

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

Tele: 925-443-1911

E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

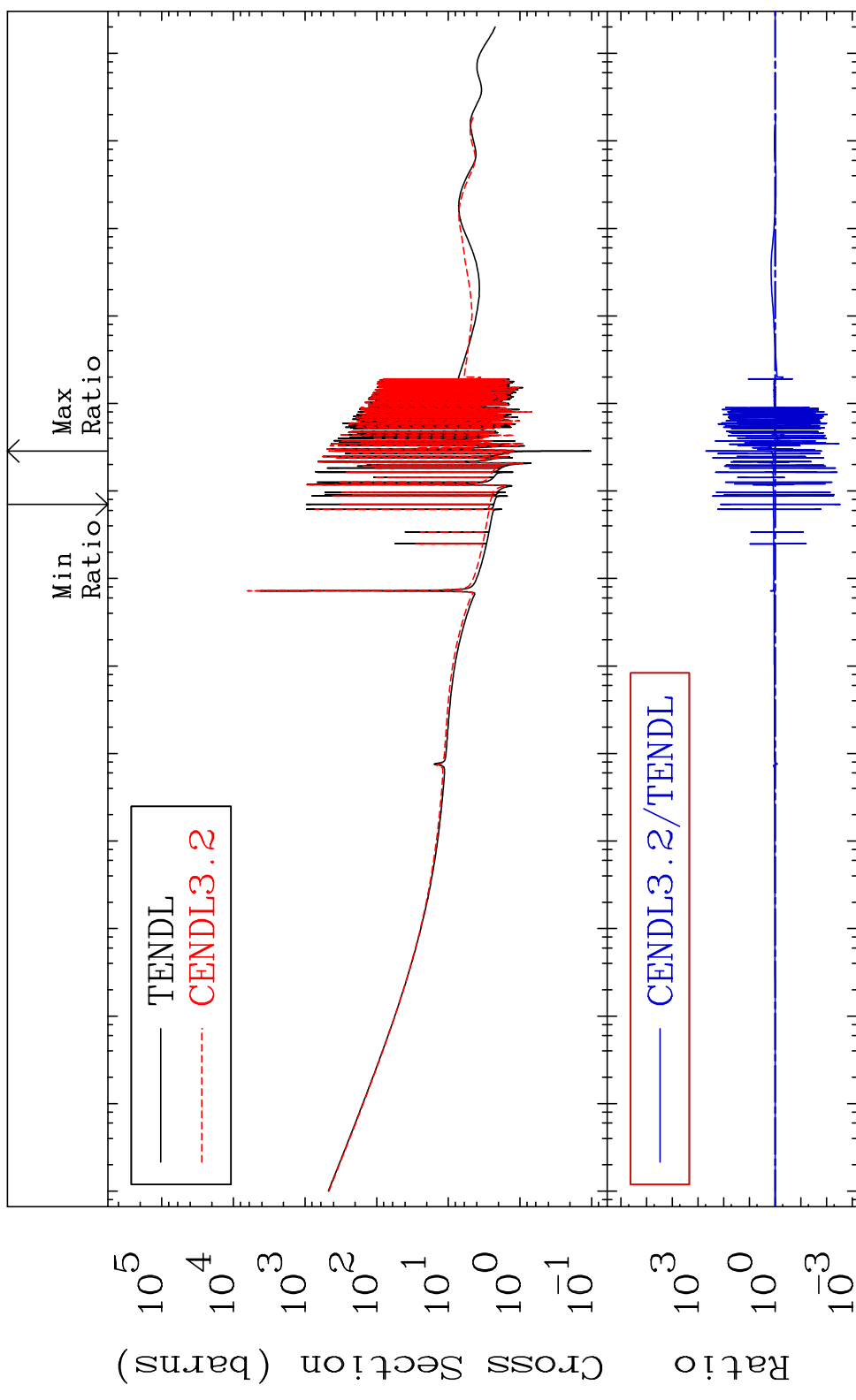
MAT 5728

Total

57-La-139

Cross Section

-99.71 To 9999. %



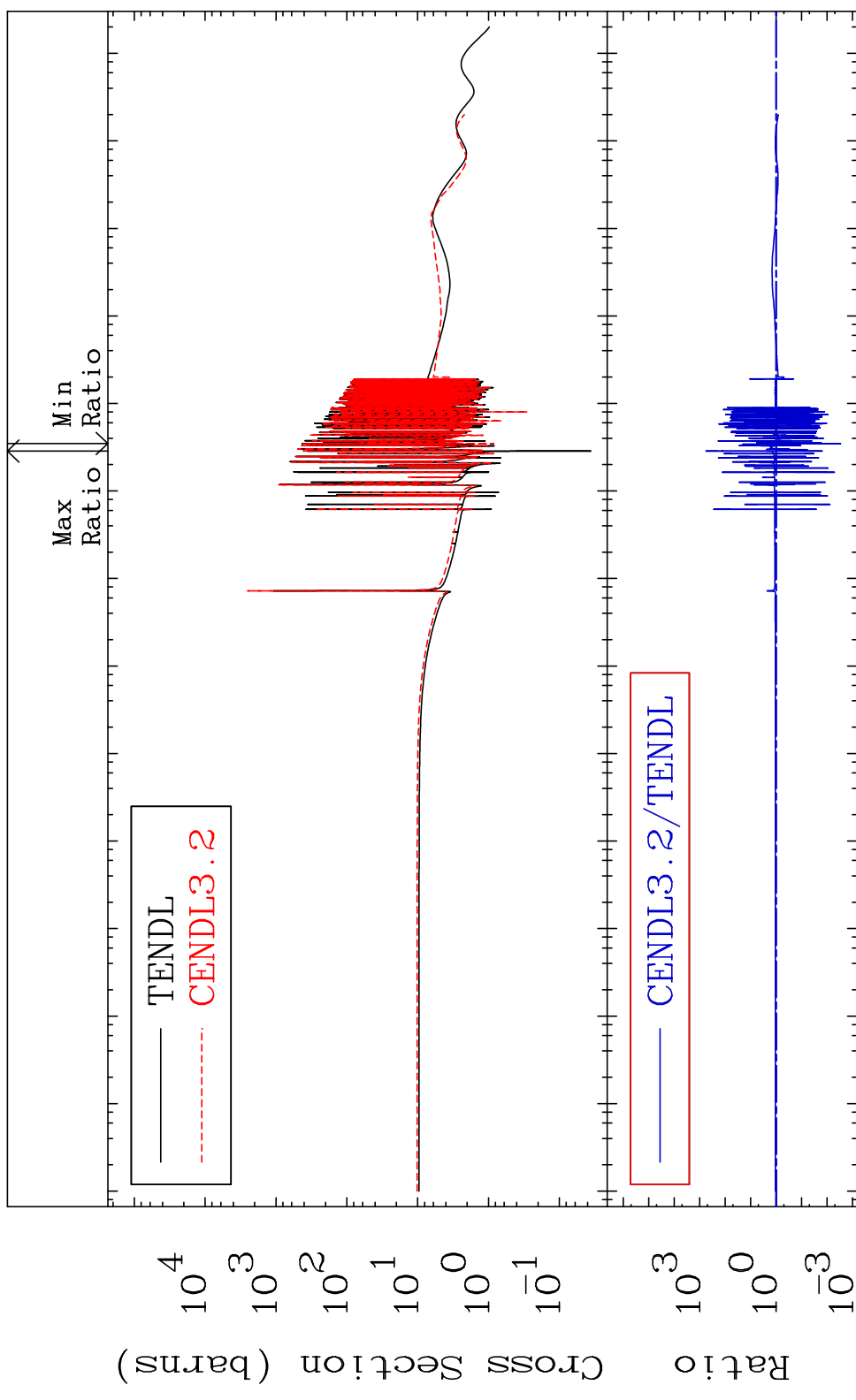
1

Incident Energy (eV)

57-La-139

MAT 5728

Elastic Cross Section -99.70 To 9999. % 57-La-139



2

Incident Energy (eV)

57-La-139

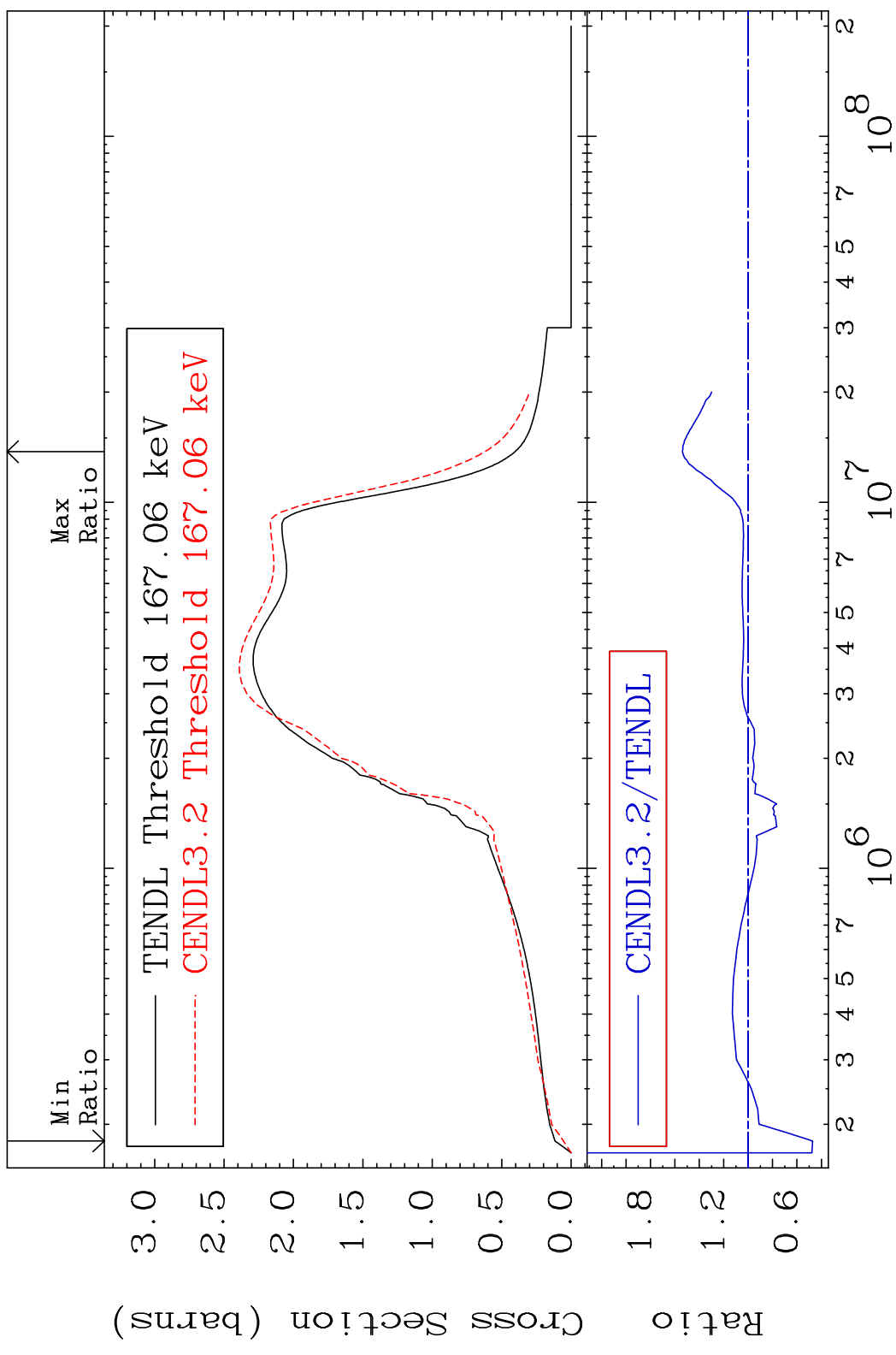
MAT 5728

Inelastic

57-La-139

Cross Section

-52.76 To 53.88 %

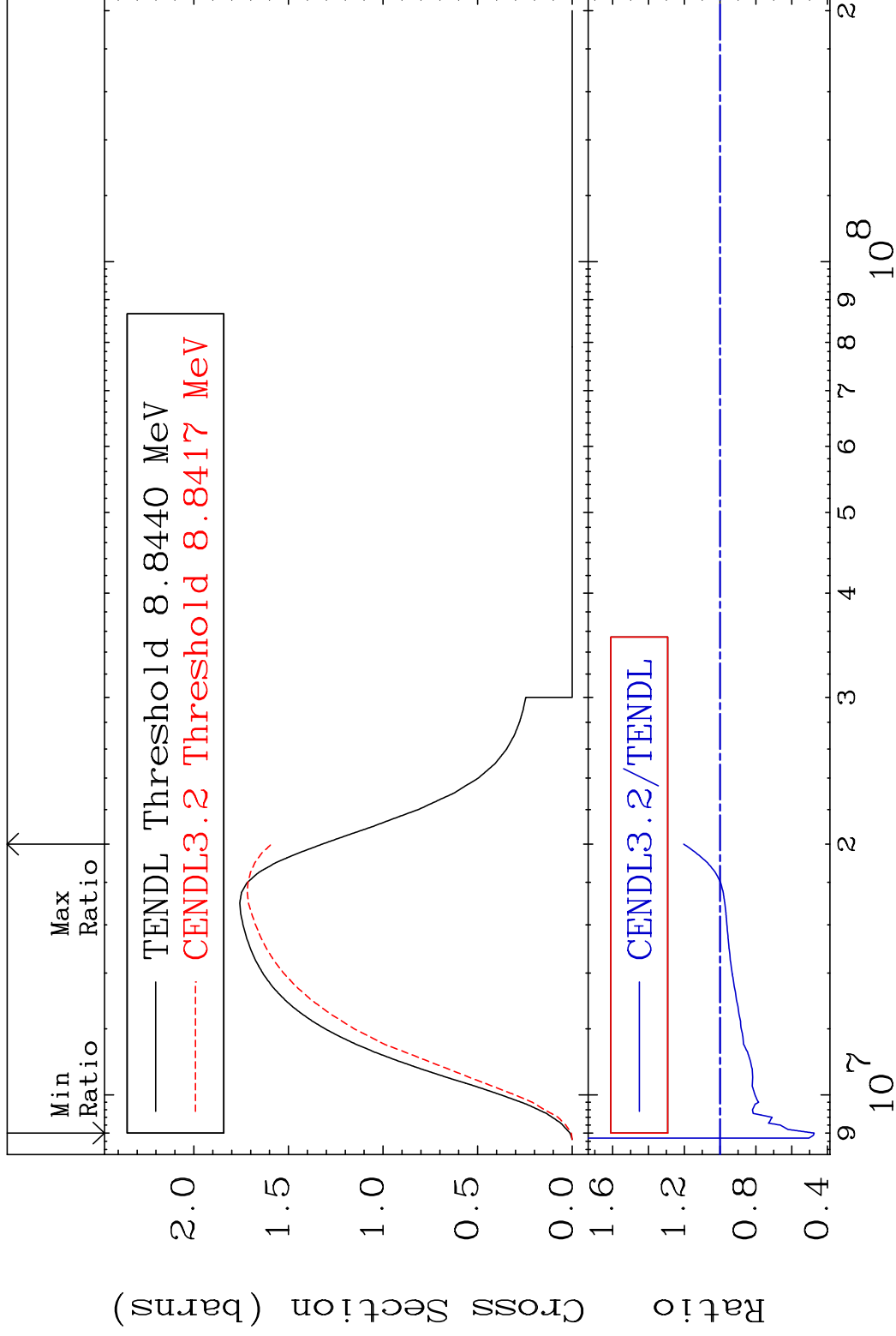


MAT 5728

(n,2n)

57-La-139

Cross Section -52.51 To 20.36 %



4

Incident Energy (eV)

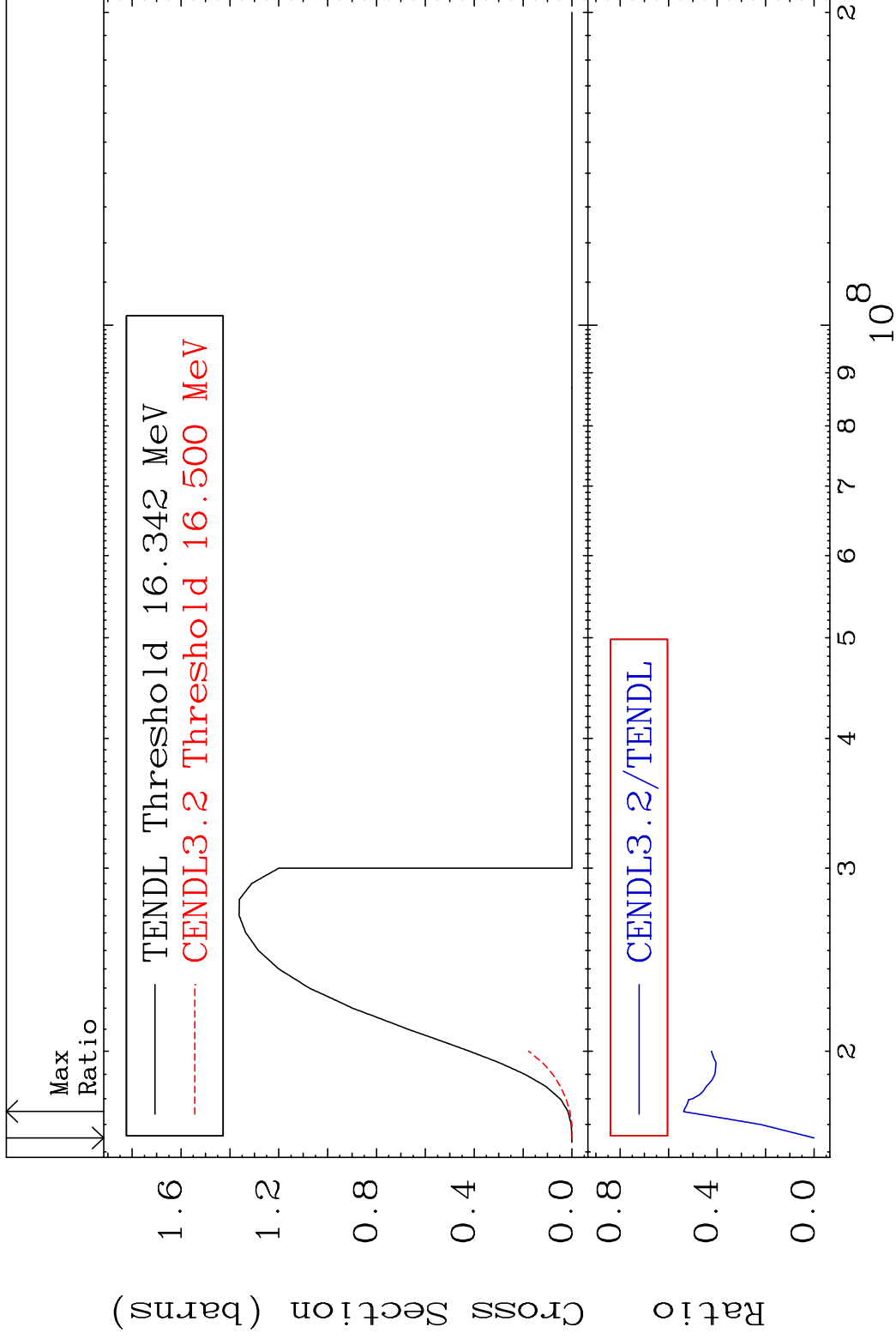
57-La-139

MAT 5728

(n,3n)

57-La-139

Cross Section -100.0 To -46.15%



5

Incident Energy (eV)

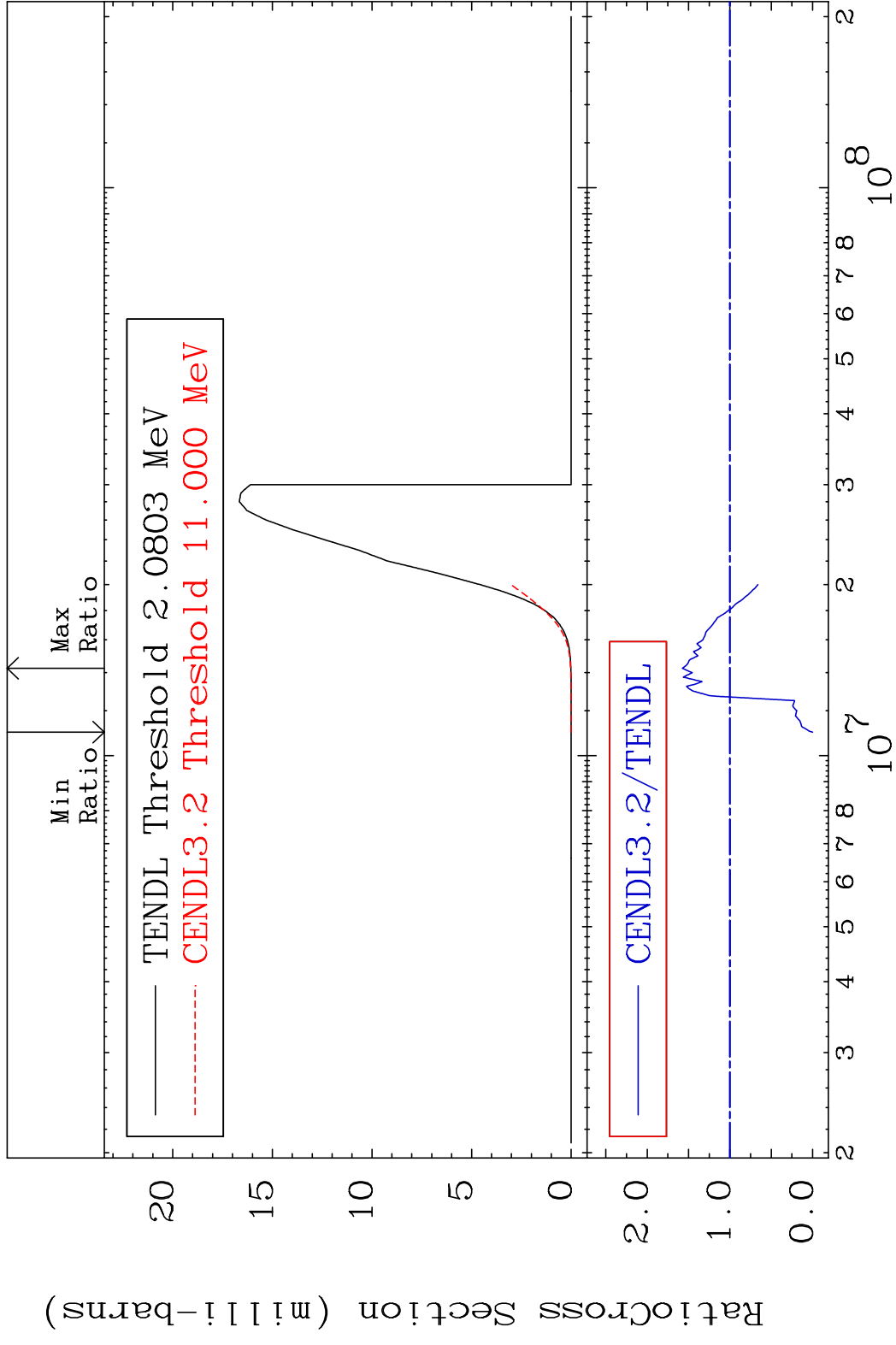
57-La-139

MAT 5728

57-La-139

(n, n') α

Cross Section -100.0 To 57.49 %



6

Incident Energy (eV)

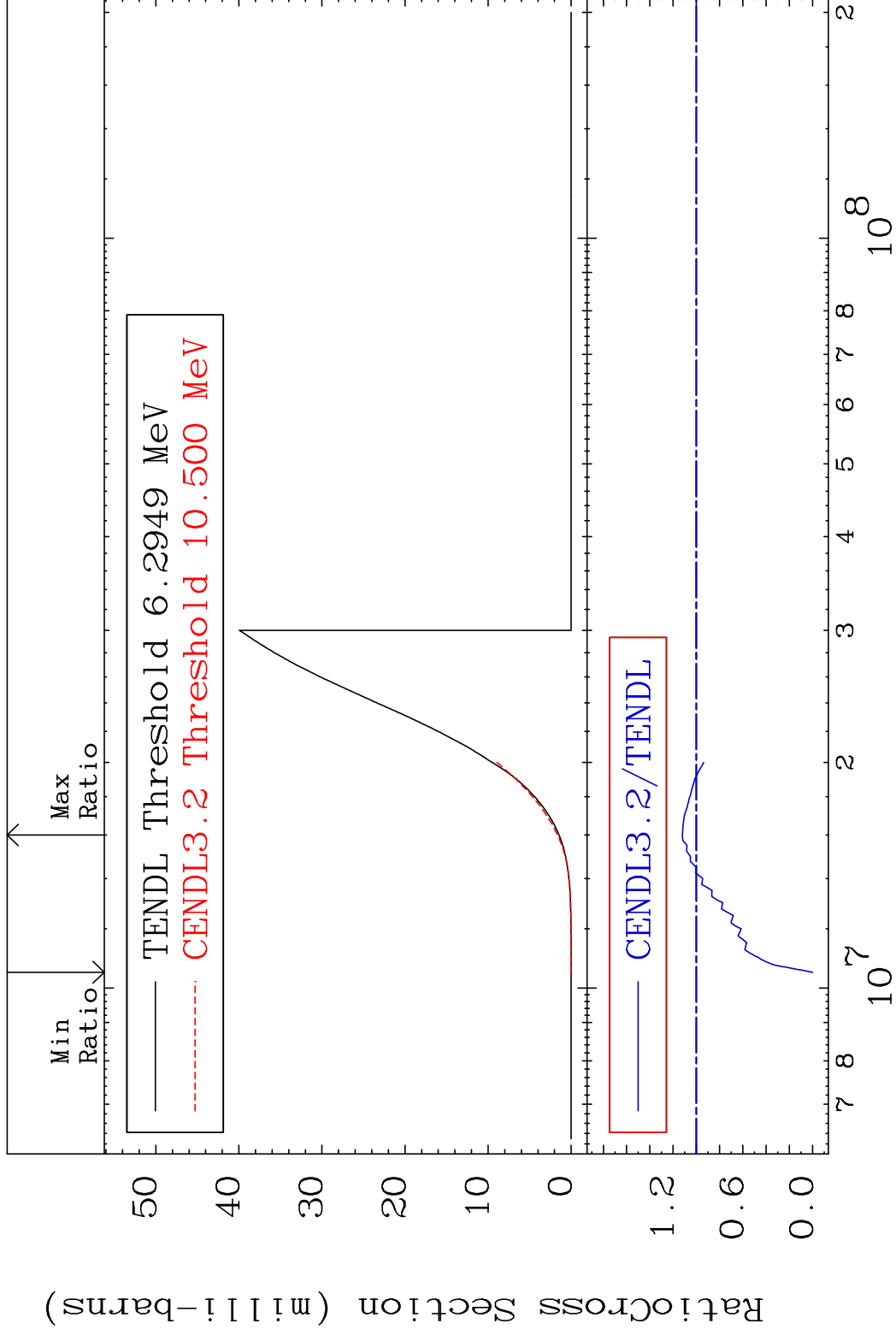
57-La-139

MAT 5728

(n, n') p

57-La-139

Cross Section -100.0 To 12.04 %

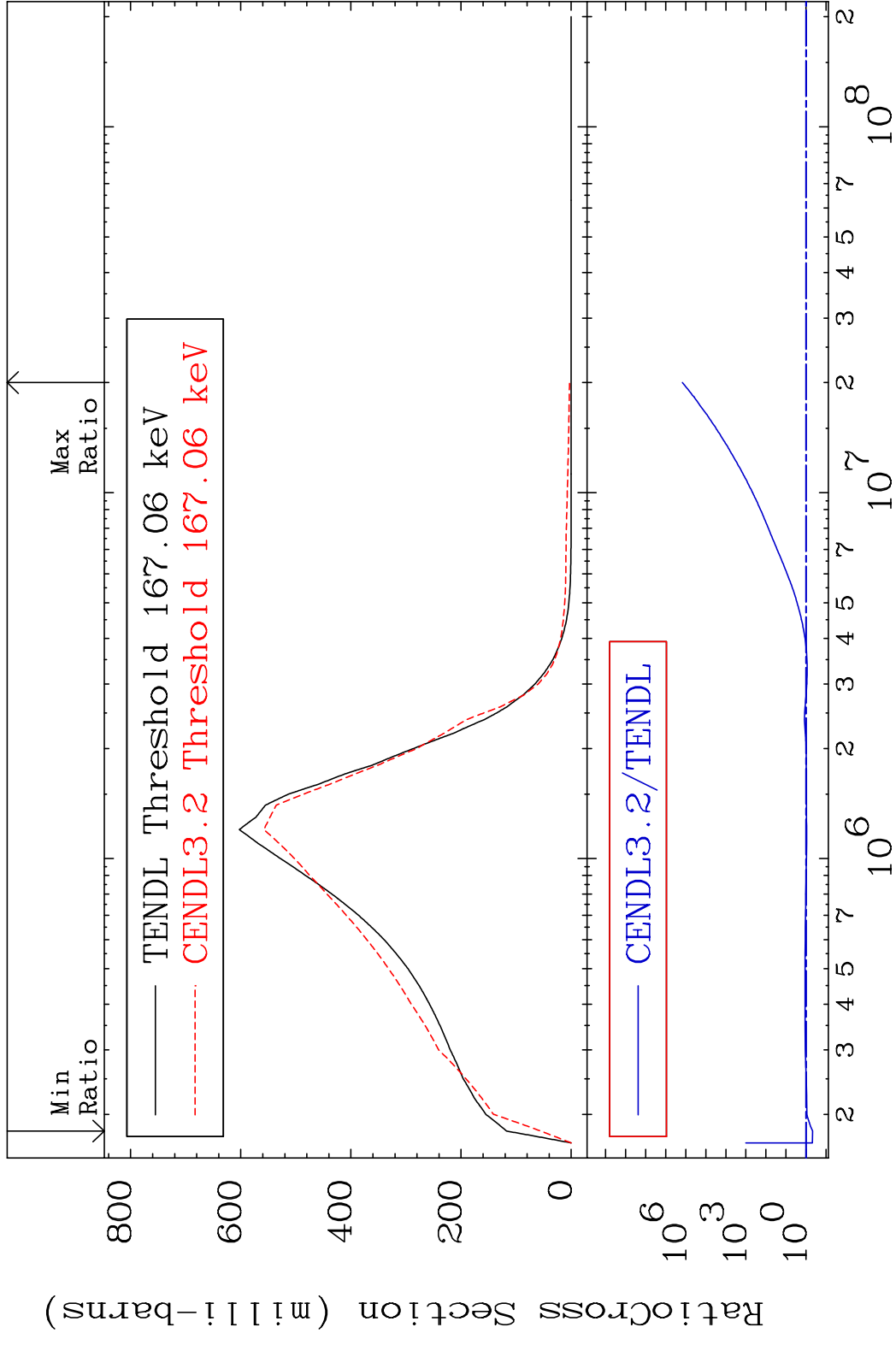


7

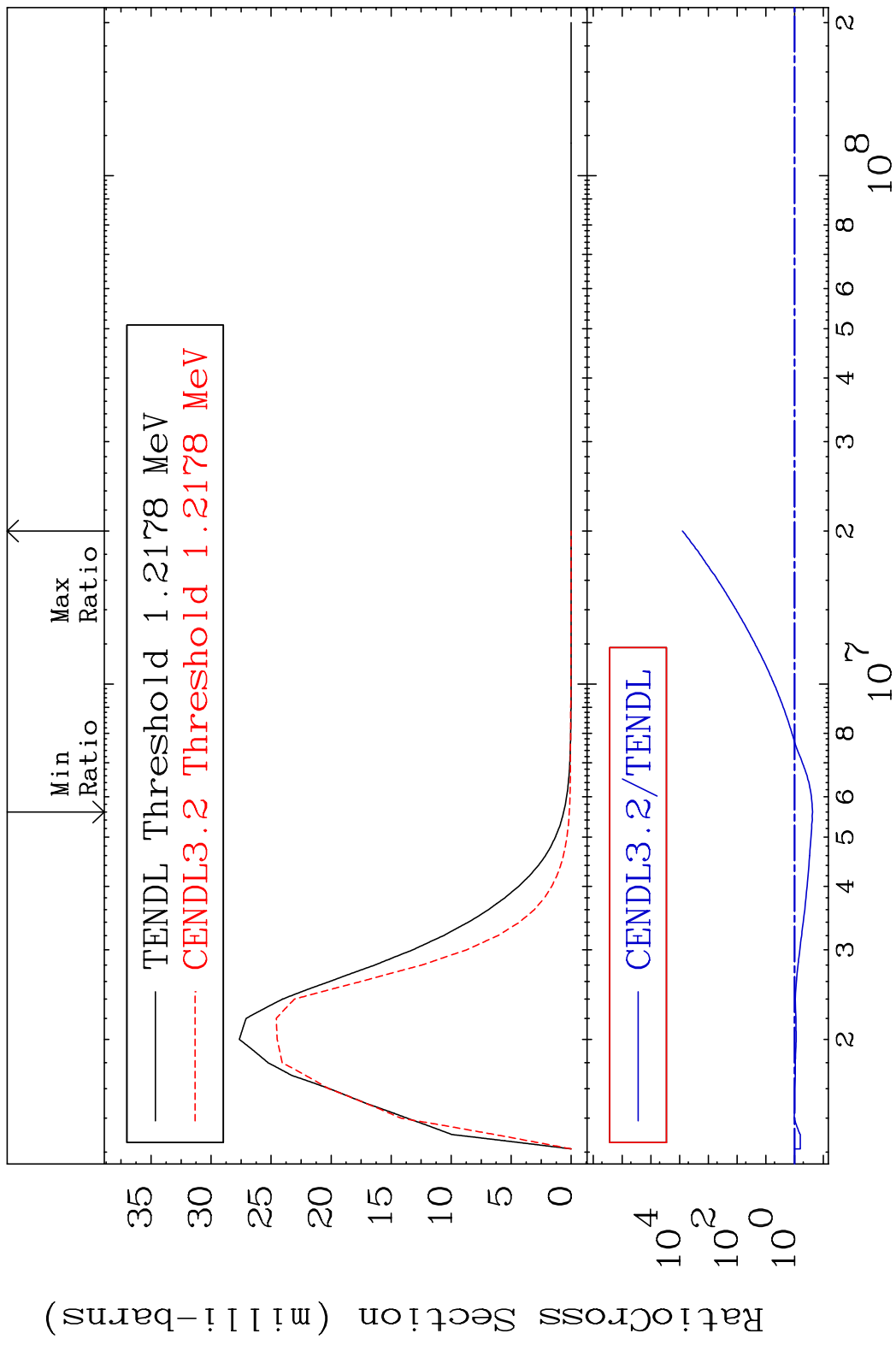
Incident Energy (eV)

