

Program Complot
(Version 2018-1)

by

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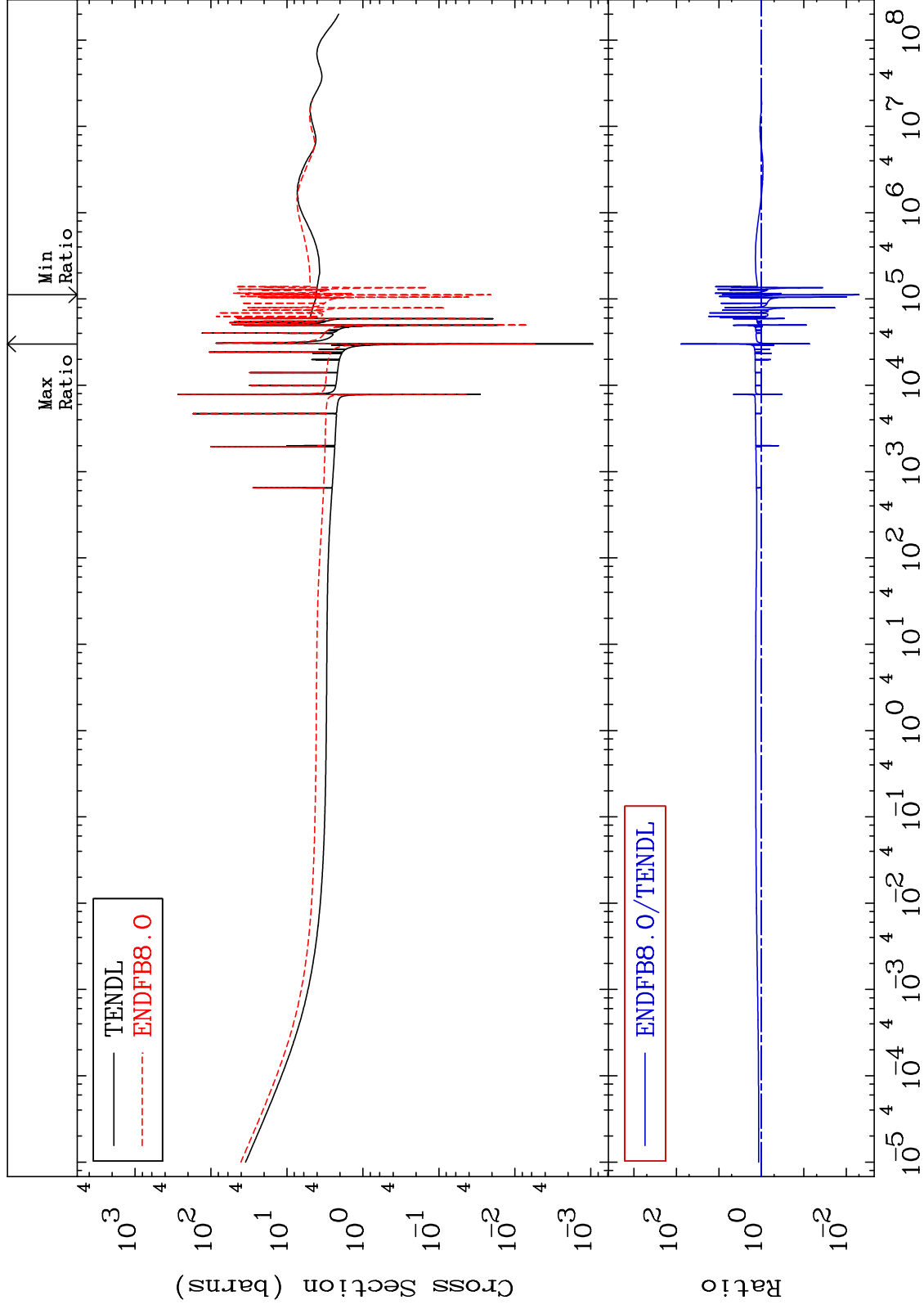
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 5649

Total
Cross Section

56-Ba-138
-99.50 To 7843. %



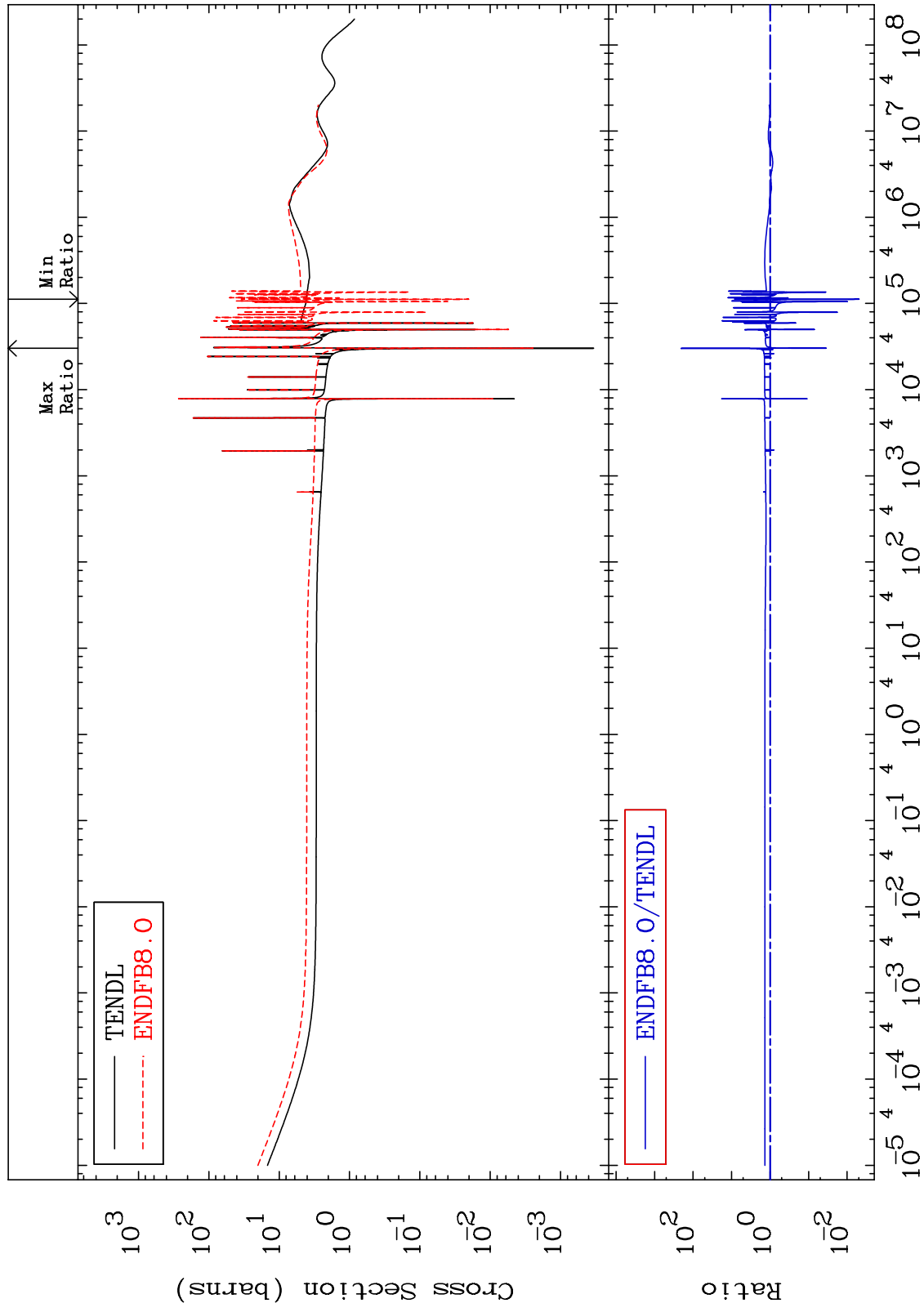
Incident Energy (eV)

