

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

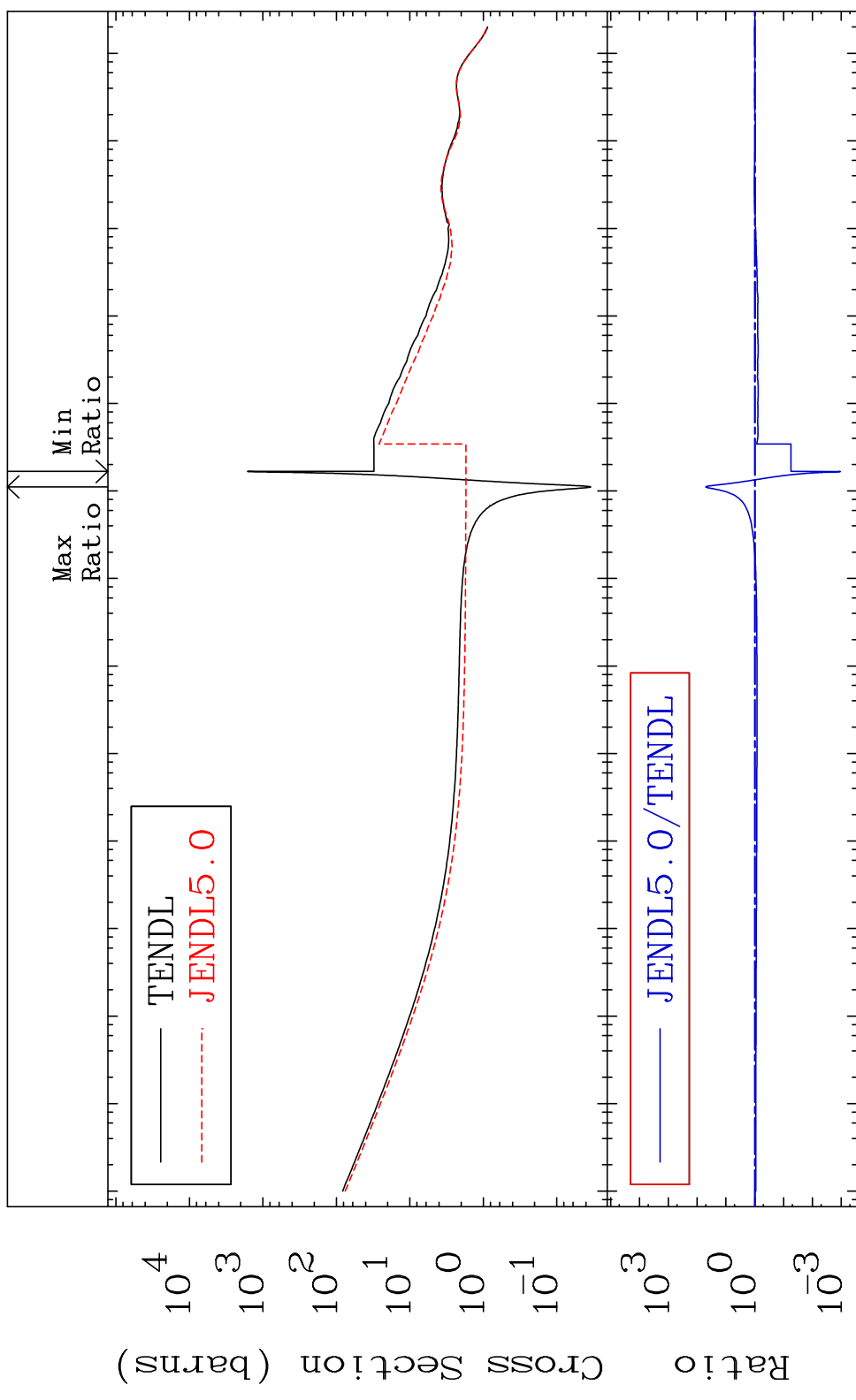
Press Mouse Button to Start

MAT 2219

Total

22-Ti-44

Cross Section -99.89 To 4910. %



1

Incident Energy (eV)

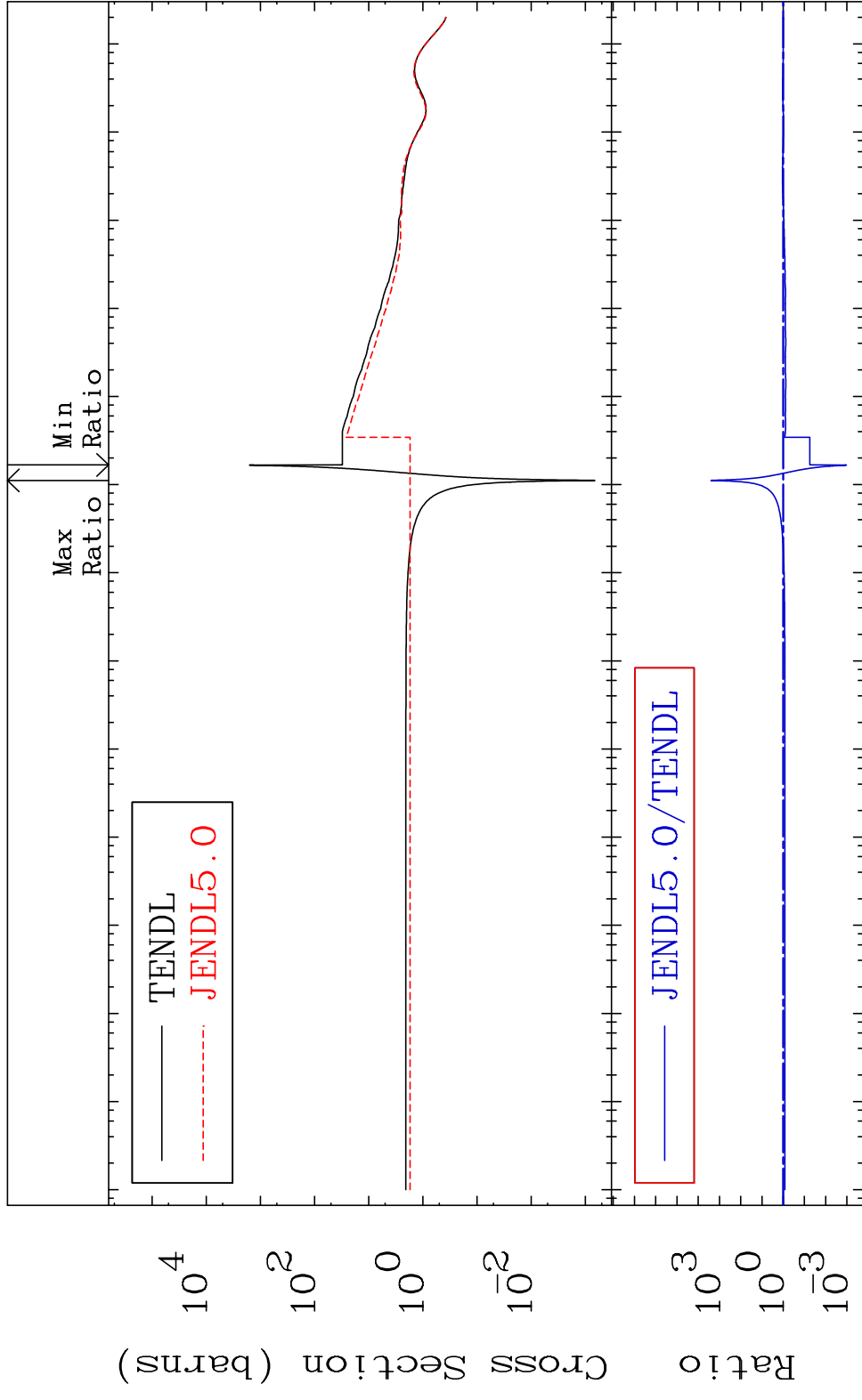
22-Ti-44

MAT 2219

Elastic

22-Ti-44

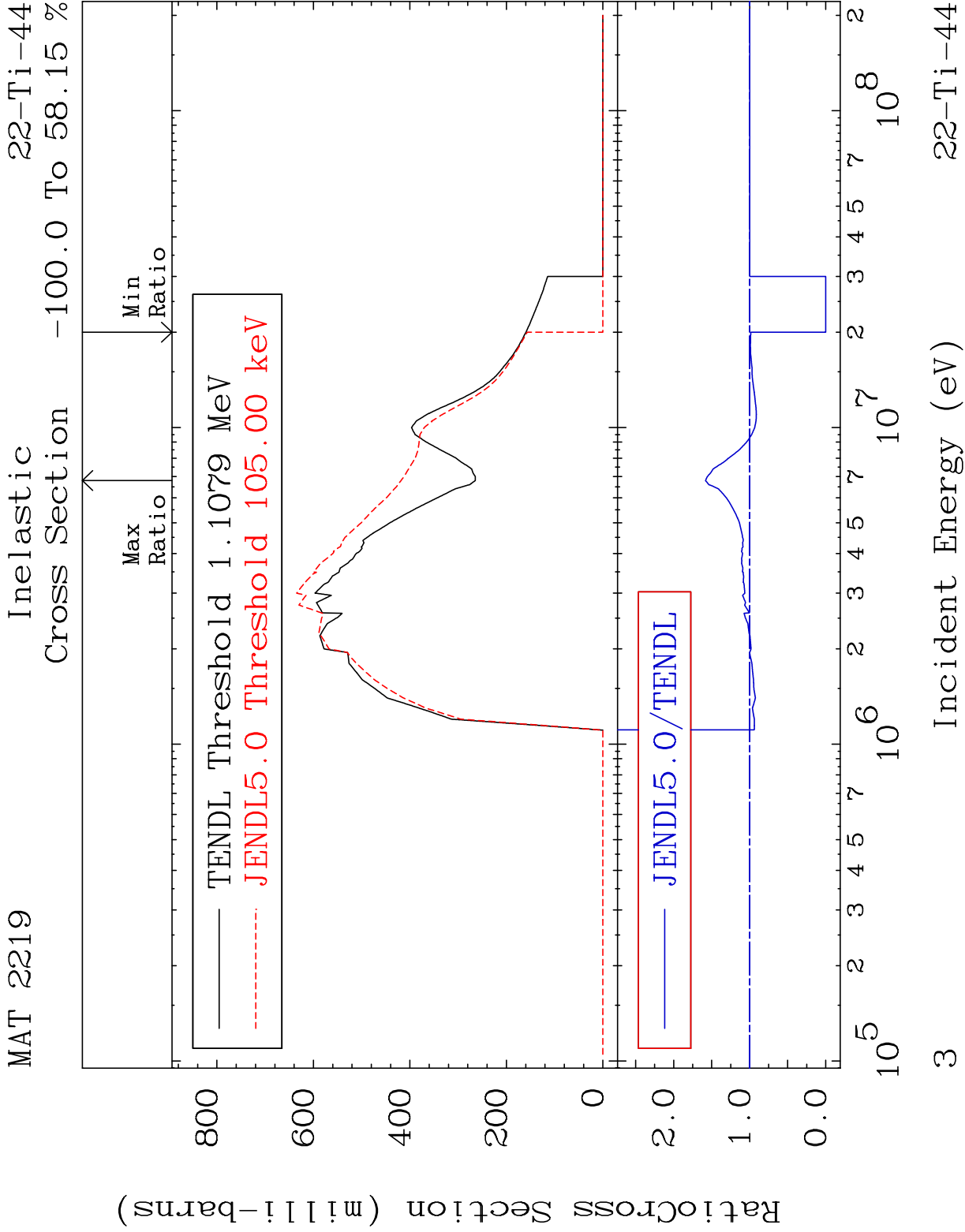
Cross Section -99.89 To 9999. %



2

Incident Energy (eV)

22-Ti-44

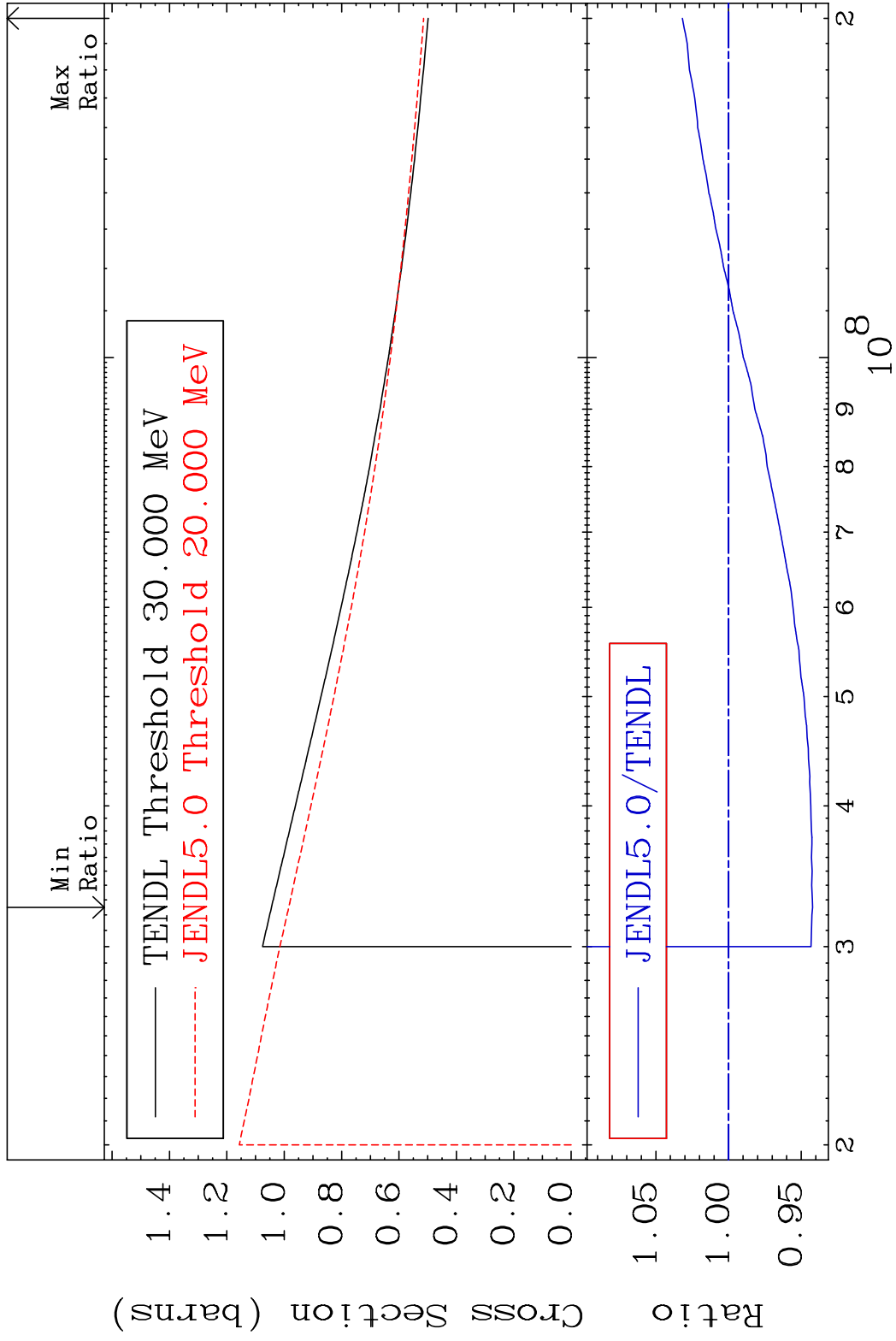


MAT 2219

(n, remainder)

22-Ti-44

Cross Section -5.777 To 3.176 %

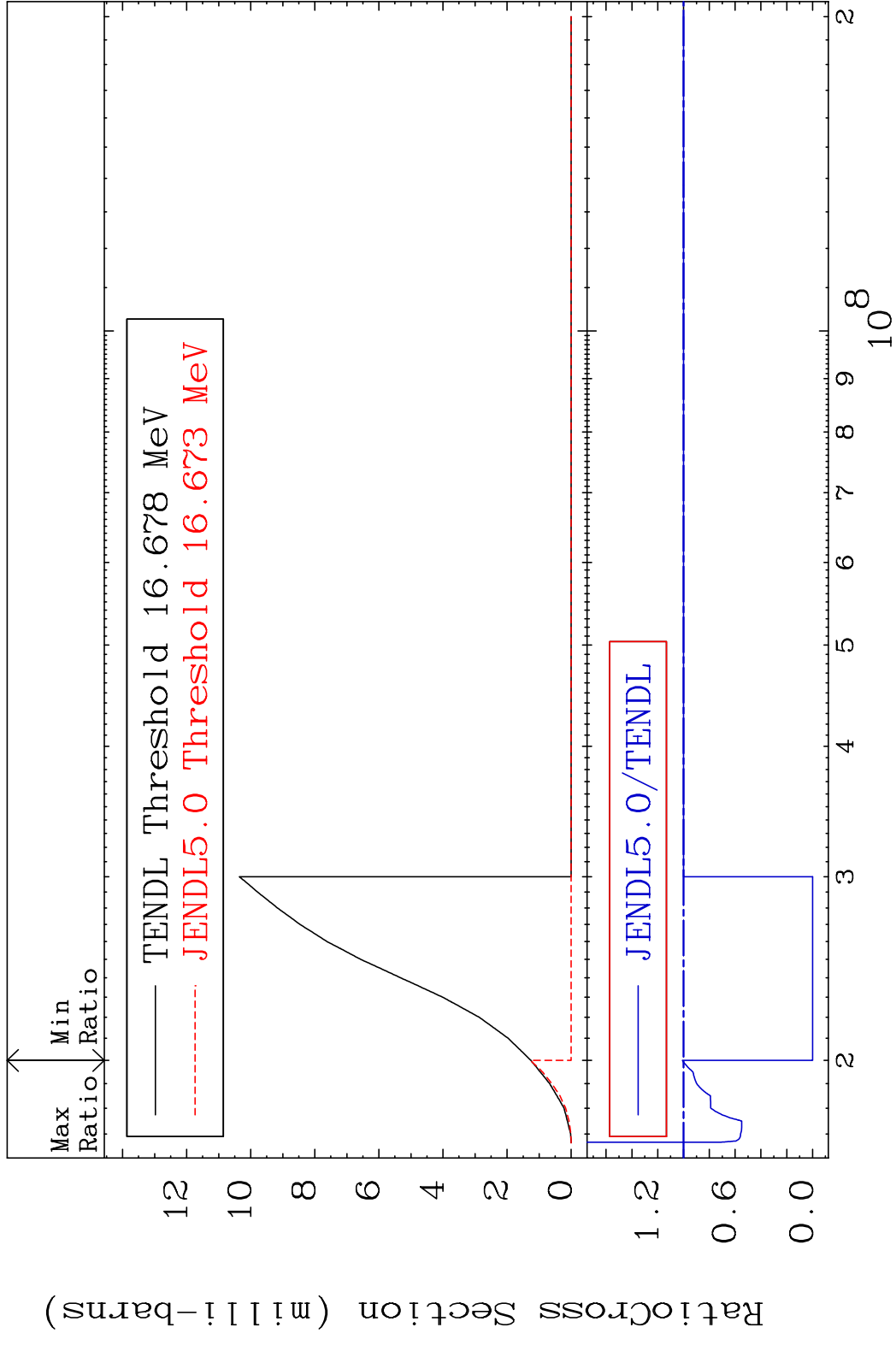


4

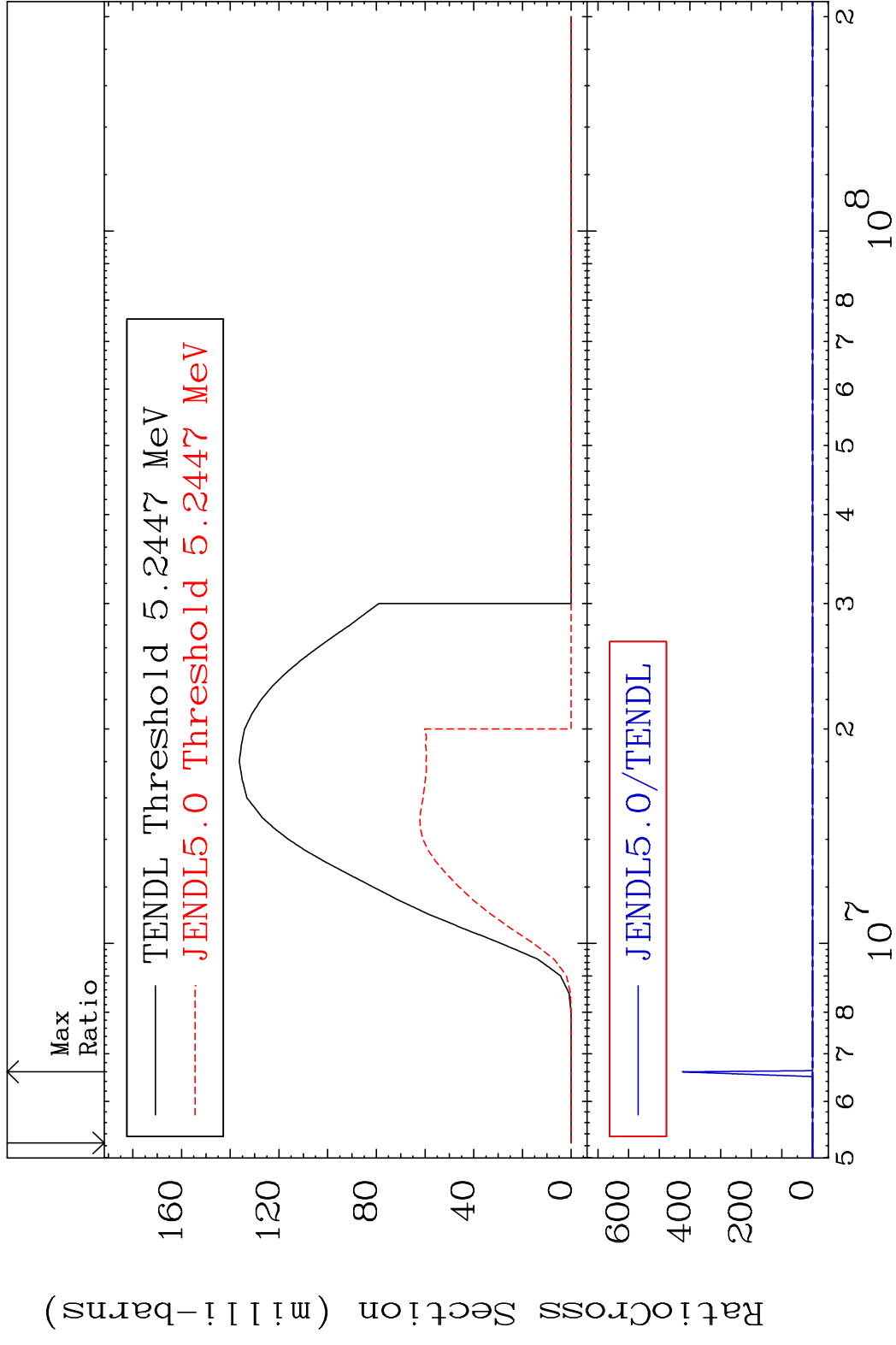
Incident Energy (eV)

22-Ti-44

MAT 2219 (n,2n) 22-Ti-44  
 Cross Section -100.0 To 0.900 %

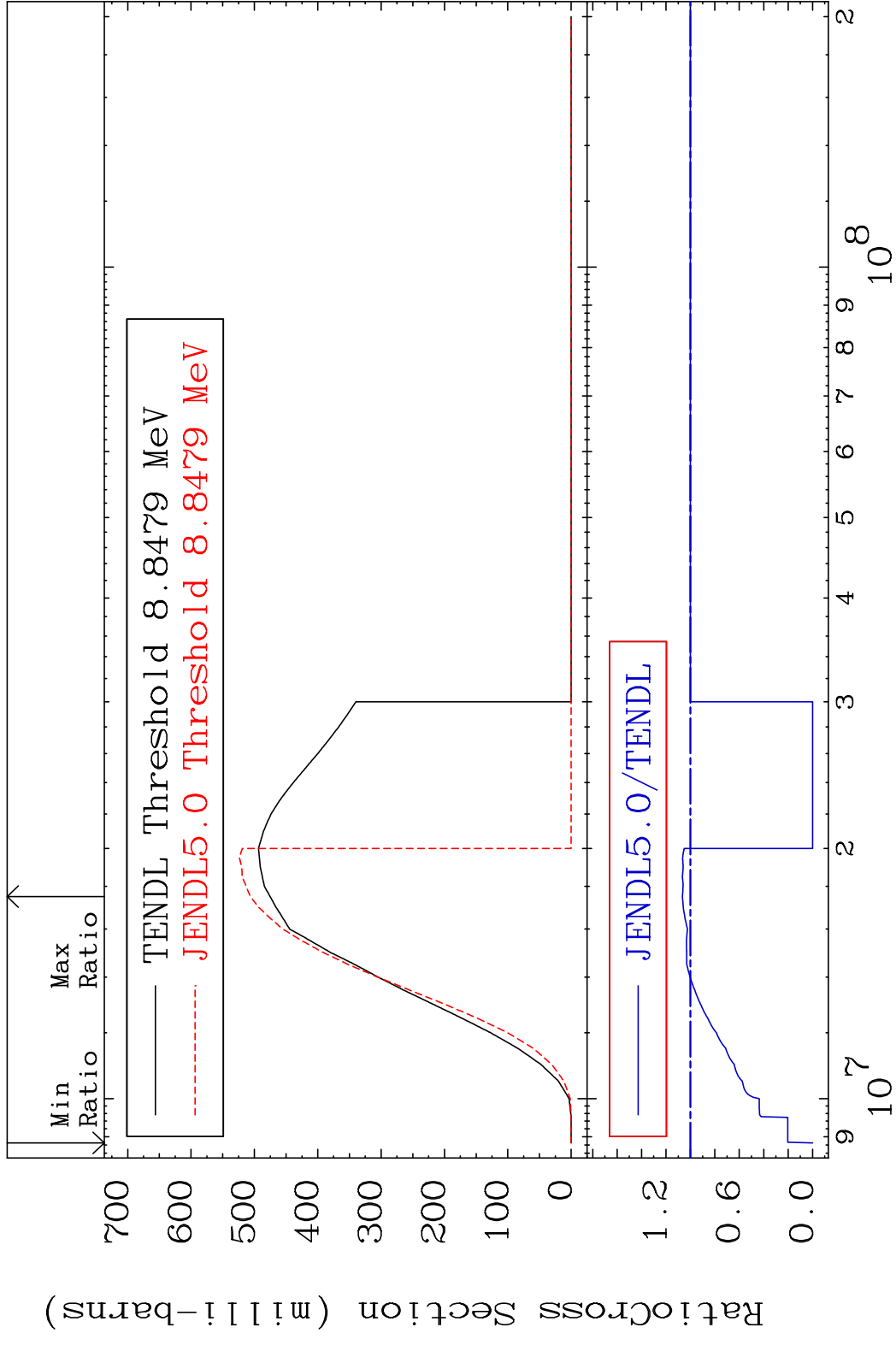


MAT 2219 (n, n')  $\alpha$  22-Ti-44  
 Cross Section -100.0 To 9999. %



6 6 Incident Energy (eV) 22-Ti-44

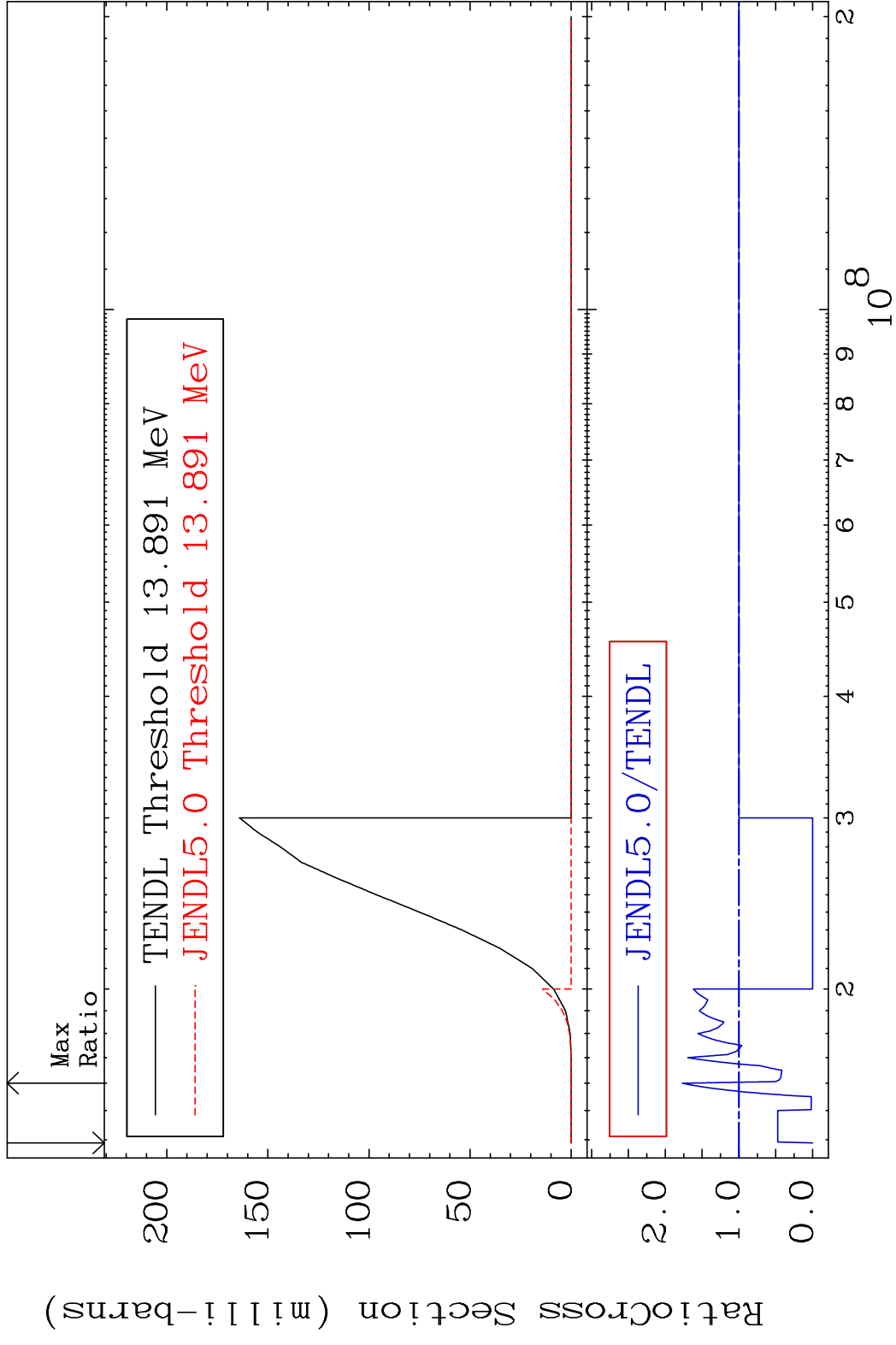
MAT 2219 (n, n') p 22-Ti-44  
 Cross Section -100.0 To 6.585 %



