Program Complot
(Version 2021-1)
by
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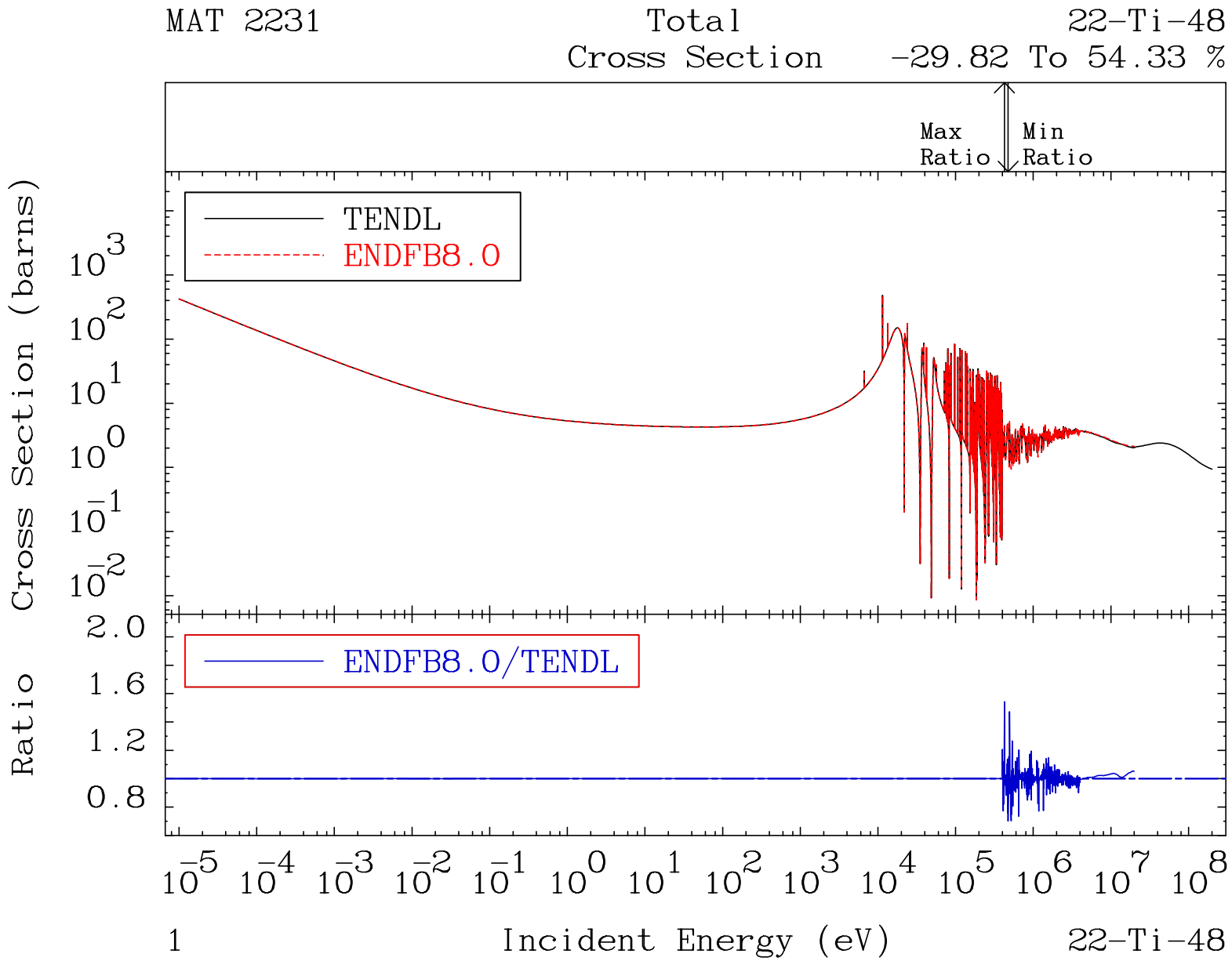
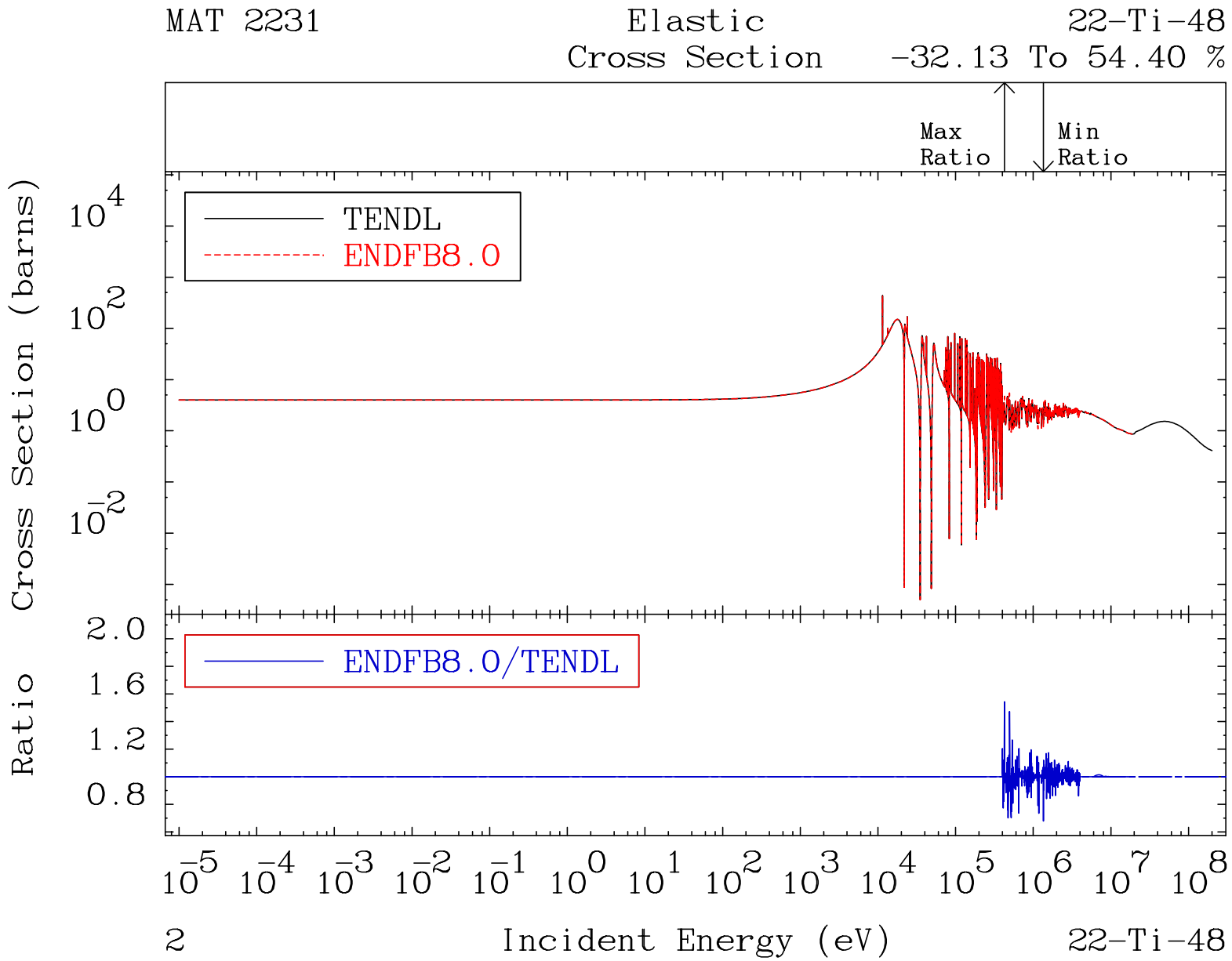