56-Ba-138

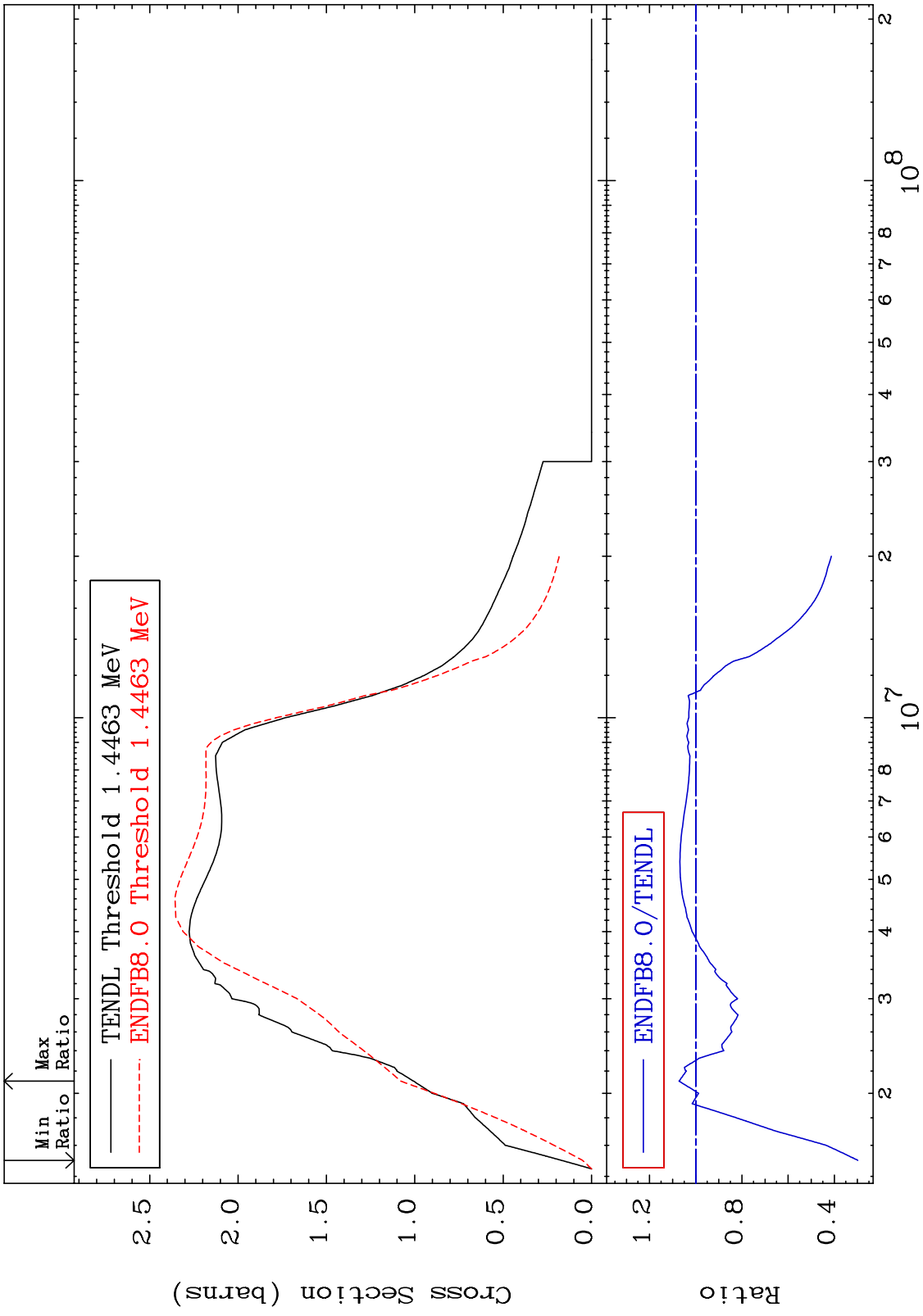
MAT 5649

Elastic Cross Section

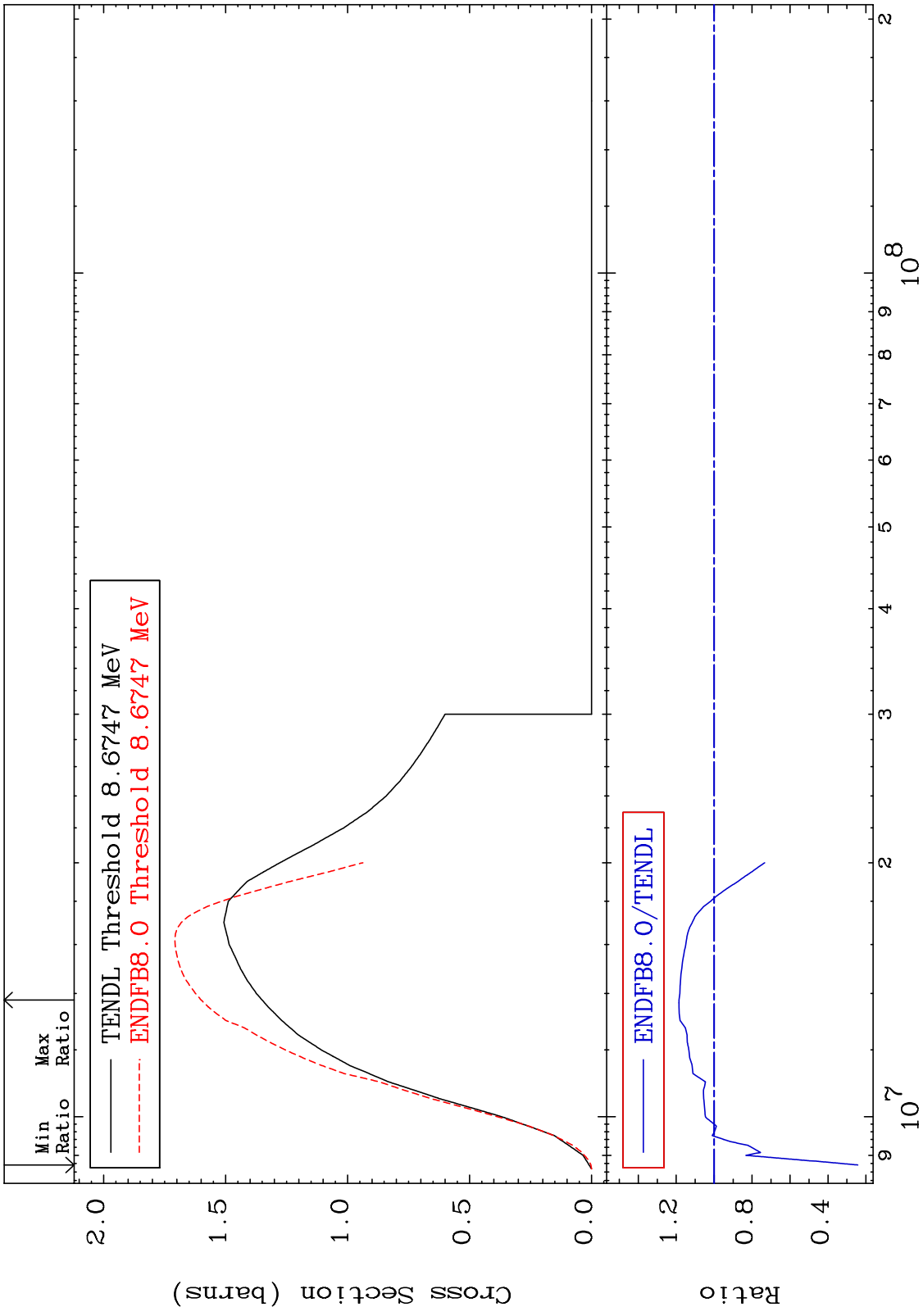
56-Ba-138
-99.51 To 9999. %



MAT 5649 Inelastic Cross Section 56-Ba-138 -70.19 To 7.223 %



MAT 5649 (n,2n) Cross Section 56-Ba-138 -75.75 To 18.52 %



4 56-Ba-138

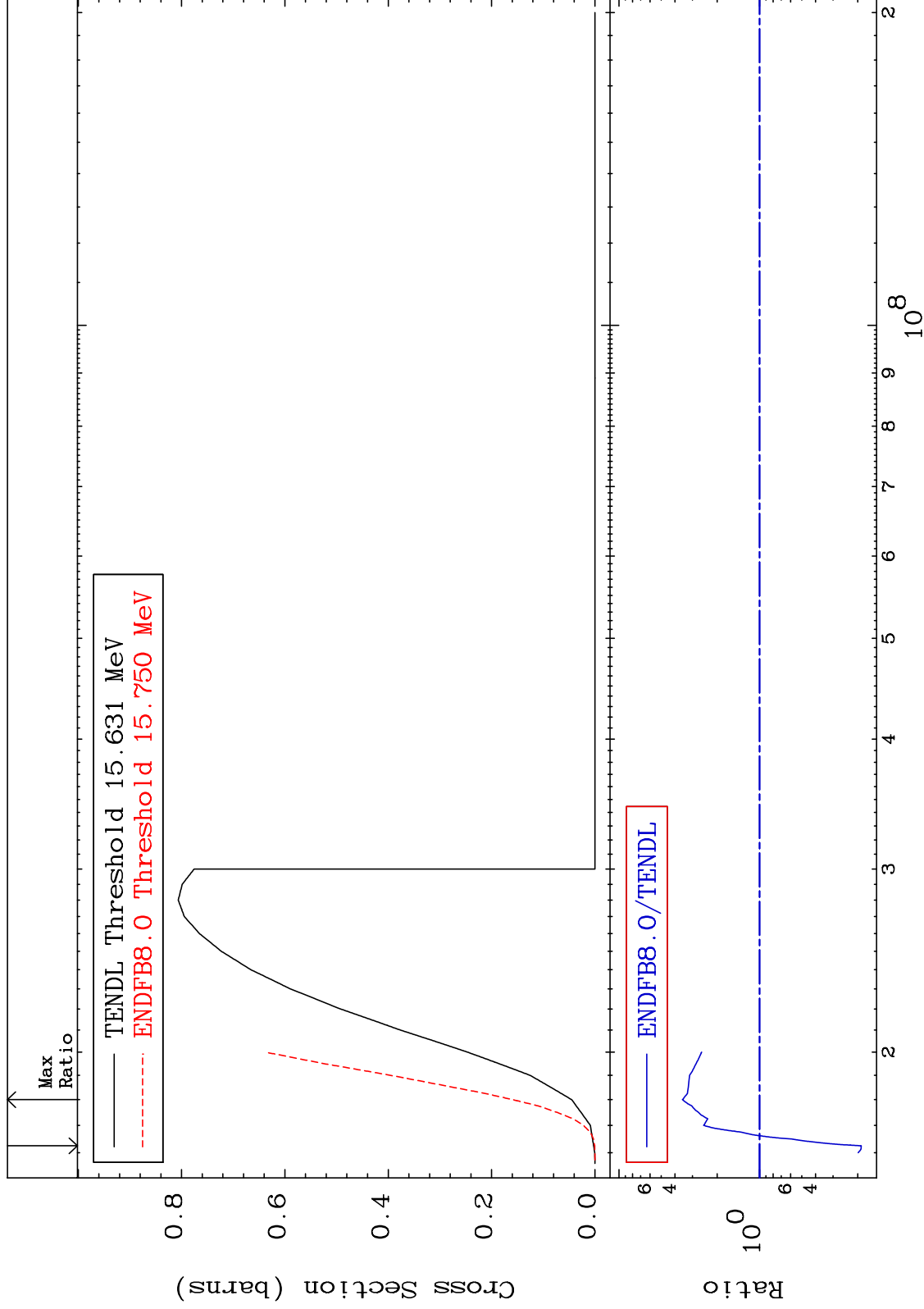
MAT 5649

(n,3n)

56-Ba-138

Cross Section

-81.11 To 253.2 %



5

Incident Energy (eV)

56-Ba-138

MAT 5649

(n, n') α

56-Ba-138

-60.76 To 54.25 %

Cross Section

Max Ratio

Min Ratio

TENDL Threshold 2.5795 MeV
ENDFB8.0 Threshold 11.250 MeV

Cross Section (milli-barns)

35
30
25
20
15
10
5
0

ENDFB8.0/TENDL

Ratio

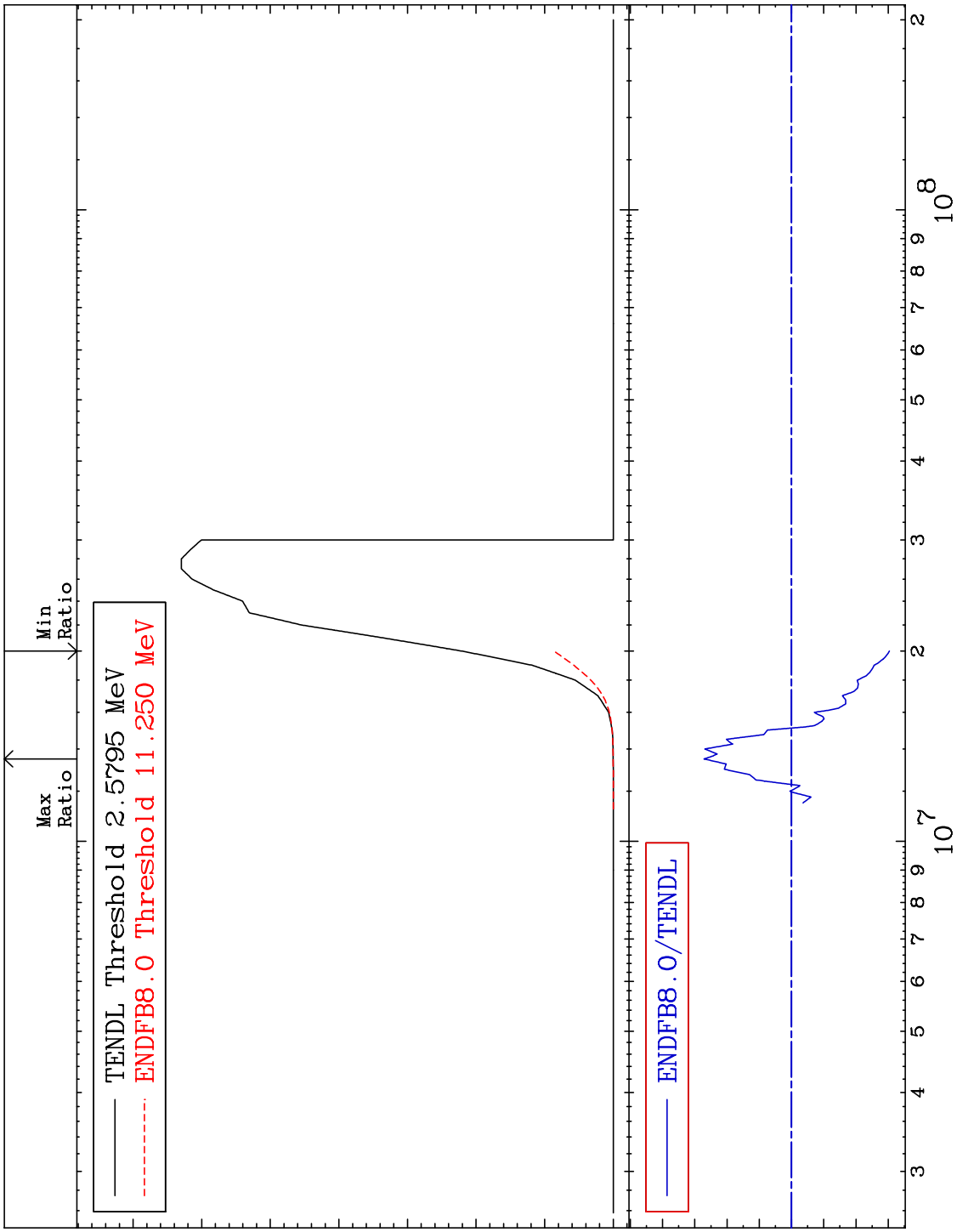
1.6
1.2
0.8
0.4

10⁷
10⁸

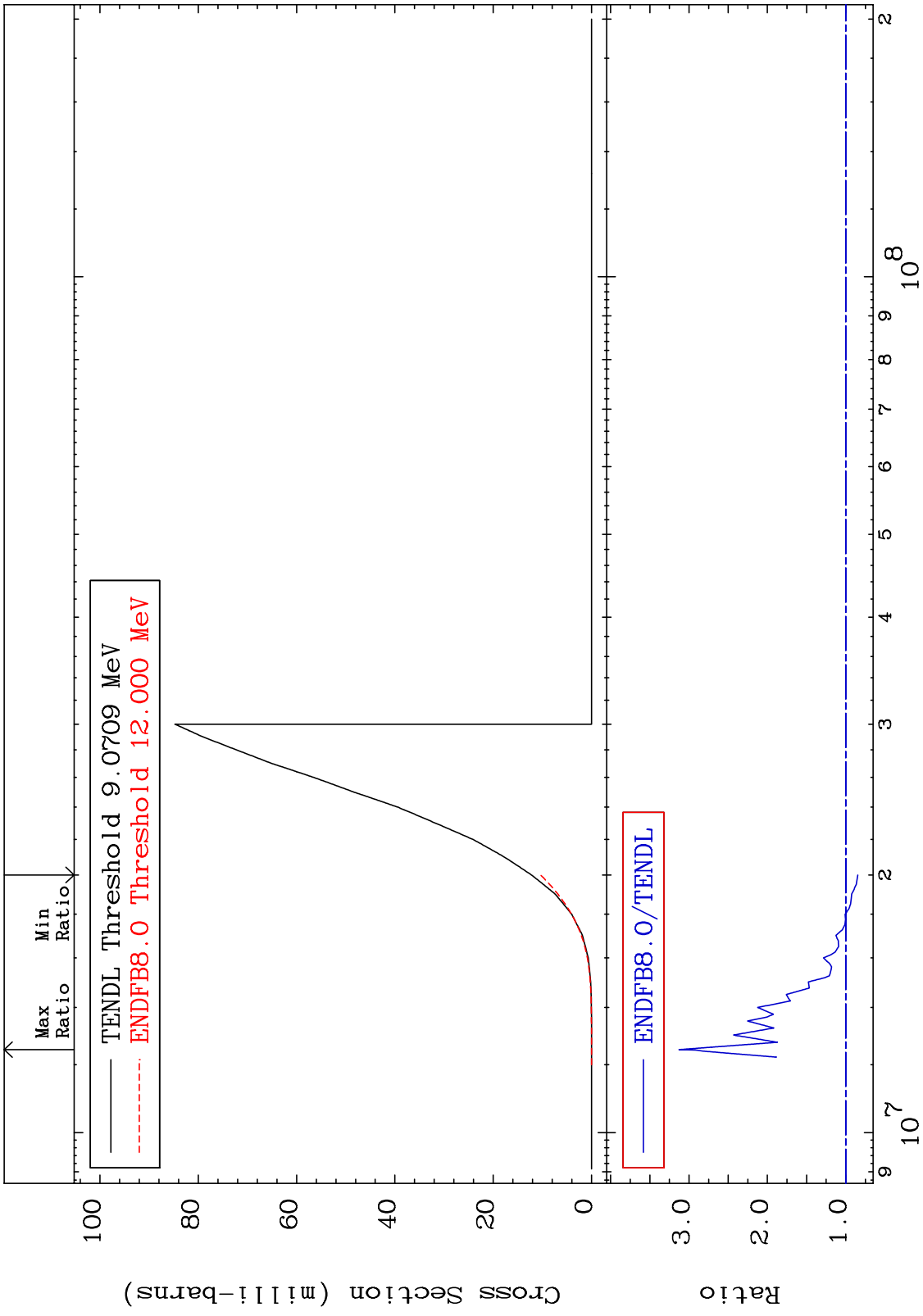
6

Incident Energy (eV)

