Table 077: Muons in Iridium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
77 (Ir)	192.217 (3)	22.420	757.0	0.12690	2.9658	0.0819	3.5480	5.3418	0.10

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	3.944				3.944	1.470×10^0
14.0 MeV	5.616×10^1	3.143				3.143	2.616×10^0
20.0 MeV	6.802×10^1	2.502				2.502	4.778×10^0
30.0 MeV	8.509×10^1	1.975				1.975	9.334×10^0
40.0 MeV	1.003×10^2	1.704				1.705	1.482×10^1
80.0 MeV	1.527×10^2	1.307				1.307	4.242×10^1
100. MeV	1.764×10^2	1.237				1.237	5.818×10^1
140. MeV	2.218×10^2	1.169				1.169	9.160×10^1
200. MeV	2.868×10^2	1.137				1.137	1.438×10^2
239. MeV	3.285×10^2	1.134	0.000			1.134	*Minimum ionization*
300. MeV	3.917×10^2	1.138	0.000		0.000	1.139	2.319×10^2
400. MeV	4.945×10^2	1.157	0.000		0.000	1.157	3.190×10^2
800. MeV	8.995×10^2	1.236	0.001		0.000	1.237	6.528×10^2
1.00 GeV	1.101×10^3	1.267	0.001		0.000	1.269	8.123×10^2
1.40 GeV	1.502×10^3	1.318	0.002		0.001	1.321	1.121×10^3
2.00 GeV	2.103×10^3	1.372	0.004	0.001	0.001	1.378	1.565×10^3
3.00 GeV	3.104×10^3	1.433	0.007	0.003	0.001	1.445	2.273×10^3
4.00 GeV	4.104×10^3	1.475	0.010	0.006	0.002	1.494	2.953×10^3
8.00 GeV	8.105×10^3	1.572	0.024	0.021	0.003	1.621	5.514×10^3
10.0 GeV	1.011×10^4	1.601	0.032	0.030	0.004	1.667	6.730×10^3
14.0 GeV	1.411×10^4	1.642	0.049	0.050	0.005	1.746	9.073×10^3
20.0 GeV	2.011×10^4	1.684	0.076	0.081	0.007	1.849	1.241×10^4
30.0 GeV	3.011×10^4	1.728	0.124	0.143	0.011	2.006	1.760×10^4
40.0 GeV	4.011×10^4	1.757	0.175	0.211	0.014	2.158	2.240×10^4
80.0 GeV	8.011×10^4	1.822	0.395	0.509	0.028	2.756	3.876×10^4
100. GeV	1.001×10^5	1.842	0.512	0.670	0.035	3.060	4.565×10^4
140. GeV	1.401×10^5	1.871	0.752	1.001	0.048	3.674	5.757×10^4
145. GeV	1.450×10^5	1.874	0.782	1.043	0.050	3.749	*Muon critical energy*
200. GeV	2.001×10^5	1.901	1.127	1.526	0.069	4.624	7.210×10^4
300. GeV	3.001×10^5	1.934	1.766	2.402	0.103	6.207	9.072×10^4
400. GeV	4.001×10^5	1.958	2.427	3.310	0.137	7.834	1.050×10^5
800. GeV	8.001×10^5	2.015	5.154	7.032	0.278	14.480	1.420×10^5
1.00 TeV	1.000×10^6	2.034	6.554	8.935	0.349	17.873	1.544×10^5
1.40 TeV	1.400×10^6	2.062	9.358	12.731	0.494	24.647	1.734×10^5
2.00 TeV	2.000×10^6	2.093	13.645	18.523	0.714	34.977	1.938×10^5
3.00 TeV	3.000×10^6	2.128	20.800	28.146	1.092	52.167	2.170×10^5
4.00 TeV	4.000×10^6	2.153	28.046	37.871	1.475	69.547	2.336×10^5
8.00 TeV	8.000×10^6	2.215	57.250	76.956	3.062	139.485	2.734×10^5
10.0 TeV	1.000×10^7	2.236	71.960	96.601	3.877	174.675	2.862×10^5
14.0 TeV	1.400×10^7	2.267	101.301	135.799	5.549	244.917	3.054×10^5
20.0 TeV	2.000×10^7	2.300	145.558	194.844	8.110	350.814	3.258×10^5
30.0 TeV	3.000×10^7	2.339	219.236	293.077	12.531	527.185	3.489×10^5
40.0 TeV	4.000×10^7	2.367	293.165	391.537	17.055	704.125	3.652×10^5
80.0 TeV	8.000×10^7	2.436	589.275	785.647	35.934	1413.294	4.045×10^5
100. TeV	1.000×10^8	2.459	737.560	982.880	45.680	1768.581	4.172×10^5