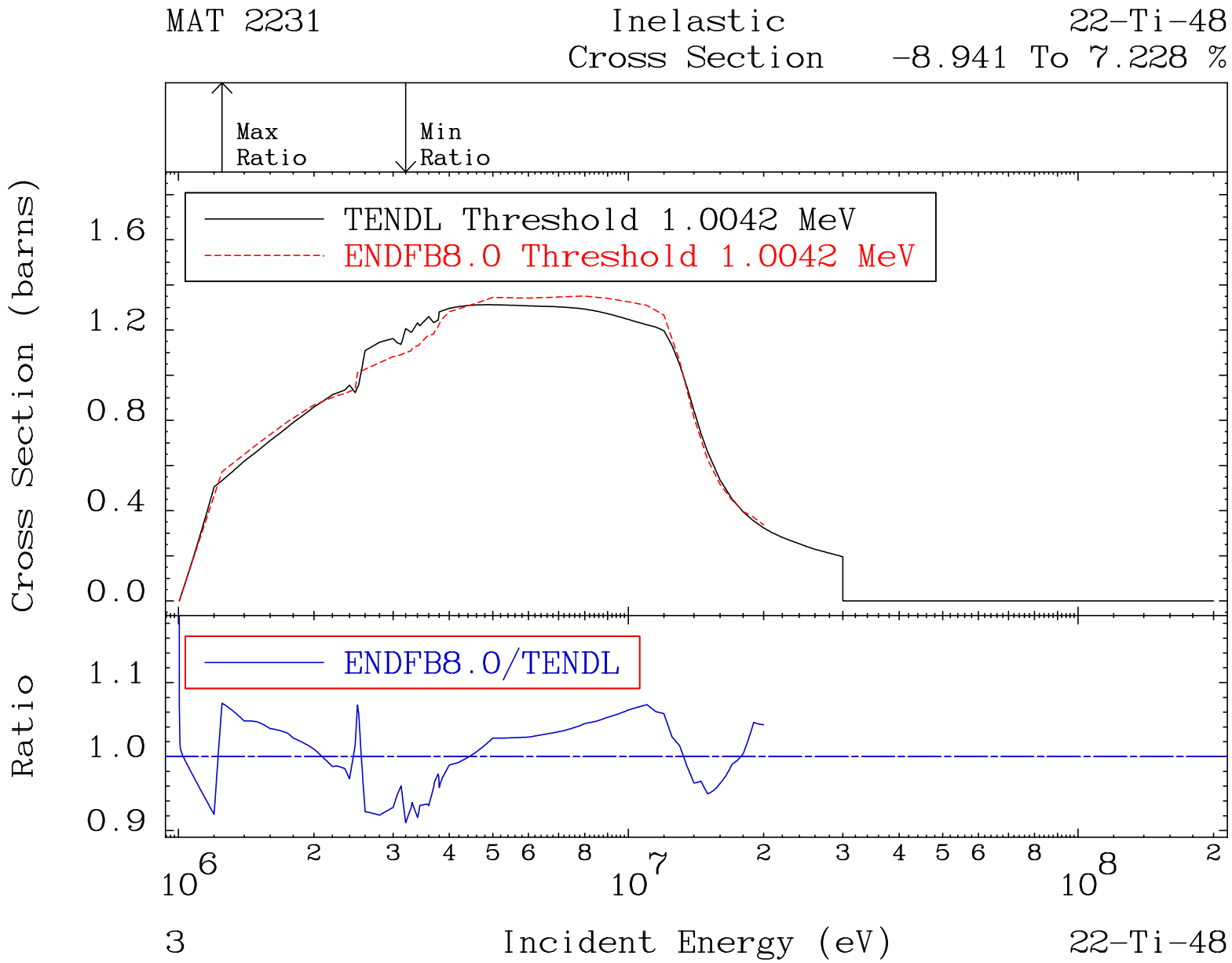
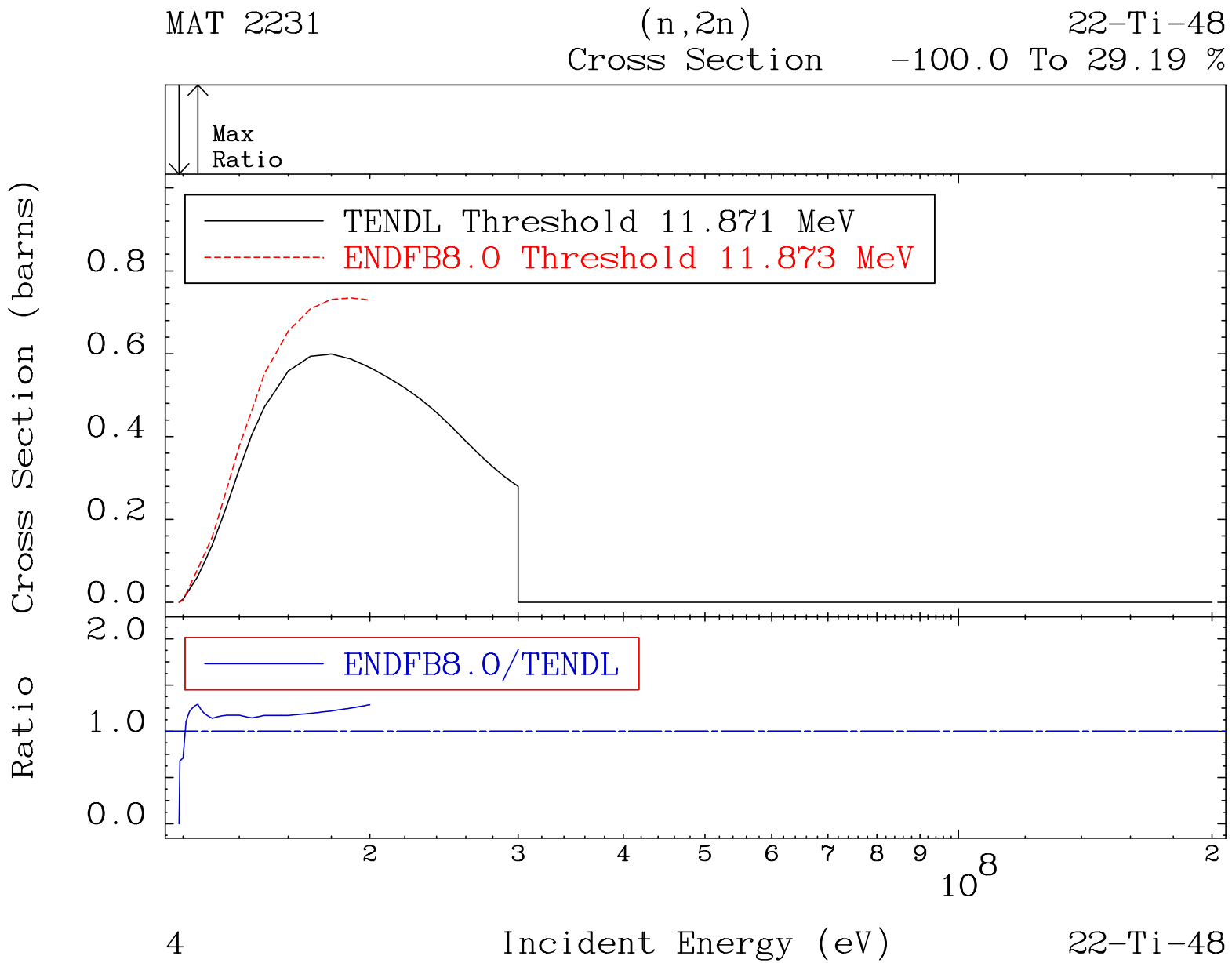
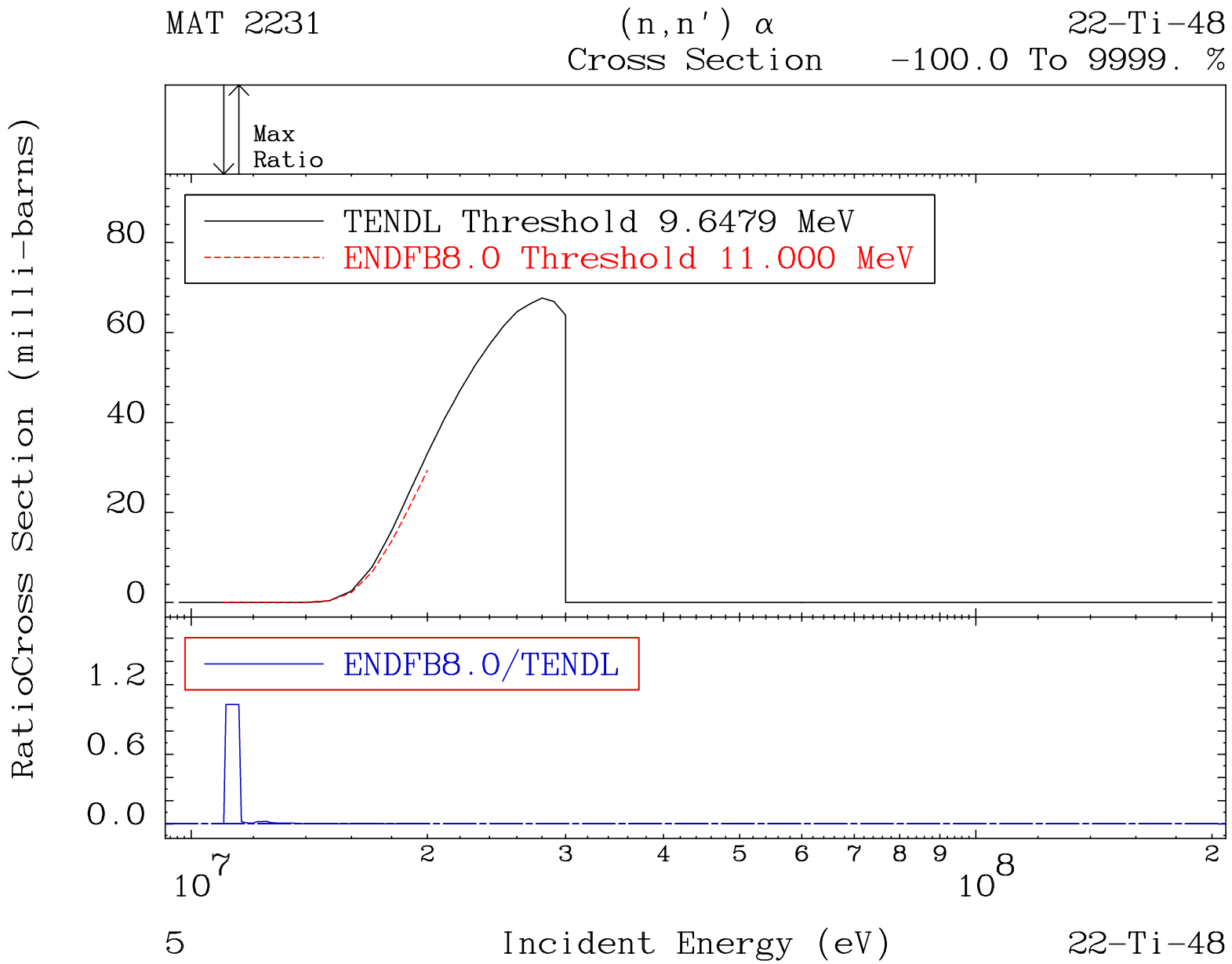
Press Mouse Button to Start