56-Ba-138

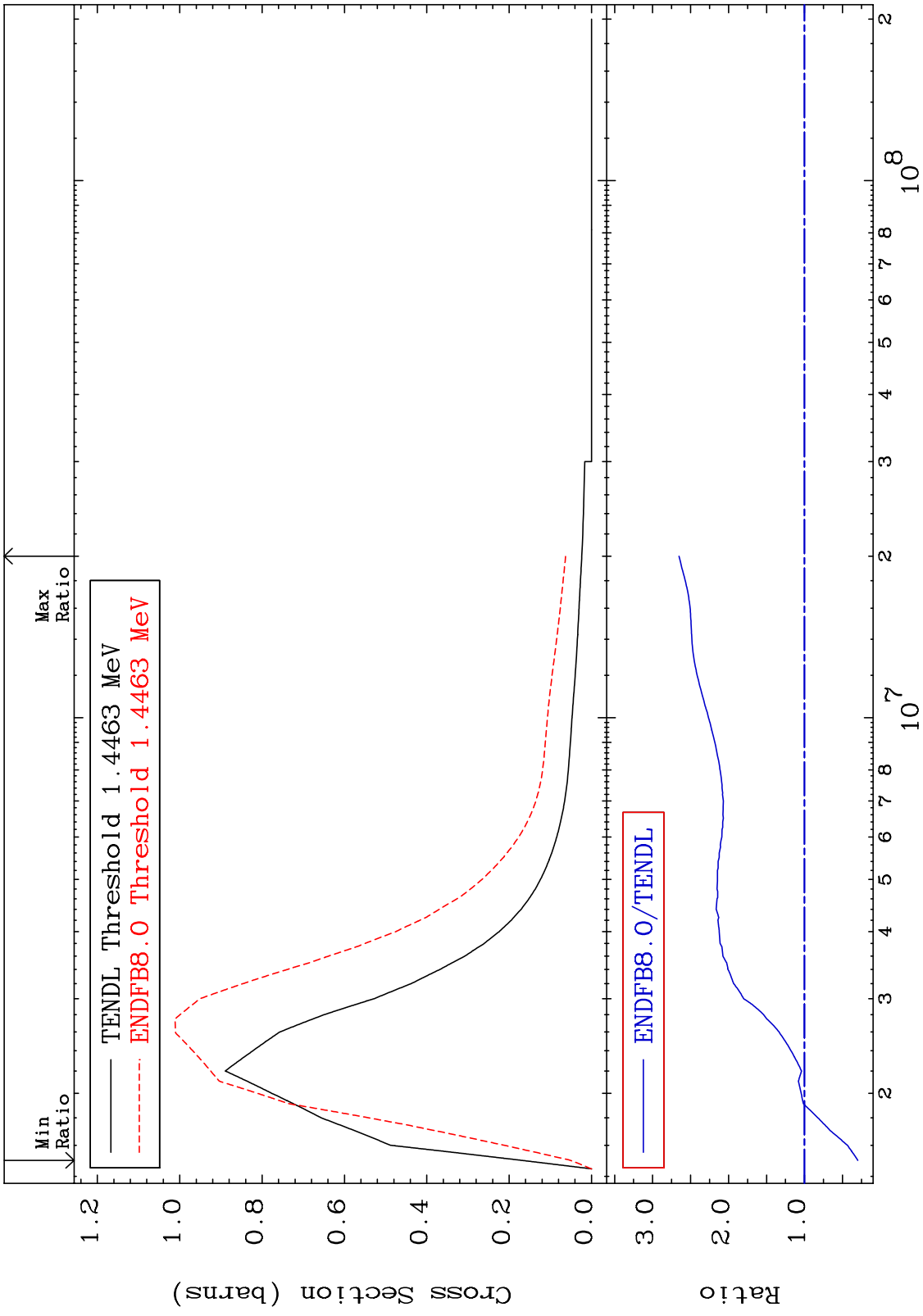


MAT 5649 (n,n') p 56-Ba-138
Cross Section -15.36 To 212.7 %

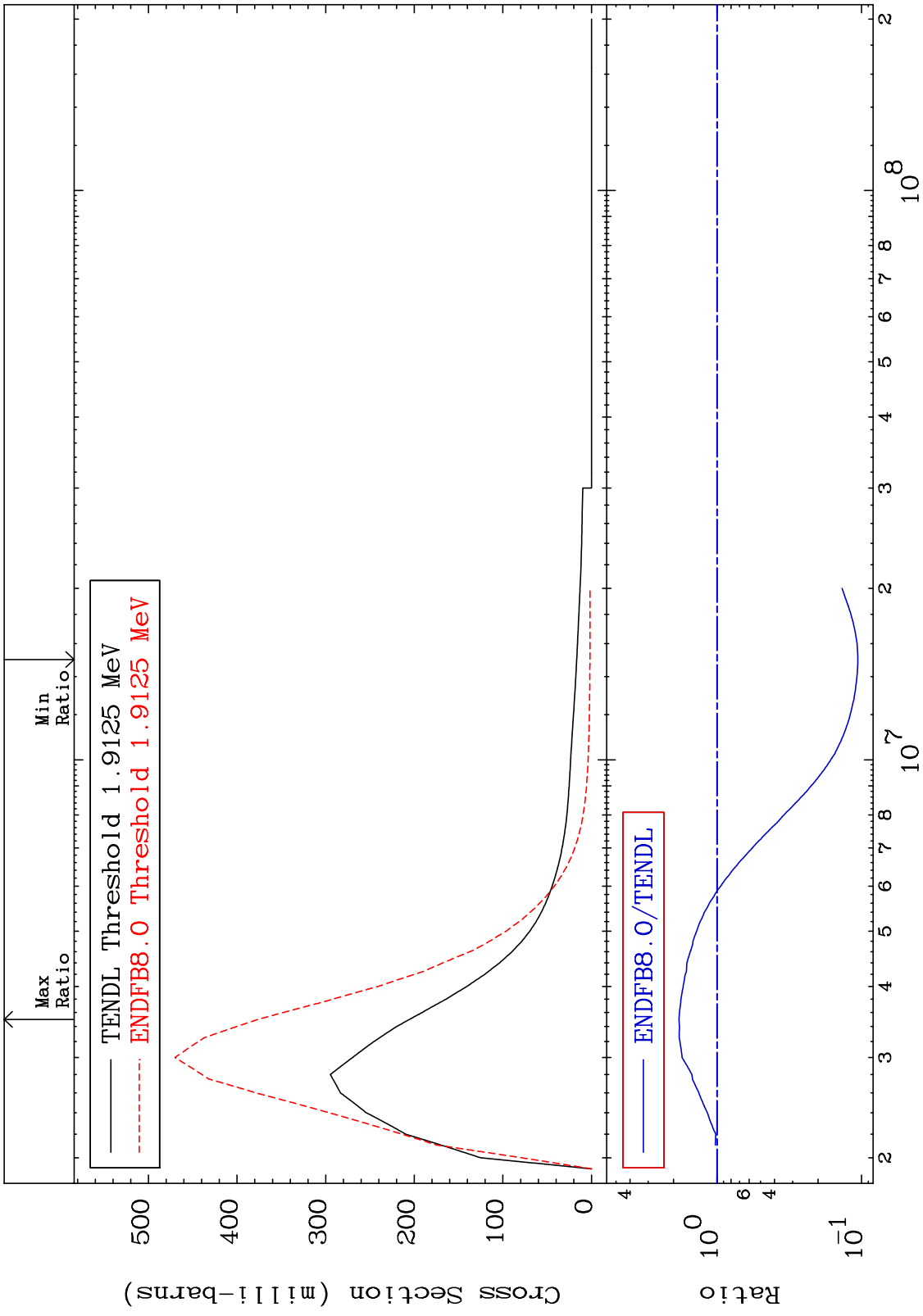


56-Ba-138

MAT 5649 MT= 51 (n,n') Level Cross Section 56-Ba-138
 -70.19 To 165.2 %



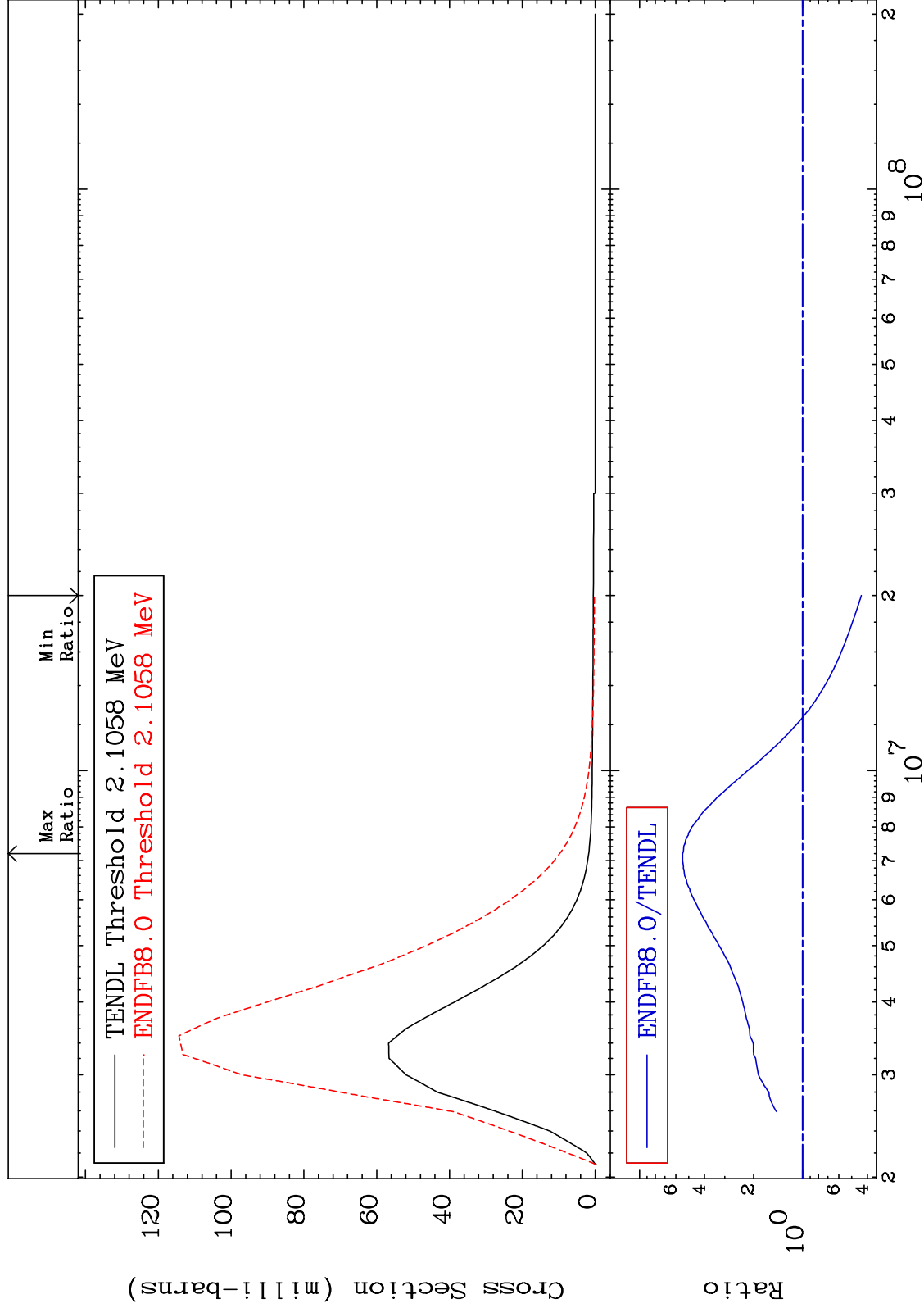
MAT 5649 MT= 52 (n,n') Level Cross Section 56-Ba-138
 -89.38 To 83.15 %



MAT 5649

MT= 53 (n,n') Level
Cross Section

56-Ba-138
-56.37 To 443.9 %



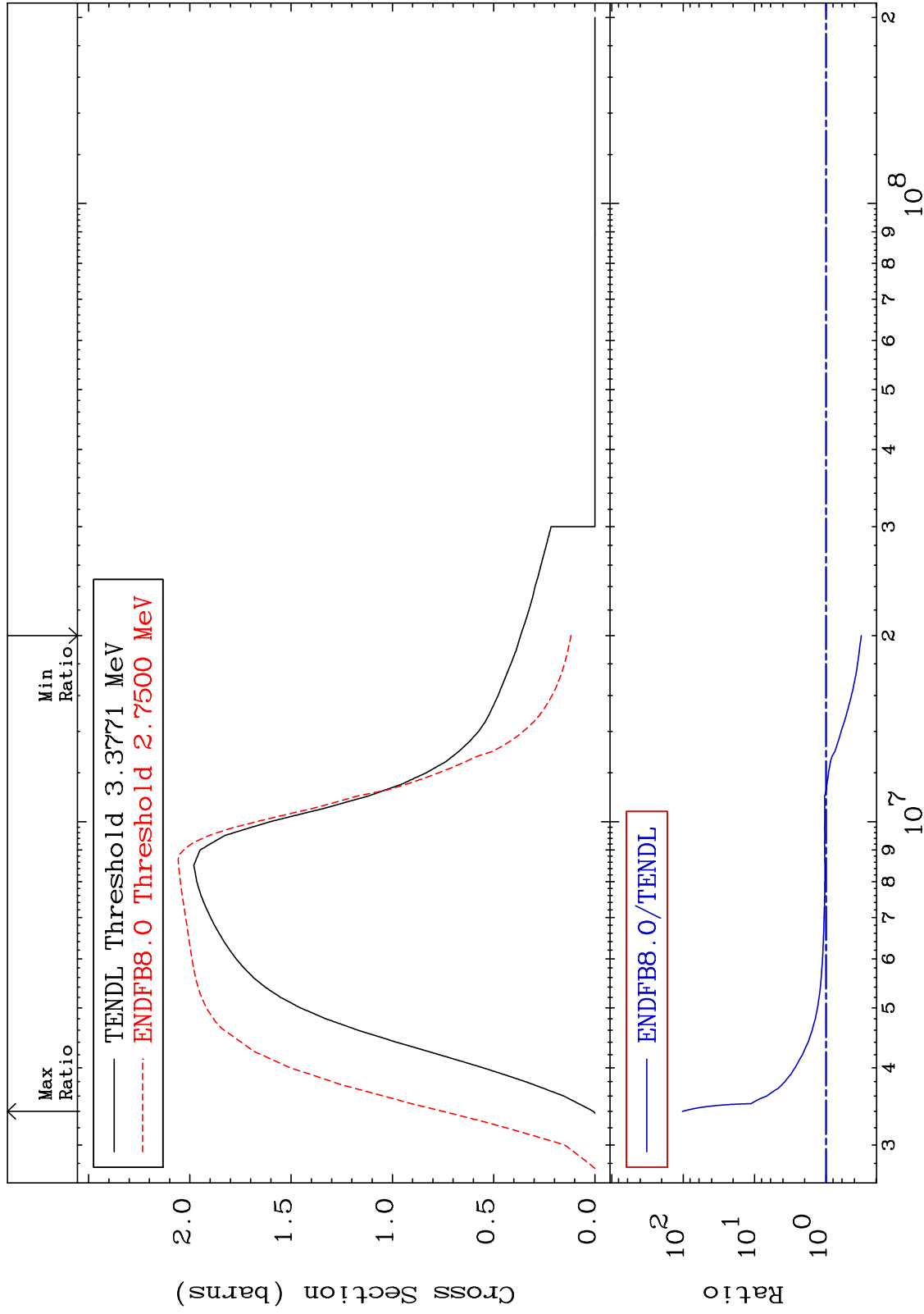
10

56-Ba-138

MAT 5649

(n, n') Continuum
Cross Section

56-Ba-138
-67.83 To 9999. %



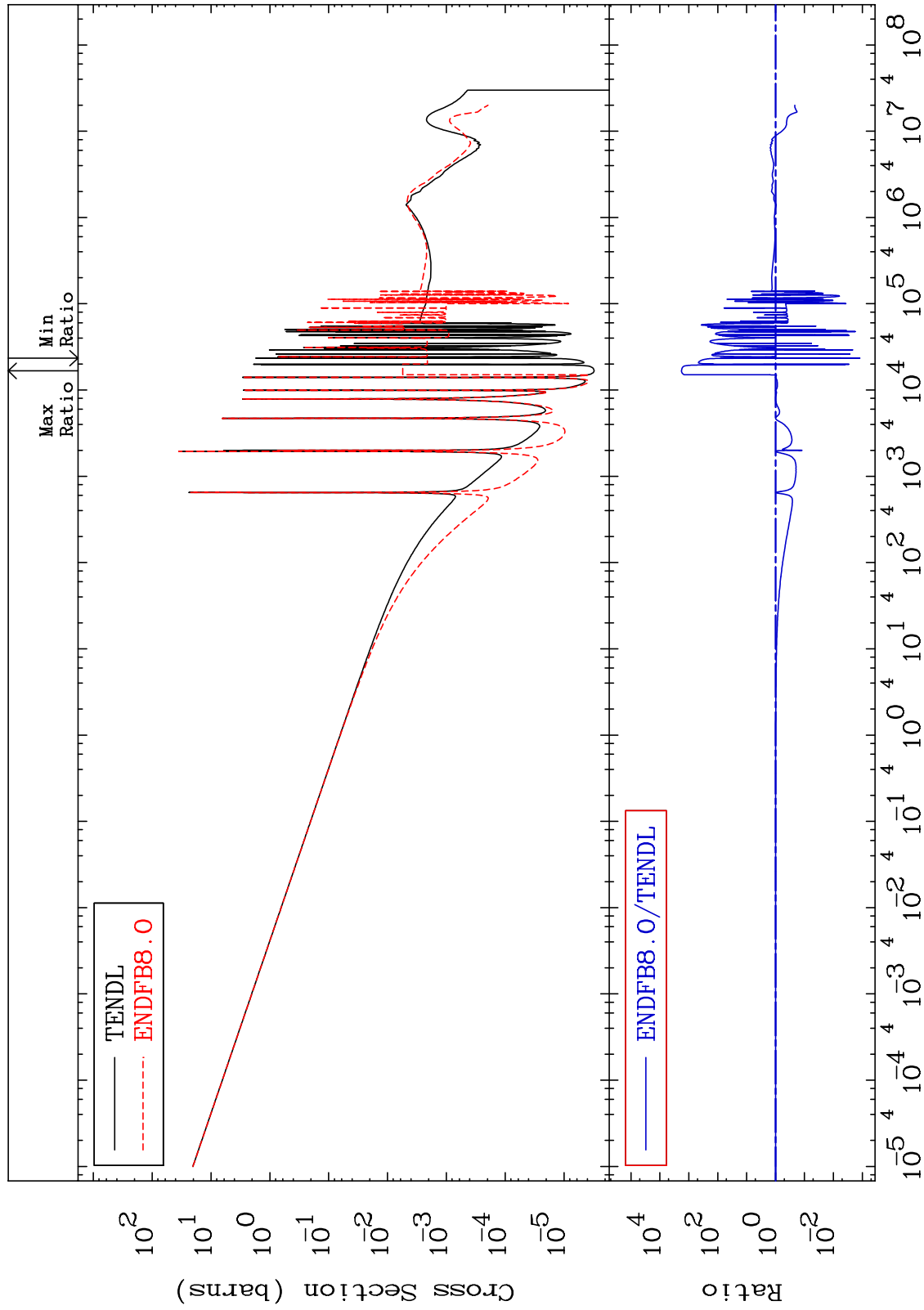
MAT 5649

(n, γ)