57-La-139

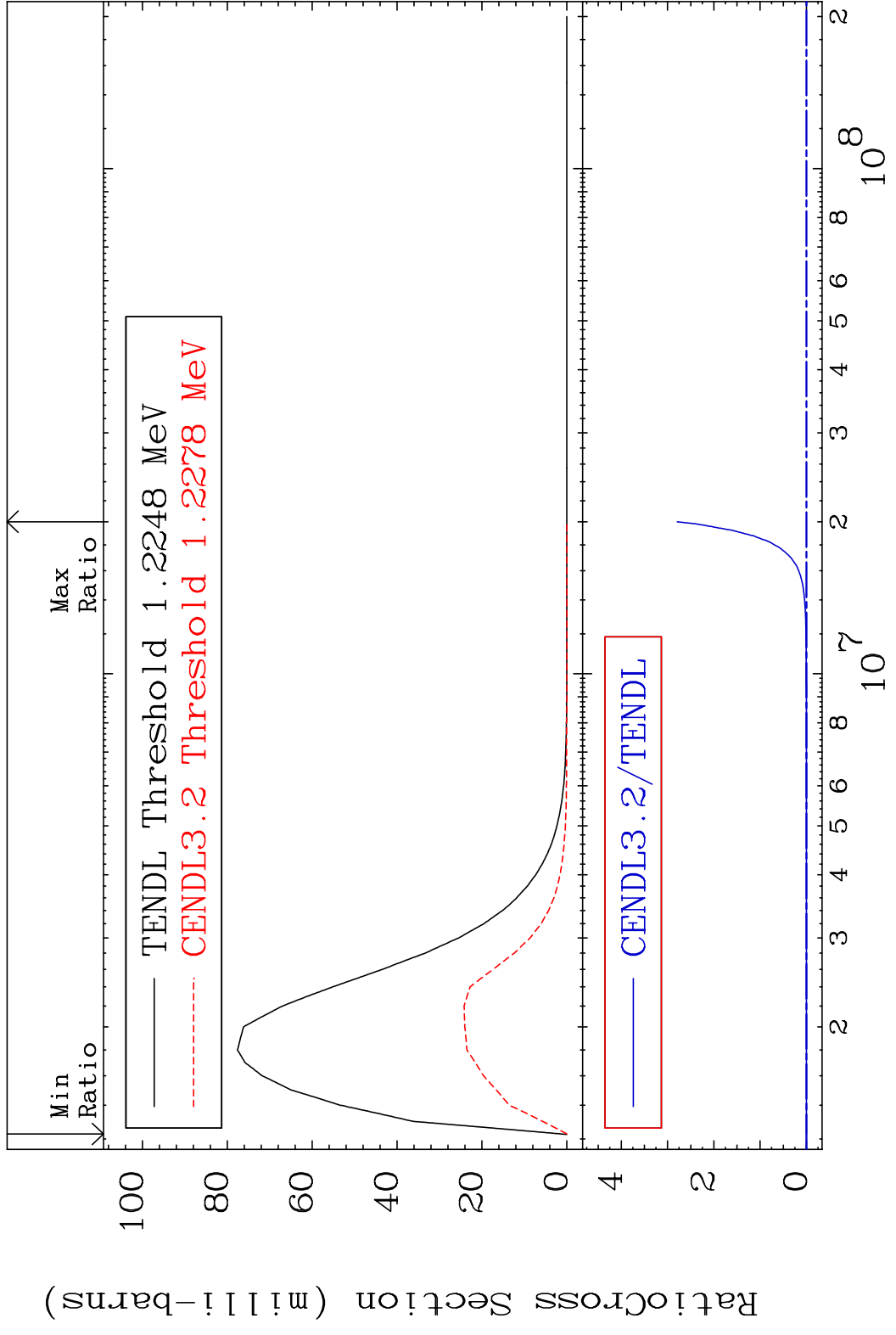
MAT 5728 MT= 51 (n,n') Level 57-La-139
 Cross Section -52.76 To 9999. %



MAT 5728 MT= 52 (n, n') Level 57-La-139
 Cross Section -76.11 To 9999. %

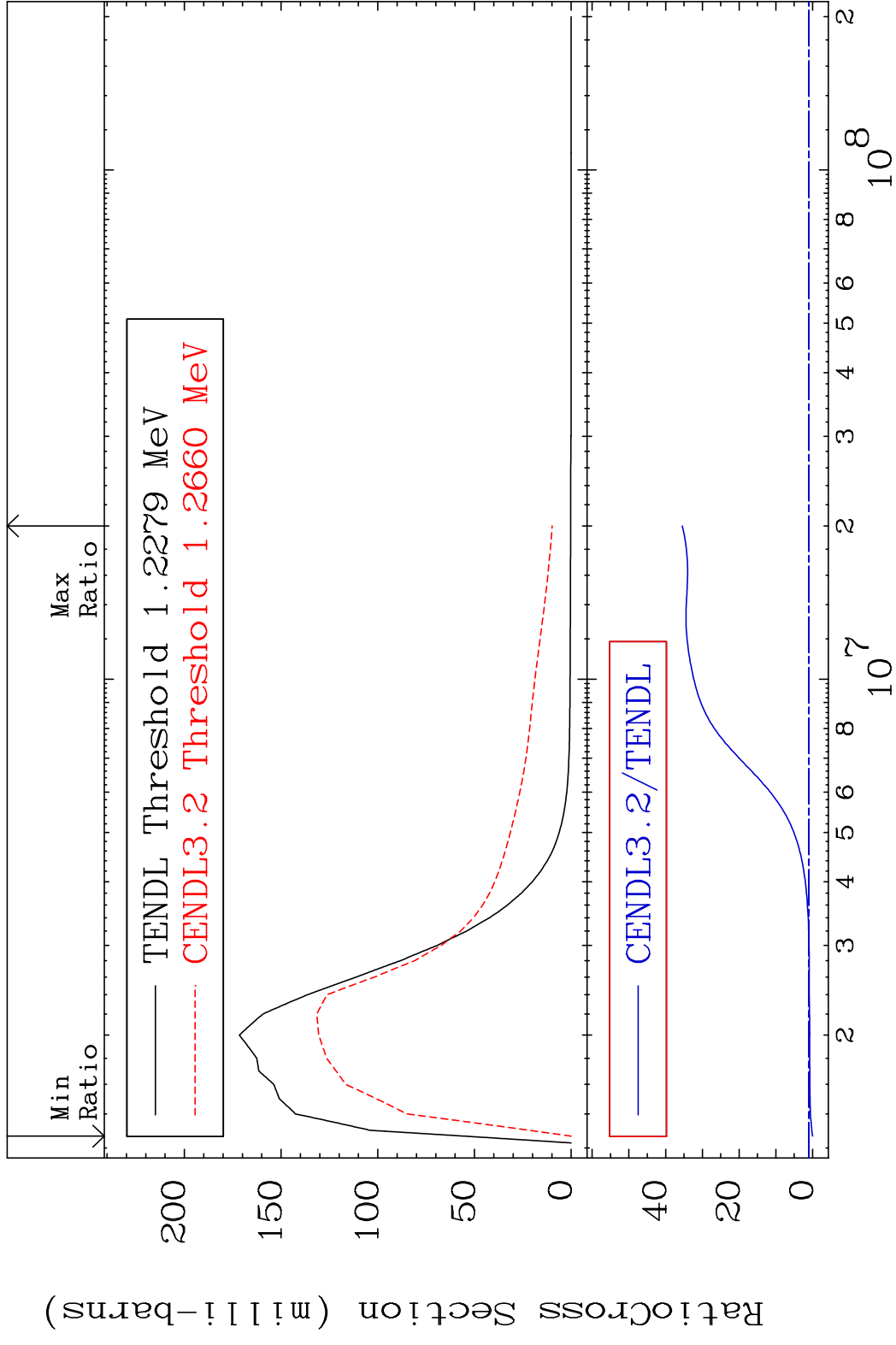


MAT 5728 MT= 53 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %

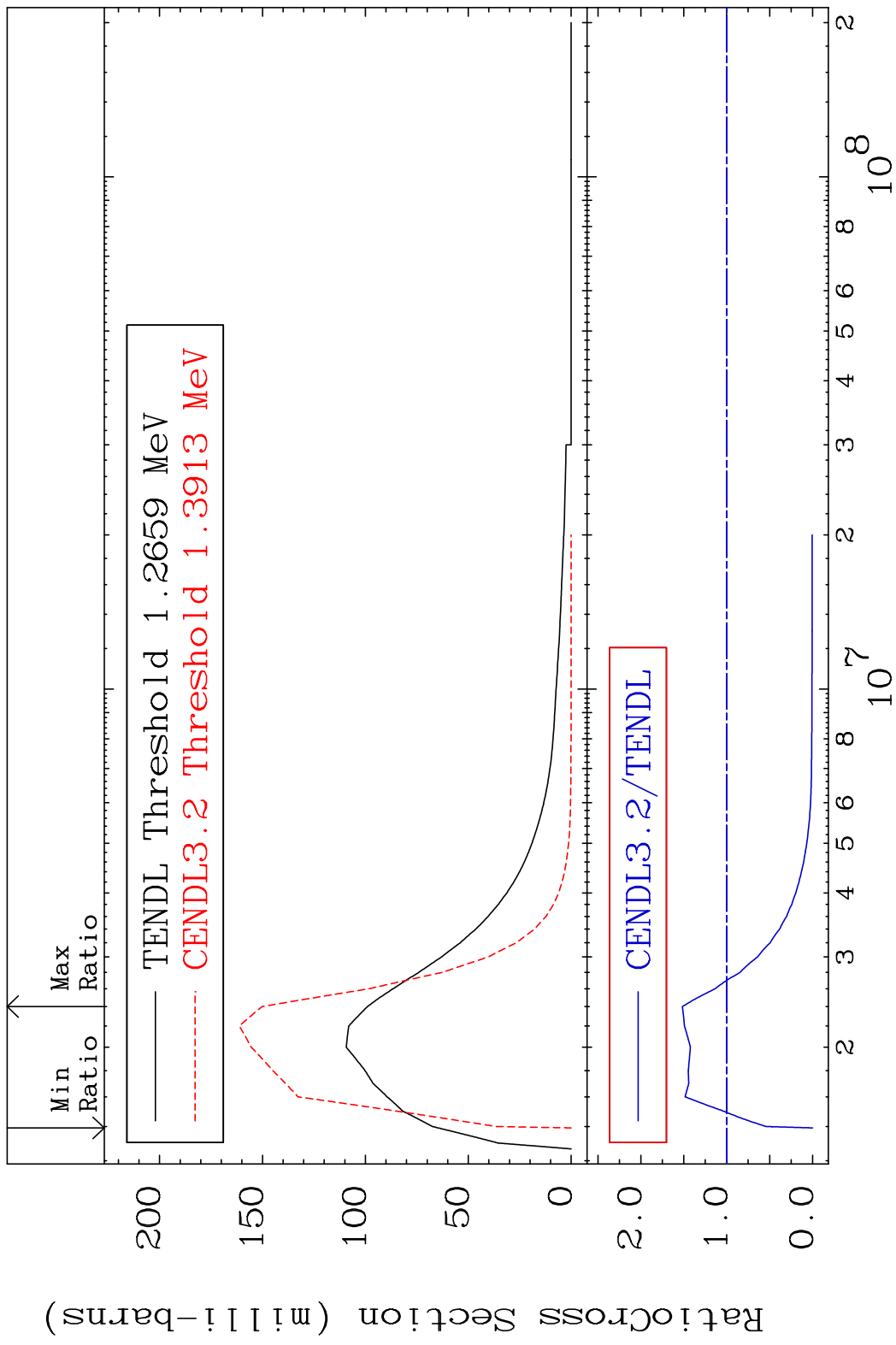


10 Incident Energy (eV) 57-La-139

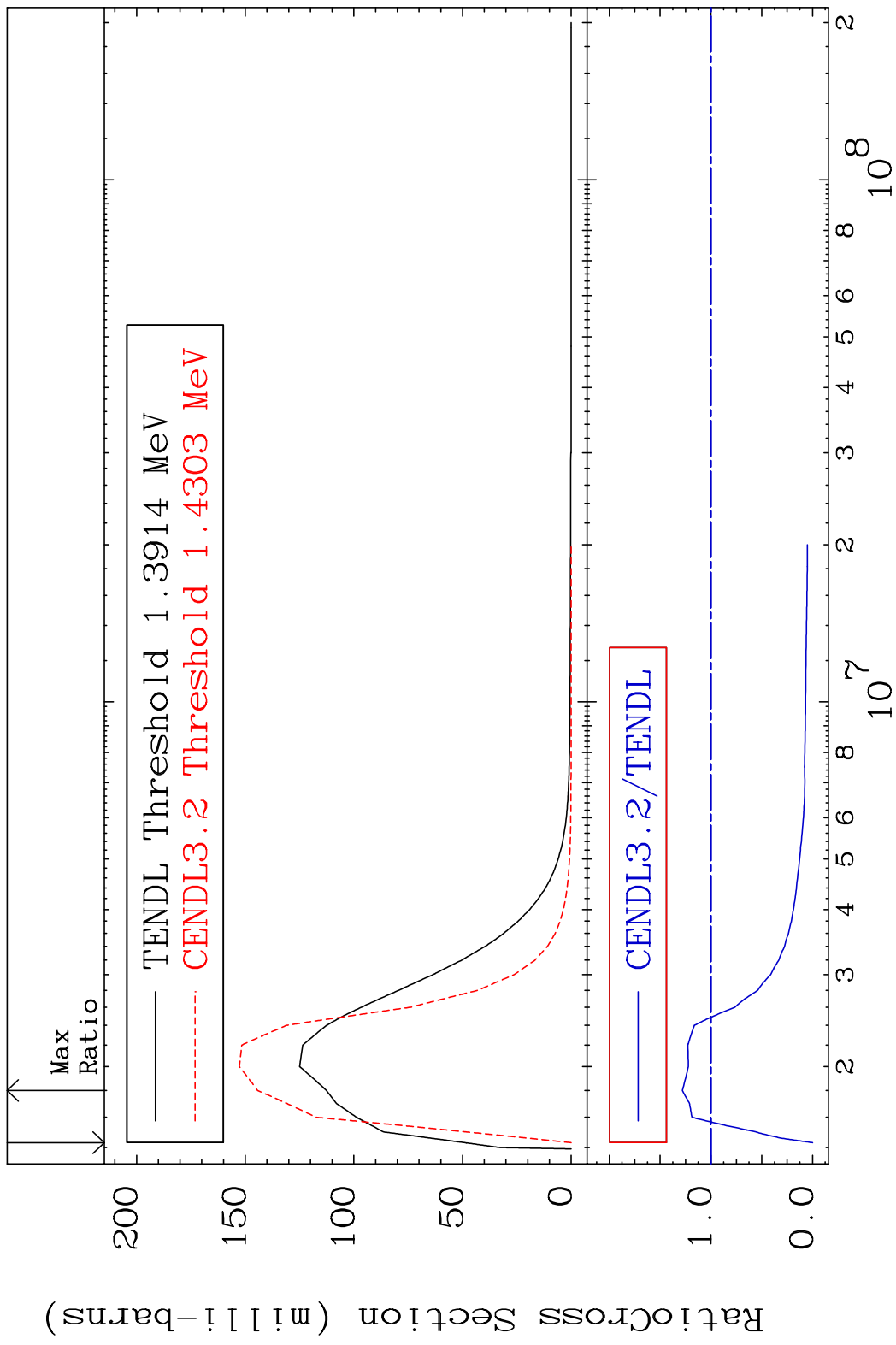
MAT 5728 MT= 54 (n, n') Level 57-La-139
 Cross Section -100.0 To 3445. %



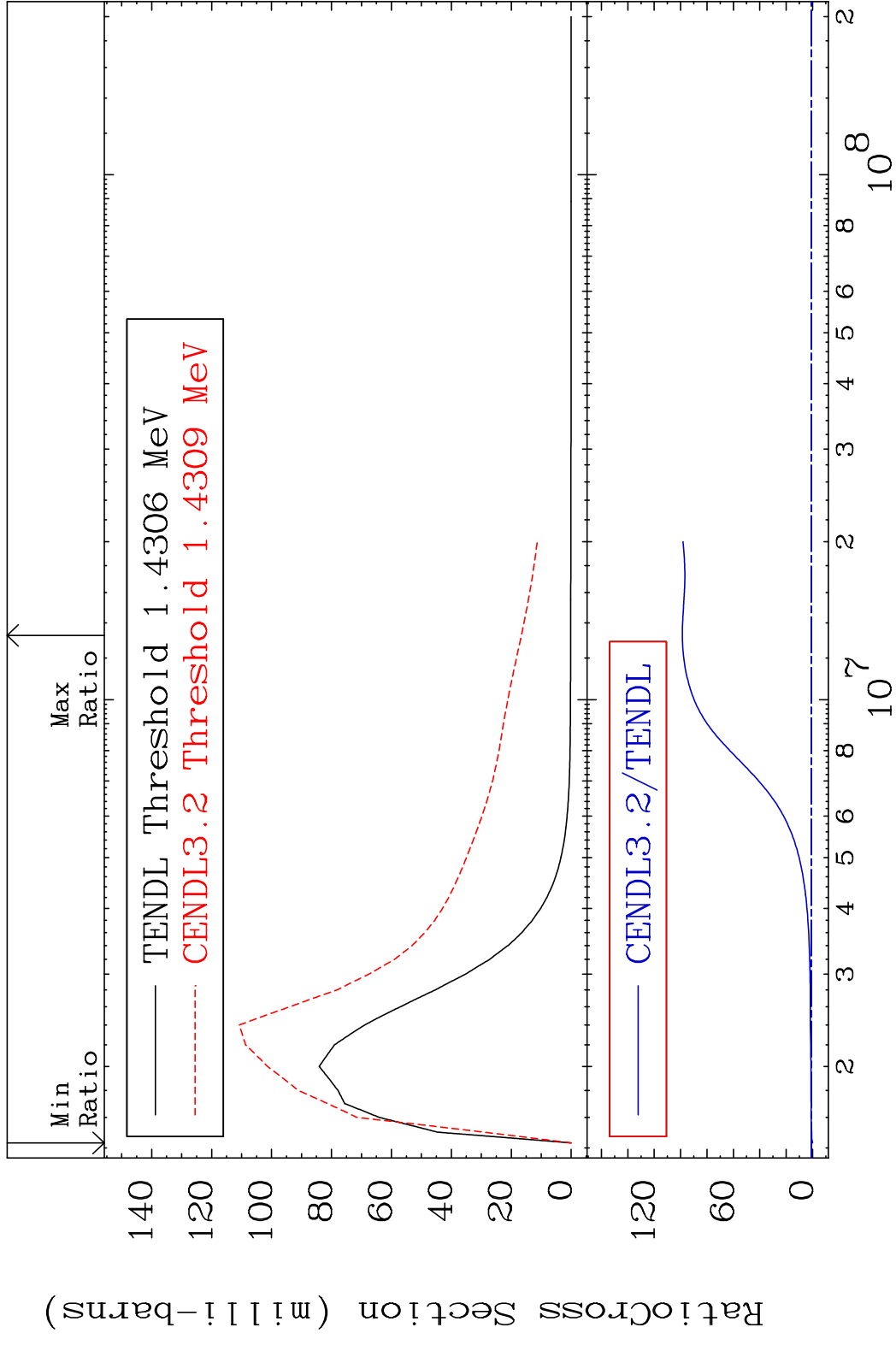
MAT 5728 MT= 55 (n, n') Level 57-La-139
 Cross Section -100.0 To 51.66 %



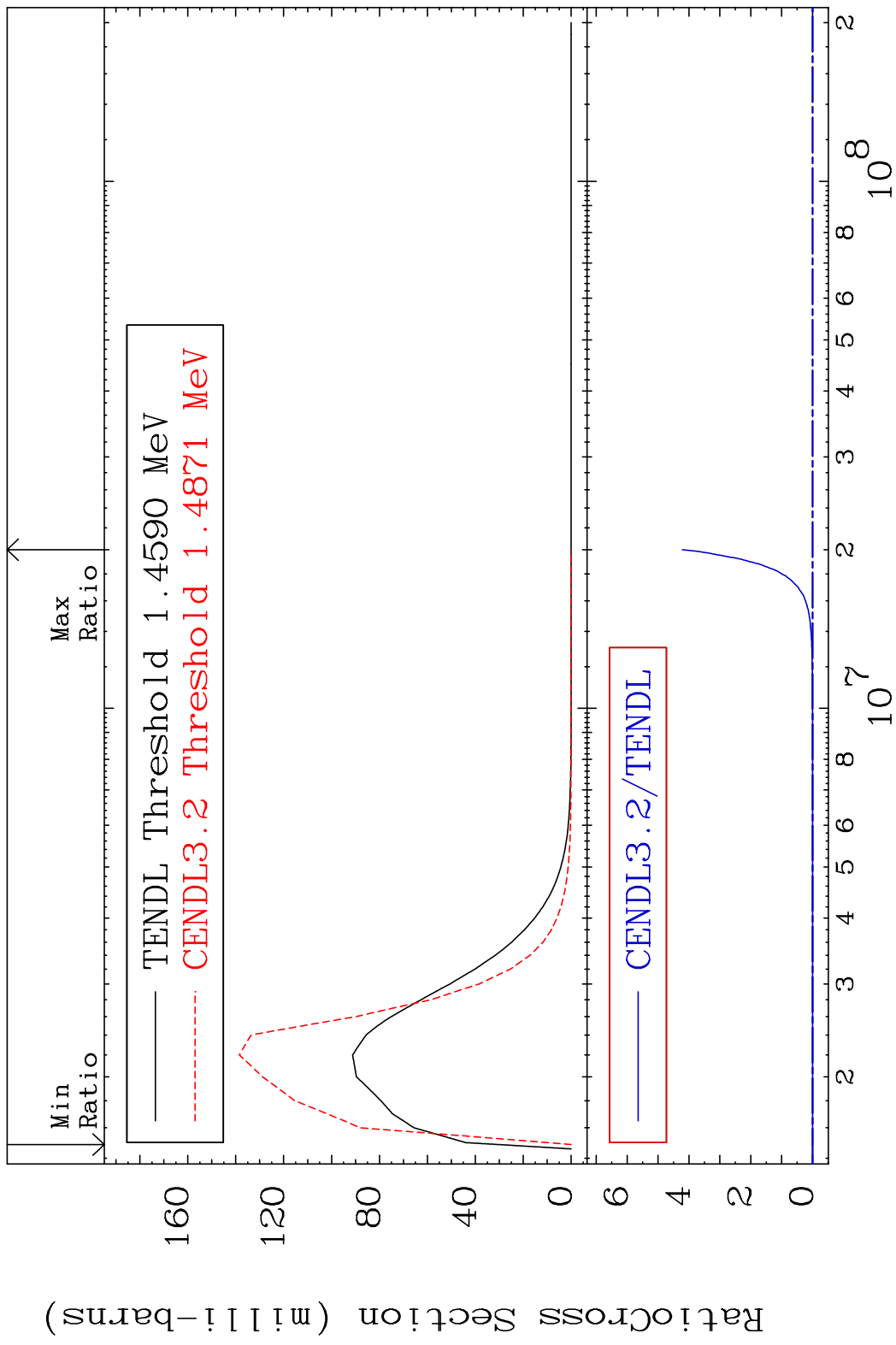
MAT 5728 MT= 56 (n,n') Level 57-La-139
 Cross Section -100.0 To 28.12 %



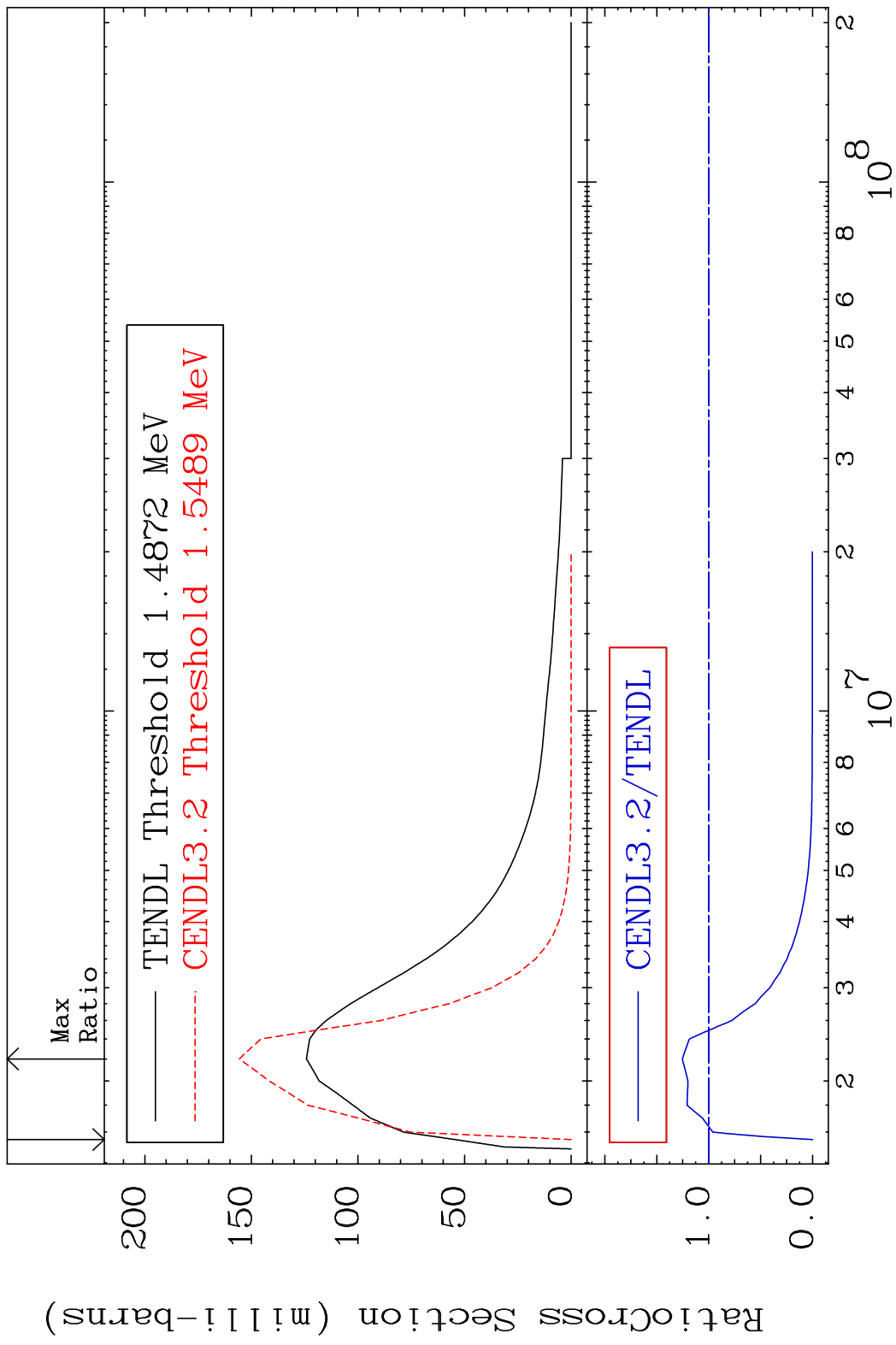
MAT 5728 MT= 57 (n, n') Level 57-La-139
 Cross Section -100.0 To 9767. %



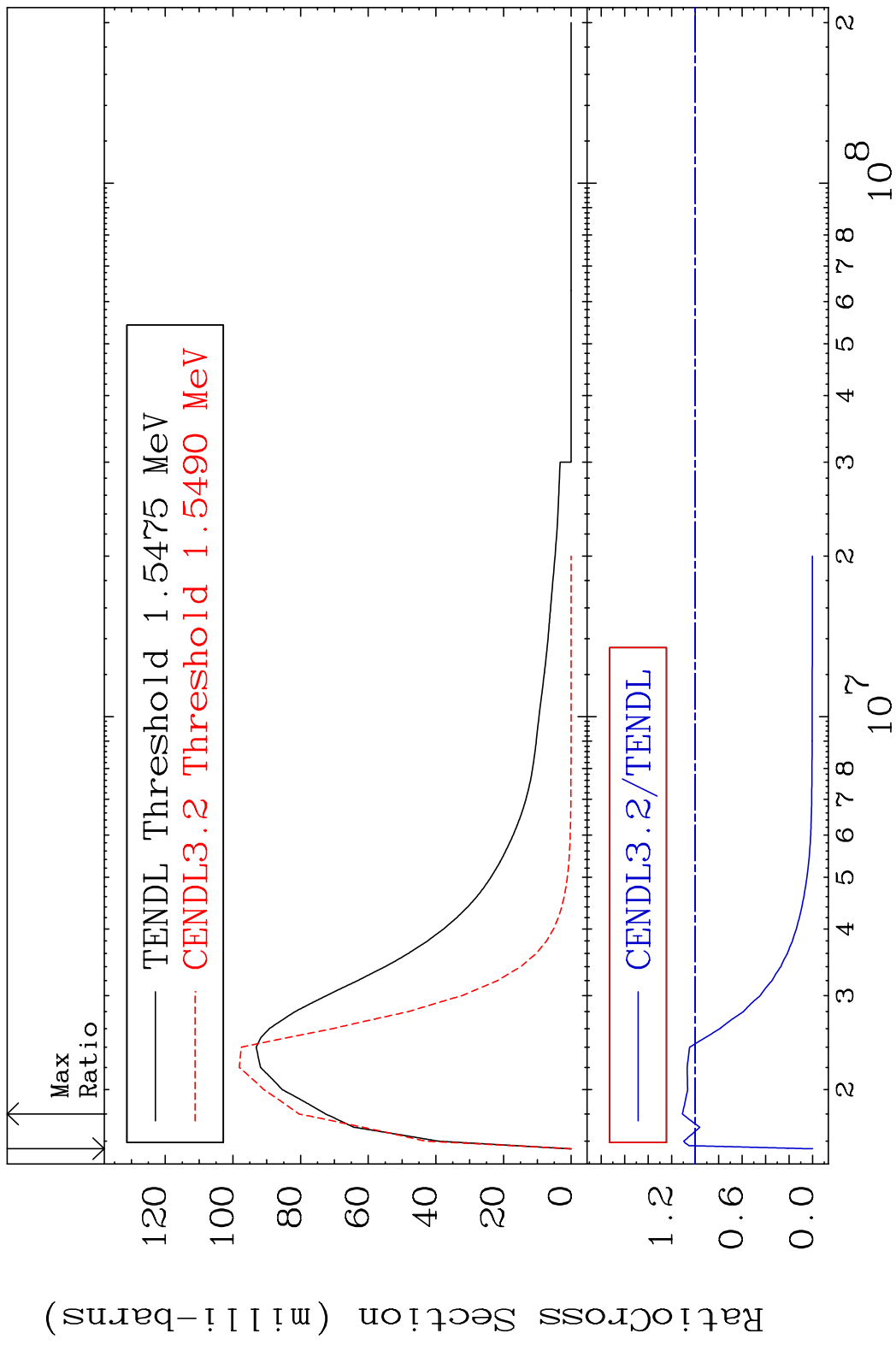
MAT 5728 MT= 58 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



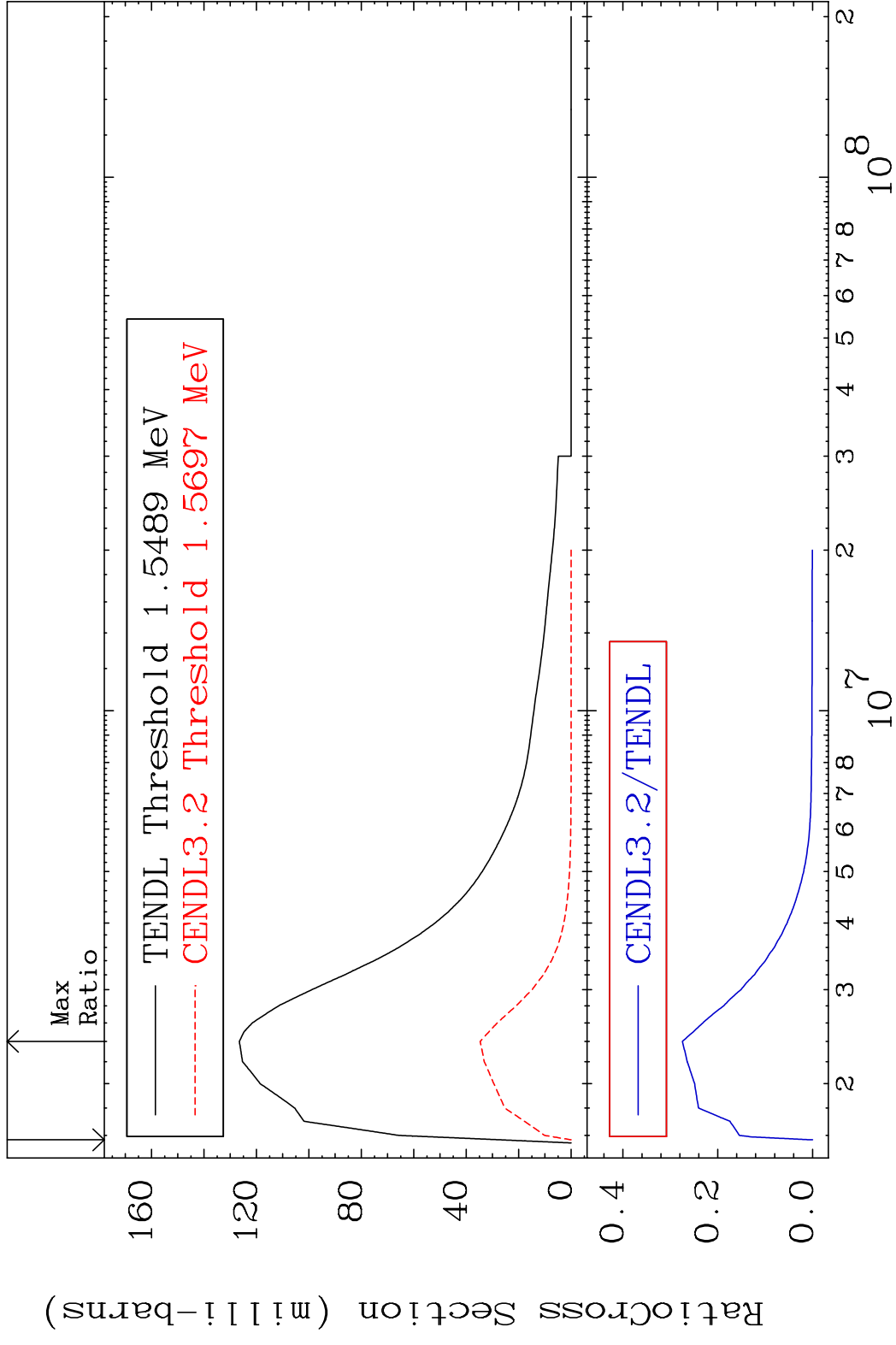
MAT 5728 MT= 59 (n, n') Level 57-La-139
 Cross Section -100.0 To 25.34 %



