

Program Complot  
(Version 2021-1)

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

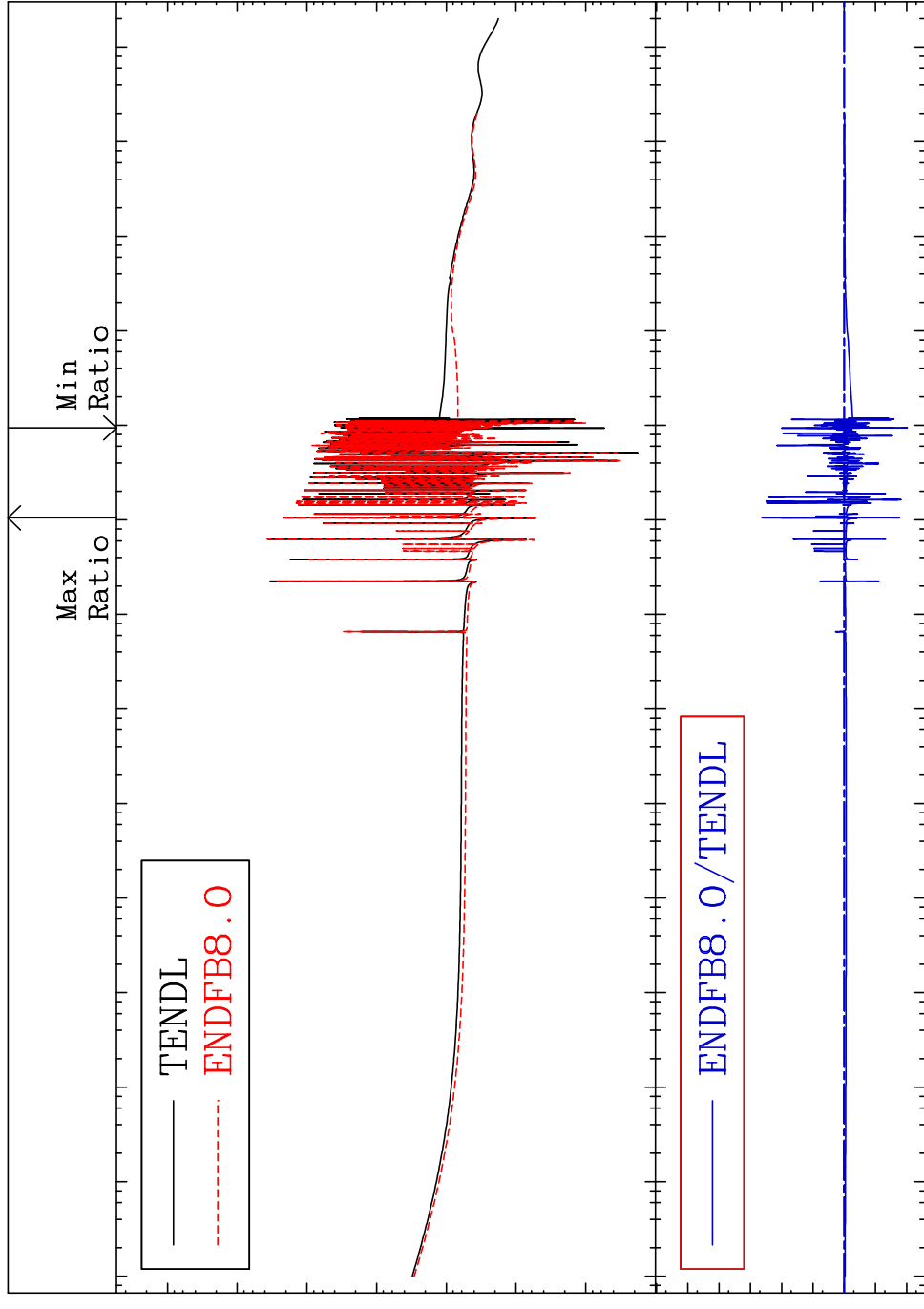
MAT 4449

Total

44-Ru-104

Cross Section

-99.03 To 9999. %



10<sup>5</sup>  
10<sup>4</sup>  
10<sup>3</sup>  
10<sup>2</sup>  
10<sup>1</sup>  
10<sup>0</sup>  
10<sup>-1</sup>  
Cross Section (barns)

10<sup>3</sup>  
10<sup>0</sup>  
Ratio

10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>  
Incident Energy (eV)

1

Incident Energy (eV)

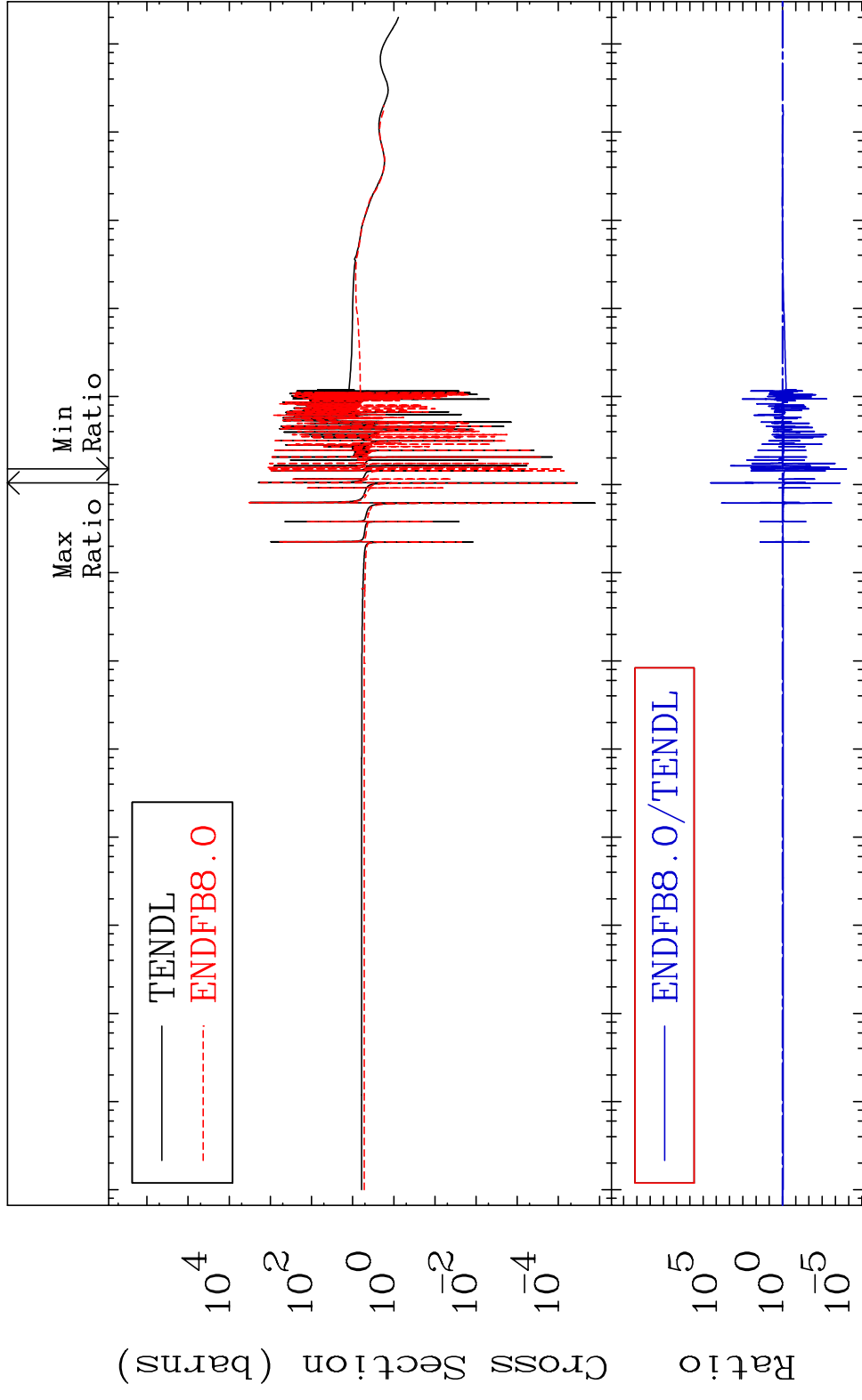
44-Ru-104

MAT 4449

Elastic

44-Ru-104

Cross Section -100.0 To 9999. %



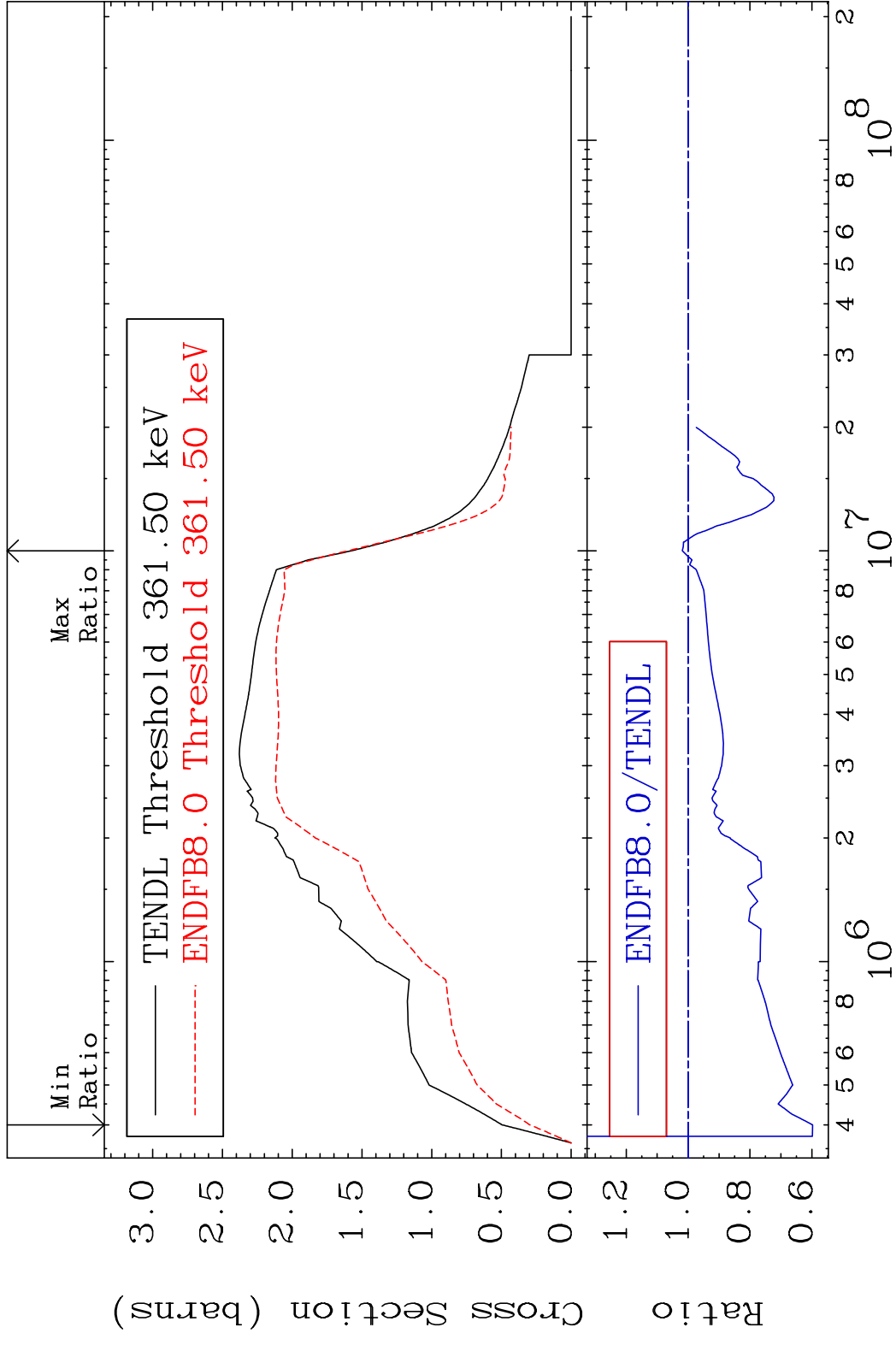
10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

2

Incident Energy (eV)

44-Ru-104

MAT 4449 Inelastic 44-Ru-104  
 Cross Section -40.22 To 1.862 %

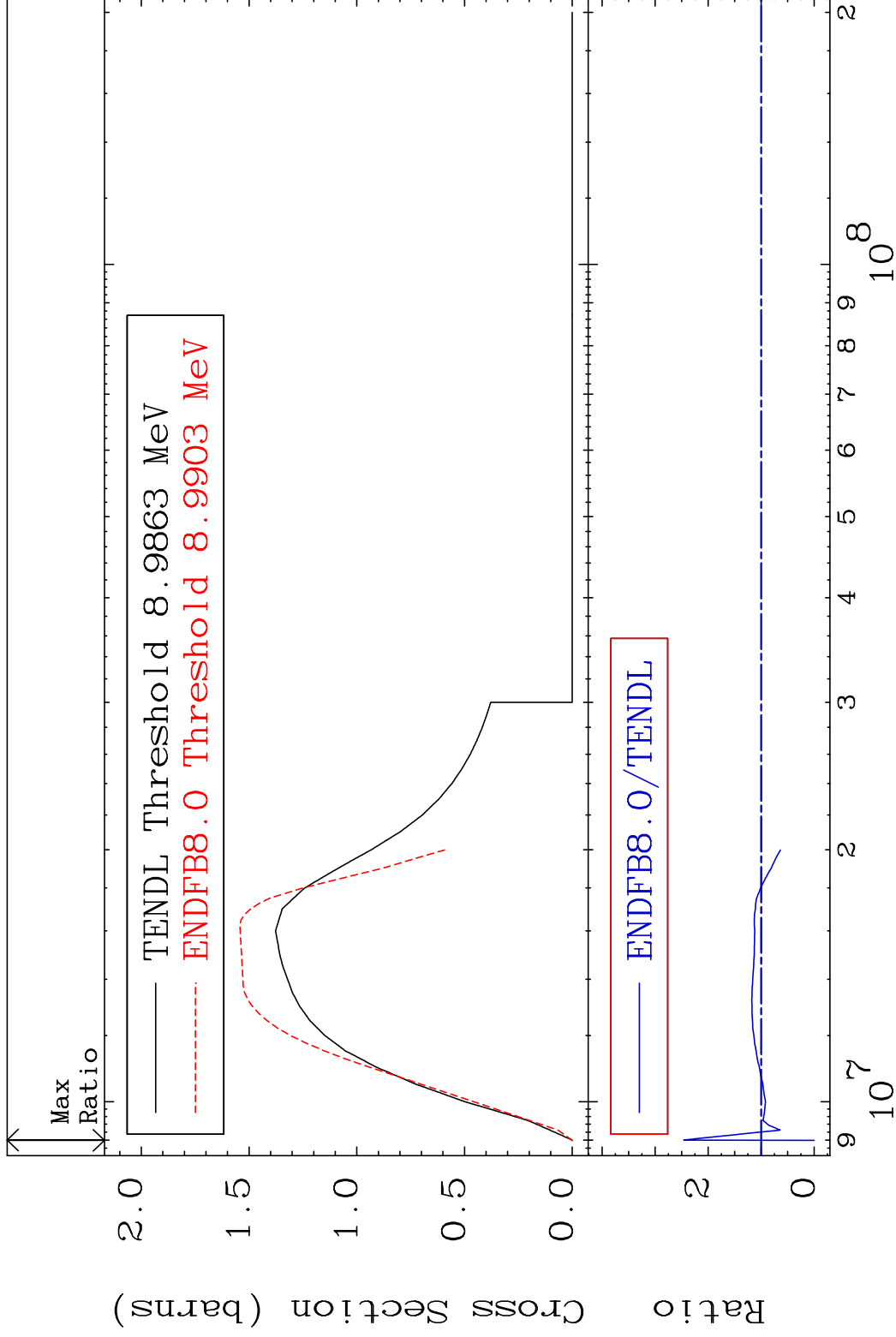


MAT 4449

(n,2n)