56-Ba-138

Cross Section

-99.88 To 9999. %



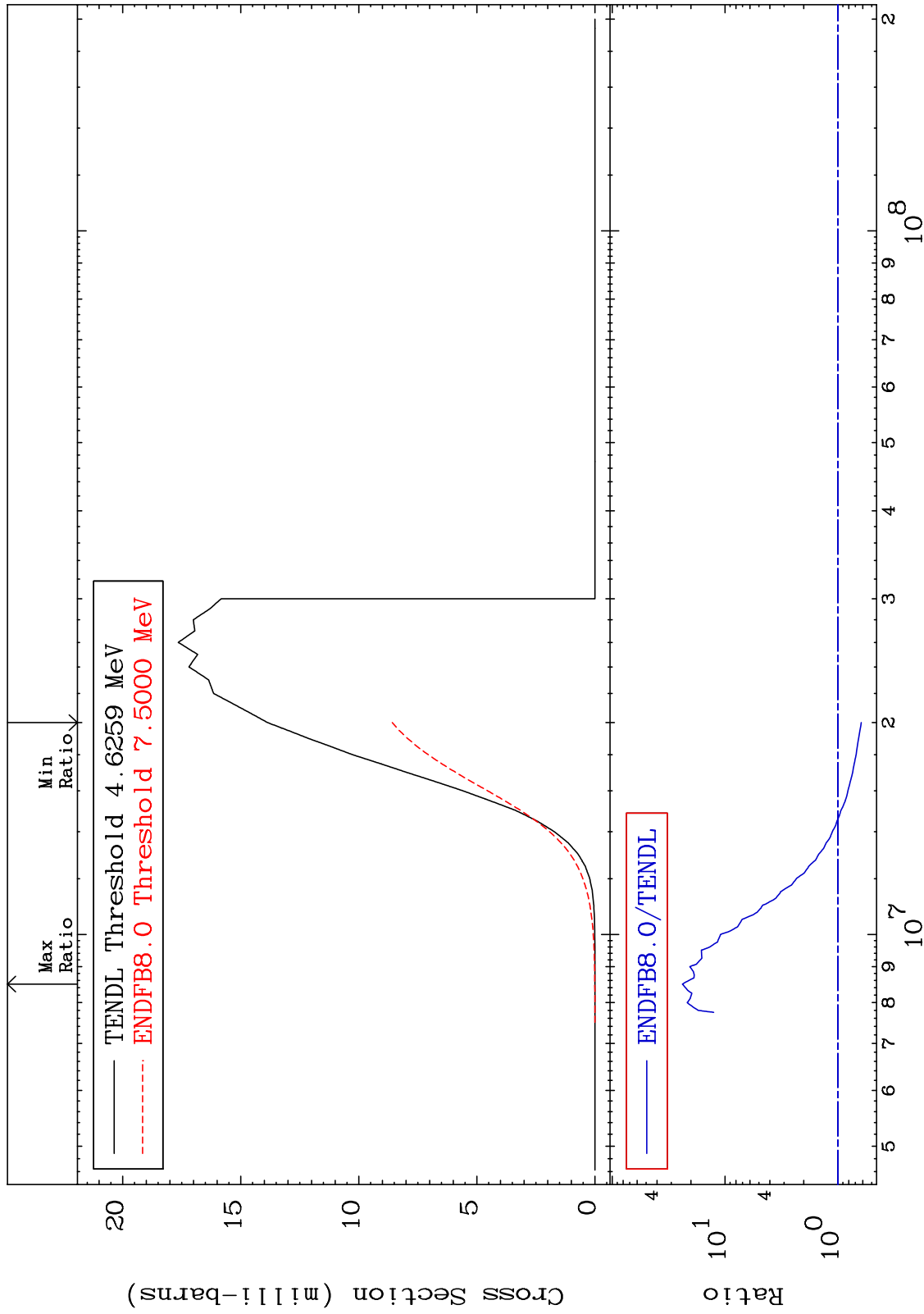
MAT 5649

(n,p)

