

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

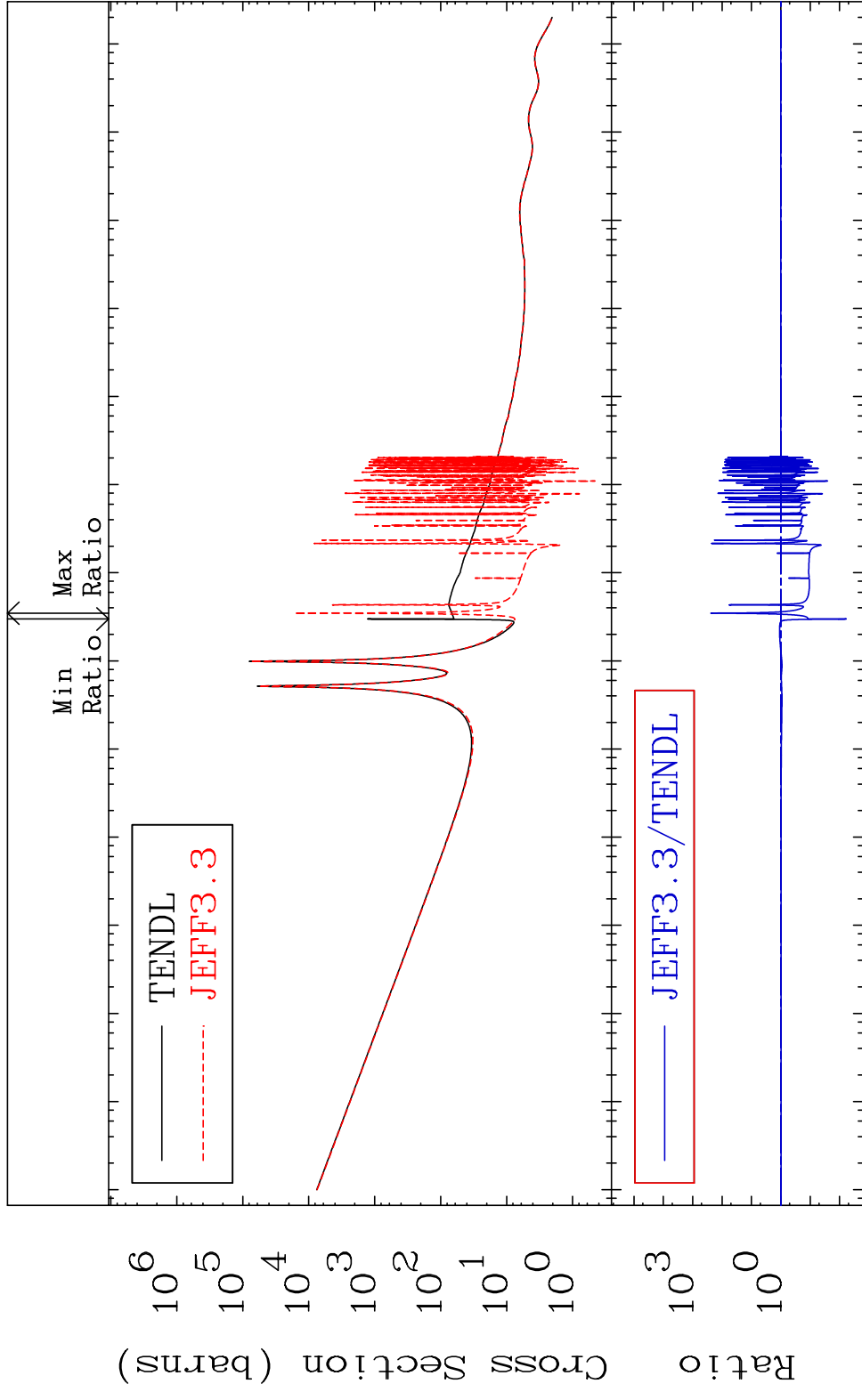
Tele: 925-443-1911

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

Press Mouse Button to Start

MAT 5425

Total Cross Section -99.41 To 9999. %
54-Xe-124



10⁶
10⁵
10⁴
10³
10²
10¹
10⁰
Cross Section (barns)

10³
10⁰
Ratio

10⁻⁵ 10⁻⁴ 10⁻³ 10⁻² 10⁻¹ 10⁰ 10¹ 10² 10³ 10⁴ 10⁵ 10⁶ 10⁷ 10⁸
Incident Energy (eV)

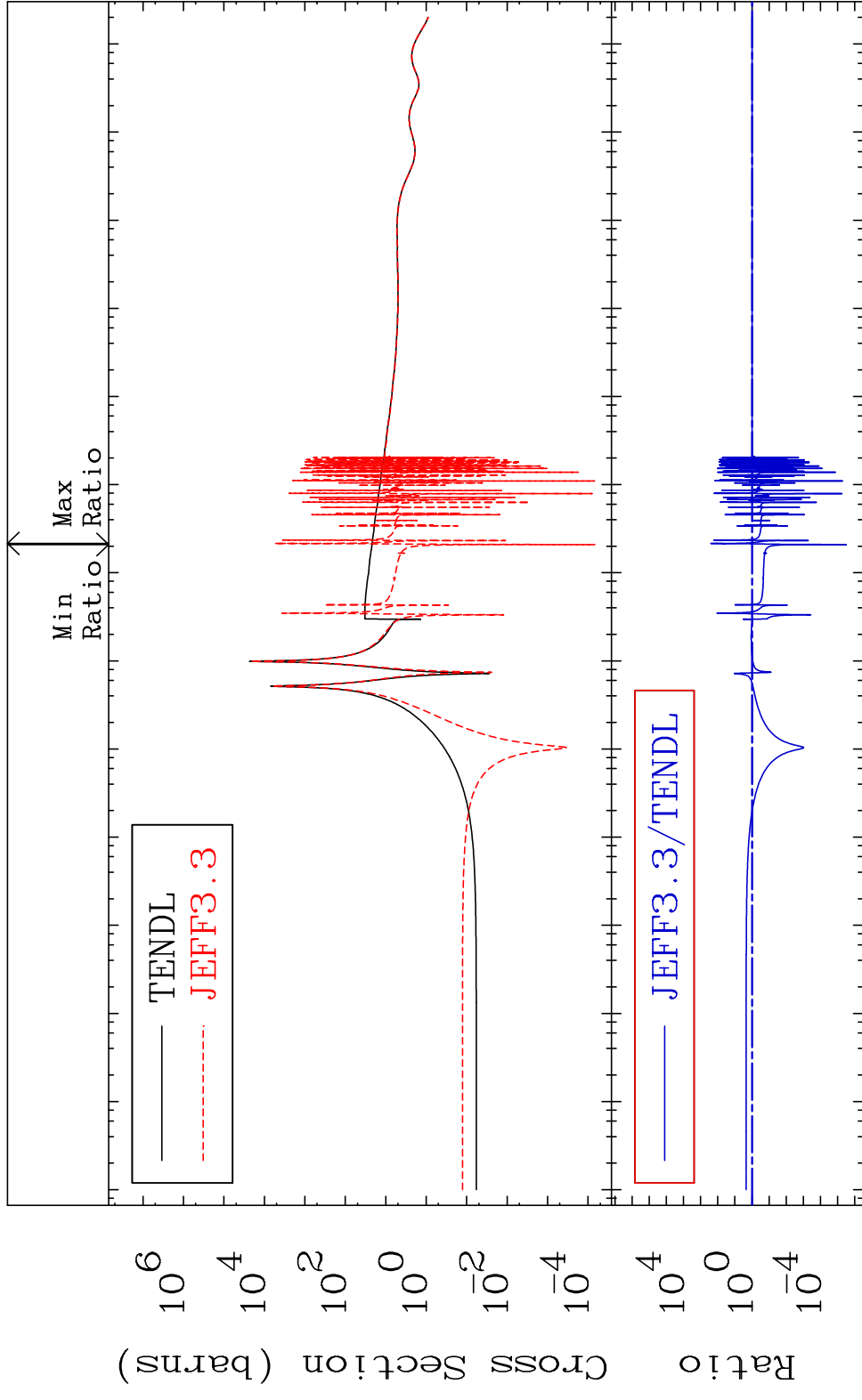
54-Xe-124

MAT 5425

54-Xe-124

Elastic

Cross Section -100.0 To 9999. %

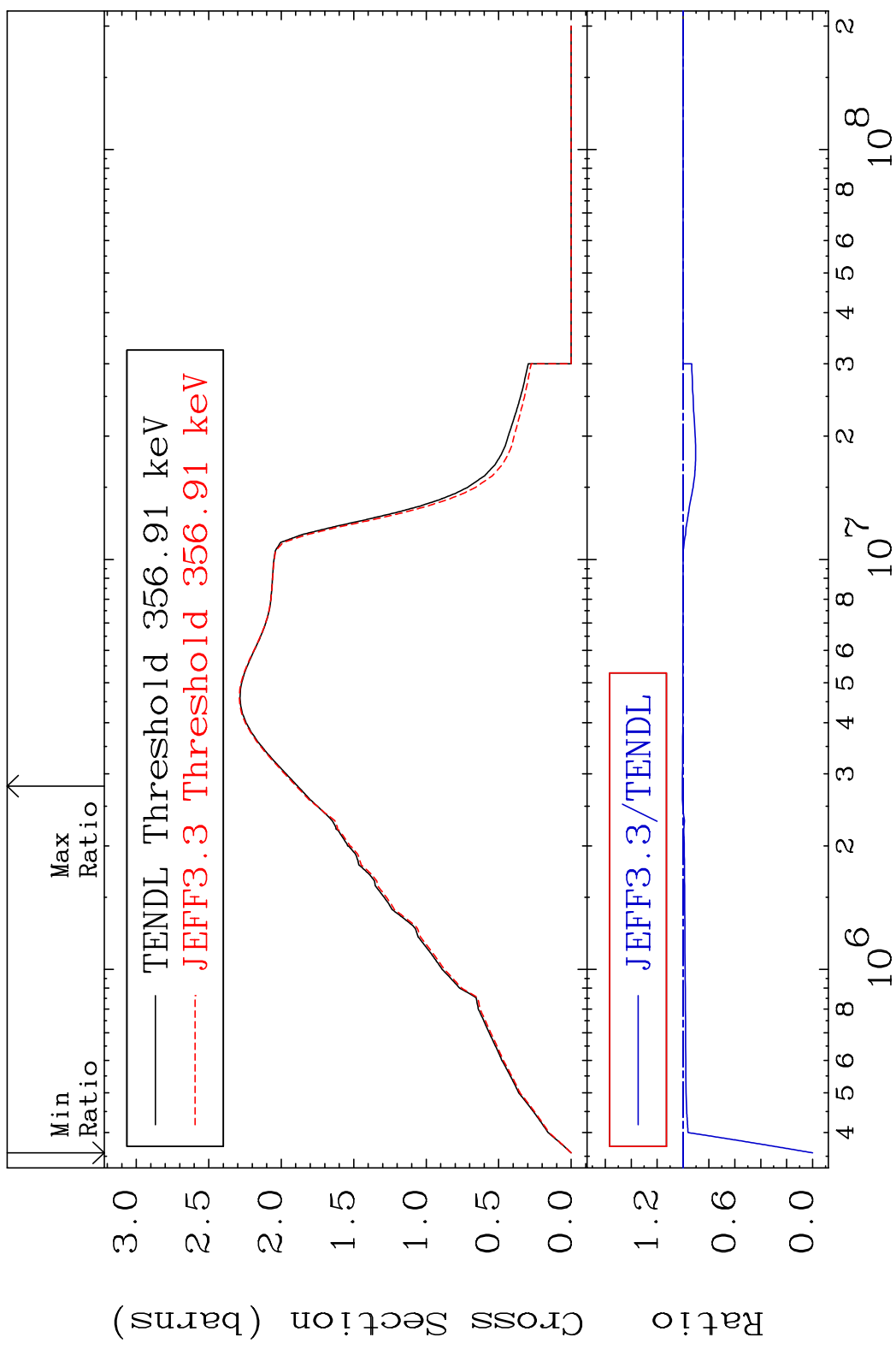


MAT 5425

Inelastic

54-Xe-124

Cross Section -100.0 To 0.532 %

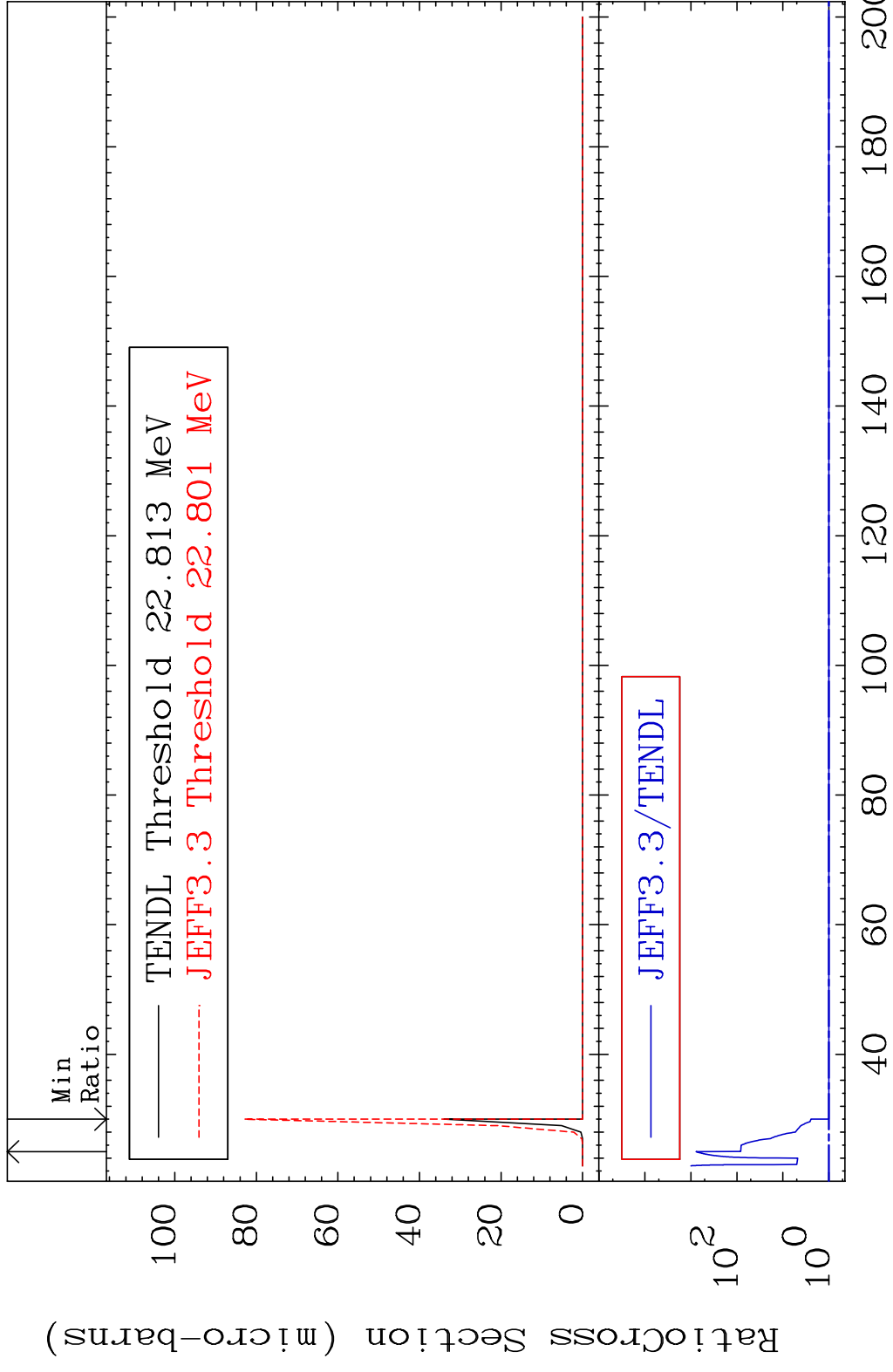


3

Incident Energy (eV)

54-Xe-124

MAT 5425 (n,2n) d 54-Xe-124
 Cross Section 0.000 To 9999. %

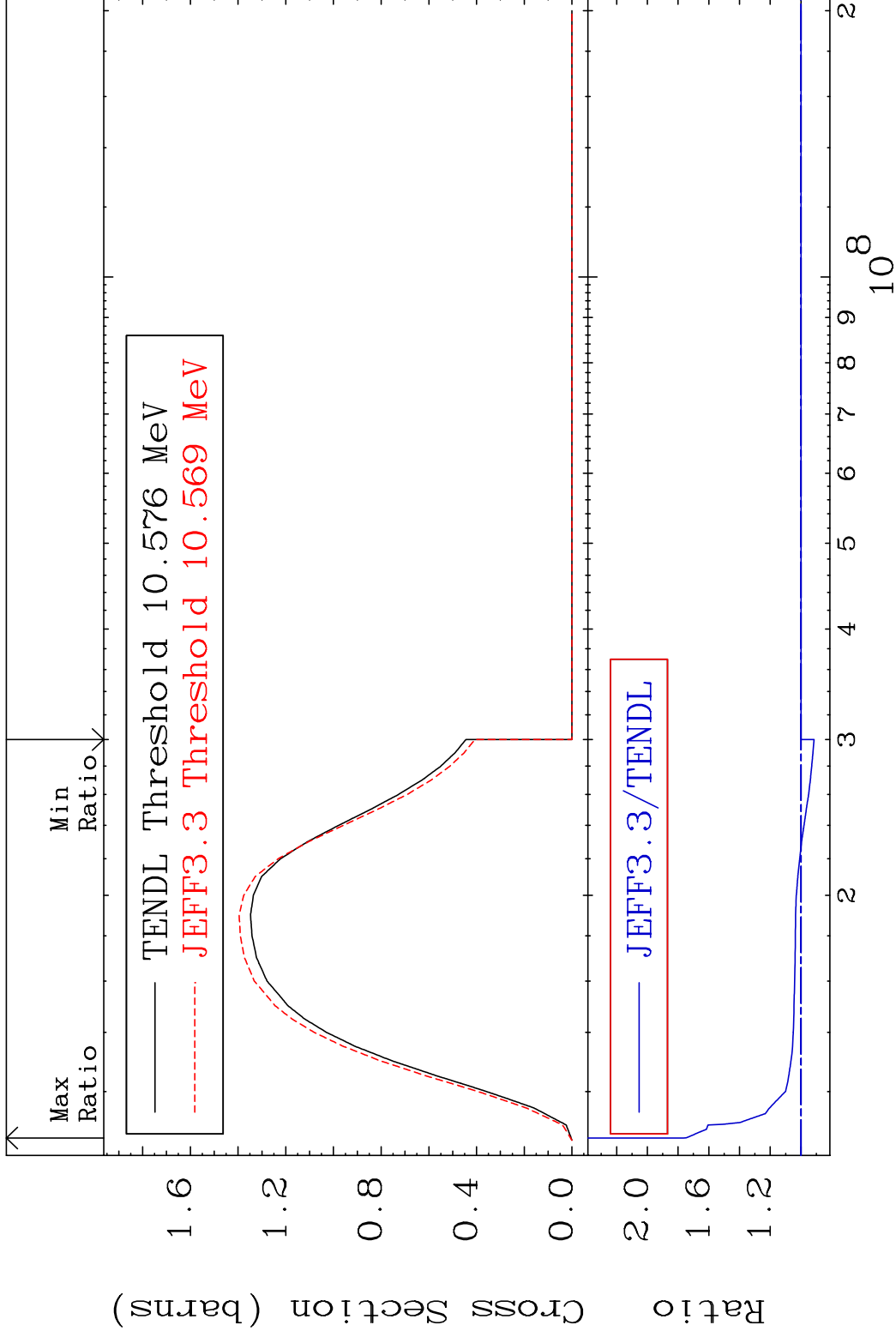


MAT 5425

(n,2n)

54-Xe-124

Cross Section -8.480 To 76.49 %



5

Incident Energy (eV)

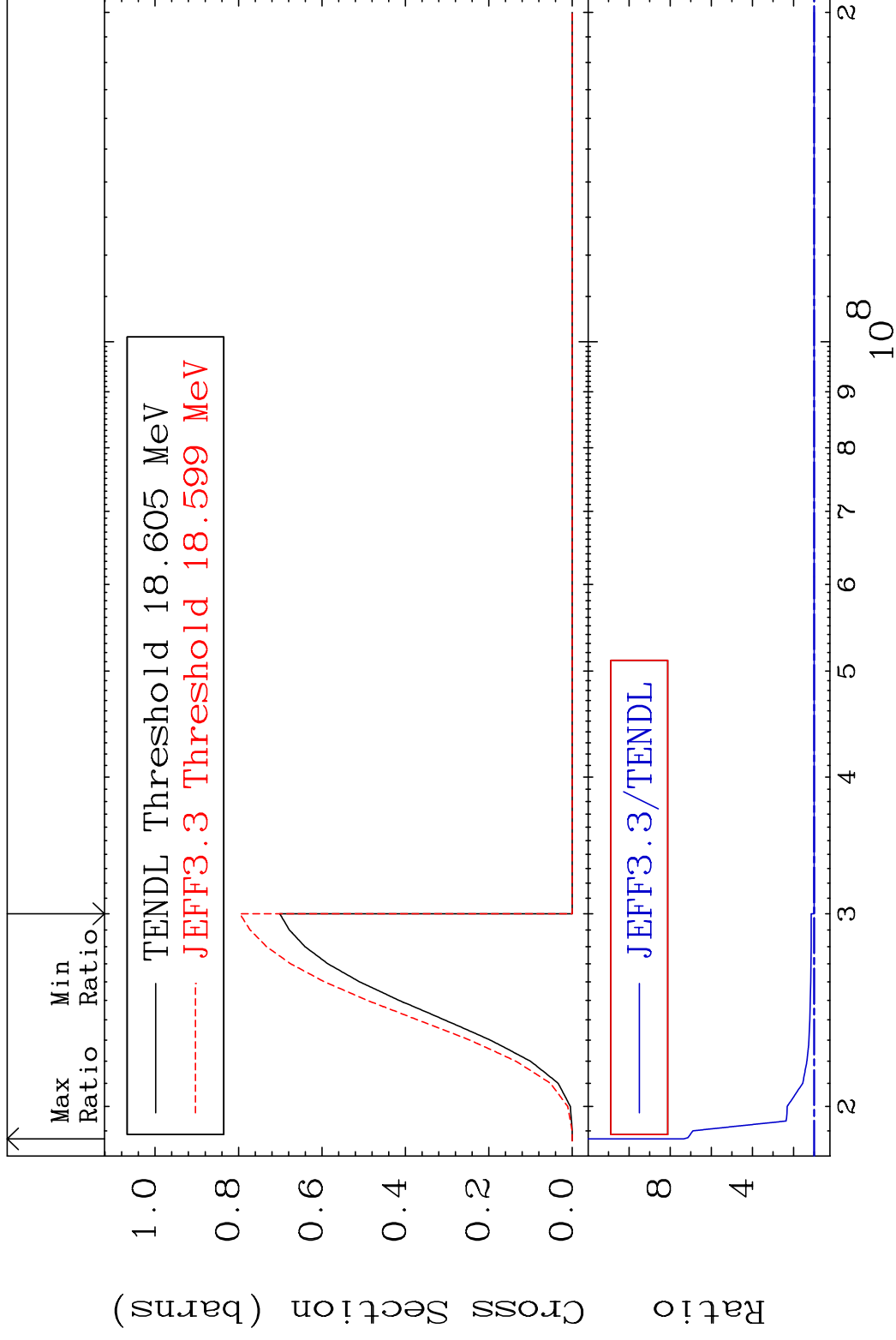
54-Xe-124

MAT 5425

(n,3n)

54-Xe-124

Cross Section 0.000 To 634.4 %



6

Incident Energy (eV)

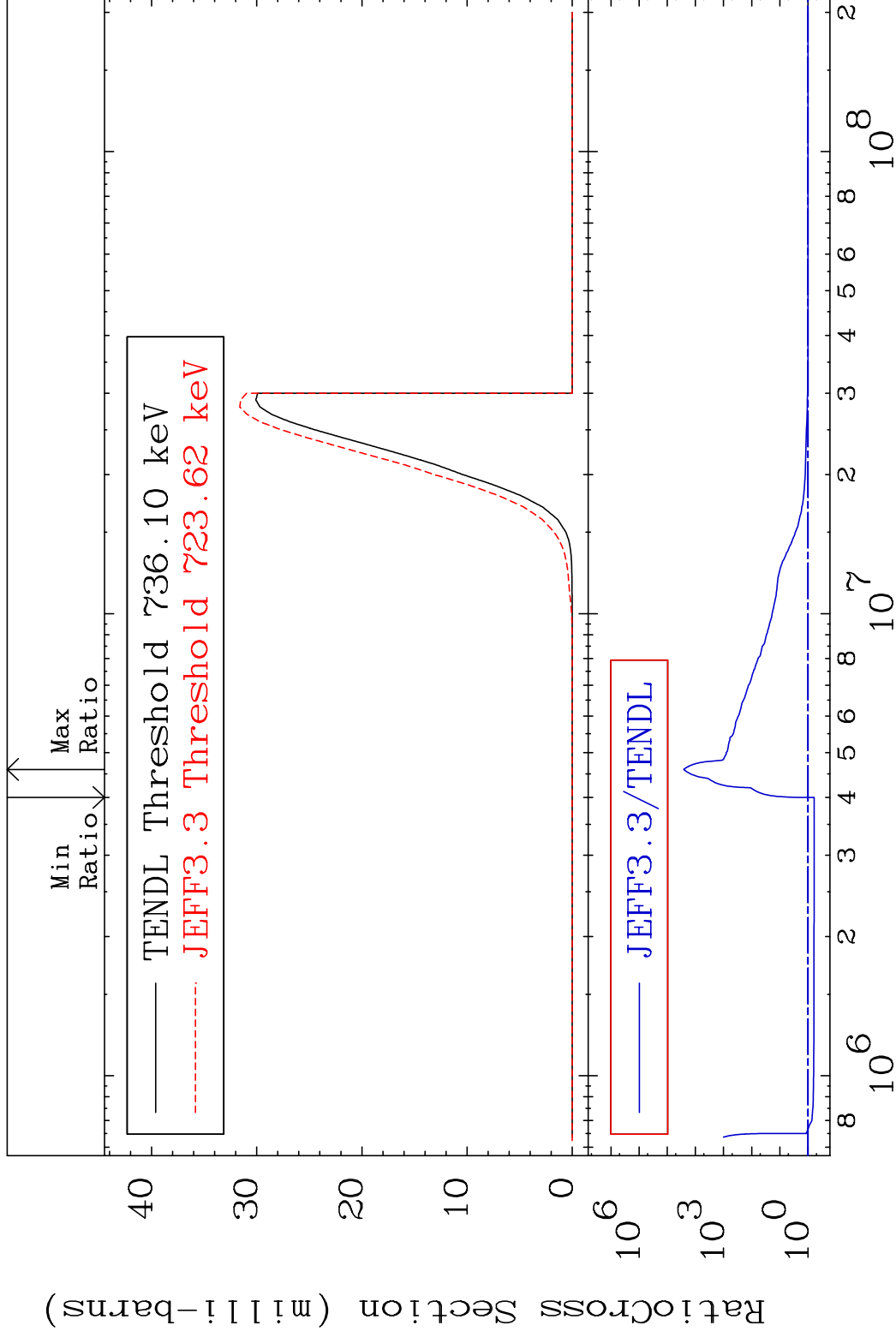
54-Xe-124

MAT 5425

(n, n') α

54-Xe-124

Cross Section -39.44 To 9999. %



7

Incident Energy (eV)

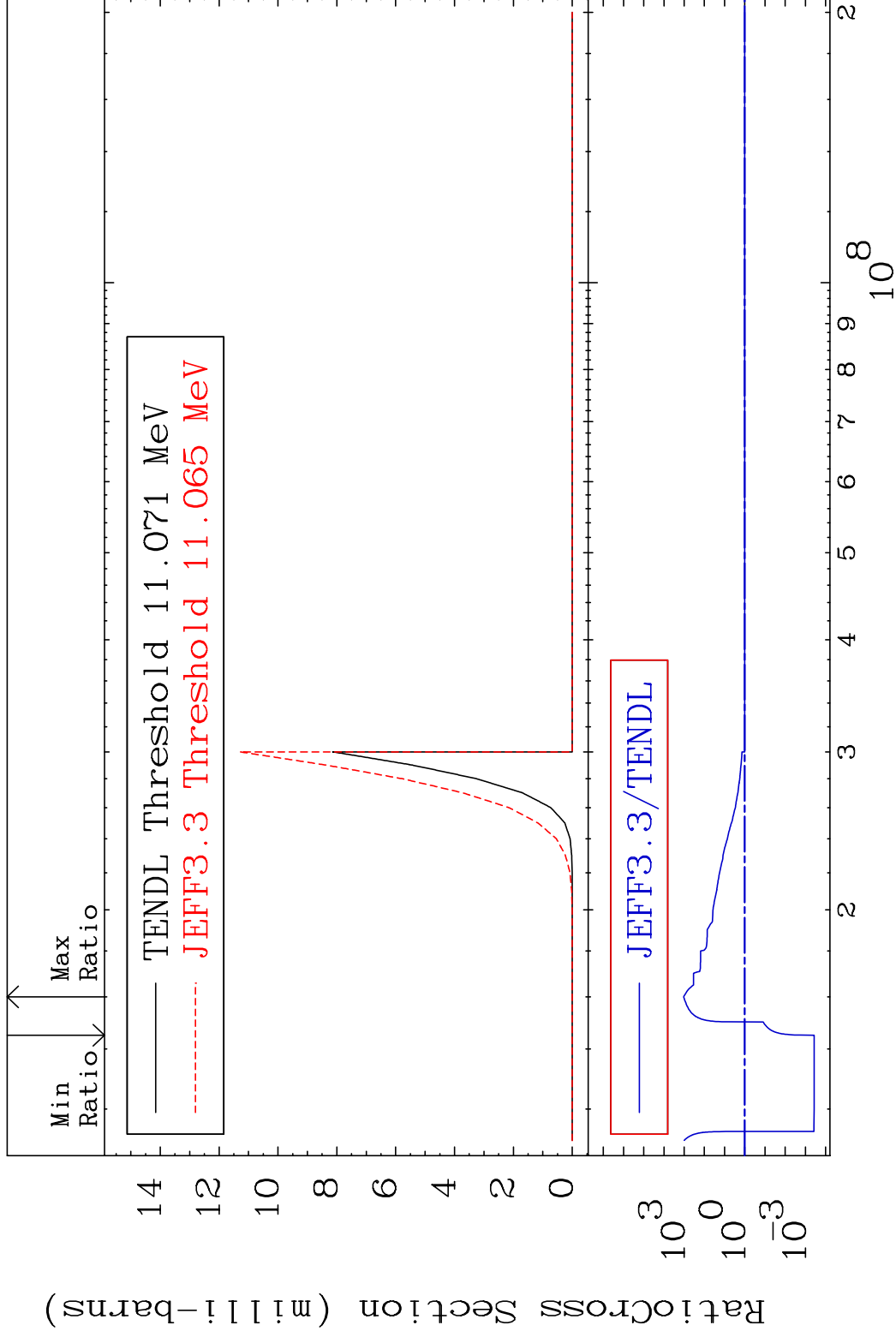
54-Xe-124

MAT 5425

(n,2n) α

54-Xe-124

Cross Section -99.96 To 9999. %

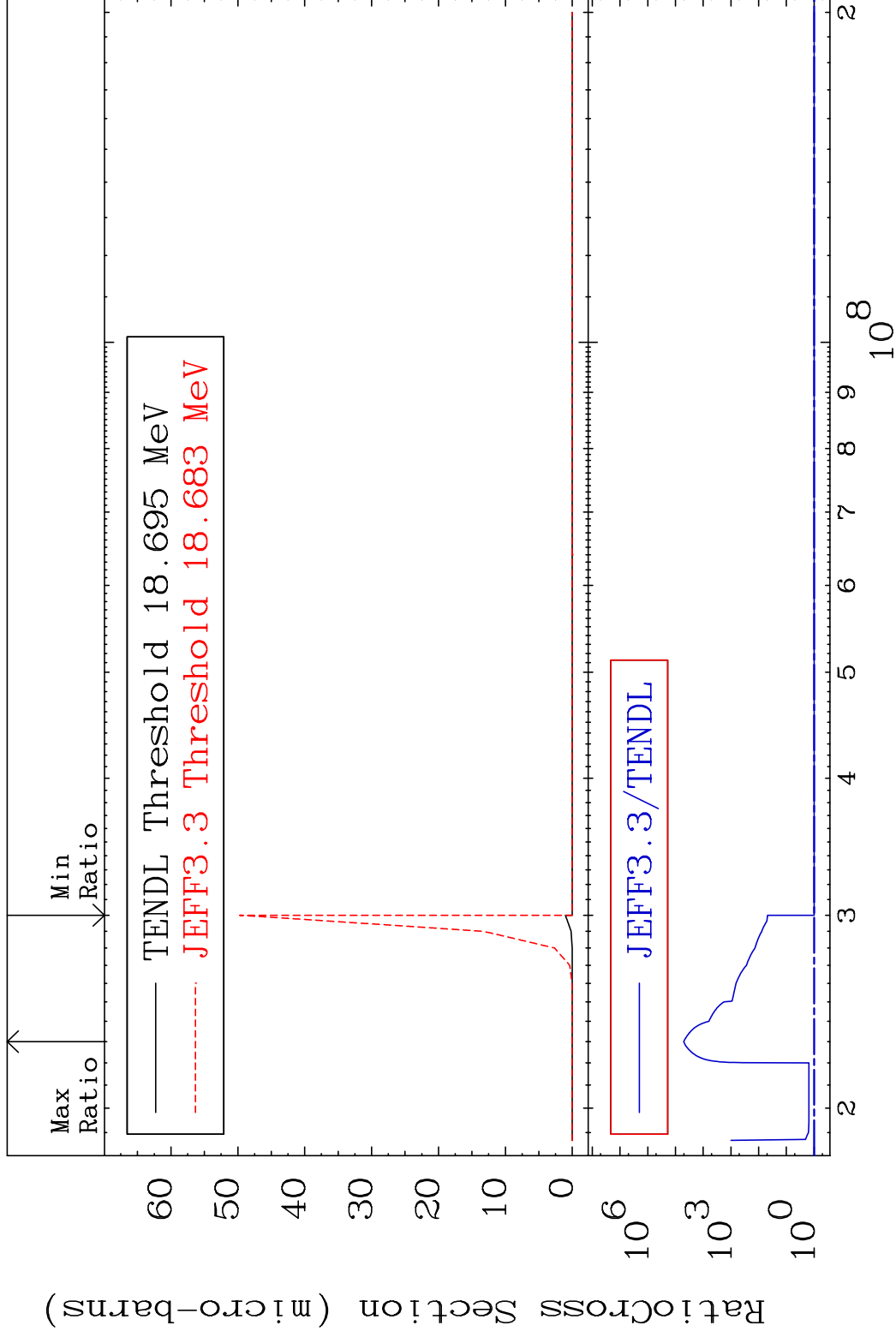


MAT 5425

(n,3n) α

54-Xe-124

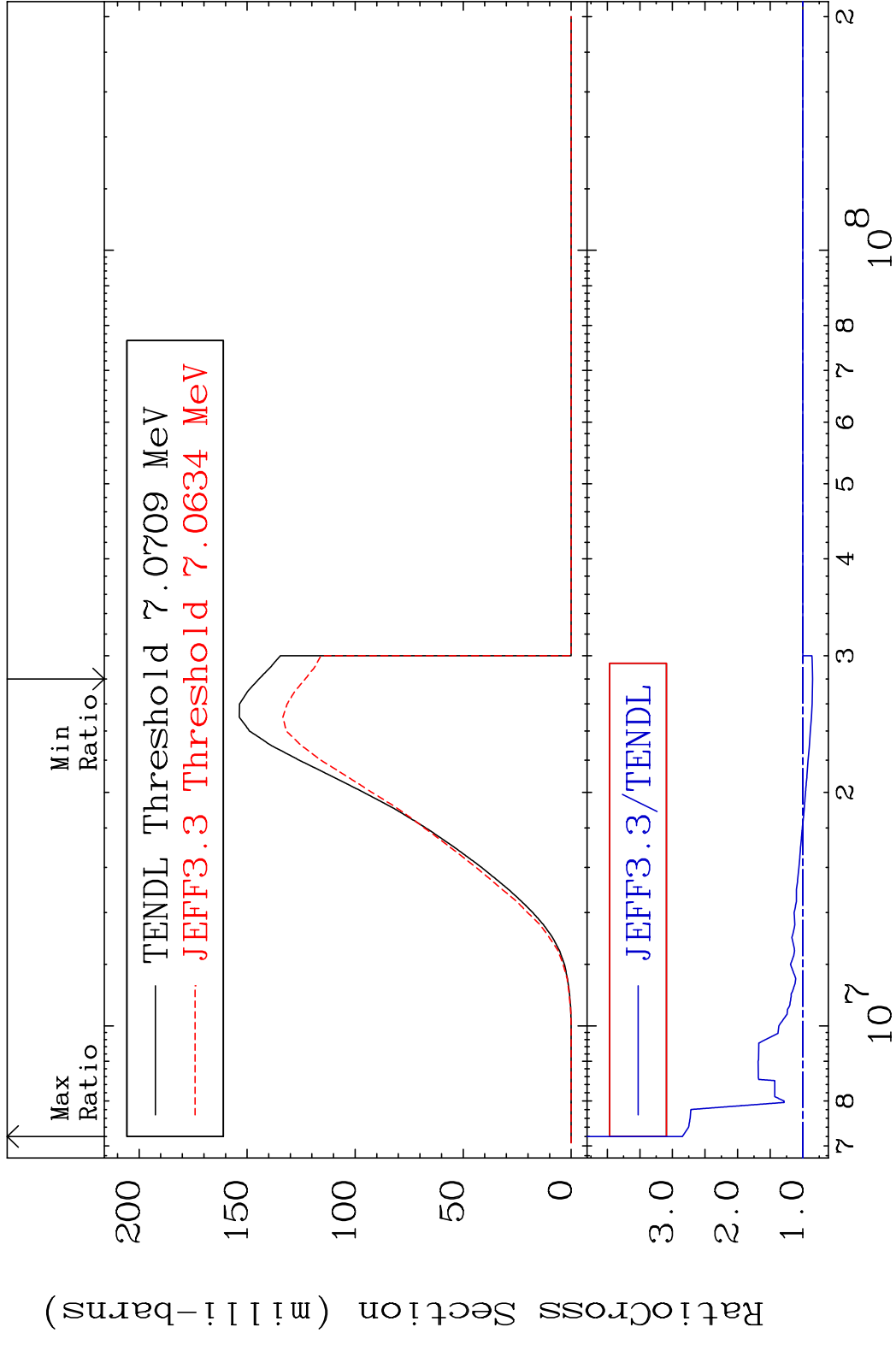
Cross Section 0.000 To 9999. %



MAT 5425

(n, n') p 54-Xe-124

Cross Section -14.83 To 184.8 %



10

Incident Energy (eV)

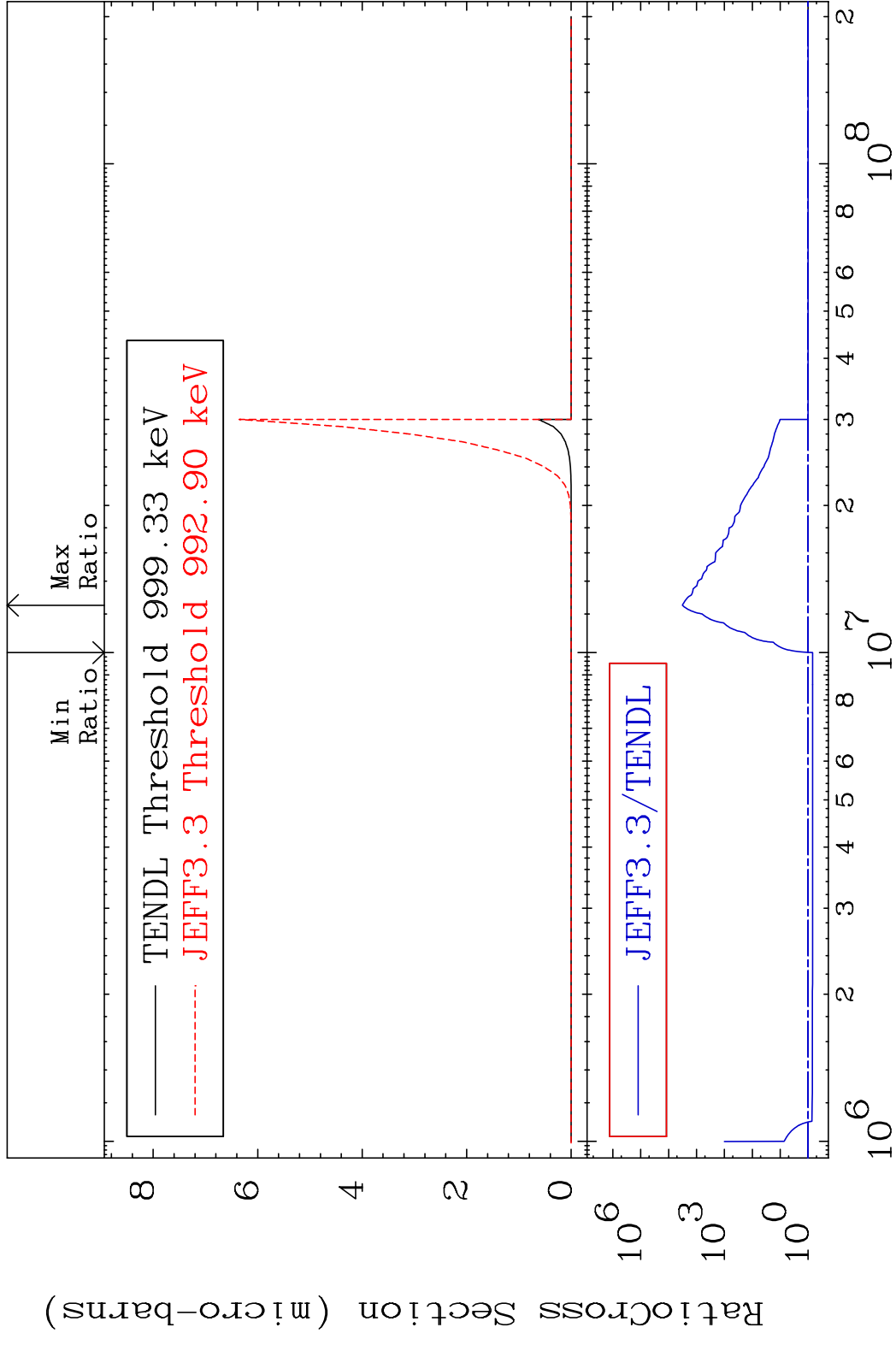
54-Xe-124

MAT 5425

(n, n') 2α

54-Xe-124

Cross Section -30.85 To 9999. %



11

Incident Energy (eV)

