

Program Complot
(Version 2018-1)

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

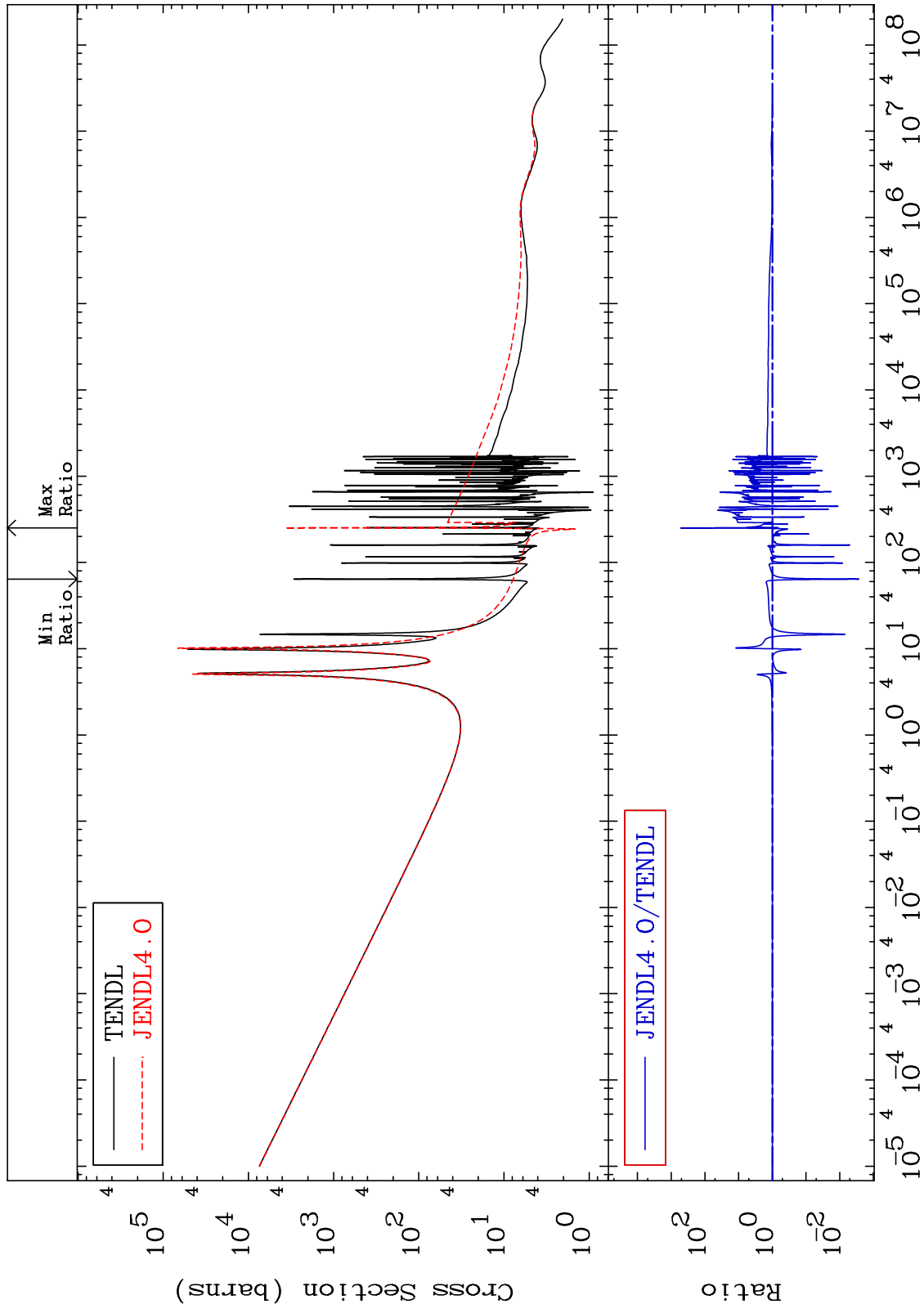
MAT 5425

Total

54-Xe-124

Cross Section

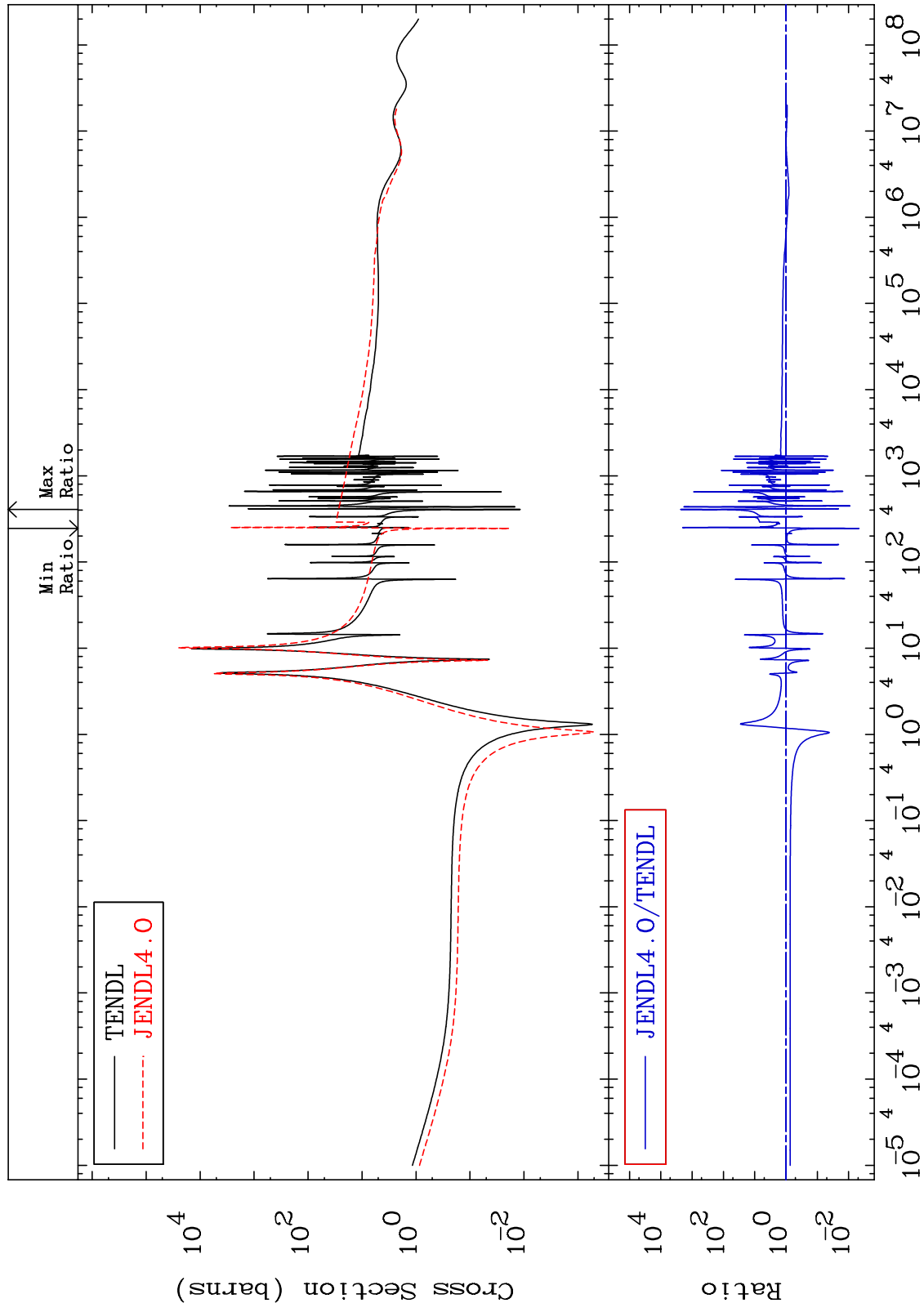
-99.73 To 9999. %



MAT 5425

Elastic
Cross Section

54-Xe-124
-99.54 To 9999. %

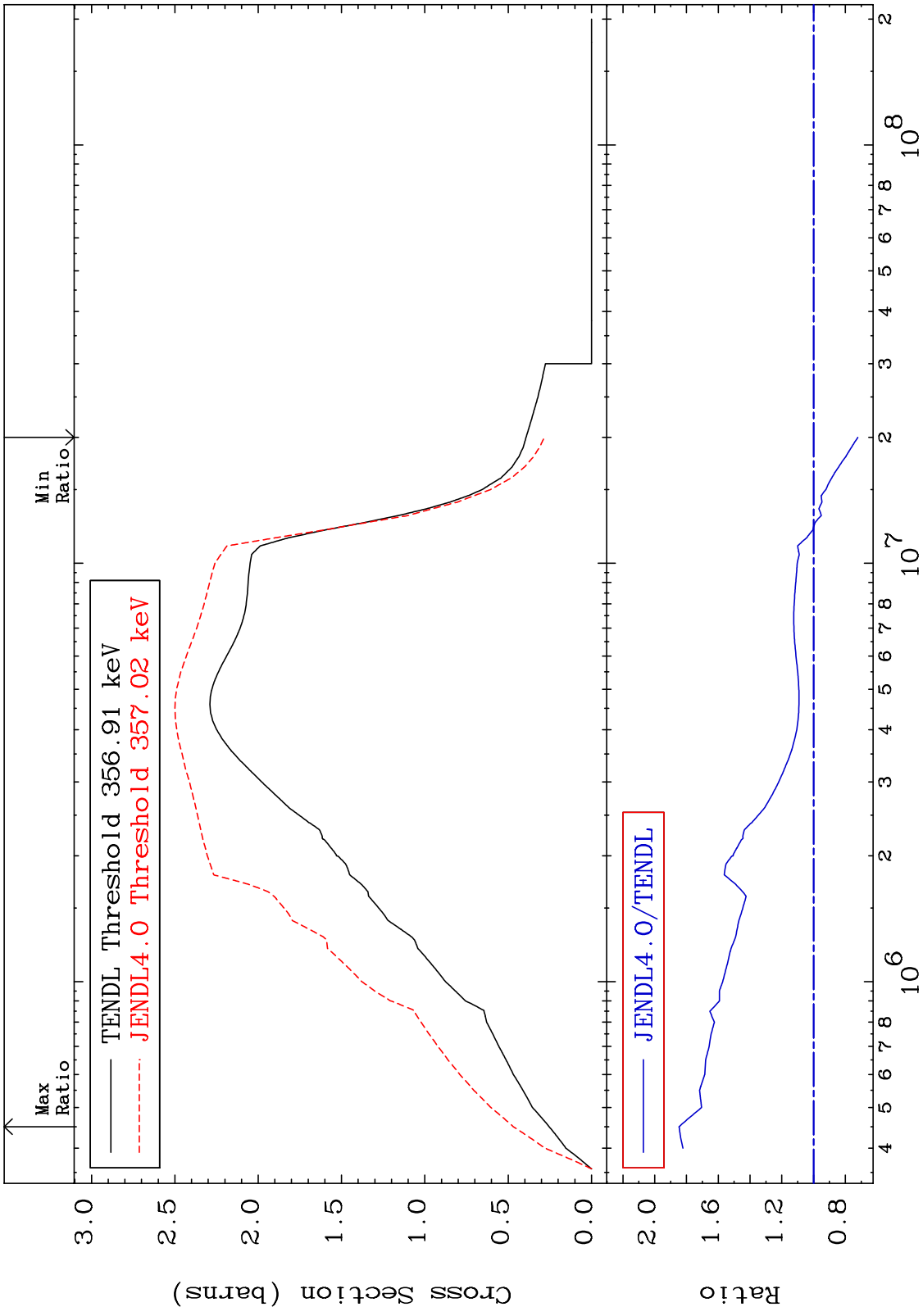


2

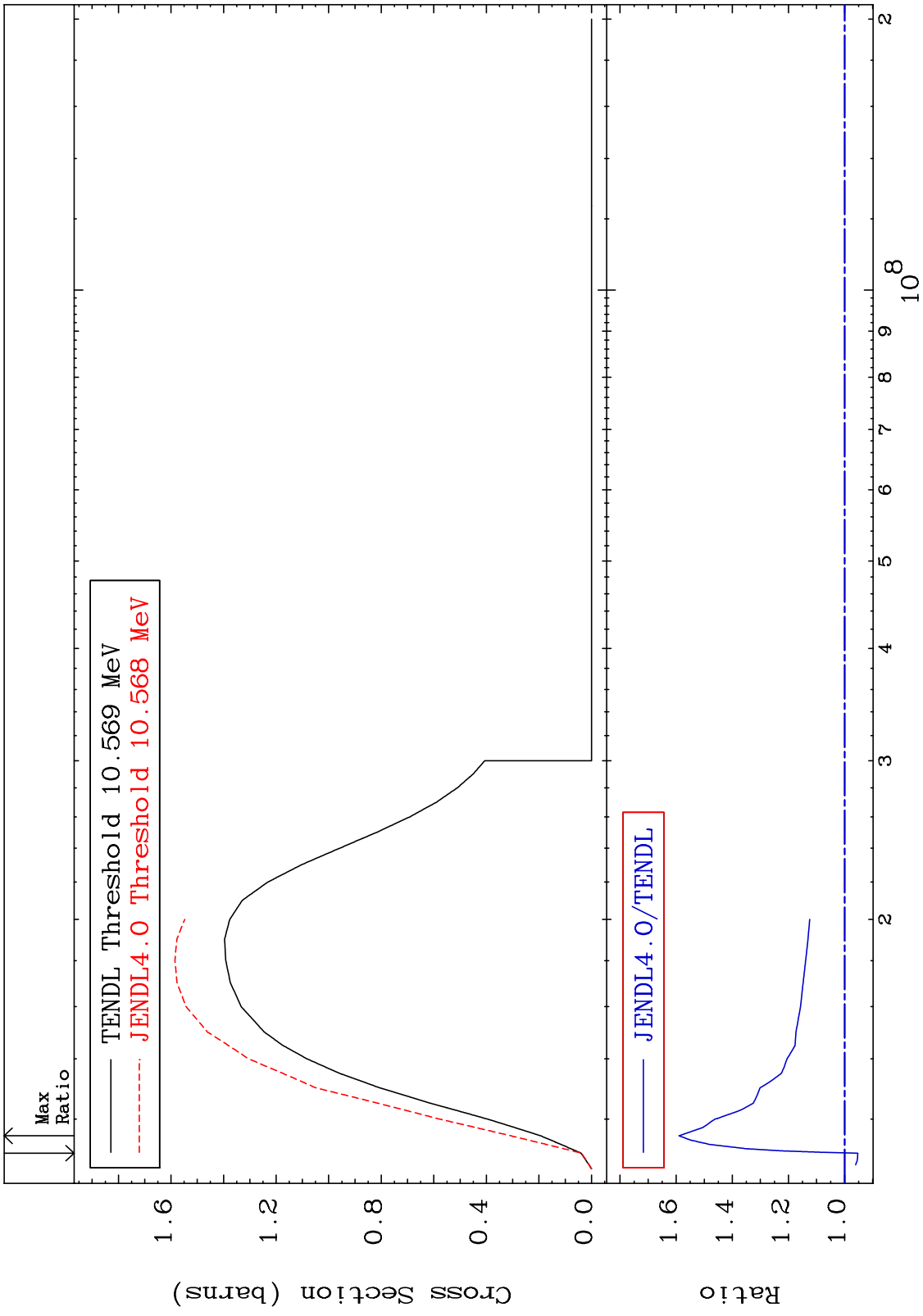
Incident Energy (eV)

54-Xe-124

MAT 5425 Inelastic Cross Section 54-Xe-124 -27.87 To 84.68 %



MAT 5425 (n,2n) Cross Section 54-Xe-124 -4.710 To 58.97 %



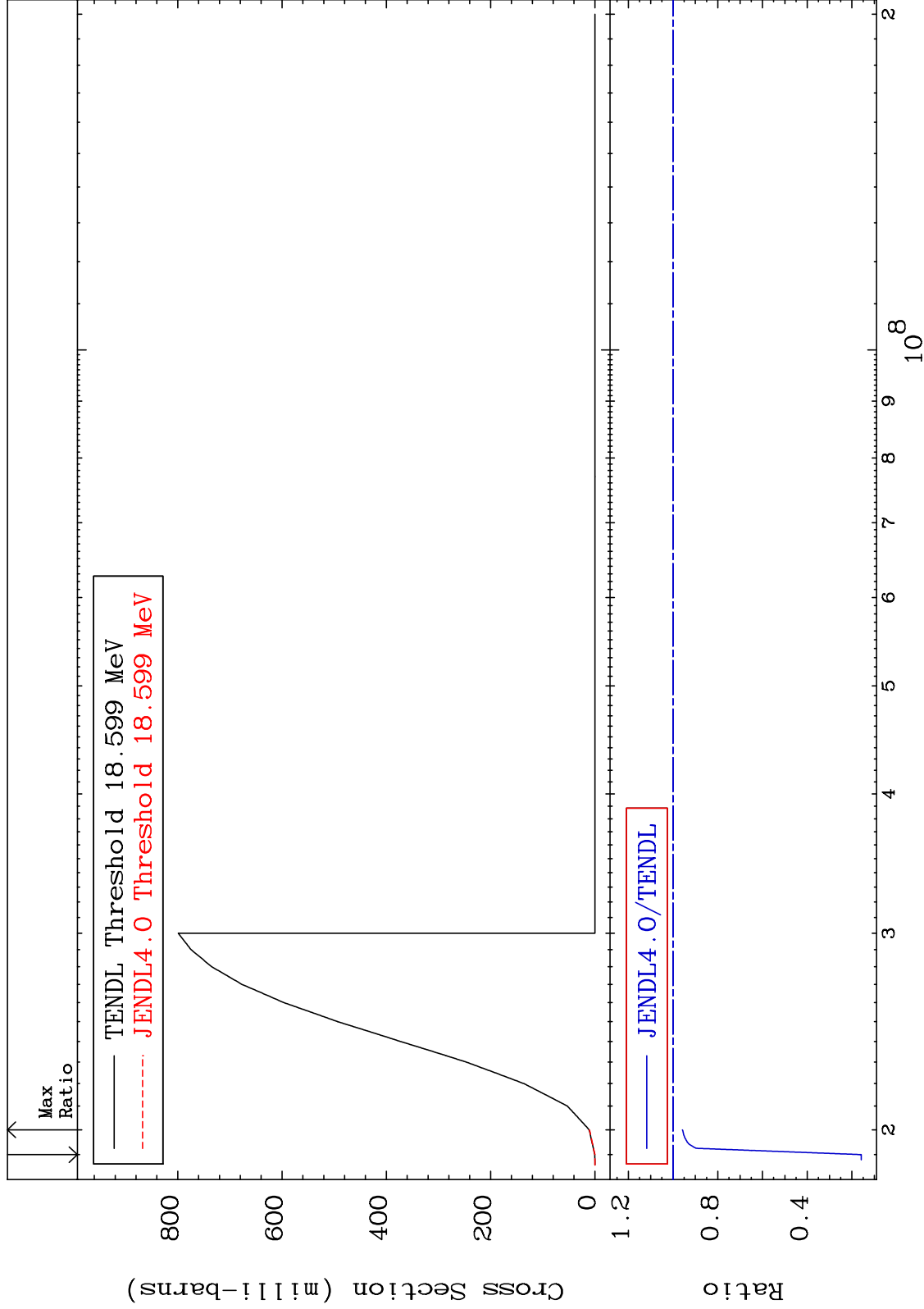
MAT 5425

(n,3n)

54-Xe-124

Cross Section

-84.18 To -4.218%

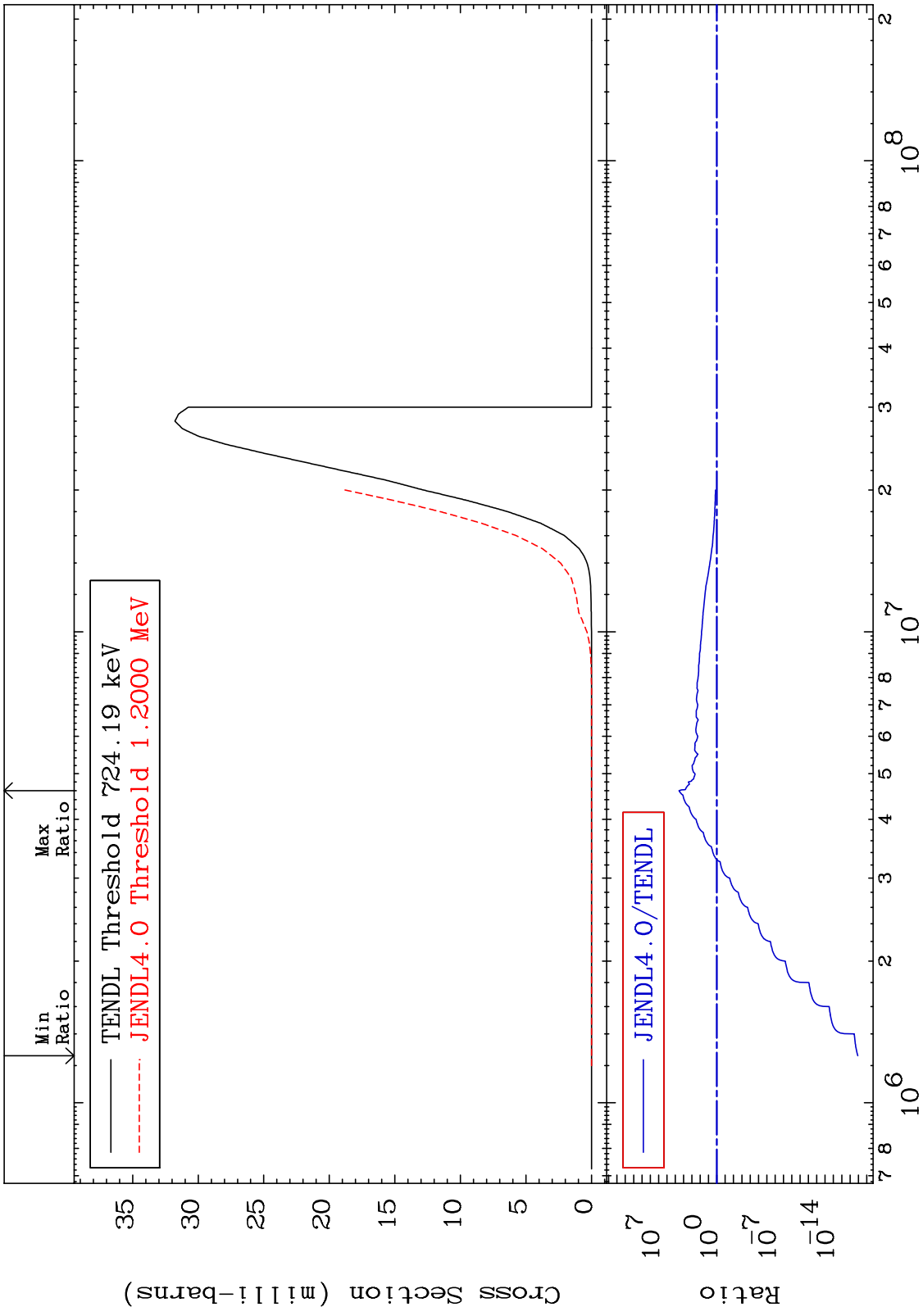


5

Incident Energy (eV)

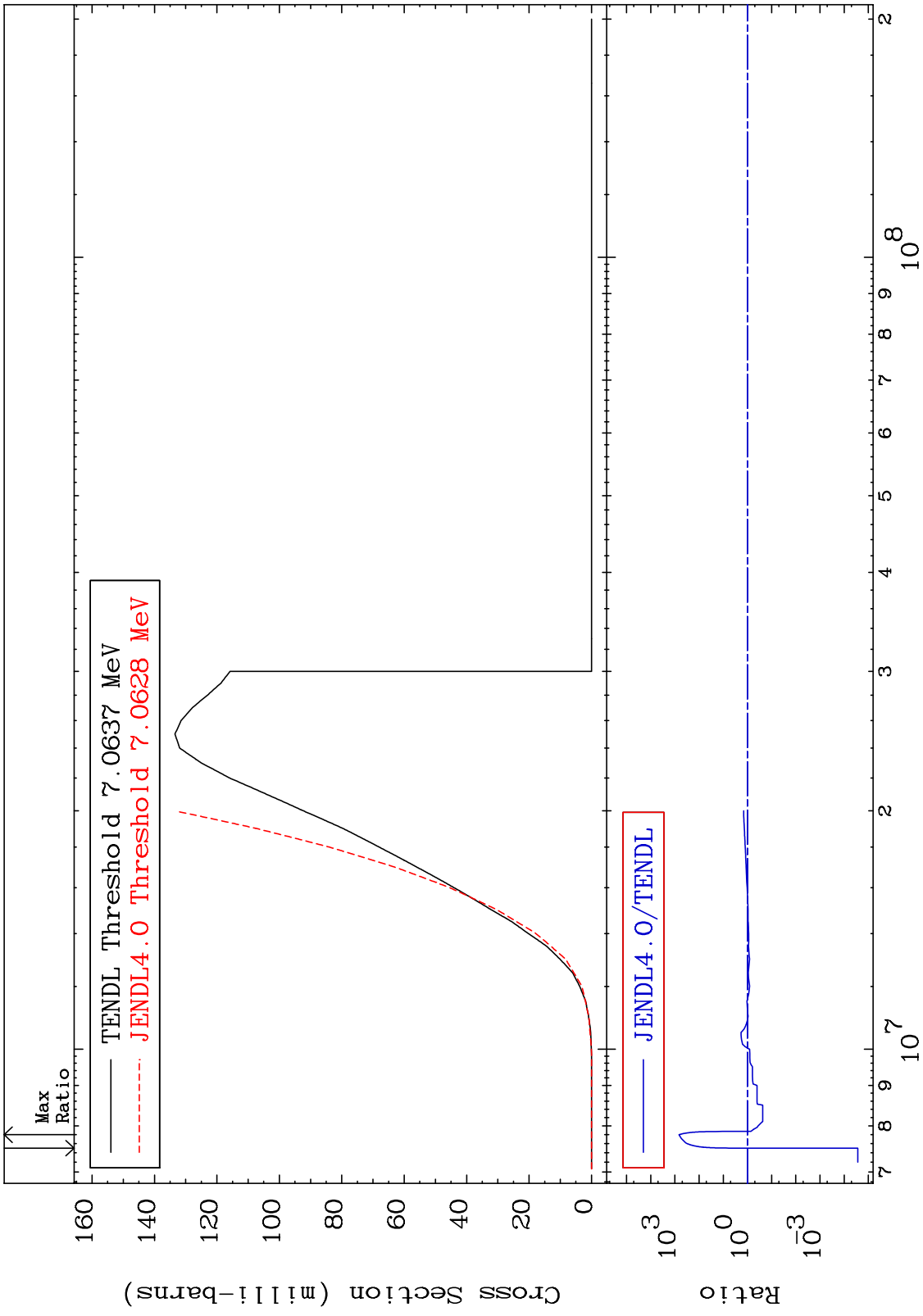
54-Xe-124

MAT 5425 $(n, n') \alpha$ 54-Xe-124
Cross Section -100.0 To 9999. %



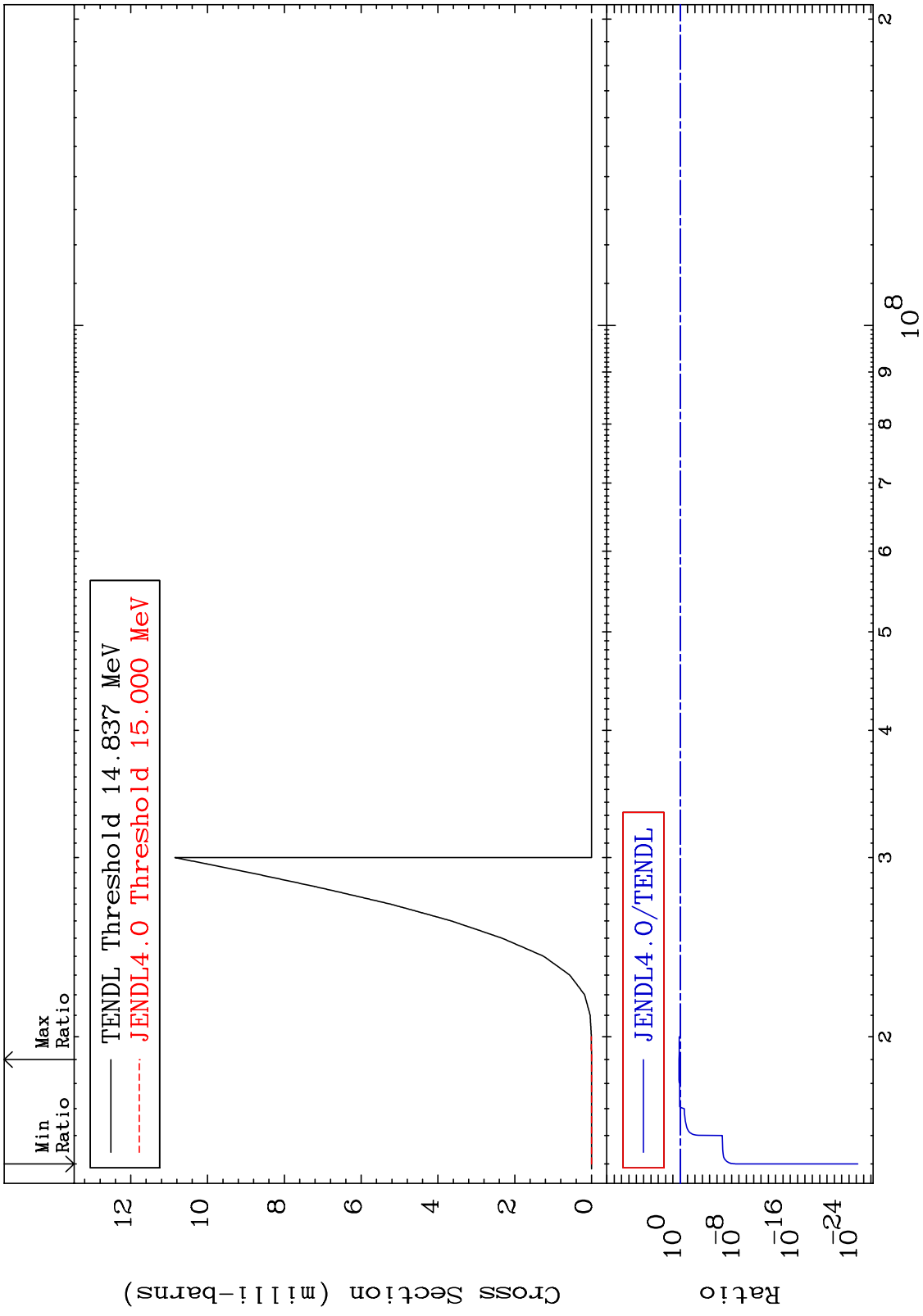
6 Incident Energy (eV) 54-Xe-124

MAT 5425 (n,n') p 54-Xe-124
Cross Section -100.0 To 9999. %

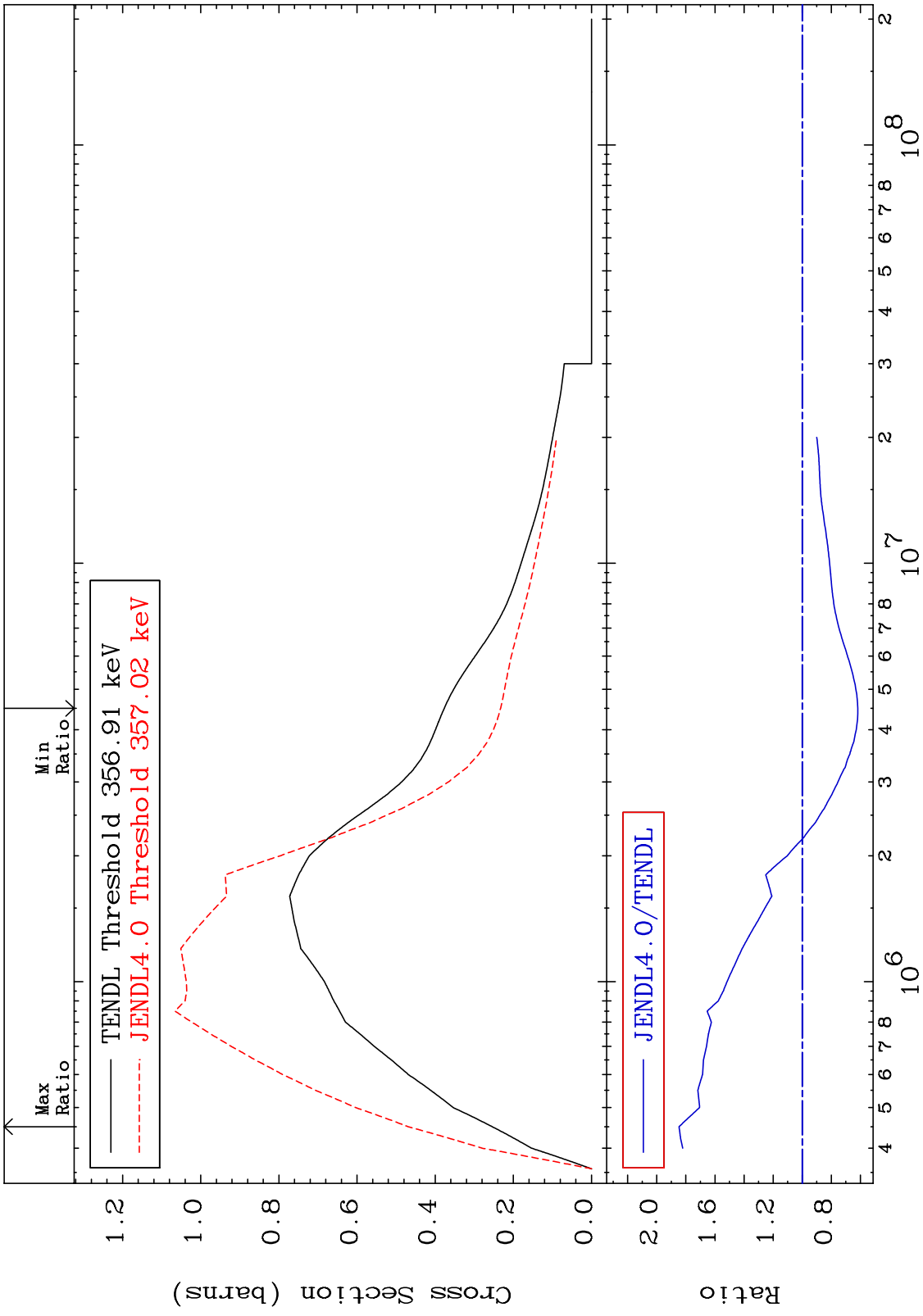


7 Incident Energy (eV) 54-Xe-124

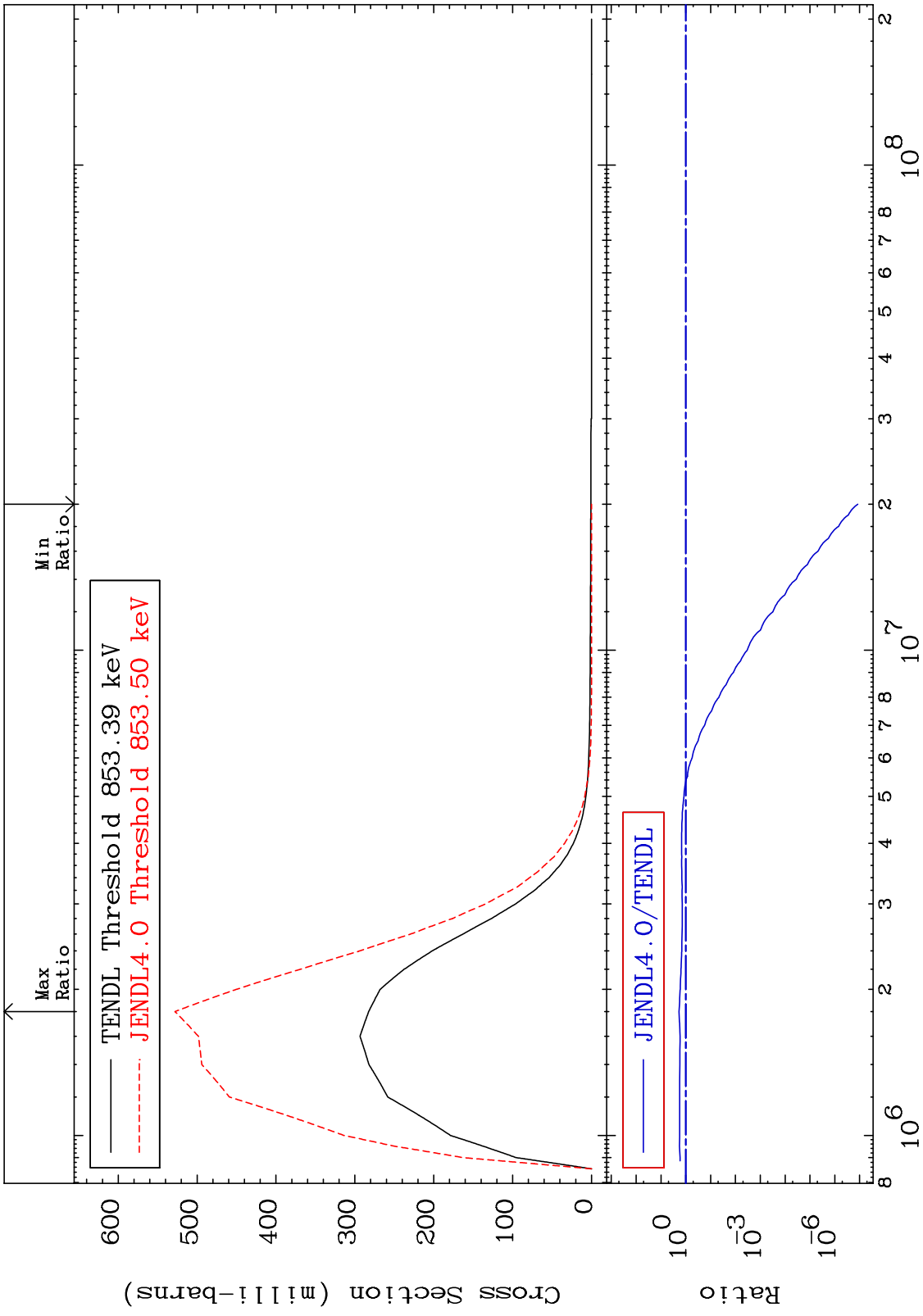
MAT 5425 (n,n') d 54-Xe-124
 Cross Section -100.0 To 46.98 %



