

Table 120: Muons in Cortical bone (ICRP)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.52130	1.850	106.4	0.06198	3.5919	0.1161	3.0919	3.6488	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
10.0 MeV	4.704×10^1	7.142				7.142	7.765×10^{-1}		
14.0 MeV	5.616×10^1	5.581				5.581	1.417×10^0		
20.0 MeV	6.802×10^1	4.366				4.366	2.646×10^0		
30.0 MeV	8.509×10^1	3.393				3.393	5.281×10^0		
40.0 MeV	1.003×10^2	2.900				2.901	8.489×10^0		
80.0 MeV	1.527×10^2	2.179				2.179	2.489×10^1		
100. MeV	1.764×10^2	2.044				2.044	3.440×10^1		
140. MeV	2.218×10^2	1.907				1.907	5.475×10^1		
200. MeV	2.868×10^2	1.830				1.830	8.700×10^1		
300. MeV	3.917×10^2	1.803			0.000	1.803	1.422×10^2		
303. MeV	3.950×10^2	1.803			0.000	1.803	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	1.812			0.000	1.812	1.976×10^2		
800. MeV	8.995×10^2	1.888	0.000		0.000	1.889	4.138×10^2		
1.00 GeV	1.101×10^3	1.922	0.000		0.000	1.923	5.187×10^2		
1.40 GeV	1.502×10^3	1.976	0.000	0.000	0.001	1.978	7.237×10^2		
2.00 GeV	2.103×10^3	2.036	0.001	0.000	0.001	2.039	1.022×10^3		
3.00 GeV	3.104×10^3	2.105	0.001	0.001	0.001	2.108	1.504×10^3		
4.00 GeV	4.104×10^3	2.152	0.002	0.002	0.002	2.158	1.973×10^3		
8.00 GeV	8.105×10^3	2.260	0.005	0.005	0.004	2.274	3.773×10^3		
10.0 GeV	1.011×10^4	2.293	0.007	0.007	0.005	2.311	4.645×10^3		
14.0 GeV	1.411×10^4	2.340	0.010	0.011	0.006	2.368	6.354×10^3		
20.0 GeV	2.011×10^4	2.388	0.016	0.018	0.009	2.431	8.853×10^3		
30.0 GeV	3.011×10^4	2.439	0.026	0.031	0.013	2.510	1.290×10^4		
40.0 GeV	4.011×10^4	2.474	0.036	0.046	0.017	2.574	1.683×10^4		
80.0 GeV	8.011×10^4	2.553	0.082	0.111	0.033	2.780	3.176×10^4		
100. GeV	1.001×10^5	2.578	0.106	0.146	0.041	2.872	3.884×10^4		
140. GeV	1.401×10^5	2.614	0.157	0.219	0.058	3.048	5.235×10^4		
200. GeV	2.001×10^5	2.652	0.236	0.335	0.082	3.305	7.125×10^4		
300. GeV	3.001×10^5	2.696	0.371	0.530	0.123	3.720	9.975×10^4		
400. GeV	4.001×10^5	2.726	0.511	0.734	0.163	4.135	1.252×10^5		
749. GeV	7.492×10^5	2.794	1.018	1.467	0.309	5.588	<i>Muon critical energy</i>		
800. GeV	8.001×10^5	2.801	1.094	1.576	0.330	5.801	2.065×10^5		
1.00 TeV	1.000×10^6	2.825	1.394	2.009	0.415	6.644	2.387×10^5		
1.40 TeV	1.400×10^6	2.862	1.999	2.873	0.588	8.322	2.924×10^5		
2.00 TeV	2.000×10^6	2.902	2.926	4.195	0.851	10.875	3.553×10^5		
3.00 TeV	3.000×10^6	2.947	4.479	6.394	1.304	15.125	4.330×10^5		
4.00 TeV	4.000×10^6	2.980	6.056	8.622	1.765	19.423	4.912×10^5		
8.00 TeV	8.000×10^6	3.061	12.435	17.589	3.680	36.766	6.384×10^5		
10.0 TeV	1.000×10^7	3.088	15.657	22.103	4.667	45.515	6.872×10^5		
14.0 TeV	1.400×10^7	3.128	22.089	31.100	6.698	63.016	7.616×10^5		
20.0 TeV	2.000×10^7	3.172	31.812	44.665	9.817	89.467	8.411×10^5		
30.0 TeV	3.000×10^7	3.223	47.990	67.238	15.228	133.678	9.319×10^5		
40.0 TeV	4.000×10^7	3.259	64.243	89.878	20.778	178.159	9.965×10^5		
80.0 TeV	8.000×10^7	3.349	129.413	180.511	44.052	357.325	1.152×10^6		
100. TeV	1.000×10^8	3.378	162.080	225.877	56.108	447.445	1.202×10^6		