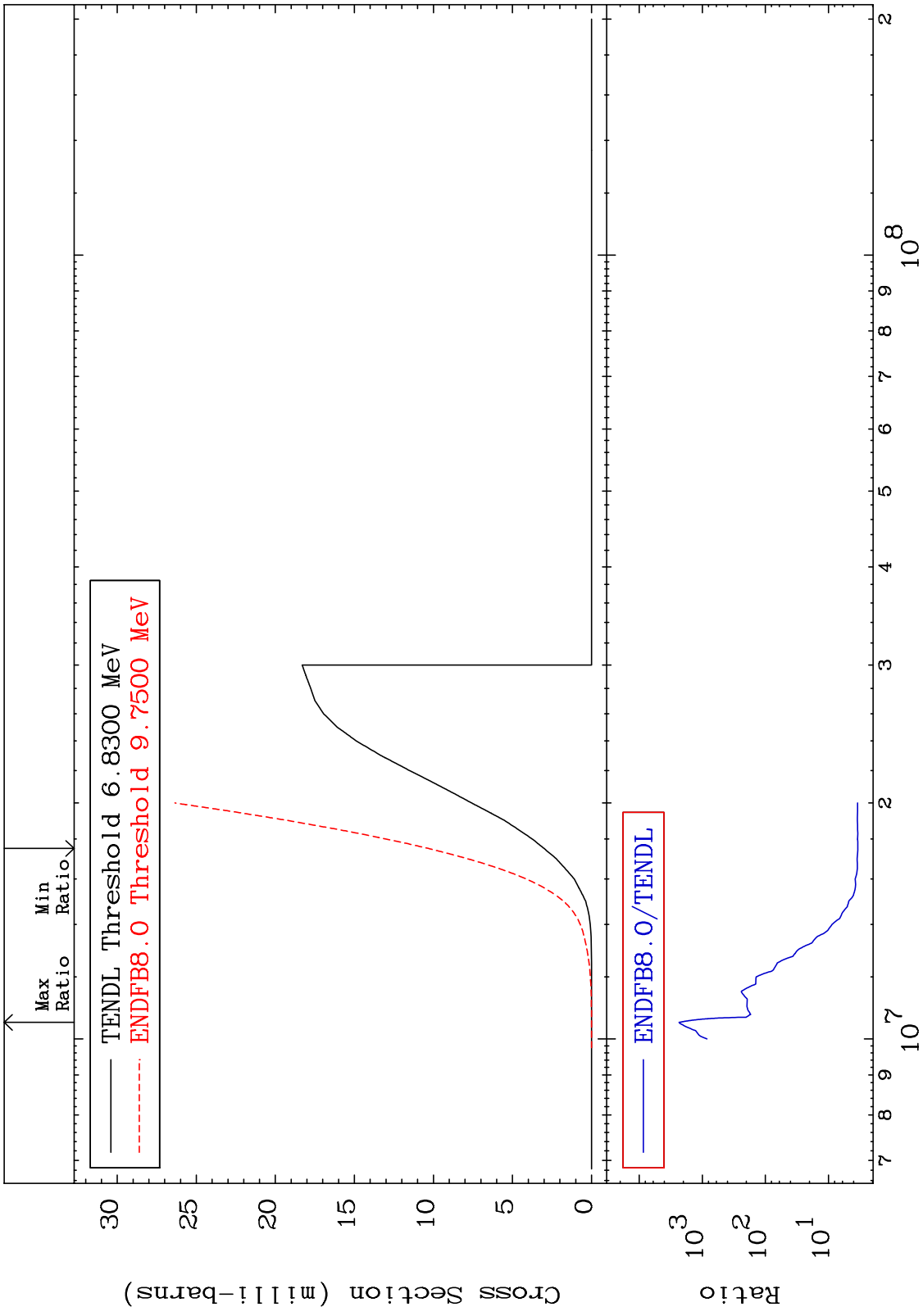
⁵⁶Ba-138

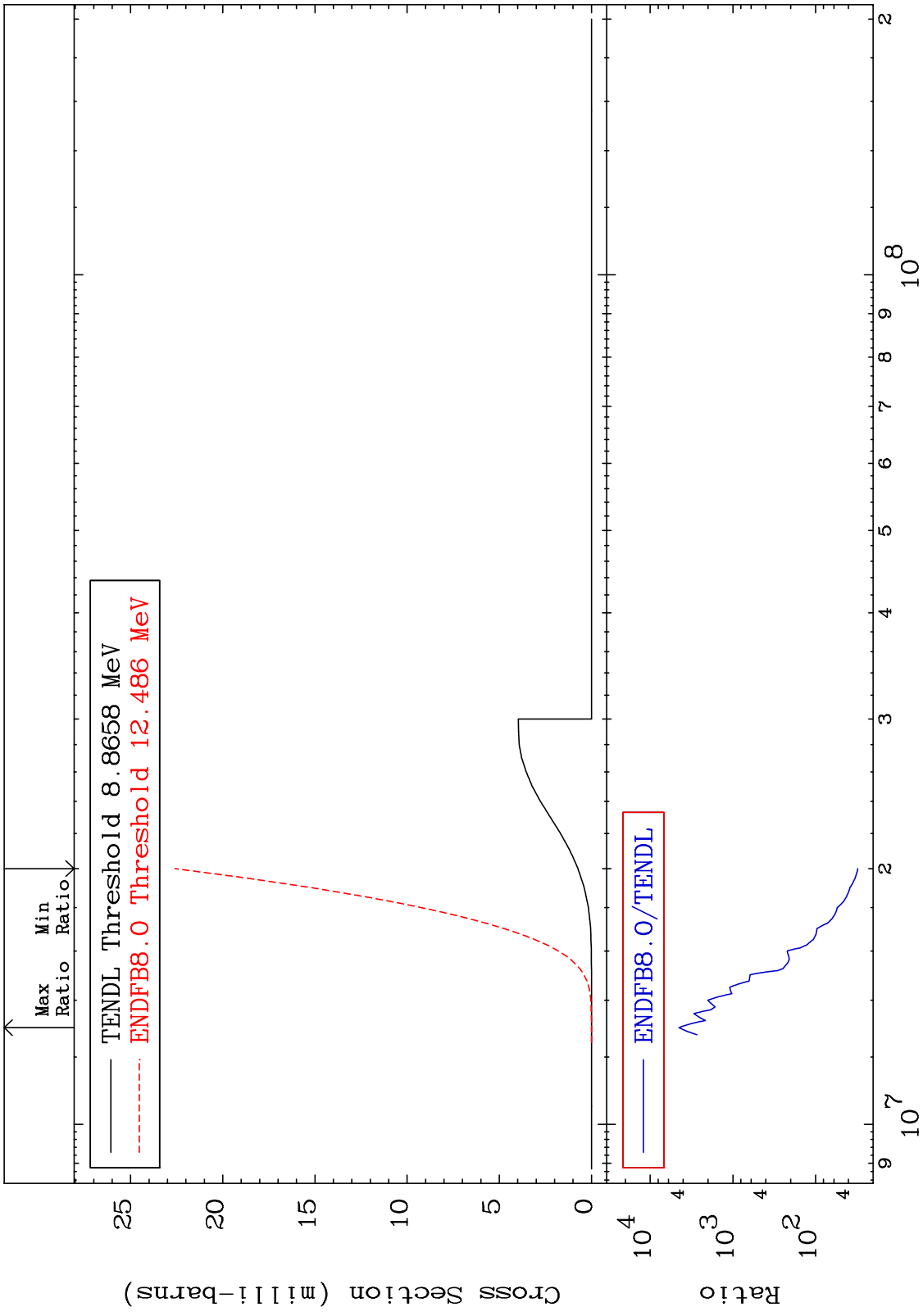
-38.07 To 2282. %

Cross Section

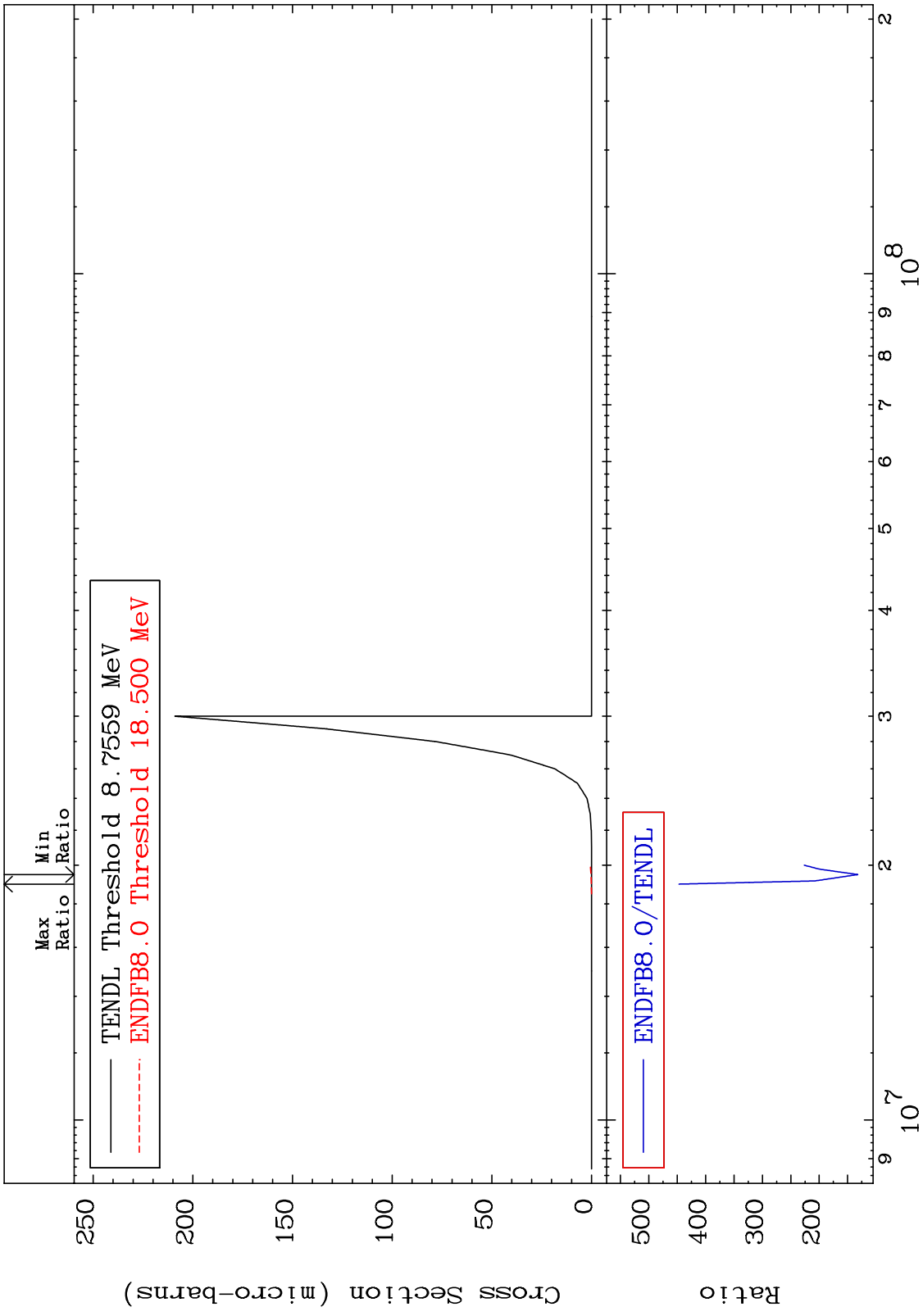


MAT 5649 (n,d) Cross Section 56-Ba-138 243.4 To 9999. %





MAT 5649 (n, He-3) 56-Ba-138
 Cross Section 9999. To 9999. %



16 56-Ba-138

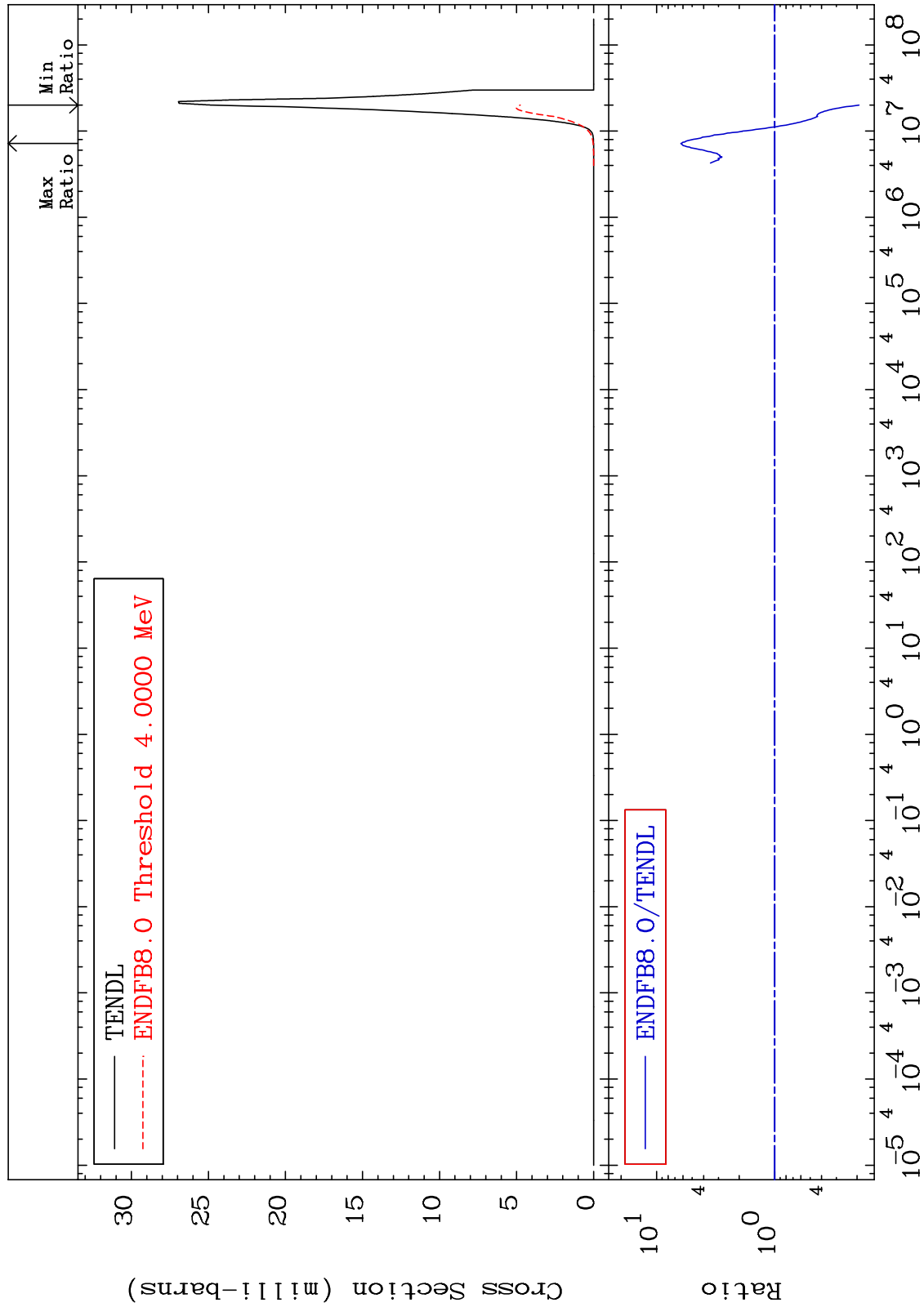
MAT 5649

(n, α)

56-Ba-138

Cross Section

-80.75 To 524.0 %



17

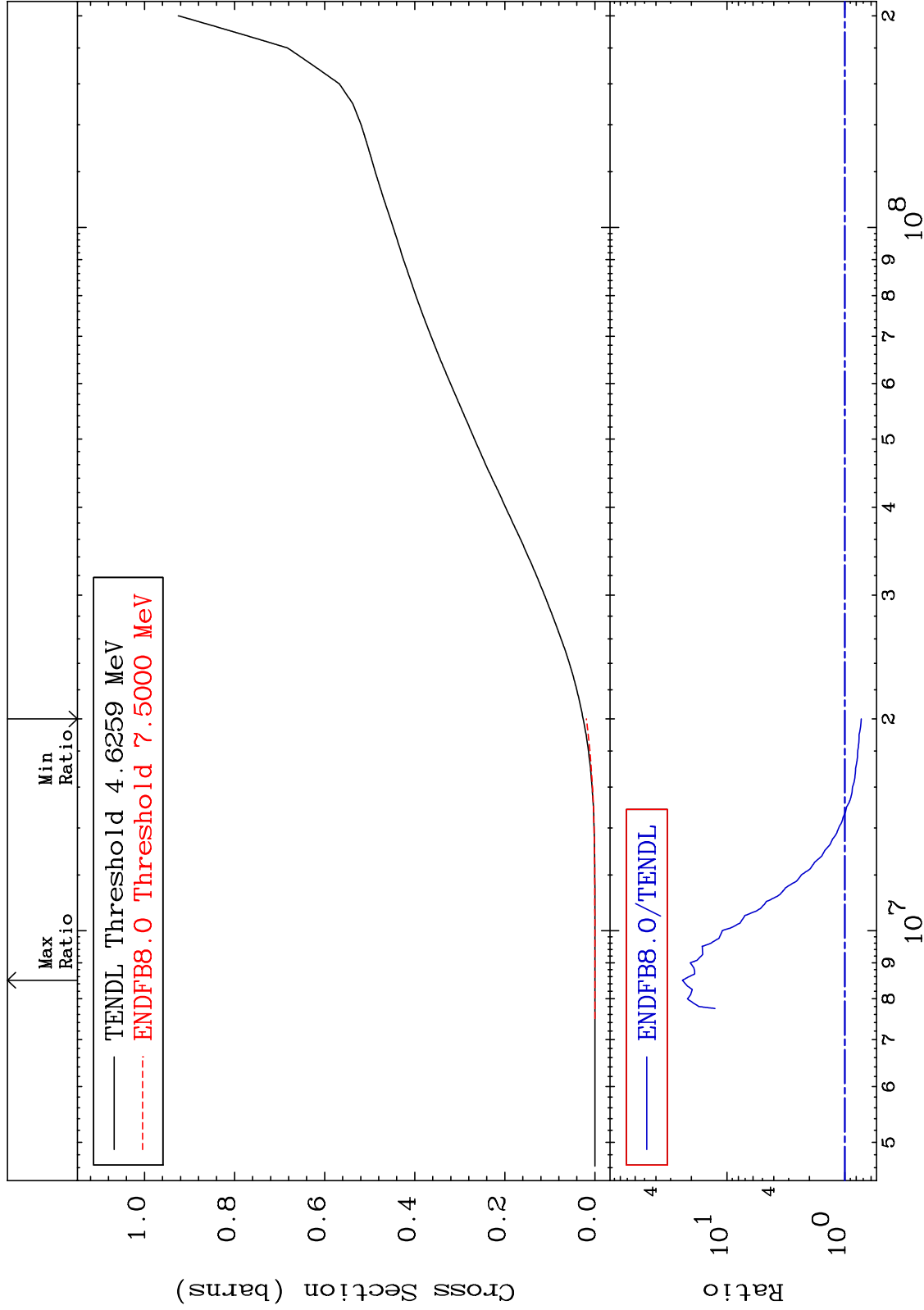
Incident Energy (eV)

56-Ba-138

MAT 5649

Hydrogen Production
Cross Section

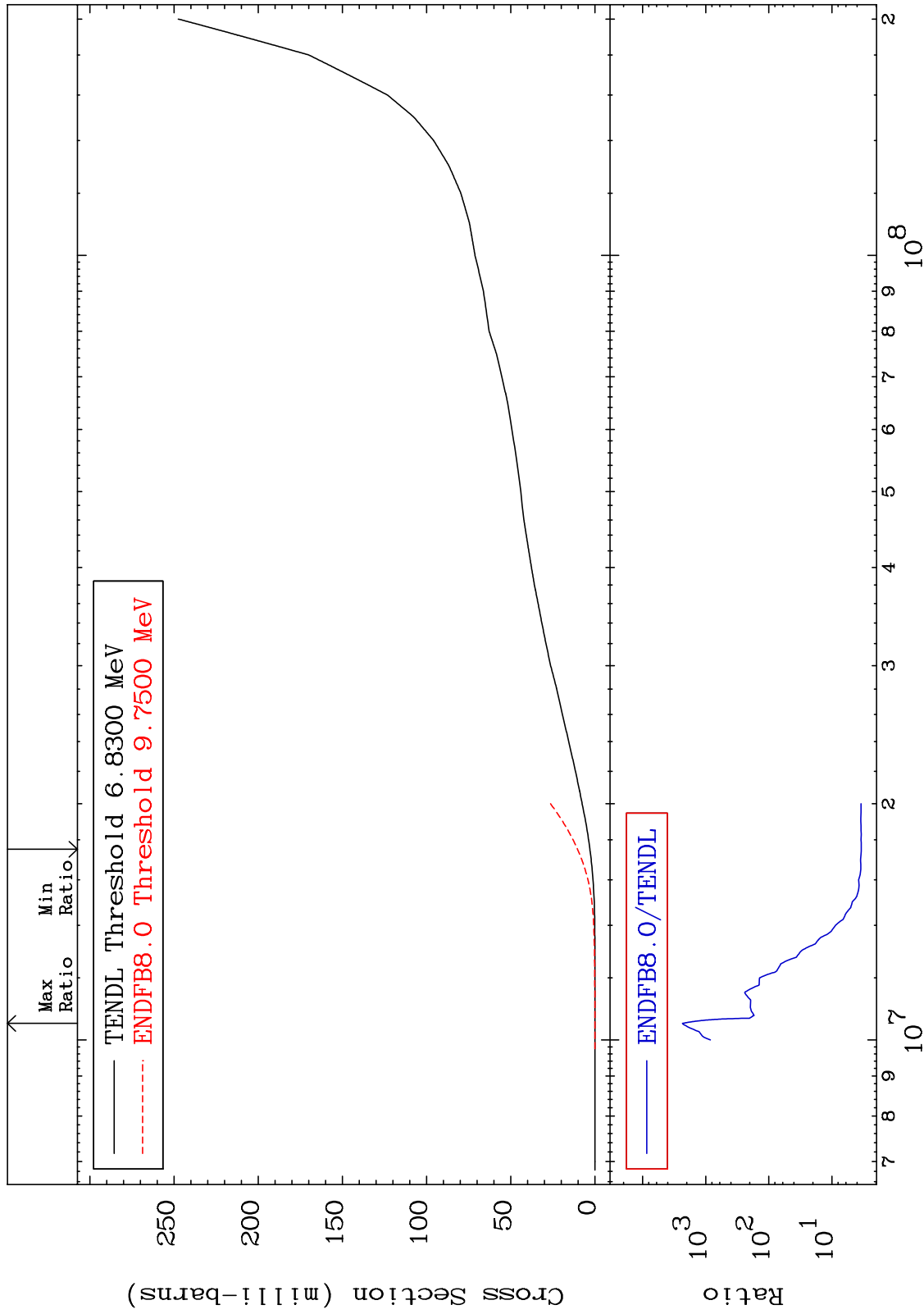
56-Ba-138
-27.43 To 2282. %



MAT 5649

Deuterium Production
Cross Section

56-Ba-138
243.4 To 9999. %



19

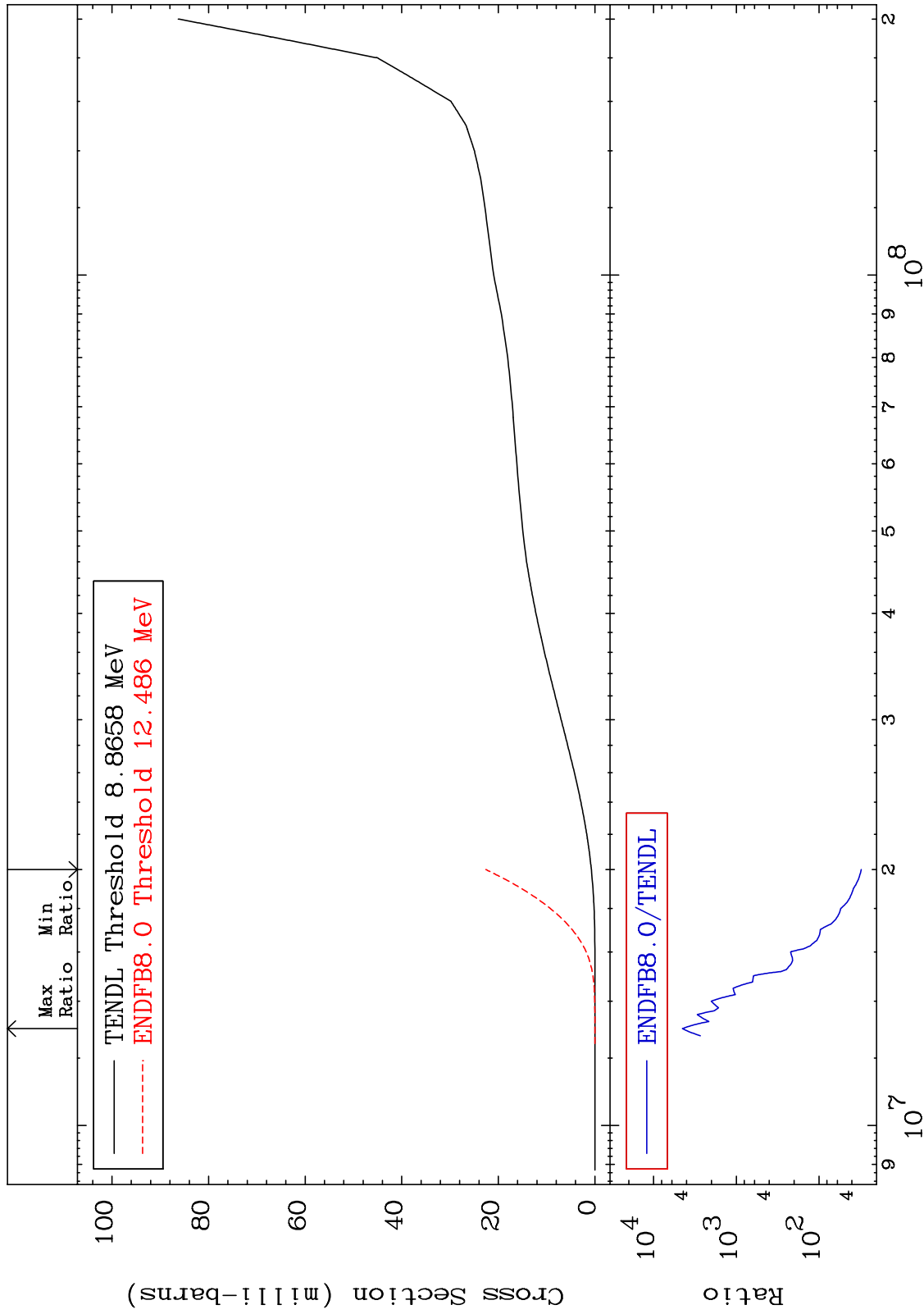
Incident Energy (eV)

