Muons in berkelium (Bk)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
97 (Bk)	[247.07031 (4)]	??	952.0	0.25556	3.0000	0.5509	3.0000	6.2912	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	3.662				3.662	1.604×10^0
14.0 MeV	5.616×10^1	2.938				2.938	2.834×10^0
20.0 MeV	6.802×10^1	2.351				2.351	5.140×10^0
30.0 MeV	8.509×10^1	1.866				1.866	9.973×10^0
40.0 MeV	1.003×10^2	1.616				1.616	1.576×10^1
80.0 MeV	1.527×10^2	1.250				1.251	4.472×10^1
100. MeV	1.764×10^2	1.187				1.187	6.117×10^1
140. MeV	2.218×10^2	1.129				1.129	9.588×10^1
200. MeV	2.868×10^2	1.106				1.107	1.497×10^2
212. MeV	2.999×10^2	1.106	0.000			1.106	*Minimum ionization*
300. MeV	3.917×10^2	1.119	0.000		0.000	1.119	2.398×10^2
400. MeV	4.945×10^2	1.145	0.000		0.000	1.145	3.281×10^2
800. MeV	8.995×10^2	1.237	0.001		0.000	1.239	6.631×10^2
1.00 GeV	1.101×10^3	1.272	0.002		0.000	1.274	8.222×10^2
1.40 GeV	1.502×10^3	1.326	0.003		0.000	1.329	1.129×10^3
2.00 GeV	2.103×10^3	1.383	0.005	0.001	0.001	1.389	1.570×10^3
3.00 GeV	3.104×10^3	1.446	0.008	0.003	0.001	1.459	2.271×10^3
4.00 GeV	4.104×10^3	1.489	0.012	0.006	0.002	1.509	2.945×10^3
8.00 GeV	8.105×10^3	1.583	0.029	0.024	0.003	1.639	5.478×10^3
10.0 GeV	1.011×10^4	1.611	0.038	0.034	0.004	1.688	6.680×10^3
14.0 GeV	1.411×10^4	1.651	0.059	0.056	0.005	1.771	8.992×10^3
20.0 GeV	2.011×10^4	1.690	0.091	0.092	0.007	1.882	1.228×10^4
30.0 GeV	3.011×10^4	1.730	0.150	0.164	0.011	2.056	1.736×10^4
40.0 GeV	4.011×10^4	1.757	0.212	0.242	0.014	2.227	2.203×10^4
80.0 GeV	8.011×10^4	1.818	0.479	0.591	0.027	2.916	3.769×10^4
100. GeV	1.001×10^5	1.836	0.620	0.779	0.034	3.271	4.416×10^4
125. GeV	1.248×10^5	1.854	0.798	1.015	0.042	3.711	*Muon critical energy*
140. GeV	1.401×10^5	1.864	0.911	1.166	0.047	3.989	5.522×10^4
200. GeV	2.001×10^5	1.893	1.364	1.780	0.067	5.106	6.850×10^4
300. GeV	3.001×10^5	1.925	2.138	2.805	0.101	6.971	8.521×10^4
400. GeV	4.001×10^5	1.948	2.938	3.867	0.134	8.889	9.788×10^4
800. GeV	8.001×10^5	2.004	6.235	8.222	0.271	16.735	1.302×10^5
1.00 TeV	1.000×10^6	2.023	7.927	10.449	0.341	20.742	1.409×10^5
1.40 TeV	1.400×10^6	2.051	11.316	14.891	0.483	28.742	1.572×10^5
2.00 TeV	2.000×10^6	2.080	16.495	21.668	0.698	40.943	1.746×10^5
3.00 TeV	3.000×10^6	2.115	25.134	32.928	1.067	61.246	1.945×10^5
4.00 TeV	4.000×10^6	2.140	33.883	44.307	1.441	81.772	2.085×10^5
8.00 TeV	8.000×10^6	2.201	69.129	90.039	2.991	164.361	2.424×10^5
10.0 TeV	1.000×10^7	2.221	86.879	113.023	3.786	205.911	2.532×10^5
14.0 TeV	1.400×10^7	2.251	122.282	158.887	5.417	288.838	2.695×10^5
20.0 TeV	2.000×10^7	2.284	175.674	227.972	7.914	413.846	2.868×10^5
30.0 TeV	3.000×10^7	2.322	264.646	342.902	12.227	622.099	3.064×10^5
40.0 TeV	4.000×10^7	2.350	353.935	458.095	16.639	831.021	3.202×10^5
80.0 TeV	8.000×10^7	2.417	711.071	919.187	35.048	1667.725	3.535×10^5
100. TeV	1.000×10^8	2.439	889.750	1149.940	44.550	2086.682	3.642×10^5