Muons in lutetium aluminum oxide (1) ($LuAlO_3$)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.43209	8.300	423.2	0.19022	3.0000	0.2000	3.0000	5.0967	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	4.812				4.812	1.173×10^0
14.0 MeV	5.616×10^1	3.794				3.794	2.119×10^0
20.0 MeV	6.802×10^1	2.993				2.993	3.919×10^0
30.0 MeV	8.509×10^1	2.346				2.347	7.742×10^0
40.0 MeV	1.003×10^2	2.017				2.018	1.237×10^1
80.0 MeV	1.527×10^2	1.539				1.539	3.576×10^1
100. MeV	1.764×10^2	1.455				1.455	4.916×10^1
140. MeV	2.218×10^2	1.372				1.372	7.760×10^1
200. MeV	2.868×10^2	1.332				1.332	1.221×10^2
253. MeV	3.431×10^2	1.326			0.000	1.326	*Minimum ionization*
300. MeV	3.917×10^2	1.329	0.000		0.000	1.329	1.975×10^2
400. MeV	4.945×10^2	1.347	0.000		0.000	1.347	2.722×10^2
800. MeV	8.995×10^2	1.430	0.001		0.000	1.431	5.600×10^2
1.00 GeV	1.101×10^3	1.463	0.001		0.000	1.464	6.981×10^2
1.40 GeV	1.502×10^3	1.515	0.002	0.000	0.001	1.518	9.662×10^2
2.00 GeV	2.103×10^3	1.572	0.003	0.001	0.001	1.577	1.354×10^3
3.00 GeV	3.104×10^3	1.635	0.005	0.003	0.001	1.644	1.974×10^3
4.00 GeV	4.104×10^3	1.679	0.007	0.005	0.002	1.693	2.573×10^3
8.00 GeV	8.105×10^3	1.777	0.017	0.016	0.003	1.814	4.848×10^3
10.0 GeV	1.011×10^4	1.806	0.023	0.022	0.004	1.856	5.937×10^3
14.0 GeV	1.411×10^4	1.848	0.035	0.036	0.006	1.925	8.052×10^3
20.0 GeV	2.011×10^4	1.889	0.054	0.059	0.008	2.011	1.110×10^4
30.0 GeV	3.011×10^4	1.934	0.089	0.104	0.012	2.139	1.592×10^4
40.0 GeV	4.011×10^4	1.963	0.125	0.153	0.015	2.257	2.047×10^4
80.0 GeV	8.011×10^4	2.029	0.283	0.369	0.030	2.712	3.660×10^4
100. GeV	1.001×10^5	2.049	0.367	0.486	0.037	2.940	4.369×10^4
140. GeV	1.401×10^5	2.080	0.538	0.726	0.051	3.396	5.634×10^4
200. GeV	2.001×10^5	2.111	0.807	1.107	0.073	4.099	7.240×10^4
212. GeV	2.118×10^5	2.116	0.859	1.180	0.077	4.234	*Muon critical energy*
300. GeV	3.001×10^5	2.147	1.265	1.743	0.109	5.266	9.388×10^4
400. GeV	4.001×10^5	2.173	1.739	2.403	0.146	6.461	1.110×10^5
800. GeV	8.001×10^5	2.234	3.696	5.109	0.295	11.335	1.572×10^5
1.00 TeV	1.000×10^6	2.255	4.701	6.494	0.370	13.821	1.731×10^5
1.40 TeV	1.400×10^6	2.285	6.715	9.255	0.525	18.782	1.979×10^5
2.00 TeV	2.000×10^6	2.318	9.796	13.471	0.759	26.345	2.247×10^5
3.00 TeV	3.000×10^6	2.356	14.940	20.475	1.161	38.932	2.558×10^5
4.00 TeV	4.000×10^6	2.383	20.151	27.555	1.569	51.659	2.780×10^5
8.00 TeV	8.000×10^6	2.450	41.161	56.014	3.263	102.889	3.318×10^5
10.0 TeV	1.000×10^7	2.472	51.747	70.320	4.133	128.674	3.491×10^5
14.0 TeV	1.400×10^7	2.506	72.864	98.863	5.921	180.155	3.753×10^5
20.0 TeV	2.000×10^7	2.542	104.724	141.861	8.661	257.790	4.030×10^5
30.0 TeV	3.000×10^7	2.584	157.761	213.403	13.401	387.151	4.344×10^5
40.0 TeV	4.000×10^7	2.614	210.986	285.116	18.256	516.973	4.567×10^5
80.0 TeV	8.000×10^7	2.689	424.199	572.167	38.545	1037.601	5.102×10^5
100. TeV	1.000×10^8	2.713	530.983	715.824	49.032	1298.553	5.274×10^5