Muons in lutetium fluoride (LuF_3)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.42248	8.300	458.7	0.19861	3.0000	0.2214	3.0000	5.2803	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	4.642				4.642	1.218×10^0
14.0 MeV	5.616×10^1	3.662				3.662	2.198×10^0
20.0 MeV	6.802×10^1	2.891				2.891	4.062×10^0
30.0 MeV	8.509×10^1	2.268				2.268	8.019×10^0
40.0 MeV	1.003×10^2	1.951				1.951	1.280×10^1
80.0 MeV	1.527×10^2	1.489				1.489	3.699×10^1
100. MeV	1.764×10^2	1.408				1.408	5.083×10^1
140. MeV	2.218×10^2	1.331				1.331	8.018×10^1
200. MeV	2.868×10^2	1.293				1.294	1.261×10^2
246. MeV	3.356×10^2	1.288				1.289	*Minimum ionization*
300. MeV	3.917×10^2	1.293	0.000		0.000	1.293	2.036×10^2
400. MeV	4.945×10^2	1.311	0.000		0.000	1.312	2.804×10^2
800. MeV	8.995×10^2	1.394	0.001		0.000	1.396	5.756×10^2
1.00 GeV	1.101×10^3	1.427	0.001		0.000	1.429	7.172×10^2
1.40 GeV	1.502×10^3	1.480	0.002	0.000	0.001	1.482	9.918×10^2
2.00 GeV	2.103×10^3	1.536	0.003	0.001	0.001	1.541	1.388×10^3
3.00 GeV	3.104×10^3	1.598	0.005	0.003	0.001	1.608	2.023×10^3
4.00 GeV	4.104×10^3	1.641	0.007	0.005	0.002	1.656	2.635×10^3
8.00 GeV	8.105×10^3	1.738	0.018	0.017	0.003	1.776	4.959×10^3
10.0 GeV	1.011×10^4	1.767	0.024	0.023	0.004	1.819	6.072×10^3
14.0 GeV	1.411×10^4	1.808	0.037	0.038	0.006	1.889	8.228×10^3
20.0 GeV	2.011×10^4	1.849	0.057	0.062	0.008	1.976	1.133×10^4
30.0 GeV	3.011×10^4	1.892	0.093	0.109	0.011	2.106	1.623×10^4
40.0 GeV	4.011×10^4	1.921	0.131	0.161	0.015	2.229	2.084×10^4
80.0 GeV	8.011×10^4	1.985	0.297	0.388	0.029	2.700	3.712×10^4
100. GeV	1.001×10^5	2.005	0.385	0.510	0.037	2.938	4.422×10^4
140. GeV	1.401×10^5	2.035	0.565	0.762	0.051	3.414	5.684×10^4
199. GeV	1.989×10^5	2.065	0.841	1.153	0.072	4.132	*Muon critical energy*
200. GeV	2.001×10^5	2.066	0.847	1.161	0.072	4.147	7.277×10^4
300. GeV	3.001×10^5	2.101	1.328	1.828	0.108	5.367	9.392×10^4
400. GeV	4.001×10^5	2.126	1.826	2.520	0.144	6.617	1.107×10^5
800. GeV	8.001×10^5	2.186	3.879	5.356	0.292	11.715	1.555×10^5
1.00 TeV	1.000×10^6	2.206	4.934	6.808	0.367	14.316	1.710×10^5
1.40 TeV	1.400×10^6	2.236	7.047	9.702	0.520	19.506	1.948×10^5
2.00 TeV	2.000×10^6	2.268	10.280	14.119	0.752	27.420	2.206×10^5
3.00 TeV	3.000×10^6	2.305	15.675	21.460	1.150	40.591	2.504×10^5
4.00 TeV	4.000×10^6	2.332	21.142	28.878	1.555	53.908	2.717×10^5
8.00 TeV	8.000×10^6	2.397	43.180	58.699	3.233	107.511	3.233×10^5
10.0 TeV	1.000×10^7	2.419	54.284	73.690	4.095	134.488	3.399×10^5
14.0 TeV	1.400×10^7	2.452	76.431	103.598	5.865	188.347	3.649×10^5
20.0 TeV	2.000×10^7	2.487	109.845	148.653	8.578	269.565	3.914×10^5
30.0 TeV	3.000×10^7	2.528	165.471	223.616	13.269	404.886	4.214×10^5
40.0 TeV	4.000×10^7	2.558	221.294	298.757	18.074	540.683	4.427×10^5
80.0 TeV	8.000×10^7	2.630	444.905	599.527	38.150	1085.214	4.939×10^5
100. TeV	1.000×10^8	2.654	556.893	750.049	48.525	1358.124	5.104×10^5