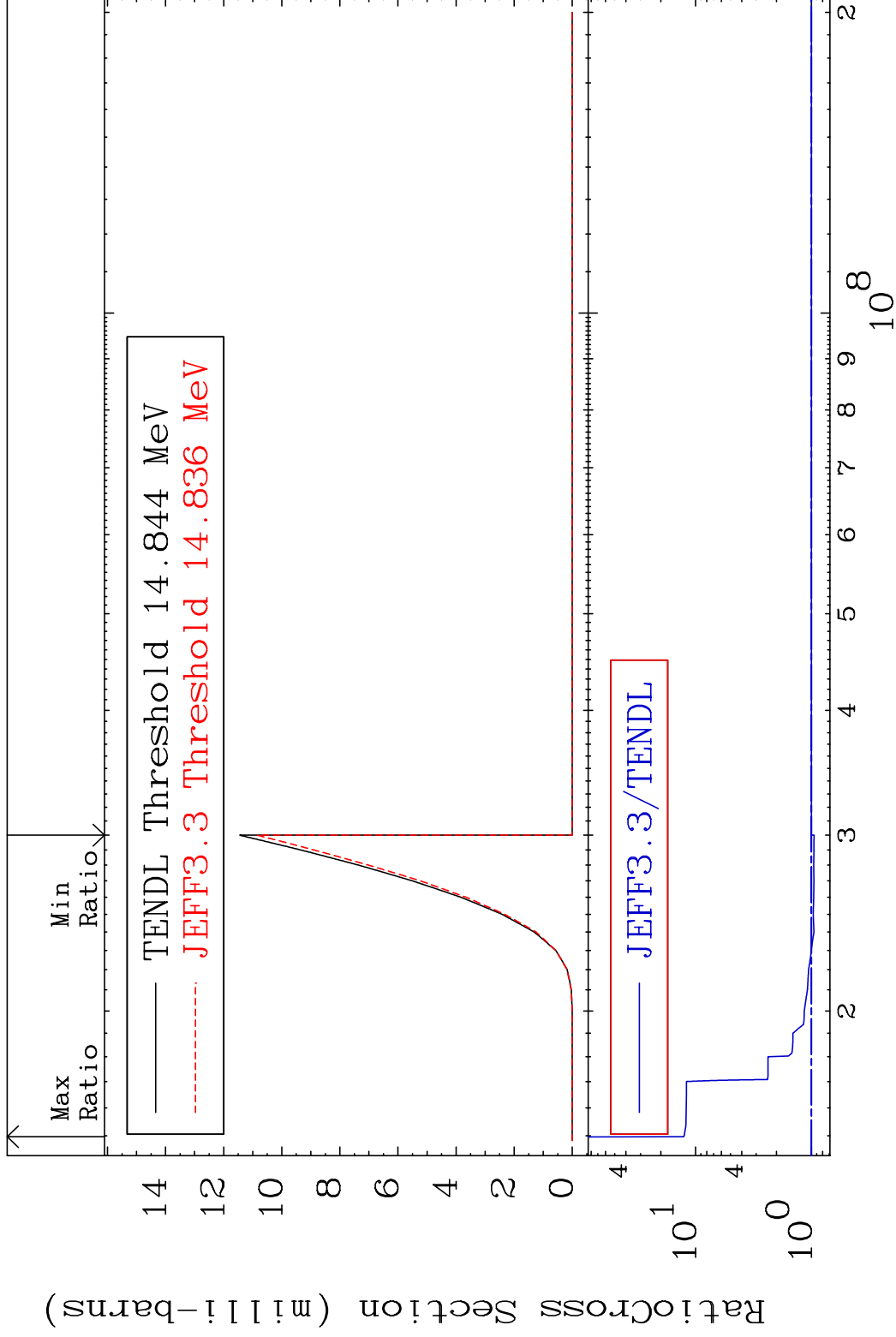
54-Xe-124

MAT 5425

(n, n') d

54-Xe-124

Cross Section -5.300 To 1169. %



12

Incident Energy (eV)

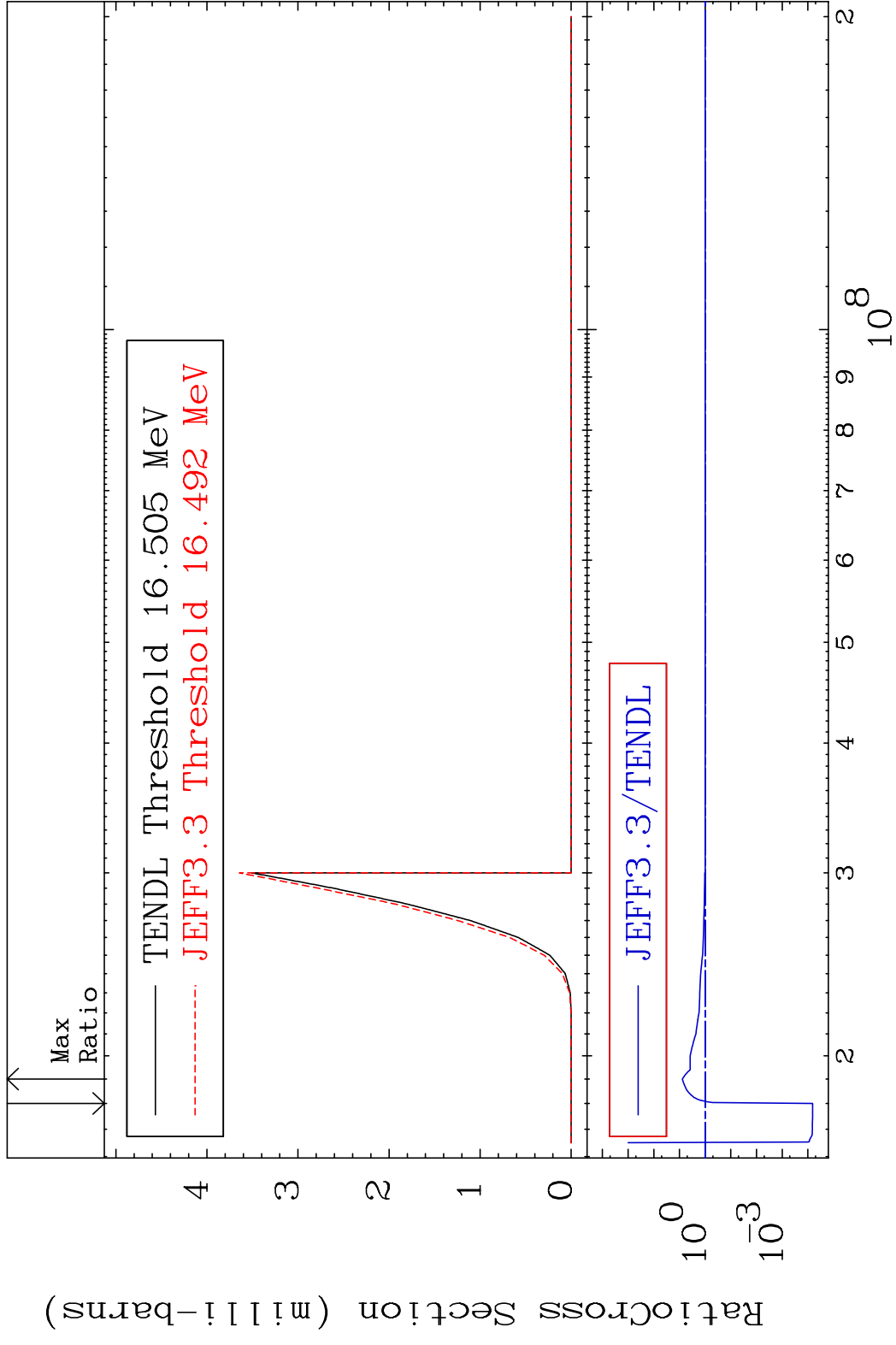
54-Xe-124

MAT 5425

(n, n') t

54-Xe-124

Cross Section -99.99 To 672.3 %



MAT 5425

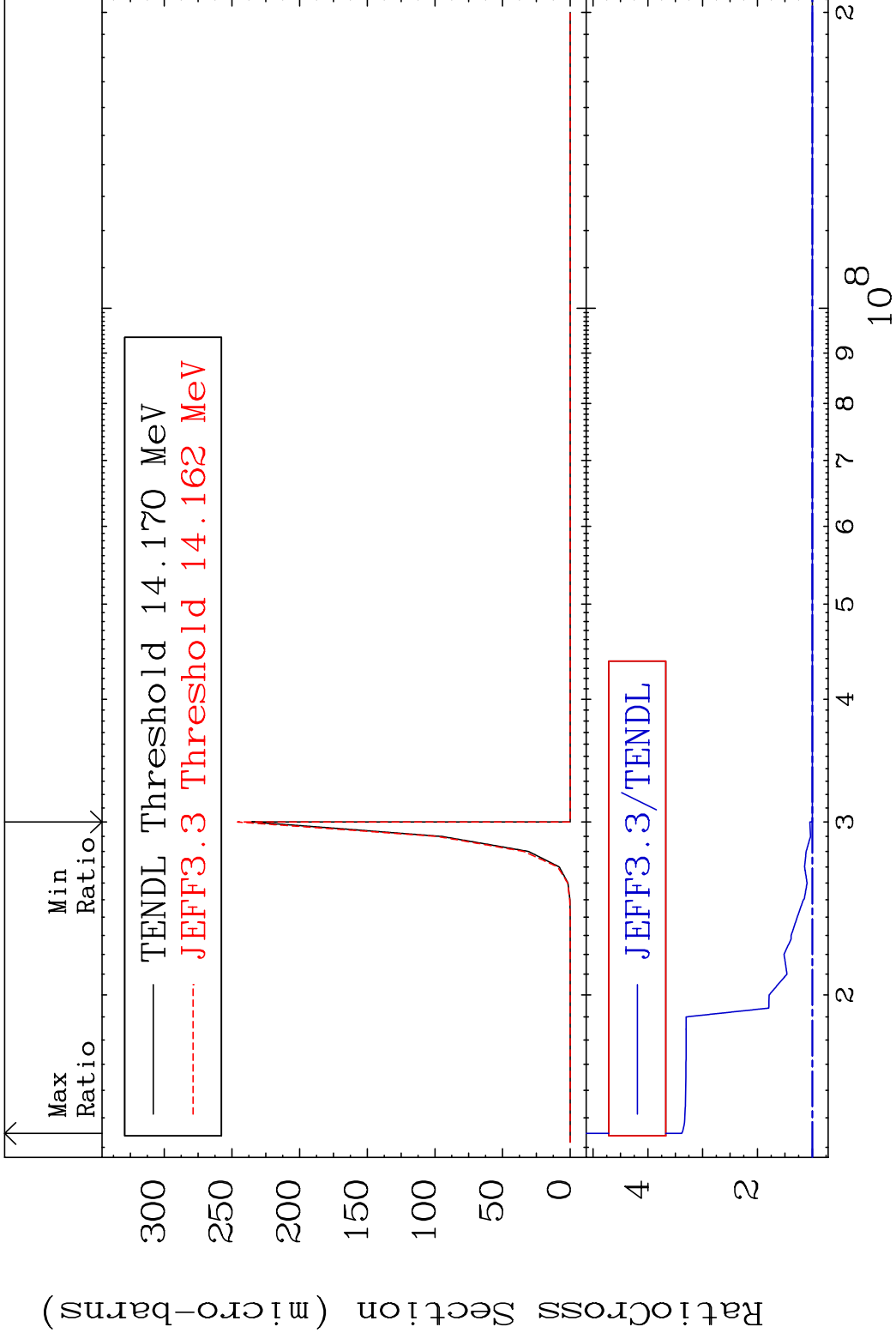
(n,n') He-3

54-Xe-124

Cross Section

0.000

To 238.2 %



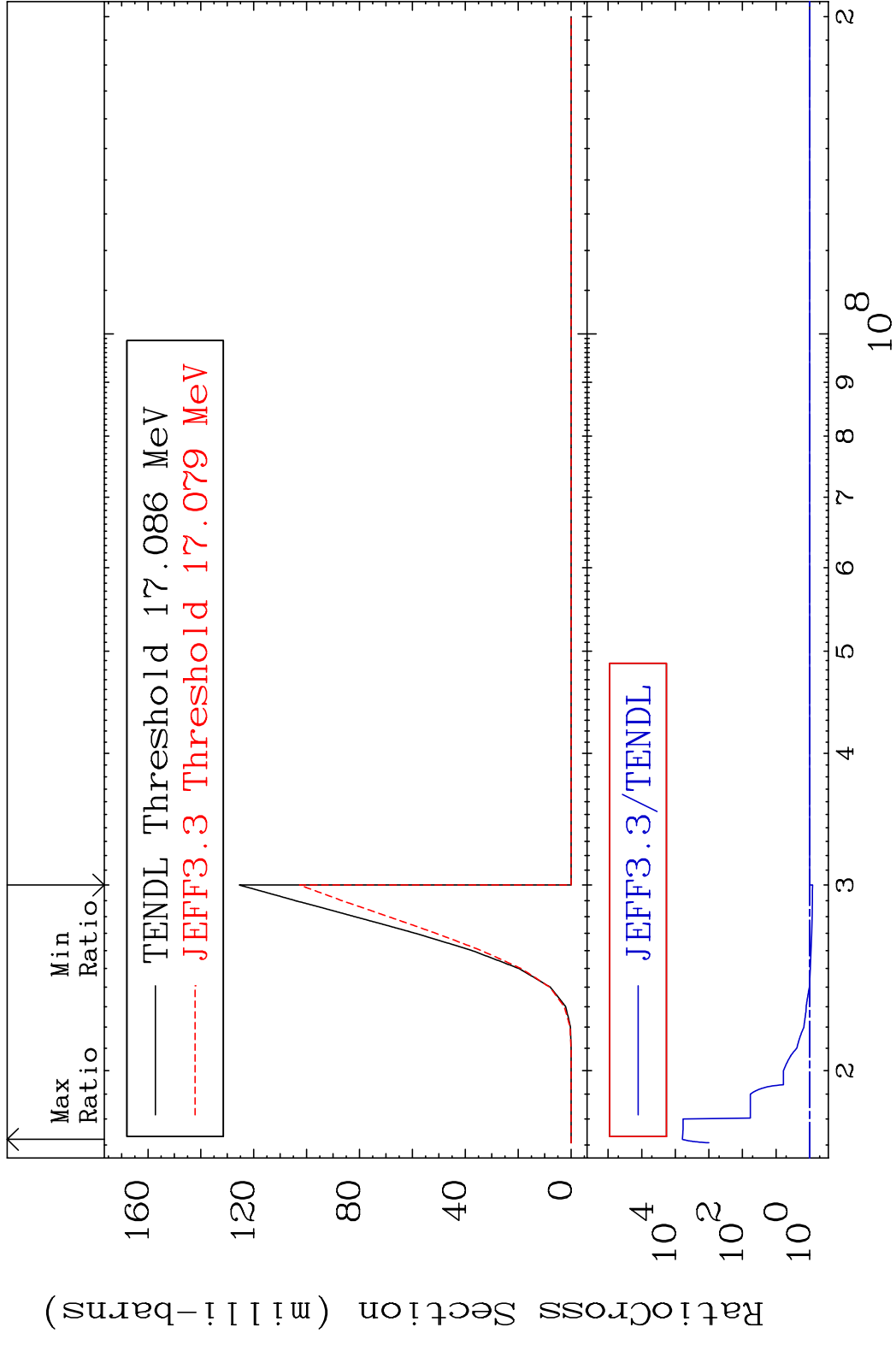
14

Incident Energy (eV)

