Table 092: Muons in Uranium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
92 (U)	[238.02891 (3)]	18.950	890.0	0.19677	2.8171	0.2260	3.3721	5.8694	0.14

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	3.665				3.665	1.595×10^0
14.0 MeV	5.616×10^1	2.933				2.933	2.826×10^0
20.0 MeV	6.802×10^1	2.342				2.342	5.138×10^0
30.0 MeV	8.509×10^1	1.855				1.855	9.995×10^0
40.0 MeV	1.003×10^2	1.604				1.604	1.583×10^1
80.0 MeV	1.527×10^2	1.234				1.234	4.509×10^1
100. MeV	1.764×10^2	1.169				1.169	6.178×10^1
140. MeV	2.218×10^2	1.109				1.109	9.707×10^1
200. MeV	2.868×10^2	1.083				1.083	1.520×10^2
227. MeV	3.154×10^2	1.081	0.000			1.082	*Minimum ionization*
300. MeV	3.917×10^2	1.089	0.000		0.000	1.089	2.443×10^2
400. MeV	4.945×10^2	1.109	0.000		0.000	1.109	3.353×10^2
800. MeV	8.995×10^2	1.191	0.001		0.000	1.192	6.824×10^2
1.00 GeV	1.101×10^3	1.223	0.002		0.000	1.225	8.478×10^2
1.40 GeV	1.502×10^3	1.273	0.003		0.001	1.277	1.167×10^3
2.00 GeV	2.103×10^3	1.328	0.004	0.001	0.001	1.334	1.627×10^3
3.00 GeV	3.104×10^3	1.389	0.007	0.003	0.001	1.402	2.357×10^3
4.00 GeV	4.104×10^3	1.431	0.011	0.006	0.002	1.451	3.057×10^3
8.00 GeV	8.105×10^3	1.527	0.027	0.023	0.003	1.580	5.688×10^3
10.0 GeV	1.011×10^4	1.555	0.036	0.032	0.004	1.628	6.935×10^3
14.0 GeV	1.411×10^4	1.596	0.055	0.053	0.005	1.711	9.330×10^3
20.0 GeV	2.011×10^4	1.637	0.086	0.088	0.007	1.819	1.273×10^4
30.0 GeV	3.011×10^4	1.680	0.140	0.156	0.011	1.988	1.798×10^4
40.0 GeV	4.011×10^4	1.708	0.198	0.230	0.014	2.152	2.282×10^4
80.0 GeV	8.011×10^4	1.771	0.449	0.560	0.027	2.808	3.904×10^4
100. GeV	1.001×10^5	1.790	0.581	0.738	0.034	3.145	4.577×10^4
128. GeV	1.284×10^5	1.810	0.772	0.995	0.043	3.623	*Muon critical energy*
140. GeV	1.401×10^5	1.818	0.853	1.105	0.047	3.824	5.729×10^4
200. GeV	2.001×10^5	1.846	1.278	1.686	0.067	4.879	7.116×10^4
300. GeV	3.001×10^5	1.878	2.004	2.655	0.101	6.640	8.867×10^4
400. GeV	4.001×10^5	1.901	2.753	3.660	0.135	8.451	1.020×10^5
800. GeV	8.001×10^5	1.956	5.844	7.781	0.272	15.855	1.360×10^5
1.00 TeV	1.000×10^6	1.974	7.430	9.888	0.342	19.637	1.473×10^5
1.40 TeV	1.400×10^6	2.002	10.607	14.090	0.484	27.185	1.646×10^5
2.00 TeV	2.000×10^6	2.031	15.463	20.503	0.700	38.699	1.830×10^5
3.00 TeV	3.000×10^6	2.065	23.564	31.156	1.070	57.858	2.040×10^5
4.00 TeV	4.000×10^6	2.089	31.769	41.921	1.446	77.228	2.189×10^5
8.00 TeV	8.000×10^6	2.149	64.824	85.189	3.001	155.165	2.547×10^5
10.0 TeV	1.000×10^7	2.169	81.471	106.935	3.799	194.376	2.662×10^5
14.0 TeV	1.400×10^7	2.199	114.675	150.327	5.436	272.640	2.835×10^5
20.0 TeV	2.000×10^7	2.232	164.754	215.690	7.944	390.622	3.018×10^5
30.0 TeV	3.000×10^7	2.269	248.123	324.427	12.273	587.094	3.225×10^5
40.0 TeV	4.000×10^7	2.296	331.768	433.413	16.702	784.182	3.372×10^5
80.0 TeV	8.000×10^7	2.363	666.782	869.666	35.176	1573.988	3.725×10^5
100. TeV	1.000×10^8	2.385	834.540	1087.990	44.710	1969.627	3.838×10^5