

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

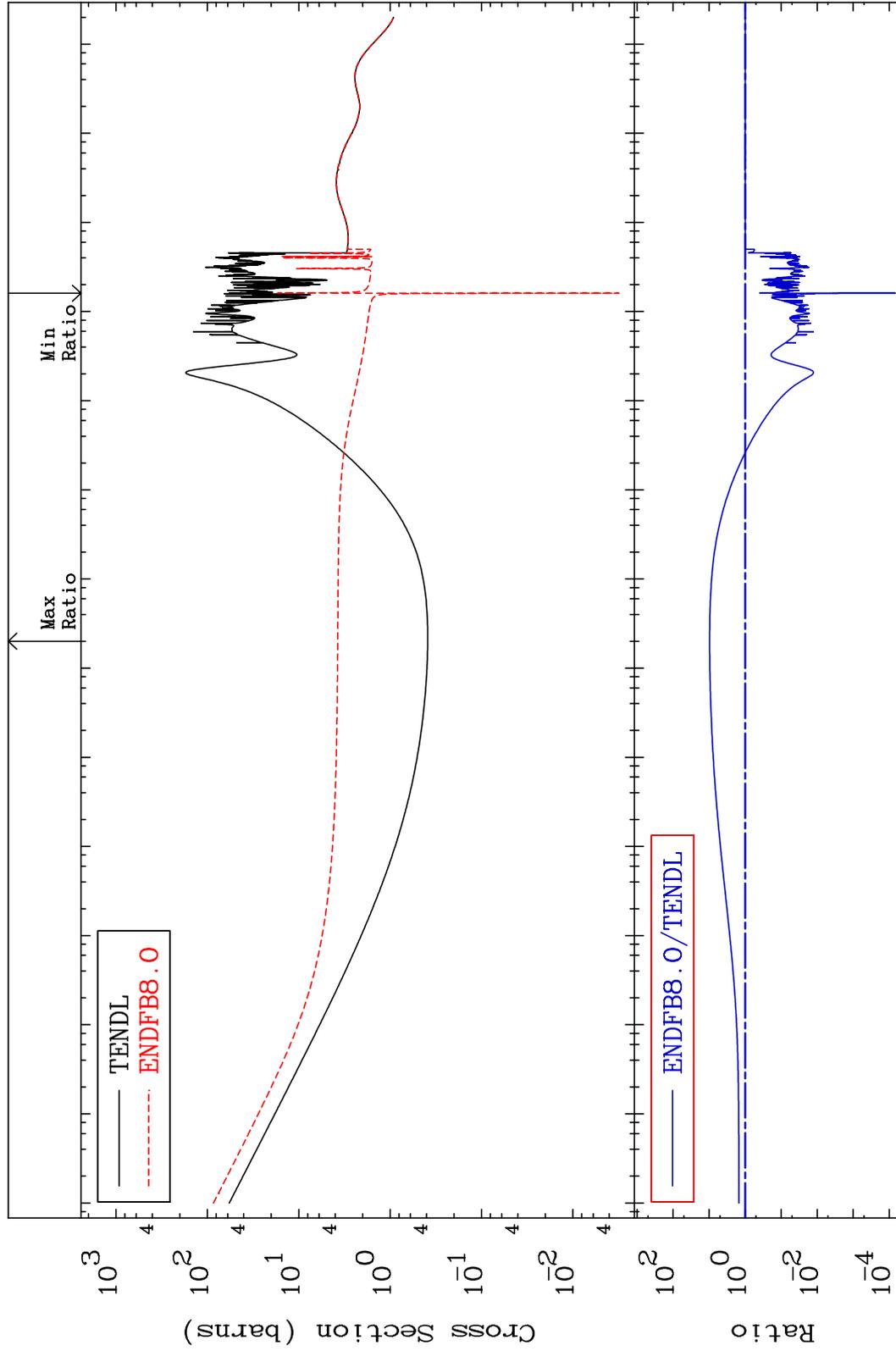
MAT 2049

Total

20-Ca-48

Cross Section

-99.99 To 866.8 %



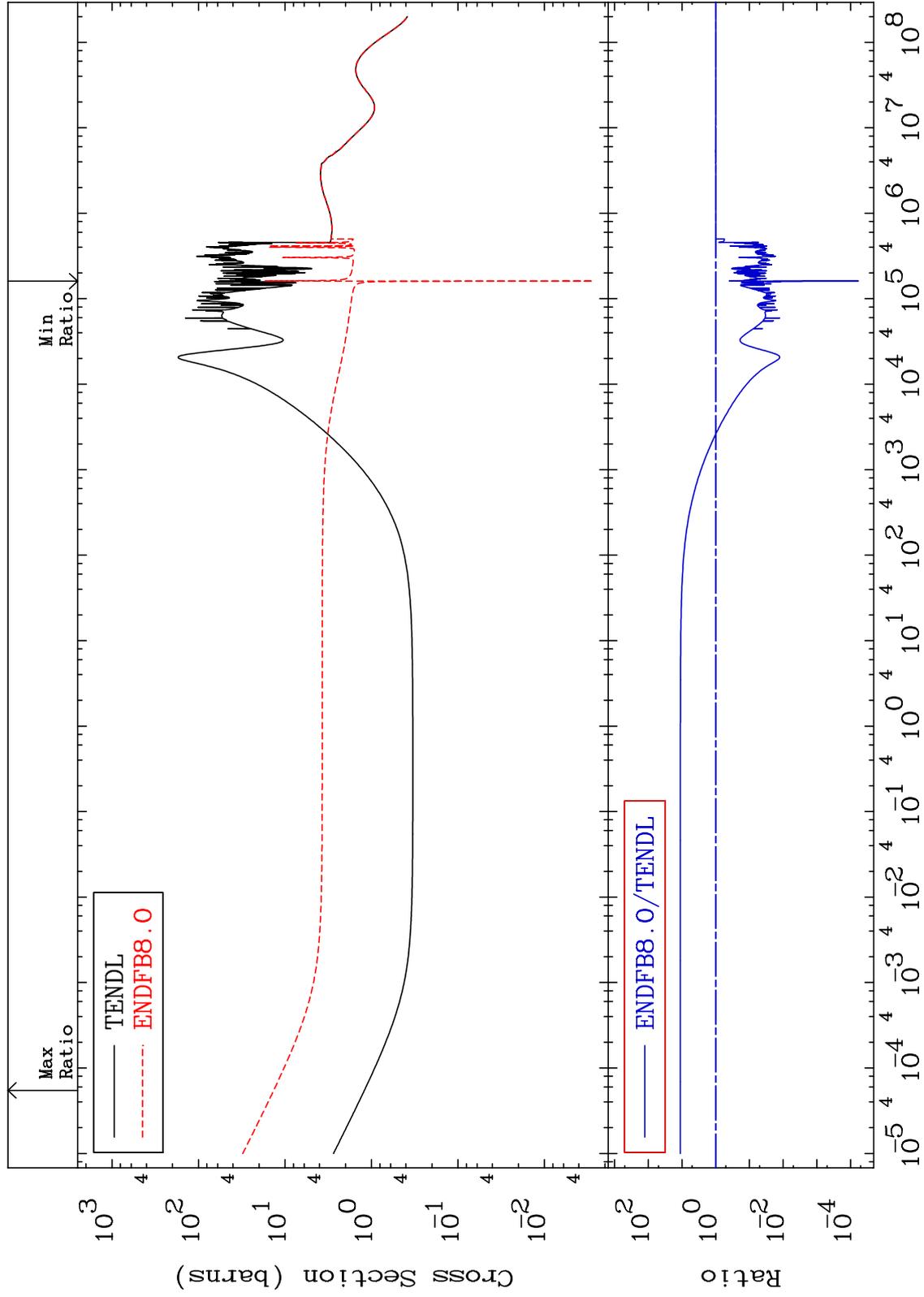
Incident Energy (eV)

20-Ca-48

MAT 2049

Elastic  
Cross Section

20-Ca-48  
-99.99 To 1019. %



2

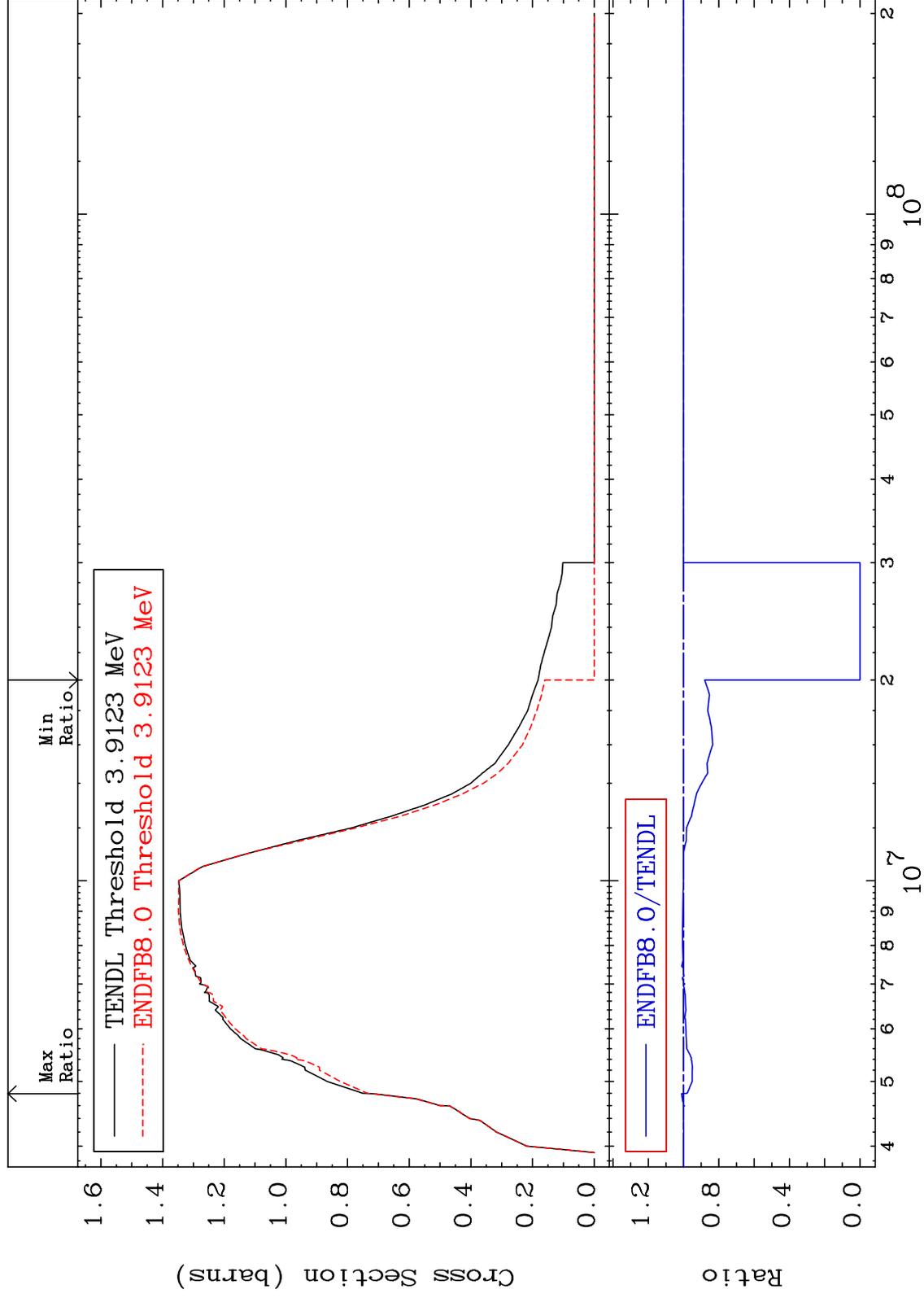
Incident Energy (eV)

20-Ca-48

MAT 2049

Inelastic  
Cross Section

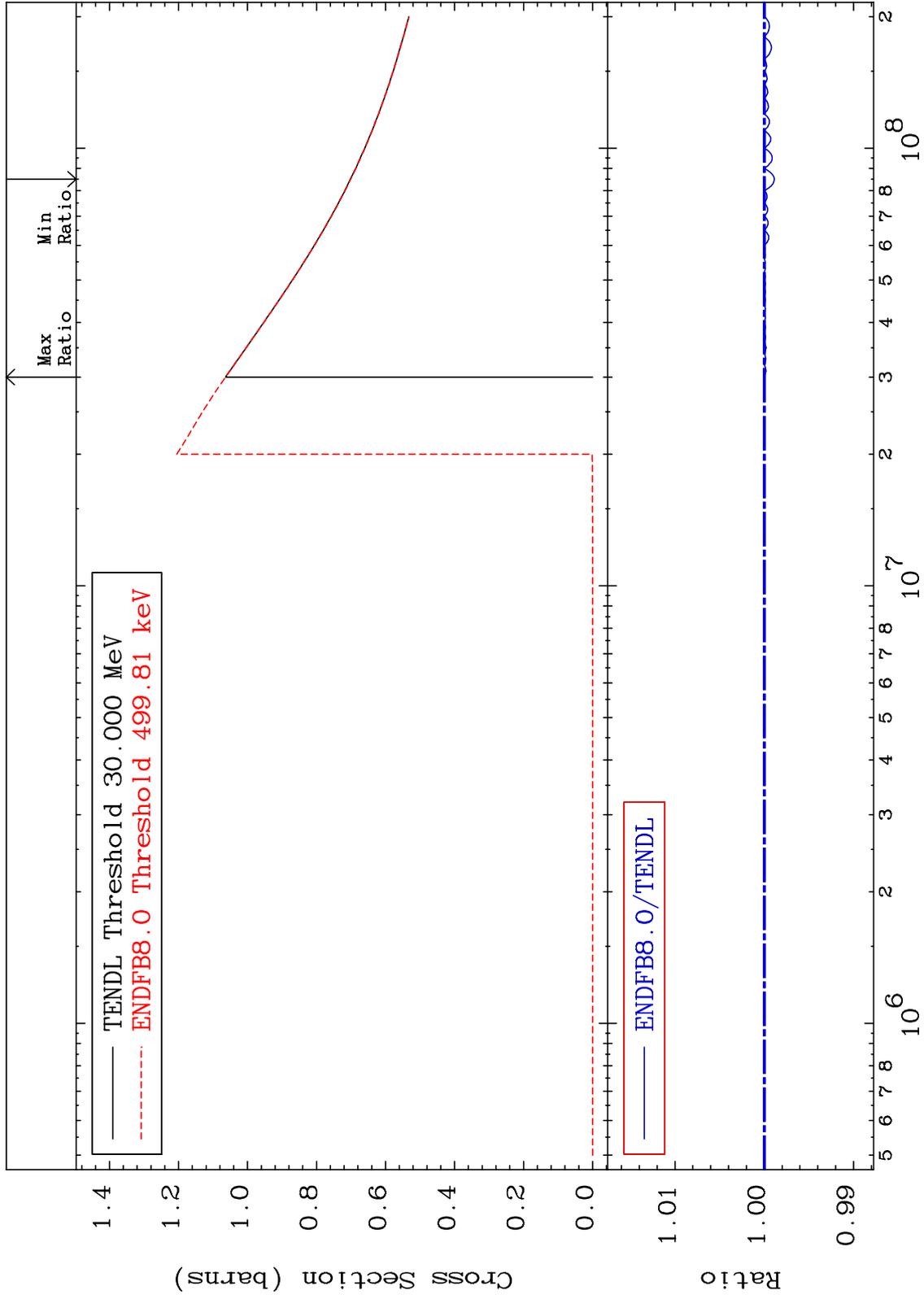
20-Ca-48  
-100.0 To 1.124 %



MAT 2049

(n, remainder)  
Cross Section

20-Ca-48  
-0.112 To 0.002 %



4

Incident Energy (eV)

20-Ca-48

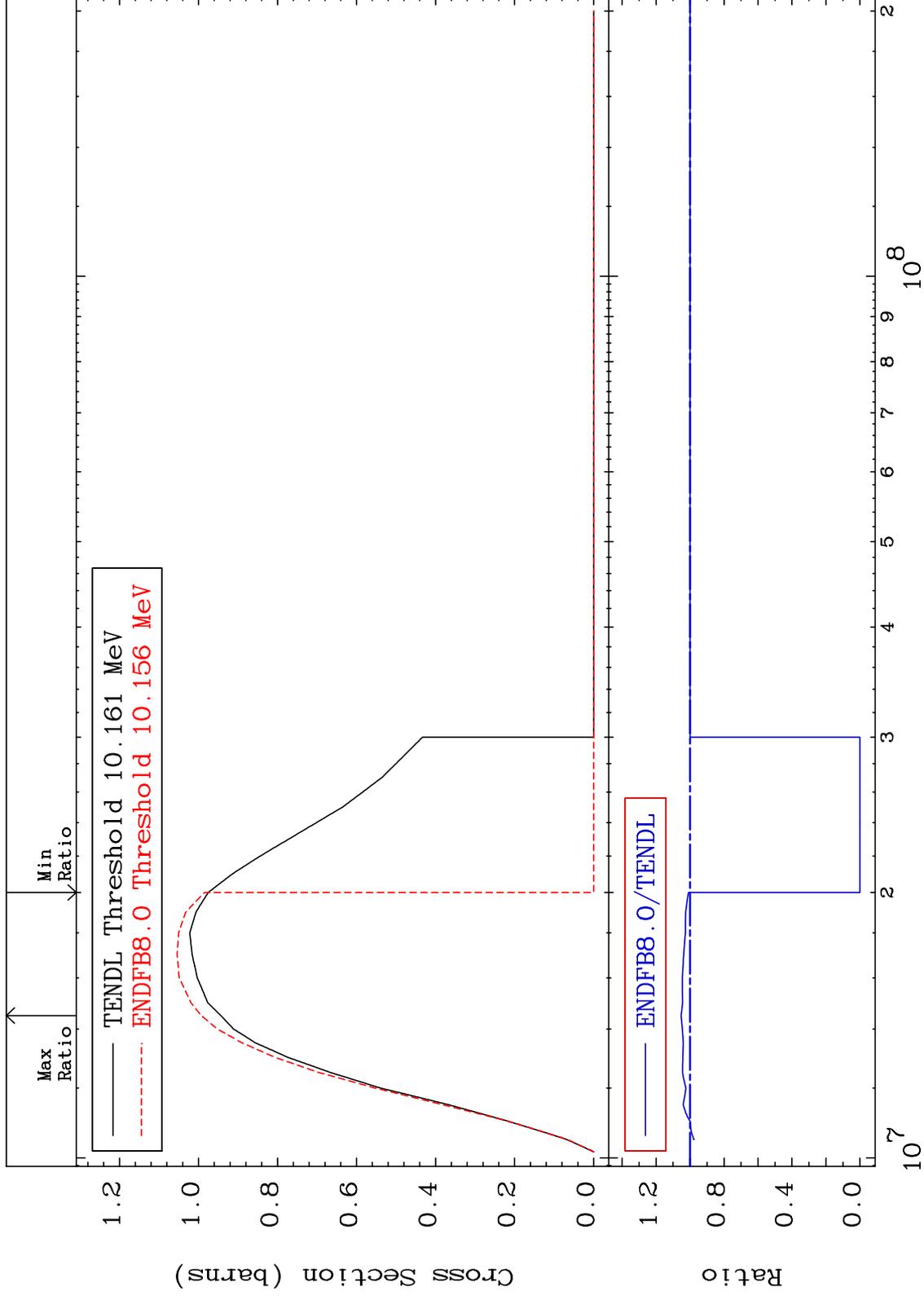
MAT 2049

(n,2n)

20-Ca-48

Cross Section

-100.0 To 5.246 %



Incident Energy (eV)

20-Ca-48

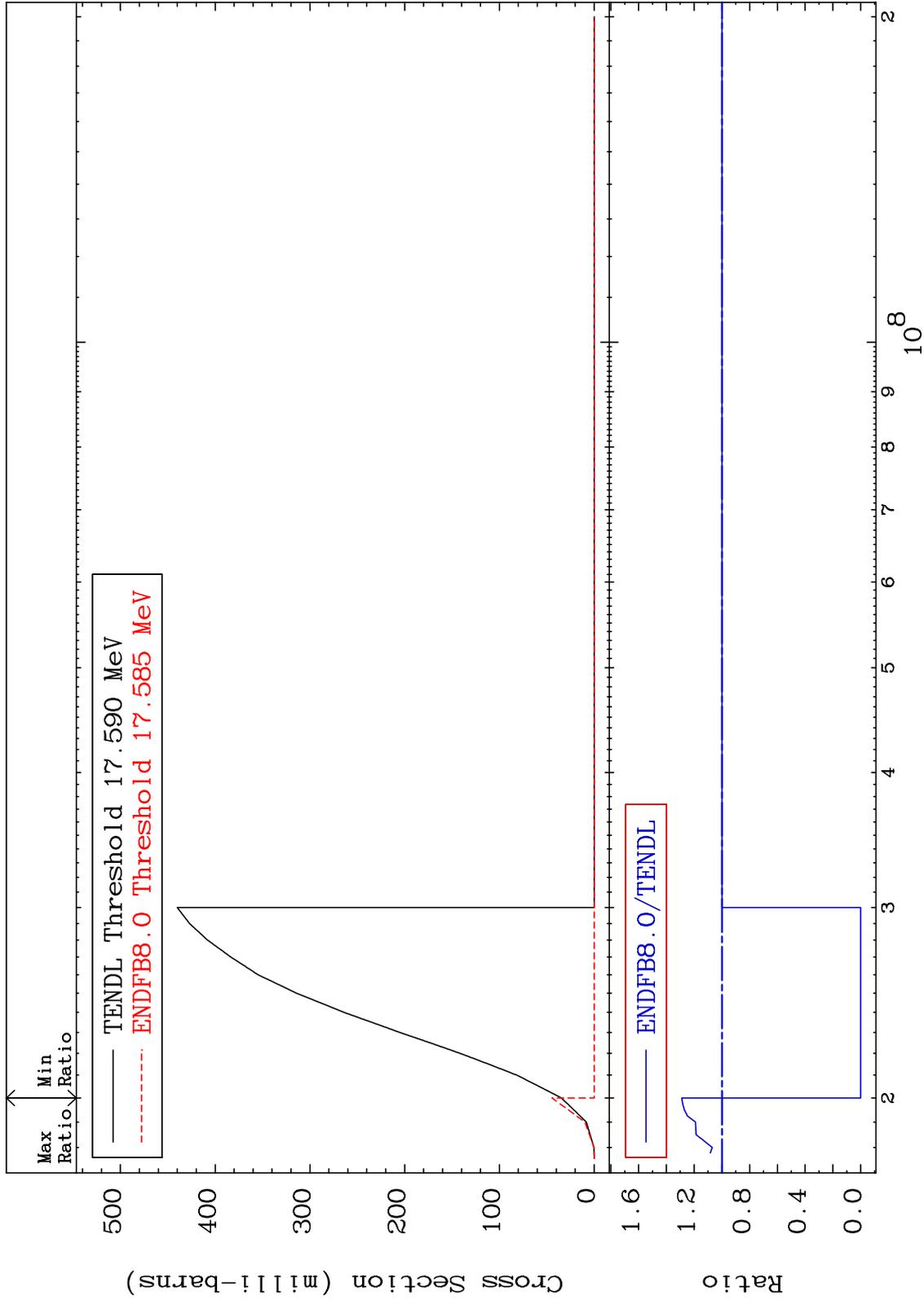
MAT 2049

(n,3n)

