

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](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

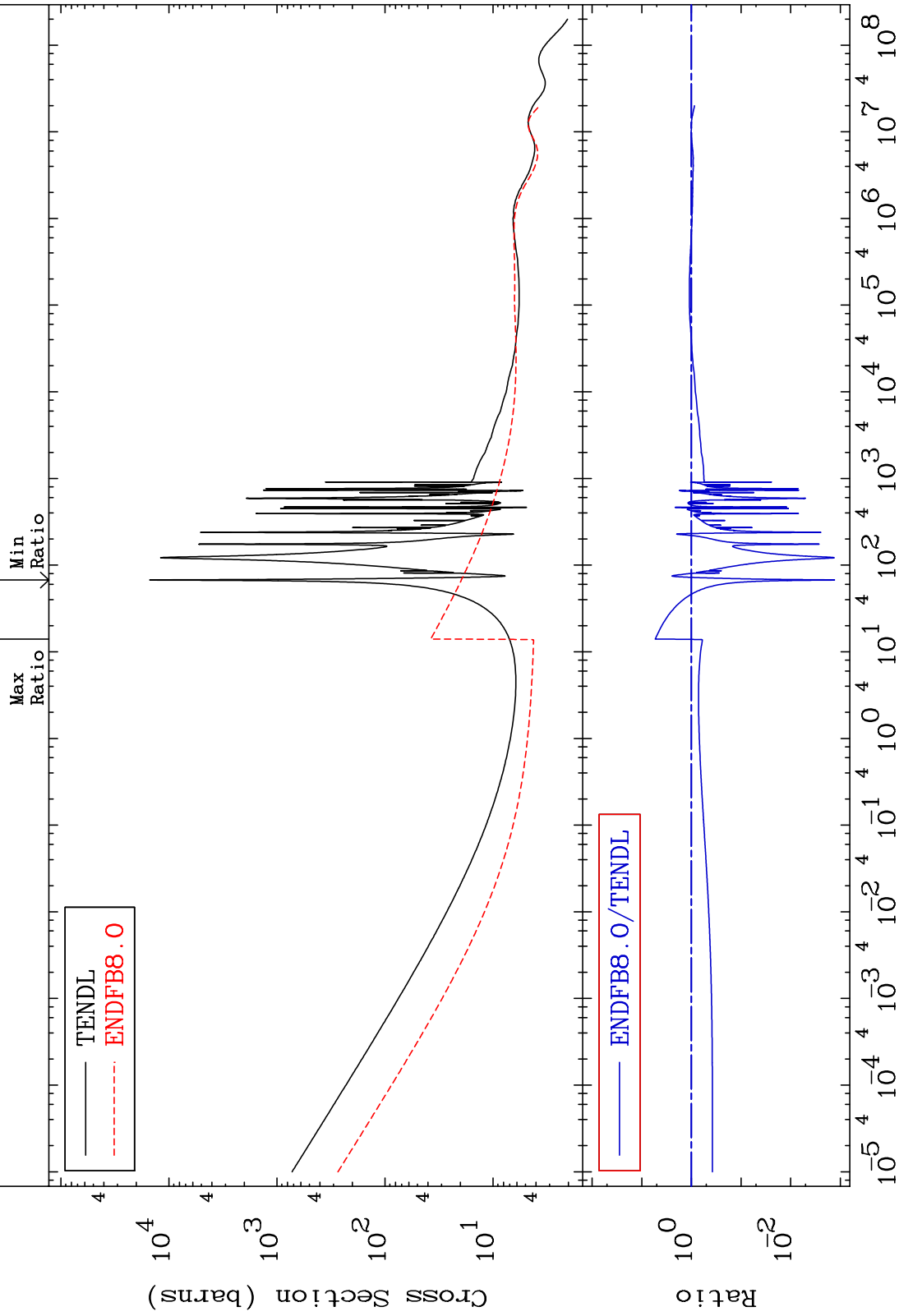
Press Mouse Button to Start

MAT 5137

51-Sb-125

-99.87 To 434.6 %

Total  
Cross Section



1

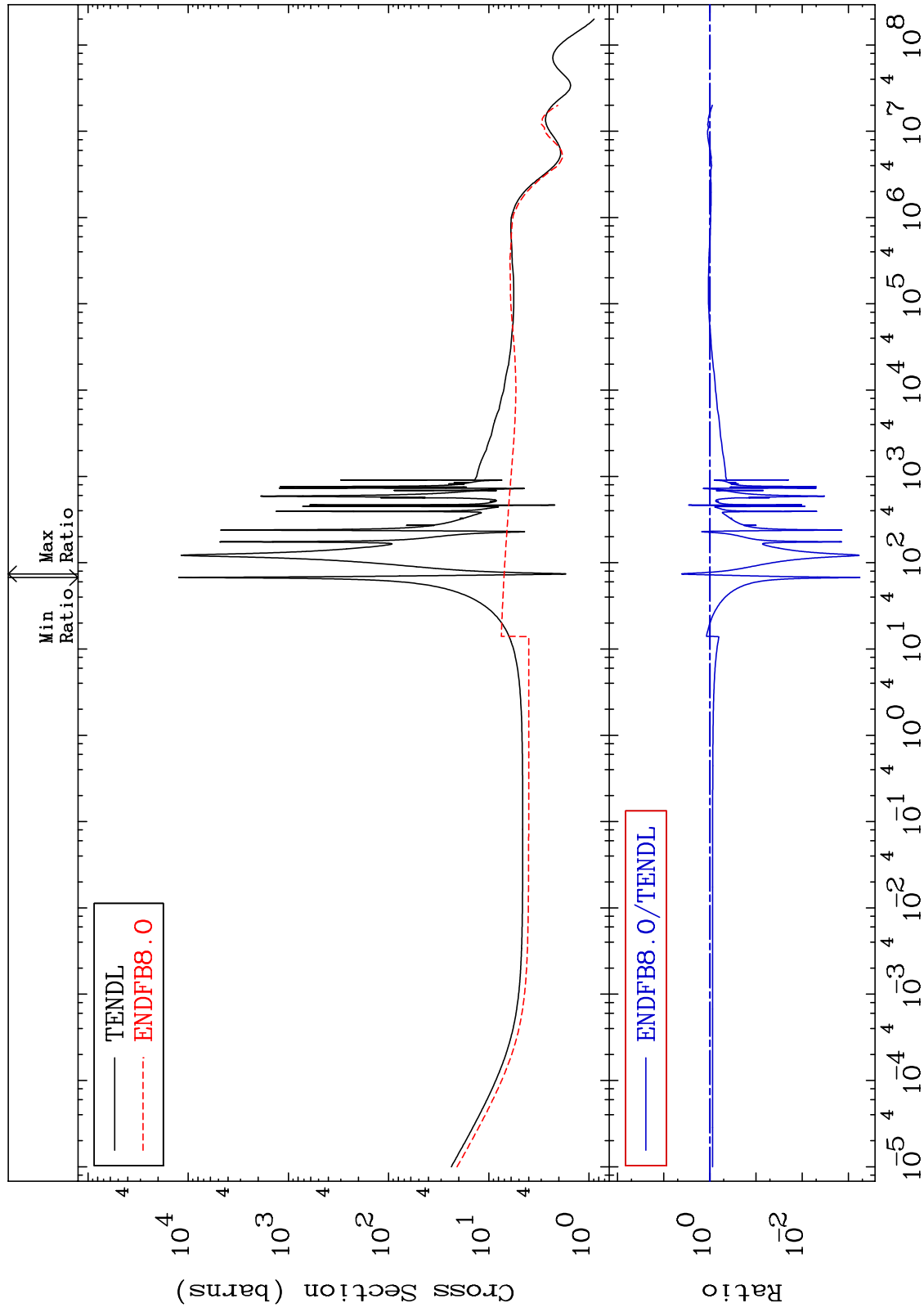
Incident Energy (eV)

51-Sb-125

MAT 5137

Elastic  
Cross Section

51-Sb-125  
-99.94 To 312.7 %

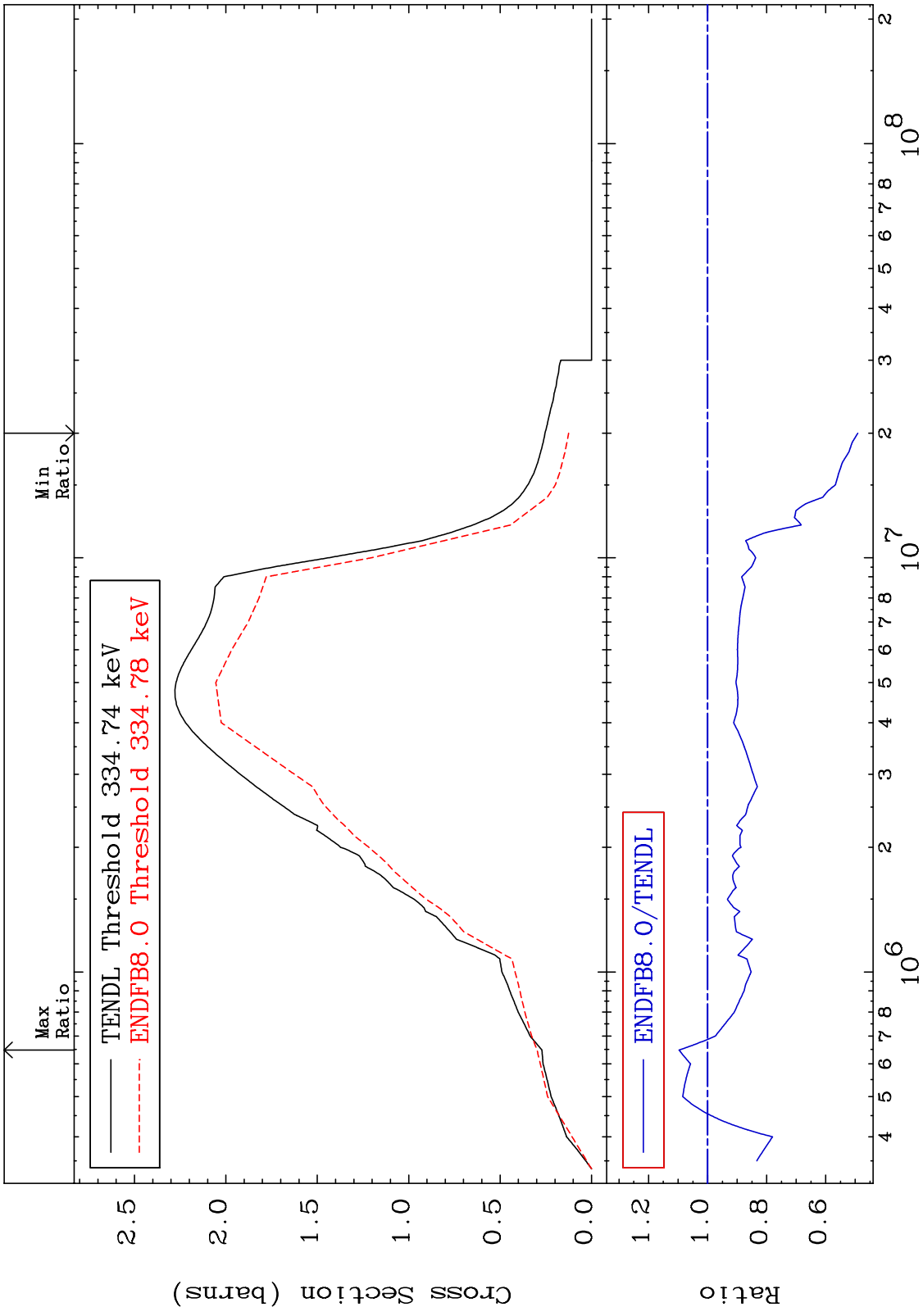


2

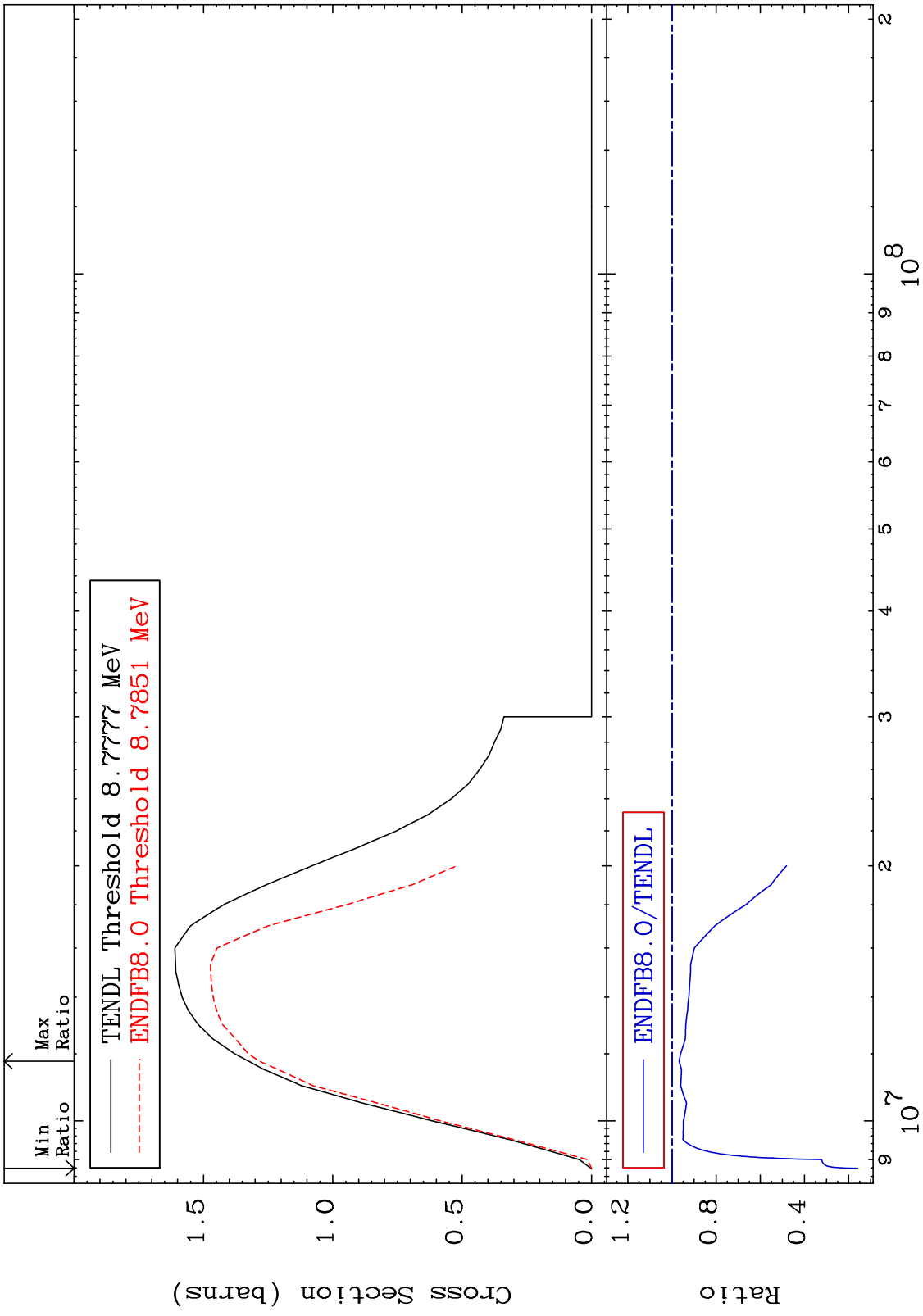
Incident Energy (eV)

51-Sb-125

MAT 5137 Inelastic Cross Section 51-Sb-125 -50.87 To 9.681 %



MAT 5137 (n,2n) Cross Section 51-Sb-125 -84.13 To -3.151%



4 51-Sb-125

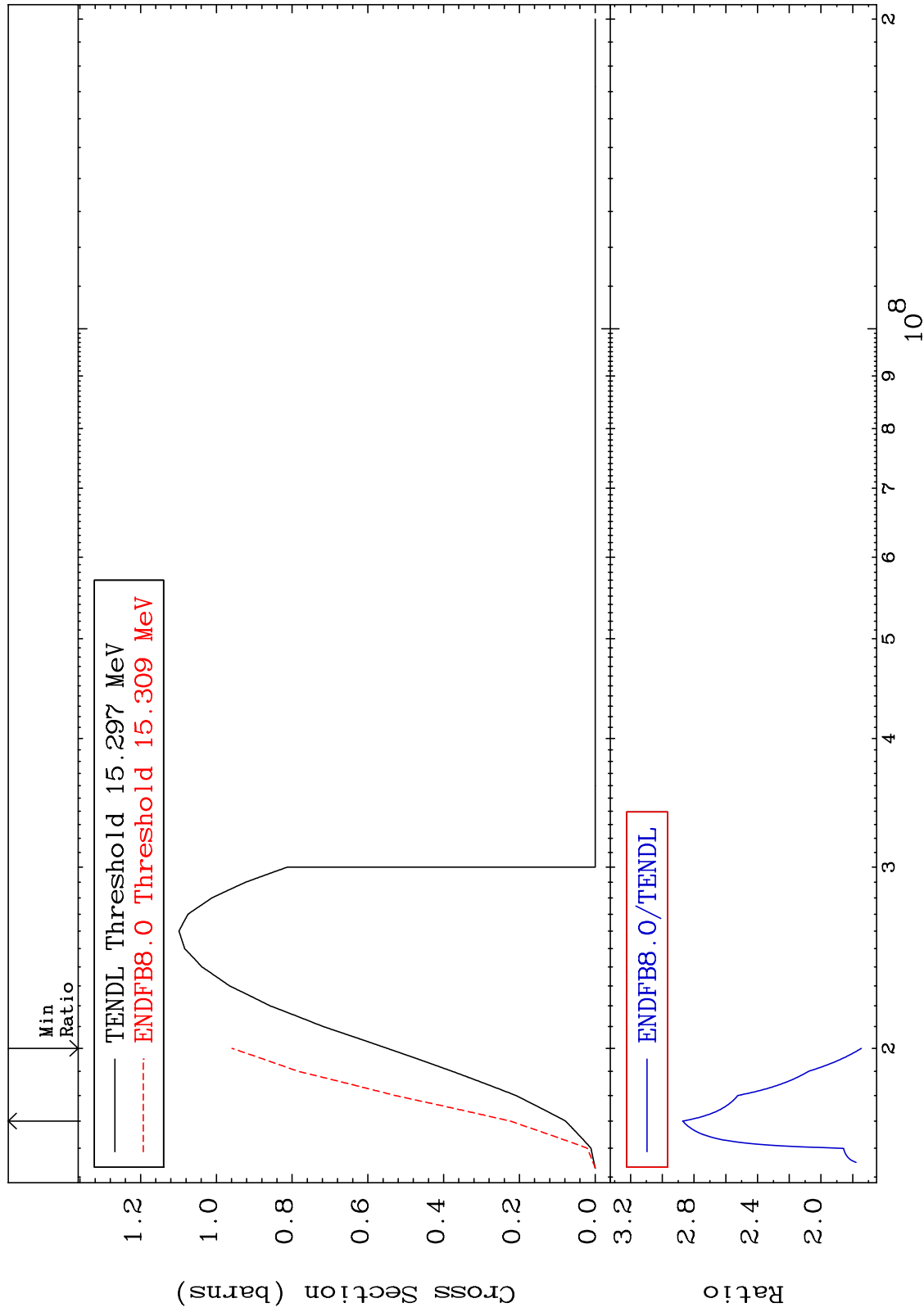
MAT 5137

(n,3n)

