

## Muons in copernicium (Cn)

Z	A [g/mol]	$\rho$ [g/cm <sup>3</sup> ]	I [eV]	a	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
112 (Cn)	[285.17712(5)]	??	1156.0	0.28410	3.0000	0.6774	3.0000	6.6791	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm <sup>2</sup> /g]	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
10.0 MeV	$4.704 \times 10^1$	3.462				3.462	$1.726 \times 10^0$		
14.0 MeV	$5.616 \times 10^1$	2.799				2.799	$3.022 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	2.254				2.254	$5.434 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	1.799				1.799	$1.046 \times 10^1$		
40.0 MeV	$1.003 \times 10^2$	1.562				1.562	$1.646 \times 10^1$		
80.0 MeV	$1.527 \times 10^2$	1.215				1.215	$4.633 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.154				1.154	$6.326 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.100				1.100	$9.891 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.080	0.000			1.080	$1.541 \times 10^2$		
207. MeV	$2.943 \times 10^2$	1.080	0.000			1.080	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.094	0.000		0.000	1.095	$2.463 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.122	0.000		0.000	1.123	$3.365 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.222	0.001		0.000	1.224	$6.766 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.259	0.002		0.000	1.262	$8.375 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.315	0.003		0.000	1.319	$1.147 \times 10^3$		
2.00 GeV	$2.103 \times 10^3$	1.375	0.005	0.000	0.001	1.382	$1.591 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.440	0.009	0.003	0.001	1.454	$2.295 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.484	0.014	0.006	0.001	1.506	$2.970 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	1.581	0.034	0.025	0.003	1.645	$5.501 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	1.610	0.045	0.037	0.004	1.696	$6.698 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	1.650	0.069	0.061	0.005	1.787	$8.994 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	1.690	0.108	0.103	0.007	1.908	$1.224 \times 10^4$		
30.0 GeV	$3.011 \times 10^4$	1.731	0.176	0.184	0.010	2.102	$1.723 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	1.758	0.249	0.273	0.014	2.295	$2.178 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	1.818	0.564	0.670	0.027	3.080	$3.678 \times 10^4$		
100. GeV	$1.001 \times 10^5$	1.837	0.730	0.884	0.034	3.487	$4.288 \times 10^4$		
110. GeV	$1.102 \times 10^5$	1.845	0.815	0.993	0.037	3.692	<i>Muon critical energy</i>		
140. GeV	$1.401 \times 10^5$	1.864	1.072	1.326	0.047	4.311	$5.319 \times 10^4$		
200. GeV	$2.001 \times 10^5$	1.893	1.606	2.028	0.066	5.595	$6.538 \times 10^4$		
300. GeV	$3.001 \times 10^5$	1.926	2.516	3.198	0.100	7.742	$8.052 \times 10^4$		
400. GeV	$4.001 \times 10^5$	1.949	3.456	4.412	0.133	9.952	$9.189 \times 10^4$		
800. GeV	$8.001 \times 10^5$	2.005	7.331	9.391	0.268	18.998	$1.205 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.023	9.319	11.938	0.337	23.620	$1.299 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.051	13.300	17.015	0.478	32.846	$1.442 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.081	19.382	24.764	0.690	46.921	$1.594 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.116	29.527	37.637	1.055	70.337	$1.767 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.140	39.798	50.648	1.425	94.014	$1.890 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.201	81.171	102.937	2.958	189.269	$2.184 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.221	102.003	129.217	3.744	237.188	$2.278 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.252	143.553	181.657	5.356	332.821	$2.420 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.285	206.210	260.650	7.826	476.973	$2.570 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.323	310.619	392.060	12.089	717.093	$2.739 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	2.350	415.391	523.772	16.451	957.967	$2.860 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	2.418	834.437	1050.969	34.647	1922.475	$3.149 \times 10^5$		
100. TeV	$1.000 \times 10^8$	2.440	1044.080	1314.800	44.040	2405.363	$3.241 \times 10^5$		