MAT 5425 MT= 51 (n,n') Level Cross Section 54-Xe-124
 -38.25 To 84.68 %

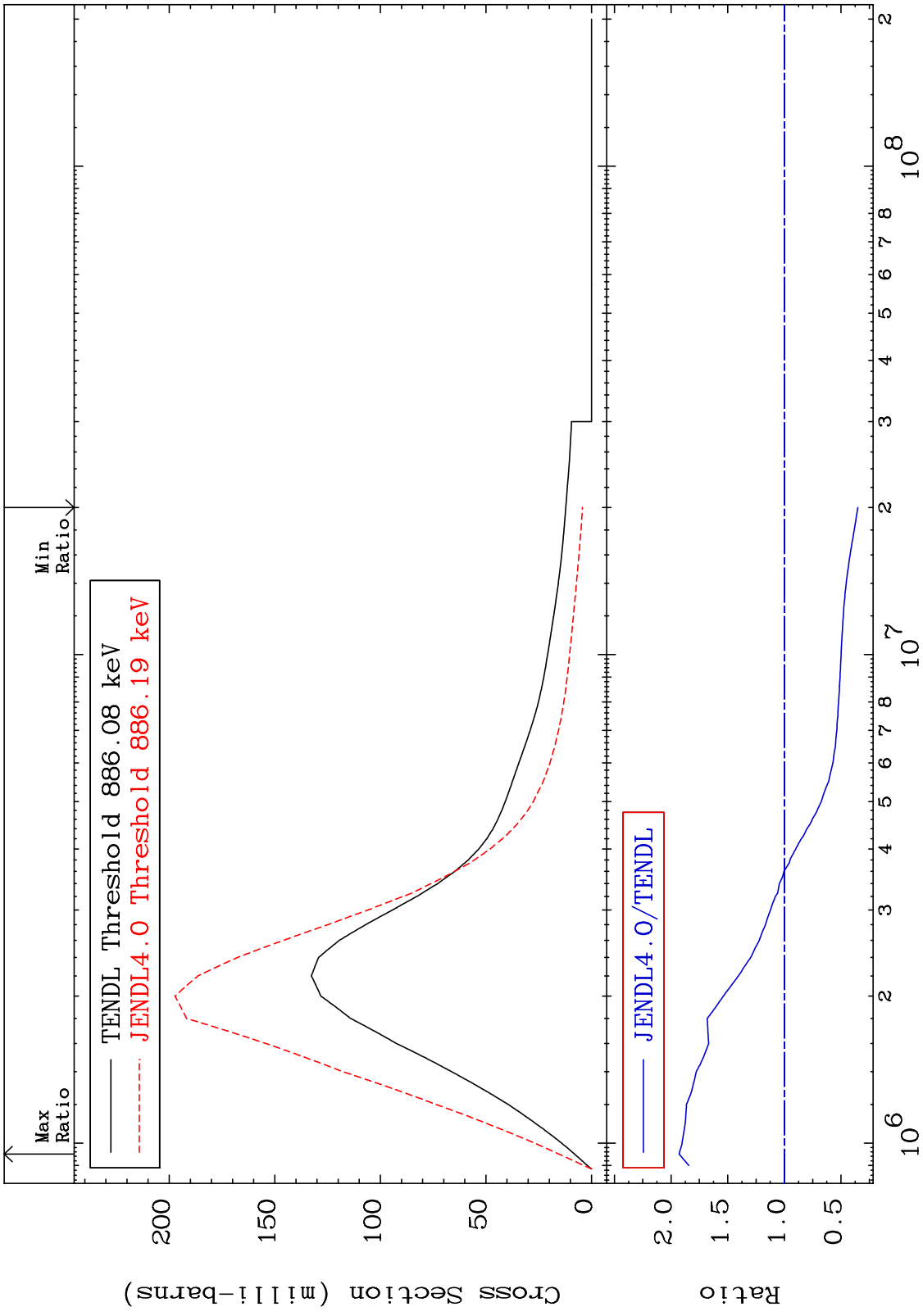


MAT 5425 MT= 52 (n,n') Level Cross Section 54-Xe-124 -100.0 To 86.95 %



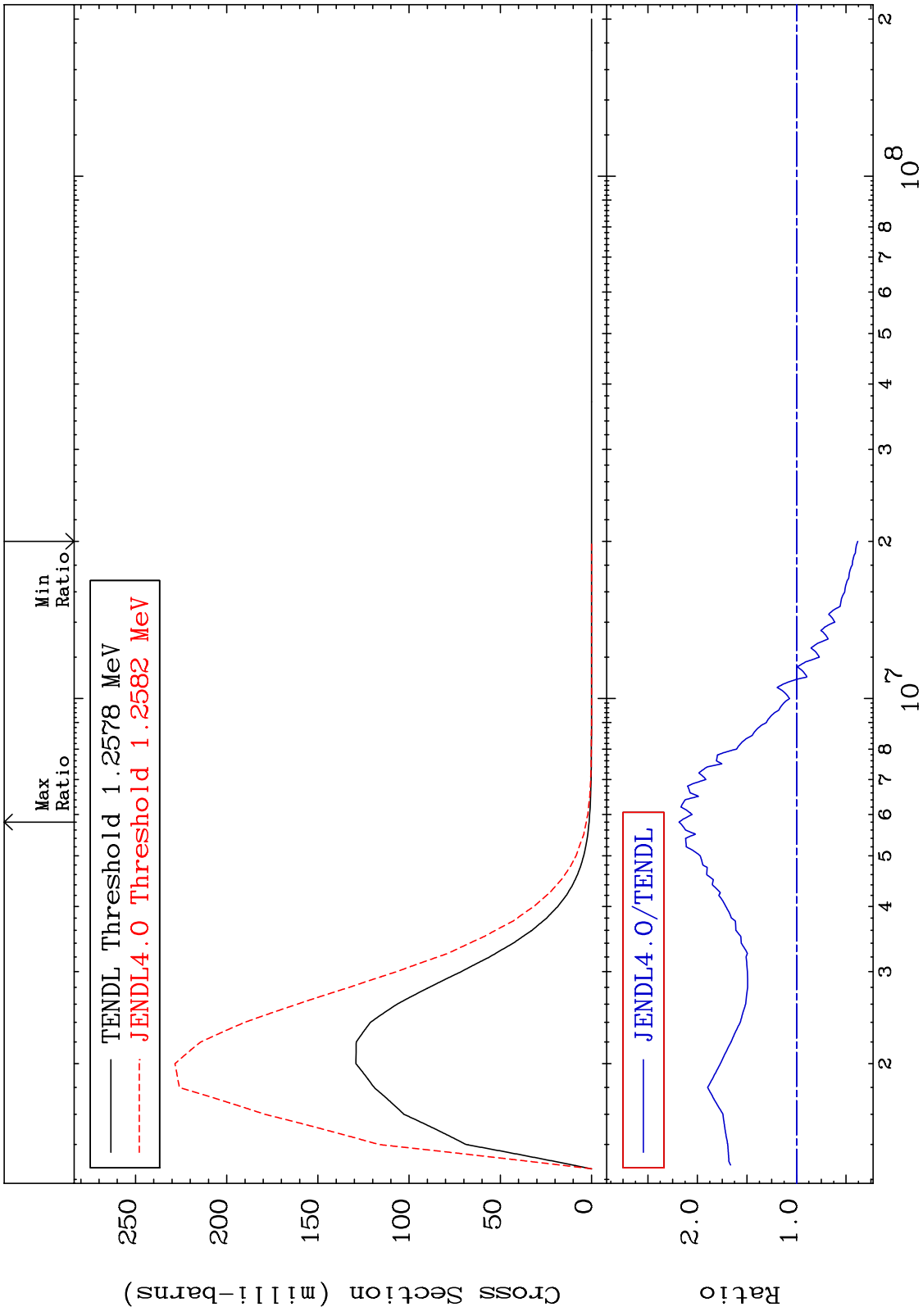
54-Xe-124

MAT 5425 MT= 53 (n,n') Level Cross Section 54-Xe-124 -64.85 To 92.97 %

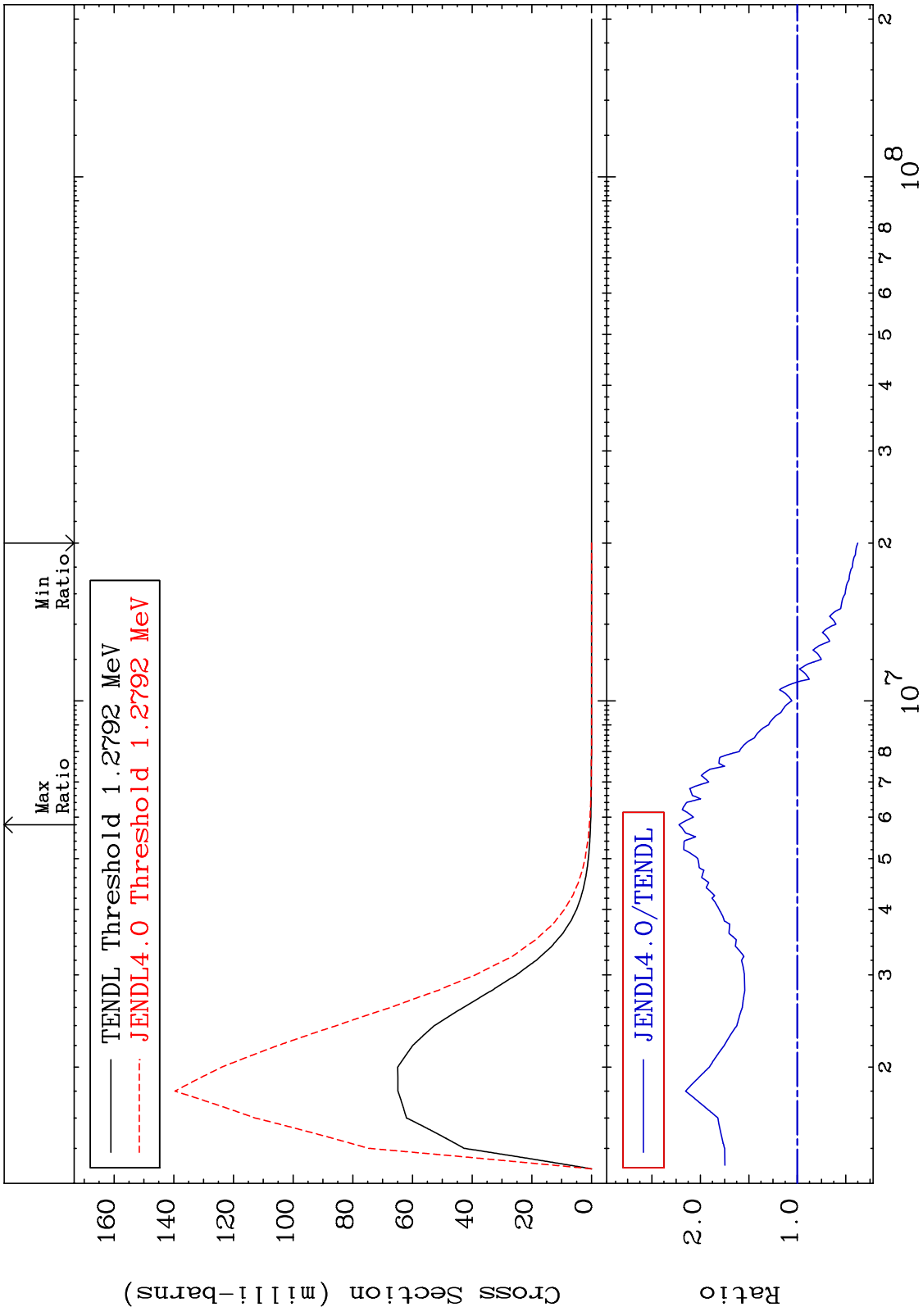


11 Incident Energy (eV) 54-Xe-124

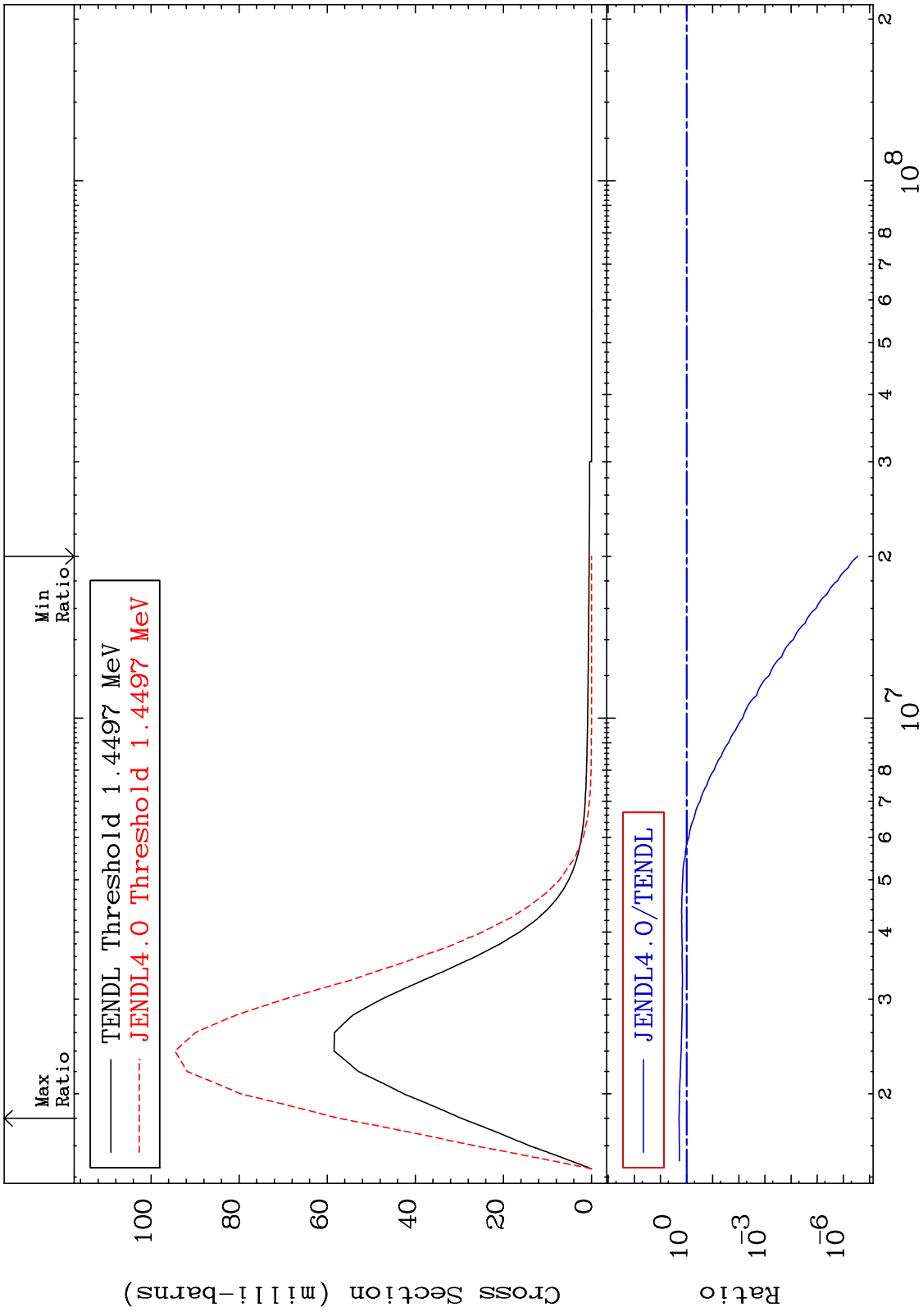
MAT 5425 MT= 54 (n,n') Level Cross Section 54-Xe-124 -61.85 To 118.5 %



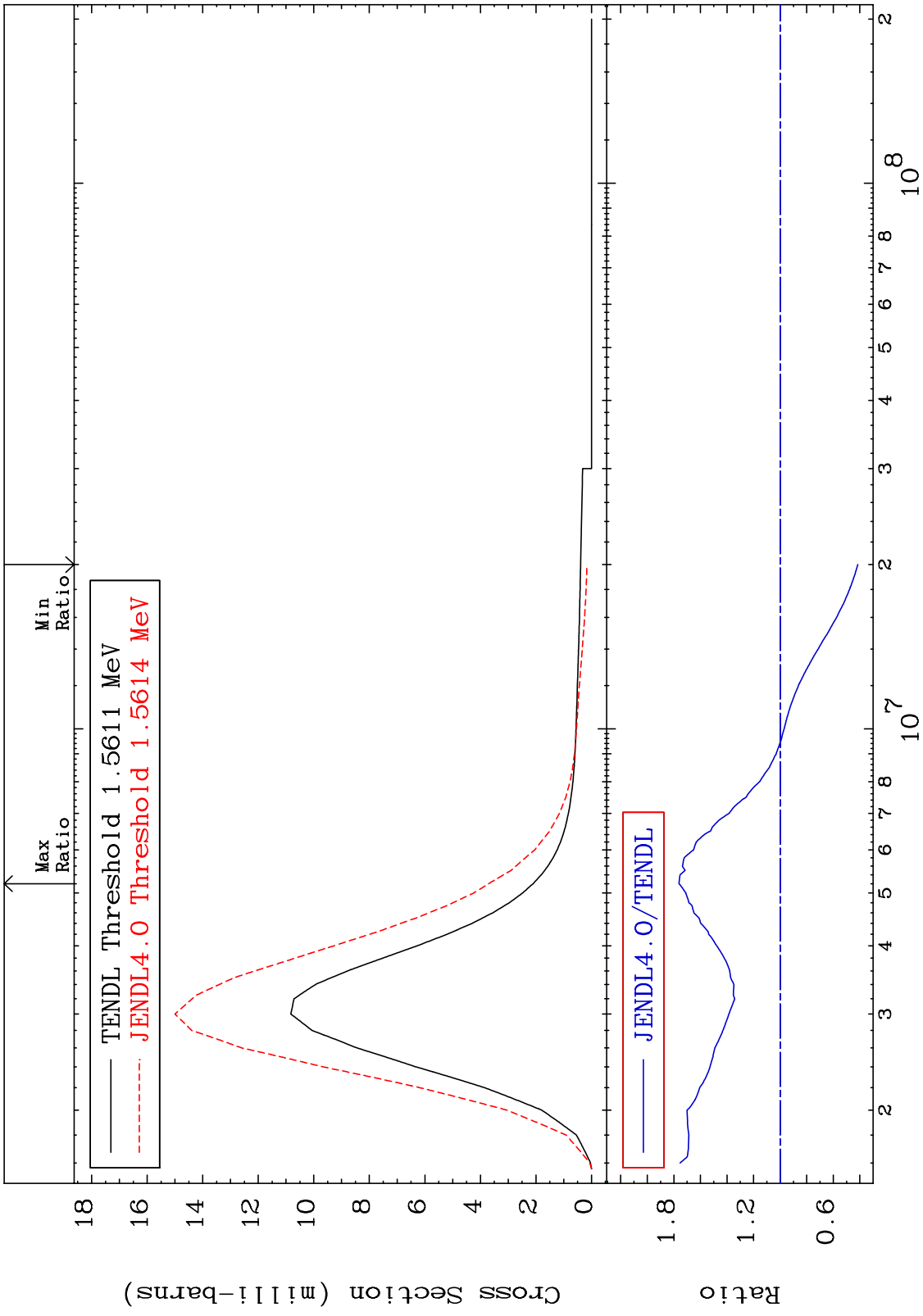
MAT 5425 MT= 55 (n,n') Level Cross Section 54-Xe-124 -62.44 To 122.0 %



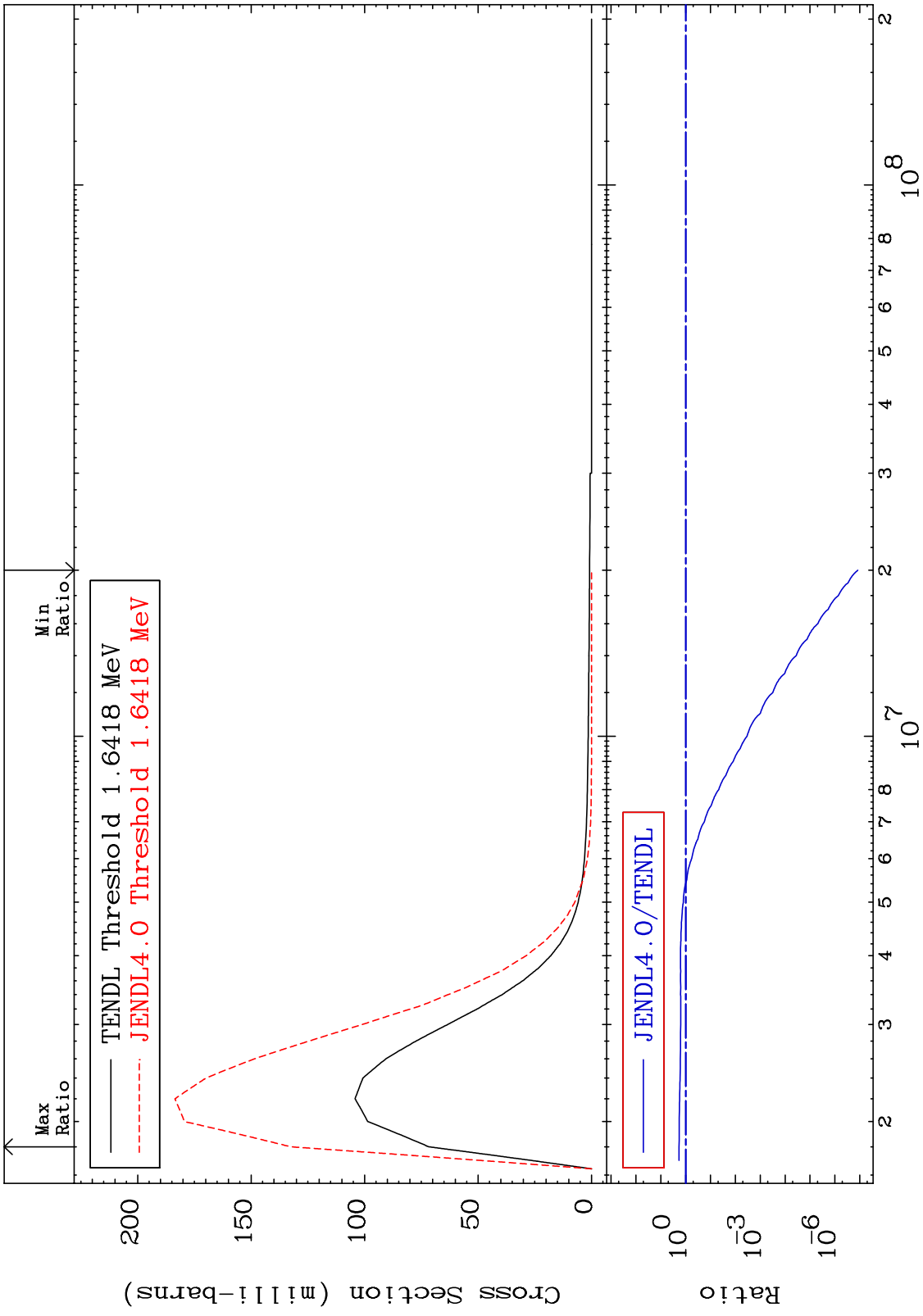
MAT 5425 MT= 56 (n,n') Level Cross Section 54-Xe-124 -100.0 To 94.09 %



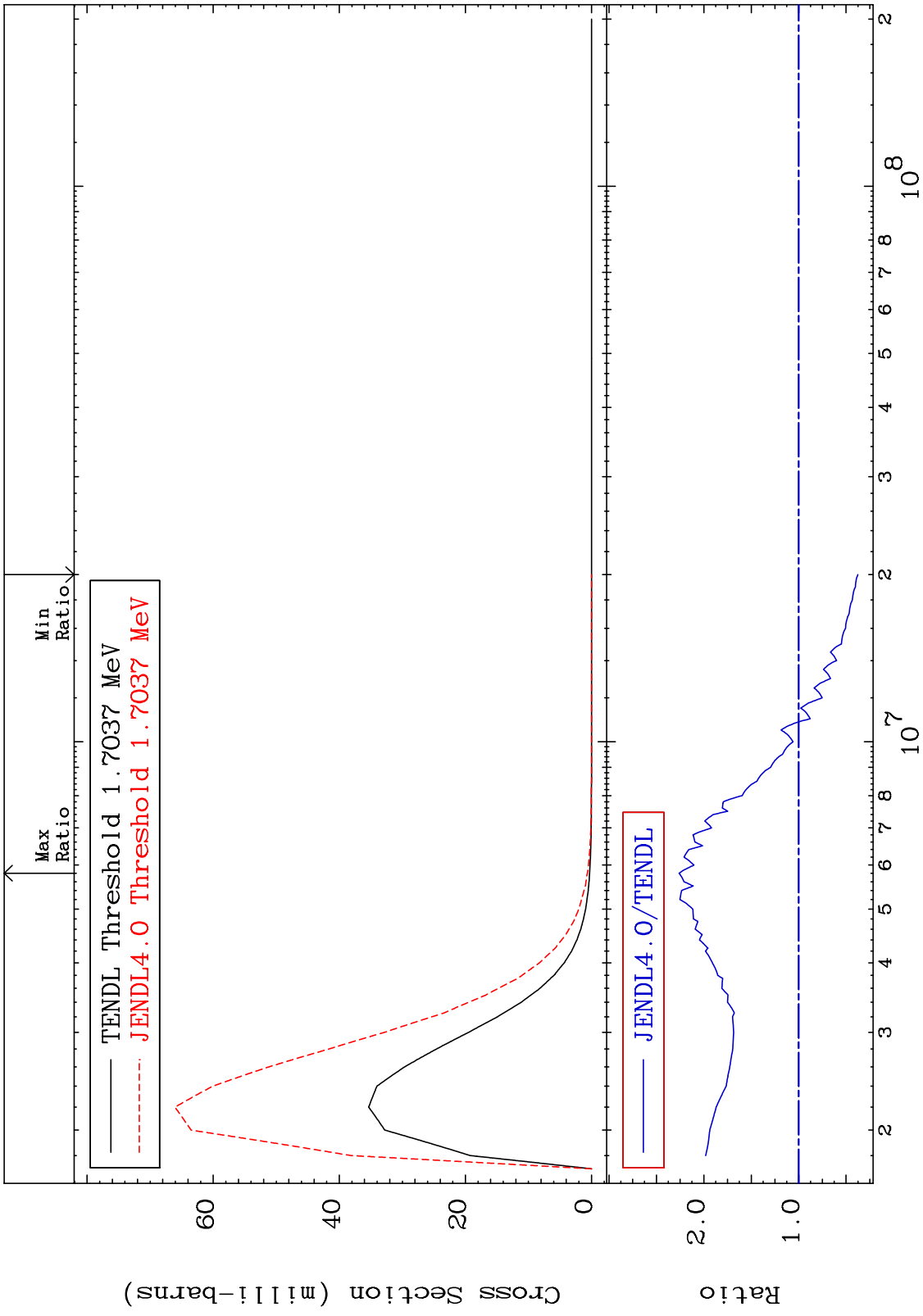
MAT 5425 MT= 57 (n,n') Level Cross Section 54-Xe-124 -58.49 To 76.09 %



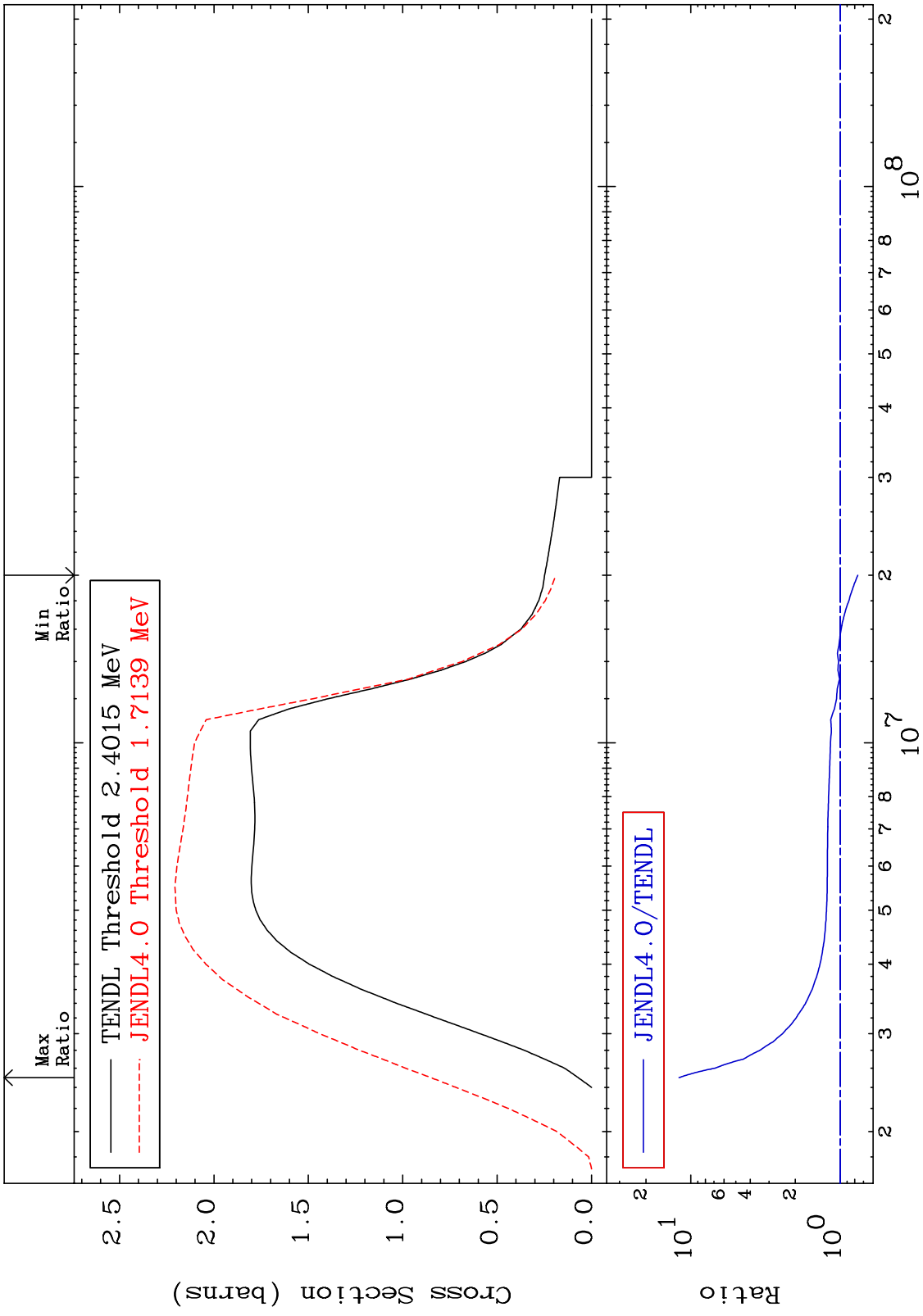
MAT 5425 MT= 58 (n,n') Level Cross Section 54-Xe-124 -100.0 To 84.81 %



MAT 5425 MT= 59 (n,n') Level Cross Section 54-Xe-124 -62.39 To 126.1 %



MAT 5425 (n, n') Continuum Cross Section 54-Xe-124 -23.69 To 1100. %



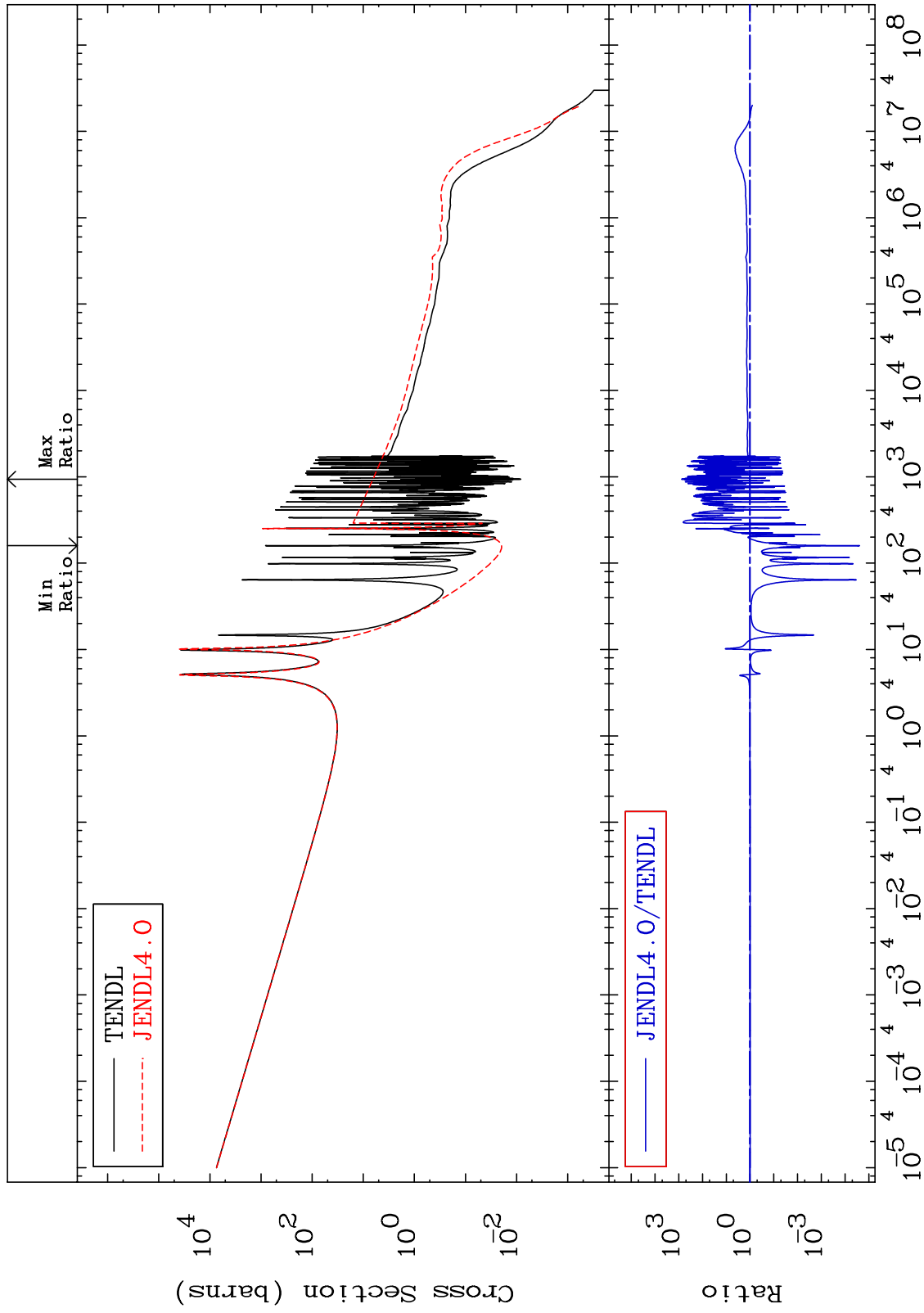
MAT 5425

54-Xe-124

(n, γ)

Cross Section

-100.0 To 9999. %



MAT 5425

(n,p)

54-Xe-124

-72.95 To 9999. %

Cross Section

Max Ratio

Min Ratio

TENDL Threshold 1.7294 keV
JENDL4.0 Threshold 100.00 keV

100

Cross Section (milli-barns)

80

60

40

20

0

10⁴

10²

10⁰

JENDL4.0/TENDL

Ratio

10⁴

10²

10⁰

10⁰

10⁰

10⁰

10⁰

10⁰

10⁶

10⁷

10⁸

2

3

4

5

6

7

8

9

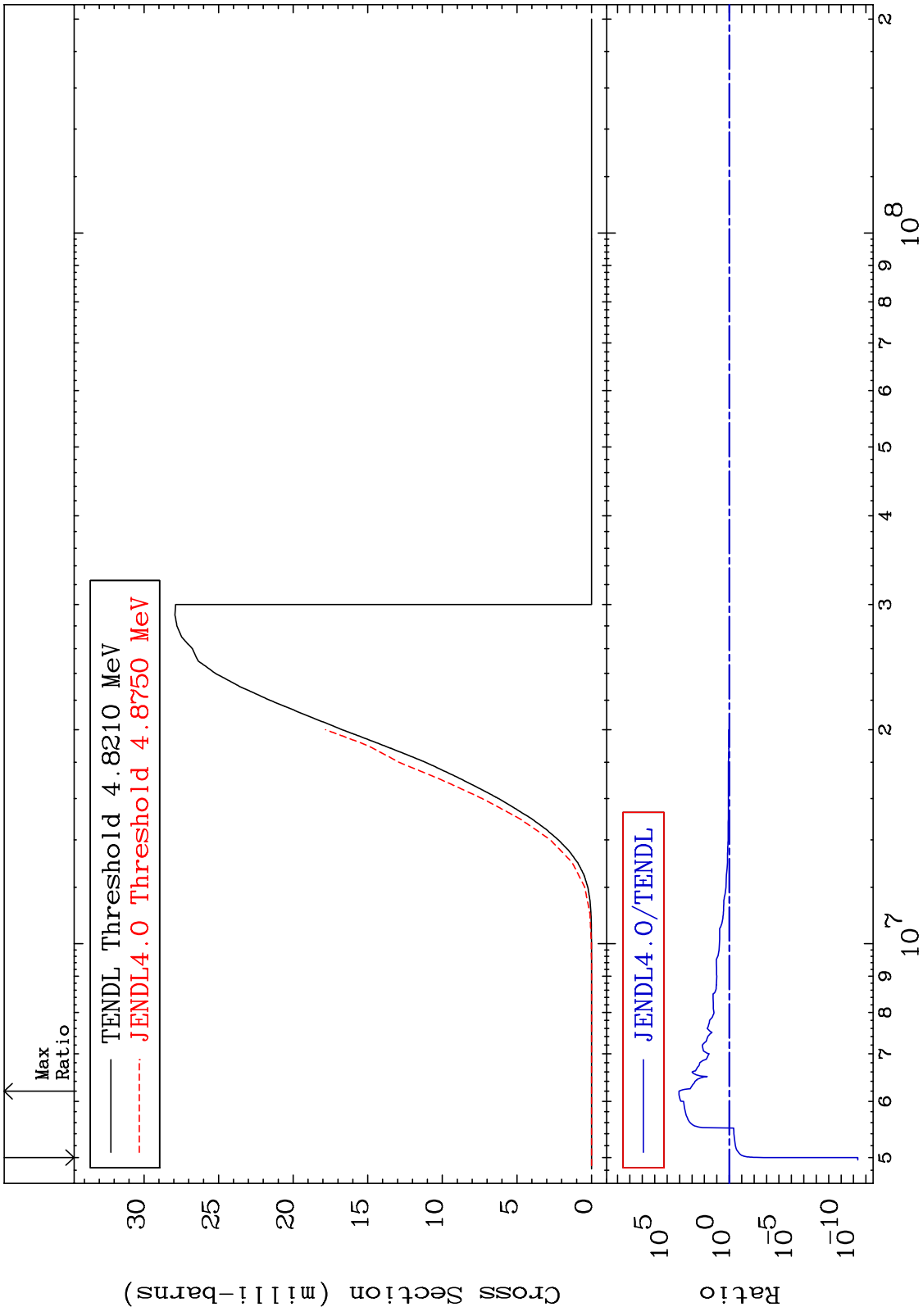
10

Incident Energy (eV)

54-Xe-124

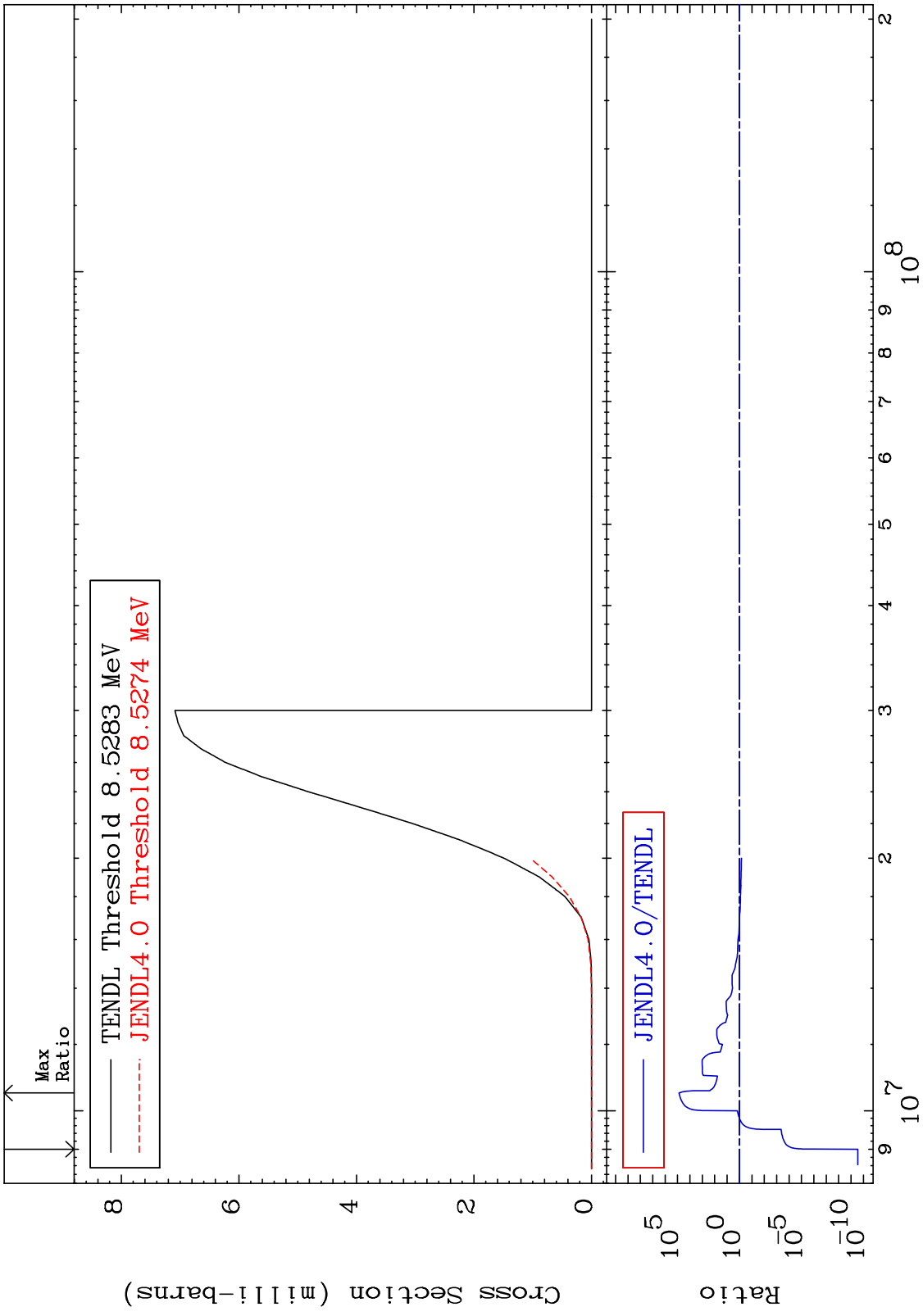
20

MAT 5425 (n,d) Cross Section 54-Xe-124 -100.0 To 9999. %

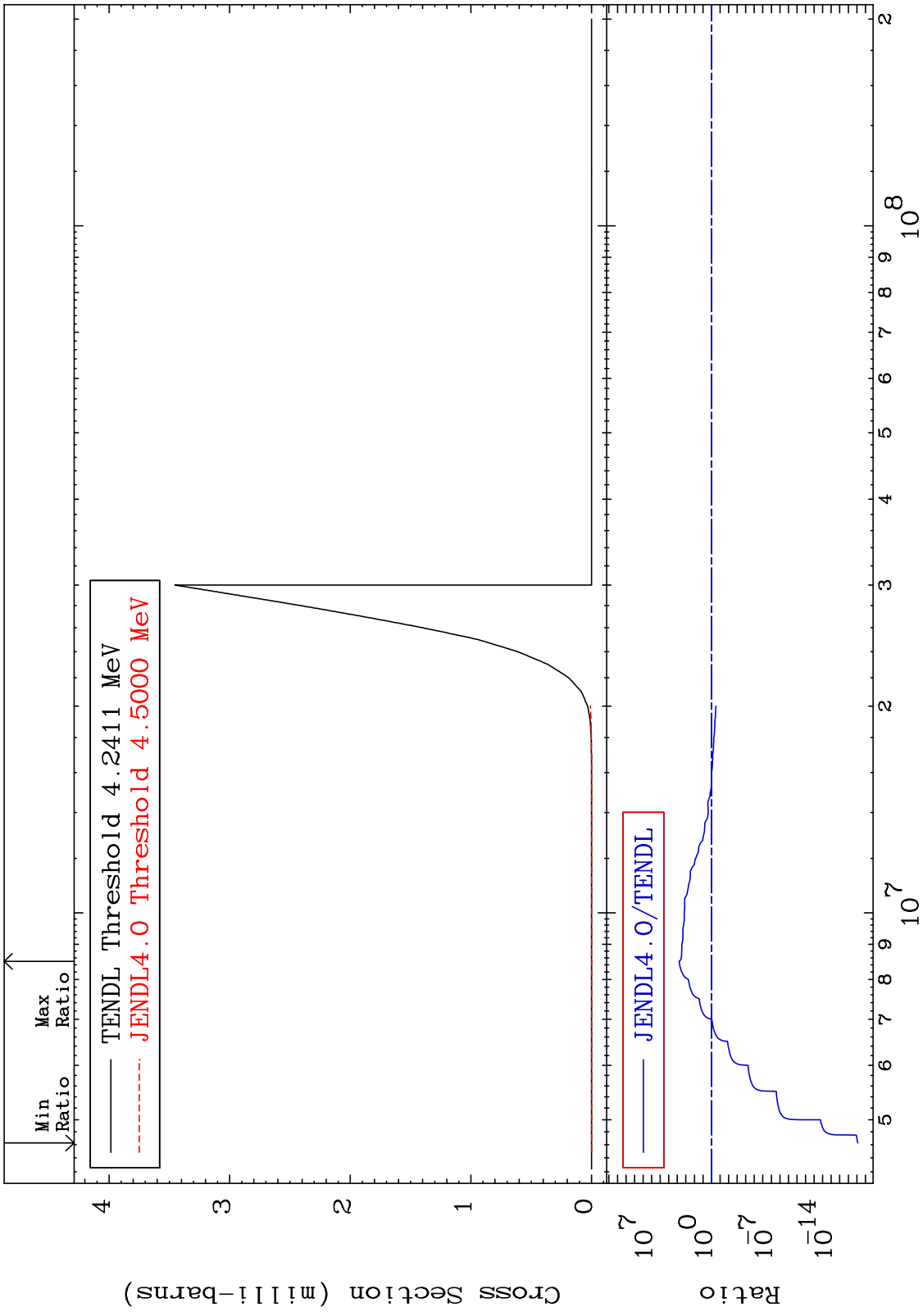


21 Incident Energy (eV) 54-Xe-124

MAT 5425 (n,t) 54-Xe-124
 Cross Section -100.0 To 9999. %



Incident Energy (eV) 54-Xe-124



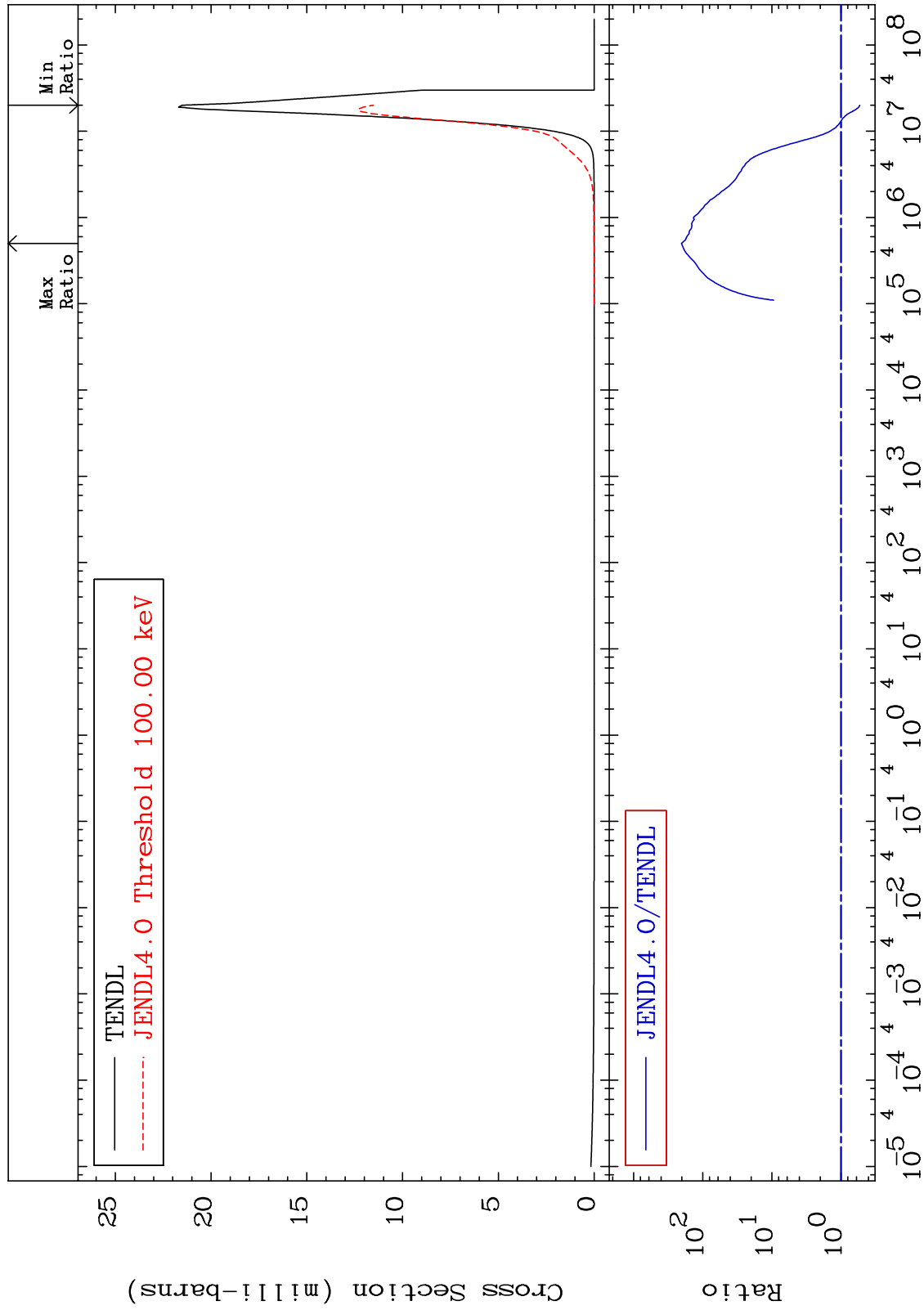
MAT 5425

(n, α)

