Table 075: Muons in Rhenium

Z	A [g/mol]	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
75 (Re)	186.207 (1)	21.020	736.0	0.15184	2.8627	0.0559	3.4845	5.3445	0.08

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	3.991				3.991	1.450×10^0
14.0 MeV	5.616×10^1	3.179				3.179	2.584×10^0
20.0 MeV	6.802×10^1	2.529				2.529	4.722×10^0
30.0 MeV	8.509×10^1	1.996				1.996	9.229×10^0
40.0 MeV	1.003×10^2	1.722				1.722	1.466×10^1
80.0 MeV	1.527×10^2	1.320				1.320	4.197×10^1
100. MeV	1.764×10^2	1.248				1.248	5.759×10^1
140. MeV	2.218×10^2	1.179				1.179	9.070×10^1
200. MeV	2.868×10^2	1.147				1.147	1.425×10^2
243. MeV	3.325×10^2	1.143	0.000			1.143	*Minimum ionization*
300. MeV	3.917×10^2	1.147	0.000		0.000	1.148	2.298×10^2
400. MeV	4.945×10^2	1.166	0.000		0.000	1.166	3.163×10^2
800. MeV	8.995×10^2	1.245	0.001		0.000	1.246	6.476×10^2
1.00 GeV	1.101×10^3	1.277	0.001		0.000	1.279	8.060×10^2
1.40 GeV	1.502×10^3	1.327	0.002		0.001	1.330	1.112×10^3
2.00 GeV	2.103×10^3	1.382	0.004	0.001	0.001	1.388	1.554×10^3
3.00 GeV	3.104×10^3	1.443	0.007	0.003	0.001	1.455	2.256×10^3
4.00 GeV	4.104×10^3	1.486	0.010	0.006	0.002	1.504	2.932×10^3
8.00 GeV	8.105×10^3	1.583	0.024	0.021	0.003	1.632	5.475×10^3
10.0 GeV	1.011×10^4	1.613	0.031	0.030	0.004	1.678	6.683×10^3
14.0 GeV	1.411×10^4	1.655	0.048	0.049	0.005	1.757	9.010×10^3
20.0 GeV	2.011×10^4	1.697	0.074	0.080	0.007	1.859	1.233×10^4
30.0 GeV	3.011×10^4	1.741	0.121	0.141	0.011	2.015	1.749×10^4
40.0 GeV	4.011×10^4	1.770	0.172	0.208	0.014	2.165	2.227×10^4
80.0 GeV	8.011×10^4	1.836	0.388	0.502	0.028	2.755	3.861×10^4
100. GeV	1.001×10^5	1.856	0.503	0.660	0.035	3.055	4.550×10^4
140. GeV	1.401×10^5	1.885	0.738	0.986	0.048	3.659	5.746×10^4
148. GeV	1.480×10^5	1.890	0.786	1.053	0.051	3.781	*Muon critical energy*
200. GeV	2.001×10^5	1.915	1.106	1.503	0.069	4.594	7.207×10^4
300. GeV	3.001×10^5	1.948	1.734	2.366	0.103	6.153	9.083×10^4
400. GeV	4.001×10^5	1.972	2.383	3.260	0.138	7.754	1.053×10^5
800. GeV	8.001×10^5	2.030	5.059	6.924	0.278	14.293	1.427×10^5
1.00 TeV	1.000×10^6	2.049	6.434	8.799	0.350	17.632	1.553×10^5
1.40 TeV	1.400×10^6	2.077	9.187	12.536	0.495	24.297	1.745×10^5
2.00 TeV	2.000×10^6	2.108	13.397	18.239	0.716	34.462	1.952×10^5
3.00 TeV	3.000×10^6	2.143	20.421	27.716	1.095	51.377	2.188×10^5
4.00 TeV	4.000×10^6	2.168	27.537	37.291	1.479	68.478	2.356×10^5
8.00 TeV	8.000×10^6	2.231	56.214	75.779	3.072	137.297	2.761×10^5
10.0 TeV	1.000×10^7	2.251	70.659	95.123	3.889	171.924	2.890×10^5
14.0 TeV	1.400×10^7	2.283	99.471	133.722	5.566	241.043	3.086×10^5
20.0 TeV	2.000×10^7	2.317	142.932	191.864	8.134	345.248	3.293×10^5
30.0 TeV	3.000×10^7	2.356	215.283	288.597	12.570	518.807	3.528×10^5
40.0 TeV	4.000×10^7	2.384	287.882	385.553	17.109	692.930	3.694×10^5
80.0 TeV	8.000×10^7	2.453	578.670	773.636	36.046	1390.806	4.093×10^5
100. TeV	1.000×10^8	2.476	724.290	967.850	45.820	1740.438	4.221×10^5