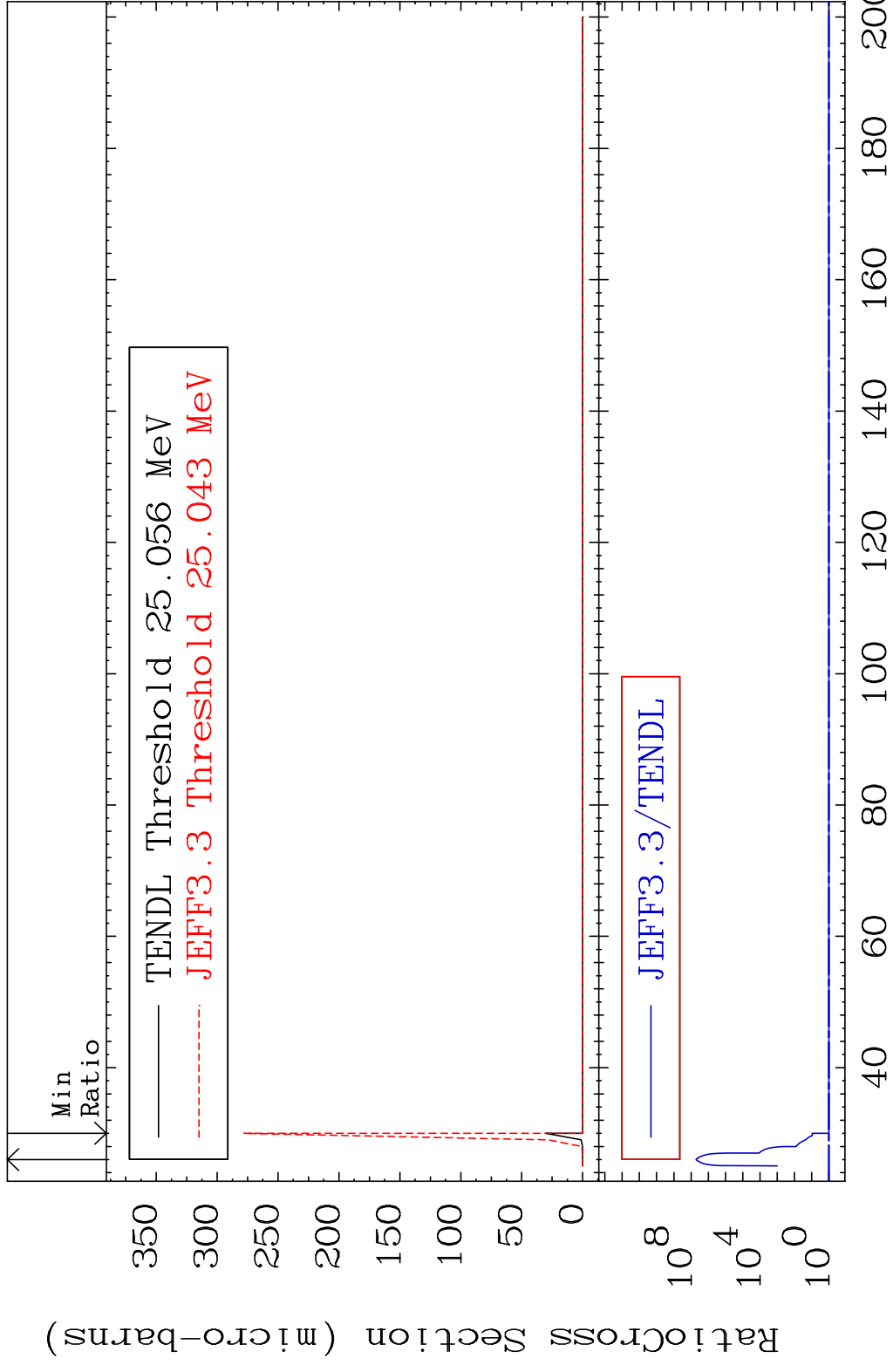
54-Xe-124

MAT 5425

(n,2n) p 54-Xe-124
Cross Section -18.12 To 9999. %



MAT 5425 (n,3n) p 54-Xe-124
 Cross Section 0.000 To 9999. %

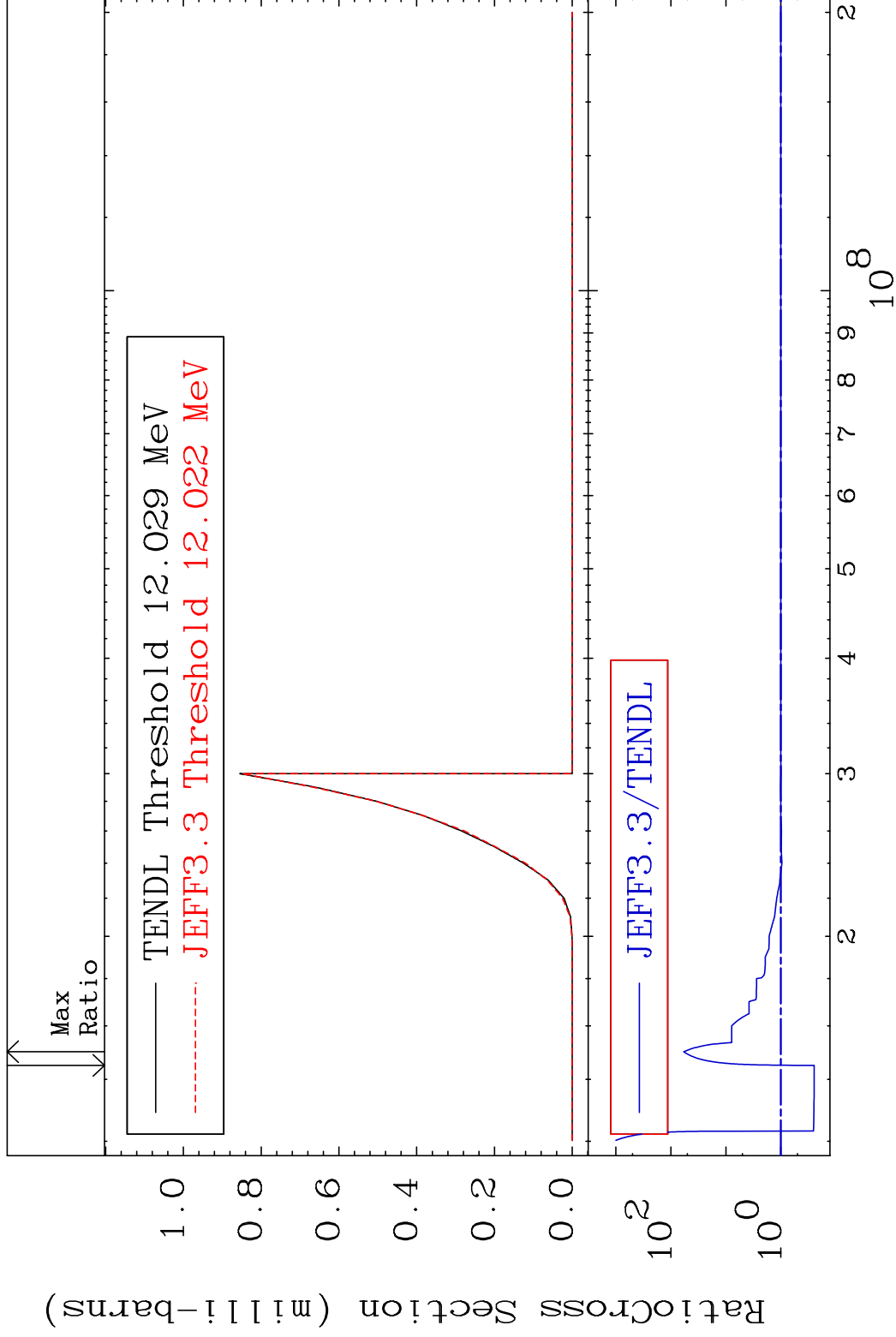


MAT 5425

(n,2n) p

54-Xe-124

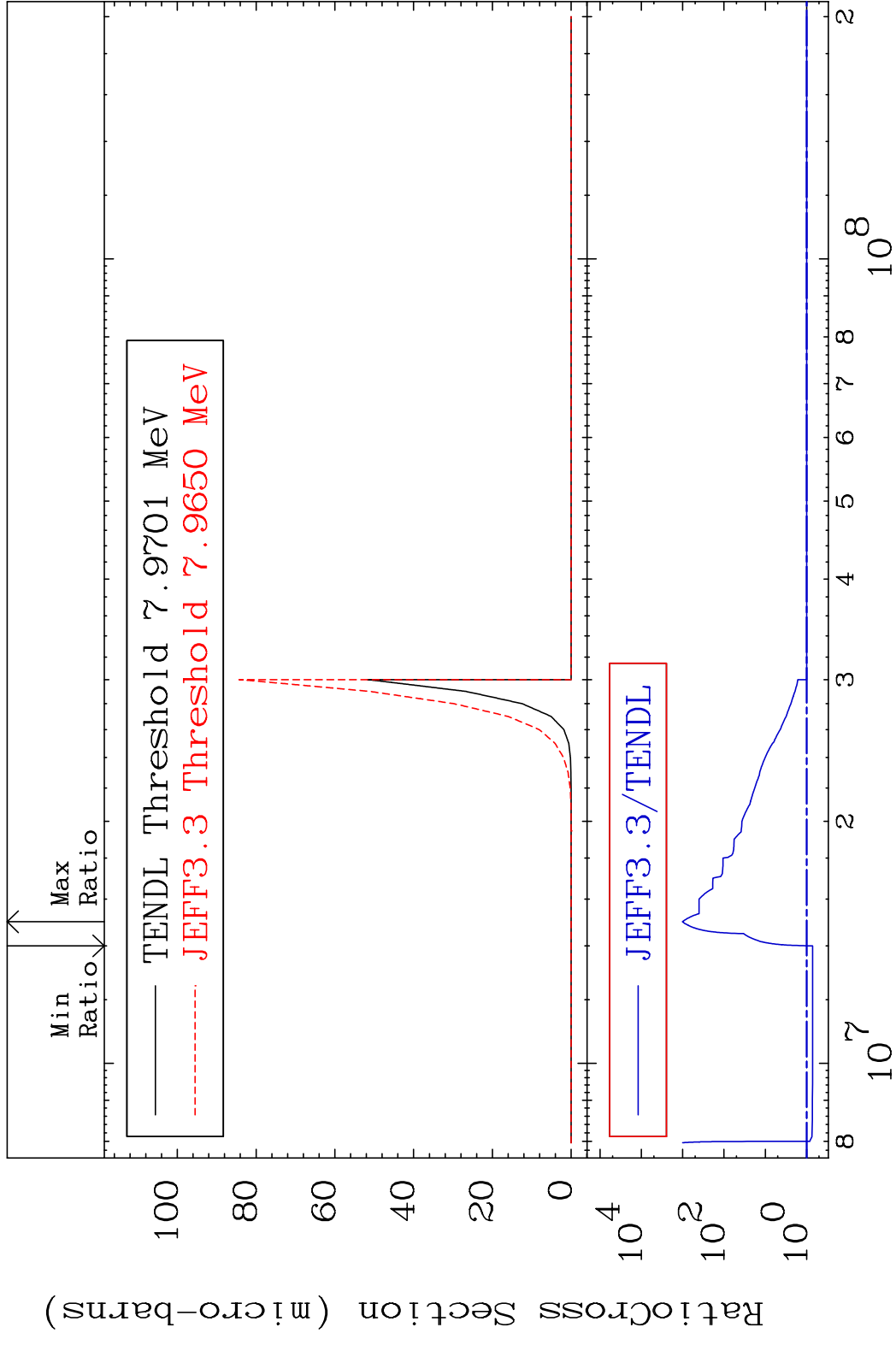
Cross Section -75.16 To 5754. %



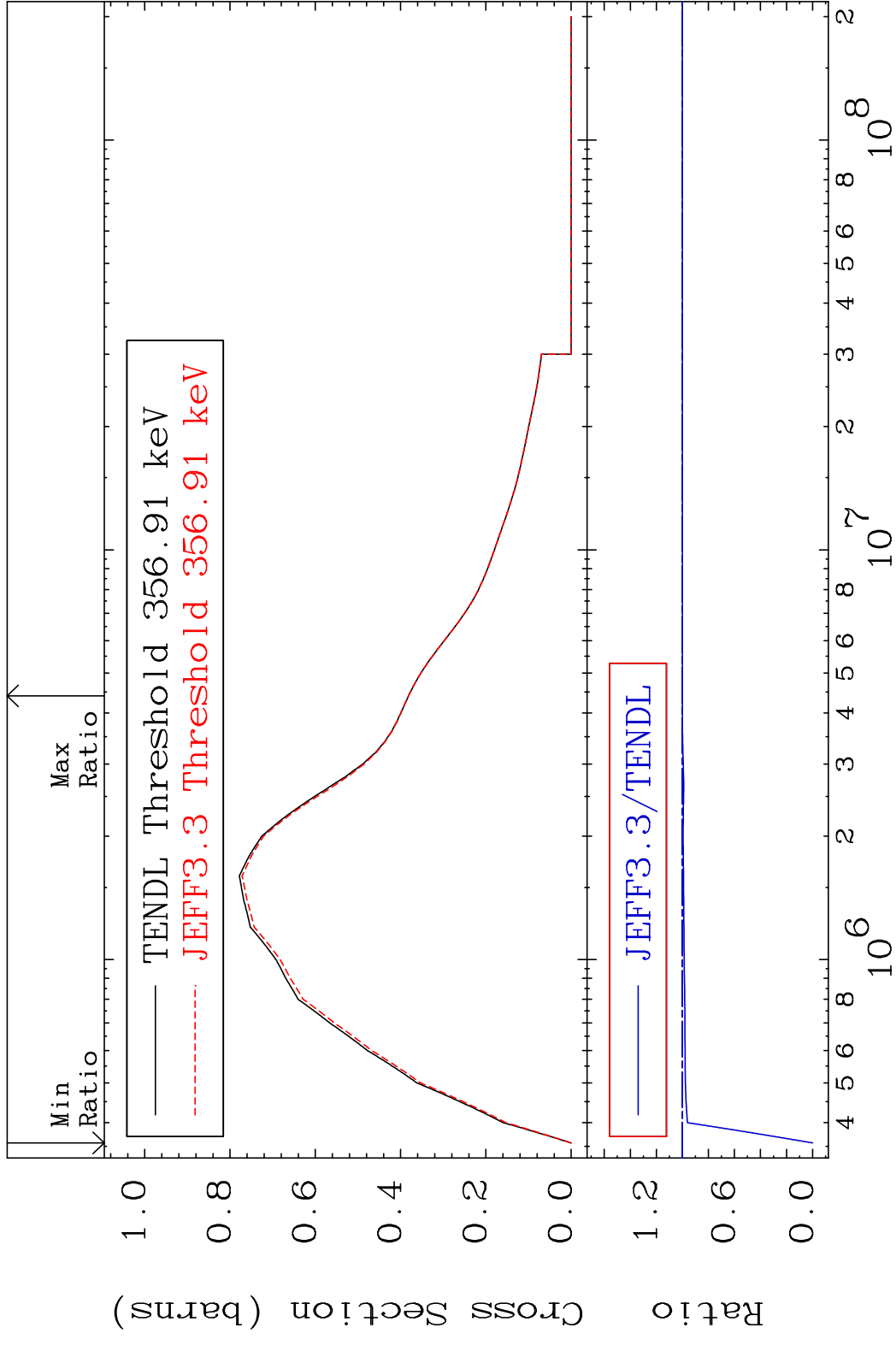
MAT 5425

(n,n') p α 54-Xe-124

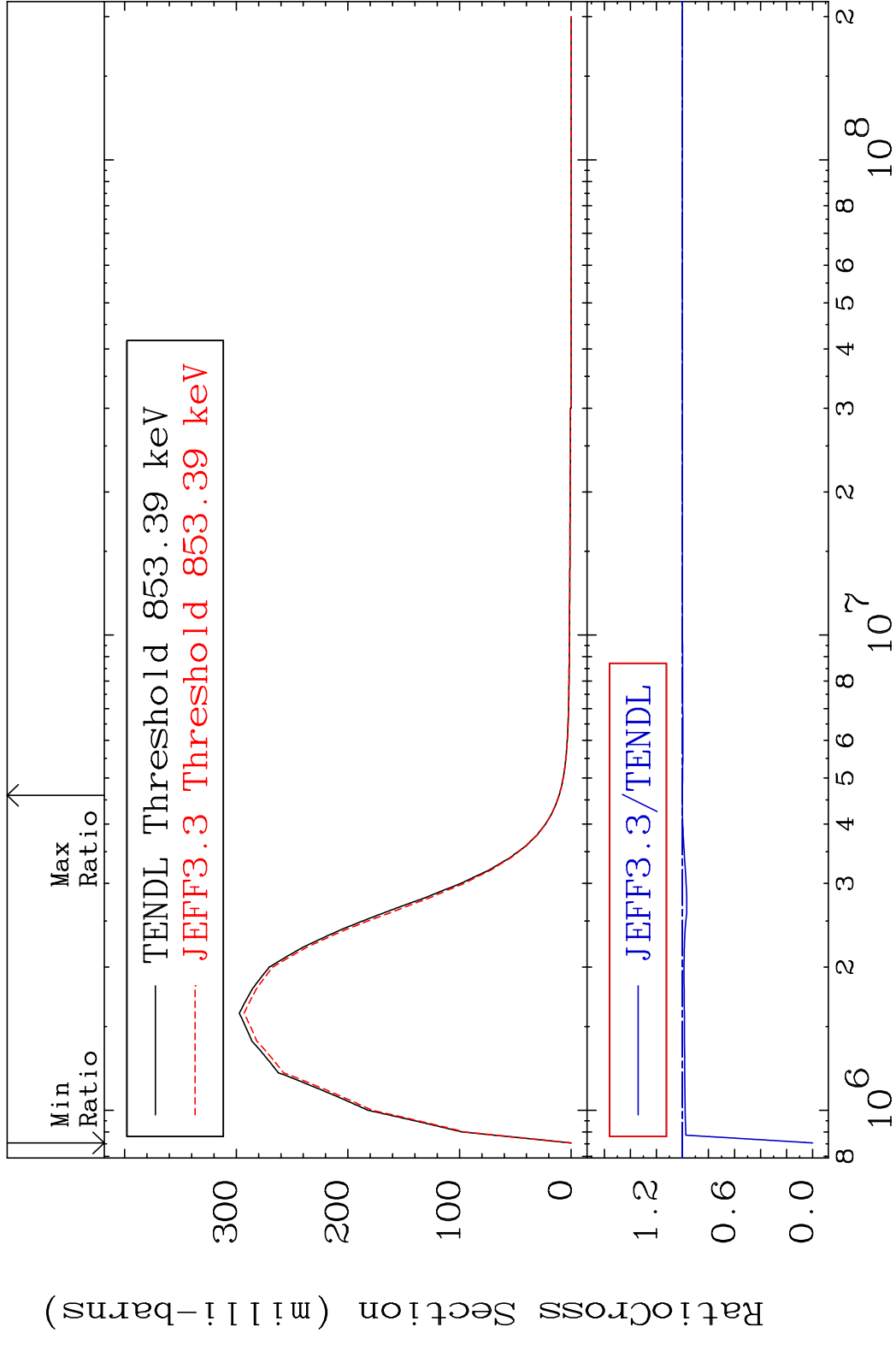
Cross Section -28.22 To 9999. %



MAT 5425 MT= 51 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.005 %

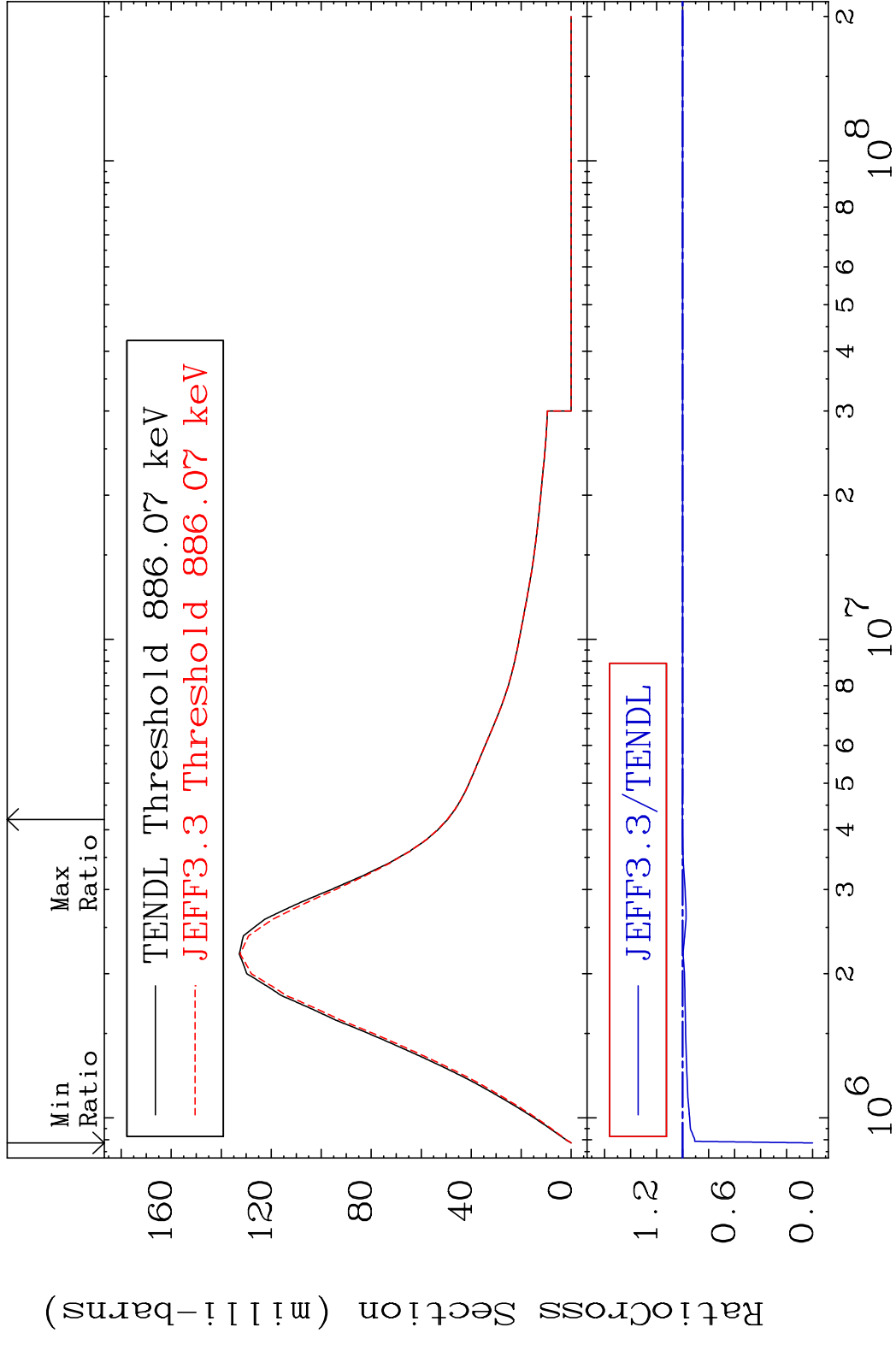


MAT 5425 MT= 52 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.095 %



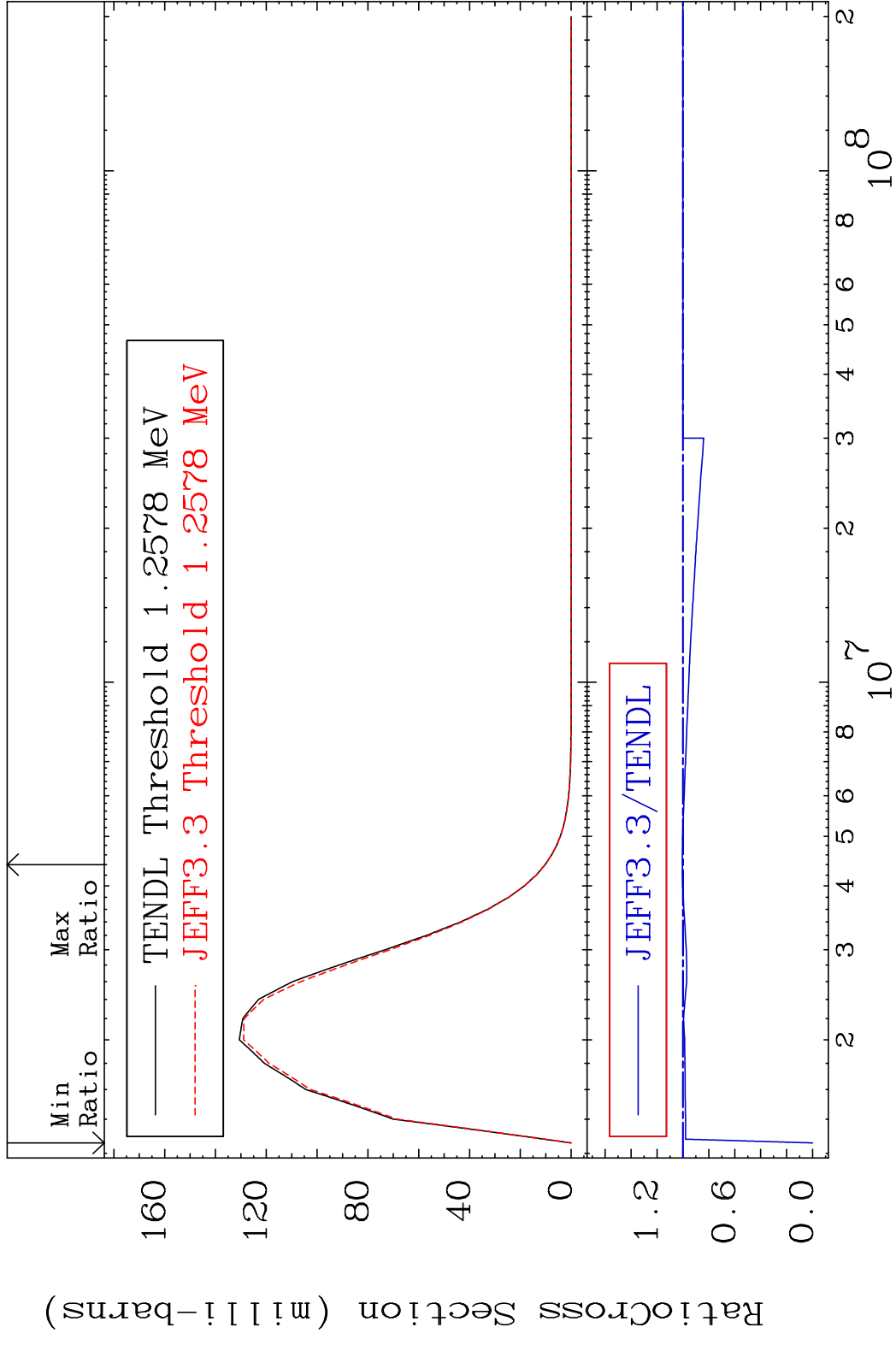
20 Incident Energy (eV) 54-Xe-124

MAT 5425 MT= 53 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.226 %

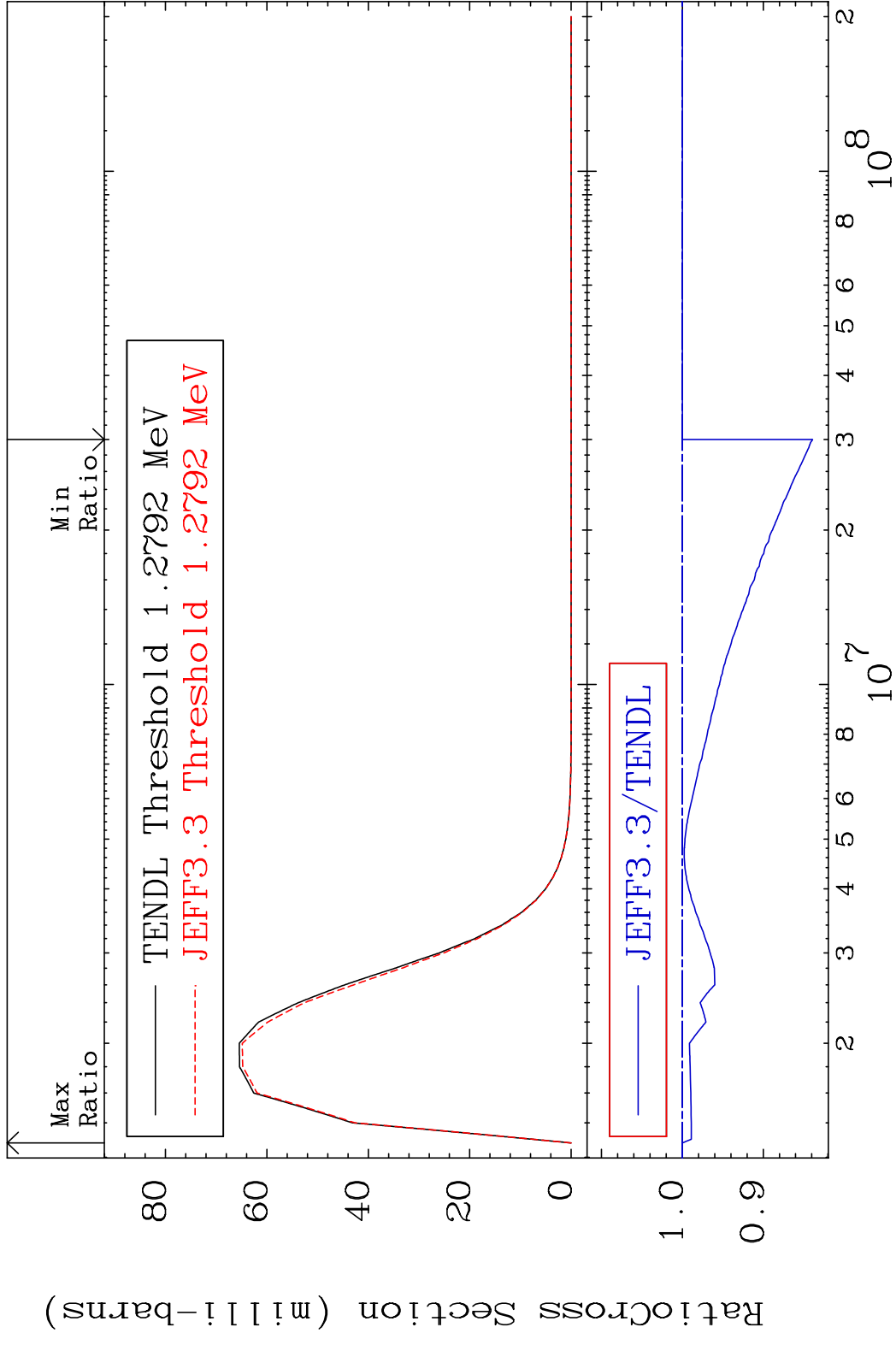


21 Incident Energy (eV) 54-Xe-124

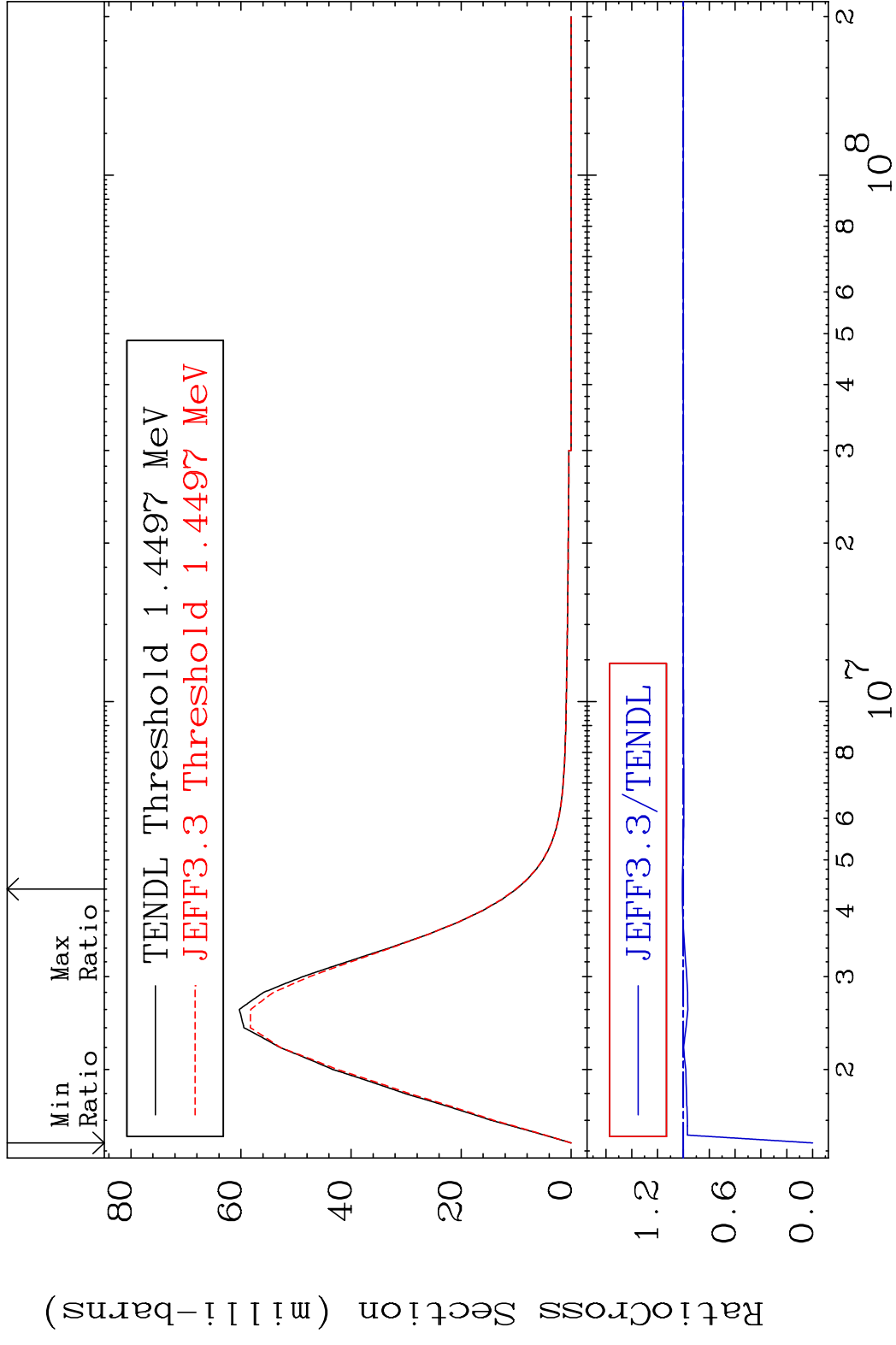
MAT 5425 MT= 54 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.446 %



MAT 5425 MT= 55 (n,n') Level 54-Xe-124
 Cross Section -16.09 To 0.000 %

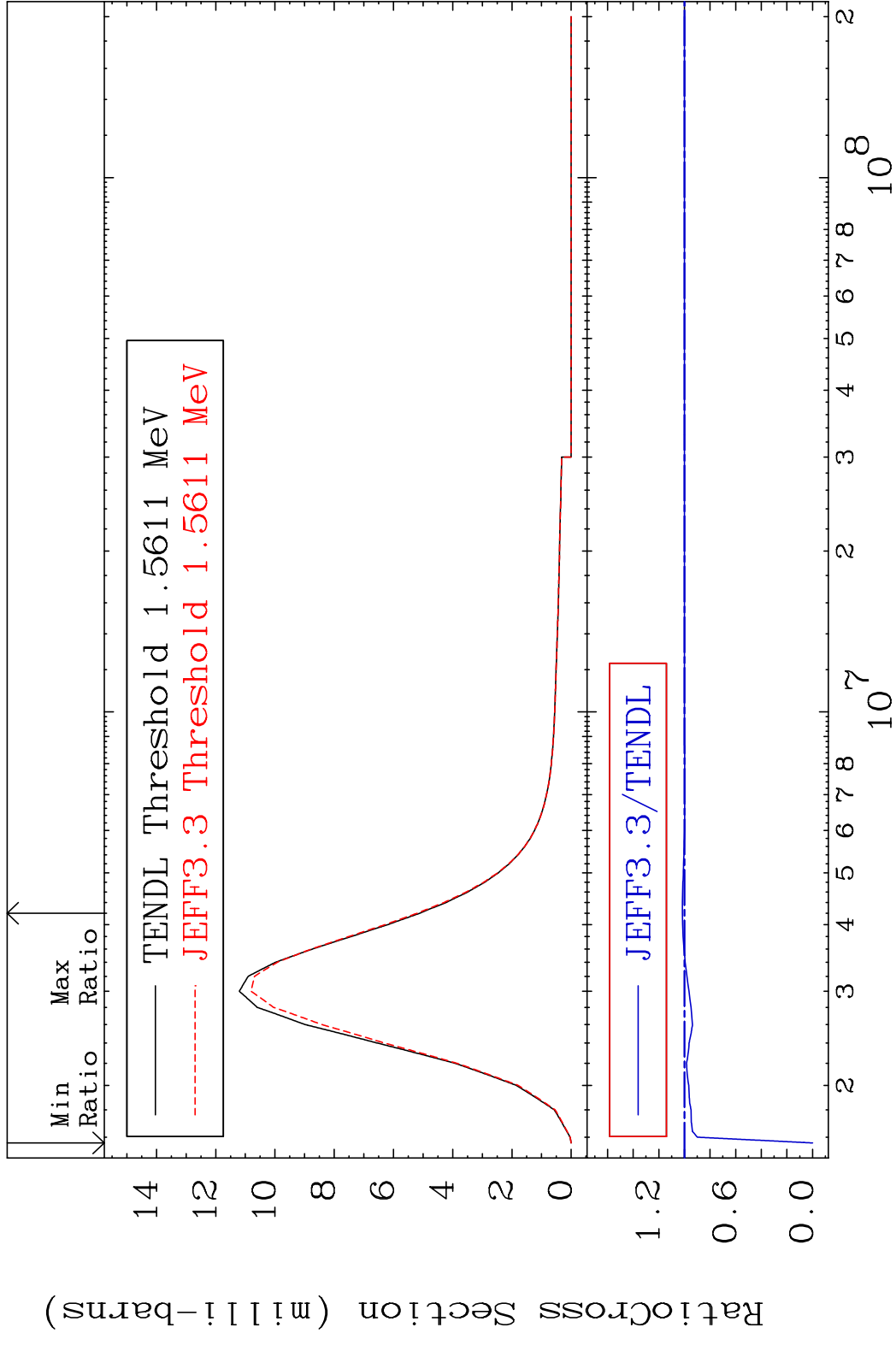


MAT 5425 MT= 56 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.802 %

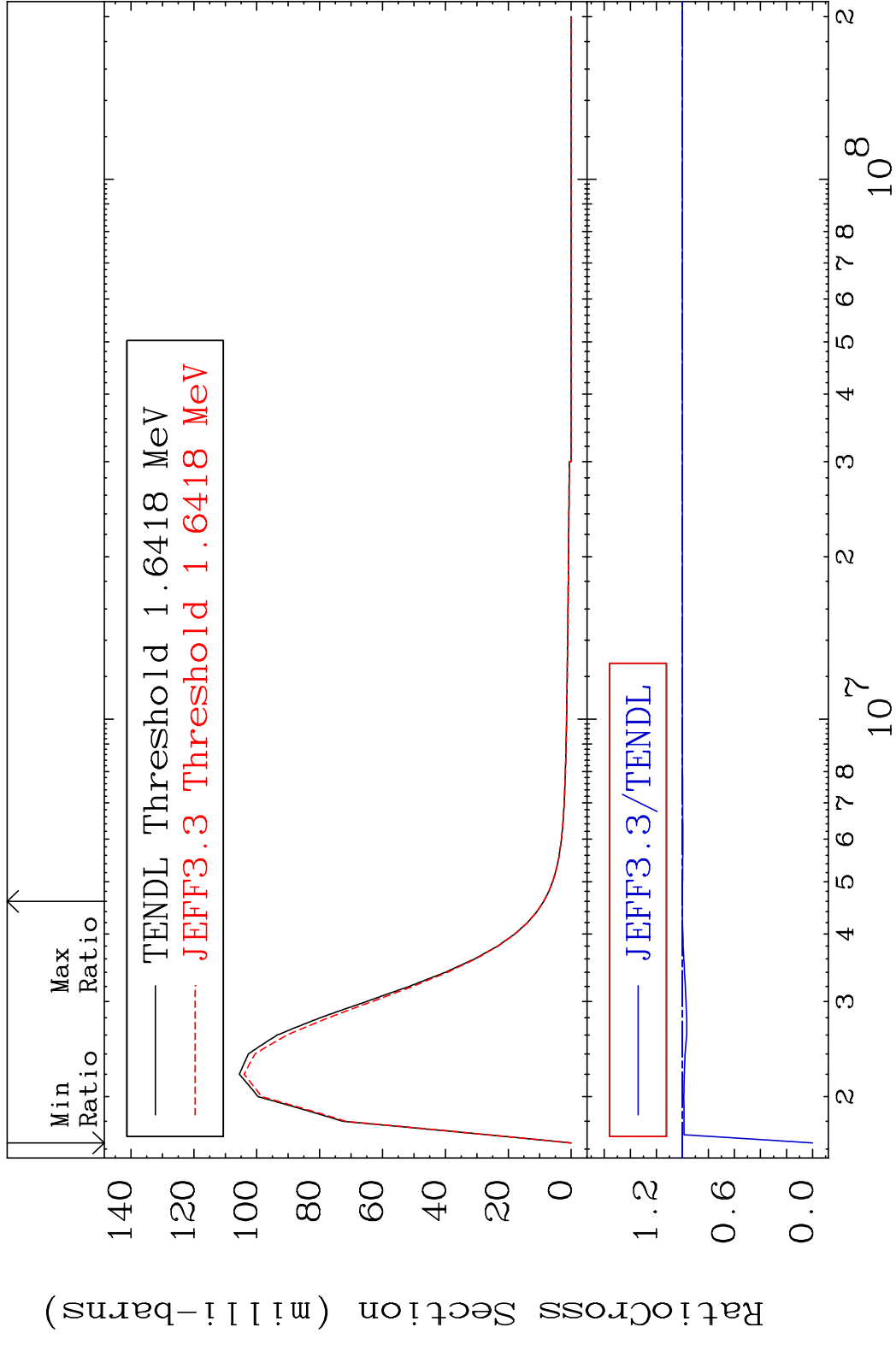


24 Incident Energy (eV) 54-Xe-124

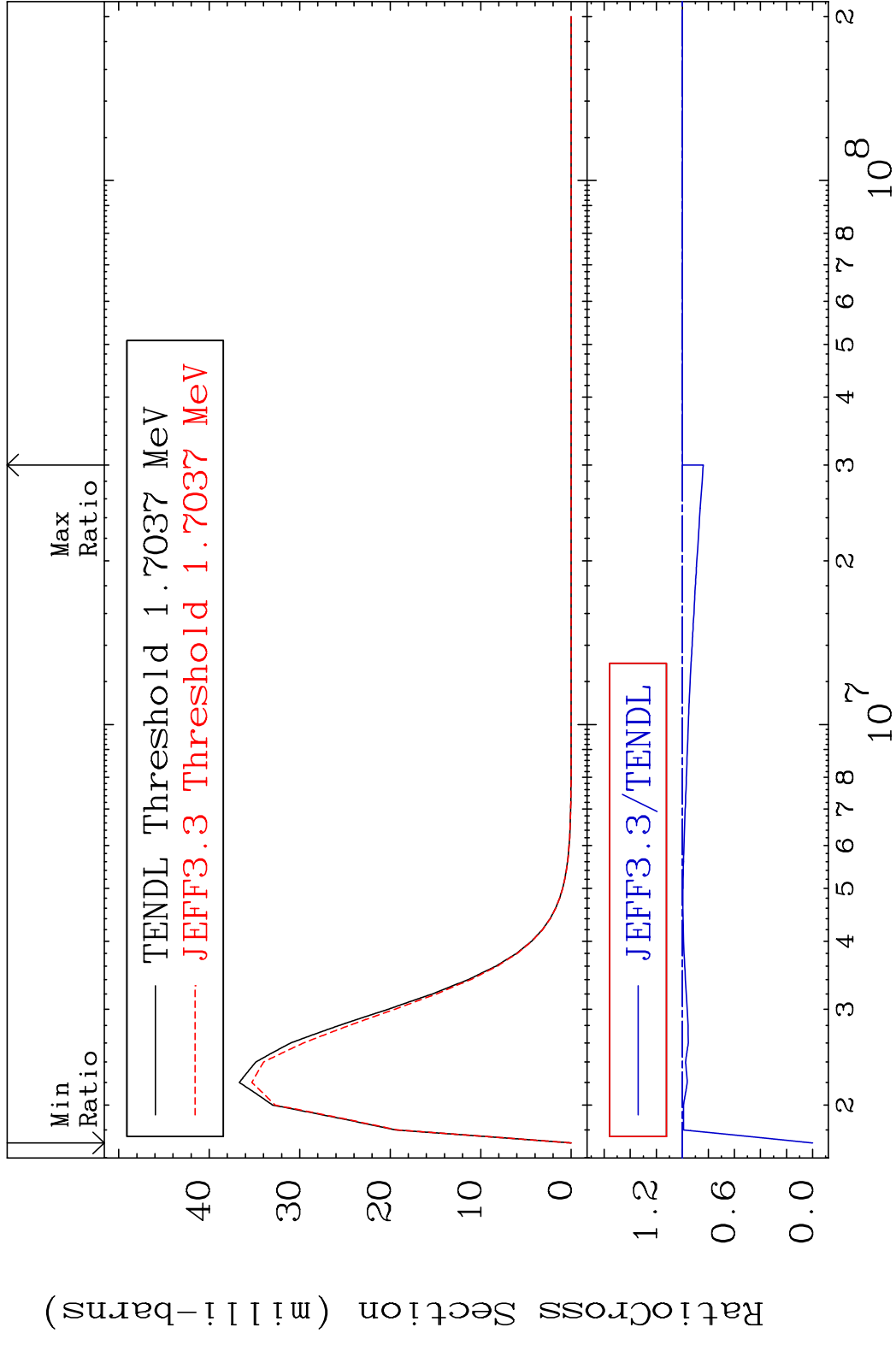
MAT 5425 MT= 57 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 1.612 %



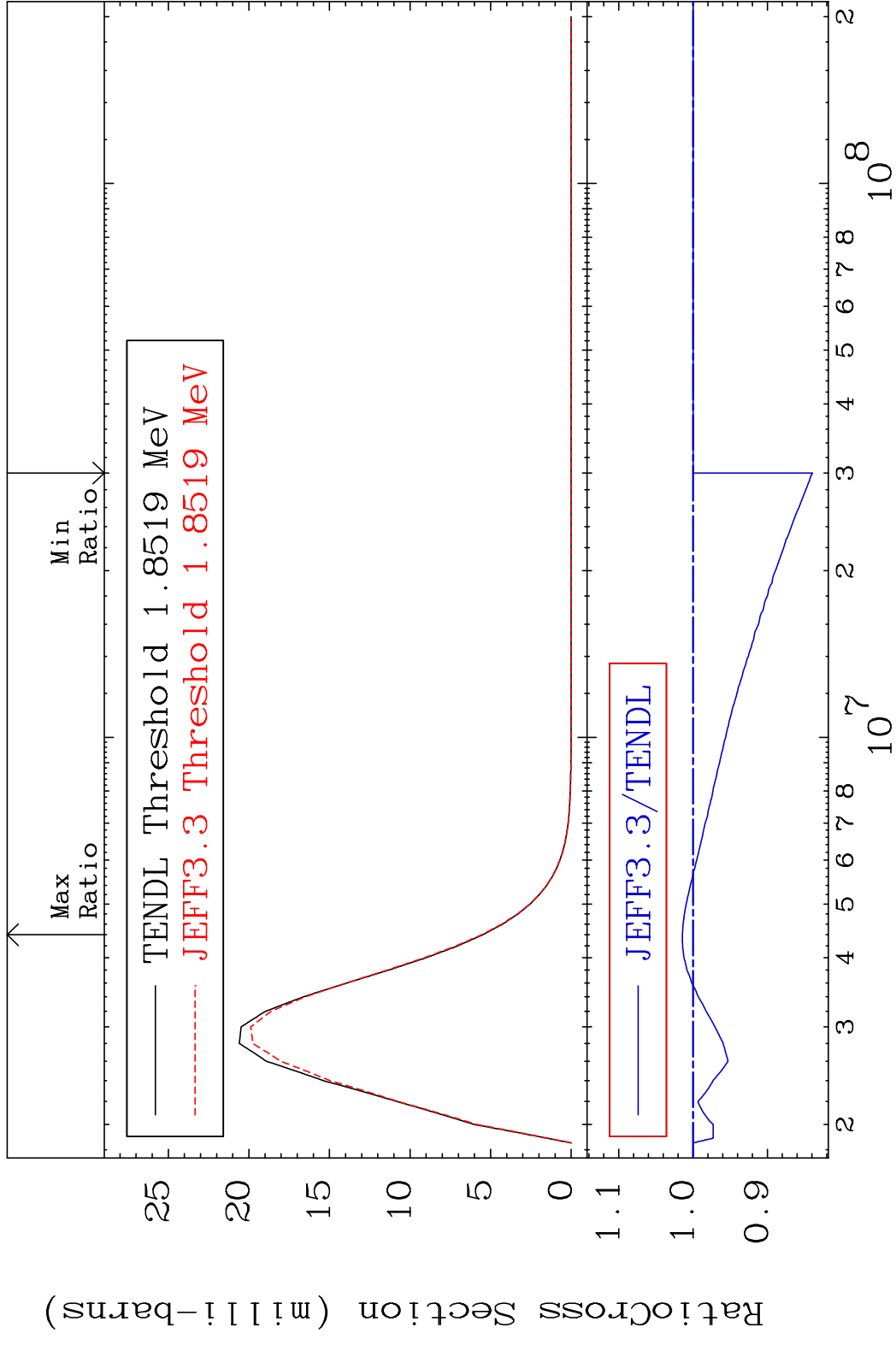
MAT 5425 MT= 58 (n,n') Level 54-Xe-124
 Cross Section -100.0 To 0.019 %



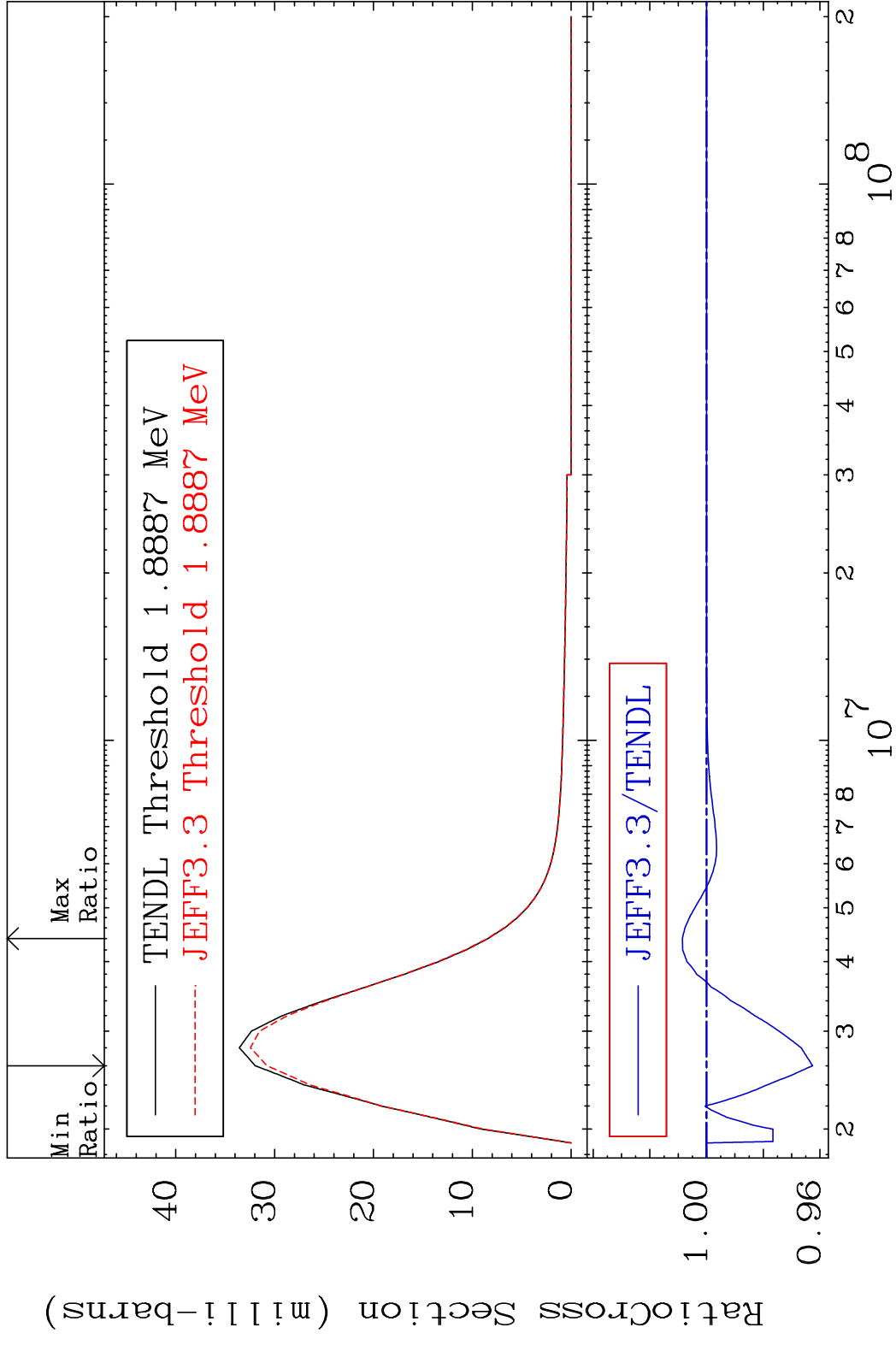
MAT 5425 MT= 59 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.000 %



MAT 5425 MT= 60 (n, n') Level 54-Xe-124
 Cross Section -16.08 To 1.436 %

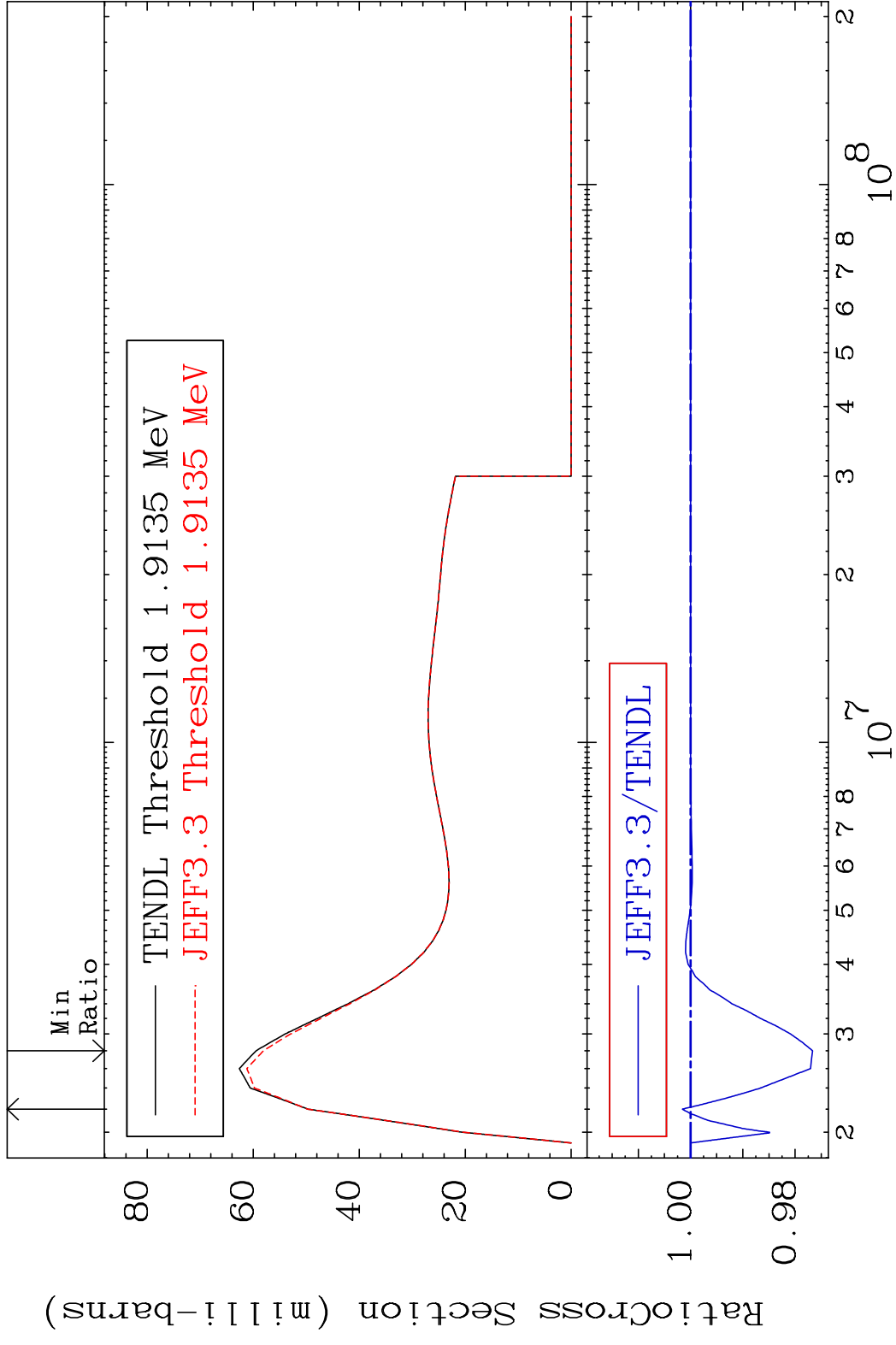


MAT 5425 MT= 61 (n, n') Level 54-Xe-124
 Cross Section -3.738 To 0.854 %

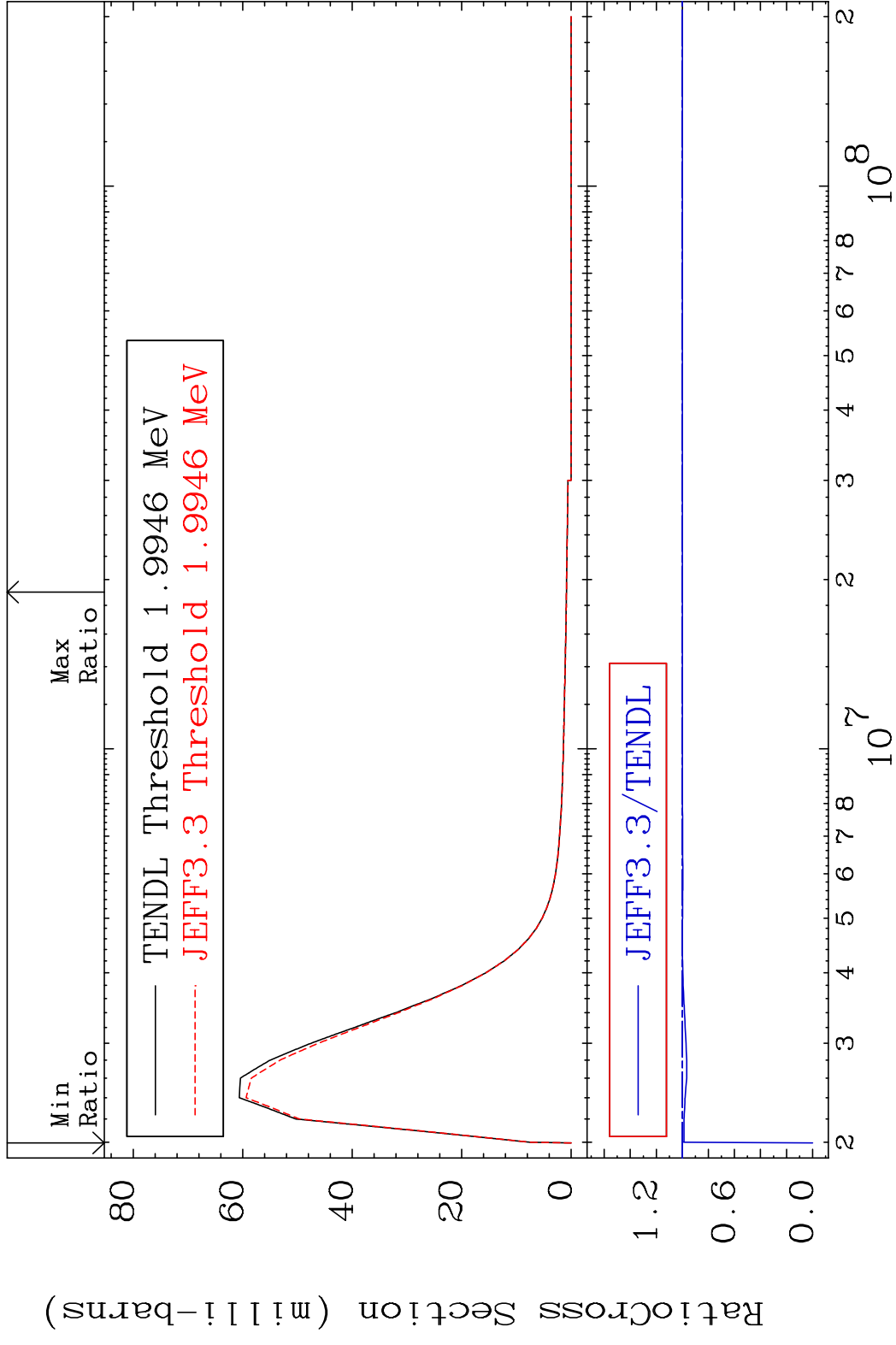


29 Incident Energy (eV) 54-Xe-124

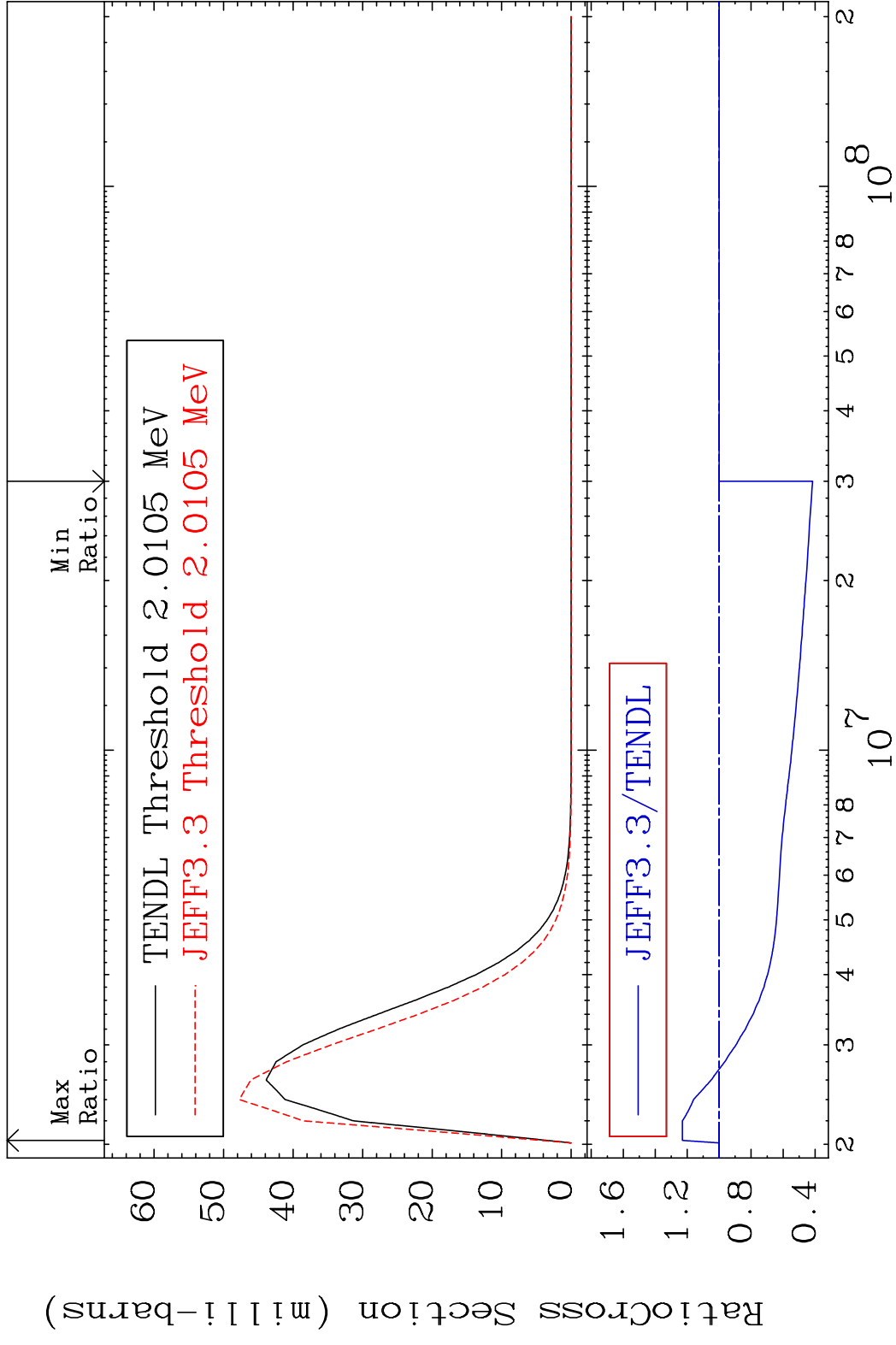
MAT 5425 MT= 62 (n, n') Level 54-Xe-124
 Cross Section -2.333 To 0.157 %



