

Program Complot
(Version 2021-1)

by

Dermott E. Cullen
(Present Contact Information)

Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550

U.S.A.

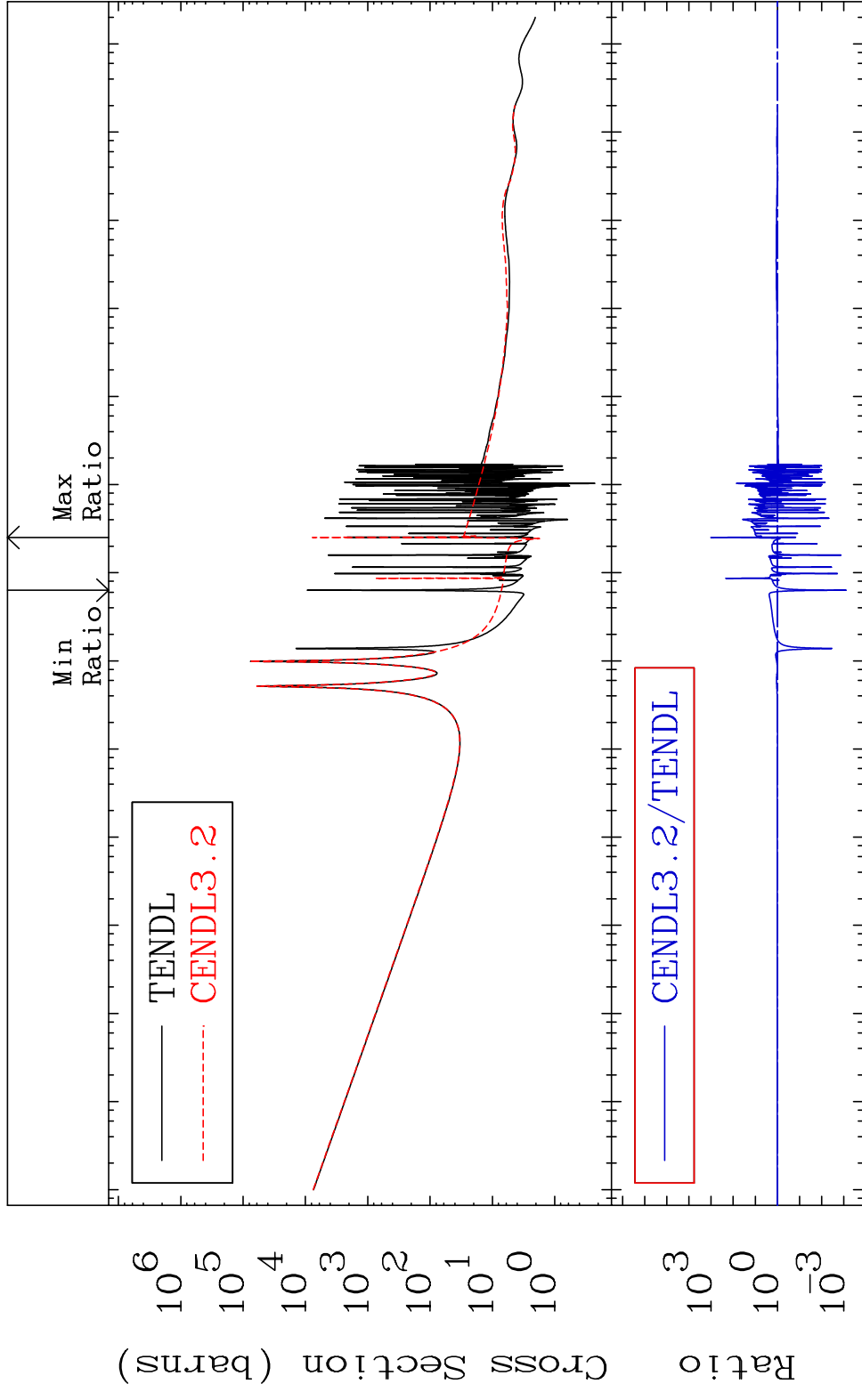
Tele: 925-443-1911

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

Press Mouse Button to Start

MAT 5425

Total Cross Section -99.92 To 9999. %
54-Xe-124



1

Incident Energy (eV)

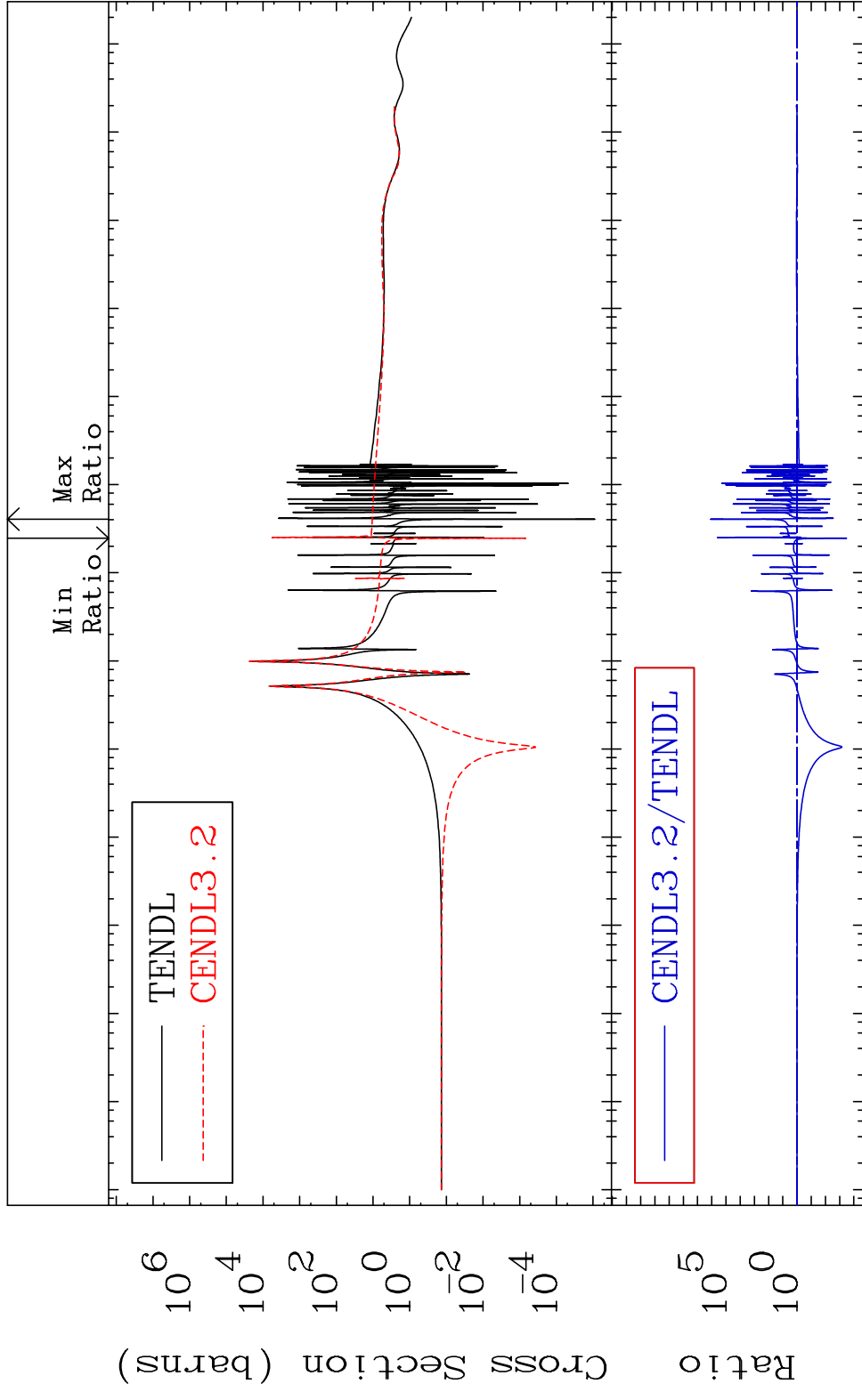
54-Xe-124

MAT 5425

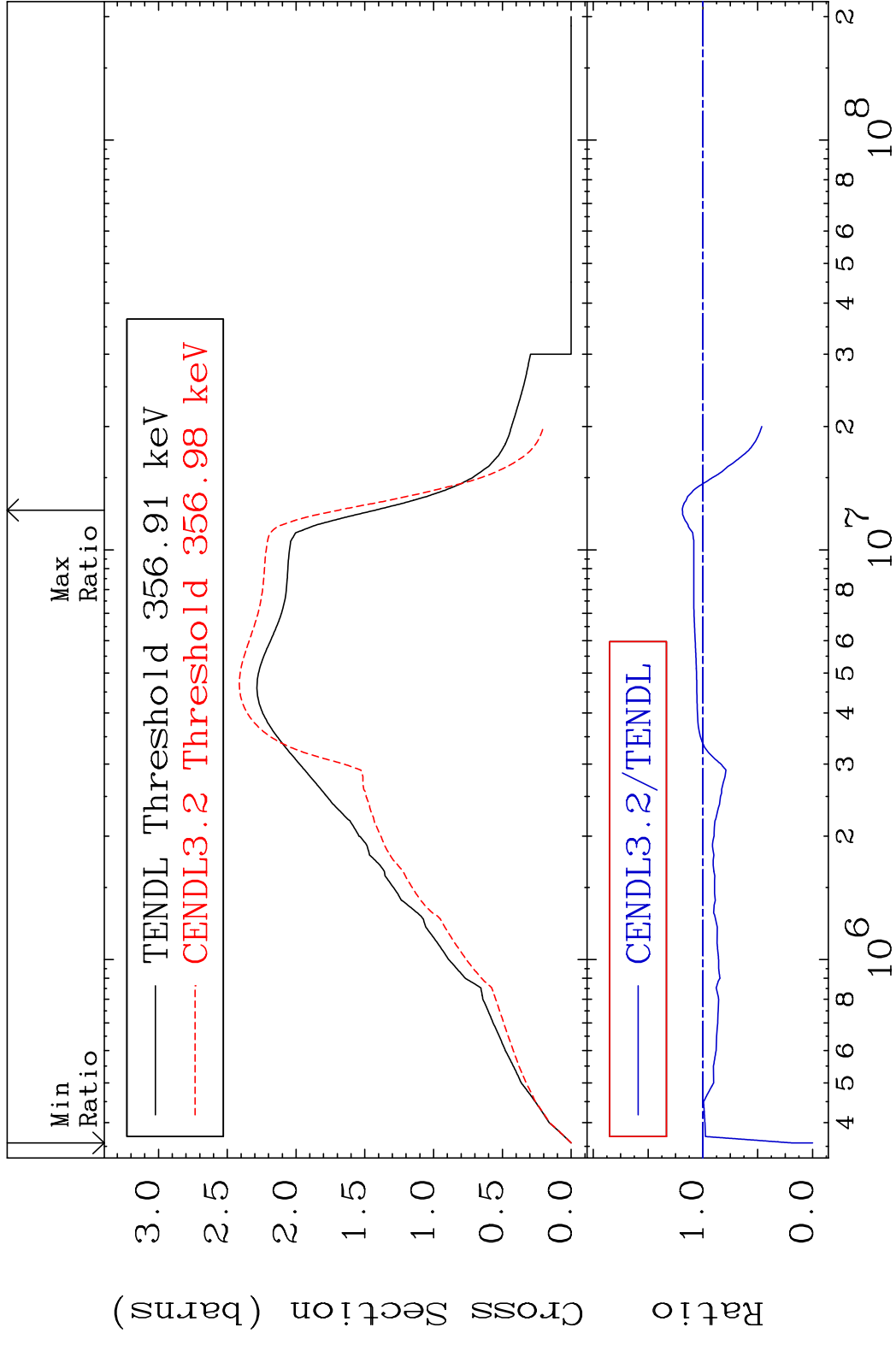
54-Xe-124

Elastic

Cross Section -99.97 To 9999. %



MAT 5425 Inelastic 54-Xe-124
 Cross Section -100.0 To 18.74 %

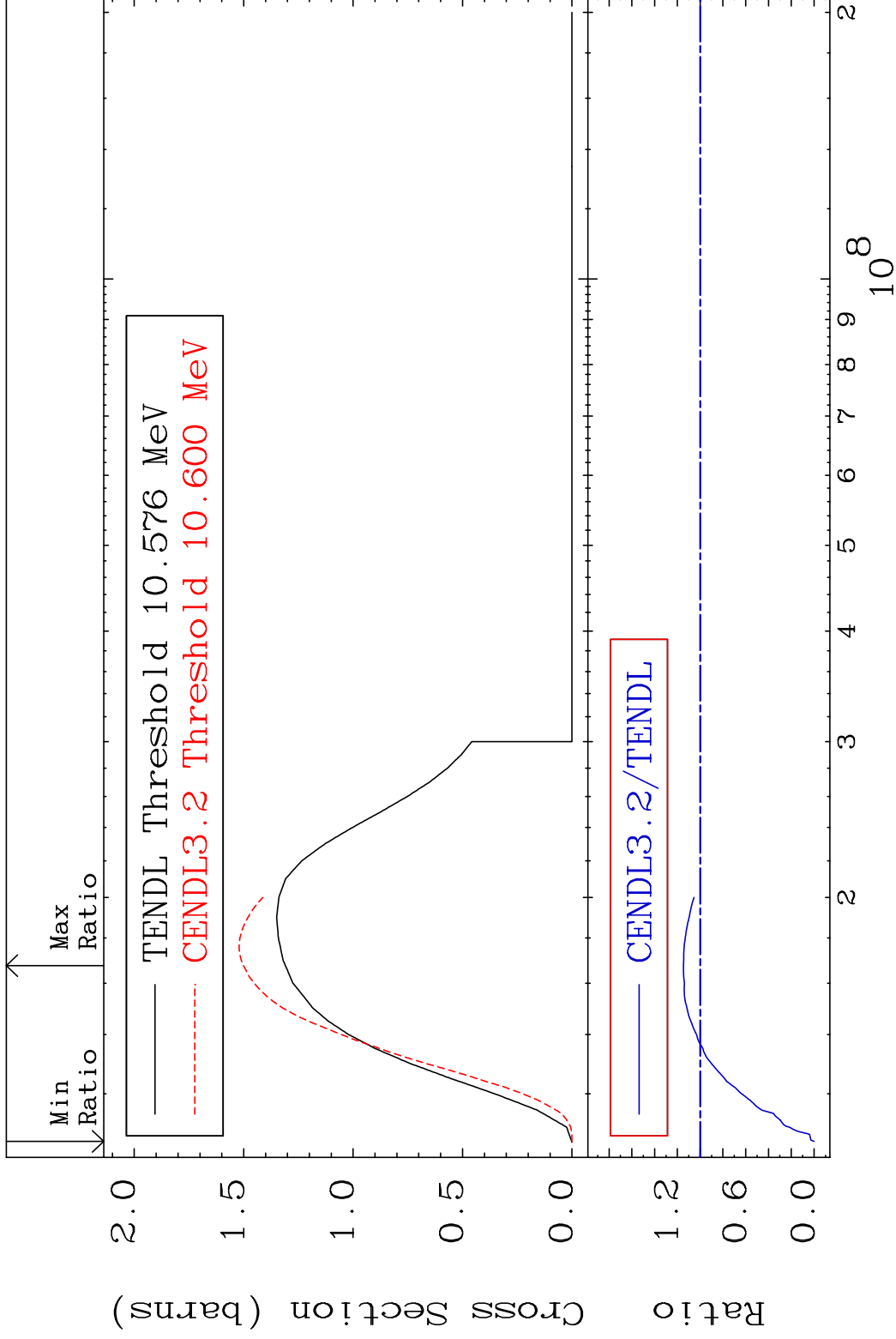


MAT 5425

(n,2n)

54-Xe-124

Cross Section -100.0 To 14.67 %



4

Incident Energy (eV)

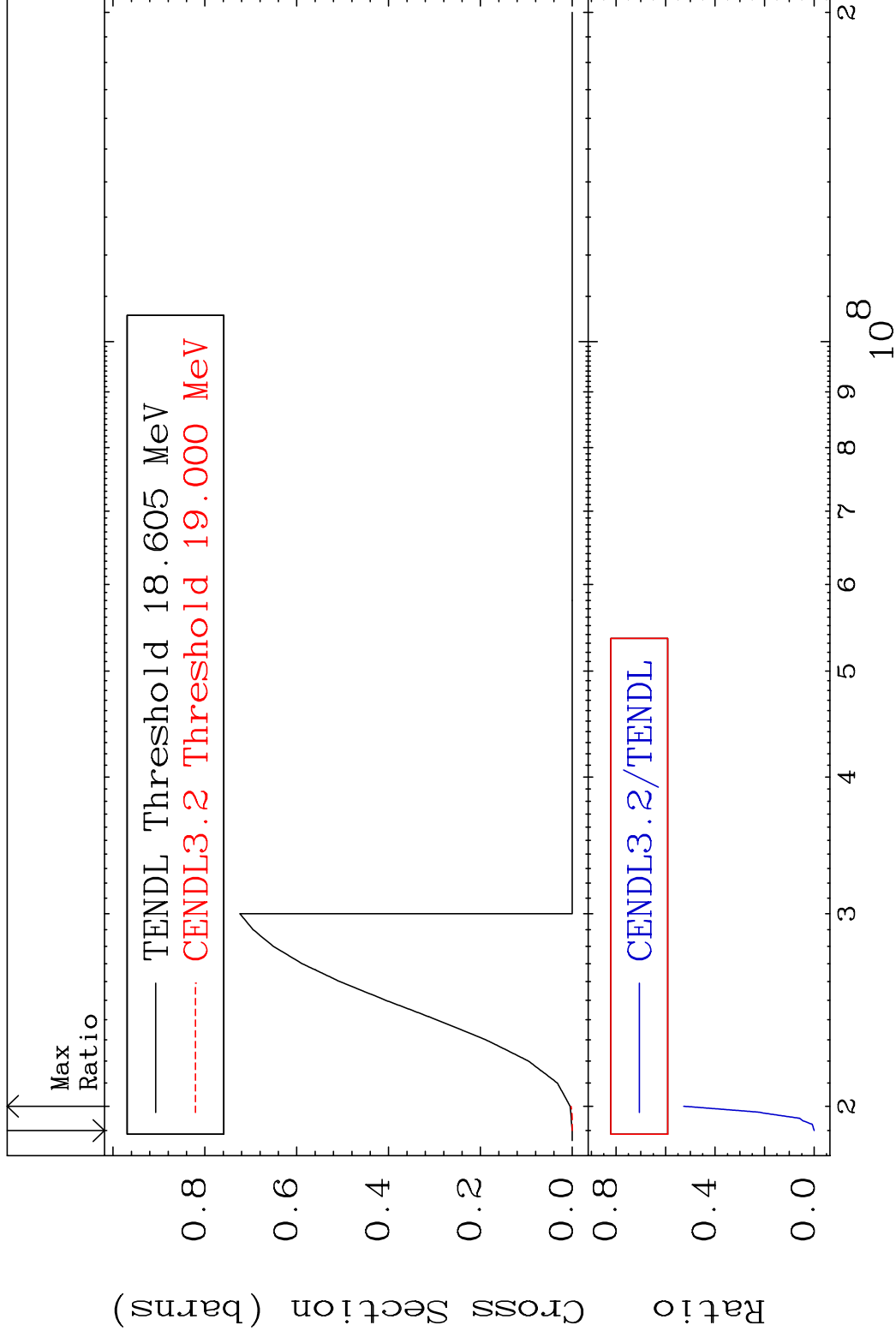
54-Xe-124

MAT 5425

(n,3n)

54-Xe-124

Cross Section -100.0 To -47.30%



5

Incident Energy (eV)

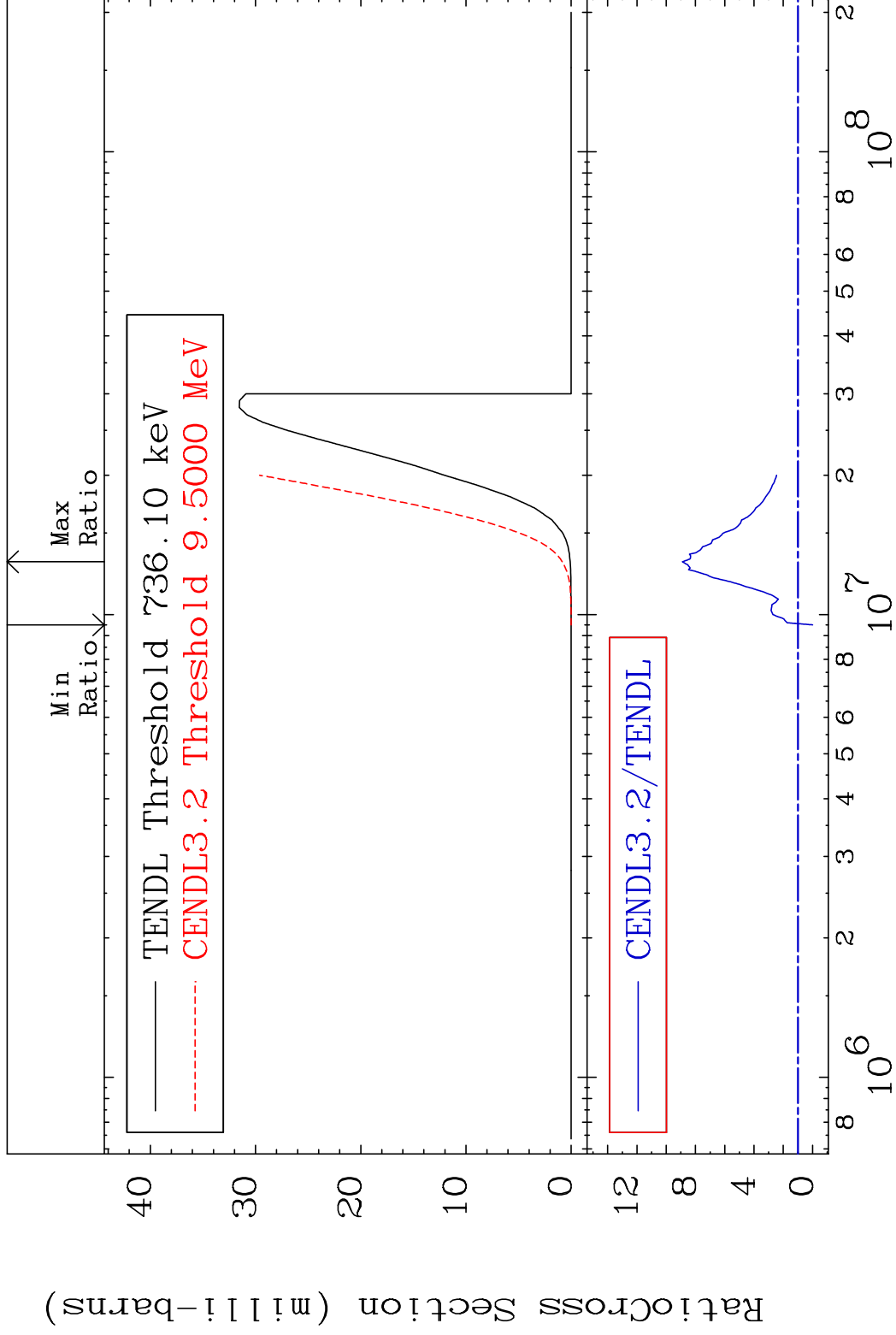
54-Xe-124

MAT 5425

(n, n') α

54-Xe-124

Cross Section -100.0 To 789.8 %



6

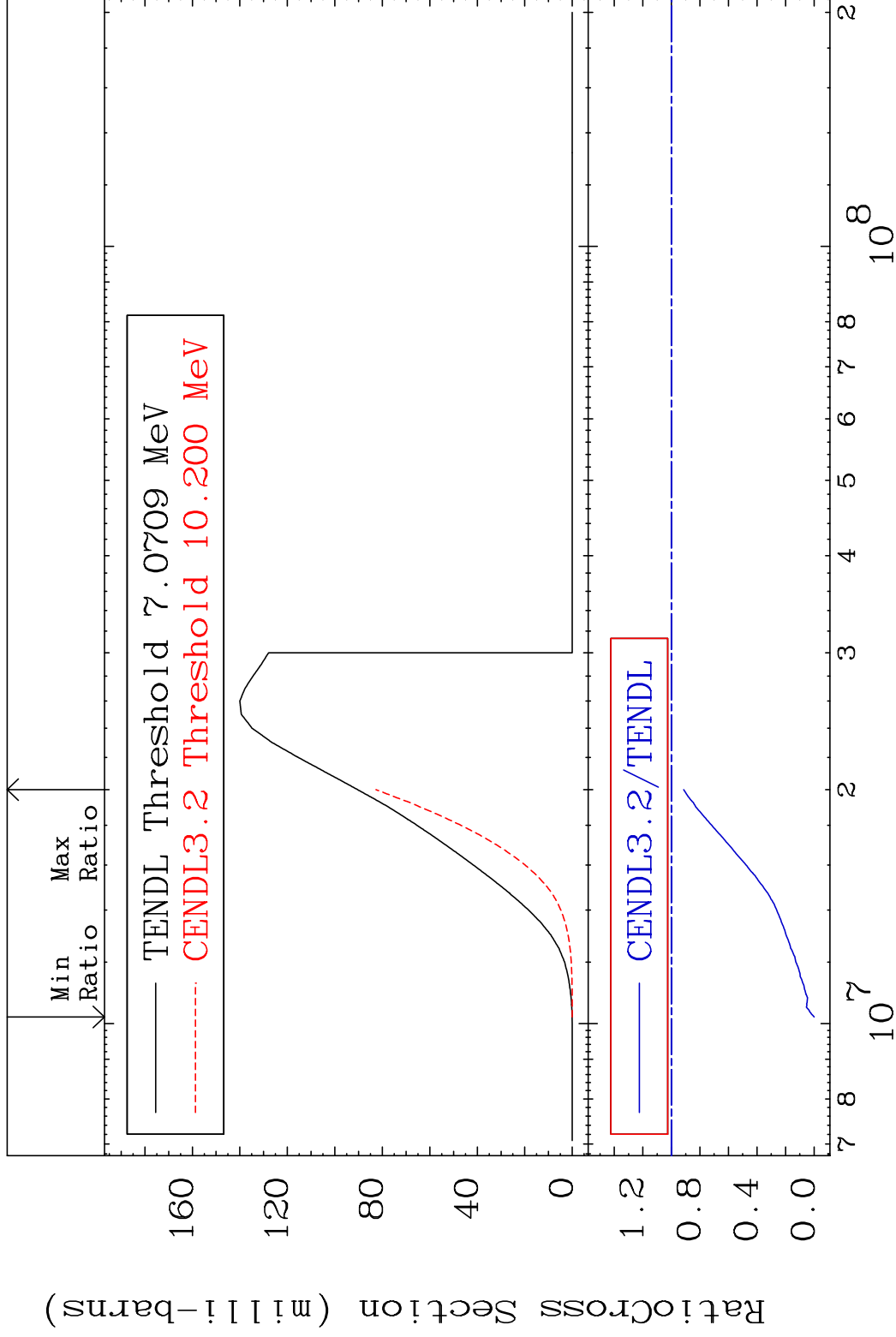
Incident Energy (eV)

54-Xe-124

MAT 5425

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

Cross Section -100.0 To -8.609%

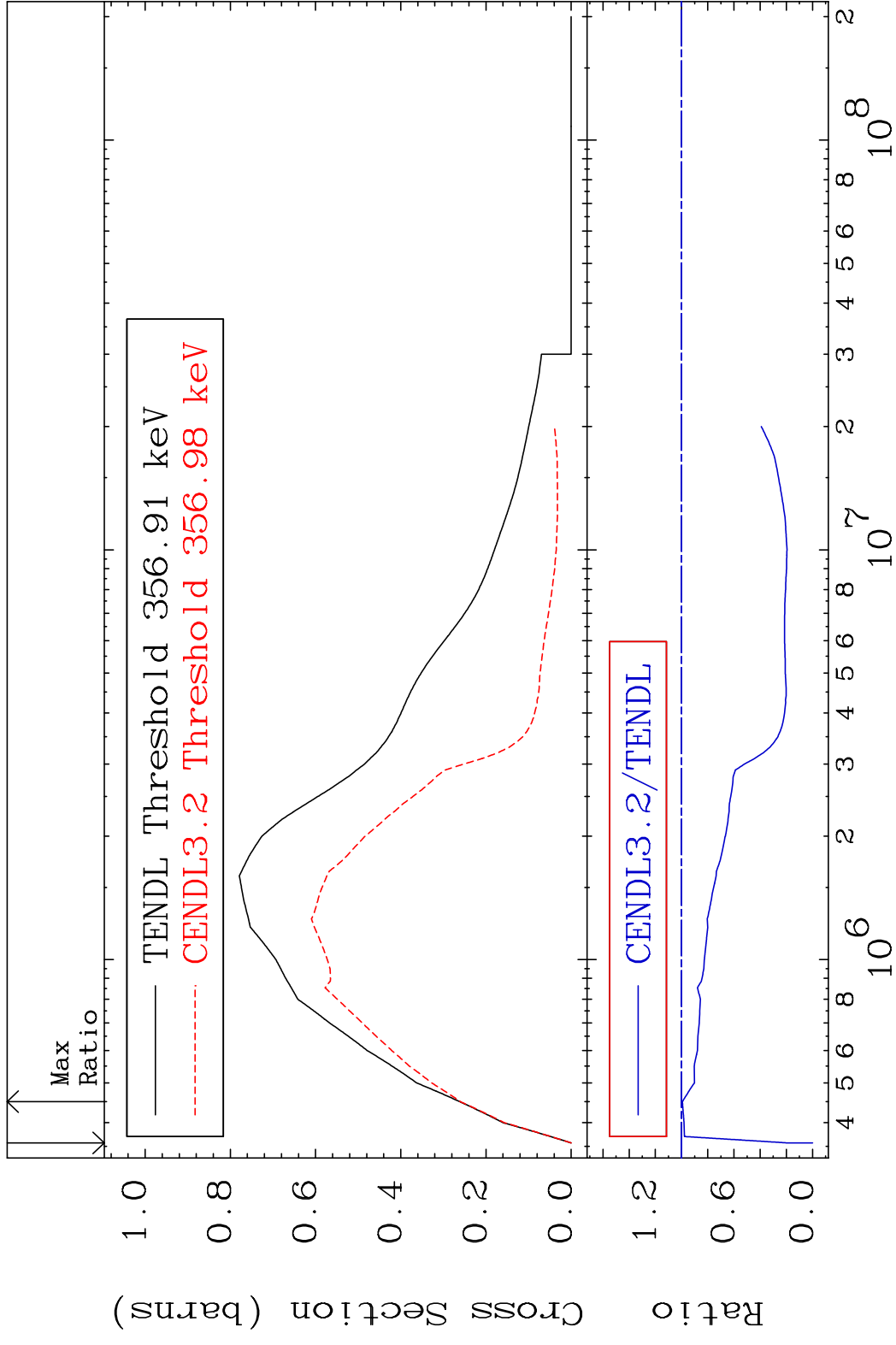


7

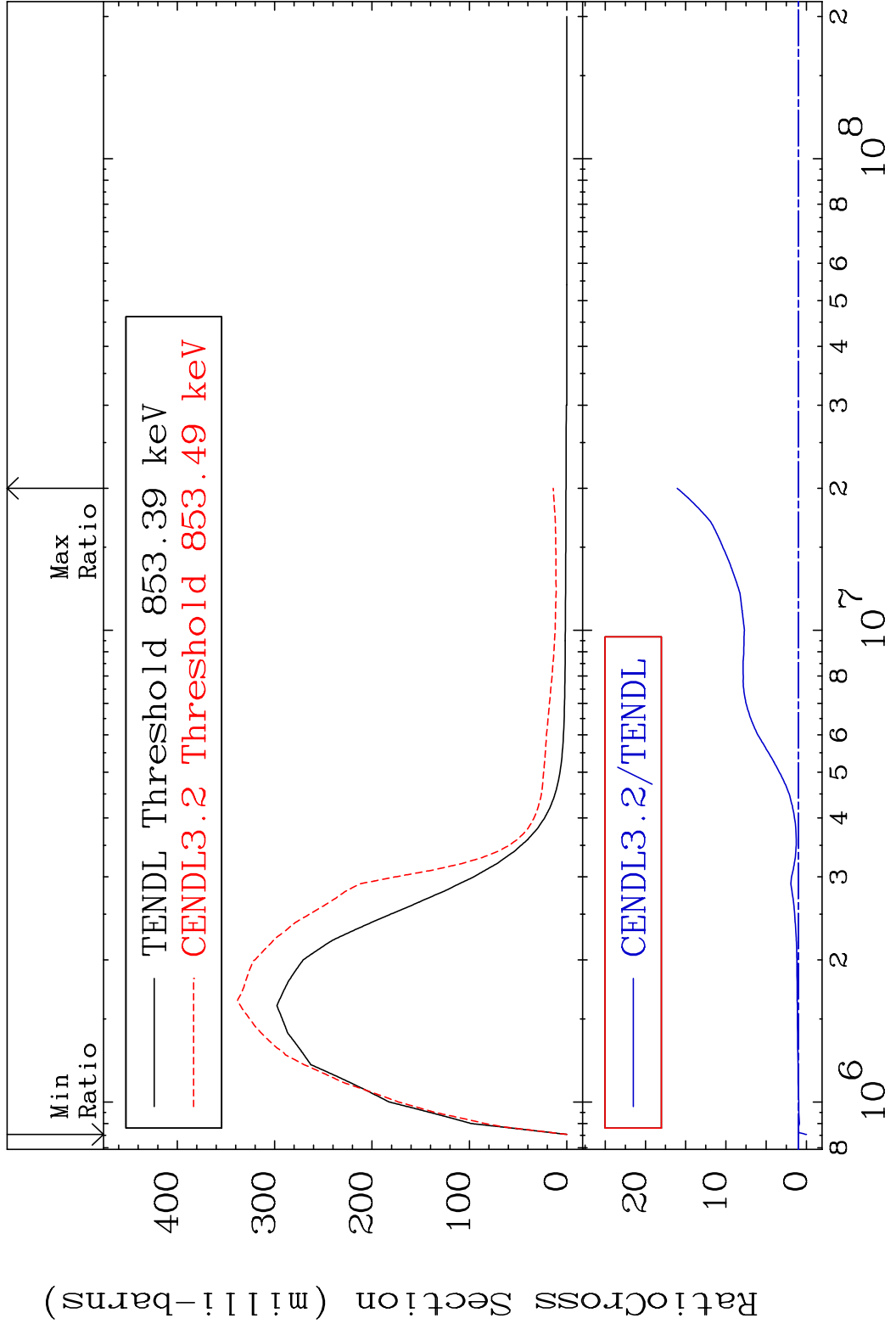
Incident Energy (eV)