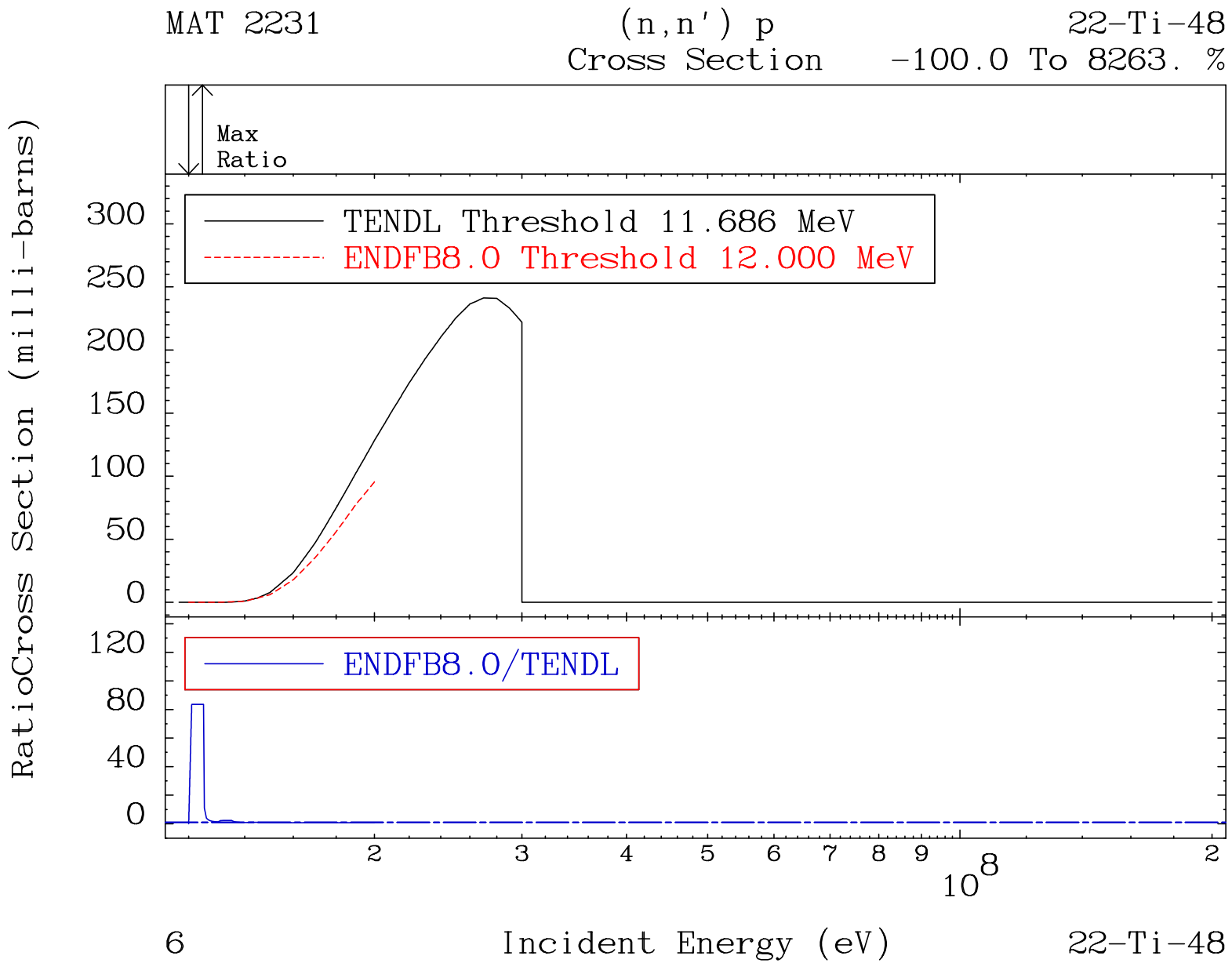

MAT 2231
Total
Cross Section
22-Ti-48
-29.82 To 54.33 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
22-Ti-48

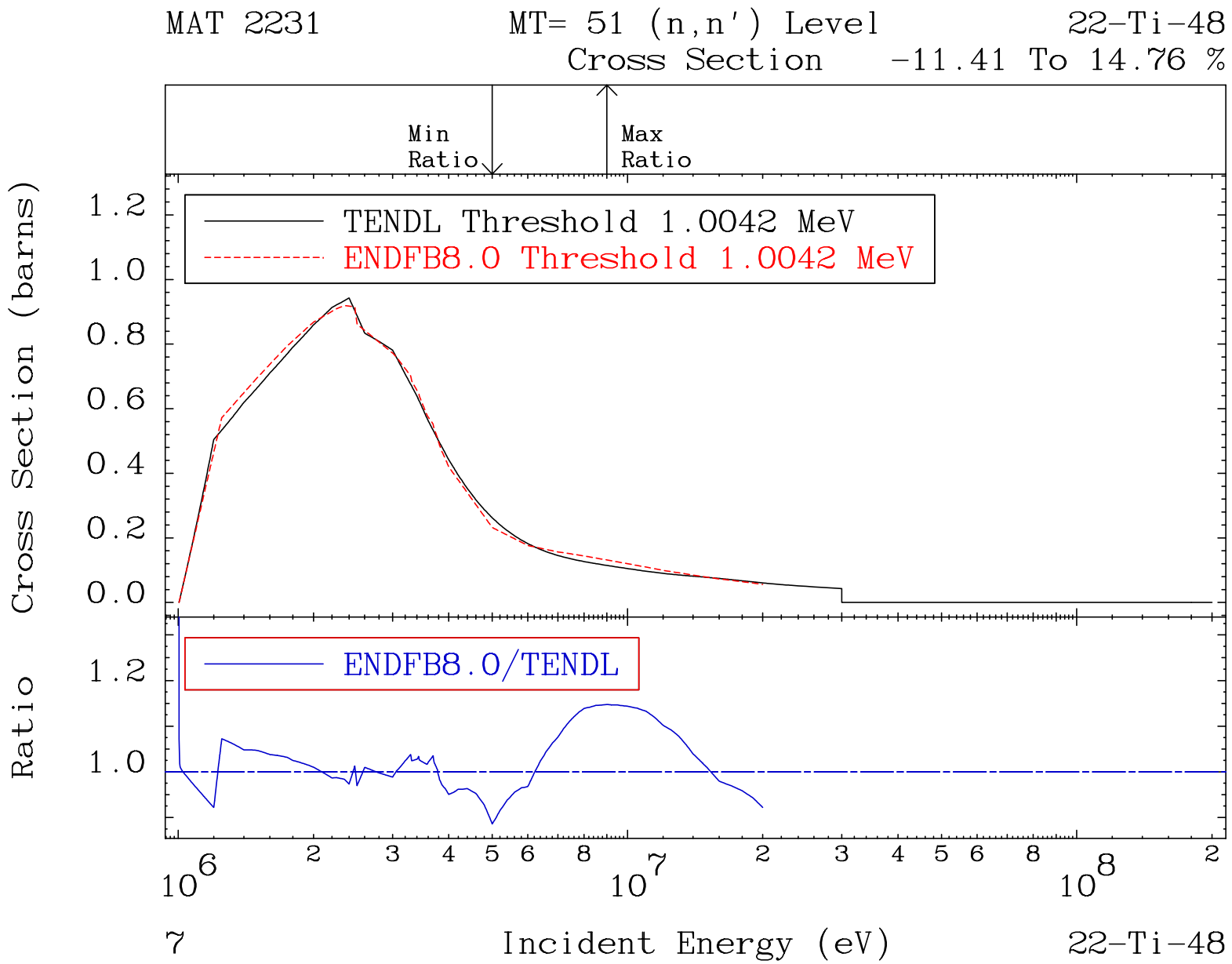

MAT 2231
Elastic
Cross Section
22-Ti-48
-32.13 To 54.40 %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
22-Ti-48