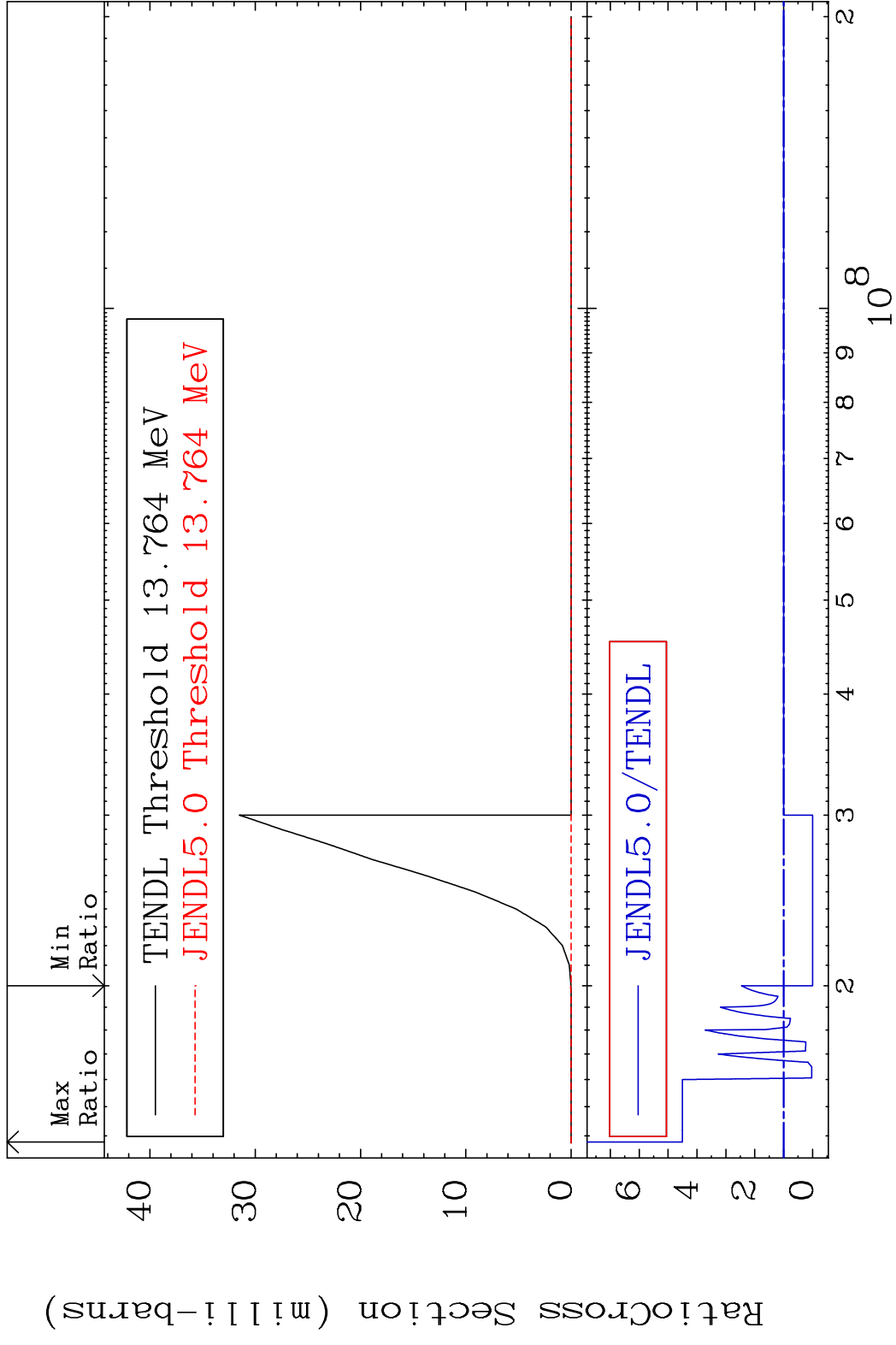
7 22-Ti-44



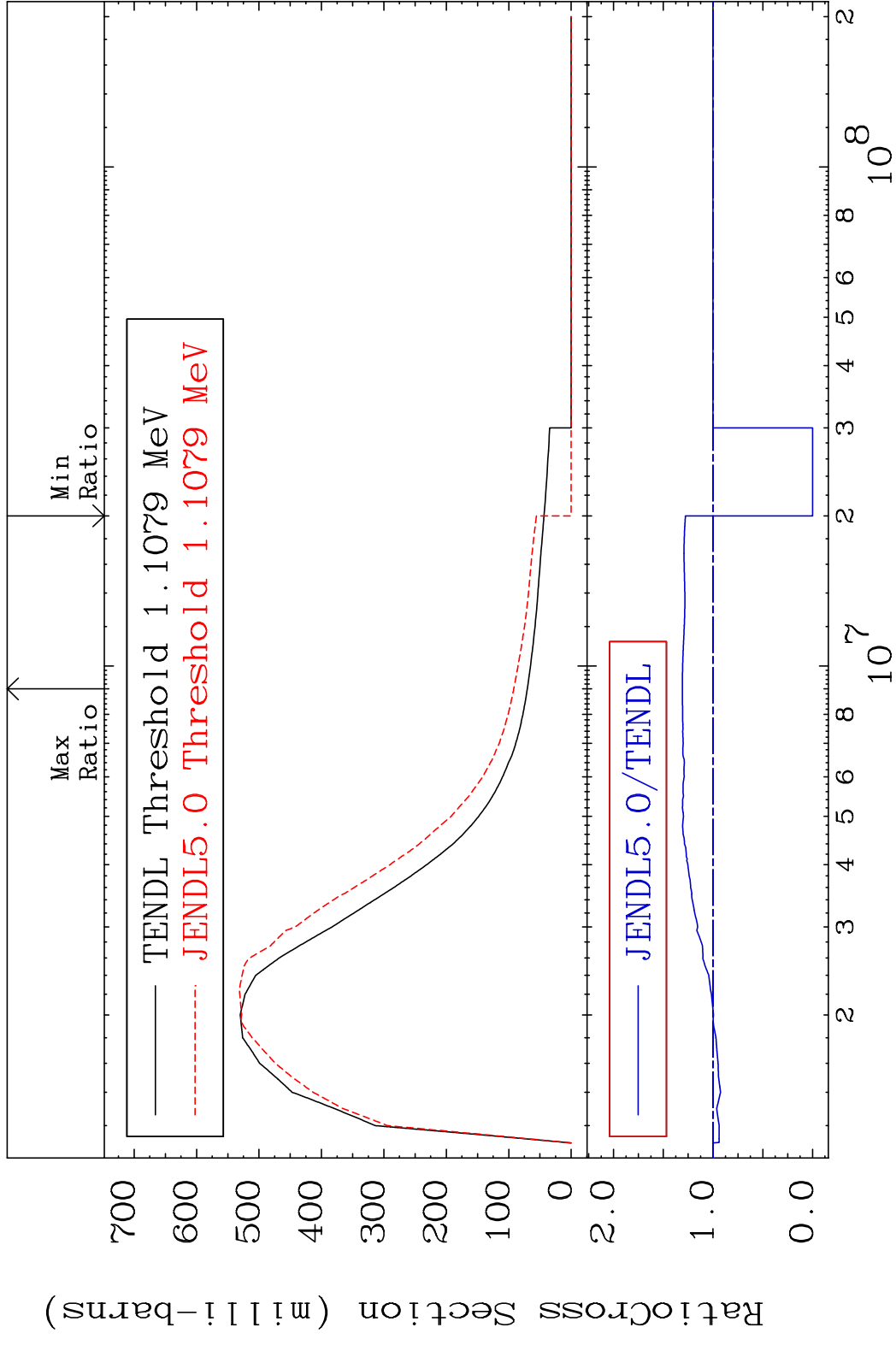
MAT 2219 (n,2n) p 22-Ti-44  
 Cross Section -100.0 To 76.77 %



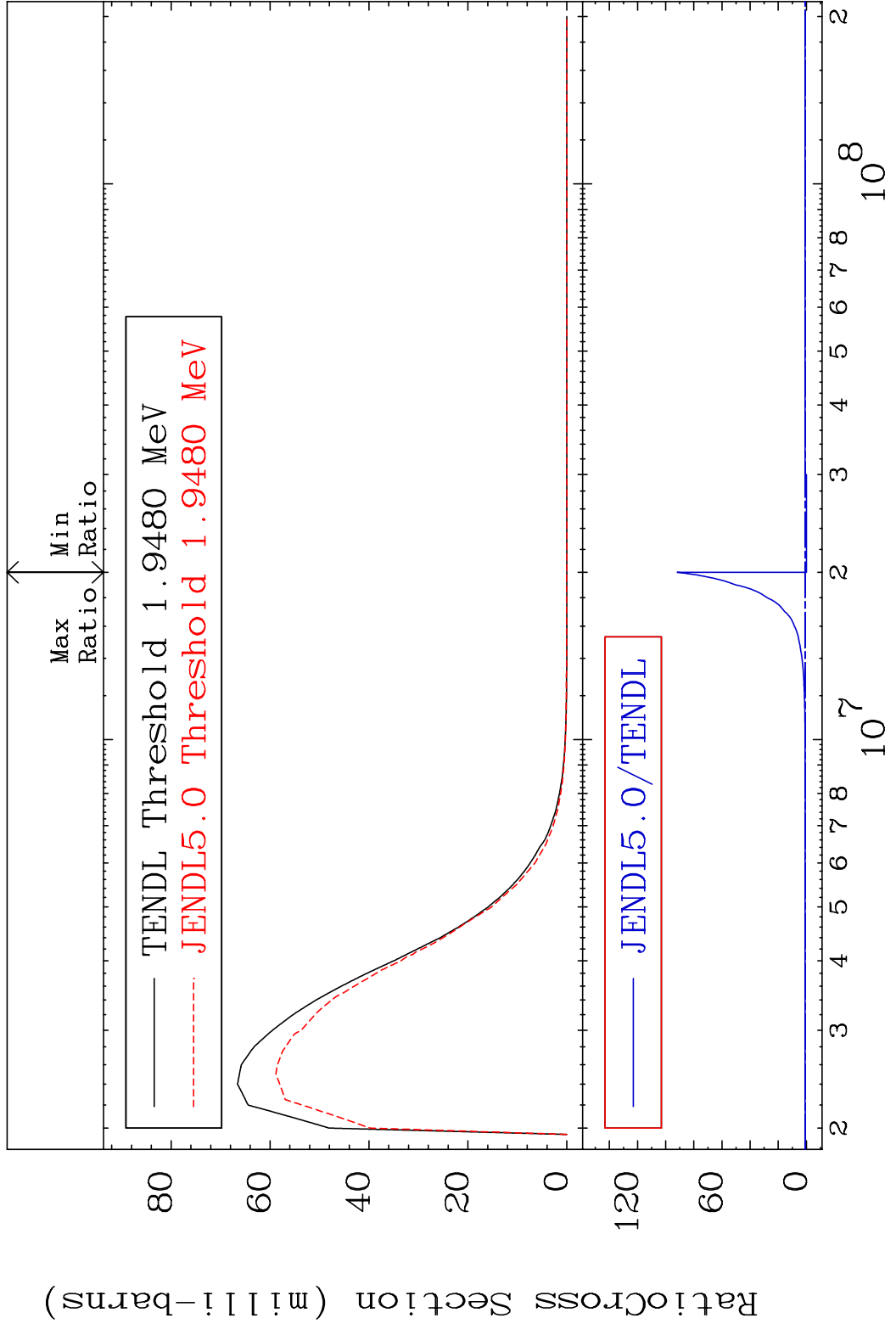
MAT 2219 (n,n') p α 22-Ti-44  
 Cross Section -100.0 To 350.6 %



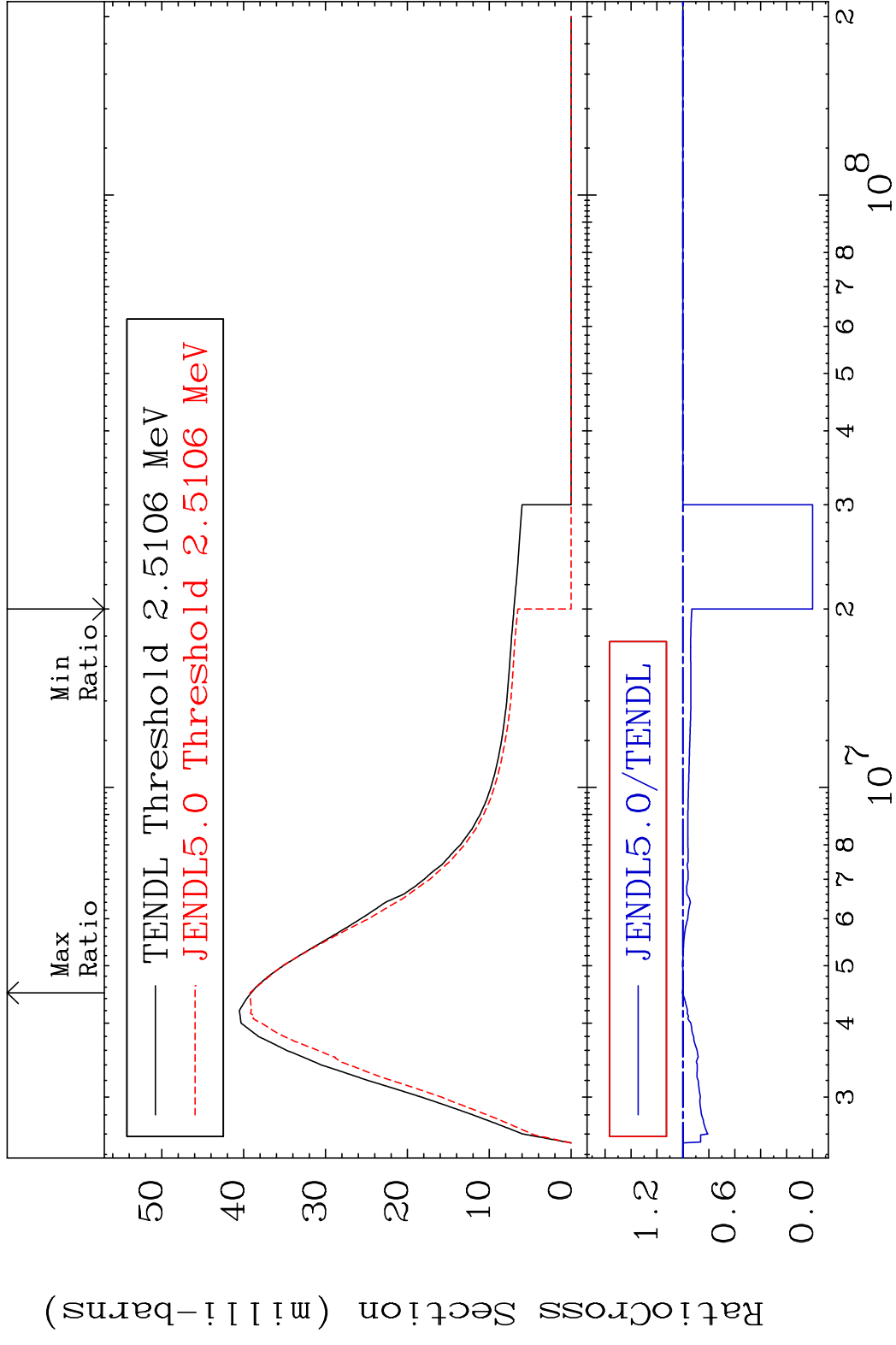
MAT 2219 MT= 51 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 30.86 %



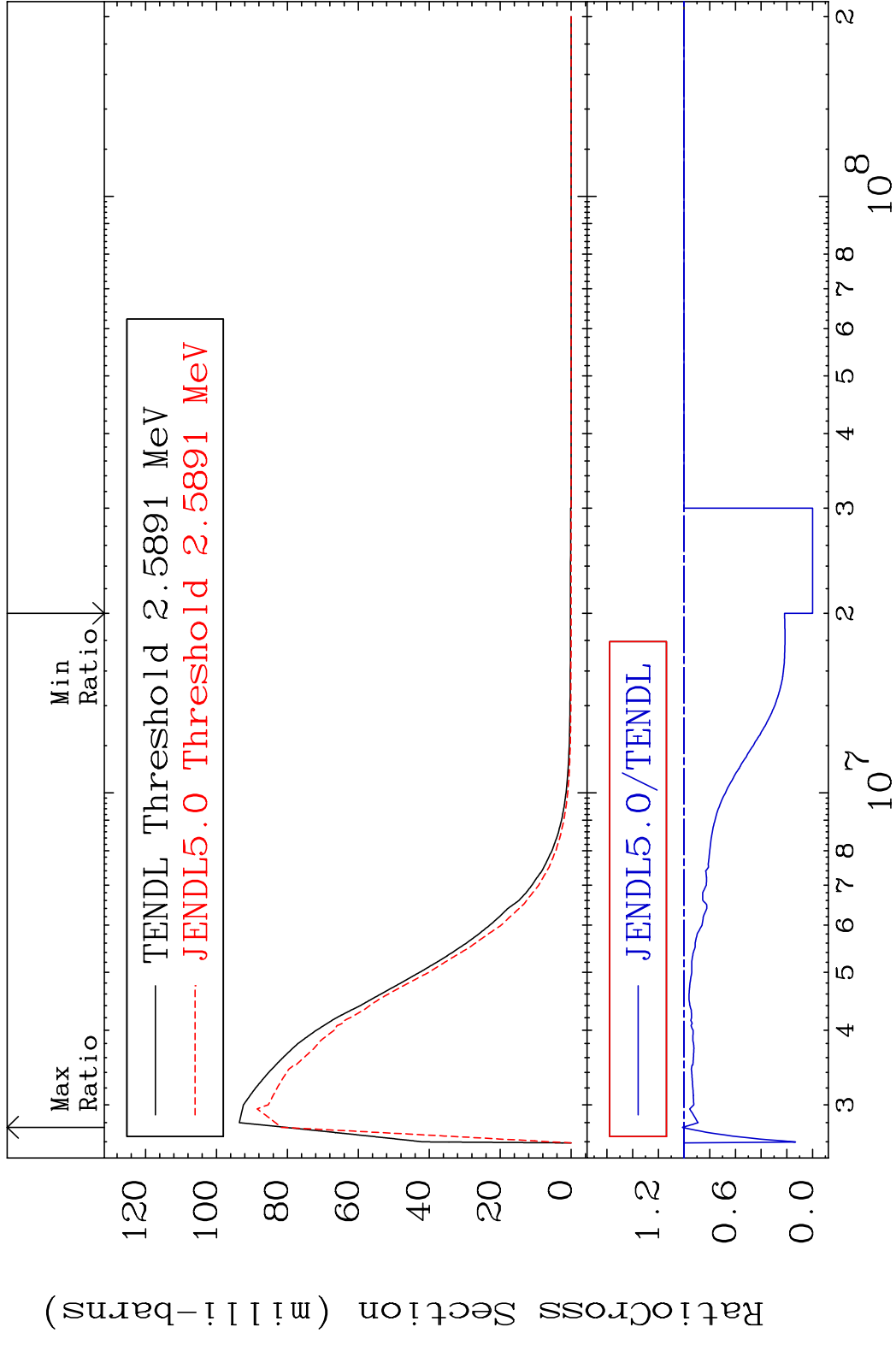
MAT 2219 MT= 52 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 9084. %



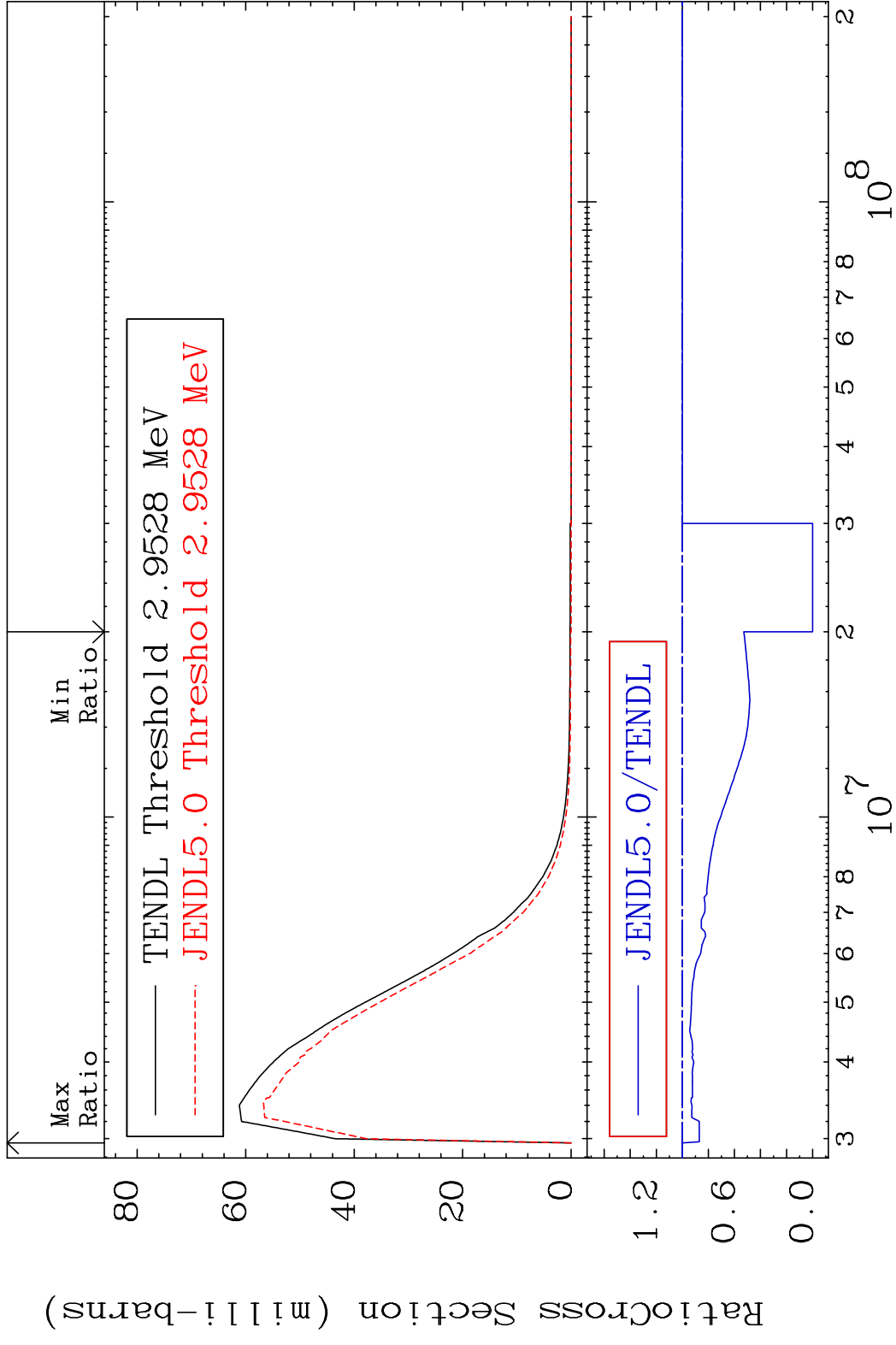
MAT 2219 MT= 53 (n,n') Level 22-Ti-44  
 Cross Section -100.0 To 0.411 %



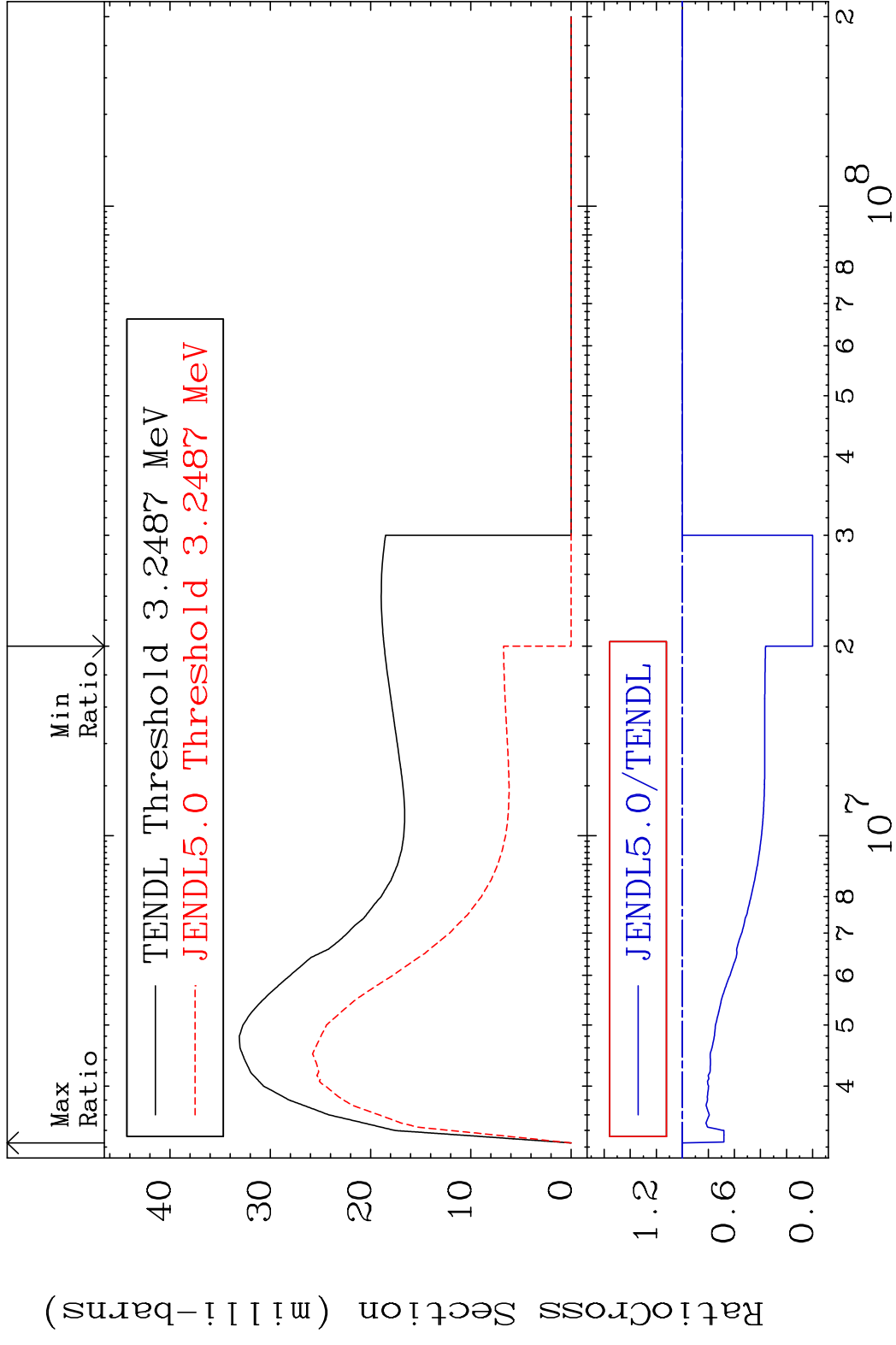
MAT 2219 MT= 54 (n,n') Level 22-Ti-44  
 Cross Section -100.0 To 1.336 %



MAT 2219 MT= 55 (n,n') Level 22-Ti-44  
 Cross Section -100.0 To 0.000 %

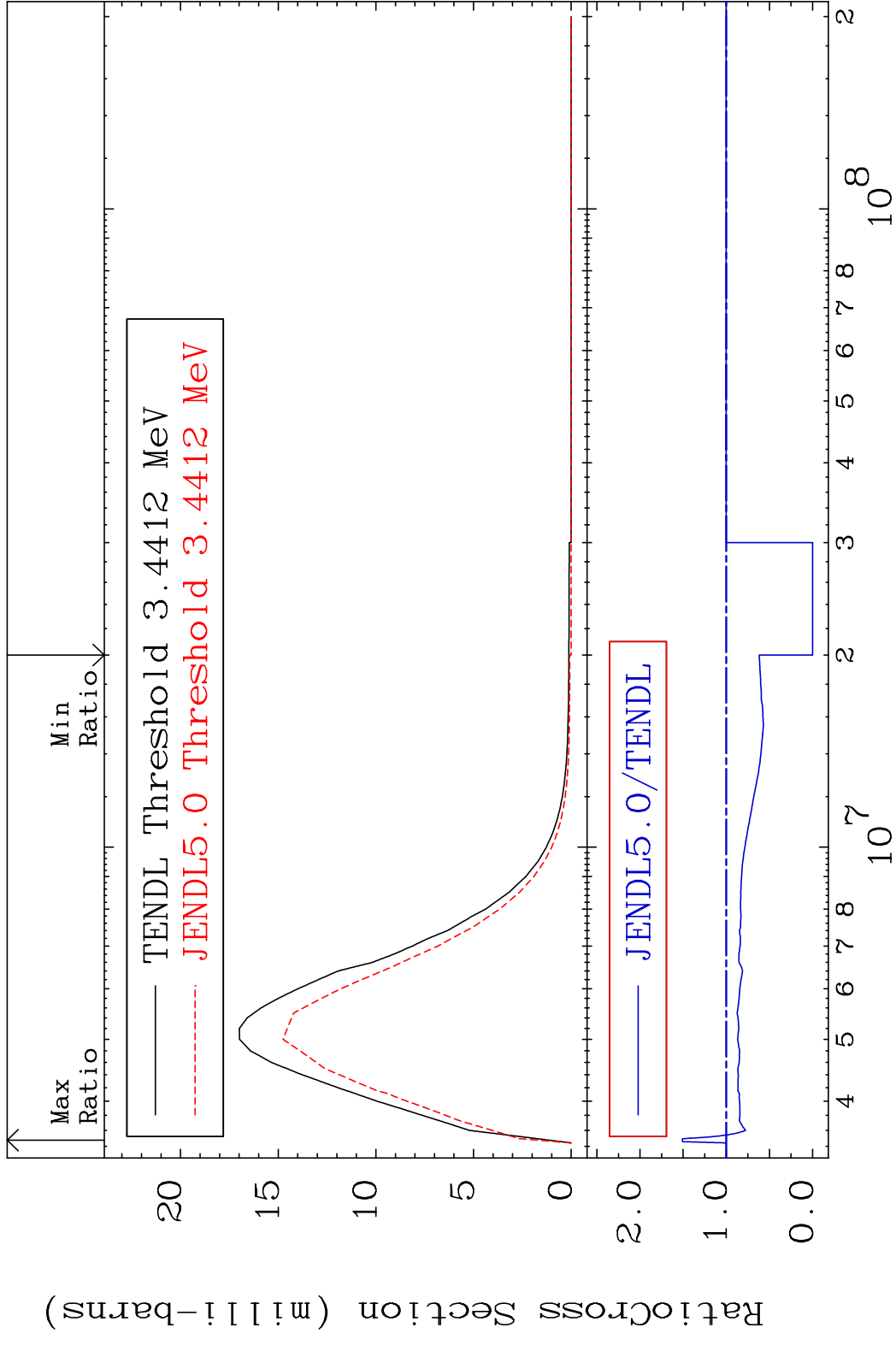


MAT 2219 MT= 56 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 0.000 %

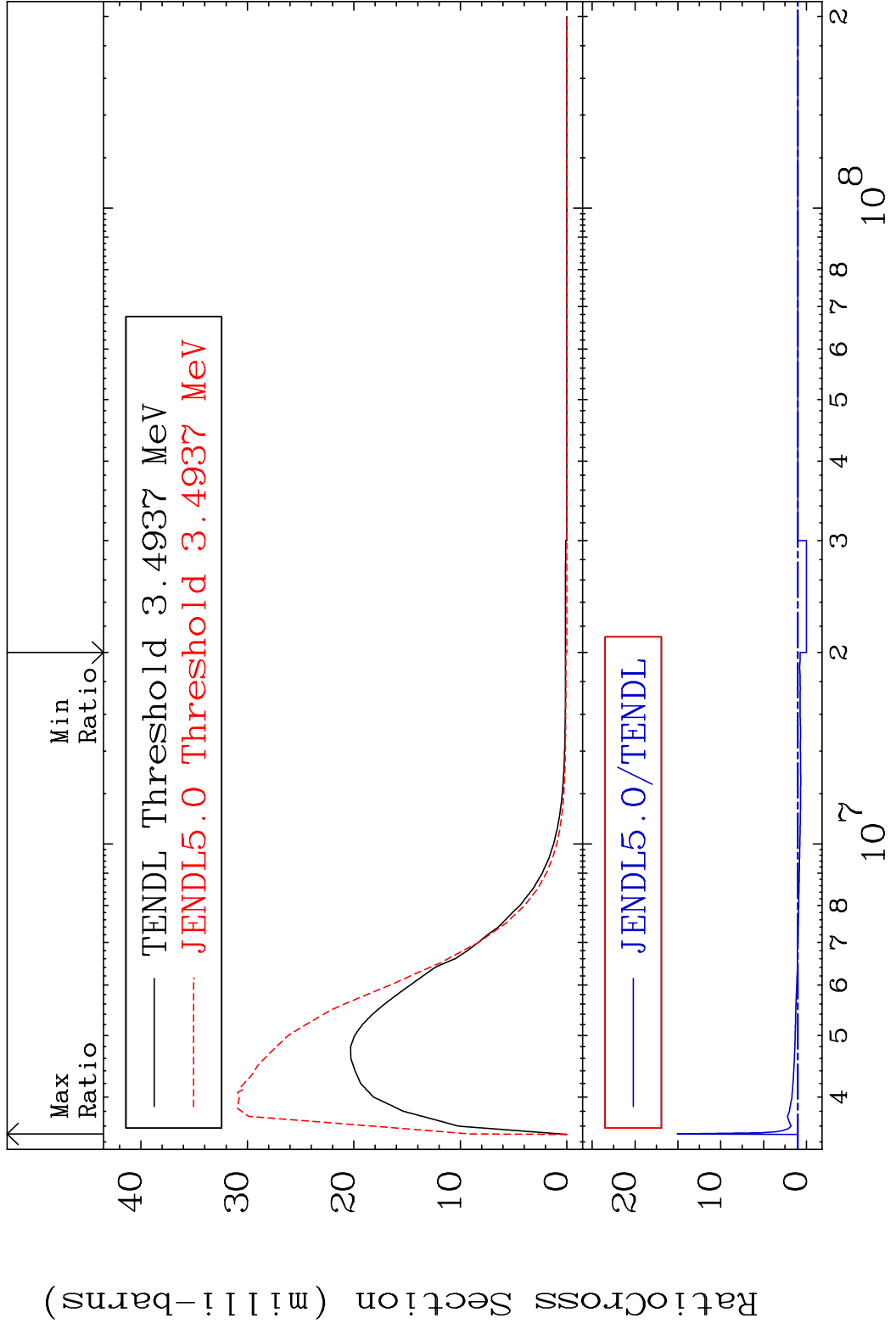




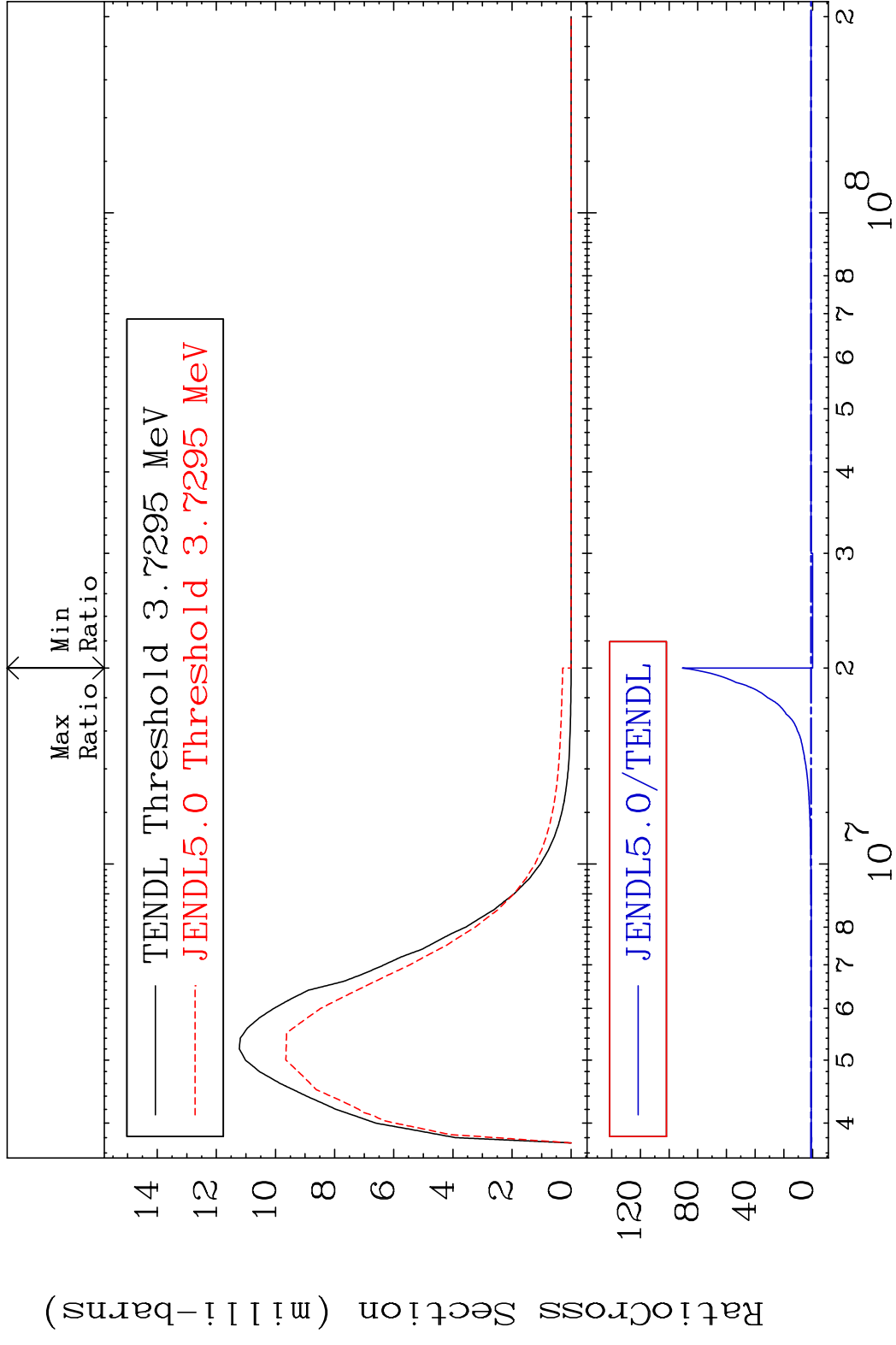
MAT 2219 MT= 57 (n,n') Level 22-Ti-44  
 Cross Section -100.0 To 50.91 %