54-Xe-124

Cross Section

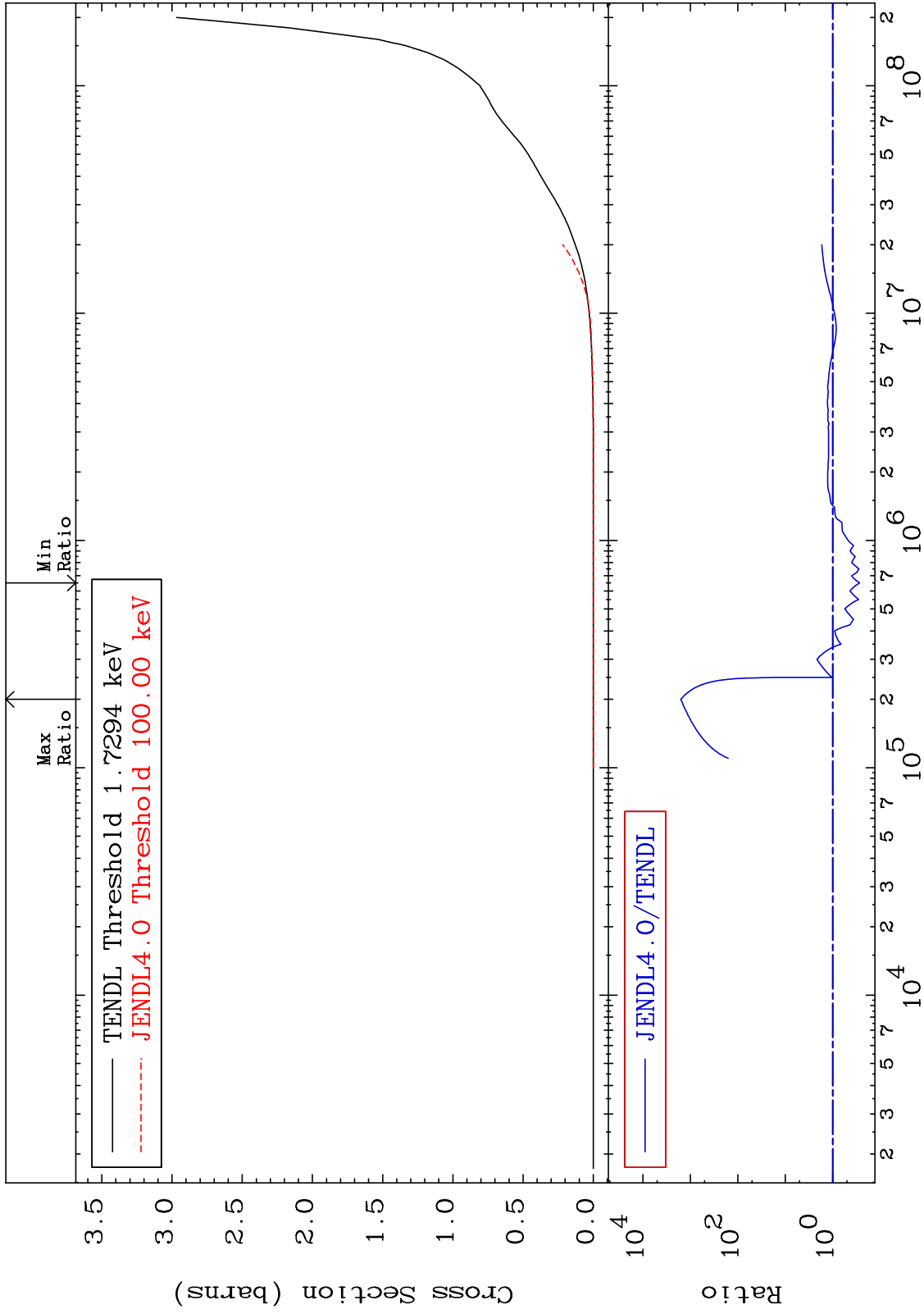
-46.42 To 9999. %

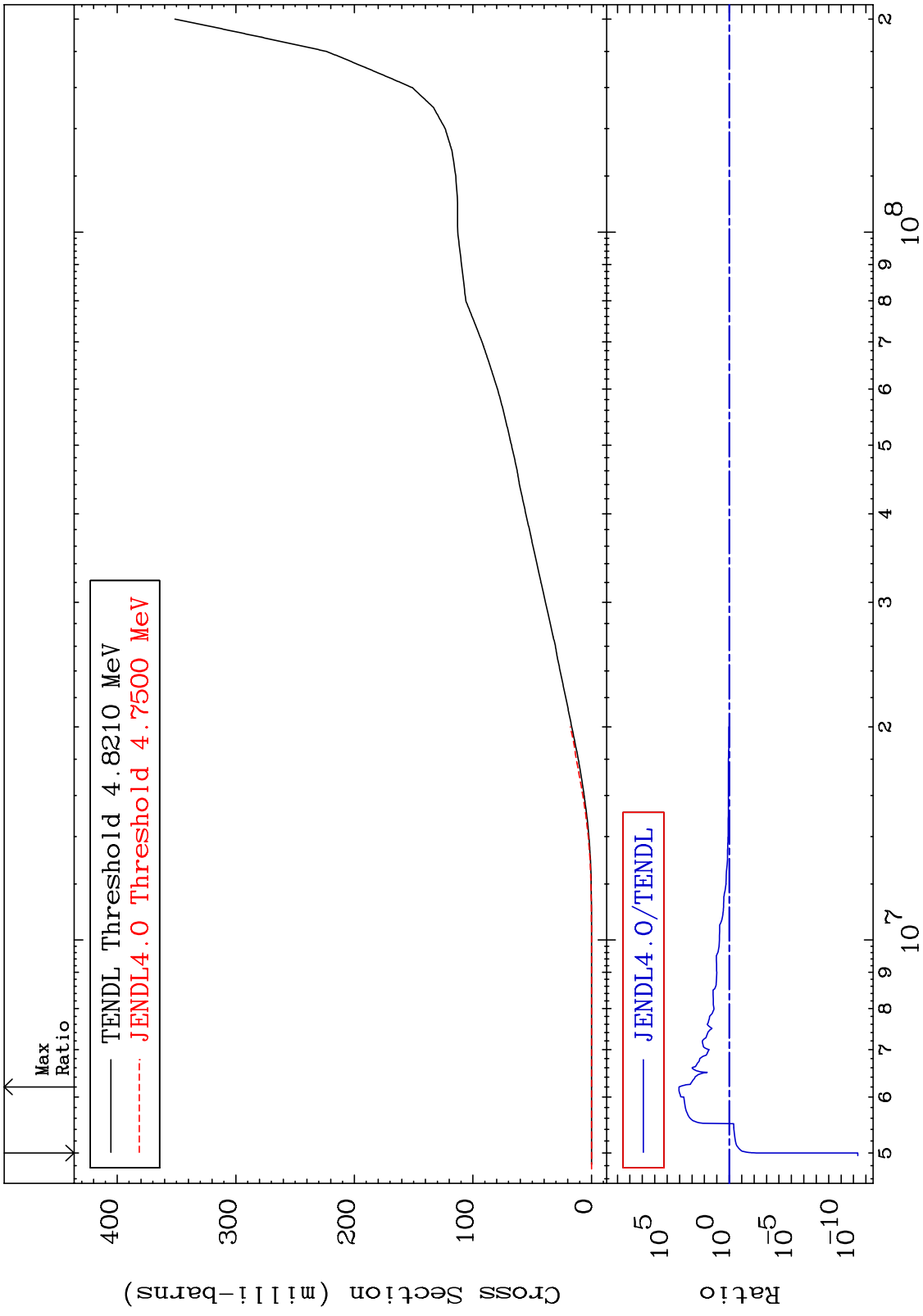


MAT 5425

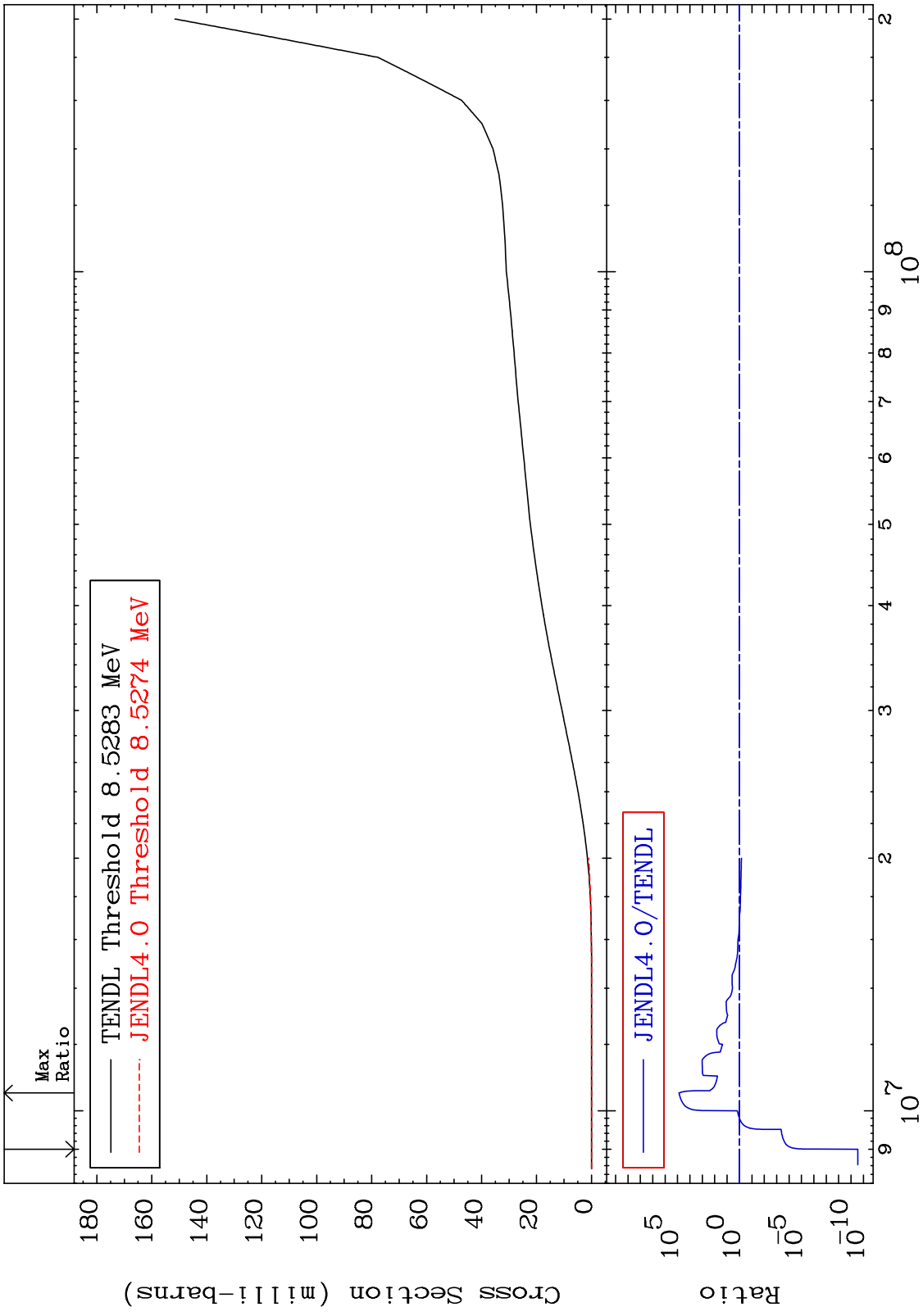
Hydrogen Production
Cross Section

54-Xe-124
-72.95 To 9999. %





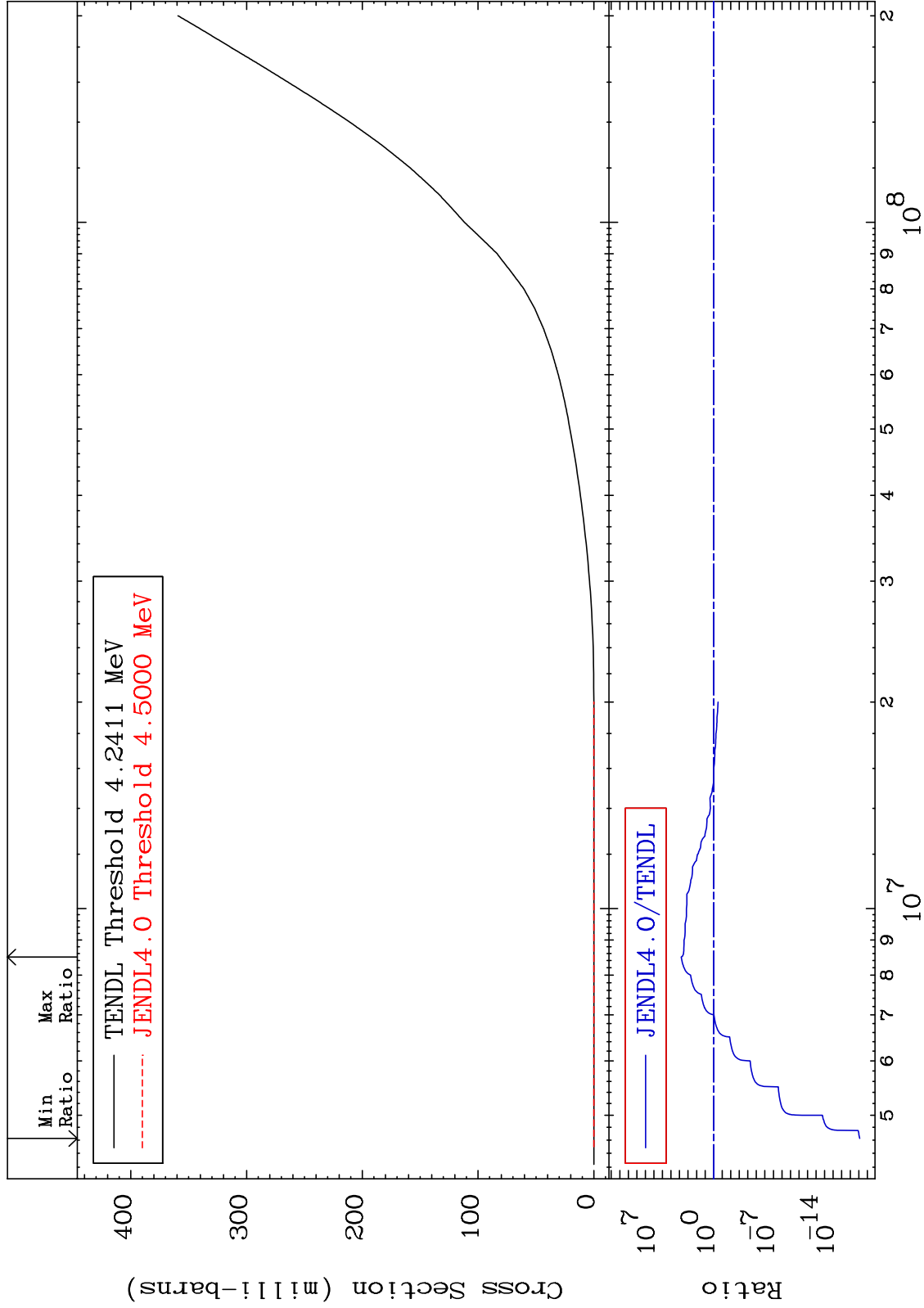
MAT 5425 Tritium Production Cross Section 54-Xe-124 -100.0 To 9999. %



MAT 5425

He-3 Production
Cross Section

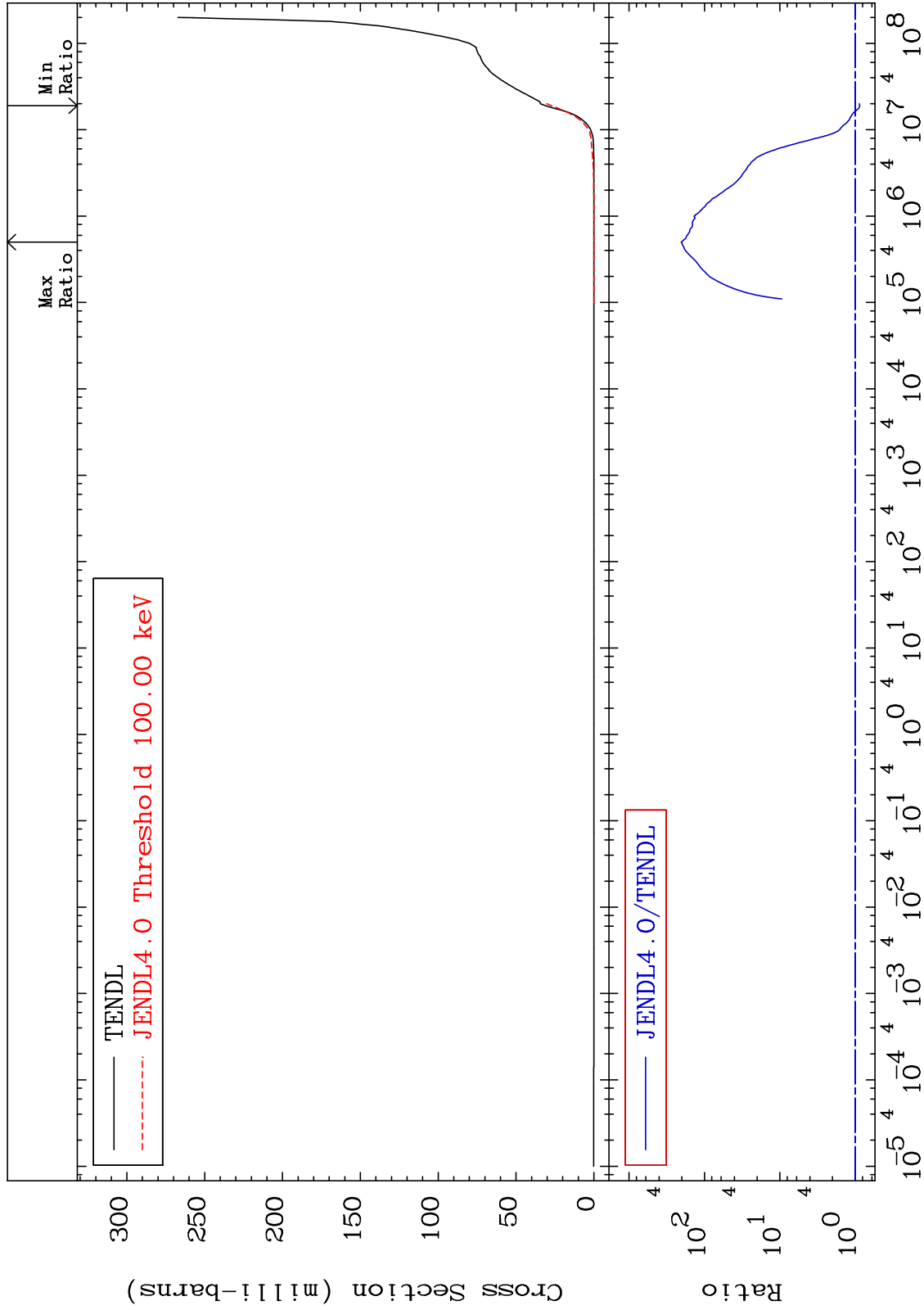
54-Xe-124
-100.0 To 9999. %



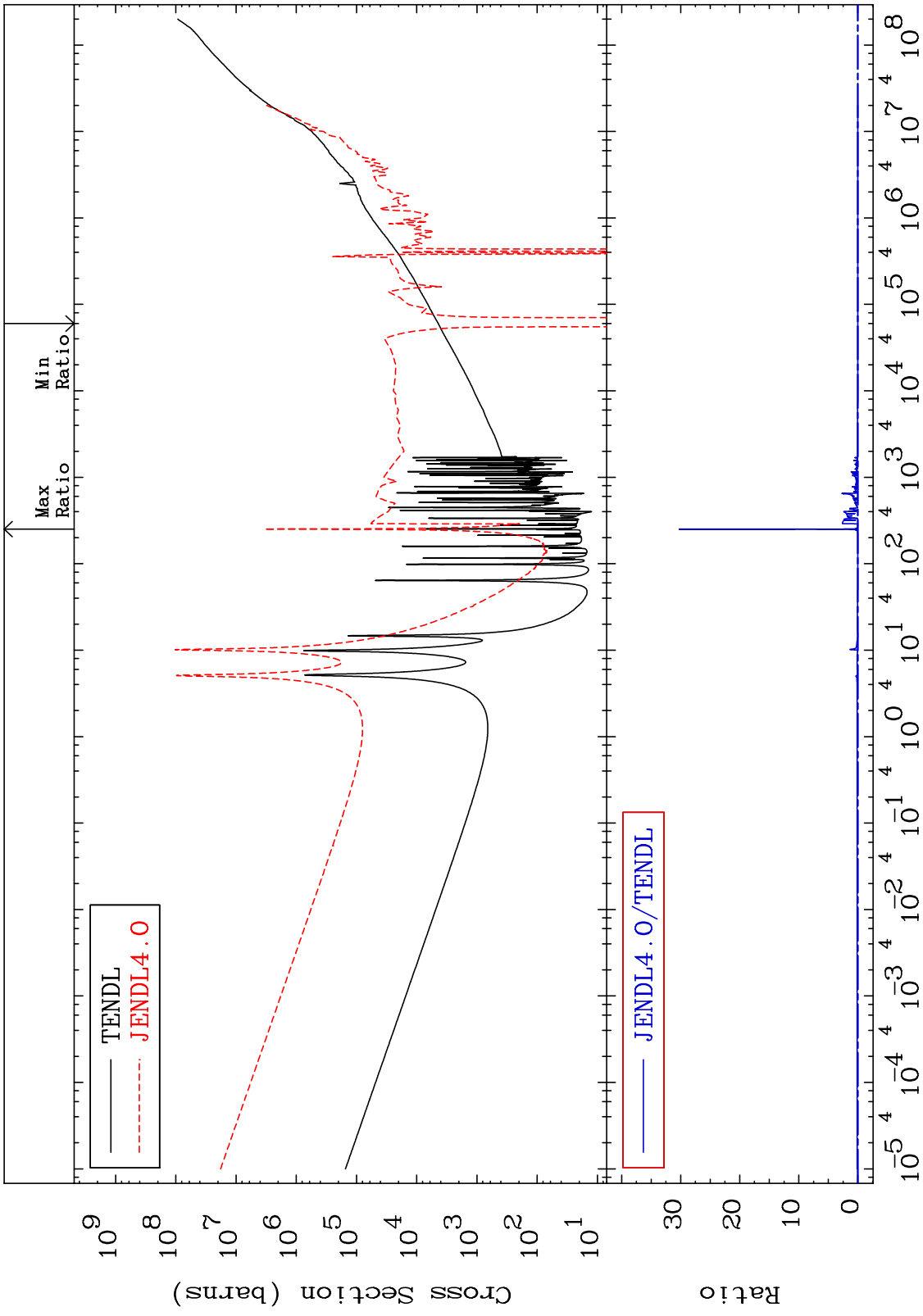
MAT 5425

He-4 Production
Cross Section

54-Xe-124
-12.92 To 9999. %

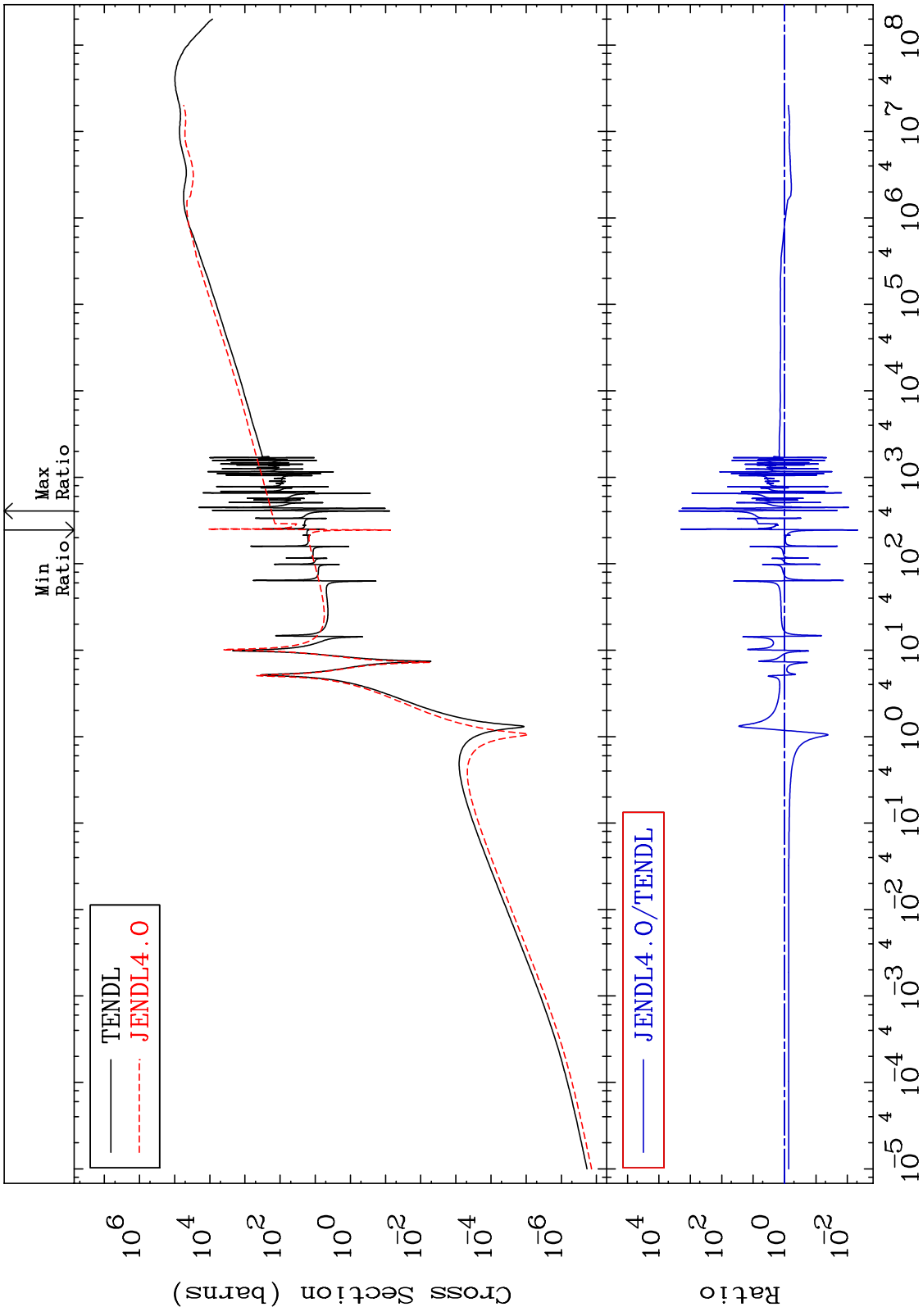


MAT 5425 Kerma total (eV-barns) 54-Xe-124
 Cross Section -273.3 To 9999. %

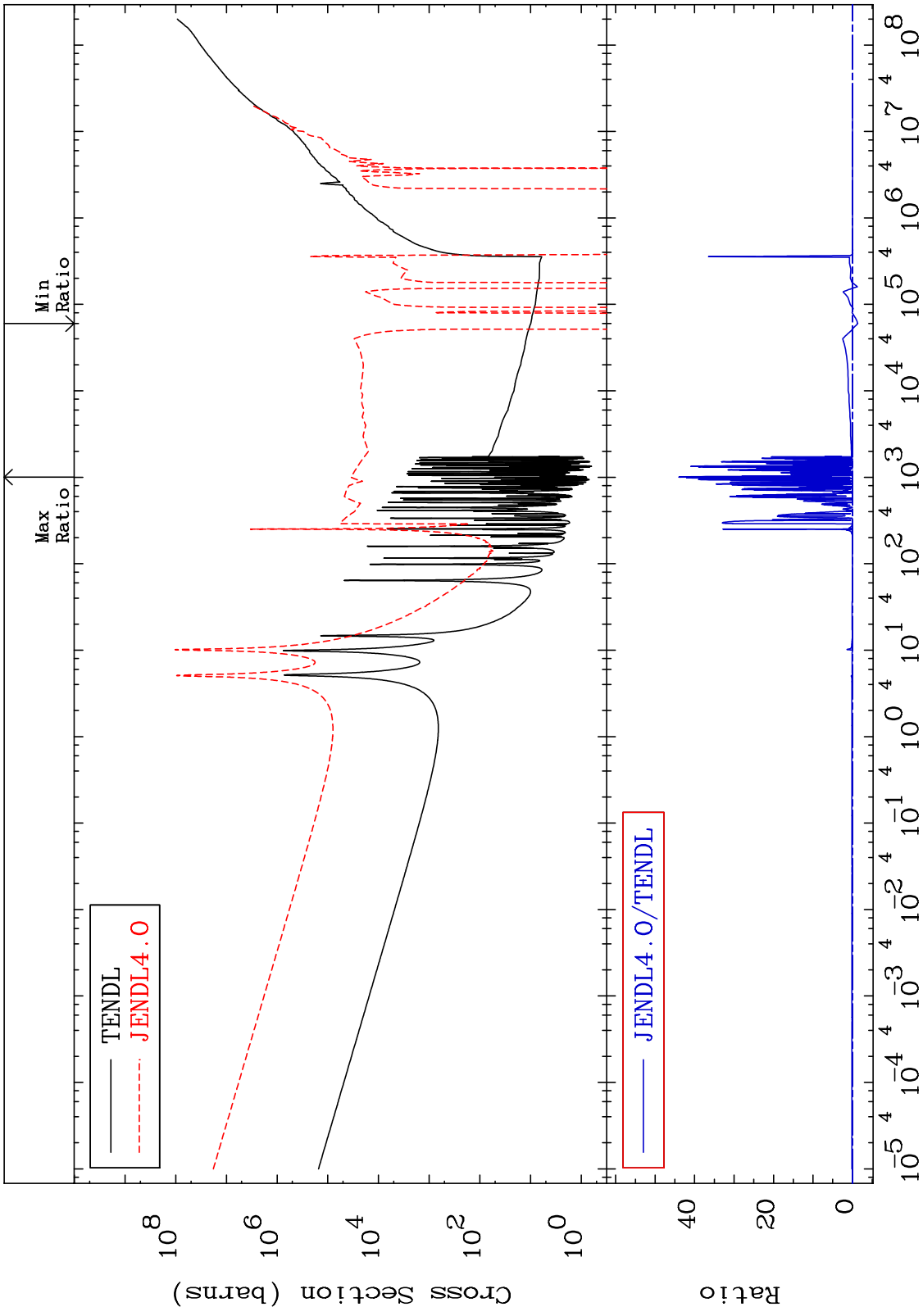


30 Incident Energy (eV) 54-Xe-124

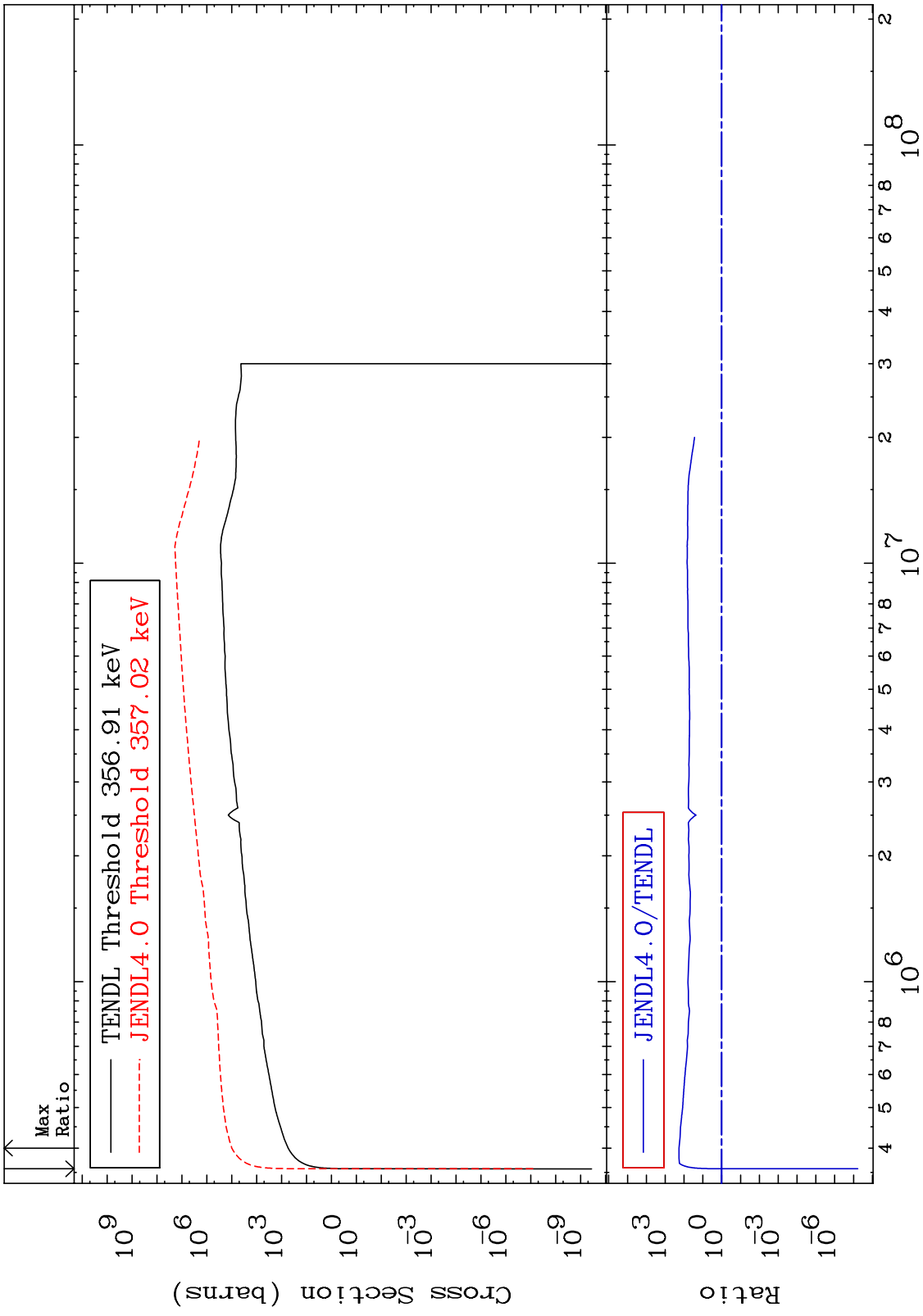
MAT 5425 54-Xe-124 -99.54 To 9999. %
 Kerma elastic Cross Section



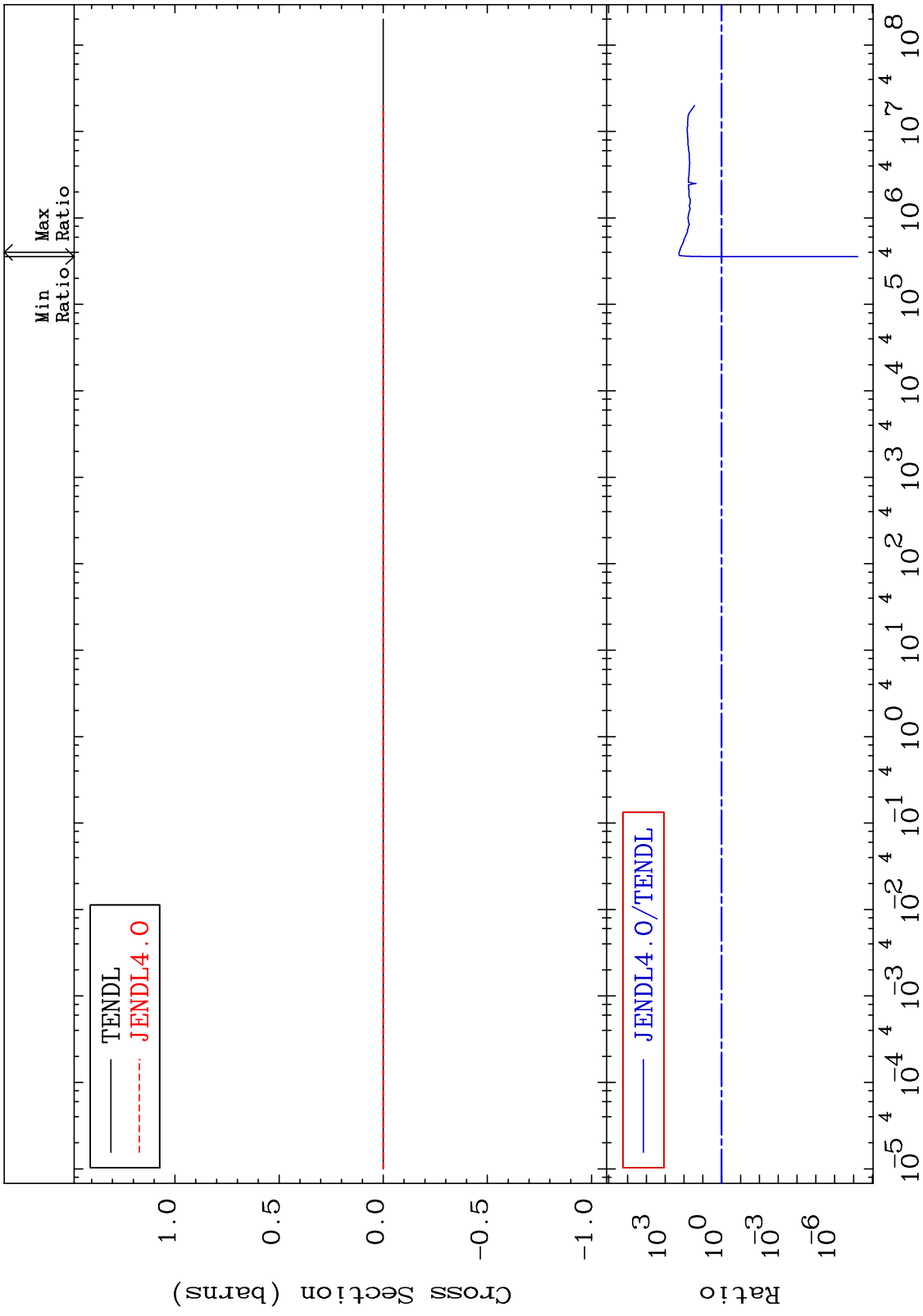
MAT 5425 Kerma non-elastic (all but mt2) 54-Xe-124
 -9999. To 9999. %
 Cross Section