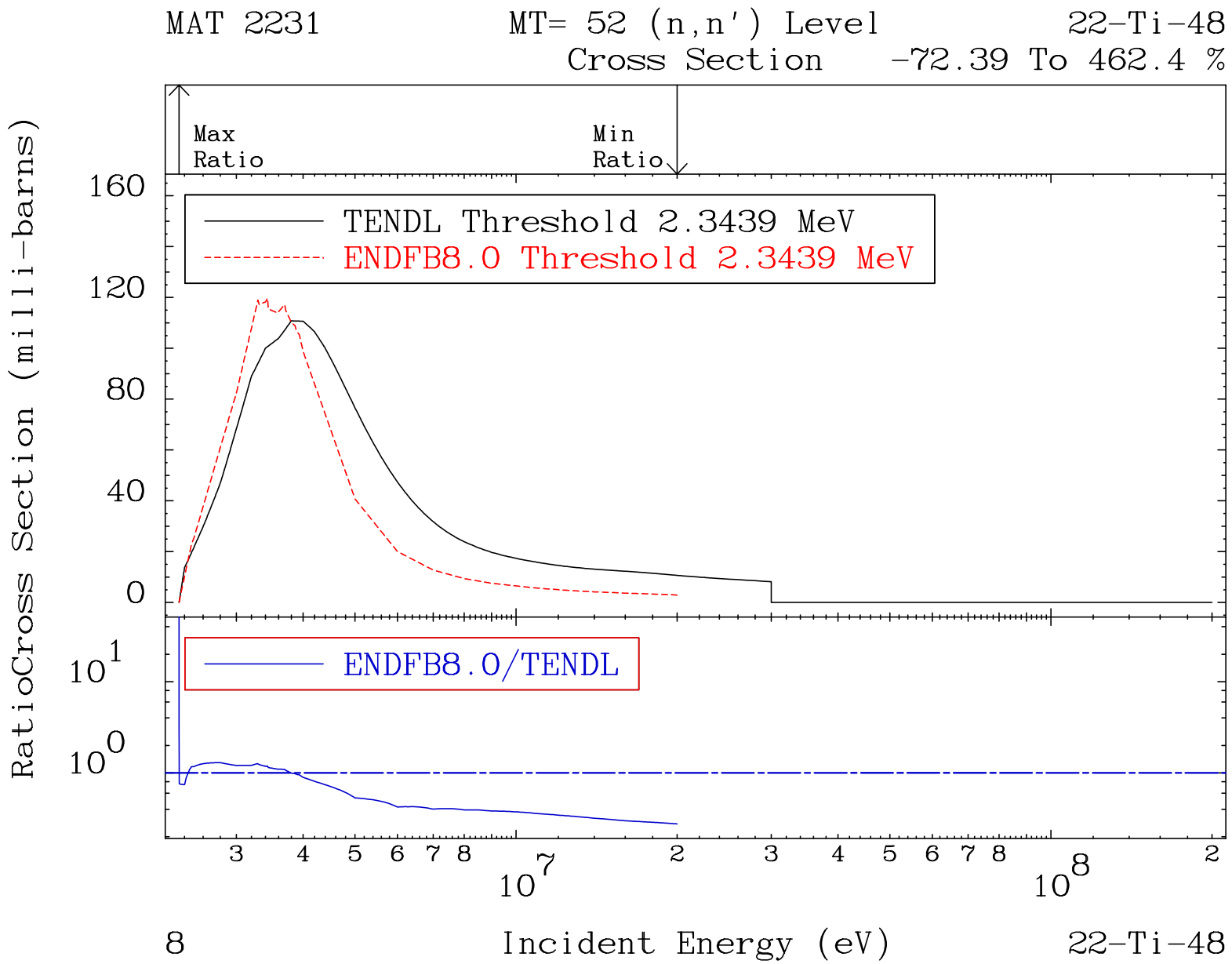

MAT 2231
Inelastic
Cross Section
22-Ti-48
-8.941 To 7.228 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.0042 MeV
ENDFB8.0 Threshold 1.0042 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.1
1.0
0.9
10^6
10^7
10^8
Incident Energy (eV)
3
22-Ti-48

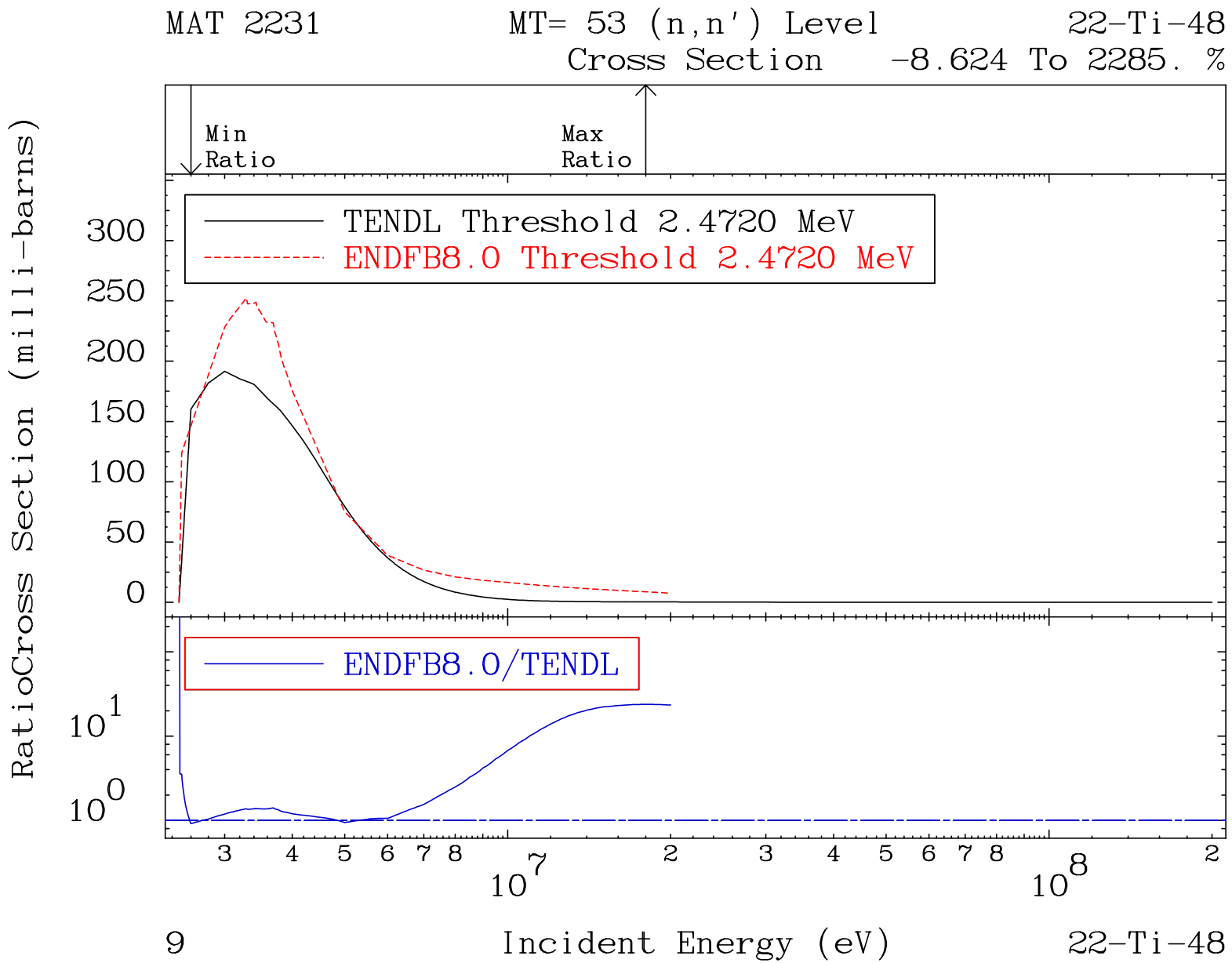

MAT 2231
(n,2n)
Cross Section
22-Ti-48
-100.0 To 29.19 %
Max
Ratio
TENDL Threshold 11.871 MeV
ENDFB8.0 Threshold 11.873 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
0.0
0.2
0.4
0.6
0.8
1.0
2.0
2
3
4
5
6
7
8
9
2
10^8
Incident Energy (eV)
4
22-Ti-48

