

TABLES OF DYNAMIC PARAMETERS OF THE CPS

by

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Introduction

Most measurements of PS-machine studies use the magnetic field as a reference and B-trigger pulses have to be converted to particle energy, momentum etc. Therefore precise 5-6 place tables of the kinetic energy, momentum, the parameters  $\gamma$ ,  $\eta$ ,  $\beta$  and the acceleration frequency have been computed in steps of 10 gauss for every B-pulse. Moreover, if a measurement refers to a B-pulse plus several hundred microseconds delay, one should know how much the field increased during the delay or an oscilloscope sweep. The tables include the time base for such interpolations.

If the beam is displaced by  $+\Delta R$ , it has an increased momentum determined by the momentum compaction factor  $\alpha = 0.027$ . Thus we enter the table at an increased B-value given by

$$\frac{\Delta B}{B} = \frac{\Delta p}{p} = \frac{\Delta R}{\alpha R} = \frac{\Delta R}{270 \text{ cm}}$$

and find all other parameters in the tables except the frequency  $f$ . The correction in  $f$  is

$$\frac{\Delta f}{f} = \left( \frac{1}{\alpha \gamma^2} - 1 \right) \frac{\Delta R}{R}$$

#### Method of calculation

The following formulas have been used in a programme for the CDC 6400 computer:

$$r = R - \frac{s}{2\pi} = 70.07887 \dots m$$

$$\eta = Brc/E_0 \qquad p = \eta \cdot 0.938256 \text{ GeV}/c$$

$$\gamma = \sqrt{\eta^2 + 1} \qquad T = \gamma E_0 - E_0$$

$$\beta = \eta/\gamma \qquad f = 20 \beta \frac{c}{2\pi R}$$

$$\dot{B} = \dot{B}_0 - \tau^{-1} \cdot B = 14000 \text{ Gauss/s} - 0.32s^{-1} \cdot B$$

$$t = \sum_{1}^n \frac{10 \text{ Gauss}}{\dot{B}_n}$$

The initial  $\dot{B}_0$  and the time constant  $\tau$  of the PS-magnet have been adjusted in a way that the time  $t$  fits to a recent measurement by Mr. R. Ley of  $t(B)$  during a normal machine cycle up to 19 GeV within  $< 1$  ms error. At higher energies, the cumulative error is probably larger but still unimportant for interpolations between B-pulses.

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Distribution: open

B gauss	T GeV	P GeV/c	$\gamma$	$\eta-\beta\gamma$	$\beta$	f MHz	t msec
140	.0450	.2941	1.0480	.3135	.299130	2.85450	0.00
150	.0515	.3151	1.0549	.3359	.318395	3.03835	.72
160	.0584	.3361	1.0622	.3583	.337275	3.21851	1.43
170	.0657	.3572	1.0700	.3807	.355753	3.39486	2.15
180	.0733	.3782	1.0782	.4031	.373528	3.56733	2.87
190	.0814	.3992	1.0867	.4254	.391485	3.73582	3.58
200	.0898	.4202	1.0957	.4478	.408720	3.90029	4.30
210	.0986	.4412	1.1050	.4702	.425528	4.06068	5.02
220	.1077	.4622	1.1148	.4926	.441907	4.21698	5.74
230	.1171	.4832	1.1248	.5150	.457856	4.36918	6.46
240	.1269	.5042	1.1353	.5374	.473375	4.51727	7.17
250	.1370	.5252	1.1460	.5598	.488465	4.66127	7.89
260	.1474	.5462	1.1571	.5822	.503129	4.80121	8.61
270	.1581	.5672	1.1686	.6046	.517372	4.93712	9.33
280	.1692	.5883	1.1803	.6270	.531197	5.06905	10.05
290	.1805	.6093	1.1923	.6494	.544510	5.19705	10.77
300	.1920	.6303	1.2047	.6718	.557518	5.32118	11.49
310	.2039	.6513	1.2173	.6941	.570228	5.44151	12.20
320	.2160	.6723	1.2302	.7165	.582447	5.55812	12.92
330	.2284	.6933	1.2434	.7389	.594284	5.67107	13.64
340	.2410	.7143	1.2568	.7613	.605747	5.78046	14.36
350	.2538	.7353	1.2705	.7837	.616845	5.88636	15.08
360	.2669	.7563	1.2844	.8061	.627587	5.98887	15.80
370	.2802	.7773	1.2986	.8285	.637982	6.08806	16.52
380	.2937	.7983	1.3130	.8509	.648039	6.18404	17.24
390	.3074	.8194	1.3276	.8733	.657768	6.27688	17.96
400	.3213	.8404	1.3425	.8957	.667180	6.36669	18.68
410	.3354	.8614	1.3575	.9181	.676282	6.45355	19.41
420	.3497	.8824	1.3728	.9405	.685084	6.53755	20.13
430	.3642	.9034	1.3882	.9628	.693596	6.61878	20.85
440	.3789	.9244	1.4038	.9852	.701828	6.69733	21.57
450	.3937	.9454	1.4196	1.0076	.709787	6.77328	22.29
460	.4087	.9664	1.4356	1.0300	.717484	6.84673	23.01
470	.4239	.9874	1.4517	1.0524	.724927	6.91775	23.73
480	.4392	1.0084	1.4681	1.0748	.732124	6.98643	24.46
490	.4546	1.0294	1.4845	1.0972	.739084	7.05285	25.18
500	.4702	1.0505	1.5012	1.1196	.745815	7.11708	25.90
510	.4859	1.0715	1.5179	1.1420	.752325	7.17920	26.62
520	.5018	1.0925	1.5348	1.1644	.758622	7.23929	27.35
530	.5178	1.1135	1.5519	1.1868	.764713	7.29742	28.07
540	.5340	1.1345	1.5691	1.2092	.770606	7.35365	28.79
550	.5502	1.1555	1.5864	1.2315	.776308	7.40806	29.52
560	.5666	1.1765	1.6039	1.2539	.781825	7.46071	30.24
570	.5831	1.1975	1.6214	1.2763	.787163	7.51167	30.96
580	.5996	1.2185	1.6391	1.2987	.792333	7.56099	31.69
590	.6163	1.2395	1.6569	1.3211	.797336	7.60873	32.41
600	.6331	1.2605	1.6748	1.3435	.802180	7.65496	33.13
610	.6500	1.2816	1.6928	1.3659	.806871	7.69972	33.86
620	.6670	1.3026	1.7109	1.3883	.811414	7.74307	34.58
630	.6841	1.3236	1.7292	1.4107	.815814	7.78506	35.31
640	.7013	1.3446	1.7475	1.4331	.820077	7.82574	36.03
650	.7186	1.3656	1.7659	1.4555	.824208	7.86516	36.76
660	.7360	1.3866	1.7844	1.4779	.828211	7.90336	37.48
670	.7534	1.4076	1.8030	1.5002	.832092	7.94039	38.21
680	.7709	1.4286	1.8217	1.5226	.835854	7.97629	38.93
690	.7885	1.4496	1.8404	1.5450	.839501	8.01110	39.66
700	.8062	1.4706	1.8592	1.5674	.843039	8.04486	40.38
710	.8239	1.4916	1.8782	1.5898	.846471	8.07761	41.11
720	.8416	1.5127	1.8972	1.6122	.849800	8.10938	41.84
730	.8596	1.5337	1.9162	1.6346	.853030	8.14021	42.56
740	.8776	1.5547	1.9354	1.6570	.856166	8.17013	43.29
750	.8956	1.5757	1.9546	1.6794	.859209	8.19917	44.01
760	.9137	1.5967	1.9738	1.7018	.862164	8.22737	44.74
770	.9318	1.6177	1.9932	1.7242	.865034	8.25475	45.47
780	.9500	1.6387	2.0126	1.7466	.867821	8.28135	46.20
790	.9683	1.6597	2.0320	1.7689	.870528	8.30718	46.92

B gauss	T GeV	P GeV/c	$\delta$	$\eta$	$\beta$	f MHz	t msec
800	.9866	1.6807	2.0516	1.7913	.873159	8.33229	47.65
810	1.0050	1.7017	2.0711	1.8137	.875716	8.35669	48.38
820	1.0234	1.7227	2.0908	1.8361	.878201	8.38040	49.11
830	1.0419	1.7438	2.1105	1.8585	.880617	8.40345	49.83
840	1.0604	1.7648	2.1302	1.8809	.882966	8.42587	50.56
850	1.0790	1.7858	2.1500	1.9033	.885250	8.44767	51.29
860	1.0976	1.8068	2.1699	1.9257	.887472	8.46888	52.02
870	1.1163	1.8278	2.1897	1.9481	.889634	8.48951	52.75
880	1.1350	1.8488	2.2097	1.9705	.891738	8.50958	53.48
890	1.1538	1.8698	2.2297	1.9929	.893786	8.52912	54.20
900	1.1726	1.8908	2.2497	2.0153	.895779	8.54814	54.93
910	1.1914	1.9118	2.2698	2.0376	.897719	8.56666	55.66
920	1.2103	1.9328	2.2899	2.0600	.899609	8.58469	56.39
930	1.2292	1.9538	2.3101	2.0824	.901449	8.60225	57.12
940	1.2482	1.9749	2.3303	2.1048	.903242	8.61936	57.85
950	1.2671	1.9959	2.3505	2.1272	.904989	8.63603	58.58
960	1.2862	2.0169	2.3708	2.1496	.906691	8.65227	59.31
970	1.3052	2.0379	2.3911	2.1720	.908350	8.66810	60.04
980	1.3243	2.0589	2.4115	2.1944	.909967	8.68354	60.77
990	1.3435	2.0799	2.4319	2.2168	.911544	8.69858	61.50
1000	1.3626	2.1009	2.4523	2.2392	.913081	8.71325	62.23
1010	1.3818	2.1219	2.4728	2.2616	.914581	8.72756	62.97
1020	1.4011	2.1429	2.4933	2.2840	.916044	8.74152	63.70
1030	1.4203	2.1639	2.5138	2.3063	.917471	8.75514	64.43
1040	1.4396	2.1849	2.5344	2.3287	.918863	8.76843	65.16
1050	1.4589	2.2060	2.5550	2.3511	.920222	8.78140	65.89
1060	1.4783	2.2270	2.5756	2.3735	.921549	8.79405	66.62
1070	1.4977	2.2480	2.5962	2.3959	.922844	8.80641	67.35
1080	1.5171	2.2690	2.6169	2.4183	.924103	8.81848	68.09
1090	1.5365	2.2900	2.6376	2.4407	.925343	8.83026	68.82
1100	1.5559	2.3110	2.6583	2.4631	.926549	8.84177	69.55
1110	1.5754	2.3320	2.6791	2.4855	.927727	8.85301	70.28
1120	1.5949	2.3530	2.6999	2.5079	.928878	8.86400	71.02
1130	1.6145	2.3740	2.7207	2.5303	.930003	8.87473	71.75
1140	1.6340	2.3950	2.7415	2.5527	.931102	8.88522	72.48
1150	1.6536	2.4160	2.7624	2.5750	.932176	8.89547	73.22
1160	1.6732	2.4371	2.7833	2.5974	.933227	8.90550	73.95
1170	1.6928	2.4581	2.8042	2.6198	.934254	8.91529	74.68
1180	1.7124	2.4791	2.8251	2.6422	.935258	8.92488	75.42
1190	1.7321	2.5001	2.8461	2.6646	.936240	8.93425	76.15
1200	1.7518	2.5211	2.8670	2.6870	.937201	8.94342	76.89
1210	1.7715	2.5421	2.8880	2.7094	.938140	8.95239	77.62
1220	1.7912	2.5631	2.9091	2.7318	.939060	8.96116	78.36
1230	1.8109	2.5841	2.9301	2.7542	.939960	8.96975	79.09
1240	1.8307	2.6051	2.9512	2.7766	.940840	8.97815	79.83
1250	1.8505	2.6261	2.9722	2.7990	.941702	8.98637	80.56
1260	1.8703	2.6471	2.9933	2.8214	.942546	8.99443	81.30
1270	1.8901	2.6682	3.0144	2.8437	.943372	9.00231	82.03
1280	1.9099	2.6892	3.0356	2.8661	.944181	9.01003	82.77
1290	1.9297	2.7102	3.0567	2.8885	.944973	9.01759	83.50
1300	1.9496	2.7312	3.0779	2.9109	.945749	9.02499	84.24
1310	1.9695	2.7522	3.0991	2.9333	.946509	9.03225	84.98
1320	1.9894	2.7732	3.1203	2.9557	.947254	9.03935	85.71
1330	2.0093	2.7942	3.1415	2.9781	.947984	9.04632	86.45
1340	2.0292	2.8152	3.1627	3.0005	.948699	9.05314	87.18
1350	2.0491	2.8362	3.1840	3.0229	.949399	9.05982	87.92
1360	2.0691	2.8572	3.2053	3.0453	.950086	9.06638	88.66
1370	2.0891	2.8782	3.2265	3.0677	.950759	9.07280	89.40
1380	2.1090	2.8993	3.2478	3.0901	.951419	9.07910	90.13
1390	2.1290	2.9203	3.2691	3.1124	.952067	9.08528	90.87
1400	2.1490	2.9413	3.2905	3.1348	.952701	9.09134	91.61
1410	2.1691	2.9623	3.3118	3.1572	.953324	9.09728	92.35
1420	2.1891	2.9833	3.3332	3.1796	.953934	9.10310	93.08
1430	2.2092	3.0043	3.3545	3.2020	.954533	9.10882	93.82
1440	2.2292	3.0253	3.3759	3.2244	.955121	9.11442	94.56
1450	2.2493	3.0463	3.3973	3.2468	.955697	9.11992	95.30
1460	2.2694	3.0673	3.4187	3.2692	.956263	9.12532	96.04

