

Muons in ag halides in phot emulsion

$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
0.43663	6.470	487.1	0.24593	2.6814	0.0353	3.2117	5.6166	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	4.749				4.749	1.192×10^0
14.0 MeV	5.616×10^1	3.748				3.748	2.149×10^0
20.0 MeV	6.802×10^1	2.960				2.960	3.970×10^0
30.0 MeV	8.509×10^1	2.323				2.323	7.834×10^0
40.0 MeV	1.003×10^2	1.999				1.999	1.250×10^1
80.0 MeV	1.527×10^2	1.525				1.525	3.610×10^1
100. MeV	1.764×10^2	1.441				1.441	4.963×10^1
140. MeV	2.218×10^2	1.359				1.359	7.834×10^1
200. MeV	2.868×10^2	1.319				1.319	1.233×10^2
247. MeV	3.366×10^2	1.313				1.313	<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.317	0.000		0.000	1.318	1.994×10^2
400. MeV	4.945×10^2	1.336	0.000		0.000	1.337	2.747×10^2
800. MeV	8.995×10^2	1.423	0.001		0.000	1.424	5.643×10^2
1.00 GeV	1.101×10^3	1.458	0.001		0.000	1.459	7.030×10^2
1.40 GeV	1.502×10^3	1.513	0.001	0.000	0.001	1.516	9.718×10^2
2.00 GeV	2.103×10^3	1.573	0.002	0.001	0.001	1.578	1.359×10^3
3.00 GeV	3.104×10^3	1.641	0.004	0.003	0.001	1.650	1.978×10^3
4.00 GeV	4.104×10^3	1.688	0.006	0.005	0.002	1.701	2.575×10^3
8.00 GeV	8.105×10^3	1.794	0.015	0.015	0.003	1.828	4.835×10^3
10.0 GeV	1.011×10^4	1.826	0.020	0.021	0.004	1.871	5.916×10^3
14.0 GeV	1.411×10^4	1.871	0.031	0.034	0.006	1.941	8.013×10^3
20.0 GeV	2.011×10^4	1.916	0.047	0.055	0.008	2.027	1.104×10^4
30.0 GeV	3.011×10^4	1.964	0.078	0.095	0.012	2.149	1.582×10^4
40.0 GeV	4.011×10^4	1.996	0.109	0.140	0.015	2.261	2.036×10^4
80.0 GeV	8.011×10^4	2.066	0.247	0.335	0.030	2.678	3.658×10^4
100. GeV	1.001×10^5	2.087	0.320	0.440	0.037	2.885	4.378×10^4
140. GeV	1.401×10^5	2.117	0.470	0.657	0.051	3.297	5.674×10^4
200. GeV	2.001×10^5	2.149	0.705	1.000	0.073	3.928	7.340×10^4
239. GeV	2.389×10^5	2.165	0.859	1.220	0.087	4.332	<i>Muon critical energy</i>
300. GeV	3.001×10^5	2.186	1.106	1.574	0.109	4.976	9.598×10^4
400. GeV	4.001×10^5	2.211	1.521	2.169	0.146	6.048	1.142×10^5
800. GeV	8.001×10^5	2.274	3.234	4.609	0.295	10.413	1.640×10^5
1.00 TeV	1.000×10^6	2.294	4.115	5.858	0.370	12.639	1.814×10^5
1.40 TeV	1.400×10^6	2.325	5.881	8.350	0.525	17.082	2.085×10^5
2.00 TeV	2.000×10^6	2.358	8.583	12.154	0.759	23.856	2.381×10^5
3.00 TeV	3.000×10^6	2.397	13.096	18.476	1.161	35.130	2.725×10^5
4.00 TeV	4.000×10^6	2.424	17.670	24.866	1.569	46.530	2.971×10^5
8.00 TeV	8.000×10^6	2.492	36.119	50.556	3.262	92.430	3.570×10^5
10.0 TeV	1.000×10^7	2.514	45.419	63.472	4.131	115.537	3.763×10^5
14.0 TeV	1.400×10^7	2.548	63.968	89.240	5.916	161.674	4.054×10^5
20.0 TeV	2.000×10^7	2.585	91.961	128.061	8.653	231.261	4.363×10^5
30.0 TeV	3.000×10^7	2.627	138.562	192.654	13.383	347.227	4.713×10^5
40.0 TeV	4.000×10^7	2.658	185.338	257.403	18.226	463.626	4.962×10^5
80.0 TeV	8.000×10^7	2.733	372.739	516.588	38.450	930.510	5.559×10^5
100. TeV	1.000×10^8	2.758	466.607	646.302	48.897	1164.564	5.750×10^5