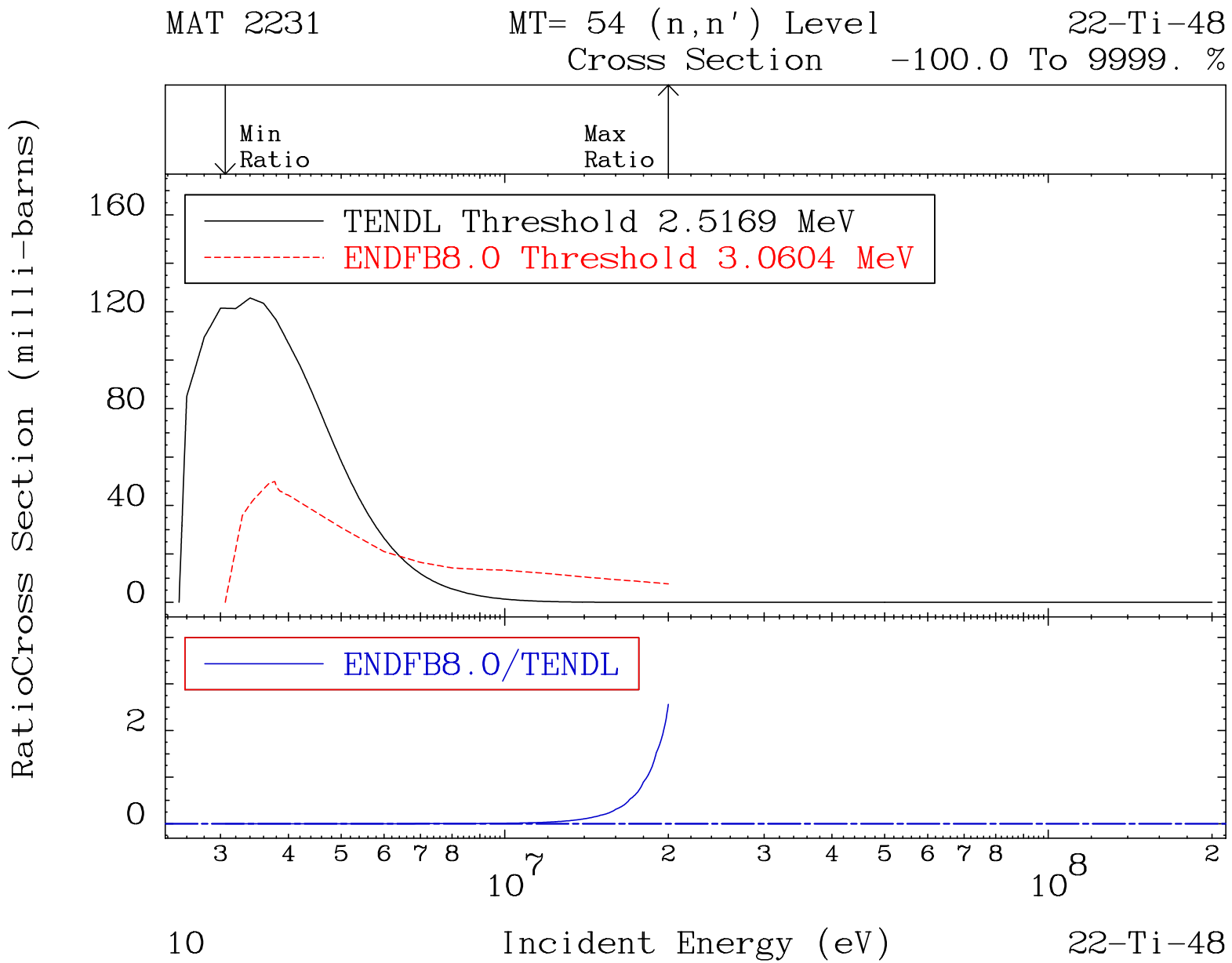

MAT 2231
(n,n') α
Cross Section
22-Ti-48
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 9.6479 MeV
ENDFB8.0 Threshold 11.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
5
22-Ti-48

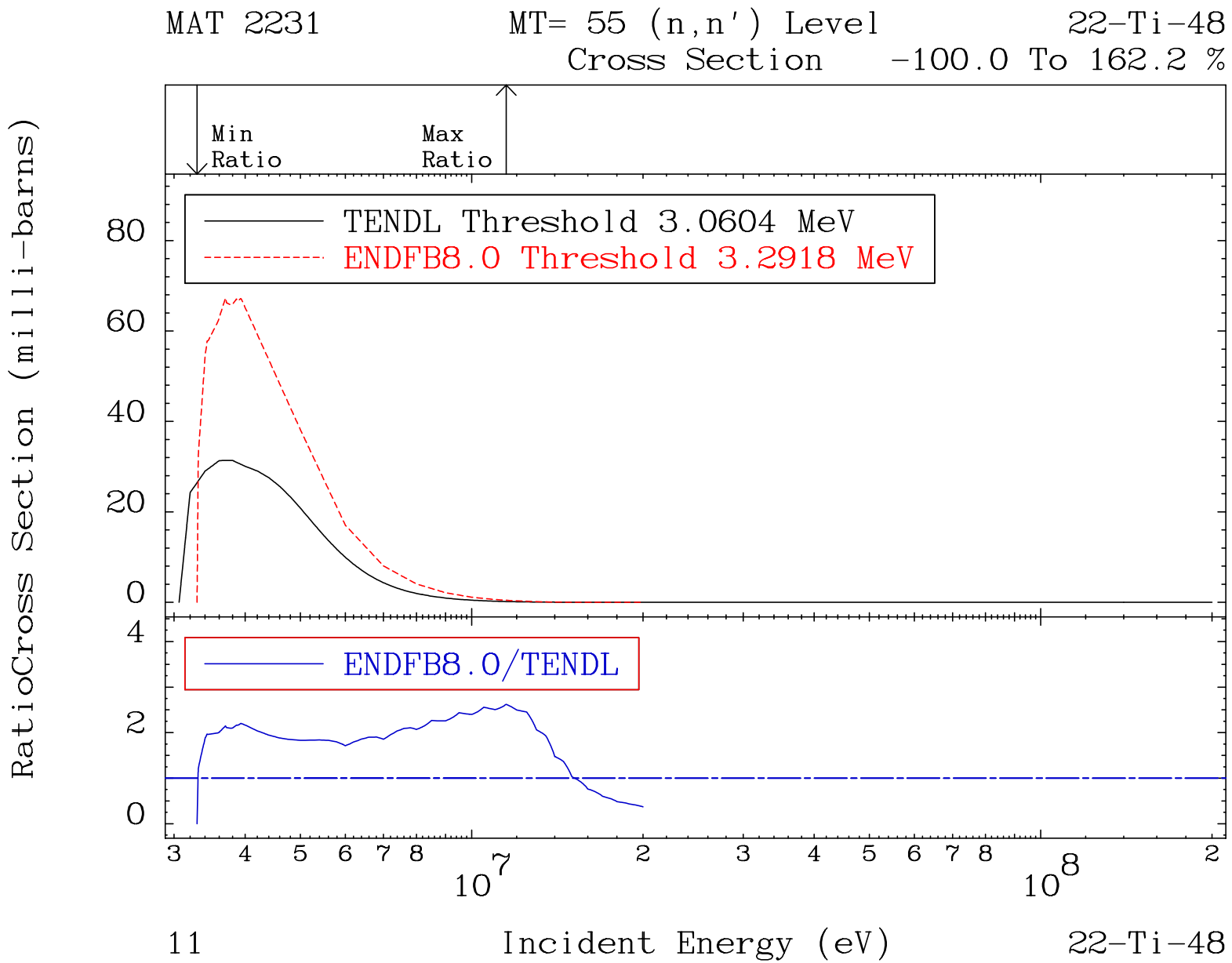

MAT 2231
(n,n') p
Cross Section
22-Ti-48
-100.0 To 8263. %
Max
Ratio
TENDL Threshold 11.686 MeV
ENDFB8.0 Threshold 12.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
120
80
40
0
2
3
4
5
6
7
8
9
2
10^8
6
Incident Energy (eV)
22-Ti-48

