

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

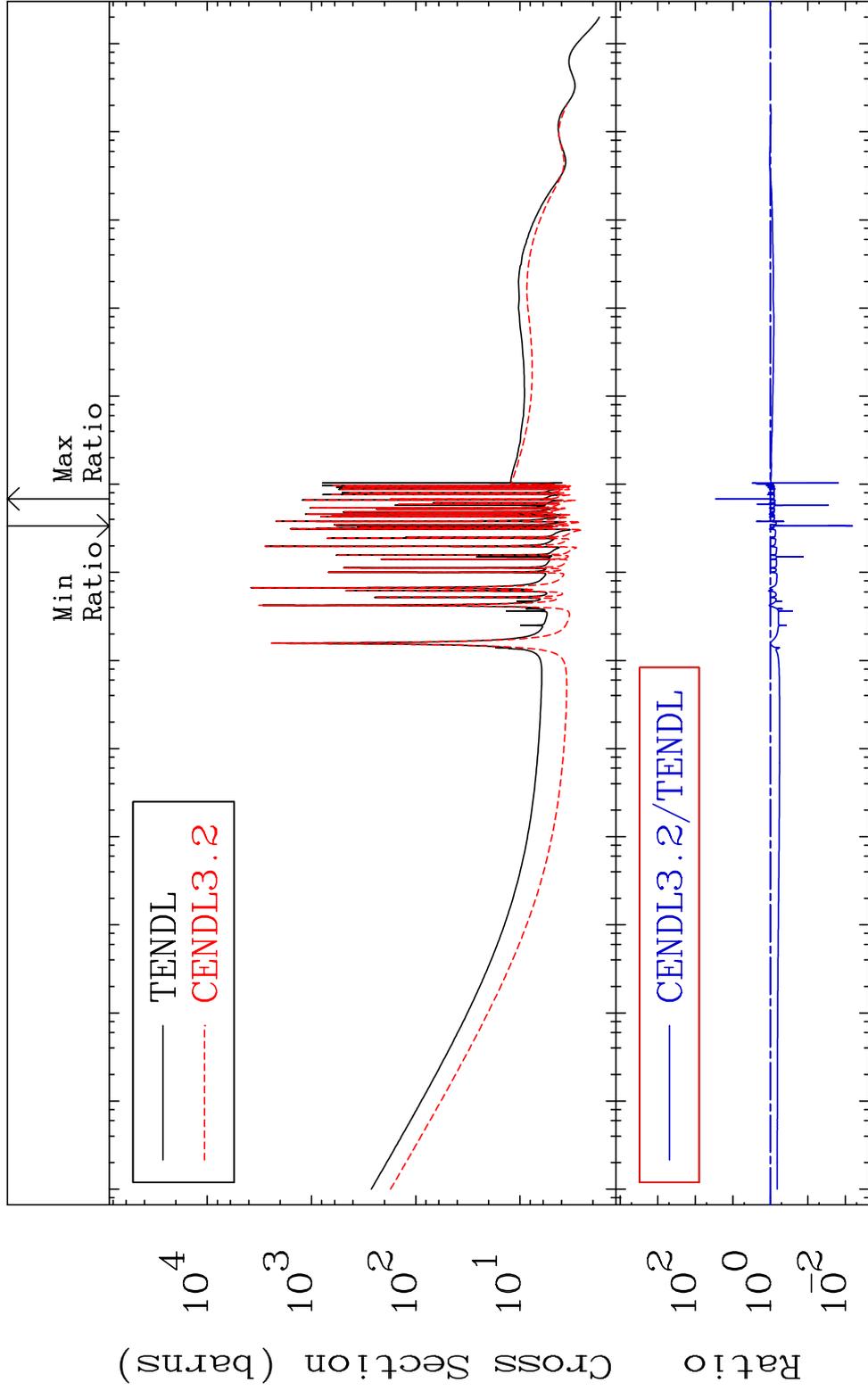
Press Mouse Button to Start

MAT 4440

Total

44-Ru-101

Cross Section -99.36 To 2725. %



10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸

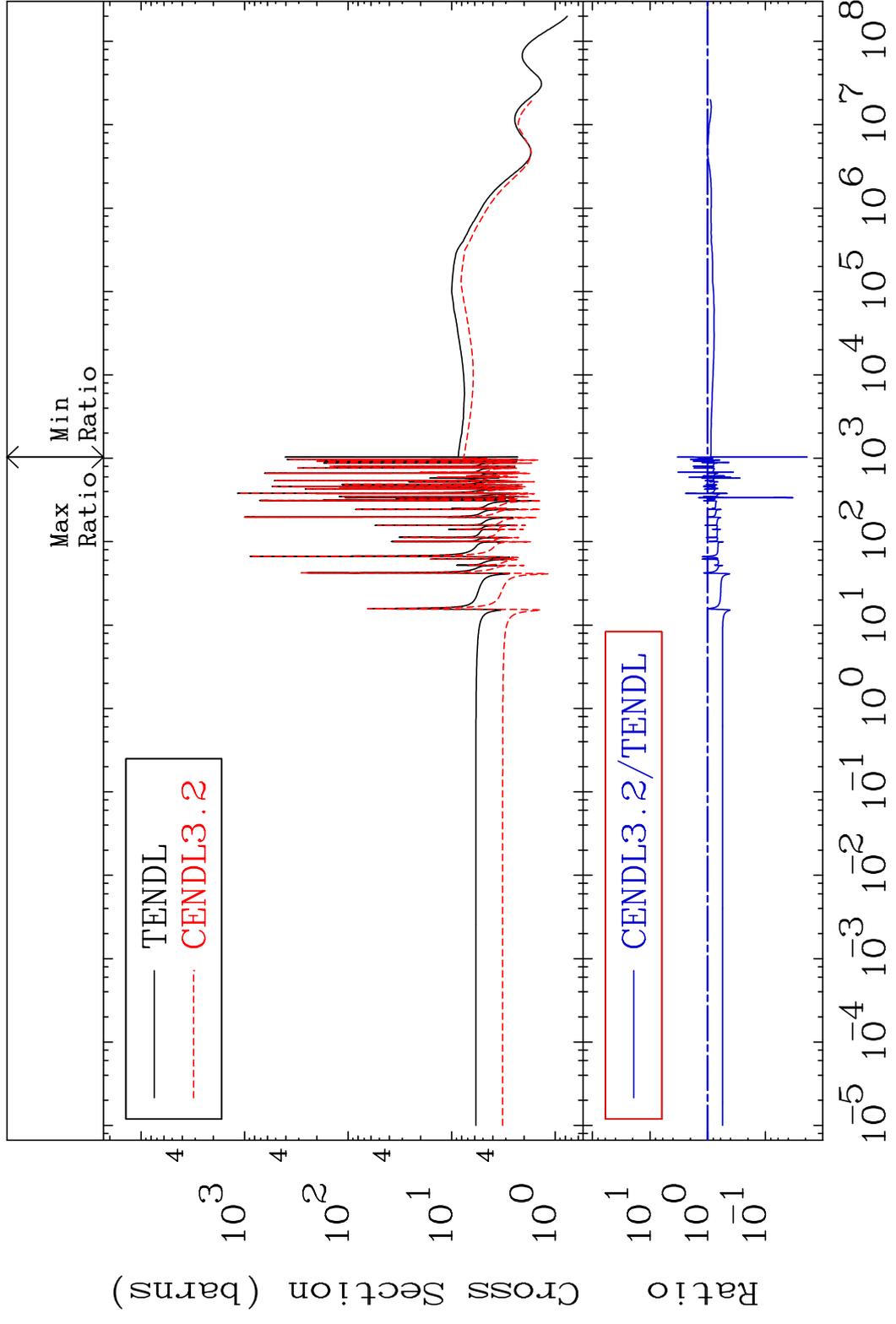
1

Incident Energy (eV)

44-Ru-101

MAT 4440

Elastic Cross Section -98.11 To 231.1 %
44-Ru-101

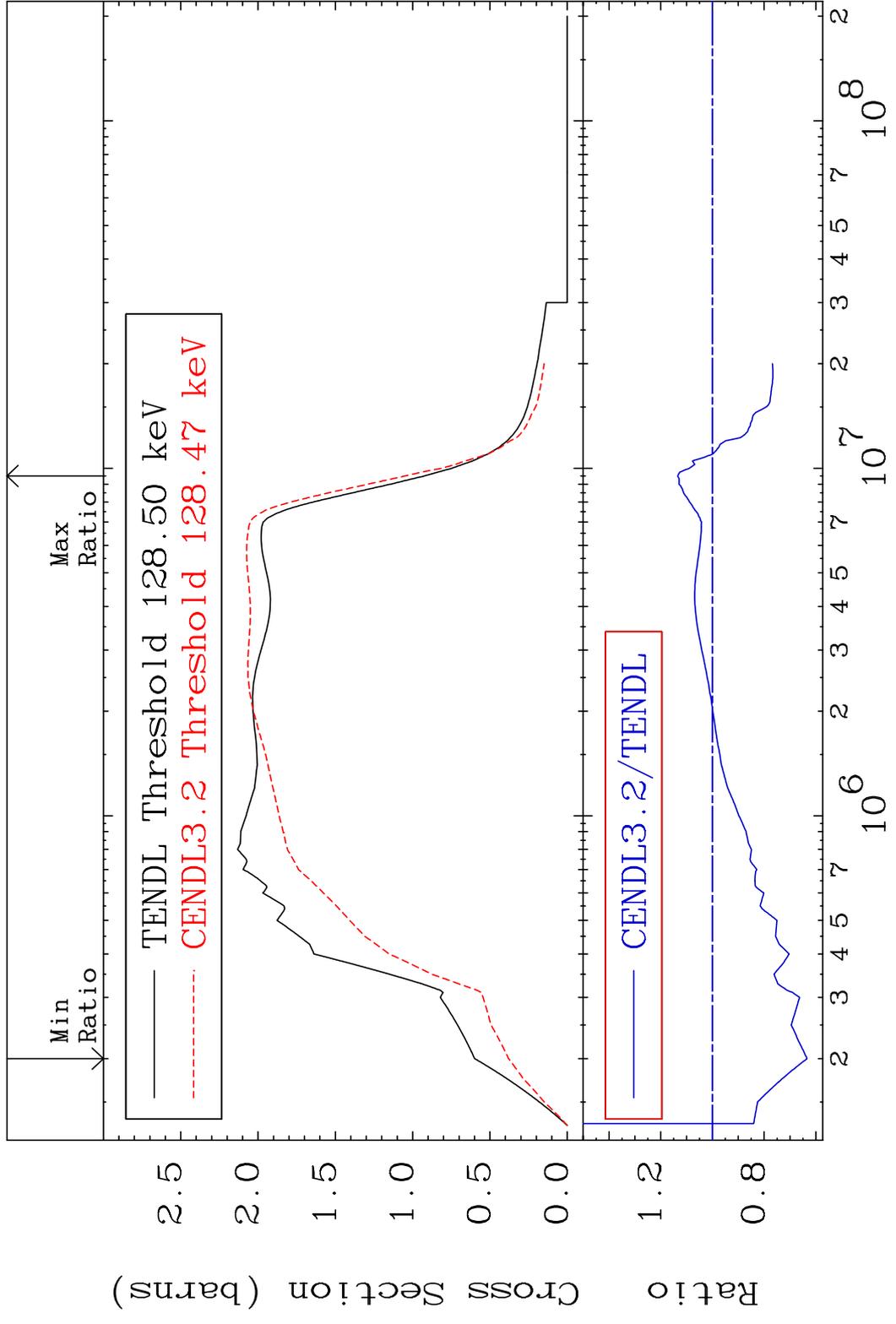


2

Incident Energy (eV)

44-Ru-101

MAT 4440 Inelastic 44-Ru-101
 Cross Section -36.59 To 13.44 %

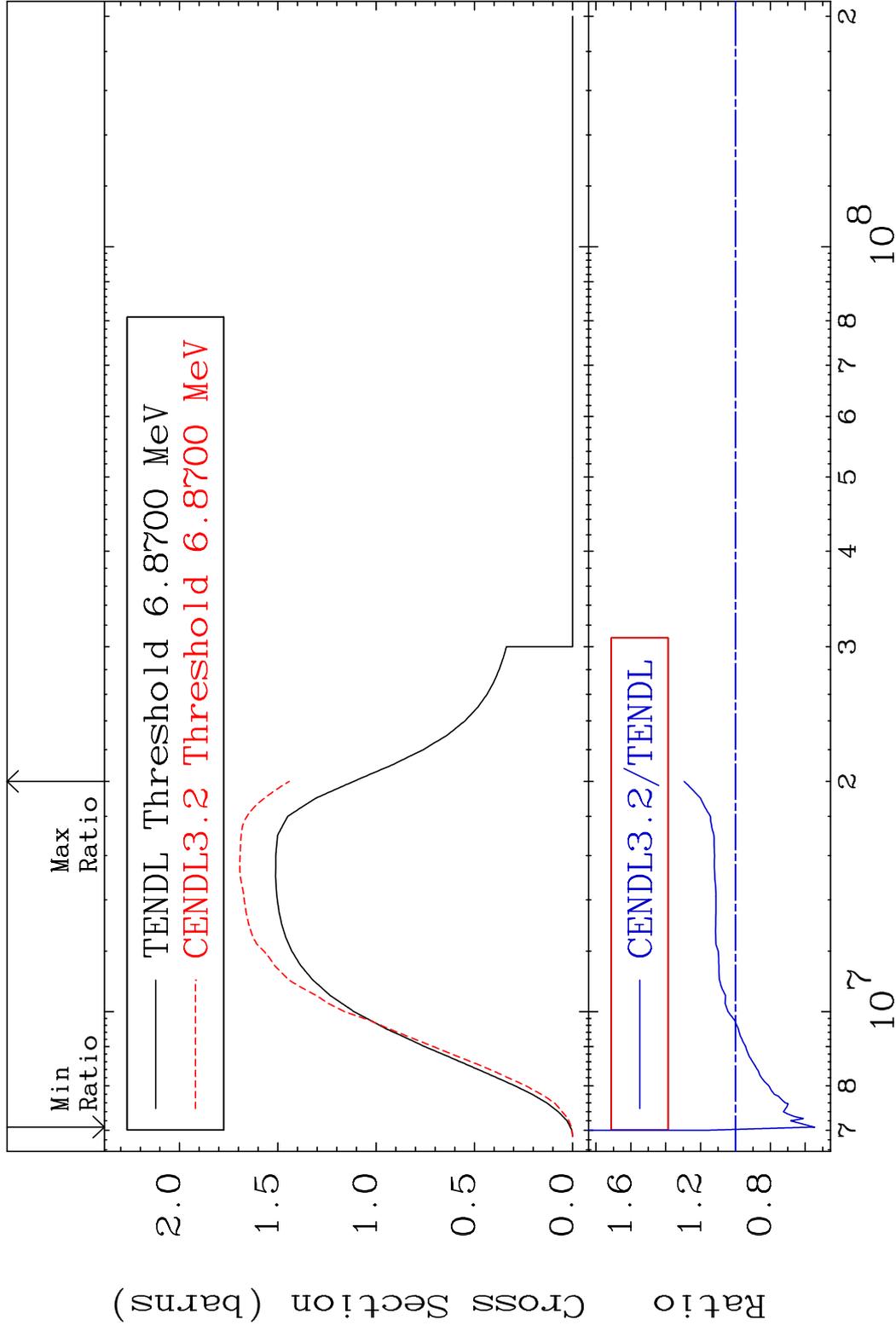


MAT 4440

(n,2n)

44-Ru-101

Cross Section -45.42 To 29.46 %

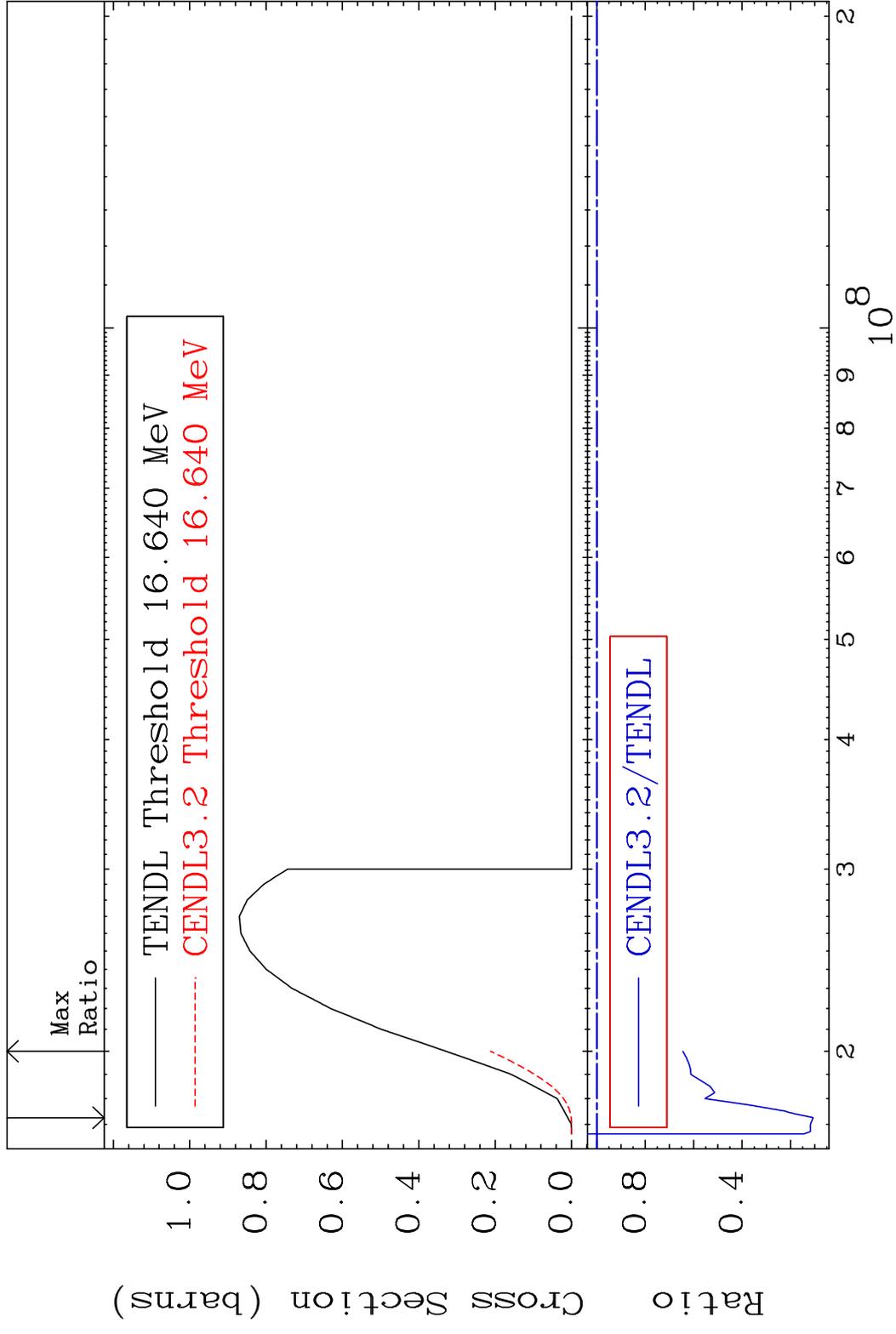


4

Incident Energy (eV)

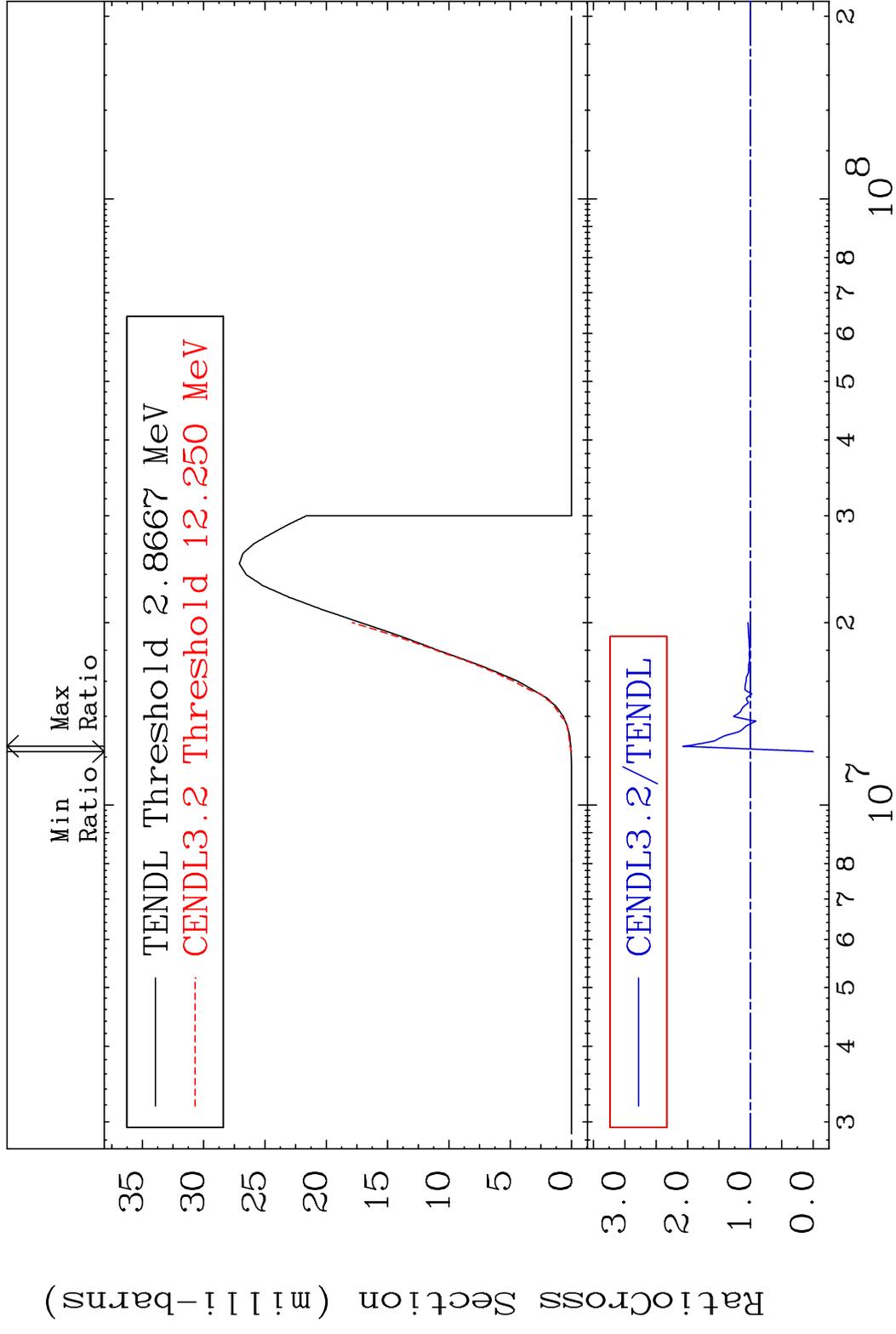
44-Ru-101

MAT 4440 (n,3n) 44-Ru-101
 Cross Section -89.35 To -35.51%



5 Incident Energy (eV) 44-Ru-101

MAT 4440 (n, n') α 44-Ru-101
 Cross Section -100.0 To 107.6 %

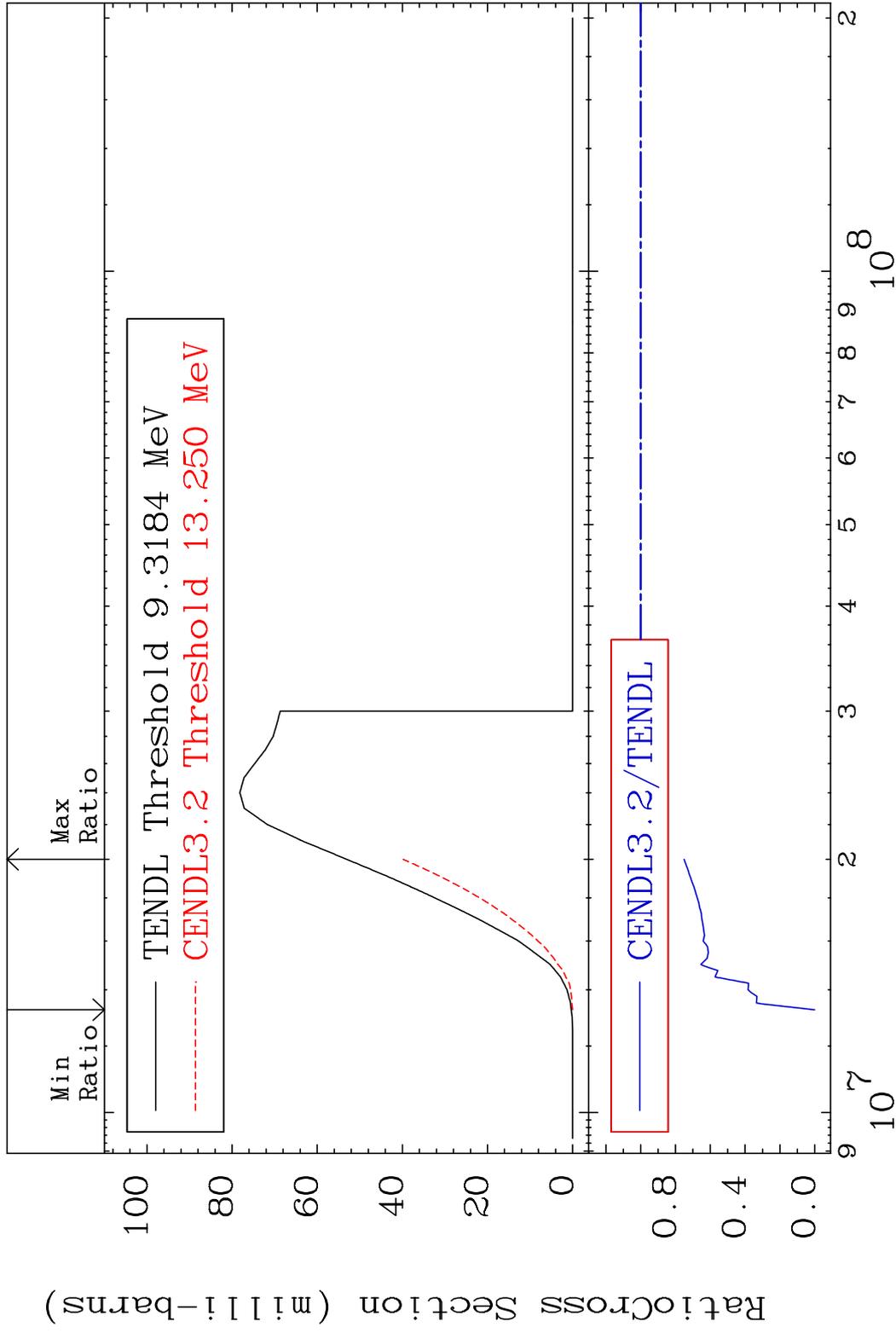


MAT 4440

(n, n') p

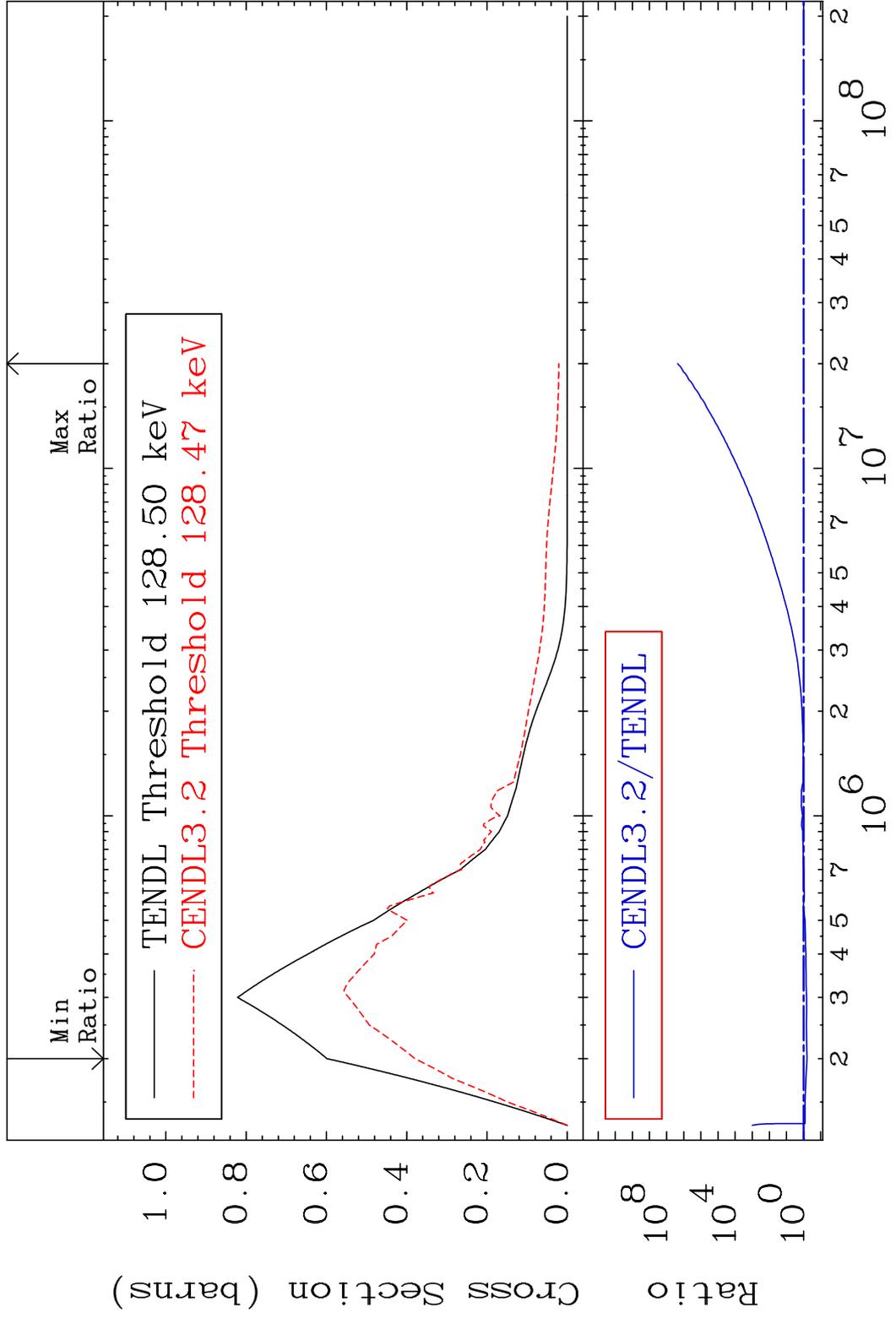
44-Ru-101

Cross Section -100.0 To -24.96%

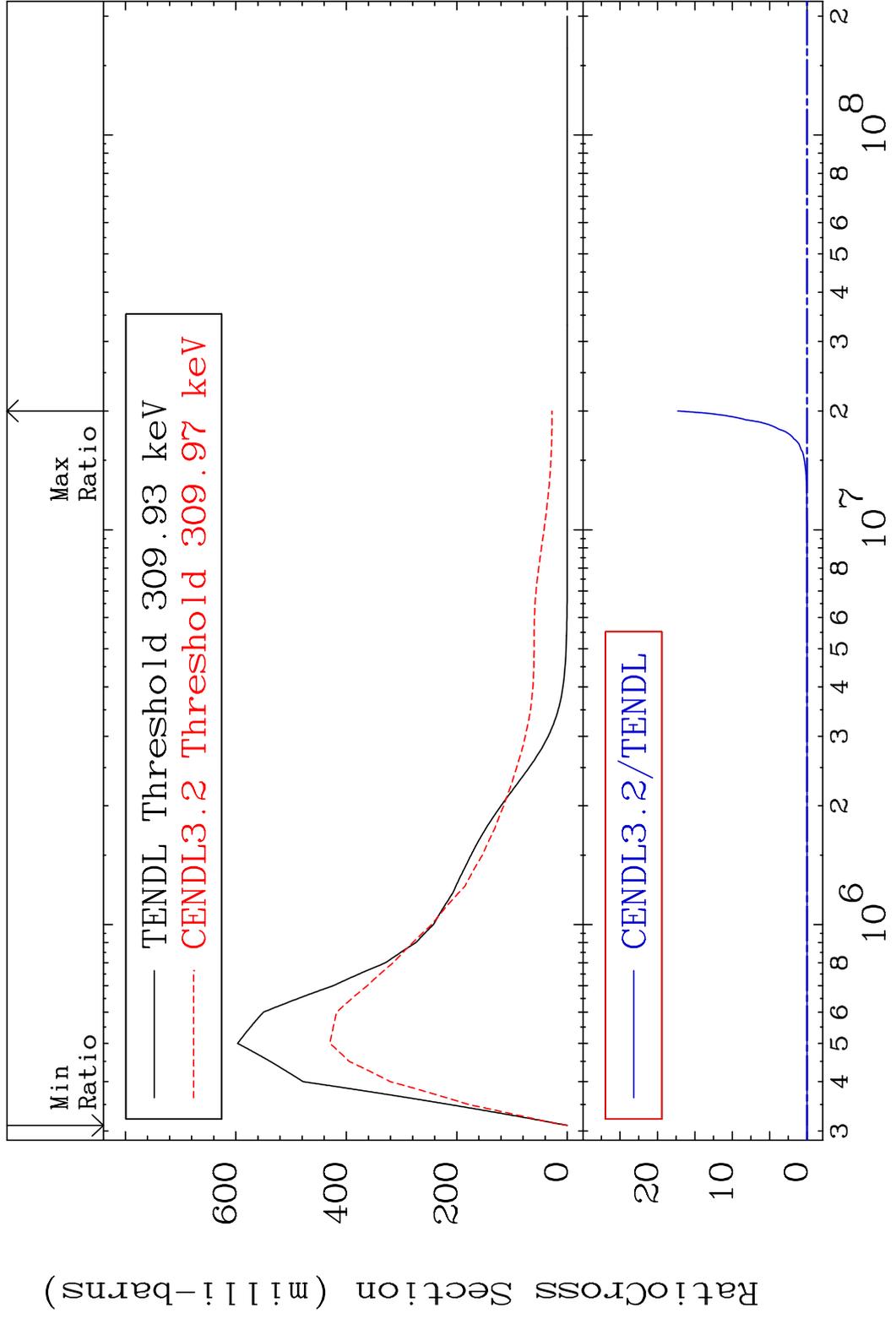


7 Incident Energy (eV) 44-Ru-101

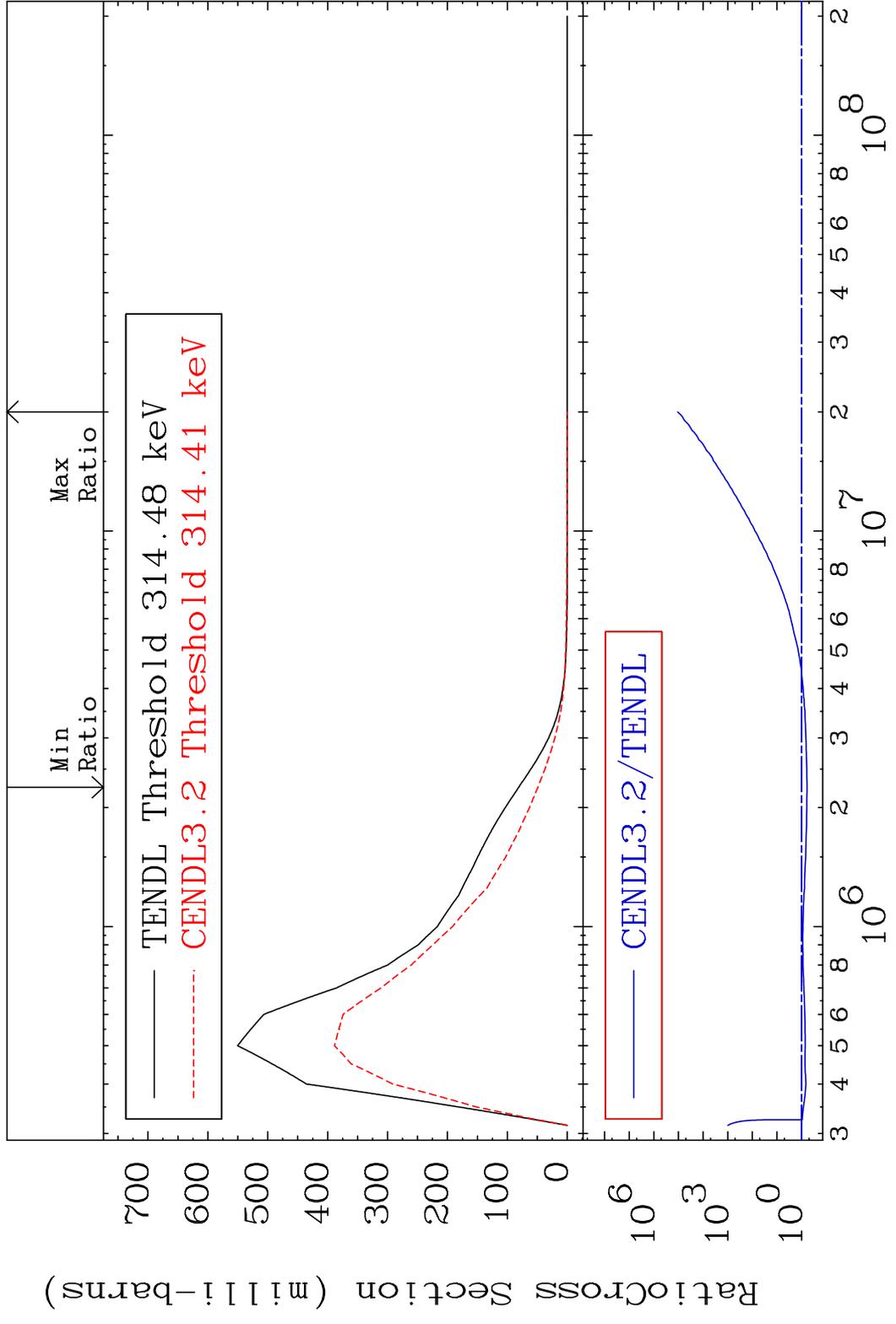
MAT 4440 MT= 51 (n,n') Level 44-Ru-101
 Cross Section -36.59 To 9999. %



