

TABLA DE ENERGIA VS RIGIDEZ MAGNETICA
PARA PARTICULAS DE ^3He MONOIONIZADO

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RESUMEN

A table of singly-ionized ^3He nuclei energies vs. magnetic field strength times orbit radius has been prepared in the range 50 to 2000 Kgauss \cdot cm.

Se ha preparado esta tabla de energía vs rigidez magnética (E vs $B\rho$) en vista de la iniciación, en los Laboratorios Van de Graaff de la U.N.A.M., del programa de medición de valores Q y distribuciones angulares de reacciones nucleares entre los elementos ligeros y primeros intermedios, utilizando partículas de ^3He monoionizado como proyectiles. El intervalo de variación de la rigidez magnética está comprendido entre 51 y 2000 Kgauss \cdot cm.

Se utilizó la fórmula que se transcribe a continuación, misma que empleó

H.A. Enge¹ para determinar valores semejantes para protones, deuterones, tritones y alfas.

$$E' = m_0 c^2 \left(\sqrt{1 + \left(\frac{ZeB\rho}{m_0 c} \right)^2} - 1 \right)$$

Desarrollando esta ecuación en serie de potencias de $(B\rho)^2$, con la sustitución $\frac{F}{M} = \frac{e}{m_0}$ para la carga específica y dividiendo entre $10^{11} \cdot e$ para obtener el valor de la energía en KeV, se tiene:

$$E = 10^{-11} \left[\frac{FZ^2}{2M} (B\rho)^2 - \frac{F^3 Z^4}{8M^3 c^2} (B\rho)^4 + \right. \\ \left. + \frac{F^5 Z^6}{16M^5 c^4} (B\rho)^6 - \frac{5F^7 Z^8}{128M^7 c^6} (B\rho)^8 + \dots \right]$$

En el cálculo se utilizaron las siguientes constantes:

$$F = 9652.19 \text{ uem. (gm-equiv)}^{-1} \text{ (Constante de Faraday)}^2.$$

$$M = 3.0164401 \text{ uam. (Masa del } ^3\text{He monoionizado)}^3.$$

$$c = 2.997930 \times 10^{10} \text{ cm. seg}^{-1} \text{ (Velocidad de la luz)}^2.$$

$$Z = 1 \text{ (Para } Z = 2 \text{ ver referencia (4))}$$

Esta tabla se procesó en el Centro de Cálculo Electrónico de la U.N.A.M. utilizando la ecuación numérica:

$$E_{^3\text{He}} = 1.5599931 \times 10^{-2} (B\rho)^2 - 4.5568087 \times 10^{-11} (B\rho)^4 + \\ + 2.5956757 \times 10^{-19} (B\rho)^6 - 1.8482047 \times 10^{-27} (B\rho)^8 + \dots,$$

que resulta de sustituir las constantes anteriores en la expresión de E .

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$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
51	40.575	1.606
52	42.181	1.637
53	43.819	1.669
54	45.489	1.700
55	47.189	1.731
56	48.920	1.762
57	50.683	1.793
58	52.477	1.825
59	54.302	1.856
60	56.159	1.887
61	58.046	1.918
62	59.965	1.949
63	61.915	1.981
64	63.896	2.012
65	65.908	2.043
66	67.952	2.074
67	70.027	2.105
68	72.133	2.137
69	74.270	2.168
70	76.438	2.199
71	78.638	2.230
72	80.868	2.261
73	83.130	2.293
74	85.423	2.324
75	87.748	2.355
76	90.103	2.386
77	92.490	2.417
78	94.908	2.449
79	97.357	2.480
80	99.837	2.511
81	102.349	2.542
82	104.891	2.573
83	107.465	2.605
84	110.070	2.636
85	112.707	2.667
86	115.374	2.698
87	118.073	2.729
88	120.803	2.761
89	123.564	2.792
90	126.356	2.823
91	129.179	2.854
92	132.034	2.885
93	134.920	2.917
94	137.837	2.948
95	140.785	2.979
96	143.765	3.010
97	146.775	3.041
98	149.817	3.072
99	152.890	3.104
100	155.994	3.135

8ρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
101	159.130	3.166
102	162.296	3.197
103	165.494	3.228
104	168.723	3.260
105	171.983	3.291
106	175.275	3.322
107	178.597	3.353
108	181.951	3.384
109	185.336	3.416
110	188.752	3.447
111	192.199	3.478
112	195.678	3.509
113	199.188	3.540
114	202.728	3.572
115	206.301	3.603
116	209.904	3.634
117	213.538	3.665
118	217.204	3.696
119	220.901	3.728
120	224.629	3.759
121	228.388	3.790
122	232.179	3.821
123	236.000	3.852
124	239.853	3.884
125	243.737	3.915
126	247.653	3.946
127	251.599	3.977
128	255.577	4.008
129	259.585	4.039
130	263.625	4.071
131	267.696	4.102
132	271.799	4.133
133	275.932	4.164
134	280.097	4.195
135	284.293	4.227
136	288.520	4.258
137	292.779	4.289
138	297.068	4.320
139	301.389	4.351
140	305.741	4.383
141	310.124	4.414
142	314.538	4.445
143	318.983	4.476
144	323.460	4.507
145	327.968	4.539
146	332.507	4.570
147	337.077	4.601
148	341.679	4.632
149	346.311	4.663
150	350.975	4.694

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
151	355.670	4.726
152	360.396	4.757
153	365.153	4.788
154	369.942	4.819
155	374.761	4.850
156	379.612	4.882
157	384.495	4.913
158	389.408	4.944
159	394.352	4.975
160	399.328	5.006
161	404.335	5.038
162	409.373	5.068
163	414.442	5.100
164	419.542	5.131
165	424.674	5.162
166	429.837	5.193
167	435.031	5.224
168	440.256	5.256
169	445.512	5.287
170	450.800	5.318
171	456.118	5.349
172	461.468	5.380
173	466.849	5.412
174	472.261	5.443
175	477.705	5.474
176	483.179	5.505
177	488.685	5.537
178	494.222	5.568
179	499.790	5.599
180	505.390	5.630
181	511.020	5.661
182	516.681	5.692
183	522.374	5.724
184	528.099	5.755
185	533.854	5.786
186	539.640	5.817
187	545.458	5.848
188	551.307	5.879
189	557.186	5.911
190	563.098	5.942
191	569.040	5.973
192	575.014	6.004
193	581.018	6.035
194	587.054	6.067
195	593.121	6.098
196	599.219	6.129
197	605.348	6.160
198	611.509	6.192
199	617.701	6.222
200	623.924	6.254

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
201	630.178	6.284
202	636.463	6.316
203	642.780	6.347
204	649.127	6.378
205	655.506	6.409
206	661.916	6.441
207	668.358	6.471
208	674.830	6.503
209	681.333	6.534
210	687.868	6.565
211	694.434	6.597
212	701.031	6.627
213	707.659	6.659
214	714.318	6.690
215	721.009	6.721
216	727.731	6.753
217	734.484	6.783
218	741.268	6.815
219	748.083	6.846
220	754.929	6.877
221	761.807	6.909
222	768.716	6.940
223	775.656	6.970
224	782.627	7.002
225	789.629	7.033
226	796.663	7.064
227	803.727	7.095
228	810.823	7.127
229	817.950	7.158
230	825.109	7.188
231	832.297	7.221
232	839.518	7.251
233	846.770	7.282
234	854.053	7.314
235	861.367	7.345
236	868.712	7.375
237	876.088	7.407
238	883.496	7.438
239	890.934	7.470
240	898.405	7.501
241	905.906	7.531
242	913.437	7.563
243	921.001	7.594
244	928.595	7.625
245	936.221	7.657
246	943.878	7.688
247	951.566	7.718
248	959.285	7.751
249	967.036	7.781
250	974.817	7.812

