

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

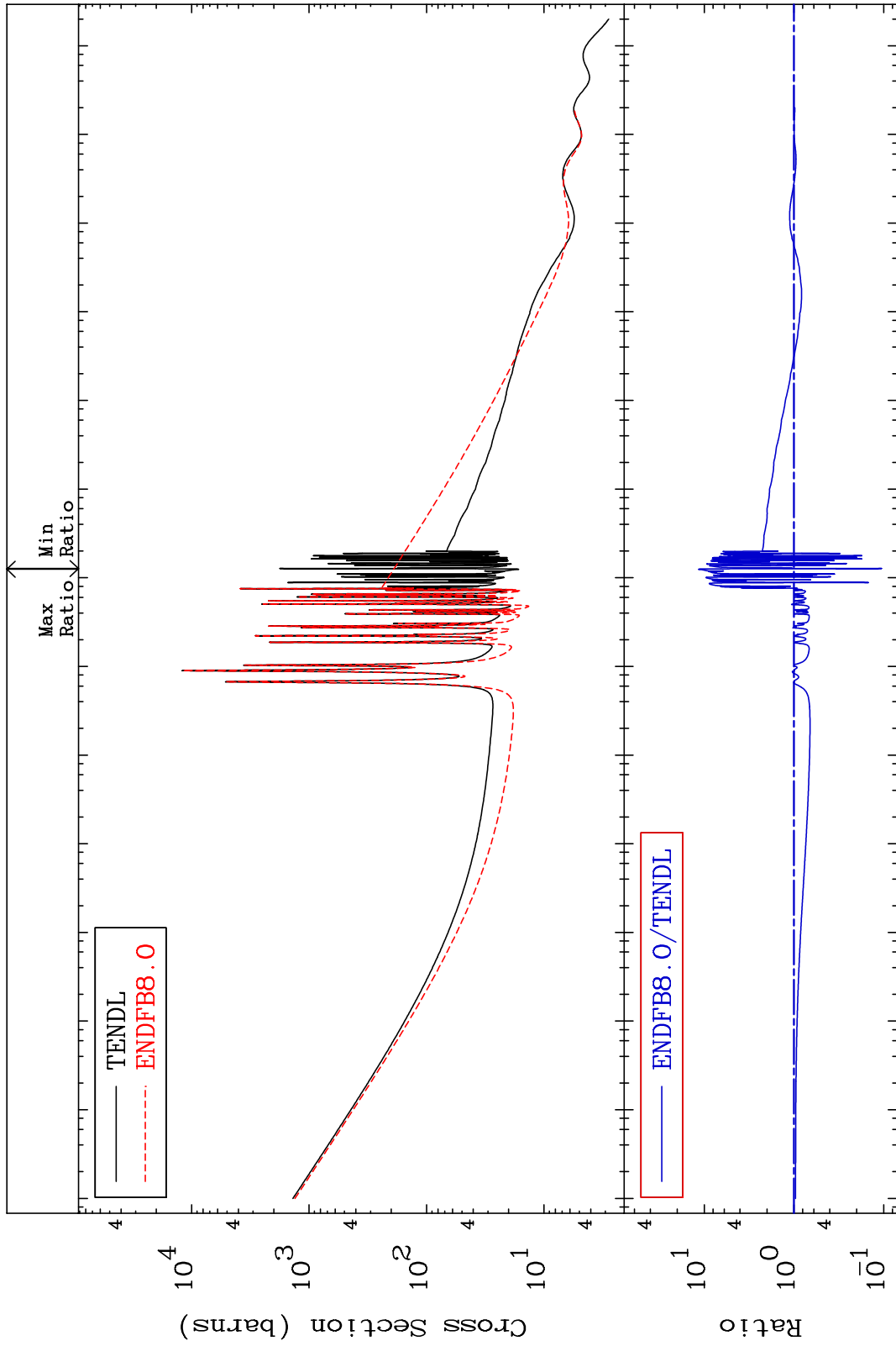
E.Mail: redcullen1@comcast.net
Web: redcullen1.net/HOMEPAGE.NEW

Press Mouse Button to Start

MAT 7640

Total
Cross Section

76-0s-189
-89.42 To 1065. %



1

Incident Energy (eV)

76-0s-189

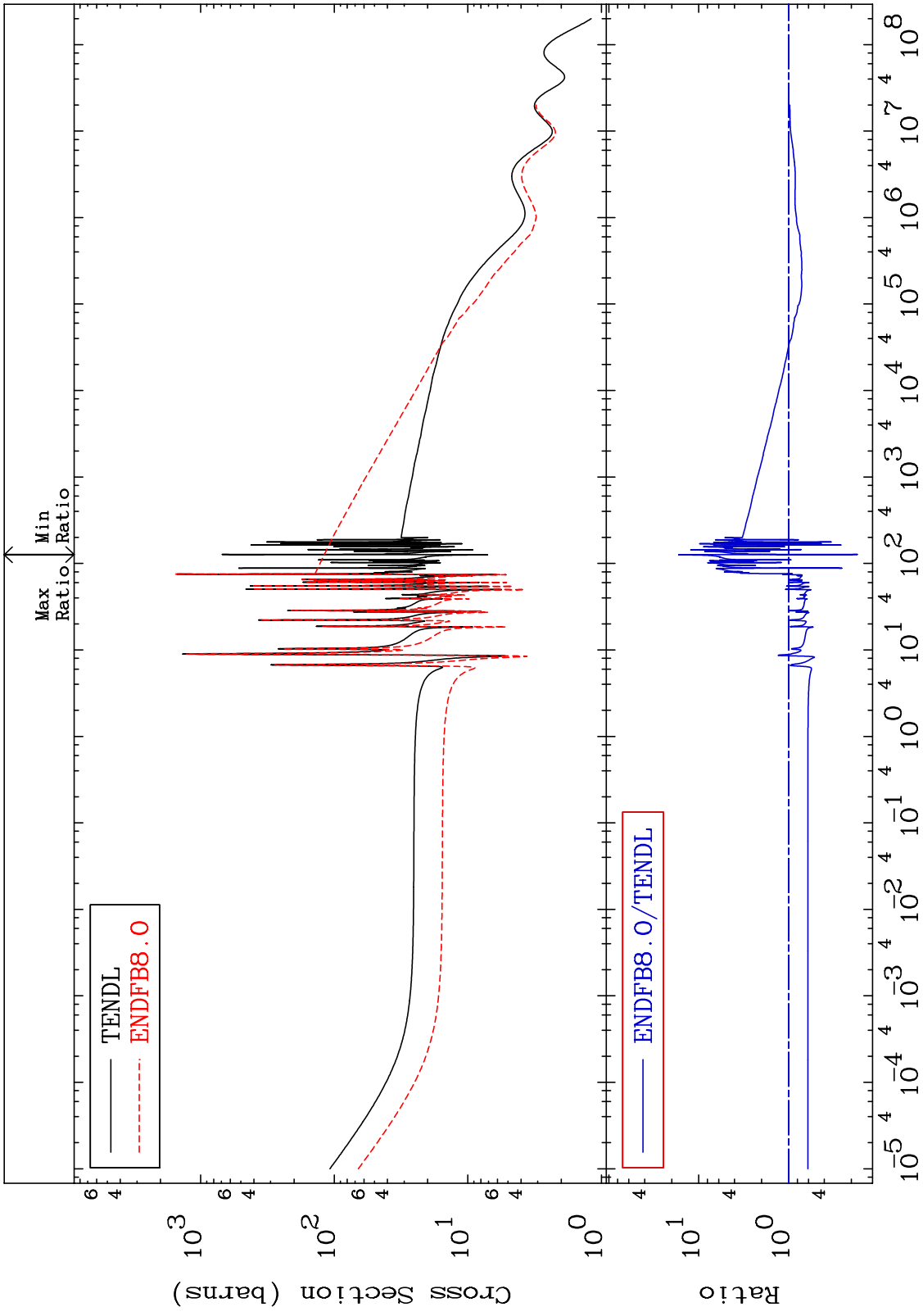
MAT 7640

Elastic

Cross Section

76-0s-189

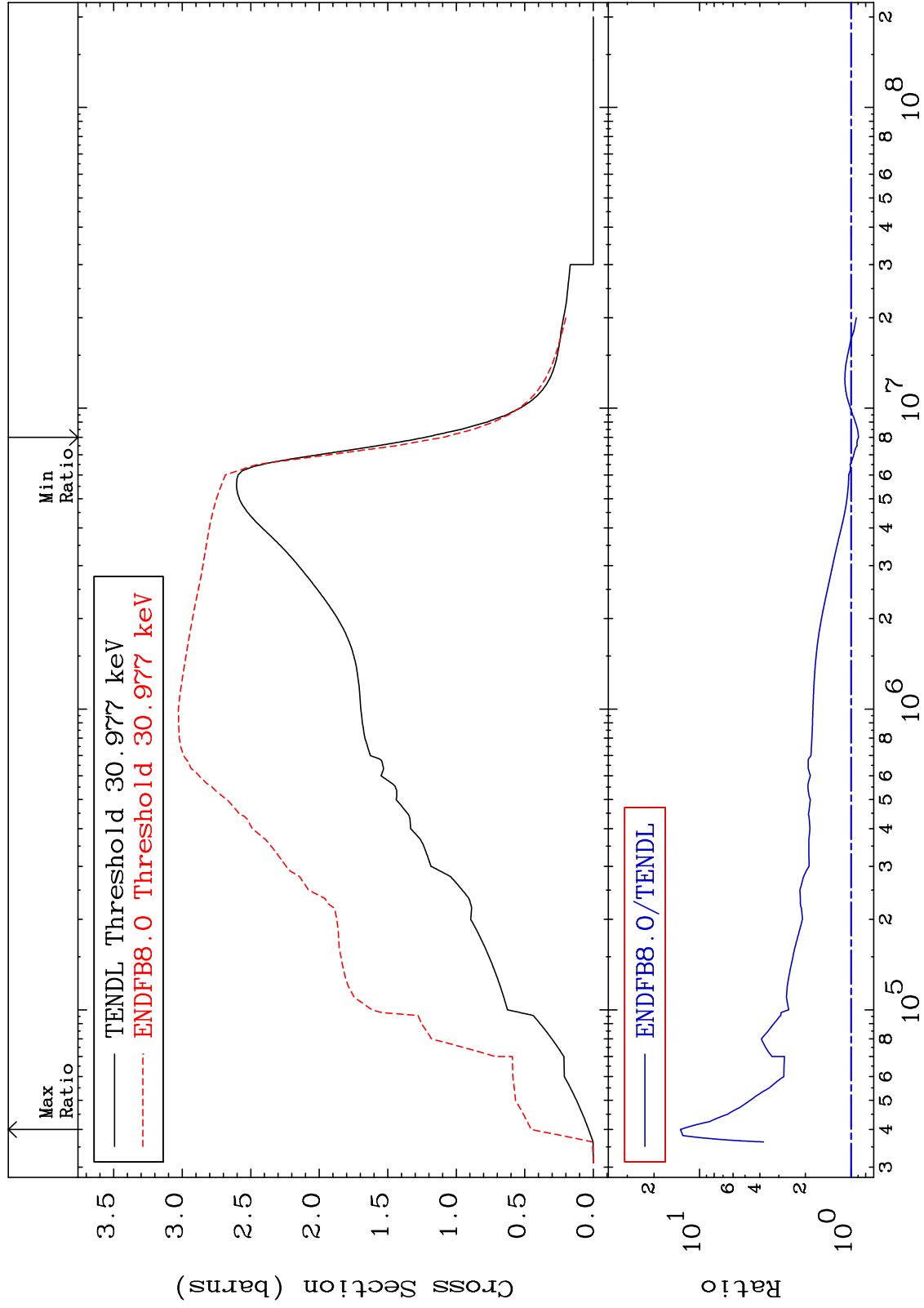
-82.80 To 1575. %



MAT 7640

Inelastic
Cross Section

76-0s-189
-10.74 To 1237. %



3

Incident Energy (eV)

76-0s-189

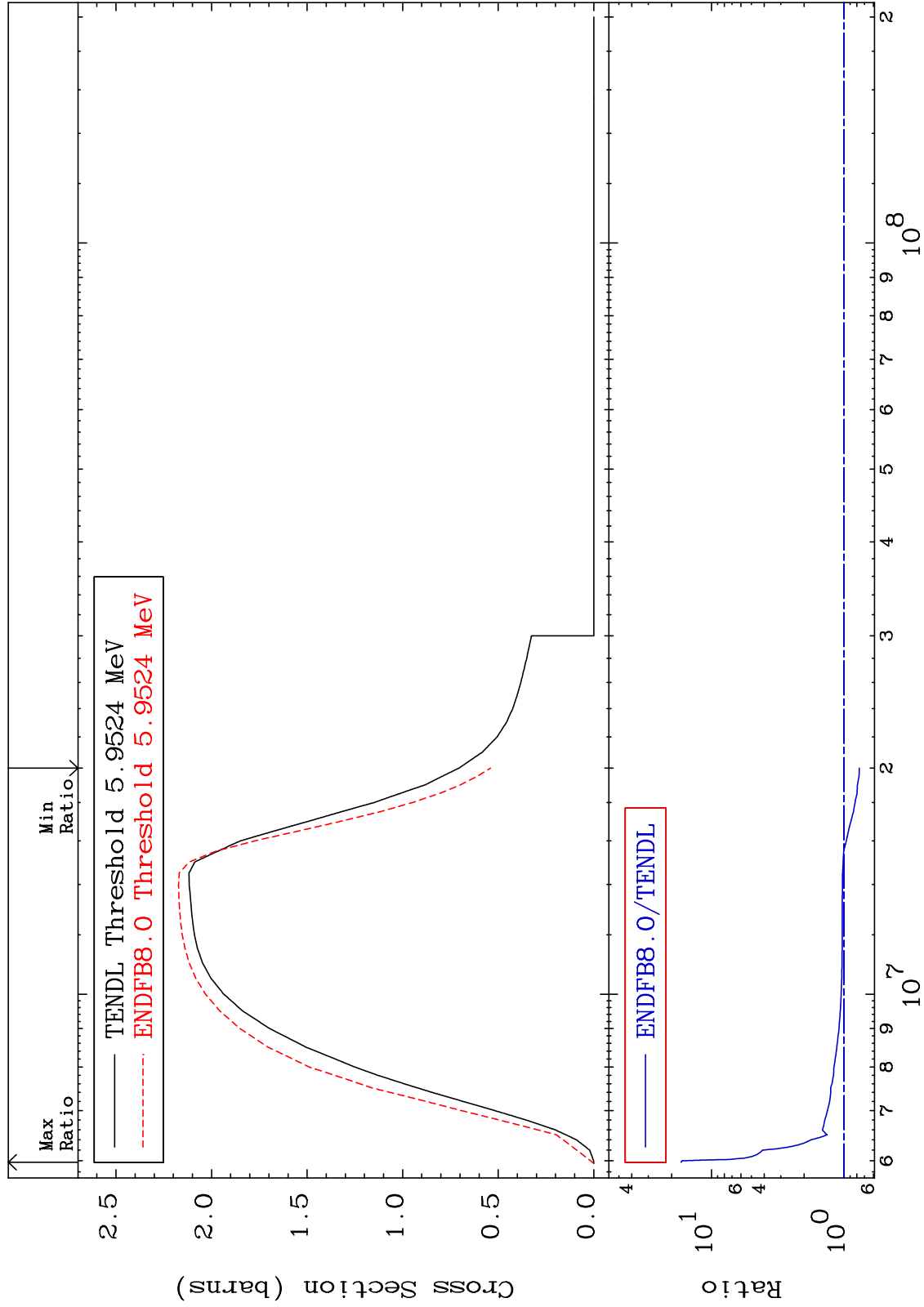
MAT 7640

(n,2n)

76-0s-189

Cross Section

-23.41 To 1599. %



4

Incident Energy (eV)

76-0s-189

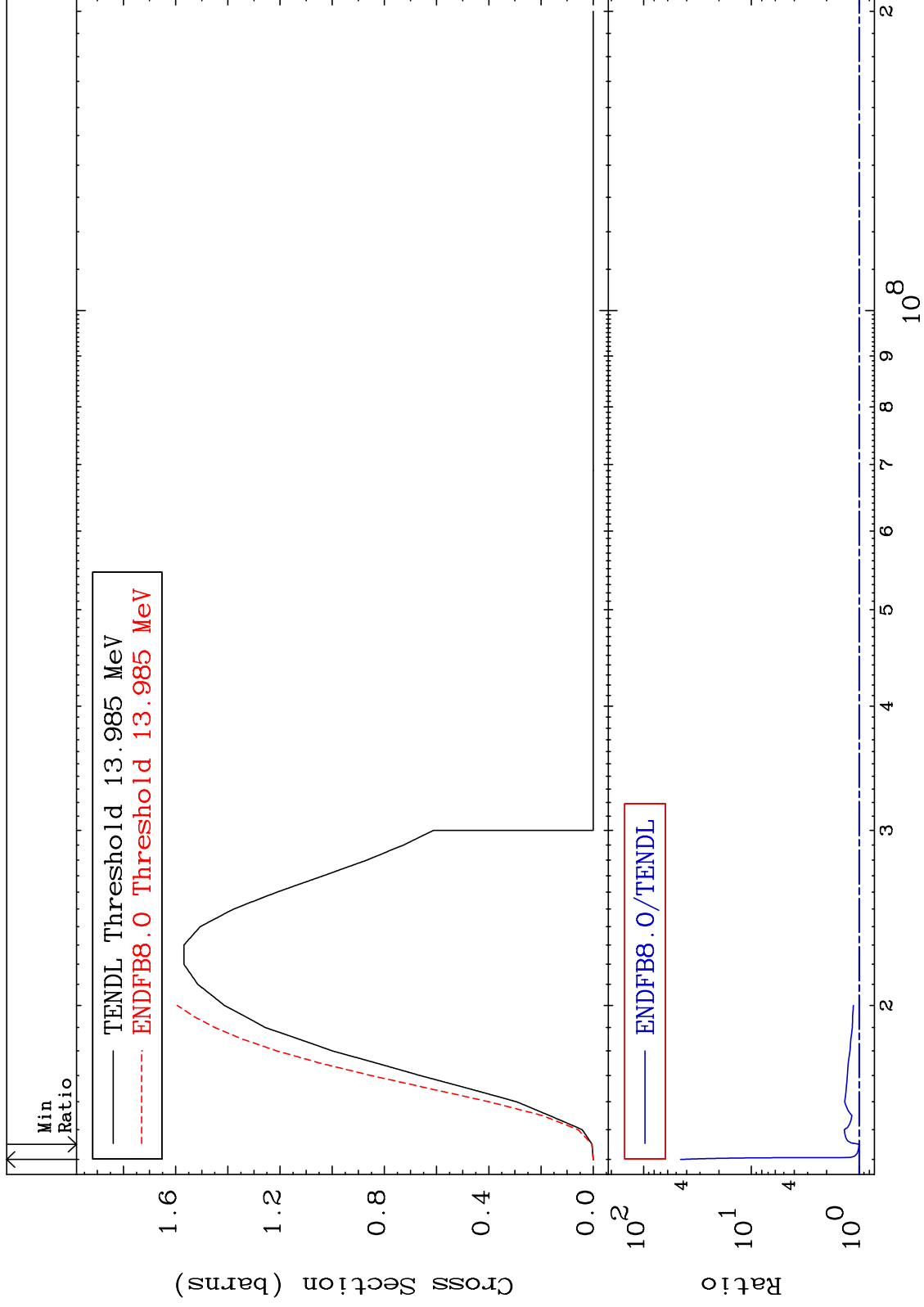
MAT 7640

(n,3n)

76-0s-189

Cross Section

-0.313 To 4444. %



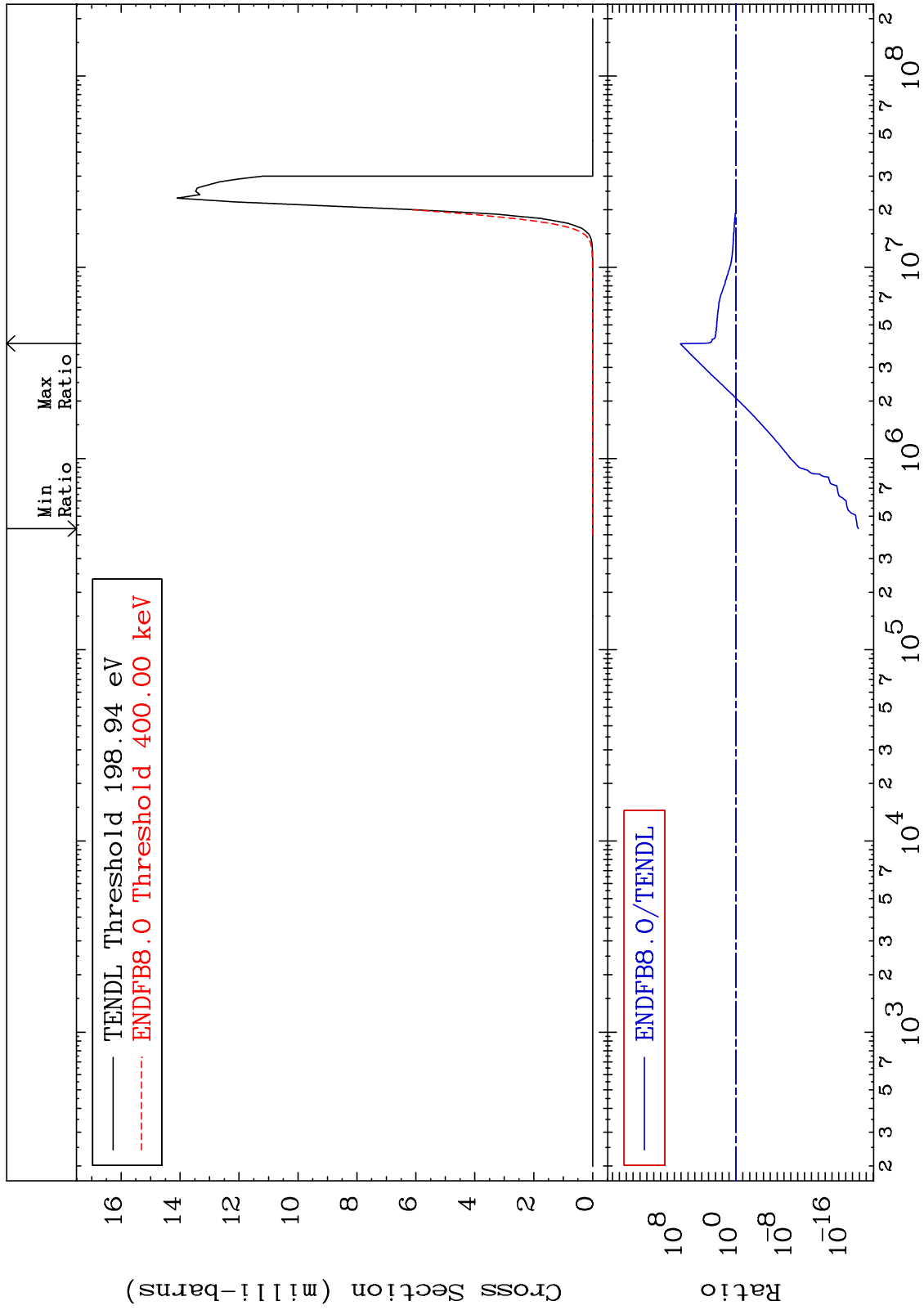
MAT 7640

(n, n') α

76-0s-189

Cross Section

-100.0 To 9999. %



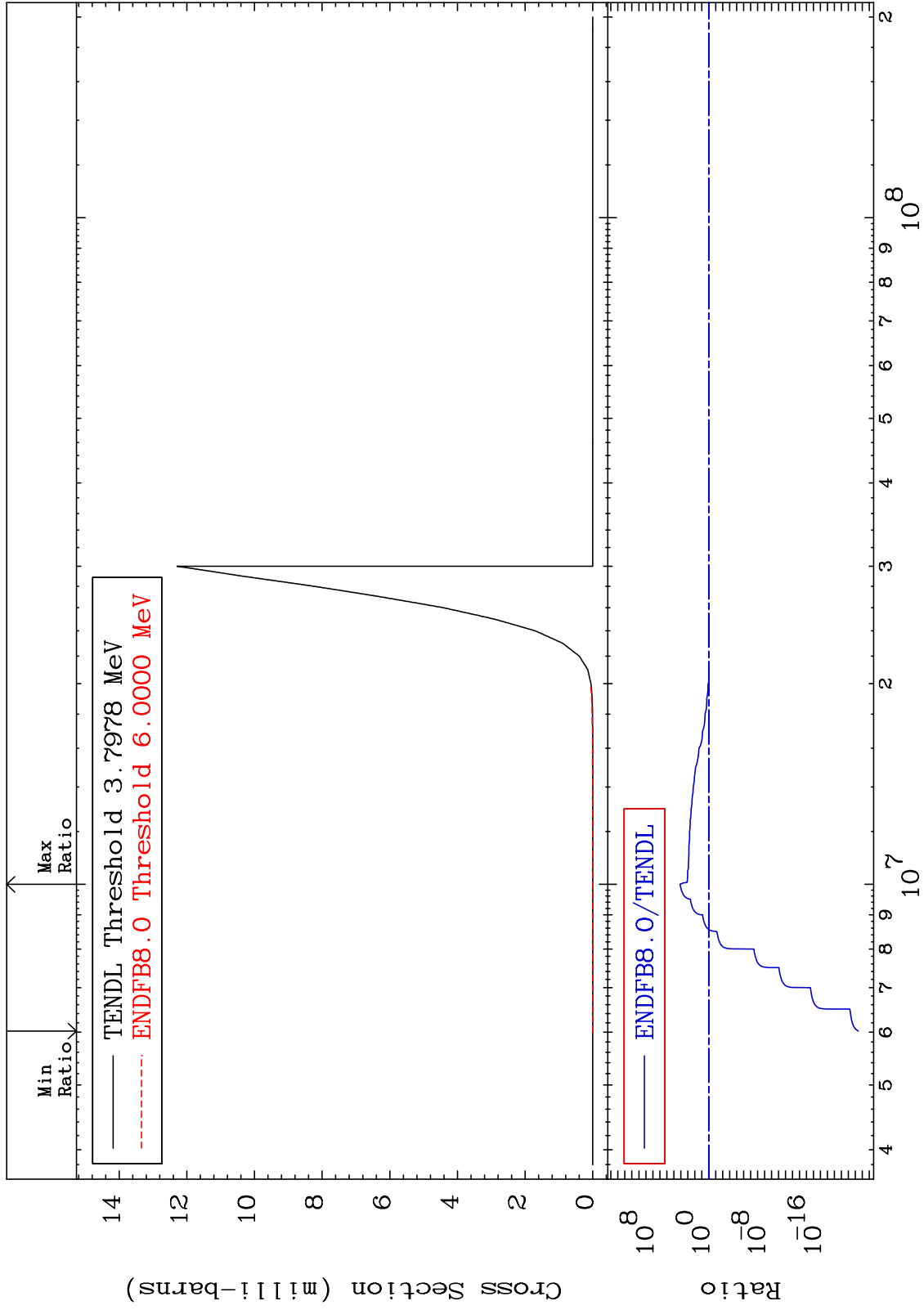
MAT 7640

(n,2n) α

76-0s-189

Cross Section

-100.0 To 9999. %



76-0s-189

Incident Energy (eV)

7

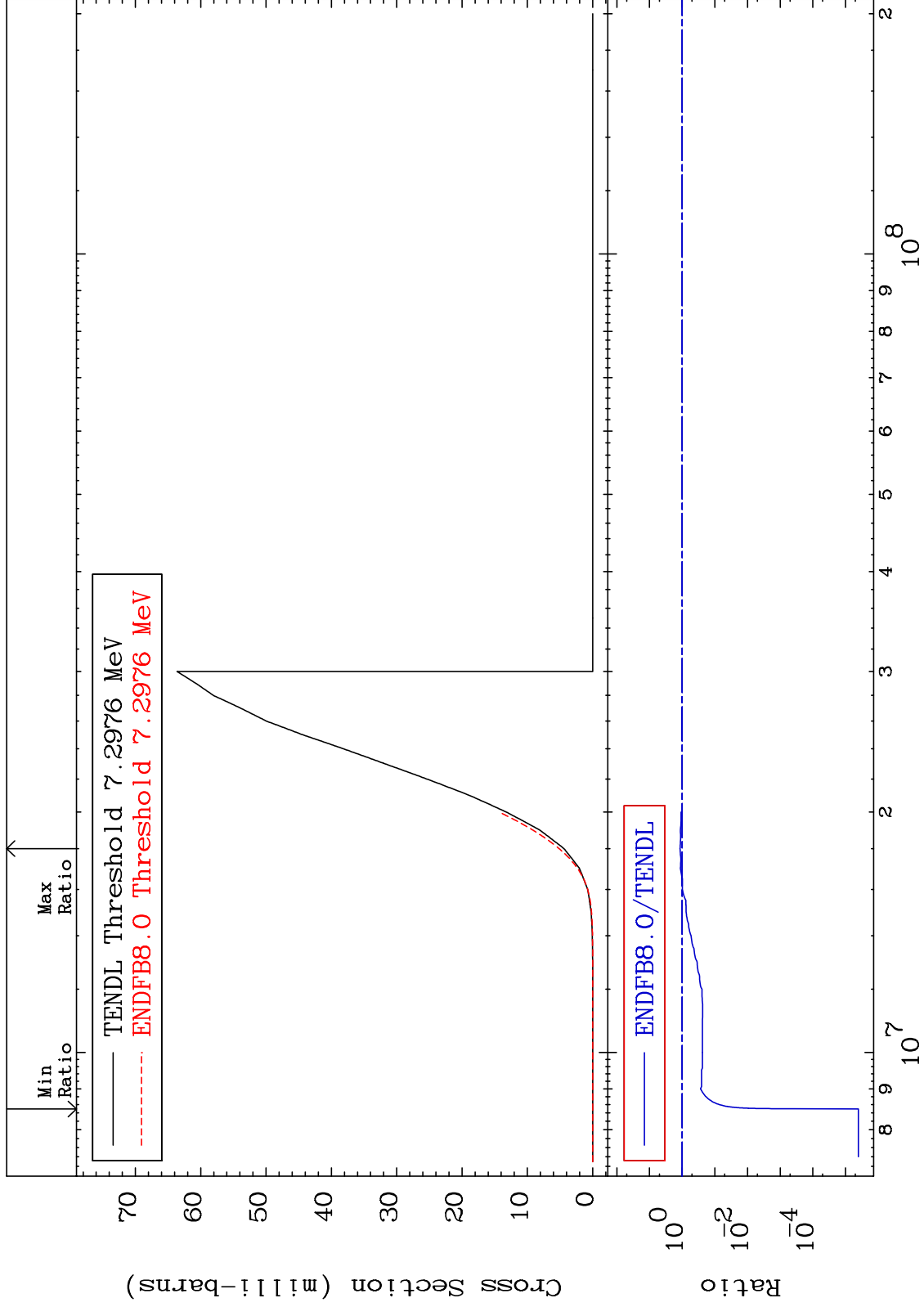
MAT 7640

(n,n') p

76-0s-189

Cross Section

-100.0 To 16.55 %



8

Incident Energy (eV)

