

Fitting function (rational (1,1)) used in the PRad paper is:

$$f(Q^2) = nG_E^p(Q^2) = n \frac{1 + p_1 Q^2}{1 + p_2 Q^2}, \quad (1)$$

where  $n$  is 1.0002 for the 1.1 GeV data set and 0.9983 for the 2.2 GeV data. Please see the PRad paper for more details.  $p_1$  is -0.071461765 and  $p_2$  is 2.881405896, both in  $(\text{GeV}/c)^{-2}$ .

The tables in 1.1GeV\_table.txt and 2.2GeV\_table.txt list the cross sections and the  $f(Q^2)$ , that is, they include the floating parameters  $n$ . Our best estimates for the floating parameter  $n$  for the two beam energy settings are listed above. These two tables are also shown here on page 2 and 3. The tables in 1.1GeV\_table\_normGE.txt and 2.2GeV\_table\_normGE.txt contain the proton electric form factor  $G_E^p(Q^2)$  without the floating parameter  $n$ , i.e.  $f(Q^2)/n$ . And they are shown here on page 4 and 5.

The bin width for each  $\theta$  angle bin is shown as “ $\theta_{bw}$ ” in the tables on page 2 and 3, the polar angle coverage of a polar angle bin goes from  $\theta - 0.5\theta_{bw}$  to  $\theta + 0.5\theta_{bw}$ .

$E_\ell$ [MeV]	$\theta$ [°]	$\theta_{bw}$ [°]	$Q^2$ [GeV/c] <sup>2</sup>	$\sigma$ [mb/sr]	$\delta\sigma_{\text{stat.}}$ [mb/sr]	$\delta\sigma_{\text{syst.}}$ [mb/sr]	$f(Q^2)$ [1]	$\delta f(Q^2)_{\text{stat.}}$ [1]	$\delta f(Q^2)_{\text{syst.}}$ [1]
1101	0.7625	0.025	0.000215	2173.3	4.2766	11.145	0.99801	0.00098	0.00253
1101	0.7875	0.025	0.000229	1920.6	3.9598	9.7921	1.0007	0.00103	0.00252
1101	0.8125	0.025	0.000244	1694.7	3.7182	8.3808	1.0006	0.0011	0.00244
1101	0.8375	0.025	0.000259	1496.8	3.5149	7.8993	0.99916	0.00117	0.00261
1101	0.8625	0.025	0.000275	1335.4	3.3365	6.0183	1.0009	0.00125	0.00222
1101	0.8875	0.025	0.000291	1190.5	3.1273	5.5142	1.0006	0.00132	0.00229
1101	0.92	0.04	0.000312	1026.6	2.2879	4.9234	0.99847	0.00111	0.00236
1101	0.9575	0.035	0.000338	874.24	2.1771	4.5716	0.99805	0.00124	0.00258
1101	0.9945	0.039	0.000365	753.64	1.834	3.2437	0.99964	0.00122	0.00211
1101	1.0355	0.043	0.000396	639.98	1.5263	3.4336	0.99868	0.00119	0.00265
1101	1.081	0.048	0.000431	538.6	1.2652	2.9792	0.99842	0.00117	0.00274
1101	1.131	0.052	0.000472	450.1	1.035	2.0112	0.99908	0.00115	0.0022
1101	1.184	0.054	0.000517	373.16	0.83371	1.5283	0.99692	0.00111	0.00201
1101	1.2405	0.059	0.000568	312.19	0.6587	1.2939	1.0009	0.00106	0.00204
1101	1.304	0.068	0.000628	253.75	0.51715	1.0226	0.99708	0.00102	0.00198
1101	1.3775	0.079	0.0007	204.03	0.41431	0.82302	0.99765	0.00101	0.00198
1101	1.4655	0.097	0.000793	159.52	0.32207	0.61447	0.99839	0.00101	0.00189
1101	1.574	0.12	0.000914	119.67	0.24211	0.43621	0.99746	0.00101	0.00179
1101	1.7105	0.153	0.00108	85.904	0.17184	0.34341	0.99791	0.001	0.00197
1101	1.8935	0.213	0.001323	57.042	0.10879	0.19283	0.99631	0.00095	0.00166
1101	2.1065	0.213	0.001637	37.081	0.07857	0.13113	0.99396	0.00106	0.00175
1101	2.3525	0.279	0.002041	23.933	0.05027	0.09441	0.99566	0.00105	0.00196
1101	2.642	0.3	0.002574	14.974	0.03506	0.05211	0.99294	0.00117	0.00174
1101	2.942	0.3	0.00319	9.7285	0.0267	0.03721	0.99203	0.00137	0.00192
1101	3.242	0.3	0.003873	6.5551	0.02	0.02711	0.98838	0.00152	0.00205
1101	3.542	0.3	0.004621	4.5928	0.01651	0.01826	0.98702	0.00179	0.00196
1101	3.842	0.3	0.005434	3.2799	0.01337	0.01262	0.98078	0.00202	0.00188
1101	4.142	0.3	0.006313	2.4286	0.0109	0.01275	0.98034	0.00223	0.00261
1101	4.442	0.3	0.007257	1.8292	0.00887	0.0065	0.97789	0.00241	0.00175
1101	4.742	0.3	0.008265	1.4116	0.00735	0.00638	0.9784	0.00259	0.00225
1101	5.046	0.308	0.009353	1.0836	0.00619	0.0054	0.96986	0.00283	0.00243
1101	5.6	0.8	0.011506	0.71577	0.00377	0.00273	0.96955	0.00262	0.00188
1101	6.5	1	0.015468	0.38535	0.00374	0.00197	0.95586	0.0048	0.00251