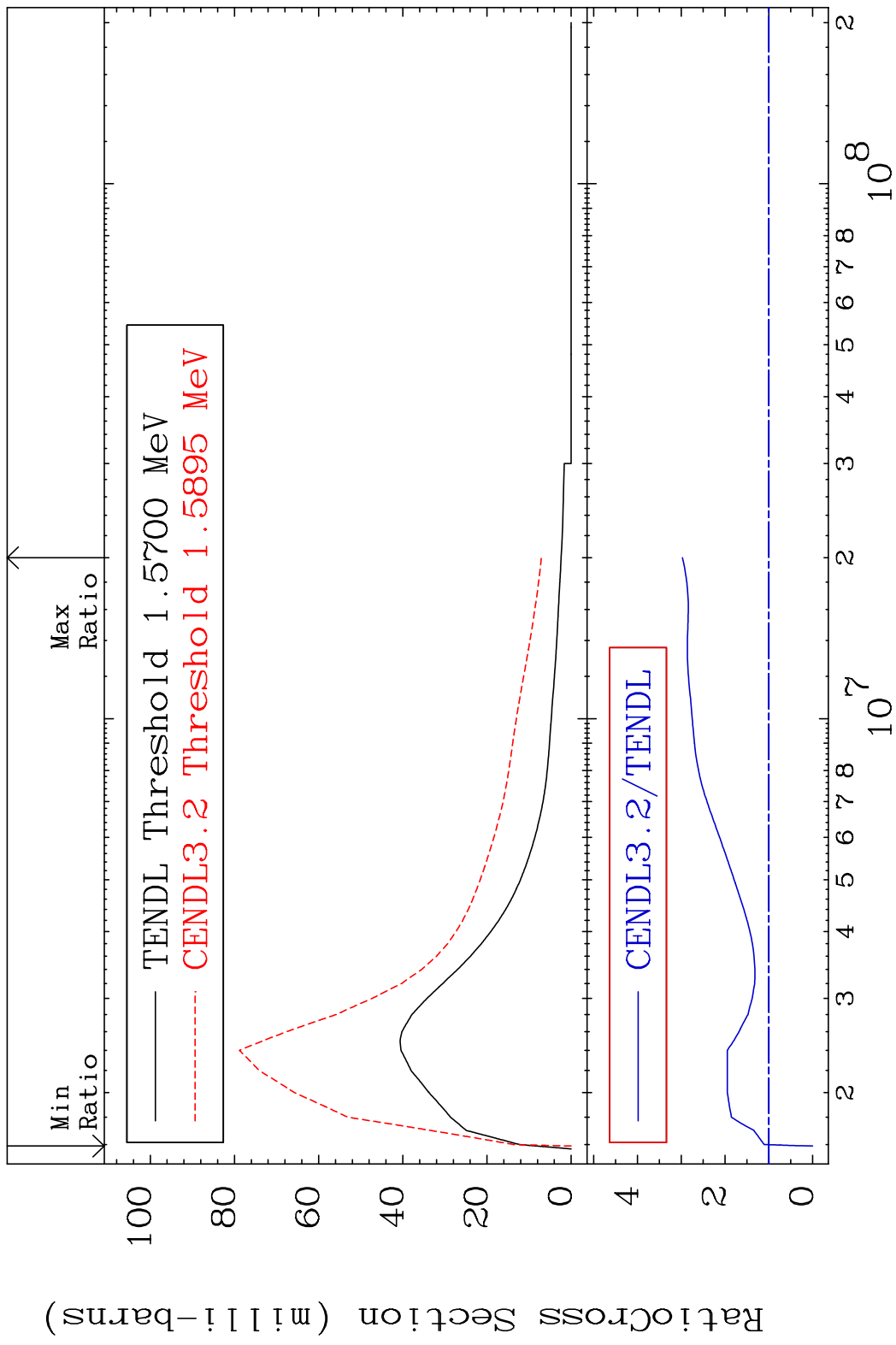
MAT 5728 MT= 60 (n,n') Level 57-La-139
 Cross Section -100.0 To 10.88 %



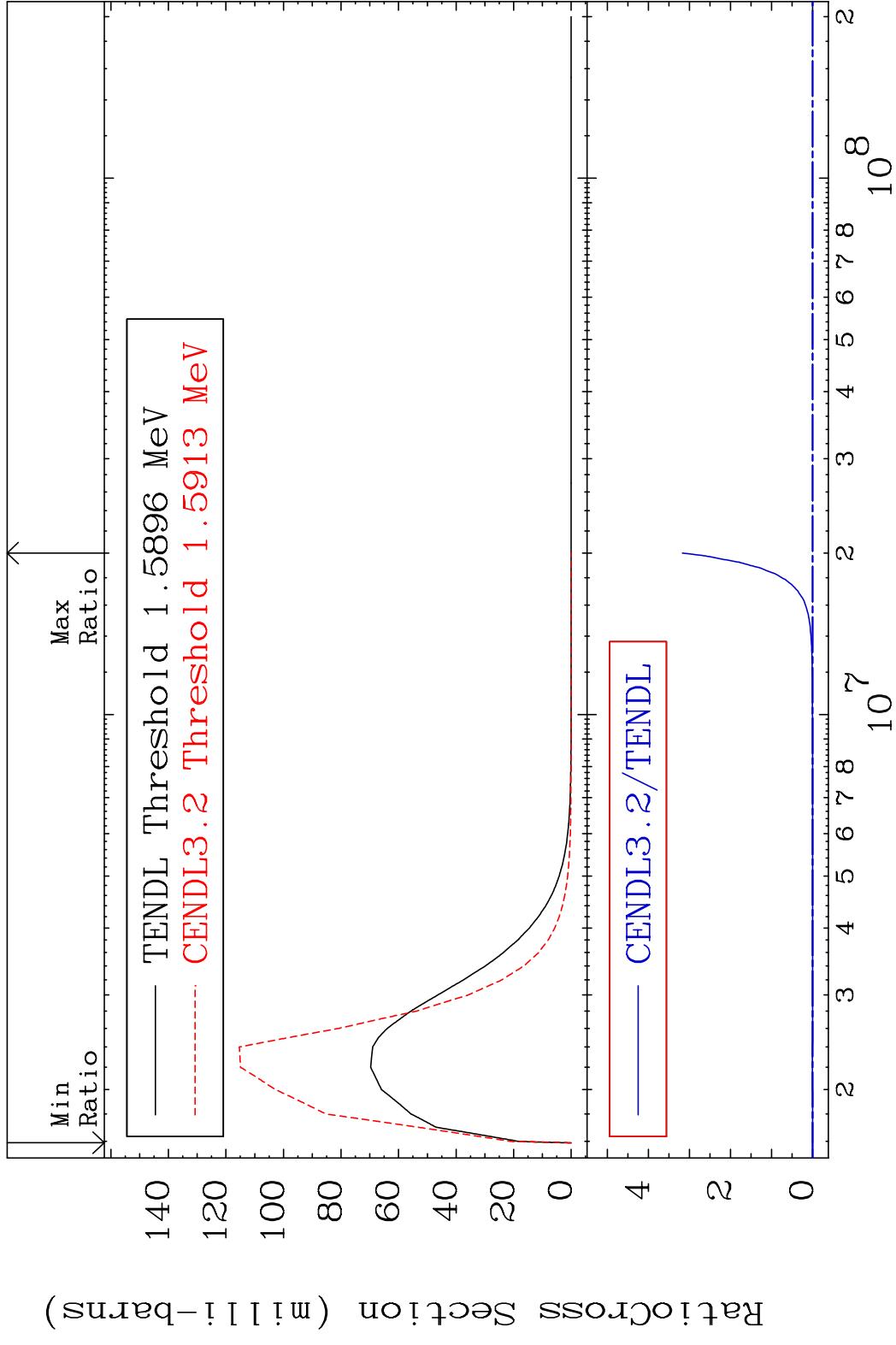
MAT 5728 MT= 61 (n,n') Level 57-La-139
 Cross Section -100.0 To -72.53%



MAT 5728 MT= 62 (n, n') Level 57-La-139
 Cross Section -100.0 To 197.6 %

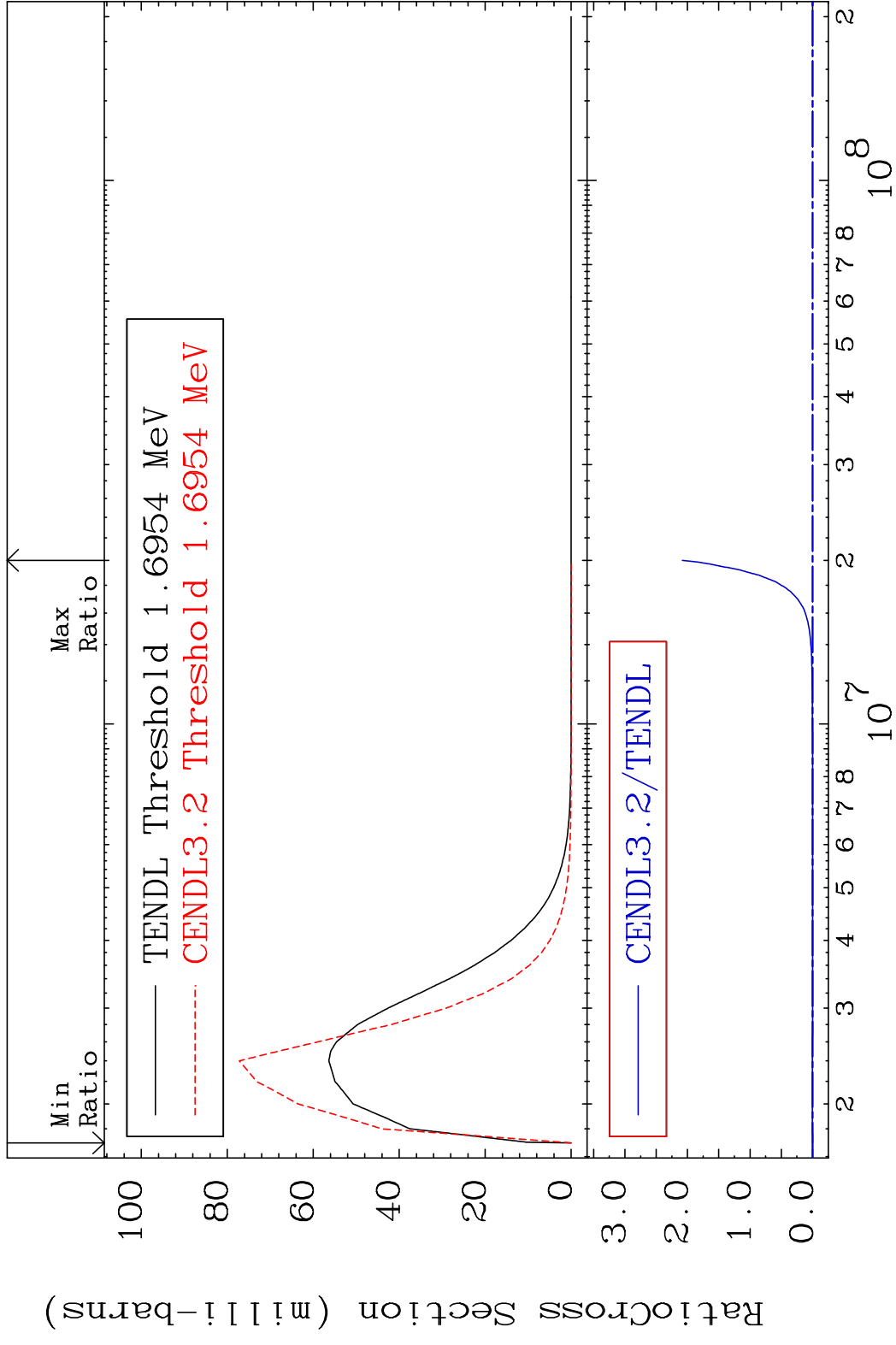


MAT 5728 MT= 63 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %

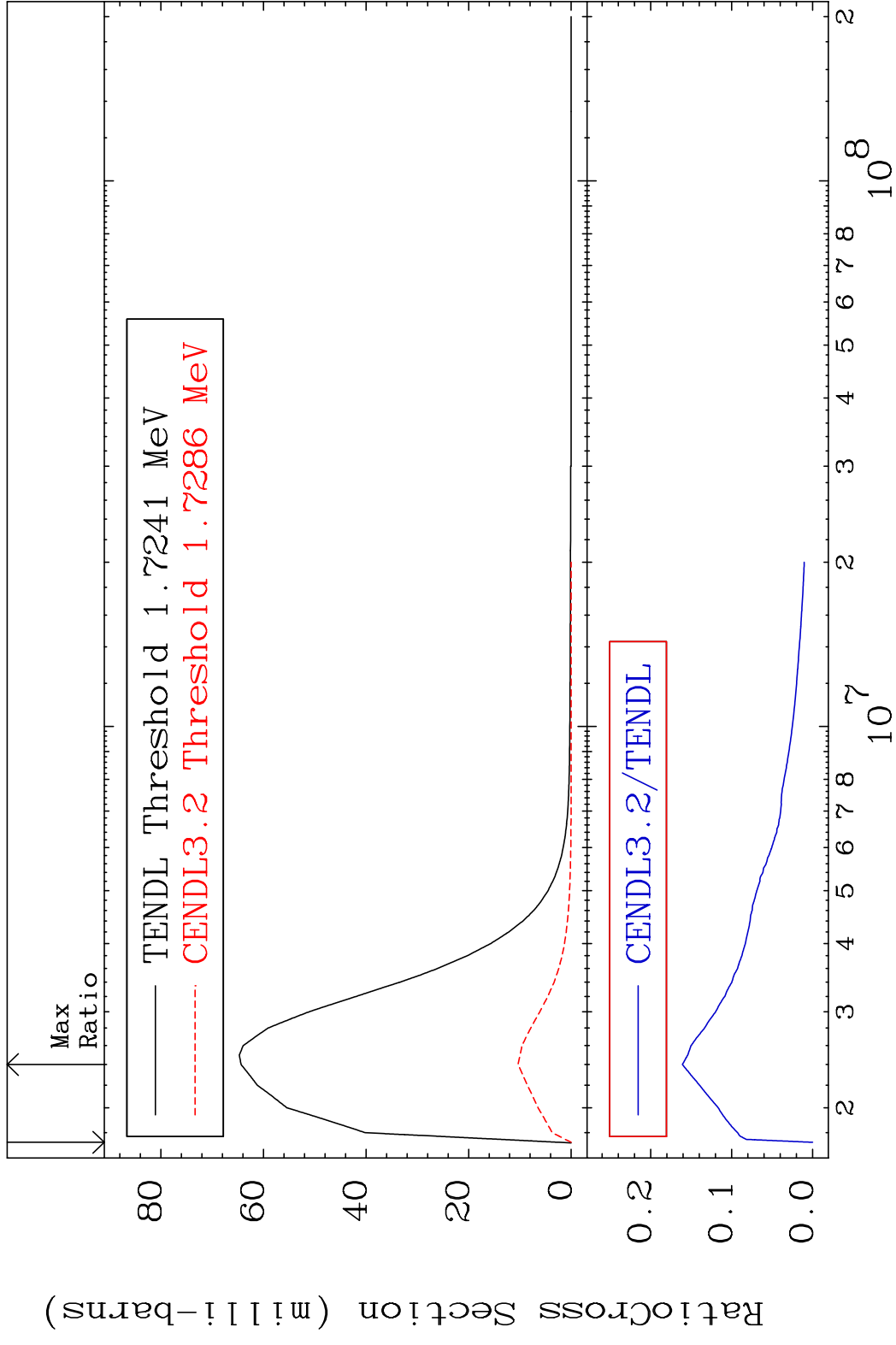


20 57-La-139

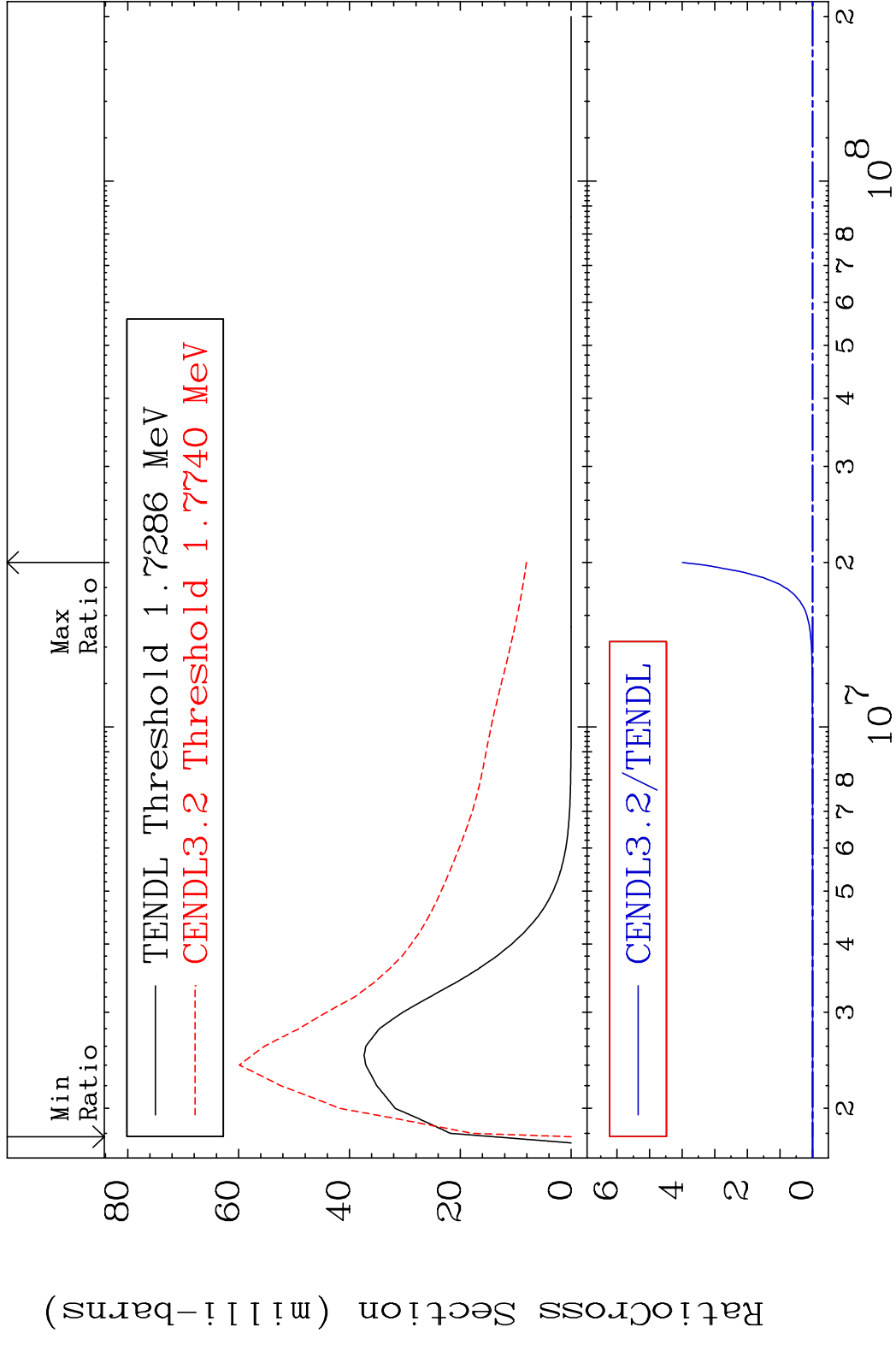
MAT 5728 MT= 64 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



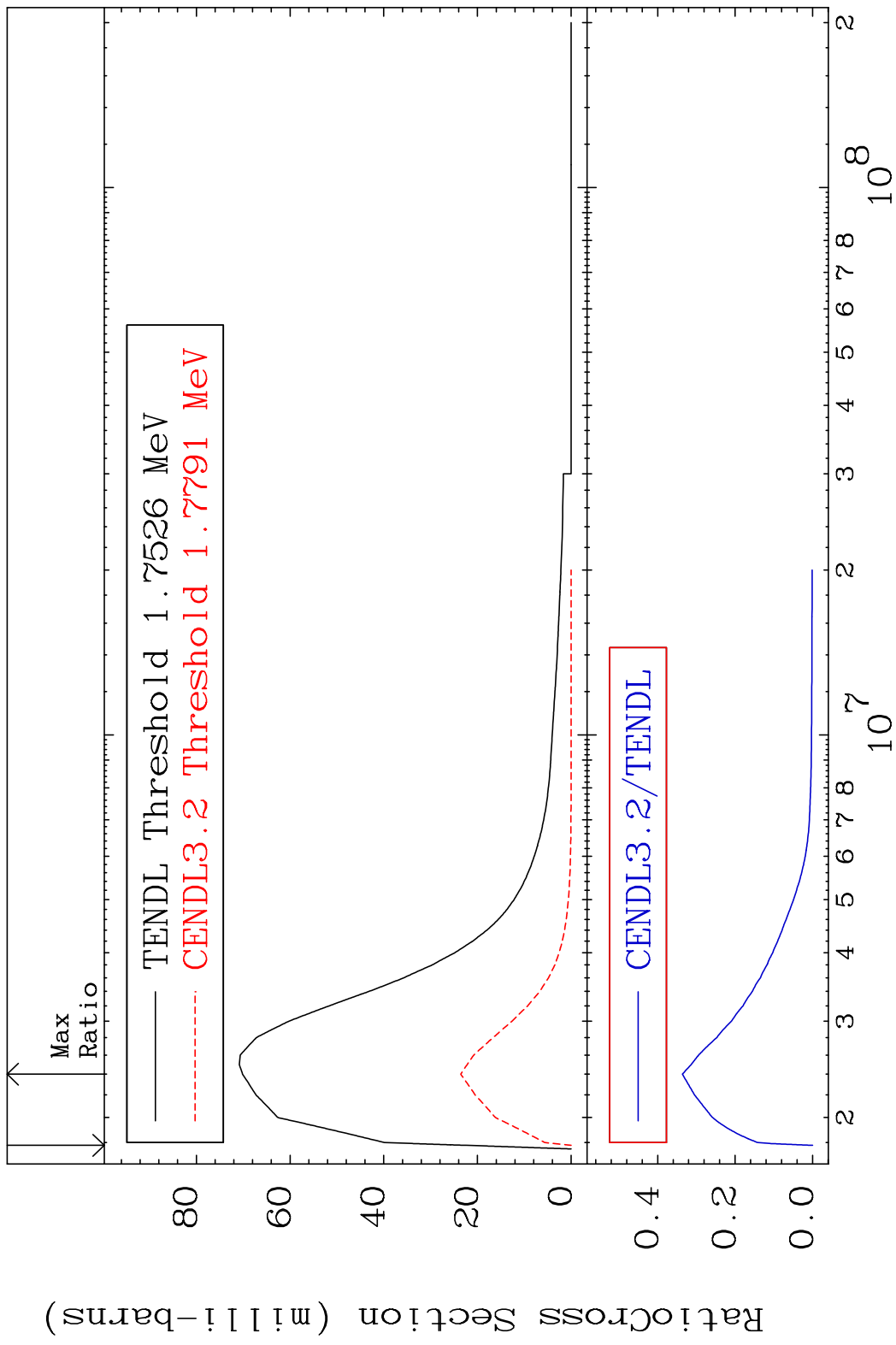
MAT 5728 MT= 65 (n, n') Level 57-La-139
 Cross Section -100.0 To -83.91%



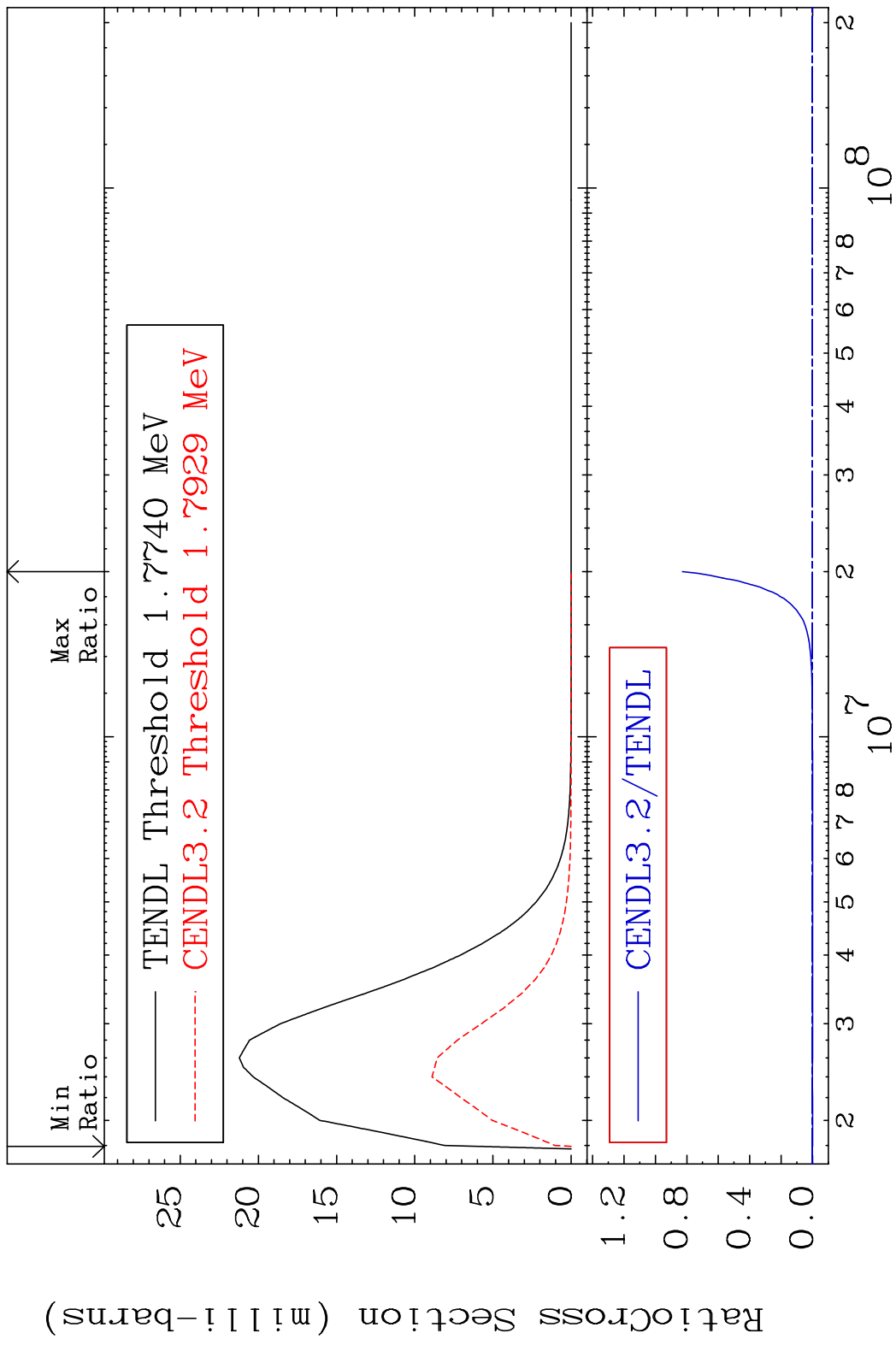
MAT 5728 MT= 66 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



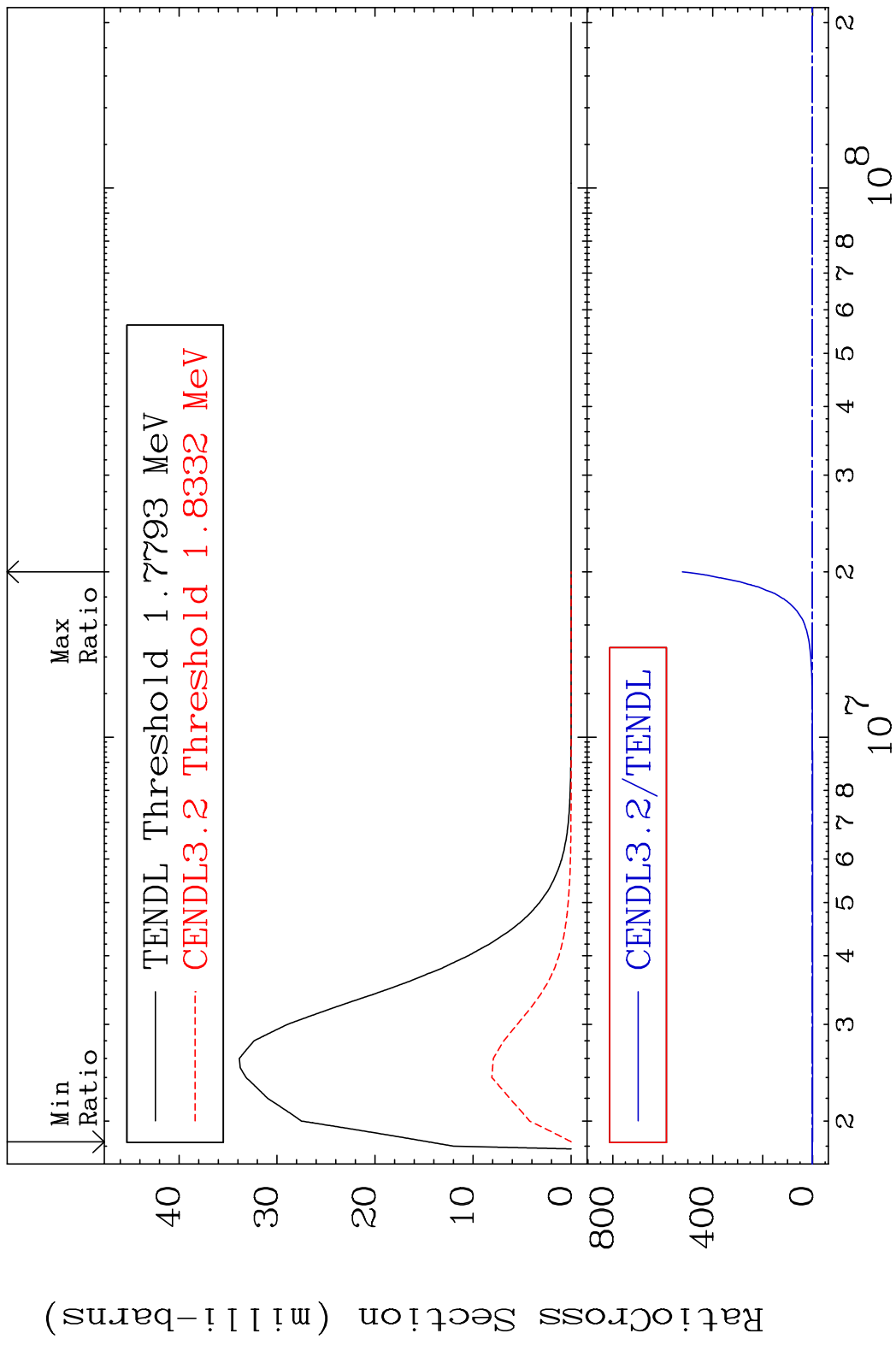
MAT 5728 MT= 67 (n, n') Level 57-La-139
 Cross Section -100.0 To -66.37%



