

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

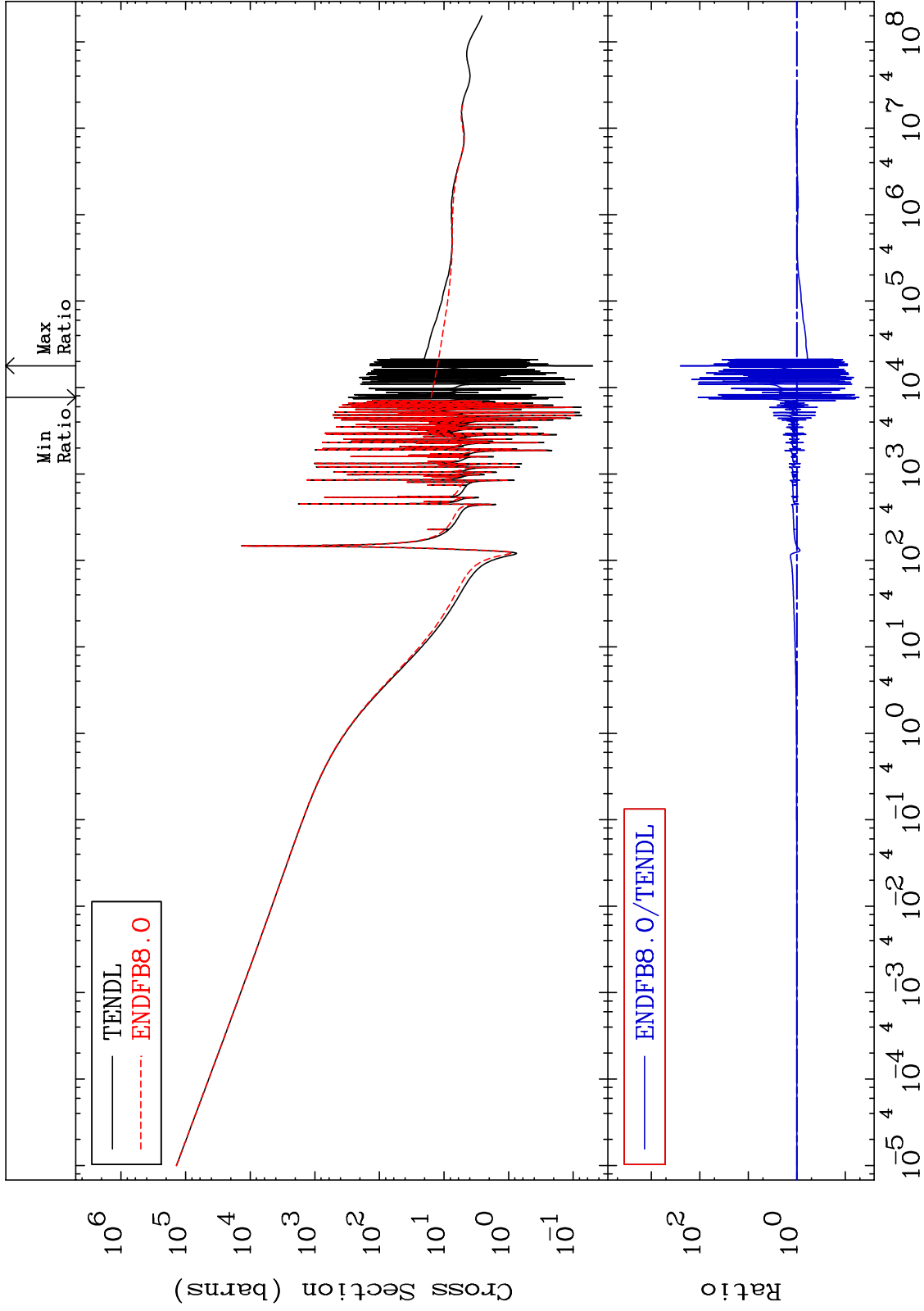
E.Mail: [redcullen1@comcast.net](mailto:redcullen1@comcast.net)  
Web: [redcullen1.net/HOMEPAGE.NEW](http://redcullen1.net/HOMEPAGE.NEW)

Press Mouse Button to Start

MAT 6649

Total  
Cross Section

66-Dy-164  
-94.76 To 9999. %



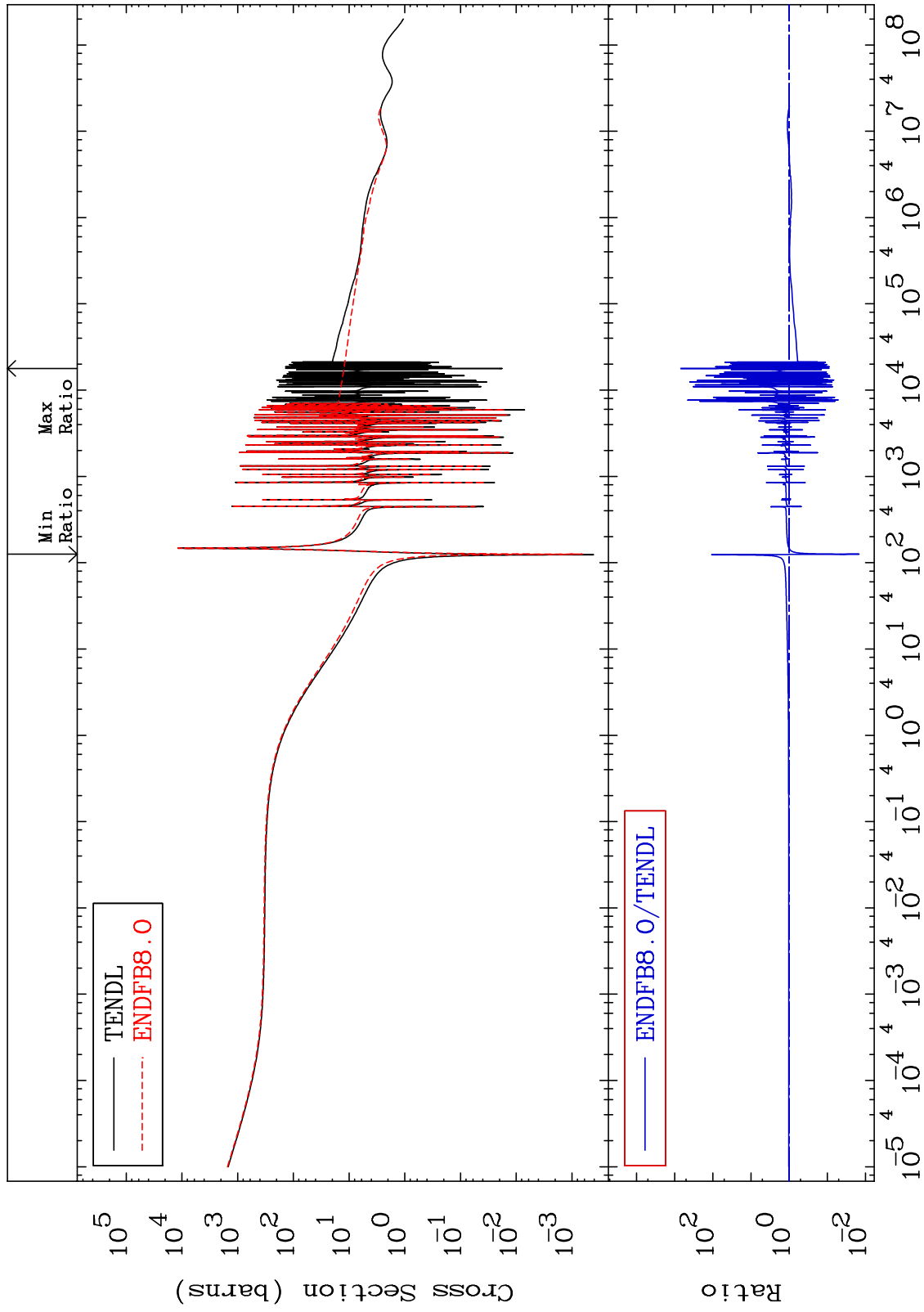
Incident Energy (eV)

66-Dy-164

MAT 6649

Elastic  
Cross Section

66-Dy-164  
-98.53 To 9999. %

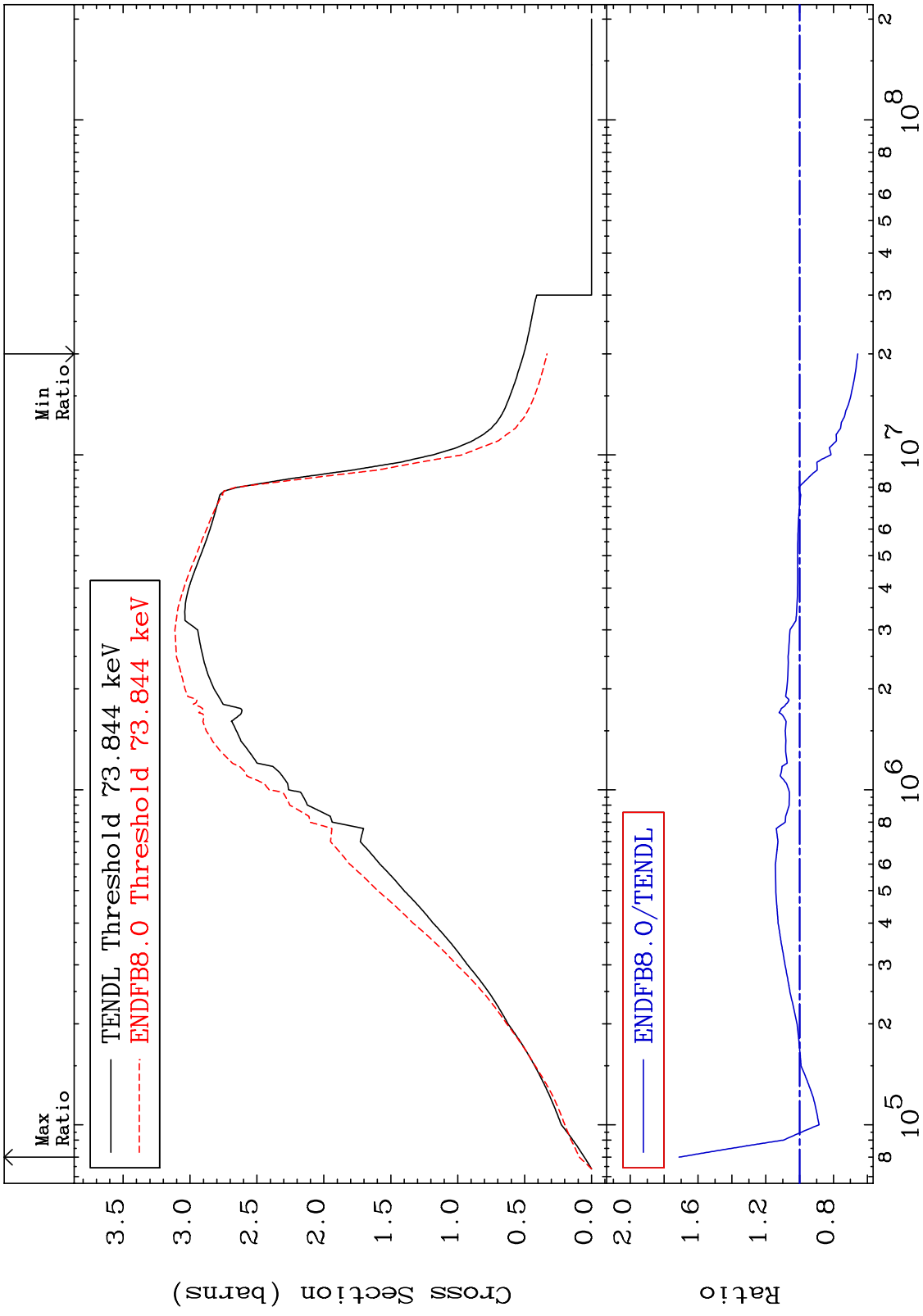


2

Incident Energy (eV)

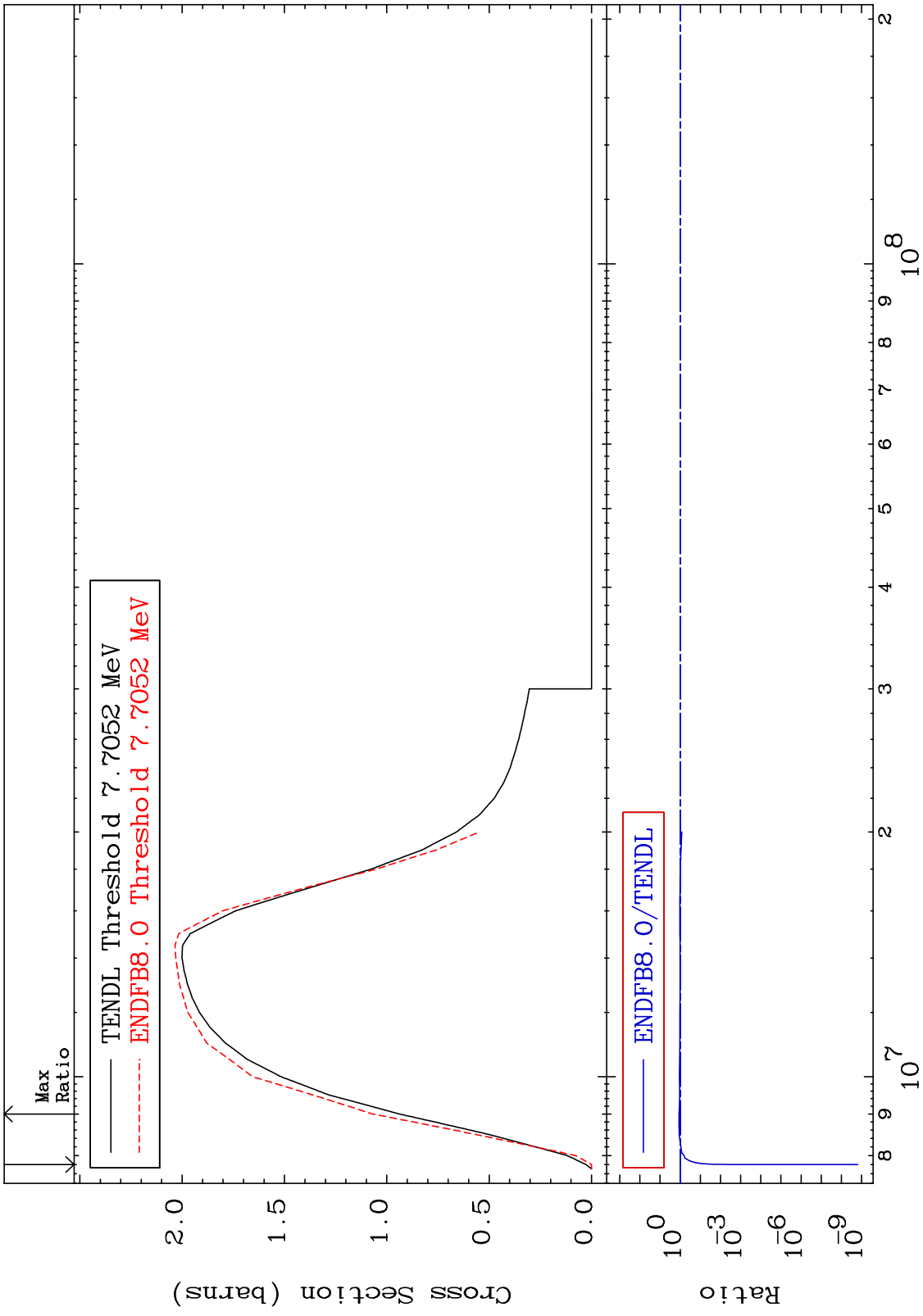
66-Dy-164

MAT 6649 Inelastic Cross Section 66-Dy-164 -34.36 To 71.22 %

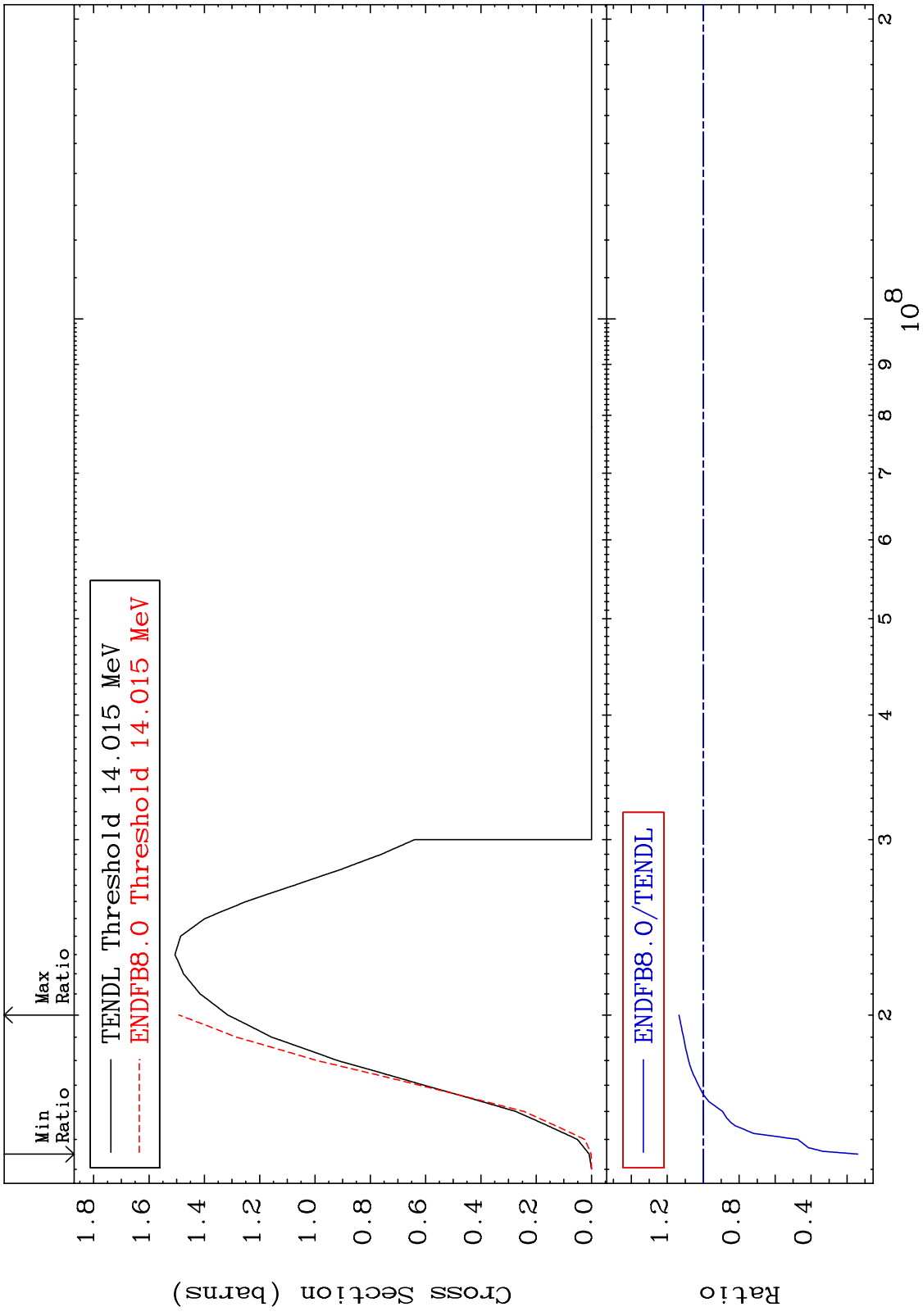


3 66-Dy-164

MAT 6649 (n,2n) Cross Section 66-Dy-164 -100.0 To 13.86 %



MAT 6649 (n,3n) 66-Dy-164  
 Cross Section -86.01 To 13.44 %



MAT 6649

(n, n')  $\alpha$

66-Dy-164

-59.16 To 995.9 %

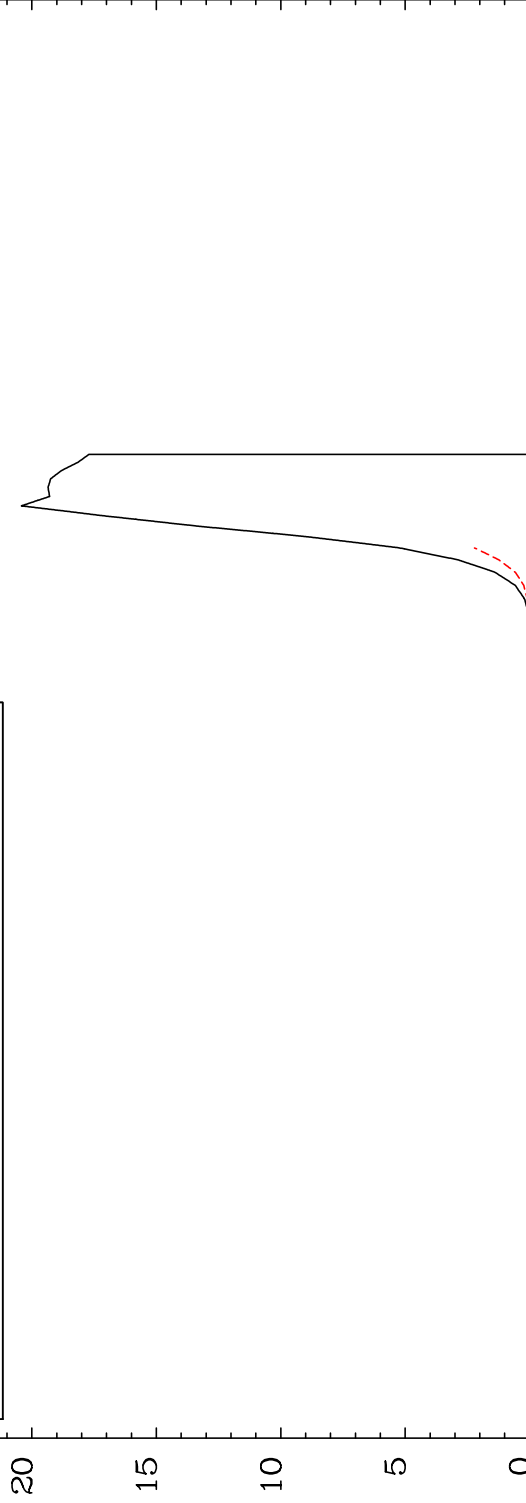
Cross Section

Max Ratio

Min Ratio

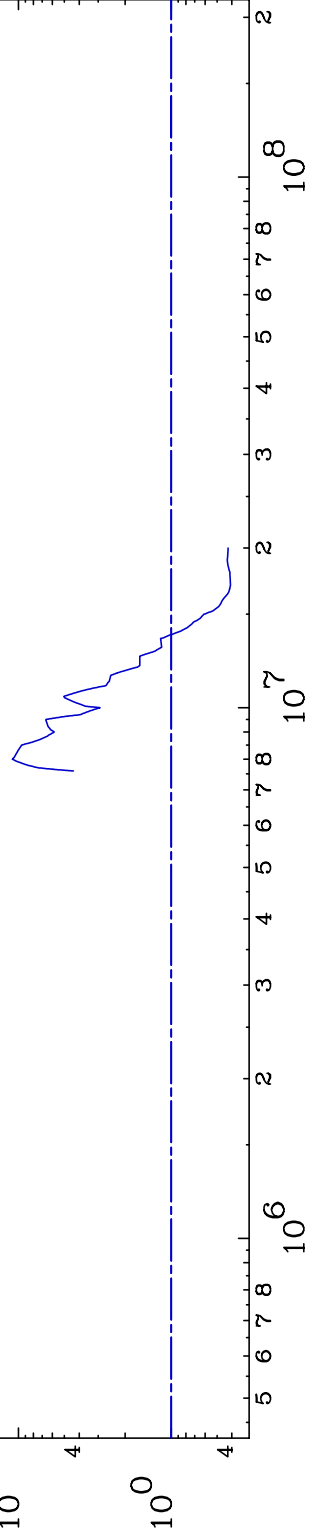
TENDL Threshold 453.91 keV  
ENDFB8.0 Threshold 7.0000 MeV

Cross Section (milli-barns)



ENDFB8.0/TENDL

Ratio



6

Incident Energy (eV)

66-Dy-164

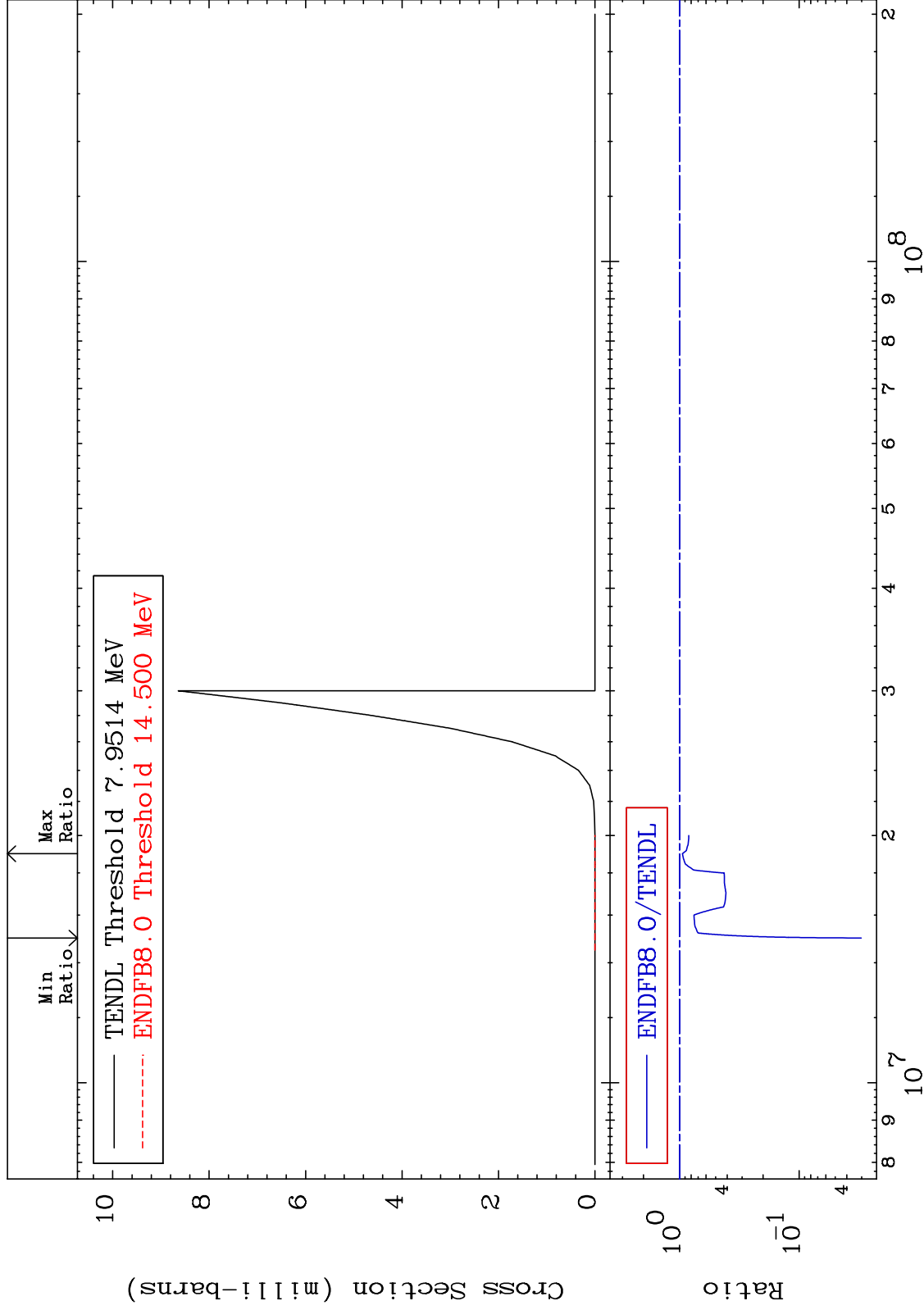
MAT 6649

(n,2n)  $\alpha$

66-Dy-164

Cross Section

-96.97 To -5.471%



7

Incident Energy (eV)

