

Muons in darmstadtium (Ds)

Z	A [g/mol]	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
110 (Ds)	[281.1645(6)]	??	1129.0	0.28068	3.0000	0.6632	3.0000	6.6357	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	3.474				3.474	1.716×10^0
14.0 MeV	5.616×10^1	2.806				2.806	3.008×10^0
20.0 MeV	6.802×10^1	2.257				2.257	5.414×10^0
30.0 MeV	8.509×10^1	1.800				1.800	1.043×10^1
40.0 MeV	1.003×10^2	1.563				1.563	1.643×10^1
80.0 MeV	1.527×10^2	1.214				1.214	4.630×10^1
100. MeV	1.764×10^2	1.154				1.154	6.323×10^1
140. MeV	2.218×10^2	1.099				1.099	9.890×10^1
200. MeV	2.868×10^2	1.079				1.079	1.542×10^2
207. MeV	2.943×10^2	1.079	0.000			1.079	<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.093	0.000		0.000	1.093	2.464×10^2
400. MeV	4.945×10^2	1.121	0.000		0.000	1.121	3.368×10^2
800. MeV	8.995×10^2	1.220	0.001		0.000	1.221	6.775×10^2
1.00 GeV	1.101×10^3	1.256	0.002		0.000	1.258	8.387×10^2
1.40 GeV	1.502×10^3	1.312	0.003		0.000	1.316	1.149×10^3
2.00 GeV	2.103×10^3	1.371	0.005	0.000	0.001	1.377	1.594×10^3
3.00 GeV	3.104×10^3	1.436	0.009	0.003	0.001	1.449	2.301×10^3
4.00 GeV	4.104×10^3	1.479	0.013	0.006	0.001	1.501	2.978×10^3
8.00 GeV	8.105×10^3	1.576	0.032	0.025	0.003	1.636	5.521×10^3
10.0 GeV	1.011×10^4	1.604	0.043	0.036	0.004	1.687	6.724×10^3
14.0 GeV	1.411×10^4	1.644	0.066	0.059	0.005	1.775	9.034×10^3
20.0 GeV	2.011×10^4	1.683	0.102	0.098	0.007	1.892	1.231×10^4
30.0 GeV	3.011×10^4	1.724	0.167	0.176	0.010	2.080	1.734×10^4
40.0 GeV	4.011×10^4	1.751	0.237	0.262	0.014	2.265	2.195×10^4
80.0 GeV	8.011×10^4	1.812	0.536	0.641	0.027	3.017	3.721×10^4
100. GeV	1.001×10^5	1.830	0.694	0.846	0.033	3.405	4.345×10^4
114. GeV	1.144×10^5	1.841	0.809	0.994	0.038	3.684	<i>Muon critical energy</i>
140. GeV	1.401×10^5	1.857	1.019	1.268	0.047	4.193	5.402×10^4
200. GeV	2.001×10^5	1.886	1.527	1.939	0.066	5.420	6.658×10^4
300. GeV	3.001×10^5	1.919	2.392	3.058	0.099	7.470	8.225×10^4
400. GeV	4.001×10^5	1.942	3.286	4.218	0.133	9.581	9.404×10^4
800. GeV	8.001×10^5	1.998	6.972	8.976	0.268	18.216	1.238×10^5
1.00 TeV	1.000×10^6	2.016	8.863	11.411	0.337	22.628	1.337×10^5
1.40 TeV	1.400×10^6	2.044	12.649	16.262	0.477	31.434	1.486×10^5
2.00 TeV	2.000×10^6	2.073	18.435	23.667	0.689	44.867	1.645×10^5
3.00 TeV	3.000×10^6	2.108	28.085	35.971	1.053	67.219	1.826×10^5
4.00 TeV	4.000×10^6	2.132	37.856	48.406	1.423	89.819	1.954×10^5
8.00 TeV	8.000×10^6	2.193	77.213	98.376	2.953	180.737	2.262×10^5
10.0 TeV	1.000×10^7	2.213	97.031	123.488	3.738	226.472	2.361×10^5
14.0 TeV	1.400×10^7	2.243	136.558	173.608	5.348	317.761	2.509×10^5
20.0 TeV	2.000×10^7	2.276	196.166	249.110	7.814	455.369	2.666×10^5
30.0 TeV	3.000×10^7	2.314	295.494	374.698	12.071	684.580	2.844×10^5
40.0 TeV	4.000×10^7	2.342	395.170	500.574	16.427	914.515	2.970×10^5
80.0 TeV	8.000×10^7	2.409	793.833	1004.422	34.594	1835.260	3.272×10^5
100. TeV	1.000×10^8	2.431	993.280	1256.570	43.970	2296.254	3.370×10^5