20-Ca-48

Cross Section

-100.0 To 28.91 %



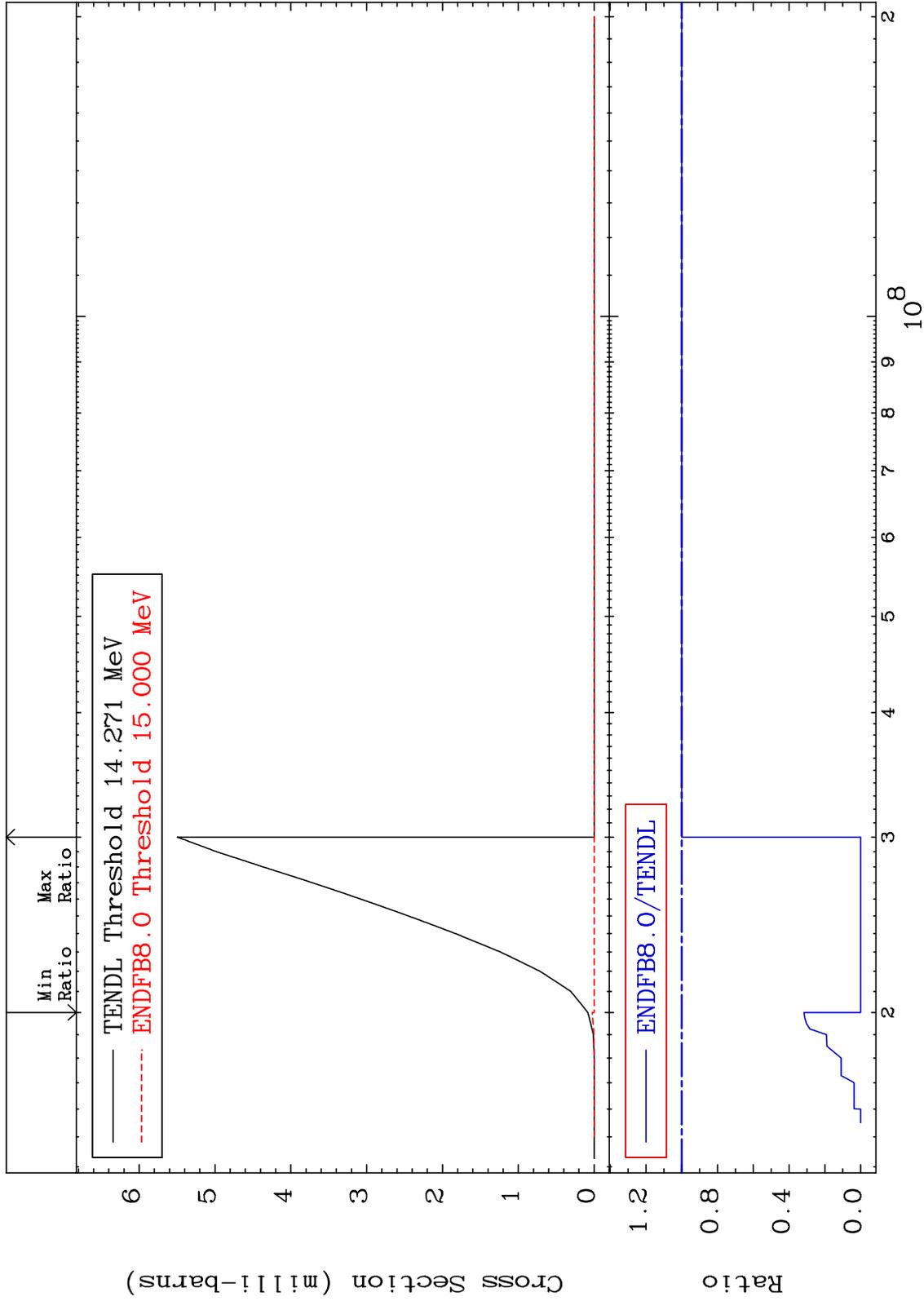
MAT 2049

(n, n')  $\alpha$

20-Ca-48

Cross Section

-100.0 To 0.000 %



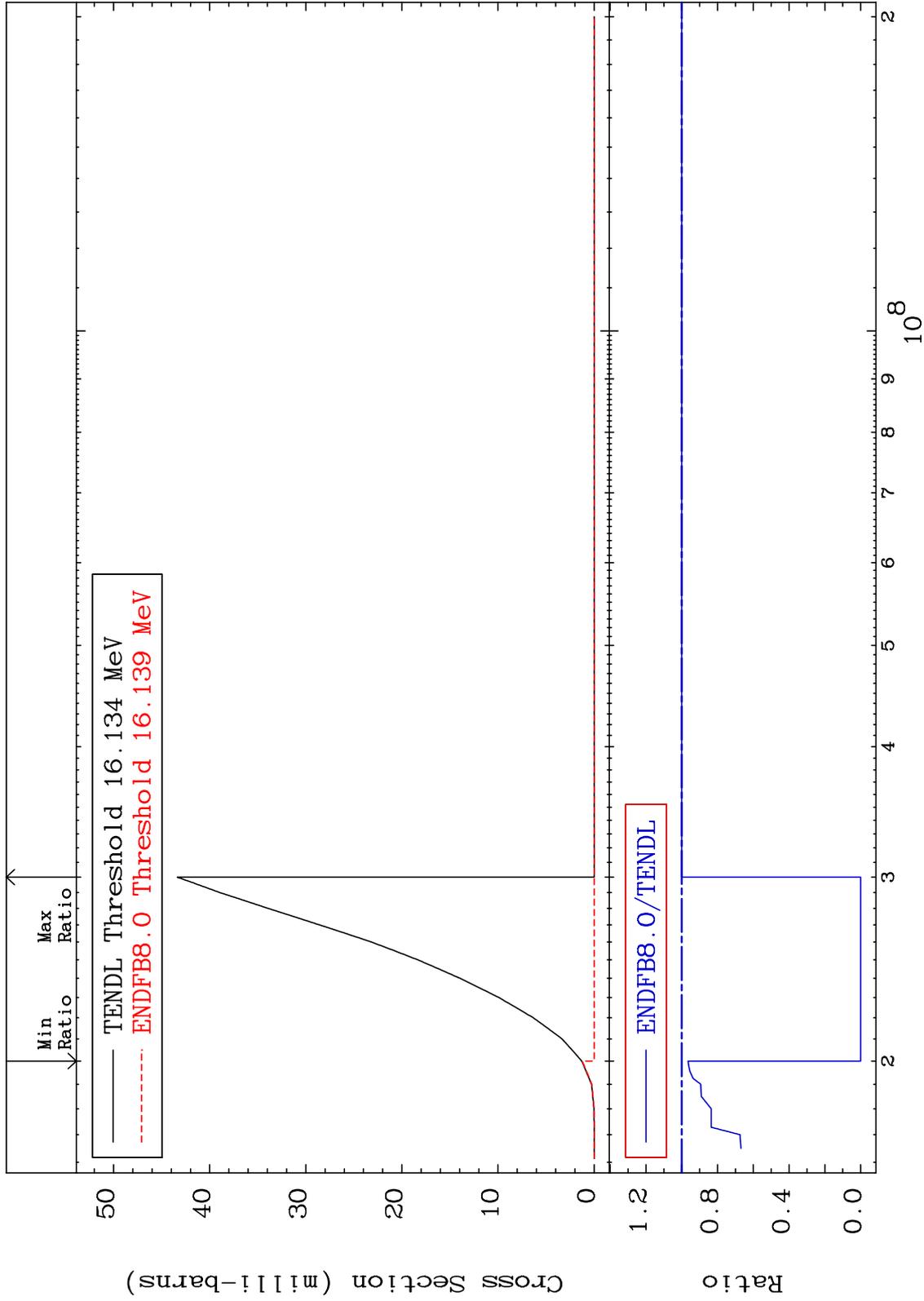
MAT 2049

(n,n') p

20-Ca-48

Cross Section

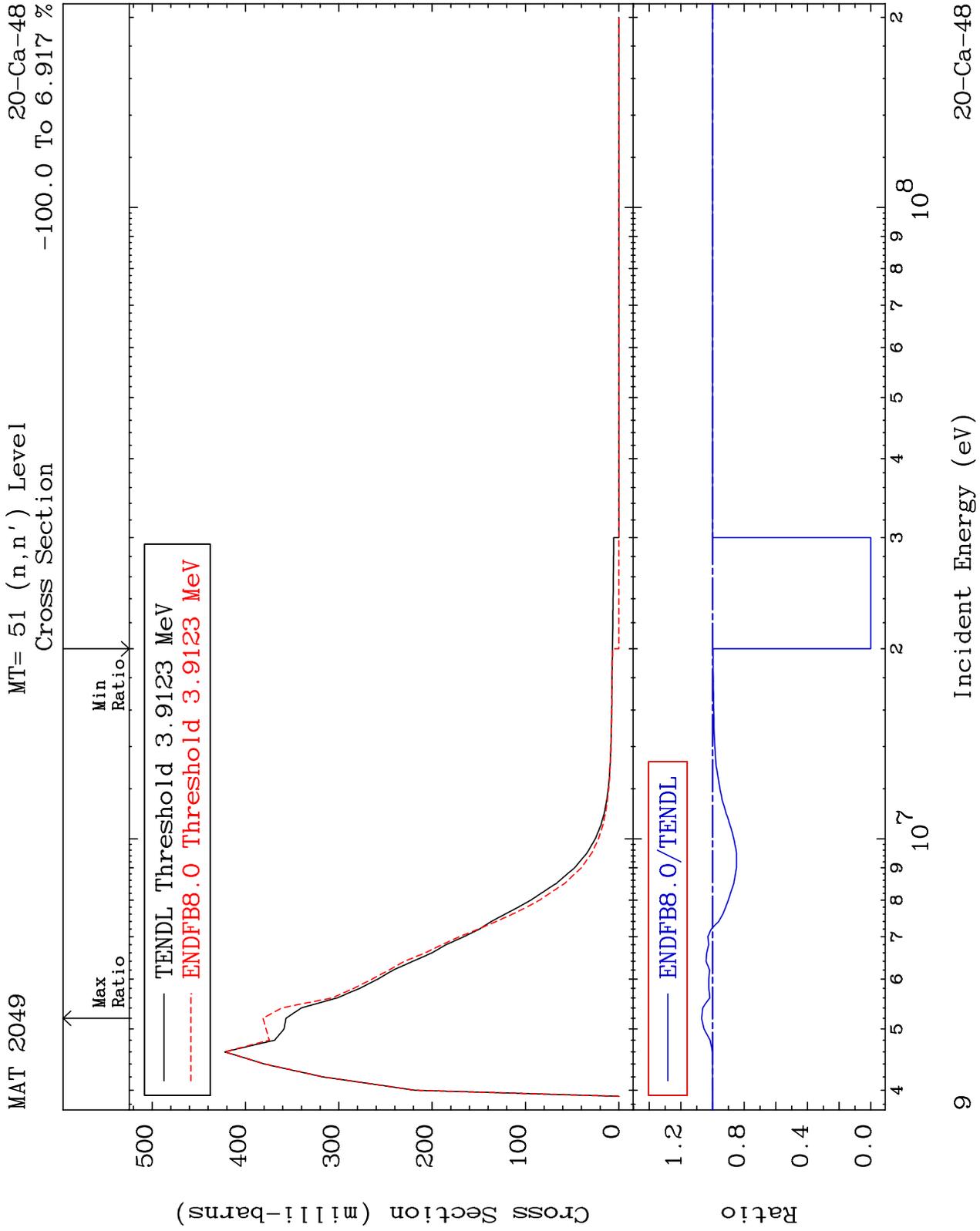
-100.0 To 0.000 %



8

Incident Energy (eV)

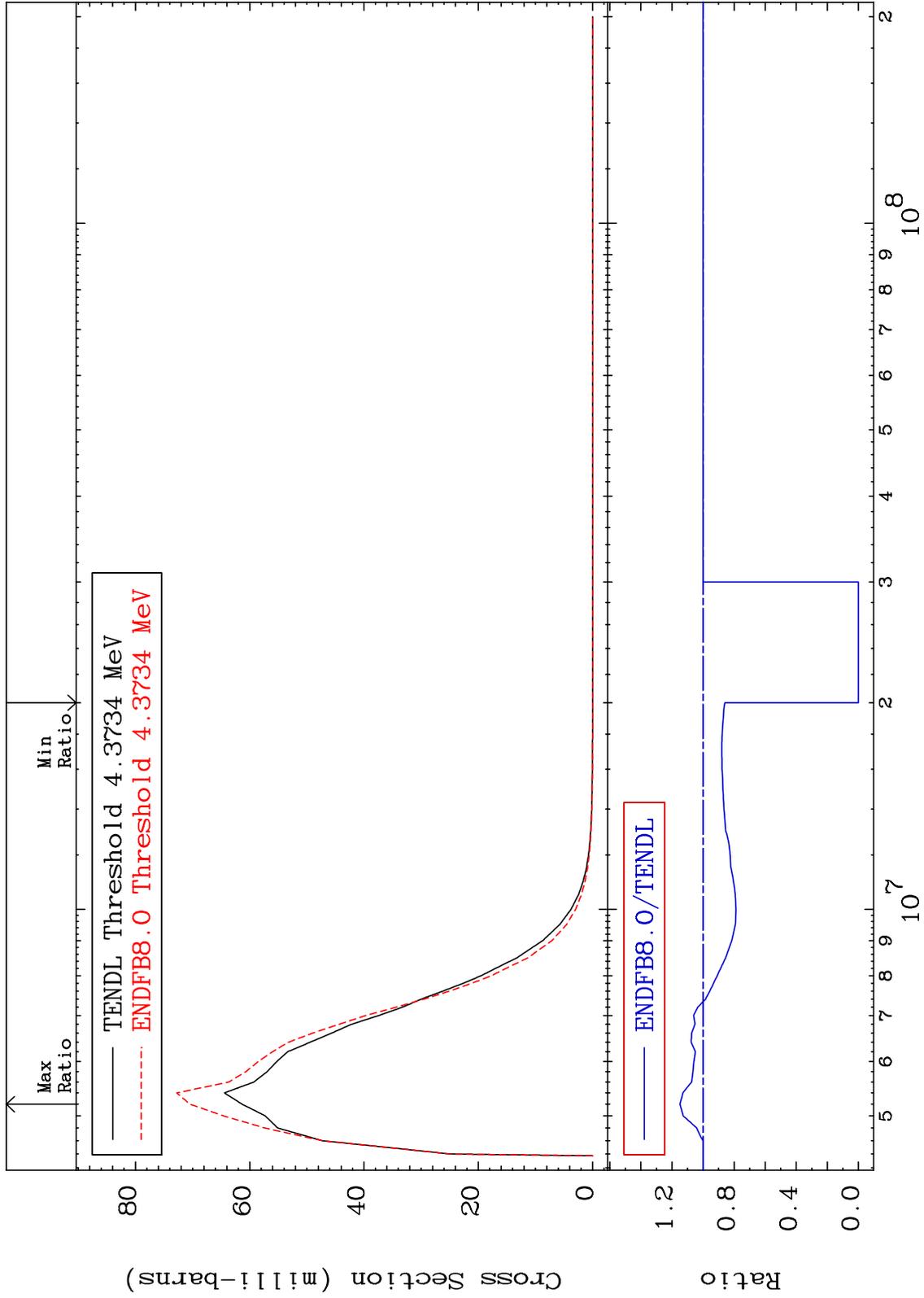
20-Ca-48



MAT 2049

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

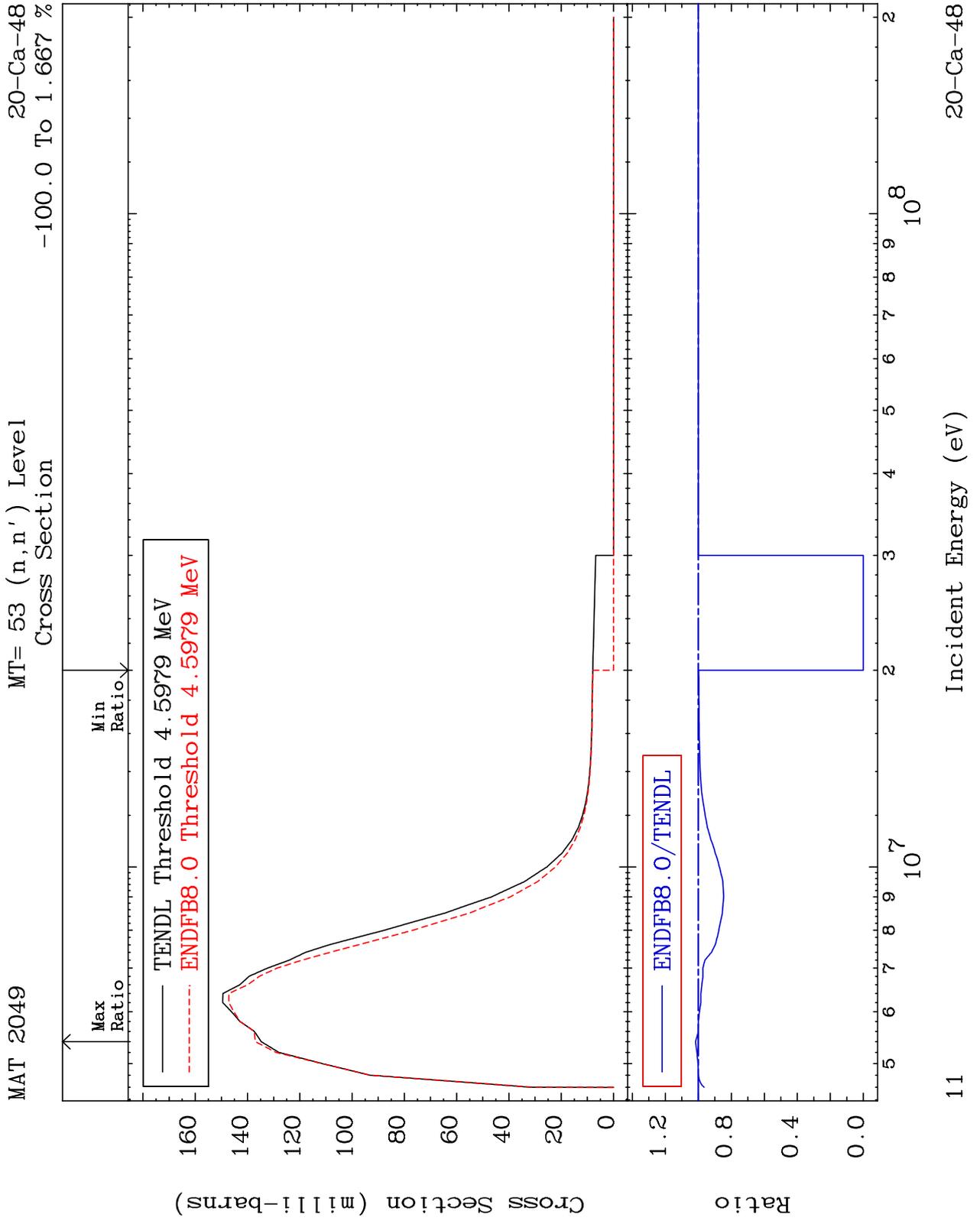
20-Ca-48  
-100.0 To 14.87 %



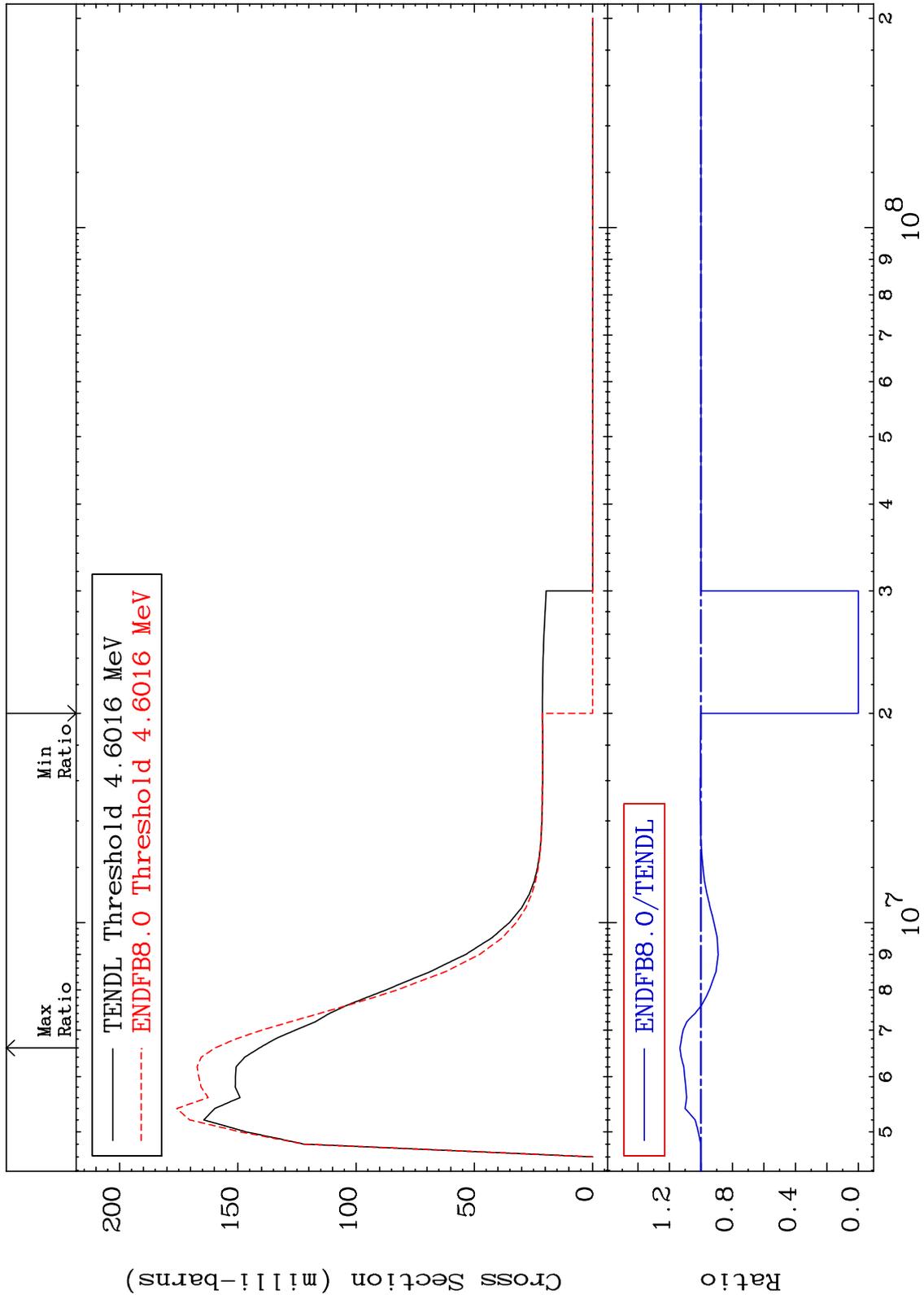
10

Incident Energy (eV)

20-Ca-48



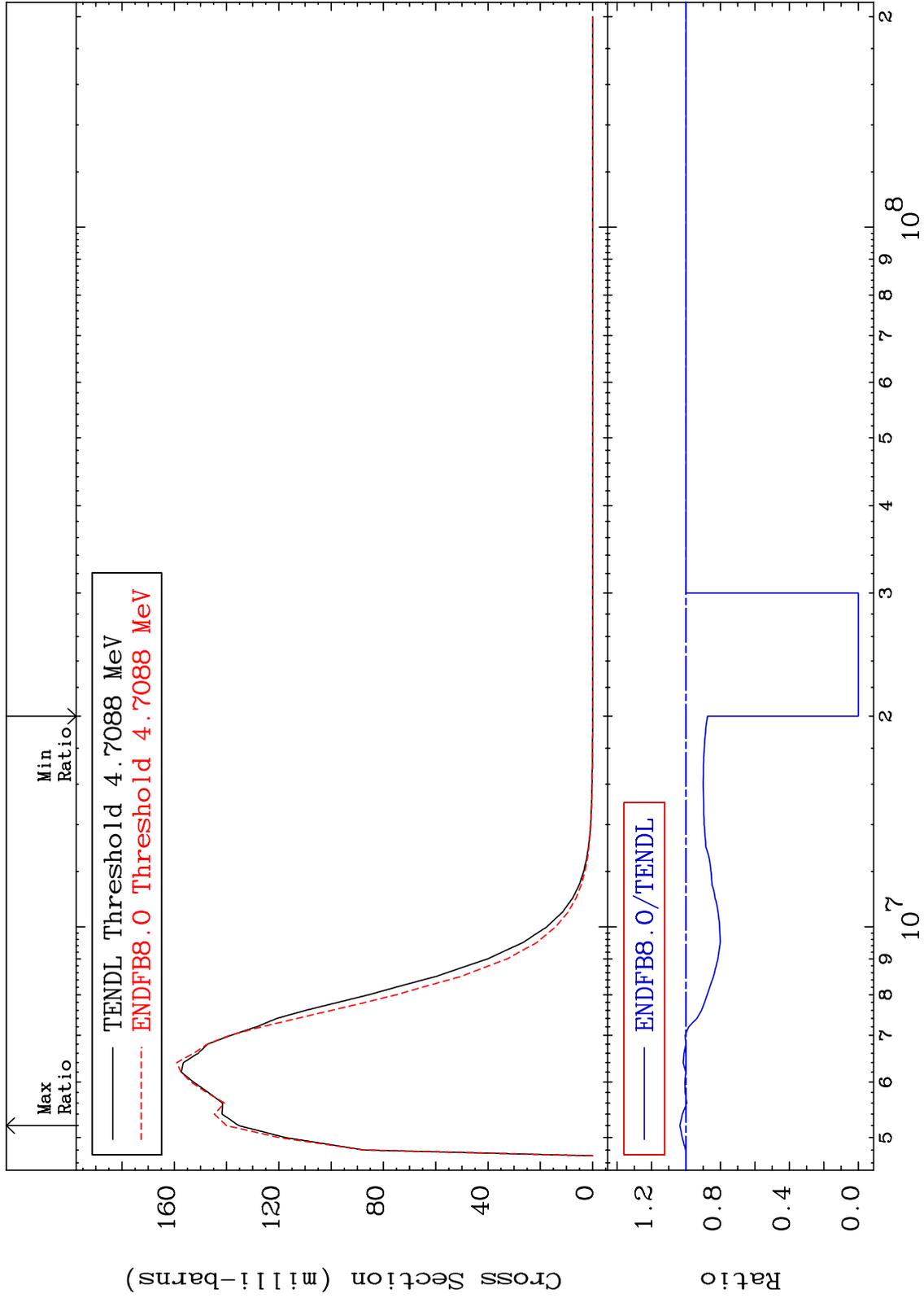
MAT 2049      MT= 54 (n,n') Level      20-Ca-48  
 Cross Section      -100.0 To 13.34 %