66-Dy-164



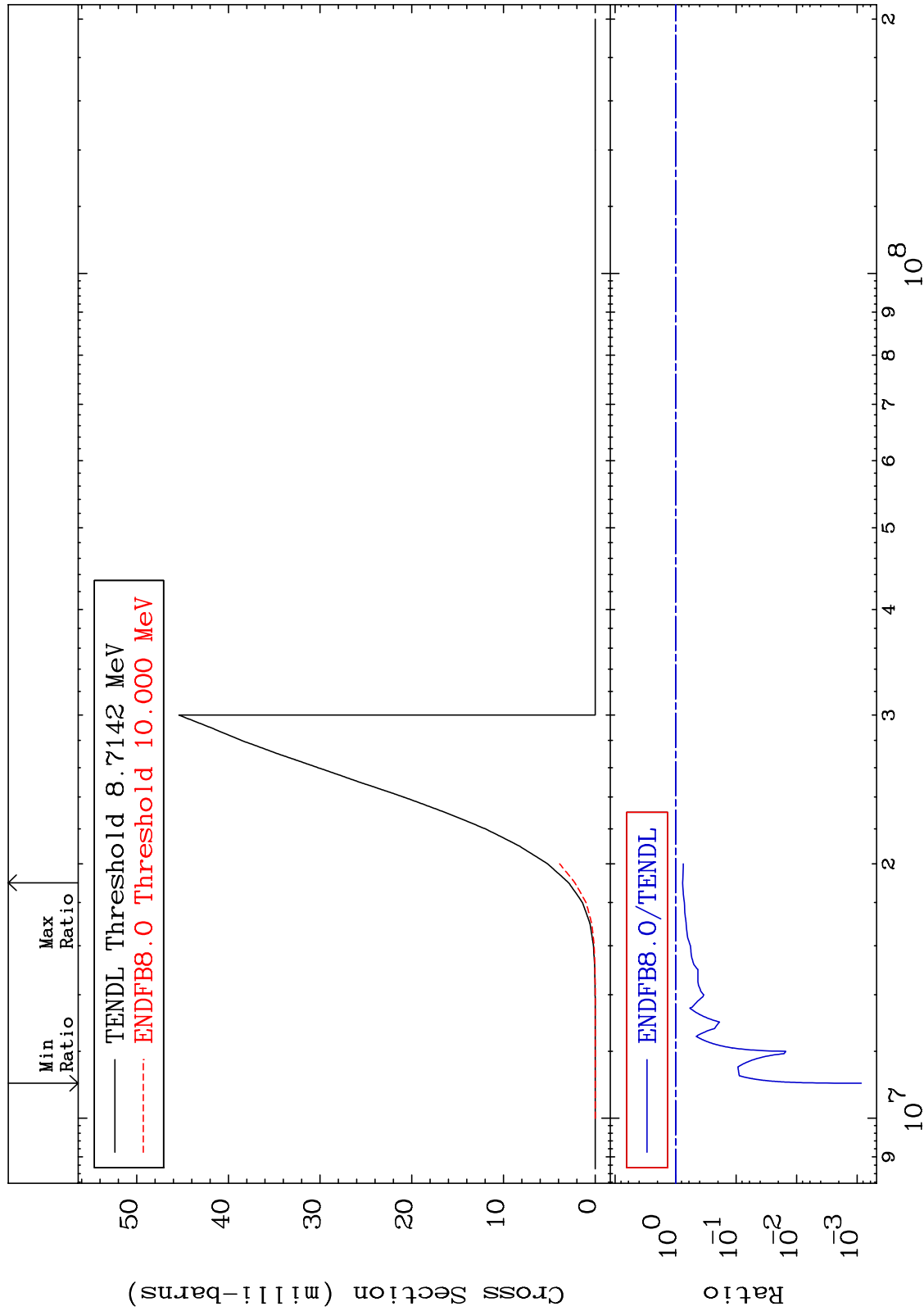
MAT 6649

(n,n') p

66-Dy-164

Cross Section

-99.91 To -23.58%

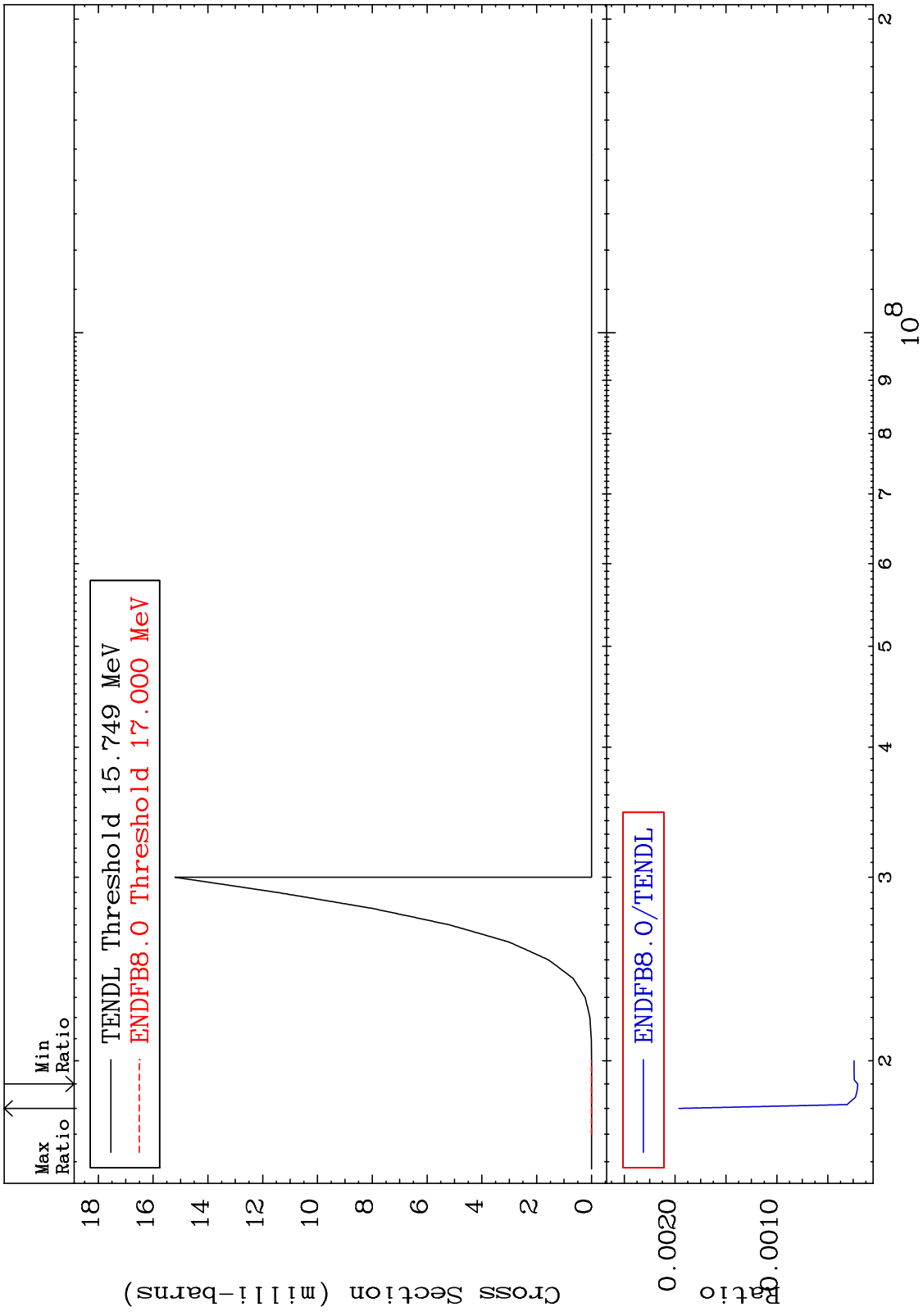


8

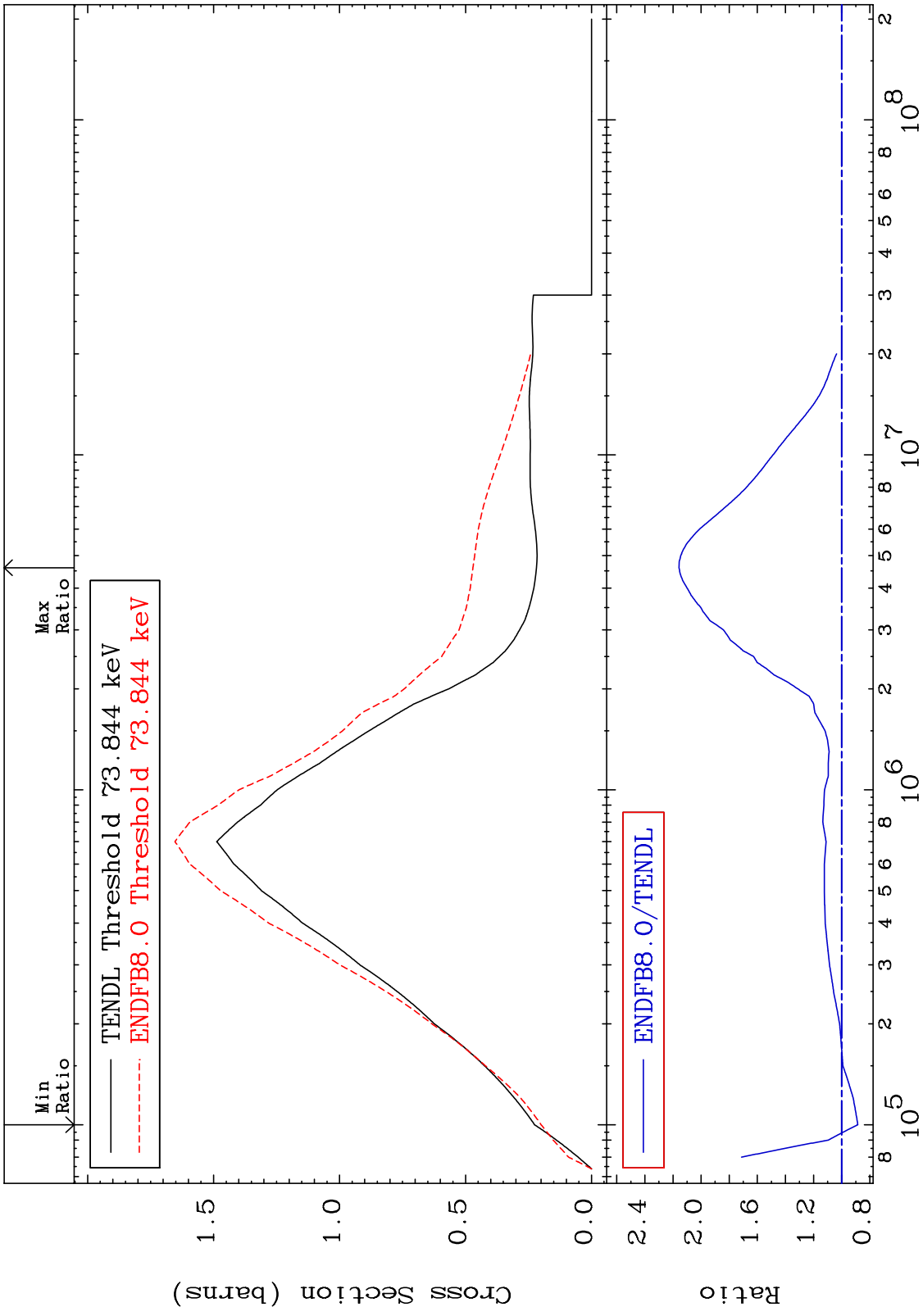
Incident Energy (eV)

66-Dy-164

MAT 6649 (n,2n) p 66-Dy-164  
 Cross Section -99.98 To -99.80%

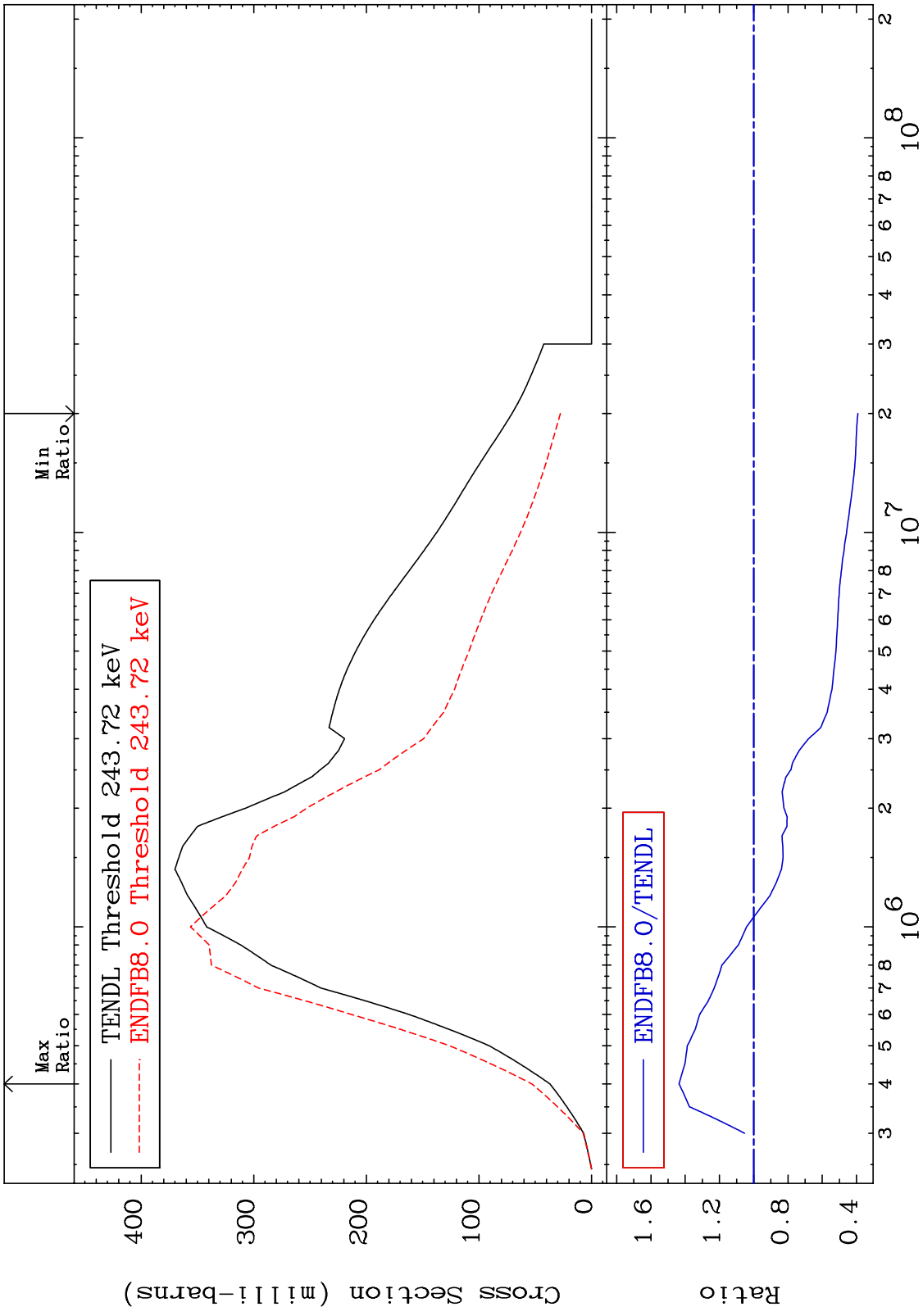


MAT 6649      MT= 51 (n,n') Level Cross Section      66-Dy-164  
 -11.48 To 115.7 %



10      Incident Energy (eV)      66-Dy-164

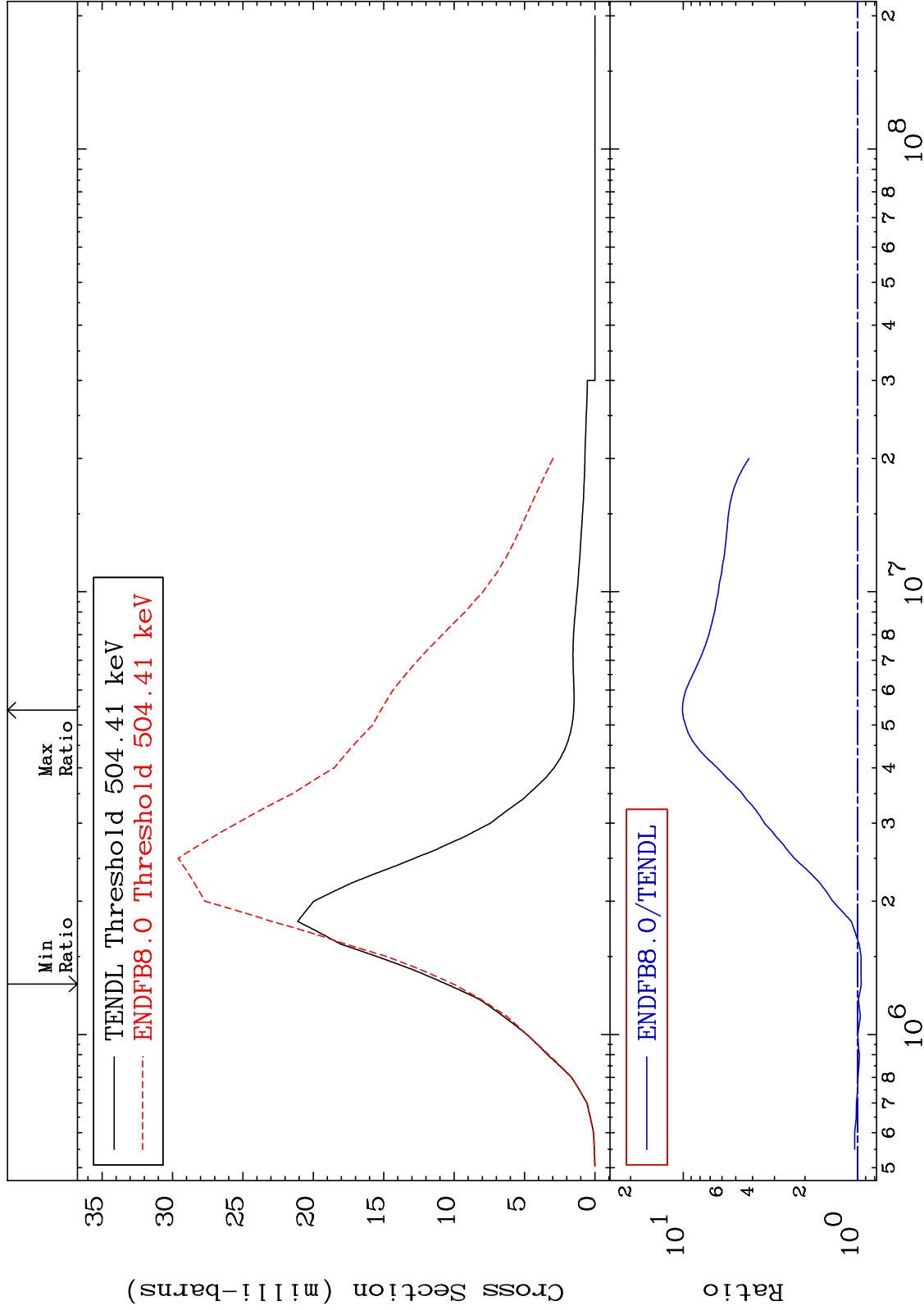
MAT 6649      MT= 52 (n,n') Level Cross Section      66-Dy-164  
 -60.79 To 43.59 %



MAT 6649

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

66-Dy-164  
-4.662 To 909.8 %

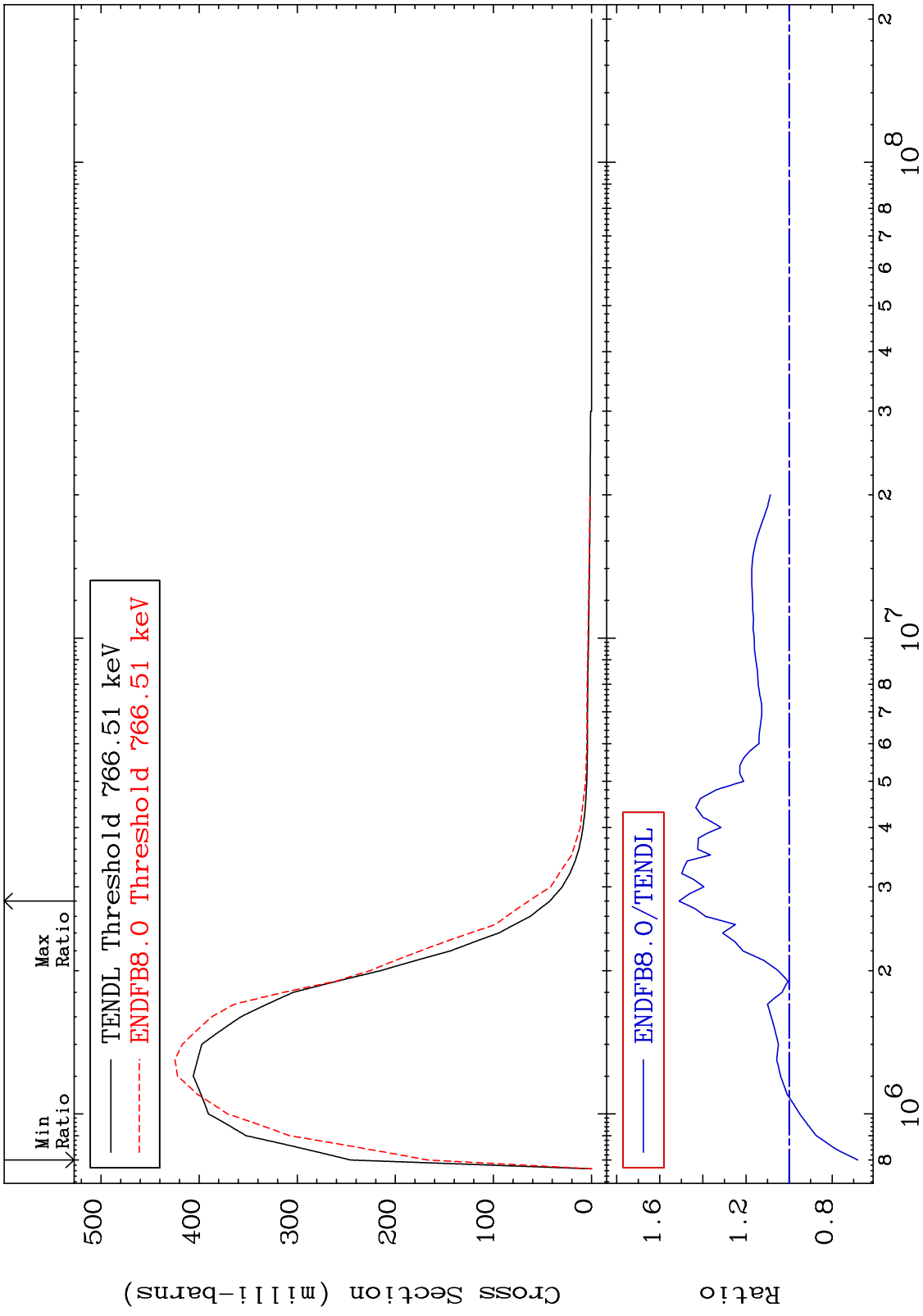


12

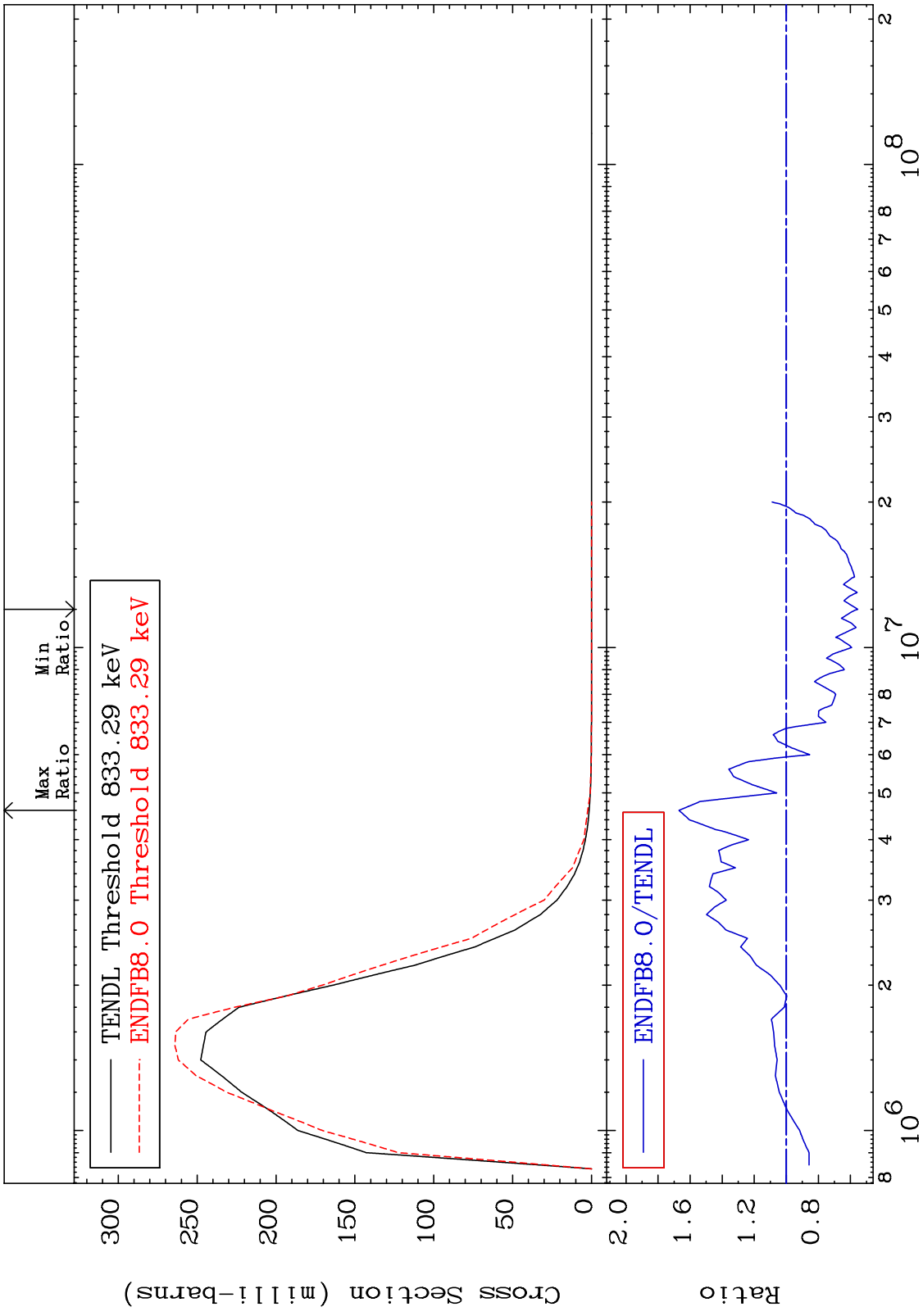
Incident Energy (eV)