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
251	982.630	7.843
252	990.474	7.875
253	998.349	7.906
254	1006.256	7.936
255	1014.192	7.968
256	1022.161	7.999
257	1030.161	8.030
258	1038.191	8.062
259	1046.253	8.093
260	1054.346	8.124
261	1062.471	8.155
262	1070.627	8.186
263	1078.813	8.217
264	1087.031	8.249
265	1095.280	8.280
266	1103.561	8.310
267	1111.871	8.342
268	1120.214	8.373
269	1128.588	8.404
270	1136.993	8.436
271	1145.429	8.466
272	1153.895	8.498
273	1162.394	8.528
274	1170.923	8.560
275	1179.484	8.592
276	1188.076	8.622
277	1196.698	8.653
278	1205.352	8.686
279	1214.038	8.715
280	1222.754	8.747
281	1231.501	8.779
282	1240.280	8.810
283	1249.090	8.840
284	1257.931	8.872
285	1266.803	8.904
286	1275.707	8.933
287	1284.641	8.966
288	1293.607	8.996
289	1302.603	9.028
290	1311.632	9.059
291	1320.691	9.090
292	1329.781	9.120
293	1338.902	9.153
294	1348.056	9.183
295	1357.239	9.214
296	1366.454	9.245
297	1375.699	9.277
298	1384.977	9.308
299	1394.285	9.339
300	1403.625	9.371

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
301	1412.996	9.401
302	1422.397	9.433
303	1431.830	9.462
304	1441.293	9.496
305	1450.790	9.525
306	1460.315	9.557
307	1469.872	9.590
308	1479.462	9.619
309	1489.082	9.650
310	1498.733	9.681
311	1508.415	9.712
312	1518.127	9.744
313	1527.872	9.776
314	1537.648	9.806
315	1547.454	9.837
316	1557.292	9.870
317	1567.162	9.899
318	1577.062	9.930
319	1586.992	9.962
320	1596.955	9.993
321	1606.948	10.024
322	1616.973	10.056
323	1627.030	10.086
324	1637.116	10.117
325	1647.234	10.150
326	1657.384	10.179
327	1667.563	10.211
328	1677.775	10.242
329	1688.017	10.274
330	1698.291	10.306
331	1708.597	10.335
332	1718.933	10.367
333	1729.300	10.398
334	1739.699	10.429
335	1750.128	10.460
336	1760.588	10.492
337	1771.081	10.522
338	1781.604	10.553
339	1792.158	10.585
340	1802.743	10.616
341	1813.360	10.646
342	1824.006	10.679
343	1834.686	10.709
344	1845.395	10.741
345	1856.137	10.772
346	1866.909	10.803
347	1877.712	10.833
348	1888.546	10.865
349	1899.411	10.895
350	1910.307	10.927

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
351	1921.235	10.959
352	1932.194	10.990
353	1943.184	11.021
354	1954.206	11.052
355	1965.258	11.081
356	1976.340	11.116
357	1987.456	11.144
358	1998.601	11.177
359	2009.778	11.207
360	2020.986	11.239
361	2032.225	11.269
362	2043.494	11.302
363	2054.797	11.332
364	2066.129	11.363
365	2077.493	11.394
366	2088.888	11.425
367	2100.313	11.456
368	2111.770	11.487
369	2123.257	11.519
370	2134.777	11.550
371	2146.327	11.582
372	2157.909	11.612
373	2169.521	11.644
374	2181.166	11.673
375	2192.839	11.705
376	2204.545	11.736
377	2216.282	11.768
378	2228.050	11.799
379	2239.849	11.832
380	2251.681	11.861
381	2263.542	11.891
382	2275.434	11.924
383	2287.358	11.954
384	2299.313	11.987
385	2311.300	12.016
386	2323.317	12.046
387	2335.363	12.081
388	2347.445	12.110
389	2359.555	12.139
390	2371.695	12.173
391	2383.868	12.205
392	2396.073	12.233
393	2408.307	12.267
394	2420.574	12.297
395	2432.872	12.326
396	2445.198	12.361
397	2457.559	12.389
398	2469.949	12.422
399	2482.371	12.452
400	2494.823	12.484

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
401	2507.307	12.514
402	2519.821	12.546
403	2532.368	12.578
404	2544.946	12.607
405	2557.553	12.638
406	2570.192	12.670
407	2582.862	12.701
408	2595.564	12.732
409	2608.297	12.763
410	2621.061	12.794
411	2633.855	12.827
412	2646.683	12.855
413	2659.539	12.888
414	2672.428	12.919
415	2685.347	12.951
416	2698.299	12.979
417	2711.278	13.014
418	2724.293	13.043
419	2737.336	13.073
420	2750.410	13.108
421	2763.518	13.137
422	2776.655	13.166
423	2789.821	13.200
424	2803.022	13.229
425	2816.251	13.263
426	2829.514	13.291
427	2842.806	13.322
428	2856.129	13.356
429	2869.485	13.384
430	2882.869	13.417
431	2896.287	13.448
432	2909.735	13.478
433	2923.214	13.511
434	2936.725	13.541
435	2950.266	13.571
436	2963.838	13.603
437	2977.442	13.636
438	2991.078	13.665
439	3004.744	13.694
440	3018.439	13.730
441	3032.169	13.759
442	3045.928	13.790
443	3059.719	13.819
444	3073.538	13.854
445	3087.392	13.882
446	3101.275	13.913
447	3115.188	13.944
448	3129.133	13.979
449	3143.112	14.006
450	3157.119	14.040

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
451	3171.159	14.067
452	3185.227	14.101
453	3199.328	14.131
454	3213.460	14.165
455	3227.625	14.195
456	3241.820	14.225
457	3256.045	14.254
458	3270.300	14.287
459	3284.587	14.320
460	3298.907	14.349
461	3313.257	14.382
462	3327.639	14.410
463	3342.049	14.443
464	3356.492	14.475
465	3370.967	14.503
466	3385.471	14.538
467	3400.010	14.567
468	3414.577	14.598
469	3429.176	14.626
470	3443.802	14.661
471	3458.464	14.692
472	3473.156	14.723
473	3487.879	14.754
474	3502.634	14.785
475	3517.419	14.815
476	3532.234	14.845
477	3547.080	14.876
478	3561.957	14.910
479	3576.867	14.940
480	3591.807	14.973
481	3606.781	14.999
482	3621.781	15.033
483	3636.814	15.066
484	3651.880	15.095
485	3666.976	15.125
486	3682.101	15.157
487	3697.259	15.190
488	3712.449	15.219
489	3727.669	15.251
490	3742.920	15.280
491	3758.201	15.312
492	3773.513	15.344
493	3788.858	15.376
494	3804.234	15.408
495	3819.643	15.436
496	3835.079	15.467
497	3850.546	15.499
498	3866.045	15.530
499	3881.576	15.561
500	3897.138	15.592