56-Ba-138

MAT 5649

Tritium Production
Cross Section

56-Ba-138
2979. To 9999. %



20

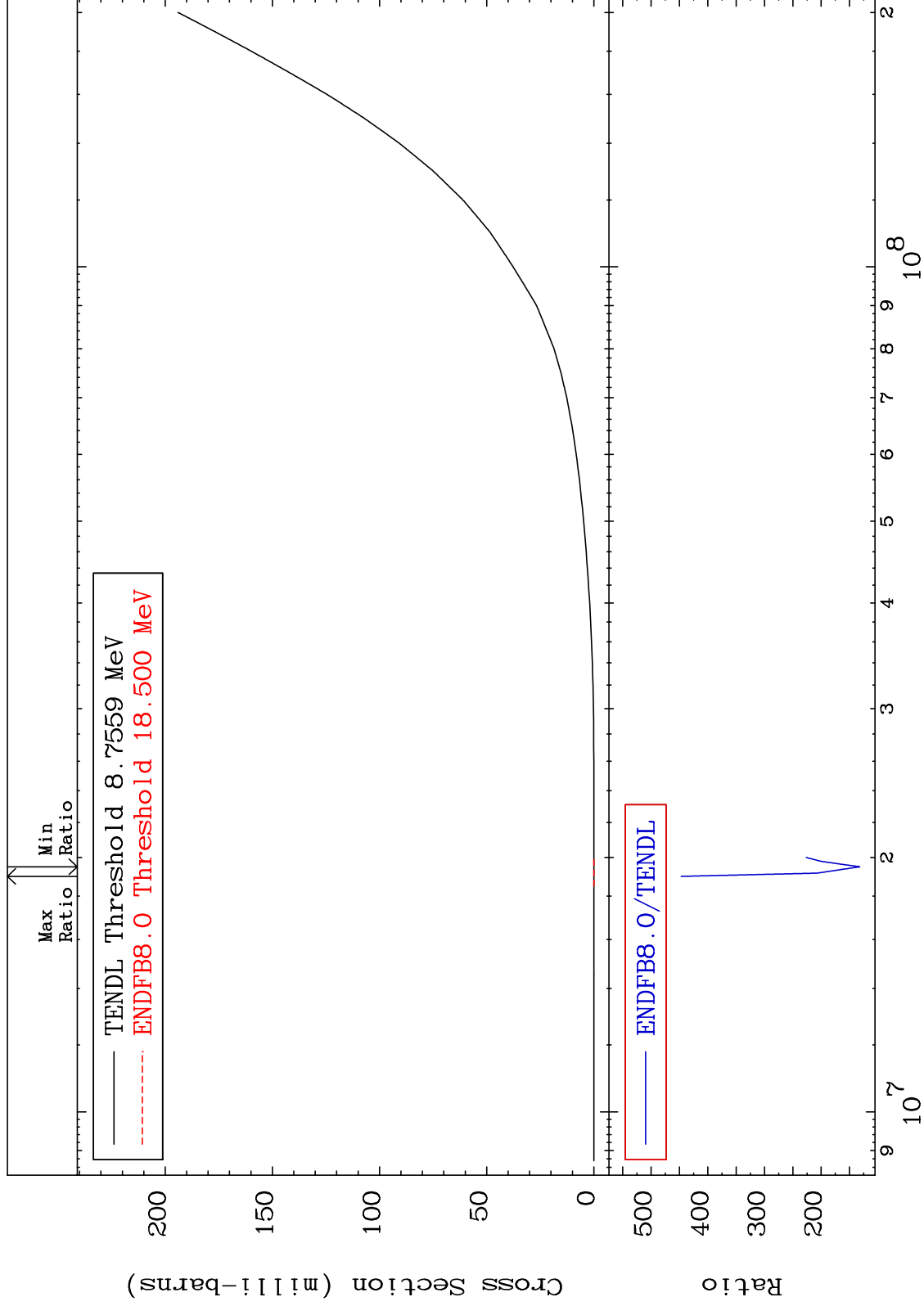
Incident Energy (eV)

56-Ba-138

MAT 5649

He-3 Production
Cross Section

56-Ba-138
9999. To 9999. %



21

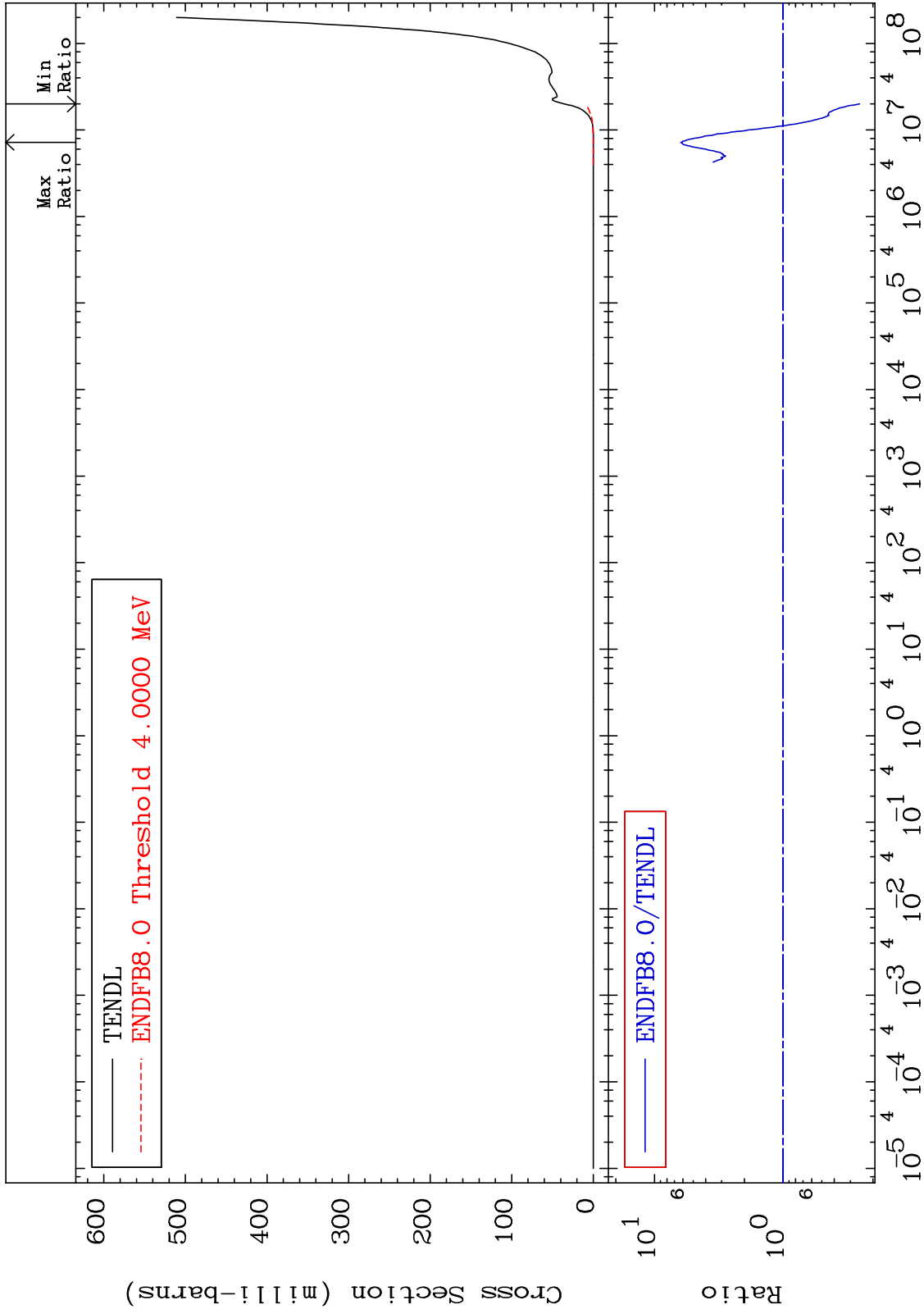
Incident Energy (eV)

