

**Table 180: Muons in Lanthanum oxybromide (LaOBr)**

$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
0.42599	6.280	439.7	0.17830	2.8457	-0.0350	3.3288	5.4666	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]	
10.0 MeV	$4.704 \times 10^1$	4.714				4.714	$1.199 \times 10^0$	
14.0 MeV	$5.616 \times 10^1$	3.718				3.718	$2.164 \times 10^0$	
20.0 MeV	$6.802 \times 10^1$	2.934				2.934	$4.000 \times 10^0$	
30.0 MeV	$8.509 \times 10^1$	2.301				2.301	$7.900 \times 10^0$	
40.0 MeV	$1.003 \times 10^2$	1.979				1.979	$1.262 \times 10^1$	
80.0 MeV	$1.527 \times 10^2$	1.508				1.508	$3.647 \times 10^1$	
100. MeV	$1.764 \times 10^2$	1.424				1.424	$5.015 \times 10^1$	
140. MeV	$2.218 \times 10^2$	1.341				1.341	$7.923 \times 10^1$	
200. MeV	$2.868 \times 10^2$	1.301				1.301	$1.248 \times 10^2$	
253. MeV	$3.431 \times 10^2$	1.294				1.295	<i>Minimum ionization</i>	
300. MeV	$3.917 \times 10^2$	1.298	0.000		0.000	1.298	$2.019 \times 10^2$	
400. MeV	$4.945 \times 10^2$	1.315	0.000		0.000	1.316	$2.785 \times 10^2$	
800. MeV	$8.995 \times 10^2$	1.398	0.001		0.000	1.399	$5.730 \times 10^2$	
1.00 GeV	$1.101 \times 10^3$	1.432	0.001		0.000	1.433	$7.141 \times 10^2$	
1.40 GeV	$1.502 \times 10^3$	1.485	0.002	0.000	0.001	1.487	$9.879 \times 10^2$	
2.00 GeV	$2.103 \times 10^3$	1.543	0.003	0.001	0.001	1.547	$1.383 \times 10^3$	
3.00 GeV	$3.104 \times 10^3$	1.608	0.004	0.003	0.001	1.616	$2.014 \times 10^3$	
4.00 GeV	$4.104 \times 10^3$	1.653	0.006	0.005	0.002	1.666	$2.623 \times 10^3$	
8.00 GeV	$8.105 \times 10^3$	1.755	0.016	0.015	0.003	1.790	$4.931 \times 10^3$	
10.0 GeV	$1.011 \times 10^4$	1.786	0.021	0.021	0.004	1.832	$6.035 \times 10^3$	
14.0 GeV	$1.411 \times 10^4$	1.830	0.032	0.035	0.006	1.902	$8.176 \times 10^3$	
20.0 GeV	$2.011 \times 10^4$	1.873	0.049	0.056	0.008	1.987	$1.126 \times 10^4$	
30.0 GeV	$3.011 \times 10^4$	1.919	0.081	0.098	0.011	2.111	$1.614 \times 10^4$	
40.0 GeV	$4.011 \times 10^4$	1.950	0.114	0.144	0.015	2.224	$2.075 \times 10^4$	
80.0 GeV	$8.011 \times 10^4$	2.018	0.258	0.346	0.030	2.653	$3.719 \times 10^4$	
100. GeV	$1.001 \times 10^5$	2.039	0.334	0.455	0.037	2.866	$4.444 \times 10^4$	
140. GeV	$1.401 \times 10^5$	2.069	0.490	0.679	0.051	3.291	$5.746 \times 10^4$	
200. GeV	$2.001 \times 10^5$	2.101	0.735	1.034	0.073	3.944	$7.410 \times 10^4$	
226. GeV	$2.262 \times 10^5$	2.111	0.843	1.187	0.082	4.224	<i>Muon critical energy</i>	
300. GeV	$3.001 \times 10^5$	2.136	1.153	1.628	0.109	5.027	$9.651 \times 10^4$	
400. GeV	$4.001 \times 10^5$	2.161	1.586	2.243	0.145	6.136	$1.145 \times 10^5$	
800. GeV	$8.001 \times 10^5$	2.222	3.371	4.768	0.293	10.656	$1.634 \times 10^5$	
1.00 TeV	$1.000 \times 10^6$	2.242	4.289	6.060	0.369	12.960	$1.804 \times 10^5$	
1.40 TeV	$1.400 \times 10^6$	2.272	6.128	8.637	0.522	17.560	$2.068 \times 10^5$	
2.00 TeV	$2.000 \times 10^6$	2.304	8.943	12.570	0.755	24.574	$2.356 \times 10^5$	
3.00 TeV	$3.000 \times 10^6$	2.342	13.642	19.106	1.155	36.247	$2.689 \times 10^5$	
4.00 TeV	$4.000 \times 10^6$	2.369	18.406	25.713	1.561	48.050	$2.928 \times 10^5$	
8.00 TeV	$8.000 \times 10^6$	2.435	37.613	52.273	3.246	95.568	$3.506 \times 10^5$	
10.0 TeV	$1.000 \times 10^7$	2.457	47.294	65.625	4.111	119.487	$3.693 \times 10^5$	
14.0 TeV	$1.400 \times 10^7$	2.490	66.602	92.265	5.888	167.246	$3.975 \times 10^5$	
20.0 TeV	$2.000 \times 10^7$	2.525	95.739	132.399	8.611	239.275	$4.273 \times 10^5$	
30.0 TeV	$3.000 \times 10^7$	2.567	144.245	199.173	13.318	359.304	$4.612 \times 10^5$	
40.0 TeV	$4.000 \times 10^7$	2.596	192.929	266.108	18.137	479.772	$4.852 \times 10^5$	
80.0 TeV	$8.000 \times 10^7$	2.670	387.965	534.039	38.266	962.942	$5.429 \times 10^5$	
100. TeV	$1.000 \times 10^8$	2.694	485.652	668.130	48.666	1205.143	$5.614 \times 10^5$	