44-Ru-104

Cross Section -100.0 To 146.1 %



4

Incident Energy (eV)

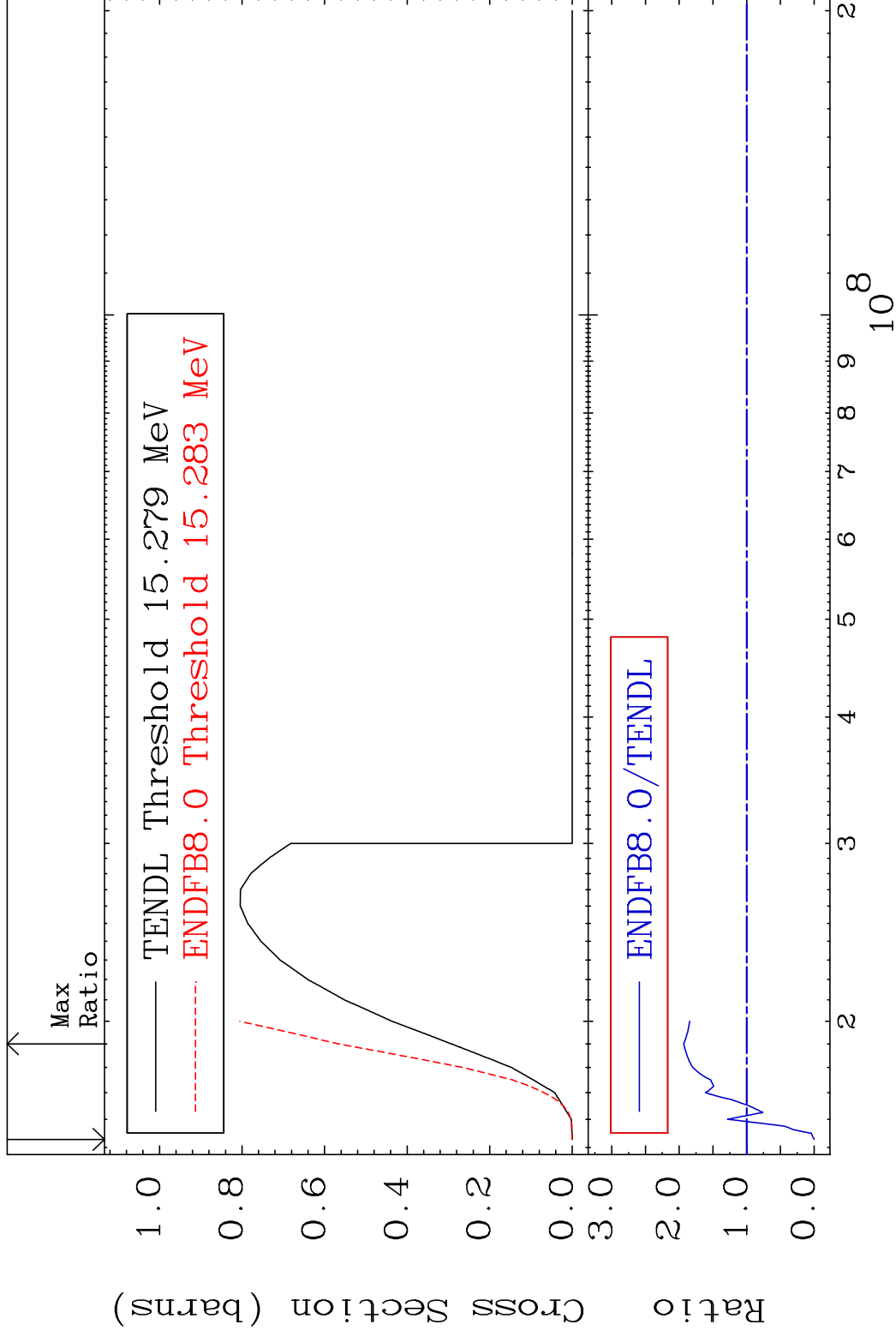
44-Ru-104

MAT 4449

(n,3n)

44-Ru-104

Cross Section -100.0 To 93.35 %



5

Incident Energy (eV)

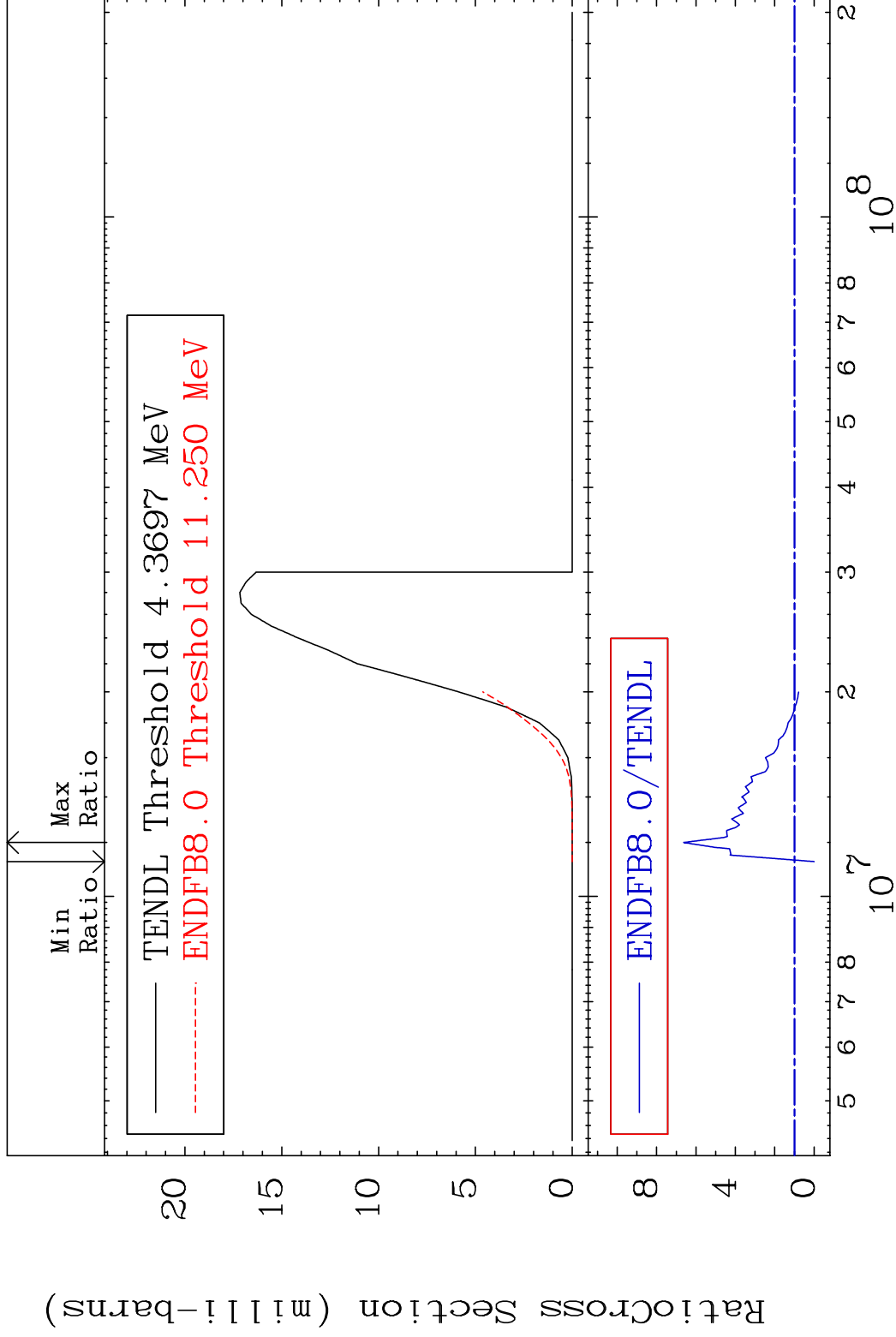
44-Ru-104

MAT 4449

(n, n')  $\alpha$

44-Ru-104

Cross Section -100.0 To 562.5 %



6

Incident Energy (eV)