76-0s-189

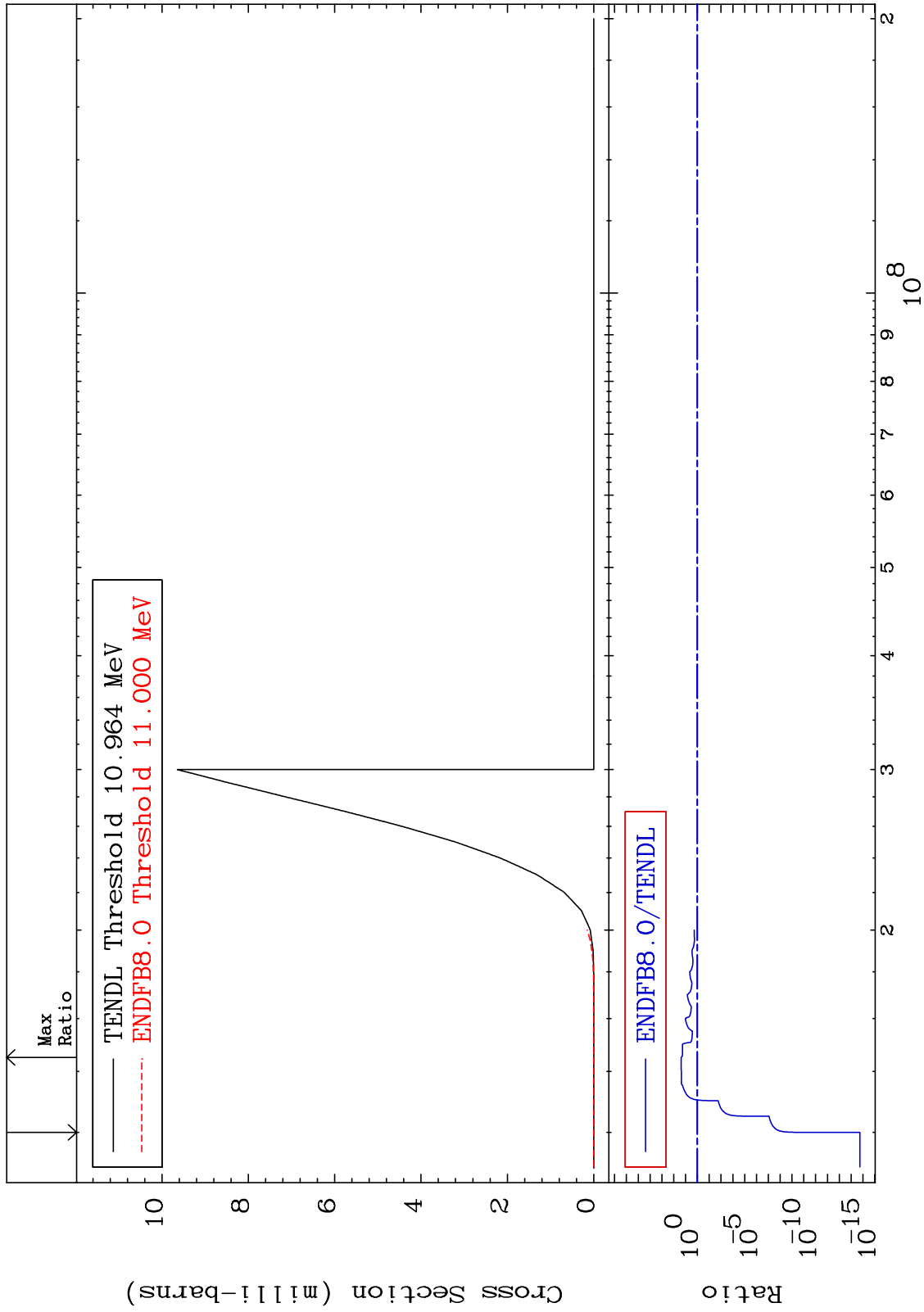
MAT 7640

(n,n') d

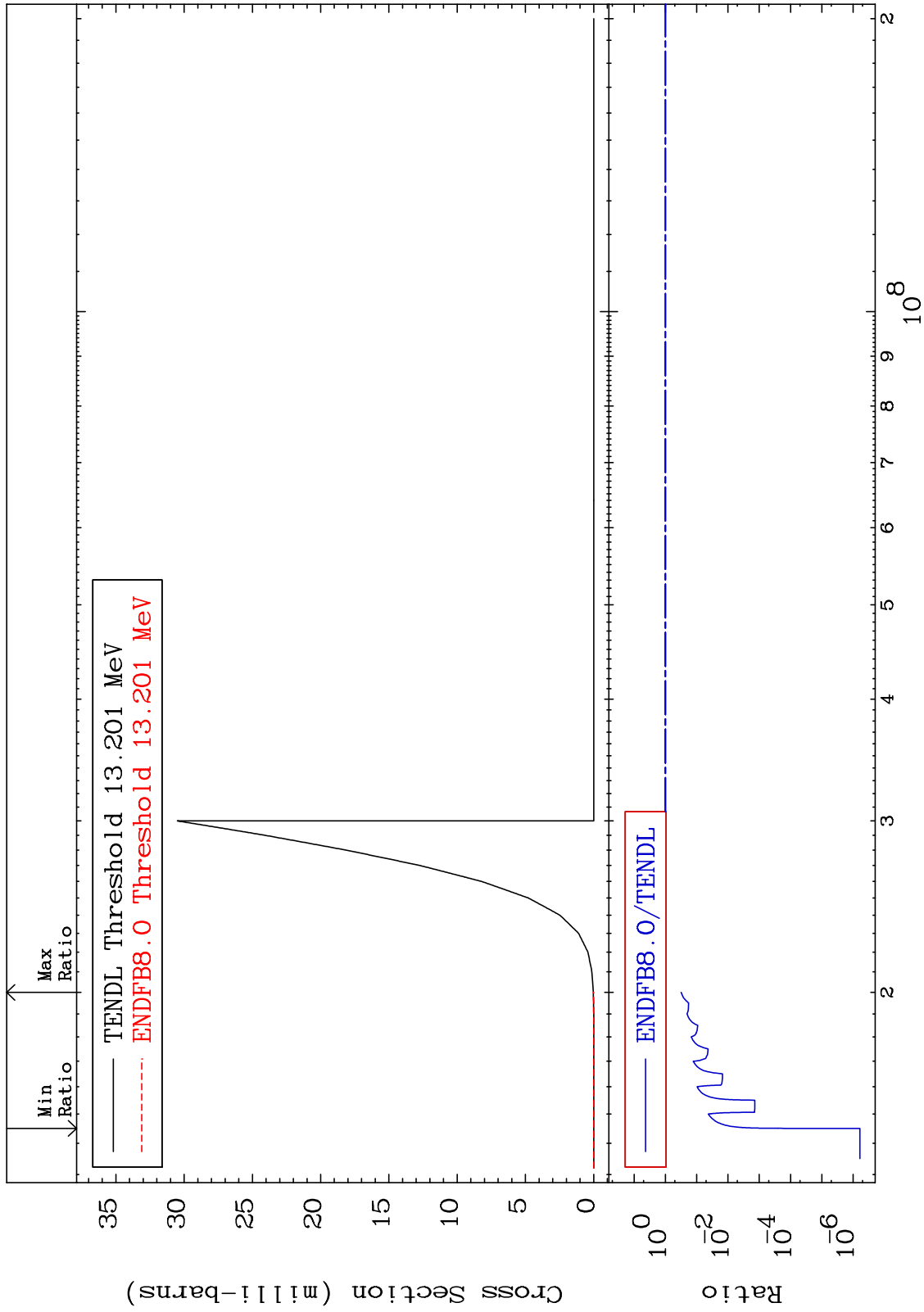
76-0s-189

Cross Section

-100.0 To 2218. %



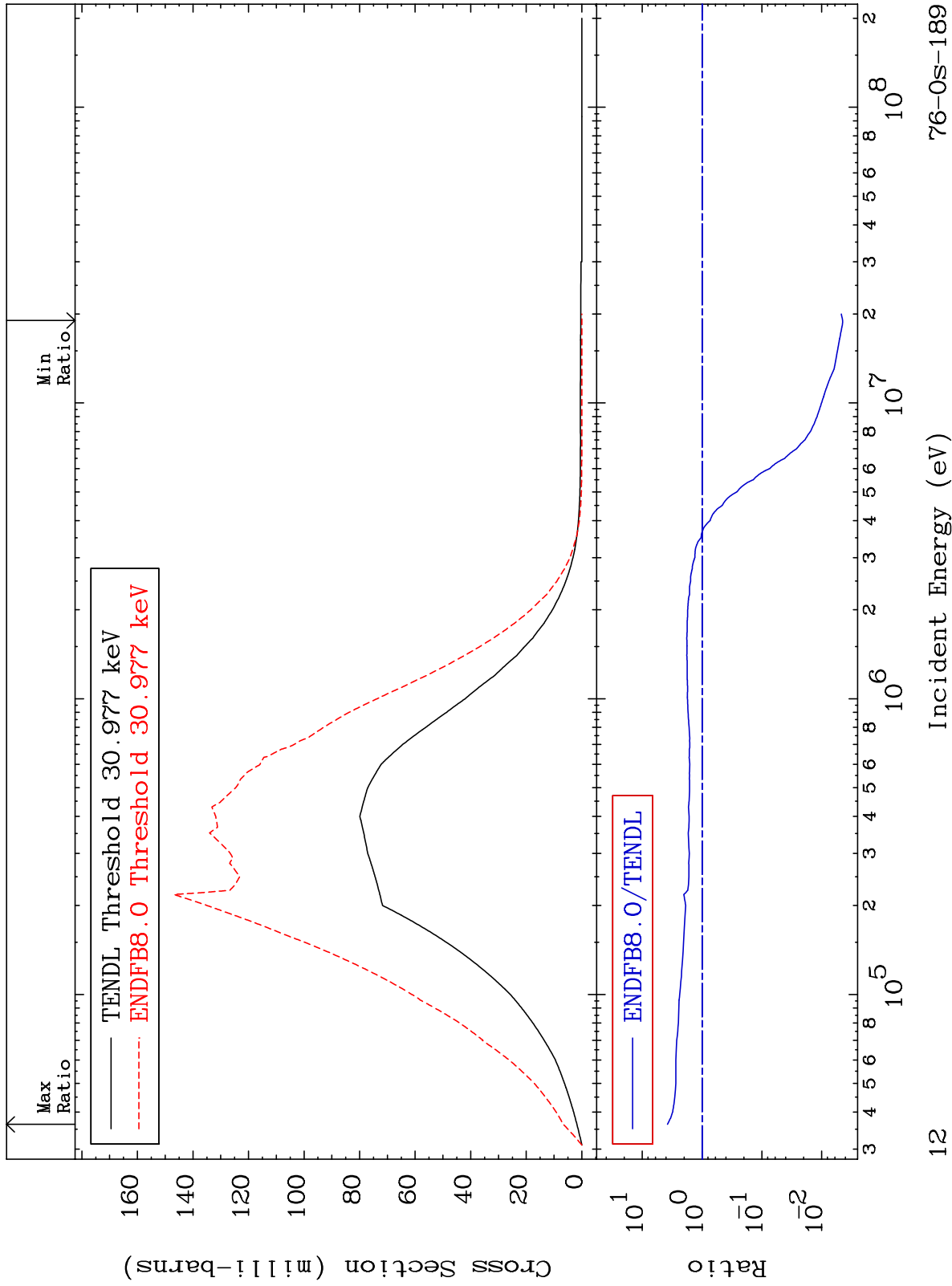
MAT 7640 (n,2n) p 76-0s-189
 Cross Section -100.0 To -68.72%



76-0s-189

Incident Energy (eV)

MAT 7640 MT= 51 (n,n') Level Cross Section 76-0s-189
 -99.55 To 278.1 %

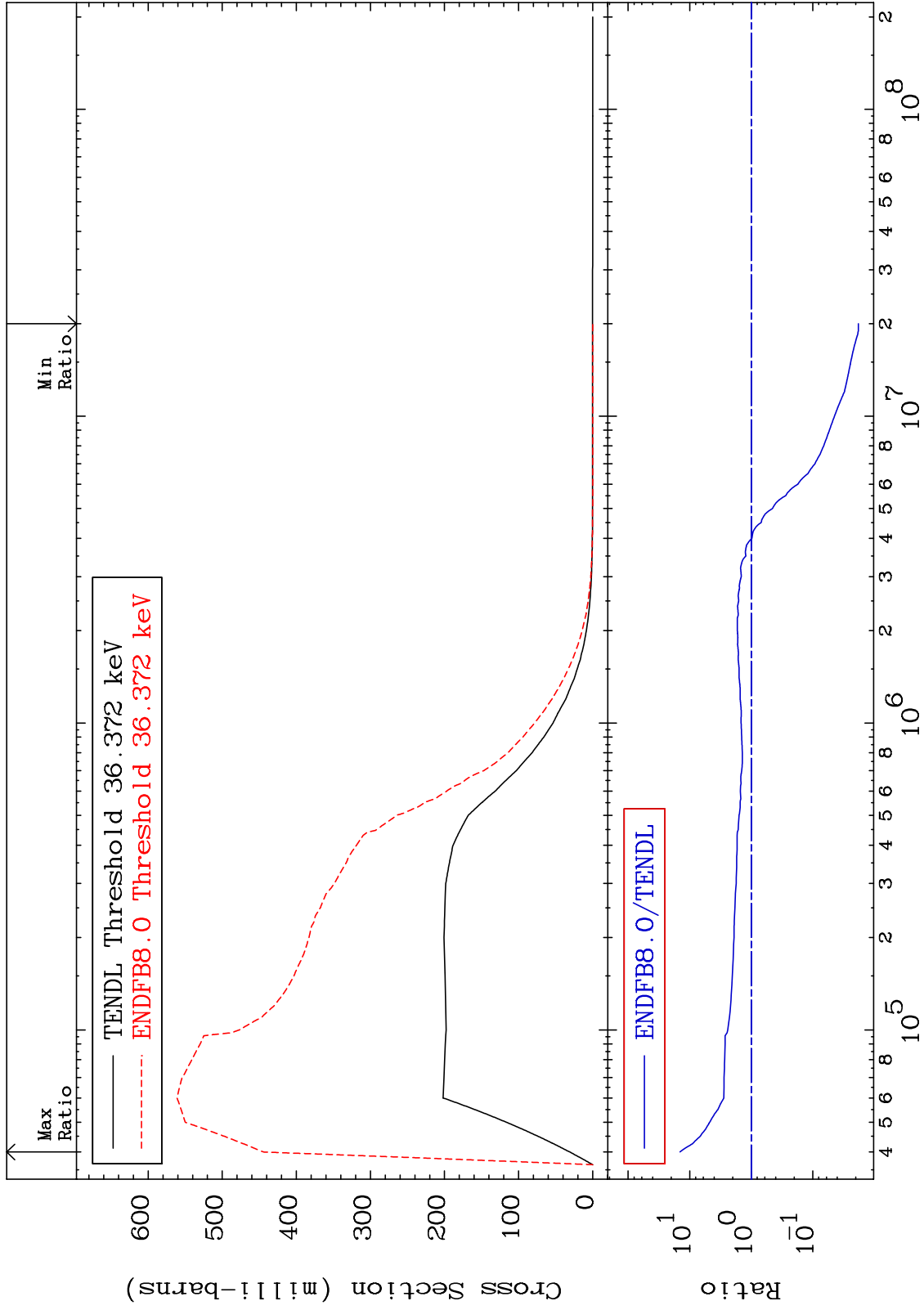


12 76-0s-189

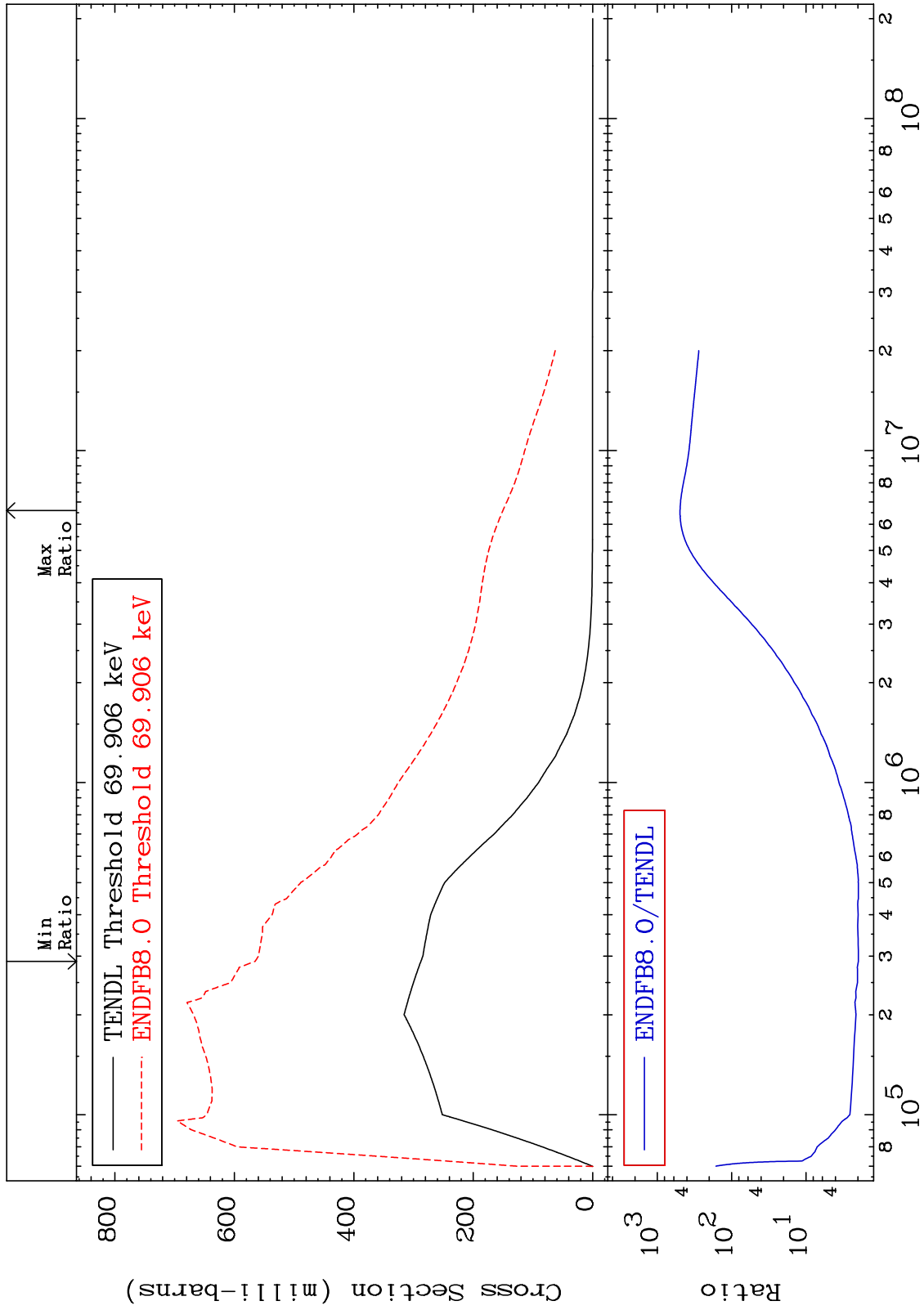
MAT 7640

MT= 52 (n,n') Level
Cross Section

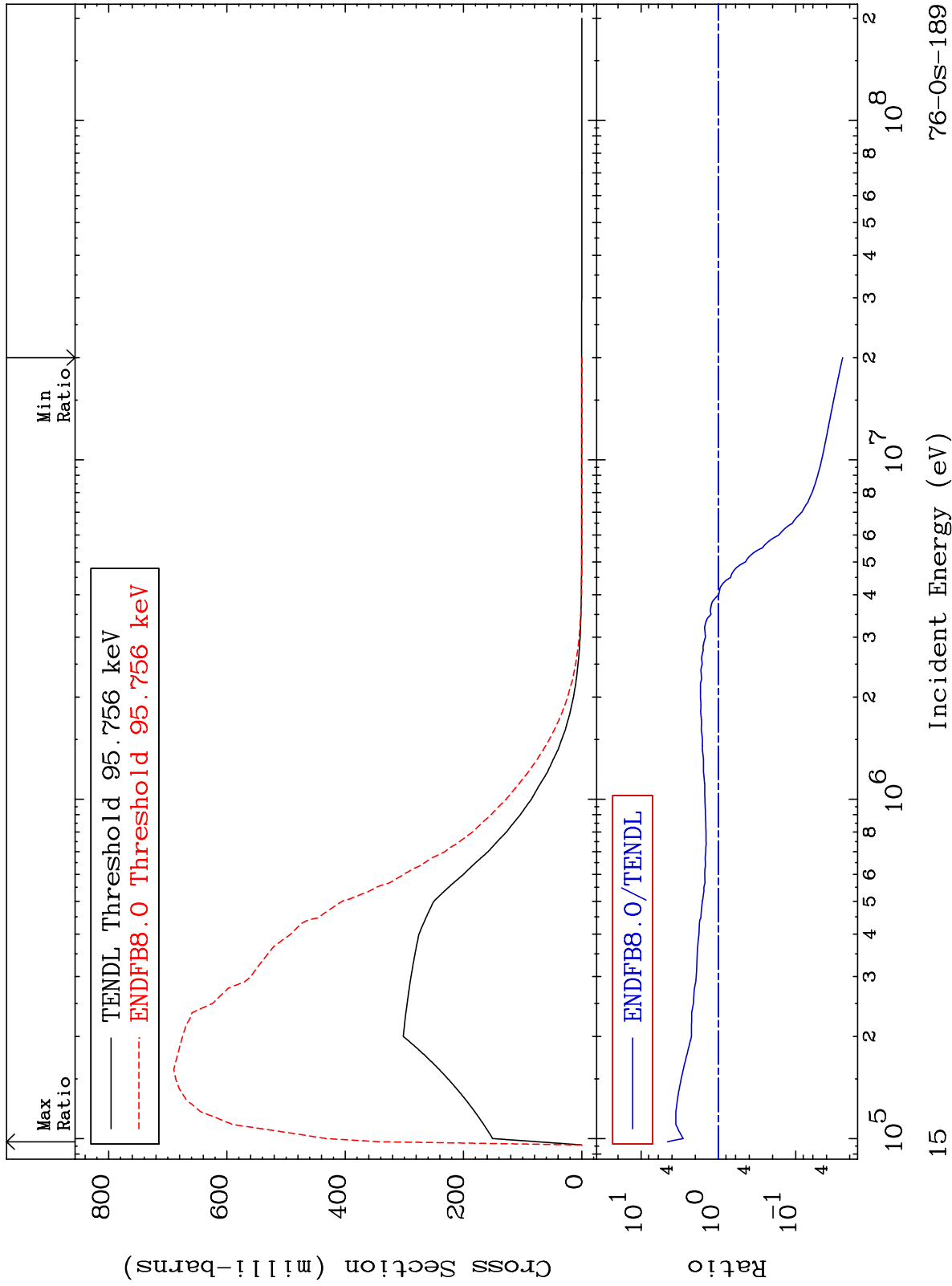
76-0s-189
-98.19 To 1334. %



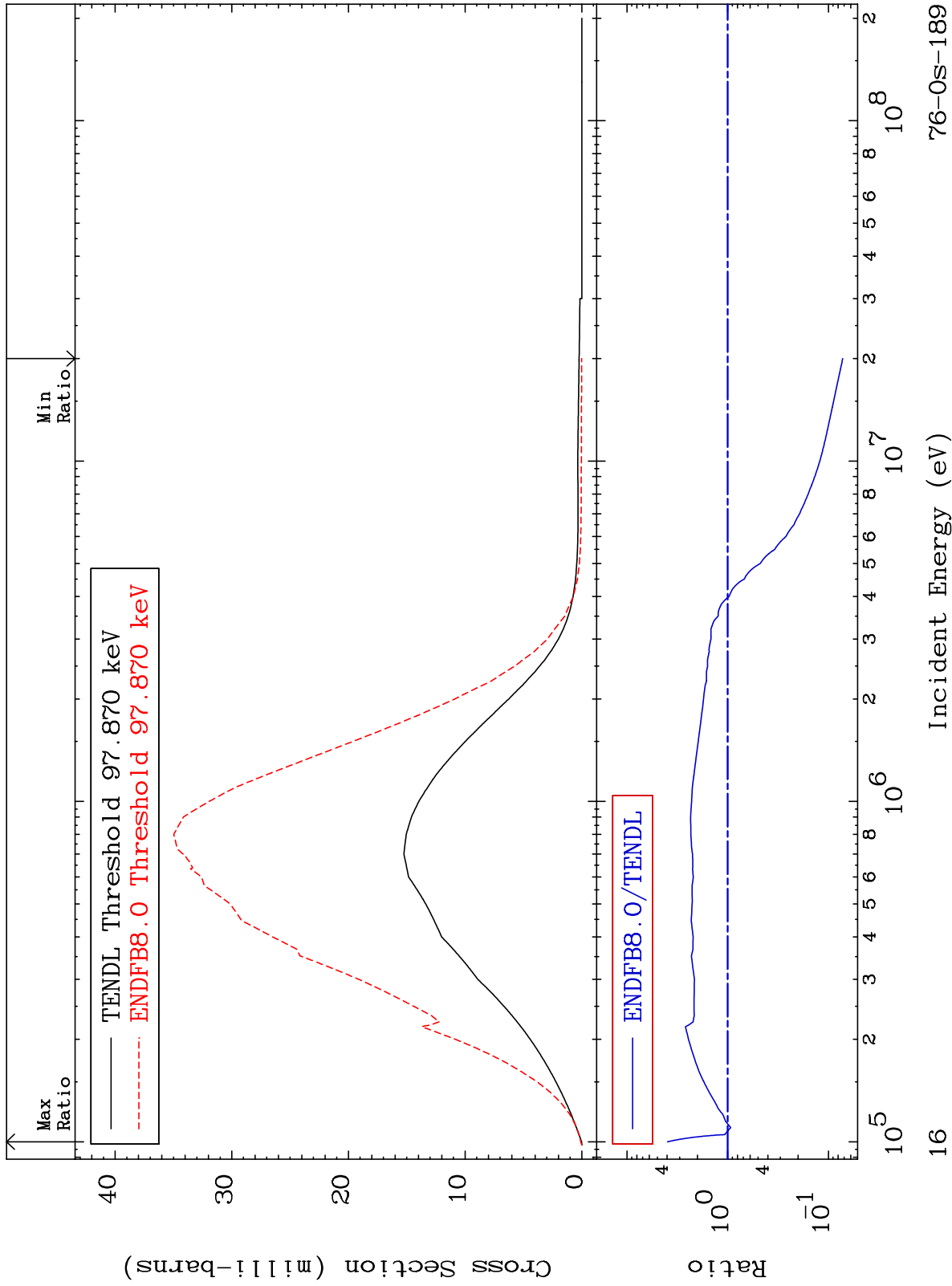
MAT 7640 MT= 53 (n,n') Level Cross Section 76-0s-189
 96.48 To 9999. %