54-Xe-124

MAT 5425 MT= 51 (n, n') Level 54-Xe-124
 Cross Section -100.0 To -0.611%

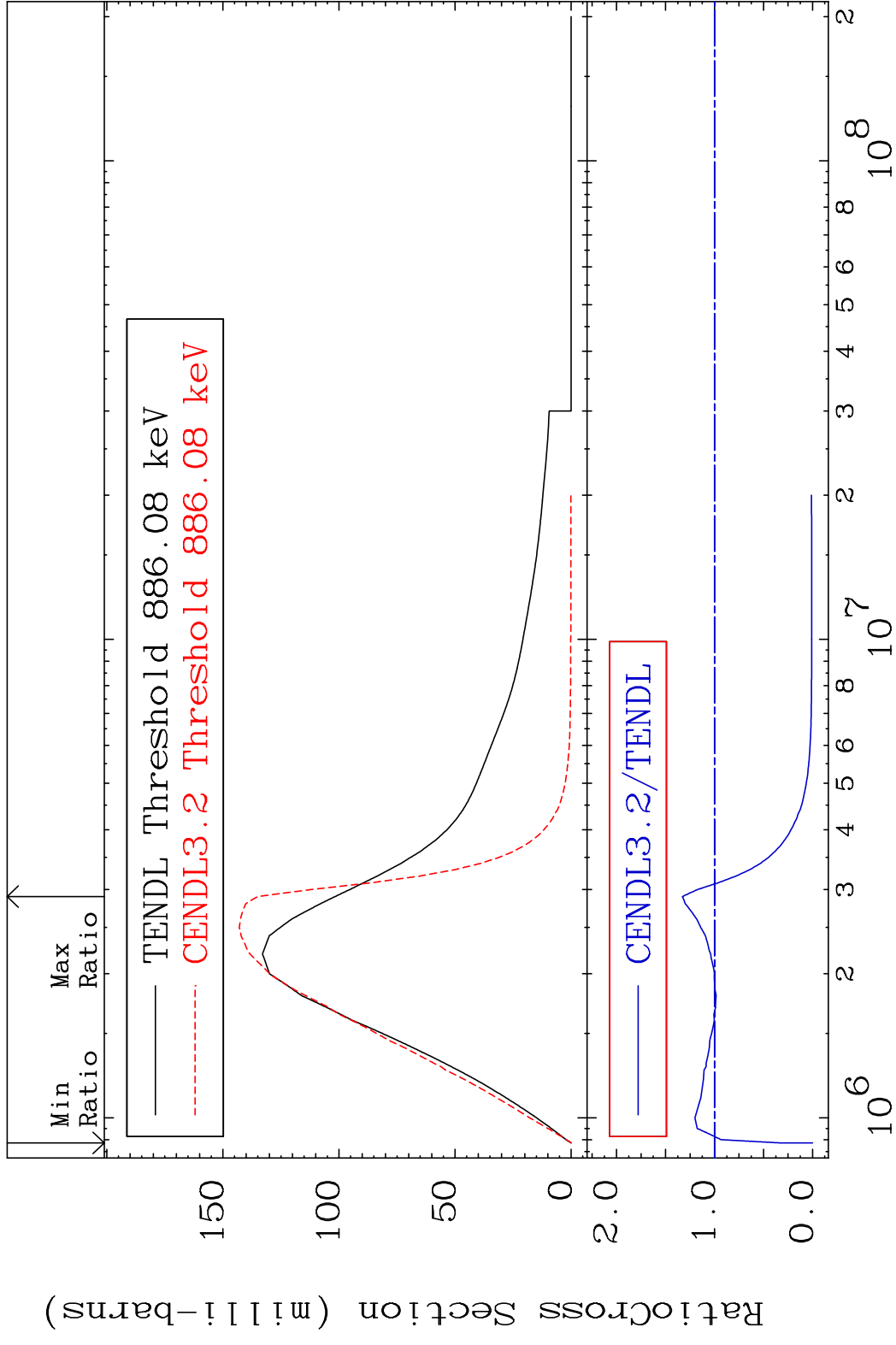


MAT 5425 MT= 52 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 1505. %



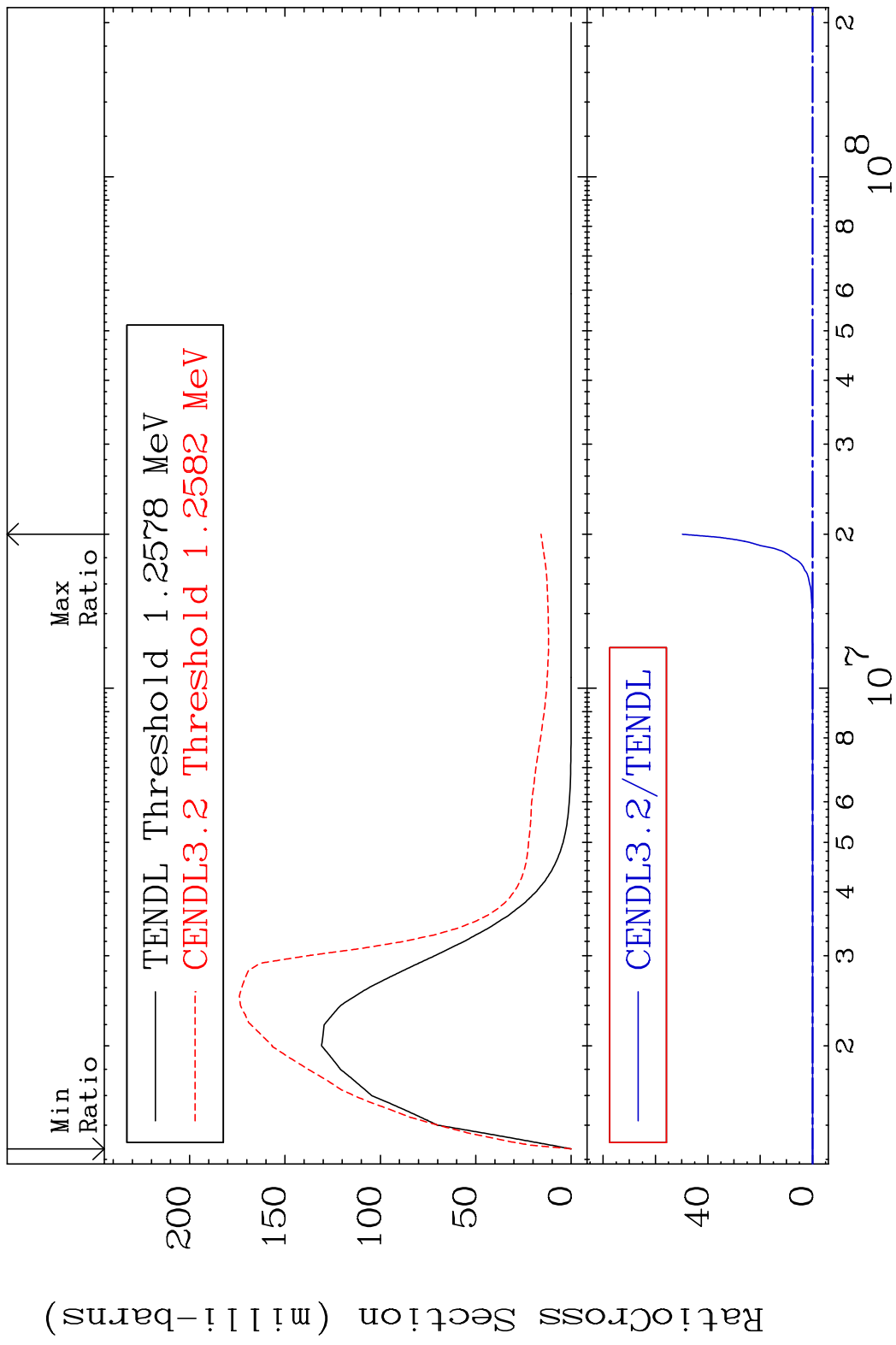
9 Incident Energy (eV) 54-Xe-124

MAT 5425 MT= 53 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 32.86 %

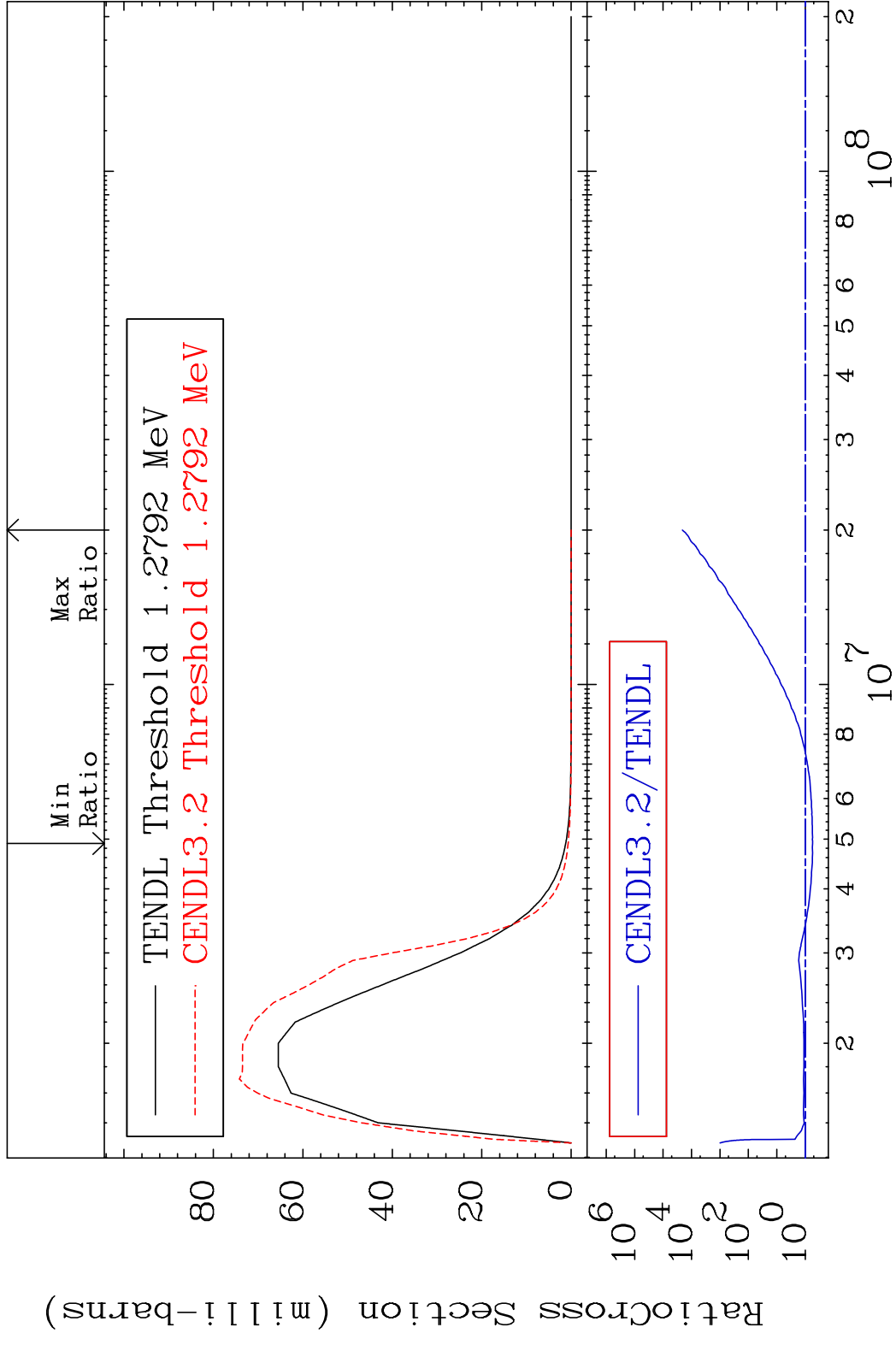


10 Incident Energy (eV) 54-Xe-124

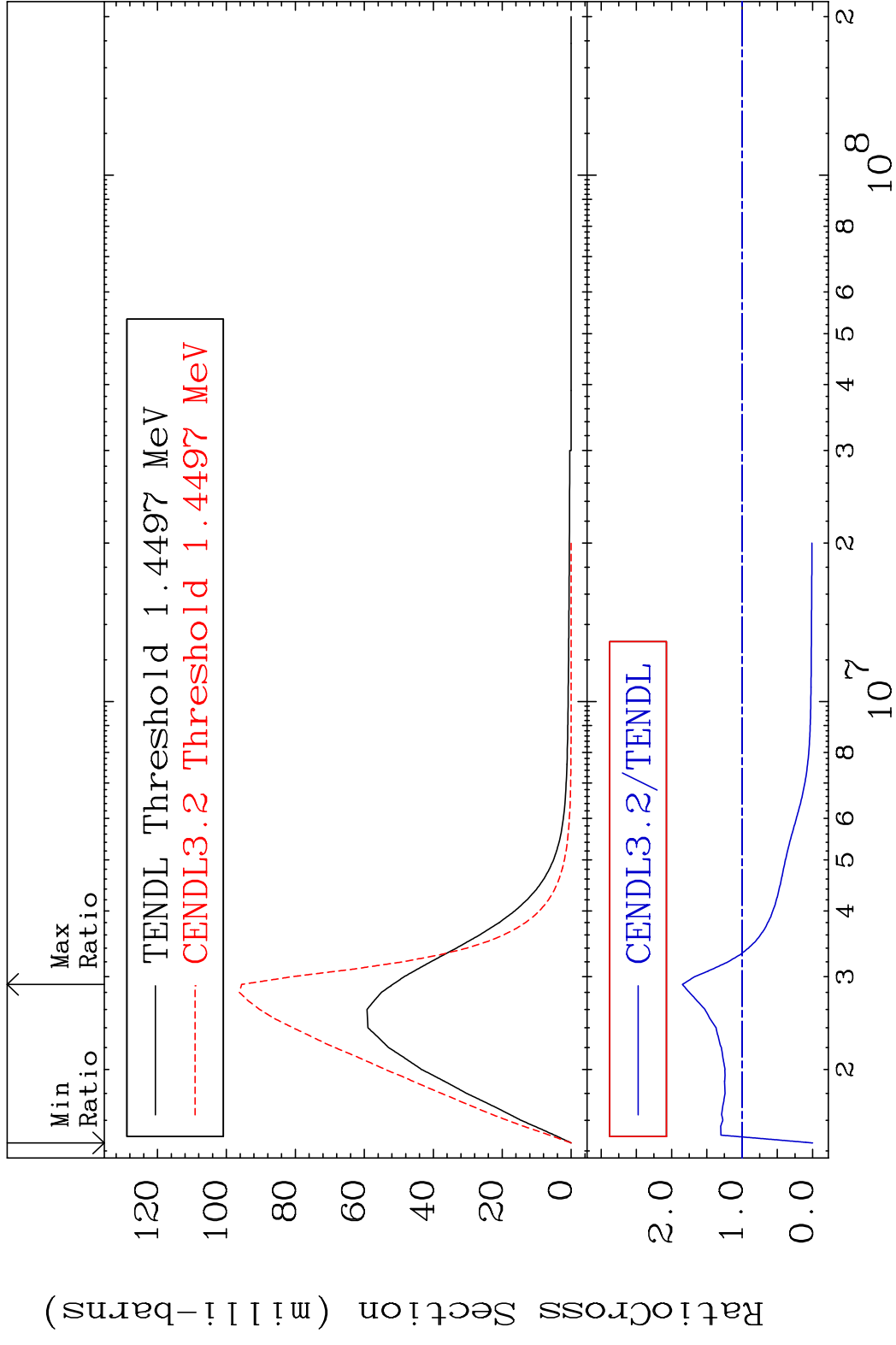
MAT 5425 MT= 54 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 9999. %



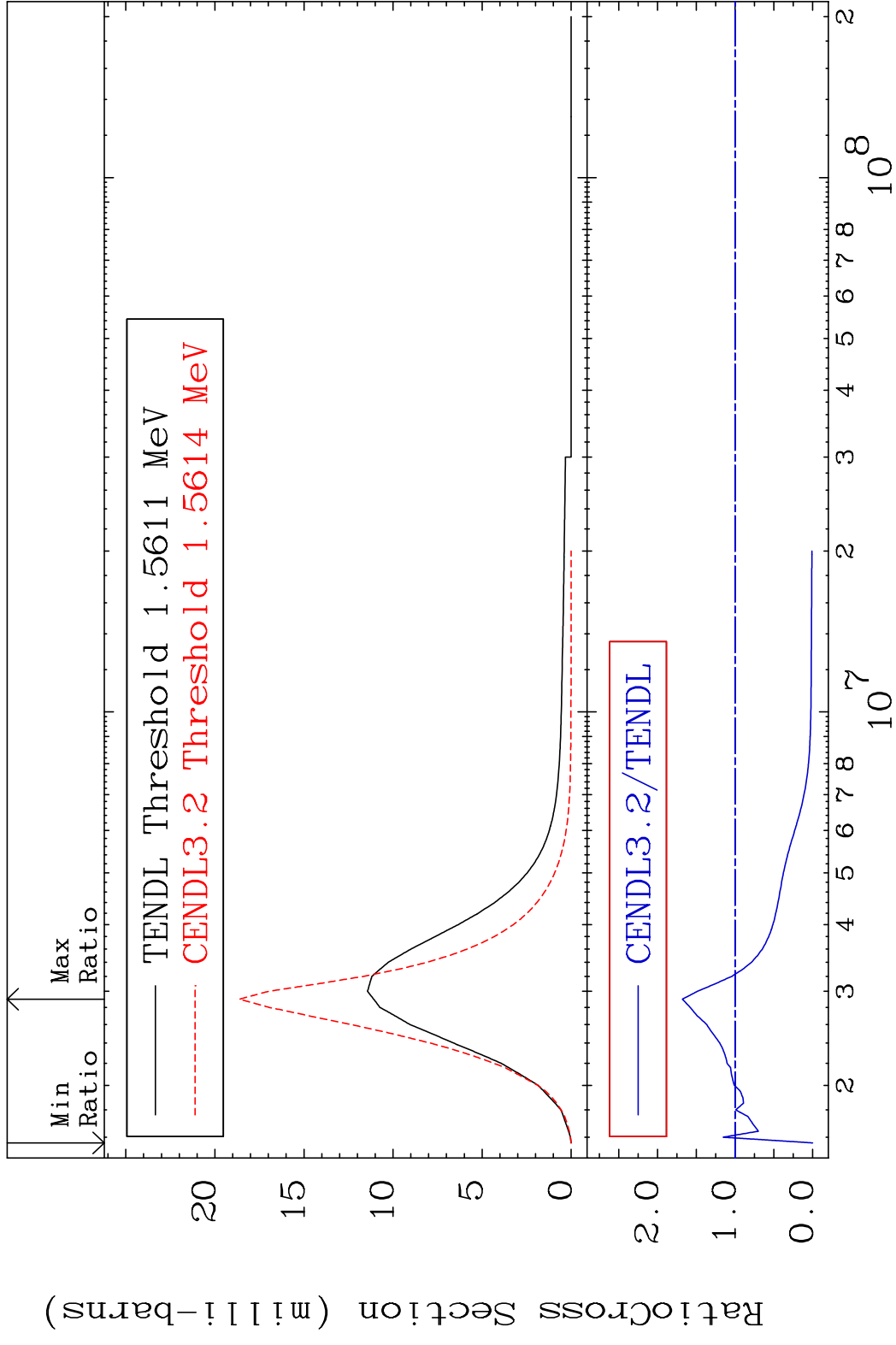
MAT 5425 MT= 55 (n, n') Level 54-Xe-124
 Cross Section -44.49 To 9999. %



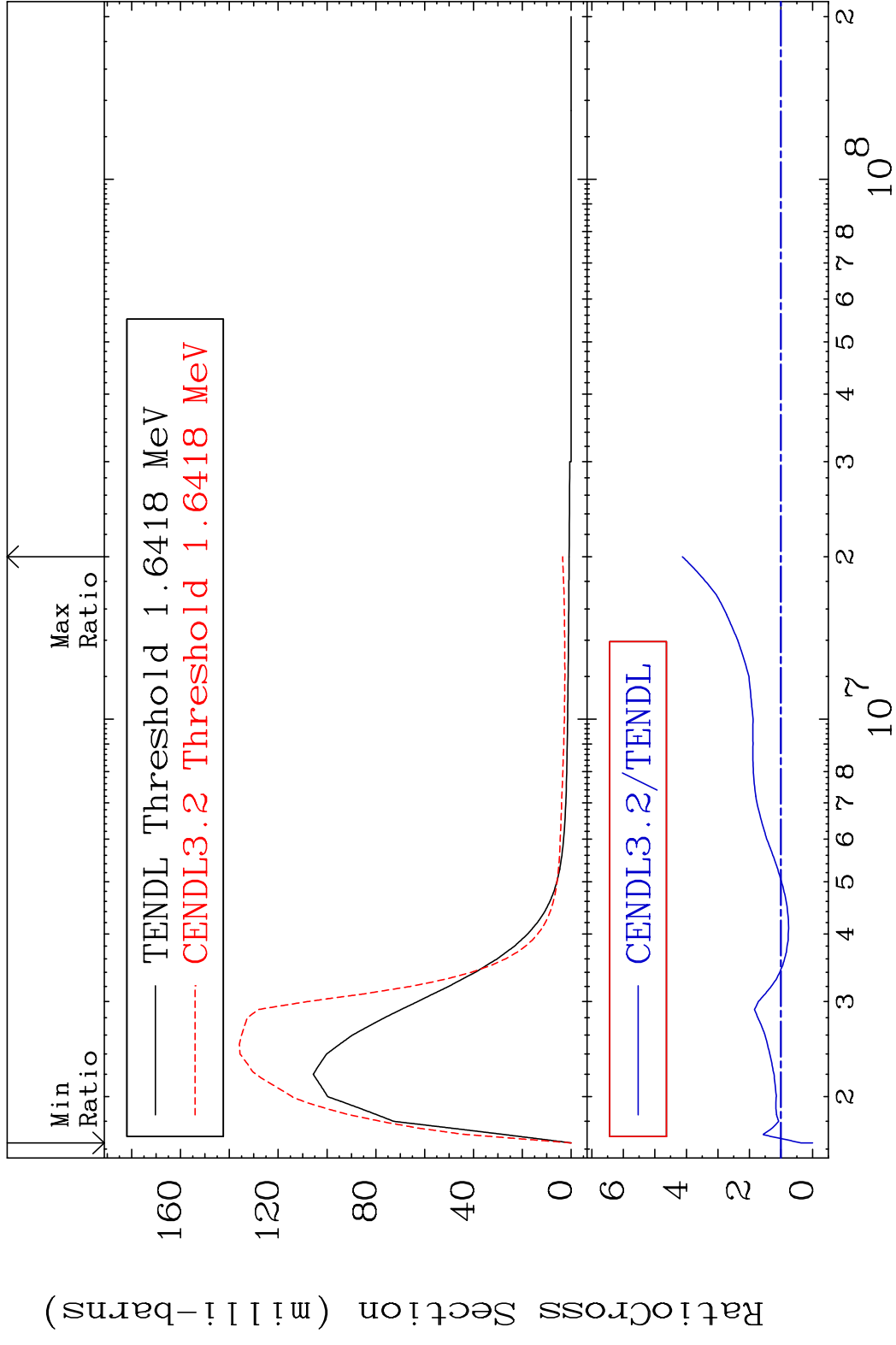
MAT 5425 MT= 56 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 84.72 %



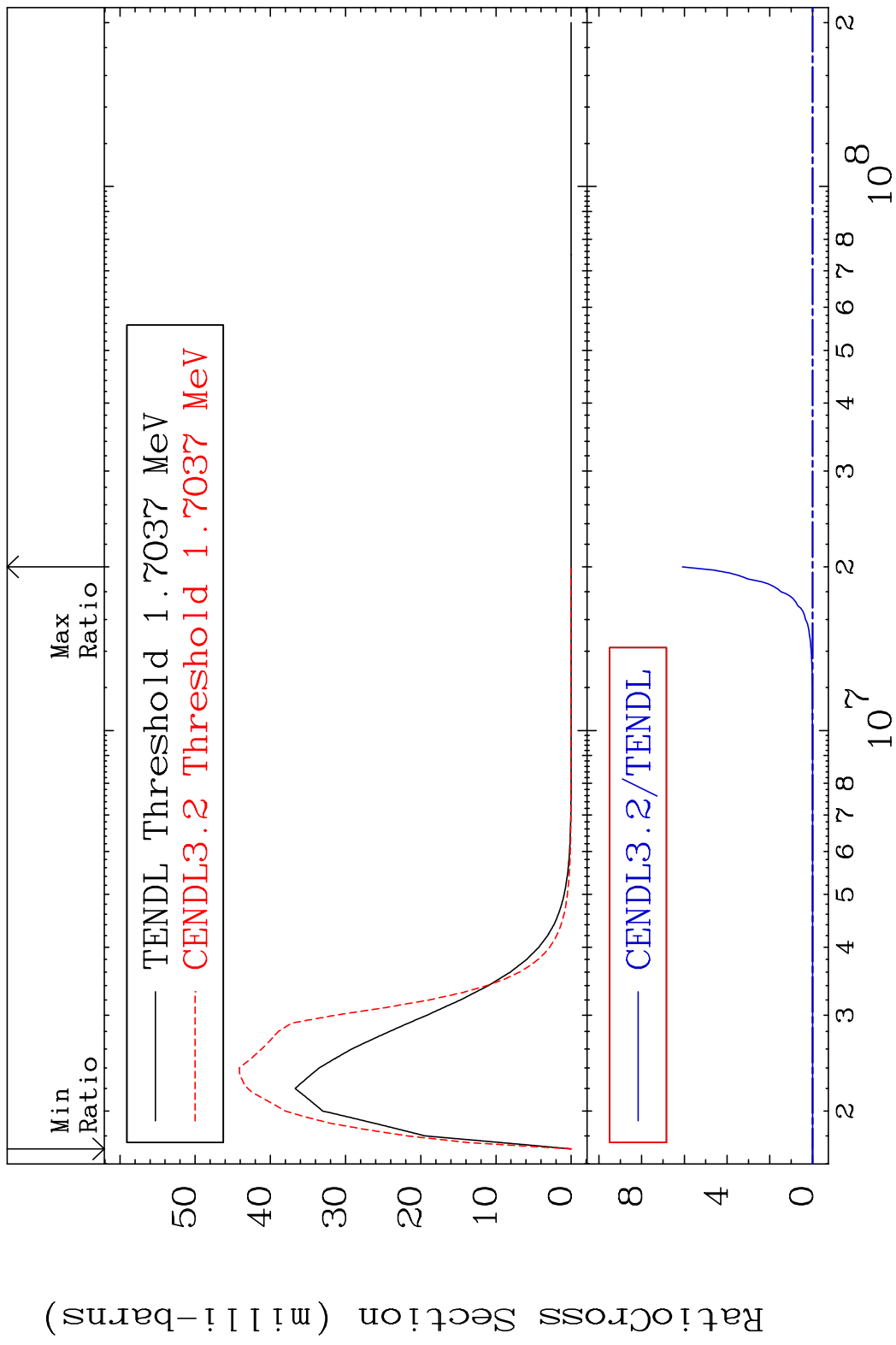
MAT 5425 MT= 57 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 68.05 %



MAT 5425 MT= 58 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 312.8 %

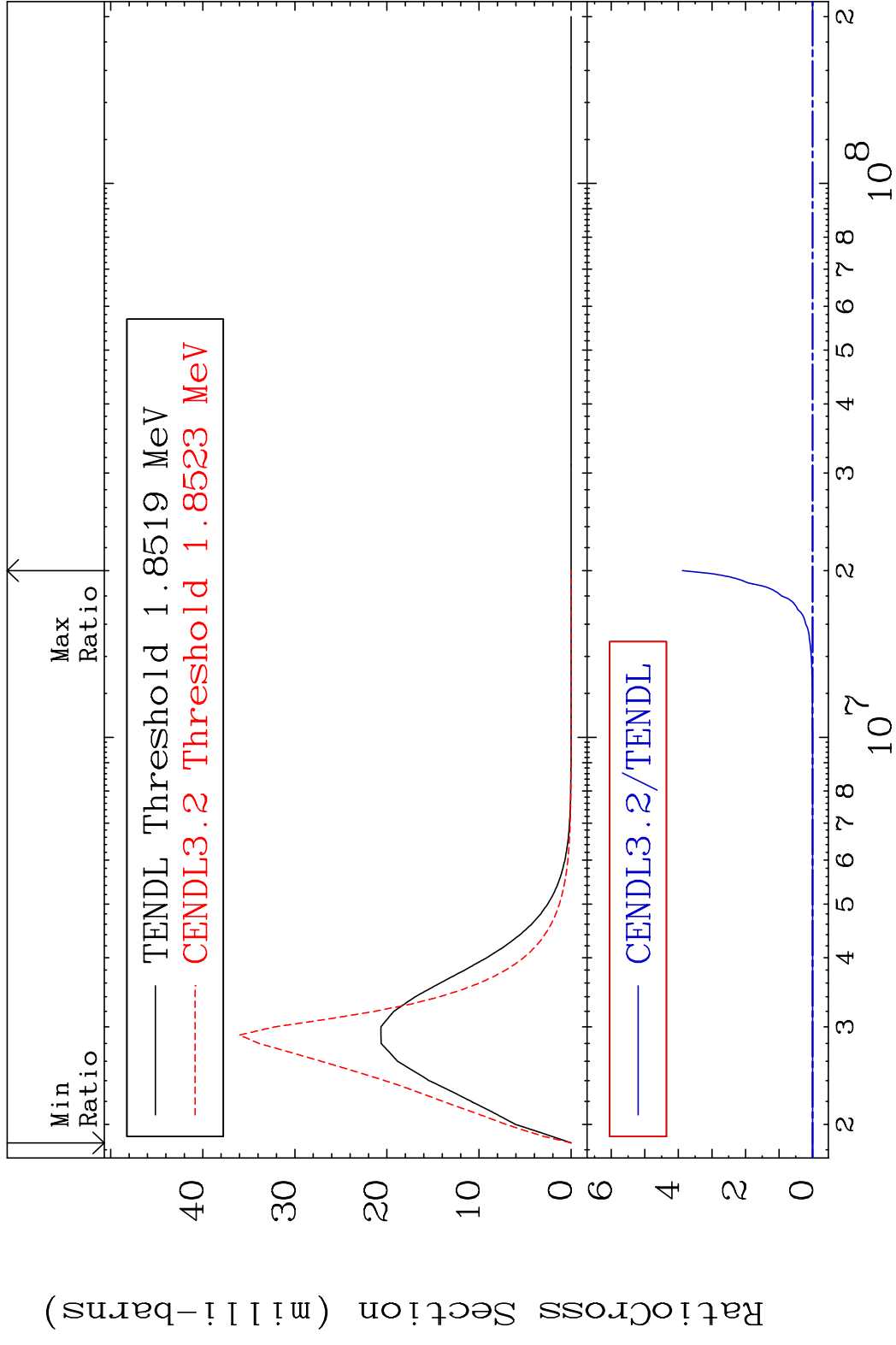


MAT 5425 MT= 59 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 9999. %

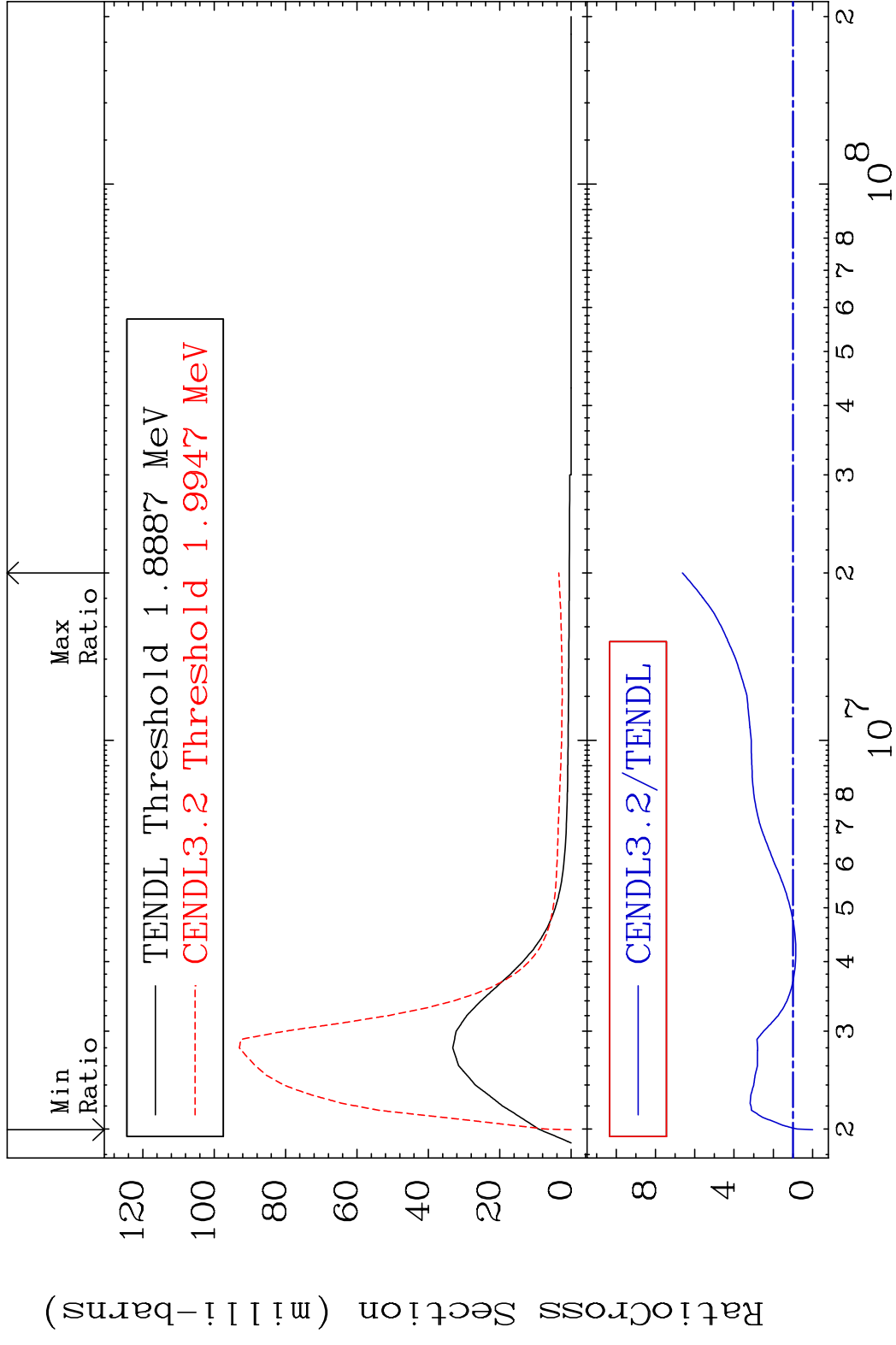


16 Incident Energy (eV) 54-Xe-124

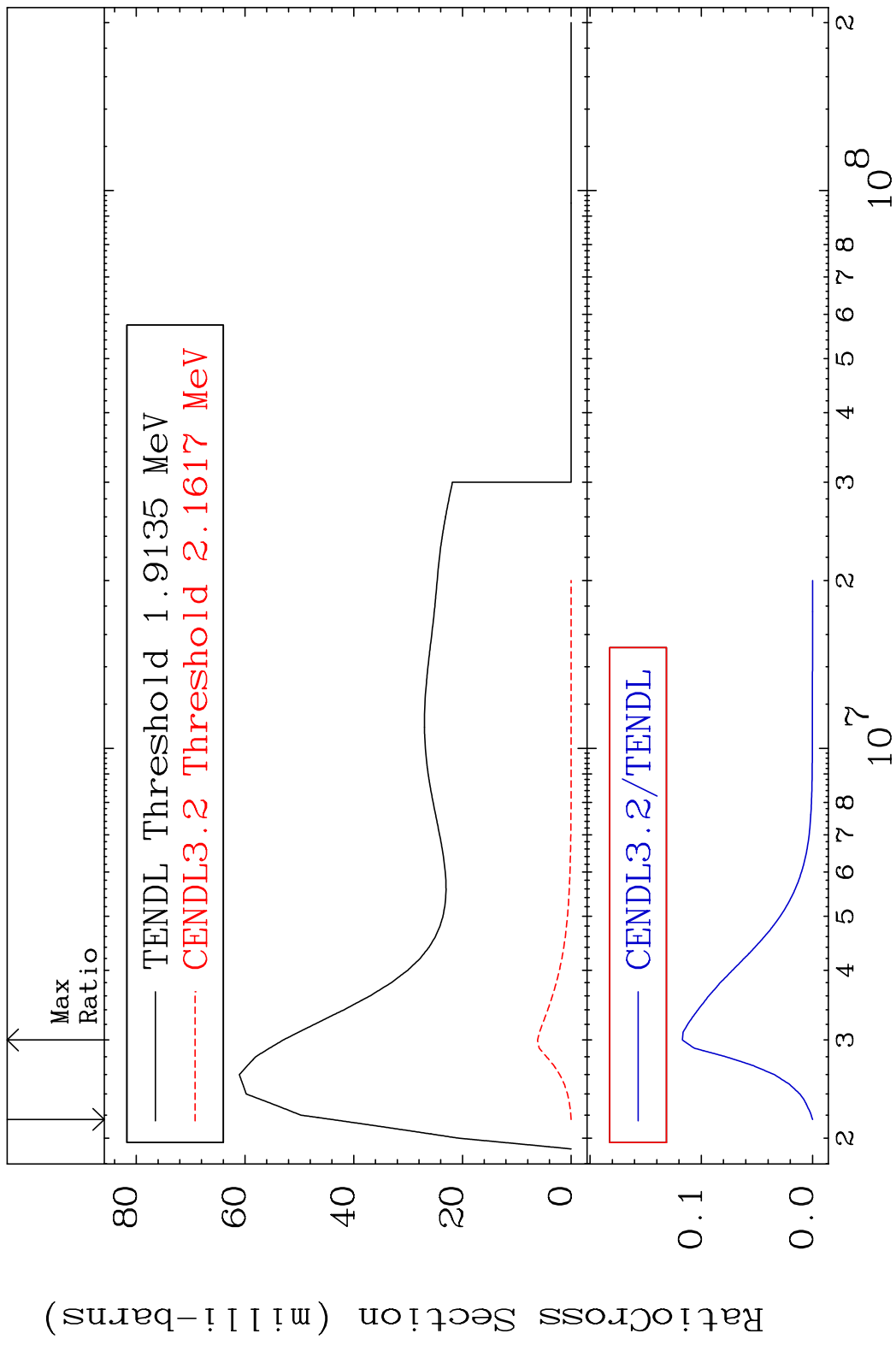
MAT 5425 MT= 60 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 9999. %