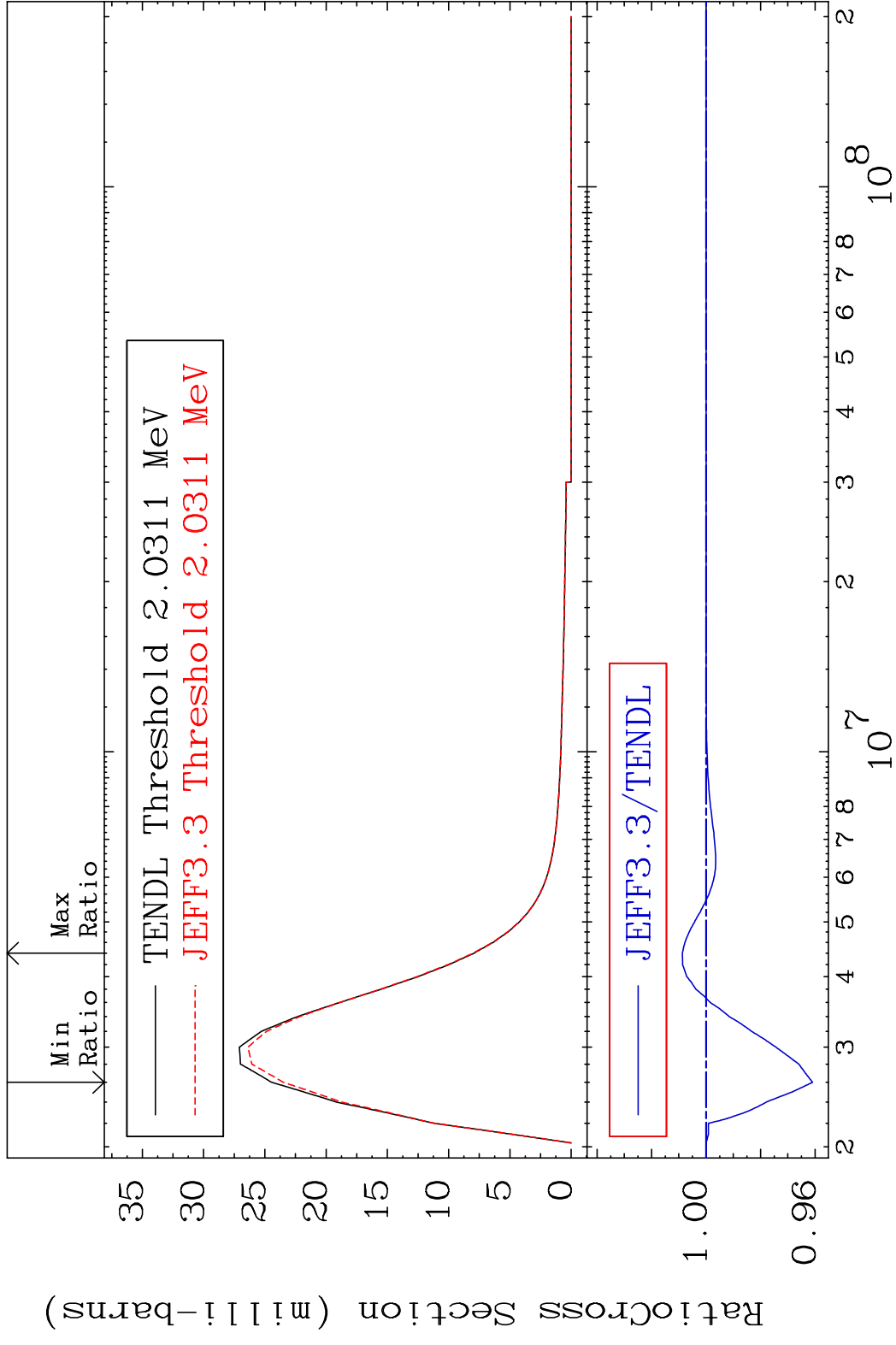
MAT 5425 MT= 63 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.000 %



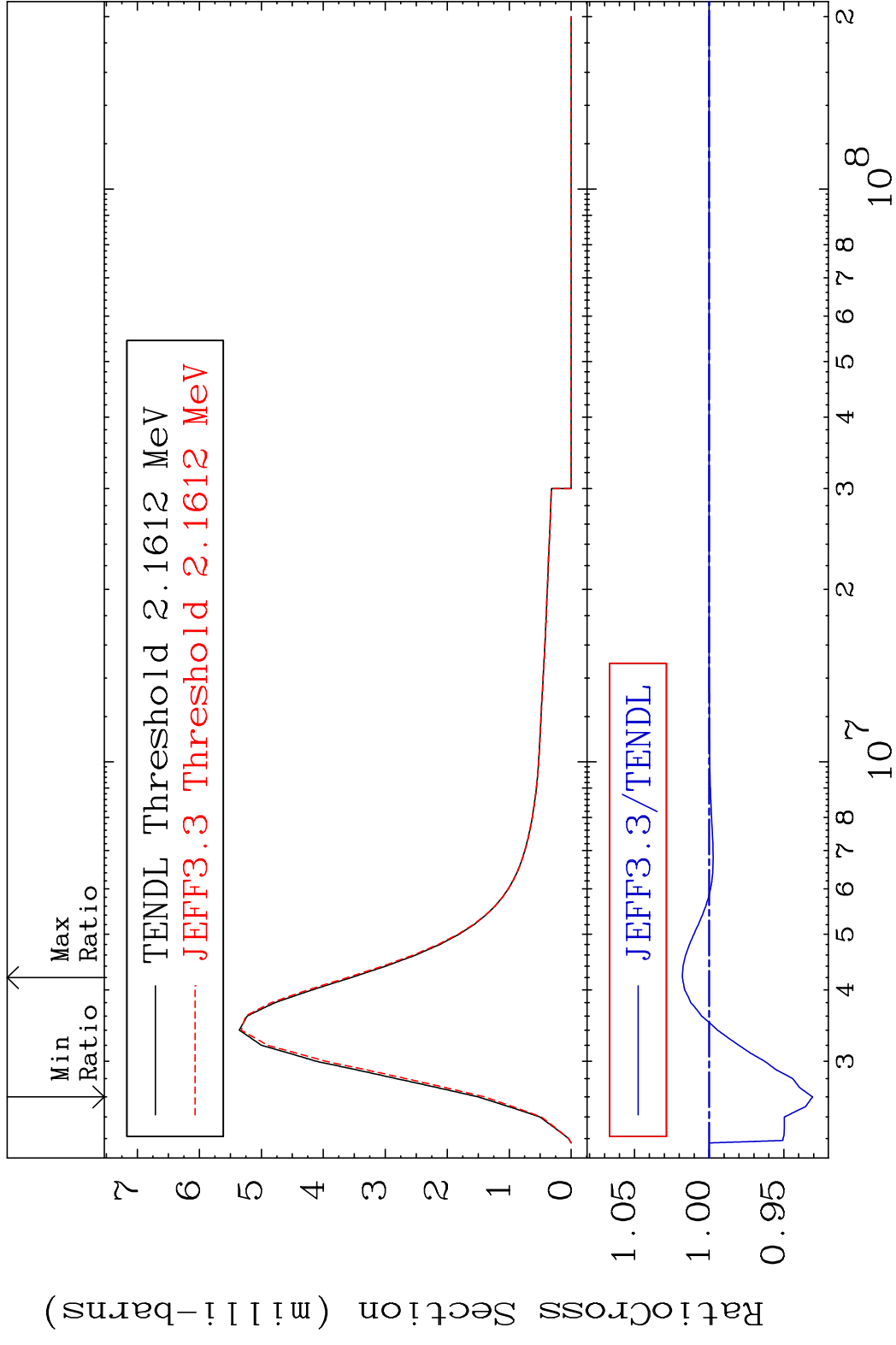
MAT 5425 MT= 64 (n, n') Level 54-Xe-124
 Cross Section -58.42 To 23.03 %



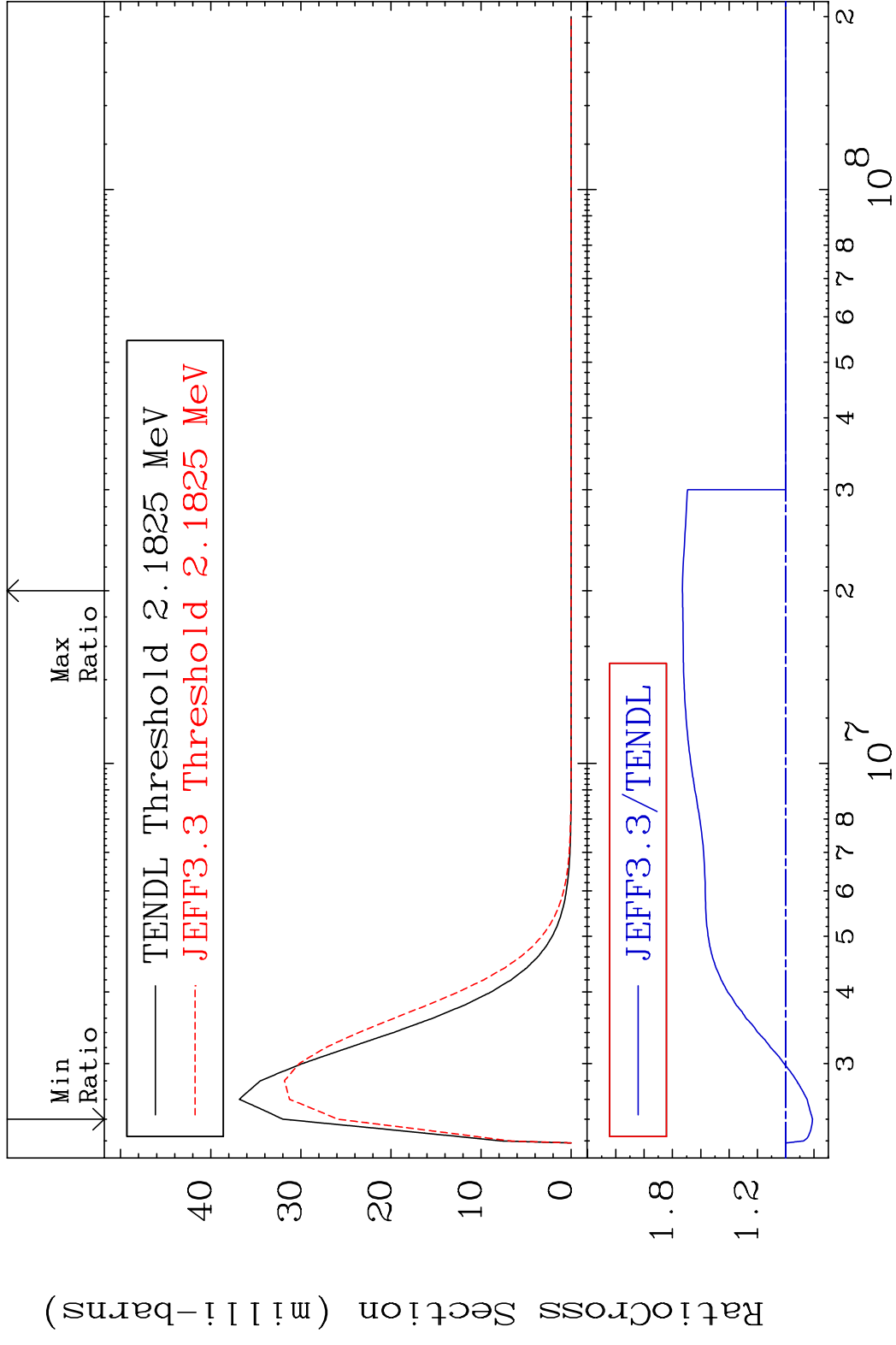
MAT 5425 MT= 65 (n,n') Level 54-Xe-124
 Cross Section -3.907 To 0.871 %



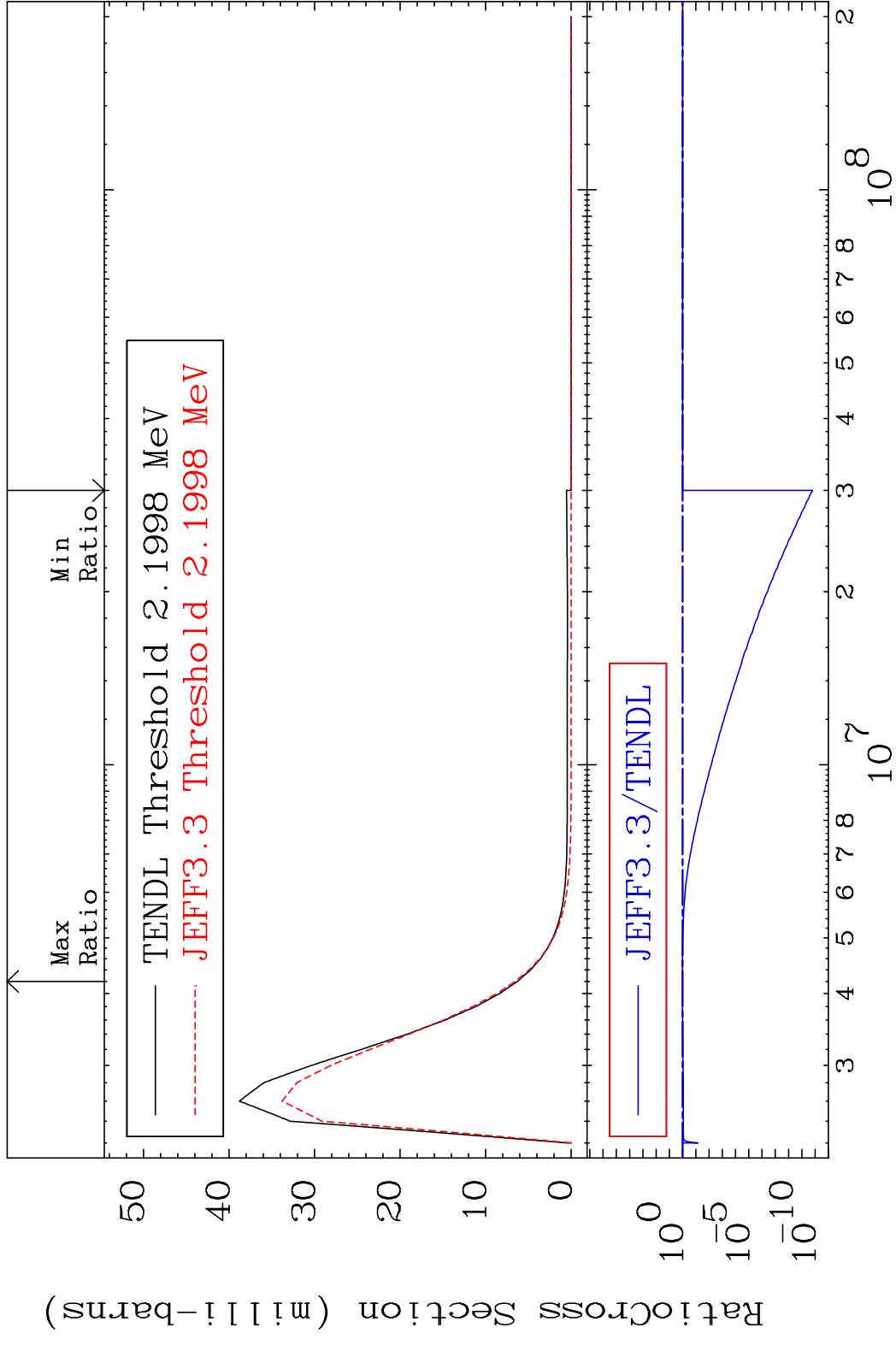
MAT 5425 MT= 66 (n, n') Level 54-Xe-124
 Cross Section -6.921 To 1.793 %



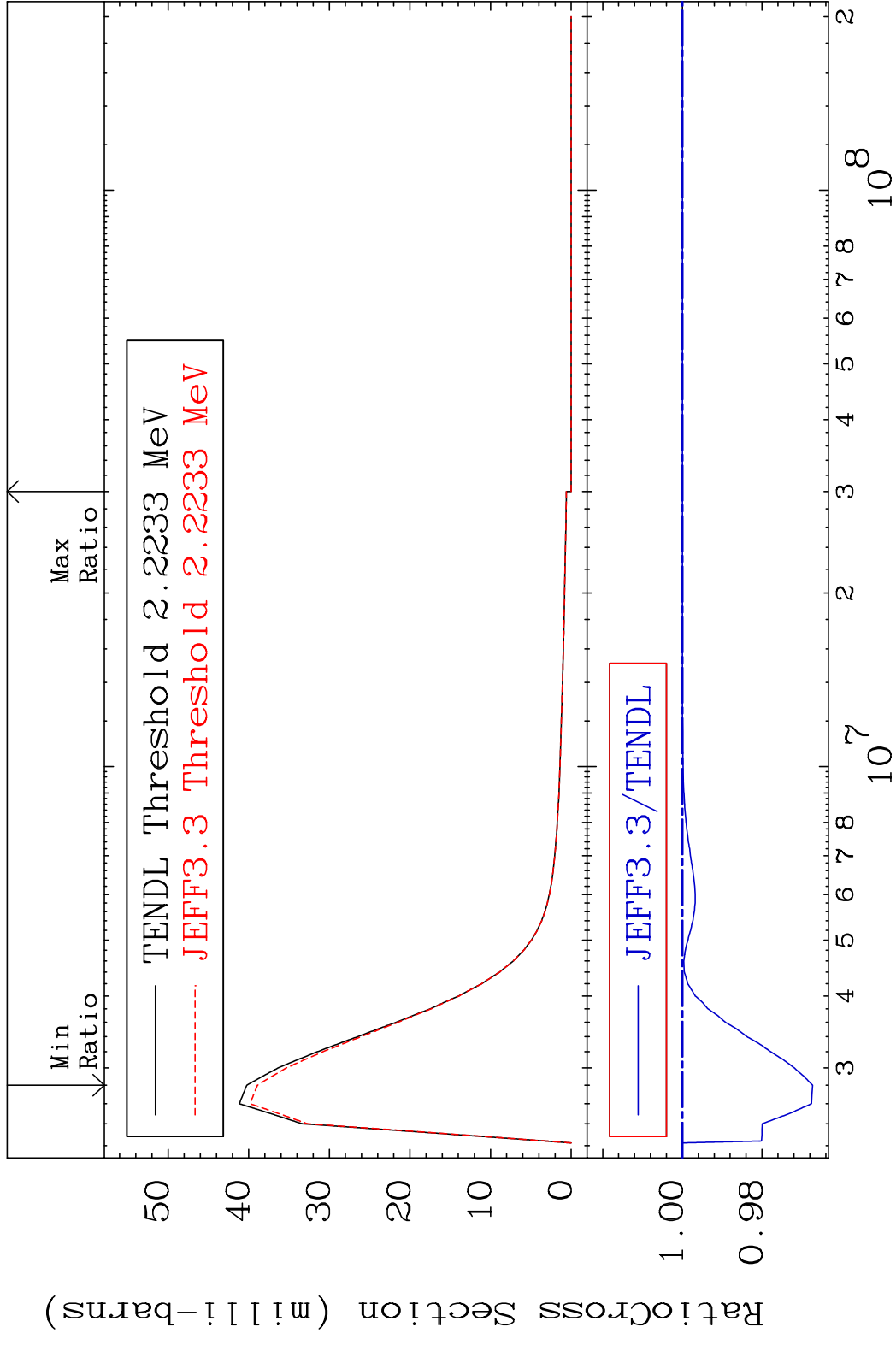
MAT 5425 MT= 67 (n, n') Level 54-Xe-124
 Cross Section -19.01 To 73.01 %



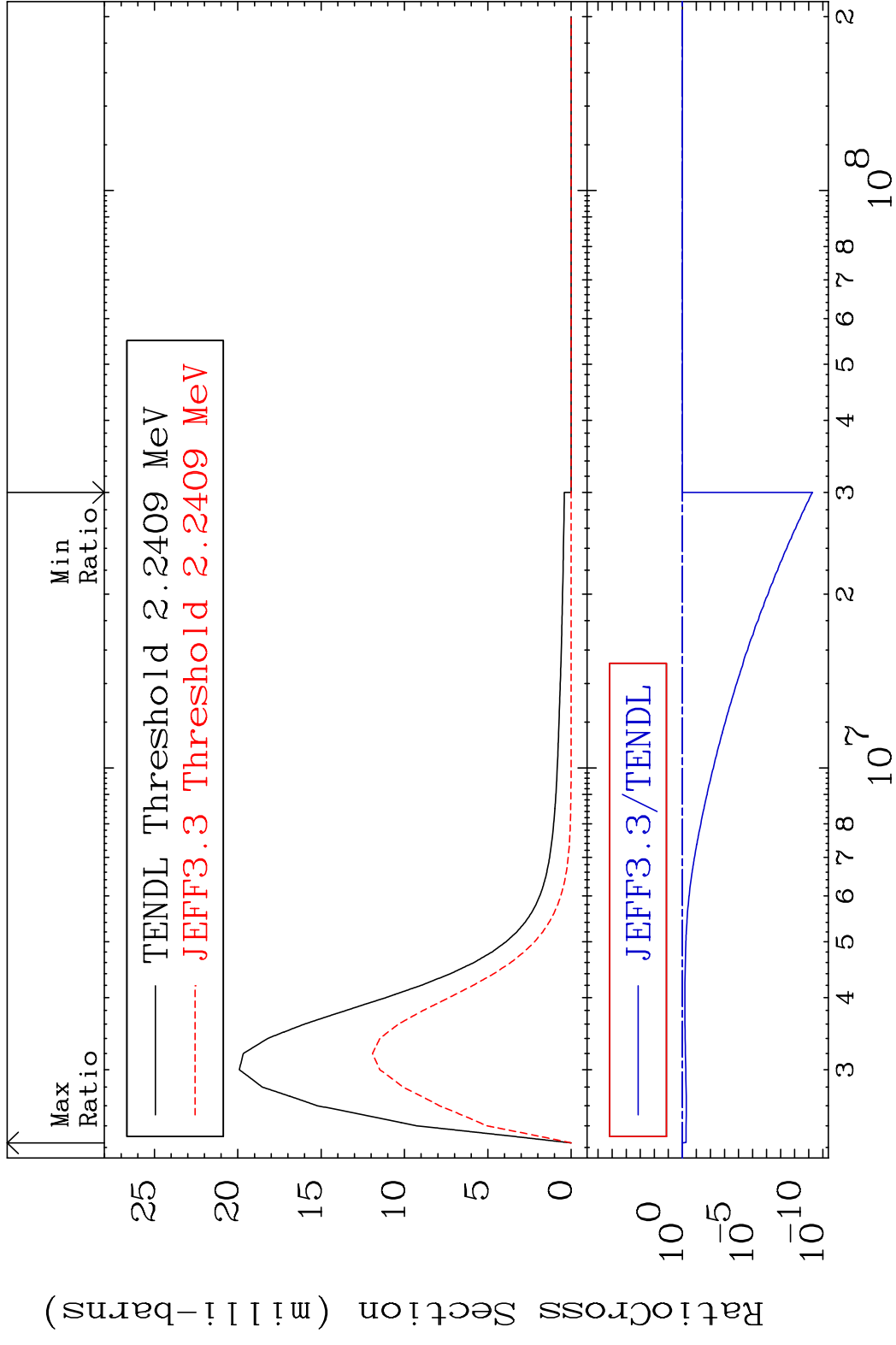
MAT 5425 MT= 68 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 4.249 %



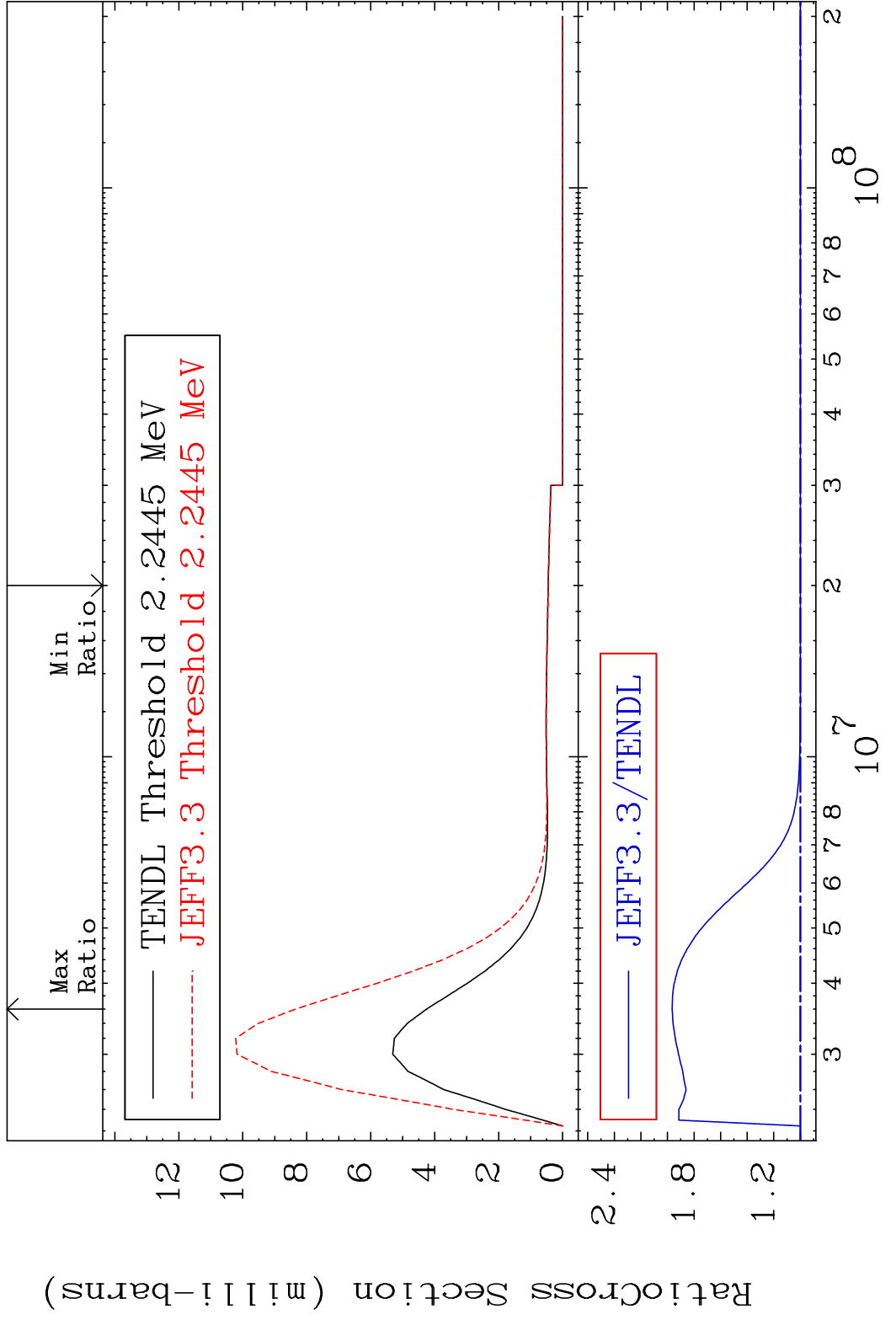
MAT 5425 MT= 69 (n, n') Level 54-Xe-124
 Cross Section -3.269 To 0.000 %



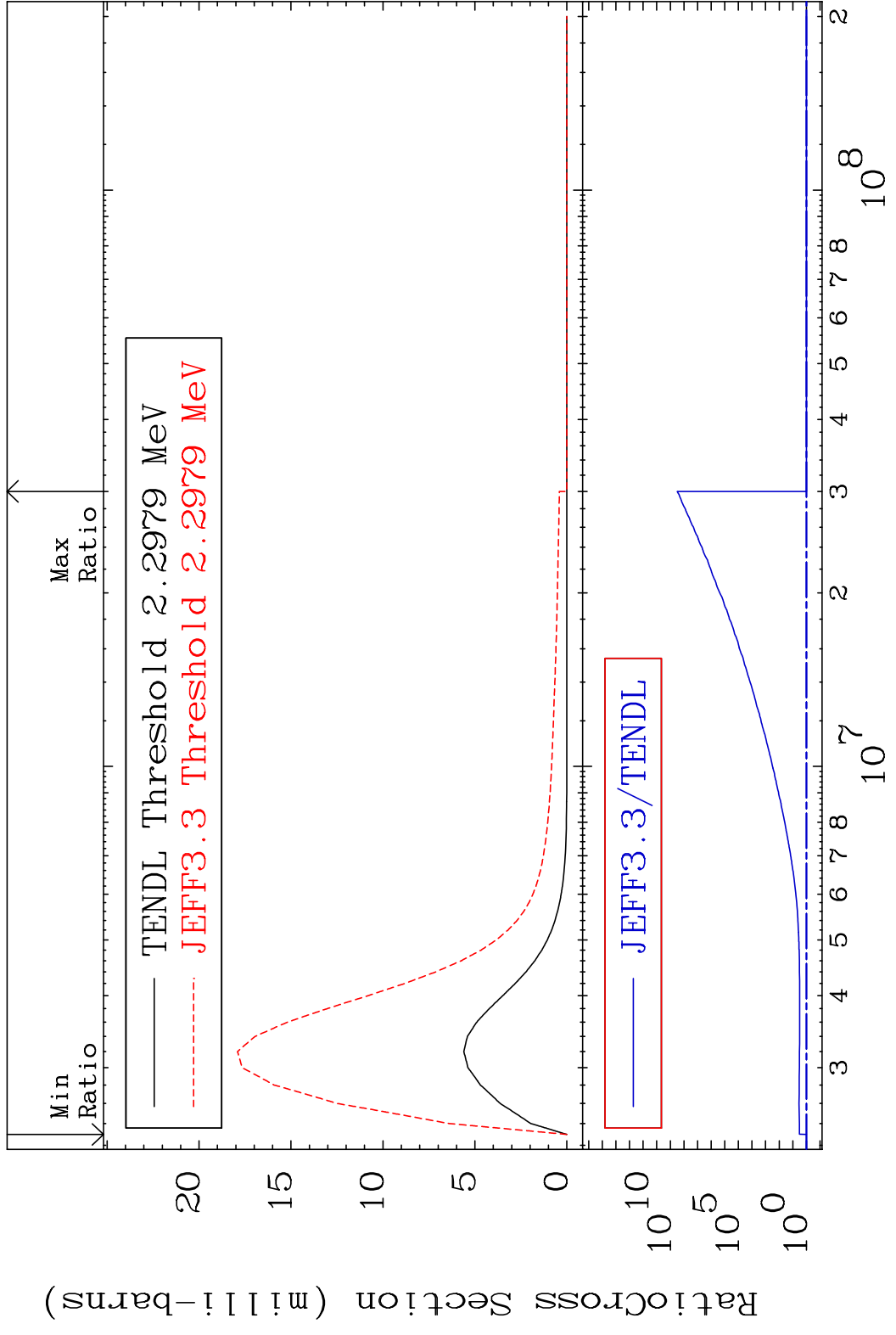
MAT 5425 MT= 70 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 0.000 %



MAT 5425 MT= 71 (n, n') Level 54-Xe-124
 Cross Section 0.000 To 96.52 %

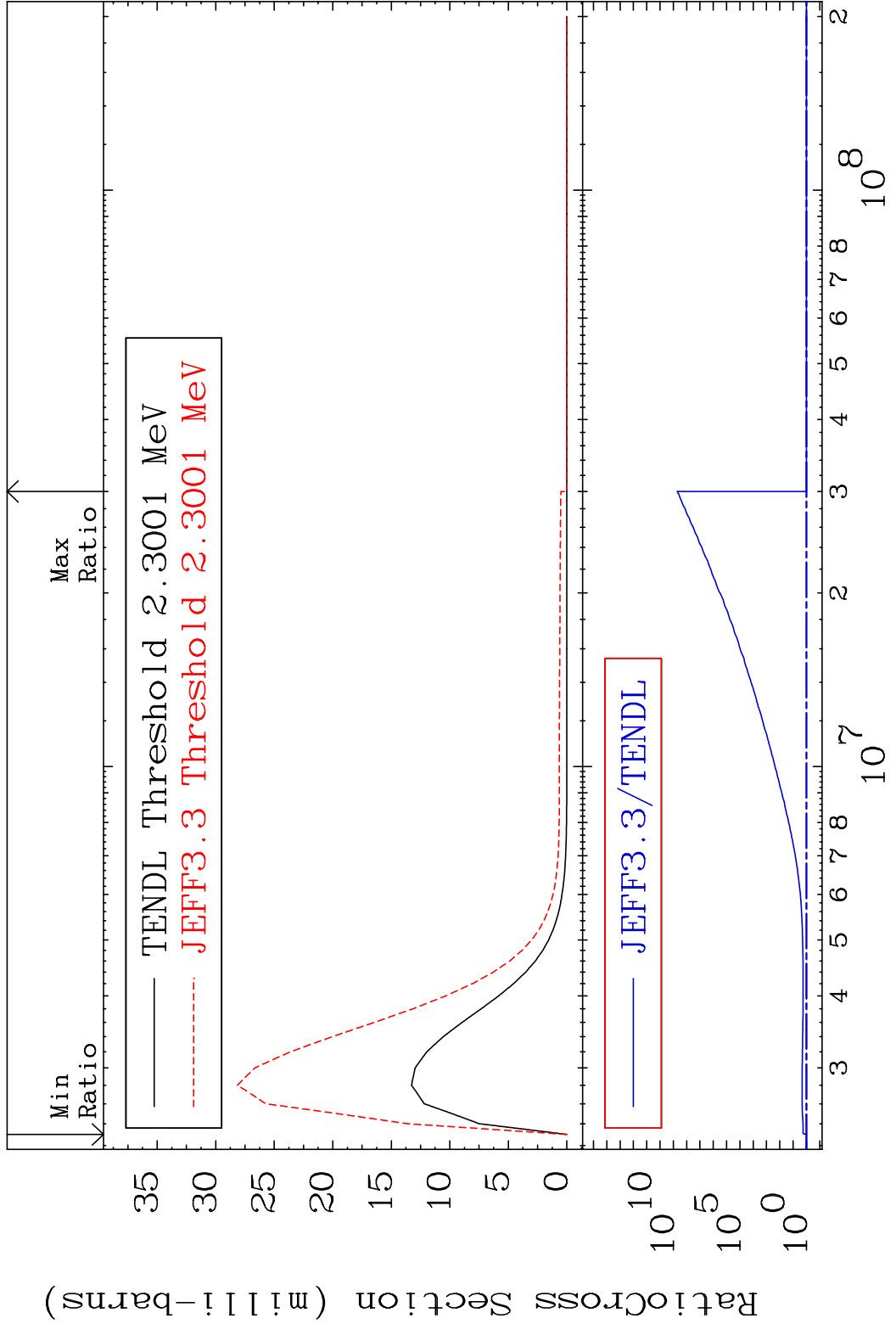


MAT 5425 MT= 72 (n, n') Level 54-Xe-124
 Cross Section 0.000 To 9999. %

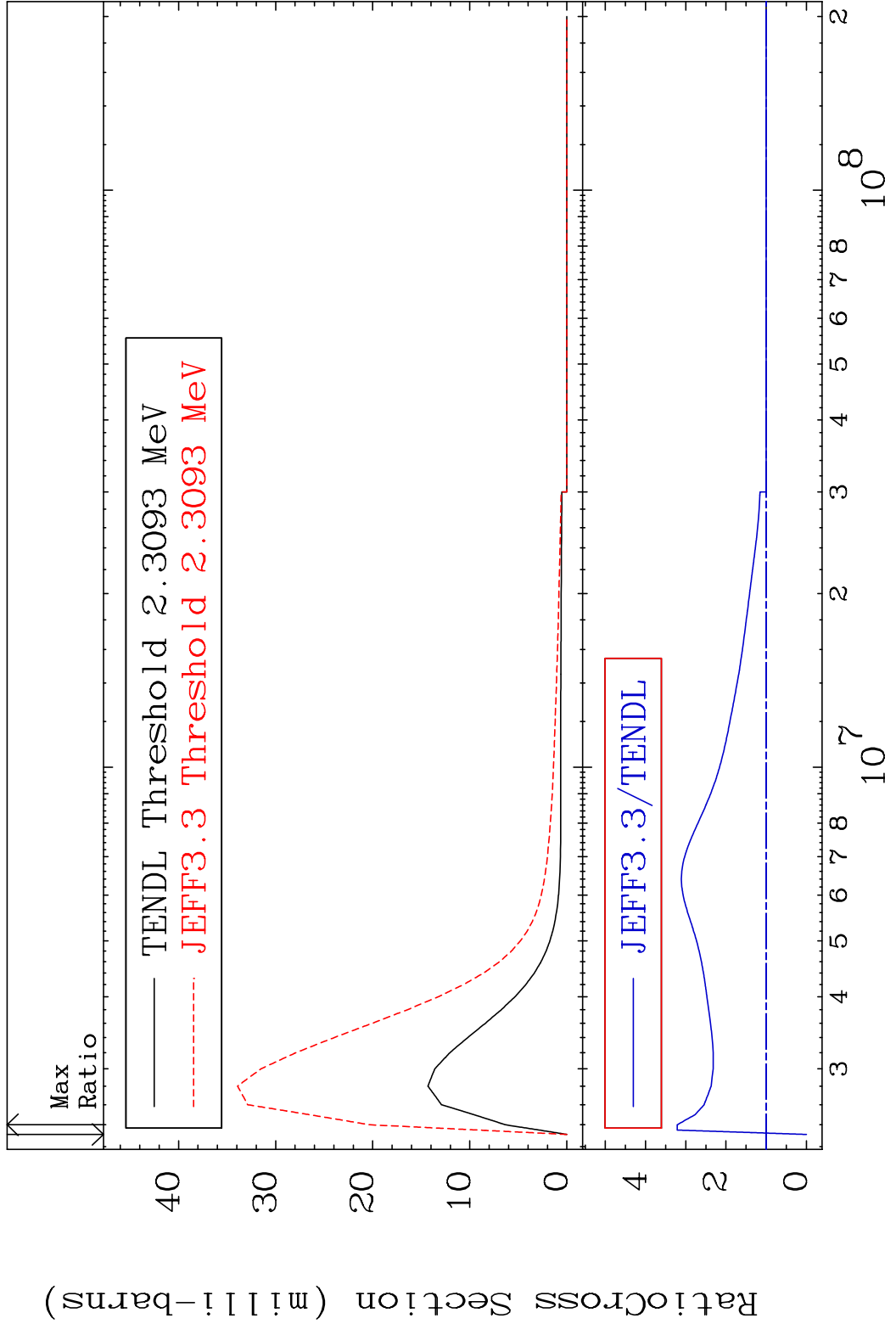


40 Incident Energy (eV) 54-Xe-124

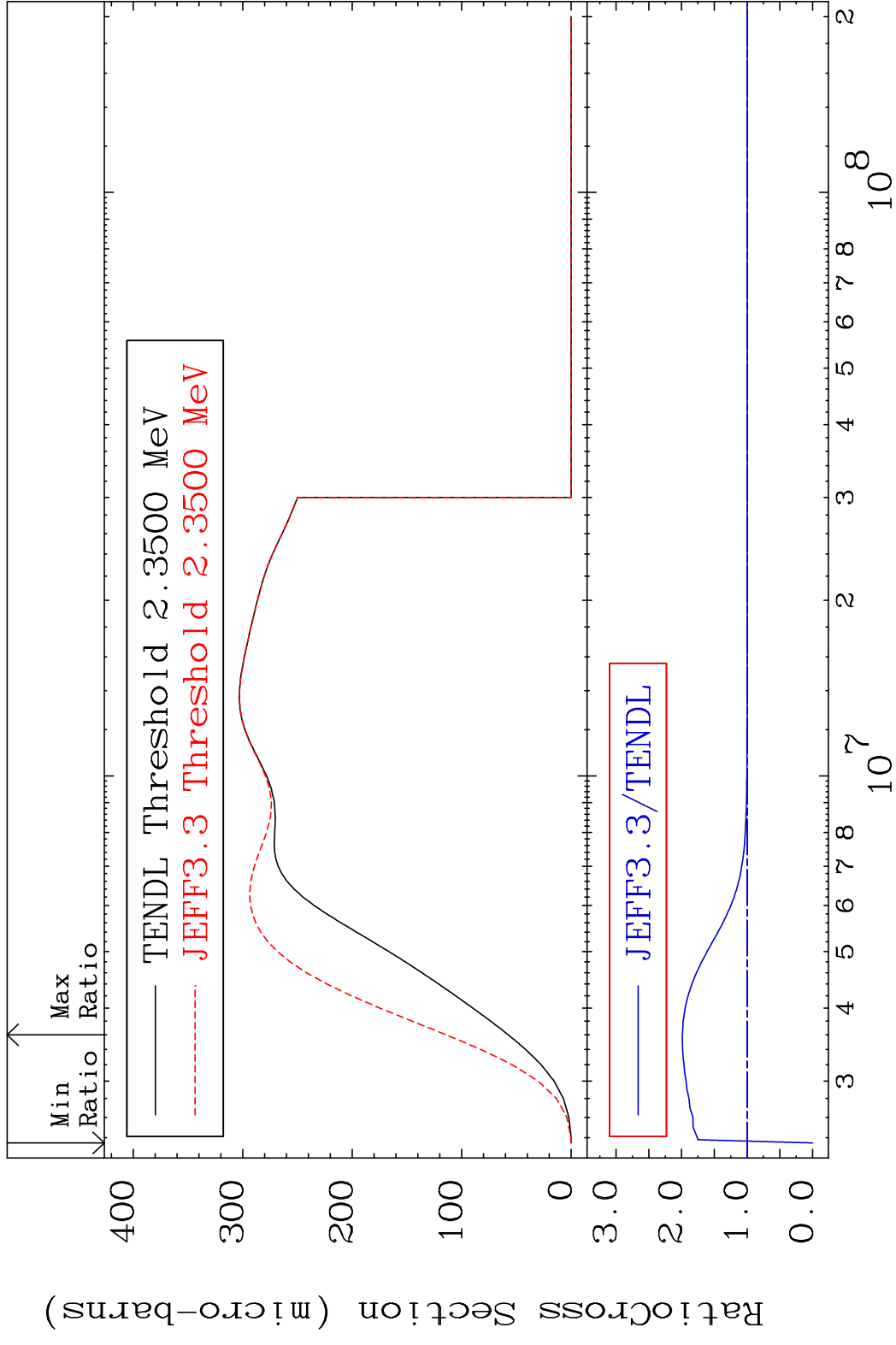
MAT 5425 MT= 73 (n, n') Level 54-Xe-124
 Cross Section 0.000 To 9999. %



