565E 02	86,994	-6,5	3,262E 01	0,011	1.
74,77	2,662E 02	87,655	-5,5	2,468E 01	0,011	1.
75,96	2,895E 02	88,330	-4,0	1,766E 01	0,011	1.
77,17	3,974E 02	89,021	-3,0	1,336E 01	0,009	1.
78,42	6,052E 02	89,728	-2,0	7,659E 00	0,007	1.
79,70	7,470E 02	90,451	-0,5	8,252E 01	0,006	1.
81,01	6,413E 02	91,192	1,0	2,006E 00	0,006	1.
82,35	3,954E 02	91,949	2,0	9,716E 00	0,008	1.
83,72	2,114E 02	92,725	3,5	1,557E 01	0,011	1.
85,13	1,256E 02	93,519	5,0	2,035E 01	0,015	1.
86,58	9,982E 01	94,333	6,5	3,054E 01	0,016	1.
88,06	7,869E 01	95,166	8,0	4,161E 01	0,018	1.
89,58	6,080E 01	96,020	9,5	5,251E 01	0,021	1.
91,14	4,917E 01	96,895	11,0	6,675E 01	0,023	1.
92,74	3,845E 01	97,792	12,5	7,992E 01	0,026	1.
94,39	3,046E 01	98,712	14,0	9,519E 01	0,030	1.
96,07	2,250E 01	99,656	16,0	1,044E 02	0,036	1.
97,81	1,781E 01	100,624	17,5	1,216E 02	0,039	1.

TRANSVERSE POLYETHYLENE 77K

6908 4

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.00800 KT=.00036

DATA CODE 6942 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 3 IS 290.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.66	1.235E 01	12.797	-27.5	5.239E 01	0.117	23.
2.99	1.070E 01	12.779	-27.0	4.243E 01	0.046	53.
3.50	1.007E 01	12.769	-26.5	3.576E 01	0.041	42.
3.99	2.117E 01	12.776	-26.0	6.951E 01	0.035	34.
4.49	3.341E 01	12.798	-25.5	1.014E 02	0.028	29.
4.99	4.430E 01	12.831	-25.0	1.251E 02	0.023	24.
5.49	4.573E 01	12.875	-24.5	1.202E 02	0.022	22.
5.99	4.606E 01	12.928	-24.0	1.133E 02	0.022	18.
6.49	4.476E 01	12.988	-23.5	1.031E 02	0.022	17.
7.00	4.580E 01	13.056	-23.0	9.900E 01	0.021	15.
7.50	4.633E 01	13.129	-22.5	9.412E 01	0.021	13.
7.99	4.672E 01	13.206	-22.0	8.946E 01	0.021	12.
8.48	4.798E 01	13.289	-21.5	8.666E 01	0.020	11.
9.00	4.928E 01	13.380	-21.0	8.383E 01	0.019	11.
9.51	4.825E 01	13.475	-20.5	7.742E 01	0.020	9.
10.01	4.917E 01	13.571	-20.0	7.452E 01	0.019	9.
10.52	5.096E 01	13.673	-19.5	7.294E 01	0.019	8.
11.00	5.445E 01	13.773	-19.0	7.387E 01	0.019	7.
11.48	5.483E 01	13.875	-18.5	7.046E 01	0.018	7.
12.00	5.501E 01	13.987	-18.0	6.675E 01	0.018	7.
12.50	6.069E 01	14.101	-17.5	6.961E 01	0.017	6.
13.00	6.342E 01	14.215	-17.0	6.883E 01	0.016	6.
13.48	6.818E 01	14.328	-16.5	7.007E 01	0.017	5.
14.00	7.050E 01	14.450	-16.0	6.842E 01	0.014	6.
14.53	7.259E 01	14.581	-15.5	6.628E 01	0.015	5.
15.00	7.335E 01	14.695	-15.0	6.353E 01	0.017	4.
15.49	7.270E 01	14.818	-14.5	5.951E 01	0.015	5.
16.00	7.127E 01	14.948	-14.0	5.495E 01	0.016	4.
16.48	7.490E 01	15.071	-13.5	5.463E 01	0.015	4.
16.98	7.410E 01	15.201	-13.0	5.084E 01	0.015	4.
17.50	7.624E 01	15.339	-12.5	4.908E 01	0.015	4.
17.97	7.819E 01	15.467	-12.0	4.741E 01	0.016	3.
18.47	7.470E 01	15.601	-11.5	4.252E 01	0.014	4.
18.99	7.310E 01	15.742	-11.0	3.891E 01	0.016	3.
19.45	7.142E 01	15.869	-10.5	3.573E 01	0.016	3.
19.92	7.087E 01	16.002	-10.0	3.320E 01	0.016	3.
20.42	6.922E 01	16.141	-9.5	3.022E 01	0.016	3.
20.93	6.873E 01	16.287	-9.0	2.783E 01	0.016	3.
21.47	6.966E 01	16.439	-8.5	2.601E 01	0.015	3.
22.02	7.190E 01	16.599	-8.0	2.457E 01	0.015	3.
22.50	7.485E 01	16.738	-7.5	2.362E 01	0.017	2.
22.99	7.681E 01	16.883	-7.0	2.221E 01	0.014	3.
23.50	8.095E 01	17.033	-6.5	2.131E 01	0.016	2.
24.03	8.811E 01	17.190	-6.0	2.091E 01	0.013	3.
24.58	9.083E 01	17.353	-5.5	1.922E 01	0.015	2.
25.03	9.025E 01	17.488	-5.0	1.724E 01	0.015	2.

25.49	9.238E 01	17.628	-4.5	1.575E 01	0.015	2.
25.97	9.029E 01	17.773	-4.0	1.356E 01	0.015	2.
26.45	8.900E 01	17.922	-3.5	1.154E 01	0.015	2.
26.96	8.747E 01	18.077	-3.0	9.581E 00	0.015	2.
27.47	8.614E 01	18.237	-2.5	7.685E 00	0.015	2.
28.01	6.791E 01	18.402	-2.0	4.737E 00	0.032	2.
28.56	1.614E 02	18.573	-1.5	7.262E 00	0.043	2.
28.98	9.932E 02	18.705	-1.0	3.223E 01	0.007	1.
29.41	3.409E 03	18.841	-0.5	4.924E 01	0.002	2.
30.00	5.501E 03	19.028	-0.0	1.130E 01	0.001	2.
30.45	3.926E 03	19.172	0.5	1.416E 02	0.002	1.
30.92	1.448E 03	19.320	1.0	4.313E 02	0.003	2.
31.55	1.243E 02	19.524	1.5	3.278E 02	0.016	2.
32.04	1.337E 01	19.682	2.0	2.355E 02	0.068	1.
32.54	7.035E 00	19.844	2.5	6.129E 02	0.086	2.
33.06	4.875E 00	20.010	3.0	2.068E 03	0.156	1.
33.41	4.167E 00	20.124	3.5	5.115E 03	0.176	1.
33.94	3.432E 00	20.298	4.0	2.398E 04	0.142	2.
34.49	2.607E 00	20.477	4.5	8.106E 04	0.241	1.
35.05	1.934E 00	20.662	5.0	3.380E 05	0.213	2.
35.62	2.022E 00	20.851	5.5	1.753E 06	0.260	1.
36.01	1.564E 00	20.980	6.0	4.221E 06	0.318	1.
36.41	5.869E-01	21.112	6.5	5.003E 06	0.828	1.
37.02	6.663E-01	21.315	7.0	2.701E 07	0.834	2.
37.64	-2.454E-01	21.523	7.5	-7.245E 07	1.790	1.
38.07	-2.071E-01	21.665	8.0	-2.062E 08	2.078	1.
38.50	4.419E-01	21.810	8.5	1.510E 09	0.962	1.
38.94	-1.673E-01	21.958	9.0	-1.999E 09	2.383	1.
39.38	-1.153E-01	22.109	9.5	-4.911E 09	3.335	1.
39.84	-1.622E-01	22.263	10.0	-2.511E 10	2.449	1.
40.30	-4.788E-02	22.420	10.5	-2.751E 10	6.591	1.

LONGITUDINAL POLYETHYLENE 4.2K

6942 3

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.00800 KT=.00036

DATA CODE 6942 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 1 IS 280.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.59	1.350E 01	14.233	-27.5	5.259F 01	0.121	40.
2.99	1.073E 01	14.316	-27.0	3.912E 01	0.037	51.
3.49	1.317E 01	14.429	-26.5	4.209E 01	0.033	41.
3.99	2.421E 01	14.552	-26.0	7.091E 01	0.030	34.
4.50	3.729E 01	14.683	-25.5	9.998E 01	0.025	28.
5.00	4.959E 01	14.819	-25.0	1.231E 02	0.020	24.
5.49	5.648E 01	14.958	-24.5	1.300E 02	0.019	20.
5.99	5.315E 01	15.104	-24.0	1.139E 02	0.019	19.
6.50	4.984E 01	15.256	-23.5	9.939E 01	0.020	16.
6.99	5.238E 01	15.406	-23.0	9.777E 01	0.019	14.
7.48	4.770E 01	15.559	-22.5	8.747E 01	0.020	13.
7.99	5.339E 01	15.718	-22.0	8.760E 01	0.018	12.
8.49	5.452E 01	15.882	-21.5	8.403E 01	0.018	11.
9.00	5.438E 01	16.048	-21.0	7.879E 01	0.018	10.
9.50	5.384E 01	16.213	-20.5	7.341E 01	0.018	9.
9.99	5.310E 01	16.375	-20.0	6.842E 01	0.019	8.
10.47	5.620E 01	16.541	-19.5	6.835E 01	0.018	8.
11.00	5.966E 01	16.721	-19.0	6.822E 01	0.017	8.
11.49	6.426E 01	16.891	-18.5	6.943E 01	0.018	6.
11.98	6.279E 01	17.062	-18.0	6.411E 01	0.016	7.
12.50	6.828E 01	17.244	-17.5	6.570E 01	0.016	6.
13.02	7.092E 01	17.425	-17.0	6.432E 01	0.015	6.
13.51	7.447E 01	17.602	-16.5	6.382E 01	0.016	5.
13.99	7.780E 01	17.773	-16.0	6.312E 01	0.015	5.
14.49	8.150E 01	17.954	-15.5	6.235E 01	0.014	5.
15.02	8.375E 01	18.146	-15.0	6.026E 01	0.014	5.
15.52	8.310E 01	18.329	-14.5	5.636E 01	0.015	4.
15.99	7.913E 01	18.501	-14.0	5.076E 01	0.015	4.
16.48	8.324E 01	18.681	-13.5	5.035E 01	0.014	4.
16.99	8.395E 01	18.870	-13.0	4.767E 01	0.014	4.
17.53	8.503E 01	19.070	-12.5	4.519E 01	0.013	4.
18.02	8.478E 01	19.253	-12.0	4.237E 01	0.015	3.
18.46	8.056E 01	19.416	-11.5	3.807E 01	0.015	3.
18.99	7.887E 01	19.616	-11.0	3.473E 01	0.013	4.
19.54	7.892E 01	19.825	-10.5	3.224E 01	0.015	3.
20.03	7.855E 01	20.012	-10.0	2.997E 01	0.015	3.
20.55	8.021E 01	20.207	-9.5	2.842E 01	0.014	3.
20.99	8.095E 01	20.375	-9.0	2.687E 01	0.017	2.
21.45	8.309E 01	20.550	-8.5	2.571E 01	0.014	3.
22.01	8.697E 01	20.769	-8.0	2.457E 01	0.013	3.
22.50	8.826E 01	20.957	-7.5	2.299E 01	0.016	2.
23.01	9.464E 01	21.153	-7.0	2.254E 01	0.012	3.
23.54	9.896E 01	21.356	-6.5	2.139E 01	0.014	2.
23.97	1.061E 02	21.524	-6.0	2.106E 01	0.013	2.
24.42	1.077E 02	21.697	-5.5	1.949E 01	0.013	2.
24.99	1.066E 02	21.922	-5.0	1.696E 01	0.011	3.
25.58	1.051E 02	22.154	-4.5	1.445E 01	0.013	2.
26.08	1.010E 02	22.346	-4.0	1.214E 01	0.013	2.
26.58	9.924E 01	22.544	-3.5	1.021E 01	0.013	2.
27.10	1.010E 02	22.749	-3.0	8.670E 00	0.013	2.

27.50	1.029E 02	22.907	-2.5	7.501E 00	0.017	1.
27.91	1.207E 02	23.069	-2.0	7.204E 00	0.011	2.
28.47	3.577E 02	23.290	-1.5	1.459E 01	0.007	2.
29.05	2.142E 03	23.519	-1.0	4.902E 01	0.003	2.
29.49	4.676E 03	23.695	-0.5	4.924E 01	0.002	1.
29.95	5.503E 03	23.876	-0.0	9.221E 00	0.002	2.
30.57	2.962E 03	24.124	0.5	1.740E 02	0.002	2.
31.05	8.300E 02	24.316	1.0	3.897E 02	0.005	1.
31.54	1.374E 02	24.513	1.5	2.914E 02	0.013	2.
32.04	1.489E 01	24.714	2.0	2.175E 02	0.050	1.
32.56	1.029E 01	24.921	2.5	8.438E 02	0.044	2.
33.09	7.199E 00	25.133	3.0	2.757E 03	0.076	1.
33.44	6.231E 00	25.277	3.5	7.109E 03	0.085	1.
33.99	4.854E 00	25.499	4.0	3.154E 04	0.072	2.
34.56	2.681E 00	25.726	4.5	8.479E 04	0.166	1.
34.94	2.600E 00	25.881	5.0	2.543E 05	0.157	1.
35.53	1.826E 00	26.118	5.5	1.209E 06	0.149	2.
36.13	2.270E 00	26.362	6.0	7.116E 06	0.147	1.
36.54	1.930E 00	26.528	6.5	1.980E 07	0.190	1.
36.95	1.110E 00	26.698	7.0	3.789E 07	0.294	1.
37.38	1.352E 00	26.870	7.5	1.562E 08	0.245	1.
38.03	2.388E-01	27.135	8.0	-1.253E 07	0.550	2.

LONGITUDINAL POLYETHYLENE 4.2K

6942 1

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.00800 KT=.00036

DATA CODE 6942 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 5 IS 270.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.60	2.002E 01	15.711	-27.5	7.190E 01	0.059	39.
2.99	1.400E 01	15.900	-27.0	4.636E 01	0.036	51.
3.49	1.529E 01	16.142	-26.5	4.434E 01	0.034	42.
4.00	2.843E 01	16.385	-26.0	7.488E 01	0.030	33.
4.49	4.405E 01	16.624	-25.5	1.062E 02	0.024	28.
4.99	5.682E 01	16.865	-25.0	1.261E 02	0.020	24.
5.49	6.042E 01	17.108	-24.5	1.238E 02	0.019	21.
5.99	6.028E 01	17.349	-24.0	1.144E 02	0.019	18.
6.49	5.838E 01	17.587	-23.5	1.030E 02	0.019	16.
6.99	5.891E 01	17.831	-23.0	9.684E 01	0.019	15.
7.50	6.116E 01	18.077	-22.5	9.302E 01	0.019	13.
8.01	5.984E 01	18.320	-22.0	8.592E 01	0.019	12.
8.49	5.772E 01	18.554	-21.5	7.779E 01	0.020	10.
8.98	5.921E 01	18.786	-21.0	7.509E 01	0.019	10.
9.50	6.066E 01	19.039	-20.5	7.208E 01	0.018	10.
10.01	6.108E 01	19.285	-20.0	6.819E 01	0.019	8.
10.50	6.351E 01	19.522	-19.5	6.686E 01	0.018	8.
11.00	6.413E 01	19.760	-19.0	6.363E 01	0.018	7.
11.49	6.705E 01	19.997	-18.5	6.274E 01	0.017	7.
11.98	6.662E 01	20.232	-18.0	5.893E 01	0.018	6.
12.50	7.223E 01	20.483	-17.5	6.009E 01	0.016	7.
13.01	7.892E 01	20.728	-17.0	6.187E 01	0.017	5.
13.50	7.820E 01	20.968	-16.5	5.786E 01	0.015	6.
14.03	8.577E 01	21.220	-16.0	5.968E 01	0.015	5.
14.53	8.568E 01	21.463	-15.5	5.616E 01	0.015	5.
15.01	8.751E 01	21.693	-15.0	5.426E 01	0.016	4.
15.51	8.802E 01	21.934	-14.5	5.143E 01	0.014	5.
16.03	8.821E 01	22.188	-14.0	4.840E 01	0.015	4.
16.52	8.747E 01	22.424	-13.5	4.519E 01	0.015	4.
17.04	9.177E 01	22.672	-13.0	4.451E 01	0.014	4.
17.51	9.175E 01	22.898	-12.5	4.196E 01	0.016	3.
18.00	9.459E 01	23.134	-12.0	4.067E 01	0.014	4.
18.51	9.074E 01	23.379	-11.5	3.655E 01	0.016	3.
18.96	9.070E 01	23.598	-11.0	3.438E 01	0.016	3.
19.43	8.774E 01	23.825	-10.5	3.120E 01	0.015	3.
19.92	8.817E 01	24.061	-10.0	2.931E 01	0.015	3.
20.43	9.167E 01	24.306	-9.5	2.834E 01	0.015	3.
20.96	9.522E 01	24.560	-9.0	2.723E 01	0.014	3.
21.50	9.489E 01	24.824	-8.5	2.496E 01	0.014	3.
21.98	9.442E 01	25.052	-8.0	2.303E 01	0.017	2.
22.47	1.013E 02	25.288	-7.5	2.277E 01	0.013	3.
22.97	1.078E 02	25.532	-7.0	2.220E 01	0.015	2.
23.50	1.119E 02	25.784	-6.5	2.090E 01	0.012	3.
24.04	1.164E 02	26.045	-6.0	1.956E 01	0.014	2.
24.48	1.203E 02	26.260	-5.5	1.841E 01	0.014	2.
24.94	1.152E 02	26.481	-5.0	1.592E 01	0.014	2.
25.41	1.193E 02	26.708	-4.5	1.471E 01	0.014	2.
25.90	1.154E 02	26.942	-4.0	1.251E 01	0.014	2.
26.40	1.131E 02	27.183	-3.5	1.058E 01	0.014	2.
26.91	1.127E 02	27.431	-3.0	8.904E 00	0.014	2.

27.44	1.184E 02	27.686	-2.5	7.624E 00	0.016	2.
27.99	1.483E 02	27.949	-2.0	7.238E 00	0.017	2.
28.55	6.621E 02	28.219	-1.5	2.180E 01	0.006	2.
28.98	2.366E 02	28.427	-1.0	5.441E 00	0.012	1.
29.42	2.572E 03	28.641	-0.5	2.551E 01	0.002	2.
30.03	5.041E 03	28.933	-0.0	8.650E 00	0.002	2.
30.49	3.074E 03	29.157	0.5	1.010E 02	0.003	1.
30.97	1.080E 03	29.387	1.0	2.831E 02	0.004	2.
31.46	1.492E 02	29.623	1.5	2.684E 02	0.014	1.
31.96	2.344E 01	29.864	2.0	2.075E 02	0.039	2.
32.47	1.100E 01	30.111	2.5	5.439E 02	0.076	1.
33.00	7.548E 00	30.364	3.0	2.074E 03	0.074	2.
33.53	5.057E 00	30.623	3.5	6.539E 03	0.137	1.
33.90	3.563E 00	30.799	4.0	1.383E 04	0.189	1.
34.46	3.047E 00	31.069	4.5	7.402E 04	0.149	2.
35.03	2.209E 00	31.346	5.0	2.462E 05	0.270	1.
35.42	8.613E-01	31.534	5.5	3.013E 05	0.642	1.
36.02	4.219E-01	31.823	6.0	8.245E 05	1.008	2.
36.64	4.762E-01	32.118	6.5	5.620E 06	1.072	1.
37.05	-1.044E 00	32.319	7.0	-4.112E 07	0.448	1.
37.48	2.728E-01	32.524	7.5	3.645E 07	1.756	1.
37.91	6.816E-01	32.732	8.0	3.147E 08	0.651	1.
38.35	4.879E-01	32.944	8.5	7.932E 08	0.540	1.

