Table 086: Muons in Radon

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
86 (Rn)	[222.01758 (2)]	9.066×10^{-3}	794.0	0.20798	2.7409	1.5368	4.9889	13.2839	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	3.782				3.782	1.535×10^0
14.0 MeV	5.616×10^1	3.018				3.018	2.730×10^0
20.0 MeV	6.802×10^1	2.405				2.405	4.980×10^0
30.0 MeV	8.509×10^1	1.902				1.902	9.715×10^0
40.0 MeV	1.003×10^2	1.644				1.644	1.540×10^1
80.0 MeV	1.527×10^2	1.267				1.267	4.394×10^1
100. MeV	1.764×10^2	1.201				1.201	6.019×10^1
140. MeV	2.218×10^2	1.140				1.140	9.452×10^1
200. MeV	2.868×10^2	1.116				1.117	1.479×10^2
216. MeV	3.039×10^2	1.116				1.116	*Minimum ionization*
300. MeV	3.917×10^2	1.127	0.000		0.000	1.128	2.372×10^2
400. MeV	4.945×10^2	1.154	0.000		0.000	1.154	3.249×10^2
800. MeV	8.995×10^2	1.258	0.001		0.000	1.260	6.559×10^2
1.00 GeV	1.101×10^3	1.300	0.001		0.000	1.302	8.119×10^2
1.40 GeV	1.502×10^3	1.367	0.002		0.001	1.371	1.111×10^3
2.00 GeV	2.103×10^3	1.443	0.004	0.001	0.001	1.449	1.536×10^3
3.00 GeV	3.104×10^3	1.531	0.007	0.003	0.001	1.543	2.204×10^3
4.00 GeV	4.104×10^3	1.595	0.010	0.006	0.002	1.614	2.837×10^3
8.00 GeV	8.105×10^3	1.745	0.026	0.022	0.003	1.796	5.173×10^3
10.0 GeV	1.011×10^4	1.790	0.034	0.031	0.004	1.860	6.267×10^3
14.0 GeV	1.411×10^4	1.855	0.052	0.051	0.005	1.964	8.357×10^3
20.0 GeV	2.011×10^4	1.920	0.081	0.085	0.007	2.094	1.131×10^4
30.0 GeV	3.011×10^4	1.989	0.132	0.149	0.011	2.282	1.588×10^4
40.0 GeV	4.011×10^4	2.035	0.187	0.221	0.014	2.457	2.010×10^4
80.0 GeV	8.011×10^4	2.135	0.422	0.535	0.028	3.121	3.450×10^4
100. GeV	1.001×10^5	2.165	0.547	0.704	0.034	3.452	4.059×10^4
140. GeV	1.401×10^5	2.208	0.804	1.053	0.048	4.114	5.119×10^4
160. GeV	1.602×10^5	2.224	0.936	1.235	0.054	4.450	*Muon critical energy*
200. GeV	2.001×10^5	2.251	1.204	1.606	0.068	5.131	6.423×10^4
300. GeV	3.001×10^5	2.297	1.888	2.530	0.102	6.817	8.110×10^4
400. GeV	4.001×10^5	2.328	2.594	3.487	0.136	8.545	9.418×10^4
800. GeV	8.001×10^5	2.399	5.506	7.409	0.274	15.590	1.283×10^5
1.00 TeV	1.000×10^6	2.420	7.001	9.415	0.344	19.183	1.399×10^5
1.40 TeV	1.400×10^6	2.452	9.996	13.415	0.487	26.353	1.576×10^5
2.00 TeV	2.000×10^6	2.485	14.573	19.519	0.705	37.285	1.767×10^5
3.00 TeV	3.000×10^6	2.522	22.211	29.661	1.077	55.473	1.985×10^5
4.00 TeV	4.000×10^6	2.547	29.946	39.909	1.455	73.860	2.141×10^5
8.00 TeV	8.000×10^6	2.609	61.114	81.099	3.021	147.844	2.516×10^5
10.0 TeV	1.000×10^7	2.628	76.812	101.800	3.825	185.067	2.637×10^5
14.0 TeV	1.400×10^7	2.659	108.123	143.108	5.473	259.364	2.819×10^5
20.0 TeV	2.000×10^7	2.691	155.348	205.330	7.998	371.369	3.011×10^5
30.0 TeV	3.000×10^7	2.729	233.967	308.849	12.357	557.903	3.229×10^5
40.0 TeV	4.000×10^7	2.756	312.850	412.606	16.816	745.030	3.384×10^5
80.0 TeV	8.000×10^7	2.822	628.791	827.918	35.424	1494.957	3.755×10^5
100. TeV	1.000×10^8	2.844	787.000	1035.760	45.030	1870.636	3.875×10^5