

Table 165: Muons in Freon-13I1 C-F₃I

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.43997	1.800	293.5	0.09112	3.1658	0.2847	3.7280	5.8774	0.00
T	p [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm ²]		
10.0 MeV	4.704×10^1	5.199				5.199	1.080×10^0		
14.0 MeV	5.616×10^1	4.088				4.088	1.956×10^0		
20.0 MeV	6.802×10^1	3.217				3.217	3.629×10^0		
30.0 MeV	8.509×10^1	2.515				2.515	7.193×10^0		
40.0 MeV	1.003×10^2	2.159				2.159	1.151×10^1		
80.0 MeV	1.527×10^2	1.640				1.640	3.343×10^1		
100. MeV	1.764×10^2	1.549				1.549	4.601×10^1		
140. MeV	2.218×10^2	1.460				1.460	7.272×10^1		
200. MeV	2.868×10^2	1.414				1.414	1.146×10^2		
257. MeV	3.471×10^2	1.406			0.000	1.407	<i>Minimum ionization</i>		
300. MeV	3.917×10^2	1.409	0.000		0.000	1.409	1.856×10^2		
400. MeV	4.945×10^2	1.427	0.000		0.000	1.427	2.562×10^2		
800. MeV	8.995×10^2	1.513	0.001		0.000	1.514	5.281×10^2		
1.00 GeV	1.101×10^3	1.548	0.001		0.000	1.549	6.586×10^2		
1.40 GeV	1.502×10^3	1.603	0.001	0.000	0.001	1.606	9.120×10^2		
2.00 GeV	2.103×10^3	1.664	0.002	0.001	0.001	1.668	1.278×10^3		
3.00 GeV	3.104×10^3	1.732	0.004	0.002	0.001	1.740	1.865×10^3		
4.00 GeV	4.104×10^3	1.779	0.005	0.004	0.002	1.791	2.431×10^3		
8.00 GeV	8.105×10^3	1.887	0.013	0.013	0.003	1.916	4.582×10^3		
10.0 GeV	1.011×10^4	1.919	0.017	0.018	0.004	1.958	5.614×10^3		
14.0 GeV	1.411×10^4	1.965	0.026	0.028	0.006	2.026	7.621×10^3		
20.0 GeV	2.011×10^4	2.011	0.041	0.046	0.008	2.107	1.052×10^4		
30.0 GeV	3.011×10^4	2.060	0.066	0.081	0.012	2.220	1.514×10^4		
40.0 GeV	4.011×10^4	2.092	0.094	0.119	0.016	2.321	1.955×10^4		
80.0 GeV	8.011×10^4	2.165	0.212	0.285	0.031	2.693	3.552×10^4		
100. GeV	1.001×10^5	2.186	0.275	0.375	0.038	2.875	4.270×10^4		
140. GeV	1.401×10^5	2.218	0.404	0.559	0.053	3.235	5.581×10^4		
200. GeV	2.001×10^5	2.251	0.606	0.852	0.075	3.785	7.295×10^4		
286. GeV	2.865×10^5	2.284	0.903	1.274	0.107	4.569	<i>Muon critical energy</i>		
300. GeV	3.001×10^5	2.288	0.951	1.342	0.112	4.694	9.663×10^4		
400. GeV	4.001×10^5	2.314	1.307	1.850	0.150	5.622	1.161×10^5		
800. GeV	8.001×10^5	2.377	2.781	3.935	0.303	9.398	1.705×10^5		
1.00 TeV	1.000×10^6	2.398	3.539	5.003	0.381	11.322	1.899×10^5		
1.40 TeV	1.400×10^6	2.429	5.058	7.133	0.539	15.161	2.203×10^5		
2.00 TeV	2.000×10^6	2.462	7.383	10.384	0.781	21.011	2.538×10^5		
3.00 TeV	3.000×10^6	2.501	11.265	15.788	1.194	30.750	2.929×10^5		
4.00 TeV	4.000×10^6	2.529	15.201	21.252	1.615	40.597	3.212×10^5		
8.00 TeV	8.000×10^6	2.597	31.076	43.217	3.360	80.251	3.899×10^5		
10.0 TeV	1.000×10^7	2.619	39.078	54.260	4.257	100.216	4.122×10^5		
14.0 TeV	1.400×10^7	2.654	55.040	76.293	6.101	140.088	4.458×10^5		
20.0 TeV	2.000×10^7	2.691	79.129	109.486	8.928	200.235	4.814×10^5		
30.0 TeV	3.000×10^7	2.733	119.233	164.713	13.821	300.502	5.219×10^5		
40.0 TeV	4.000×10^7	2.764	159.487	220.076	18.834	401.163	5.506×10^5		
80.0 TeV	8.000×10^7	2.840	320.761	441.685	39.792	805.079	6.196×10^5		
100. TeV	1.000×10^8	2.865	401.541	552.594	50.629	1007.630	6.418×10^5		