MAT 4440 MT= 52 (n, n') Level 44-Ru-101
 Cross Section -100.0 To 9999. %

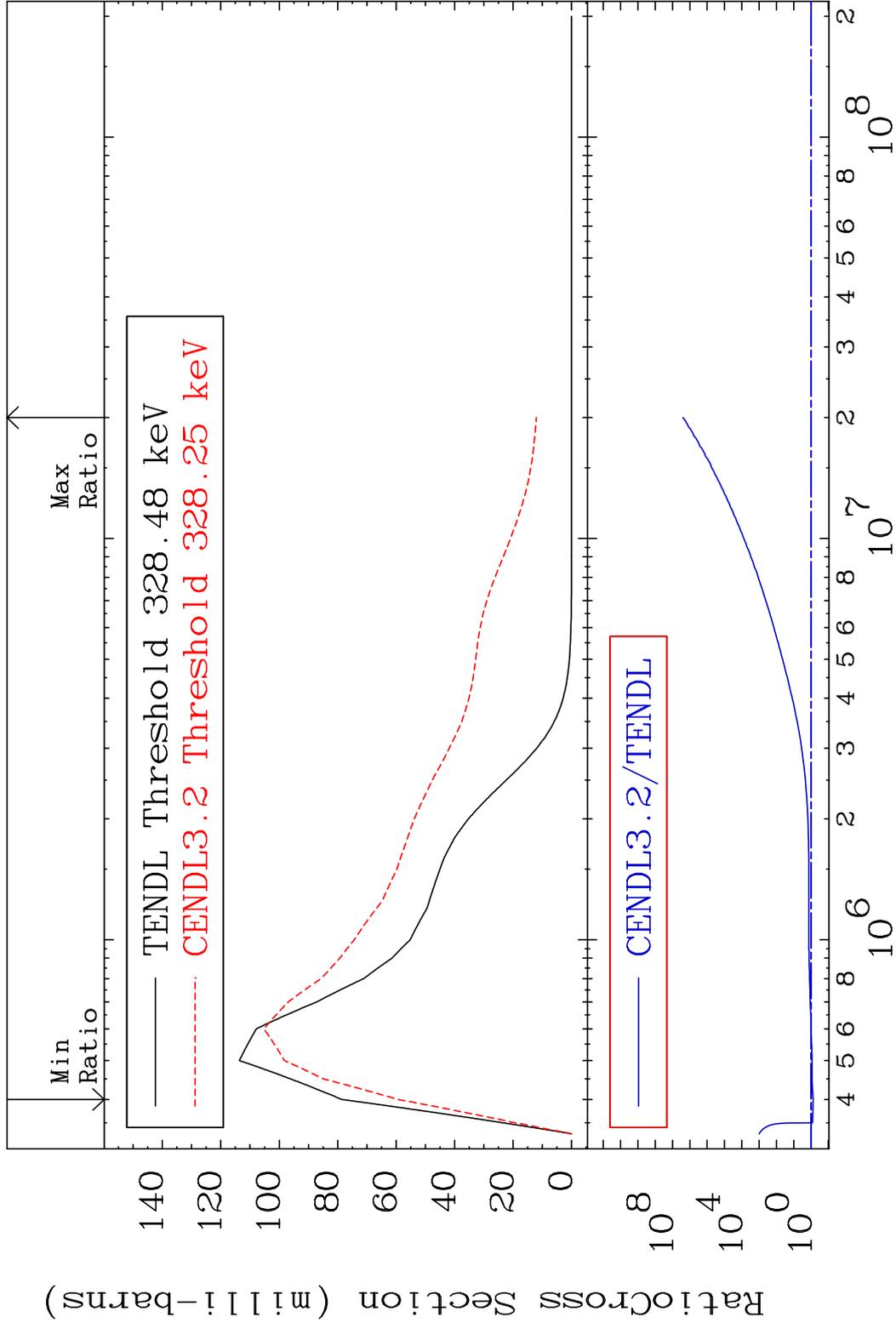


MAT 4440 MT= 53 (n, n') Level 44-Ru-101
 Cross Section -39.74 To 9999. %

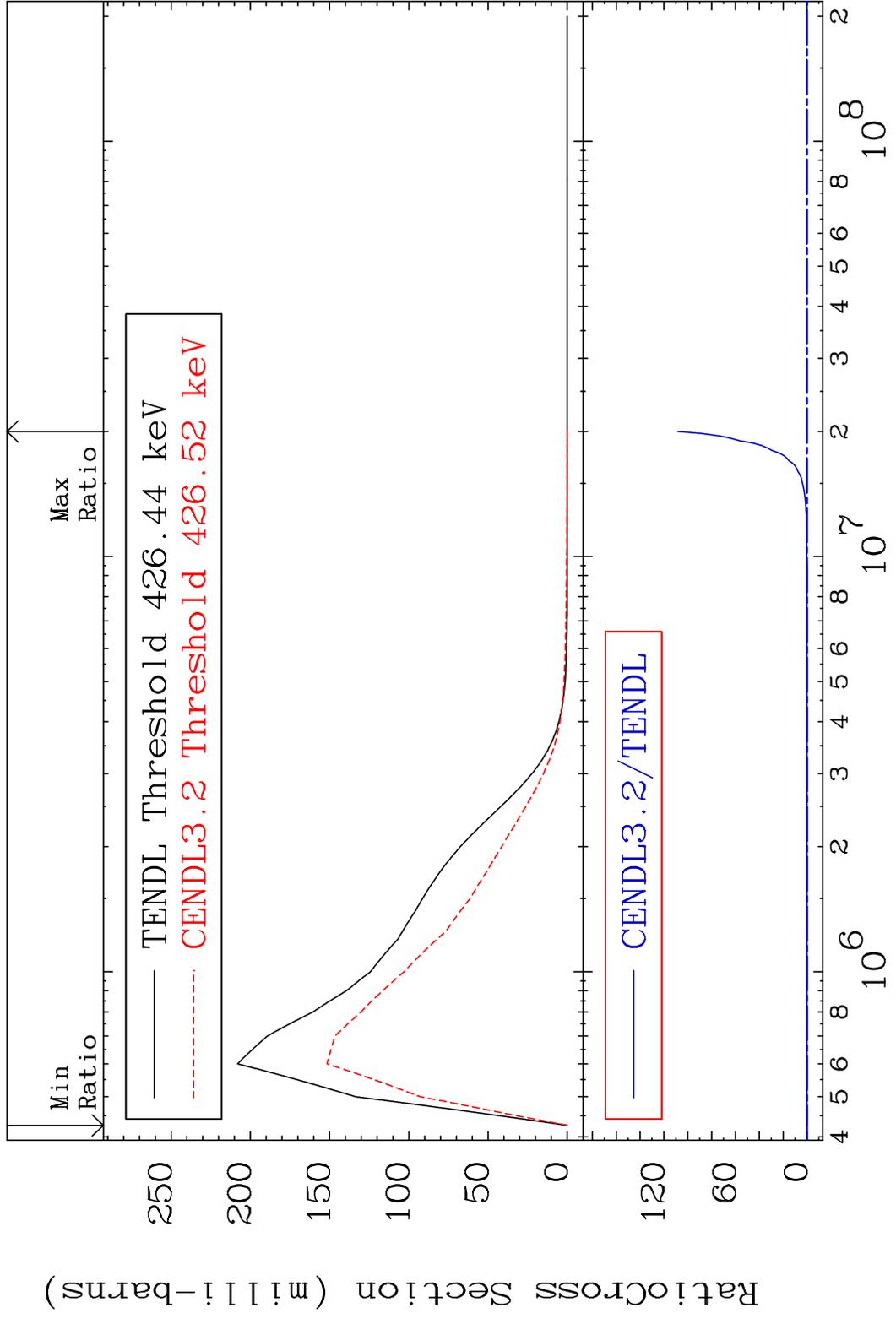


10 10 44-Ru-101

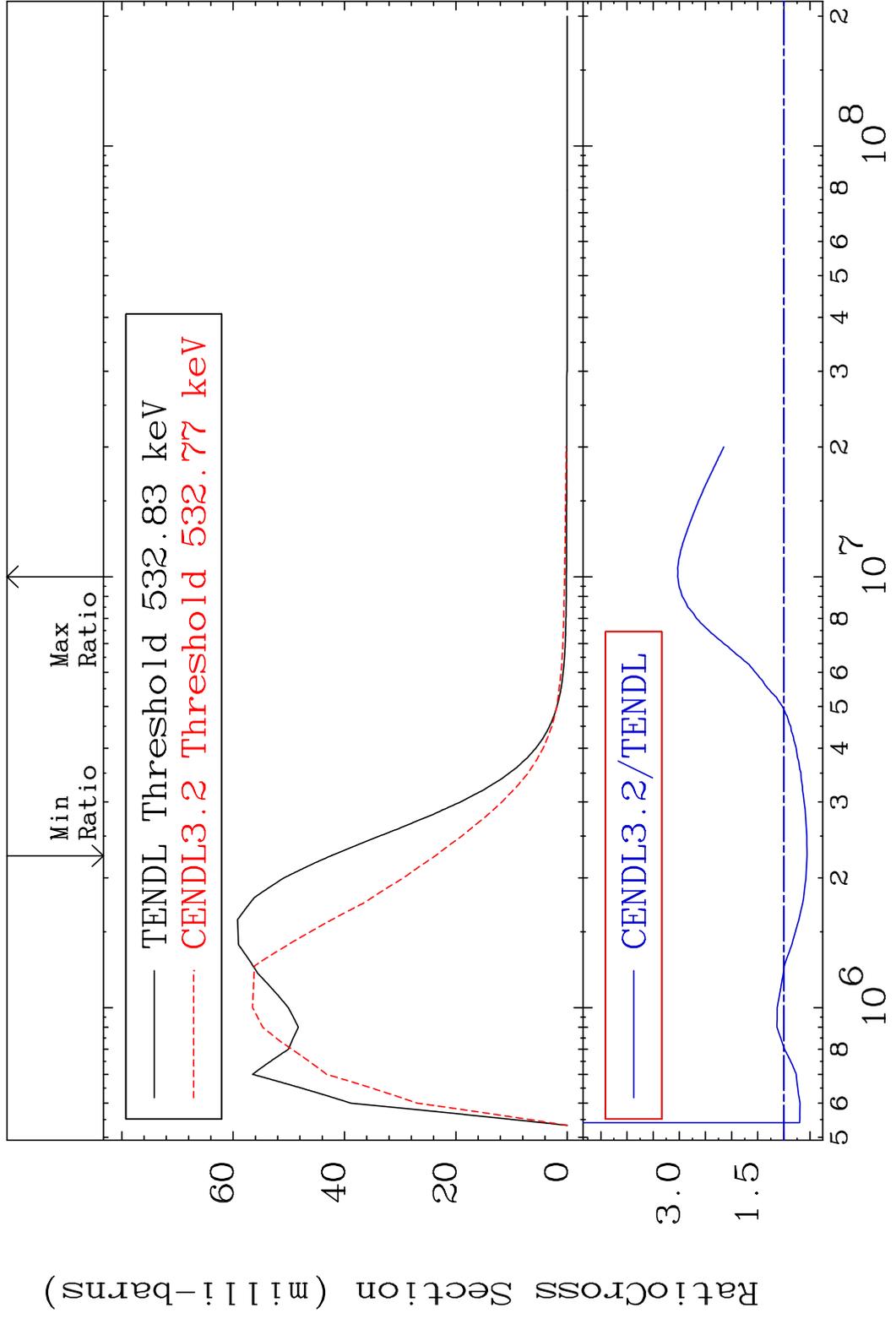
MAT 4440 MT= 54 (n,n') Level 44-Ru-101
 Cross Section -24.45 To 9999. %



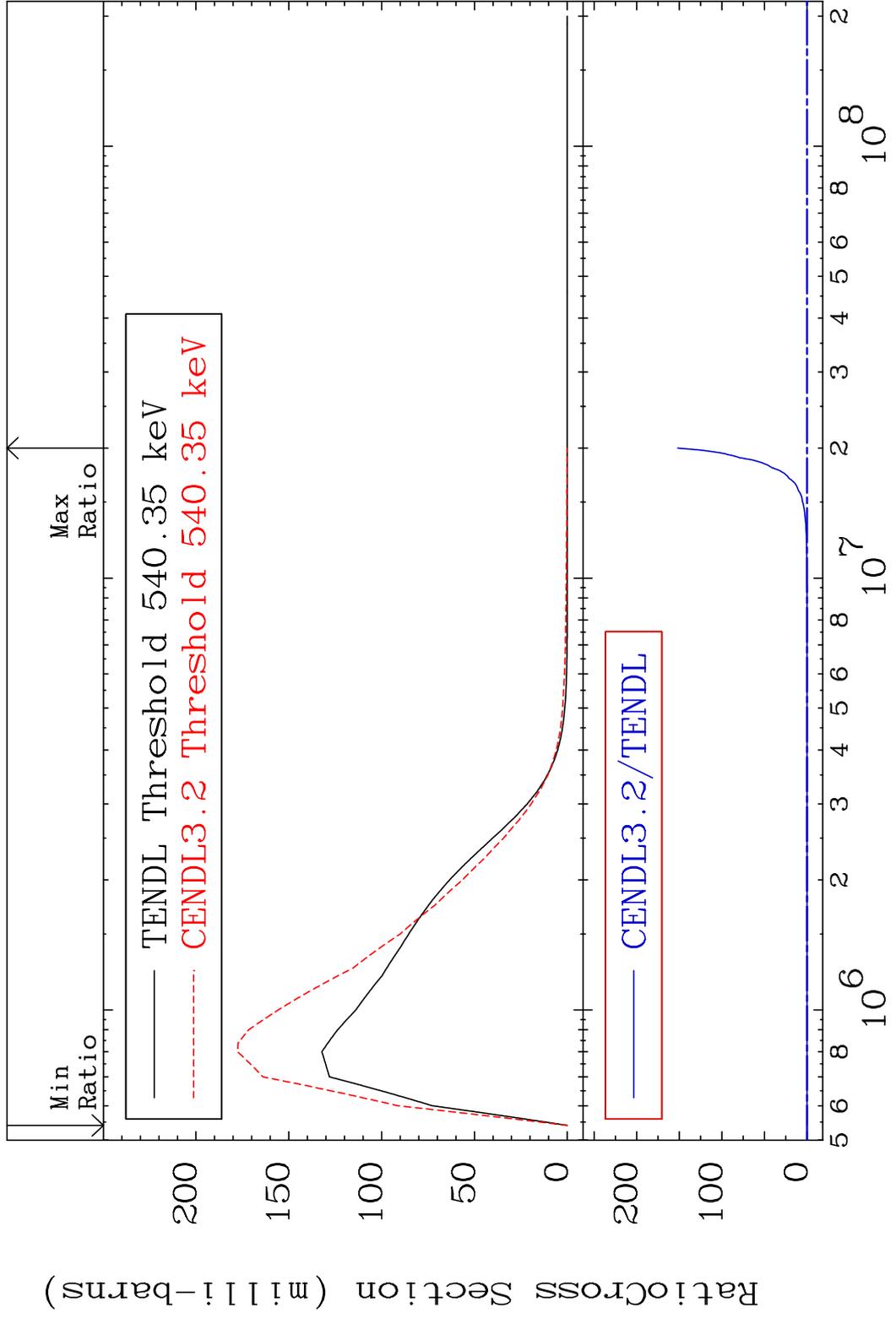
MAT 4440 MT= 55 (n,n') Level 44-Ru-101
 Cross Section -100.0 To 9999. %



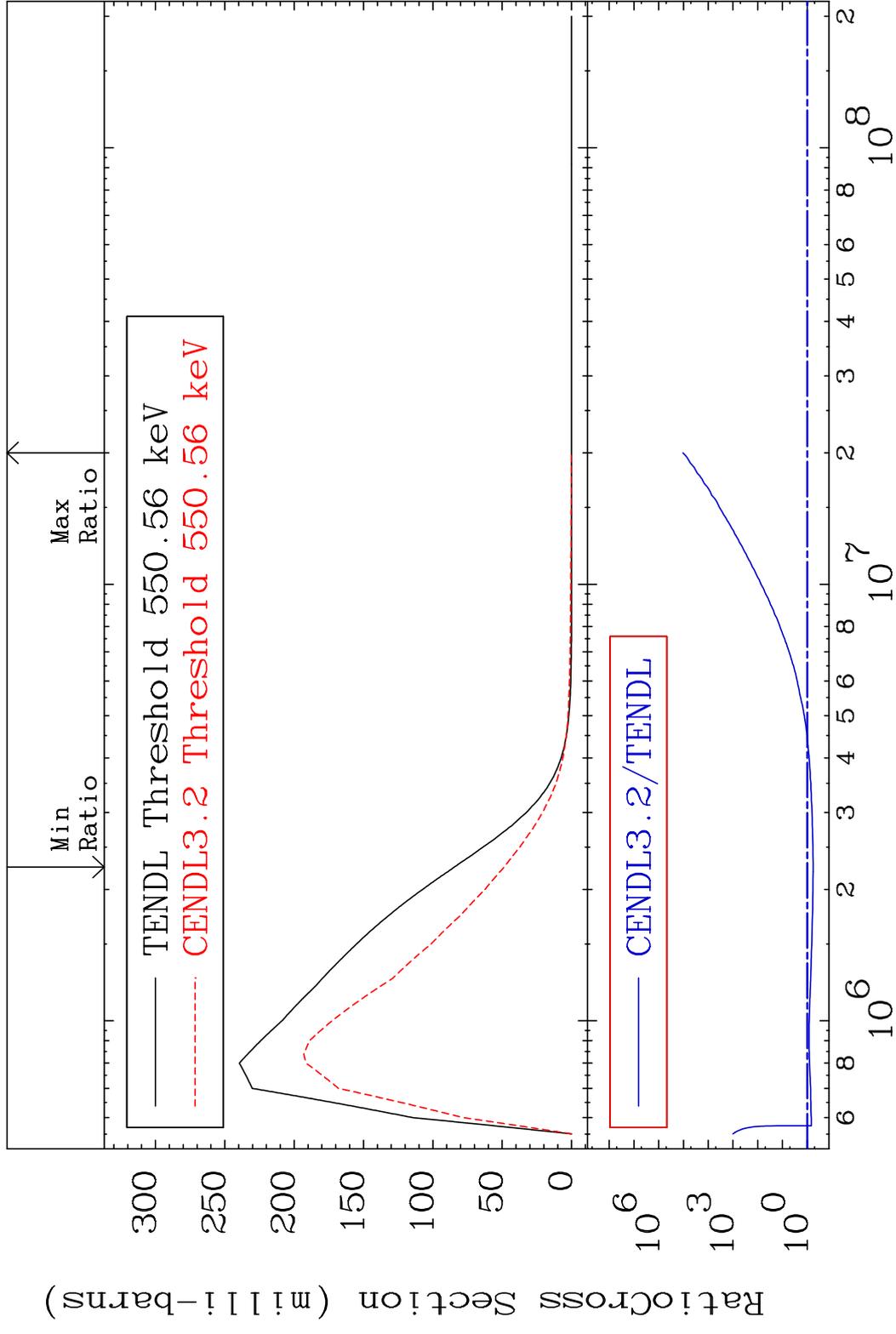
MAT 4440 MT= 56 (n, n') Level 44-Ru-101
 Cross Section -44.18 To 203.1 %



MAT 4440 MT= 57 (n, n') Level 44-Ru-101
 Cross Section -100.0 To 9999. %

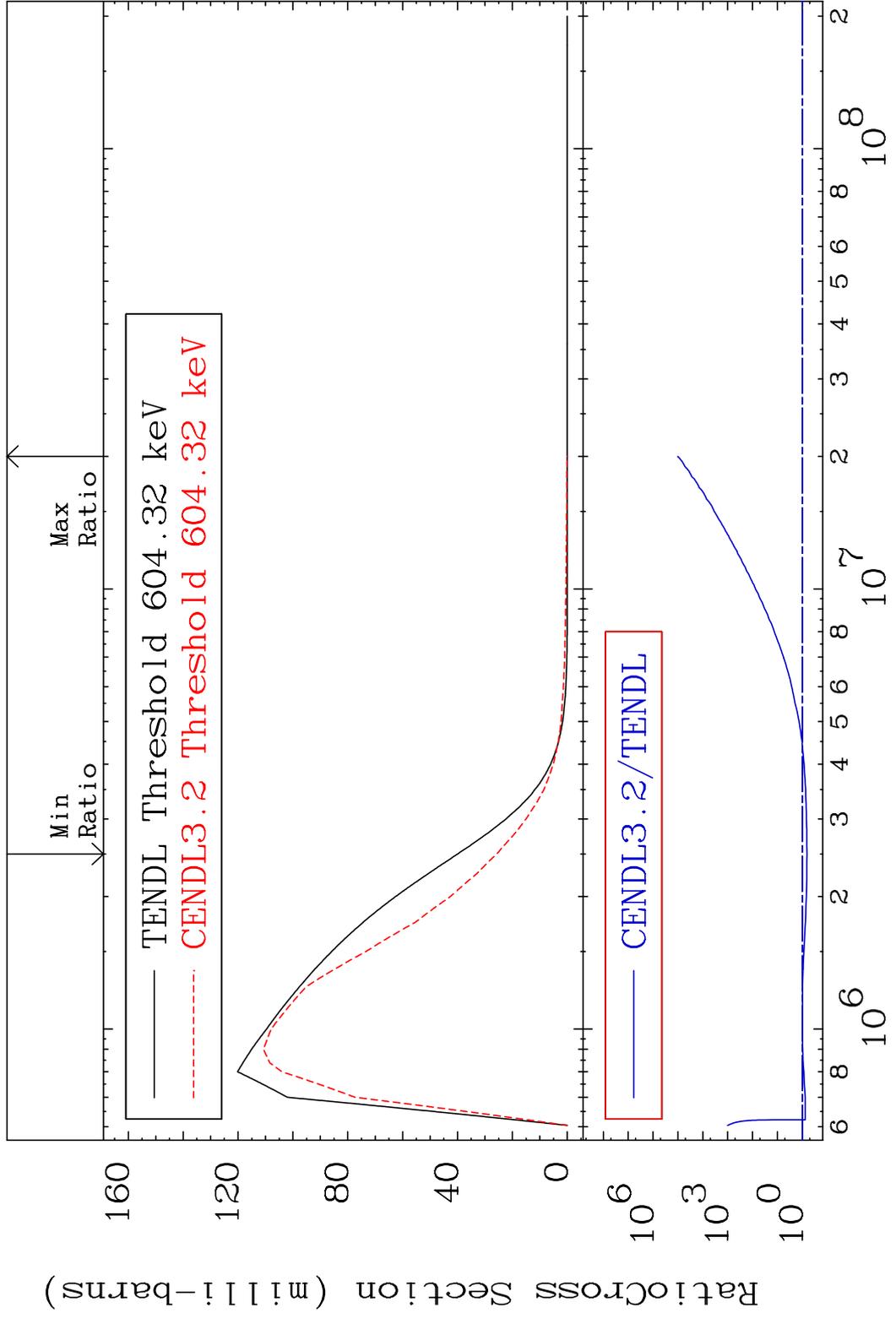


MAT 4440 MT= 58 (n, n') Level 44-Ru-101
 Cross Section -42.52 To 9999. %

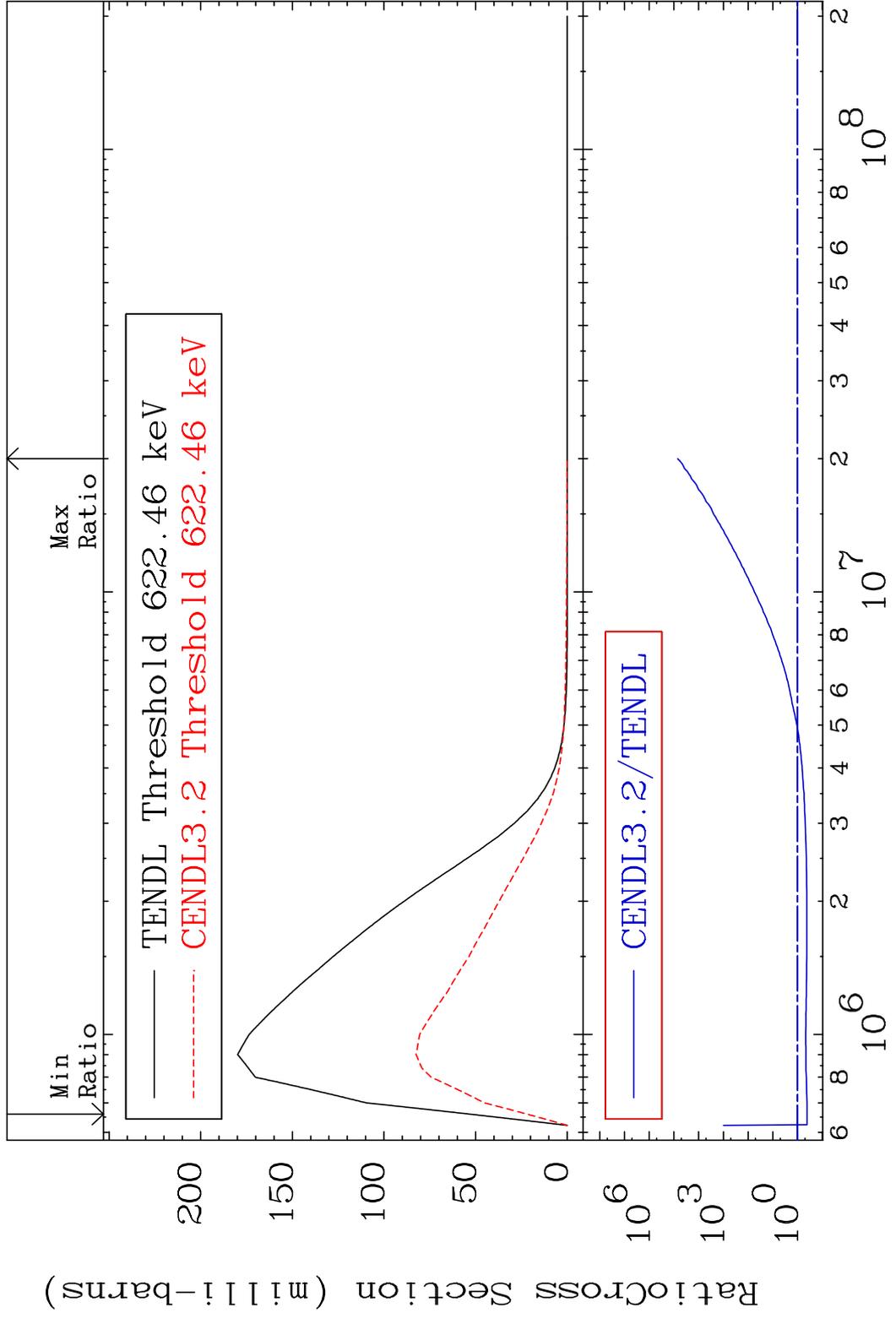


15 Incident Energy (eV) 44-Ru-101

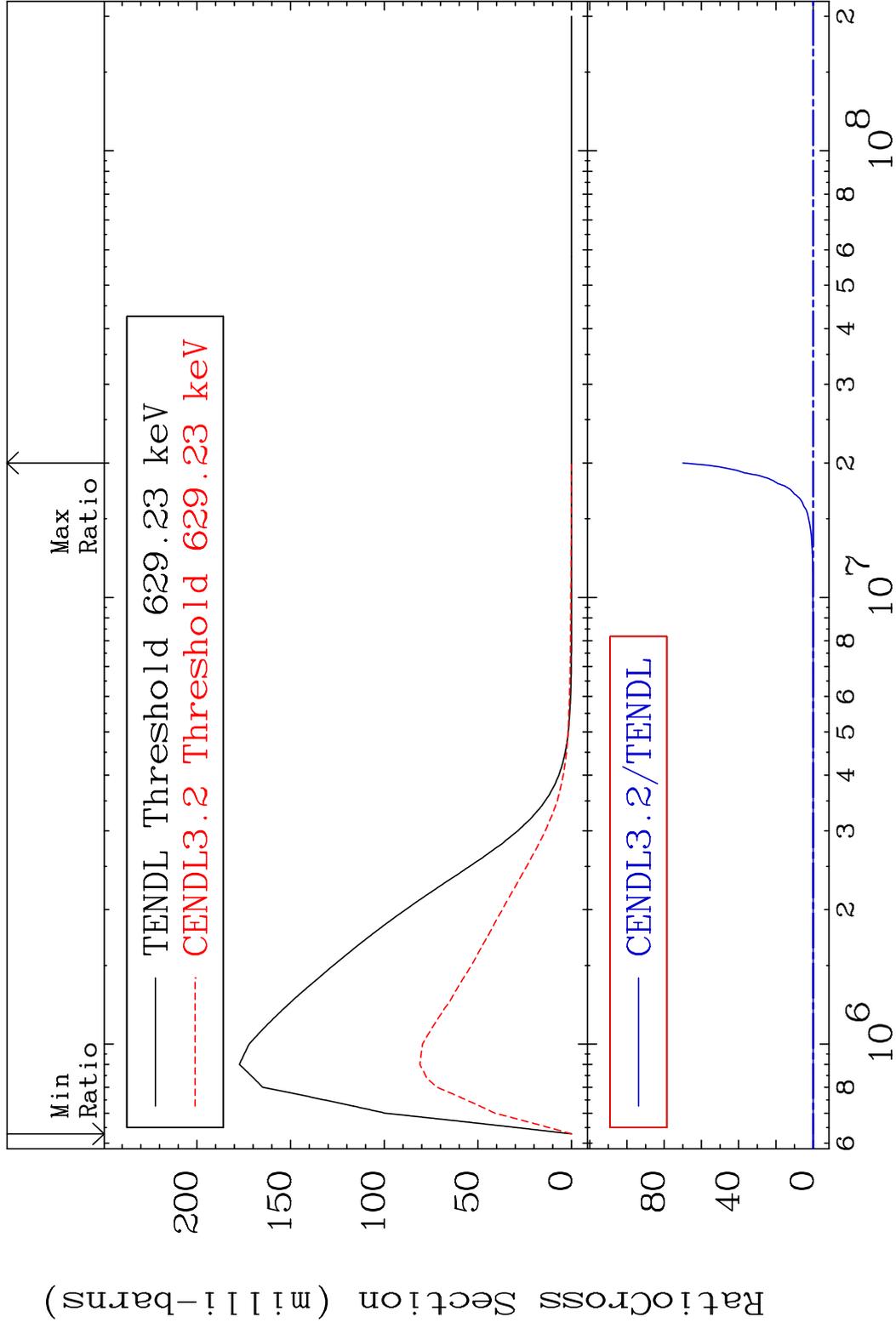
MAT 4440 MT= 59 (n, n') Level 44-Ru-101
 Cross Section -35.73 To 9999. %



