Table 307: Muons in Lawrencium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
103 (Lr)	[262.110 (2)]	??	1034.0	0.26710	3.0000	0.6045	3.0000	6.4555	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	3.583				3.583	1.650×10^0
14.0 MeV	5.616×10^1	2.882				2.882	2.906×10^0
20.0 MeV	6.802×10^1	2.312				2.312	5.253×10^0
30.0 MeV	8.509×10^1	1.839				1.839	1.016×10^1
40.0 MeV	1.003×10^2	1.595				1.595	1.603×10^1
80.0 MeV	1.527×10^2	1.236				1.236	4.534×10^1
100. MeV	1.764×10^2	1.174				1.174	6.198×10^1
140. MeV	2.218×10^2	1.117				1.117	9.706×10^1
200. MeV	2.868×10^2	1.096				1.096	1.515×10^2
209. MeV	2.968×10^2	1.096	0.000			1.096	*Minimum ionization*
300. MeV	3.917×10^2	1.109	0.000		0.000	1.110	2.423×10^2
400. MeV	4.945×10^2	1.136	0.000		0.000	1.137	3.314×10^2
800. MeV	8.995×10^2	1.232	0.001		0.000	1.234	6.681×10^2
1.00 GeV	1.101×10^3	1.268	0.002		0.000	1.270	8.278×10^2
1.40 GeV	1.502×10^3	1.323	0.003		0.000	1.326	1.136×10^3
2.00 GeV	2.103×10^3	1.381	0.005	0.001	0.001	1.387	1.577×10^3
3.00 GeV	3.104×10^3	1.445	0.008	0.003	0.001	1.458	2.279×10^3
4.00 GeV	4.104×10^3	1.488	0.012	0.006	0.001	1.509	2.953×10^3
8.00 GeV	8.105×10^3	1.584	0.031	0.024	0.003	1.642	5.484×10^3
10.0 GeV	1.011×10^4	1.612	0.041	0.035	0.004	1.692	6.684×10^3
14.0 GeV	1.411×10^4	1.652	0.062	0.057	0.005	1.777	8.989×10^3
20.0 GeV	2.011×10^4	1.691	0.097	0.096	0.007	1.891	1.226×10^4
30.0 GeV	3.011×10^4	1.732	0.158	0.170	0.011	2.072	1.731×10^4
40.0 GeV	4.011×10^4	1.759	0.224	0.252	0.014	2.250	2.194×10^4
80.0 GeV	8.011×10^4	1.819	0.507	0.616	0.027	2.971	3.737×10^4
100. GeV	1.001×10^5	1.838	0.656	0.813	0.034	3.342	4.371×10^4
120. GeV	1.197×10^5	1.853	0.805	1.008	0.040	3.707	*Muon critical energy*
140. GeV	1.401×10^5	1.865	0.963	1.218	0.047	4.095	5.451×10^4
200. GeV	2.001×10^5	1.894	1.443	1.860	0.067	5.266	6.741×10^4
300. GeV	3.001×10^5	1.927	2.262	2.932	0.100	7.223	8.357×10^4
400. GeV	4.001×10^5	1.950	3.108	4.043	0.134	9.236	9.579×10^4
800. GeV	8.001×10^5	2.006	6.594	8.600	0.270	17.472	1.268×10^5
1.00 TeV	1.000×10^6	2.025	8.383	10.931	0.339	21.680	1.370×10^5
1.40 TeV	1.400×10^6	2.052	11.966	15.578	0.480	30.078	1.526×10^5
2.00 TeV	2.000×10^6	2.082	17.441	22.669	0.694	42.889	1.693×10^5
3.00 TeV	3.000×10^6	2.117	26.573	34.451	1.061	64.203	1.882×10^5
4.00 TeV	4.000×10^6	2.142	35.820	46.357	1.433	85.754	2.016×10^5
8.00 TeV	8.000×10^6	2.202	73.072	94.210	2.974	172.460	2.339×10^5
10.0 TeV	1.000×10^7	2.223	91.831	118.260	3.764	216.080	2.442×10^5
14.0 TeV	1.400×10^7	2.253	129.246	166.250	5.385	303.137	2.598×10^5
20.0 TeV	2.000×10^7	2.286	185.670	238.540	7.868	434.366	2.762×10^5
30.0 TeV	3.000×10^7	2.324	279.694	358.798	12.155	652.974	2.949×10^5
40.0 TeV	4.000×10^7	2.352	374.051	479.331	16.541	872.277	3.081×10^5
80.0 TeV	8.000×10^7	2.419	751.448	961.805	34.837	1750.511	3.398×10^5
100. TeV	1.000×10^8	2.442	940.260	1203.260	44.280	2190.244	3.500×10^5