

**Muons in flerovium (Fl)**

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
114 (Fl)	[289.19042(5)]	??	1185.0	0.28779	3.0000	0.6923	3.0000	6.7249	0.00

  

T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]
10.0 MeV	$4.704 \times 10^1$	3.447				3.447	$1.738 \times 10^0$
14.0 MeV	$5.616 \times 10^1$	2.790				2.790	$3.039 \times 10^0$
20.0 MeV	$6.802 \times 10^1$	2.249				2.249	$5.457 \times 10^0$
30.0 MeV	$8.509 \times 10^1$	1.796				1.796	$1.049 \times 10^1$
40.0 MeV	$1.003 \times 10^2$	1.561				1.561	$1.650 \times 10^1$
80.0 MeV	$1.527 \times 10^2$	1.214				1.215	$4.638 \times 10^1$
100. MeV	$1.764 \times 10^2$	1.154				1.155	$6.331 \times 10^1$
140. MeV	$2.218 \times 10^2$	1.100				1.100	$9.895 \times 10^1$
200. MeV	$2.868 \times 10^2$	1.080	0.000			1.081	$1.542 \times 10^2$
207. MeV	$2.943 \times 10^2$	1.080	0.000			1.080	<i>Minimum ionization</i>
300. MeV	$3.917 \times 10^2$	1.095	0.000		0.000	1.095	$2.463 \times 10^2$
400. MeV	$4.945 \times 10^2$	1.123	0.000		0.000	1.124	$3.364 \times 10^2$
800. MeV	$8.995 \times 10^2$	1.225	0.001		0.000	1.226	$6.760 \times 10^2$
1.00 GeV	$1.101 \times 10^3$	1.262	0.002		0.000	1.264	$8.366 \times 10^2$
1.40 GeV	$1.502 \times 10^3$	1.319	0.003		0.000	1.323	$1.145 \times 10^3$
2.00 GeV	$2.103 \times 10^3$	1.379	0.005	0.000	0.001	1.385	$1.588 \times 10^3$
3.00 GeV	$3.104 \times 10^3$	1.445	0.009	0.003	0.001	1.458	$2.290 \times 10^3$
4.00 GeV	$4.104 \times 10^3$	1.489	0.014	0.006	0.001	1.511	$2.964 \times 10^3$
8.00 GeV	$8.105 \times 10^3$	1.587	0.034	0.025	0.003	1.649	$5.488 \times 10^3$
10.0 GeV	$1.011 \times 10^4$	1.615	0.045	0.036	0.004	1.701	$6.681 \times 10^3$
14.0 GeV	$1.411 \times 10^4$	1.656	0.068	0.060	0.005	1.791	$8.972 \times 10^3$
20.0 GeV	$2.011 \times 10^4$	1.696	0.106	0.101	0.007	1.911	$1.221 \times 10^4$
30.0 GeV	$3.011 \times 10^4$	1.737	0.174	0.181	0.010	2.104	$1.720 \times 10^4$
40.0 GeV	$4.011 \times 10^4$	1.764	0.247	0.269	0.014	2.295	$2.175 \times 10^4$
80.0 GeV	$8.011 \times 10^4$	1.825	0.558	0.661	0.027	3.072	$3.677 \times 10^4$
100. GeV	$1.001 \times 10^5$	1.844	0.723	0.873	0.033	3.475	$4.289 \times 10^4$
112. GeV	$1.117 \times 10^5$	1.853	0.819	0.996	0.037	3.707	<i>Muon critical energy</i>
140. GeV	$1.401 \times 10^5$	1.871	1.061	1.309	0.047	4.290	$5.323 \times 10^4$
200. GeV	$2.001 \times 10^5$	1.900	1.590	2.002	0.066	5.561	$6.549 \times 10^4$
300. GeV	$3.001 \times 10^5$	1.933	2.492	3.159	0.099	7.684	$8.074 \times 10^4$
400. GeV	$4.001 \times 10^5$	1.956	3.423	4.358	0.132	9.871	$9.220 \times 10^4$
800. GeV	$8.001 \times 10^5$	2.012	7.261	9.276	0.267	18.819	$1.211 \times 10^5$
1.00 TeV	$1.000 \times 10^6$	2.031	9.230	11.792	0.336	23.391	$1.306 \times 10^5$
1.40 TeV	$1.400 \times 10^6$	2.059	13.172	16.808	0.476	32.517	$1.450 \times 10^5$
2.00 TeV	$2.000 \times 10^6$	2.089	19.197	24.462	0.688	46.438	$1.604 \times 10^5$
3.00 TeV	$3.000 \times 10^6$	2.123	29.244	37.180	1.051	69.601	$1.779 \times 10^5$
4.00 TeV	$4.000 \times 10^6$	2.148	39.416	50.035	1.419	93.021	$1.903 \times 10^5$
8.00 TeV	$8.000 \times 10^6$	2.209	80.390	101.689	2.945	187.237	$2.200 \times 10^5$
10.0 TeV	$1.000 \times 10^7$	2.229	101.021	127.649	3.728	234.630	$2.295 \times 10^5$
14.0 TeV	$1.400 \times 10^7$	2.260	142.170	179.460	5.333	329.226	$2.438 \times 10^5$
20.0 TeV	$2.000 \times 10^7$	2.293	204.220	257.510	7.792	471.818	$2.590 \times 10^5$
30.0 TeV	$3.000 \times 10^7$	2.331	307.619	387.335	12.037	709.325	$2.761 \times 10^5$
40.0 TeV	$4.000 \times 10^7$	2.359	411.378	517.459	16.380	947.578	$2.883 \times 10^5$
80.0 TeV	$8.000 \times 10^7$	2.427	826.368	1038.305	34.498	1901.600	$3.175 \times 10^5$
100. TeV	$1.000 \times 10^8$	2.449	1033.980	1298.960	43.850	2379.241	$3.269 \times 10^5$