Muons in lung (ICRP)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.54965	1.050	75.3	0.08588	3.5353	0.2261	2.8001	3.4708	0.00

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	7.883				7.883	7.011×10^{-1}
14.0 MeV	5.616×10^1	6.149				6.149	1.282×10^0
20.0 MeV	6.802×10^1	4.802				4.802	2.399×10^0
30.0 MeV	8.509×10^1	3.726				3.726	4.796×10^0
40.0 MeV	1.003×10^2	3.181				3.181	7.720×10^0
80.0 MeV	1.527×10^2	2.389				2.389	2.269×10^1
100. MeV	1.764×10^2	2.247				2.247	3.135×10^1
140. MeV	2.218×10^2	2.093				2.093	4.988×10^1
200. MeV	2.868×10^2	2.004				2.005	7.929×10^1
300. MeV	3.917×10^2	1.971			0.000	1.971	1.297×10^2
318. MeV	4.105×10^2	1.970			0.000	1.971	*Minimum ionization*
400. MeV	4.945×10^2	1.977			0.000	1.977	1.804×10^2
800. MeV	8.995×10^2	2.052	0.000		0.000	2.053	3.790×10^2
1.00 GeV	1.101×10^3	2.086	0.000		0.000	2.087	4.757×10^2
1.40 GeV	1.502×10^3	2.142	0.000		0.001	2.143	6.647×10^2
2.00 GeV	2.103×10^3	2.203	0.001	0.000	0.001	2.205	9.405×10^2
3.00 GeV	3.104×10^3	2.272	0.001	0.001	0.001	2.276	1.386×10^3
4.00 GeV	4.104×10^3	2.321	0.001	0.001	0.002	2.325	1.821×10^3
8.00 GeV	8.105×10^3	2.431	0.004	0.003	0.004	2.442	3.494×10^3
10.0 GeV	1.011×10^4	2.465	0.005	0.005	0.005	2.479	4.307×10^3
14.0 GeV	1.411×10^4	2.514	0.007	0.008	0.007	2.536	5.901×10^3
20.0 GeV	2.011×10^4	2.563	0.011	0.013	0.009	2.597	8.238×10^3
30.0 GeV	3.011×10^4	2.616	0.019	0.023	0.013	2.671	1.203×10^4
40.0 GeV	4.011×10^4	2.652	0.026	0.033	0.018	2.729	1.573×10^4
80.0 GeV	8.011×10^4	2.735	0.060	0.080	0.034	2.910	2.990×10^4
100. GeV	1.001×10^5	2.761	0.077	0.106	0.042	2.987	3.669×10^4
140. GeV	1.401×10^5	2.800	0.114	0.159	0.059	3.132	4.976×10^4
200. GeV	2.001×10^5	2.840	0.172	0.243	0.084	3.339	6.831×10^4
300. GeV	3.001×10^5	2.886	0.271	0.387	0.125	3.669	9.686×10^4
400. GeV	4.001×10^5	2.918	0.375	0.536	0.167	3.995	1.230×10^5
800. GeV	8.001×10^5	2.997	0.804	1.157	0.337	5.295	2.096×10^5
1.00 TeV	1.000×10^6	3.022	1.026	1.478	0.423	5.950	2.453×10^5
1.03 TeV	1.031×10^6	3.026	1.061	1.528	0.437	6.052	*Muon critical energy*
1.40 TeV	1.400×10^6	3.061	1.473	2.117	0.601	7.252	3.061×10^5
2.00 TeV	2.000×10^6	3.103	2.160	3.096	0.870	9.229	3.792×10^5
3.00 TeV	3.000×10^6	3.151	3.312	4.726	1.332	12.521	4.719×10^5
4.00 TeV	4.000×10^6	3.186	4.484	6.378	1.803	15.851	5.428×10^5
8.00 TeV	8.000×10^6	3.271	9.228	13.033	3.764	29.296	7.256×10^5
10.0 TeV	1.000×10^7	3.299	11.627	16.385	4.774	36.085	7.870×10^5
14.0 TeV	1.400×10^7	3.342	16.416	23.063	6.855	49.676	8.811×10^5
20.0 TeV	2.000×10^7	3.388	23.660	33.136	10.052	70.237	9.822×10^5
30.0 TeV	3.000×10^7	3.441	35.722	49.897	15.602	104.662	1.098×10^6
40.0 TeV	4.000×10^7	3.480	47.848	66.711	21.298	139.338	1.181×10^6
80.0 TeV	8.000×10^7	3.574	96.489	134.024	45.204	279.292	1.379×10^6
100. TeV	1.000×10^8	3.606	120.879	167.720	57.597	349.802	1.443×10^6