MAT 5425 Kerma inelastic (mt51-91) 54-Xe-124
 -100.0 To 9999. %
 Cross Section



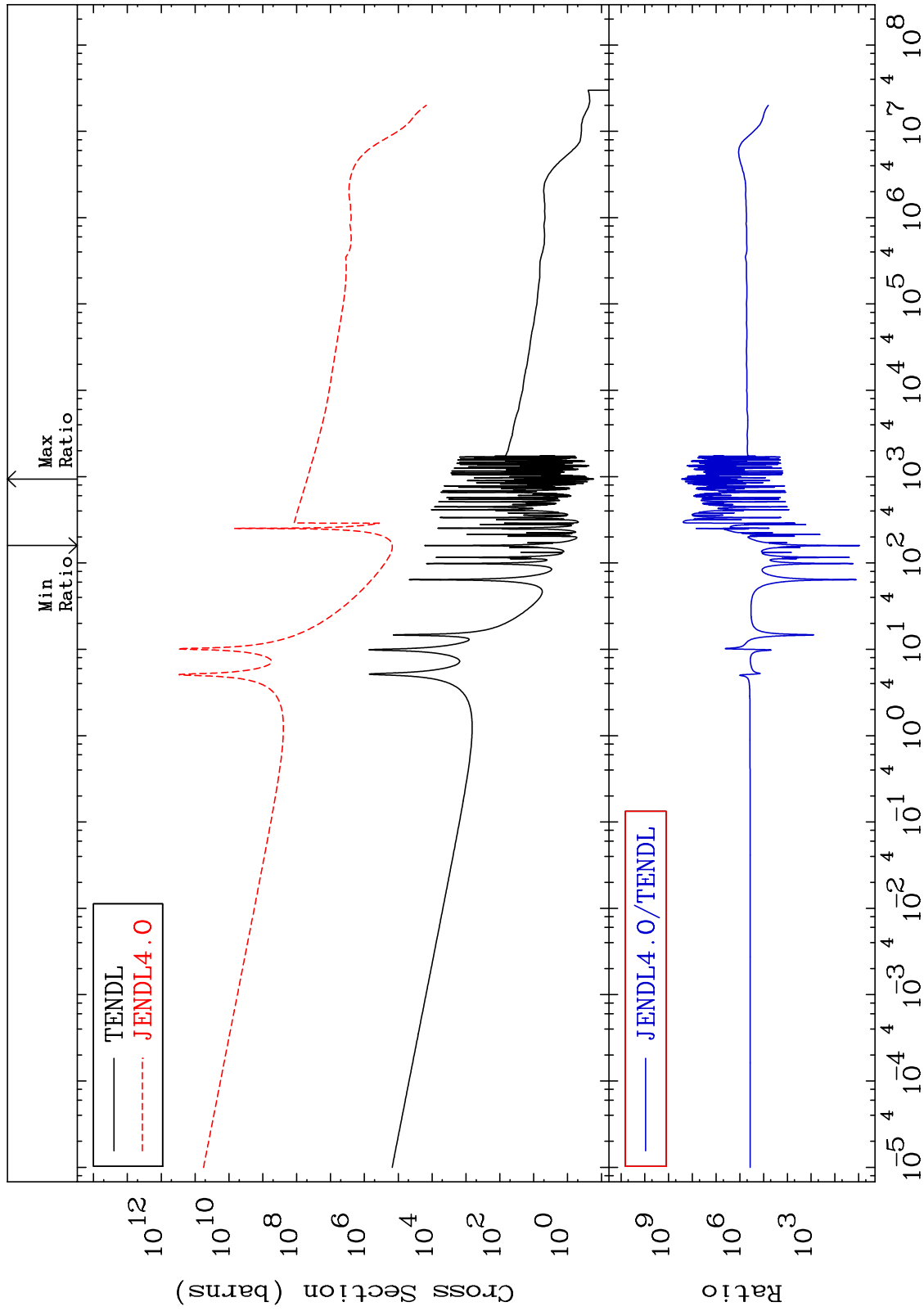
MAT 5425 Kerma fission (mt18 or mt19-20-21-38) 54-Xe-124
 Cross Section -100.0 To 9999. %



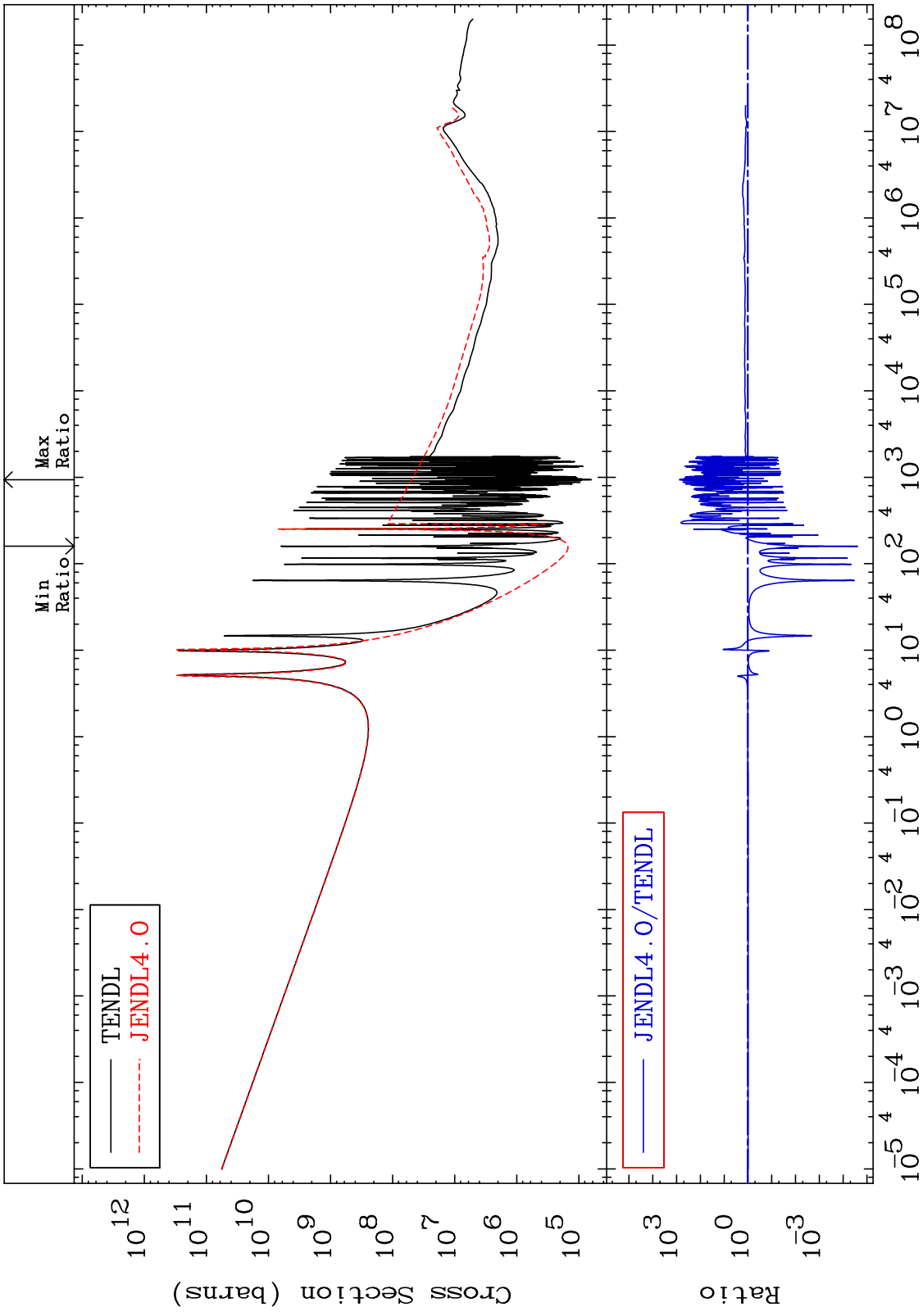
MAT 5425

Kerma capture (mt102)
Cross Section

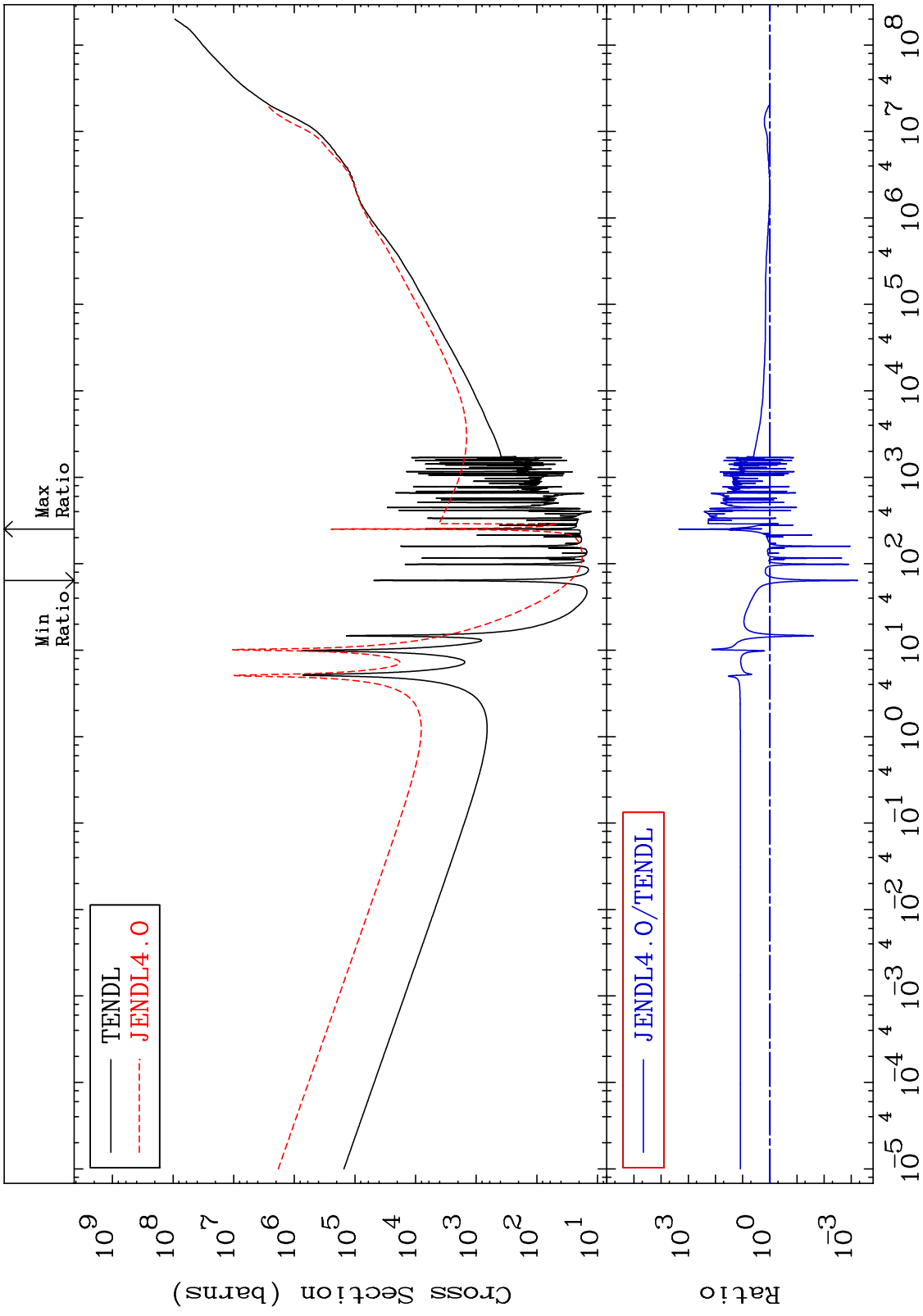
54-Xe-124
797.3 To 9999. %



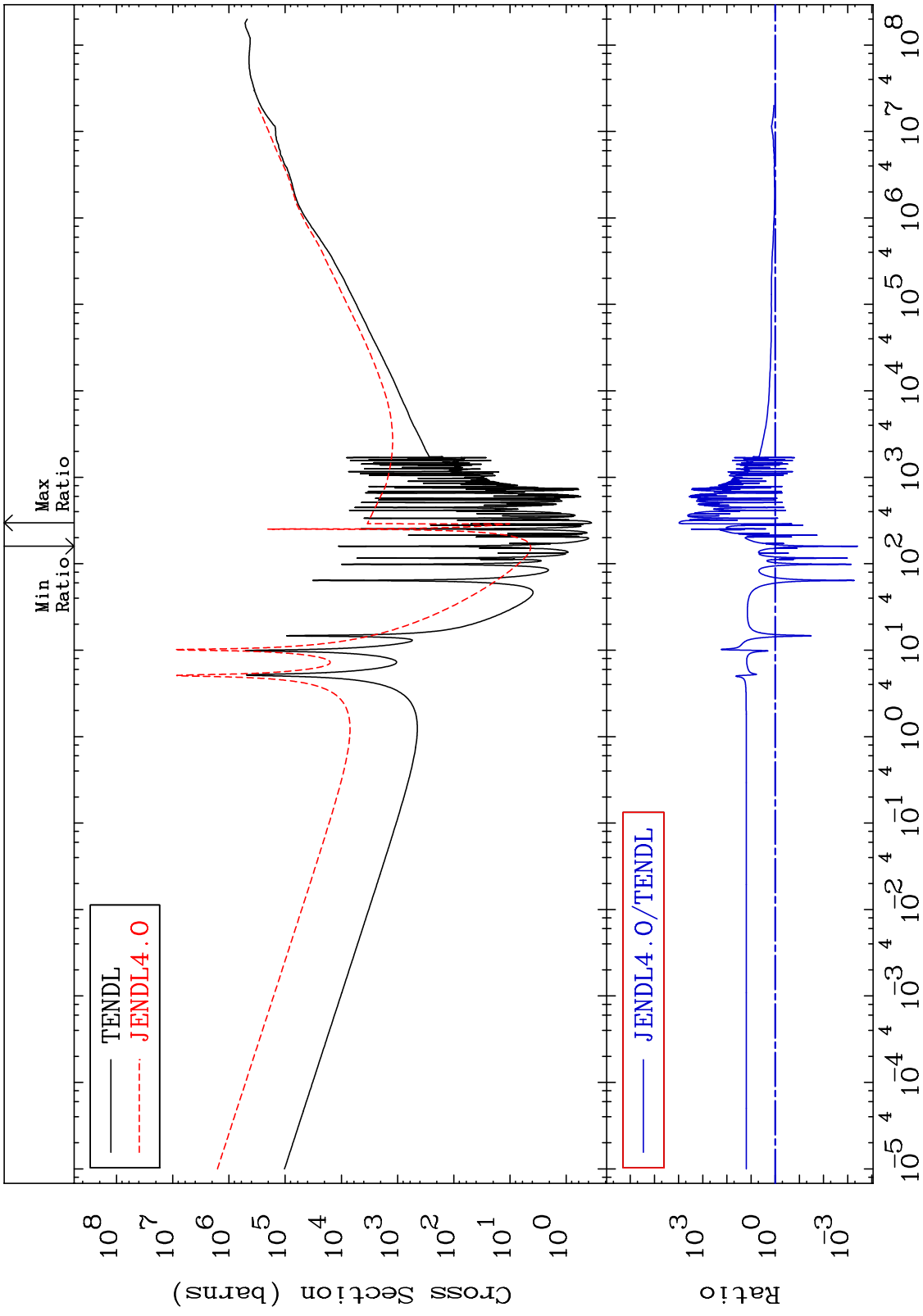
MAT 5425 54-Xe-124
-100.0 To 9999. %
 Total photon (eV-barns)
 Cross Section



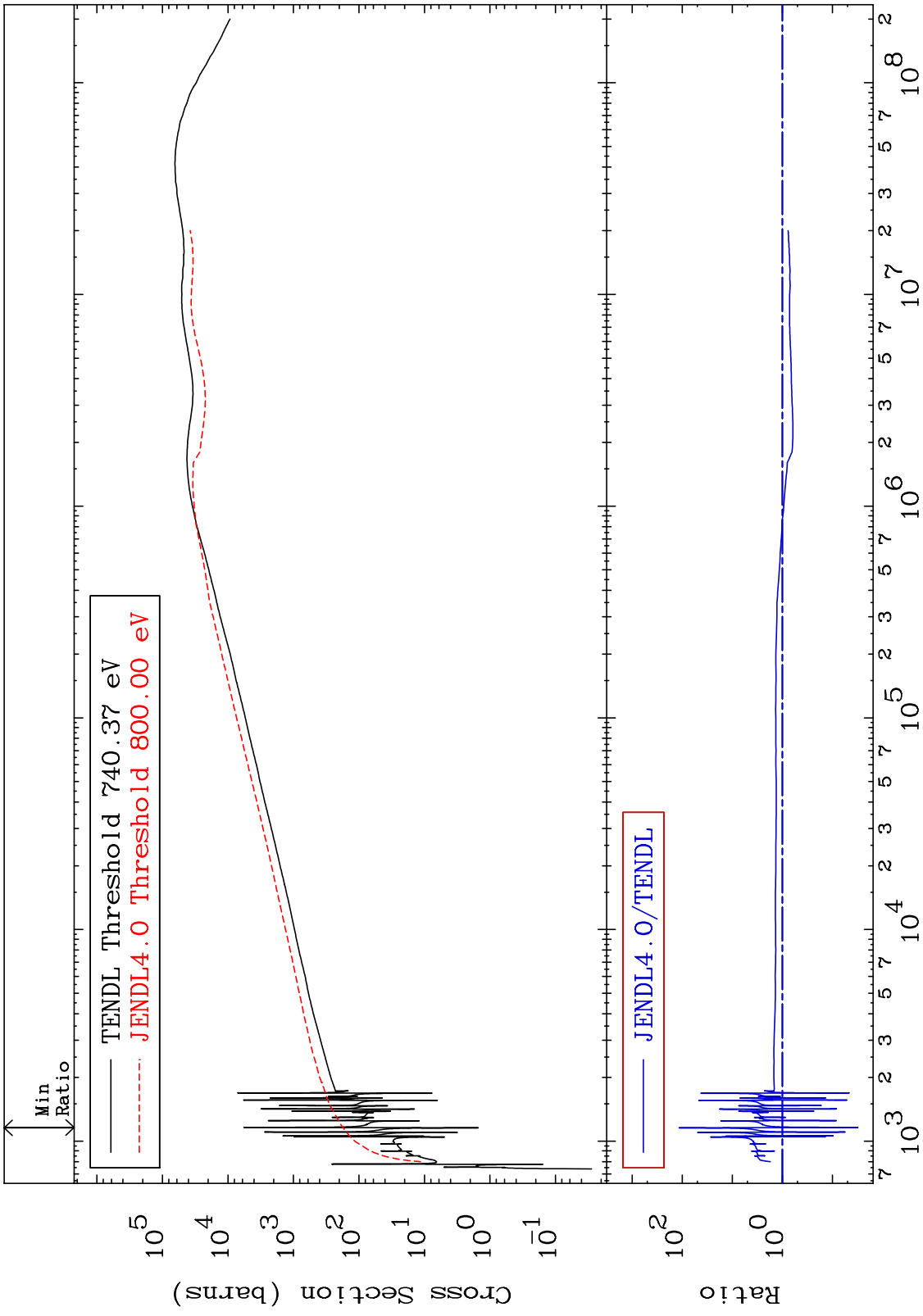
MAT 5425 Total kinematic kerma (high limit) 54-Xe-124
 Cross Section -99.94 To 9999. %



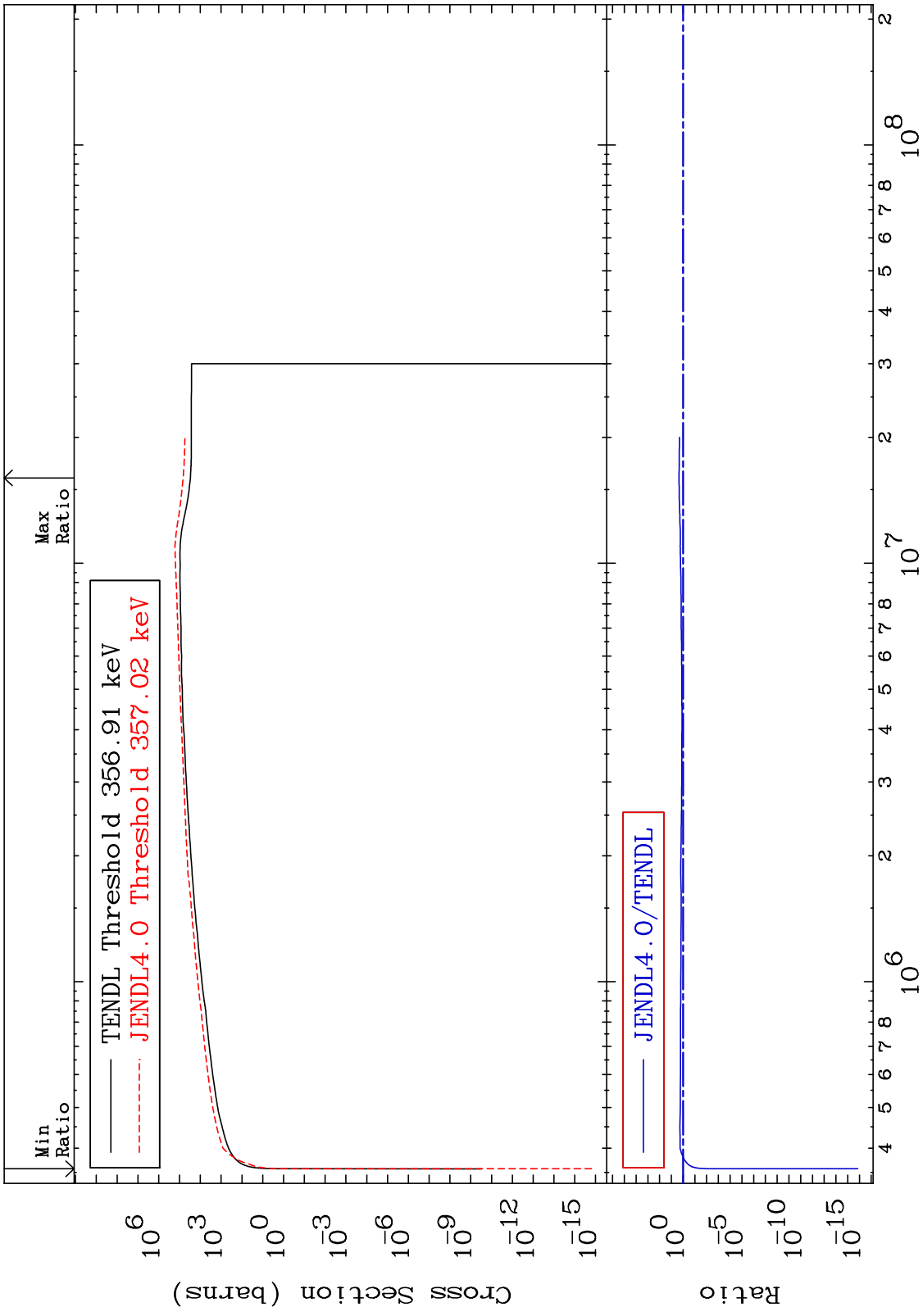
MAT 5425 Dpa total (eV-barns) 54-Xe-124
 -99.96 To 9999. %



MAT 5425 Dpa elastic (mt2) 54-Xe-124
Cross Section -96.88 To 9999. %

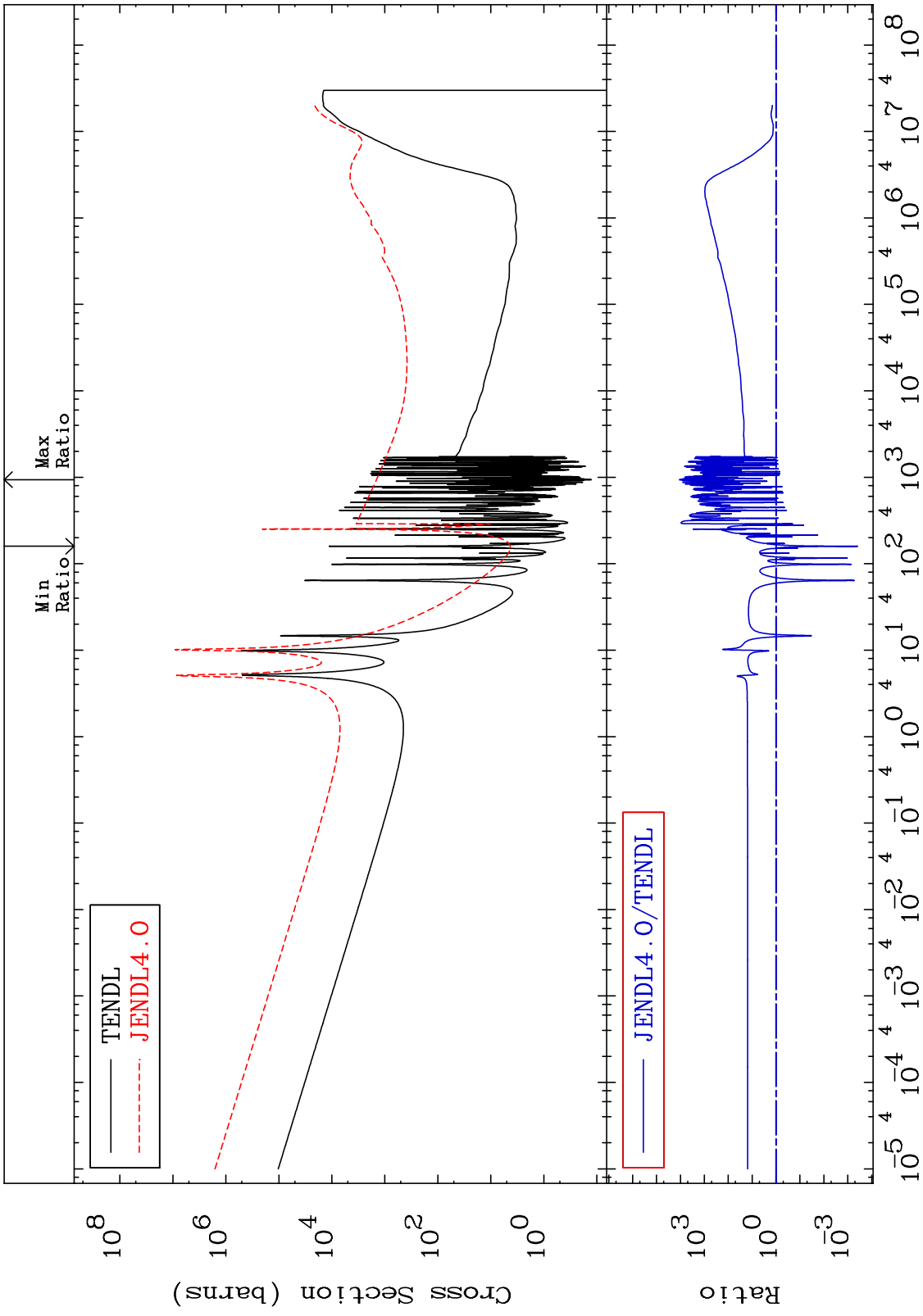


MAT 5425 Dpa inelastic (mt51-91) 54-Xe-124
 Cross Section -100.0 To 121.4 %

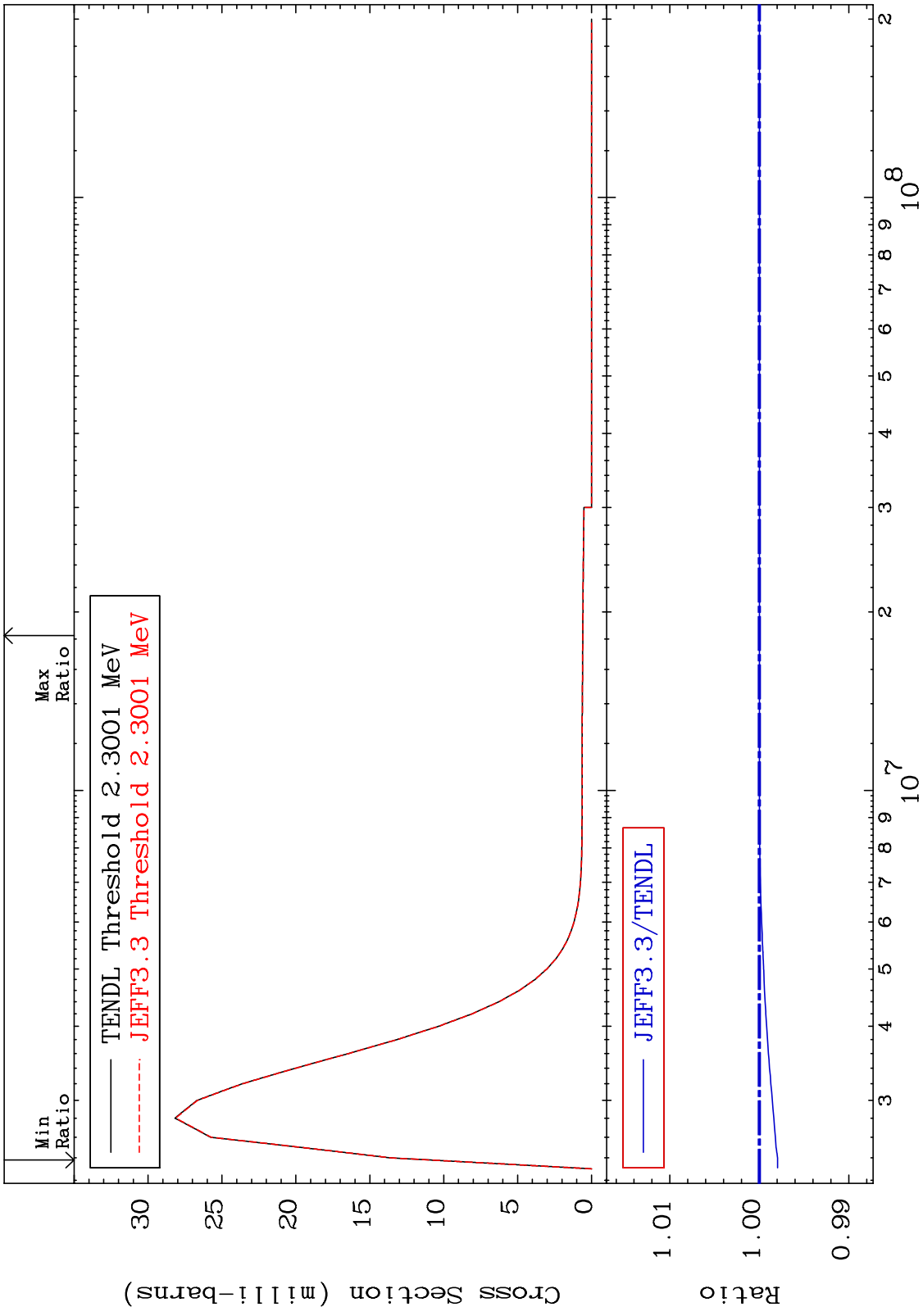


40 54-Xe-124

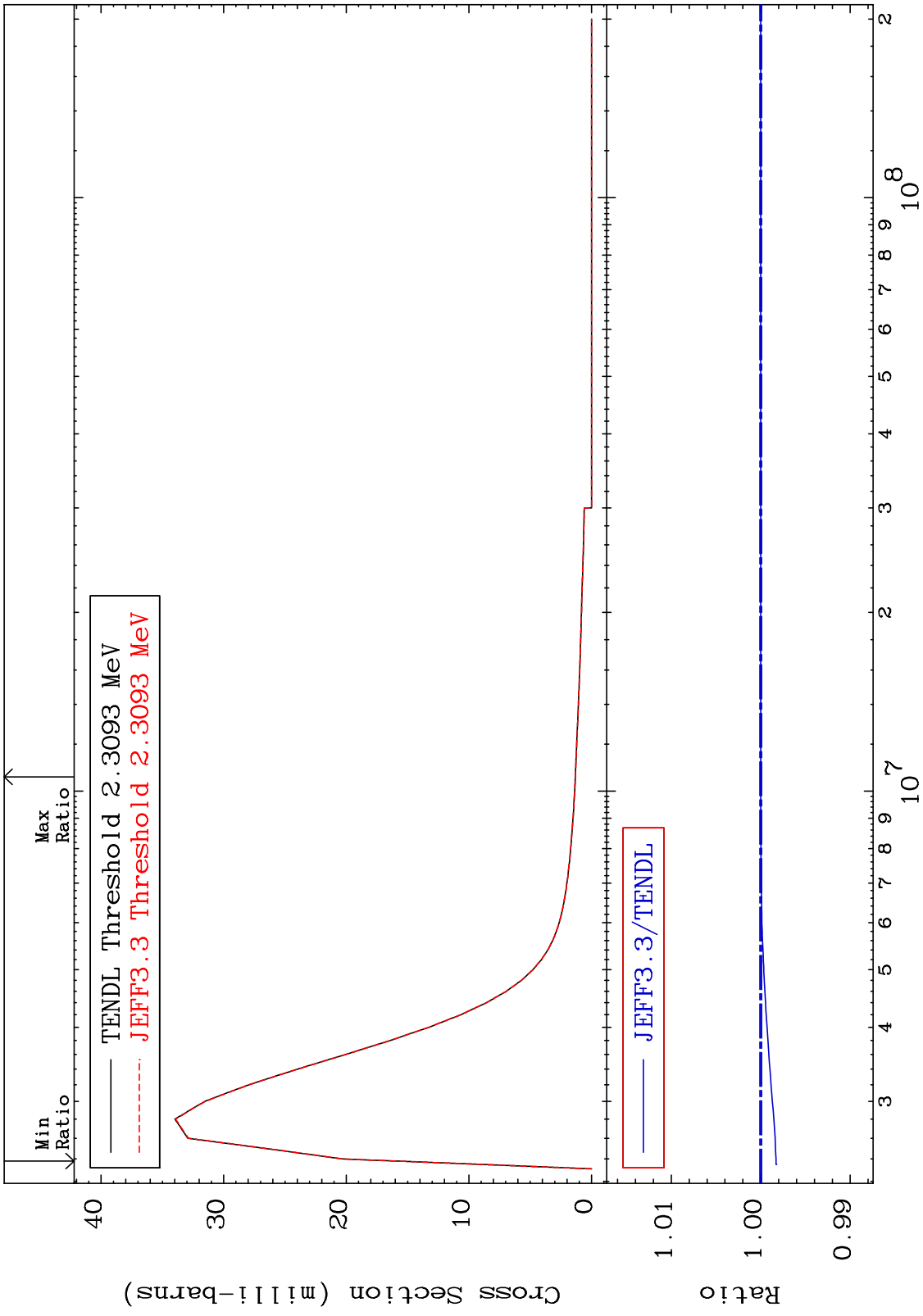
MAT 5425 Dpa disappearance (mt102 -120) 54-Xe-124
 -99.96 To 9999. %



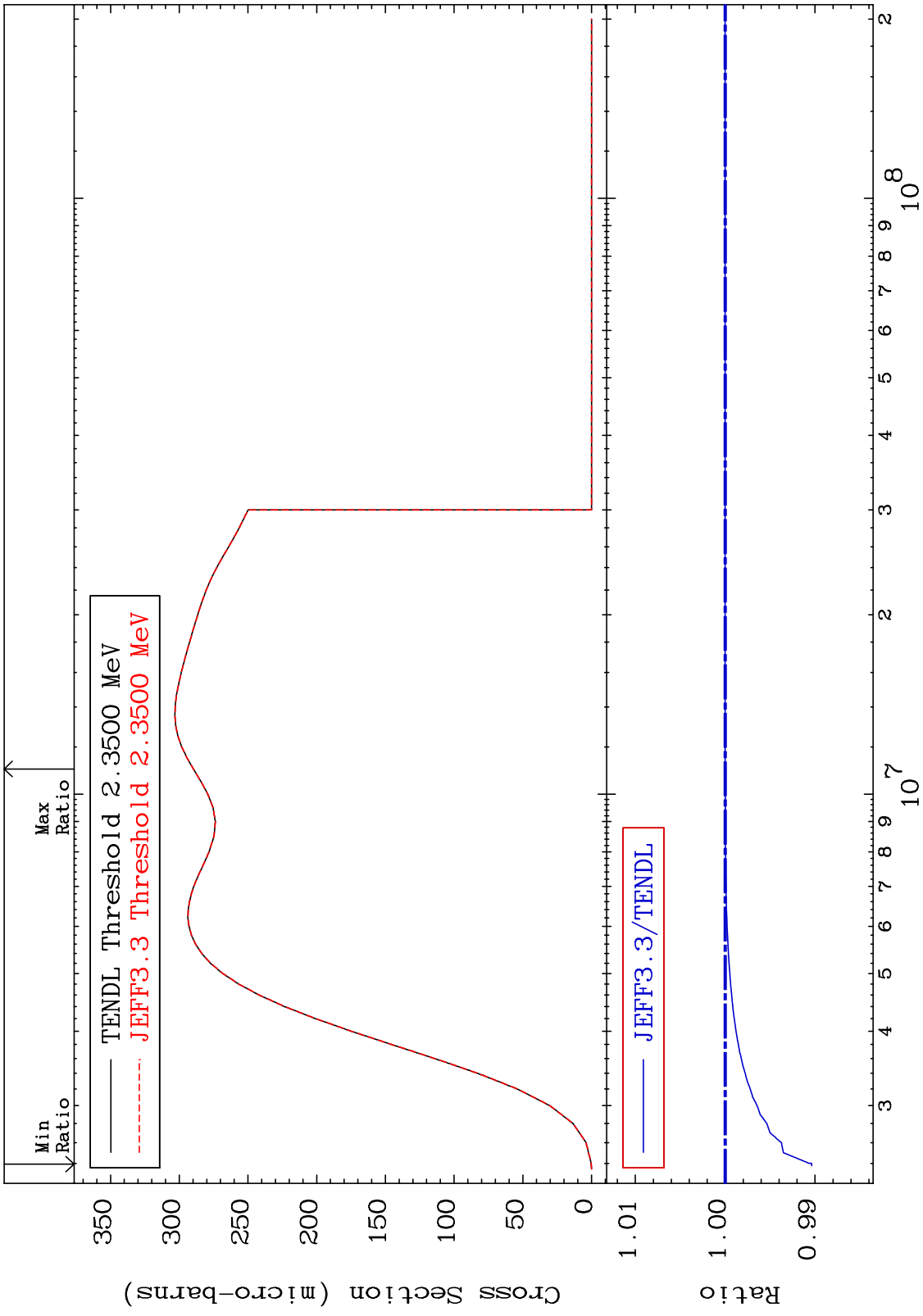
MAT 5425 MT= 73 (n,n') Level Cross Section 54-Xe-124
 -0.204 To 0.000 %



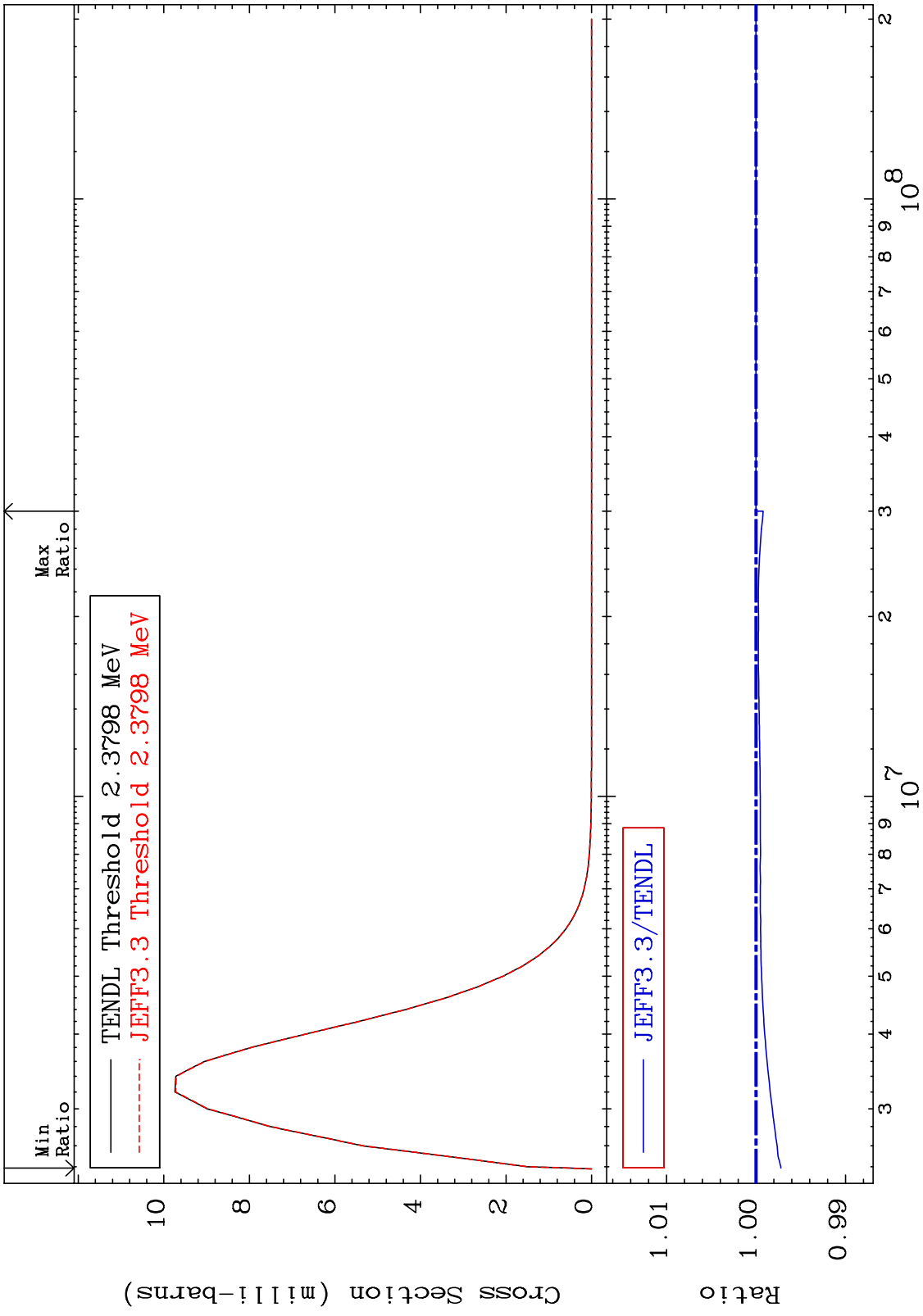
MAT 5425 MT= 74 (n,n') Level Cross Section 54-Xe-124 -0.172 To 0.000 %