LONGITUDINAL POLYETHYLENE 4.2K

6942 5

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 6942 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 6 IS 80.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.68	3.573E 01	14.871	-27.9	1.039E 02	0.104	17.
2.99	2.962E 01	14.316	-27.0	1.126E 02	0.042	53.
3.49	2.972E 01	14.429	-26.5	1.035E 02	0.024	43.
3.99	2.934E 01	14.552	-26.0	9.092E 01	0.030	34.
4.49	4.602E 01	14.680	-25.5	1.312E 02	0.026	29.
4.99	6.741E 01	14.816	-25.0	1.118E 02	0.020	25.
5.49	7.347E 01	14.959	-24.5	1.795E 02	0.019	22.
6.00	6.902E 01	15.107	-24.0	1.568E 02	0.019	19.
6.50	6.430E 01	15.254	-23.5	1.364E 02	0.021	16.
6.99	6.417E 01	15.403	-23.0	1.274E 02	0.020	15.
7.50	6.528E 01	15.562	-22.5	1.214E 02	0.019	14.
8.00	6.829E 01	15.723	-22.0	1.192E 02	0.019	12.
8.49	6.944E 01	15.881	-21.5	1.140E 02	0.019	11.
8.98	7.473E 01	16.041	-21.0	1.157E 02	0.018	10.
9.49	7.408E 01	16.209	-20.5	1.080E 02	0.017	10.
10.01	7.946E 01	16.384	-20.0	1.090E 02	0.017	9.
10.52	8.497E 01	16.555	-19.5	1.099E 02	0.016	8.
10.99	8.810E 01	16.718	-19.0	1.079E 02	0.016	7.
11.47	9.544E 01	16.882	-18.5	1.107E 02	0.015	7.
11.98	9.715E 01	17.059	-18.0	1.063E 02	0.015	7.
12.48	1.097E 02	17.235	-17.5	1.134E 02	0.014	6.
12.97	1.184E 02	17.409	-17.0	1.157E 02	0.013	6.
13.49	1.264E 02	17.595	-16.5	1.165E 02	0.012	6.
14.00	1.325E 02	17.776	-16.0	1.153E 02	0.013	5.
14.48	1.347E 02	17.951	-15.5	1.108E 02	0.012	5.
14.99	1.325E 02	18.136	-15.0	1.029E 02	0.012	5.
15.48	1.222E 02	18.312	-14.5	8.965E 01	0.014	4.
15.98	1.166E 02	18.498	-14.0	8.059E 01	0.012	5.
16.52	1.103E 02	18.694	-13.9	7.875E 01	0.013	4.
17.01	1.203E 02	18.878	-13.0	7.351E 01	0.013	4.
17.53	1.274E 02	19.070	-12.5	7.308E 01	0.012	4.
18.00	1.305E 02	19.247	-12.0	7.053E 01	0.014	3.
18.50	1.303E 02	19.432	-11.5	6.617E 01	0.012	4.
19.01	1.228E 02	19.625	-11.0	5.836E 01	0.014	3.
19.47	1.200E 02	19.798	-10.5	5.360E 01	0.014	3.
19.94	1.208E 02	19.977	-10.0	5.055E 01	0.013	3.
20.43	1.207E 02	20.164	-9.5	4.713E 01	0.013	3.
20.94	1.217E 02	20.358	-9.0	4.412E 01	0.013	3.
21.47	1.212E 02	20.561	-8.5	4.055E 01	0.013	3.
22.02	1.210E 02	20.772	-8.0	3.711E 01	0.012	3.
22.50	1.255E 02	20.954	-7.5	3.560E 01	0.015	2.
22.99	1.258E 02	21.143	-7.0	3.276E 01	0.012	3.
23.49	1.285E 02	21.339	-6.5	3.050E 01	0.014	2.
24.02	1.303E 02	21.542	-6.0	2.796E 01	0.011	3.
24.56	1.240E 02	21.752	-5.5	2.375E 01	0.014	2.
25.00	1.240E 02	21.926	-5.0	2.150E 01	0.014	2.
25.46	1.280E 02	22.105	-4.5	1.986E 01	0.013	2.
25.93	1.251E 02	22.289	-4.0	1.713E 01	0.013	2.
26.41	1.230E 02	22.479	-3.5	1.462E 01	0.013	2.
26.91	1.265E 02	22.674	-3.0	1.274E 01	0.013	2.

27.42	1.226E 02	22.876	-2.5	1.015E 01	0.013	2.
27.95	1.303E 02	23.084	-2.0	8.378E 00	0.013	2.
28.49	2.446E 02	23.298	-1.5	1.093E 01	0.009	2.
29.05	1.502E 03	23.519	-1.0	3.730E 01	0.004	2.
29.48	4.121E 03	23.689	-0.5	4.972E 01	0.003	1.
29.92	5.985E 03	23.864	-0.0	1.068E 01	0.002	2.
30.52	3.681E 03	24.103	0.5	1.809E 02	0.002	2.
30.98	1.018E 03	24.288	1.0	3.999E 02	0.006	1.
31.45	1.555E 02	24.477	1.5	2.667E 02	0.022	2.
31.93	2.074E 01	24.670	2.0	2.348E 02	0.089	1.
32.43	1.235E 01	24.869	2.5	8.051E 02	0.087	2.
32.93	9.818E 00	25.072	3.0	2.621E 03	0.121	1.
33.45	6.395E 00	25.281	3.5	9.899E 03	0.117	2.
33.98	5.614E 00	25.495	4.0	3.590E 04	0.174	1.
34.53	3.664E 00	25.714	4.5	1.321E 05	0.179	2.
35.08	1.290E 00	25.939	5.0	2.136E 05	0.656	1.
35.46	2.707E 00	26.092	5.5	1.357E 06	0.305	1.
36.04	1.784E 00	26.327	6.0	5.566E 06	0.301	2.
36.63	1.418E 00	26.568	6.5	2.144E 07	0.509	1.
37.04	1.774E 00	26.732	7.0	8.600E 07	0.394	1.
37.45	1.616E 00	26.899	7.5	2.553E 08	0.416	1.
37.87	4.388E 00	27.069	8.0	2.297E 09	0.126	1.
38.51	6.701E-01	27.330	8.5	3.333E 09	1.000	2.
39.16	1.438E 00	27.598	9.0	3.047E 10	0.411	1.
39.61	3.053E 00	27.780	9.5	2.307E 11	0.164	1.
40.06	9.754E-01	27.966	10.0	2.680E 11	0.564	1.
40.53	-2.743E-01	28.156	10.5	-2.797E 11	1.922	1.
41.00	8.875E-01	28.349	11.0	3.429E 12	0.283	1.

TRANSVERSE POLYETHYLENE 4.2K

6942 6

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 6942 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 2 IS 90.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.73	3.579E 01	19.777	-27.5	1.321E 02	0.245	5.
2.99	2.683E 01	15.901	-27.0	9.354E 01	0.191	54.
3.49	3.850E 01	16.141	-26.5	1.210E 02	0.027	43.
3.99	2.537E 01	16.384	-26.0	7.112E 01	0.042	36.
4.50	4.957E 01	16.626	-25.5	1.274E 02	0.032	29.
4.99	7.000E 01	16.864	-25.0	1.681E 02	0.024	25.
5.49	7.434E 01	17.104	-24.5	1.631E 02	0.022	22.
5.98	7.166E 01	17.344	-24.0	1.459E 02	0.023	19.
6.48	7.236E 01	17.583	-23.5	1.372E 02	0.022	17.
6.99	7.061E 01	17.830	-23.0	1.248E 02	0.021	16.
7.49	7.389E 01	18.071	-22.5	1.221E 02	0.021	13.
7.99	7.448E 01	18.310	-22.0	1.152E 02	0.020	13.
8.49	7.641E 01	18.552	-21.5	1.110E 02	0.020	11.
9.00	8.139E 01	18.796	-21.0	1.110E 02	0.018	11.
9.49	8.240E 01	19.035	-20.5	1.058E 02	0.019	9.
9.98	8.726E 01	19.269	-20.0	1.057E 02	0.017	9.
10.50	9.027E 01	19.521	-19.5	1.027E 02	0.016	9.
11.00	9.765E 01	19.762	-19.0	1.048E 02	0.017	7.
11.50	9.689E 01	20.004	-18.5	9.813E 01	0.015	8.
12.00	1.103E 02	20.245	-18.0	1.054E 02	0.016	6.
12.50	1.182E 02	20.484	-17.5	1.066E 02	0.014	7.
13.02	1.294E 02	20.737	-17.0	1.100E 02	0.013	6.
13.49	1.379E 02	20.964	-16.5	1.110E 02	0.014	5.
13.99	1.432E 02	21.203	-16.0	1.089E 02	0.012	6.
14.52	1.484E 02	21.456	-15.5	1.062E 02	0.012	5.
15.02	1.422E 02	21.699	-15.0	9.610E 01	0.012	5.
15.49	1.359E 02	21.928	-14.5	8.684E 01	0.014	4.
15.99	1.282E 02	22.168	-14.0	7.722E 01	0.013	5.
16.52	1.272E 02	22.420	-13.5	7.193E 01	0.014	4.
17.00	1.310E 02	22.655	-13.0	6.988E 01	0.013	4.
17.51	1.375E 02	22.900	-12.5	6.889E 01	0.013	4.
18.04	1.422E 02	23.157	-12.0	6.668E 01	0.012	4.
18.53	1.451E 02	23.390	-11.5	6.393E 01	0.013	3.
18.96	1.343E 02	23.599	-11.0	5.594E 01	0.014	3.
19.48	1.369E 02	23.851	-10.5	5.318E 01	0.012	4.
20.03	1.353E 02	24.114	-10.0	4.876E 01	0.013	3.
20.52	1.372E 02	24.348	-9.5	4.618E 01	0.013	3.
21.02	1.351E 02	24.590	-9.0	4.222E 01	0.013	3.
21.54	1.369E 02	24.842	-8.5	3.954E 01	0.012	3.
21.99	1.369E 02	25.059	-8.0	3.681E 01	0.016	2.
22.46	1.379E 02	25.283	-7.5	3.434E 01	0.012	3.
23.03	1.391E 02	25.562	-7.0	3.135E 01	0.012	3.
23.53	1.392E 02	25.802	-6.5	2.864E 01	0.014	2.
23.94	1.442E 02	25.999	-6.0	2.743E 01	0.014	2.
24.47	1.425E 02	26.254	-5.5	2.429E 01	0.011	3.
25.02	1.419E 02	26.517	-5.0	2.142E 01	0.013	2.
25.47	1.385E 02	26.734	-4.5	1.874E 01	0.013	2.
25.93	1.413E 02	26.957	-4.0	1.693E 01	0.013	2.
26.40	1.411E 02	27.186	-3.5	1.471E 01	0.013	2.
26.89	1.417E 02	27.421	-3.0	1.257E 01	0.013	2.

27.39	1.405E 02	27.663	-2.5	1.029E 01	0.013	2.
27.91	1.425E 02	27.911	-2.0	8.206E 00	0.012	2.
28.44	2.073E 02	28.167	-1.5	8.541E 00	0.010	2.
28.99	1.061E 03	28.430	-1.0	2.513E 01	0.005	2.
29.55	4.278E 03	28.701	-0.5	3.348E 01	0.002	2.
29.98	6.120E 03	28.909	-0.0	1.995E-01	0.002	1.
30.42	4.217E 03	29.122	0.5	1.099E 02	0.002	2.
31.02	8.651E 02	29.413	1.0	2.926E 02	0.007	2.
31.49	6.731E 01	29.637	1.5	1.513E 02	0.061	1.
31.97	1.785E 01	29.867	2.0	2.151E 02	0.166	2.
32.45	1.368E 01	30.101	2.5	7.148E 02	0.278	1.
32.95	9.354E 00	30.341	3.0	2.626E 03	0.208	2.
33.46	5.527E 00	30.586	3.5	6.415E 03	0.262	1.
33.98	4.479E 00	30.837	4.0	2.820E 04	0.165	2.
34.51	3.549E 00	31.094	4.5	9.641E 04	0.263	1.
35.06	1.822E 00	31.358	5.0	3.341E 05	0.441	2.
35.62	1.625E 00	31.627	5.5	1.133E 06	0.567	1.
36.00	2.415E 00	31.810	6.0	5.091E 06	0.359	1.
36.38	2.185E 00	31.996	6.5	1.413E 07	0.389	1.
36.98	1.697E 00	32.282	7.0	7.355E 07	0.316	2.
37.58	2.718E 00	32.573	7.5	5.540E 08	0.257	1.
37.99	1.899E 00	32.772	8.0	1.263E 09	0.362	1.
38.41	1.984E 00	32.974	8.5	4.375E 09	0.337	1.
38.84	1.599E 00	33.179	9.0	1.190E 10	0.412	1.
39.49	3.678E-01	33.494	9.5	2.596E 10	1.534	2.
40.16	-3.351E 00	33.816	10.0	-1.072E 12	0.168	1.
40.61	3.133E-01	34.035	10.5	3.649E 11	1.815	1.
41.08	-3.702E-01	34.258	11.0	-1.602E 12	1.536	1.
41.55	5.064E-01	34.485	11.5	8.315E 12	1.096	1.
42.03	-2.194E-01	34.716	12.0	-1.396E 13	2.471	1.
42.52	1.610E 00	34.951	12.5	4.062E 14	0.149	1.

TRANSVERSE POLYETHYLENE 4.2K

6942 2

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 6942 COMPUTED 080867 INCIDENT ENERGY .0300 ANGLE NO 4 IS 100.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
2.67	1.622E 01	17.244	-27.5	5.655E 01	0.170	21.
2.99	2.226E 01	17.488	-27.0	7.146E 01	0.044	53.
3.49	1.628E 01	17.856	-26.5	4.782E 01	0.029	42.
3.99	1.982E 01	18.213	-26.0	5.099E 01	0.034	34.
4.49	4.316E 01	18.564	-25.5	1.018E 02	0.024	29.
4.99	6.136E 01	18.913	-25.0	1.330E 02	0.019	25.
5.49	6.653E 01	19.254	-24.5	1.331E 02	0.018	21.
5.99	6.641E 01	19.590	-24.0	1.230E 02	0.019	19.
6.50	6.729E 01	19.929	-23.5	1.456E 02	0.018	17.
7.01	6.616E 01	20.264	-23.0	1.056E 02	0.019	15.
7.50	7.030E 01	20.588	-22.5	1.048E 02	0.019	13.
7.99	7.121E 01	20.905	-22.0	9.950E 01	0.018	12.
8.49	7.436E 01	21.221	-21.5	9.748E 01	0.018	11.
8.98	7.703E 01	21.535	-21.0	9.481E 01	0.018	10.
9.49	8.092E 01	21.857	-20.5	9.359E 01	0.017	10.
10.01	8.586E 01	22.187	-20.0	9.319E 01	0.017	9.
10.52	8.975E 01	22.505	-19.5	9.167E 01	0.017	8.
11.00	9.356E 01	22.803	-19.0	9.018E 01	0.017	7.
11.48	9.723E 01	23.100	-18.5	8.862E 01	0.016	7.
11.99	1.085E 02	23.415	-18.0	9.318E 01	0.015	7.
12.50	1.183E 02	23.725	-17.5	9.584E 01	0.015	6.
12.99	1.301E 02	24.027	-17.0	9.953E 01	0.014	6.
13.52	1.354E 02	24.347	-16.5	9.746E 01	0.013	6.
14.03	1.390E 02	24.656	-16.0	9.437E 01	0.014	5.
14.52	1.417E 02	24.952	-15.5	9.095E 01	0.014	5.
15.04	1.396E 02	25.262	-15.0	8.430E 01	0.013	5.
15.52	1.275E 02	25.555	-14.5	7.280E 01	0.015	4.
15.98	1.230E 02	25.826	-14.0	6.653E 01	0.015	4.
16.45	1.191E 02	26.109	-13.5	6.086E 01	0.016	4.
16.95	1.257E 02	26.403	-13.0	6.052E 01	0.015	4.
17.47	1.282E 02	26.711	-12.5	5.792E 01	0.014	4.
18.01	1.322E 02	27.032	-12.0	5.581E 01	0.014	4.
18.51	1.314E 02	27.324	-11.5	5.208E 01	0.016	3.
18.95	1.229E 02	27.583	-11.0	4.604E 01	0.016	3.
19.48	1.209E 02	27.898	-10.5	4.218E 01	0.014	4.
20.04	1.217E 02	28.224	-10.0	3.930E 01	0.016	3.
20.54	1.222E 02	28.515	-9.5	3.675E 01	0.016	3.
21.06	1.242E 02	28.816	-9.0	3.469E 01	0.015	3.
21.50	1.254E 02	29.075	-8.5	3.273E 01	0.018	2.
21.96	1.272E 02	29.343	-8.0	3.086E 01	0.015	3.
22.54	1.307E 02	29.674	-7.5	2.891E 01	0.014	3.
23.03	1.309E 02	29.959	-7.0	2.657E 01	0.017	2.
23.54	1.384E 02	30.254	-6.5	2.559E 01	0.014	3.
24.07	9.720E 01	30.557	-6.0	1.636E 01	0.023	2.
24.50	1.318E 02	30.807	-5.5	2.009E 01	0.017	2.
24.95	1.360E 02	31.064	-5.0	1.877E 01	0.016	2.

25.41	1,305E 02	31.327	-4,5	1,614E 01	0,017	2.
26.00	1,365E 02	31.666	-4,0	1,445E 01	0,013	3.
26.61	1,390E 02	32.016	-3,5	1,189E 01	0,016	2.
27.12	1,327E 02	32.304	-3,0	9,769E 00	0,016	2.
27.51	1,334E 02	32.526	-2,5	8,408E 00	0,023	1.
27.90	1,400E 02	32.752	-2,0	7,295E 00	0,016	2.
28.45	2,440E 02	33.061	-1,5	8,942E 00	0,012	2.
29.01	1,331E 03	33.379	-1,0	2,780E 01	0,005	2.
29.58	4,247E 03	33.705	-0,5	2,731E 01	0,002	2.
30.03	4,996E 03	33.956	-0,0	2,304E 01	0,003	1.
30.48	2,767E 03	34.212	0,5	8,619E 01	0,003	2.
30.94	6,516E 02	34.474	1,0	1,777E 02	0,009	1.
31.42	9,420E 01	34.742	1,5	1,173E 02	0,024	2.
32.07	1,421E 01	35.108	2,0	2,089E 02	0,062	2.
32.57	9,228E 00	35.390	2,5	6,317E 02	0,119	1.
32.91	7,730E 00	35.581	3,0	1,523E 03	0,131	1.
33.43	5,588E 00	35.874	3,5	6,206E 03	0,118	2.
33.96	4,039E 00	36.172	4,0	1,942E 04	0,215	1.
34.51	4,246E 00	36.479	4,5	1,213E 05	0,140	2.
35.07	2,935E 00	36.791	5,0	3,725E 05	0,266	1.
35.45	2,362E 00	37.004	5,5	9,137E 05	0,311	1.
36.03	1,749E 00	37.330	6,0	4,565E 06	0,296	2.
36.63	2,239E 00	37.662	6,5	2,666E 07	0,314	1.
37.03	1,422E 00	37.889	7,0	5,468E 07	0,461	1.
37.45	9,368E 01	38.119	7,5	1,182E 08	0,669	1.
37.87	-3,085E 01	38.352	8,0	-1,300E 08	2,121	1.
38.51	-3,298E 01	38.710	8,5	1,251E 09	0,353	2.
39.17	1,783E 00	39.076	9,0	3,117E 10	0,324	1.
39.62	-1,284E 00	39.326	9,5	-8,071E 10	0,467	1.
40.07	3,624E 01	39.579	10,0	8,353E 10	1,637	1.
40.54	2,505E 01	39.837	10,5	2,162E 11	1,079	1.