$E_\ell$ [MeV]	$\theta$ [ $^\circ$ ]	$\theta_{bw}$ [ $^\circ$ ]	$Q^2$ [GeV/c] $^2$	$\sigma$ [mb/sr]	$\delta\sigma_{\text{stat.}}$ [mb/sr]	$\delta\sigma_{\text{syst.}}$ [mb/sr]	$f(Q^2)$ [1]	$\delta f(Q^2)_{\text{stat.}}$ [1]	$\delta f(Q^2)_{\text{syst.}}$ [1]
2143	0.7075	0.015	0.0007	770.68	1.1202	2.1799	0.99548	0.00072	0.00131
2143	0.723	0.016	0.000731	708.49	1.029	2.0367	0.99672	0.00072	0.00133
2143	0.7395	0.017	0.000765	647.43	0.93569	1.7811	0.99676	0.00072	0.00127
2143	0.757	0.018	0.000801	588.99	0.85118	1.5389	0.99621	0.00072	0.00119
2143	0.7755	0.019	0.000841	532.97	0.77834	1.4419	0.9945	0.00073	0.00124
2143	0.7955	0.021	0.000885	483.98	0.70171	1.319	0.99717	0.00072	0.00125
2143	0.817	0.022	0.000934	433.38	0.64203	1.2135	0.99526	0.00074	0.00129
2143	0.84	0.024	0.000987	387.58	0.57302	1.1074	0.9949	0.00074	0.00132
2143	0.8655	0.027	0.001048	344.1	0.50158	0.92061	0.99516	0.00073	0.00123
2143	0.8935	0.029	0.001116	302.8	0.44735	0.81152	0.99485	0.00074	0.00123
2143	0.924	0.032	0.001194	264.97	0.39036	0.72446	0.99518	0.00074	0.00126
2143	0.9575	0.035	0.001282	228.76	0.33633	0.62901	0.99287	0.00073	0.00127
2143	0.9945	0.039	0.001383	196.55	0.28454	0.5671	0.99274	0.00072	0.00134
2143	1.0355	0.043	0.001499	167.69	0.24187	0.44462	0.99405	0.00072	0.00122
2143	1.081	0.048	0.001634	140.92	0.20253	0.37934	0.99297	0.00072	0.00125
2143	1.131	0.052	0.001789	117.65	0.16705	0.35418	0.99304	0.00071	0.00142
2143	1.184	0.054	0.00196	98.229	0.1393	0.28399	0.99429	0.00071	0.00136
2143	1.2405	0.059	0.002152	81.225	0.11288	0.22507	0.99233	0.00069	0.0013
2143	1.304	0.068	0.002377	66.412	0.09185	0.1905	0.99132	0.00069	0.00135
2143	1.3775	0.079	0.002653	53.224	0.07312	0.15754	0.99008	0.00068	0.00141
2143	1.4655	0.097	0.003002	41.55	0.05614	0.11158	0.98986	0.00067	0.00127
2143	1.574	0.12	0.003463	31.148	0.04103	0.09216	0.98826	0.00066	0.00143
2143	1.7105	0.153	0.004089	22.306	0.02713	0.06532	0.98714	0.00061	0.00142
2143	1.8935	0.213	0.005009	14.783	0.01759	0.04313	0.98404	0.00059	0.00141
2143	2.1065	0.213	0.006197	9.6171	0.01315	0.02956	0.98134	0.00068	0.00149
2143	2.3525	0.279	0.007726	6.1215	0.00874	0.01979	0.97523	0.00071	0.00155
2143	2.642	0.3	0.009739	3.8297	0.00631	0.01215	0.97134	0.00082	0.00154
2143	2.942	0.3	0.012069	2.4644	0.00485	0.00725	0.96437	0.00097	0.00141
2143	3.242	0.3	0.014646	1.6433	0.00373	0.00498	0.95424	0.00112	0.00146
2143	3.542	0.3	0.017469	1.1416	0.00307	0.00384	0.94722	0.00133	0.00165
2143	3.842	0.3	0.020537	0.81784	0.00252	0.0038	0.94111	0.00151	0.00217
2143	4.142	0.3	0.023848	0.60265	0.00206	0.00256	0.93677	0.00168	0.0021
2143	4.442	0.3	0.027401	0.4421	0.00166	0.00233	0.91986	0.00184	0.00248
2143	4.742	0.3	0.031196	0.33932	0.00138	0.00201	0.91612	0.00199	0.00301
2143	5.046	0.308	0.035285	0.25817	0.00116	0.00172	0.90179	0.00218	0.00318
2143	5.4	0.4	0.040354	0.19505	0.001	0.0015	0.89474	0.0025	0.00389
2143	5.8	0.4	0.046477	0.14266	0.00106	0.00144	0.87877	0.00361	0.00478
2143	6.5	1	0.058188	0.086	0.00068	0.00099	0.84966	0.00376	0.00546