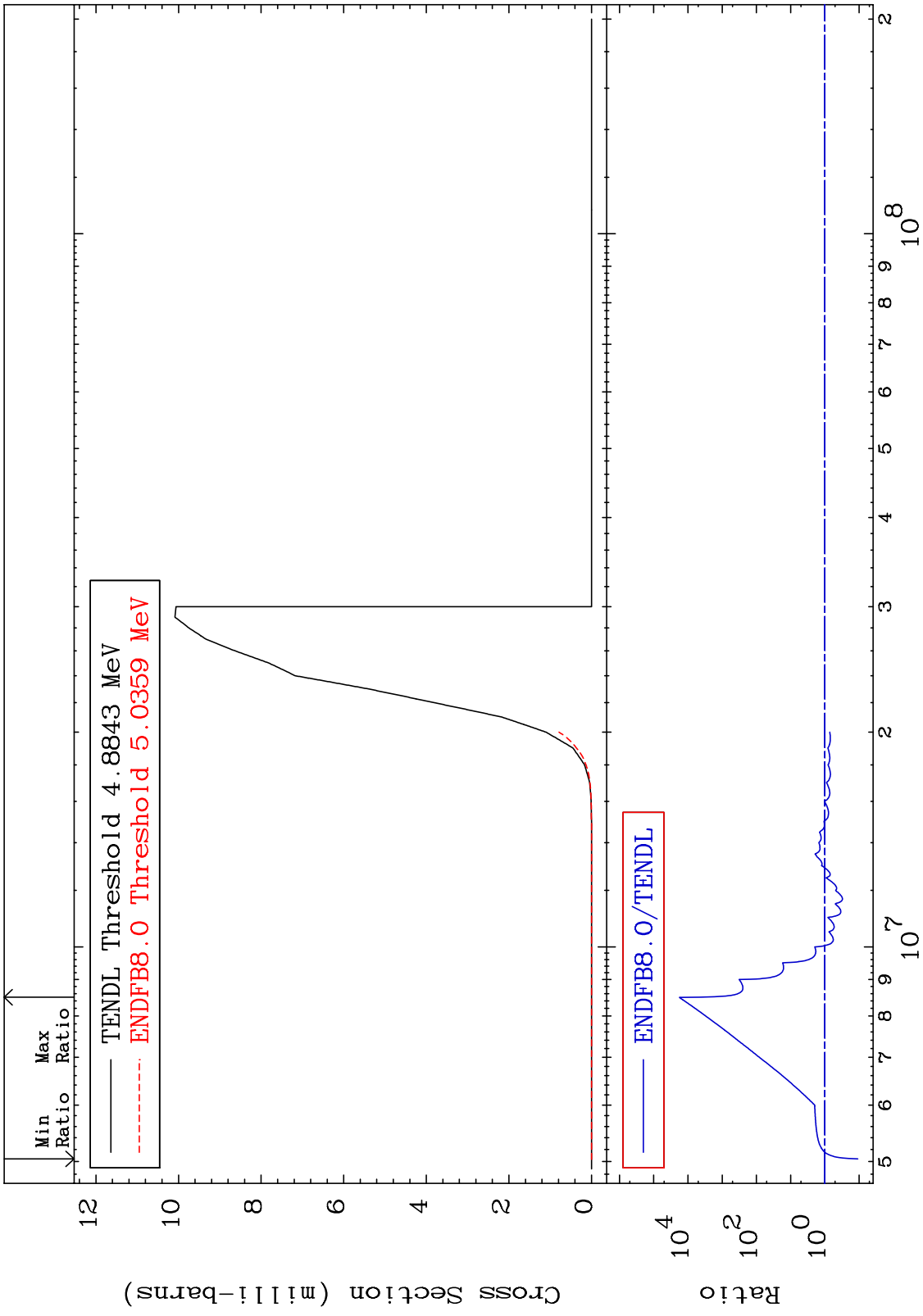
51-Sb-125

Cross Section

74.56 To 187.2 %



MAT 5137  $(n, n') \alpha$  51-Sb-125  
 Cross Section -89.16 To 9999. %



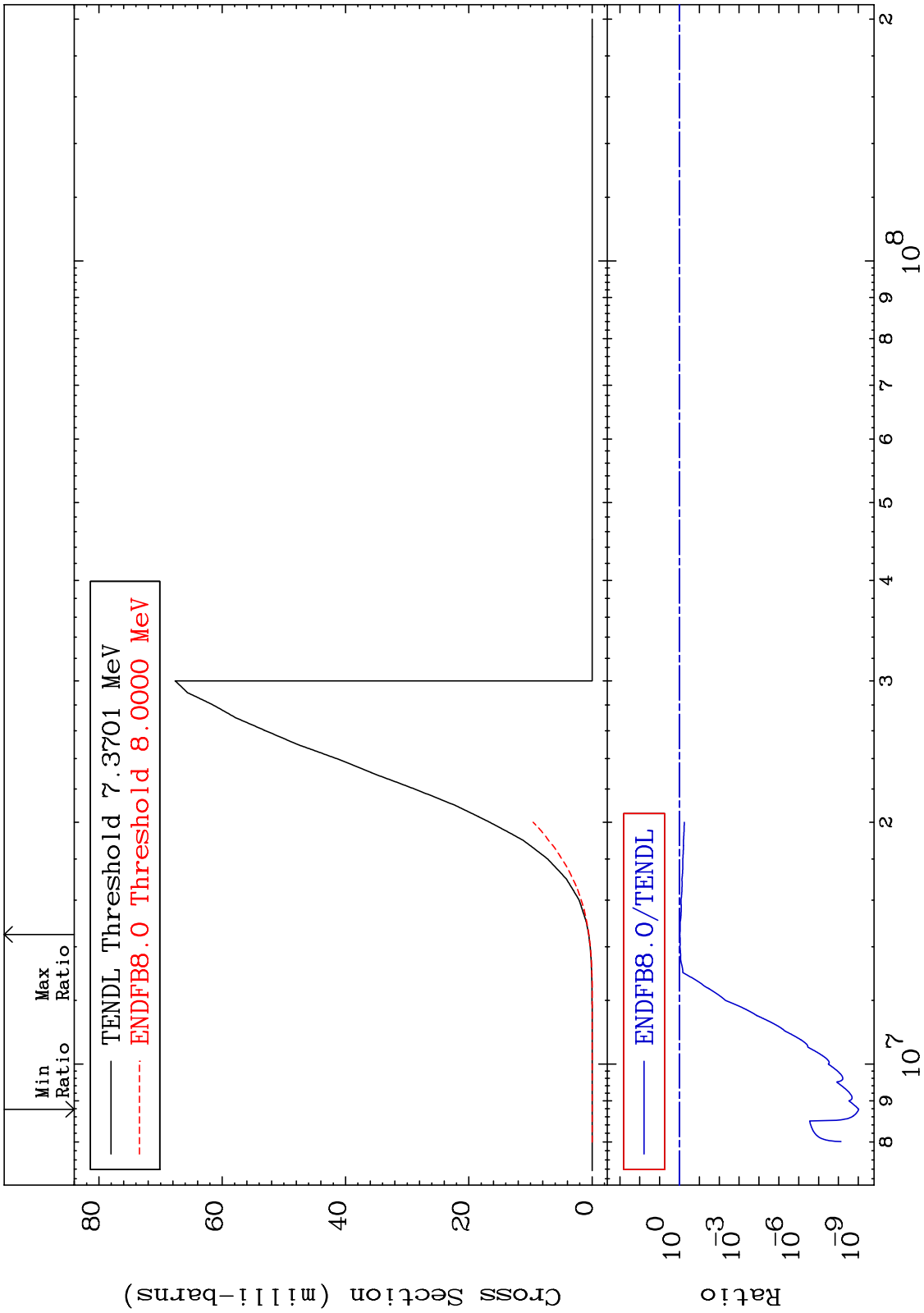
MAT 5137

(n,n') p

51-Sb-125

Cross Section

-100.0 To -3.208%

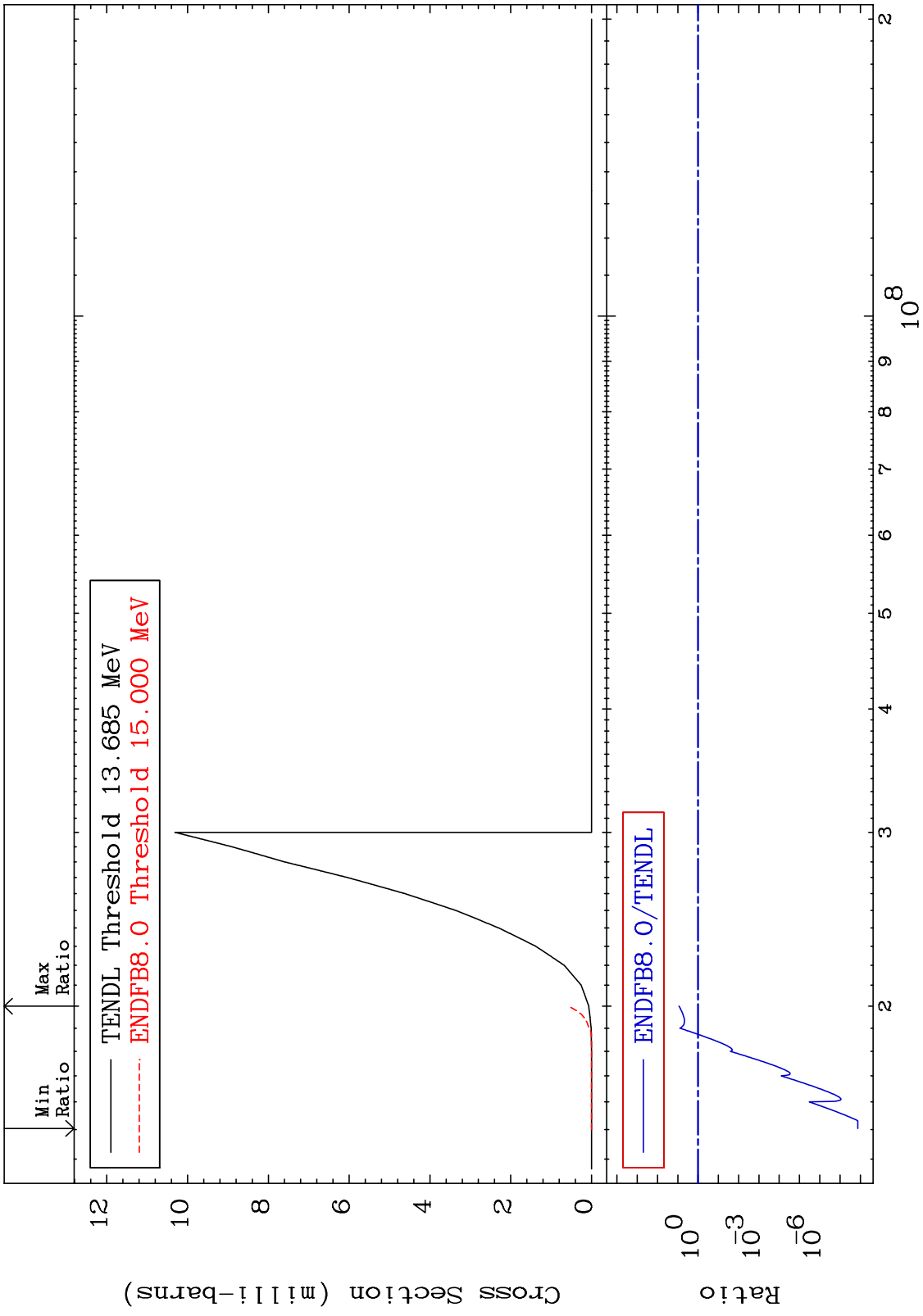


7

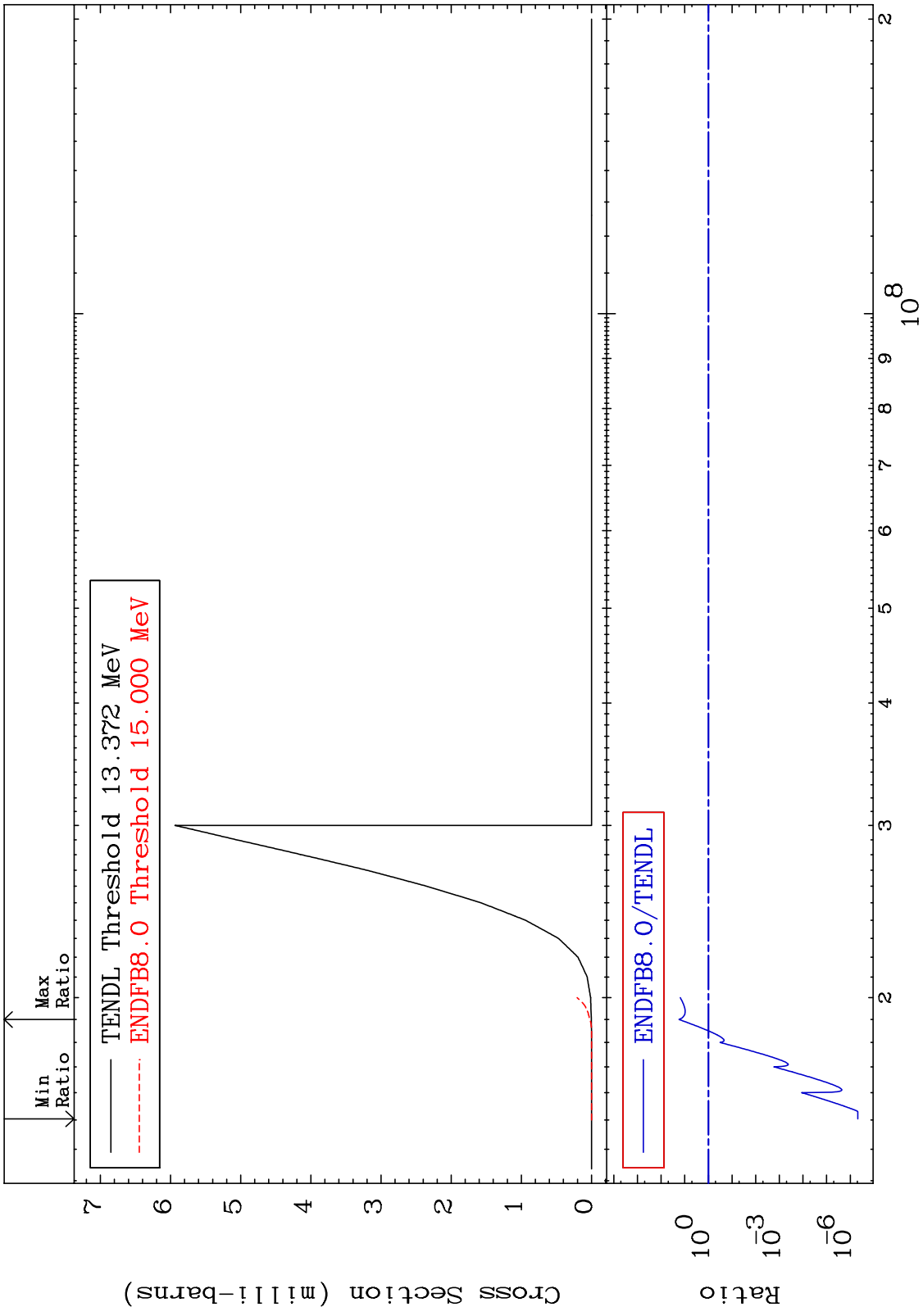
Incident Energy (eV)

51-Sb-125





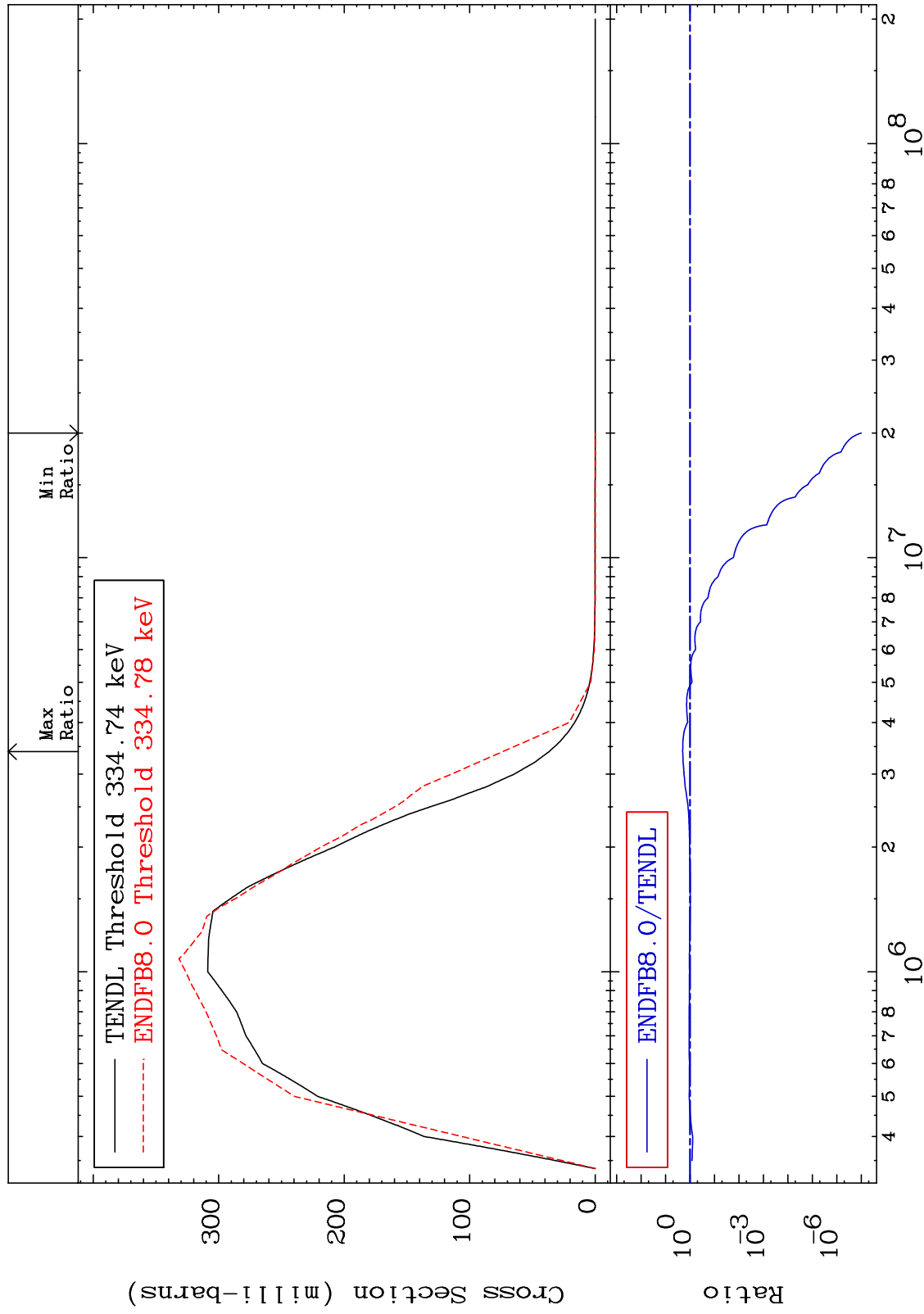
MAT 5137 (n,n') t 51-Sb-125  
 Cross Section -100.0 To 1643. %



MAT 5137

MT= 51 (n,n') Level  
Cross Section

51-Sb-125  
-100.0 To 101.3 %

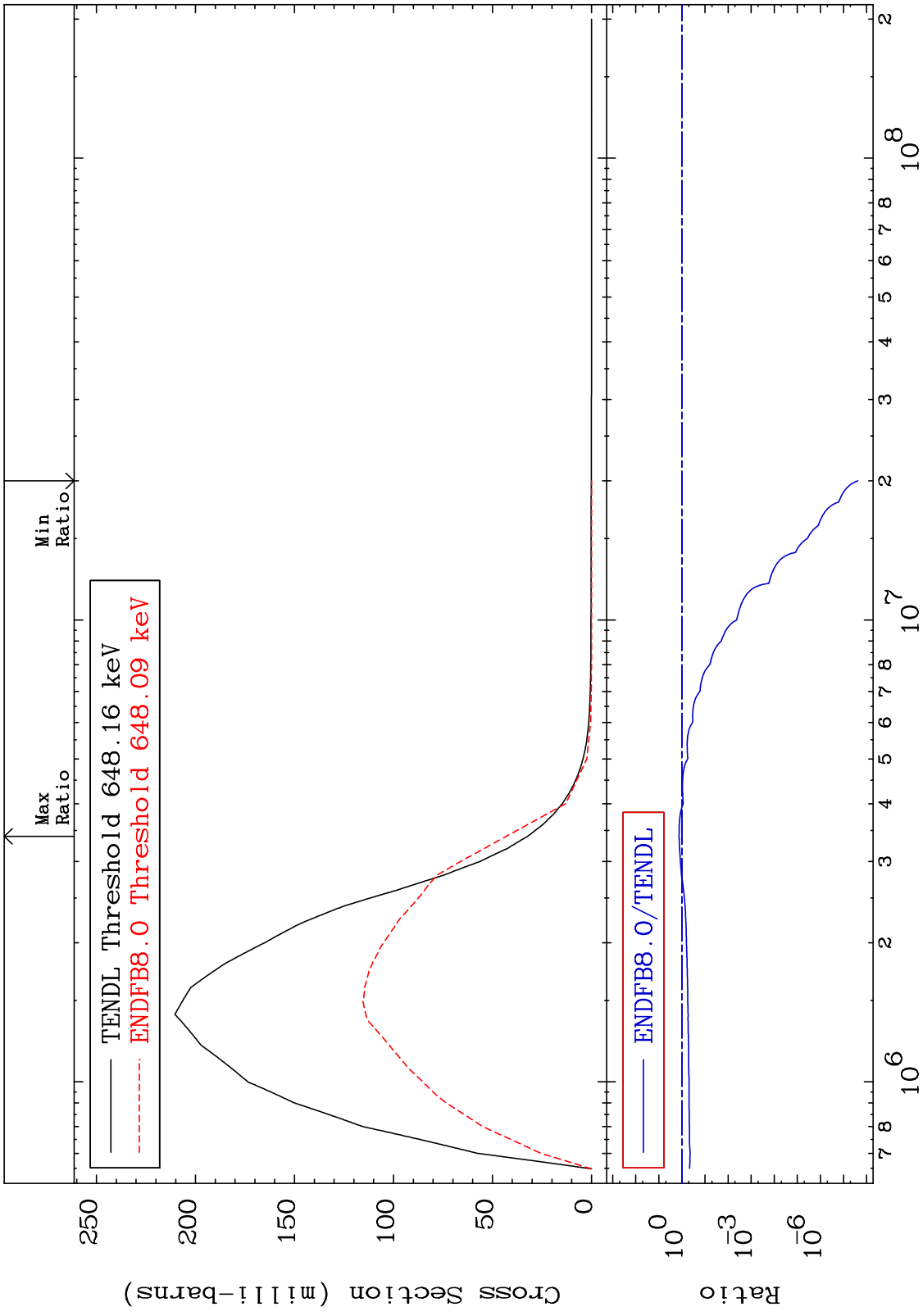


10

Incident Energy (eV)

51-Sb-125

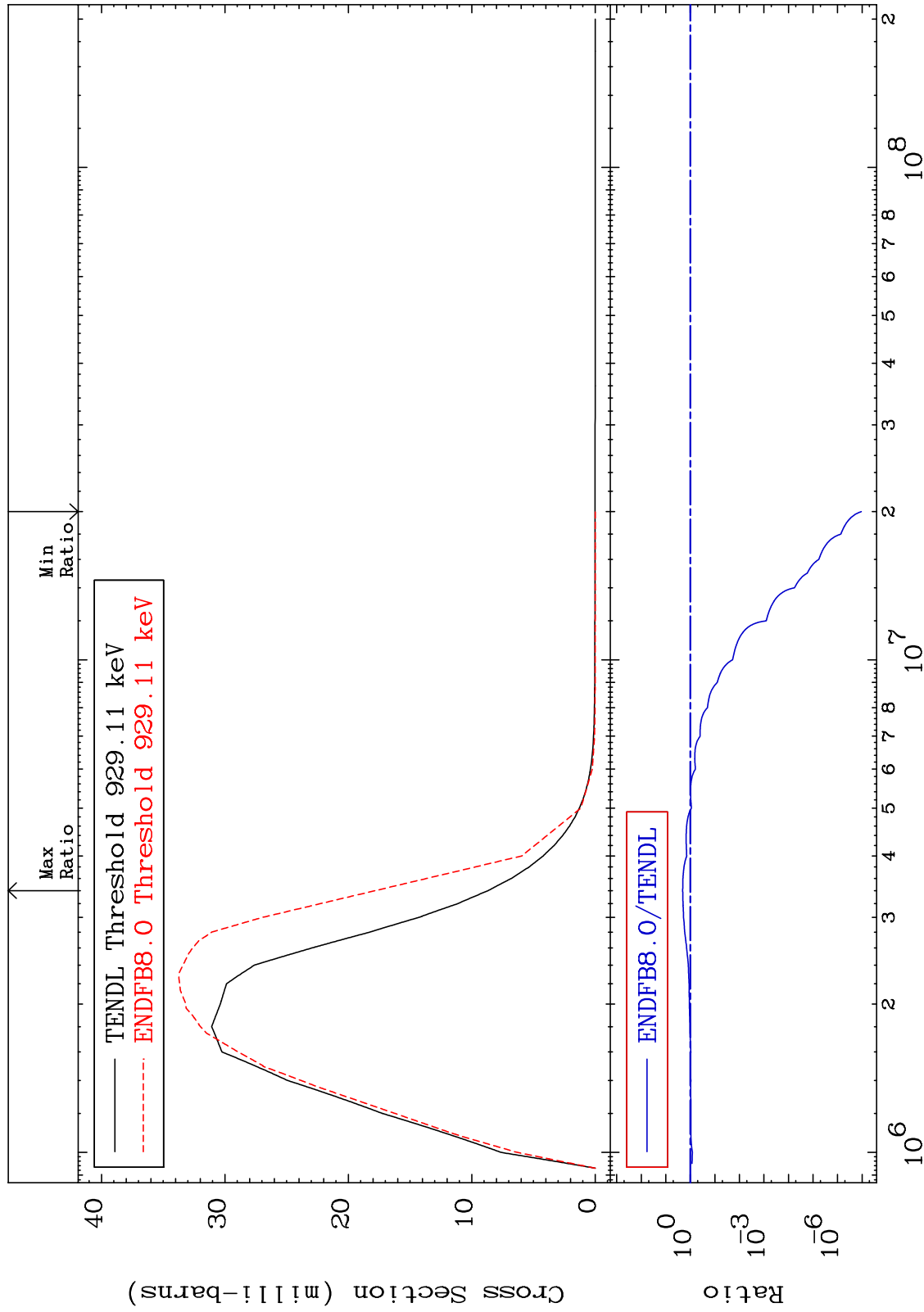
MAT 5137 MT= 52 (n,n') Level Cross Section 51-Sb-125 -100.0 To 33.26 %



MAT 5137

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

51-Sb-125  
-100.0 To 105.4 %

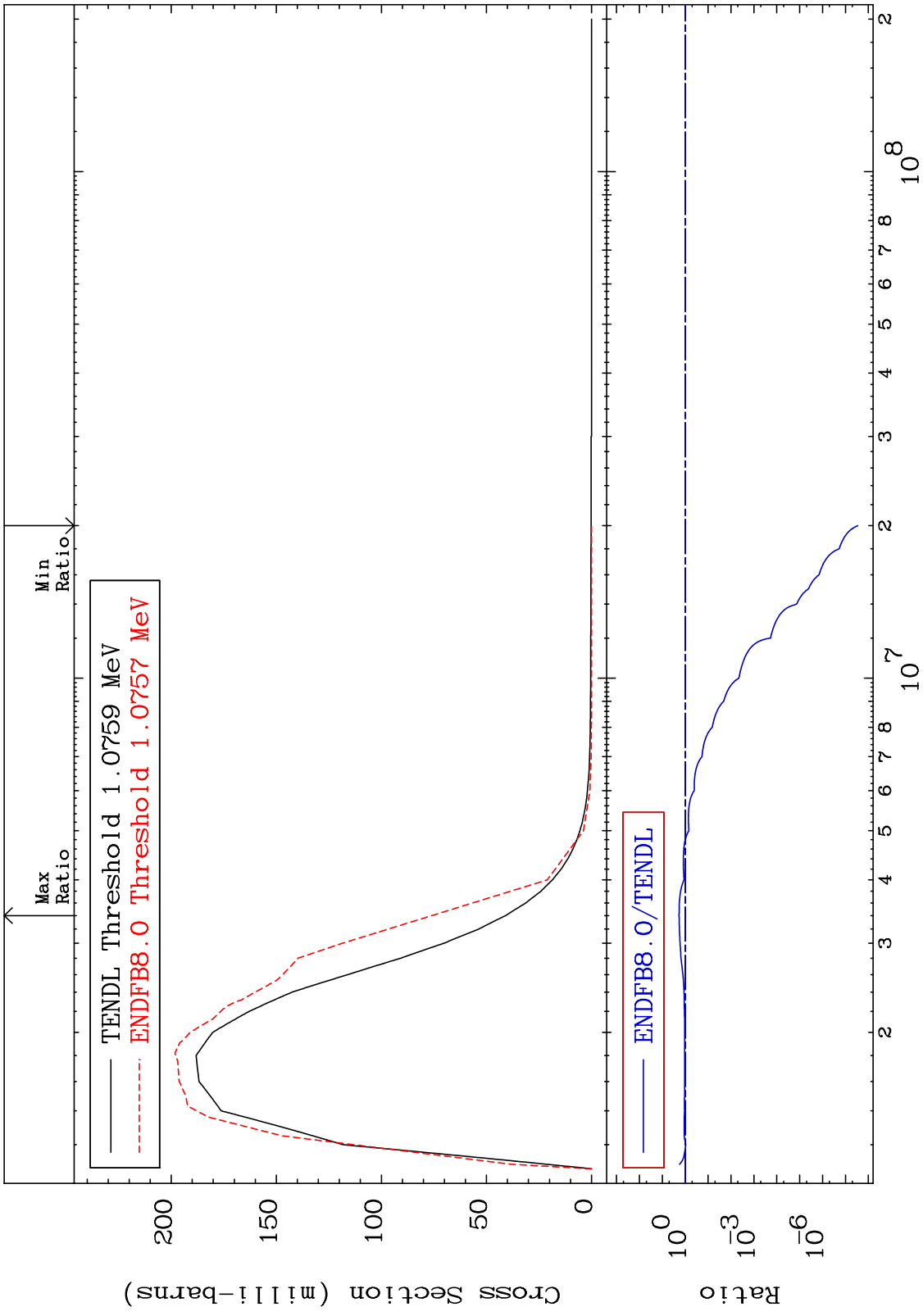


12

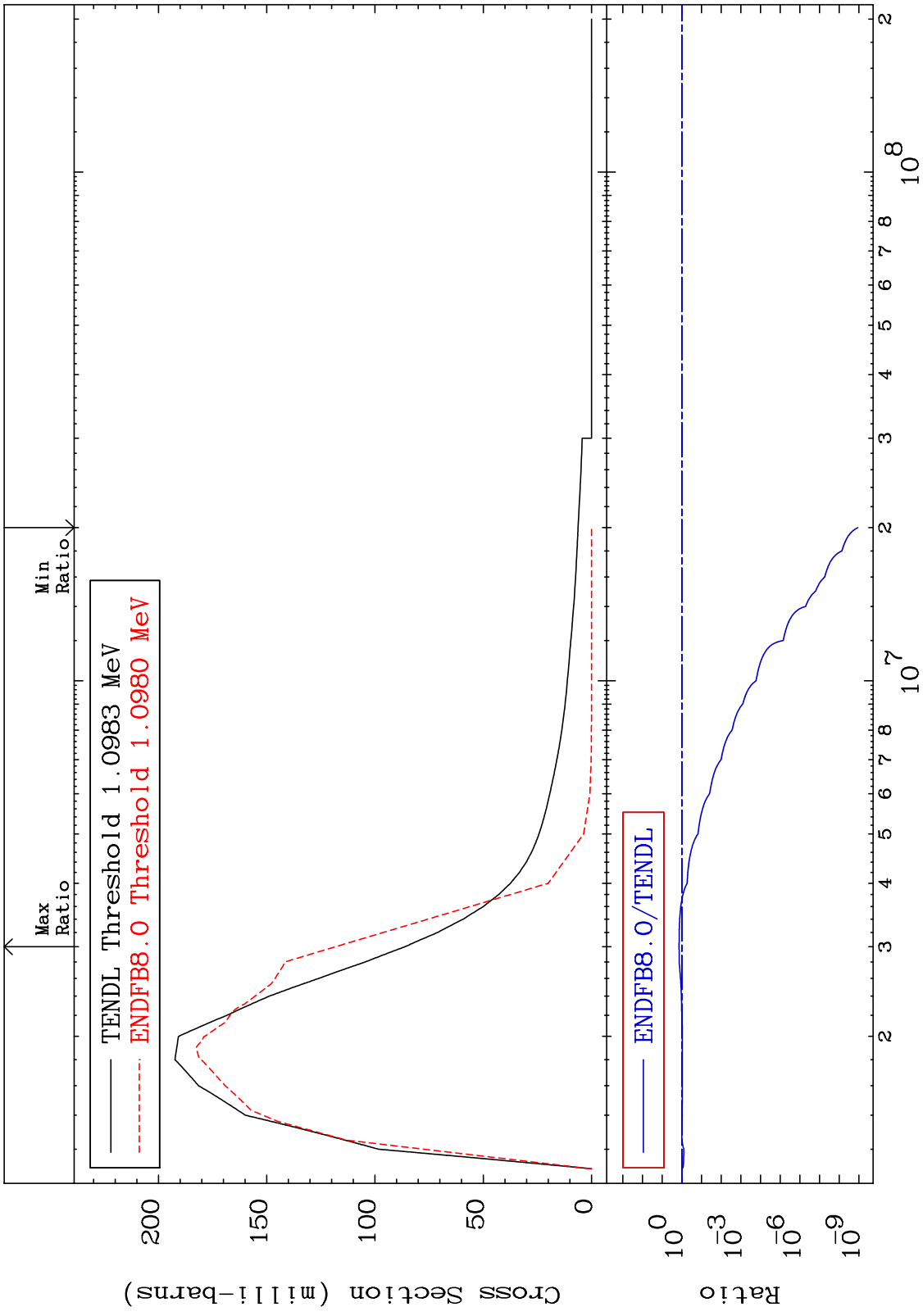
Incident Energy (eV)

51-Sb-125

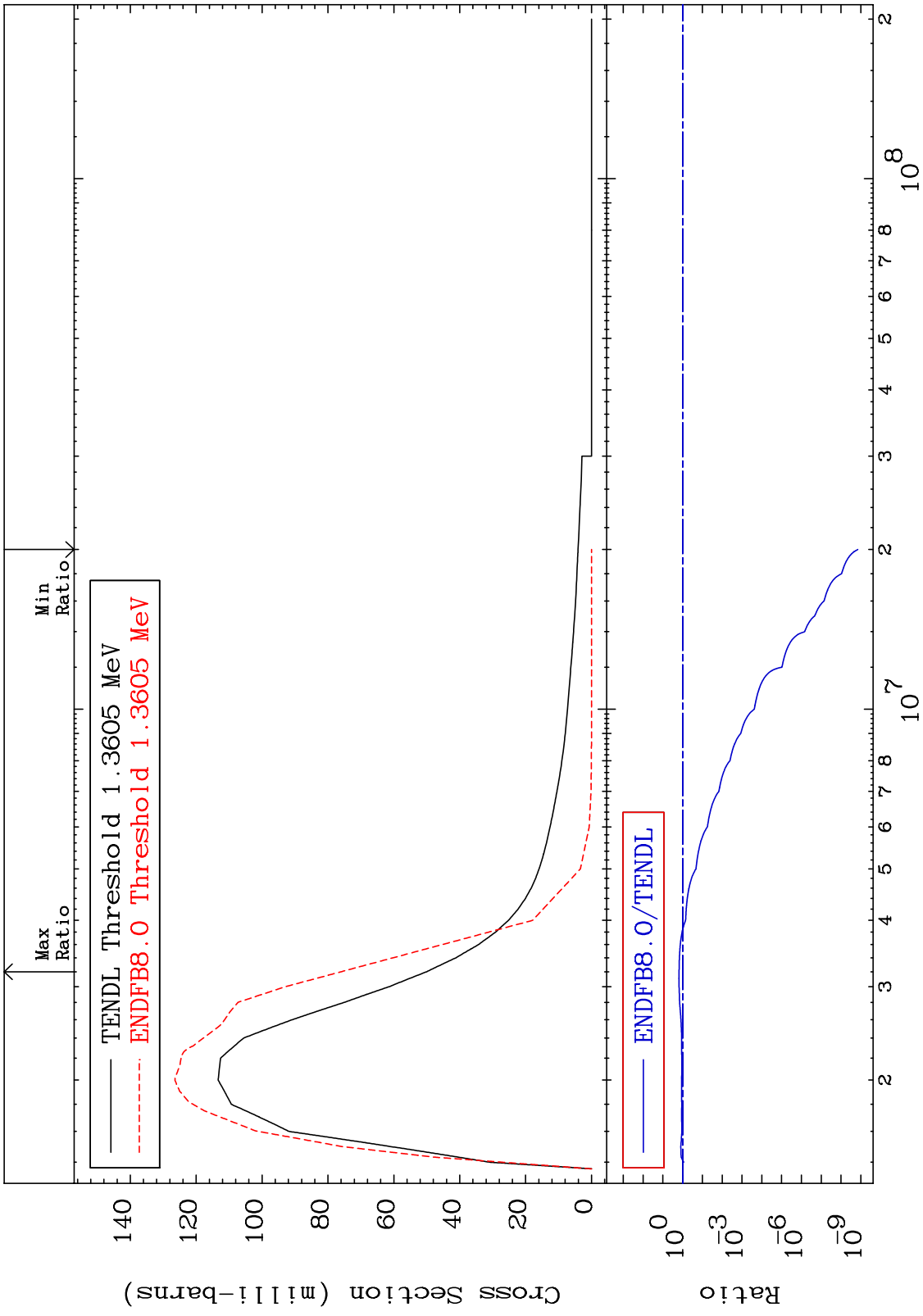
MAT 5137 MT= 54 (n,n') Level Cross Section 51-Sb-125 -100.0 To 85.91 %