MAT 7640 MT= 54 (n,n') Level Cross Section 76-0s-189 -97.53 To 356.2 %



MAT 7640 MT= 55 (n,n') Level Cross Section 76-0s-189
-92.78 To 296.0 %

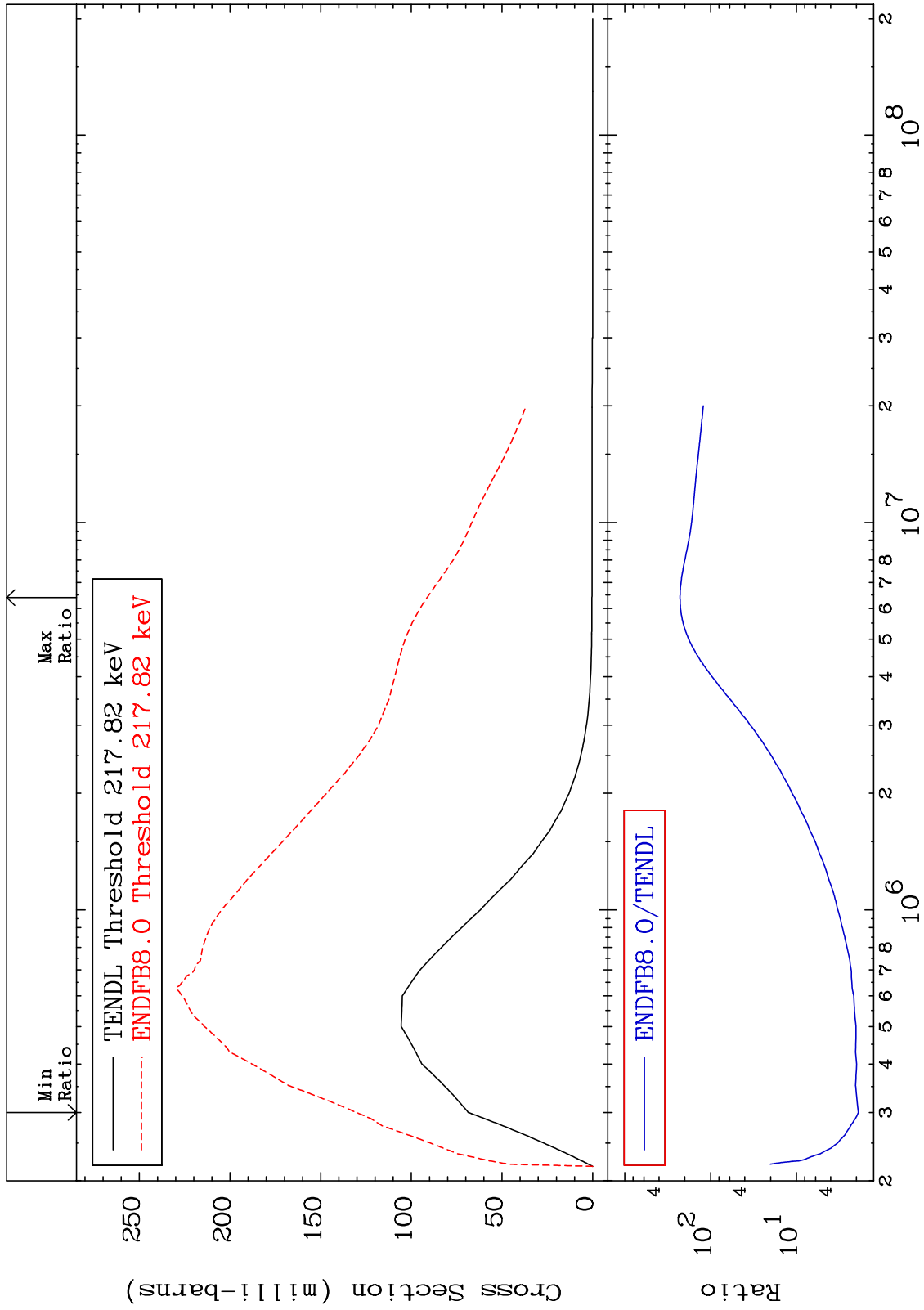


76-0s-189

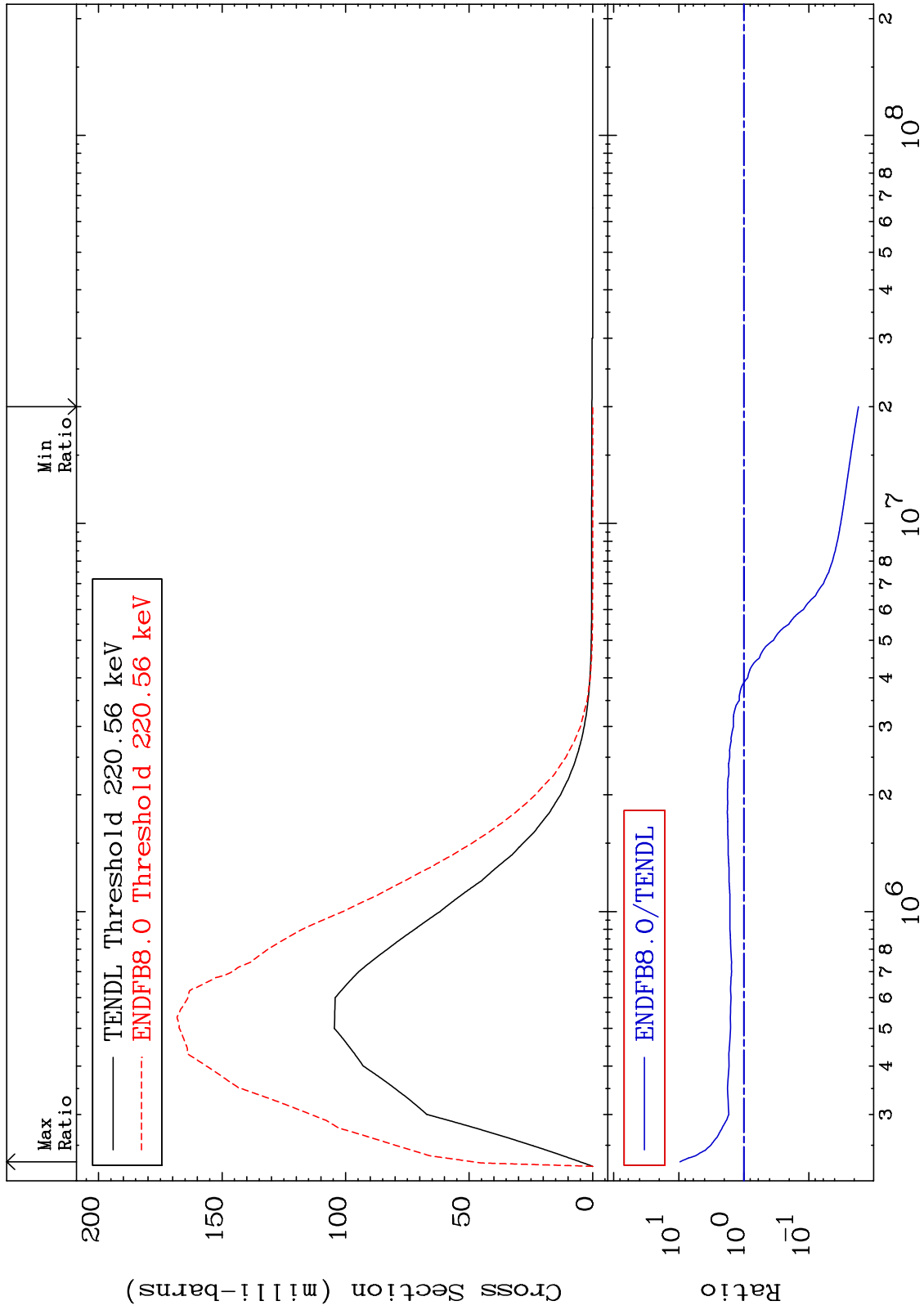
Incident Energy (eV)

16

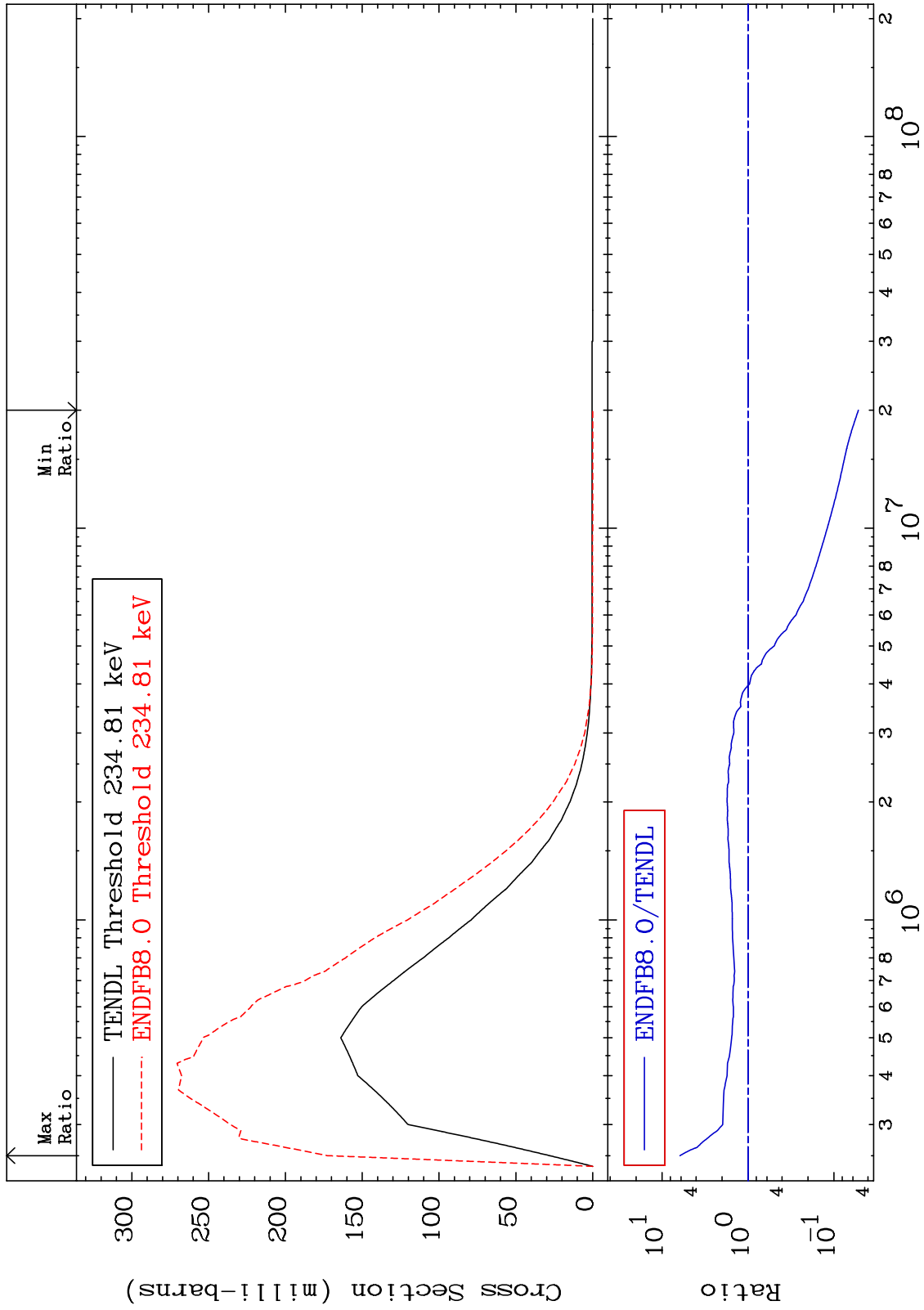
MAT 7640 MT= 56 (n,n') Level Cross Section 76-0s-189
 89.93 To 9999. %



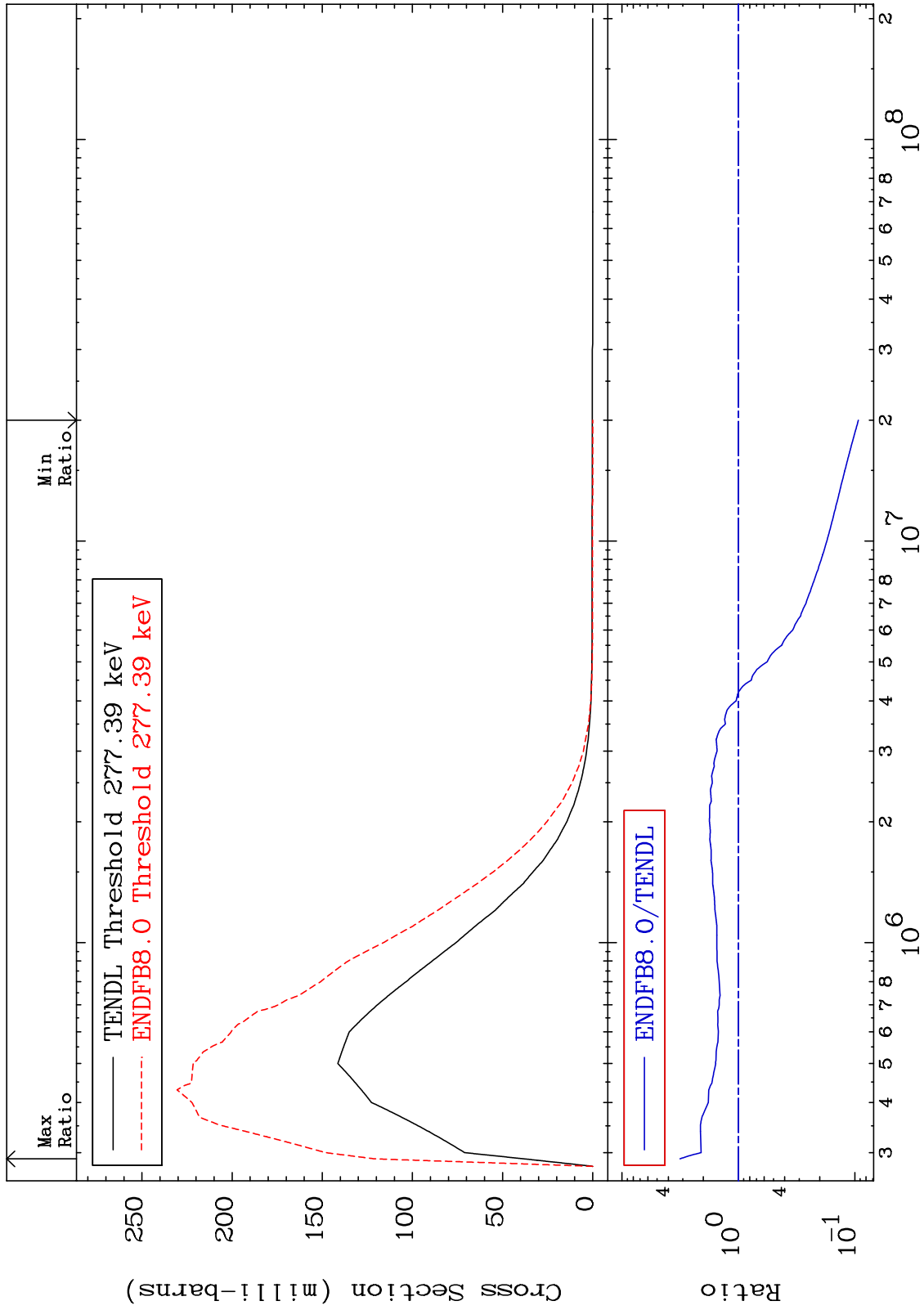
MAT 7640 MT= 57 (n,n') Level Cross Section 76-0s-189
 -98.27 To 856.9 %



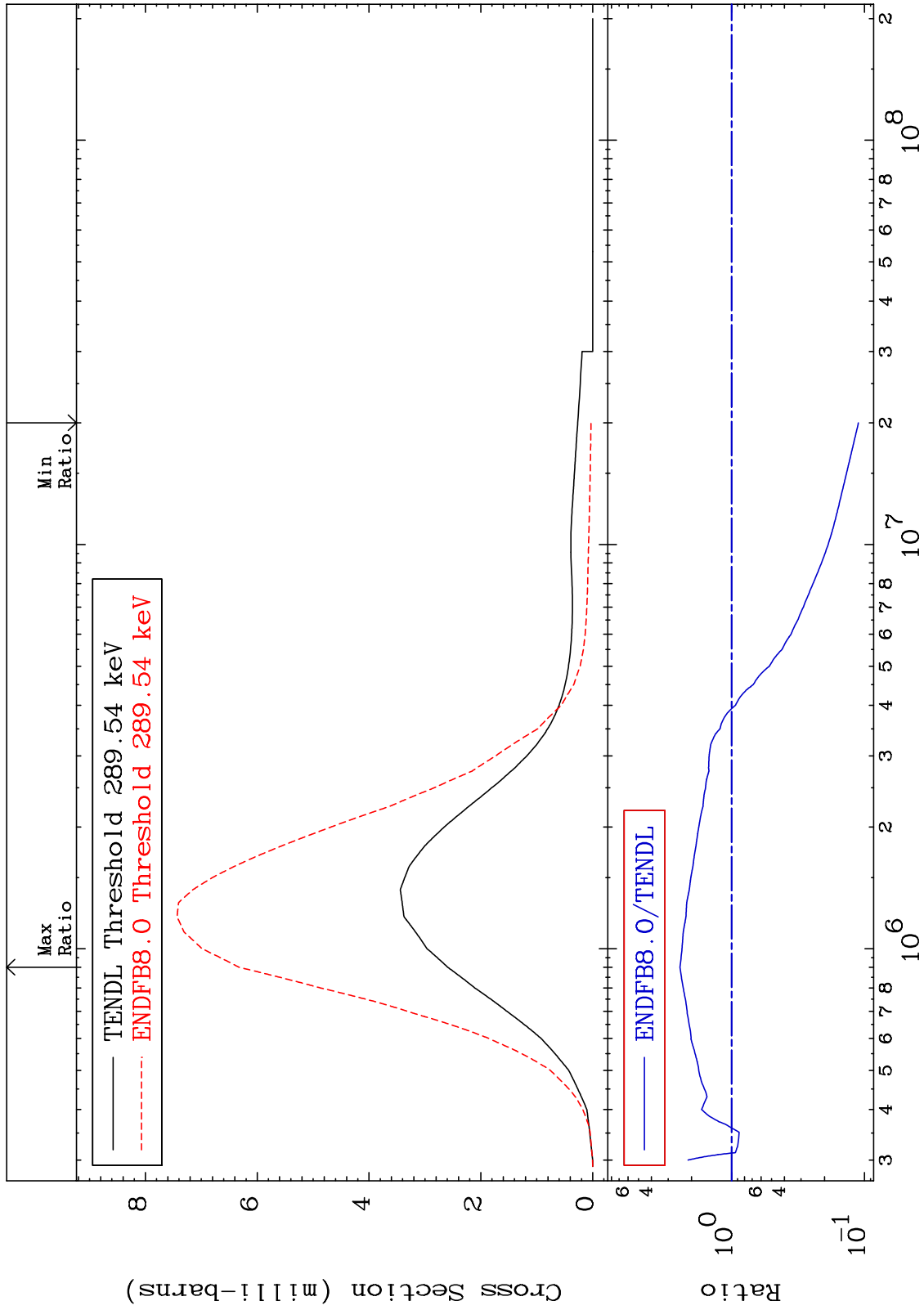
MAT 7640 MT= 58 (n,n') Level Cross Section 76-0s-189
 -94.82 To 516.8 %



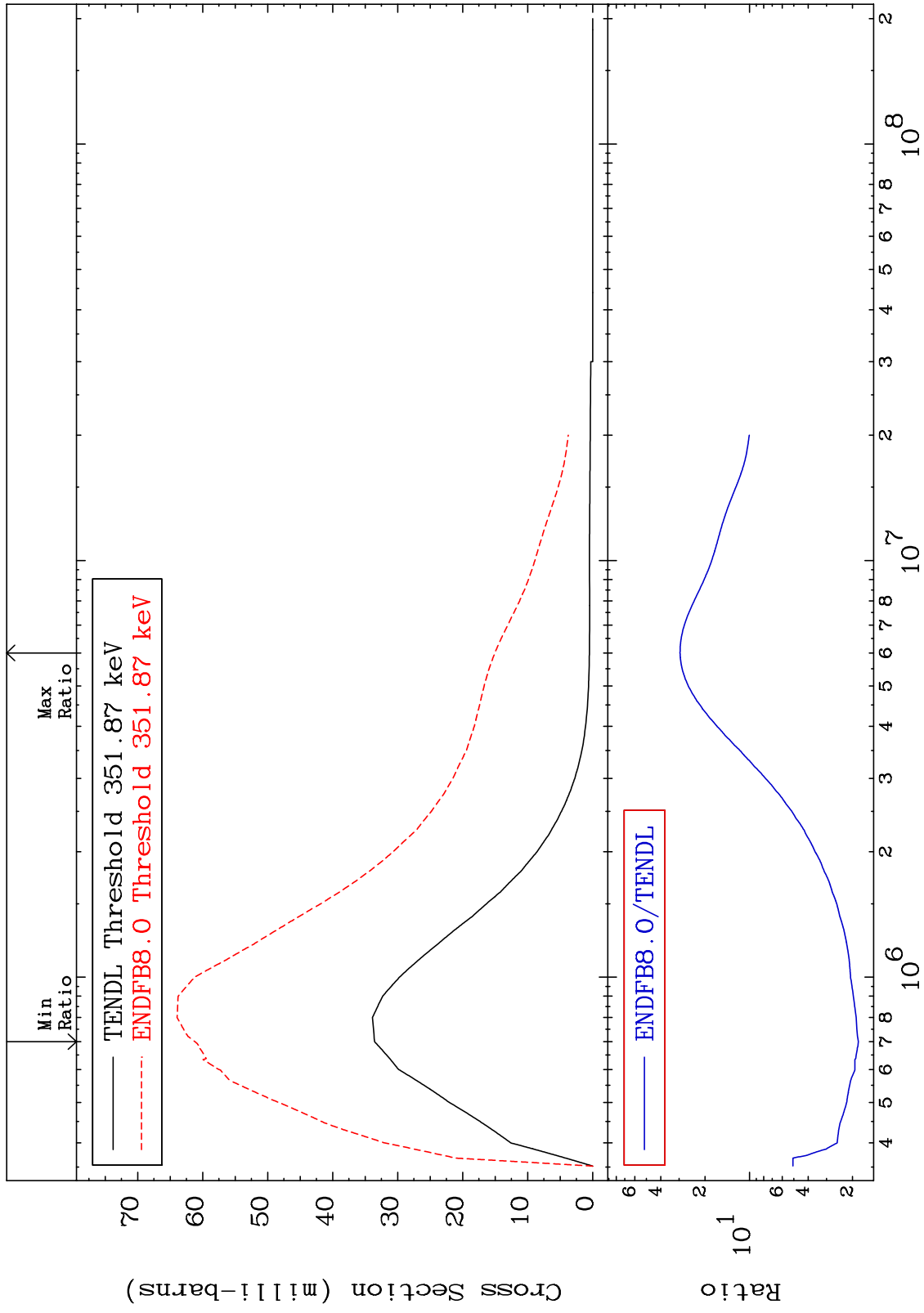
MAT 7640 MT= 59 (n,n') Level Cross Section 76-0s-189
 -90.69 To 217.2 %



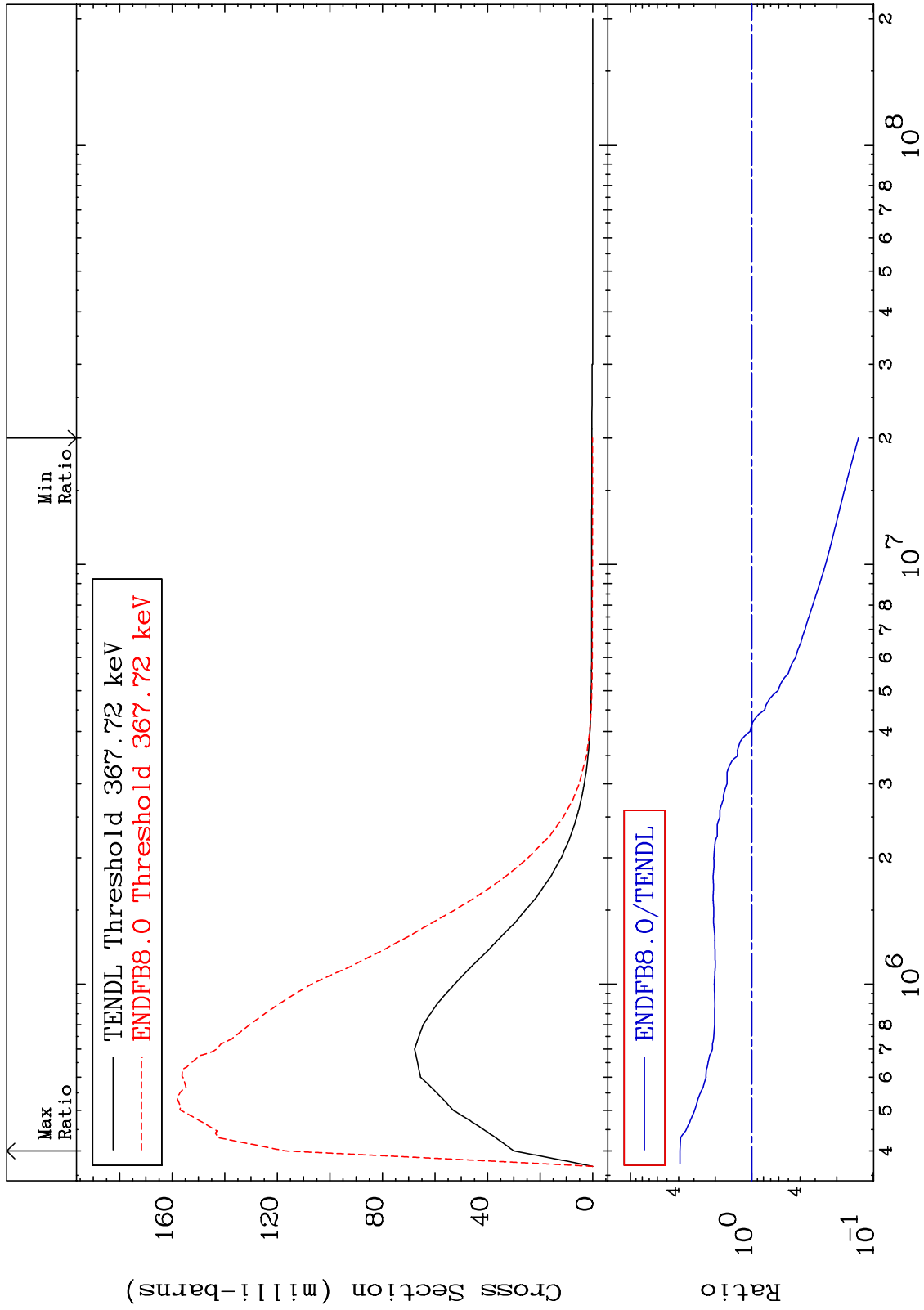
MAT 7640 MT= 60 (n,n') Level Cross Section 76-0s-189
 -88.88 To 143.9 %



MAT 7640 MT= 61 (n,n') Level Cross Section 76-0s-189
 82.31 To 2857. %



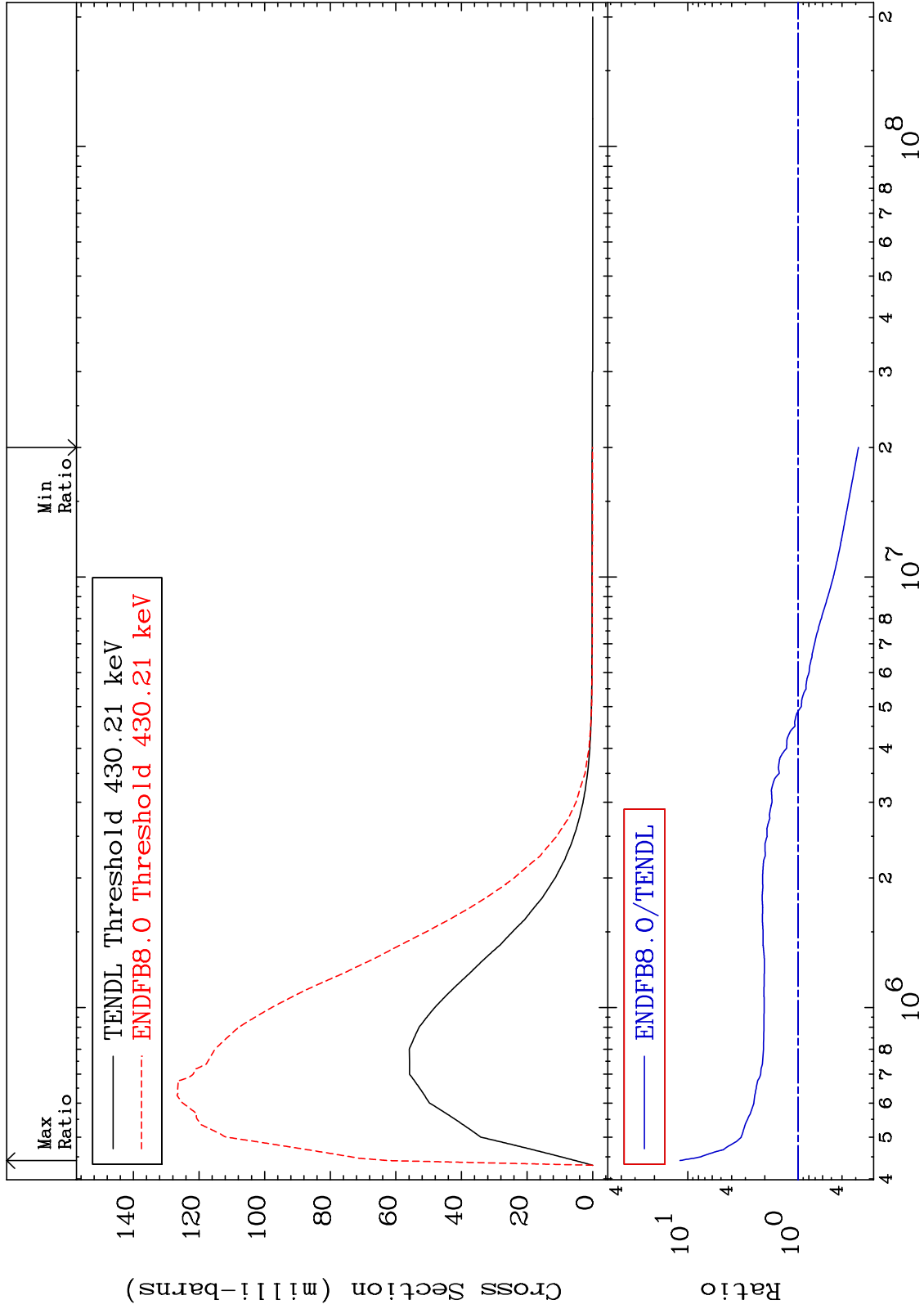
MAT 7640 MT= 62 (n,n') Level Cross Section 76-0s-189
 -86.76 To 290.0 %