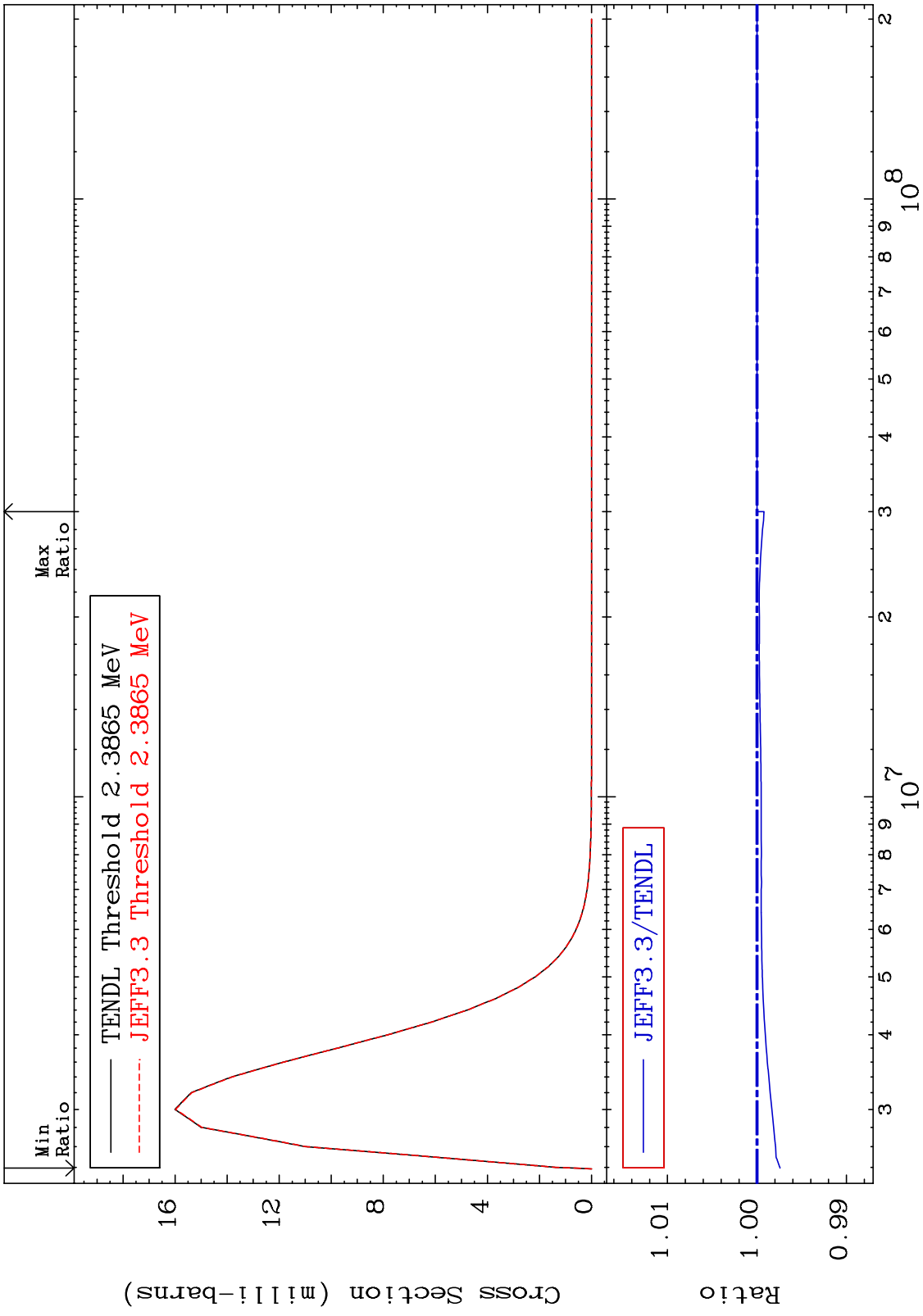
MAT 5425 MT= 75 (n,n') Level Cross Section 54-Xe-124 -0.963 To 0.000 %



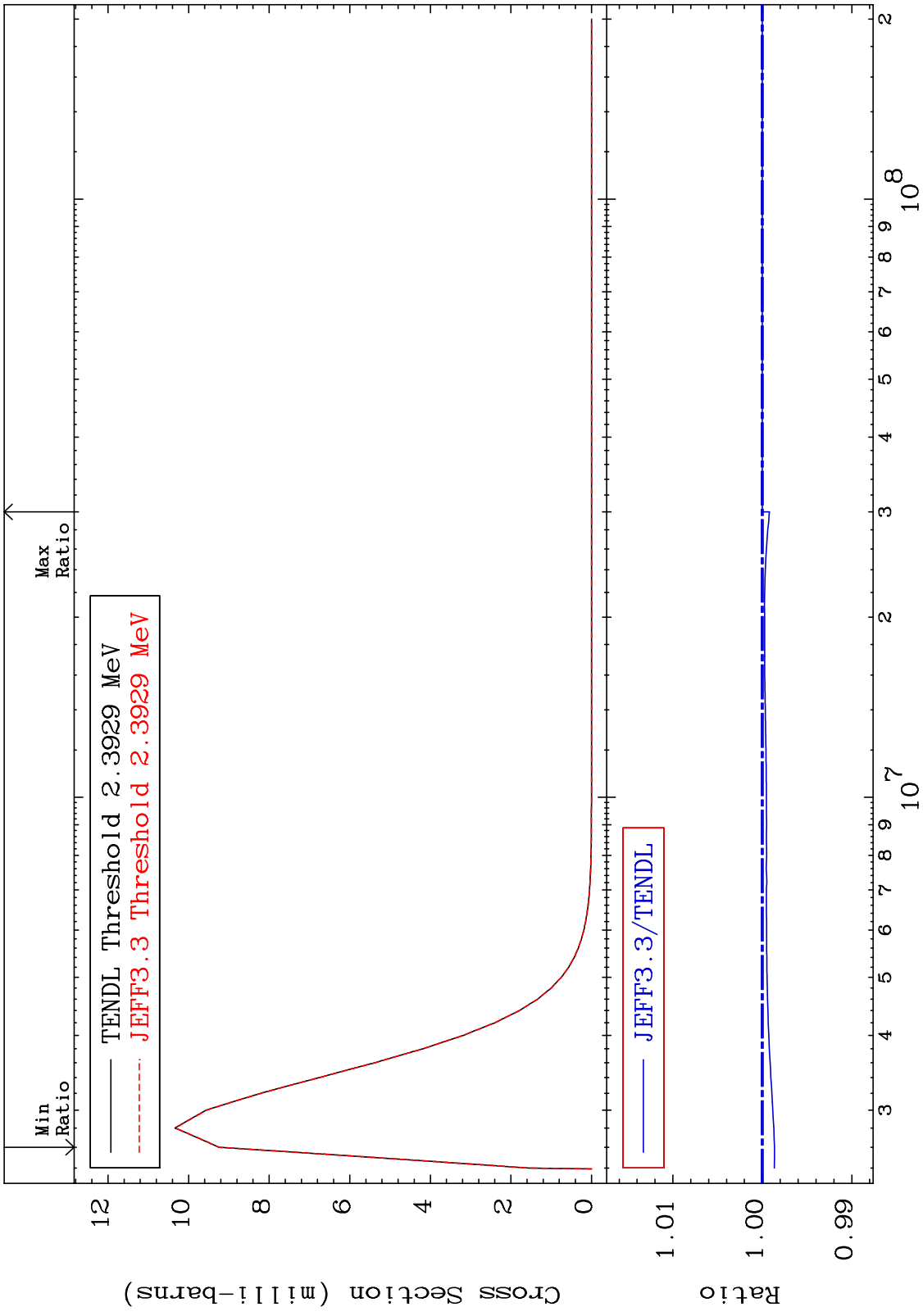
MAT 5425 MT= 76 (n,n') Level Cross Section 54-Xe-124 -0.277 To 0.000 %



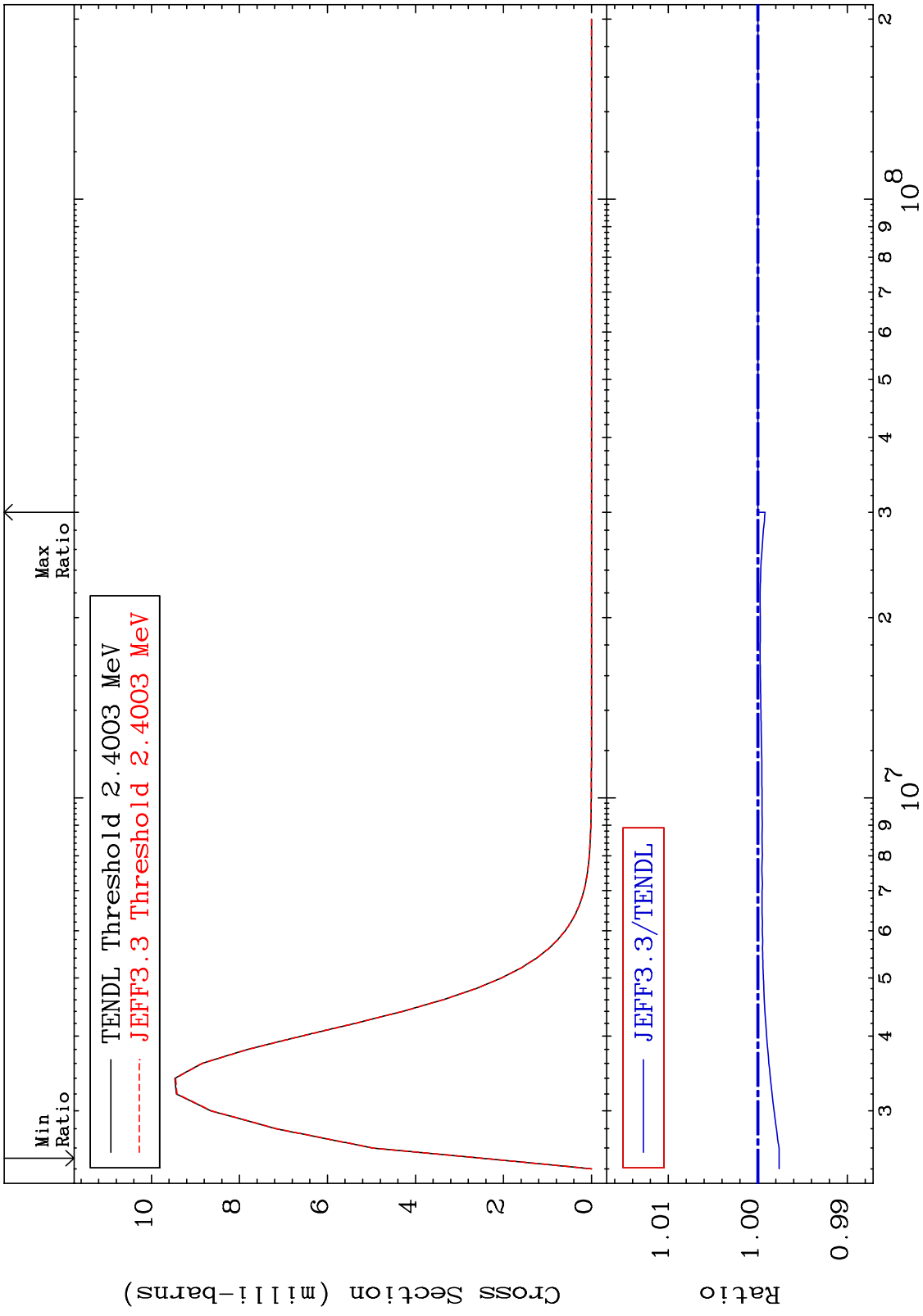
MAT 5425 MT= 77 (n,n') Level Cross Section 54-Xe-124 -0.256 To 0.000 %



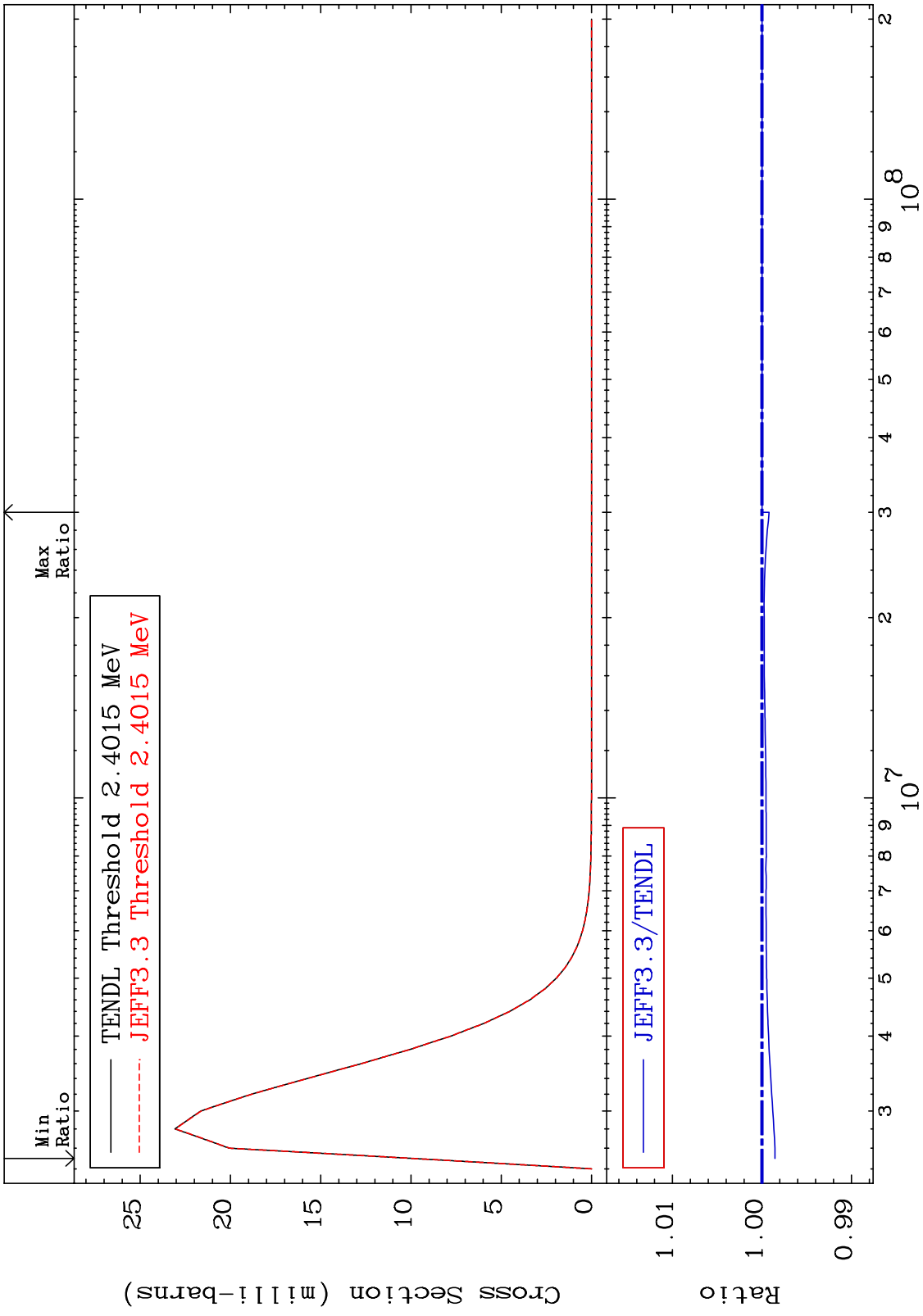
MAT 5425 MT= 78 (n,n') Level Cross Section 54-Xe-124 -0.137 To 0.000 %



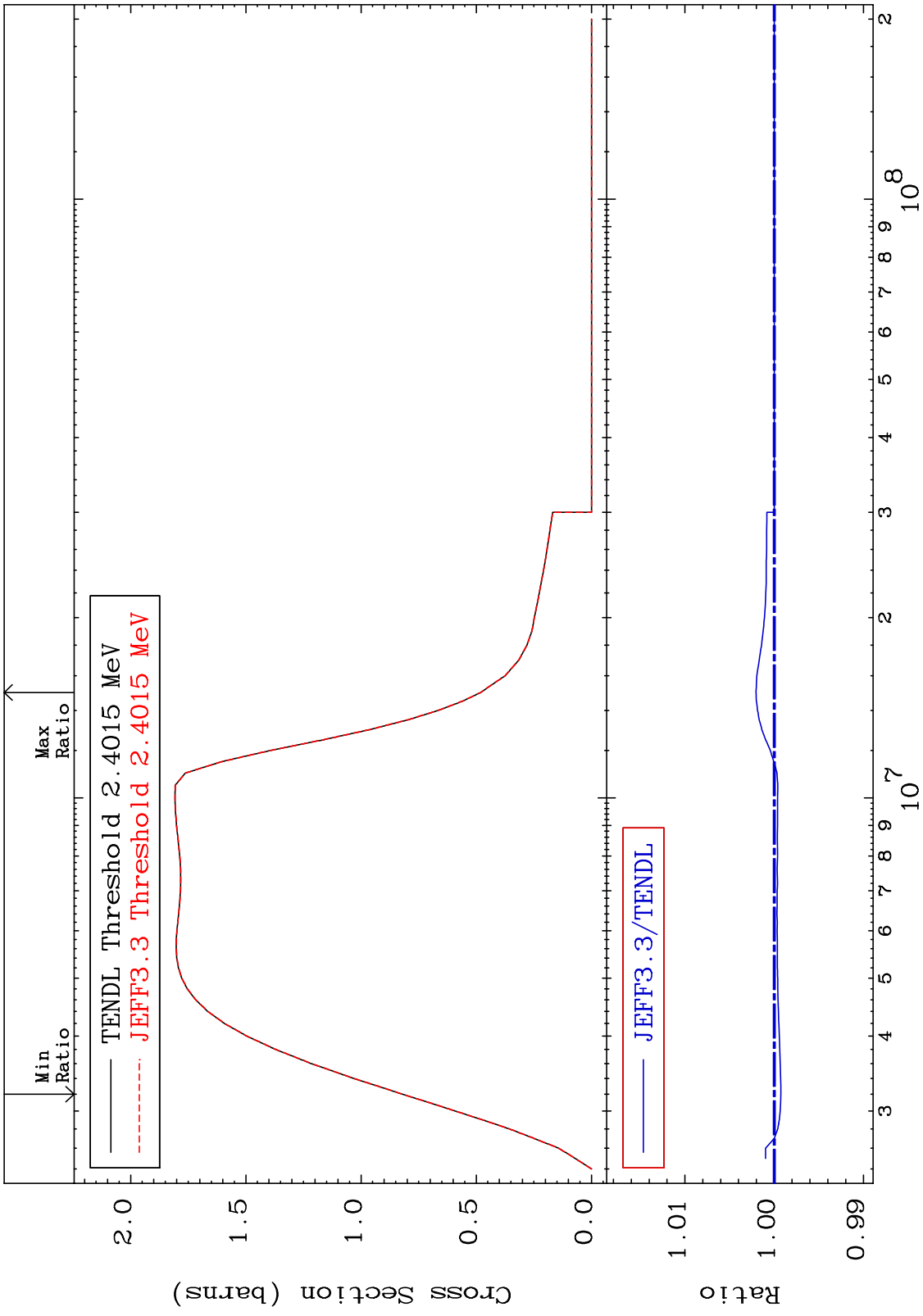
MAT 5425 MT= 79 (n,n') Level Cross Section 54-Xe-124 -0.237 To 0.000 %



MAT 5425 MT= 80 (n,n') Level Cross Section 54-Xe-124 -0.145 To 0.000 %



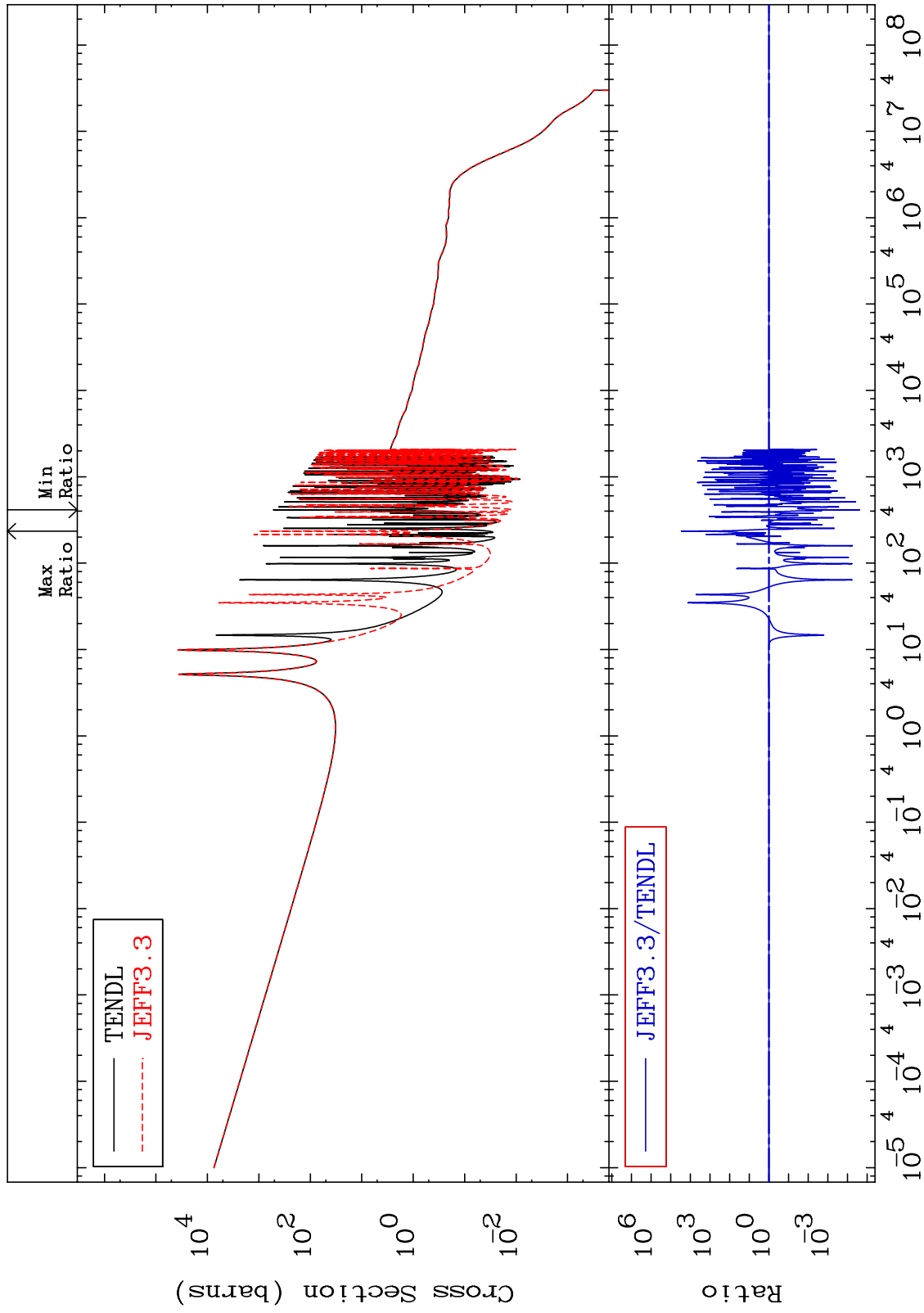
MAT 5425 (n,n') Continuum Cross Section 54-Xe-124 -0.074 To 0.204 %

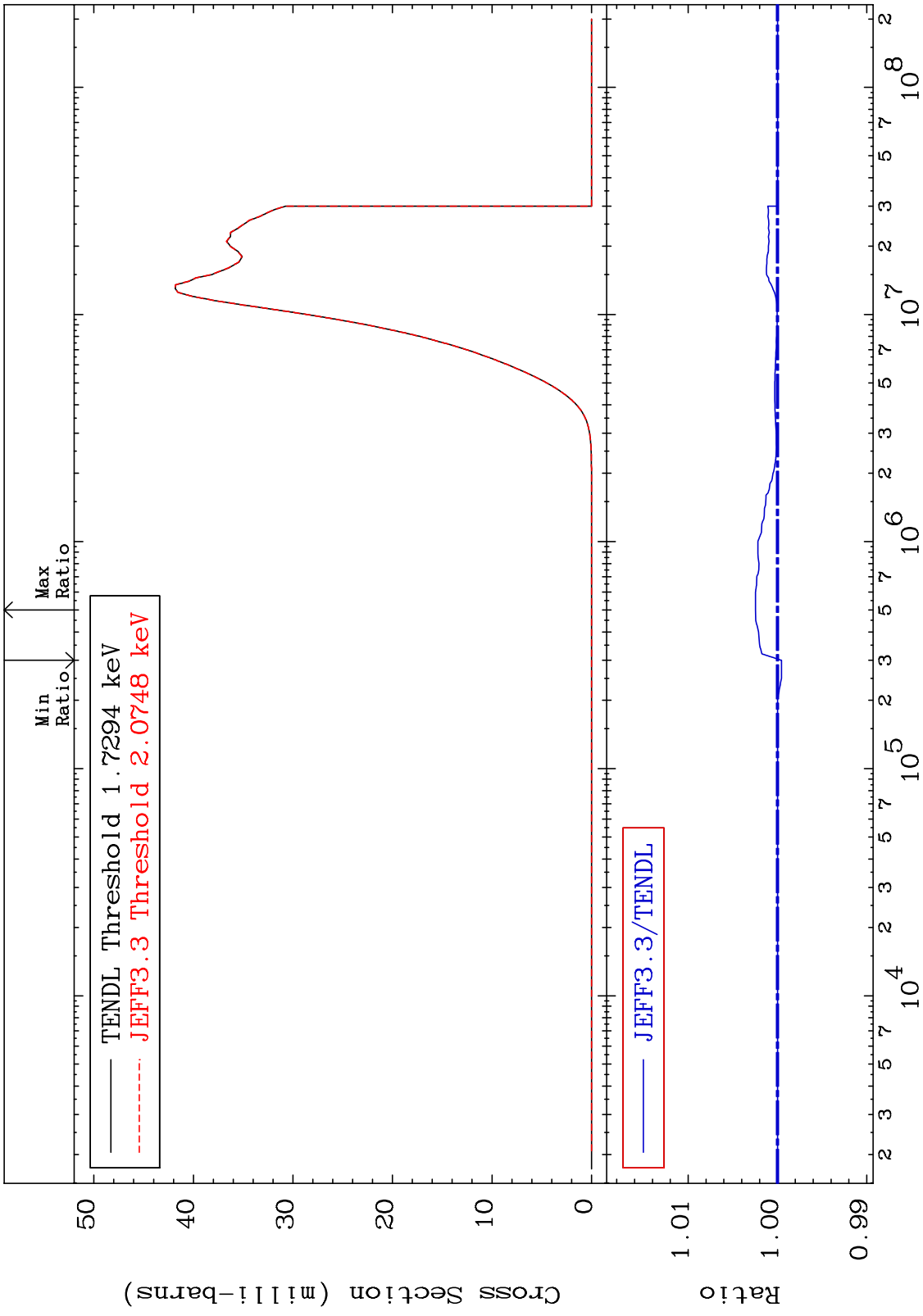


MAT 5425

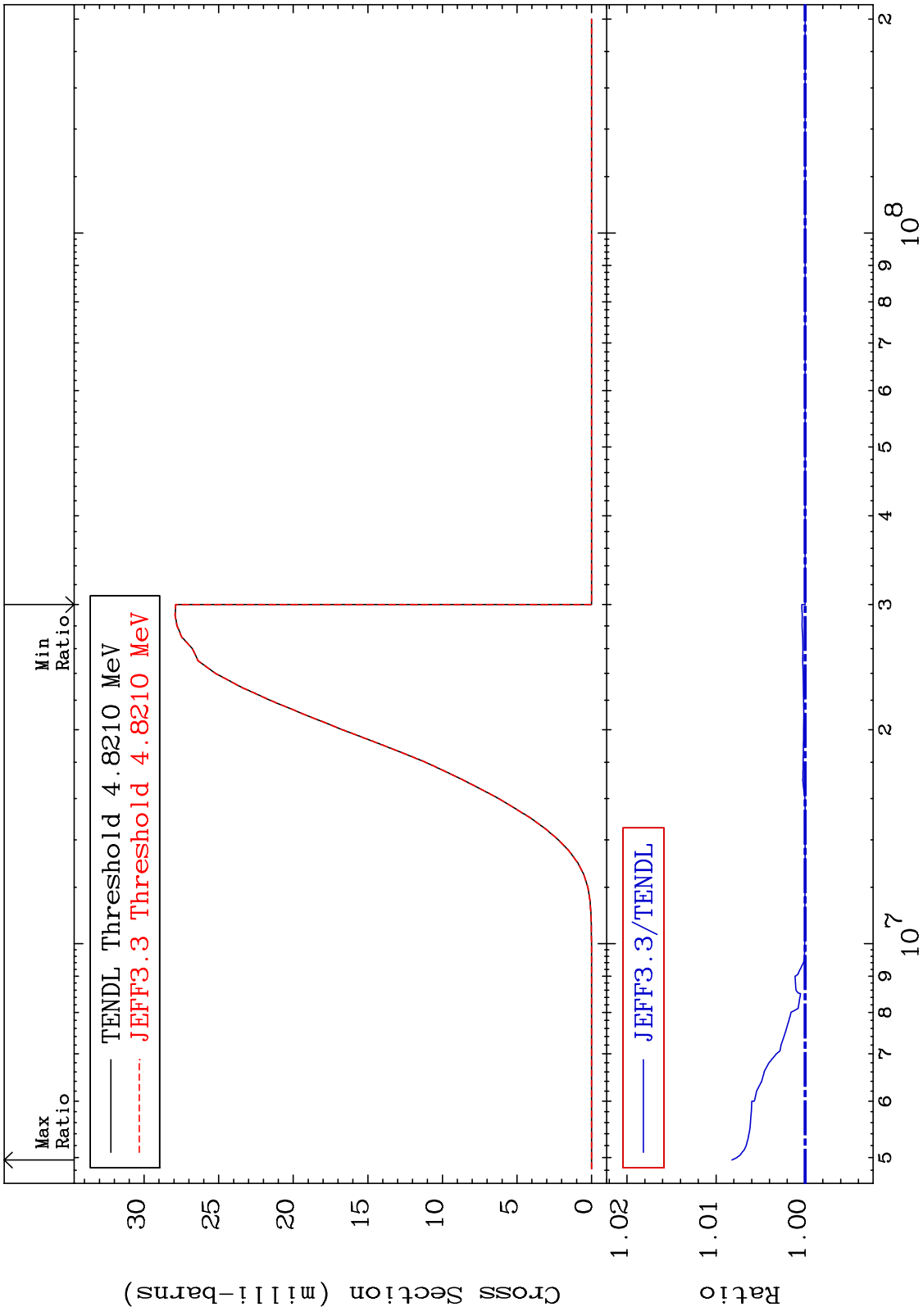
(n, γ)
Cross Section

54-Xe-124
-100.0 To 9999. %



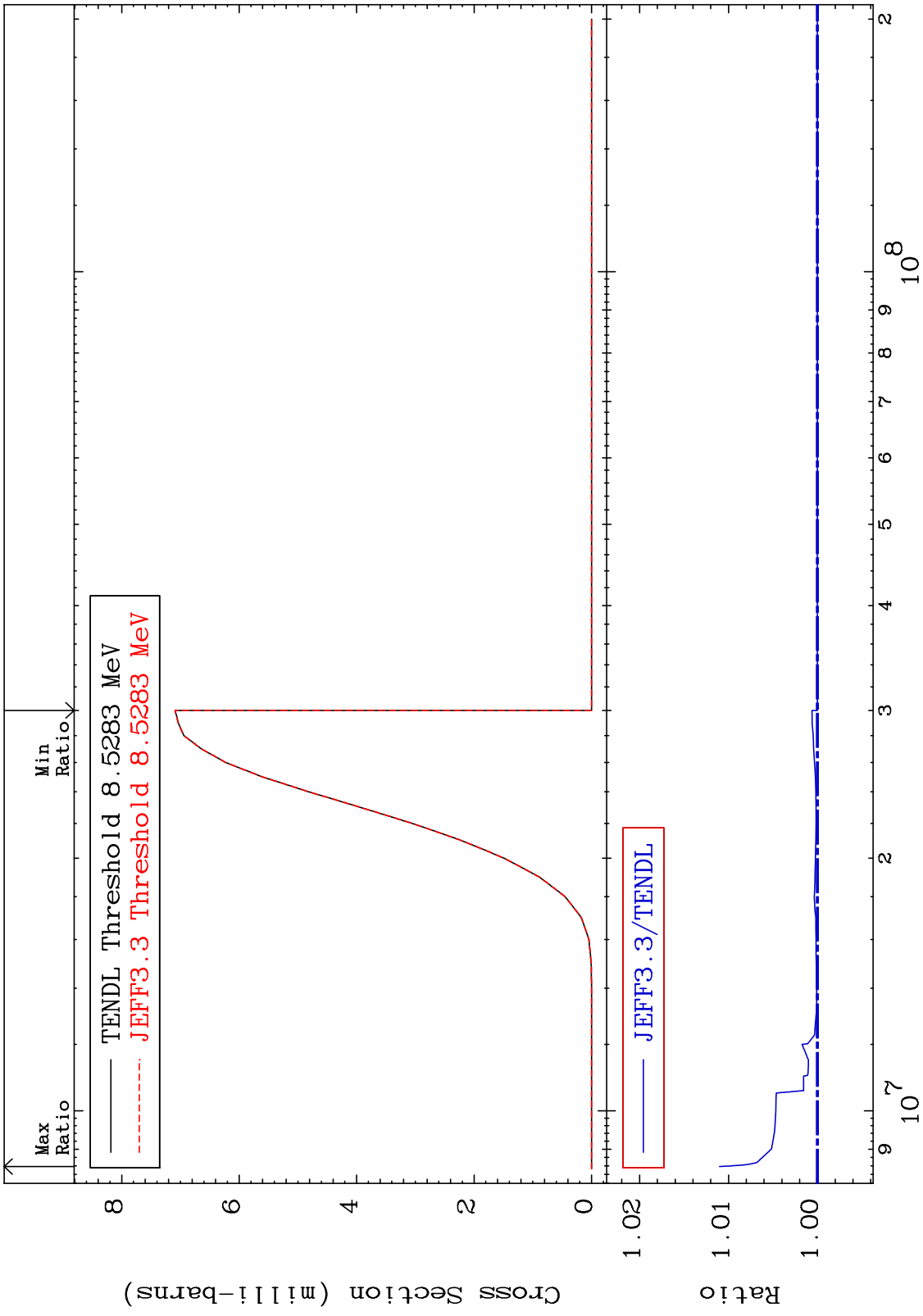


MAT 5425 (n,d) Cross Section 54-Xe-124 To 0.823 %

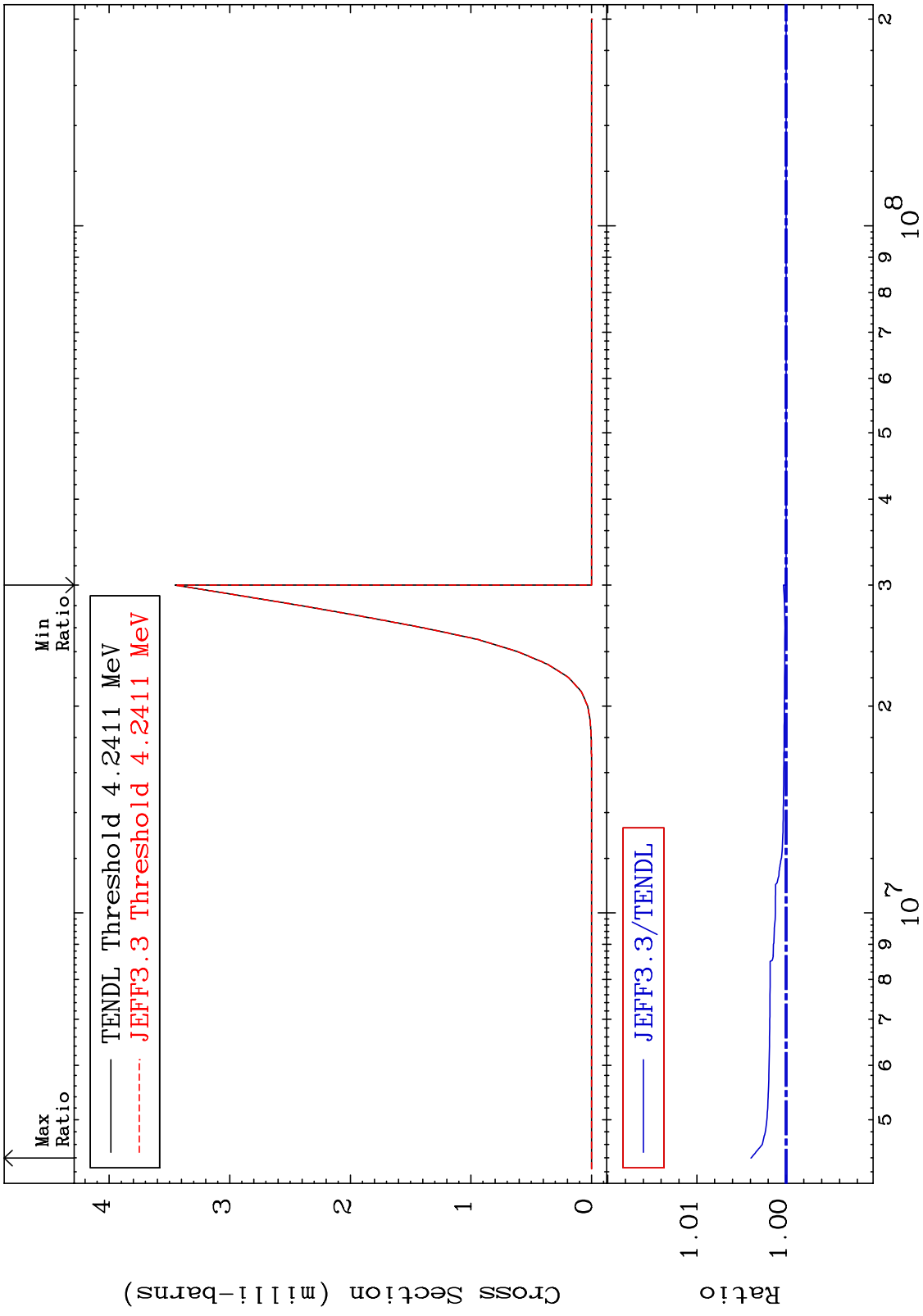


53 54-Xe-124 Incident Energy (eV)