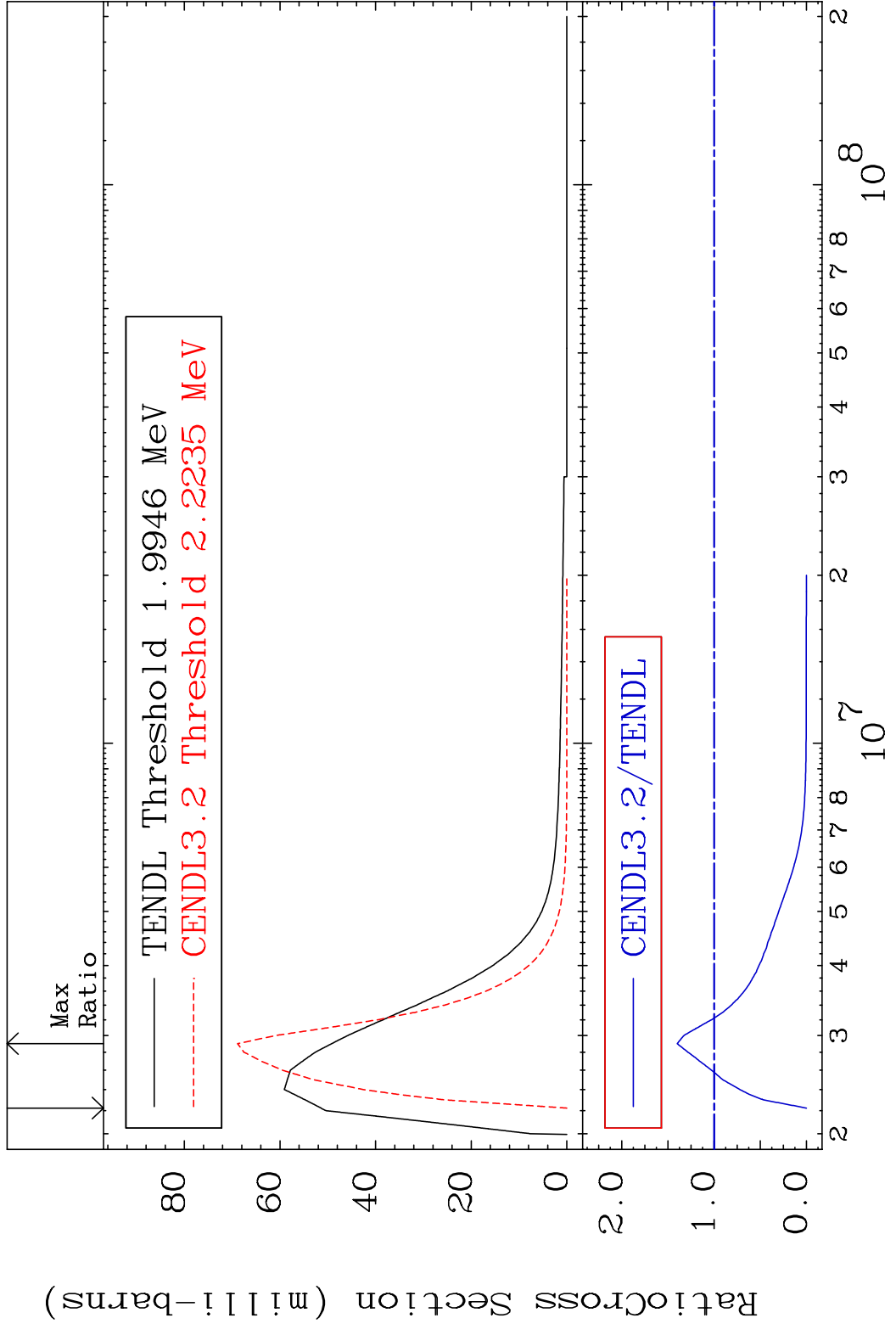
MAT 5425 MT= 61 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 563.2 %



MAT 5425 MT= 62 (n, n') Level 54-Xe-124
 Cross Section -100.0 To -88.30%

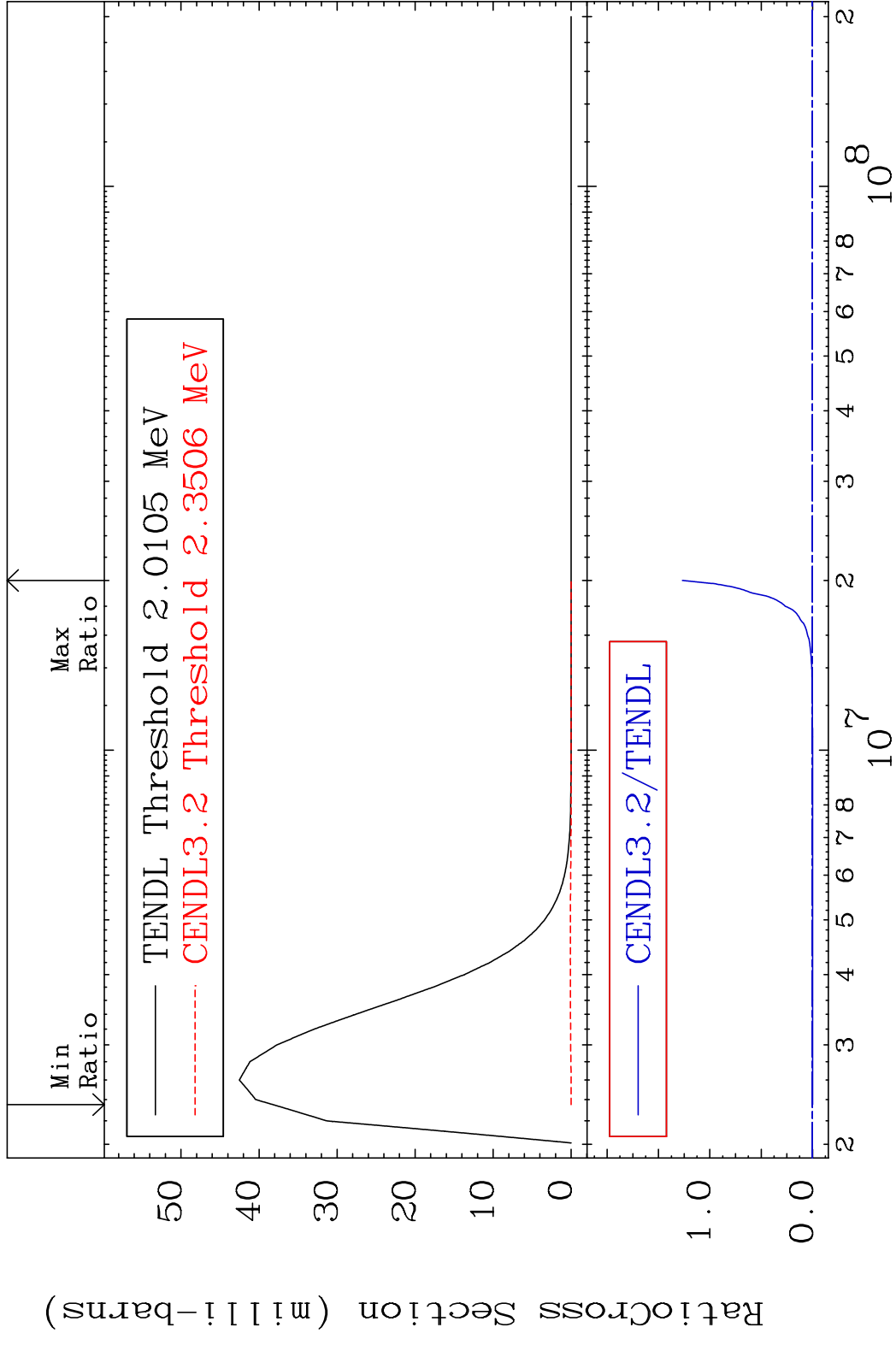


MAT 5425 MT= 63 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 40.03 %

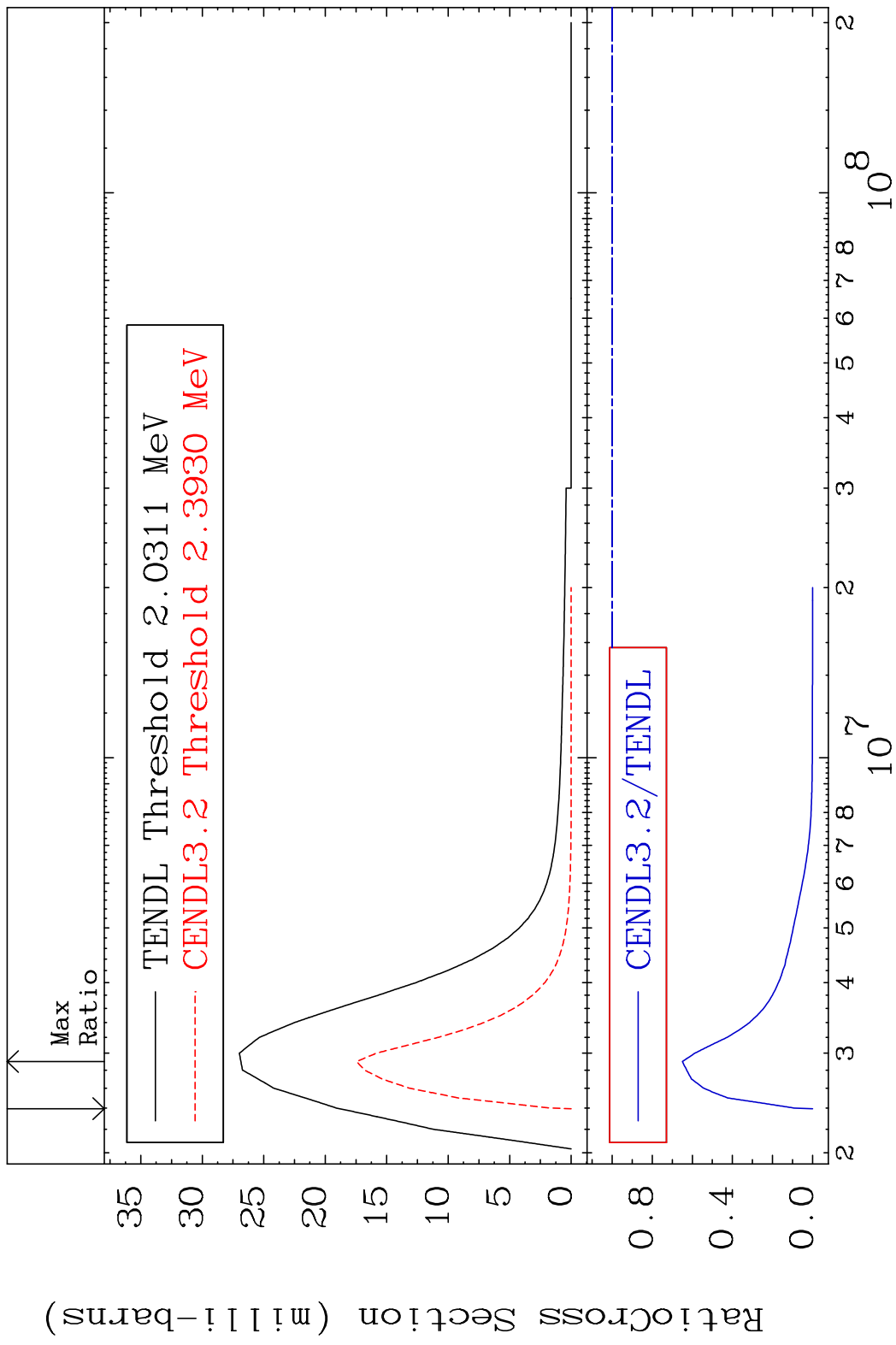


20 20 54-Xe-124

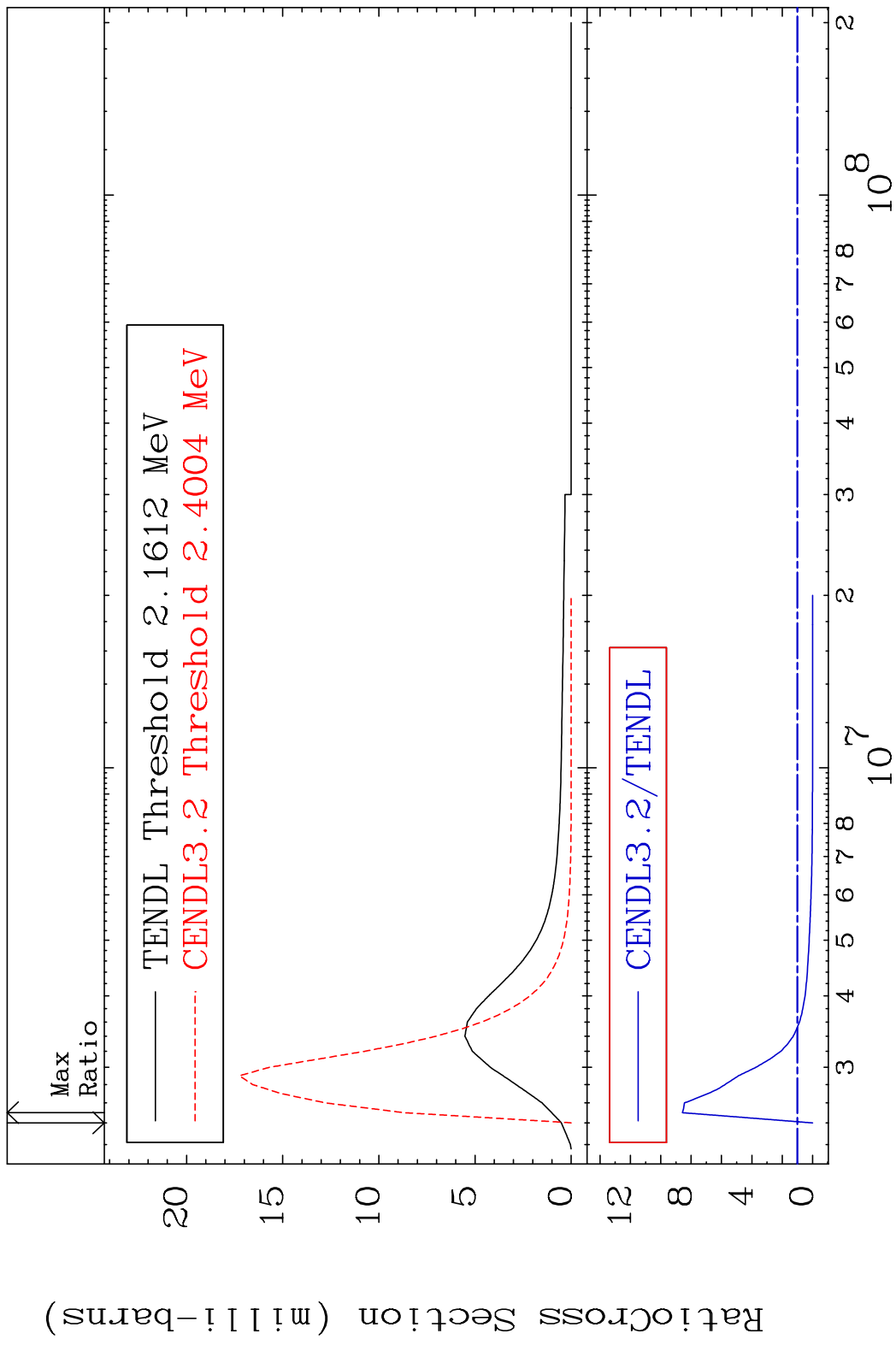
MAT 5425 MT= 64 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 9999. %



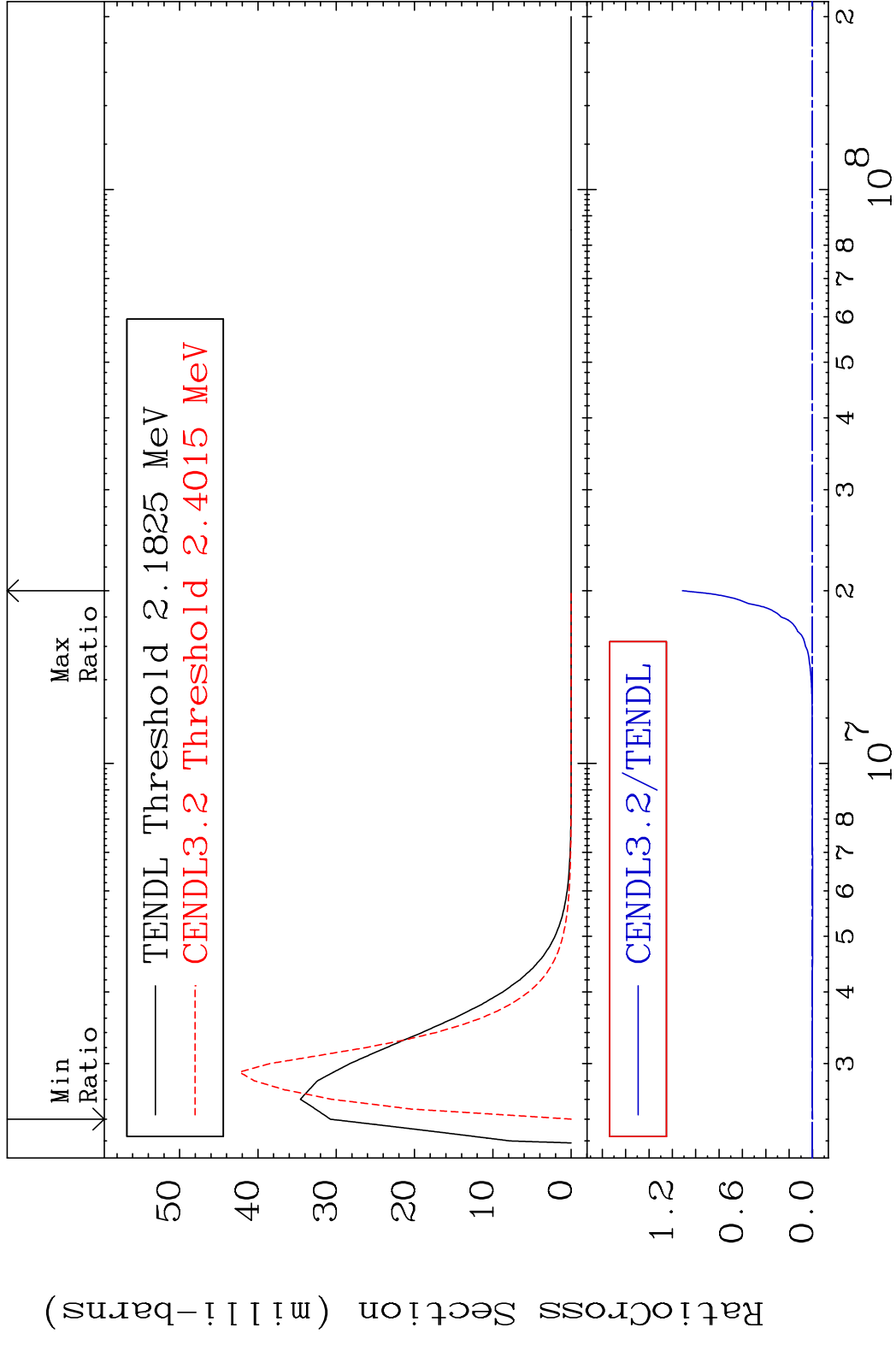
MAT 5425 MT= 65 (n, n') Level 54-Xe-124
 Cross Section -100.0 To -35.02%



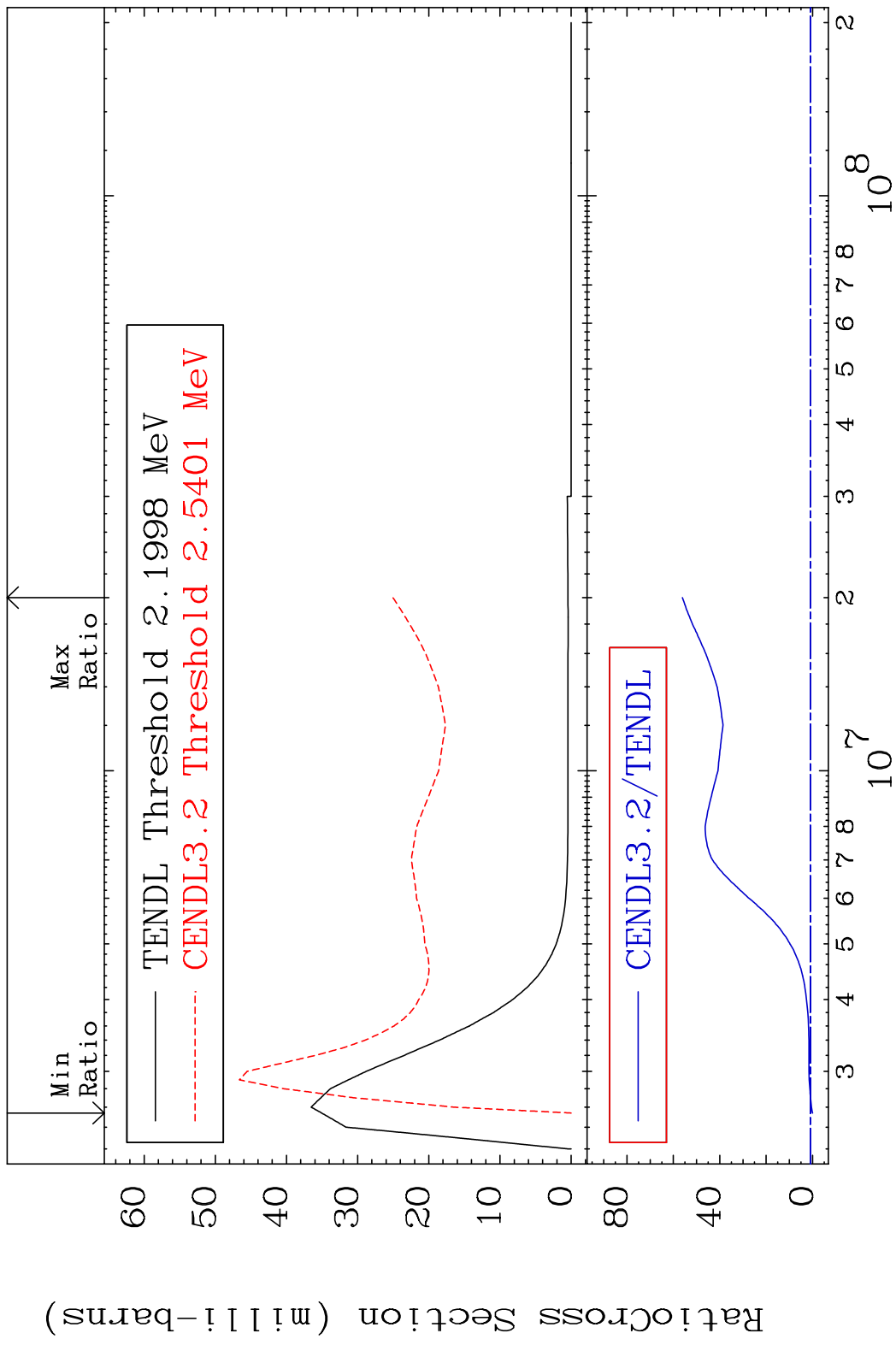
MAT 5425 MT= 66 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 757.7 %



MAT 5425 MT= 67 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 9999. %



MAT 5425 MT= 68 (n, n') Level 54-Xe-124
 Cross Section -100.0 To 5513. %



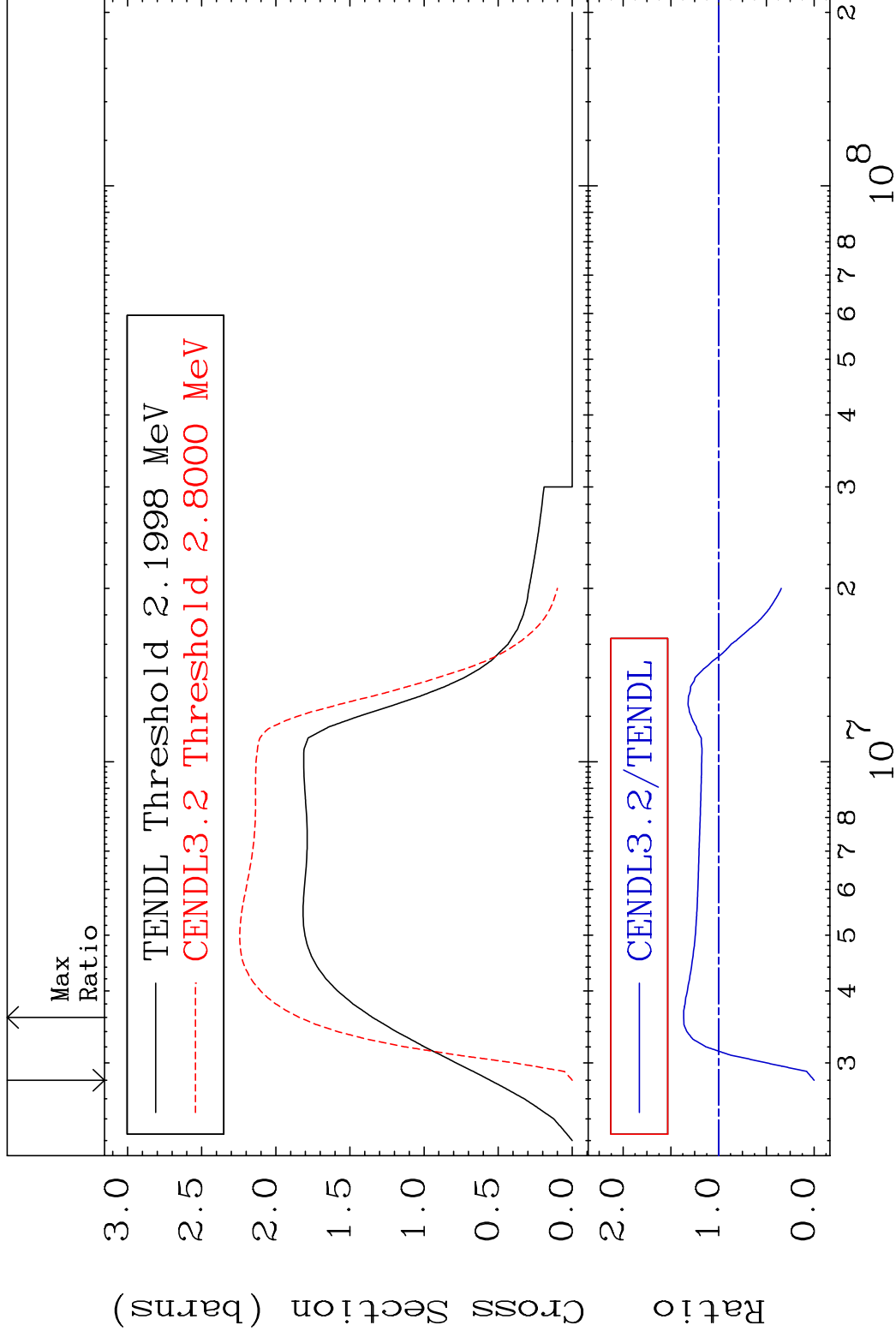
25 Incident Energy (eV) 54-Xe-124

MAT 5425

(n, n') Continuum

54-Xe-124

Cross Section -100.0 To 36.59 %



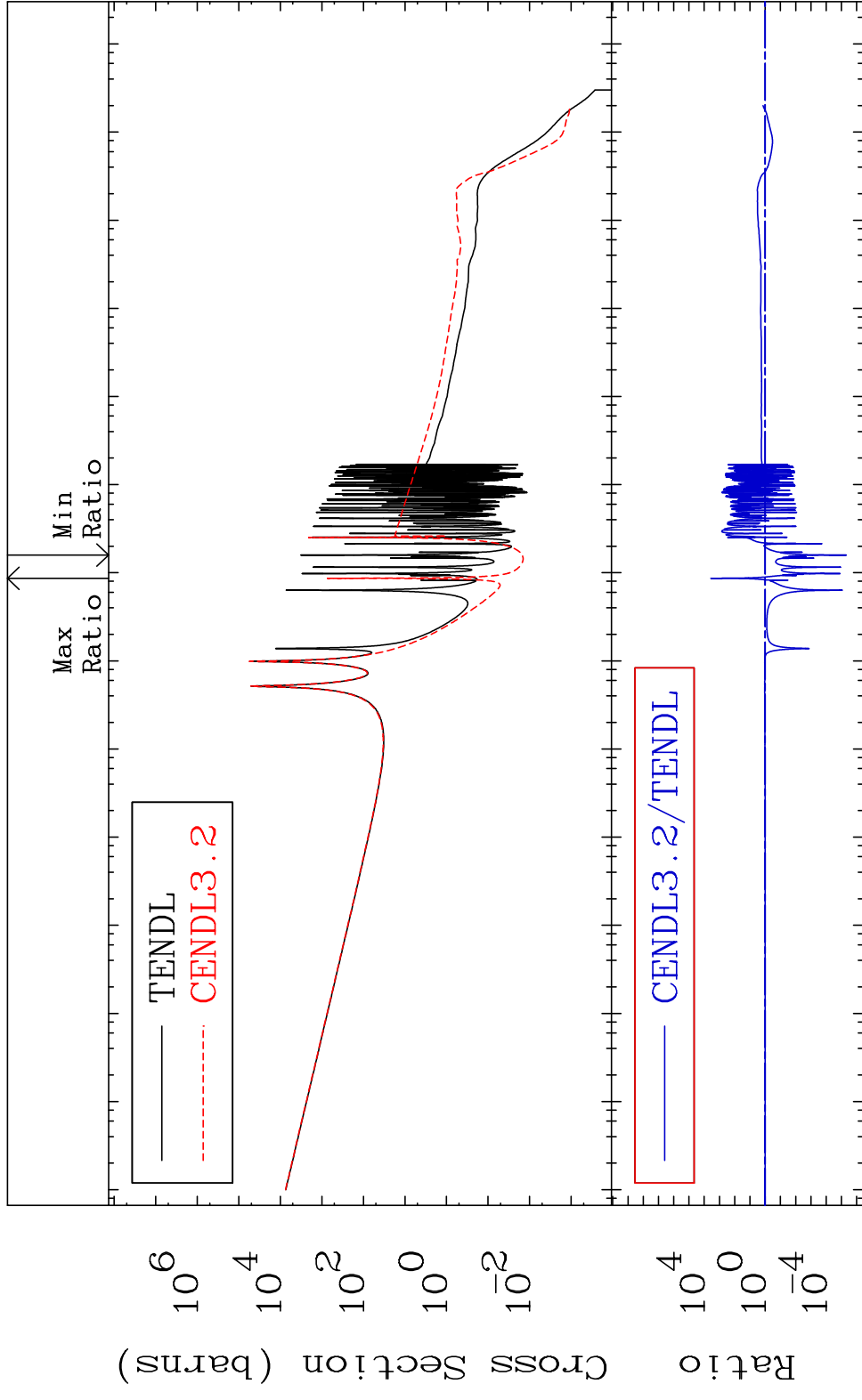
26

Incident Energy (eV)

54-Xe-124

MAT 5425

(n, γ)
Cross Section -100.0 To 9999. %
54-Xe-124

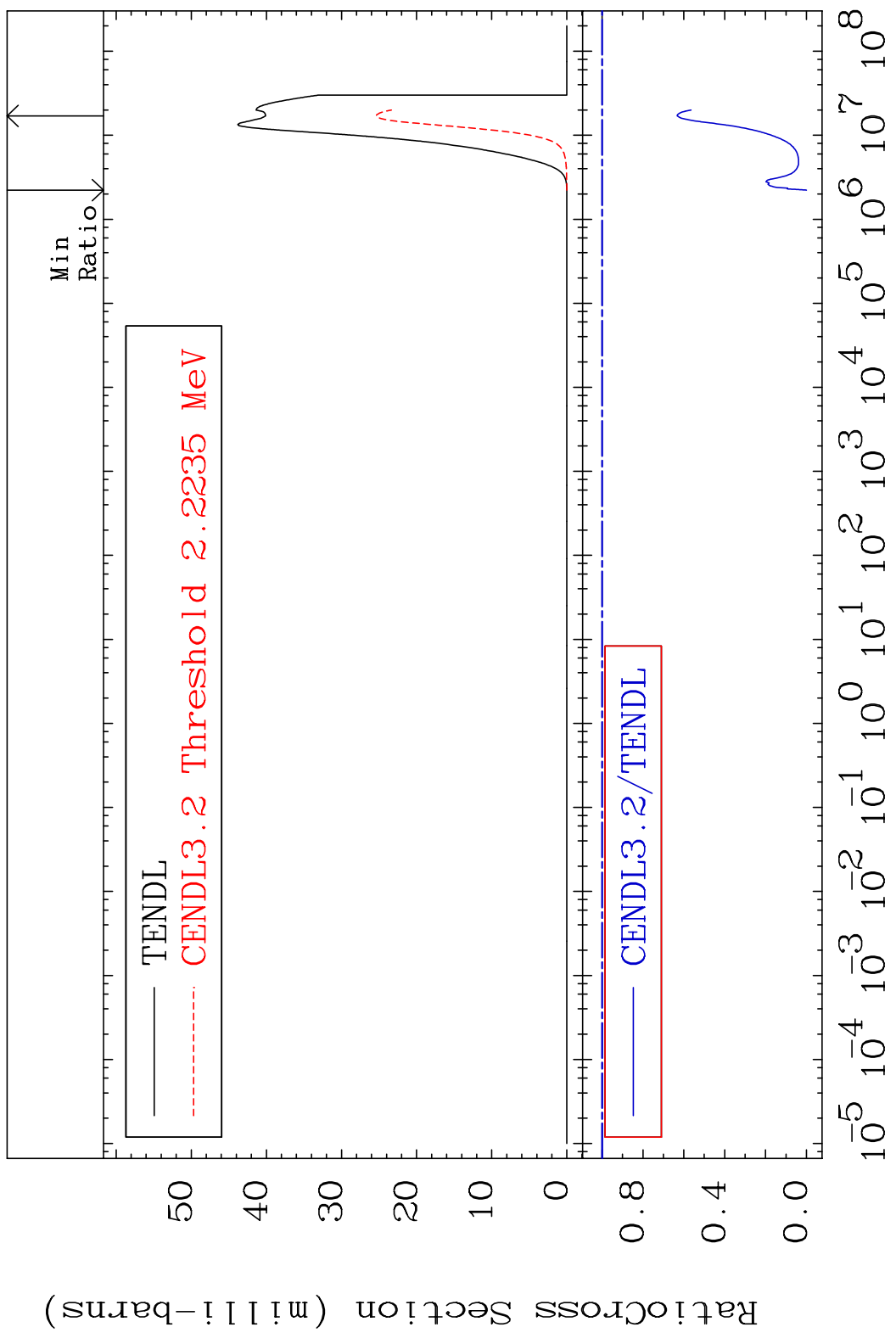


MAT 5425

(n, p)