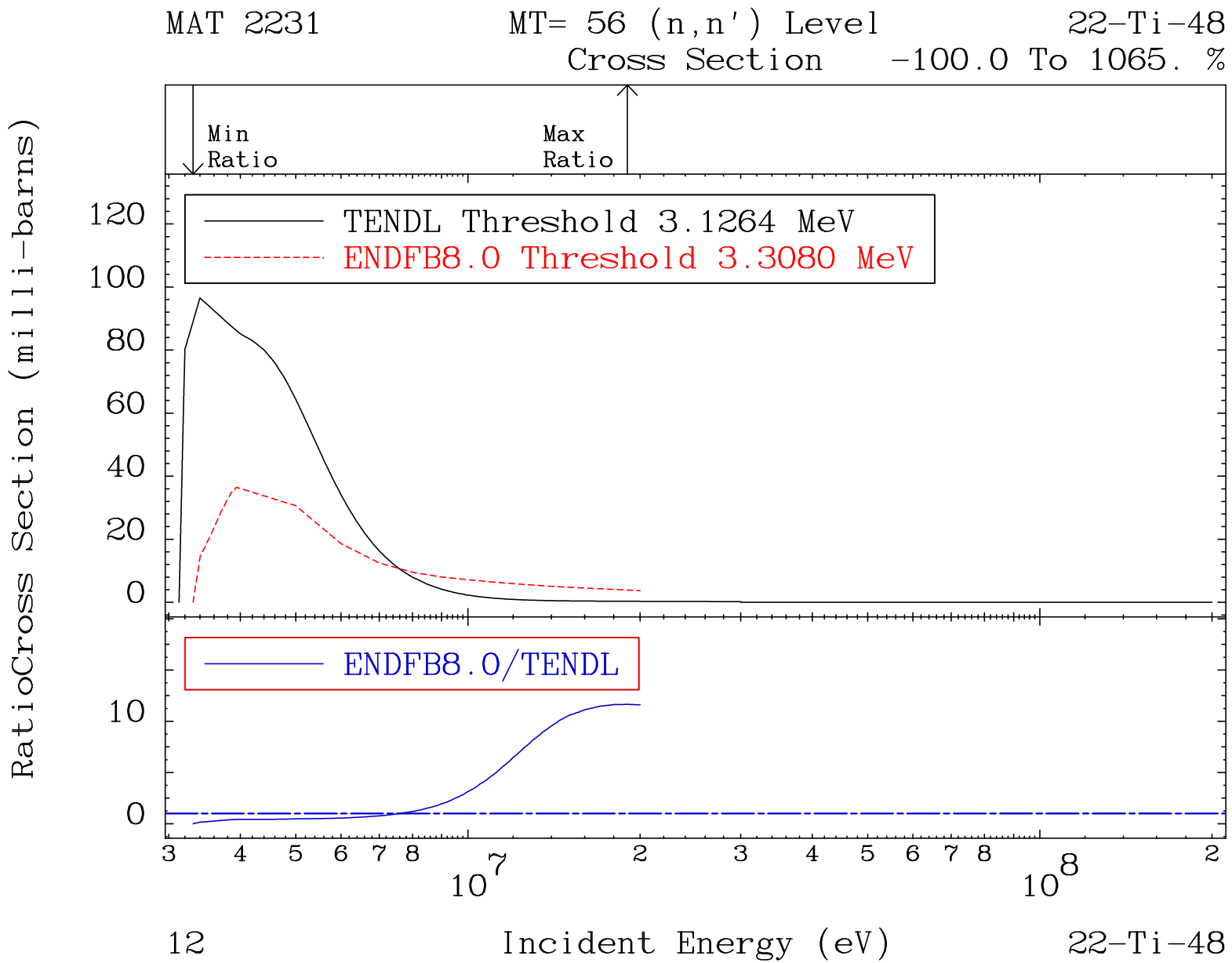

MAT 2231
MT= 51 (n,n') Level
22-Ti-48
Cross Section -11.41 To 14.76 %
Min Ratio
Max Ratio
TENDL Threshold 1.0042 MeV
ENDFB8.0 Threshold 1.0042 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
22-Ti-48

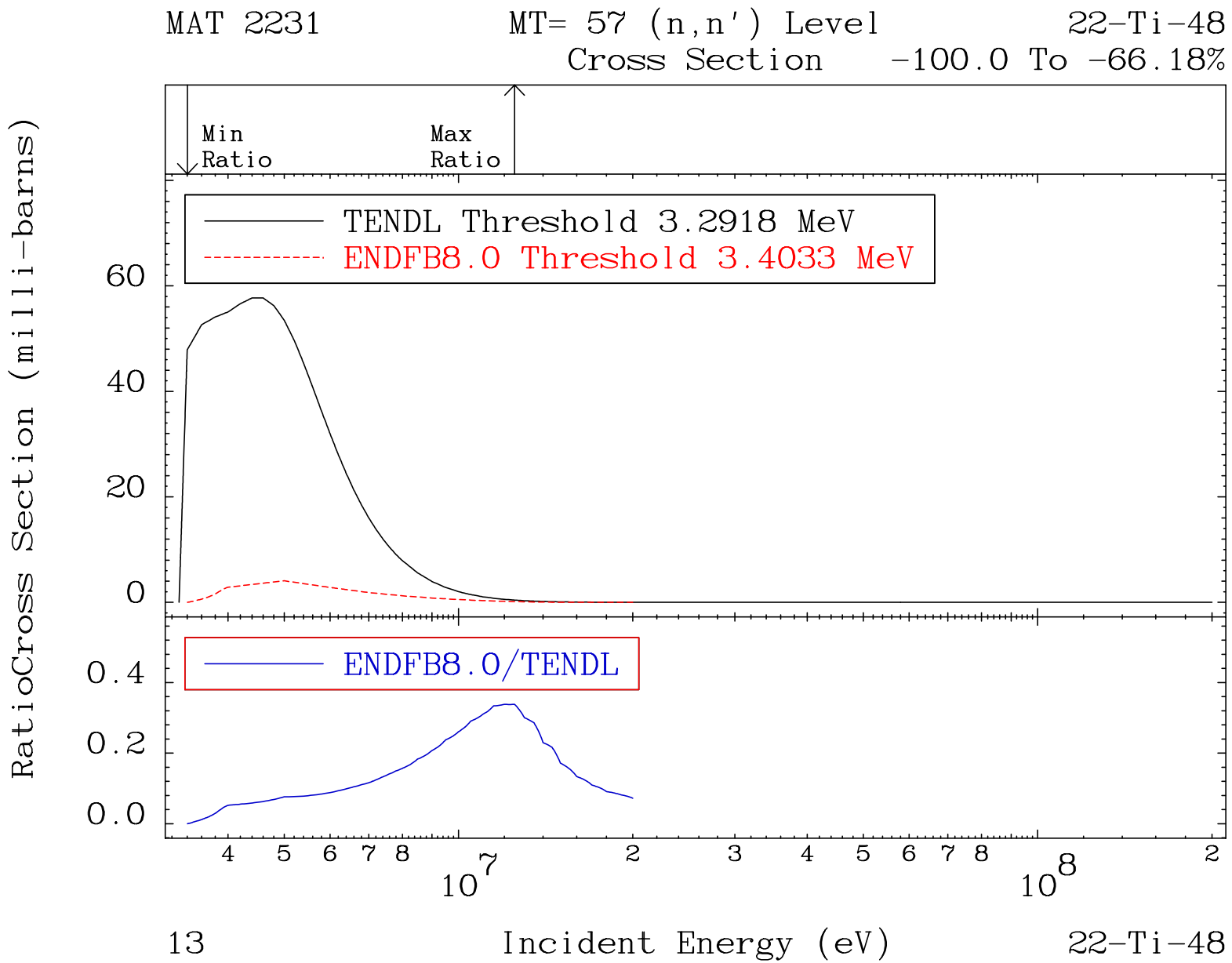

MAT 2231
MT= 52 (n,n') Level
22-Ti-48
Cross Section -72.39 To 462.4 %
Max Ratio
Min Ratio
TENDL Threshold 2.3439 MeV
ENDFB8.0 Threshold 2.3439 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^1
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
8
22-Ti-48