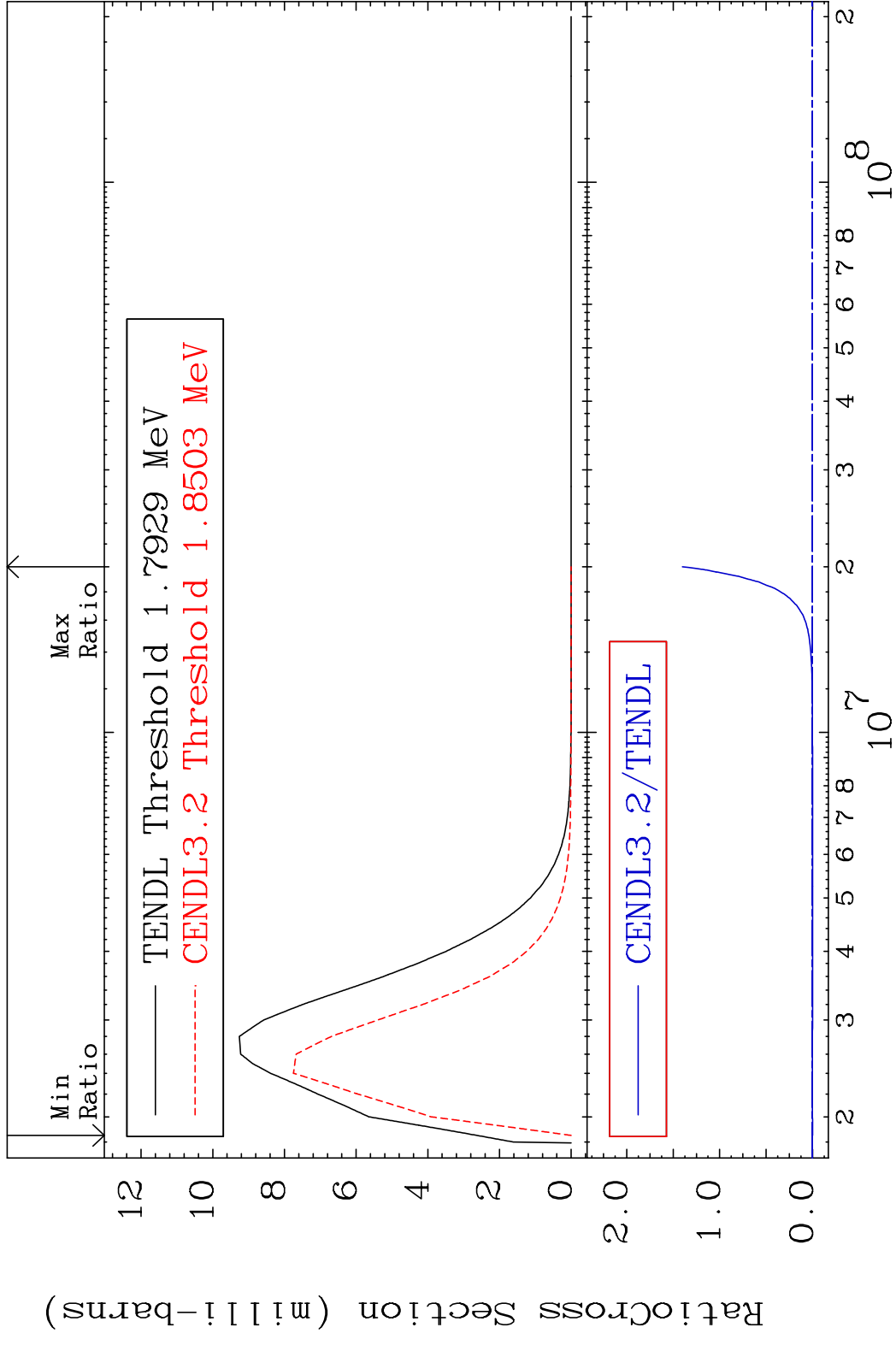
MAT 5728 MT= 68 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



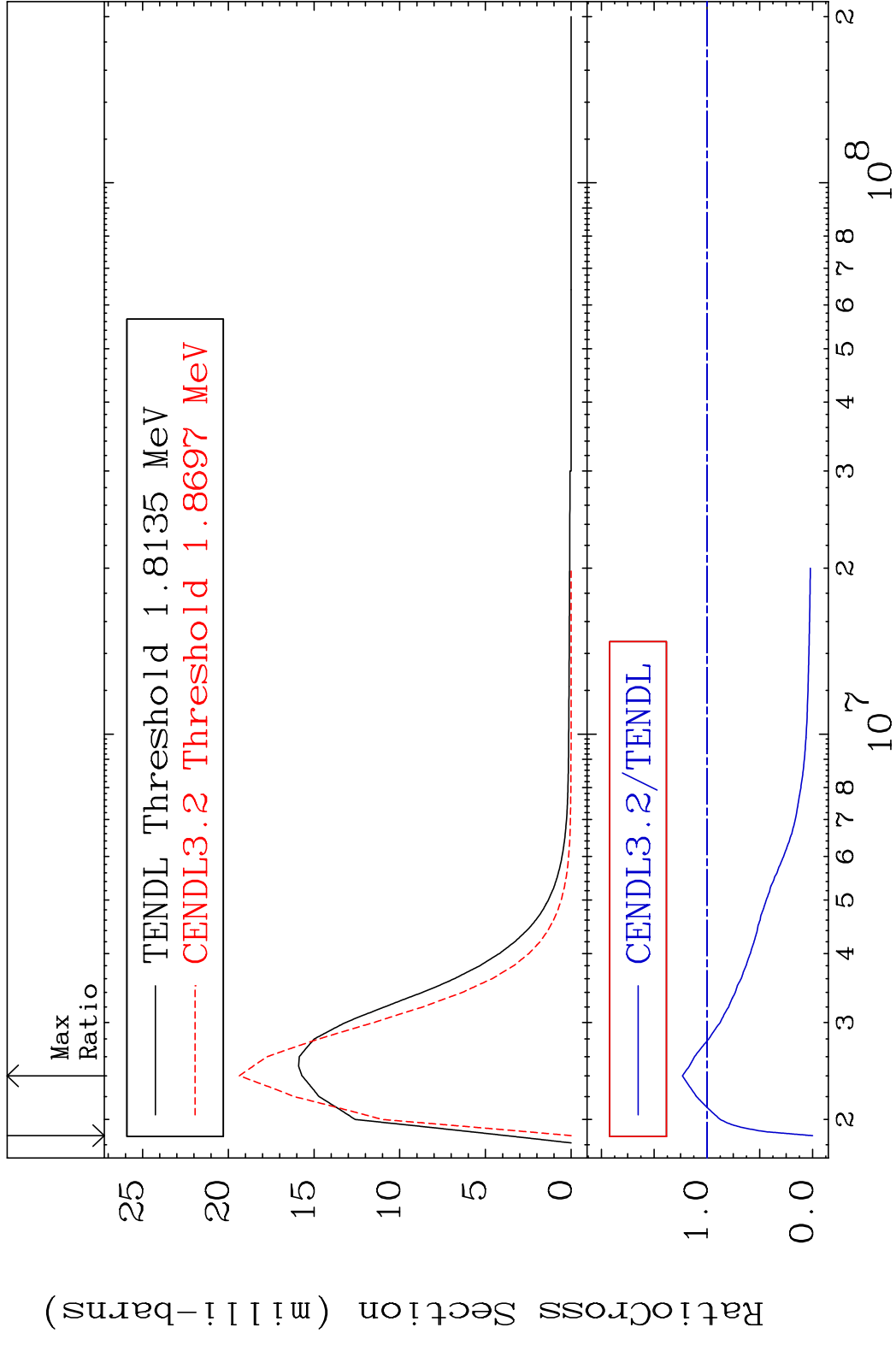
MAT 5728 MT= 69 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



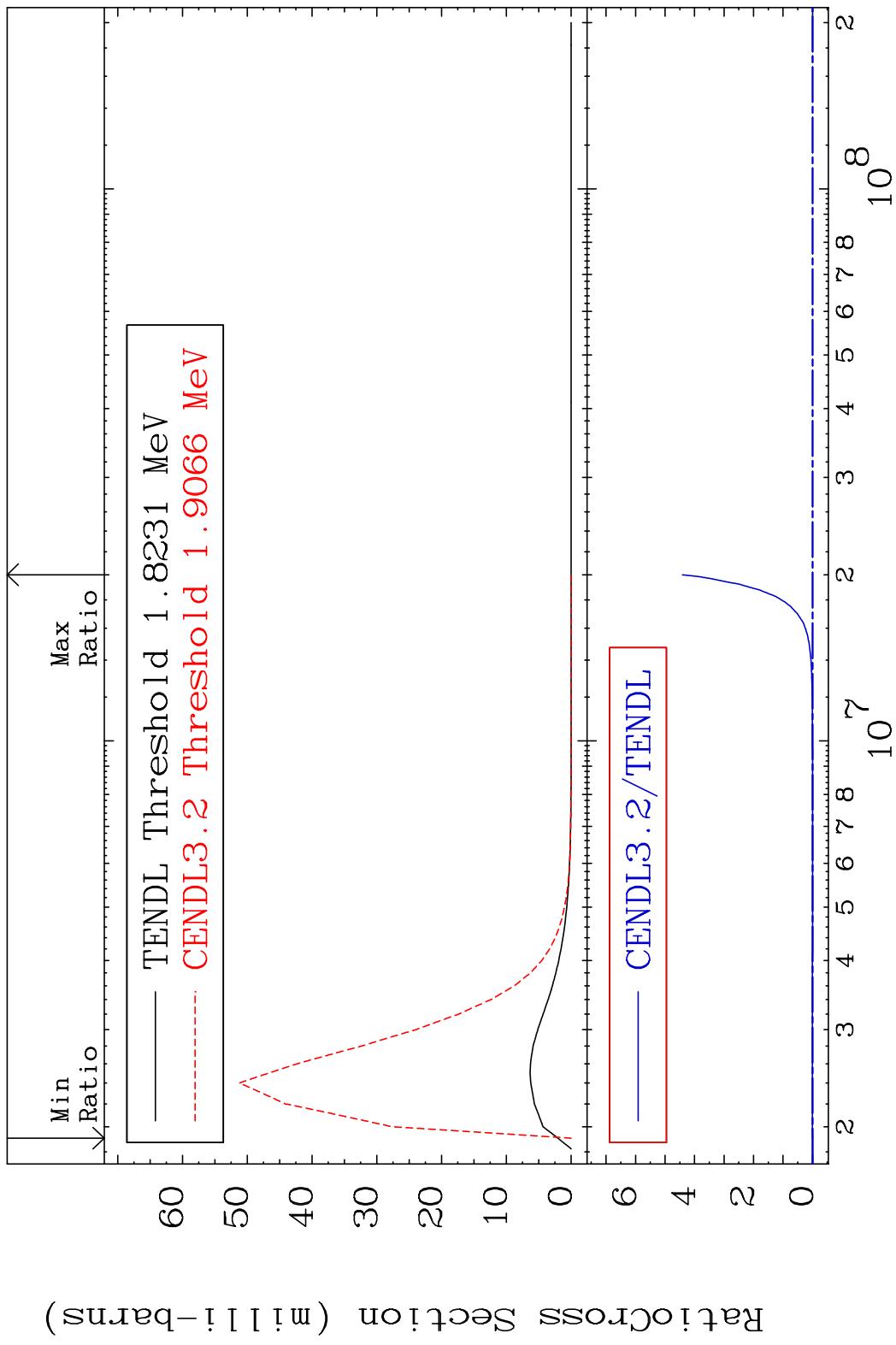
MAT 5728 MT= 70 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



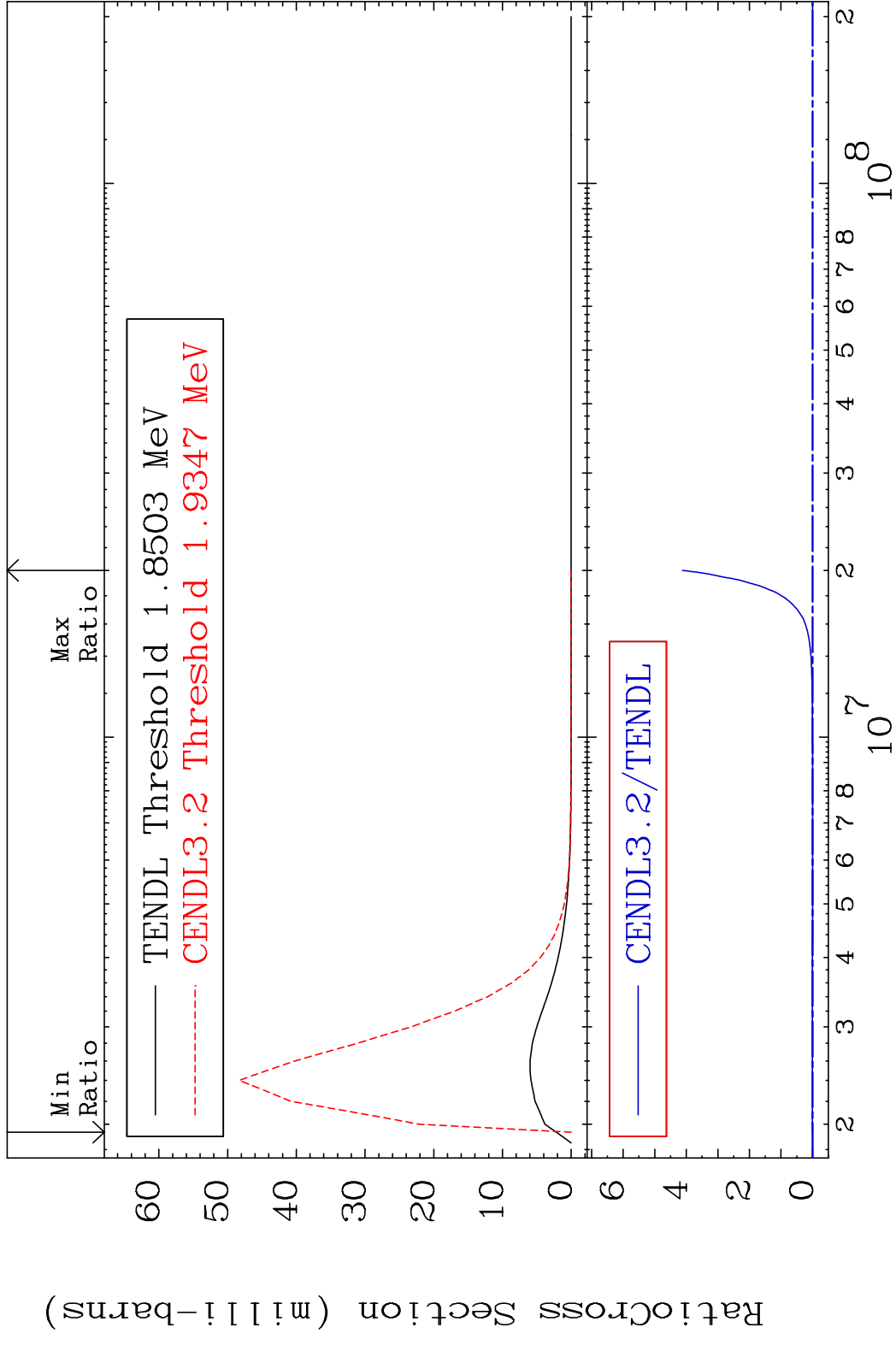
MAT 5728 MT= 71 (n,n') Level 57-La-139
 Cross Section -100.0 To 23.29 %



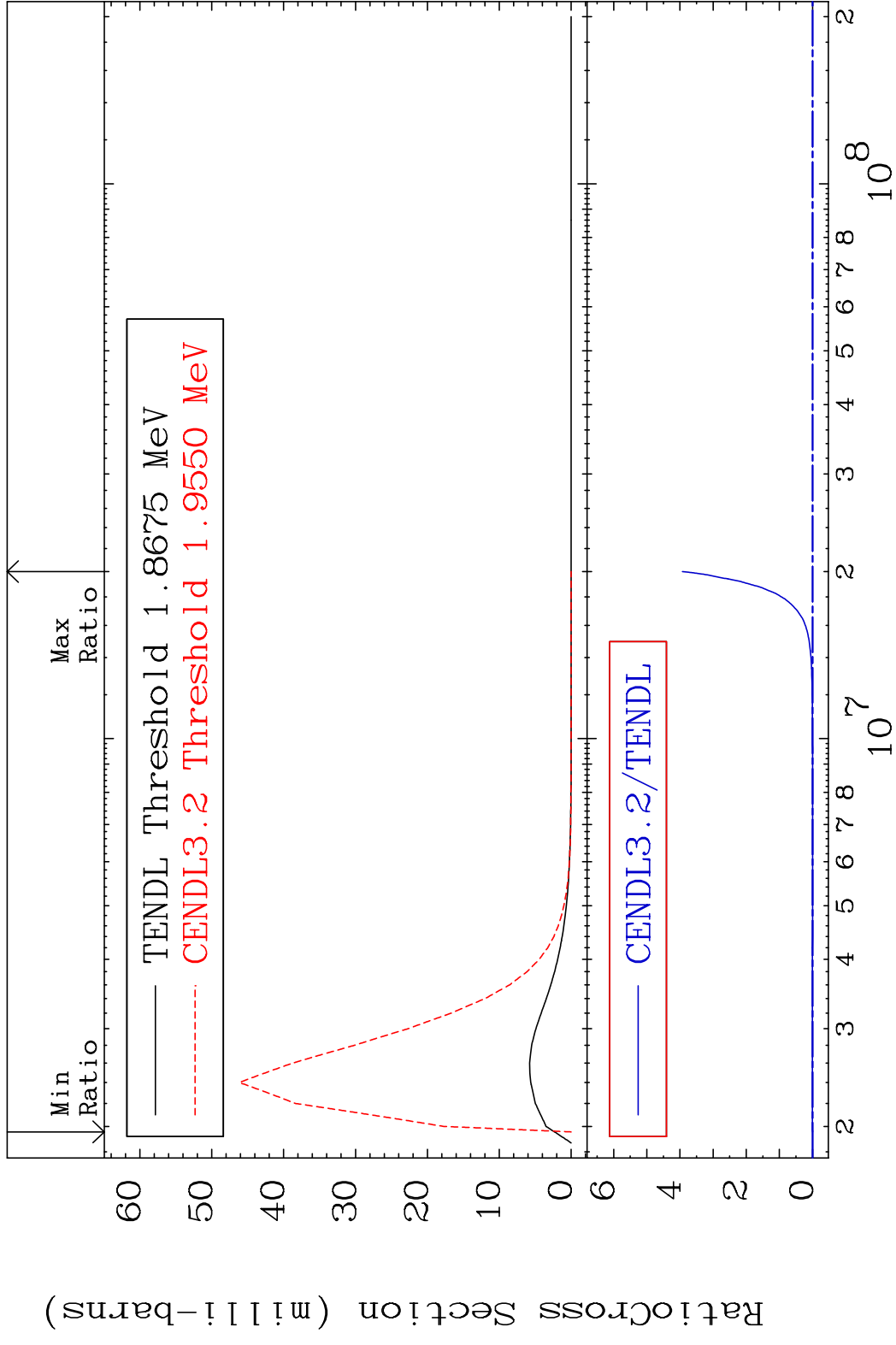
MAT 5728 MT= 72 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



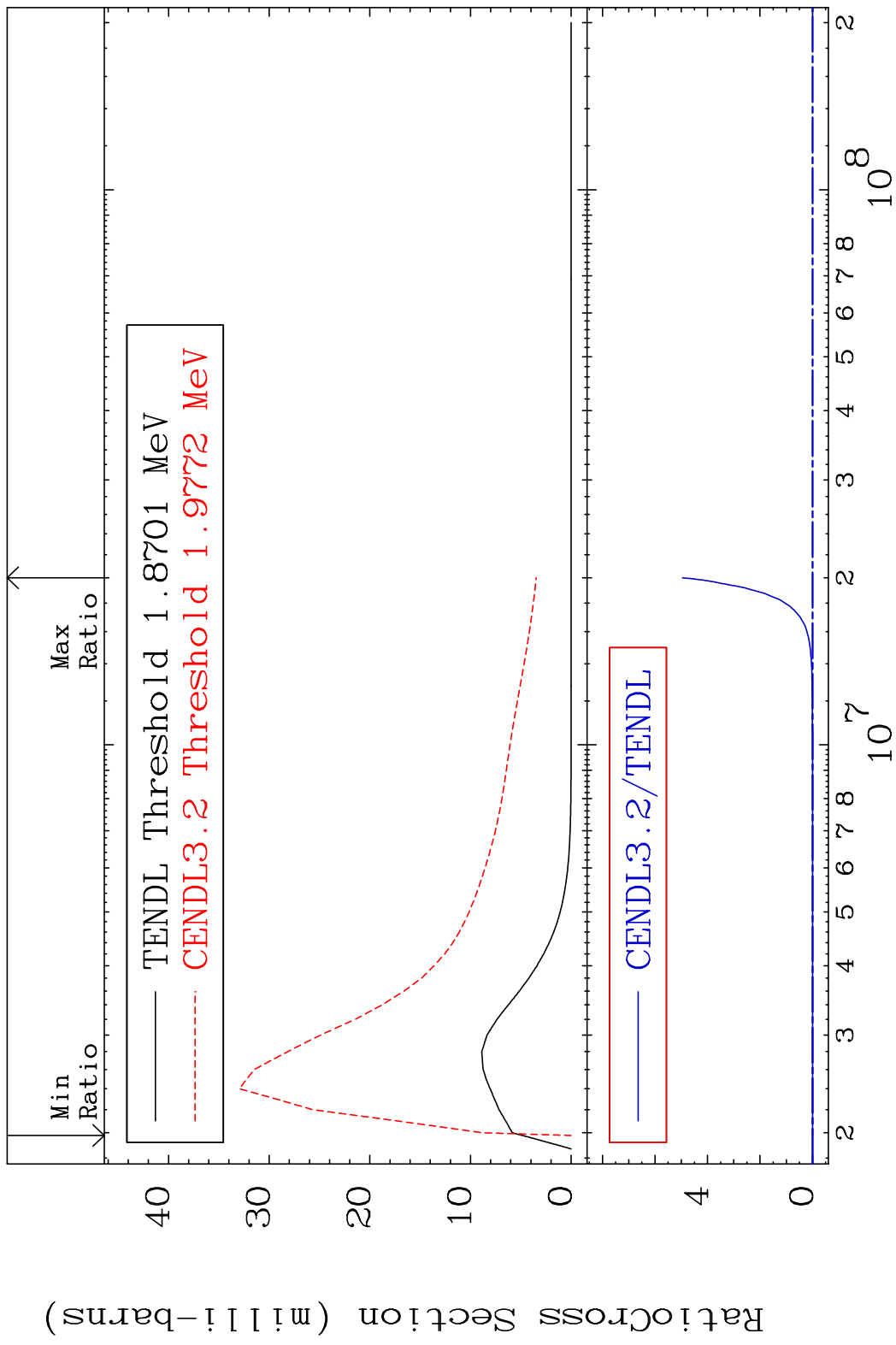
MAT 5728 MT= 73 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



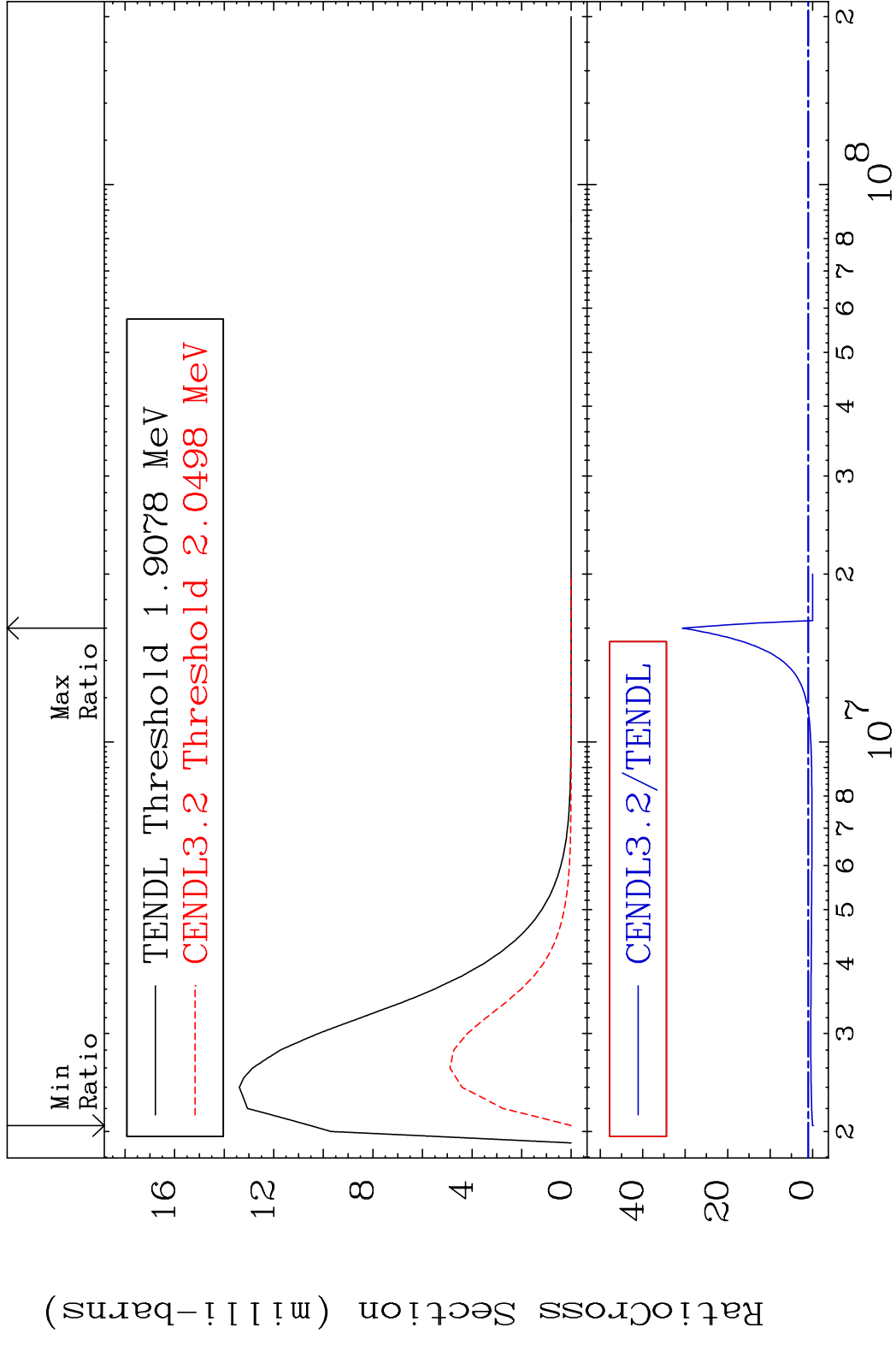
MAT 5728 MT= 74 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



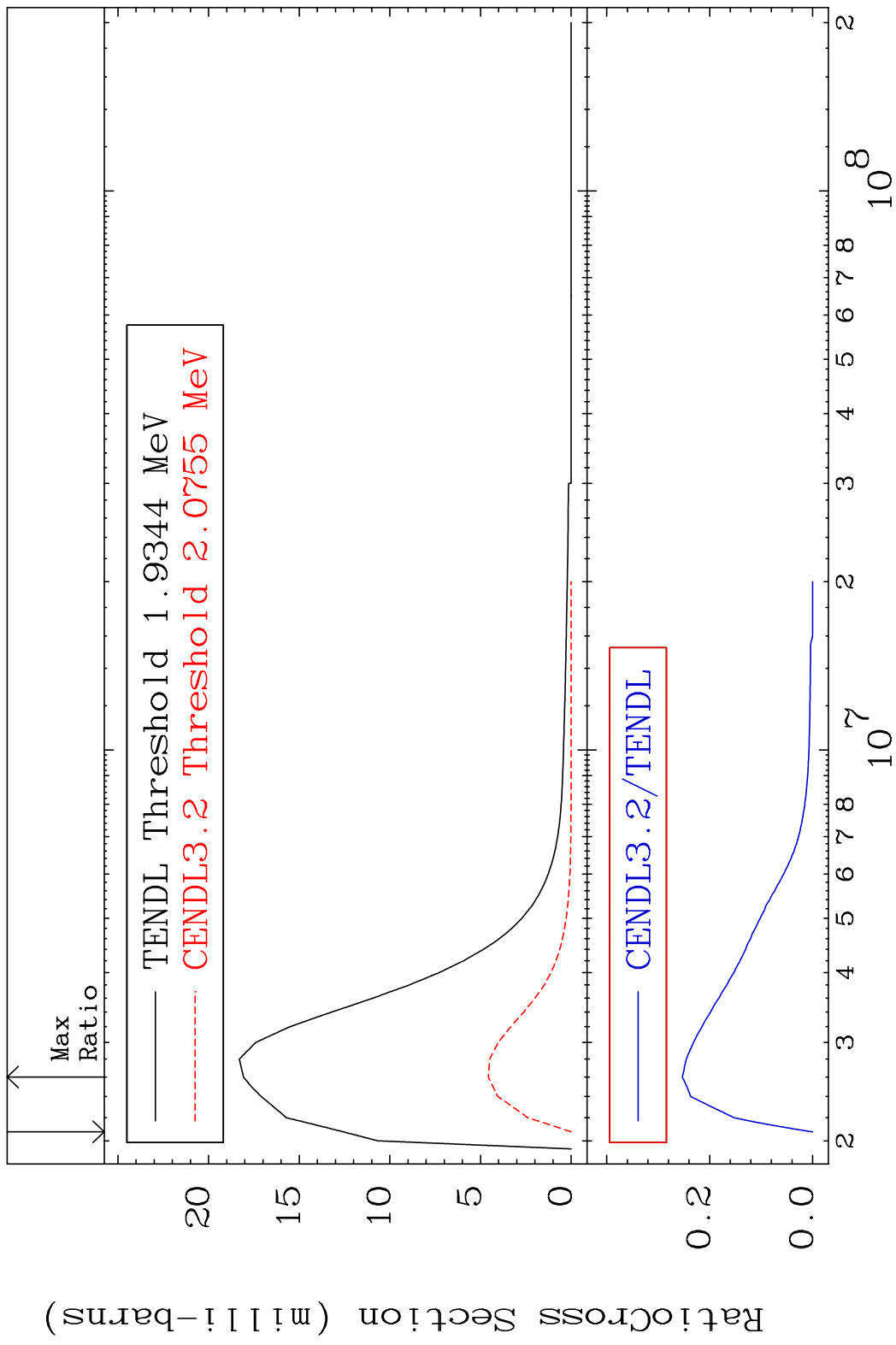
MAT 5728 MT= 75 (n, n') Level 57-La-139
 Cross Section -100.0 To 9999. %



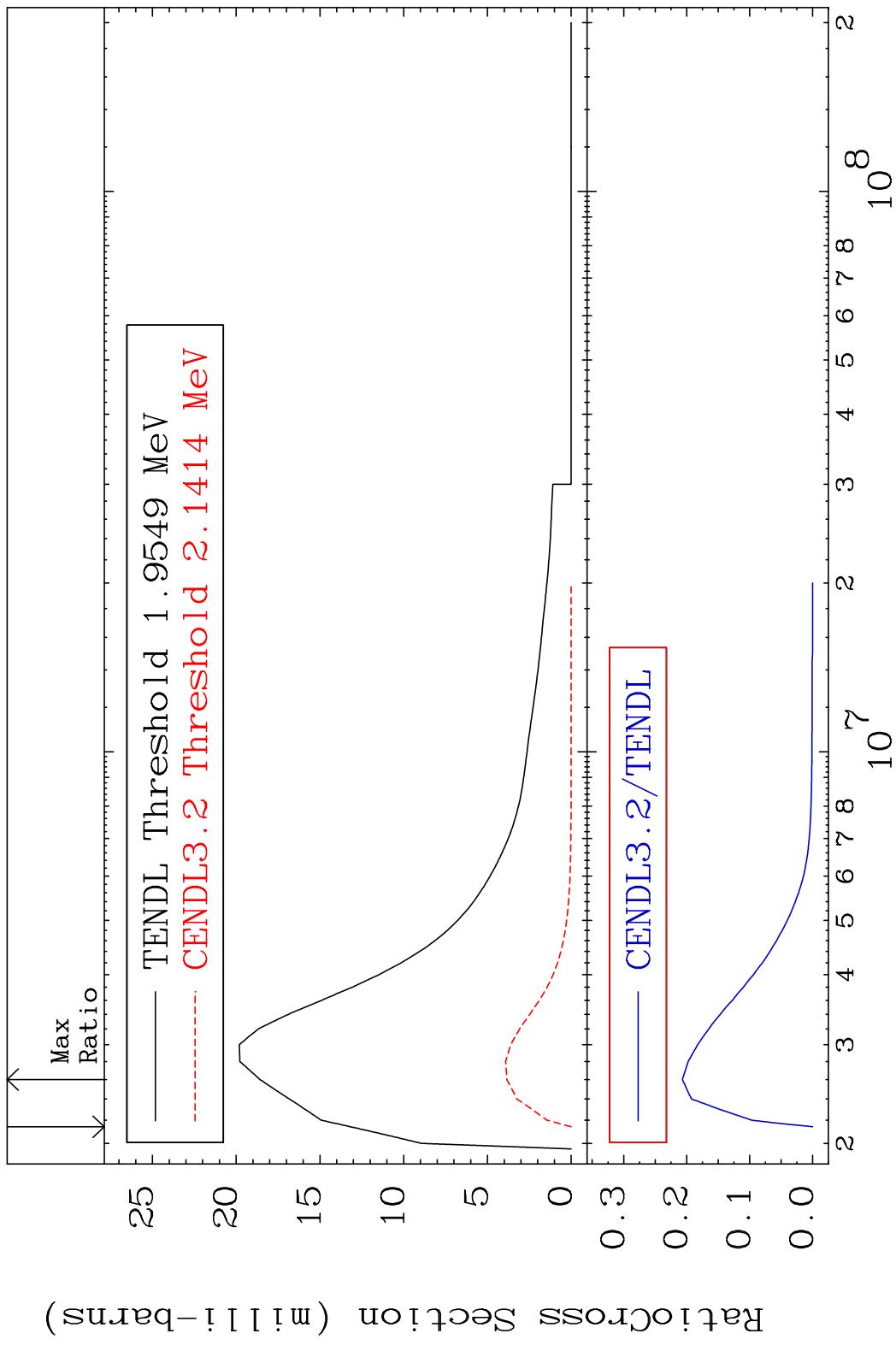
MAT 5728 MT= 76 (n, n') Level 57-La-139
 Cross Section -100.0 To 2967. %