TRANSVERSE POLYETHYLENE 4,2K

6942 4

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.00800 KT=.00036

DATA CODE 6928 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 3 IS 290.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.68	1.844F 01	17.053	-36.5	7.911E 01	0.127	10.
3.99	1.986E 01	17.038	-36.0	8.089E 01	0.081	35.
4.50	1.770E 01	17.026	-35.5	6.731E 01	0.056	29.
5.00	1.612E 01	17.027	-35.0	5.718E 01	0.051	24.
5.49	1.860E 01	17.040	-34.5	6.217E 01	0.046	81.
5.99	2.000E 01	17.063	-34.0	6.540E 01	0.042	19.
6.50	2.212E 01	17.096	-33.5	6.577E 01	0.039	17.
7.01	2.217E 01	17.138	-33.0	6.231E 01	0.040	15.
7.51	2.519E 01	17.185	-32.5	6.728E 01	0.036	13.
8.00	2.486E 01	17.238	-32.0	6.312E 01	0.036	12.
8.49	2.635E 01	17.296	-31.5	6.376E 01	0.035	11.
8.99	2.700E 01	17.360	-31.0	6.226E 01	0.035	10.
9.50	2.919E 01	17.431	-30.5	6.427E 01	0.031	10.
10.00	3.097E 01	17.505	-30.0	6.514E 01	0.033	8.
10.47	3.119E 01	17.580	-29.5	6.282E 01	0.031	8.
10.99	3.078E 01	17.663	-29.0	5.920E 01	0.031	8.
11.50	3.166E 01	17.751	-28.5	5.829E 01	0.030	7.
12.02	3.319E 01	17.843	-28.0	5.844E 01	0.029	7.
12.52	3.678E 01	17.937	-27.5	6.195E 01	0.029	6.
13.02	3.976E 01	18.032	-27.0	6.422E 01	0.026	6.
13.51	3.944E 01	18.126	-26.5	6.114E 01	0.028	5.
13.97	4.970E 01	18.219	-26.0	7.409E 01	0.024	5.
14.46	6.434E 01	18.320	-25.5	9.204E 01	0.020	5.
14.97	7.447E 01	18.428	-25.0	1.021E 02	0.018	5.
15.52	7.606E 01	18.544	-24.5	9.974E 01	0.017	5.
16.03	7.259E 01	18.657	-24.0	9.125E 01	0.020	4.
16.51	7.316E 01	18.764	-23.5	8.836E 01	0.019	4.
17.01	7.427E 01	18.877	-23.0	8.606E 01	0.018	4.
17.53	7.103E 01	18.998	-22.5	7.878E 01	0.018	4.
18.01	7.285E 01	19.110	-22.0	7.761E 01	0.021	3.
18.50	7.296E 01	19.229	-21.5	7.457E 01	0.018	4.
19.02	7.848E 01	19.354	-21.0	7.680E 01	0.019	3.
19.48	7.419E 01	19.467	-20.5	6.979E 01	0.019	3.
19.96	8.198E 01	19.585	-20.0	7.403E 01	0.018	3.
20.46	7.974E 01	19.709	-19.5	6.900E 01	0.018	3.
20.98	8.249E 01	19.840	-19.0	6.828E 01	0.017	3.
21.51	8.284E 01	19.976	-18.5	6.543E 01	0.017	3.
21.97	8.362E 01	20.096	-18.0	6.340E 01	0.020	2.
22.45	8.979E 01	20.220	-17.5	6.523E 01	0.016	3.
23.04	9.198E 01	20.376	-17.0	6.333E 01	0.015	3.
23.55	9.576E 01	20.512	-16.5	6.285E 01	0.018	2.
23.98	9.213E 01	20.626	-16.0	5.815E 01	0.018	2.
24.52	8.998E 01	20.773	-15.5	5.394E 01	0.015	3.
25.08	9.118E 01	20.926	-15.0	5.175E 01	0.017	2.
25.55	8.401E 01	21.054	-14.5	4.554E 01	0.018	2.
26.02	8.339E 01	21.186	-14.0	4.310E 01	0.018	2.
26.52	8.425E 01	21.322	-13.5	4.138E 01	0.017	2.
27.02	8.257E 01	21.464	-13.0	3.847E 01	0.018	2.
27.54	8.638E 01	21.610	-12.5	3.807E 01	0.017	2.
28.07	8.443E 01	21.762	-12.0	3.507E 01	0.017	2.

28.48	8.589E 01	21.880	-11.5	3.404E 01	0.023	1.
28.90	8.720E 01	22.001	-11.0	3.292E 01	0.016	2.
29.48	8.523E 01	22.167	-10.5	3.001E 01	0.016	2.
30.07	8.789E 01	22.339	-10.0	2.873E 01	0.016	2.
30.53	9.170E 01	22.472	-9.5	2.825E 01	0.021	1.
30.99	9.398E 01	22.609	-9.0	2.717E 01	0.015	2.
31.47	9.345E 01	22.750	-8.5	2.527E 01	0.021	1.
31.96	9.943E 01	22.895	-8.0	2.502E 01	0.014	2.
32.46	9.955E 01	23.044	-7.5	2.319E 01	0.020	1.
32.97	1.049E 02	23.198	-7.0	2.248E 01	0.013	2.
33.49	1.083E 02	23.355	-6.5	2.120E 01	0.018	1.
34.03	1.105E 02	23.518	-6.0	1.957E 01	0.013	2.
34.58	1.138E 02	23.684	-5.5	1.807E 01	0.019	1.
34.95	1.151E 02	23.798	-5.0	1.685E 01	0.019	1.
35.52	1.132E 02	23.974	-4.5	1.449E 01	0.013	2.
36.11	1.150E 02	24.154	-4.0	1.261E 01	0.017	1.
36.51	1.082E 02	24.277	-3.5	1.054E 01	0.018	1.
36.91	1.038E 02	24.403	-3.0	8.854E 00	0.019	1.
37.54	8.905E 01	24.596	-2.5	6.026E 00	0.029	2.
38.17	1.845E 02	24.795	-2.0	9.000E 00	0.033	1.
38.60	6.287E 02	24.931	-1.5	2.282E 01	0.012	1.
39.05	1.979E 03	25.069	-1.0	4.615E 01	0.005	1.
39.49	4.393E 03	25.211	-0.5	4.359E 01	0.003	1.
39.95	4.922E 03	25.355	-0.0	8.119E-01	0.002	1.
40.41	3.961E 03	25.503	0.5	8.968E 01	0.002	1.
40.89	2.016E 03	25.653	1.0	4.775E 02	0.003	1.
41.37	6.250E 02	25.807	1.5	9.113E 02	0.006	1.
41.86	1.107E 02	25.963	2.0	8.522E 02	0.016	1.
42.35	1.634E 01	26.123	2.5	6.268E 02	0.051	1.
42.86	7.646E 00	26.287	3.0	1.432E 03	0.093	1.
43.38	6.623E 00	26.453	3.5	6.024E 03	0.100	1.
43.90	4.617E 00	26.624	4.0	2.048E 04	0.138	1.
44.44	2.180E 00	26.798	4.5	4.766E 04	0.290	1.
44.98	1.493E 00	26.975	5.0	1.632E 05	0.404	1.
45.54	3.279E 00	27.157	5.5	1.824E 06	0.178	1.
46.10	3.597E 00	27.342	6.0	1.039E 07	0.153	1.
46.68	5.881E 00	27.531	6.5	9.013E 07	0.092	1.
47.26	5.089E 00	27.725	7.5	4.240E 08	0.103	1.
47.86	3.582E 00	27.923	8.0	1.664E 09	0.136	1.
48.47	1.865E 00	28.125	8.5	4.964E 09	0.229	1.
49.09	1.352E 00	28.331	9.0	2.120E 10	0.300	1.
49.73	5.071E-01	28.542	9.5	4.828E 10	0.753	1.
50.37	7.292E-01	28.758	10.5	4.346E 11	0.516	1.
51.03	5.909E-01	28.979	11.0	2.277E 12	0.596	1.
51.70	1.203E 00	29.205	11.5	3.097E 13	0.304	1.
52.38	6.673E-01	29.436	12.5	1.189E 14	0.528	1.
53.08	9.795E-01	29.672	13.0	1.251E 15	0.347	1.
53.79	5.113E-01	29.913	14.0	4.855E 15	0.672	1.
54.52	2.638E-01	30.160	14.5	1.935E 16	1.246	1.
55.26	8.340E-01	30.413	15.5	4.916E 17	0.367	1.
56.02	2.362E-01	30.672	16.0	1.165E 18	1.318	1.
56.79	6.608E-02	30.937	17.0	2.843E 18	4.630	1.
57.58	1.057E-01	31.208	17.5	4.143E 19	2.749	1.
58.38	9.608E-01	31.486	18.5	3.584E 21	0.298	1.
59.20	3.087E-01	31.770	19.0	1.148E 22	0.882	1.

LONGITUDINAL POLYETHYLENE 4.2K

6928 3

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.00800 KT=.00036

DATA CODE 6928 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 1 IS 280.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.52	1.019E 01	19.000	-36.5	7.237E 01	0.127	25.
3.99	1.807E 01	19.088	-36.0	6.711E 01	0.056	33.
4.49	1.891E 01	19.201	-35.5	6.512E 01	0.047	29.
4.99	2.236E 01	19.321	-35.0	7.133E 01	0.044	23.
5.49	1.916E 01	19.444	-34.5	5.732E 01	0.043	21.
5.99	2.000E 01	19.514	-34.0	5.624E 01	0.043	18.
6.49	2.314E 01	19.712	-33.5	6.100E 01	0.037	17.
7.00	2.458E 01	19.853	-33.0	6.112E 01	0.036	14.
7.49	2.619E 01	19.993	-32.5	6.148E 01	0.034	13.
8.00	2.737E 01	20.140	-32.0	6.094E 01	0.033	12.
8.51	2.854E 01	20.292	-31.5	6.025E 01	0.032	11.
9.02	2.956E 01	20.446	-31.0	5.924E 01	0.032	10.
9.52	2.990E 01	20.600	-30.5	5.708E 01	0.032	9.
10.00	3.273E 01	20.752	-30.0	5.957E 01	0.031	8.
10.49	3.179E 01	20.907	-29.5	5.525E 01	0.031	8.
10.98	3.428E 01	21.065	-29.0	5.685E 01	0.030	7.
11.48	3.939E 01	21.224	-28.5	6.243E 01	0.027	7.
12.00	3.867E 01	21.397	-28.0	5.845E 01	0.026	7.
12.52	3.986E 01	21.569	-27.5	5.750E 01	0.027	6.
12.99	4.061E 01	21.726	-27.0	5.622E 01	0.028	5.
13.49	4.346E 01	21.893	-26.5	5.755E 01	0.025	6.
14.01	5.656E 01	22.070	-26.0	7.153E 01	0.022	5.
14.52	7.300E 01	22.243	-25.5	8.839E 01	0.019	5.
14.99	8.598E 01	22.407	-25.0	1.000E 02	0.019	4.
15.49	8.637E 01	22.500	-24.5	9.625E 01	0.016	5.
16.02	8.316E 01	22.764	-24.0	8.859E 01	0.010	4.
16.51	8.015E 01	22.936	-23.5	8.191E 01	0.018	4.
17.02	7.862E 01	23.117	-23.0	7.687E 01	0.018	4.
17.49	0.357E 01	23.283	-22.5	7.850E 01	0.020	3.
17.98	7.758E 01	23.458	-22.0	6.988E 01	0.018	4.
18.49	8.330E 01	23.640	-21.5	7.183E 01	0.019	3.
18.95	8.704E 01	23.804	-21.0	7.218E 01	0.018	3.
19.50	8.620E 01	24.003	-20.5	6.813E 01	0.016	4.
20.07	8.924E 01	24.212	-20.0	6.710E 01	0.017	3.
20.50	9.016E 01	24.368	-19.5	6.532E 01	0.021	2.
20.94	9.098E 01	24.529	-19.0	6.339E 01	0.017	3.
21.49	9.278E 01	24.730	-18.5	6.157E 01	0.016	3.
21.96	1.000E 02	24.905	-18.0	6.363E 01	0.019	2.
22.45	9.975E 01	25.086	-17.5	6.069E 01	0.015	3.
22.96	1.049E 02	25.273	-17.0	6.095E 01	0.017	2.
23.48	1.041E 02	25.468	-16.5	5.761E 01	0.014	3.
24.02	1.060E 02	25.670	-16.0	5.575E 01	0.017	2.
24.47	1.035E 02	25.837	-15.5	5.219E 01	0.017	2.
24.93	9.812E 01	26.010	-15.0	4.728E 01	0.017	2.
25.40	9.306E 01	26.188	-14.5	4.280E 01	0.017	2.
25.89	9.428E 01	26.371	-14.0	4.130E 01	0.017	2.
26.39	9.264E 01	26.560	-13.5	3.855E 01	0.017	2.
26.90	9.418E 01	26.755	-13.0	3.713E 01	0.016	2.
27.43	9.727E 01	26.957	-12.5	3.624E 01	0.016	2.
27.98	9.775E 01	27.165	-12.0	3.428E 01	0.016	2.

28.54	9.791E 01	27.380	-11.5	3.221E 01	0.015	2.
28.97	9.795E 01	27.546	-11.0	3.063E 01	0.021	1.
29.42	9.597E 01	27.716	-10.5	2.844E 01	0.015	2.
30.02	9.995E 01	27.949	-10.0	2.746E 01	0.015	2.
30.49	1.022E 02	28.129	-9.5	2.644E 01	0.020	1.
30.97	1.038E 02	28.314	-9.0	2.518E 01	0.014	2.
31.46	1.099E 02	28.503	-8.5	2.489E 01	0.019	1.
31.96	1.151E 02	28.698	-8.0	2.420E 01	0.013	2.
32.47	1.148E 02	28.897	-7.5	2.232E 01	0.018	1.
33.00	1.209E 02	29.102	-7.0	2.155E 01	0.012	2.
33.53	1.302E 02	29.311	-6.5	2.116E 01	0.017	1.
33.90	1.352E 02	29.455	-6.0	2.053E 01	0.016	1.
34.46	1.337E 02	29.674	-5.5	1.818E 01	0.011	2.
35.03	1.338E 02	29.899	-5.0	1.609E 01	0.016	1.
35.43	1.397E 02	30.053	-4.5	1.532E 01	0.015	1.
36.03	1.372E 02	30.289	-4.0	1.289E 01	0.011	2.
36.64	1.412E 02	30.531	-3.5	1.106E 01	0.015	1.
37.06	1.438E 02	30.696	-3.0	9.760E 00	0.015	1.
37.48	1.635E 02	30.864	-2.5	9.394E 00	0.014	1.
37.92	2.913E 02	31.036	-2.0	1.369E 01	0.010	1.
38.36	8.608E 02	31.210	-1.5	3.135E 01	0.006	1.
38.81	1.984E 03	31.388	-1.0	5.062E 01	0.004	1.
39.49	4.312E 03	31.662	-0.5	3.416E 01	0.002	2.
40.20	4.224E 03	31.942	-0.0	1.309E 01	0.002	1.
40.68	2.532E 03	32.134	0.5	2.022E 02	0.003	1.
41.17	7.754E 02	32.329	1.0	4.625E 02	0.006	1.
41.67	2.260E 02	32.529	1.5	7.779E 02	0.011	1.
42.17	3.248E 01	32.732	2.0	5.909E 02	0.031	1.
42.69	1.121E 01	32.939	2.5	1.044E 03	0.066	1.
43.22	7.686E 00	33.150	3.0	3.627E 03	0.085	1.
43.75	5.296E 00	33.366	4.0	1.269E 04	0.108	1.
44.30	4.443E 00	33.586	4.5	5.459E 04	0.110	1.
44.86	2.991E 00	33.810	5.0	1.911E 05	0.155	1.
45.43	4.221E 00	34.039	5.5	1.427E 06	0.114	1.
46.00	6.200E 00	34.272	6.0	1.133E 07	0.083	1.
46.59	5.186E 00	34.510	6.5	5.240E 07	0.095	1.
47.19	5.580E 00	34.753	7.0	3.196E 08	0.087	1.
47.81	4.274E 00	35.001	8.0	1.425E 09	0.104	1.
48.43	2.152E 00	35.255	8.5	4.298E 09	0.192	1.
49.07	1.194E 00	35.513	9.0	1.471E 10	0.320	1.
49.72	1.650E 00	35.777	9.5	1.294E 11	0.221	1.
50.38	5.329E-01	36.047	10.5	2.749E 11	0.654	1.
51.05	9.624E-01	36.322	11.0	3.377E 12	0.346	1.
51.74	1.078E 00	36.604	11.5	2.664E 13	0.335	1.
52.45	6.873E-01	36.891	12.5	1.241E 14	0.474	1.
53.16	4.305E-01	37.185	13.0	5.899E 14	0.762	1.
53.90	1.343E 00	37.485	14.0	1.451E 16	0.242	1.
54.64	3.460E-01	37.792	14.5	3.071E 16	0.842	1.
55.41	4.263E-01	38.105	15.5	3.240E 17	0.710	1.
56.19	7.400E-01	38.426	16.0	5.026E 18	0.408	1.
56.98	3.759E-01	38.753	17.0	2.385E 19	0.756	1.
57.80	3.128E-01	39.089	18.0	1.941E 20	0.923	1.
58.63	4.573E-01	39.431	18.5	2.909E 21	0.602	1.

LONGITUDINAL POLYETHYLENE 4.2K

6928 1

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.00800 KT=.00036

DATA CODE 6928 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 5 IS 270.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.59	2.180E 01	21.010	-36.5	7.959E 01	0.066	24.
3.99	2.378E 01	21.204	-36.0	8.082E 01	0.044	34.
4.50	2.072E 01	21.446	-35.5	6.483E 01	0.044	28.
5.00	2.199E 01	21.688	-35.0	6.362E 01	0.040	24.
5.50	2.599E 01	21.931	-34.5	7.017E 01	0.036	21.
6.00	2.451E 01	22.172	-34.0	6.174E 01	0.037	18.
6.50	2.897E 01	22.411	-33.5	6.853E 01	0.033	16.
7.00	2.610E 01	22.655	-33.0	5.809E 01	0.034	15.
7.51	3.004E 01	22.901	-32.5	6.299E 01	0.032	13.
8.00	3.005E 01	23.134	-32.0	5.974E 01	0.033	11.
8.48	3.295E 01	23.368	-31.5	6.199E 01	0.031	11.
8.99	3.486E 01	23.612	-31.0	6.219E 01	0.030	10.
9.49	3.902E 01	23.852	-30.5	6.611E 01	0.028	9.
10.00	4.114E 01	24.098	-30.0	6.621E 01	0.027	9.
10.52	4.200E 01	24.349	-29.5	6.429E 01	0.027	8.
11.01	4.062E 01	24.588	-29.0	5.926E 01	0.028	7.
11.51	4.139E 01	24.826	-28.5	5.757E 01	0.027	7.
12.00	4.052E 01	25.061	-28.0	5.385E 01	0.029	6.
12.48	4.141E 01	25.292	-27.5	5.269E 01	0.028	6.
12.98	4.551E 01	25.538	-27.0	5.523E 01	0.026	6.
13.48	4.906E 01	25.776	-26.5	5.698E 01	0.026	5.
14.00	6.385E 01	26.028	-26.0	7.070E 01	0.020	6.
14.50	8.189E 01	26.270	-25.5	8.679E 01	0.021	4.
14.98	9.494E 01	26.500	-25.0	9.654E 01	0.017	5.
15.48	1.006E 02	26.740	-24.5	9.794E 01	0.018	4.
16.00	9.735E 01	26.993	-24.0	9.057E 01	0.016	5.
16.56	9.203E 01	27.259	-23.5	8.160E 01	0.018	4.
17.00	9.153E 01	27.476	-23.0	7.808E 01	0.020	3.
17.47	9.023E 01	27.701	-22.5	7.391E 01	0.017	4.
18.03	8.771E 01	27.971	-22.0	6.847E 01	0.017	4.
18.54	9.088E 01	28.217	-21.5	6.784E 01	0.019	3.
19.00	9.290E 01	28.436	-21.0	6.667E 01	0.019	3.
19.47	9.722E 01	28.664	-20.5	6.695E 01	0.018	3.
19.96	9.975E 01	28.901	-20.0	6.579E 01	0.017	3.
20.47	1.021E 02	29.146	-19.5	6.436E 01	0.017	3.
21.00	1.016E 02	29.401	-19.0	6.117E 01	0.017	3.
21.55	1.072E 02	29.666	-18.5	6.141E 01	0.016	3.
22.02	1.104E 02	29.895	-18.0	6.062E 01	0.019	2.
22.52	1.109E 02	30.132	-17.5	5.824E 01	0.015	3.
23.02	1.156E 02	30.376	-17.0	5.794E 01	0.018	2.
23.44	1.127E 02	30.578	-16.5	5.428E 01	0.018	2.
23.98	1.155E 02	30.838	-16.0	5.291E 01	0.014	3.
24.54	1.117E 02	31.106	-15.5	4.851E 01	0.017	2.
25.00	1.101E 02	31.328	-15.0	4.574E 01	0.017	2.
25.47	1.048E 02	31.557	-14.5	4.152E 01	0.017	2.
25.96	1.031E 02	31.791	-14.0	3.888E 01	0.017	2.
26.46	1.017E 02	32.033	-13.5	3.645E 01	0.017	2.
26.98	1.094E 02	32.282	-13.0	3.710E 01	0.016	2.
27.51	1.055E 02	32.538	-12.5	3.381E 01	0.016	2.
28.05	1.116E 02	32.801	-12.0	3.366E 01	0.015	2.

