

Table 189: Muons in Lithium tetraborate $\text{Li}_2\text{B}_4\text{O}_7$

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.48487	2.440	94.6	0.11075	3.4389	0.0737	2.6502	3.2093	0.00
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	6.748				6.748	8.208×10^{-1}	
14.0 MeV	5.616×10^1	5.270				5.270	1.499×10^0	
20.0 MeV	6.802×10^1	4.120				4.120	2.801×10^0	
30.0 MeV	8.509×10^1	3.200				3.200	5.593×10^0	
40.0 MeV	1.003×10^2	2.735				2.735	8.995×10^0	
80.0 MeV	1.527×10^2	2.048				2.048	2.642×10^1	
100. MeV	1.764×10^2	1.920				1.920	3.653×10^1	
140. MeV	2.218×10^2	1.790				1.790	5.821×10^1	
200. MeV	2.868×10^2	1.716				1.716	9.258×10^1	
300. MeV	3.917×10^2	1.688			0.000	1.688	1.515×10^2	
314. MeV	4.065×10^2	1.688			0.000	1.688	<i>Minimum ionization</i>	
400. MeV	4.945×10^2	1.695			0.000	1.695	2.107×10^2	
800. MeV	8.995×10^2	1.761	0.000		0.000	1.762	4.422×10^2	
1.00 GeV	1.101×10^3	1.791	0.000		0.000	1.792	5.547×10^2	
1.40 GeV	1.502×10^3	1.840	0.000		0.001	1.841	7.748×10^2	
2.00 GeV	2.103×10^3	1.893	0.001	0.000	0.001	1.895	1.096×10^3	
3.00 GeV	3.104×10^3	1.954	0.001	0.001	0.001	1.957	1.614×10^3	
4.00 GeV	4.104×10^3	1.996	0.001	0.001	0.002	2.001	2.120×10^3	
8.00 GeV	8.105×10^3	2.093	0.003	0.003	0.004	2.103	4.064×10^3	
10.0 GeV	1.011×10^4	2.122	0.004	0.004	0.005	2.136	5.007×10^3	
14.0 GeV	1.411×10^4	2.165	0.007	0.007	0.007	2.185	6.857×10^3	
20.0 GeV	2.011×10^4	2.208	0.010	0.012	0.009	2.239	9.568×10^3	
30.0 GeV	3.011×10^4	2.255	0.017	0.021	0.013	2.306	1.396×10^4	
40.0 GeV	4.011×10^4	2.286	0.024	0.030	0.018	2.359	1.825×10^4	
80.0 GeV	8.011×10^4	2.359	0.055	0.074	0.034	2.523	3.462×10^4	
100. GeV	1.001×10^5	2.382	0.071	0.098	0.042	2.593	4.244×10^4	
140. GeV	1.401×10^5	2.416	0.105	0.146	0.059	2.727	5.748×10^4	
200. GeV	2.001×10^5	2.452	0.158	0.224	0.083	2.917	7.874×10^4	
300. GeV	3.001×10^5	2.492	0.250	0.356	0.125	3.222	1.113×10^5	
400. GeV	4.001×10^5	2.521	0.344	0.493	0.166	3.525	1.410×10^5	
800. GeV	8.001×10^5	2.590	0.739	1.066	0.335	4.730	2.386×10^5	
960. GeV	9.603×10^5	2.608	0.902	1.302	0.404	5.217	<i>Muon critical energy</i>	
1.00 TeV	1.000×10^6	2.613	0.943	1.361	0.421	5.339	2.784×10^5	
1.40 TeV	1.400×10^6	2.647	1.353	1.950	0.598	6.548	3.459×10^5	
2.00 TeV	2.000×10^6	2.684	1.984	2.851	0.866	8.385	4.267×10^5	
3.00 TeV	3.000×10^6	2.726	3.040	4.352	1.326	11.445	5.284×10^5	
4.00 TeV	4.000×10^6	2.757	4.115	5.874	1.795	14.541	6.058×10^5	
8.00 TeV	8.000×10^6	2.832	8.464	12.004	3.746	27.047	8.044×10^5	
10.0 TeV	1.000×10^7	2.857	10.663	15.092	4.751	33.363	8.708×10^5	
14.0 TeV	1.400×10^7	2.895	15.050	21.243	6.821	46.010	9.725×10^5	
20.0 TeV	2.000×10^7	2.935	21.685	30.522	10.001	65.145	1.082×10^6	
30.0 TeV	3.000×10^7	2.982	32.732	45.961	15.520	97.197	1.206×10^6	
40.0 TeV	4.000×10^7	3.016	43.836	61.450	21.184	129.487	1.295×10^6	
80.0 TeV	8.000×10^7	3.100	88.359	123.458	44.947	259.863	1.509×10^6	
100. TeV	1.000×10^8	3.127	110.678	154.499	57.261	325.566	1.578×10^6	