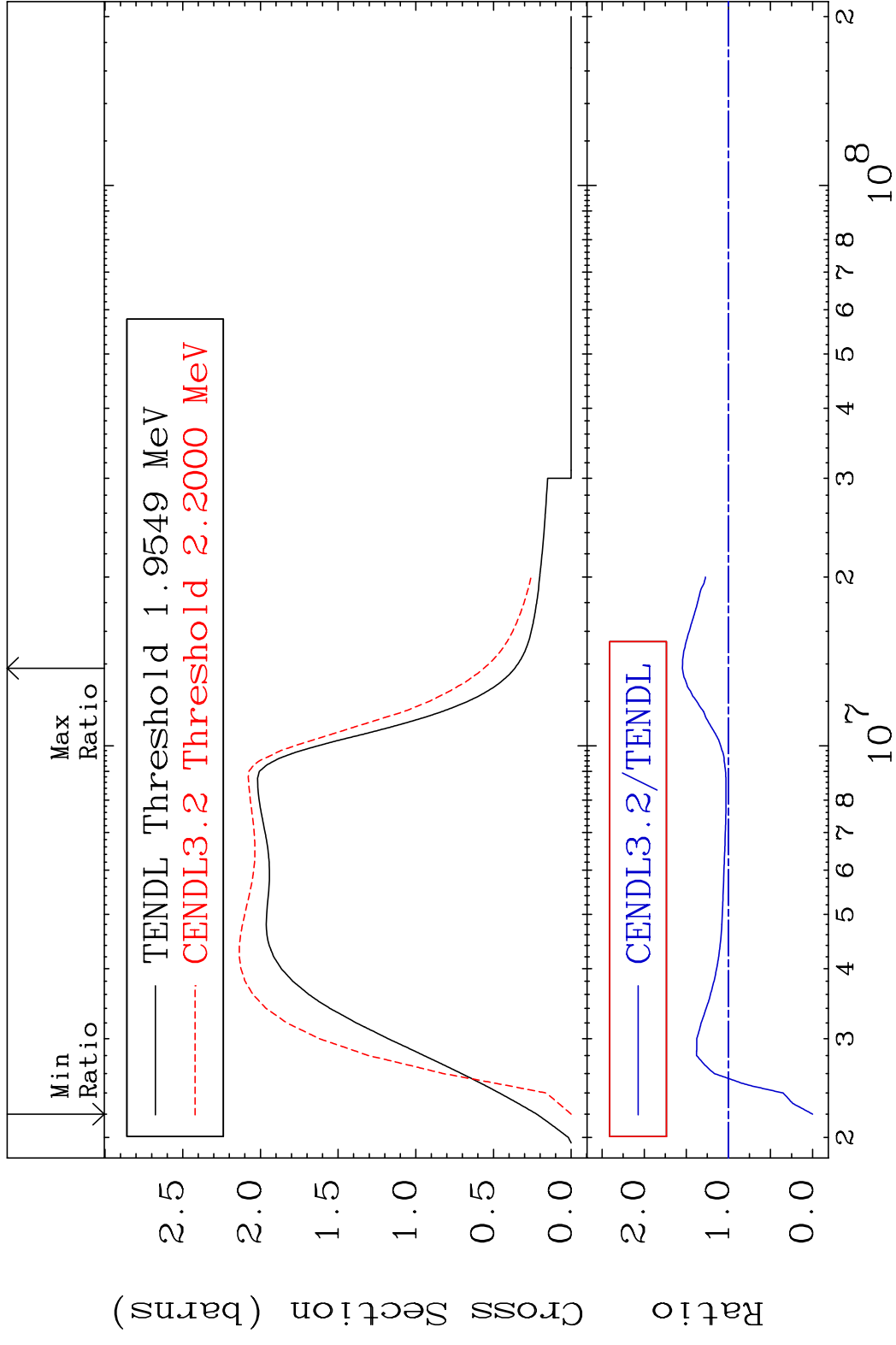
MAT 5728 MT= 77 (n, n') Level 57-La-139
 Cross Section -100.0 To -74.69%



MAT 5728 MT= 78 (n, n') Level 57-La-139
 Cross Section -100.0 To -79.32%



MAT 5728 (n,n') Continuum 57-La-139
 Cross Section -100.0 To 54.70 %

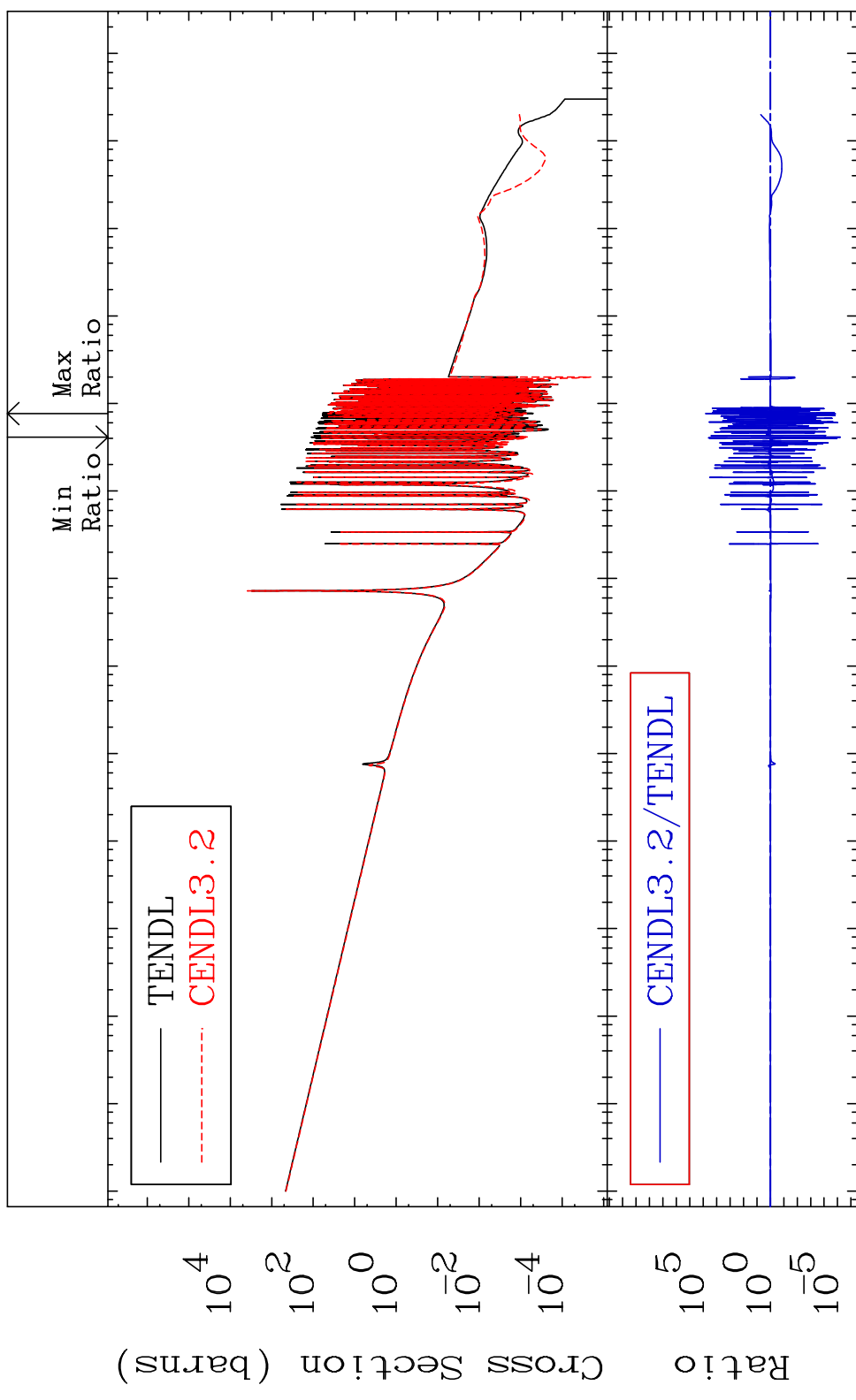


MAT 5728

(n, γ)

57-La-139

Cross Section -100.0 To 9999. %



37

Incident Energy (eV)

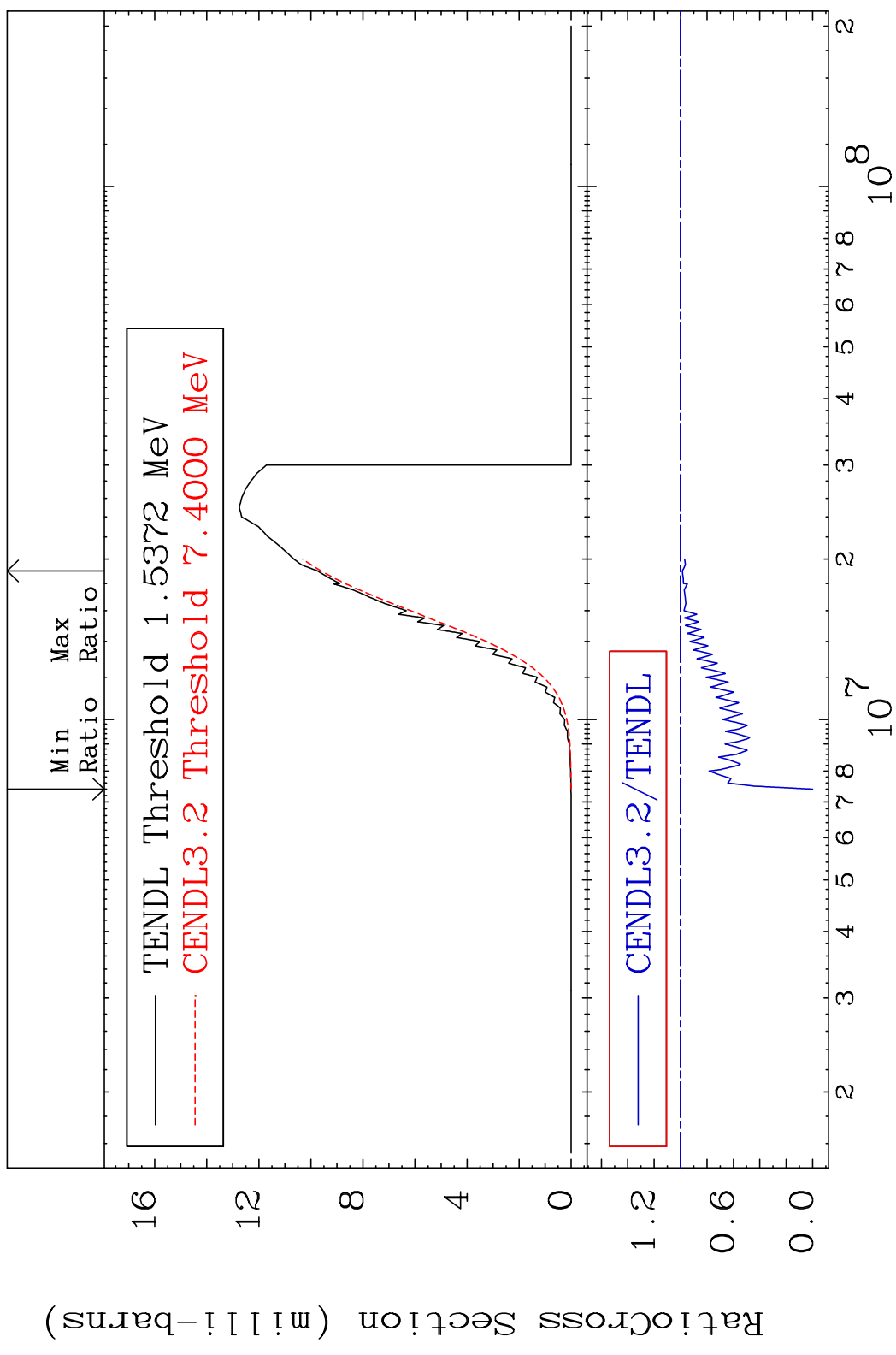
57-La-139

MAT 5728

(n,p)

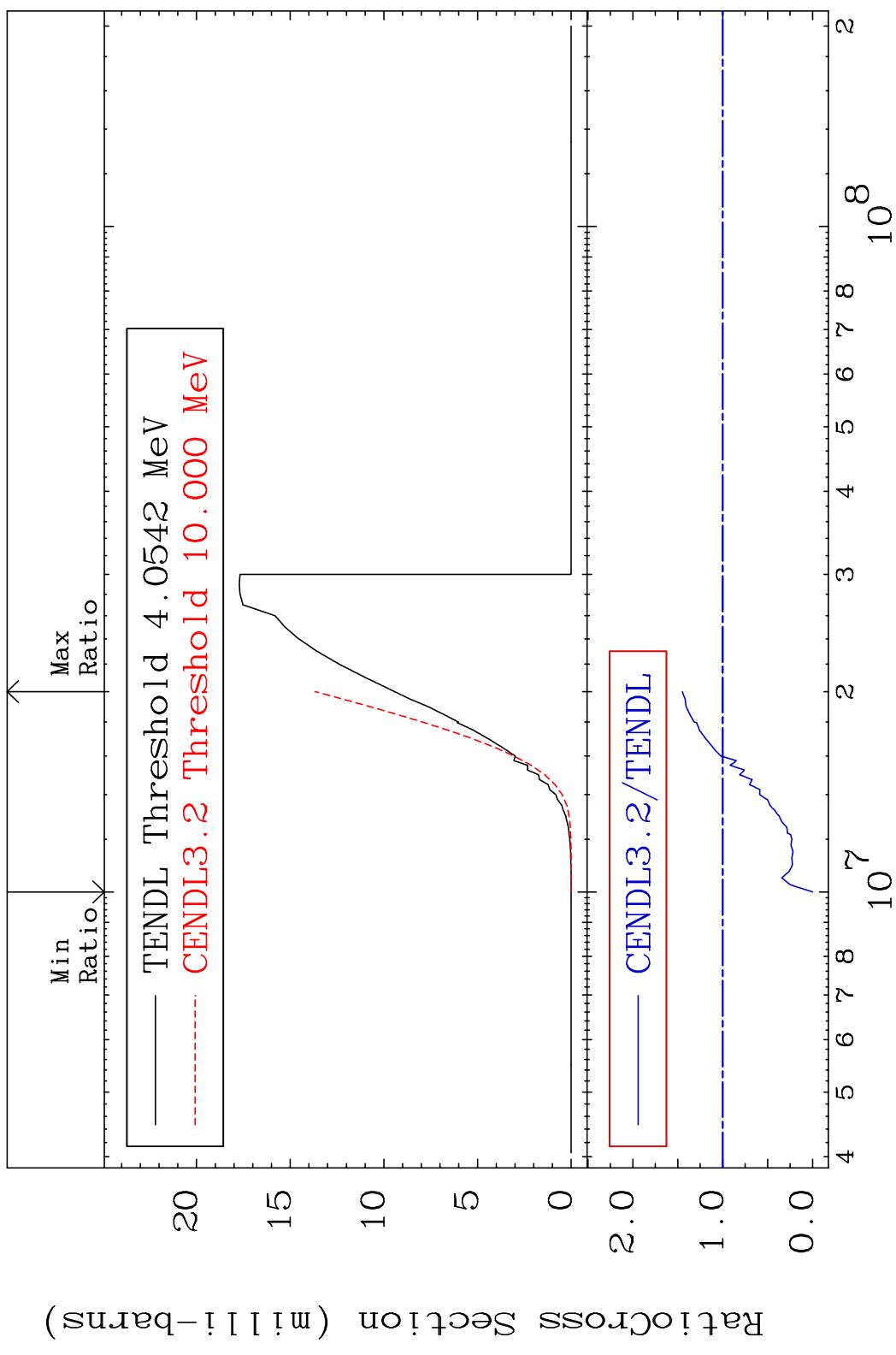
57-La-139

Cross Section -100.0 To -1.358%



MAT 5728

(n,d) 57-La-139
Cross Section -100.0 To 44.91 %

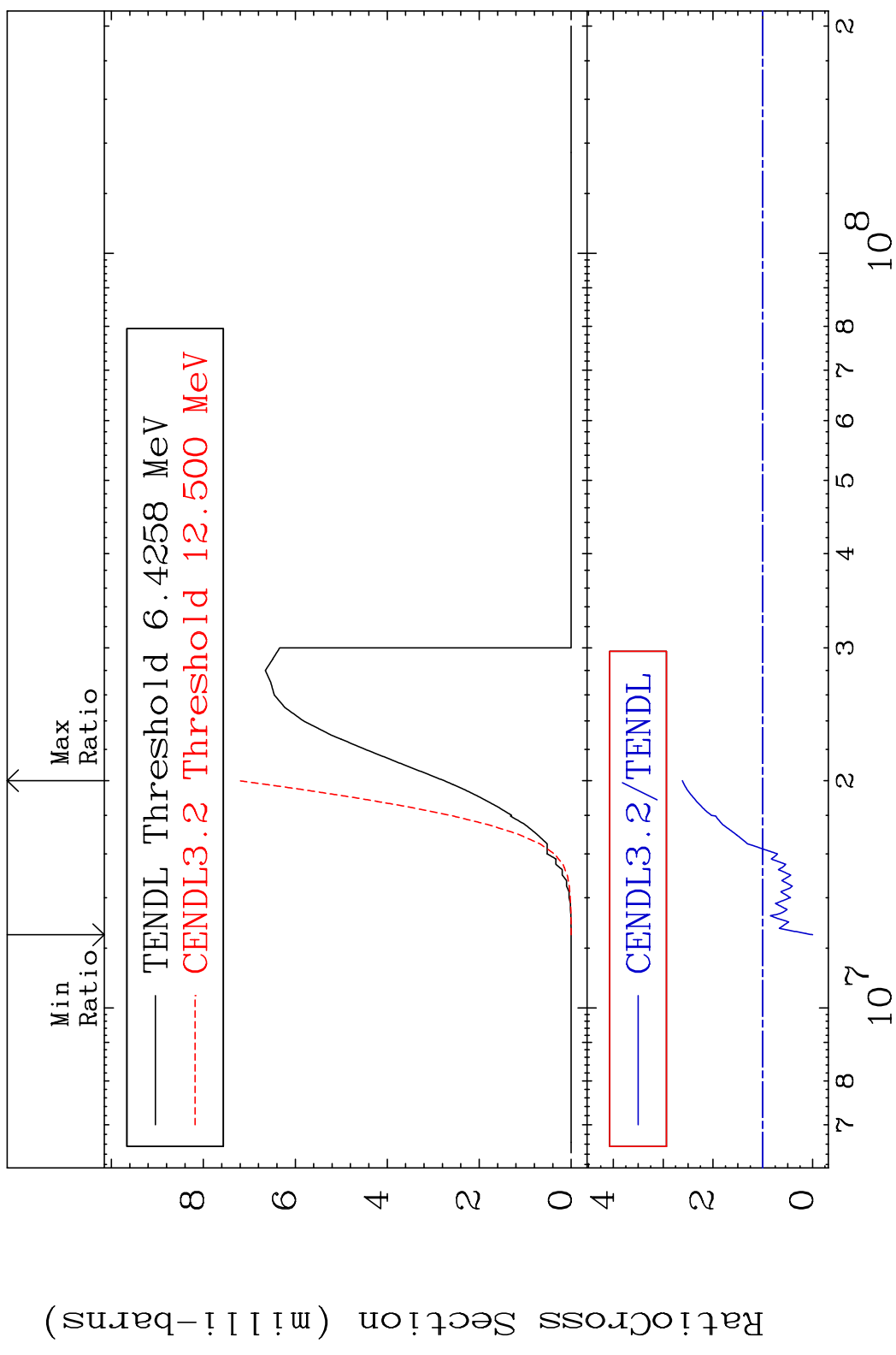


MAT 5728

(n, t)

57-La-139

Cross Section -100.0 To 161.4 %



40

Incident Energy (eV)

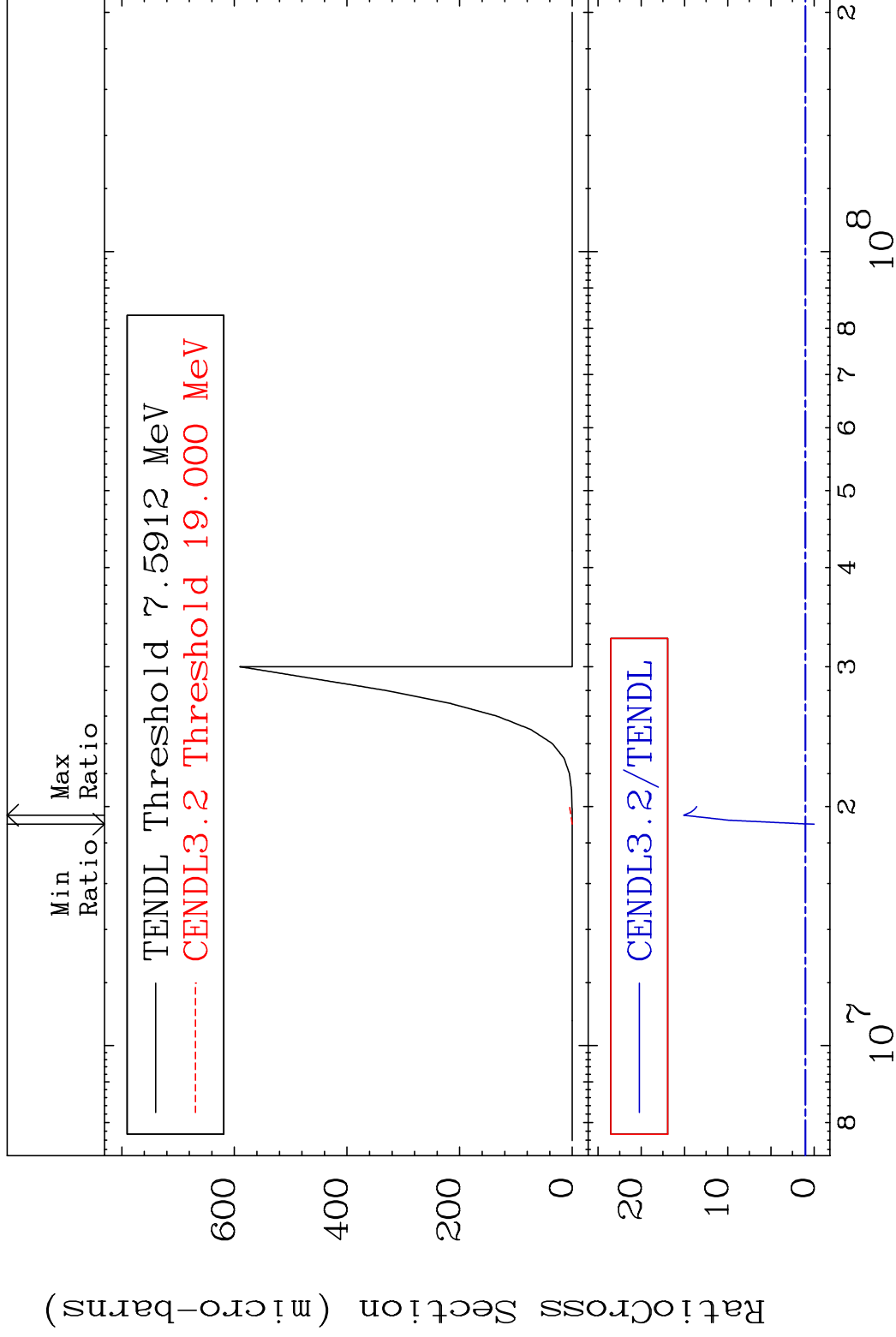
57-La-139

MAT 5728

(n, He-3)

57-La-139

Cross Section -100.0 To 1410. %



41

Incident Energy (eV)

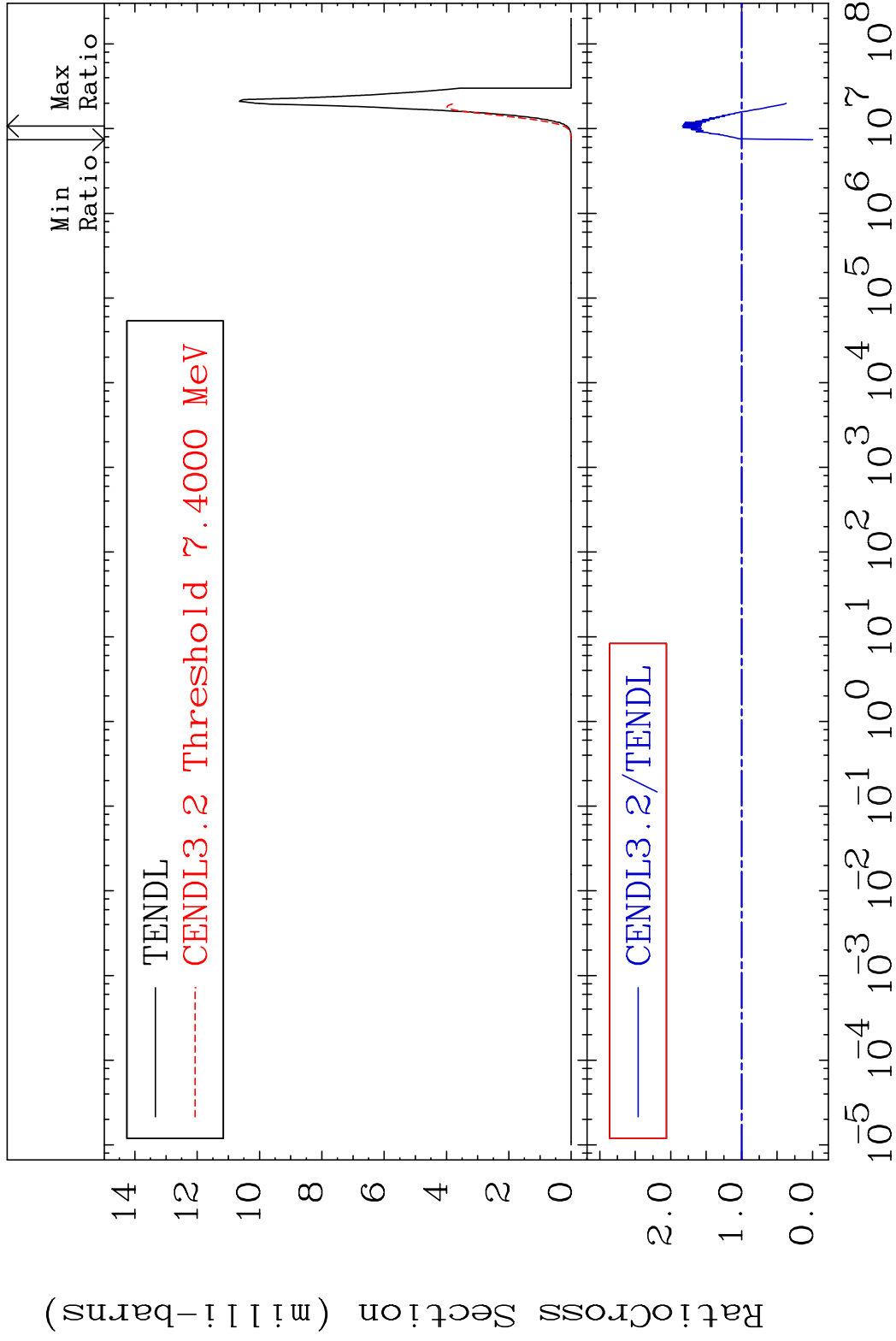
57-La-139

MAT 5728

(n, α)

57-La-139

Cross Section -100.0 To 83.53 %



42

Incident Energy (eV)

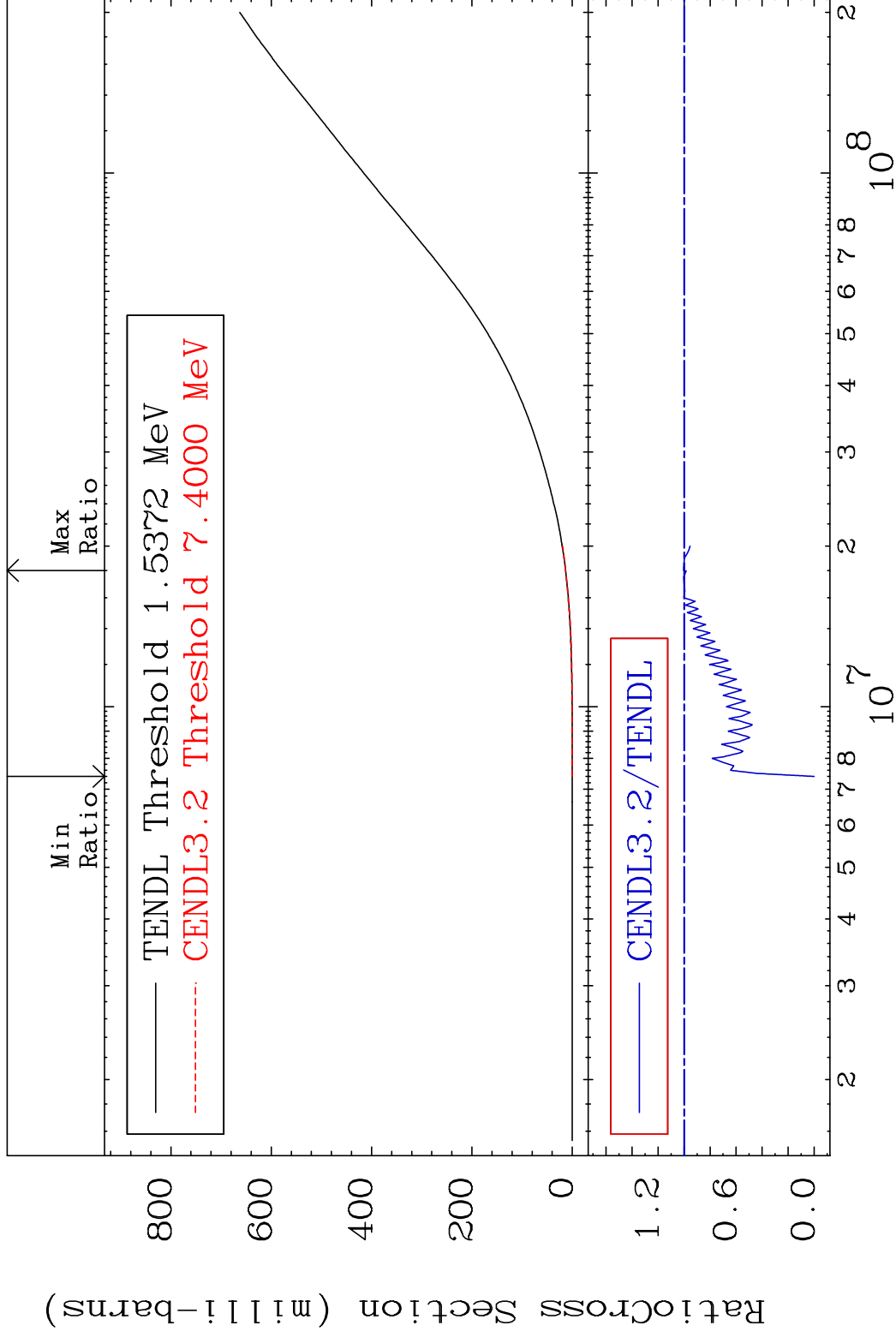
57-La-139

MAT 5728

Hydrogen Production

57-La-139

Cross Section -100.0 To 0.322 %



43

Incident Energy (eV)