B gauss	T GeV	P GeV/c	I	$\gamma$	$\beta$	f MHz	t msec
1470	2.2895	3.0883	3.4401	3.2916	.956818	9.13062	96.78
1480	2.3096	3.1093	3.4616	3.3140	.957363	9.13582	97.52
1490	2.3297	3.1304	3.4830	3.3364	.957898	9.14093	98.26
1500	2.3498	3.1514	3.5045	3.3588	.958423	9.14594	99.00
1510	2.3700	3.1724	3.5259	3.3811	.958939	9.15086	99.73
1520	2.3901	3.1934	3.5474	3.4035	.959445	9.15569	100.47
1530	2.4103	3.2144	3.5689	3.4259	.959942	9.16043	101.21
1540	2.4304	3.2354	3.5904	3.4483	.960430	9.16509	101.95
1550	2.4506	3.2564	3.6119	3.4707	.960910	9.16966	102.70
1560	2.4708	3.2774	3.6334	3.4931	.961381	9.17416	103.44
1570	2.4910	3.2984	3.6550	3.5155	.961843	9.17857	104.18
1580	2.5112	3.3194	3.6765	3.5379	.962298	9.18291	104.92
1590	2.5315	3.3405	3.6980	3.5603	.962744	9.18717	105.66
1600	2.5517	3.3615	3.7196	3.5827	.963183	9.19136	106.40
1610	2.5719	3.3825	3.7412	3.6051	.963615	9.19548	107.14
1620	2.5922	3.4035	3.7628	3.6275	.964039	9.19952	107.88
1630	2.6124	3.4245	3.7844	3.6498	.964455	9.20350	108.62
1640	2.6327	3.4455	3.8060	3.6722	.964865	9.20741	109.37
1650	2.6530	3.4665	3.8276	3.6946	.965268	9.21125	110.11
1660	2.6733	3.4875	3.8492	3.7170	.965664	9.21503	110.85
1670	2.6936	3.5085	3.8708	3.7394	.966053	9.21875	111.59
1680	2.7139	3.5295	3.8924	3.7618	.966436	9.22240	112.34
1690	2.7342	3.5505	3.9141	3.7842	.966812	9.22599	113.08
1700	2.7545	3.5716	3.9357	3.8066	.967183	9.22953	113.82
1710	2.7748	3.5926	3.9574	3.8290	.967547	9.23300	114.56
1720	2.7951	3.6136	3.9791	3.8514	.967905	9.23642	115.31
1730	2.8155	3.6346	4.0008	3.8738	.968258	9.23979	116.05
1740	2.8358	3.6556	4.0224	3.8962	.968605	9.24310	116.80
1750	2.8562	3.6766	4.0441	3.9185	.968946	9.24635	117.54
1760	2.8765	3.6976	4.0658	3.9409	.969282	9.24956	118.28
1770	2.8969	3.7186	4.0875	3.9633	.969612	9.25271	119.03
1780	2.9173	3.7396	4.1093	3.9857	.969938	9.25582	119.77
1790	2.9377	3.7606	4.1310	4.0081	.970258	9.25887	120.52
1800	2.9580	3.7816	4.1527	4.0305	.970573	9.26188	121.26
1810	2.9784	3.8027	4.1744	4.0529	.970883	9.26484	122.01
1820	2.9988	3.8237	4.1962	4.0753	.971189	9.26775	122.75
1830	3.0192	3.8447	4.2179	4.0977	.971489	9.27062	123.50
1840	3.0397	3.8657	4.2397	4.1201	.971785	9.27345	124.24
1850	3.0601	3.8867	4.2615	4.1425	.972077	9.27623	124.99
1860	3.0805	3.9077	4.2832	4.1649	.972364	9.27897	125.73
1870	3.1009	3.9287	4.3050	4.1872	.972647	9.28167	126.48
1880	3.1214	3.9497	4.3268	4.2096	.972926	9.28433	127.23
1890	3.1418	3.9707	4.3486	4.2320	.973200	9.28695	127.97
1900	3.1623	3.9917	4.3704	4.2544	.973470	9.28953	128.72
1910	3.1827	4.0127	4.3922	4.2768	.973736	9.29207	129.47
1920	3.2032	4.0338	4.4140	4.2992	.973999	9.29457	130.21
1930	3.2236	4.0548	4.4358	4.3216	.974257	9.29704	130.96
1940	3.2441	4.0758	4.4576	4.3440	.974512	9.29947	131.71
1950	3.2646	4.0968	4.4794	4.3664	.974763	9.30186	132.45
1960	3.2851	4.1178	4.5013	4.3888	.975010	9.30422	133.20
1970	3.3056	4.1388	4.5231	4.4112	.975254	9.30655	133.95
1980	3.3261	4.1598	4.5449	4.4336	.975494	9.30884	134.70
1990	3.3465	4.1808	4.5668	4.4559	.975731	9.31110	135.45
2000	3.3670	4.2018	4.5886	4.4783	.975964	9.31333	136.19
2010	3.3876	4.2228	4.6105	4.5007	.976194	9.31552	136.94
2020	3.4081	4.2438	4.6323	4.5231	.976421	9.31769	137.69
2030	3.4286	4.2649	4.6542	4.5455	.976645	9.31982	138.44
2040	3.4491	4.2859	4.6761	4.5679	.976866	9.32193	139.19
2050	3.4696	4.3069	4.6980	4.5903	.977083	9.32400	139.94
2060	3.4902	4.3279	4.7198	4.6127	.977297	9.32605	140.69
2070	3.5107	4.3489	4.7417	4.6351	.977509	9.32807	141.44
2080	3.5312	4.3699	4.7636	4.6575	.977718	9.33006	142.19
2090	3.5518	4.3909	4.7855	4.6799	.977923	9.33202	142.94
2100	3.5723	4.4119	4.8074	4.7023	.978126	9.33396	143.69
2110	3.5929	4.4329	4.8293	4.7246	.978326	9.33587	144.44
2120	3.6134	4.4539	4.8512	4.7470	.978524	9.33775	145.19
2130	3.6340	4.4749	4.8731	4.7694	.978719	9.33961	145.94

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
2140	3.6546	4.4960	4.8951	4.7918	.978911	9.34144	146.69
2150	3.6751	4.5170	4.9170	4.8142	.979100	9.34325	147.44
2160	3.6957	4.5380	4.9389	4.8366	.979288	9.34504	148.19
2170	3.7163	4.5590	4.9608	4.8590	.979472	9.34680	148.94
2180	3.7368	4.5800	4.9828	4.8814	.979554	9.34854	149.69
2190	3.7574	4.6010	5.0047	4.9038	.979834	9.35026	150.45
2200	3.7780	4.6220	5.0266	4.9262	.980012	9.35195	151.20
2210	3.7986	4.6430	5.0486	4.9486	.980187	9.35362	151.95
2220	3.8192	4.6640	5.0705	4.9710	.980360	9.35527	152.70
2230	3.8398	4.6850	5.0925	4.9933	.980530	9.35690	153.45
2240	3.8604	4.7060	5.1144	5.0157	.980699	9.35851	154.21
2250	3.8810	4.7271	5.1364	5.0381	.980865	9.36009	154.96
2260	3.9016	4.7481	5.1584	5.0605	.981029	9.36166	155.71
2270	3.9222	4.7691	5.1803	5.0829	.981191	9.36321	156.47
2280	3.9428	4.7901	5.2023	5.1053	.981351	9.36473	157.22
2290	3.9635	4.8111	5.2243	5.1277	.981509	9.36624	157.97
2300	3.9841	4.8321	5.2463	5.1501	.981666	9.36773	158.73
2310	4.0047	4.8531	5.2683	5.1725	.981820	9.36920	159.48
2320	4.0253	4.8741	5.2902	5.1949	.981972	9.37065	160.23
2330	4.0460	4.8951	5.3122	5.2173	.982122	9.37209	160.99
2340	4.0666	4.9161	5.3342	5.2397	.982271	9.37351	161.74
2350	4.0872	4.9371	5.3562	5.2620	.982417	9.37490	162.50
2360	4.1079	4.9582	5.3782	5.2844	.982562	9.37629	163.25
2370	4.1285	4.9792	5.4002	5.3068	.982705	9.37765	164.01
2380	4.1492	5.0002	5.4222	5.3292	.982845	9.37900	164.76
2390	4.1698	5.0212	5.4442	5.3516	.982985	9.38033	165.52
2400	4.1905	5.0422	5.4662	5.3740	.983124	9.38165	166.27
2410	4.2111	5.0632	5.4883	5.3964	.983260	9.38295	167.03
2420	4.2318	5.0842	5.5103	5.4188	.983395	9.38423	167.79
2430	4.2525	5.1052	5.5323	5.4412	.983528	9.38550	168.54
2440	4.2731	5.1262	5.5543	5.4636	.983659	9.38676	169.30
2450	4.2938	5.1472	5.5764	5.4860	.983789	9.38800	170.05
2460	4.3145	5.1682	5.5984	5.5084	.983918	9.38922	170.81
2470	4.3351	5.1893	5.6204	5.5307	.984044	9.39043	171.57
2480	4.3558	5.2103	5.6425	5.5531	.984170	9.39163	172.33
2490	4.3765	5.2313	5.6645	5.5755	.984294	9.39281	173.08
2500	4.3972	5.2523	5.6865	5.5979	.984416	9.39398	173.84
2510	4.4179	5.2733	5.7086	5.6203	.984537	9.39514	174.60
2520	4.4385	5.2943	5.7306	5.6427	.984657	9.39628	175.36
2530	4.4592	5.3153	5.7527	5.6651	.984775	9.39741	176.11
2540	4.4799	5.3363	5.7747	5.6875	.984892	9.39852	176.87
2550	4.5006	5.3573	5.7968	5.7099	.985008	9.39963	177.63
2560	4.5213	5.3783	5.8188	5.7323	.985122	9.40072	178.39
2570	4.5420	5.3993	5.8409	5.7547	.985235	9.40180	179.15
2580	4.5627	5.4204	5.8630	5.7771	.985347	9.40286	179.91
2590	4.5834	5.4414	5.8850	5.7994	.985457	9.40392	180.66
2600	4.6041	5.4624	5.9071	5.8218	.985567	9.40496	181.42
2610	4.6248	5.4834	5.9292	5.8442	.985675	9.40599	182.18
2620	4.6455	5.5044	5.9512	5.8666	.985781	9.40701	182.94
2630	4.6662	5.5254	5.9733	5.8890	.985887	9.40802	183.70
2640	4.6870	5.5464	5.9954	5.9114	.985992	9.40901	184.46
2650	4.7077	5.5674	6.0175	5.9338	.986095	9.41000	185.22
2660	4.7284	5.5884	6.0395	5.9562	.986197	9.41098	185.98
2670	4.7491	5.6094	6.0616	5.9786	.986299	9.41194	186.74
2680	4.7698	5.6304	6.0837	6.0010	.986398	9.41289	187.50
2690	4.7906	5.6515	6.1058	6.0234	.986497	9.41384	188.27
2700	4.8113	5.6725	6.1279	6.0458	.986593	9.41477	189.03
2710	4.8320	5.6935	6.1500	6.0681	.986692	9.41570	189.79
2720	4.8527	5.7145	6.1721	6.0905	.986787	9.41661	190.55
2730	4.8735	5.7355	6.1942	6.1129	.986882	9.41751	191.31
2740	4.8942	5.7565	6.2163	6.1353	.986976	9.41841	192.07
2750	4.9149	5.7775	6.2384	6.1577	.987069	9.41929	192.83
2760	4.9357	5.7985	6.2605	6.1801	.987160	9.42017	193.60
2770	4.9564	5.8195	6.2826	6.2025	.987251	9.42103	194.36
2780	4.9772	5.8405	6.3047	6.2249	.987341	9.42189	195.12
2790	4.9979	5.8615	6.3268	6.2473	.987430	9.42274	195.88
2800	5.0187	5.8826	6.3489	6.2697	.987518	9.42358	196.65

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
3480	6.4329	7.3112	7.8562	7.7923	.991866	9.46507	248.97
3490	6.4537	7.3322	7.8784	7.8147	.991912	9.46551	249.75
3500	6.4746	7.3532	7.9006	7.8371	.991957	9.46594	250.52
3510	6.4954	7.3742	7.9228	7.8595	.992003	9.46637	251.30
3520	6.5162	7.3952	7.9451	7.8819	.992047	9.46680	252.07
3530	6.5371	7.4162	7.9673	7.9043	.992092	9.46723	252.85
3540	6.5579	7.4372	7.9895	7.9267	.992136	9.46765	253.63
3550	6.5788	7.4582	8.0117	7.9490	.992180	9.46807	254.41
3560	6.5996	7.4792	8.0339	7.9714	.992223	9.46848	255.18
3570	6.6205	7.5003	8.0561	7.9938	.992266	9.46889	255.96
3580	6.6413	7.5213	8.0784	8.0162	.992309	9.46930	256.74
3590	6.6622	7.5423	8.1006	8.0386	.992351	9.46970	257.52
3600	6.6830	7.5633	8.1228	8.0610	.992393	9.47010	258.29
3610	6.7039	7.5843	8.1450	8.0834	.992435	9.47050	259.07
3620	6.7247	7.6053	8.1672	8.1058	.992476	9.47089	259.85
3630	6.7456	7.6263	8.1895	8.1282	.992517	9.47128	260.63
3640	6.7664	7.6473	8.2117	8.1506	.992557	9.47167	261.41
3650	6.7873	7.6683	8.2339	8.1730	.992598	9.47205	262.19
3660	6.8081	7.6893	8.2561	8.1954	.992638	9.47243	262.97
3670	6.8290	7.7103	8.2784	8.2177	.992677	9.47281	263.75
3680	6.8498	7.7314	8.3006	8.2401	.992717	9.47319	264.53
3690	6.8707	7.7524	8.3228	8.2625	.992756	9.47356	265.31
3700	6.8915	7.7734	8.3451	8.2849	.992794	9.47393	266.09
3710	6.9124	7.7944	8.3673	8.3073	.992833	9.47430	266.87
3720	6.9333	7.8154	8.3895	8.3297	.992871	9.47466	267.65
3730	6.9541	7.8364	8.4117	8.3521	.992908	9.47502	268.43
3740	6.9750	7.8574	8.4340	8.3745	.992946	9.47538	269.21
3750	6.9958	7.8784	8.4562	8.3969	.992983	9.47573	269.99
3760	7.0167	7.8994	8.4784	8.4193	.993020	9.47608	270.77
3770	7.0376	7.9204	8.5007	8.4417	.993057	9.47643	271.55
3780	7.0584	7.9414	8.5229	8.4641	.993093	9.47678	272.33
3790	7.0793	7.9625	8.5452	8.4864	.993129	9.47712	273.12
3800	7.1002	7.9835	8.5674	8.5088	.993165	9.47746	273.90
3810	7.1210	8.0045	8.5896	8.5312	.993200	9.47780	274.68
3820	7.1419	8.0255	8.6119	8.5536	.993235	9.47814	275.46
3830	7.1628	8.0465	8.6341	8.5760	.993270	9.47847	276.25
3840	7.1836	8.0675	8.6564	8.5984	.993305	9.47880	277.03
3850	7.2045	8.0885	8.6786	8.6208	.993339	9.47913	277.81
3860	7.2254	8.1095	8.7008	8.6432	.993373	9.47946	278.59
3870	7.2462	8.1305	8.7231	8.6656	.993407	9.47978	279.38
3880	7.2671	8.1515	8.7453	8.6880	.993441	9.48010	280.16
3890	7.2880	8.1725	8.7676	8.7104	.993474	9.48042	280.94
3900	7.3088	8.1936	8.7898	8.7328	.993507	9.48073	281.73
3910	7.3297	8.2146	8.8121	8.7551	.993540	9.48105	282.51
3920	7.3506	8.2356	8.8343	8.7775	.993573	9.48136	283.30
3930	7.3715	8.2566	8.8566	8.7999	.993605	9.48167	284.08
3940	7.3923	8.2776	8.8788	8.8223	.993637	9.48197	284.87
3950	7.4132	8.2986	8.9011	8.8447	.993669	9.48228	285.65
3960	7.4341	8.3196	8.9233	8.8671	.993701	9.48258	286.44
3970	7.4550	8.3406	8.9456	8.8895	.993732	9.48288	287.22
3980	7.4758	8.3616	8.9678	8.9119	.993763	9.48318	288.01
3990	7.4967	8.3826	8.9901	8.9343	.993794	9.48347	288.79
4000	7.5176	8.4036	9.0123	8.9567	.993825	9.48377	289.58
4010	7.5385	8.4247	9.0346	8.9791	.993855	9.48406	290.37
4020	7.5594	8.4457	9.0568	9.0015	.993886	9.48434	291.15
4030	7.5802	8.4667	9.0791	9.0238	.993916	9.48463	291.94
4040	7.6011	8.4877	9.1013	9.0462	.993946	9.48492	292.73
4050	7.6220	8.5087	9.1236	9.0686	.993975	9.48520	293.51
4060	7.6429	8.5297	9.1459	9.0910	.994004	9.48548	294.30
4070	7.6638	8.5507	9.1681	9.1134	.994034	9.48576	295.09
4080	7.6847	8.5717	9.1904	9.1358	.994063	9.48603	295.87
4090	7.7055	8.5927	9.2126	9.1582	.994091	9.48631	296.66
4100	7.7264	8.6137	9.2349	9.1806	.994120	9.48658	297.45
4110	7.7473	8.6347	9.2571	9.2030	.994148	9.48685	298.24
4120	7.7682	8.6558	9.2794	9.2254	.994176	9.48712	299.03
4130	7.7891	8.6768	9.3017	9.2478	.994204	9.48738	299.82
4140	7.8100	8.6978	9.3239	9.2702	.994232	9.48765	300.60