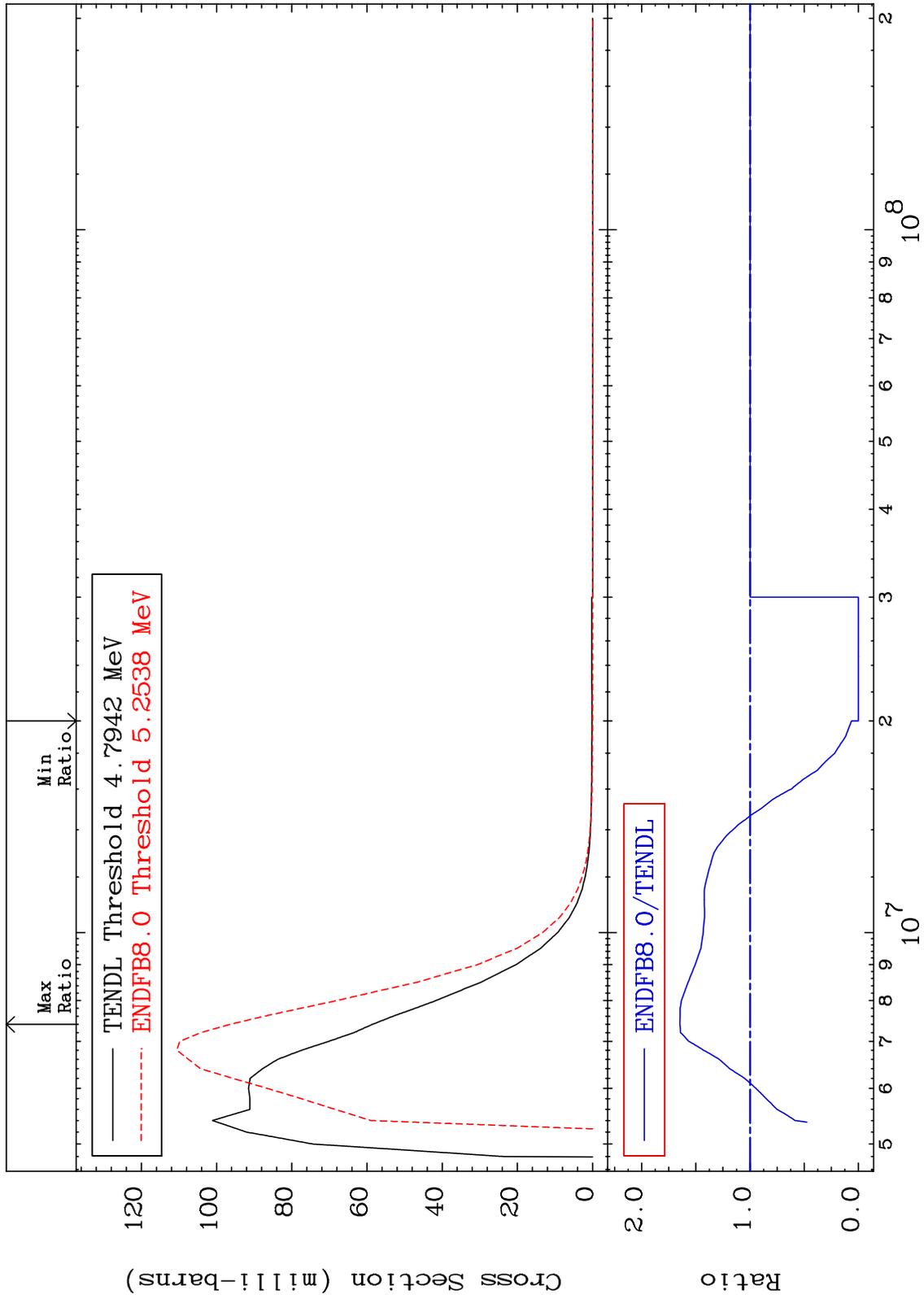
MAT 2049

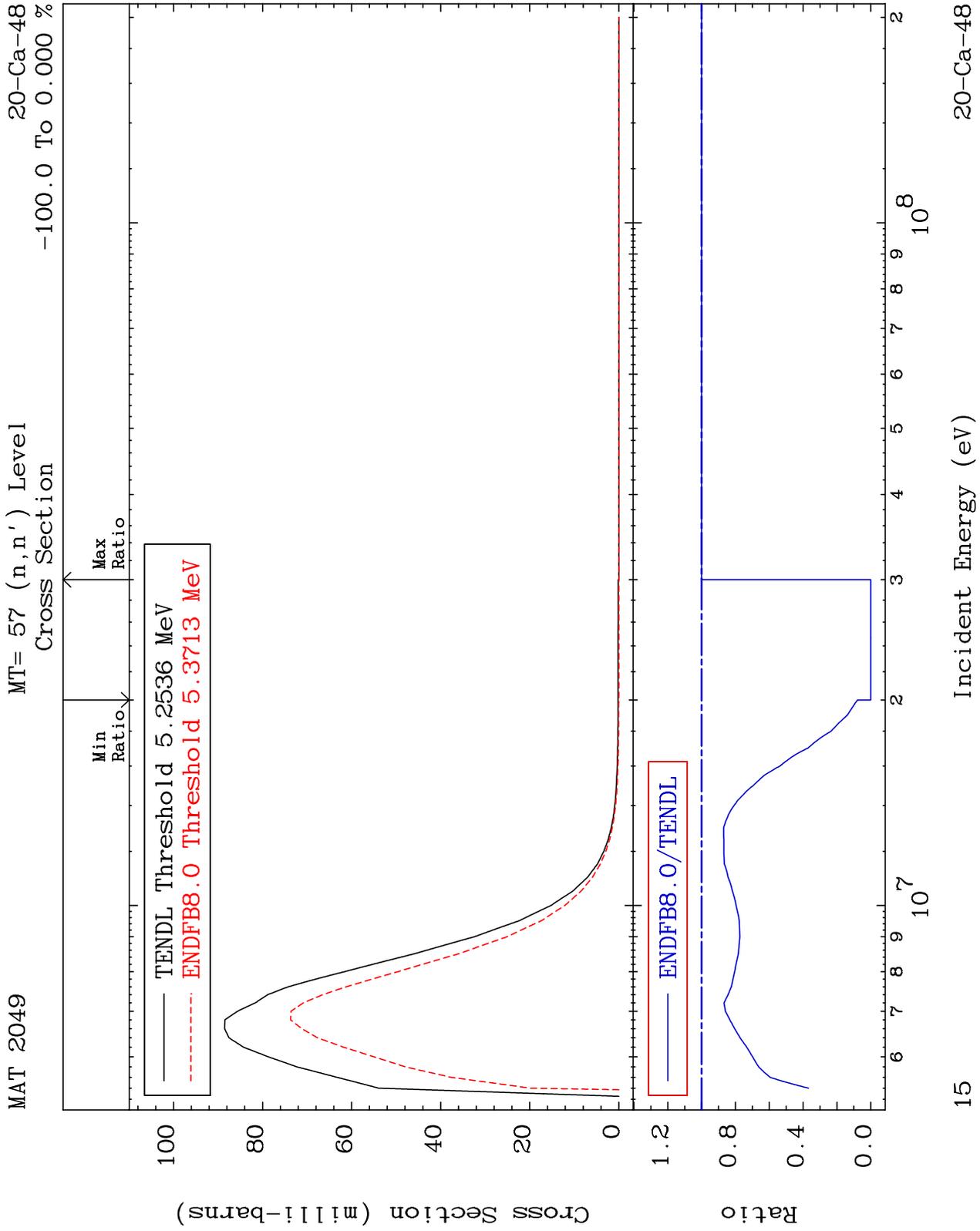
MT= 55 (n,n') Level  
Cross Section

20-Ca-48  
-100.0 To 3.493 %



MAT 2049      MT= 56 (n,n') Level      20-Ca-48  
 Cross Section      -100.0 To 64.69 %