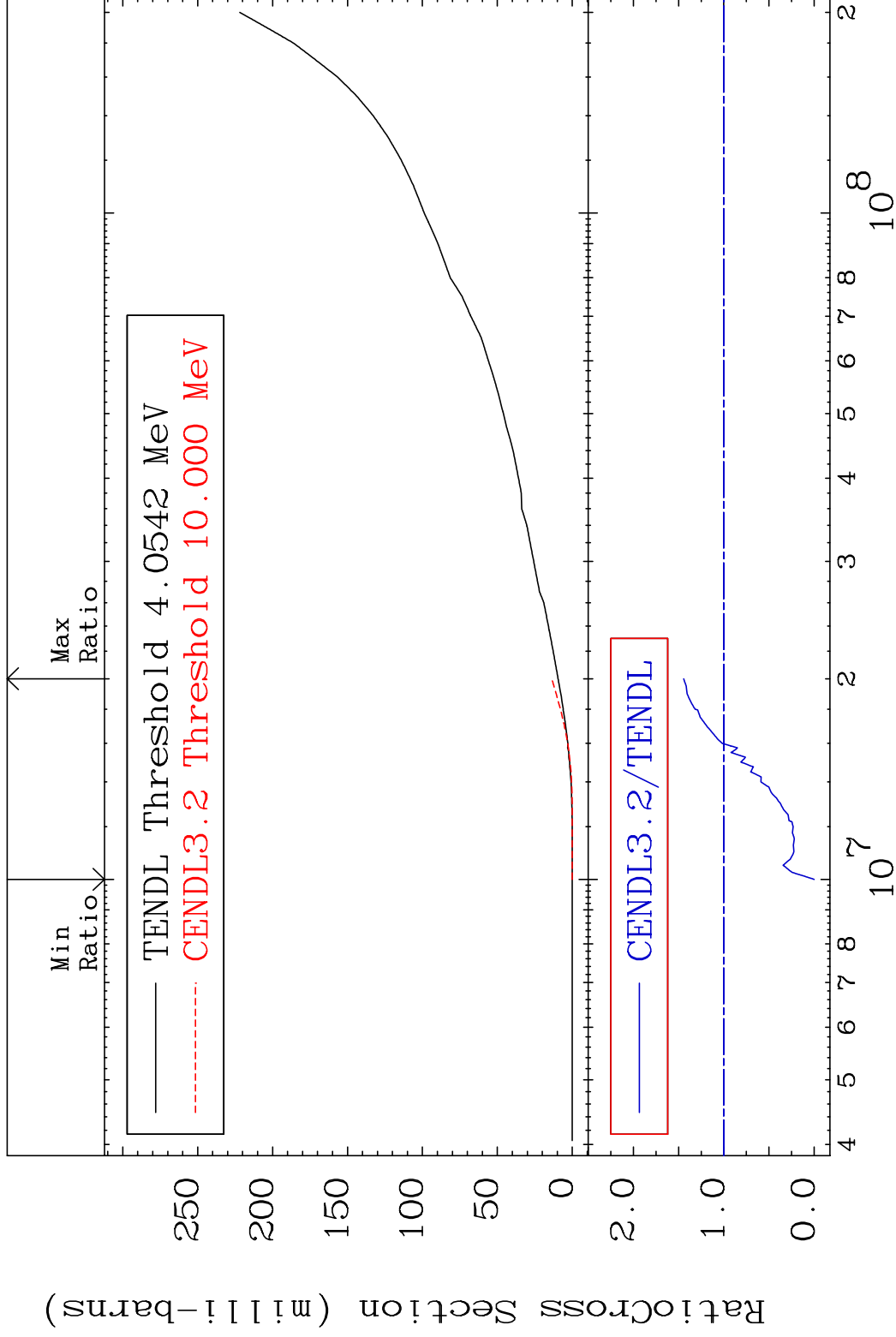
57-La-139

MAT 5728

Deuterium Production

57-La-139

Cross Section -100.0 To 44.41 %



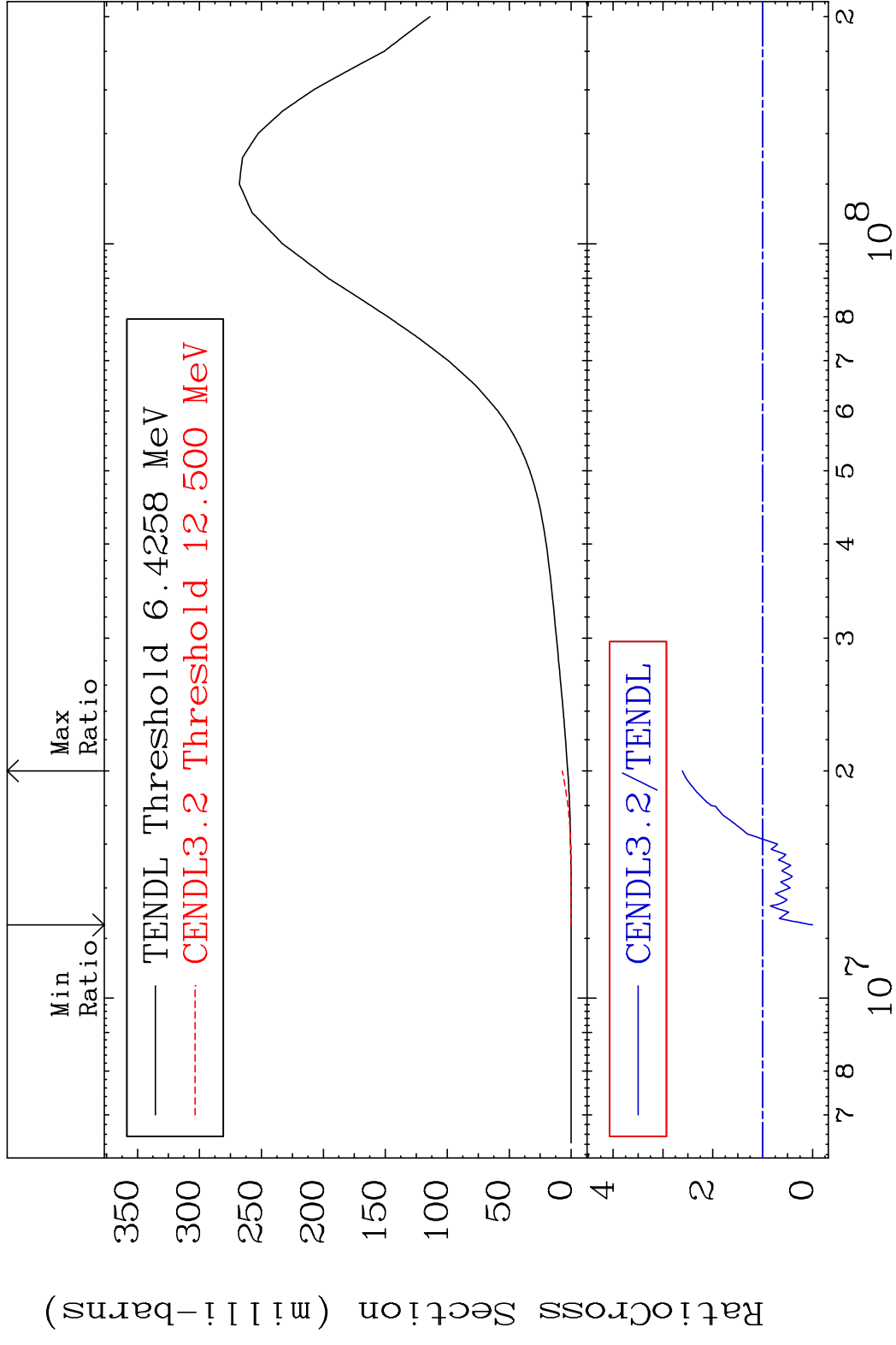
44

Incident Energy (eV)

57-La-139

MAT 5728

Tritium Production 57-La-139
Cross Section -100.0 To 161.1 %



45

Incident Energy (eV)

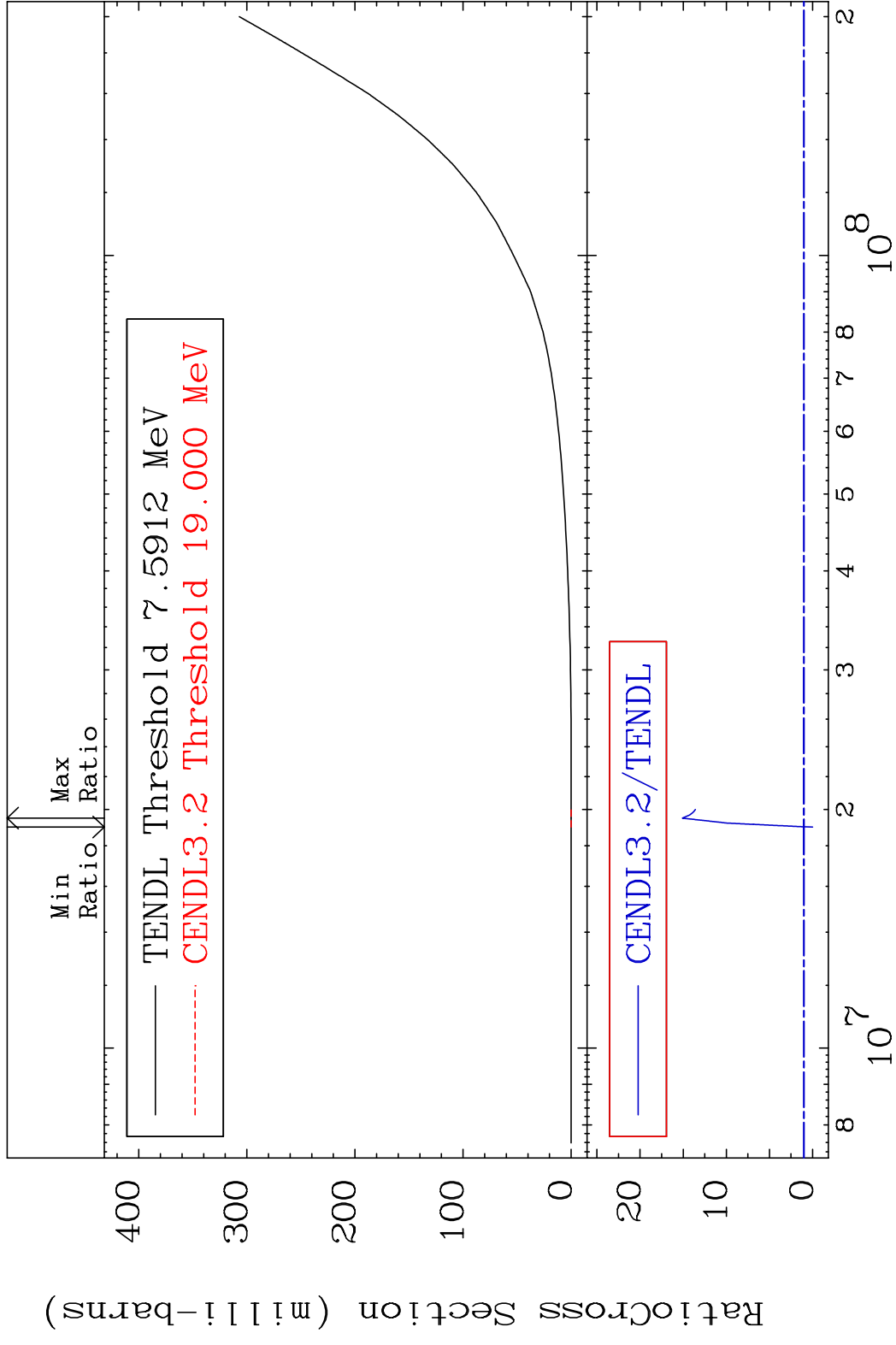
57-La-139

MAT 5728

He-3 Production

57-La-139

Cross Section -100.0 To 1410. %



46

Incident Energy (eV)

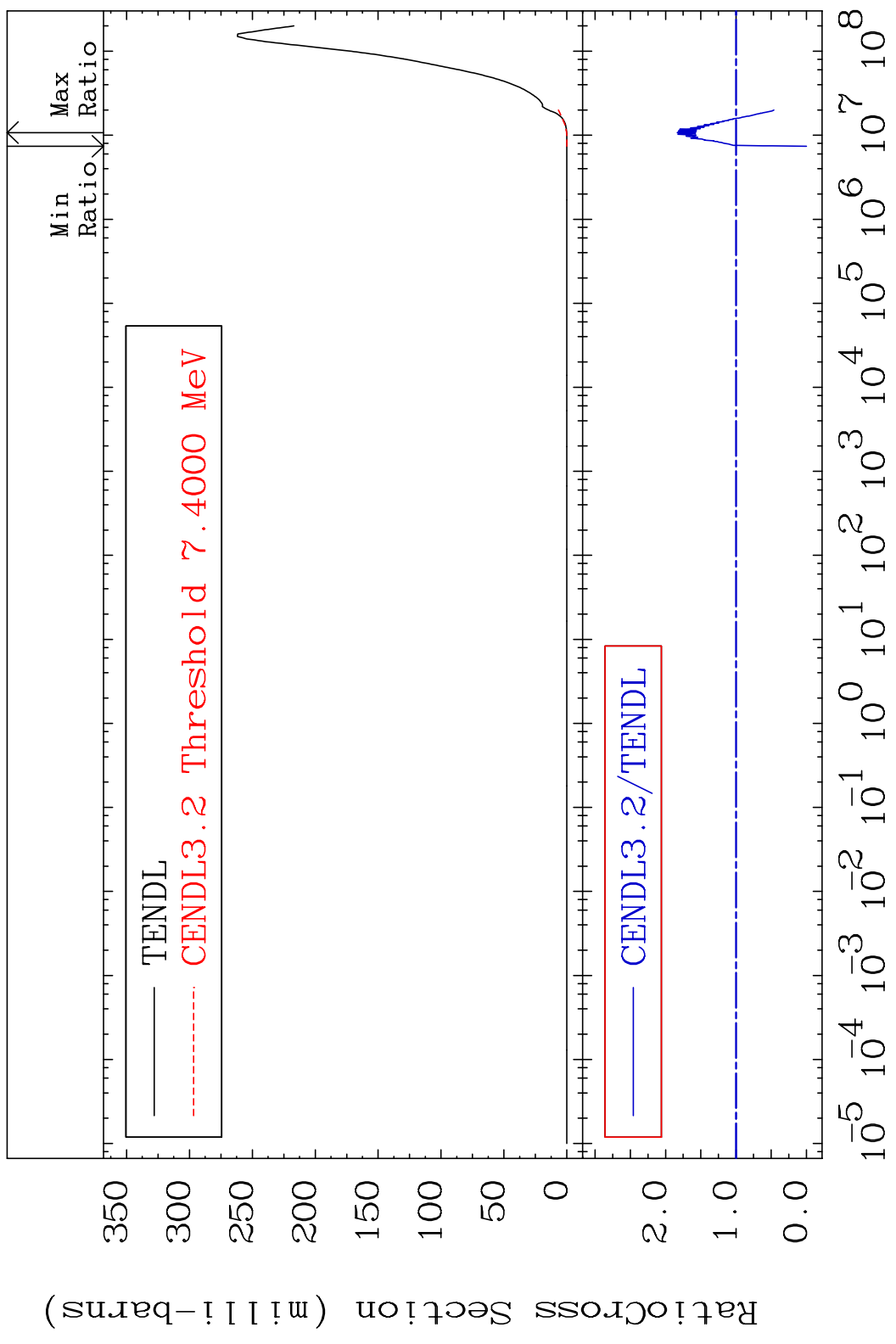
57-La-139

MAT 5728

He-4 Production

57-La-139

Cross Section -100.0 To 83.51 %

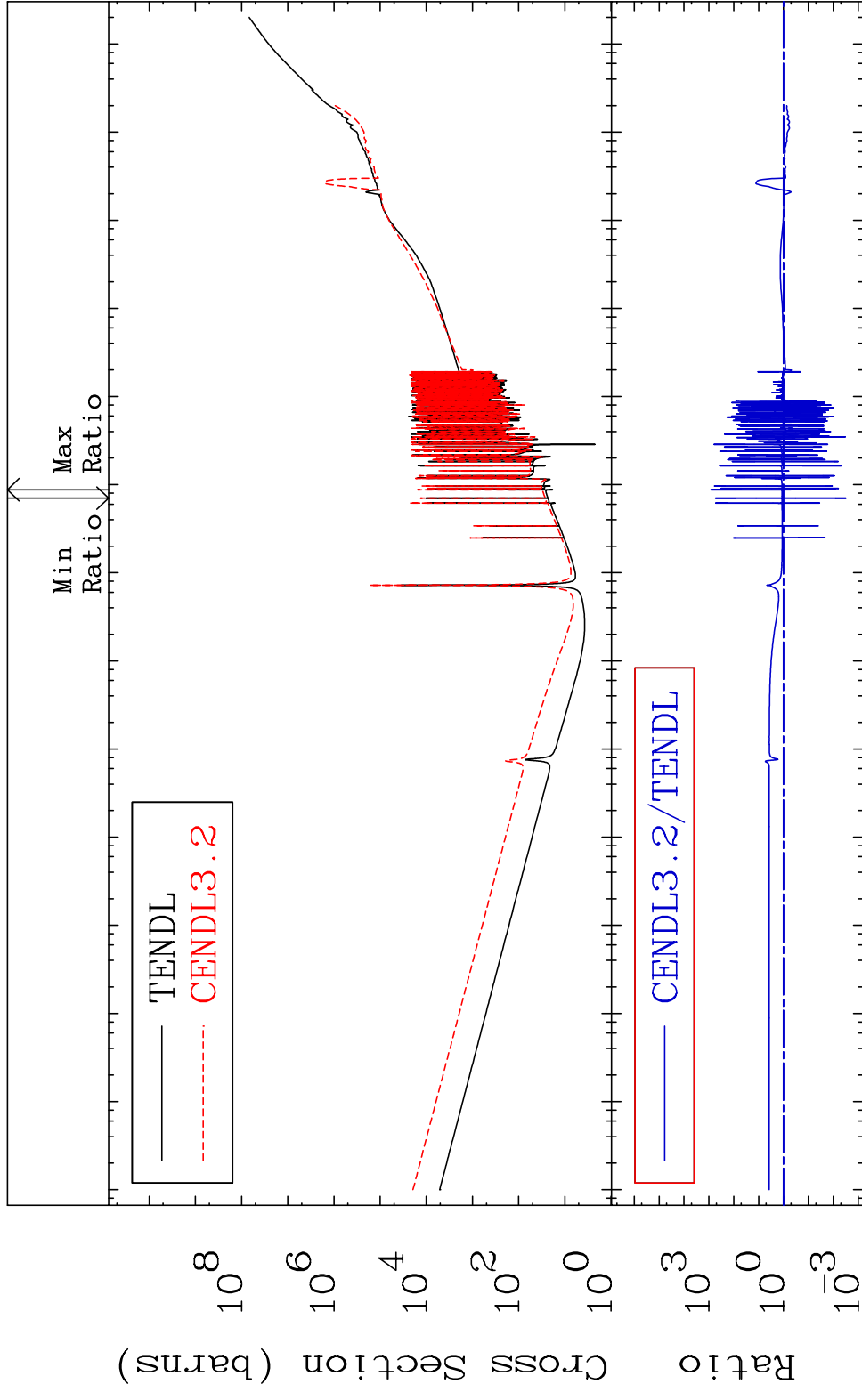


47

Incident Energy (eV)

57-La-139

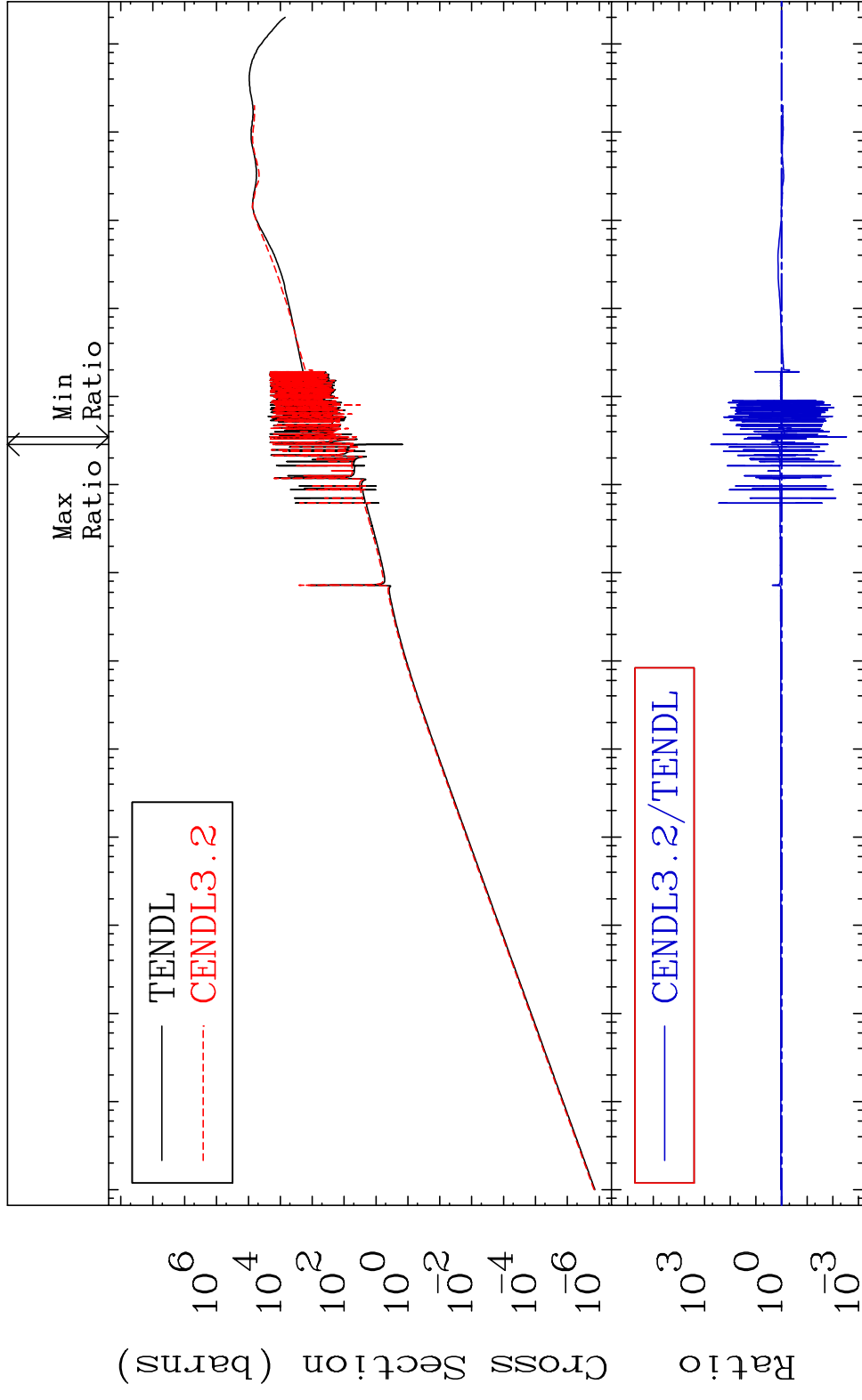
MAT 5728 Kerma total (eV-barns) 57-La-139
 Cross Section -99.70 To 9999. %



MAT 5728

Kerma elastic
Cross Section

57-La-139
-99.70 To 9999. %

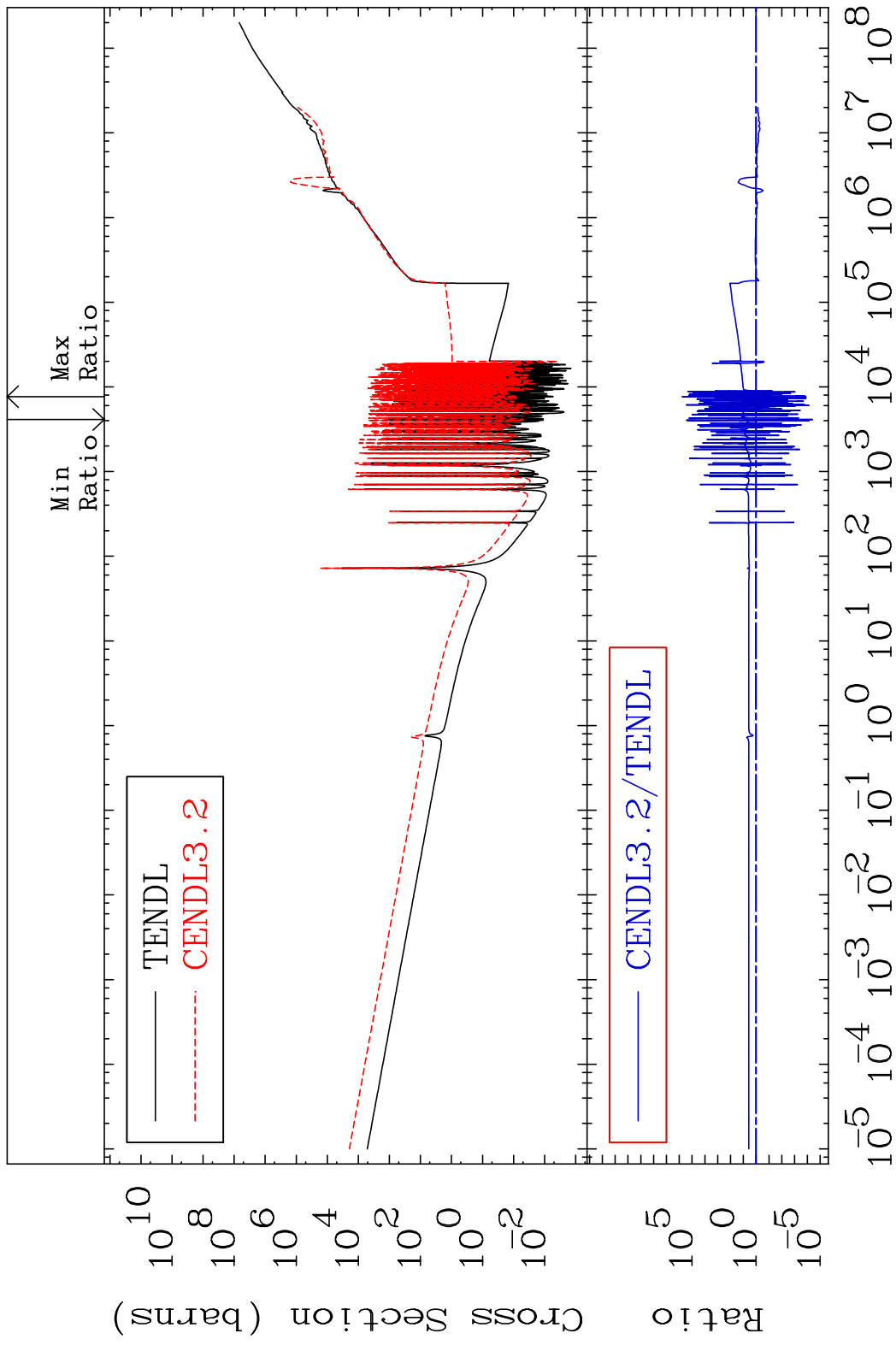


49

Incident Energy (eV)

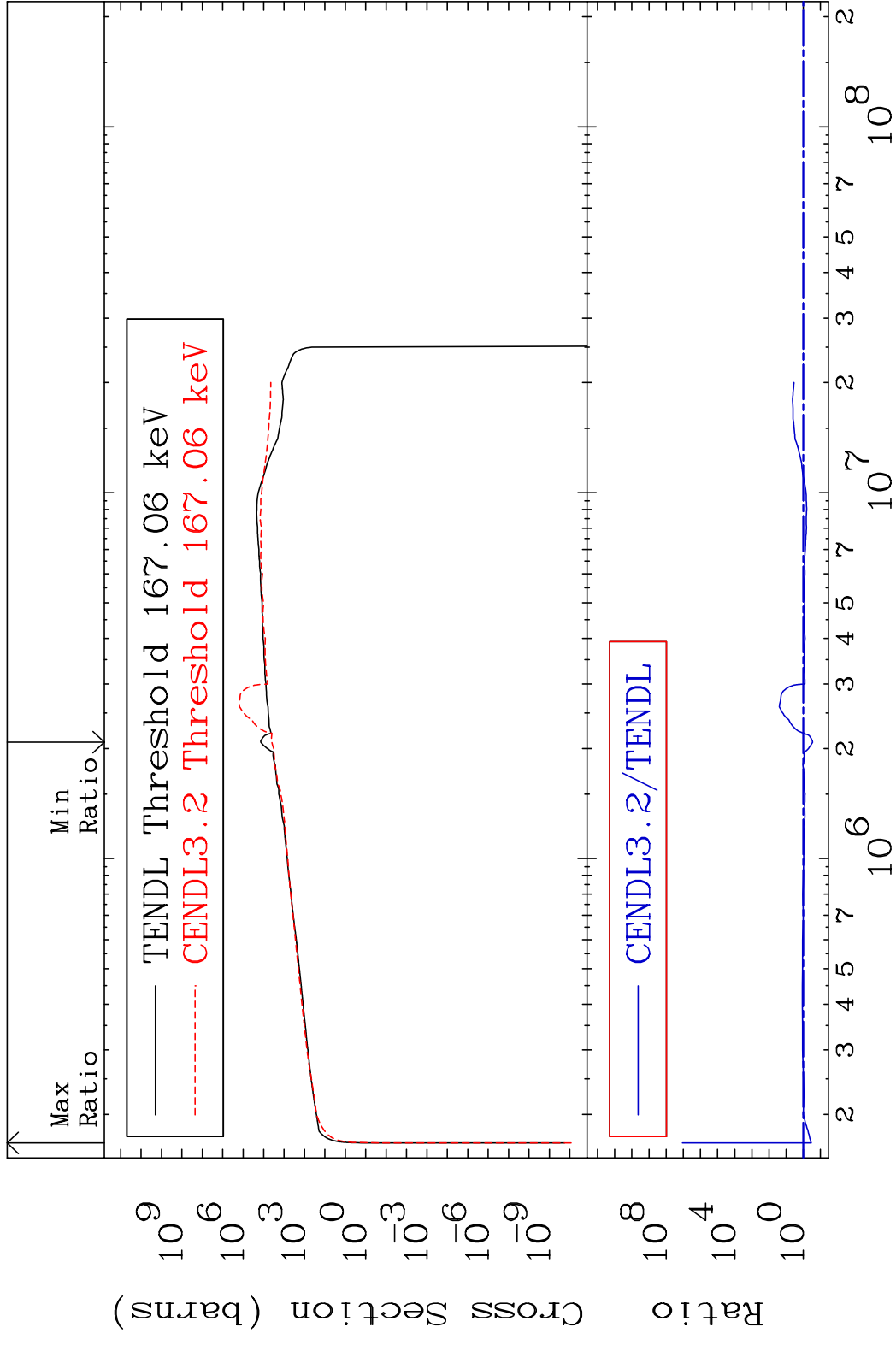
57-La-139

MAT 5728 Kerma non-elastic (all but mt2) 57-La-139
 Cross Section -100.0 To 9999. %

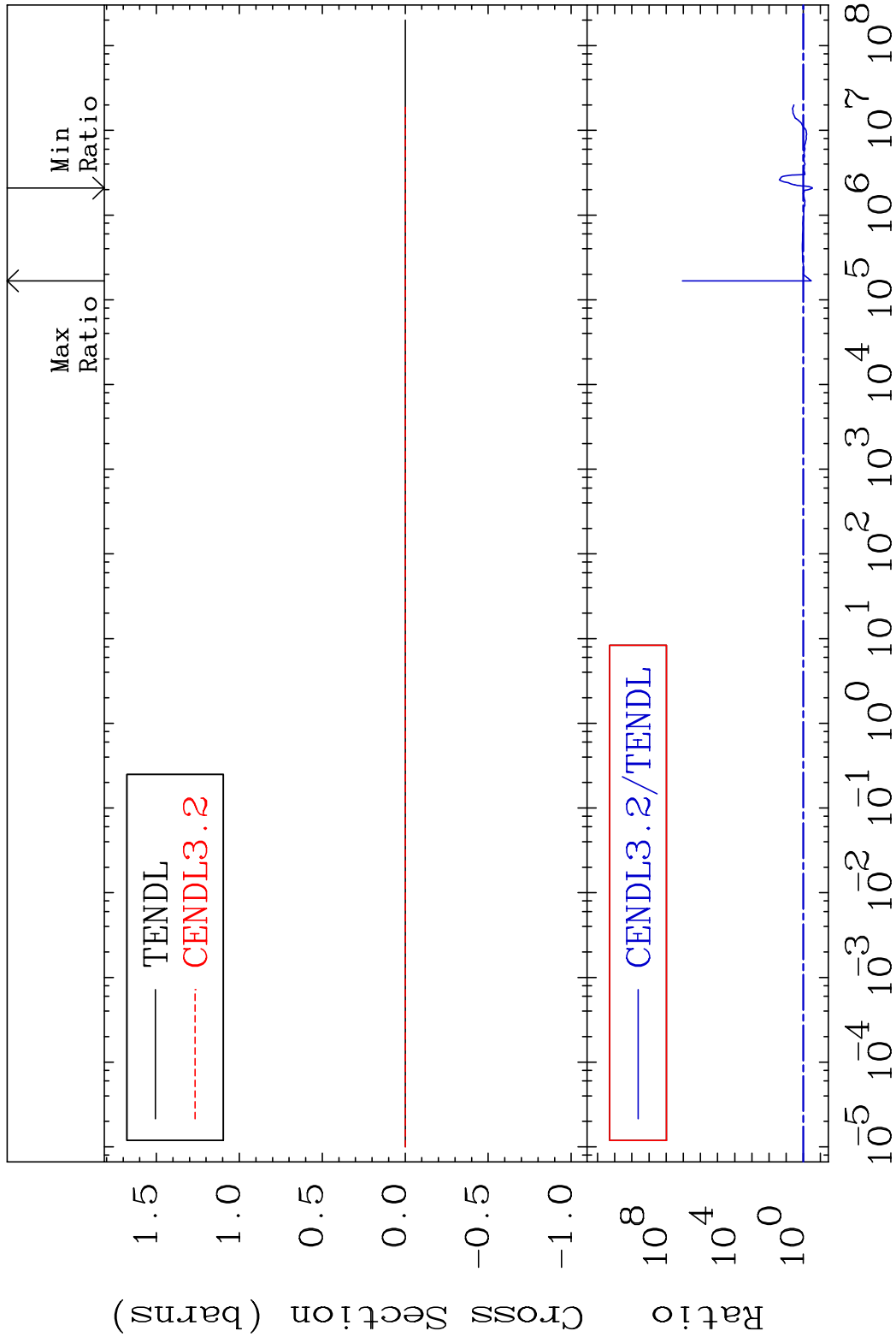


50 Incident Energy (eV) 57-La-139

MAT 5728 Kerma inelastic (mt51-91) 57-La-139
 Cross Section -71.13 To 9999. %

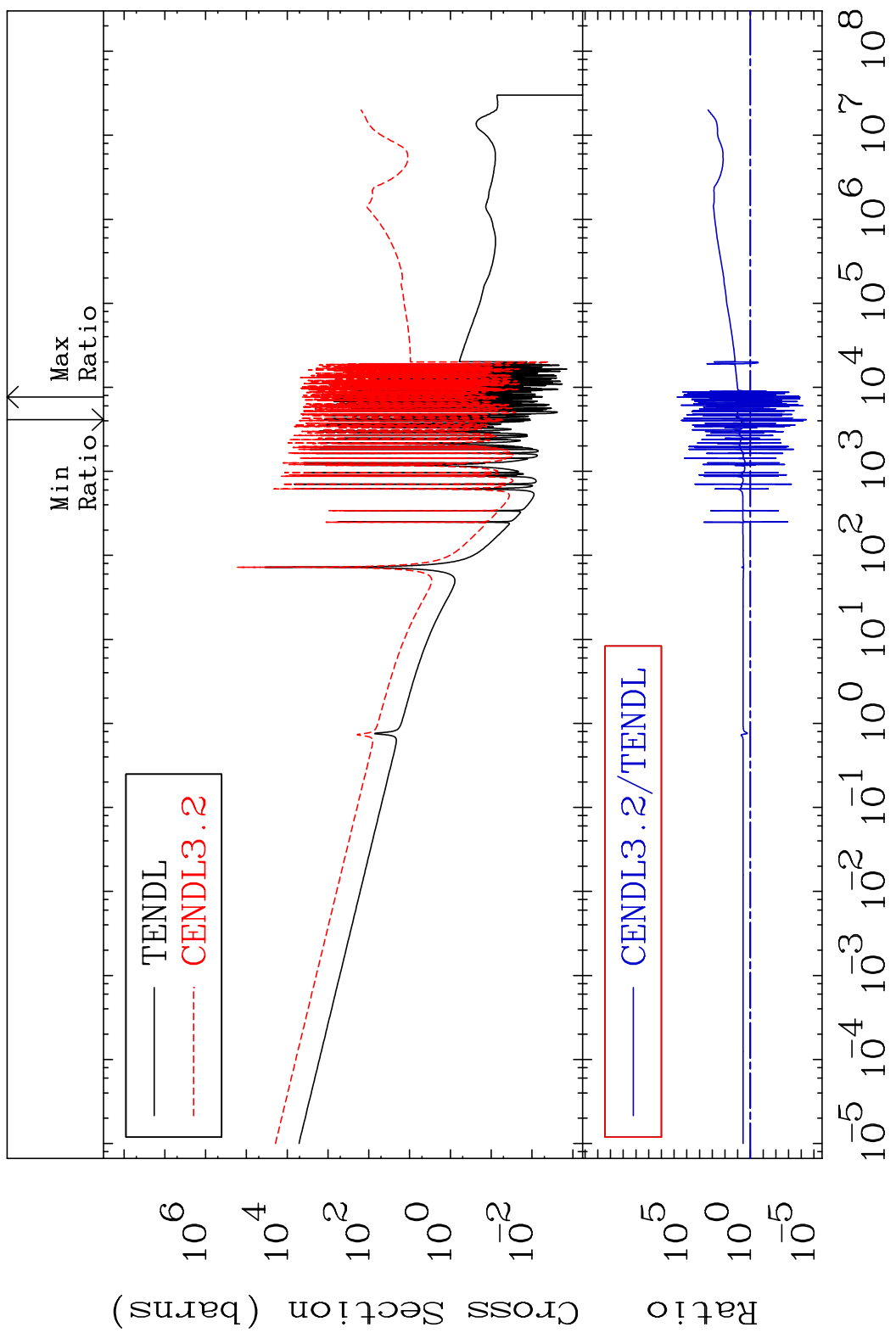


MAT 5728 Kerma fission (mt18 or mt19-20-21-38) 57-La-139
 Cross Section -71.13 To 9999. %