56-Ba-138

MAT 5649

He-4 Production
Cross Section

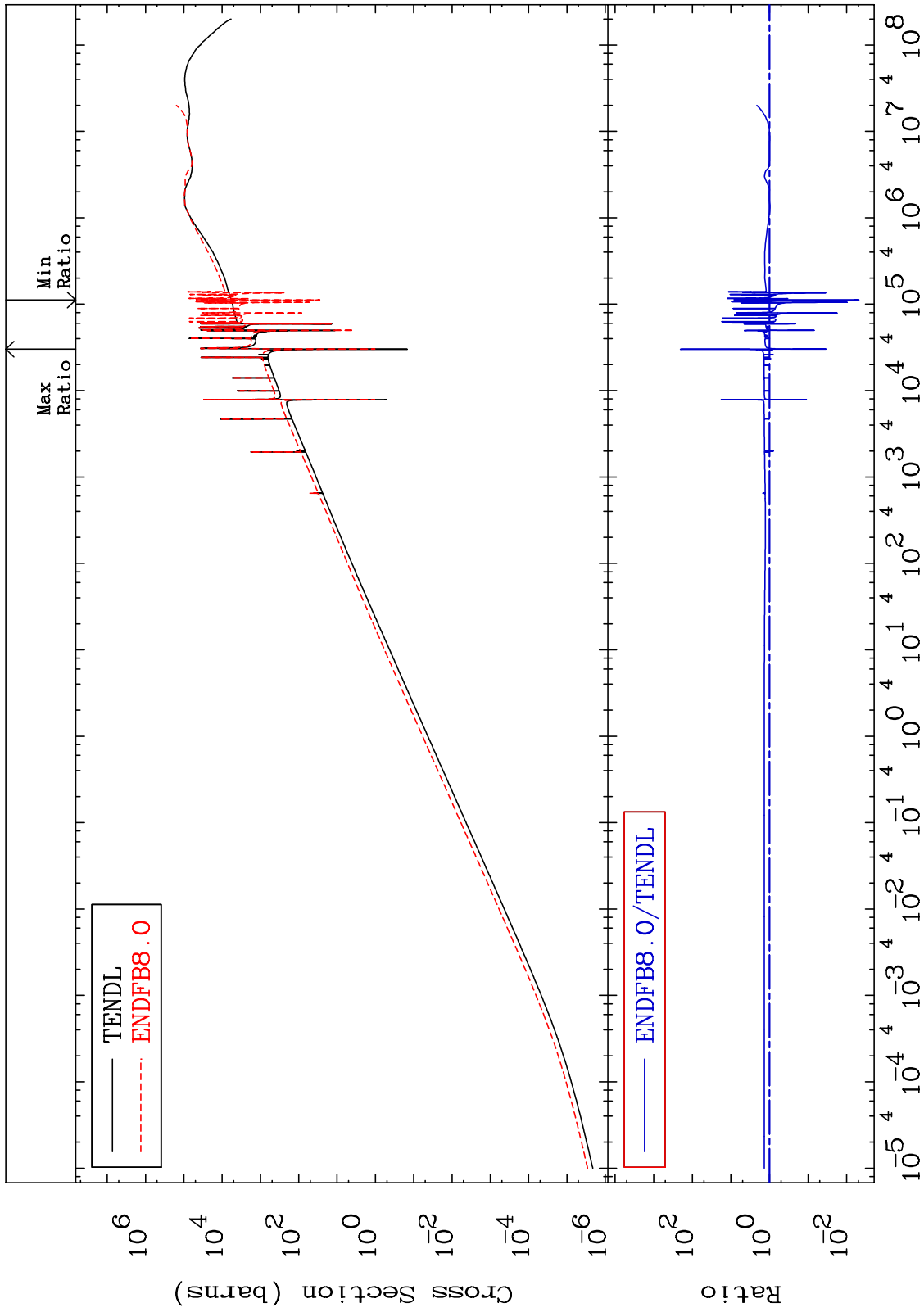
56-Ba-138
-74.59 To 524.0 %



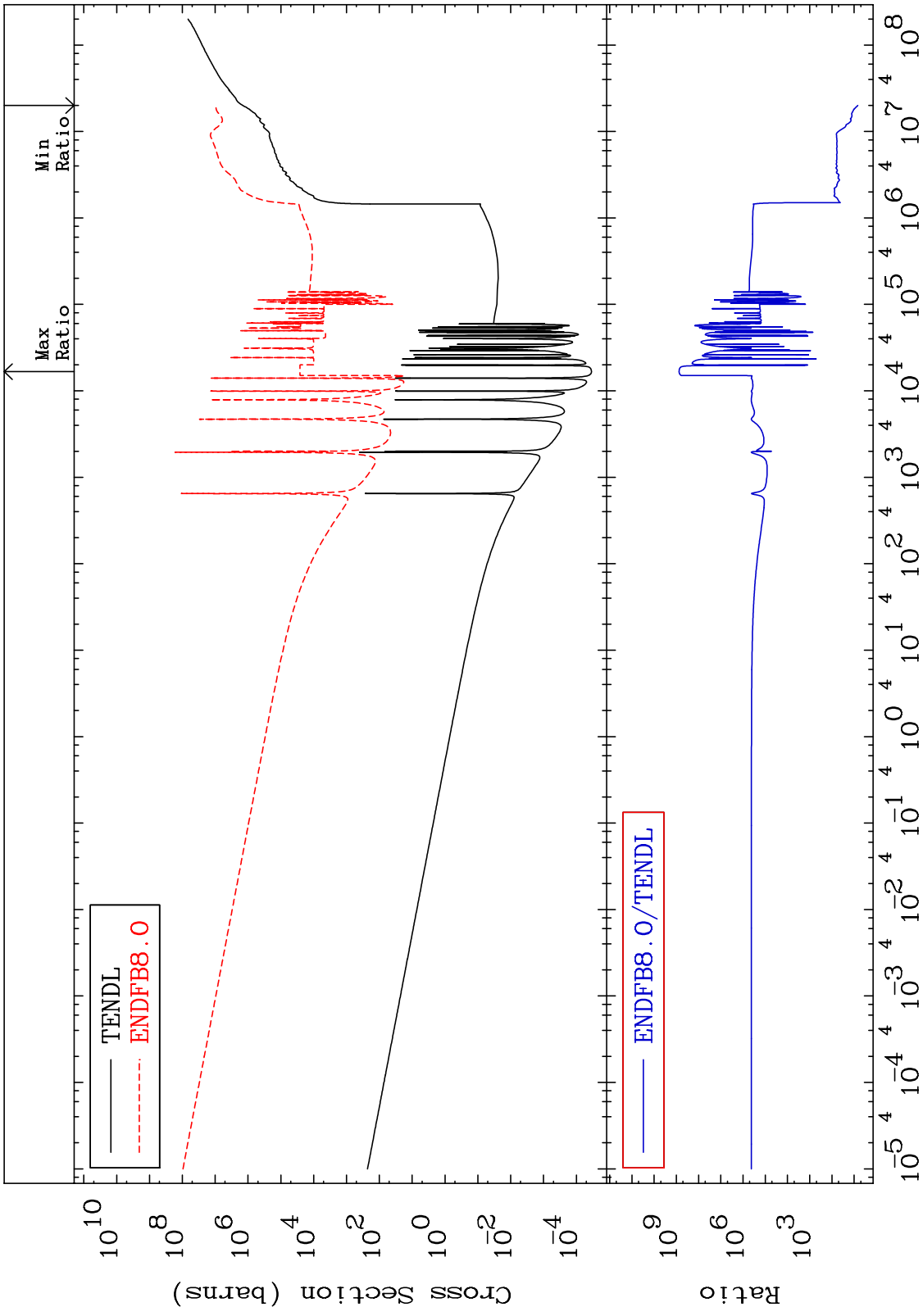
MAT 5649

Kerma elastic
Cross Section

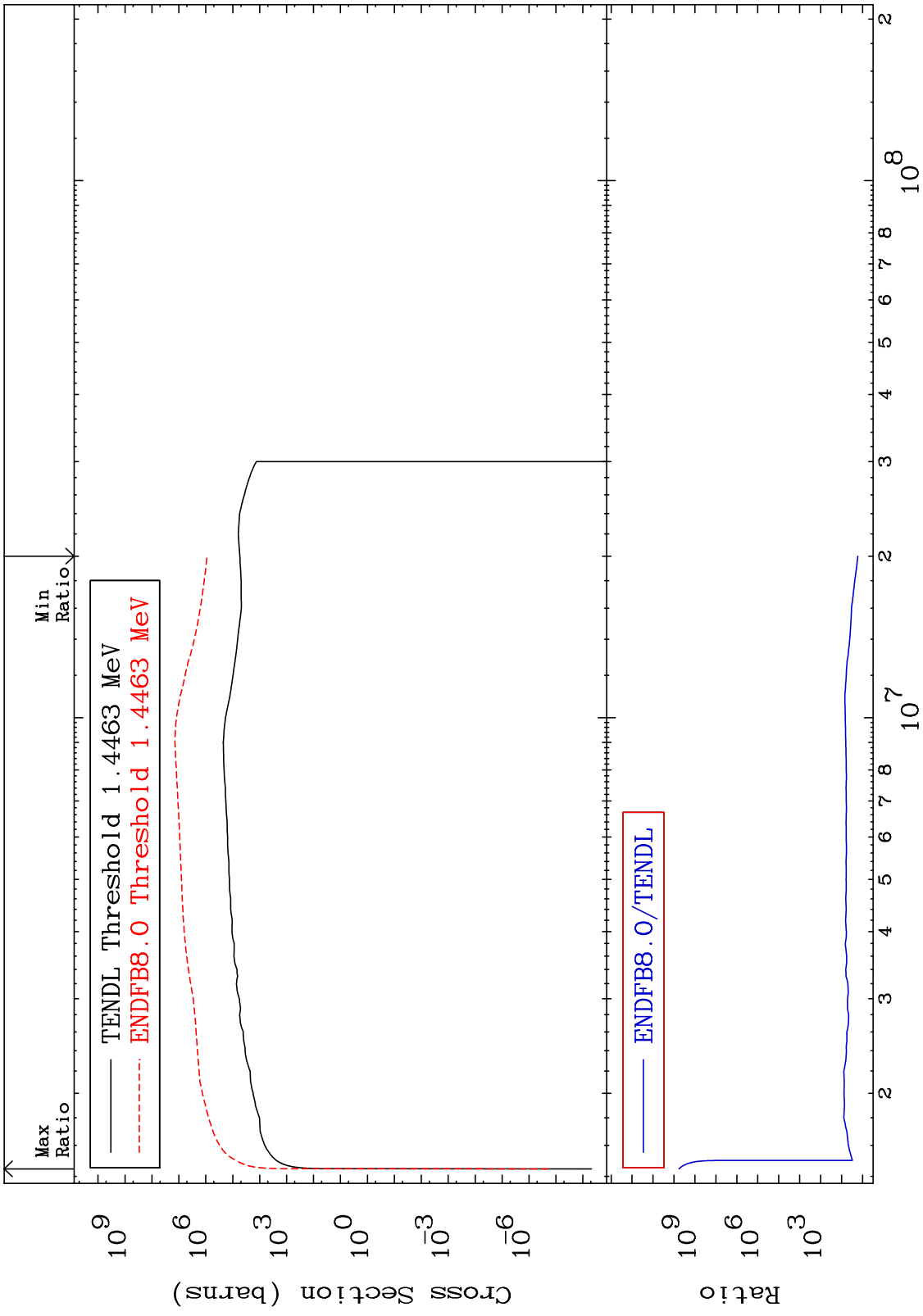
56-Ba-138
-99.52 To 9999. %



MAT 5649 Kerma non-elastic (all but mt2) Cross Section 56-Ba-138 581.0 To 9999. %



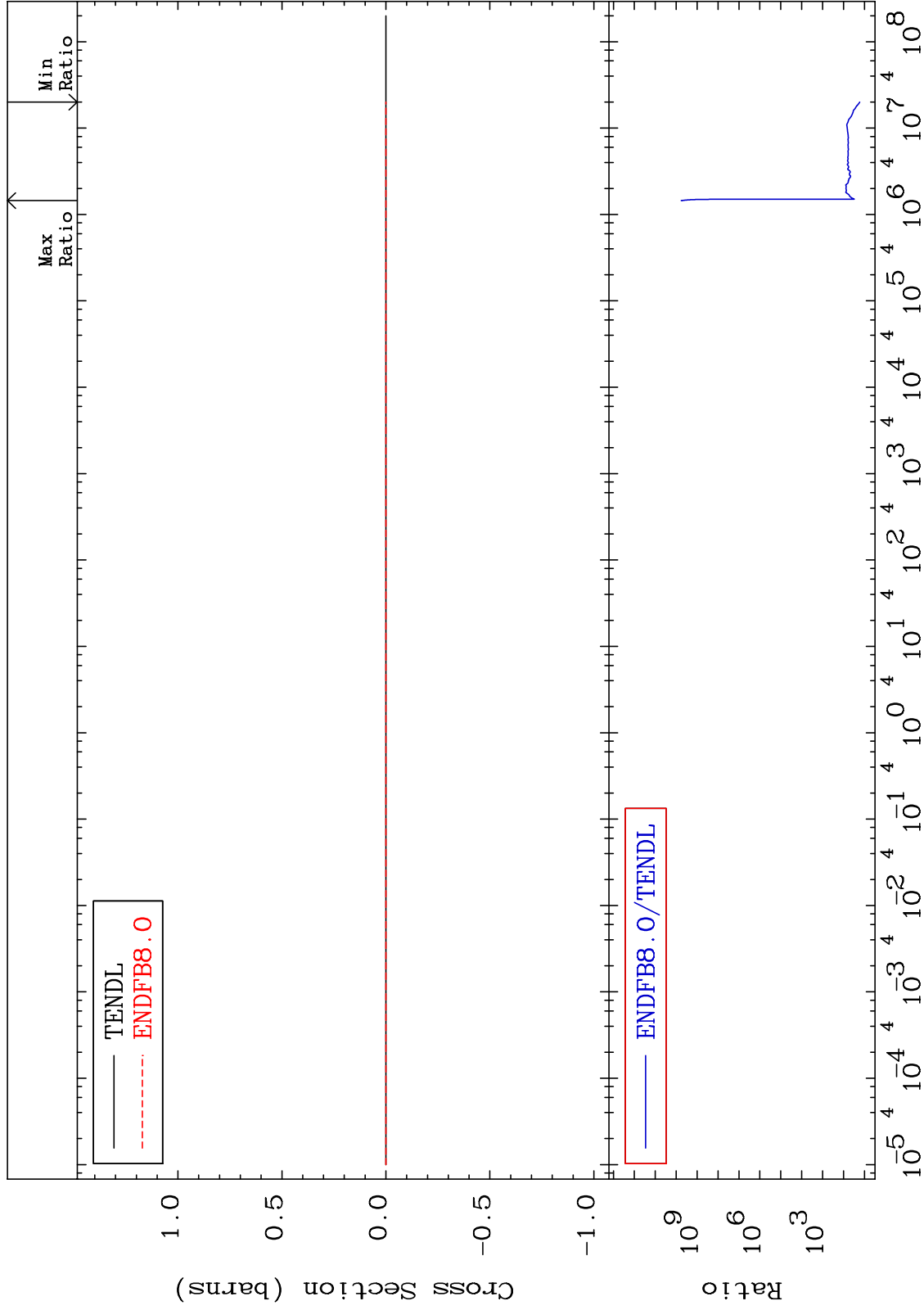
MAT 5649 Kerma inelastic (mt51-91) 56-Ba-138
 Cross Section 1569. To 9999. %