MAT 5137 MT= 55 (n,n') Level Cross Section 51-Sb-125 -100.0 To 37.29 %

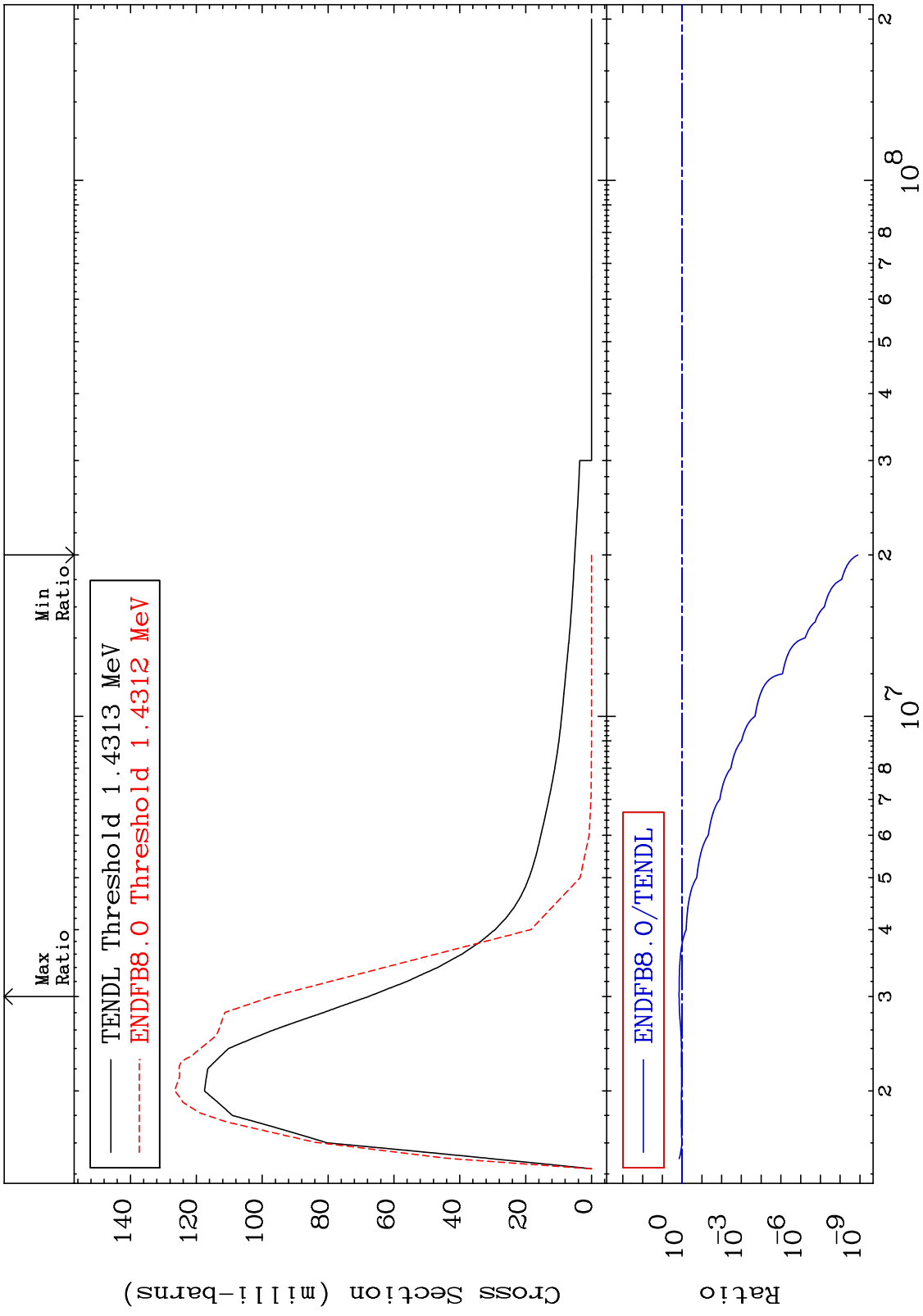


MAT 5137 MT= 56 (n,n') Level Cross Section 51-Sb-125 -100.0 To 51.93 %

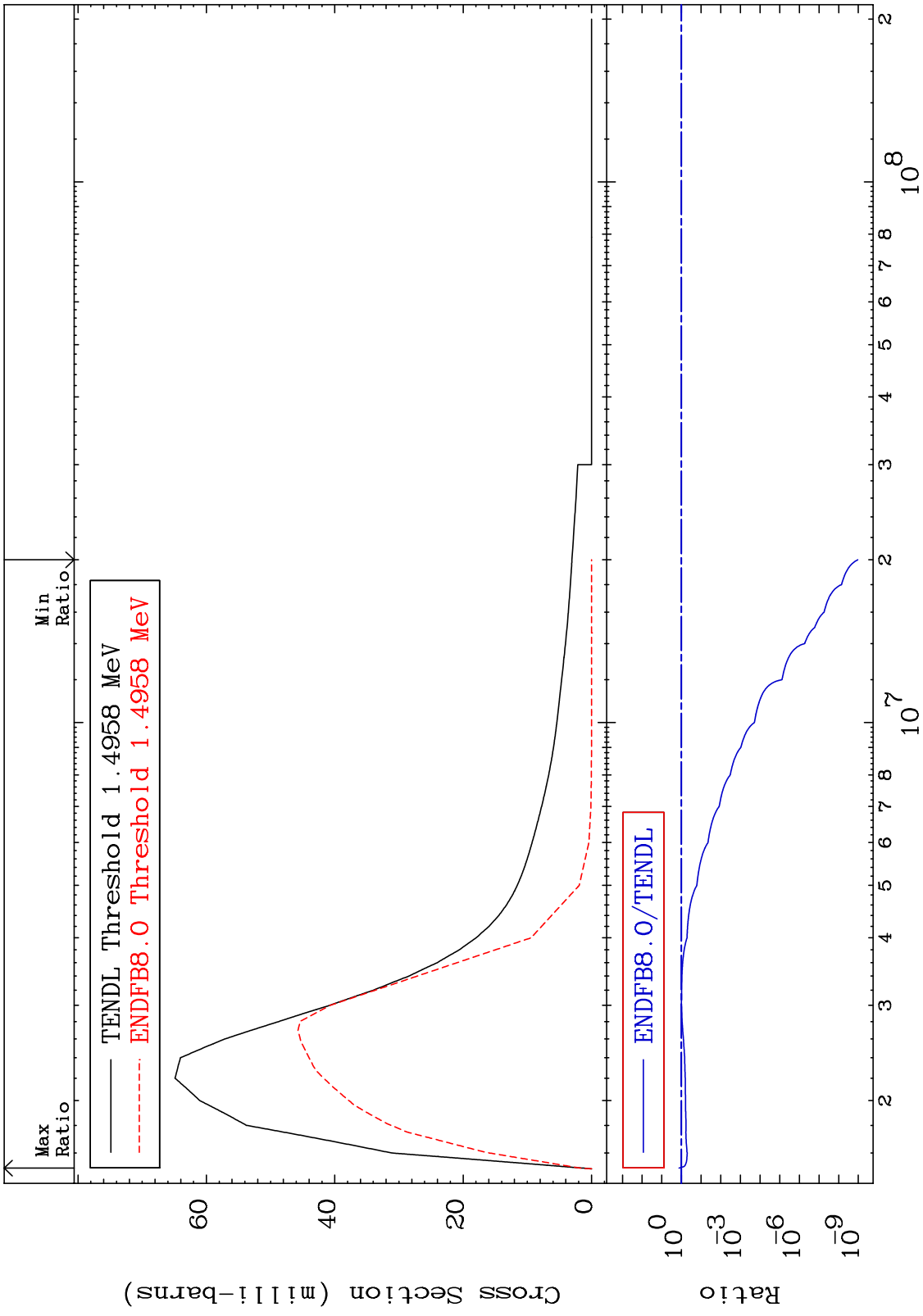




MAT 5137 MT= 57 (n,n') Level Cross Section 51-Sb-125 -100.0 To 43.38 %



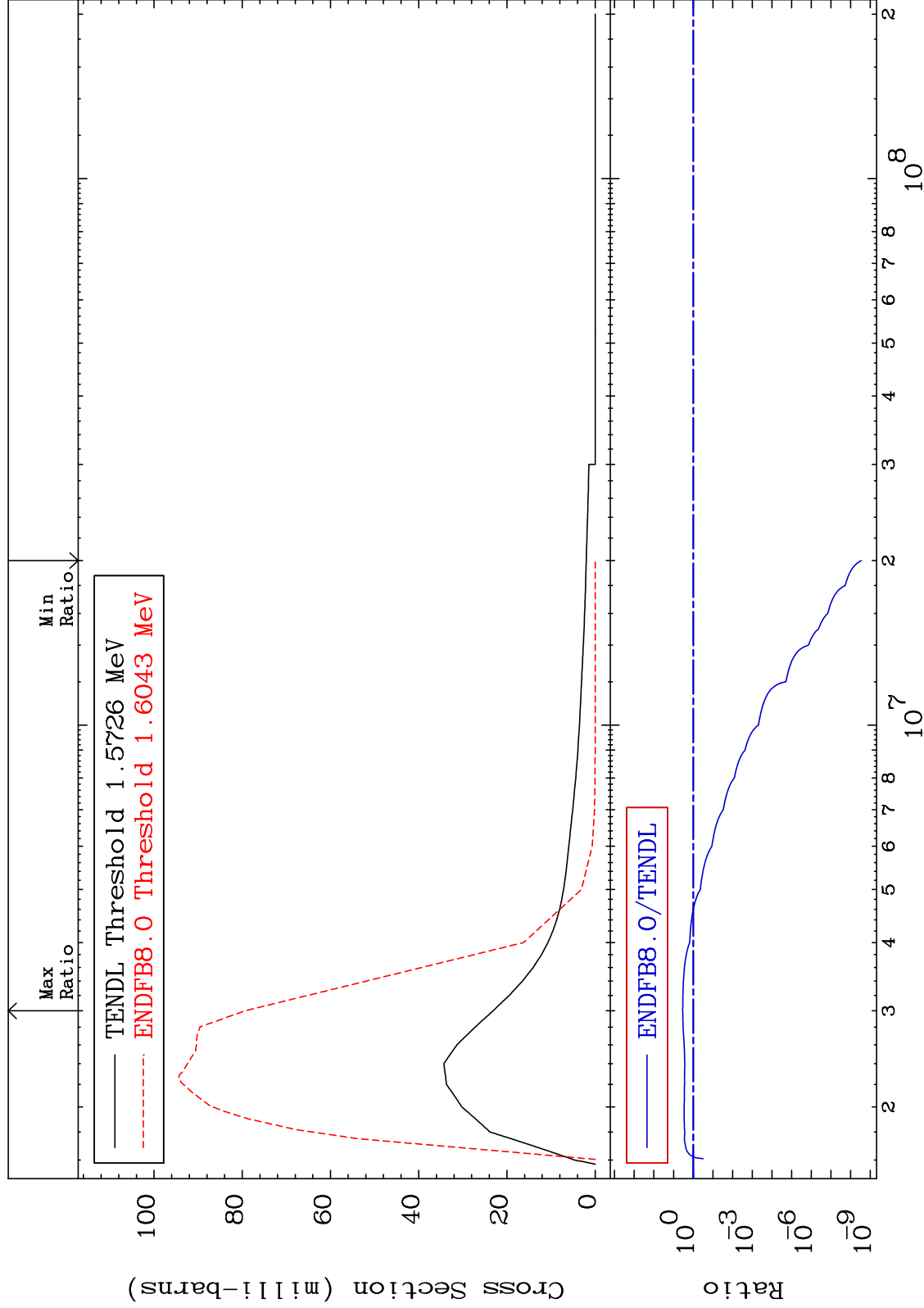
MAT 5137 MT= 58 (n,n') Level Cross Section 51-Sb-125 -100.0 To 32.51 %



MAT 5137

MT= 59 (n,n') Level  
Cross Section

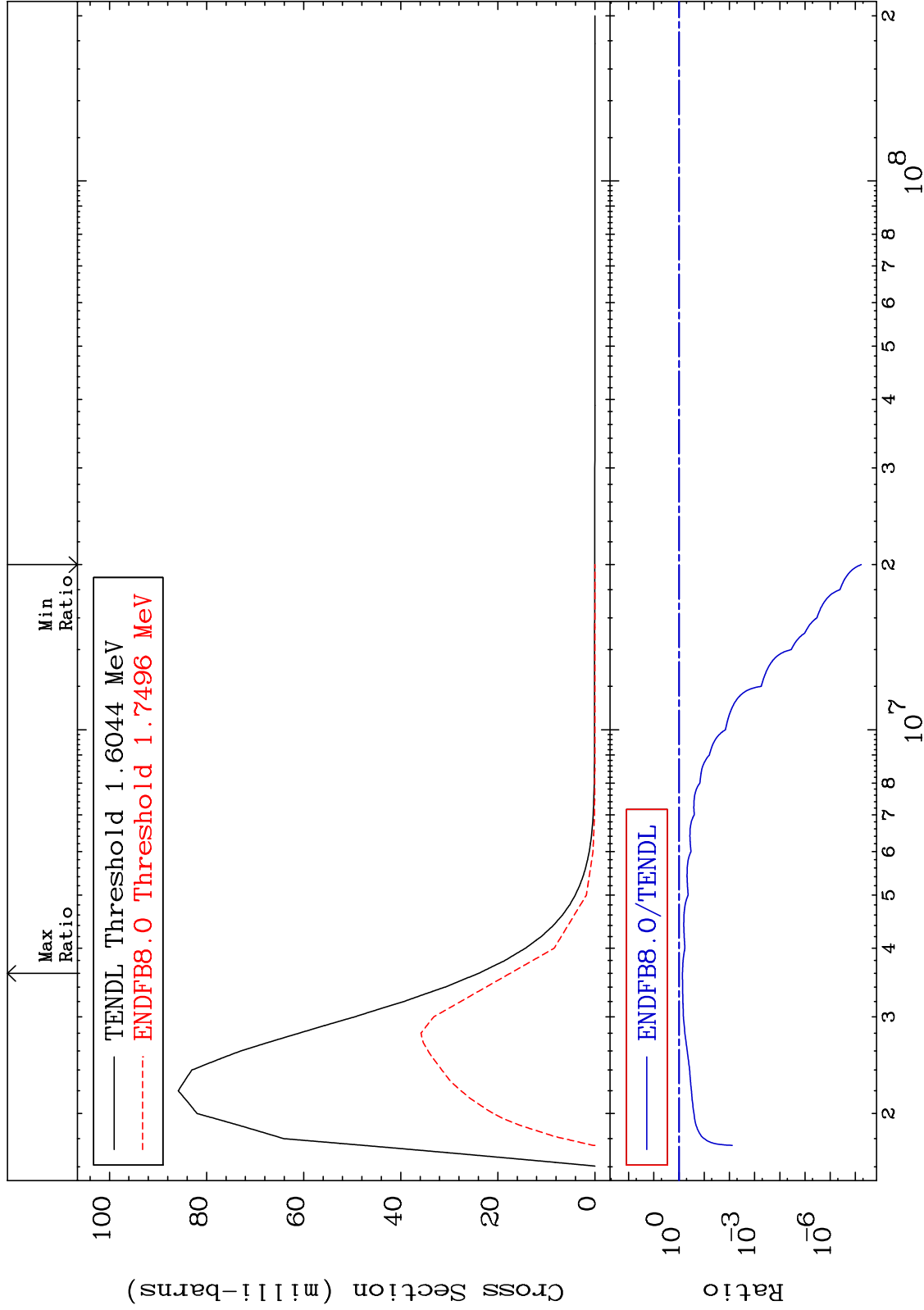
51-Sb-125  
-100.0 To 243.2 %



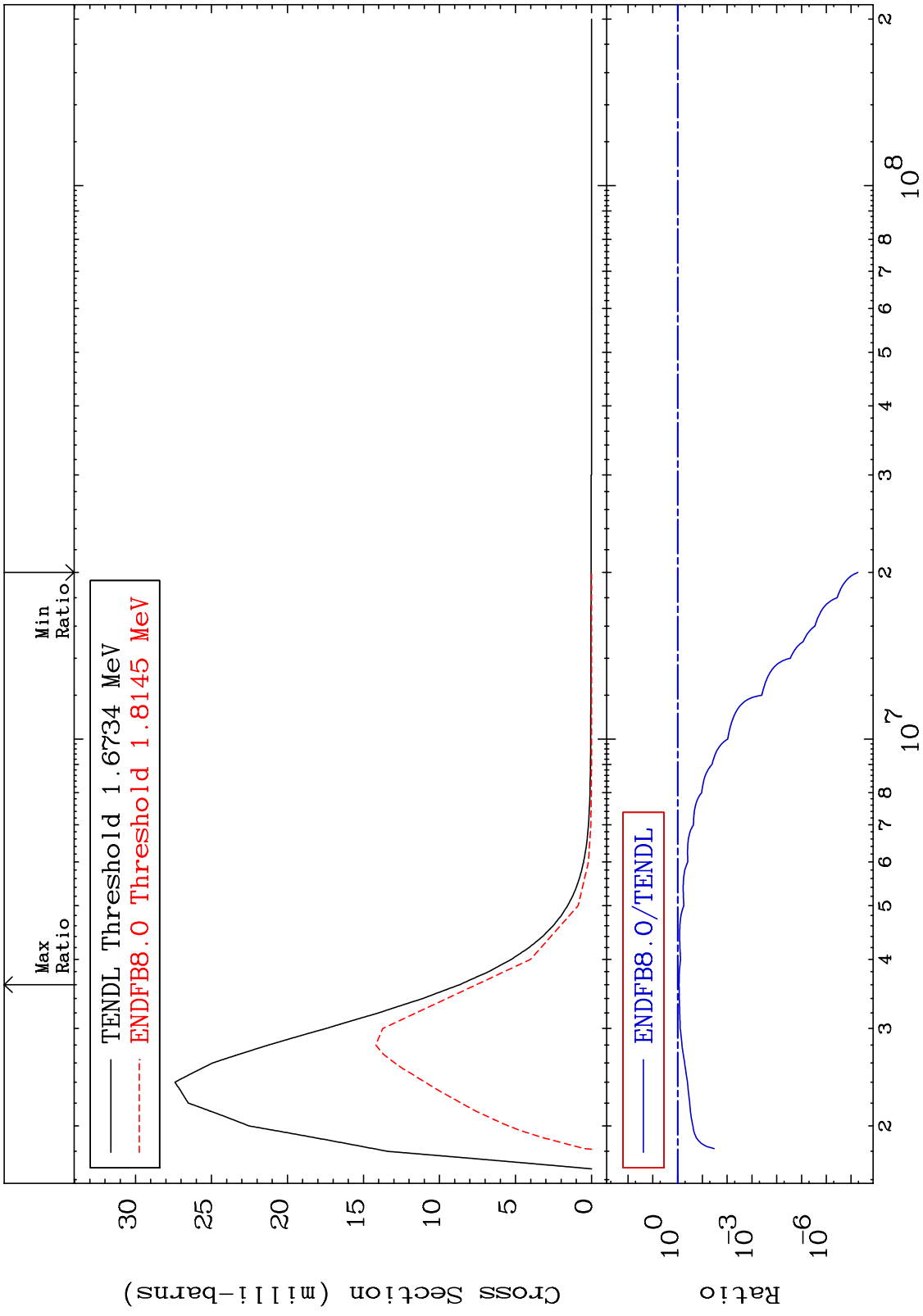
MAT 5137

MT= 60 (n,n') Level  
Cross Section

51-Sb-125  
-100.0 To -27.00%



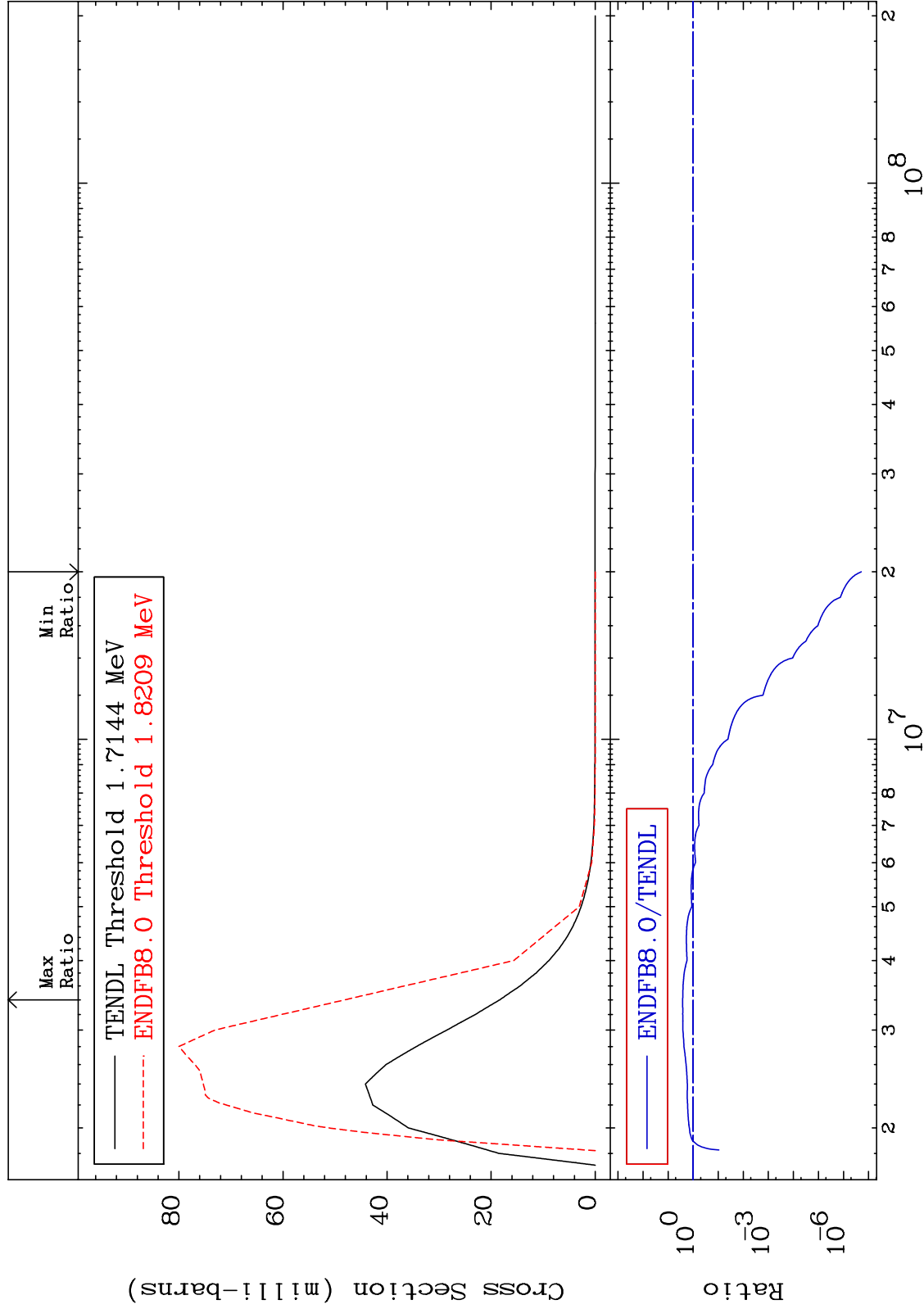
MAT 5137 MT= 61 (n,n') Level Cross Section 51-Sb-125 -100.0 To -12.70%



