Table 003: Muons in Lithium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
3 (Li)	6.941 (2)	0.534	40.0	0.95136	2.4993	0.1304	1.6397	3.1221	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	6.698				6.698	8.207×10^{-1}
14.0 MeV	5.616×10^1	5.209				5.209	1.505×10^0
20.0 MeV	6.802×10^1	4.055				4.055	2.826×10^0
30.0 MeV	8.509×10^1	3.134				3.135	5.671×10^0
40.0 MeV	1.003×10^2	2.669				2.669	9.151×10^0
80.0 MeV	1.527×10^2	1.988				1.988	2.708×10^1
100. MeV	1.764×10^2	1.865				1.865	3.750×10^1
140. MeV	2.218×10^2	1.739				1.739	5.981×10^1
200. MeV	2.868×10^2	1.667				1.667	9.519×10^1
300. MeV	3.917×10^2	1.639			0.000	1.639	1.559×10^2
318. MeV	4.105×10^2	1.639			0.000	1.639	*Minimum ionization*
400. MeV	4.945×10^2	1.643			0.000	1.644	2.168×10^2
800. MeV	8.995×10^2	1.701			0.000	1.701	4.561×10^2
1.00 GeV	1.101×10^3	1.727			0.000	1.727	5.727×10^2
1.40 GeV	1.502×10^3	1.768	0.000		0.001	1.769	8.014×10^2
2.00 GeV	2.103×10^3	1.813	0.000		0.001	1.814	1.136×10^3
3.00 GeV	3.104×10^3	1.863	0.000	0.000	0.002	1.865	1.679×10^3
4.00 GeV	4.104×10^3	1.897	0.001	0.000	0.002	1.900	2.210×10^3
8.00 GeV	8.105×10^3	1.977	0.001	0.001	0.004	1.984	4.265×10^3
10.0 GeV	1.011×10^4	2.002	0.002	0.002	0.005	2.011	5.266×10^3
14.0 GeV	1.411×10^4	2.039	0.003	0.003	0.007	2.052	7.235×10^3
20.0 GeV	2.011×10^4	2.077	0.005	0.005	0.009	2.096	1.013×10^4
30.0 GeV	3.011×10^4	2.118	0.008	0.009	0.014	2.149	1.483×10^4
40.0 GeV	4.011×10^4	2.146	0.011	0.014	0.018	2.189	1.944×10^4
80.0 GeV	8.011×10^4	2.212	0.025	0.034	0.035	2.305	3.722×10^4
100. GeV	1.001×10^5	2.232	0.032	0.045	0.043	2.353	4.580×10^4
140. GeV	1.401×10^5	2.262	0.048	0.067	0.060	2.438	6.250×10^4
200. GeV	2.001×10^5	2.294	0.073	0.103	0.086	2.556	8.653×10^4
300. GeV	3.001×10^5	2.330	0.115	0.165	0.128	2.739	1.243×10^5
400. GeV	4.001×10^5	2.355	0.160	0.230	0.171	2.916	1.597×10^5
800. GeV	8.001×10^5	2.417	0.346	0.502	0.346	3.611	2.827×10^5
1.00 TeV	1.000×10^6	2.437	0.443	0.643	0.435	3.959	3.356×10^5
1.40 TeV	1.400×10^6	2.468	0.638	0.925	0.617	4.649	4.287×10^5
1.58 TeV	1.578×10^6	2.479	0.727	1.053	0.699	4.958	*Muon critical energy*
2.00 TeV	2.000×10^6	2.501	0.940	1.360	0.894	5.695	5.451×10^5
3.00 TeV	3.000×10^6	2.539	1.446	2.085	1.371	7.441	6.983×10^5
4.00 TeV	4.000×10^6	2.566	1.962	2.823	1.857	9.207	8.190×10^5
8.00 TeV	8.000×10^6	2.633	4.057	5.799	3.881	16.370	1.141×10^6
10.0 TeV	1.000×10^7	2.655	5.119	7.301	4.924	19.999	1.251×10^6
14.0 TeV	1.400×10^7	2.689	7.239	10.291	7.075	27.293	1.421×10^6
20.0 TeV	2.000×10^7	2.725	10.450	14.806	10.382	38.363	1.606×10^6
30.0 TeV	3.000×10^7	2.767	15.797	22.311	16.131	57.006	1.819×10^6
40.0 TeV	4.000×10^7	2.797	21.178	29.845	22.035	75.855	1.970×10^6
80.0 TeV	8.000×10^7	2.871	42.758	60.014	46.852	152.495	2.335×10^6
100. TeV	1.000×10^8	2.896	53.580	75.120	59.730	191.326	2.452×10^6