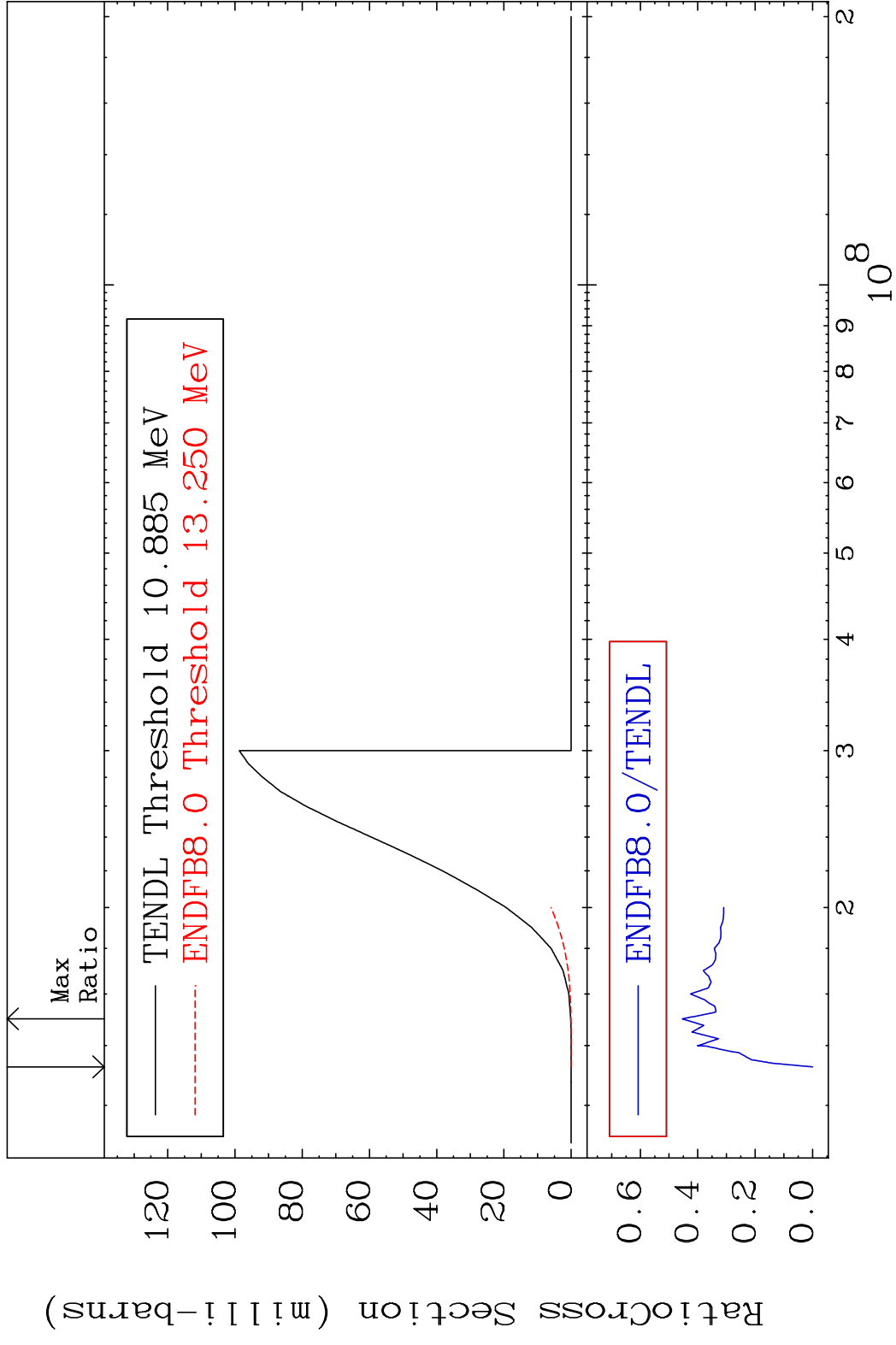
44-Ru-104

MAT 4449

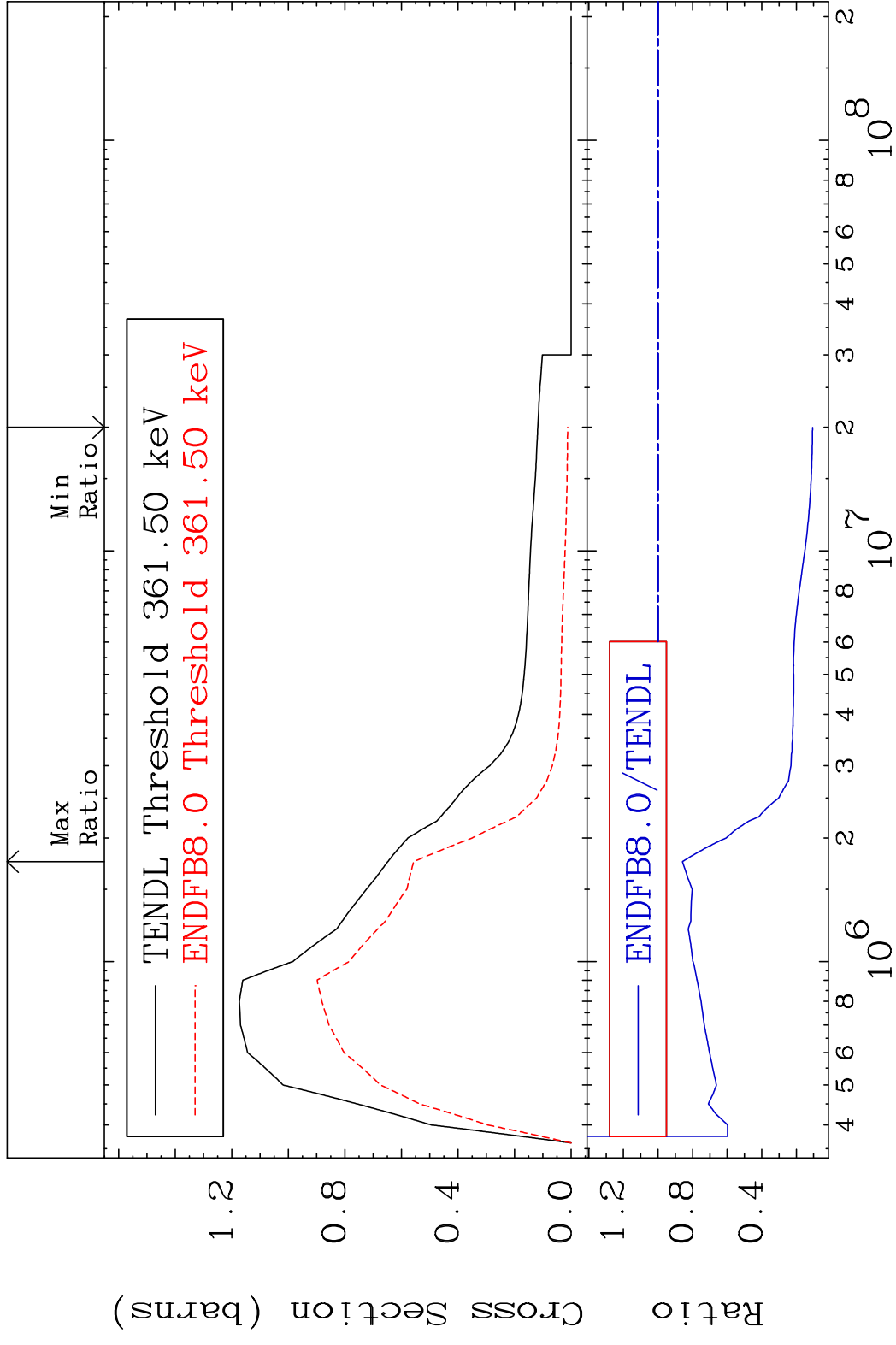
(n, n') p

44-Ru-104

Cross Section -100.0 To -54.64%

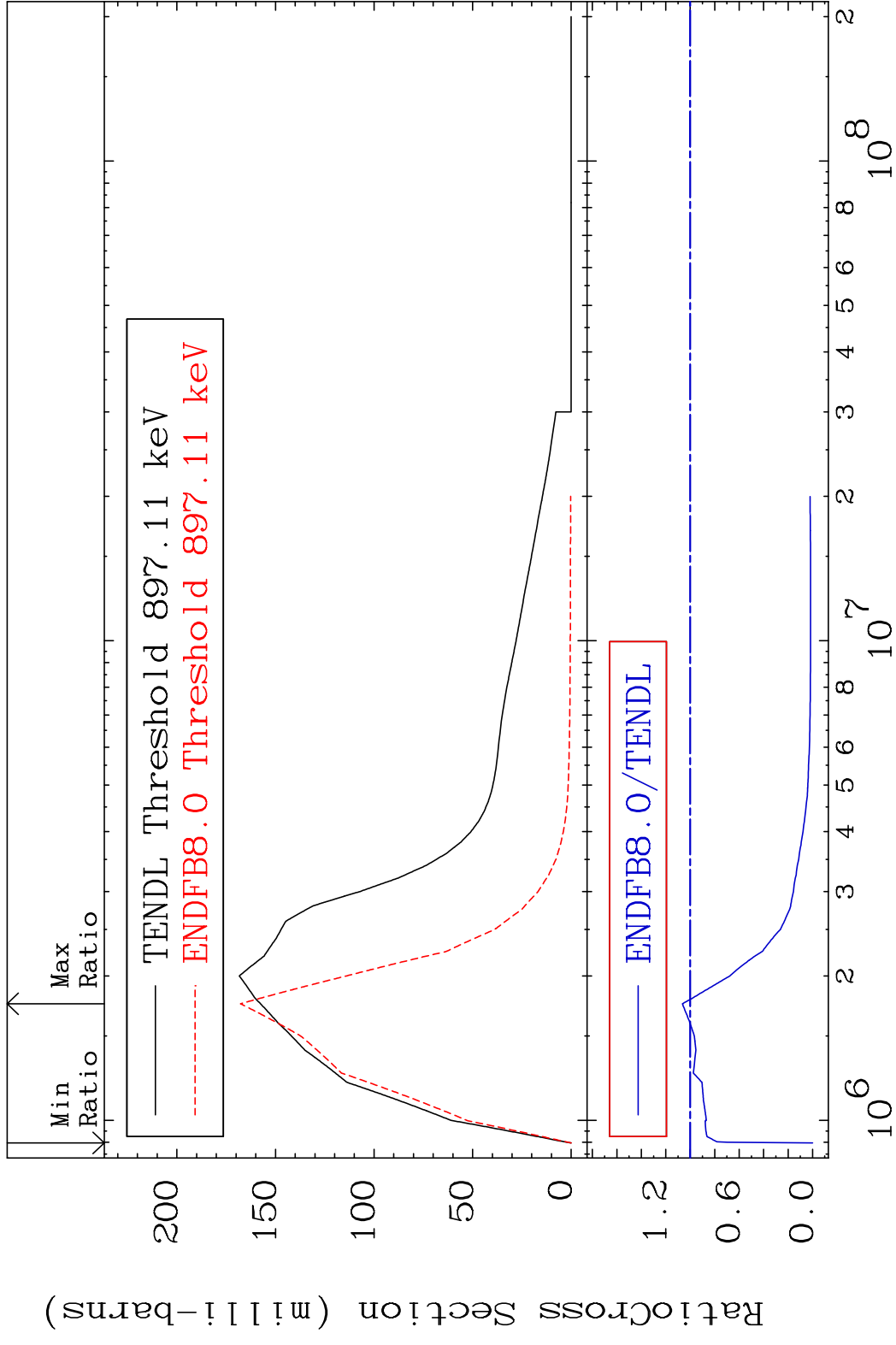


MAT 4449 MT= 51 (n, n') Level 44-Ru-104  
 Cross Section -89.39 To -14.09%



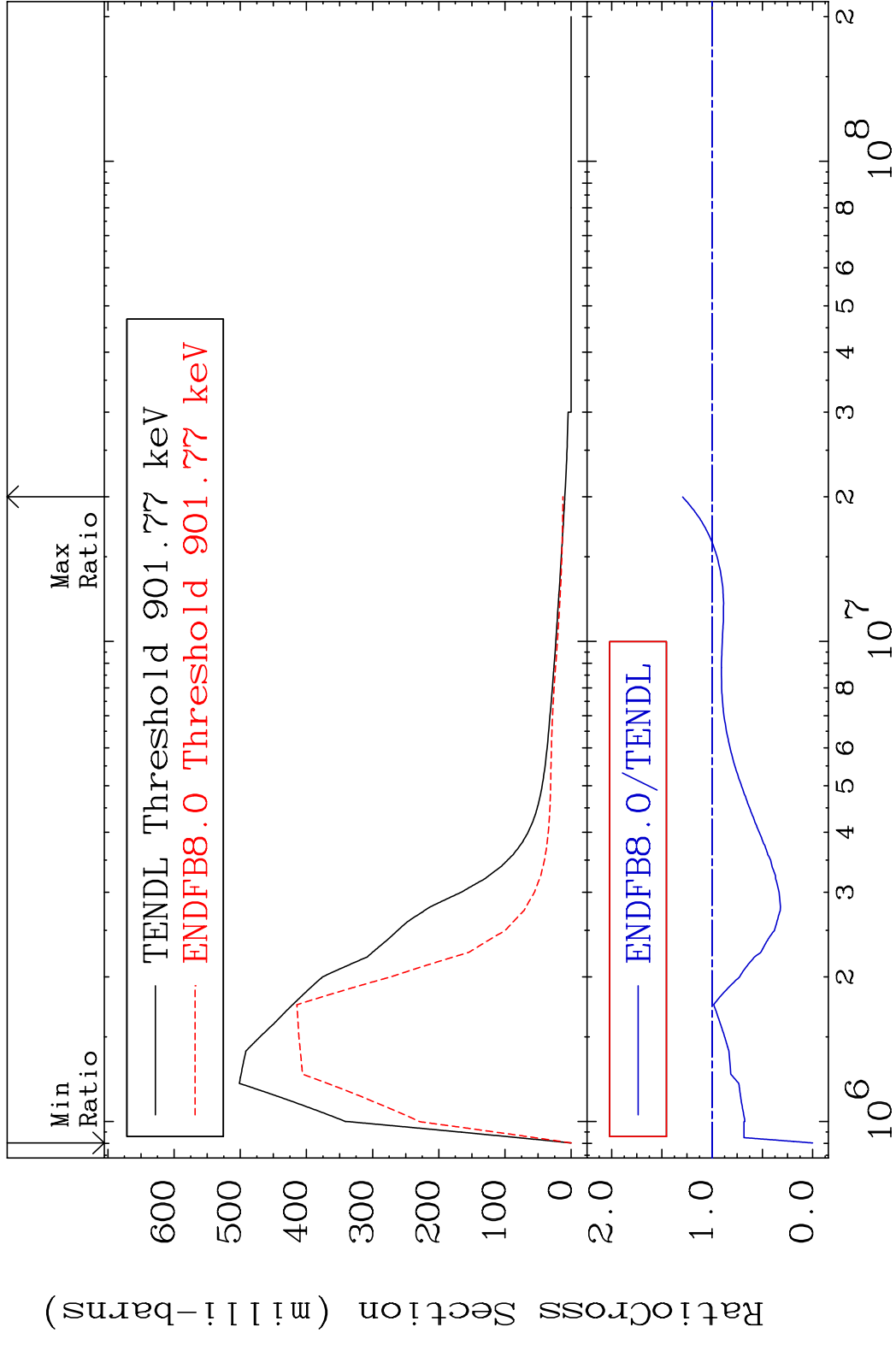
8 Incident Energy (eV) 44-Ru-104

MAT 4449 MT= 52 (n, n') Level 44-Ru-104  
 Cross Section -100.0 To 6.456 %

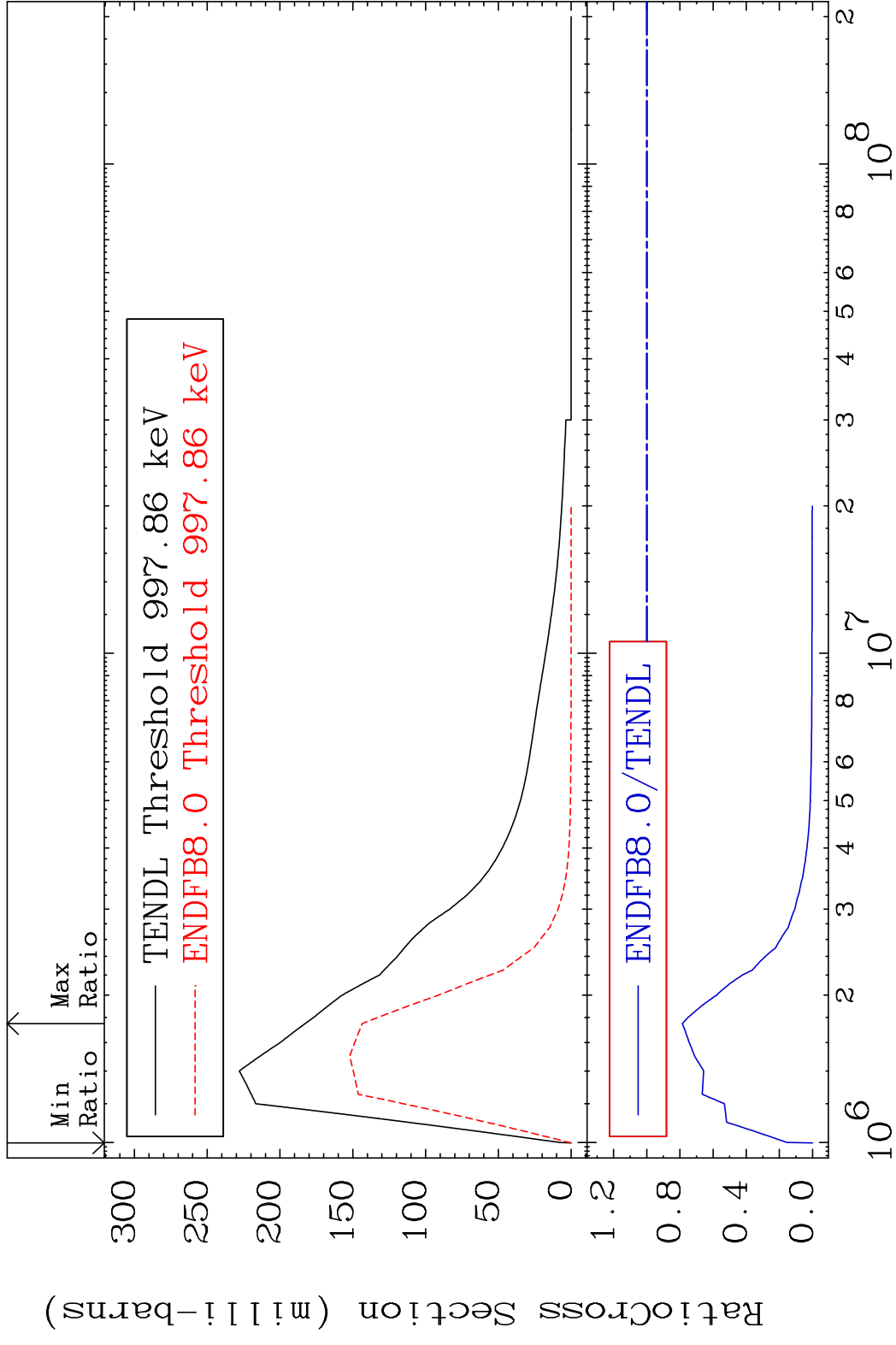


9 Incident Energy (eV) 44-Ru-104

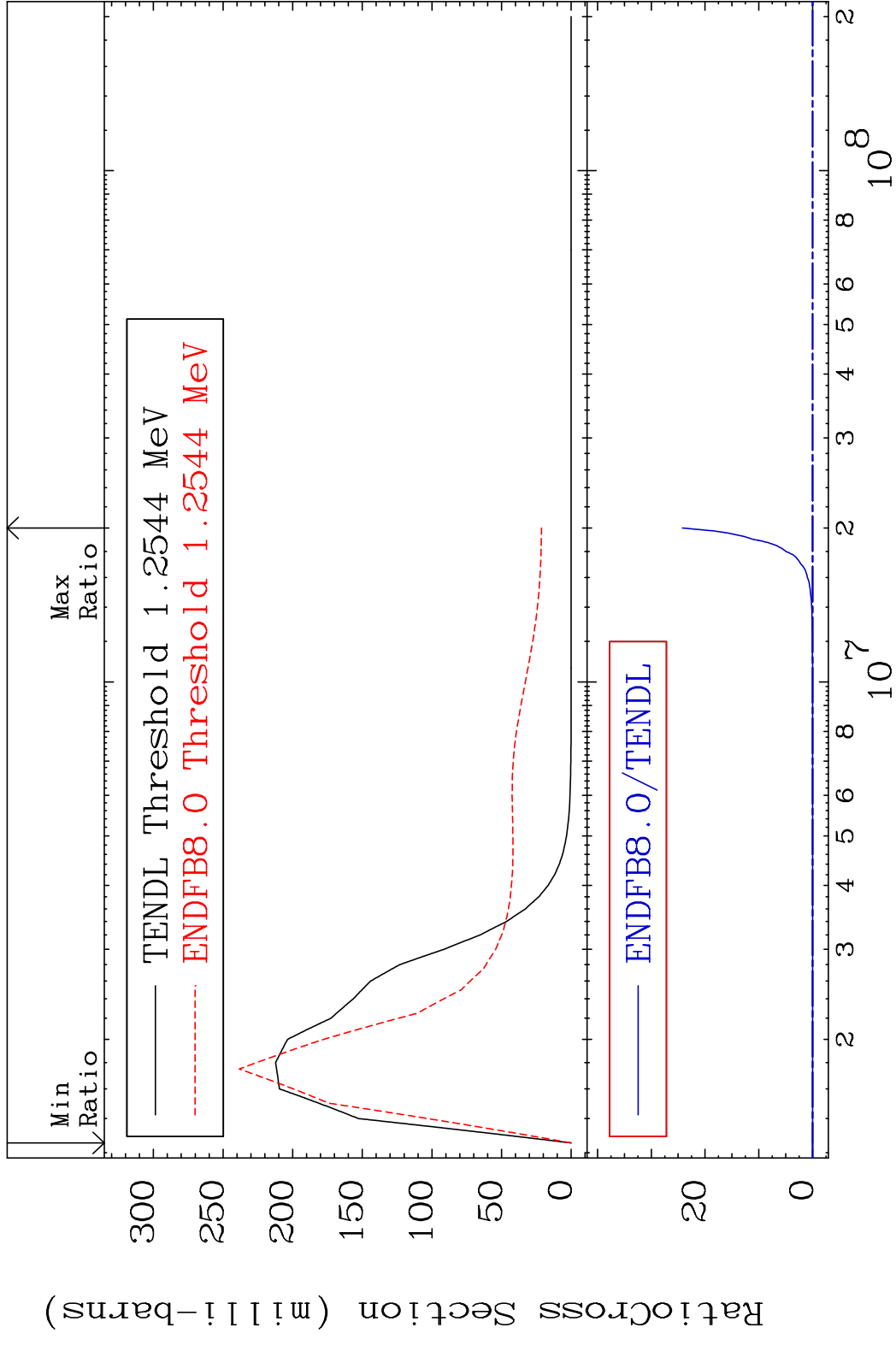
MAT 4449 MT= 53 (n, n') Level 44-Ru-104  
 Cross Section -100.0 To 29.59 %