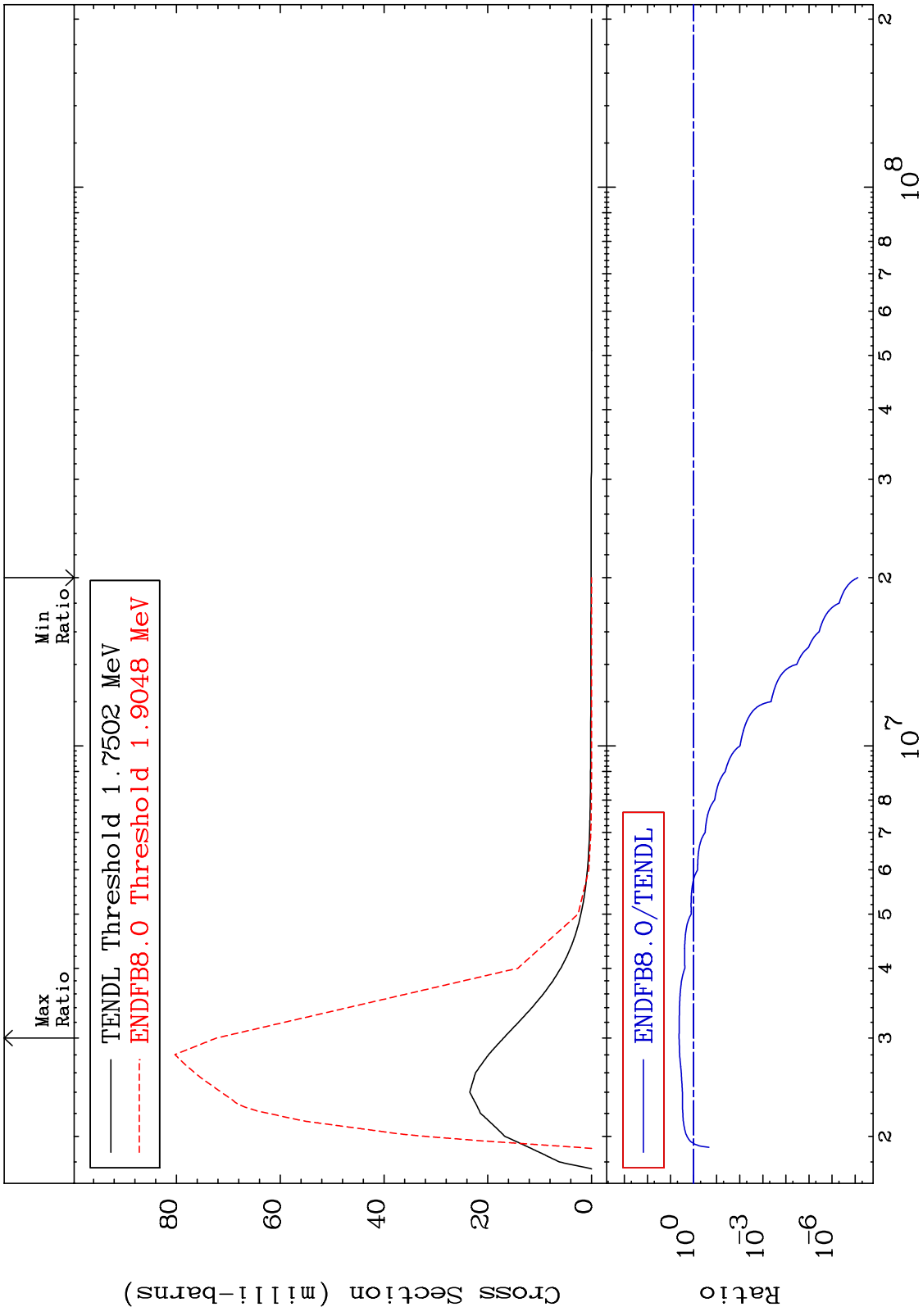
MAT 5137

MT= 62 (n,n') Level  
Cross Section

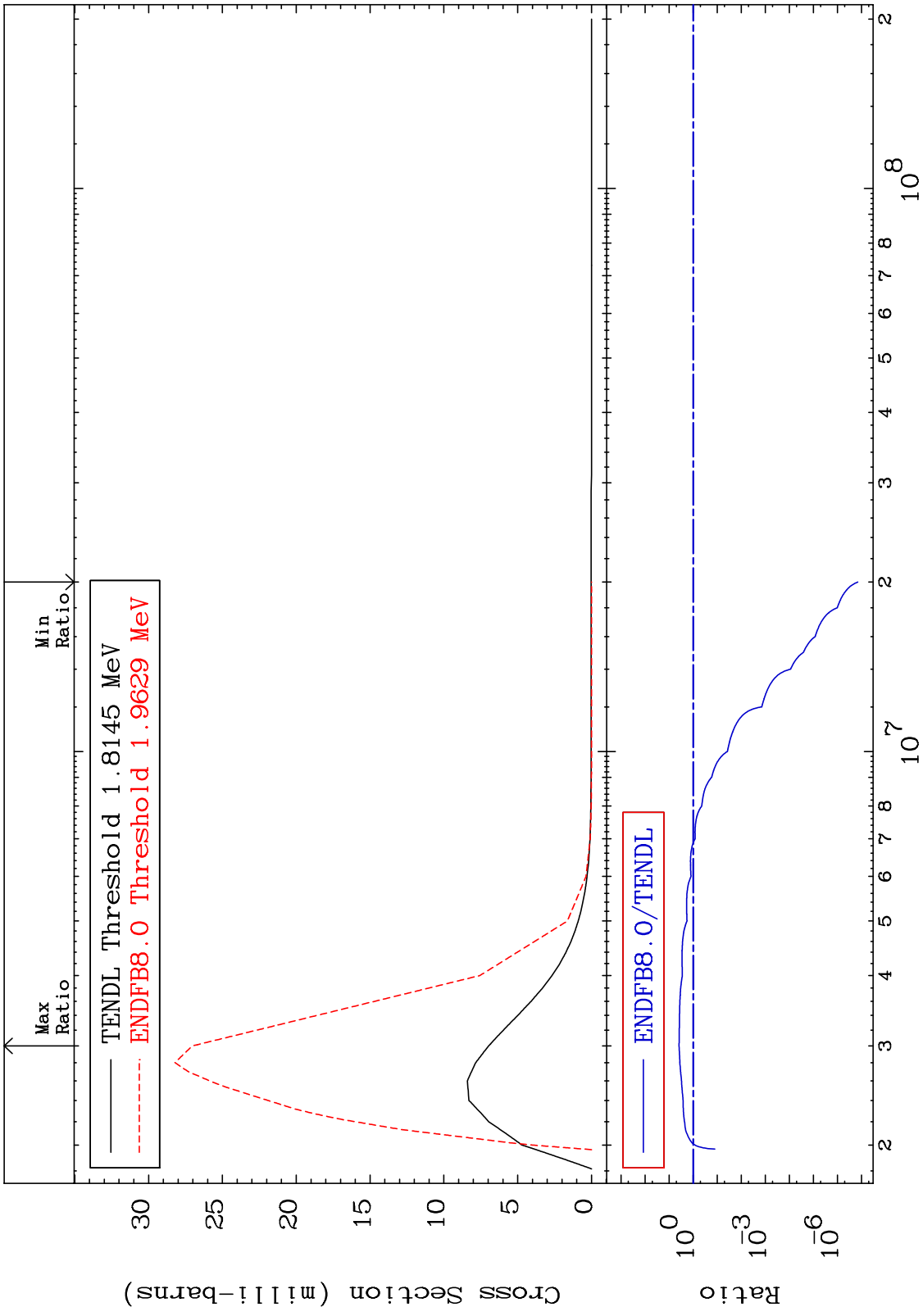
51-Sb-125  
-100.0 To 162.4 %



MAT 5137 MT= 63 (n,n') Level Cross Section 51-Sb-125 -100.0 To 326.5 %

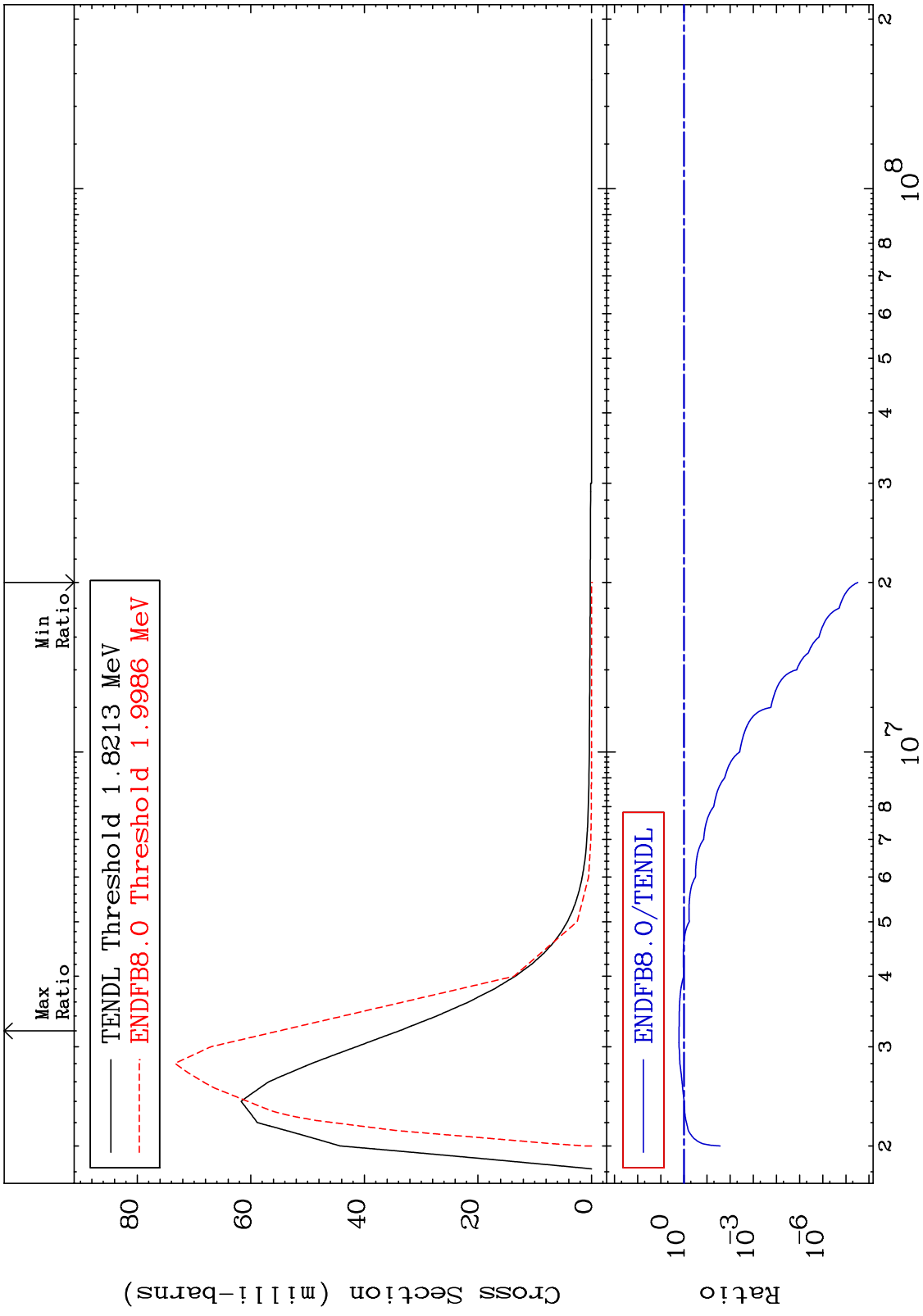


MAT 5137 MT= 64 (n,n') Level Cross Section 51-Sb-125 -100.0 To 288.2 %

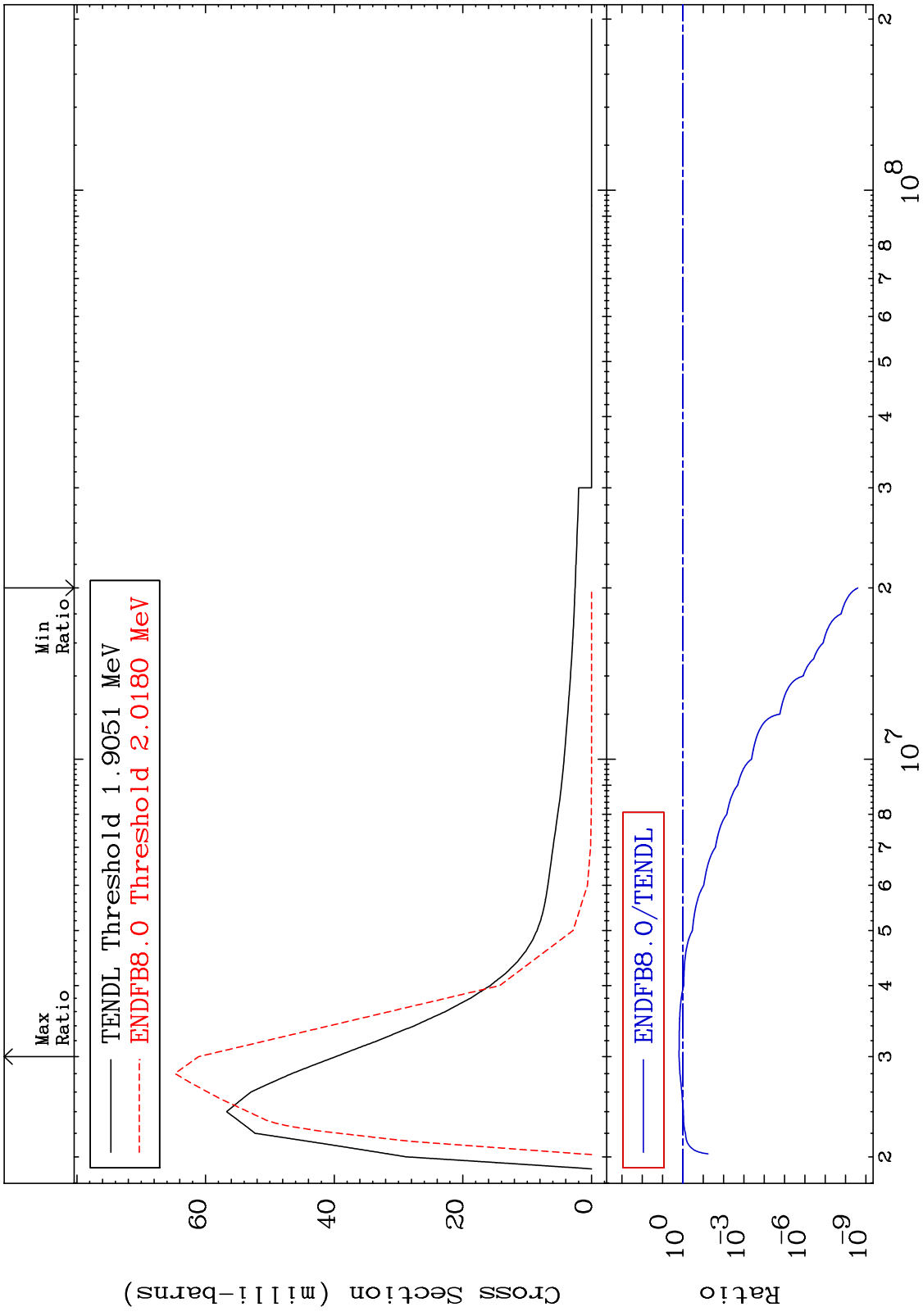




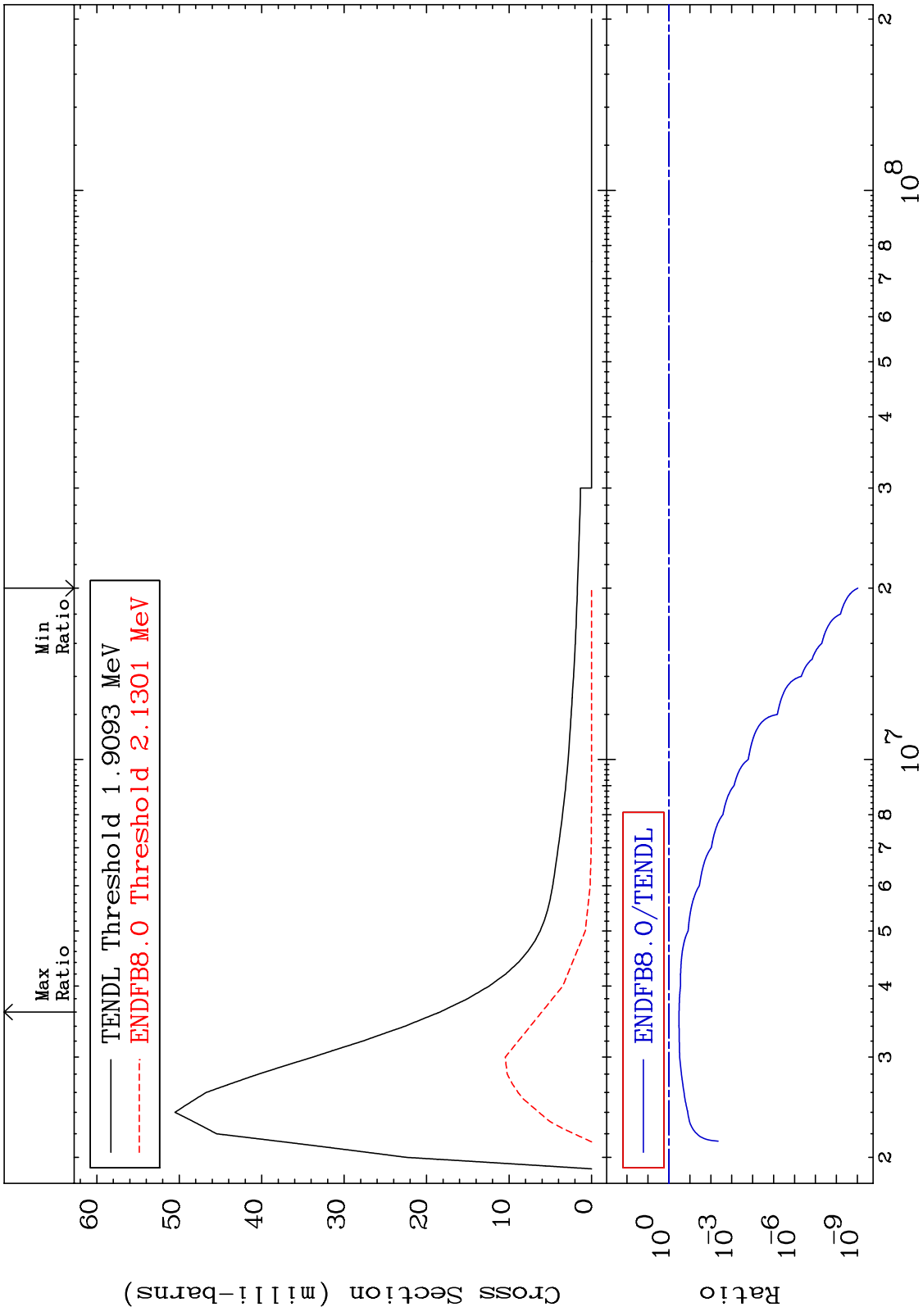
MAT 5137 MT= 65 (n,n') Level Cross Section 51-Sb-125 -100.0 To 62.48 %



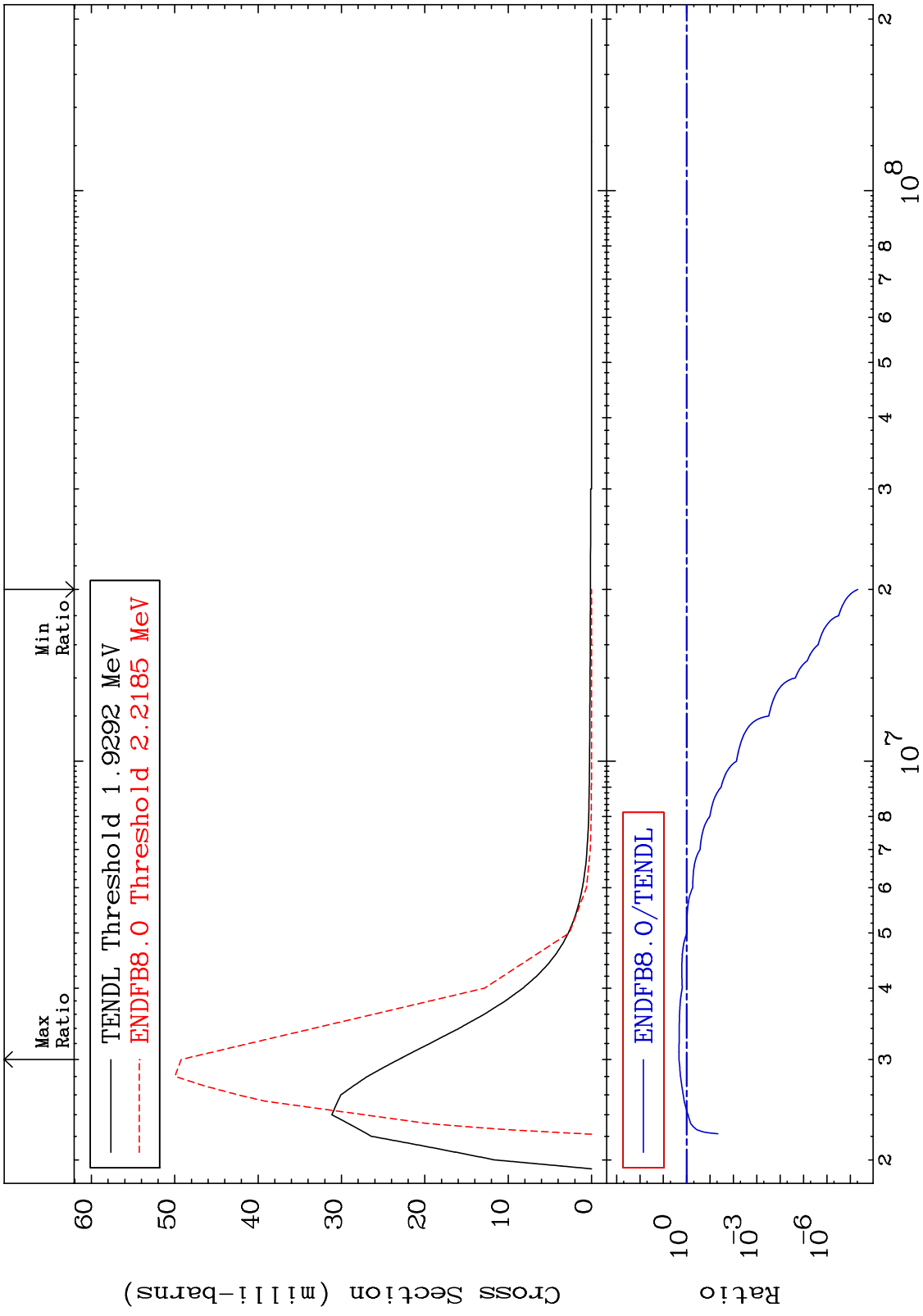
MAT 5137 MT= 66 (n,n') Level Cross Section 51-Sb-125 -100.0 To 53.63 %



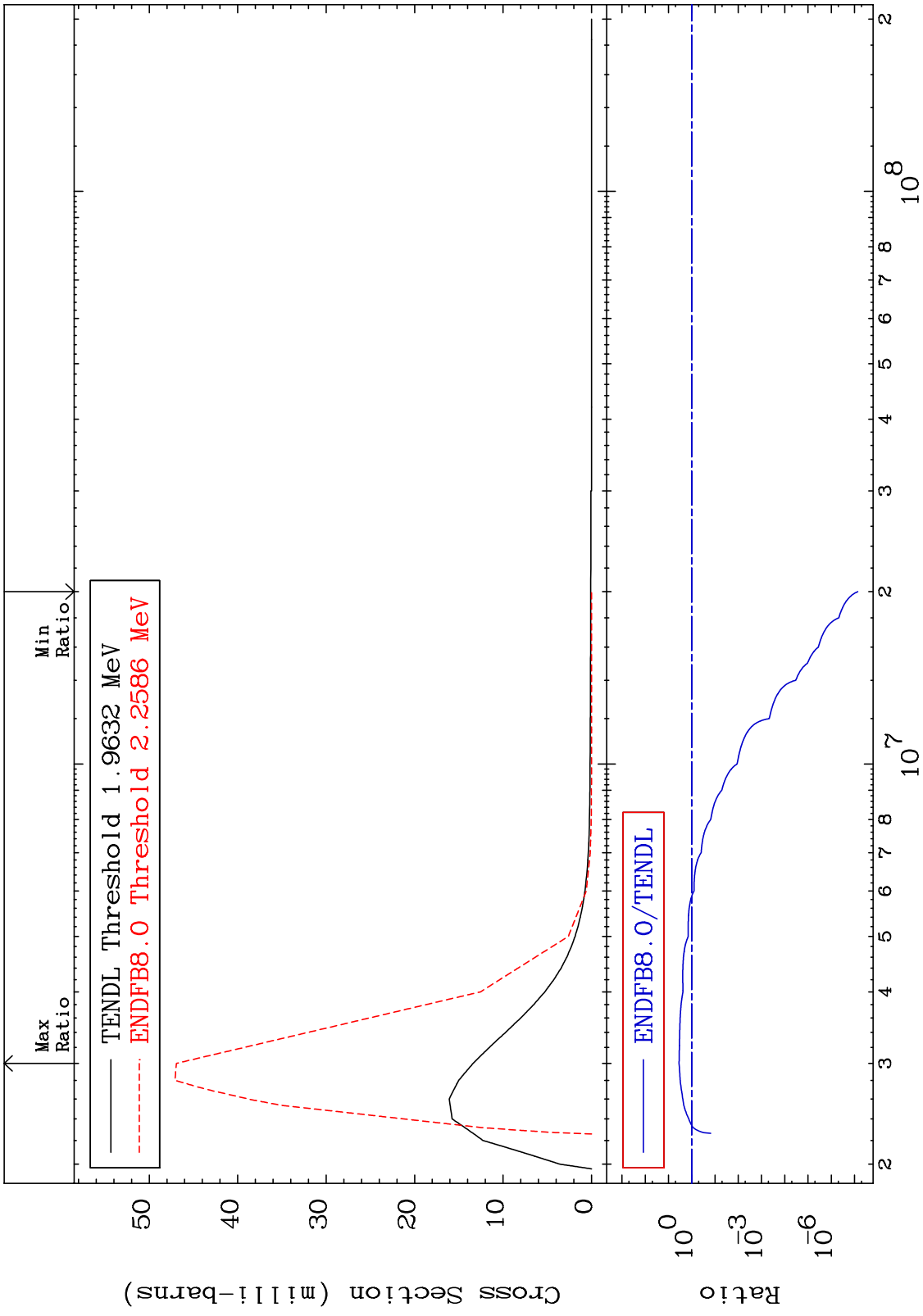
MAT 5137 MT= 67 (n,n') Level Cross Section 51-Sb-125 -100.0 To -67.15%



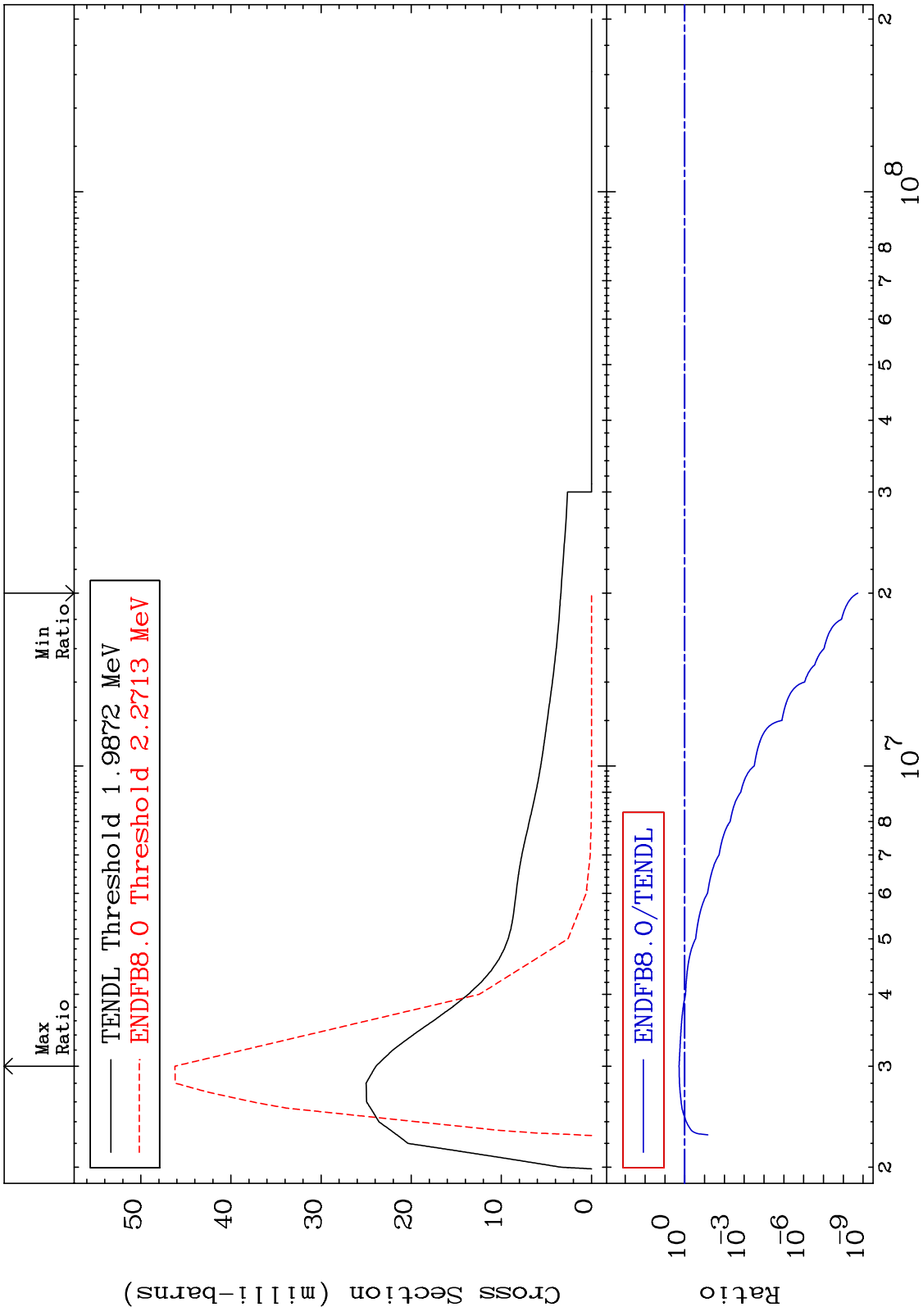
MAT 5137 MT= 68 (n,n') Level Cross Section 51-Sb-125 -100.0 To 112.8 %