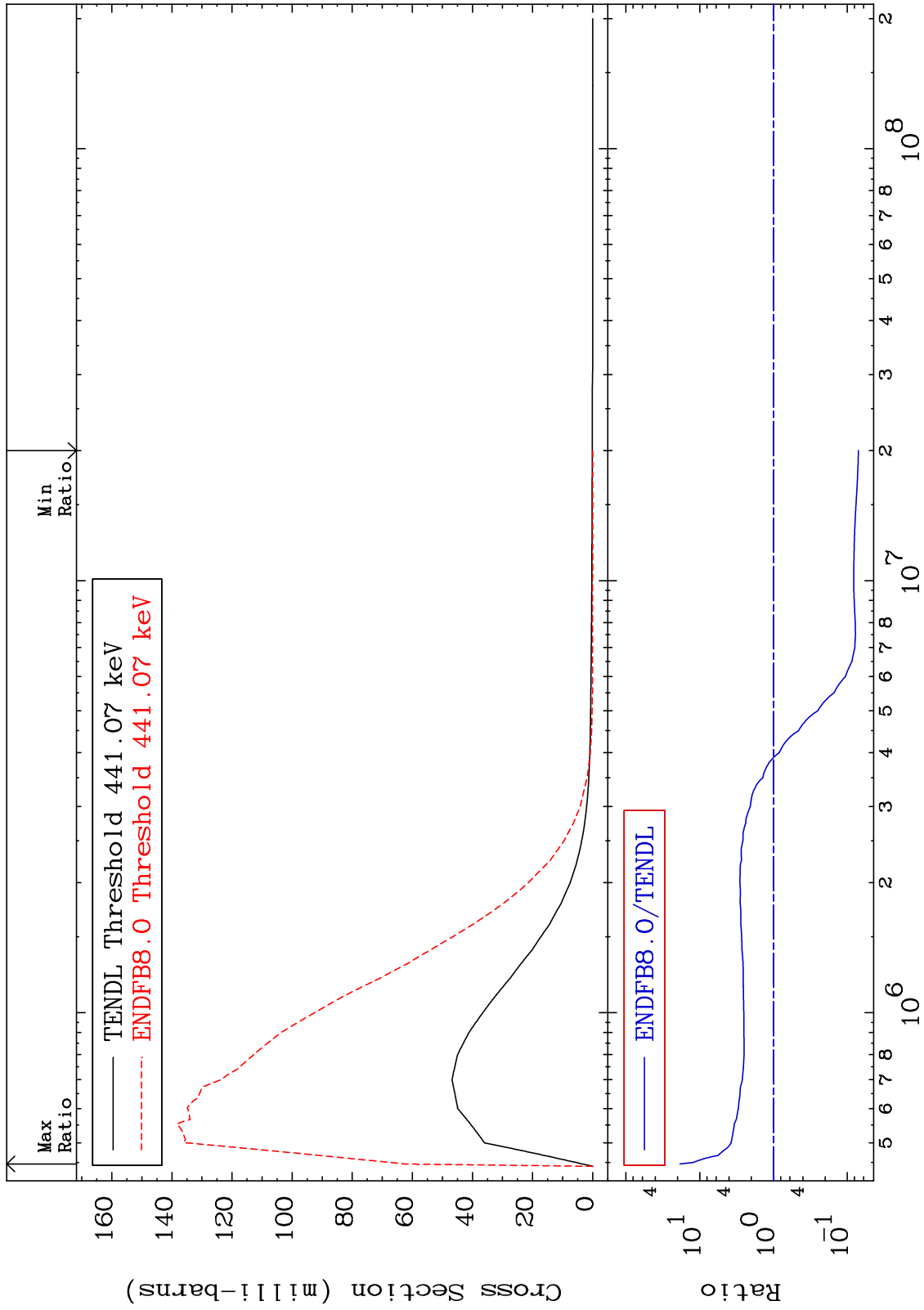
MAT 7640

MT= 63 (n,n') Level
Cross Section

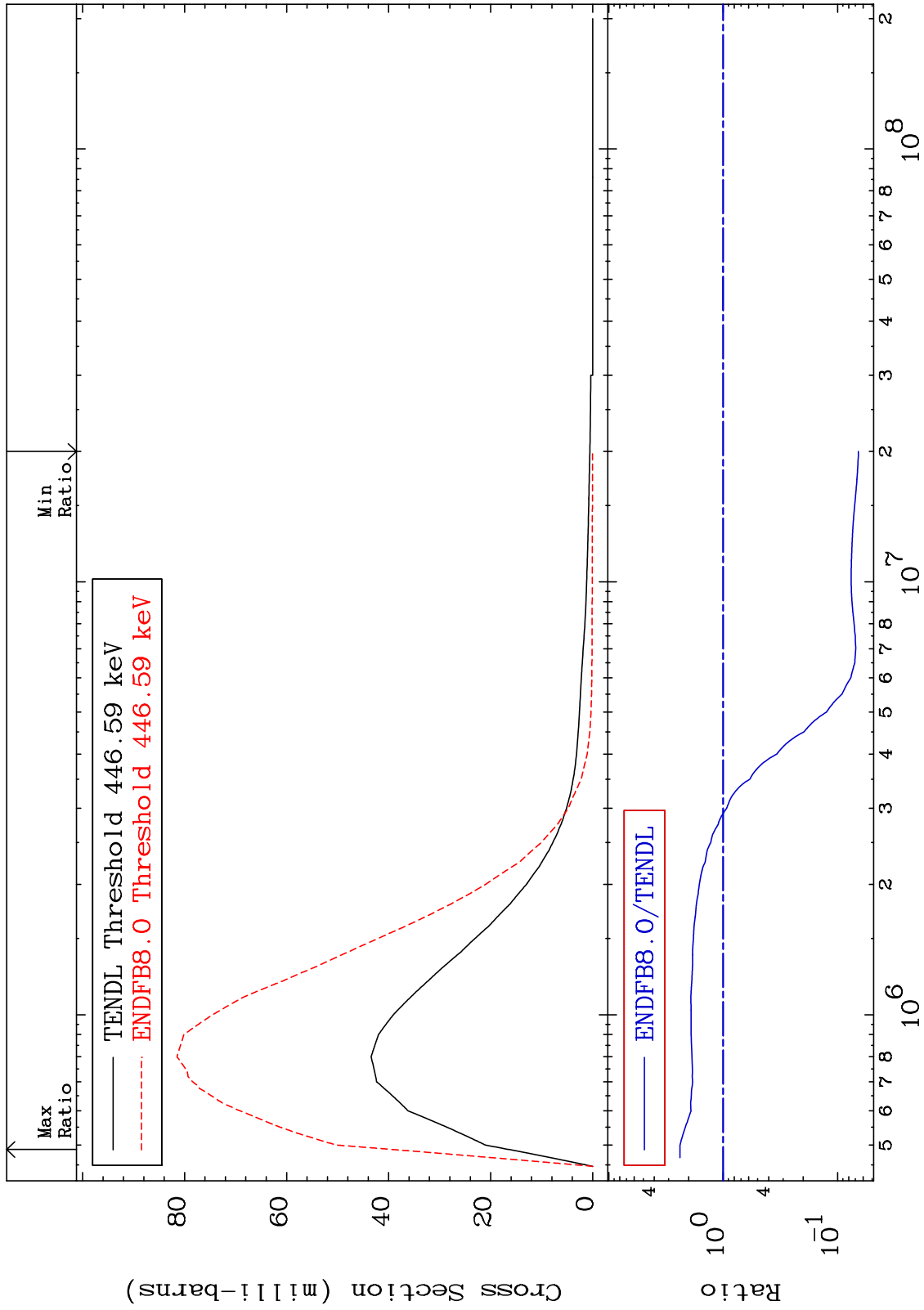
76-0s-189
-71.62 To 1075. %



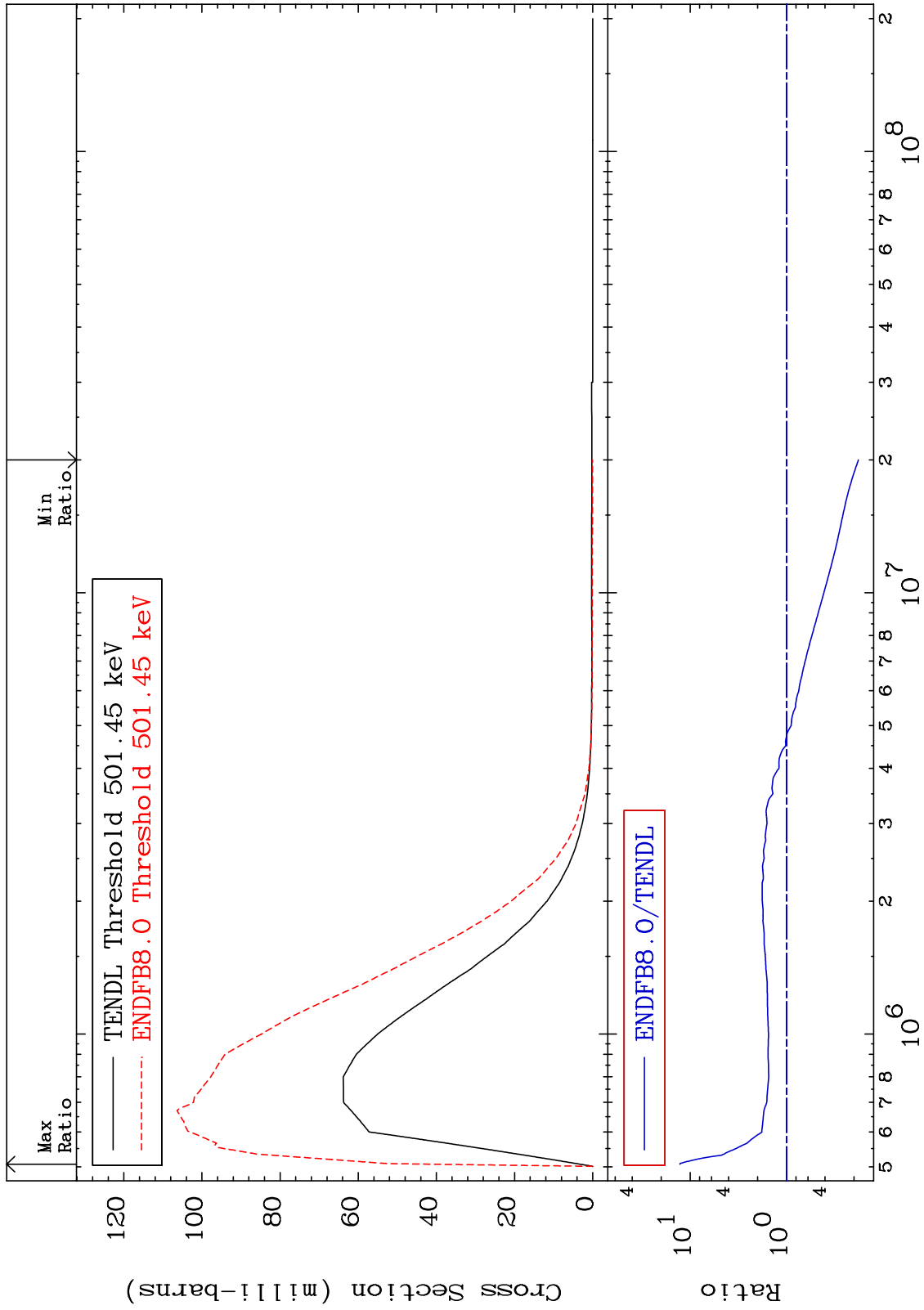
MAT 7640 MT= 64 (n,n') Level Cross Section 76-0s-189
 -92.93 To 1751. %



MAT 7640 MT= 65 (n,n') Level Cross Section 76-0s-189
 -93.41 To 138.5 %



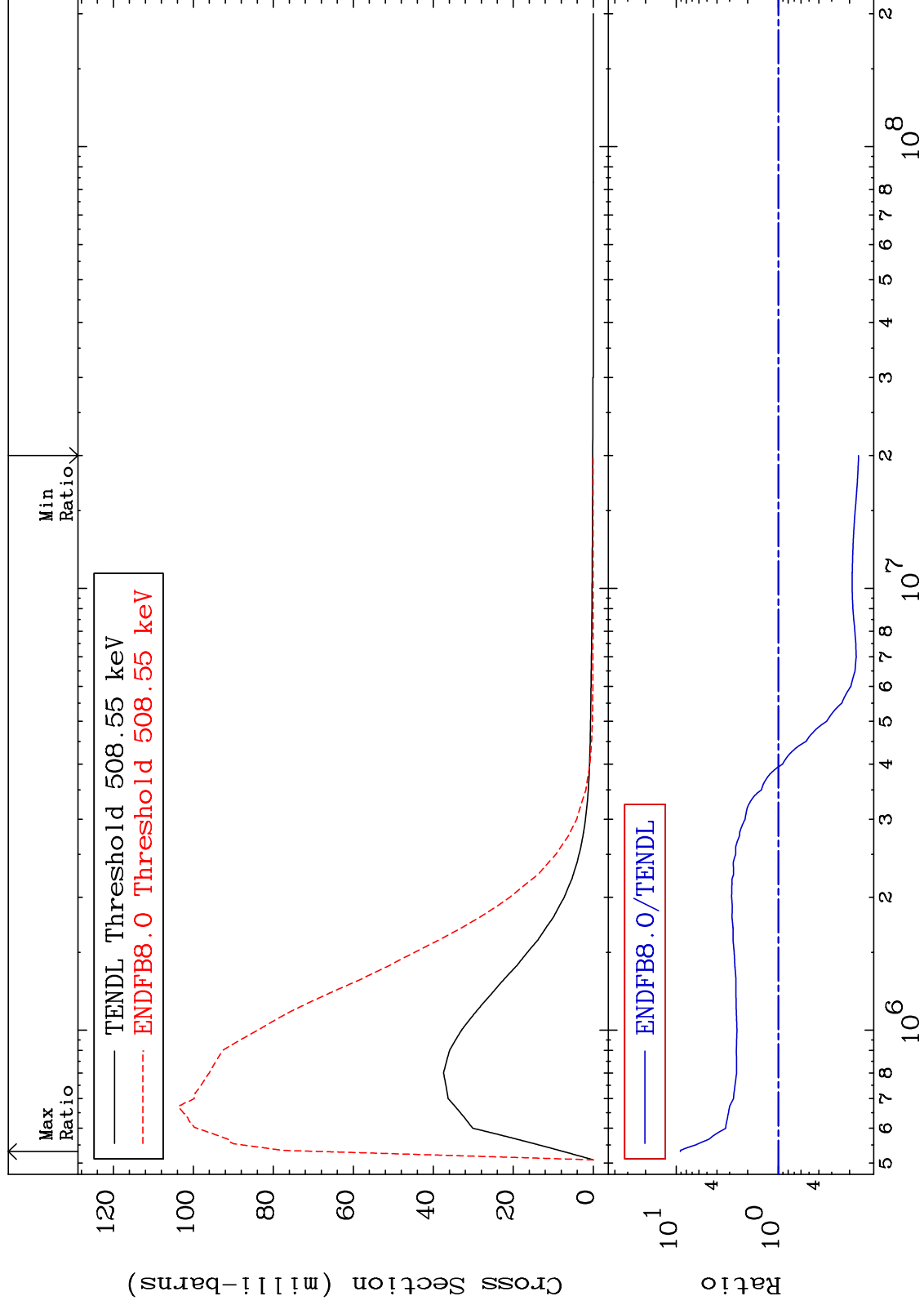
MAT 7640 MT= 66 (n,n') Level Cross Section 76-0s-189
 -82.02 To 1174. %



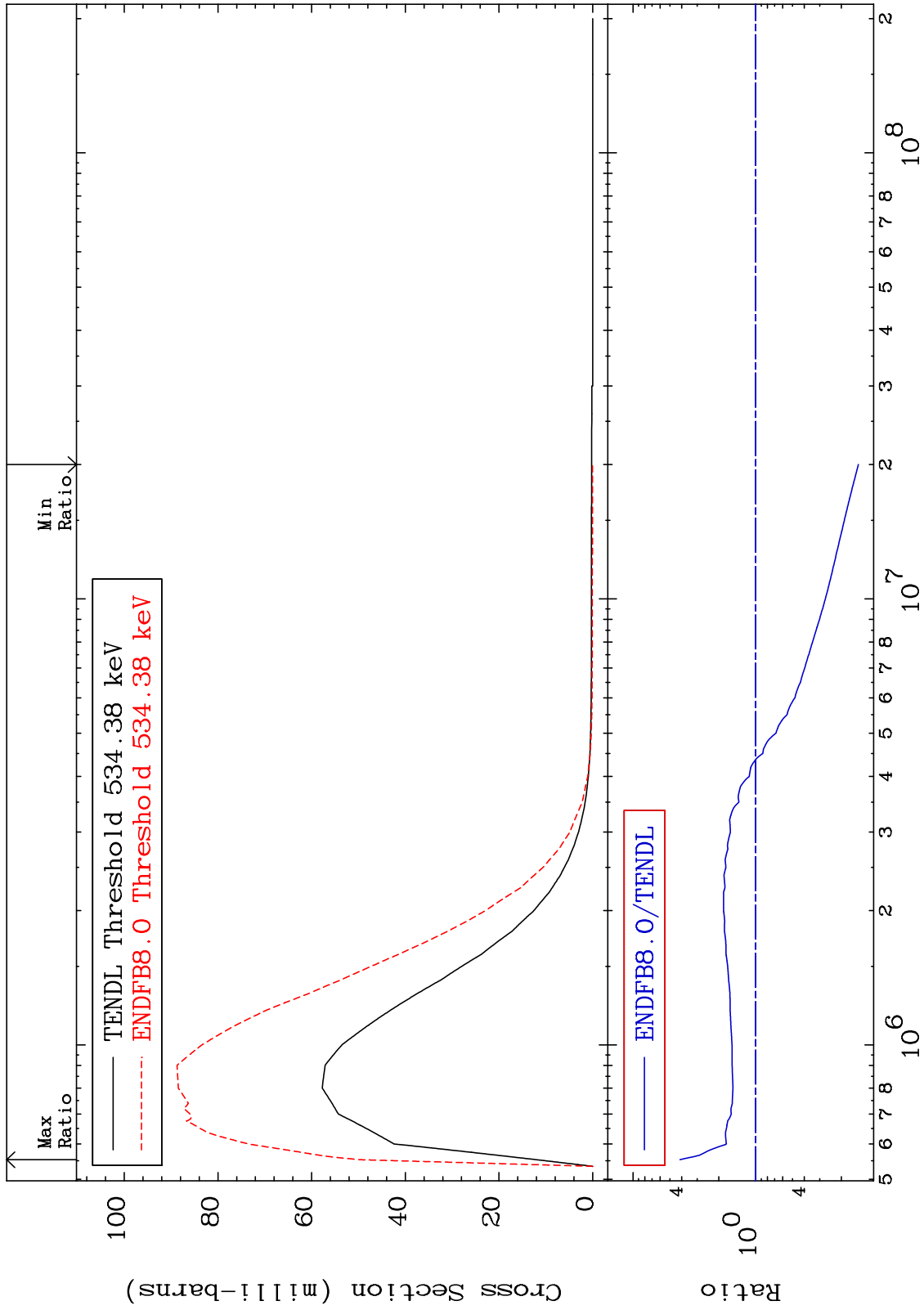
MAT 7640

MT= 67 (n,n') Level
Cross Section

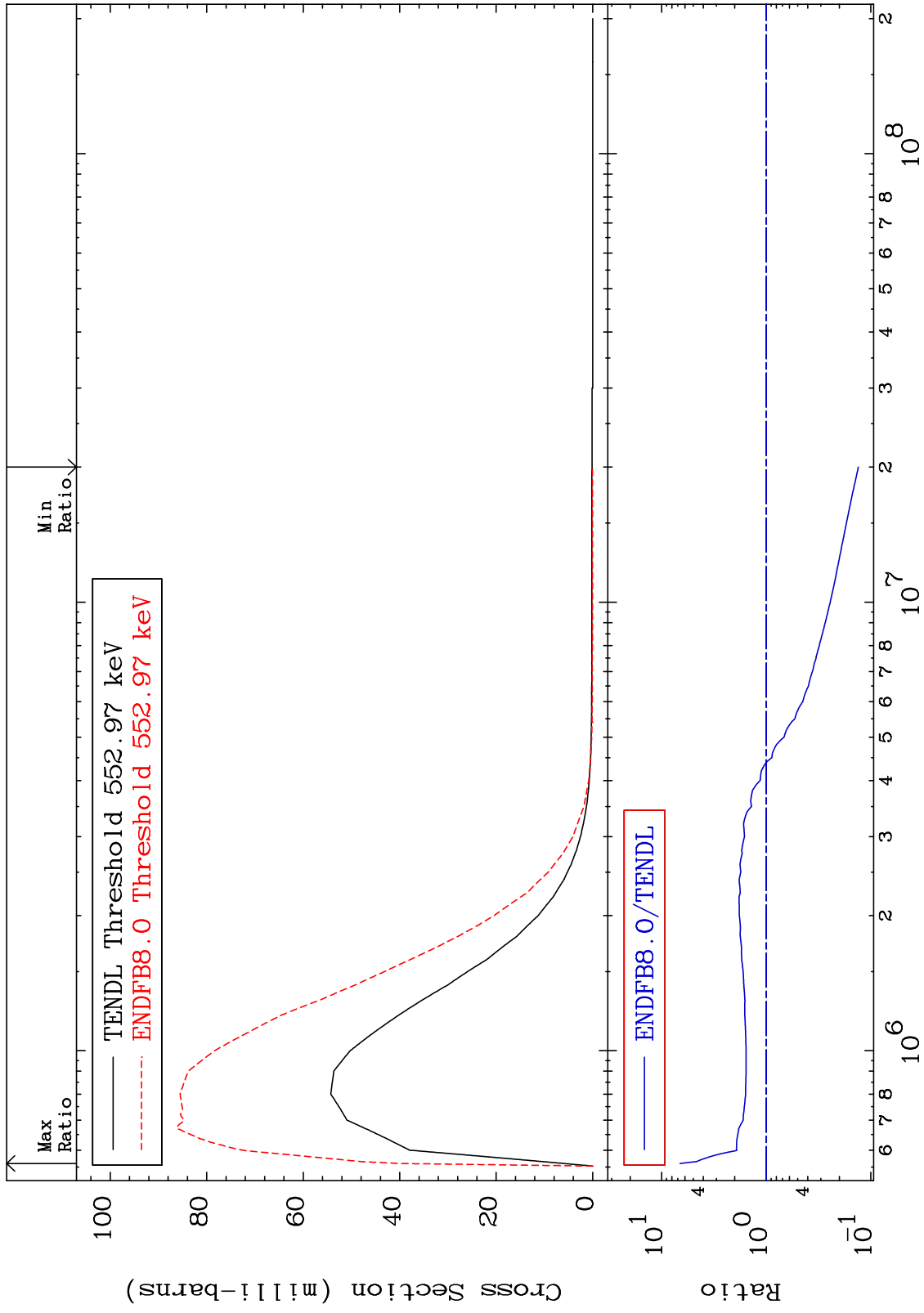
76-0s-189
-83.63 To 811.3 %



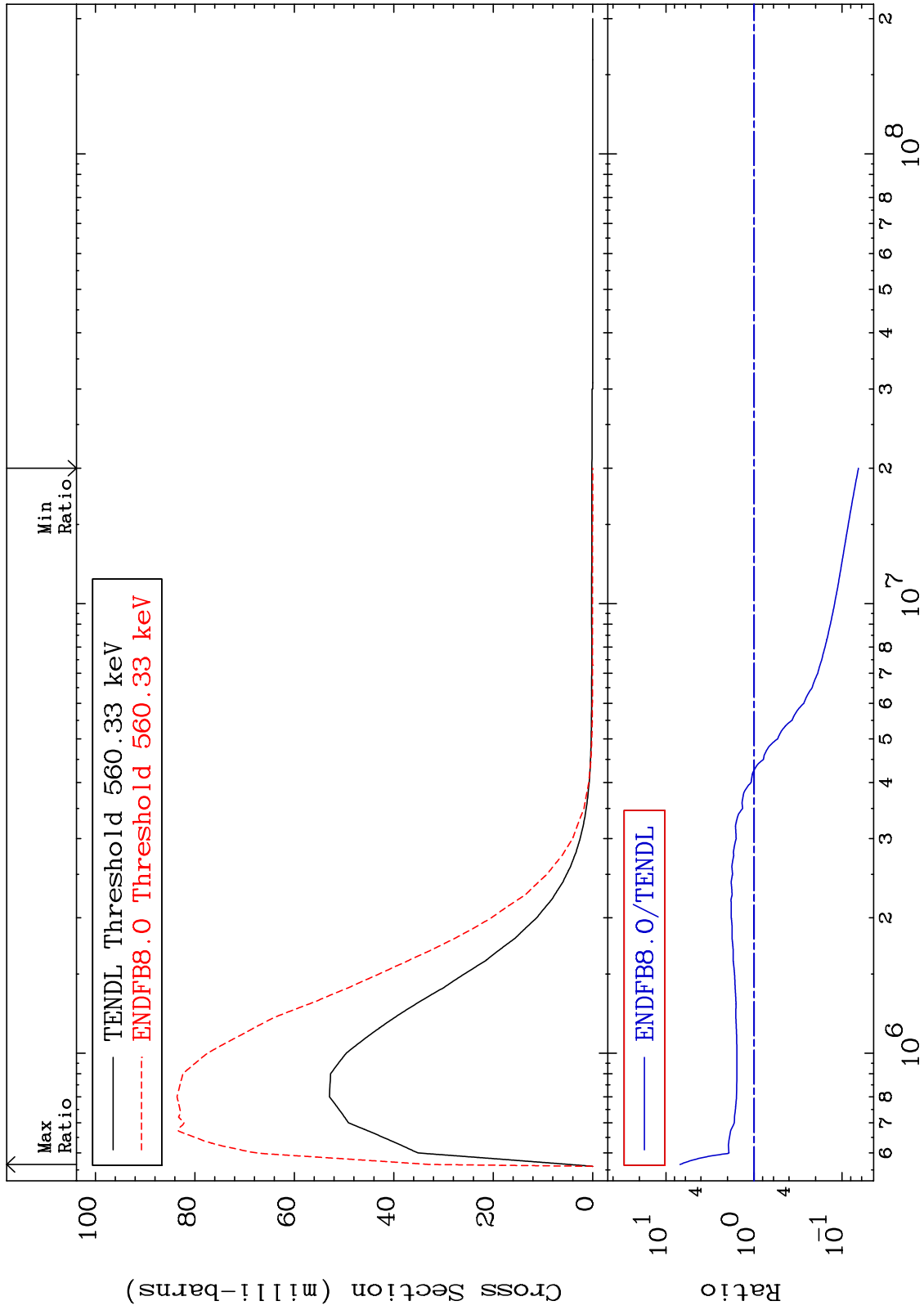
MAT 7640 MT= 68 (n,n') Level Cross Section 76-0s-189
 -85.50 To 313.5 %



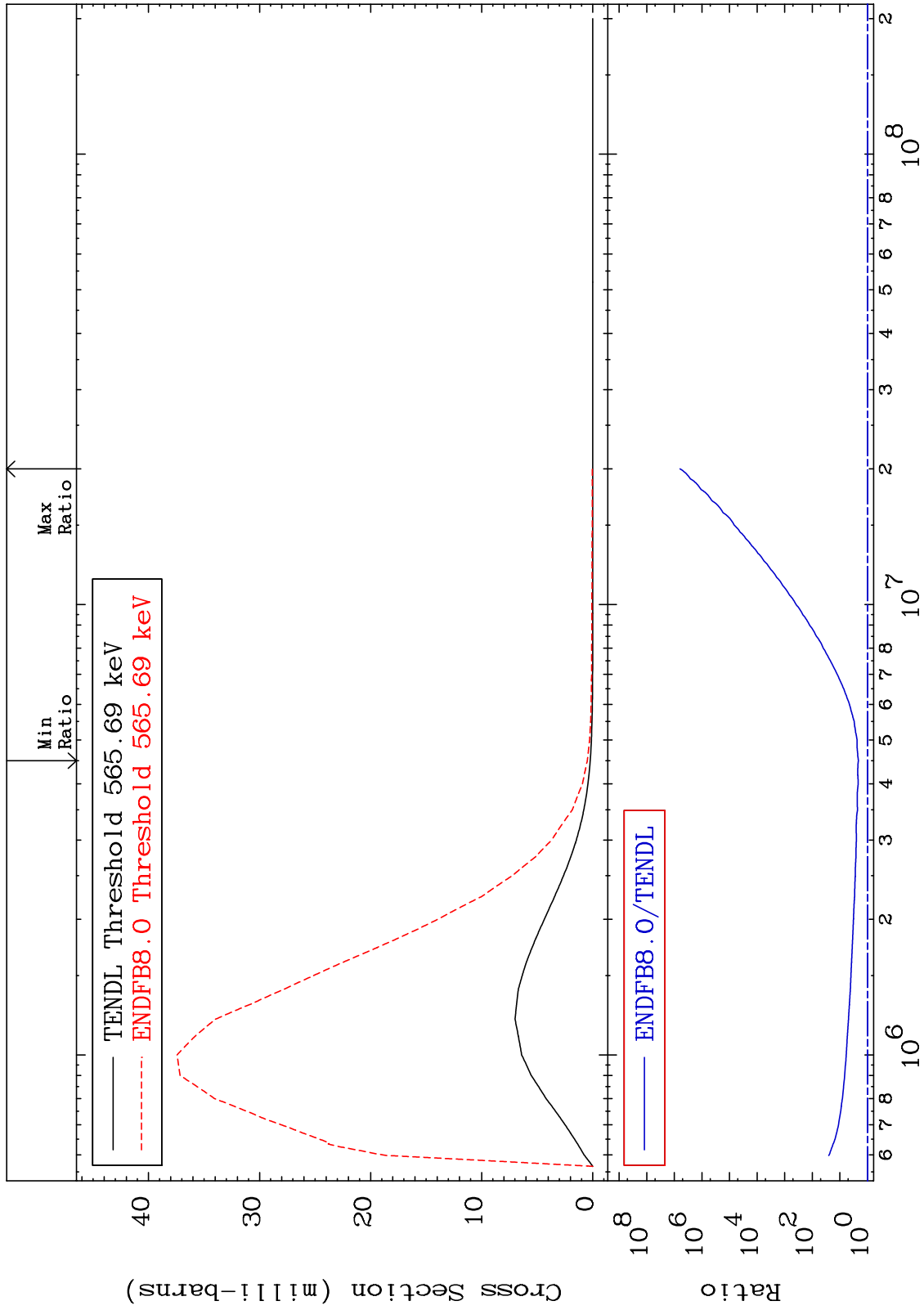
MAT 7640 MT= 69 (n,n') Level Cross Section 76-0s-189 -86.86 To 567.7 %



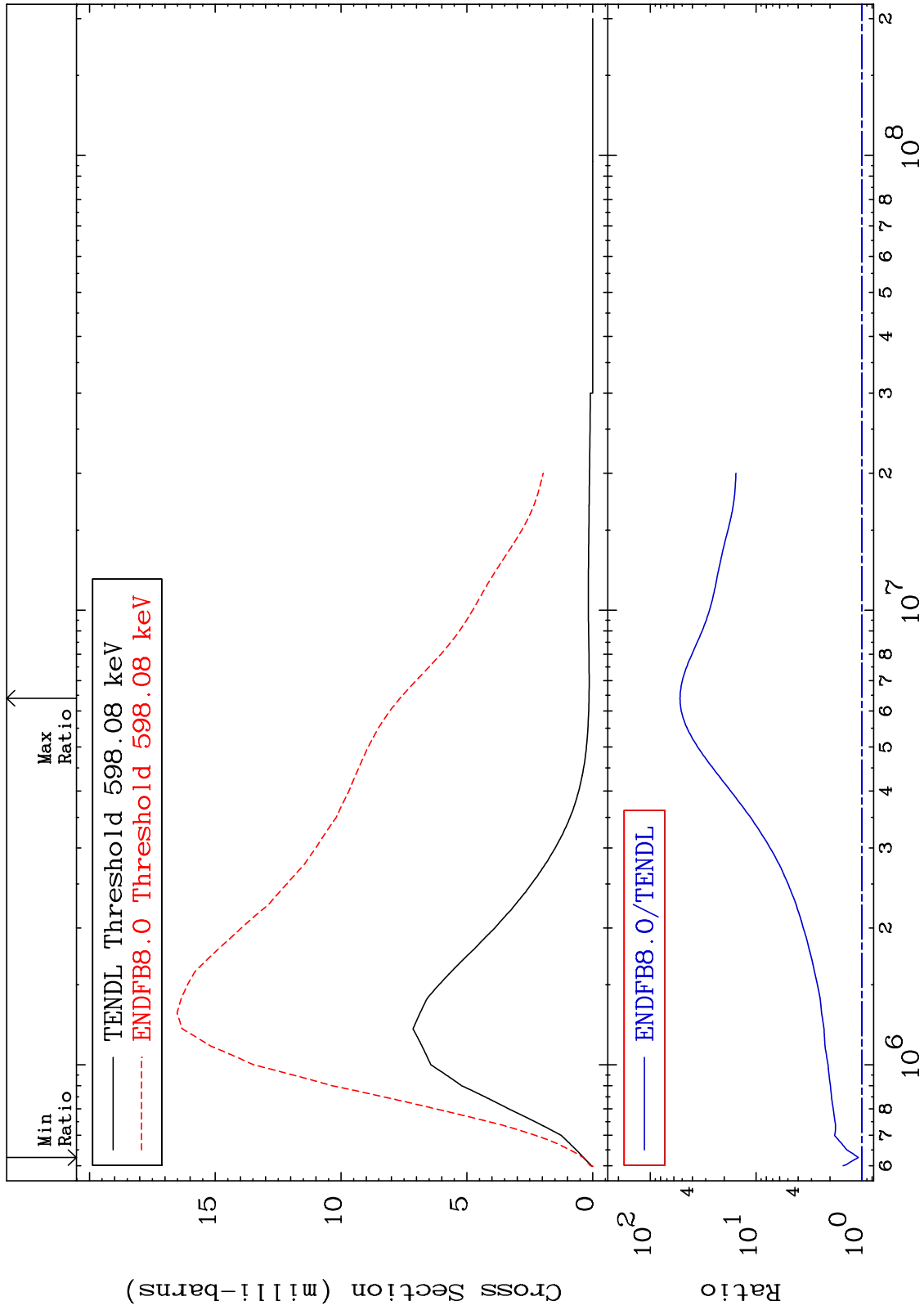
MAT 7640 MT= 70 (n,n') Level Cross Section 76-0s-189 -93.47 To 591.8 %