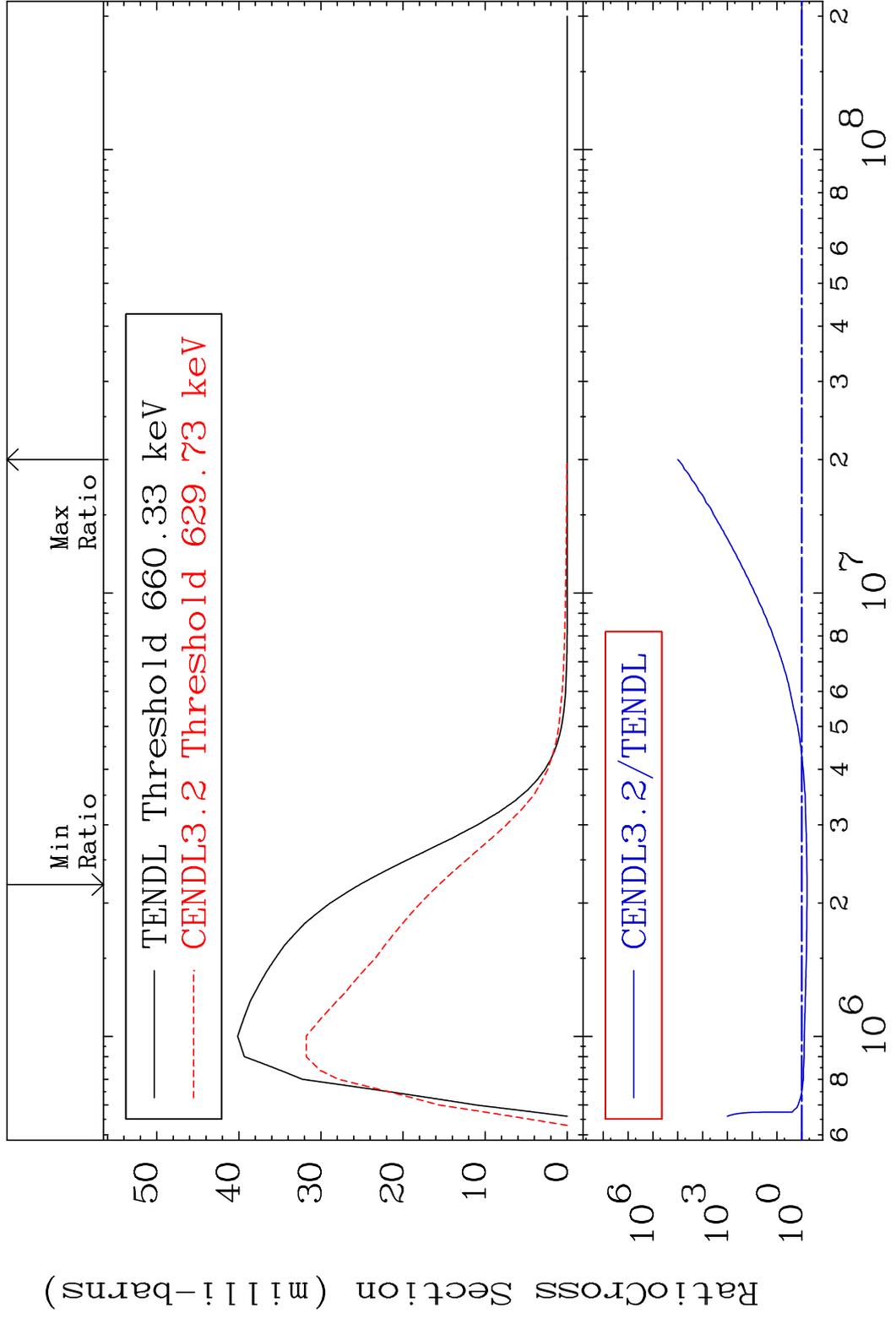
MAT 4440 MT= 60 (n, n') Level 44-Ru-101
 Cross Section -58.77 To 9999. %



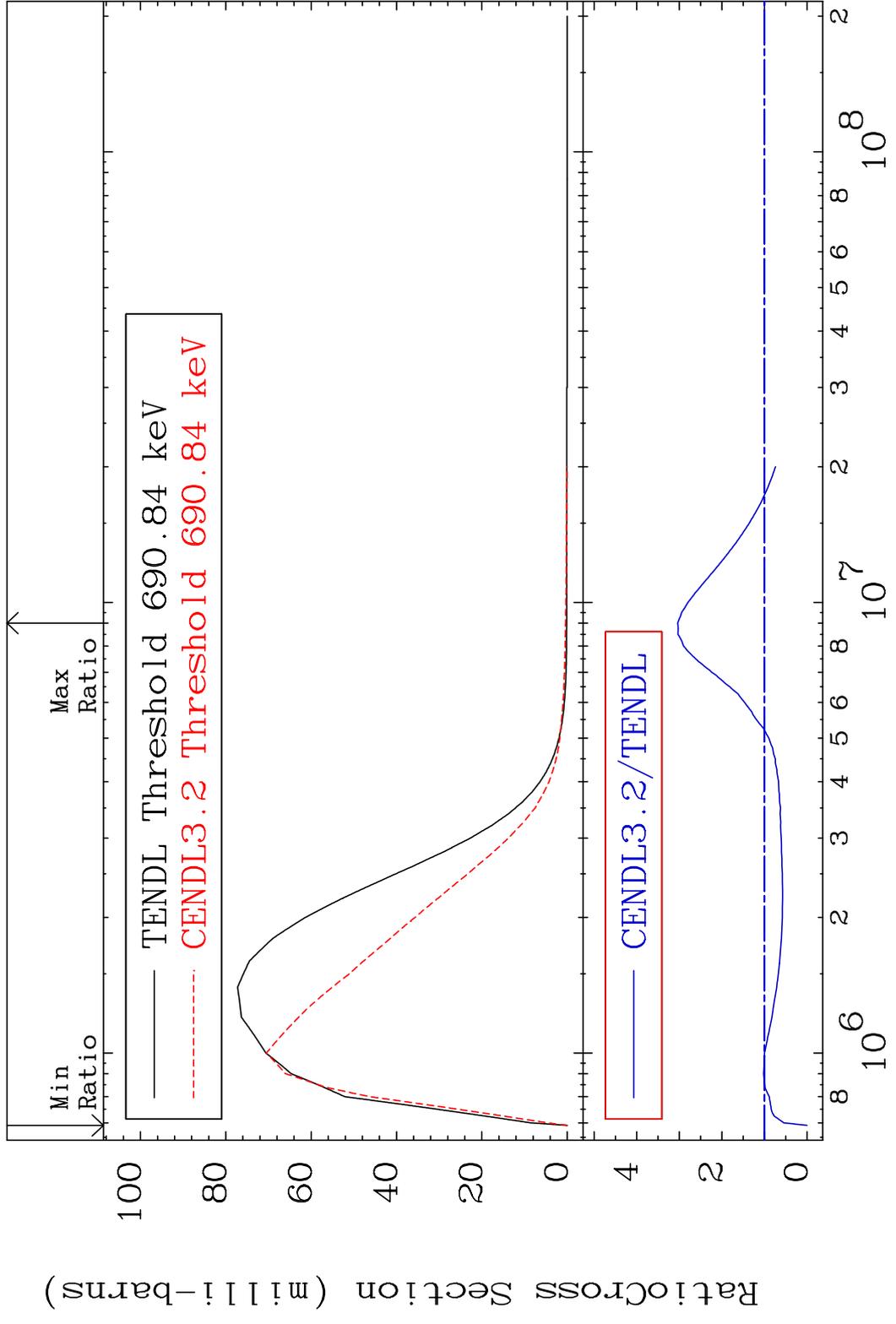
MAT 4440 MT= 61 (n, n') Level 44-Ru-101
 Cross Section -100.0 To 9999. %



MAT 4440 MT= 62 (n, n') Level 44-Ru-101
 Cross Section -38.25 To 9999. %

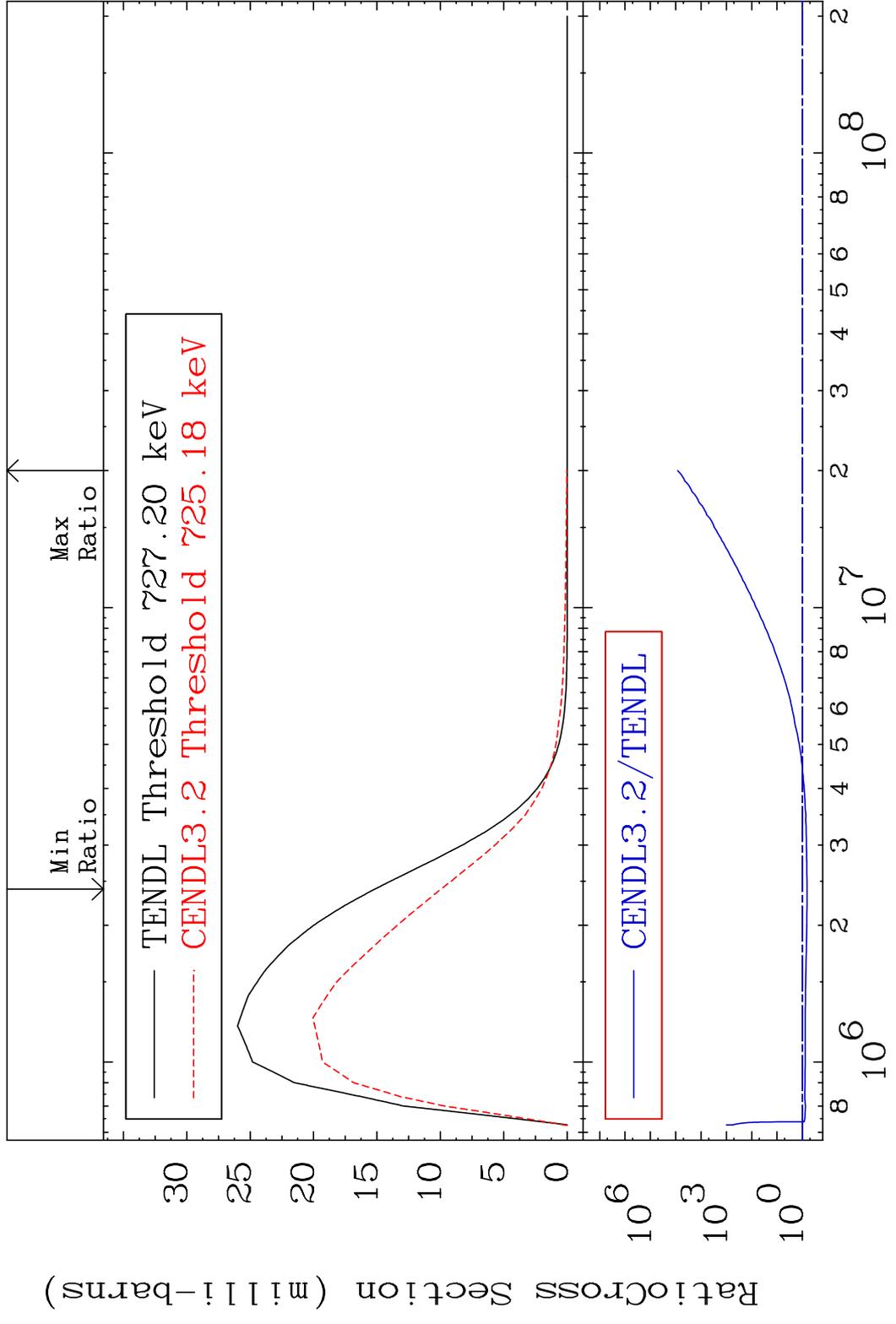


MAT 4440 MT= 63 (n, n') Level 44-Ru-101
 Cross Section -100.0 To 203.9 %

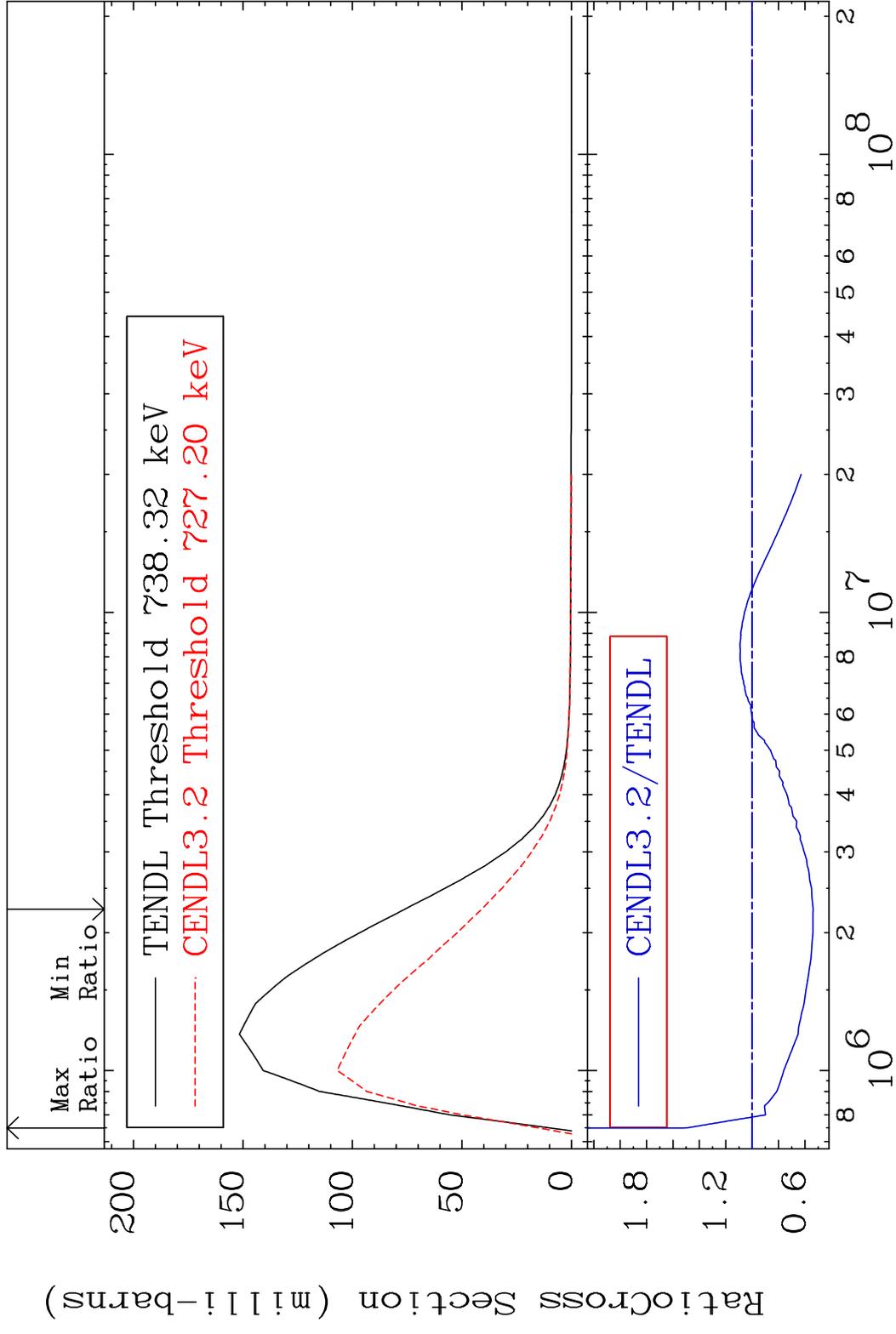


20 Incident Energy (eV) 44-Ru-101

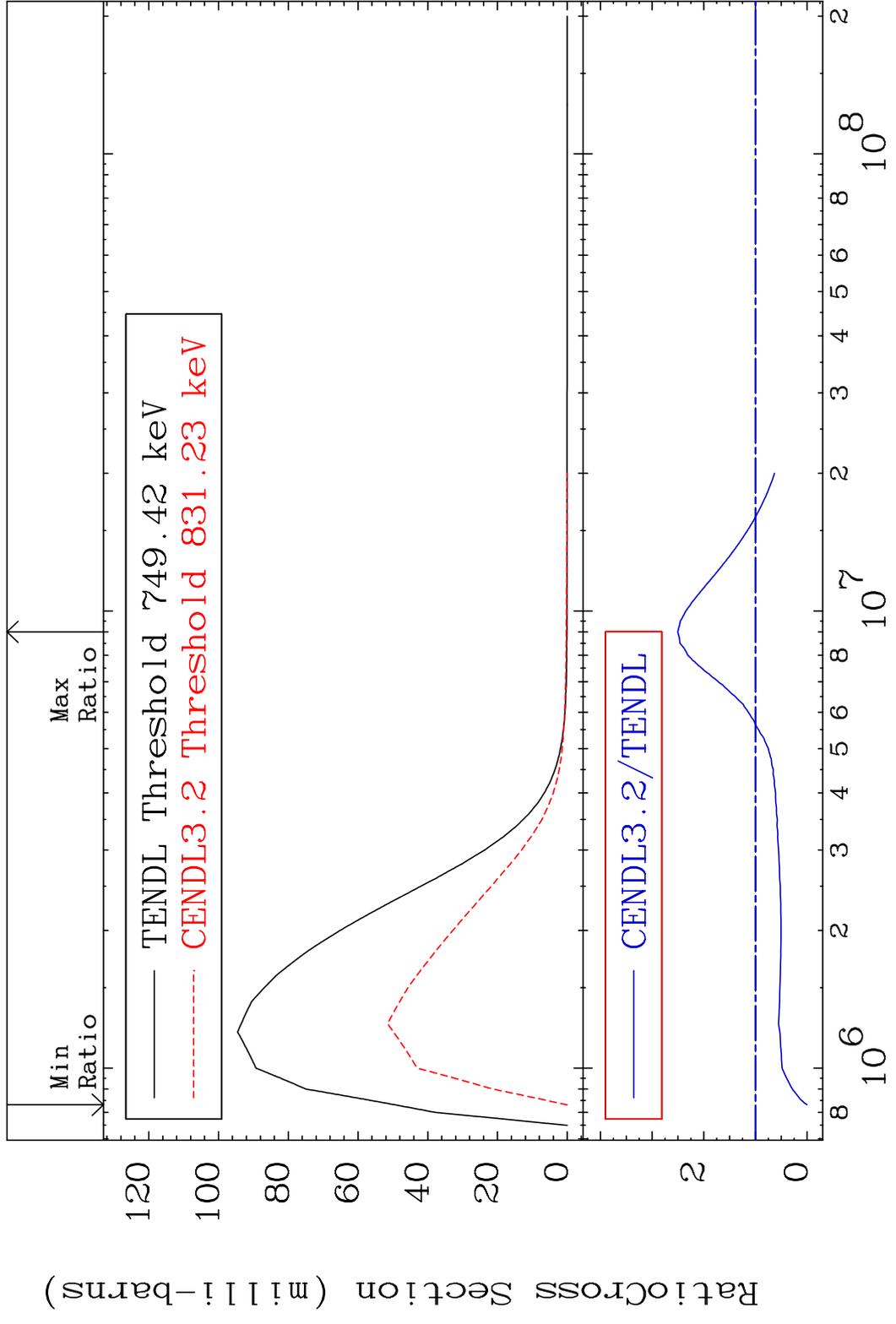
MAT 4440 MT= 64 (n, n') Level 44-Ru-101
 Cross Section -34.34 To 9999. %



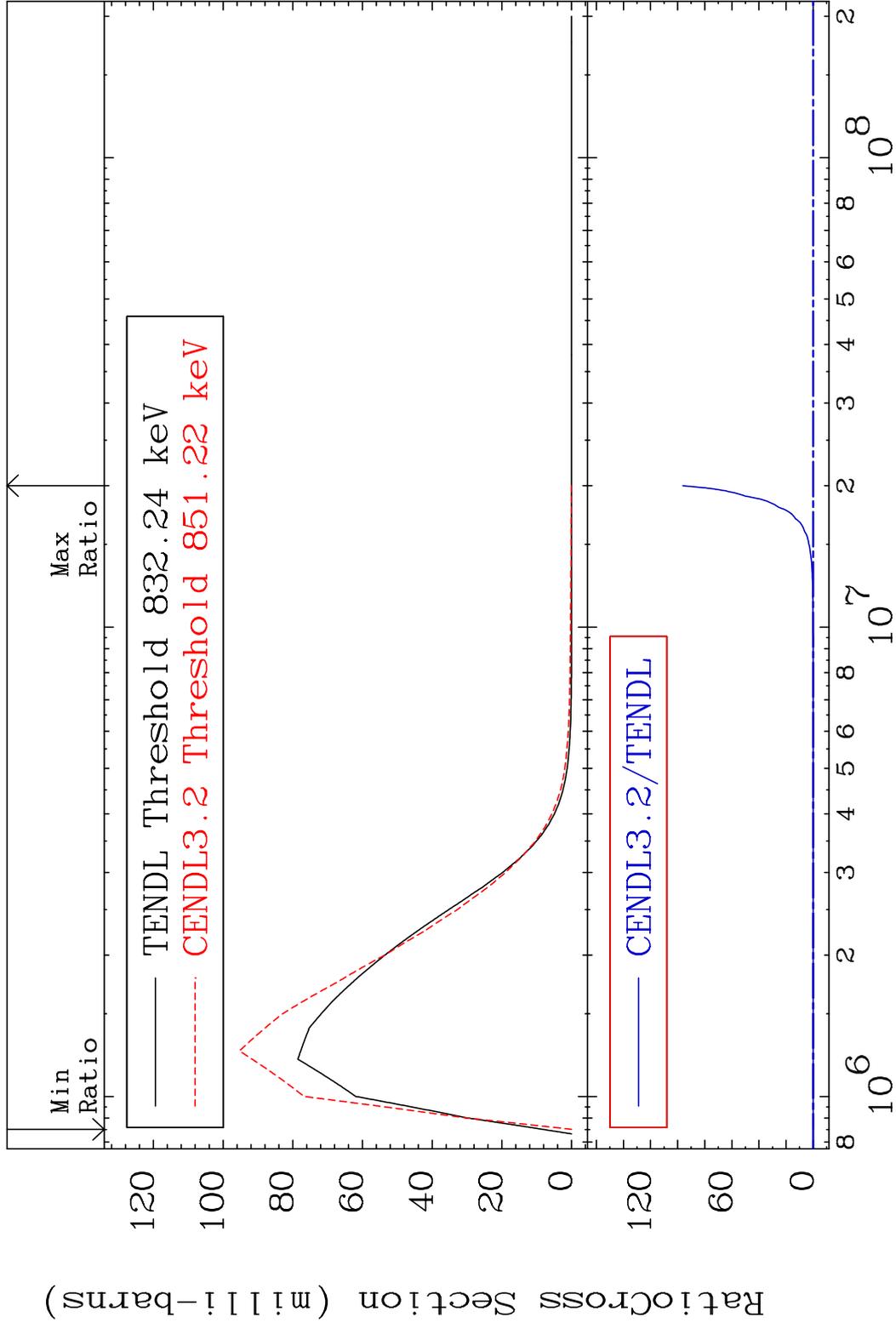
MAT 4440 MT= 65 (n,n') Level 44-Ru-101
 Cross Section -46.24 To 52.52 %