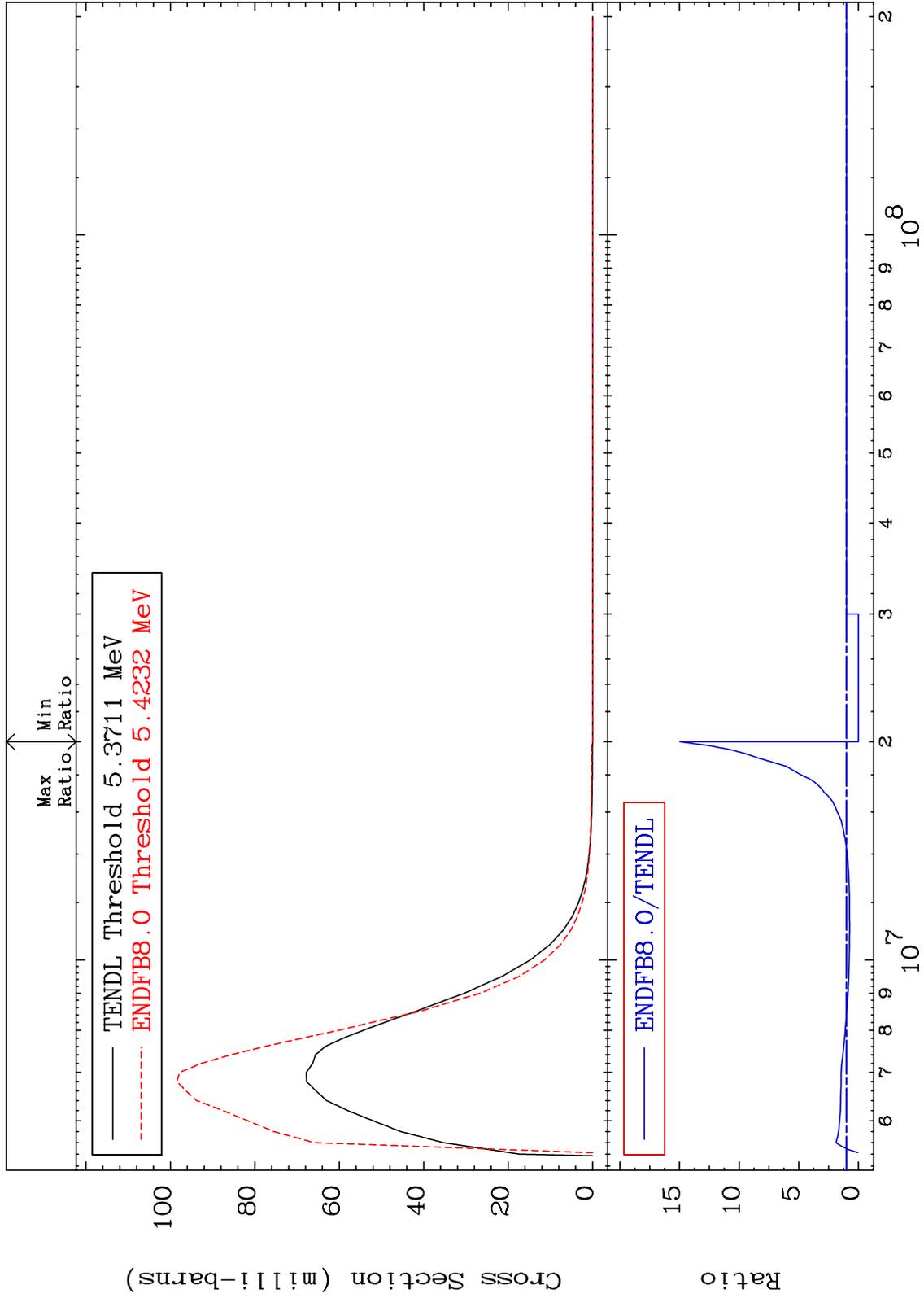




MAT 2049

MT= 58 (n,n') Level  
Cross Section

20-Ca-48  
-100.0 To 1397. %



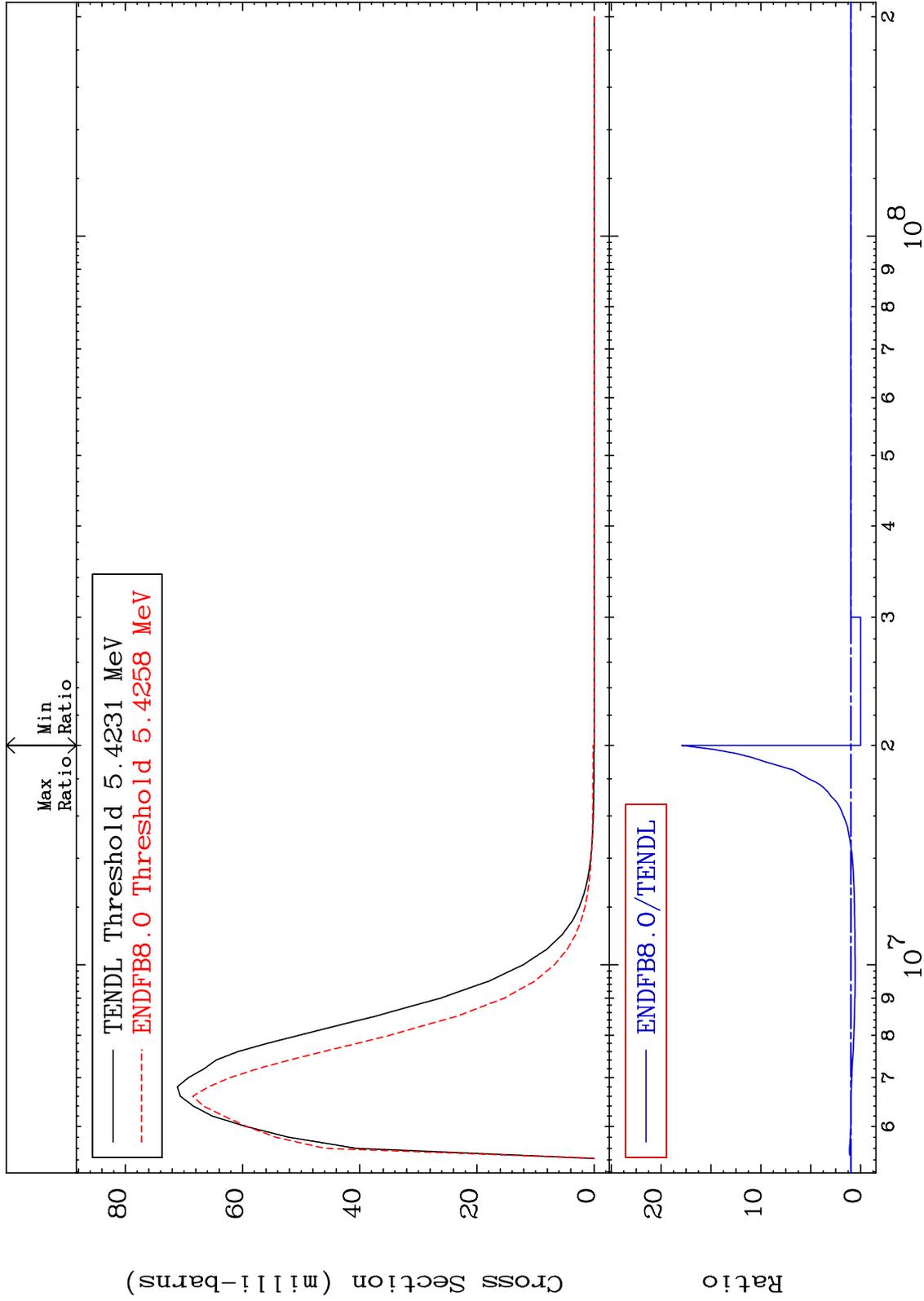
16

20-Ca-48

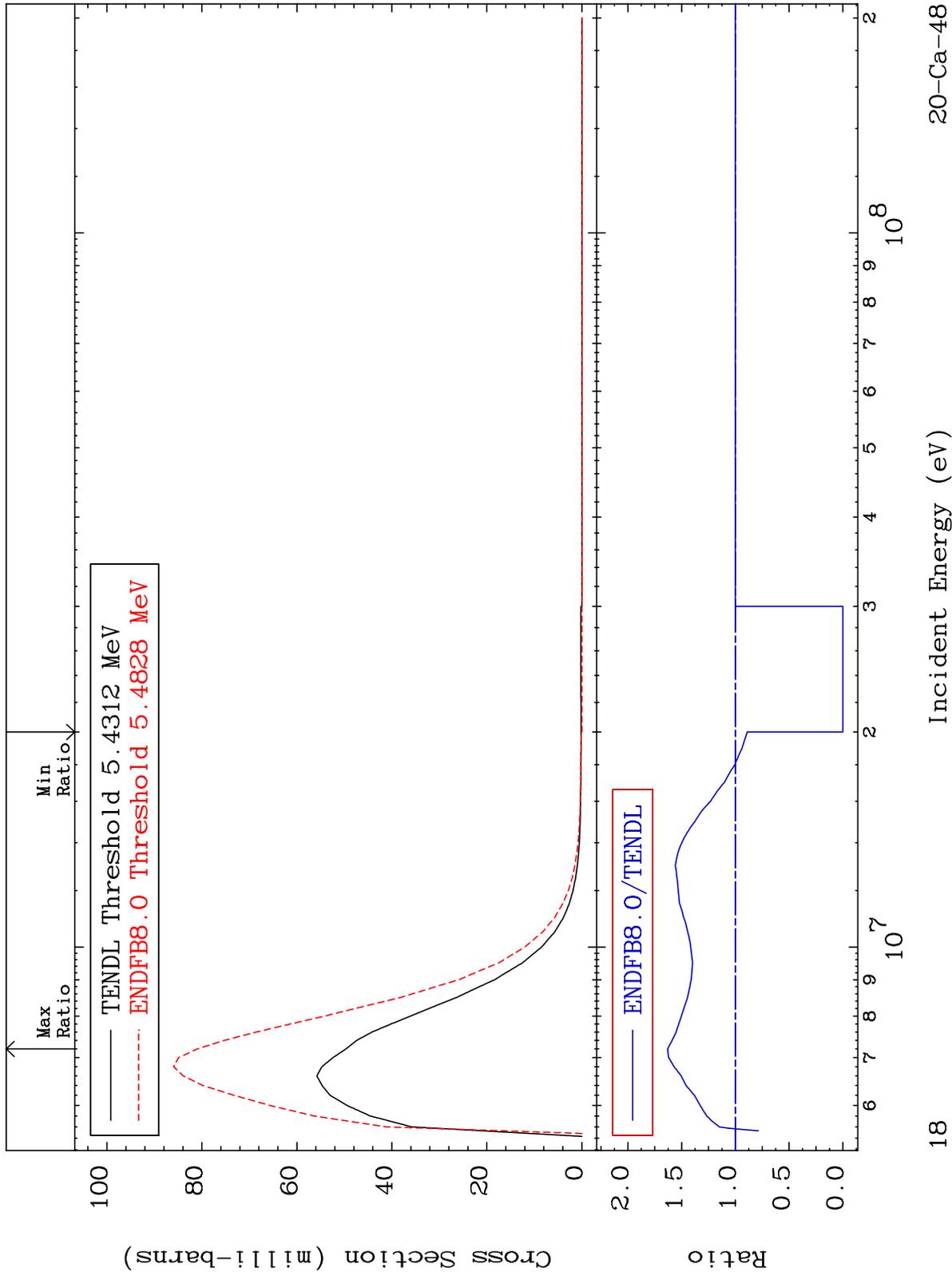
MAT 2049

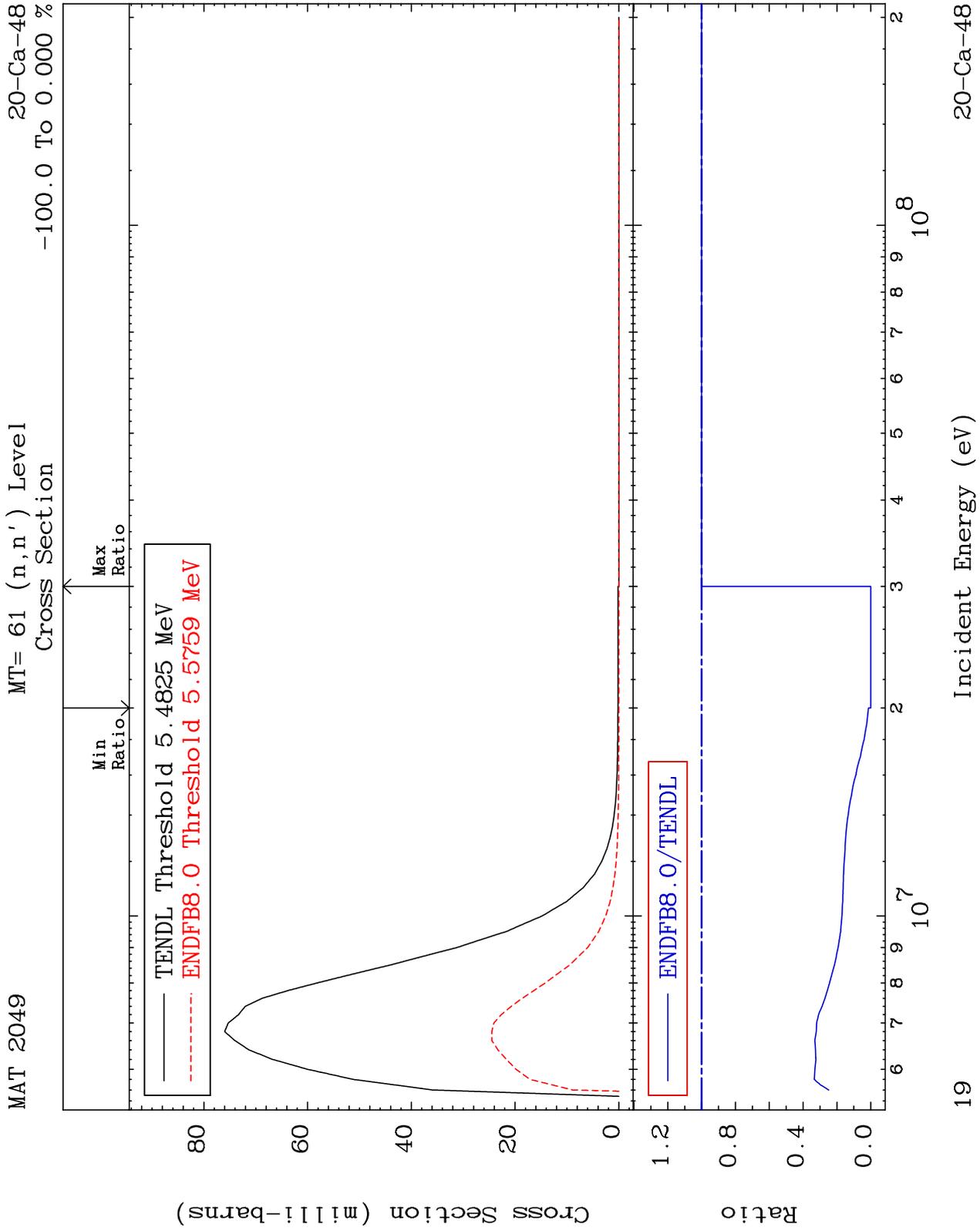
MT= 59 (n,n') Level  
Cross Section

20-Ca-48  
-100.0 To 1693. %



MAT 2049 MT= 60 (n,n') Level Cross Section 20-Ca-48  
 -100.0 To 63.02 %

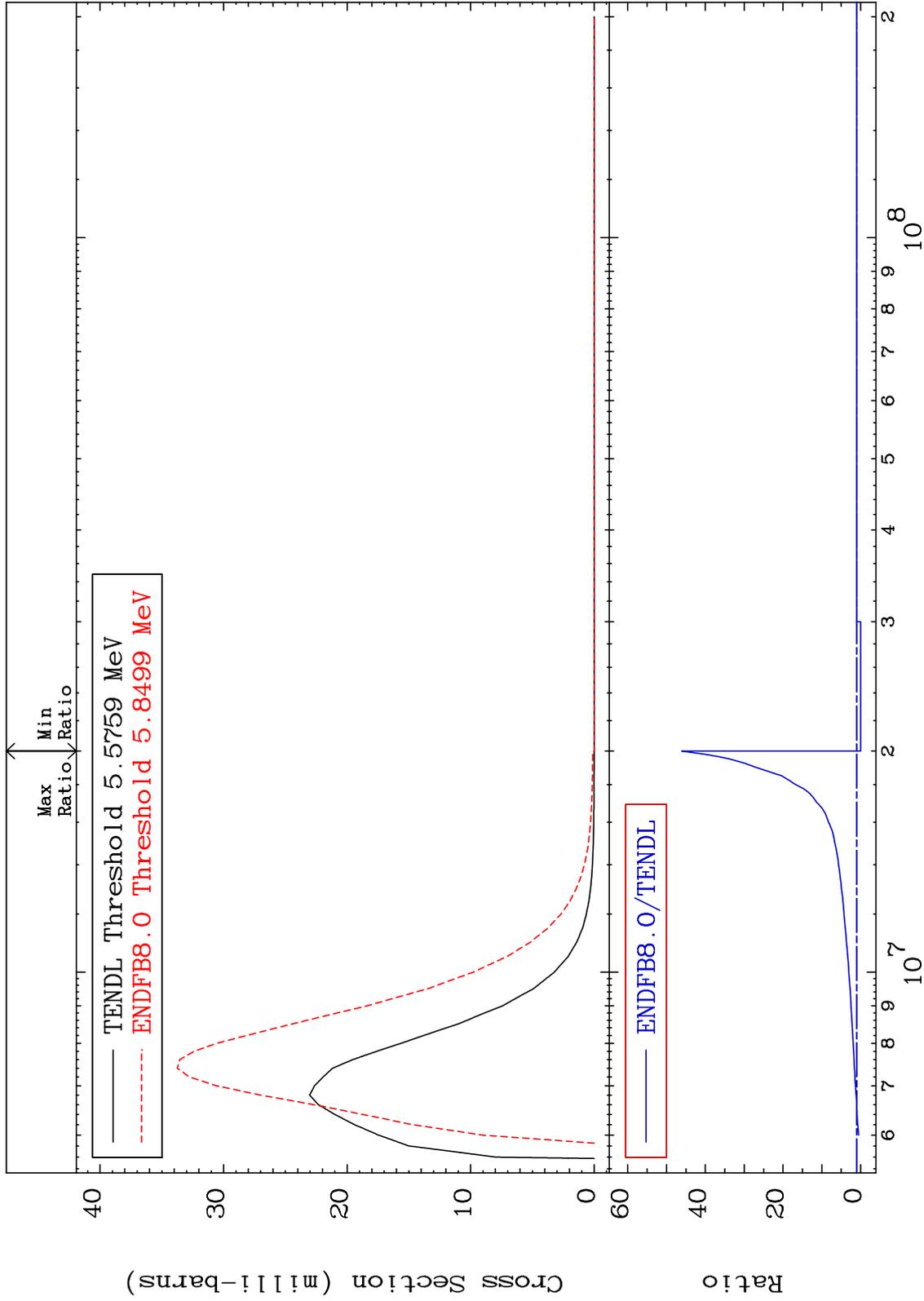




MAT 2049

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

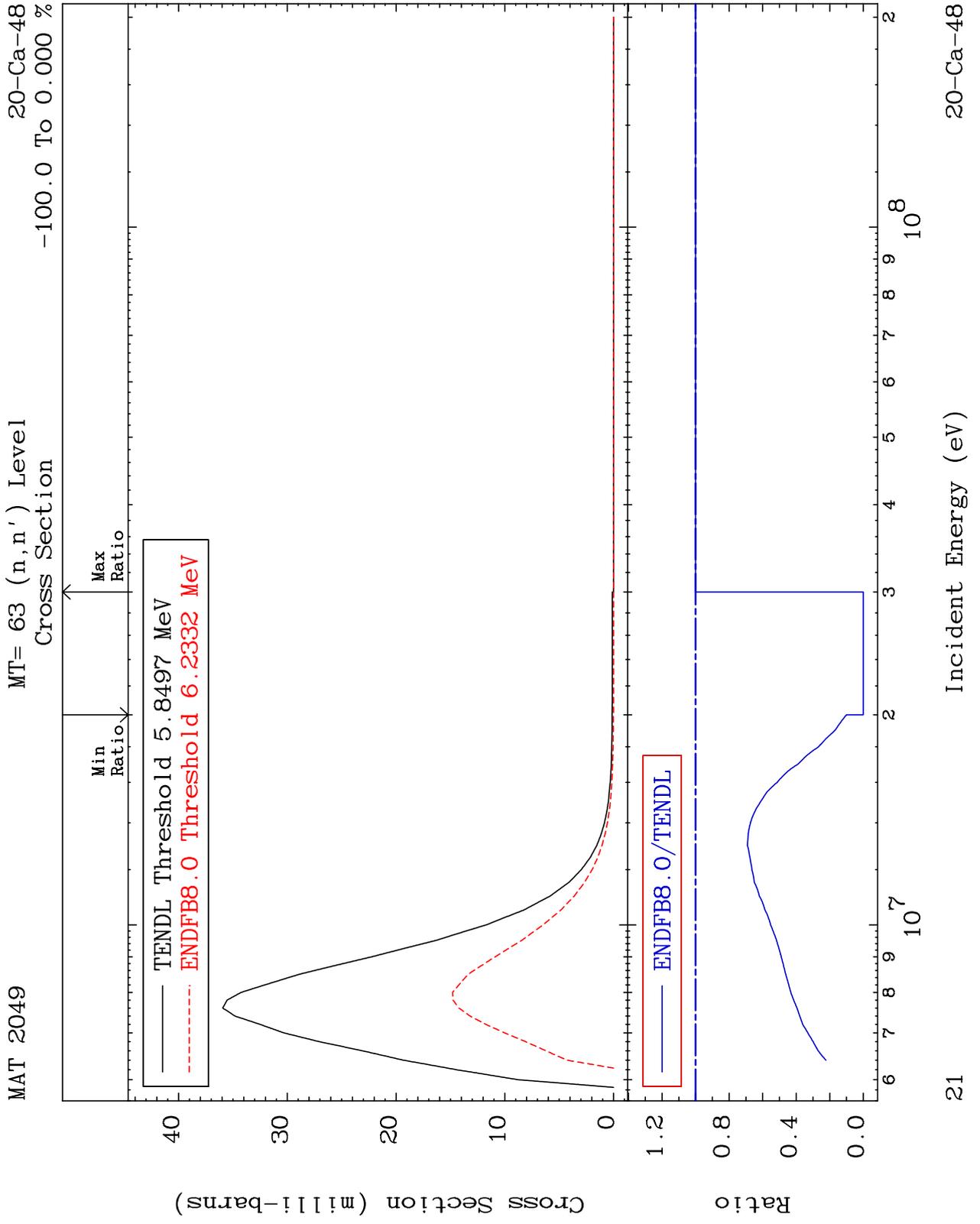
20-Ca-48  
-100.0 To 4508. %

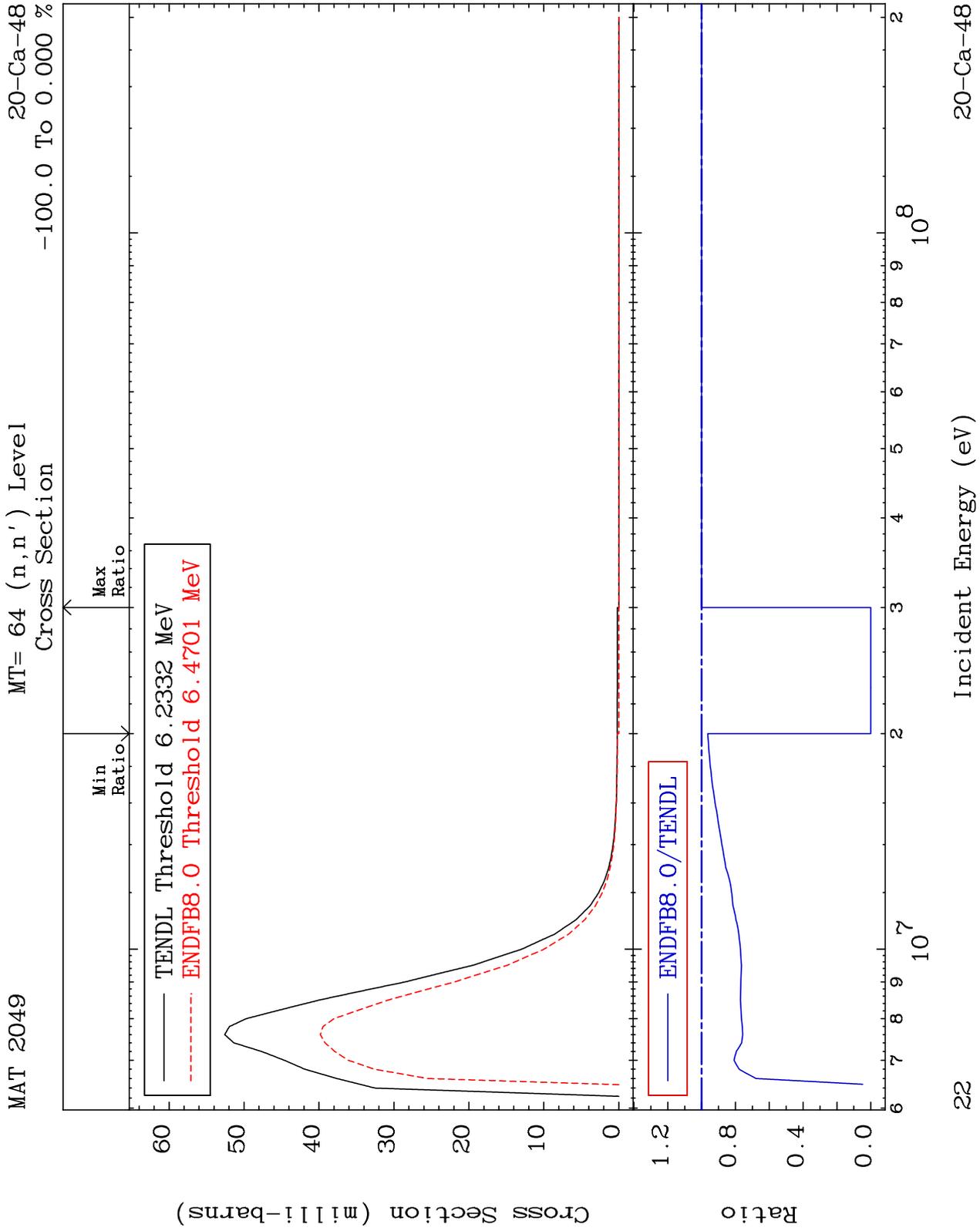


20

Incident Energy (eV)

