

Table 315: Muons in Roentgenium

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
111 (Rg)	[280.164 (5)]	??	1143.0	0.28162	3.0000	0.6672	3.0000	6.6477	0.00
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	3.505				3.505	1.703×10^0		
14.0 MeV	5.616×10^1	2.832				2.832	2.983×10^0		
20.0 MeV	6.802×10^1	2.280				2.280	5.367×10^0		
30.0 MeV	8.509×10^1	1.819				1.819	1.034×10^1		
40.0 MeV	1.003×10^2	1.579				1.579	1.627×10^1		
80.0 MeV	1.527×10^2	1.227				1.228	4.582×10^1		
100. MeV	1.764×10^2	1.167				1.167	6.258×10^1		
140. MeV	2.218×10^2	1.111				1.111	9.786×10^1		
200. MeV	2.868×10^2	1.091	0.000			1.091	1.525×10^2		
207. MeV	2.943×10^2	1.091	0.000			1.091	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.105	0.000		0.000	1.106	2.438×10^2		
400. MeV	4.945×10^2	1.133	0.000		0.000	1.134	3.331×10^2		
800. MeV	8.995×10^2	1.234	0.001		0.000	1.236	6.699×10^2		
1.00 GeV	1.101×10^3	1.271	0.002		0.000	1.273	8.293×10^2		
1.40 GeV	1.502×10^3	1.327	0.003		0.000	1.331	1.136×10^3		
2.00 GeV	2.103×10^3	1.387	0.005	0.000	0.001	1.394	1.576×10^3		
3.00 GeV	3.104×10^3	1.453	0.009	0.003	0.001	1.467	2.274×10^3		
4.00 GeV	4.104×10^3	1.497	0.014	0.007	0.001	1.520	2.943×10^3		
8.00 GeV	8.105×10^3	1.595	0.034	0.026	0.003	1.658	5.453×10^3		
10.0 GeV	1.011×10^4	1.624	0.045	0.037	0.004	1.711	6.640×10^3		
14.0 GeV	1.411×10^4	1.664	0.069	0.062	0.005	1.801	8.917×10^3		
20.0 GeV	2.011×10^4	1.704	0.108	0.103	0.007	1.923	1.214×10^4		
30.0 GeV	3.011×10^4	1.745	0.177	0.184	0.010	2.118	1.709×10^4		
40.0 GeV	4.011×10^4	1.773	0.250	0.274	0.014	2.312	2.161×10^4		
80.0 GeV	8.011×10^4	1.834	0.564	0.672	0.027	3.099	3.651×10^4		
100. GeV	1.001×10^5	1.853	0.731	0.887	0.034	3.507	4.258×10^4		
111. GeV	1.108×10^5	1.861	0.821	1.003	0.037	3.724	<i>Muon critical energy</i>		
140. GeV	1.401×10^5	1.880	1.073	1.330	0.047	4.333	5.282×10^4		
200. GeV	2.001×10^5	1.909	1.608	2.034	0.067	5.620	6.496×10^4		
300. GeV	3.001×10^5	1.942	2.520	3.208	0.100	7.772	8.004×10^4		
400. GeV	4.001×10^5	1.966	3.461	4.426	0.133	9.987	9.137×10^4		
800. GeV	8.001×10^5	2.022	7.342	9.418	0.269	19.053	1.199×10^5		
1.00 TeV	1.000×10^6	2.041	9.333	11.973	0.338	23.686	1.293×10^5		
1.40 TeV	1.400×10^6	2.069	13.319	17.064	0.478	32.933	1.436×10^5		
2.00 TeV	2.000×10^6	2.099	19.411	24.835	0.692	47.039	1.587×10^5		
3.00 TeV	3.000×10^6	2.134	29.571	37.745	1.057	70.509	1.760×10^5		
4.00 TeV	4.000×10^6	2.159	39.857	50.793	1.428	94.239	1.882×10^5		
8.00 TeV	8.000×10^6	2.220	81.292	103.230	2.963	189.708	2.175×10^5		
10.0 TeV	1.000×10^7	2.240	102.156	129.585	3.750	237.734	2.269×10^5		
14.0 TeV	1.400×10^7	2.271	143.769	182.174	5.366	333.582	2.411×10^5		
20.0 TeV	2.000×10^7	2.304	206.520	261.392	7.840	478.059	2.560×10^5		
30.0 TeV	3.000×10^7	2.343	311.086	393.174	12.112	718.717	2.730×10^5		
40.0 TeV	4.000×10^7	2.371	416.017	525.259	16.482	960.132	2.849×10^5		
80.0 TeV	8.000×10^7	2.439	835.699	1053.956	34.711	1926.808	3.138×10^5		
100. TeV	1.000×10^8	2.461	1045.660	1318.540	44.120	2410.784	3.230×10^5		