MAT 4440 MT= 66 (n, n') Level 44-Ru-101
 Cross Section -100.0 To 150.4 %

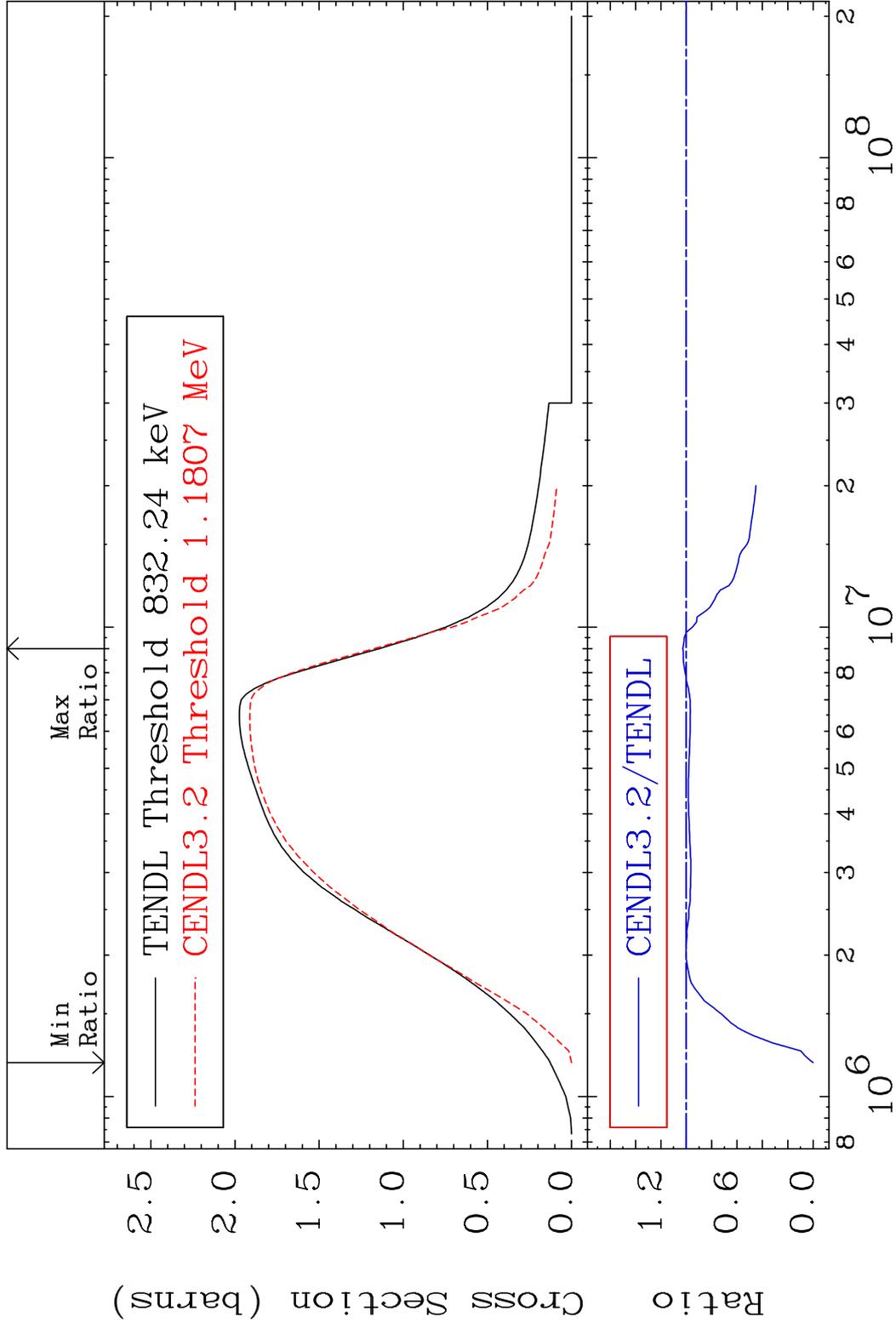


MAT 4440 MT= 67 (n, n') Level 44-Ru-101
 Cross Section -100.0 To 9999. %



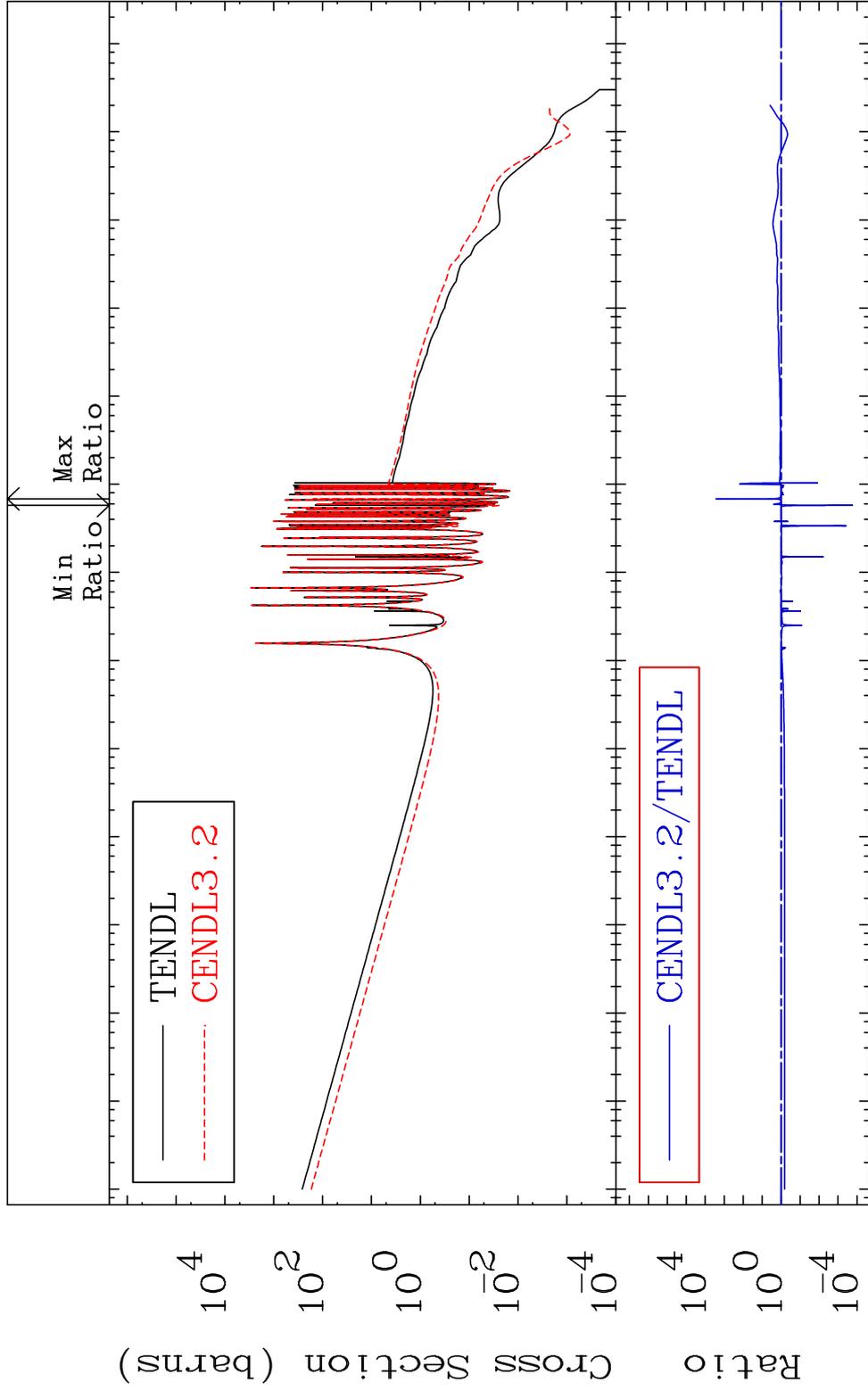
24 Incident Energy (eV) 44-Ru-101

MAT 4440 (n, n') Continuum 44-Ru-101
 Cross Section -100.0 To 2.724 %

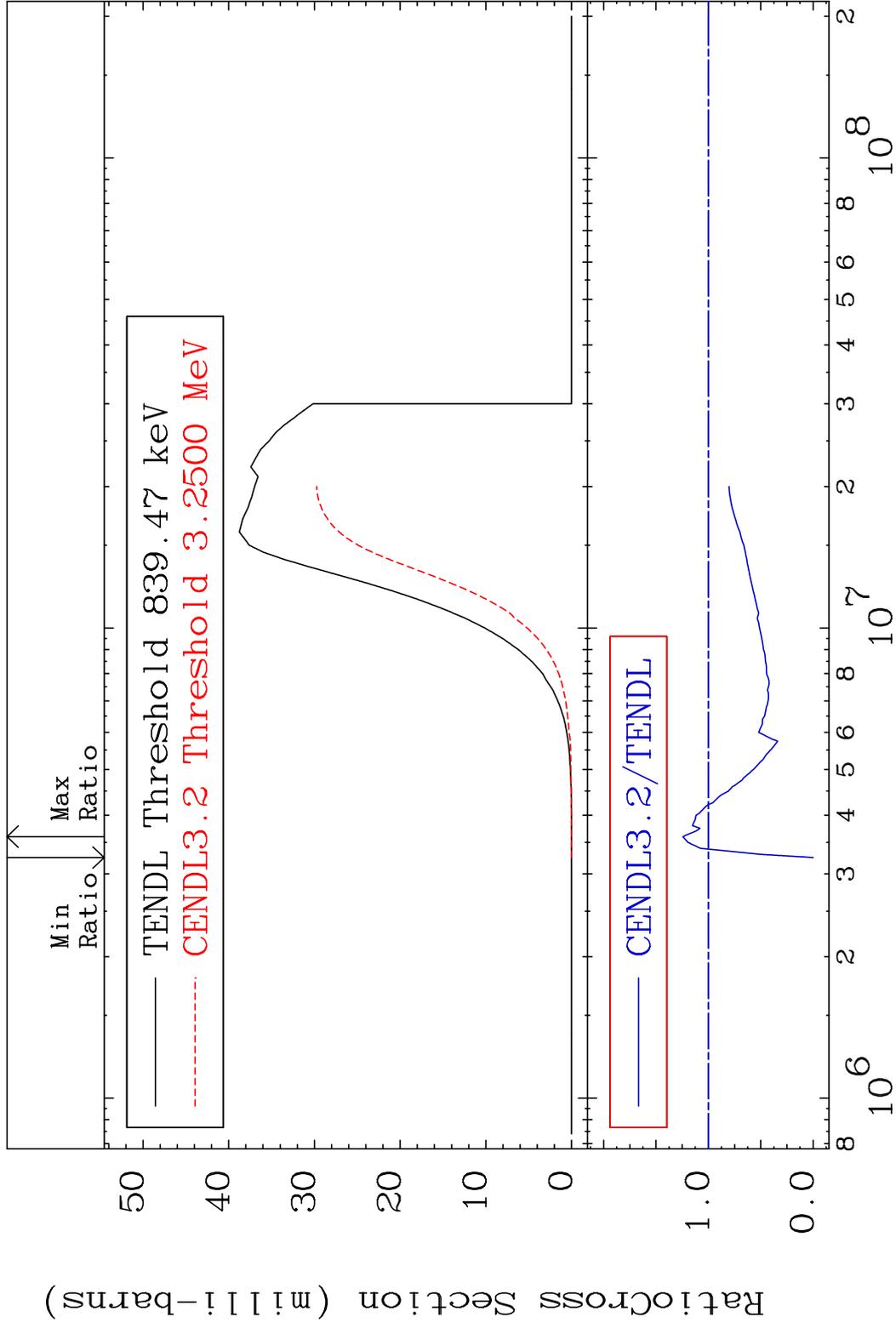


MAT 4440

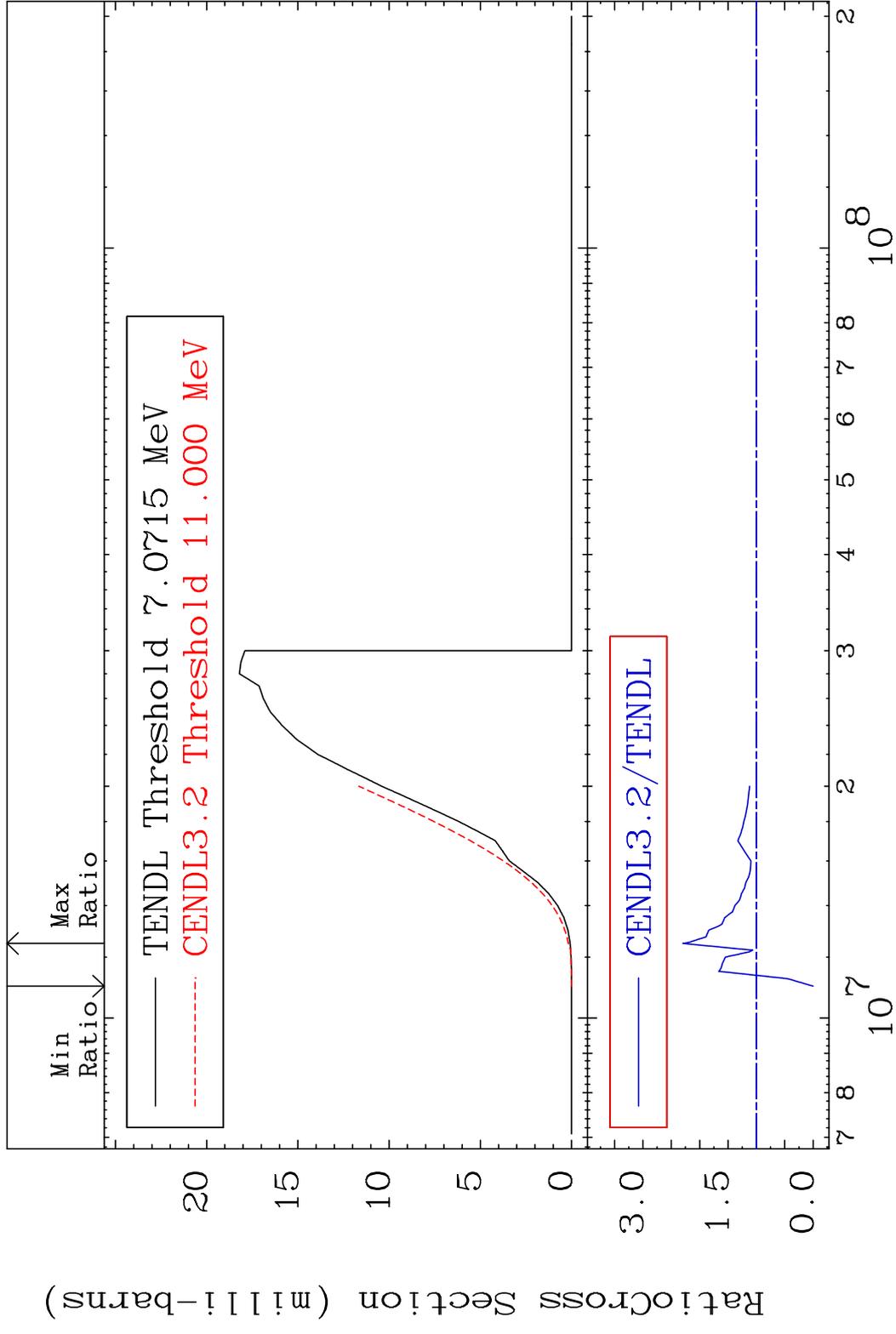
(n, γ)
Cross Section -99.98 To 9999. %
44-Ru-101



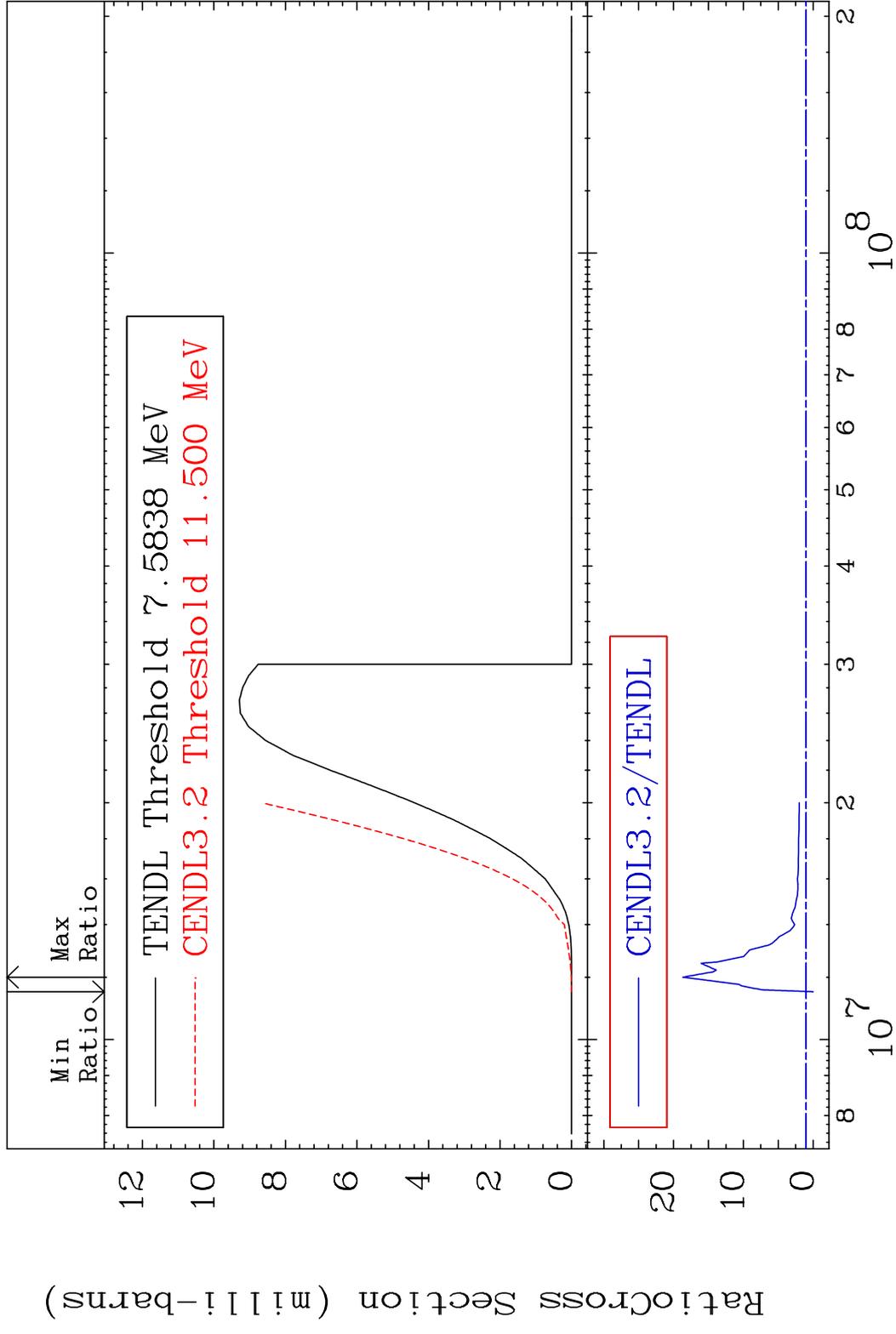
MAT 4440 (n,p) 44-Ru-101
 Cross Section -100.0 To 24.40 %



MAT 4440 (n,d) 44-Ru-101
 Cross Section -100.0 To 129.7 %



MAT 4440 (n, t) 44-Ru-101
 Cross Section -100.0 To 1767. %

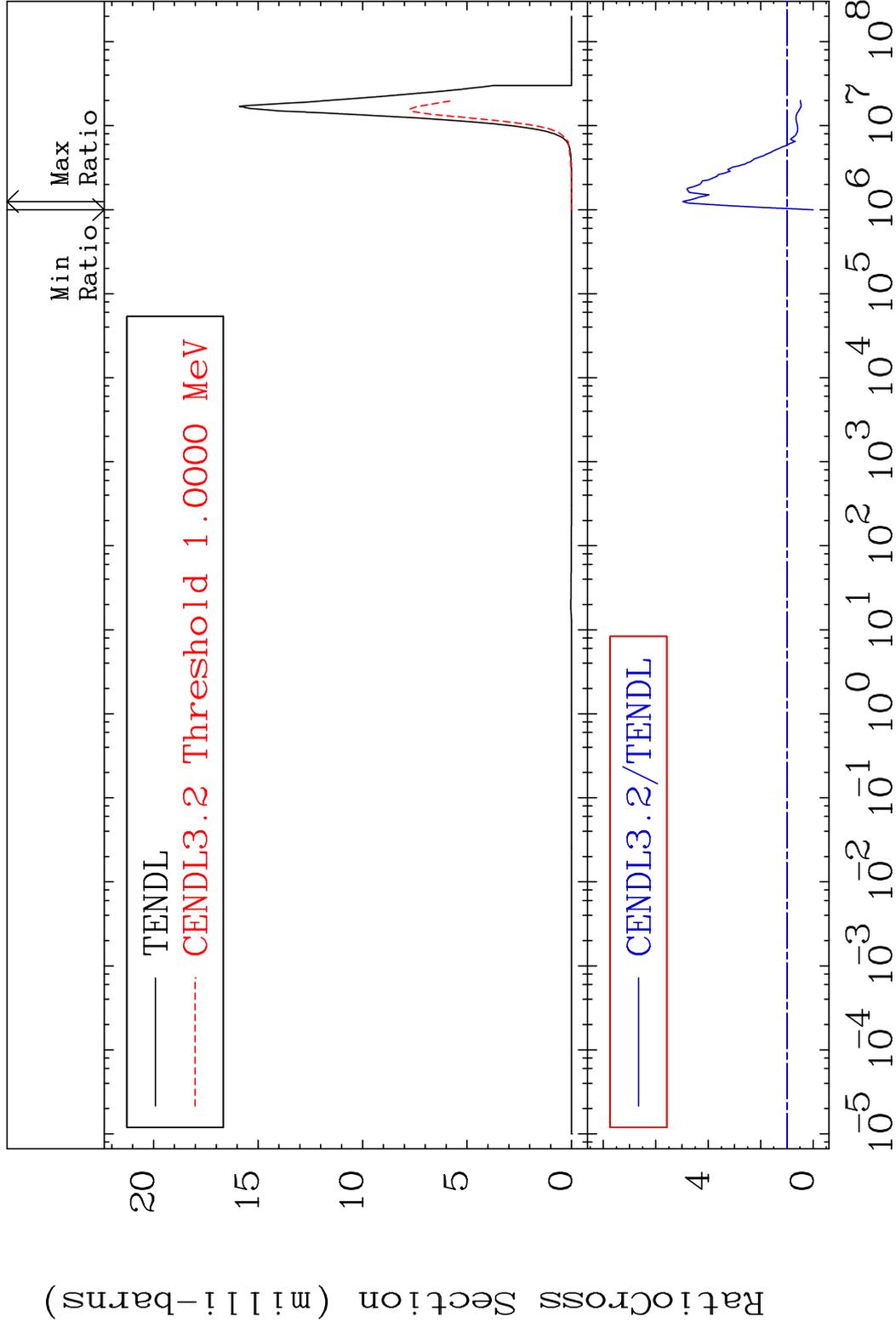


MAT 4440

(n, α)

44-Ru-101

Cross Section -100.0 To 396.9 %

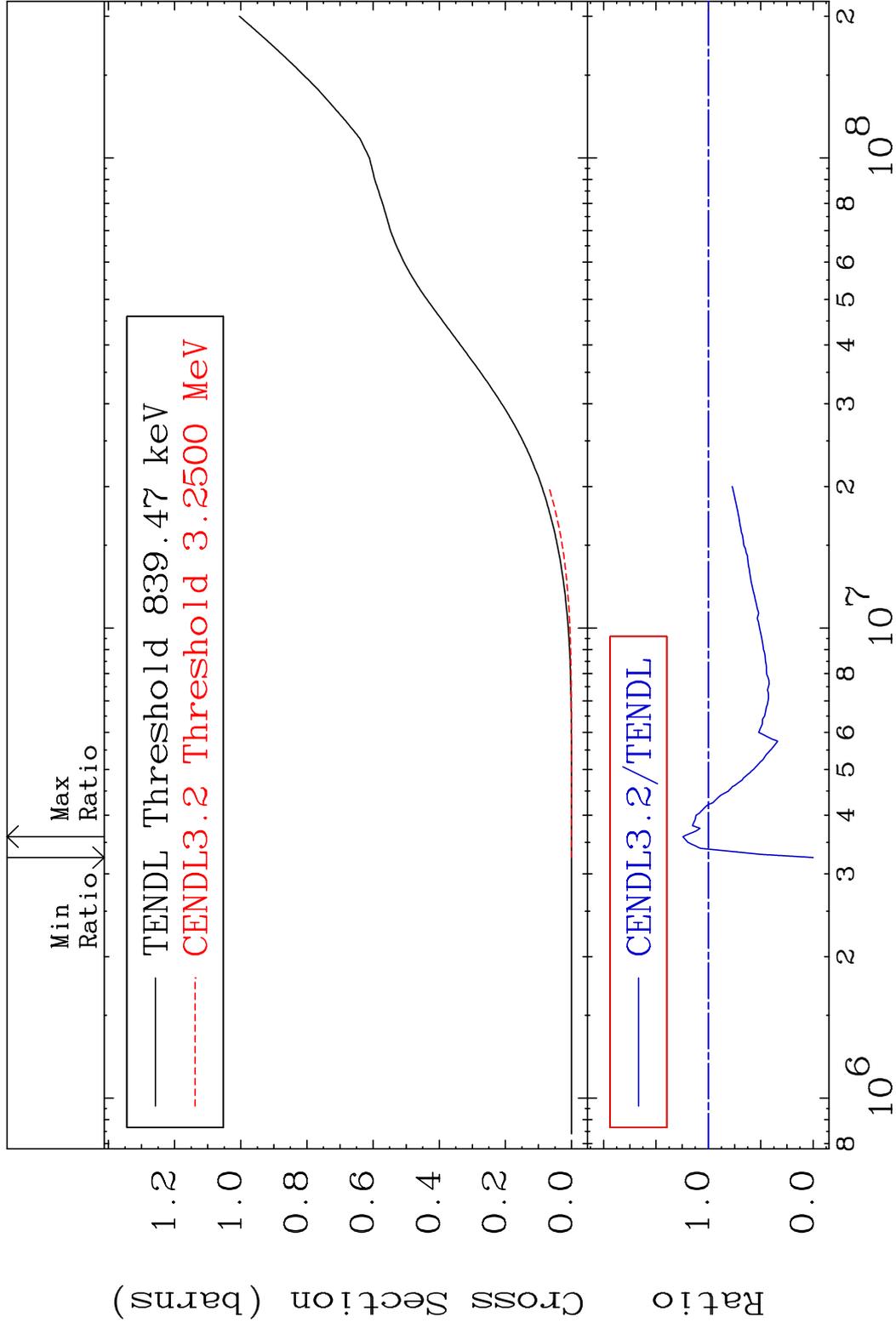


30

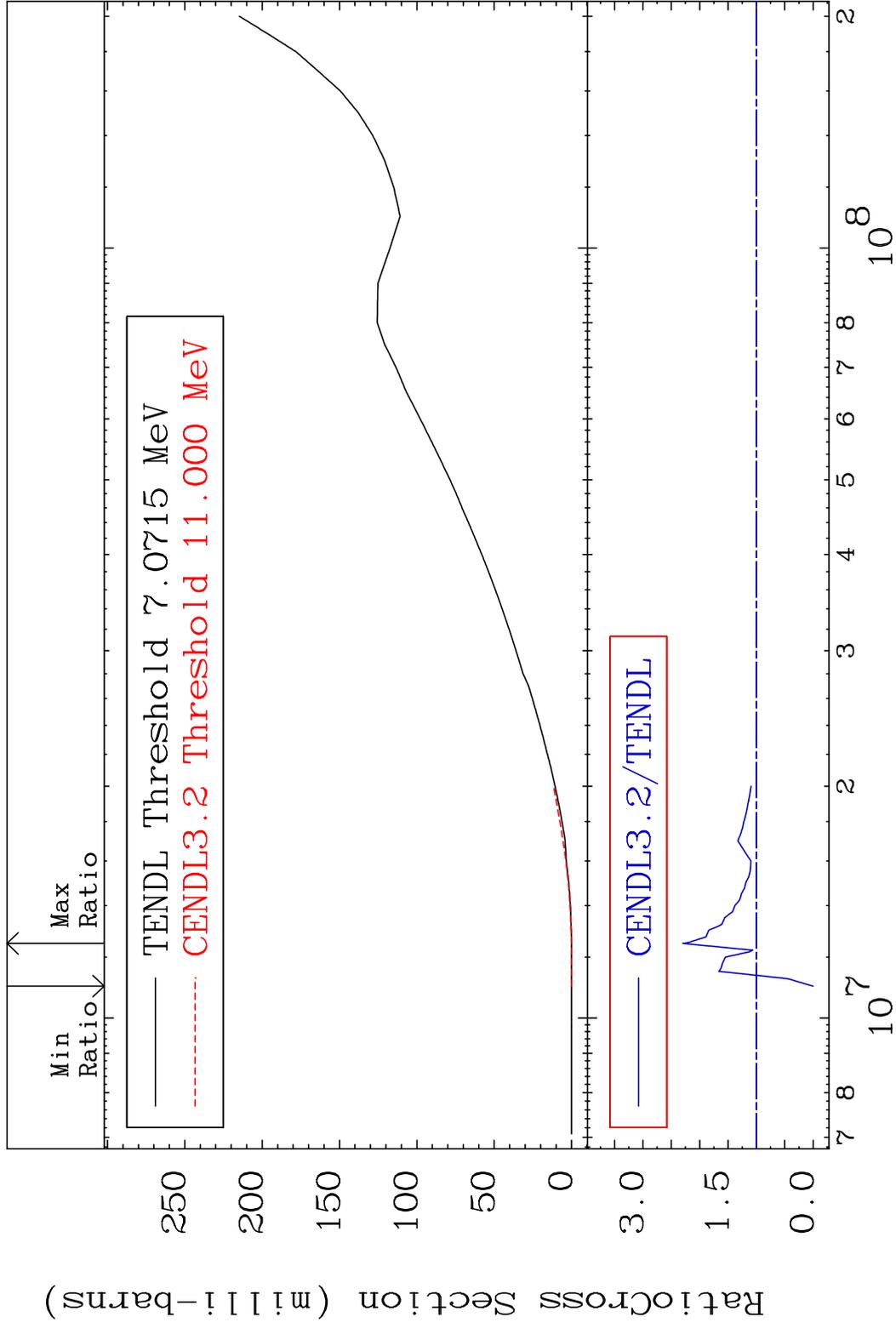
Incident Energy (eV)

44-Ru-101

MAT 4440 Hydrogen Production 44-Ru-101
 Cross Section -100.0 To 24.40 %



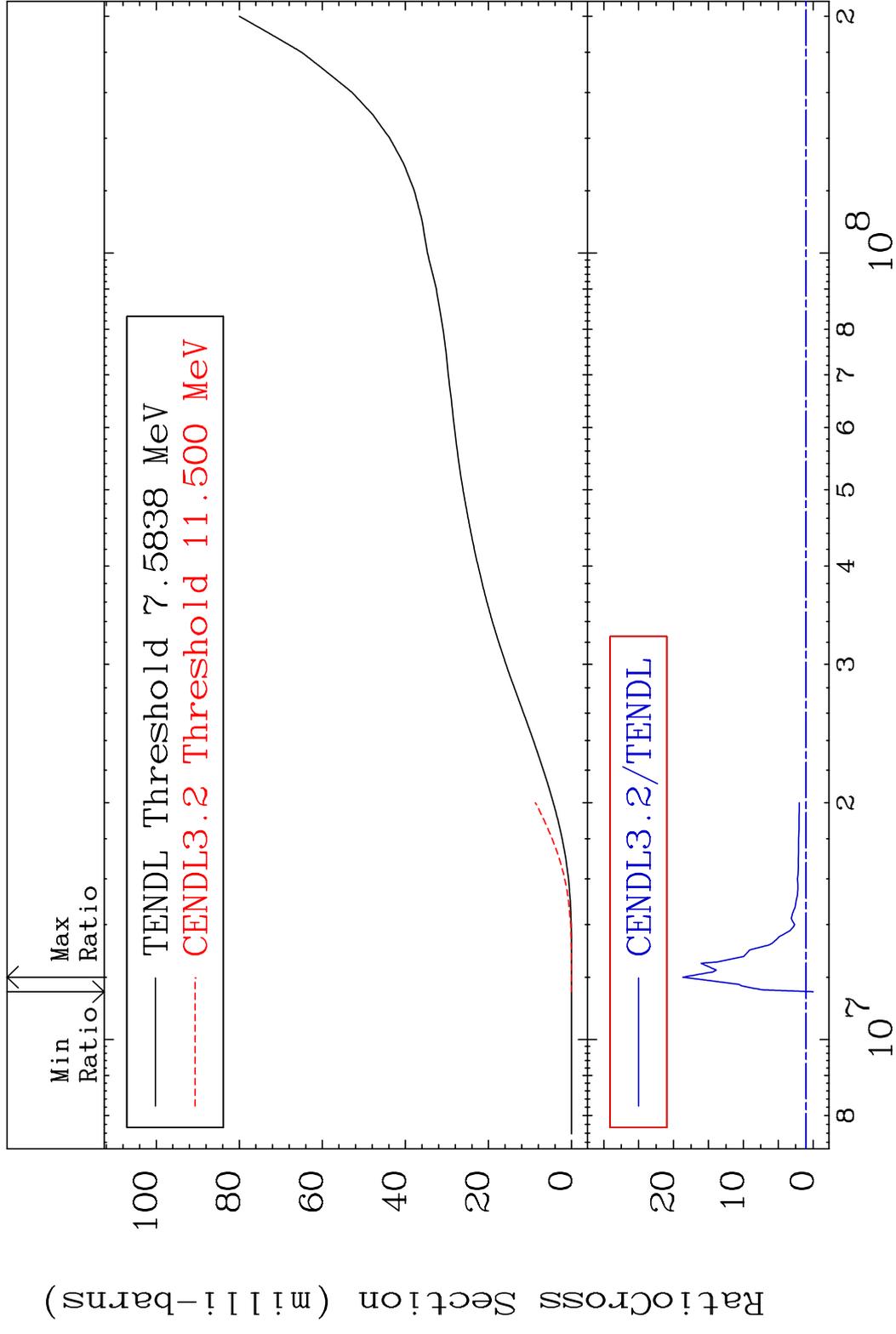
MAT 4440 Deuterium Production 44-Ru-101
 Cross Section -100.0 To 129.7 %