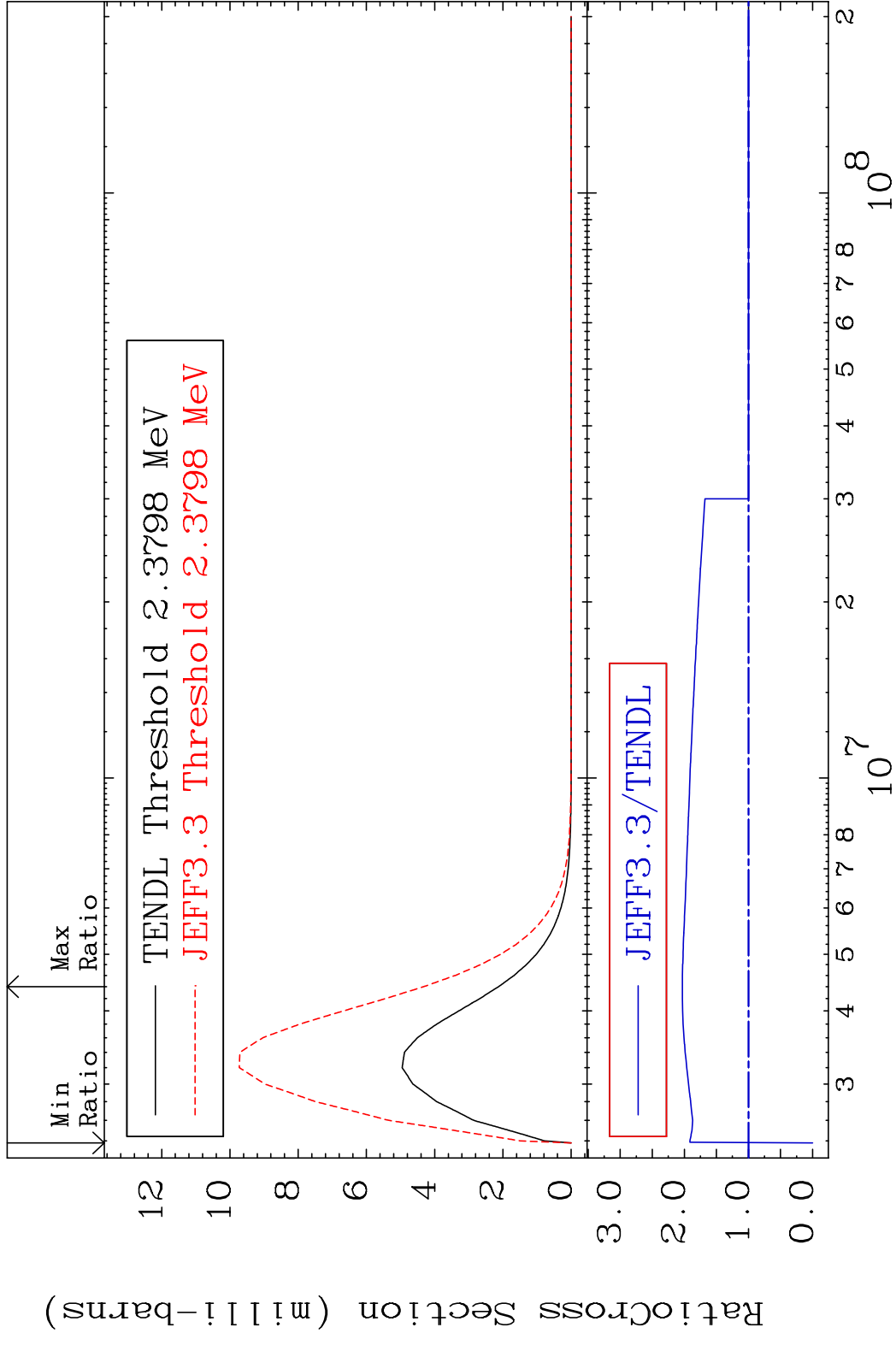
MAT 5425 MT= 74 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 221.4 %



MAT 5425 MT= 75 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 98.83 %



MAT 5425 MT= 76 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 103.1 %

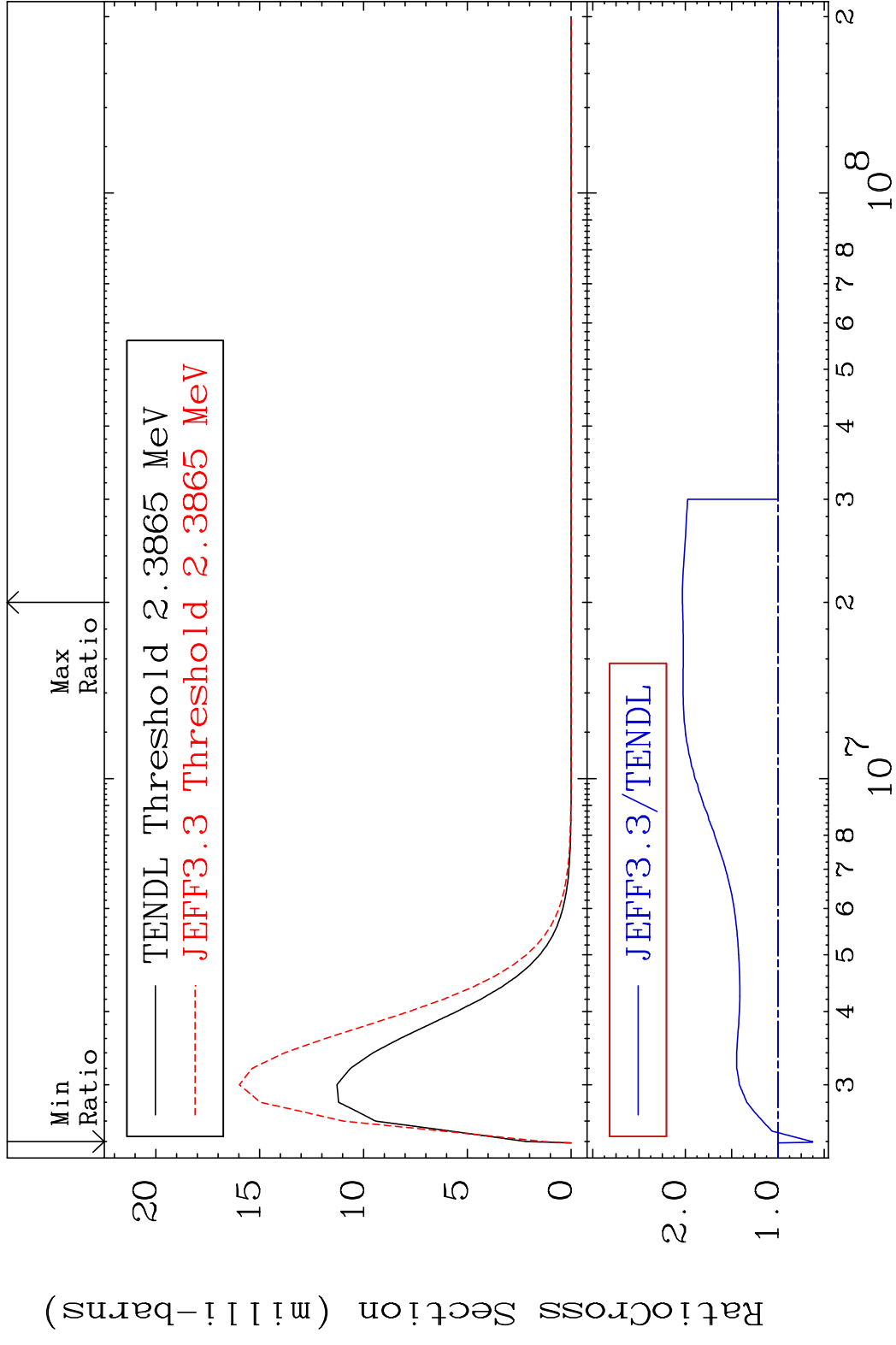


MAT 5425

MT= 77 (n, n') Level

54-Xe-124

Cross Section -37.30 To 103.3 %

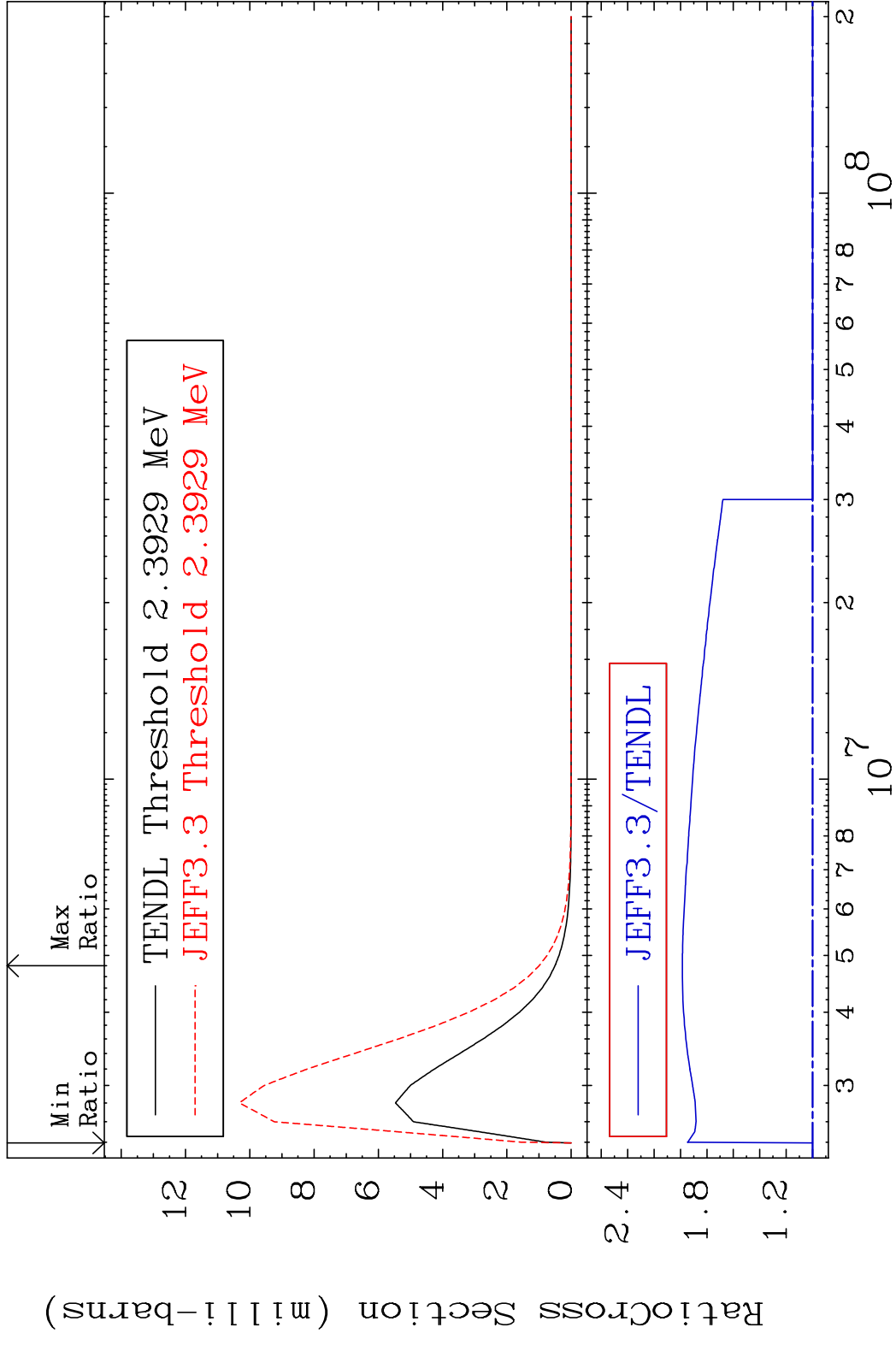


45

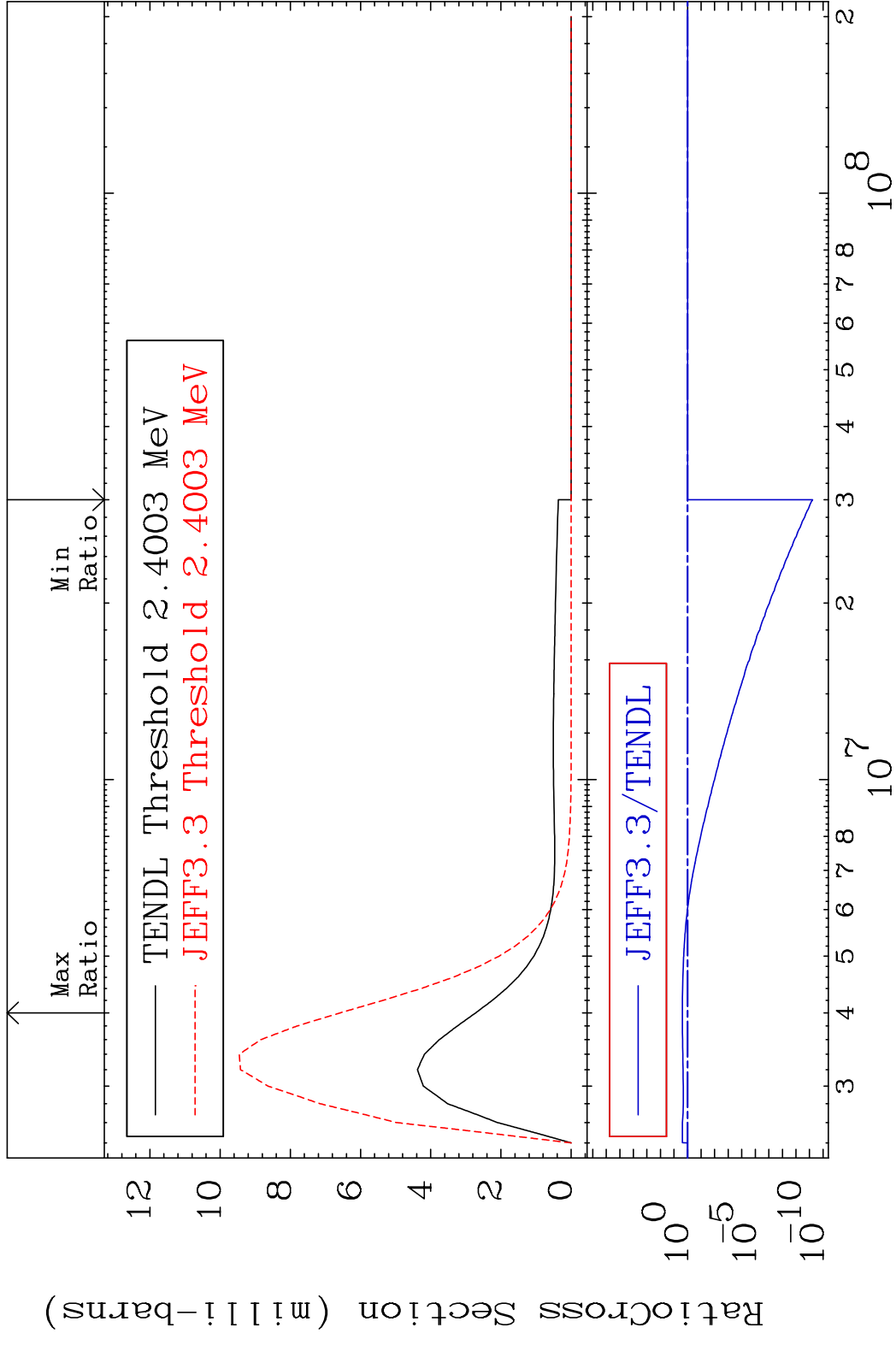
Incident Energy (eV)

54-Xe-124

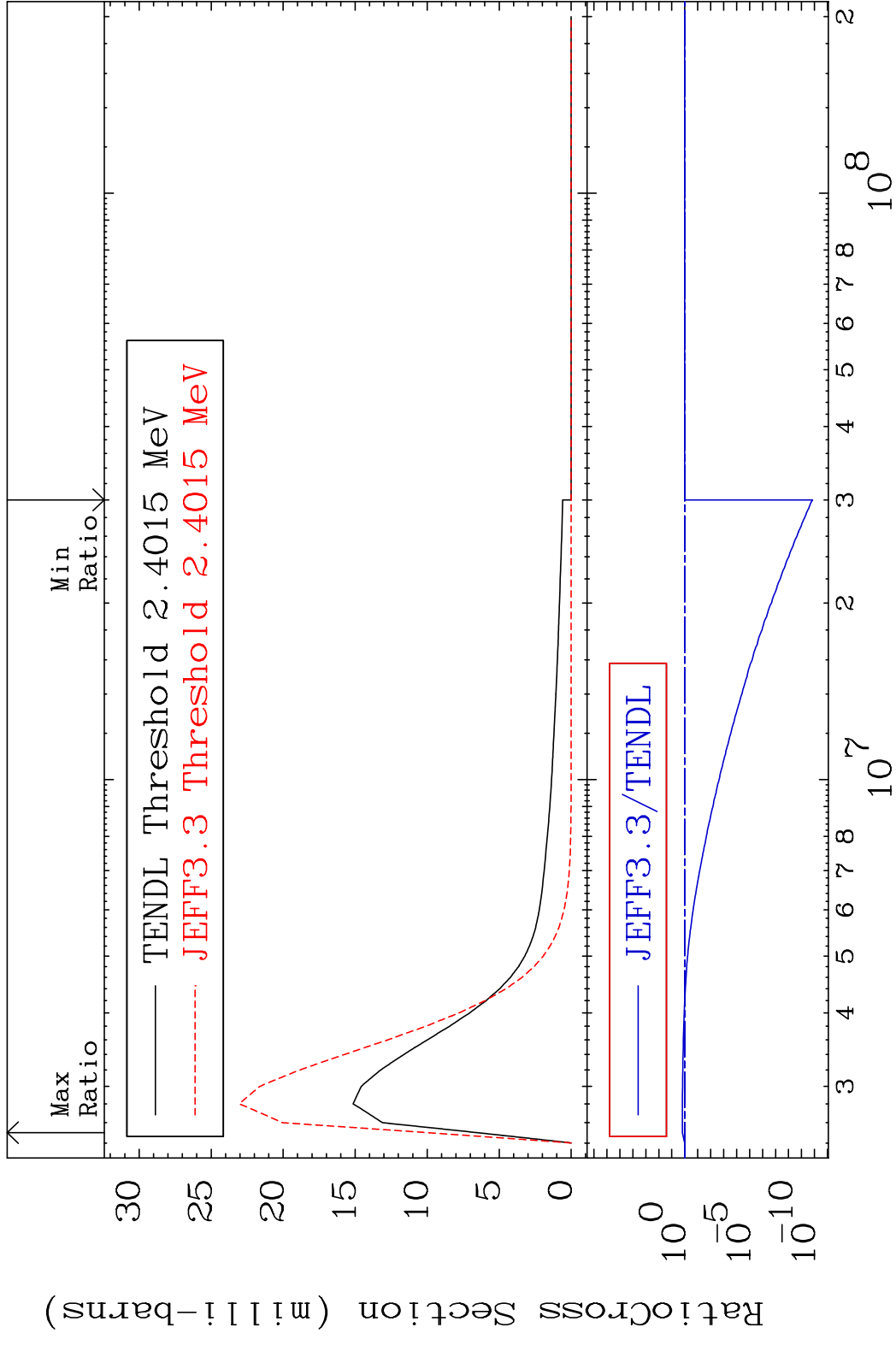
MAT 5425 MT= 78 (n, n') Level 54-Xe-124
 Cross Section 0.000 To 98.61 %



MAT 5425 MT= 79 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 141.9 %



MAT 5425 MT= 80 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 52.99 %

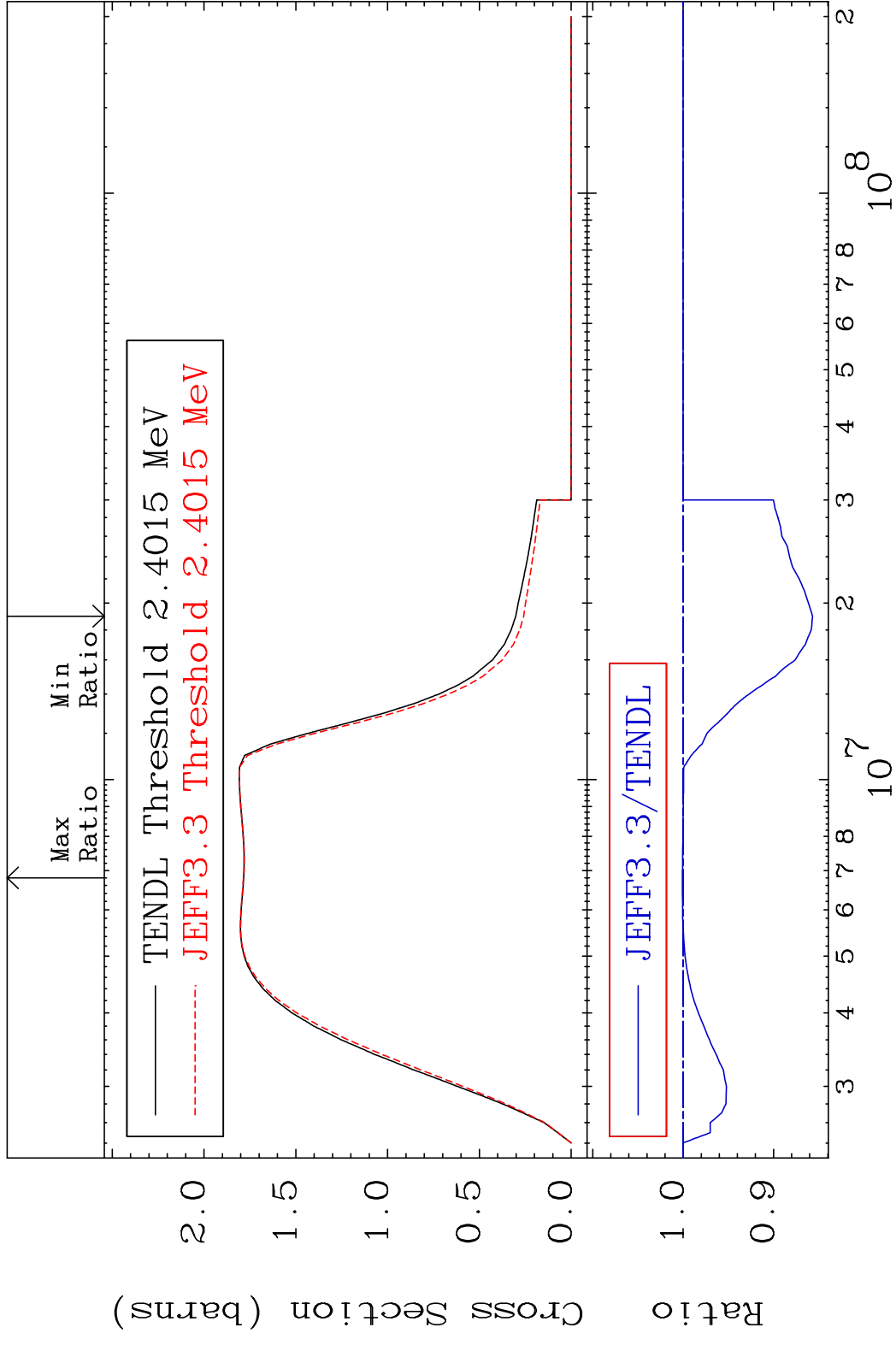


MAT 5425

(n, n') Continuum

54-Xe-124

Cross Section -14.31 To 0.087 %

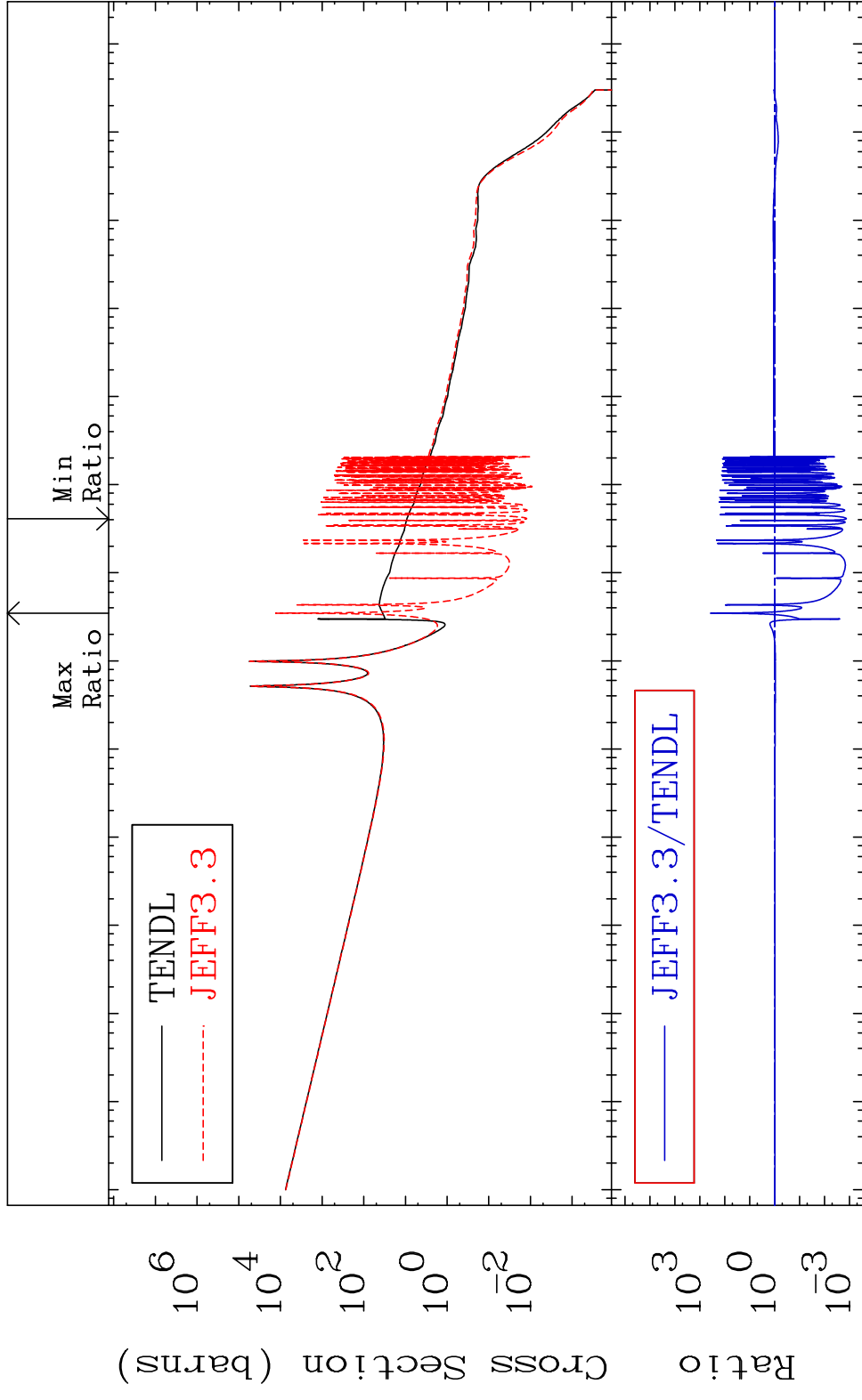


MAT 5425

54-Xe-124

(n, γ)

Cross Section -99.87 To 9999. %



50

Incident Energy (eV)

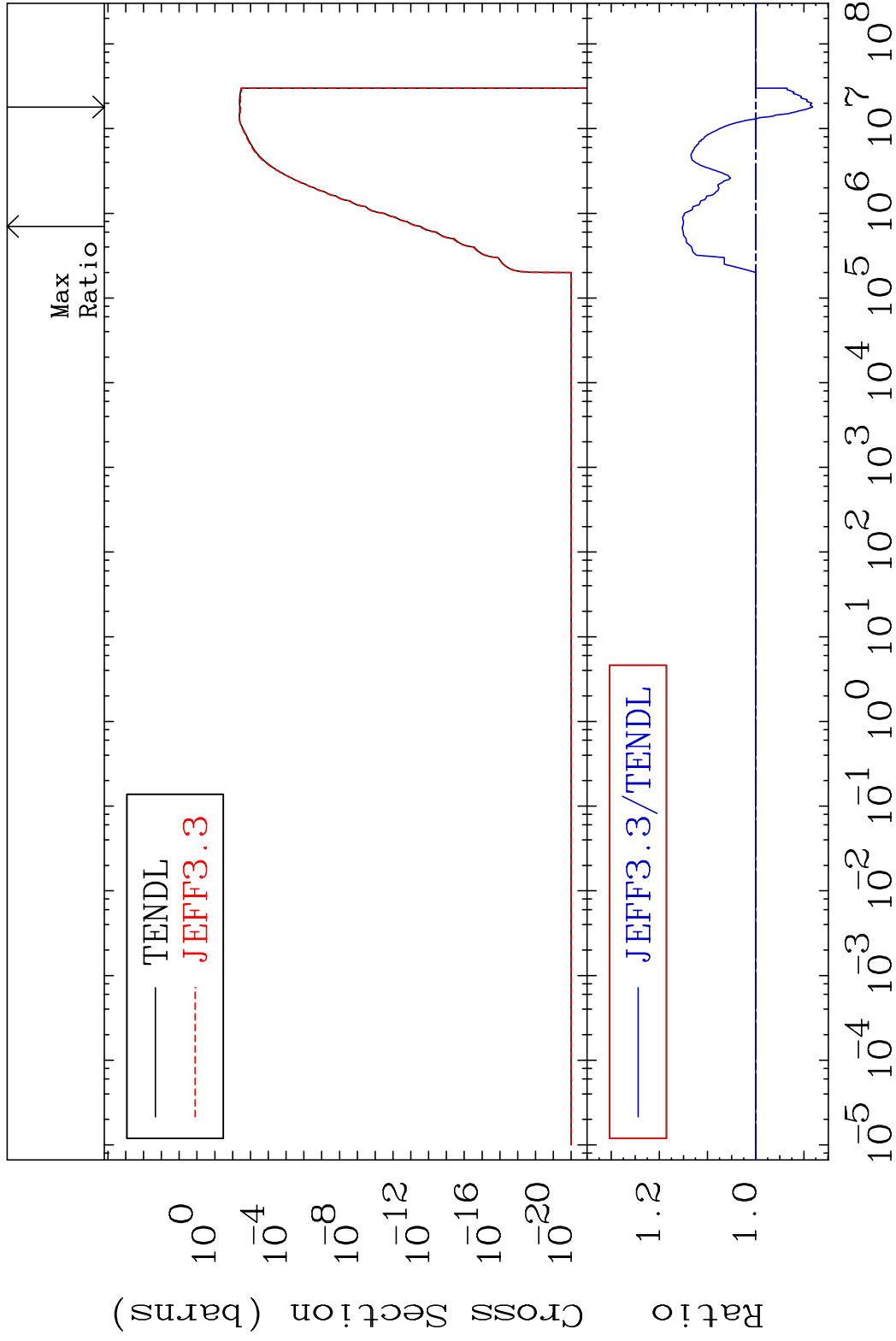
54-Xe-124

MAT 5425

(n, p)

54-Xe-124

Cross Section -11.81 To 15.22 %



51

Incident Energy (eV)

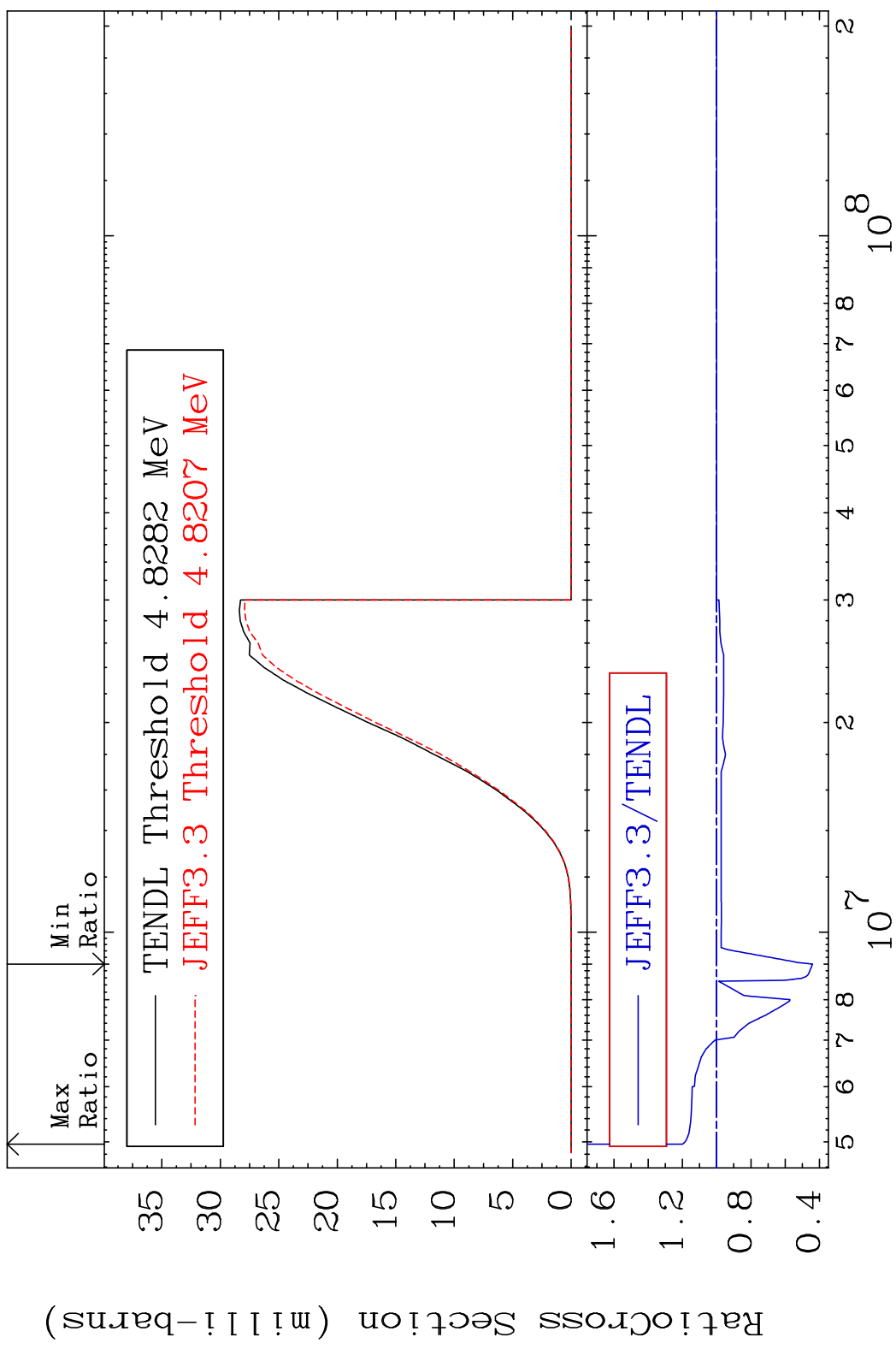
54-Xe-124

MAT 5425

(n, d)

54-Xe-124

Cross Section -56.01 To 20.06 %

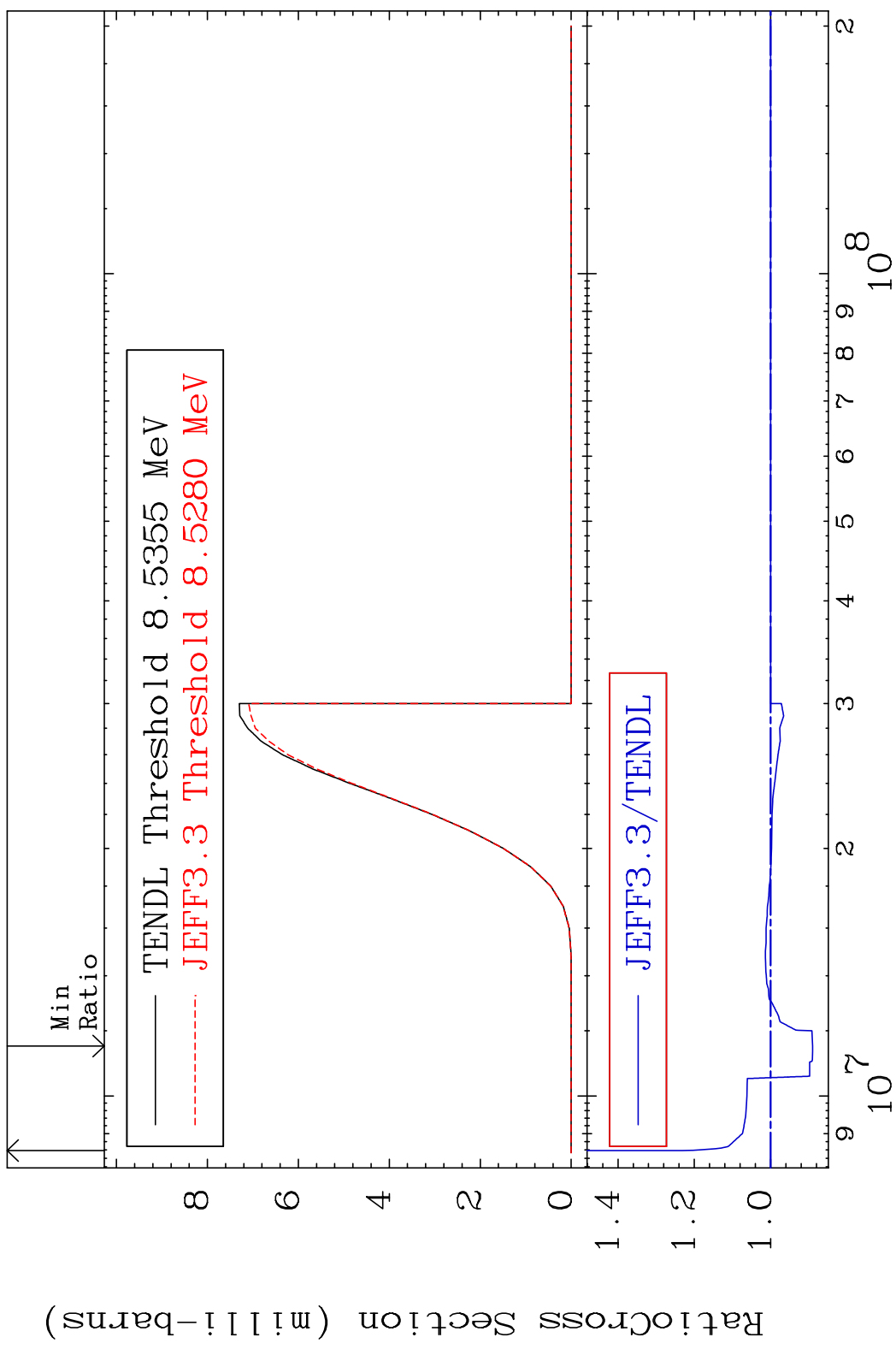


MAT 5425

(n, t)

54-Xe-124

Cross Section -10.98 To 23.13 %

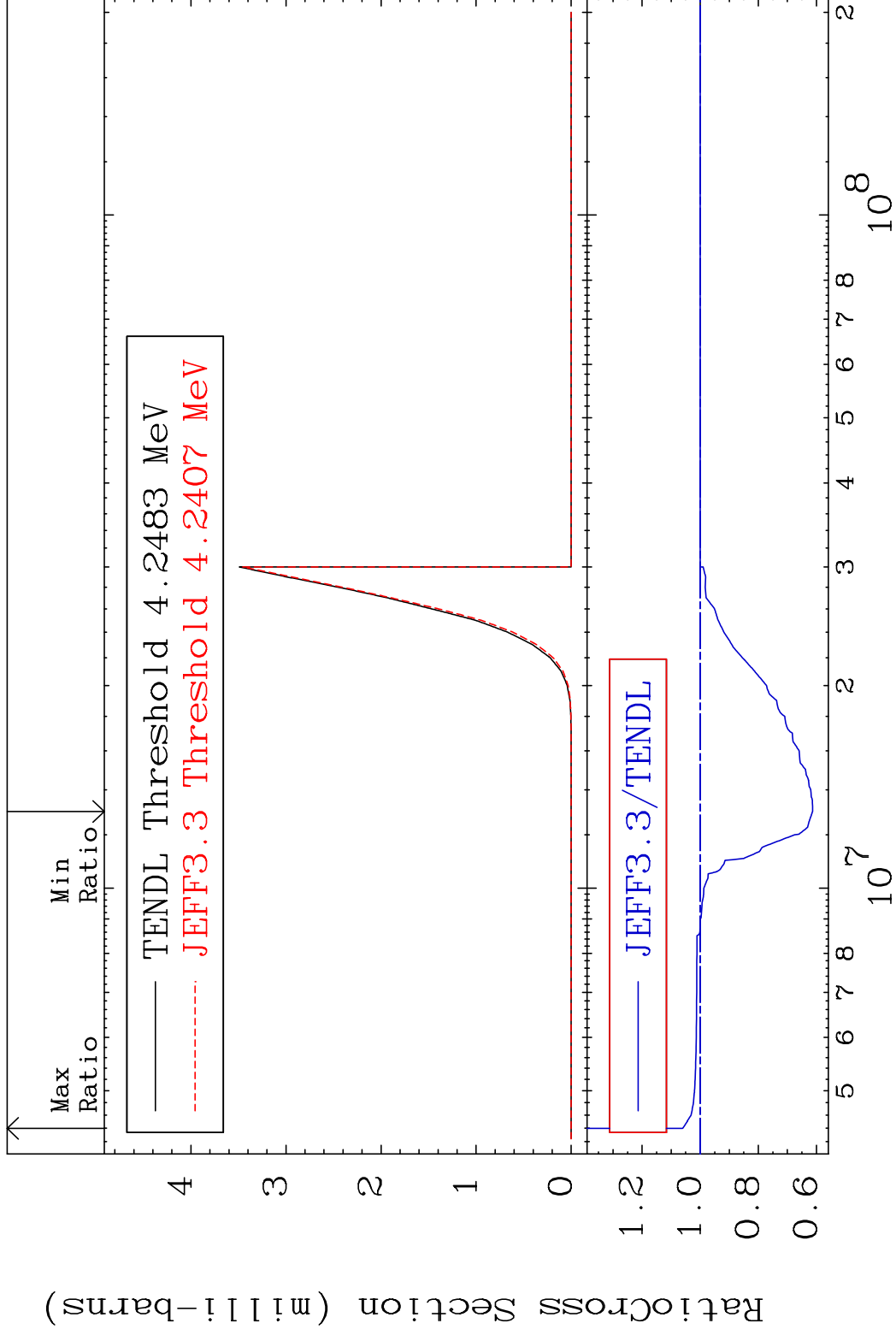


MAT 5425

(n, He-3)