MAT 5728

Kerma capture (mt102) 57-La-139
Cross Section -100.0 To 9999. %

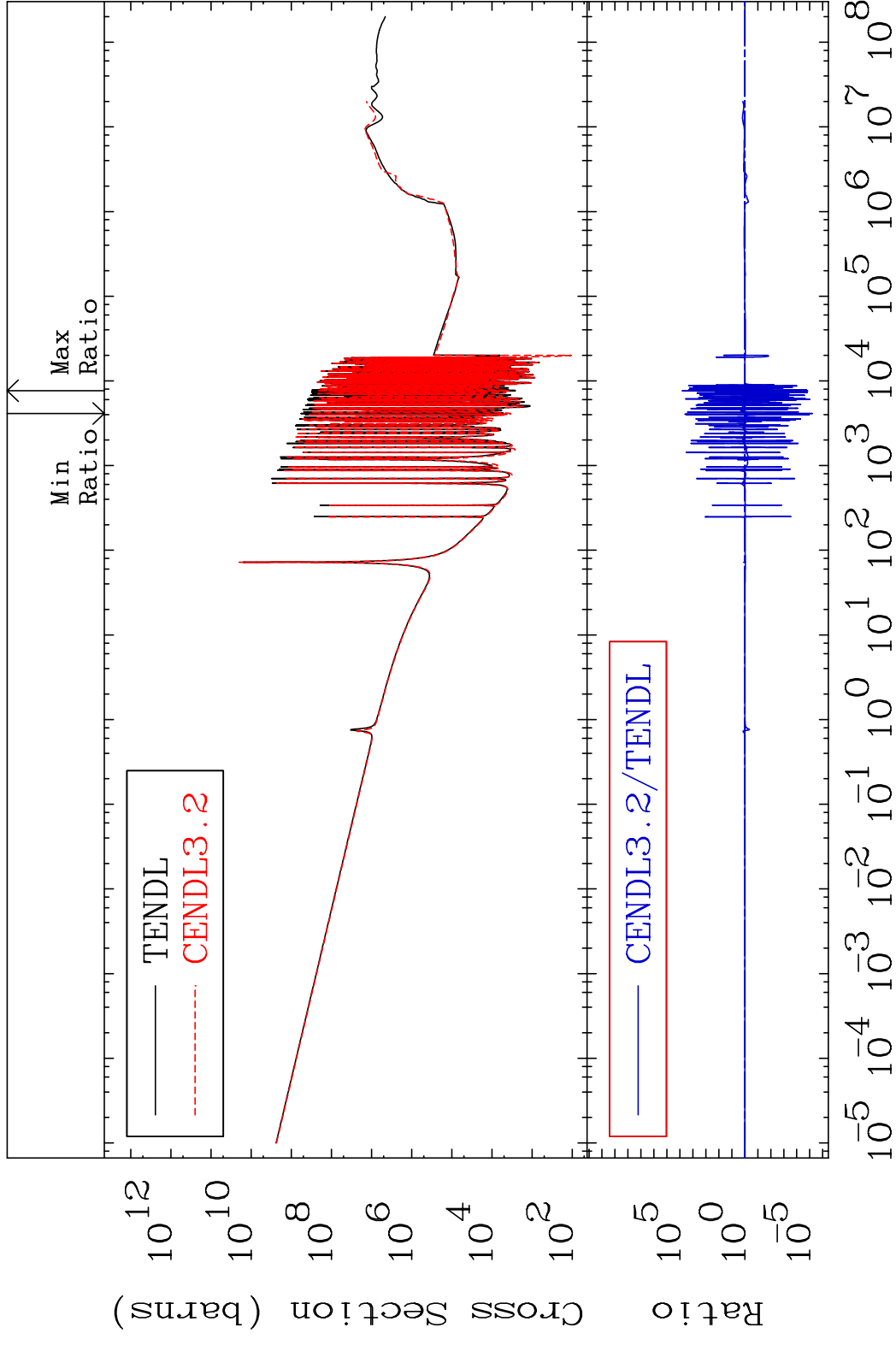


53

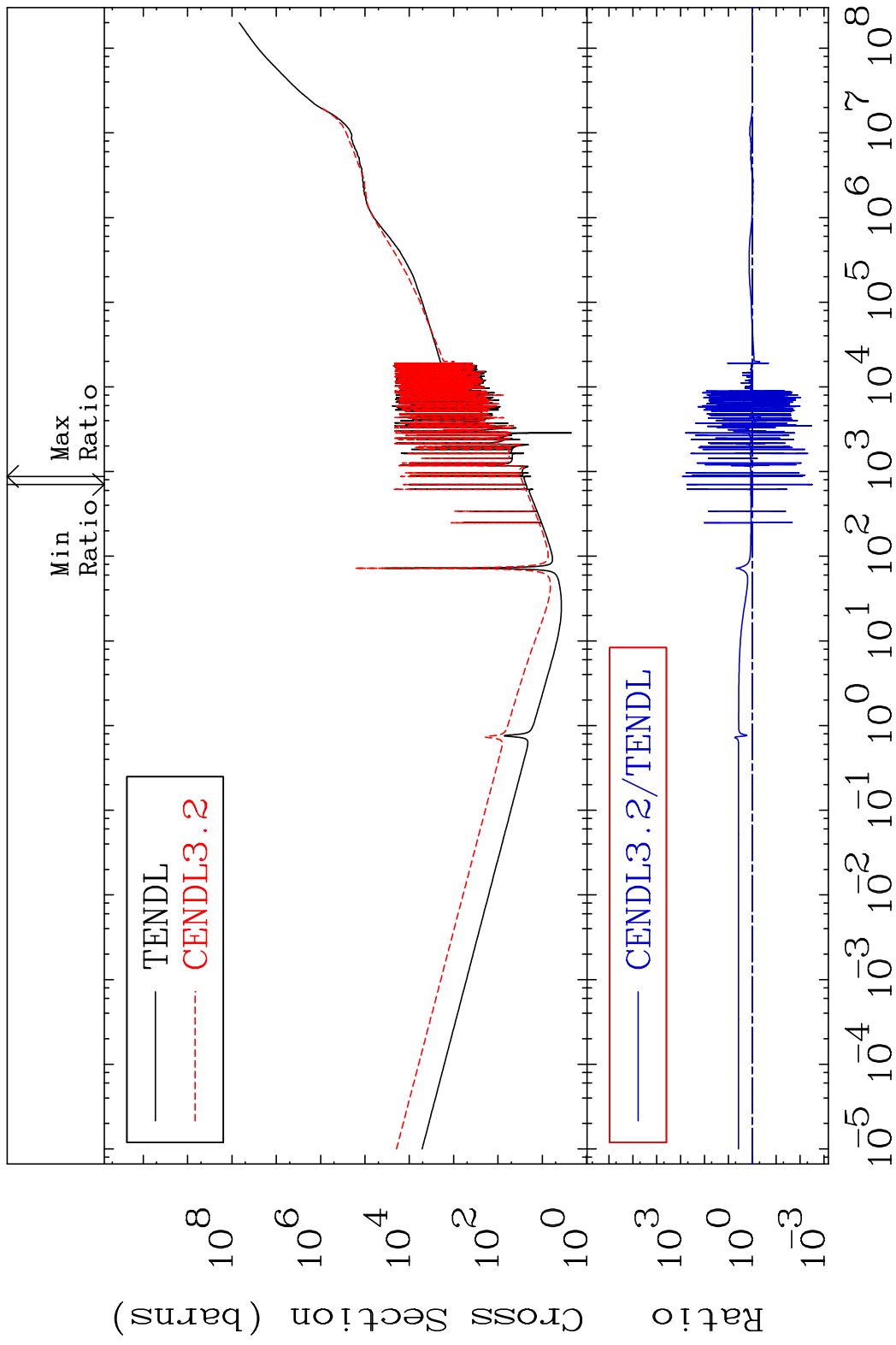
Incident Energy (eV)

57-La-139

MAT 5728 Total photon (eV-barns) 57-La-139
 Cross Section -100.0 To 9999. %



MAT 5728 Total kinematic kerma (high limit) 57-La-139
 Cross Section -99.70 To 9999. %

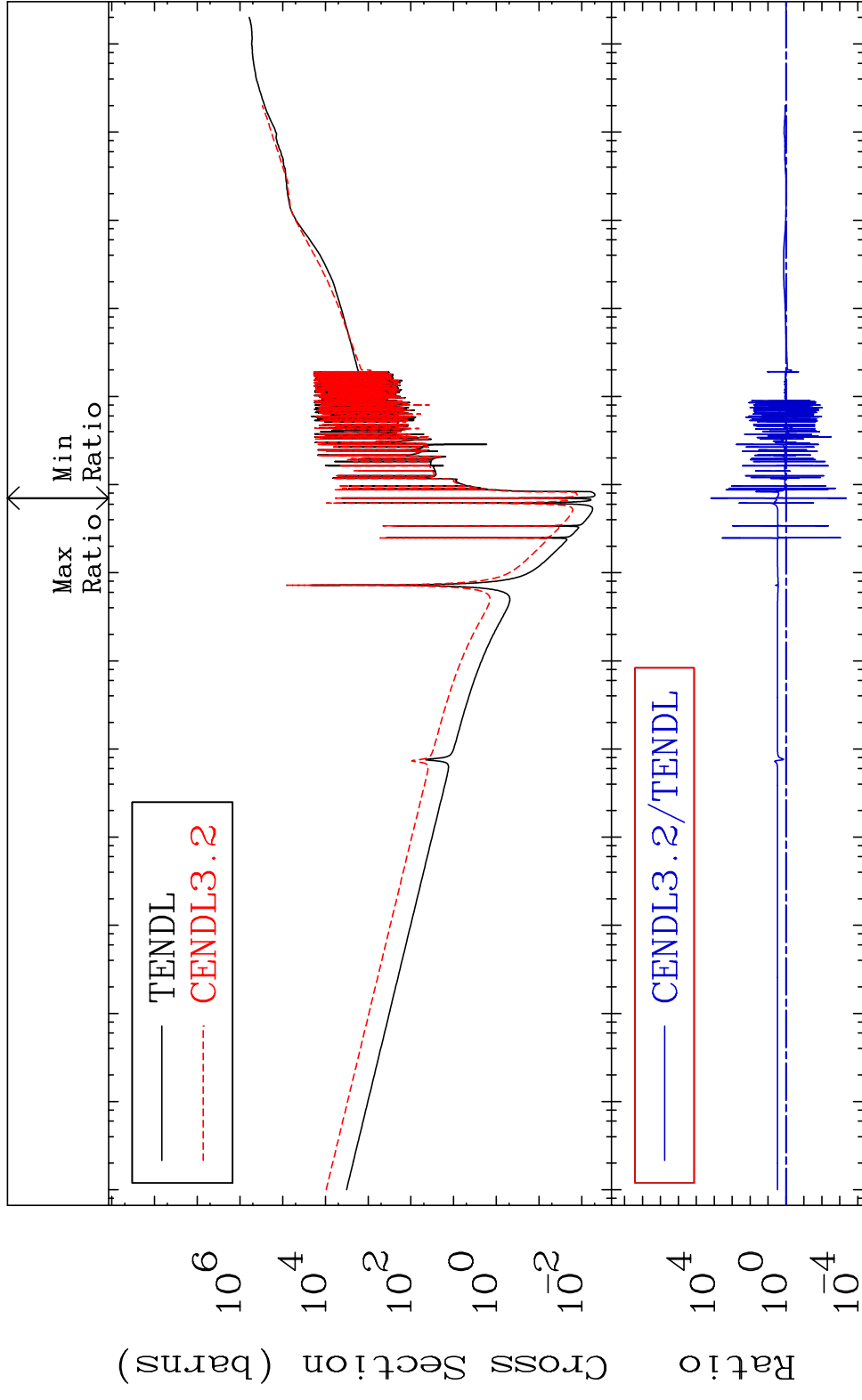


MAT 5728

Dpa total (eV-barns)

57-La-139

Cross Section -99.96 To 9999. %



56

Incident Energy (eV)

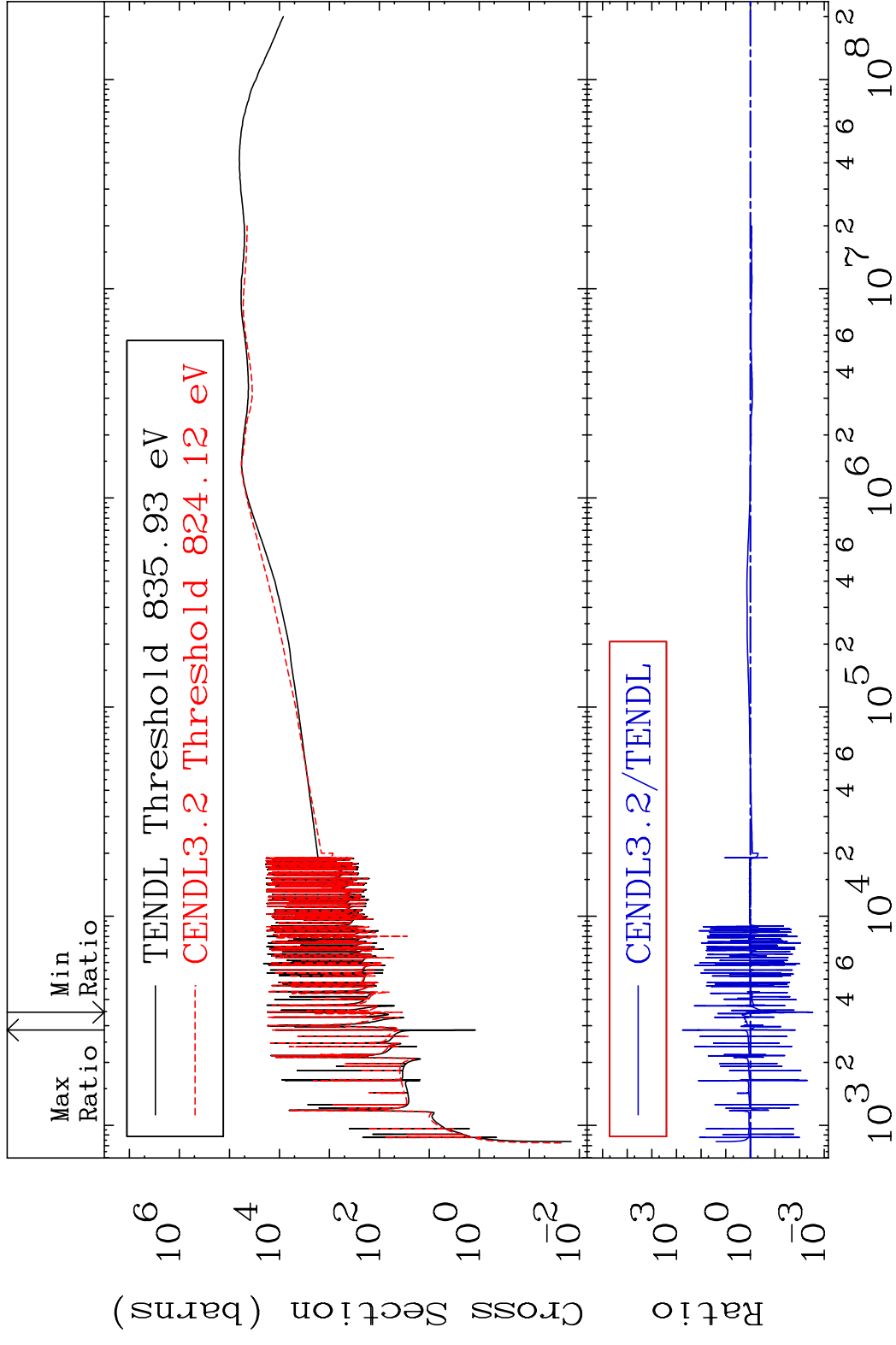
57-La-139

MAT 5728

Dpa elastic (mt2)

57-La-139

Cross Section -99.70 To 9999. %



57

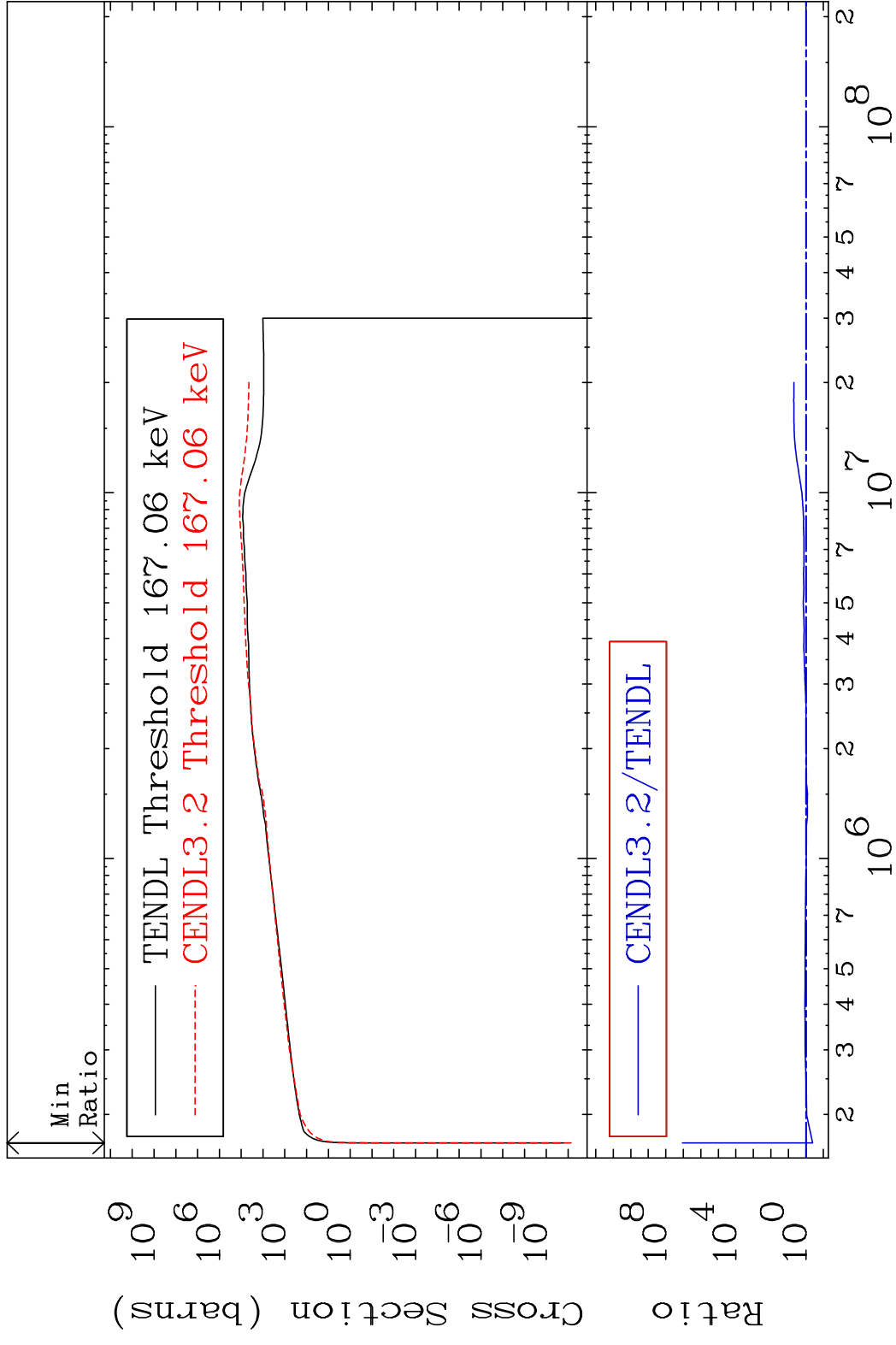
Incident Energy (eV)

57-La-139

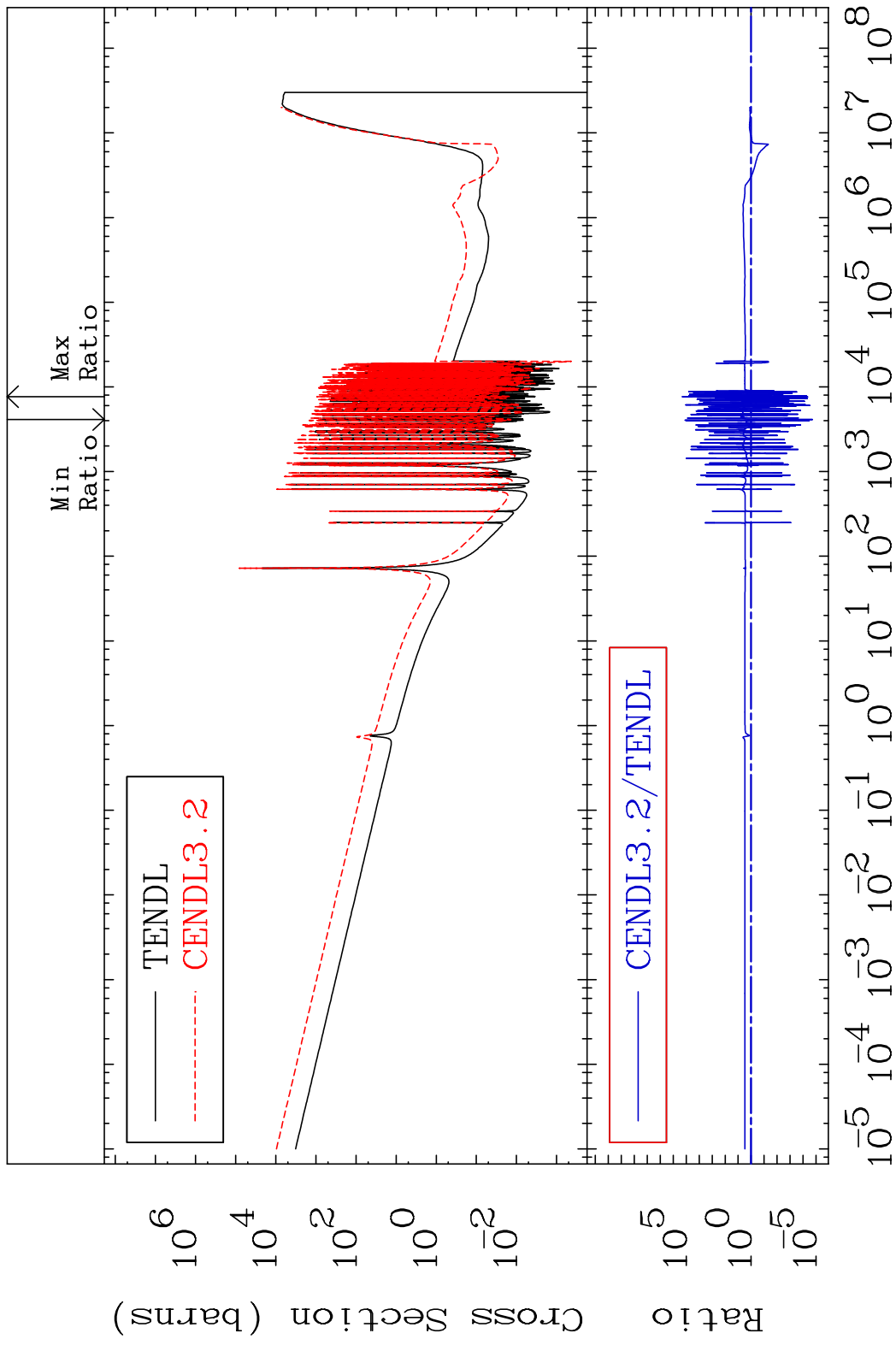
MAT 5728

Dpa inelastic (mt51-91) 57-La-139

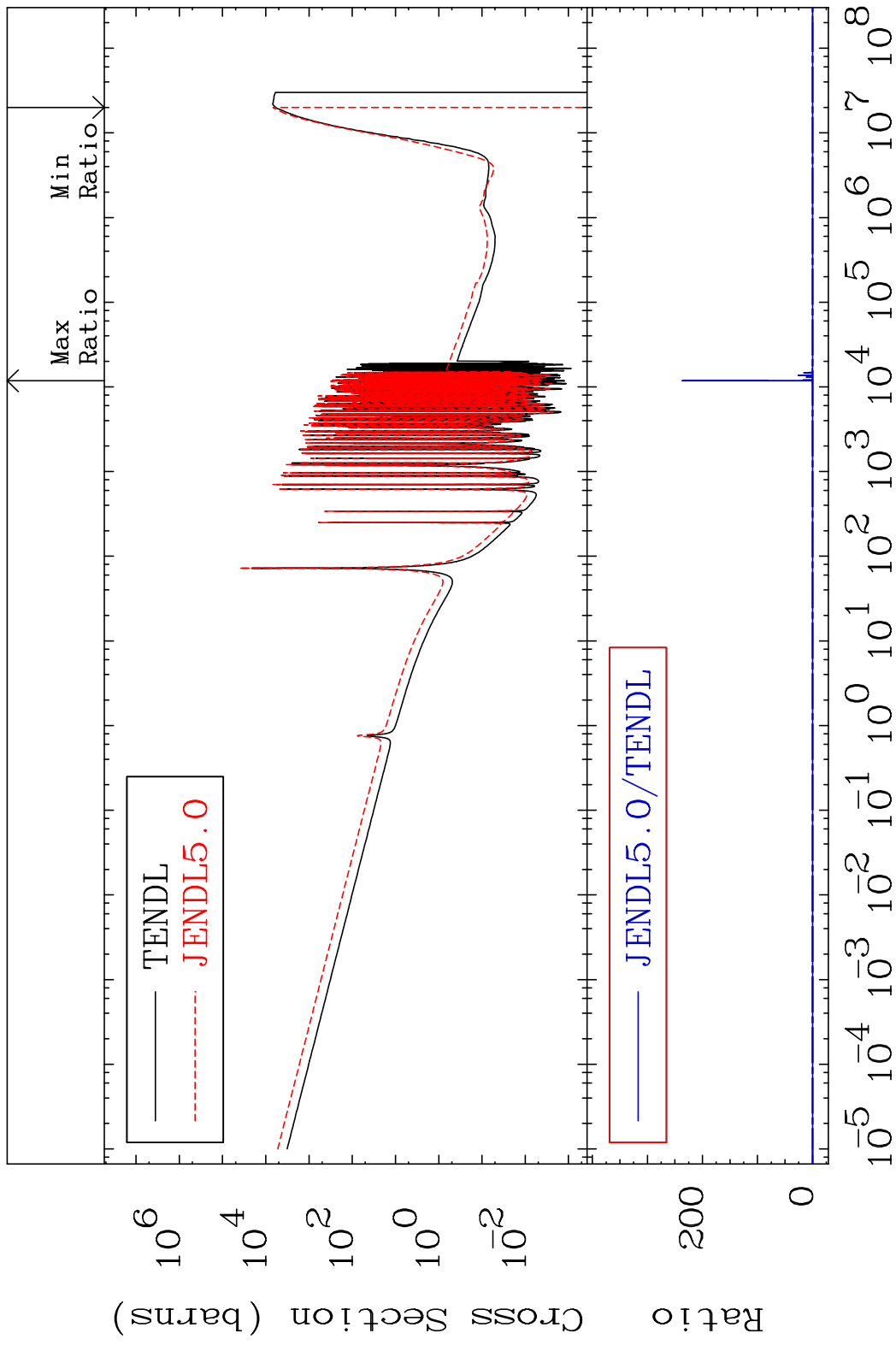
Cross Section -58.42 To 9999. %



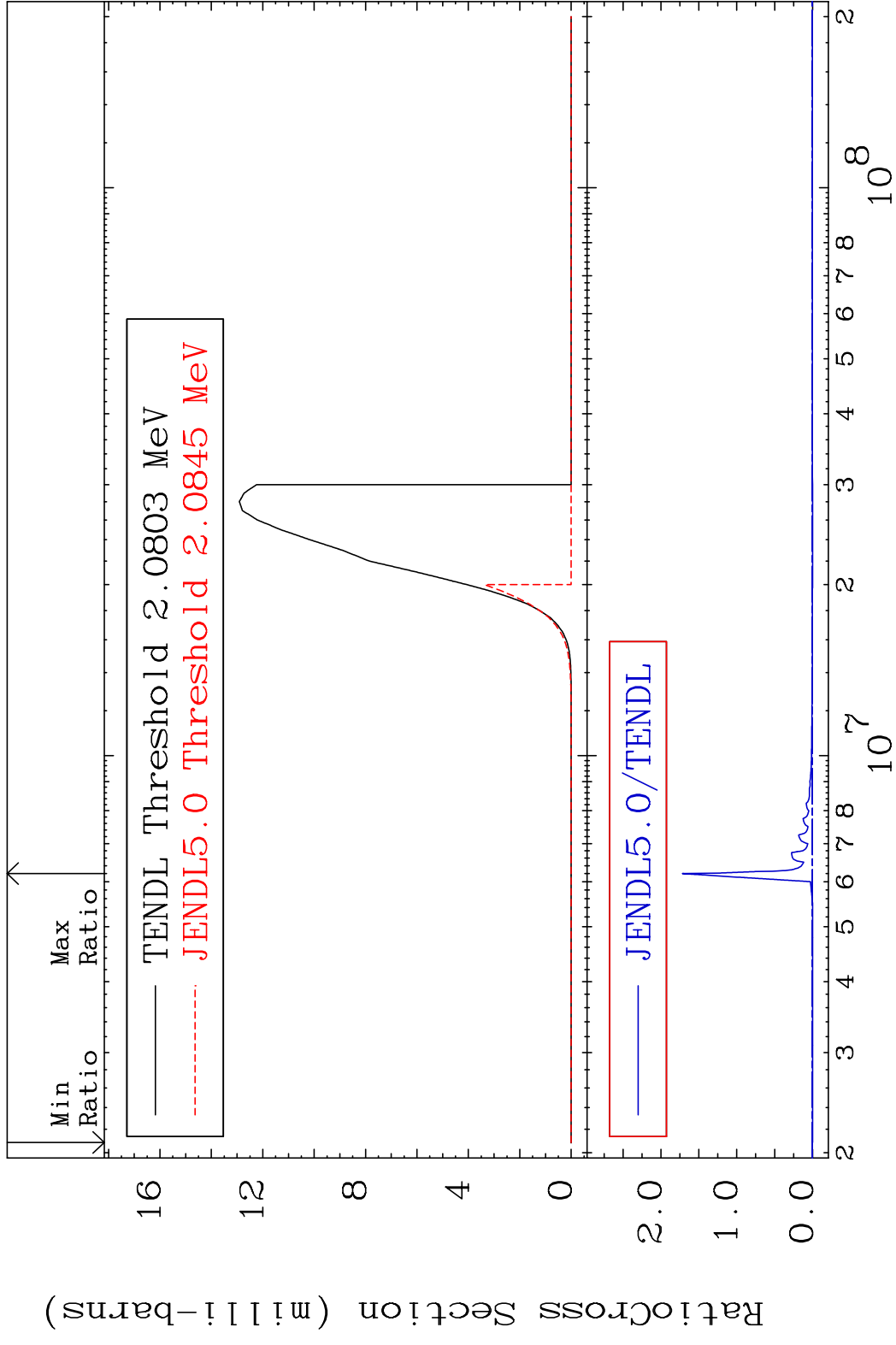
MAT 5728 Dpa disappearance (mt102 -120) 57-La-139
 Cross Section -100.0 To 9999. %

