

Muons in cadmium tungstate (CdWO_4)

| | $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|-----------------------|-----------------------------|----------|--------------------------|-----------|----------|------------------------------------|-----------|-----------------------------|
| | 0.42747 | 7.900 | 468.3 | 0.12861 | 2.9150 | 0.0123 | 3.5941 | 5.3594 | 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 | 4.680 | | | | 4.680 | | | 1.208×10^0 |
| 14.0 MeV | 5.616×10^1 | 3.693 | | | | 3.693 | | | 2.180×10^0 |
| 20.0 MeV | 6.802×10^1 | 2.916 | | | | 2.916 | | | 4.028×10^0 |
| 30.0 MeV | 8.509×10^1 | 2.288 | | | | 2.288 | | | 7.952×10^0 |
| 40.0 MeV | 1.003×10^2 | 1.968 | | | | 1.968 | | | 1.269×10^1 |
| 80.0 MeV | 1.527×10^2 | 1.496 | | | | 1.496 | | | 3.671×10^1 |
| 100. MeV | 1.764×10^2 | 1.411 | | | | 1.412 | | | 5.050×10^1 |
| 140. MeV | 2.218×10^2 | 1.329 | | | | 1.329 | | | 7.985×10^1 |
| 200. MeV | 2.868×10^2 | 1.287 | | | | 1.288 | | | 1.259×10^2 |
| 253. MeV | 3.431×10^2 | 1.280 | 0.000 | | | 1.281 | | | <i>Minimum ionization</i> |
| 300. MeV | 3.917×10^2 | 1.283 | 0.000 | | 0.000 | 1.284 | | | 2.039×10^2 |
| 400. MeV | 4.945×10^2 | 1.300 | 0.000 | | 0.000 | 1.301 | | | 2.813×10^2 |
| 800. MeV | 8.995×10^2 | 1.382 | 0.001 | | 0.000 | 1.383 | | | 5.792×10^2 |
| 1.00 GeV | 1.101×10^3 | 1.415 | 0.001 | | 0.000 | 1.416 | | | 7.221×10^2 |
| 1.40 GeV | 1.502×10^3 | 1.468 | 0.002 | 0.000 | 0.001 | 1.470 | | | 9.990×10^2 |
| 2.00 GeV | 2.103×10^3 | 1.525 | 0.003 | 0.001 | 0.001 | 1.530 | | | 1.399×10^3 |
| 3.00 GeV | 3.104×10^3 | 1.591 | 0.005 | 0.003 | 0.001 | 1.600 | | | 2.037×10^3 |
| 4.00 GeV | 4.104×10^3 | 1.636 | 0.007 | 0.005 | 0.002 | 1.650 | | | 2.652×10^3 |
| 8.00 GeV | 8.105×10^3 | 1.739 | 0.018 | 0.016 | 0.003 | 1.777 | | | 4.979×10^3 |
| 10.0 GeV | 1.011×10^4 | 1.770 | 0.024 | 0.023 | 0.004 | 1.821 | | | 6.090×10^3 |
| 14.0 GeV | 1.411×10^4 | 1.815 | 0.036 | 0.038 | 0.006 | 1.894 | | | 8.242×10^3 |
| 20.0 GeV | 2.011×10^4 | 1.859 | 0.056 | 0.062 | 0.008 | 1.985 | | | 1.133×10^4 |
| 30.0 GeV | 3.011×10^4 | 1.906 | 0.091 | 0.108 | 0.011 | 2.119 | | | 1.621×10^4 |
| 40.0 GeV | 4.011×10^4 | 1.938 | 0.129 | 0.159 | 0.015 | 2.242 | | | 2.079×10^4 |
| 80.0 GeV | 8.011×10^4 | 2.008 | 0.292 | 0.384 | 0.029 | 2.714 | | | 3.697×10^4 |
| 100. GeV | 1.001×10^5 | 2.029 | 0.379 | 0.505 | 0.037 | 2.950 | | | 4.404×10^4 |
| 140. GeV | 1.401×10^5 | 2.060 | 0.556 | 0.754 | 0.051 | 3.422 | | | 5.662×10^4 |
| 200. GeV | 2.001×10^5 | 2.092 | 0.833 | 1.149 | 0.072 | 4.148 | | | 7.253×10^4 |
| 203. GeV | 2.036×10^5 | 2.094 | 0.849 | 1.171 | 0.074 | 4.189 | | | <i>Muon critical energy</i> |
| 300. GeV | 3.001×10^5 | 2.128 | 1.307 | 1.809 | 0.108 | 5.353 | | | 9.370×10^4 |
| 400. GeV | 4.001×10^5 | 2.153 | 1.796 | 2.492 | 0.144 | 6.588 | | | 1.105×10^5 |
| 800. GeV | 8.001×10^5 | 2.214 | 3.818 | 5.298 | 0.292 | 11.623 | | | 1.557×10^5 |
| 1.00 TeV | 1.000×10^6 | 2.234 | 4.856 | 6.733 | 0.367 | 14.192 | | | 1.712×10^5 |
| 1.40 TeV | 1.400×10^6 | 2.265 | 6.936 | 9.596 | 0.520 | 19.318 | | | 1.953×10^5 |
| 2.00 TeV | 2.000×10^6 | 2.297 | 10.119 | 13.965 | 0.752 | 27.134 | | | 2.214×10^5 |
| 3.00 TeV | 3.000×10^6 | 2.335 | 15.431 | 21.225 | 1.150 | 40.143 | | | 2.515×10^5 |
| 4.00 TeV | 4.000×10^6 | 2.362 | 20.814 | 28.564 | 1.555 | 53.295 | | | 2.730×10^5 |
| 8.00 TeV | 8.000×10^6 | 2.428 | 42.515 | 58.062 | 3.232 | 106.238 | | | 3.252×10^5 |
| 10.0 TeV | 1.000×10^7 | 2.450 | 53.449 | 72.889 | 4.094 | 132.884 | | | 3.420×10^5 |
| 14.0 TeV | 1.400×10^7 | 2.483 | 75.259 | 102.475 | 5.863 | 186.081 | | | 3.673×10^5 |
| 20.0 TeV | 2.000×10^7 | 2.519 | 108.165 | 147.043 | 8.575 | 266.303 | | | 3.941×10^5 |
| 30.0 TeV | 3.000×10^7 | 2.560 | 162.946 | 221.195 | 13.264 | 399.966 | | | 4.245×10^5 |
| 40.0 TeV | 4.000×10^7 | 2.590 | 217.921 | 295.524 | 18.065 | 534.102 | | | 4.461×10^5 |
| 80.0 TeV | 8.000×10^7 | 2.664 | 438.147 | 593.039 | 38.125 | 1071.976 | | | 4.979×10^5 |
| 100. TeV | 1.000×10^8 | 2.688 | 548.444 | 741.930 | 48.490 | 1341.553 | | | 5.146×10^5 |