MAT 4449 MT= 54 (n,n') Level 44-Ru-104  
 Cross Section -100.0 To -21.47%



MAT 4449 MT= 55 (n, n') Level 44-Ru-104  
 Cross Section -100.0 To 9999. %

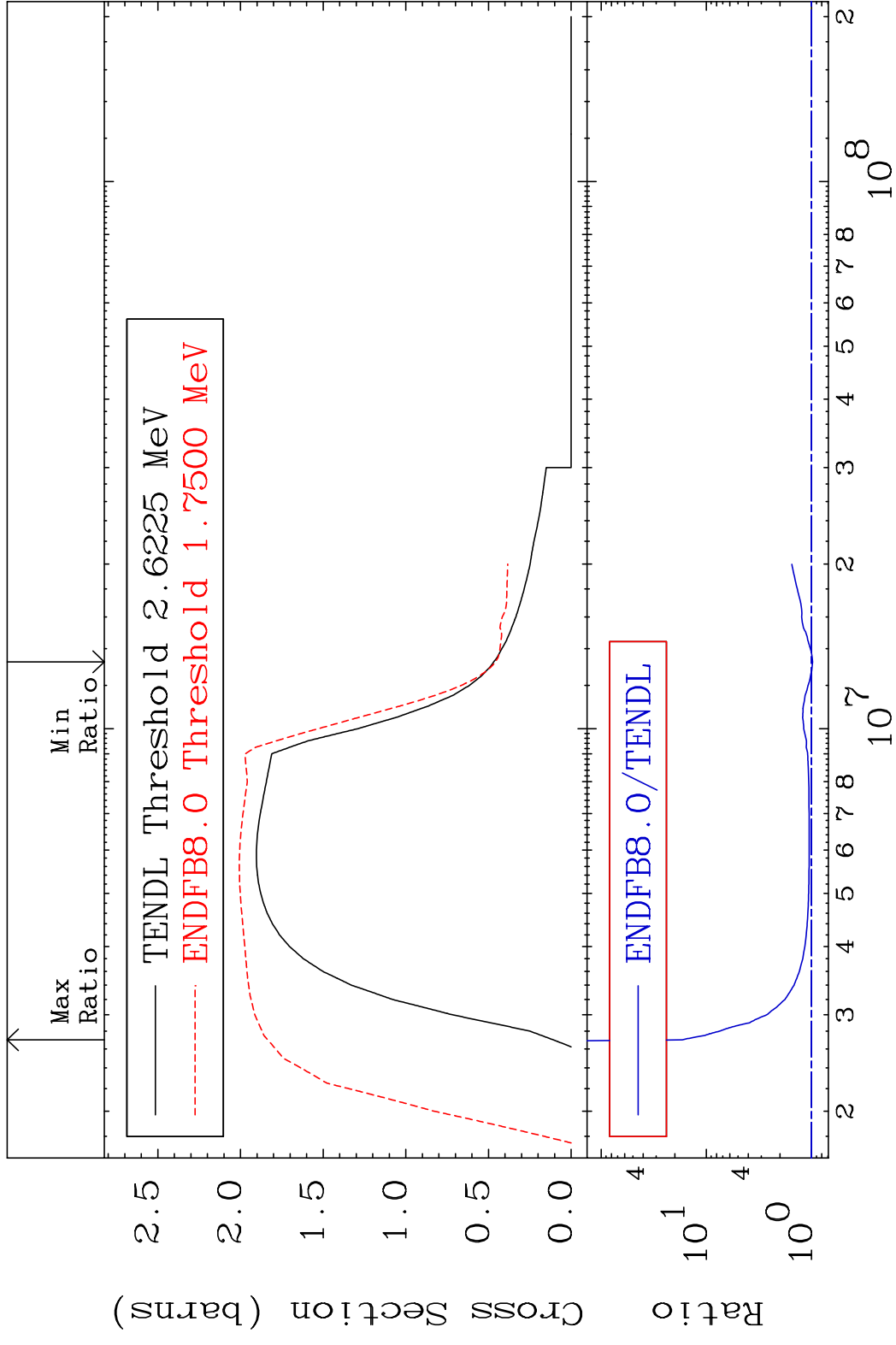


MAT 4449

(n,n') Continuum

44-Ru-104

Cross Section -2.150 To 1594. %

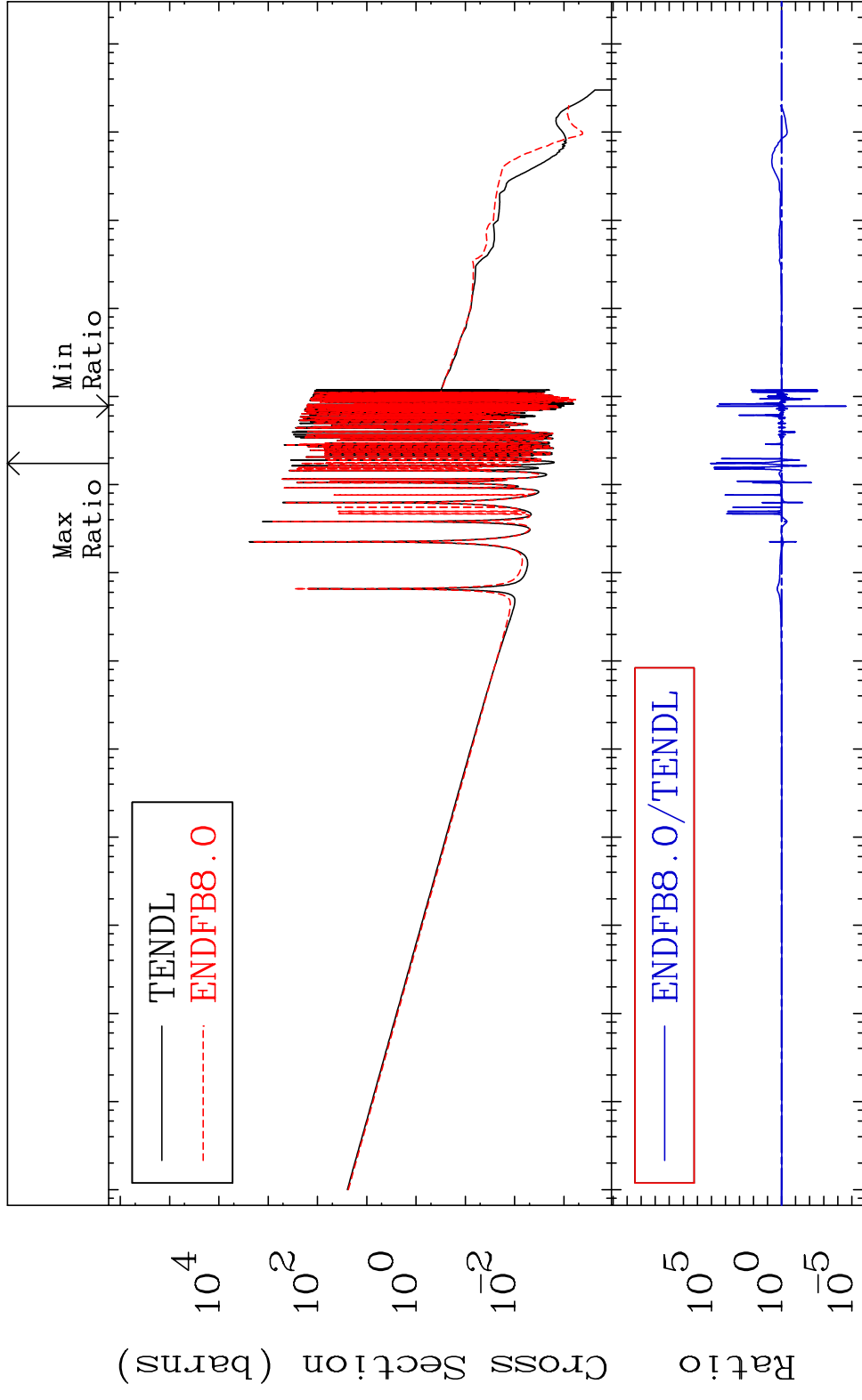


MAT 4449

44-Ru-104

(n,  $\gamma$ )

Cross Section -100.0 To 9999. %



14

Incident Energy (eV)

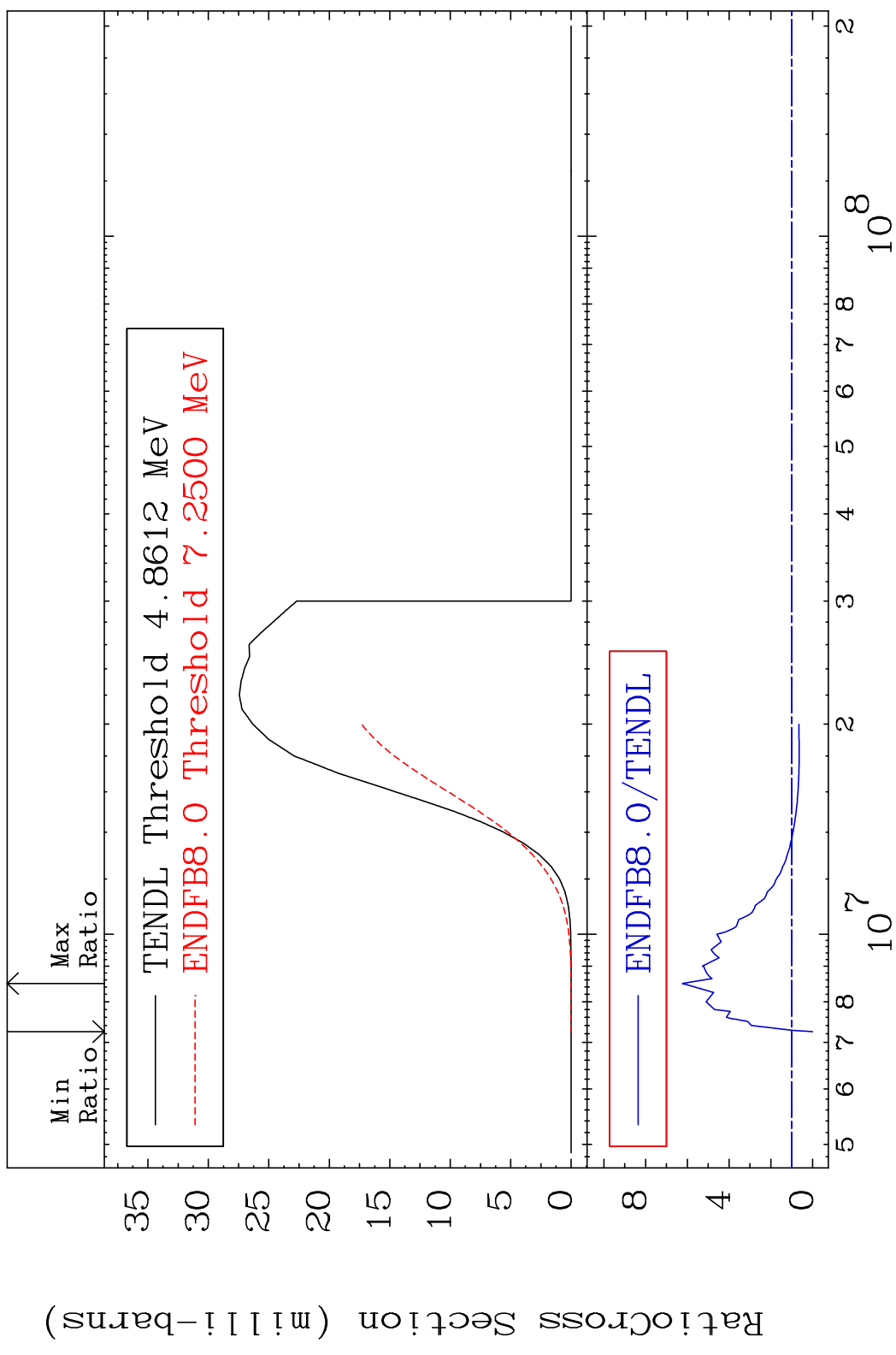
44-Ru-104

MAT 4449

(n, p)

44-Ru-104

Cross Section -100.0 To 524.0 %

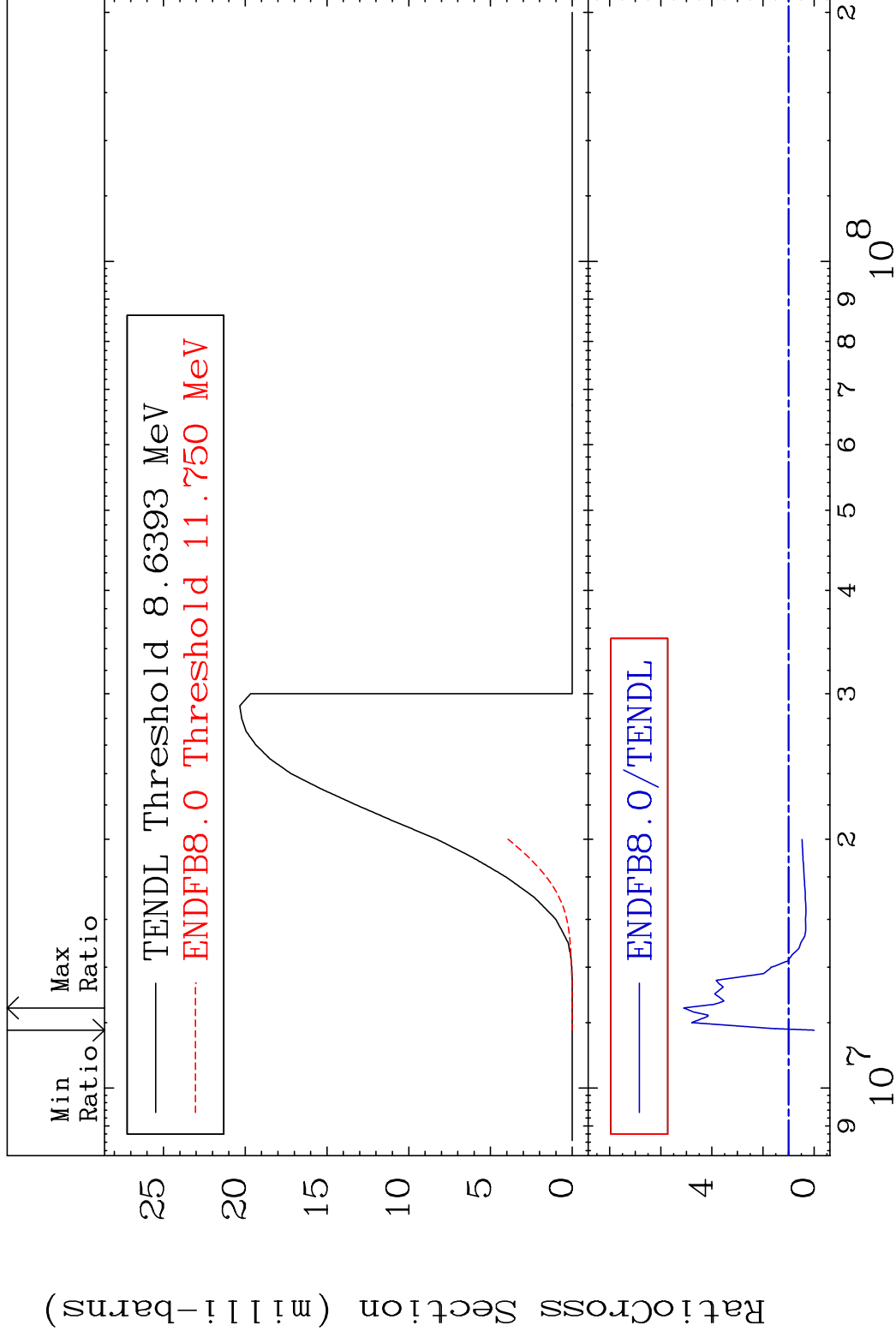


MAT 4449

(n, d)

44-Ru-104

Cross Section -100.0 To 410.6 %



16

Incident Energy (eV)