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
4150	7.8309	8.7188	9.3462	9.2925	.994260	9.48791	301.39
4160	7.8518	8.7398	9.3685	9.3149	.994287	9.48817	302.18
4170	7.8726	8.7608	9.3907	9.3373	.994314	9.48843	302.97
4180	7.8935	8.7818	9.4130	9.3597	.994341	9.48869	303.76
4190	7.9144	8.8028	9.4353	9.3821	.994368	9.48894	304.55
4200	7.9353	8.8238	9.4575	9.4045	.994394	9.48920	305.34
4210	7.9562	8.8448	9.4798	9.4269	.994421	9.48945	306.13
4220	7.9771	8.8658	9.5021	9.4493	.994447	9.48970	306.92
4230	7.9980	8.8869	9.5243	9.4717	.994473	9.48995	307.71
4240	8.0189	8.9079	9.5466	9.4941	.994499	9.49019	308.50
4250	8.0398	8.9289	9.5689	9.5165	.994524	9.49044	309.29
4260	8.0607	8.9499	9.5911	9.5389	.994550	9.49068	310.08
4270	8.0816	8.9709	9.6134	9.5612	.994575	9.49092	310.88
4280	8.1025	8.9919	9.6357	9.5836	.994600	9.49116	311.67
4290	8.1234	9.0129	9.6579	9.6060	.994625	9.49140	312.46
4300	8.1443	9.0339	9.6802	9.6284	.994650	9.49164	313.25
4310	8.1652	9.0549	9.7025	9.6508	.994674	9.49187	314.04
4320	8.1861	9.0759	9.7248	9.6732	.994699	9.49210	314.84
4330	8.2070	9.0969	9.7470	9.6956	.994723	9.49234	315.63
4340	8.2278	9.1180	9.7693	9.7180	.994747	9.49257	316.42
4350	8.2487	9.1390	9.7916	9.7404	.994771	9.49279	317.21
4360	8.2696	9.1600	9.8138	9.7628	.994795	9.49302	318.01
4370	8.2905	9.1810	9.8361	9.7852	.994819	9.49325	318.80
4380	8.3114	9.2020	9.8584	9.8076	.994842	9.49347	319.59
4390	8.3323	9.2230	9.8807	9.8299	.994865	9.49369	320.39
4400	8.3533	9.2440	9.9030	9.8523	.994888	9.49391	321.18
4410	8.3742	9.2650	9.9252	9.8747	.994911	9.49413	321.98
4420	8.3951	9.2860	9.9475	9.8971	.994934	9.49435	322.77
4430	8.4160	9.3070	9.9698	9.9195	.994957	9.49457	323.56
4440	8.4369	9.3280	9.9921	9.9419	.994979	9.49478	324.36
4450	8.4578	9.3491	10.0143	9.9643	.995002	9.49500	325.15
4460	8.4787	9.3701	10.0366	9.9867	.995024	9.49521	325.95
4470	8.4996	9.3911	10.0589	10.0091	.995046	9.49542	326.74
4480	8.5205	9.4121	10.0812	10.0315	.995068	9.49563	327.54
4490	8.5414	9.4331	10.1035	10.0539	.995090	9.49584	328.34
4500	8.5623	9.4541	10.1258	10.0763	.995111	9.49604	329.13
4510	8.5832	9.4751	10.1480	10.0986	.995133	9.49625	329.93
4520	8.6041	9.4961	10.1703	10.1210	.995154	9.49645	330.72
4530	8.6250	9.5171	10.1926	10.1434	.995176	9.49665	331.52
4540	8.6459	9.5381	10.2149	10.1658	.995197	9.49685	332.32
4550	8.6668	9.5591	10.2372	10.1882	.995218	9.49705	333.12
4560	8.6877	9.5802	10.2595	10.2106	.995238	9.49725	333.91
4570	8.7086	9.6012	10.2817	10.2330	.995259	9.49745	334.71
4580	8.7296	9.6222	10.3040	10.2554	.995280	9.49765	335.51
4590	8.7505	9.6432	10.3263	10.2778	.995300	9.49784	336.31
4600	8.7714	9.6642	10.3486	10.3002	.995320	9.49803	337.10
4610	8.7923	9.6852	10.3709	10.3226	.995340	9.49823	337.90
4620	8.8132	9.7062	10.3932	10.3450	.995360	9.49842	338.70
4630	8.8341	9.7272	10.4155	10.3673	.995380	9.49861	339.50
4640	8.8550	9.7482	10.4377	10.3897	.995400	9.49880	340.30
4650	8.8759	9.7692	10.4600	10.4121	.995420	9.49898	341.10
4660	8.8969	9.7902	10.4823	10.4345	.995439	9.49917	341.90
4670	8.9178	9.8113	10.5046	10.4569	.995459	9.49935	342.69
4680	8.9387	9.8323	10.5269	10.4793	.995478	9.49954	343.49
4690	8.9596	9.8533	10.5492	10.5017	.995497	9.49972	344.29
4700	8.9805	9.8743	10.5715	10.5241	.995516	9.49990	345.09
4710	9.0014	9.8953	10.5938	10.5465	.995535	9.50008	345.89
4720	9.0223	9.9163	10.6161	10.5689	.995554	9.50026	346.70
4730	9.0433	9.9373	10.6384	10.5913	.995572	9.50044	347.50
4740	9.0642	9.9583	10.6607	10.6137	.995591	9.50062	348.30
4750	9.0851	9.9793	10.6830	10.6360	.995609	9.50079	349.10
4760	9.1060	10.0003	10.7052	10.6584	.995628	9.50097	349.90
4770	9.1269	10.0214	10.7275	10.6808	.995646	9.50114	350.70
4780	9.1478	10.0424	10.7498	10.7032	.995664	9.50131	351.50
4790	9.1688	10.0634	10.7721	10.7256	.995682	9.50148	352.30
4800	9.1897	10.0844	10.7944	10.7480	.995700	9.50165	353.11
4810	9.2106	10.1054	10.8167	10.7704	.995717	9.50182	353.91

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
4820	9.2315	10.1264	10.8390	10.7928	.995735	9.50199	354.71
4830	9.2524	10.1474	10.8613	10.8152	.995753	9.50216	355.51
4840	9.2734	10.1684	10.8836	10.8376	.995770	9.50233	356.32
4850	9.2943	10.1894	10.9059	10.8600	.995787	9.50249	357.12
4860	9.3152	10.2104	10.9282	10.8824	.995804	9.50266	357.92
4870	9.3361	10.2314	10.9505	10.9047	.995822	9.50282	358.73
4880	9.3570	10.2525	10.9728	10.9271	.995839	9.50298	359.53
4890	9.3780	10.2735	10.9951	10.9495	.995855	9.50314	360.33
4900	9.3989	10.2945	11.0174	10.9719	.995872	9.50330	361.14
4910	9.4198	10.3155	11.0397	10.9943	.995889	9.50346	361.94
4920	9.4407	10.3365	11.0620	11.0167	.995906	9.50362	362.75
4930	9.4617	10.3575	11.0843	11.0391	.995922	9.50378	363.55
4940	9.4826	10.3785	11.1066	11.0615	.995938	9.50393	364.36
4950	9.5035	10.3995	11.1289	11.0839	.995955	9.50409	365.16
4960	9.5244	10.4205	11.1512	11.1063	.995971	9.50424	365.97
4970	9.5453	10.4415	11.1735	11.1287	.995987	9.50440	366.77
4980	9.5663	10.4625	11.1958	11.1511	.996003	9.50455	367.58
4990	9.5872	10.4836	11.2181	11.1734	.996019	9.50470	368.39
5000	9.6081	10.5046	11.2404	11.1958	.996035	9.50485	369.19
5010	9.6290	10.5256	11.2627	11.2182	.996050	9.50500	370.00
5020	9.6500	10.5466	11.2850	11.2406	.996066	9.50515	370.80
5030	9.6709	10.5676	11.3073	11.2630	.996082	9.50530	371.61
5040	9.6918	10.5886	11.3296	11.2854	.996097	9.50545	372.42
5050	9.7128	10.6096	11.3519	11.3078	.996112	9.50559	373.23
5060	9.7337	10.6306	11.3742	11.3302	.996128	9.50574	374.03
5070	9.7546	10.6516	11.3965	11.3526	.996143	9.50588	374.84
5080	9.7755	10.6726	11.4188	11.3750	.996158	9.50603	375.65
5090	9.7965	10.6936	11.4411	11.3974	.996173	9.50617	376.46
5100	9.8174	10.7147	11.4635	11.4198	.996188	9.50631	377.27
5110	9.8383	10.7357	11.4858	11.4421	.996203	9.50646	378.07
5120	9.8593	10.7567	11.5081	11.4645	.996217	9.50660	378.88
5130	9.8802	10.7777	11.5304	11.4869	.996232	9.50674	379.69
5140	9.9011	10.7987	11.5527	11.5093	.996247	9.50687	380.50
5150	9.9220	10.8197	11.5750	11.5317	.996261	9.50701	381.31
5160	9.9430	10.8407	11.5973	11.5541	.996275	9.50715	382.12
5170	9.9639	10.8617	11.6196	11.5765	.996290	9.50729	382.93
5180	9.9848	10.8827	11.6419	11.5989	.996304	9.50742	383.74
5190	10.0058	10.9037	11.6642	11.6213	.996318	9.50756	384.55
5200	10.0267	10.9247	11.6865	11.6437	.996332	9.50769	385.36
5210	10.0476	10.9458	11.7088	11.6661	.996346	9.50783	386.17
5220	10.0686	10.9668	11.7312	11.6885	.996360	9.50796	386.98
5230	10.0895	10.9878	11.7535	11.7108	.996374	9.50809	387.79
5240	10.1104	11.0088	11.7758	11.7332	.996388	9.50822	388.60
5250	10.1314	11.0298	11.7981	11.7556	.996401	9.50835	389.42
5260	10.1523	11.0508	11.8204	11.7780	.996415	9.50848	390.23
5270	10.1732	11.0718	11.8427	11.8004	.996429	9.50861	391.04
5280	10.1942	11.0928	11.8650	11.8228	.996442	9.50874	391.85
5290	10.2151	11.1138	11.8873	11.8452	.996455	9.50887	392.66
5300	10.2360	11.1348	11.9096	11.8676	.996469	9.50899	393.48
5310	10.2570	11.1558	11.9320	11.8900	.996482	9.50912	394.29
5320	10.2779	11.1769	11.9543	11.9124	.996495	9.50924	395.10
5330	10.2988	11.1979	11.9766	11.9348	.996508	9.50937	395.92
5340	10.3198	11.2189	11.9989	11.9572	.996521	9.50949	396.73
5350	10.3407	11.2399	12.0212	11.9795	.996534	9.50962	397.54
5360	10.3617	11.2609	12.0435	12.0019	.996547	9.50974	398.36
5370	10.3826	11.2819	12.0658	12.0243	.996560	9.50986	399.17
5380	10.4035	11.3029	12.0882	12.0467	.996572	9.50998	399.98
5390	10.4245	11.3239	12.1105	12.0691	.996585	9.51010	400.80
5400	10.4454	11.3449	12.1328	12.0915	.996598	9.51022	401.61
5410	10.4663	11.3659	12.1551	12.1139	.996610	9.51034	402.43
5420	10.4873	11.3869	12.1774	12.1363	.996623	9.51046	403.24
5430	10.5082	11.4080	12.1997	12.1587	.996635	9.51058	404.06
5440	10.5292	11.4290	12.2220	12.1811	.996647	9.51070	404.87
5450	10.5501	11.4500	12.2444	12.2035	.996659	9.51081	405.69
5460	10.5710	11.4710	12.2667	12.2259	.996672	9.51093	406.51
5470	10.5920	11.4920	12.2890	12.2482	.996684	9.51104	407.32
5480	10.6129	11.5130	12.3113	12.2706	.996696	9.51116	408.14