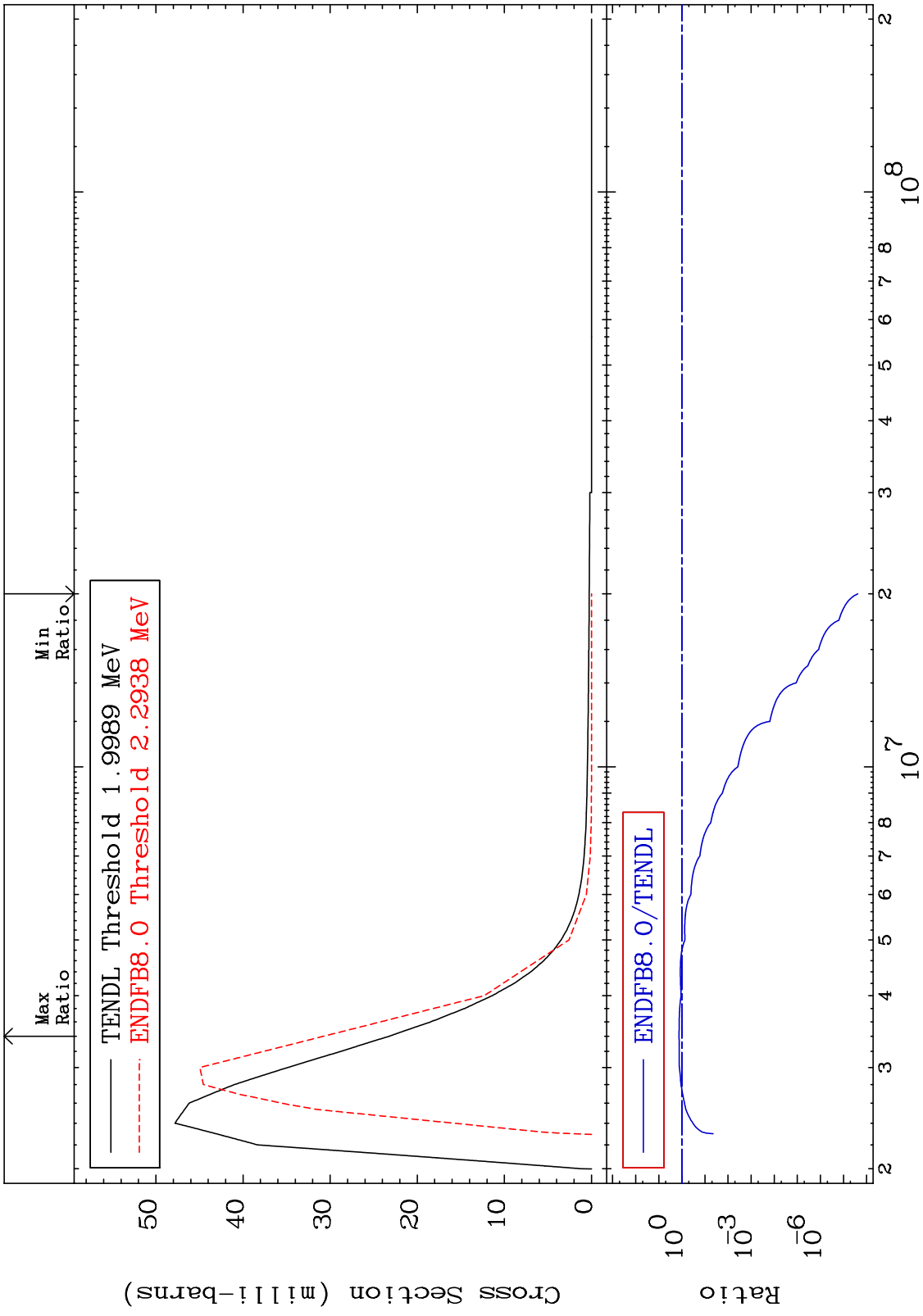
MAT 5137      MT= 69 (n,n') Level Cross Section      51-Sb-125  
 -100.0 To 250.6 %



MAT 5137 MT= 70 (n,n') Level Cross Section 51-Sb-125 -100.0 To 93.24 %

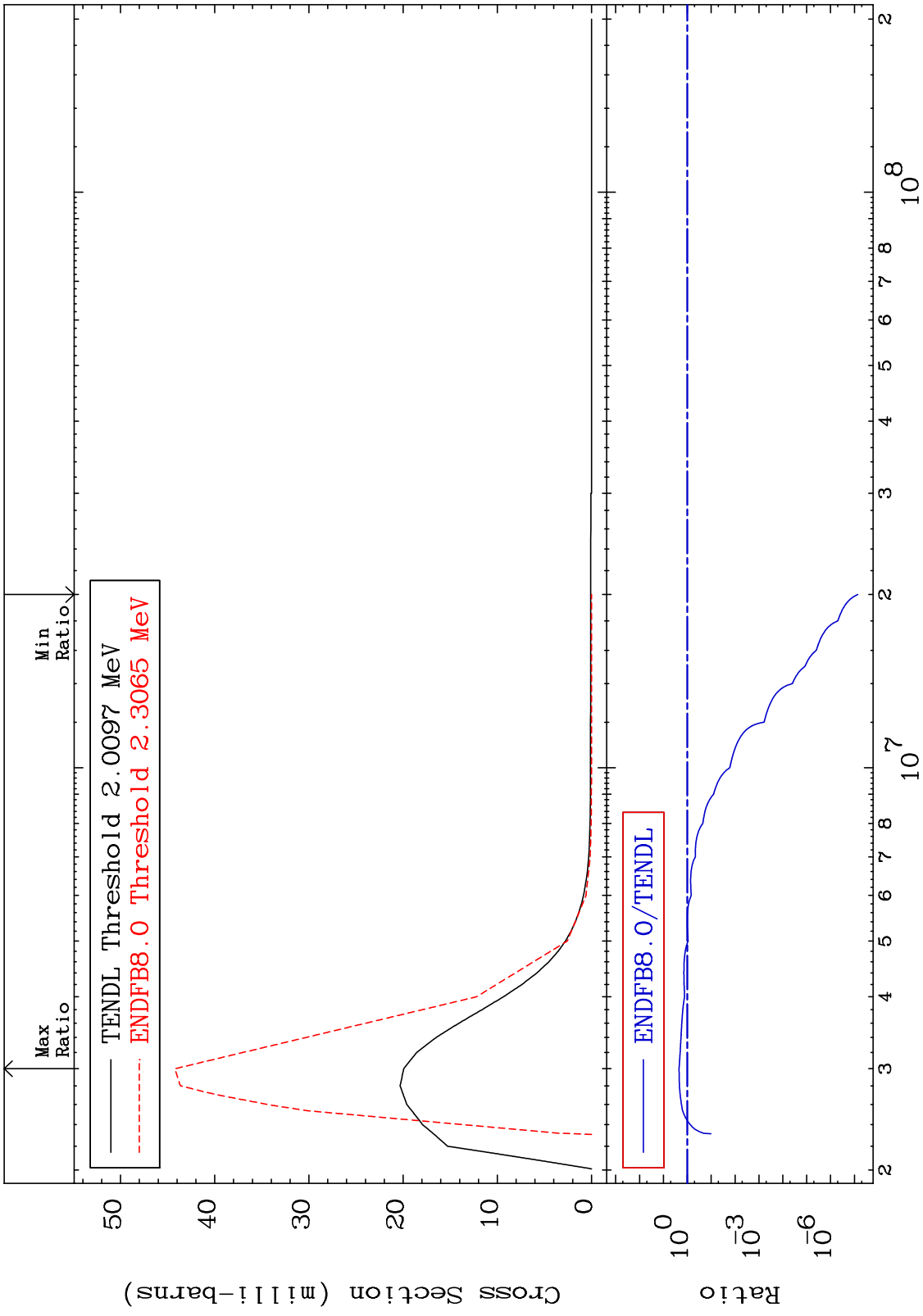


MAT 5137 MT= 71 (n,n') Level Cross Section 51-Sb-125 -100.0 To 32.42 %



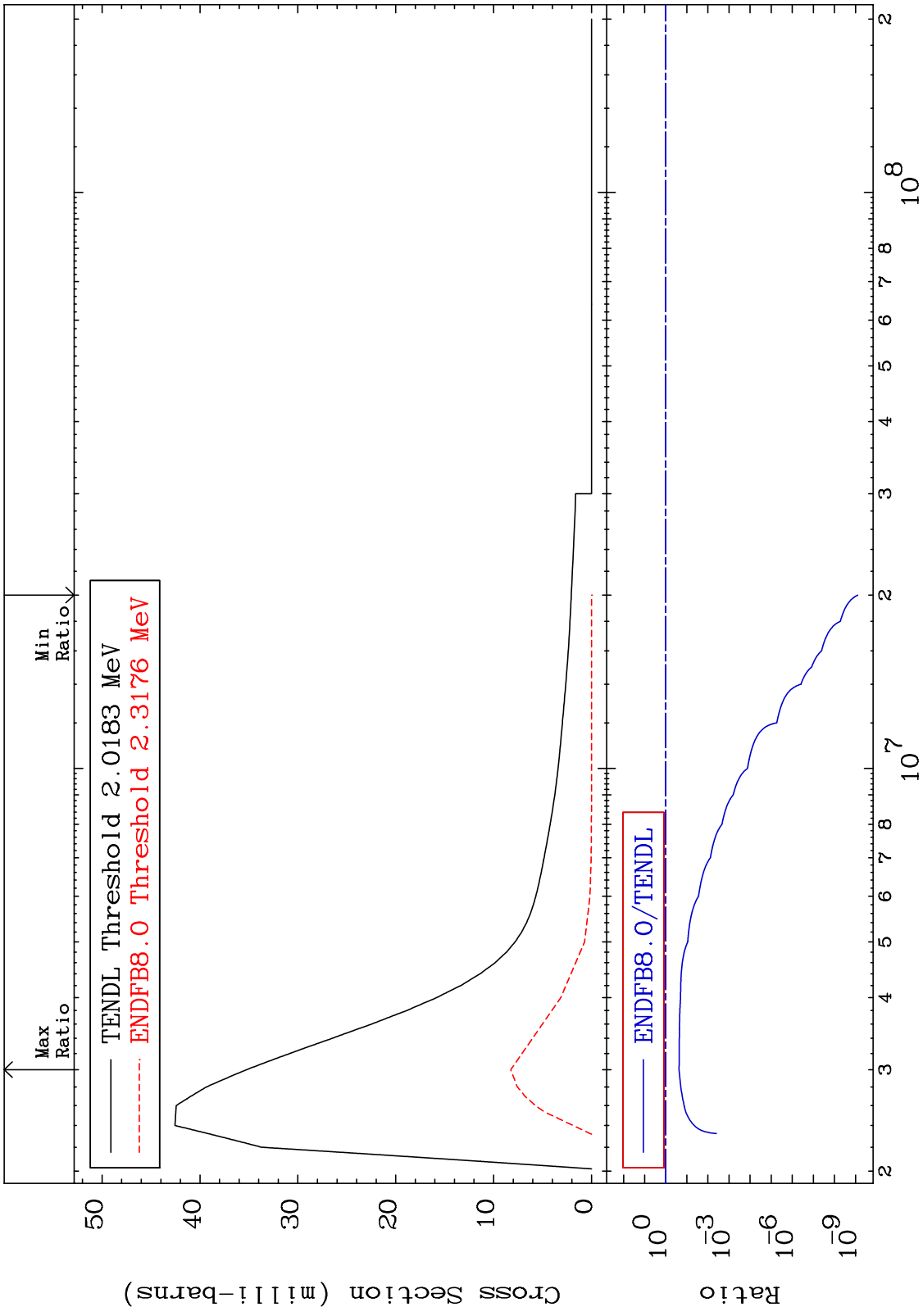
30 51-Sb-125

MAT 5137 MT= 72 (n,n') Level Cross Section 51-Sb-125 -100.0 To 121.8 %

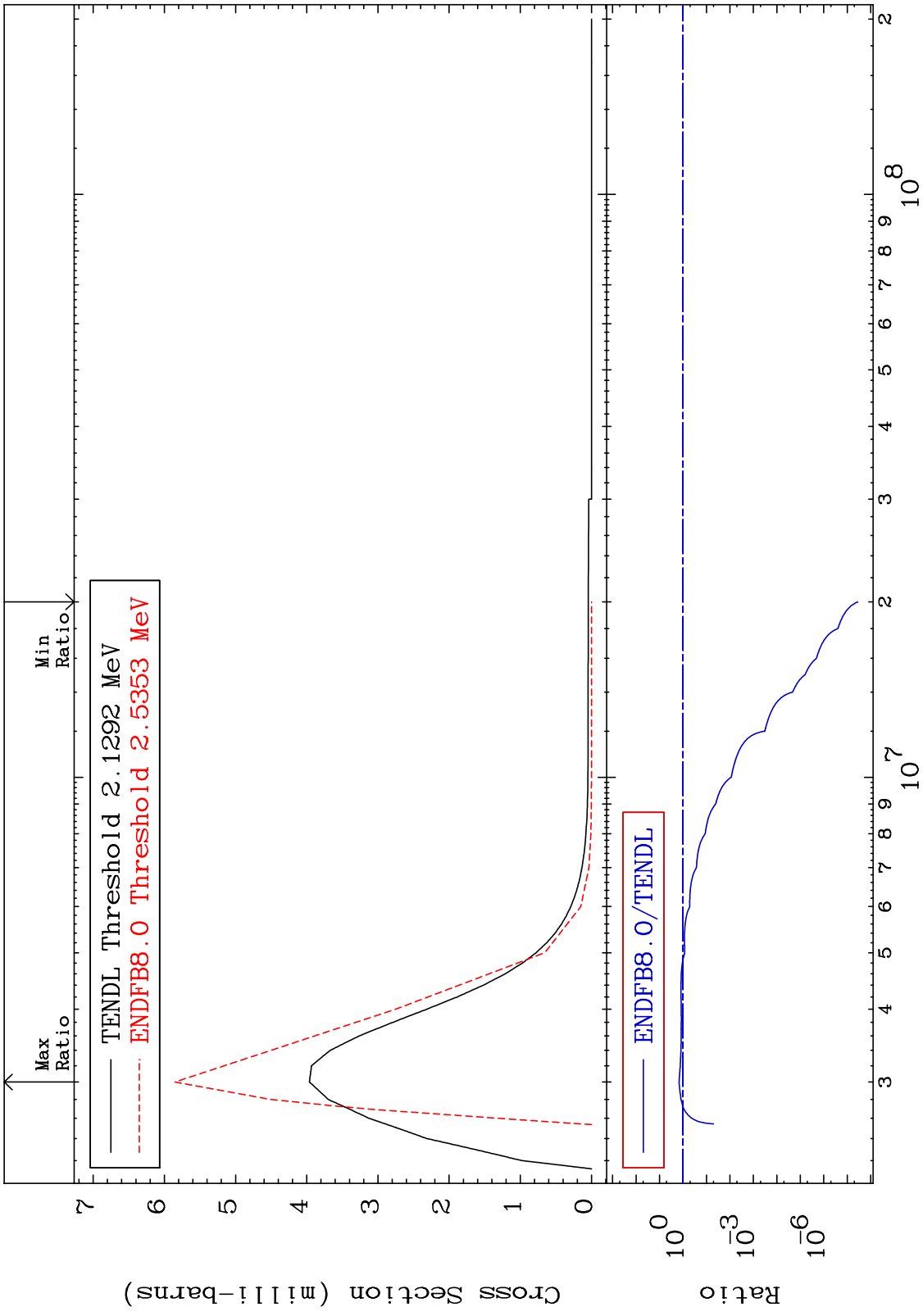




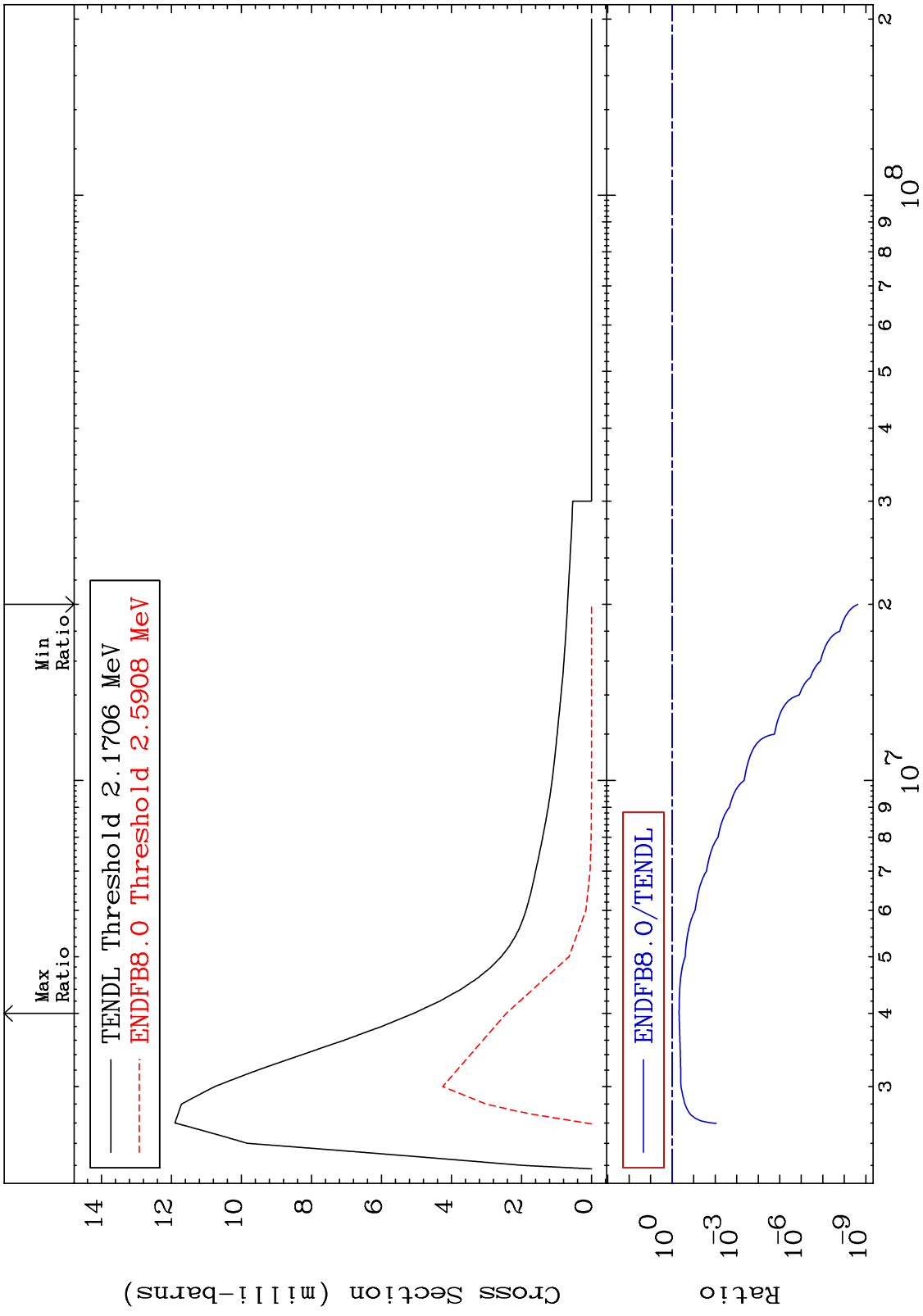
MAT 5137 MT= 73 (n,n') Level Cross Section 51-Sb-125 -100.0 To -76.60%



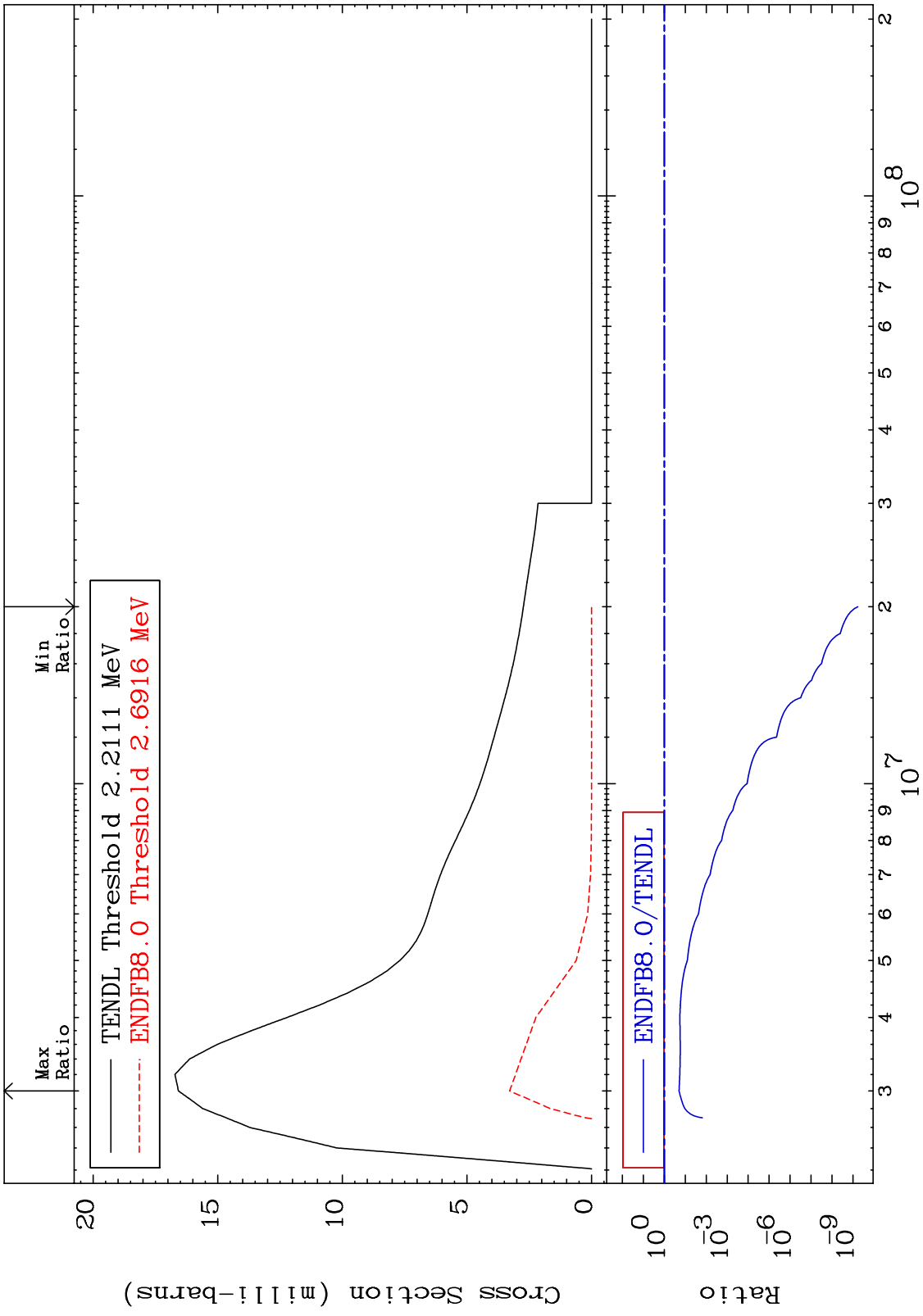
MAT 5137 MT= 74 (n,n') Level Cross Section 51-Sb-125 -100.0 To 47.64 %



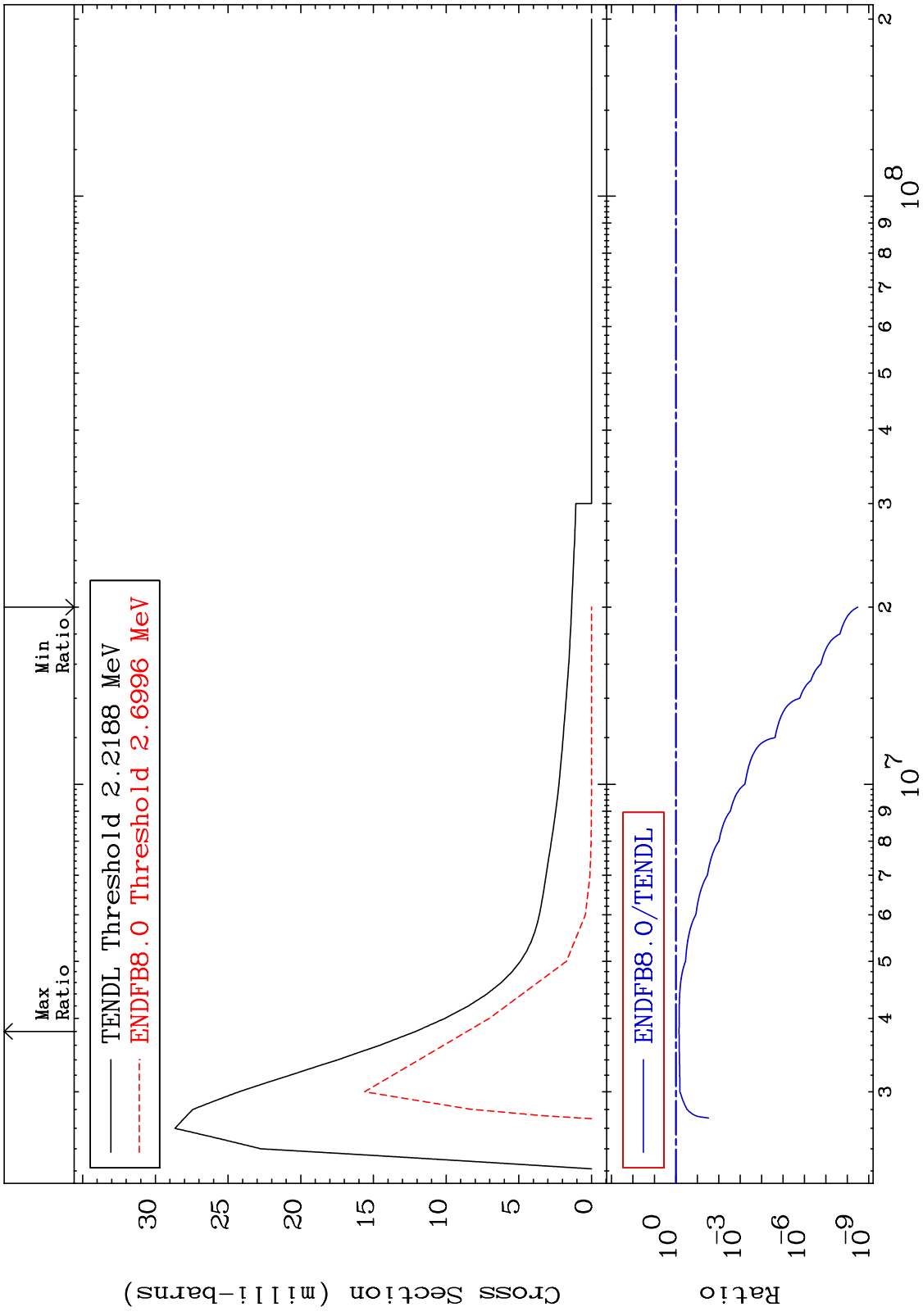
MAT 5137 MT= 75 (n,n') Level Cross Section 51-Sb-125 -100.0 To -52.04%