32 Incident Energy (eV) 44-Ru-101

MAT 4440

Tritium Production 44-Ru-101
Cross Section -100.0 To 1767. %



33

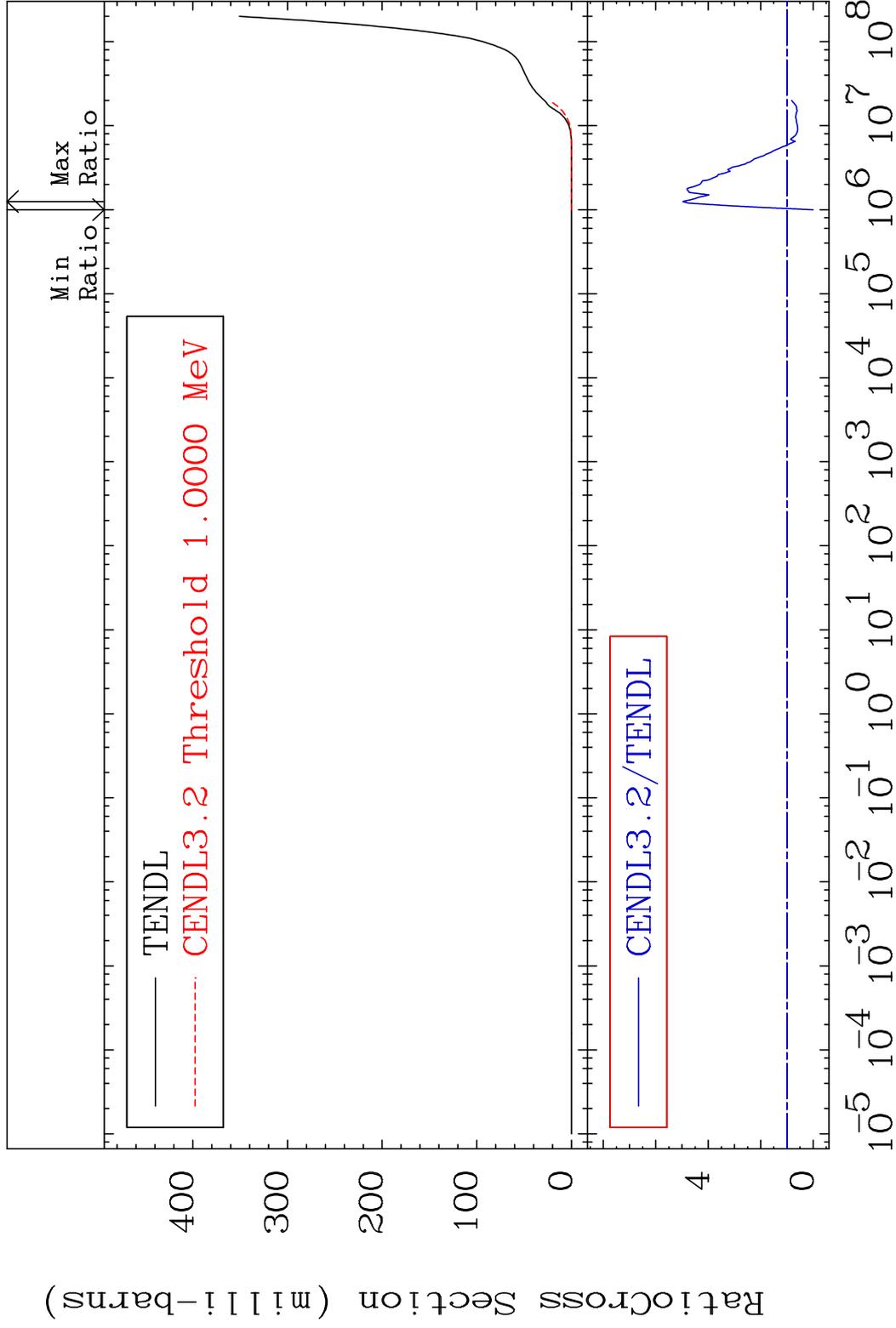
Incident Energy (eV) 44-Ru-101

MAT 4440

He-4 Production

44-Ru-101

Cross Section -100.0 To 396.9 %

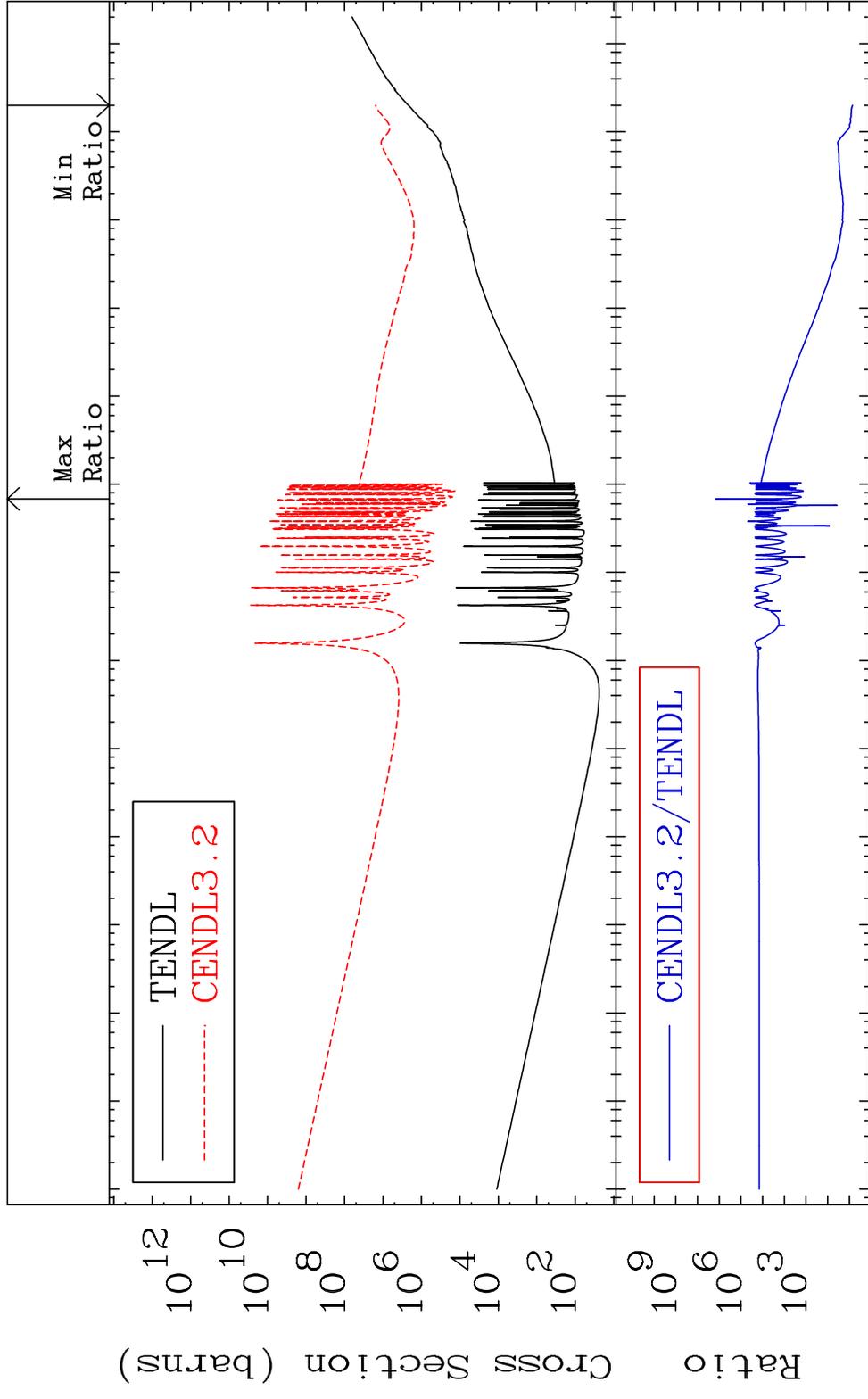


34

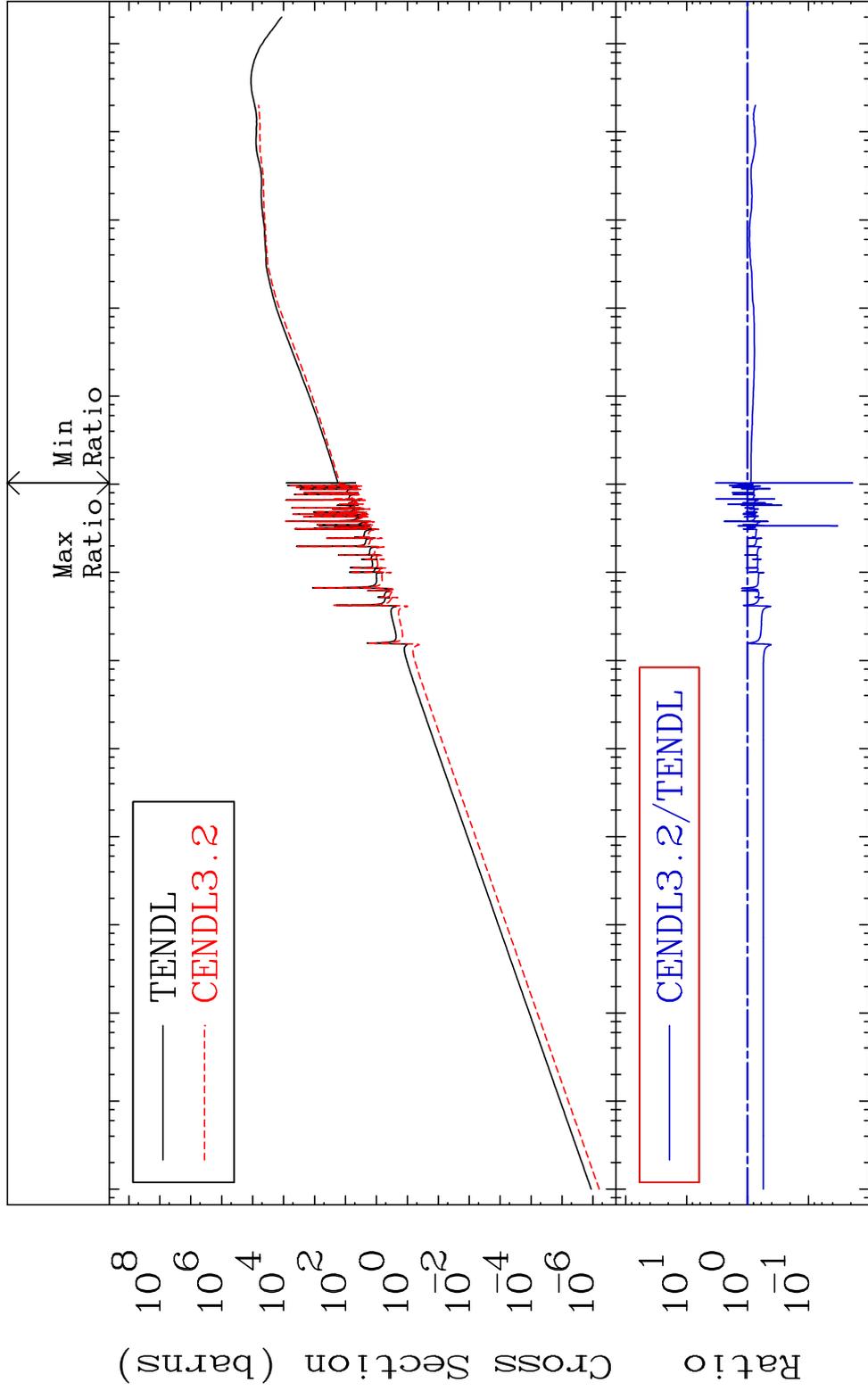
44-Ru-101

44-Ru-101

MAT 4440 Kerma total (eV-barns) 44-Ru-101
 Cross Section 617.4 To 9999. %

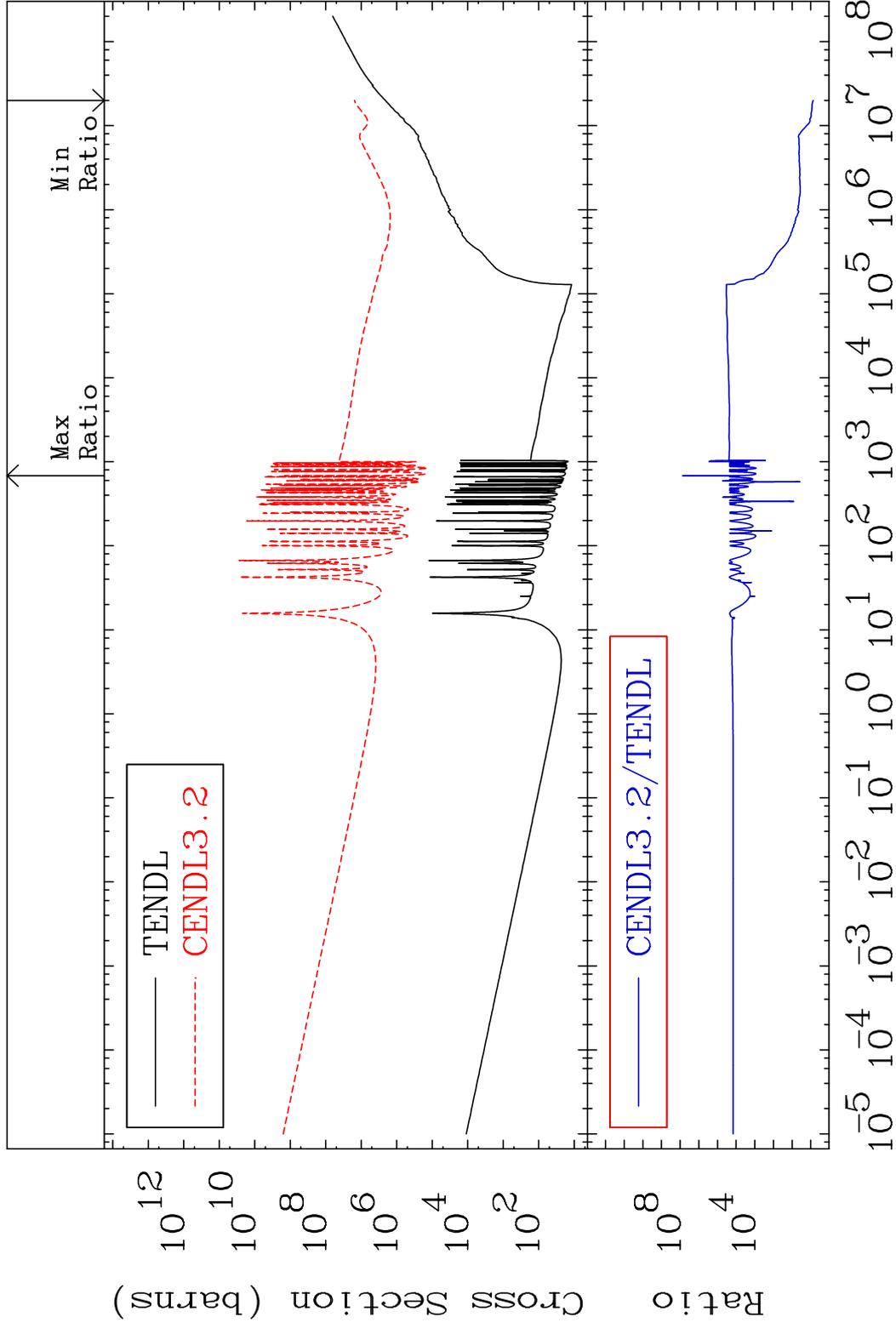


MAT 4440 Kerma elastic 44-Ru-101
 Cross Section -98.11 To 231.1 %

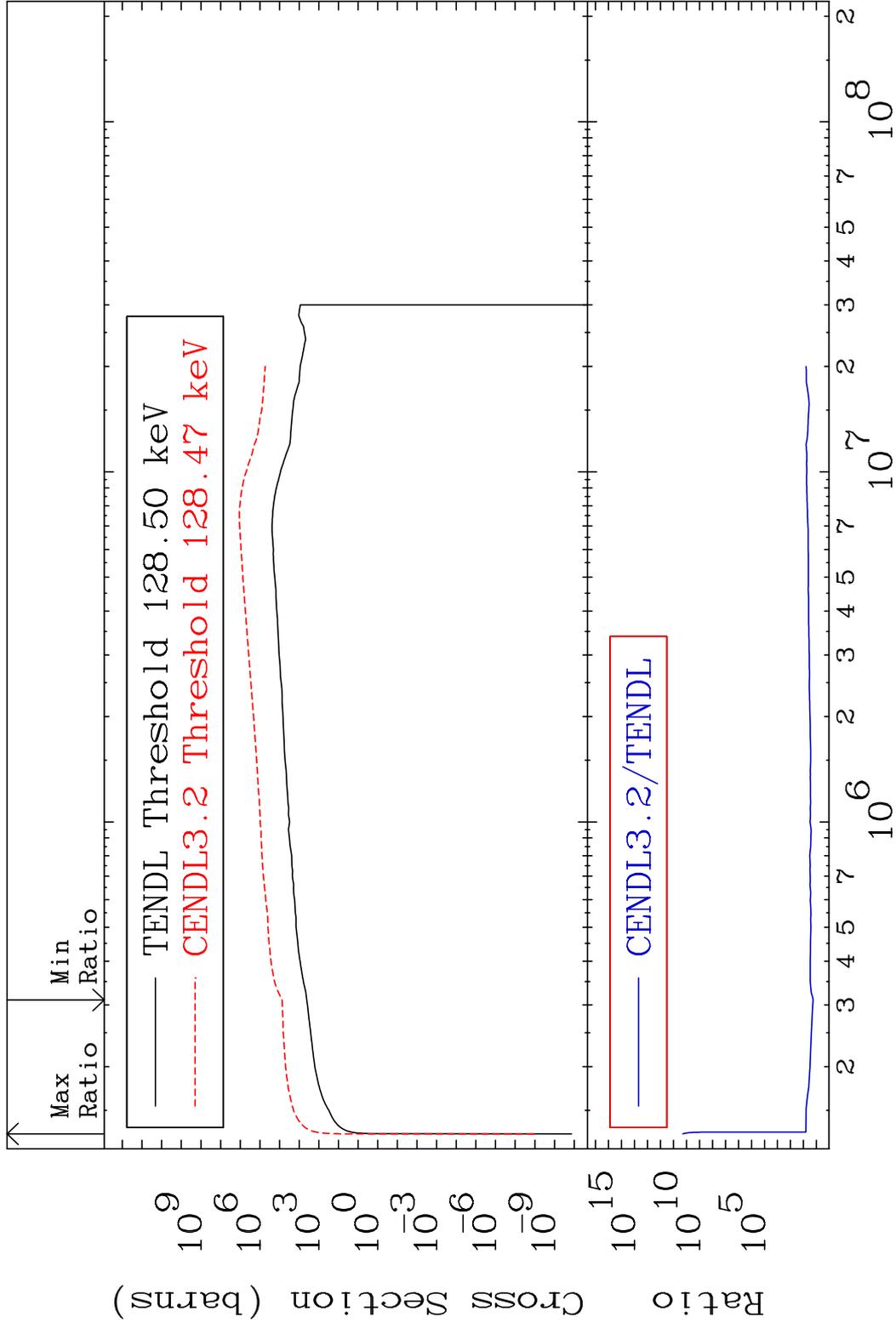


Incident Energy (eV) 44-Ru-101

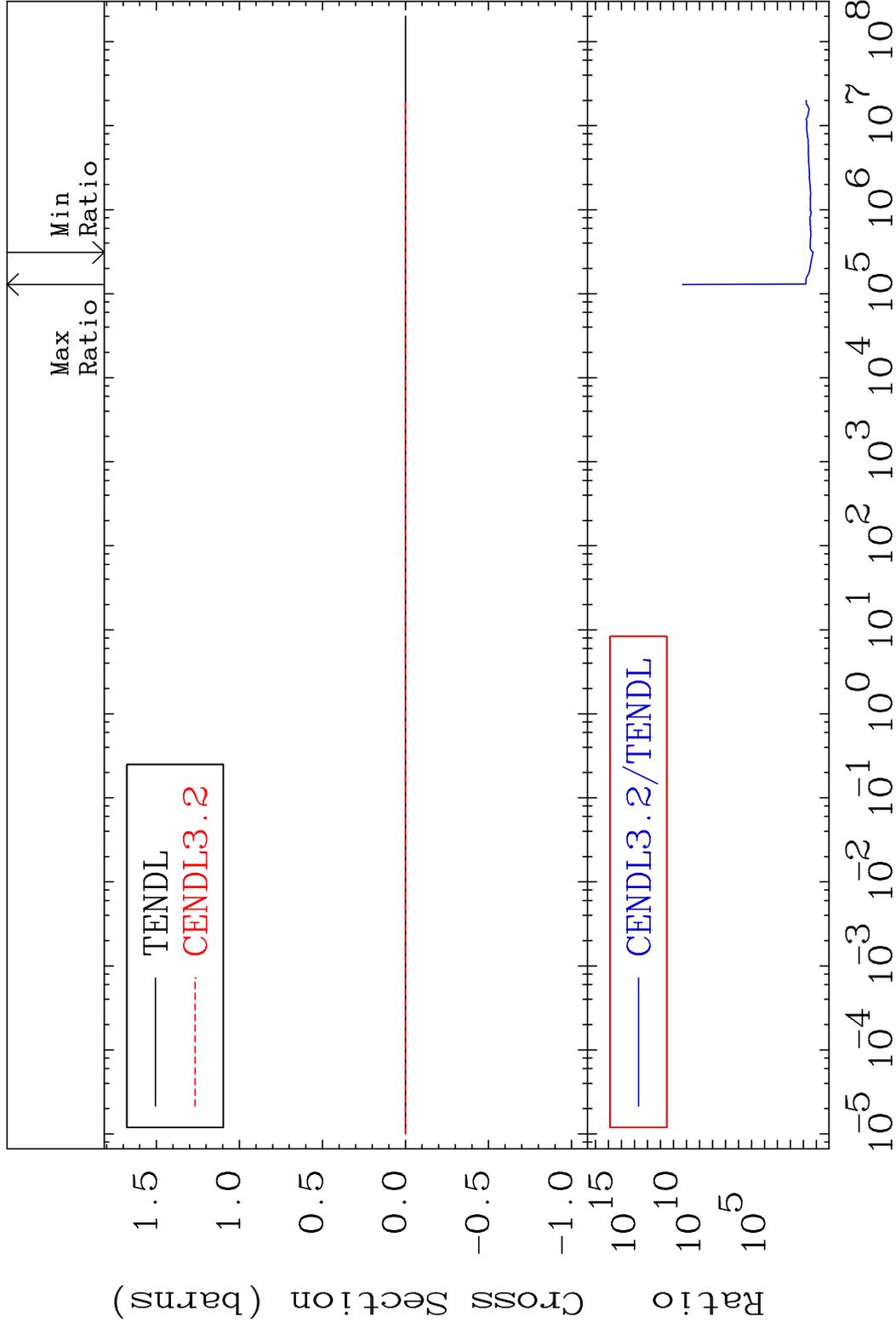
MAT 4440 Kerma non-elastic (all but mt2) 44-Ru-101
 Cross Section 644.0 To 9999. %



MAT 4440 Kerma inelastic (mt51-91) 44-Ru-101
 Cross Section 1696. To 9999. %

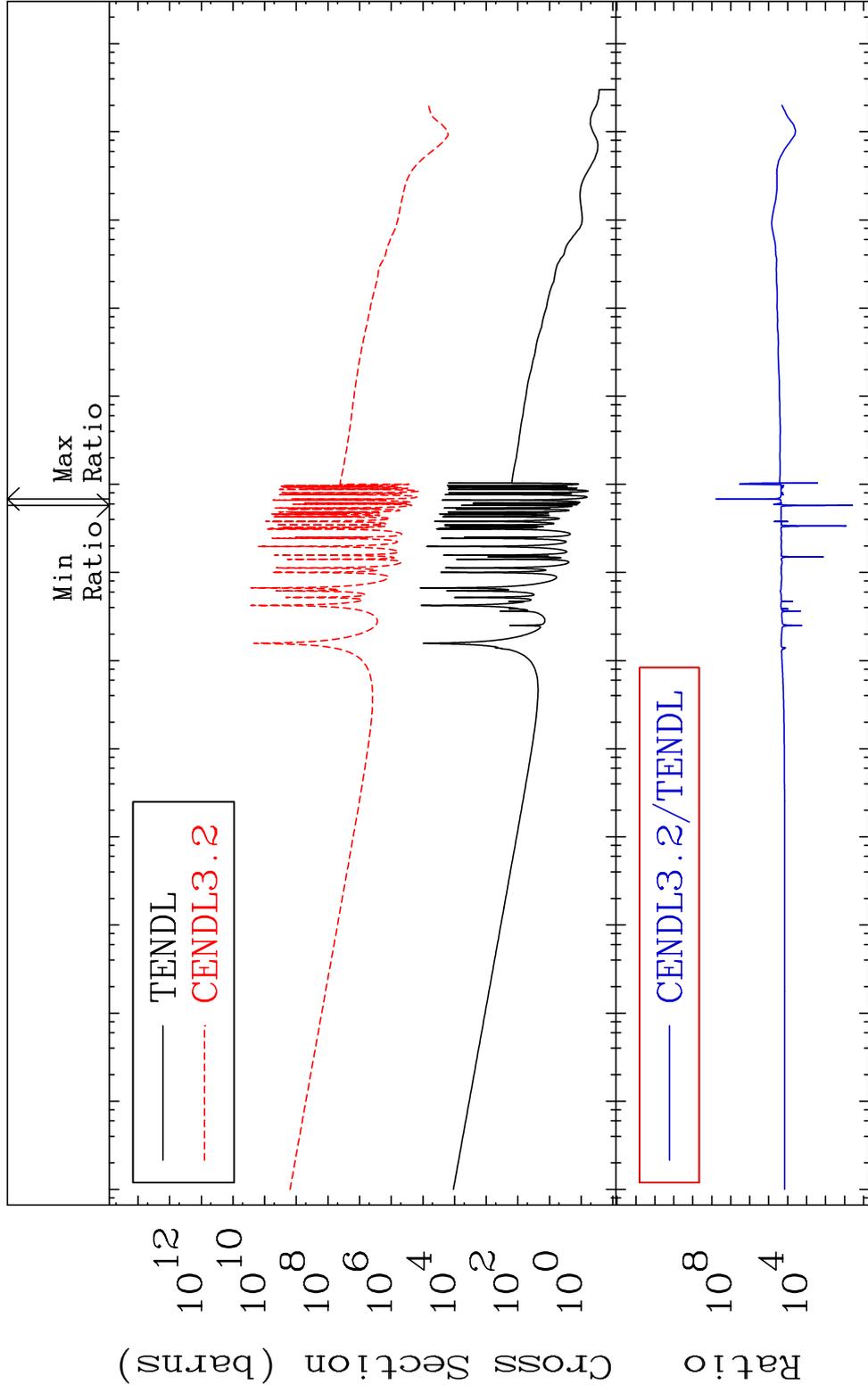


MAT 4440 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-101
 Cross Section 1696. To 9999. %



MAT 4440

Kerma capture (mt102) 44-Ru-101
Cross Section 3708. To 9999. %

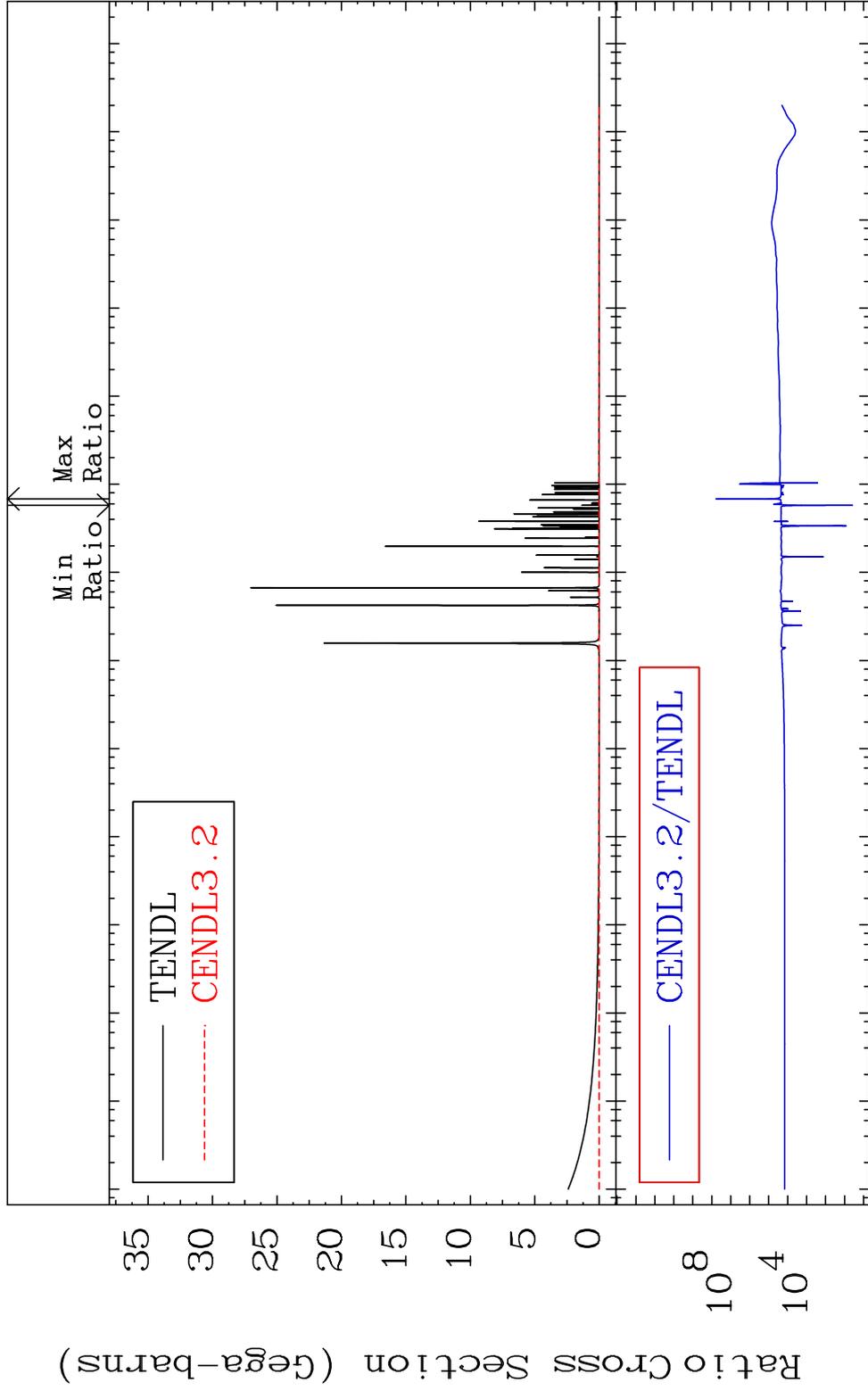


40

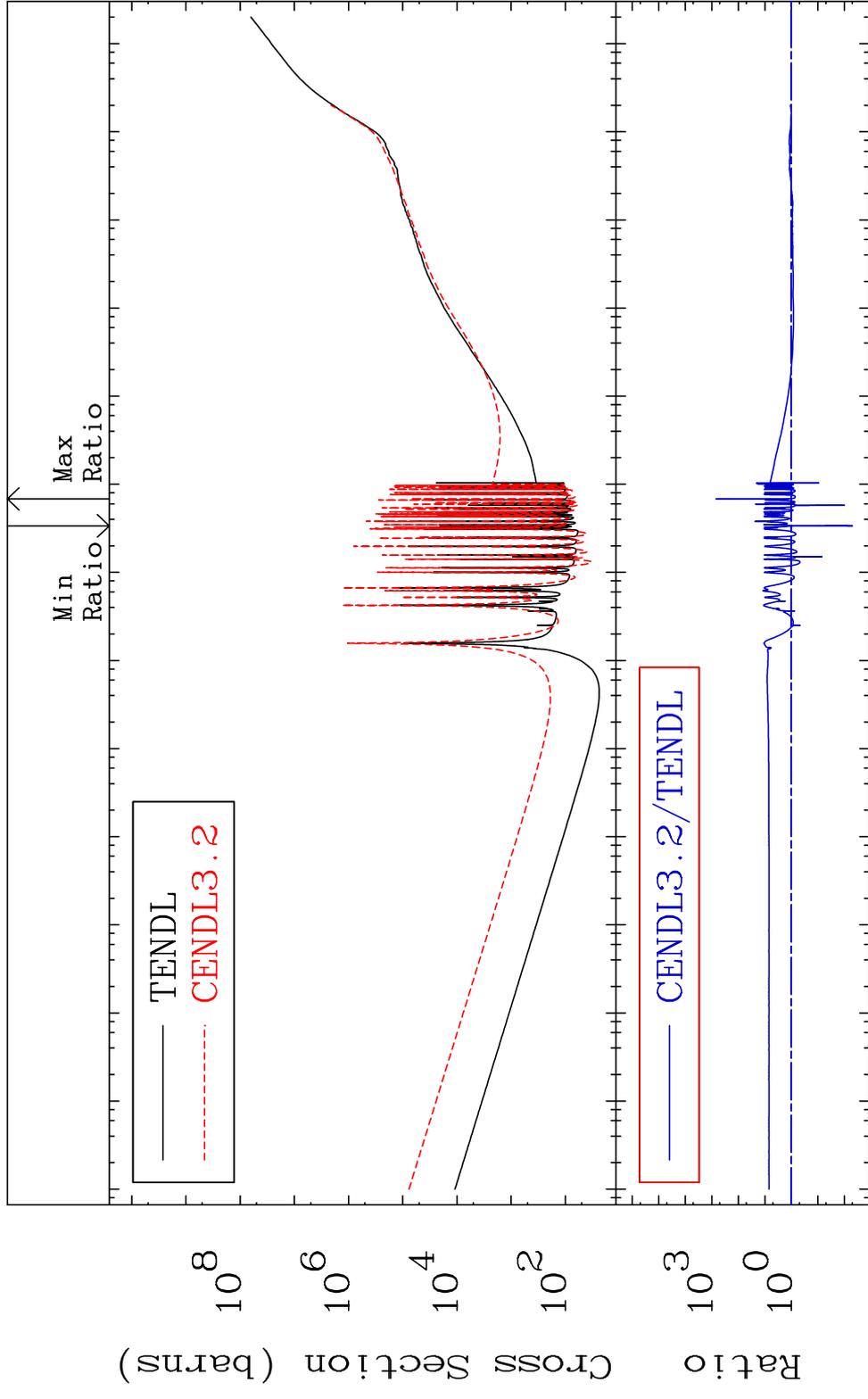
Incident Energy (eV)

44-Ru-101

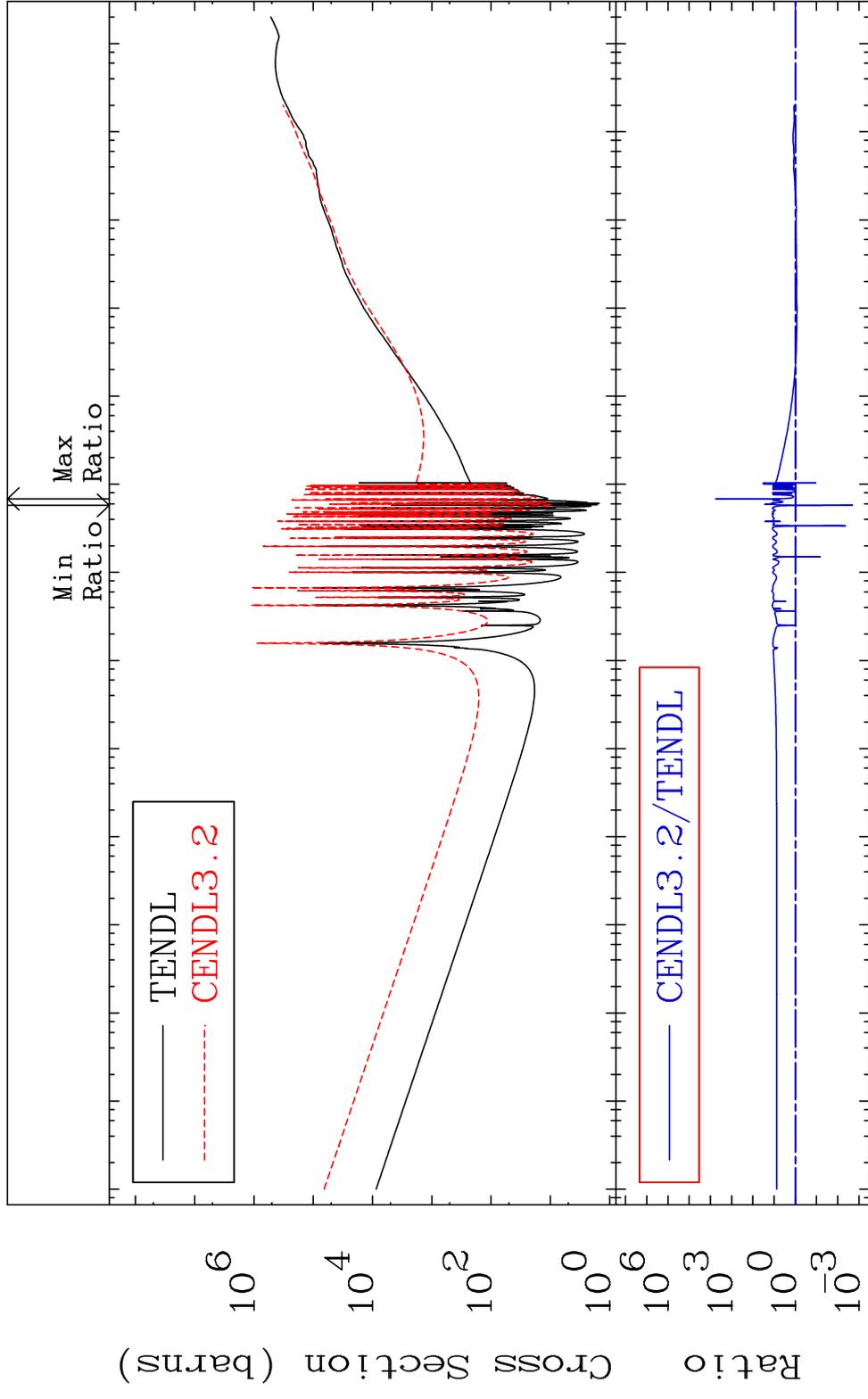
MAT 4440 Total photon (eV-barns) 44-Ru-101
 Cross Section 3708. To 9999. %



MAT 4440 Total kinematic kerma (high limit) 44-Ru-101
 Cross Section -99.50 To 9999. %



MAT 4440 Dpa total (eV-barns) 44-Ru-101
 Cross Section -99.80 To 9999. %

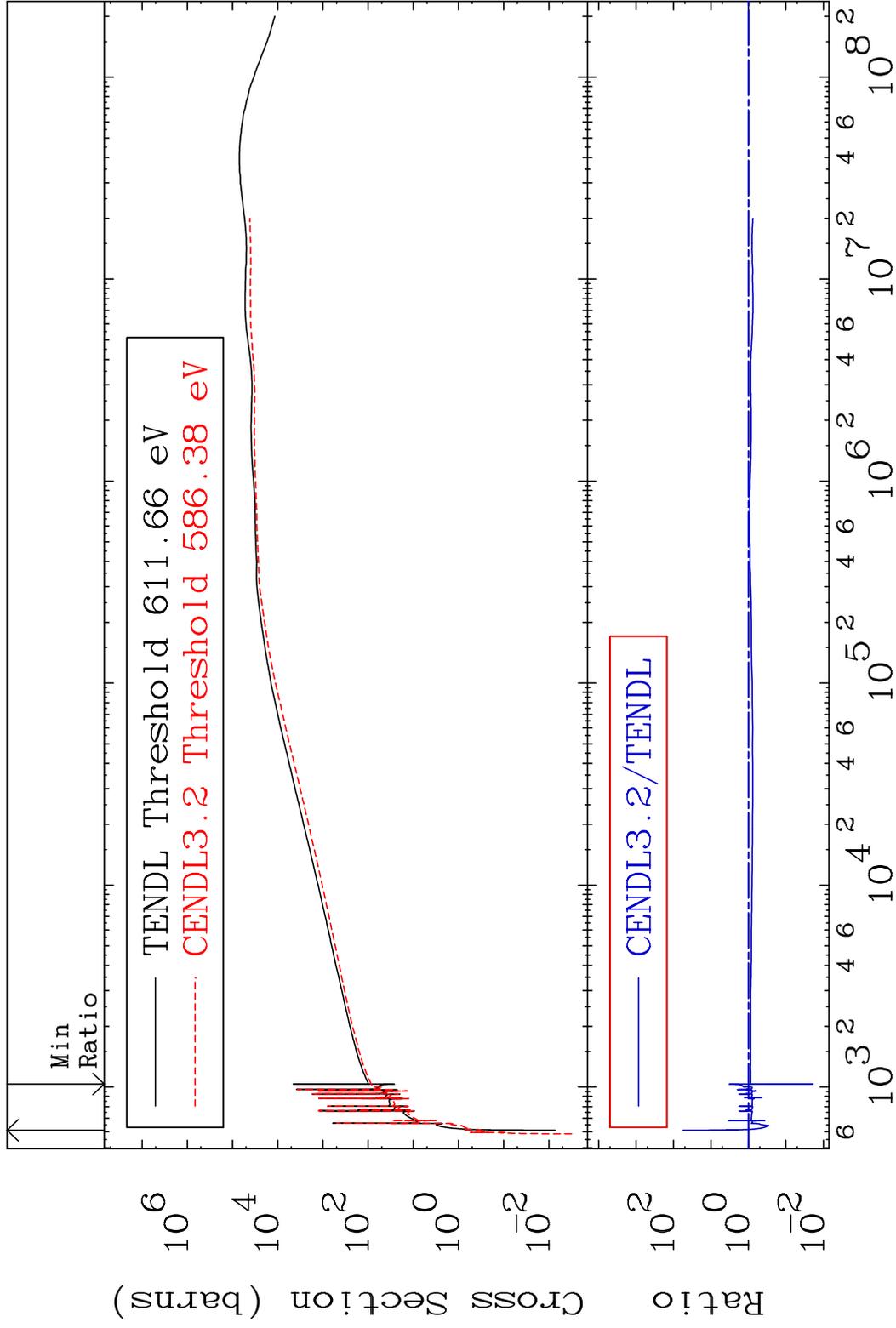


MAT 4440

Dpa elastic (mt2)