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
5490	10.6338	11.5340	12.3336	12.2930	.996708	9.51127	408.95
5500	10.6548	11.5550	12.3560	12.3154	.996720	9.51139	409.77
5510	10.6757	11.5760	12.3783	12.3378	.996731	9.51150	410.59
5520	10.6967	11.5970	12.4006	12.3602	.996743	9.51161	411.41
5530	10.7176	11.6180	12.4229	12.3826	.996755	9.51172	412.22
5540	10.7386	11.6391	12.4452	12.4050	.996767	9.51184	413.04
5550	10.7595	11.6601	12.4675	12.4274	.996778	9.51195	413.86
5560	10.7804	11.6811	12.4899	12.4498	.996790	9.51206	414.68
5570	10.8014	11.7021	12.5122	12.4722	.996801	9.51217	415.49
5580	10.8223	11.7231	12.5345	12.4946	.996813	9.51227	416.31
5590	10.8433	11.7441	12.5568	12.5169	.996824	9.51238	417.13
5600	10.8642	11.7651	12.5791	12.5393	.996835	9.51249	417.95
5610	10.8851	11.7861	12.6015	12.5617	.996846	9.51260	418.77
5620	10.9061	11.8071	12.6238	12.5841	.996858	9.51270	419.59
5630	10.9270	11.8281	12.6461	12.6065	.996869	9.51281	420.41
5640	10.9480	11.8491	12.6684	12.6289	.996880	9.51292	421.23
5650	10.9689	11.8702	12.6908	12.6513	.996891	9.51302	422.05
5660	10.9899	11.8912	12.7131	12.6737	.996902	9.51312	422.87
5670	11.0108	11.9122	12.7354	12.6961	.996912	9.51323	423.69
5680	11.0318	11.9332	12.7577	12.7185	.996923	9.51333	424.51
5690	11.0527	11.9542	12.7800	12.7409	.996934	9.51343	425.33
5700	11.0736	11.9752	12.8024	12.7633	.996945	9.51354	426.15
5710	11.0946	11.9962	12.8247	12.7856	.996955	9.51364	426.97
5720	11.1155	12.0172	12.8470	12.8080	.996966	9.51374	427.79
5730	11.1365	12.0382	12.8693	12.8304	.996976	9.51384	428.62
5740	11.1574	12.0592	12.8917	12.8528	.996987	9.51394	429.44
5750	11.1784	12.0802	12.9140	12.8752	.996997	9.51404	430.26
5760	11.1993	12.1013	12.9363	12.8976	.997008	9.51414	431.08
5770	11.2203	12.1223	12.9586	12.9200	.997018	9.51424	431.91
5780	11.2412	12.1433	12.9810	12.9424	.997029	9.51433	432.73
5790	11.2622	12.1643	13.0033	12.9648	.997039	9.51443	433.55
5800	11.2831	12.1853	13.0256	12.9872	.997049	9.51453	434.37
5810	11.3040	12.2063	13.0479	13.0096	.997059	9.51462	435.20
5820	11.3250	12.2273	13.0703	13.0320	.997069	9.51472	436.02
5830	11.3459	12.2483	13.0926	13.0543	.997079	9.51482	436.85
5840	11.3669	12.2693	13.1149	13.0767	.997089	9.51491	437.67
5850	11.3878	12.2903	13.1372	13.0991	.997099	9.51501	438.49
5860	11.4088	12.3113	13.1596	13.1215	.997109	9.51510	439.32
5870	11.4297	12.3324	13.1819	13.1439	.997118	9.51519	440.14
5880	11.4507	12.3534	13.2042	13.1663	.997128	9.51529	440.97
5890	11.4716	12.3744	13.2266	13.1887	.997138	9.51538	441.79
5900	11.4926	12.3954	13.2489	13.2111	.997147	9.51547	442.62
5910	11.5135	12.4164	13.2712	13.2335	.997157	9.51556	443.44
5920	11.5345	12.4374	13.2935	13.2559	.997167	9.51565	444.27
5930	11.5554	12.4584	13.3159	13.2783	.997176	9.51574	445.10
5940	11.5764	12.4794	13.3382	13.3007	.997186	9.51583	445.92
5950	11.5973	12.5004	13.3605	13.3230	.997195	9.51592	446.75
5960	11.6183	12.5214	13.3828	13.3454	.997204	9.51601	447.58
5970	11.6392	12.5424	13.4052	13.3678	.997214	9.51610	448.40
5980	11.6602	12.5635	13.4275	13.3902	.997223	9.51619	449.23
5990	11.6811	12.5845	13.4498	13.4126	.997232	9.51628	450.06
6000	11.7021	12.6055	13.4722	13.4350	.997241	9.51637	450.89
6010	11.7230	12.6265	13.4945	13.4574	.997250	9.51645	451.71
6020	11.7440	12.6475	13.5168	13.4798	.997260	9.51654	452.54
6030	11.7649	12.6685	13.5392	13.5022	.997269	9.51663	453.37
6040	11.7859	12.6895	13.5615	13.5246	.997278	9.51671	454.20
6050	11.8068	12.7105	13.5838	13.5470	.997287	9.51680	455.03
6060	11.8278	12.7315	13.6062	13.5694	.997295	9.51688	455.86
6070	11.8487	12.7525	13.6285	13.5917	.997304	9.51697	456.68
6080	11.8697	12.7735	13.6508	13.6141	.997313	9.51705	457.51
6090	11.8907	12.7946	13.6731	13.6365	.997322	9.51714	458.34
6100	11.9116	12.8156	13.6955	13.6589	.997331	9.51722	459.17
6110	11.9326	12.8366	13.7178	13.6813	.997339	9.51730	460.00
6120	11.9535	12.8576	13.7401	13.7037	.997348	9.51738	460.83
6130	11.9745	12.8786	13.7625	13.7261	.997357	9.51747	461.66
6140	11.9954	12.8996	13.7848	13.7485	.997365	9.51755	462.49
6150	12.0164	12.9206	13.8071	13.7709	.997374	9.51763	463.33

B gauss	T GeV	P GeV/c	$\delta$	$\eta$	$\beta$	f MHz	t msec
6160	12.0373	12.9416	13.8295	13.7933	.997382	9.51771	464.16
6170	12.0583	12.9626	13.8518	13.8157	.997391	9.51779	464.99
6180	12.0792	12.9836	13.8741	13.8381	.997399	9.51787	465.82
6190	12.1002	13.0046	13.8965	13.8604	.997407	9.51795	466.65
6200	12.1211	13.0257	13.9188	13.8828	.997416	9.51803	467.48
6210	12.1421	13.0467	13.9411	13.9052	.997424	9.51811	468.32
6220	12.1631	13.0677	13.9635	13.9276	.997432	9.51819	469.15
6230	12.1840	13.0887	13.9858	13.9500	.997441	9.51827	469.98
6240	12.2050	13.1097	14.0081	13.9724	.997449	9.51835	470.81
6250	12.2259	13.1307	14.0305	13.9948	.997457	9.51842	471.65
6260	12.2469	13.1517	14.0528	14.0172	.997465	9.51850	472.48
6270	12.2678	13.1727	14.0751	14.0396	.997473	9.51858	473.31
6280	12.2888	13.1937	14.0975	14.0620	.997481	9.51865	474.15
6290	12.3097	13.2147	14.1198	14.0844	.997489	9.51873	474.98
6300	12.3307	13.2357	14.1422	14.1068	.997497	9.51881	475.82
6310	12.3517	13.2568	14.1645	14.1291	.997505	9.51888	476.65
6320	12.3726	13.2778	14.1868	14.1515	.997513	9.51896	477.48
6330	12.3936	13.2988	14.2092	14.1739	.997520	9.51903	478.32
6340	12.4145	13.3198	14.2315	14.1963	.997528	9.51910	479.15
6350	12.4355	13.3408	14.2538	14.2187	.997536	9.51918	479.99
6360	12.4564	13.3618	14.2762	14.2411	.997544	9.51925	480.83
6370	12.4774	13.3828	14.2985	14.2635	.997551	9.51933	481.66
6380	12.4984	13.4038	14.3208	14.2859	.997559	9.51940	482.50
6390	12.5193	13.4248	14.3432	14.3083	.997567	9.51947	483.33
6400	12.5403	13.4458	14.3655	14.3307	.997574	9.51954	484.17
6410	12.5612	13.4668	14.3879	14.3531	.997582	9.51961	485.01
6420	12.5822	13.4879	14.4102	14.3755	.997589	9.51969	485.84
6430	12.6032	13.5089	14.4325	14.3978	.997597	9.51976	486.68
6440	12.6241	13.5299	14.4549	14.4202	.997604	9.51983	487.52
6450	12.6451	13.5509	14.4772	14.4426	.997612	9.51990	488.36
6460	12.6660	13.5719	14.4995	14.4650	.997619	9.51997	489.19
6470	12.6870	13.5929	14.5219	14.4874	.997626	9.52004	490.03
6480	12.7079	13.6139	14.5442	14.5098	.997634	9.52011	490.87
6490	12.7289	13.6349	14.5666	14.5322	.997641	9.52018	491.71
6500	12.7499	13.6559	14.5889	14.5546	.997648	9.52025	492.55
6510	12.7708	13.6769	14.6112	14.5770	.997655	9.52032	493.39
6520	12.7918	13.6979	14.6336	14.5994	.997662	9.52038	494.22
6530	12.8127	13.7190	14.6559	14.6218	.997669	9.52045	495.06
6540	12.8337	13.7400	14.6783	14.6442	.997677	9.52052	495.90
6550	12.8547	13.7610	14.7006	14.6665	.997684	9.52059	496.74
6560	12.8756	13.7820	14.7229	14.6889	.997691	9.52065	497.58
6570	12.8966	13.8030	14.7453	14.7113	.997698	9.52072	498.42
6580	12.9175	13.8240	14.7676	14.7337	.997705	9.52079	499.26
6590	12.9385	13.8450	14.7900	14.7561	.997712	9.52085	500.11
6600	12.9595	13.8660	14.8123	14.7785	.997718	9.52092	500.95
6610	12.9804	13.8870	14.8346	14.8009	.997725	9.52099	501.79
6620	13.0014	13.9080	14.8570	14.8233	.997732	9.52105	502.63
6630	13.0224	13.9290	14.8793	14.8457	.997739	9.52112	503.47
6640	13.0433	13.9501	14.9017	14.8681	.997746	9.52118	504.31
6650	13.0643	13.9711	14.9240	14.8905	.997753	9.52125	505.15
6660	13.0852	13.9921	14.9463	14.9129	.997759	9.52131	506.00
6670	13.1062	14.0131	14.9687	14.9352	.997766	9.52137	506.84
6680	13.1272	14.0341	14.9910	14.9576	.997773	9.52144	507.68
6690	13.1481	14.0551	15.0134	14.9800	.997779	9.52150	508.52
6700	13.1691	14.0761	15.0357	15.0024	.997786	9.52156	509.37
6710	13.1901	14.0971	15.0581	15.0248	.997792	9.52163	510.21
6720	13.2110	14.1181	15.0804	15.0472	.997799	9.52169	511.06
6730	13.2320	14.1391	15.1027	15.0696	.997806	9.52175	511.90
6740	13.2529	14.1601	15.1251	15.0920	.997812	9.52181	512.74
6750	13.2739	14.1812	15.1474	15.1144	.997818	9.52187	513.59
6760	13.2949	14.2022	15.1698	15.1368	.997825	9.52194	514.43
6770	13.3158	14.2232	15.1921	15.1592	.997831	9.52200	515.28
6780	13.3368	14.2442	15.2145	15.1816	.997838	9.52206	516.12
6790	13.3578	14.2652	15.2368	15.2039	.997844	9.52212	516.97
6800	13.3787	14.2862	15.2591	15.2263	.997850	9.52218	517.81
6810	13.3997	14.3072	15.2815	15.2487	.997857	9.52224	518.66
6820	13.4207	14.3282	15.3038	15.2711	.997863	9.52230	519.50

B gauss	T GeV	P GeV/c	Y	$\eta$	$\beta$	f MHz	t msec
6830	13.4416	14.3492	15.3262	15.2935	.997869	0.52236	520.35
6840	13.4626	14.3702	15.3485	15.3159	.997875	0.52242	521.20
6850	13.4835	14.3912	15.3709	15.3383	.997881	0.52248	522.04
6860	13.5045	14.4123	15.3932	15.3607	.997888	0.52253	522.89
6870	13.5255	14.4333	15.4155	15.3831	.997894	0.52259	523.74
6880	13.5464	14.4543	15.4379	15.4055	.997900	0.52265	524.59
6890	13.5674	14.4753	15.4602	15.4279	.997906	0.52271	525.43
6900	13.5884	14.4963	15.4826	15.4503	.997912	0.52277	526.28
6910	13.6093	14.5173	15.5049	15.4726	.997918	0.52282	527.13
6920	13.6303	14.5383	15.5273	15.4950	.997924	0.52288	527.98
6930	13.6513	14.5593	15.5496	15.5174	.997930	0.52294	528.83
6940	13.6722	14.5803	15.5720	15.5398	.997936	0.52299	529.67
6950	13.6932	14.6013	15.5943	15.5622	.997942	0.52305	530.52
6960	13.7142	14.6223	15.6167	15.5846	.997948	0.52311	531.37
6970	13.7351	14.6434	15.6390	15.6070	.997954	0.52316	532.22
6980	13.7561	14.6644	15.6613	15.6294	.997959	0.52322	533.07
6990	13.7771	14.6854	15.6837	15.6518	.997965	0.52327	533.92
7000	13.7980	14.7064	15.7060	15.6742	.997971	0.52333	534.77
7010	13.8190	14.7274	15.7284	15.6966	.997977	0.52338	535.62
7020	13.8400	14.7484	15.7507	15.7190	.997983	0.52344	536.47
7030	13.8609	14.7694	15.7731	15.7413	.997988	0.52349	537.32
7040	13.8819	14.7904	15.7954	15.7637	.997994	0.52355	538.17
7050	13.9029	14.8114	15.8178	15.7861	.998000	0.52360	539.03
7060	13.9238	14.8324	15.8401	15.8085	.998005	0.52366	539.88
7070	13.9448	14.8534	15.8625	15.8309	.998011	0.52371	540.73
7080	13.9658	14.8745	15.8848	15.8533	.998016	0.52376	541.58
7090	13.9867	14.8955	15.9072	15.8757	.998022	0.52382	542.43
7100	14.0077	14.9165	15.9295	15.8981	.998028	0.52387	543.29
7110	14.0287	14.9375	15.9519	15.9205	.998033	0.52392	544.14
7120	14.0496	14.9585	15.9742	15.9429	.998039	0.52397	544.99
7130	14.0706	14.9795	15.9965	15.9653	.998044	0.52403	545.84
7140	14.0916	15.0005	16.0189	15.9877	.998050	0.52408	546.70
7150	14.1125	15.0215	16.0412	16.0100	.998055	0.52413	547.55
7160	14.1335	15.0425	16.0636	16.0324	.998060	0.52418	548.40
7170	14.1545	15.0635	16.0859	16.0548	.998066	0.52423	549.26
7180	14.1754	15.0845	16.1083	16.0772	.998071	0.52429	550.11
7190	14.1964	15.1056	16.1306	16.0996	.998077	0.52434	550.97
7200	14.2174	15.1266	16.1530	16.1220	.998082	0.52439	551.82
7210	14.2383	15.1476	16.1753	16.1444	.998087	0.52444	552.68
7220	14.2593	15.1686	16.1977	16.1668	.998092	0.52449	553.53
7230	14.2803	15.1896	16.2200	16.1892	.998098	0.52454	554.39
7240	14.3013	15.2106	16.2424	16.2116	.998103	0.52459	555.24
7250	14.3222	15.2316	16.2647	16.2340	.998108	0.52464	556.10
7260	14.3432	15.2526	16.2871	16.2564	.998113	0.52469	556.96
7270	14.3642	15.2736	16.3094	16.2787	.998119	0.52474	557.81
7280	14.3851	15.2946	16.3318	16.3011	.998124	0.52479	558.67
7290	14.4061	15.3156	16.3541	16.3235	.998129	0.52484	559.53
7300	14.4271	15.3367	16.3765	16.3459	.998134	0.52488	560.38
7310	14.4480	15.3577	16.3988	16.3683	.998139	0.52493	561.24
7320	14.4690	15.3787	16.4212	16.3907	.998144	0.52498	562.10
7330	14.4900	15.3997	16.4435	16.4131	.998149	0.52503	562.96
7340	14.5110	15.4207	16.4659	16.4355	.998154	0.52508	563.81
7350	14.5319	15.4417	16.4882	16.4579	.998159	0.52512	564.67
7360	14.5529	15.4627	16.5106	16.4803	.998164	0.52517	565.53
7370	14.5739	15.4837	16.5329	16.5027	.998169	0.52522	566.39
7380	14.5948	15.5047	16.5553	16.5251	.998174	0.52527	567.25
7390	14.6158	15.5257	16.5776	16.5474	.998179	0.52531	568.11
7400	14.6368	15.5467	16.6000	16.5698	.998184	0.52536	568.97
7410	14.6578	15.5678	16.6223	16.5922	.998189	0.52541	569.83
7420	14.6787	15.5888	16.6447	16.6146	.998194	0.52545	570.69
7430	14.6997	15.6098	16.6670	16.6370	.998198	0.52550	571.55
7440	14.7207	15.6308	16.6894	16.6594	.998203	0.52555	572.41
7450	14.7416	15.6518	16.7117	16.6818	.998208	0.52559	573.27
7460	14.7626	15.6728	16.7341	16.7042	.998213	0.52564	574.13
7470	14.7836	15.6938	16.7564	16.7266	.998218	0.52568	574.99
7480	14.8046	15.7148	16.7788	16.7490	.998222	0.52573	575.85
7490	14.8255	15.7358	16.8011	16.7714	.998227	0.52577	576.71