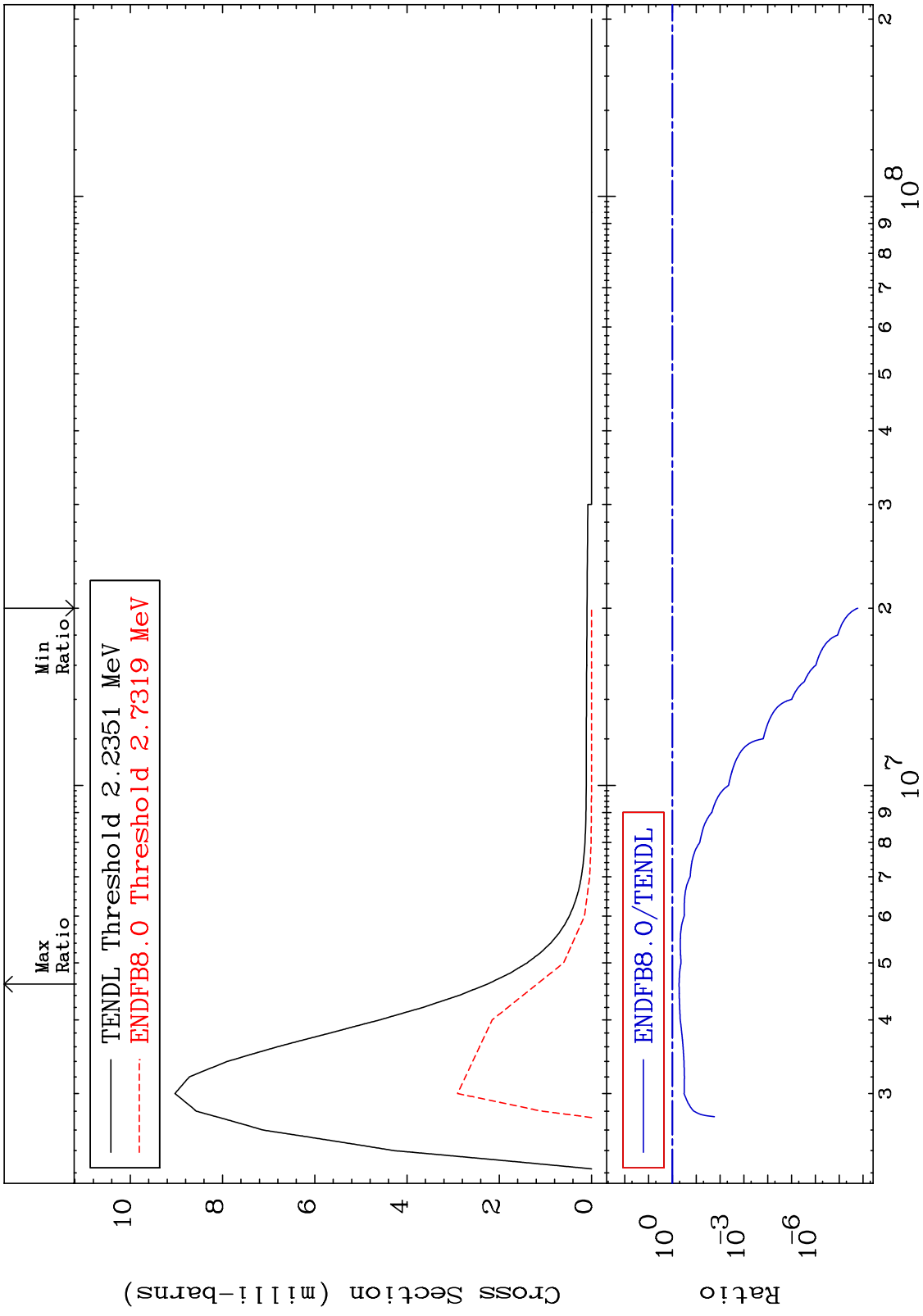
MAT 5137 MT= 76 (n,n') Level Cross Section 51-Sb-125 -100.0 To -80.17%



MAT 5137 MT= 77 (n,n') Level Cross Section 51-Sb-125 -100.0 To -29.21%



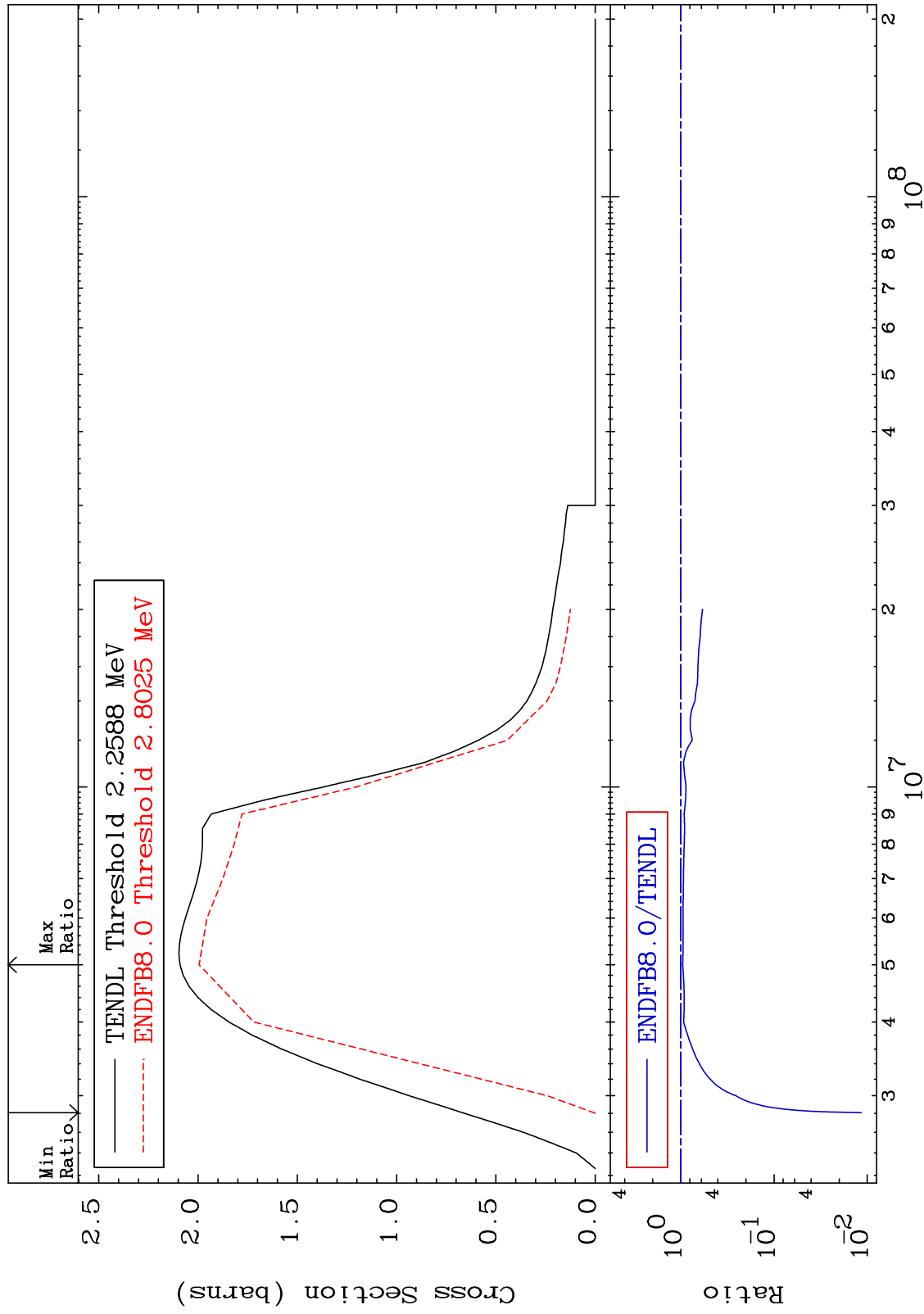
MAT 5137 MT= 78 (n,n') Level Cross Section 51-Sb-125 -100.0 To -47.58%



MAT 5137

(n,n') Continuum  
Cross Section

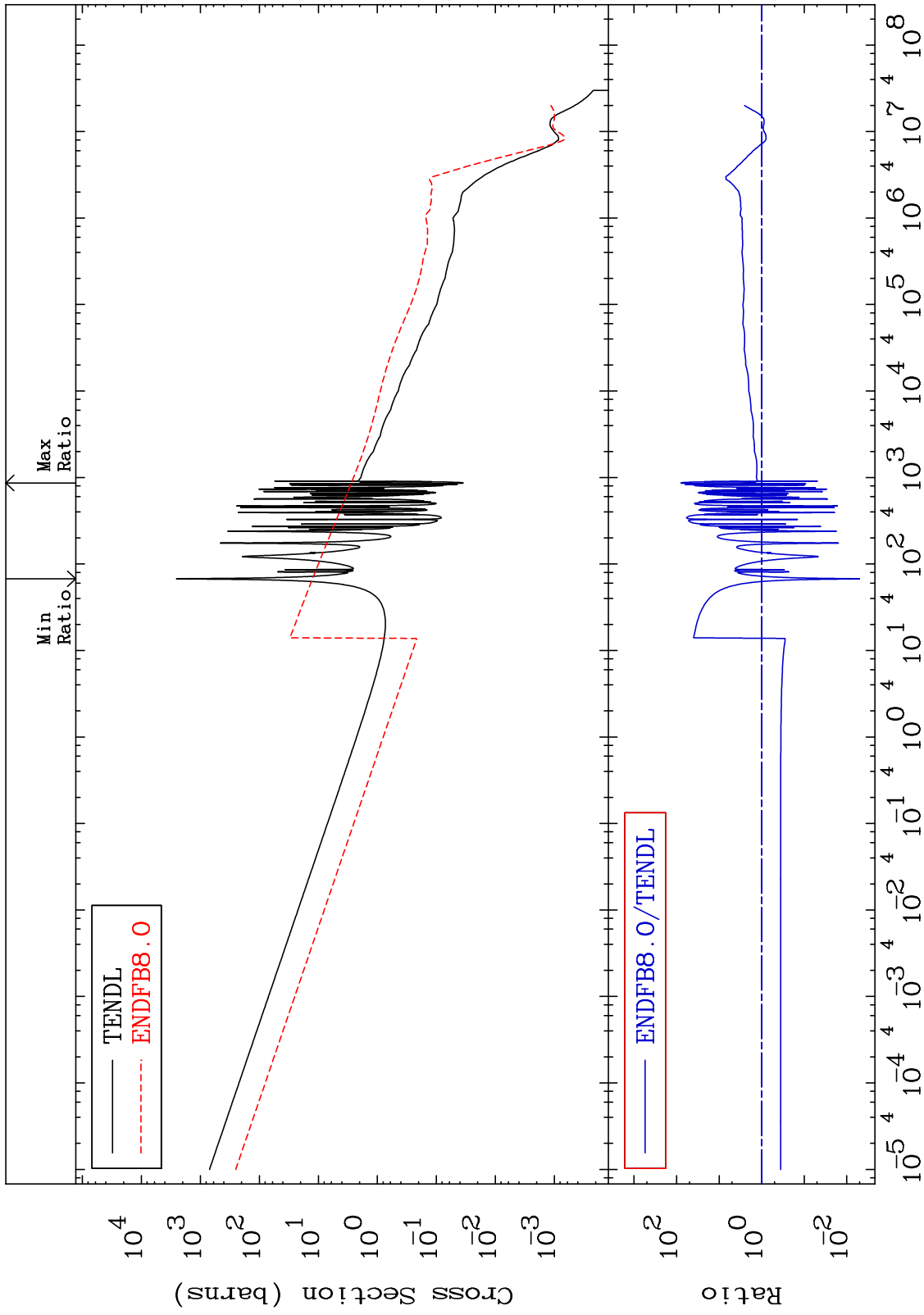
51-Sb-125  
-98.84 To -4.598%



MAT 5137

(n,  $\gamma$ )  
Cross Section

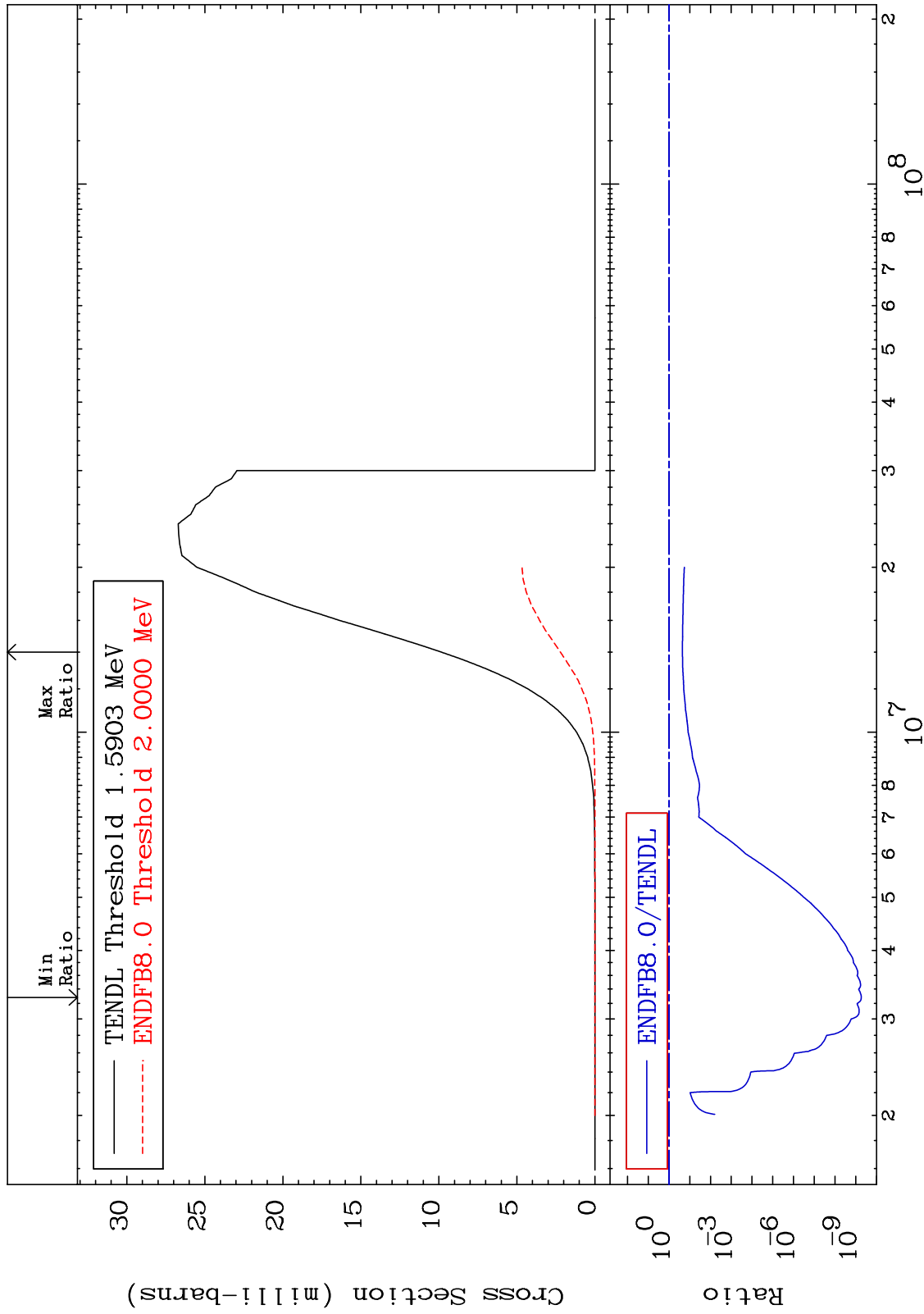
51-Sb-125  
-99.50 To 7858. %





MAT 5137

(n,p) Cross Section  
51-Sb-125  
-100.0 To -77.48%

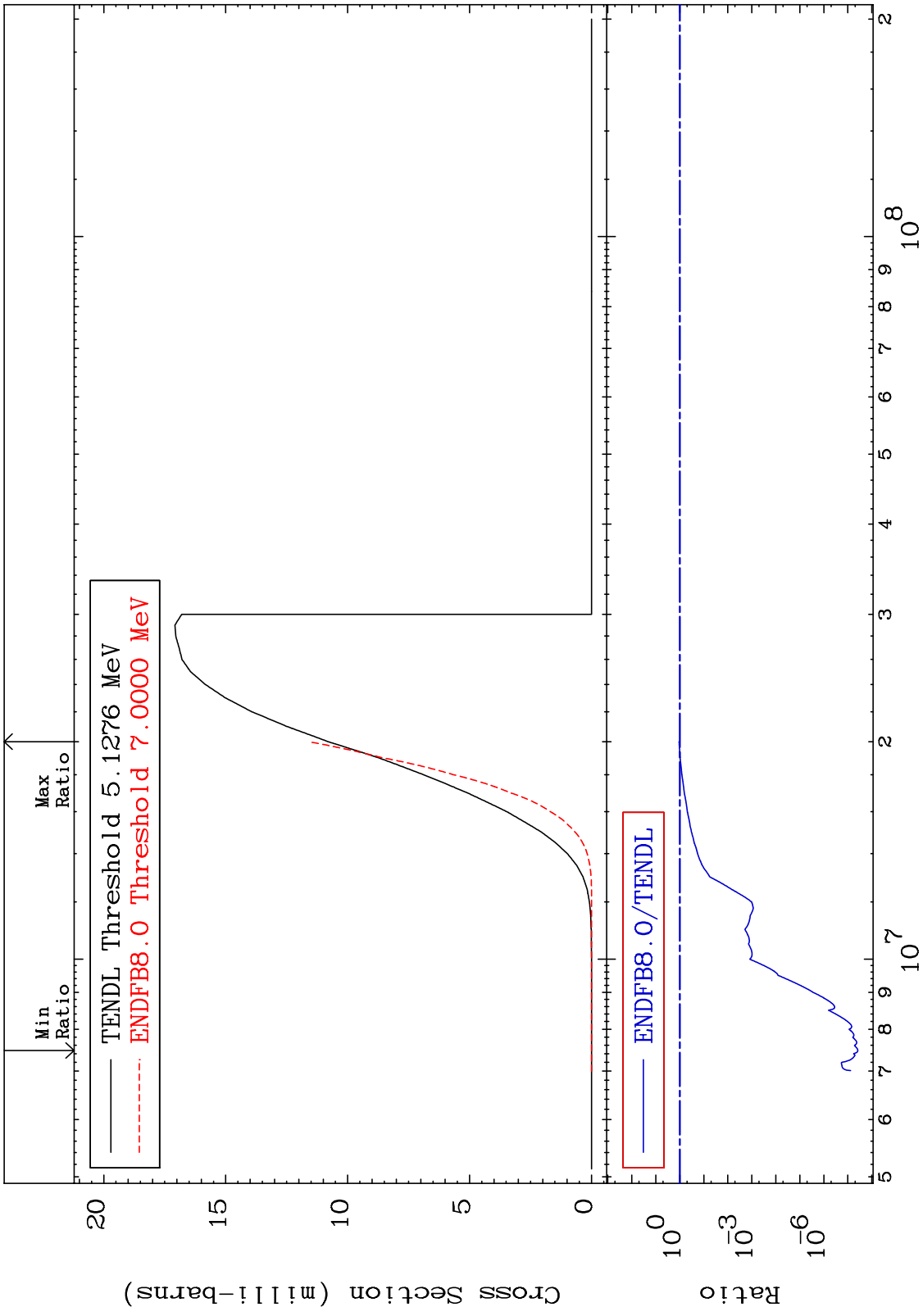


40

Incident Energy (eV)

51-Sb-125

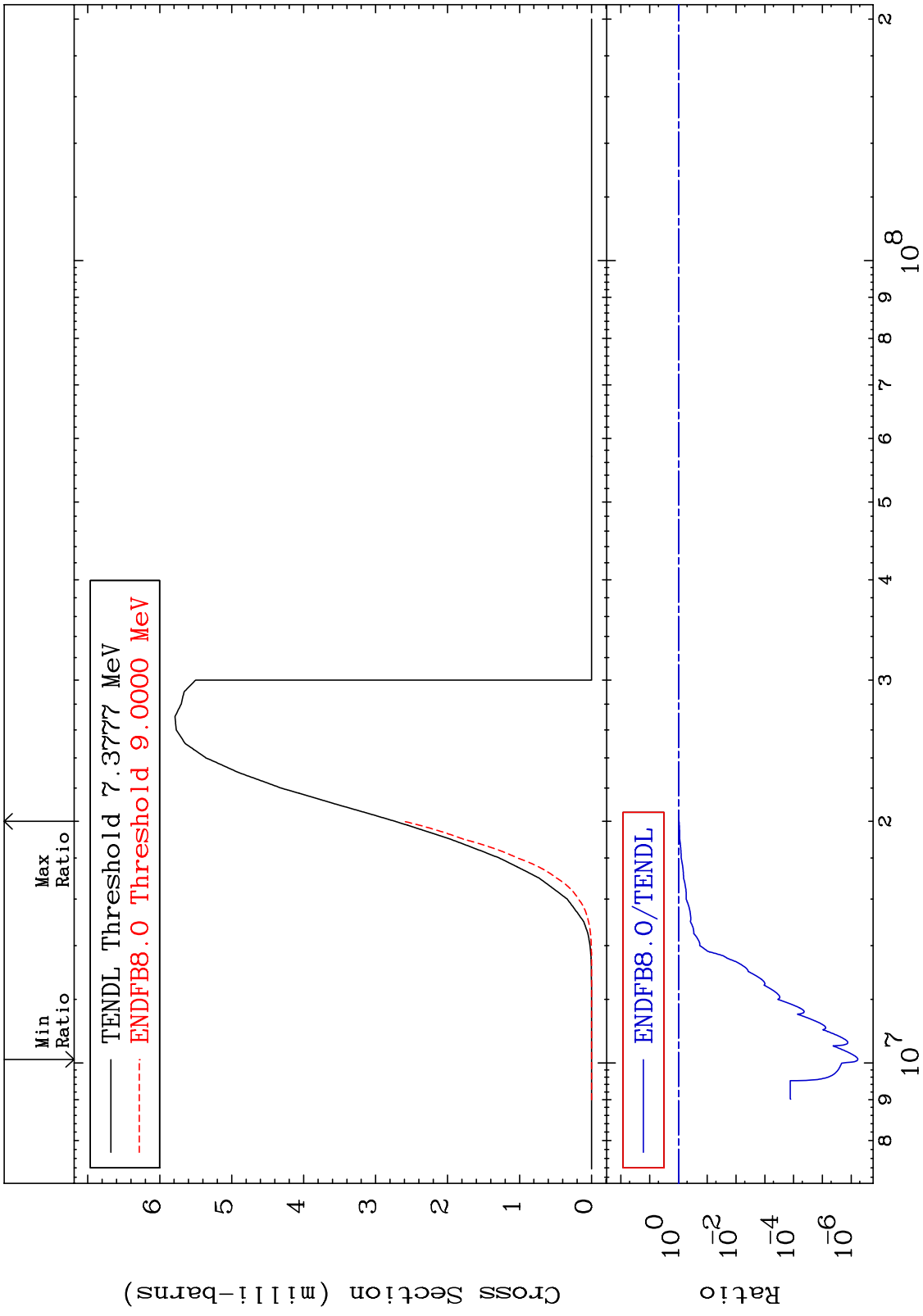
MAT 5137 (n,d) Cross Section 51-Sb-125 -100.0 To 7.455 %



41 Incident Energy (eV) 51-Sb-125

MAT 5137 51-Sb-125  
-100.0 To -4.604%

(n,t)  
 Cross Section



MAT 5137

(n,  $\alpha$ )

51-Sb-125

-100.0 To 9999. %

Cross Section

Min Ratio

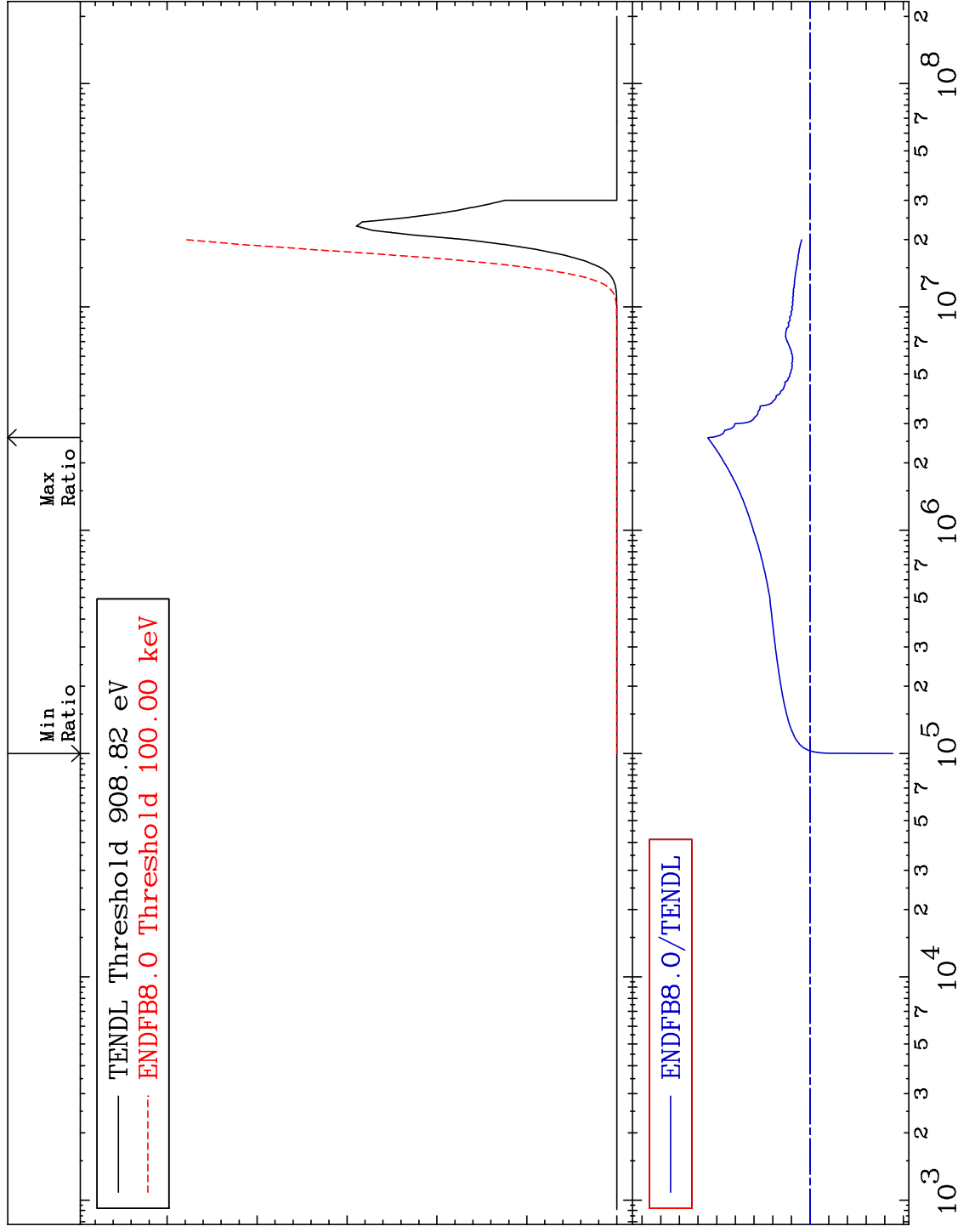
Max Ratio

TENDL Threshold 908.82 eV  
ENDFB8.0 Threshold 100.00 keV

Cross Section (milli-barns)

ENDFB8.0/TENDL

Ratio  
 $10^4$   
 $10^0$   
 $10^{-4}$



43

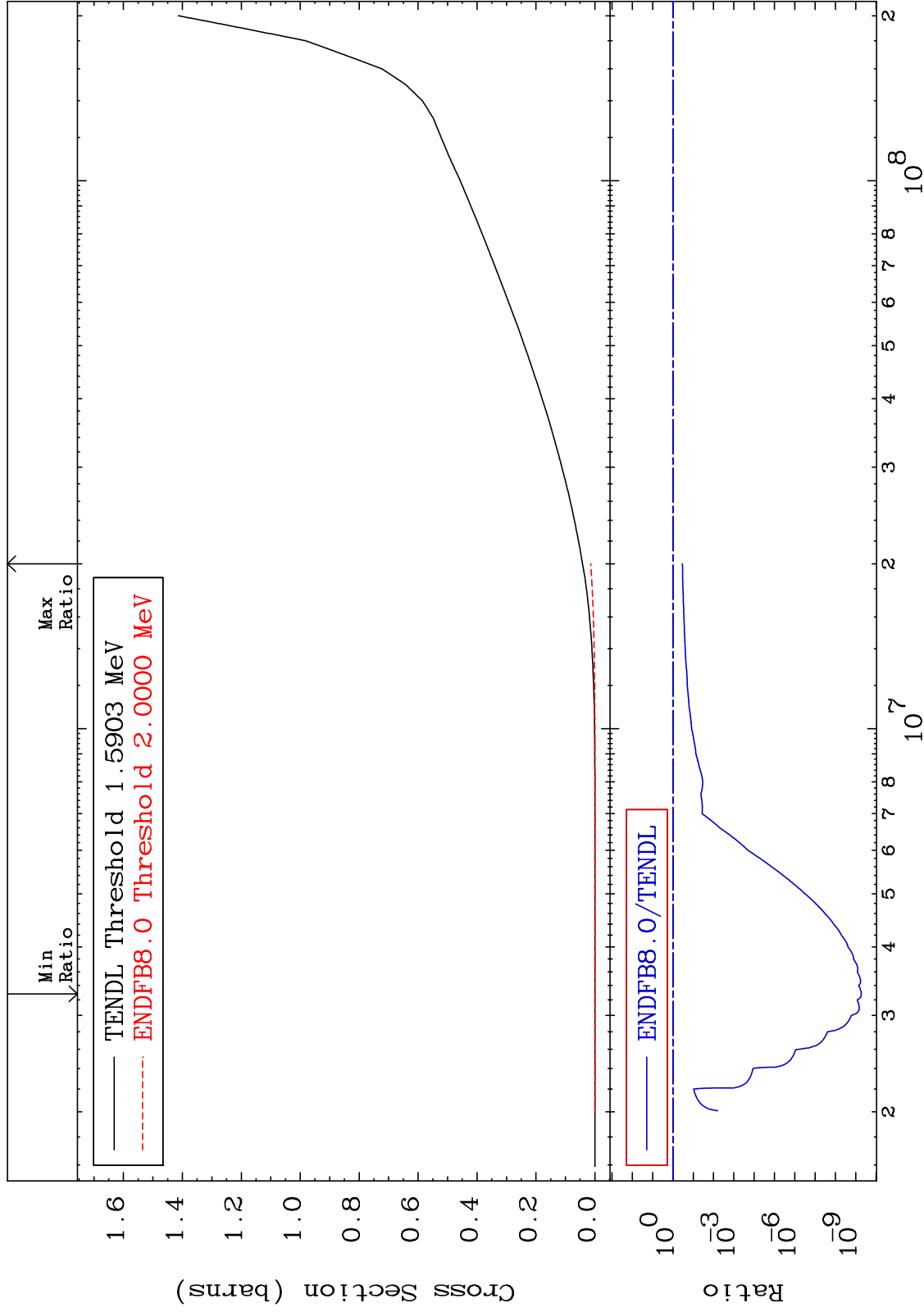
Incident Energy (eV)