54-Xe-124

Cross Section -100.0 To -36.76%



28

Incident Energy (eV)

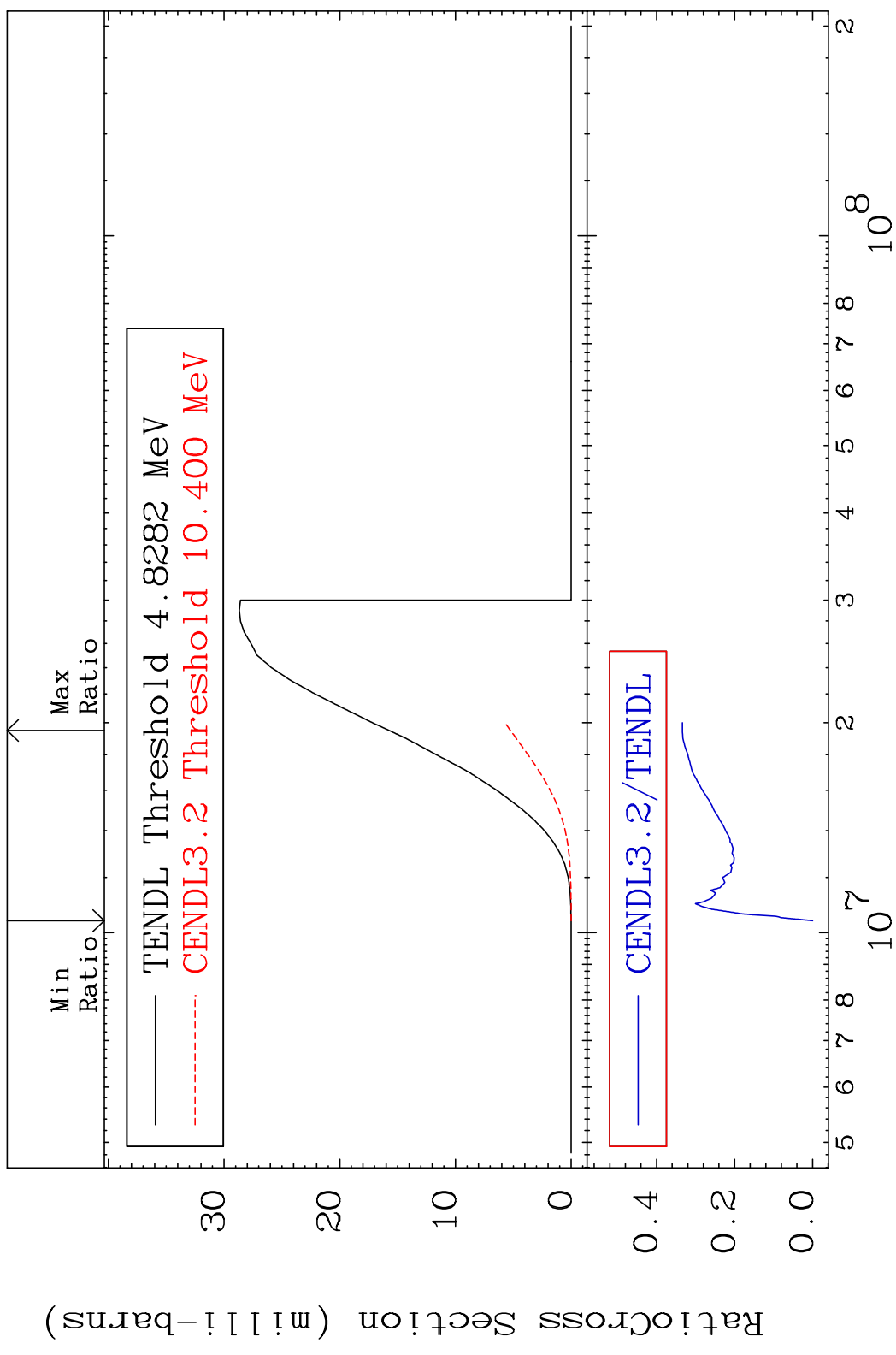
54-Xe-124

MAT 5425

(n, d)

54-Xe-124

Cross Section -100.0 To -66.61%

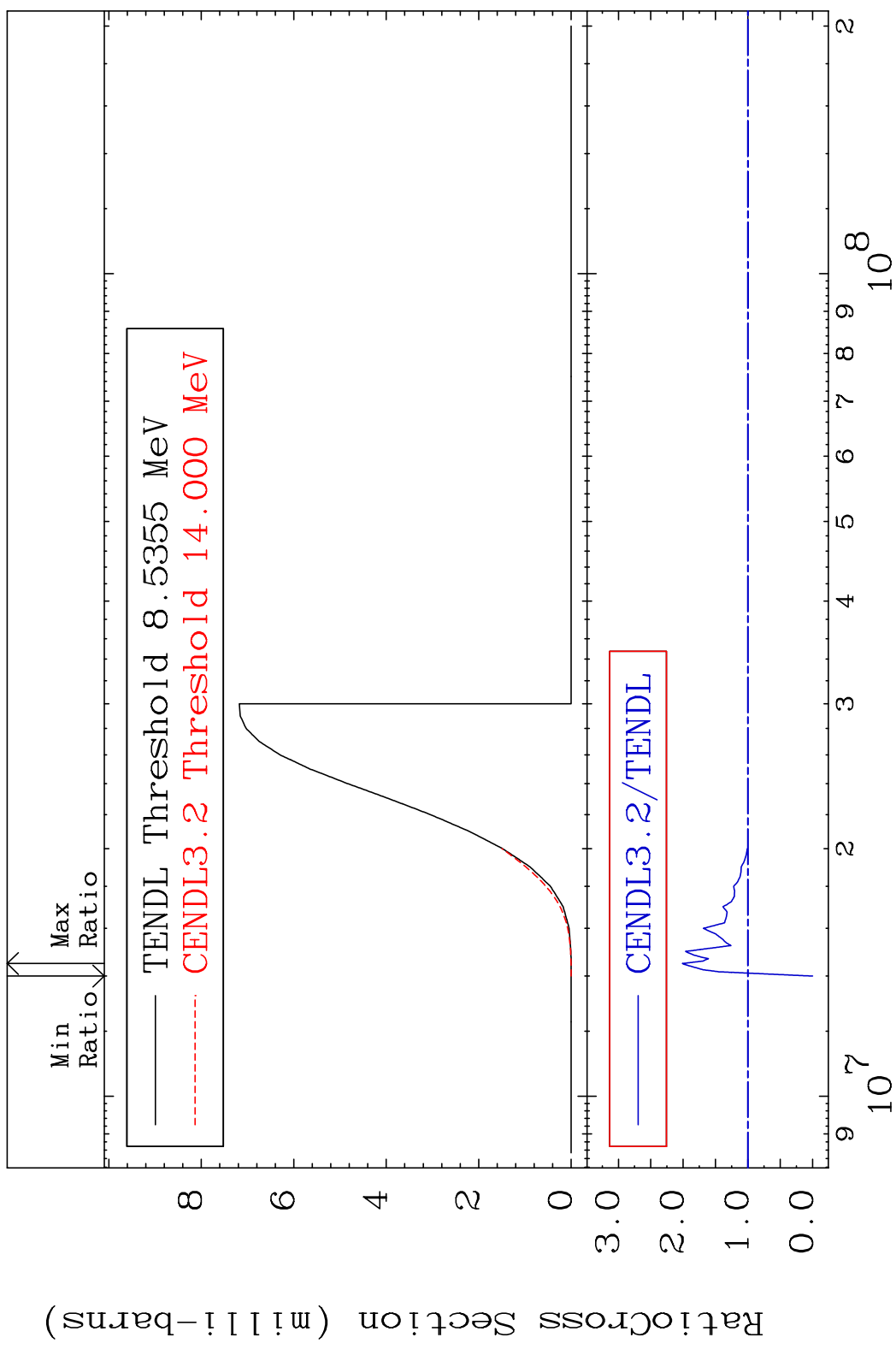


MAT 5425

(n, t)

54-Xe-124

Cross Section -100.0 To 101.2 %



30

Incident Energy (eV)

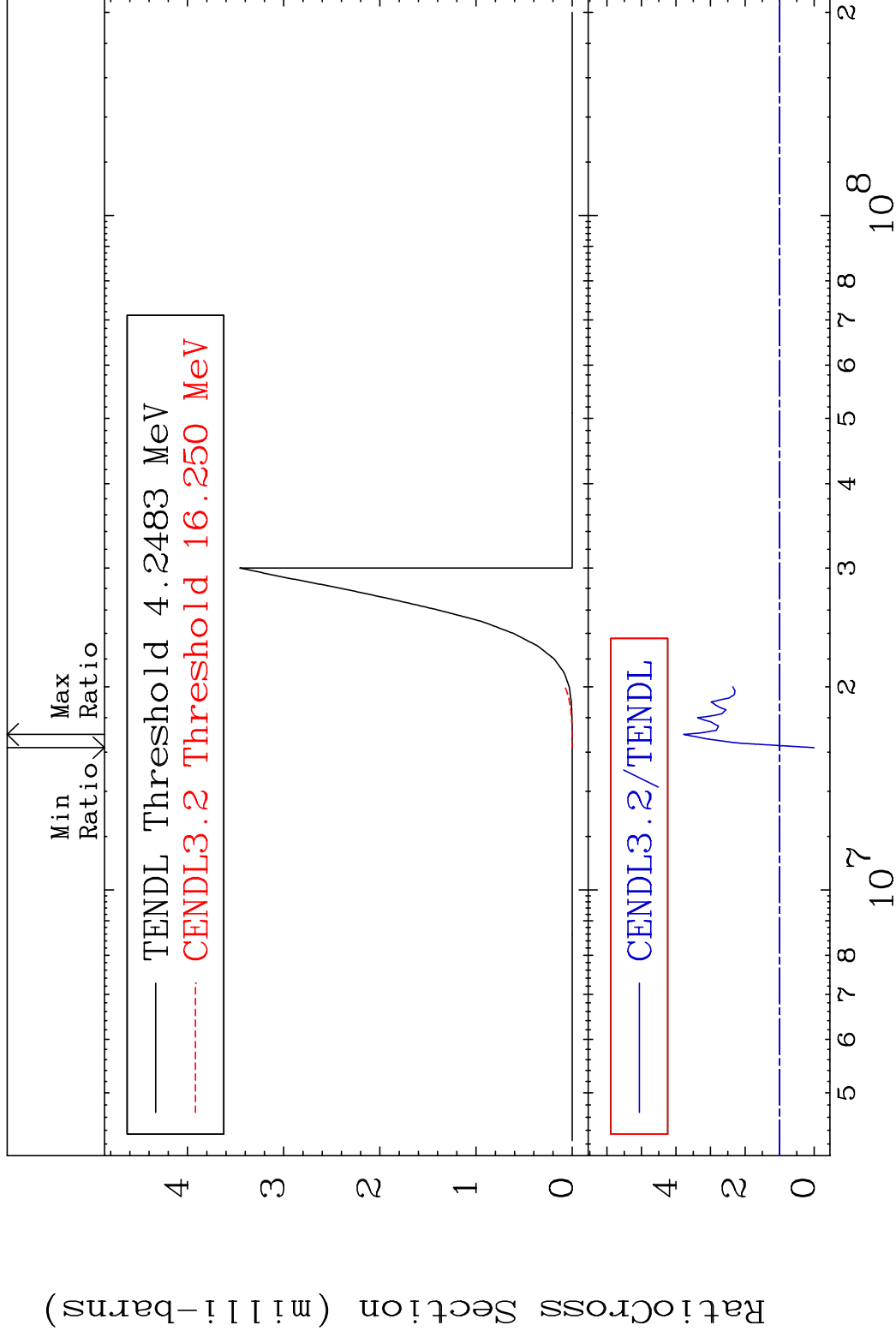
54-Xe-124

MAT 5425

(n, He-3)

54-Xe-124

Cross Section -100.0 To 277.8 %



31

Incident Energy (eV)

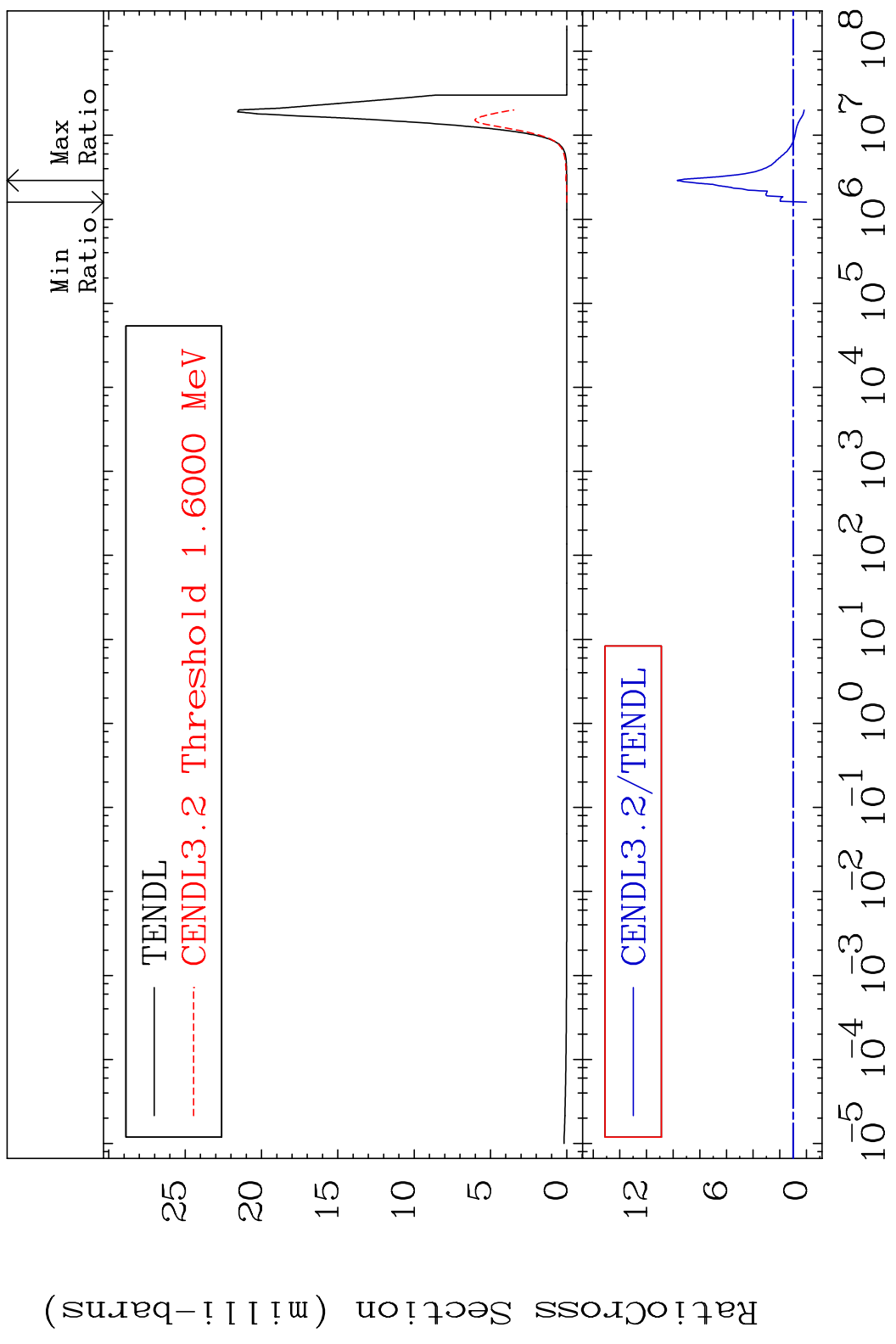
54-Xe-124

MAT 5425

(n, α)

54-Xe-124

Cross Section -100.0 To 869.7 %



32

Incident Energy (eV)

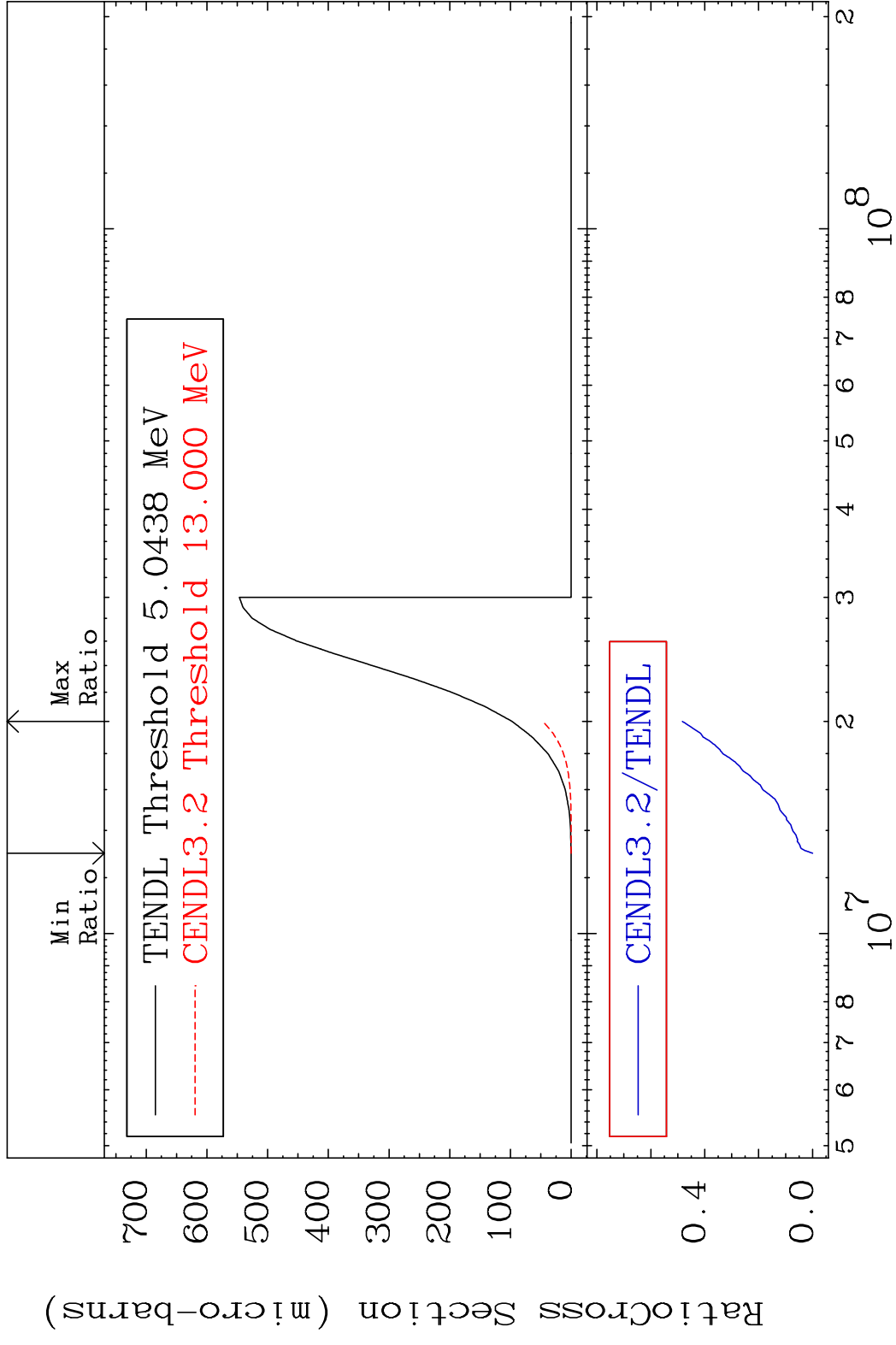
54-Xe-124

MAT 5425

(n,2p)

54-Xe-124

Cross Section -100.0 To -51.69%

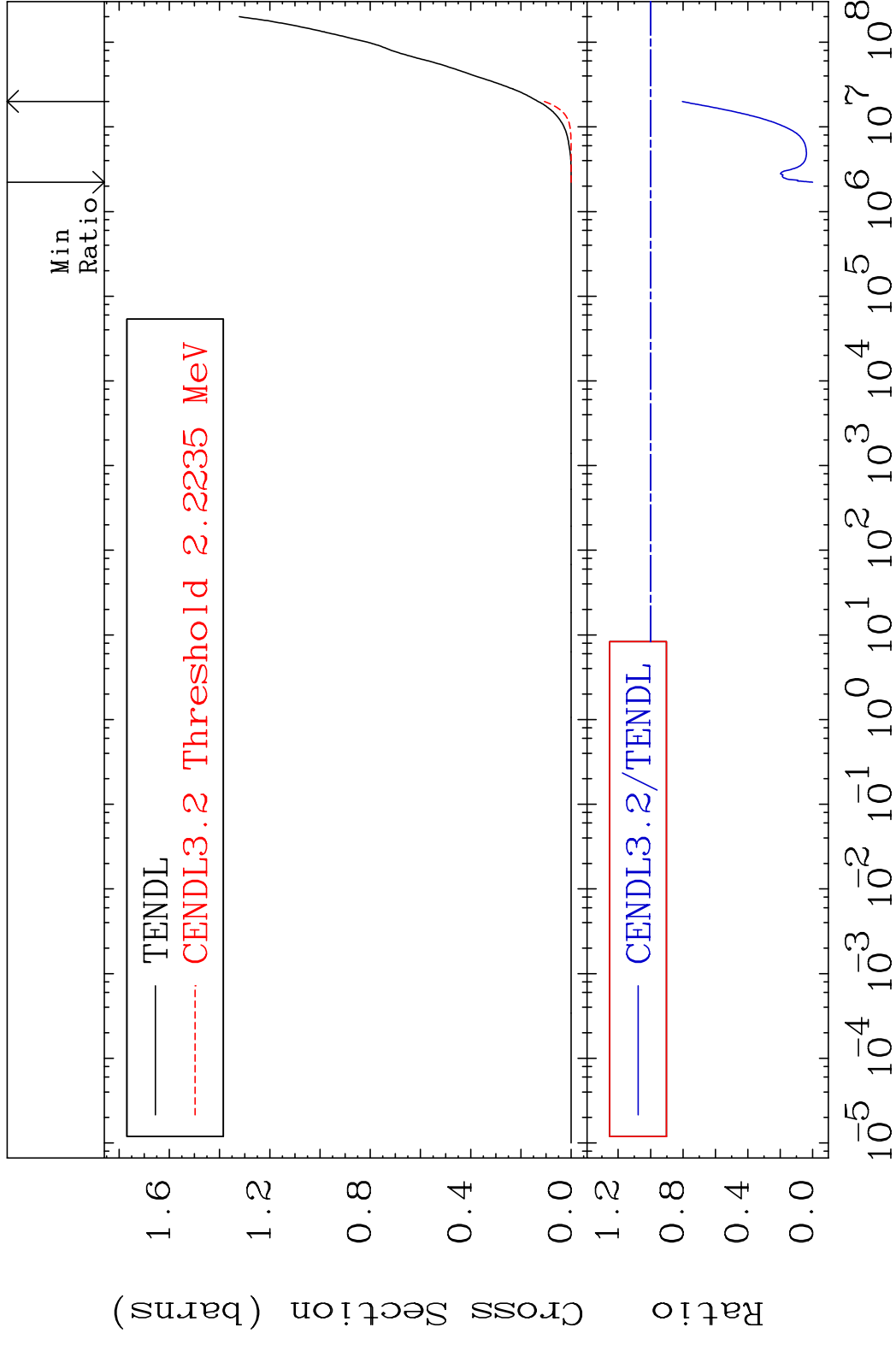


MAT 5425

Hydrogen Production

54-Xe-124

Cross Section -100.0 To -19.62%

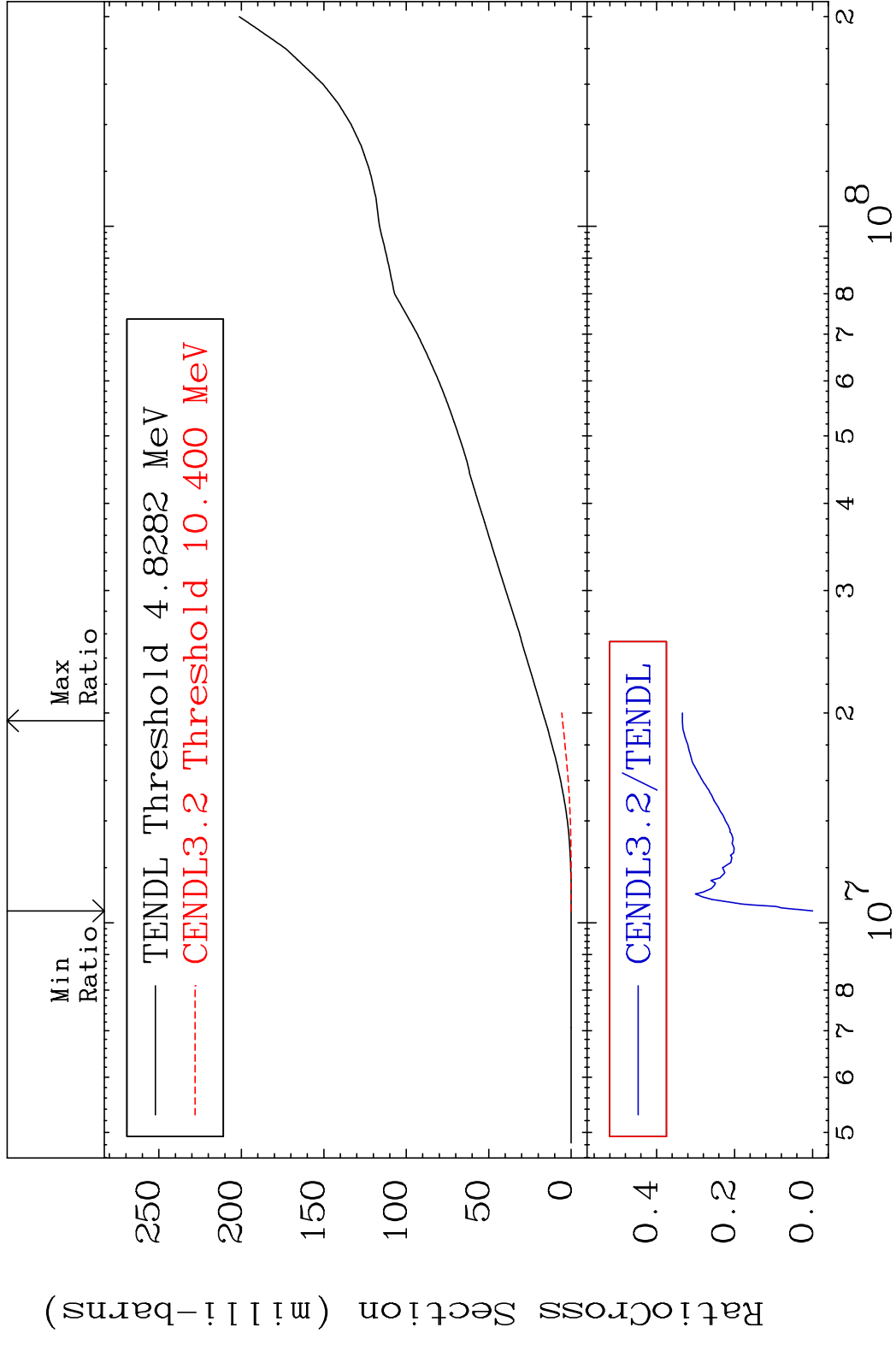


MAT 5425

Deuterium Production

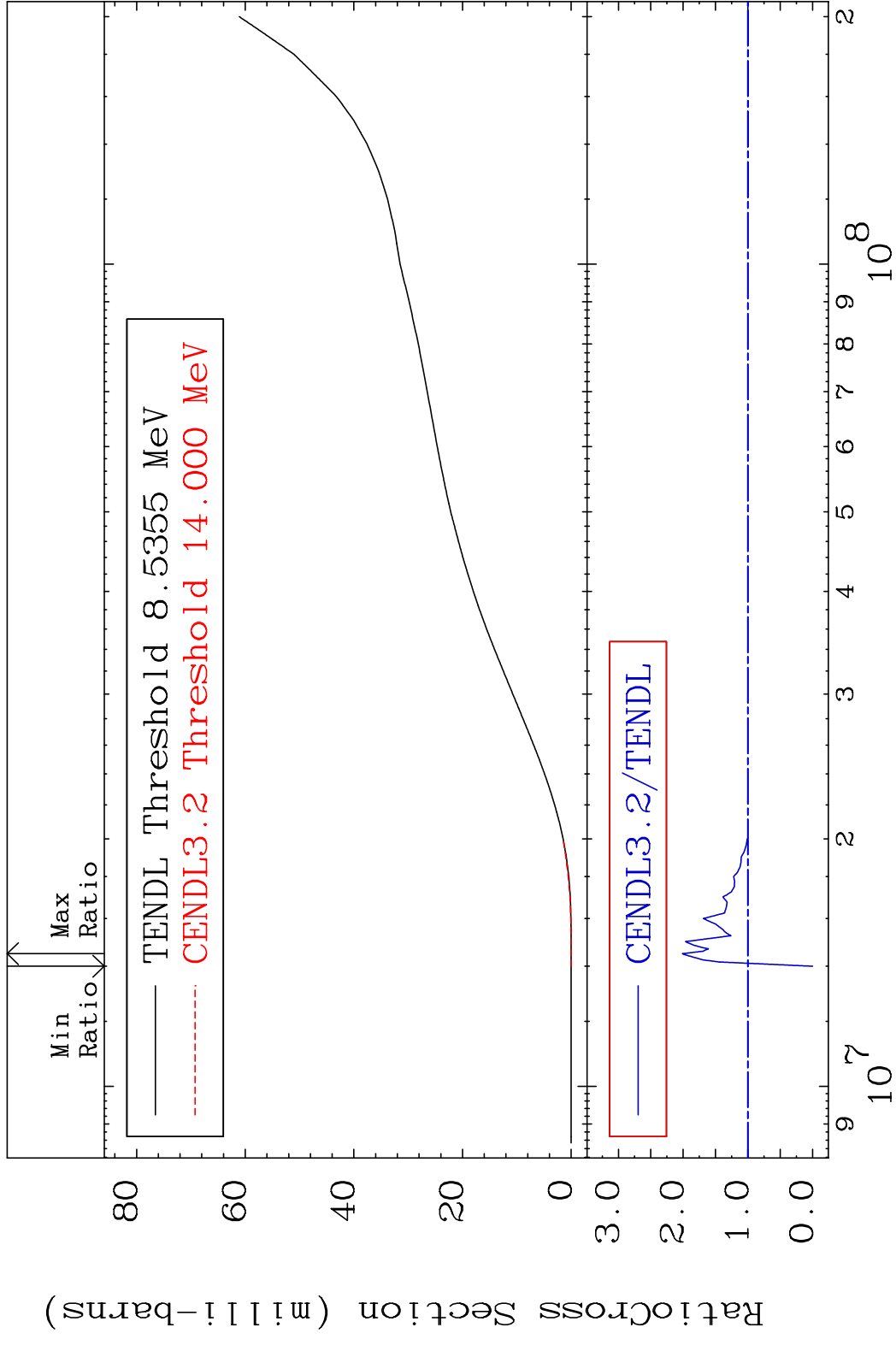
54-Xe-124

Cross Section -100.0 To -66.61%



MAT 5425

Tritium Production 54-Xe-124
Cross Section -100.0 To 101.2 %

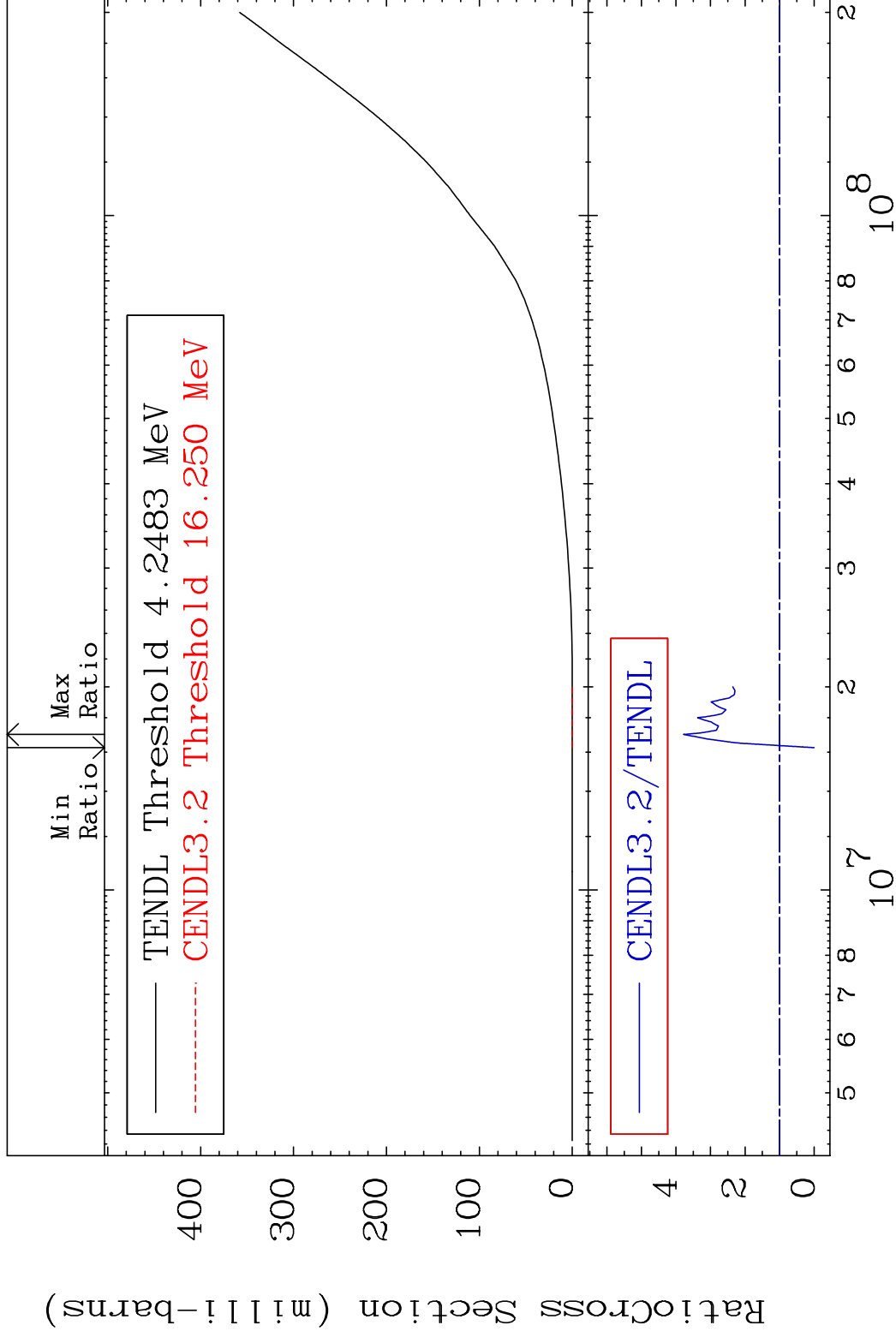


MAT 5425

He-3 Production

54-Xe-124

Cross Section -100.0 To 277.8 %



37

Incident Energy (eV)