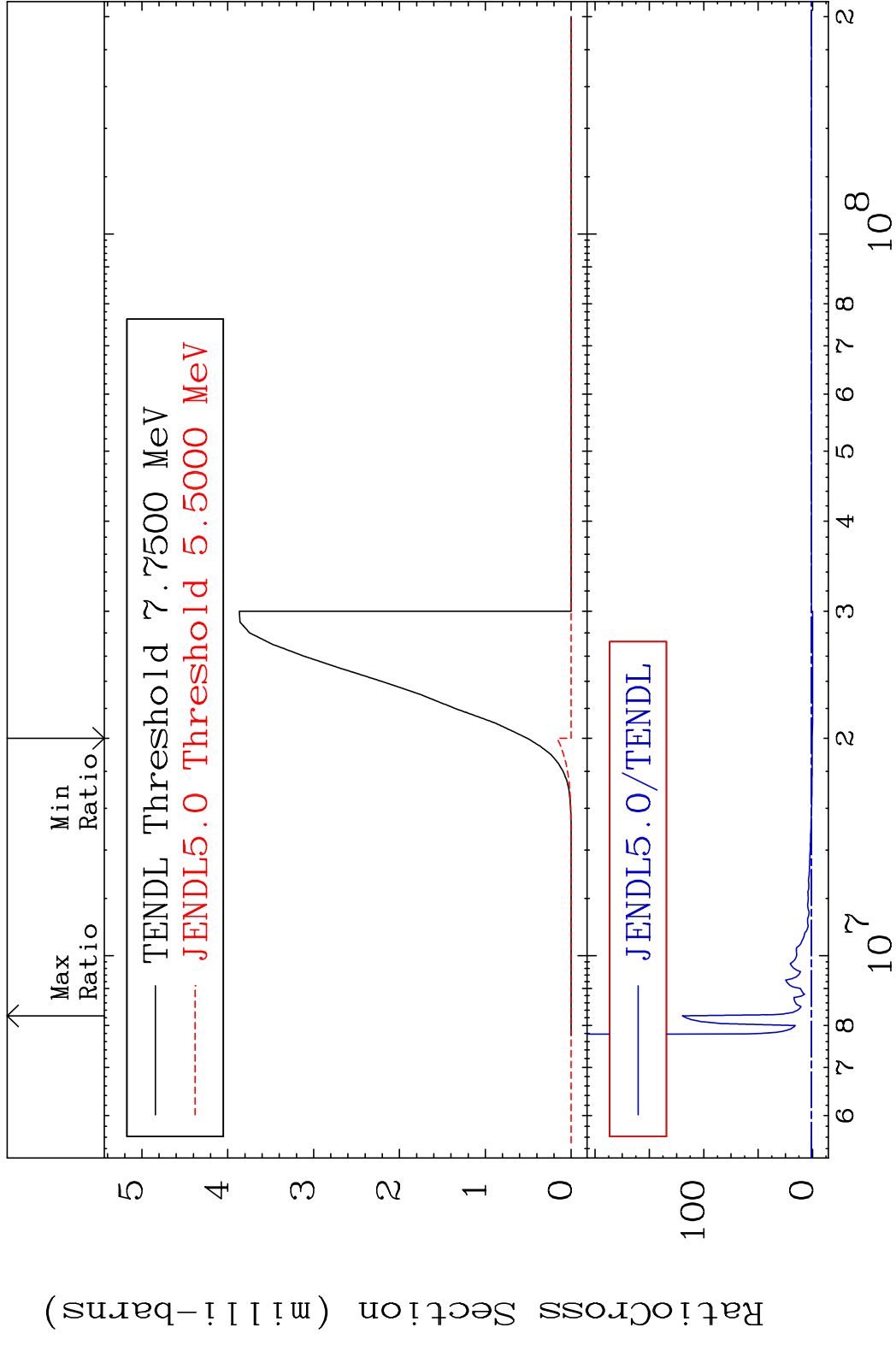


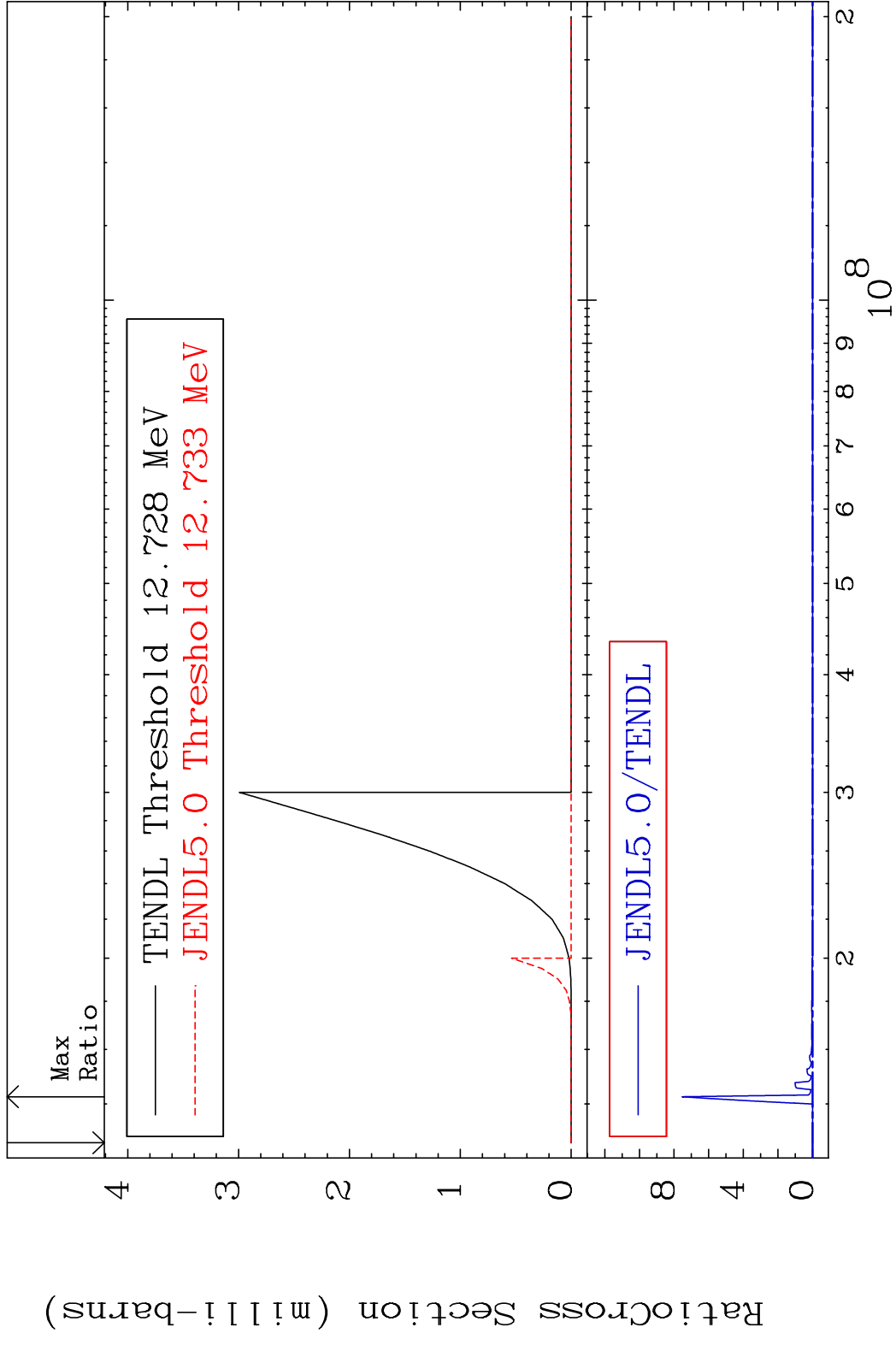
MAT 5728 Dpa disappearance (mt102 -120) 57-La-139
 Cross Section -100.0 To 9999. %

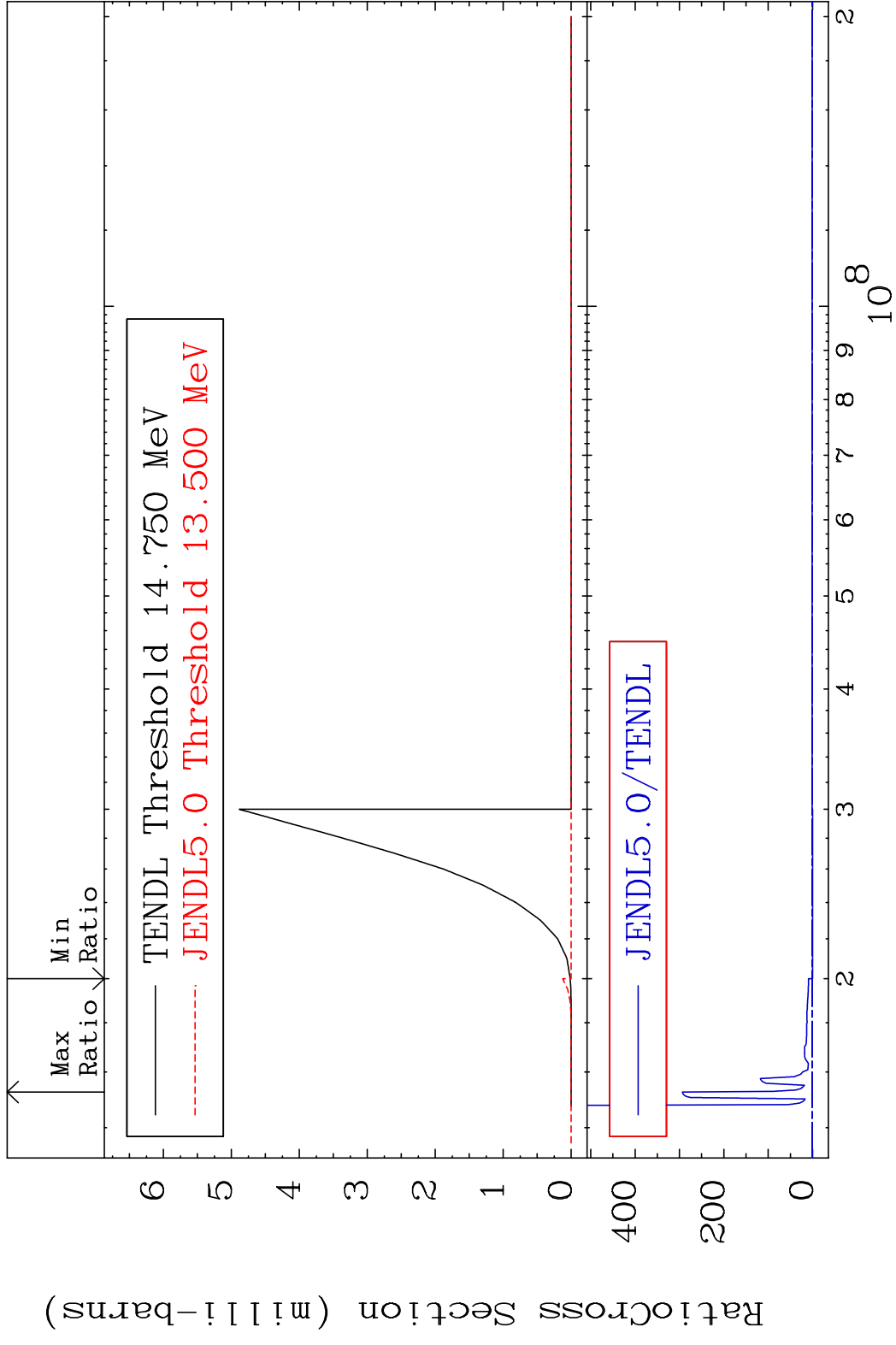


60 Incident Energy (eV) 57-La-139

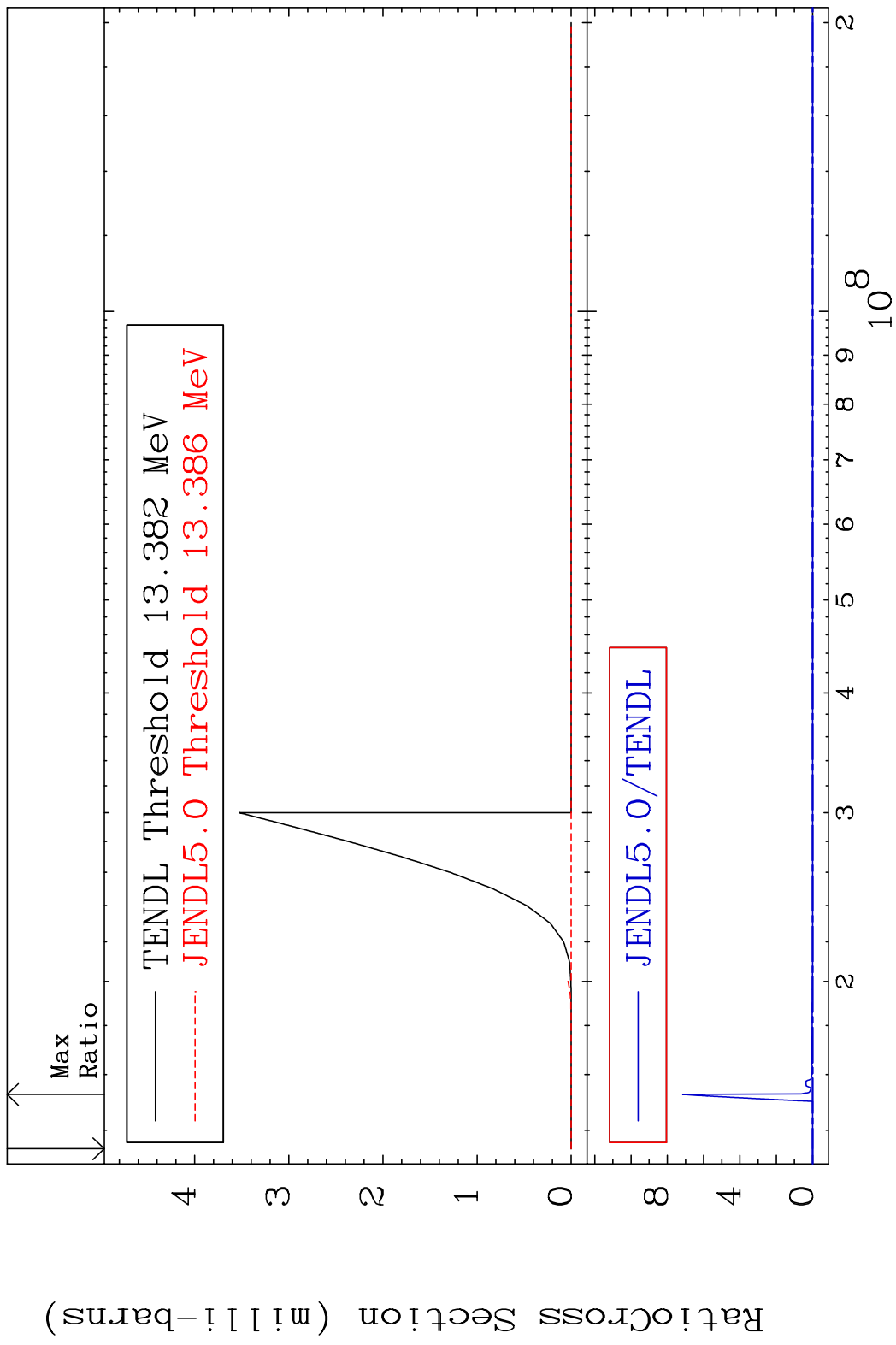


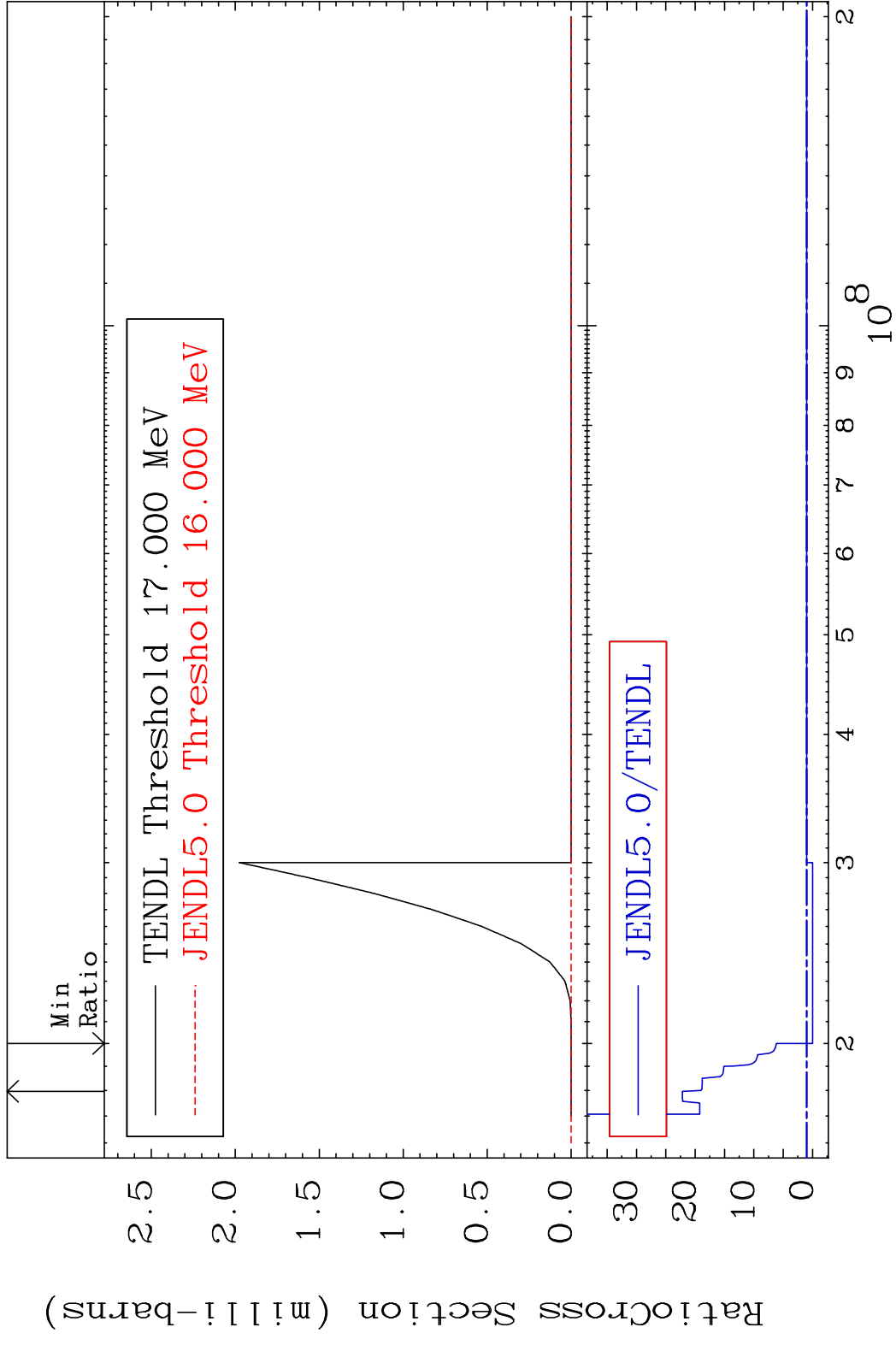


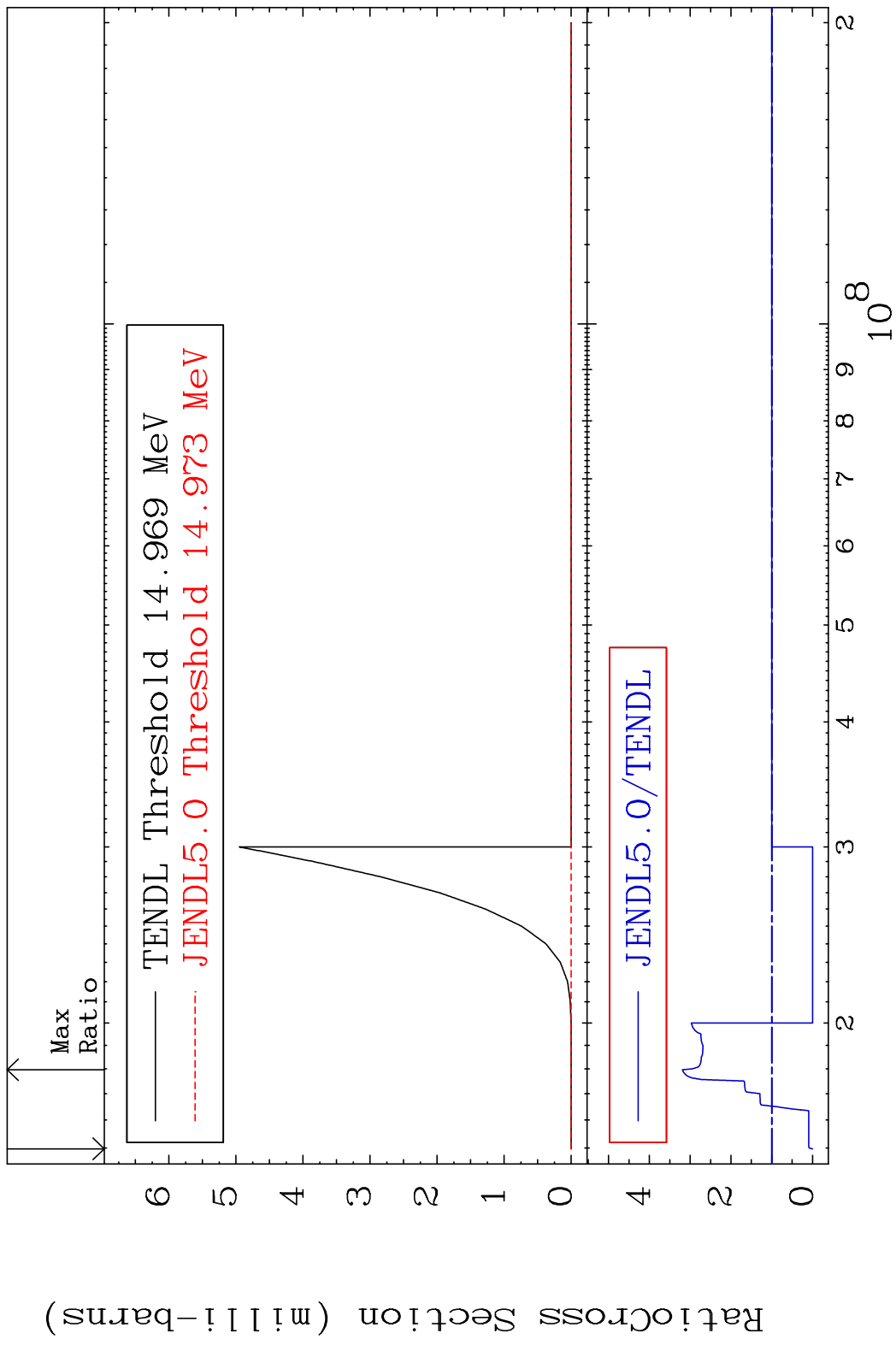


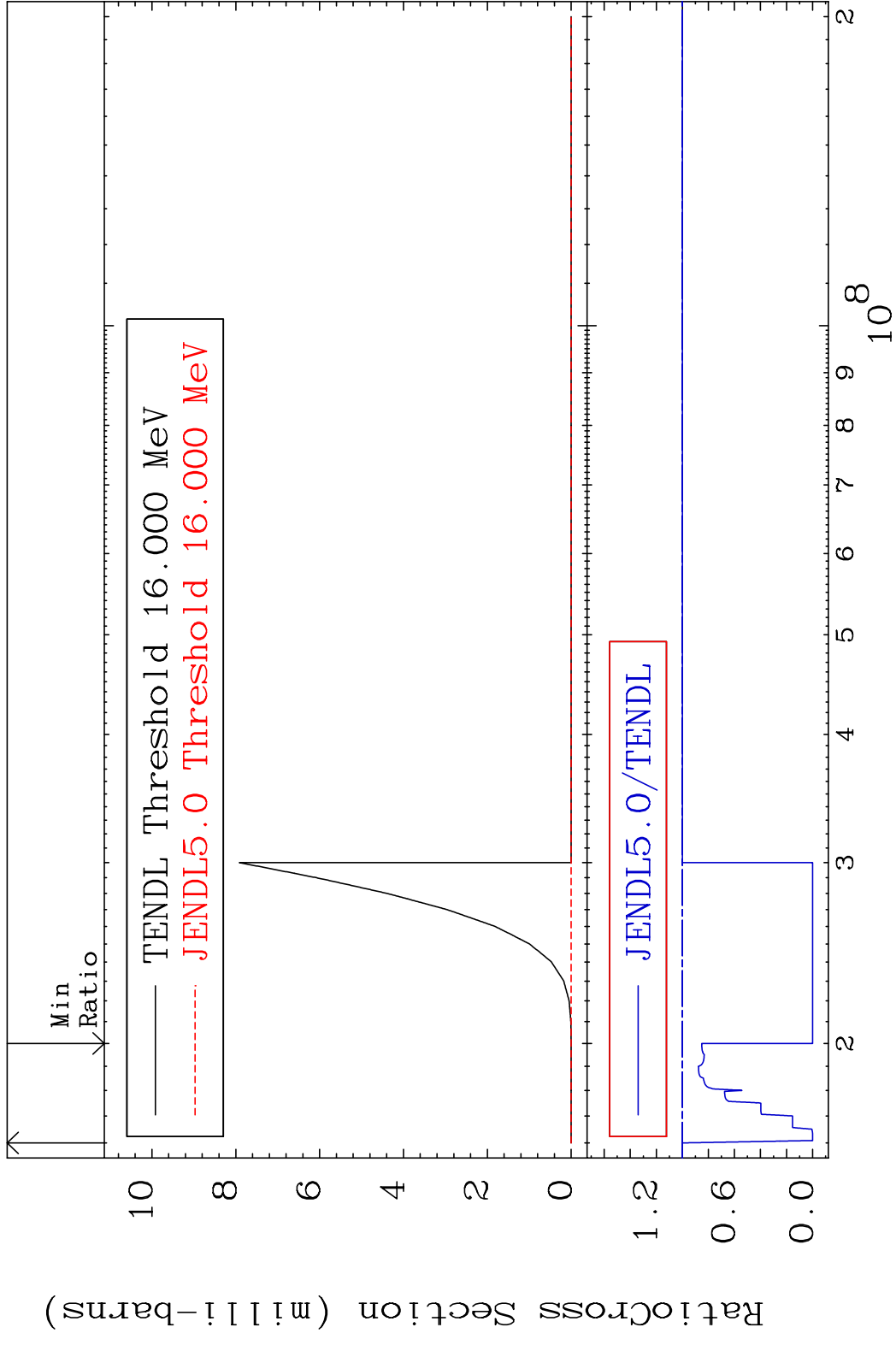


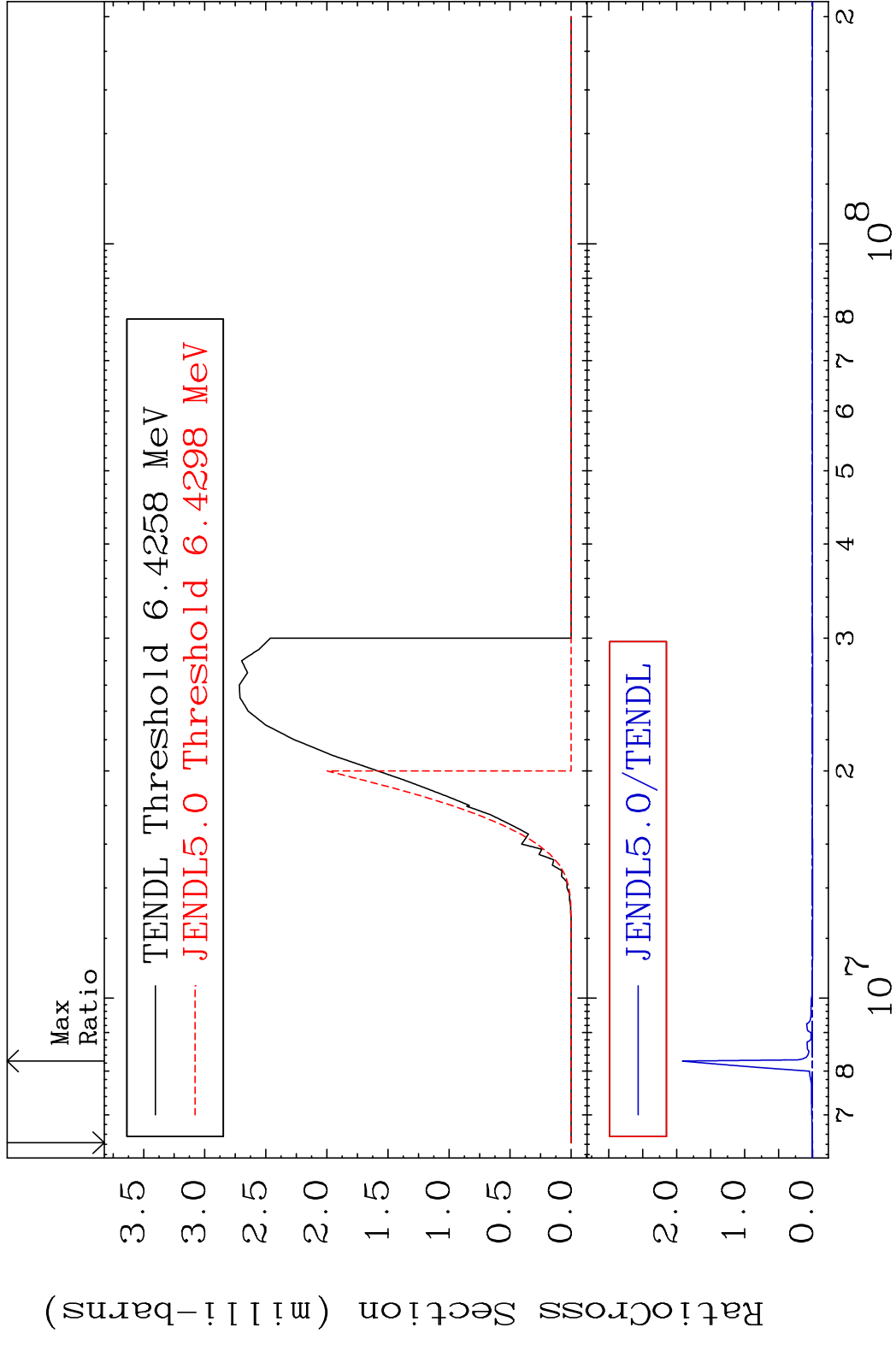
MAT 5728 (n, n') t:56-Ba-136g 57-La-139
 Radionuclide Production Cross Section Ratio



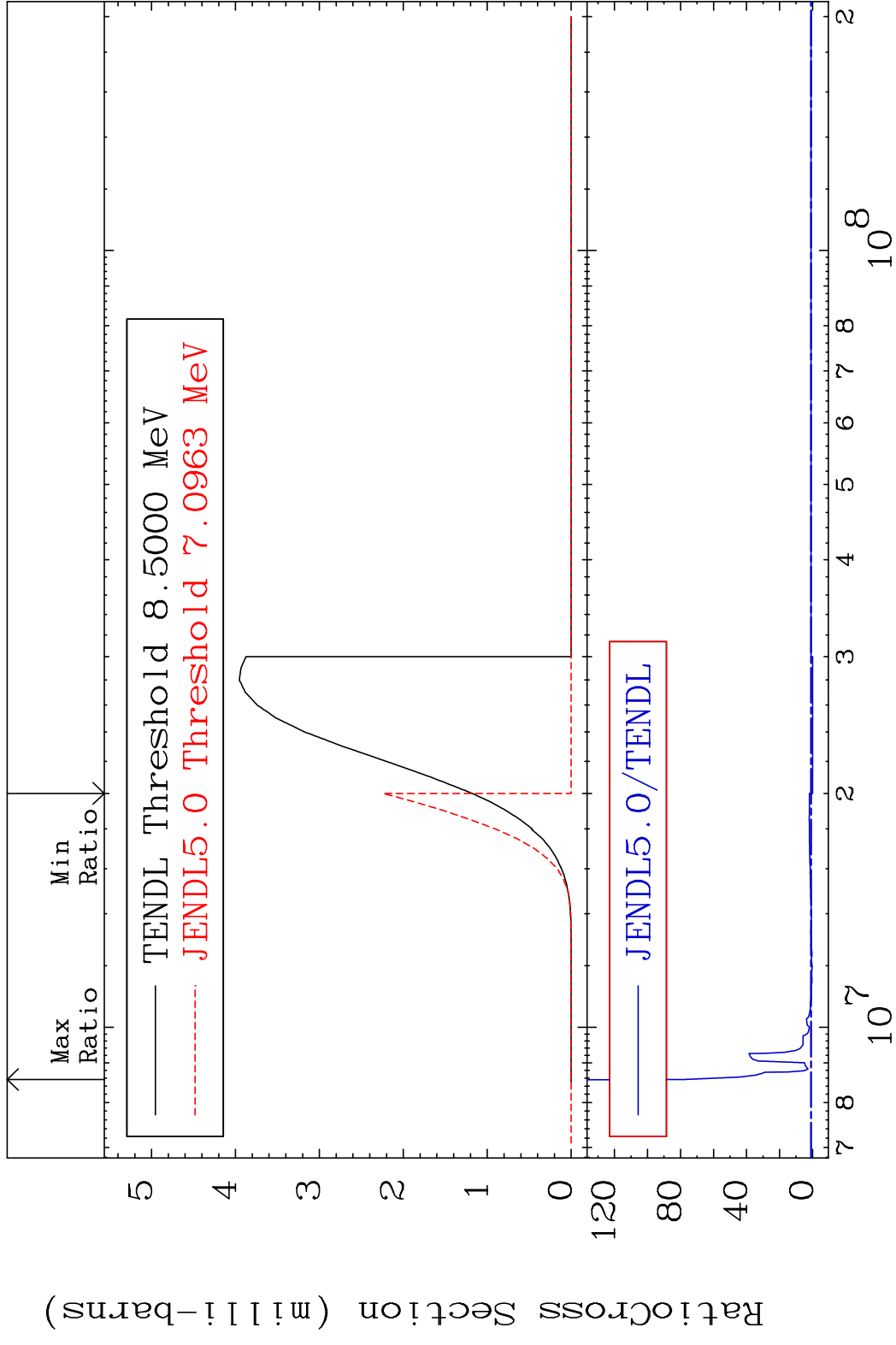








MAT 5728 (n, t):56-Ba-137m2 57-La-139
 Radionuclide Production Cross Section 180.01 dth 7789. %



70 Incident Energy (eV) 57-La-139