28.47	1.076E 02	33.004	-11.5	3.093E 01	0.022	1.
28.91	1.075E 02	33.212	-11.0	2.938E 01	0.015	2.
29.50	1.067E 02	33.496	-10.5	2.716E 01	0.015	2.
29.95	1.132E 02	33.715	-10.0	2.724E 01	0.021	1.
30.41	1.119E 02	33.939	-9.5	2.534E 01	0.015	2.
31.05	1.151E 02	34.246	-9.0	2.395E 01	0.014	2.
31.54	1.146E 02	34.482	-8.5	2.225E 01	0.020	1.
32.04	1.235E 02	34.724	-8.0	2.226E 01	0.014	2.
32.56	1.274E 02	34.972	-7.5	2.120E 01	0.019	1.
32.91	1.340E 02	35.140	-7.0	2.106E 01	0.018	1.
33.44	1.424E 02	35.399	-6.5	2.043E 01	0.012	2.
33.99	1.562E 02	35.663	-6.0	2.026E 01	0.016	1.
34.55	1.540E 02	35.934	-5.5	1.786E 01	0.011	2.
35.13	1.508E 02	36.211	-5.0	1.542E 01	0.016	1.
35.52	1.548E 02	36.400	-4.5	1.442E 01	0.016	1.
35.92	1.577E 02	36.593	-4.0	1.326E 01	0.016	1.
36.53	1.508E 02	36.888	-3.5	1.061E 01	0.012	2.
37.16	1.570E 02	37.189	-3.0	8.936E 00	0.018	1.
37.58	2.192E 02	37.395	-2.5	1.049E 01	0.014	1.
38.02	5.298E 02	37.604	-2.0	2.054E 01	0.008	1.
38.46	1.420E 03	37.817	-1.5	4.194E 01	0.005	1.
38.91	2.913E 03	38.034	-1.0	5.819E 01	0.003	1.
39.37	3.938E 03	38.254	-0.5	3.926E 01	0.003	1.
39.83	4.141E 03	38.478	-0.0	4.835E 00	0.003	1.
40.31	3.147E 03	38.707	0.5	2.407E 01	0.003	1.
40.79	1.606E 03	38.939	1.0	1.841E 02	0.004	1.
41.28	6.647E 02	39.176	1.5	5.198E 02	0.007	1.
41.78	1.377E 02	39.417	2.0	6.032E 02	0.015	1.
42.29	2.093E 01	39.662	2.5	4.788E 02	0.043	1.
42.81	9.445E 00	39.912	3.0	1.100E 03	0.075	1.
43.34	5.029E 00	40.167	3.5	2.961E 03	0.124	1.
43.87	3.544E 00	40.426	4.0	1.060E 04	0.174	1.
44.42	2.505E 00	40.690	4.5	3.842E 04	0.238	1.
44.98	3.209E 00	40.959	5.0	2.565E 05	0.175	1.
45.55	3.643E 00	41.233	5.5	1.544E 06	0.150	1.
46.13	3.414E 00	41.513	6.0	7.844E 06	0.156	1.
46.72	5.272E 00	41.797	6.5	6.720E 07	0.102	1.
47.32	4.771E 00	42.088	7.5	3.460E 08	0.110	1.
47.94	3.074E 00	42.384	8.0	1.303E 09	0.155	1.
48.56	1.713E 00	42.685	8.5	4.368E 09	0.257	1.
49.20	1.360E 00	42.993	9.0	2.149E 10	0.294	1.
49.85	1.224E 00	43.307	10.0	1.237E 11	0.327	1.
50.51	7.102E-01	43.627	10.5	4.741E 11	0.533	1.
51.19	9.082E-01	43.953	11.0	4.144E 12	0.394	1.
51.88	1.174E 00	44.287	12.0	3.793E 13	0.302	1.
52.59	1.343E-01	44.626	12.5	3.187E 13	2.584	1.
53.31	5.040E-01	44.973	13.5	9.126E 14	0.705	1.
54.04	5.615E-01	45.327	14.0	8.067E 15	0.586	1.
54.79	8.179E-01	45.689	15.0	9.707E 16	0.372	1.
55.56	4.630E-01	46.058	15.5	4.733E 17	0.701	1.
56.34	1.836E-01	46.435	16.5	1.687E 18	1.721	1.
57.14	8.994E-01	46.819	17.0	7.771E 19	0.345	1.
57.95	-2.941E-01	47.212	18.0	-2.502E 20	0.994	1.
58.79	3.610E-01	47.614	19.0	3.168E 21	0.778	1.

LONGITUDINAL POLYETHYLENE 4.2K

6928 5

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 6928 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 6 IS 80.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.72	3.218E 01	19.030	-36.5	1.348E 02	0.133	6.
3.99	2.881E 01	19.089	-36.0	1.157E 02	0.046	34.
4.49	2.705E 01	19.200	-35.5	1.004E 02	0.035	29.
4.99	2.013E 01	19.320	-35.0	6.960E 01	0.042	25.
5.50	1.874E 01	19.448	-34.5	6.046E 01	0.045	22.
6.00	2.015E 01	19.577	-34.0	6.112E 01	0.049	18.
6.49	2.005E 01	19.710	-33.5	5.734E 01	0.046	17.
6.99	1.914E 01	19.851	-33.0	5.160E 01	0.048	15.
7.50	2.497E 01	19.997	-32.5	6.345E 01	0.039	14.
8.01	2.354E 01	20.144	-32.0	5.668E 01	0.041	12.
8.50	2.532E 01	20.291	-31.5	5.799E 01	0.041	11.
8.99	2.638E 01	20.440	-31.0	5.746E 01	0.041	10.
9.50	2.893E 01	20.596	-30.5	6.005E 01	0.037	10.
10.00	3.303E 01	20.750	-30.0	6.524E 01	0.038	8.
10.50	3.261E 01	20.910	-29.5	6.156E 01	0.034	9.
11.01	3.432E 01	21.073	-29.0	6.176E 01	0.037	7.
11.49	3.627E 01	21.228	-28.5	6.253E 01	0.033	7.
11.99	3.840E 01	21.394	-28.0	6.323E 01	0.032	7.
12.50	4.238E 01	21.561	-27.5	6.681E 01	0.031	6.
12.99	4.426E 01	21.725	-27.0	6.676E 01	0.030	6.
13.51	5.628E 01	21.901	-26.5	8.109E 01	0.025	6.
14.02	7.892E 01	22.073	-26.0	1.090E 02	0.021	5.
14.51	1.159E 02	22.239	-25.5	1.535E 02	0.017	5.
15.02	1.481E 02	22.416	-25.0	1.879E 02	0.014	5.
15.50	1.492E 02	22.584	-24.5	1.818E 02	0.015	4.
16.01	1.456E 02	22.761	-24.0	1.700E 02	0.013	5.
16.55	1.390E 02	22.948	-23.5	1.551E 02	0.015	4.
17.04	1.367E 02	23.124	-23.0	1.463E 02	0.015	4.
17.50	1.328E 02	23.284	-22.5	1.368E 02	0.017	3.
17.97	1.342E 02	23.453	-22.0	1.330E 02	0.015	4.
18.53	1.394E 02	23.655	-21.5	1.317E 02	0.014	4.
19.05	1.342E 02	23.840	-21.0	1.214E 02	0.016	3.
19.51	1.389E 02	24.005	-20.5	1.208E 02	0.016	3.
19.98	1.480E 02	24.178	-20.0	1.236E 02	0.015	3.
20.47	1.531E 02	24.358	-19.5	1.225E 02	0.014	3.
20.99	1.573E 02	24.545	-19.0	1.204E 02	0.014	3.
21.52	1.640E 02	24.740	-18.5	1.199E 02	0.013	3.
21.97	1.739E 02	24.908	-18.0	1.221E 02	0.015	2.
22.45	1.851E 02	25.083	-17.5	1.246E 02	0.012	3.
23.04	1.965E 02	25.301	-17.0	1.254E 02	0.011	3.
23.54	2.072E 02	25.490	-16.5	1.263E 02	0.013	2.
23.96	2.039E 02	25.646	-16.0	1.195E 02	0.013	2.
24.50	2.011E 02	25.848	-15.5	1.121E 02	0.011	3.
25.06	1.868E 02	26.057	-15.0	9.869E 01	0.013	2.
25.52	1.683E 02	26.230	-14.5	8.507E 01	0.014	2.
25.99	1.552E 02	26.409	-14.0	7.481E 01	0.014	2.
26.47	1.479E 02	26.592	-13.5	6.785E 01	0.015	2.
26.97	1.542E 02	26.782	-13.0	6.719E 01	0.014	2.
27.49	1.557E 02	26.977	-12.5	6.420E 01	0.014	2.
28.01	1.628E 02	27.179	-12.0	6.338E 01	0.013	2.

28.56	1.540E 02	27.387	-11.5	5.644E 01	0.014	2.
28.98	1.534E 02	27.547	-11.0	5.355E 01	0.019	1.
29.40	1.556E 02	27.711	-10.5	5.162E 01	0.013	2.
29.99	1.567E 02	27.936	-10.0	4.835E 01	0.013	2.
30.59	1.620E 02	28.169	-9.5	4.627E 01	0.013	2.
31.05	1.689E 02	28.348	-9.0	4.533E 01	0.017	1.
31.53	1.692E 02	28.532	-8.5	4.248E 01	0.012	2.
32.01	1.720E 02	28.720	-8.0	4.024E 01	0.017	1.
32.51	1.735E 02	28.913	-7.5	3.761E 01	0.012	2.
33.02	1.811E 02	29.111	-7.0	3.615E 01	0.016	1.
33.54	1.810E 02	29.314	-6.5	3.303E 01	0.011	2.
34.07	1.773E 02	29.522	-6.0	2.932E 01	0.016	1.
34.43	1.737E 02	29.664	-5.5	2.675E 01	0.016	1.
34.99	1.691E 02	29.882	-5.0	2.314E 01	0.011	2.
35.56	1.660E 02	30.104	-4.5	1.989E 01	0.016	1.
35.94	1.696E 02	30.256	-4.0	1.840E 01	0.015	1.
36.53	1.642E 02	30.489	-3.5	1.502E 01	0.011	2.
37.14	1.574E 02	30.728	-3.0	1.172E 01	0.016	1.
37.55	1.612E 02	30.891	-2.5	1.018E 01	0.016	1.
37.97	2.232E 02	31.057	-2.0	1.155E 01	0.013	1.
38.40	5.909E 02	31.226	-1.5	2.373E 01	0.008	1.
38.83	1.524E 03	31.398	-1.0	4.301E 01	0.005	1.
39.50	4.588E 03	31.663	-0.5	3.990E 01	0.002	2.
40.18	4.900E 03	31.933	-0.0	1.322E 01	0.003	1.
40.64	2.827E 03	32.119	0.5	2.132E 02	0.003	1.
41.11	7.474E 02	32.307	1.0	4.110E 02	0.007	1.
41.59	1.914E 02	32.499	1.5	5.830E 02	0.014	1.
42.08	2.701E 01	32.695	2.0	4.149E 02	0.056	1.
42.58	1.196E 01	32.894	2.5	8.932E 02	0.110	1.
43.09	8.943E 00	33.097	3.0	3.209E 03	0.129	1.
43.60	5.921E 00	33.304	3.5	1.020E 04	0.163	1.
44.13	3.598E 00	33.515	4.0	2.999E 04	0.242	1.
44.66	3.217E 00	33.730	4.5	1.313E 05	0.256	1.
45.20	2.767E 00	33.950	5.0	5.613E 05	0.289	1.
45.76	1.991E 00	34.173	6.0	2.046E 06	0.401	1.
46.32	4.618E 00	34.401	6.5	2.452E 07	0.173	1.
46.90	6.431E 00	34.634	7.0	1.805E 08	0.120	1.
47.48	4.596E 00	34.871	7.5	6.987E 08	0.154	1.
48.08	2.438E 00	35.113	8.0	2.059E 09	0.278	1.
48.69	2.032E 00	35.360	8.5	9.797E 09	0.306	1.
49.31	7.162E-01	35.612	9.5	2.028E 10	0.843	1.
49.94	3.885E-01	35.869	10.0	6.655E 10	1.490	1.
50.58	9.679E-01	36.131	10.5	1.034E 12	0.583	1.
51.24	1.014E 00	36.398	11.0	6.978E 12	0.549	1.
51.91	1.358E 00	36.672	12.0	6.224E 13	0.383	1.
52.59	1.318E 00	36.951	12.5	4.160E 14	0.403	1.
53.29	1.318E 00	37.235	13.5	2.970E 15	0.385	1.
54.00	9.318E-01	37.526	14.0	1.554E 16	0.511	1.
54.72	-1.992E-01	37.823	14.5	-2.554E 16	2.518	1.
55.46	4.289E-01	38.127	15.5	4.398E 17	1.092	1.
56.21	3.260E-01	38.437	16.0	2.781E 18	1.340	1.
56.98	-2.386E-02	38.753	17.0	-1.766E 18	19.078	1.
57.77	1.012E 00	39.077	18.0	6.780E 20	0.436	1.
58.57	3.951E-02	39.408	18.5	2.504E 20	10.918	1.

TRANSVERSE POLYETHYLENE 4.2K

6928 6

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 6928 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 2 IS 90.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
4.02	2.720E 01	21.219	-36.0	1.007E 02	0.072	30.
4.49	4.068E 01	21.444	-35.5	1.388E 02	0.039	30.
4.99	2.592E 01	21.686	-35.0	8.232E 01	0.051	25.
5.49	2.099E 01	21.927	-34.5	6.183E 01	0.057	22.
5.99	2.176E 01	22.167	-34.0	6.020E 01	0.061	14.
6.49	2.595E 01	22.407	-33.5	6.736E 01	0.050	17.
6.98	2.262E 01	22.645	-33.0	5.539E 01	0.055	15.
7.48	2.533E 01	22.886	-32.5	5.837E 01	0.048	14.
8.00	2.454E 01	23.135	-32.0	5.337E 01	0.051	13.
8.50	2.702E 01	23.378	-31.5	5.572E 01	0.049	11.
8.98	3.072E 01	23.609	-31.0	6.034E 01	0.044	10.
9.48	3.058E 01	23.849	-30.5	5.704E 01	0.043	10.
9.99	3.505E 01	24.096	-30.0	6.215E 01	0.040	9.
10.49	3.510E 01	24.334	-29.5	5.934E 01	0.042	8.
10.99	3.984E 01	24.574	-29.0	6.433E 01	0.036	8.
11.49	3.909E 01	24.816	-28.5	6.017E 01	0.037	7.
11.98	4.553E 01	25.056	-28.0	6.692E 01	0.033	7.
12.48	4.406E 01	25.294	-27.5	6.203E 01	0.035	6.
12.96	5.045E 01	25.526	-27.0	6.798E 01	0.031	6.
13.47	6.207E 01	25.773	-26.5	7.995E 01	0.026	6.
14.01	8.351E 01	26.034	-26.0	1.026E 02	0.021	6.
14.54	1.250E 02	26.288	-25.5	1.467E 02	0.017	5.
14.99	1.579E 02	26.506	-25.0	1.784E 02	0.016	4.
15.47	1.608E 02	26.735	-24.5	1.744E 02	0.014	5.
15.96	1.551E 02	26.974	-24.0	1.613E 02	0.016	4.
16.49	1.527E 02	27.226	-23.5	1.519E 02	0.014	5.
17.03	1.436E 02	27.490	-23.0	1.364E 02	0.016	4.
17.54	1.420E 02	27.736	-22.5	1.291E 02	0.015	4.
18.01	1.463E 02	27.960	-22.0	1.279E 02	0.017	3.
18.49	1.448E 02	28.193	-21.5	1.216E 02	0.015	4.
19.00	1.484E 02	28.436	-21.0	1.193E 02	0.016	3.
19.45	1.550E 02	28.652	-20.5	1.200E 02	0.016	3.
19.99	1.580E 02	28.914	-20.0	1.167E 02	0.013	4.
20.56	1.650E 02	29.187	-19.5	1.161E 02	0.014	3.
21.06	1.657E 02	29.431	-19.0	1.116E 02	0.014	3.
21.50	1.730E 02	29.640	-18.5	1.122E 02	0.017	2.
21.95	1.872E 02	29.857	-18.0	1.166E 02	0.013	3.
22.50	1.959E 02	30.126	-17.5	1.161E 02	0.012	3.
22.98	2.066E 02	30.357	-17.0	1.173E 02	0.014	2.
23.48	2.223E 02	30.597	-16.5	1.206E 02	0.011	3.
23.99	2.221E 02	30.844	-16.0	1.149E 02	0.013	2.
24.52	2.193E 02	31.100	-15.5	1.080E 02	0.011	3.
25.07	2.007E 02	31.363	-15.0	9.374E 01	0.014	2.
25.52	1.820E 02	31.581	-14.5	8.142E 01	0.014	2.
25.99	1.690E 02	31.804	-14.0	7.215E 01	0.015	2.
26.46	1.640E 02	32.034	-13.5	6.673E 01	0.015	2.
26.95	1.653E 02	32.270	-13.0	6.397E 01	0.014	2.
27.46	1.698E 02	32.513	-12.5	6.229E 01	0.014	2.
27.97	1.711E 02	32.762	-12.0	5.934E 01	0.014	2.
28.51	1.736E 02	33.019	-11.5	5.671E 01	0.013	2.

29.05	1.680E 02	33.283	-11.0	5.157E 01	0.013	2.
29.47	1.689E 02	33.486	-10.5	4.931E 01	0.019	1.
29.91	1.691E 02	33.693	-10.0	4.682E 01	0.013	2.
30.49	1.746E 02	33.977	-9.5	4.486E 01	0.013	2.
30.95	1.706E 02	34.195	-9.0	4.127E 01	0.018	1.
31.41	1.730E 02	34.419	-8.5	3.929E 01	0.012	2.
32.04	1.755E 02	34.725	-8.0	3.632E 01	0.012	2.
32.53	1.774E 02	34.960	-7.5	3.409E 01	0.017	1.
33.03	1.838E 02	35.201	-7.0	3.258E 01	0.012	2.
33.54	1.821E 02	35.447	-6.5	2.956E 01	0.016	1.
34.07	1.835E 02	35.699	-6.0	2.707E 01	0.011	2.
34.60	1.782E 02	35.957	-5.5	2.362E 01	0.016	1.
34.97	1.801E 02	36.132	-5.0	2.209E 01	0.016	1.
35.52	1.794E 02	36.401	-4.5	1.933E 01	0.011	2.
36.09	1.798E 02	36.675	-4.0	1.671E 01	0.016	1.
36.48	1.733E 02	36.862	-3.5	1.438E 01	0.016	1.
36.87	1.704E 02	37.052	-3.0	1.245E 01	0.016	1.
37.48	1.710E 02	37.343	-2.5	9.929E 00	0.011	2.
38.10	2.464E 02	37.641	-2.0	1.065E 01	0.013	1.
38.52	6.442E 02	37.844	-1.5	2.126E 01	0.007	1.
38.94	1.555E 03	38.050	-1.0	3.485E 01	0.005	1.
39.38	3.784E 03	38.259	-0.5	4.293E 01	0.003	1.
39.82	4.722E 03	38.472	-0.0	7.316E 00	0.003	1.
40.50	2.929E 03	38.799	0.5	1.098E 02	0.003	2.
41.19	6.558E 02	39.134	1.0	4.356E 02	0.007	1.
41.67	1.088E 02	39.362	1.5	3.800E 02	0.023	1.
42.15	2.267E 01	39.594	2.0	3.853E 02	0.093	1.
42.64	1.151E 01	39.830	2.5	9.223E 02	0.191	1.
43.13	1.059E 01	40.070	3.0	3.966E 03	0.207	1.
43.64	7.911E 00	40.314	3.5	1.384E 04	0.232	1.
44.16	4.898E 00	40.563	4.0	4.033E 04	0.261	1.
44.68	4.103E 00	40.816	4.5	1.609E 05	0.237	1.
45.22	2.568E 00	41.074	5.0	4.869E 05	0.348	1.
45.76	3.178E 00	41.336	6.0	2.966E 06	0.271	1.
46.32	5.170E 00	41.603	6.5	2.423E 07	0.172	1.
46.88	5.553E 00	41.875	7.0	1.335E 08	0.171	1.
47.46	3.976E 00	42.152	7.5	5.019E 08	0.227	1.
48.04	3.127E 00	42.434	8.0	2.125E 09	0.267	1.
48.64	3.042E-01	42.722	8.5	1.142E 09	2.469	1.
49.24	1.792E-01	43.015	9.0	3.819E 09	3.830	1.
49.86	1.686E 00	43.313	10.0	2.099E 11	0.408	1.
50.49	8.664E-01	43.617	10.5	6.487E 11	0.748	1.
51.14	1.581E 00	43.927	11.0	7.345E 12	0.407	1.
51.79	-3.733E-01	44.242	12.0	-1.110E 13	1.623	1.
52.46	5.349E-01	44.564	12.5	1.053E 14	1.175	1.
53.14	8.808E-01	44.892	13.0	1.187E 15	0.710	1.
53.83	4.158E-01	45.227	14.0	3.971E 15	1.435	1.
54.54	5.827E-01	45.568	14.5	4.091E 16	1.044	1.
55.26	8.686E-01	45.916	15.5	4.654E 17	0.666	1.
56.00	3.004E-01	46.270	16.0	1.276E 18	1.951	1.
56.75	-3.088E-02	46.632	17.0	-1.082E 18	18.037	1.
57.52	4.402E-01	47.002	17.5	1.326E 20	1.202	1.
58.30	-1.263E-01	47.378	18.5	-3.409E 20	4.188	1.
59.10	-1.298E-01	47.763	19.0	-3.279E 21	3.968	1.