66-Dy-164

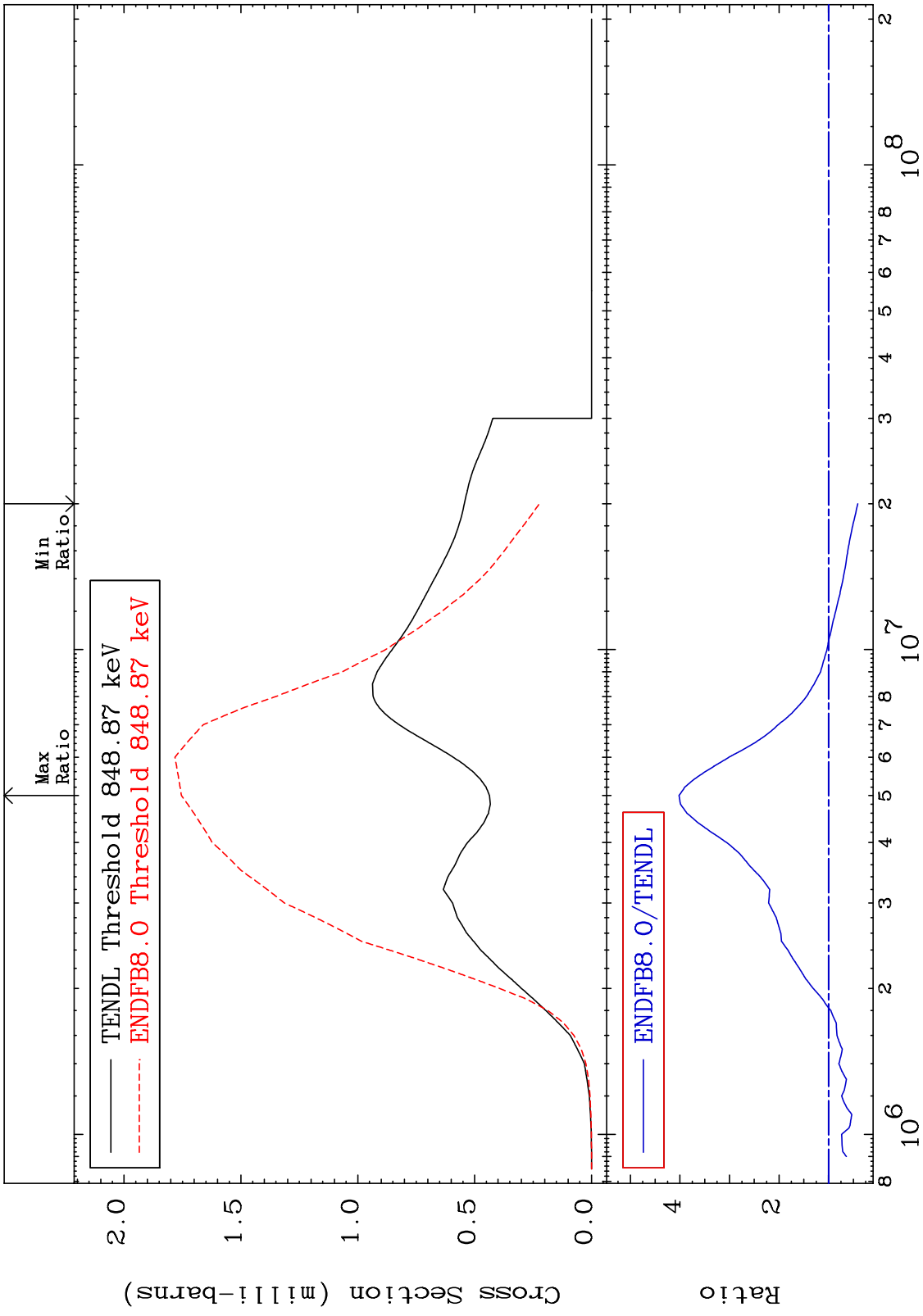
MAT 6649      MT= 54 (n,n') Level      66-Dy-164  
 Cross Section      -31.93 To 51.08 %



MAT 6649 MT= 55 (n,n') Level Cross Section 66-Dy-164  
 -44.61 To 66.91 %



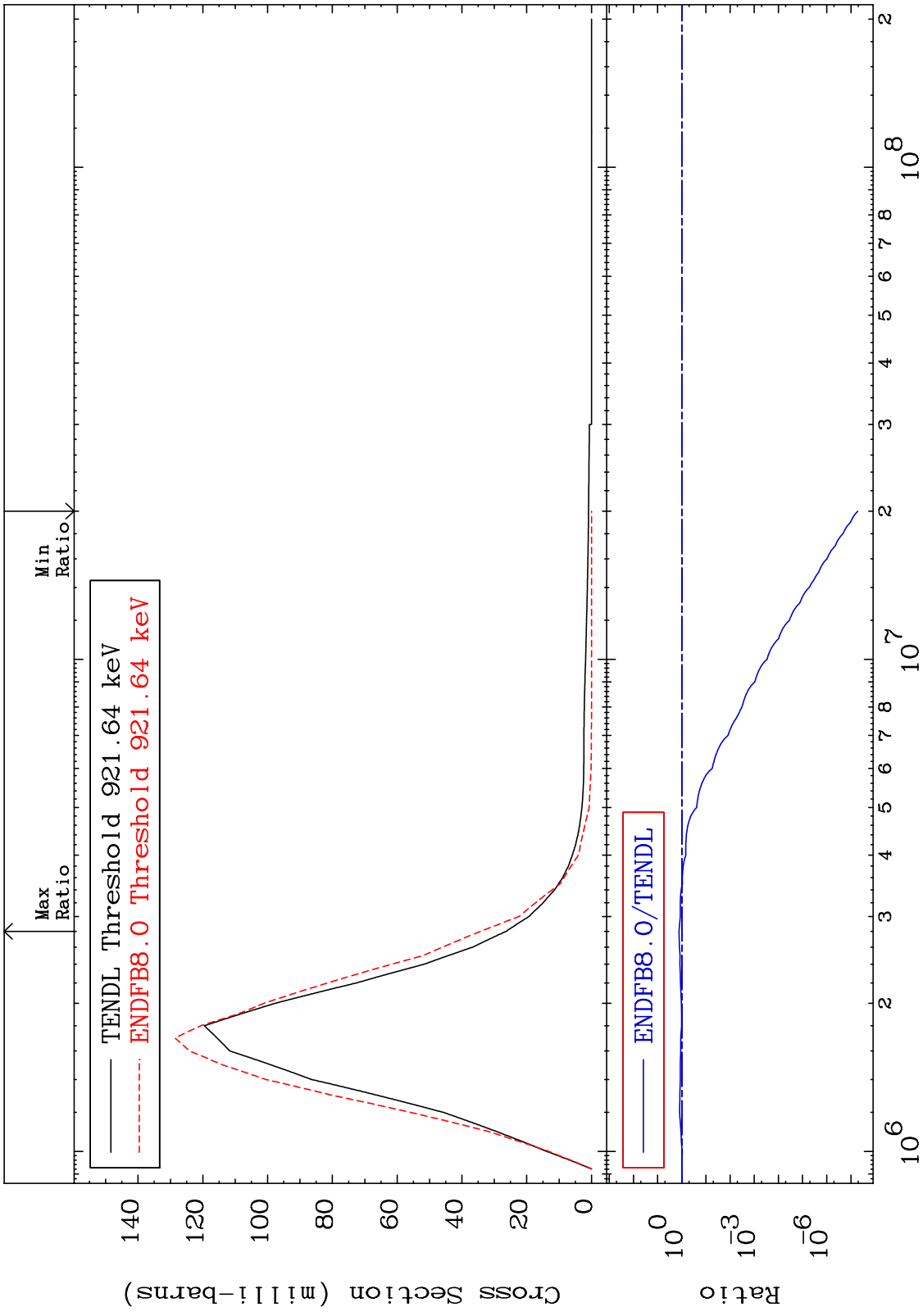
MAT 6649      MT= 56 (n,n') Level      66-Dy-164  
 Cross Section      -59.00 To 301.8 %



15      Incident Energy (eV)      66-Dy-164

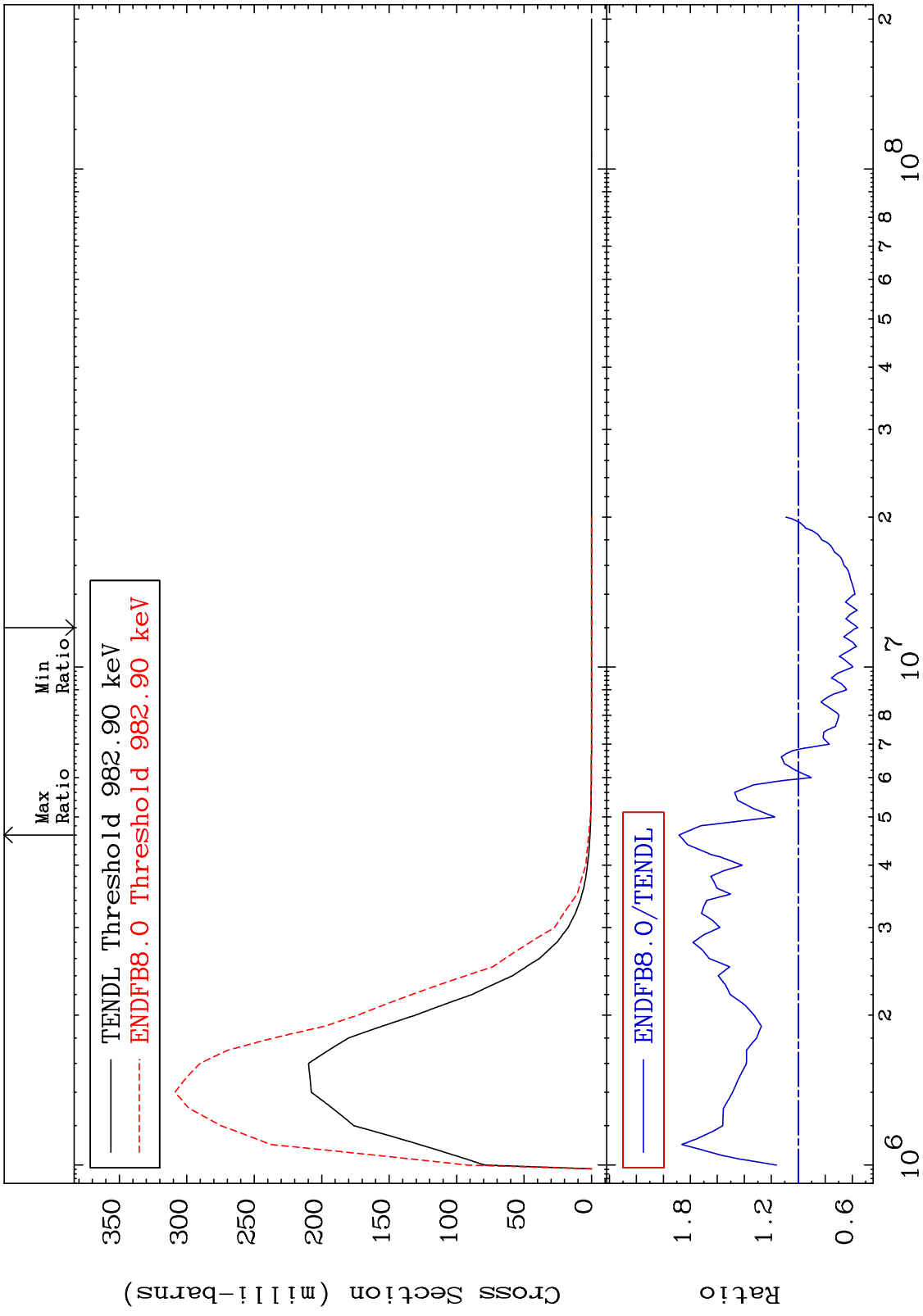


MAT 6649      MT= 57 (n,n') Level Cross Section      66-Dy-164  
-100.0 To 29.70 %



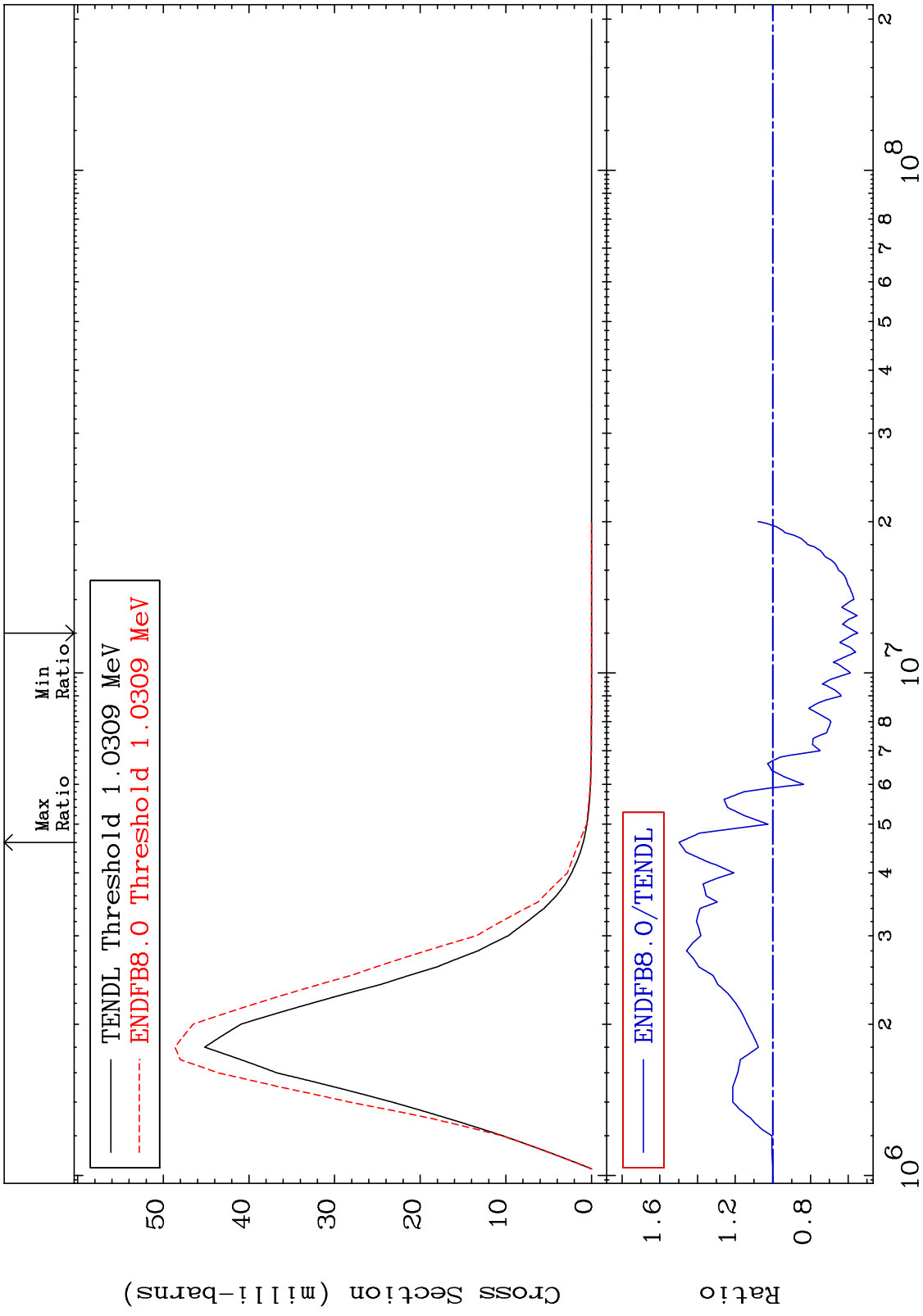
16      Incident Energy (eV)      66-Dy-164

MAT 6649      MT= 58 (n,n') Level      66-Dy-164  
Cross Section      -44.16 To 88.38 %



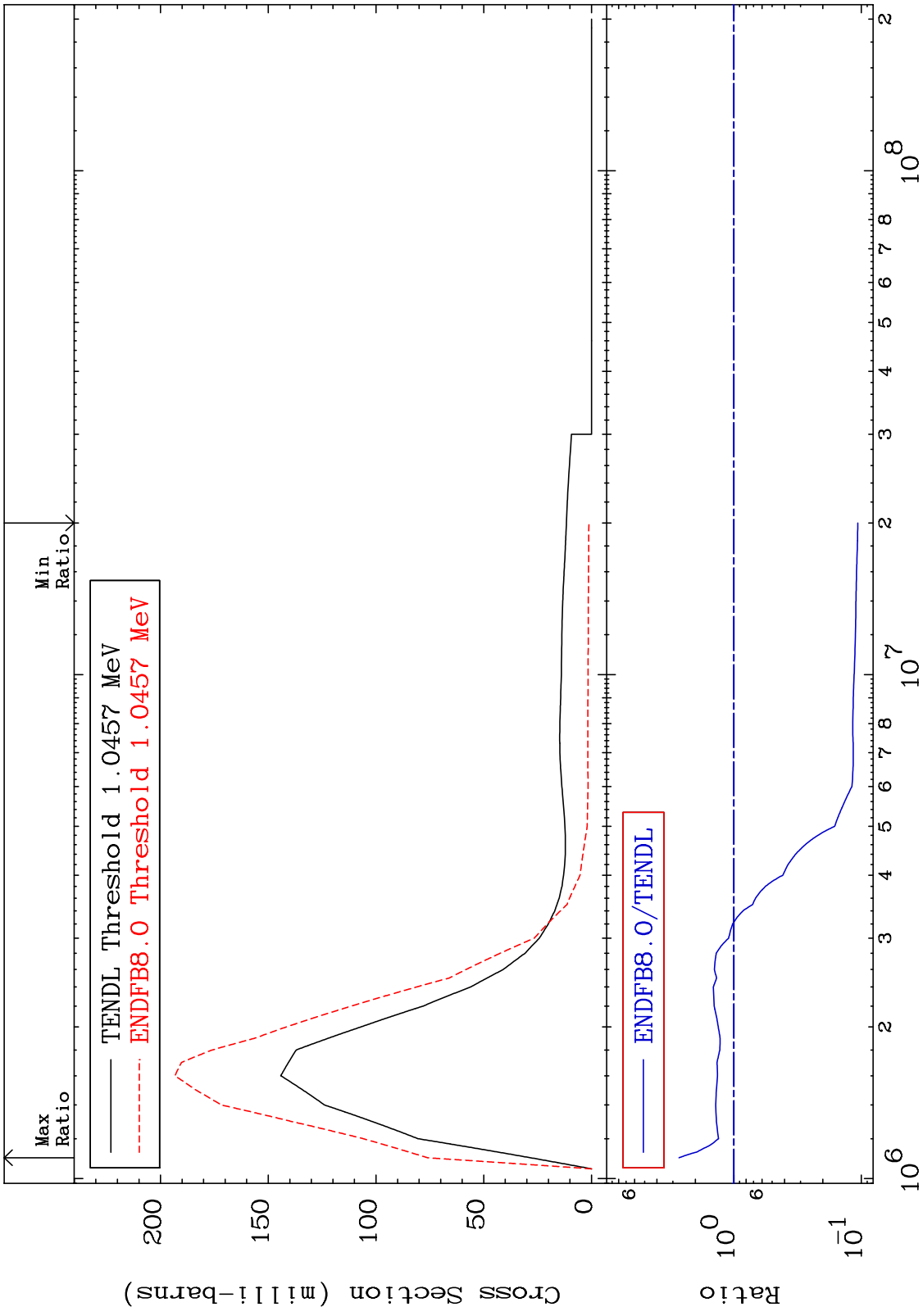
17      Incident Energy (eV)      66-Dy-164

MAT 6649      MT= 59 (n,n') Level Cross Section      66-Dy-164  
 -45.12 To 49.79 %



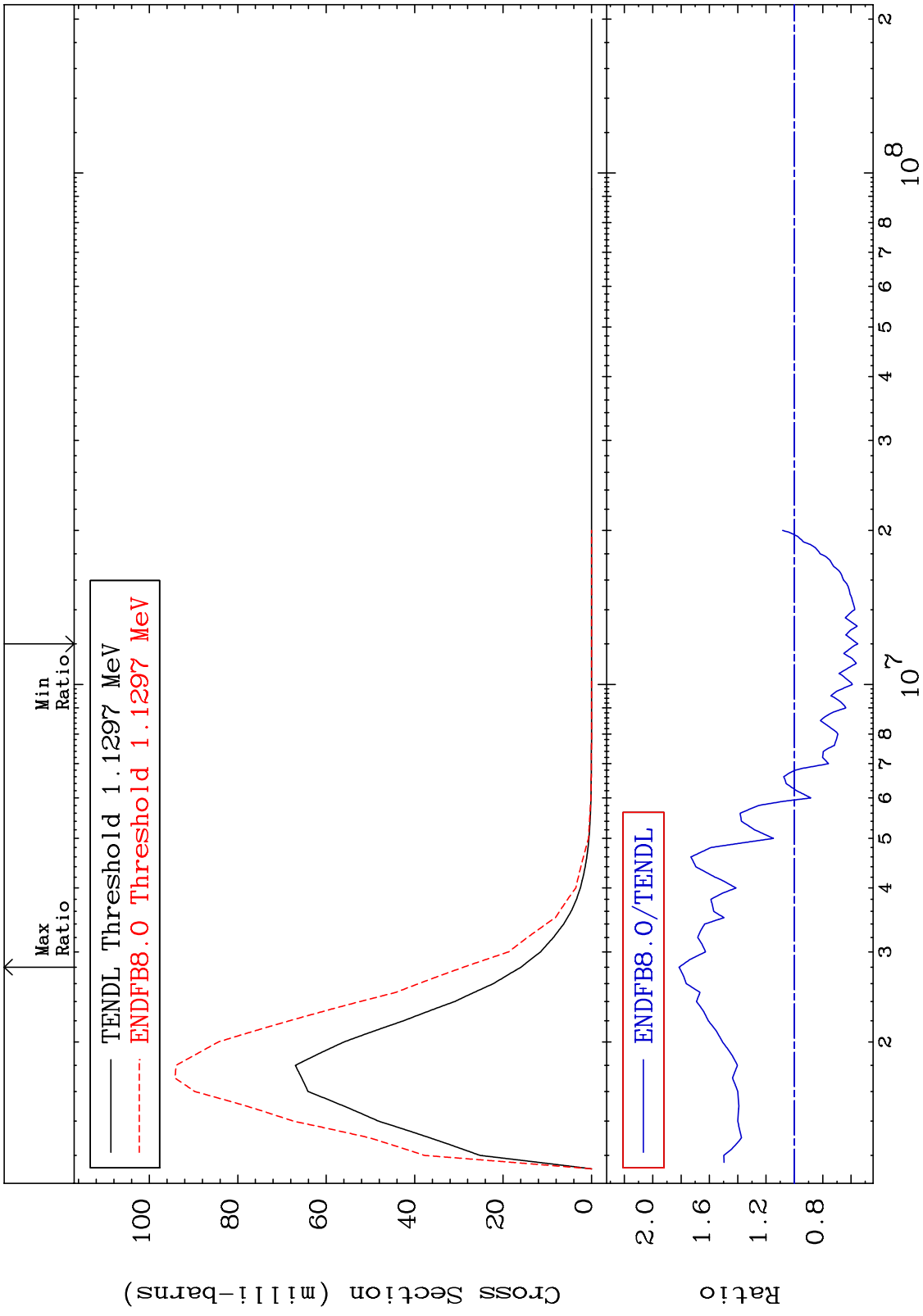
18      66-Dy-164

MAT 6649      MT= 60 (n,n') Level Cross Section      66-Dy-164  
 -89.35 To 168.6 %