MAT 5649

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

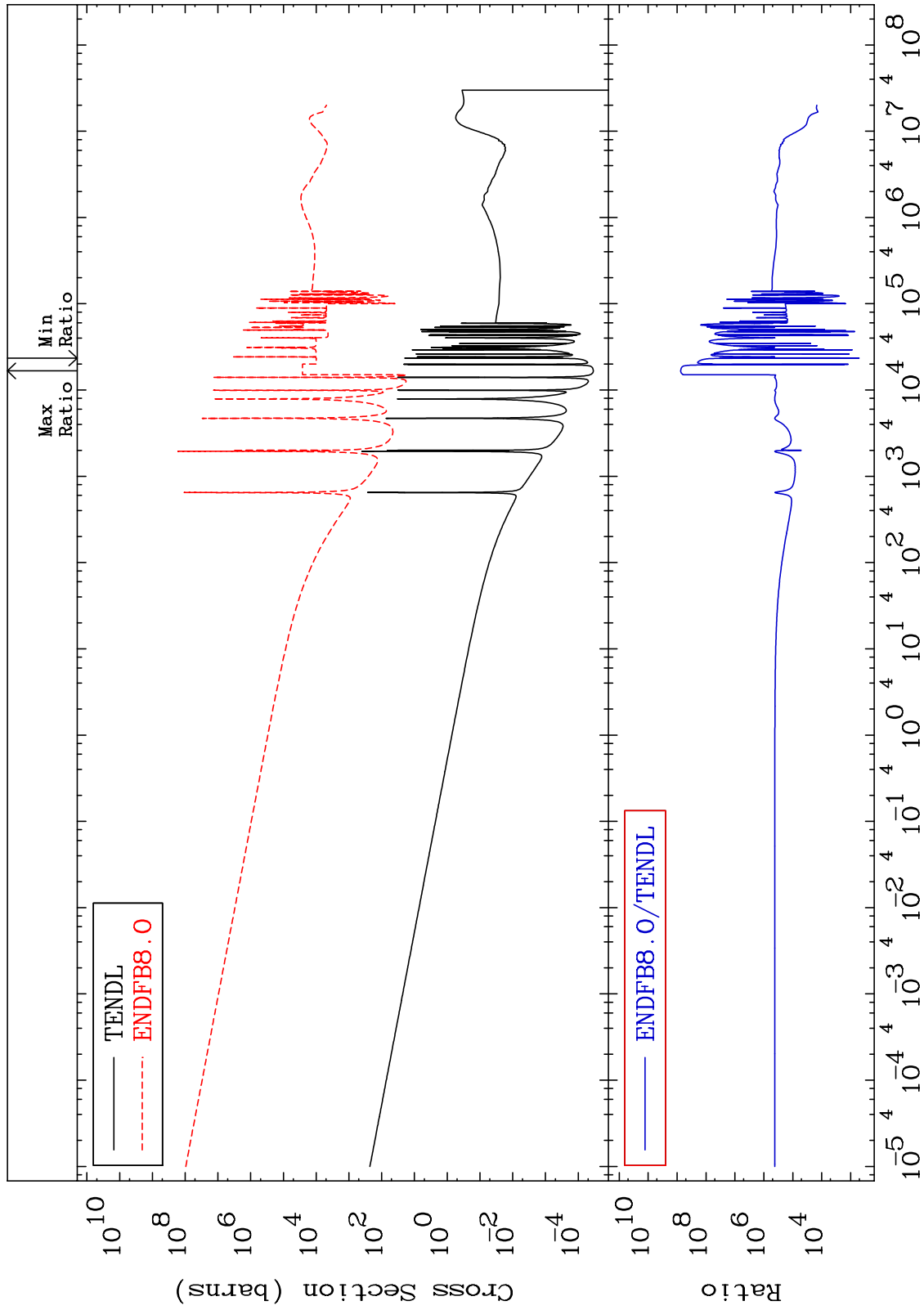
56-Ba-138
1569. To 9999. %



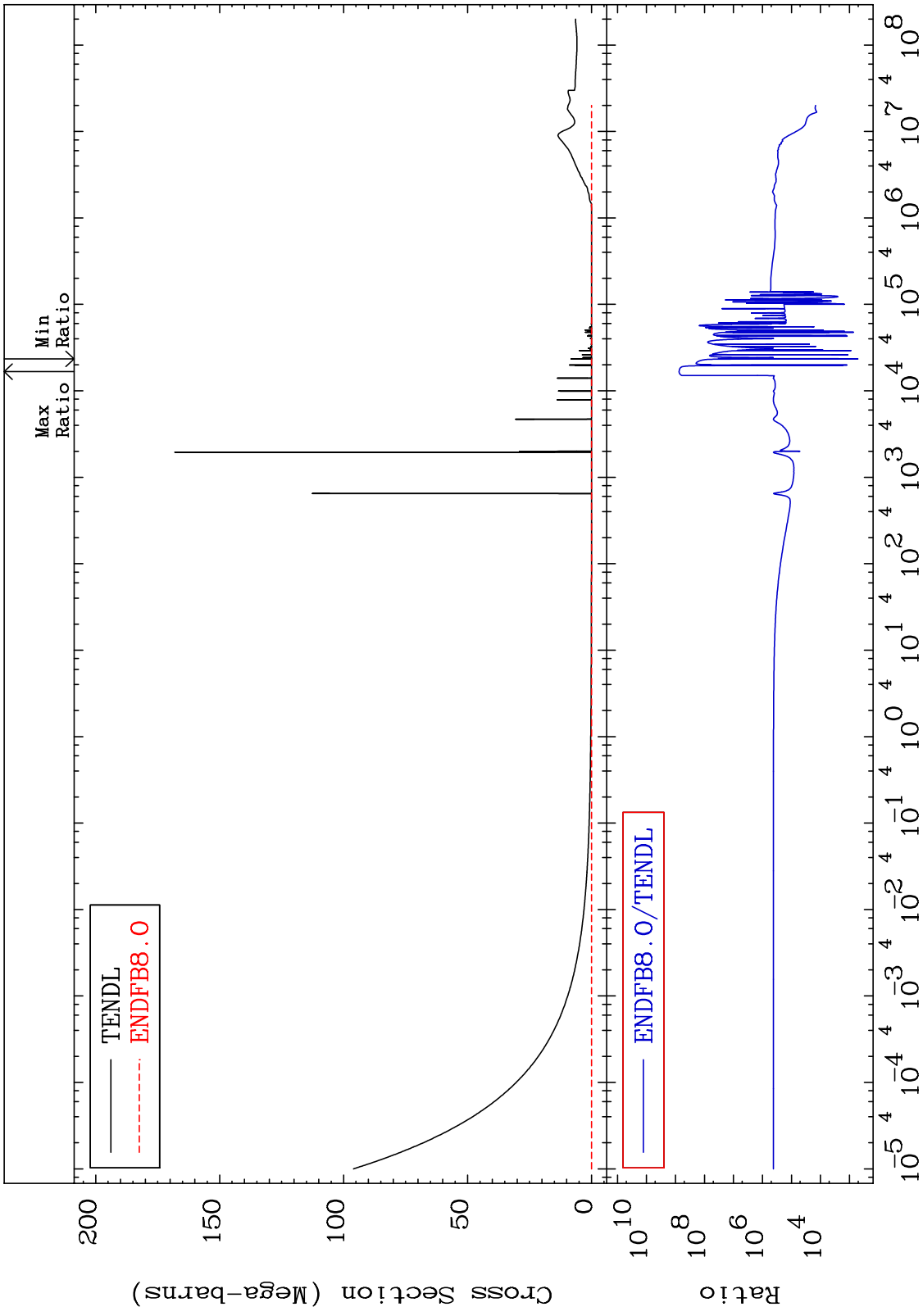
MAT 5649

Kerma capture (mt102)
Cross Section

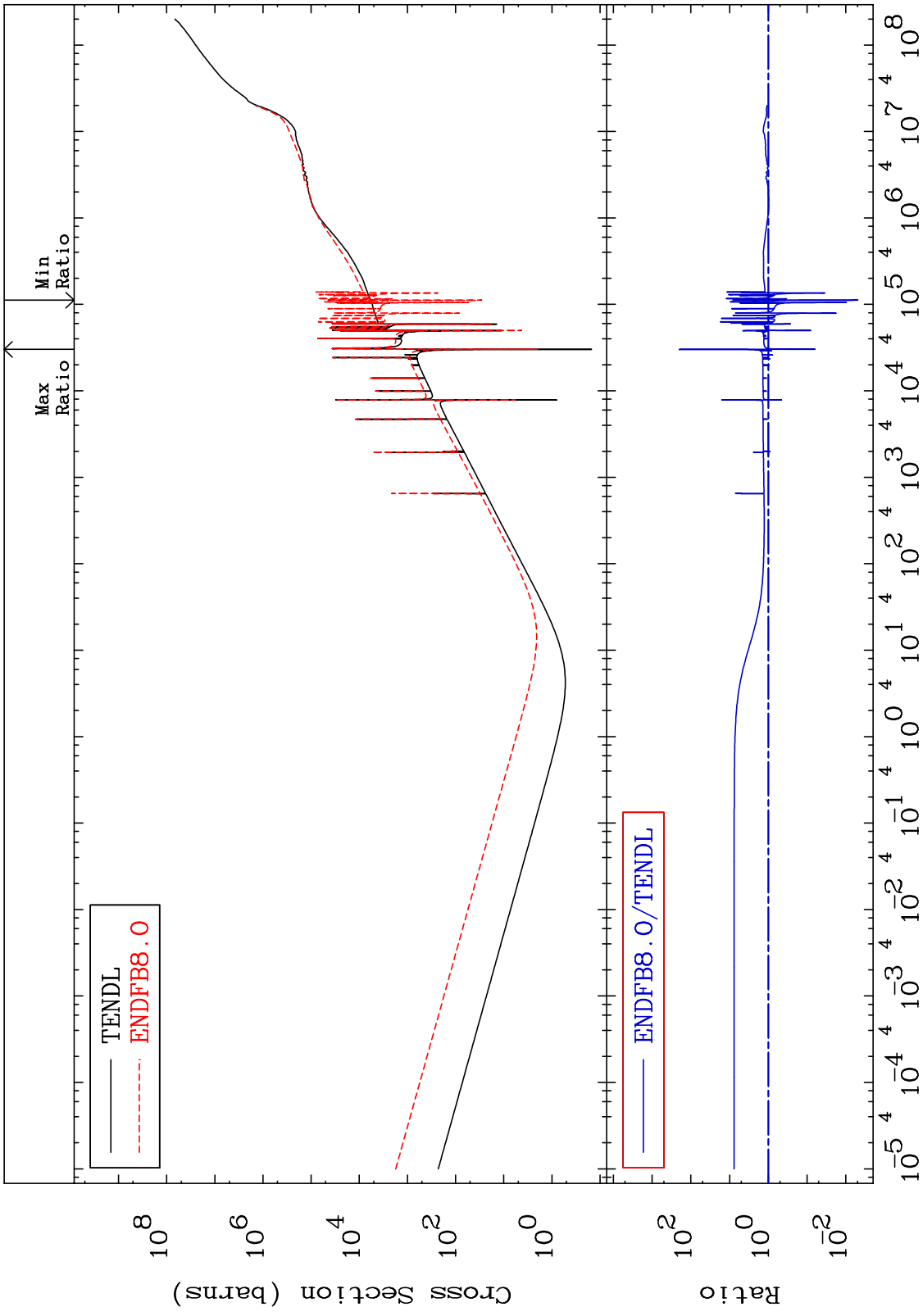
56-Ba-138
9999. To 9999. %



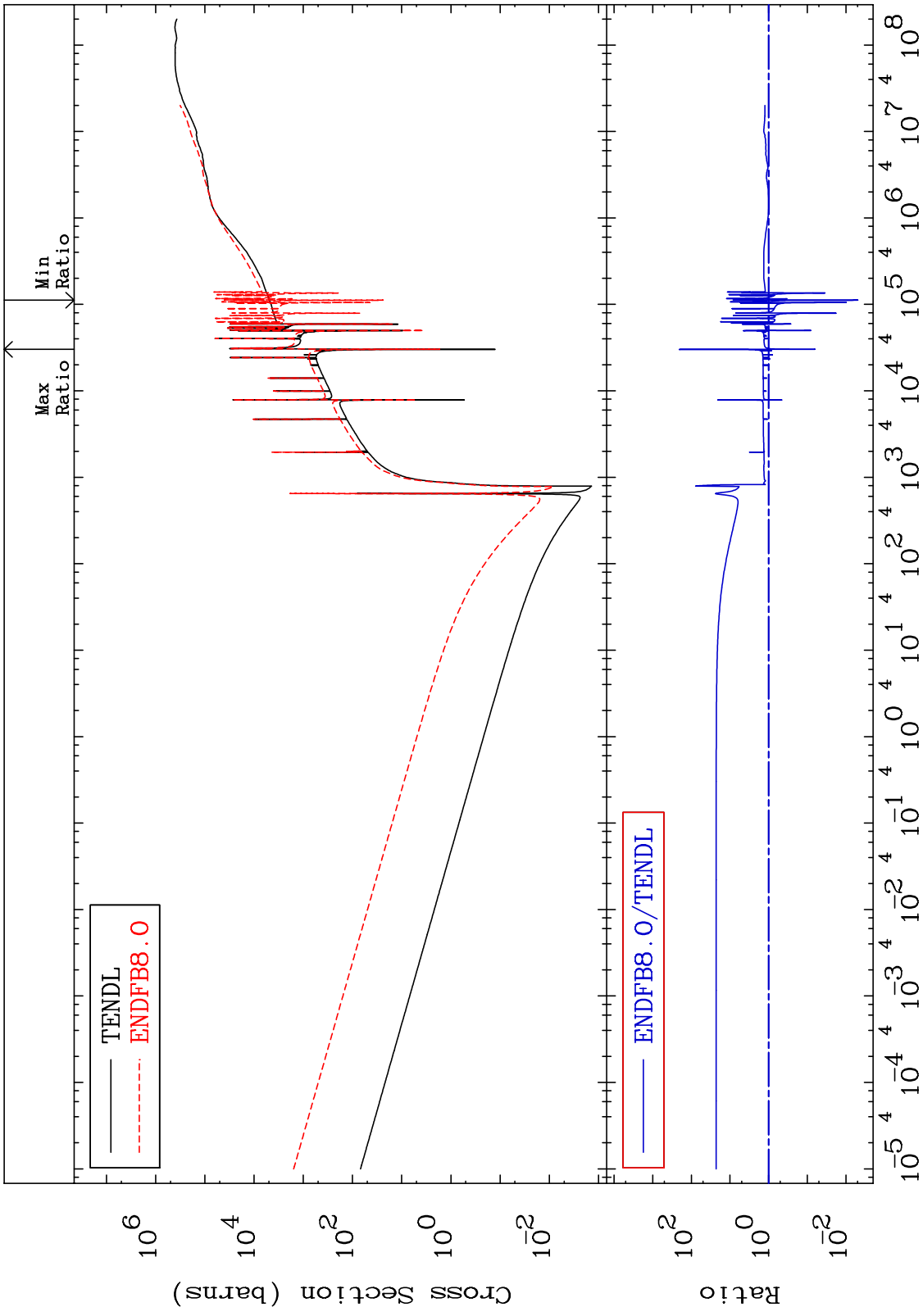
MAT 5649 Total photon (eV-barns) 56-Ba-138
 Cross Section 9999. To 9999. %



MAT 5649 Total kinematic kerma (high limit) 56-Ba-138
 Cross Section -99.51 To 9999. %



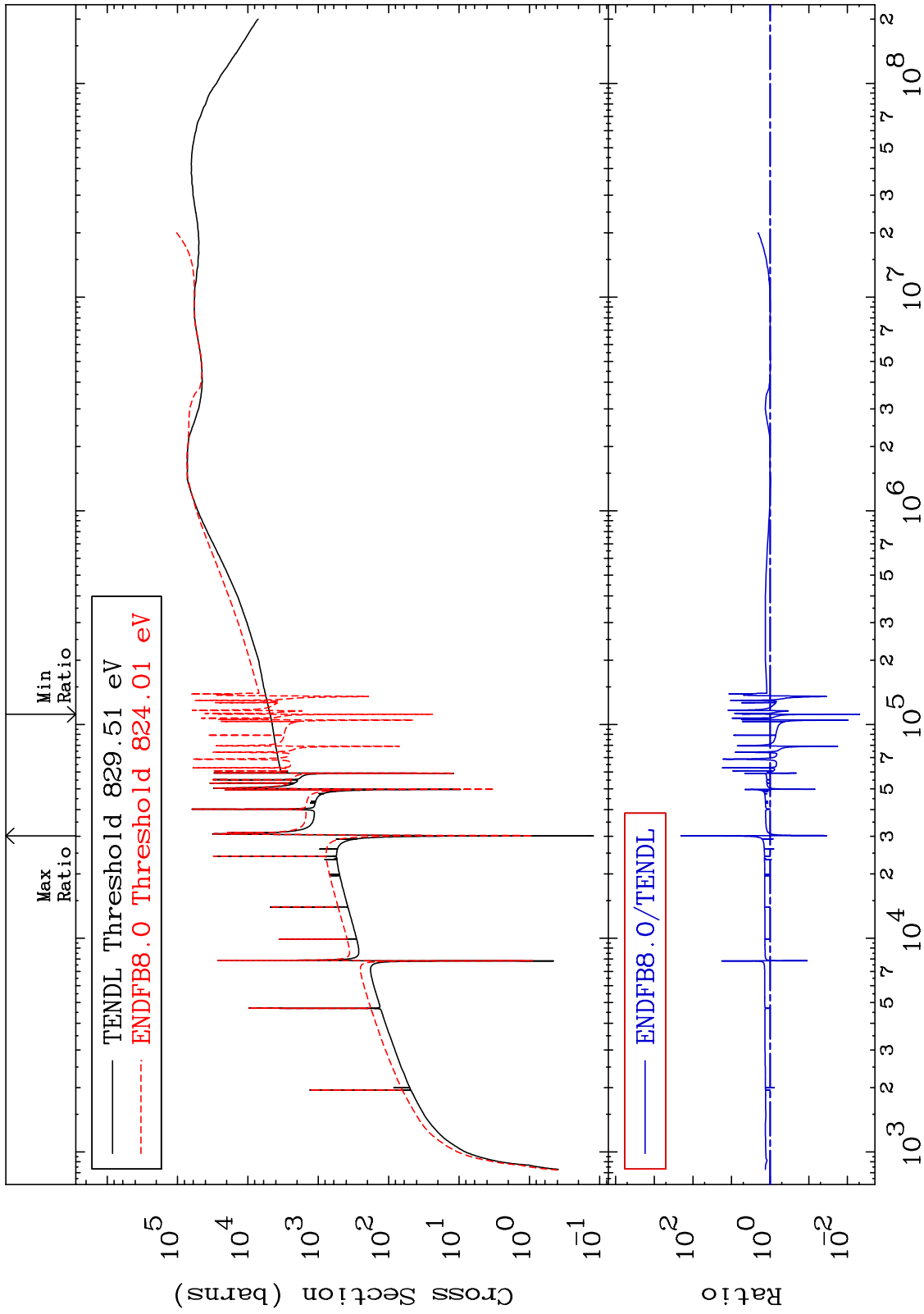
MAT 5649 Dpa total (eV-barns) 56-Ba-138
 Cross Section -99.51 To 9999. %



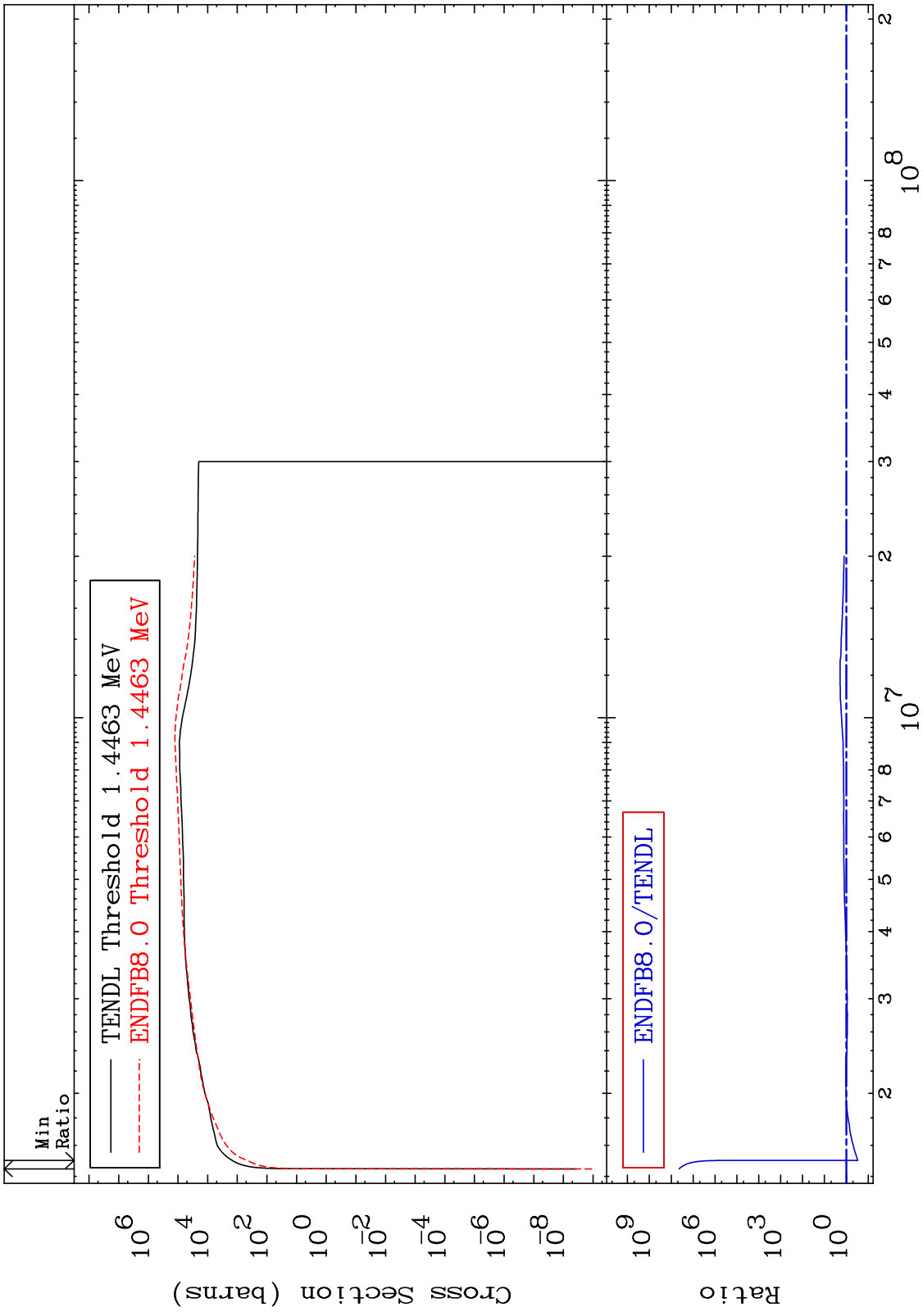
MAT 5649

Dpa elastic (mt2)
Cross Section

56-Ba-138
-99.52 To 9999. %



MAT 5649 Dpa inelastic (mt51-91) 56-Ba-138
 Cross Section -70.25 To 9999. %



MAT 5649 Dpa disappearance (mt102 -120) 56-Ba-138
 Cross Section -91.91 To 9999. %