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
501	3912.730	15.623
502	3928.354	15.654
503	3944.008	15.689
504	3959.697	15.715
505	3975.413	15.746
506	3991.159	15.780
507	4006.940	15.810
508	4022.750	15.840
509	4038.591	15.870
510	4054.462	15.904
511	4070.366	15.934
512	4086.300	15.967
513	4102.268	15.997
514	4118.265	16.026
515	4134.291	16.059
516	4150.351	16.088
517	4166.440	16.117
518	4182.558	16.154
519	4198.712	16.183
520	4214.896	16.212
521	4231.108	16.244
522	4247.352	16.277
523	4263.629	16.305
524	4279.935	16.341
525	4296.276	16.365
526	4312.641	16.401
527	4329.043	16.433
528	4345.477	16.461
529	4361.938	16.492
530	4378.430	16.524
531	4394.955	16.555
532	4411.510	16.586
533	4428.097	16.618
534	4444.716	16.645
535	4461.361	16.680
536	4478.041	16.711
537	4494.752	16.742
538	4511.494	16.772
539	4528.267	16.803
540	4545.070	16.838
541	4561.908	16.863
542	4578.772	16.898
543	4595.670	16.923
544	4612.594	16.963
545	4629.558	16.988
546	4646.546	17.022
547	4663.569	17.052
548	4680.621	17.081
549	4697.703	17.115
550	4714.818	17.144

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
551	4731.963	17.173
552	4749.137	17.207
553	4766.345	17.236
554	4783.581	17.270
555	4800.851	17.303
556	4818.155	17.327
557	4835.482	17.365
558	4852.847	17.393
559	4870.240	17.426
560	4887.667	17.454
561	4905.121	17.487
562	4922.608	17.514
563	4940.123	17.547
564	4957.670	17.579
565	4975.250	17.612
566	4992.862	17.644
567	5010.507	17.671
568	5028.178	17.703
569	5045.882	17.735
570	5063.617	17.762
571	5081.379	17.799
572	5099.179	17.825
573	5117.004	17.862
574	5134.866	17.888
575	5152.754	17.919
576	5170.674	17.956
577	5188.630	17.981
578	5206.612	18.012
579	5224.625	18.043
580	5242.668	18.079
581	5260.748	18.105
582	5278.853	18.135
583	5296.988	18.171
584	5315.160	18.201
585	5333.361	18.231
586	5351.593	18.261
587	5369.855	18.291
588	5388.146	18.321
589	5406.468	18.356
590	5424.825	18.386
591	5443.211	18.415
592	5461.627	18.450
593	5480.077	18.480
594	5498.557	18.509
595	5517.067	18.538
596	5535.605	18.572
597	5554.177	18.607
598	5572.785	18.630
599	5591.415	18.664
600	5610.079	18.698

B_p (Kgauss·cm)	E (KeV)	ΔE (KeV)
601	5628.778	18.727
602	5647.505	18.755
603	5666.260	18.789
604	5685.050	18.822
605	5703.872	18.850
606	5722.723	18.884
607	5741.608	18.912
608	5760.520	18.945
609	5779.465	18.973
610	5798.438	19.006
611	5817.445	19.039
612	5836.484	19.066
613	5855.550	19.099
614	5874.650	19.132
615	5893.782	19.158
616	5912.940	19.191
617	5932.132	19.223
618	5951.356	19.256
619	5970.612	19.282
620	5989.895	19.314
621	6009.210	19.346
622	6028.557	19.379
623	6047.936	19.410
624	6067.346	19.436
625	6086.783	19.474
626	6106.257	19.500
627	6125.758	19.531
628	6145.289	19.569
629	6164.858	19.594
630	6184.452	19.625
631	6204.078	19.656
632	6223.734	19.687
633	6243.422	19.718
634	6263.140	19.749
635	6282.890	19.780
636	6302.670	19.810
637	6322.481	19.847
638	6342.328	19.871
639	6362.200	19.902
640	6382.102	19.938
641	6402.040	19.968
642	6422.009	19.992
643	6442.002	20.028
644	6462.030	20.065
645	6482.095	20.088
646	6502.183	20.124
647	6522.308	20.147
648	6542.455	20.183
649	6562.638	20.219
650	6582.858	20.241

Bρ Kgouss·cm)	E (KeV)	ΔE (KeV)
651	6603.099	20.277
652	6623.377	20.306
653	6643.684	20.342
654	6664.026	20.364
655	6684.390	20.406
656	6704.796	20.428
657	6725.225	20.463
658	6745.688	20.491
659	6766.180	20.527
660	6786.707	20.554
661	6807.262	20.583
662	6827.845	20.618
663	6848.463	20.645
664	6869.109	20.680
665	6889.789	20.708
666	6910.498	20.742
667	6931.240	20.770
668	6952.011	20.804
669	6972.815	20.831
670	6993.647	20.865
671	7014.512	20.899
672	7035.412	20.926
673	7056.339	20.953
674	7077.293	20.987
675	7098.280	21.021
676	7119.301	21.054
677	7140.356	21.081
678	7161.438	21.107
679	7182.545	21.148
680	7203.693	21.174
681	7224.867	21.200
682	7246.067	21.240
683	7267.308	21.266
684	7288.574	21.299
685	7309.873	21.324
686	7331.198	21.365
687	7352.563	21.390
688	7373.953	21.422
689	7395.376	21.447
690	7416.824	21.487
691	7438.312	21.512
692	7459.825	21.545
693	7481.370	21.577
694	7502.947	21.609
695	7524.556	21.633
696	7546.190	21.673
697	7567.863	21.697
698	7589.560	21.729
699	7611.290	21.768
700	7633.058	21.792

B_p (Kgauss·cm)	E (KeV)	ΔE (KeV)
701	7654.850	21.824
702	7676.674	21.855
703	7698.529	21.886
704	7720.416	21.917
705	7742.333	21.941
706	7764.274	21.979
707	7786.254	22.010
708	7808.265	22.041
709	7830.306	22.072
710	7852.379	22.103
711	7874.482	22.133
712	7896.615	22.164
713	7918.780	22.194
714	7940.974	22.224
715	7963.199	22.255
716	7985.454	22.293
717	8007.747	22.315
718	8030.062	22.353
719	8052.416	22.374
720	8074.790	22.412
721	8097.203	22.442
722	8119.646	22.472
723	8142.118	22.509
724	8164.628	22.531
725	8187.159	22.568
726	8209.727	22.597
727	8232.325	22.626
728	8254.952	22.655
729	8277.608	22.693
730	8300.301	22.721
731	8323.023	22.750
732	8345.774	22.779
733	8368.553	22.816
734	8391.369	22.844
735	8414.214	22.873
736	8437.088	22.910
737	8459.998	22.938
738	8482.936	22.966
739	8505.902	22.994
740	8528.897	23.030
741	8551.928	23.058
742	8574.986	23.095
743	8598.081	23.122
744	8621.204	23.150
745	8644.354	23.186
746	8667.541	23.213
747	8690.755	23.249
748	8714.004	23.276
749	8737.281	23.304
750	8760.585	23.339