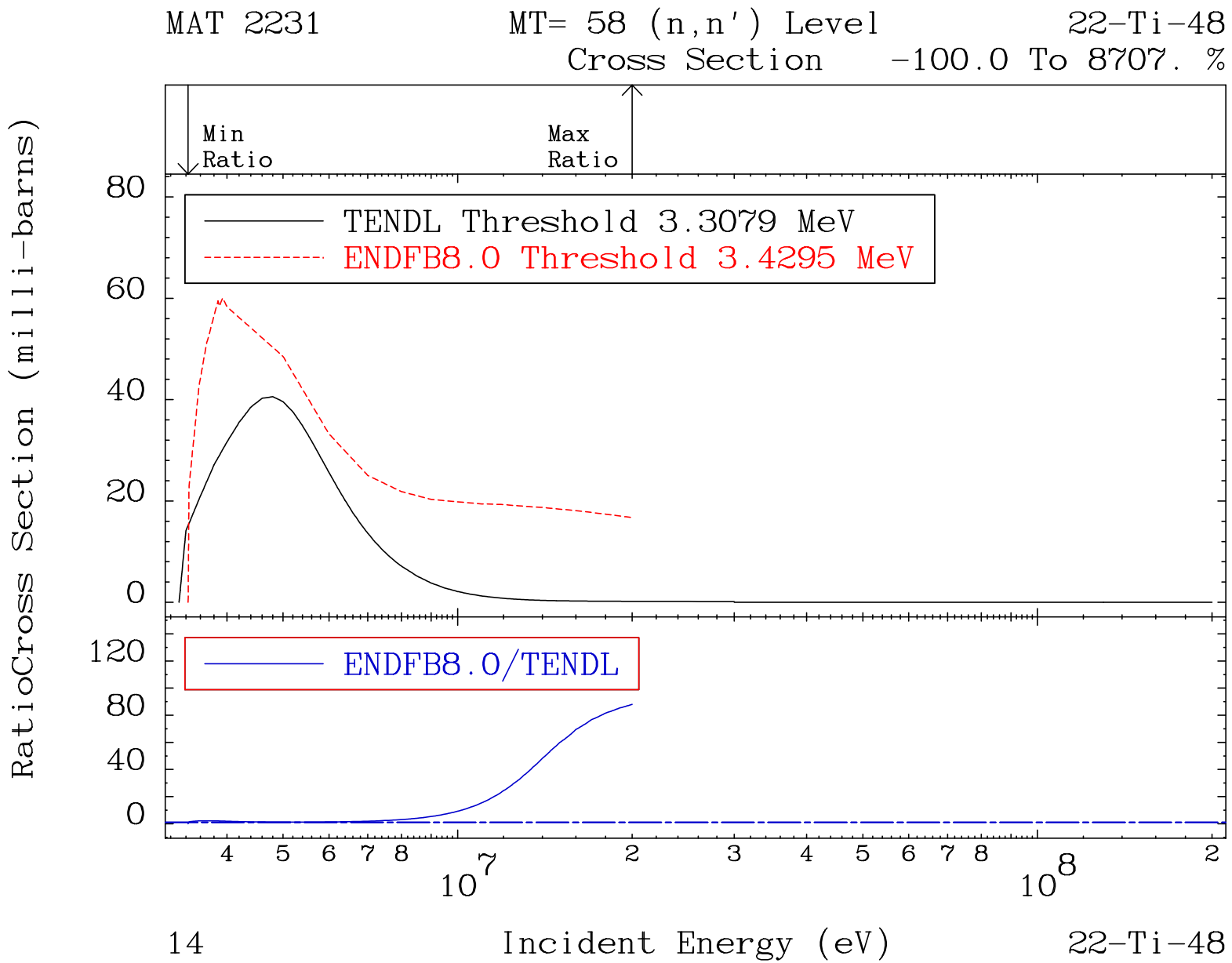

MAT 2231
MT= 53 (n,n') Level
22-Ti-48
Cross Section -8.624 To 2285. %
Min Ratio
Max Ratio
TENDL Threshold 2.4720 MeV
ENDFB8.0 Threshold 2.4720 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
$10^1$
$10^0$
3 4 5 6 7 8 $10^7$ 2 3 4 5 6 7 8 $10^8$ 2
Incident Energy (eV)
9
22-Ti-48

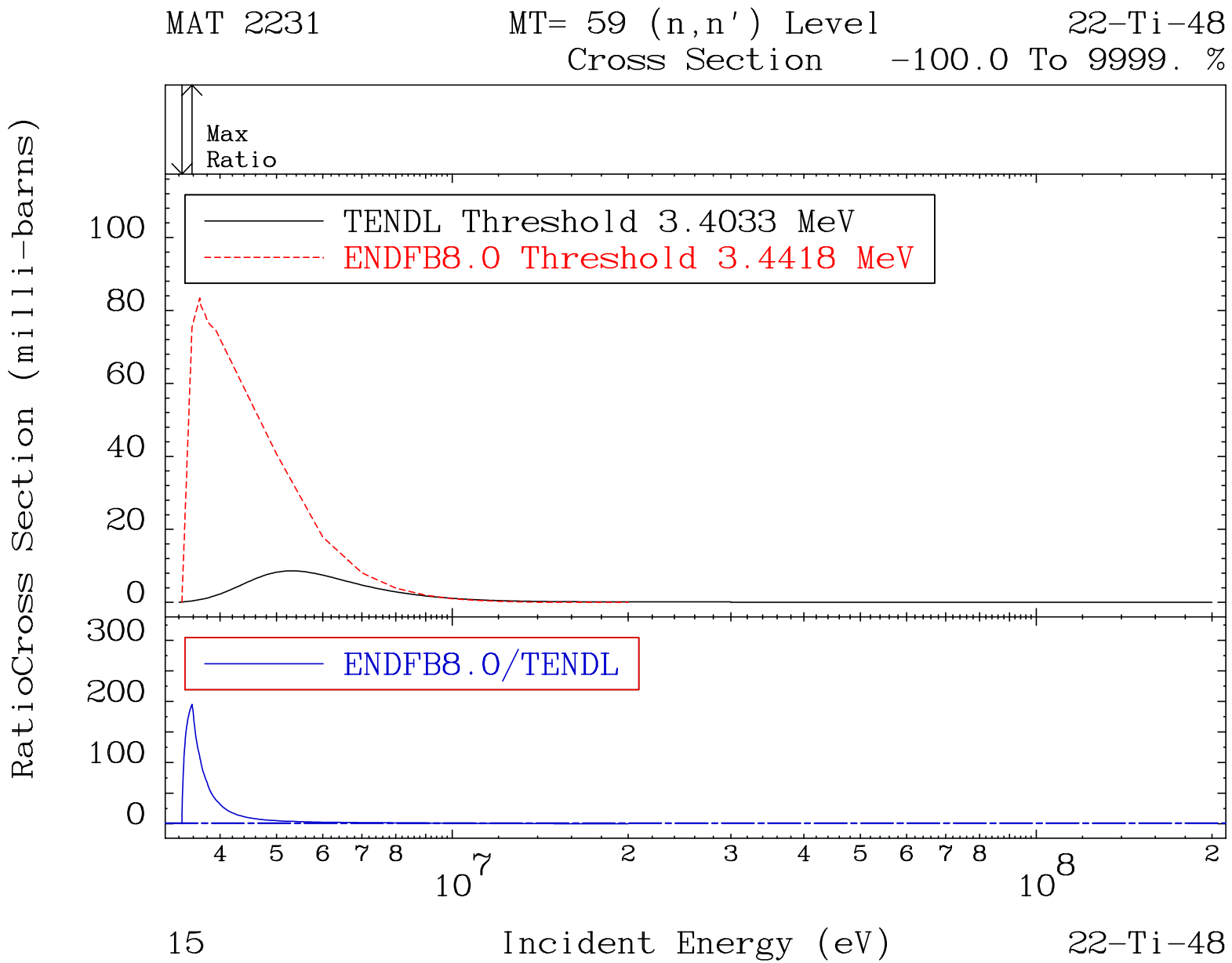

MAT 2231
MT= 54 (n,n') Level
22-Ti-48
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.5169 MeV
ENDFB8.0 Threshold 3.0604 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
22-Ti-48

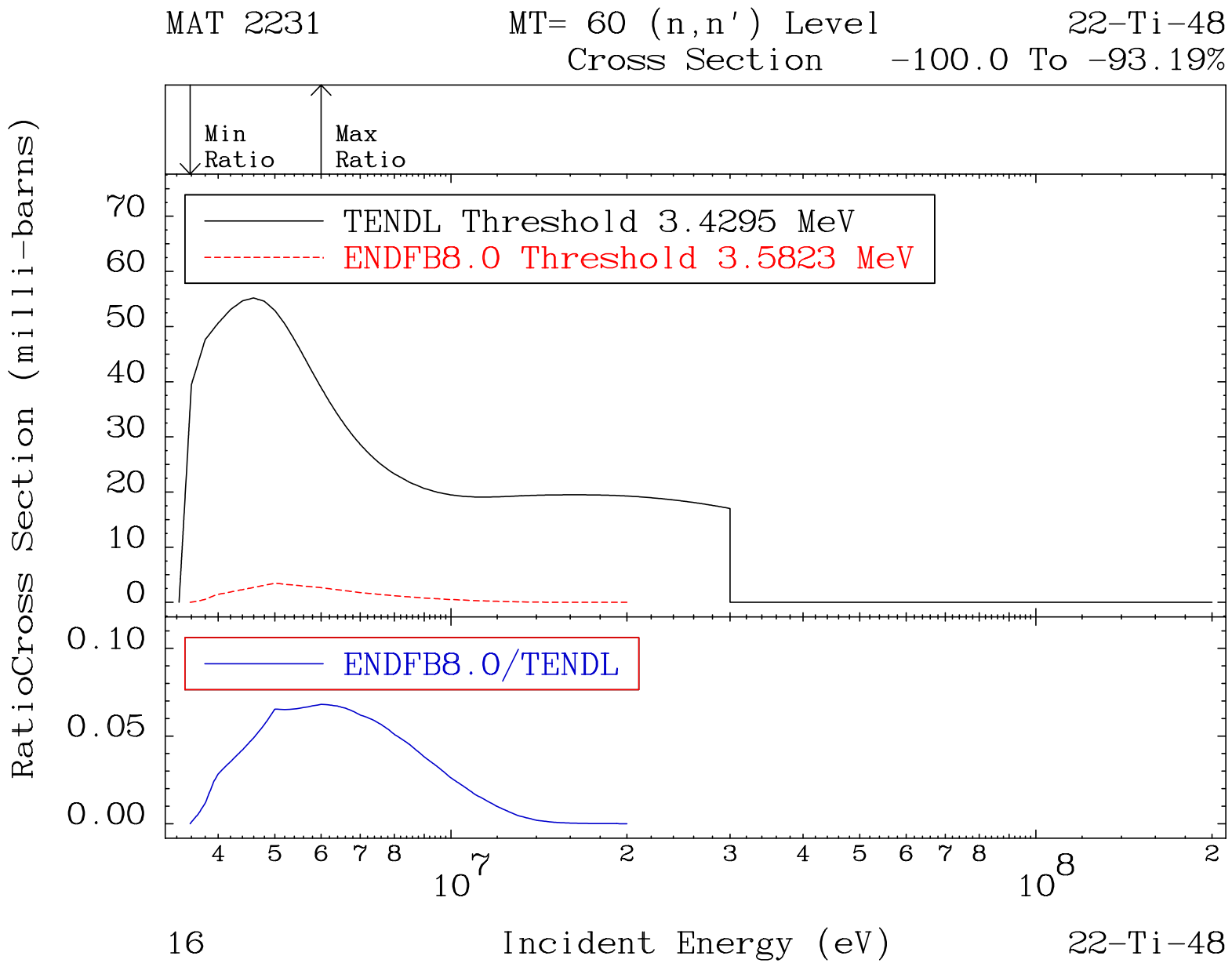

MAT 2231
MT= 55 (n,n') Level
22-Ti-48
Cross Section -100.0 To 162.2 %
Min Ratio
Max Ratio
TENDL Threshold 3.0604 MeV
ENDFB8.0 Threshold 3.2918 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
4
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
22-Ti-48