51-Sb-125

MAT 5137

Hydrogen Production  
Cross Section

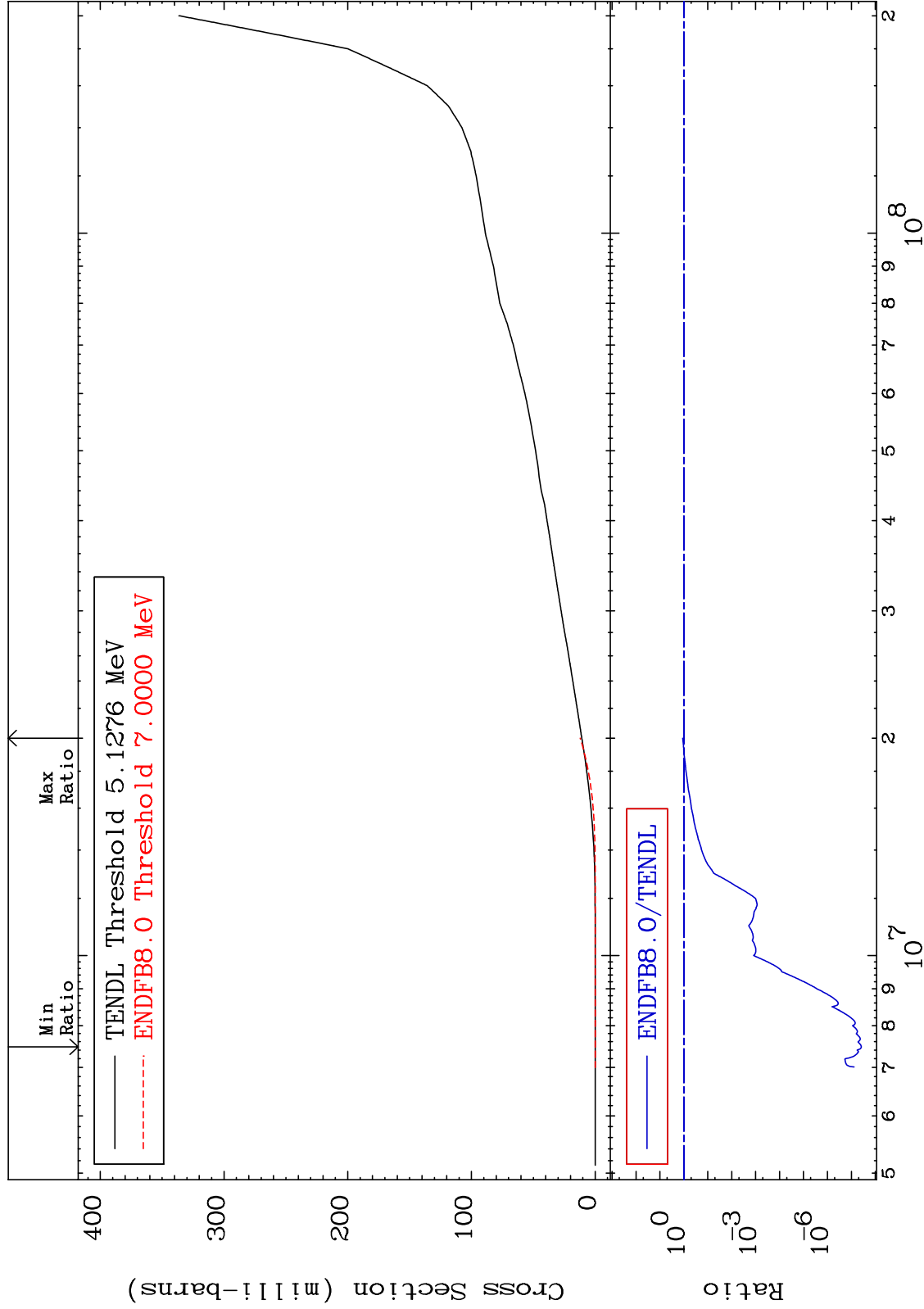
51-Sb-125  
-100.0 To -66.17%



MAT 5137

Deuterium Production  
Cross Section

51-Sb-125  
-100.0 To 12.25 %



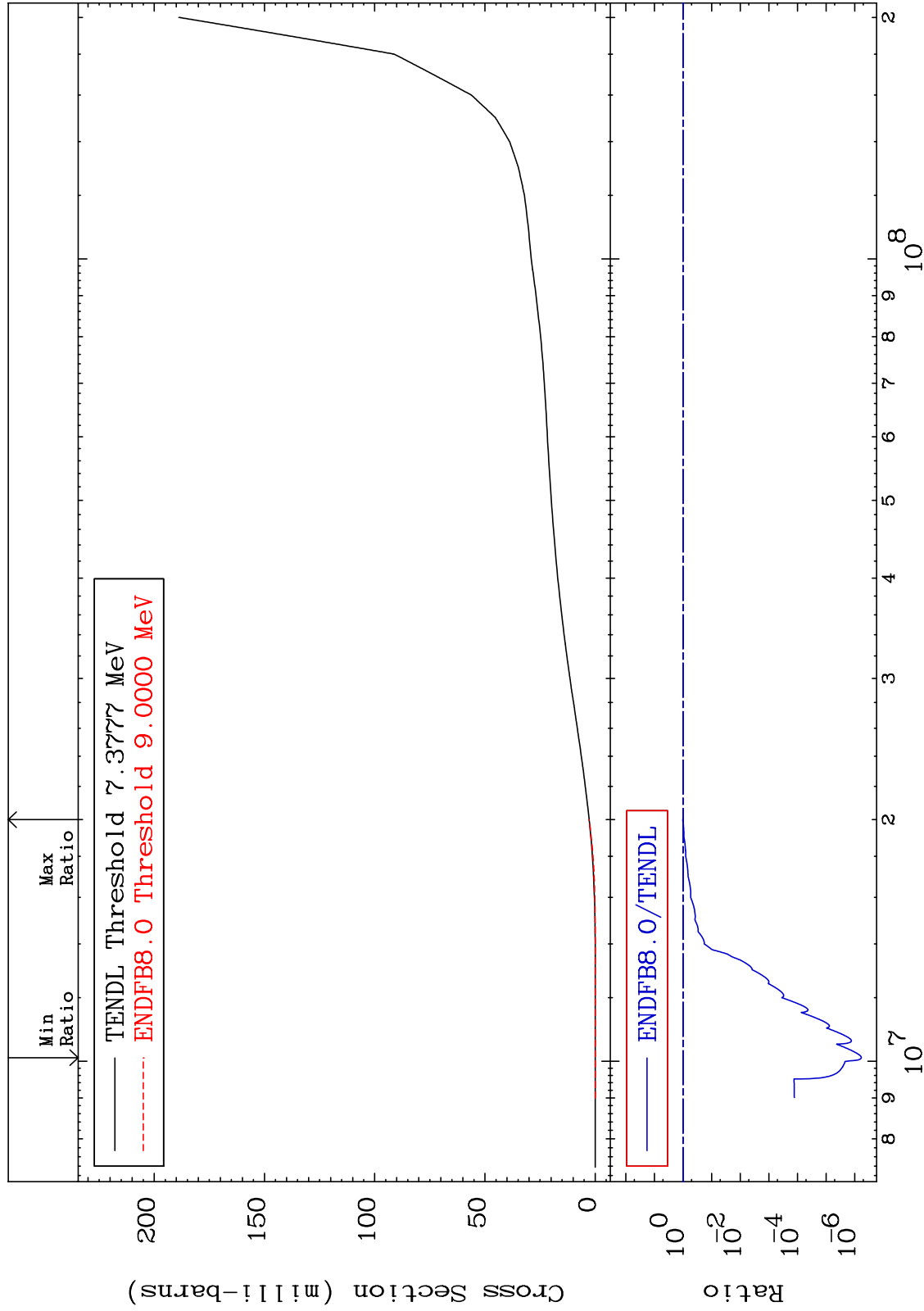
45

51-Sb-125

MAT 5137

Tritium Production  
Cross Section

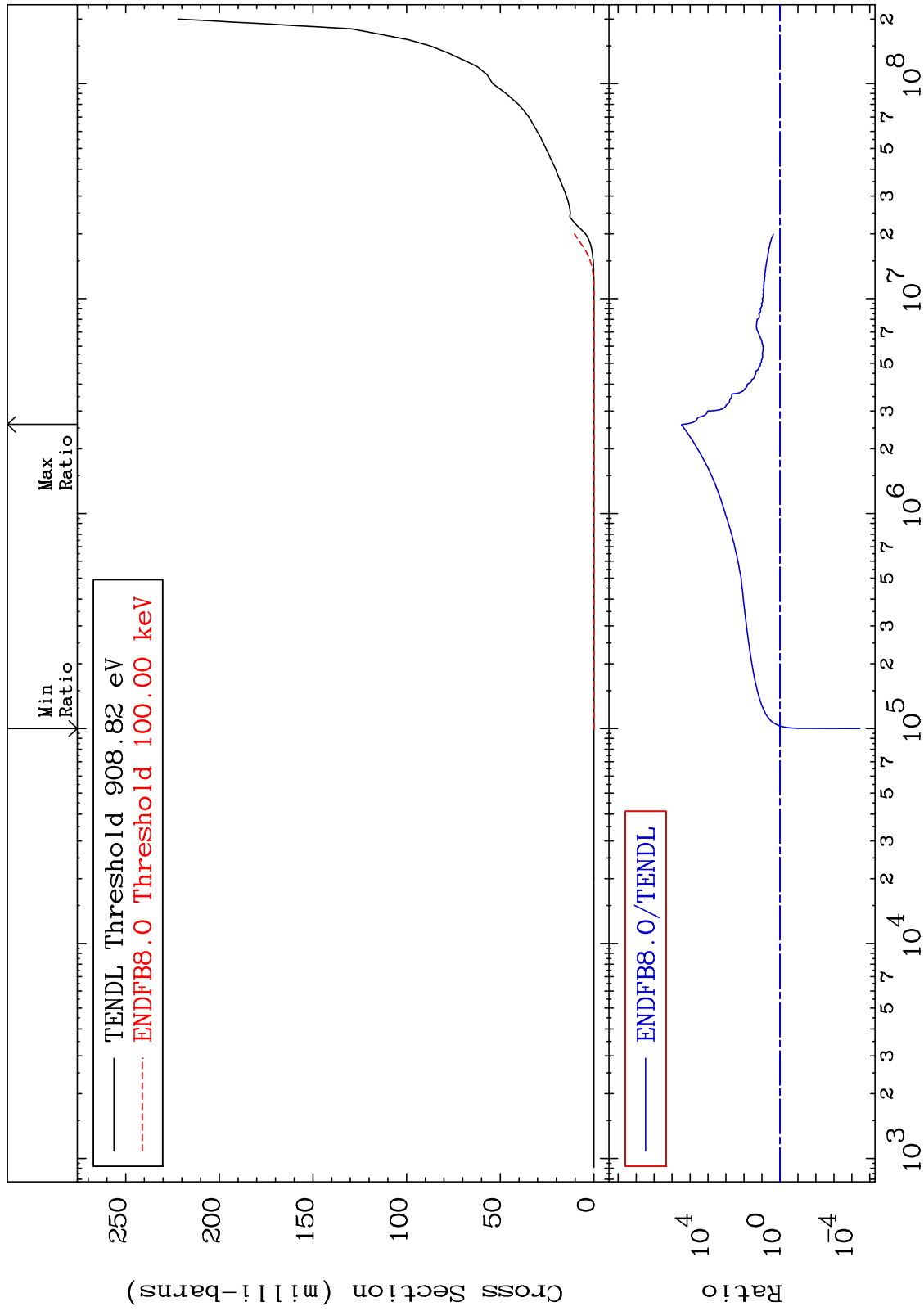
51-Sb-125  
-100.0 To 2.464 %



MAT 5137

He-4 Production  
Cross Section

51-Sb-125  
-100.0 To 9999. %



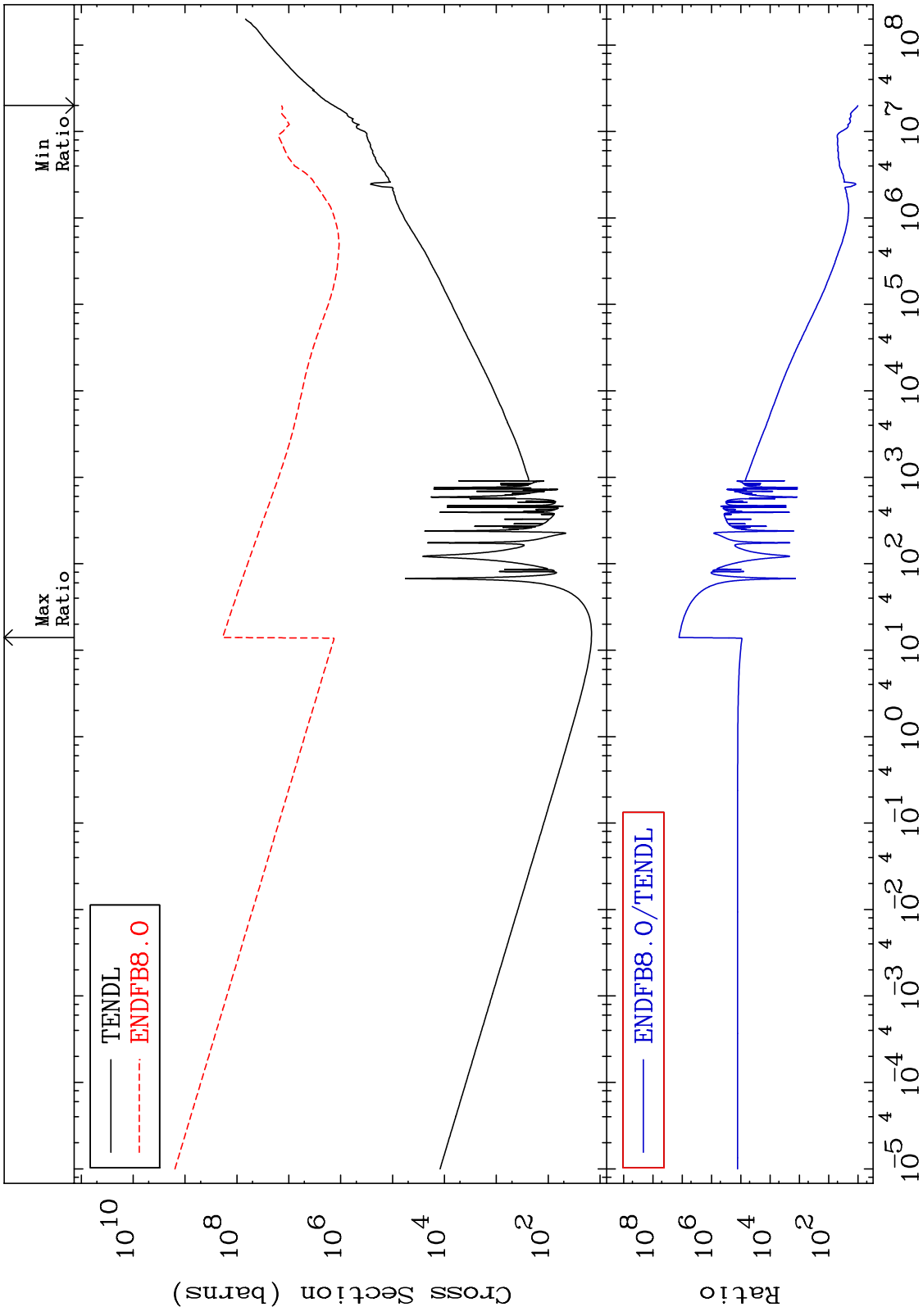
47

Incident Energy (eV)

51-Sb-125



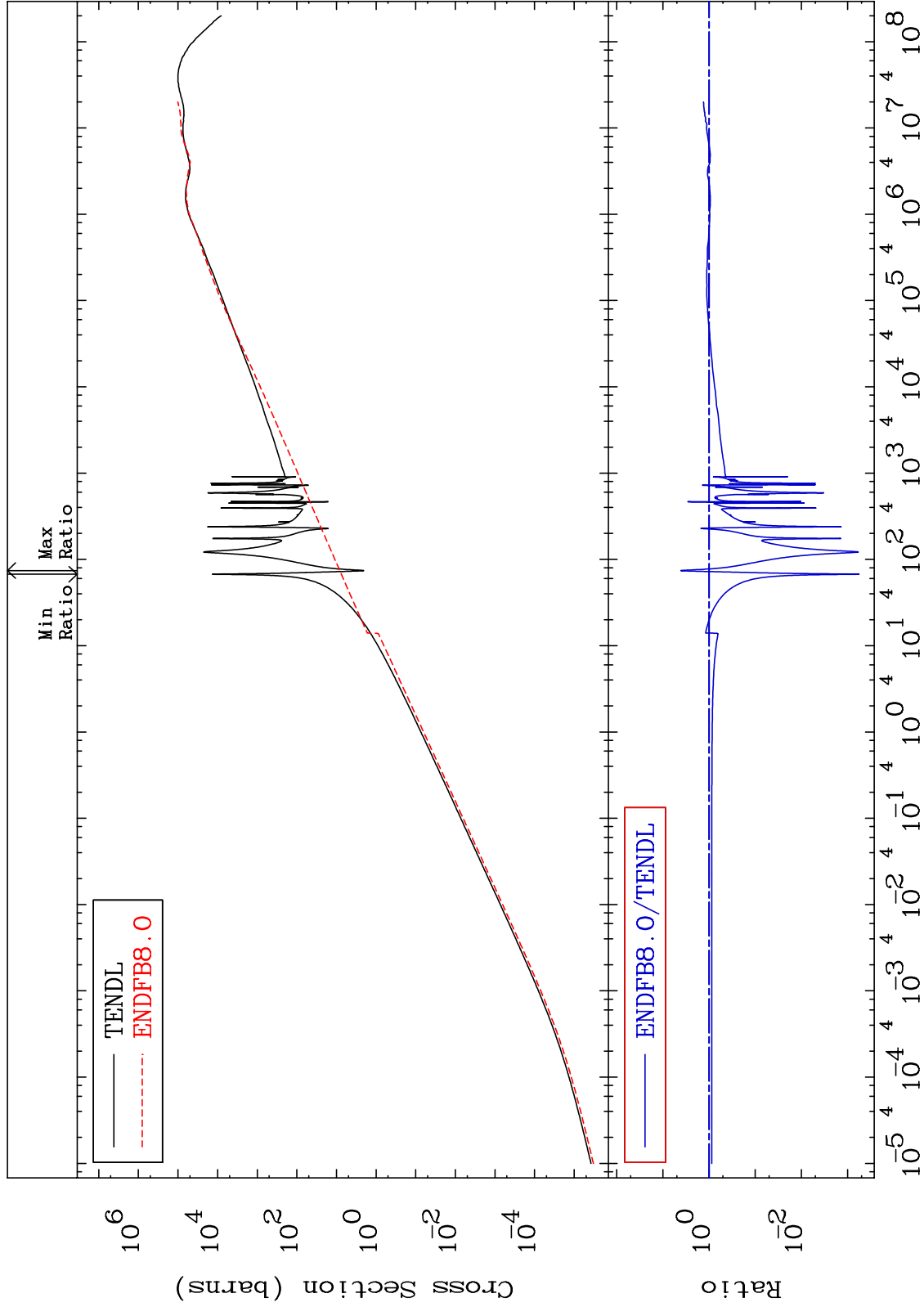
MAT 5137      Kerma total (eV-barns)      51-Sb-125  
 Cross Section      908.6 To 9999. %