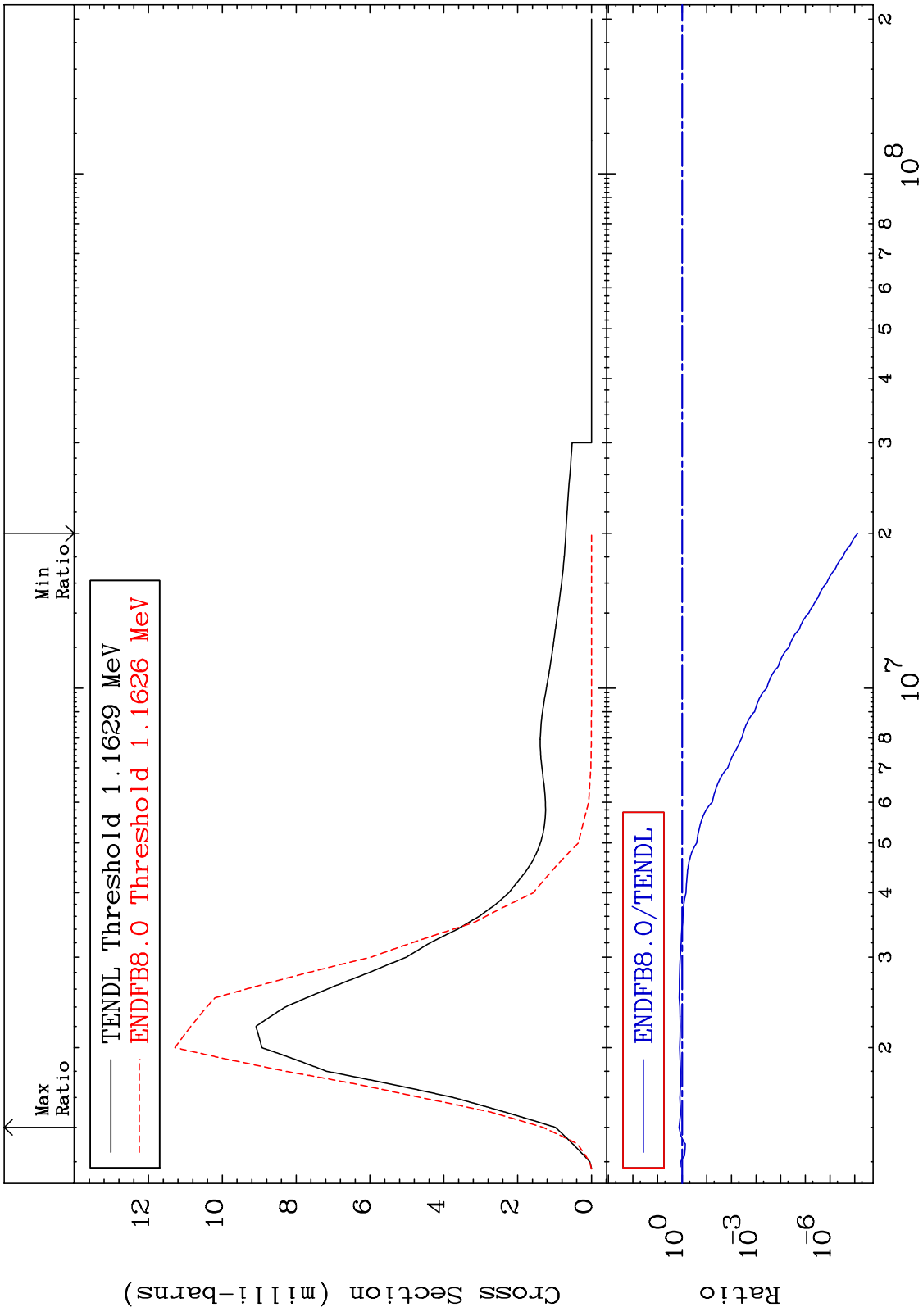


19      Incident Energy (eV)      66-Dy-164

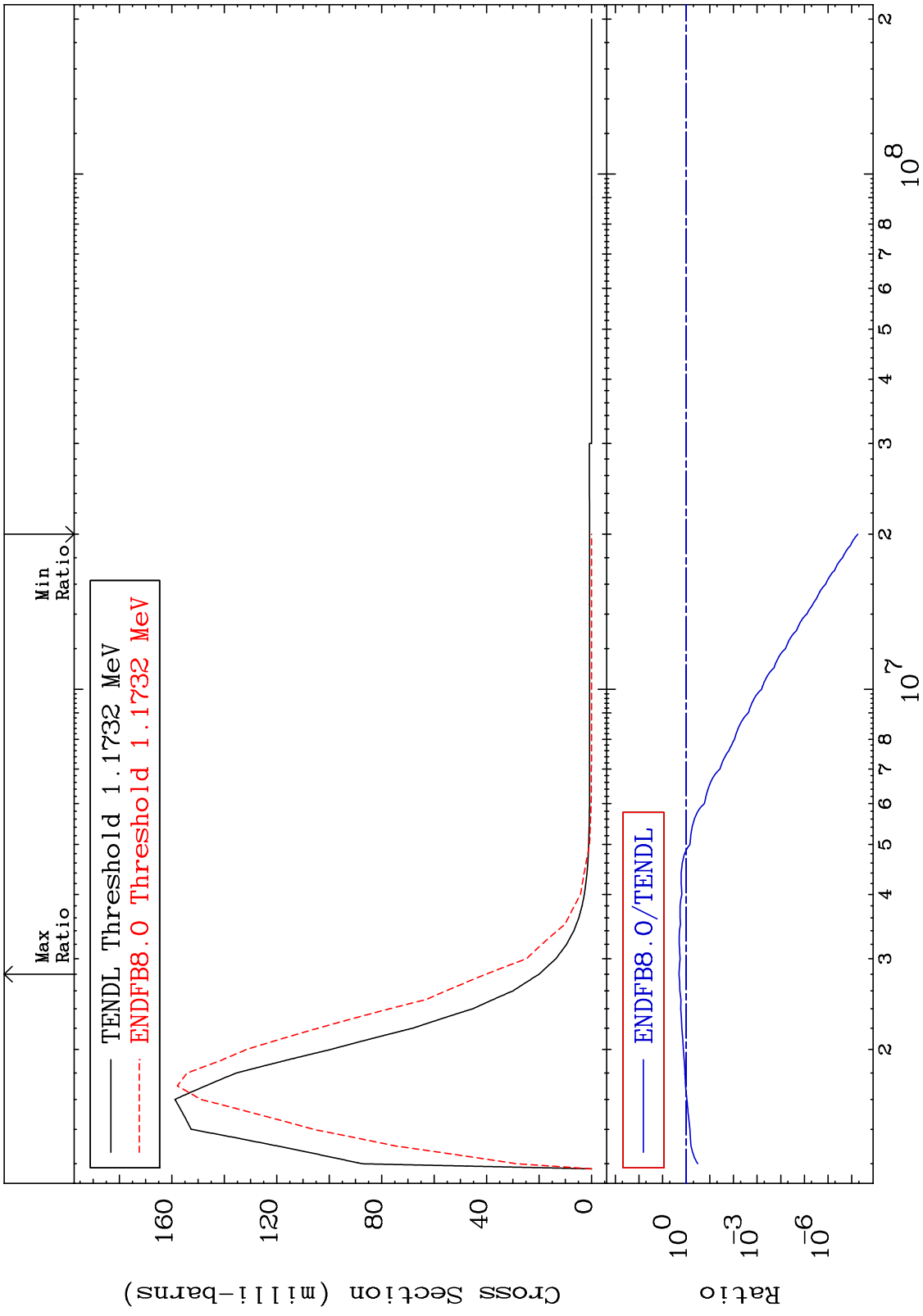
MAT 6649 MT= 61 (n,n') Level Cross Section 66-Dy-164  
 -44.76 To 81.43 %



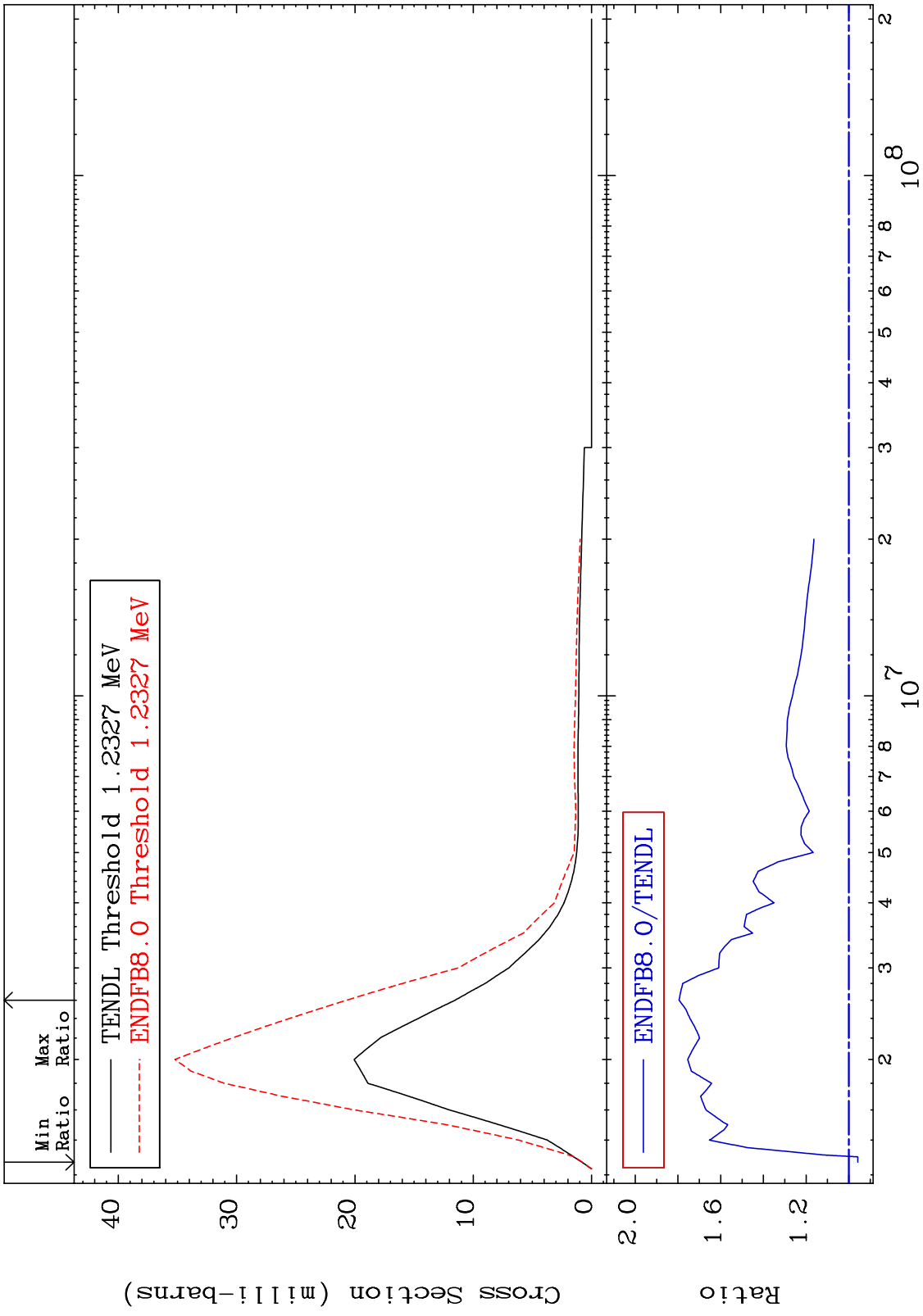
MAT 6649      MT= 62 (n,n') Level Cross Section      66-Dy-164  
 -100.0 To 34.24 %



MAT 6649      MT= 63 (n,n') Level Cross Section      66-Dy-164  
 -100.0 To 101.1 %

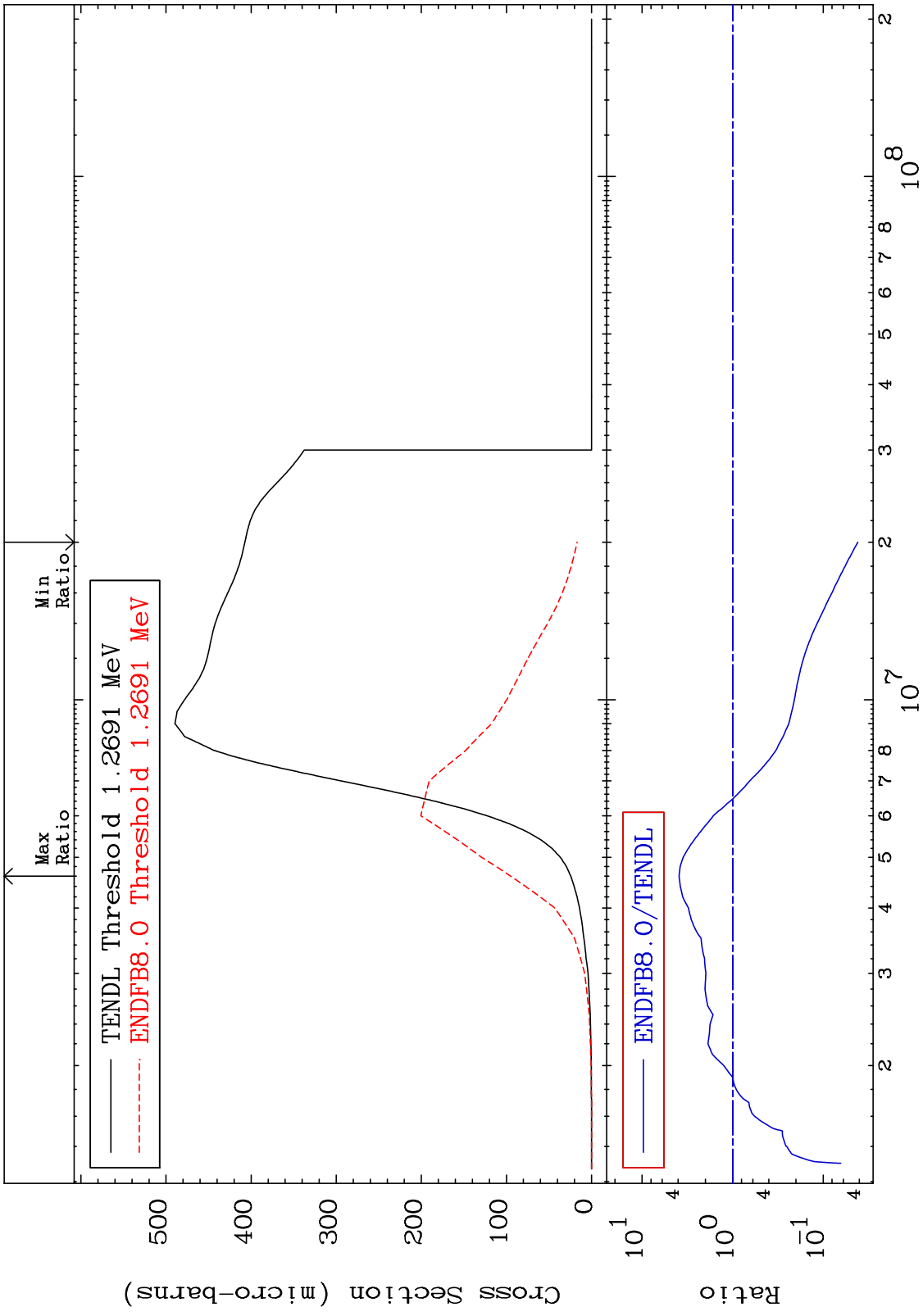


MAT 6649 MT= 64 (n,n') Level Cross Section 66-Dy-164  
 -4.194 To 79.49 %

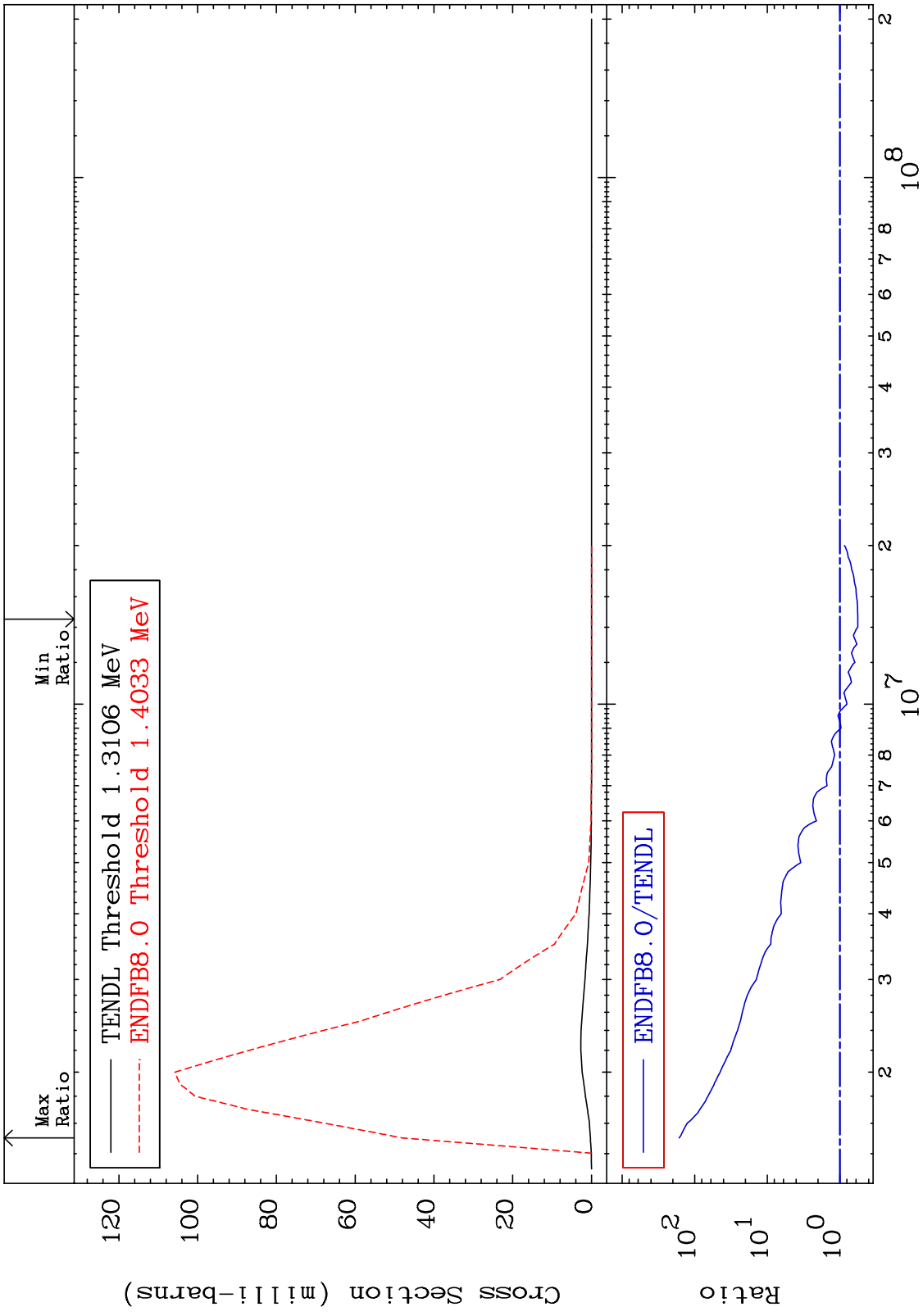




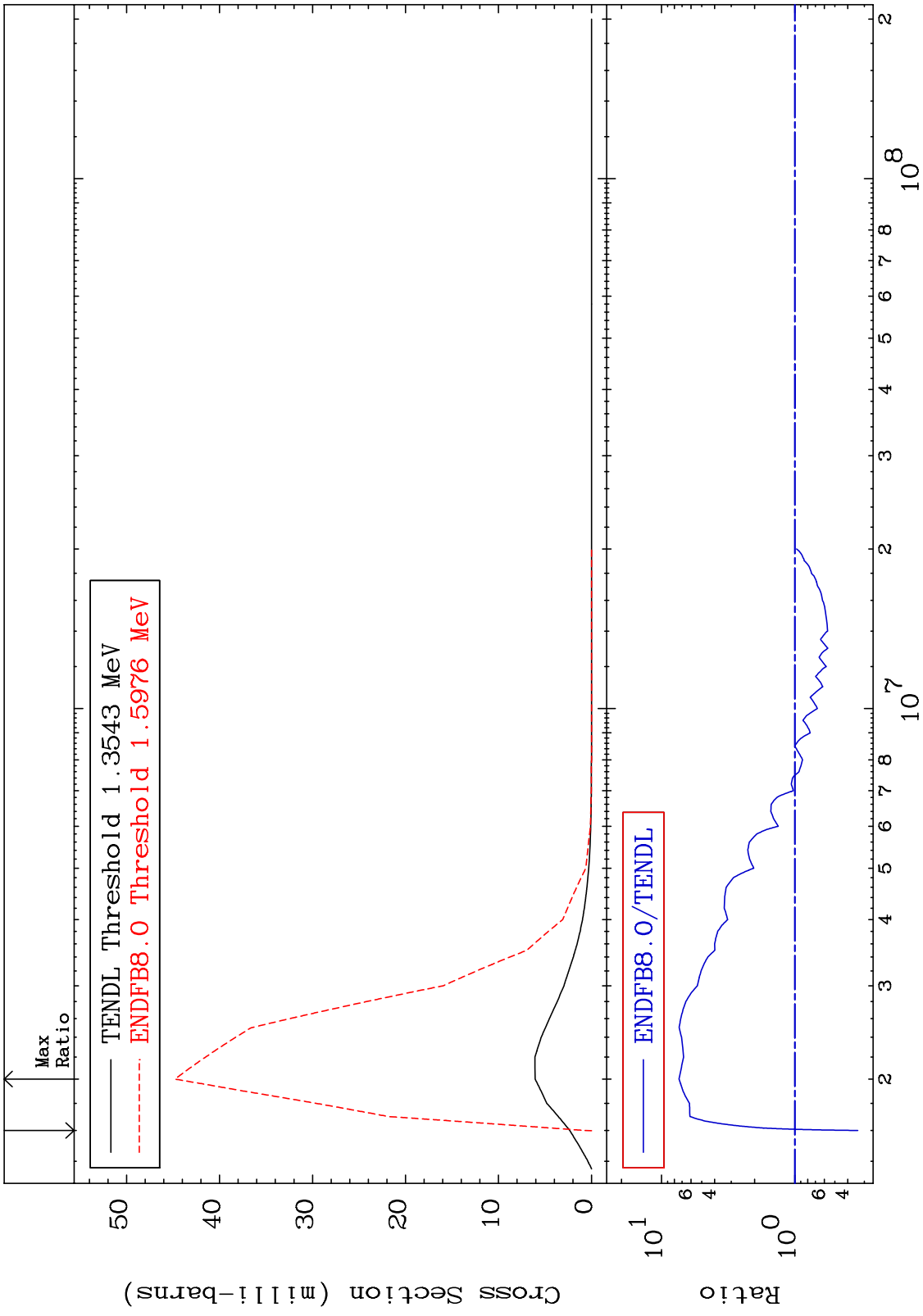
MAT 6649      MT= 65 (n,n') Level Cross Section      66-Dy-164  
 -95.85 To 291.2 %



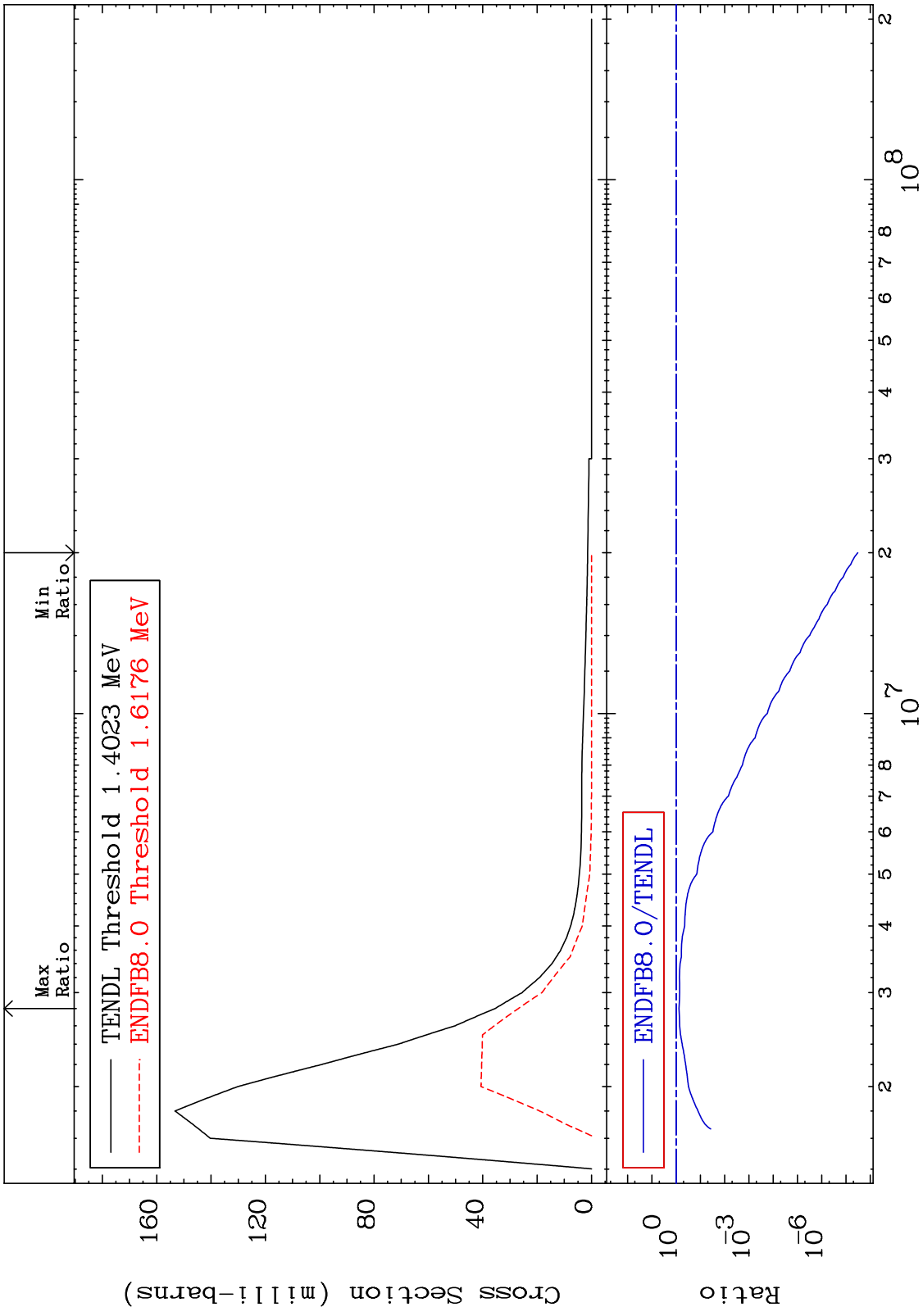
MAT 6649      MT= 66 (n,n') Level Cross Section      66-Dy-164  
 -43.41 To 9999. %