TRANSVERSE POLYETHYLENE 4.2K

6928 2

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 6928 COMPUTED 070667 INCIDENT ENERGY .0400 ANGLE NO 4 IS 100.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.70	2.027E 01	23.096	-36.5	7.385E 01	0.129	9.
3.99	1.835E 01	23.319	-36.0	6.327E 01	0.067	34.
4.49	1.970E 01	23.687	-35.5	6.274E 01	0.040	29.
5.00	1.757E 01	24.054	-35.0	5.150E 01	0.044	25.
5.50	1.619E 01	24.411	-34.5	4.409E 01	0.053	21.
6.00	2.125E 01	24.762	-34.0	5.406E 01	0.049	19.
6.49	2.333E 01	25.105	-33.5	5.581E 01	0.046	16.
6.98	2.393E 01	25.442	-33.0	5.387E 01	0.047	15.
7.50	2.807E 01	25.790	-32.5	5.941E 01	0.041	14.
8.00	2.811E 01	26.132	-32.0	5.621E 01	0.042	12.
8.50	3.143E 01	26.462	-31.5	5.948E 01	0.040	11.
8.99	3.497E 01	26.788	-31.0	6.276E 01	0.039	10.
9.50	3.467E 01	27.123	-30.5	5.906E 01	0.038	10.
10.00	3.854E 01	27.446	-30.0	6.244E 01	0.038	8.
10.47	3.992E 01	27.755	-29.5	6.171E 01	0.036	8.
10.99	4.056E 01	28.083	-29.0	5.972E 01	0.035	8.
11.50	4.413E 01	28.412	-28.5	6.192E 01	0.034	7.
12.01	4.469E 01	28.738	-28.0	5.978E 01	0.034	7.
12.52	5.073E 01	29.059	-27.5	6.482E 01	0.032	6.
13.01	5.474E 01	29.372	-27.0	6.688E 01	0.030	6.
13.50	6.444E 01	29.674	-26.5	7.543E 01	0.030	5.
14.01	9.238E 01	29.993	-26.0	1.032E 02	0.022	6.
14.55	1.336E 02	30.328	-25.5	1.425E 02	0.019	5.
15.01	1.743E 02	30.615	-25.0	1.788E 02	0.017	4.
15.50	1.702E 02	30.916	-24.5	1.676E 02	0.016	5.
16.01	1.654E 02	31.230	-24.0	1.550E 02	0.017	4.
16.48	1.593E 02	31.522	-23.5	1.441E 02	0.017	4.
16.98	1.514E 02	31.826	-23.0	1.313E 02	0.017	4.
17.50	1.555E 02	32.143	-22.5	1.291E 02	0.017	4.
17.97	1.600E 02	32.432	-22.0	1.276E 02	0.019	3.
18.47	1.591E 02	32.732	-21.5	1.216E 02	0.016	4.
18.98	1.628E 02	33.043	-21.0	1.192E 02	0.018	3.
19.44	1.625E 02	33.320	-20.5	1.144E 02	0.018	3.
20.00	1.720E 02	33.655	-20.0	1.155E 02	0.015	4.
20.50	1.790E 02	33.952	-19.5	1.151E 02	0.020	2.
20.93	1.865E 02	34.208	-19.0	1.156E 02	0.016	3.
21.46	1.902E 02	34.526	-18.5	1.126E 02	0.016	3.
22.01	2.065E 02	34.855	-18.0	1.165E 02	0.015	3.
22.49	2.125E 02	35.137	-17.5	1.148E 02	0.018	2.
22.98	2.231E 02	35.430	-17.0	1.153E 02	0.014	3.
23.49	2.327E 02	35.730	-16.5	1.149E 02	0.016	2.
24.01	2.302E 02	36.041	-16.0	1.083E 02	0.013	3.
24.56	2.364E 02	36.361	-15.5	1.058E 02	0.016	2.
25.00	2.092E 02	36.625	-15.0	8.969E 01	0.017	2.
25.46	1.889E 02	36.895	-14.5	7.750E 01	0.017	2.
25.94	1.807E 02	37.173	-14.0	7.073E 01	0.018	2.
26.42	1.748E 02	37.458	-13.5	6.514E 01	0.018	2.
26.93	1.677E 02	37.751	-13.0	5.940E 01	0.018	2.
27.44	1.755E 02	38.051	-12.5	5.883E 01	0.017	2.
27.97	1.810E 02	38.360	-12.0	5.736E 01	0.017	2.

28.52	1.772E 02	38.677	-11.5	5.285E 01	0.017	2.
29.08	1.754E 02	39.003	-11.0	4.905E 01	0.017	2.
29.51	1.737E 02	39.253	-10.5	4.617E 01	0.023	1.
29.95	1.839E 02	39.509	-10.0	4.636E 01	0.016	2.
30.56	1.826E 02	39.859	-9.5	4.260E 01	0.016	2.
31.02	1.830E 02	40.127	-9.0	4.014E 01	0.023	1.
31.50	1.813E 02	40.402	-8.5	3.723E 01	0.016	2.
31.98	1.920E 02	40.683	-8.0	3.676E 01	0.021	1.
32.48	1.929E 02	40.970	-7.5	3.425E 01	0.015	2.
32.99	1.915E 02	41.263	-7.0	3.133E 01	0.021	1.
33.52	1.904E 02	41.563	-6.5	2.848E 01	0.015	2.
34.05	1.864E 02	41.869	-6.0	2.530E 01	0.021	1.
34.41	1.892E 02	42.078	-5.5	2.392E 01	0.021	1.
34.97	1.869E 02	42.397	-5.0	2.105E 01	0.015	2.
35.54	1.746E 02	42.722	-4.5	1.721E 01	0.022	1.
35.93	1.694E 02	42.944	-4.0	1.512E 01	0.025	1.
36.53	1.267E 02	43.283	-3.5	9.619E 00	0.035	2.
37.13	8.240E 01	43.629	-3.0	5.056E 00	0.094	1.
37.55	9.068E 01	43.865	-2.5	4.717E 00	0.090	1.
37.97	1.690E 02	44.104	-2.0	7.203E 00	0.047	1.
38.40	5.547E 02	44.348	-1.5	1.834E 01	0.015	1.
38.83	1.664E 03	44.595	-1.0	3.859E 01	0.007	1.
39.50	3.447E 03	44.974	-0.5	2.452E 01	0.003	2.
40.19	3.245E 03	45.361	-0.0	8.422E 00	0.004	1.
40.66	1.886E 03	45.625	0.5	1.266E 02	0.006	1.
41.13	5.533E 02	45.893	1.0	2.697E 02	0.011	1.
41.61	8.823E 01	46.166	1.5	2.394E 02	0.028	1.
42.11	1.832E 01	46.444	2.0	2.525E 02	0.078	1.
42.61	1.029E 01	46.726	2.5	6.961E 02	0.119	1.
43.12	7.943E 00	47.013	3.0	2.605E 03	0.141	1.
43.64	5.777E 00	47.305	3.5	9.195E 03	0.193	1.
44.16	3.710E 00	47.602	4.0	2.886E 04	0.268	1.
44.70	4.377E 00	47.904	4.5	1.686E 05	0.234	1.
45.25	3.962E 00	48.211	5.5	7.673E 05	0.244	1.
45.81	3.618E 00	48.524	6.0	3.591E 06	0.258	1.
46.38	4.612E 00	48.842	6.5	2.396E 07	0.207	1.
46.96	5.774E 00	49.166	7.0	1.606E 08	0.175	1.
47.55	3.367E 00	49.496	7.5	5.140E 08	0.286	1.
48.15	2.924E 00	49.832	8.0	2.515E 09	0.270	1.
48.76	2.014E 00	50.174	9.0	1.003E 10	0.404	1.
49.38	-3.886E-01	50.522	9.5	-1.153E 10	2.008	1.
50.02	5.607E-01	50.877	10.0	1.022E 11	1.318	1.
50.67	1.224E-01	51.238	10.5	1.415E 11	6.242	1.
51.33	-3.651E-01	51.606	11.5	-2.761E 12	2.105	1.
52.01	7.321E-01	51.981	12.0	3.749E 13	1.036	1.
52.70	-7.292E-01	52.363	12.5	-2.618E 14	1.013	1.
53.40	1.707E 00	52.752	13.5	4.455E 15	0.424	1.
54.11	6.807E-01	53.149	14.0	1.340E 16	1.014	1.
54.84	9.171E-01	53.554	15.0	1.415E 17	0.785	1.
55.59	-7.928E-01	53.966	15.5	-9.979E 17	0.886	1.
56.35	4.862E-01	54.387	16.5	5.200E 18	1.341	1.
57.13	8.512E-01	54.816	17.0	8.069E 19	0.746	1.
57.92	-4.846E-02	55.253	18.0	-4.252E 19	13.400	1.
58.73	2.453E-01	55.699	18.5	2.084E 21	2.796	1.

TRANSVERSE POLYETHYLENE 4.2K

6928 4

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=199.24 MASS= 14.00 DWC=0.00800 KT=0.00036

DATA CODE 2034 COMPUTED 072667 INCIDENT ENERGY .0801 ANGLE NO 3 IS 290.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.24	1.455E 01	34.857	-77.0	1.128E 02	0.504	20.
3.59	8.370E 00	34.748	-76.5	6.147E 01	0.790	40.
4.09	1.309E 01	34.612	-76.0	9.037E 01	0.345	33.
4.59	9.934E 00	34.499	-75.5	6.397E 01	0.199	28.
5.09	1.185E 01	34.404	-75.0	7.198E 01	0.176	24.
5.60	1.266E 01	34.325	-74.6	7.268E 01	0.249	21.
6.10	8.262E 00	34.260	-74.0	4.566E 01	0.141	18.
6.59	1.290E 01	34.209	-73.5	6.780E 01	0.081	16.
7.10	1.282E 01	34.167	-73.0	6.438E 01	0.079	15.
7.61	1.253E 01	34.136	-72.5	6.051E 01	0.082	13.
8.11	1.248E 01	34.113	-72.0	5.801E 01	0.076	12.
8.61	1.156E 01	34.099	-71.5	5.166E 01	0.076	11.
9.12	6.707E 00	34.092	-71.0	2.900E 01	0.090	10.
9.61	1.017E 01	34.092	-70.5	4.247E 01	0.076	9.
10.09	1.145E 01	34.098	-70.0	4.635E 01	0.076	8.
10.57	1.254E 01	34.109	-69.5	4.912E 01	0.084	8.
11.09	1.187E 01	34.126	-69.0	4.526E 01	0.066	8.
11.62	1.350E 01	34.149	-68.5	4.972E 01	0.065	7.
12.10	1.047E 01	34.175	-68.0	3.762E 01	0.076	6.
12.57	1.737E 01	34.205	-67.5	6.080E 01	0.063	6.
13.08	1.784E 01	34.240	-67.0	6.058E 01	0.057	6.
13.61	2.317E 01	34.281	-66.5	7.655E 01	0.047	6.
14.13	2.994E 01	34.326	-66.0	9.612E 01	0.044	5.
14.62	3.525E 01	34.372	-65.5	1.104E 02	0.038	5.
15.09	3.743E 01	34.418	-65.0	1.144E 02	0.041	4.
15.58	3.981E 01	34.470	-64.5	1.187E 02	0.034	5.
16.10	3.723E 01	34.528	-64.0	1.082E 02	0.038	4.
16.58	3.635E 01	34.584	-63.5	1.032E 02	0.037	4.
17.09	3.582E 01	34.646	-63.0	9.925E 01	0.037	4.
17.61	3.508E 01	34.713	-62.5	9.484E 01	0.037	4.
18.09	3.184E 01	34.777	-62.0	8.414E 01	0.044	3.
18.59	3.373E 01	34.848	-61.5	8.713E 01	0.036	4.
19.12	2.985E 01	34.920	-61.0	7.927E 01	0.043	3.
19.58	3.147E 01	34.988	-60.5	7.767E 01	0.041	3.
20.06	3.079E 01	35.061	-60.0	7.437E 01	0.041	3.
20.56	3.135E 01	35.138	-59.5	7.402E 01	0.040	3.
21.08	3.055E 01	35.220	-59.0	7.054E 01	0.040	3.
21.62	3.341E 01	35.308	-58.5	7.535E 01	0.037	3.
22.09	3.086E 01	35.386	-58.0	6.818E 01	0.047	2.
22.57	3.293E 01	35.467	-57.5	7.126E 01	0.035	3.
23.07	3.148E 01	35.553	-57.0	6.669E 01	0.044	2.
23.58	2.988E 01	35.644	-56.5	6.193E 01	0.037	3.
24.11	2.945E 01	35.739	-56.0	5.970E 01	0.044	2.
24.59	3.237E 01	35.819	-55.5	6.439E 01	0.041	2.
25.11	3.155E 01	35.924	-55.0	6.135E 01	0.034	3.
25.69	3.199E 01	36.034	-54.5	6.067E 01	0.041	2.

26.17	3.199E 01	36.127	-54.0	5.946E 01	0.039	2.
26.67	3.549E 01	36.223	-53.5	6.465E 01	0.036	2.
27.18	3.301E 01	36.324	-53.0	5.890E 01	0.038	2.
27.70	3.399E 01	36.429	-52.5	5.933E 01	0.037	2.
28.11	3.437E 01	36.510	-52.0	5.901E 01	0.051	1.
28.52	3.531E 01	36.595	-51.5	5.960E 01	0.038	2.
29.08	3.704E 01	36.711	-51.0	6.111E 01	0.034	2.
29.66	3.773E 01	36.833	-50.5	6.079E 01	0.032	2.
30.11	3.875E 01	36.928	-50.0	6.133E 01	0.045	1.
30.56	3.760E 01	37.026	-49.5	5.843E 01	0.033	2.
31.19	3.961E 01	37.161	-49.0	5.997E 01	0.030	2.
31.67	4.085E 01	37.266	-48.5	6.067E 01	0.042	1.
32.16	3.844E 01	37.375	-48.0	5.594E 01	0.031	2.
32.67	3.937E 01	37.487	-47.5	5.615E 01	0.043	1.
33.01	3.732E 01	37.564	-47.0	5.249E 01	0.044	1.
33.54	4.090E 01	37.683	-46.5	5.631E 01	0.029	2.
34.07	4.280E 01	37.806	-46.0	5.766E 01	0.039	1.
34.62	4.235E 01	37.933	-45.5	5.578E 01	0.028	2.
35.19	4.313E 01	38.063	-45.0	5.553E 01	0.039	1.
35.57	4.419E 01	38.153	-44.5	5.601E 01	0.038	1.
35.96	4.262E 01	38.245	-44.0	5.317E 01	0.039	1.
36.56	4.478E 01	38.386	-43.5	5.452E 01	0.026	2.
37.17	4.634E 01	38.532	-43.0	5.502E 01	0.036	1.
37.58	4.671E 01	38.632	-42.5	5.452E 01	0.034	1.
38.01	4.853E 01	38.735	-42.0	5.566E 01	0.033	1.
38.44	4.611E 01	38.840	-41.5	5.195E 01	0.035	1.
39.10	4.998E 01	39.002	-41.0	5.479E 01	0.023	2.
39.78	4.868E 01	39.169	-40.5	5.189E 01	0.033	1.
40.24	5.099E 01	39.283	-40.0	5.332E 01	0.032	1.
40.71	5.260E 01	39.401	-39.5	5.393E 01	0.031	1.
41.18	5.238E 01	39.521	-39.0	5.263E 01	0.031	1.
41.67	5.044E 01	39.643	-38.5	4.965E 01	0.032	1.
42.16	5.370E 01	39.769	-38.0	5.176E 01	0.030	1.
42.67	5.366E 01	39.898	-37.5	5.062E 01	0.030	1.
43.18	5.678E 01	40.029	-37.0	5.240E 01	0.029	1.
43.70	5.482E 01	40.164	-36.5	4.946E 01	0.029	1.
44.23	5.366E 01	40.302	-36.0	4.731E 01	0.029	1.
44.77	5.776E 01	40.443	-35.5	4.974E 01	0.028	1.
45.32	5.557E 01	40.587	-35.0	4.671E 01	0.028	1.
45.88	5.594E 01	40.735	-34.0	4.586E 01	0.028	1.
46.46	5.888E 01	40.887	-33.5	4.705E 01	0.026	1.
47.04	5.790E 01	41.042	-33.0	4.507E 01	0.027	1.
47.63	6.273E 01	41.200	-32.5	4.754E 01	0.025	1.
48.24	6.028E 01	41.363	-32.0	4.443E 01	0.026	1.
48.85	6.363E 01	41.530	-31.0	4.557E 01	0.025	1.
49.48	6.403E 01	41.700	-30.5	4.454E 01	0.025	1.
50.12	6.095E 01	41.875	-30.0	4.112E 01	0.025	1.
50.78	6.287E 01	42.054	-29.5	4.111E 01	0.025	1.
51.44	6.442E 01	42.238	-28.5	4.078E 01	0.024	1.
52.12	6.920E 01	42.426	-28.0	4.237E 01	0.023	1.
52.81	7.558E 01	42.618	-27.5	4.470E 01	0.022	1.
53.52	8.365E 01	42.816	-26.5	4.772E 01	0.020	1.
54.24	9.506E 01	43.018	-26.0	5.225E 01	0.019	1.
54.98	1.078E 02	43.226	-25.0	5.700E 01	0.017	1.
55.73	1.167E 02	43.439	-24.5	5.928E 01	0.017	1.
56.49	1.207E 02	43.657	-23.5	5.878E 01	0.016	1.
57.27	1.196E 02	43.881	-23.0	5.576E 01	0.016	1.
58.07	1.137E 02	44.111	-22.0	5.063E 01	0.016	1.
58.89	1.163E 02	44.346	-21.0	4.936E 01	0.016	1.
59.72	1.091E 02	44.588	-20.5	4.402E 01	0.017	1.
60.57	1.194E 02	44.836	-19.5	4.565E 01	0.015	1.