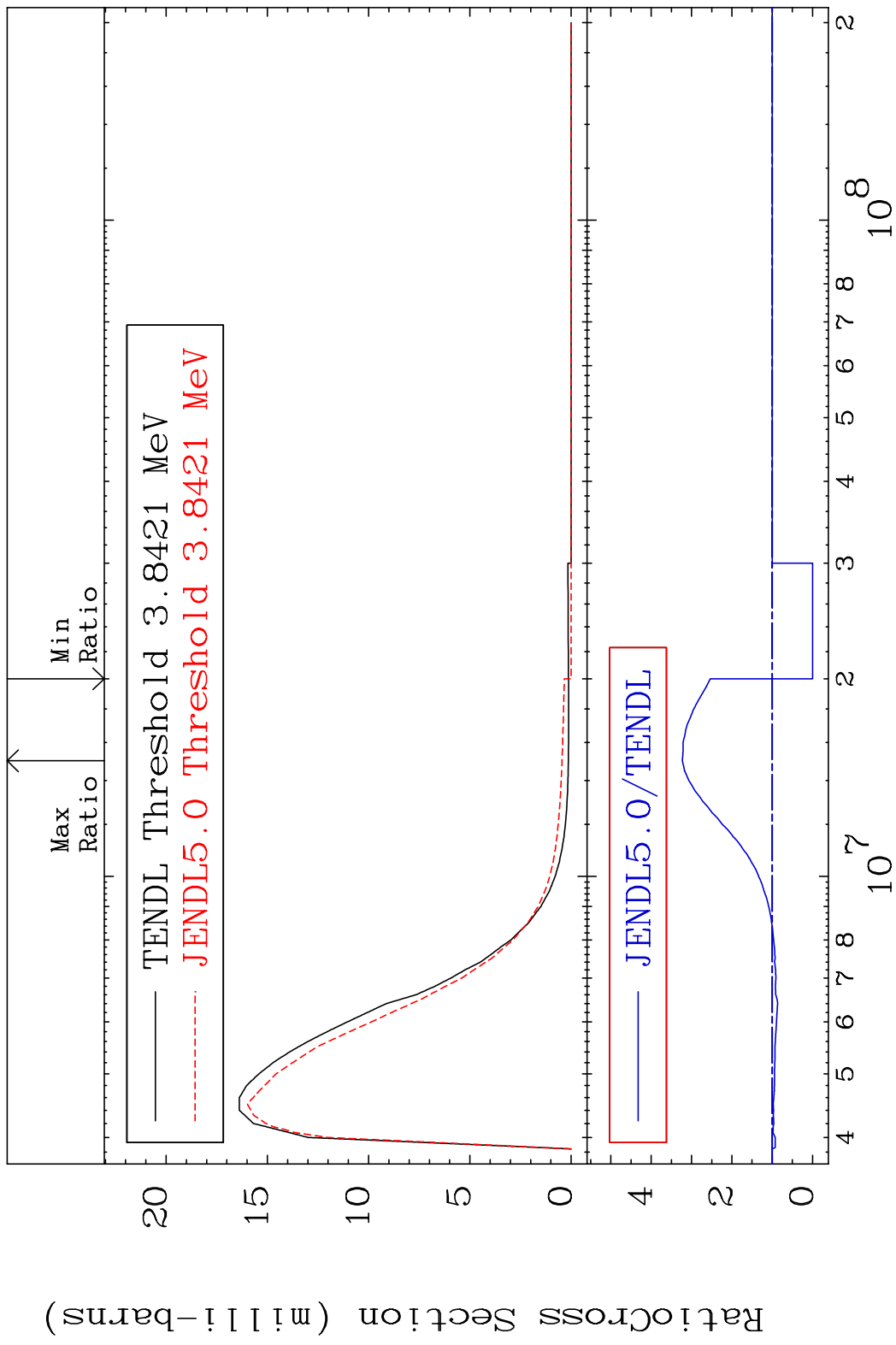
MAT 2219 MT= 58 (n,n') Level 22-Ti-44  
 Cross Section -100.0 To 1408. %



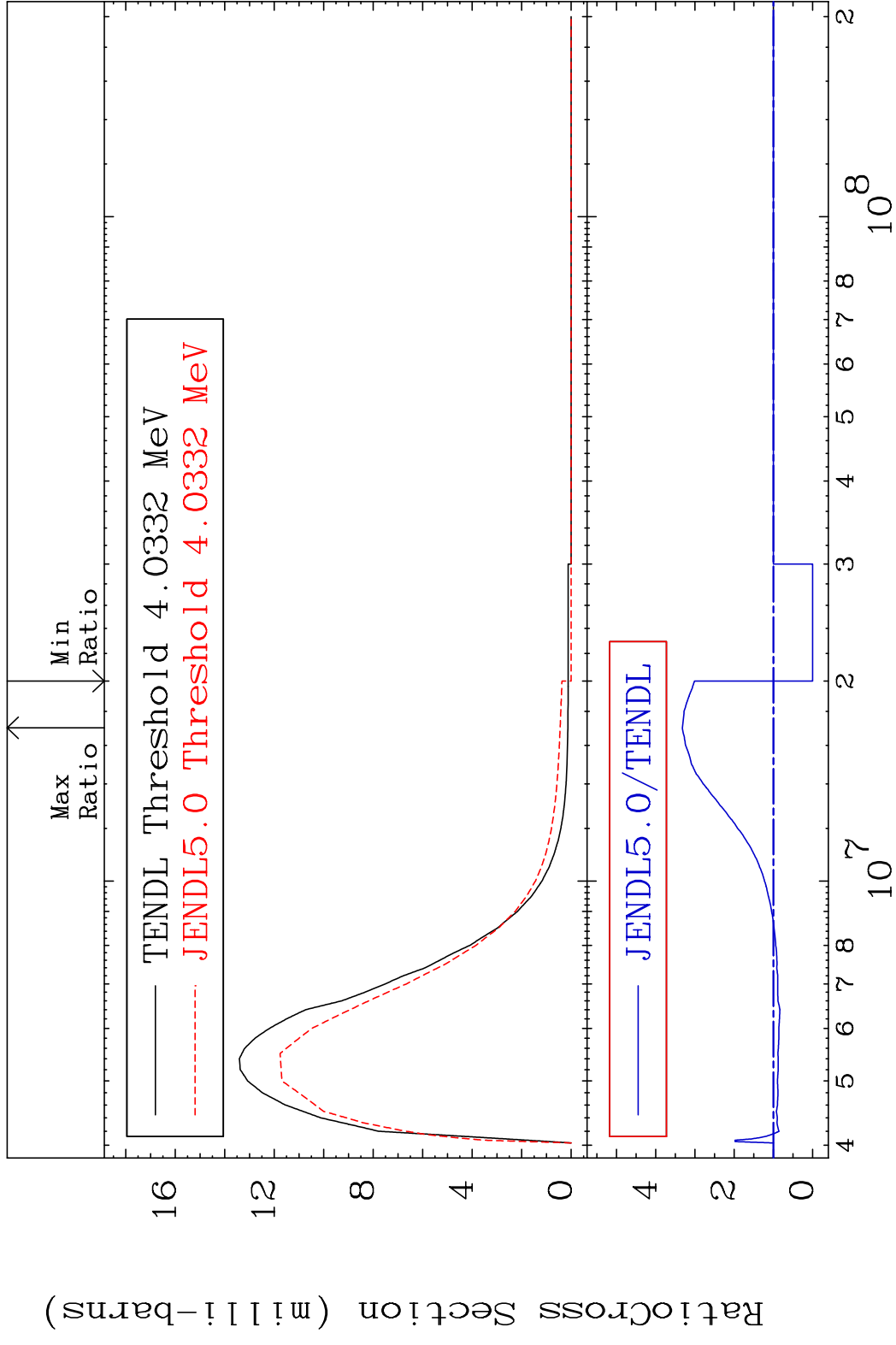
MAT 2219 MT= 59 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 8975. %



MAT 2219 MT= 60 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 222.7 %

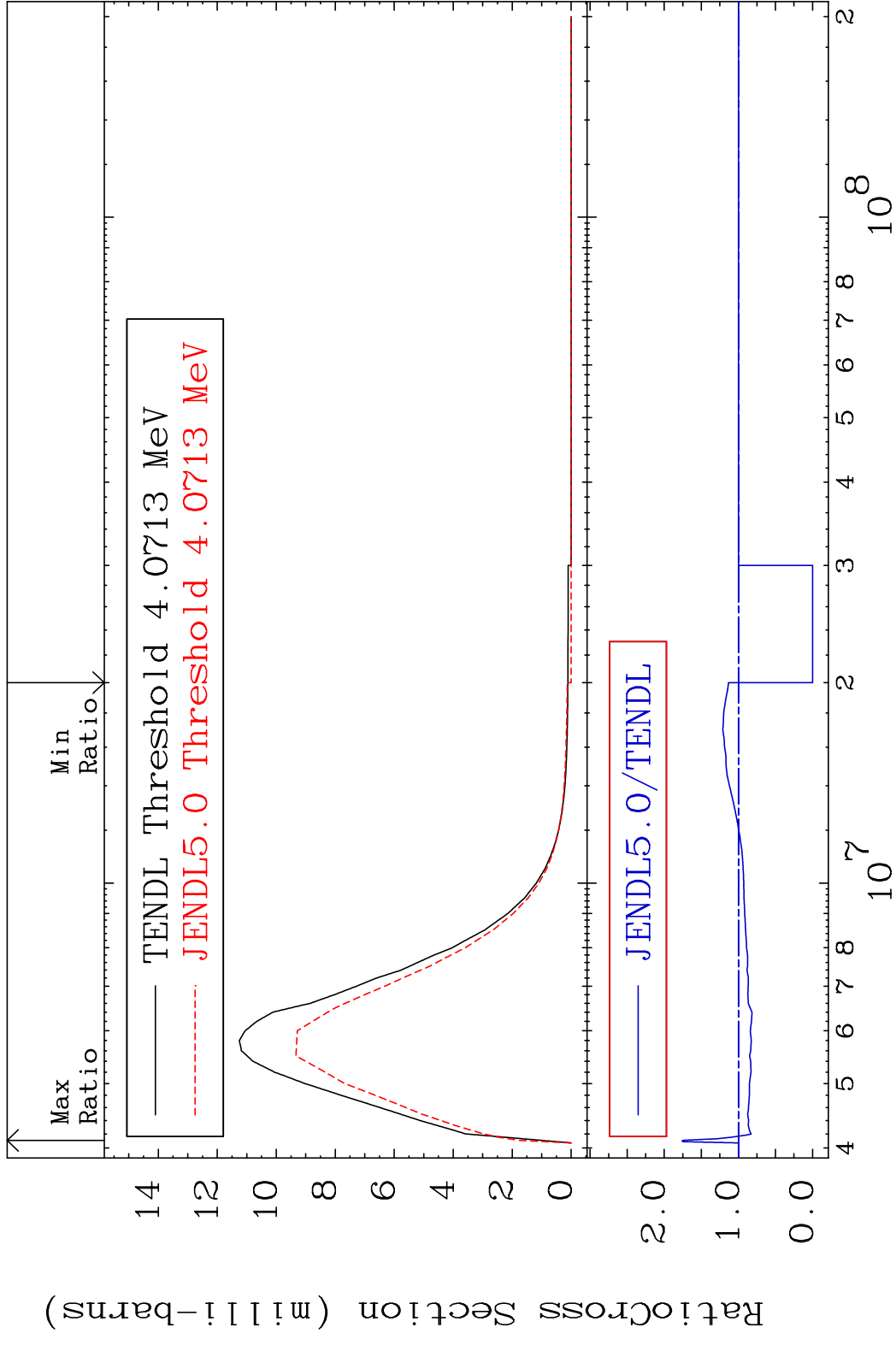


MAT 2219 MT= 61 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 232.1 %

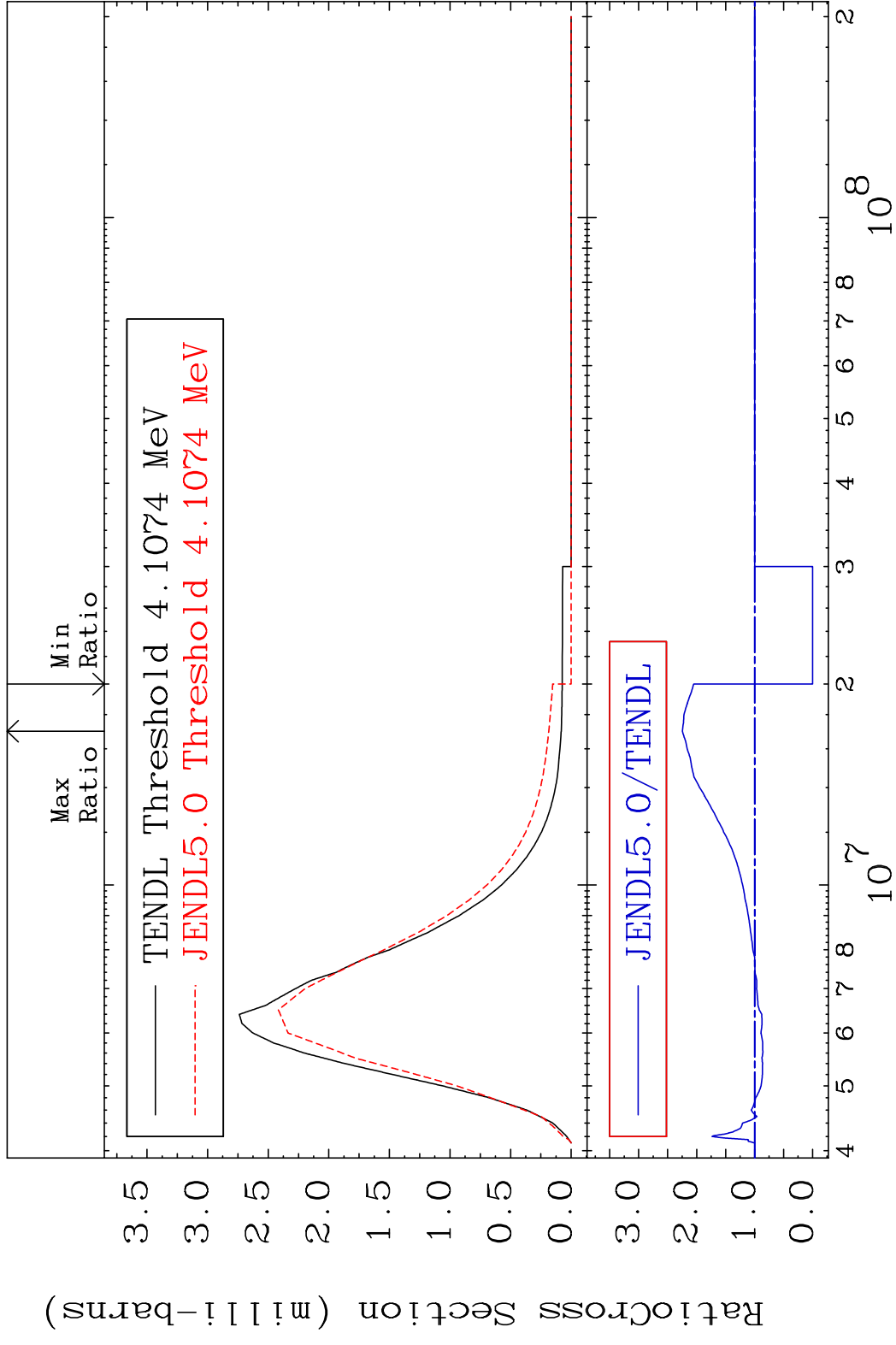


20 22-Ti-44

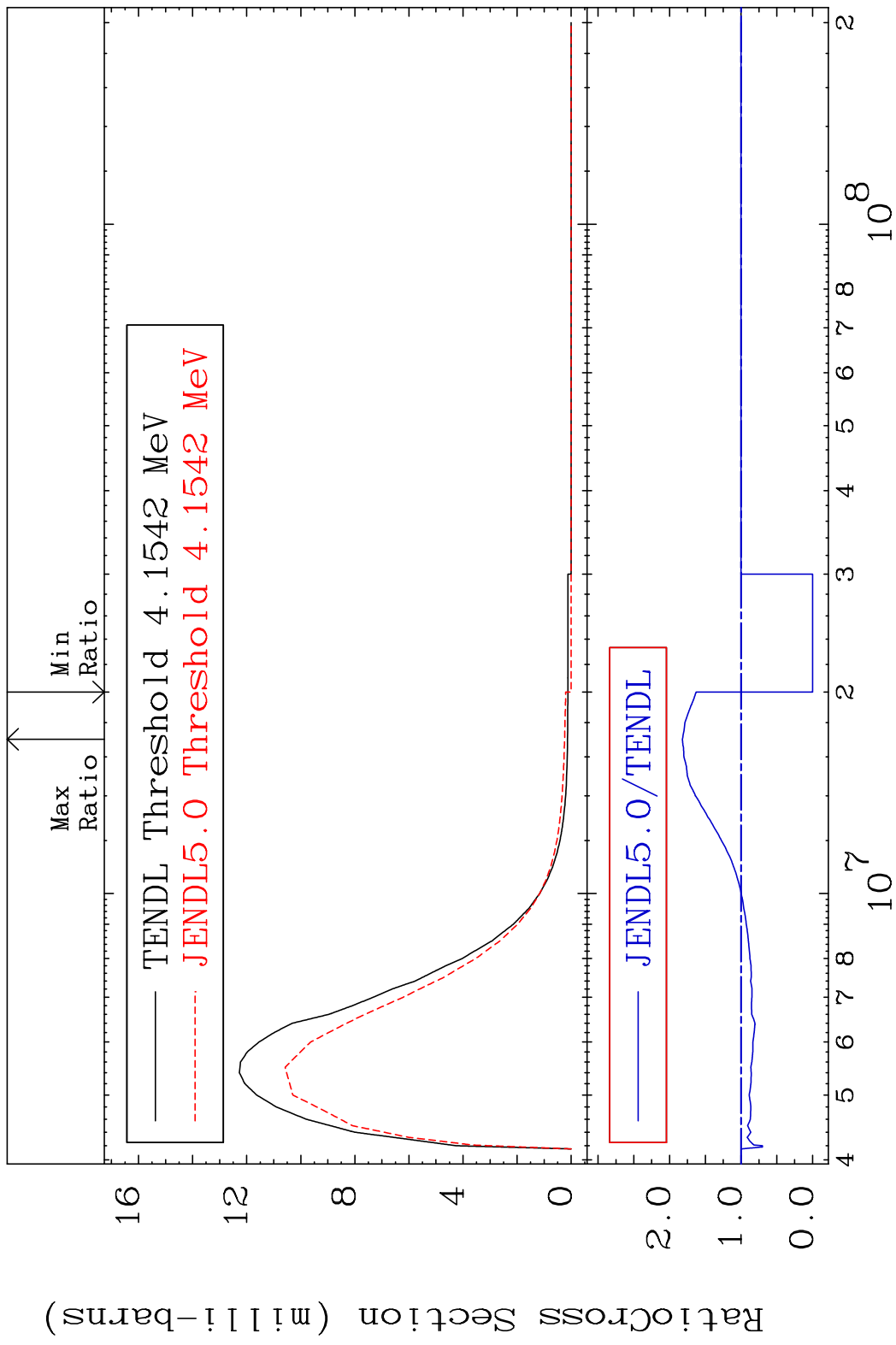
MAT 2219 MT= 62 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 75.57 %



MAT 2219 MT= 63 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 124.7 %

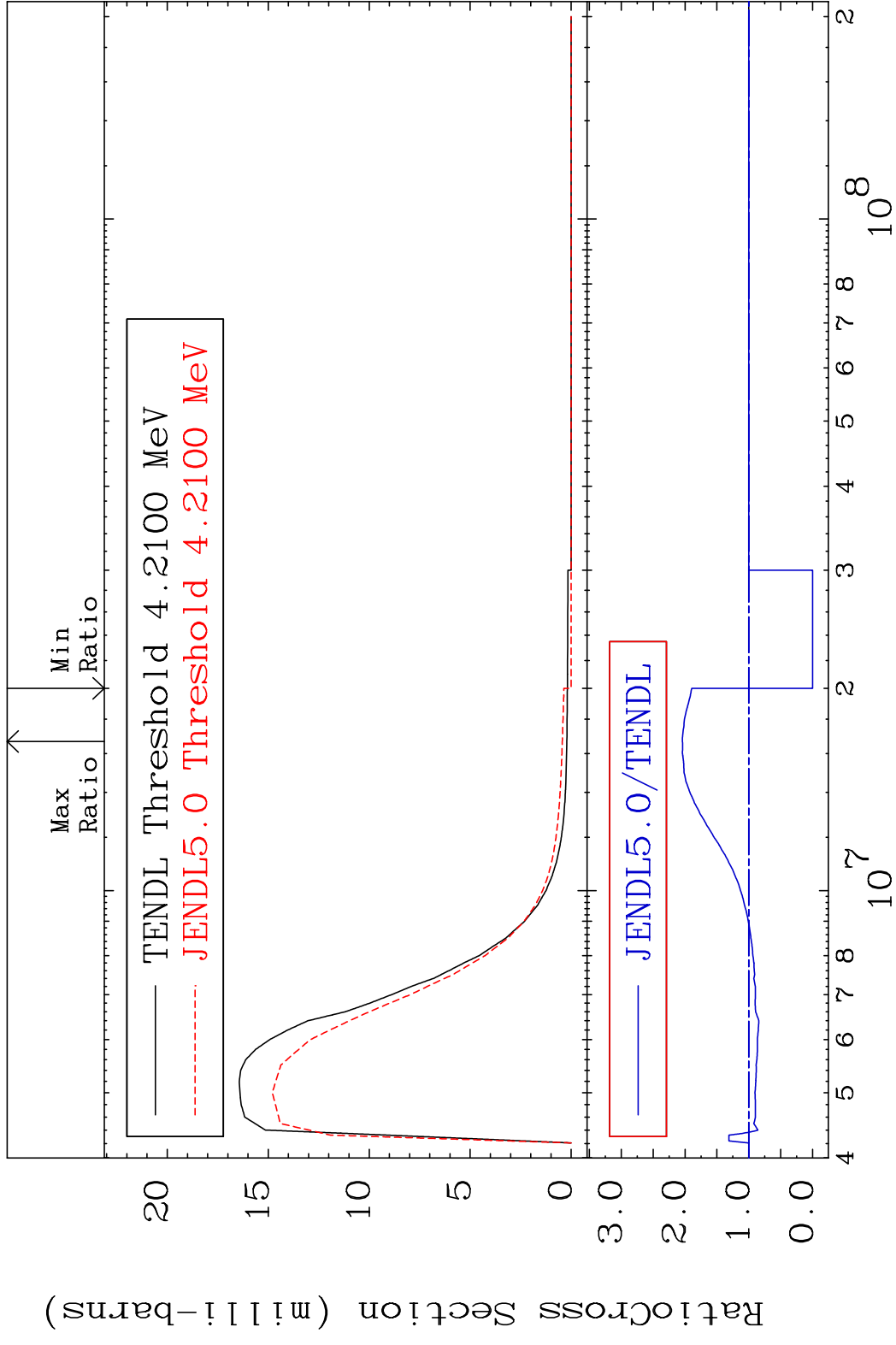


MAT 2219 MT= 64 (n,n') Level 22-Ti-44  
 Cross Section -100.0 To 82.11 %

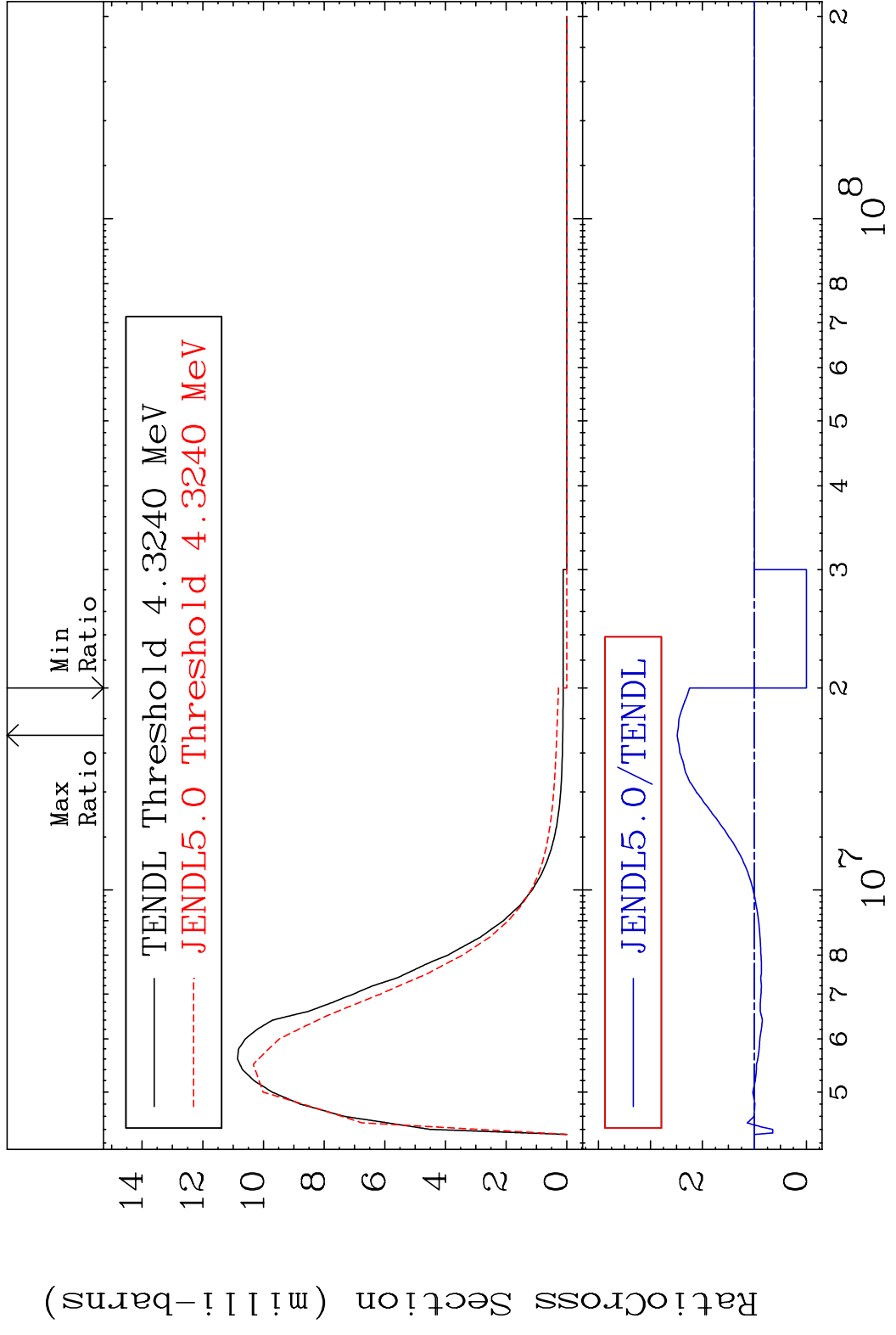




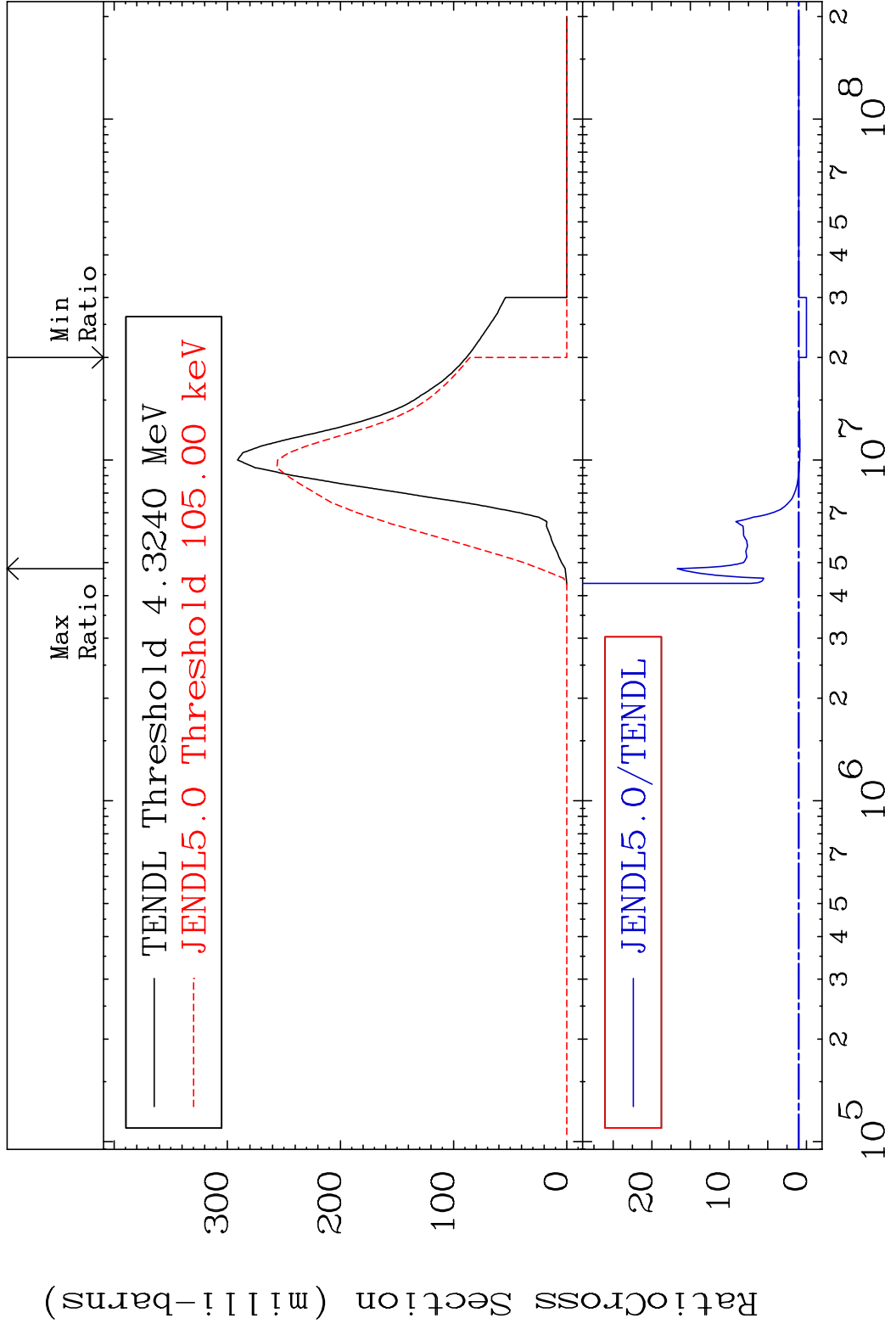
MAT 2219 MT= 65 (n, n') Level 22-Ti-44  
 Cross Section -100.0 To 104.2 %



