

Table 191: Muons in M3 WAX

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.55512	1.050	67.9	0.07864	3.6412	0.1523	2.7529	3.2540	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	8.068				8.068	6.844×10^{-1}		
14.0 MeV	5.616×10^1	6.290				6.290	1.252×10^0		
20.0 MeV	6.802×10^1	4.910				4.910	2.344×10^0		
30.0 MeV	8.509×10^1	3.808				3.808	4.689×10^0		
40.0 MeV	1.003×10^2	3.250				3.250	7.550×10^0		
80.0 MeV	1.527×10^2	2.437				2.437	2.221×10^1		
100. MeV	1.764×10^2	2.283				2.284	3.071×10^1		
140. MeV	2.218×10^2	2.126				2.126	4.895×10^1		
200. MeV	2.868×10^2	2.035				2.035	7.791×10^1		
300. MeV	3.917×10^2	2.000			0.000	2.000	1.276×10^2		
318. MeV	4.105×10^2	1.999			0.000	2.000	<i>Minimum ionization</i>		
400. MeV	4.945×10^2	2.005			0.000	2.006	1.776×10^2		
800. MeV	8.995×10^2	2.079	0.000		0.000	2.080	3.735×10^2		
1.00 GeV	1.101×10^3	2.113	0.000		0.000	2.113	4.689×10^2		
1.40 GeV	1.502×10^3	2.168	0.000		0.001	2.169	6.556×10^2		
2.00 GeV	2.103×10^3	2.228	0.001	0.000	0.001	2.230	9.282×10^2		
3.00 GeV	3.104×10^3	2.298	0.001	0.001	0.001	2.301	1.369×10^3		
4.00 GeV	4.104×10^3	2.346	0.001	0.001	0.002	2.350	1.799×10^3		
8.00 GeV	8.105×10^3	2.456	0.003	0.003	0.004	2.467	3.455×10^3		
10.0 GeV	1.011×10^4	2.490	0.004	0.004	0.005	2.503	4.260×10^3		
14.0 GeV	1.411×10^4	2.539	0.007	0.007	0.007	2.559	5.839×10^3		
20.0 GeV	2.011×10^4	2.588	0.010	0.012	0.009	2.620	8.155×10^3		
30.0 GeV	3.011×10^4	2.641	0.017	0.021	0.014	2.693	1.192×10^4		
40.0 GeV	4.011×10^4	2.678	0.024	0.030	0.018	2.750	1.559×10^4		
80.0 GeV	8.011×10^4	2.762	0.055	0.074	0.034	2.925	2.967×10^4		
100. GeV	1.001×10^5	2.788	0.071	0.097	0.043	2.999	3.642×10^4		
140. GeV	1.401×10^5	2.827	0.105	0.146	0.059	3.137	4.946×10^4		
200. GeV	2.001×10^5	2.867	0.158	0.224	0.084	3.334	6.800×10^4		
300. GeV	3.001×10^5	2.913	0.250	0.356	0.126	3.646	9.667×10^4		
400. GeV	4.001×10^5	2.946	0.345	0.494	0.168	3.953	1.230×10^5		
800. GeV	8.001×10^5	3.026	0.742	1.067	0.339	5.174	2.112×10^5		
1.00 TeV	1.000×10^6	3.051	0.947	1.364	0.426	5.789	2.477×10^5		
1.11 TeV	1.111×10^6	3.064	1.061	1.527	0.476	6.128	<i>Muon critical energy</i>		
1.40 TeV	1.400×10^6	3.091	1.360	1.954	0.605	7.010	3.104×10^5		
2.00 TeV	2.000×10^6	3.133	1.995	2.859	0.876	8.864	3.864×10^5		
3.00 TeV	3.000×10^6	3.182	3.061	4.366	1.342	11.951	4.832×10^5		
4.00 TeV	4.000×10^6	3.217	4.145	5.895	1.816	15.072	5.576×10^5		
8.00 TeV	8.000×10^6	3.303	8.536	12.052	3.792	27.683	7.505×10^5		
10.0 TeV	1.000×10^7	3.331	10.758	15.153	4.809	34.052	8.155×10^5		
14.0 TeV	1.400×10^7	3.374	15.193	21.332	6.907	46.806	9.153×10^5		
20.0 TeV	2.000×10^7	3.421	21.904	30.652	10.130	66.108	1.023×10^6		
30.0 TeV	3.000×10^7	3.475	33.076	46.160	15.727	98.438	1.146×10^6		
40.0 TeV	4.000×10^7	3.513	44.310	61.717	21.473	131.014	1.234×10^6		
80.0 TeV	8.000×10^7	3.609	89.352	124.002	45.596	262.559	1.445×10^6		
100. TeV	1.000×10^8	3.641	111.933	155.181	58.105	328.860	1.513×10^6		