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
751	8783.925	23.375
752	8807.300	23.393
753	8830.694	23.437
754	8854.132	23.455
755	8877.587	23.499
756	8901.087	23.526
757	8924.614	23.552
758	8948.166	23.588
759	8971.754	23.614
760	8995.368	23.649
761	9019.017	23.675
762	9042.692	23.710
763	9066.402	23.744
764	9090.147	23.770
765	9113.918	23.795
766	9137.713	23.839
767	9161.553	23.855
768	9185.409	23.899
769	9209.309	23.924
770	9233.234	23.959
771	9257.193	23.984
772	9281.177	24.018
773	9305.195	24.052
774	9329.248	24.077
775	9353.325	24.111
776	9377.436	24.145
777	9401.581	24.169
778	9425.750	24.203
779	9449.953	24.236
780	9474.190	24.260
781	9498.451	24.294
782	9522.746	24.327
783	9547.073	24.361
784	9571.435	24.384
785	9595.820	24.427
786	9620.247	24.441
787	9644.689	24.484
788	9669.173	24.517
789	9693.691	24.540
790	9718.232	24.573
791	9742.805	24.606
792	9767.411	24.629
793	9792.040	24.671
794	9816.712	24.694
795	9841.407	24.726
796	9866.133	24.759
797	9890.893	24.791
798	9915.684	24.823
799	9940.508	24.846
800	9965.354	24.887

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
801	9990.242	24.910
802	10015.153	24.942
803	10040.095	24.984
804	10065.079	25.006
805	10090.085	25.027
806	10115.112	25.069
807	10140.181	25.100
808	10165.281	25.133
809	10190.414	25.153
810	10215.567	25.195
811	10240.762	25.226
812	10265.988	25.248
813	10291.236	25.288
814	10316.524	25.309
815	10341.833	25.351
816	10367.184	25.370
817	10392.554	25.413
818	10417.967	25.433
819	10443.400	25.473
820	10468.873	25.494
821	10494.367	25.535
822	10519.902	25.554
823	10545.456	25.596
824	10571.052	25.626
825	10596.678	25.655
826	10622.333	25.676
827	10648.009	25.716
828	10673.725	25.746
829	10699.471	25.776
830	10725.247	25.816
831	10751.063	25.836
832	10776.899	25.865
833	10802.764	25.905
834	10828.669	25.924
835	10854.593	25.964
836	10880.557	25.994
837	10906.551	26.023
838	10932.574	26.052
839	10958.626	26.092
840	10984.718	26.109
841	11010.827	26.150
842	11036.977	26.179
843	11063.156	26.208
844	11089.364	26.236
845	11115.600	26.275
846	11141.875	26.295
847	11168.170	26.332
848	11194.502	26.362
849	11220.864	26.401
850	11247.265	26.417

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
851	11273.682	26.457
852	11300.139	26.485
853	11326.624	26.513
854	11353.137	26.552
855	11379.689	26.581
856	11406.270	26.608
857	11432.878	26.635
858	11459.513	26.675
859	11486.188	26.702
860	11512.890	26.729
861	11539.619	26.768
862	11566.387	26.785
863	11593.172	26.834
864	11620.006	26.849
865	11646.855	26.889
866	11673.744	26.915
867	11700.659	26.942
868	11727.601	26.981
869	11754.582	27.007
870	11781.589	27.046
871	11808.635	27.072
872	11835.707	27.098
873	11862.805	27.137
874	11889.942	27.163
875	11917.105	27.188
876	11944.293	27.227
877	11971.520	27.254
878	11998.774	27.291
879	12026.065	27.317
880	12053.382	27.342
881	12080.724	27.380
882	12108.104	27.407
883	12135.511	27.442
884	12162.954	27.470
885	12190.424	27.506
886	12217.930	27.532
887	12245.462	27.556
888	12273.018	27.594
889	12300.612	27.632
890	12328.244	27.657
891	12355.901	27.681
892	12383.582	27.718
893	12411.300	27.756
894	12439.056	27.767
895	12466.823	27.817
896	12494.640	27.842
897	12522.482	27.866
898	12550.348	27.903
899	12578.251	27.939
900	12606.190	27.964

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
901	12634.154	27.987
902	12662.141	28.024
903	12690.165	28.061
904	12718.226	28.084
905	12746.310	28.120
906	12774.430	28.144
907	12802.574	28.181
908	12830.755	28.203
909	12858.958	28.240
910	12887.198	28.277
911	12915.475	28.299
912	12943.774	28.335
913	12972.109	28.358
914	13000.467	28.395
915	13028.862	28.429
916	13057.291	28.452
917	13085.743	28.489
918	13114.232	28.510
919	13142.742	28.547
920	13171.289	28.582
921	13199.871	28.604
922	13228.475	28.639
923	13257.114	28.675
924	13285.789	28.697
925	13314.486	28.732
926	13343.218	28.767
927	13371.985	28.790
928	13400.775	28.824
929	13429.599	28.859
930	13458.458	28.894
931	13487.352	28.916
932	13516.268	28.936
933	13545.204	28.985
934	13574.189	29.006
935	13603.195	29.041
936	13632.236	29.075
937	13661.311	29.096
938	13690.407	29.131
939	13719.538	29.165
940	13748.703	29.186
941	13777.889	29.233
942	13807.122	29.255
943	13836.377	29.275
944	13865.652	29.321
945	13894.973	29.344
946	13924.317	29.376
947	13953.693	29.410
948	13983.103	29.445
949	14012.548	29.464
950	14042.012	29.498

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
951	14071.510	29.532
952	14101.042	29.566
953	14130.608	29.584
954	14160.192	29.633
955	14189.825	29.651
956	14219.476	29.685
957	14249.161	29.718
958	14278.879	29.738
959	14308.617	29.785
960	14338.402	29.803
961	14368.205	29.837
962	14398.042	29.869
963	14427.911	29.904
964	14457.815	29.921
965	14487.736	29.968
966	14517.704	29.986
967	14547.690	30.020
968	14577.710	30.052
969	14607.762	30.085
970	14637.847	30.116
971	14667.963	30.151
972	14698.114	30.167
973	14728.281	30.214
974	14758.495	30.232
975	14788.727	30.264
976	14818.991	30.297
977	14849.288	30.328
978	14879.616	30.361
979	14909.977	30.393
980	14940.370	30.423
981	14970.793	30.457
982	15001.250	30.473
983	15031.723	30.520
984	15062.243	30.537
985	15092.780	30.582
986	15123.362	30.600
987	15153.962	30.631
988	15184.593	30.677
989	15215.270	30.694
990	15245.964	30.725
991	15276.689	30.756
992	15307.445	30.788
993	15338.233	30.818
994	15369.051	30.850
995	15399.901	30.896
996	15430.797	30.911
997	15461.708	30.943
998	15492.651	30.973
999	15523.624	31.003
1000	15554.627	31.035

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1001	15585.662	31.064
1002	15616.726	31.096
1003	15647.822	31.126
1004	15678.948	31.158
1005	15710.106	31.186
1006	15741.292	31.217
1007	15772.509	31.247
1008	15803.756	31.278
1009	15835.034	31.307
1010	15866.341	31.339
1011	15897.680	31.382
1012	15929.062	31.398
1013	15960.460	31.426
1014	15991.886	31.473
1015	16023.359	31.487
1016	16054.846	31.532
1017	16086.378	31.547
1018	16117.925	31.590
1019	16149.515	31.622
1020	16181.137	31.651
1021	16212.788	31.679
1022	16244.467	31.709
1023	16276.176	31.737
1024	16307.913	31.768
1025	16339.681	31.797
1026	16371.478	31.825
1027	16403.303	31.870
1028	16435.173	31.883
1029	16467.056	31.928
1030	16498.984	31.957
1031	16530.941	31.985
1032	16562.926	32.016
1033	16594.942	32.042
1034	16626.984	32.072
1035	16659.056	32.117
1036	16691.173	32.128
1037	16723.301	32.172
1038	16755.473	32.201
1039	16787.674	32.229
1040	16819.903	32.258
1041	16852.161	32.285
1042	16884.446	32.331
1043	16916.777	32.357
1044	16949.134	32.369
1045	16981.503	32.414
1046	17013.917	32.441
1047	17046.358	32.487
1048	17078.845	32.498
1049	17111.343	32.539
1050	17143.882	32.569