MAT 2219 MT= 66 (n,n') Level 22-Ti-44  
 Cross Section -100.0 To 148.6 %



MAT 2219 (n,n') Continuum <sup>22</sup>Ti-44  
 Cross Section -100.0 To 1572. %

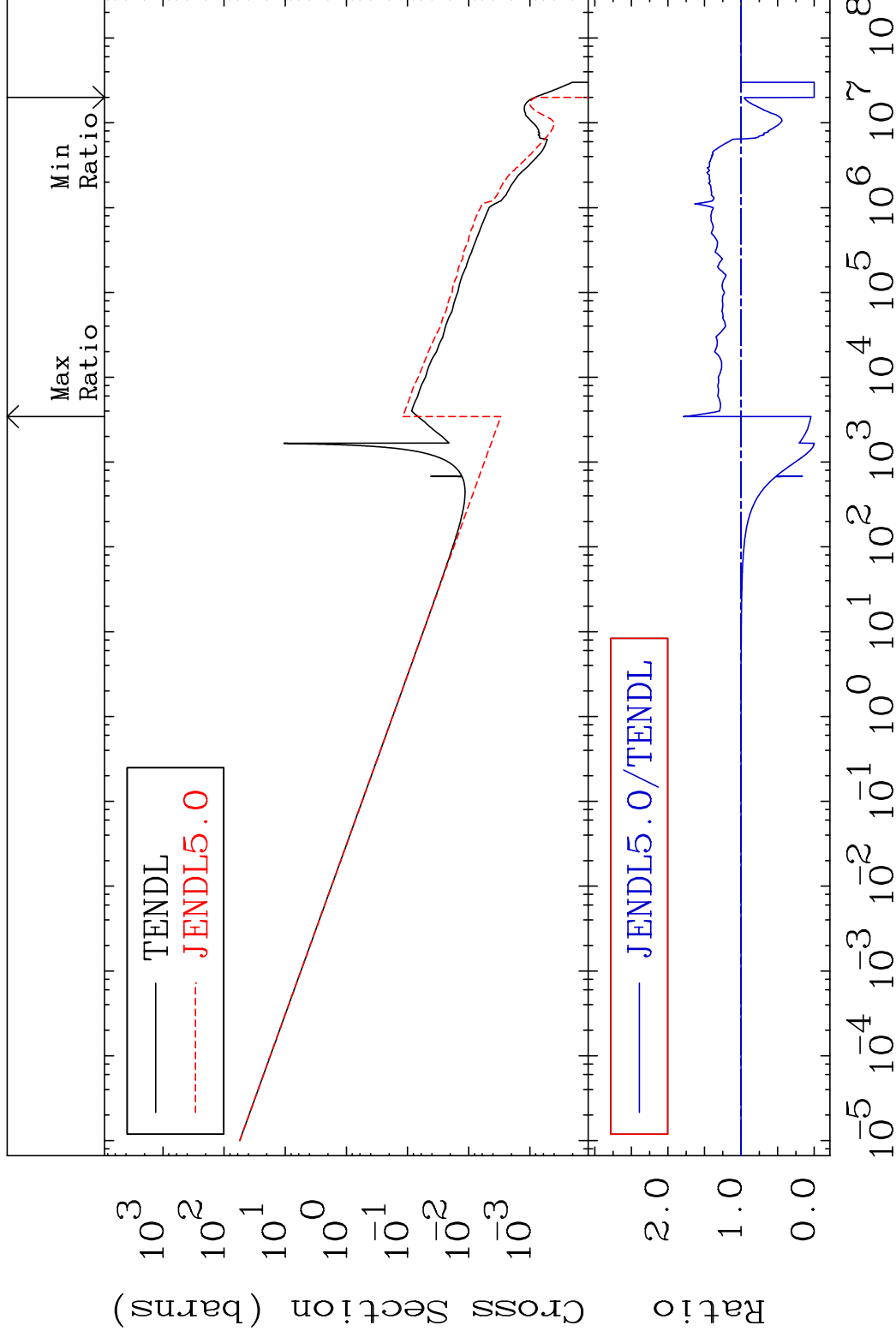


MAT 2219

(n,  $\gamma$ )

22-Ti-44

Cross Section -100.0 To 78.53 %

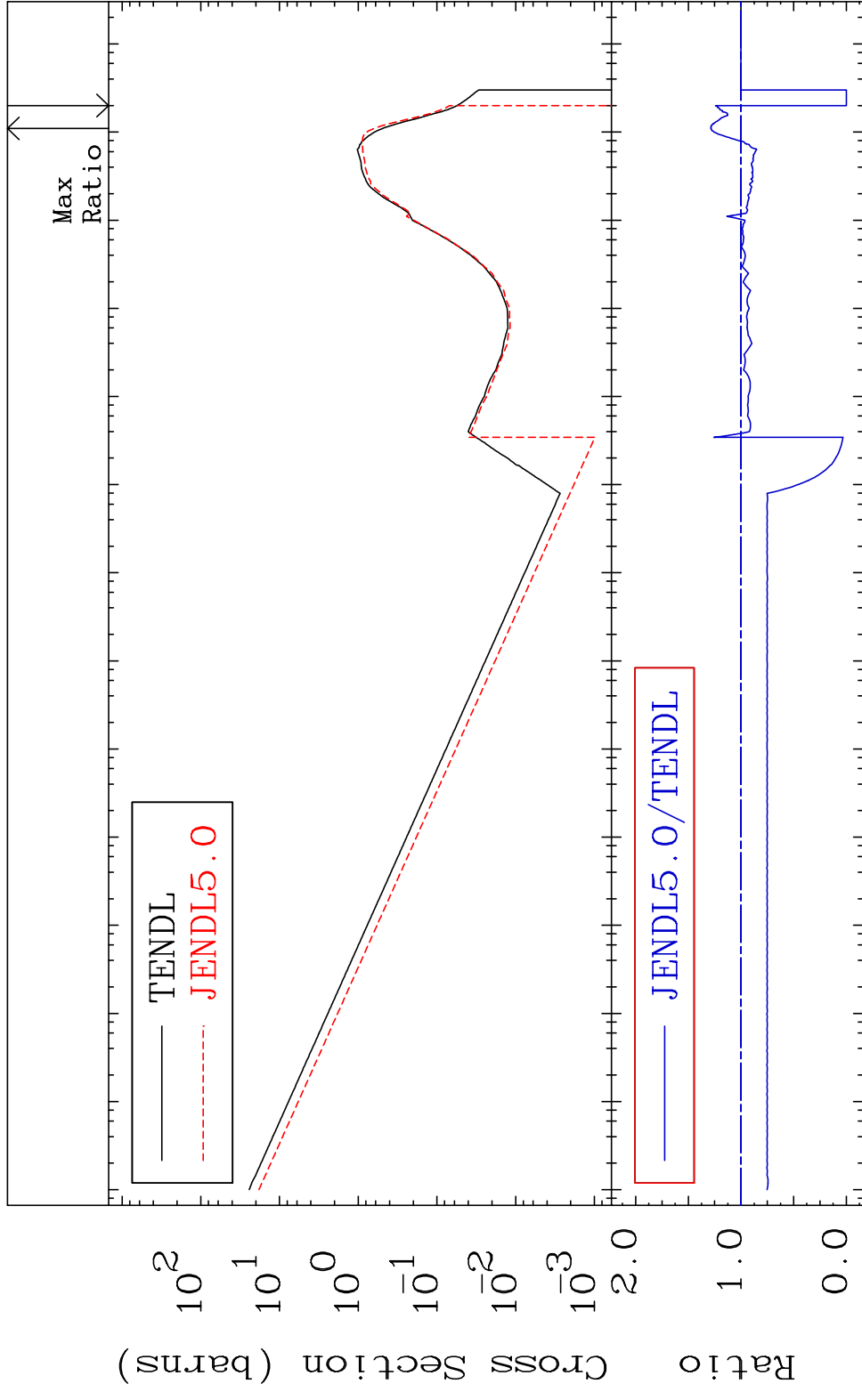


27

Incident Energy (eV)

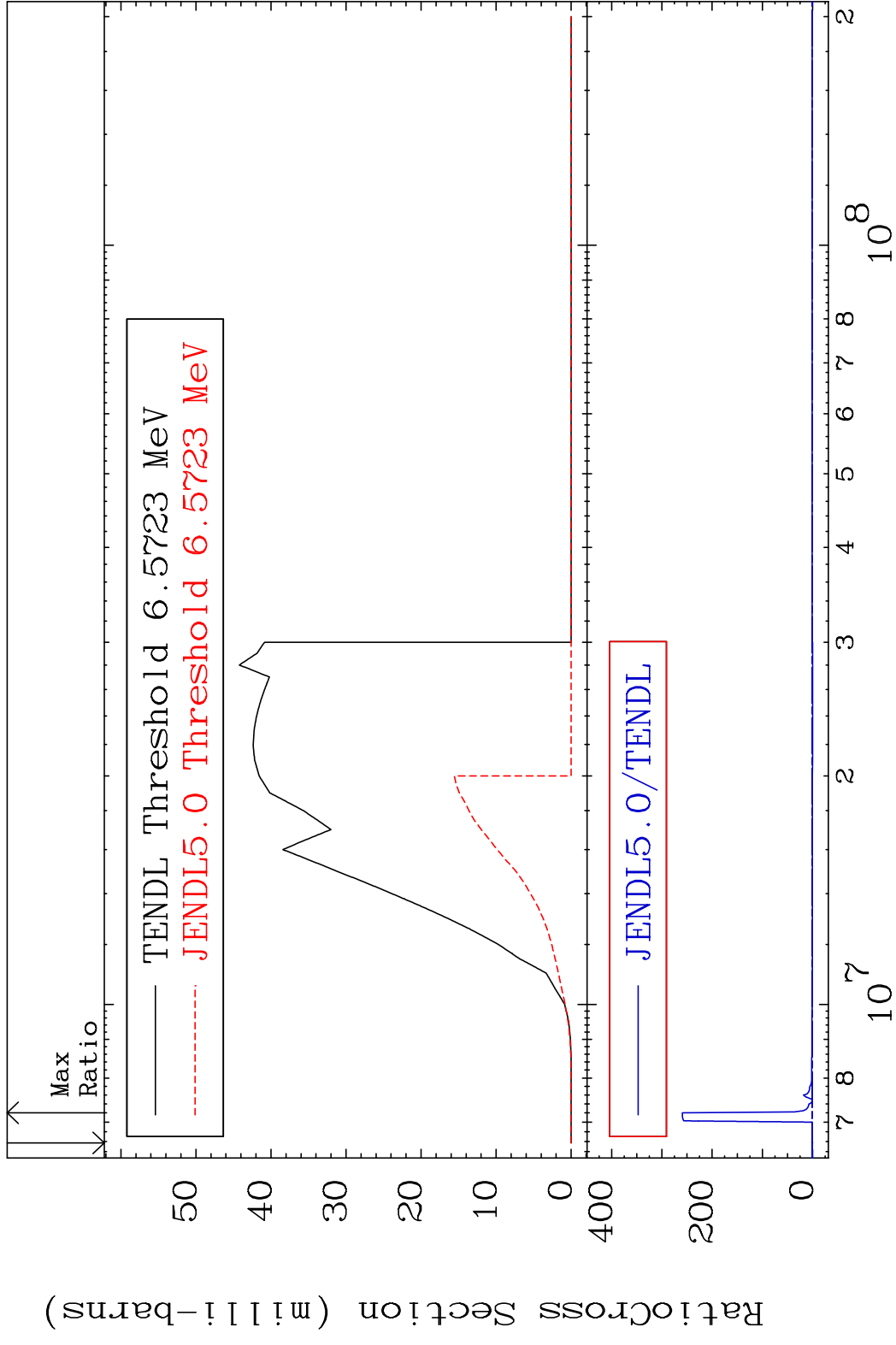
22-Ti-44

MAT 2219 (n,p) Cross Section -100.0 To 28.75 % 22-Ti-44



28 Incident Energy (eV) 22-Ti-44

MAT 2219 (n,d) 22-Ti-44  
 Cross Section -100.0 To 9999. %

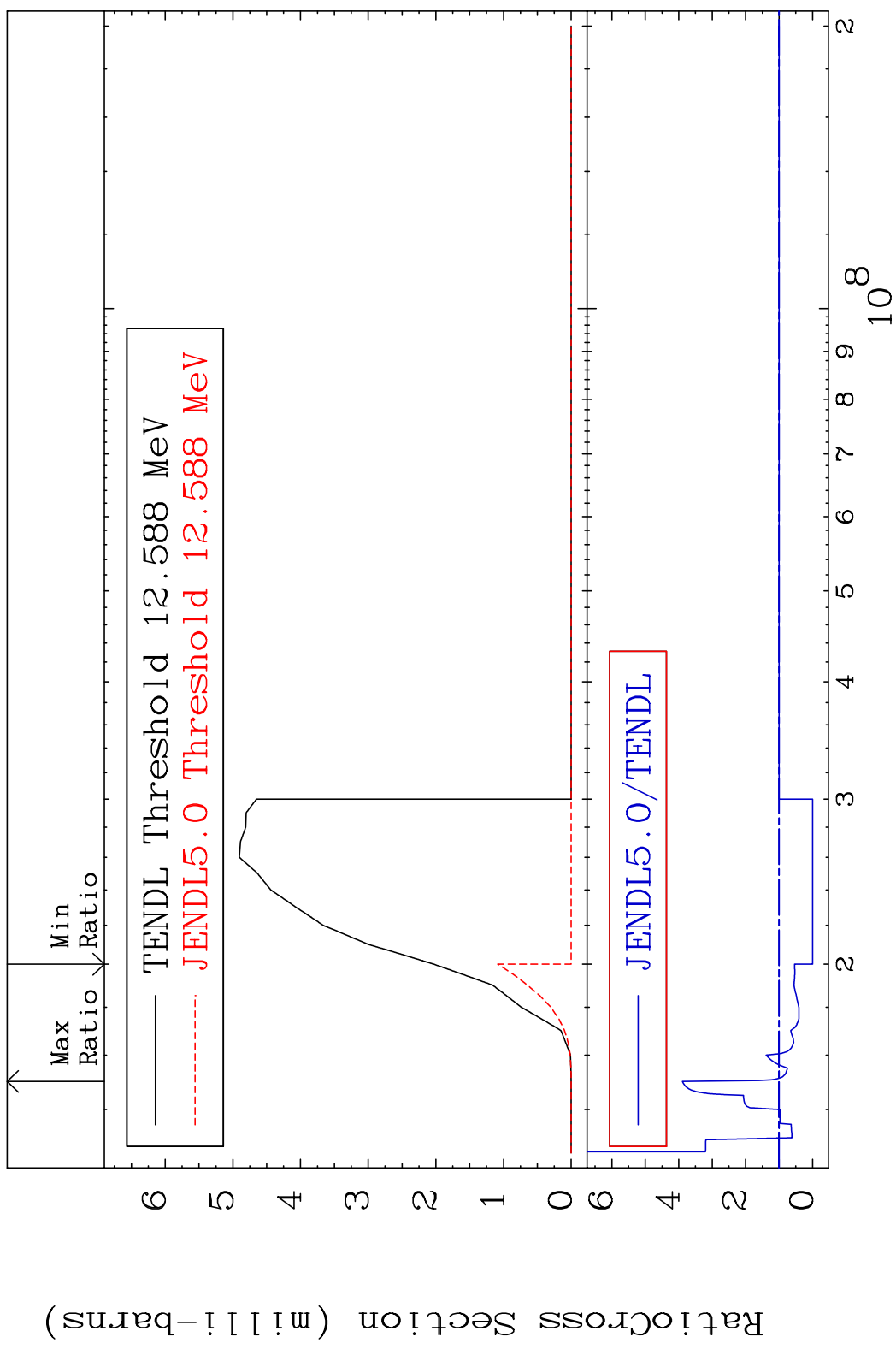


MAT 2219

(n, t)

<sup>22</sup>Ti-44

Cross Section -100.0 To 289.3 %

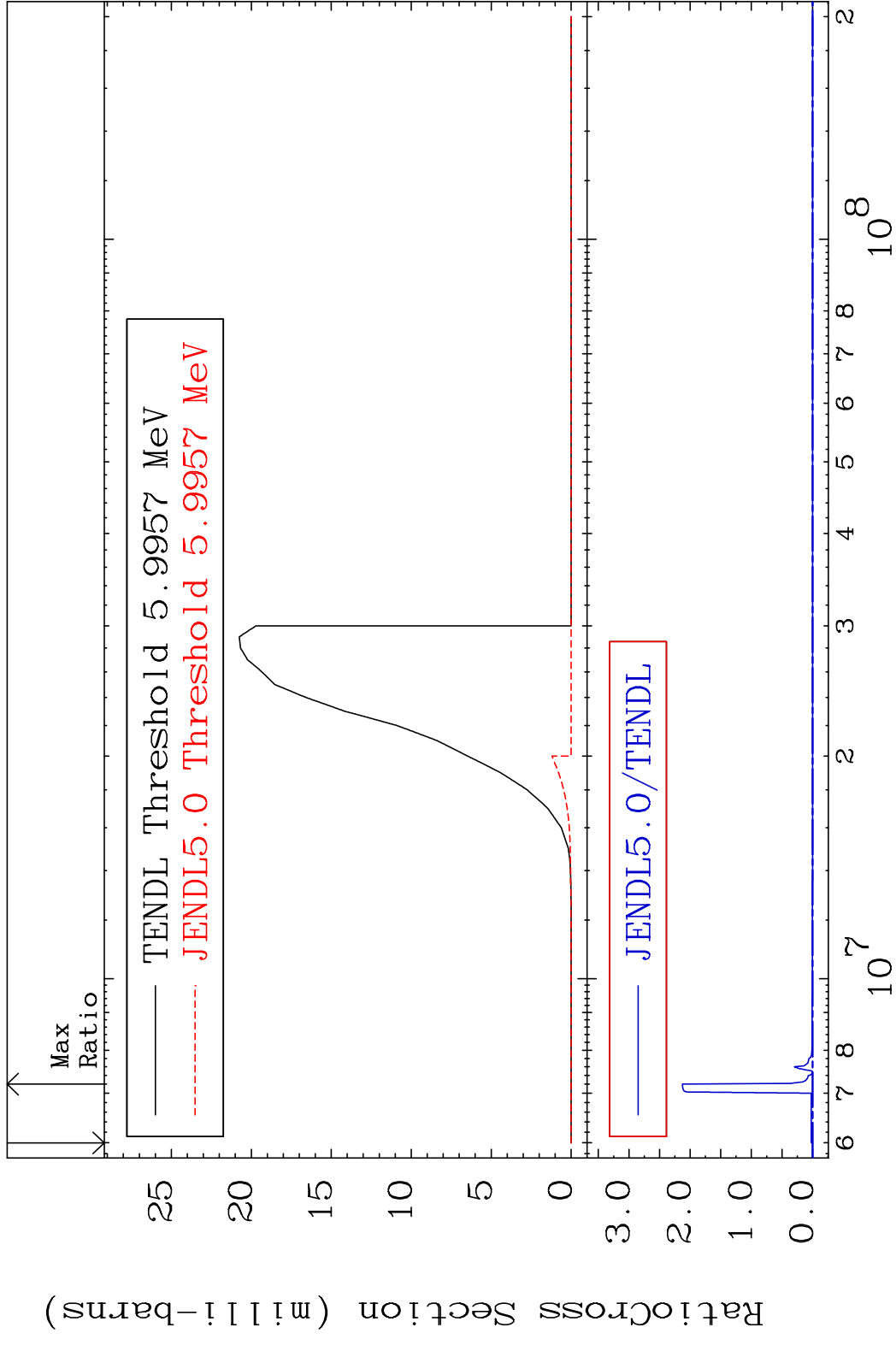


MAT 2219

(n, He-3)

22-Ti-44

Cross Section -100.0 To 9999. %



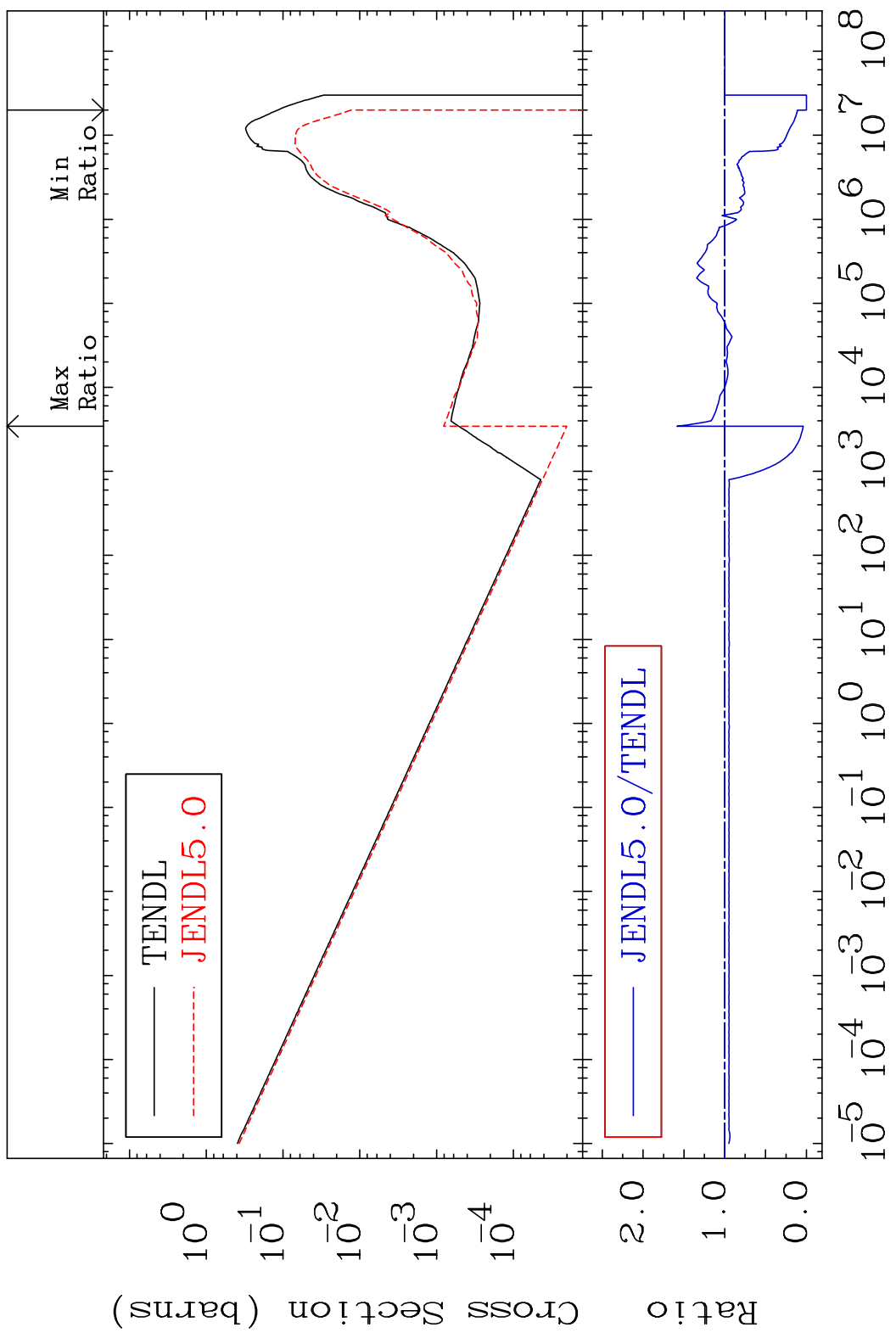


MAT 2219

(n,  $\alpha$ )

22-Ti-44

Cross Section -100.0 To 58.29 %



32

Incident Energy (eV)

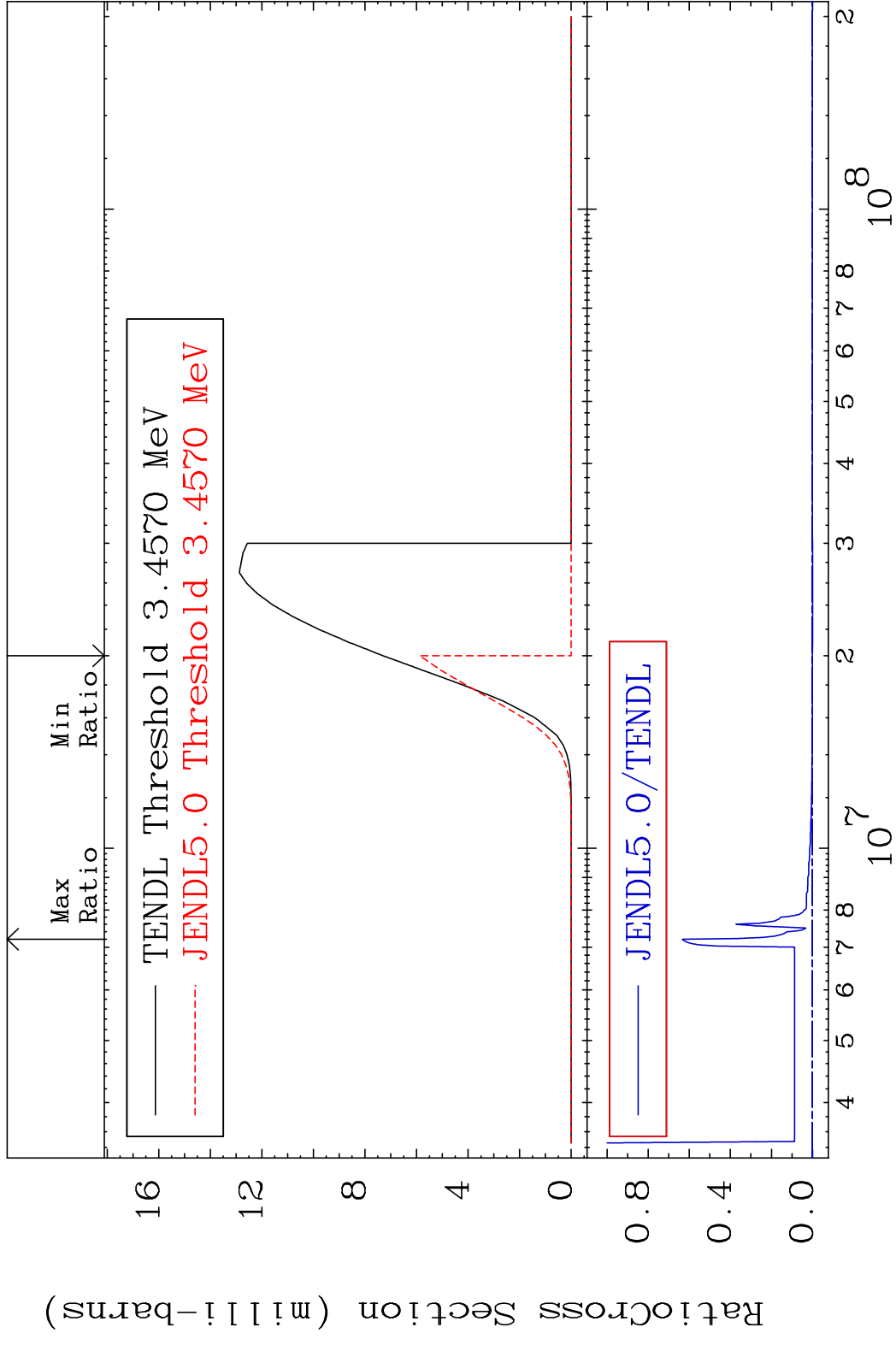
22-Ti-44

MAT 2219

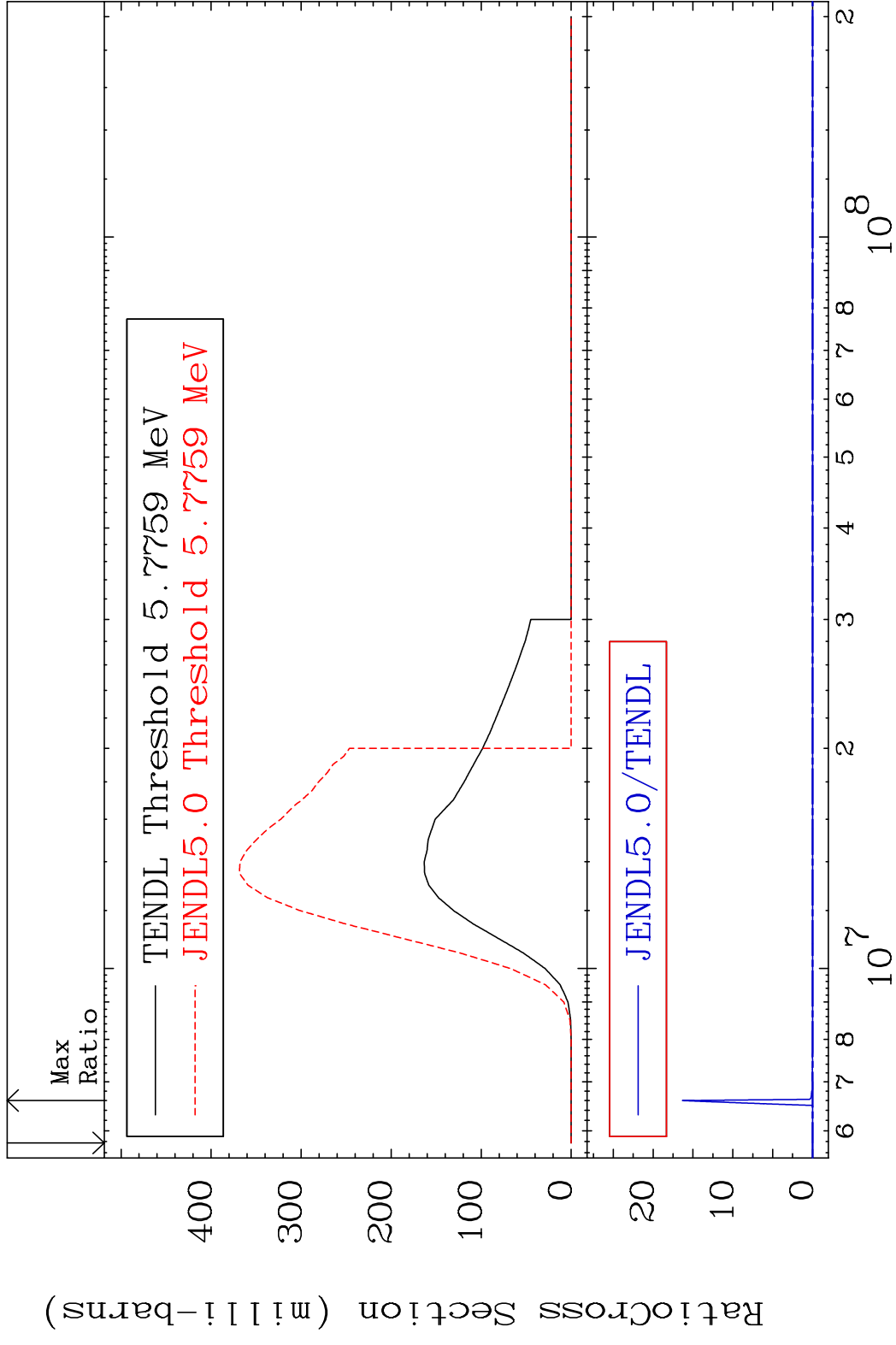
(n,2α)