$E_\ell$ [MeV]	$\theta$ [°]	$Q^2$ [GeV/c] <sup>2</sup>	$G_E^p(Q^2)$ [1]	$\delta G_E^p(Q^2)_{\text{stat.}}$ [1]	$\delta G_E^p(Q^2)_{\text{syst.}}$ [1]
1101	0.7625	0.000215	0.99779	0.00098	0.00253
1101	0.7875	0.000229	1.0005	0.00103	0.00252
1101	0.8125	0.000244	1.0004	0.0011	0.00244
1101	0.8375	0.000259	0.99895	0.00117	0.0026
1101	0.8625	0.000275	1.0007	0.00125	0.00222
1101	0.8875	0.000291	1.0004	0.00131	0.00228
1101	0.92	0.000312	0.99825	0.00111	0.00236
1101	0.9575	0.000338	0.99783	0.00124	0.00258
1101	0.9945	0.000365	0.99942	0.00122	0.00211
1101	1.0355	0.000396	0.99846	0.00119	0.00265
1101	1.081	0.000431	0.99821	0.00117	0.00273
1101	1.131	0.000472	0.99886	0.00115	0.0022
1101	1.184	0.000517	0.9967	0.00111	0.00201
1101	1.2405	0.000568	1.0007	0.00106	0.00204
1101	1.304	0.000628	0.99686	0.00102	0.00198
1101	1.3775	0.0007	0.99743	0.00101	0.00198
1101	1.4655	0.000793	0.99817	0.00101	0.00189
1101	1.574	0.000914	0.99724	0.00101	0.00179
1101	1.7105	0.00108	0.99769	0.001	0.00197
1101	1.8935	0.001323	0.99609	0.00095	0.00166
1101	2.1065	0.001637	0.99374	0.00106	0.00175
1101	2.3525	0.002041	0.99544	0.00105	0.00196
1101	2.642	0.002574	0.99272	0.00117	0.00174
1101	2.942	0.00319	0.99181	0.00137	0.00192
1101	3.242	0.003873	0.98816	0.00152	0.00205
1101	3.542	0.004621	0.9868	0.00179	0.00196
1101	3.842	0.005434	0.98057	0.00202	0.00188
1101	4.142	0.006313	0.98012	0.00223	0.00261
1101	4.442	0.007257	0.97768	0.00241	0.00175
1101	4.742	0.008265	0.97819	0.00259	0.00225
1101	5.046	0.009353	0.96965	0.00283	0.00243
1101	5.6	0.011506	0.96934	0.00262	0.00188
1101	6.5	0.015468	0.95565	0.0048	0.0025