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1051	17176.451	32.596
1052	17209.047	32.624
1053	17241.671	32.650
1054	17274.321	32.695
1055	17307.016	32.722
1056	17339.738	32.748
1057	17372.486	32.777
1058	17405.263	32.820
1059	17438.083	32.830
1060	17470.913	32.873
1061	17503.786	32.901
1062	17536.687	32.945
1063	17569.632	32.953
1064	17602.585	32.998
1065	17635.583	33.025
1066	17668.608	33.049
1067	17701.657	33.096
1068	17734.753	33.120
1069	17767.873	33.147
1070	17801.020	33.171
1071	17834.191	33.218
1072	17867.409	33.225
1073	17900.634	33.286
1074	17933.920	33.295
1075	17967.215	33.319
1076	18000.534	33.365
1077	18033.899	33.389
1078	18067.288	33.434
1079	18100.722	33.458
1080	18134.180	33.483
1081	18167.663	33.510
1082	18201.173	33.534
1083	18234.707	33.578
1084	18268.285	33.622
1085	18301.907	33.627
1086	18335.534	33.673
1087	18369.207	33.696
1088	18402.903	33.720
1089	18436.623	33.766
1090	18470.389	33.787
1091	18504.176	33.814
1092	18537.990	33.857
1093	18571.847	33.881
1094	18605.728	33.907
1095	18639.635	33.948
1096	18673.583	33.973
1097	18707.556	33.998
1098	18741.554	34.039
1099	18775.593	34.065
1100	18809.658	34.088

$B\rho$ (Kgauss-cm)	E (KeV)	ΔE (KeV)
1101	18843.746	34.131
1102	18877.877	34.155
1103	18912.032	34.180
1104	18946.212	34.220
1105	18980.432	34.246
1106	19014.678	34.288
1107	19048.966	34.310
1108	19083.276	34.335
1109	19117.611	34.378
1110	19151.989	34.400
1111	19186.389	34.425
1112	19220.814	34.466
1113	19255.280	34.489
1114	19289.769	34.511
1115	19324.280	34.557
1116	19358.837	34.596
1117	19393.433	34.600
1118	19428.033	34.643
1119	19462.676	34.684
1120	19497.360	34.708
1121	19532.068	34.729
1122	19566.797	34.772
1123	19601.569	34.795
1124	19636.364	34.836
1125	19671.200	34.859
1126	19706.059	34.881
1127	19740.940	34.923
1128	19775.863	34.944
1129	19810.807	34.986
1130	19845.793	35.009
1131	19880.802	35.049
1132	19915.851	35.072
1133	19950.923	35.094
1134	19986.017	35.135
1135	20021.152	35.157
1136	20056.309	35.198
1137	20091.507	35.220
1138	20126.727	35.262
1139	20161.989	35.282
1140	20197.271	35.323
1141	20232.594	35.345
1142	20267.939	35.366
1143	20303.305	35.408
1144	20338.713	35.448
1145	20374.161	35.470
1146	20409.631	35.489
1147	20445.120	35.531
1148	20480.651	35.573
1149	20516.224	35.571
1150	20551.795	35.633

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1151	20587.428	35.655
1152	20623.083	35.676
1153	20658.759	35.714
1154	20694.473	35.736
1155	20730.209	35.777
1156	20765.986	35.797
1157	20801.783	35.837
1158	20837.620	35.877
1159	20873.497	35.899
1160	20909.396	35.917
1161	20945.313	35.958
1162	20981.271	35.978
1163	21017.249	36.018
1164	21053.267	36.059
1165	21089.326	36.078
1166	21125.404	36.096
1167	21161.500	36.140
1168	21197.640	36.177
1169	21233.817	36.197
1170	21270.014	36.238
1171	21306.252	36.256
1172	21342.508	36.297
1173	21378.805	36.315
1174	21415.120	36.356
1175	21451.476	36.374
1176	21487.850	36.414
1177	21524.264	36.455
1178	21560.719	36.472
1179	21597.191	36.491
1180	21633.682	36.552
1181	21670.234	36.550
1182	21706.784	36.610
1183	21743.394	36.629
1184	21780.023	36.647
1185	21816.670	36.685
1186	21853.355	36.726
1187	21890.081	36.744
1188	21926.825	36.783
1189	21963.608	36.801
1190	22000.409	36.840
1191	22037.249	36.880
1192	22074.129	36.896
1193	22111.025	36.938
1194	22147.963	36.953
1195	22184.916	36.994
1196	22221.910	37.009
1197	22258.919	37.072
1198	22295.991	37.067
1199	22333.058	37.127
1200	22370.185	37.145

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1201	22407.330	37.161
1202	22444.491	37.200
1203	22481.691	37.238
1204	22518.929	37.281
1205	22556.210	37.293
1206	22593.503	37.312
1207	22630.815	37.372
1208	22668.187	37.387
1209	22705.574	37.406
1210	22742.980	37.443
1211	22780.423	37.481
1212	22817.904	37.523
1213	22855.427	37.535
1214	22892.962	37.574
1215	22930.536	37.591
1216	22968.127	37.630
1217	23005.757	37.668
1218	23043.425	37.683
1219	23081.108	37.721
1220	23118.829	37.760
1221	23156.589	37.775
1222	23194.364	37.813
1223	23232.177	37.852
1224	23270.029	37.865
1225	23307.894	37.906
1226	23345.800	37.943
1227	23383.743	37.957
1228	23421.700	37.995
1229	23459.695	38.034
1230	23497.729	38.047
1231	23535.776	38.086
1232	23573.862	38.124
1233	23611.986	38.137
1234	23650.123	38.174
1235	23688.297	38.215
1236	23726.512	38.251
1237	23764.763	38.266
1238	23803.029	38.302
1239	23841.331	38.316
1240	23879.647	38.378
1241	23918.025	38.391
1242	23956.416	38.405
1243	23994.821	38.467
1244	24033.288	38.479
1245	24071.767	38.494
1246	24110.261	38.554
1247	24148.815	38.568
1248	24187.383	38.605
1249	24225.988	38.641
1250	24264.629	38.656