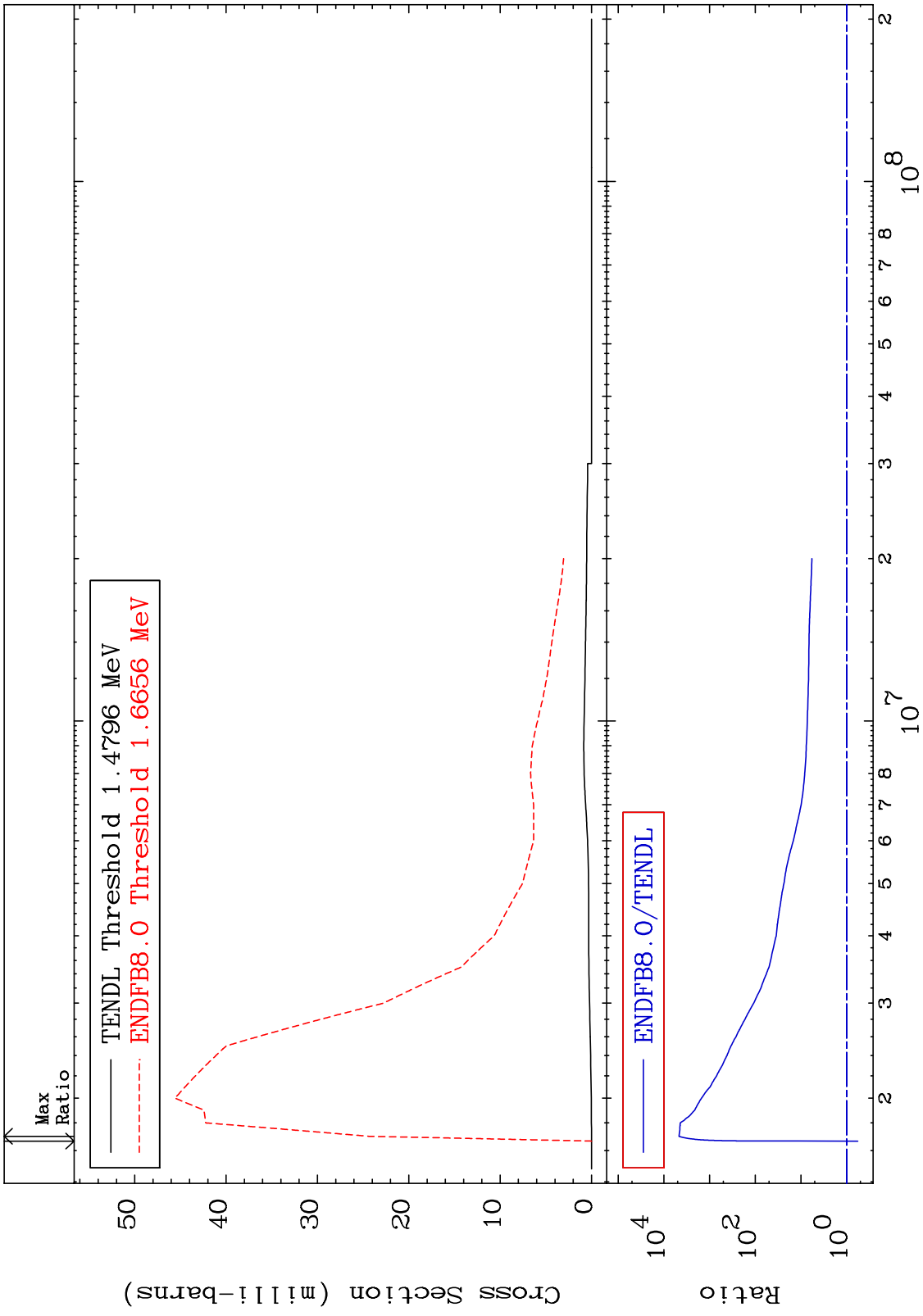
MAT 6649      MT= 67 (n,n') Level      66-Dy-164  
 Cross Section      -66.39 To 638.4 %



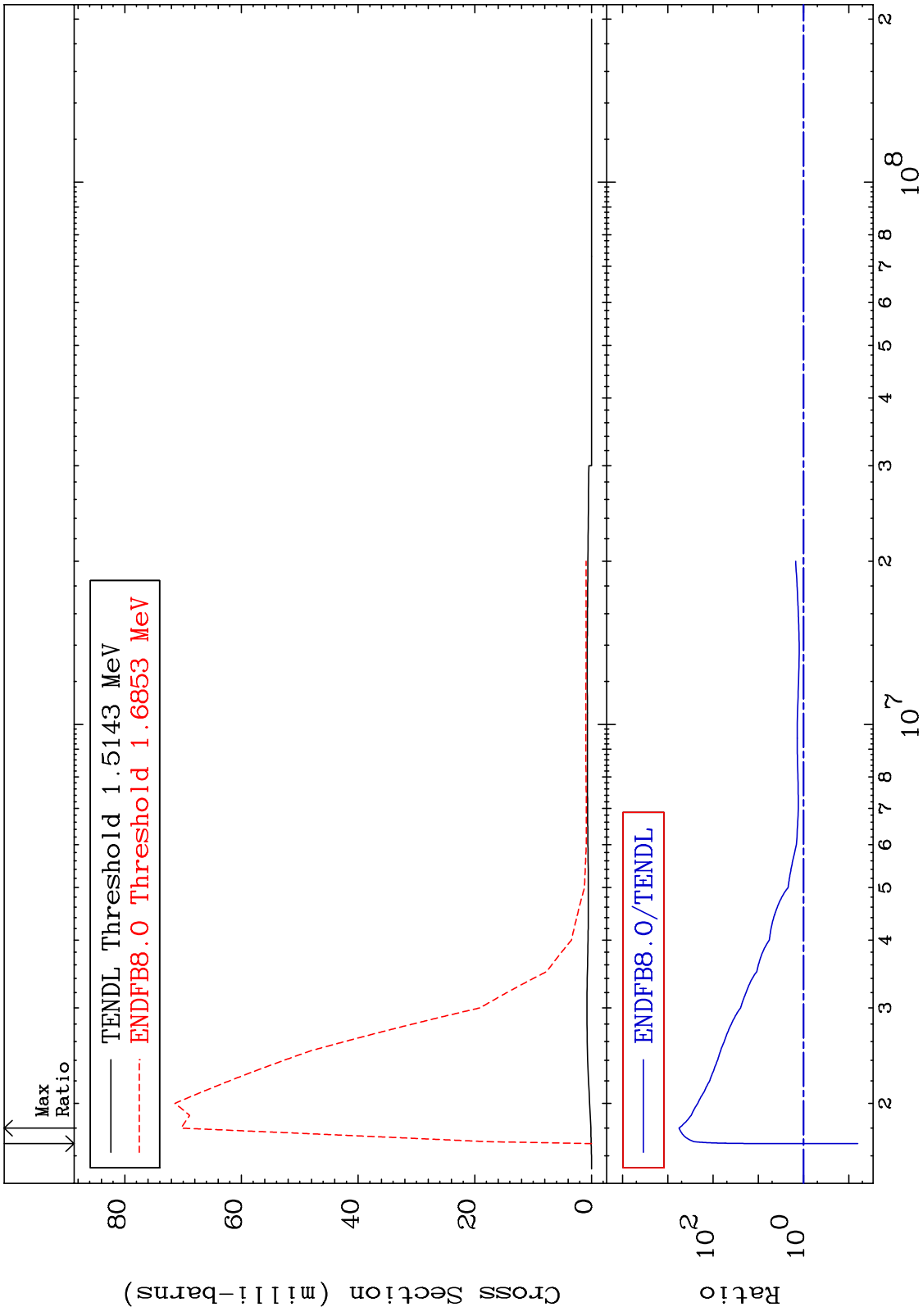
MAT 6649      MT= 68 (n,n') Level Cross Section      66-Dy-164  
 -100.0 To -23.96%



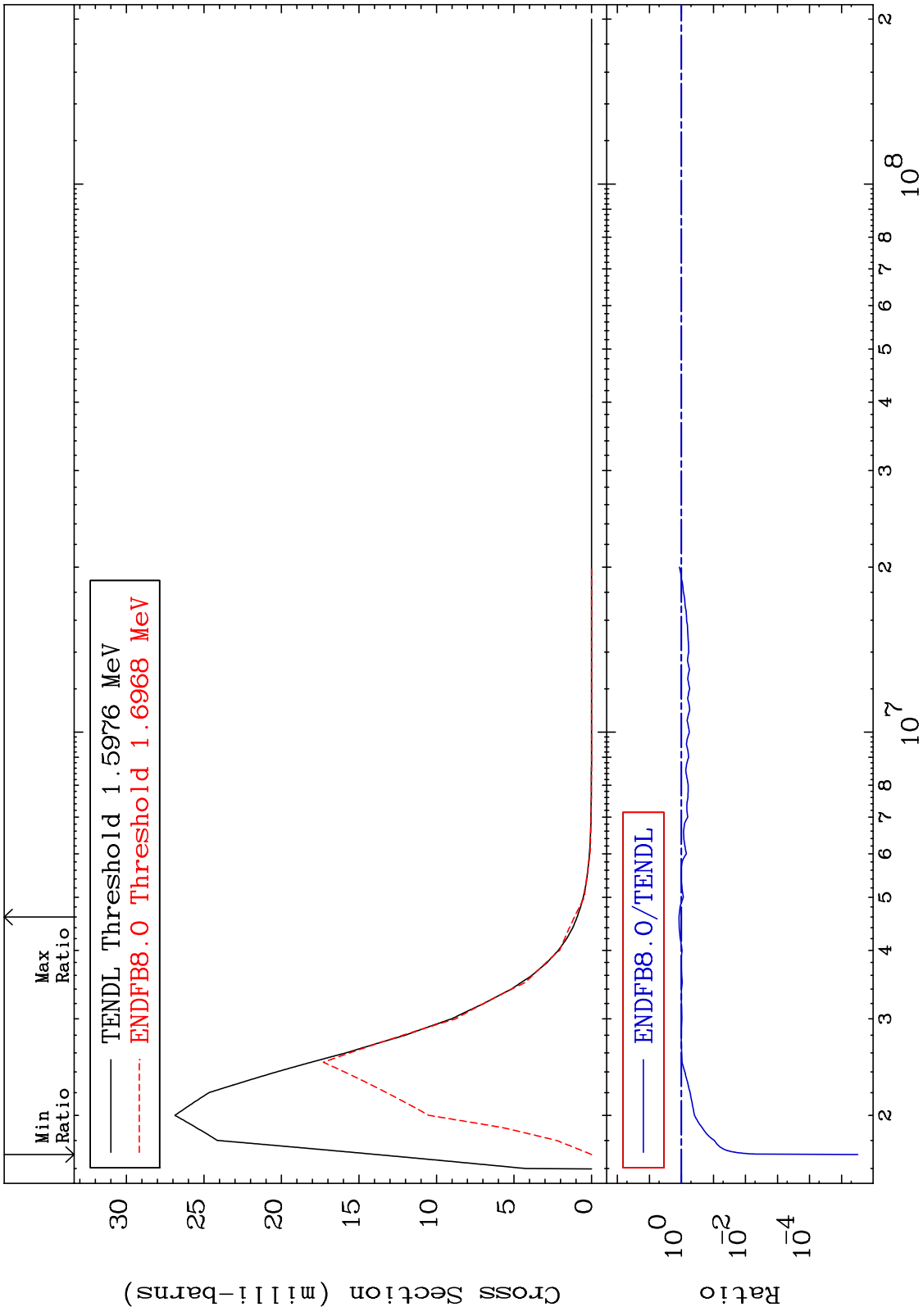
MAT 6649      MT= 69 (n,n') Level      66-Dy-164  
 Cross Section      -43.21 To 9999. %



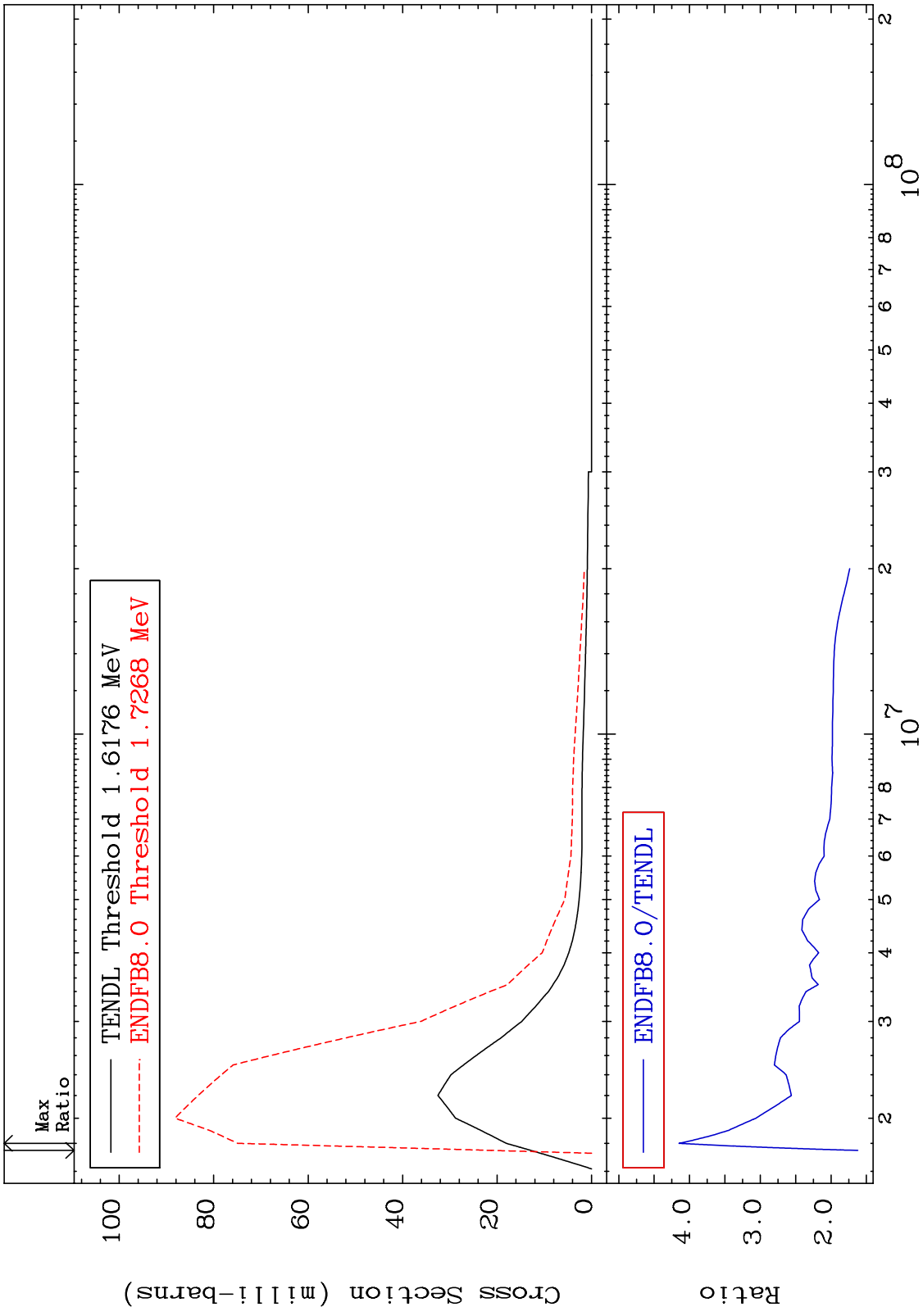
MAT 6649      MT= 70 (n,n') Level      66-Dy-164  
 Cross Section      -93.67 To 9999. %



MAT 6649 MT= 71 (n,n') Level Cross Section 66-Dy-164  
 -100.0 To 18.61 %

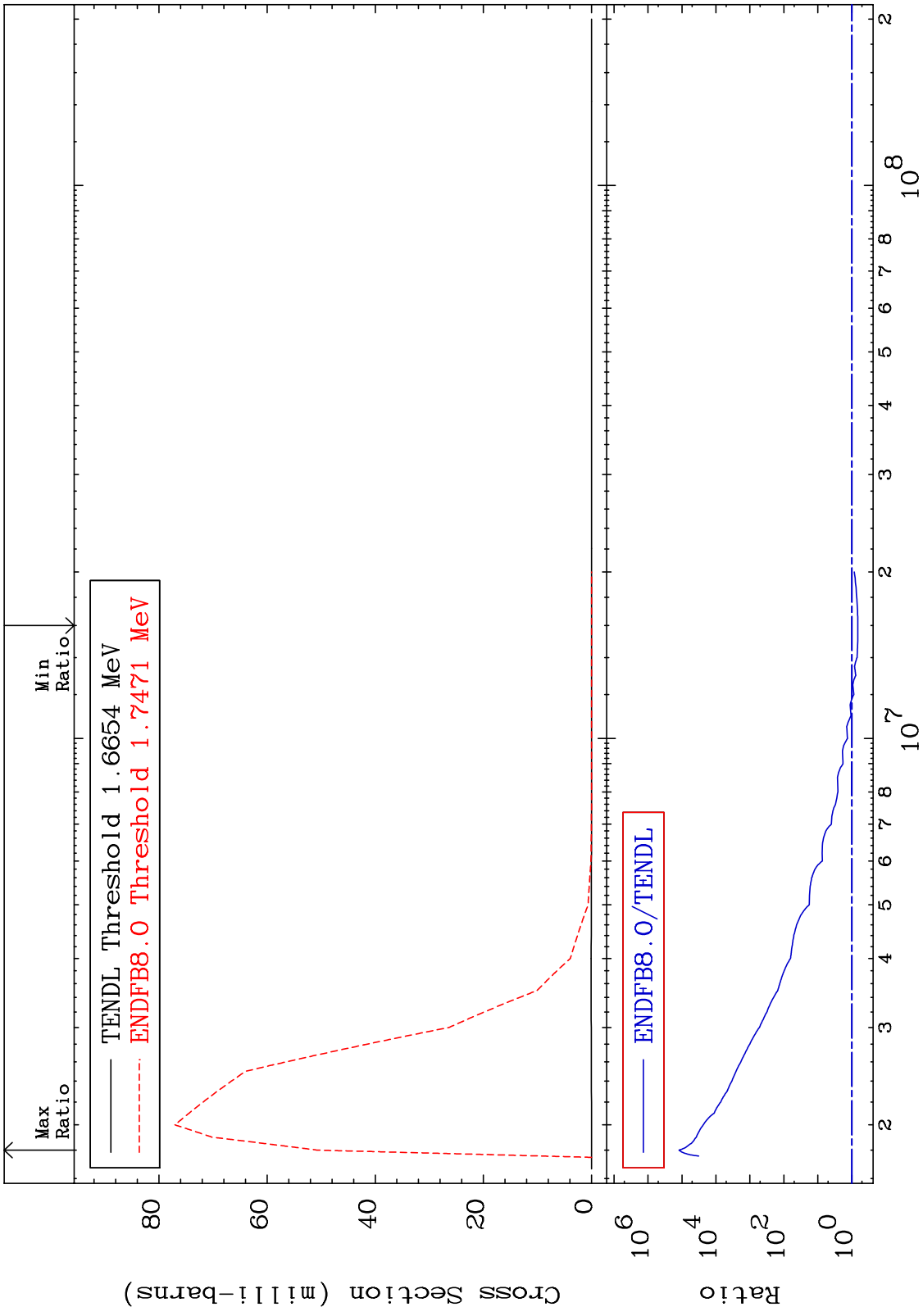


MAT 6649 MT= 72 (n,n') Level Cross Section 66-Dy-164 62.12 To 314.8 %

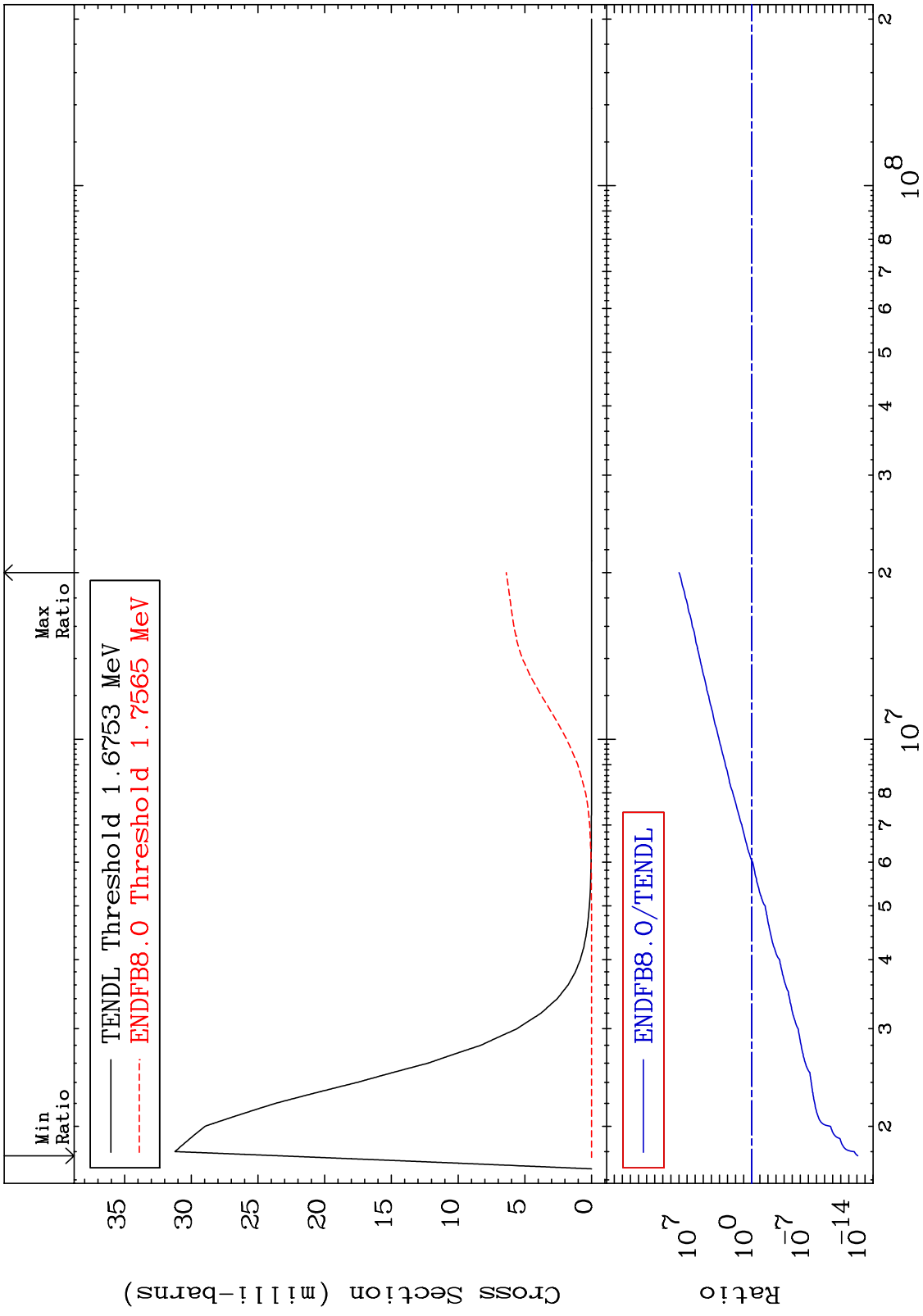




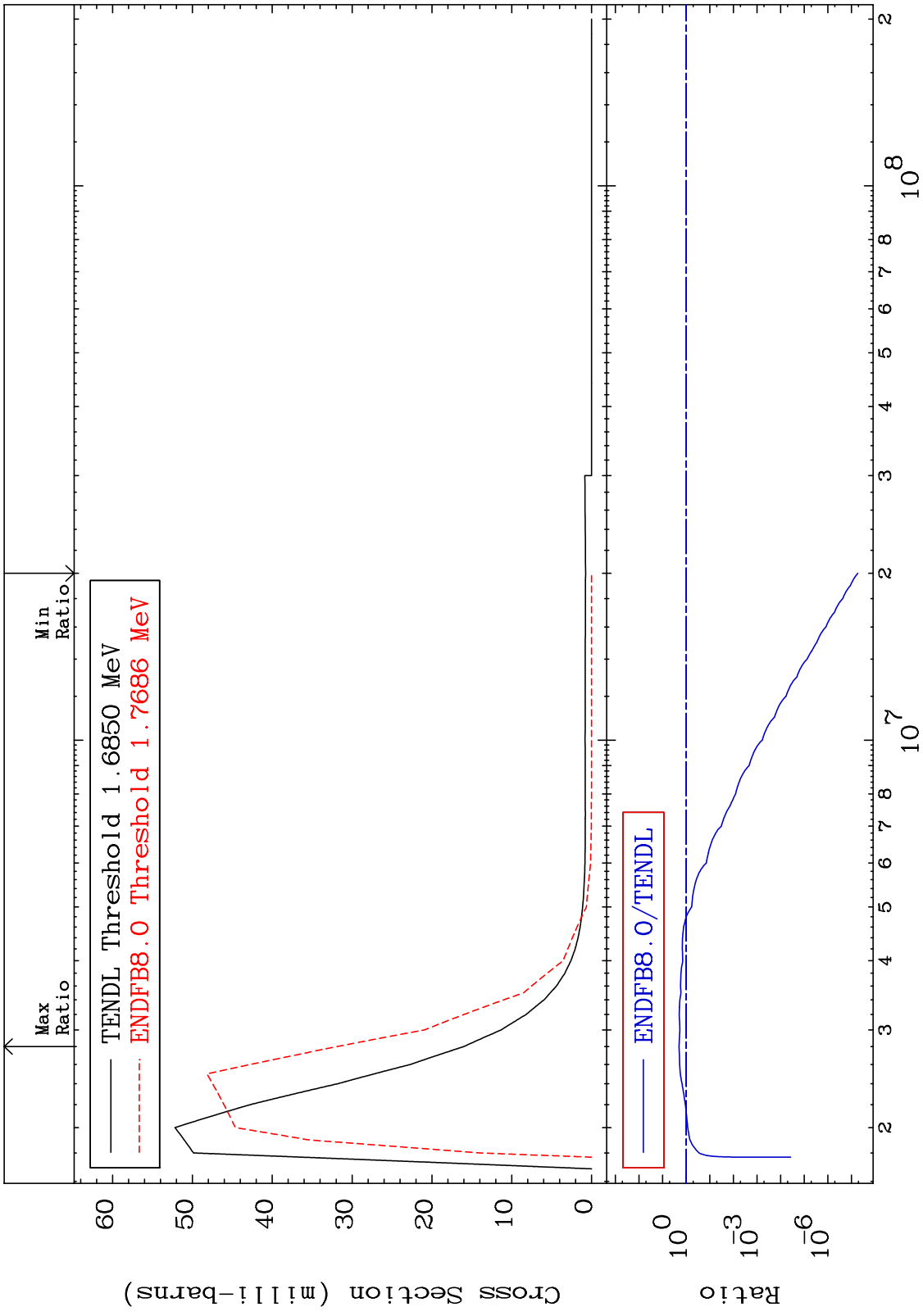
MAT 6649      MT= 73 (n,n') Level      66-Dy-164  
 Cross Section      -33.58 To 9999. %