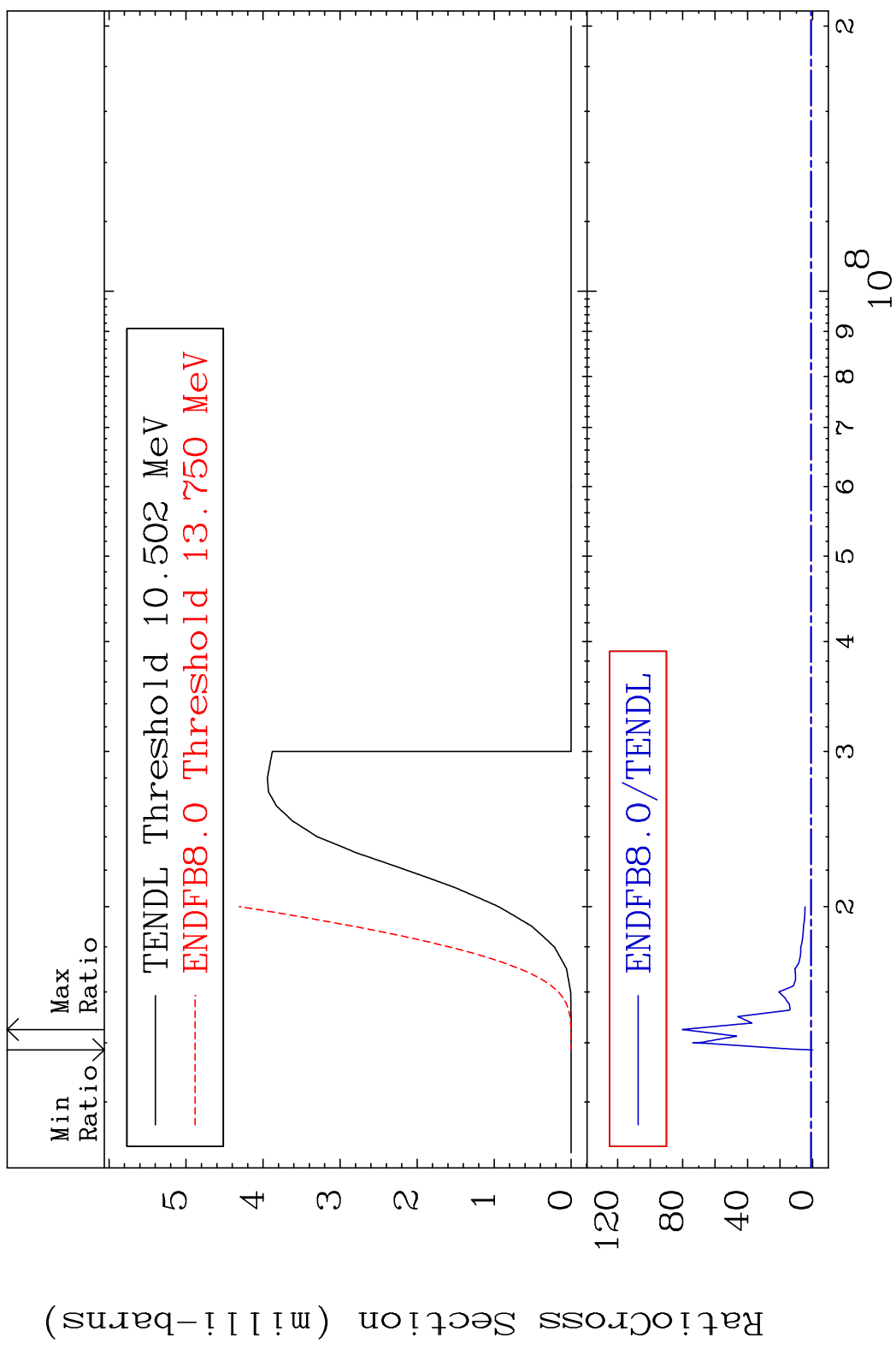
44-Ru-104

MAT 4449

(n, t)

44-Ru-104

Cross Section -100.0 To 7916. %

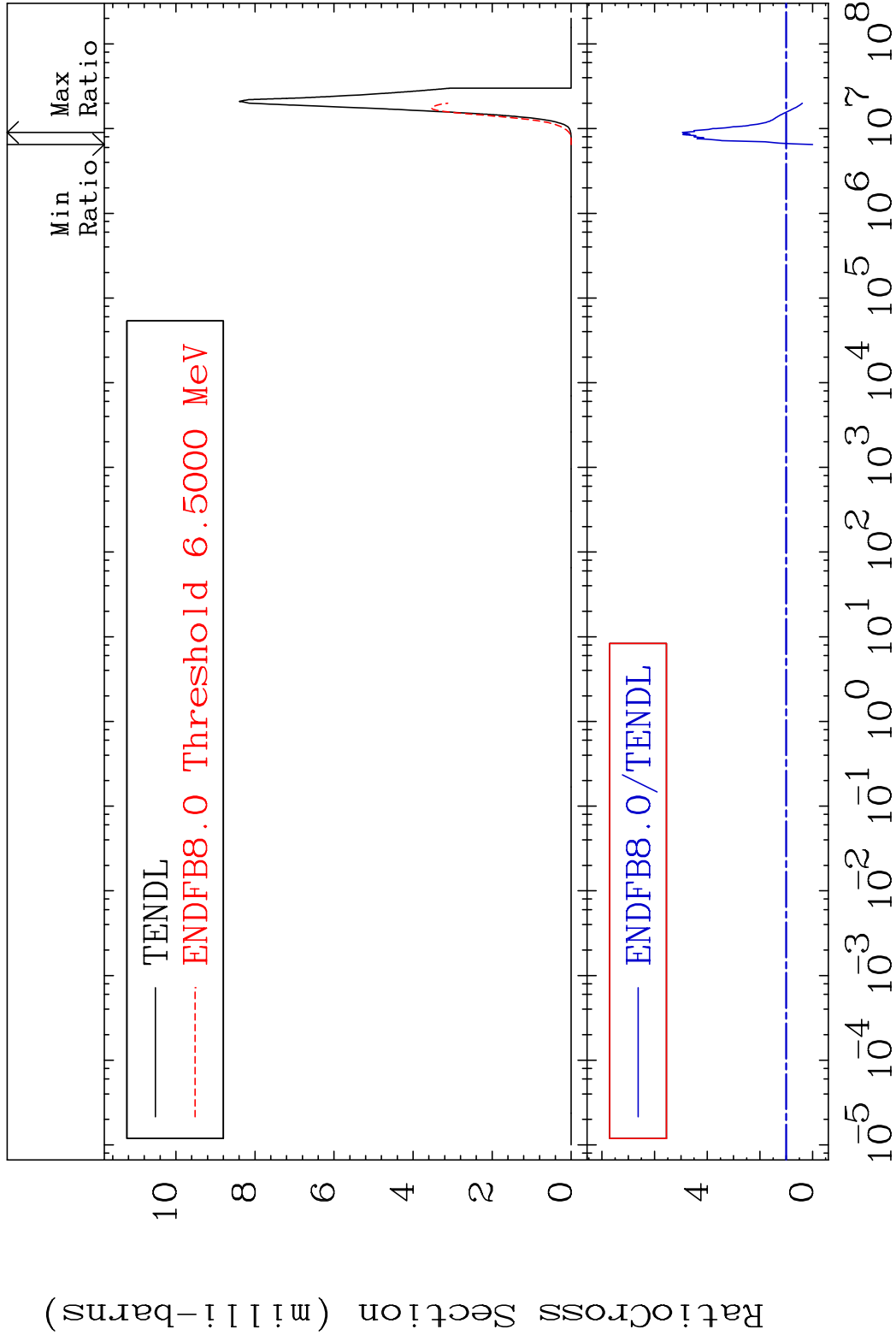


MAT 4449

(n,  $\alpha$ )

44-Ru-104

Cross Section -100.0 To 394.6 %

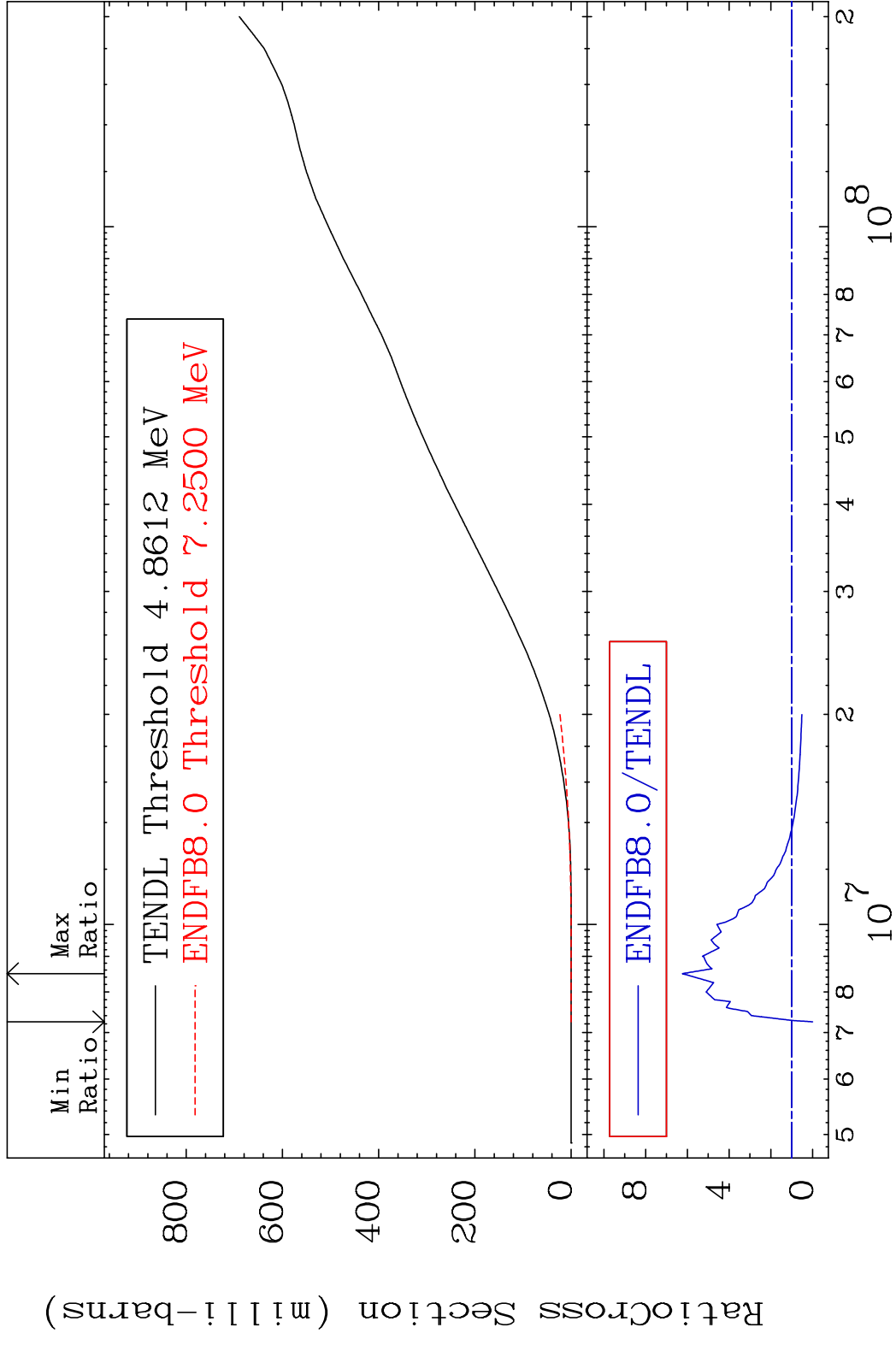


18

Incident Energy (eV)

44-Ru-104

MAT 4449 Hydrogen Production 44-Ru-104  
 Cross Section -100.0 To 524.0 %

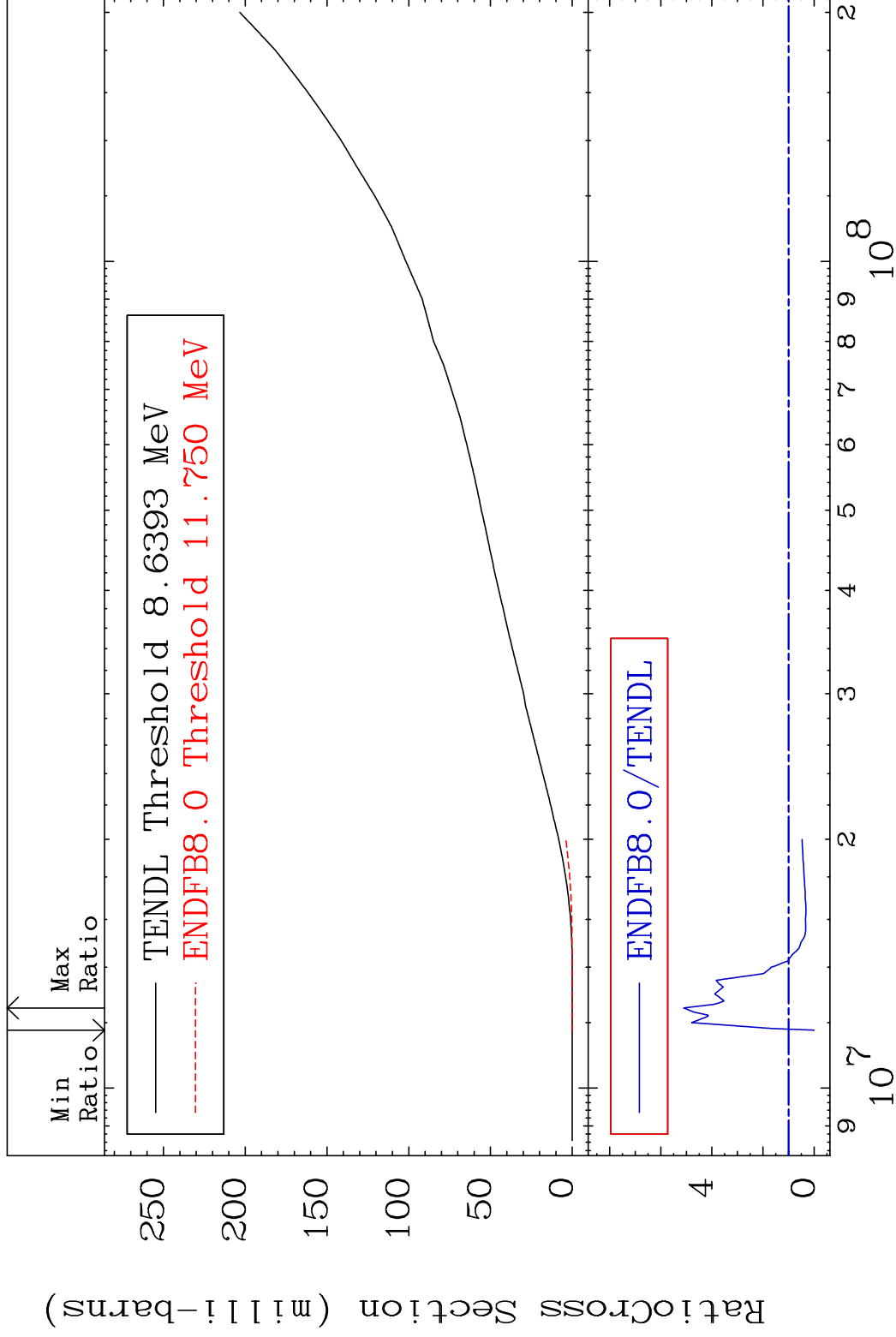


MAT 4449

Deuterium Production

44-Ru-104

Cross Section -100.0 To 410.6 %



20

Incident Energy (eV)

