Table 051: Muons in Antimony

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
51 (Sb)	121.760 (1)	6.691	487.0	0.16652	2.9319	0.3189	3.3489	5.6241	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	4.516				4.516	1.262×10^0
14.0 MeV	5.616×10^1	3.573				3.573	2.268×10^0
20.0 MeV	6.802×10^1	2.826				2.826	4.176×10^0
30.0 MeV	8.509×10^1	2.220				2.220	8.221×10^0
40.0 MeV	1.003×10^2	1.910				1.911	1.311×10^1
80.0 MeV	1.527×10^2	1.458				1.458	3.780×10^1
100. MeV	1.764×10^2	1.377				1.377	5.195×10^1
140. MeV	2.218×10^2	1.300				1.300	8.198×10^1
200. MeV	2.868×10^2	1.264				1.264	1.290×10^2
242. MeV	3.316×10^2	1.259				1.259	*Minimum ionization*
300. MeV	3.917×10^2	1.264	0.000		0.000	1.264	2.083×10^2
400. MeV	4.945×10^2	1.283	0.000		0.000	1.283	2.868×10^2
800. MeV	8.995×10^2	1.367	0.001		0.000	1.368	5.883×10^2
1.00 GeV	1.101×10^3	1.401	0.001		0.000	1.402	7.326×10^2
1.40 GeV	1.502×10^3	1.454	0.002	0.000	0.001	1.457	1.012×10^3
2.00 GeV	2.103×10^3	1.512	0.003	0.001	0.001	1.517	1.415×10^3
3.00 GeV	3.104×10^3	1.577	0.005	0.003	0.001	1.586	2.059×10^3
4.00 GeV	4.104×10^3	1.621	0.007	0.005	0.002	1.636	2.679×10^3
8.00 GeV	8.105×10^3	1.722	0.017	0.017	0.003	1.760	5.027×10^3
10.0 GeV	1.011×10^4	1.753	0.023	0.024	0.004	1.804	6.149×10^3
14.0 GeV	1.411×10^4	1.796	0.035	0.038	0.005	1.875	8.323×10^3
20.0 GeV	2.011×10^4	1.839	0.054	0.062	0.008	1.964	1.145×10^4
30.0 GeV	3.011×10^4	1.884	0.089	0.108	0.011	2.094	1.638×10^4
40.0 GeV	4.011×10^4	1.915	0.125	0.159	0.015	2.215	2.102×10^4
80.0 GeV	8.011×10^4	1.982	0.284	0.381	0.029	2.676	3.742×10^4
100. GeV	1.001×10^5	2.002	0.367	0.501	0.036	2.907	4.458×10^4
140. GeV	1.401×10^5	2.032	0.539	0.747	0.050	3.370	5.736×10^4
200. GeV	2.001×10^5	2.063	0.808	1.138	0.071	4.081	7.352×10^4
204. GeV	2.043×10^5	2.064	0.827	1.165	0.073	4.130	*Muon critical energy*
300. GeV	3.001×10^5	2.097	1.268	1.791	0.107	5.264	9.505×10^4
400. GeV	4.001×10^5	2.122	1.743	2.467	0.143	6.476	1.122×10^5
800. GeV	8.001×10^5	2.182	3.704	5.241	0.289	11.417	1.581×10^5
1.00 TeV	1.000×10^6	2.201	4.712	6.660	0.363	13.937	1.739×10^5
1.40 TeV	1.400×10^6	2.231	6.732	9.490	0.514	18.969	1.984×10^5
2.00 TeV	2.000×10^6	2.263	9.822	13.810	0.744	26.640	2.250×10^5
3.00 TeV	3.000×10^6	2.300	14.982	20.989	1.137	39.409	2.557×10^5
4.00 TeV	4.000×10^6	2.326	20.211	28.244	1.537	52.319	2.776×10^5
8.00 TeV	8.000×10^6	2.391	41.295	57.409	3.193	104.289	3.307×10^5
10.0 TeV	1.000×10^7	2.412	51.920	72.070	4.043	130.447	3.479×10^5
14.0 TeV	1.400×10^7	2.445	73.113	101.322	5.789	182.670	3.737×10^5
20.0 TeV	2.000×10^7	2.480	105.090	145.388	8.464	261.423	4.010×10^5
30.0 TeV	3.000×10^7	2.521	158.325	218.706	13.085	392.638	4.320×10^5
40.0 TeV	4.000×10^7	2.550	211.753	292.198	17.815	524.318	4.539×10^5
80.0 TeV	8.000×10^7	2.622	425.795	586.386	37.562	1052.366	5.067×10^5
100. TeV	1.000×10^8	2.646	533.000	733.620	47.760	1317.027	5.237×10^5