54-Xe-124

Cross Section -38.67 To 6.149 %



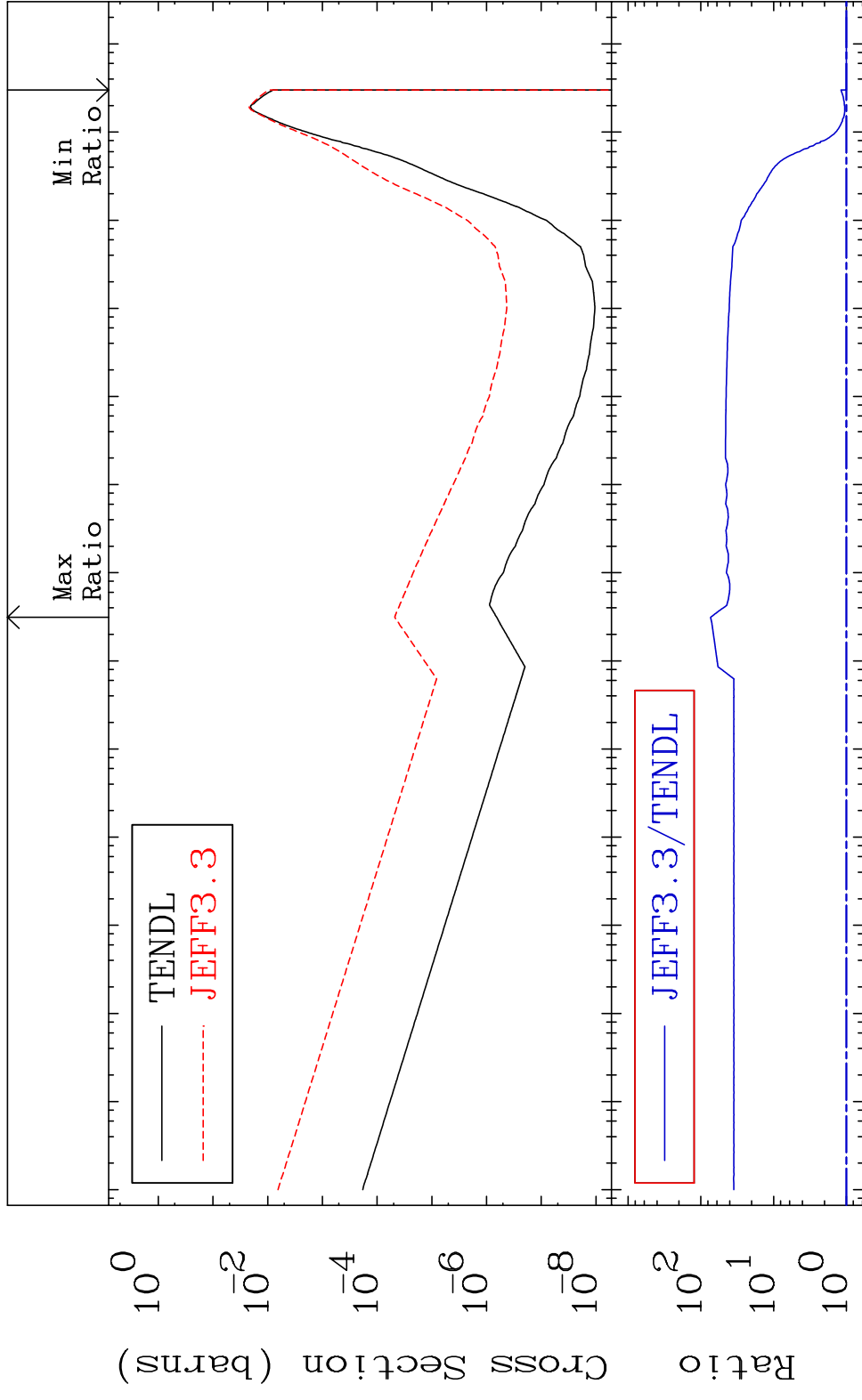
54

Incident Energy (eV)

54-Xe-124

MAT 5425

(n, α)
Cross Section 0.000 To 7214. %
54-Xe-124

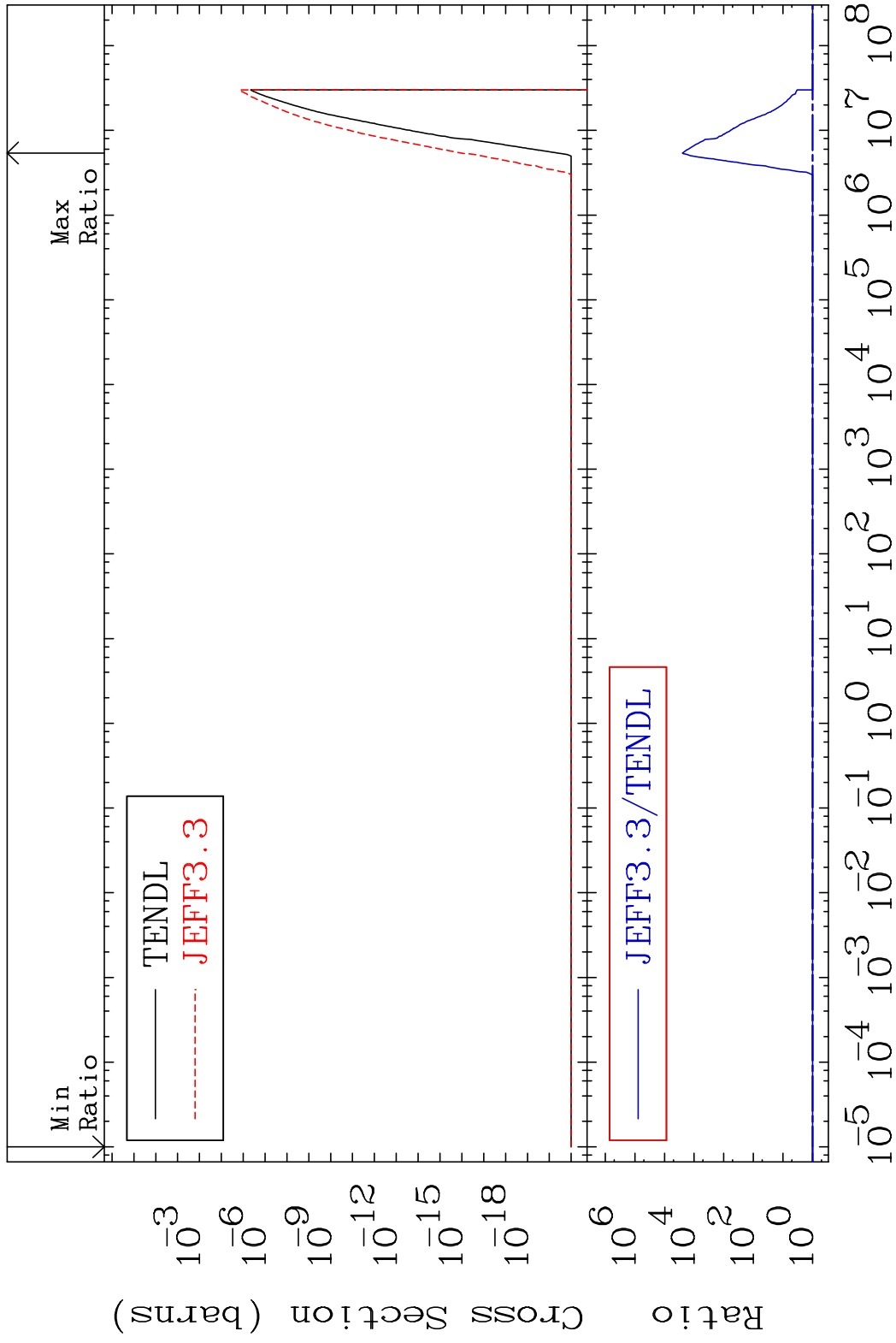


MAT 5425

(n,2α)

54-Xe-124

Cross Section 0.000 To 9999. %



56

Incident Energy (eV)

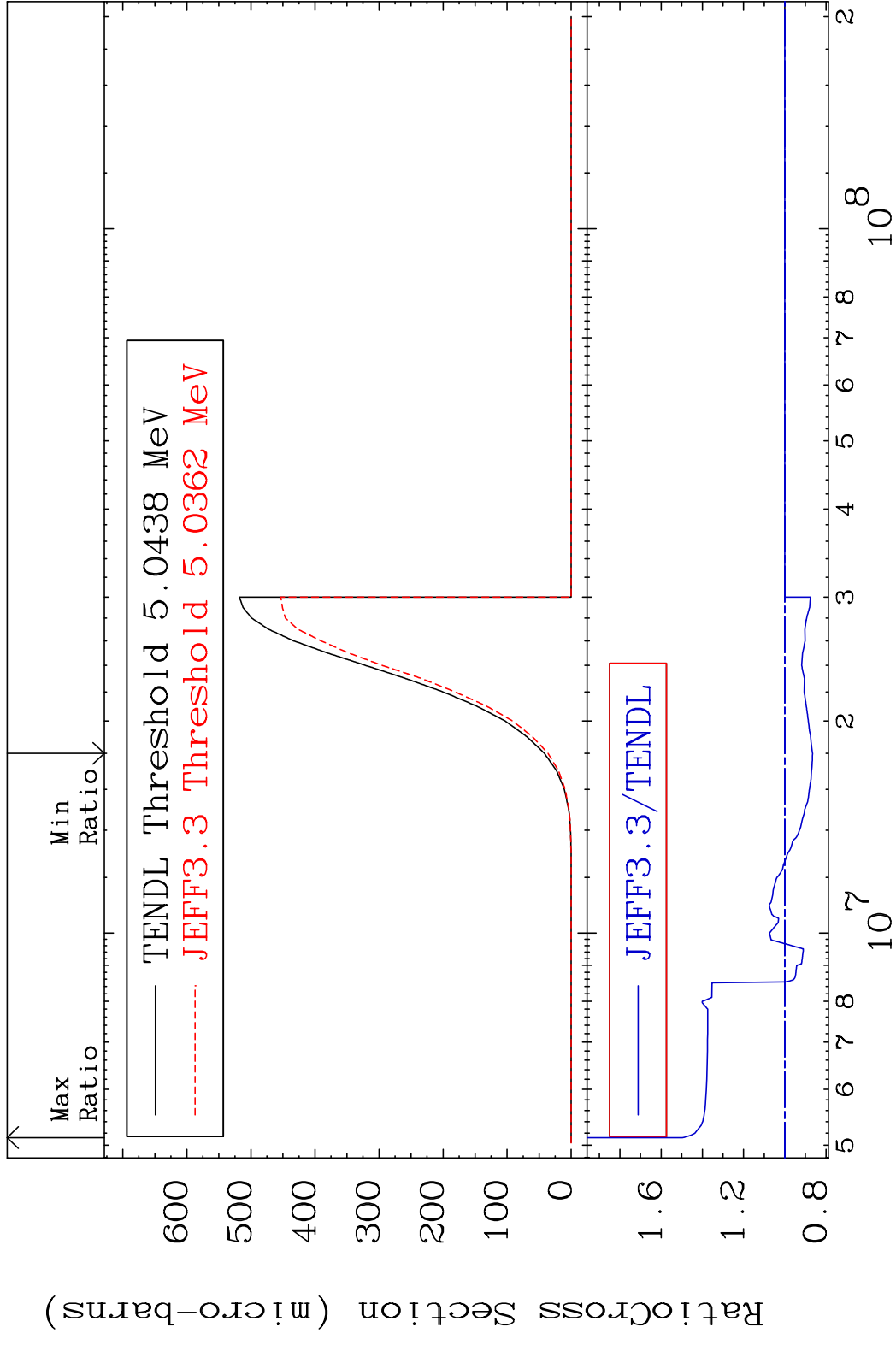
54-Xe-124

MAT 5425

(n,2p)

54-Xe-124

Cross Section -13.47 To 49.70 %

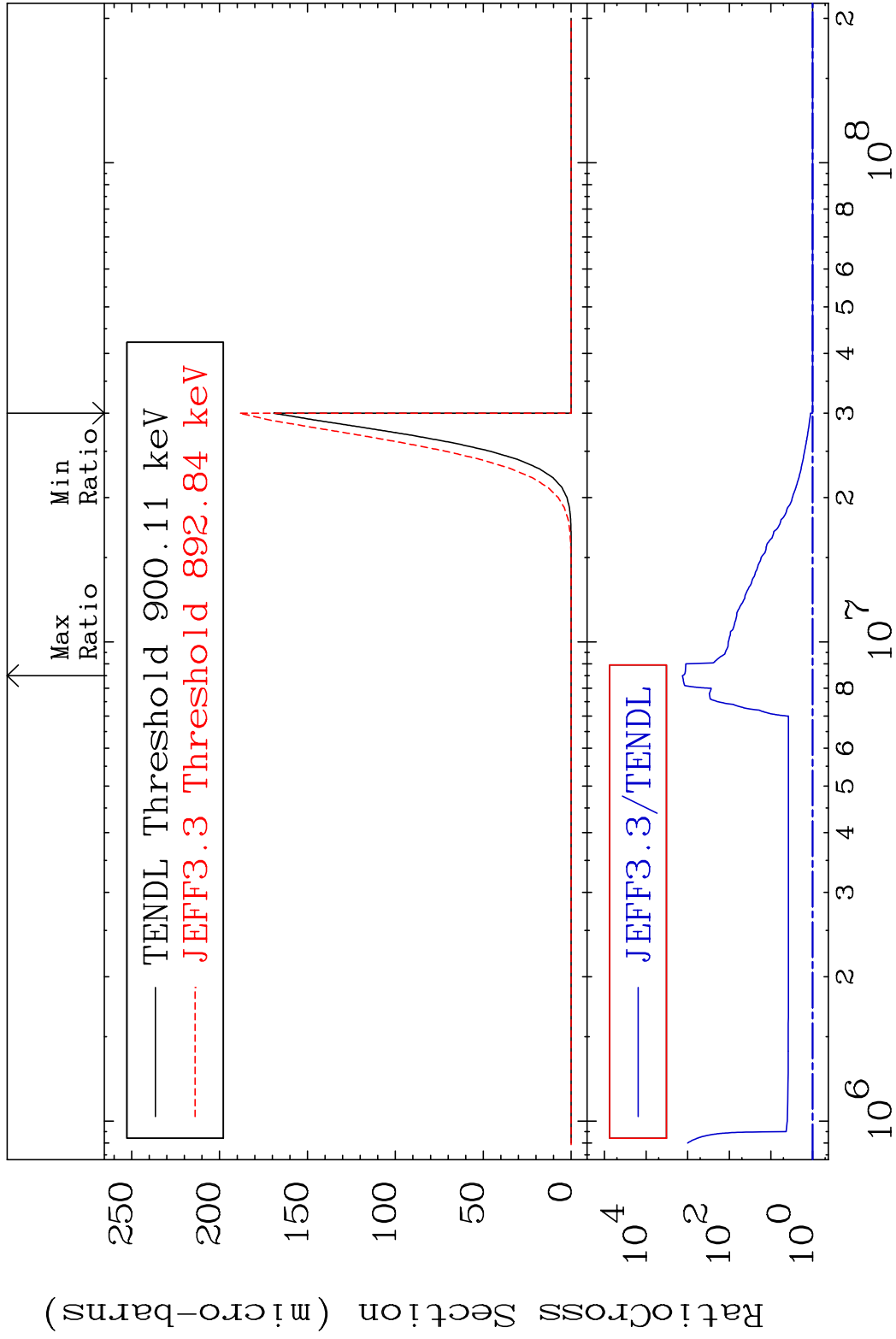


MAT 5425

(n,p) α

54-Xe-124

Cross Section 0.000 To 9999. %



58

Incident Energy (eV)

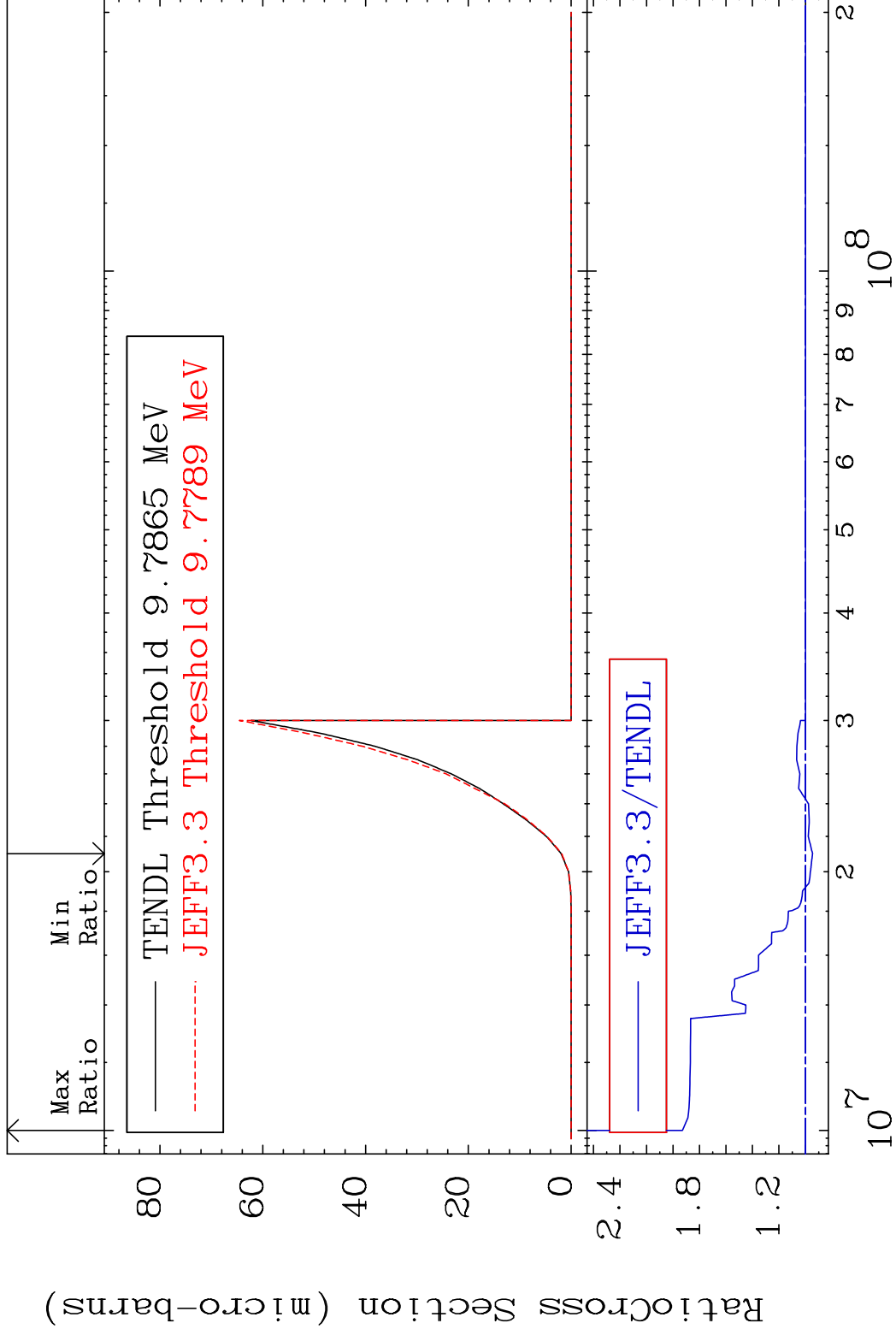
54-Xe-124

MAT 5425

(n,p) d

54-Xe-124

Cross Section -5.357 To 92.92 %



59

Incident Energy (eV)

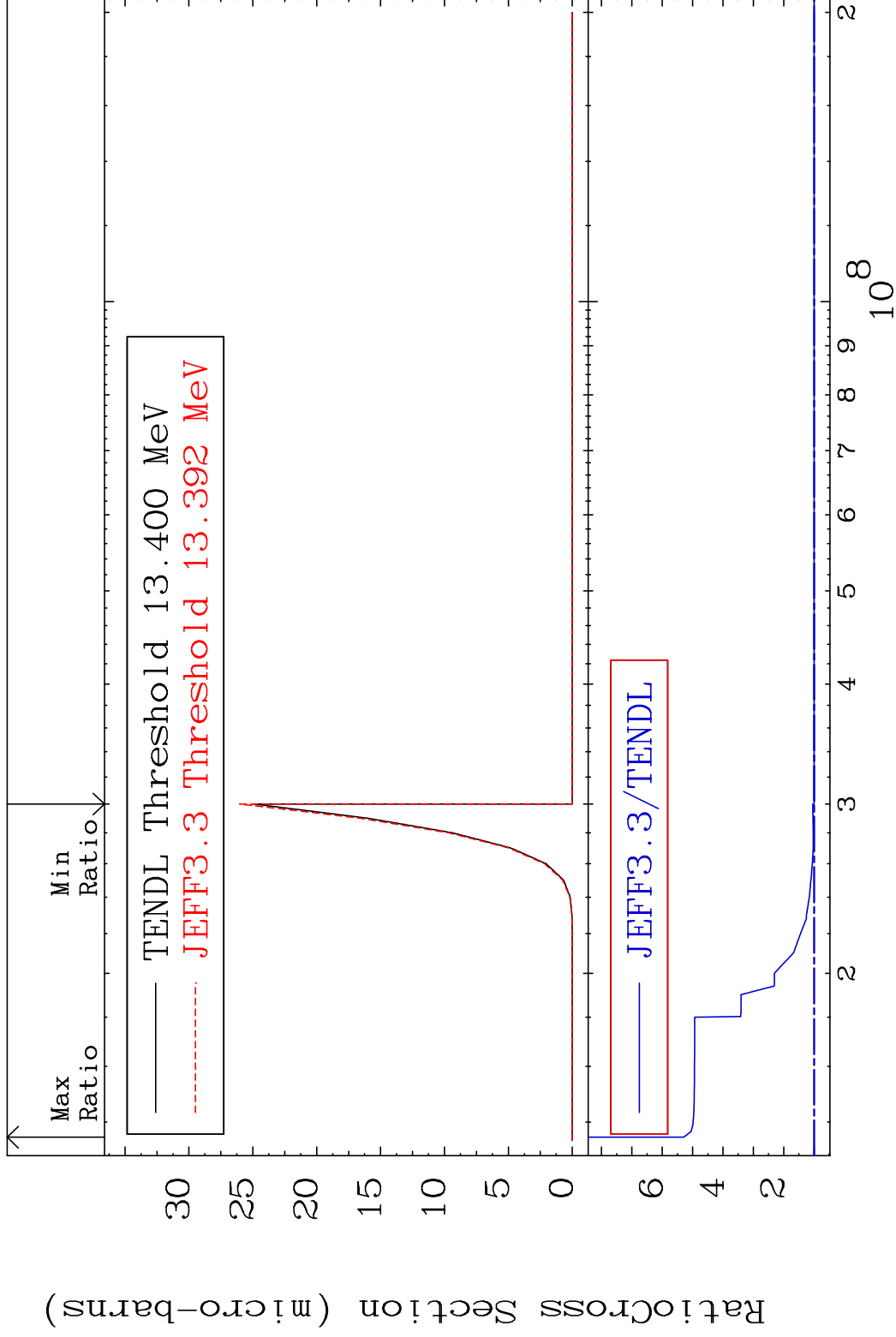
54-Xe-124

MAT 5425

(n,p) t

54-Xe-124

Cross Section 0.000 To 429.5 %



60

Incident Energy (eV)

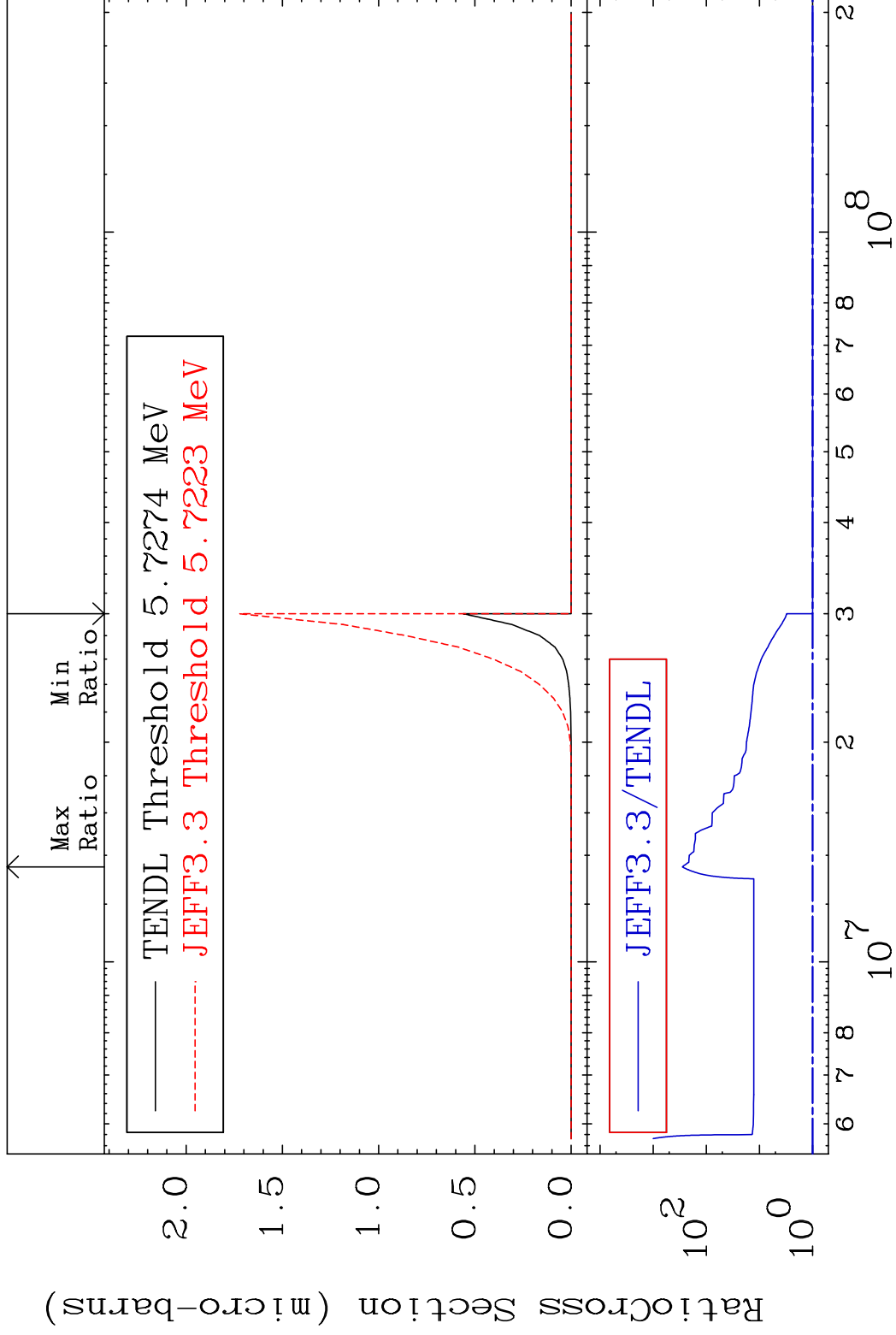
54-Xe-124

MAT 5425

(n,d) α

54-Xe-124

Cross Section 0.000 To 9999. %



61

Incident Energy (eV)