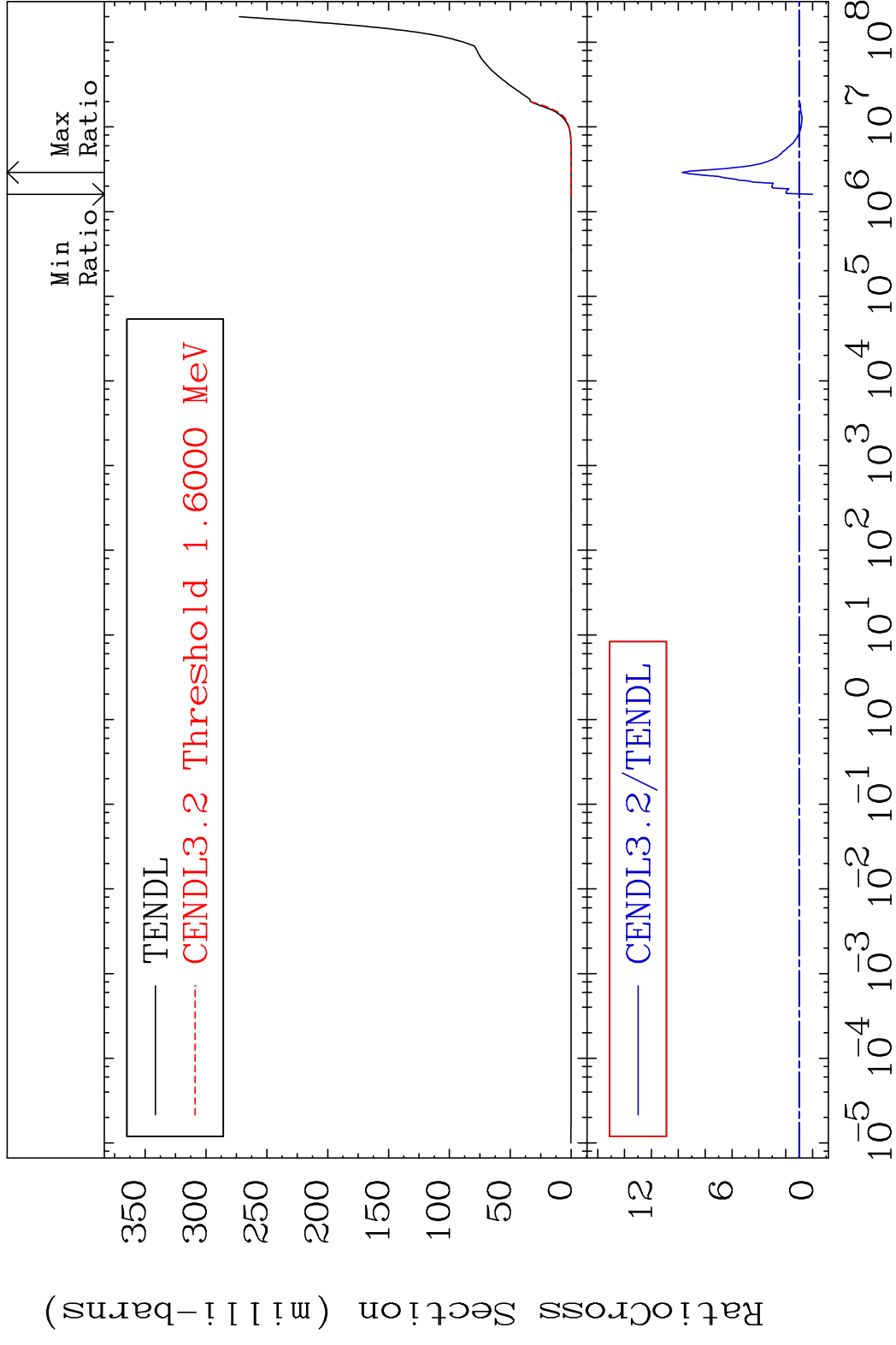
54-Xe-124

MAT 5425

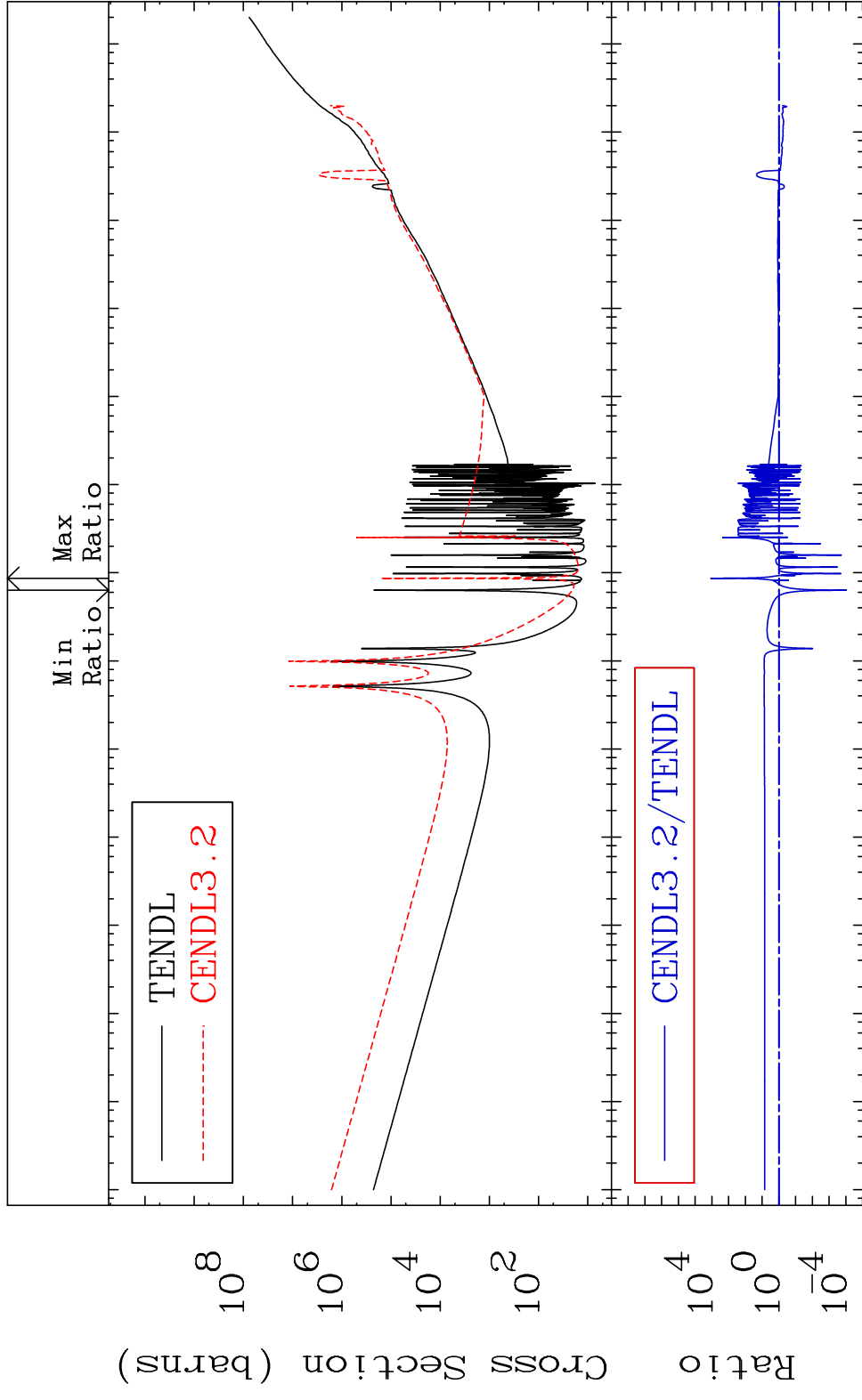
He-4 Production

54-Xe-124

Cross Section -100.0 To 869.7 %

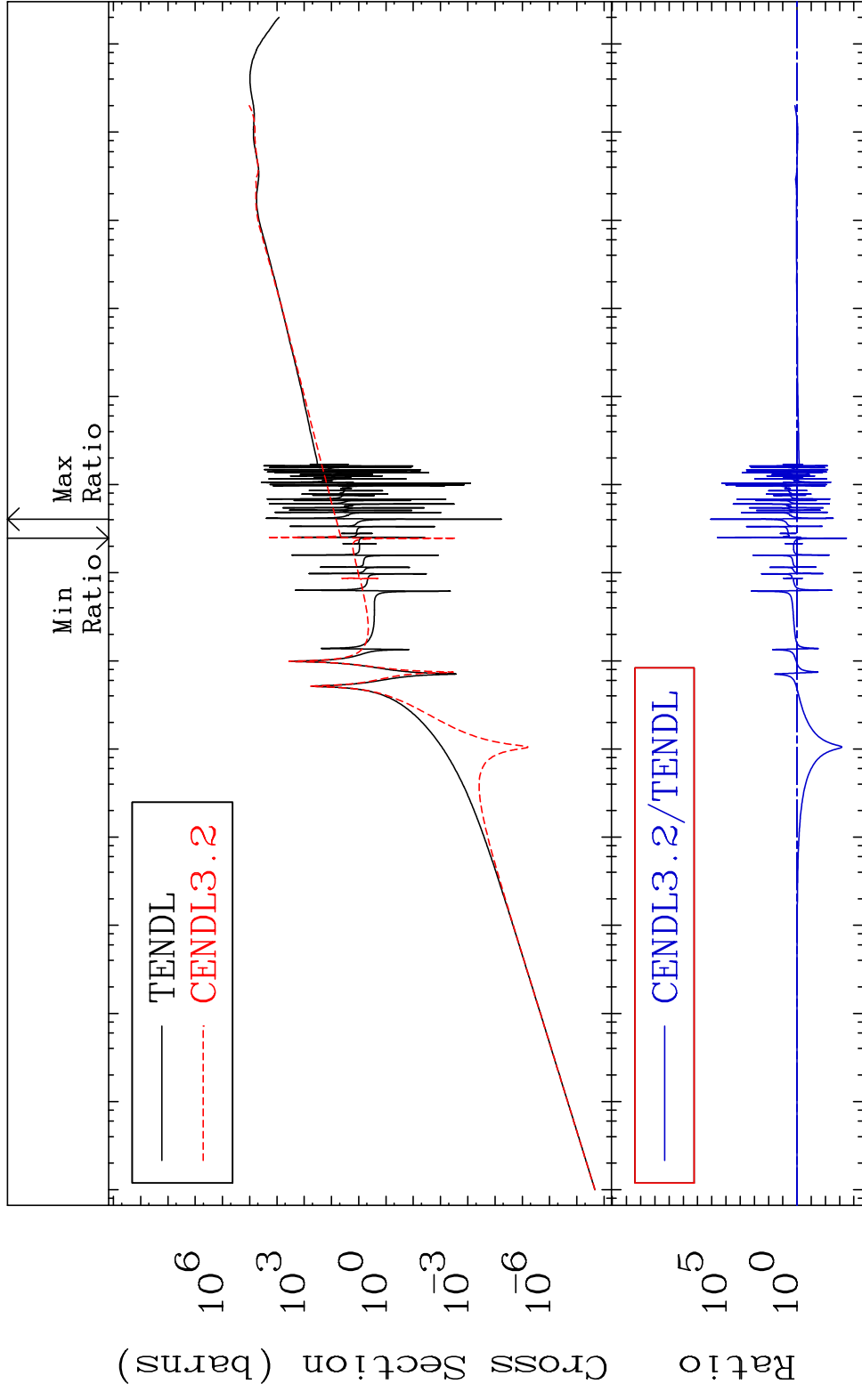


MAT 5425 Kerma total (eV-barns) 54-Xe-124
 Cross Section -99.99 To 9999. %



MAT 5425

Kerma elastic Cross Section -99.97 To 9999. %
54-Xe-124

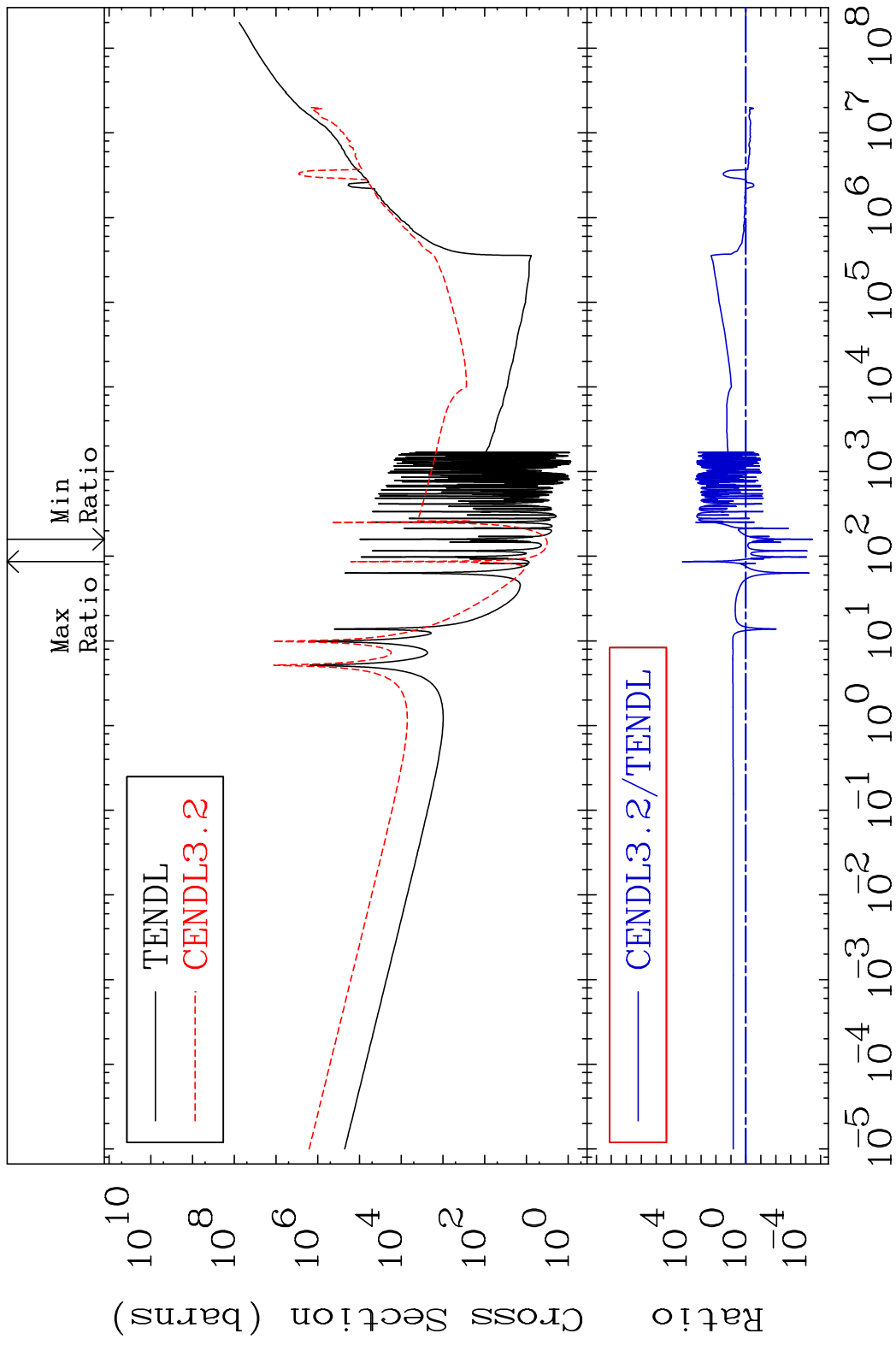


40

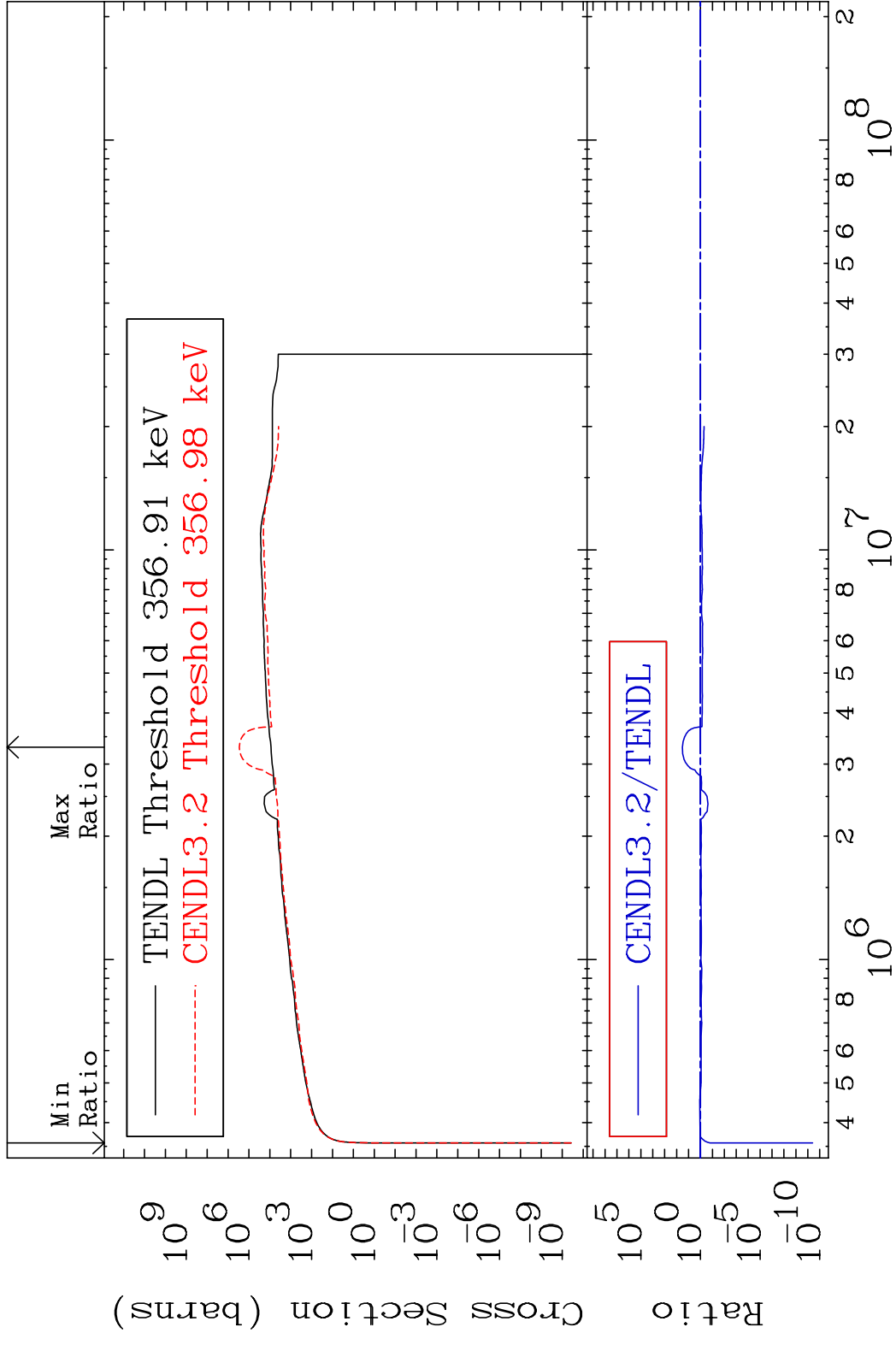
Incident Energy (eV)

54-Xe-124

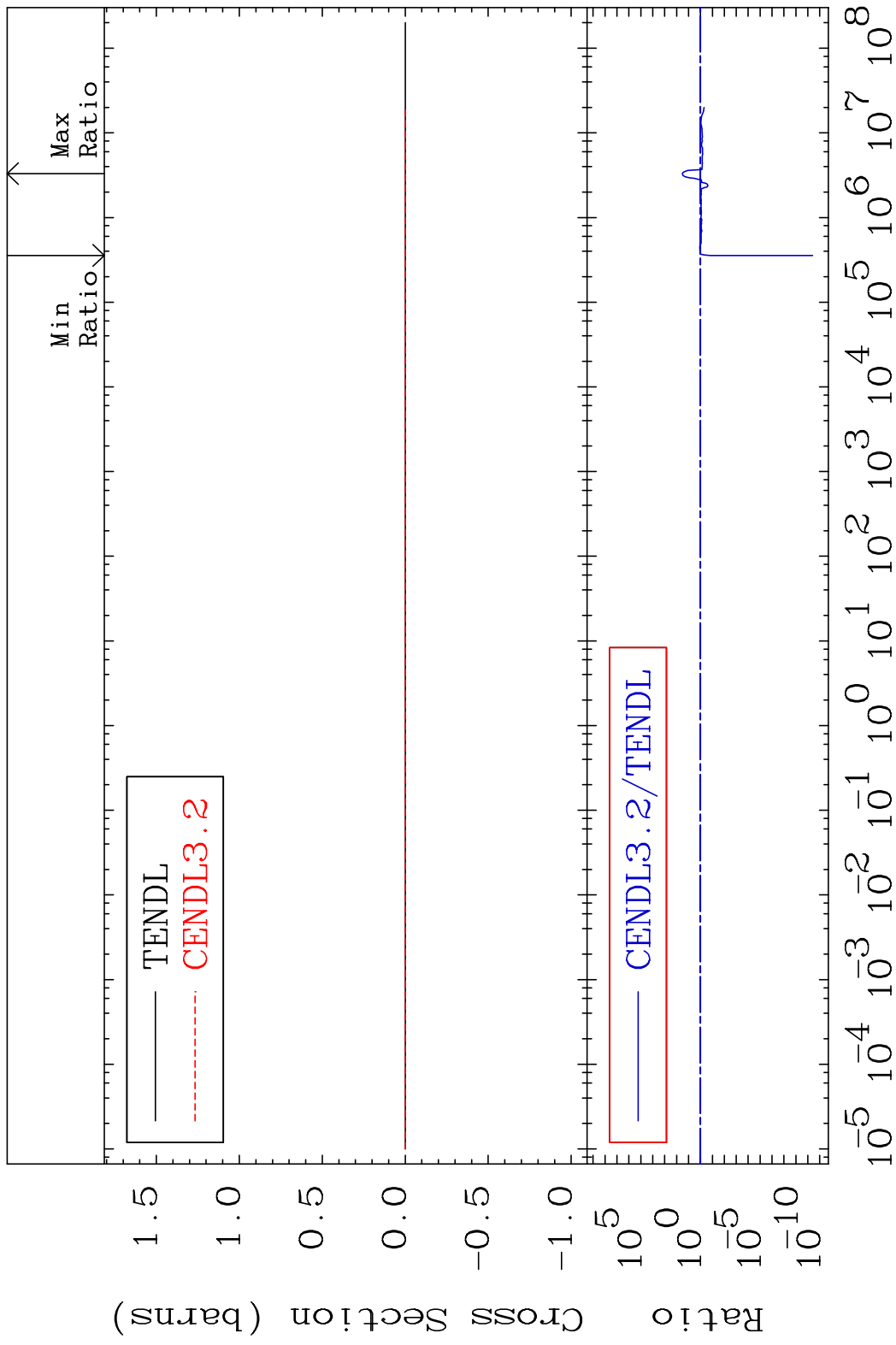
MAT 5425 Kerma non-elastic (all but mt2) 54-Xe-124
 Cross Section -100.0 To 9999. %



MAT 5425 Kerma inelastic (mt51-91) 54-Xe-124
 Cross Section -100.0 To 3189. %



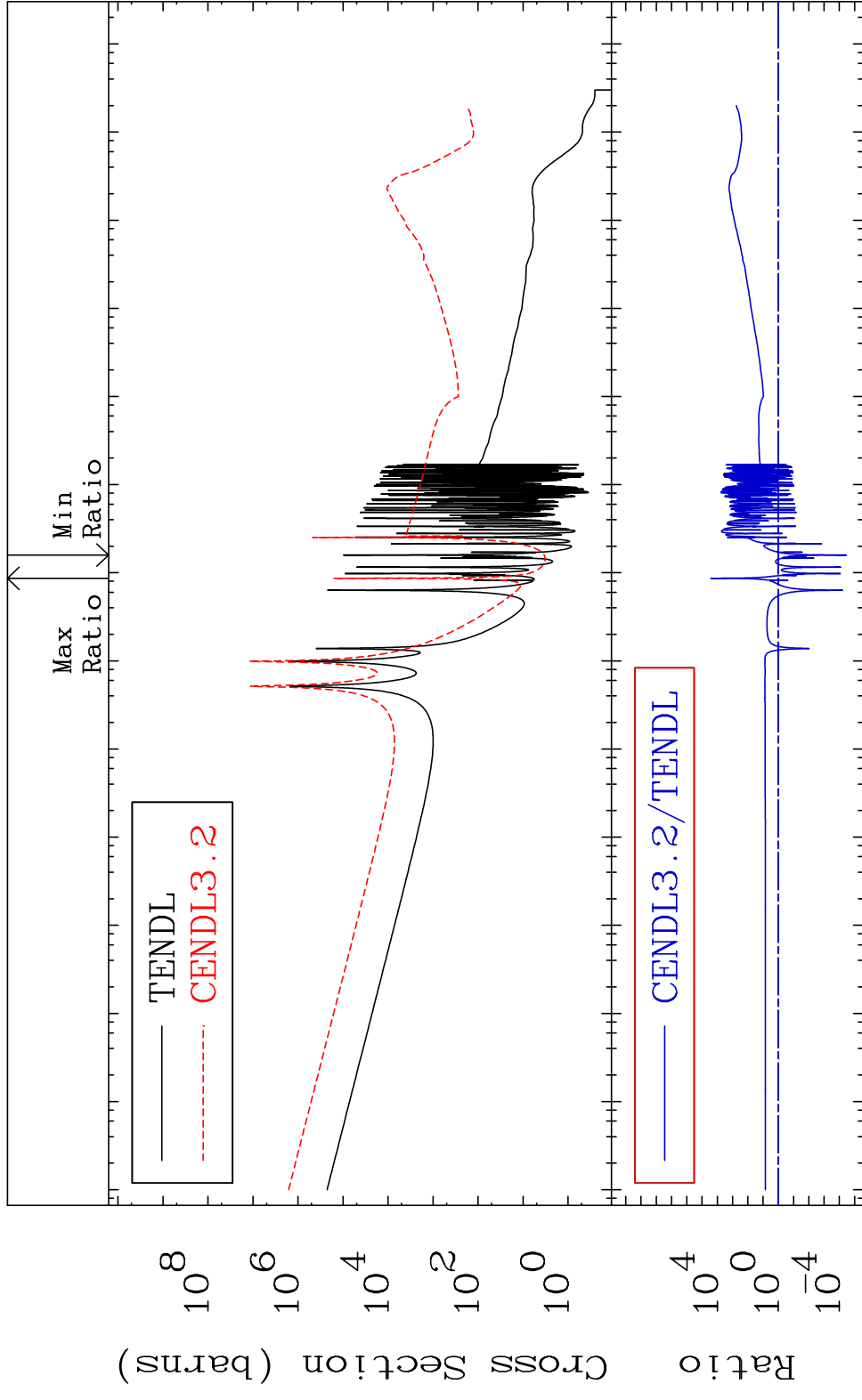
MAT 5425 Kerma fission (mt18 or mt19-20-21-38) 54-Xe-124
 Cross Section -100.0 To 3189. %



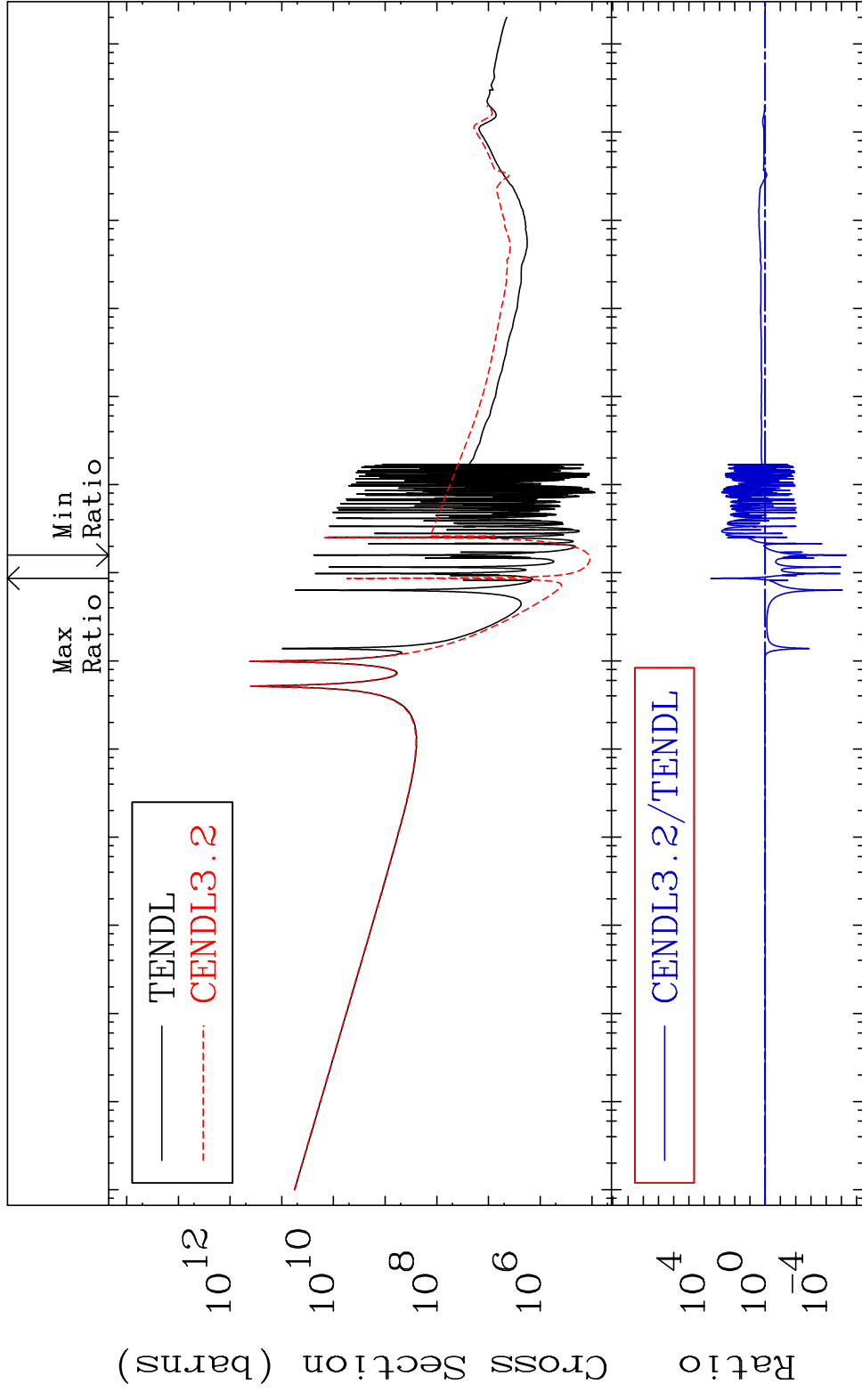
MAT 5425

Kerma capture (mt102) 54-Xe-124

Cross Section -100.0 To 9999. %

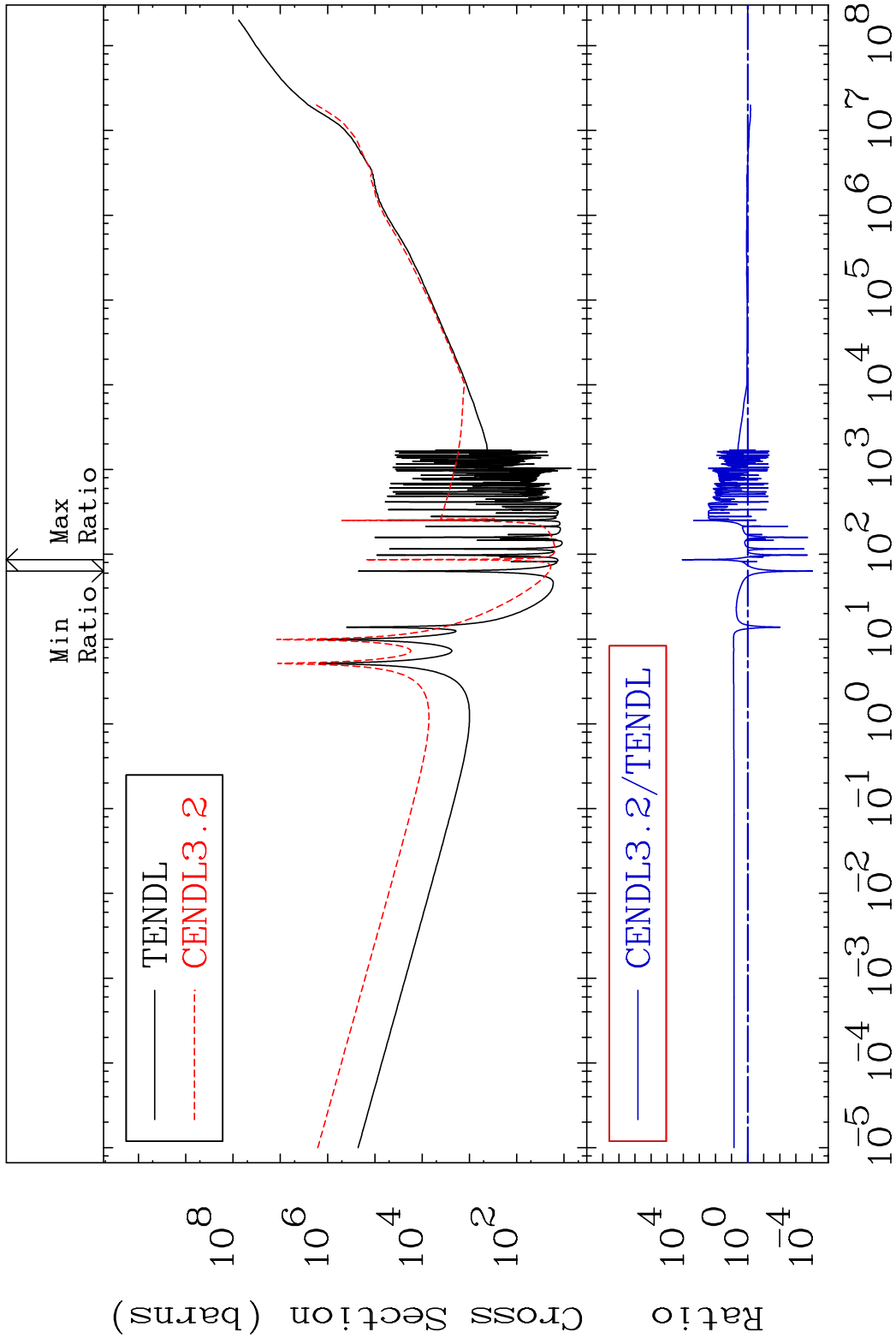


MAT 5425 Total photon (eV-barns) 54-Xe-124
 Cross Section -100.0 To 9999. %



45 Incident Energy (eV) 54-Xe-124

MAT 5425 Total kinematic kerma (high limit) 54-Xe-124
 Cross Section -99.99 To 9999. %

