Table 321: Muons in Element 117

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
117 (Un)	[294. (9)]	??	1227.0	0.29274	3.0000	0.7120	3.0000	6.7851	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	3.439				3.439	1.749×10^0
14.0 MeV	5.616×10^1	2.789				2.789	3.051×10^0
20.0 MeV	6.802×10^1	2.251				2.252	5.468×10^0
30.0 MeV	8.509×10^1	1.800				1.800	1.049×10^1
40.0 MeV	1.003×10^2	1.565				1.565	1.648×10^1
80.0 MeV	1.527×10^2	1.219				1.219	4.626×10^1
100. MeV	1.764×10^2	1.159				1.159	6.312×10^1
140. MeV	2.218×10^2	1.105				1.105	9.860×10^1
200. MeV	2.868×10^2	1.086	0.000			1.086	1.535×10^2
206. MeV	2.933×10^2	1.086	0.000			1.086	*Minimum ionization*
300. MeV	3.917×10^2	1.101	0.000		0.000	1.101	2.452×10^2
400. MeV	4.945×10^2	1.129	0.000		0.000	1.130	3.349×10^2
800. MeV	8.995×10^2	1.233	0.001		0.000	1.235	6.724×10^2
1.00 GeV	1.101×10^3	1.271	0.002		0.000	1.273	8.318×10^2
1.40 GeV	1.502×10^3	1.329	0.003		0.000	1.333	1.138×10^3
2.00 GeV	2.103×10^3	1.390	0.005		0.001	1.396	1.578×10^3
3.00 GeV	3.104×10^3	1.457	0.009	0.003	0.001	1.470	2.274×10^3
4.00 GeV	4.104×10^3	1.502	0.014	0.006	0.001	1.524	2.942×10^3
8.00 GeV	8.105×10^3	1.601	0.034	0.025	0.003	1.663	5.444×10^3
10.0 GeV	1.011×10^4	1.630	0.045	0.036	0.004	1.716	6.628×10^3
14.0 GeV	1.411×10^4	1.671	0.069	0.060	0.005	1.806	8.898×10^3
20.0 GeV	2.011×10^4	1.711	0.108	0.101	0.007	1.928	1.211×10^4
30.0 GeV	3.011×10^4	1.753	0.177	0.182	0.010	2.123	1.705×10^4
40.0 GeV	4.011×10^4	1.780	0.250	0.270	0.014	2.316	2.156×10^4
80.0 GeV	8.011×10^4	1.842	0.565	0.665	0.027	3.100	3.645×10^4
100. GeV	1.001×10^5	1.861	0.732	0.878	0.033	3.506	4.251×10^4
112. GeV	1.117×10^5	1.870	0.830	1.003	0.037	3.741	*Muon critical energy*
140. GeV	1.401×10^5	1.888	1.075	1.318	0.046	4.329	5.277×10^4
200. GeV	2.001×10^5	1.918	1.611	2.016	0.066	5.612	6.491×10^4
300. GeV	3.001×10^5	1.951	2.523	3.181	0.099	7.756	8.002×10^4
400. GeV	4.001×10^5	1.974	3.466	4.390	0.132	9.964	9.137×10^4
800. GeV	8.001×10^5	2.031	7.353	9.346	0.266	18.999	1.200×10^5
1.00 TeV	1.000×10^6	2.050	9.347	11.882	0.335	23.615	1.294×10^5
1.40 TeV	1.400×10^6	2.078	13.339	16.936	0.474	32.829	1.437×10^5
2.00 TeV	2.000×10^6	2.108	19.439	24.651	0.685	46.886	1.589×10^5
3.00 TeV	3.000×10^6	2.143	29.612	37.468	1.047	70.272	1.762×10^5
4.00 TeV	4.000×10^6	2.168	39.912	50.421	1.414	93.917	1.885×10^5
8.00 TeV	8.000×10^6	2.230	81.397	102.481	2.935	189.045	2.179×10^5
10.0 TeV	1.000×10^7	2.250	102.285	128.646	3.715	236.899	2.274×10^5
14.0 TeV	1.400×10^7	2.281	143.947	180.856	5.314	332.401	2.415×10^5
20.0 TeV	2.000×10^7	2.314	206.770	259.504	7.764	476.355	2.565×10^5
30.0 TeV	3.000×10^7	2.353	311.456	390.335	11.994	716.141	2.735×10^5
40.0 TeV	4.000×10^7	2.381	416.505	521.468	16.321	956.678	2.856×10^5
80.0 TeV	8.000×10^7	2.449	836.650	1046.354	34.367	1919.823	3.145×10^5
100. TeV	1.000×10^8	2.472	1046.840	1309.030	43.680	2402.024	3.238×10^5