Muons in cesium (Cs)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
55 (Cs)	132.90545196 (6)	1.873	488.0	0.18233	2.8866	0.5473	3.5914	6.9135	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	4.464				4.464	1.277×10^0
14.0 MeV	5.616×10^1	3.532				3.532	2.294×10^0
20.0 MeV	6.802×10^1	2.794				2.794	4.224×10^0
30.0 MeV	8.509×10^1	2.195				2.195	8.315×10^0
40.0 MeV	1.003×10^2	1.890				1.890	1.325×10^1
80.0 MeV	1.527×10^2	1.444				1.444	3.820×10^1
100. MeV	1.764×10^2	1.366				1.366	5.248×10^1
140. MeV	2.218×10^2	1.291				1.291	8.274×10^1
200. MeV	2.868×10^2	1.257				1.257	1.300×10^2
236. MeV	3.250×10^2	1.254				1.254	*Minimum ionization*
300. MeV	3.917×10^2	1.261	0.000		0.000	1.261	2.096×10^2
400. MeV	4.945×10^2	1.284	0.000		0.000	1.285	2.882×10^2
800. MeV	8.995×10^2	1.378	0.001		0.000	1.380	5.881×10^2
1.00 GeV	1.101×10^3	1.415	0.001		0.000	1.417	7.311×10^2
1.40 GeV	1.502×10^3	1.473	0.002	0.000	0.001	1.476	1.007×10^3
2.00 GeV	2.103×10^3	1.535	0.003	0.001	0.001	1.540	1.405×10^3
3.00 GeV	3.104×10^3	1.605	0.005	0.003	0.001	1.615	2.038×10^3
4.00 GeV	4.104×10^3	1.653	0.007	0.006	0.002	1.668	2.647×10^3
8.00 GeV	8.105×10^3	1.762	0.018	0.018	0.003	1.801	4.945×10^3
10.0 GeV	1.011×10^4	1.794	0.024	0.025	0.004	1.847	6.041×10^3
14.0 GeV	1.411×10^4	1.840	0.037	0.040	0.005	1.923	8.161×10^3
20.0 GeV	2.011×10^4	1.886	0.057	0.065	0.008	2.017	1.121×10^4
30.0 GeV	3.011×10^4	1.934	0.094	0.114	0.011	2.154	1.600×10^4
40.0 GeV	4.011×10^4	1.966	0.133	0.167	0.015	2.282	2.051×10^4
80.0 GeV	8.011×10^4	2.036	0.300	0.401	0.029	2.767	3.639×10^4
100. GeV	1.001×10^5	2.057	0.389	0.527	0.036	3.010	4.332×10^4
140. GeV	1.401×10^5	2.088	0.571	0.787	0.050	3.497	5.564×10^4
200. GeV	1.996×10^5	2.119	0.853	1.195	0.071	4.239	*Muon critical energy*
200. GeV	2.001×10^5	2.119	0.855	1.199	0.071	4.245	7.120×10^4
300. GeV	3.001×10^5	2.154	1.341	1.886	0.106	5.489	9.187×10^4
400. GeV	4.001×10^5	2.178	1.844	2.598	0.142	6.763	1.083×10^5
800. GeV	8.001×10^5	2.237	3.918	5.519	0.287	11.963	1.522×10^5
1.00 TeV	1.000×10^6	2.257	4.984	7.013	0.360	14.615	1.673×10^5
1.40 TeV	1.400×10^6	2.286	7.120	9.993	0.510	19.911	1.906×10^5
2.00 TeV	2.000×10^6	2.317	10.388	14.540	0.738	27.985	2.159×10^5
3.00 TeV	3.000×10^6	2.354	15.843	22.098	1.128	41.424	2.451×10^5
4.00 TeV	4.000×10^6	2.380	21.371	29.735	1.525	55.011	2.660×10^5
8.00 TeV	8.000×10^6	2.444	43.656	60.435	3.168	109.704	3.165×10^5
10.0 TeV	1.000×10^7	2.465	54.886	75.866	4.011	137.230	3.328×10^5
14.0 TeV	1.400×10^7	2.497	77.286	106.658	5.742	192.184	3.573×10^5
20.0 TeV	2.000×10^7	2.532	111.082	153.042	8.396	275.053	3.833×10^5
30.0 TeV	3.000×10^7	2.572	167.344	230.212	12.979	413.109	4.127×10^5
40.0 TeV	4.000×10^7	2.601	223.807	307.564	17.670	551.643	4.336×10^5
80.0 TeV	8.000×10^7	2.672	449.996	617.197	37.249	1107.116	4.838×10^5
100. TeV	1.000×10^8	2.696	563.280	772.160	47.360	1385.497	4.999×10^5