

Muons in cerium fluoride (CeF₃)

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.43123	6.160	348.4	0.18617	3.0000	0.2000	3.0000	5.0079	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
10.0 MeV	4.704×10^1	4.958				4.958	1.135×10^0		
14.0 MeV	5.616×10^1	3.903				3.904	2.054×10^0		
20.0 MeV	6.802×10^1	3.075				3.075	3.804×10^0		
30.0 MeV	8.509×10^1	2.407				2.407	7.529×10^0		
40.0 MeV	1.003×10^2	2.068				2.068	1.204×10^1		
80.0 MeV	1.527×10^2	1.574				1.574	3.489×10^1		
100. MeV	1.764×10^2	1.486				1.487	4.800×10^1		
140. MeV	2.218×10^2	1.400				1.400	7.585×10^1		
200. MeV	2.868×10^2	1.357				1.357	1.195×10^2		
257. MeV	3.471×10^2	1.349			0.000	1.350	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.352	0.000		0.000	1.352	1.935×10^2		
400. MeV	4.945×10^2	1.369	0.000		0.000	1.369	2.671×10^2		
800. MeV	8.995×10^2	1.449	0.001		0.000	1.450	5.507×10^2		
1.00 GeV	1.101×10^3	1.482	0.001		0.000	1.483	6.870×10^2		
1.40 GeV	1.502×10^3	1.534	0.001	0.000	0.001	1.536	9.517×10^2		
2.00 GeV	2.103×10^3	1.590	0.002	0.001	0.001	1.594	1.335×10^3		
3.00 GeV	3.104×10^3	1.653	0.004	0.003	0.001	1.661	1.948×10^3		
4.00 GeV	4.104×10^3	1.696	0.006	0.004	0.002	1.709	2.541×10^3		
8.00 GeV	8.105×10^3	1.794	0.015	0.014	0.003	1.826	4.798×10^3		
10.0 GeV	1.011×10^4	1.823	0.020	0.020	0.004	1.867	5.881×10^3		
14.0 GeV	1.411×10^4	1.864	0.030	0.032	0.006	1.933	7.985×10^3		
20.0 GeV	2.011×10^4	1.906	0.047	0.053	0.008	2.013	1.102×10^4		
30.0 GeV	3.011×10^4	1.950	0.076	0.092	0.012	2.130	1.585×10^4		
40.0 GeV	4.011×10^4	1.979	0.108	0.135	0.015	2.238	2.043×10^4		
80.0 GeV	8.011×10^4	2.045	0.244	0.325	0.030	2.644	3.684×10^4		
100. GeV	1.001×10^5	2.065	0.316	0.427	0.037	2.846	4.414×10^4		
140. GeV	1.401×10^5	2.095	0.463	0.637	0.052	3.249	5.728×10^4		
200. GeV	2.001×10^5	2.127	0.695	0.971	0.074	3.867	7.420×10^4		
241. GeV	2.415×10^5	2.144	0.856	1.199	0.089	4.288	<i>Muon critical energy</i>		
300. GeV	3.001×10^5	2.163	1.090	1.528	0.111	4.892	9.715×10^4		
400. GeV	4.001×10^5	2.188	1.498	2.106	0.147	5.941	1.157×10^5		
800. GeV	8.001×10^5	2.250	3.185	4.479	0.298	10.213	1.664×10^5		
1.00 TeV	1.000×10^6	2.270	4.052	5.693	0.375	12.391	1.842×10^5		
1.40 TeV	1.400×10^6	2.300	5.790	8.115	0.531	16.738	2.119×10^5		
2.00 TeV	2.000×10^6	2.333	8.450	11.811	0.768	23.363	2.421×10^5		
3.00 TeV	3.000×10^6	2.371	12.890	17.955	1.175	34.391	2.772×10^5		
4.00 TeV	4.000×10^6	2.398	17.390	24.164	1.588	45.542	3.024×10^5		
8.00 TeV	8.000×10^6	2.465	35.537	49.129	3.303	90.435	3.635×10^5		
10.0 TeV	1.000×10^7	2.487	44.683	61.679	4.184	113.035	3.832×10^5		
14.0 TeV	1.400×10^7	2.521	62.926	86.718	5.994	158.160	4.130×10^5		
20.0 TeV	2.000×10^7	2.557	90.454	124.439	8.770	226.221	4.446×10^5		
30.0 TeV	3.000×10^7	2.599	136.283	187.201	13.572	339.656	4.804×10^5		
40.0 TeV	4.000×10^7	2.629	182.280	250.115	18.490	453.515	5.058×10^5		
80.0 TeV	8.000×10^7	2.703	366.552	501.948	39.046	910.251	5.668×10^5		
100. TeV	1.000×10^8	2.728	458.848	627.982	49.670	1139.230	5.864×10^5		