Table 308: Muons in Rutherfordium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
104 (Rf)	[267.122 (4)]	??	1047.0	0.26960	3.0000	0.6157	3.0000	6.4898	0.00

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	3.537				3.537	1.673×10^0
14.0 MeV	5.616×10^1	2.847				2.847	2.945×10^0
20.0 MeV	6.802×10^1	2.285				2.285	5.320×10^0
30.0 MeV	8.509×10^1	1.818				1.818	1.029×10^1
40.0 MeV	1.003×10^2	1.577				1.577	1.623×10^1
80.0 MeV	1.527×10^2	1.223				1.223	4.587×10^1
100. MeV	1.764×10^2	1.161				1.161	6.270×10^1
140. MeV	2.218×10^2	1.105				1.105	9.816×10^1
200. MeV	2.868×10^2	1.084				1.084	1.531×10^2
209. MeV	2.968×10^2	1.084	0.000			1.084	*Minimum ionization*
300. MeV	3.917×10^2	1.097	0.000		0.000	1.098	2.450×10^2
400. MeV	4.945×10^2	1.124	0.000		0.000	1.125	3.350×10^2
800. MeV	8.995×10^2	1.220	0.001		0.000	1.222	6.752×10^2
1.00 GeV	1.101×10^3	1.255	0.002		0.000	1.258	8.364×10^2
1.40 GeV	1.502×10^3	1.310	0.003		0.000	1.314	1.147×10^3
2.00 GeV	2.103×10^3	1.368	0.005	0.000	0.001	1.374	1.593×10^3
3.00 GeV	3.104×10^3	1.431	0.009	0.003	0.001	1.445	2.302×10^3
4.00 GeV	4.104×10^3	1.474	0.013	0.006	0.001	1.496	2.981×10^3
8.00 GeV	8.105×10^3	1.569	0.031	0.025	0.003	1.629	5.534×10^3
10.0 GeV	1.011×10^4	1.597	0.042	0.035	0.004	1.679	6.743×10^3
14.0 GeV	1.411×10^4	1.637	0.064	0.059	0.005	1.765	9.065×10^3
20.0 GeV	2.011×10^4	1.676	0.099	0.097	0.007	1.880	1.236×10^4
30.0 GeV	3.011×10^4	1.716	0.162	0.173	0.011	2.064	1.743×10^4
40.0 GeV	4.011×10^4	1.743	0.229	0.257	0.014	2.245	2.207×10^4
80.0 GeV	8.011×10^4	1.803	0.518	0.628	0.027	2.979	3.750×10^4
100. GeV	1.001×10^5	1.822	0.672	0.829	0.034	3.358	4.382×10^4
116. GeV	1.165×10^5	1.834	0.799	0.996	0.039	3.670	*Muon critical energy*
140. GeV	1.401×10^5	1.849	0.986	1.242	0.047	4.126	5.456×10^4
200. GeV	2.001×10^5	1.877	1.477	1.898	0.067	5.321	6.734×10^4
300. GeV	3.001×10^5	1.910	2.315	2.992	0.100	7.319	8.331×10^4
400. GeV	4.001×10^5	1.933	3.180	4.127	0.134	9.375	9.536×10^4
800. GeV	8.001×10^5	1.988	6.747	8.778	0.270	17.785	1.258×10^5
1.00 TeV	1.000×10^6	2.006	8.578	11.157	0.339	22.083	1.359×10^5
1.40 TeV	1.400×10^6	2.034	12.243	15.901	0.480	30.660	1.512×10^5
2.00 TeV	2.000×10^6	2.064	17.844	23.140	0.694	43.744	1.675×10^5
3.00 TeV	3.000×10^6	2.098	27.187	35.166	1.061	65.514	1.861×10^5
4.00 TeV	4.000×10^6	2.122	36.647	47.320	1.433	87.525	1.993×10^5
8.00 TeV	8.000×10^6	2.183	74.757	96.166	2.974	176.082	2.308×10^5
10.0 TeV	1.000×10^7	2.203	93.947	120.716	3.765	220.633	2.410×10^5
14.0 TeV	1.400×10^7	2.233	132.222	169.703	5.387	309.548	2.562×10^5
20.0 TeV	2.000×10^7	2.266	189.944	243.494	7.872	443.578	2.723×10^5
30.0 TeV	3.000×10^7	2.303	286.131	366.251	12.161	666.849	2.906×10^5
40.0 TeV	4.000×10^7	2.331	382.657	489.291	16.549	890.829	3.035×10^5
80.0 TeV	8.000×10^7	2.398	768.729	981.778	34.853	1787.760	3.346×10^5
100. TeV	1.000×10^8	2.420	961.880	1228.240	44.300	2236.842	3.445×10^5