22-Ti-44

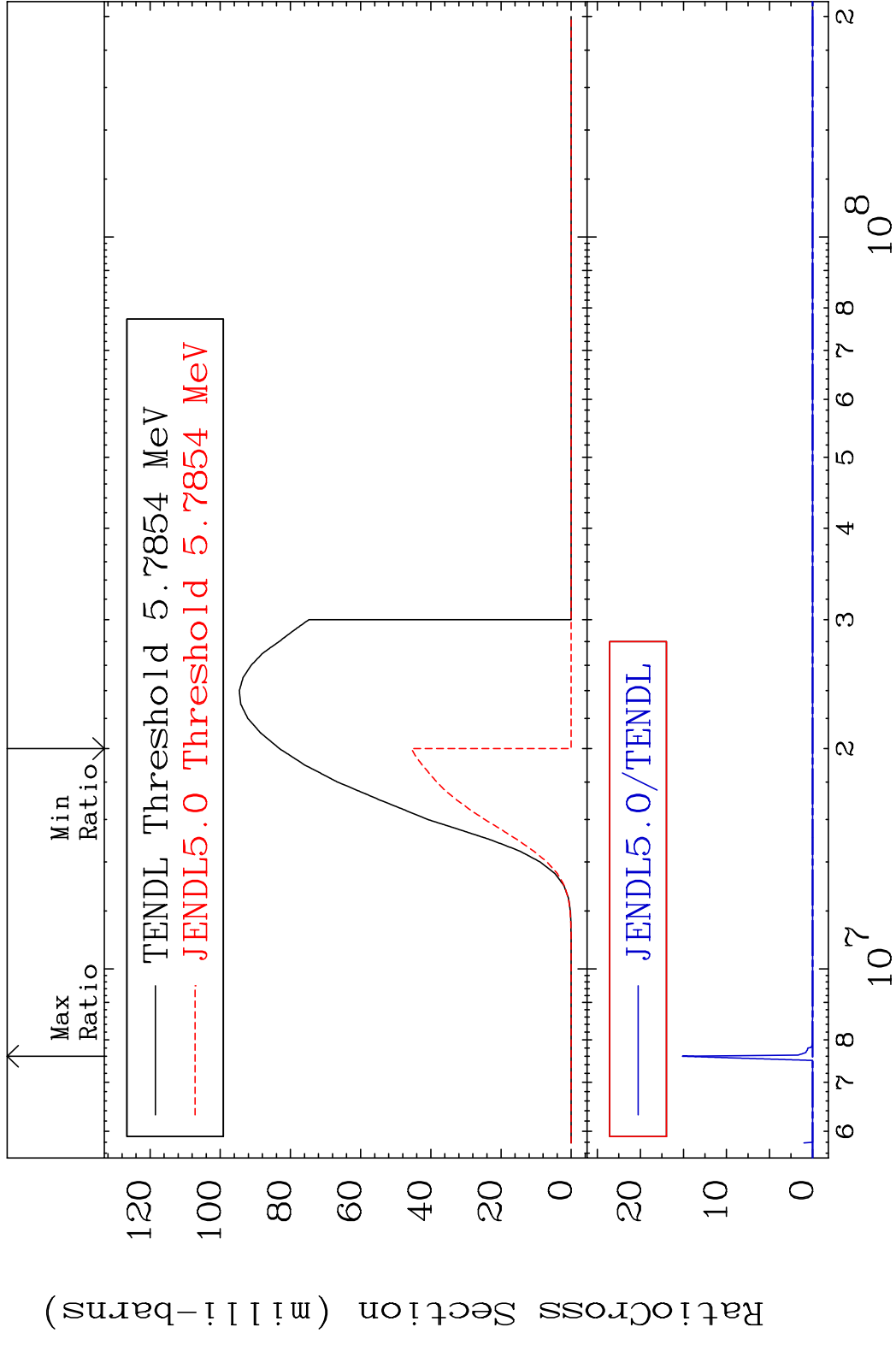
Cross Section -100.0 To 9999. %



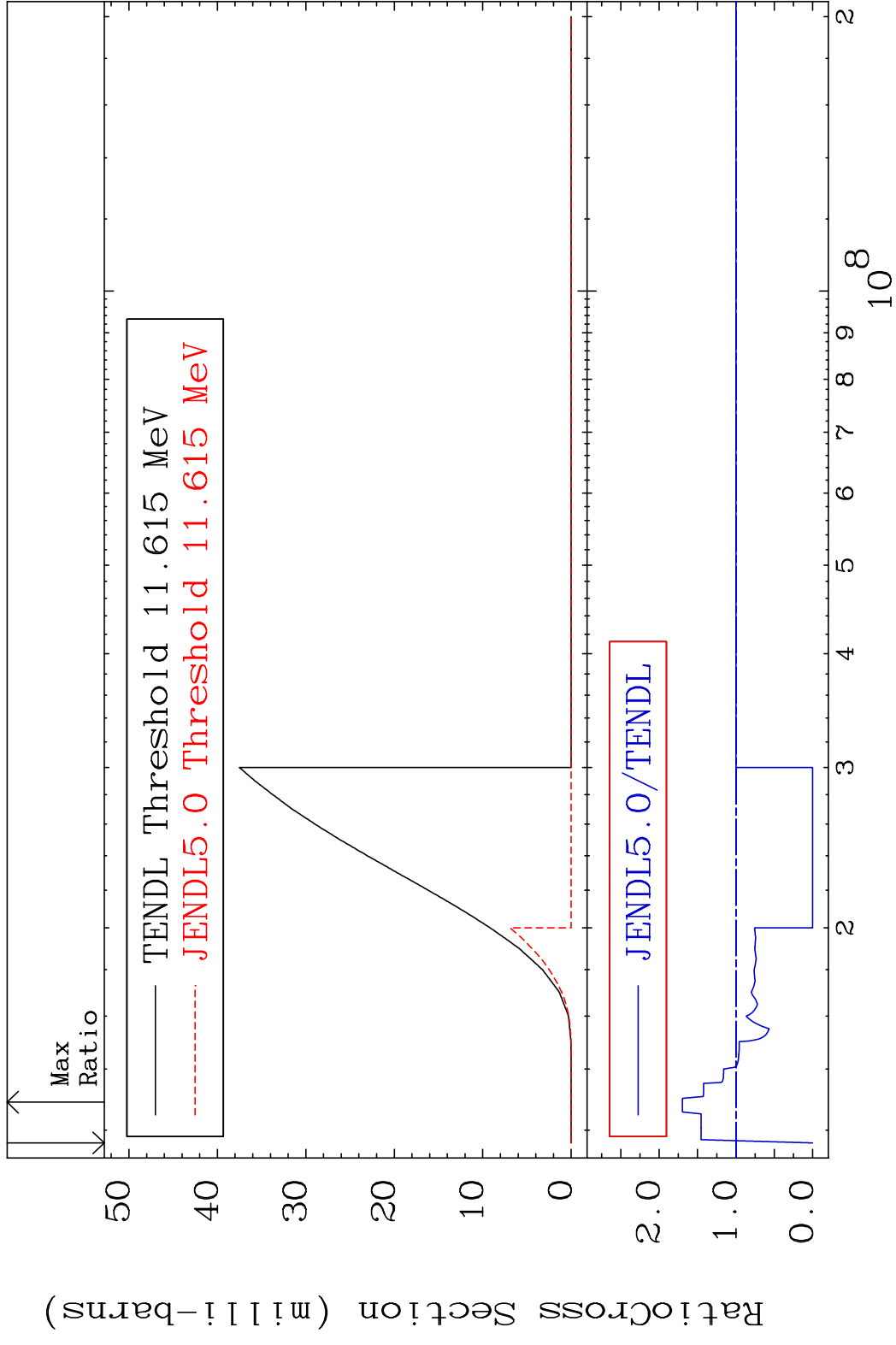
MAT 2219 (n,2p) 22-Ti-44  
 Cross Section -100.0 To 9999. %



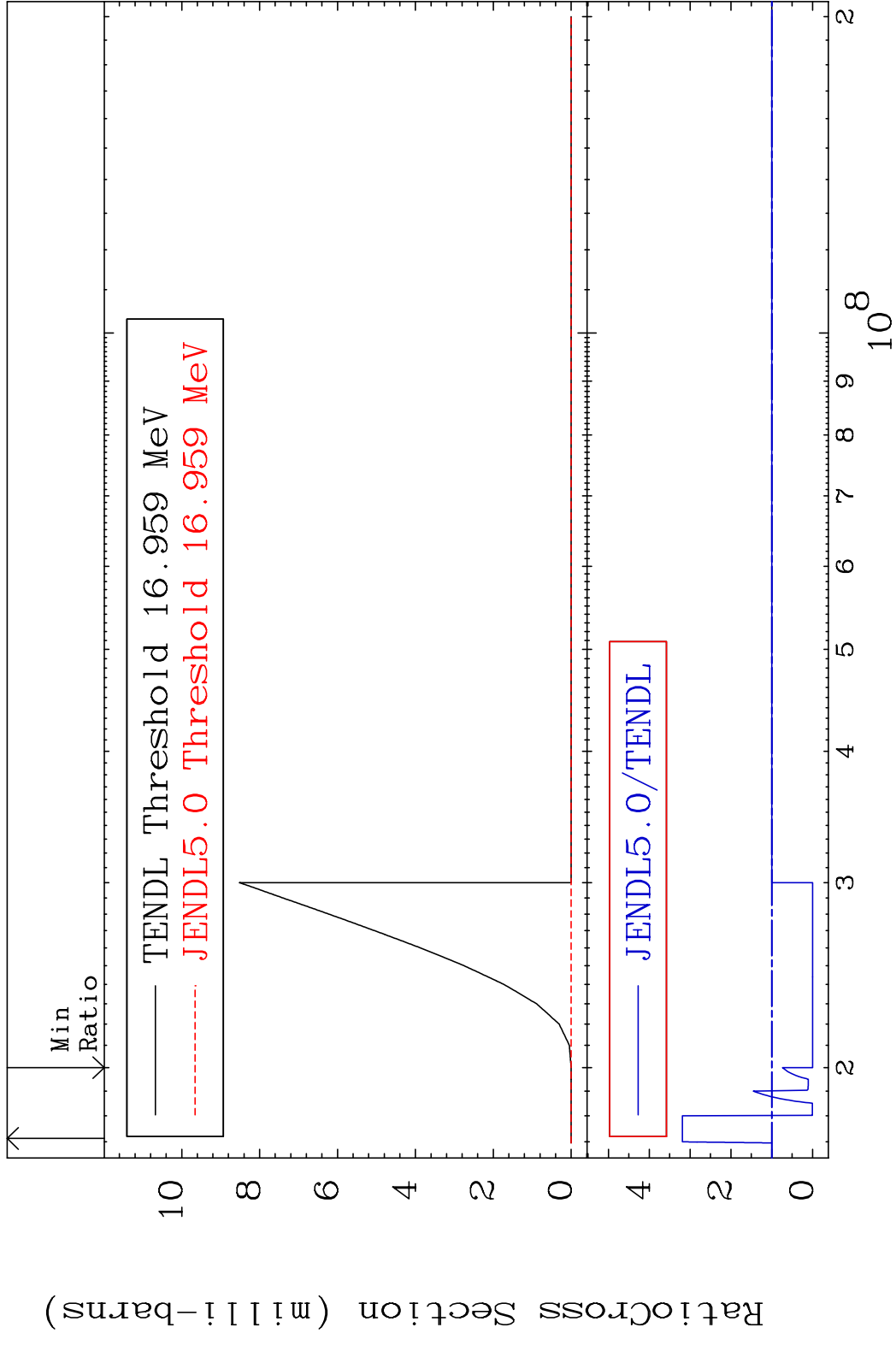
MAT 2219 (n,p)  $\alpha$   $^{22}\text{Ti-44}$   
 Cross Section -100.0 To 9999. %



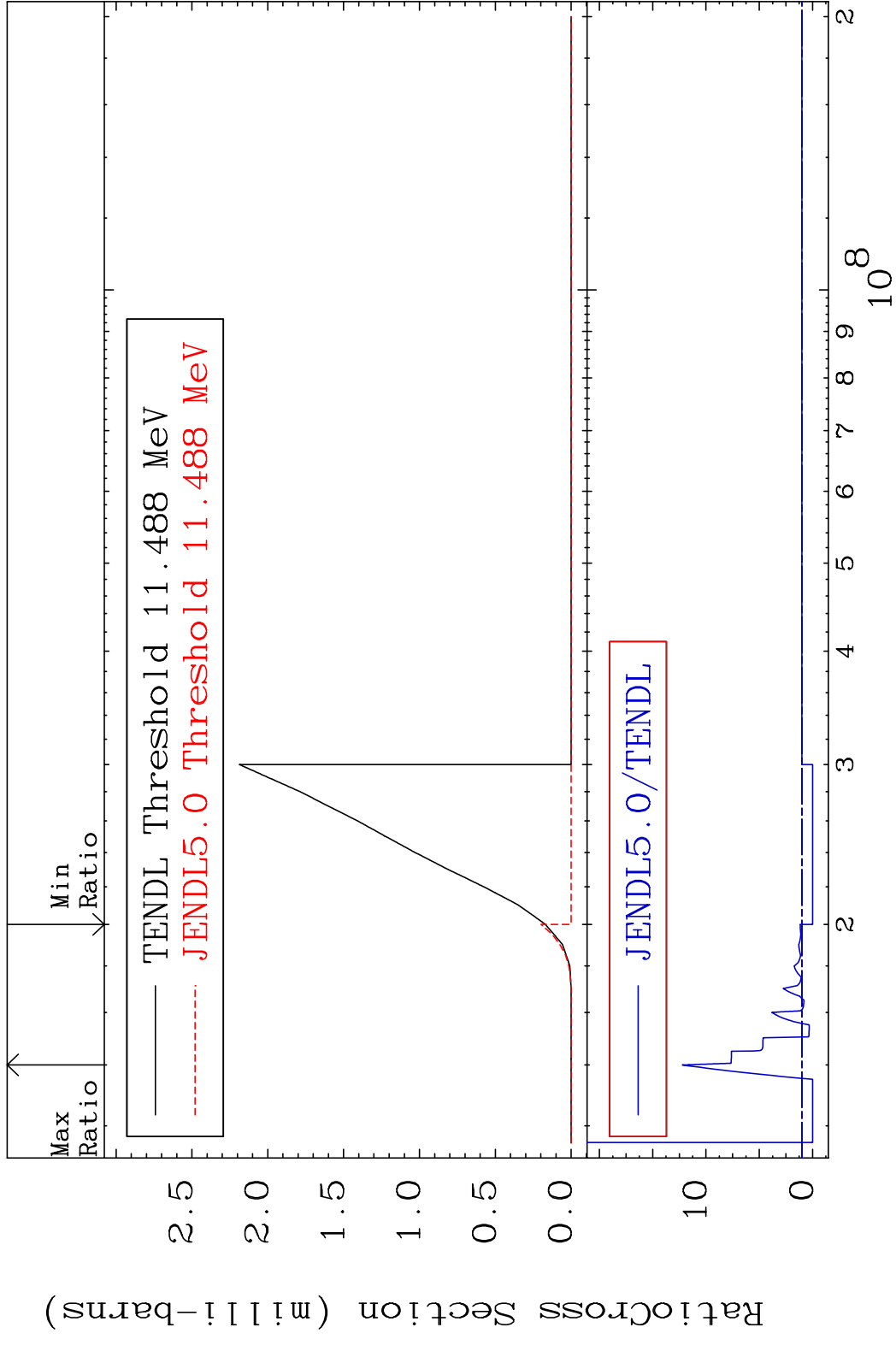
MAT 2219 (n,p) d <sup>22</sup>Ti-44  
 Cross Section -100.0 To 69.81 %



MAT 2219 (n,p) t 22-Ti-44  
 Cross Section -100.0 To 219.0 %



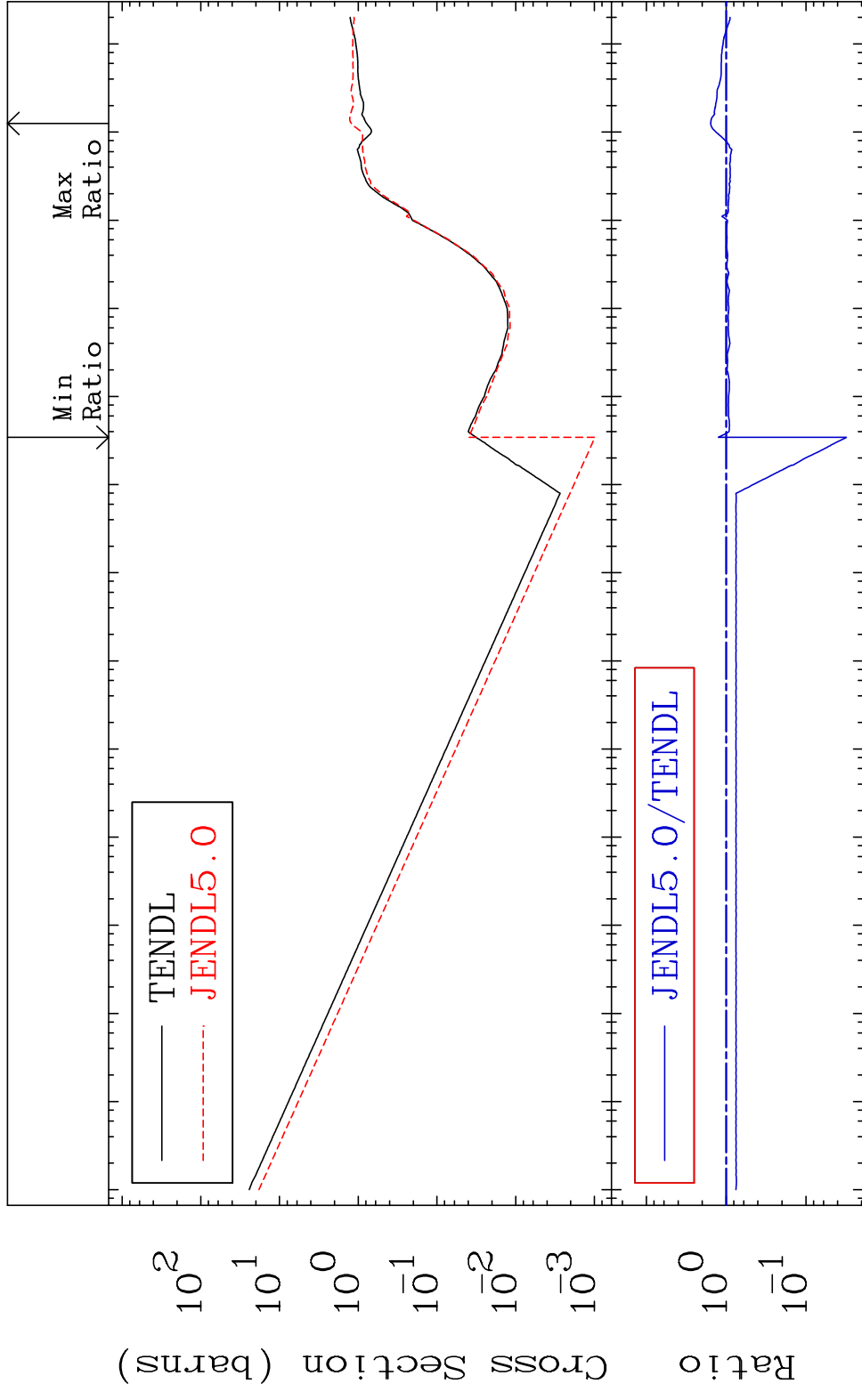
MAT 2219 (n,d)  $\alpha$   $^{22}\text{Ti-44}$   
 Cross Section -100.0 To 1122. %



MAT 2219

Hydrogen Production  
Cross Section -96.89 To 56.08 %

22-Ti-44



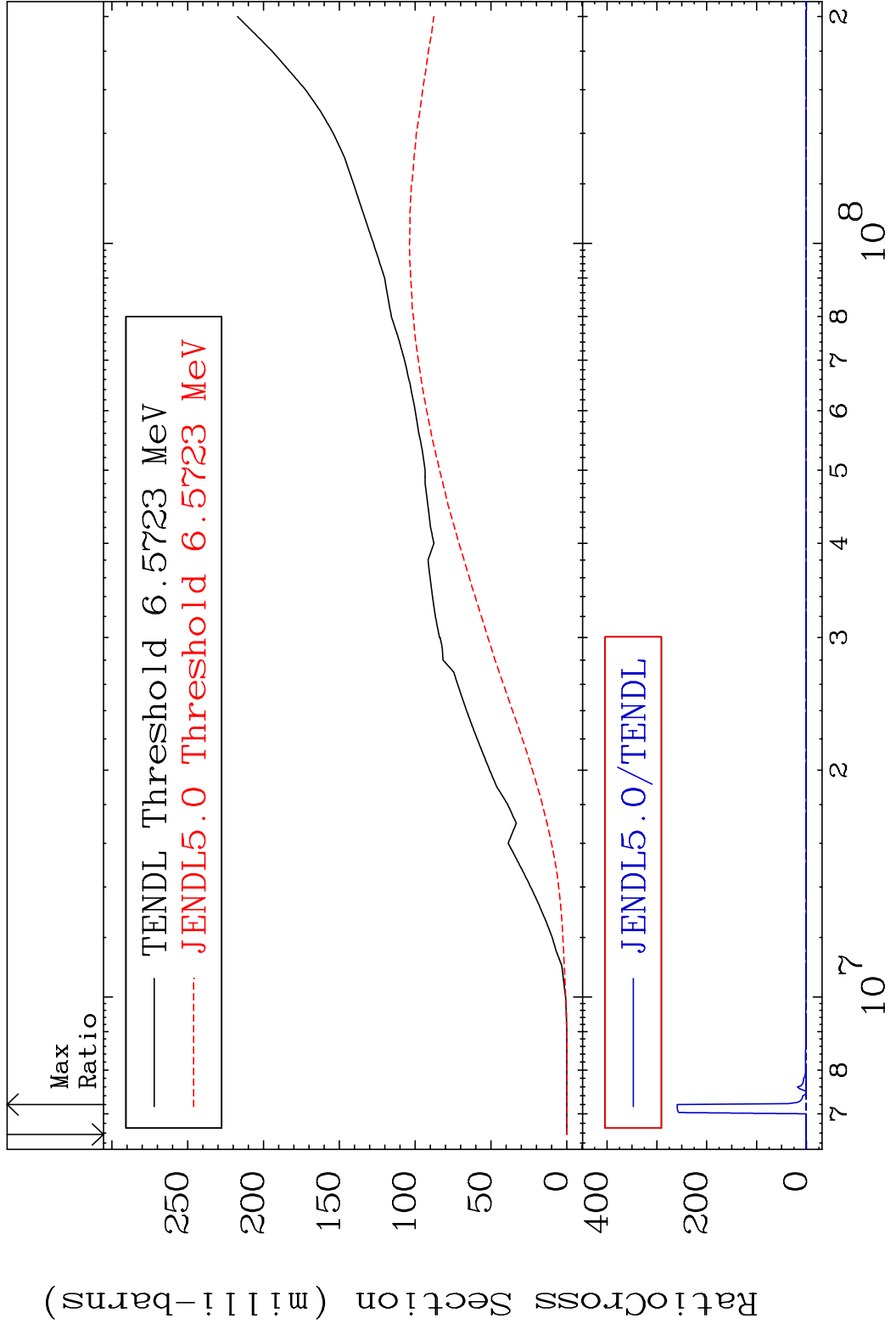
39

Incident Energy (eV)

22-Ti-44

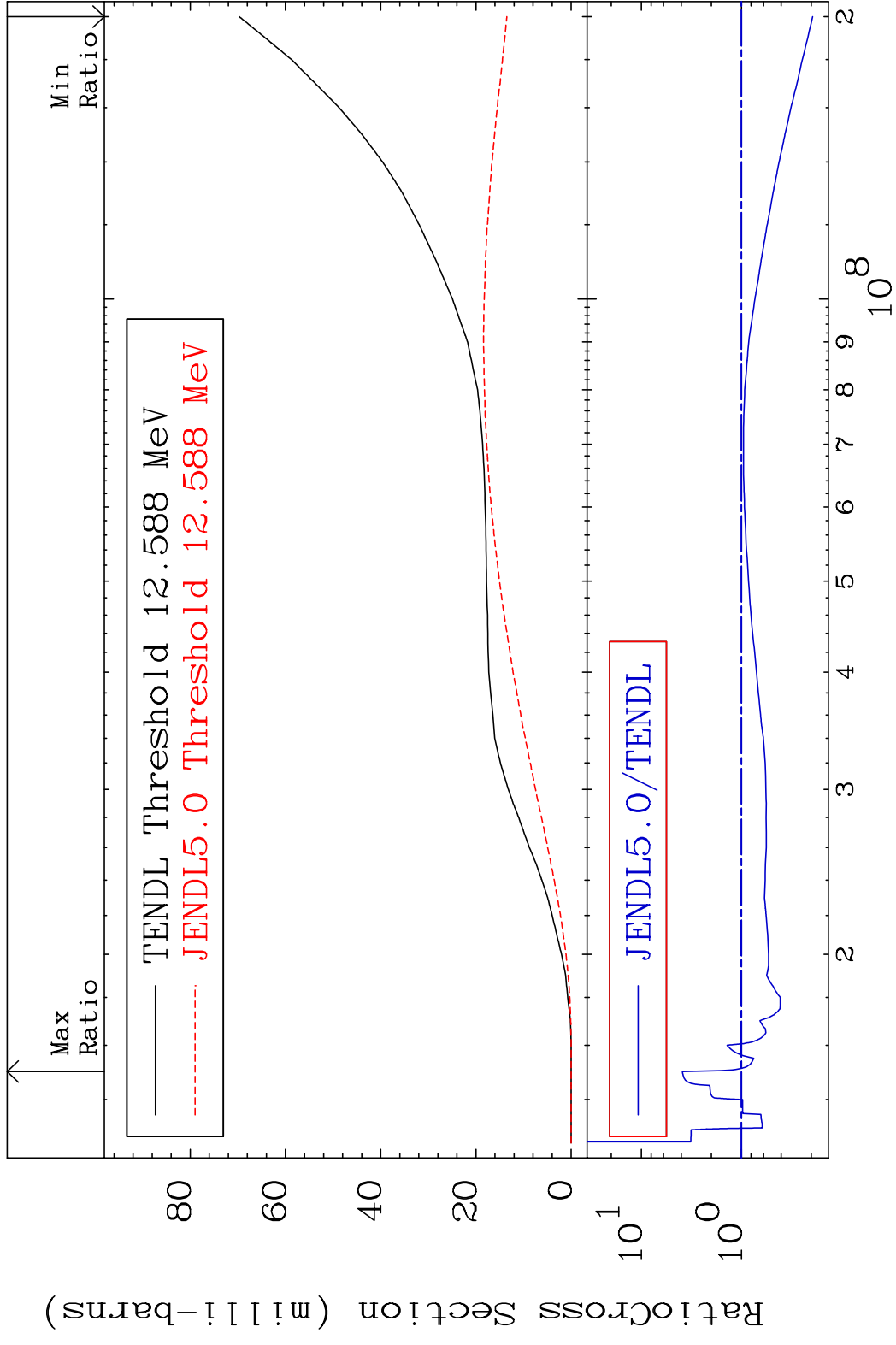


MAT 2219 Deuterium Production <sup>22</sup>Ti-44  
 Cross Section -100.0 To 9999. %