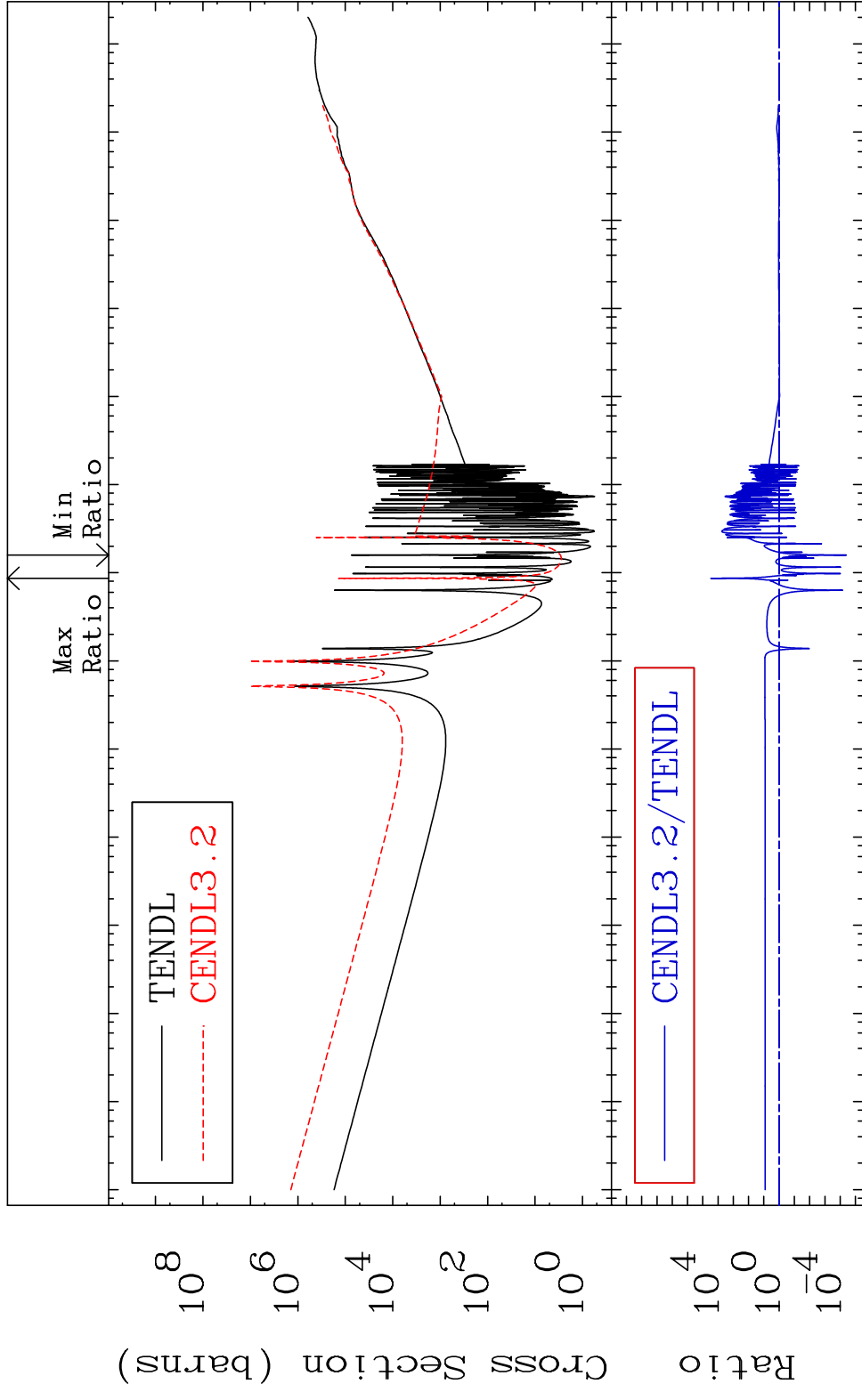


MAT 5425

Dpa total (eV-barns)

54-Xe-124

Cross Section -100.0 To 9999. %

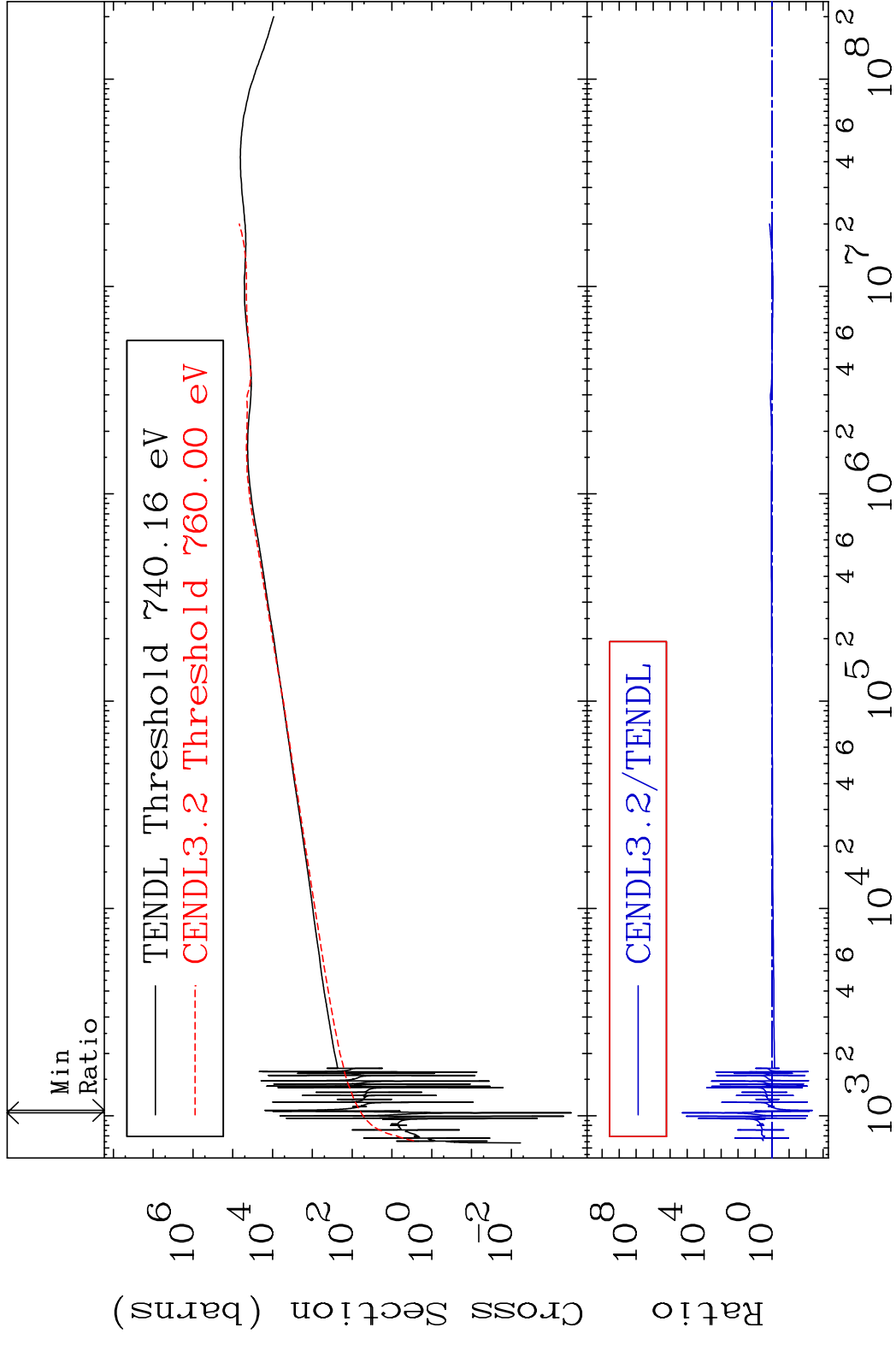


47

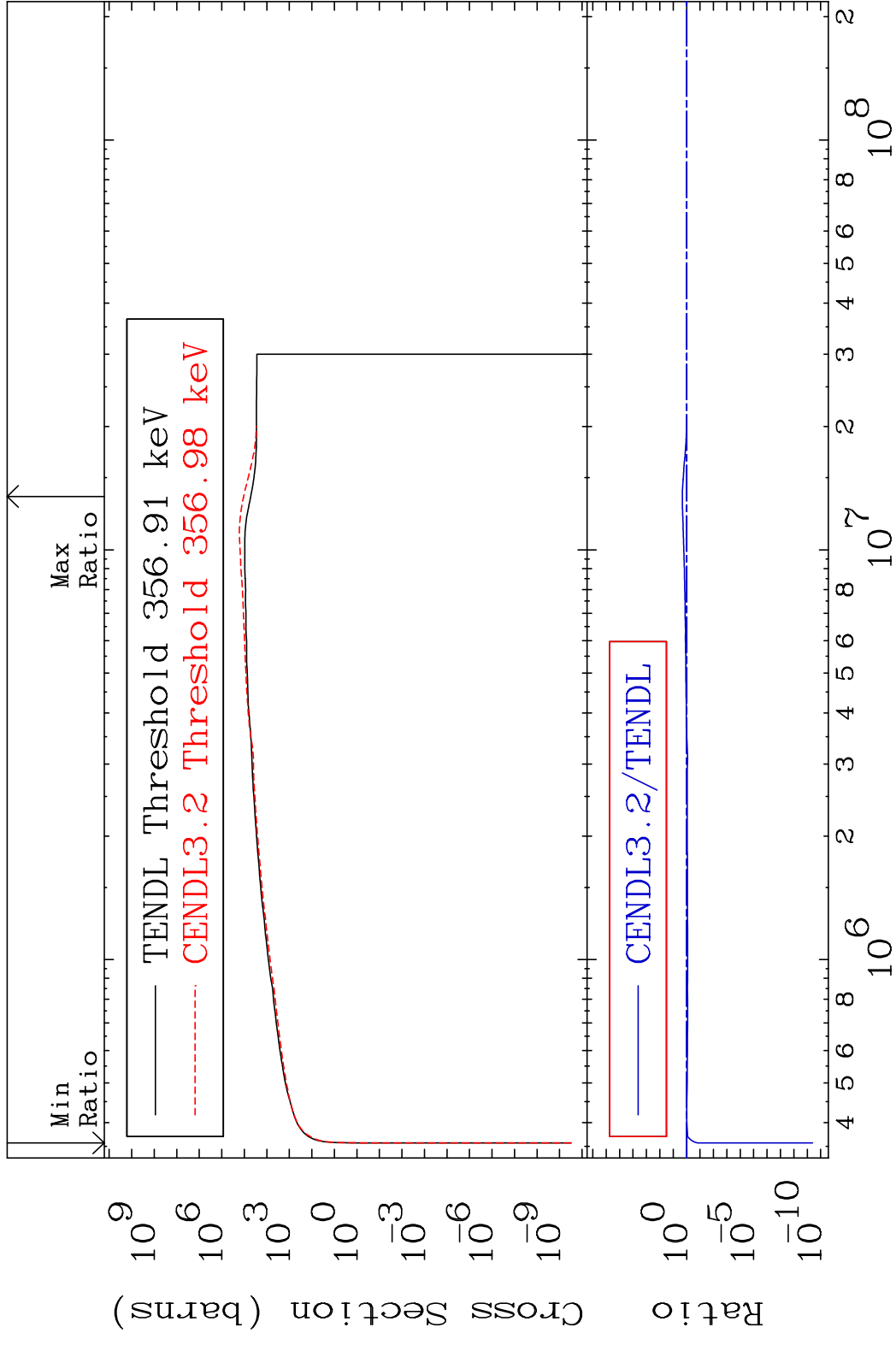
Incident Energy (eV)

54-Xe-124

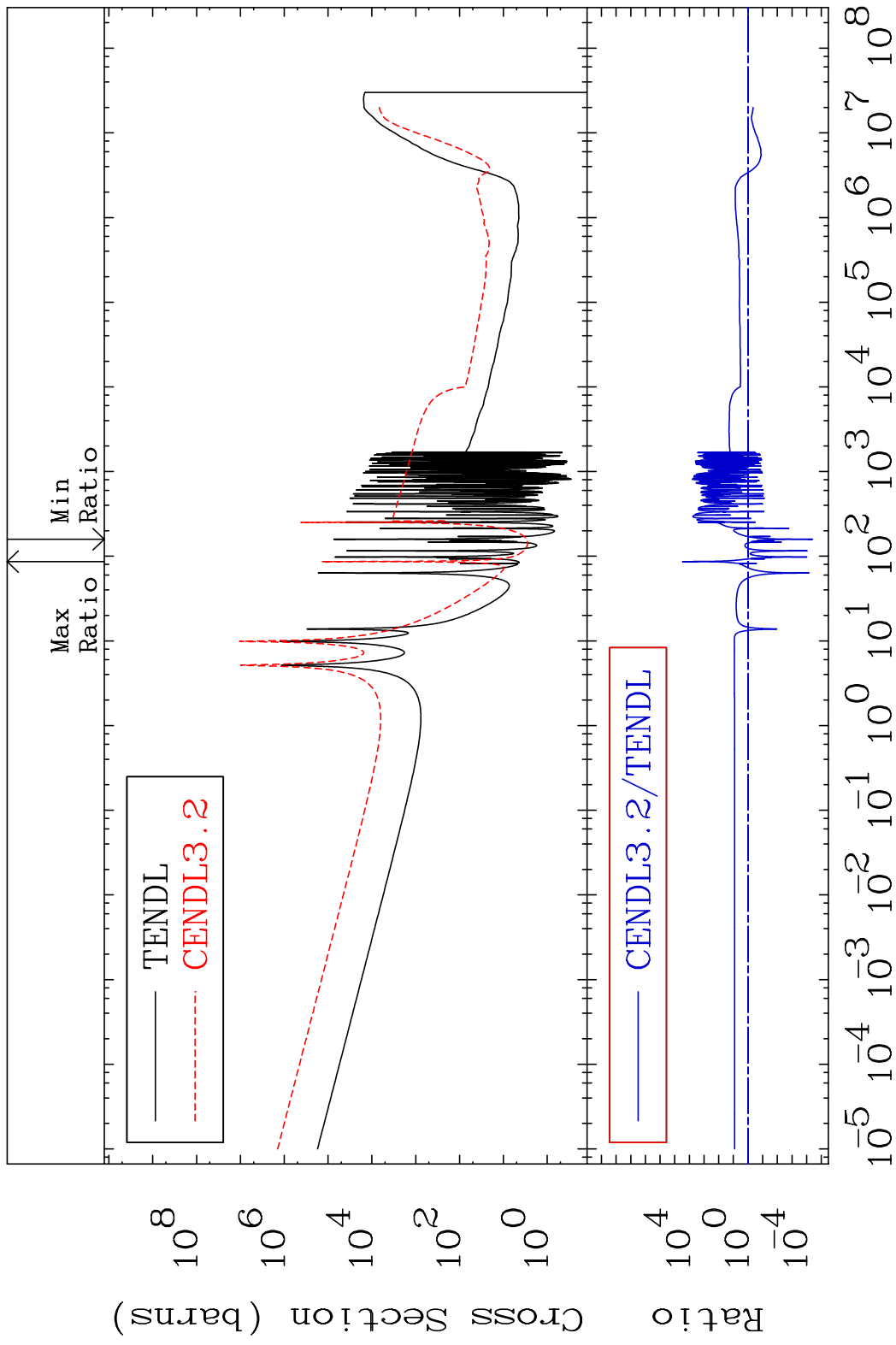
MAT 5425 Dpa elastic (mt2) 54-Xe-124
 Cross Section -99.59 To 9999. %



MAT 5425 Dpa inelastic (mt51-91) 54-Xe-124
 Cross Section -100.0 To 108.0 %

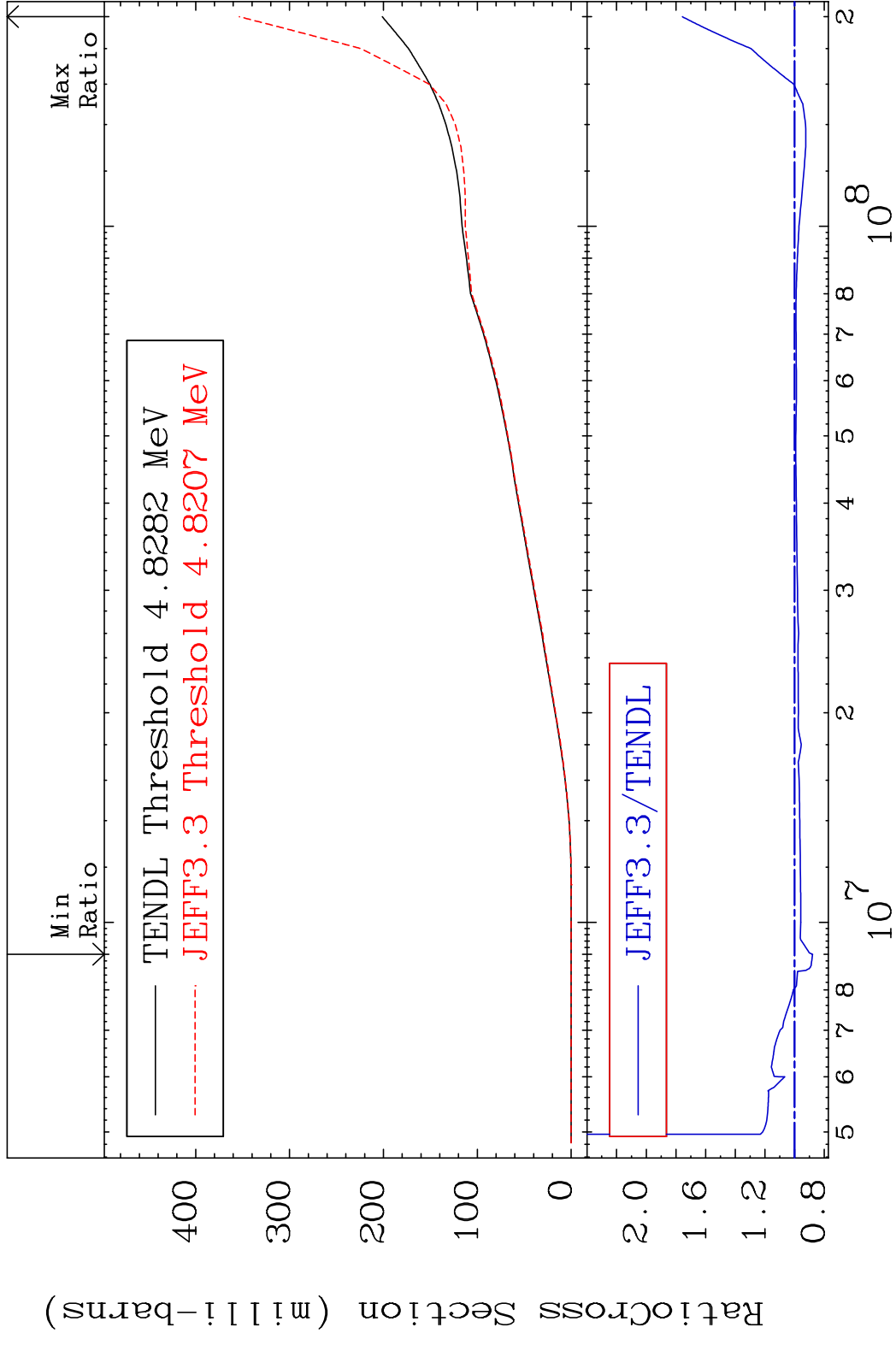


MAT 5425 Dpa disappearance (mt102 -120) 54-Xe-124
 Cross Section -100.0 To 9999. %



MAT 5425

Deuterium Production 54-Xe-124
Cross Section -12.14 To 75.66 %

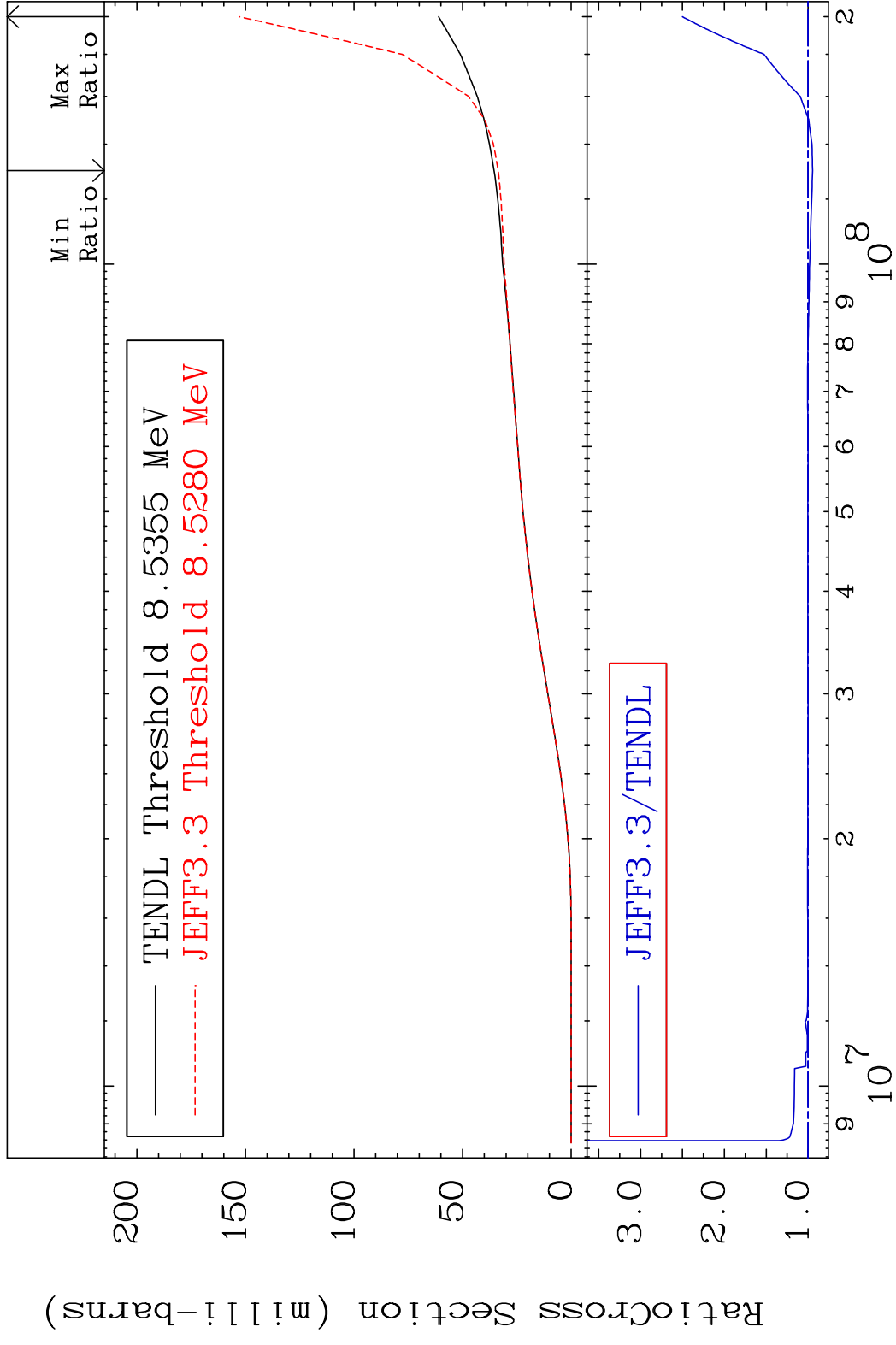


MAT 5425

Tritium Production

54-Xe-124

Cross Section -5.359 To 150.1 %

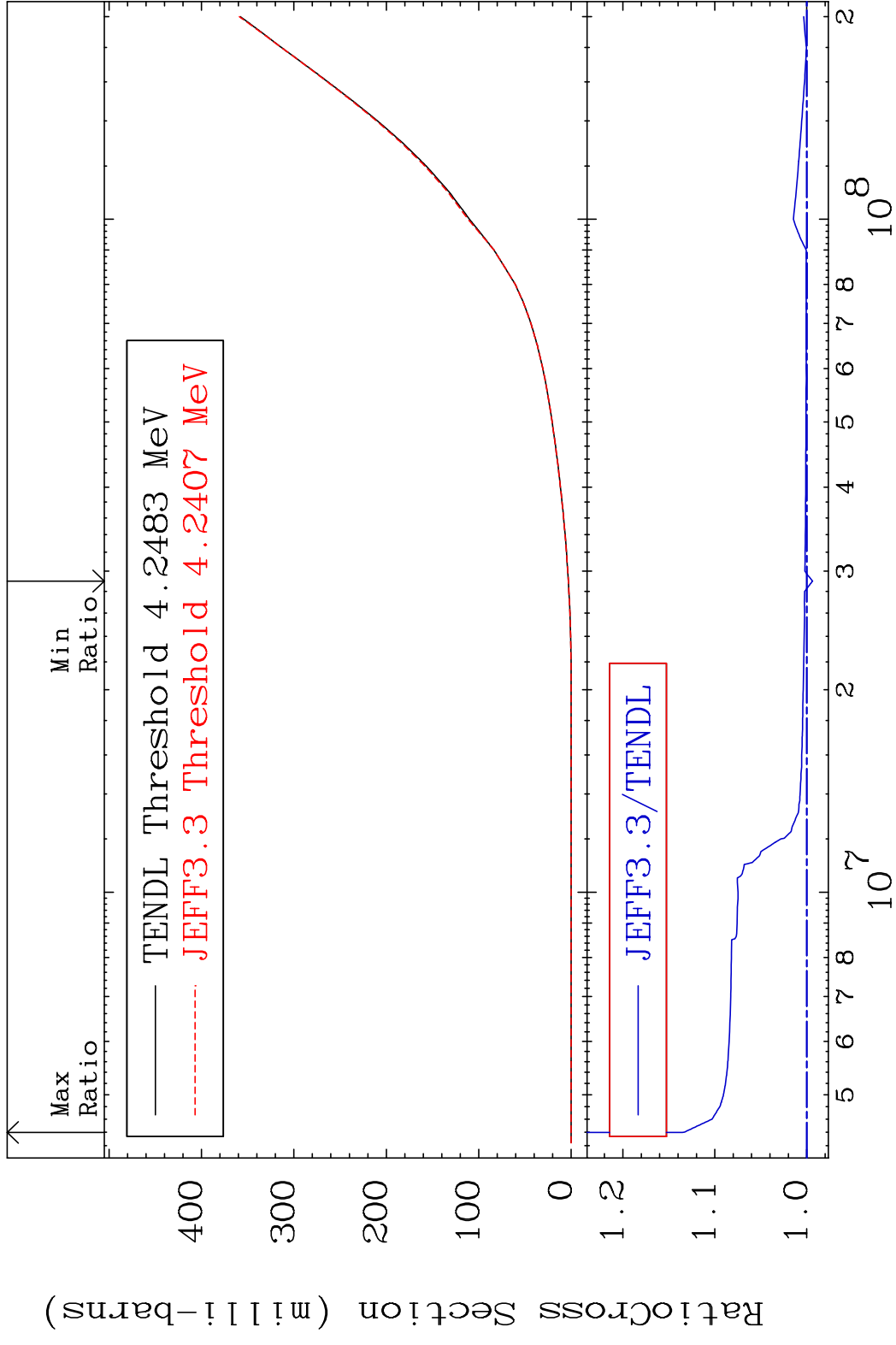


MAT 5425

He-3 Production

54-Xe-124

Cross Section -0.636 To 13.53 %

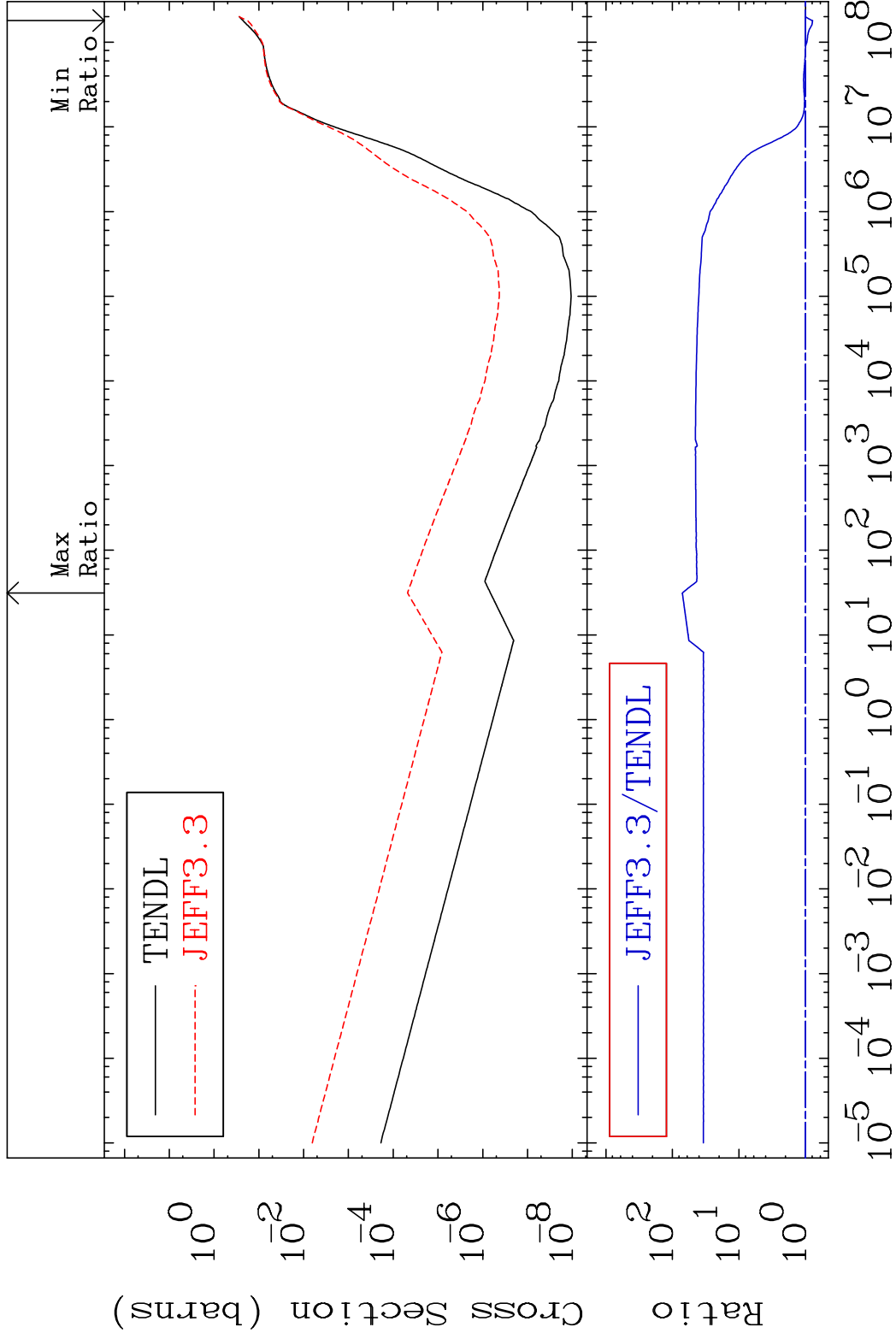


MAT 5425

He-4 Production

54-Xe-124

Cross Section -21.38 To 7002. %



54

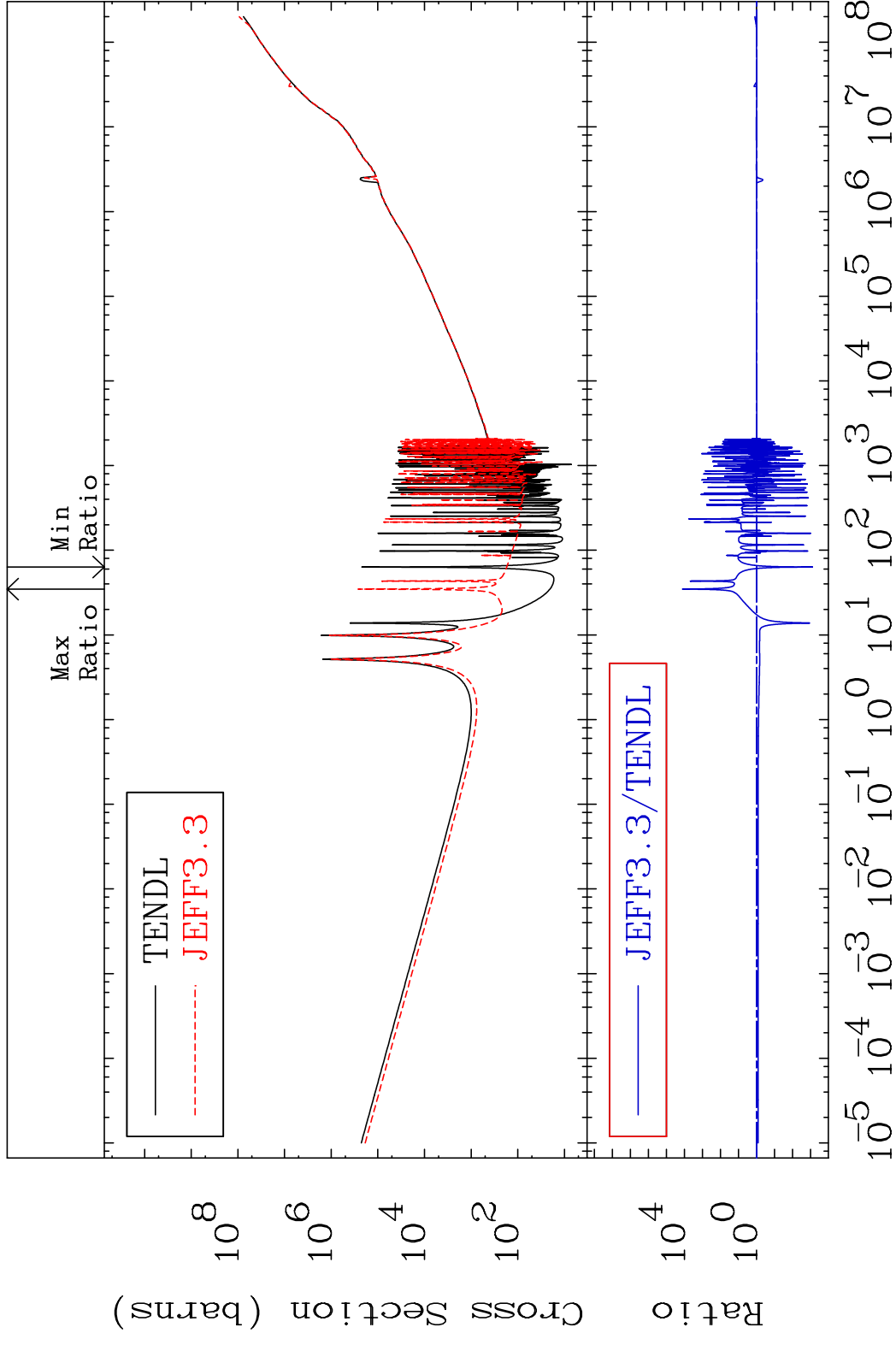
Incident Energy (eV)