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1251	24303.285	38.691
1252	24341.976	38.729
1253	24380.705	38.742
1254	24419.447	38.804
1255	24458.251	38.816
1256	24497.067	38.826
1257	24535.893	38.891
1258	24574.784	38.902
1259	24613.686	38.938
1260	24652.624	38.976
1261	24691.600	38.988
1262	24730.588	39.023
1263	24769.611	39.061
1264	24808.672	39.096
1265	24847.768	39.110
1266	24886.878	39.145
1267	24926.023	39.183
1268	24965.206	39.218
1269	25004.424	39.229
1270	25043.653	39.291
1271	25082.944	39.277
1272	25122.221	39.340
1273	25161.561	39.374
1274	25200.935	39.385
1275	25240.320	39.423
1276	25279.743	39.459
1277	25319.202	39.469
1278	25358.671	39.531
1279	25398.202	39.540
1280	25437.742	39.577
1281	25477.319	39.588
1282	25516.907	39.648
1283	25556.555	39.658
1284	25596.213	39.694
1285	25635.907	39.731
1286	25675.638	39.740
1287	25715.378	39.802
1288	25755.180	39.812
1289	25794.992	39.847
1290	25834.839	39.883
1291	25874.722	39.892
1292	25914.614	39.953
1293	25954.567	39.964
1294	25994.531	39.998
1295	26034.529	40.034
1296	26074.563	40.043
1297	26114.606	40.104
1298	26154.710	40.114
1299	26194.824	40.149
1300	26234.973	40.183

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1301	26275.156	40.219
1302	26315.375	40.226
1303	26355.601	40.264
1304	26395.865	40.323
1305	26436.188	40.333
1306	26476.521	40.340
1307	26516.861	40.402
1308	26557.263	40.436
1309	26597.699	40.445
1310	26638.144	40.481
1311	26678.625	40.512
1312	26719.137	40.549
1313	26759.686	40.557
1314	26800.243	40.618
1315	26840.861	40.625
1316	26881.486	40.660
1317	26922.146	40.696
1318	26962.842	40.728
1319	27003.570	40.763
1320	27044.333	40.797
1321	27085.130	40.803
1322	27125.933	40.839
1323	27166.772	40.873
1324	27207.645	40.907
1325	27248.552	40.941
1326	27289.493	40.975
1327	27330.468	41.009
1328	27371.477	41.016
1329	27412.493	41.048
1330	27453.541	41.112
1331	27494.653	41.116
1332	27535.769	41.150
1333	27576.919	41.157
1334	27618.076	41.220
1335	27659.296	41.250
1336	27700.546	41.257
1337	27741.803	41.292
1338	27783.095	41.353
1339	27824.448	41.358
1340	27865.806	41.391
1341	27907.197	41.426
1342	27948.623	41.430
1343	27990.053	41.490
1344	28031.543	41.527
1345	28073.070	41.530
1346	28114.600	41.563
1347	28156.163	41.623
1348	28197.786	41.629
1349	28239.415	41.663
1350	28281.078	41.695

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1351	28322.773	41.728
1352	28364.501	41.732
1353	28406.233	41.795
1354	28448.028	41.799
1355	28489.827	41.858
1356	28531.685	41.864
1357	28573.549	41.925
1358	28615.474	41.929
1359	28657.403	41.962
1360	28699.365	41.995
1361	28741.360	42.027
1362	28783.387	42.059
1363	28825.446	42.091
1364	28867.537	42.094
1365	28909.631	42.157
1366	28951.788	42.189
1367	28993.977	42.191
1368	29036.168	42.254
1369	29078.422	42.255
1370	29120.677	42.288
1371	29162.965	42.350
1372	29205.315	42.354
1373	29247.669	42.383
1374	29290.052	42.417
1375	29332.469	42.446
1376	29374.915	42.481
1377	29417.396	42.512
1378	29459.908	42.544
1379	29502.452	42.576
1380	29545.028	42.576
1381	29587.604	42.639
1382	29630.243	42.670
1383	29672.913	42.672
1384	29715.585	42.732
1385	29758.317	42.735
1386	29801.052	42.796
1387	29843.848	42.799
1388	29886.647	42.858
1389	29929.505	42.860
1390	29972.365	42.892
1391	30015.257	42.952
1392	30058.209	42.954
1393	30101.163	42.986
1394	30144.149	43.015
1395	30187.164	43.077
1396	30230.241	43.078
1397	30273.319	43.108
1398	30316.427	43.139
1399	30359.566	43.170
1400	30402.736	43.201

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1401	30445.937	43.232
1402	30489.169	43.263
1403	30532.432	43.294
1404	30575.726	43.323
1405	30619.049	43.354
1406	30662.403	43.386
1407	30705.789	43.415
1408	30749.204	43.446
1409	30792.650	43.475
1410	30836.125	43.506
1411	30879.631	43.537
1412	30923.168	43.567
1413	30966.735	43.597
1414	31010.332	43.628
1415	31053.960	43.656
1416	31097.616	43.656
1417	31141.272	43.719
1418	31184.991	43.747
1419	31228.738	43.778
1420	31272.516	43.806
1421	31316.322	43.838
1422	31360.160	43.866
1423	31404.026	43.896
1424	31447.922	43.927
1425	31491.849	43.956
1426	31535.805	43.985
1427	31579.790	44.015
1428	31623.805	44.045
1429	31667.850	44.074
1430	31711.924	44.135
1431	31756.059	44.132
1432	31800.191	44.162
1433	31844.353	44.192
1434	31888.545	44.221
1435	31932.766	44.250
1436	31977.016	44.311
1437	32021.327	44.307
1438	32065.634	44.338
1439	32109.972	44.399
1440	32154.371	44.393
1441	32198.764	44.457
1442	32243.221	44.453
1443	32287.674	44.514
1444	32332.188	44.510
1445	32376.698	44.571
1446	32421.269	44.568
1447	32465.837	44.628
1448	32510.465	44.658
1449	32555.123	44.685
1450	32599.808	44.681

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1451	32644.489	44.743
1452	32689.232	44.772
1453	32734.004	44.799
1454	32778.803	44.827
1455	32823.630	44.857
1456	32868.487	44.917
1457	32913.404	44.913
1458	32958.317	44.941
1459	33003.258	44.968
1460	33048.226	45.031
1461	33093.257	45.024
1462	33138.281	45.085
1463	33183.366	45.081
1464	33228.447	45.140
1465	33273.587	45.170
1466	33318.757	45.199
1467	33363.956	45.190
1468	33409.146	45.251
1469	33454.397	45.280
1470	33499.677	45.309
1471	33544.986	45.369
1472	33590.355	45.362
1473	33635.717	45.390
1474	33681.107	45.450
1475	33726.557	45.445
1476	33772.002	45.506
1477	33817.508	45.499
1478	33863.007	45.561
1479	33908.568	45.586
1480	33954.154	45.615
1481	33999.769	45.642
1482	34045.411	45.668
1483	34091.079	45.694
1484	34136.773	45.724
1485	34182.497	45.748
1486	34228.245	45.809
1487	34274.054	45.805
1488	34319.859	45.863
1489	34365.722	45.890
1490	34411.612	45.916
1491	34457.528	45.944
1492	34503.472	45.970
1493	34549.442	45.996
1494	34595.438	46.023
1495	34641.461	46.049
1496	34687.510	46.110
1497	34733.620	46.103
1498	34779.723	46.162
1499	34825.885	46.189
1500	34872.074	46.216

