

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]		
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		