54-Xe-124

MAT 5425

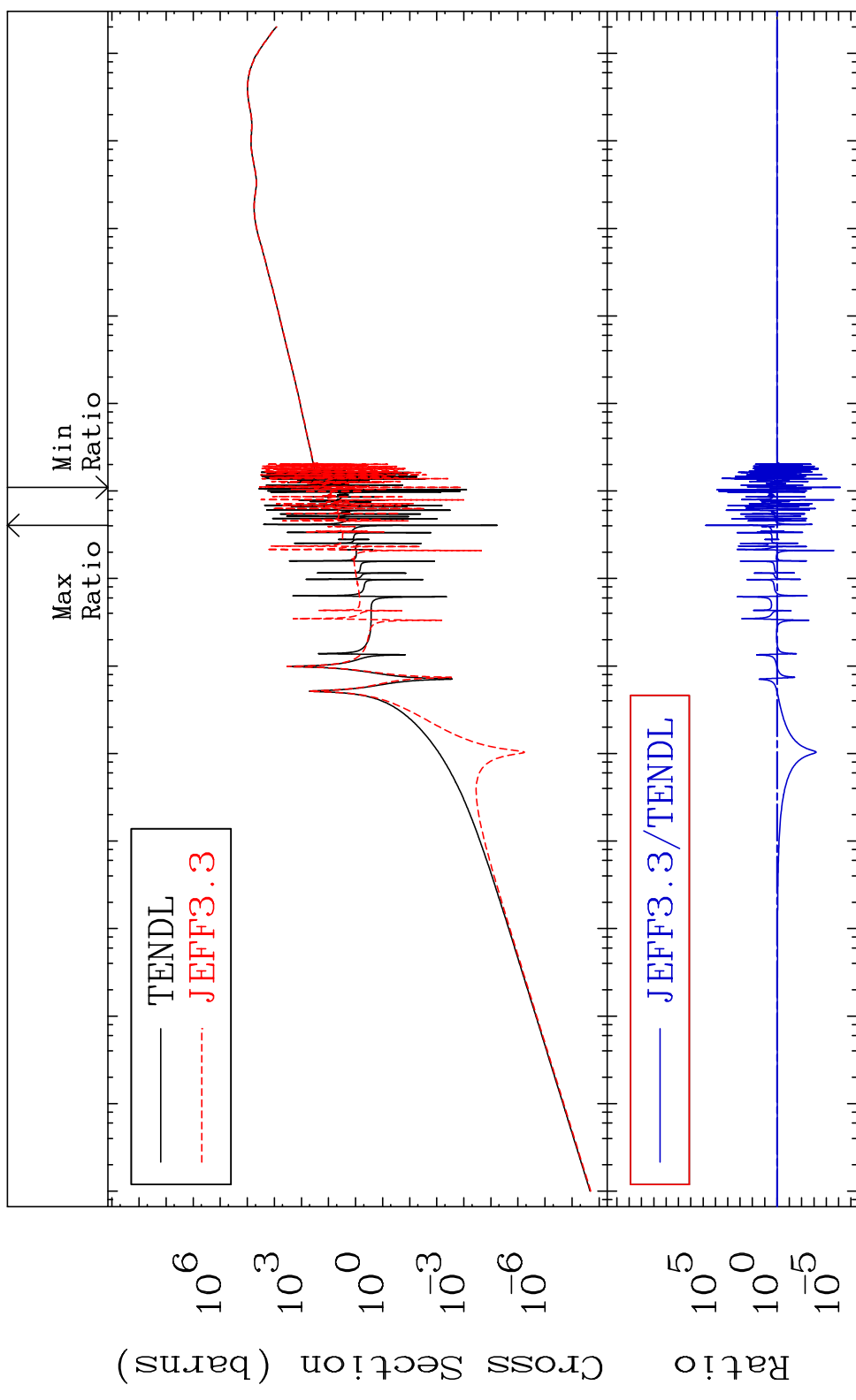
Kerma total (eV-barns) 54-Xe-124

Cross Section -99.92 To 9999. %



MAT 5425

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

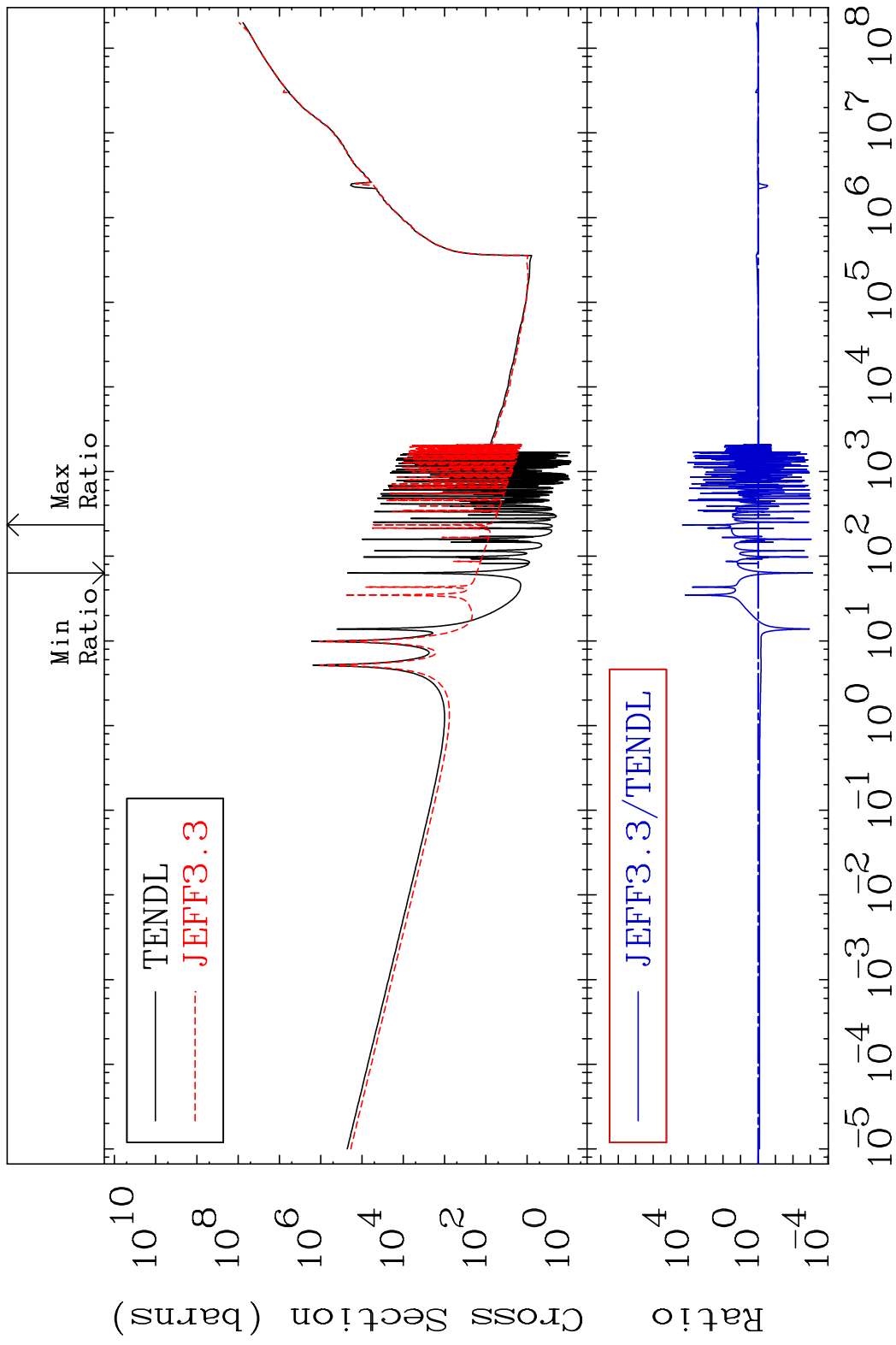


10⁶
10³
10⁰
10⁻³
10⁻⁶
Cross Section (barns)

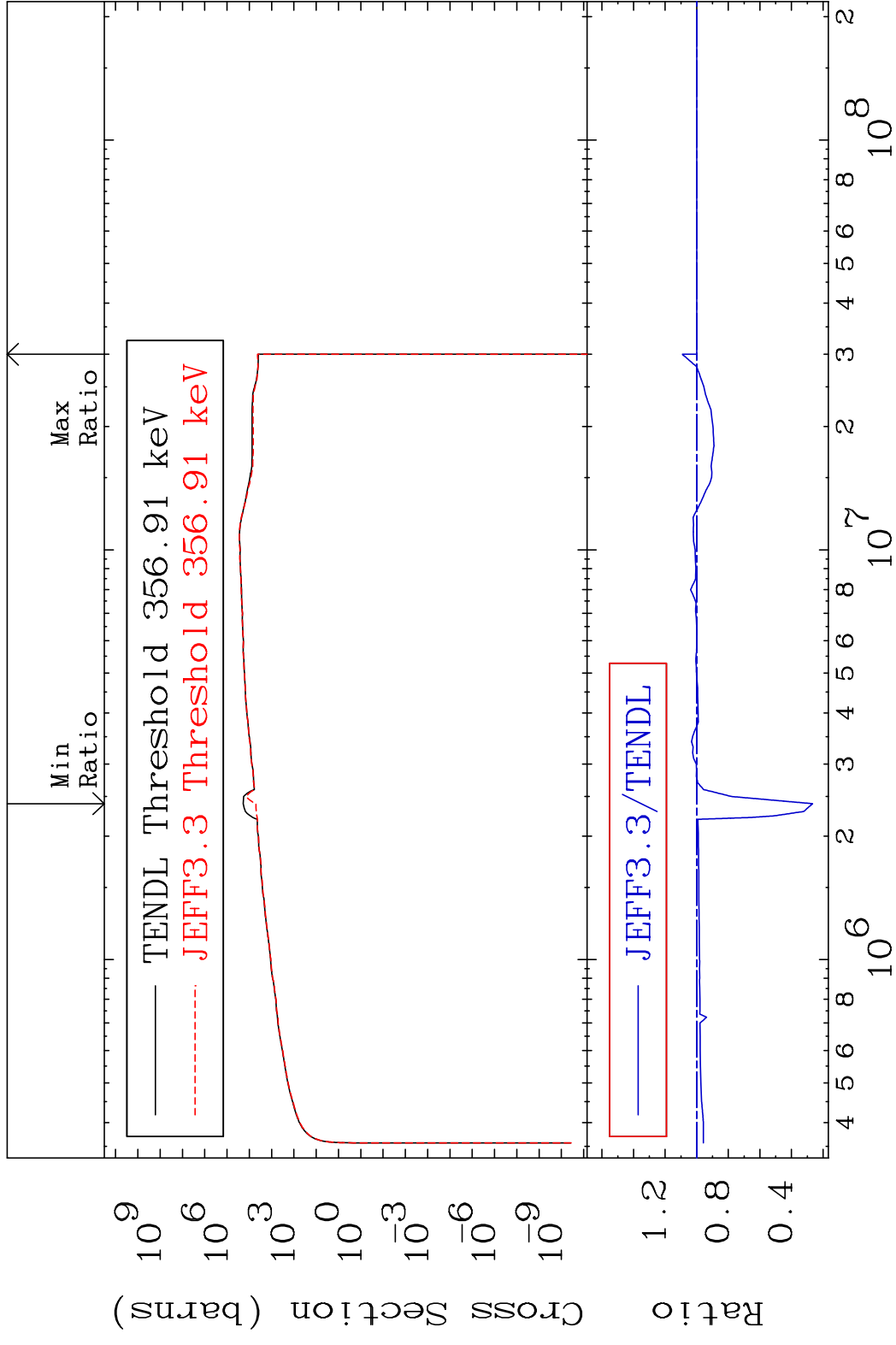
10⁵
10⁰
10⁻⁵
Ratio

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

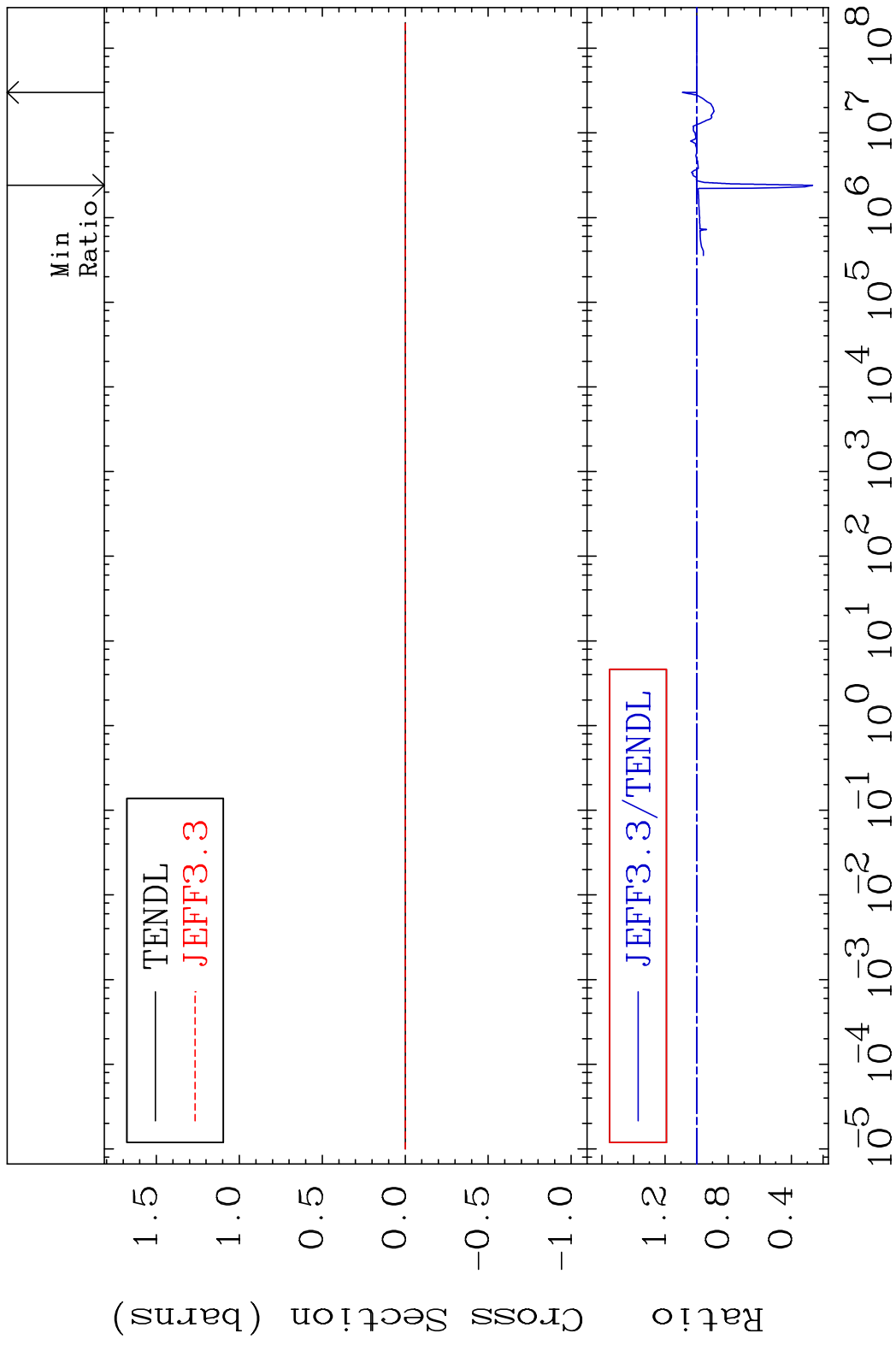
MAT 5425 Kerma non-elastic (all but mt2) 54-Xe-124
 Cross Section -99.92 To 9999. %



MAT 5425 Kerma inelastic (mt51-91) 54-Xe-124
 Cross Section -73.32 To 9.111 %

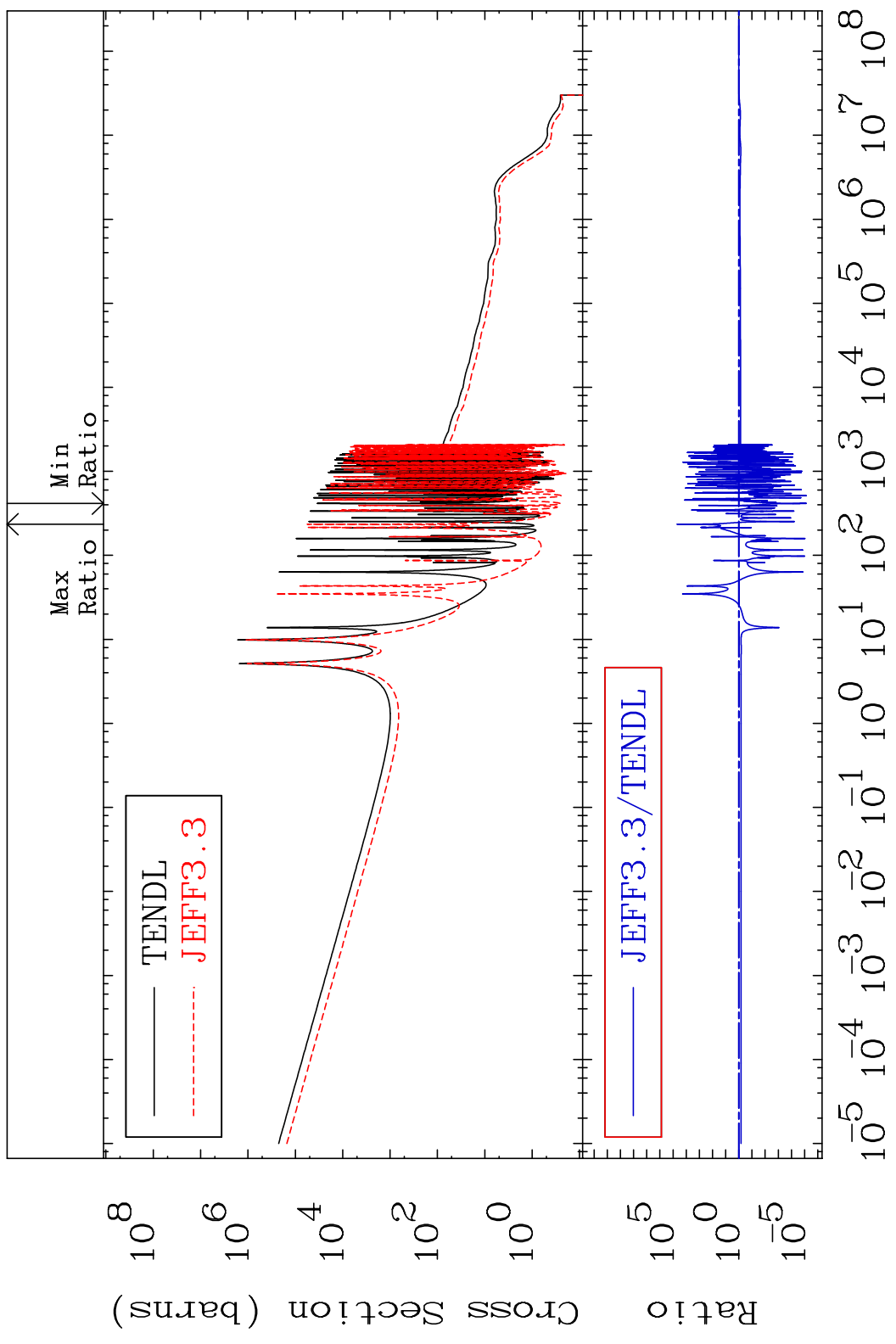


MAT 5425 Kerma fission (mt18 or mt19-20-21-38) 54-Xe-124
 Cross Section -73.32 To 9.111 %



MAT 5425

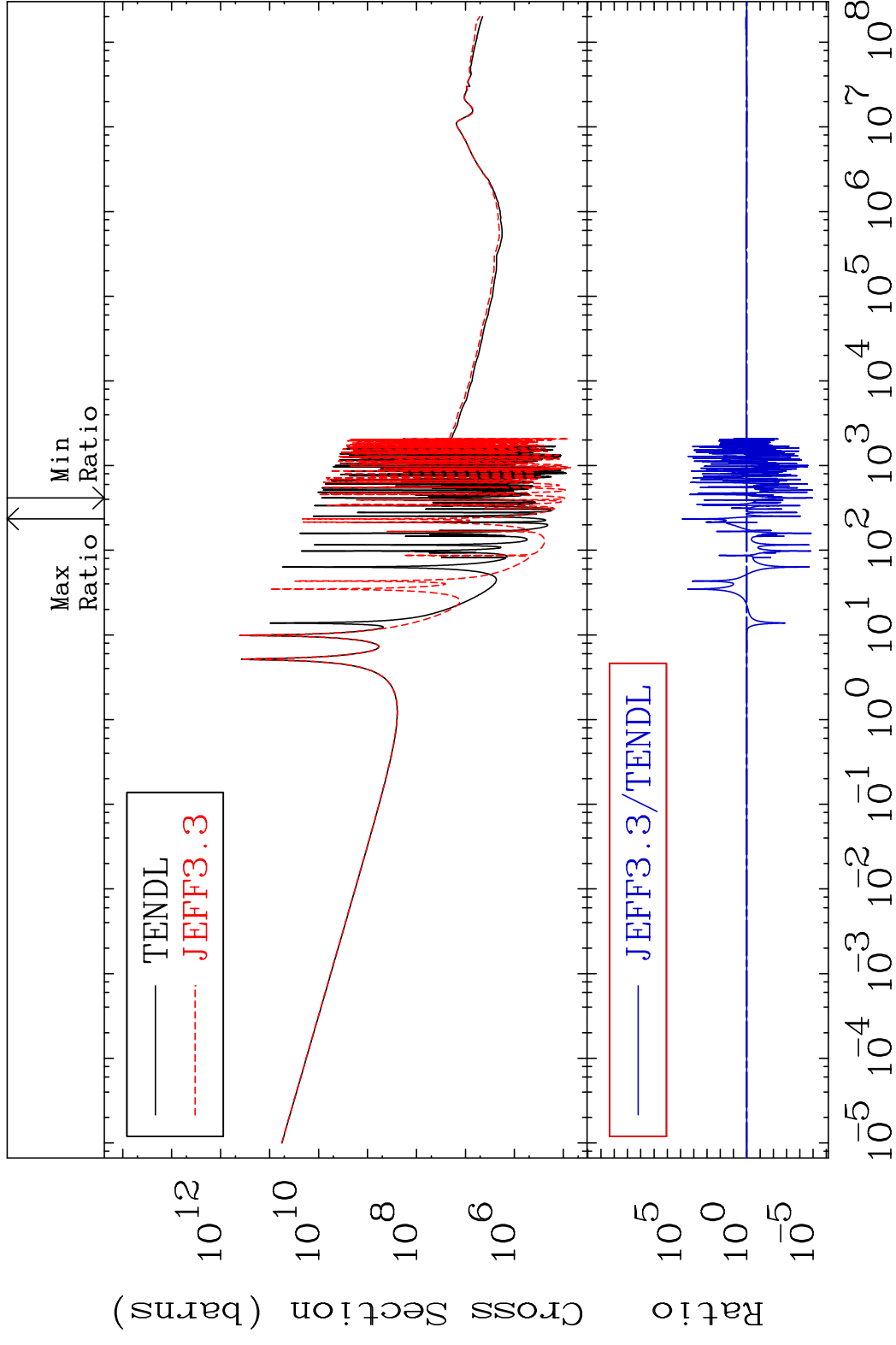
Kerma capture (mt102) 54-Xe-124
Cross Section -100.0 To 9999. %



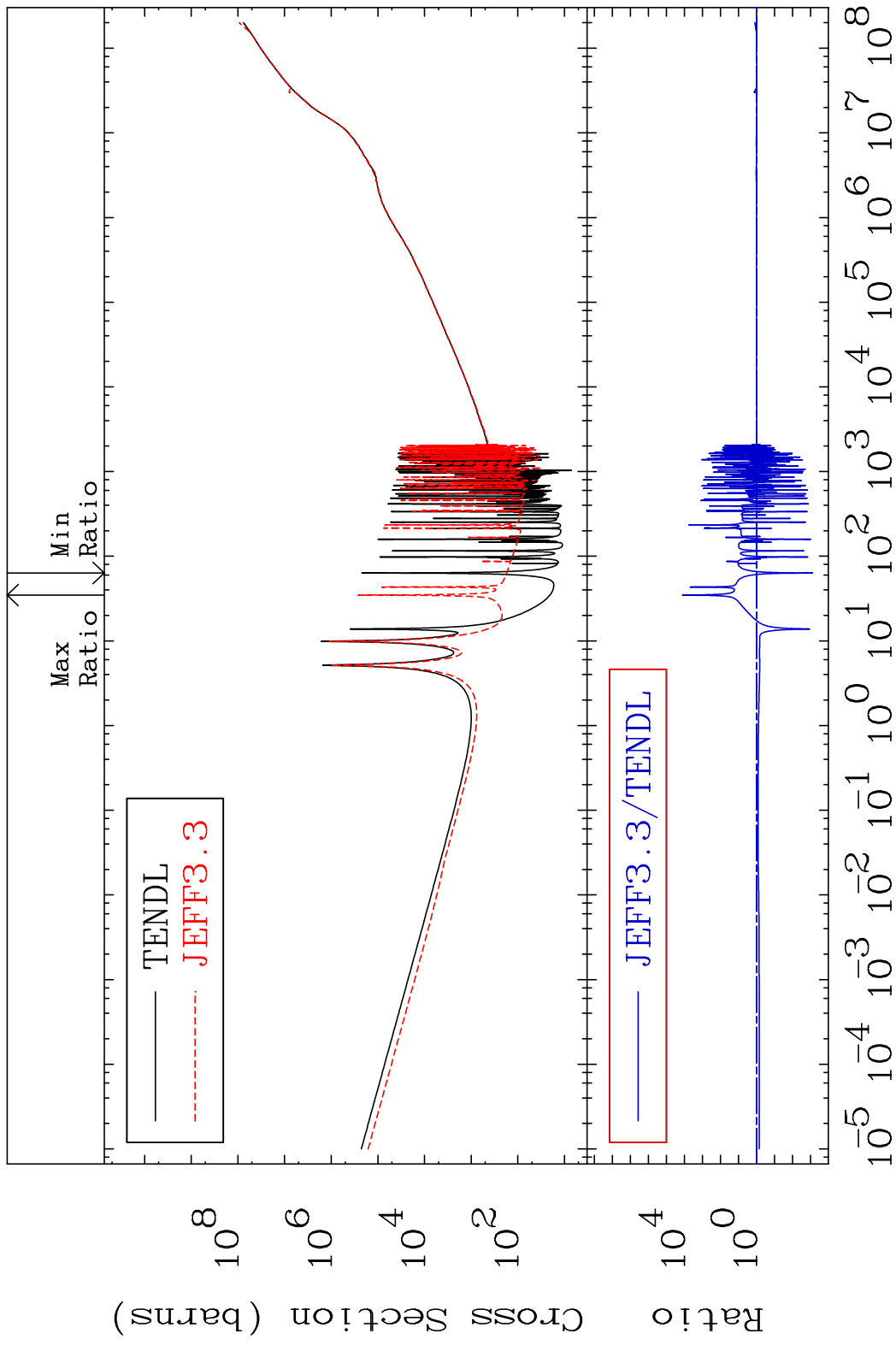
60

54-Xe-124

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



MAT 5425 Total kinematic kerma (high limit) 54-Xe-124
 Cross Section -99.92 To 9999. %

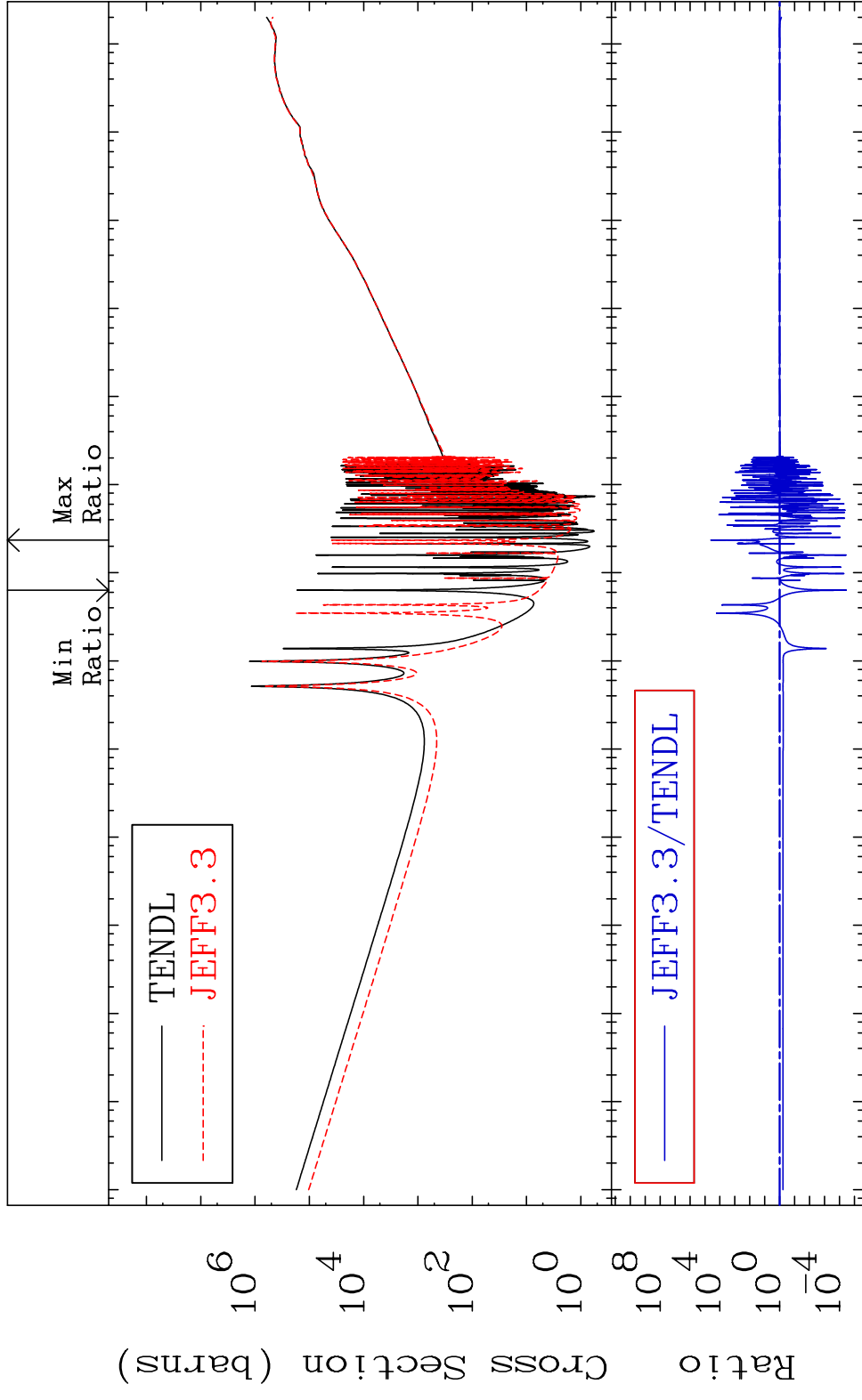


MAT 5425

Dpa total (eV-barns)

54-Xe-124

Cross Section -100.0 To 9999. %



63

Incident Energy (eV)