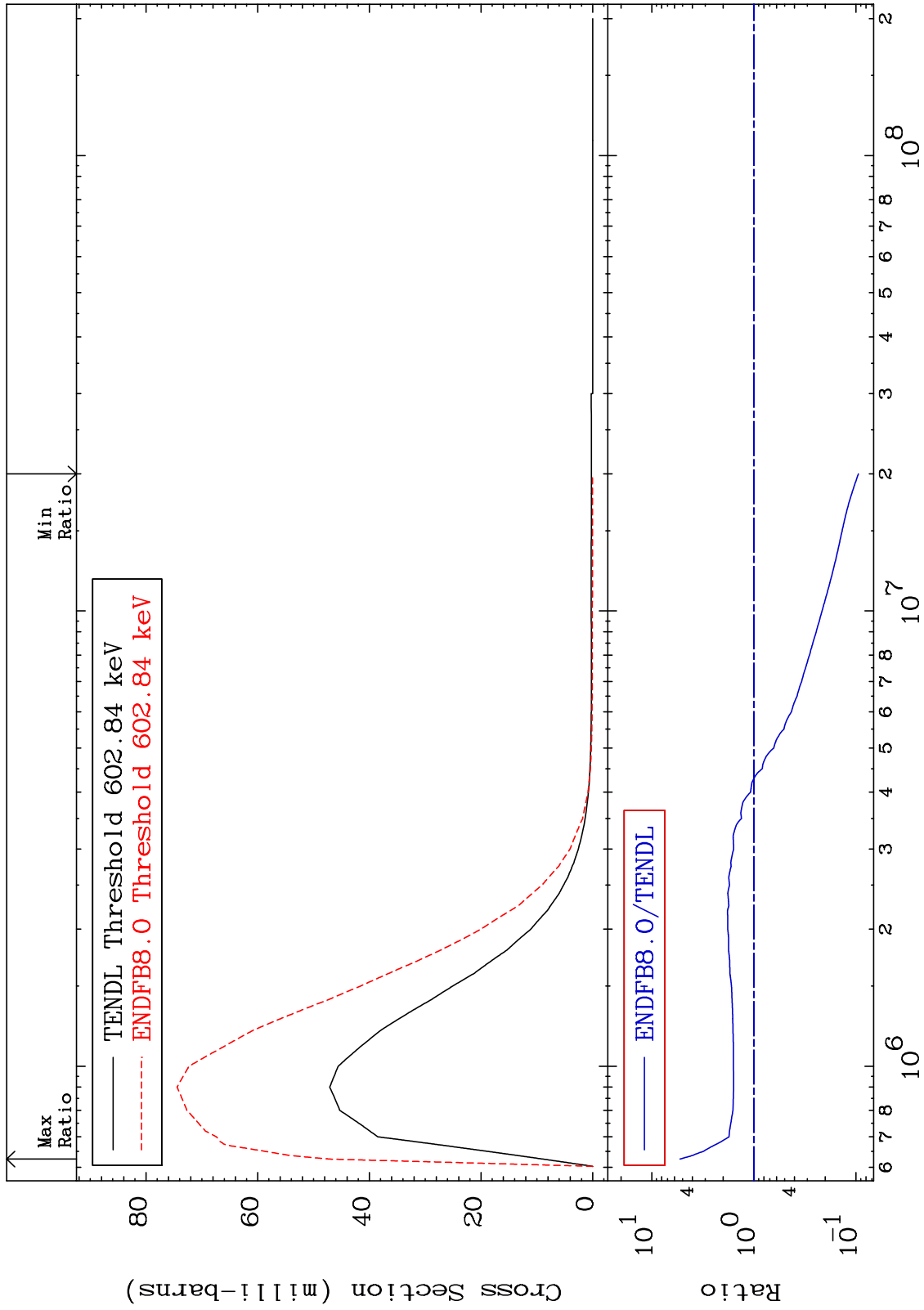
MAT 7640 MT= 71 (n,n') Level Cross Section 76-0s-189
 112.2 To 9999. %



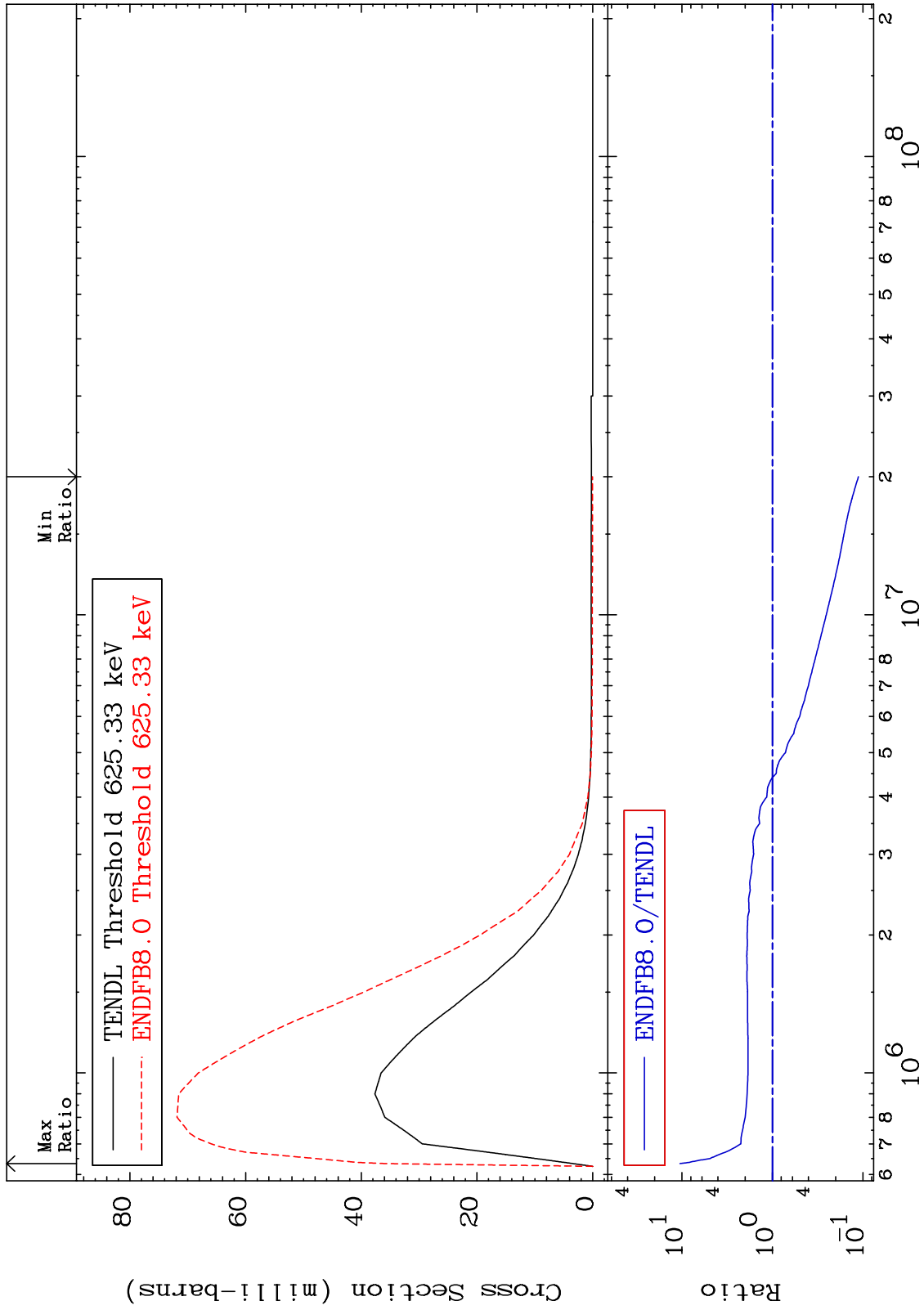
MAT 7640 MT= 72 (n,n') Level Cross Section 76-0s-189
 8.020 To 5147. %



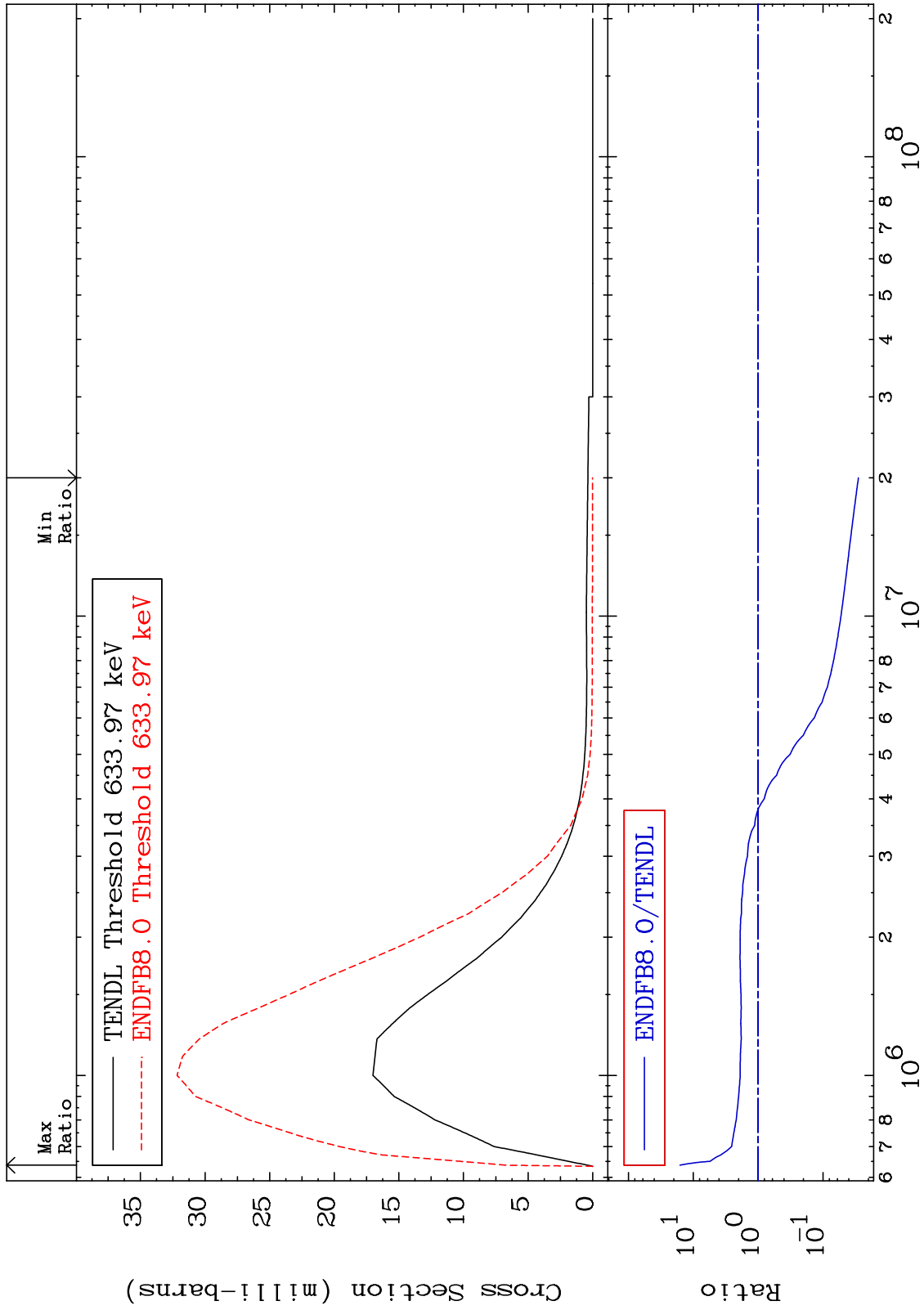
MAT 7640 MT= 73 (n,n') Level Cross Section 76-0s-189
 -90.52 To 429.2 %



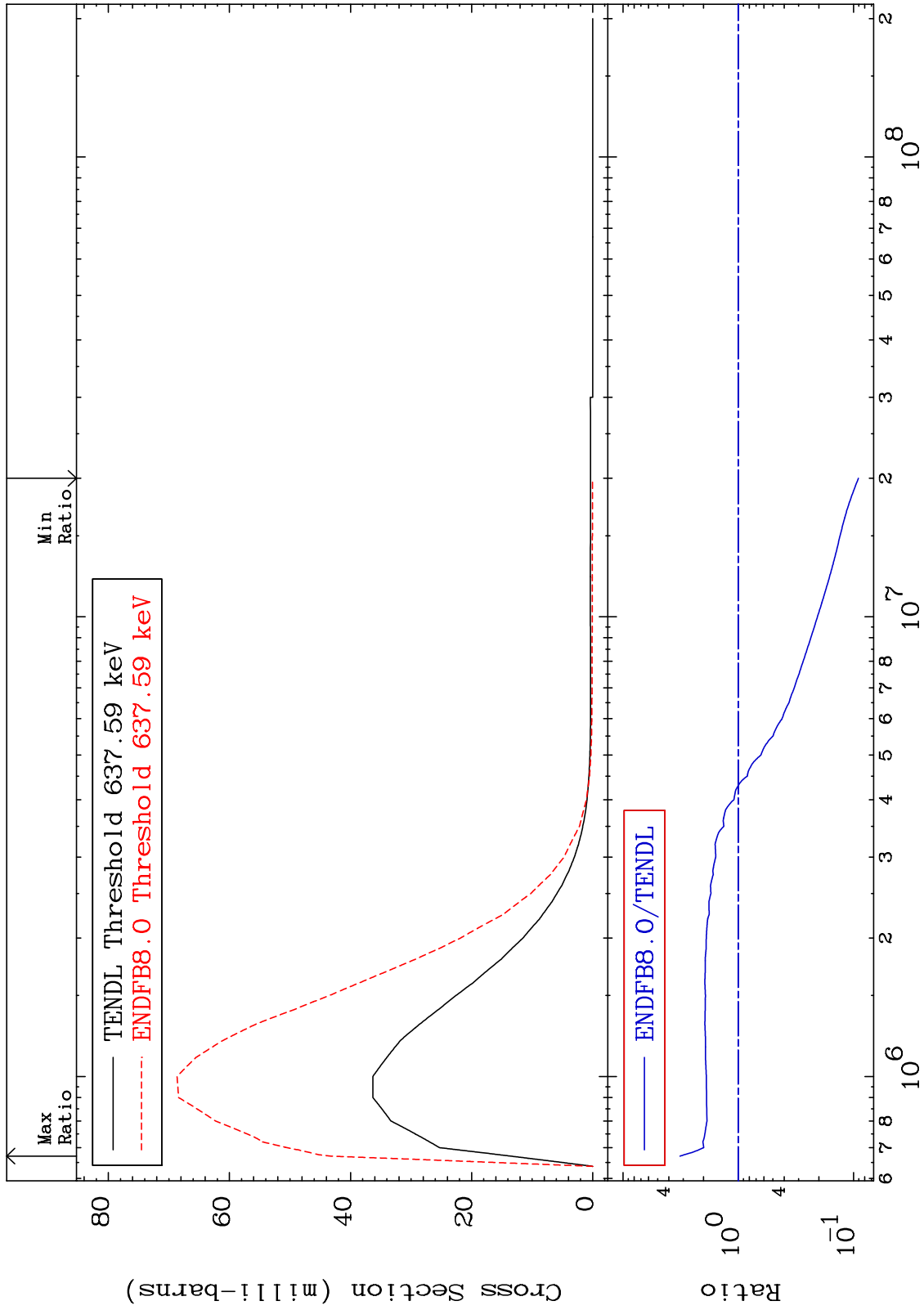
MAT 7640 MT= 74 (n,n') Level Cross Section 76-0s-189
 -88.77 To 951.2 %



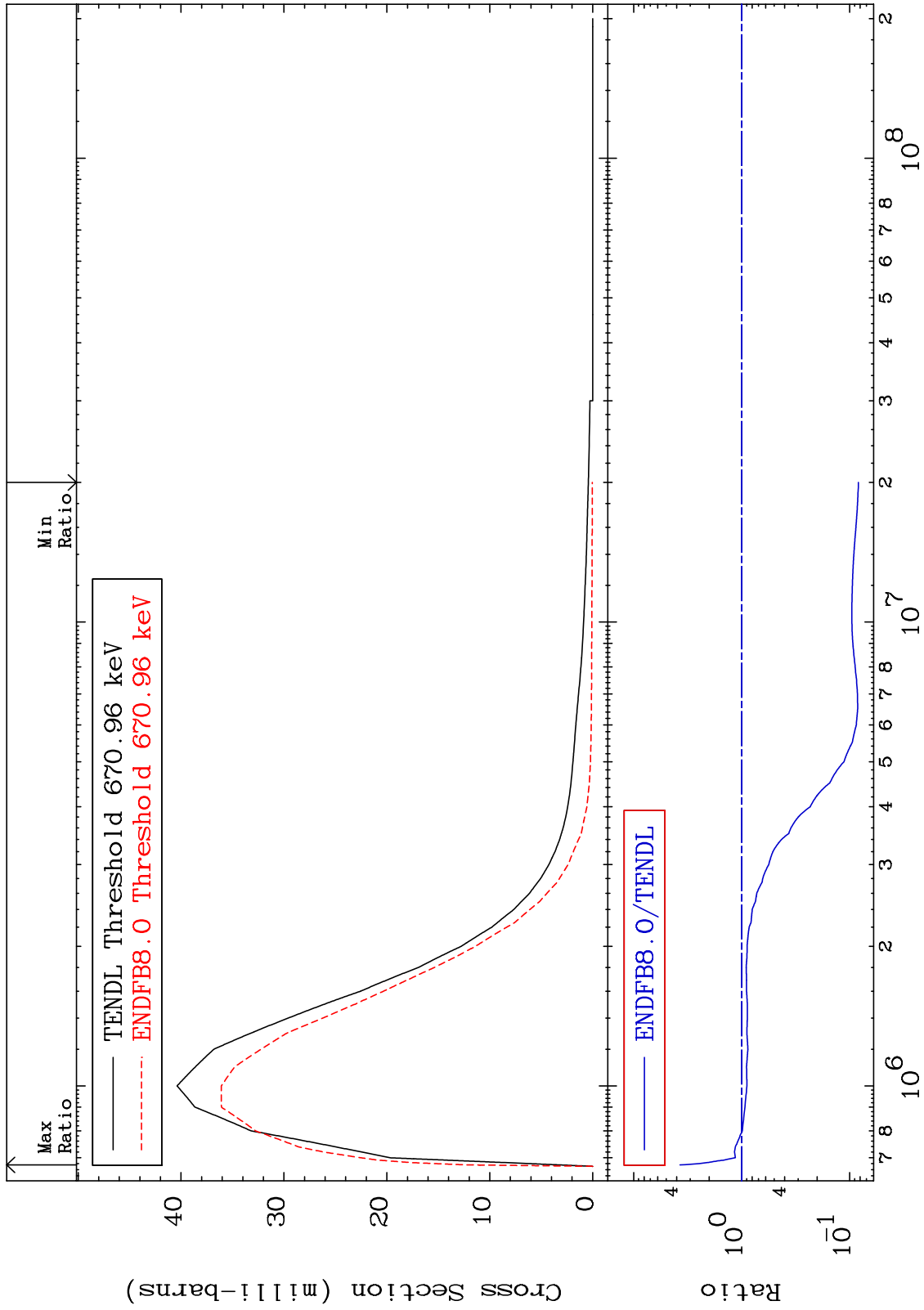
MAT 7640 MT= 75 (n,n') Level Cross Section 76-0s-189 -97.16 To 1501. %



MAT 7640 MT= 76 (n,n') Level Cross Section 76-0s-189
 -90.93 To 219.9 %

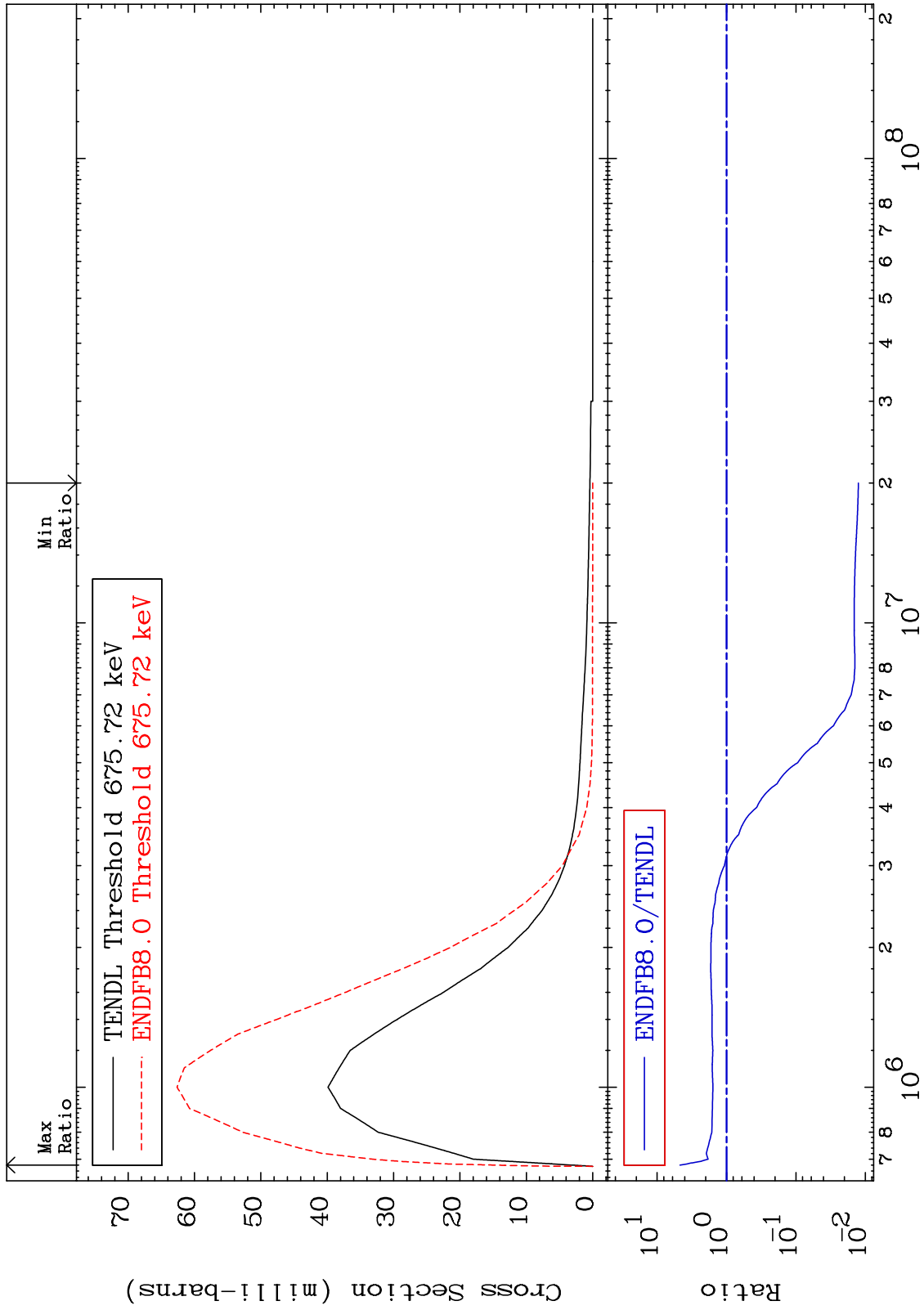


MAT 7640 MT= 77 (n,n') Level Cross Section 76-0s-189
 -91.70 To 272.0 %

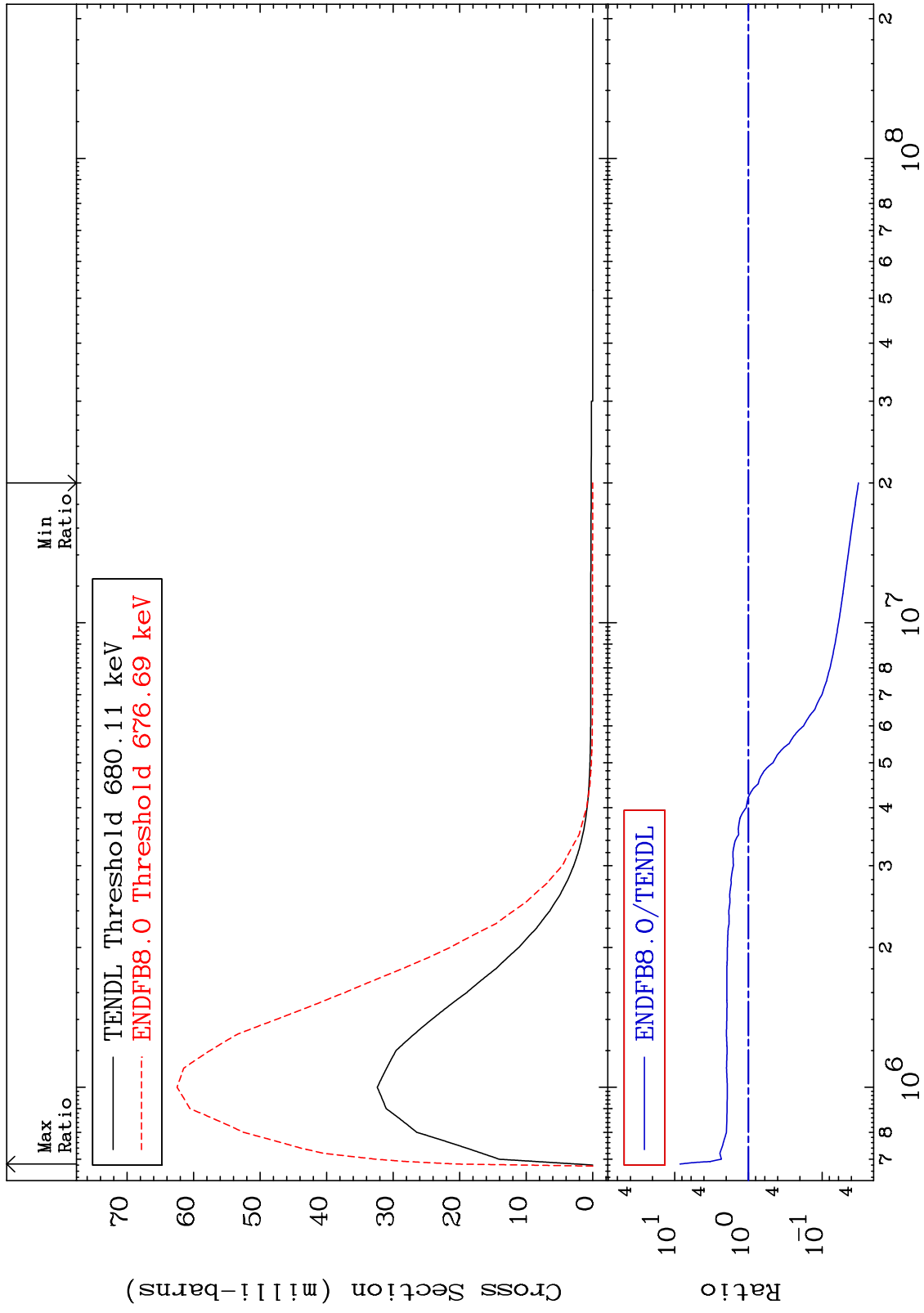


38 76-0s-189

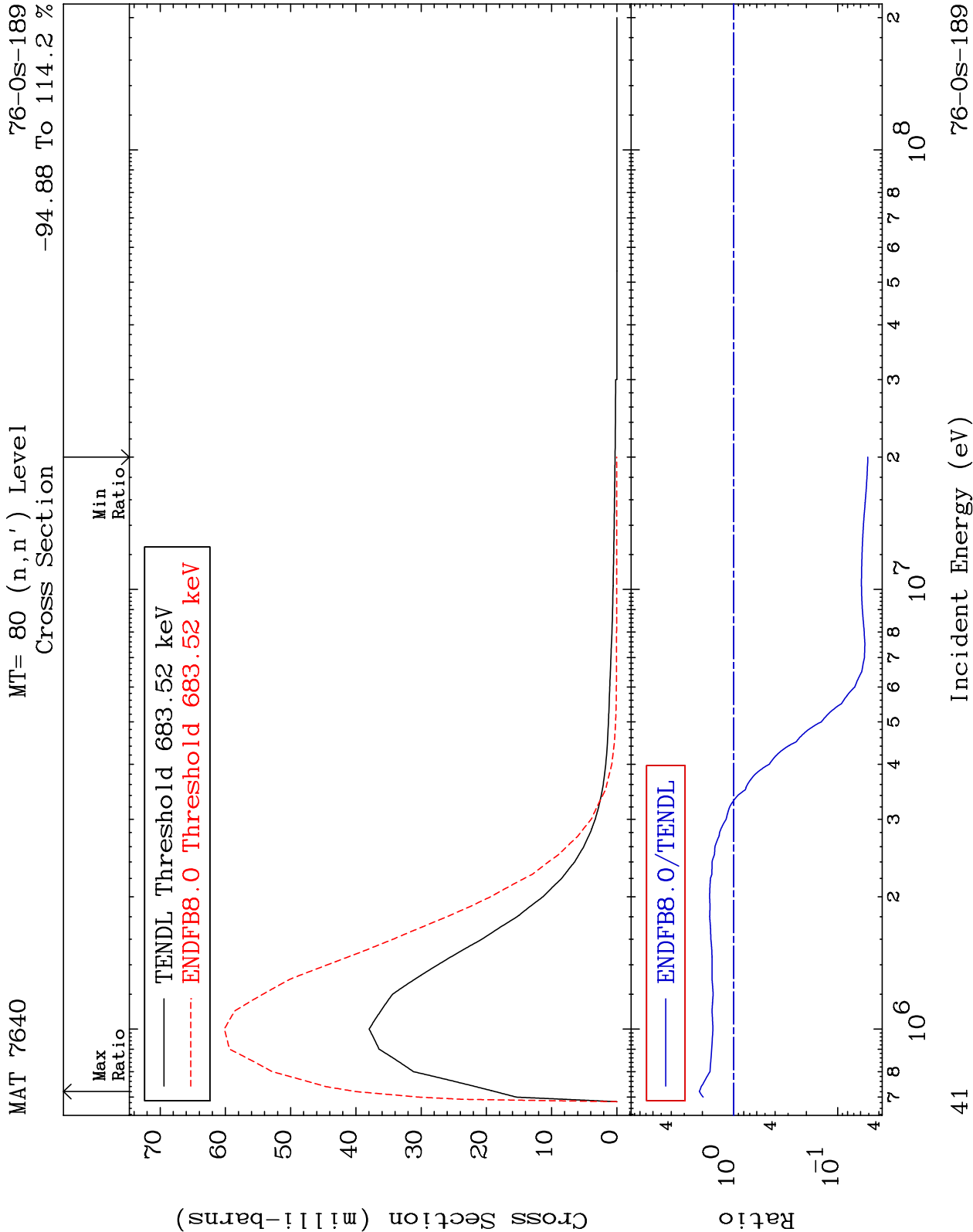
MAT 7640 MT= 78 (n,n') Level Cross Section 76-0s-189
 -98.74 To 368.0 %