61.44	1.181E 02	45.090	-18.5	4.269E 01	0.015	1.
62.32	1.238E 02	45.352	-18.0	4.217E 01	0.015	1.
63.23	1.240E 02	45.620	-17.0	3.964E 01	0.015	1.
64.16	1.308E 02	45.895	-16.0	3.910E 01	0.014	1.
65.10	1.308E 02	46.177	-15.0	3.637E 01	0.014	1.
66.07	1.268E 02	46.468	-14.0	3.261E 01	0.014	1.
67.06	1.269E 02	46.766	-13.0	3.046E 01	0.014	1.
68.07	1.308E 02	47.072	-12.0	2.817E 01	0.014	1.
69.11	1.341E 02	47.386	-11.0	2.610E 01	0.014	1.
70.17	1.345E 02	47.709	-10.0	2.337E 01	0.014	1.
71.25	1.383E 02	48.042	-9.0	2.116E 01	0.013	1.
72.36	1.508E 02	48.383	-7.5	1.994E 01	0.012	1.
73.49	1.552E 02	48.734	-6.5	1.730E 01	0.012	1.
74.66	1.733E 02	49.095	-5.5	1.573E 01	0.011	1.
75.84	2.585E 02	49.466	-4.5	1.810E 01	0.009	1.
77.06	6.524E 02	49.847	-3.0	3.220E 01	0.005	1.
78.31	1.379E 03	50.240	-2.0	3.931E 01	0.004	1.
79.59	1.958E 03	50.644	-0.5	1.199E 01	0.003	1.
80.90	1.695E 03	51.059	1.0	1.712E 02	0.003	1.
82.24	8.495E 02	51.487	2.0	1.038E 04	0.004	1.
83.62	2.171E 02	51.927	3.5	1.929E 05	0.009	1.
85.03	2.591E 01	52.381	5.0	1.569E 06	0.030	1.
86.48	3.466E 00	52.848	6.5	1.458E 07	0.130	1.
87.96	1.160E 00	53.328	8.0	3.581E 08	0.347	1.
89.48	6.036E 01	53.824	9.5	1.473E 10	0.597	1.
91.05	0.	54.334	11.0	0.	9.990	1.
92.65	1.605E 00	54.861	12.5	3.206E 14	0.180	1.
94.30	1.129E 00	55.403	14.0	2.377E 16	0.219	1.
95.99	1.292E 00	55.962	16.0	3.207E 18	0.182	1.
97.72	2.630E 02	56.539	17.5	8.659E 18	9.975	1.
99.51	6.040E 01	57.134	19.5	2.985E 22	0.388	1.
101.34	5.023E 02	57.748	21.0	4.242E 23	4.228	1.
103.23	2.698E 01	58.382	23.0	4.463E 26	0.774	1.

LONGITUDINAL POLYETHYLENE 4.2K

2034 3

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4,2K

SIGMA=159,24 MASS= 14,00 DWC=.00800 KT=.00036

DATA CODE 2034 COMPUTED 072667 INCIDENT ENERGY .0801 ANGLE NO 1 IS 280.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.16	1.348E 01	37.467	-77,0	9.981E 01	0,475	35.
3.59	1,261E 01	37.900	-76,5	8,728E 01	0,351	40.
4.10	1,348E 01	37,550	-76,0	8,726E 01	0,726	32.
4.59	1,445E 01	37,611	-75,5	8,717E 01	0,138	27.
5.09	6,757E 00	37,681	-75,0	3,840E 01	0,359	23.
5.59	9,804E 00	37,759	-74,5	5,281E 01	0,113	20.
6.09	6,372E 00	37,845	-74,0	3,241E 01	0,566	18.
6.59	1,501E 01	37,938	-73,5	7,330E 01	0,075	16.
7.09	1,108E 01	38,036	-73,0	5,168E 01	0,081	14.
7.60	1,494E 01	38,139	-72,5	6,671E 01	0,067	13.
8.11	1,196E 01	38,250	-72,0	5,131E 01	0,076	12.
8.61	9,722E 00	38,360	-71,5	4,004E 01	0,080	10.
9.10	1,081E 01	38,474	-71,0	4,298E 01	0,072	10.
9.61	1,340E 01	38,594	-70,5	5,128E 01	0,066	9.
10.10	1,732E 01	38,713	-70,0	6,422E 01	0,063	8.
10.59	1,152E 01	38,837	-69,5	4,122E 01	0,069	8.
11.09	1,456E 01	38,965	-69,0	5,036E 01	0,066	7.
11.59	1,752E 01	39,095	-68,5	5,880E 01	0,059	7.
12.09	1,639E 01	39,225	-68,0	5,340E 01	0,060	6.
12.58	1,635E 01	39,356	-67,5	5,175E 01	0,060	6.
13.09	2,138E 01	39,497	-67,0	6,563E 01	0,051	6.
13.59	2,553E 01	39,635	-66,5	7,616E 01	0,050	5.
14.07	3,371E 01	39,770	-66,0	9,784E 01	0,042	5.
14.58	4,131E 01	39,914	-65,5	1,167E 02	0,036	5.
15.12	4,456E 01	40,068	-65,0	1,222E 02	0,033	5.
15.62	4,412E 01	40,216	-64,5	1,178E 02	0,036	4.
16.09	4,119E 01	40,354	-64,0	1,074E 02	0,037	4.
16.59	4,282E 01	40,501	-63,5	1,089E 02	0,036	4.
17.11	3,916E 01	40,656	-63,0	9,695E 01	0,036	4.
17.58	4,114E 01	40,799	-62,5	9,949E 01	0,040	3.
18.07	3,855E 01	40,949	-62,0	9,098E 01	0,035	4.
18.58	3,678E 01	41,106	-61,5	8,464E 01	0,040	3.
19.04	3,905E 01	41,248	-61,0	8,796E 01	0,038	3.
19.60	3,562E 01	41,421	-60,5	7,813E 01	0,034	4.
20.18	3,779E 01	41,604	-60,0	8,065E 01	0,038	3.
20.61	4,139E 01	41,740	-59,5	8,661E 01	0,042	2.
21.05	3,704E 01	41,881	-59,0	7,593E 01	0,036	3.
21.61	3,526E 01	42,058	-58,5	7,050E 01	0,036	3.
22.08	3,759E 01	42,211	-58,0	7,355E 01	0,042	2.
22.58	3,792E 01	42,371	-57,5	7,256E 01	0,034	3.
23.09	3,778E 01	42,537	-57,0	7,070E 01	0,041	2.
23.62	3,618E 01	42,710	-56,5	6,612E 01	0,033	3.
24.16	3,981E 01	42,889	-56,0	7,106E 01	0,038	2.
24.61	3,604E 01	43,038	-55,5	6,308E 01	0,040	2.
25.08	3,722E 01	43,191	-55,0	6,386E 01	0,039	2.
25.55	4,000E 01	43,350	-54,5	6,722E 01	0,036	2.

26.04	3.915E 01	43.514	-54.0	6.443E 01	0.036	2.
26.55	3.502E 01	43.683	-53.5	5.640E 01	0.039	2.
27.07	4.024E 01	43.858	-53.0	6.340E 01	0.035	2.
27.60	3.875E 01	44.040	-52.5	5.968E 01	0.035	2.
28.15	3.961E 01	44.227	-52.0	5.965E 01	0.034	2.
28.57	3.717E 01	44.371	-51.5	5.496E 01	0.051	1.
29.01	3.962E 01	44.520	-51.0	5.754E 01	0.033	2.
29.60	4.021E 01	44.724	-50.5	5.692E 01	0.034	2.
30.06	4.005E 01	44.881	-50.0	5.568E 01	0.046	1.
30.53	4.216E 01	45.043	-49.5	5.749E 01	0.031	2.
31.17	4.416E 01	45.266	-49.0	5.861E 01	0.030	2.
31.66	4.695E 01	45.438	-48.5	6.108E 01	0.040	1.
32.17	4.450E 01	45.615	-48.0	5.669E 01	0.030	2.
32.68	4.444E 01	45.796	-47.5	5.542E 01	0.041	1.
33.04	5.055E 01	45.920	-47.0	6.212E 01	0.038	1.
33.58	4.837E 01	46.110	-46.5	5.811E 01	0.027	2.
34.13	4.995E 01	46.305	-46.0	5.869E 01	0.037	1.
34.50	4.732E 01	46.438	-45.5	5.473E 01	0.038	1.
35.08	4.979E 01	46.643	-45.0	5.626E 01	0.026	2.
35.67	5.219E 01	46.852	-44.5	5.750E 01	0.039	1.
36.07	4.745E 01	46.996	-44.0	5.145E 01	0.037	1.
36.48	5.163E 01	47.142	-43.5	5.505E 01	0.035	1.
37.11	5.282E 01	47.367	-43.0	5.487E 01	0.024	2.
37.75	5.605E 01	47.598	-42.5	5.670E 01	0.032	1.
38.19	5.745E 01	47.755	-42.0	6.707E 01	0.032	1.
38.63	5.519E 01	47.916	-41.5	5.377E 01	0.032	1.
39.09	5.565E 01	48.080	-41.0	5.325E 01	0.032	1.
39.55	6.037E 01	48.247	-40.5	5.666E 01	0.030	1.
40.02	5.703E 01	48.418	-40.0	5.248E 01	0.031	1.
40.49	6.398E 01	48.592	-39.5	5.770E 01	0.029	1.
40.98	6.031E 01	48.769	-39.0	5.328E 01	0.030	1.
41.48	5.972E 01	48.950	-38.5	5.167E 01	0.029	1.
41.98	6.203E 01	49.134	-38.0	5.253E 01	0.028	1.
42.49	5.965E 01	49.323	-37.5	4.941E 01	0.029	1.
43.02	6.163E 01	49.515	-37.0	4.992E 01	0.028	1.
43.55	6.378E 01	49.711	-36.5	5.049E 01	0.027	1.
44.09	6.505E 01	49.911	-36.0	5.029E 01	0.027	1.
44.64	6.371E 01	50.115	-35.5	4.808E 01	0.027	1.
45.21	6.272E 01	50.324	-35.0	4.617E 01	0.027	1.
45.78	6.360E 01	50.537	-34.5	4.574E 01	0.026	1.
46.37	6.681E 01	50.754	-33.5	4.671E 01	0.026	1.
46.96	7.069E 01	50.976	-33.0	4.812E 01	0.025	1.
47.57	6.718E 01	51.203	-32.5	4.449E 01	0.025	1.
48.19	6.855E 01	51.434	-32.0	4.412E 01	0.025	1.
48.82	6.951E 01	51.671	-31.5	4.346E 01	0.024	1.
49.47	7.109E 01	51.913	-30.5	4.313E 01	0.024	1.
50.12	6.972E 01	52.160	-30.0	4.100E 01	0.024	1.
50.79	7.398E 01	52.412	-29.5	4.213E 01	0.023	1.
51.48	7.880E 01	52.670	-28.5	4.341E 01	0.022	1.
52.18	8.283E 01	52.934	-28.0	4.410E 01	0.021	1.
52.89	9.361E 01	53.204	-27.0	4.810E 01	0.020	1.
53.62	1.085E 02	53.479	-26.5	5.374E 01	0.018	1.
54.36	1.228E 02	53.761	-25.5	5.853E 01	0.017	1.
55.11	1.373E 02	54.050	-25.0	6.286E 01	0.016	1.
55.89	1.444E 02	54.345	-24.0	6.346E 01	0.015	1.
56.68	1.004E 02	54.647	-23.5	4.222E 01	0.018	1.
57.48	1.354E 02	54.955	-22.5	5.444E 01	0.015	1.
58.31	1.405E 02	55.271	-22.0	5.388E 01	0.015	1.
59.15	1.389E 02	55.595	-21.0	5.066E 01	0.015	1.
60.01	1.361E 02	55.926	-20.0	4.712E 01	0.015	1.

60.89	1.387E 02	56.265	-19.0	4.542E 01	0.015	1.
61.79	1.445E 02	56.612	-18.5	4.463E 01	0.014	1.
62.71	1.451E 02	56.968	-17.5	4.211E 01	0.014	1.
63.65	1.490E 02	57.332	-16.5	4.047E 01	0.013	1.
64.61	1.473E 02	57.705	-15.5	3.725E 01	0.013	1.
65.59	1.493E 02	58.087	-14.5	3.499E 01	0.013	1.
66.59	1.550E 02	58.479	-13.5	3.343E 01	0.013	1.
67.62	1.549E 02	58.881	-12.5	3.052E 01	0.013	1.
68.67	1.547E 02	59.293	-11.5	2.759E 01	0.013	1.
69.75	1.595E 02	59.715	-10.5	2.547E 01	0.012	1.
70.83	1.694E 02	60.148	-9.0	2.389E 01	0.012	1.
71.98	1.776E 02	60.592	-8.0	2.173E 01	0.011	1.
73.14	1.898E 02	61.047	-7.0	1.968E 01	0.011	1.
74.32	2.006E 02	61.515	-6.0	1.706E 01	0.013	1.
75.54	2.842E 02	61.994	-4.5	1.886E 01	0.011	1.
76.78	6.632E 02	62.487	-3.5	3.164E 01	0.006	1.
78.05	1.365E 03	62.993	-2.0	3.949E 01	0.004	1.
79.36	1.845E 03	63.512	-0.5	1.665E 01	0.003	1.
80.70	1.568E 03	64.049	0.5	5.516E 01	0.003	1.
82.07	7.682E 02	64.593	2.0	4.802E 03	0.005	1.
83.48	1.888E 02	65.156	3.5	9.822E 04	0.010	1.
84.93	2.295E 01	65.735	5.0	9.119E 05	0.031	1.
86.41	4.448E 00	66.329	6.5	1.372E 07	0.078	1.
87.93	1.016E 00	66.941	8.0	2.574E 08	0.294	1.
89.50	2.261E 00	67.570	9.5	5.087E 10	0.097	1.
91.10	5.085E 01	68.217	11.0	1.114E 12	0.478	1.
92.75	1.212E 00	68.883	12.5	2.860E 14	0.167	1.
94.44	7.286E 01	69.568	14.5	2.071E 16	0.287	1.
96.18	1.335E 01	70.273	16.0	5.139E 17	1.753	1.
97.97	6.229E 01	71.000	18.0	3.682E 20	0.290	1.

LONGITUDINAL POLYETHYLENE 4.2K

2034 1

VELOCITY SELECTOR CHANNEL COMPRESSION

LONGITUDINAL POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.00800 KT=.00036

DATA CODE 2034 COMPUTED 072667 INCIDENT ENERGY .0801 ANGLE NO 5 IS 270.00 DEGREES

ENERGY	SIGMA	KAP-SQ	EPS	G(EPS)	ERROR	NO CHAN
3.17	1.111E 01	40.133	-77.0	7.834E 01	0.528	35.
3.59	1.349E 01	40.340	-76.5	8.900E 01	0.459	39.
4.09	1.147E 01	40.579	-76.0	7.012E 01	0.579	32.
4.59	1.379E 01	40.819	-75.5	7.859E 01	0.406	27.
5.09	1.011E 01	41.062	-75.0	5.434E 01	0.144	24.
5.60	9.918E 00	41.307	-74.5	9.013E 01	0.112	20.
6.10	1.210E 01	41.548	-74.0	5.796E 01	0.093	18.
6.59	1.436E 01	41.785	-73.5	6.576E 01	0.081	15.
7.09	1.228E 01	42.027	-73.0	5.369E 01	0.139	15.
7.60	1.449E 01	42.268	-72.5	6.038E 01	0.077	12.
8.09	1.317E 01	42.505	-72.0	5.268E 01	0.072	12.
8.61	1.662E 01	42.755	-71.5	6.352E 01	0.061	11.
9.10	1.844E 01	42.991	-71.0	6.811E 01	0.063	9.
9.58	1.464E 01	43.223	-70.5	5.218E 01	0.075	9.
10.09	1.467E 01	43.472	-70.0	5.038E 01	0.062	9.
10.59	1.667E 01	43.711	-69.5	5.522E 01	0.066	7.
11.09	1.780E 01	43.953	-69.0	5.696E 01	0.056	8.
11.63	1.858E 01	44.211	-68.5	5.743E 01	0.057	7.
12.12	1.736E 01	44.450	-68.0	5.194E 01	0.062	6.
12.61	2.183E 01	44.685	-67.5	6.332E 01	0.052	6.
13.08	2.477E 01	44.913	-67.0	6.981E 01	0.055	5.
13.58	3.715E 01	45.154	-66.5	1.016E 02	0.038	6.
14.11	4.109E 01	45.409	-66.0	1.091E 02	0.038	5.
14.62	4.388E 01	45.654	-65.5	1.131E 02	0.036	5.
15.10	4.899E 01	45.886	-65.0	1.230E 02	0.037	4.
15.61	5.547E 01	46.130	-64.5	1.355E 02	0.030	5.
16.14	5.215E 01	46.386	-64.0	1.239E 02	0.034	4.
16.63	4.732E 01	46.624	-63.5	1.094E 02	0.035	4.
17.09	4.806E 01	46.842	-63.0	1.086E 02	0.038	3.
17.56	4.447E 01	47.070	-62.5	9.798E 01	0.035	4.
18.12	4.624E 01	47.341	-62.0	9.916E 01	0.033	4.
18.64	4.232E 01	47.589	-61.5	8.843E 01	0.039	3.
19.09	3.947E 01	47.810	-61.0	8.066E 01	0.040	3.
19.57	4.092E 01	48.040	-60.5	8.173E 01	0.039	3.
20.06	4.664E 01	48.278	-60.0	9.090E 01	0.035	3.
20.58	4.261E 01	48.526	-59.5	8.110E 01	0.036	3.
21.11	4.142E 01	48.783	-59.0	7.684E 01	0.036	3.
21.57	3.830E 01	49.004	-58.5	6.957E 01	0.045	2.
22.05	4.015E 01	49.234	-58.0	7.142E 01	0.035	3.
22.64	4.118E 01	49.519	-57.5	7.123E 01	0.034	3.
23.15	4.386E 01	49.765	-57.0	7.412E 01	0.040	2.
23.57	4.175E 01	49.969	-56.5	6.924E 01	0.040	2.
24.12	4.045E 01	50.231	-56.0	6.547E 01	0.033	3.
24.68	4.342E 01	50.502	-55.5	6.859E 01	0.037	2.
25.14	3.925E 01	50.726	-55.0	6.073E 01	0.040	2.
25.62	4.209E 01	50.956	-54.5	6.380E 01	0.038	2.

26.11	4.421E 01	51.193	-54.0	6.559E 01	0.036	2.
26.62	3.952E 01	51.437	-53.5	5.737E 01	0.038	2.
27.14	4.019E 01	51.688	-53.0	5.705E 01	0.037	2.
27.67	4.367E 01	51.946	-52.5	6.058E 01	0.035	2.
28.09	4.091E 01	52.145	-52.0	5.578E 01	0.051	1.
28.51	4.337E 01	52.348	-51.5	5.809E 01	0.034	2.
29.09	4.493E 01	52.626	-51.0	5.873E 01	0.033	2.
29.68	4.791E 01	52.913	-50.5	6.105E 01	0.032	2.
30.14	4.982E 01	53.134	-50.0	6.230E 01	0.044	1.
30.61	4.581E 01	53.360	-49.5	5.616E 01	0.032	2.
31.09	4.732E 01	53.591	-49.0	5.688E 01	0.044	1.
31.58	4.718E 01	53.829	-48.5	5.557E 01	0.031	2.
32.08	4.684E 01	54.071	-48.0	5.402E 01	0.043	1.
32.60	5.022E 01	54.319	-47.5	5.668E 01	0.030	2.
33.13	4.625E 01	54.574	-47.0	5.109E 01	0.043	1.
33.67	5.006E 01	54.835	-46.5	5.407E 01	0.029	2.
34.22	5.100E 01	55.101	-46.0	5.385E 01	0.039	1.
34.60	5.720E 01	55.283	-45.5	5.946E 01	0.037	1.
34.98	5.228E 01	55.468	-45.0	5.349E 01	0.039	1.
35.57	5.489E 01	55.751	-44.5	5.481E 01	0.026	2.
36.17	5.141E 01	56.041	-44.0	5.007E 01	0.038	1.
36.58	5.513E 01	56.238	-43.5	5.280E 01	0.036	1.
37.00	5.488E 01	56.439	-43.0	5.166E 01	0.036	1.
37.42	5.817E 01	56.644	-42.5	5.381E 01	0.035	1.
38.07	5.782E 01	56.957	-42.0	5.205E 01	0.024	2.
38.74	6.350E 01	57.278	-41.5	5.561E 01	0.032	1.
39.19	5.832E 01	57.497	-41.0	5.011E 01	0.034	1.
39.65	6.040E 01	57.720	-40.5	5.091E 01	0.033	1.
40.12	6.595E 01	57.947	-40.0	5.450E 01	0.031	1.
40.60	6.480E 01	58.178	-39.5	5.249E 01	0.031	1.
41.09	6.045E 01	58.413	-39.0	4.796E 01	0.032	1.
41.59	6.611E 01	58.652	-38.5	5.137E 01	0.031	1.
42.09	6.663E 01	58.896	-38.0	5.067E 01	0.031	1.
42.61	7.158E 01	59.144	-37.5	5.325E 01	0.029	1.
43.13	7.131E 01	59.397	-37.0	5.188E 01	0.029	1.
43.67	6.863E 01	59.654	-36.5	4.879E 01	0.029	1.
44.21	7.017E 01	59.916	-36.0	4.872E 01	0.029	1.
44.77	6.996E 01	60.183	-35.5	4.742E 01	0.028	1.
45.33	7.352E 01	60.456	-35.0	4.862E 01	0.027	1.
45.91	7.178E 01	60.733	-34.0	4.628E 01	0.027	1.
46.49	7.095E 01	61.016	-33.5	4.457E 01	0.027	1.
47.09	7.390E 01	61.304	-33.0	4.520E 01	0.026	1.
47.70	7.548E 01	61.598	-32.5	4.491E 01	0.025	1.
48.32	7.820E 01	61.897	-32.0	4.523E 01	0.025	1.
48.95	7.487E 01	62.203	-31.0	4.206E 01	0.026	1.
49.60	7.886E 01	62.514	-30.5	4.299E 01	0.025	1.
50.26	8.069E 01	62.832	-30.0	4.265E 01	0.024	1.
50.93	8.388E 01	63.156	-29.0	4.294E 01	0.023	1.
51.62	8.806E 01	63.486	-28.5	4.362E 01	0.023	1.
52.32	9.734E 01	63.824	-28.0	4.659E 01	0.021	1.
53.03	1.085E 02	64.168	-27.0	5.013E 01	0.020	1.
53.76	1.221E 02	64.519	-26.5	5.439E 01	0.019	1.
54.50	1.396E 02	64.878	-25.5	5.984E 01	0.017	1.
55.26	1.495E 02	65.244	-25.0	6.159E 01	0.016	1.
56.04	1.516E 02	65.617	-24.0	5.992E 01	0.016	1.
56.83	1.514E 02	65.999	-23.5	5.731E 01	0.016	1.
57.64	1.513E 02	66.389	-22.5	5.472E 01	0.016	1.
58.47	1.525E 02	66.787	-21.5	5.263E 01	0.016	1.
59.31	1.506E 02	67.194	-21.0	4.943E 01	0.015	1.
60.17	1.503E 02	67.610	-20.0	4.680E 01	0.015	1.