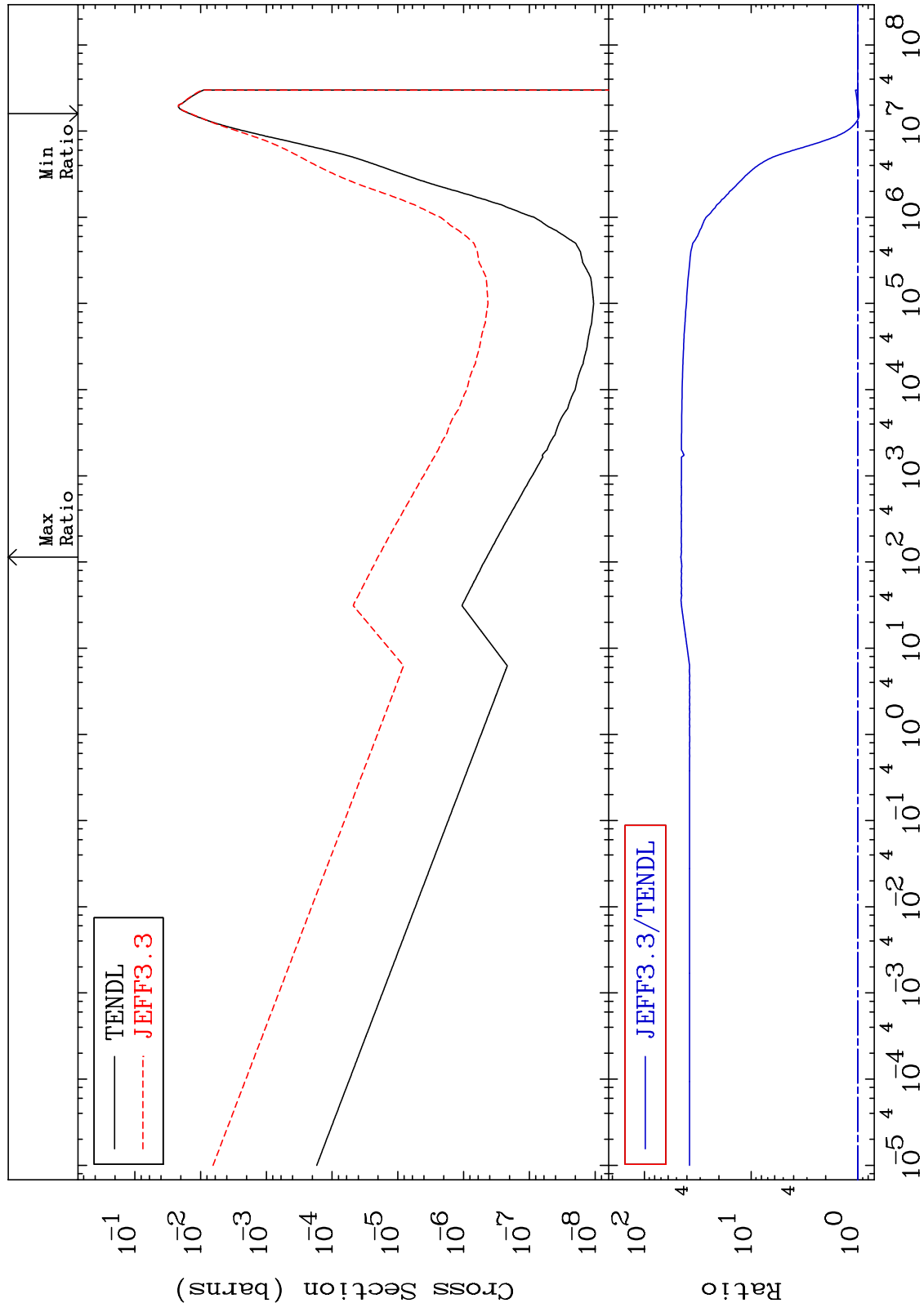
MAT 5425 (n,t) Cross Section 54-Xe-124 To 1.101 %

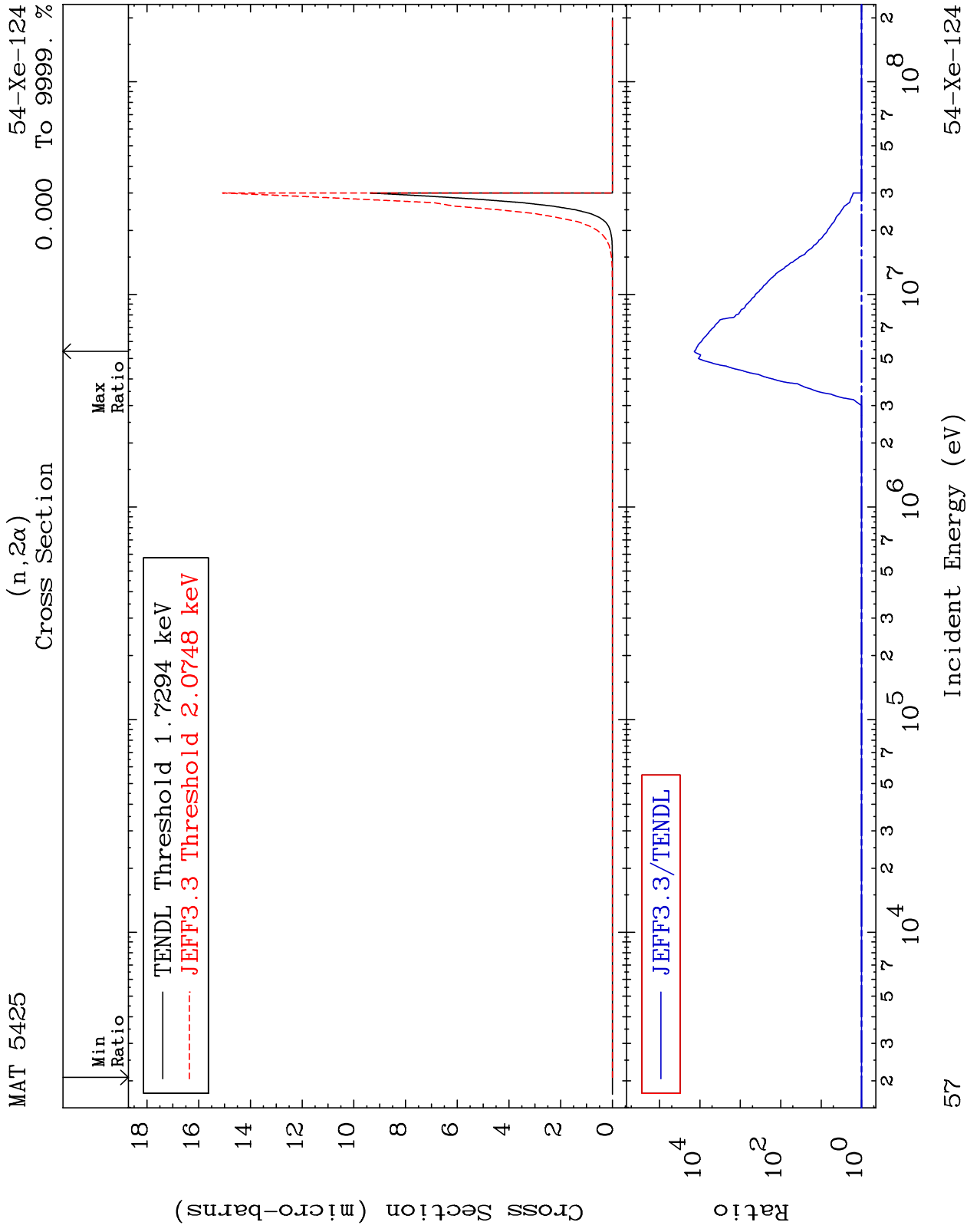


MAT 5425 (n, He-3) Cross Section 54-Xe-124 To 0.395 %

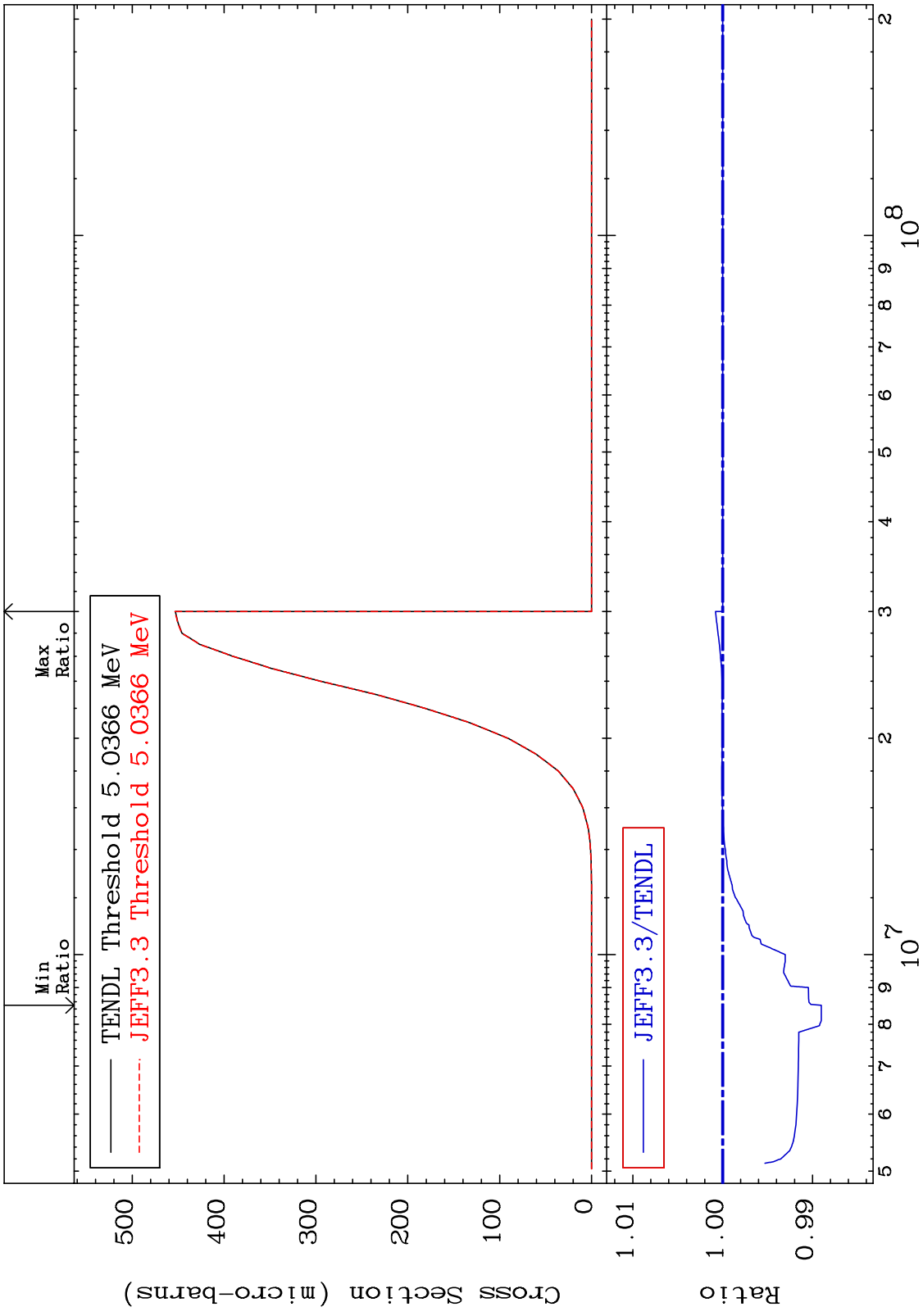


MAT 5425 (n, α) Cross Section 54-Xe-124 -2.679 To 4454. %





MAT 5425 (n,2p) Cross Section 54-Xe-124 -1.099 To 0.079 %



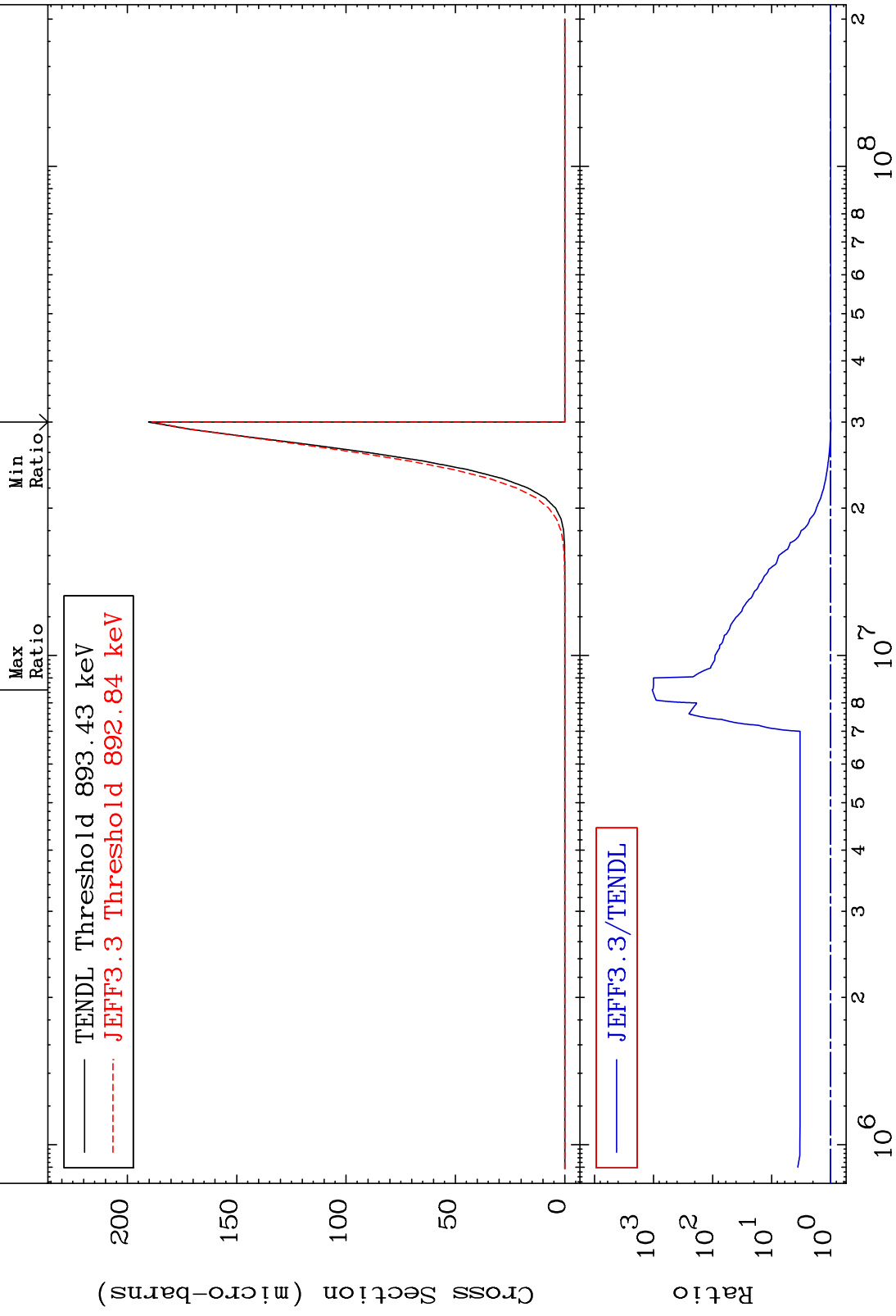
MAT 5425

(n,p) α

54-Xe-124

-0.811 To 9999. %

Cross Section

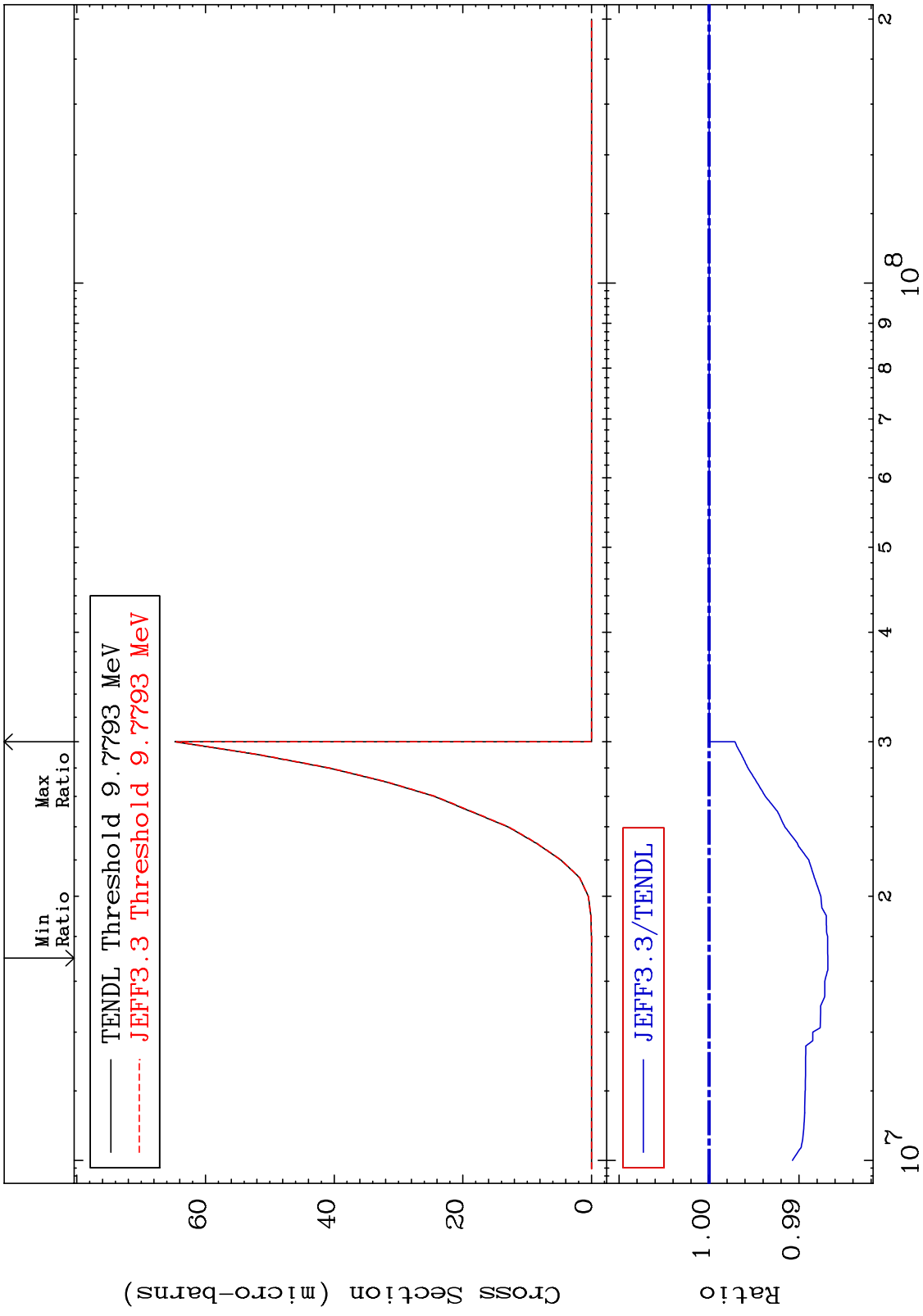


59

Incident Energy (eV)

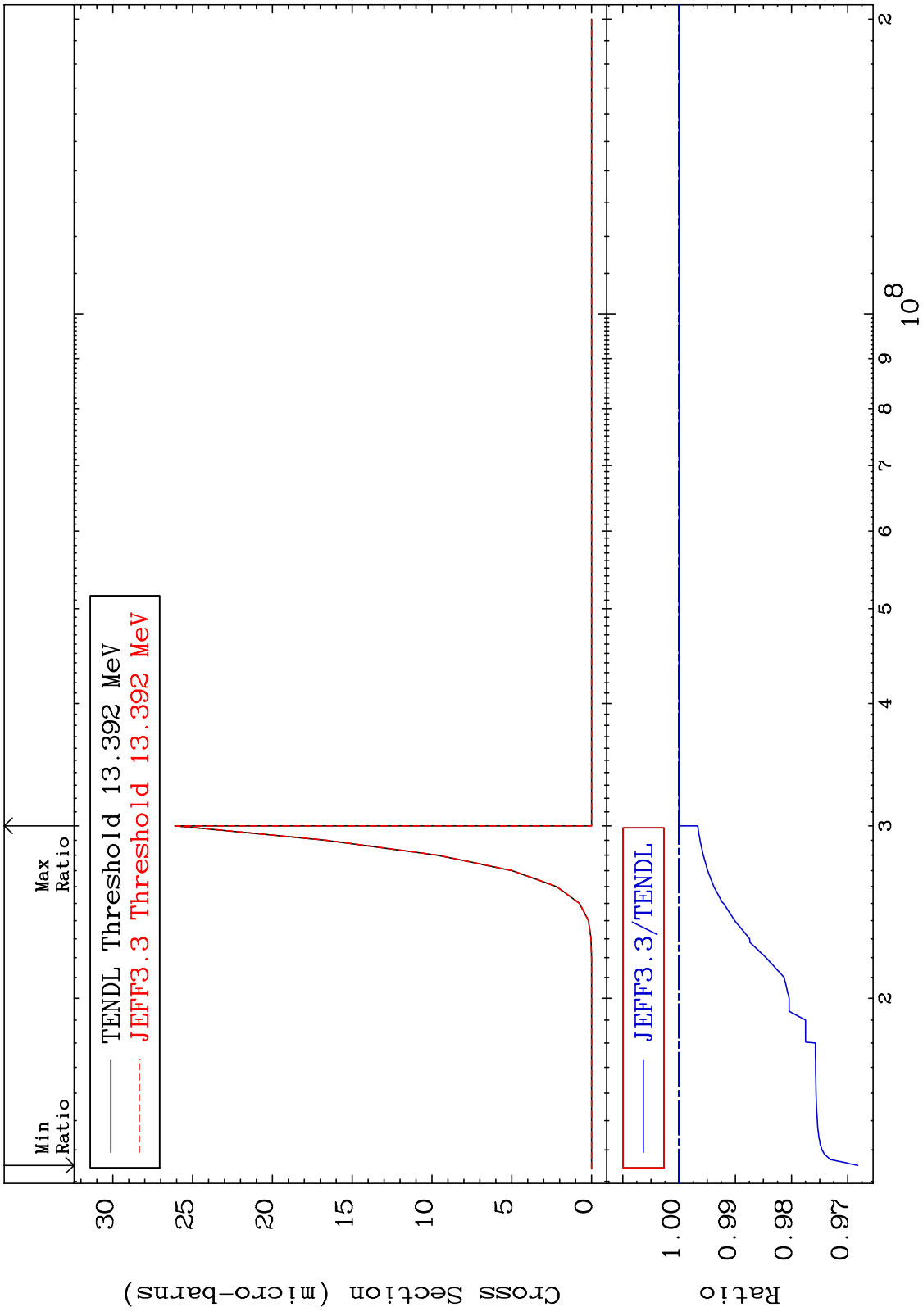
54-Xe-124

MAT 5425 (n,p) d 54-Xe-124
 Cross Section -1.320 To 0.000 %

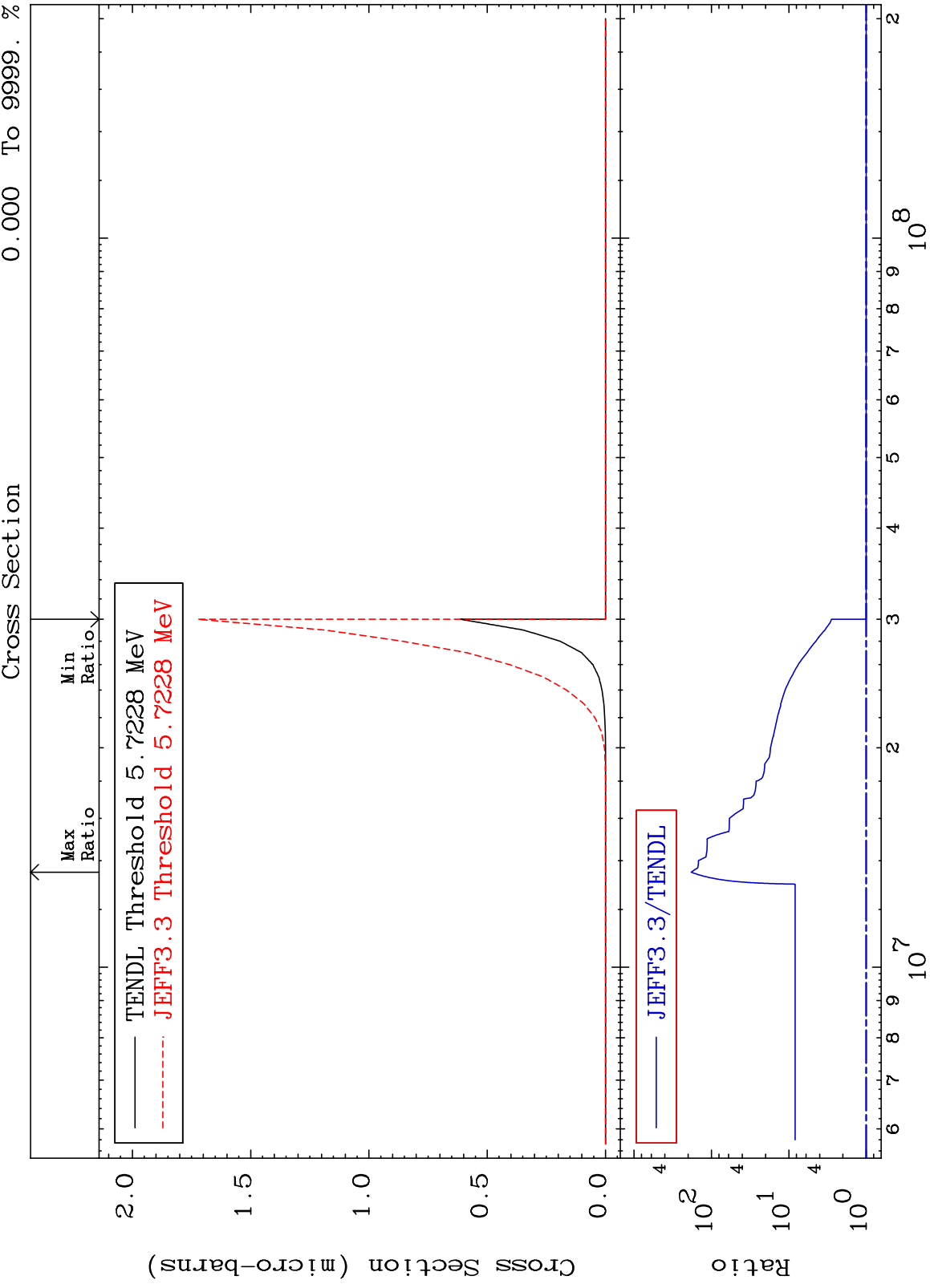


Incident Energy (eV) 54-Xe-124

MAT 5425 (n,p) t 54-Xe-124
 Cross Section -3.178 To 0.000 %



MAT 5425 (n,d) α 54-Xe-124 To 9999. %

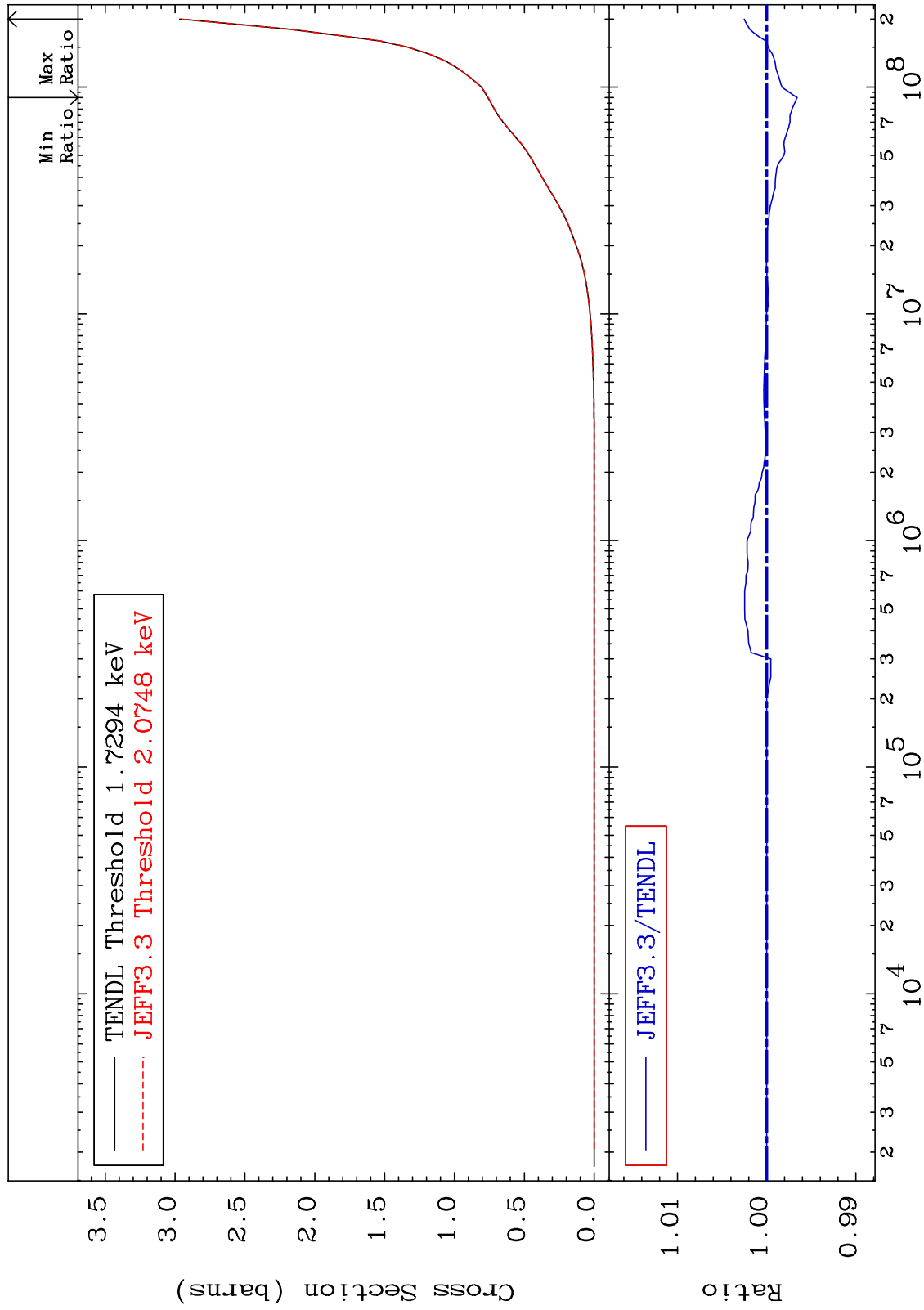


62 54-Xe-124

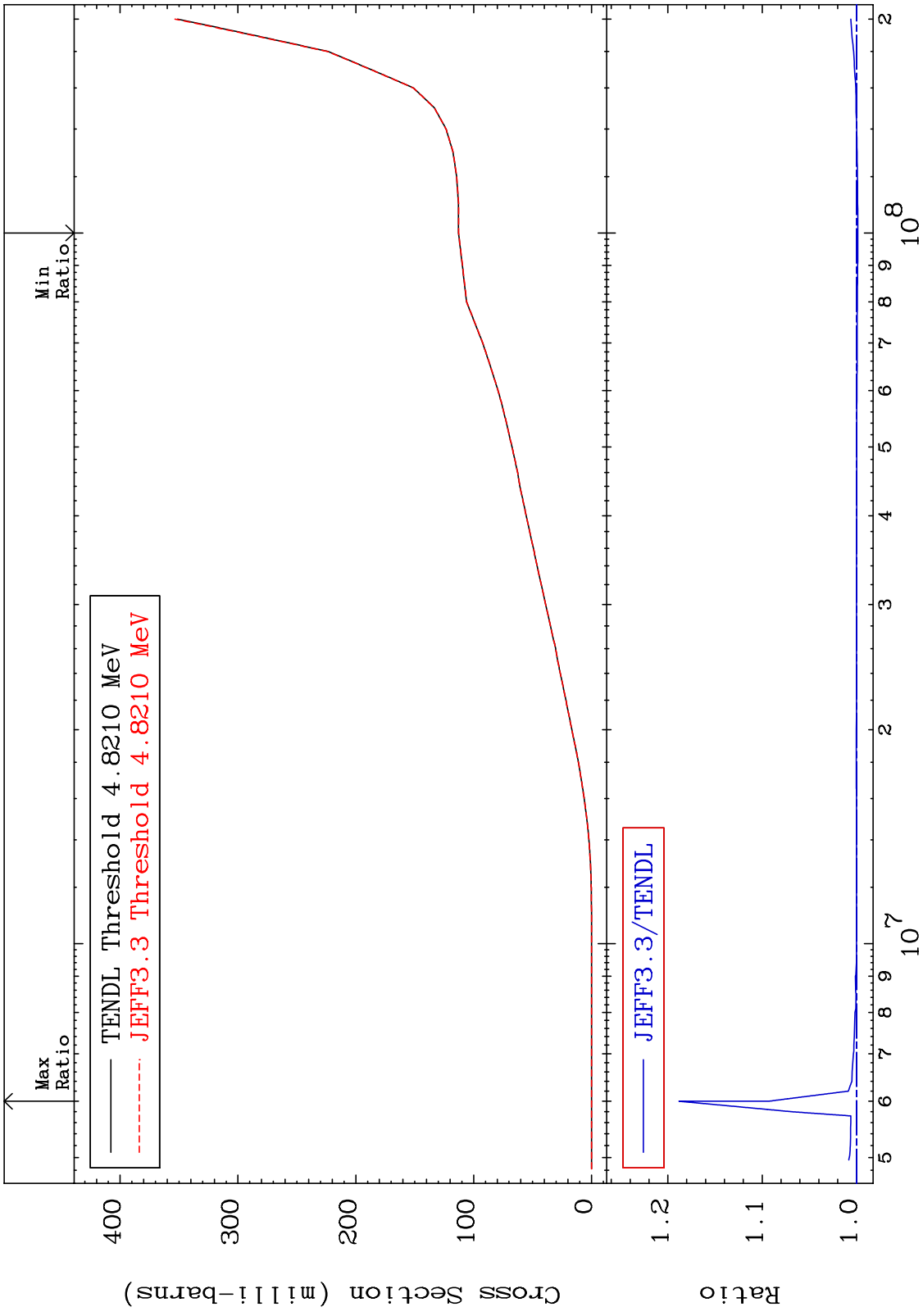
MAT 5425

Hydrogen Production
Cross Section

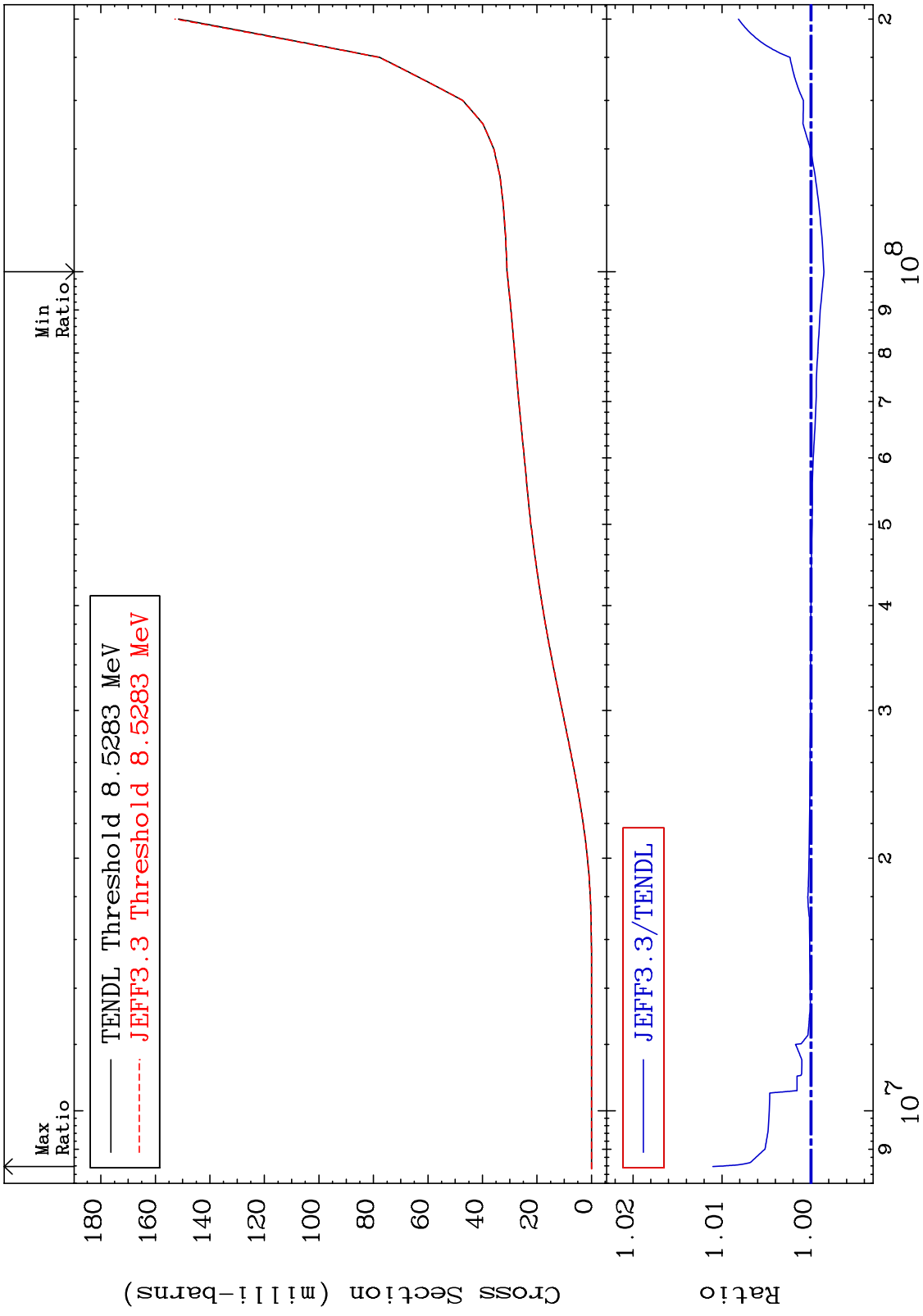
54-Xe-124
-0.341 To 0.252 %



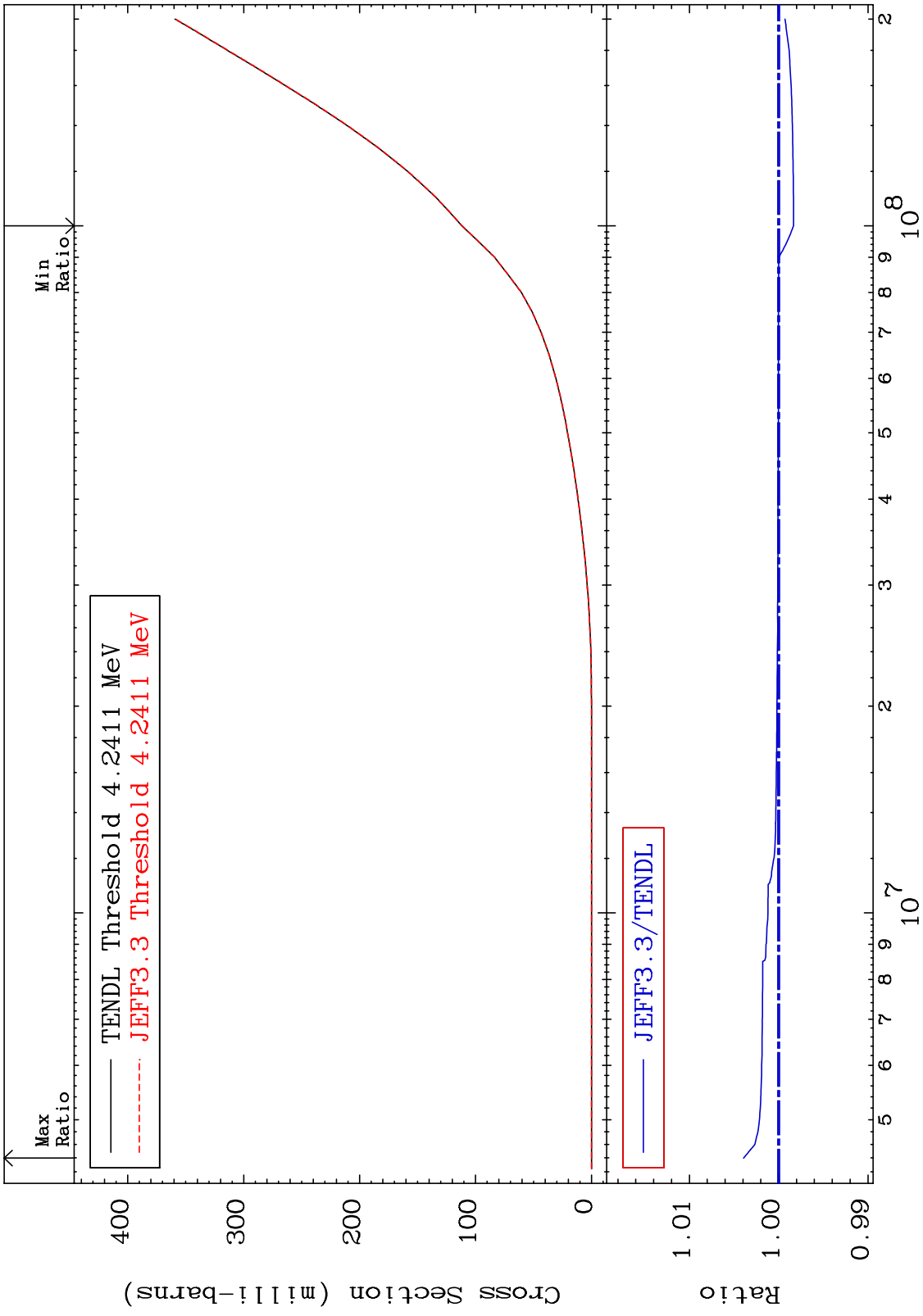
MAT 5425 Deuterium Production Cross Section 54-Xe-124 -0.140 To 18.82 %