MAT 7640 MT= 79 (n,n') Level Cross Section 76-0s-189
 -96.78 To 747.5 %



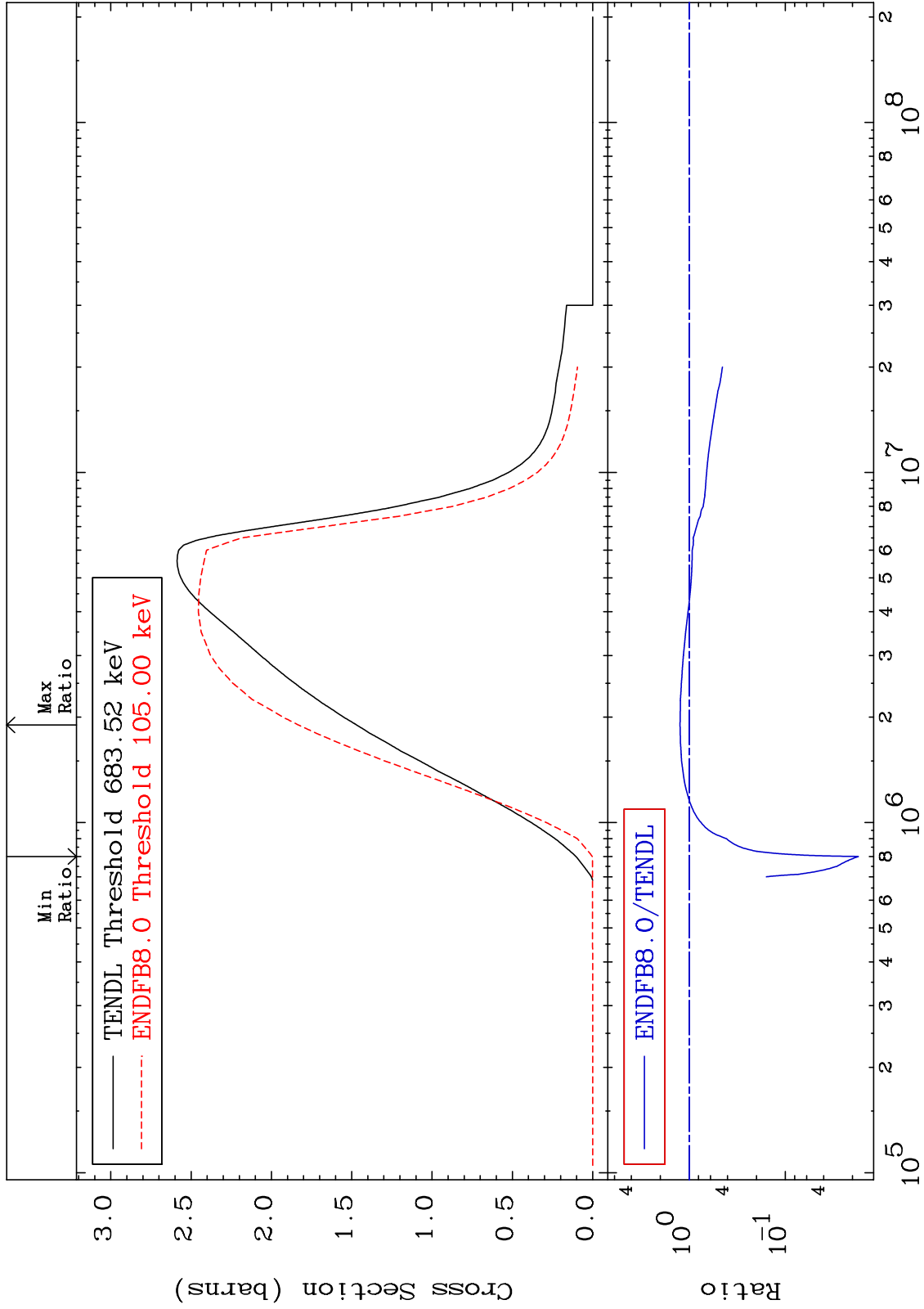
40 7 8 10⁶ 2 3 4 5 6 7 8 10⁸ 2 76-0s-189



MAT 7640

(n, n') Continuum
Cross Section

76-0s-189
-98.26 To 24.69 %



42

Incident Energy (eV)

76-0s-189

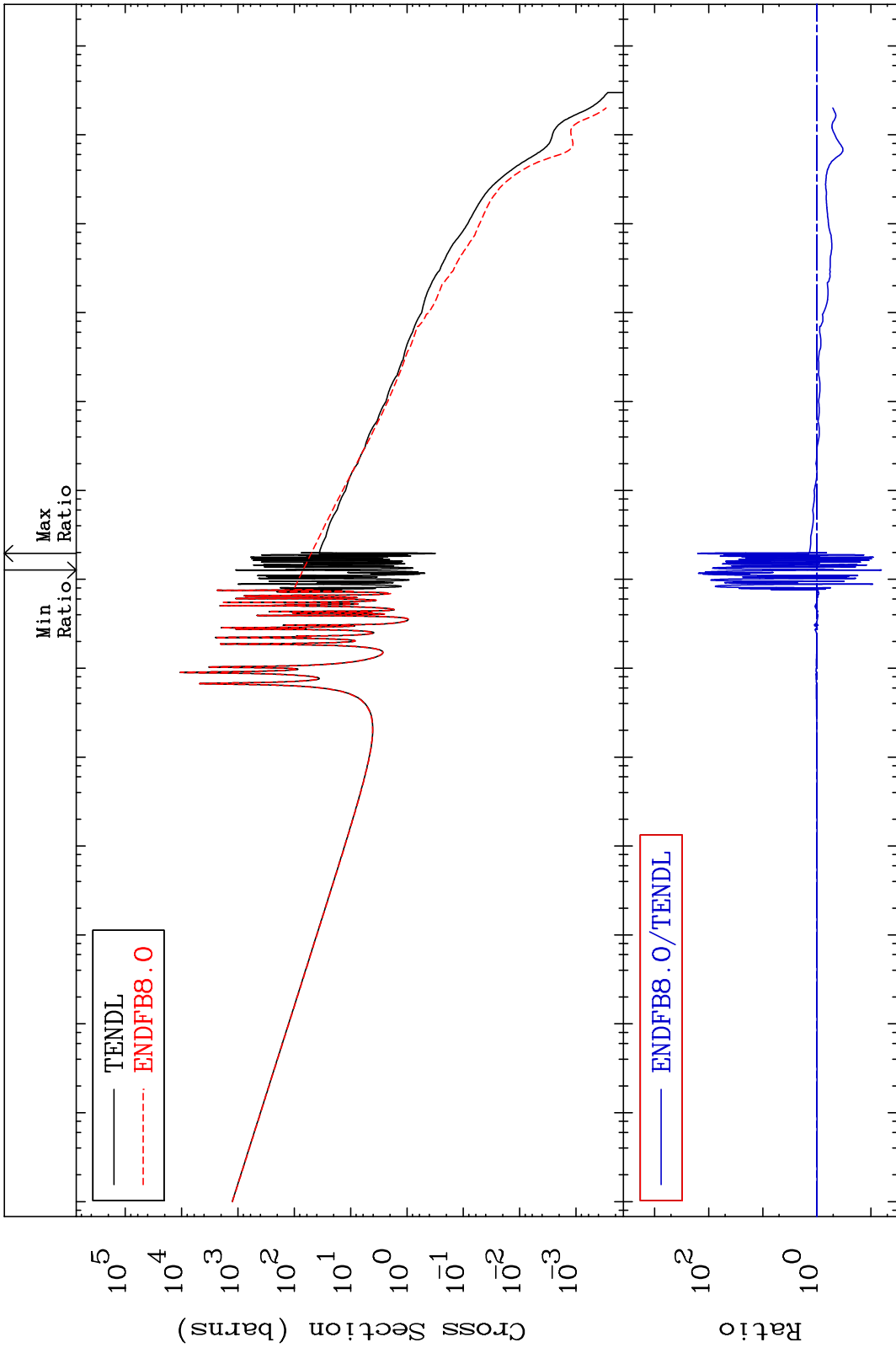
MAT 7640

(n, γ)

76-0s-189

Cross Section

-93.62 To 9999. %

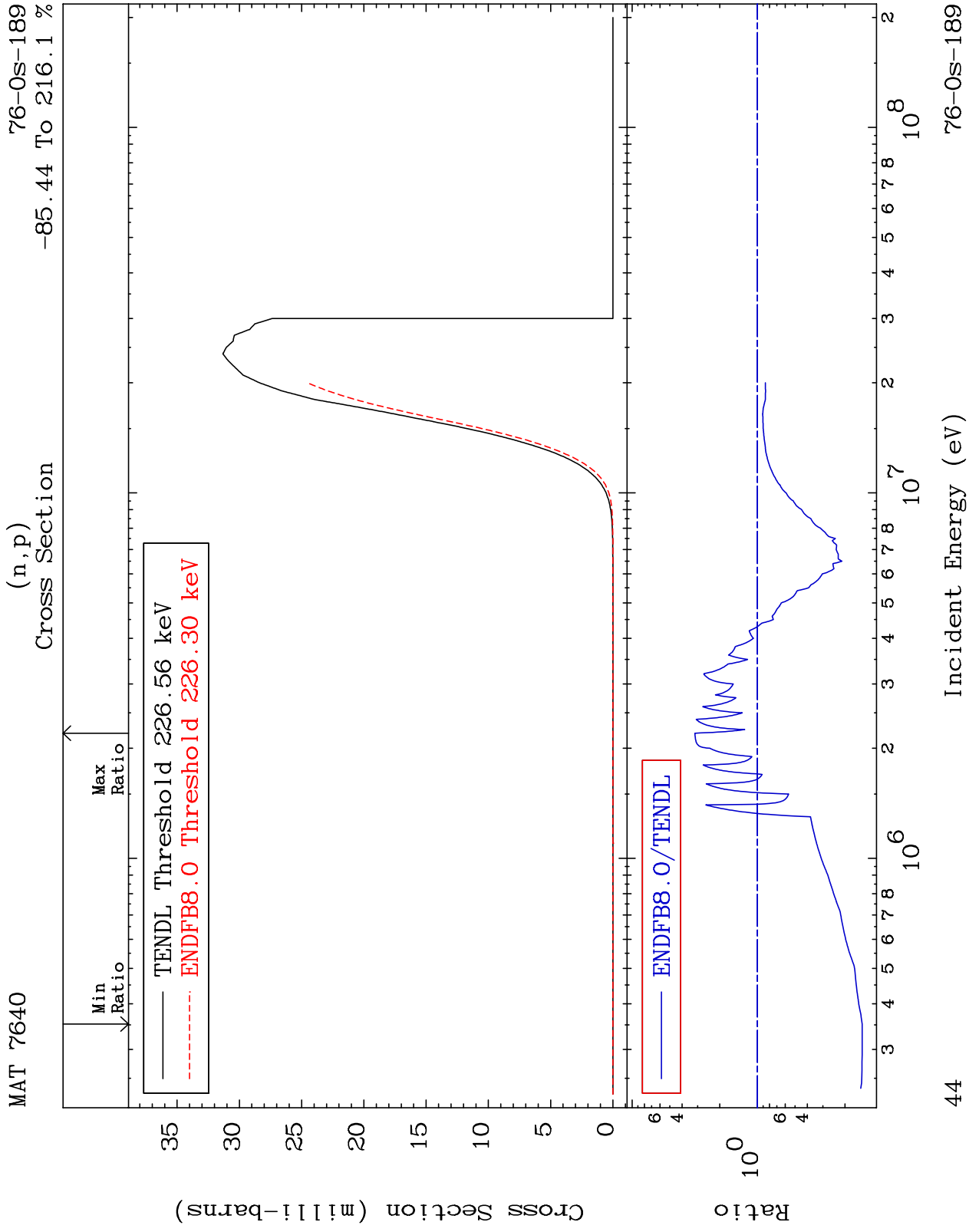


— TENDL
- - - ENDFB8.0

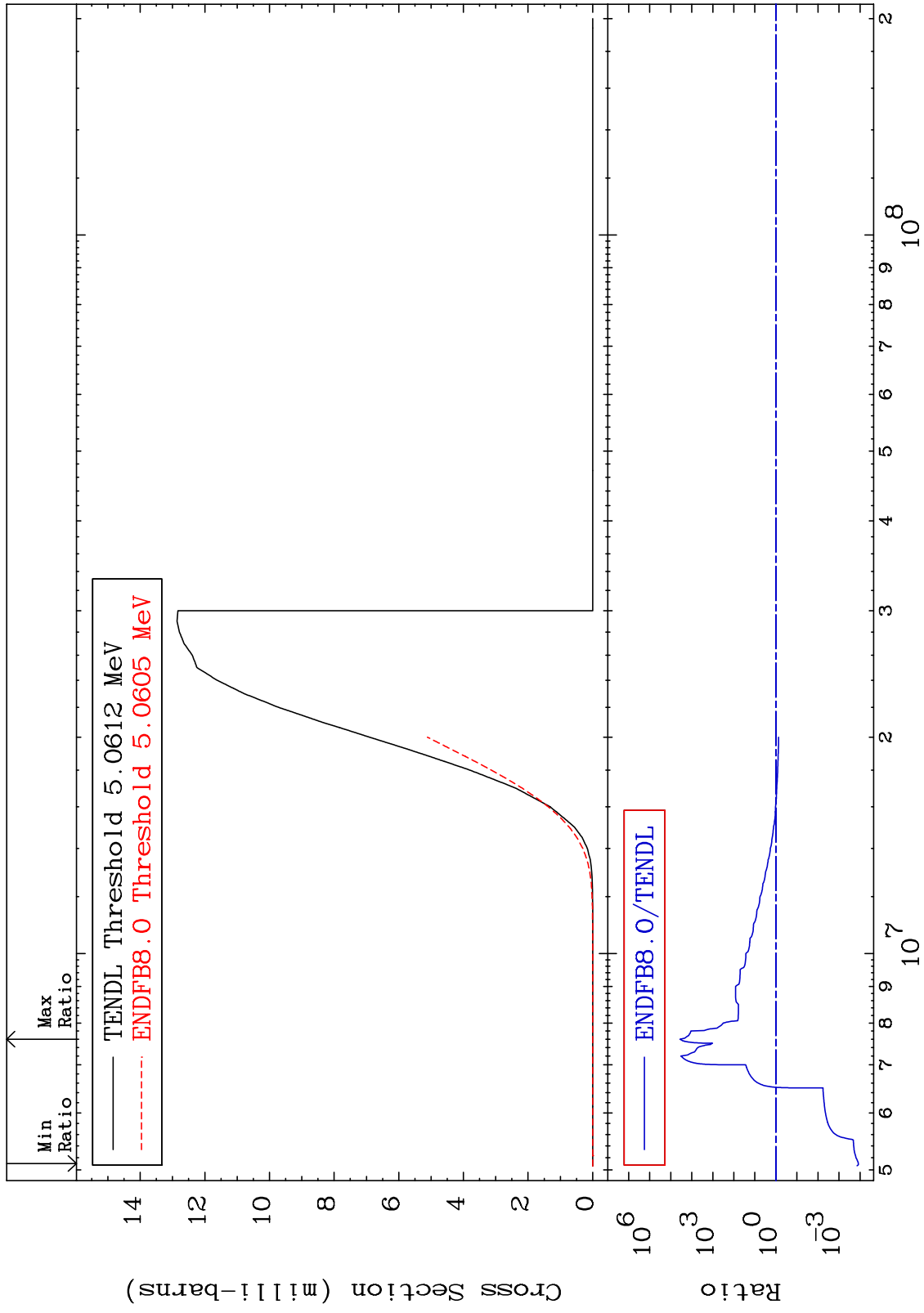
— ENDFB8.0/TENDL

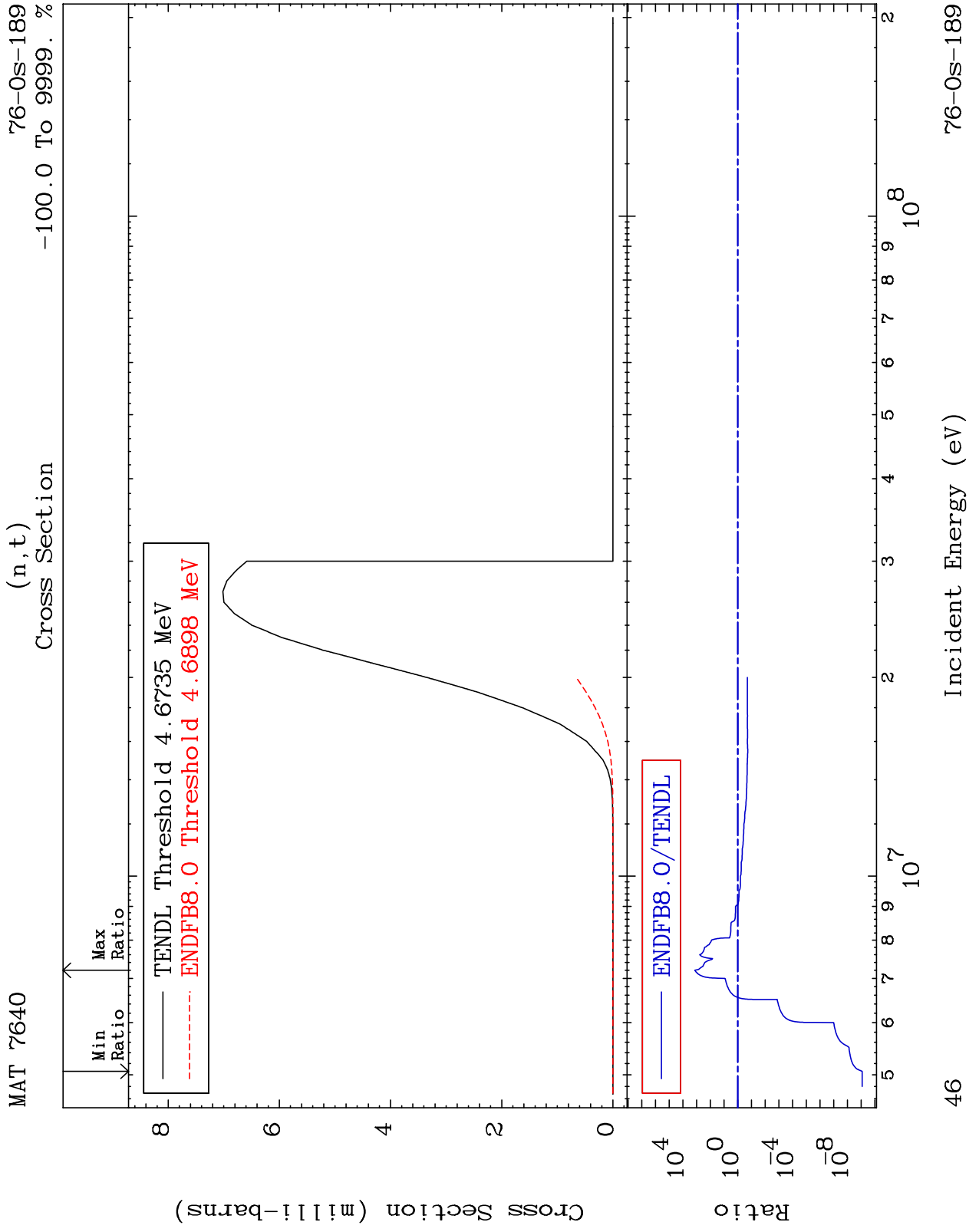
Incident Energy (eV)

76-0s-189



MAT 7640 (n,d) Cross Section 76-0s-189 -99.99 To 9999. %





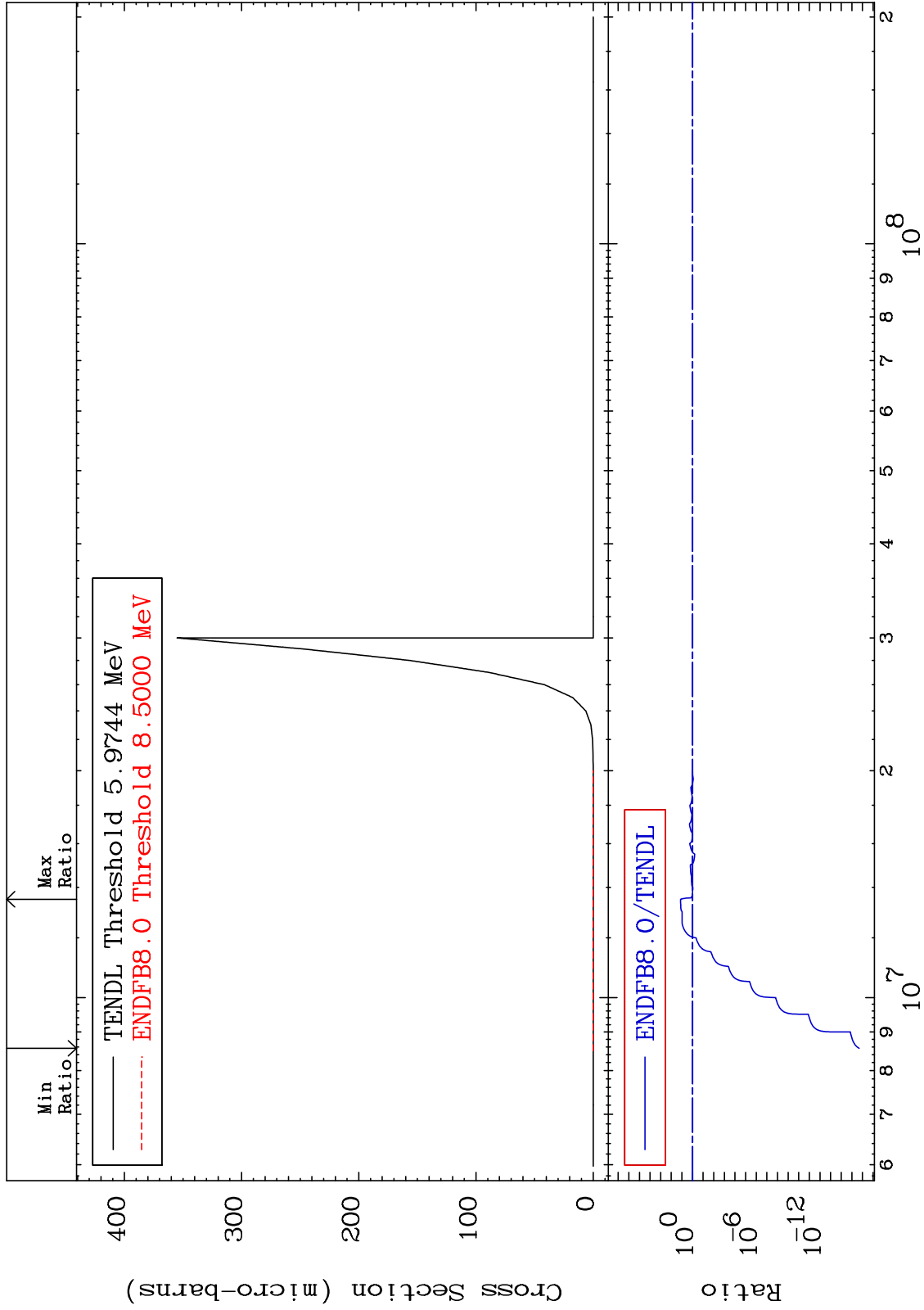
MAT 7640

(n, He-3)

76-0s-189

Cross Section

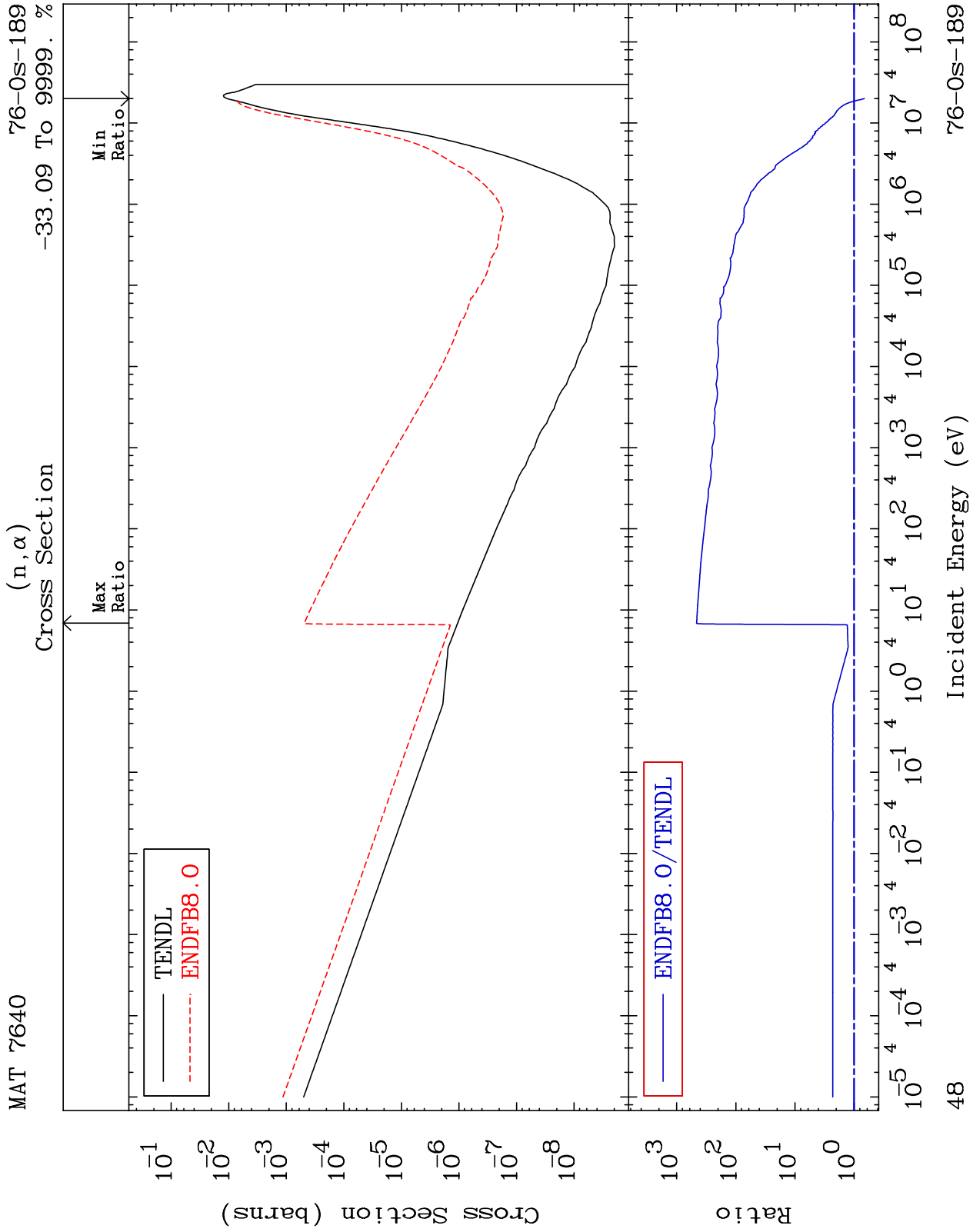
-100.0 To 1218. %



47

Incident Energy (eV)