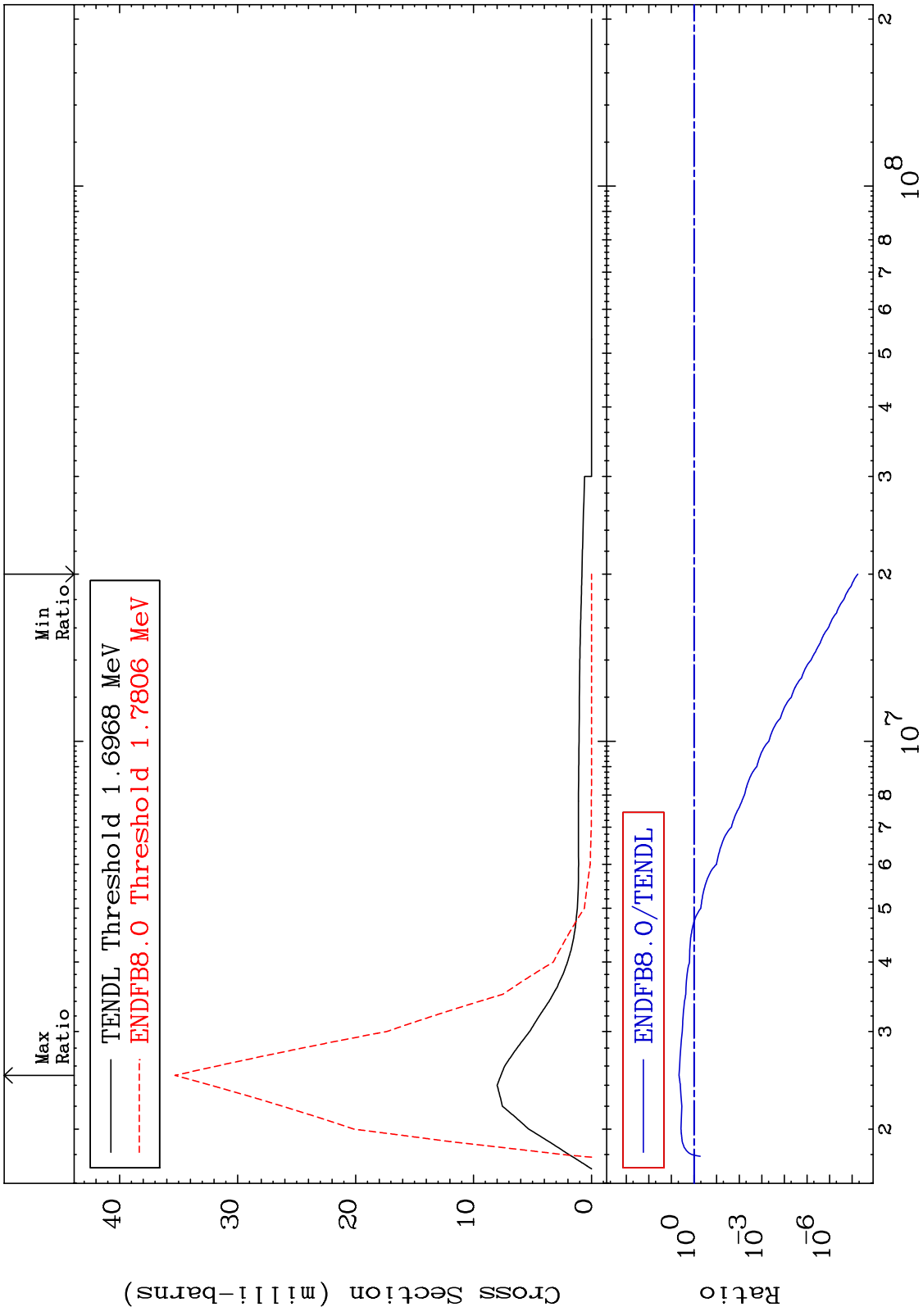
MAT 6649      MT= 74 (n,n') Level Cross Section      66-Dy-164  
 -100.0 To 9999. %



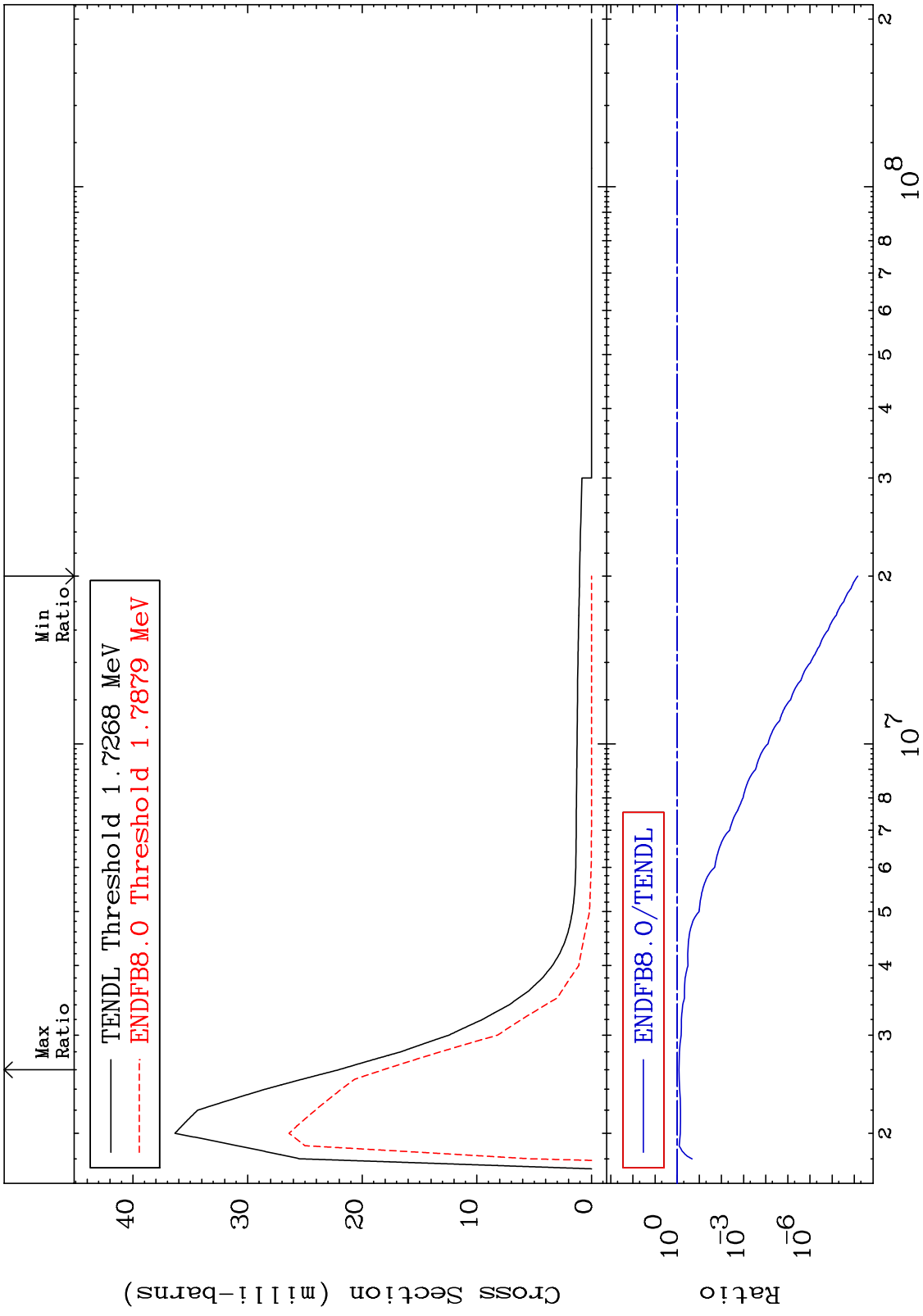
MAT 6649 MT= 75 (n,n') Level Cross Section 66-Dy-164  
 -100.0 To 98.93 %



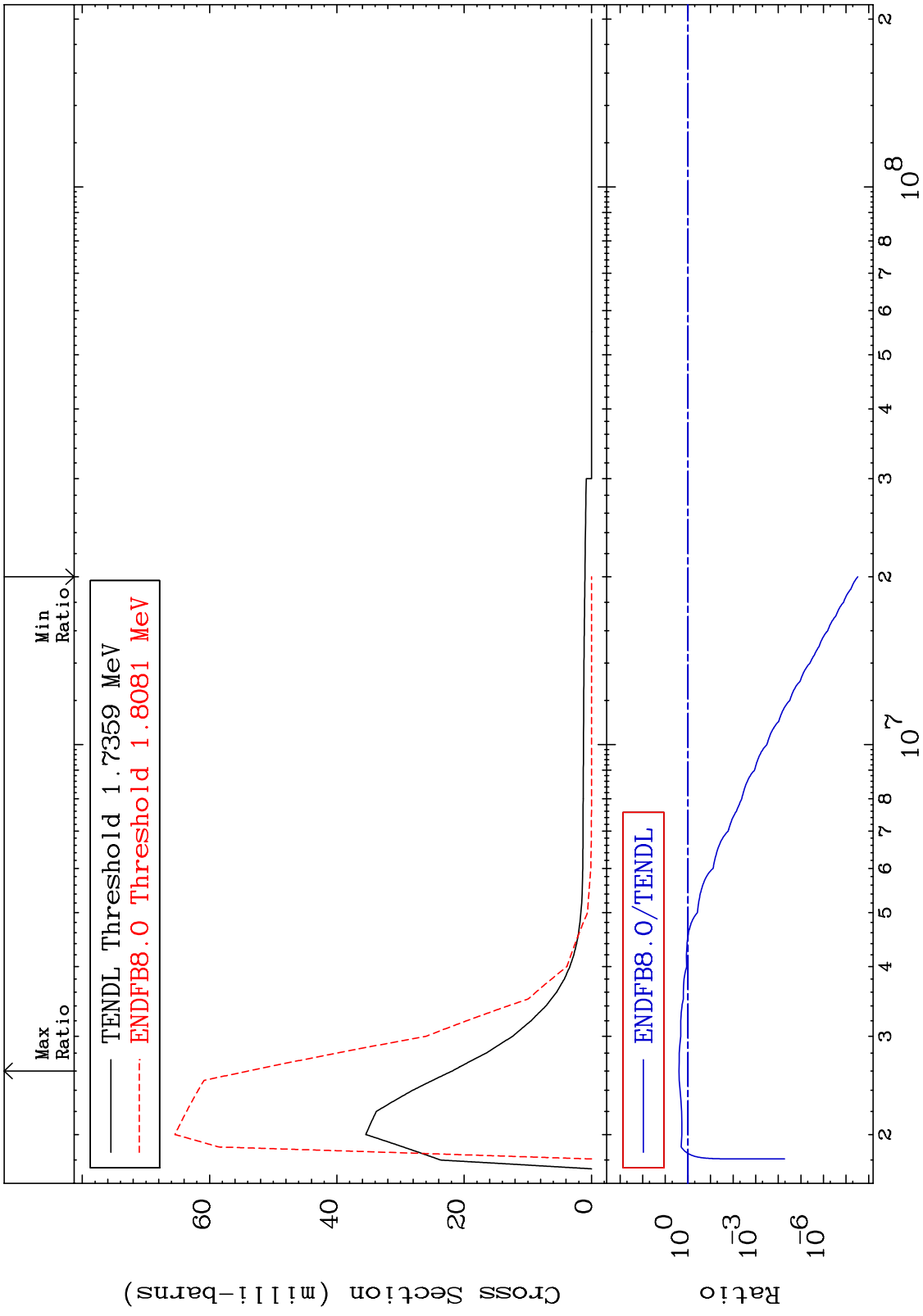
MAT 6649      MT= 76 (n,n') Level Cross Section      66-Dy-164  
 -100.0 To 359.8 %



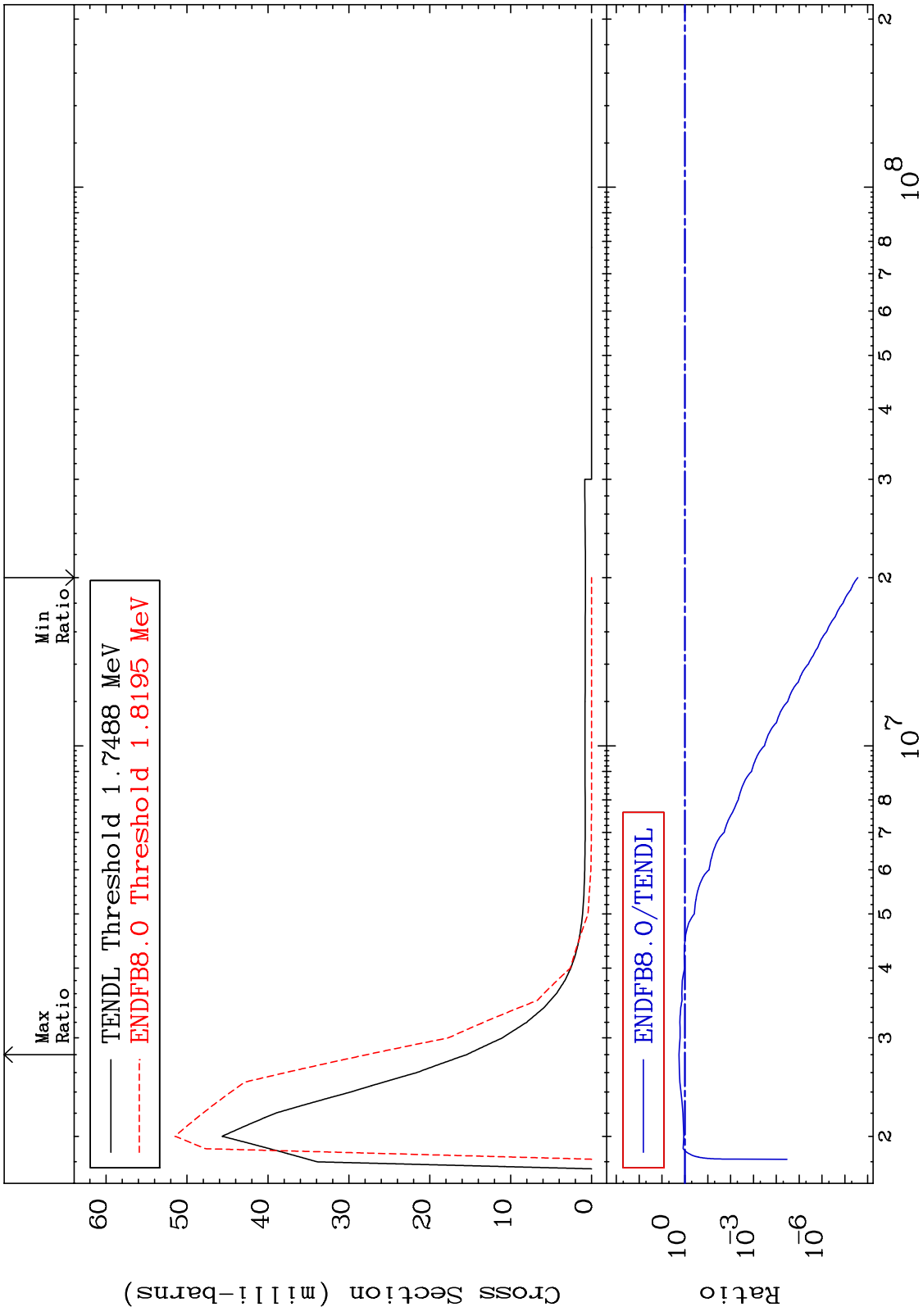
MAT 6649      MT= 77 (n,n') Level      66-Dy-164  
 Cross Section      -100.0 To -17.63%



MAT 6649      MT= 78 (n,n') Level Cross Section      66-Dy-164  
 -100.0 To 146.4 %



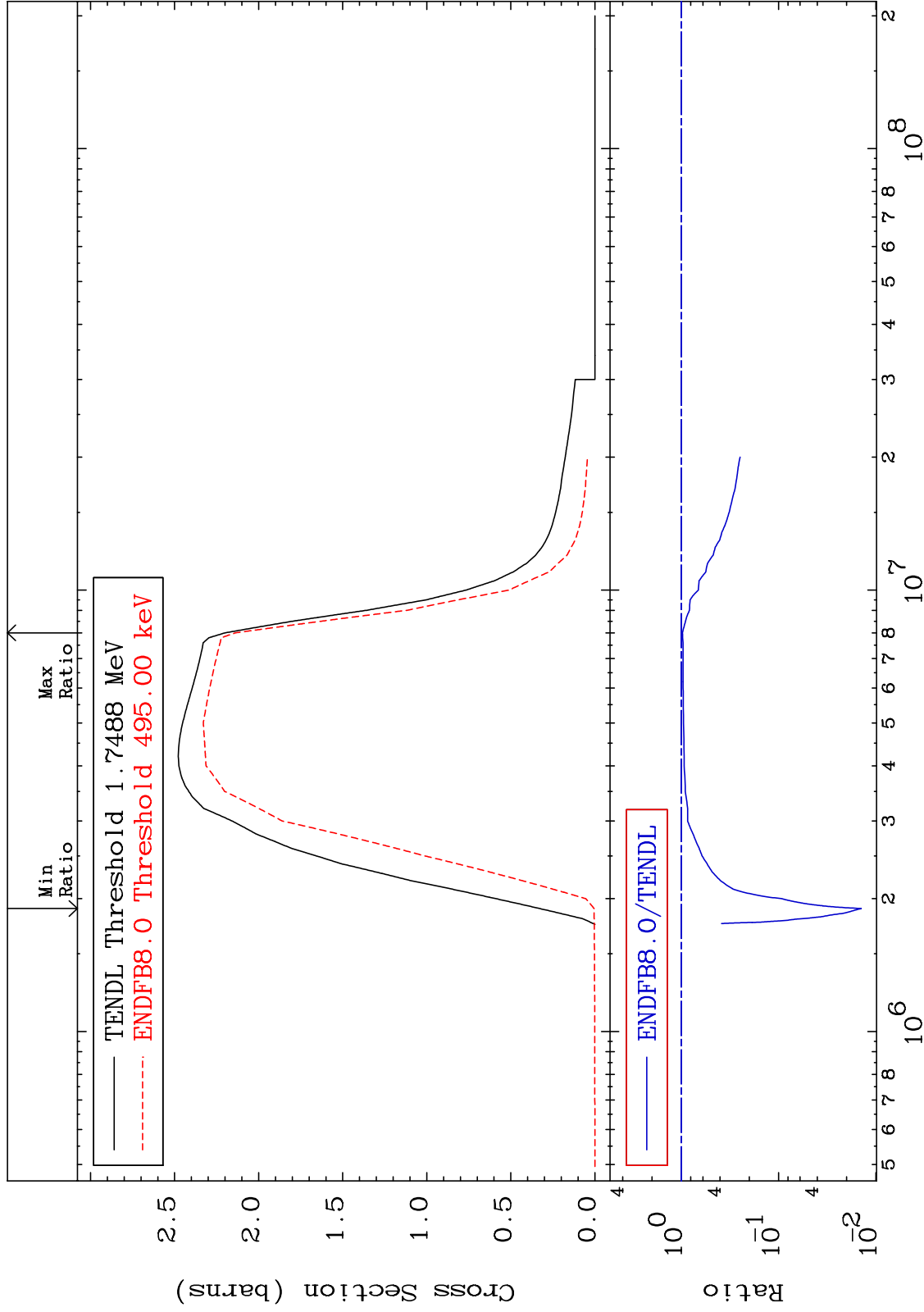
MAT 6649      MT= 79 (n,n') Level Cross Section      66-Dy-164  
 -100.0 To 79.94 %



MAT 6649

(n, n') Continuum  
Cross Section

66-Dy-164  
-98.59 To -2.777%





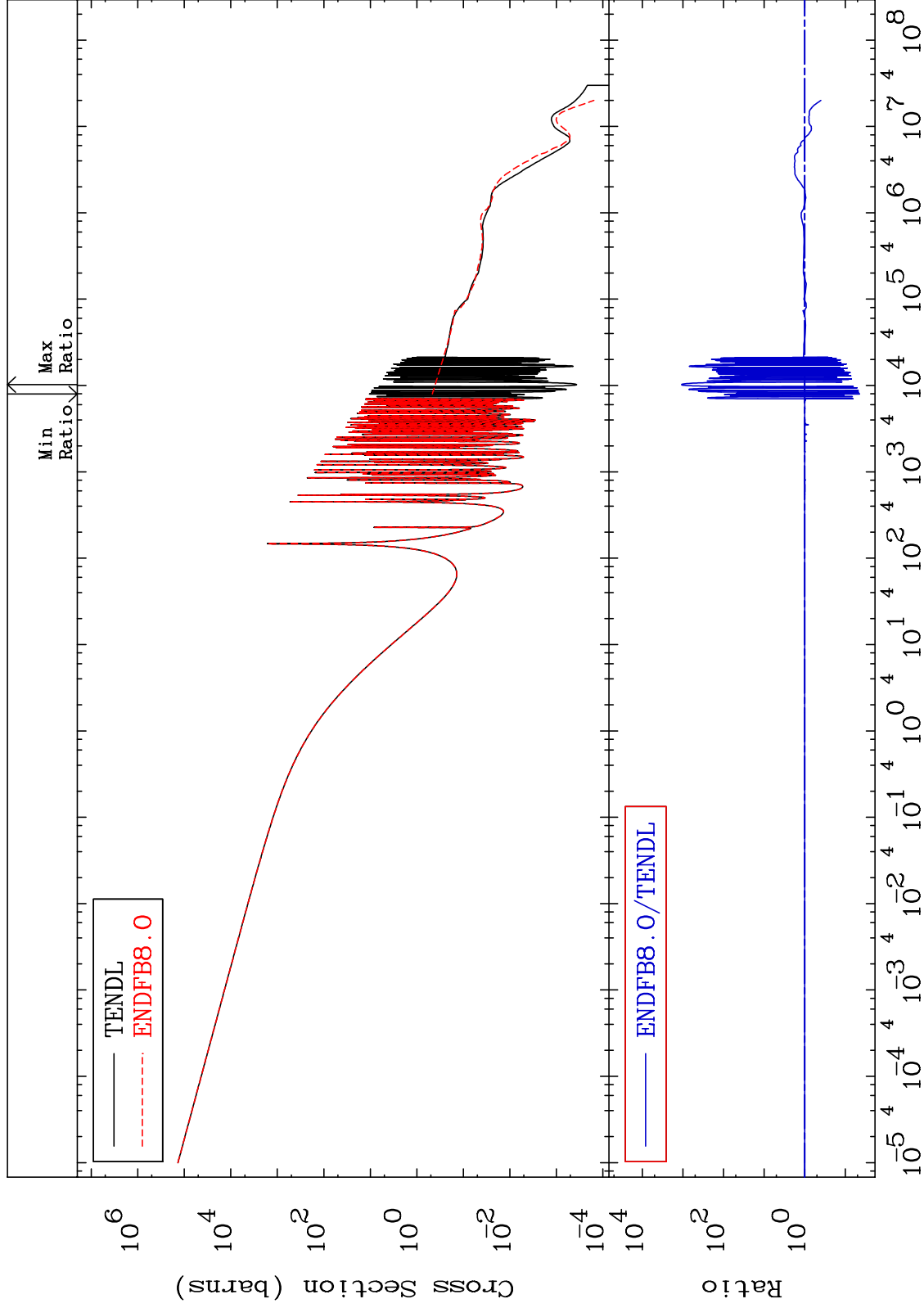
MAT 6649

(n,  $\gamma$ )

66-Dy-164

Cross Section

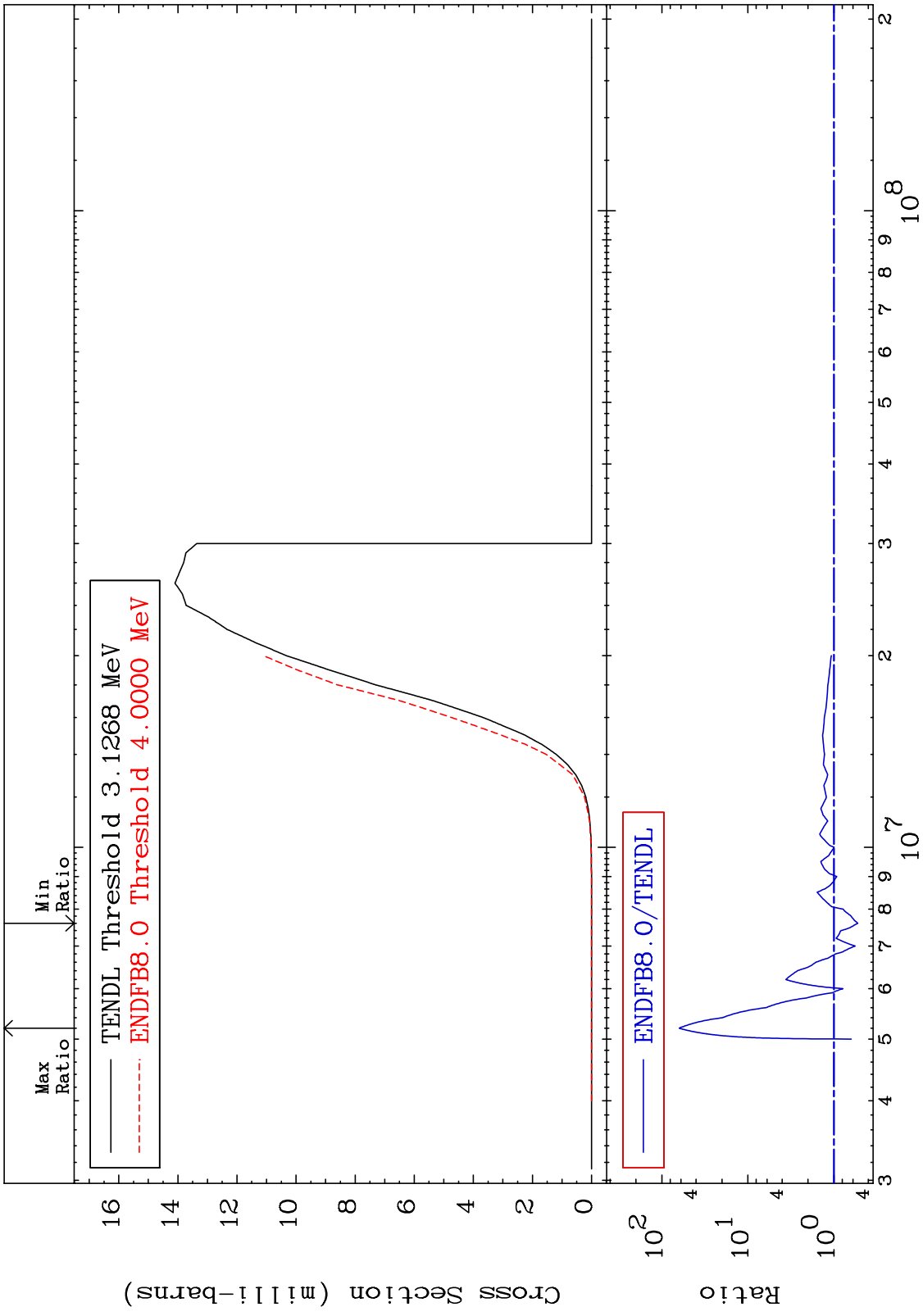
-95.59 To 9999. %



40

Incident Energy (eV)