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
7500	14.8465	15.7568	16.8235	16.7938	.998232	9.52582	577.57
7510	14.8675	15.7778	16.8459	16.8161	.998237	9.52586	578.44
7520	14.8884	15.7989	16.8682	16.8385	.998241	9.52591	579.30
7530	14.9094	15.8199	16.8906	16.8609	.998246	9.52595	580.16
7540	14.9304	15.8409	16.9129	16.8833	.998251	9.52600	581.02
7550	14.9514	15.8619	16.9353	16.9057	.998255	9.52604	581.89
7560	14.9723	15.8829	16.9576	16.9281	.998260	9.52608	582.75
7570	14.9933	15.9039	16.9800	16.9505	.998264	9.52613	583.61
7580	15.0143	15.9249	17.0023	16.9729	.998269	9.52617	584.48
7590	15.0352	15.9459	17.0247	16.9953	.998273	9.52622	585.34
7600	15.0562	15.9669	17.0470	17.0177	.998278	9.52626	586.21
7610	15.0772	15.9879	17.0694	17.0401	.998282	9.52630	587.07
7620	15.0982	16.0089	17.0917	17.0625	.998287	9.52634	587.94
7630	15.1191	16.0300	17.1141	17.0848	.998291	9.52639	588.80
7640	15.1401	16.0510	17.1364	17.1072	.998296	9.52643	589.67
7650	15.1611	16.0720	17.1588	17.1296	.998300	9.52647	590.53
7660	15.1821	16.0930	17.1811	17.1520	.998305	9.52651	591.40
7670	15.2030	16.1140	17.2035	17.1744	.998309	9.52656	592.26
7680	15.2240	16.1350	17.2259	17.1968	.998314	9.52660	593.13
7690	15.2450	16.1560	17.2482	17.2192	.998318	9.52664	593.99
7700	15.2660	16.1770	17.2706	17.2416	.998322	9.52668	594.86
7710	15.2869	16.1980	17.2929	17.2640	.998327	9.52672	595.73
7720	15.3079	16.2190	17.3153	17.2864	.998331	9.52676	596.60
7730	15.3289	16.2400	17.3376	17.3088	.998335	9.52681	597.46
7740	15.3498	16.2611	17.3600	17.3312	.998340	9.52685	598.33
7750	15.3708	16.2821	17.3823	17.3535	.998344	9.52689	599.20
7760	15.3918	16.3031	17.4047	17.3759	.998348	9.52693	600.07
7770	15.4128	16.3241	17.4270	17.3983	.998352	9.52697	600.93
7780	15.4337	16.3451	17.4494	17.4207	.998357	9.52701	601.80
7790	15.4547	16.3661	17.4718	17.4431	.998361	9.52705	602.67
7800	15.4757	16.3871	17.4941	17.4655	.998365	9.52709	603.54
7810	15.4967	16.4081	17.5165	17.4879	.998369	9.52713	604.41
7820	15.5176	16.4291	17.5388	17.5103	.998373	9.52717	605.28
7830	15.5386	16.4501	17.5612	17.5327	.998377	9.52721	606.15
7840	15.5596	16.4711	17.5835	17.5551	.998382	9.52725	607.02
7850	15.5806	16.4922	17.6059	17.5775	.998386	9.52729	607.89
7860	15.6015	16.5132	17.6282	17.5999	.998390	9.52733	608.76
7870	15.6225	16.5342	17.6506	17.6222	.998394	9.52736	609.63
7880	15.6435	16.5552	17.6730	17.6446	.998398	9.52740	610.50
7890	15.6645	16.5762	17.6953	17.6670	.998402	9.52744	611.37
7900	15.6854	16.5972	17.7177	17.6894	.998406	9.52748	612.24
7910	15.7064	16.6182	17.7400	17.7118	.998410	9.52752	613.12
7920	15.7274	16.6392	17.7624	17.7342	.998414	9.52756	613.99
7930	15.7484	16.6602	17.7847	17.7566	.998418	9.52759	614.86
7940	15.7694	16.6812	17.8071	17.7790	.998422	9.52763	615.73
7950	15.7903	16.7023	17.8294	17.8014	.998426	9.52767	616.60
7960	15.8113	16.7233	17.8518	17.8238	.998430	9.52771	617.48
7970	15.8323	16.7443	17.8742	17.8462	.998434	9.52775	618.35
7980	15.8533	16.7653	17.8965	17.8686	.998438	9.52778	619.22
7990	15.8742	16.7863	17.9189	17.8909	.998442	9.52782	620.10
8000	15.8952	16.8073	17.9412	17.9133	.998445	9.52786	620.97
8010	15.9162	16.8283	17.9636	17.9357	.998449	9.52789	621.85
8020	15.9372	16.8493	17.9859	17.9581	.998453	9.52793	622.72
8030	15.9581	16.8703	18.0083	17.9805	.998457	9.52797	623.60
8040	15.9791	16.8913	18.0307	18.0029	.998461	9.52800	624.47
8050	16.0001	16.9123	18.0530	18.0253	.998465	9.52804	625.34
8060	16.0211	16.9334	18.0754	18.0477	.998468	9.52808	626.22
8070	16.0420	16.9544	18.0977	18.0701	.998472	9.52811	627.10
8080	16.0630	16.9754	18.1201	18.0925	.998476	9.52815	627.97
8090	16.0840	16.9964	18.1424	18.1149	.998480	9.52818	628.85
8100	16.1050	17.0174	18.1648	18.1373	.998484	9.52822	629.72
8110	16.1260	17.0384	18.1872	18.1596	.998487	9.52826	630.60
8120	16.1469	17.0594	18.2095	18.1820	.998491	9.52829	631.48
8130	16.1679	17.0804	18.2319	18.2044	.998495	9.52833	632.35
8140	16.1889	17.1014	18.2542	18.2268	.998498	9.52836	633.23
8150	16.2099	17.1224	18.2766	18.2492	.998502	9.52840	634.11
8160	16.2308	17.1434	18.2989	18.2716	.998506	9.52843	634.99

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
8170	16.2518	17.1645	18.3213	18.2940	.998509	9.52847	635.87
8180	16.2728	17.1855	18.3437	18.3164	.998513	9.52850	636.74
8190	16.2938	17.2065	18.3660	18.3388	.998517	9.52854	637.62
8200	16.3148	17.2275	18.3884	18.3612	.998520	9.52857	638.50
8210	16.3357	17.2485	18.4107	18.3836	.998524	9.52860	639.38
8220	16.3567	17.2695	18.4331	18.4060	.998527	9.52864	640.26
8230	16.3777	17.2905	18.4555	18.4283	.998531	9.52867	641.14
8240	16.3987	17.3115	18.4778	18.4507	.998534	9.52871	642.02
8250	16.4196	17.3325	18.5002	18.4731	.998538	9.52874	642.90
8260	16.4406	17.3535	18.5225	18.4955	.998542	9.52877	643.78
8270	16.4616	17.3745	18.5449	18.5179	.998545	9.52881	644.66
8280	16.4826	17.3956	18.5673	18.5403	.998549	9.52884	645.54
8290	16.5036	17.4166	18.5896	18.5627	.998552	9.52887	646.42
8300	16.5245	17.4376	18.6120	18.5851	.998556	9.52891	647.30
8310	16.5455	17.4586	18.6343	18.6075	.998559	9.52894	648.18
8320	16.5665	17.4796	18.6567	18.6299	.998562	9.52897	649.07
8330	16.5875	17.5006	18.6790	18.6523	.998566	9.52901	649.95
8340	16.6085	17.5216	18.7014	18.6747	.998569	9.52904	650.83
8350	16.6294	17.5426	18.7238	18.6970	.998573	9.52907	651.71
8360	16.6504	17.5636	18.7461	18.7194	.998576	9.52910	652.60
8370	16.6714	17.5846	18.7685	18.7418	.998580	9.52914	653.48
8380	16.6924	17.6056	18.7908	18.7642	.998583	9.52917	654.36
8390	16.7133	17.6267	18.8132	18.7866	.998586	9.52920	655.25
8400	16.7343	17.6477	18.8356	18.8090	.998590	9.52923	656.13
8410	16.7553	17.6687	18.8579	18.8314	.998593	9.52927	657.01
8420	16.7763	17.6897	18.8803	18.8538	.998596	9.52930	657.90
8430	16.7973	17.7107	18.9026	18.8762	.998600	9.52933	658.78
8440	16.8182	17.7317	18.9250	18.8986	.998603	9.52936	659.67
8450	16.8392	17.7527	18.9474	18.9210	.998606	9.52939	660.55
8460	16.8602	17.7737	18.9697	18.9434	.998610	9.52942	661.44
8470	16.8812	17.7947	18.9921	18.9657	.998613	9.52945	662.32
8480	16.9022	17.8157	19.0145	18.9881	.998616	9.52949	663.21
8490	16.9231	17.8367	19.0368	19.0105	.998619	9.52952	664.09
8500	16.9441	17.8578	19.0592	19.0329	.998623	9.52955	664.98
8510	16.9651	17.8788	19.0815	19.0553	.998626	9.52958	665.87
8520	16.9861	17.8998	19.1039	19.0777	.998629	9.52961	666.75
8530	17.0071	17.9208	19.1263	19.1001	.998632	9.52964	667.64
8540	17.0280	17.9418	19.1486	19.1225	.998635	9.52967	668.53
8550	17.0490	17.9628	19.1710	19.1449	.998639	9.52970	669.42
8560	17.0700	17.9838	19.1933	19.1673	.998642	9.52973	670.30
8570	17.0910	18.0048	19.2157	19.1897	.998645	9.52976	671.19
8580	17.1120	18.0258	19.2381	19.2121	.998648	9.52979	672.08
8590	17.1330	18.0468	19.2604	19.2344	.998651	9.52982	672.97
8600	17.1539	18.0678	19.2828	19.2568	.998654	9.52985	673.86
8610	17.1749	18.0889	19.3051	19.2792	.998657	9.52988	674.75
8620	17.1959	18.1099	19.3275	19.3016	.998661	9.52991	675.64
8630	17.2169	18.1309	19.3499	19.3240	.998664	9.52994	676.52
8640	17.2379	18.1519	19.3722	19.3464	.998667	9.52997	677.41
8650	17.2588	18.1729	19.3946	19.3688	.998670	9.53000	678.30
8660	17.2798	18.1939	19.4170	19.3912	.998673	9.53003	679.20
8670	17.3008	18.2149	19.4393	19.4136	.998676	9.53006	680.09
8680	17.3218	18.2359	19.4617	19.4360	.998679	9.53009	680.98
8690	17.3428	18.2569	19.4840	19.4584	.998682	9.53011	681.87
8700	17.3637	18.2779	19.5064	19.4808	.998685	9.53014	682.76
8710	17.3847	18.2989	19.5288	19.5031	.998688	9.53017	683.65
8720	17.4057	18.3200	19.5511	19.5255	.998691	9.53020	684.54
8730	17.4267	18.3410	19.5735	19.5479	.998694	9.53023	685.43
8740	17.4477	18.3620	19.5959	19.5703	.998697	9.53026	686.33
8750	17.4687	18.3830	19.6182	19.5927	.998700	9.53029	687.22
8760	17.4896	18.4040	19.6406	19.6151	.998703	9.53031	688.11
8770	17.5106	18.4250	19.6629	19.6375	.998706	9.53034	689.01
8780	17.5316	18.4460	19.6853	19.6599	.998709	9.53037	689.90
8790	17.5526	18.4670	19.7077	19.6823	.998712	9.53040	690.79
8800	17.5736	18.4880	19.7300	19.7047	.998715	9.53043	691.69
8810	17.5945	18.5090	19.7524	19.7271	.998718	9.53045	692.58
8820	17.6155	18.5300	19.7748	19.7495	.998721	9.53048	693.47
8830	17.6365	18.5511	19.7971	19.7718	.998723	9.53051	694.37