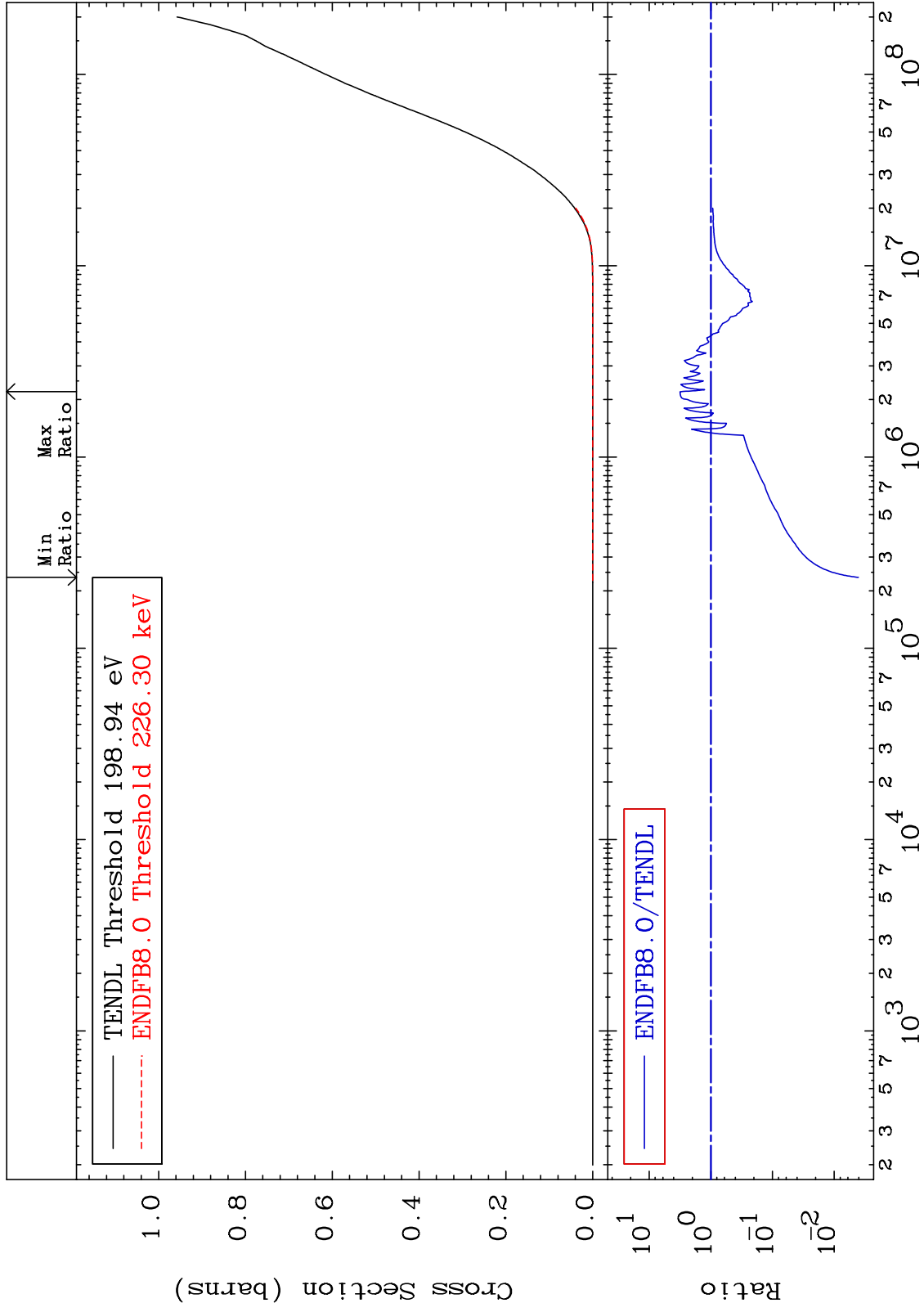
76-0s-189



MAT 7640

Hydrogen Production
Cross Section

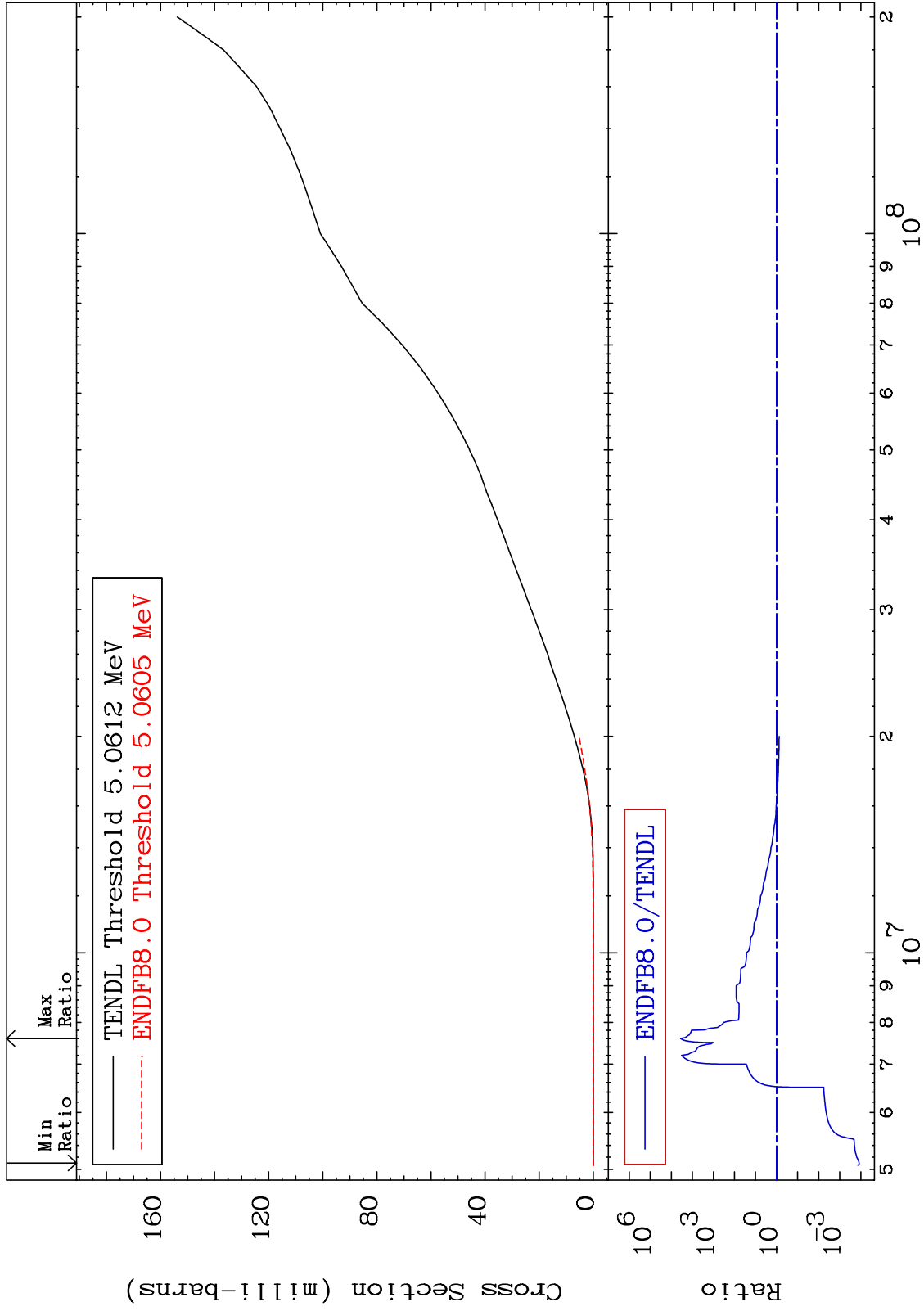
76-0s-189
-99.59 To 216.1 %



MAT 7640

Deuterium Production
Cross Section

76-0s-189
-99.99 To 9999. %



50

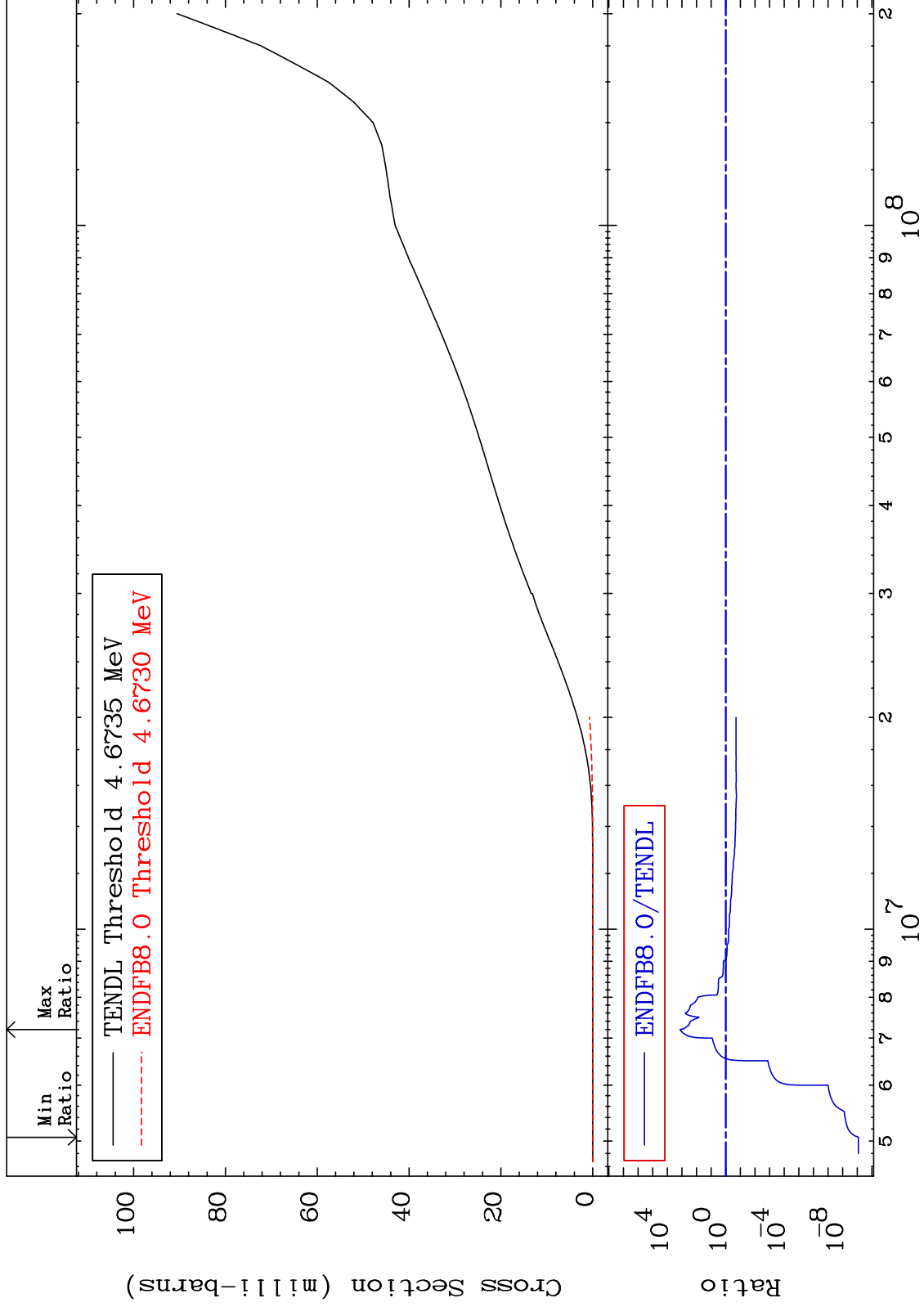
Incident Energy (eV)

76-0s-189

MAT 7640

Tritium Production
Cross Section

76-0s-189
-100.0 To 9999. %



51

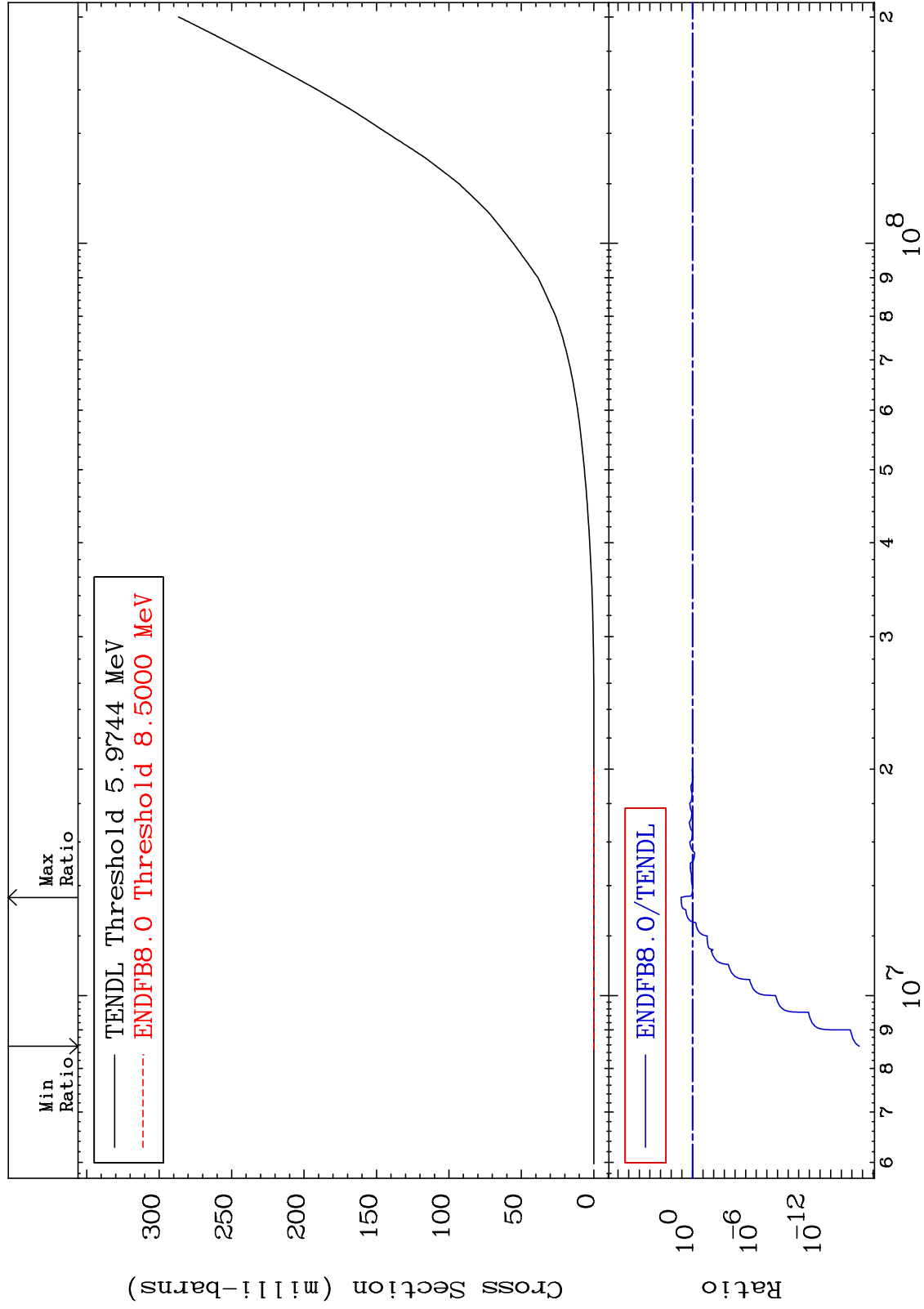
Incident Energy (eV)

76-0s-189

MAT 7640

He-3 Production
Cross Section

76-0s-189
-100.0 To 1080. %



52

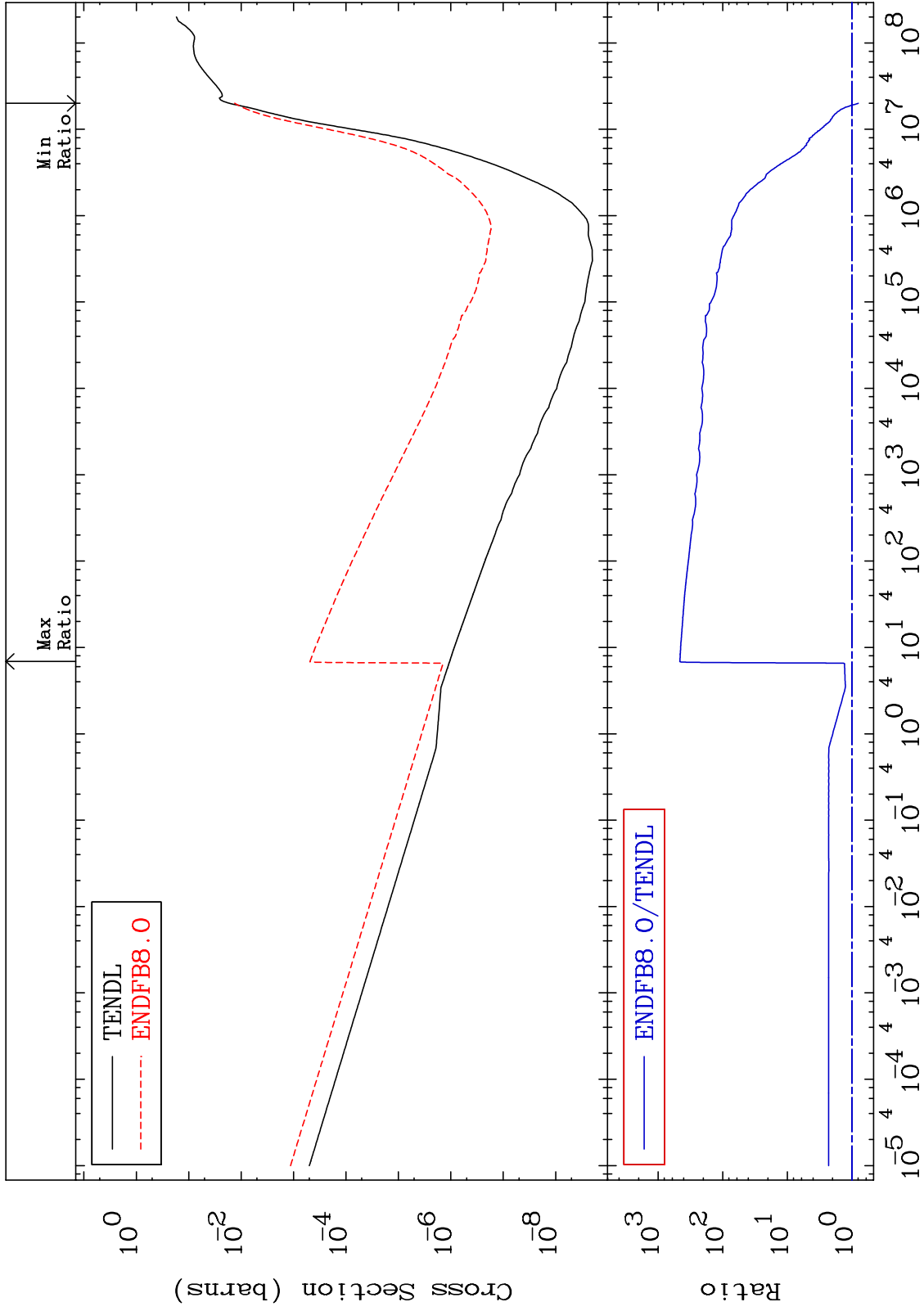
Incident Energy (eV)

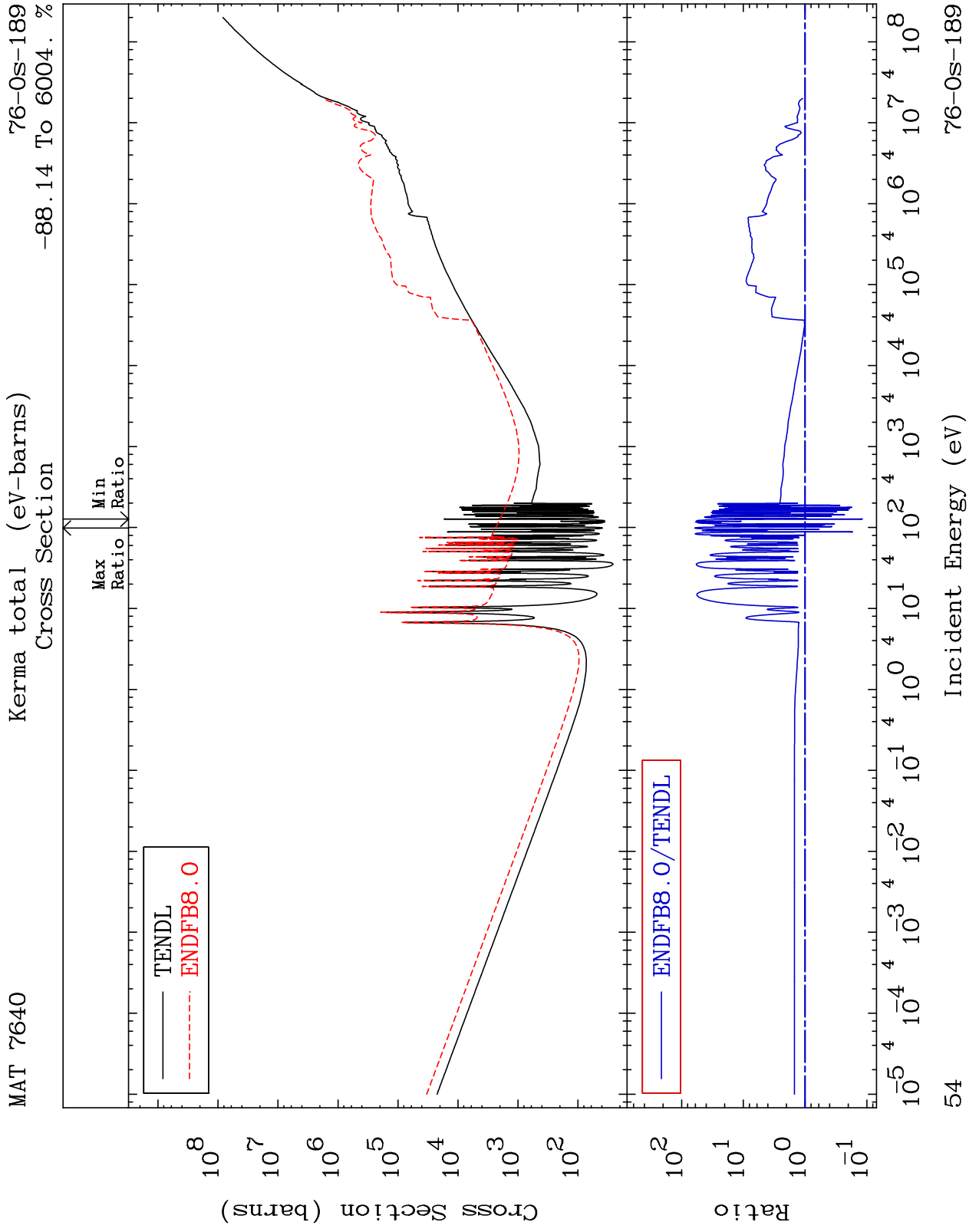
76-0s-189

MAT 7640

He-4 Production
Cross Section

76-0s-189
-20.49 To 9999. %

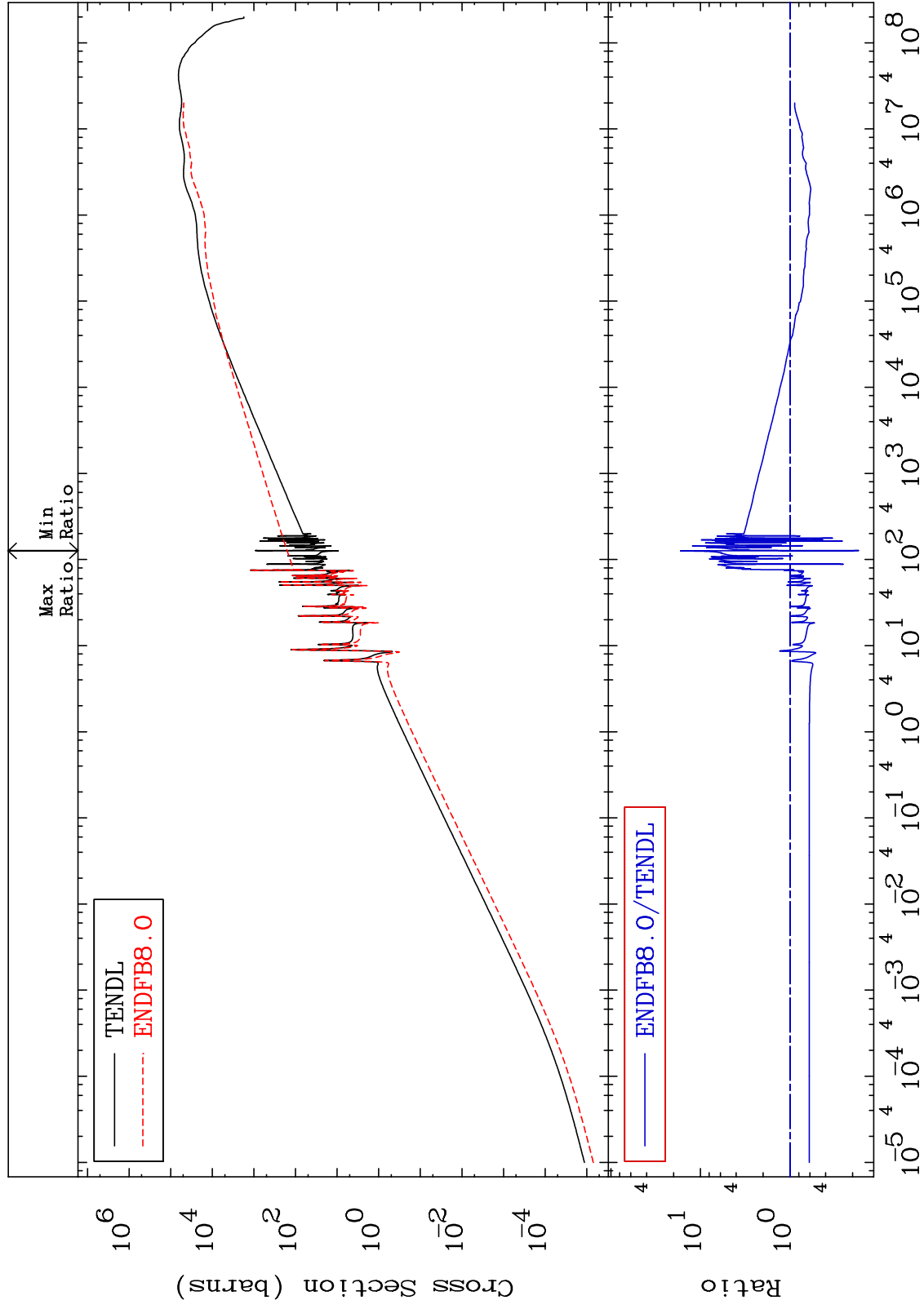




MAT 7640

Kerma elastic
Cross Section

76-0s-189
-82.80 To 1575. %



55

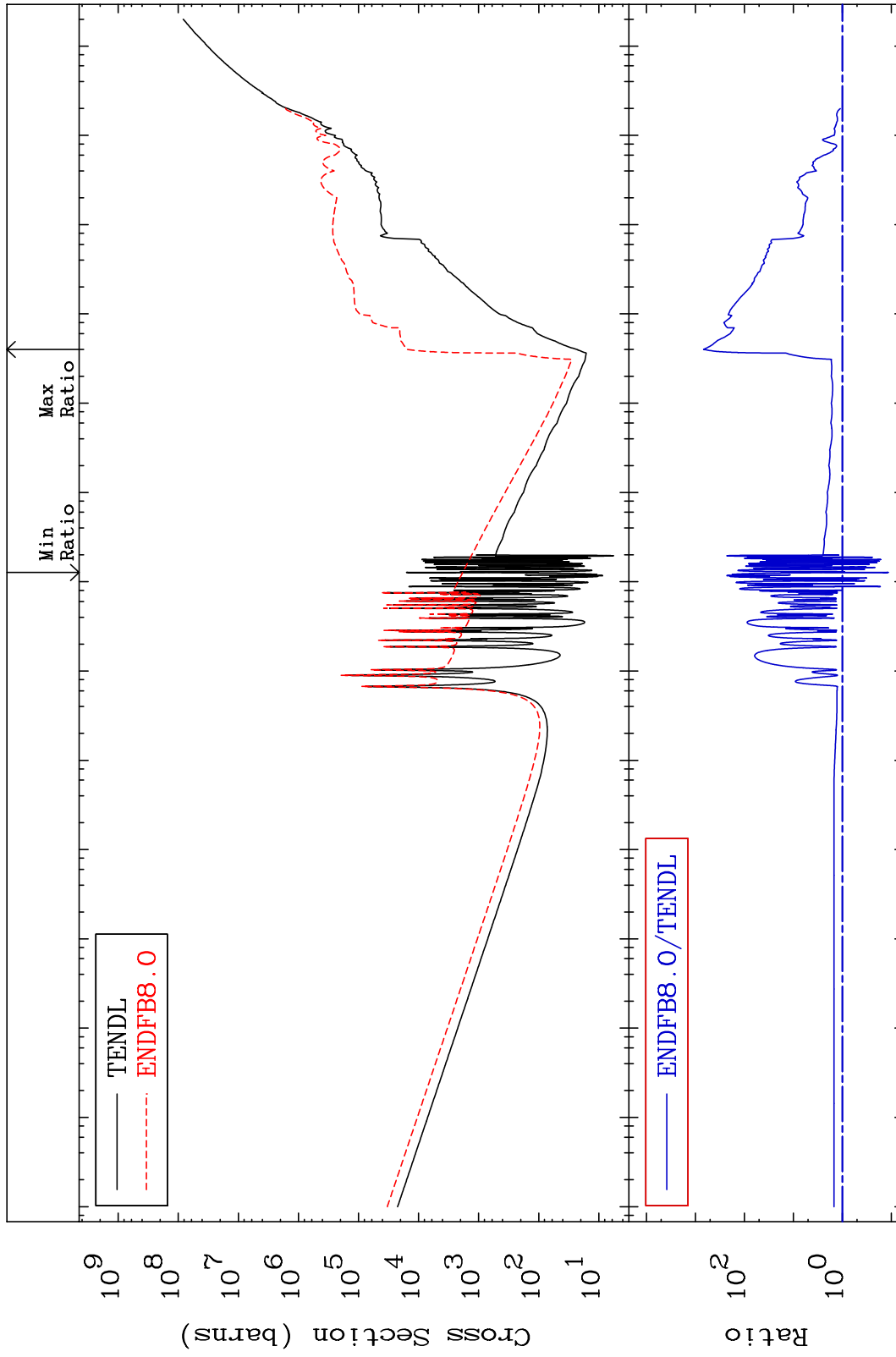
Incident Energy (eV)