$E_\ell$ [MeV]	$\theta$ [°]	$Q^2$ [GeV/c] <sup>2</sup>	$G_E^p(Q^2)$ [1]	$\delta G_E^p(Q^2)_{\text{stat.}}$ [1]	$\delta G_E^p(Q^2)_{\text{syst.}}$ [1]
2143	0.7075	0.0007	0.99715	0.00073	0.00131
2143	0.723	0.000731	0.9984	0.00073	0.00133
2143	0.7395	0.000765	0.99844	0.00072	0.00127
2143	0.757	0.000801	0.99789	0.00072	0.00119
2143	0.7755	0.000841	0.99617	0.00073	0.00124
2143	0.7955	0.000885	0.99885	0.00073	0.00126
2143	0.817	0.000934	0.99693	0.00074	0.00129
2143	0.84	0.000987	0.99657	0.00074	0.00133
2143	0.8655	0.001048	0.99684	0.00073	0.00123
2143	0.8935	0.001116	0.99653	0.00074	0.00123
2143	0.924	0.001194	0.99686	0.00074	0.00126
2143	0.9575	0.001282	0.99454	0.00073	0.00127
2143	0.9945	0.001383	0.99441	0.00072	0.00135
2143	1.0355	0.001499	0.99573	0.00072	0.00122
2143	1.081	0.001634	0.99464	0.00072	0.00125
2143	1.131	0.001789	0.99471	0.00071	0.00142
2143	1.184	0.00196	0.99597	0.00071	0.00136
2143	1.2405	0.002152	0.994	0.00069	0.0013
2143	1.304	0.002377	0.99299	0.00069	0.00136
2143	1.3775	0.002653	0.99175	0.00069	0.00141
2143	1.4655	0.003002	0.99152	0.00067	0.00128
2143	1.574	0.003463	0.98992	0.00066	0.00143
2143	1.7105	0.004089	0.98881	0.00061	0.00142
2143	1.8935	0.005009	0.9857	0.00059	0.00141
2143	2.1065	0.006197	0.983	0.00068	0.00149
2143	2.3525	0.007726	0.97688	0.00071	0.00155
2143	2.642	0.009739	0.97298	0.00082	0.00155
2143	2.942	0.012069	0.96599	0.00098	0.00141
2143	3.242	0.014646	0.95585	0.00112	0.00146
2143	3.542	0.017469	0.94881	0.00133	0.00165
2143	3.842	0.020537	0.9427	0.00152	0.00217
2143	4.142	0.023848	0.93835	0.00169	0.00211
2143	4.442	0.027401	0.92141	0.00184	0.00248
2143	4.742	0.031196	0.91766	0.002	0.00302
2143	5.046	0.035285	0.90331	0.00219	0.00319
2143	5.4	0.040354	0.89625	0.0025	0.0039
2143	5.8	0.046477	0.88026	0.00362	0.00479
2143	6.5	0.058188	0.85109	0.00377	0.00547