B gauss	T GeV	P GeV/c	$\lambda$	$\eta$	$\beta$	f MHz	t msac
8840	17.6575	18.5721	19.8195	19.7942	.998726	9.53054	695.26
8850	17.6785	18.5931	19.8418	19.8166	.998729	9.53056	696.16
8860	17.6995	18.6141	19.8642	19.8390	.998732	9.53059	697.05
8870	17.7204	18.6351	19.8866	19.8614	.998735	9.53062	697.95
8880	17.7414	18.6561	19.9089	19.8838	.998738	9.53065	698.85
8890	17.7624	18.6771	19.9313	19.9062	.998741	9.53067	699.74
8900	17.7834	18.6981	19.9537	19.9286	.998743	9.53070	700.64
8910	17.8044	18.7191	19.9760	19.9510	.998746	9.53073	701.54
8920	17.8254	18.7401	19.9984	19.9734	.998749	9.53075	702.43
8930	17.8463	18.7611	20.0208	19.9958	.998752	9.53078	703.33
8940	17.8673	18.7822	20.0431	20.0182	.998755	9.53081	704.23
8950	17.8883	18.8032	20.0655	20.0405	.998757	9.53083	705.13
8960	17.9093	18.8242	20.0878	20.0629	.998760	9.53086	706.02
8970	17.9303	18.8452	20.1102	20.0853	.998763	9.53089	706.92
8980	17.9512	18.8662	20.1326	20.1077	.998765	9.53091	707.82
8990	17.9722	18.8872	20.1549	20.1301	.998768	9.53094	708.72
9000	17.9932	18.9082	20.1773	20.1525	.998771	9.53096	709.62
9010	18.0142	18.9292	20.1997	20.1749	.998774	9.53099	710.52
9020	18.0352	18.9502	20.2220	20.1973	.998777	9.53102	711.42
9030	18.0562	18.9712	20.2444	20.2197	.998779	9.53104	712.32
9040	18.0772	18.9922	20.2668	20.2421	.998782	9.53107	713.22
9050	18.0981	19.0133	20.2891	20.2645	.998785	9.53109	714.12
9060	18.1191	19.0343	20.3115	20.2869	.998787	9.53112	715.02
9070	18.1401	19.0553	20.3339	20.3092	.998790	9.53114	715.92
9080	18.1611	19.0763	20.3562	20.3316	.998793	9.53117	716.82
9090	18.1821	19.0973	20.3786	20.3540	.998795	9.53120	717.72
9100	18.2031	19.1183	20.4009	20.3764	.998798	9.53122	718.62
9110	18.2240	19.1393	20.4233	20.3988	.998801	9.53125	719.52
9120	18.2450	19.1603	20.4457	20.4212	.998803	9.53127	720.43
9130	18.2660	19.1813	20.4680	20.4436	.998806	9.53130	721.33
9140	18.2870	19.2023	20.4904	20.4660	.998808	9.53132	722.23
9150	18.3080	19.2233	20.5128	20.4884	.998811	9.53135	723.13
9160	18.3290	19.2444	20.5351	20.5108	.998814	9.53137	724.04
9170	18.3499	19.2654	20.5575	20.5332	.998816	9.53139	724.94
9180	18.3709	19.2864	20.5799	20.5556	.998819	9.53142	725.84
9190	18.3919	19.3074	20.6022	20.5779	.998821	9.53144	726.75
9200	18.4129	19.3284	20.6246	20.6003	.998824	9.53147	727.65
9210	18.4339	19.3494	20.6470	20.6227	.998826	9.53149	728.56
9220	18.4549	19.3704	20.6693	20.6451	.998829	9.53152	729.46
9230	18.4758	19.3914	20.6917	20.6675	.998831	9.53154	730.37
9240	18.4968	19.4124	20.7141	20.6899	.998834	9.53157	731.27
9250	18.5178	19.4334	20.7364	20.7123	.998837	9.53159	732.18
9260	18.5388	19.4544	20.7588	20.7347	.998839	9.53161	733.08
9270	18.5598	19.4755	20.7812	20.7571	.998842	9.53164	733.99
9280	18.5808	19.4965	20.8035	20.7795	.998844	9.53166	734.90
9290	18.6018	19.5175	20.8259	20.8019	.998847	9.53168	735.80
9300	18.6227	19.5385	20.8483	20.8243	.998849	9.53171	736.71
9310	18.6437	19.5595	20.8706	20.8466	.998851	9.53173	737.62
9320	18.6647	19.5805	20.8930	20.8690	.998854	9.53175	738.52
9330	18.6857	19.6015	20.9153	20.8914	.998856	9.53178	739.43
9340	18.7067	19.6225	20.9377	20.9138	.998859	9.53180	740.34
9350	18.7277	19.6435	20.9601	20.9362	.998861	9.53182	741.25
9360	18.7487	19.6645	20.9824	20.9586	.998864	9.53185	742.16
9370	18.7696	19.6855	21.0048	20.9810	.998866	9.53187	743.06
9380	18.7906	19.7066	21.0272	21.0034	.998869	9.53189	743.97
9390	18.8116	19.7276	21.0495	21.0258	.998871	9.53192	744.88
9400	18.8326	19.7486	21.0719	21.0482	.998873	9.53194	745.79
9410	18.8536	19.7696	21.0943	21.0706	.998876	9.53196	746.70
9420	18.8746	19.7906	21.1166	21.0930	.998878	9.53199	747.61
9430	18.8955	19.8116	21.1390	21.1153	.998880	9.53201	748.52
9440	18.9165	19.8326	21.1614	21.1377	.998883	9.53203	749.43
9450	18.9375	19.8536	21.1837	21.1601	.998885	9.53205	750.34
9460	18.9585	19.8746	21.2061	21.1825	.998888	9.53208	751.25
9470	18.9795	19.8956	21.2285	21.2049	.998890	9.53210	752.17
9480	19.0005	19.9166	21.2508	21.2273	.998892	9.53212	753.08
9490	19.0215	19.9377	21.2732	21.2497	.998895	9.53214	753.99
9500	19.0424	19.9587	21.2956	21.2721	.998897	9.53216	754.90

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
9510	19.0634	19.9797	21.3179	21.2945	.998999	9.53219	755.81
9520	19.0844	20.0007	21.3403	21.3169	.998901	9.53221	756.73
9530	19.1054	20.0217	21.3627	21.3393	.998904	9.53223	757.64
9540	19.1264	20.0427	21.3850	21.3617	.998906	9.53225	758.55
9550	19.1474	20.0637	21.4074	21.3840	.998908	9.53227	759.47
9560	19.1684	20.0847	21.4298	21.4064	.998911	9.53230	760.38
9570	19.1894	20.1057	21.4521	21.4288	.998913	9.53232	761.29
9580	19.2103	20.1267	21.4745	21.4512	.998915	9.53234	762.21
9590	19.2313	20.1477	21.4969	21.4736	.998917	9.53236	763.12
9600	19.2523	20.1688	21.5193	21.4960	.998920	9.53238	764.04
9610	19.2733	20.1898	21.5416	21.5184	.998922	9.53240	764.95
9620	19.2943	20.2108	21.5640	21.5408	.998924	9.53243	765.87
9630	19.3153	20.2318	21.5864	21.5632	.998926	9.53245	766.78
9640	19.3363	20.2528	21.6087	21.5856	.998929	9.53247	767.70
9650	19.3572	20.2738	21.6311	21.6080	.998931	9.53249	768.62
9660	19.3782	20.2948	21.6535	21.6304	.998933	9.53251	769.53
9670	19.3992	20.3158	21.6758	21.6527	.998935	9.53253	770.45
9680	19.4202	20.3368	21.6982	21.6751	.998937	9.53255	771.37
9690	19.4412	20.3578	21.7206	21.6975	.998940	9.53257	772.28
9700	19.4622	20.3788	21.7429	21.7199	.998942	9.53259	773.20
9710	19.4832	20.3999	21.7653	21.7423	.998944	9.53261	774.12
9720	19.5042	20.4209	21.7877	21.7647	.998946	9.53264	775.04
9730	19.5251	20.4419	21.8100	21.7871	.998948	9.53266	775.95
9740	19.5461	20.4629	21.8324	21.8095	.998950	9.53268	776.87
9750	19.5671	20.4839	21.8548	21.8319	.998953	9.53270	777.79
9760	19.5881	20.5049	21.8771	21.8543	.998955	9.53272	778.71
9770	19.6091	20.5259	21.8995	21.8767	.998957	9.53274	779.63
9780	19.6301	20.5469	21.9219	21.8991	.998959	9.53276	780.55
9790	19.6511	20.5679	21.9442	21.9214	.998961	9.53278	781.47
9800	19.6720	20.5889	21.9666	21.9438	.998963	9.53280	782.39
9810	19.6930	20.6099	21.9890	21.9662	.998965	9.53282	783.31
9820	19.7140	20.6318	22.0113	21.9886	.998967	9.53284	784.23
9830	19.7350	20.6528	22.0337	22.0110	.998970	9.53286	785.15
9840	19.7560	20.6738	22.0561	22.0334	.998972	9.53288	786.07
9850	19.7770	20.6948	22.0785	22.0558	.998974	9.53290	787.00
9860	19.7980	20.7158	22.1008	22.0782	.998976	9.53292	787.92
9870	19.8190	20.7368	22.1232	22.1006	.998978	9.53294	788.84
9880	19.8399	20.7578	22.1456	22.1230	.998980	9.53296	789.76
9890	19.8609	20.7788	22.1679	22.1454	.998982	9.53298	790.68
9900	19.8819	20.7998	22.1903	22.1678	.998984	9.53300	791.61
9910	19.9029	20.8208	22.2127	22.1901	.998986	9.53302	792.53
9920	19.9239	20.8418	22.2350	22.2125	.998988	9.53304	793.45
9930	19.9449	20.8628	22.2574	22.2349	.998990	9.53306	794.38
9940	19.9659	20.8838	22.2798	22.2573	.998992	9.53307	795.30
9950	19.9869	20.9048	22.3021	22.2797	.998994	9.53309	796.23
9960	20.0079	20.9258	22.3245	22.3021	.998996	9.53311	797.15
9970	20.0288	20.9468	22.3469	22.3245	.998998	9.53313	798.08
9980	20.0498	20.9678	22.3693	22.3469	.999000	9.53315	799.00
9990	20.0708	20.9888	22.3916	22.3693	.999002	9.53317	799.93
10000	20.0918	21.0098	22.4140	22.3917	.999004	9.53319	800.85
10010	20.1128	21.0308	22.4364	22.4141	.999006	9.53321	801.78
10020	20.1338	21.0518	22.4587	22.4365	.999008	9.53323	802.70
10030	20.1548	21.0728	22.4811	22.4588	.999010	9.53325	803.63
10040	20.1758	21.0938	22.5035	22.4812	.999012	9.53327	804.56
10050	20.1967	21.1148	22.5258	22.5036	.999014	9.53328	805.48
10060	20.2177	21.1358	22.5482	22.5260	.999016	9.53330	806.41
10070	20.2387	21.1568	22.5706	22.5484	.999018	9.53332	807.34
10080	20.2597	21.1778	22.5929	22.5708	.999020	9.53334	808.27
10090	20.2807	21.1988	22.6153	22.5932	.999022	9.53336	809.20
10100	20.3017	21.2198	22.6377	22.6156	.999024	9.53338	810.12
10110	20.3227	21.2408	22.6601	22.6380	.999026	9.53339	811.05
10120	20.3437	21.2618	22.6824	22.6604	.999028	9.53341	811.98
10130	20.3647	21.2828	22.7048	22.6828	.999030	9.53343	812.91
10140	20.3856	21.3038	22.7272	22.7052	.999032	9.53345	813.84
10150	20.4066	21.3248	22.7495	22.7275	.999033	9.53347	814.77
10160	20.4276	21.3458	22.7719	22.7499	.999035	9.53349	815.70
10170	20.4486	21.3668	22.7943	22.7723	.999037	9.53350	816.63

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
10190	20.4696	21.3873	22.8166	22.7947	.999039	9.53352	817.56
10190	20.4906	21.4083	22.8390	22.8171	.999041	9.53354	818.49
10200	20.5116	21.4293	22.8614	22.8395	.999043	9.53356	819.42
10210	20.5326	21.4503	22.8838	22.8619	.999045	9.53358	820.35
10220	20.5536	21.4713	22.9061	22.8843	.999047	9.53359	821.29
10230	20.5745	21.4923	22.9285	22.9067	.999048	9.53361	822.22
10240	20.5955	21.5133	22.9509	22.9291	.999050	9.53363	823.15
10250	20.6165	21.5343	22.9732	22.9515	.999052	9.53365	824.08
10260	20.6375	21.5554	22.9956	22.9739	.999054	9.53366	825.02
10270	20.6585	21.5764	23.0180	22.9962	.999055	9.53368	825.95
10280	20.6795	21.5974	23.0403	23.0186	.999059	9.53370	826.88
10290	20.7005	21.6184	23.0627	23.0410	.999060	9.53372	827.82
10300	20.7215	21.6394	23.0851	23.0634	.999061	9.53373	828.75
10310	20.7425	21.6604	23.1075	23.0858	.999063	9.53375	829.68
10320	20.7634	21.6814	23.1298	23.1082	.999065	9.53377	830.62
10330	20.7844	21.7024	23.1522	23.1306	.999067	9.53379	831.55
10340	20.8054	21.7234	23.1746	23.1530	.999069	9.53380	832.49
10350	20.8264	21.7444	23.1969	23.1754	.999070	9.53382	833.42
10360	20.8474	21.7654	23.2193	23.1978	.999072	9.53384	834.36
10370	20.8684	21.7865	23.2417	23.2202	.999074	9.53385	835.30
10380	20.8894	21.8075	23.2641	23.2426	.999075	9.53387	836.23
10390	20.9104	21.8285	23.2864	23.2649	.999078	9.53389	837.17
10400	20.9314	21.8495	23.3088	23.2873	.999079	9.53391	838.10
10410	20.9524	21.8705	23.3312	23.3097	.999081	9.53392	839.04
10420	20.9733	21.8915	23.3535	23.3321	.999083	9.53394	839.98
10430	20.9943	21.9125	23.3759	23.3545	.999085	9.53396	840.92
10440	21.0153	21.9335	23.3983	23.3769	.999086	9.53397	841.85
10450	21.0363	21.9545	23.4207	23.3993	.999088	9.53399	842.79
10460	21.0573	21.9755	23.4430	23.4217	.999090	9.53401	843.73
10470	21.0783	21.9965	23.4654	23.4441	.999092	9.53402	844.67
10480	21.0993	22.0176	23.4878	23.4665	.999093	9.53404	845.61
10490	21.1203	22.0386	23.5101	23.4889	.999095	9.53406	846.55
10500	21.1413	22.0596	23.5325	23.5113	.999097	9.53407	847.49
10510	21.1623	22.0806	23.5549	23.5336	.999098	9.53409	848.43
10520	21.1832	22.1016	23.5773	23.5560	.999100	9.53410	849.37
10530	21.2042	22.1226	23.5996	23.5784	.999102	9.53412	850.31
10540	21.2252	22.1436	23.6220	23.6008	.999104	9.53414	851.25
10550	21.2462	22.1646	23.6444	23.6232	.999105	9.53415	852.19
10560	21.2672	22.1856	23.6667	23.6456	.999107	9.53417	853.13
10570	21.2882	22.2066	23.6891	23.6680	.999109	9.53419	854.07
10580	21.3092	22.2276	23.7115	23.6904	.999110	9.53420	855.01
10590	21.3302	22.2487	23.7339	23.7128	.999112	9.53422	855.96
10600	21.3512	22.2697	23.7562	23.7352	.999114	9.53423	856.90
10610	21.3722	22.2907	23.7786	23.7576	.999115	9.53425	857.84
10620	21.3931	22.3117	23.8010	23.7800	.999117	9.53427	858.78
10630	21.4141	22.3327	23.8233	23.8023	.999119	9.53428	859.73
10640	21.4351	22.3537	23.8457	23.8247	.999120	9.53430	860.67
10650	21.4561	22.3747	23.8681	23.8471	.999122	9.53431	861.61
10660	21.4771	22.3957	23.8905	23.8695	.999124	9.53433	862.56
10670	21.4981	22.4167	23.9128	23.8919	.999125	9.53434	863.50
10680	21.5191	22.4377	23.9352	23.9143	.999127	9.53436	864.45
10690	21.5401	22.4587	23.9576	23.9367	.999128	9.53438	865.39
10700	21.5611	22.4798	23.9799	23.9591	.999130	9.53439	866.34
10710	21.5821	22.5008	24.0023	23.9815	.999132	9.53441	867.28
10720	21.6031	22.5218	24.0247	24.0039	.999133	9.53442	868.23
10730	21.6240	22.5428	24.0471	24.0263	.999135	9.53444	869.18
10740	21.6450	22.5638	24.0694	24.0487	.999137	9.53445	870.12
10750	21.6660	22.5848	24.0918	24.0710	.999138	9.53447	871.07
10760	21.6870	22.6058	24.1142	24.0934	.999140	9.53448	872.02
10770	21.7080	22.6268	24.1366	24.1158	.999141	9.53450	872.96
10780	21.7290	22.6478	24.1589	24.1382	.999143	9.53451	873.91
10790	21.7500	22.6688	24.1813	24.1606	.999145	9.53453	874.86
10800	21.7710	22.6898	24.2037	24.1830	.999146	9.53454	875.81
10810	21.7920	22.7109	24.2260	24.2054	.999148	9.53456	876.76
10820	21.8130	22.7319	24.2484	24.2278	.999149	9.53457	877.70
10830	21.8340	22.7529	24.2708	24.2502	.999151	9.53459	878.65
10840	21.8549	22.7739	24.2932	24.2726	.999152	9.53460	879.60