66-Dy-164



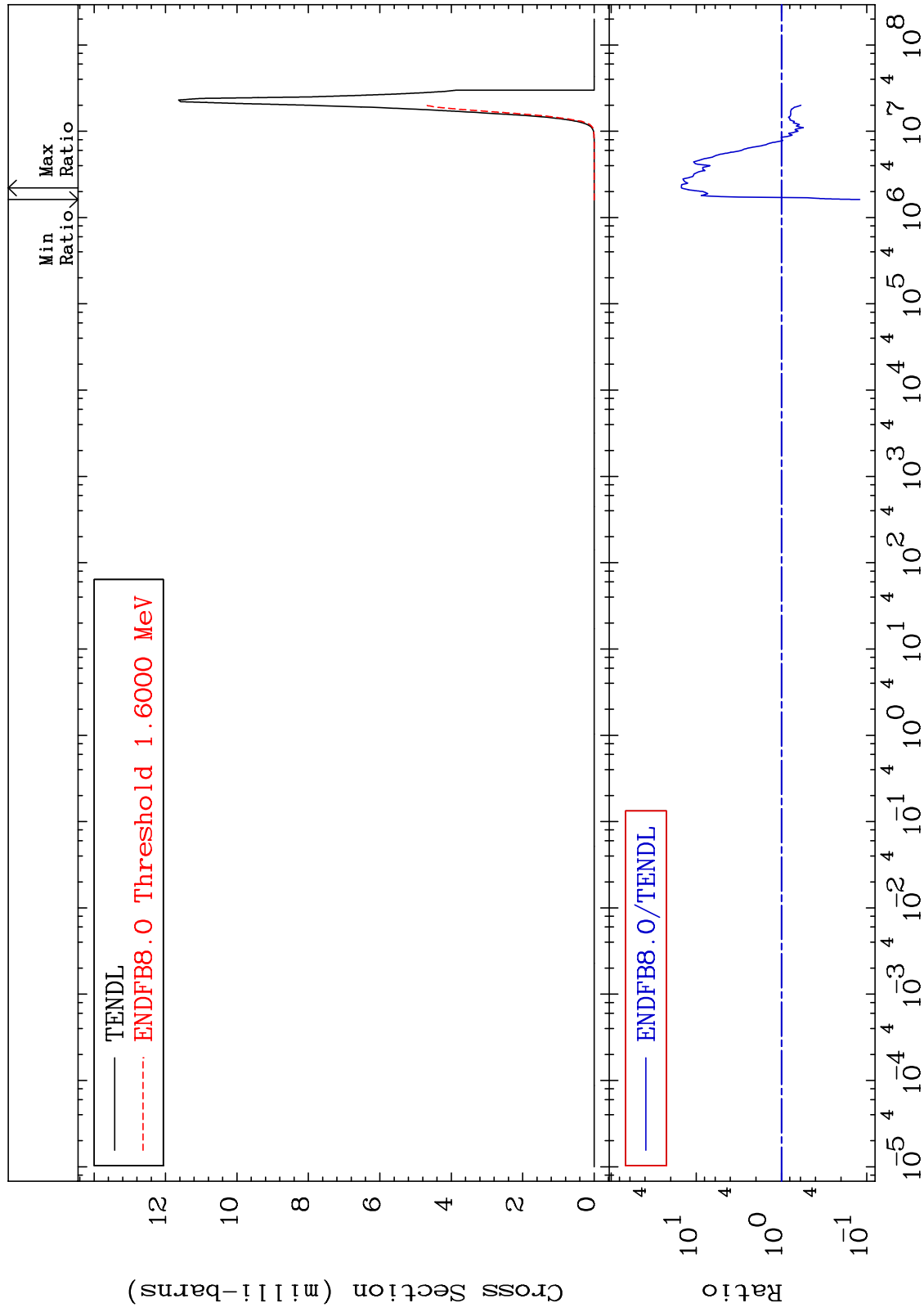
MAT 6649

(n,  $\alpha$ )

66-Dy-164

Cross Section

-87.94 To 1394. %



42

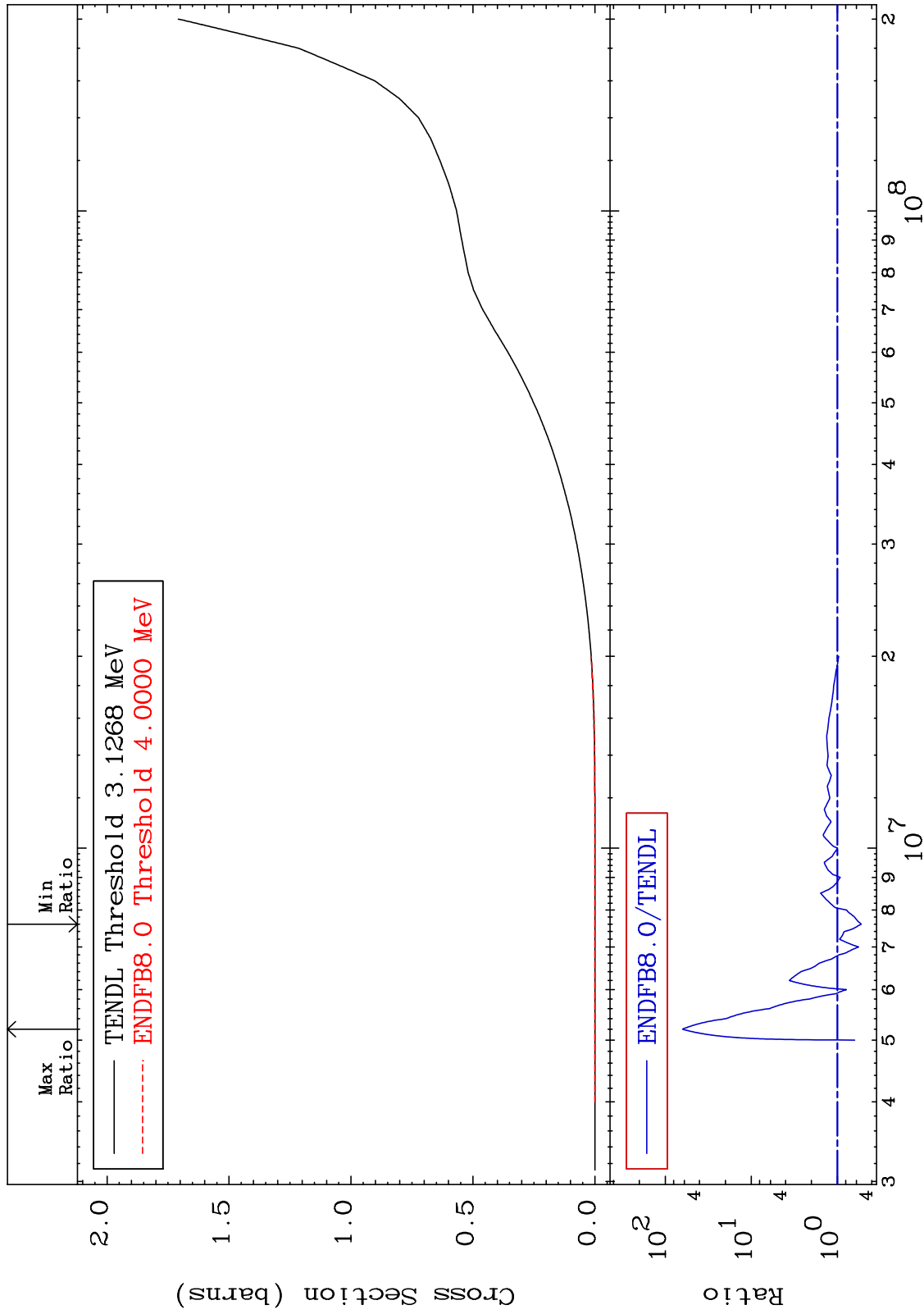
Incident Energy (eV)

66-Dy-164

MAT 6649

Hydrogen Production  
Cross Section

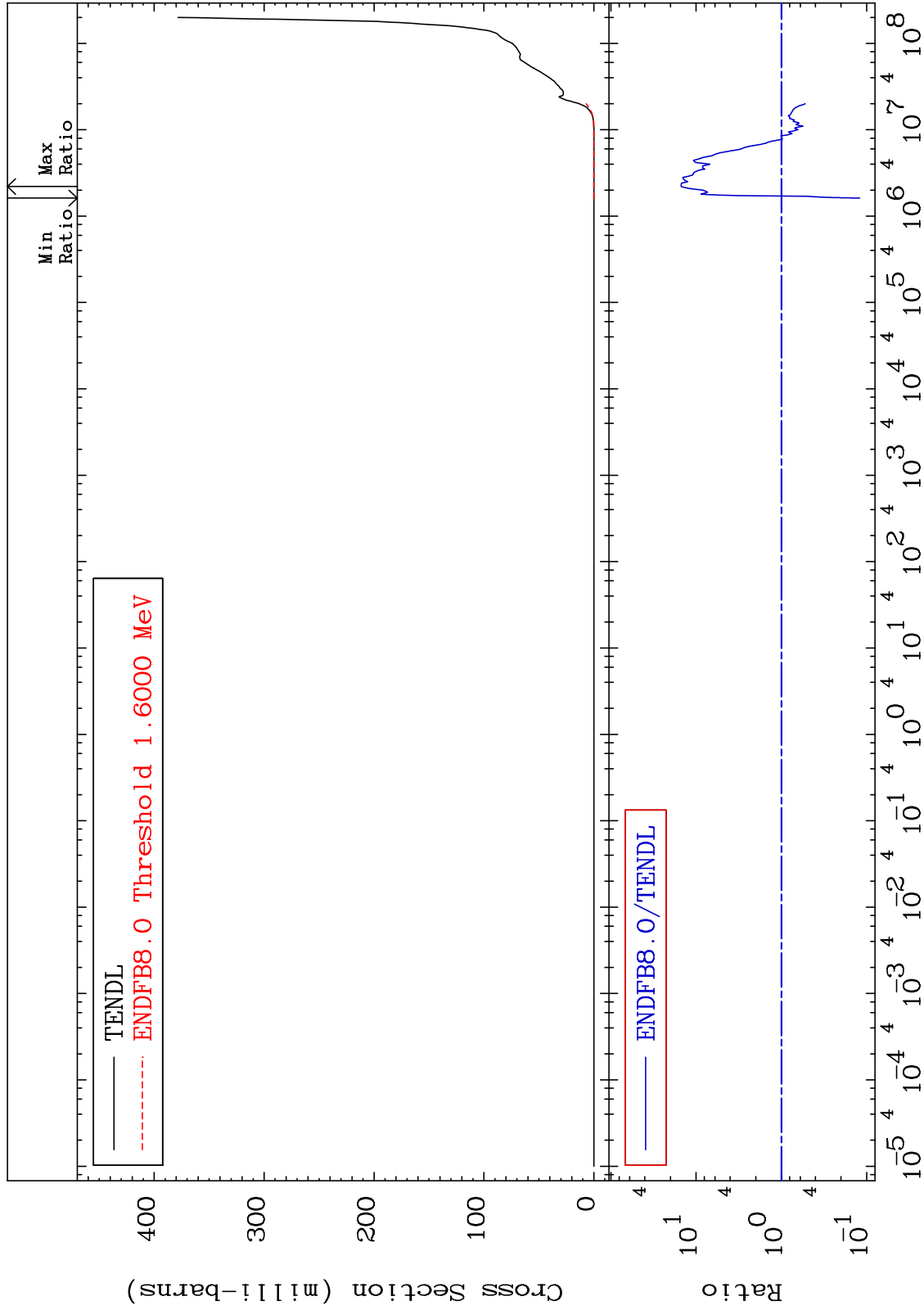
66-Dy-164  
-47.24 To 6217. %



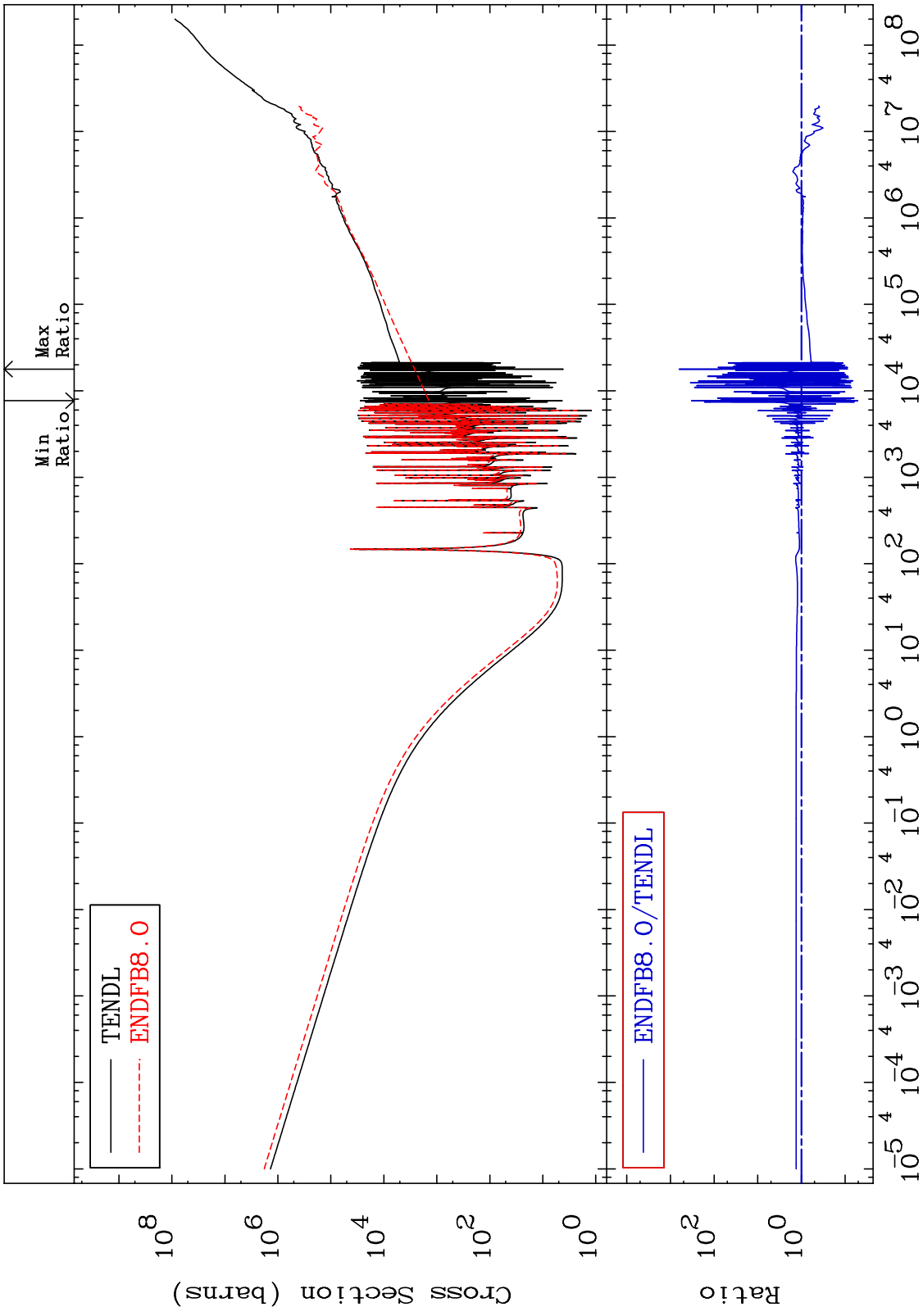
MAT 6649

He-4 Production  
Cross Section

66-Dy-164  
-87.94 To 1394. %



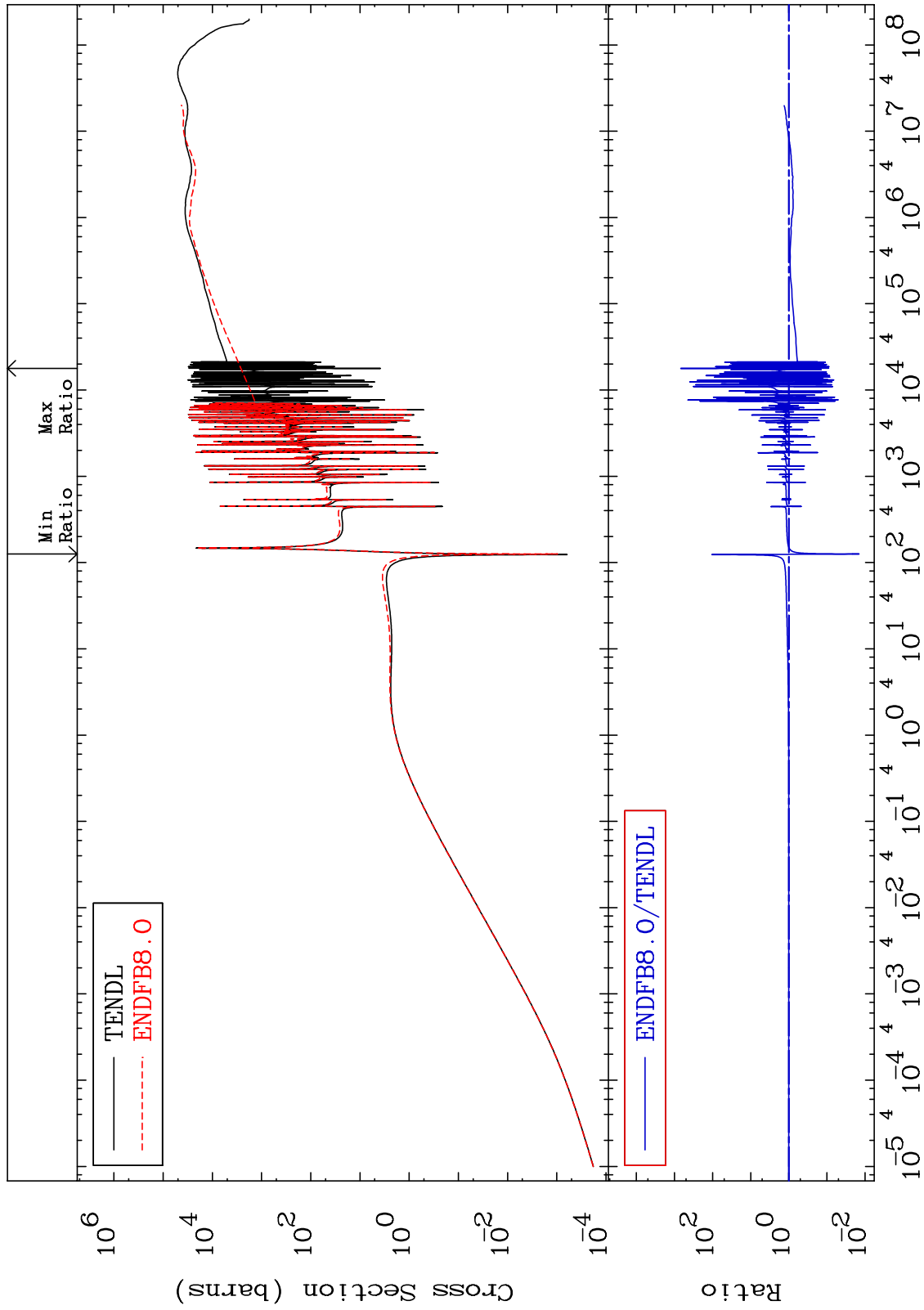
MAT 6649      Kerma total (eV-barns)      66-Dy-164  
 Cross Section      -94.91 To 9999. %



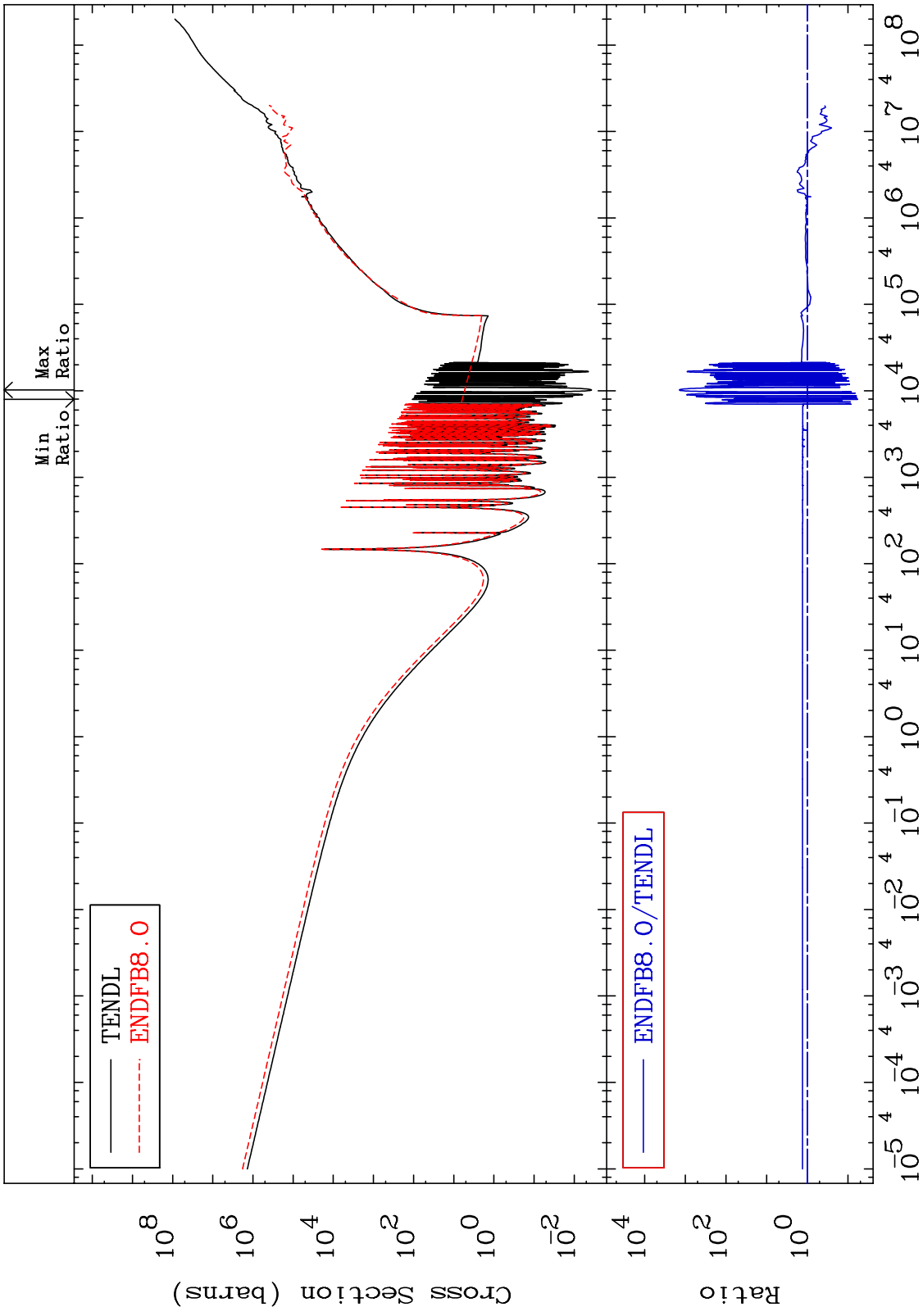
MAT 6649

Kerma elastic  
Cross Section

66-Dy-164  
-98.56 To 9999. %

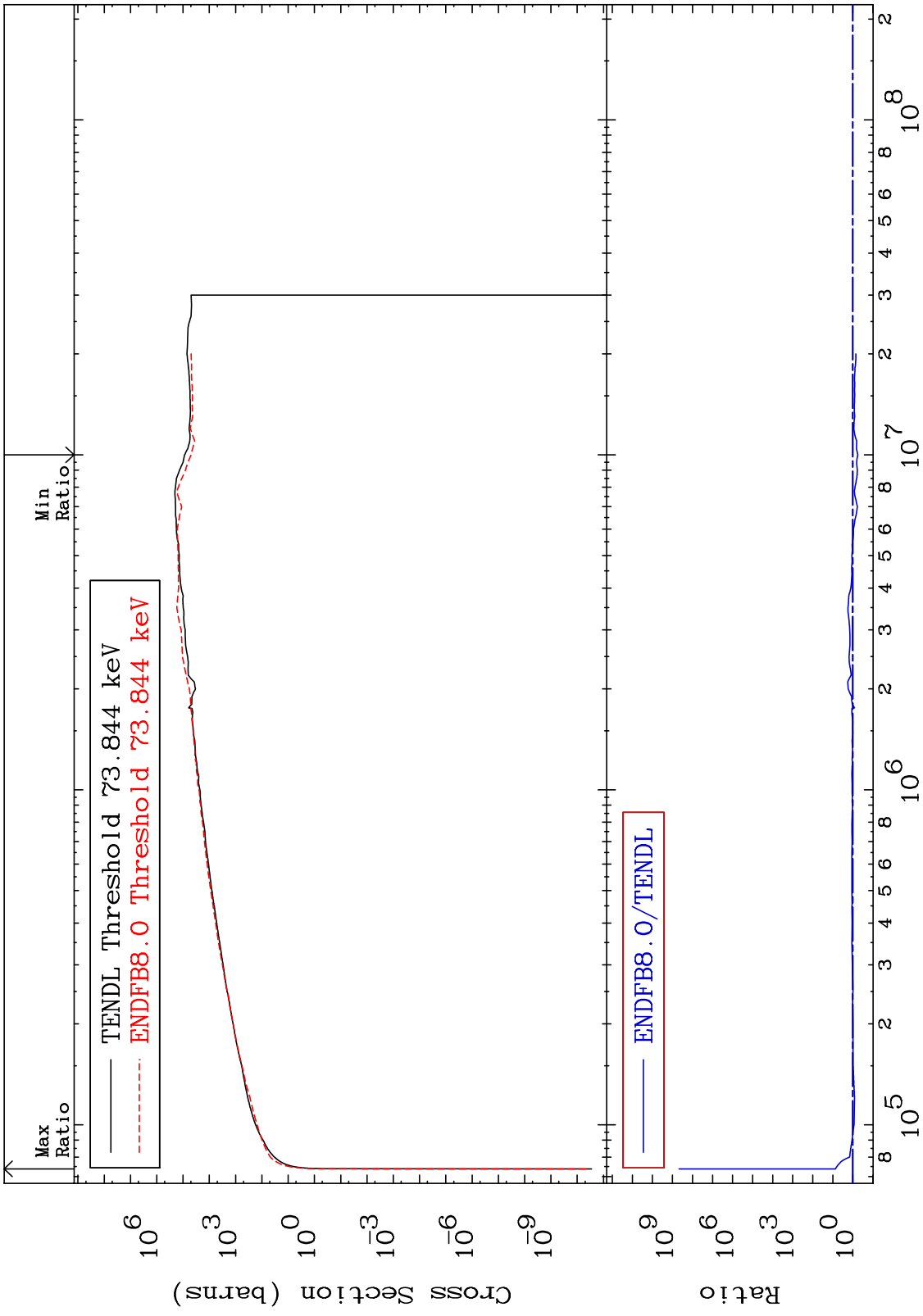


MAT 6649 Kerma non-elastic (all but mt2) 66-Dy-164  
 Cross Section -94.25 To 9999. %