MAT 5425 Tritium Production Cross Section 54-Xe-124 -0.146 To 1.101 %



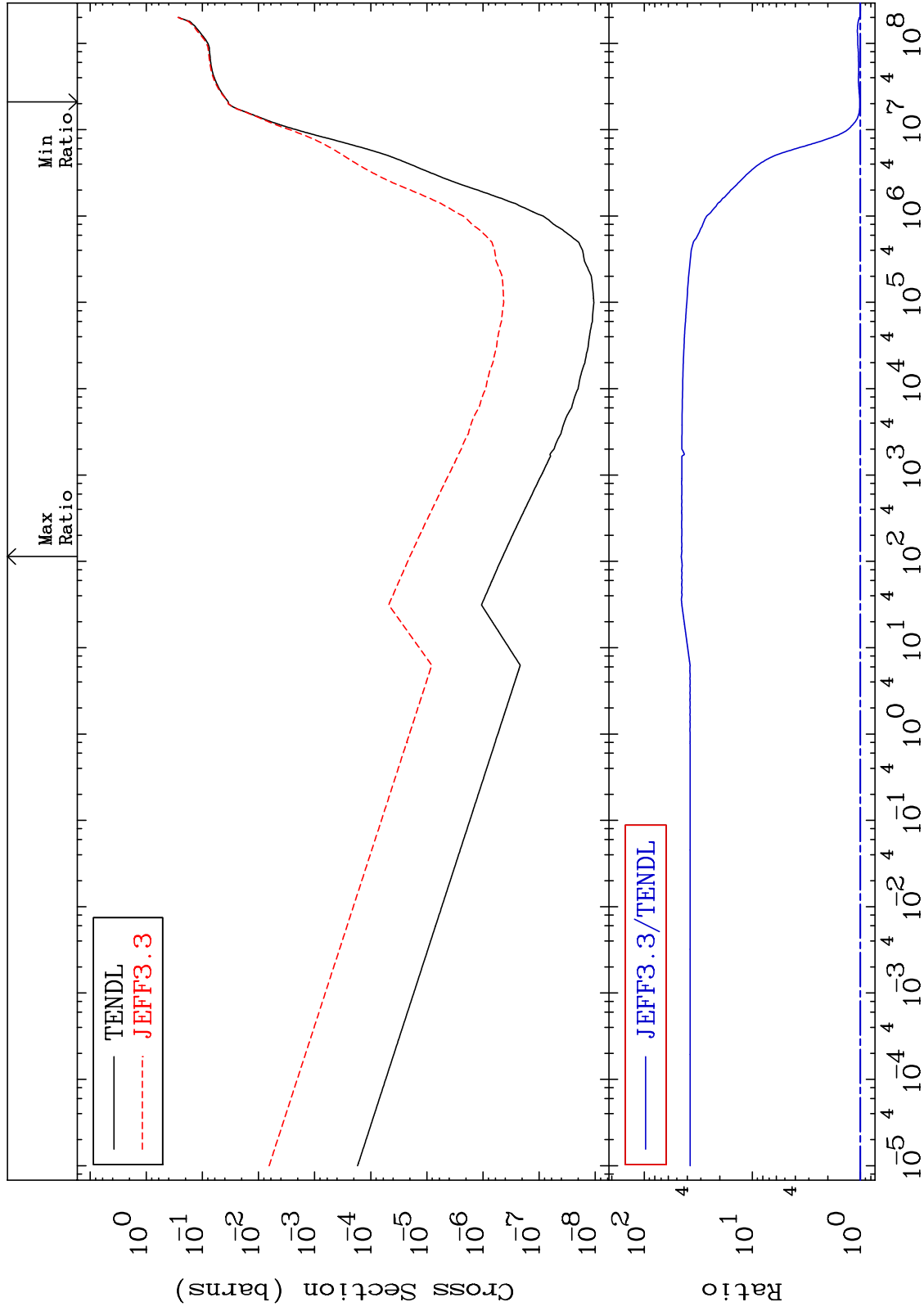
MAT 5425 He-3 Production Cross Section 54-Xe-124
 -0.166 To 0.395 %



MAT 5425

He-4 Production
Cross Section

54-Xe-124
1.311 To 4454. %

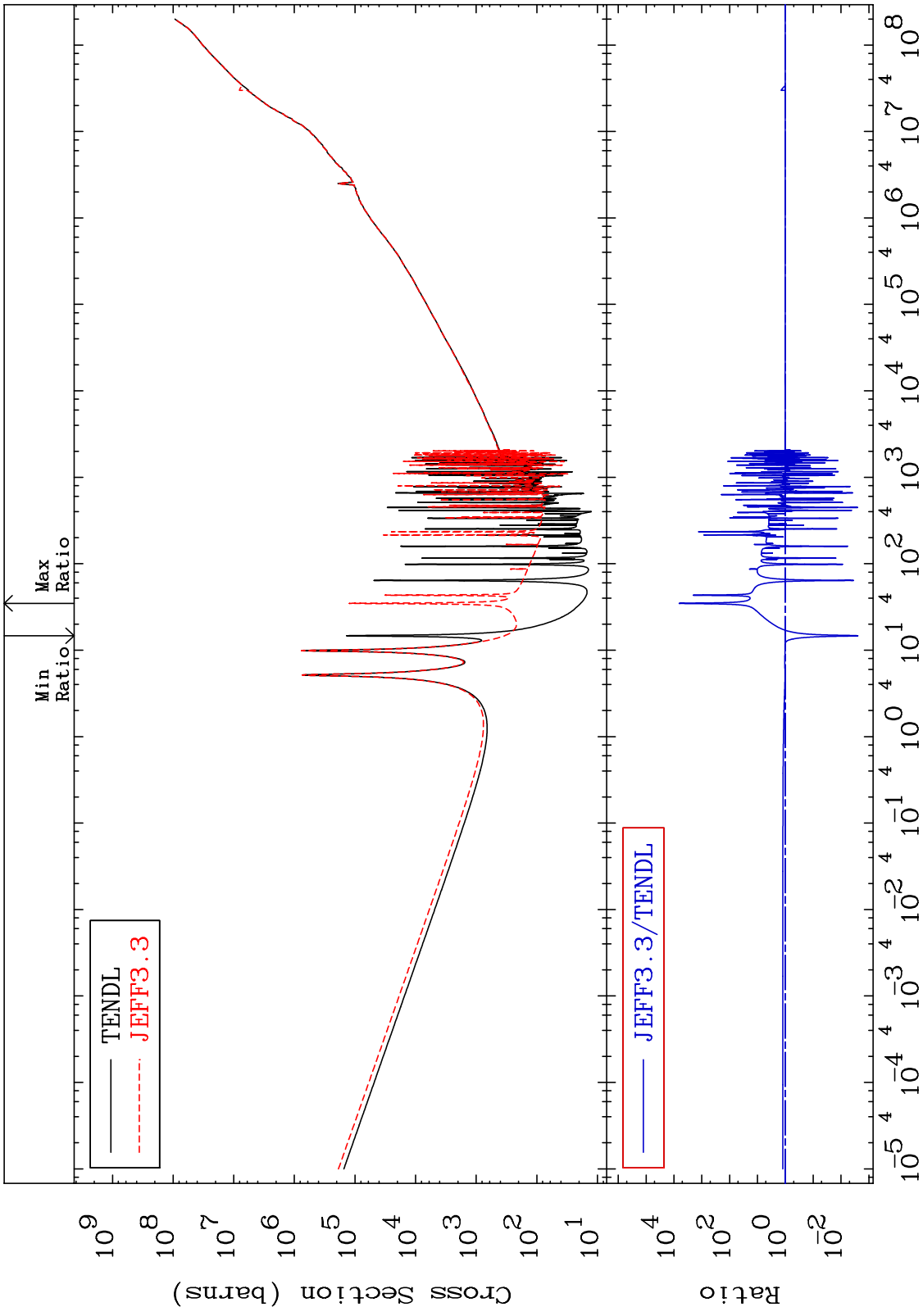


67

Incident Energy (eV)

54-Xe-124

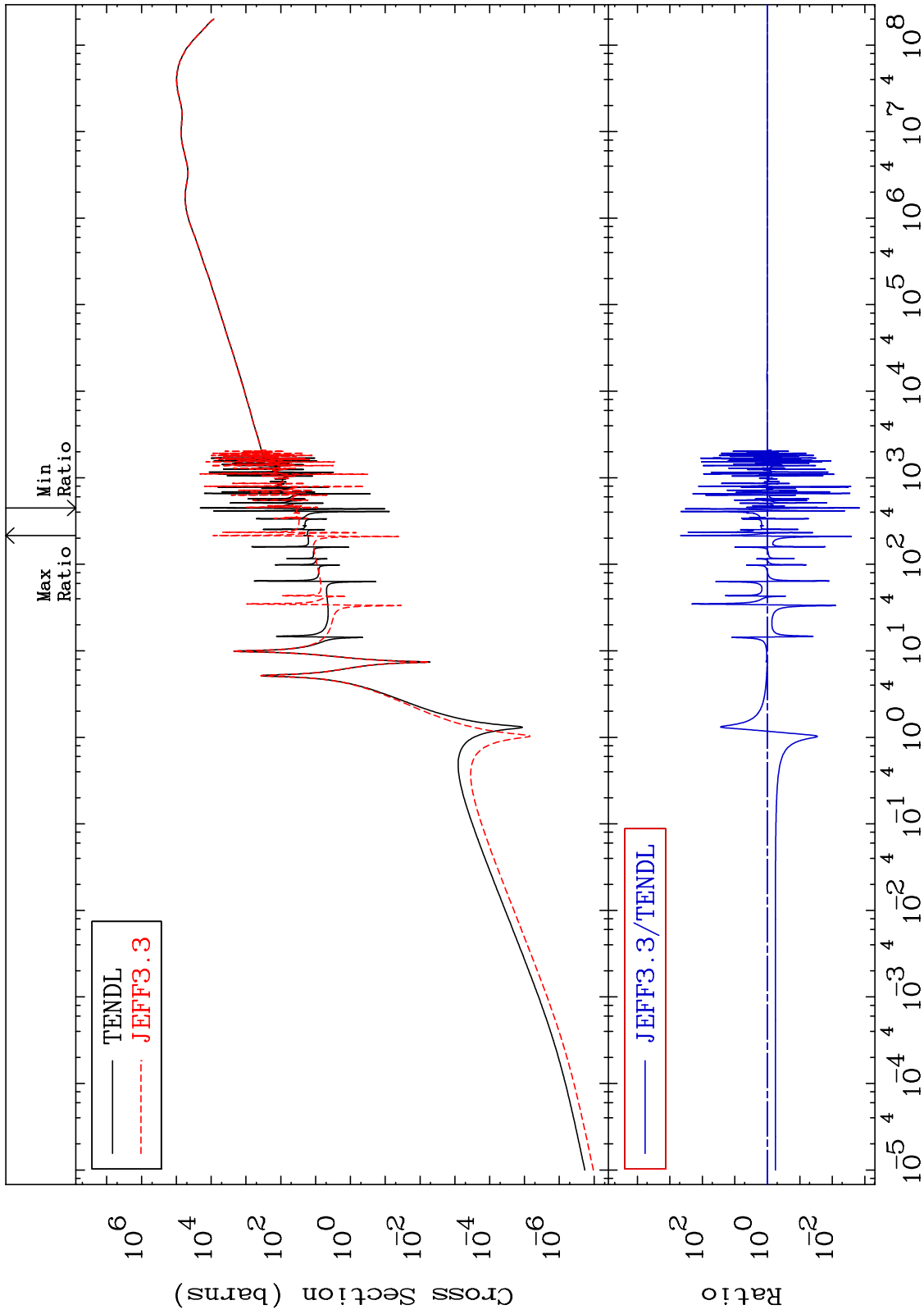
MAT 5425 Kerma total (eV-barns) 54-Xe-124
 Cross Section -99.75 To 9999. %



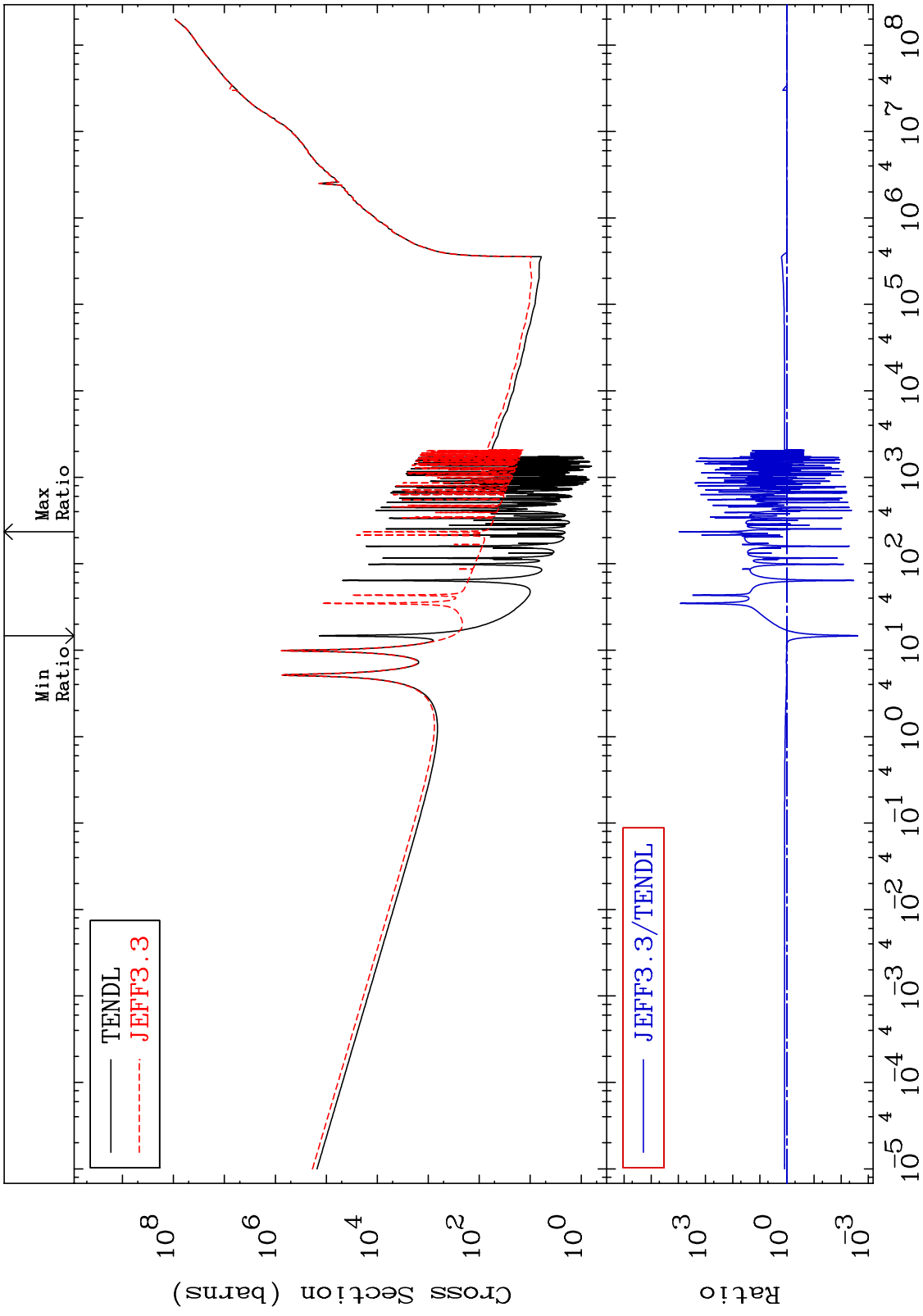
MAT 5425

Kerma elastic
Cross Section

54-Xe-124
-99.86 To 9999. %



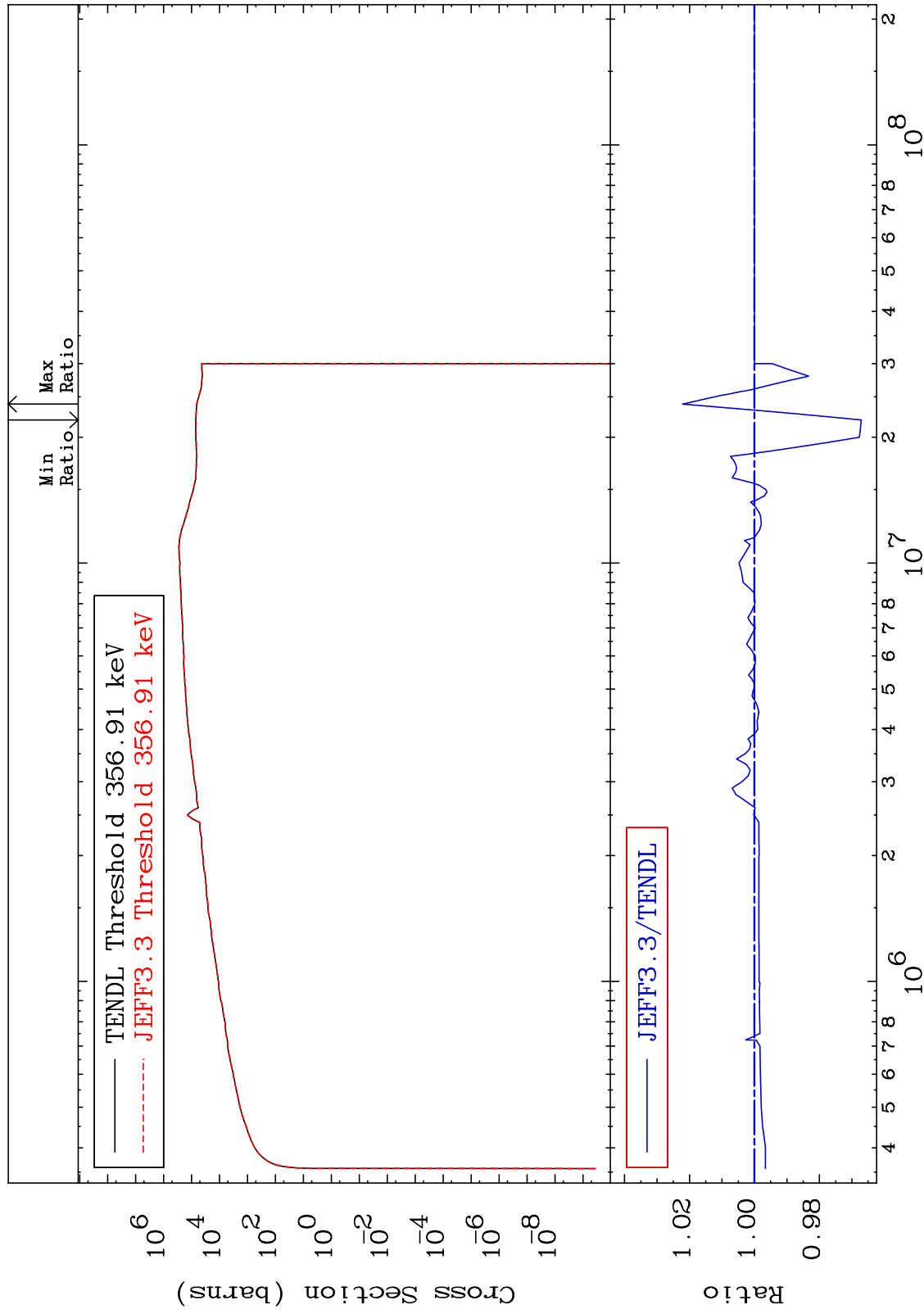
MAT 5425 Kerma non-elastic (all but mt2) 54-Xe-124
 Cross Section -99.76 To 9999. %



MAT 5425

Kerma inelastic (mt51-91)
Cross Section

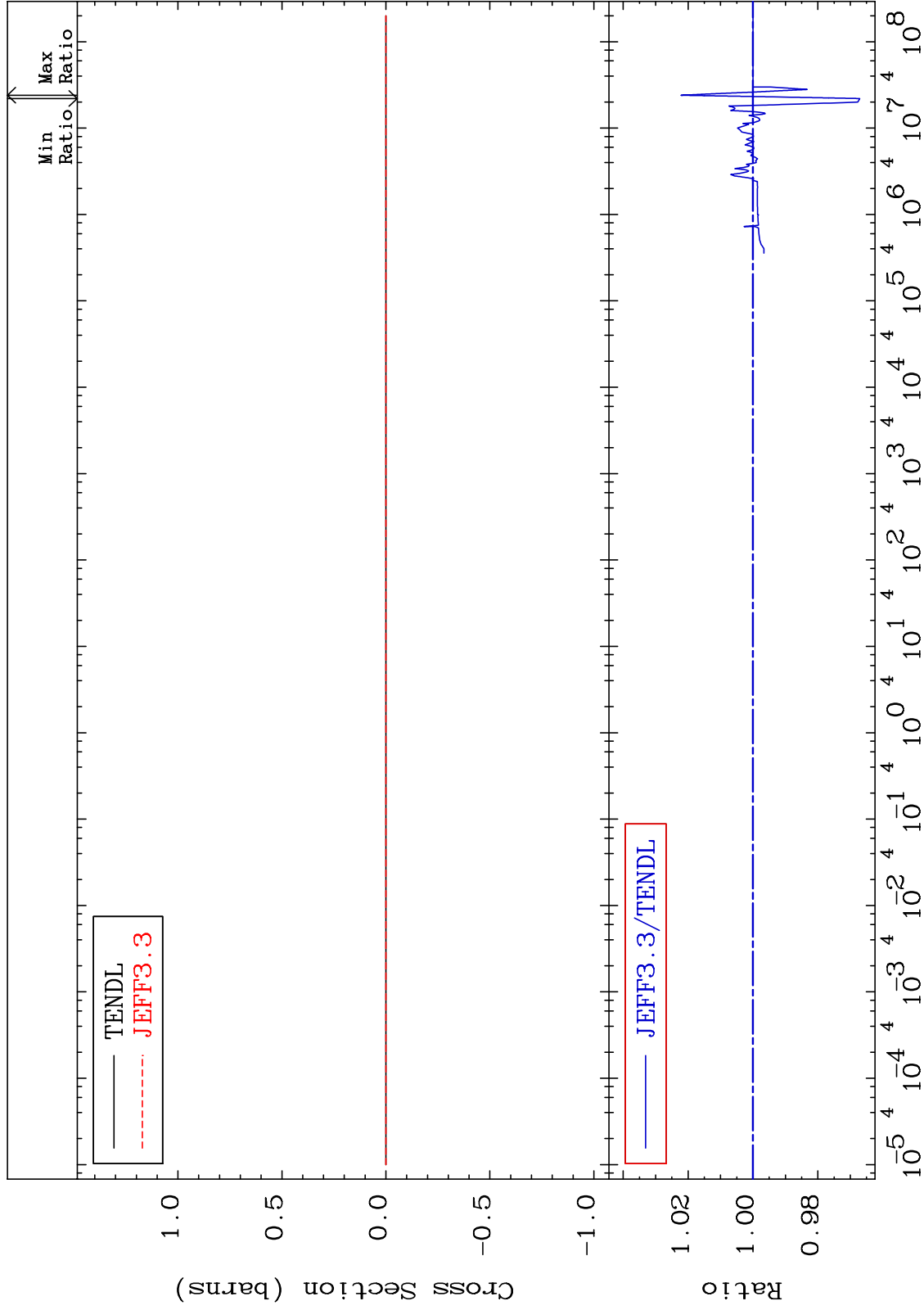
54-Xe-124
-3.292 To 2.211 %



MAT 5425

Kerma fission (mt18 or mt19-20-21-38)
Cross Section

54-Xe-124
-3.292 To 2.211 %



72

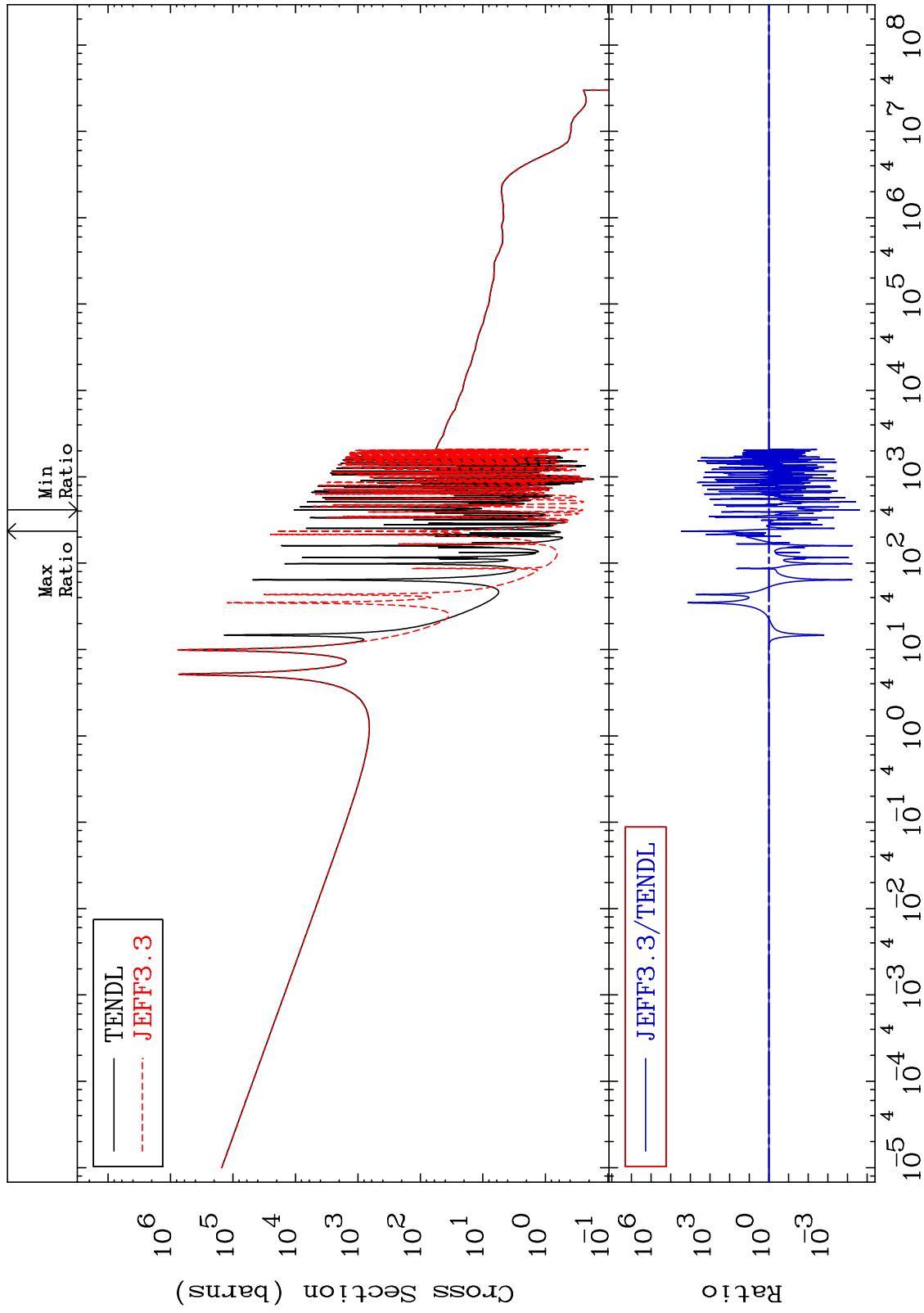
Incident Energy (eV)

54-Xe-124

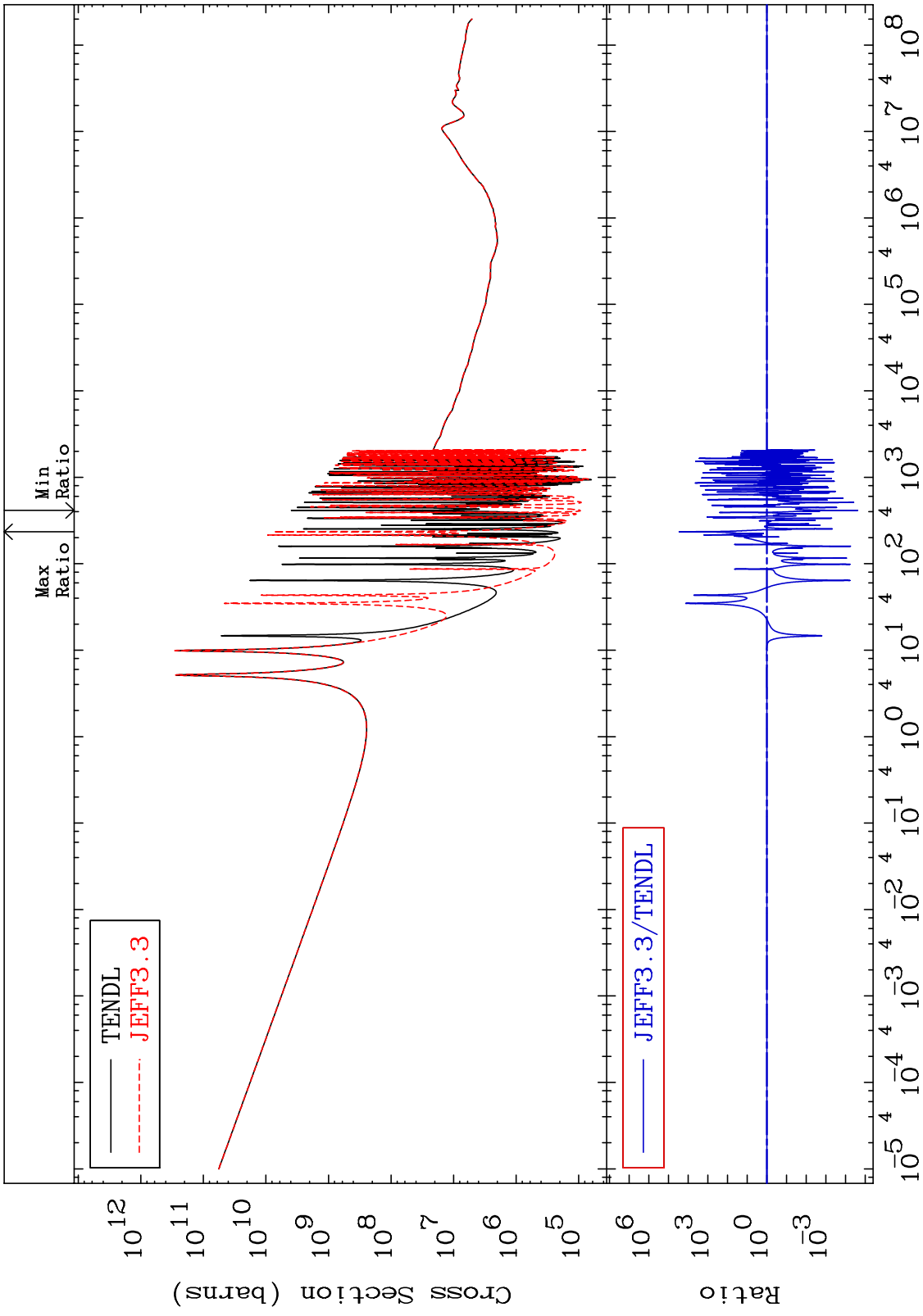
MAT 5425

Kerma capture (mt102)
Cross Section

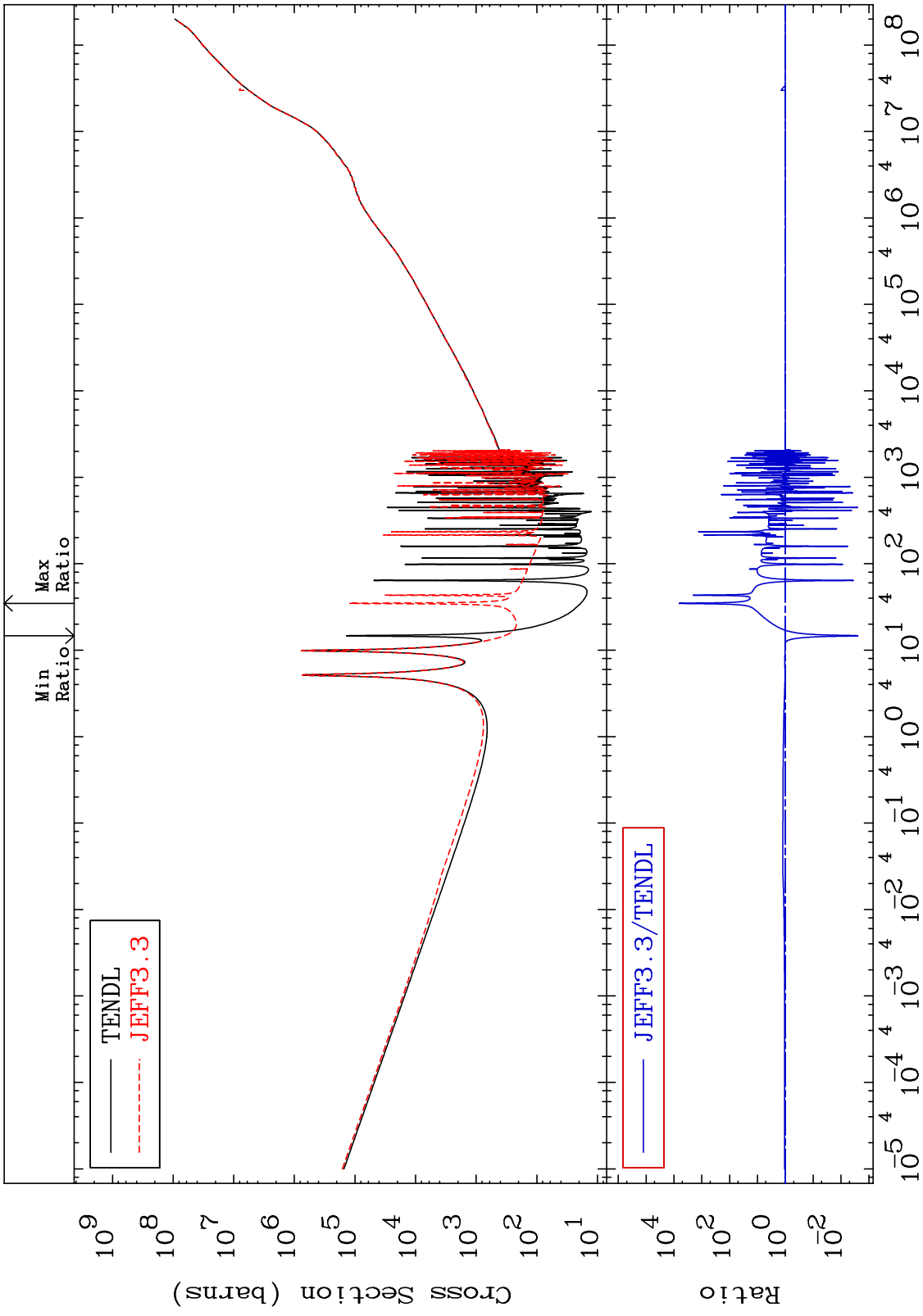
54-Xe-124
-100.0 To 9999. %



MAT 5425 54-Xe-124
 Total photon (eV-barns) -100.0 To 9999. %
 Cross Section

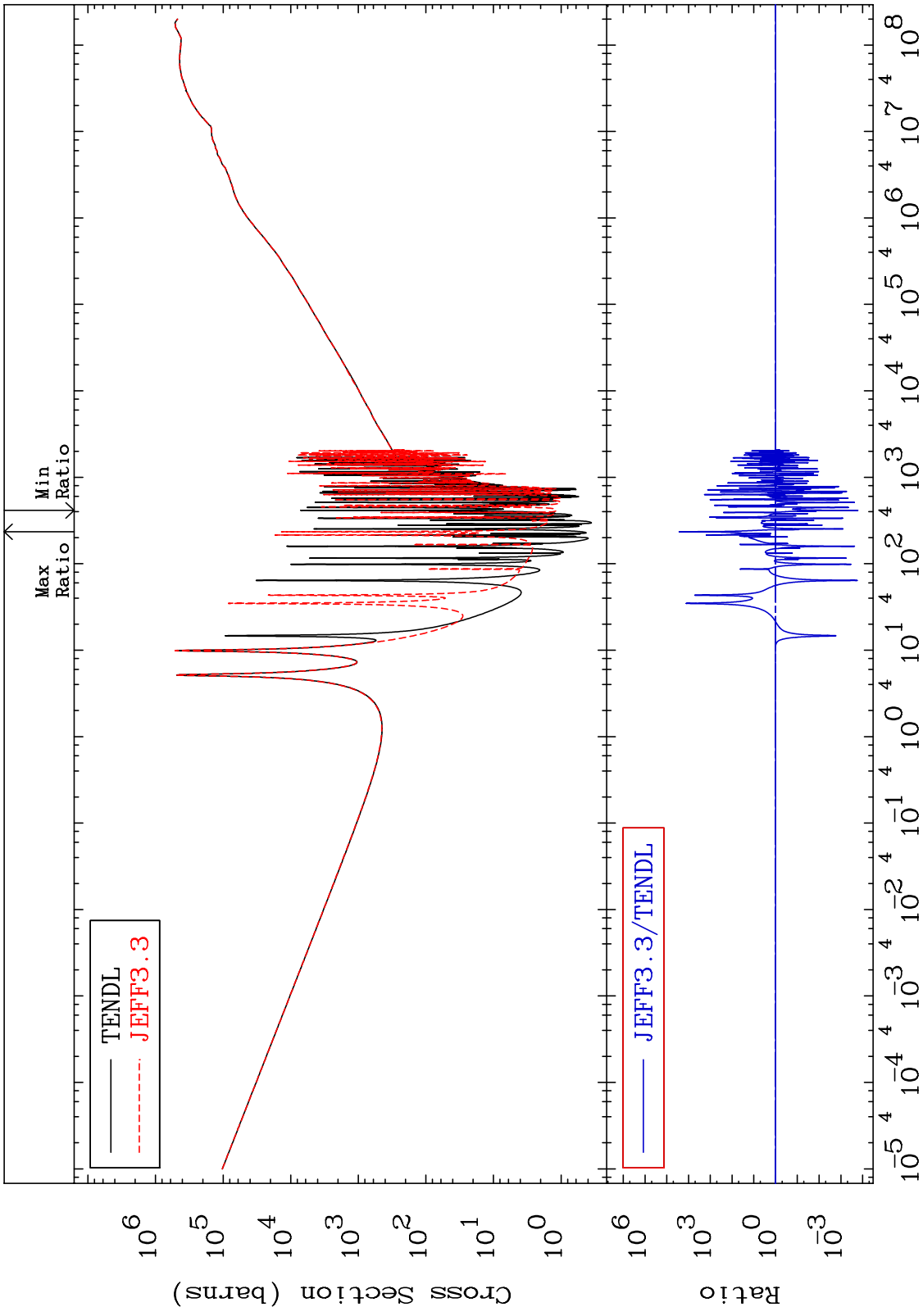


MAT 5425 Total kinematic kerma (high limit) 54-Xe-124
 -99.75 To 9999. %
 Cross Section



75 Incident Energy (eV) 54-Xe-124

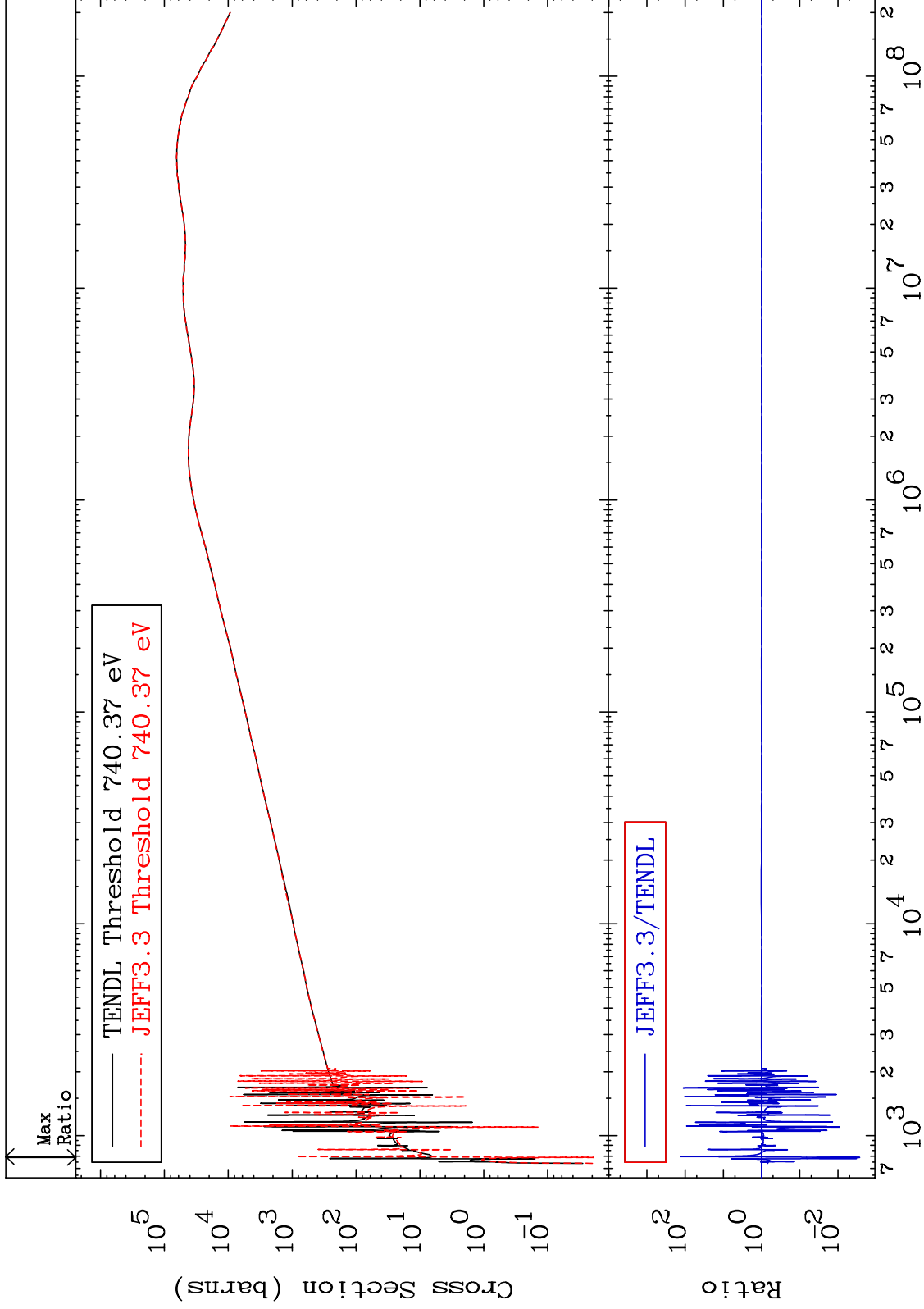
MAT 5425 Dpa total (eV-barns) 54-Xe-124
 Cross Section -99.98 To 9999. %