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1501	34918.290	46.240
1502	34964.530	46.267
1503	35010.797	46.294
1504	35057.091	46.318
1505	35103.409	46.380
1506	35149.789	46.371
1507	35196.160	46.432
1508	35242.592	46.458
1509	35289.050	46.482
1510	35335.532	46.510
1511	35382.042	46.535
1512	35428.577	46.559
1513	35475.136	46.621
1514	35521.757	46.611
1515	35568.368	46.672
1516	35615.040	46.697
1517	35661.737	46.723
1518	35708.460	46.748
1519	35755.208	46.774
1520	35801.982	46.834
1521	35848.816	46.822
1522	35895.638	46.885
1523	35942.523	46.873
1524	35989.396	46.933
1525	36036.329	46.960
1526	36083.289	47.021
1527	36130.310	47.008
1528	36177.318	47.034
1529	36224.352	47.095
1530	36271.447	47.120
1531	36318.567	47.143
1532	36365.710	47.170
1533	36412.880	47.192
1534	36460.072	47.219
1535	36507.291	47.277
1536	36554.568	47.267
1537	36601.835	47.327
1538	36649.162	47.352
1539	36696.514	47.375
1540	36743.889	47.437
1541	36791.326	47.424
1542	36838.750	47.485
1543	36886.235	47.472
1544	36933.707	47.532
1545	36981.239	47.558
1546	37028.797	47.617
1547	37076.414	47.604
1548	37124.018	47.668
1549	37171.686	47.652
1550	37219.338	47.712

$B\rho$ (Kgauss · cm)	E (KeV)	ΔE (KeV)
1551	37267.050	47.737
1552	37314.787	47.799
1553	37362.586	47.783
1554	37410.369	47.845
1555	37458.214	47.830
1556	37506.044	47.892
1557	37553.936	47.915
1558	37601.851	47.975
1559	37649.826	47.962
1560	37697.788	48.023
1561	37745.811	48.045
1562	37793.856	48.068
1563	37841.924	48.092
1564	37890.016	48.115
1565	37938.131	48.176
1566	37986.307	48.159
1567	38034.466	48.222
1568	38082.688	48.245
1569	38130.933	48.304
1570	38179.237	48.289
1571	38227.526	48.350
1572	38275.876	48.374
1573	38324.250	48.397
1574	38372.647	48.418
1575	38421.065	48.479
1576	38469.544	48.463
1577	38518.007	48.523
1578	38566.530	48.545
1579	38615.075	48.569
1580	38663.644	48.629
1581	38712.273	48.613
1582	38760.886	48.673
1583	38809.559	48.694
1584	38858.253	48.719
1585	38906.972	48.778
1586	38955.750	48.760
1587	39004.510	48.823
1588	39053.333	48.844
1589	39102.177	48.904
1590	39151.081	48.888
1591	39199.969	48.947
1592	39248.916	48.971
1593	39297.887	48.990
1594	39346.877	49.013
1595	39395.890	49.073
1596	39444.963	49.057
1597	39494.020	49.116
1598	39543.136	49.136
1599	39592.272	49.199
1600	39641.471	49.180

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1601	39690.651	49.242
1602	39739.893	49.261
1603	39789.154	49.322
1604	39838.476	49.303
1605	39887.779	49.366
1606	39937.145	49.385
1607	39986.530	49.407
1608	40035.937	49.425
1609	40085.362	49.488
1610	40134.850	49.509
1611	40184.359	49.529
1612	40233.888	49.550
1613	40283.438	49.610
1614	40333.048	49.591
1615	40382.639	49.652
1616	40432.291	49.711
1617	40482.002	49.692
1618	40531.694	49.753
1619	40581.447	49.773
1620	40631.220	49.793
1621	40681.013	49.813
1622	40730.826	49.875
1623	40780.701	49.893
1624	40830.594	49.914
1625	40880.508	49.974
1626	40930.482	49.953
1627	40980.435	50.016
1628	41030.451	50.033
1629	41080.484	50.096
1630	41130.580	50.073
1631	41180.653	50.134
1632	41230.787	50.154
1633	41280.941	50.214
1634	41331.155	50.193
1635	41381.348	50.252
1636	41431.600	50.273
1637	41481.873	50.335
1638	41532.208	50.310
1639	41582.518	50.371
1640	41632.889	50.391
1641	41683.280	50.452
1642	41733.732	50.429
1643	41784.161	50.489
1644	41834.650	50.508
1645	41885.158	50.571
1646	41935.729	50.546
1647	41986.275	50.606
1648	42036.881	50.668
1649	42087.549	50.642
1650	42138.191	50.705

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1651	42188.896	50.725
1652	42239.621	50.741
1653	42290.362	50.803
1654	42341.165	50.821
1655	42391.986	50.838
1656	42442.824	50.858
1657	42493.682	50.919
1658	42544.601	50.936
1659	42595.537	50.955
1660	42646.492	50.972
1661	42697.464	51.032
1662	42748.496	51.052
1663	42799.548	51.069
1664	42850.617	51.131
1665	42901.748	51.147
1666	42952.895	51.166
1667	43004.061	51.182
1668	43055.243	51.243
1669	43106.486	51.261
1670	43157.747	51.280
1671	43209.027	51.339
1672	43260.366	51.313
1673	43311.679	51.374
1674	43363.053	51.435
1675	43414.488	51.453
1676	43465.941	51.470
1677	43517.411	51.485
1678	43568.896	51.504
1679	43620.400	51.565
1680	43671.965	51.582
1681	43723.547	51.641
1682	43775.188	51.615
1683	43826.803	51.676
1684	43878.479	51.737
1685	43930.216	51.708
1686	43981.924	51.770
1687	44033.694	51.786
1688	44085.480	51.849
1689	44137.329	51.863
1690	44189.192	51.880
1691	44241.072	51.897
1692	44292.969	51.957
1693	44344.926	51.973
1694	44396.899	51.989
1695	44448.888	52.051
1696	44500.939	52.067
1697	44553.006	52.082
1698	44605.088	52.099
1699	44657.187	52.157
1700	44709.344	52.177

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1701	44761.521	52.235
1702	44813.756	52.207
1703	44865.963	52.267
1704	44918.230	52.328
1705	44970.558	52.299
1706	45022.857	52.358
1707	45075.215	52.419
1708	45127.634	52.390
1709	45180.024	52.451
1710	45232.475	52.512
1711	45284.987	52.482
1712	45337.469	52.541
1713	45390.010	52.558
1714	45442.568	52.617
1715	45495.185	52.634
1716	45547.819	52.646
1717	45600.465	52.664
1718	45653.129	52.724
1719	45705.853	52.738
1720	45758.591	52.799
1721	45811.390	52.768
1722	45864.158	52.828
1723	45916.986	52.889
1724	45969.875	52.904
1725	46022.779	52.919
1726	46075.698	52.932
1727	46128.630	52.993
1728	46181.623	53.008
1729	46234.631	53.021
1730	46287.652	53.084
1731	46340.736	53.097
1732	46393.833	53.157
1733	46446.990	53.125
1734	46500.115	53.185
1735	46553.300	53.245
1736	46606.545	53.261
1737	46659.806	53.275
1738	46713.081	53.286
1739	46766.367	53.350
1740	46819.717	53.362
1741	46873.079	53.375
1742	46926.454	53.435
1743	46979.889	53.451
1744	47033.340	53.510
1745	47086.850	53.476
1746	47140.326	53.586
1747	47193.912	53.550
1748	47247.462	53.611
1749	47301.073	53.623
1750	47354.696	53.685