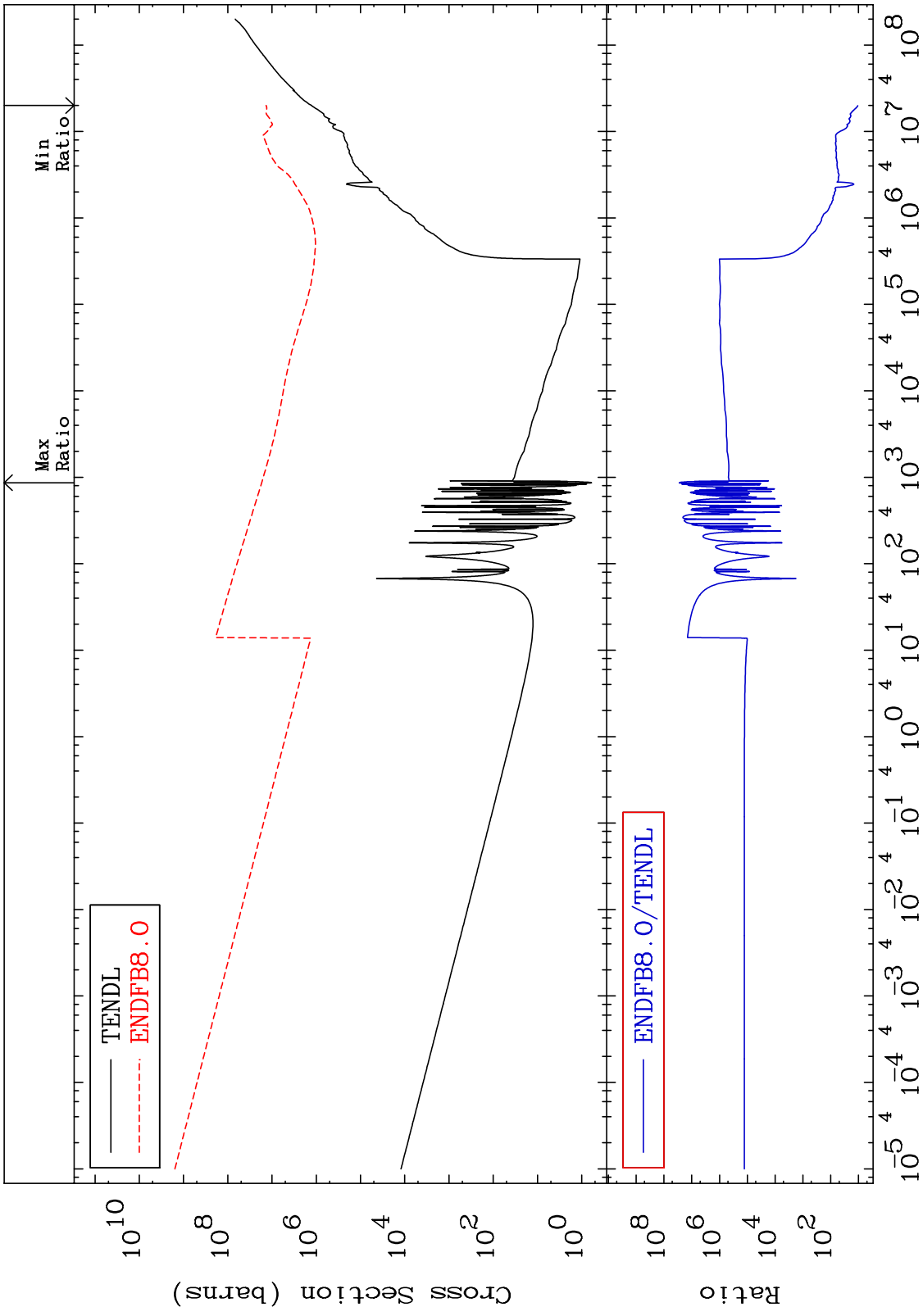
MAT 5137

Kerma elastic  
Cross Section

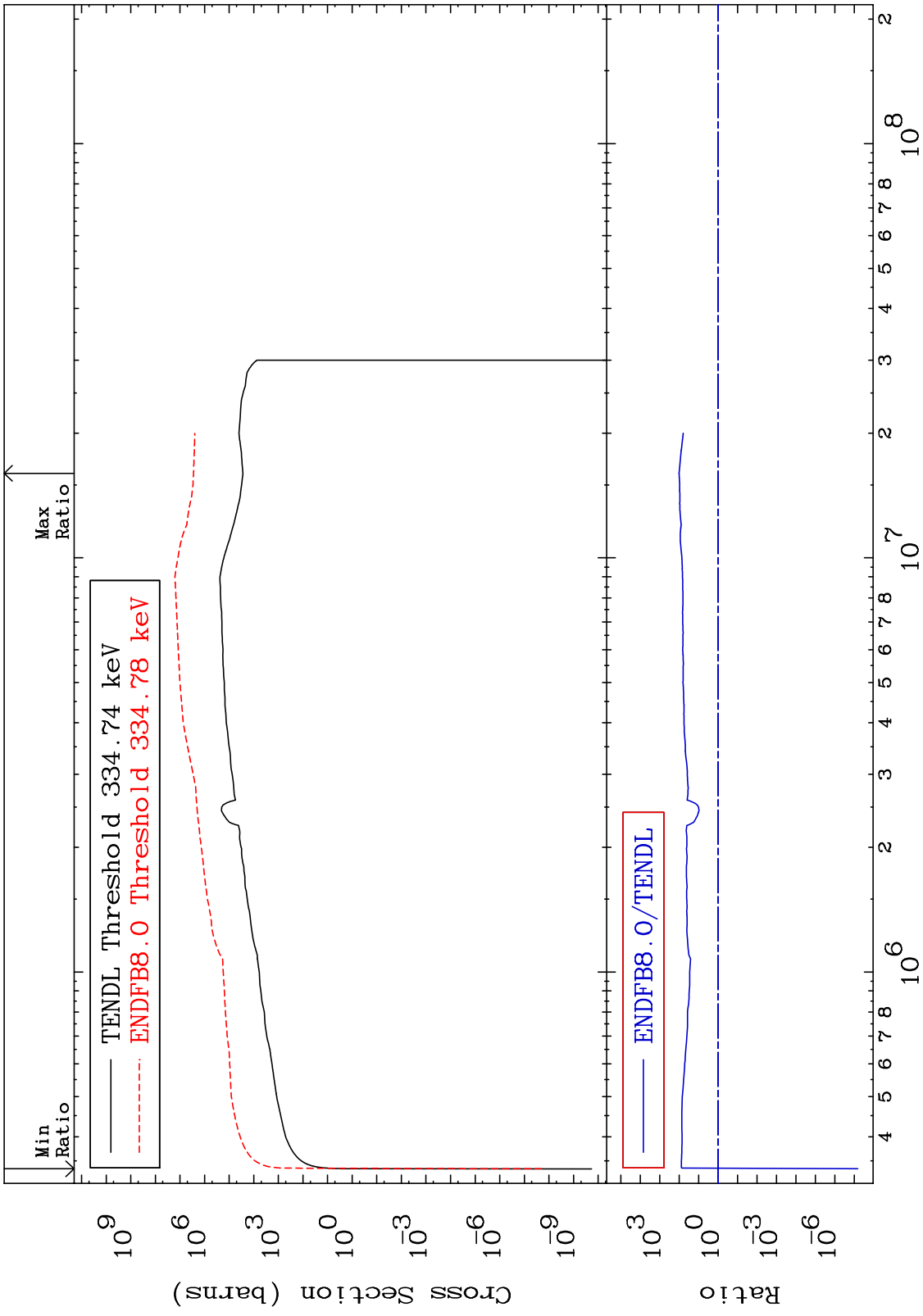
51-Sb-125  
-99.94 To 312.7 %



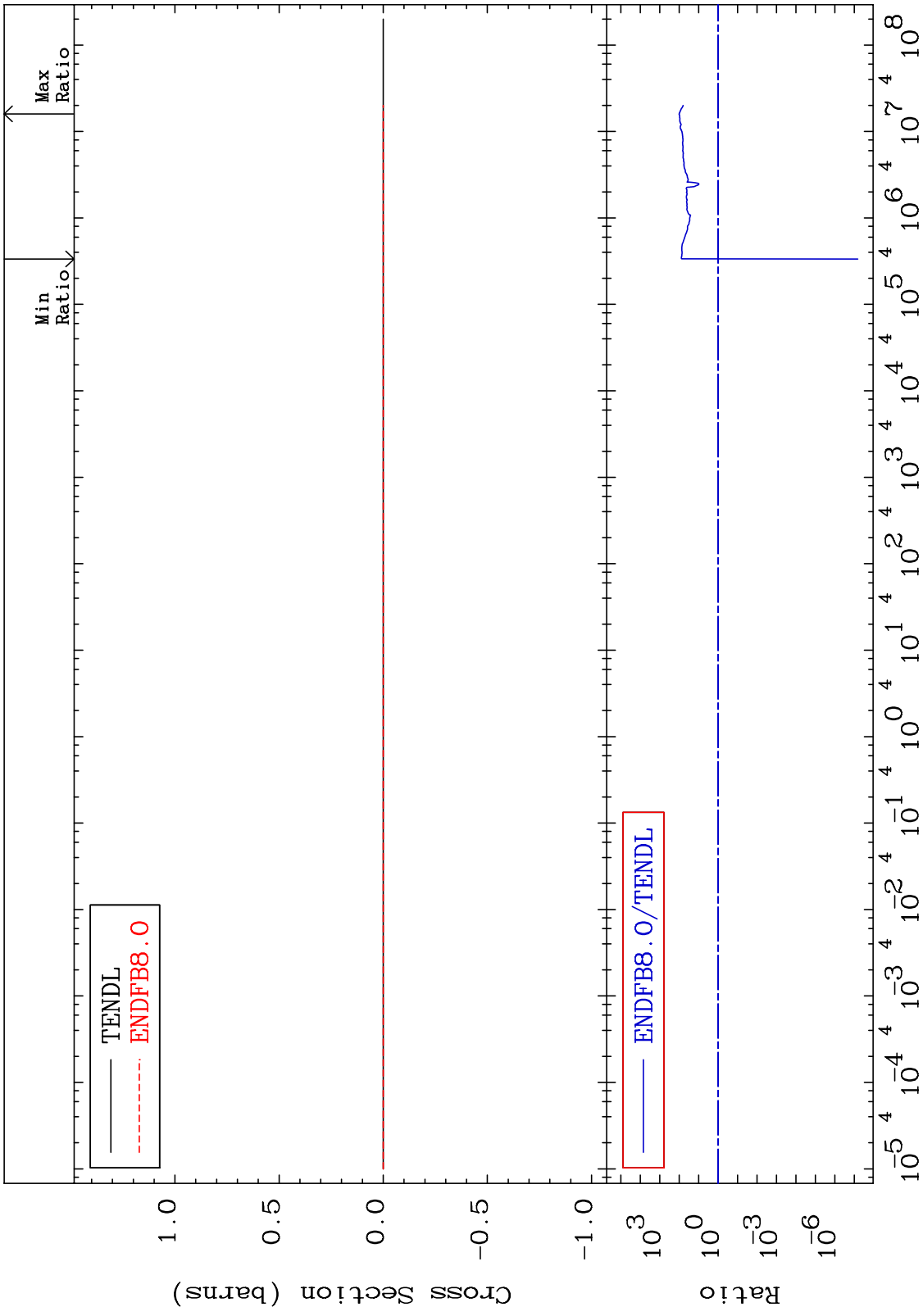
MAT 5137      Kerma non-elastic (all but mt2)      51-Sb-125  
 Cross Section      961.0      To 9999. %



MAT 5137 Kerma inelastic (mt51-91) 51-Sb-125  
 -100.0 To 9999. %



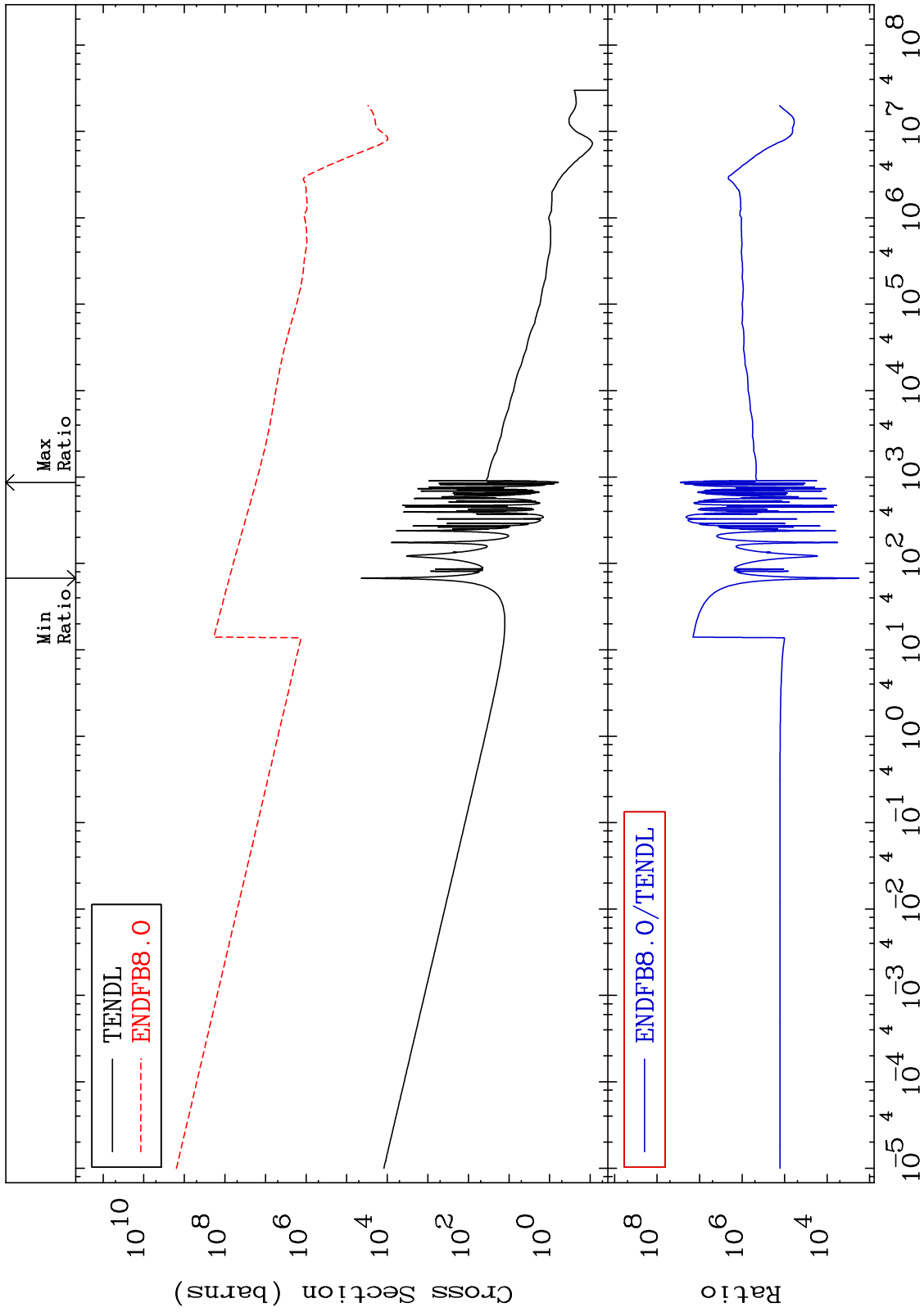
MAT 5137 Kerma fission (mt18 or mt19-20-21-38) 51-Sb-125  
 Cross Section -100.0 To 9999. %



MAT 5137

Kerma capture (mt102)  
Cross Section

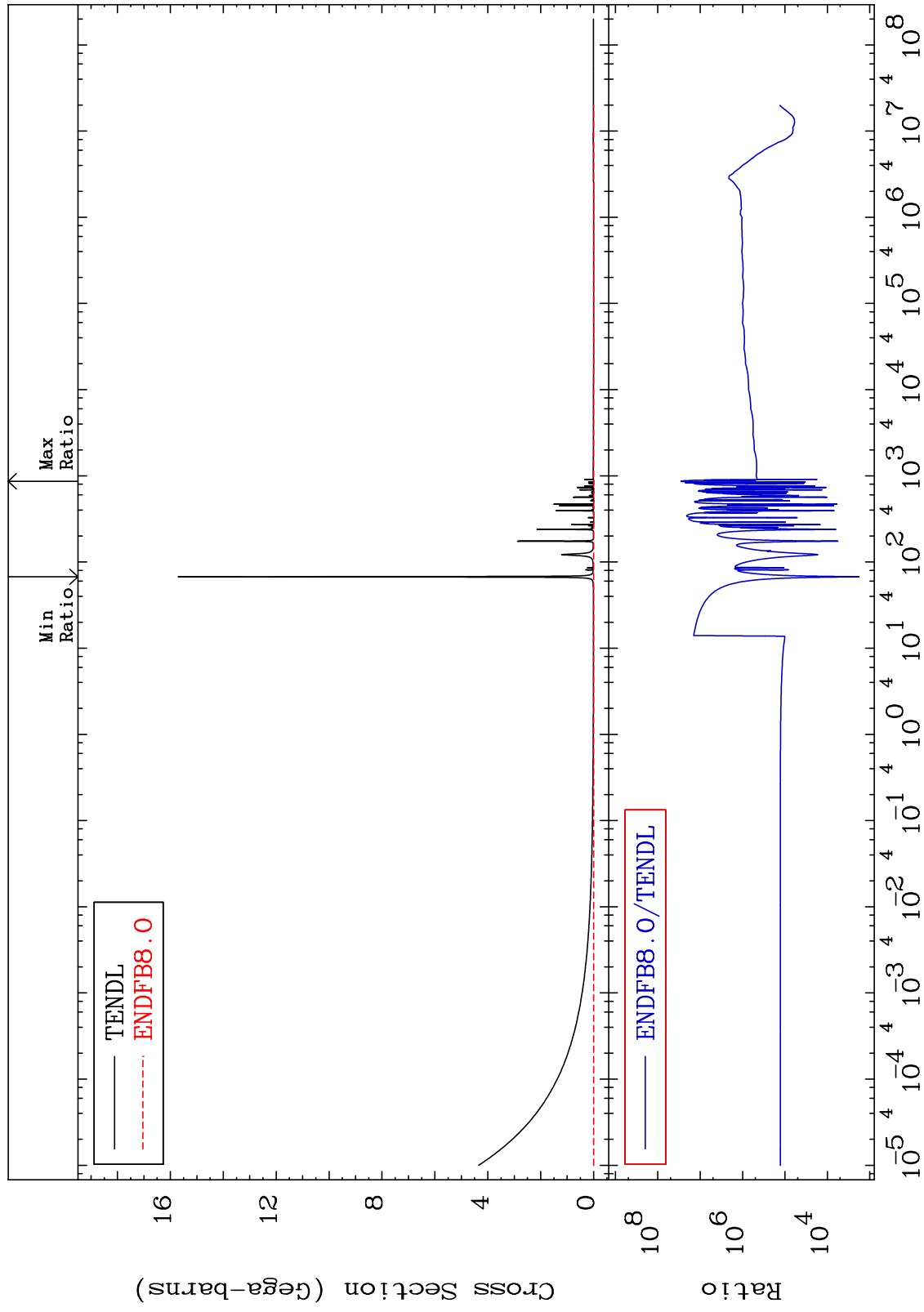
51-Sb-125  
9999. To 9999. %



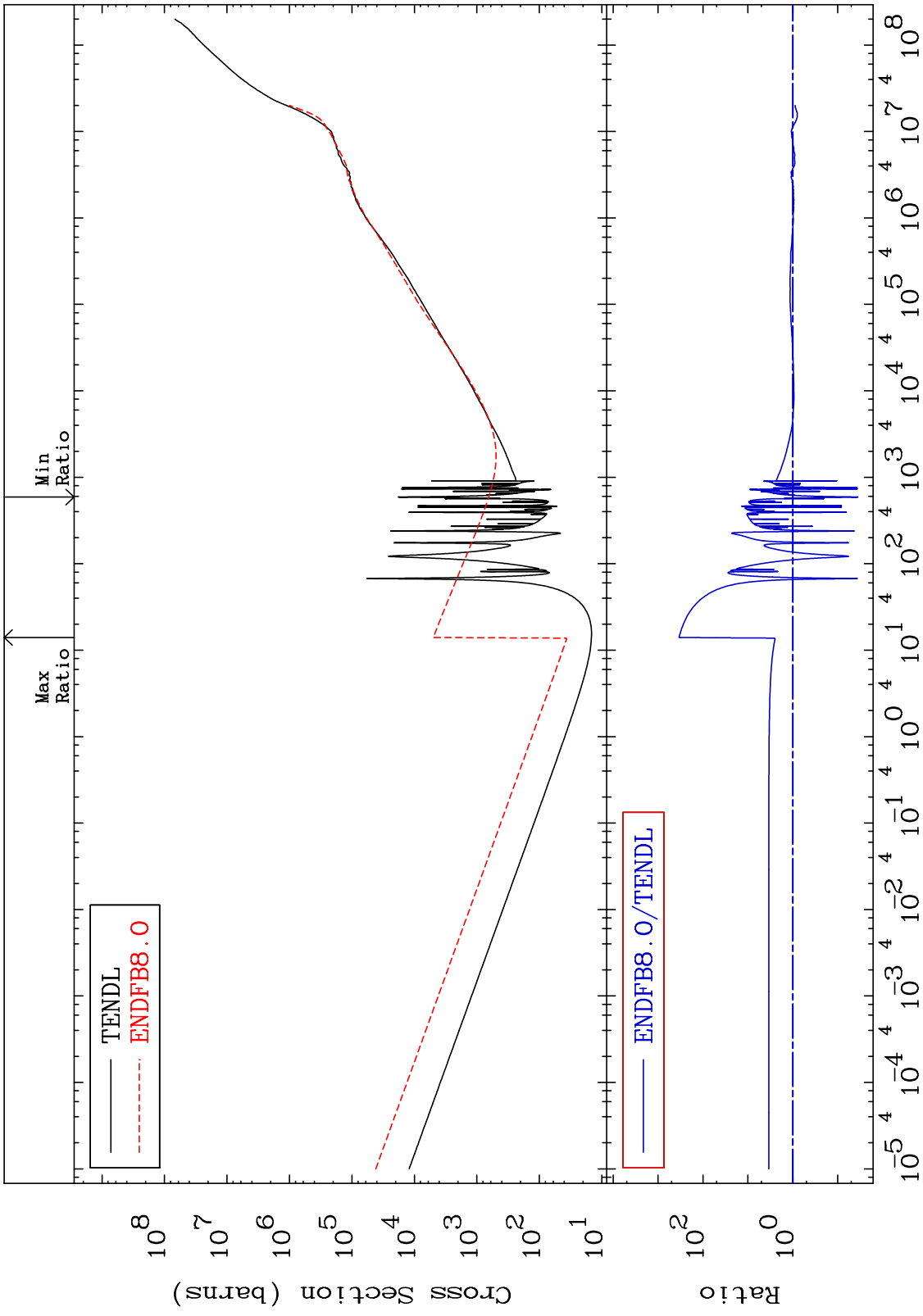
MAT 5137

Total photon (eV-barns)  
Cross Section

51-Sb-125  
9999. To 9999. %



MAT 5137      Total kinematic kerma (high limit)      51-Sb-125  
 Cross Section      -96.44 To 9999. %

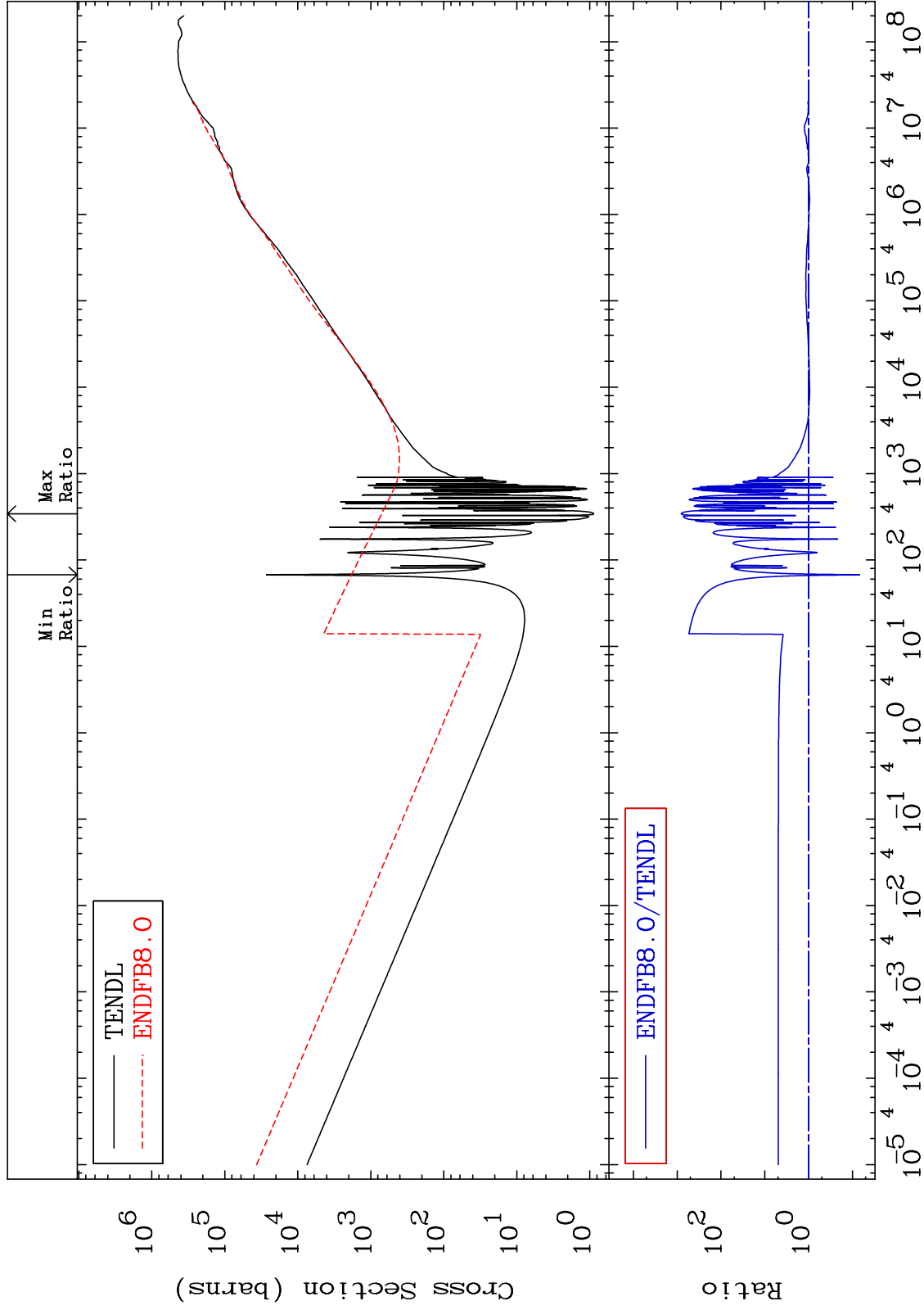




MAT 5137

Dpa total (eV-barns)  
Cross Section

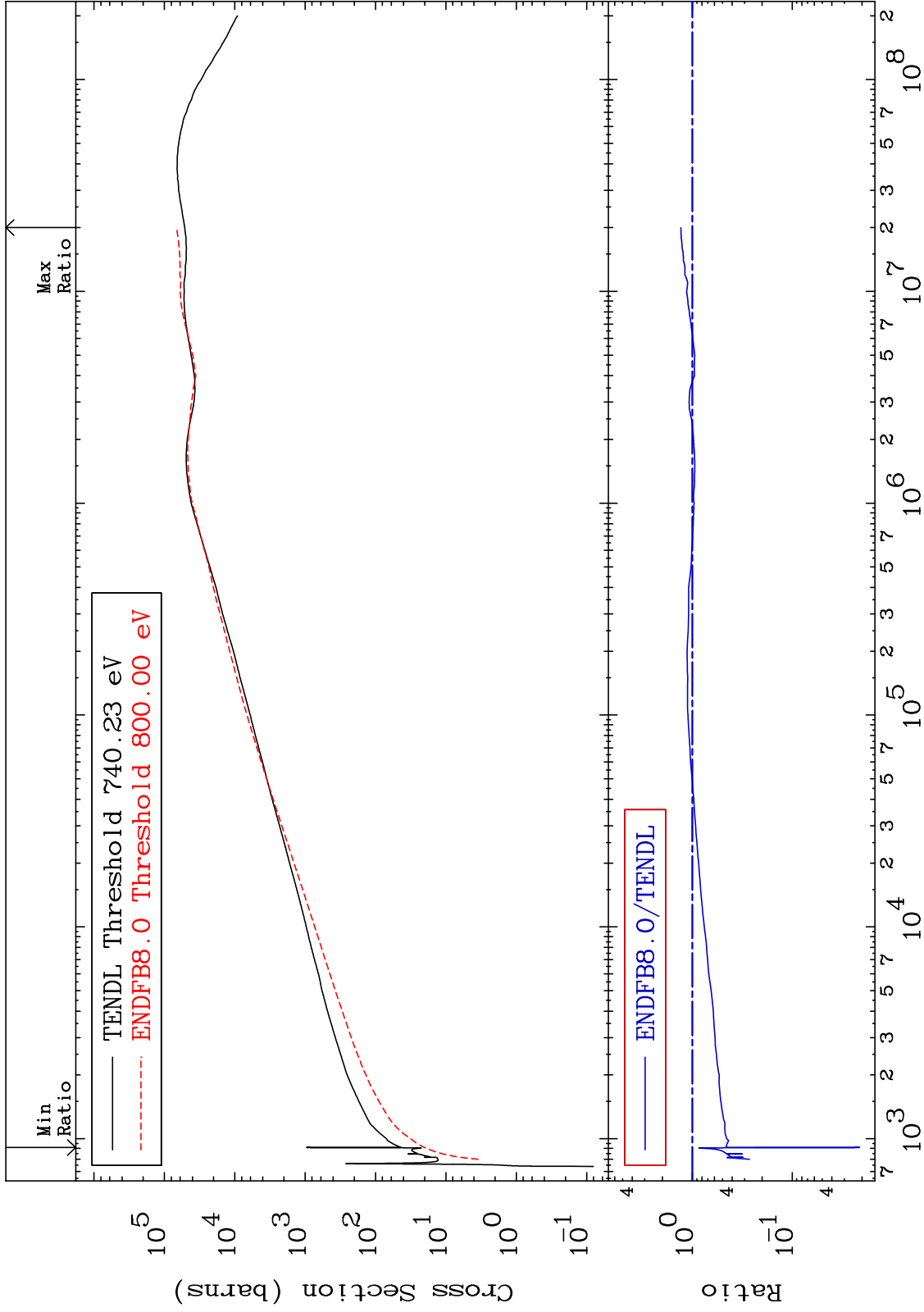
51-Sb-125  
-93.20 To 9999. %



MAT 5137

Dpa elastic (mt2)  
Cross Section

51-Sb-125  
-97.89 To 30.49 %

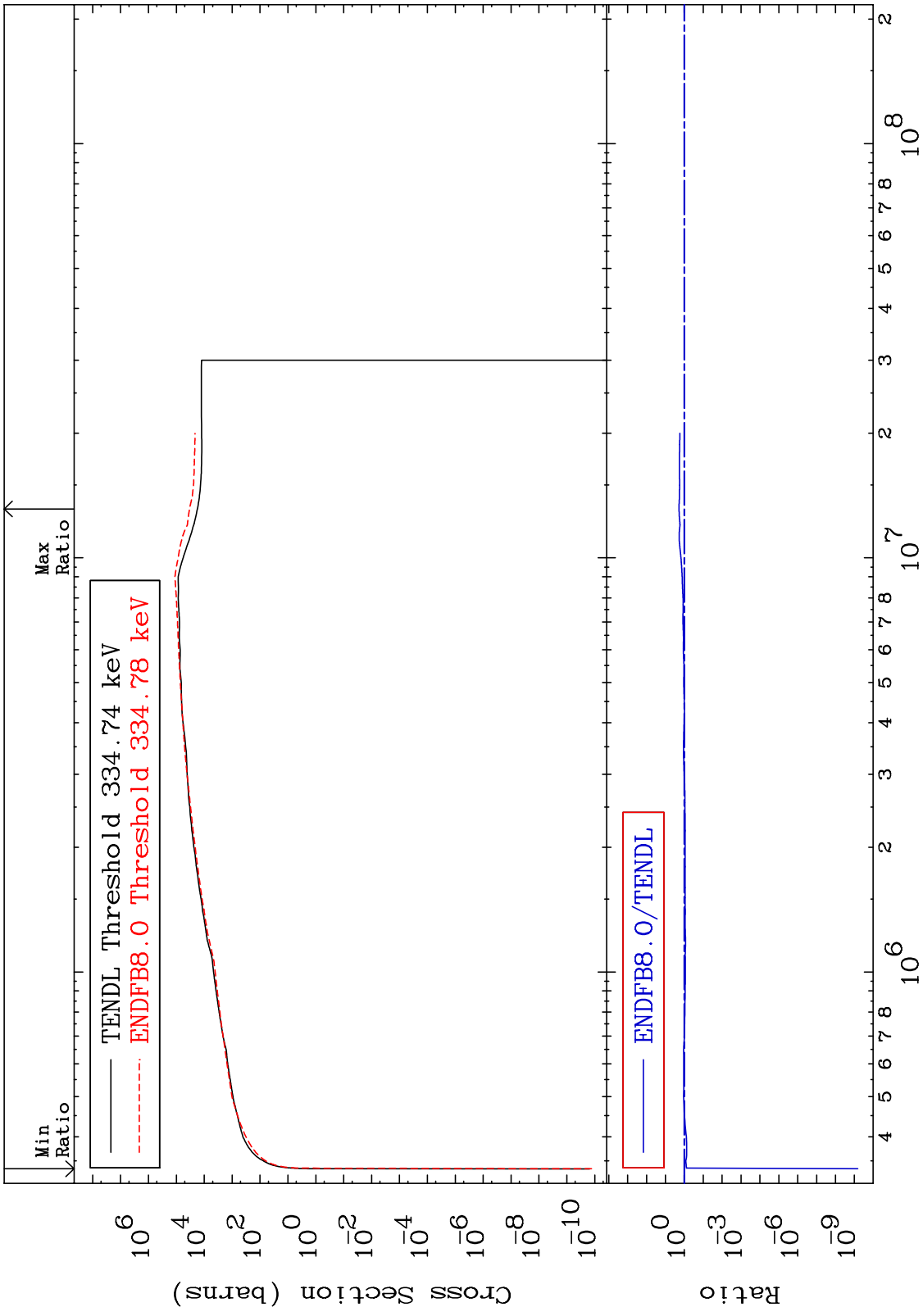


57

Incident Energy (eV)

51-Sb-125

MAT 5137      Dpa inelastic (mt51-91)      51-Sb-125  
 Cross Section      -100.0 To 90.42 %



MAT 5137

Dpa disappearance (mt102 -120)  
Cross Section

51-Sb-125  
-93.20 To 9999. %