44-Ru-101

Cross Section -98.13 To 5567. %

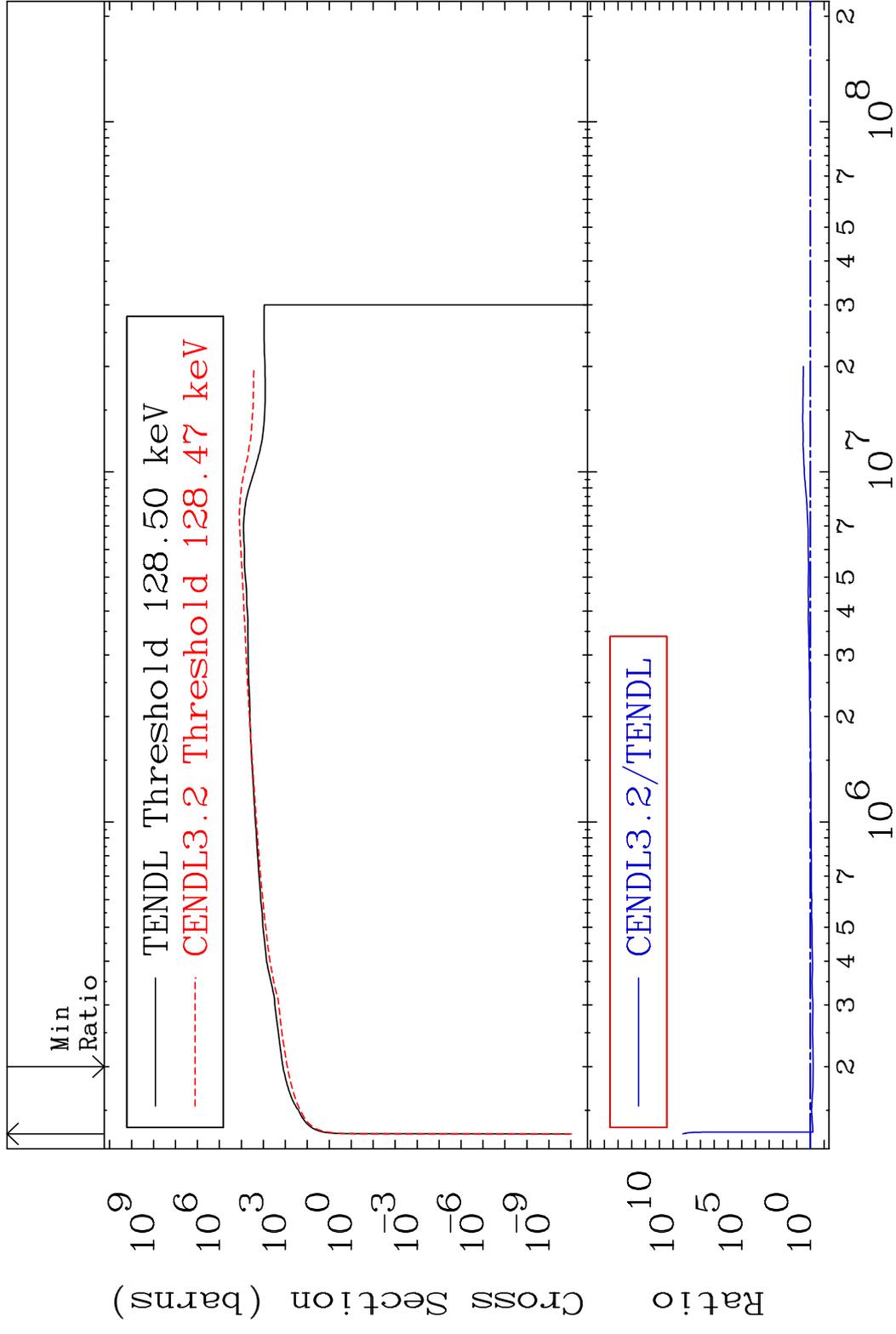


44

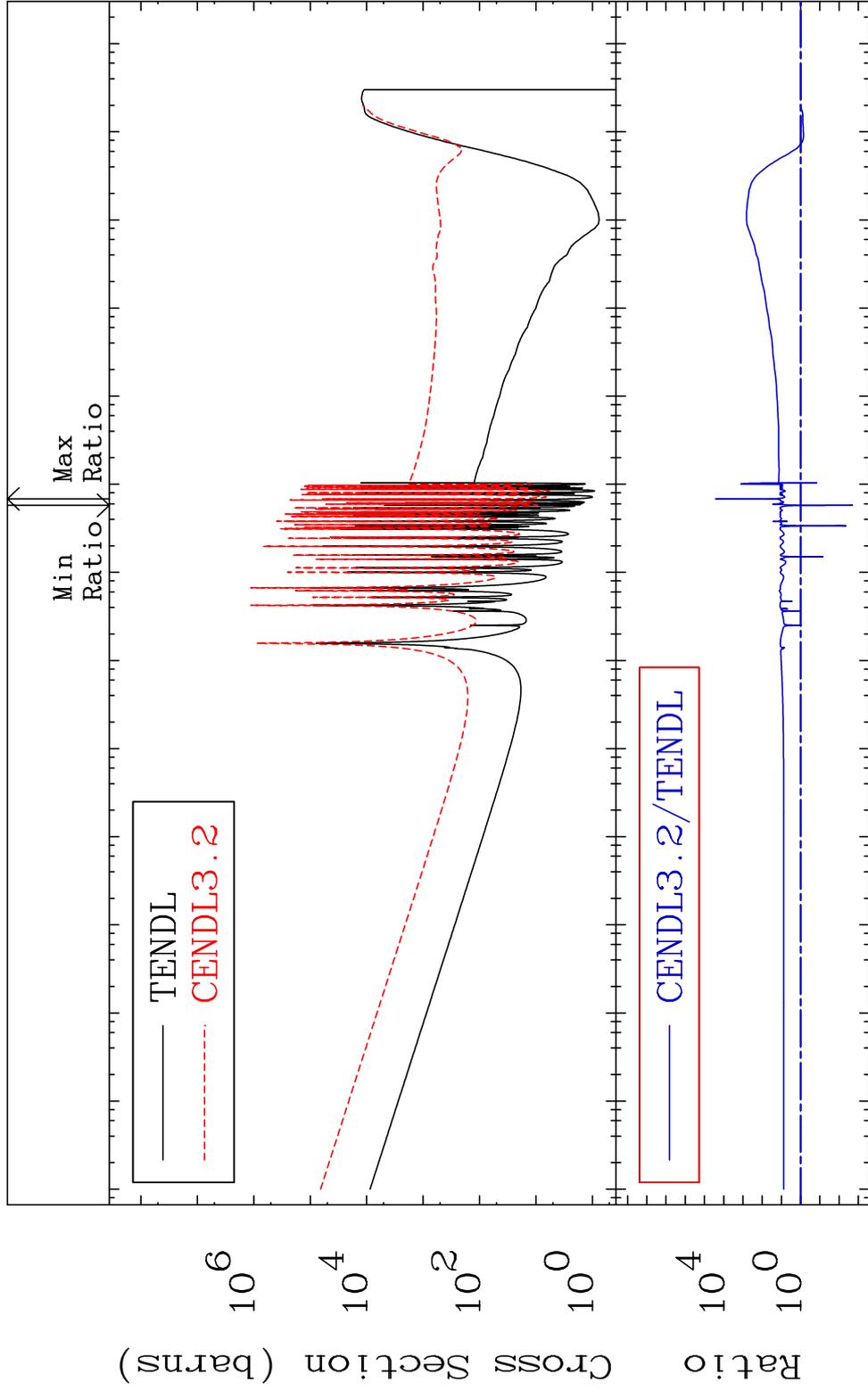
Incident Energy (eV)

44-Ru-101

MAT 4440 Dpa inelastic (mt51-91) 44-Ru-101
 Cross Section -36.71 To 9999. %



MAT 4440 Dpa disappearance (mt102 -120) 44-Ru-101
 Cross Section -99.80 To 9999. %

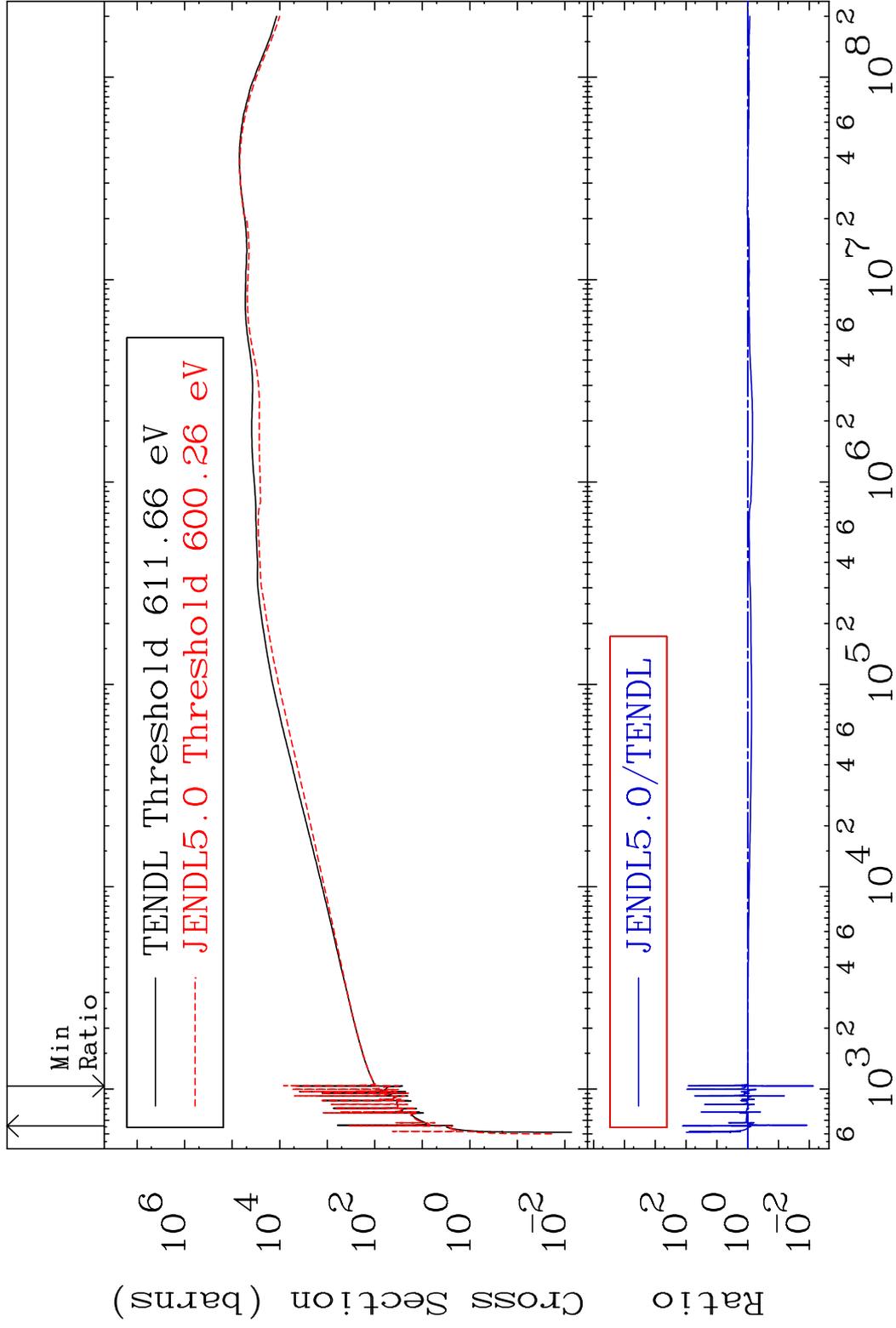


MAT 4440

Dpa elastic (mt2)

44-Ru-101

Cross Section -99.25 To 9999. %

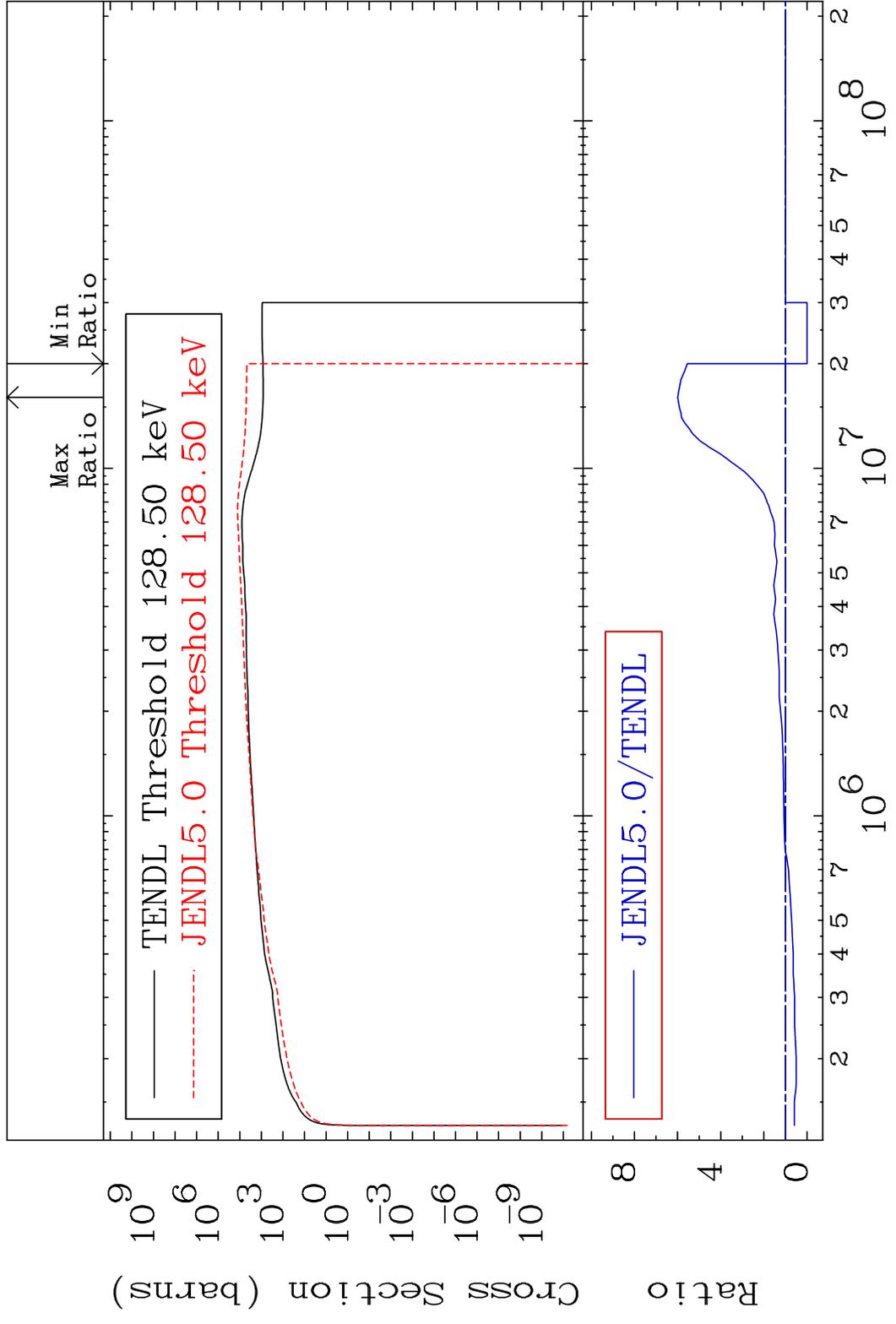


47

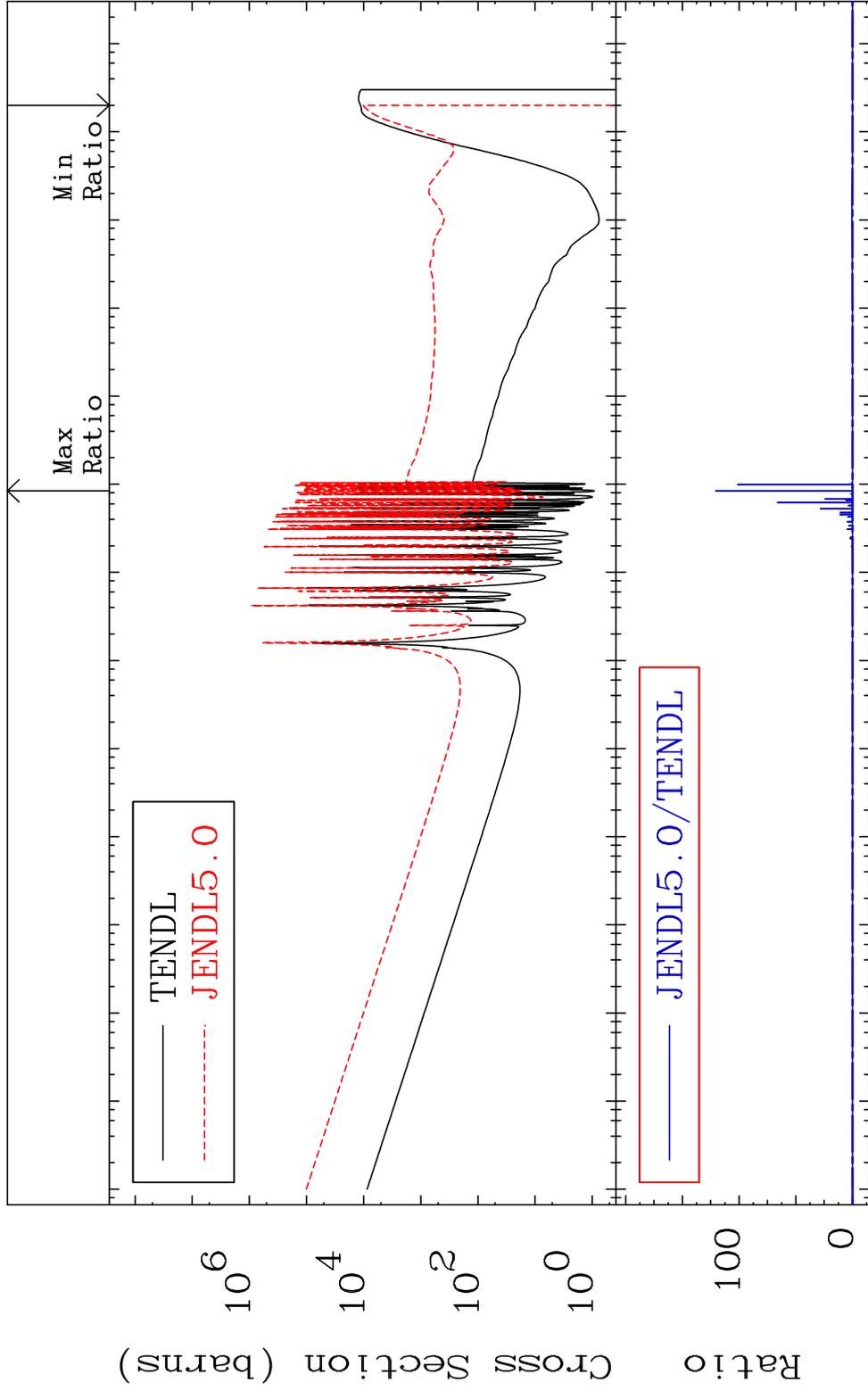
Incident Energy (eV)

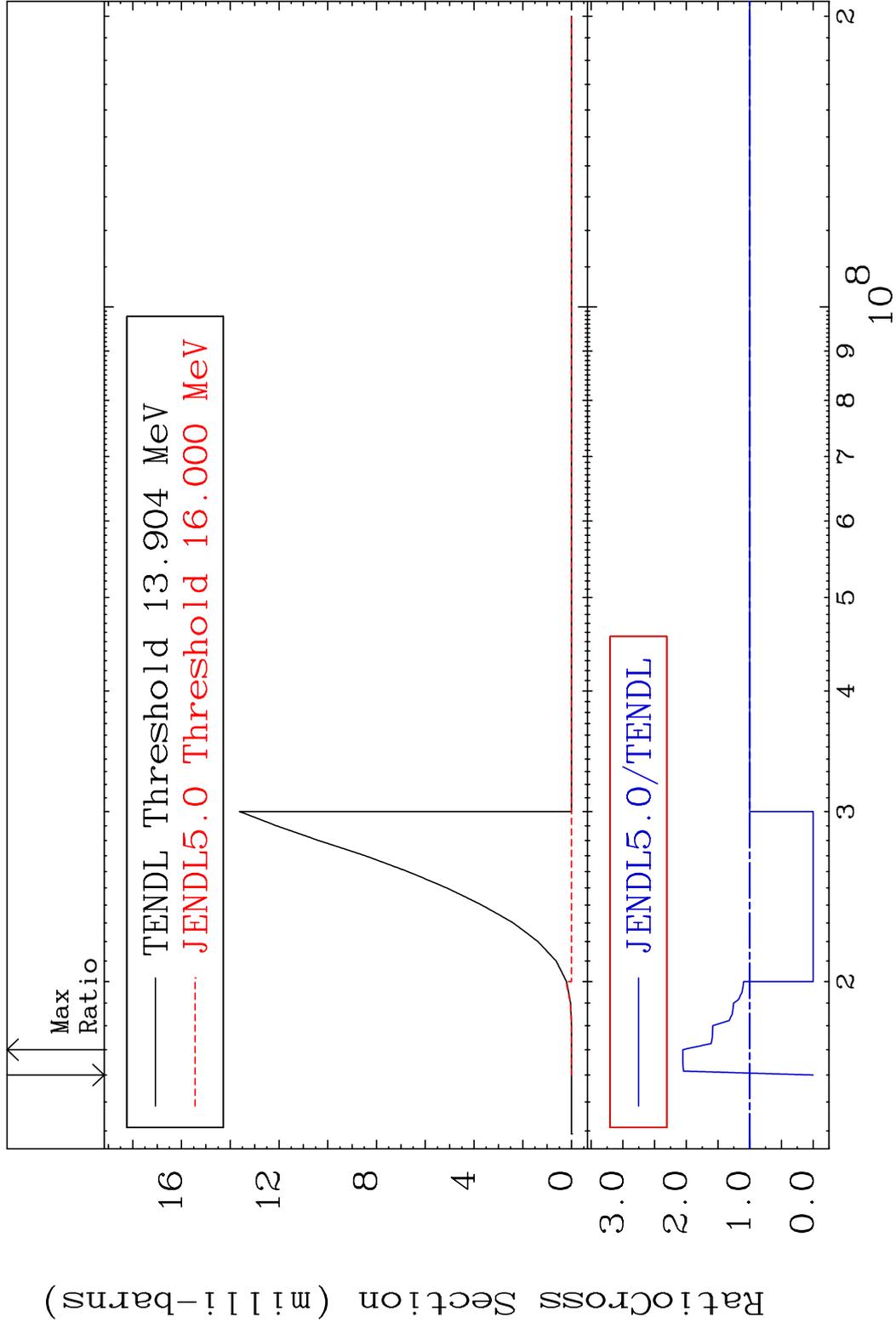
44-Ru-101

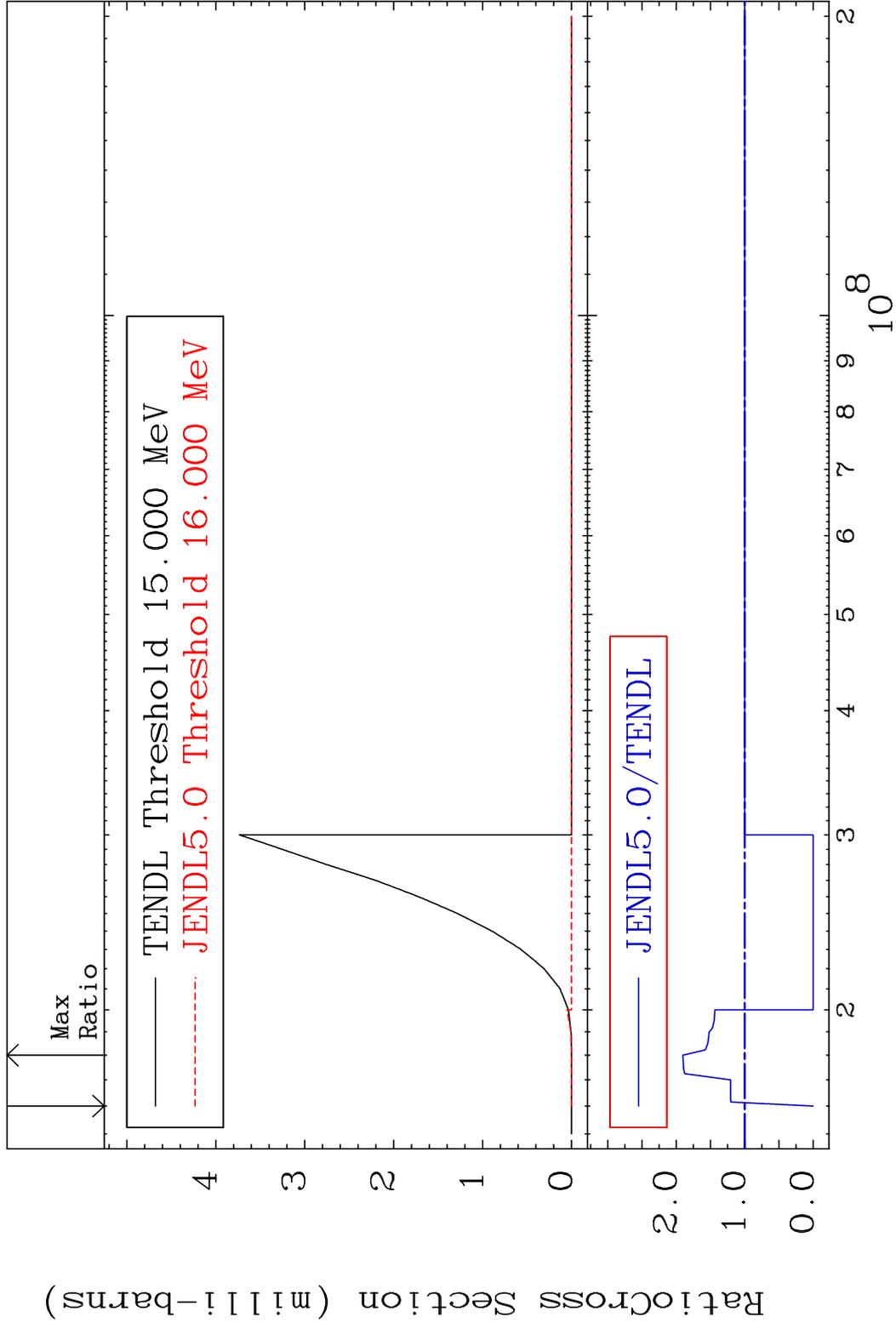
MAT 4440 Dpa inelastic (mt51-91) 44-Ru-101
 Cross Section -100.0 To 499.6 %

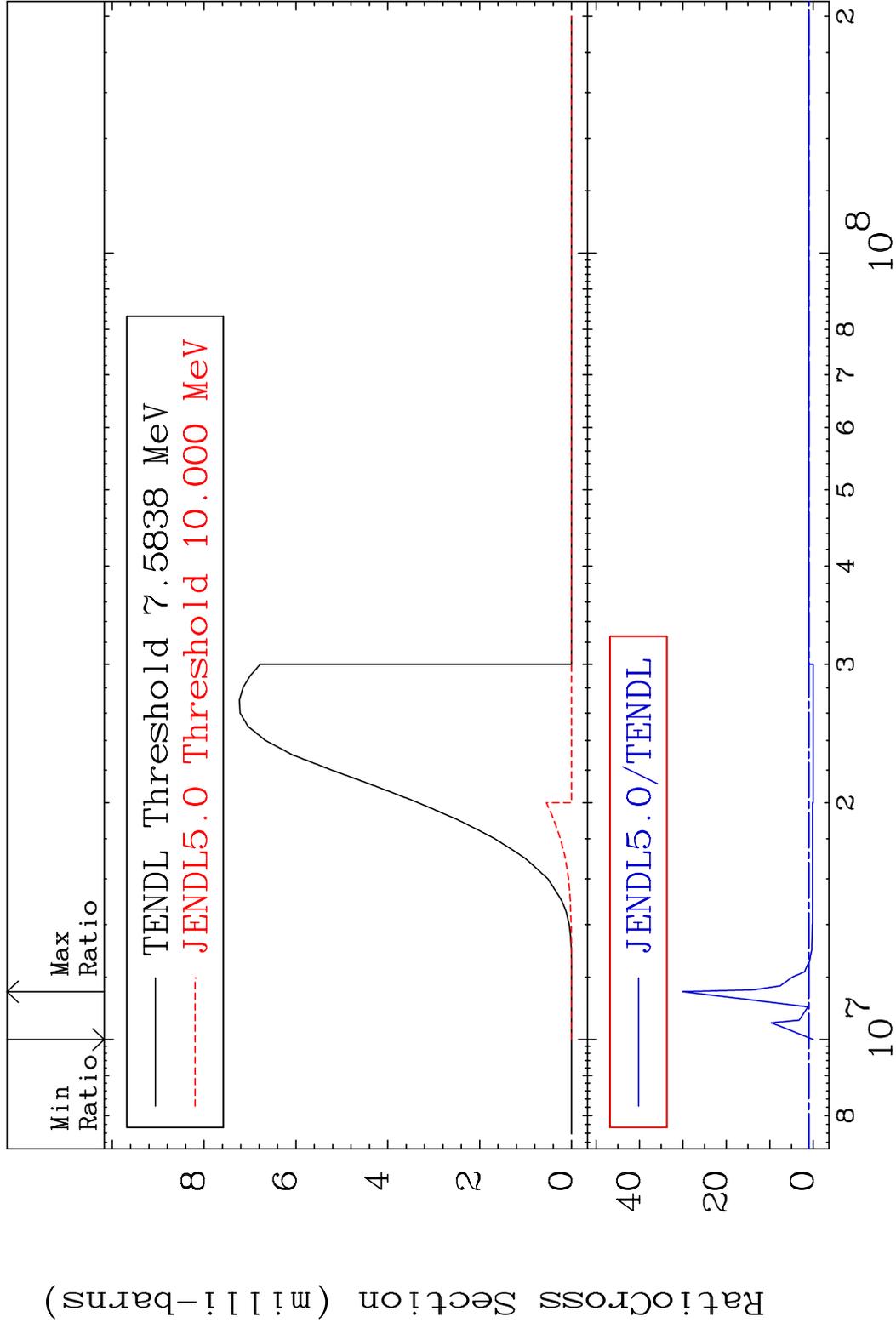


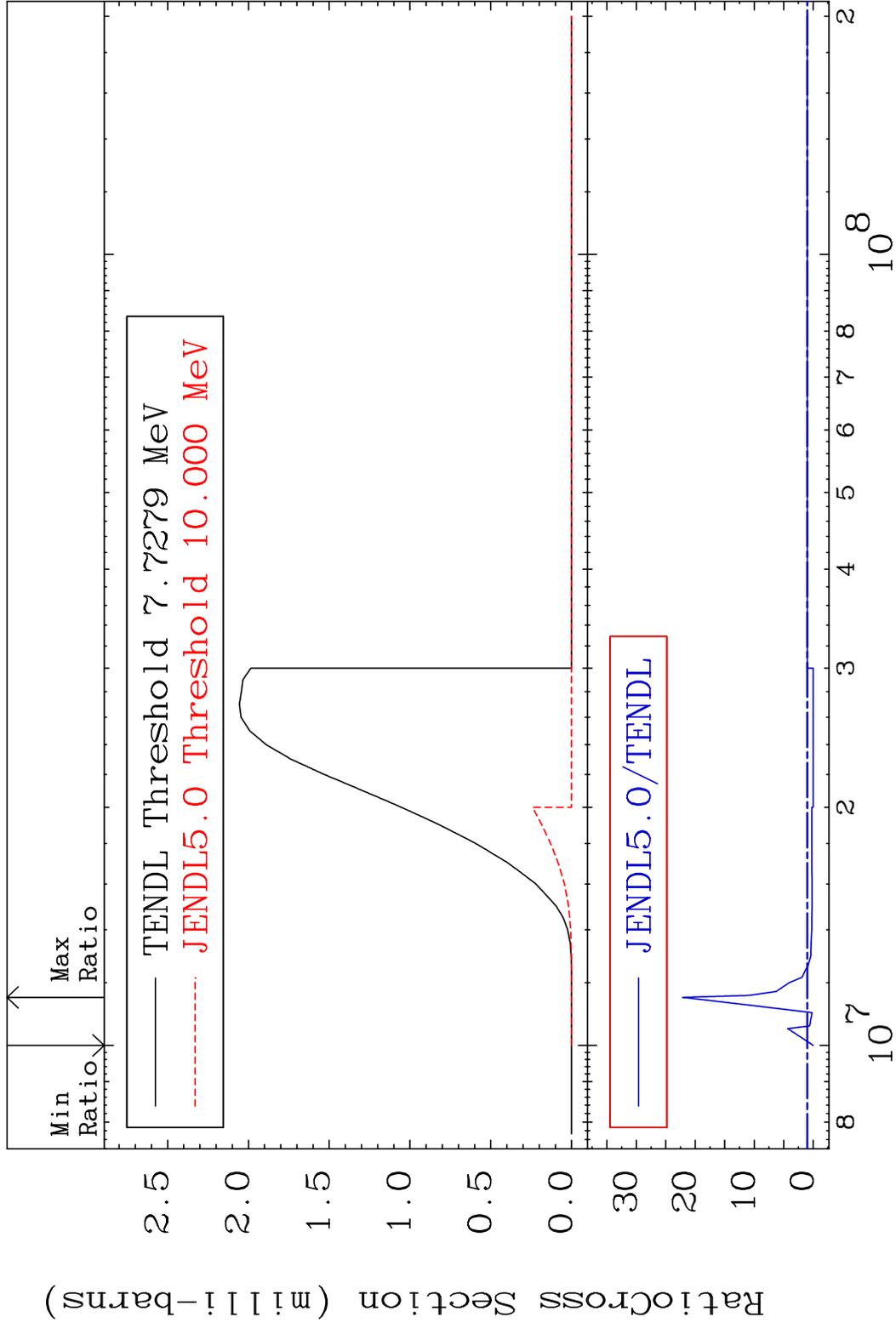
MAT 4440 Dpa disappearance (mt102 -120) 44-Ru-101
 Cross Section -100.0 To 9999. %