44-Ru-104

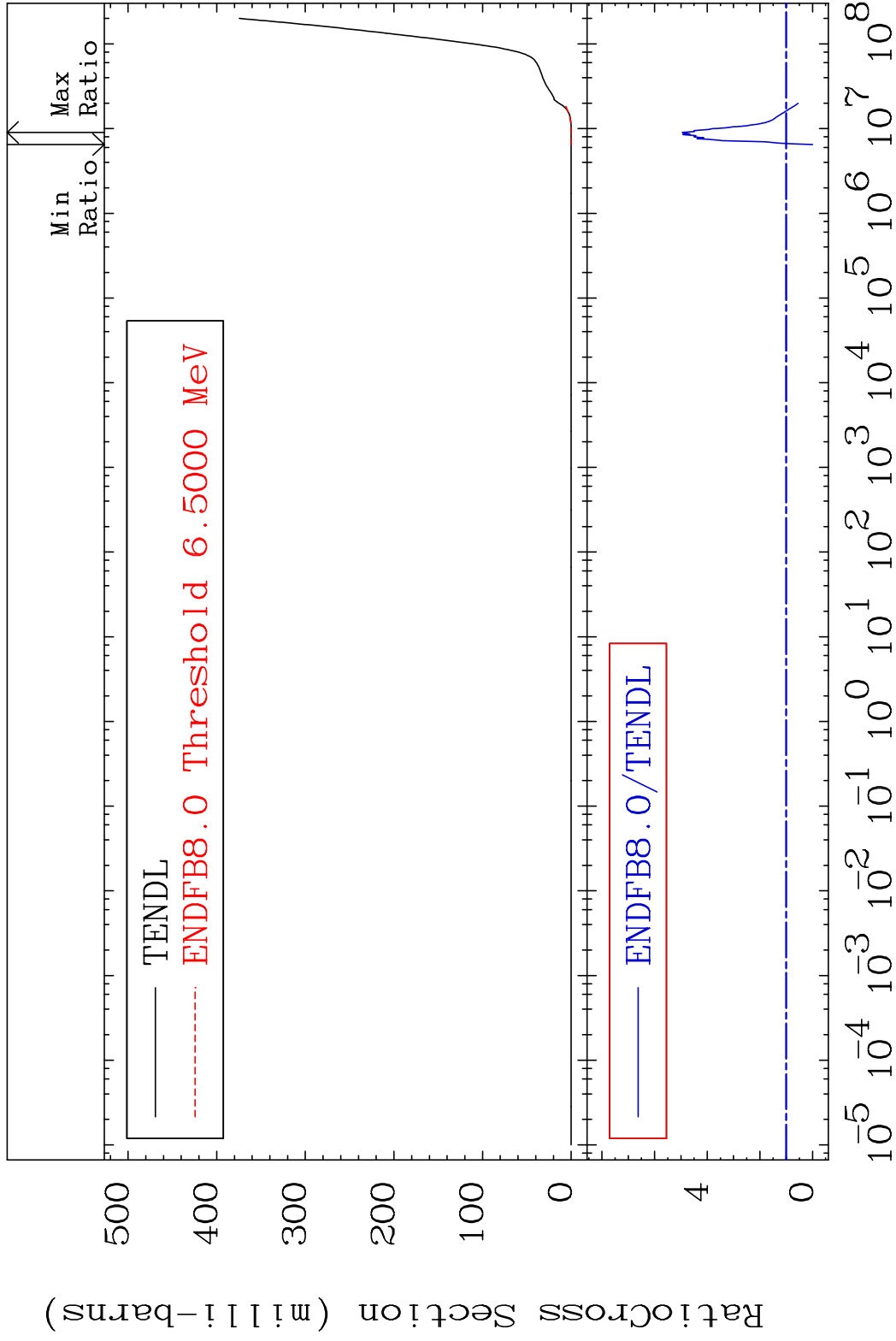


MAT 4449

He-4 Production

44-Ru-104

Cross Section -100.0 To 394.6 %

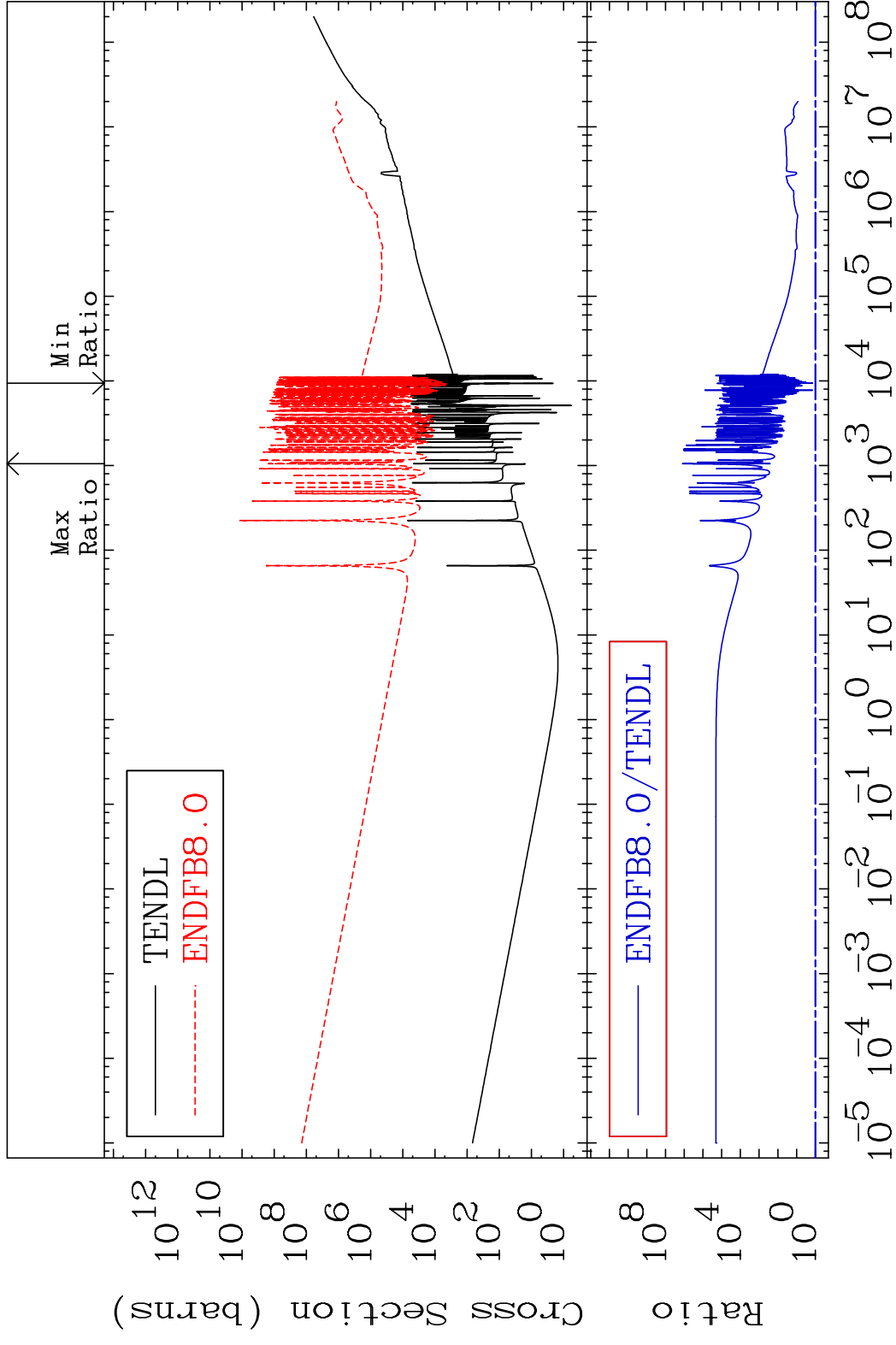


22

Incident Energy (eV)