20-Ca-48

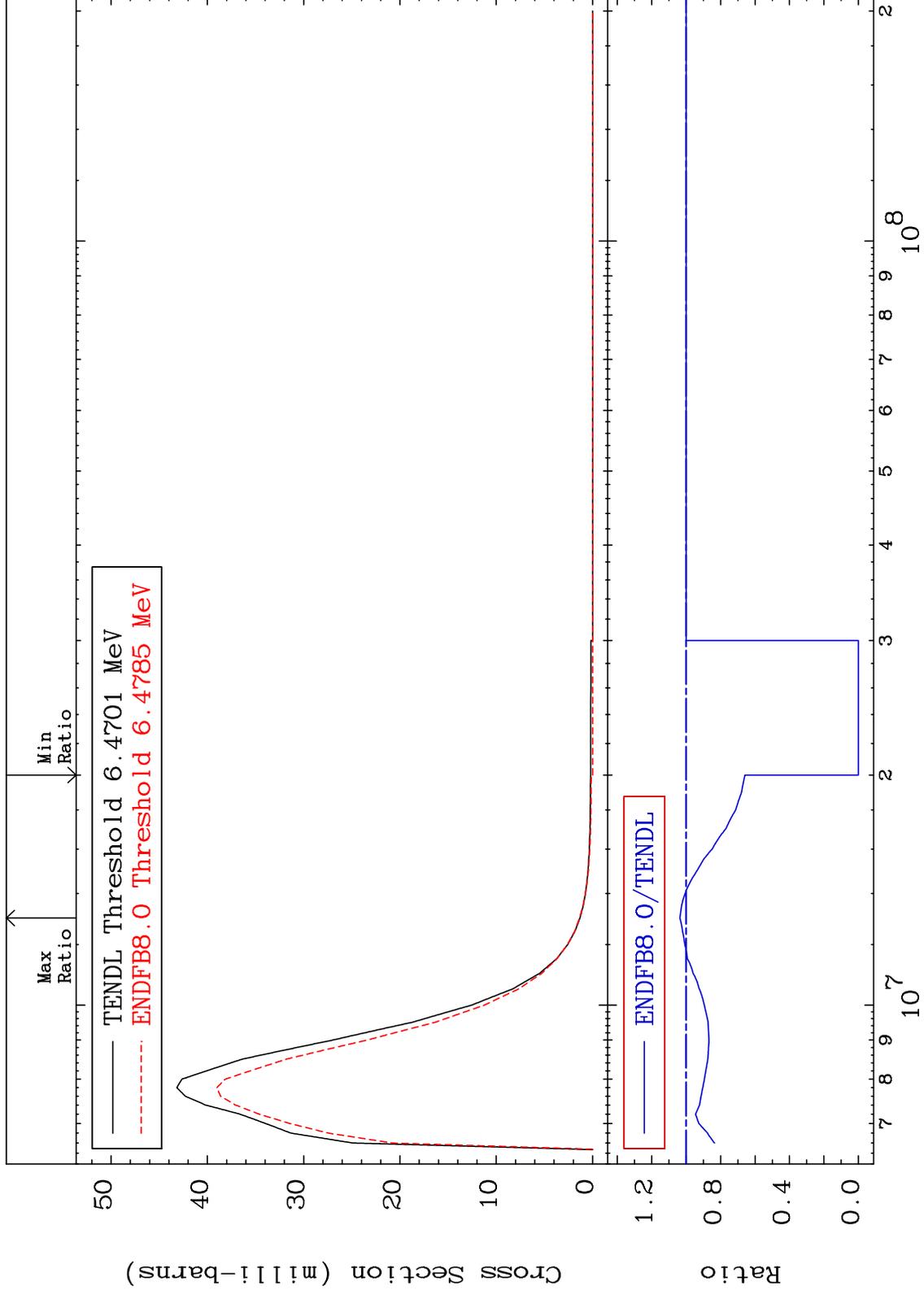




MAT 2049

MT= 65 (n,n') Level  
Cross Section

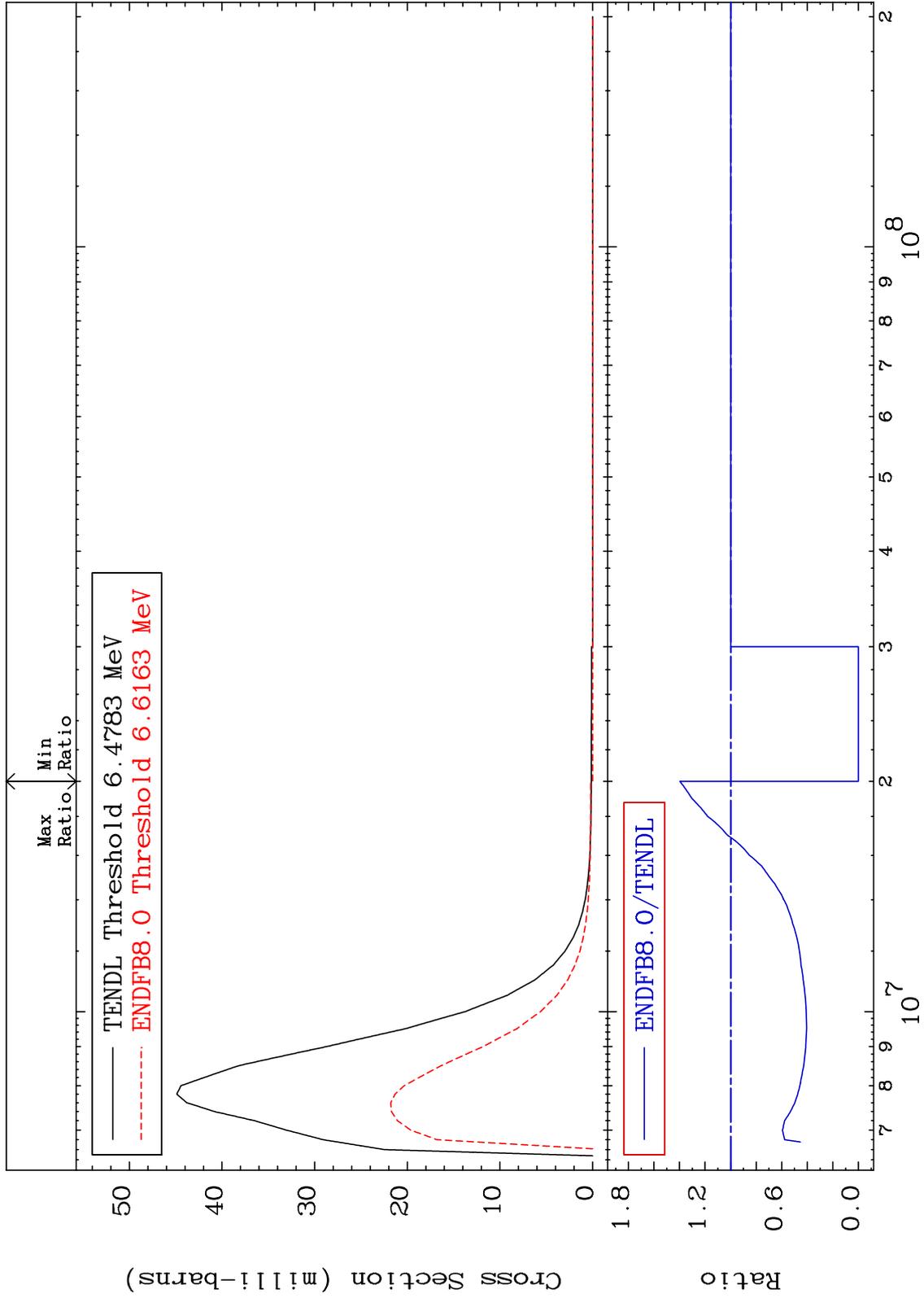
20-Ca-48  
-100.0 To 3.612 %



MAT 2049

MT= 66 (n,n') Level  
Cross Section

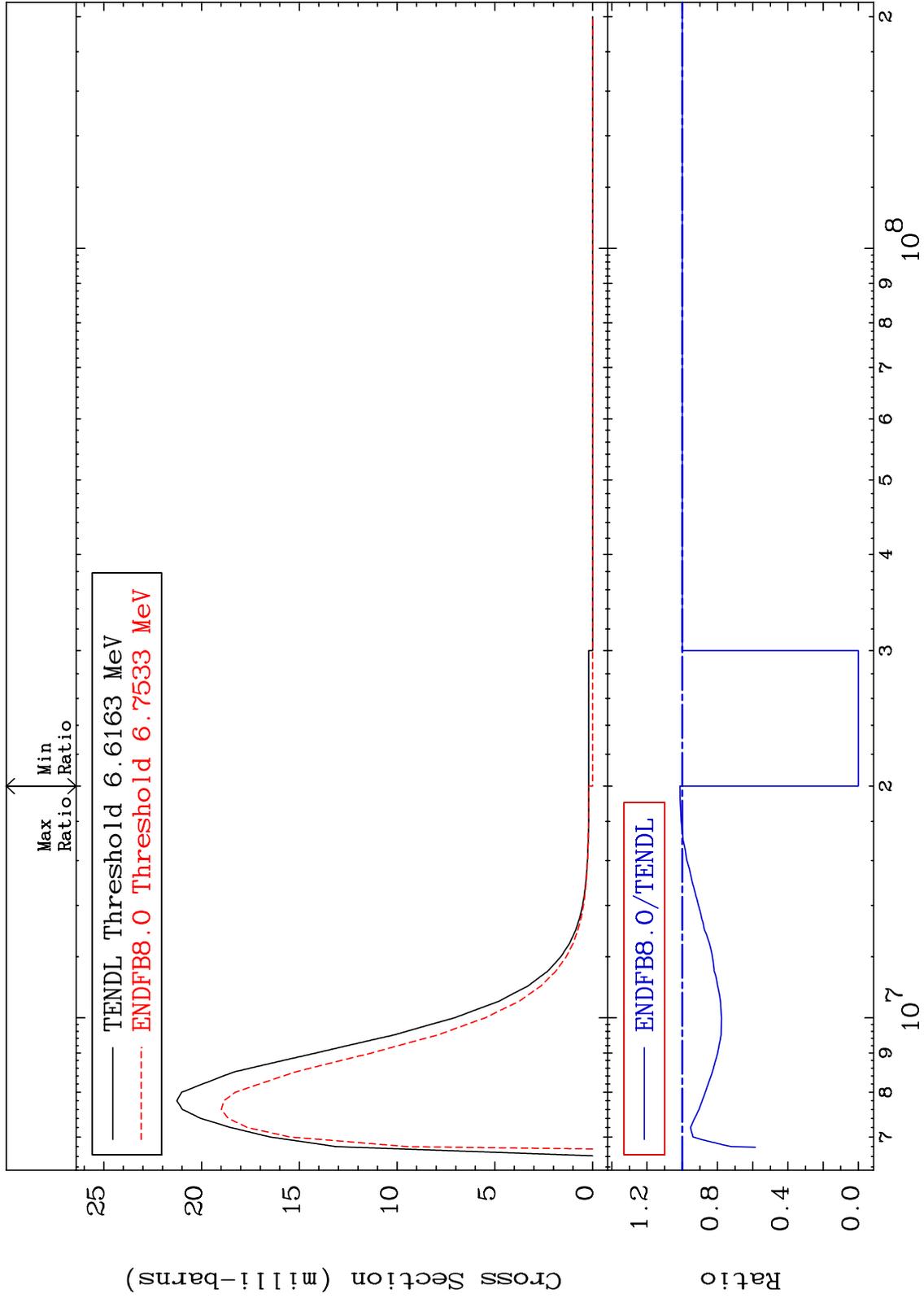
20-Ca-48  
-100.0 To 39.66 %



MAT 2049

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

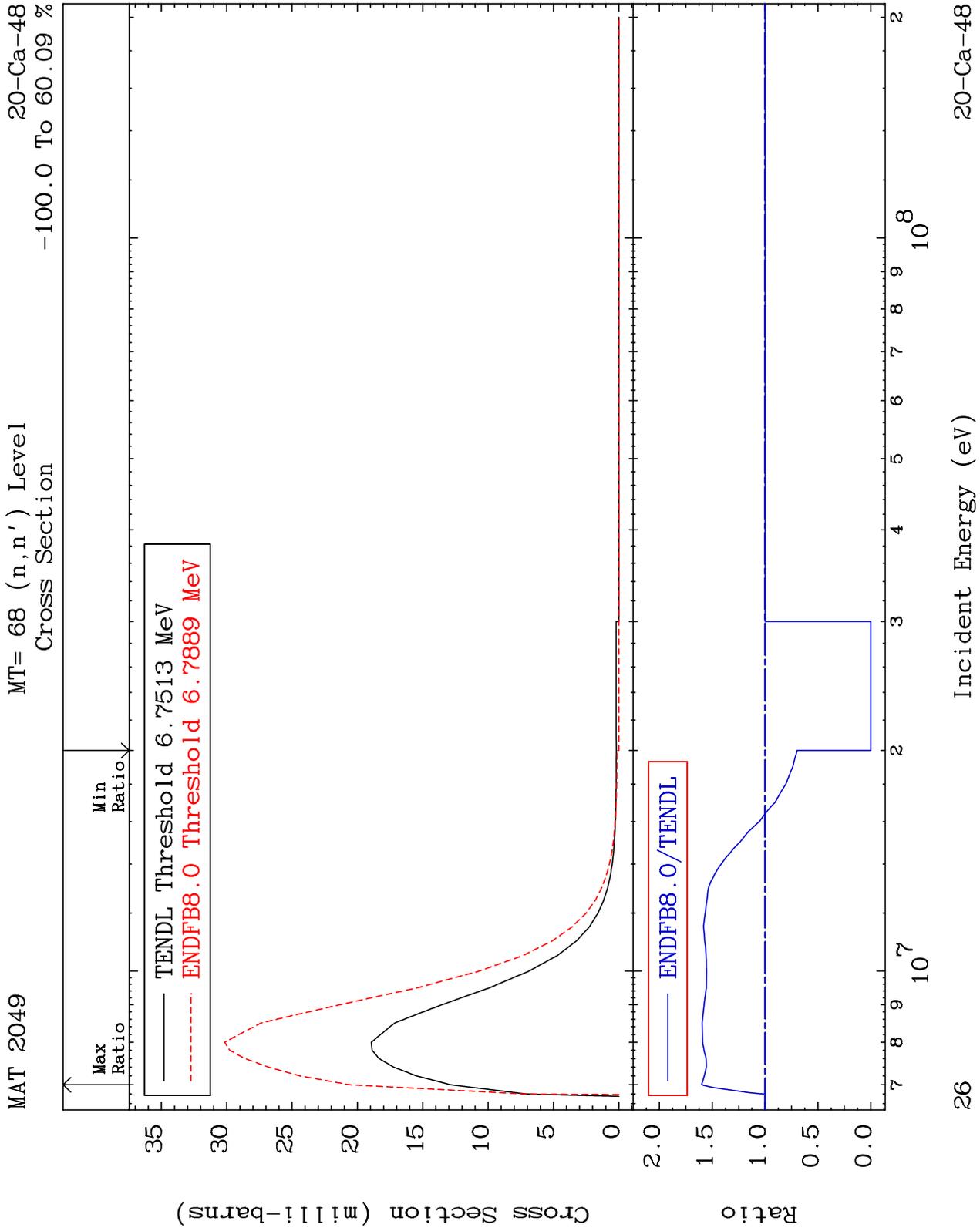
20-Ca-48  
-100.0 To 1.313 %

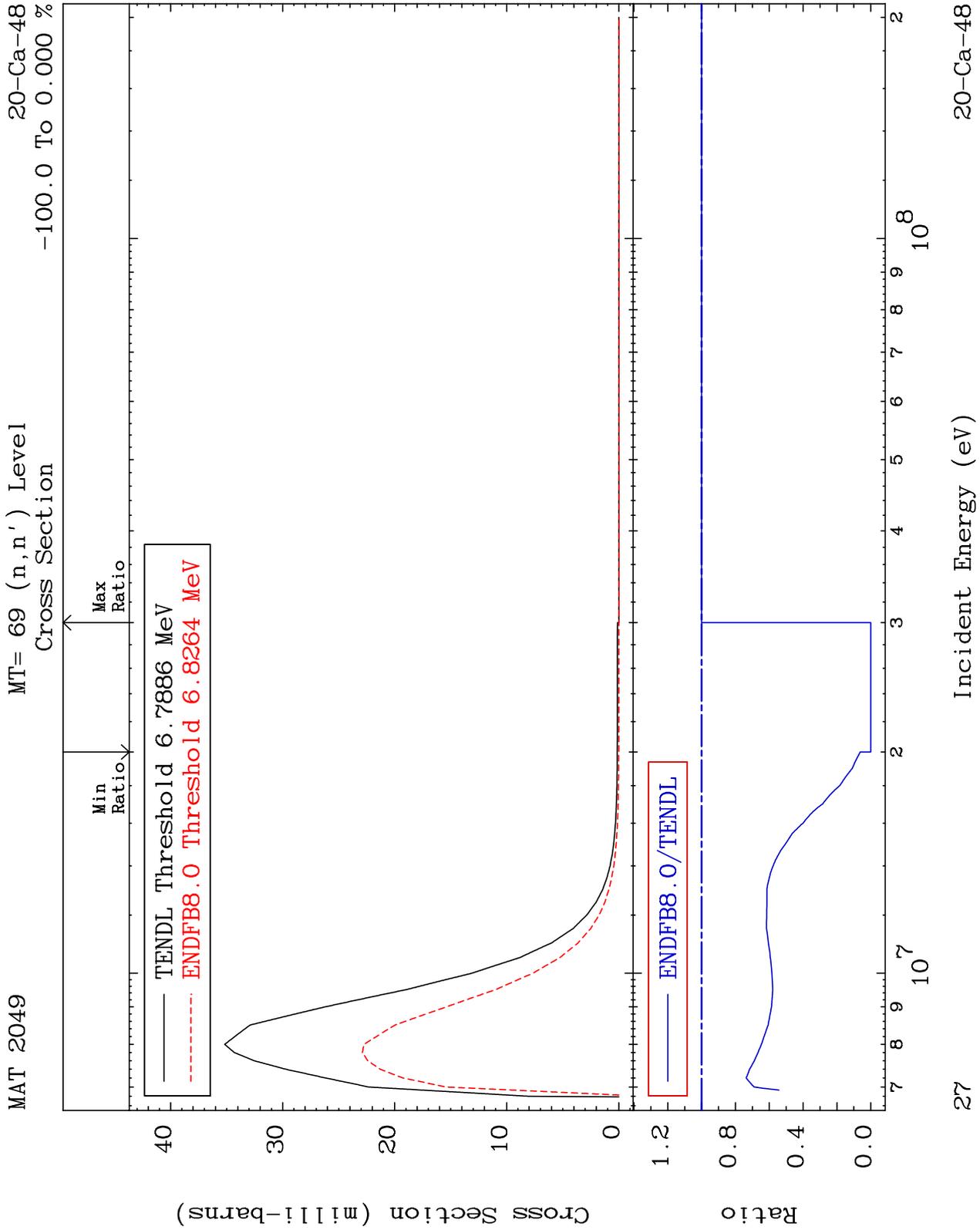


25

20-Ca-48

20-Ca-48

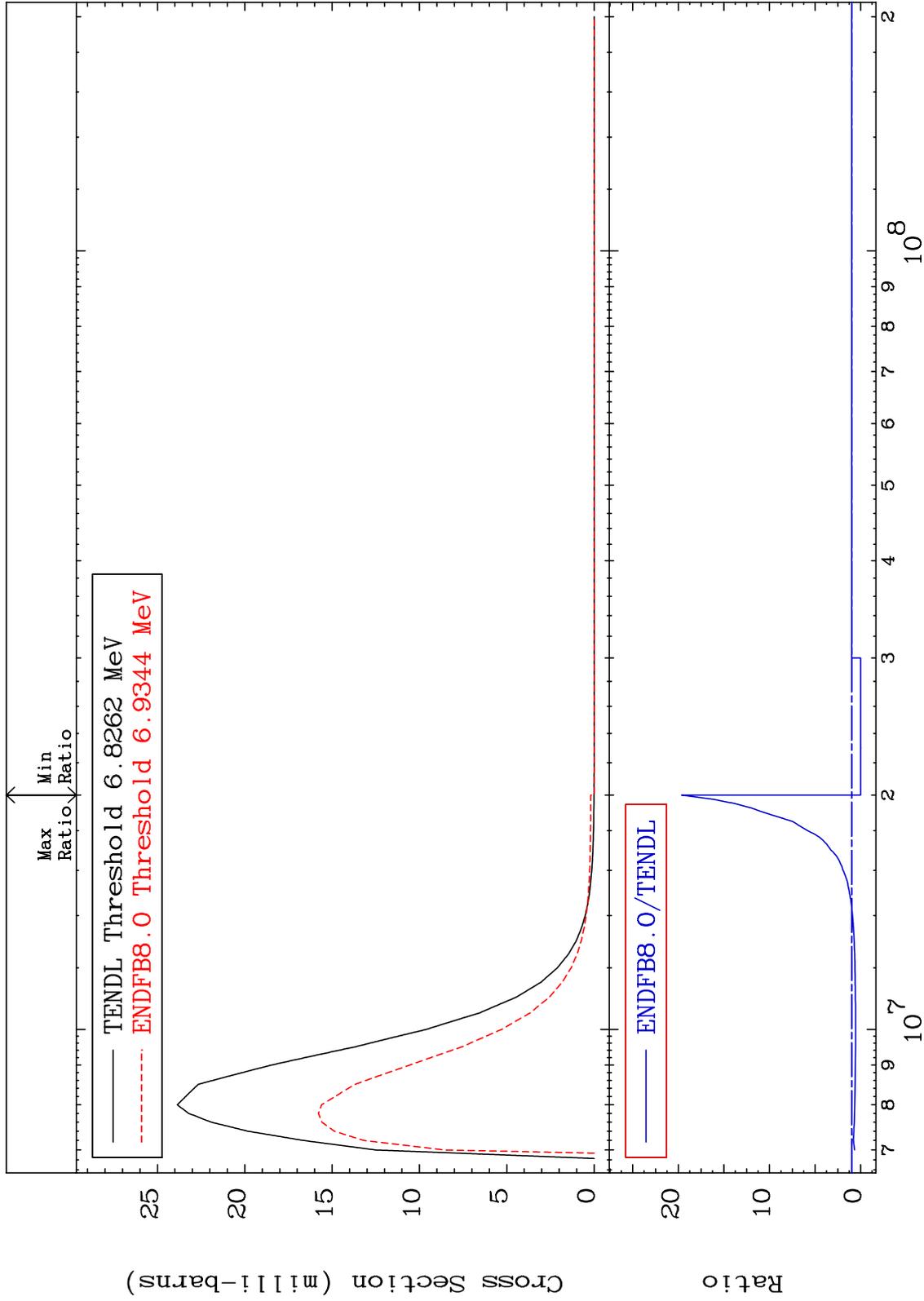




MAT 2049

MT= 70 (n,n') Level  
Cross Section

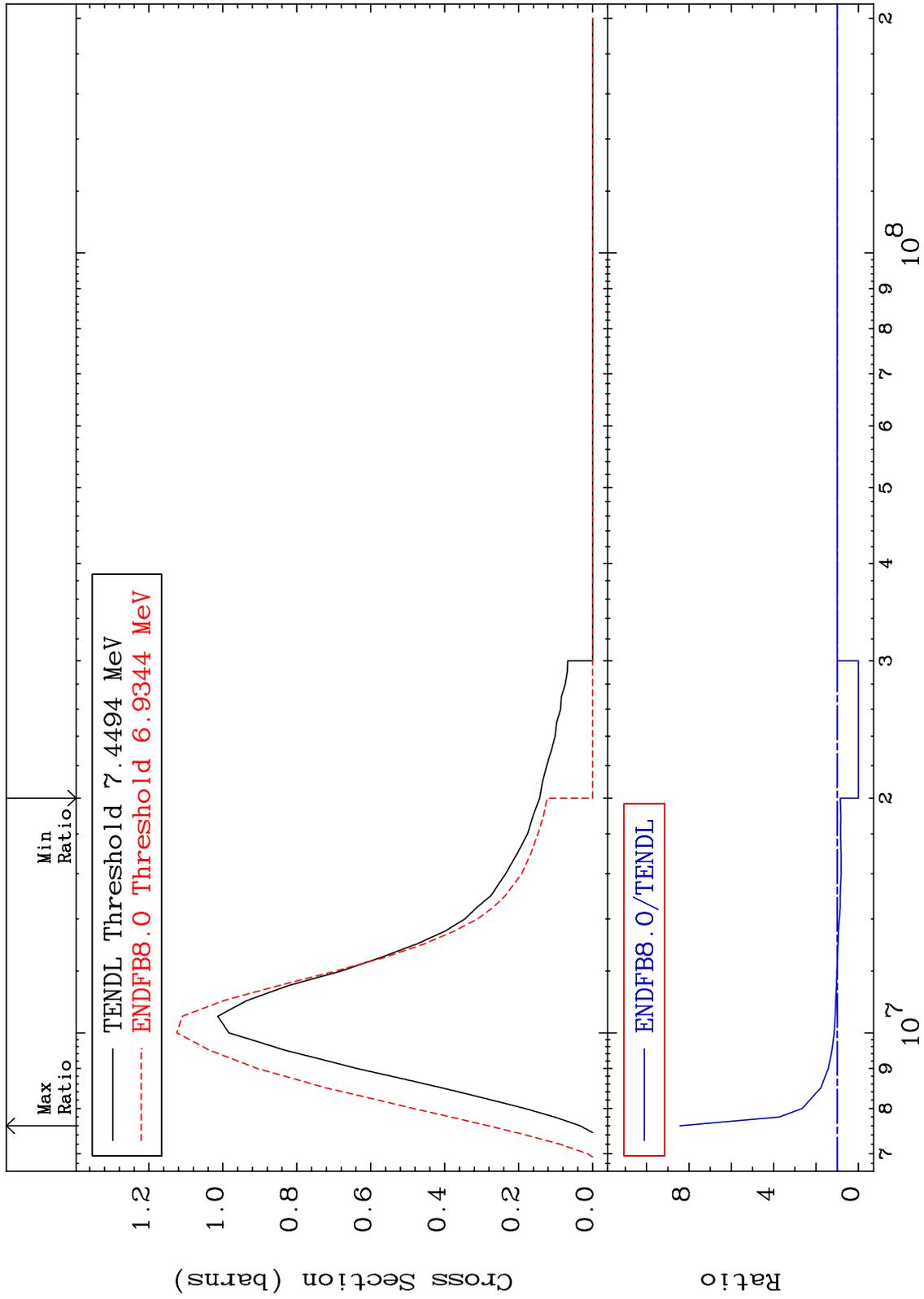
20-Ca-48  
-100.0 To 1863. %



MAT 2049

(n,n') Continuum  
Cross Section

20-Ca-48  
-100.0 To 742.6 %



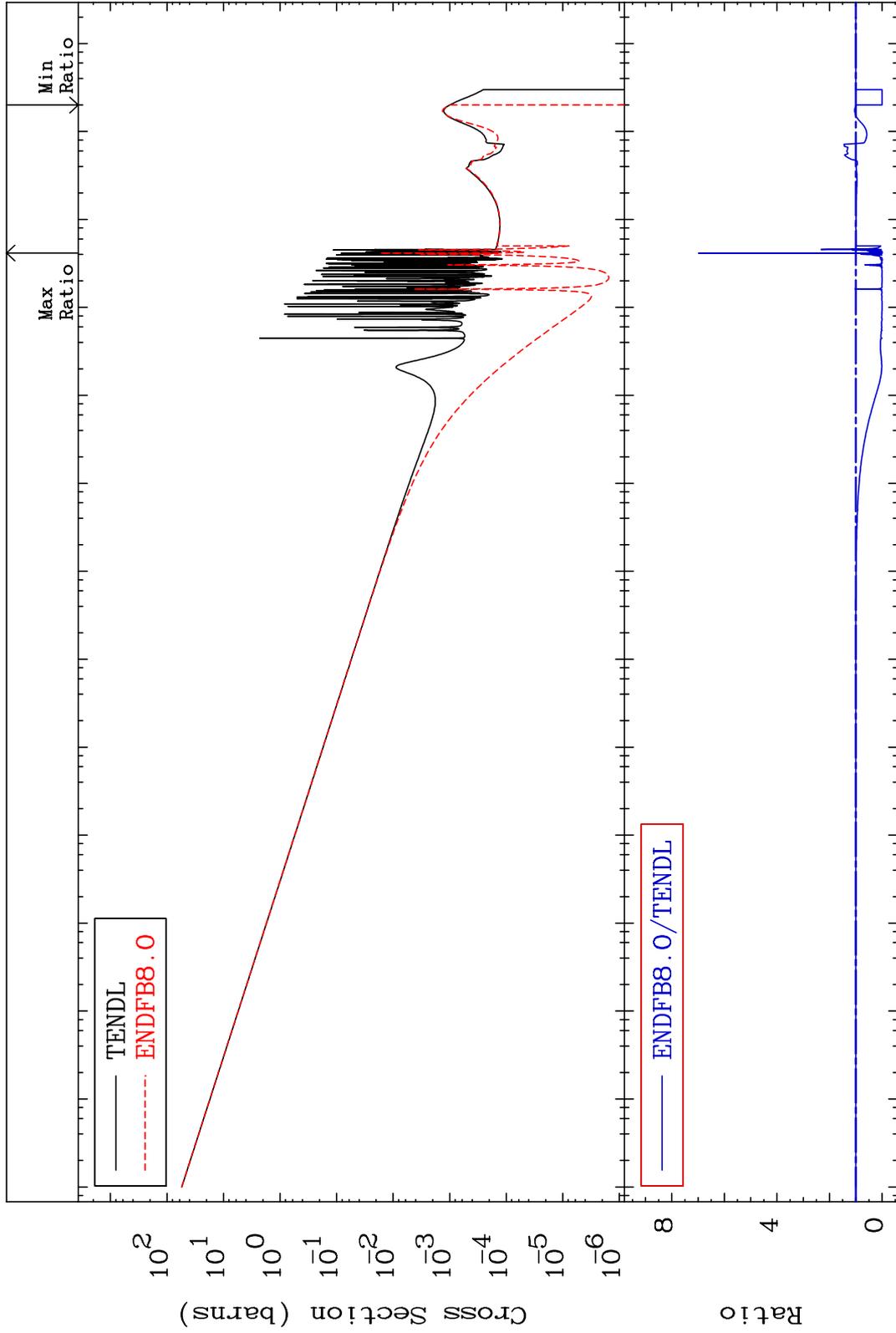
MAT 2049

(n,  $\gamma$ )