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
10850	21.8759	22.7949	24.3155	24.2950	.999154	9.53462	880.55
10860	21.8969	22.8159	24.3379	24.3174	.999156	9.53463	881.50
10870	21.9179	22.8369	24.3603	24.3397	.999157	9.53465	882.45
10880	21.9389	22.8579	24.3827	24.3621	.999159	9.53466	883.40
10890	21.9599	22.8789	24.4050	24.3845	.999160	9.53468	884.35
10900	21.9809	22.8999	24.4274	24.4069	.999162	9.53469	885.30
10910	22.0019	22.9209	24.4498	24.4293	.999163	9.53471	886.25
10920	22.0229	22.9429	24.4721	24.4517	.999165	9.53472	887.21
10930	22.0439	22.9639	24.4945	24.4741	.999166	9.53474	888.16
10940	22.0649	22.9849	24.5169	24.4965	.999168	9.53475	889.11
10950	22.0859	23.0059	24.5393	24.5189	.999169	9.53476	890.06
10960	22.1068	23.0269	24.5616	24.5413	.999171	9.53478	891.02
10970	22.1278	23.0479	24.5840	24.5637	.999172	9.53479	891.97
10980	22.1488	23.0689	24.6064	24.5861	.999174	9.53481	892.92
10990	22.1698	23.0899	24.6288	24.6084	.999175	9.53482	893.88
11000	22.1908	23.1109	24.6511	24.6308	.999177	9.53484	894.83
11010	22.2118	23.1319	24.6735	24.6532	.999178	9.53485	895.78
11020	22.2328	23.1529	24.6959	24.6756	.999180	9.53487	896.74
11030	22.2538	23.1739	24.7182	24.6980	.999181	9.53488	897.69
11040	22.2748	23.1949	24.7406	24.7204	.999183	9.53489	898.65
11050	22.2958	23.2159	24.7630	24.7428	.999184	9.53491	899.60
11060	22.3168	23.2369	24.7854	24.7652	.999186	9.53492	900.56
11070	22.3378	23.2579	24.8077	24.7876	.999187	9.53494	901.52
11080	22.3587	23.2789	24.8301	24.8100	.999189	9.53495	902.47
11090	22.3797	23.2999	24.8525	24.8324	.999190	9.53496	903.43
11100	22.4007	23.3209	24.8749	24.8548	.999192	9.53498	904.38
11110	22.4217	23.3419	24.8972	24.8771	.999193	9.53499	905.34
11120	22.4427	23.3629	24.9196	24.8995	.999195	9.53501	906.30
11130	22.4637	23.3839	24.9420	24.9219	.999196	9.53502	907.26
11140	22.4847	23.4049	24.9644	24.9443	.999197	9.53503	908.22
11150	22.5057	23.4259	24.9867	24.9667	.999199	9.53505	909.17
11160	22.5267	23.4469	25.0091	24.9891	.999200	9.53506	910.13
11170	22.5477	23.4679	25.0315	25.0115	.999202	9.53507	911.09
11180	22.5687	23.4889	25.0539	25.0339	.999203	9.53509	912.05
11190	22.5897	23.5099	25.0762	25.0563	.999205	9.53510	913.01
11200	22.6107	23.5309	25.0986	25.0787	.999206	9.53511	913.97
11210	22.6316	23.5519	25.1210	25.1011	.999207	9.53513	914.93
11220	22.6526	23.5729	25.1433	25.1235	.999209	9.53514	915.89
11230	22.6736	23.5939	25.1657	25.1458	.999210	9.53515	916.85
11240	22.6946	23.6149	25.1881	25.1682	.999212	9.53517	917.81
11250	22.7156	23.6359	25.2105	25.1906	.999213	9.53518	918.77
11260	22.7366	23.6569	25.2328	25.2130	.999214	9.53519	919.73
11270	22.7576	23.6779	25.2552	25.2354	.999216	9.53521	920.70
11280	22.7786	23.6989	25.2776	25.2578	.999217	9.53522	921.66
11290	22.7996	23.7199	25.3000	25.2802	.999219	9.53523	922.62
11300	22.8206	23.7409	25.3223	25.3026	.999220	9.53525	923.58
11310	22.8416	23.7619	25.3447	25.3250	.999221	9.53526	924.55
11320	22.8626	23.7829	25.3671	25.3474	.999223	9.53527	925.51
11330	22.8836	23.8039	25.3895	25.3698	.999224	9.53529	926.47
11340	22.9046	23.8249	25.4118	25.3922	.999225	9.53530	927.44
11350	22.9256	23.8459	25.4342	25.4145	.999227	9.53531	928.40
11360	22.9466	23.8669	25.4566	25.4369	.999228	9.53533	929.37
11370	22.9675	23.8879	25.4790	25.4593	.999229	9.53534	930.33
11380	22.9885	23.9089	25.5013	25.4817	.999231	9.53535	931.30
11390	23.0095	23.9299	25.5237	25.5041	.999232	9.53536	932.26
11400	23.0305	23.9509	25.5461	25.5265	.999234	9.53538	933.23
11410	23.0515	23.9719	25.5685	25.5489	.999235	9.53539	934.19
11420	23.0725	23.9929	25.5908	25.5713	.999236	9.53540	935.16
11430	23.0935	24.0139	25.6132	25.5937	.999238	9.53542	936.13
11440	23.1145	24.0349	25.6356	25.6161	.999239	9.53543	937.09
11450	23.1355	24.0559	25.6580	25.6385	.999240	9.53544	938.06
11460	23.1565	24.0769	25.6803	25.6609	.999242	9.53545	939.03
11470	23.1775	24.0979	25.7027	25.6832	.999243	9.53547	939.99
11480	23.1985	24.1189	25.7251	25.7056	.999244	9.53548	940.96
11490	23.2194	24.1399	25.7475	25.7280	.999245	9.53549	941.93
11500	23.2404	24.1609	25.7698	25.7504	.999247	9.53550	942.90
11510	23.2614	24.1819	25.7922	25.7728	.999248	9.53552	943.87

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msc
11520	23.2024	24.2025	25.8146	25.7952	.999249	9.53553	944.84
11530	23.3034	24.2235	25.8370	25.8176	.999251	9.53554	945.81
11540	23.3244	24.2445	25.8593	25.8400	.999252	9.53555	946.78
11550	23.3454	24.2655	25.8817	25.8624	.999253	9.53557	947.75
11560	23.3664	24.2865	25.9041	25.8848	.999255	9.53558	948.72
11570	23.3874	24.3076	25.9265	25.9072	.999256	9.53559	949.69
11580	23.4084	24.3286	25.9488	25.9296	.999257	9.53560	950.66
11590	23.4294	24.3496	25.9712	25.9519	.999258	9.53562	951.63
11600	23.4504	24.3706	25.9936	25.9743	.999260	9.53563	952.60
11610	23.4714	24.3916	26.0160	25.9967	.999261	9.53564	953.58
11620	23.4924	24.4126	26.0383	26.0191	.999262	9.53565	954.55
11630	23.5134	24.4336	26.0607	26.0415	.999264	9.53566	955.52
11640	23.5344	24.4546	26.0831	26.0639	.999265	9.53568	956.49
11650	23.5553	24.4756	26.1055	26.0863	.999266	9.53569	957.47
11660	23.5763	24.4966	26.1278	26.1087	.999267	9.53570	958.44
11670	23.5973	24.5176	26.1502	26.1311	.999269	9.53571	959.41
11680	23.6183	24.5387	26.1726	26.1535	.999270	9.53572	960.39
11690	23.6393	24.5597	26.1950	26.1759	.999271	9.53574	961.36
11700	23.6603	24.5807	26.2173	26.1983	.999272	9.53575	962.34
11710	23.6813	24.6017	26.2397	26.2206	.999274	9.53576	963.31
11720	23.7023	24.6227	26.2621	26.2430	.999275	9.53577	964.29
11730	23.7233	24.6437	26.2845	26.2654	.999276	9.53578	965.26
11740	23.7443	24.6647	26.3068	26.2878	.999277	9.53579	966.24
11750	23.7653	24.6857	26.3292	26.3102	.999278	9.53581	967.22
11760	23.7863	24.7067	26.3516	26.3326	.999280	9.53582	968.19
11770	23.8073	24.7277	26.3740	26.3550	.999281	9.53583	969.17
11780	23.8283	24.7487	26.3963	26.3774	.999282	9.53584	970.15
11790	23.8493	24.7698	26.4187	26.3998	.999283	9.53585	971.12
11800	23.8703	24.7908	26.4411	26.4222	.999285	9.53586	972.10
11810	23.8912	24.8118	26.4635	26.4446	.999286	9.53588	973.08
11820	23.9122	24.8328	26.4858	26.4670	.999287	9.53589	974.06
11830	23.9332	24.8538	26.5082	26.4893	.999288	9.53590	975.04
11840	23.9542	24.8748	26.5306	26.5117	.999289	9.53591	976.02
11850	23.9752	24.8958	26.5530	26.5341	.999291	9.53592	976.99
11860	23.9962	24.9168	26.5753	26.5565	.999292	9.53593	977.97
11870	24.0172	24.9378	26.5977	26.5789	.999293	9.53594	978.95
11880	24.0382	24.9588	26.6201	26.6013	.999294	9.53596	979.93
11890	24.0592	24.9798	26.6425	26.6237	.999295	9.53597	980.92
11900	24.0802	25.0009	26.6648	26.6461	.999297	9.53598	981.90
11910	24.1012	25.0219	26.6872	26.6685	.999298	9.53599	982.88
11920	24.1222	25.0429	26.7096	26.6909	.999299	9.53600	983.86
11930	24.1432	25.0639	26.7320	26.7133	.999300	9.53601	984.84
11940	24.1642	25.0849	26.7544	26.7357	.999301	9.53602	985.82
11950	24.1852	25.1059	26.7767	26.7580	.999302	9.53603	986.81
11960	24.2062	25.1269	26.7991	26.7804	.999304	9.53605	987.79
11970	24.2272	25.1479	26.8215	26.8028	.999305	9.53606	988.77
11980	24.2482	25.1689	26.8439	26.8252	.999306	9.53607	989.75
11990	24.2691	25.1899	26.8662	26.8476	.999307	9.53608	990.74
12000	24.2901	25.2109	26.8886	26.8700	.999308	9.53609	991.72
12010	24.3111	25.2320	26.9110	26.8924	.999309	9.53610	992.71
12020	24.3321	25.2530	26.9334	26.9148	.999310	9.53611	993.69
12030	24.3531	25.2740	26.9557	26.9372	.999312	9.53612	994.68
12040	24.3741	25.2950	26.9781	26.9596	.999313	9.53613	995.66
12050	24.3951	25.3160	27.0005	26.9820	.999314	9.53614	996.65
12060	24.4161	25.3370	27.0229	27.0044	.999315	9.53616	997.63
12070	24.4371	25.3580	27.0452	27.0267	.999316	9.53617	998.62
12080	24.4581	25.3790	27.0676	27.0491	.999317	9.53618	999.60
12090	24.4791	25.4000	27.0900	27.0715	.999318	9.53619	1000.59
12100	24.5001	25.4210	27.1124	27.0939	.999320	9.53620	1001.58
12110	24.5211	25.4420	27.1347	27.1163	.999321	9.53621	1002.57
12120	24.5421	25.4631	27.1571	27.1387	.999322	9.53622	1003.55
12130	24.5631	25.4841	27.1795	27.1611	.999323	9.53623	1004.54
12140	24.5841	25.5051	27.2019	27.1835	.999324	9.53624	1005.53
12150	24.6051	25.5261	27.2243	27.2059	.999325	9.53625	1006.52
12160	24.6261	25.5471	27.2466	27.2283	.999326	9.53626	1007.51
12170	24.6471	25.5681	27.2690	27.2507	.999327	9.53627	1008.50
12180	24.6680	25.5891	27.2914	27.2731	.999328	9.53628	1009.49

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
12190	24.6890	25.5101	27.3138	27.2954	.999330	9.53629	1010.48
12200	24.7100	25.5311	27.3361	27.3178	.999331	9.53630	1011.47
12210	24.7310	25.5521	27.3585	27.3402	.999332	9.53631	1012.46
12220	24.7520	25.5731	27.3809	27.3626	.999333	9.53633	1013.45
12230	24.7730	25.5942	27.4033	27.3850	.999334	9.53634	1014.44
12240	24.7940	25.6152	27.4256	27.4074	.999335	9.53635	1015.43
12250	24.8150	25.6362	27.4480	27.4298	.999336	9.53636	1016.42
12260	24.8360	25.6572	27.4704	27.4522	.999337	9.53637	1017.41
12270	24.8570	25.6782	27.4928	27.4746	.999338	9.53638	1018.41
12280	24.8780	25.6992	27.5152	27.4970	.999339	9.53639	1019.40
12290	24.8990	25.7202	27.5375	27.5194	.999340	9.53640	1020.39
12300	24.9200	25.7412	27.5599	27.5418	.999341	9.53641	1021.38
12310	24.9410	25.7622	27.5823	27.5641	.999343	9.53642	1022.38
12320	24.9620	25.7832	27.6047	27.5865	.999344	9.53643	1023.37
12330	24.9830	25.8042	27.6270	27.6089	.999345	9.53644	1024.37
12340	25.0040	25.8253	27.6494	27.6313	.999346	9.53645	1025.36
12350	25.0250	25.8463	27.6718	27.6537	.999347	9.53646	1026.36
12360	25.0460	25.8673	27.6942	27.6761	.999348	9.53647	1027.35
12370	25.0670	25.8883	27.7165	27.6985	.999349	9.53648	1028.35
12380	25.0880	26.0093	27.7389	27.7209	.999350	9.53649	1029.34
12390	25.1089	26.0303	27.7613	27.7433	.999351	9.53650	1030.34
12400	25.1299	26.0513	27.7837	27.7657	.999352	9.53651	1031.34
12410	25.1509	26.0723	27.8061	27.7881	.999353	9.53652	1032.33
12420	25.1719	26.0933	27.8284	27.8105	.999354	9.53653	1033.33
12430	25.1929	26.1143	27.8508	27.8328	.999355	9.53654	1034.33
12440	25.2139	26.1353	27.8732	27.8552	.999356	9.53655	1035.32
12450	25.2349	26.1564	27.8956	27.8776	.999357	9.53656	1036.32
12460	25.2559	26.1774	27.9179	27.9000	.999358	9.53657	1037.32
12470	25.2769	26.1984	27.9403	27.9224	.999359	9.53658	1038.32
12480	25.2979	26.2194	27.9627	27.9448	.999360	9.53659	1039.32
12490	25.3189	26.2404	27.9851	27.9672	.999361	9.53660	1040.32
12500	25.3399	26.2614	28.0074	27.9896	.999362	9.53661	1041.32
12510	25.3609	26.2824	28.0298	28.0120	.999363	9.53662	1042.32
12520	25.3819	26.3034	28.0522	28.0344	.999364	9.53663	1043.32
12530	25.4029	26.3244	28.0746	28.0568	.999365	9.53664	1044.32
12540	25.4239	26.3454	28.0970	28.0792	.999366	9.53665	1045.32
12550	25.4449	26.3664	28.1193	28.1015	.999367	9.53666	1046.32
12560	25.4659	26.3875	28.1417	28.1239	.999368	9.53666	1047.32
12570	25.4869	26.4085	28.1641	28.1463	.999369	9.53667	1048.32
12580	25.5079	26.4295	28.1865	28.1687	.999370	9.53668	1049.33
12590	25.5289	26.4505	28.2088	28.1911	.999371	9.53669	1050.33
12600	25.5499	26.4715	28.2312	28.2135	.999372	9.53670	1051.33
12610	25.5709	26.4925	28.2536	28.2359	.999373	9.53671	1052.34
12620	25.5918	26.5135	28.2760	28.2583	.999374	9.53672	1053.34
12630	25.6128	26.5345	28.2984	28.2807	.999375	9.53673	1054.34
12640	25.6338	26.5555	28.3207	28.3031	.999376	9.53674	1055.35
12650	25.6548	26.5765	28.3431	28.3255	.999377	9.53675	1056.35
12660	25.6758	26.5975	28.3655	28.3479	.999378	9.53676	1057.36
12670	25.6968	26.6186	28.3879	28.3702	.999379	9.53677	1058.36
12680	25.7178	26.6396	28.4102	28.3926	.999380	9.53678	1059.37
12690	25.7388	26.6606	28.4326	28.4150	.999381	9.53679	1060.37
12700	25.7598	26.6816	28.4550	28.4374	.999382	9.53680	1061.38
12710	25.7808	26.7026	28.4774	28.4598	.999383	9.53681	1062.39
12720	25.8018	26.7236	28.4998	28.4822	.999384	9.53682	1063.39
12730	25.8228	26.7446	28.5221	28.5046	.999385	9.53682	1064.40
12740	25.8438	26.7656	28.5445	28.5270	.999386	9.53683	1065.41
12750	25.8648	26.7866	28.5669	28.5494	.999387	9.53684	1066.41
12760	25.8858	26.8076	28.5893	28.5718	.999388	9.53685	1067.42
12770	25.9068	26.8286	28.6116	28.5942	.999389	9.53686	1068.43
12780	25.9278	26.8497	28.6340	28.6166	.999390	9.53687	1069.44
12790	25.9488	26.8707	28.6564	28.6389	.999391	9.53688	1070.45
12800	25.9698	26.8917	28.6788	28.6613	.999392	9.53689	1071.46
12810	25.9908	26.9127	28.7012	28.6837	.999393	9.53690	1072.47
12820	26.0118	26.9337	28.7235	28.7061	.999394	9.53691	1073.48
12830	26.0328	26.9547	28.7459	28.7285	.999395	9.53692	1074.49
12840	26.0538	26.9757	28.7683	28.7509	.999396	9.53692	1075.50
12850	26.0748	26.9967	28.7907	28.7733	.999397	9.53693	1076.51