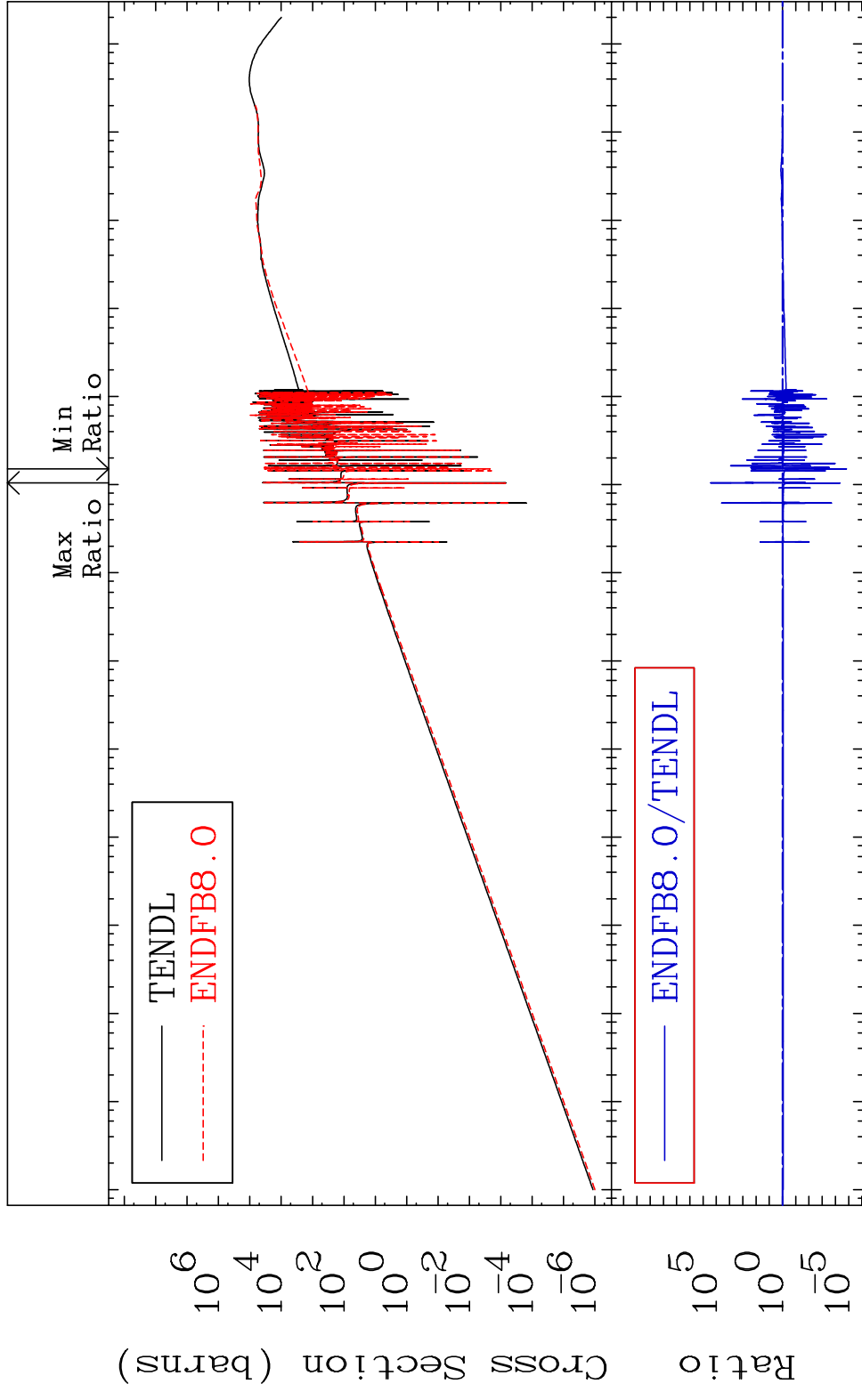
44-Ru-104

MAT 4449 Kerma total (eV-barns) 44-Ru-104  
 Cross Section 39.41 To 9999. %

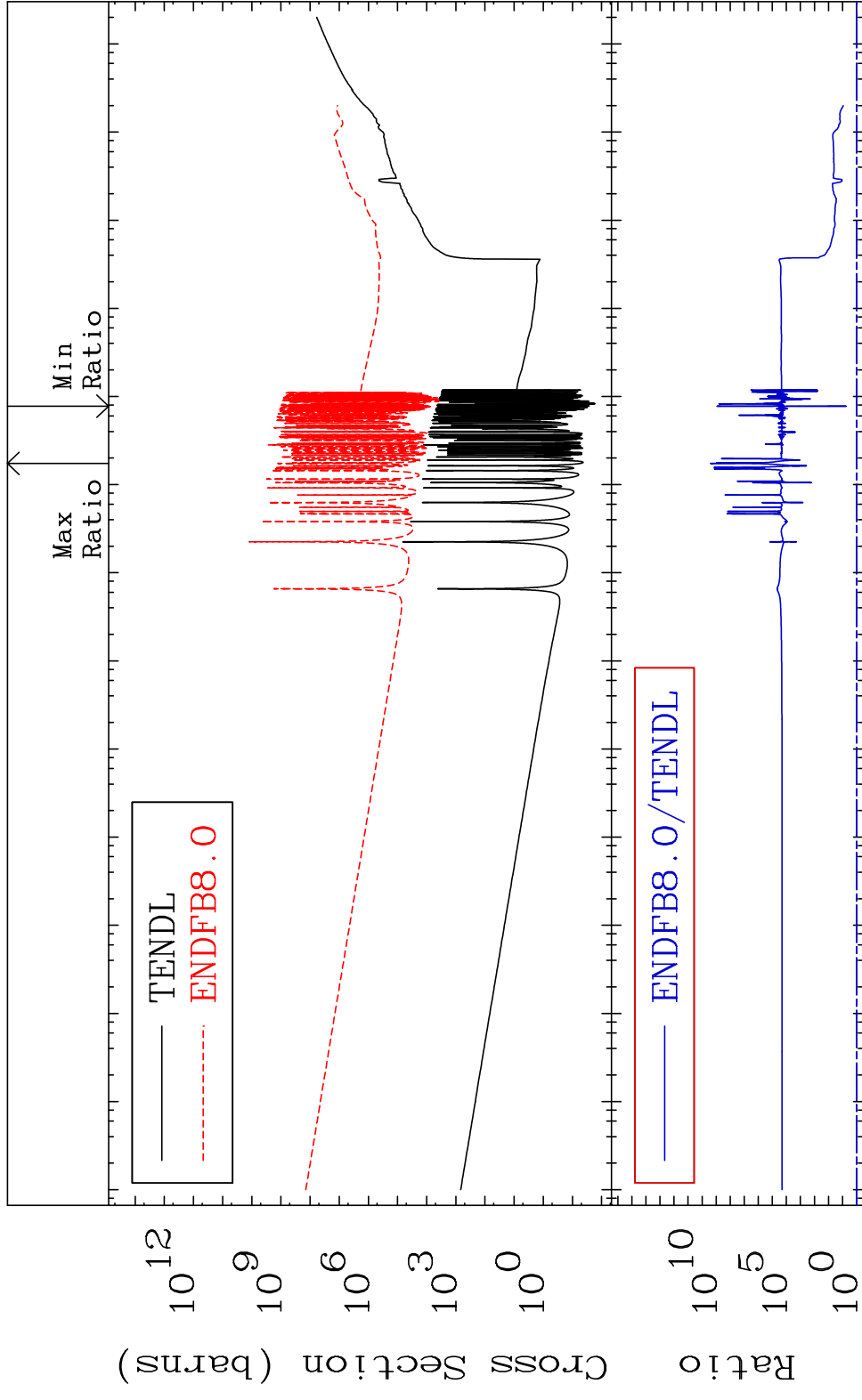


MAT 4449

Kerma elastic Cross Section -100.0 To 9999. %  
44-Ru-104

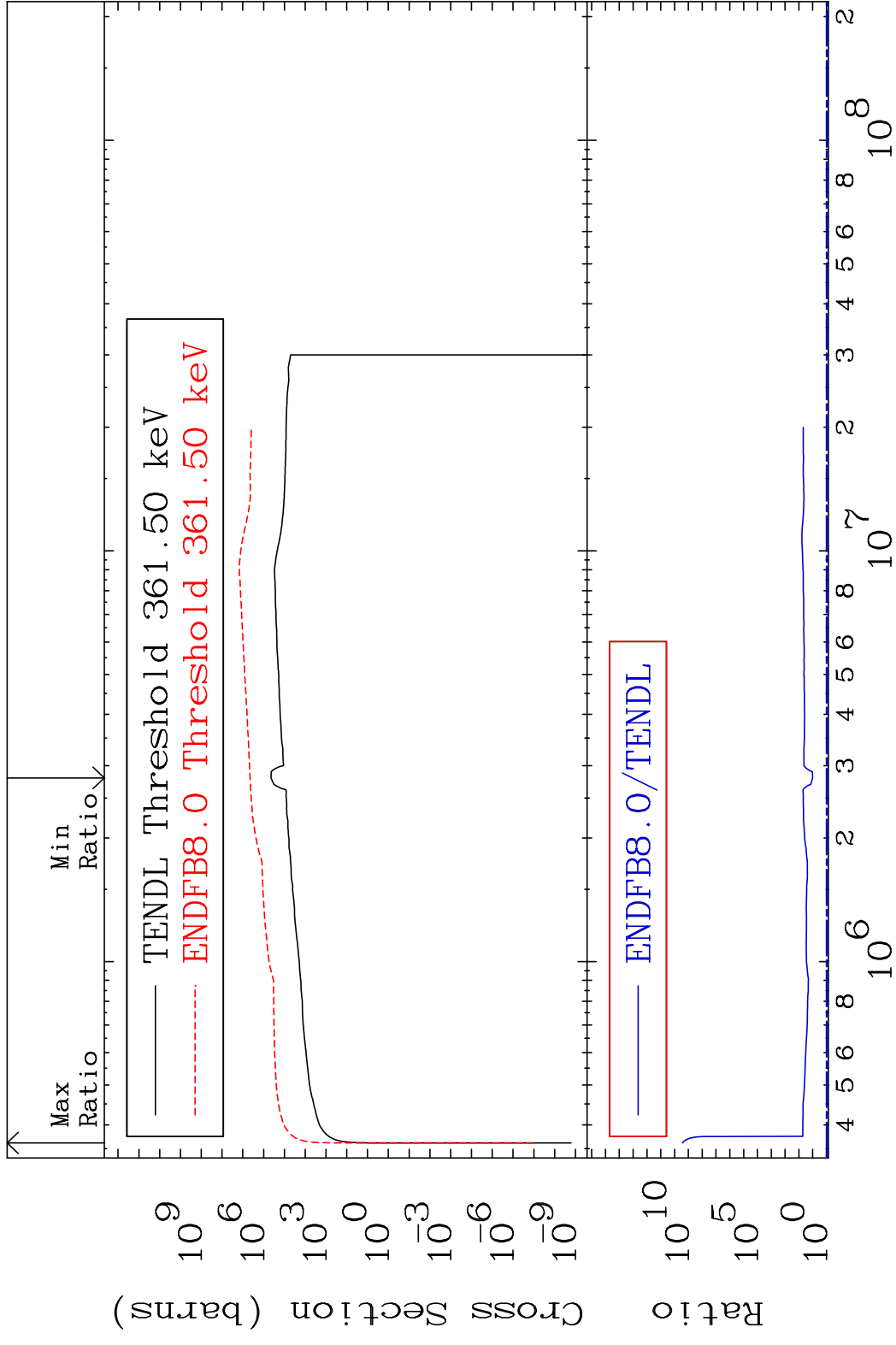


MAT 4449 Kerma non-elastic (all but mt2) 44-Ru-104  
 Cross Section 439.1 To 9999. %

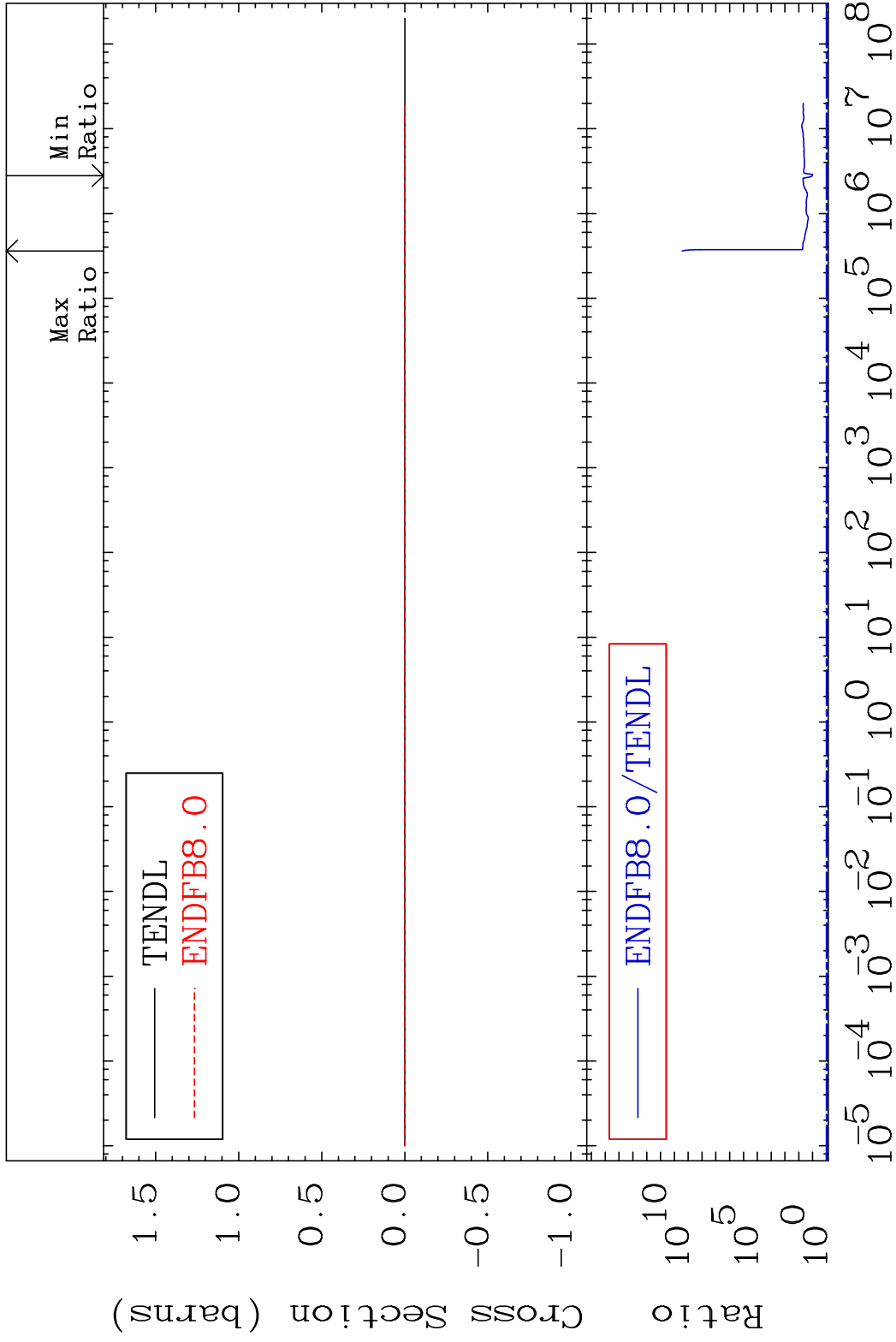


10<sup>-5</sup> 10<sup>-4</sup> 10<sup>-3</sup> 10<sup>-2</sup> 10<sup>-1</sup> 10<sup>0</sup> 10<sup>1</sup> 10<sup>2</sup> 10<sup>3</sup> 10<sup>4</sup> 10<sup>5</sup> 10<sup>6</sup> 10<sup>7</sup> 10<sup>8</sup>

MAT 4449 Kerma inelastic (mt51-91) 44-Ru-104  
 Cross Section 923.9 To 9999. %

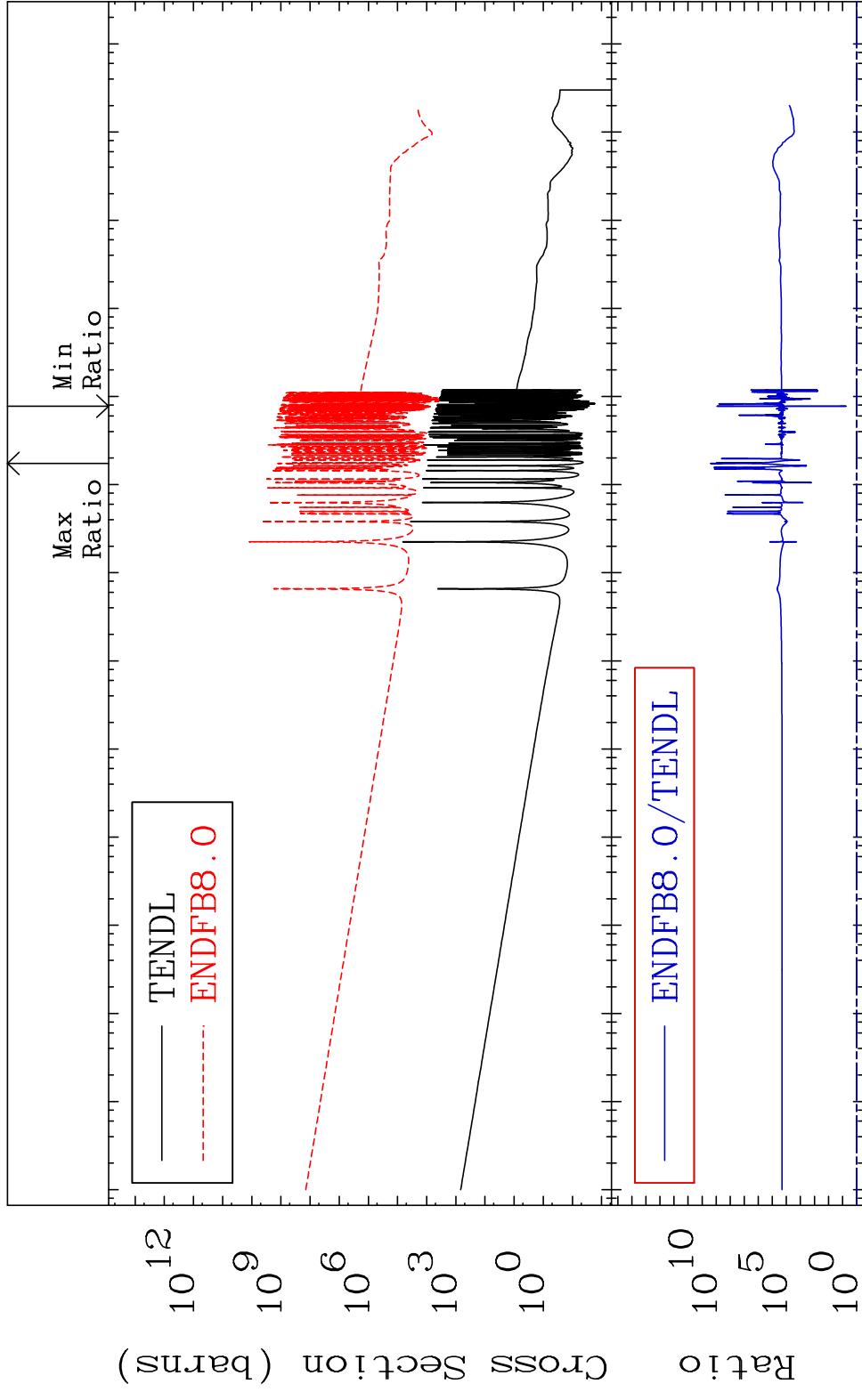


MAT 4449 Kerma fission (mt18 or mt19-20-21-38) 44-Ru-104  
 Cross Section 923.9 To 9999. %