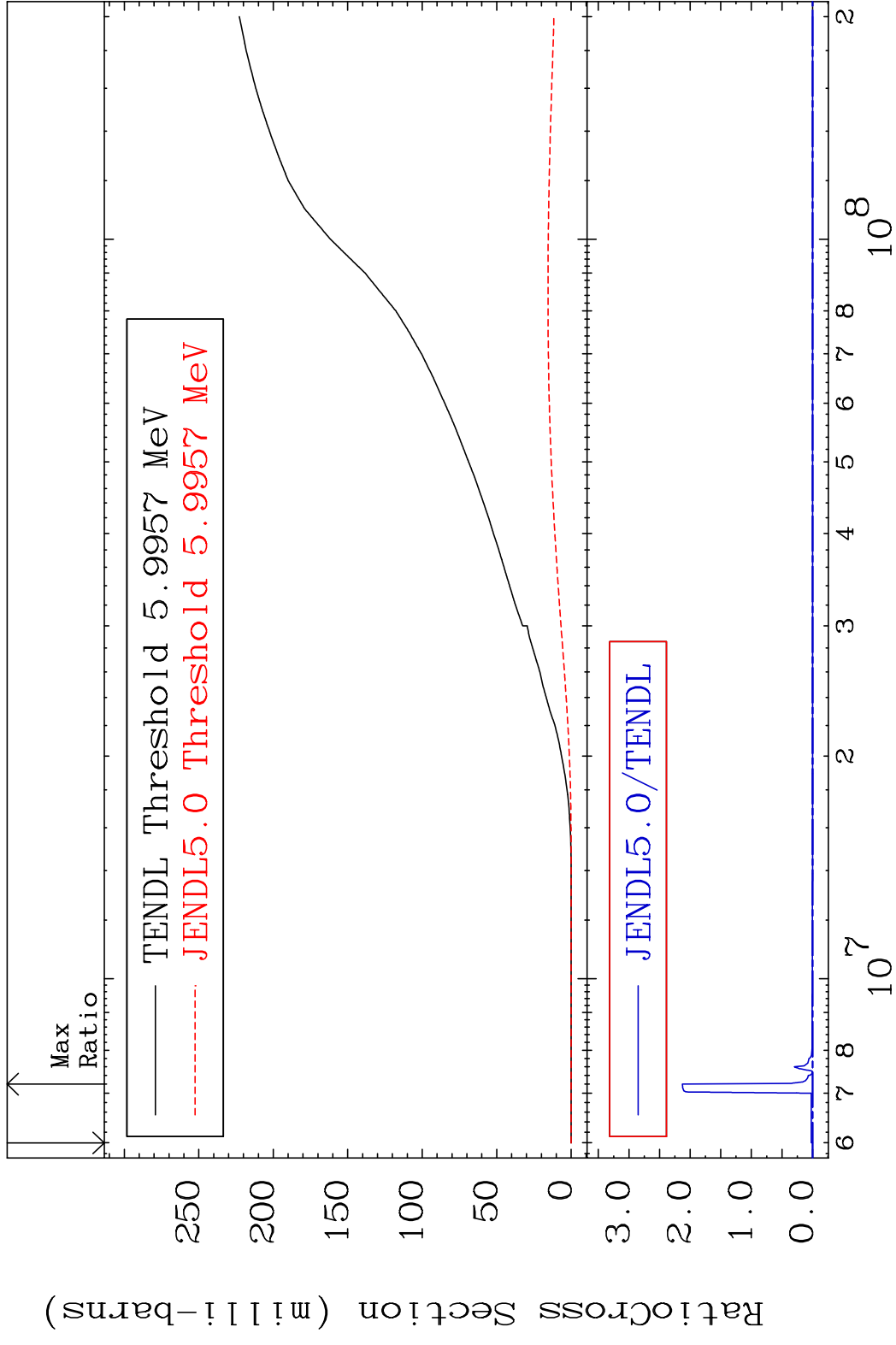


40 200 400 0 250 200 150 100 50 0 10<sup>7</sup> 10<sup>8</sup> 22-Ti-44

MAT 2219 Tritium Production 22-Ti-44  
 Cross Section -80.61 To 289.3 %



MAT 2219 He-3 Production 22-Ti-44  
 Cross Section -100.0 To 9999. %

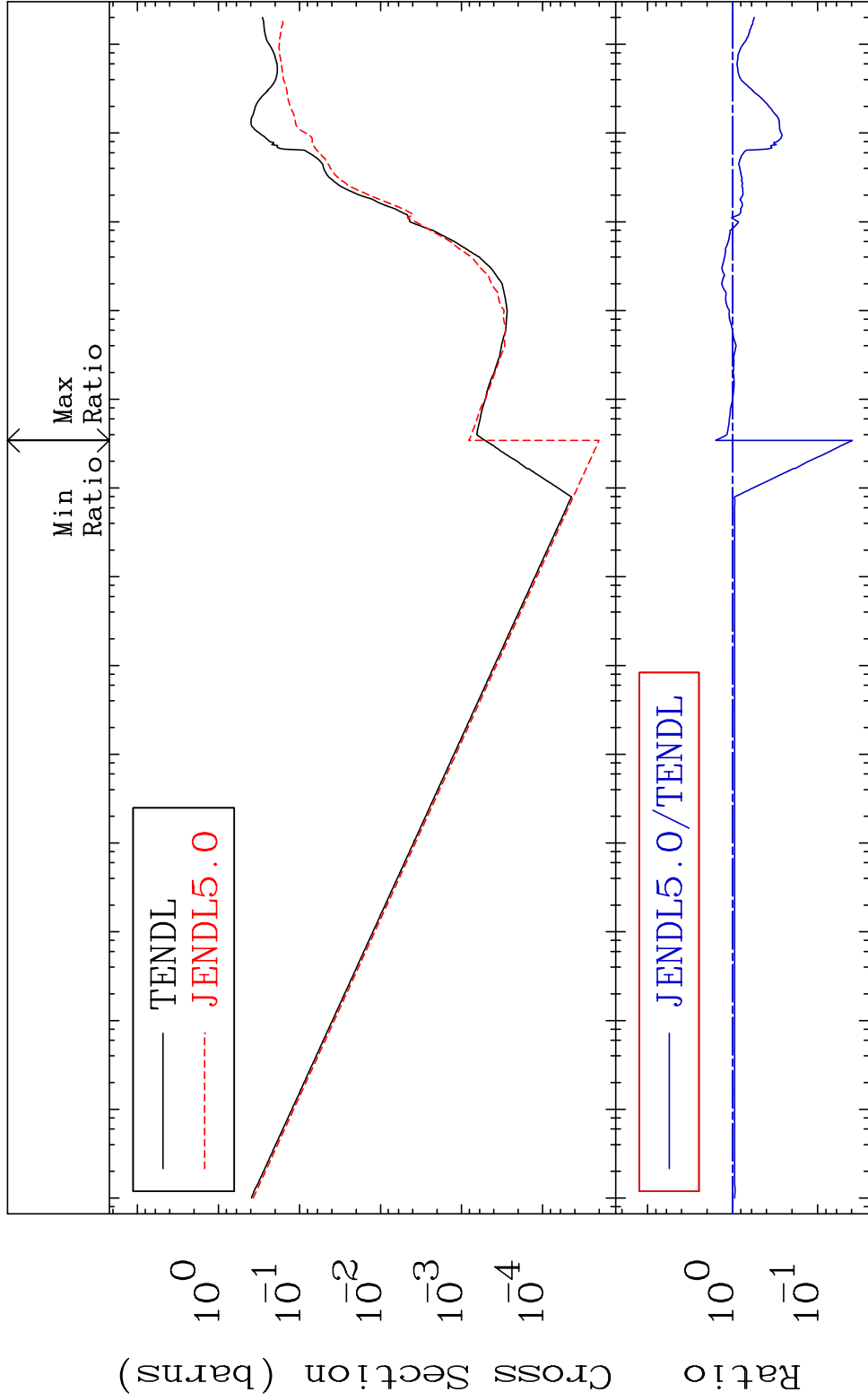


MAT 2219

He-4 Production

22-Ti-44

Cross Section -96.07 To 58.29 %

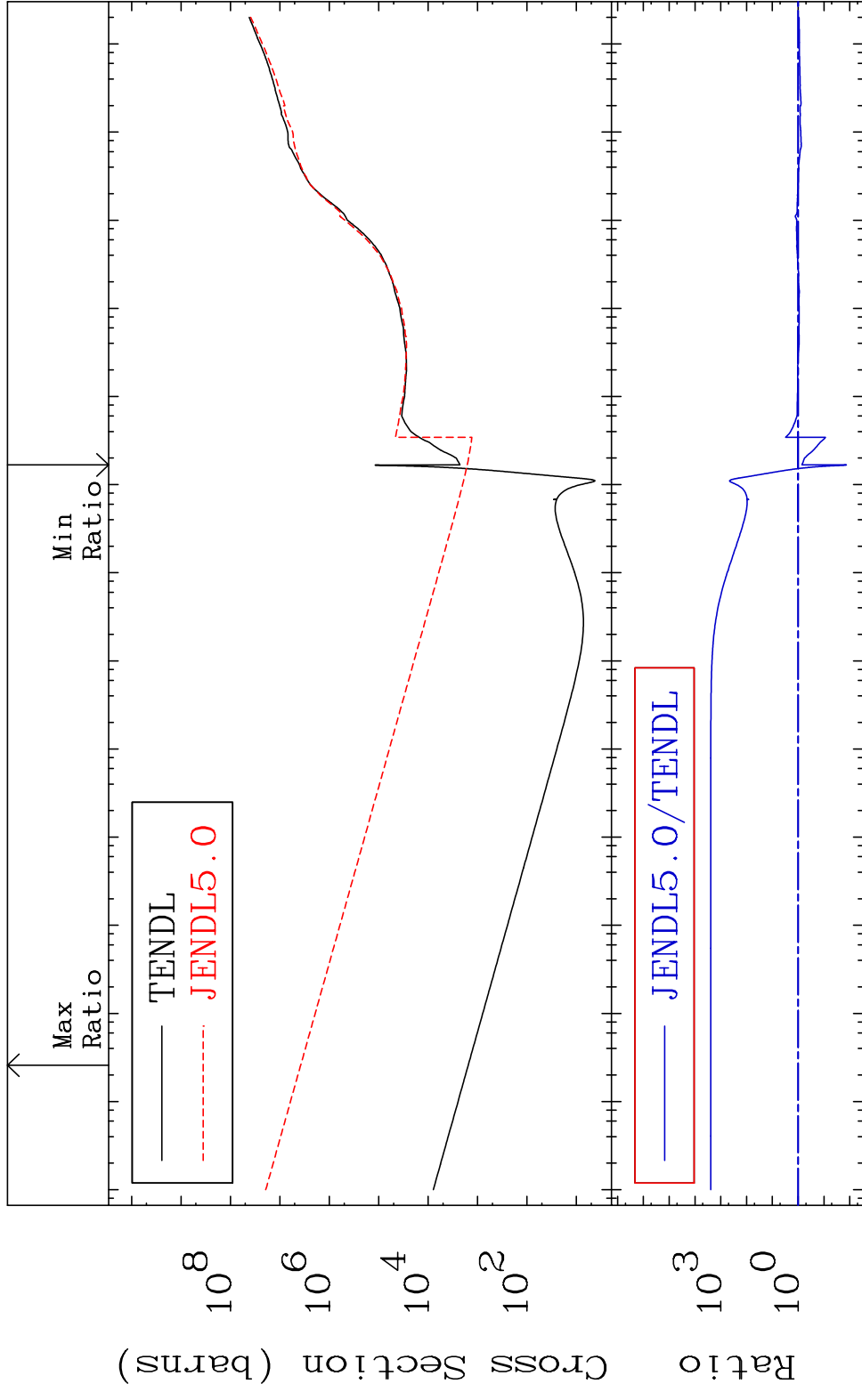


43

Incident Energy (eV)

22-Ti-44

MAT 2219 Kerma total (eV-barns) 22-Ti-44  
 Cross Section -98.64 To 9999. %

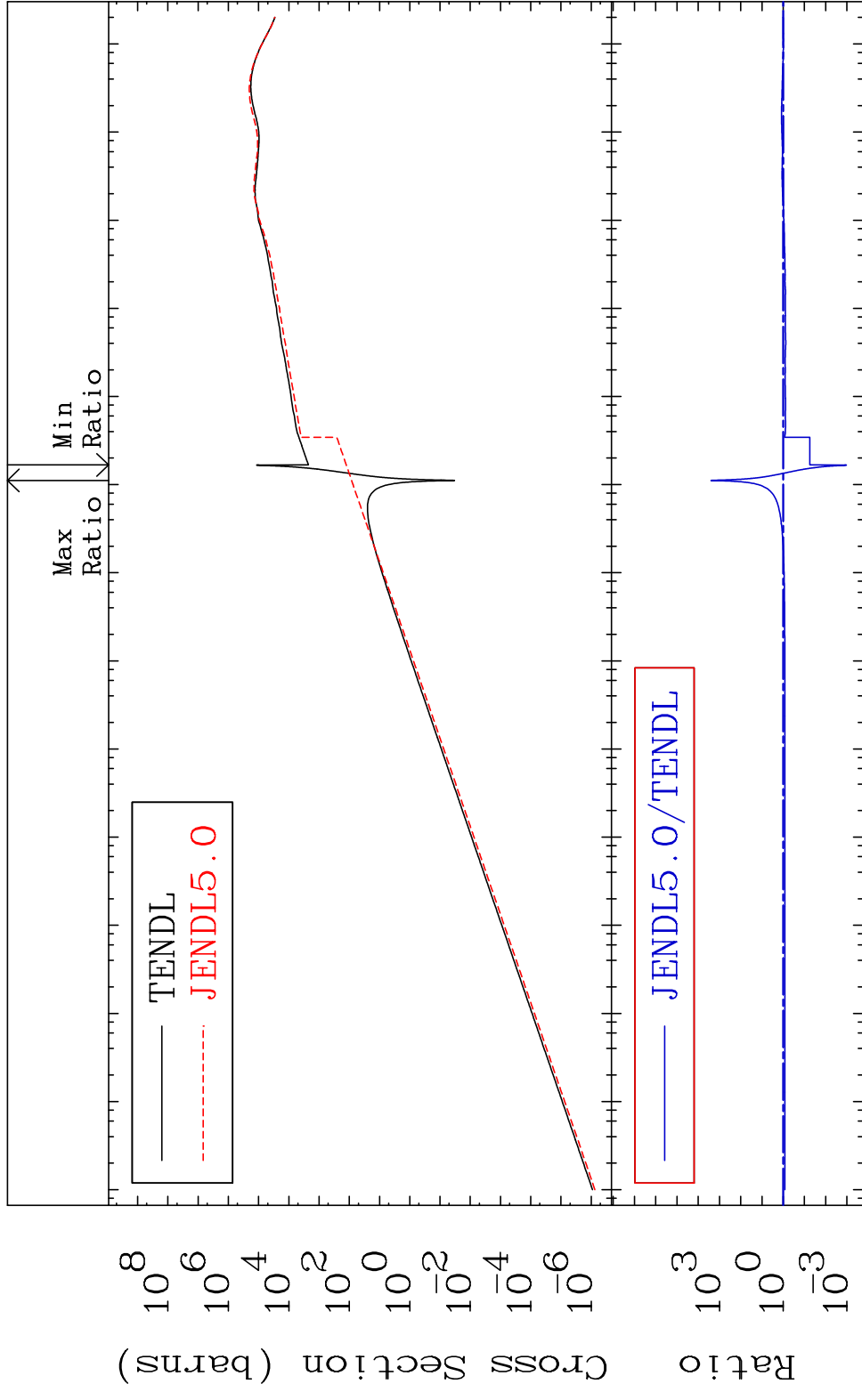


44 Incident Energy (eV) 22-Ti-44

MAT 2219

Kerma elastic  
Cross Section

22-Ti-44  
-99.89 To 9999. %

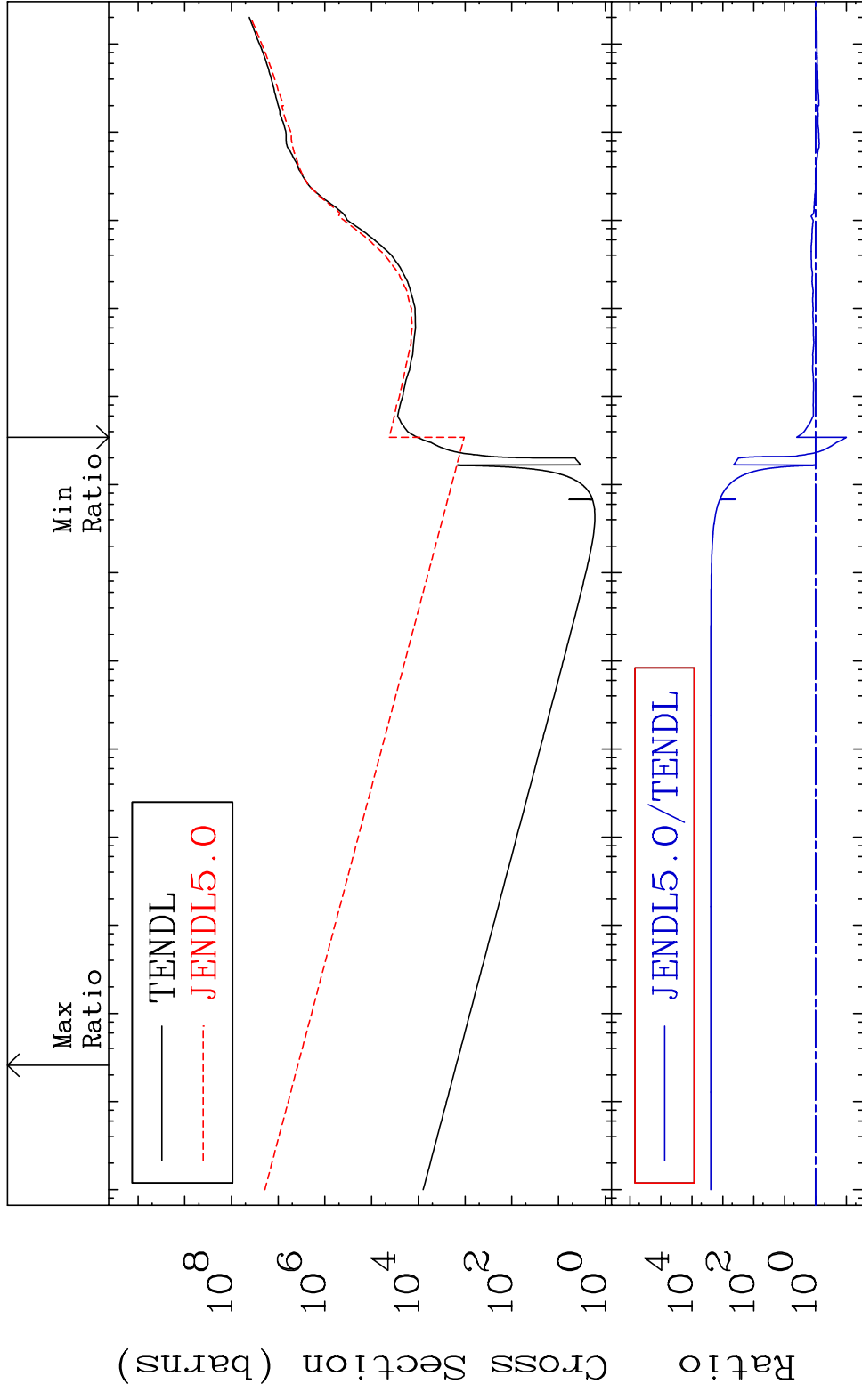


45

Incident Energy (eV)

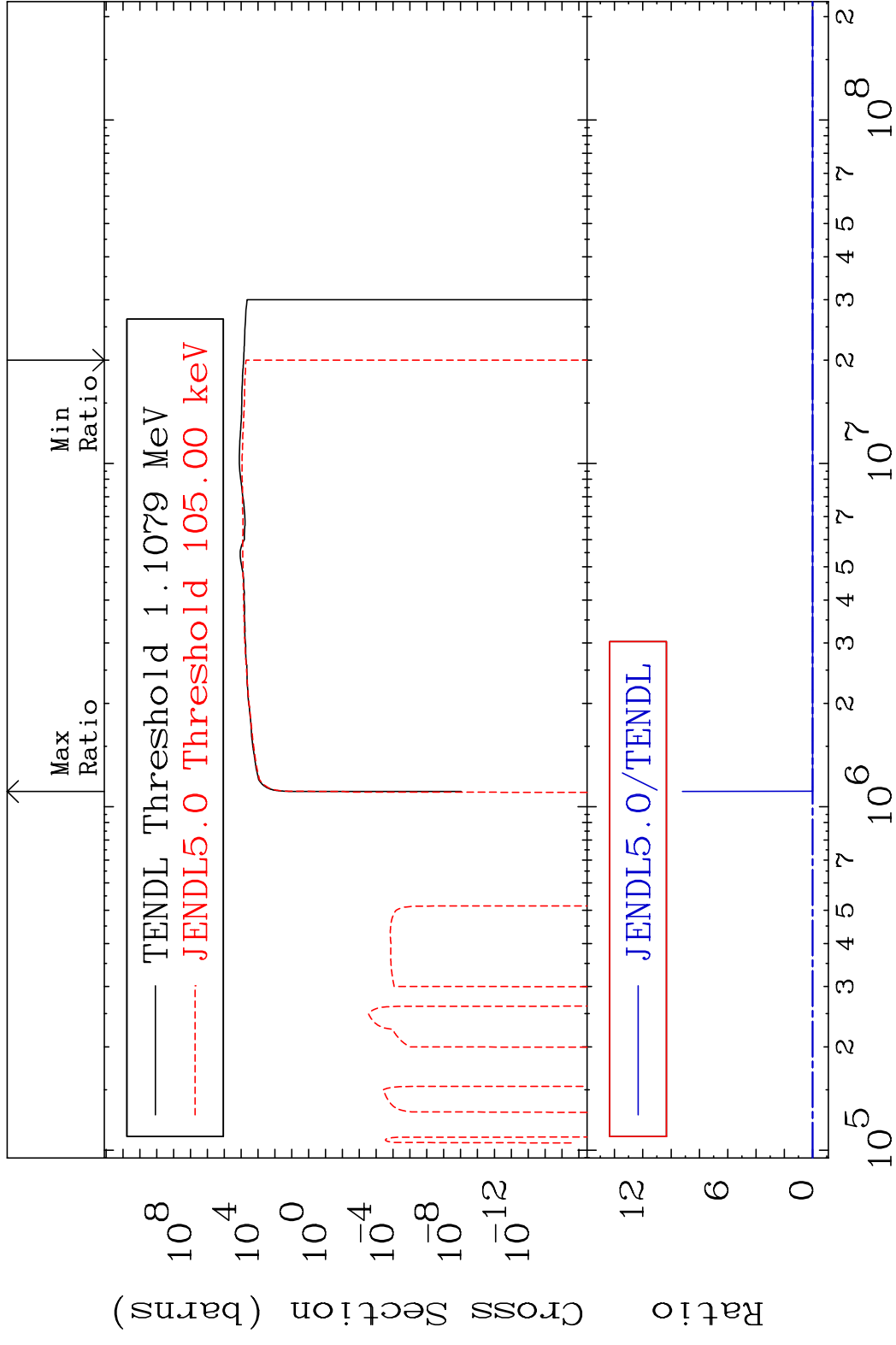
22-Ti-44

MAT 2219 Kerma non-elastic (all but mt2) 22-Ti-44  
 Cross Section -89.94 To 9999. %



46 Incident Energy (eV) 22-Ti-44

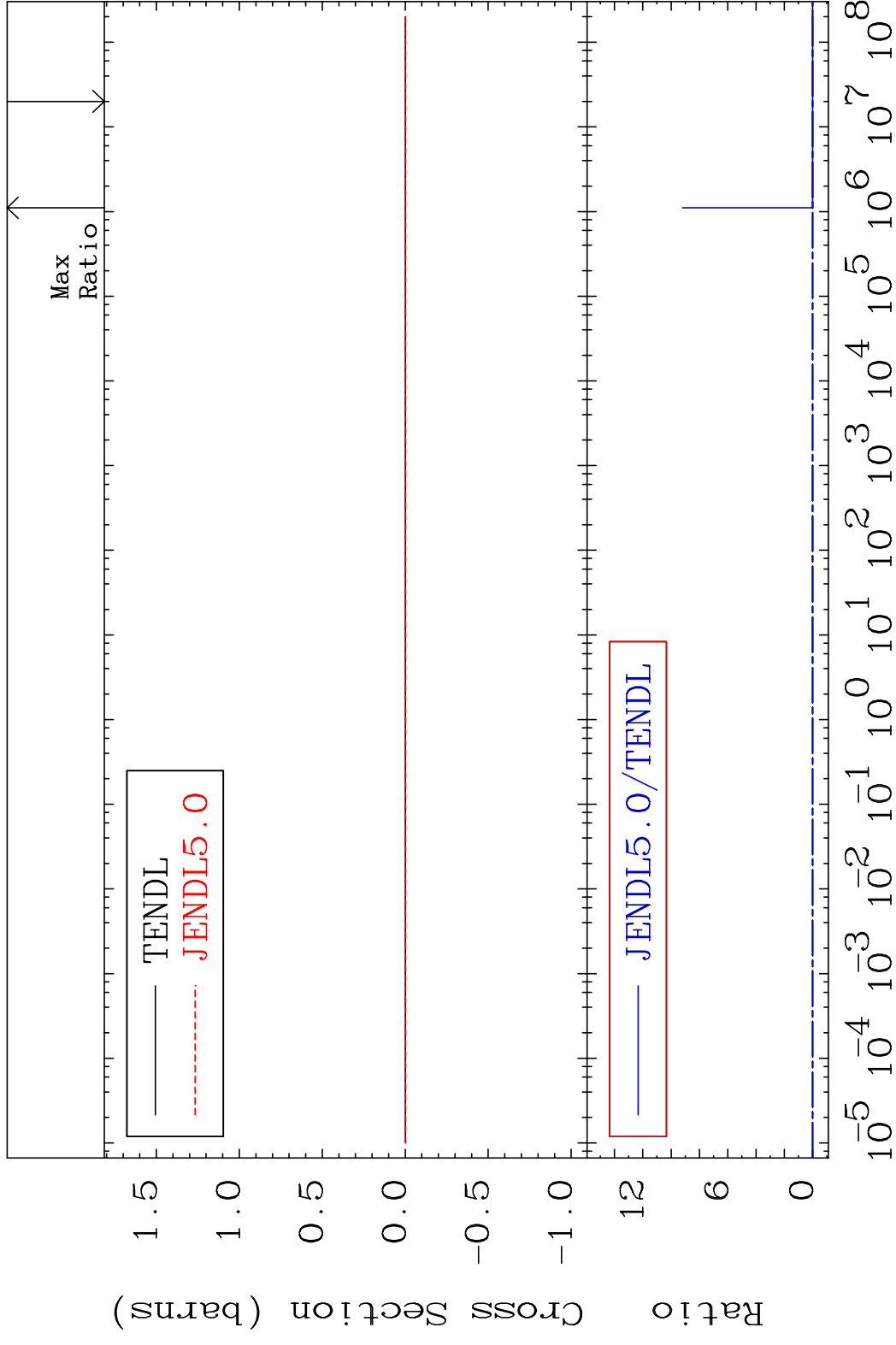
MAT 2219 Kerma inelastic (mt51-91) 22-Ti-44  
 Cross Section -100.0 To 9999. %



47 Incident Energy (eV) 22-Ti-44



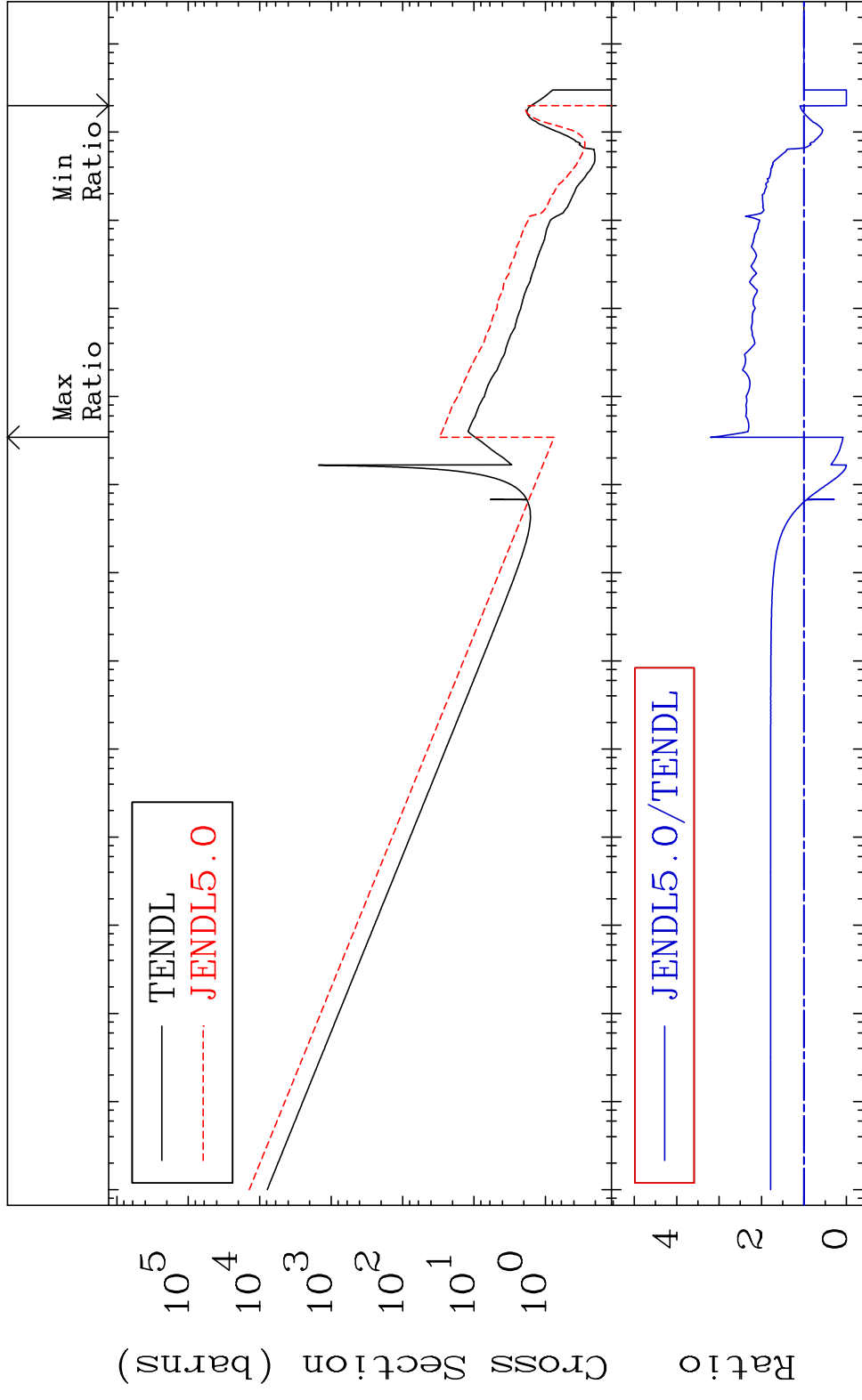
MAT 2219 Kerma fission (mt18 or mt19-20-21-38) 22-Ti-44  
 Cross Section -100.0 To 9999. %



MAT 2219

Kerma capture (mt102) 22-Ti-44

Cross Section -100.0 To 219.8 %

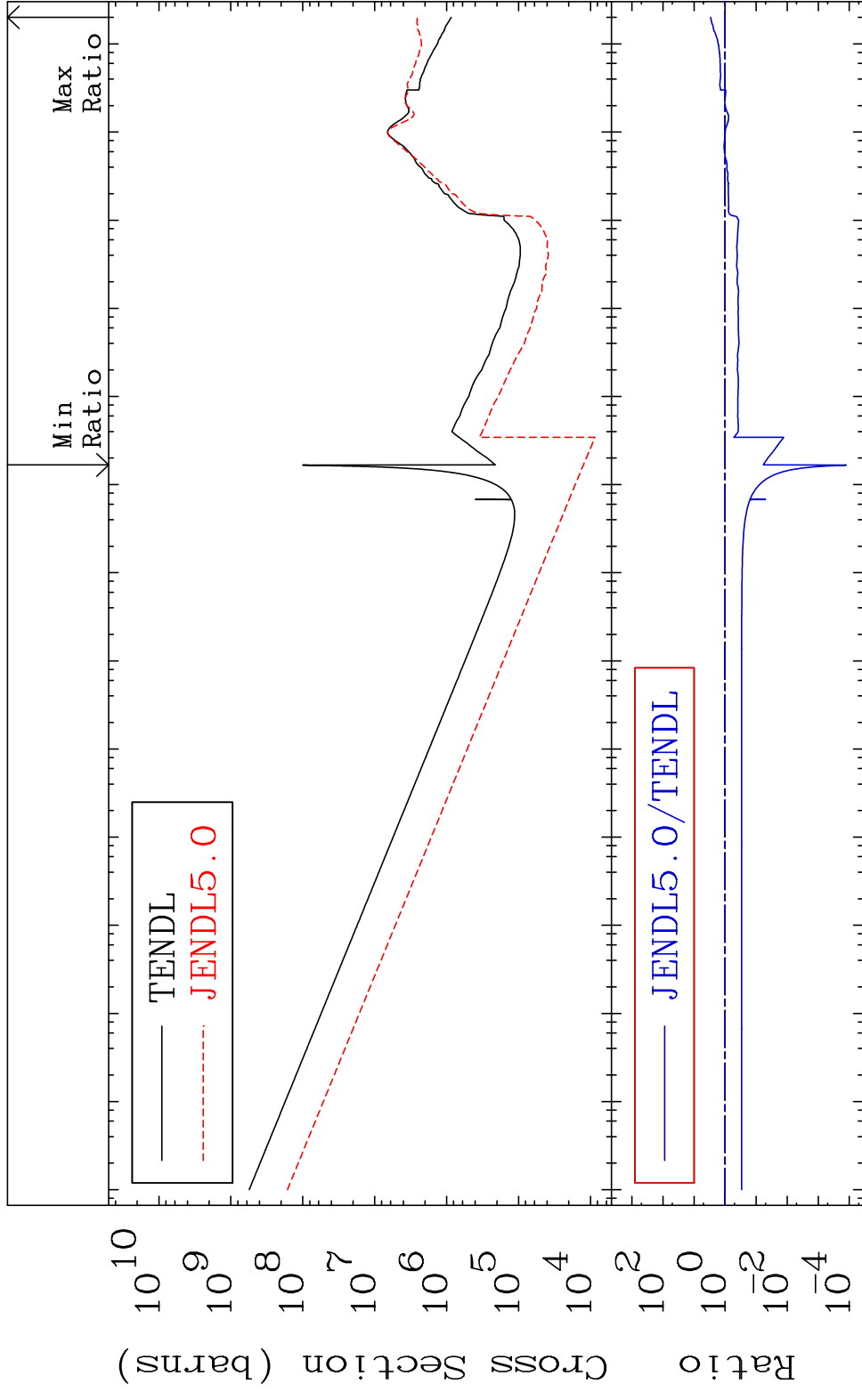


49

Incident Energy (eV)

