Muons in scandium (Sc)

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
21 (Sc)	44.955908(5)	2.989	216.0	0.15754	3.0517	0.1640	3.0593	4.6949	0.10

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	5.769				5.770	9.712×10^{-1}
14.0 MeV	5.616×10^1	4.529				4.529	1.762×10^0
20.0 MeV	6.802×10^1	3.557				3.557	3.273×10^0
30.0 MeV	8.509×10^1	2.775				2.775	6.499×10^0
40.0 MeV	1.003×10^2	2.377				2.377	1.042×10^1
80.0 MeV	1.527×10^2	1.796				1.796	3.038×10^1
100. MeV	1.764×10^2	1.692				1.692	4.188×10^1
140. MeV	2.218×10^2	1.588				1.588	6.640×10^1
200. MeV	2.868×10^2	1.534				1.535	1.050×10^2
267. MeV	3.577×10^2	1.522			0.000	1.522	*Minimum ionization*
300. MeV	3.917×10^2	1.523			0.000	1.524	1.705×10^2
400. MeV	4.945×10^2	1.539	0.000		0.000	1.539	2.359×10^2
800. MeV	8.995×10^2	1.622	0.000		0.000	1.623	4.888×10^2
1.00 GeV	1.101×10^3	1.656	0.001		0.000	1.657	6.108×10^2
1.40 GeV	1.502×10^3	1.711	0.001	0.000	0.001	1.713	8.480×10^2
2.00 GeV	2.103×10^3	1.771	0.001	0.001	0.001	1.774	1.192×10^3
3.00 GeV	3.104×10^3	1.838	0.002	0.002	0.001	1.844	1.744×10^3
4.00 GeV	4.104×10^3	1.884	0.004	0.003	0.002	1.893	2.279×10^3
8.00 GeV	8.105×10^3	1.989	0.009	0.009	0.004	2.010	4.322×10^3
10.0 GeV	1.011×10^4	2.020	0.011	0.012	0.004	2.048	5.308×10^3
14.0 GeV	1.411×10^4	2.065	0.017	0.019	0.006	2.108	7.231×10^3
20.0 GeV	2.011×10^4	2.110	0.027	0.032	0.008	2.178	1.003×10^4
30.0 GeV	3.011×10^4	2.158	0.044	0.055	0.012	2.270	1.452×10^4
40.0 GeV	4.011×10^4	2.189	0.062	0.080	0.016	2.349	1.885×10^4
80.0 GeV	8.011×10^4	2.261	0.141	0.193	0.031	2.627	3.493×10^4
100. GeV	1.001×10^5	2.283	0.183	0.253	0.039	2.759	4.236×10^4
140. GeV	1.401×10^5	2.316	0.269	0.379	0.054	3.018	5.621×10^4
200. GeV	2.001×10^5	2.350	0.403	0.578	0.077	3.409	7.491×10^4
300. GeV	3.001×10^5	2.389	0.634	0.912	0.116	4.051	1.018×10^5
400. GeV	4.001×10^5	2.416	0.872	1.258	0.154	4.702	1.247×10^5
422. GeV	4.217×10^5	2.421	0.924	1.334	0.163	4.844	*Muon critical energy*
800. GeV	8.001×10^5	2.483	1.859	2.684	0.312	7.338	1.923×10^5
1.00 TeV	1.000×10^6	2.505	2.367	3.414	0.392	8.679	2.173×10^5
1.40 TeV	1.400×10^6	2.538	3.387	4.873	0.555	11.355	2.575×10^5
2.00 TeV	2.000×10^6	2.574	4.950	7.103	0.804	15.431	3.026×10^5
3.00 TeV	3.000×10^6	2.615	7.563	10.809	1.230	22.217	3.564×10^5
4.00 TeV	4.000×10^6	2.644	10.214	14.558	1.663	29.080	3.956×10^5
8.00 TeV	8.000×10^6	2.716	20.918	29.639	3.463	56.736	4.923×10^5
10.0 TeV	1.000×10^7	2.740	26.318	37.224	4.388	70.671	5.238×10^5
14.0 TeV	1.400×10^7	2.777	37.100	52.355	6.290	98.522	5.716×10^5
20.0 TeV	2.000×10^7	2.816	53.386	75.158	9.208	140.569	6.223×10^5
30.0 TeV	3.000×10^7	2.861	80.465	113.098	14.258	210.683	6.800×10^5
40.0 TeV	4.000×10^7	2.894	107.653	151.139	19.433	281.119	7.210×10^5
80.0 TeV	8.000×10^7	2.974	216.637	303.421	41.077	564.110	8.194×10^5
100. TeV	1.000×10^8	3.001	271.250	379.640	52.270	706.161	8.511×10^5