20-Ca-48

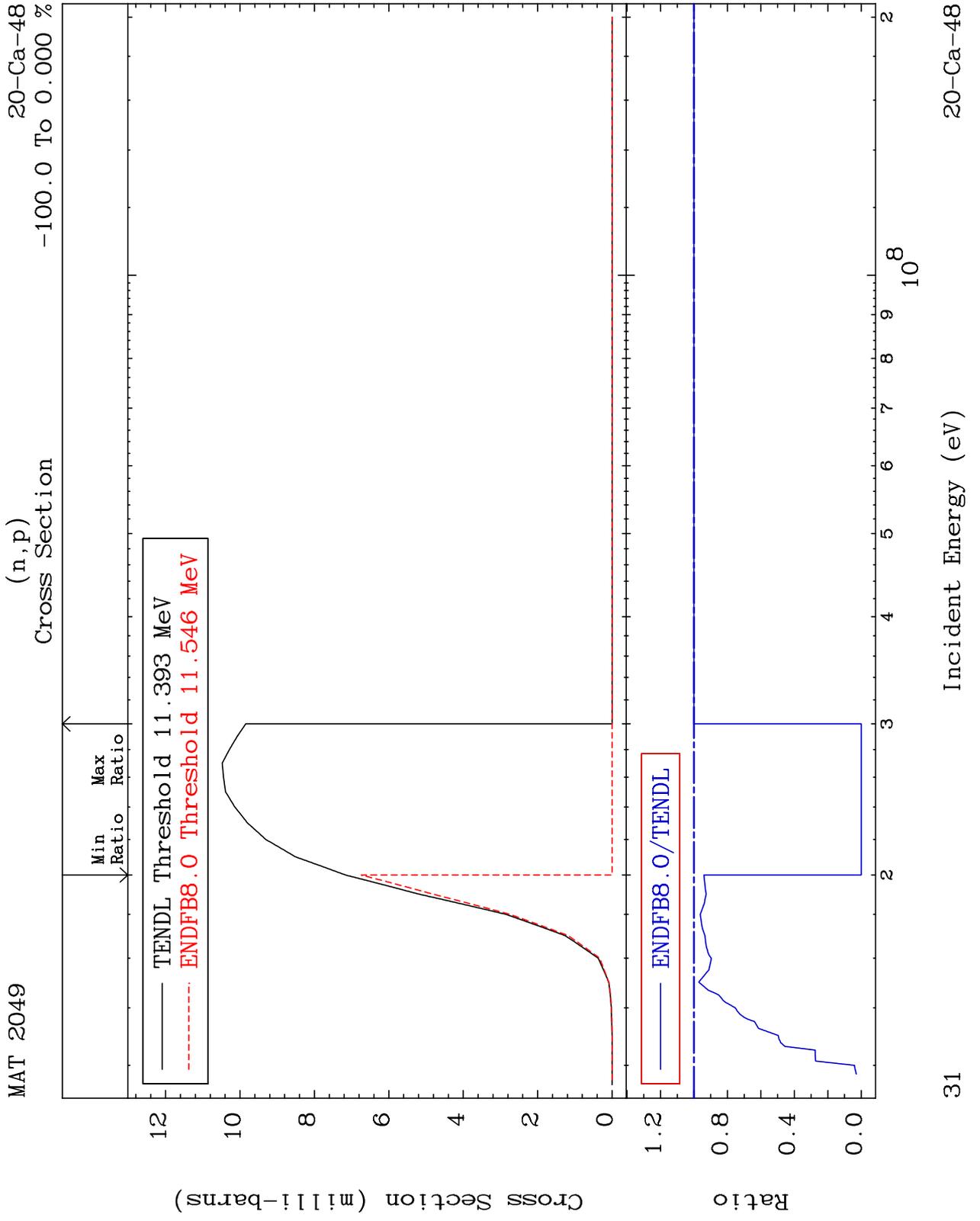
Cross Section

-100.0 To 597.7 %



30

20-Ca-48



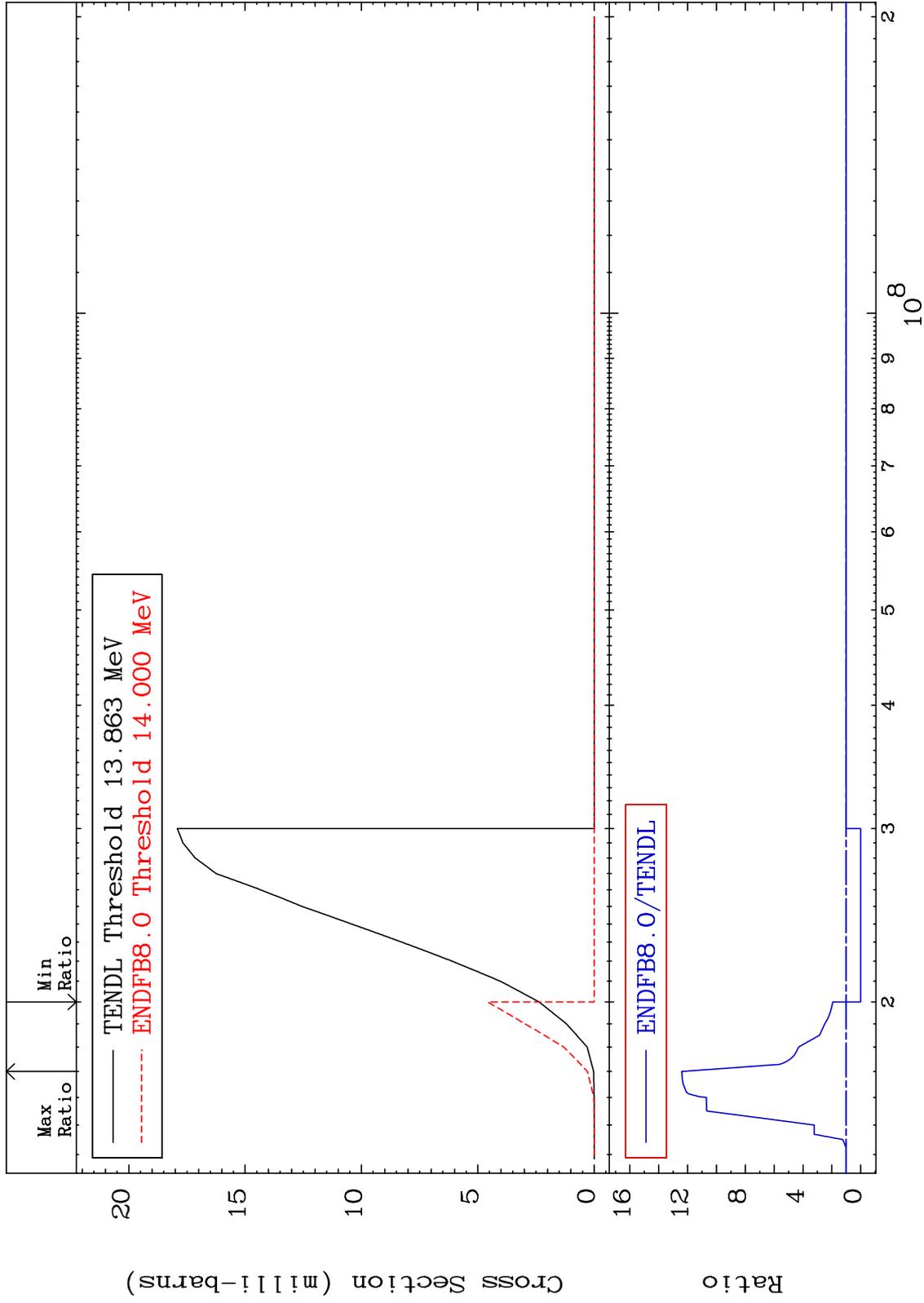
MAT 2049

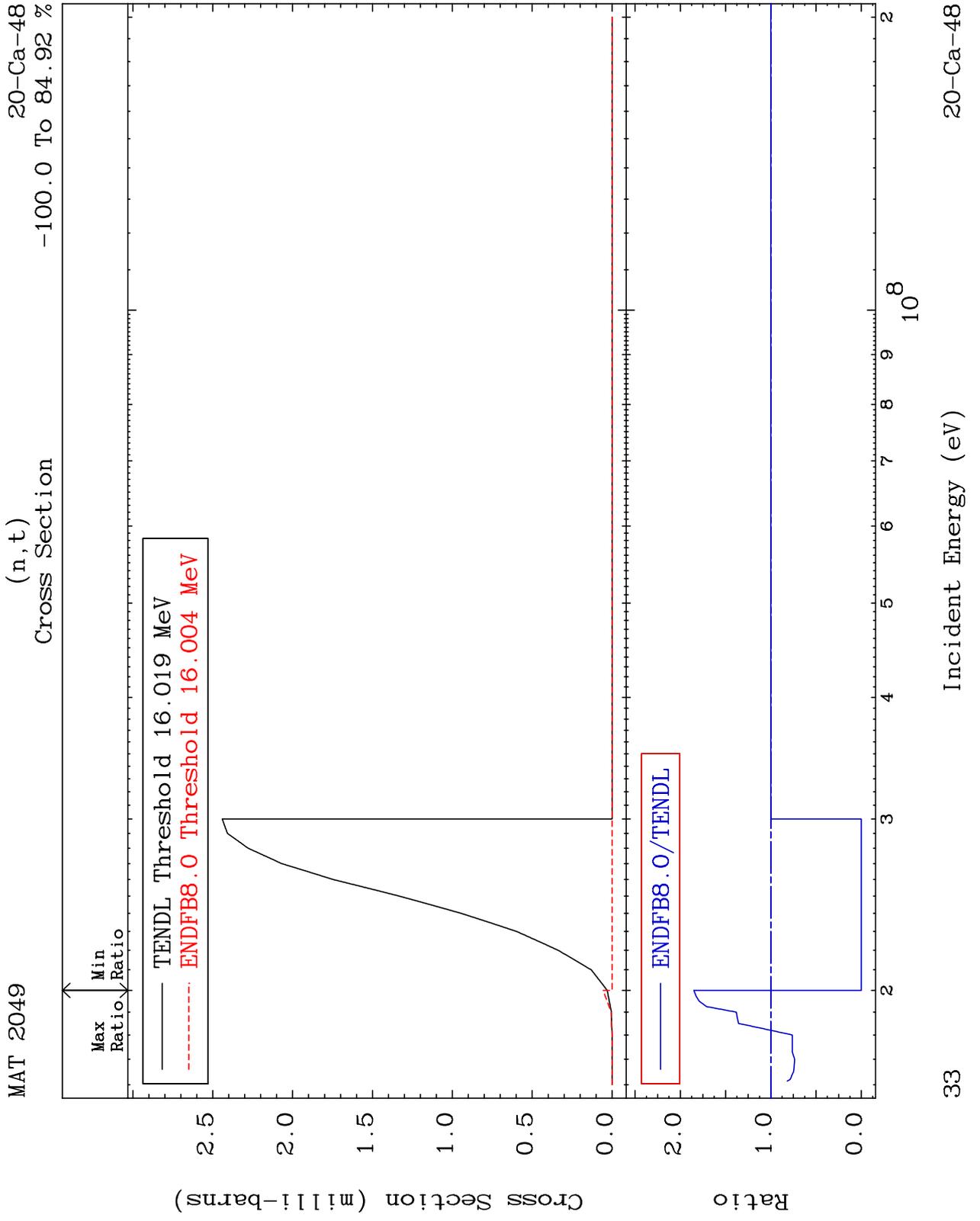
(n,d)

<sup>20</sup>Ca-48

Cross Section

-100.0 To 1141. %





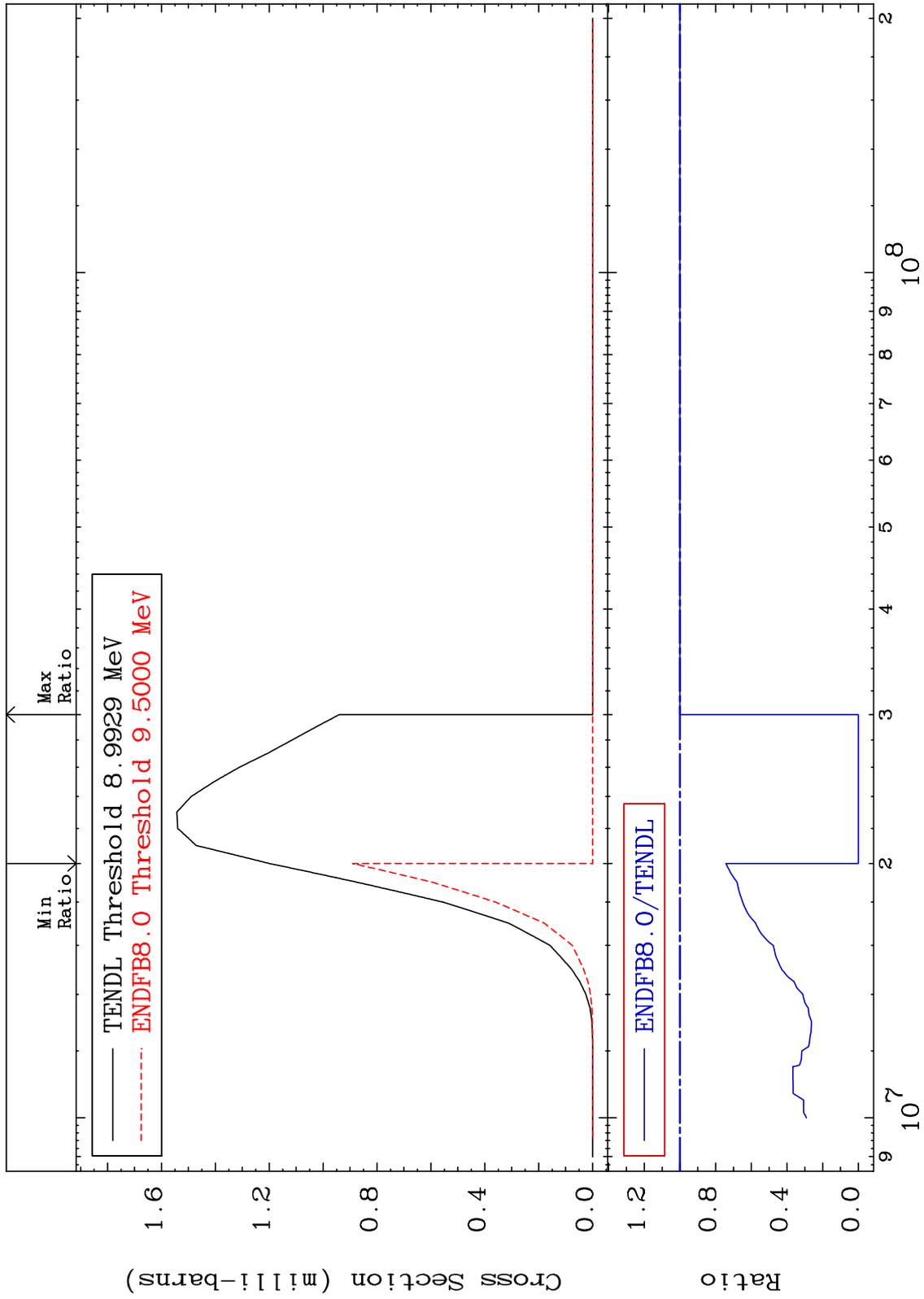
MAT 2049

(n,  $\alpha$ )

20-Ca-48

-100.0 To 0.000 %

Cross Section



34

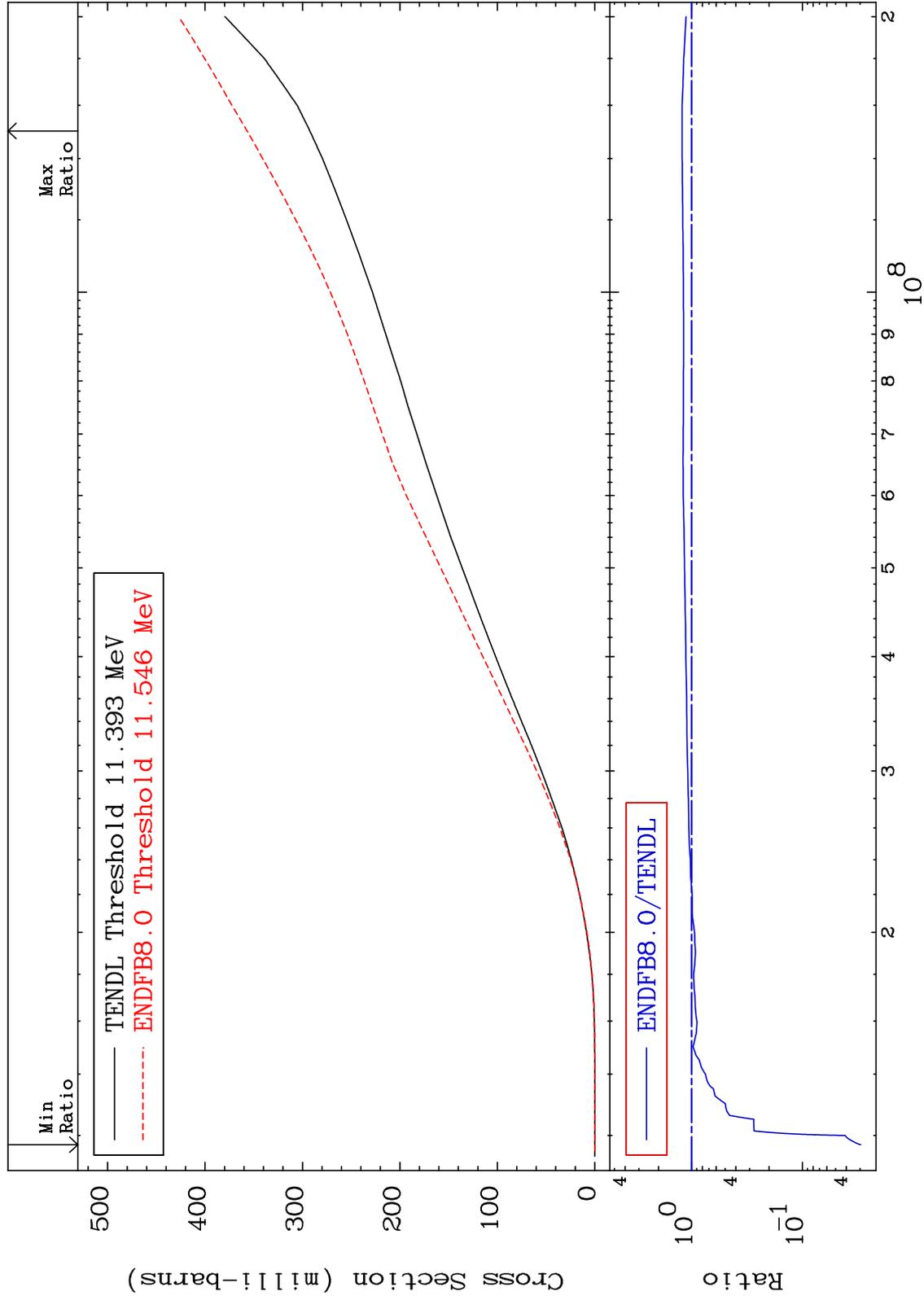
Incident Energy (eV)

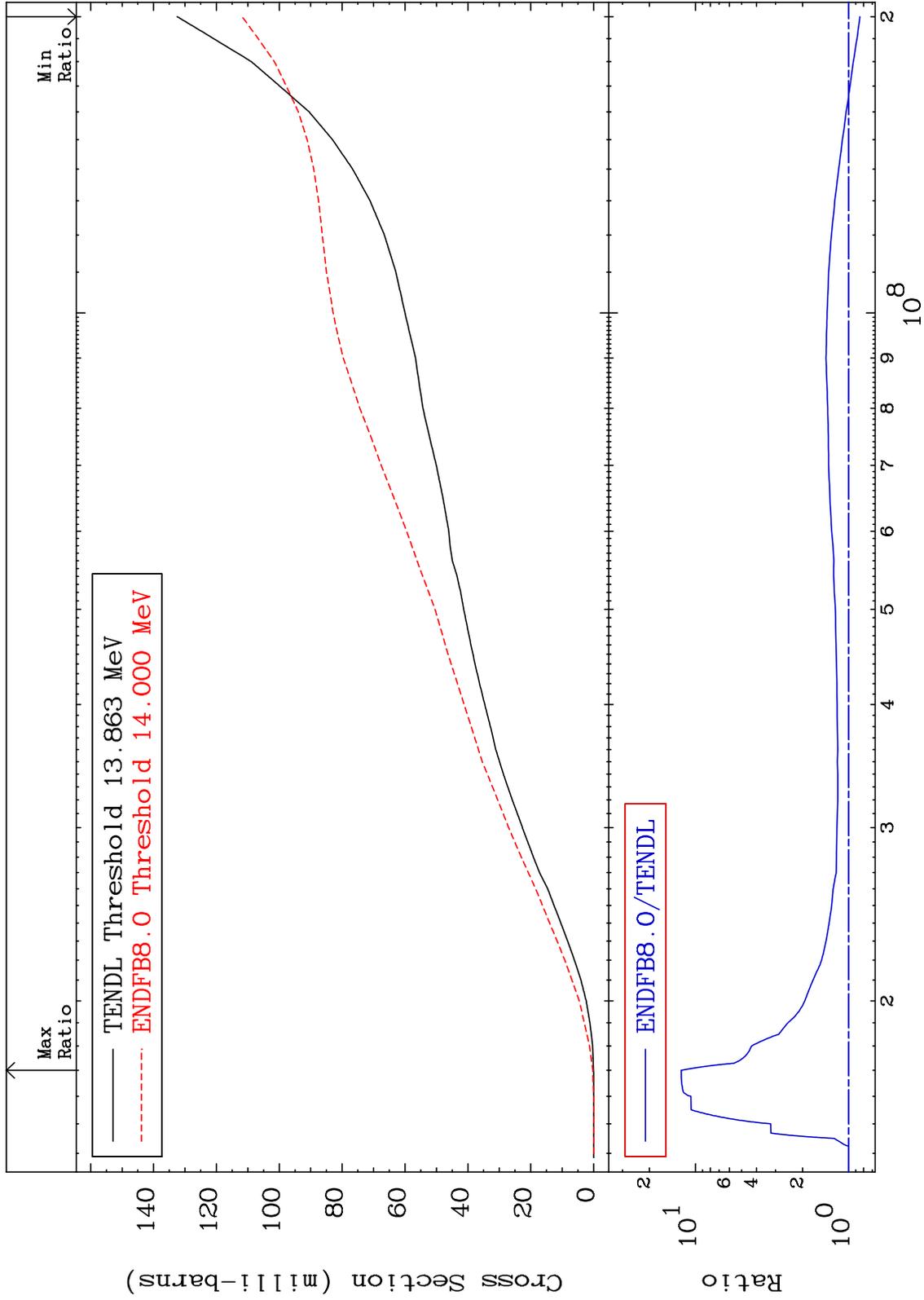
20-Ca-48

MAT 2049

### Hydrogen Production Cross Section

20-Ca-48  
-97.04 To 22.03 %

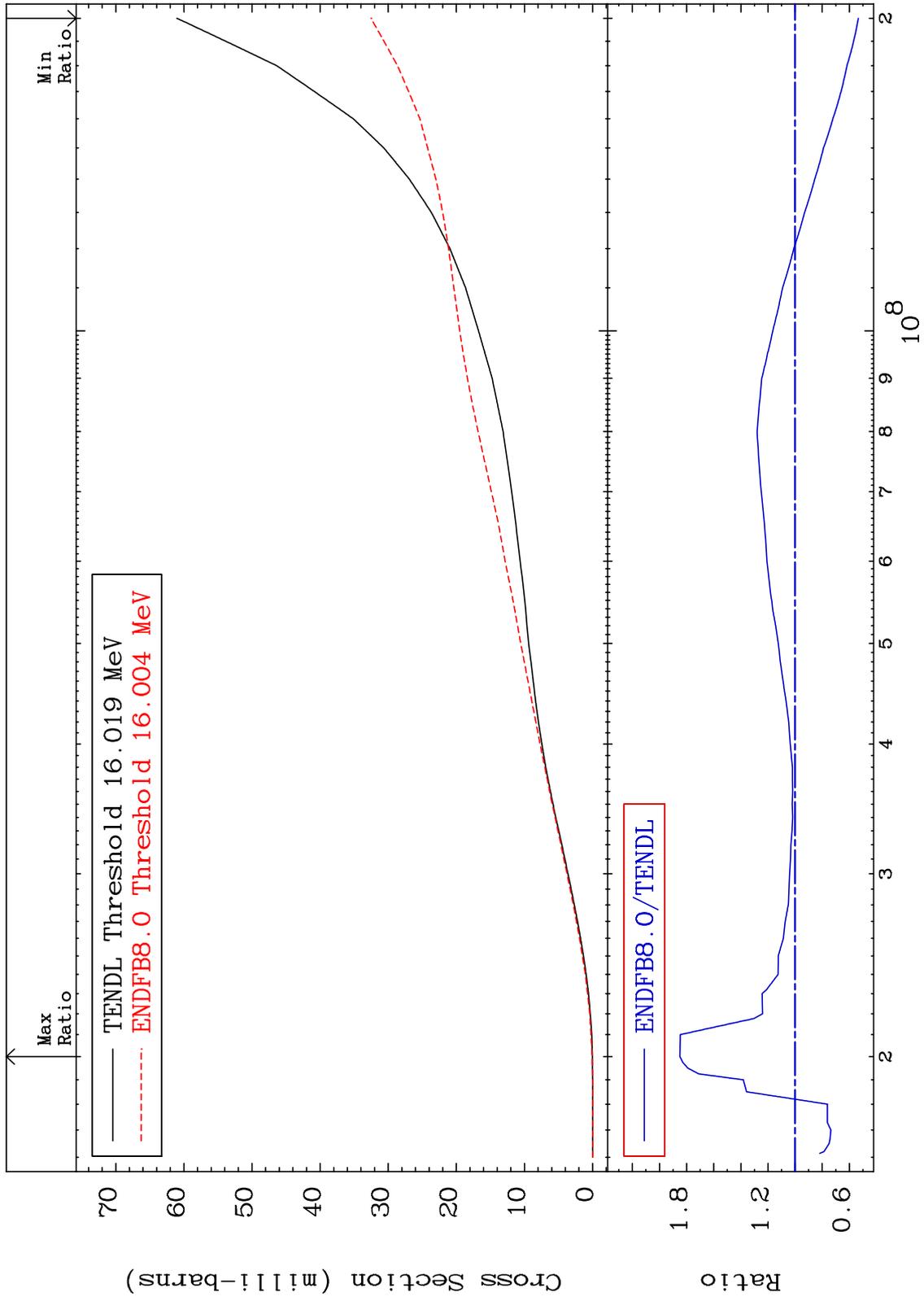




MAT 2049

Tritium Production  
Cross Section

20-Ca-48  
-46.68 To 84.92 %



37

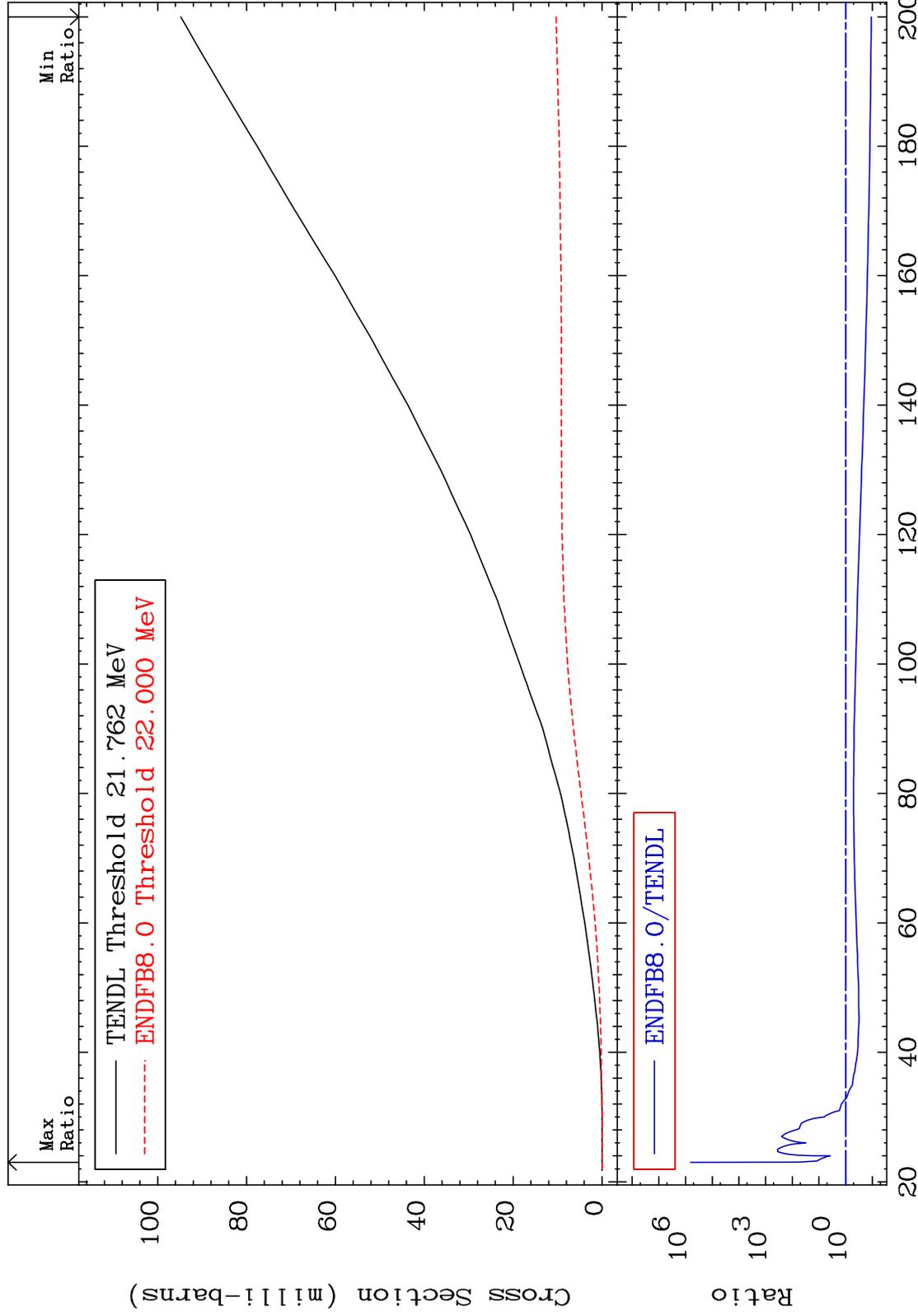
Incident Energy (eV)