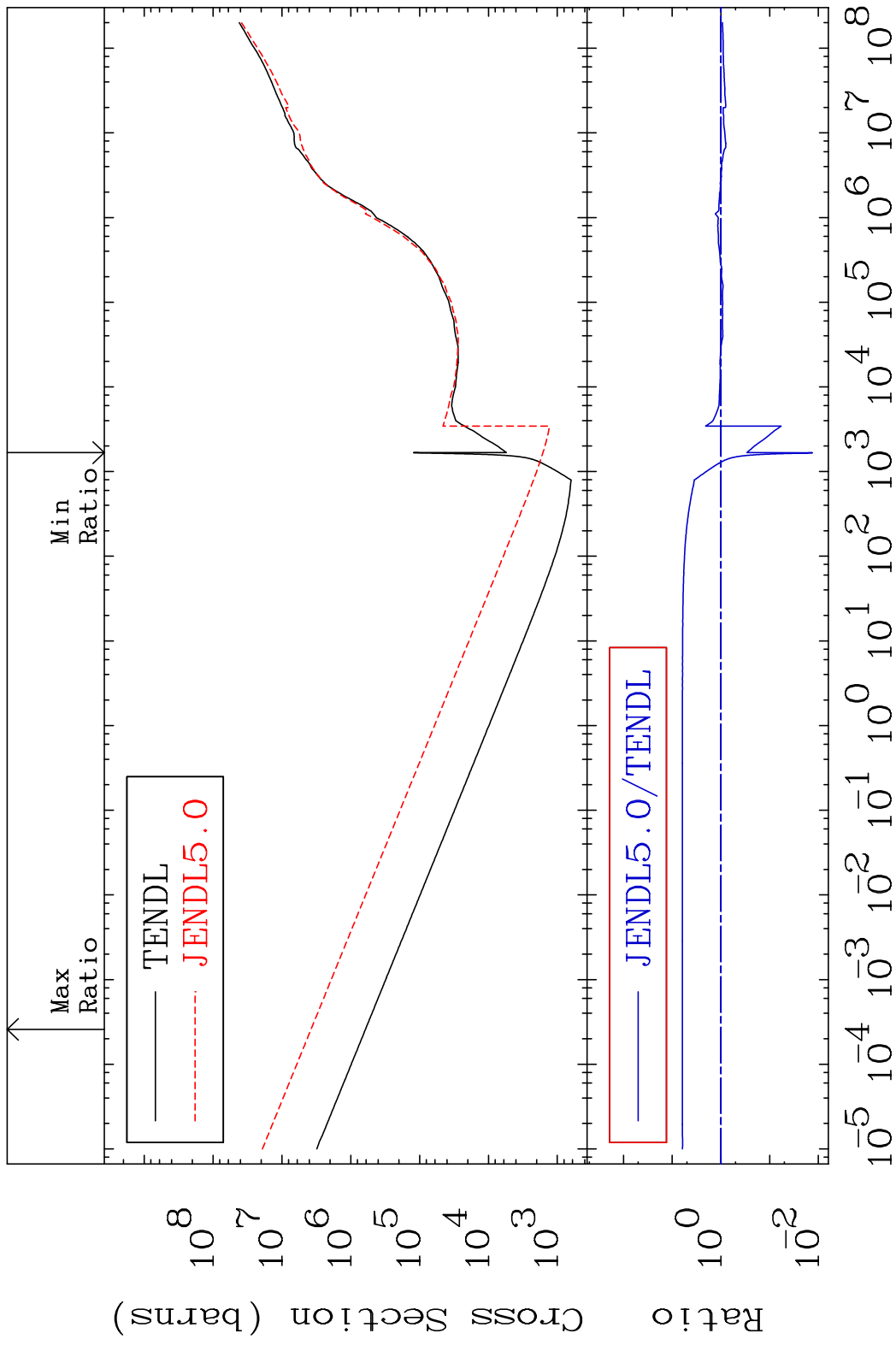
22-Ti-44

MAT 2219 Total photon (eV-barns) 22-Ti-44  
 Cross Section -99.99 To 190.8 %

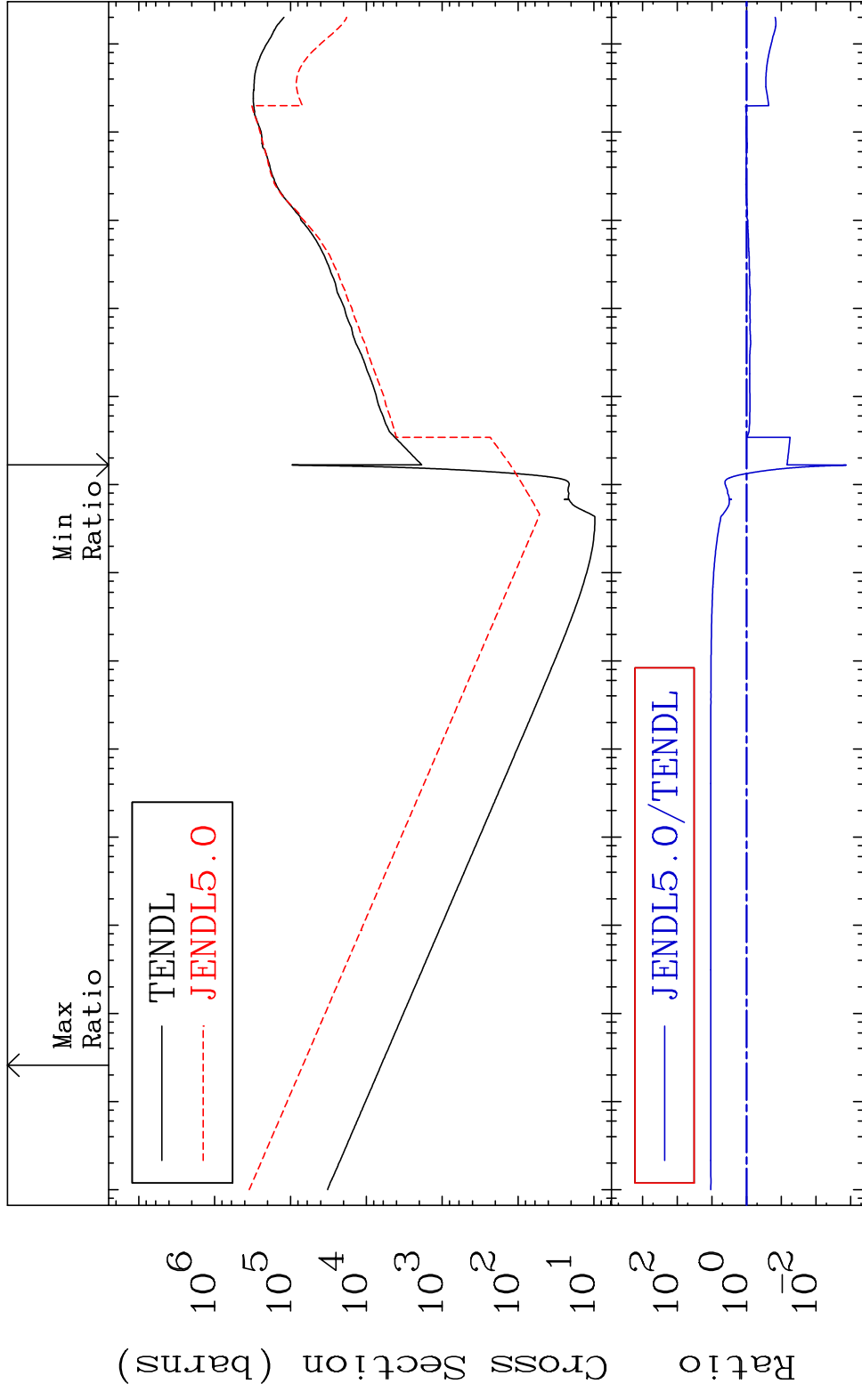


50 Incident Energy (eV) 22-Ti-44

MAT 2219 Total kinematic kerma (high limit) 22-Ti-44  
 Cross Section -98.68 To 519.5 %



MAT 2219      Dpa total (eV-barns)      22-Ti-44  
 Cross Section      -99.87 To 979.8 %



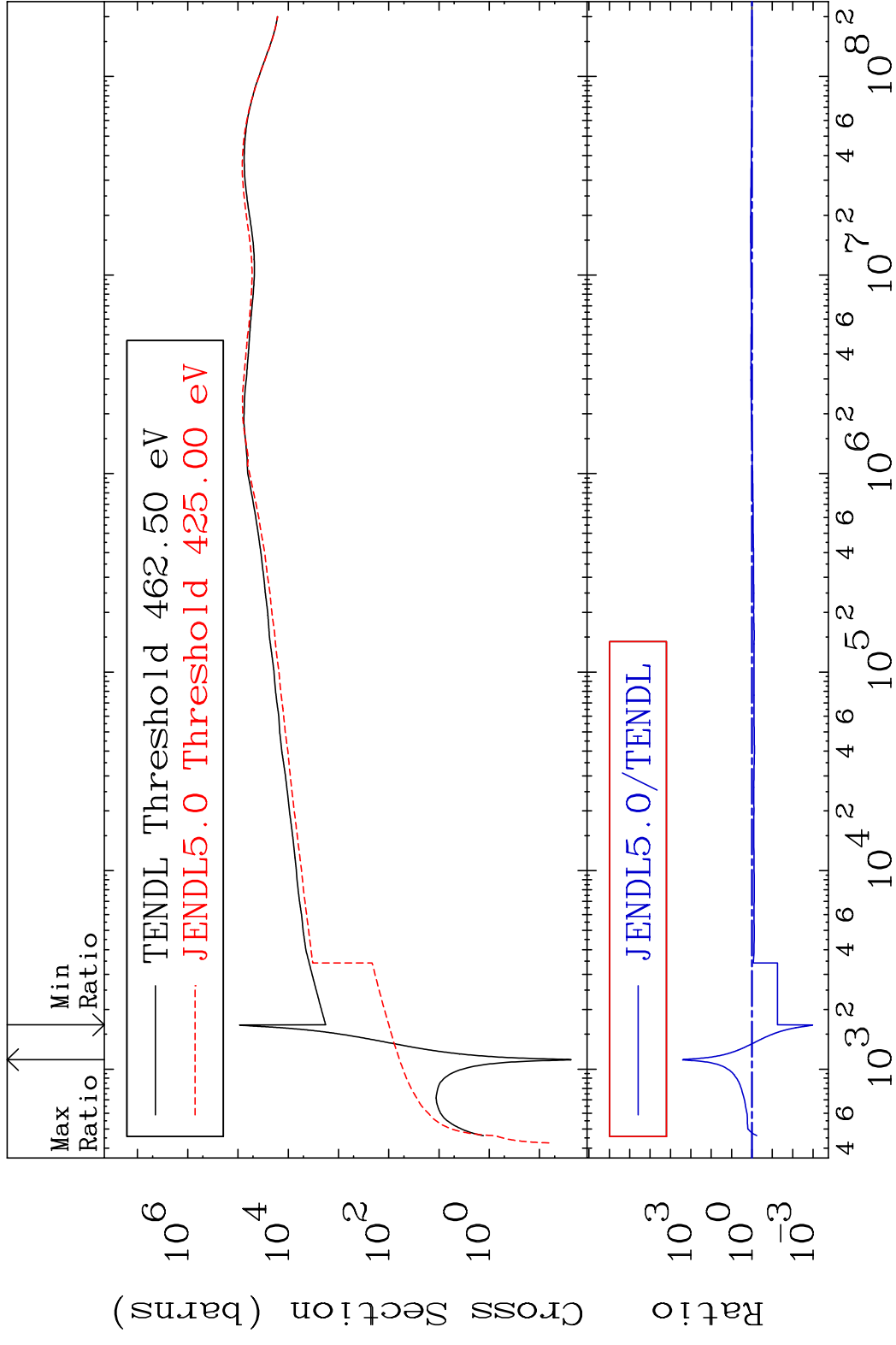
52      Incident Energy (eV)      22-Ti-44

MAT 2219

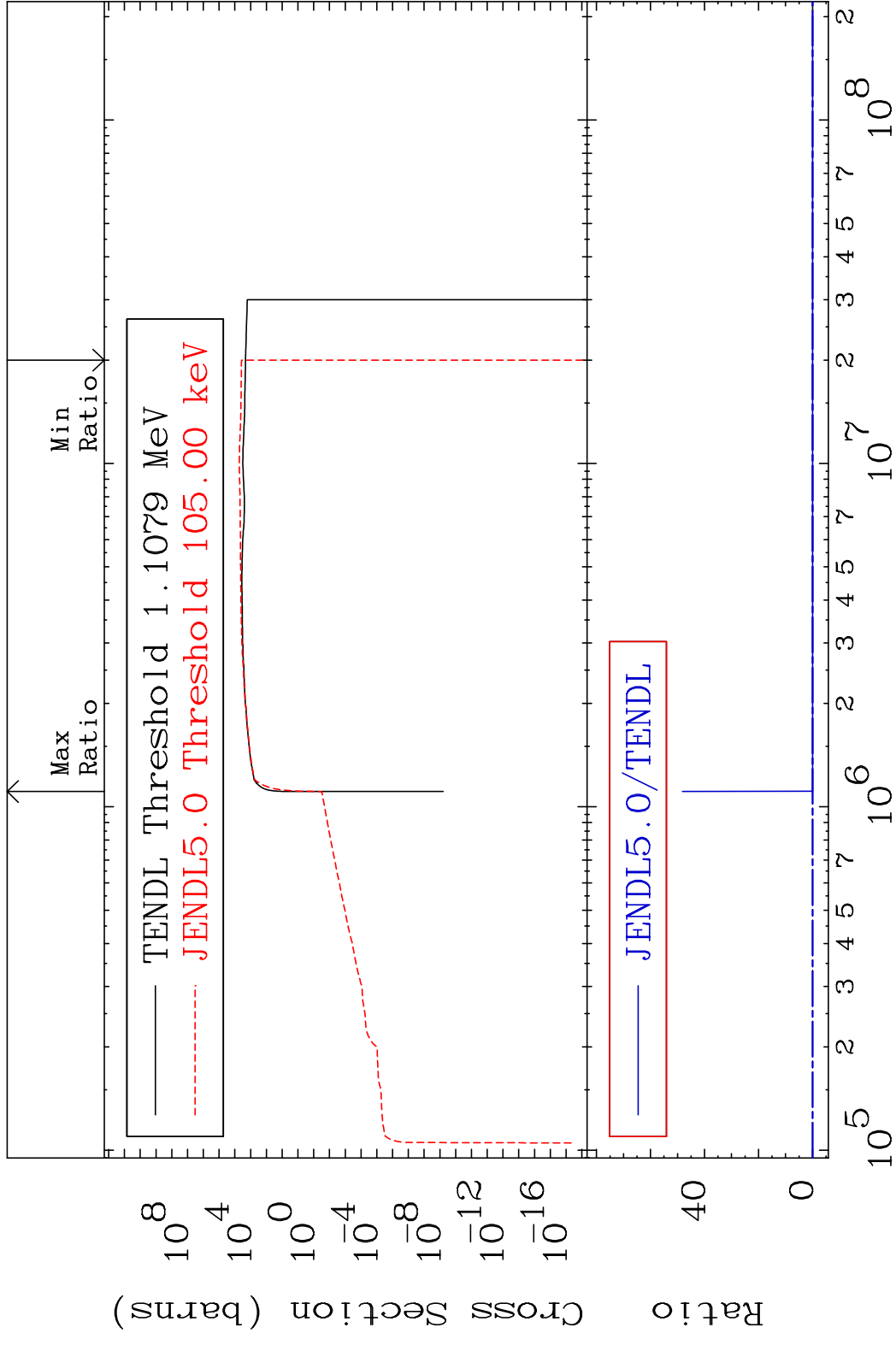
Dpa elastic (mt2)

22-Ti-44

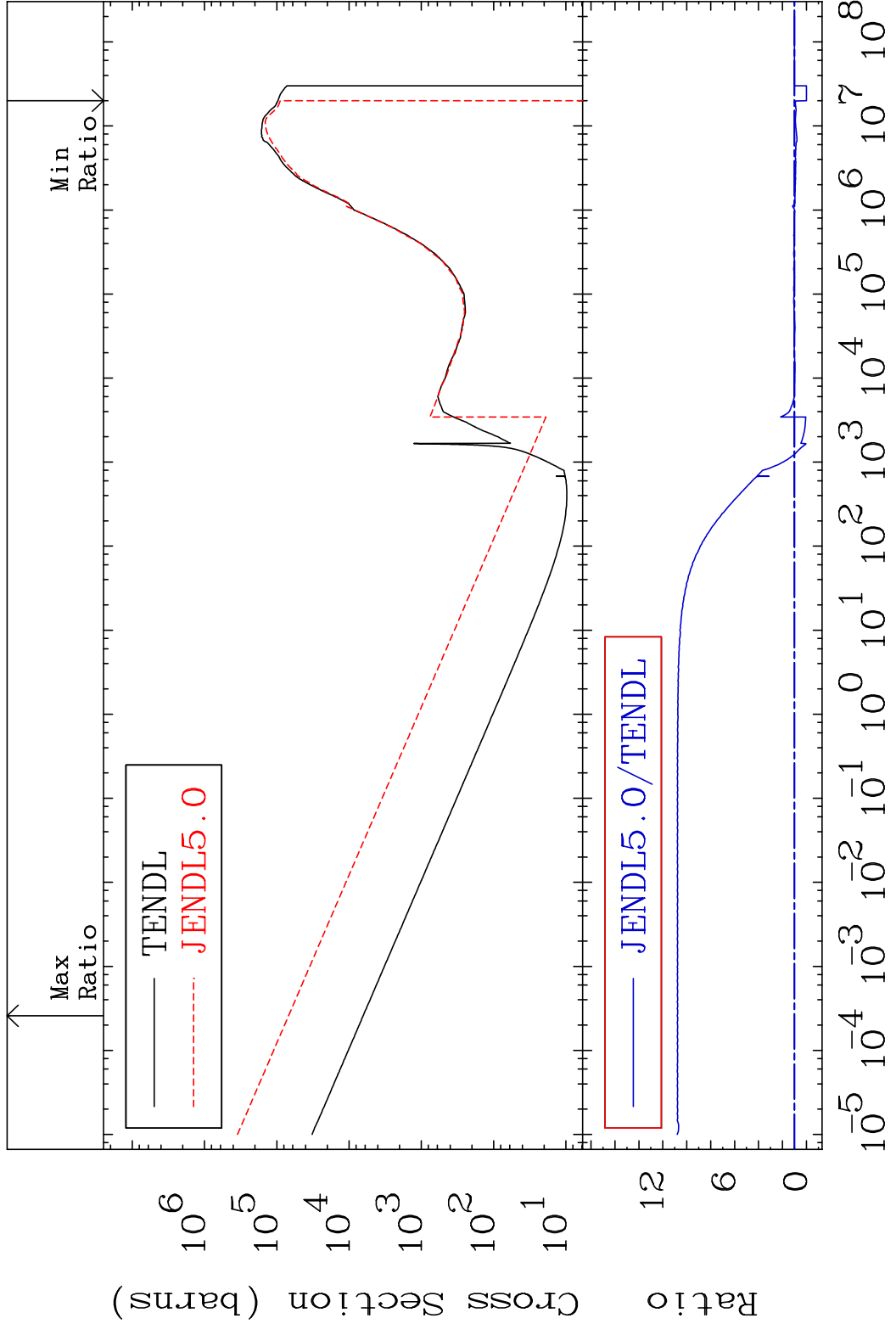
Cross Section -99.89 To 9999. %



MAT 2219 Dpa inelastic (mt51-91) 22-Ti-44  
 Cross Section -100.0 To 9999. %



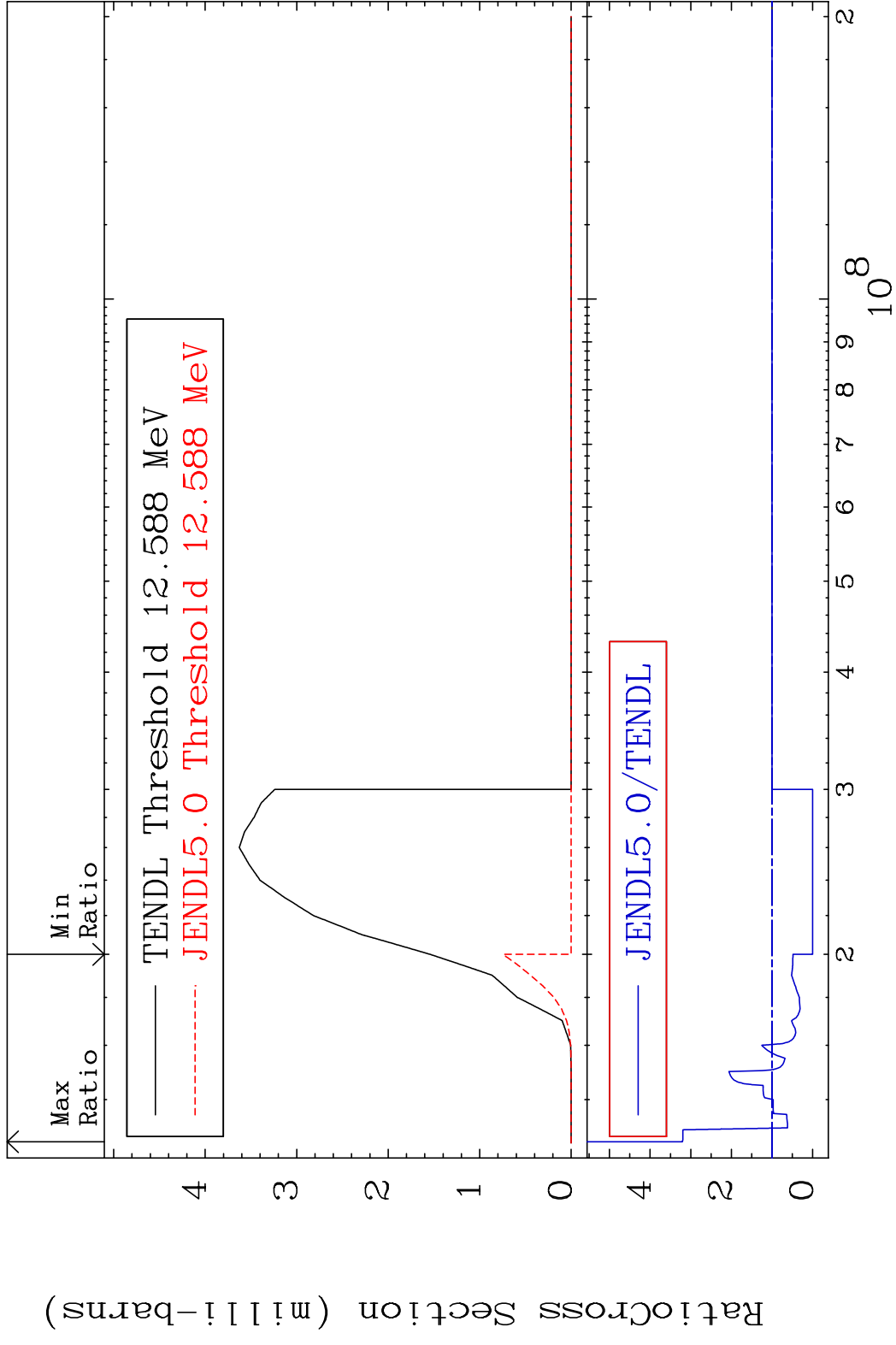
MAT 2219 Dpa disappearance (mt102 -120) 22-Ti-44  
 Cross Section -100.0 To 979.8 %

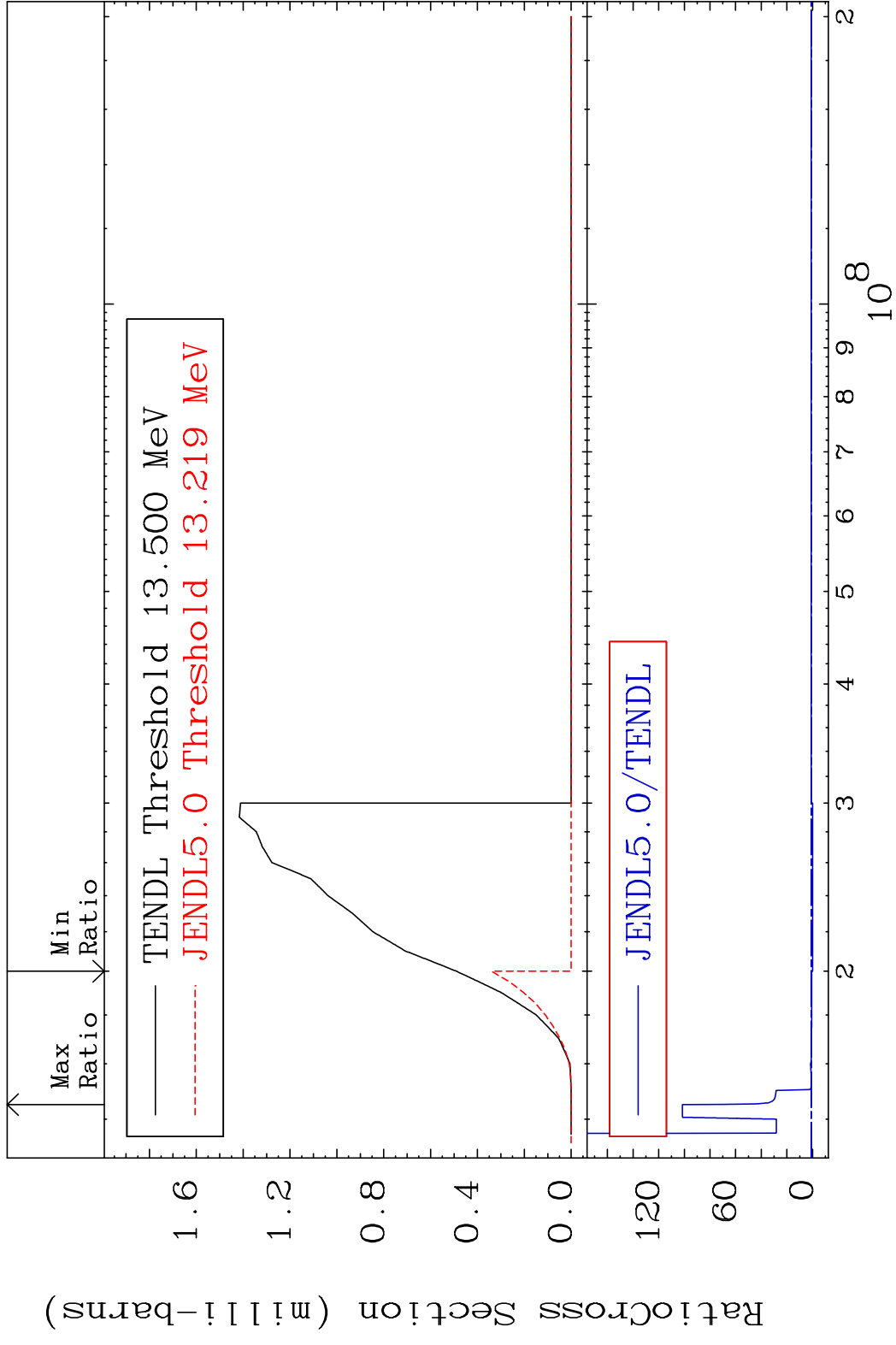


55 Incident Energy (eV) 22-Ti-44

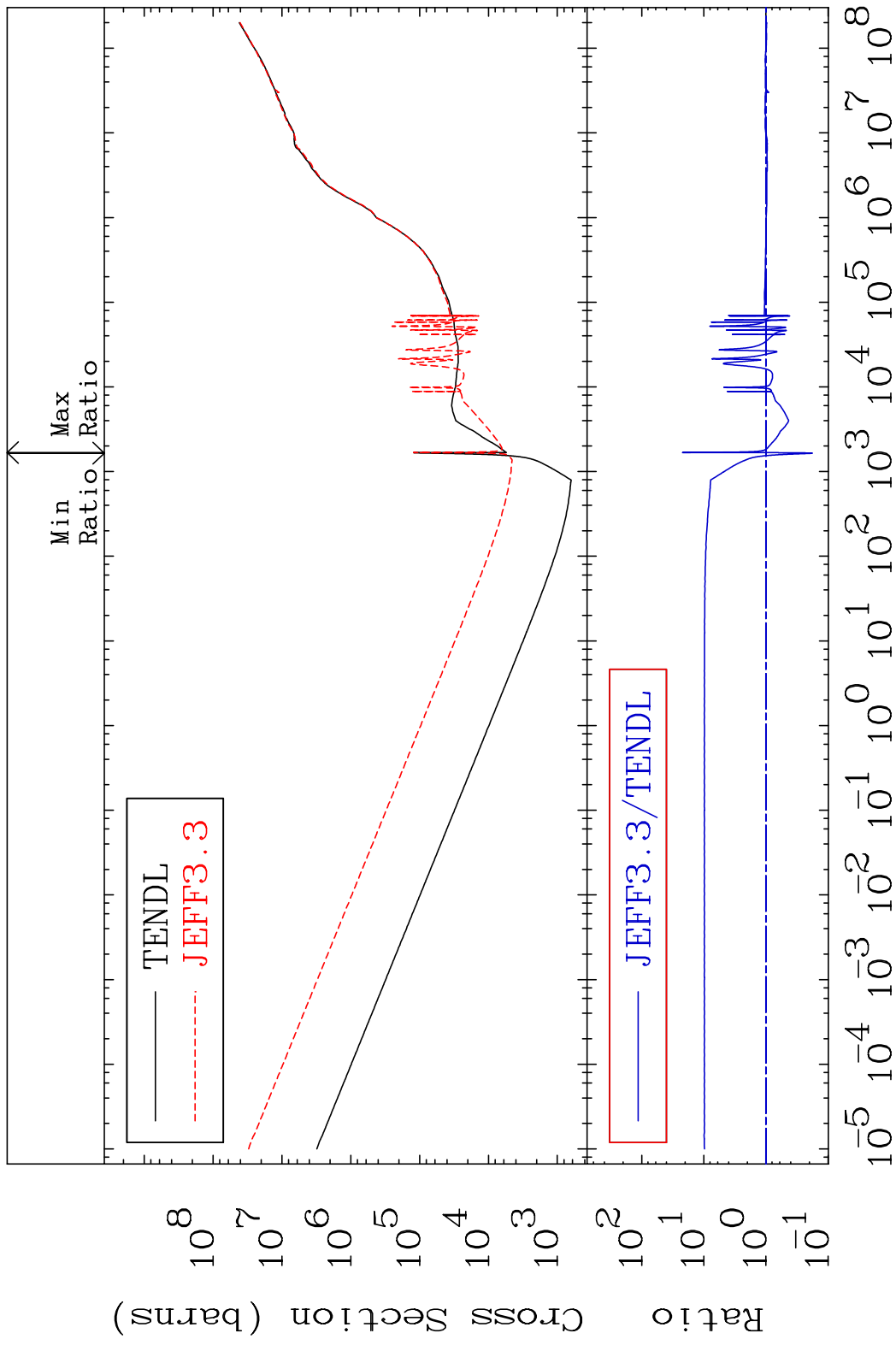


MAT 2219 (n, t):21-Sc-42g 22-Ti-44  
 Radionuclide Production Cross Section 180.0 mb 220.6 %

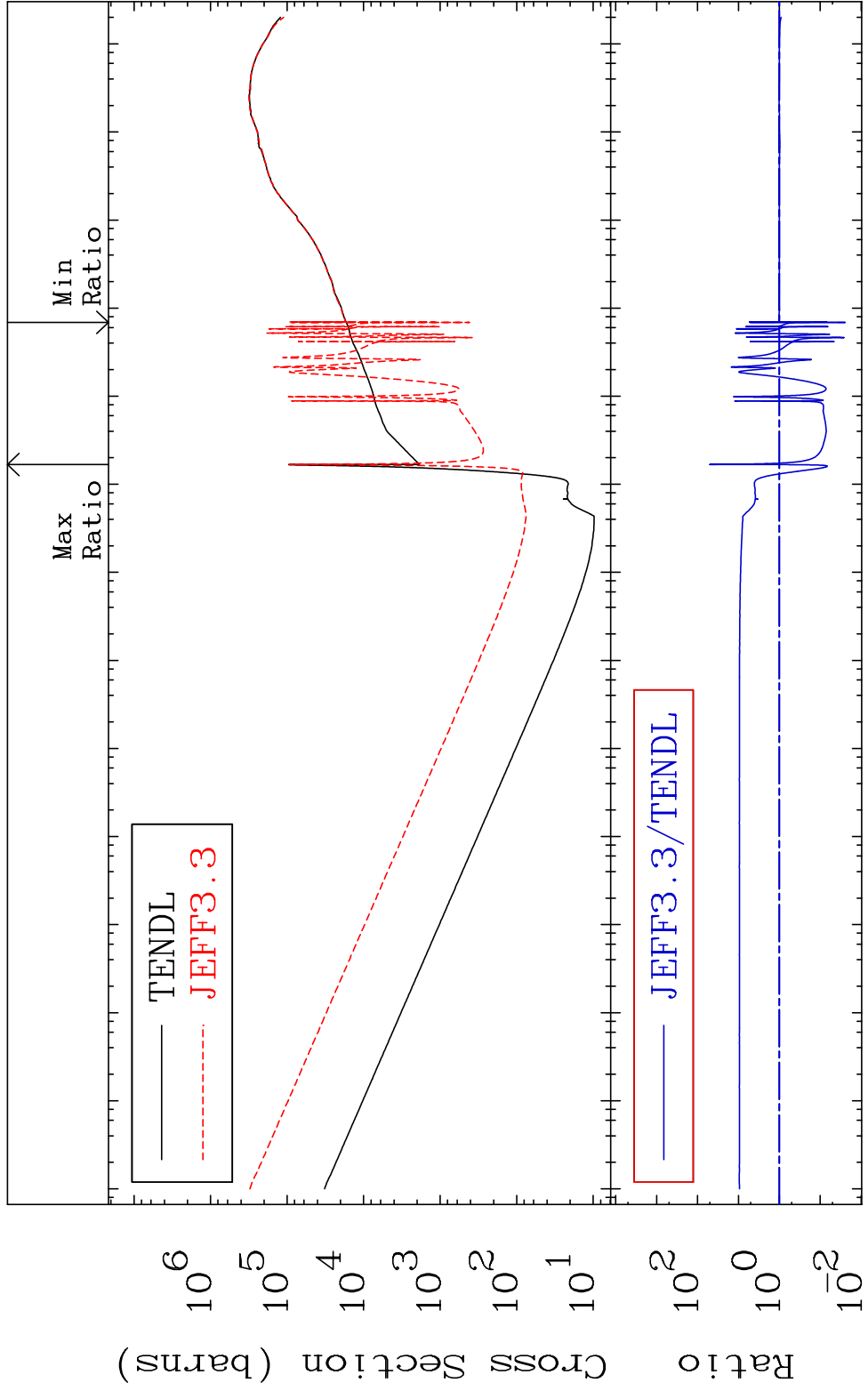




MAT 2219 Total kinematic kerma (high limit) 22-Ti-44  
 Cross Section -82.24 To 2124. %