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1751	47408.381	53.698
1752	47462.079	53.711
1753	47515.790	53.725
1754	47569.515	53.784
1755	47623.299	53.845
1756	47677.144	53.811
1757	47730.955	53.868
1758	47784.823	53.885
1759	47838.708	53.943
1760	47892.651	53.956
1761	47946.607	54.018
1762	48000.625	53.981
1763	48054.606	54.040
1764	48108.646	54.104
1765	48162.750	54.116
1766	48216.866	54.126
1767	48270.992	54.139
1768	48325.131	54.200
1769	48379.331	54.260
1770	48433.591	54.223
1771	48487.814	54.285
1772	48542.099	54.344
1773	48596.443	54.309
1774	48650.752	54.367
1775	48705.119	54.430
1776	48759.549	54.441
1777	48813.990	54.451
1778	48868.441	54.465
1779	48922.906	54.524
1780	48977.430	54.586
1781	49032.016	54.546
1782	49086.562	54.609
1783	49141.171	54.668
1784	49195.839	54.629
1785	49250.468	54.740
1786	49305.208	54.701
1787	49359.909	54.763
1788	49414.672	54.774
1789	49469.446	54.834
1790	49524.280	54.843
1791	49579.123	54.855
1792	49633.978	54.917
1793	49688.895	54.926
1794	49743.821	54.988
1795	49798.809	54.947
1796	49853.756	55.058
1797	49908.814	55.018
1798	49963.832	55.080
1799	50018.912	55.140
1800	50074.052	55.149

Bρ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1801	50129.201	55.161
1802	50184.362	55.170
1803	50239.532	55.231
1804	50294.763	55.291
1805	50350.054	55.251
1806	50405.305	55.362
1807	50460.667	55.320
1808	50515.987	55.382
1809	50571.369	55.392
1810	50626.761	55.452
1811	50682.213	55.461
1812	50737.674	55.471
1813	50793.145	55.533
1814	50848.678	55.540
1815	50904.218	55.602
1816	50959.820	55.611
1817	51015.431	55.671
1818	51071.102	55.629
1819	51126.731	55.742
1820	51182.473	55.699
1821	51238.172	55.760
1822	51293.932	55.818
1823	51349.750	55.778
1824	51405.528	55.890
1825	51461.418	55.846
1826	51517.264	55.907
1827	51573.171	55.915
1828	51629.086	55.977
1829	51685.063	55.985
1830	51741.048	56.046
1831	51797.094	56.053
1832	51853.147	56.061
1833	51909.208	56.124
1834	51965.332	56.183
1835	52021.515	56.138
1836	52077.653	56.200
1837	52133.853	56.261
1838	52190.114	56.215
1839	52246.329	56.329
1840	52302.658	56.284
1841	52358.942	56.344
1842	52415.286	56.406
1843	52471.692	56.413
1844	52528.105	56.419
1845	52584.524	56.482
1846	52641.006	56.488
1847	52697.494	56.496
1848	52753.990	56.556
1849	52810.546	56.617
1850	52867.163	56.624

Bρ (Kgauss-cm)	E (KeV)	ΔE (KeV)
1851	52923.787	56.632
1852	52980.419	56.639
1853	53037.058	56.698
1854	53093.756	56.761
1855	53150.517	56.765
1856	53207.282	56.775
1857	53264.057	56.834
1858	53320.891	56.841
1859	53377.732	56.901
1860	53434.633	56.908
1861	53491.541	56.915
1862	53548.456	56.975
1863	53605.431	56.983
1864	53662.414	57.042
1865	53719.456	57.048
1866	53776.504	57.055
1867	53833.559	57.116
1868	53890.675	57.176
1869	53947.851	57.126
1870	54004.977	57.244
1871	54062.221	57.194
1872	54119.415	57.255
1873	54176.670	57.316
1874	54233.986	57.320
1875	54291.306	57.328
1876	54348.634	57.387
1877	54406.021	57.393
1878	54463.414	57.453
1879	54520.867	57.459
1880	54578.326	57.520
1881	54635.846	57.525
1882	54693.371	57.531
1883	54750.902	57.589
1884	54808.491	57.597
1885	54866.088	57.657
1886	54923.745	57.662
1887	54981.407	57.722
1888	55039.129	57.727
1889	55096.856	57.731
1890	55154.587	57.793
1891	55212.380	57.797
1892	55270.177	57.858
1893	55328.035	57.918
1894	55385.953	57.868
1895	55443.821	57.927
1896	55501.748	57.987
1897	55559.735	57.994
1898	55617.729	57.996
1899	55675.725	58.057
1900	55733.782	58.119

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1901	55791.901	58.065
1902	55849.966	58.182
1903	55908.148	58.131
1904	55966.279	58.248
1905	56024.527	58.193
1906	56082.720	58.254
1907	56140.974	58.316
1908	56199.290	58.319
1909	56257.609	58.324
1910	56315.933	58.382
1911	56374.315	58.387
1912	56432.702	58.447
1913	56491.149	58.452
1914	56549.601	58.510
1915	56608.111	58.515
1916	56666.626	58.518
1917	56725.144	58.636
1918	56783.780	58.580
1919	56842.360	58.642
1920	56901.002	58.644
1921	56959.646	58.707
1922	57018.353	58.707
1923	57077.060	58.769
1924	57135.829	58.771
1925	57194.600	58.832
1926	57253.432	58.834
1927	57312.266	58.895
1928	57371.161	58.897
1929	57430.058	58.958
1930	57489.016	58.960
1931	57547.976	58.962
1932	57606.938	59.024
1933	57665.962	59.024
1934	57724.986	59.086
1935	57784.072	59.147
1936	57843.219	59.089
1937	57902.308	59.209
1938	57961.517	59.150
1939	58020.667	59.213
1940	58079.880	59.273
1941	58139.153	59.275
1942	58198.428	59.334
1943	58257.762	59.335
1944	58317.097	59.399
1945	58376.496	59.397
1946	58435.893	59.400
1947	58495.293	59.459
1948	58554.752	59.462
1949	58614.214	59.522
1950	58673.736	59.582

$B\rho$ (Kgauss·cm)	E (KeV)	ΔE (KeV)
1951	58733.318	59.583
1952	58792.901	59.583
1953	58852.484	59.645
1954	58912.129	59.645
1955	58971.774	59.707
1956	59031.481	59.707
1957	59091.188	59.767
1958	59150.955	59.765
1959	59210.720	59.770
1960	59270.490	59.889
1961	59330.379	59.828
1962	59390.207	59.888
1963	59450.095	59.950
1964	59510.045	59.950
1965	59569.995	60.012
1966	59630.007	60.009
1967	59690.016	60.011
1968	59750.027	60.071
1969	59810.098	60.131
1970	59870.229	60.131
1971	59930.360	60.129
1972	59990.489	60.193
1973	60050.682	60.190
1974	60110.872	60.251
1975	60171.123	60.313
1976	60231.436	60.311
1977	60291.747	60.310
1978	60352.057	60.370
1979	60412.427	60.371
1980	60472.798	60.431
1981	60533.229	60.429
1982	60593.658	60.490
1983	60654.148	60.551
1984	60714.699	60.487
1985	60775.186	60.609
1986	60835.795	60.548
1987	60896.343	60.669
1988	60957.012	60.669
1989	61017.681	60.666
1990	61078.347	60.726
1991	61139.073	60.724
1992	61199.797	60.786
1993	61260.583	60.784
1994	61321.367	60.845
1995	61382.212	60.843
1996	61443.055	60.902
1997	61503.957	60.901
1998	61564.858	60.961
1999	61625.819	60.960
2000	61686.779	61.020