Table 316: Muons in Copernicium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
112 (Cp)	[287. (5)]	??	1156.0	0.28410	3.0000	0.6774	3.0000	6.6791	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	3.462				3.462	1.726×10^0
14.0 MeV	5.616×10^1	2.799				2.799	3.022×10^0
20.0 MeV	6.802×10^1	2.254				2.254	5.434×10^0
30.0 MeV	8.509×10^1	1.799				1.799	1.046×10^1
40.0 MeV	1.003×10^2	1.562				1.562	1.646×10^1
80.0 MeV	1.527×10^2	1.215				1.215	4.633×10^1
100. MeV	1.764×10^2	1.154				1.154	6.326×10^1
140. MeV	2.218×10^2	1.100				1.100	9.891×10^1
200. MeV	2.868×10^2	1.080	0.000			1.080	1.541×10^2
207. MeV	2.943×10^2	1.080	0.000			1.080	*Minimum ionization*
300. MeV	3.917×10^2	1.094	0.000		0.000	1.095	2.463×10^2
400. MeV	4.945×10^2	1.122	0.000		0.000	1.123	3.365×10^2
800. MeV	8.995×10^2	1.222	0.001		0.000	1.224	6.766×10^2
1.00 GeV	1.101×10^3	1.259	0.002		0.000	1.262	8.375×10^2
1.40 GeV	1.502×10^3	1.315	0.003		0.000	1.319	1.147×10^3
2.00 GeV	2.103×10^3	1.375	0.005	0.000	0.001	1.382	1.591×10^3
3.00 GeV	3.104×10^3	1.440	0.009	0.003	0.001	1.454	2.295×10^3
4.00 GeV	4.104×10^3	1.484	0.014	0.006	0.001	1.506	2.970×10^3
8.00 GeV	8.105×10^3	1.581	0.034	0.025	0.003	1.645	5.501×10^3
10.0 GeV	1.011×10^4	1.610	0.045	0.037	0.004	1.696	6.698×10^3
14.0 GeV	1.411×10^4	1.650	0.069	0.061	0.005	1.787	8.994×10^3
20.0 GeV	2.011×10^4	1.690	0.108	0.103	0.007	1.908	1.224×10^4
30.0 GeV	3.011×10^4	1.731	0.176	0.184	0.010	2.102	1.723×10^4
40.0 GeV	4.011×10^4	1.758	0.249	0.273	0.014	2.295	2.178×10^4
80.0 GeV	8.011×10^4	1.818	0.564	0.670	0.027	3.080	3.678×10^4
100. GeV	1.001×10^5	1.837	0.730	0.884	0.034	3.487	4.288×10^4
110. GeV	1.102×10^5	1.845	0.815	0.993	0.037	3.692	*Muon critical energy*
140. GeV	1.401×10^5	1.864	1.072	1.326	0.047	4.311	5.319×10^4
200. GeV	2.001×10^5	1.893	1.606	2.028	0.066	5.595	6.538×10^4
300. GeV	3.001×10^5	1.926	2.516	3.198	0.100	7.742	8.052×10^4
400. GeV	4.001×10^5	1.949	3.456	4.412	0.133	9.952	9.189×10^4
800. GeV	8.001×10^5	2.005	7.331	9.391	0.268	18.998	1.205×10^5
1.00 TeV	1.000×10^6	2.023	9.319	11.938	0.337	23.620	1.299×10^5
1.40 TeV	1.400×10^6	2.051	13.300	17.015	0.478	32.846	1.442×10^5
2.00 TeV	2.000×10^6	2.081	19.382	24.764	0.690	46.921	1.594×10^5
3.00 TeV	3.000×10^6	2.116	29.527	37.637	1.055	70.337	1.767×10^5
4.00 TeV	4.000×10^6	2.140	39.798	50.648	1.425	94.014	1.890×10^5
8.00 TeV	8.000×10^6	2.201	81.171	102.937	2.958	189.269	2.184×10^5
10.0 TeV	1.000×10^7	2.221	102.003	129.217	3.744	237.188	2.278×10^5
14.0 TeV	1.400×10^7	2.252	143.553	181.657	5.356	332.821	2.420×10^5
20.0 TeV	2.000×10^7	2.285	206.210	260.650	7.826	476.973	2.570×10^5
30.0 TeV	3.000×10^7	2.323	310.619	392.060	12.089	717.093	2.739×10^5
40.0 TeV	4.000×10^7	2.350	415.391	523.772	16.451	957.967	2.860×10^5
80.0 TeV	8.000×10^7	2.418	834.437	1050.969	34.647	1922.475	3.149×10^5
100. TeV	1.000×10^8	2.440	1044.080	1314.800	44.040	2405.363	3.241×10^5