20-Ca-48

MAT 2049

He-3 Production  
Cross Section

20-Ca-48  
-89.10 To 9999. %



38

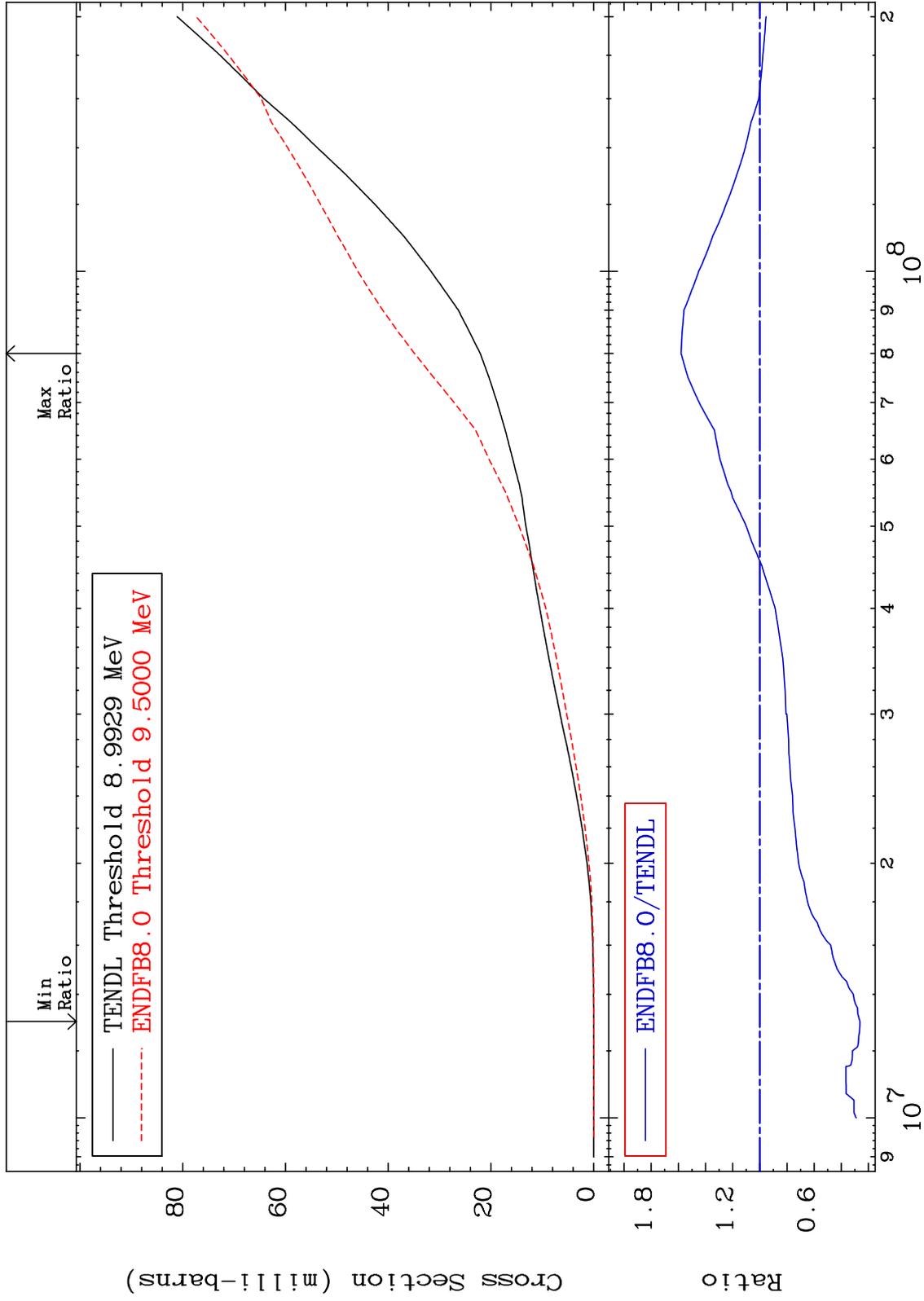
Incident Energy (MeV)

20-Ca-48

MAT 2049

He-4 Production  
Cross Section

20-Ca-48  
-73.72 To 57.95 %



39

Incident Energy (eV)

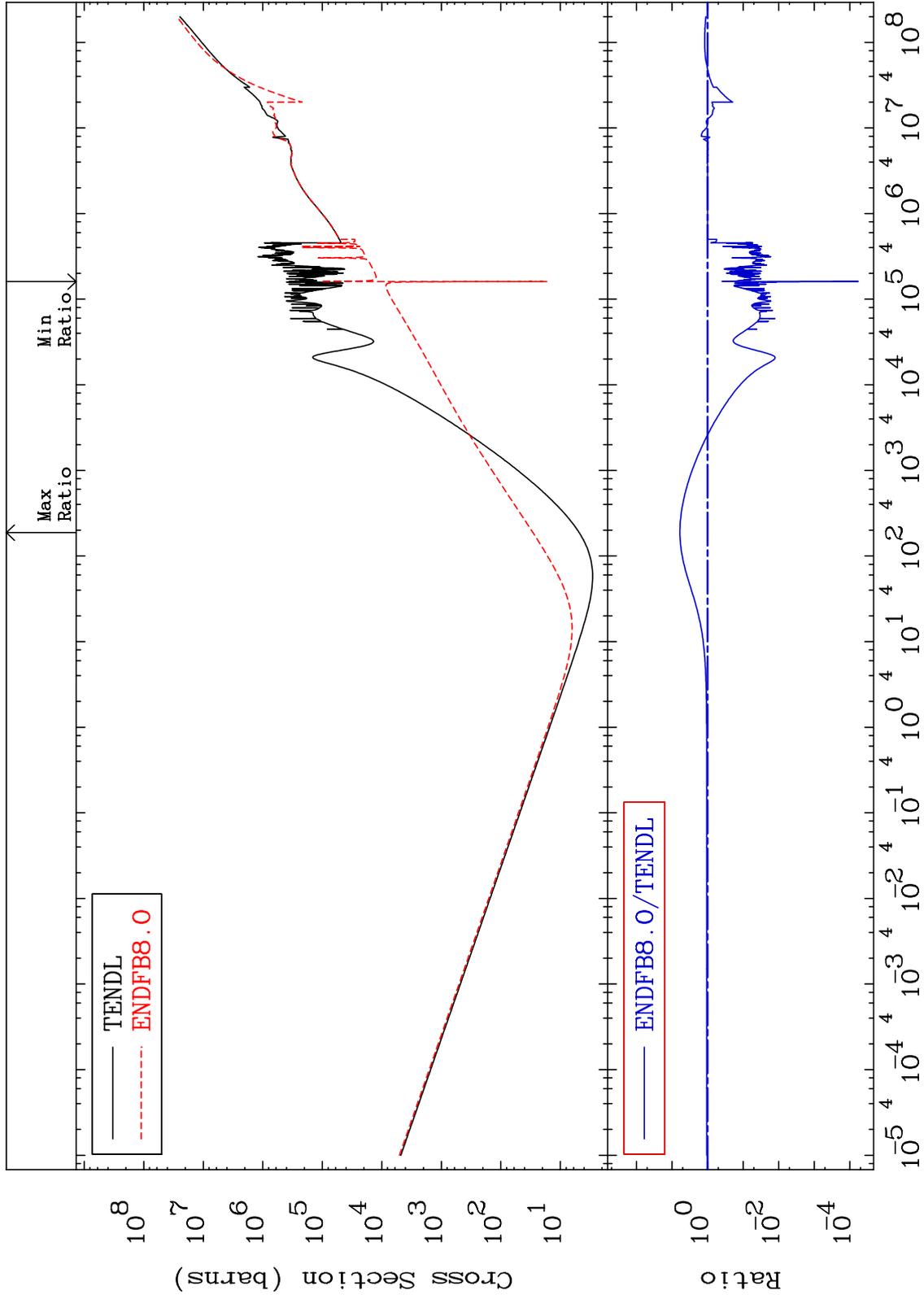
20-Ca-48

MAT 2049

Kerma total (eV-barns)  
Cross Section

20-Ca-48

-99.99 To 497.8 %

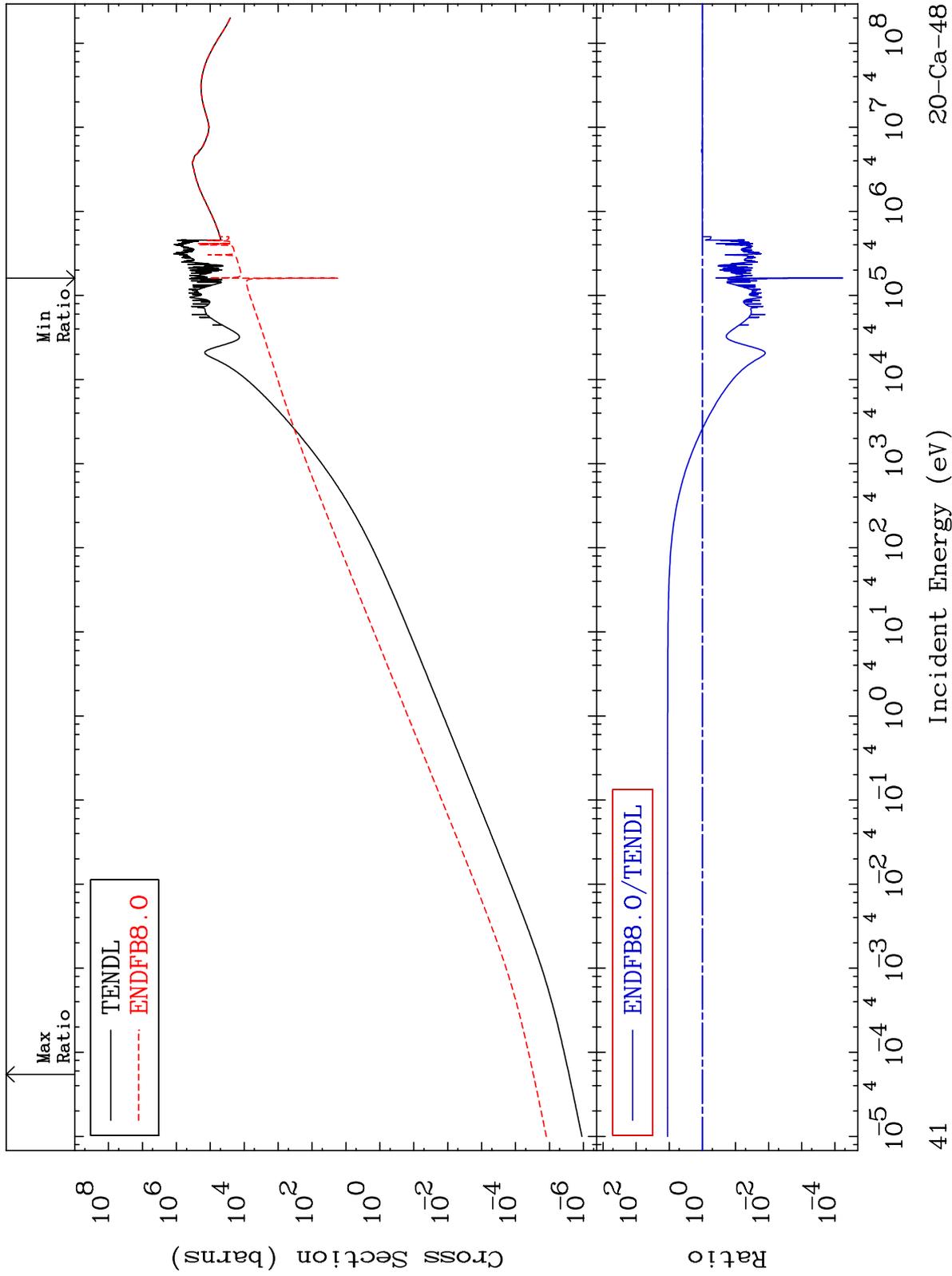


40

Incident Energy (eV)

20-Ca-48

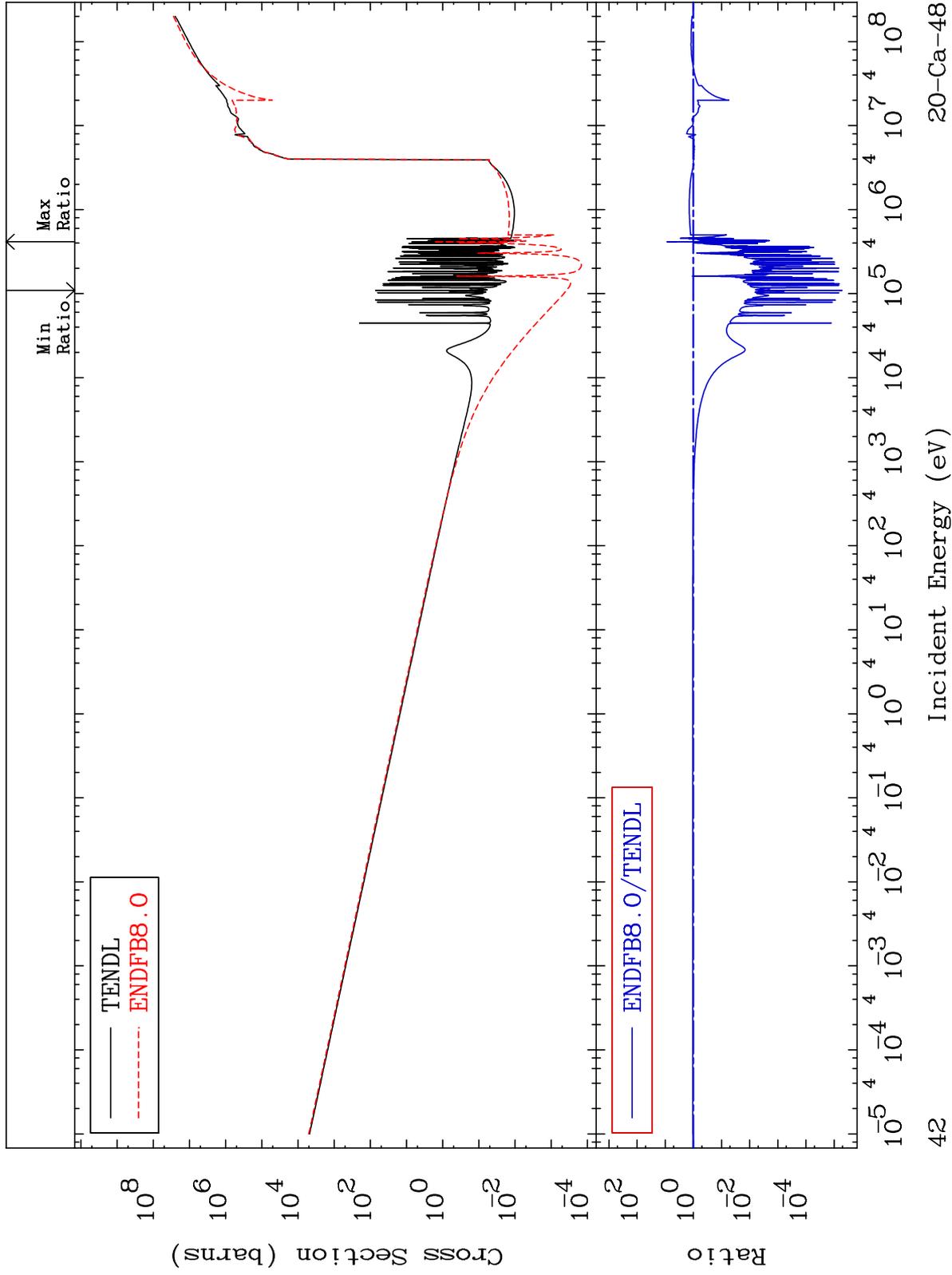
MAT 2049 Kerma elastic Cross Section 20-Ca-48 -99.99 To 1019. %



MAT 2049

Kerma non-elastic (all but mt2)  
Cross Section

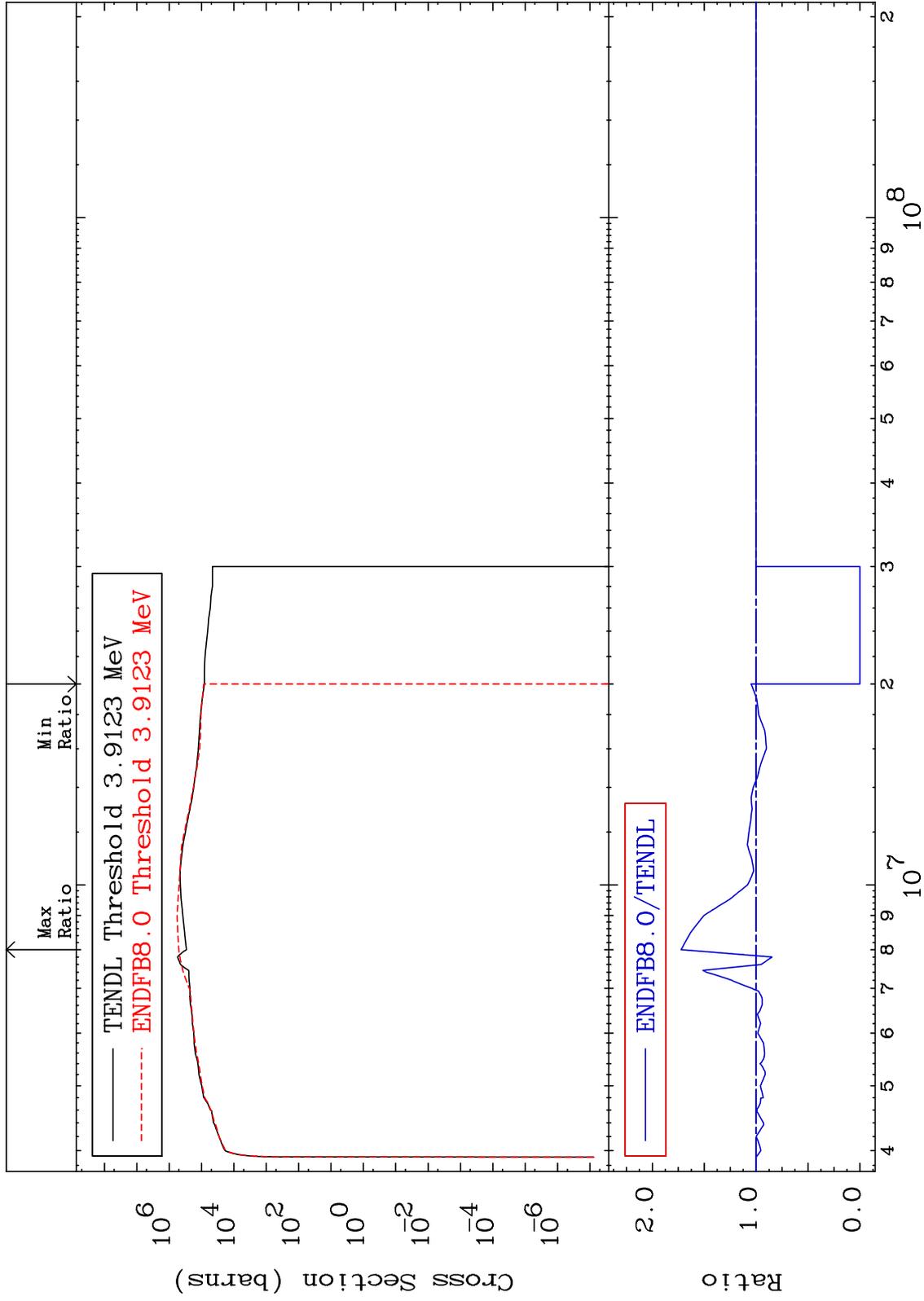
20-Ca-48  
-100.0 To 759.4 %



MAT 2049

Kerma inelastic (mt51-91)  
Cross Section

20-Ca-48  
-100.0 To 72.28 %



43

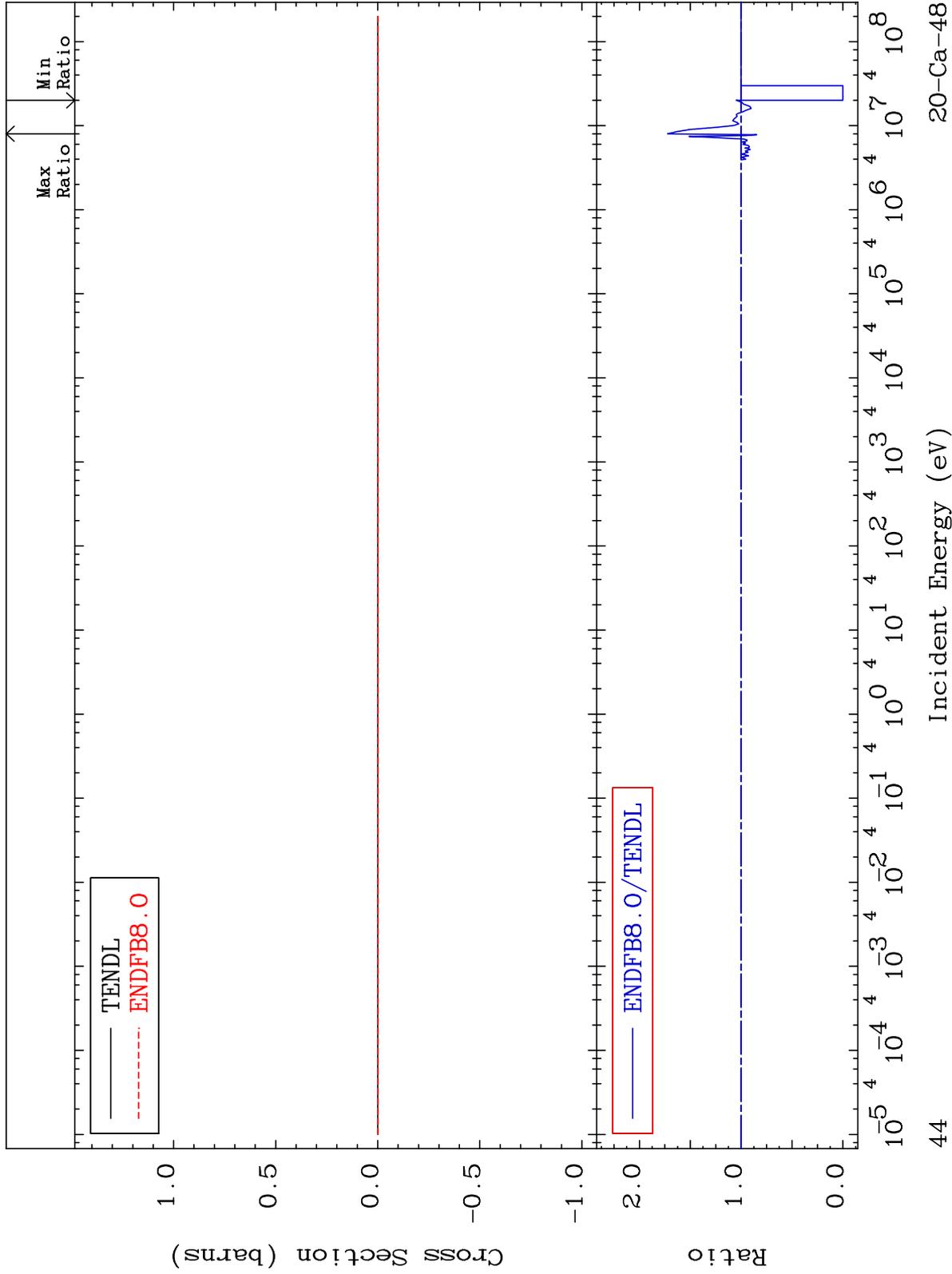
Incident Energy (eV)