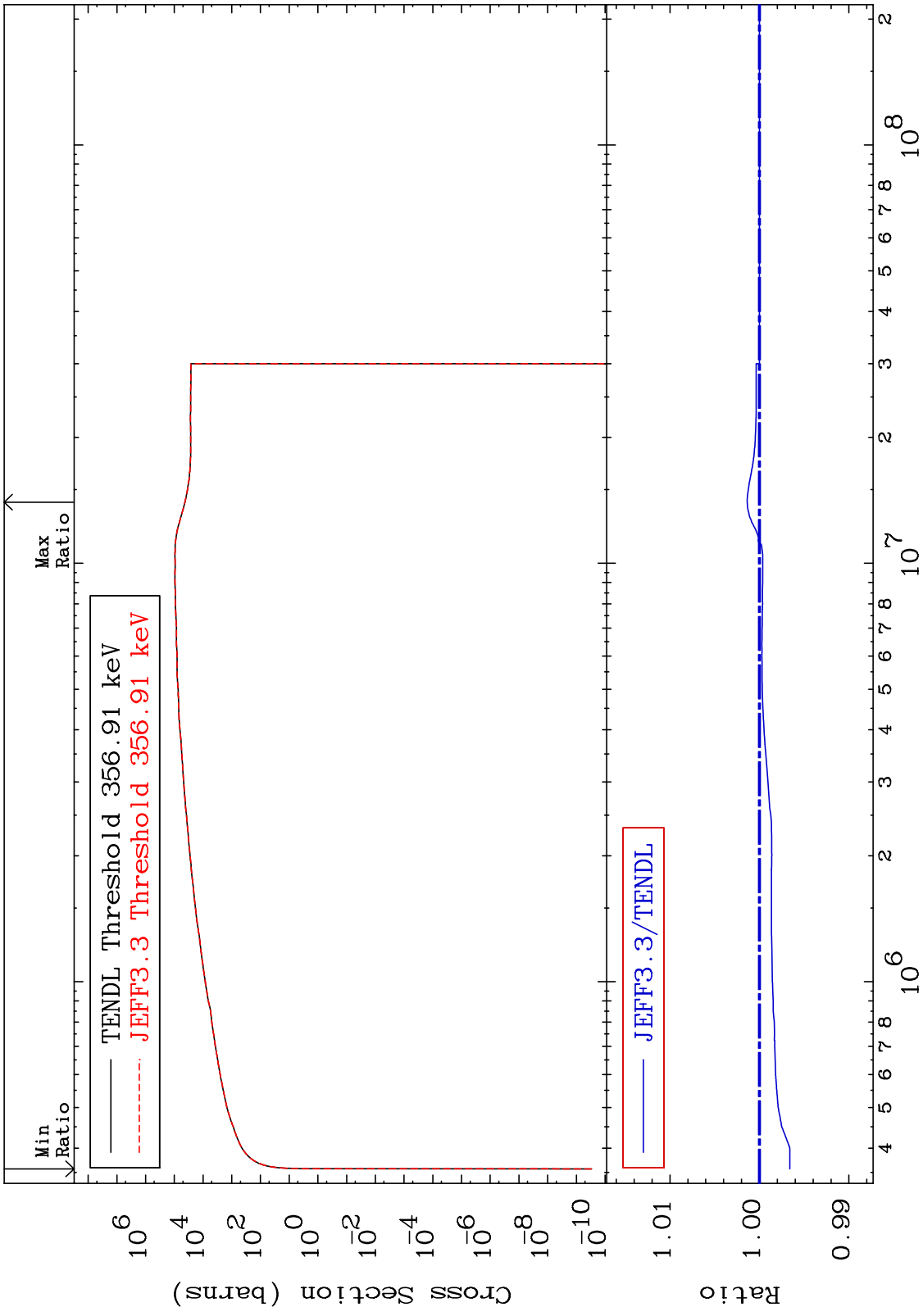
MAT 5425

Dpa elastic (mt2)
Cross Section

54-Xe-124
-99.73 To 9999. %



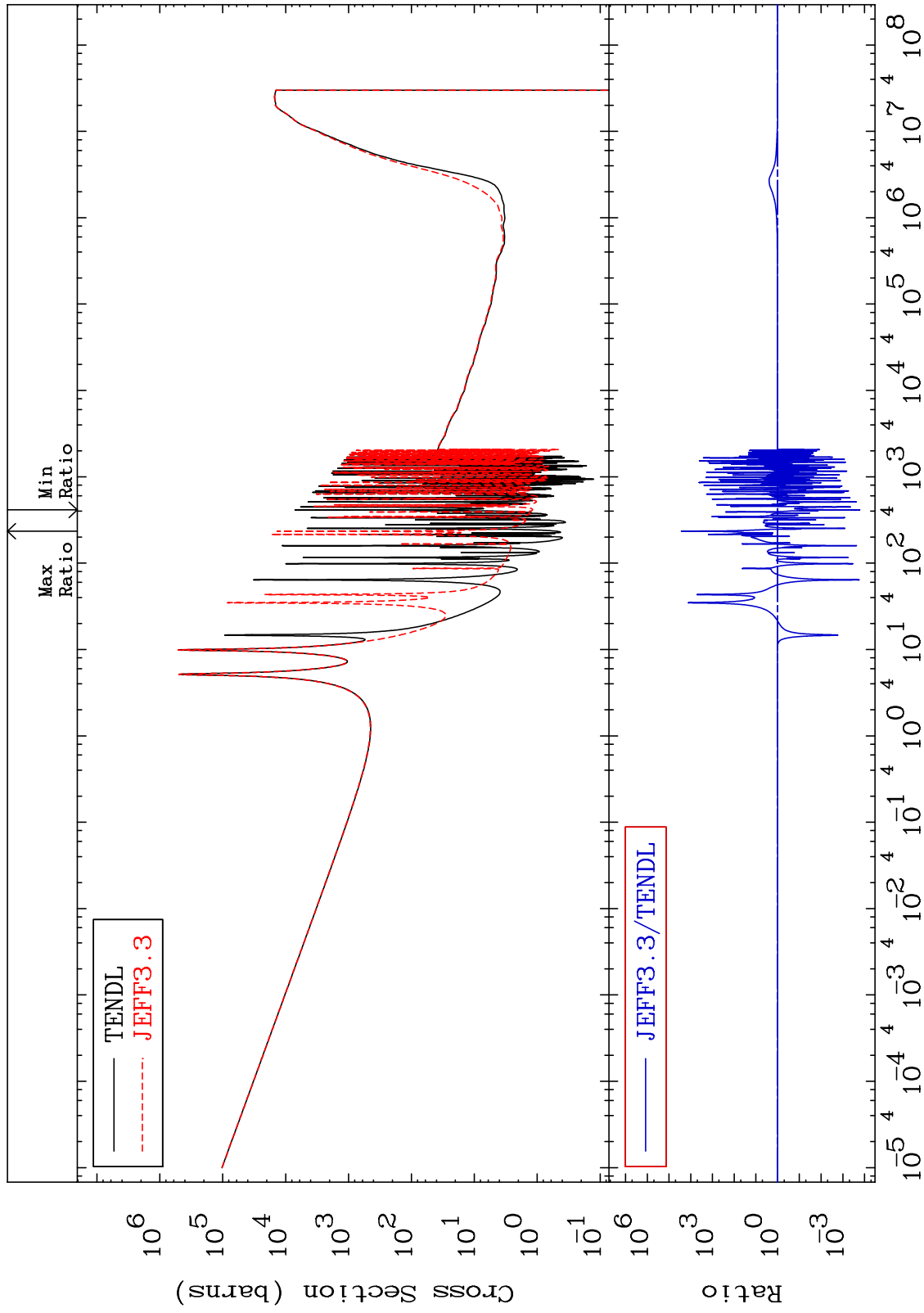
MAT 5425 Dpa inelastic (mt51-91) 54-Xe-124
 Cross Section -0.339 To 0.138 %



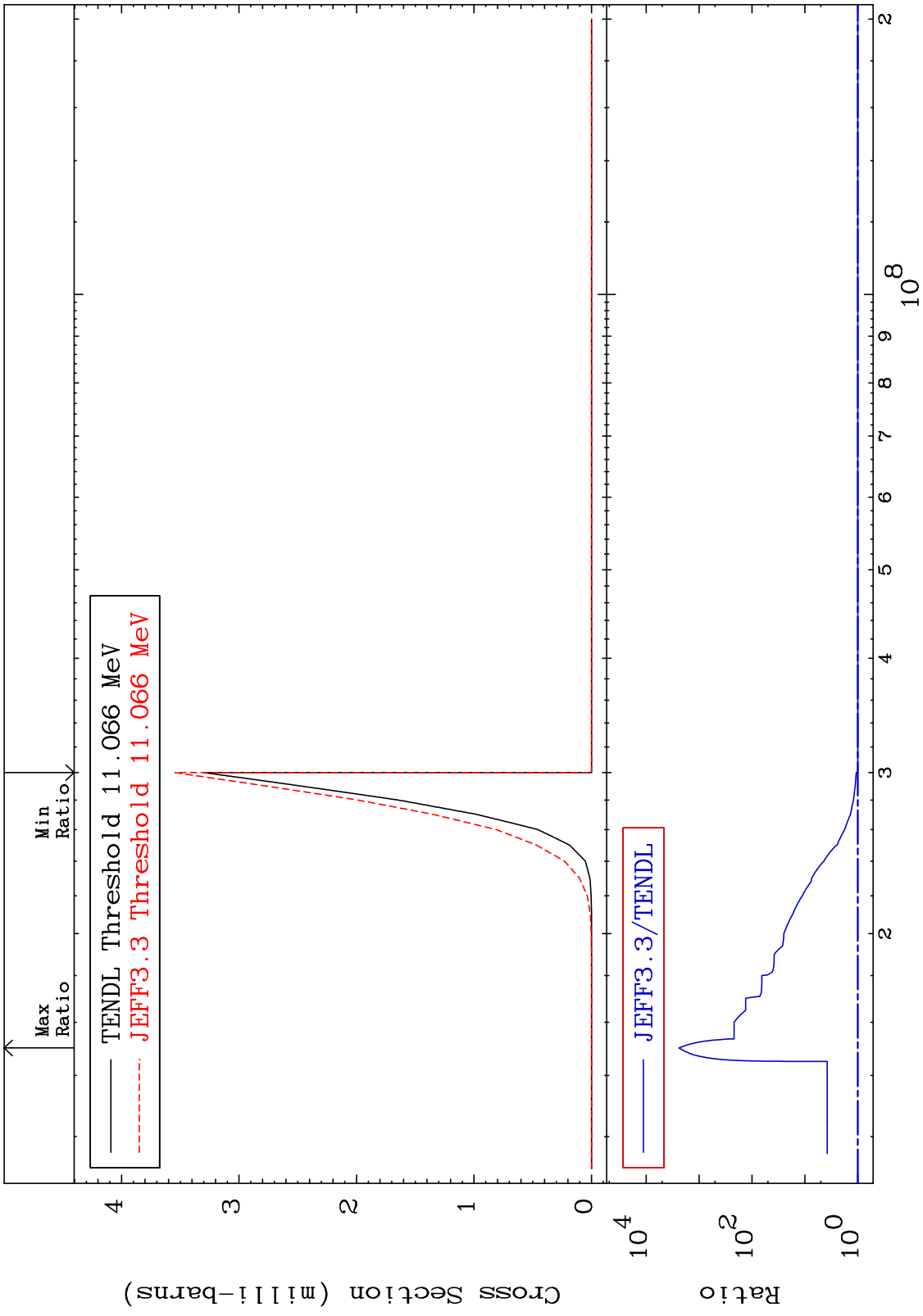
MAT 5425

Dpa disappearance (mt102 -120)
Cross Section

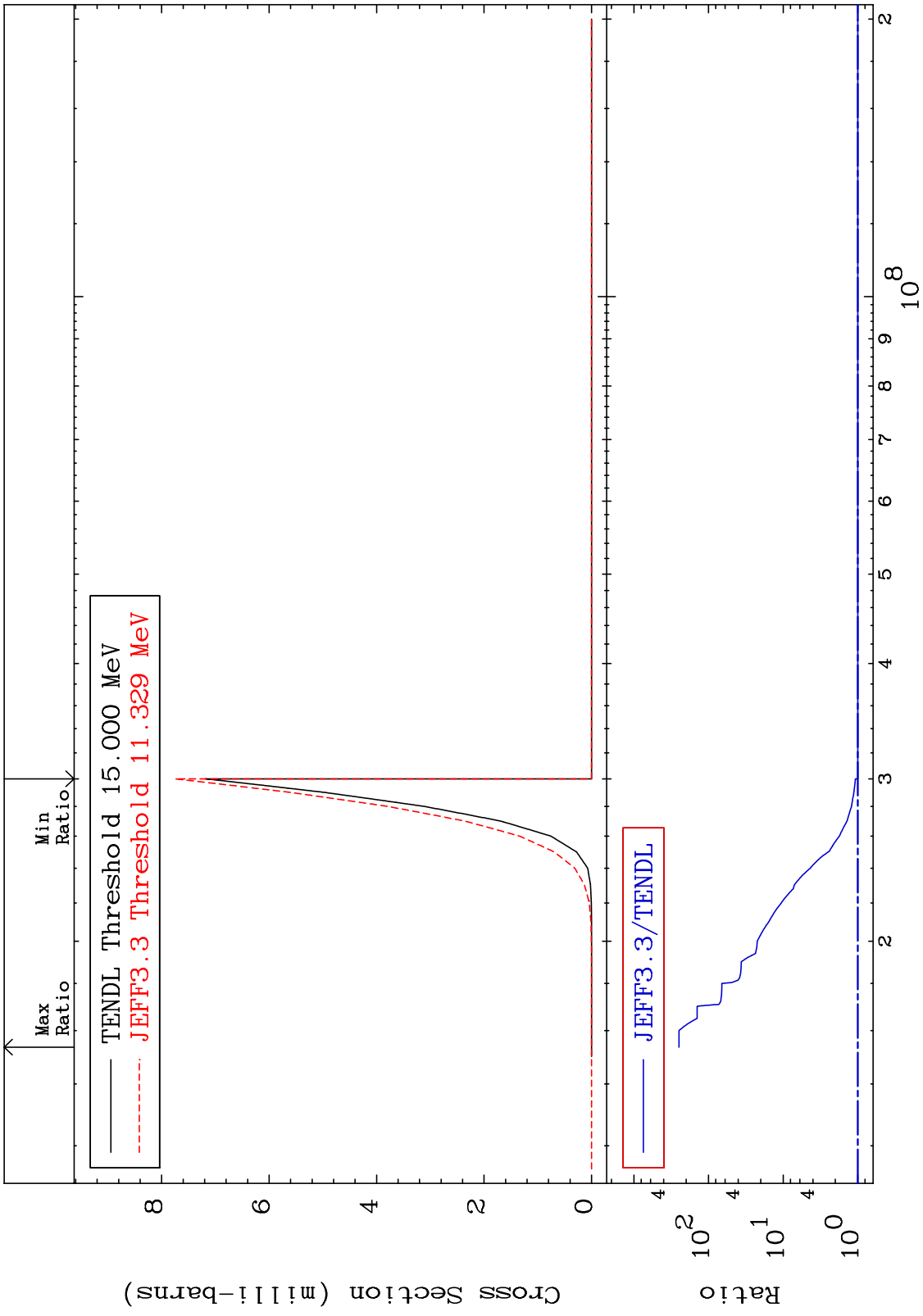
54-Xe-124
-99.98 To 9999. %



MAT 5425 (n,2n) α :52-Te-119g 54-Xe-124
 Radionuclide Production Cross Section 0.000 To 9999. %

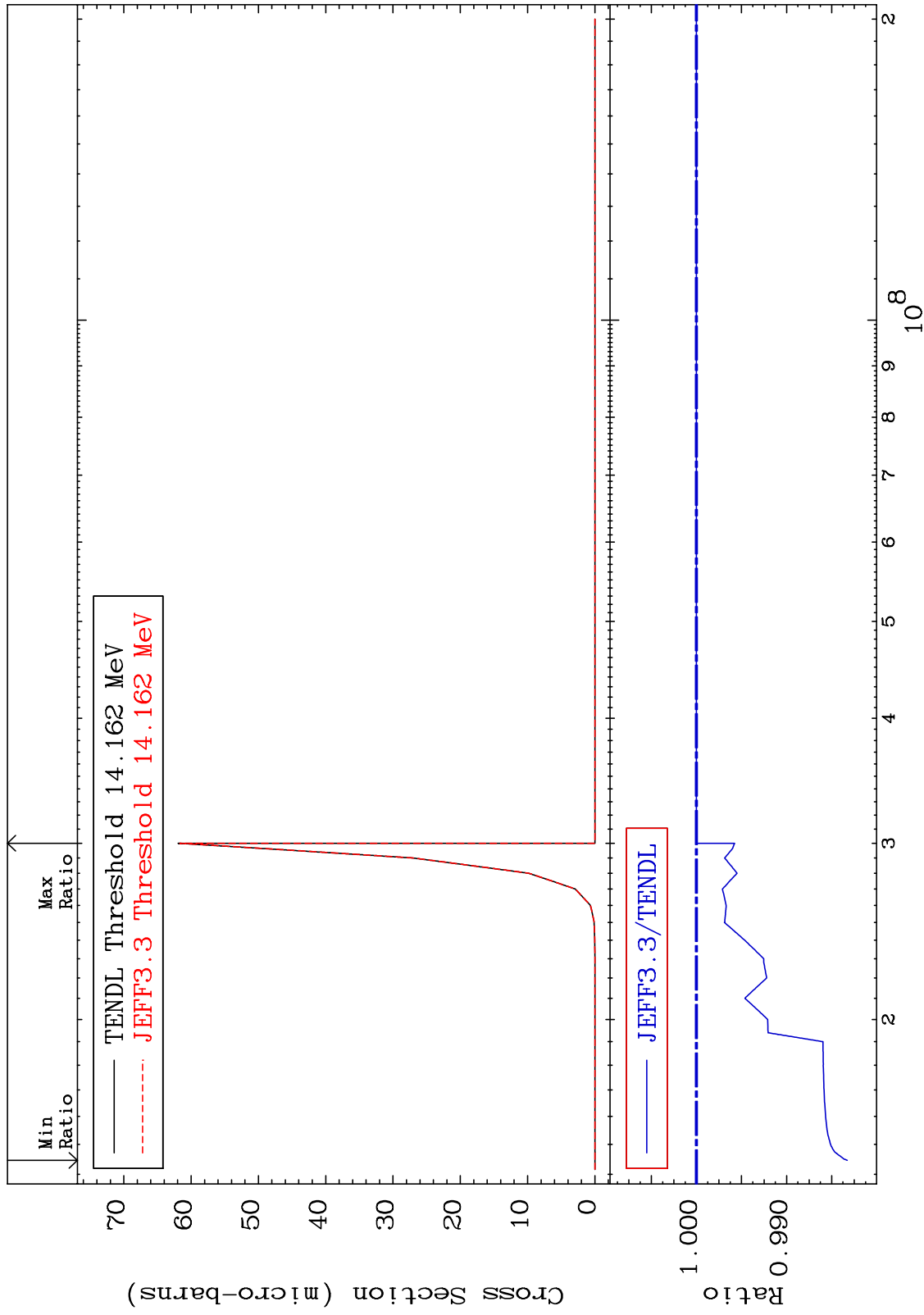


MAT 5425 (n,2n) α :52-Te-119m2 54-Xe-124
 Radionuclide Production Cross Section 0.000 To 9999. %

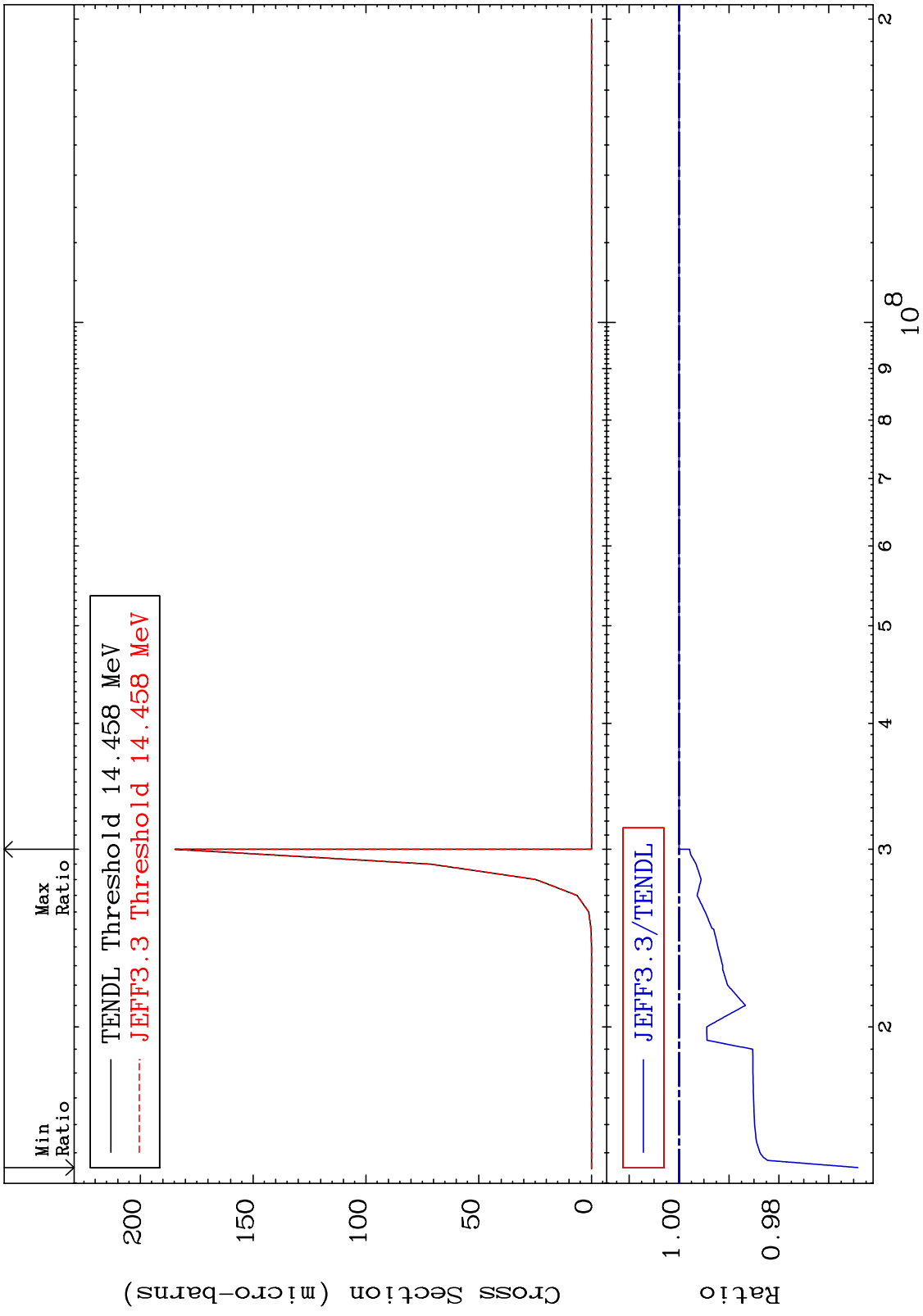


MAT 5425

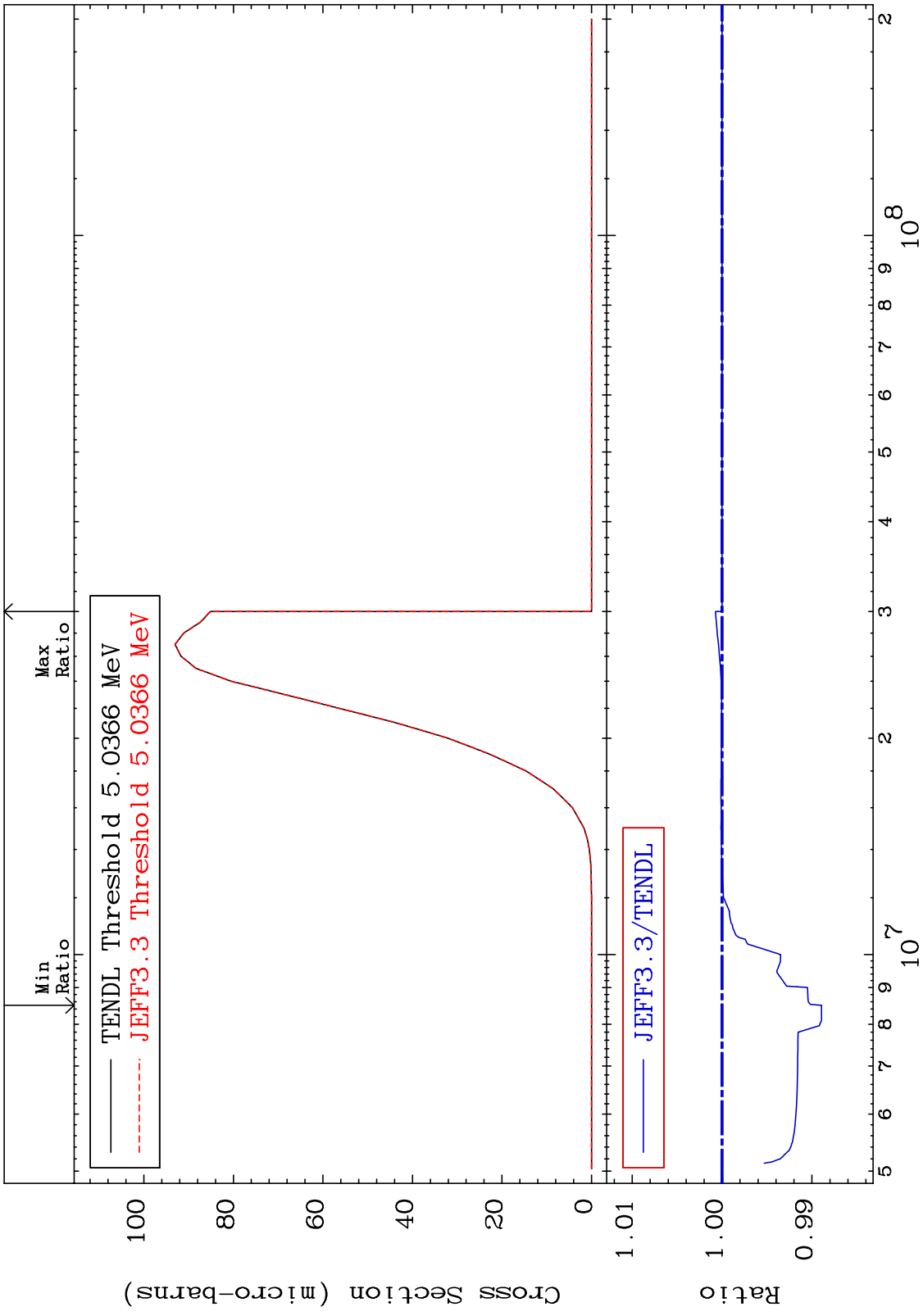
(n,n') He-3:52-Te-121g 54-Xe-124
Radionuclide Production Cross Section -1.673 To 0.000 %



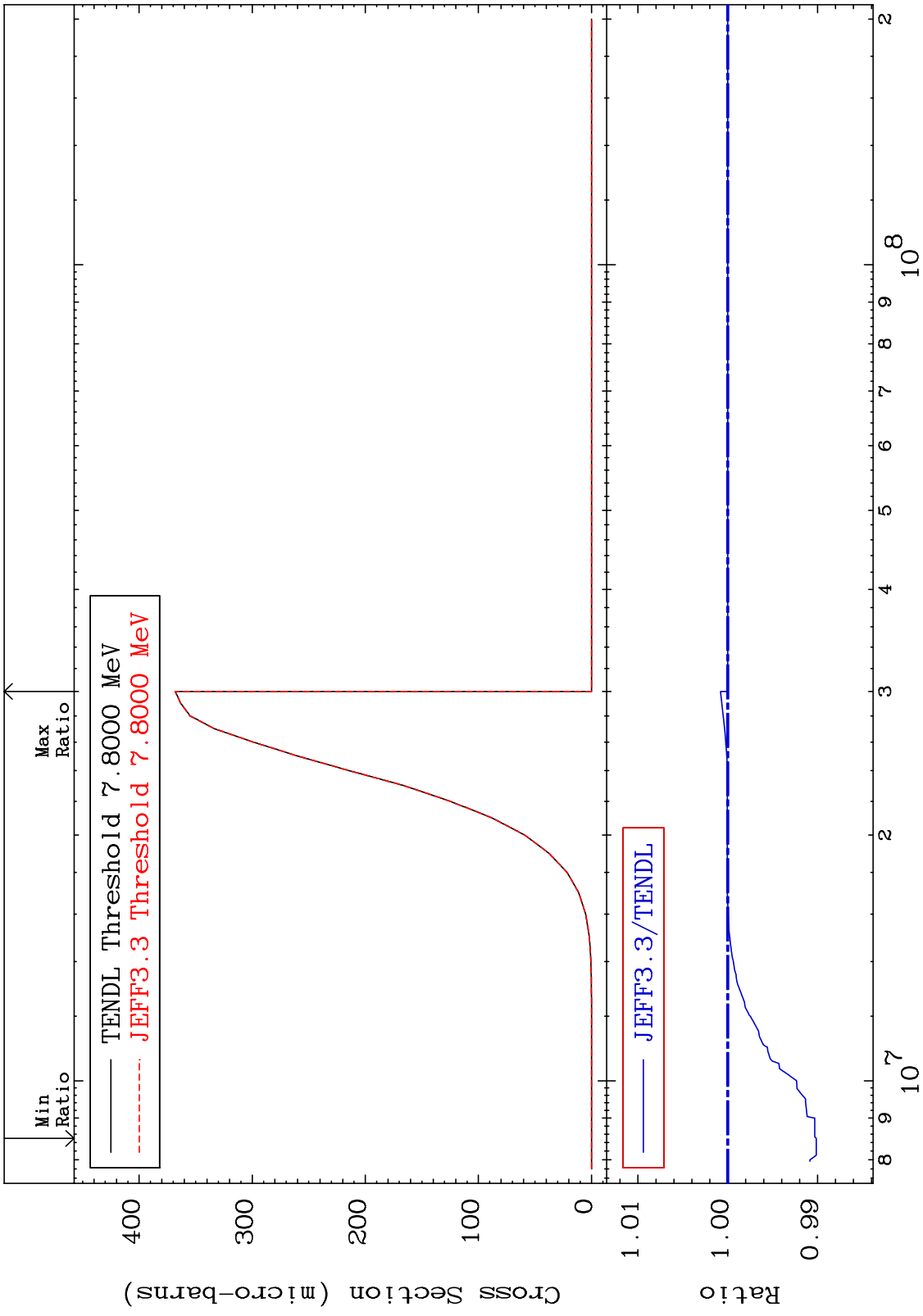
MAT 5425 (n,n') He-3:52-Te-121m2 54-Xe-124
 Radionuclide Production Cross Section -3.583 To 0.000 %



MAT 5425 (n,2p):52-Te-123g 54-Xe-124
 Radionuclide Production Cross Section -1.106 To 0.075 %



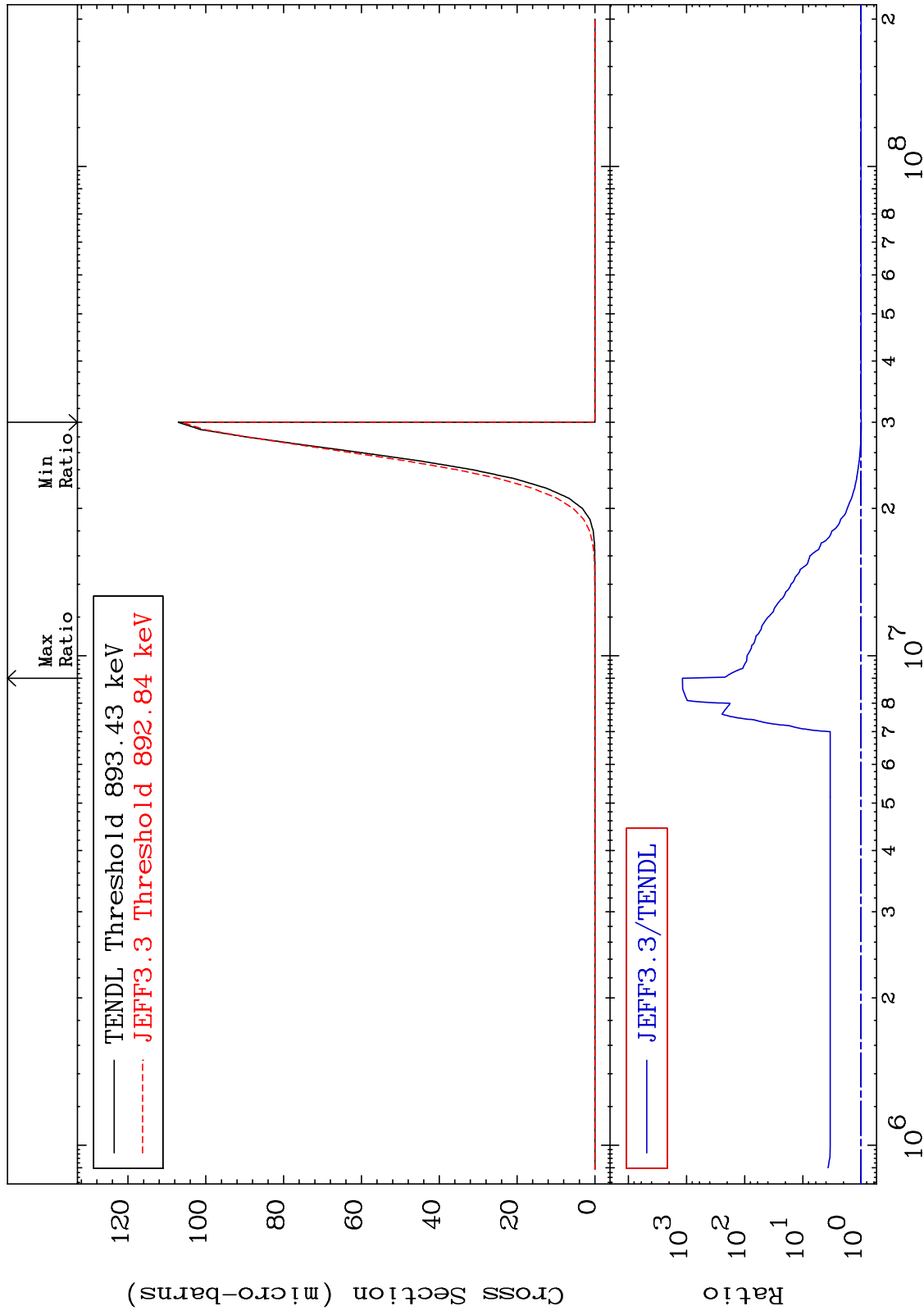
MAT 5425 (n,2p):52-Te-123m2 54-Xe-124
 Radionuclide Production Cross Section -0.986 To 0.080 %



MAT 5425

54-Xe-124

(n,p) α :51-Sb-120g
Radionuclide Production Cross Section -0.959 To 9999. %

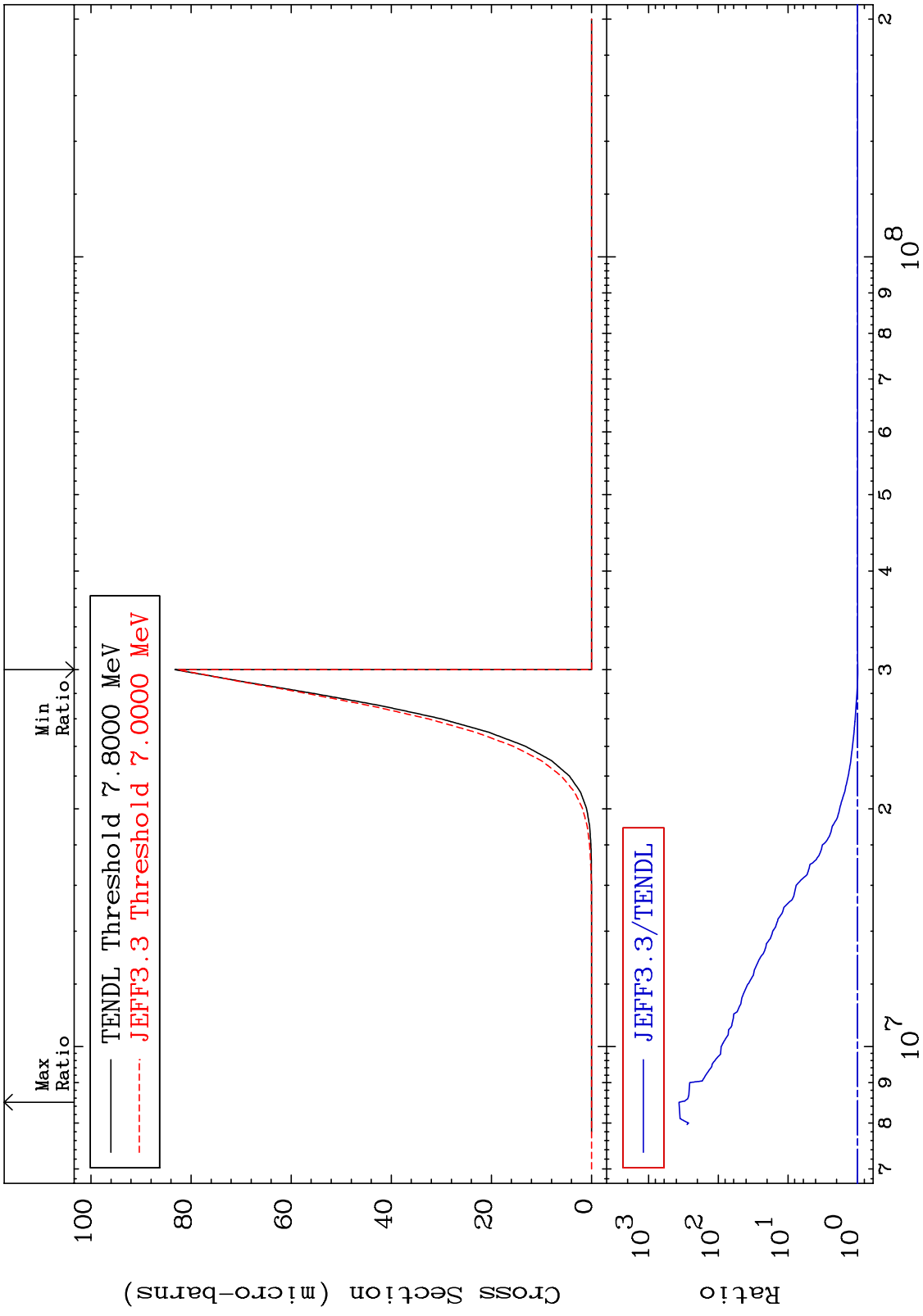


86

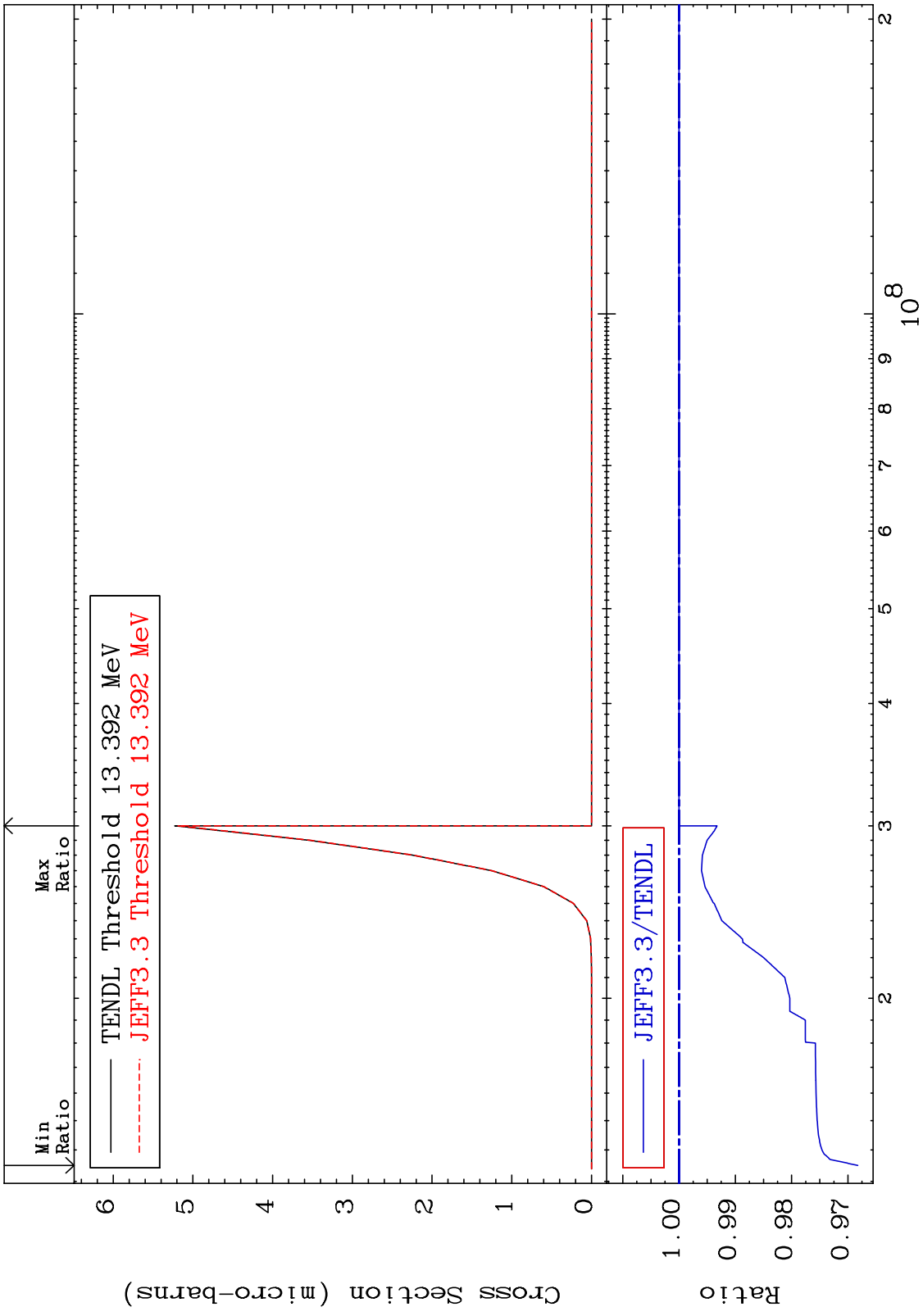
Incident Energy (eV)

54-Xe-124

MAT 5425 (n,p) α :51-Sb-120m6 54-Xe-124
 Radionuclide Production Cross Section -0.622 To 9999. %



MAT 5425 (n,p) t:52-Te-121g 54-Xe-124
 Radionuclide Production Cross Section -3.175 To 0.000 %



MAT 5425 (n,p) t:52-Te-121m2 54-Xe-124
 Radionuclide Production Cross Section -2.883 To 0.000 %