76-0s-189

MAT 7640

Kerma non-elastic (all but mt2)
Cross Section

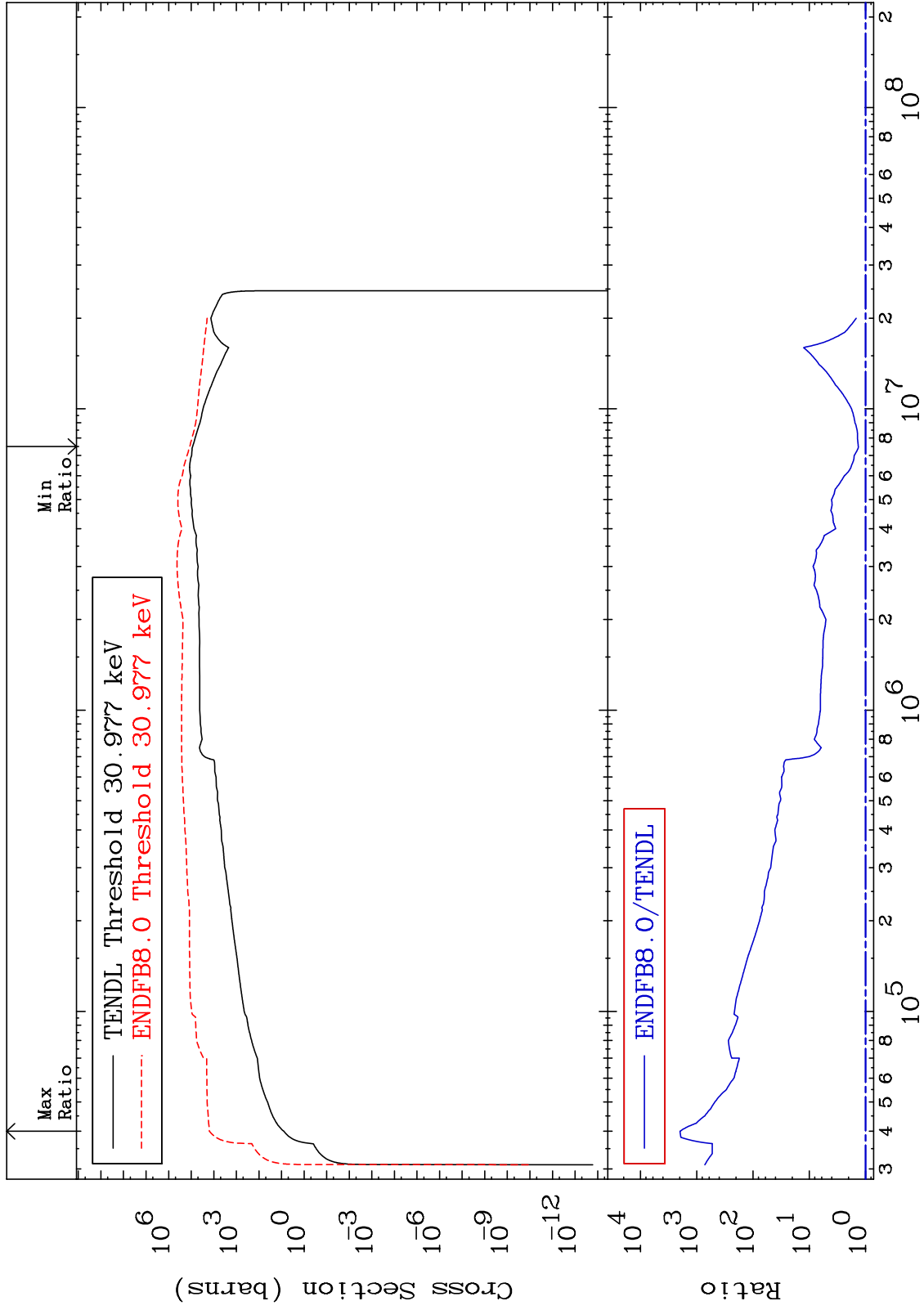
76-0s-189
-88.45 To 9999. %



MAT 7640

Kerma inelastic (mt51-91)
Cross Section

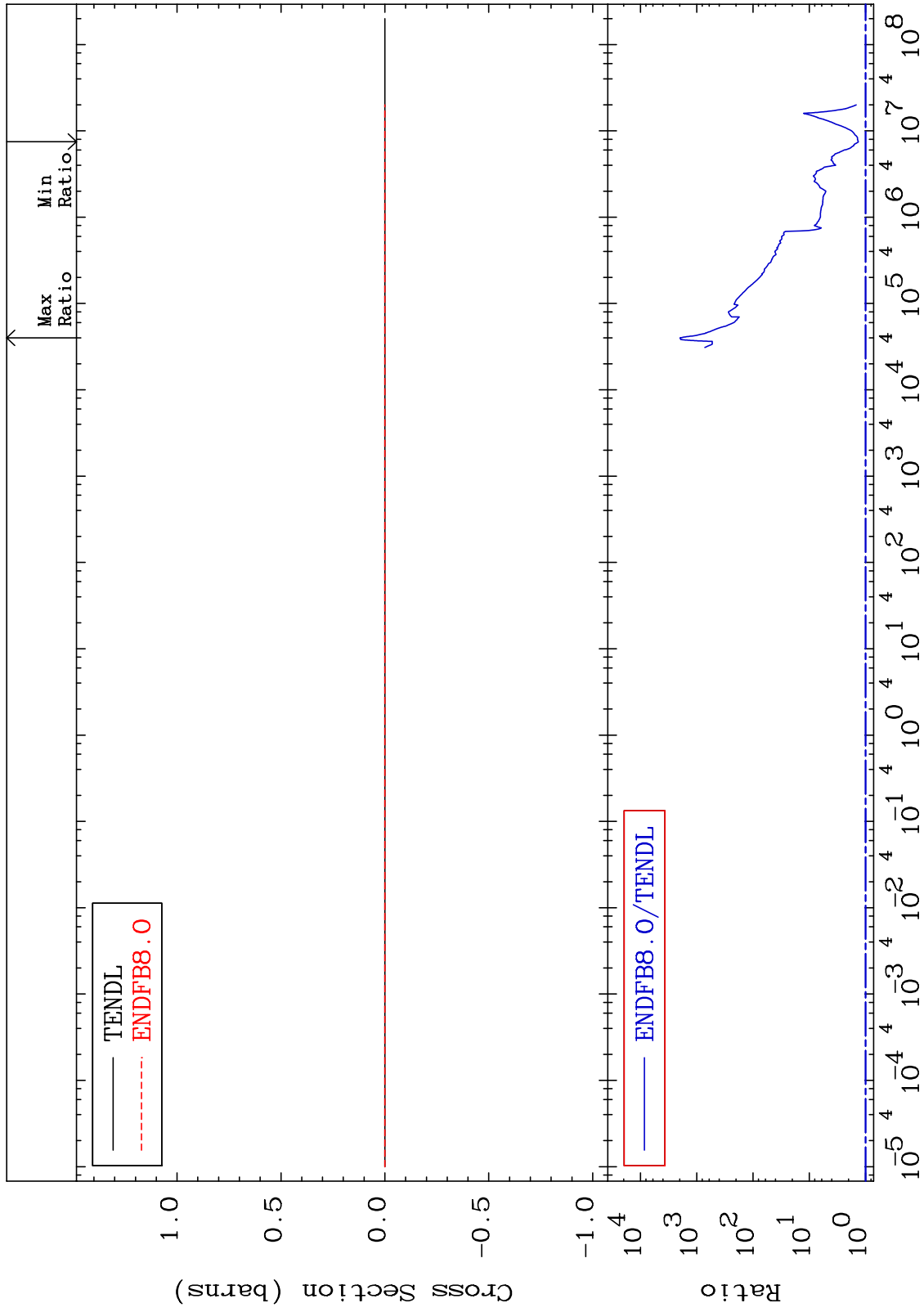
76-Os-189
33.75 To 9999. %



MAT 7640

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

76-0s-189
33.75 To 9999. %



58

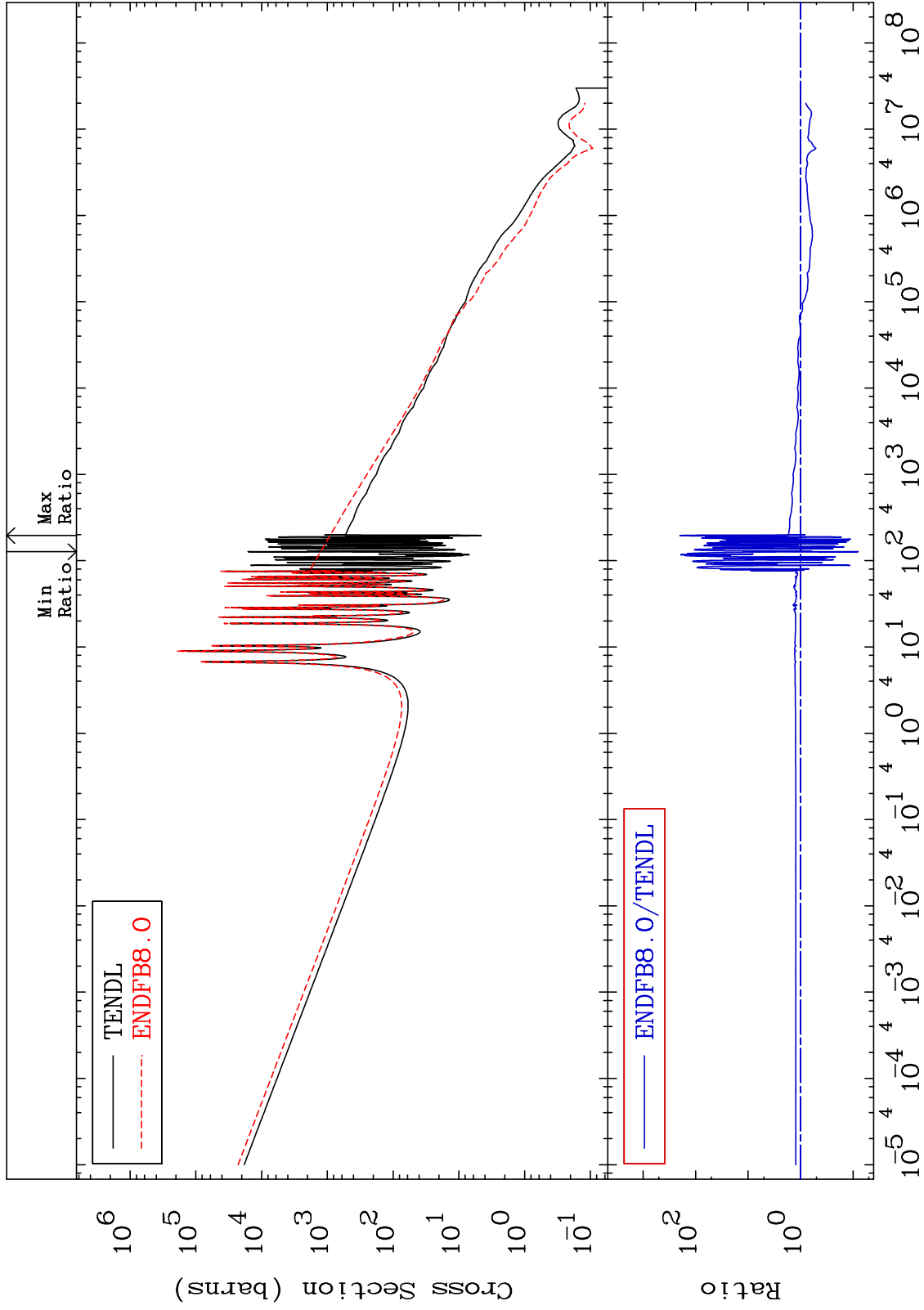
Incident Energy (eV)

76-0s-189

MAT 7640

Kerma capture (mt102)
Cross Section

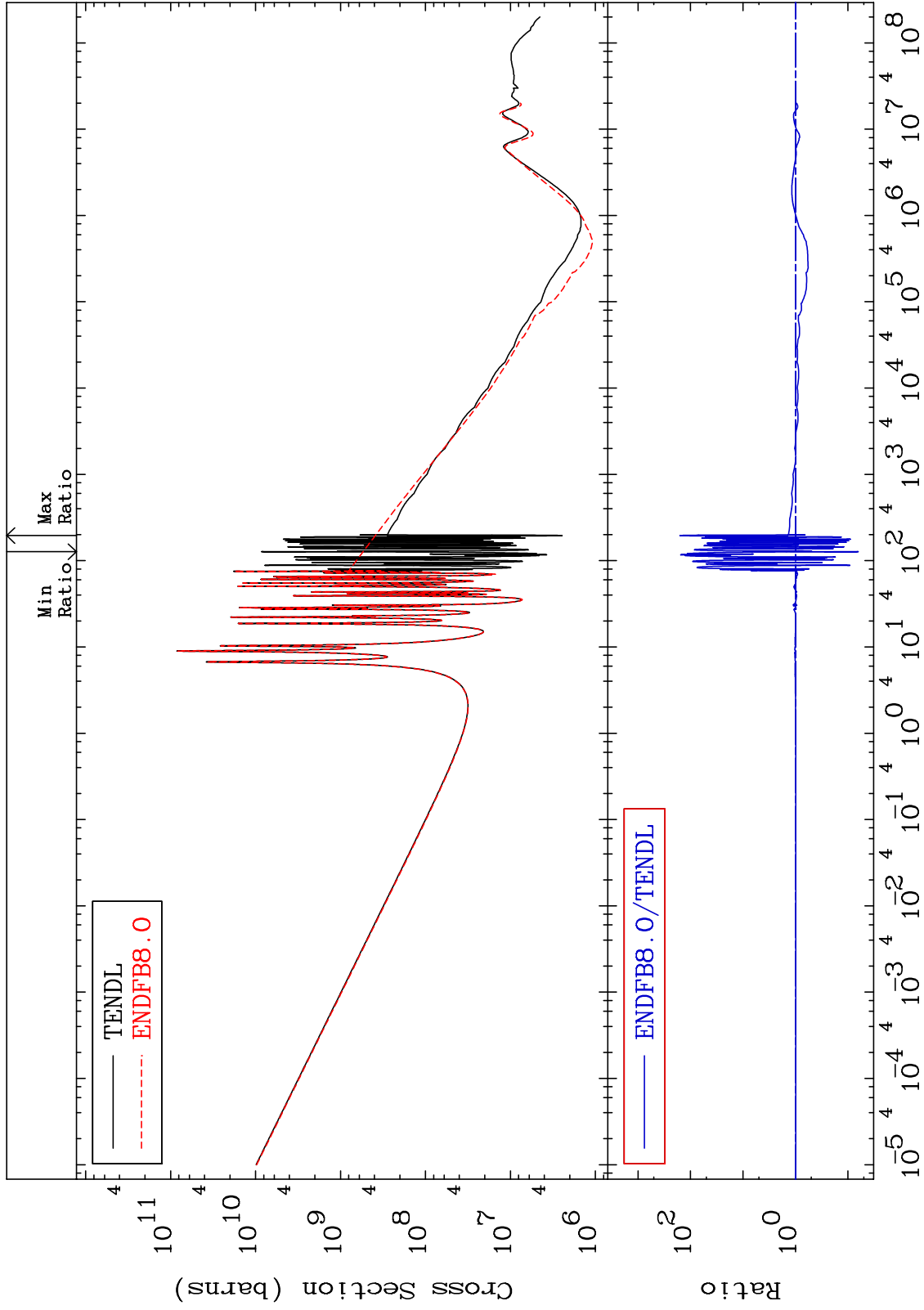
76-0s-189
-92.09 To 9999. %



MAT 7640

Total photon (eV-barns)
Cross Section

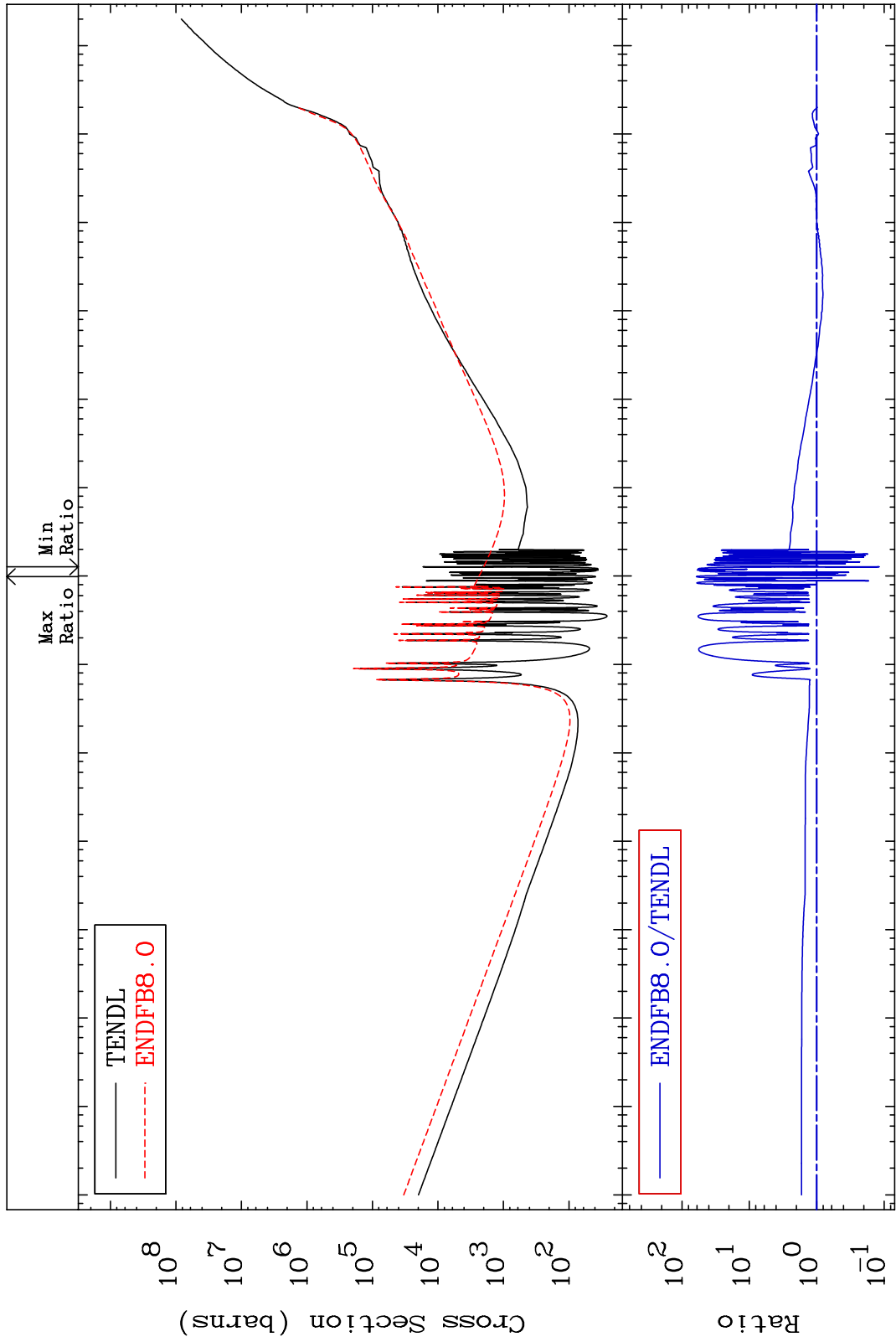
76-0s-189
-93.67 To 9999. %



60

76-0s-189

MAT 7640 Total kinematic kerma (high limit) 76-0s-189
 Cross Section -88.14 To 6002. %



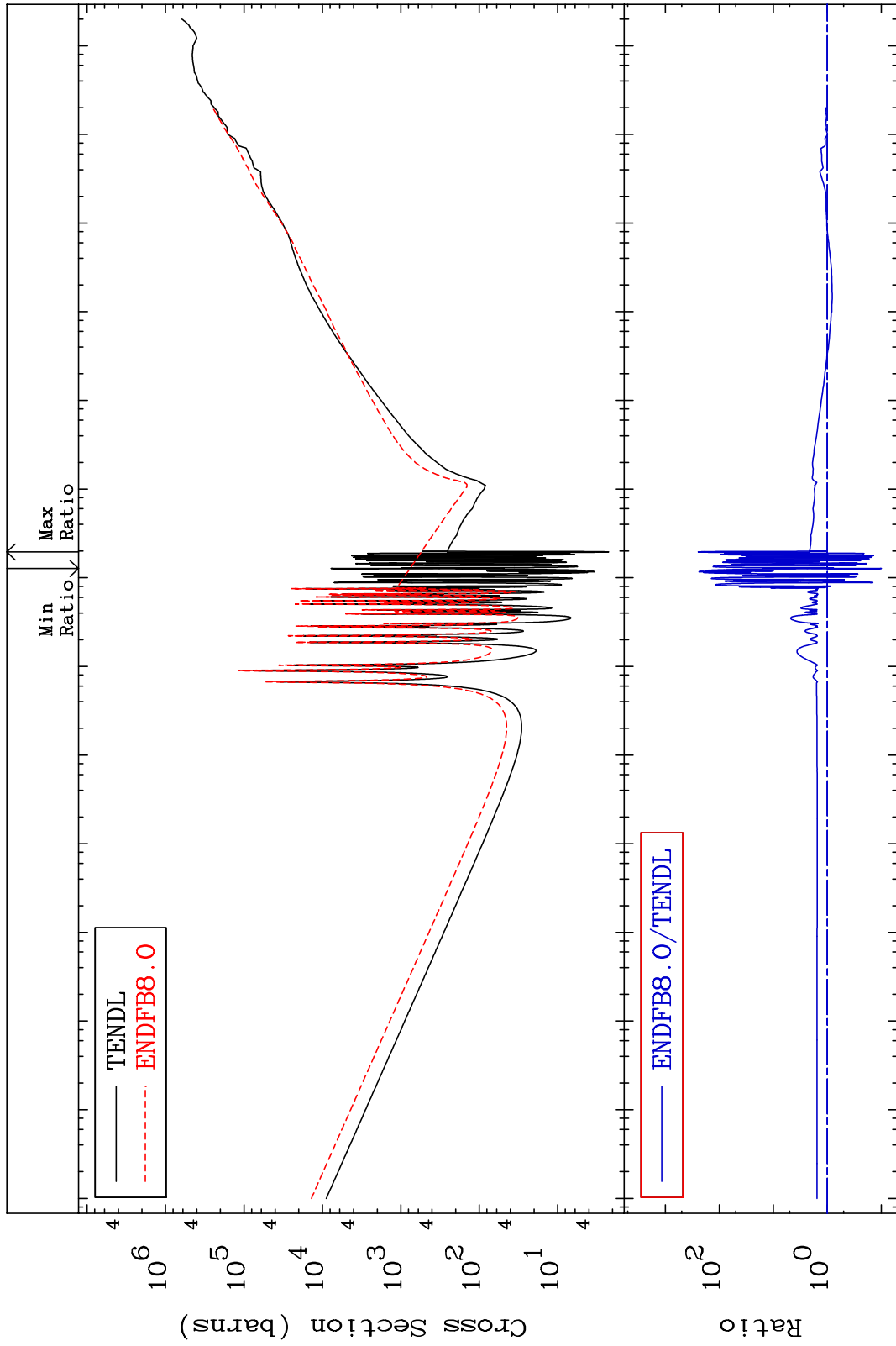
MAT 7640

Dpa total (eV-barns)

76-0s-189

-90.10 To 9999. %

Cross Section



10⁶
10⁵
10⁴
10³
10²
10¹
10⁰
10⁻¹
10⁻²
10⁻³
10⁻⁴
10⁻⁵

10⁸
10⁷
10⁶
10⁵
10⁴
10³
10²
10¹
10⁰
10⁻¹
10⁻²
10⁻³
10⁻⁴
10⁻⁵

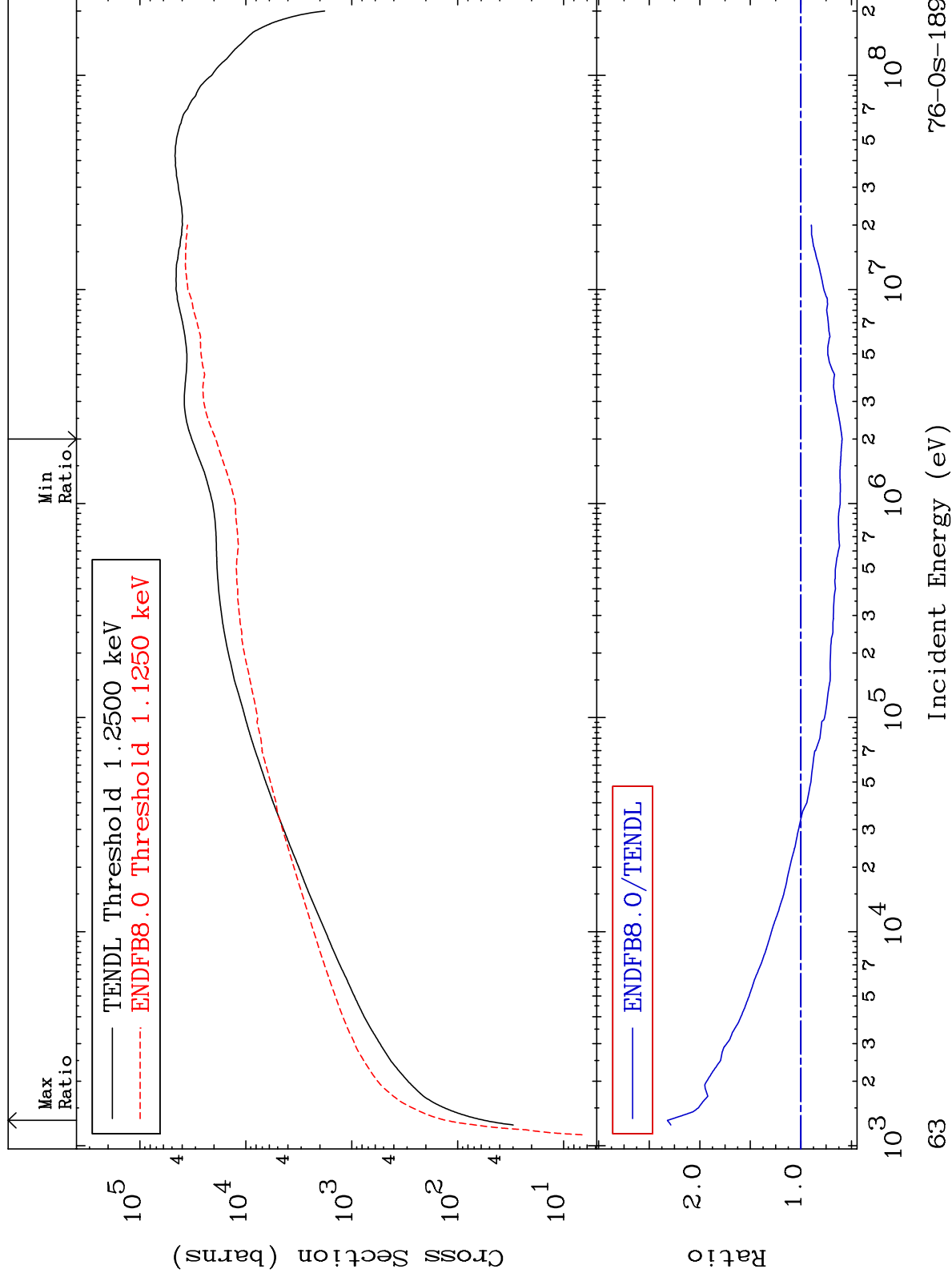
Incident Energy (eV)

76-0s-189

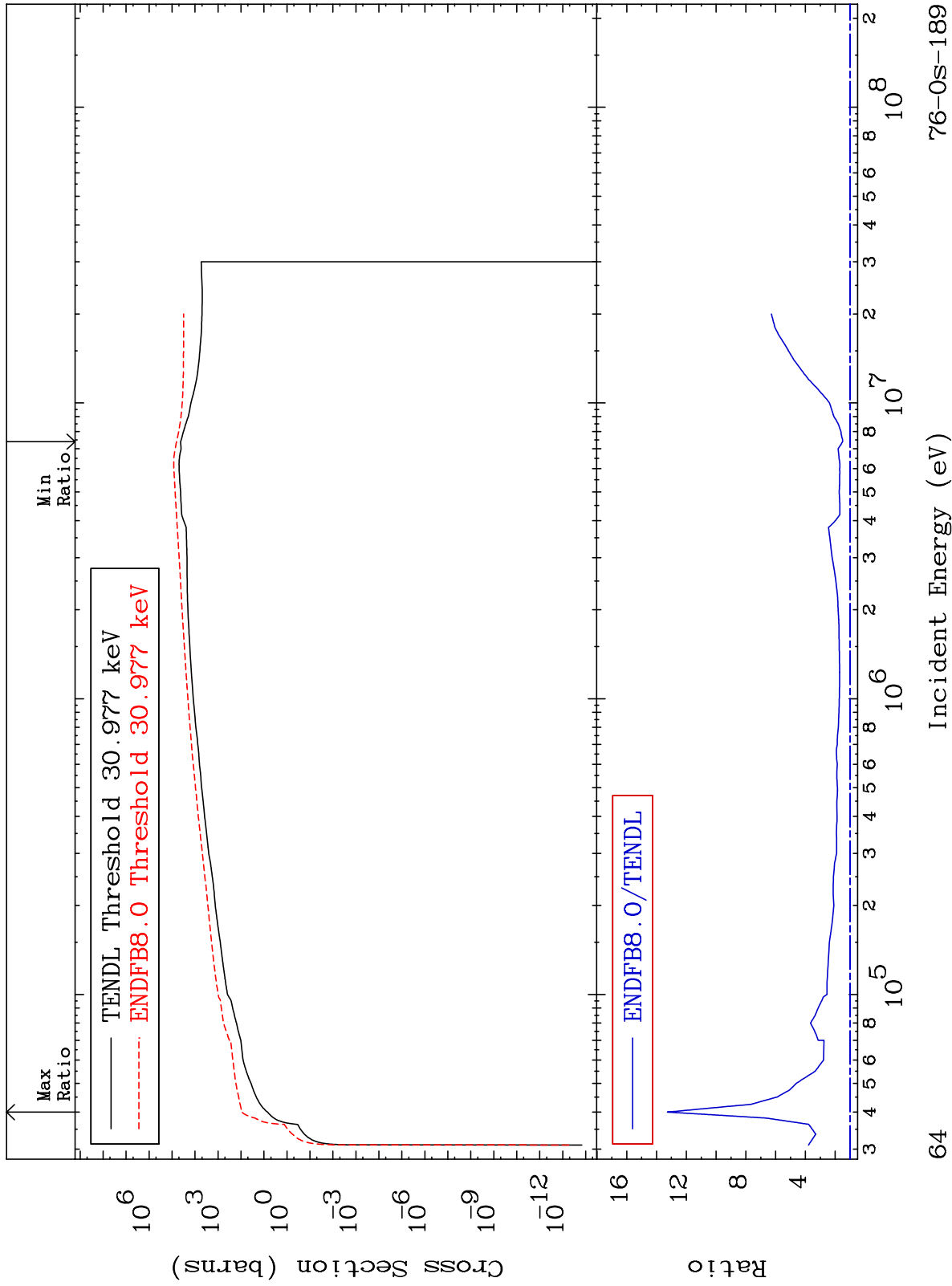
MAT 7640

Dpa elastic (mt2)
Cross Section

76-0s-189
-40.79 To 132.0 %



MAT 7640 Dpa inelastic (mt51-91) 76-0s-189
 Cross Section 49.57 To 1226. %



MAT 7640

Dpa disappearance (mt102 -120)

76-0s-189

-90.10 To 9999. %

Cross Section