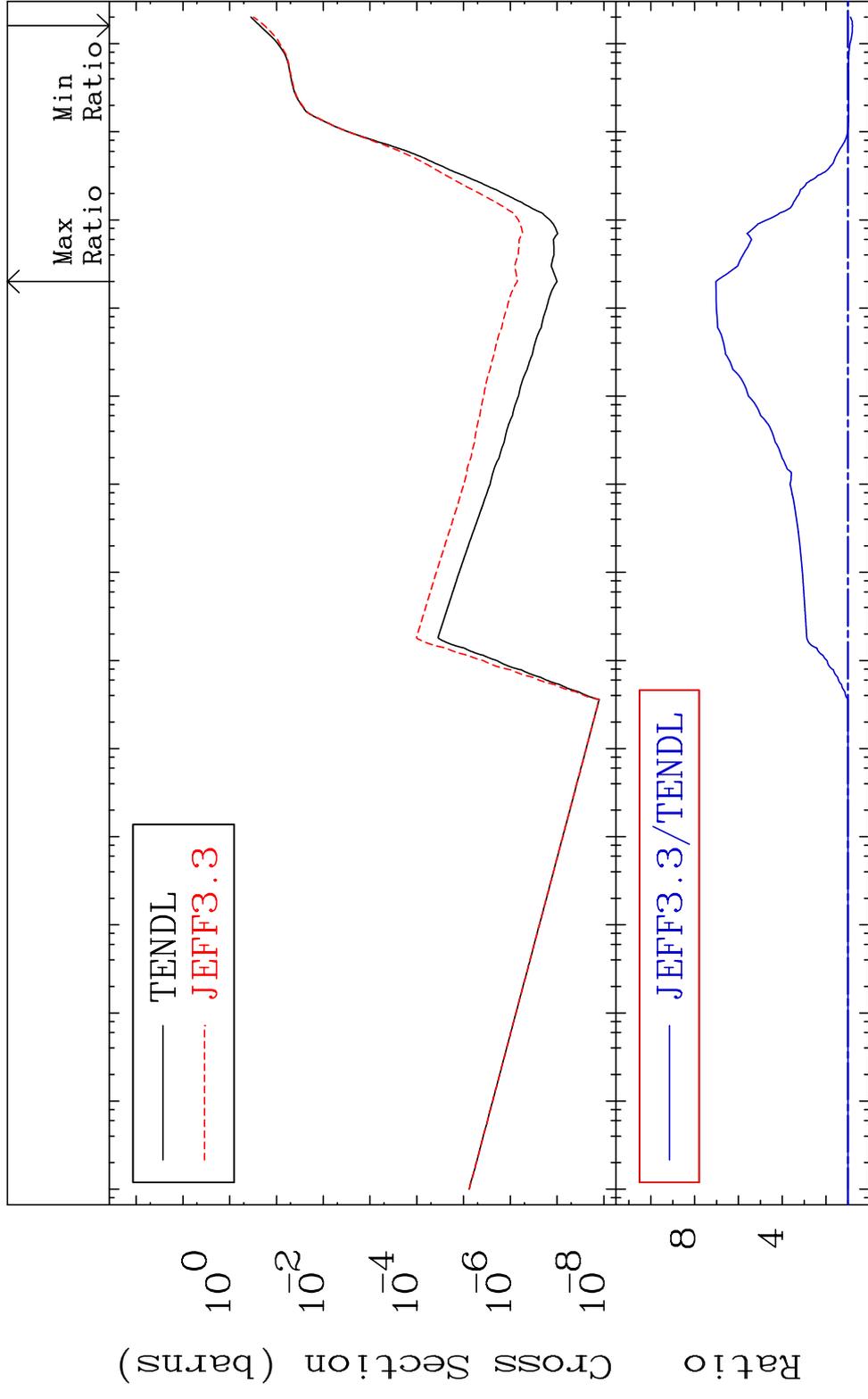


MAT 4440

He-4 Production

44-Ru-101

Cross Section -20.71 To 603.0 %



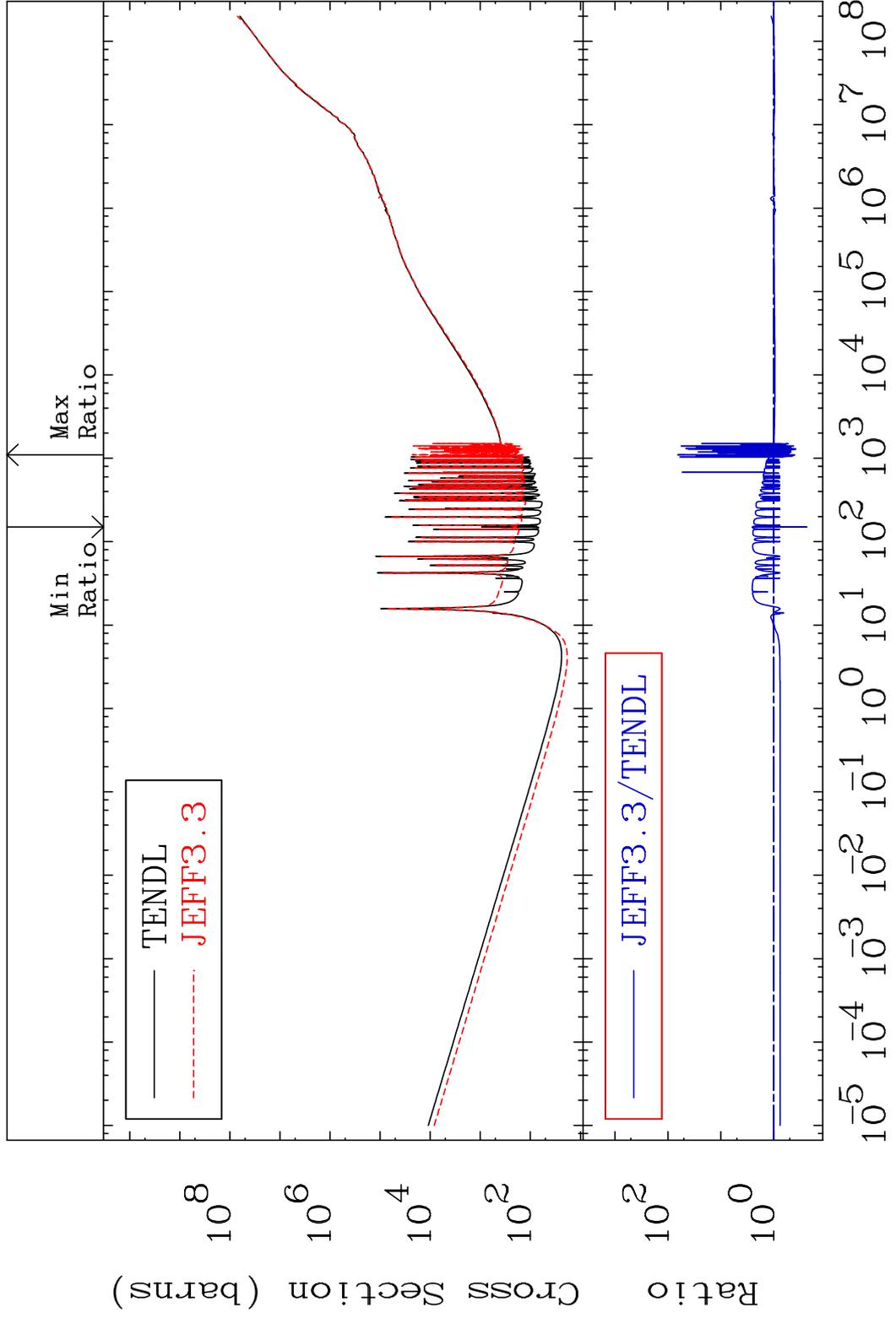
54

Incident Energy (eV)

44-Ru-101

MAT 4440

Kerma total (eV-barns) 44-Ru-101
Cross Section -76.39 To 6434. %



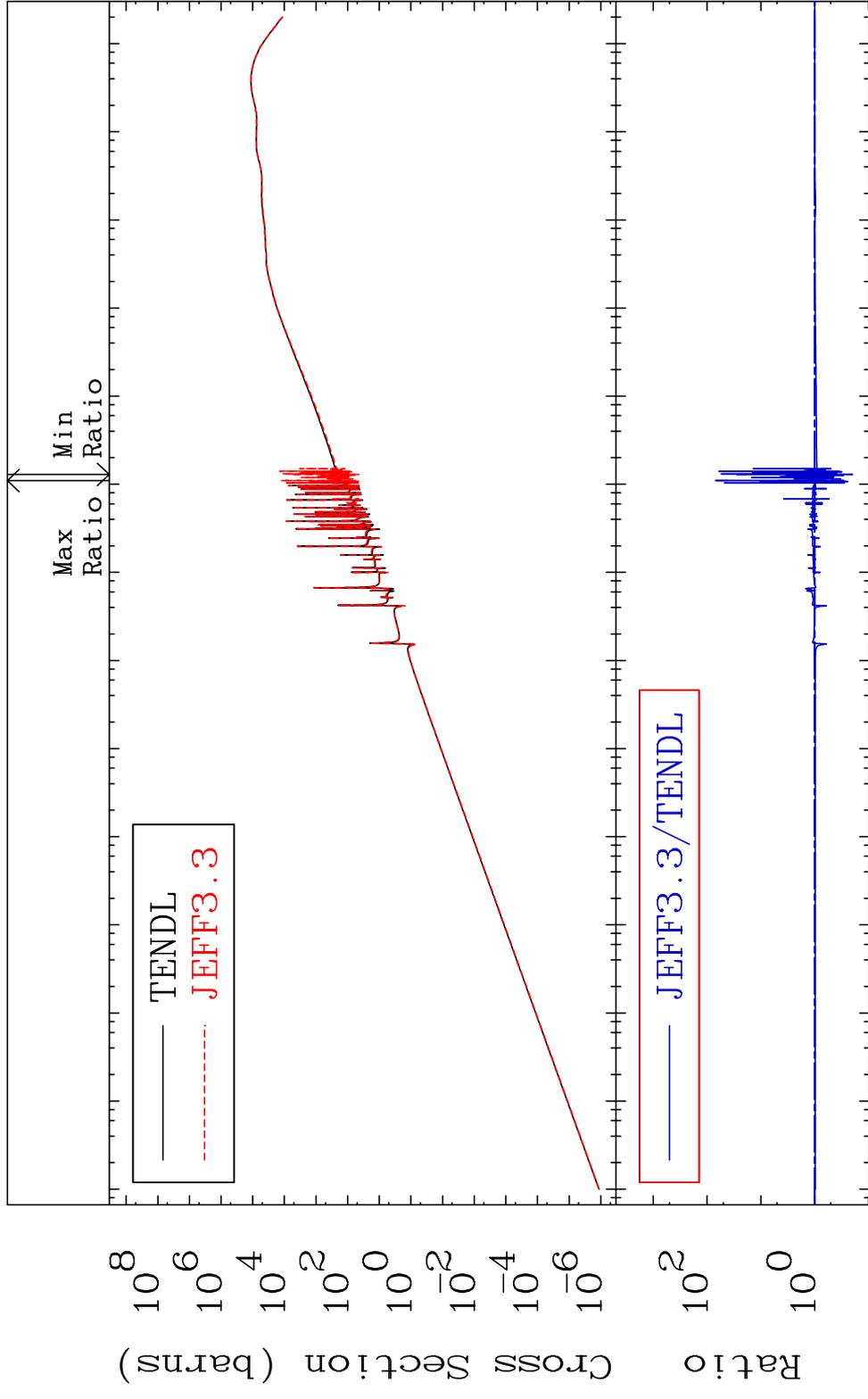
55

Incident Energy (eV)

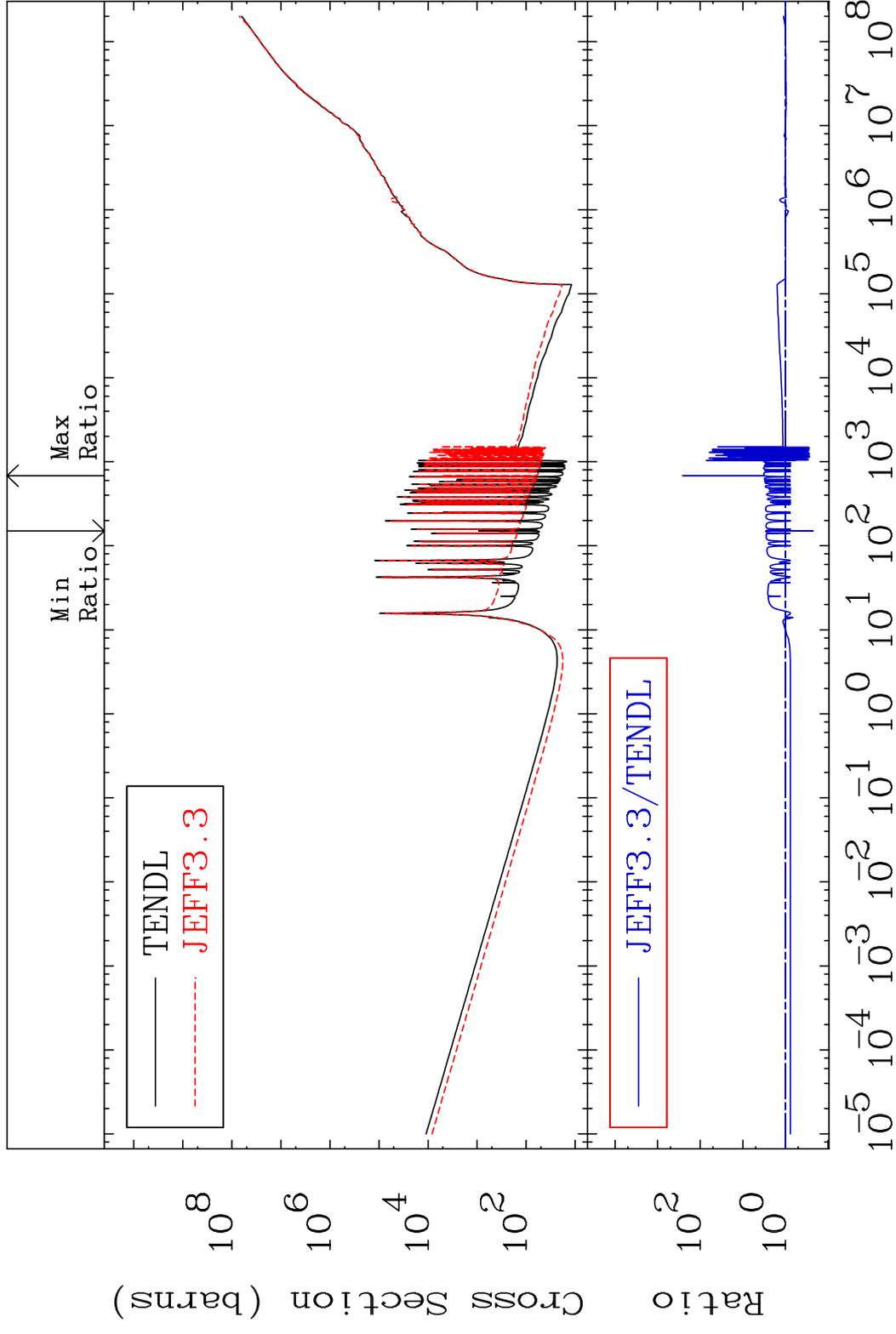
44-Ru-101

MAT 4440

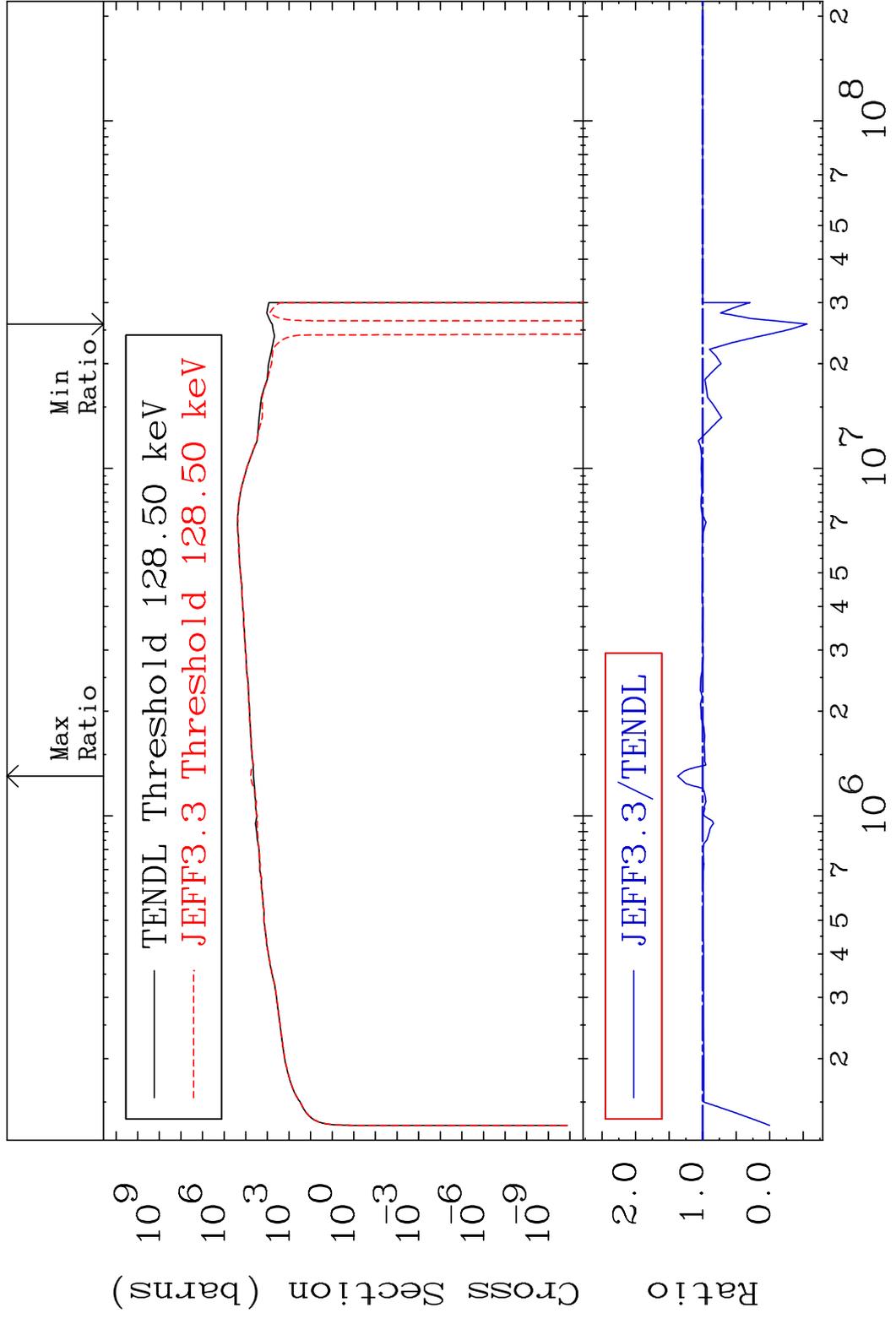
Kerma elastic Cross Section -80.19 To 6747. %
44-Ru-101



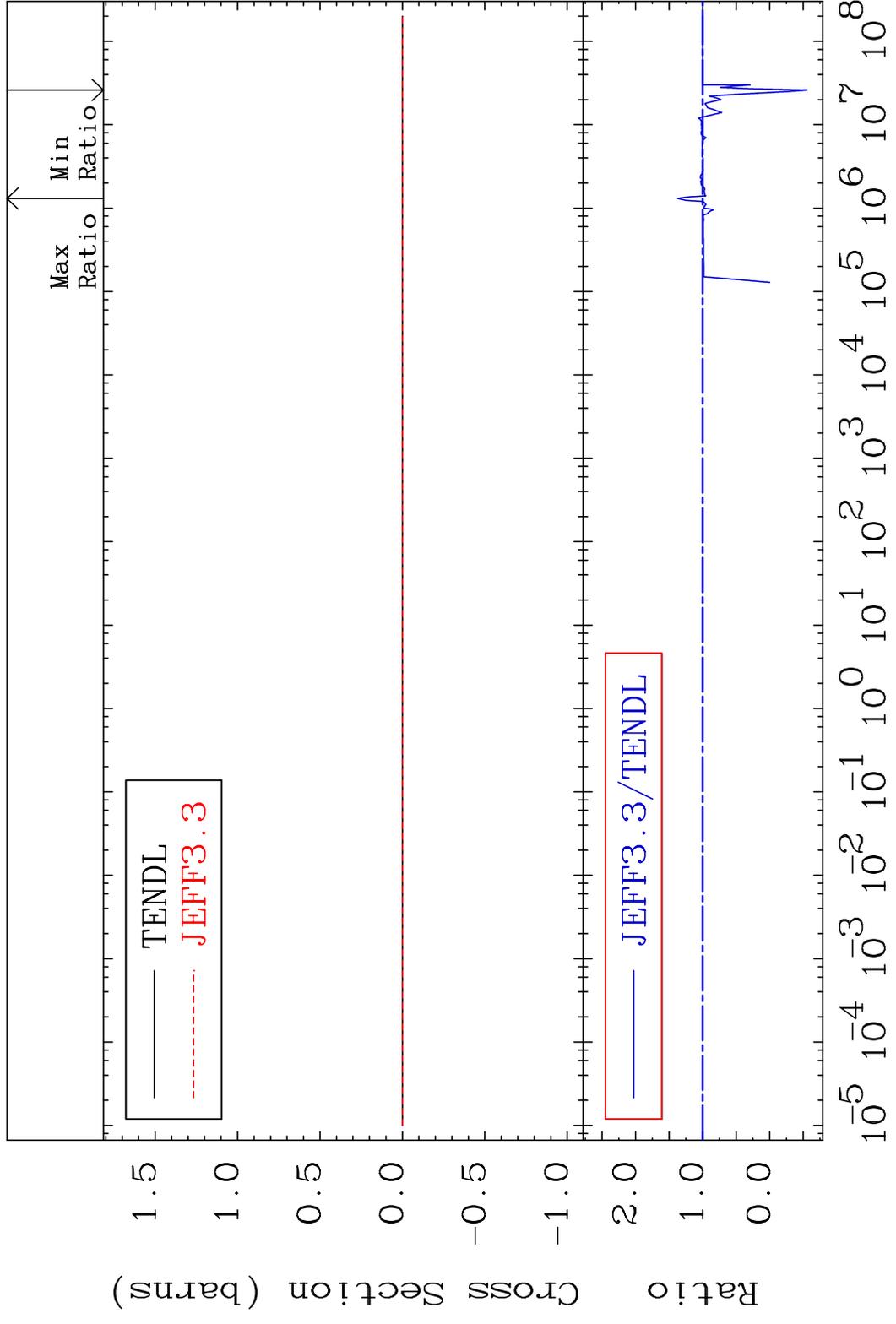
MAT 4440 Kerma non-elastic (all but mt2) 44-Ru-101
 Cross Section -77.67 To 9999. %



MAT 4440 Kerma inelastic (mt51-91) 44-Ru-101
 Cross Section -155.7 To 37.18 %

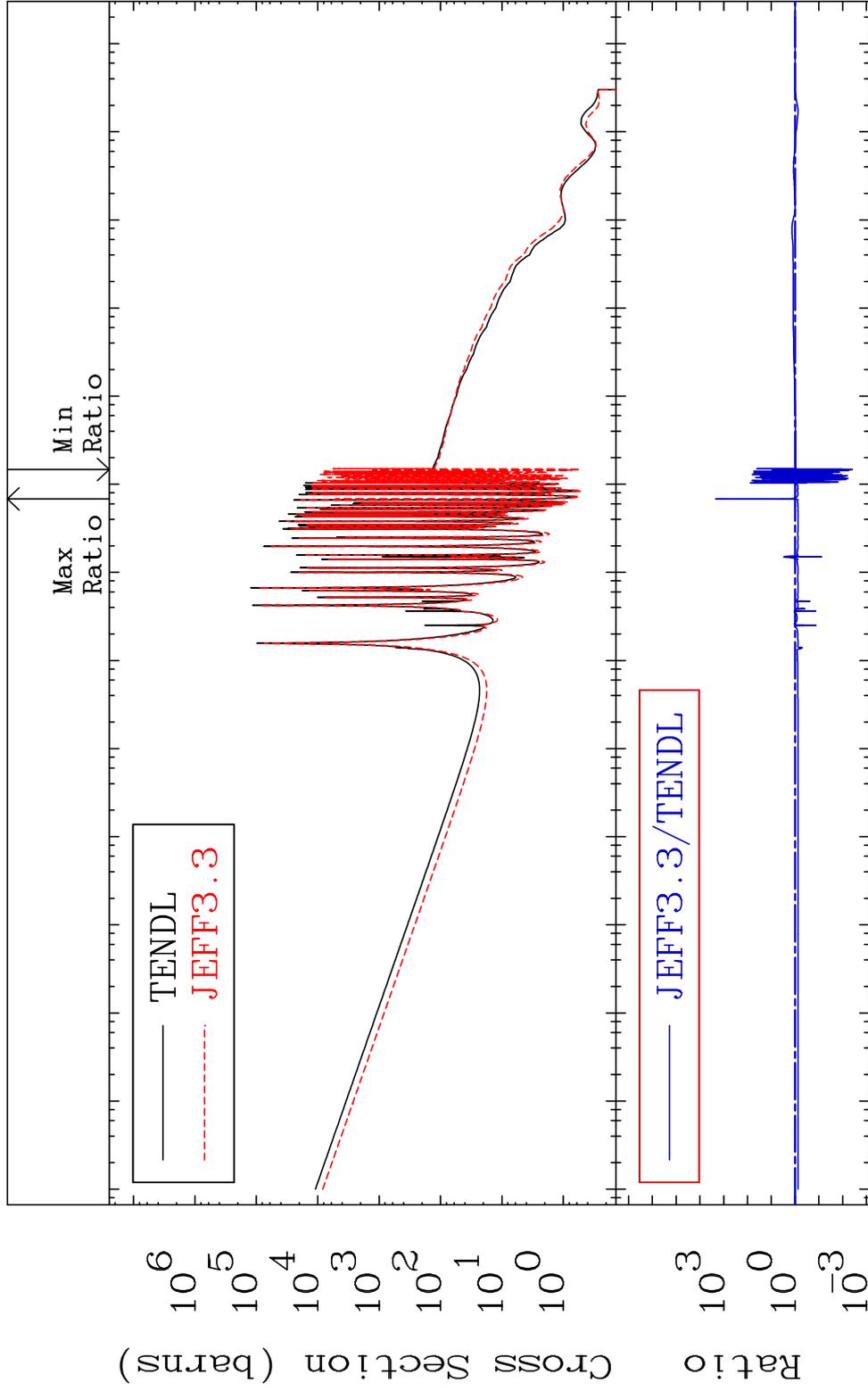


MAT 4440 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-101
 Cross Section -155.7 To 37.18 %



MAT 4440

Kerma capture (mt102) 44-Ru-101
Cross Section -99.61 To 9999. %

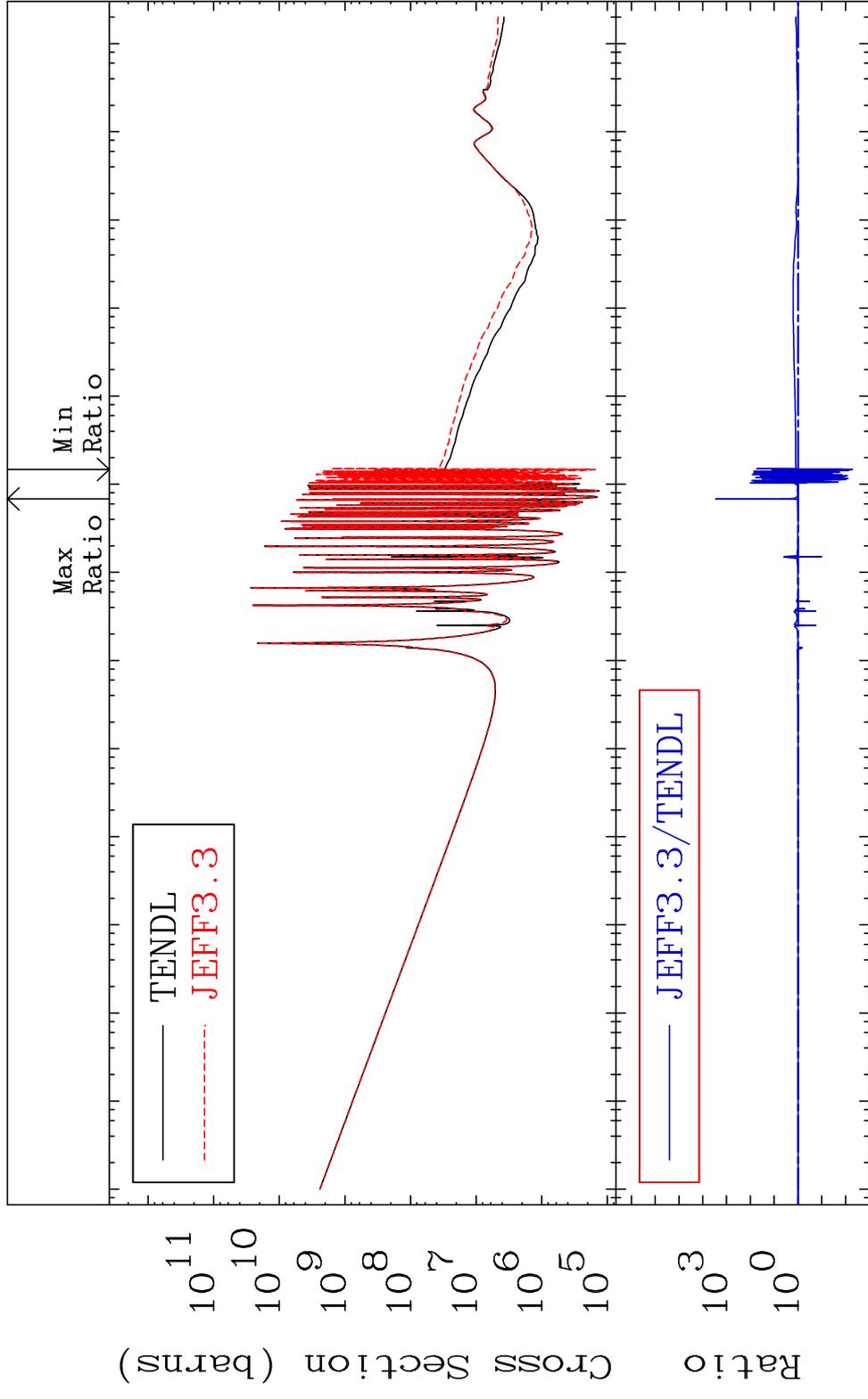


60

Incident Energy (eV)

44-Ru-101

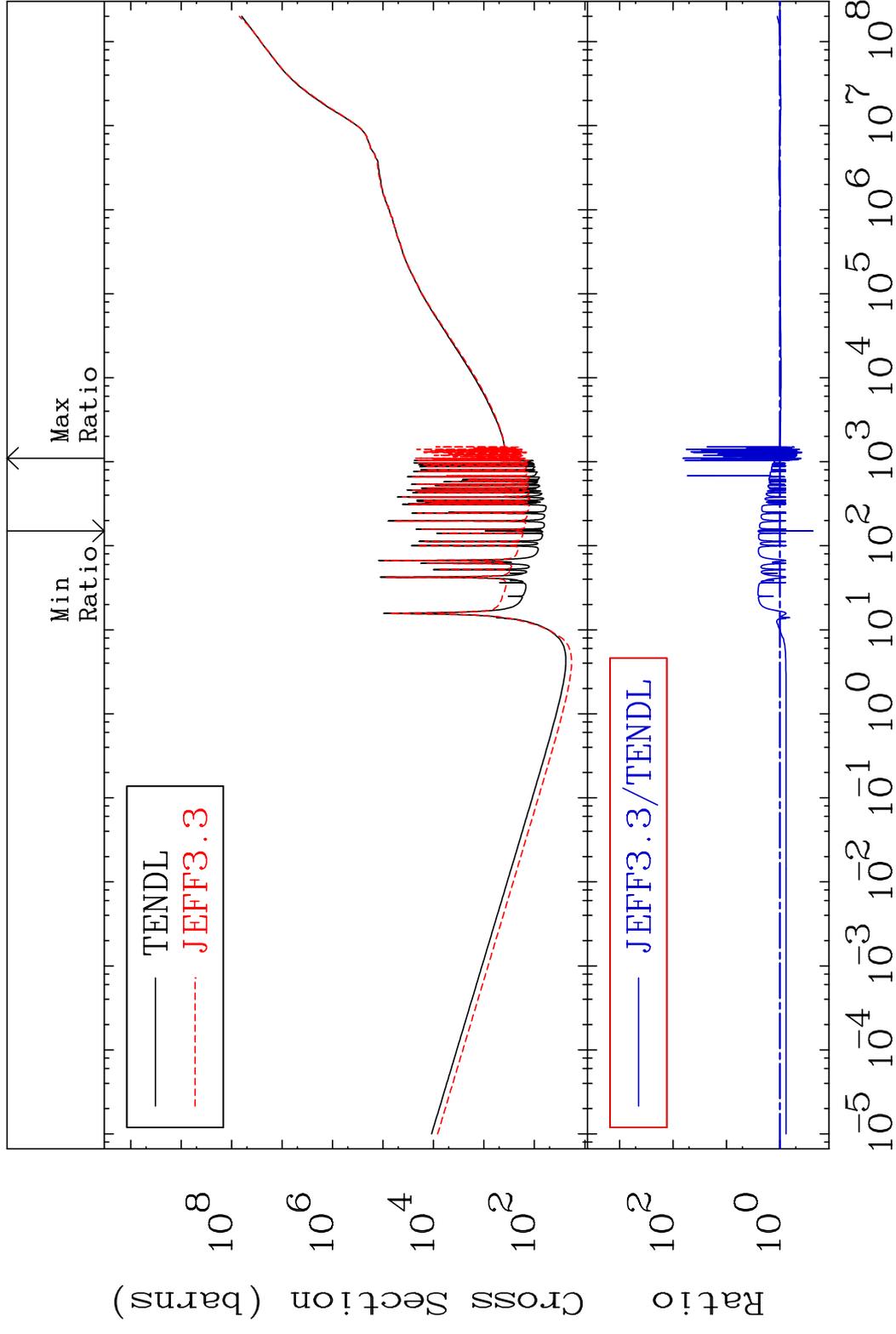
MAT 4440 Total photon (eV-barns) 44-Ru-101
 Cross Section -99.49 To 9999. %