61.05	1.509E 02	68.635	-19.0	4.447E 01	0.015	1.
61.96	1.559E 02	68.469	-18.0	4.331E 01	0.015	1.
62.88	1.590E 02	68.913	-17.0	4.151E 01	0.014	1.
63.82	1.607E 02	69.367	-16.5	3.926E 01	0.014	1.
64.78	1.654E 02	69.831	-15.5	3.762E 01	0.014	1.
65.77	1.658E 02	70.306	-14.5	3.491E 01	0.014	1.
66.77	1.651E 02	70.792	-13.5	3.199E 01	0.013	1.
67.81	1.644E 02	71.289	-12.5	2.907E 01	0.013	1.
68.86	1.676E 02	71.797	-11.0	2.680E 01	0.013	1.
69.94	1.736E 02	72.318	-10.0	2.483E 01	0.013	1.
71.05	1.747E 02	72.851	-9.0	2.202E 01	0.013	1.
72.18	1.824E 02	73.396	-8.0	1.989E 01	0.013	1.
73.34	1.896E 02	73.955	-7.0	1.746E 01	0.013	1.
74.52	2.189E 02	74.527	-5.5	1.644E 01	0.012	1.
75.74	3.723E 02	75.114	-4.5	2.161E 01	0.008	1.
76.99	7.977E 02	75.714	-3.0	3.268E 01	0.005	1.
78.27	1.373E 03	76.330	-2.0	3.259E 01	0.004	1.
79.57	1.571E 03	76.961	-0.5	8.125E 00	0.004	1.
80.92	1.143E 03	77.609	1.0	1.019E 02	0.004	1.
82.29	4.831E 02	78.272	2.0	5.715E 03	0.007	1.
83.71	1.017E 02	78.953	3.5	9.692E 04	0.015	1.
85.16	9.754E 00	79.652	5.0	7.053E 05	0.064	1.
86.64	3.909E 00	80.368	6.5	2.200E 07	0.103	1.
88.17	-1.505E 01	81.104	8.0	-6.998E 07	2.574	1.
89.74	8.821E 01	81.859	9.5	3.672E 10	0.389	1.
91.35	1.813E 00	82.635	11.0	7.418E 12	0.157	1.
93.00	2.474E 00	83.432	13.0	1.103E 15	0.110	1.
94.70	6.001E 01	84.250	14.5	3.260E 16	0.525	1.
96.44	7.873E 01	85.091	16.5	5.868E 18	0.357	1.
98.24	6.871E 01	85.936	18.0	7.968E 20	0.292	1.

LONGITUDINAL POLYETHYLENE 4.2K

2034 5

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 2034 COMPUTED 072667 INCIDENT ENERGY .0801 ANGLE NO 6 IS 80.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.27	1.365E 01	37.474	-77.0	1.159E 02	0.897	15.
3.59	1.966E 01	37.500	-76.5	1.579E 02	0.393	40.
4.09	1.965E 01	37.549	-76.0	1.476E 02	0.541	34.
4.60	9.479E 00	37.611	-75.5	6.639E 01	0.524	28.
5.10	9.219E 00	37.682	-75.0	6.096E 01	0.579	24.
5.60	1.205E 01	37.761	-74.5	7.515E 01	0.235	21.
6.09	9.007E 00	37.846	-74.0	5.331E 01	0.104	18.
6.60	1.197E 01	37.939	-73.5	6.750E 01	0.087	17.
7.10	1.479E 01	38.037	-73.0	7.980E 01	0.088	14.
7.58	1.376E 01	38.137	-72.5	7.175E 01	0.078	13.
8.08	1.043E 01	38.243	-72.0	5.204E 01	0.076	12.
8.58	1.612E 01	38.354	-71.5	7.762E 01	0.067	11.
9.10	2.139E 01	38.474	-71.0	9.899E 01	0.057	11.
9.61	1.577E 01	38.596	-70.5	7.060E 01	0.075	9.
10.09	1.706E 01	38.712	-70.0	7.384E 01	0.075	8.
10.57	2.041E 01	38.831	-69.5	8.541E 01	0.067	8.
11.08	1.548E 01	38.962	-69.0	6.277E 01	0.070	8.
11.60	1.215E 01	39.096	-68.5	4.760E 01	0.083	7.
12.12	1.057E 01	39.233	-68.0	4.021E 01	0.090	7.
12.63	1.444E 01	39.370	-67.5	5.334E 01	0.080	6.
13.13	1.522E 01	39.507	-67.0	5.447E 01	0.076	6.
13.61	1.241E 01	39.641	-66.5	4.328E 01	0.089	5.
14.08	1.843E 01	39.772	-66.0	6.269E 01	0.067	5.
14.57	2.141E 01	39.911	-65.5	7.101E 01	0.061	5.
15.08	2.454E 01	40.059	-65.0	7.920E 01	0.057	5.
15.57	2.724E 01	40.201	-64.5	8.567E 01	0.056	4.
16.08	2.391E 01	40.351	-64.0	7.322E 01	0.054	5.
16.62	2.286E 01	40.511	-63.5	6.817E 01	0.060	4.
17.12	2.432E 01	40.661	-63.0	7.070E 01	0.056	4.
17.65	2.467E 01	40.819	-62.5	7.001E 01	0.055	4.
18.12	2.247E 01	40.965	-62.0	6.236E 01	0.066	3.
18.62	2.767E 01	41.118	-61.5	7.496E 01	0.049	4.
19.14	2.658E 01	41.278	-61.0	7.032E 01	0.057	3.
19.60	2.684E 01	41.422	-60.5	6.943E 01	0.057	3.
20.08	2.468E 01	41.573	-60.0	6.254E 01	0.059	3.
20.58	2.905E 01	41.730	-59.5	7.197E 01	0.051	3.
21.09	2.784E 01	41.894	-59.0	6.742E 01	0.052	3.
21.63	2.748E 01	42.065	-58.5	6.493E 01	0.051	3.
22.09	3.233E 01	42.213	-58.0	7.490E 01	0.056	2.
22.57	2.988E 01	42.367	-57.5	6.783E 01	0.048	3.
23.06	3.287E 01	42.527	-57.0	7.300E 01	0.054	2.
23.57	3.356E 01	42.694	-56.5	7.293E 01	0.042	3.
24.09	3.519E 01	42.866	-56.0	7.478E 01	0.050	2.
24.53	3.496E 01	43.009	-55.5	7.294E 01	0.050	2.
25.08	3.388E 01	43.194	-55.0	6.904E 01	0.040	3.
25.66	3.738E 01	43.386	-54.5	7.440E 01	0.047	2.
26.14	3.319E 01	43.546	-54.0	6.476E 01	0.050	2.
26.63	3.810E 01	43.710	-53.5	7.287E 01	0.044	2.
27.13	4.027E 01	43.880	-53.0	7.542E 01	0.042	2.
27.65	3.821E 01	44.056	-52.5	7.002E 01	0.043	2.

28.18	3.987E 01	44.237	-52.0	7.153E 01	0.041	2.
28.59	4.513E 01	44.377	-51.5	7.965E 01	0.053	1.
29.01	4.230E 01	44.521	-51.0	7.338E 01	0.039	2.
29.58	4.583E 01	44.717	-50.5	7.768E 01	0.037	2.
30.17	4.930E 01	44.921	-50.0	8.161E 01	0.035	2.
30.63	4.852E 01	45.078	-49.5	7.889E 01	0.049	1.
31.09	5.248E 01	45.240	-49.0	8.376E 01	0.033	2.
31.57	5.859E 01	45.405	-48.5	9.175E 01	0.042	1.
32.05	5.959E 01	45.575	-48.0	9.149E 01	0.029	2.
32.55	6.002E 01	45.749	-47.5	9.036E 01	0.040	1.
33.06	6.044E 01	45.928	-47.0	8.919E 01	0.029	2.
33.58	6.124E 01	46.111	-46.5	8.850E 01	0.039	1.
34.12	6.417E 01	46.300	-46.0	9.077E 01	0.027	2.
34.66	6.437E 01	46.493	-45.5	8.910E 01	0.037	1.
35.03	6.879E 01	46.625	-45.0	9.382E 01	0.036	1.
35.60	7.016E 01	46.828	-44.5	9.358E 01	0.025	2.
36.18	7.464E 01	47.036	-44.0	9.724E 01	0.033	1.
36.58	7.493E 01	47.178	-43.5	9.608E 01	0.033	1.
36.98	7.562E 01	47.322	-43.0	9.541E 01	0.033	1.
37.60	8.074E 01	47.644	-42.5	9.942E 01	0.022	2.
38.23	8.931E 01	47.772	-42.0	1.072E 02	0.029	1.
38.66	8.227E 01	47.927	-41.5	9.704E 01	0.030	1.
39.10	8.611E 01	48.086	-41.0	9.980E 01	0.029	1.
39.55	9.234E 01	48.247	-40.5	1.051E 02	0.027	1.
40.00	9.338E 01	48.412	-40.0	1.043E 02	0.027	1.
40.46	9.564E 01	48.580	-39.5	1.049E 02	0.026	1.
40.93	9.494E 01	48.751	-39.0	1.021E 02	0.027	1.
41.41	9.664E 01	48.925	-38.5	1.020E 02	0.026	1.
41.89	1.011E 02	49.103	-38.0	1.045E 02	0.025	1.
42.39	9.996E 01	49.284	-37.5	1.013E 02	0.025	1.
42.89	1.048E 02	49.469	-37.0	1.040E 02	0.024	1.
43.40	1.061E 02	49.657	-36.5	1.031E 02	0.024	1.
43.92	1.099E 02	49.849	-36.0	1.045E 02	0.023	1.
44.46	1.053E 02	50.045	-35.5	9.786E 01	0.023	1.
45.00	1.106E 02	50.245	-35.0	1.005E 02	0.023	1.
45.55	1.088E 02	50.449	-34.5	9.652E 01	0.023	1.
46.11	1.144E 02	50.657	-34.0	9.910E 01	0.022	1.
46.68	1.128E 02	50.870	-33.5	9.537E 01	0.022	1.
47.26	1.109E 02	51.087	-33.0	9.142E 01	0.022	1.
47.85	1.122E 02	51.308	-32.0	9.004E 01	0.022	1.
48.46	1.155E 02	51.534	-31.5	9.024E 01	0.021	1.
49.07	1.153E 02	51.764	-31.0	8.765E 01	0.021	1.
49.70	1.154E 02	51.999	-30.5	8.524E 01	0.021	1.
50.34	1.202E 02	52.240	-30.0	8.626E 01	0.020	1.
50.99	1.173E 02	52.485	-29.0	8.164E 01	0.020	1.
51.65	1.181E 02	52.736	-28.5	7.969E 01	0.020	1.
52.33	1.315E 02	52.992	-28.0	8.587E 01	0.019	1.
53.02	1.465E 02	53.254	-27.0	9.253E 01	0.017	1.
53.72	1.828E 02	53.521	-26.5	1.115E 02	0.015	1.
54.44	2.116E 02	53.794	-25.5	1.245E 02	0.014	1.
55.18	2.485E 02	54.073	-25.0	1.408E 02	0.013	1.
55.92	2.670E 02	54.359	-24.0	1.455E 02	0.012	1.
56.69	2.810E 02	54.650	-23.5	1.470E 02	0.012	1.
57.47	2.755E 02	54.949	-22.5	1.381E 02	0.012	1.
58.26	2.807E 02	55.254	-22.0	1.346E 02	0.011	1.
59.07	2.719E 02	55.566	-21.0	1.245E 02	0.012	1.
59.90	2.752E 02	55.885	-20.0	1.199E 02	0.011	1.
60.75	2.871E 02	56.211	-19.5	1.188E 02	0.011	1.
61.61	3.020E 02	56.545	-18.5	1.183E 02	0.011	1.
62.50	3.218E 02	56.887	-17.5	1.190E 02	0.010	1.
63.40	3.331E 02	57.236	-16.5	1.158E 02	0.010	1.
64.32	3.268E 02	57.594	-16.0	1.063E 02	0.010	1.
65.26	3.169E 02	57.961	-15.0	9.608E 01	0.010	1.
66.23	3.011E 02	58.336	-14.0	8.456E 01	0.010	1.

67.21	2.923E 02	58.720	-13.0	7.558E 01	0.010	1.
68.22	2.922E 02	59.114	-12.0	6.900E 01	0.010	1.
69.25	2.895E 02	59.517	-11.0	6.183E 01	0.010	1.
70.30	2.971E 02	59.930	-10.0	5.677E 01	0.010	1.
71.38	2.980E 02	60.354	-8.5	5.019E 01	0.010	1.
72.48	2.956E 02	60.788	-7.5	4.308E 01	0.010	1.
73.61	2.938E 02	61.232	-6.5	3.612E 01	0.010	1.
74.76	2.883E 02	61.688	-5.5	2.887E 01	0.010	1.
75.94	3.402E 02	62.156	-4.0	2.626E 01	0.009	1.
77.15	6.930E 02	62.636	-3.0	3.754E 01	0.006	1.
78.39	1.464E 03	63.128	-1.5	4.508E 01	0.004	1.
79.66	2.091E 03	63.632	-0.5	1.154E 01	0.003	1.
80.96	1.874E 03	64.150	1.0	2.852E 02	0.003	1.
82.30	1.050E 03	64.682	2.0	1.753E 04	0.005	1.
83.66	3.606E 02	65.228	3.5	4.215E 05	0.008	1.
85.06	6.393E 01	65.789	5.0	4.927E 06	0.024	1.
86.50	4.775E 00	66.364	6.5	2.476E 07	0.219	1.
87.97	1.216E 00	66.956	8.0	4.480E 08	0.790	1.
89.48	1.917E-01	67.564	9.5	5.397E 09	4.015	1.
91.03	-2.249E-01	68.188	11.0	-5.270E 11	2.680	1.
92.62	3.795E 00	68.830	12.5	8.141E 14	0.116	1.
94.25	1.470E 00	69.490	14.0	3.199E 16	0.308	1.
95.92	1.805E 00	70.169	16.0	4.447E 18	0.227	1.
97.64	1.816E 00	70.867	17.5	5.685E 20	0.216	1.
99.41	2.528E 00	71.585	19.5	1.136E 23	0.139	1.
101.23	2.519E 00	72.324	21.0	1.845E 25	0.118	1.
103.09	1.629E 00	73.085	23.0	2.225E 27	0.185	1.
105.01	6.864E-01	73.869	25.0	2.007E 29	0.203	1.

TRANSVERSE POLYETHYLENE 4.2K

2034 6

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 2034 COMPUTED 072667 INCIDENT ENERGY .0801 ANGLE NO 2 IS 90.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.33	3.269E 01	40.213	-77.0	2.653E 02	0.886	4.
3.59	1.241E 01	40.339	-76.5	9.671E 01	0.417	41.
4.09	1.716E 01	40.580	-76.0	1.237E 02	0.290	34.
4.60	4.792E 00	40.822	-75.5	3.248E 01	0.859	29.
5.10	8.655E 00	41.063	-75.0	5.519E 01	0.543	24.
5.59	1.244E 01	41.300	-74.5	7.707E 01	0.271	21.
6.09	1.248E 01	41.541	-74.0	7.044E 01	0.168	19.
6.60	1.123E 01	41.786	-73.5	6.063E 01	0.188	17.
7.10	1.152E 01	42.031	-73.0	5.903E 01	0.122	15.
7.60	1.724E 01	42.269	-72.5	8.488E 01	0.086	13.
8.08	1.223E 01	42.504	-72.0	5.802E 01	0.096	12.
8.60	1.644E 01	42.751	-71.5	7.468E 01	0.080	12.
9.11	1.737E 01	42.998	-71.0	7.592E 01	0.093	10.
9.59	1.883E 01	43.230	-70.5	7.966E 01	0.090	9.
10.08	1.379E 01	43.467	-70.0	5.628E 01	0.098	9.
10.58	2.145E 01	43.709	-69.5	8.452E 01	0.078	8.
11.09	1.436E 01	43.953	-69.0	5.465E 01	0.094	8.
11.60	1.669E 01	44.197	-68.5	6.159E 01	0.092	7.
12.10	1.094E 01	44.442	-68.0	3.908E 01	0.112	7.
12.61	1.050E 01	44.683	-67.5	3.636E 01	0.119	6.
13.10	1.456E 01	44.919	-67.0	4.906E 01	0.106	6.
13.62	2.083E 01	45.169	-66.5	6.822E 01	0.076	6.
14.12	2.534E 01	45.412	-66.0	8.069E 01	0.071	5.
14.60	2.571E 01	45.645	-65.5	7.971E 01	0.068	5.
15.11	2.573E 01	45.890	-65.0	7.771E 01	0.067	5.
15.59	2.587E 01	46.121	-64.5	7.613E 01	0.073	4.
16.09	2.716E 01	46.363	-64.0	7.779E 01	0.061	5.
16.62	2.456E 01	46.618	-63.5	6.854E 01	0.079	4.
17.11	2.497E 01	46.855	-63.0	6.789E 01	0.070	4.
17.62	2.743E 01	47.102	-62.5	7.289E 01	0.065	4.
18.09	2.933E 01	47.328	-62.0	7.601E 01	0.071	3.
18.58	2.878E 01	47.563	-61.5	7.292E 01	0.058	4.
19.09	3.126E 01	47.807	-61.0	7.733E 01	0.063	3.
19.62	2.692E 01	48.062	-60.5	6.501E 01	0.059	4.
20.17	3.095E 01	48.328	-60.0	7.285E 01	0.060	3.
20.66	3.140E 01	48.564	-59.5	7.233E 01	0.058	3.
21.17	3.393E 01	48.810	-59.0	7.633E 01	0.054	3.
21.61	3.128E 01	49.021	-58.5	6.899E 01	0.071	2.
22.06	3.729E 01	49.239	-58.0	8.069E 01	0.049	3.
22.62	3.342E 01	49.510	-57.5	7.057E 01	0.052	3.
23.10	3.267E 01	49.743	-57.0	6.748E 01	0.064	2.
23.61	3.705E 01	49.985	-56.5	7.494E 01	0.046	3.
24.12	3.960E 01	50.234	-56.0	7.836E 01	0.054	2.
24.55	3.774E 01	50.439	-55.5	7.336E 01	0.055	2.
25.10	4.269E 01	50.704	-55.0	8.111E 01	0.040	3.
25.66	4.324E 01	50.977	-54.5	8.018E 01	0.048	2.
26.13	4.360E 01	51.202	-54.0	7.935E 01	0.047	2.
26.61	4.316E 01	51.434	-53.5	7.698E 01	0.047	2.
27.11	4.716E 01	51.672	-53.0	8.244E 01	0.043	2.
27.61	4.726E 01	51.917	-52.5	8.091E 01	0.042	2.

