

Muons in lanthanum chloride (LaCl₃)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.44034	3.860	329.5	0.20155	3.0000	0.2418	3.0000	5.3428	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	5.109				5.109		1.101×10^0	
14.0 MeV	5.616×10^1	4.020				4.020		1.992×10^0	
20.0 MeV	6.802×10^1	3.166				3.166		3.693×10^0	
30.0 MeV	8.509×10^1	2.477				2.477		7.312×10^0	
40.0 MeV	1.003×10^2	2.127				2.127		1.169×10^1	
80.0 MeV	1.527×10^2	1.618				1.618		3.392×10^1	
100. MeV	1.764×10^2	1.529				1.529		4.666×10^1	
140. MeV	2.218×10^2	1.442				1.442		7.372×10^1	
200. MeV	2.868×10^2	1.400				1.400		1.161×10^2	
253. MeV	3.431×10^2	1.393			0.000	1.394			<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.397	0.000		0.000	1.397		1.878×10^2	
400. MeV	4.945×10^2	1.415	0.000		0.000	1.416		2.589×10^2	
800. MeV	8.995×10^2	1.501	0.001		0.000	1.502		5.329×10^2	
1.00 GeV	1.101×10^3	1.536	0.001		0.000	1.537		6.645×10^2	
1.40 GeV	1.502×10^3	1.590	0.001	0.000	0.001	1.592		9.199×10^2	
2.00 GeV	2.103×10^3	1.649	0.002	0.001	0.001	1.653		1.289×10^3	
3.00 GeV	3.104×10^3	1.714	0.004	0.002	0.001	1.722		1.881×10^3	
4.00 GeV	4.104×10^3	1.759	0.006	0.004	0.002	1.771		2.453×10^3	
8.00 GeV	8.105×10^3	1.860	0.014	0.013	0.003	1.891		4.631×10^3	
10.0 GeV	1.011×10^4	1.890	0.018	0.019	0.004	1.932		5.677×10^3	
14.0 GeV	1.411×10^4	1.933	0.028	0.030	0.006	1.997		7.712×10^3	
20.0 GeV	2.011×10^4	1.976	0.043	0.049	0.008	2.077		1.066×10^4	
30.0 GeV	3.011×10^4	2.021	0.071	0.086	0.012	2.190		1.534×10^4	
40.0 GeV	4.011×10^4	2.051	0.100	0.126	0.015	2.293		1.980×10^4	
80.0 GeV	8.011×10^4	2.118	0.226	0.303	0.030	2.678		3.592×10^4	
100. GeV	1.001×10^5	2.139	0.293	0.398	0.037	2.868		4.313×10^4	
140. GeV	1.401×10^5	2.170	0.430	0.595	0.052	3.248		5.623×10^4	
200. GeV	2.001×10^5	2.202	0.645	0.906	0.074	3.828		7.323×10^4	
266. GeV	2.657×10^5	2.228	0.884	1.246	0.098	4.456			<i>Muon critical energy</i>
300. GeV	3.001×10^5	2.239	1.012	1.427	0.111	4.790		9.655×10^4	
400. GeV	4.001×10^5	2.265	1.391	1.968	0.148	5.772		1.155×10^5	
800. GeV	8.001×10^5	2.328	2.959	4.184	0.299	9.771		1.682×10^5	
1.00 TeV	1.000×10^6	2.348	3.765	5.319	0.376	11.809		1.868×10^5	
1.40 TeV	1.400×10^6	2.379	5.381	7.584	0.533	15.878		2.159×10^5	
2.00 TeV	2.000×10^6	2.413	7.854	11.040	0.771	22.079		2.479×10^5	
3.00 TeV	3.000×10^6	2.451	11.985	16.785	1.179	32.401		2.850×10^5	
4.00 TeV	4.000×10^6	2.479	16.171	22.593	1.594	42.838		3.118×10^5	
8.00 TeV	8.000×10^6	2.547	33.058	45.942	3.315	84.863		3.769×10^5	
10.0 TeV	1.000×10^7	2.570	41.571	57.681	4.199	106.021		3.979×10^5	
14.0 TeV	1.400×10^7	2.604	58.553	81.099	6.016	148.273		4.297×10^5	
20.0 TeV	2.000×10^7	2.641	84.182	116.381	8.802	212.007		4.633×10^5	
30.0 TeV	3.000×10^7	2.684	126.839	175.090	13.619	318.232		5.016×10^5	
40.0 TeV	4.000×10^7	2.715	169.653	233.944	18.552	424.865		5.287×10^5	
80.0 TeV	8.000×10^7	2.791	341.193	469.524	39.171	852.679		5.938×10^5	
100. TeV	1.000×10^8	2.815	427.120	587.423	49.827	1067.186		6.147×10^5	