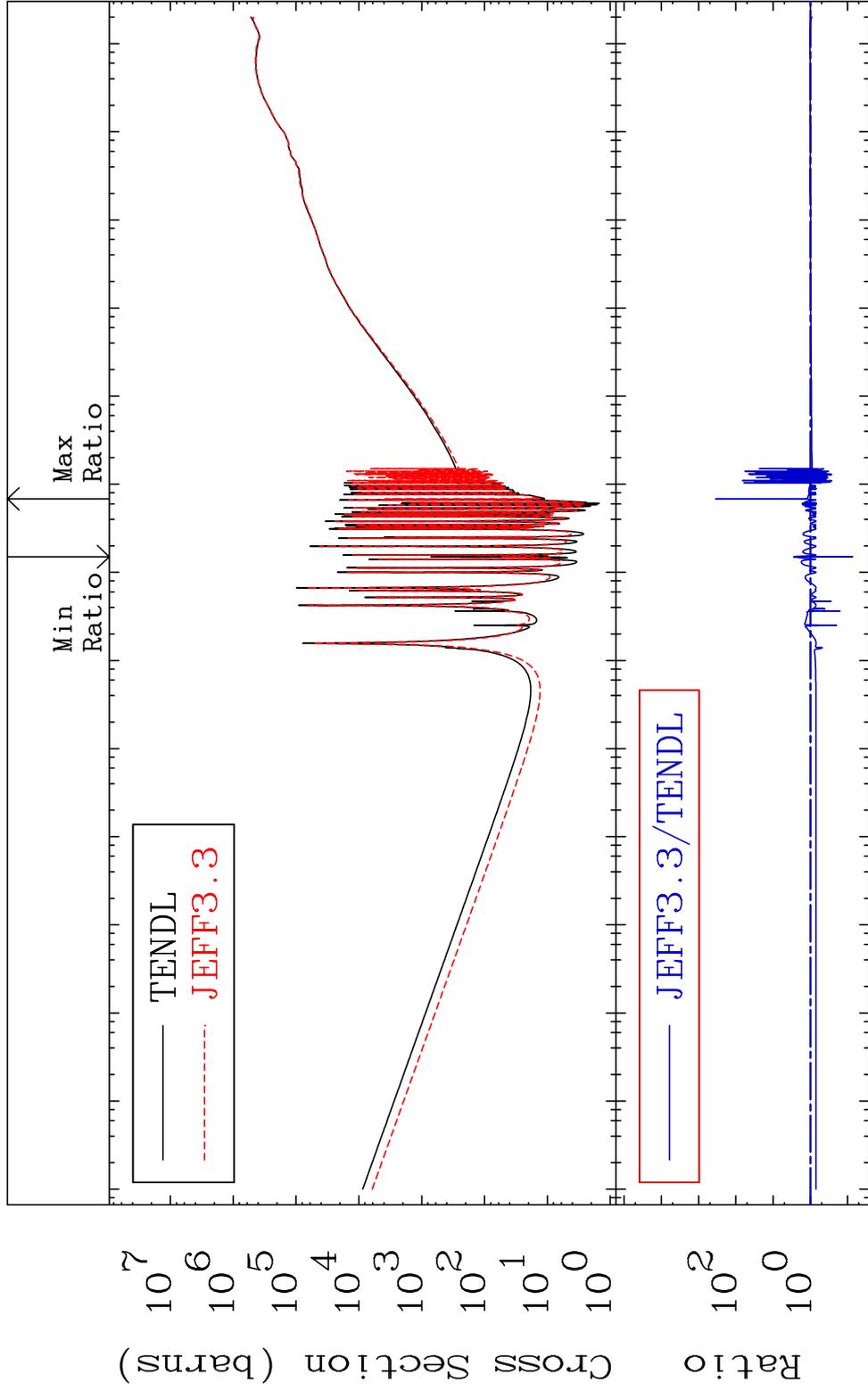
Ratio
 10^3
 10^0

10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8

MAT 4440 Total kinematic kerma (high limit) 44-Ru-101
 Cross Section -76.29 To 6432. %



MAT 4440 Dpa total (eV-barns) 44-Ru-101
 Cross Section -92.61 To 9999. %



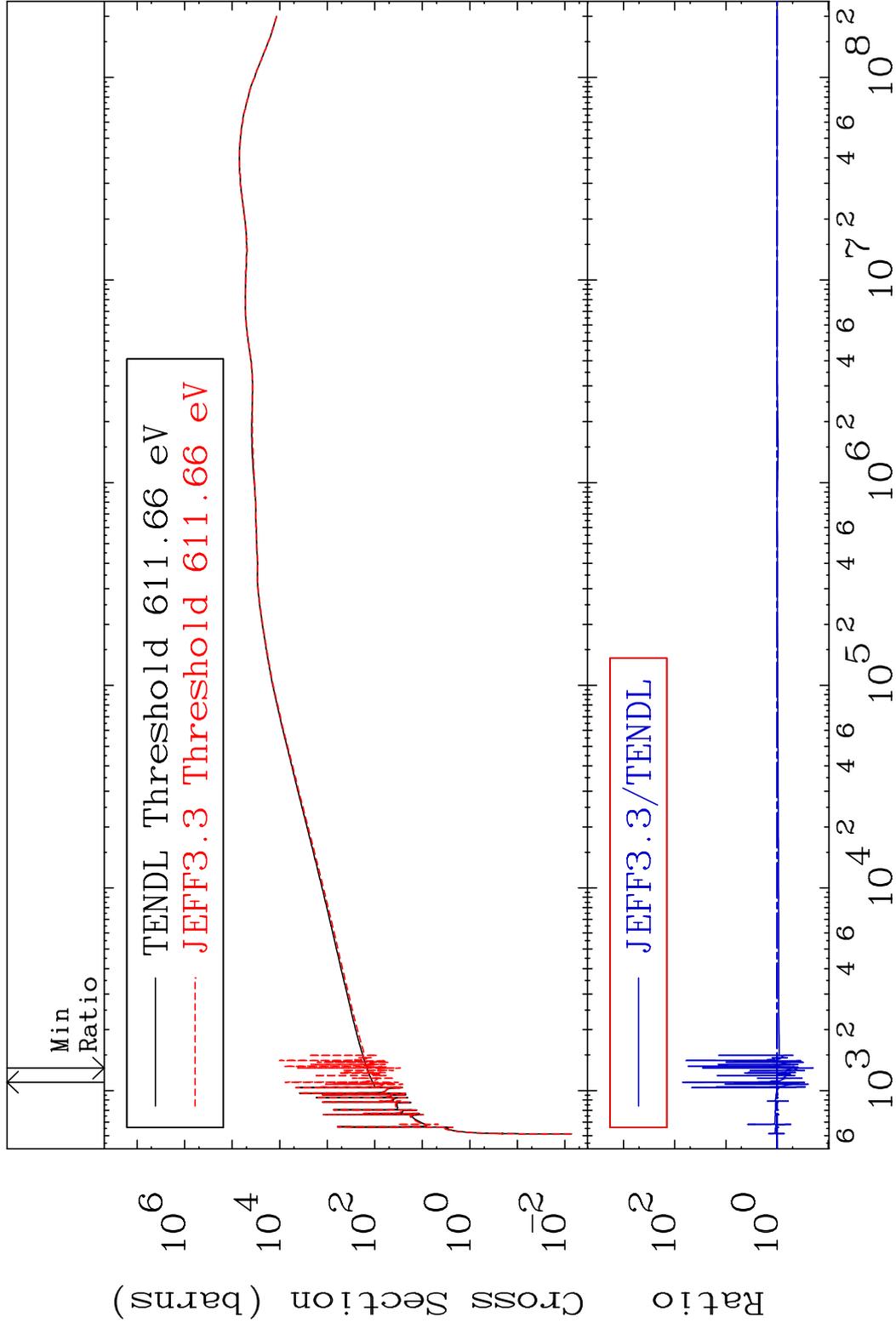
63 Incident Energy (eV) 44-Ru-101

MAT 4440

Dpa elastic (mt2)

44-Ru-101

Cross Section -80.19 To 6855. %

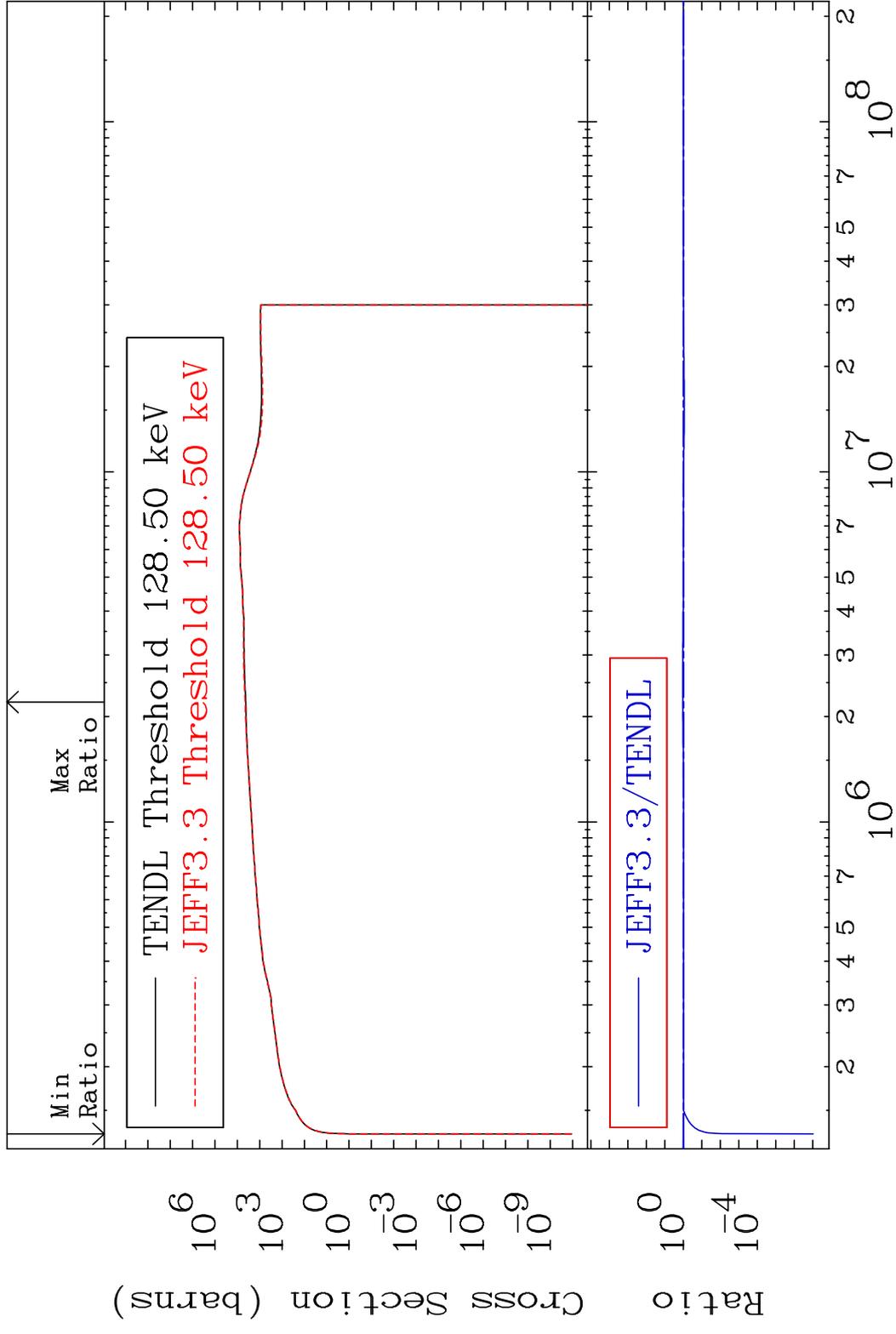


64

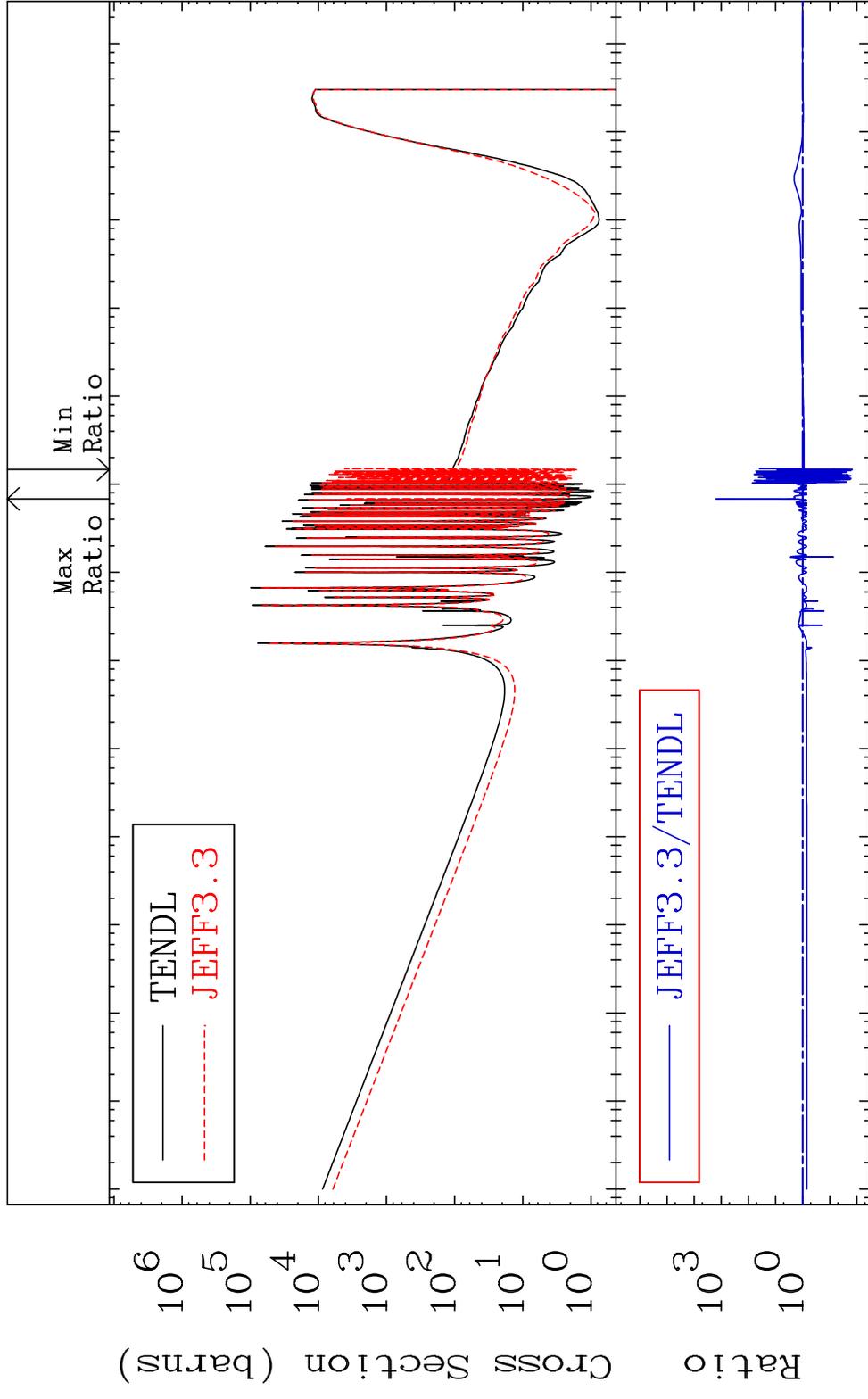
Incident Energy (eV)

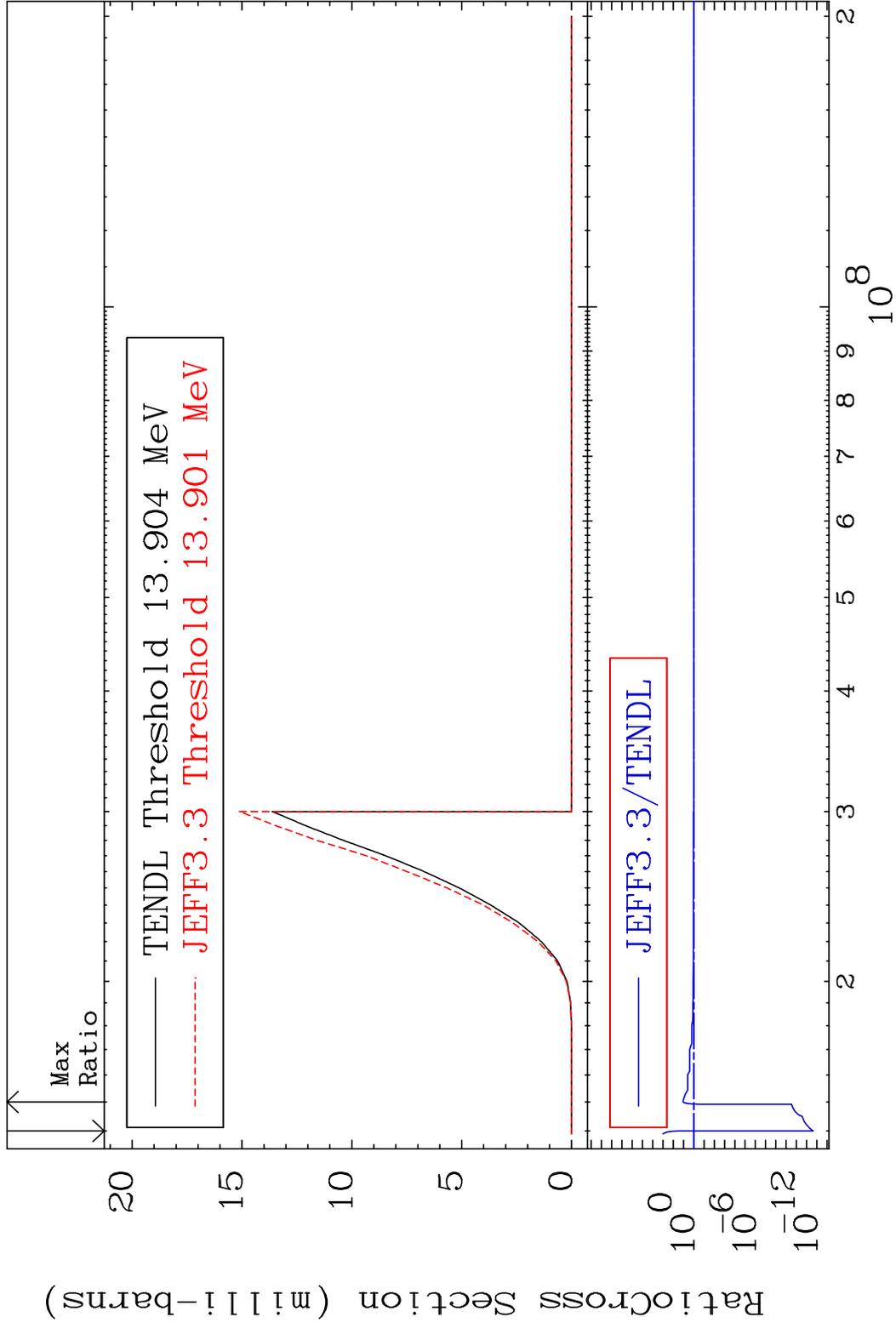
44-Ru-101

MAT 4440 Dpa inelastic (mt51-91) 44-Ru-101
 Cross Section -100.0 To 6.941 %

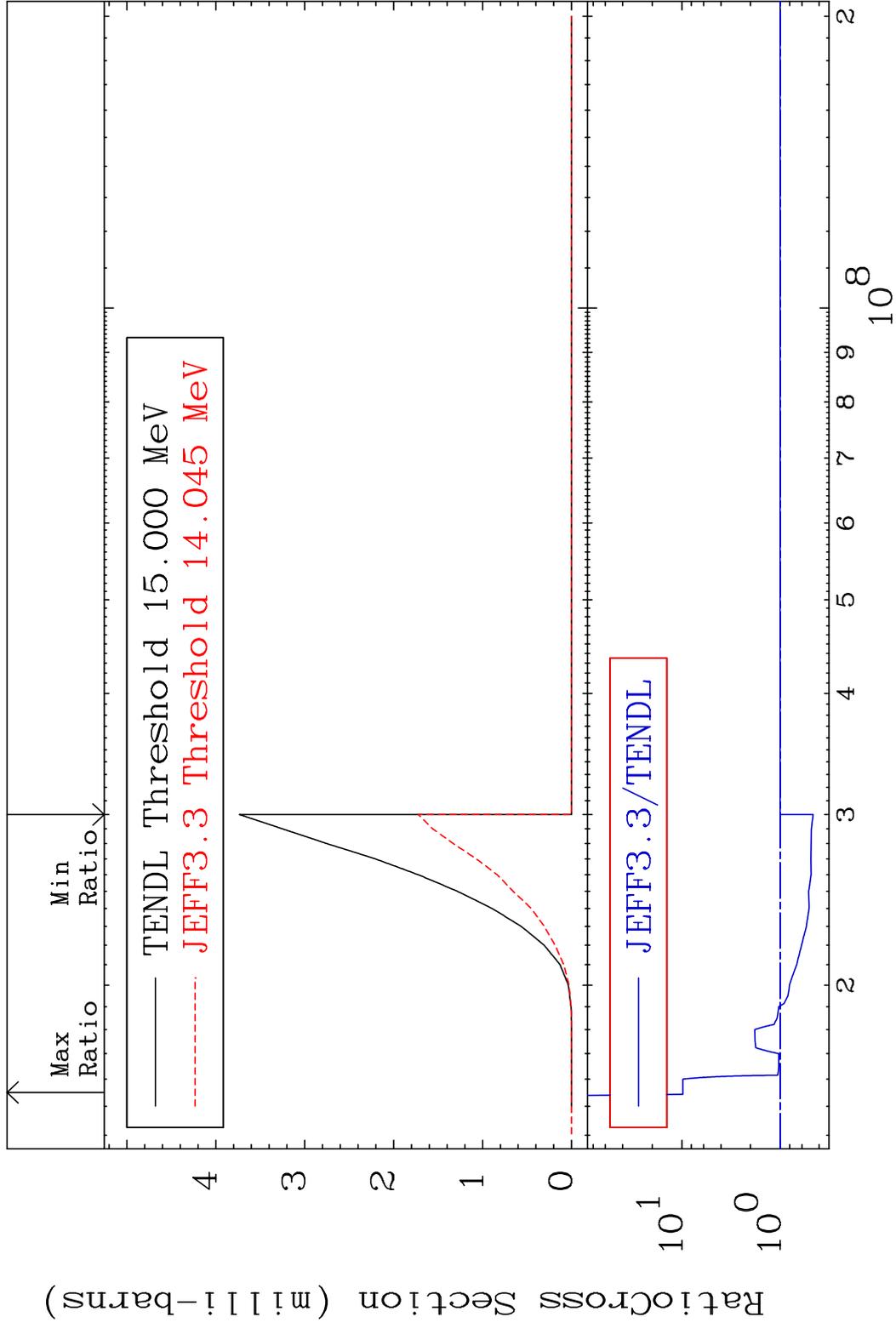


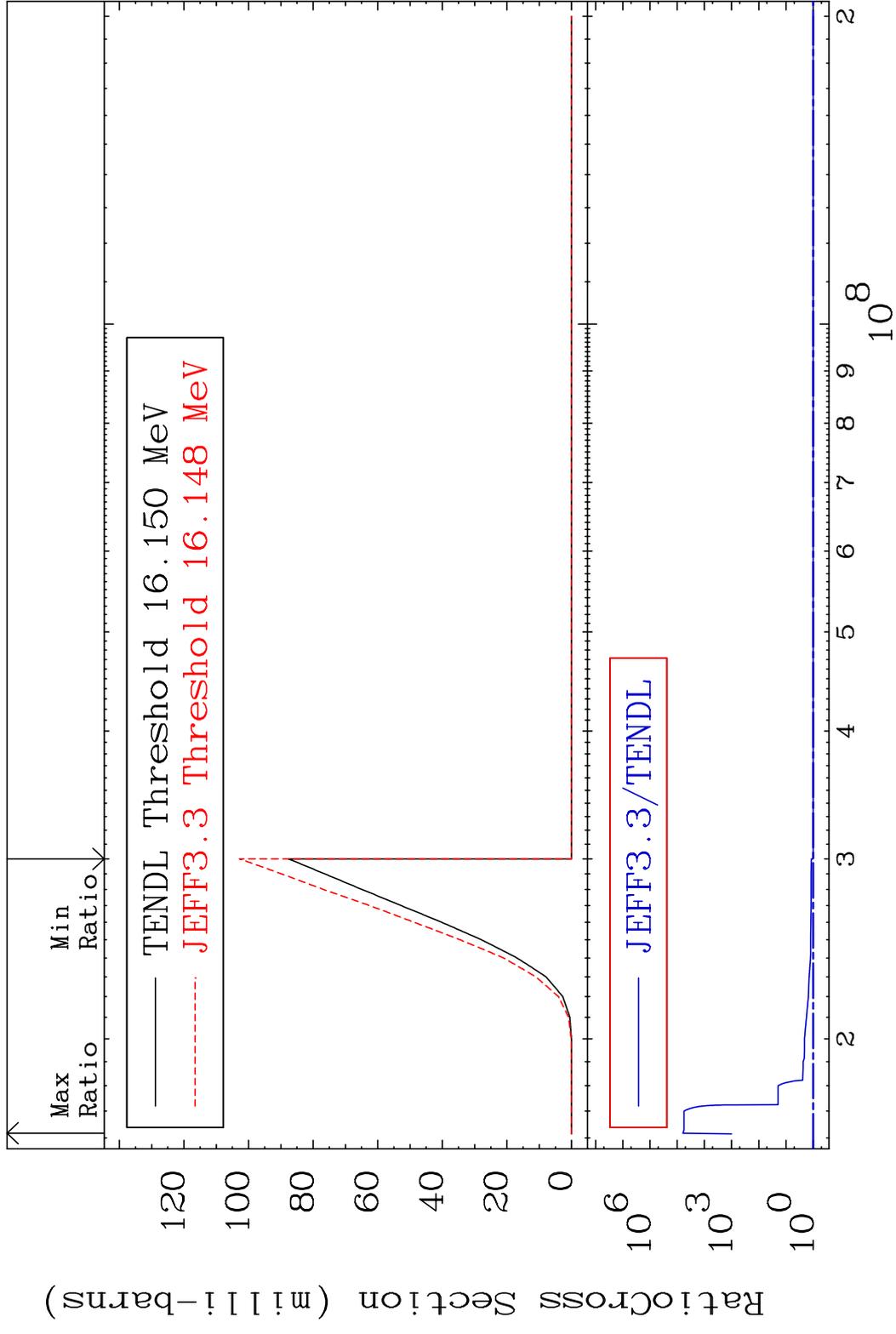
MAT 4440 Dpa disappearance (mt102 -120) 44-Ru-101
 Cross Section -98.55 To 9999. %

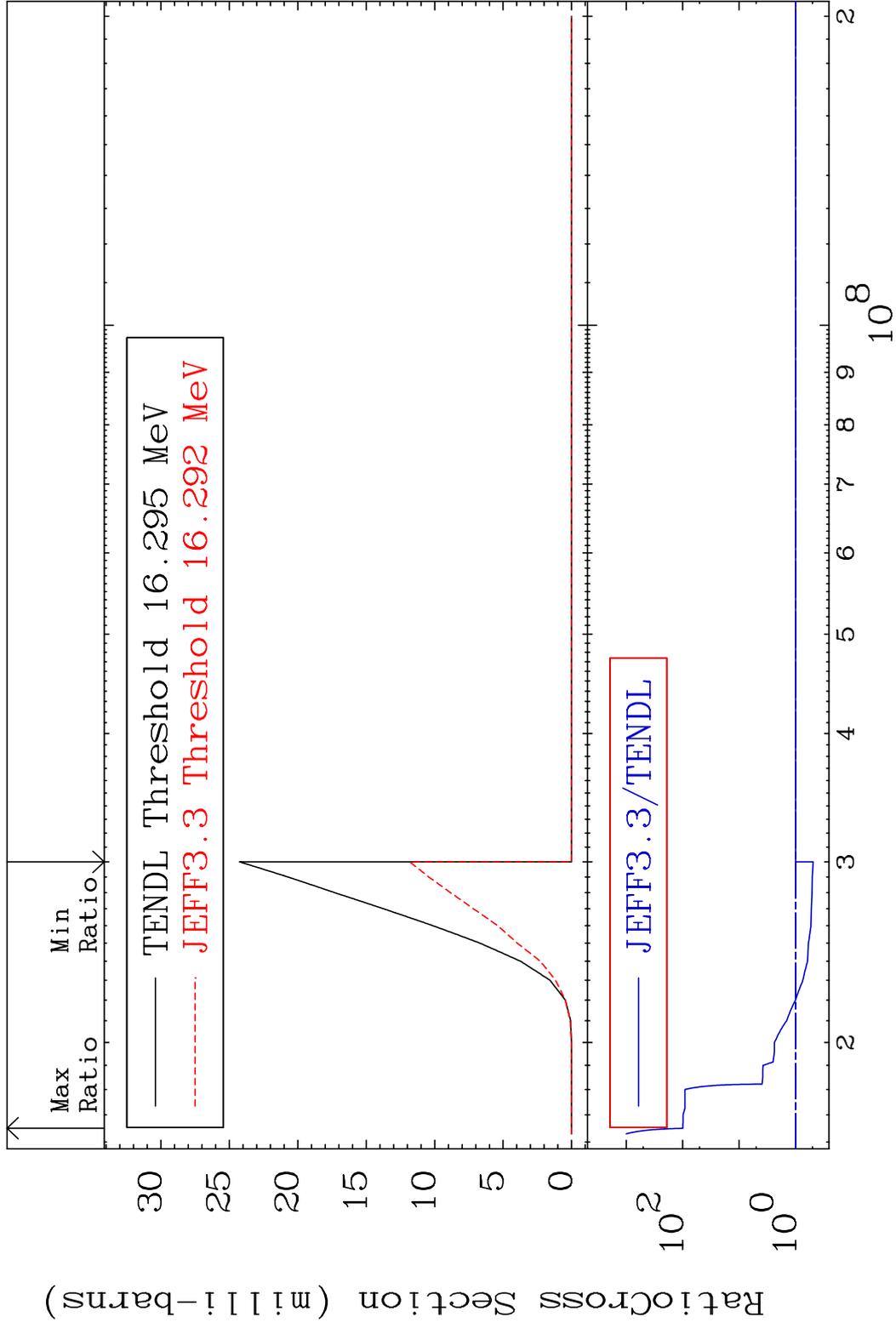




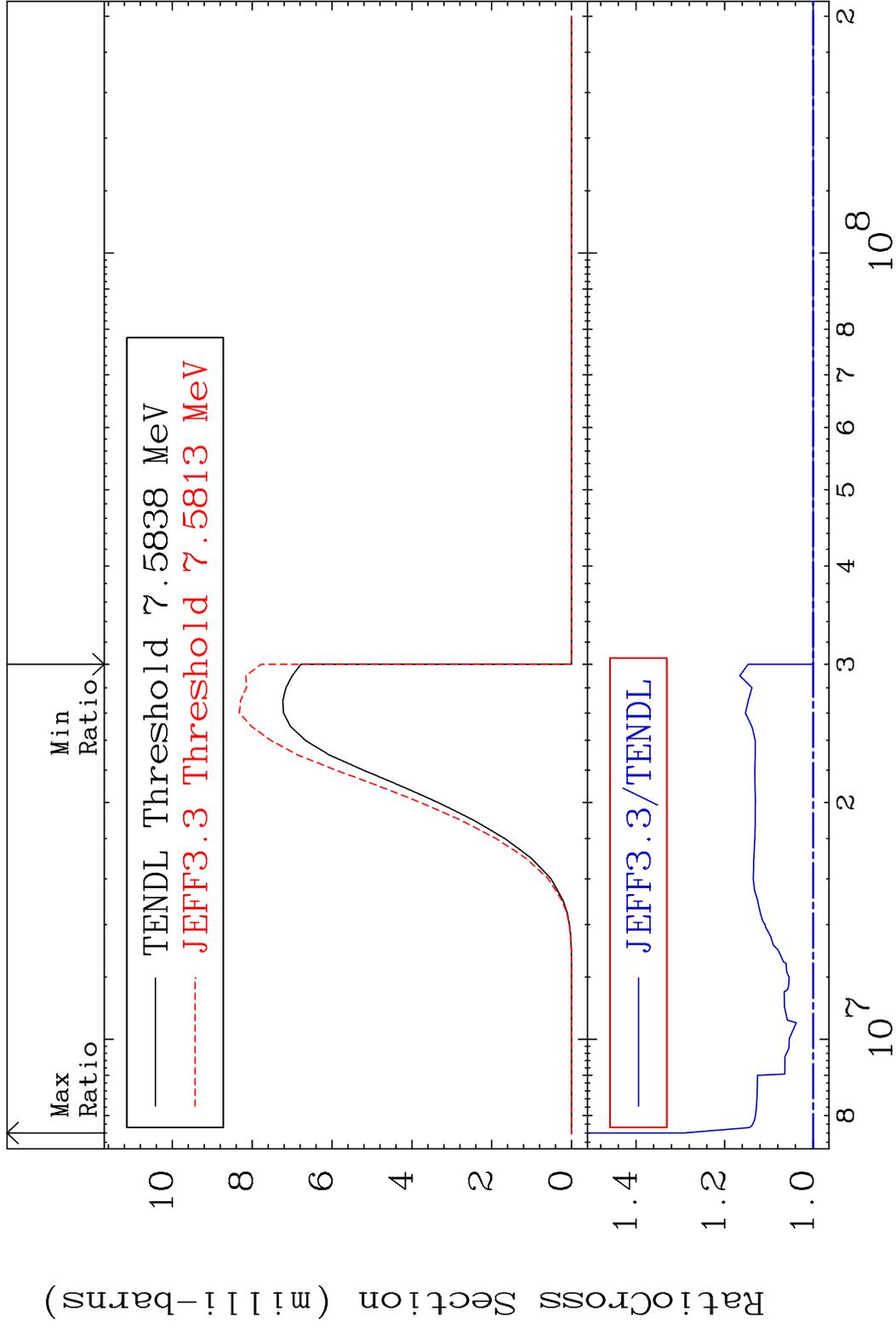
MAT 4440 (n, n') d:43-Tc-99m2 44-Ru-101
 Radionuclide Production Cross Section 53e671d10 877.2 %







MAT 4440 (n, t):43-Tc-99g 44-Ru-101
 Radionuclide Production Cross Section 29.43 %



MAT 4440 (n,t):43-Tc-99m2 44-Ru-101
 Radionuclide Production Cross Section 58.61 mb 15.53 %