20-Ca-48

MAT 2049

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

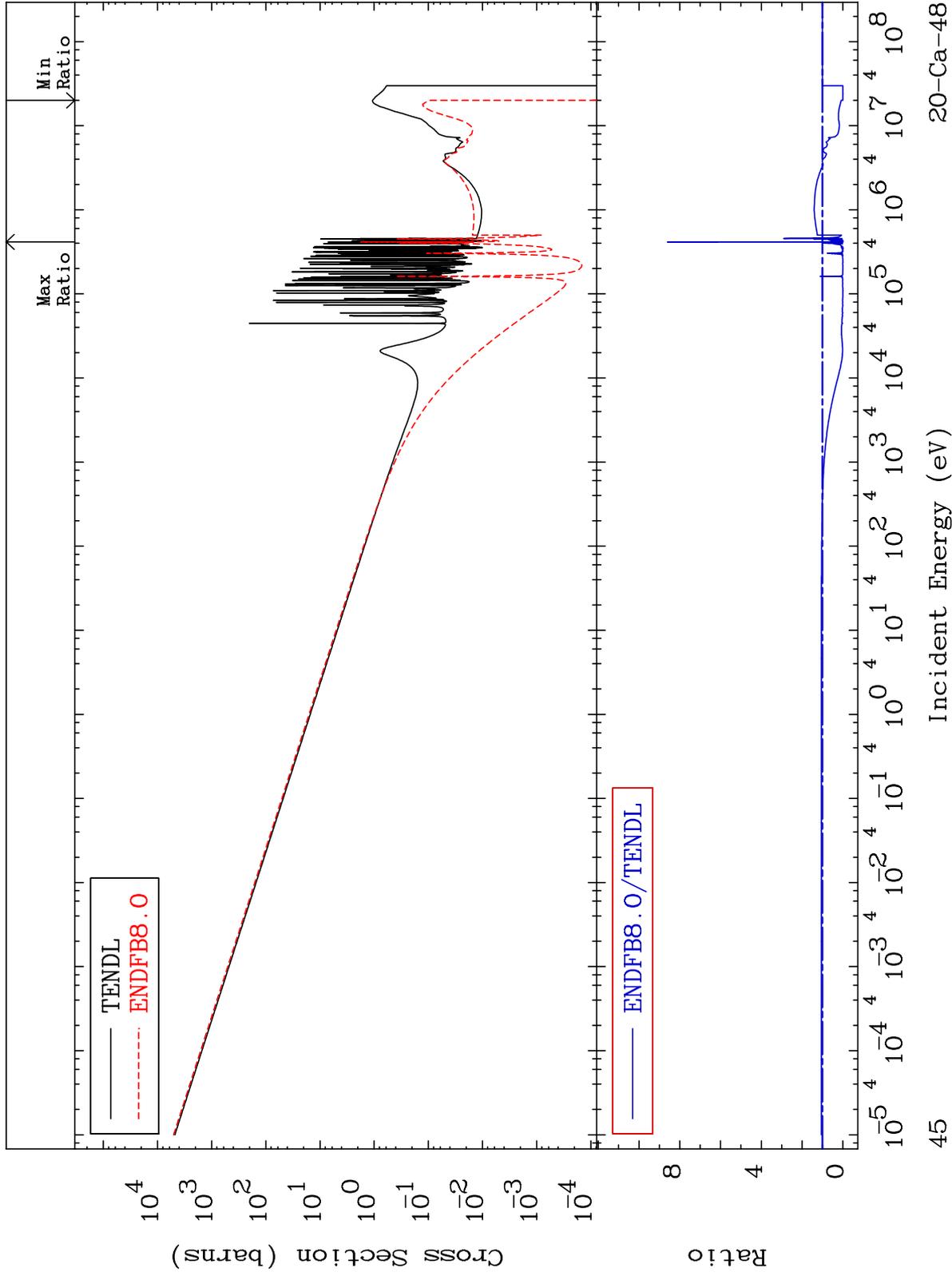
20-Ca-48  
-100.0 To 72.28 %



MAT 2049

Kerma capture (mt102)  
Cross Section

20-Ca-48  
-100.0 To 759.4 %



45

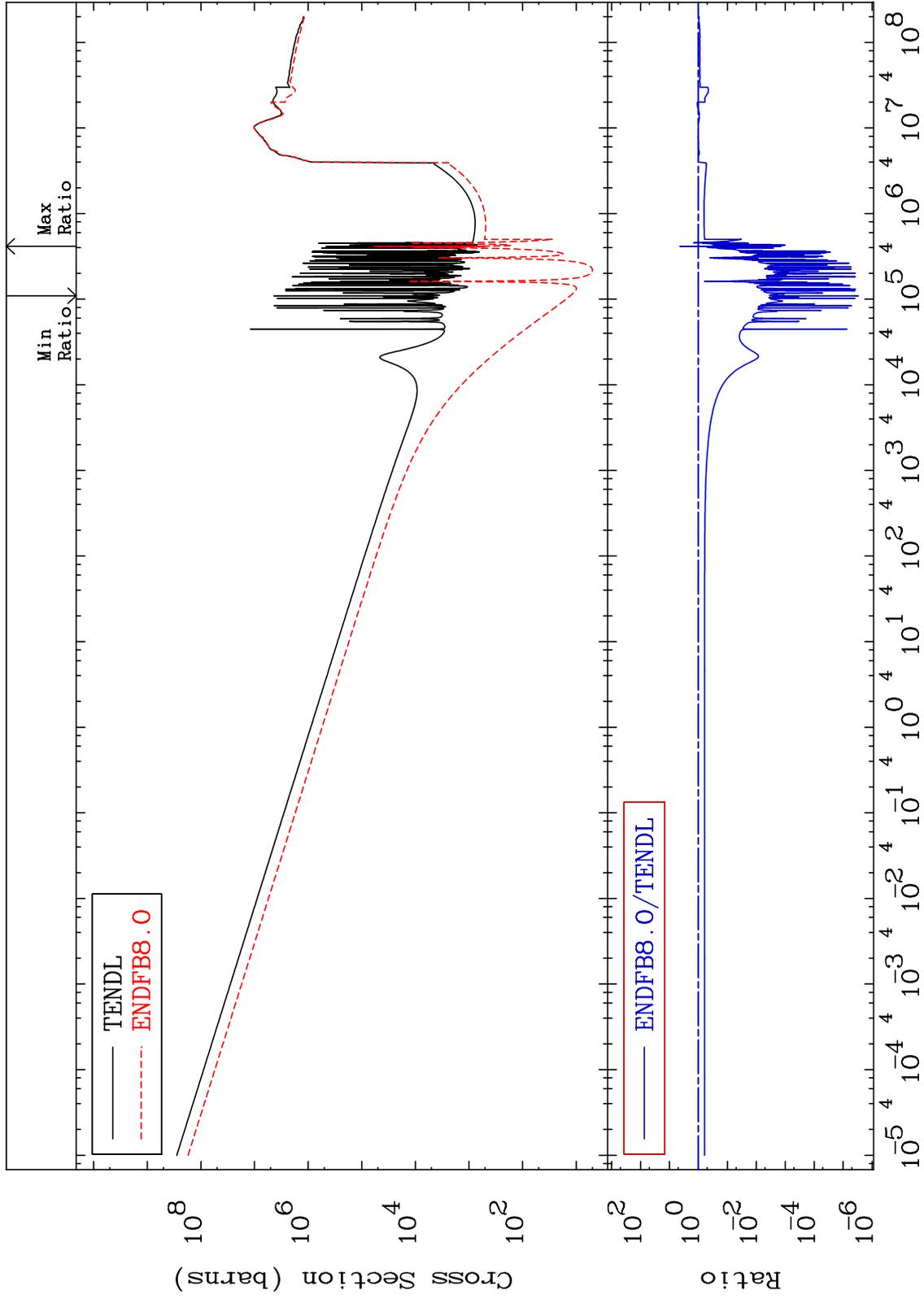
Incident Energy (eV)

20-Ca-48

MAT 2049

Total photon (eV-barns)  
Cross Section

20-Ca-48  
-100.0 To 335.3 %



46

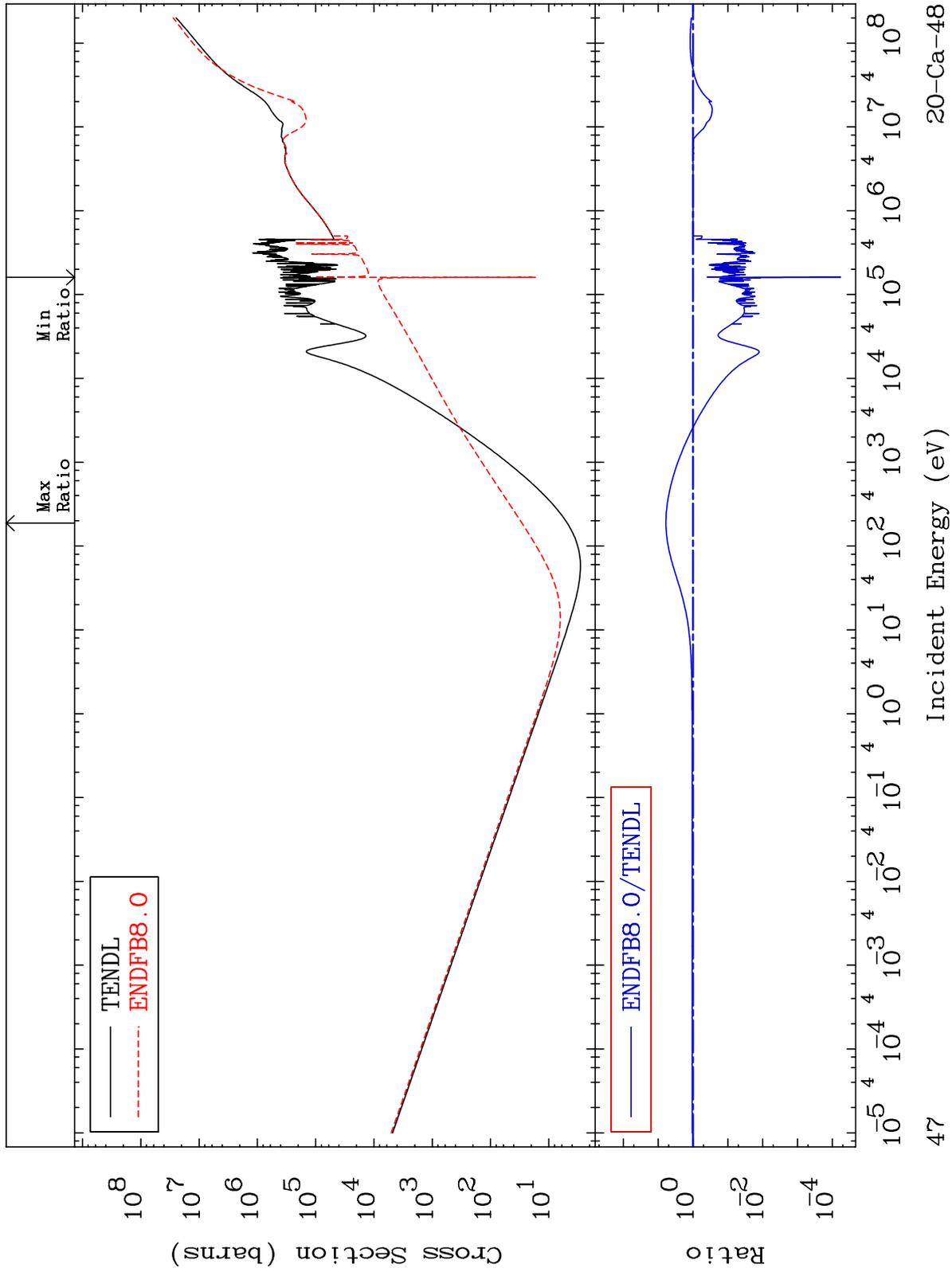
Incident Energy (eV)

20-Ca-48

MAT 2049

Total kinematic kerma (high limit)  
Cross Section

20-Ca-48  
-99.99 To 497.8 %



47

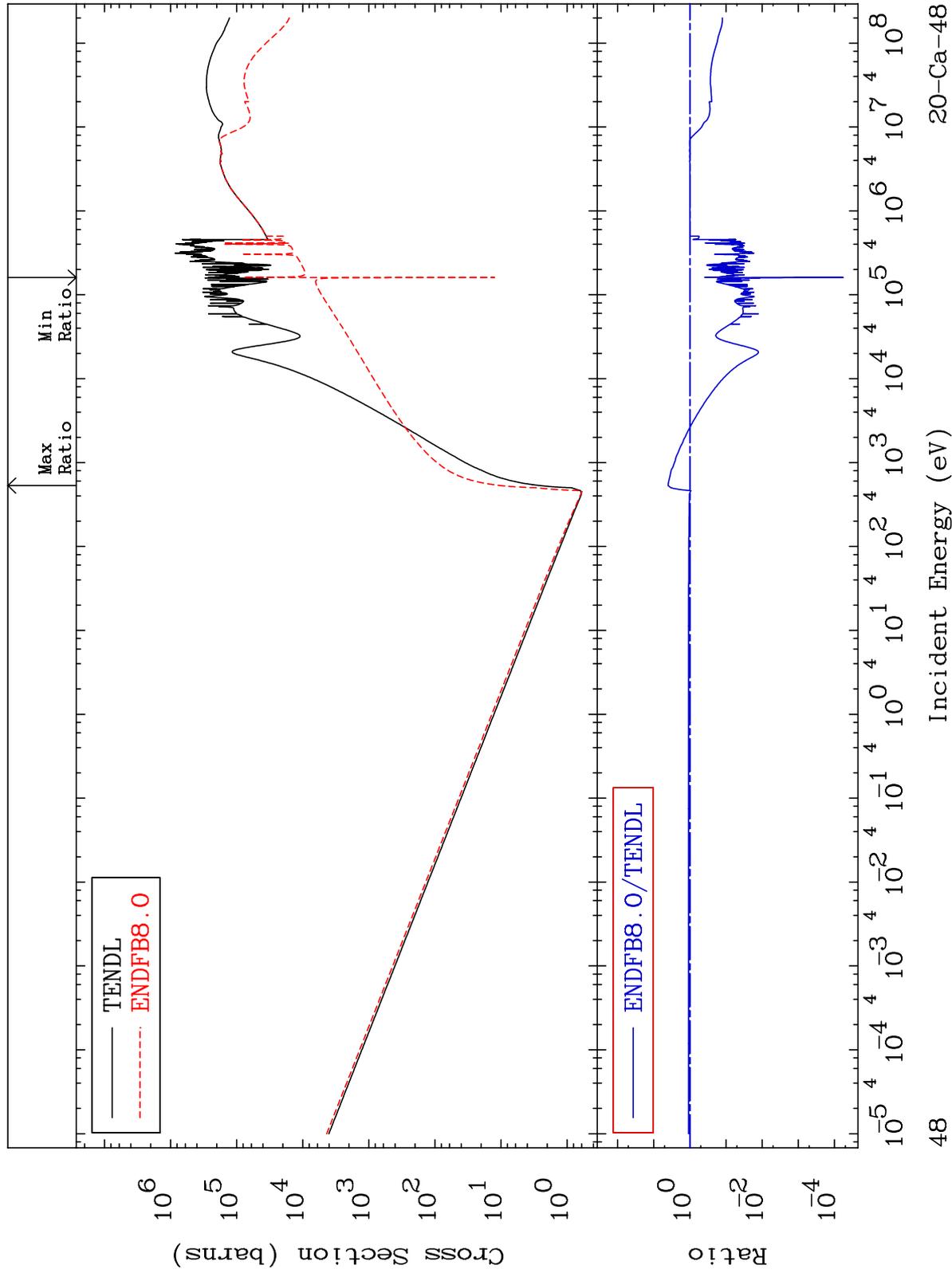
Incident Energy (eV)

20-Ca-48

MAT 2049

Dpa total (eV-barns)  
Cross Section

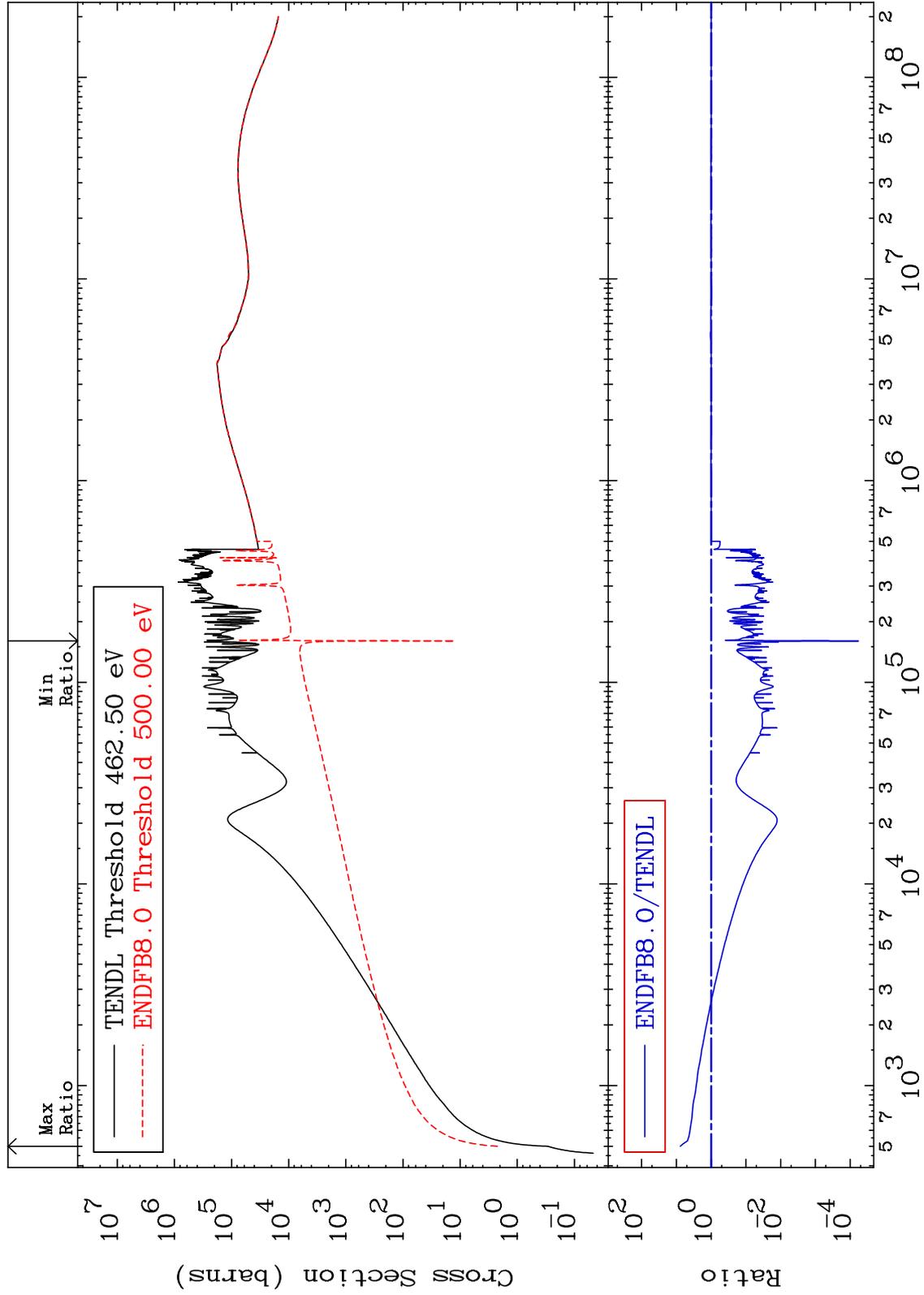
20-Ca-48  
-99.99 To 297.7 %



MAT 2049

Dpa elastic (mt2)  
Cross Section

20-Ca-48  
-99.99 To 667.6 %



49

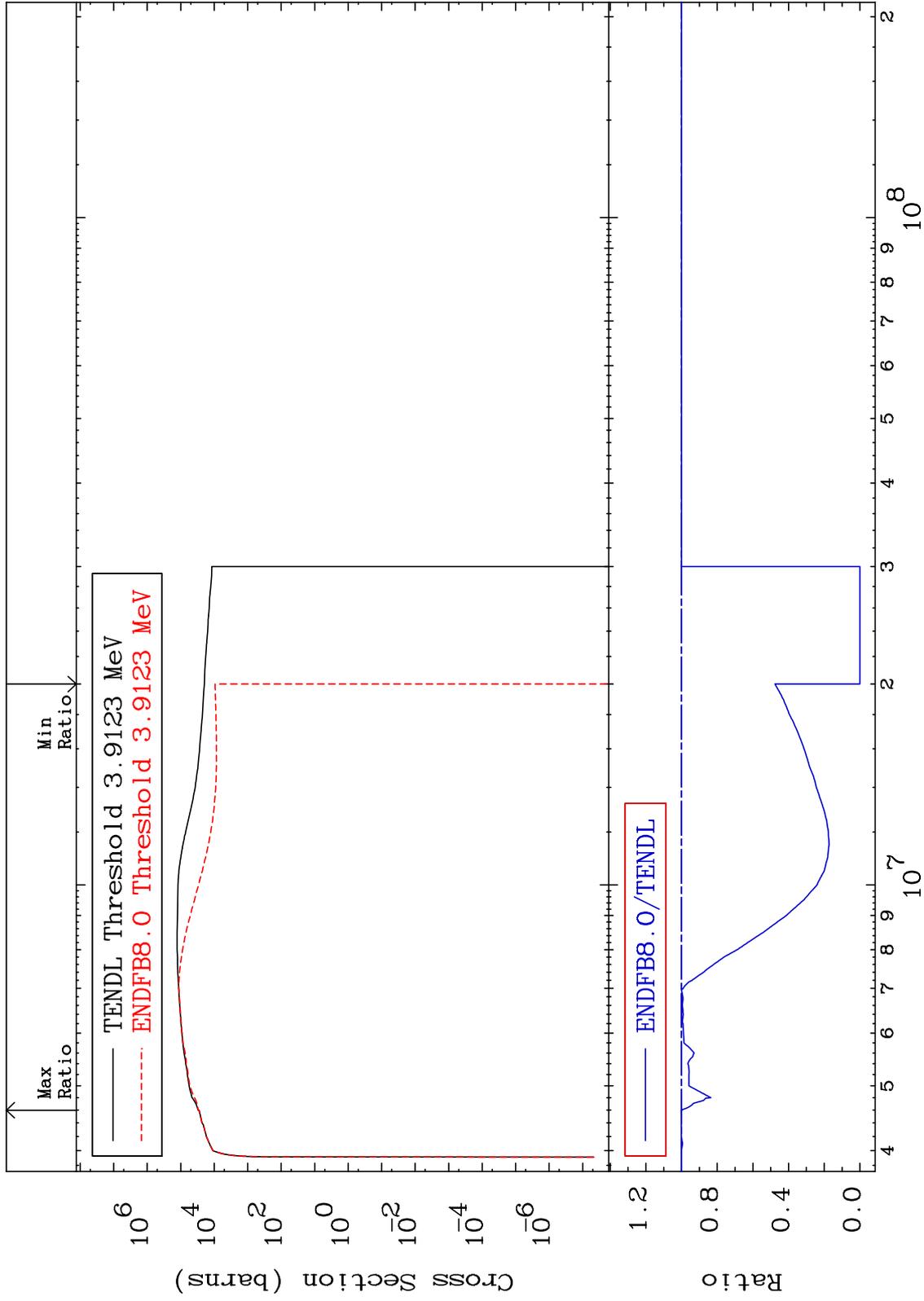
Incident Energy (eV)

20-Ca-48

MAT 2049

Dpa inelastic (mt51-91)  
Cross Section

20-Ca-48  
-100.0 To 0.222 %



MAT 2049

Dpa disappearance (mt102 -120)  
Cross Section

20-Ca-48  
-100.0 To 793.5 %

