Table 084: Muons in Polonium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
84 (Po)	[208.98243 (2)]	9.320	830.0	0.09282	3.1830	0.4267	3.8293	6.4003	0.14

T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm^2/g]	Photonucl	Total	CSDA range [g/cm^2]
10.0 MeV	4.704×10^1	3.877				3.877	1.503×10^0
14.0 MeV	5.616×10^1	3.098				3.098	2.667×10^0
20.0 MeV	6.802×10^1	2.471				2.471	4.858×10^0
30.0 MeV	8.509×10^1	1.956				1.956	9.464×10^0
40.0 MeV	1.003×10^2	1.691				1.691	1.500×10^1
80.0 MeV	1.527×10^2	1.302				1.302	4.275×10^1
100. MeV	1.764×10^2	1.234				1.234	5.856×10^1
140. MeV	2.218×10^2	1.170				1.170	9.199×10^1
200. MeV	2.868×10^2	1.142				1.142	1.441×10^2
222. MeV	3.104×10^2	1.141	0.000			1.141	*Minimum ionization*
300. MeV	3.917×10^2	1.150	0.000		0.000	1.150	2.315×10^2
400. MeV	4.945×10^2	1.172	0.000		0.000	1.173	3.176×10^2
800. MeV	8.995×10^2	1.261	0.001		0.000	1.262	6.458×10^2
1.00 GeV	1.101×10^3	1.295	0.002		0.000	1.297	8.020×10^2
1.40 GeV	1.502×10^3	1.349	0.002		0.001	1.352	1.104×10^3
2.00 GeV	2.103×10^3	1.407	0.004	0.001	0.001	1.413	1.537×10^3
3.00 GeV	3.104×10^3	1.472	0.007	0.003	0.001	1.485	2.226×10^3
4.00 GeV	4.104×10^3	1.517	0.011	0.007	0.002	1.536	2.888×10^3
8.00 GeV	8.105×10^3	1.619	0.026	0.023	0.003	1.671	5.374×10^3
10.0 GeV	1.011×10^4	1.649	0.035	0.032	0.004	1.720	6.553×10^3
14.0 GeV	1.411×10^4	1.693	0.053	0.052	0.005	1.804	8.822×10^3
20.0 GeV	2.011×10^4	1.736	0.082	0.087	0.007	1.913	1.205×10^4
30.0 GeV	3.011×10^4	1.782	0.135	0.153	0.011	2.081	1.706×10^4
40.0 GeV	4.011×10^4	1.813	0.190	0.225	0.014	2.243	2.168×10^4
80.0 GeV	8.011×10^4	1.880	0.430	0.545	0.028	2.884	3.737×10^4
100. GeV	1.001×10^5	1.900	0.557	0.718	0.034	3.211	4.394×10^4
139. GeV	1.395×10^5	1.930	0.814	1.068	0.048	3.861	*Muon critical energy*
140. GeV	1.401×10^5	1.930	0.817	1.074	0.048	3.870	5.528×10^4
200. GeV	2.001×10^5	1.960	1.225	1.637	0.068	4.892	6.904×10^4
300. GeV	3.001×10^5	1.994	1.920	2.578	0.102	6.597	8.659×10^4
400. GeV	4.001×10^5	2.018	2.638	3.553	0.136	8.348	1.000×10^5
800. GeV	8.001×10^5	2.076	5.601	7.550	0.276	15.504	1.347×10^5
1.00 TeV	1.000×10^6	2.095	7.121	9.595	0.346	19.158	1.463×10^5
1.40 TeV	1.400×10^6	2.123	10.167	13.671	0.490	26.453	1.640×10^5
2.00 TeV	2.000×10^6	2.154	14.823	19.891	0.709	37.579	1.829×10^5
3.00 TeV	3.000×10^6	2.189	22.592	30.225	1.084	56.091	2.046×10^5
4.00 TeV	4.000×10^6	2.214	30.460	40.669	1.464	74.808	2.199×10^5
8.00 TeV	8.000×10^6	2.277	62.164	82.641	3.039	150.123	2.569×10^5
10.0 TeV	1.000×10^7	2.297	78.133	103.736	3.847	188.015	2.688×10^5
14.0 TeV	1.400×10^7	2.328	109.983	145.829	5.505	263.647	2.867×10^5
20.0 TeV	2.000×10^7	2.362	158.022	209.234	8.044	377.664	3.056×10^5
30.0 TeV	3.000×10^7	2.401	237.997	314.721	12.430	567.550	3.271×10^5
40.0 TeV	4.000×10^7	2.429	318.241	420.450	16.917	758.039	3.423×10^5
80.0 TeV	8.000×10^7	2.498	639.637	843.657	35.637	1521.432	3.788×10^5
100. TeV	1.000×10^8	2.521	800.580	1055.450	45.300	1903.853	3.905×10^5