Table 095: Muons in Americium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
95 (Am)	[243.0614]	13.670	934.0	0.20308	2.7615	0.2274	3.5021	6.2813	0.14

T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm^2]
		[MeV cm^2/g]					
10.0 MeV	4.704×10^1	3.660				3.660	1.602×10^0
14.0 MeV	5.616×10^1	2.933				2.933	2.834×10^0
20.0 MeV	6.802×10^1	2.345				2.345	5.144×10^0
30.0 MeV	8.509×10^1	1.860				1.860	9.992×10^0
40.0 MeV	1.003×10^2	1.609				1.609	1.581×10^1
80.0 MeV	1.527×10^2	1.239				1.239	4.496×10^1
100. MeV	1.764×10^2	1.174				1.174	6.158×10^1
140. MeV	2.218×10^2	1.115				1.115	9.670×10^1
200. MeV	2.868×10^2	1.090				1.090	1.513×10^2
223. MeV	3.114×10^2	1.089	0.000			1.089	*Minimum ionization*
300. MeV	3.917×10^2	1.097	0.000		0.000	1.097	2.429×10^2
400. MeV	4.945×10^2	1.118	0.000		0.000	1.119	3.332×10^2
800. MeV	8.995×10^2	1.204	0.001		0.000	1.205	6.770×10^2
1.00 GeV	1.101×10^3	1.237	0.002		0.000	1.239	8.406×10^2
1.40 GeV	1.502×10^3	1.289	0.003		0.001	1.293	1.156×10^3
2.00 GeV	2.103×10^3	1.346	0.004	0.001	0.001	1.352	1.610×10^3
3.00 GeV	3.104×10^3	1.410	0.008	0.003	0.001	1.422	2.329×10^3
4.00 GeV	4.104×10^3	1.454	0.011	0.006	0.002	1.473	3.020×10^3
8.00 GeV	8.105×10^3	1.553	0.028	0.023	0.003	1.608	5.607×10^3
10.0 GeV	1.011×10^4	1.583	0.038	0.033	0.004	1.658	6.831×10^3
14.0 GeV	1.411×10^4	1.626	0.057	0.055	0.005	1.744	9.182×10^3
20.0 GeV	2.011×10^4	1.668	0.089	0.091	0.007	1.856	1.251×10^4
30.0 GeV	3.011×10^4	1.713	0.146	0.161	0.011	2.032	1.766×10^4
40.0 GeV	4.011×10^4	1.743	0.207	0.238	0.014	2.203	2.238×10^4
80.0 GeV	8.011×10^4	1.808	0.468	0.579	0.027	2.884	3.821×10^4
100. GeV	1.001×10^5	1.828	0.606	0.764	0.034	3.233	4.476×10^4
127. GeV	1.266×10^5	1.848	0.792	1.013	0.043	3.698	*Muon critical energy*
140. GeV	1.401×10^5	1.856	0.889	1.143	0.047	3.938	5.596×10^4
200. GeV	2.001×10^5	1.886	1.332	1.745	0.067	5.032	6.941×10^4
300. GeV	3.001×10^5	1.918	2.088	2.750	0.101	6.859	8.638×10^4
400. GeV	4.001×10^5	1.941	2.869	3.791	0.134	8.737	9.927×10^4
800. GeV	8.001×10^5	1.997	6.089	8.059	0.272	16.419	1.322×10^5
1.00 TeV	1.000×10^6	2.015	7.741	10.243	0.341	20.343	1.431×10^5
1.40 TeV	1.400×10^6	2.043	11.051	14.596	0.483	28.175	1.597×10^5
2.00 TeV	2.000×10^6	2.073	16.109	21.239	0.699	40.122	1.775×10^5
3.00 TeV	3.000×10^6	2.107	24.547	32.275	1.068	60.000	1.977×10^5
4.00 TeV	4.000×10^6	2.132	33.092	43.428	1.443	80.097	2.121×10^5
8.00 TeV	8.000×10^6	2.192	67.519	88.252	2.995	160.961	2.466×10^5
10.0 TeV	1.000×10^7	2.212	84.857	110.780	3.792	201.643	2.577×10^5
14.0 TeV	1.400×10^7	2.243	119.437	155.733	5.426	282.841	2.744×10^5
20.0 TeV	2.000×10^7	2.276	171.590	223.446	7.928	405.242	2.920×10^5
30.0 TeV	3.000×10^7	2.313	258.497	336.096	12.248	609.156	3.120×10^5
40.0 TeV	4.000×10^7	2.341	345.716	449.004	16.667	813.730	3.262×10^5
80.0 TeV	8.000×10^7	2.408	694.567	900.941	35.104	1633.022	3.602×10^5
100. TeV	1.000×10^8	2.430	869.100	1127.110	44.620	2043.262	3.711×10^5