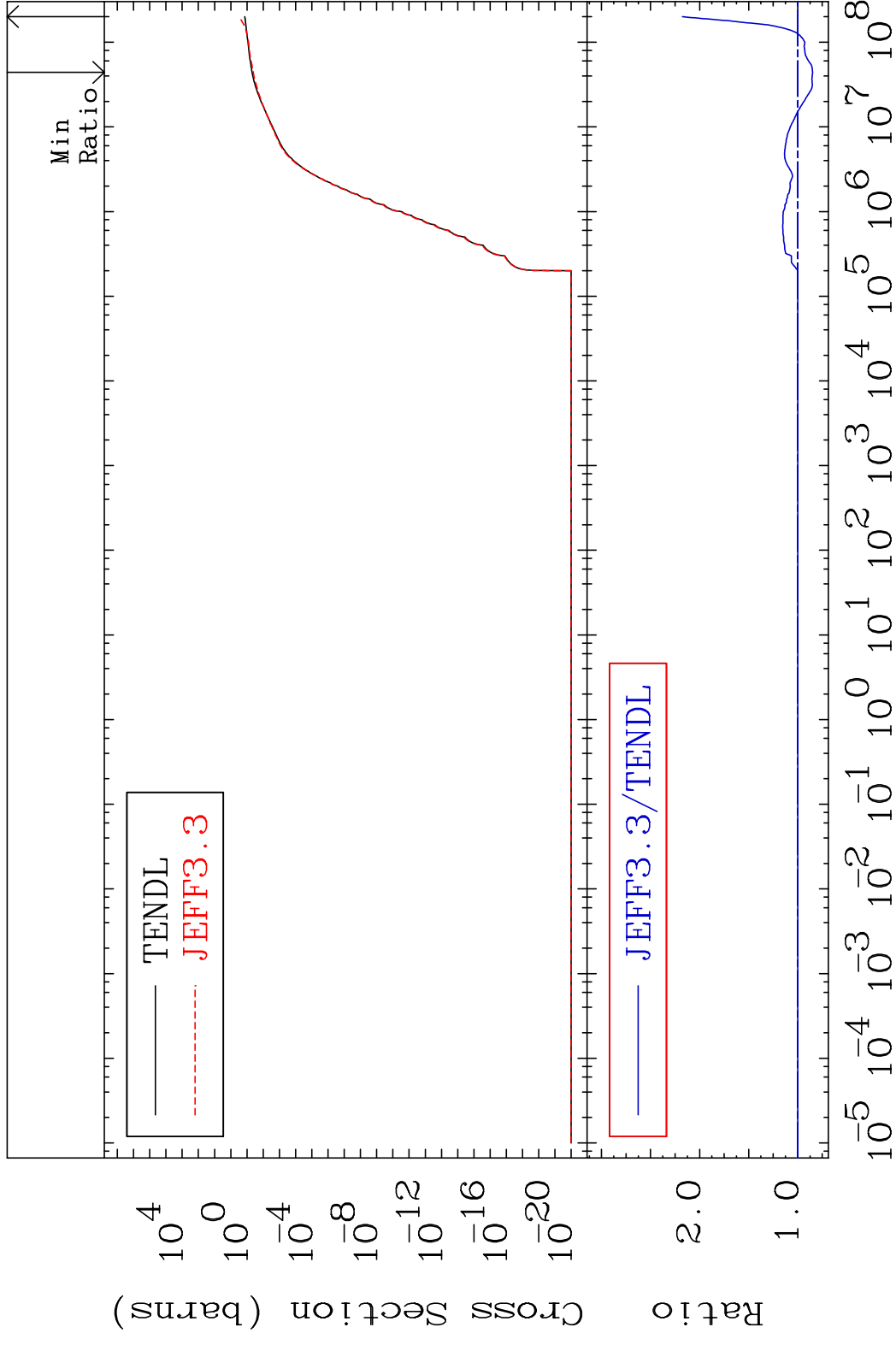
54-Xe-124

MAT 5425

Hydrogen Production

54-Xe-124

Cross Section -15.10 To 117.6 %

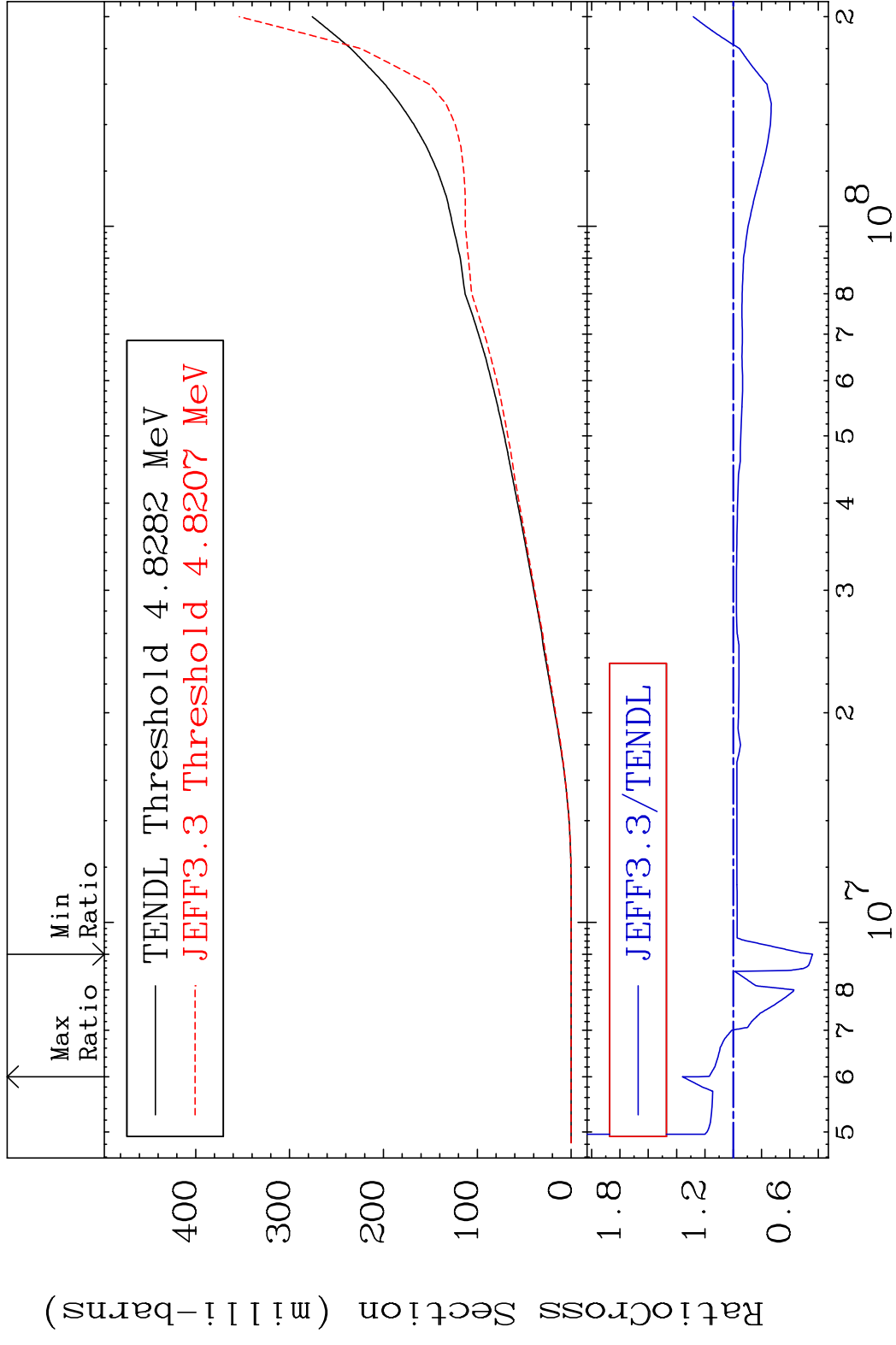


MAT 5425

Deuterium Production

54-Xe-124

Cross Section -56.01 To 35.93 %



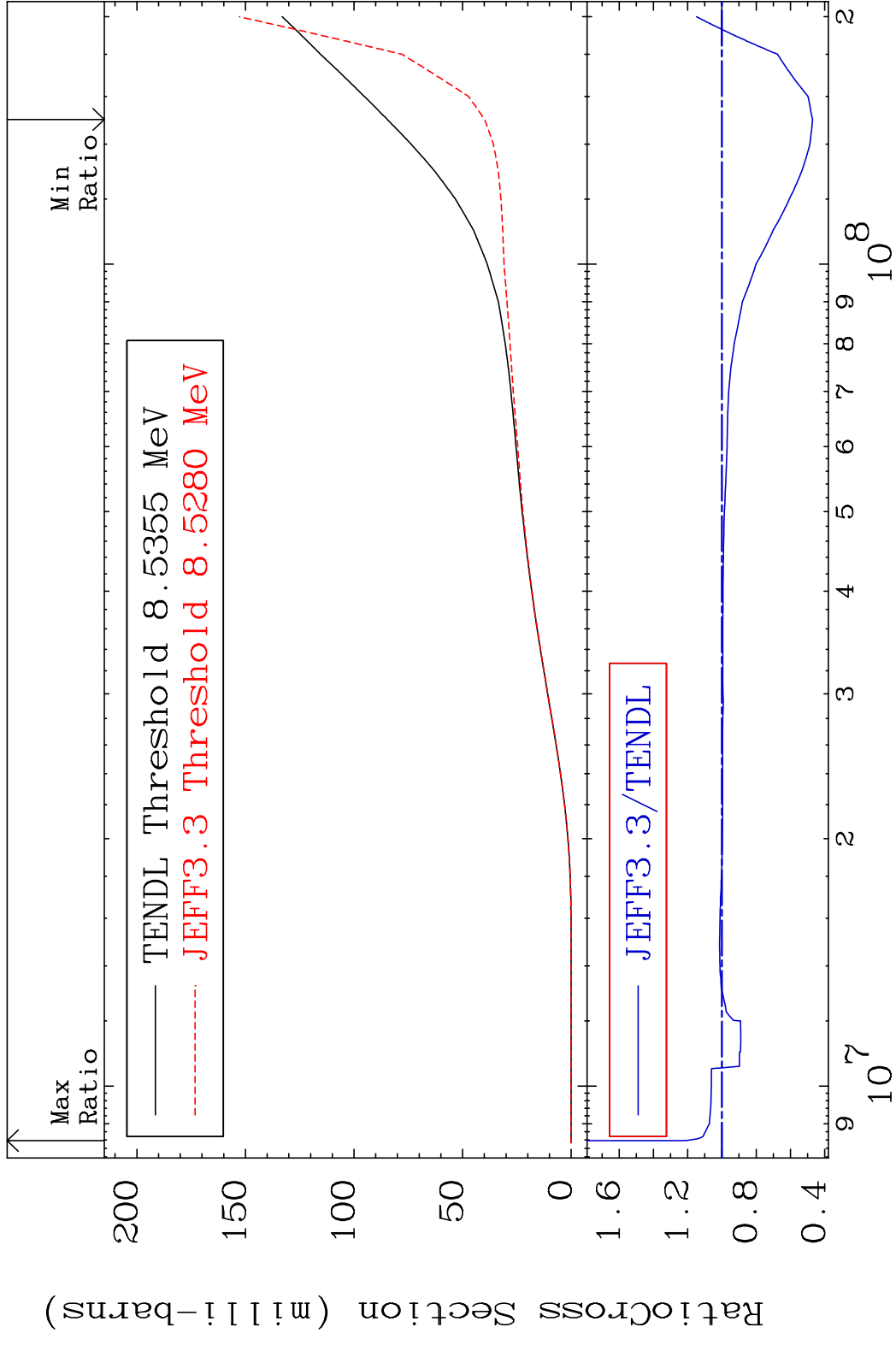
MAT 5425

Tritium Production

54-Xe-124

Cross Section

-52.95 To 23.13 %

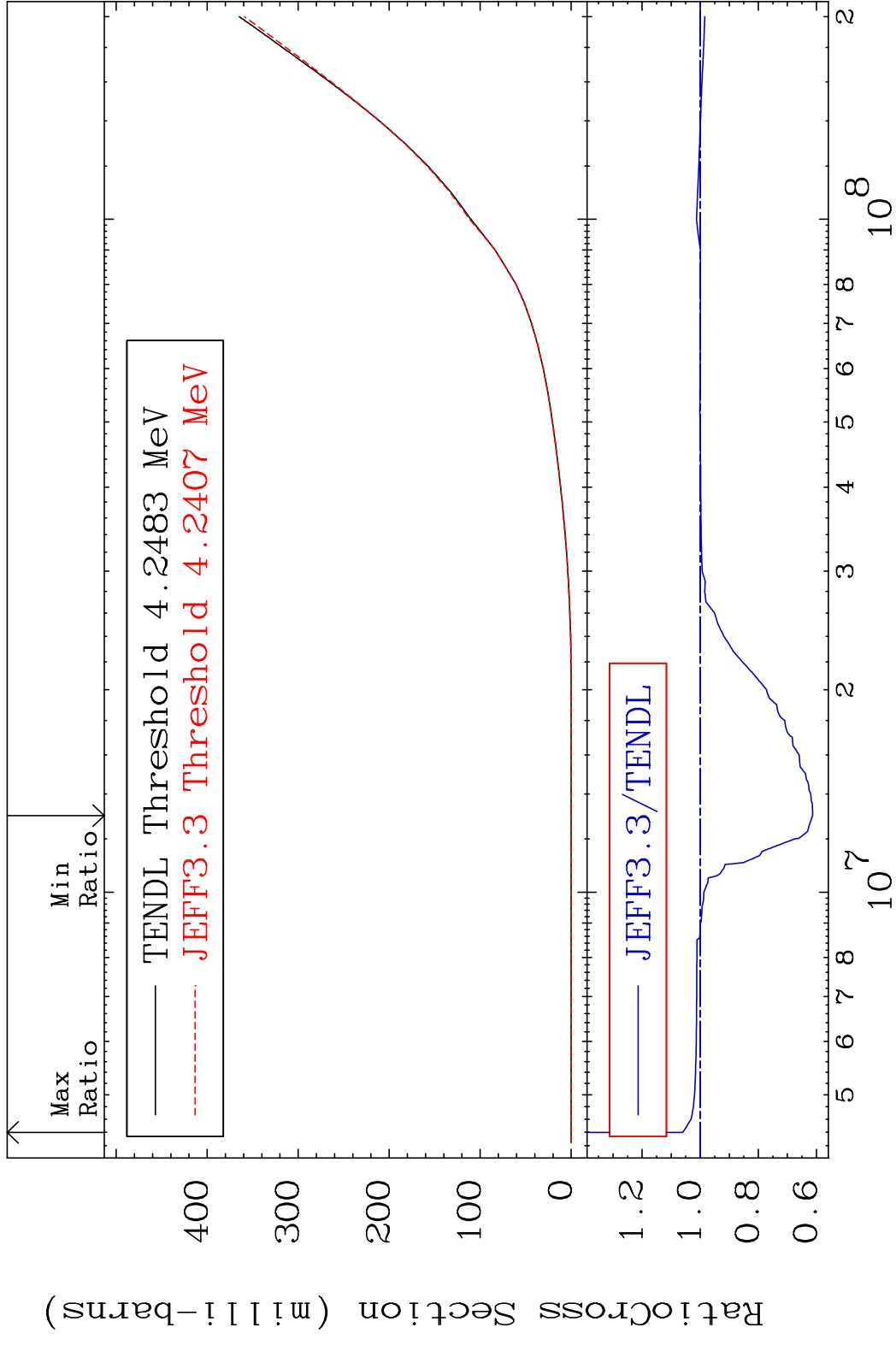


MAT 5425

He-3 Production

54-Xe-124

Cross Section -38.67 To 6.149 %

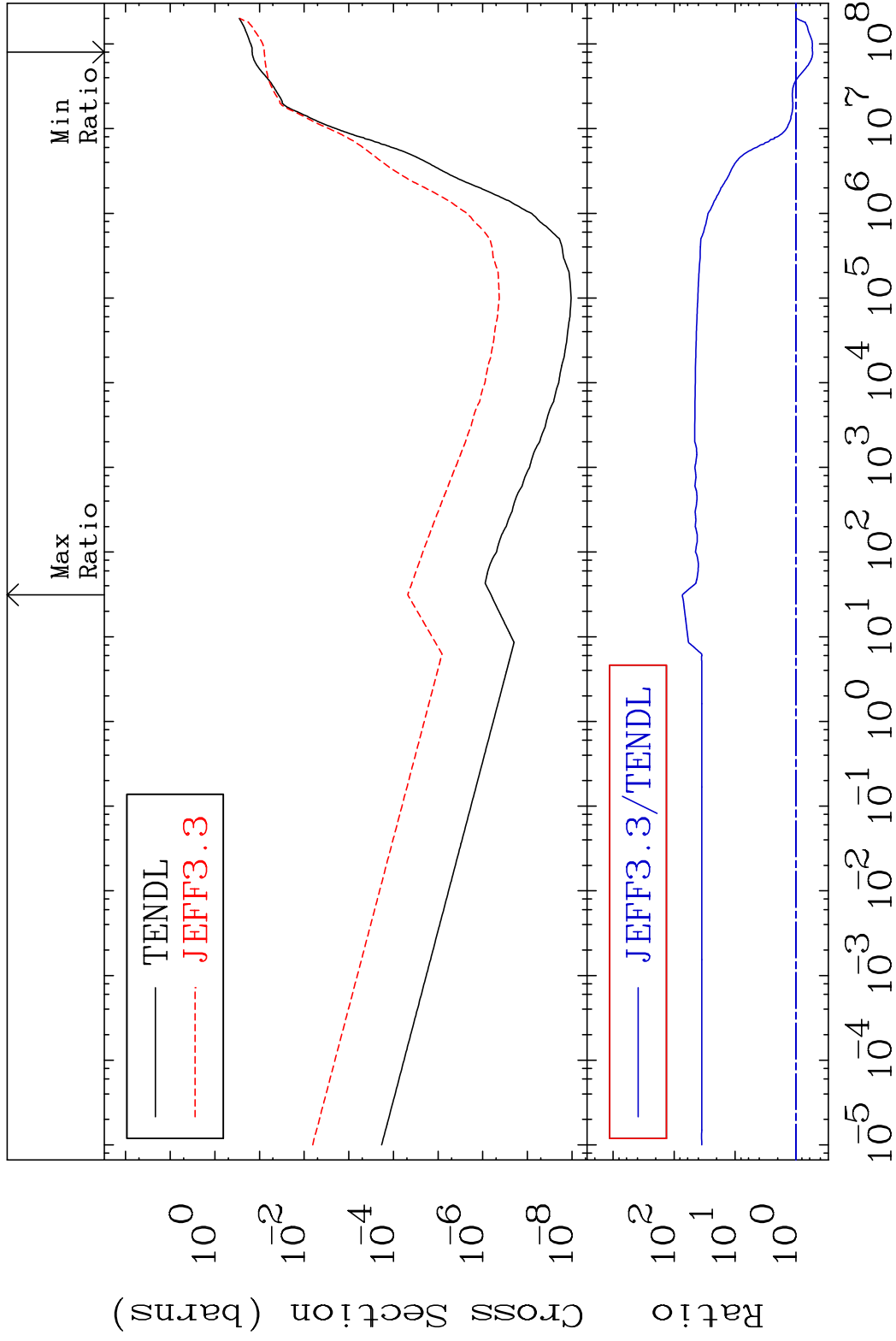


MAT 5425

He-4 Production

54-Xe-124

Cross Section -46.48 To 7214. %

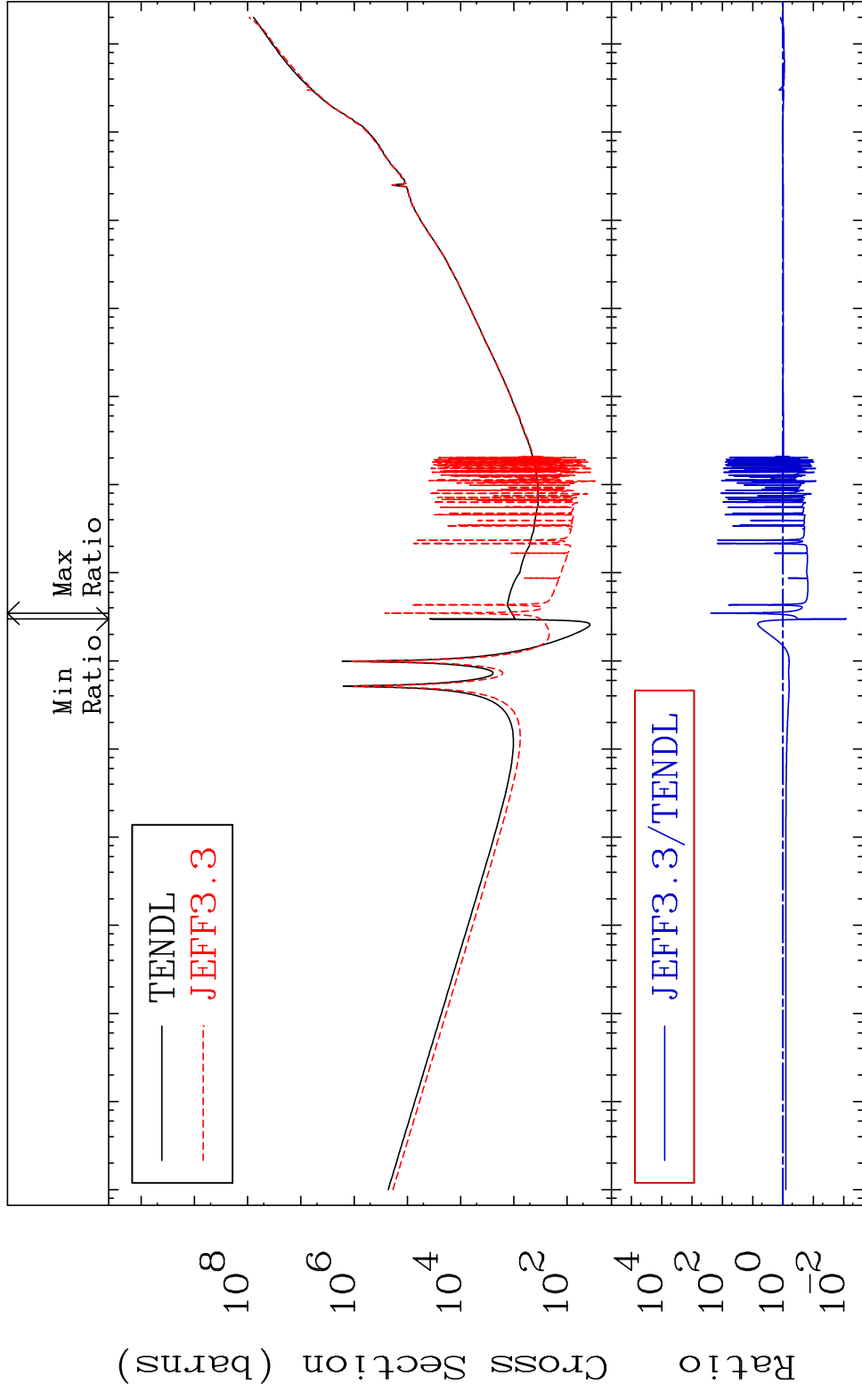


66

Incident Energy (eV)

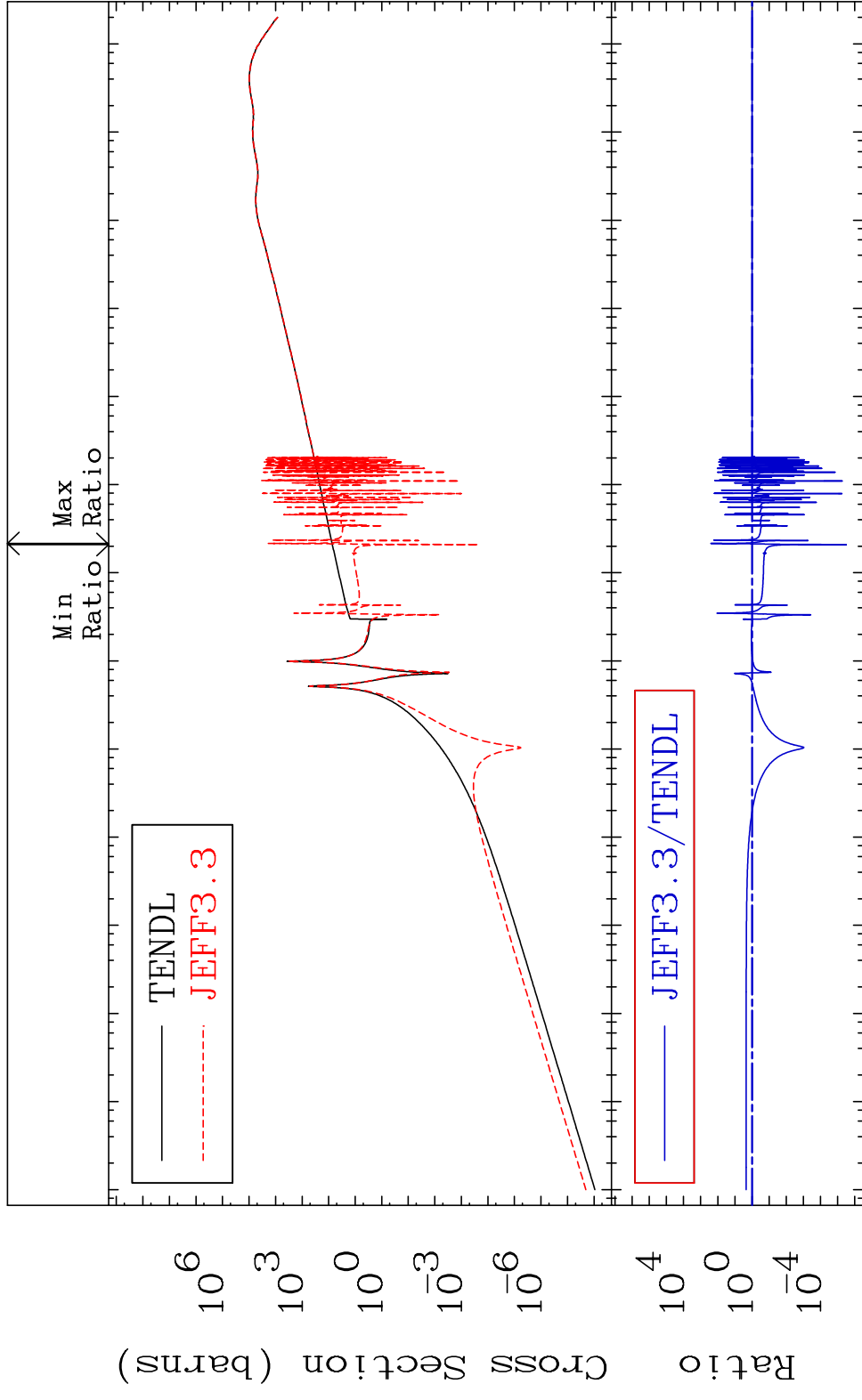
54-Xe-124

MAT 5425 Kerma total (eV-barns) 54-Xe-124
 Cross Section -99.18 To 9999. %

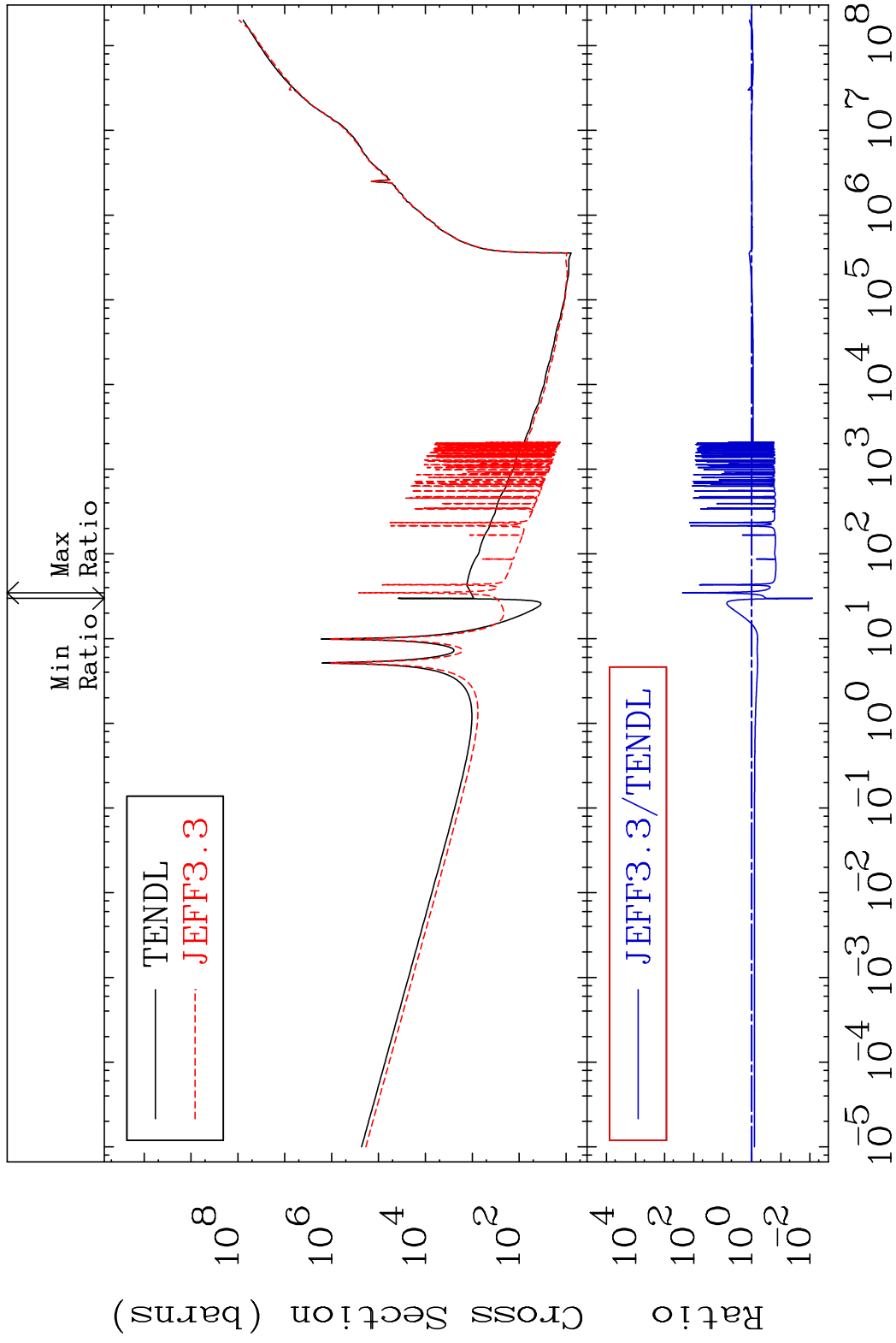


MAT 5425

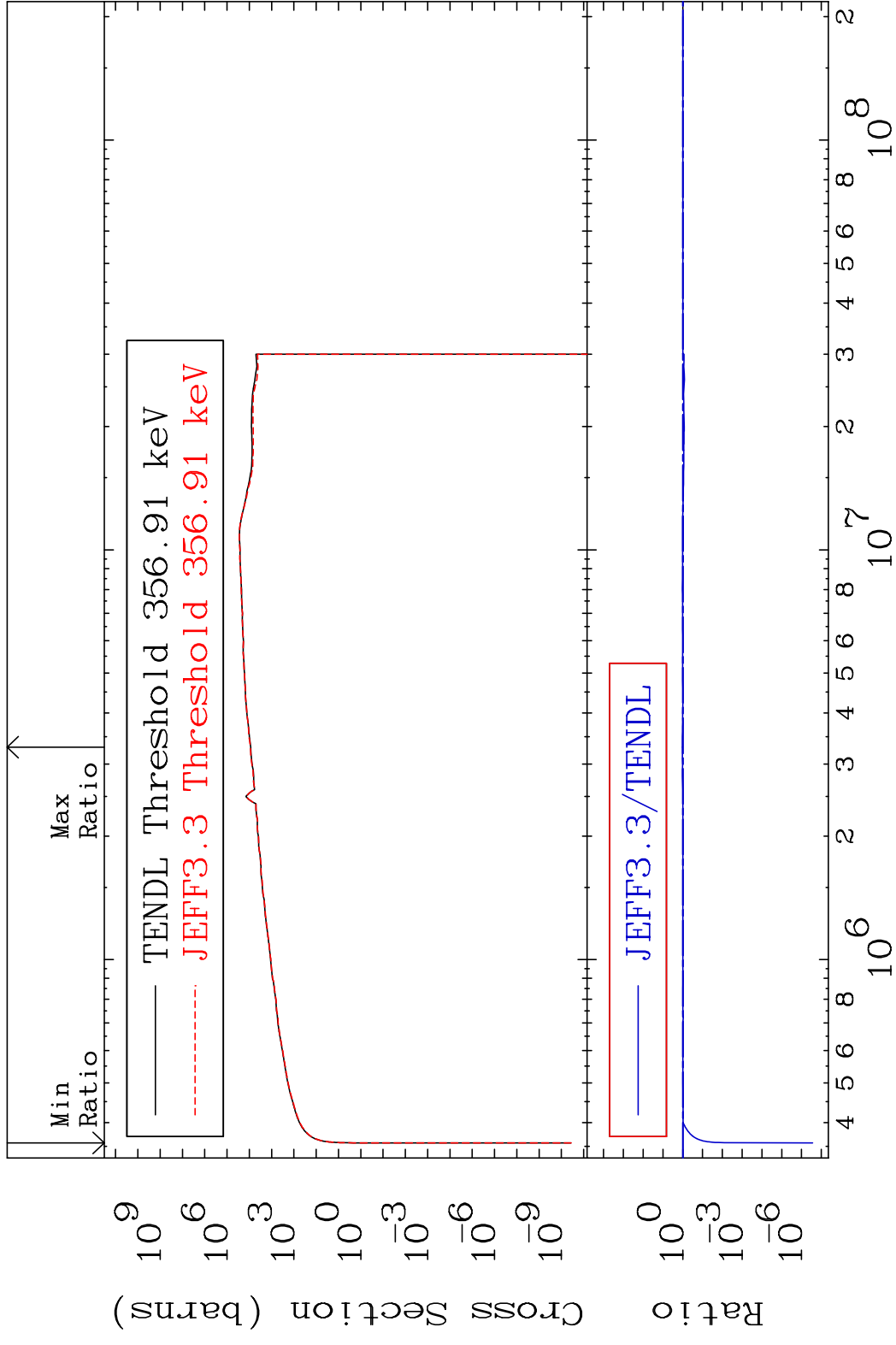
Kerma elastic Cross Section -100.0 To 9999. %
54-Xe-124



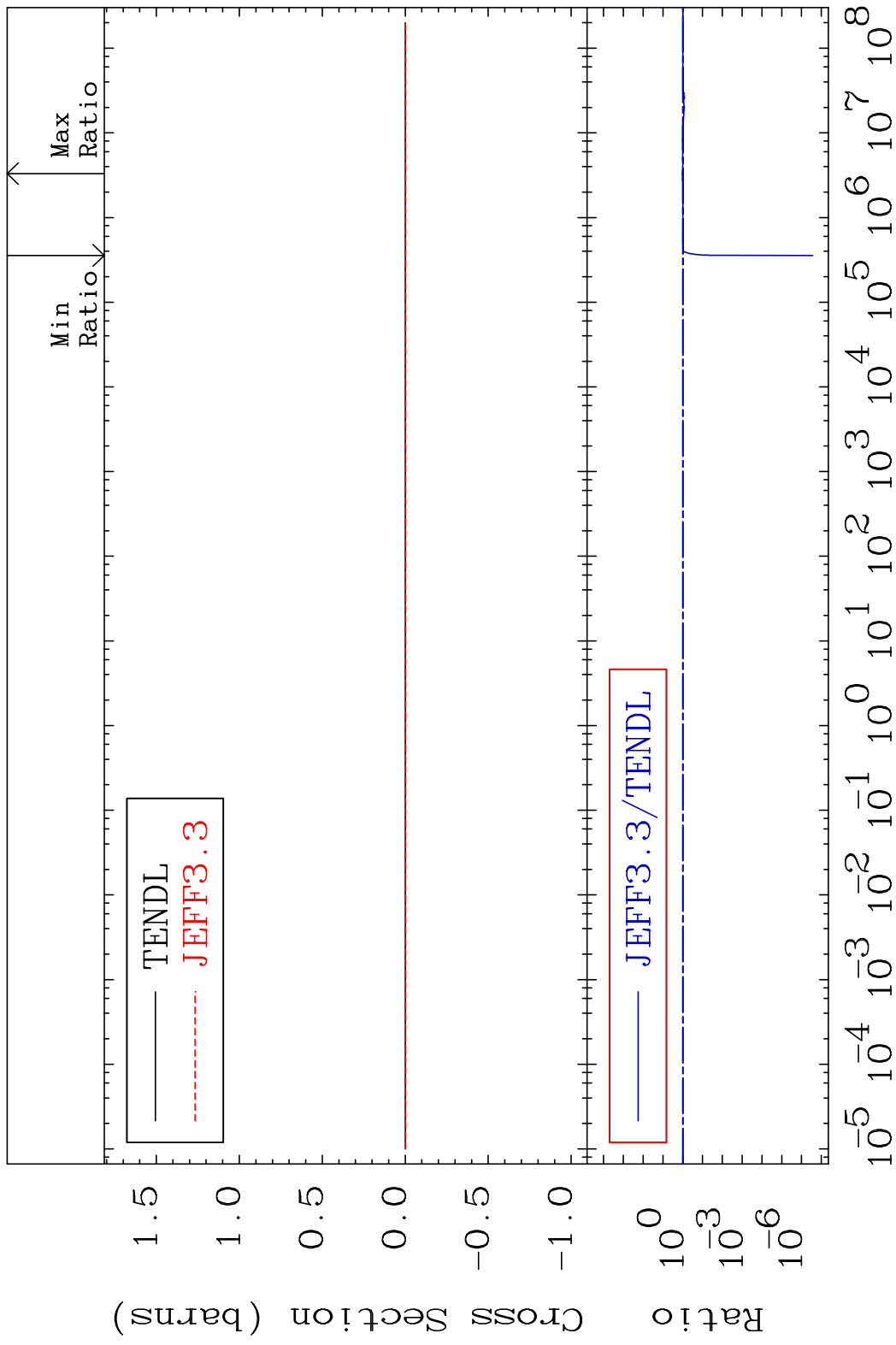
MAT 5425 Kerma non-elastic (all but mt2) 54-Xe-124
 Cross Section -99.19 To 9999. %



MAT 5425 Kerma inelastic (mt51-91) 54-Xe-124
 Cross Section -100.0 To 4.541 %



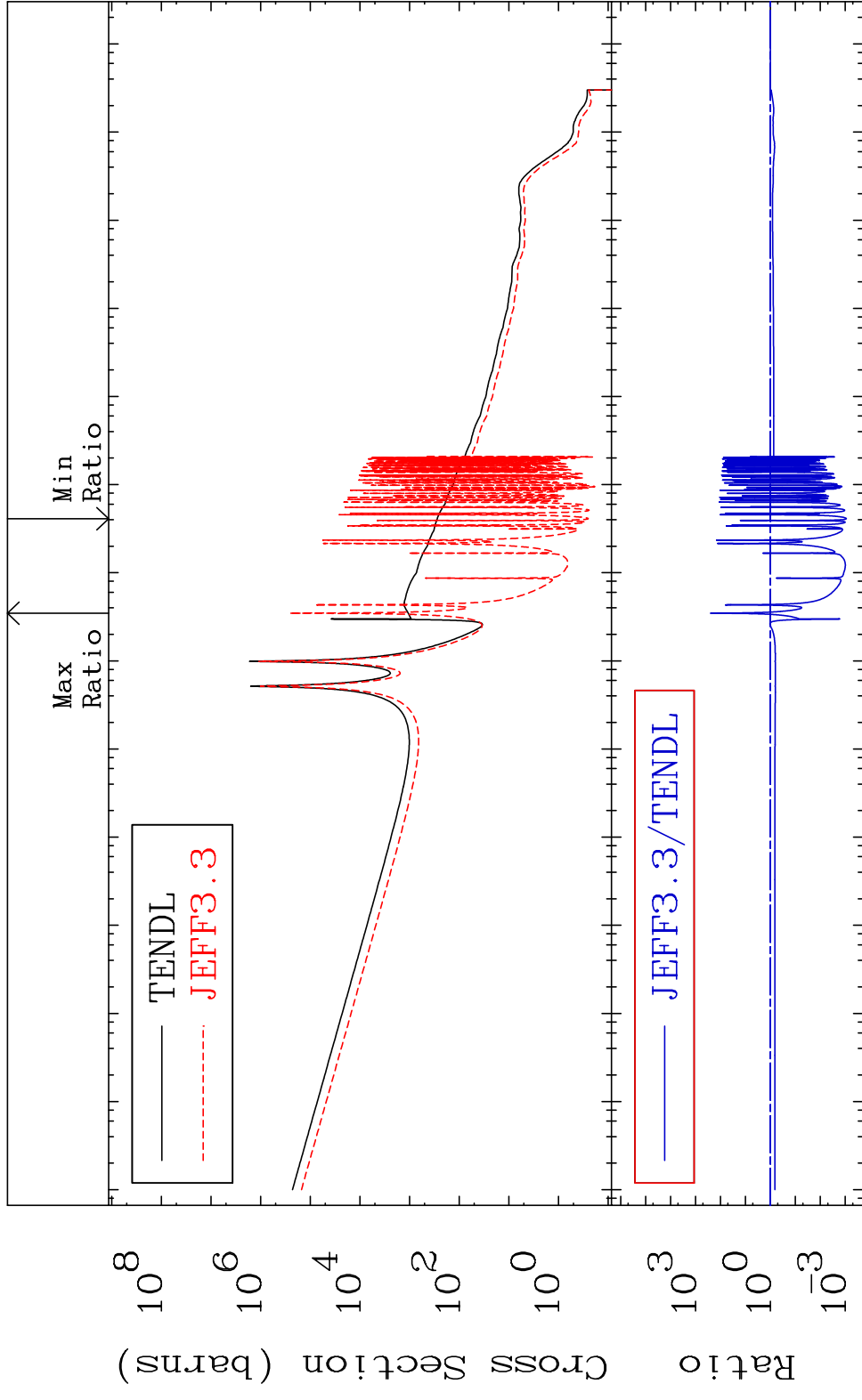
MAT 5425 Kerma fission (mt18 or mt19-20-21-38) 54-Xe-124
 Cross Section -100.0 To 4.541 %



MAT 5425

Kerma capture (mt102) 54-Xe-124

Cross Section -99.91 To 9999. %

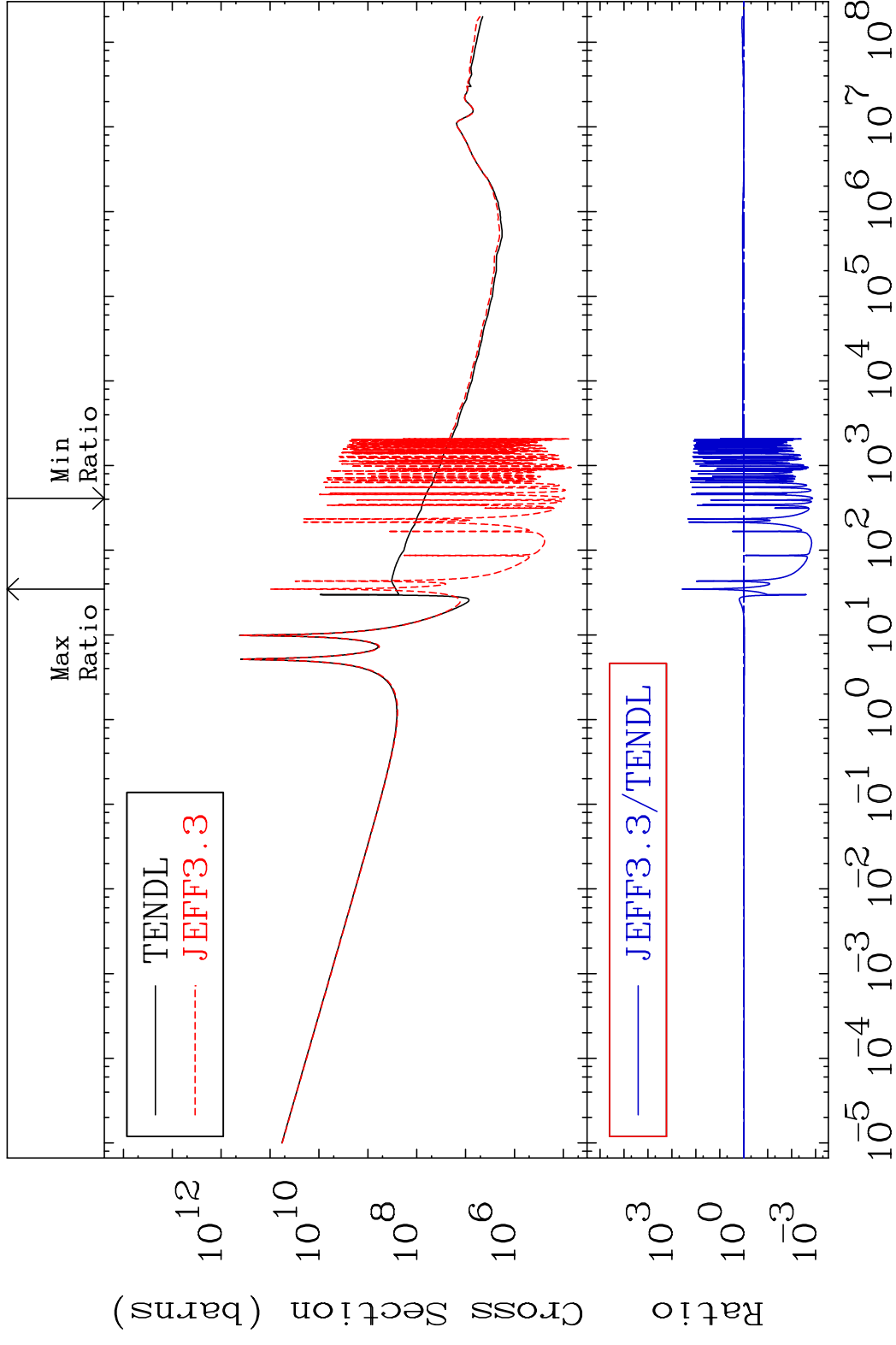


72

Incident Energy (eV)

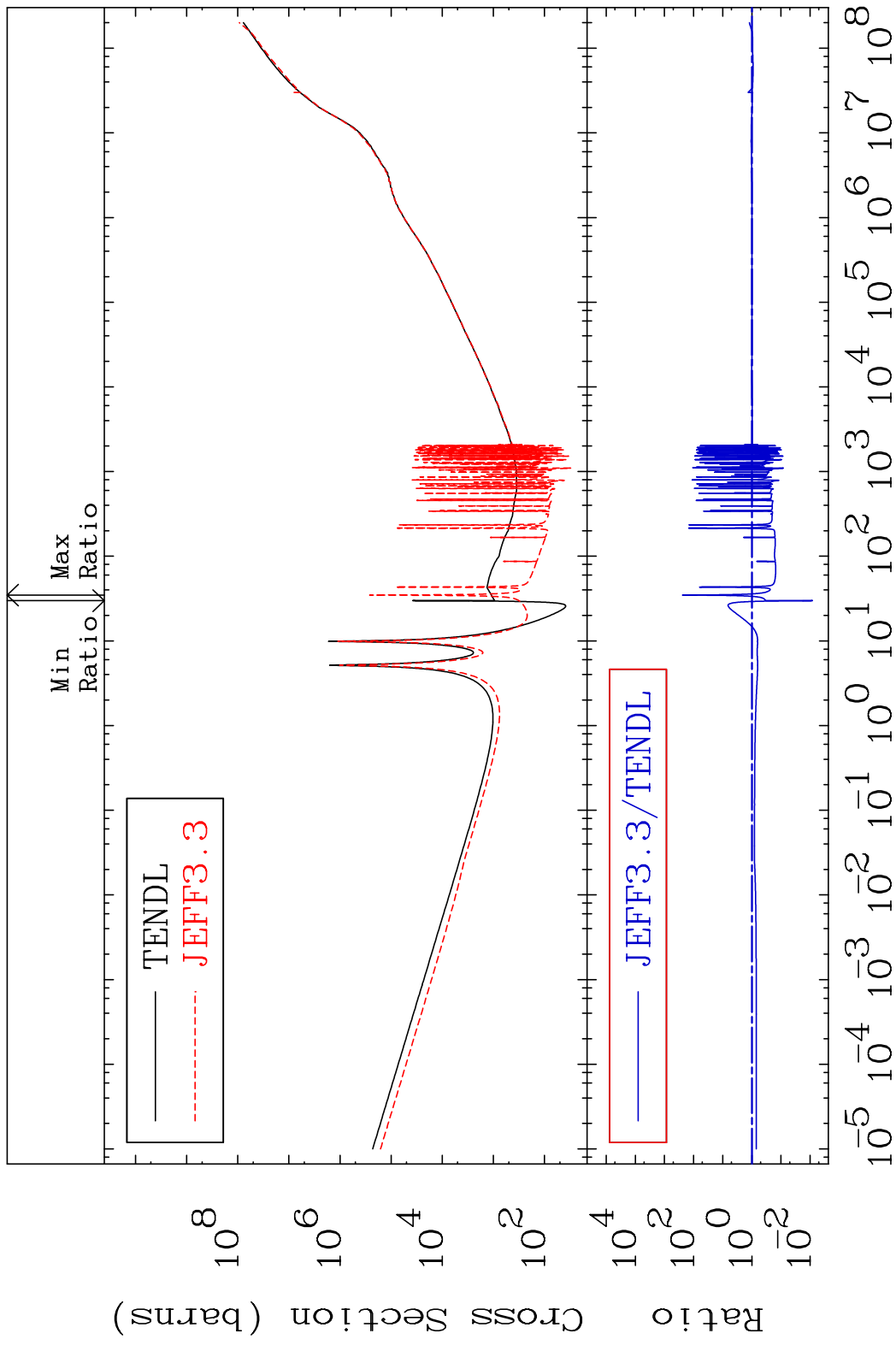
54-Xe-124

MAT 5425 Total photon (eV-barns) 54-Xe-124
 Cross Section -99.87 To 9999. %



73 Incident Energy (eV) 54-Xe-124

MAT 5425 Total kinematic kerma (high limit) 54-Xe-124
 Cross Section -99.18 To 9999. %

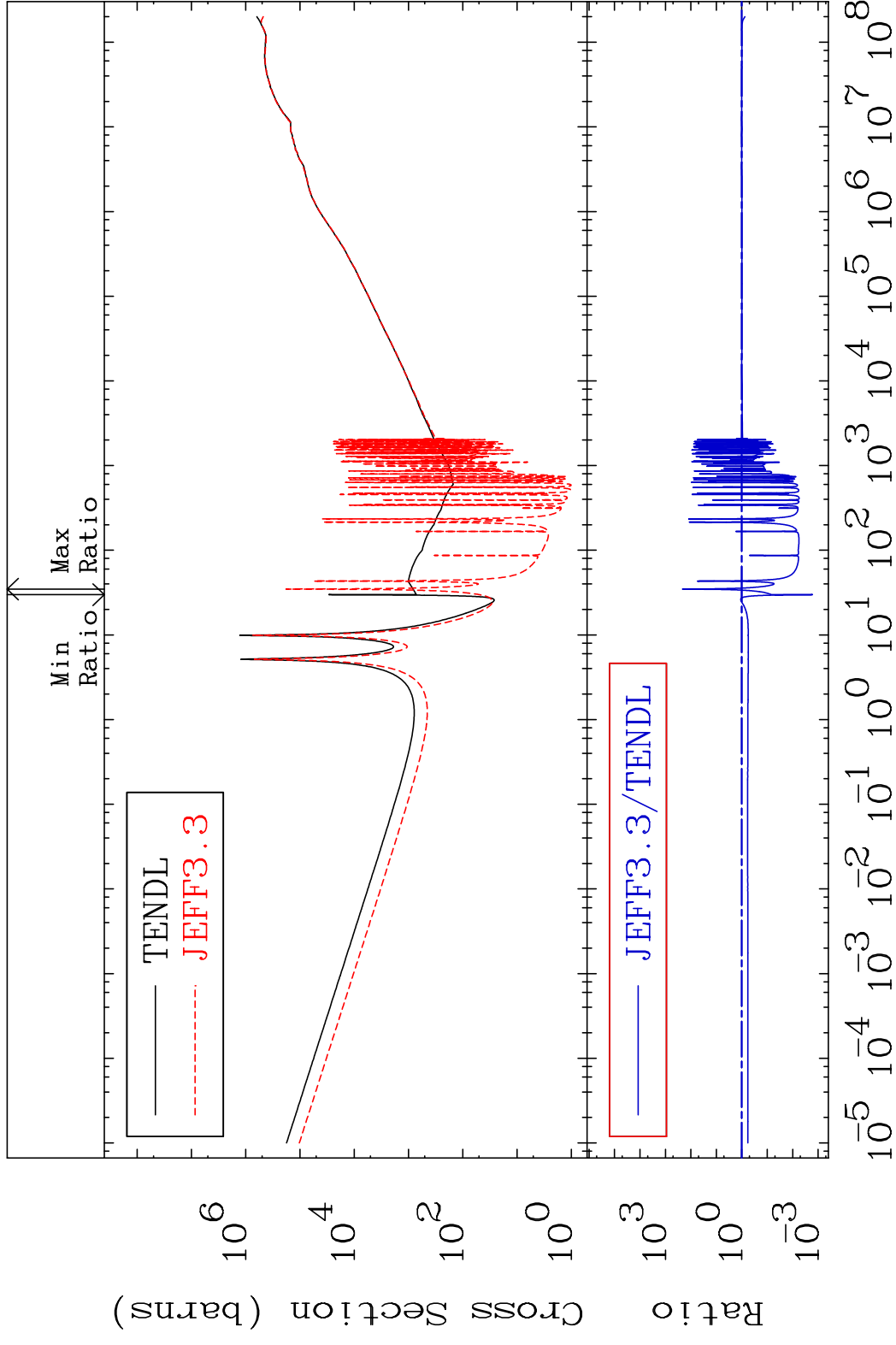


MAT 5425

Dpa total (eV-barns)

54-Xe-124

Cross Section -99.83 To 9999. %



75

Incident Energy (eV)

