Muons in terbium (Tb)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
65 (Tb)	158.92535(2)	8.230	614.0	0.24453	2.6056	0.0947	3.4224	5.9044	0.14

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	4.211				4.212	1.363×10^0
14.0 MeV	5.616×10^1	3.342				3.342	2.440×10^0
20.0 MeV	6.802×10^1	2.650				2.650	4.477×10^0
30.0 MeV	8.509×10^1	2.085				2.085	8.786×10^0
40.0 MeV	1.003×10^2	1.796				1.796	1.399×10^1
80.0 MeV	1.527×10^2	1.371				1.371	4.026×10^1
100. MeV	1.764×10^2	1.297				1.297	5.529×10^1
140. MeV	2.218×10^2	1.225				1.225	8.715×10^1
200. MeV	2.868×10^2	1.192				1.192	1.370×10^2
239. MeV	3.285×10^2	1.188	0.000			1.188	*Minimum ionization*
300. MeV	3.917×10^2	1.193	0.000		0.000	1.194	2.210×10^2
400. MeV	4.945×10^2	1.212	0.000		0.000	1.213	3.041×10^2
800. MeV	8.995×10^2	1.297	0.001		0.000	1.298	6.225×10^2
1.00 GeV	1.101×10^3	1.330	0.001		0.000	1.332	7.746×10^2
1.40 GeV	1.502×10^3	1.383	0.002	0.000	0.001	1.386	1.069×10^3
2.00 GeV	2.103×10^3	1.441	0.003	0.001	0.001	1.447	1.492×10^3
3.00 GeV	3.104×10^3	1.507	0.006	0.003	0.001	1.517	2.166×10^3
4.00 GeV	4.104×10^3	1.552	0.009	0.006	0.002	1.569	2.813×10^3
8.00 GeV	8.105×10^3	1.655	0.021	0.020	0.003	1.700	5.253×10^3
10.0 GeV	1.011×10^4	1.686	0.028	0.028	0.004	1.746	6.413×10^3
14.0 GeV	1.411×10^4	1.731	0.043	0.045	0.005	1.824	8.653×10^3
20.0 GeV	2.011×10^4	1.775	0.066	0.074	0.007	1.923	1.185×10^4
30.0 GeV	3.011×10^4	1.822	0.108	0.129	0.011	2.071	1.686×10^4
40.0 GeV	4.011×10^4	1.853	0.153	0.189	0.015	2.210	2.153×10^4
80.0 GeV	8.011×10^4	1.921	0.346	0.455	0.028	2.752	3.771×10^4
100. GeV	1.001×10^5	1.942	0.448	0.598	0.035	3.024	4.465×10^4
140. GeV	1.401×10^5	1.972	0.657	0.893	0.049	3.573	5.680×10^4
169. GeV	1.690×10^5	1.988	0.814	1.116	0.059	3.977	*Muon critical energy*
200. GeV	2.001×10^5	2.002	0.985	1.361	0.070	4.419	7.188×10^4
300. GeV	3.001×10^5	2.036	1.545	2.141	0.105	5.828	9.154×10^4
400. GeV	4.001×10^5	2.061	2.123	2.950	0.140	7.274	1.069×10^5
800. GeV	8.001×10^5	2.119	4.510	6.265	0.282	13.178	1.472×10^5
1.00 TeV	1.000×10^6	2.138	5.735	7.961	0.355	16.191	1.608×10^5
1.40 TeV	1.400×10^6	2.167	8.191	11.343	0.502	22.206	1.819×10^5
2.00 TeV	2.000×10^6	2.198	11.947	16.504	0.727	31.378	2.045×10^5
3.00 TeV	3.000×10^6	2.234	18.216	25.079	1.111	46.641	2.305×10^5
4.00 TeV	4.000×10^6	2.260	24.567	33.745	1.501	62.074	2.490×10^5
8.00 TeV	8.000×10^6	2.323	50.166	68.576	3.117	124.184	2.937×10^5
10.0 TeV	1.000×10^7	2.344	63.063	86.083	3.947	155.439	3.080×10^5
14.0 TeV	1.400×10^7	2.376	88.788	121.016	5.649	217.831	3.297×10^5
20.0 TeV	2.000×10^7	2.410	127.596	173.638	8.258	311.904	3.526×10^5
30.0 TeV	3.000×10^7	2.450	192.201	261.186	12.763	468.601	3.785×10^5
40.0 TeV	4.000×10^7	2.478	257.032	348.937	17.372	625.821	3.969×10^5
80.0 TeV	8.000×10^7	2.549	516.724	700.186	36.609	1256.069	4.412×10^5
100. TeV	1.000×10^8	2.572	646.780	875.970	46.540	1571.864	4.554×10^5