B gauss	T GeV	P GeV/c	$\gamma$	$\eta$	$\beta$	f MHz	t msec
12860	26.0958	27.0177	28.8130	28.7957	.999398	9.53694	1077.52
12870	26.1168	27.0387	28.8354	28.8181	.999398	9.53695	1078.53
12880	26.1378	27.0597	28.8578	28.8405	.999399	9.53696	1079.54
12890	26.1587	27.0808	28.8802	28.8629	.999400	9.53697	1080.56
12900	26.1797	27.1018	28.9026	28.8853	.999401	9.53698	1081.57
12910	26.2007	27.1228	28.9249	28.9076	.999402	9.53699	1082.58
12920	26.2217	27.1438	28.9473	28.9300	.999403	9.53700	1083.60
12930	26.2427	27.1648	28.9697	28.9524	.999404	9.53700	1084.61
12940	26.2637	27.1858	28.9921	28.9748	.999405	9.53701	1085.62
12950	26.2847	27.2068	29.0145	28.9972	.999406	9.53702	1086.64
12960	26.3057	27.2278	29.0368	29.0196	.999407	9.53703	1087.65
12970	26.3267	27.2488	29.0592	29.0420	.999408	9.53704	1088.67
12980	26.3477	27.2698	29.0816	29.0644	.999409	9.53705	1089.68
12990	26.3687	27.2908	29.1040	29.0868	.999410	9.53706	1090.70
13000	26.3897	27.3119	29.1263	29.1092	.999410	9.53707	1091.71
13010	26.4107	27.3329	29.1487	29.1316	.999411	9.53707	1092.73
13020	26.4317	27.3539	29.1711	29.1540	.999412	9.53708	1093.75
13030	26.4527	27.3749	29.1935	29.1763	.999413	9.53709	1094.76
13040	26.4737	27.3959	29.2159	29.1987	.999414	9.53710	1095.78
13050	26.4947	27.4169	29.2382	29.2211	.999415	9.53711	1096.80
13060	26.5157	27.4379	29.2606	29.2435	.999416	9.53712	1097.82
13070	26.5367	27.4589	29.2830	29.2659	.999417	9.53713	1098.83
13080	26.5577	27.4799	29.3054	29.2883	.999418	9.53713	1099.85
13090	26.5787	27.5009	29.3278	29.3107	.999419	9.53714	1100.87
13100	26.5997	27.5219	29.3501	29.3331	.999419	9.53715	1101.89
13110	26.6207	27.5430	29.3725	29.3555	.999420	9.53716	1102.91
13120	26.6417	27.5640	29.3949	29.3779	.999421	9.53717	1103.93
13130	26.6627	27.5850	29.4173	29.4003	.999422	9.53718	1104.95
13140	26.6837	27.6060	29.4396	29.4227	.999423	9.53718	1105.97
13150	26.7047	27.6270	29.4620	29.4450	.999424	9.53719	1106.99
13160	26.7257	27.6480	29.4844	29.4674	.999425	9.53720	1108.01
13170	26.7467	27.6690	29.5068	29.4898	.999426	9.53721	1109.04
13180	26.7677	27.6900	29.5292	29.5122	.999426	9.53722	1110.06
13190	26.7887	27.7110	29.5515	29.5346	.999427	9.53723	1111.08
13200	26.8096	27.7320	29.5739	29.5570	.999428	9.53723	1112.10
13210	26.8306	27.7530	29.5963	29.5794	.999429	9.53724	1113.13
13220	26.8516	27.7741	29.6187	29.6018	.999430	9.53725	1114.15
13230	26.8726	27.7951	29.6411	29.6242	.999431	9.53726	1115.17
13240	26.8936	27.8161	29.6634	29.6466	.999432	9.53727	1116.20
13250	26.9146	27.8371	29.6858	29.6690	.999432	9.53728	1117.22
13260	26.9356	27.8581	29.7082	29.6914	.999433	9.53728	1118.24
13270	26.9566	27.8791	29.7306	29.7137	.999434	9.53729	1119.27
13280	26.9776	27.9001	29.7529	29.7361	.999435	9.53730	1120.30
13290	26.9986	27.9211	29.7753	29.7585	.999436	9.53731	1121.32
13300	27.0196	27.9421	29.7977	29.7809	.999437	9.53732	1122.35
13310	27.0406	27.9631	29.8201	29.8033	.999438	9.53732	1123.37
13320	27.0616	27.9841	29.8425	29.8257	.999438	9.53733	1124.40
13330	27.0826	28.0052	29.8648	29.8481	.999439	9.53734	1125.43
13340	27.1036	28.0262	29.8872	29.8705	.999440	9.53735	1126.45
13350	27.1246	28.0472	29.9096	29.8929	.999441	9.53736	1127.48
13360	27.1456	28.0682	29.9320	29.9153	.999442	9.53736	1128.51
13370	27.1666	28.0892	29.9544	29.9377	.999443	9.53737	1129.54
13380	27.1876	28.1102	29.9767	29.9601	.999443	9.53738	1130.57
13390	27.2086	28.1312	29.9991	29.9824	.999444	9.53739	1131.60
13400	27.2296	28.1522	30.0215	30.0048	.999445	9.53740	1132.62
13410	27.2506	28.1732	30.0439	30.0272	.999446	9.53740	1133.65
13420	27.2716	28.1942	30.0663	30.0496	.999447	9.53741	1134.68
13430	27.2926	28.2152	30.0886	30.0720	.999448	9.53742	1135.71
13440	27.3136	28.2363	30.1110	30.0944	.999448	9.53743	1136.75
13450	27.3346	28.2573	30.1334	30.1168	.999449	9.53744	1137.78
13460	27.3556	28.2783	30.1558	30.1392	.999450	9.53744	1138.81
13470	27.3766	28.2993	30.1782	30.1616	.999451	9.53745	1139.84
13480	27.3976	28.3203	30.2005	30.1840	.999452	9.53746	1140.87
13490	27.4186	28.3413	30.2229	30.2064	.999452	9.53747	1141.90
13500	27.4396	28.3623	30.2453	30.2288	.999453	9.53747	1142.94
13510	27.4606	28.3833	30.2677	30.2511	.999454	9.53748	1143.97
13520	27.4816	28.4043	30.2901	30.2735	.999455	9.53749	1145.00

B Gauss	T GeV	P GeV/c	$\delta$	$\eta$	$\beta$	f MHz	t msec
13530	27.5026	28.4253	30.3124	30.2959	.999456	9.53750	1146.04
13540	27.5236	28.4463	30.3348	30.3183	.999456	9.53751	1147.07
13550	27.5446	28.4674	30.3572	30.3407	.999457	9.53751	1148.11
13560	27.5656	28.4884	30.3796	30.3631	.999458	9.53752	1149.14
13570	27.5866	28.5094	30.4019	30.3855	.999459	9.53753	1150.18
13580	27.6076	28.5304	30.4243	30.4079	.999460	9.53754	1151.21
13590	27.6286	28.5514	30.4467	30.4303	.999460	9.53754	1152.25
13600	27.6495	28.5724	30.4691	30.4527	.999461	9.53755	1153.28
13610	27.6705	28.5934	30.4915	30.4751	.999462	9.53756	1154.32
13620	27.6915	28.6144	30.5138	30.4975	.999463	9.53757	1155.36
13630	27.7125	28.6354	30.5362	30.5198	.999464	9.53757	1156.39
13640	27.7335	28.6564	30.5586	30.5422	.999464	9.53758	1157.43
13650	27.7545	28.6774	30.5810	30.5646	.999465	9.53759	1158.47
13660	27.7755	28.6985	30.6034	30.5870	.999466	9.53760	1159.51
13670	27.7965	28.7195	30.6257	30.6094	.999467	9.53760	1160.55
13680	27.8175	28.7405	30.6481	30.6318	.999468	9.53761	1161.58
13690	27.8385	28.7615	30.6705	30.6542	.999468	9.53762	1162.62
13700	27.8595	28.7825	30.6929	30.6766	.999469	9.53763	1163.66
13710	27.8805	28.8035	30.7153	30.6990	.999470	9.53763	1164.70
13720	27.9015	28.8245	30.7376	30.7214	.999471	9.53764	1165.74
13730	27.9225	28.8455	30.7600	30.7438	.999471	9.53765	1166.78
13740	27.9435	28.8665	30.7824	30.7662	.999472	9.53765	1167.82
13750	27.9645	28.8875	30.8048	30.7885	.999473	9.53766	1168.87
13760	27.9855	28.9085	30.8272	30.8109	.999474	9.53767	1169.91
13770	28.0065	28.9296	30.8495	30.8333	.999474	9.53768	1170.95
13780	28.0275	28.9506	30.8719	30.8557	.999475	9.53768	1171.99
13790	28.0485	28.9716	30.8943	30.8781	.999475	9.53769	1173.03
13800	28.0695	28.9926	30.9167	30.9005	.999477	9.53770	1174.08
13810	28.0905	29.0136	30.9391	30.9229	.999478	9.53771	1175.12
13820	28.1115	29.0346	30.9614	30.9453	.999478	9.53771	1176.16
13830	28.1325	29.0556	30.9838	30.9677	.999479	9.53772	1177.21
13840	28.1535	29.0766	31.0062	30.9901	.999480	9.53773	1178.25
13850	28.1745	29.0976	31.0286	31.0125	.999481	9.53773	1179.30
13860	28.1955	29.1186	31.0510	31.0349	.999481	9.53774	1180.34
13870	28.2165	29.1396	31.0733	31.0572	.999482	9.53775	1181.39
13880	28.2375	29.1607	31.0957	31.0796	.999483	9.53776	1182.43
13890	28.2585	29.1817	31.1181	31.1020	.999484	9.53776	1183.48
13900	28.2795	29.2027	31.1405	31.1244	.999484	9.53777	1184.53
13910	28.3005	29.2237	31.1629	31.1468	.999485	9.53778	1185.57
13920	28.3215	29.2447	31.1852	31.1692	.999485	9.53778	1186.62
13930	28.3425	29.2657	31.2076	31.1916	.999485	9.53779	1187.67
13940	28.3635	29.2867	31.2300	31.2140	.999487	9.53780	1188.72
13950	28.3845	29.3077	31.2524	31.2364	.999488	9.53781	1189.77
13960	28.4055	29.3287	31.2748	31.2588	.999489	9.53781	1190.81
13970	28.4265	29.3497	31.2971	31.2812	.999489	9.53782	1191.86
13980	28.4475	29.3707	31.3195	31.3036	.999490	9.53783	1192.91
13990	28.4685	29.3918	31.3419	31.3259	.999491	9.53783	1193.96
14000	28.4895	29.4128	31.3643	31.3483	.999492	9.53784	1195.01
14010	28.5105	29.4338	31.3867	31.3707	.999492	9.53785	1196.06
14020	28.5315	29.4548	31.4090	31.3931	.999493	9.53785	1197.11
14030	28.5525	29.4758	31.4314	31.4155	.999494	9.53786	1198.16
14040	28.5735	29.4968	31.4538	31.4379	.999494	9.53787	1199.22
14050	28.5945	29.5178	31.4762	31.4603	.999495	9.53787	1200.27
14060	28.6155	29.5388	31.4986	31.4827	.999496	9.53788	1201.32
14070	28.6365	29.5598	31.5209	31.5051	.999497	9.53789	1202.37
14080	28.6575	29.5808	31.5433	31.5275	.999497	9.53790	1203.43
14090	28.6785	29.6018	31.5657	31.5499	.999498	9.53790	1204.48
14100	28.6995	29.6229	31.5881	31.5723	.999499	9.53791	1205.53
14110	28.7205	29.6439	31.6105	31.5946	.999499	9.53792	1206.59
14120	28.7415	29.6649	31.6329	31.6170	.999500	9.53792	1207.64
14130	28.7625	29.6859	31.6552	31.6394	.999501	9.53793	1208.70
14140	28.7835	29.7069	31.6776	31.6618	.999502	9.53794	1209.75
14150	28.8045	29.7279	31.7000	31.6842	.999502	9.53794	1210.81
14160	28.8254	29.7489	31.7224	31.7066	.999503	9.53795	1211.86
14170	28.8464	29.7699	31.7448	31.7290	.999504	9.53796	1212.92
14180	28.8674	29.7909	31.7671	31.7514	.999504	9.53796	1213.97
14190	28.8884	29.8119	31.7895	31.7738	.999505	9.53797	1215.03