MAT 2219      Dpa total (eV-barns)      22-Ti-44  
 Cross Section      -97.55 To 4912. %

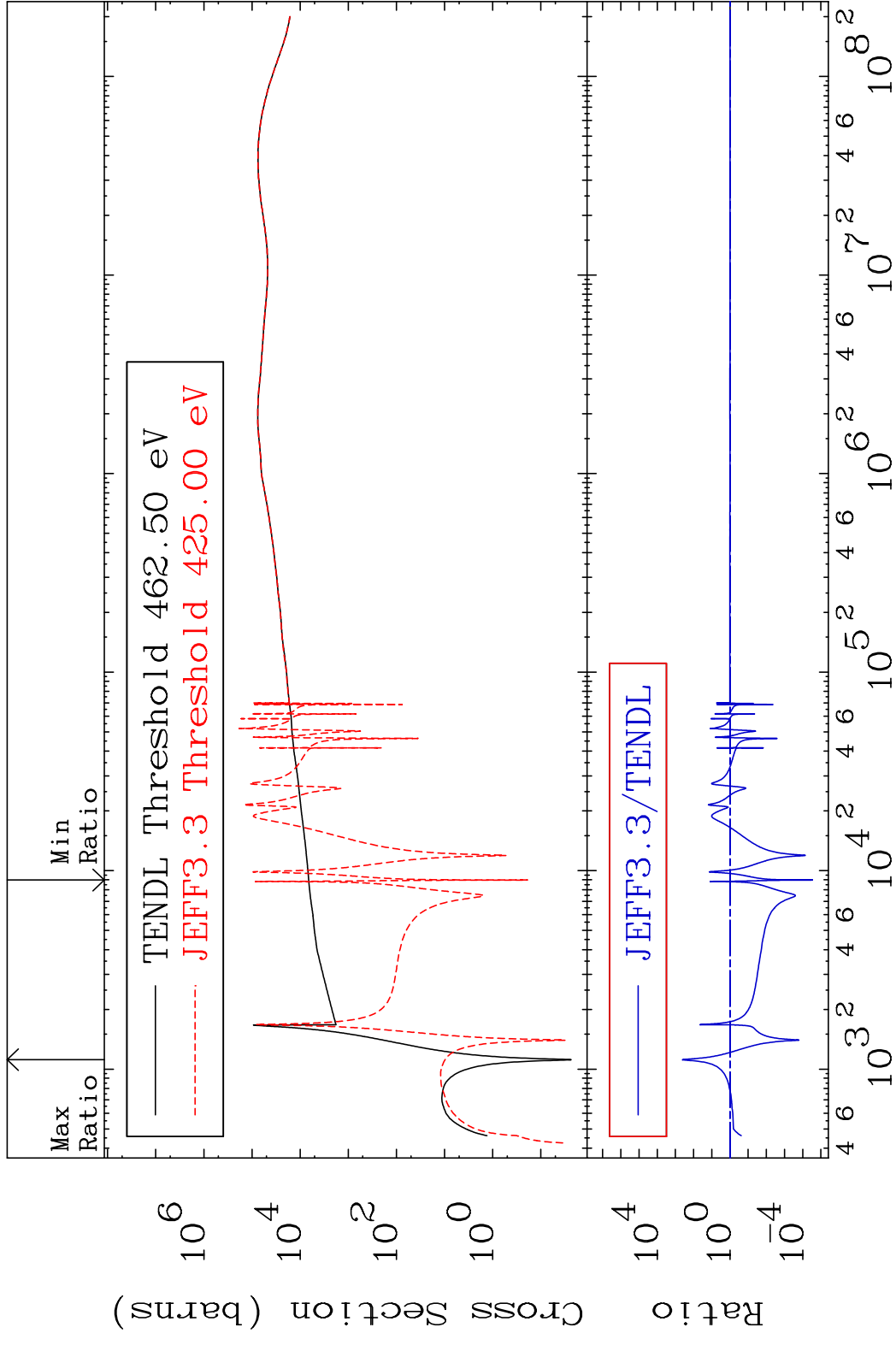


MAT 2219

Dpa elastic (mt2)

22-Ti-44

Cross Section -100.0 To 9999. %

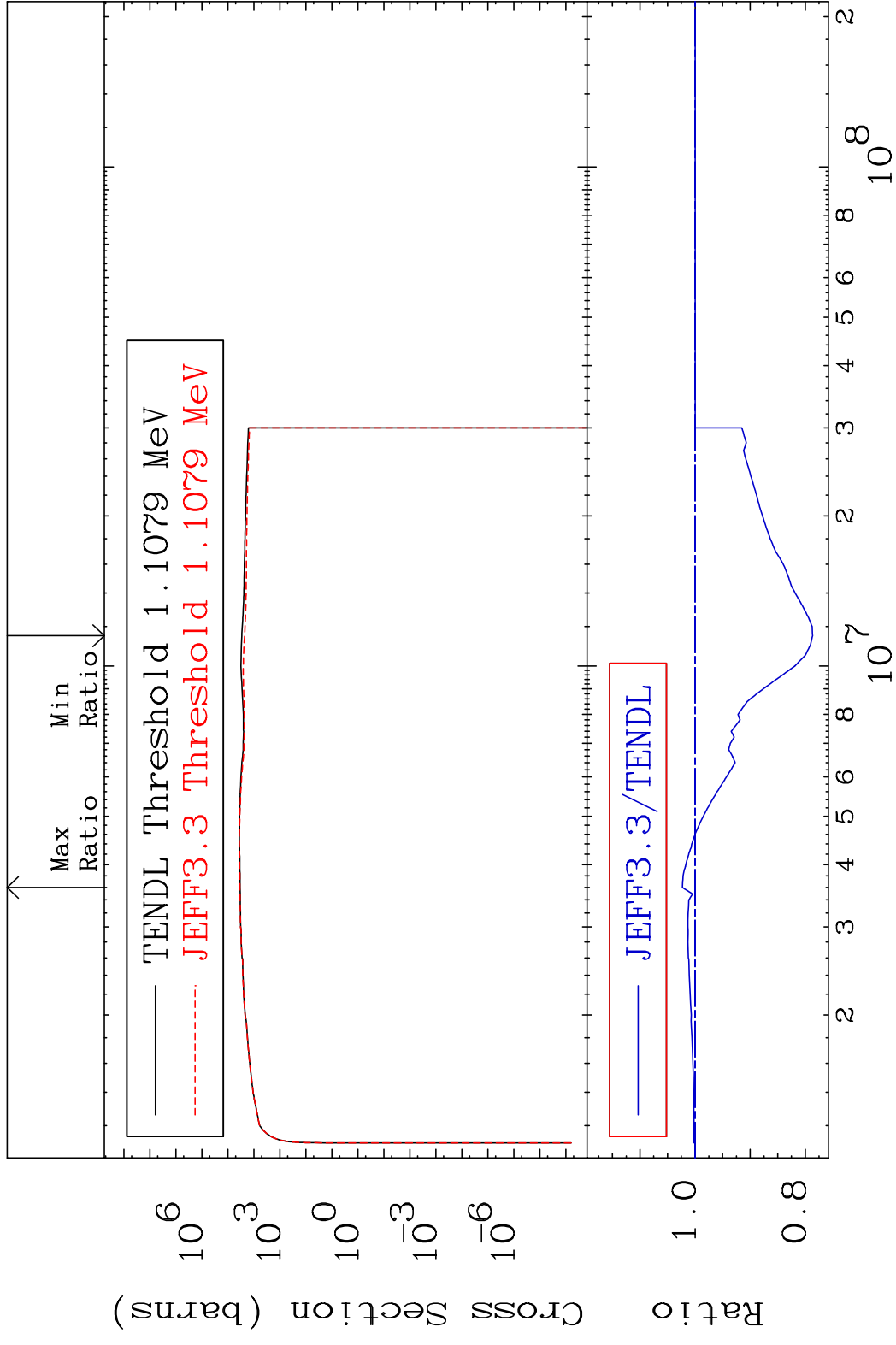


60

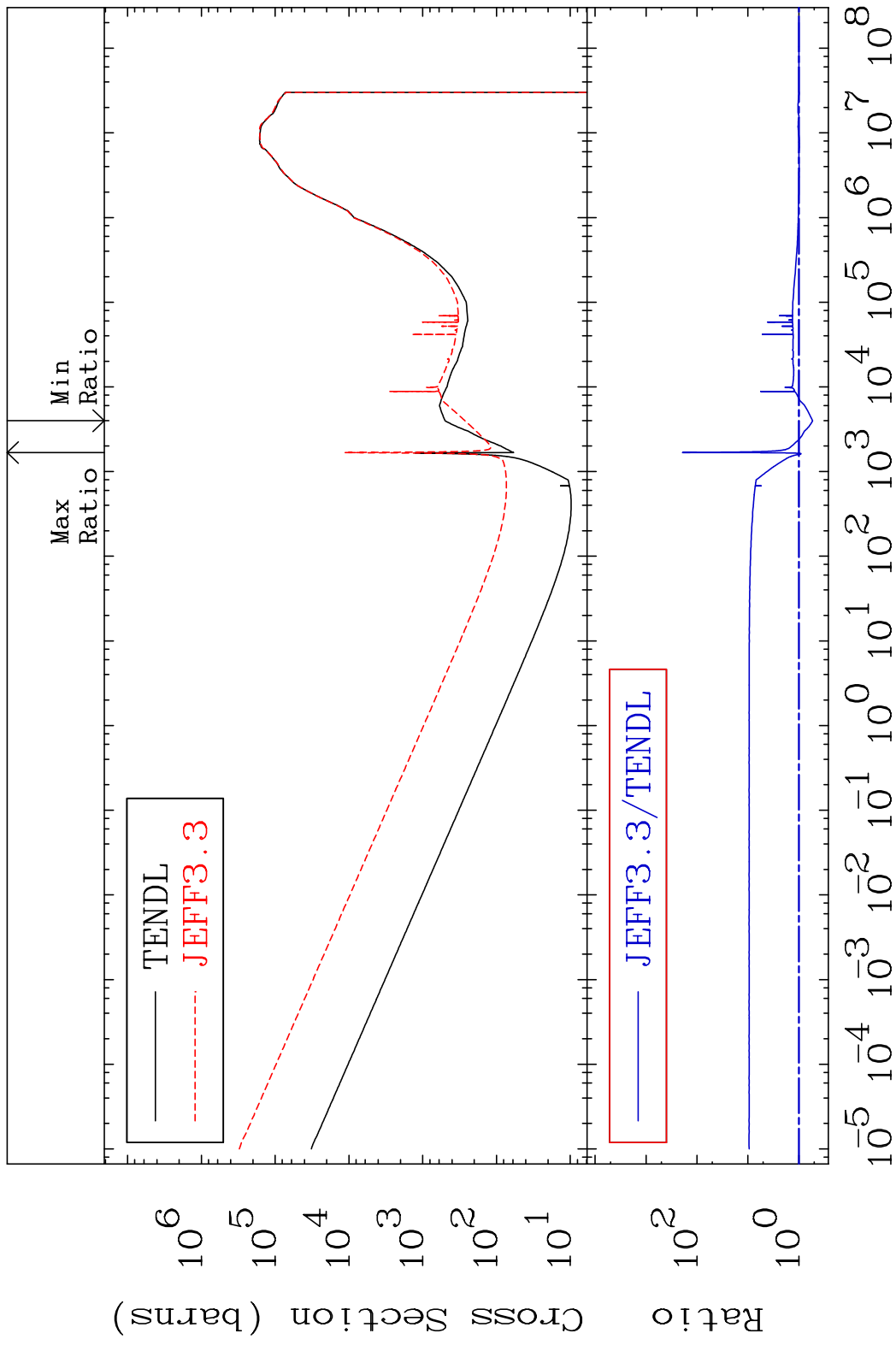
Incident Energy (eV)

22-Ti-44

MAT 2219      Dpa inelastic (mt51-91)      22-Ti-44  
 Cross Section      -21.33 To 2.306 %

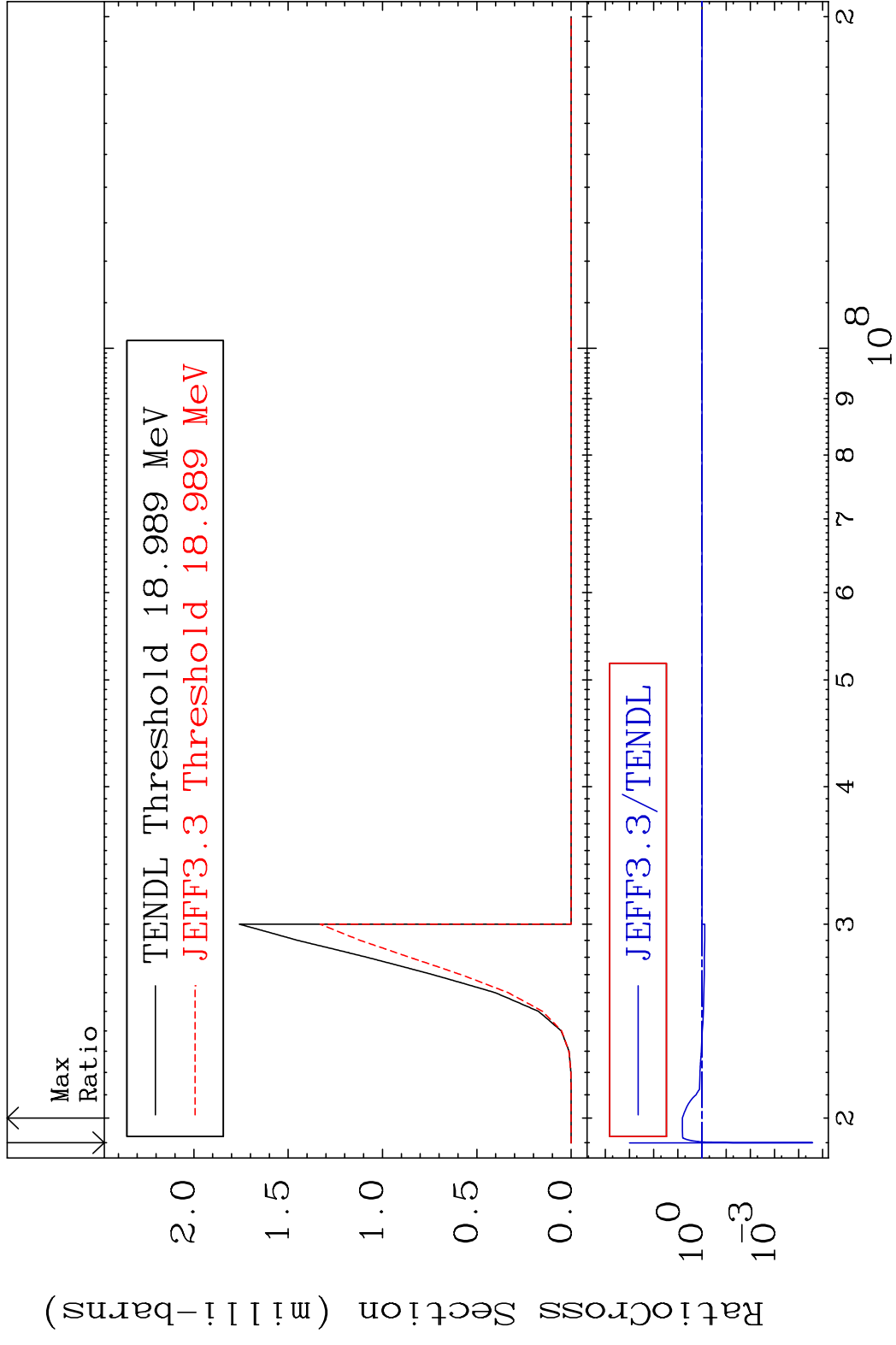


MAT 2219 Dpa disappearance (mt102 -120) 22-Ti-44  
 Cross Section -46.24 To 9999. %

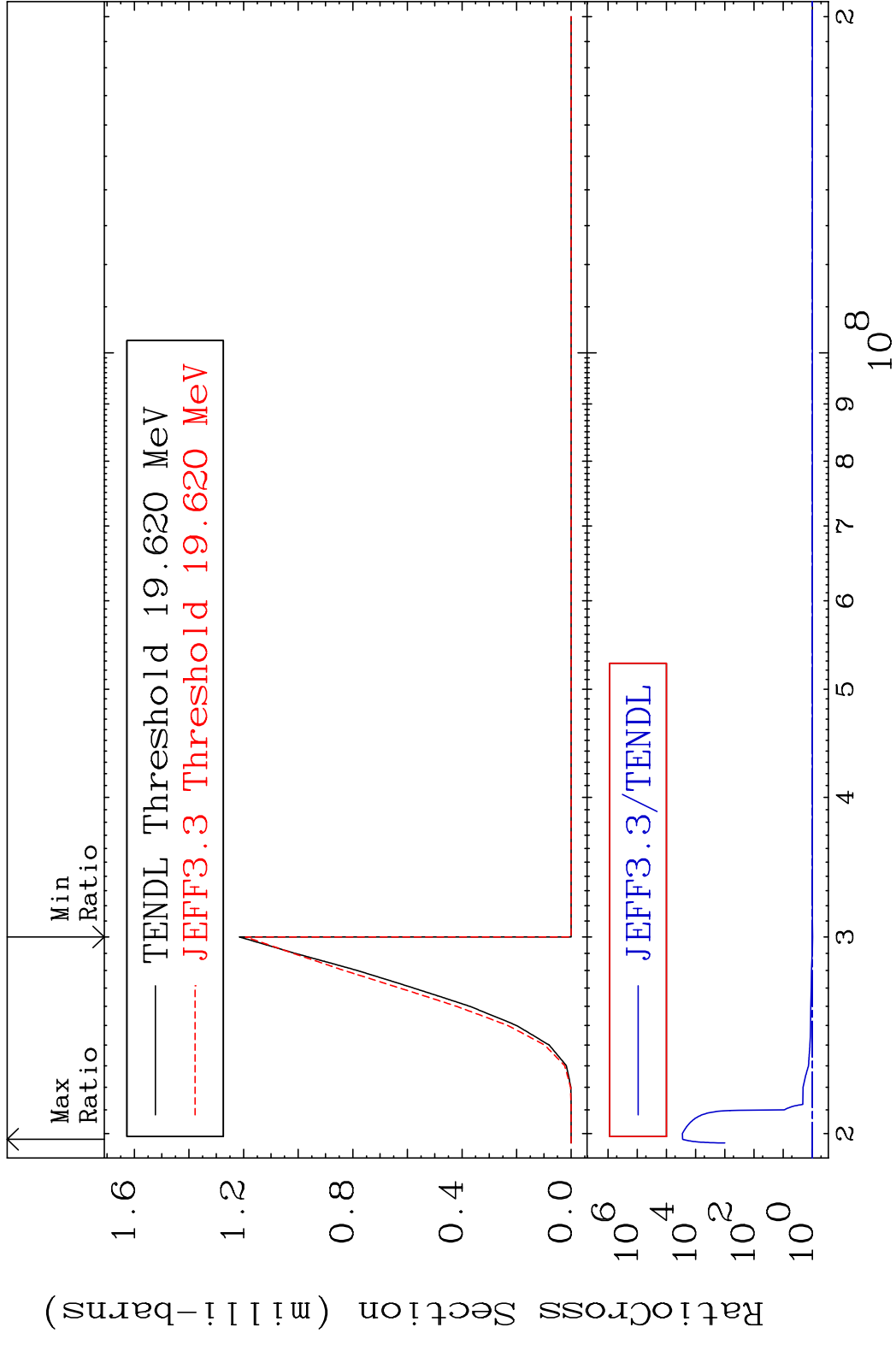


62 Incident Energy (eV) 22-Ti-44

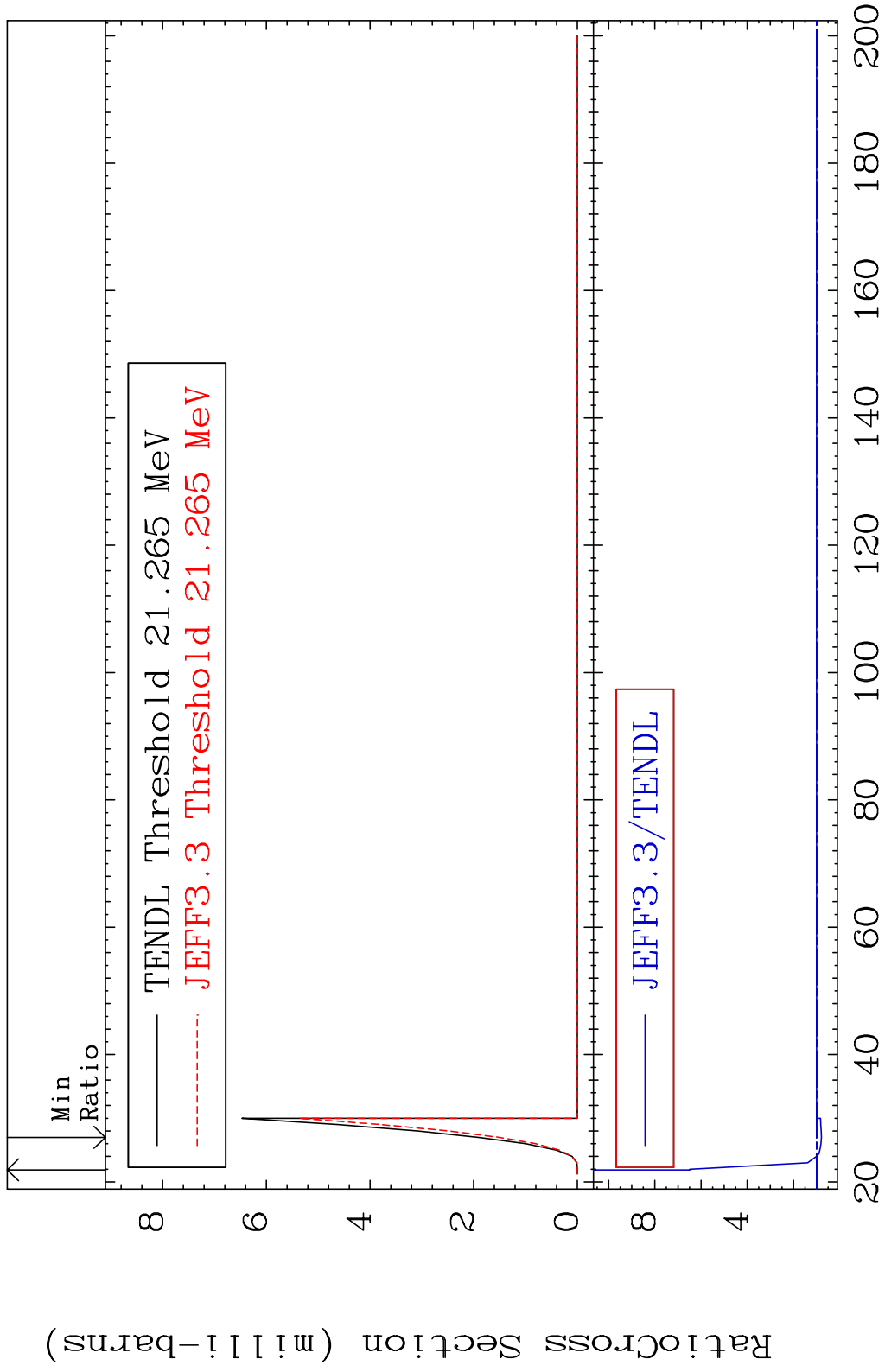
MAT 2219 (n, n') d:21-Sc-42g 22-Ti-44  
 Radionuclide Production Cross Section 18.989 MeV 544.6 %



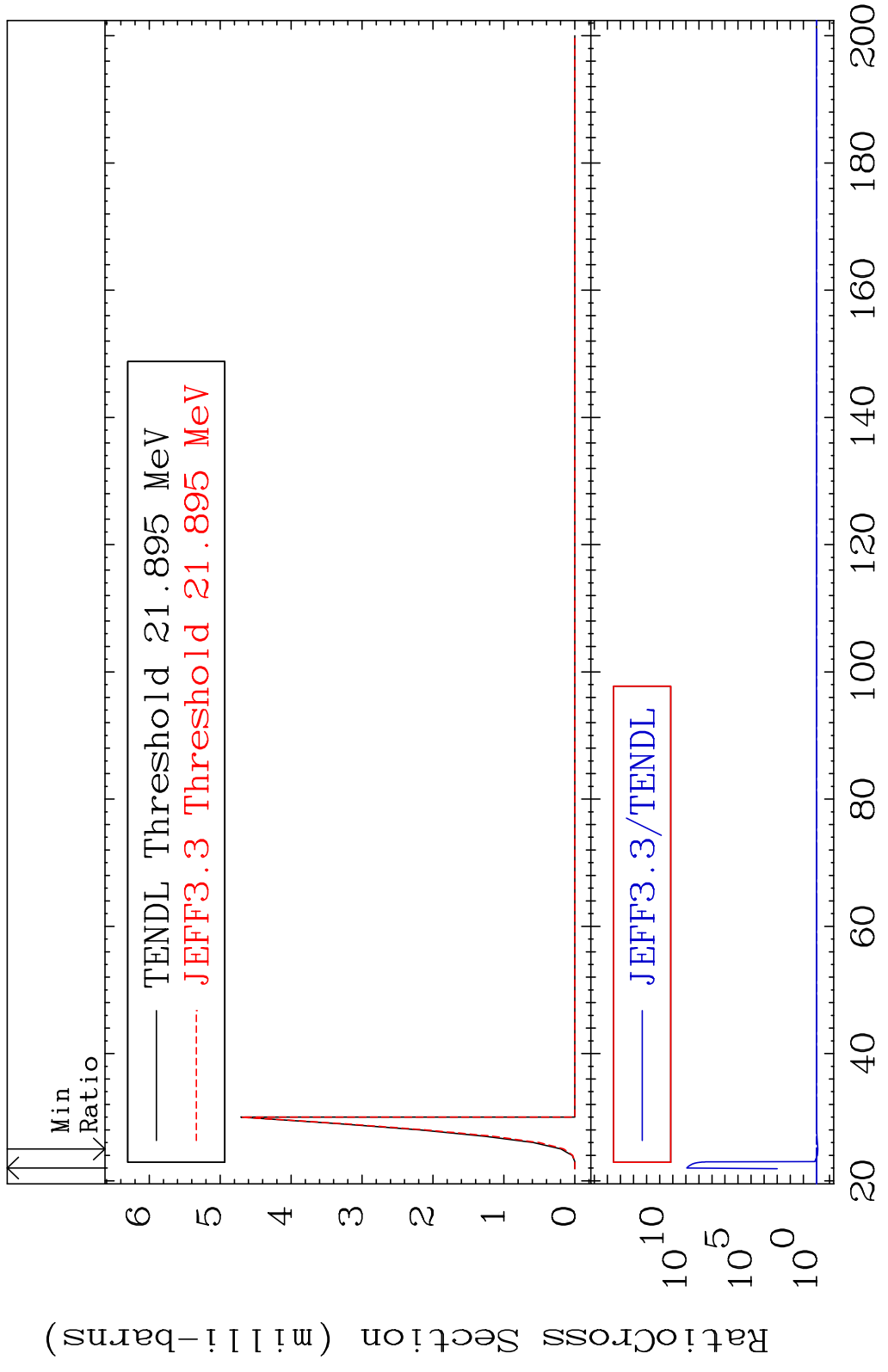




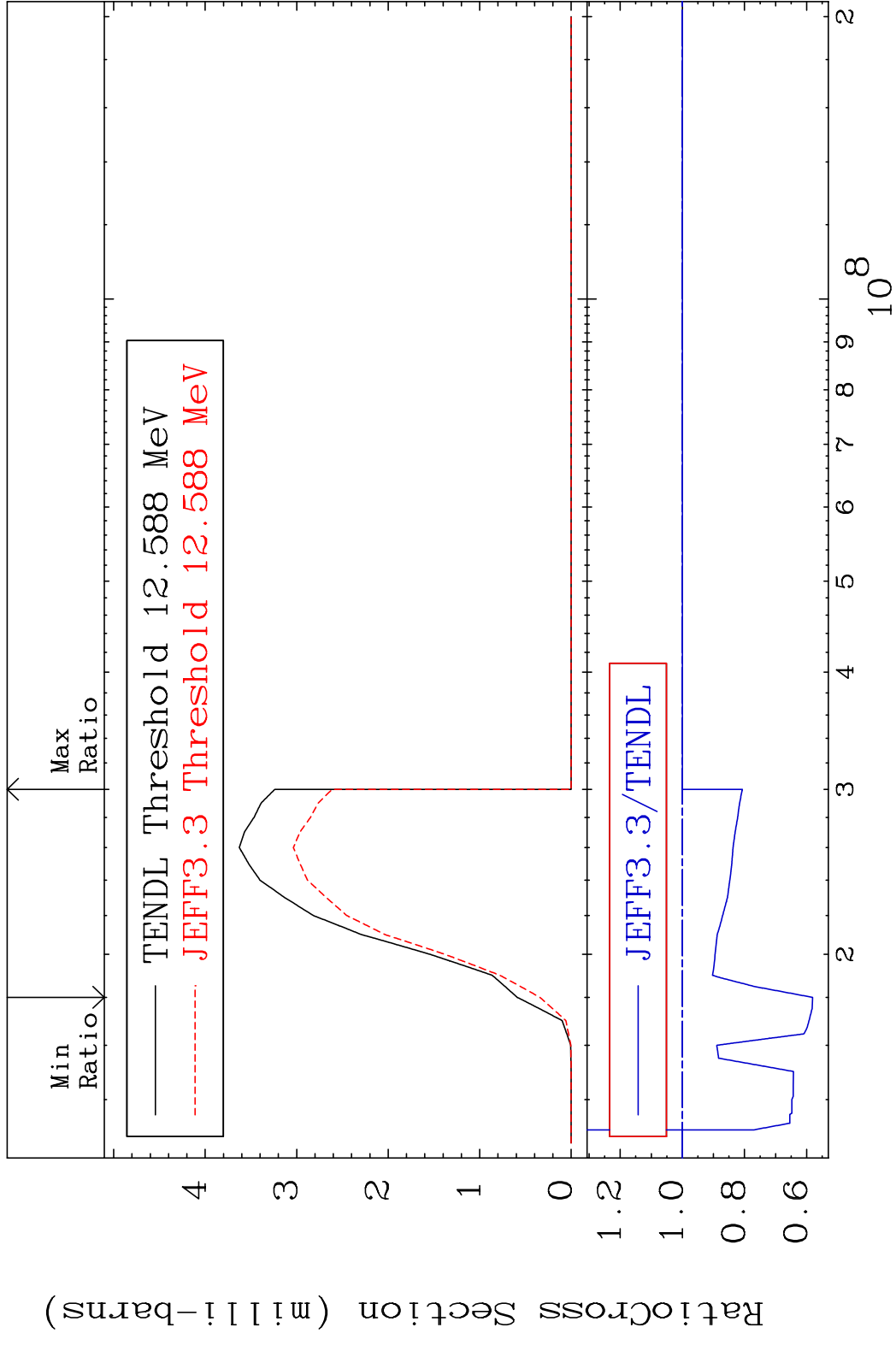
MAT 2219 (n,2n) p:21-Sc-42g 22-Ti-44  
 Radionuclide Production Cross Section 548.8 %



65 Incident Energy (MeV) 22-Ti-44



MAT 2219 (n, t):21-Sc-42g 22-Ti-44  
 Radionuclide Production Cross Section 0.000 %



MAT 2219 (n,t):21-Sc-42m2 22-Ti-44  
 Radionuclide Production Cross Section 1.846 %

