Muons in lead tungstate ($PbWO_4$)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.41315	8.300	600.7	0.22758	3.0000	0.4068	3.0023	5.8528	0.00

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	4.333				4.333	1.311×10^0
14.0 MeV	5.616×10^1	3.426				3.426	2.360×10^0
20.0 MeV	6.802×10^1	2.710				2.711	4.350×10^0
30.0 MeV	8.509×10^1	2.131				2.131	8.566×10^0
40.0 MeV	1.003×10^2	1.835				1.835	1.365×10^1
80.0 MeV	1.527×10^2	1.406				1.406	3.931×10^1
100. MeV	1.764×10^2	1.331				1.331	5.397×10^1
140. MeV	2.218×10^2	1.261				1.261	8.498×10^1
200. MeV	2.868×10^2	1.231				1.231	1.333×10^2
227. MeV	3.154×10^2	1.229				1.230	*Minimum ionization*
300. MeV	3.917×10^2	1.237	0.000		0.000	1.238	2.145×10^2
400. MeV	4.945×10^2	1.260	0.000		0.000	1.260	2.946×10^2
800. MeV	8.995×10^2	1.349	0.001		0.000	1.350	6.007×10^2
1.00 GeV	1.101×10^3	1.383	0.001		0.000	1.385	7.469×10^2
1.40 GeV	1.502×10^3	1.437	0.002		0.001	1.440	1.030×10^3
2.00 GeV	2.103×10^3	1.494	0.003	0.001	0.001	1.500	1.438×10^3
3.00 GeV	3.104×10^3	1.558	0.006	0.003	0.001	1.569	2.089×10^3
4.00 GeV	4.104×10^3	1.602	0.009	0.006	0.002	1.618	2.716×10^3
8.00 GeV	8.105×10^3	1.699	0.021	0.019	0.003	1.743	5.088×10^3
10.0 GeV	1.011×10^4	1.728	0.028	0.027	0.004	1.788	6.221×10^3
14.0 GeV	1.411×10^4	1.769	0.043	0.044	0.005	1.862	8.412×10^3
20.0 GeV	2.011×10^4	1.809	0.067	0.072	0.008	1.957	1.155×10^4
30.0 GeV	3.011×10^4	1.852	0.110	0.127	0.011	2.101	1.648×10^4
40.0 GeV	4.011×10^4	1.880	0.156	0.187	0.015	2.239	2.109×10^4
80.0 GeV	8.011×10^4	1.944	0.352	0.453	0.029	2.778	3.710×10^4
100. GeV	1.001×10^5	1.963	0.456	0.596	0.036	3.052	4.396×10^4
140. GeV	1.401×10^5	1.992	0.670	0.891	0.050	3.603	5.602×10^4
169. GeV	1.695×10^5	2.008	0.832	1.117	0.060	4.018	*Muon critical energy*
200. GeV	2.001×10^5	2.022	1.004	1.358	0.070	4.456	7.097×10^4
300. GeV	3.001×10^5	2.057	1.574	2.138	0.106	5.876	9.047×10^4
400. GeV	4.001×10^5	2.081	2.163	2.947	0.141	7.333	1.057×10^5
800. GeV	8.001×10^5	2.140	4.593	6.263	0.285	13.283	1.456×10^5
1.00 TeV	1.000×10^6	2.159	5.841	7.960	0.358	16.320	1.592×10^5
1.40 TeV	1.400×10^6	2.189	8.342	11.343	0.507	22.382	1.801×10^5
2.00 TeV	2.000×10^6	2.220	12.165	16.505	0.733	31.625	2.025×10^5
3.00 TeV	3.000×10^6	2.256	18.545	25.083	1.121	47.007	2.283×10^5
4.00 TeV	4.000×10^6	2.282	25.008	33.752	1.515	62.559	2.467×10^5
8.00 TeV	8.000×10^6	2.346	51.056	68.596	3.149	125.149	2.910×10^5
10.0 TeV	1.000×10^7	2.367	64.178	86.110	3.987	156.644	3.052×10^5
14.0 TeV	1.400×10^7	2.400	90.350	121.055	5.709	219.515	3.267×10^5
20.0 TeV	2.000×10^7	2.434	129.830	173.695	8.348	314.308	3.494×10^5
30.0 TeV	3.000×10^7	2.474	195.556	261.275	12.907	472.213	3.752×10^5
40.0 TeV	4.000×10^7	2.503	261.507	349.059	17.574	630.646	3.935×10^5
80.0 TeV	8.000×10^7	2.574	525.677	700.435	37.066	1265.754	4.374×10^5
100. TeV	1.000×10^8	2.598	657.970	876.281	47.134	1583.985	4.515×10^5