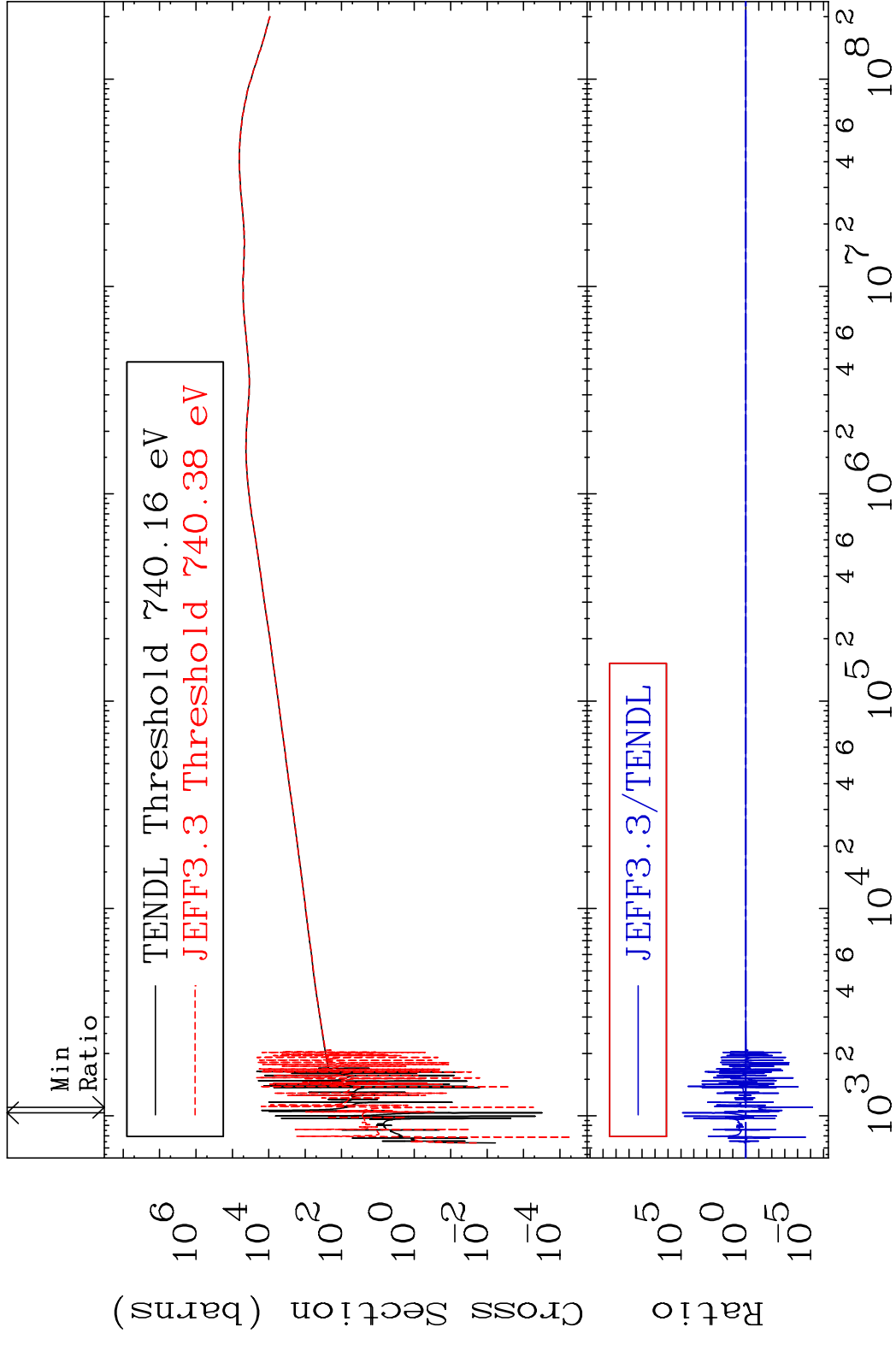
54-Xe-124

MAT 5425

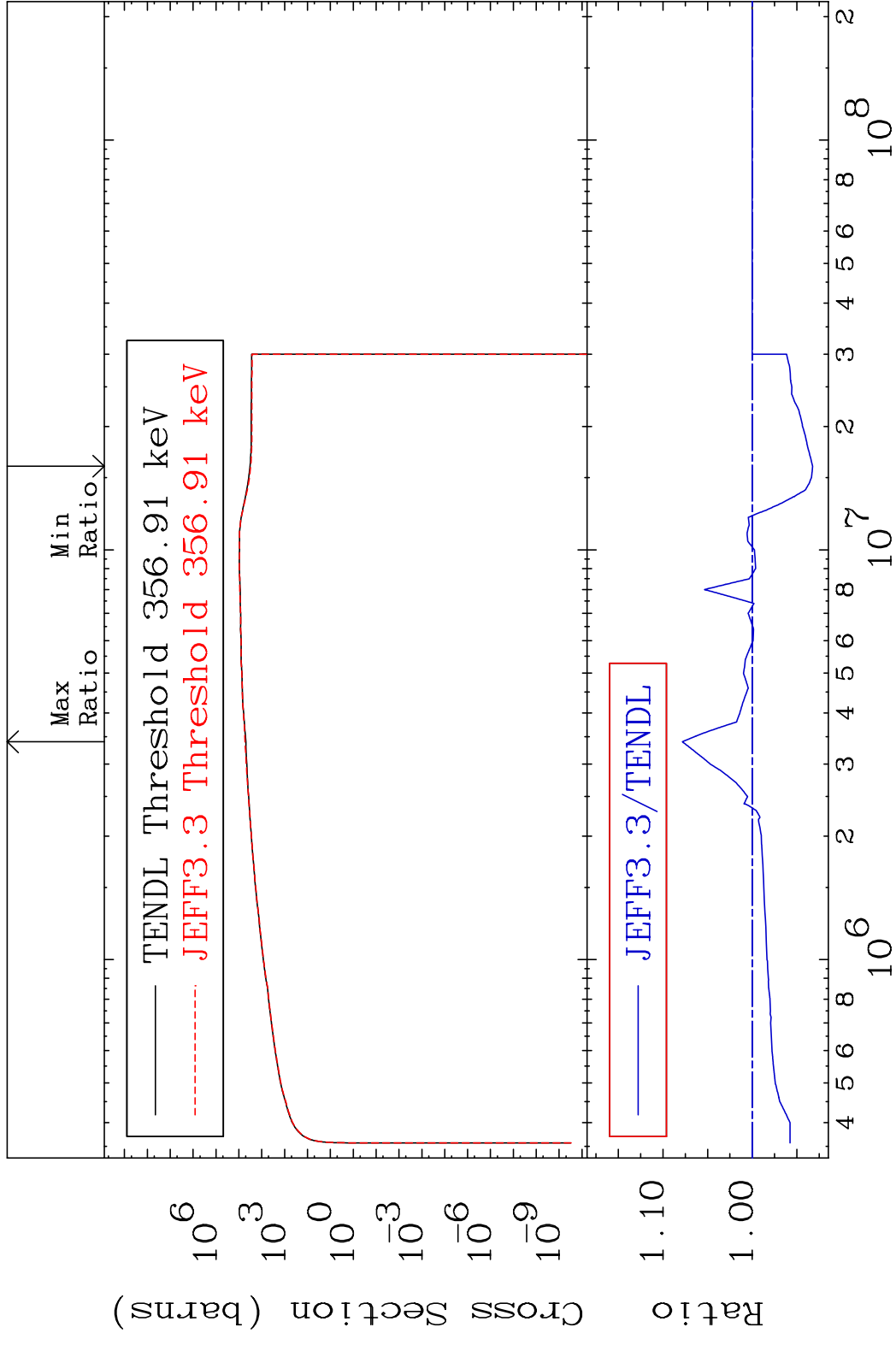
Dpa elastic (mt2)

54-Xe-124

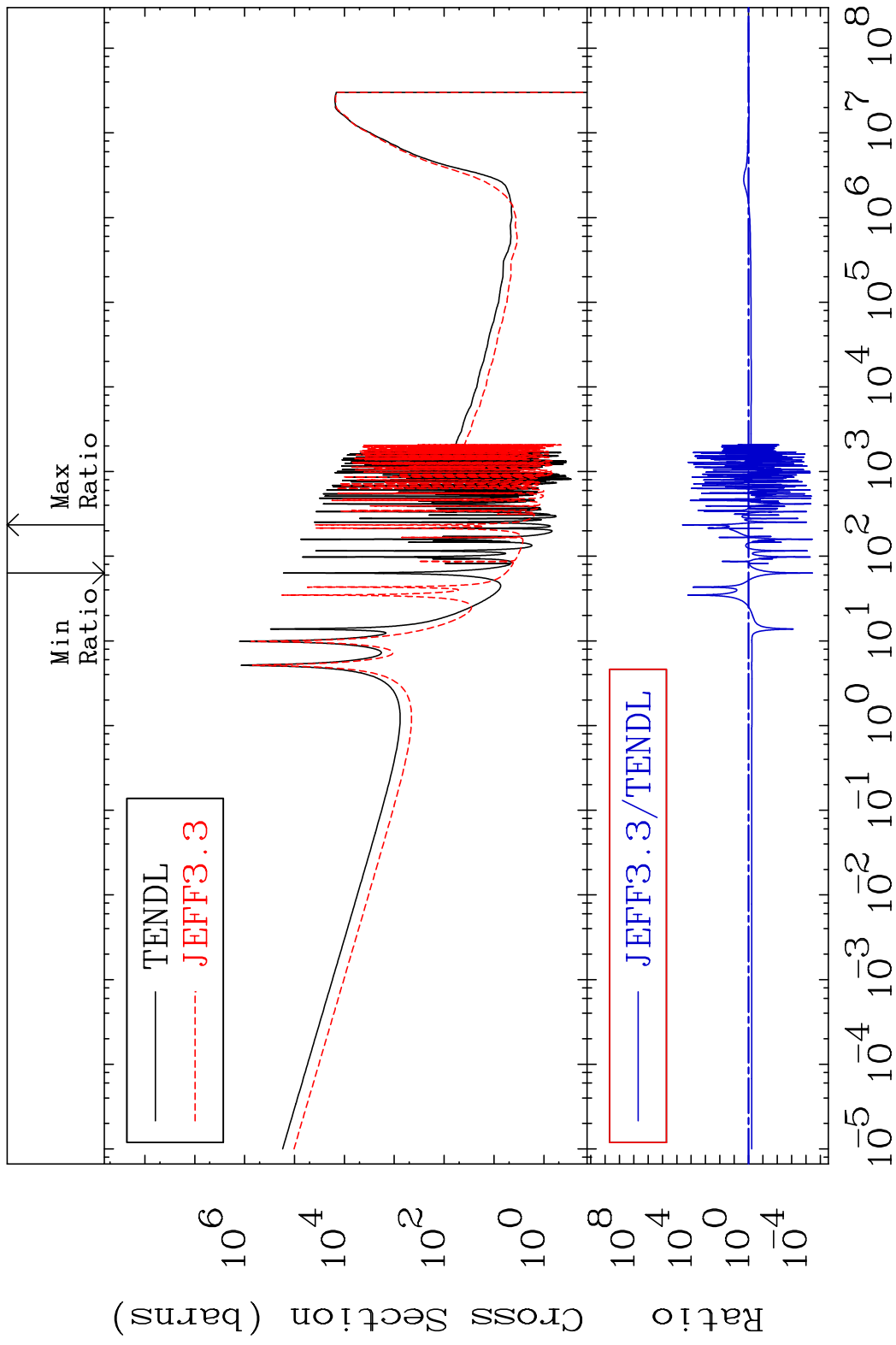
Cross Section -100.0 To 9999. %



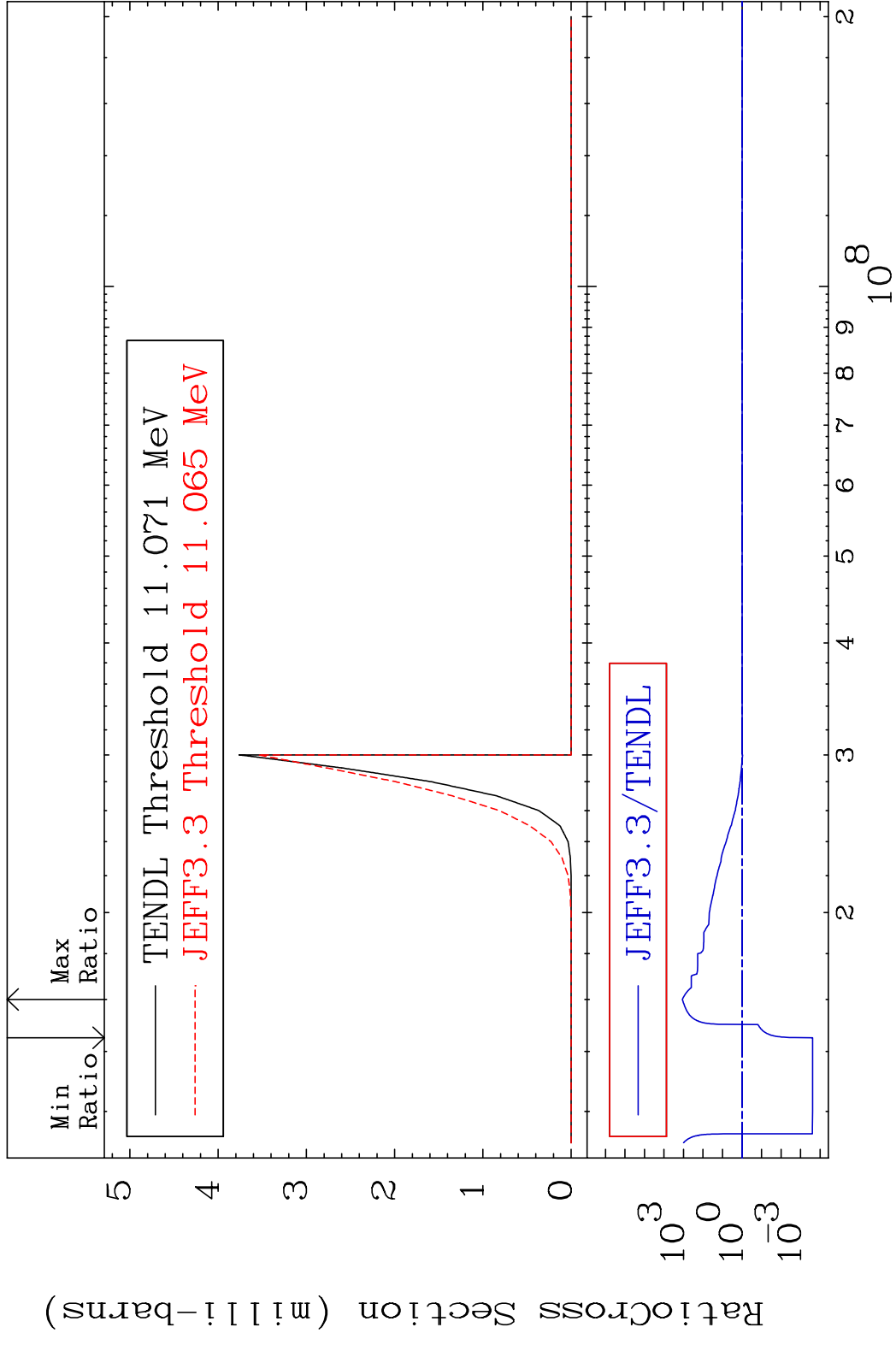
MAT 5425 Dpa inelastic (mt51-91) 54-Xe-124
 Cross Section -6.757 To 7.827 %

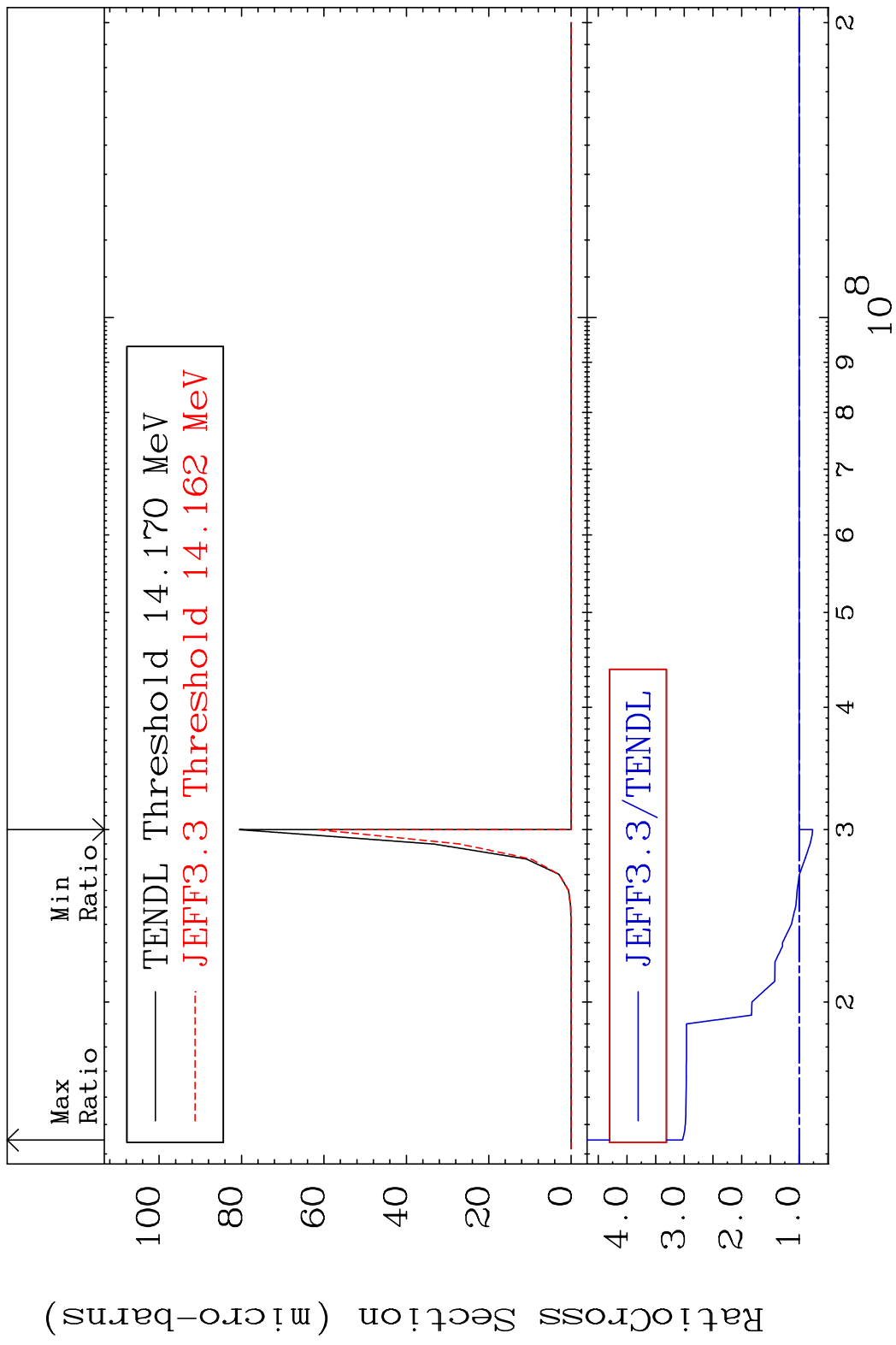


MAT 5425 Dpa disappearance (mt102 -120) 54-Xe-124
 Cross Section -100.0 To 9999. %

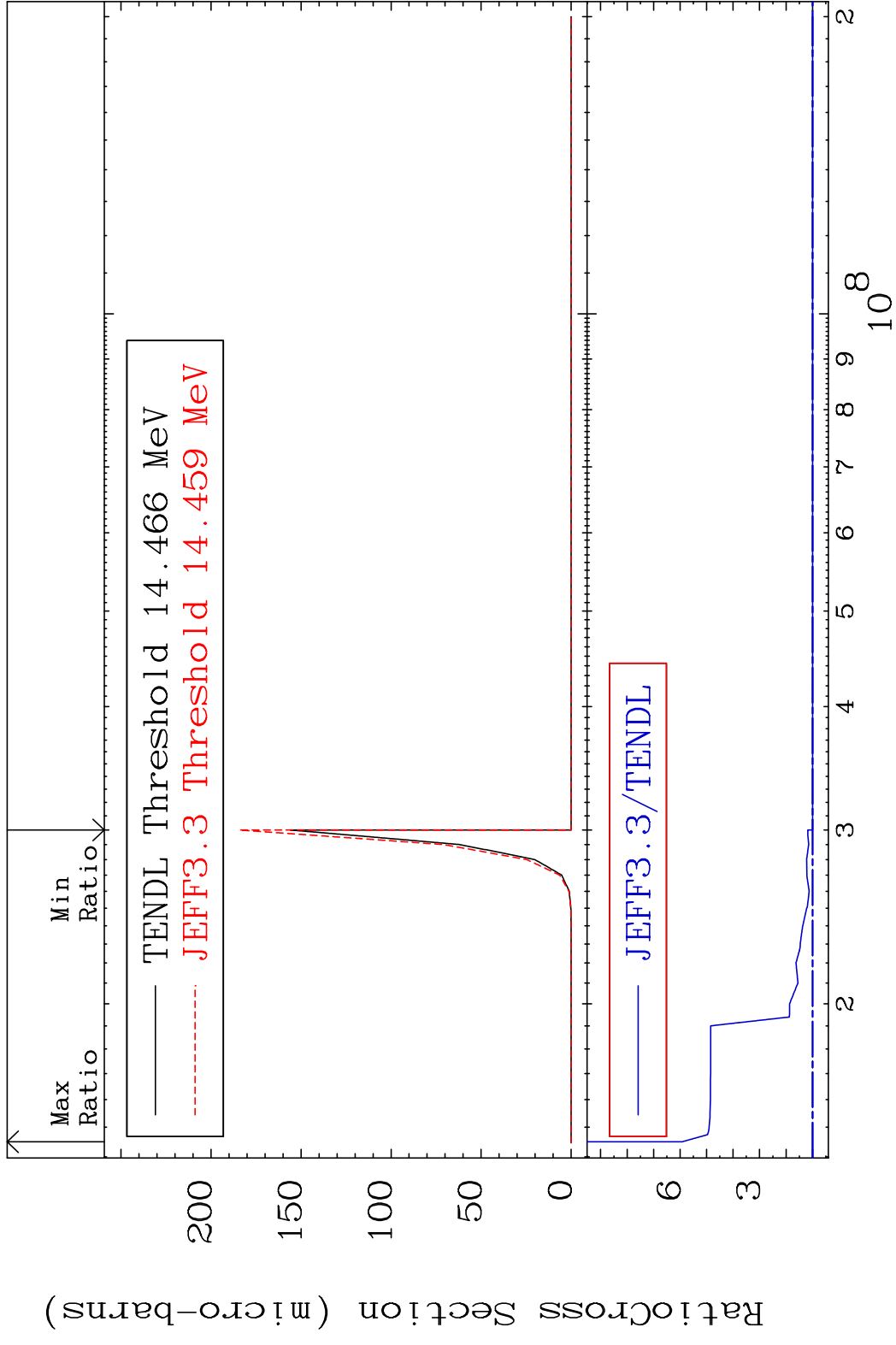


MAT 5425 (n,2n) α :52-Te-119g 54-Xe-124
 Radionuclide Production Cross Section 98.981 dth 9999. %

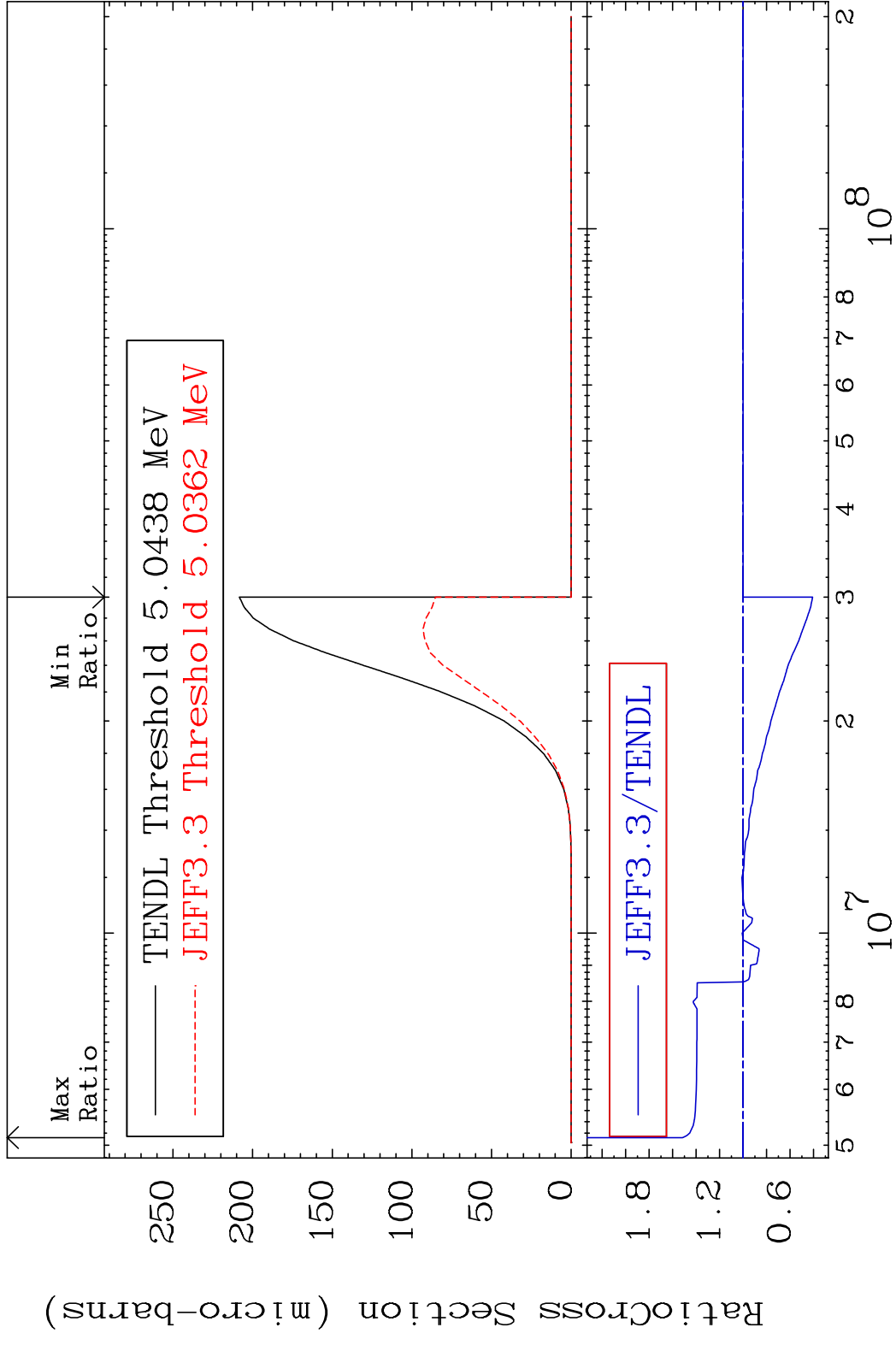




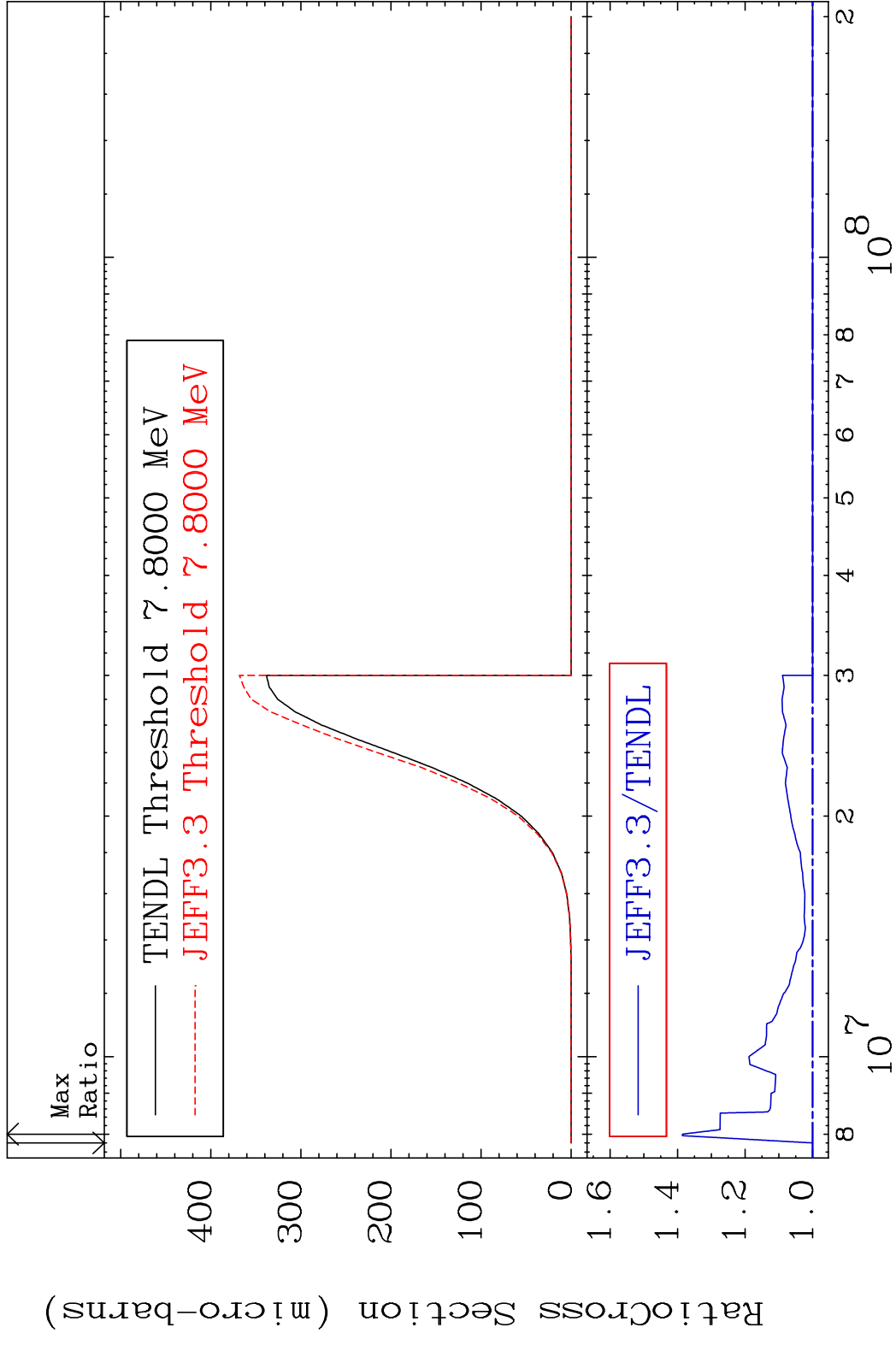
MAT 5425 (n, n') He-3:52-Te-121m2 54-Xe-124
 Radionuclide Production Cross Section 491.5 %

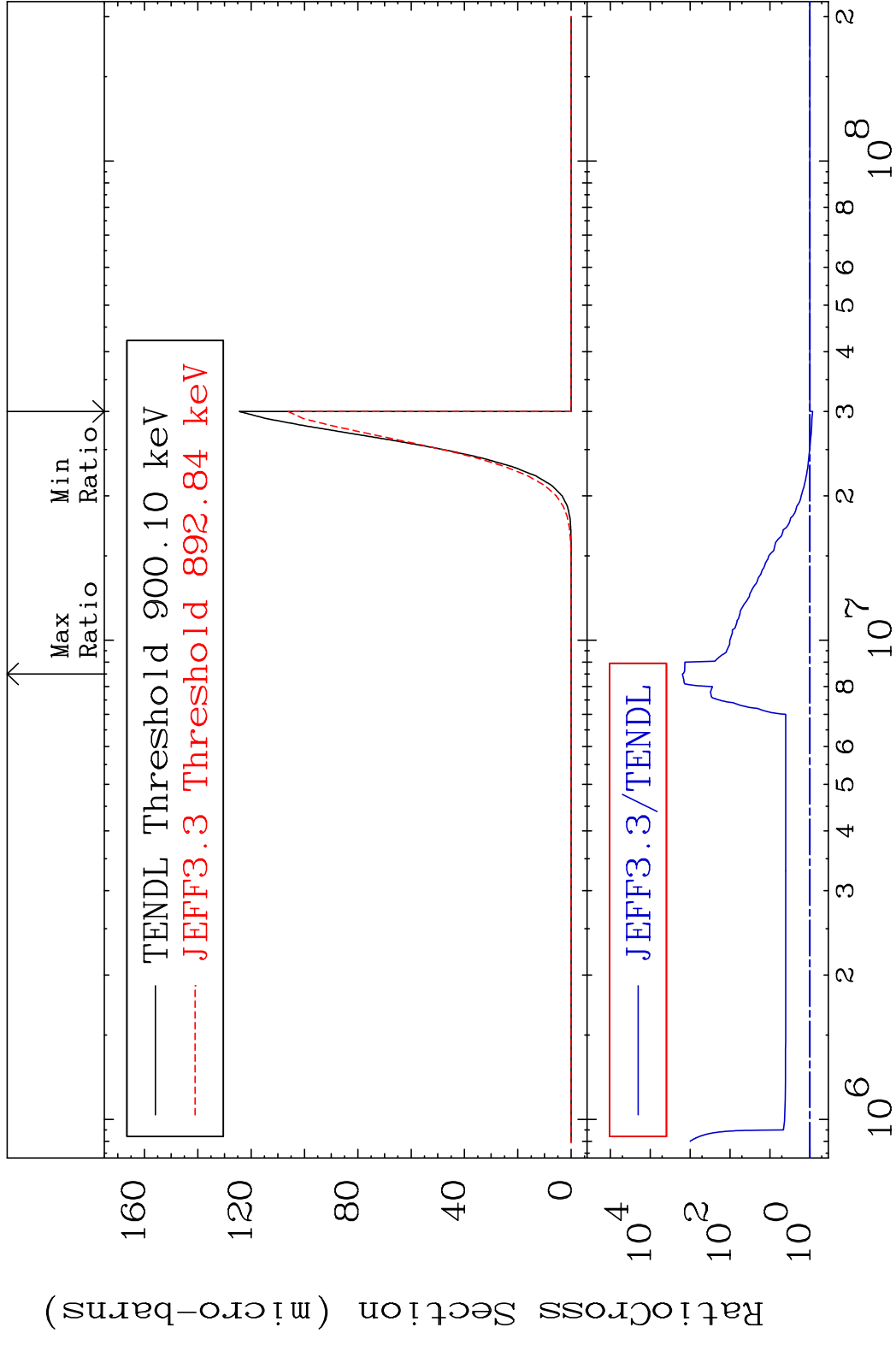


MAT 5425 (n,2p):52-Te-123g 54-Xe-124
 Radionuclide Production Cross Section 51.72 %

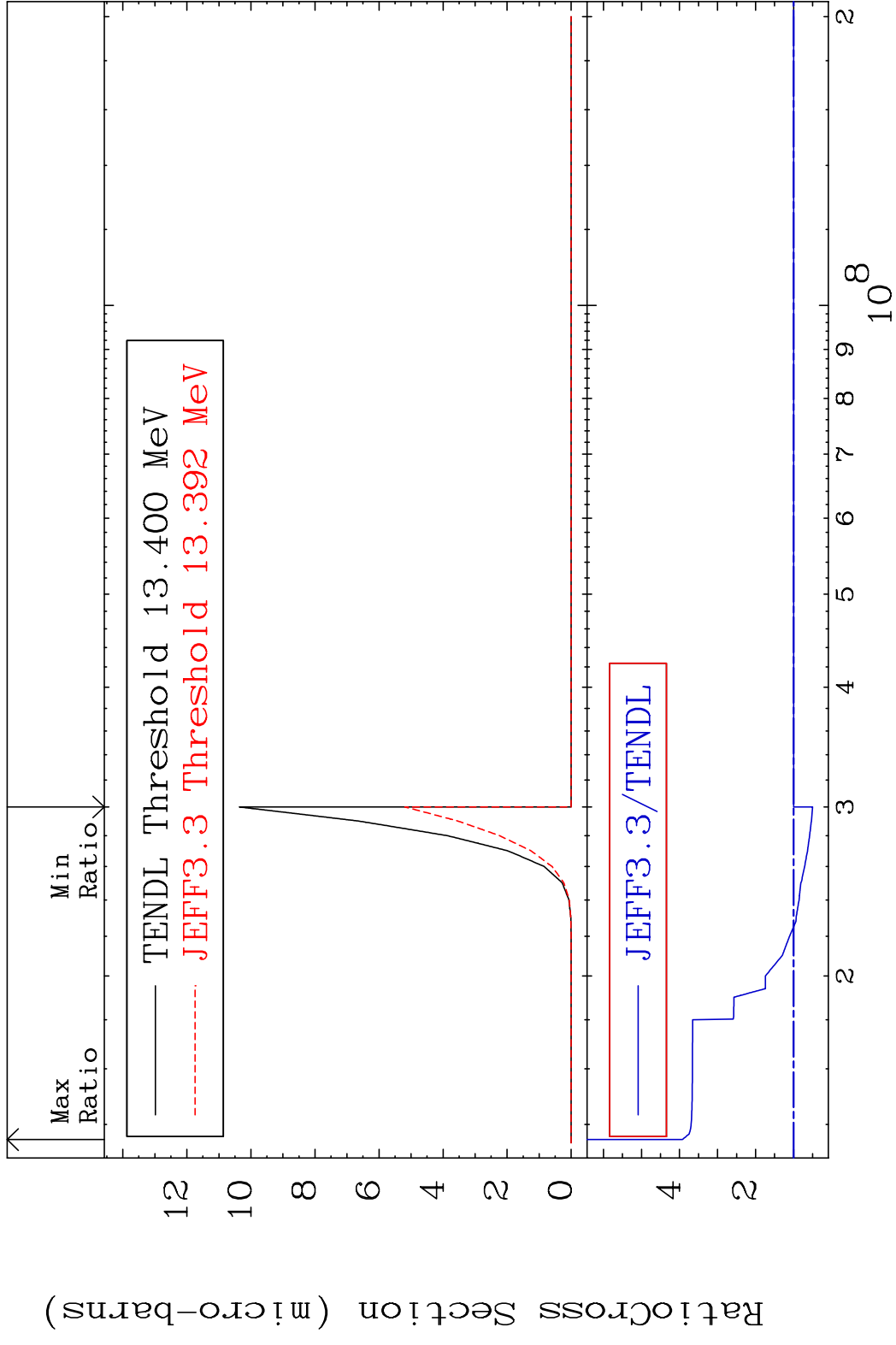


MAT 5425 (n,2p):52-Te-123m2 54-Xe-124
 Radionuclide Production Cross Section 38.60 %





MAT 5425 (n,p) t:52-Te-121g 54-Xe-124
 Radionuclide Production Cross Section 49.61 dth 292.6 %



MAT 5425 (n,p) t:52-Te-121m2 54-Xe-124
 Radionuclide Production Cross Section 374.6 %