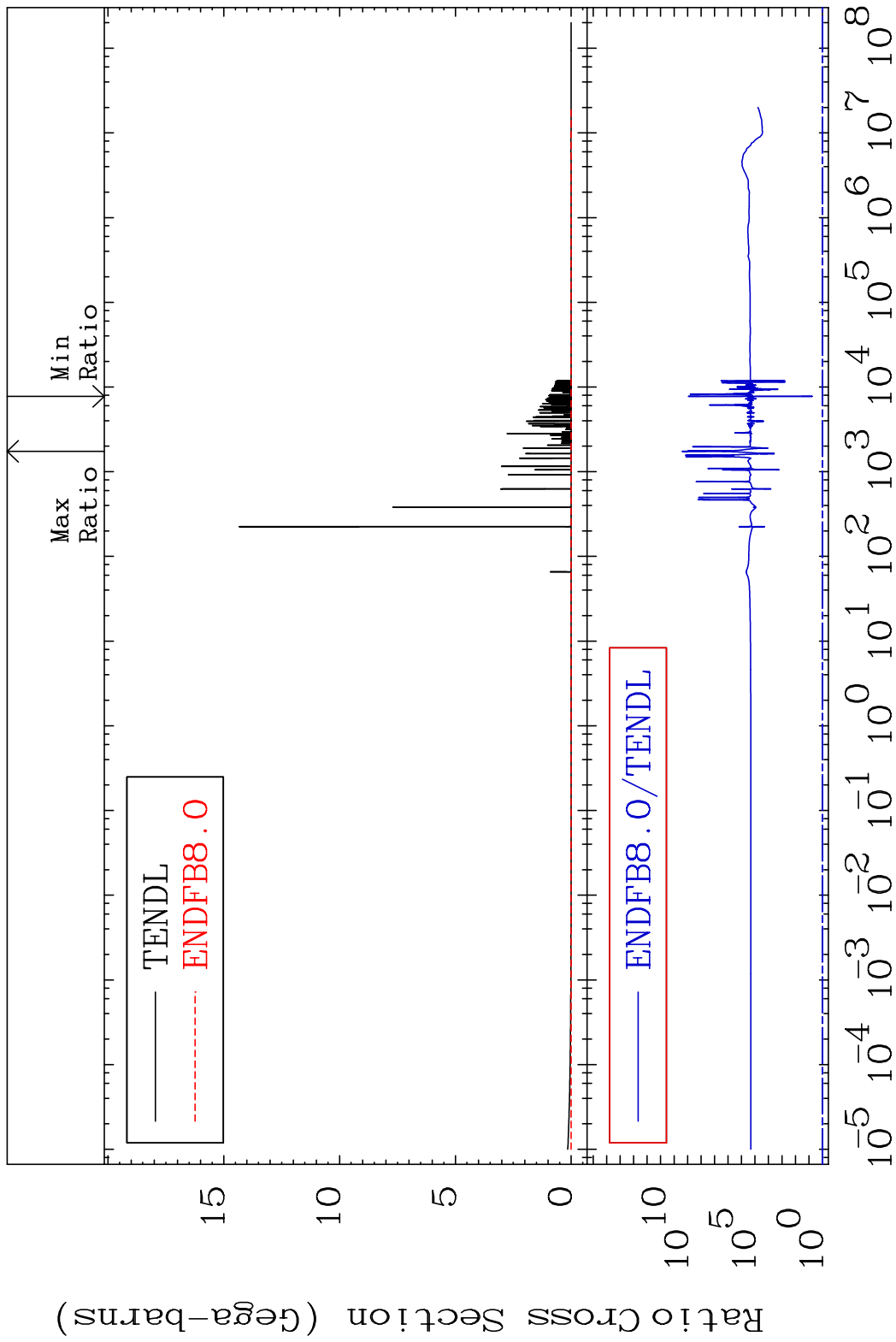


MAT 4449

Kerma capture (mt102) 44-Ru-104  
Cross Section 439.1 To 9999. %

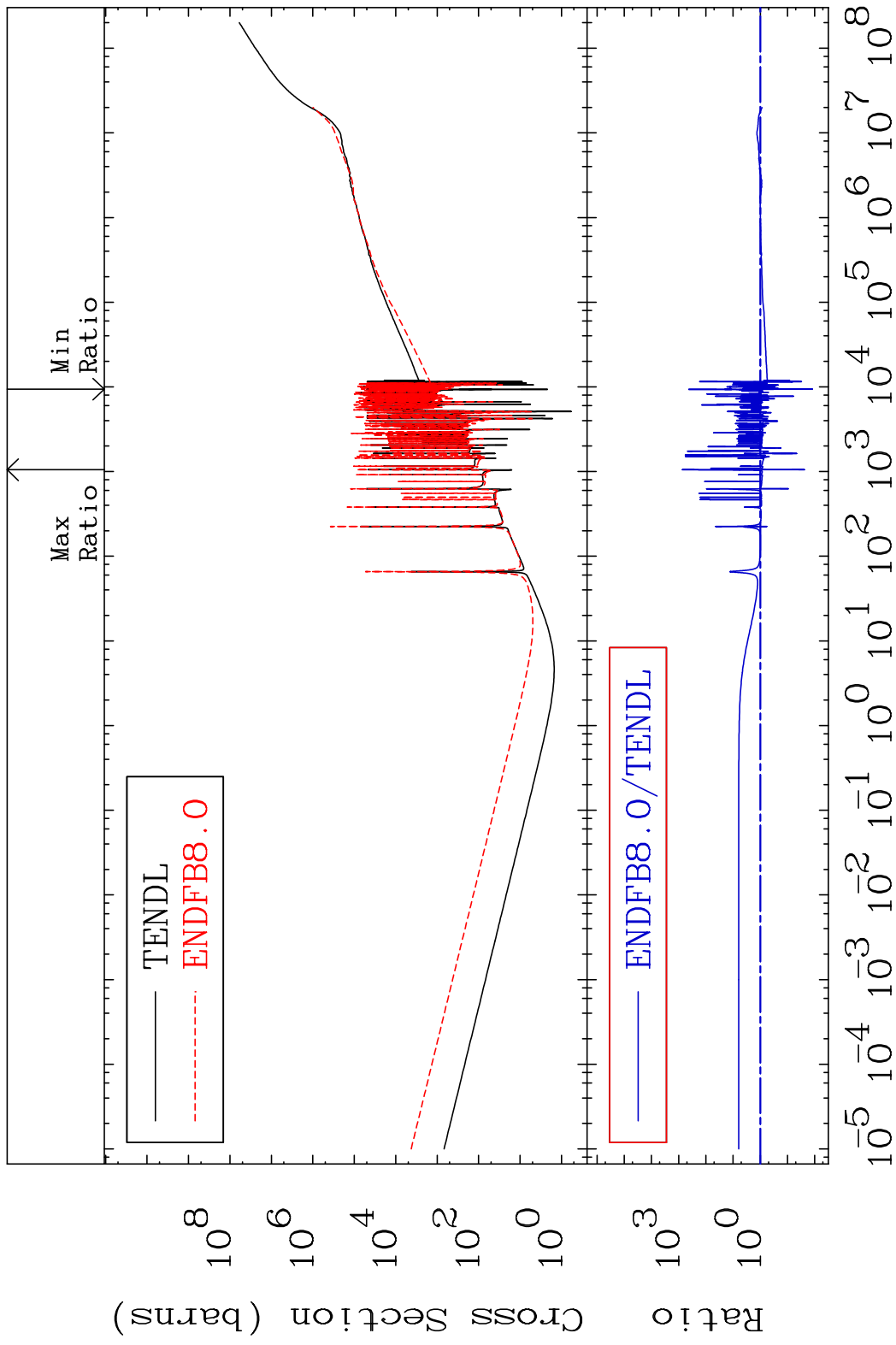


MAT 4449 Total photon (eV-barns) 44-Ru-104  
 Cross Section 439.1 To 9999. %

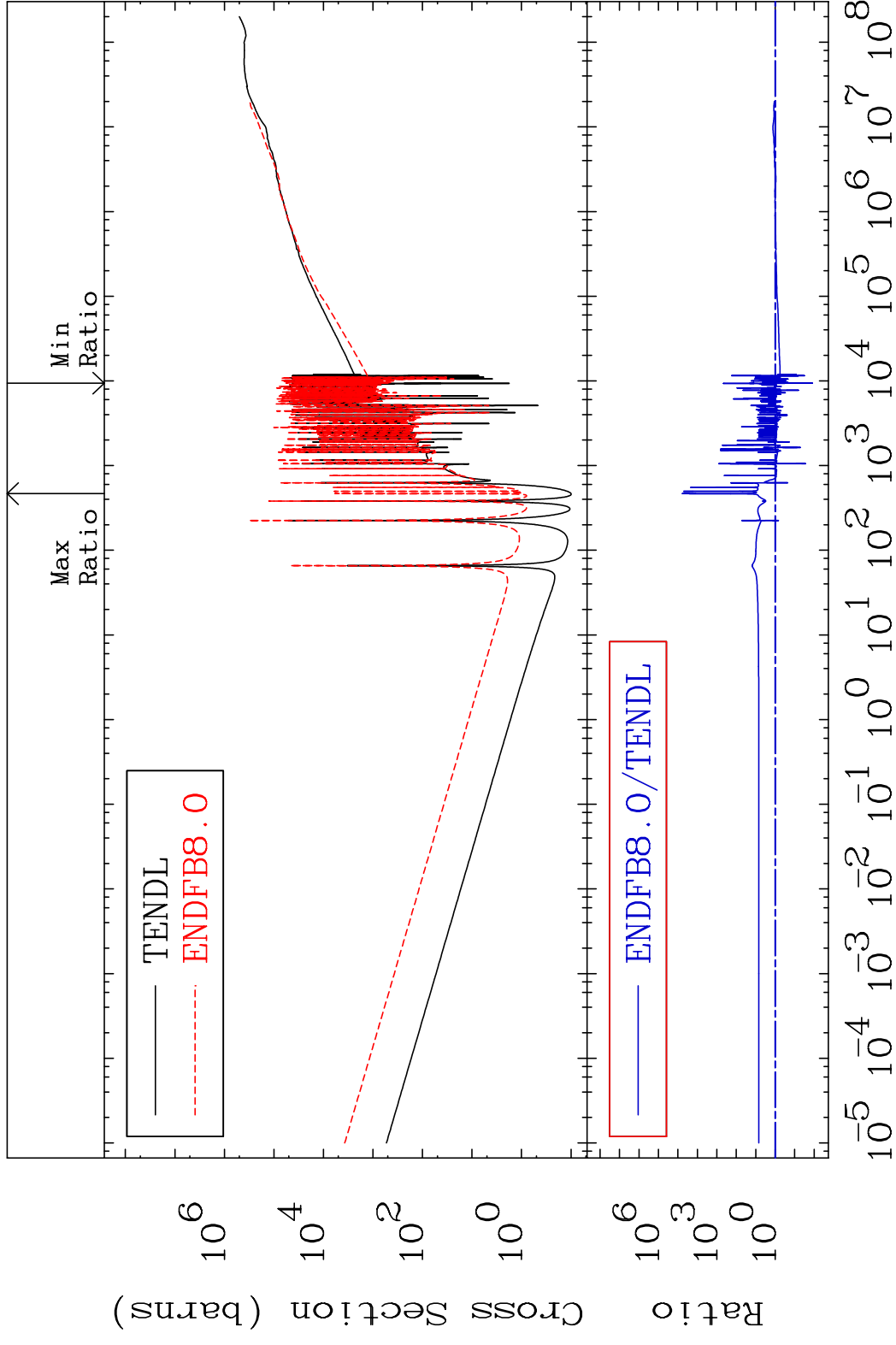


29 Incident Energy (eV) 44-Ru-104

MAT 4449 Total kinematic kerma (high limit) 44-Ru-104  
 Cross Section -98.79 To 9999. %



MAT 4449      Dpa total (eV-barns)      44-Ru-104  
 Cross Section      -98.79 To 9999. %

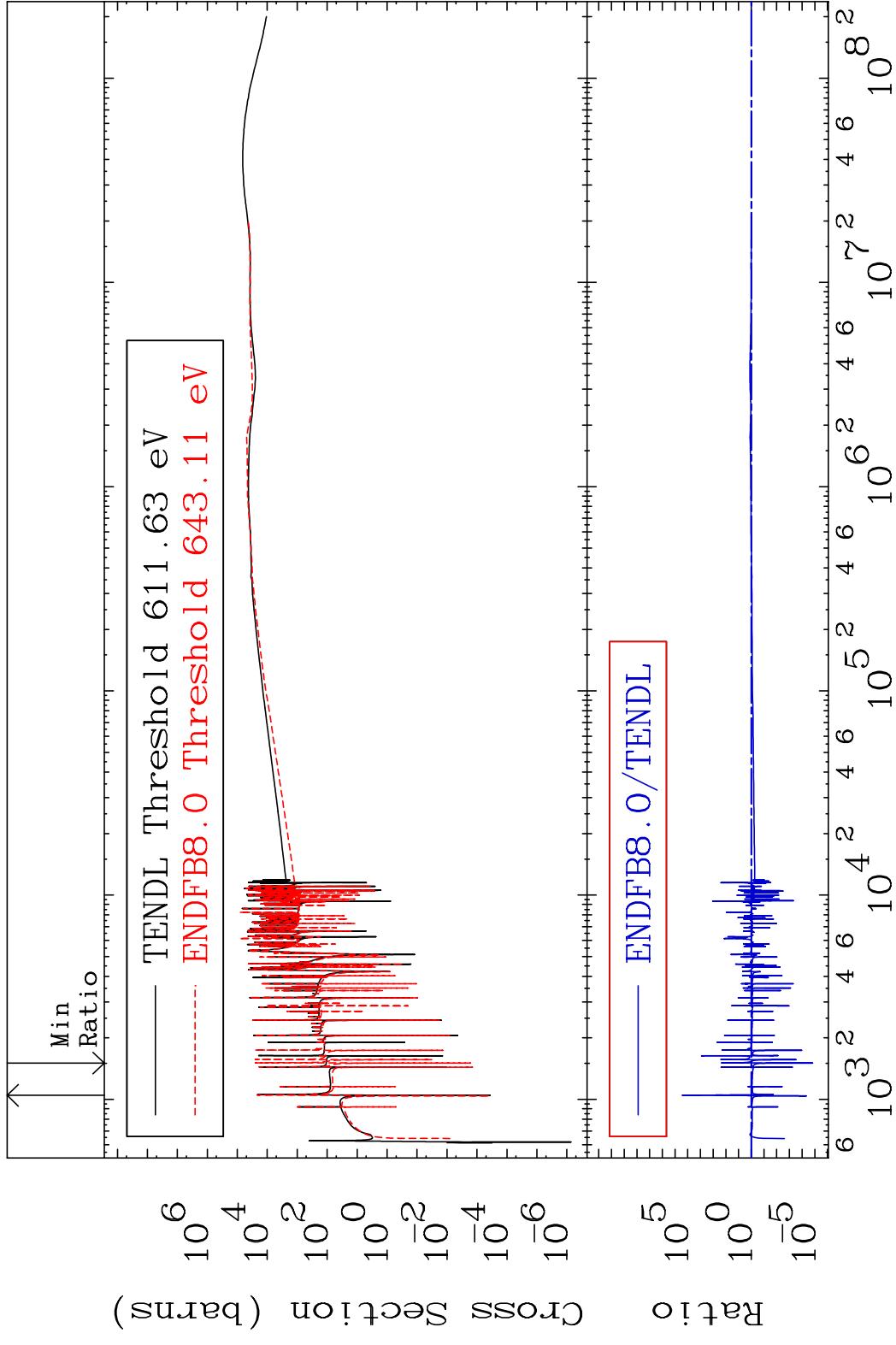


MAT 4449

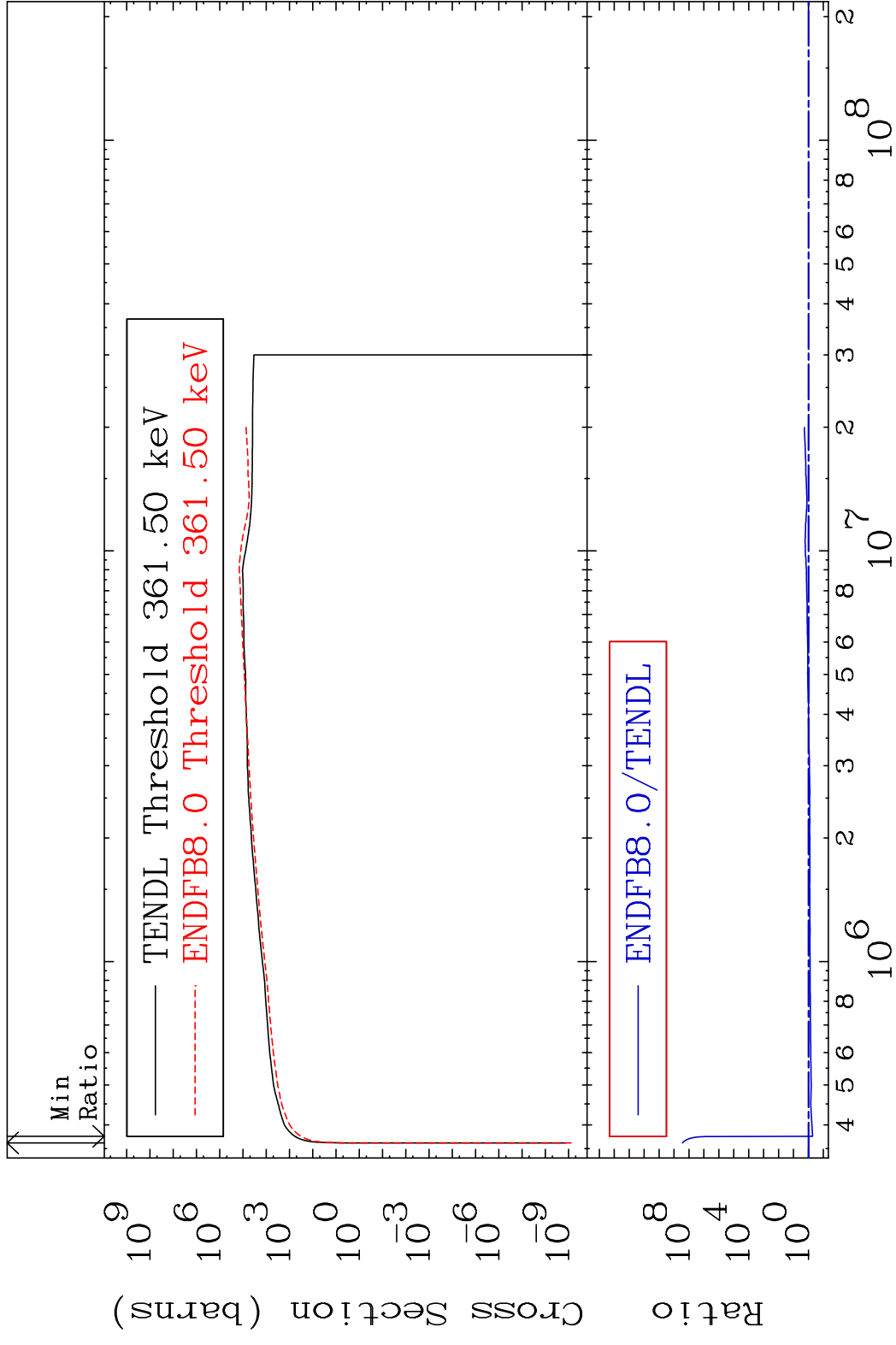
Dpa elastic (mt2)

44-Ru-104

Cross Section -100.0 To 9999. %



MAT 4449 Dpa inelastic (mt51-91) 44-Ru-104  
 Cross Section -46.69 To 9999. %



MAT 4449 Dpa disappearance (mt102 -120) 44-Ru-104  
 Cross Section -99.97 To 9999. %