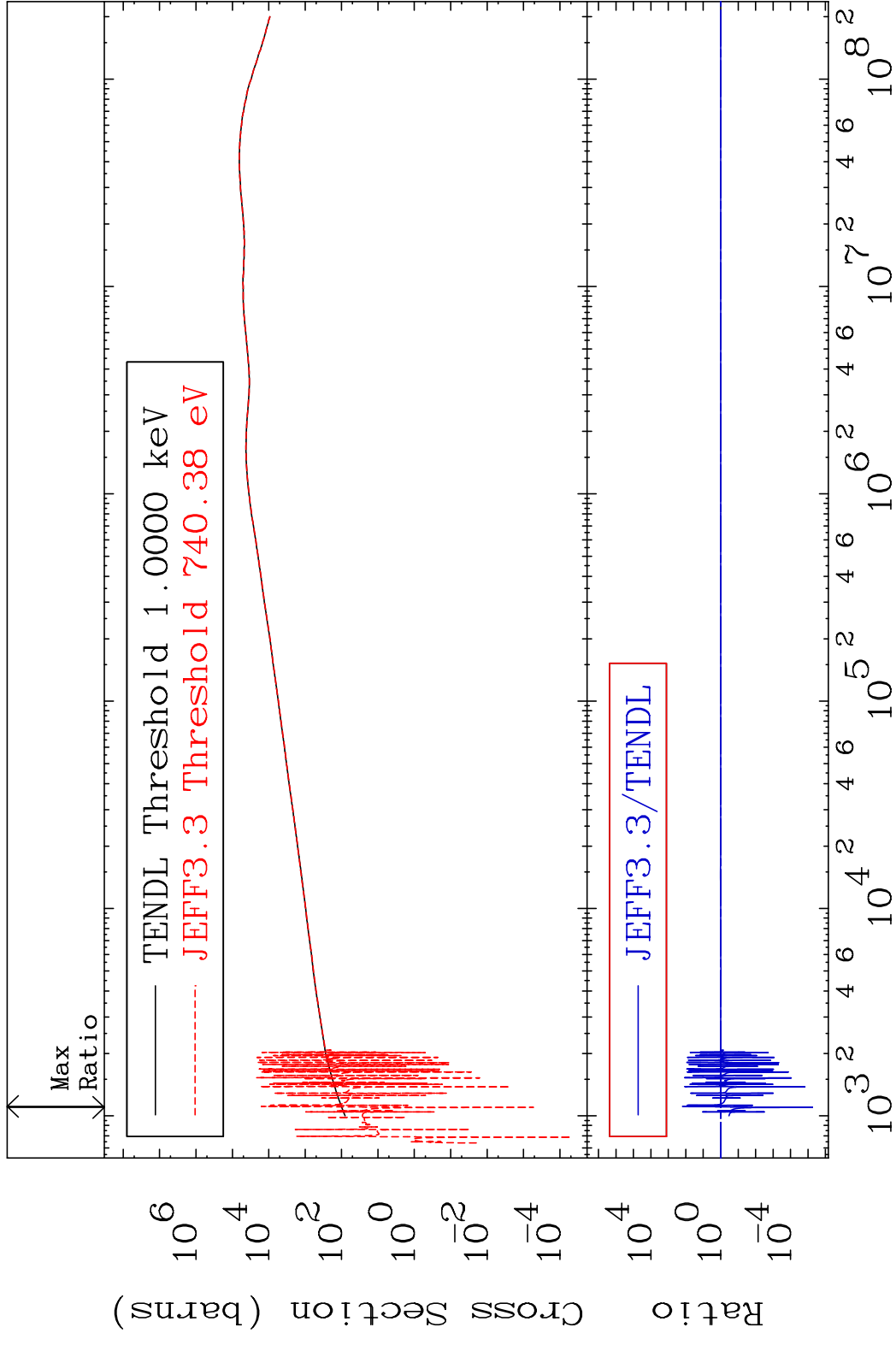
54-Xe-124

MAT 5425

Dpa elastic (mt2)

54-Xe-124

Cross Section -100.0 To 9999. %

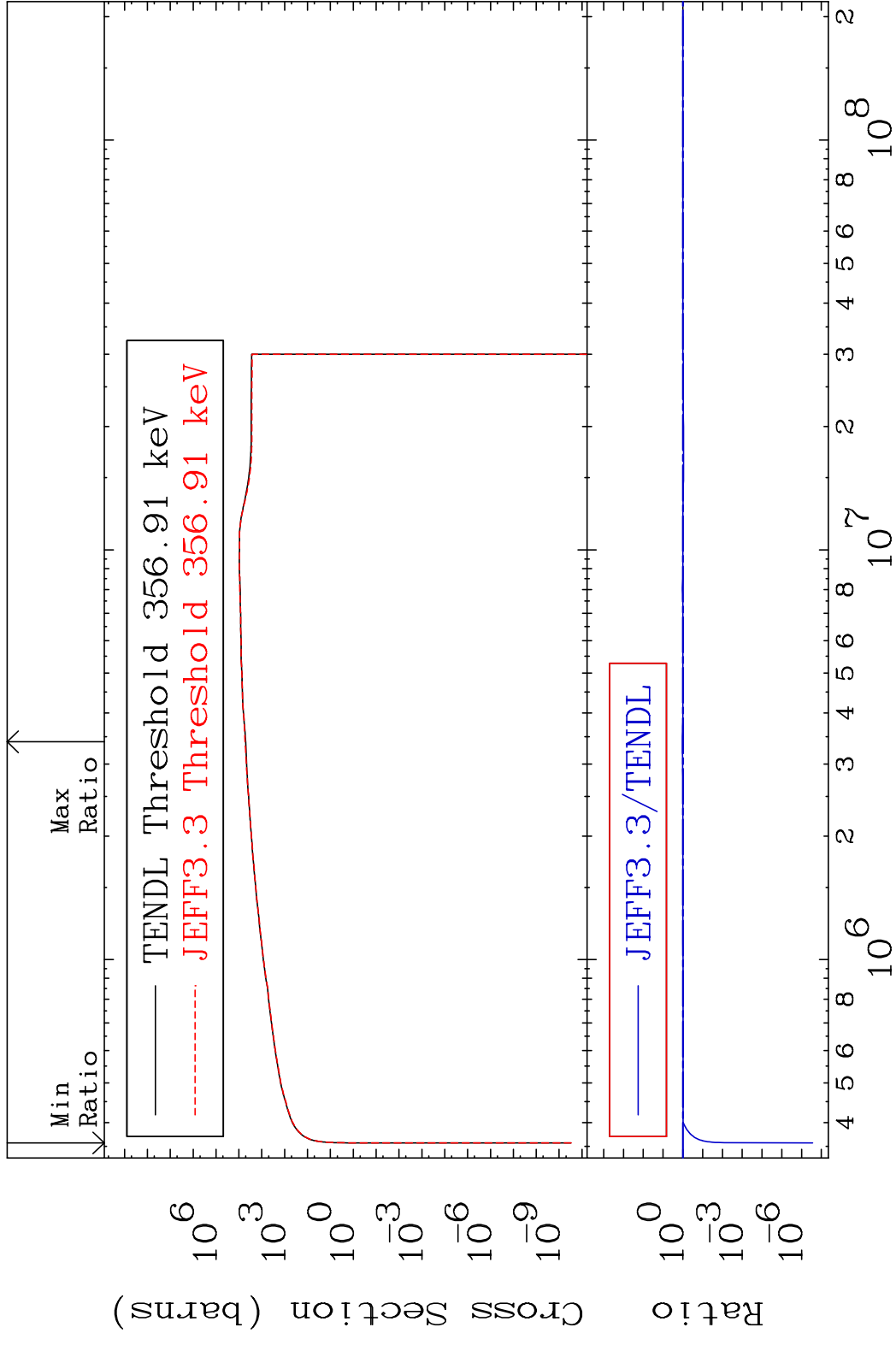


76

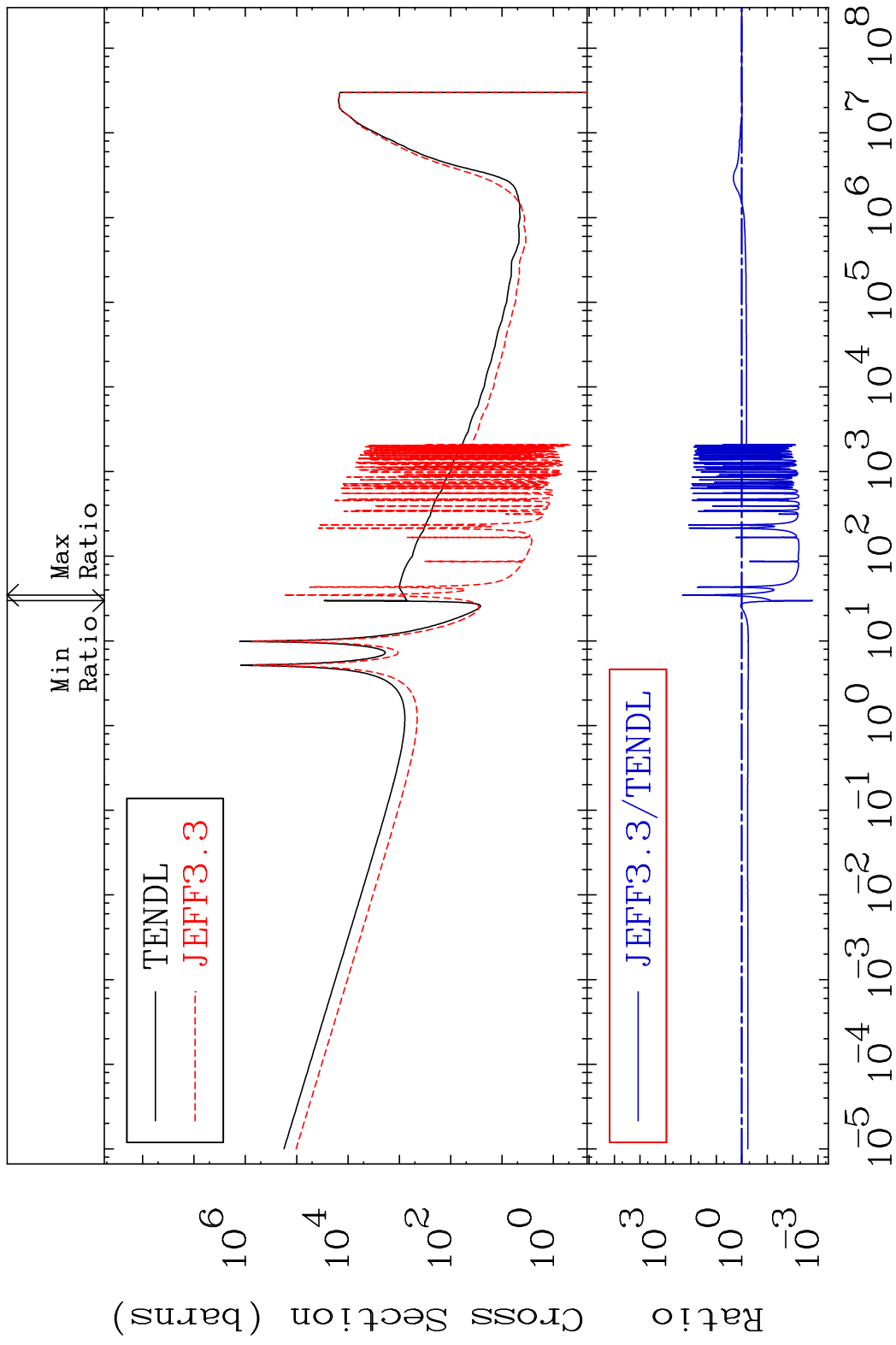
Incident Energy (eV)

54-Xe-124

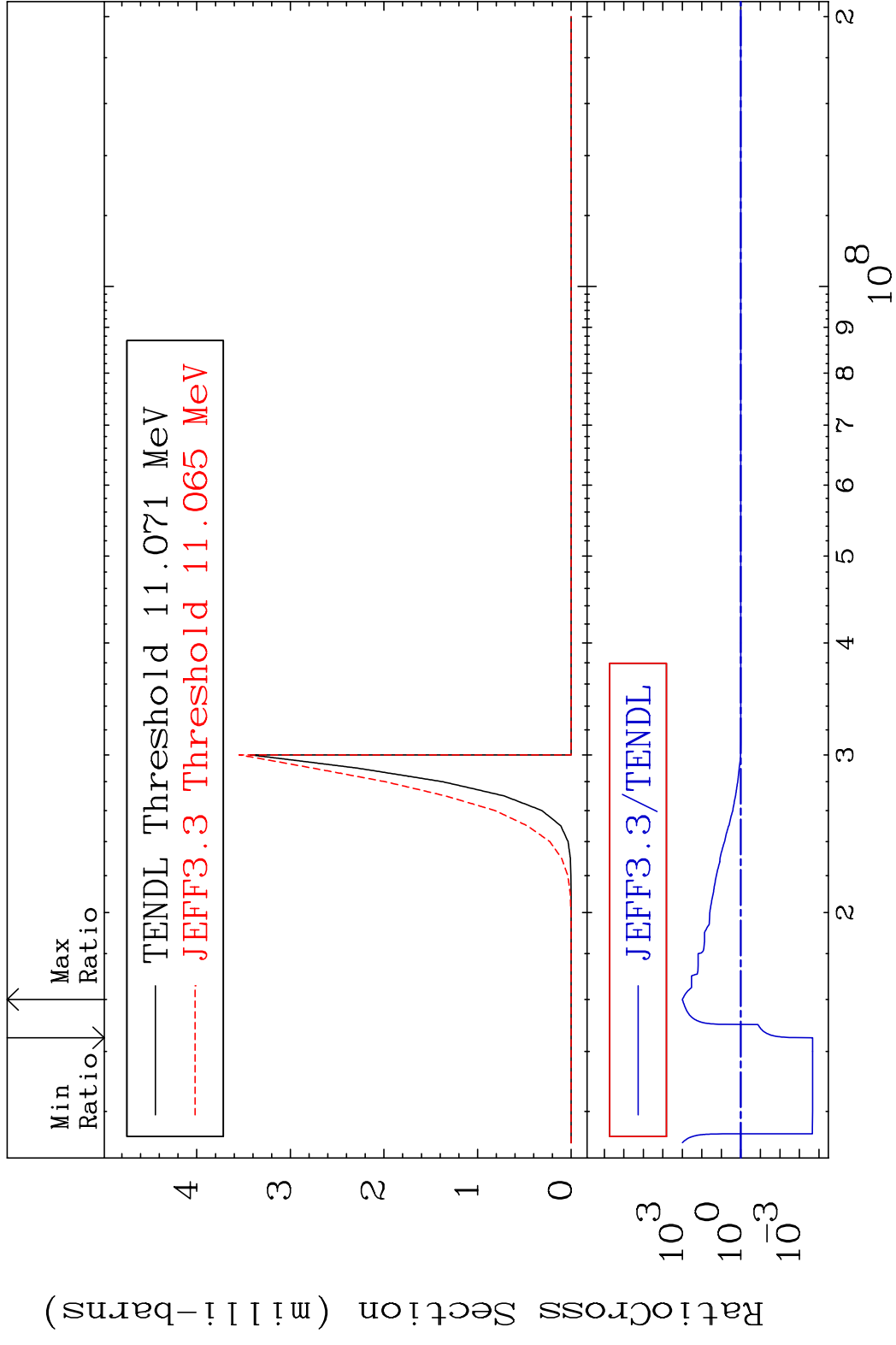
MAT 5425 Dpa inelastic (mt51-91) 54-Xe-124
 Cross Section -100.0 To 5.680 %



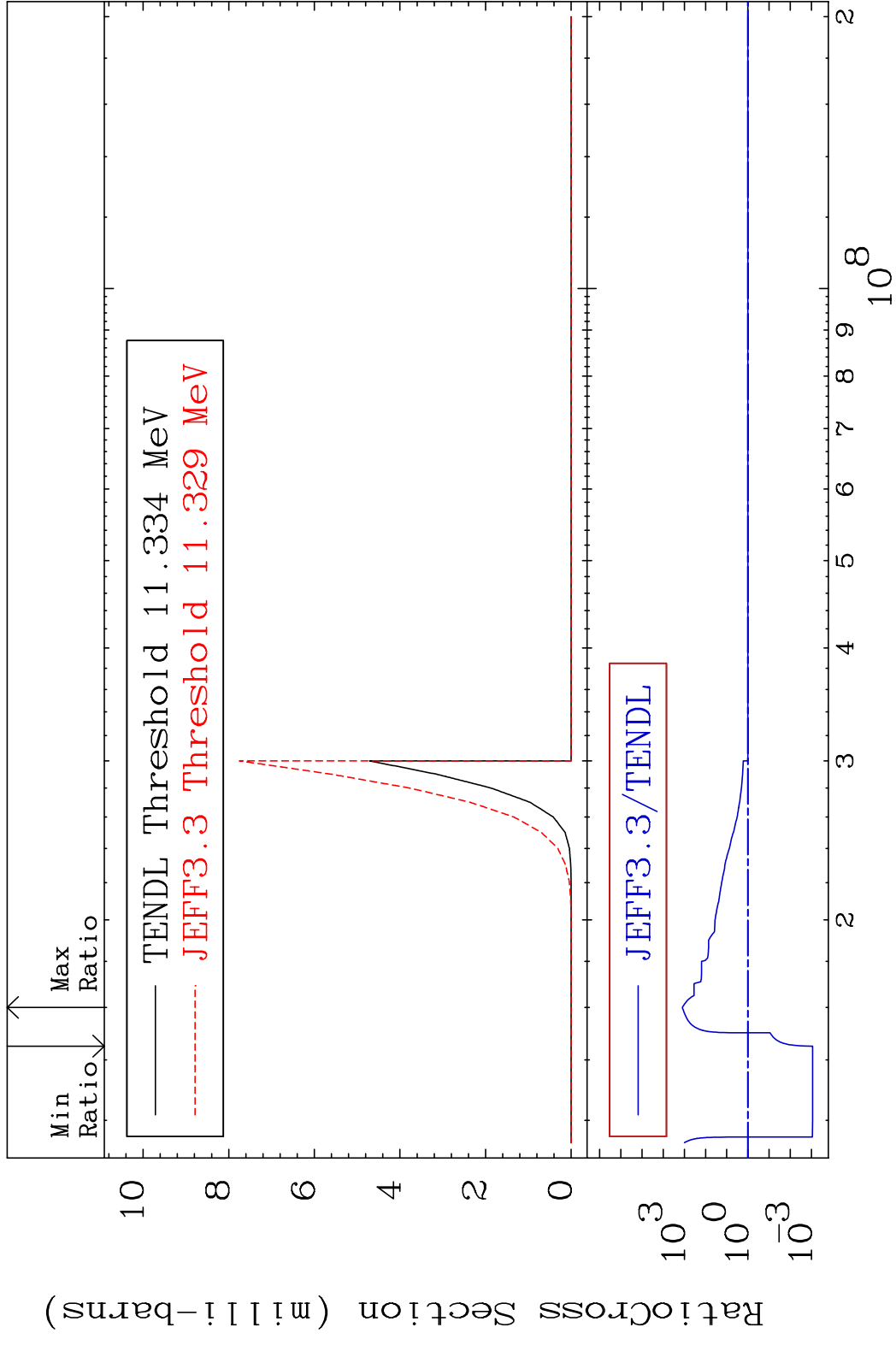
MAT 5425 Dpa disappearance (mt102 -120) 54-Xe-124
 Cross Section -99.83 To 9999. %



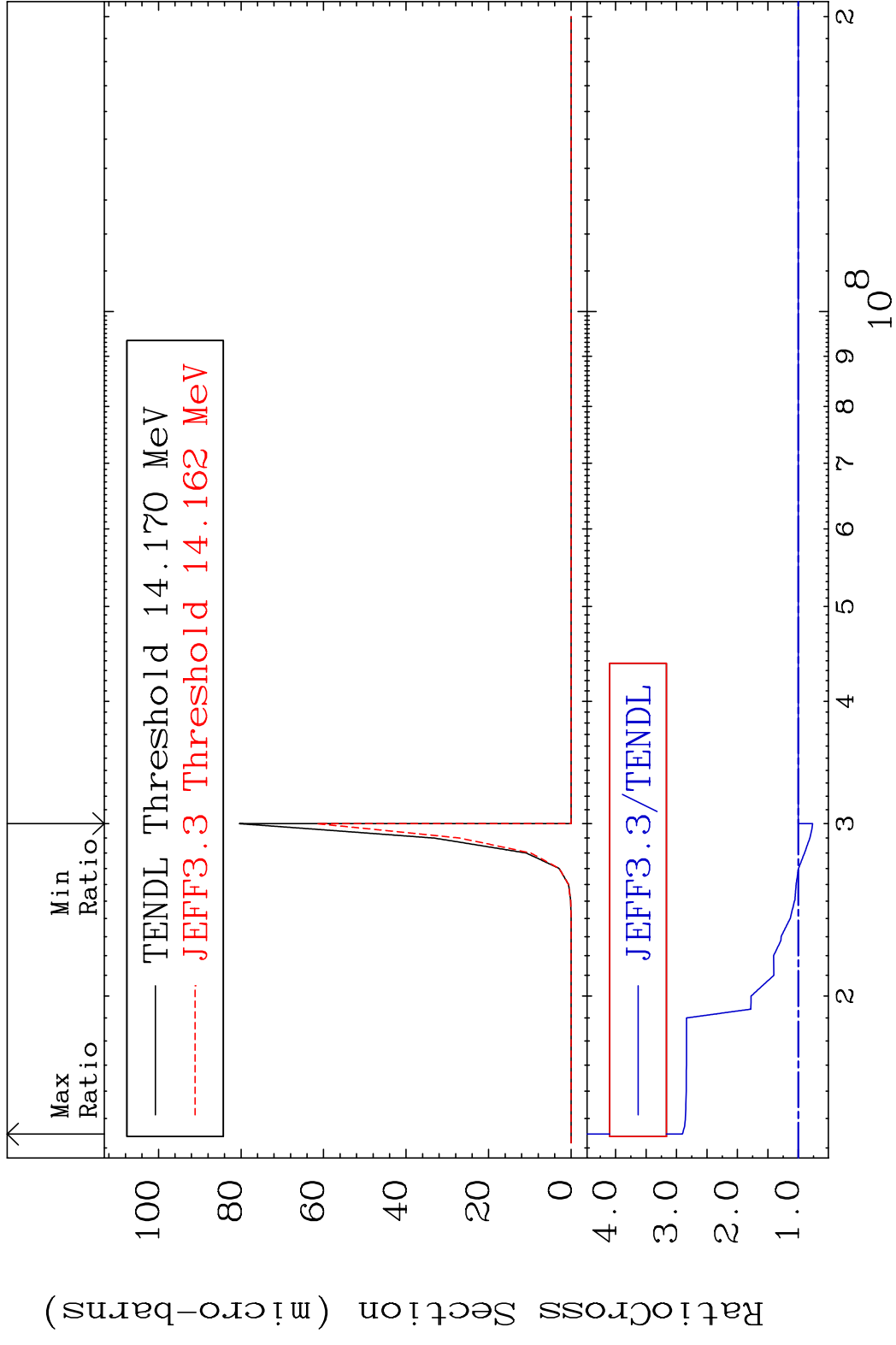
MAT 5425 (n,2n) α :52-Te-119g 54-Xe-124
 Radionuclide Production Cross Section 98.981 dth 9999. %



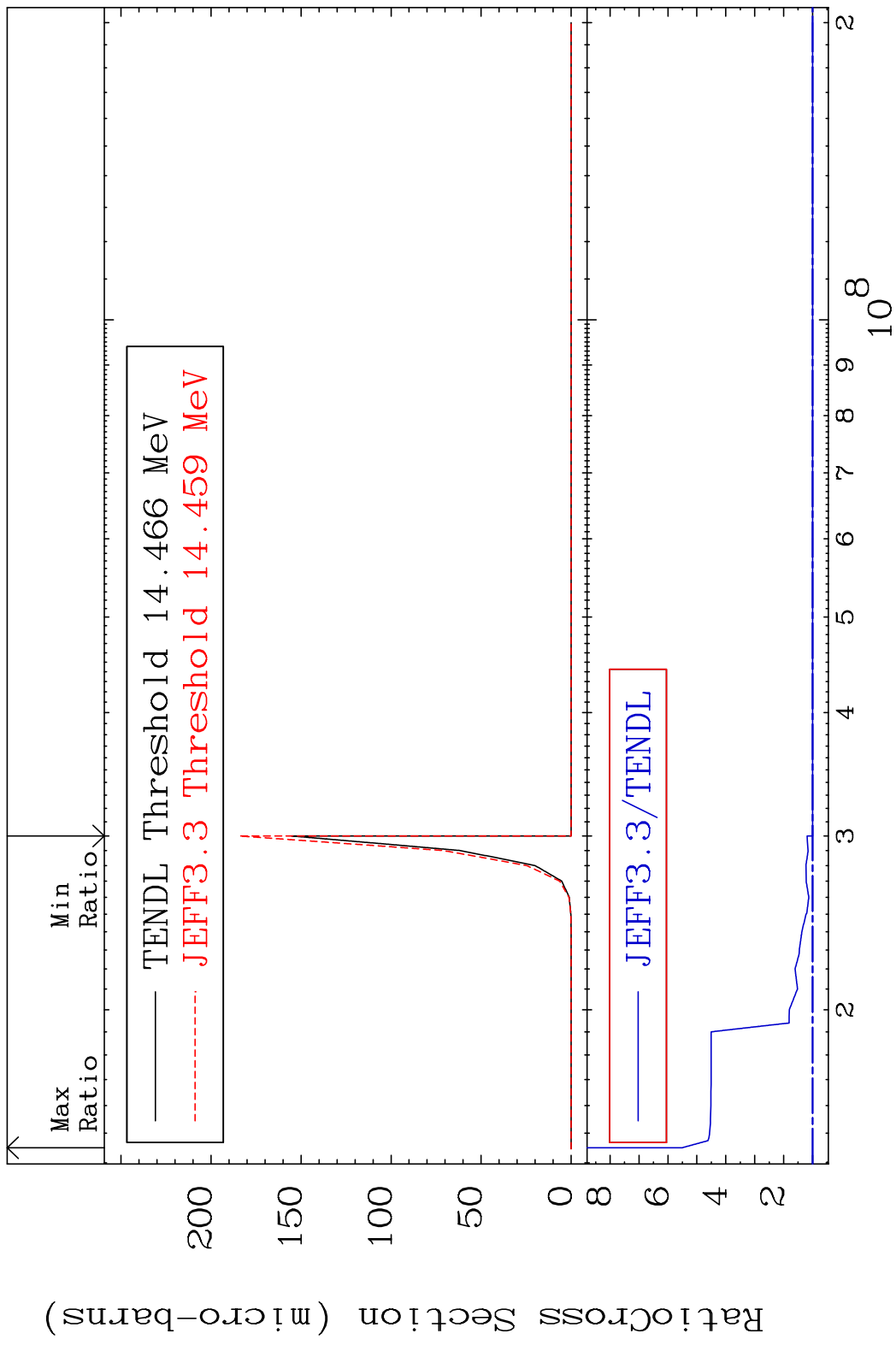
MAT 5425 (n,2n) α :52-Te-119m2 54-Xe-124
 Radionuclide Production Cross Section 99.9999 %



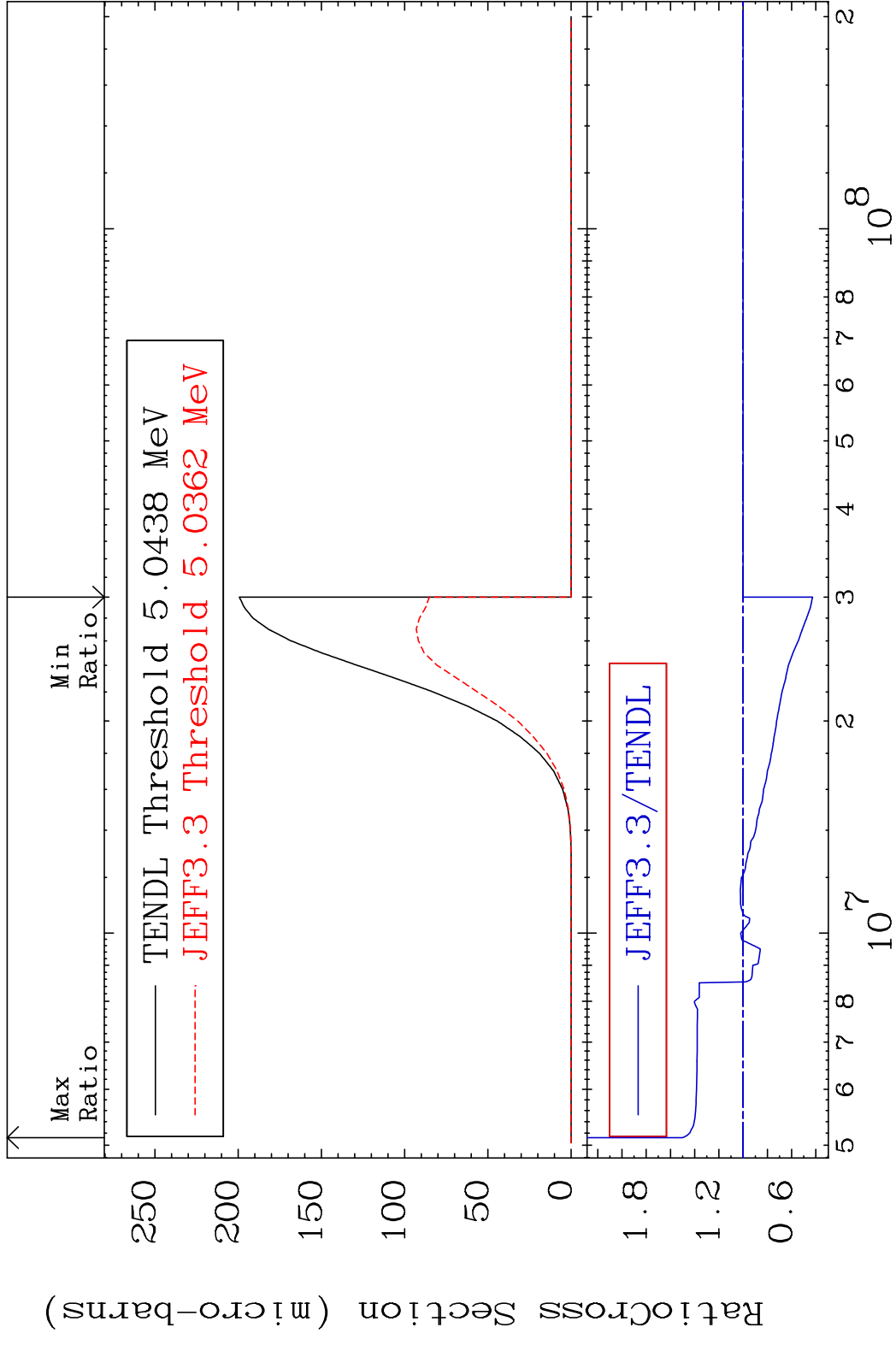
MAT 5425 (n, n') He-3:52-Te-121g 54-Xe-124
 Radionuclide Production Cross Section 190.4 %



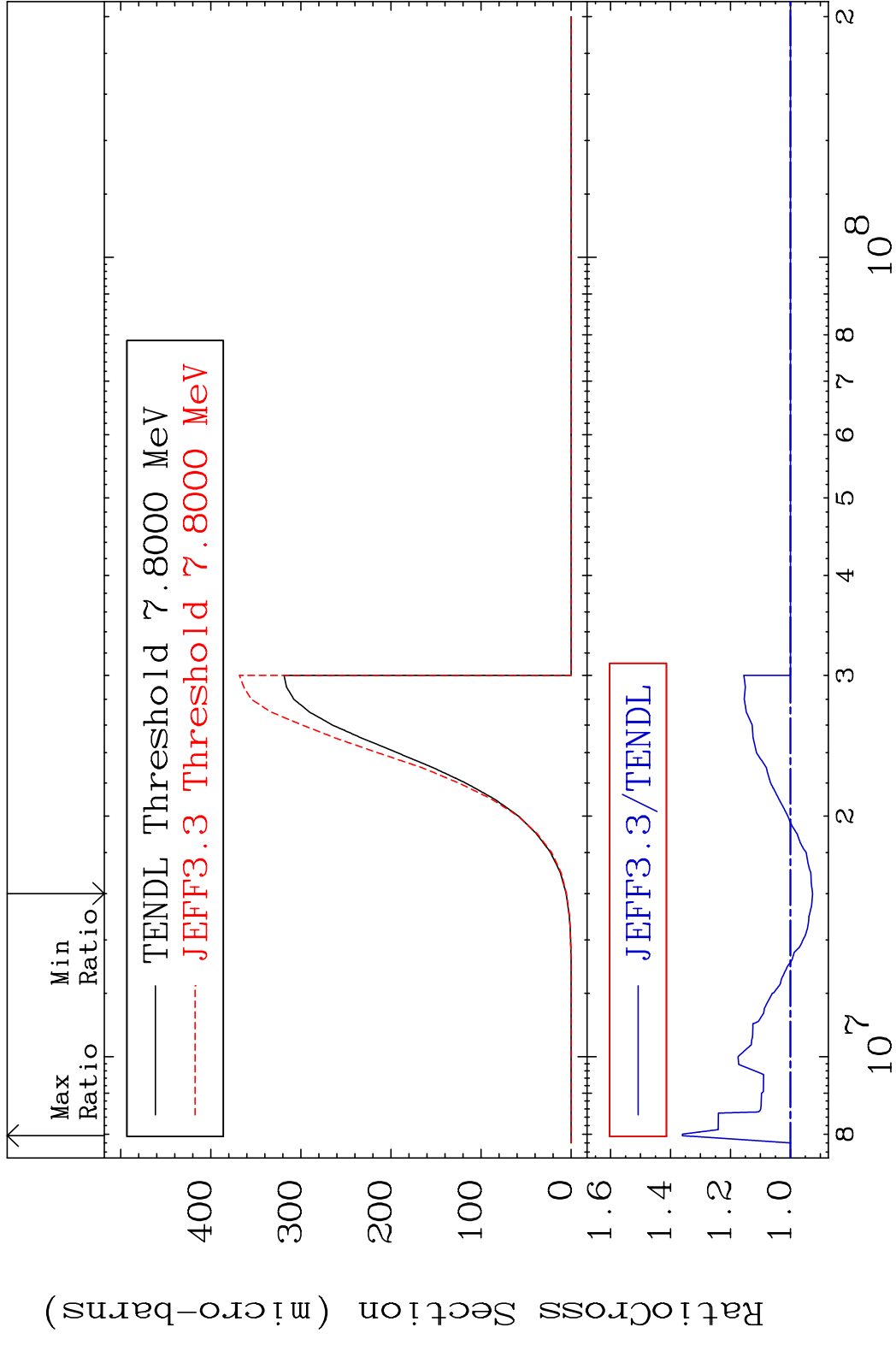
MAT 5425 (n, n') He-3:52-Te-121m2 54-Xe-124
 Radionuclide Production Cross Section 450.1 %



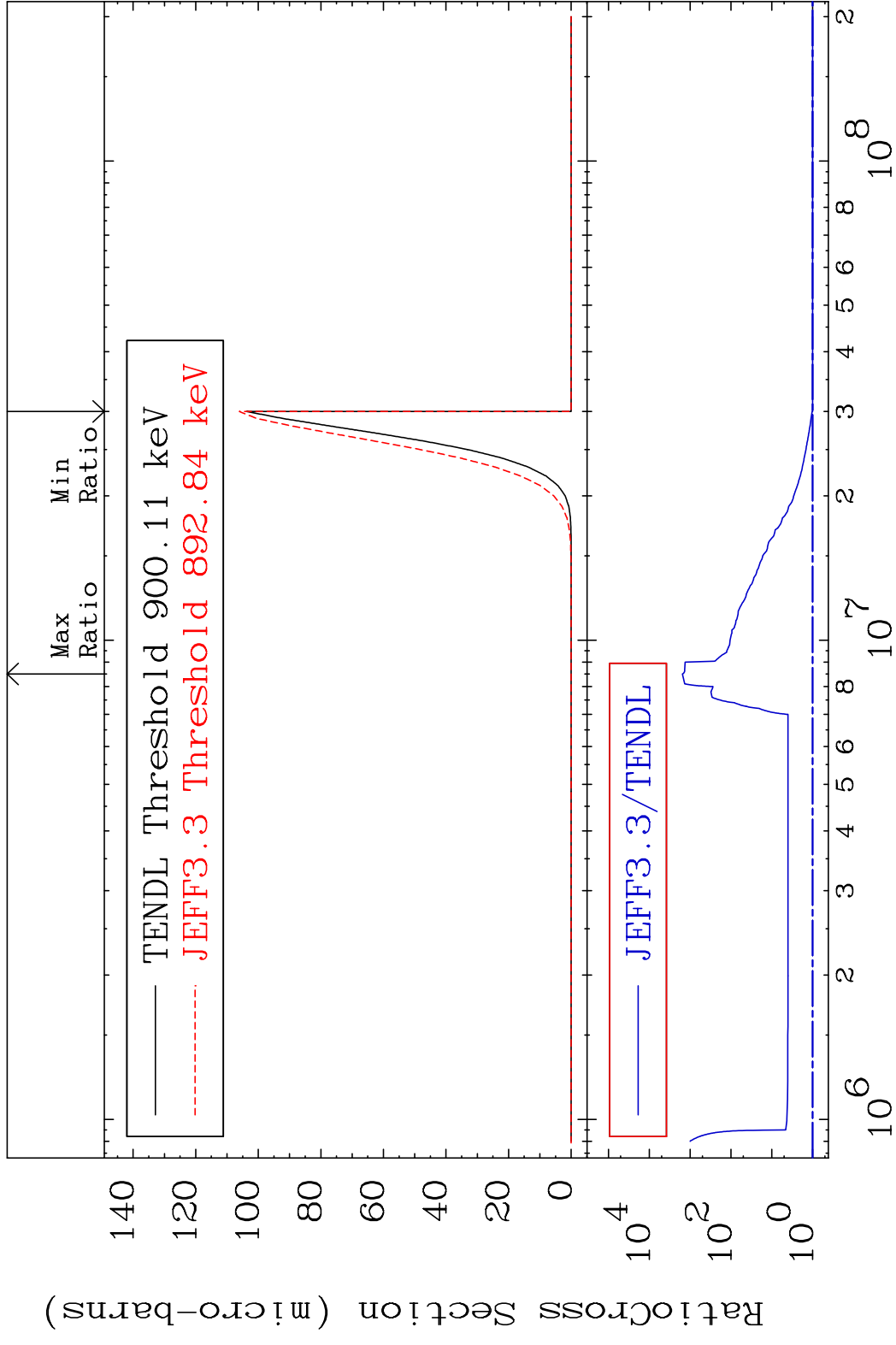
MAT 5425 (n,2p):52-Te-123g 54-Xe-124
 Radionuclide Production Cross Section 5426110 50.16 %



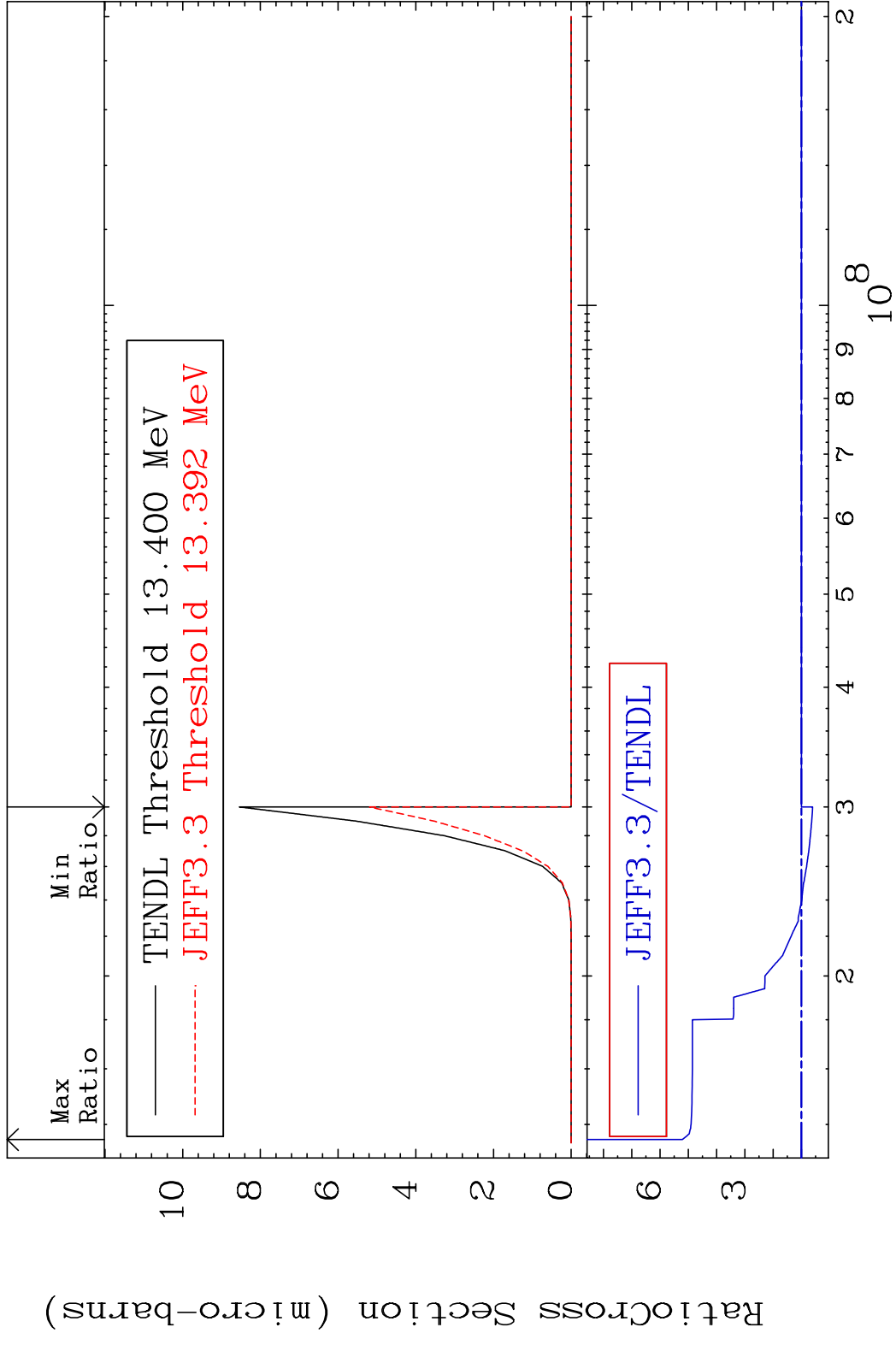
MAT 5425 (n,2p):52-Te-123m2 54-Xe-124
 Radionuclide Production Cross Section 36.03 %



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



MAT 5425 (n,p) t:52-Te-121g 54-Xe-124
 Radionuclide Production Cross Section 420.9 %



MAT 5425 (n,p) t:52-Te-121m2 54-Xe-124
 Radionuclide Production Cross Section 476.6 %