28.14	4.757E 01	52.168	-52.0	7.973E 01	0.042	2.
28.67	5.017E 01	52.427	-51.5	8.228E 01	0.040	2.
29.09	4.553E 01	52.626	-51.0	7.345E 01	0.059	1.
29.51	5.324E 01	52.830	-50.5	8.444E 01	0.037	2.
30.09	5.380E 01	53.108	-50.0	8.339E 01	0.037	2.
30.68	6.117E 01	53.394	-49.5	9.258E 01	0.033	2.
31.14	5.814E 01	53.614	-49.0	8.642E 01	0.048	1.
31.60	6.568E 01	53.840	-48.5	9.580E 01	0.031	2.
32.08	6.806E 01	54.070	-48.0	9.745E 01	0.042	1.
32.57	6.721E 01	54.306	-47.5	9.440E 01	0.030	2.
33.07	6.503E 01	54.547	-47.0	8.955E 01	0.042	1.
33.58	6.713E 01	54.794	-46.5	9.059E 01	0.029	2.
34.11	7.234E 01	55.047	-46.0	9.562E 01	0.039	1.
34.64	7.390E 01	55.305	-45.5	9.565E 01	0.026	2.
35.19	7.573E 01	55.570	-45.0	9.592E 01	0.036	1.
35.57	8.344E 01	55.750	-44.5	1.041E 02	0.034	1.
36.14	8.078E 01	56.025	-44.0	9.858E 01	0.025	2.
36.72	7.844E 01	56.307	-43.5	9.355E 01	0.035	1.
37.12	8.223E 01	56.499	-43.0	9.653E 01	0.034	1.
37.53	8.883E 01	56.694	-42.5	1.026E 02	0.031	1.
37.94	9.464E 01	56.892	-42.0	1.076E 02	0.030	1.
38.57	9.525E 01	57.196	-41.5	1.055E 02	0.021	2.
39.21	9.612E 01	57.507	-41.0	1.039E 02	0.029	1.
39.65	1.057E 02	57.718	-40.5	1.122E 02	0.027	1.
40.10	1.055E 02	57.934	-40.0	1.100E 02	0.027	1.
40.55	1.135E 02	58.153	-39.5	1.163E 02	0.025	1.
41.01	1.091E 02	58.375	-39.0	1.096E 02	0.026	1.
41.48	1.121E 02	58.602	-38.5	1.105E 02	0.025	1.
41.96	1.115E 02	58.832	-38.0	1.079E 02	0.025	1.
42.45	1.129E 02	59.067	-37.5	1.071E 02	0.025	1.
42.94	1.166E 02	59.305	-37.0	1.084E 02	0.024	1.
43.45	1.103E 02	59.548	-36.5	1.005E 02	0.025	1.
43.96	1.200E 02	59.795	-36.0	1.070E 02	0.023	1.
44.48	1.186E 02	60.047	-35.5	1.035E 02	0.023	1.
45.01	1.231E 02	60.303	-35.0	1.051E 02	0.023	1.
45.55	1.211E 02	60.563	-34.5	1.010E 02	0.023	1.
46.10	1.181E 02	60.828	-34.0	9.625E 01	0.023	1.
46.66	1.239E 02	61.099	-33.5	9.859E 01	0.022	1.
47.23	1.292E 02	61.374	-33.0	1.004E 02	0.021	1.
47.82	1.284E 02	61.654	-32.5	9.723E 01	0.021	1.
48.41	1.302E 02	61.939	-31.5	9.613E 01	0.021	1.
49.01	1.298E 02	62.230	-31.0	9.332E 01	0.021	1.
49.63	1.306E 02	62.526	-30.5	9.132E 01	0.020	1.
50.25	1.272E 02	62.828	-30.0	8.647E 01	0.021	1.
50.89	1.318E 02	63.135	-29.0	8.704E 01	0.020	1.
51.54	1.334E 02	63.449	-28.5	8.549E 01	0.020	1.
52.20	1.358E 02	63.768	-28.0	8.434E 01	0.019	1.
52.88	1.547E 02	64.094	-27.0	9.306E 01	0.018	1.
53.57	1.855E 02	64.426	-26.5	1.079E 02	0.016	1.
54.27	2.246E 02	64.764	-26.0	1.262E 02	0.014	1.
54.99	2.499E 02	65.110	-25.0	1.355E 02	0.013	1.
55.72	2.843E 02	65.462	-24.5	1.485E 02	0.012	1.
56.46	2.935E 02	65.821	-23.5	1.475E 02	0.012	1.
57.22	2.931E 02	66.187	-23.0	1.415E 02	0.012	1.
58.00	2.835E 02	66.561	-22.0	1.311E 02	0.012	1.
58.79	2.822E 02	66.943	-21.5	1.249E 02	0.012	1.
59.60	2.862E 02	67.332	-20.5	1.209E 02	0.012	1.
60.42	2.824E 02	67.730	-19.5	1.136E 02	0.012	1.
61.26	2.902E 02	68.136	-19.0	1.108E 02	0.011	1.
62.12	3.058E 02	68.550	-18.0	1.106E 02	0.011	1.
63.00	3.218E 02	68.973	-17.0	1.098E 02	0.011	1.
63.90	3.212E 02	69.405	-16.0	1.030E 02	0.010	1.
64.81	3.215E 02	69.847	-15.5	9.646E 01	0.010	1.
65.75	3.136E 02	70.298	-14.5	8.759E 01	0.010	1.

66.71	2.924E 02	70.759	-13.5	7.560E 01	0.011	1.
67.68	2.960E 02	71.230	-12.5	7.037E 01	0.010	1.
68.68	2.919E 02	71.711	-11.5	6.328E 01	0.010	1.
69.70	2.879E 02	72.203	-10.5	5.638E 01	0.010	1.
70.75	2.978E 02	72.707	-9.5	5.201E 01	0.010	1.
71.82	2.894E 02	73.221	-8.5	4.440E 01	0.010	1.
72.91	2.825E 02	73.748	-7.0	3.732E 01	0.010	1.
74.02	2.754E 02	74.286	-6.0	3.048E 01	0.010	1.
75.17	2.624E 02	74.837	-5.0	2.338E 01	0.010	1.
76.34	3.474E 02	75.401	-4.0	2.341E 01	0.009	1.
77.53	7.378E 02	75.978	-2.5	3.358E 01	0.006	1.
78.76	1.449E 03	76.568	-1.5	3.333E 01	0.004	1.
80.01	1.875E 03	77.173	-0.0	5.863E-01	0.004	1.
81.30	1.504E 03	77.793	1.0	8.281E 02	0.004	1.
82.62	7.477E 02	78.427	2.5	3.367E 04	0.006	1.
83.96	2.194E 02	79.077	4.0	6.246E 05	0.013	1.
85.35	3.178E 01	79.743	5.0	5.539E 06	0.068	1.
86.76	9.656E-01	80.426	6.5	1.060E 07	1.989	1.
88.21	-2.099E-02	81.126	8.0	-1.535E 07	68.359	1.
89.70	2.463E 00	81.843	9.5	-1.291E 11	0.371	1.
91.23	-1.405E-01	82.579	11.0	-5.741E 11	4.591	1.
92.80	-1.316E 00	83.334	12.5	-4.598E 14	0.454	1.
94.40	4.998E-01	84.108	14.5	1.649E 16	1.219	1.
96.05	-9.401E-02	84.902	16.0	-3.260E 17	6.328	1.
97.74	4.376E 00	85.718	17.5	1.784E 21	0.098	1.
99.48	2.301E 00	86.555	19.5	1.240E 23	0.183	1.
101.26	-1.757E-02	87.415	21.0	-1.417E 23	23.431	1.
103.10	-1.717E-01	88.299	23.0	-2.356E 26	2.396	1.
104.98	2.786E 00	89.206	25.0	7.436E 29	0.128	1.
106.91	1.738E 00	90.138	27.0	1.038E 32	0.186	1.
108.90	7.844E-01	91.097	29.0	1.214E 34	0.172	1.

TRANSVERSE POLYETHYLENE 4.2K

2034 2

VELOCITY SELECTOR CHANNEL COMPRESSION

TRANSVERSE POLYETHYLENE 4.2K

SIGMA=159.24 MASS= 14.00 DWC=.01200 KT=.00036

DATA CODE 2034 COMPUTED 072667 INCIDENT ENERGY .0801 ANGLE NO 4 IS 100.00 DEGREES

ENERGY	SIGMA	KAP SQ	EPS	G(EPS)	ERROR	NO CHAN
3.25	5.672E 00	42.876	-77.0	4.486E 01	0.920	18.
3.59	1.223E 01	43.179	-76.5	9.245E 01	0.595	41.
4.10	6.143E 00	43.615	-76.0	4.276E 01	0.587	33.
4.60	1.170E 01	44.036	-75.5	7.574E 01	0.375	28.
5.10	4.485E 00	44.449	-75.0	2.716E 01	0.247	24.
5.59	1.056E 01	44.846	-74.5	6.058E 01	0.222	20.
6.09	1.050E 01	45.242	-74.0	5.715E 01	0.129	19.
6.60	8.888E 00	45.638	-73.5	4.614E 01	0.130	16.
7.09	1.062E 01	46.012	-73.0	5.242E 01	0.265	14.
7.59	9.984E 00	46.395	-72.5	4.736E 01	0.114	14.
8.11	1.113E 01	46.784	-72.0	5.035E 01	0.114	12.
8.59	1.742E 01	47.141	-71.5	7.593E 01	0.089	10.
9.10	1.811E 01	47.510	-71.0	7.580E 01	0.076	11.
9.62	1.298E 01	47.887	-70.5	5.235E 01	0.100	9.
10.09	1.501E 01	48.231	-70.0	5.837E 01	0.098	8.
10.58	1.378E 01	48.576	-69.5	5.190E 01	0.104	8.
11.09	1.798E 01	48.944	-69.0	6.525E 01	0.088	8.
11.61	1.709E 01	49.311	-68.5	5.999E 01	0.092	7.
12.10	1.670E 01	49.647	-68.0	5.701E 01	0.101	6.
12.57	1.856E 01	49.976	-67.5	6.155E 01	0.085	6.
13.07	2.309E 01	50.321	-67.0	7.435E 01	0.072	6.
13.60	2.354E 01	50.686	-66.5	7.342E 01	0.072	6.
14.11	2.713E 01	51.038	-66.0	8.220E 01	0.069	5.
14.61	2.526E 01	51.374	-65.5	7.455E 01	0.070	5.
15.13	3.586E 01	51.726	-65.0	1.028E 02	0.057	5.
15.62	3.255E 01	52.057	-64.5	9.093E 01	0.064	4.
16.08	4.163E 01	52.365	-64.0	1.136E 02	0.052	4.
16.56	3.289E 01	52.684	-63.5	8.750E 01	0.063	4.
17.06	3.699E 01	53.017	-63.0	9.601E 01	0.057	4.
17.58	3.395E 01	53.364	-62.5	8.584E 01	0.060	4.
18.13	3.401E 01	53.725	-62.0	8.378E 01	0.058	4.
18.63	3.392E 01	54.054	-61.5	8.156E 01	0.067	3.
19.08	3.715E 01	54.346	-61.0	8.752E 01	0.061	3.
19.54	3.703E 01	54.648	-60.5	8.538E 01	0.060	3.
20.10	3.607E 01	55.013	-60.0	8.106E 01	0.053	4.
20.60	4.184E 01	55.337	-59.5	9.191E 01	0.067	2.
21.03	3.967E 01	55.616	-59.0	8.537E 01	0.058	3.
21.57	3.641E 01	55.961	-58.5	7.661E 01	0.059	3.
22.13	3.699E 01	56.319	-58.0	7.595E 01	0.056	3.
22.61	4.405E 01	56.626	-57.5	8.855E 01	0.062	2.
23.10	4.555E 01	56.943	-57.0	8.969E 01	0.048	3.
23.61	4.362E 01	57.269	-56.5	8.405E 01	0.059	2.
24.04	4.264E 01	57.538	-56.0	8.067E 01	0.060	2.
24.58	4.648E 01	57.883	-55.5	8.599E 01	0.046	3.
25.14	5.007E 01	58.239	-55.0	9.044E 01	0.052	2.
25.61	4.780E 01	58.532	-54.5	8.477E 01	0.055	2.
26.09	4.646E 01	58.833	-54.0	8.075E 01	0.055	2.
26.58	4.391E 01	59.141	-53.5	7.478E 01	0.057	2.
27.08	5.234E 01	59.457	-53.0	8.738E 01	0.048	2.
27.60	5.070E 01	59.782	-52.5	8.285E 01	0.050	2.

28.14	5.342E 01	60.116	-52.0	8.548E 01	0.047	2.
28.69	5.728E 01	60.458	-51.5	8.968E 01	0.045	2.
29.11	5.523E 01	60.721	-51.0	8.502E 01	0.066	1.
29.54	6.540E 01	60.990	-50.5	9.901E 01	0.040	2.
30.14	5.990E 01	61.356	-50.0	8.855E 01	0.043	2.
30.59	6.267E 01	61.638	-49.5	9.102E 01	0.057	1.
31.06	7.059E 01	61.926	-49.0	1.007E 02	0.038	2.
31.53	7.127E 01	62.219	-48.5	9.976E 01	0.051	1.
32.02	7.689E 01	62.520	-48.0	1.056E 02	0.035	2.
32.52	8.148E 01	62.826	-47.5	1.098E 02	0.047	1.
33.03	7.793E 01	63.140	-47.0	1.029E 02	0.035	2.
33.56	8.085E 01	63.460	-46.5	1.046E 02	0.047	1.
34.09	7.890E 01	63.788	-46.0	9.995E 01	0.033	2.
34.64	9.695E 01	64.122	-45.5	1.203E 02	0.041	1.
35.02	8.409E 01	64.350	-45.0	1.029E 02	0.045	1.
35.59	8.729E 01	64.698	-44.5	1.044E 02	0.031	2.
36.17	9.432E 01	65.053	-44.0	1.103E 02	0.041	1.
36.57	8.779E 01	65.295	-43.5	1.011E 02	0.043	1.
36.98	1.069E 02	65.540	-43.0	1.212E 02	0.037	1.
37.60	1.032E 02	65.916	-42.5	1.142E 02	0.027	2.
38.23	1.032E 02	66.299	-42.0	1.114E 02	0.037	1.
38.67	9.871E 01	66.560	-41.5	1.048E 02	0.039	1.
39.11	1.149E 02	66.826	-41.0	1.200E 02	0.035	1.
39.56	1.098E 02	67.095	-40.5	1.126E 02	0.035	1.
40.01	1.138E 02	67.369	-40.0	1.147E 02	0.035	1.
40.48	1.268E 02	67.647	-39.5	1.255E 02	0.032	1.
40.95	1.214E 02	67.930	-39.0	1.179E 02	0.033	1.
41.43	1.204E 02	68.218	-38.5	1.148E 02	0.033	1.
41.92	1.200E 02	68.510	-38.0	1.122E 02	0.033	1.
42.41	1.131E 02	68.807	-37.5	1.037E 02	0.035	1.
42.92	1.260E 02	69.109	-37.0	1.132E 02	0.032	1.
43.44	1.244E 02	69.417	-36.5	1.095E 02	0.032	1.
43.96	1.319E 02	69.729	-36.0	1.136E 02	0.030	1.
44.50	1.337E 02	70.047	-35.5	1.127E 02	0.030	1.
45.04	1.312E 02	70.370	-35.0	1.081E 02	0.030	1.
45.59	1.309E 02	70.699	-34.5	1.055E 02	0.030	1.
46.16	1.329E 02	71.033	-34.0	1.047E 02	0.030	1.
46.73	1.383E 02	71.374	-33.5	1.063E 02	0.028	1.
47.32	1.286E 02	71.720	-33.0	9.643E 01	0.029	1.
47.92	1.343E 02	72.073	-32.0	9.818E 01	0.029	1.
48.52	1.367E 02	72.432	-31.5	9.739E 01	0.028	1.
49.14	1.341E 02	72.797	-31.0	9.303E 01	0.028	1.
49.78	1.429E 02	73.169	-30.5	9.641E 01	0.027	1.
50.42	1.361E 02	73.548	-29.5	8.922E 01	0.027	1.
51.08	1.364E 02	73.933	-29.0	8.683E 01	0.027	1.
51.75	1.429E 02	74.326	-28.5	8.827E 01	0.026	1.
52.43	1.662E 02	74.726	-27.5	9.947E 01	0.024	1.
53.13	1.782E 02	75.134	-27.0	1.032E 02	0.023	1.
53.84	2.051E 02	75.549	-26.5	1.148E 02	0.021	1.
54.56	2.401E 02	75.972	-25.5	1.298E 02	0.019	1.
55.30	2.657E 02	76.403	-25.0	1.385E 02	0.018	1.
56.06	2.819E 02	76.843	-24.0	1.414E 02	0.018	1.
56.83	2.909E 02	77.291	-23.5	1.402E 02	0.017	1.
57.61	2.837E 02	77.748	-22.5	1.311E 02	0.017	1.
58.42	2.877E 02	78.214	-21.5	1.273E 02	0.017	1.
59.24	2.775E 02	78.689	-21.0	1.173E 02	0.017	1.
60.07	2.864E 02	79.174	-20.0	1.154E 02	0.017	1.
60.93	2.905E 02	79.668	-19.0	1.112E 02	0.016	1.
61.80	3.035E 02	80.173	-18.5	1.101E 02	0.016	1.
62.69	3.087E 02	80.688	-17.5	1.057E 02	0.016	1.
63.61	3.167E 02	81.213	-16.5	1.020E 02	0.015	1.
64.54	3.153E 02	81.749	-15.5	9.512E 01	0.015	1.
65.49	2.981E 02	82.297	-14.5	8.380E 01	0.016	1.
66.46	2.914E 02	82.856	-13.5	7.590E 01	0.016	1.

67.46	2.784E 02	83.427	-12.5	6.670E 01	0.016	1.
68.48	2.782E 02	84.010	-11.5	6.082E 01	0.016	1.
69.52	2.782E 02	84.606	-10.5	5.498E 01	0.016	1.
70.58	2.715E 02	85.215	-9.5	4.790E 01	0.016	1.
71.67	2.618E 02	85.837	-8.5	4.058E 01	0.016	1.
72.79	2.626E 02	86.473	-7.5	3.505E 01	0.016	1.
73.93	2.542E 02	87.123	-6.0	2.842E 01	0.016	1.
75.10	2.483E 02	87.788	-5.0	2.233E 01	0.017	1.
76.30	3.272E 02	88.467	-4.0	2.222E 01	0.014	1.
77.52	6.204E 02	89.163	-2.5	2.833E 01	0.010	1.
78.78	1.098E 03	89.874	-1.5	2.488E 01	0.007	1.
80.06	1.294E 03	90.602	-0.0	8.039E-02	0.006	1.
81.38	9.271E 02	91.347	1.5	6.877E 02	0.008	1.
82.73	4.185E 02	92.109	2.5	2.717E 04	0.011	1.
84.12	1.071E 02	92.890	4.0	4.826E 05	0.023	1.
85.54	1.290E 01	93.690	5.5	3.940E 06	0.081	1.
86.99	1.956E 00	94.509	7.0	4.193E 07	0.414	1.
88.48	1.296E 00	95.348	8.5	2.076E 09	0.543	1.
90.02	7.541E-01	96.207	10.0	9.759E 10	0.927	1.
91.59	-4.626E-01	97.089	11.5	-5.296E 12	1.463	1.
93.20	-1.181E 00	97.992	13.0	-1.320E 15	0.555	1.
94.86	8.020E-01	98.919	15.0	9.741E 16	0.633	1.
96.56	2.098E 00	99.869	16.5	3.101E 19	0.264	1.
98.31	-4.288E-02	100.844	18.0	-8.686E 19	13.379	1.
100.10	-7.989E-01	101.844	20.0	-2.516E 23	0.676	1.
101.95	1.237E-01	102.870	22.0	6.903E 24	3.727	1.
103.84	8.085E-01	103.924	23.5	9.172E 27	0.255	1.

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