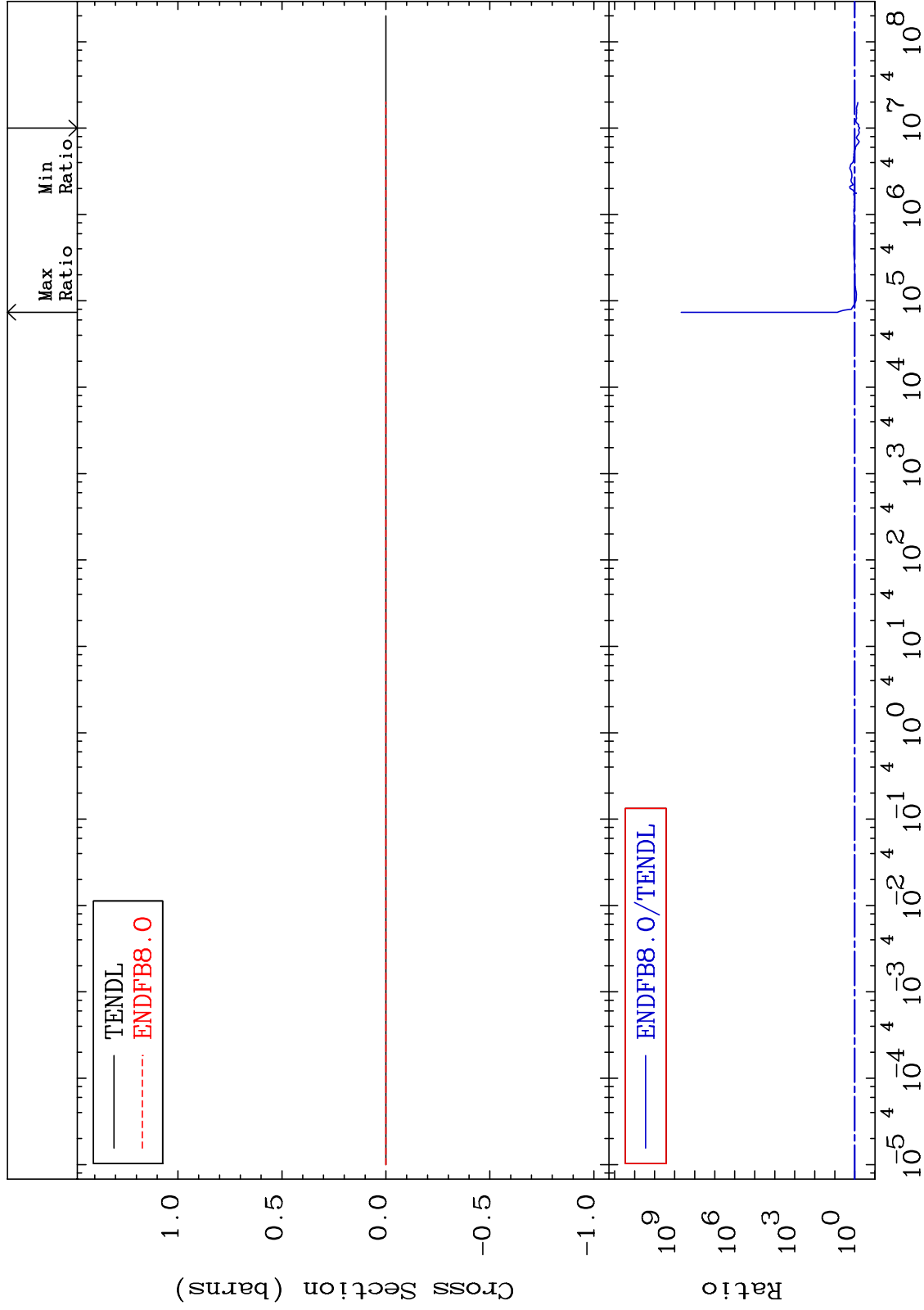
MAT 6649      Kerma inelastic (mt51-91)      66-Dy-164  
-43.80 To 9999. %  
Cross Section



MAT 6649

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

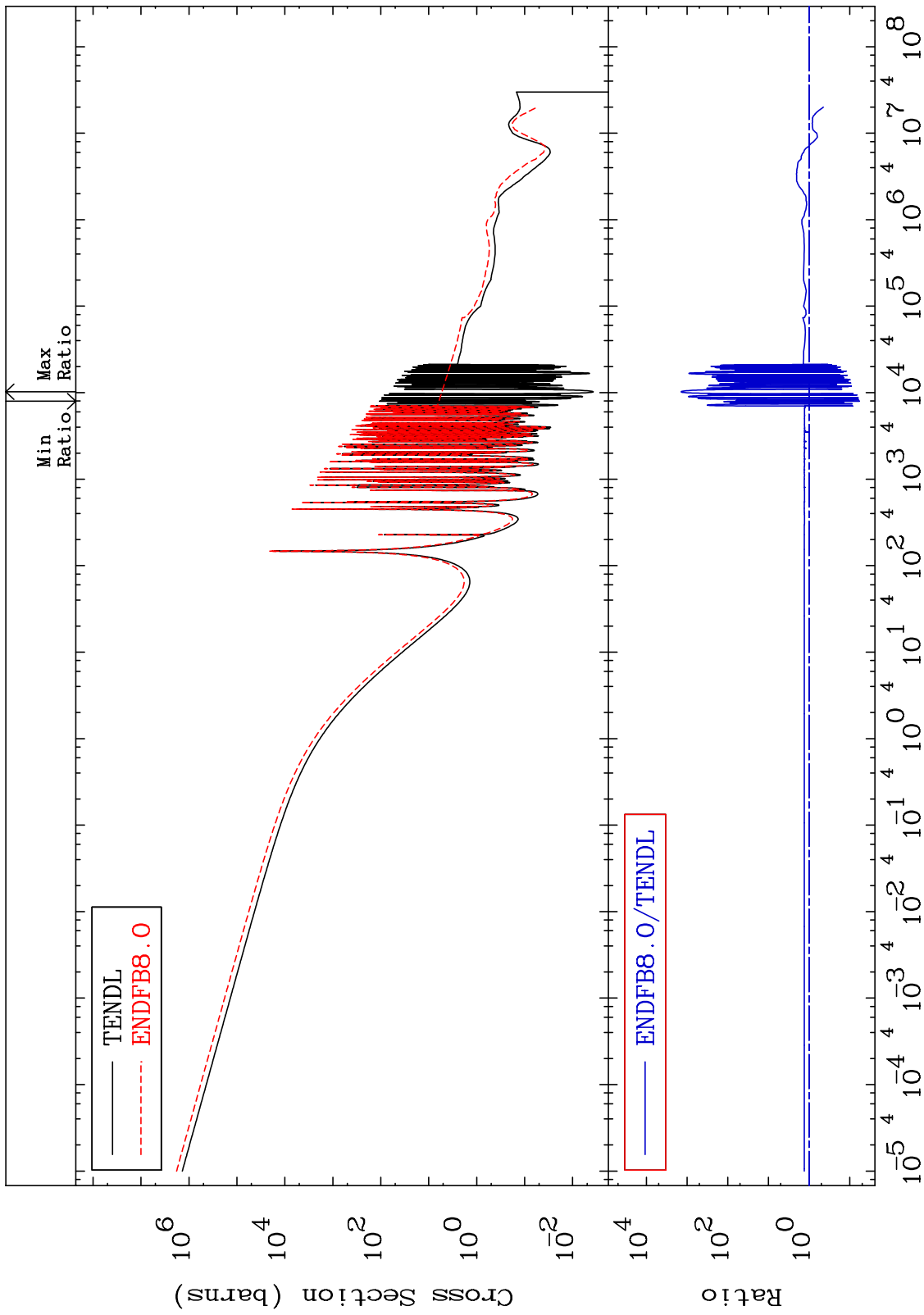
66-Dy-164  
-43.80 To 9999. %



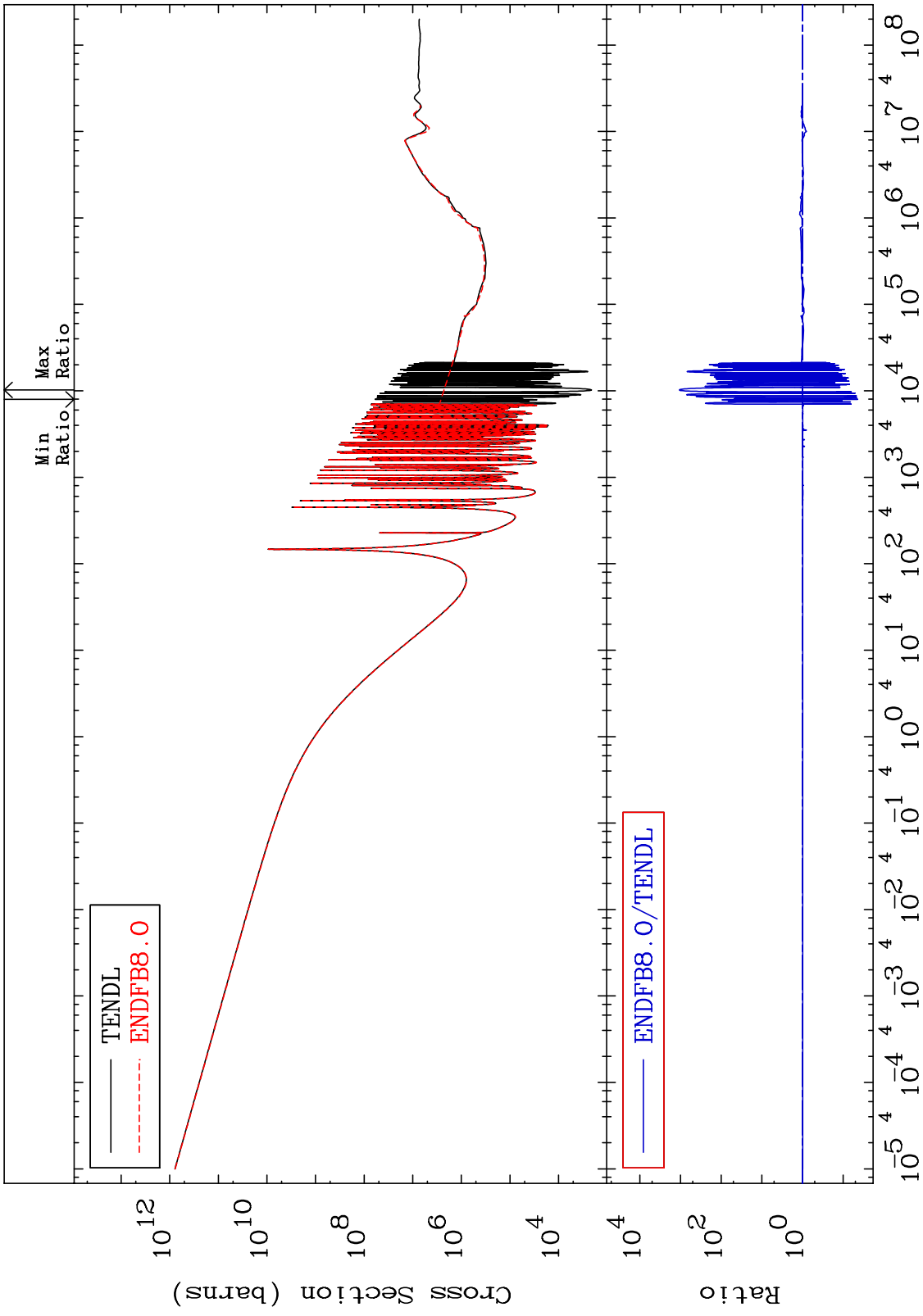
MAT 6649

Kerma capture (mt102)  
Cross Section

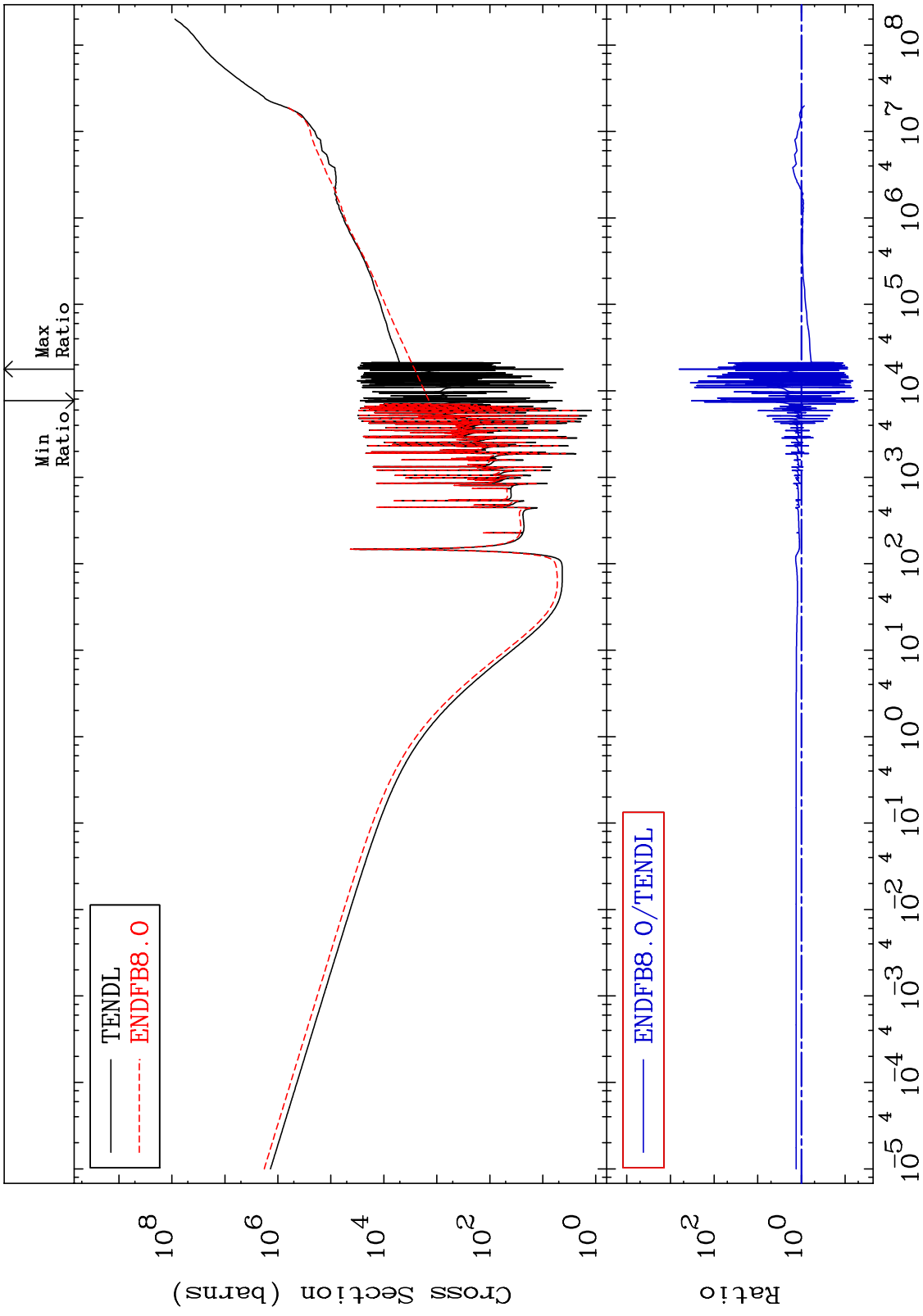
66-Dy-164  
-94.25 To 9999. %



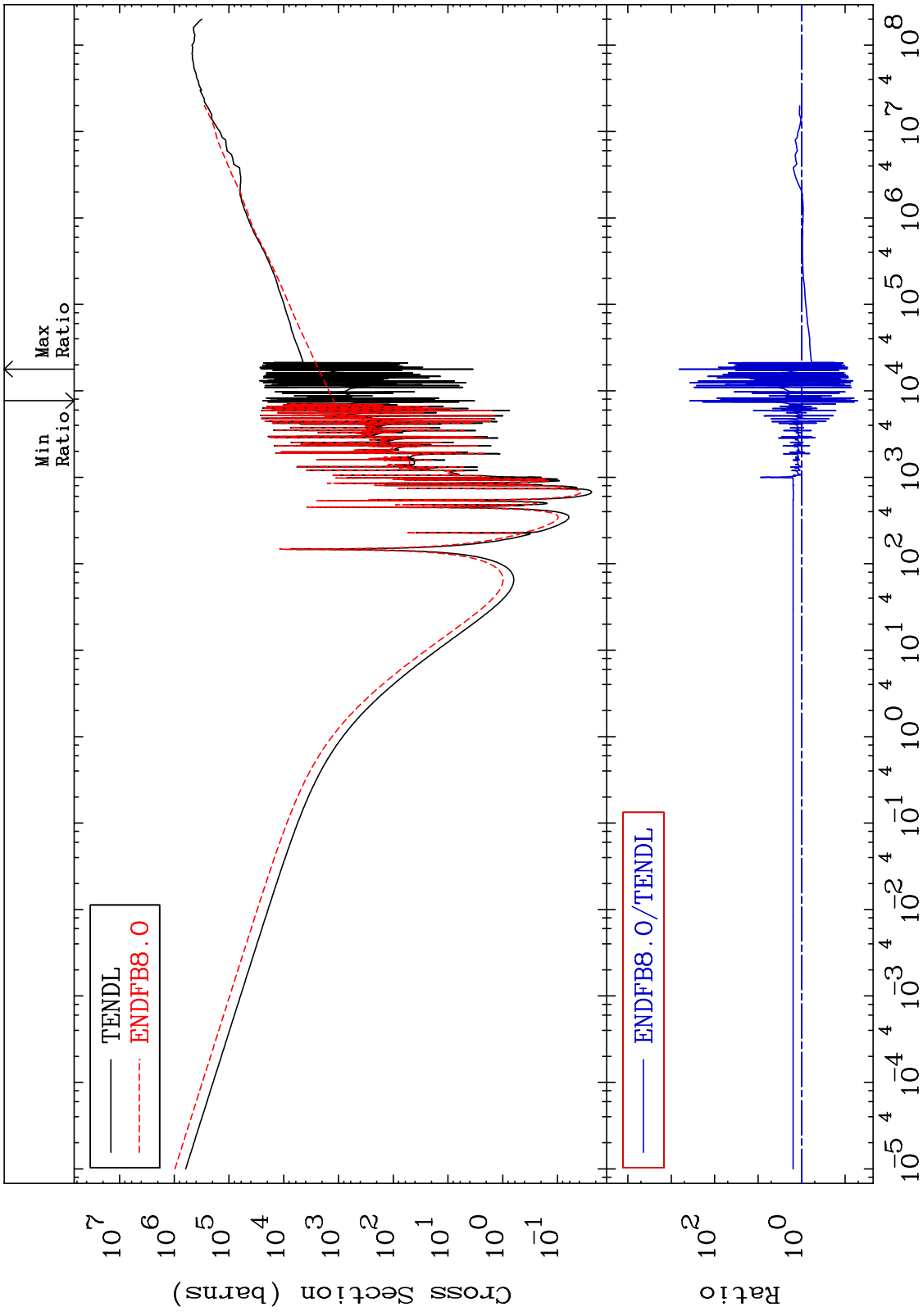
MAT 6649      Total photon (eV-barns) Cross Section      66-Dy-164  
 -95.65 To 9999. %



MAT 6649      Total kinematic kerma (high limit)      66-Dy-164  
 Cross Section      -94.91 To 9999. %



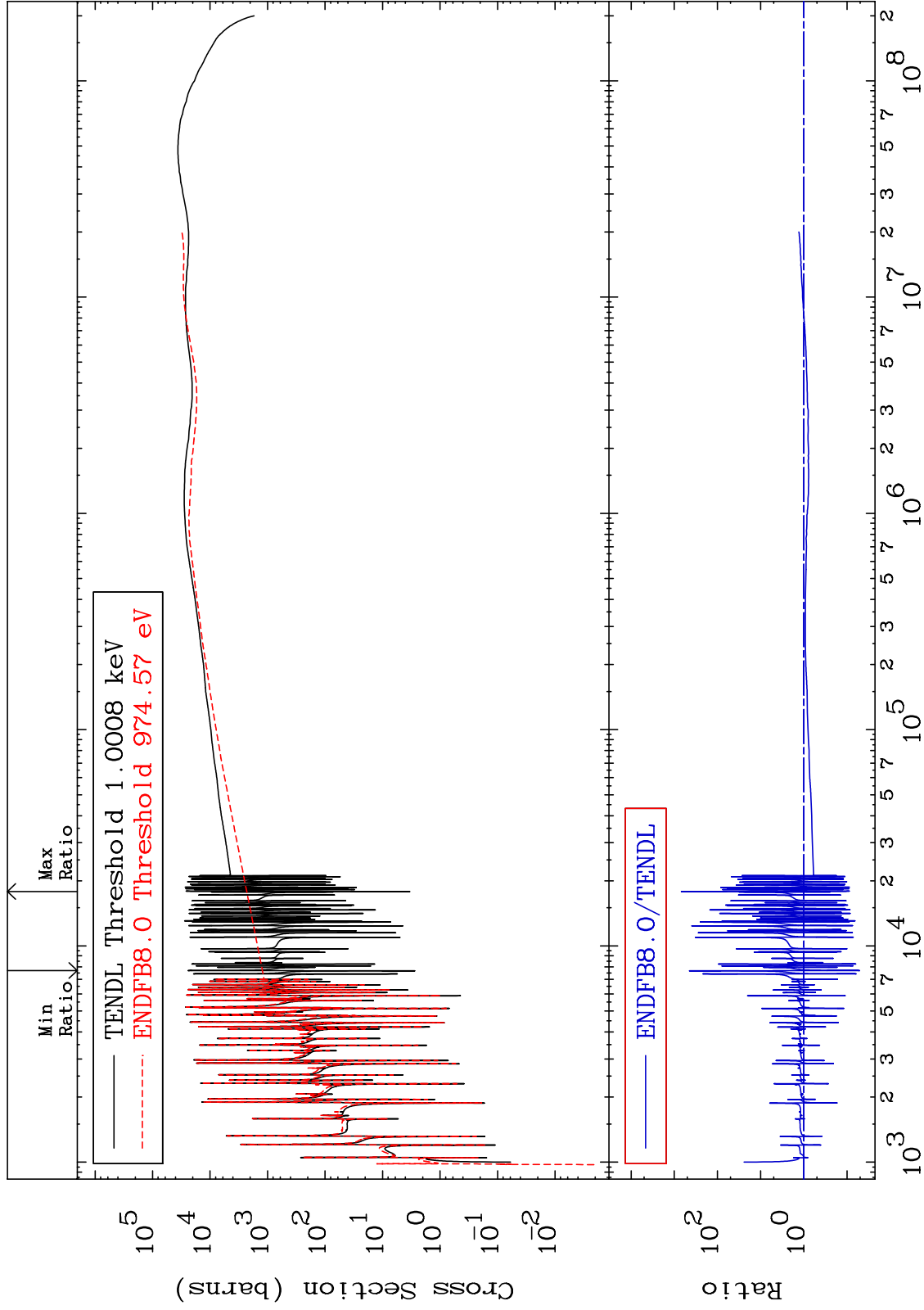
MAT 6649      Dpa total (eV-barns)      66-Dy-164  
 Cross Section      -94.91 To 9999. %



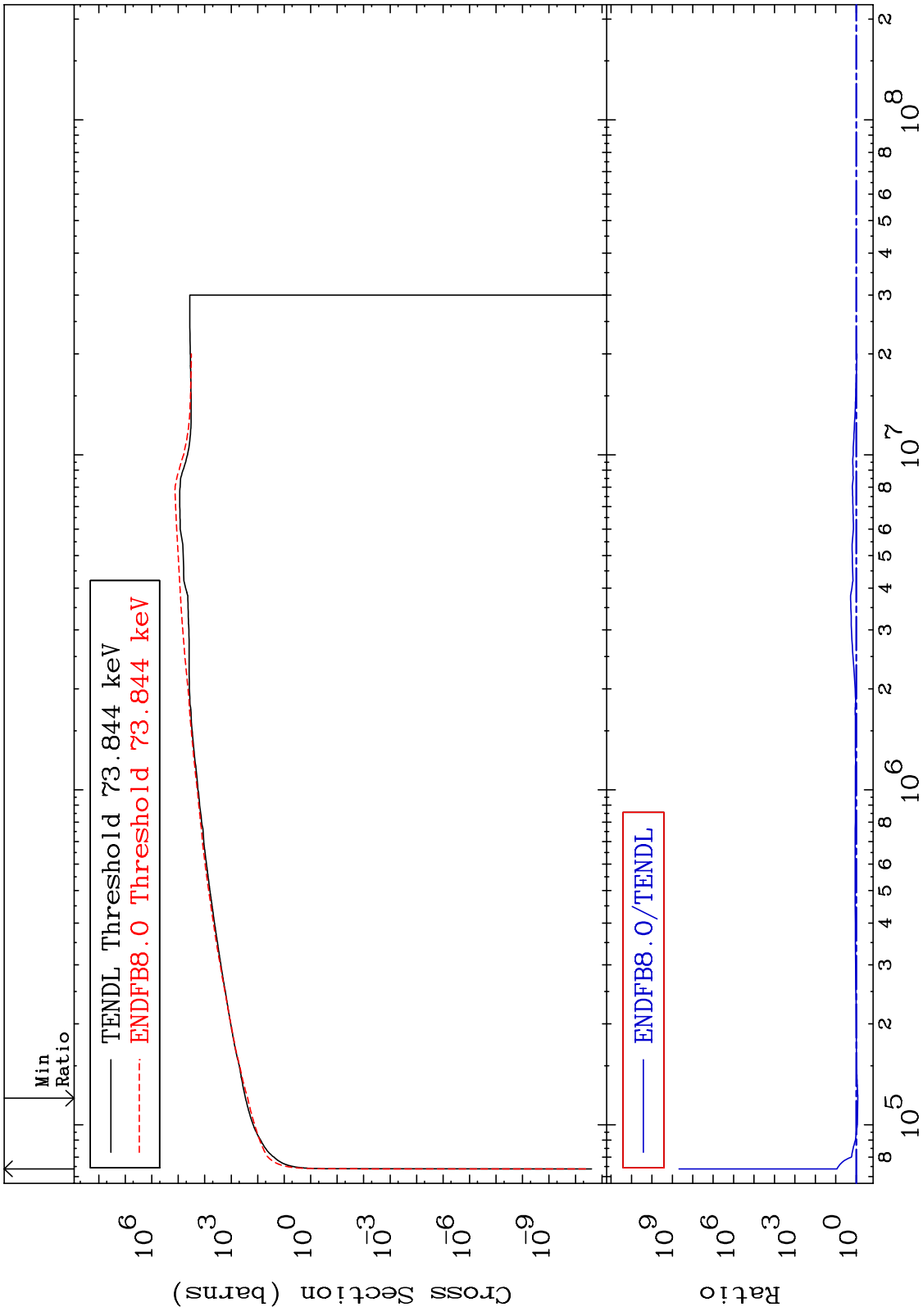
MAT 6649

Dpa elastic (mt2)  
Cross Section

66-Dy-164  
-94.92 To 9999. %



MAT 6649      Dpa inelastic (mt51-91)      66-Dy-164  
Cross Section      -17.25 To 9999. %





MAT 6649      Dpa disappearance (mt102 -120)      66-Dy-164  
 Cross Section      -93.17 To 9999. %