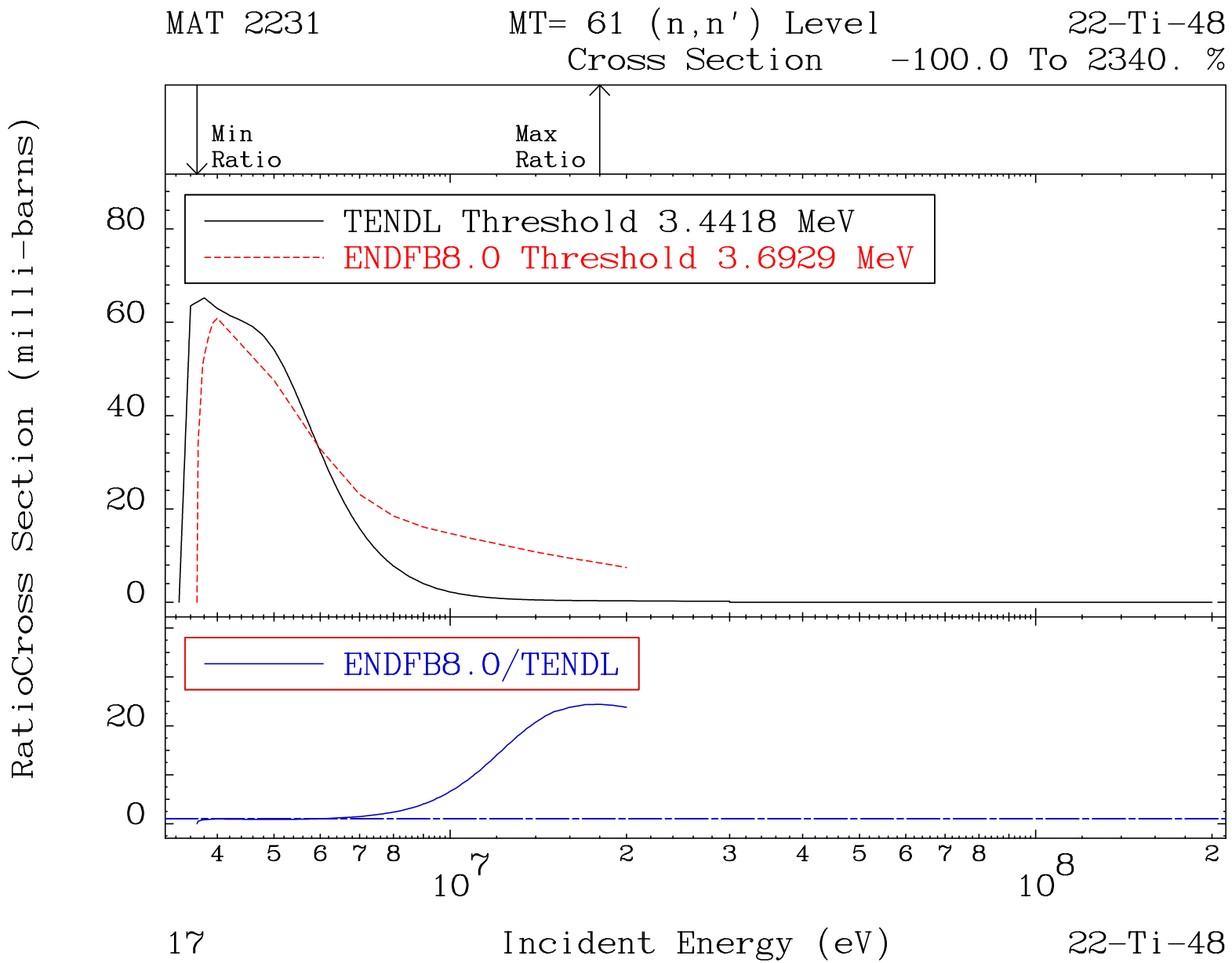

MAT 2231
MT= 56 (n,n') Level
22-Ti-48
Cross Section -100.0 To 1065. %
Min Ratio
Max Ratio
TENDL Threshold 3.1264 MeV
ENDFB8.0 Threshold 3.3080 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
10
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
22-Ti-48

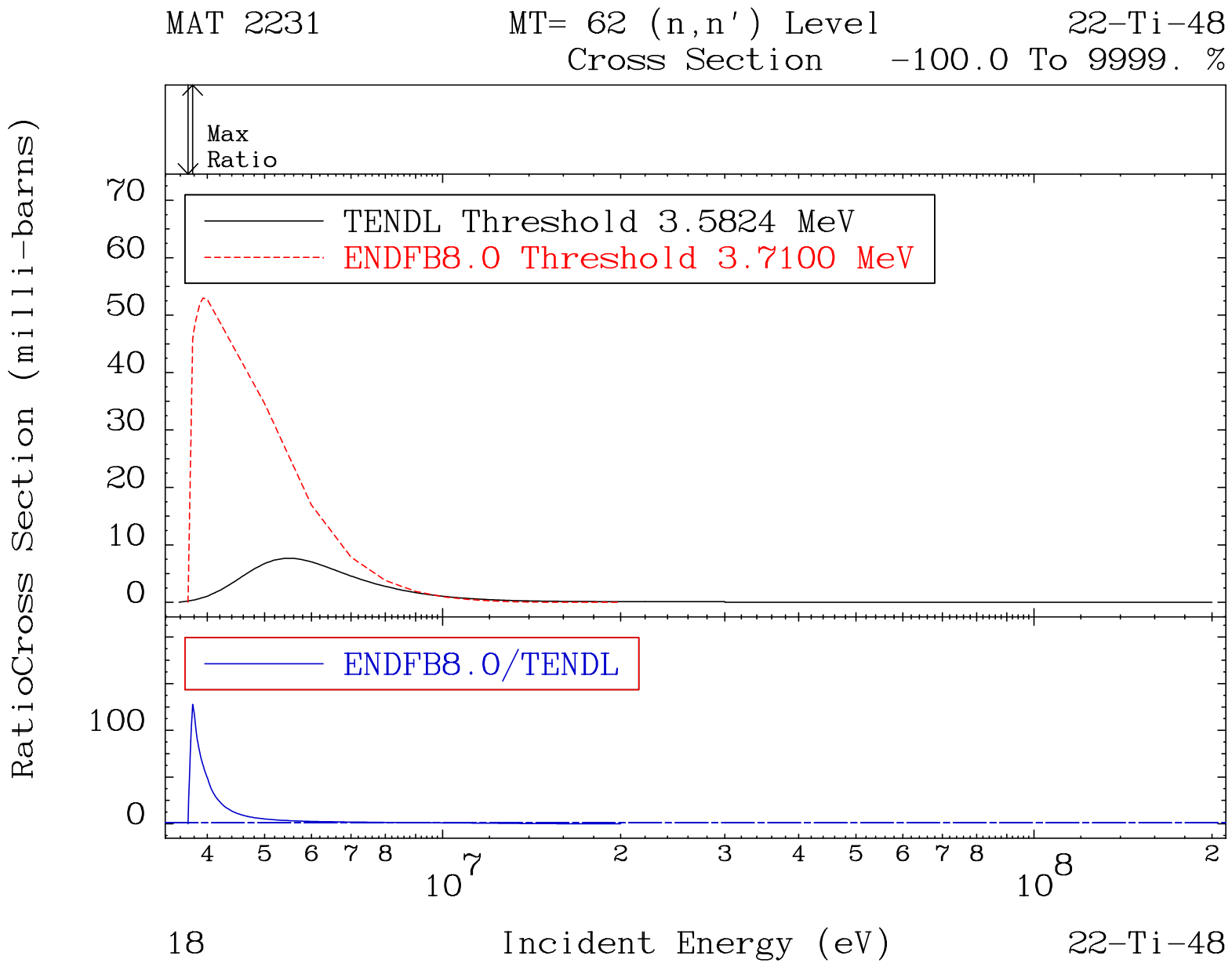

MAT 2231
MT= 57 (n,n') Level
22-Ti-48
Cross Section -100.0 To -66.18%
Min Ratio
Max Ratio
TENDL Threshold 3.2918 MeV
ENDFB8.0 Threshold 3.4033 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
0.4
0.2
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
22-Ti-48

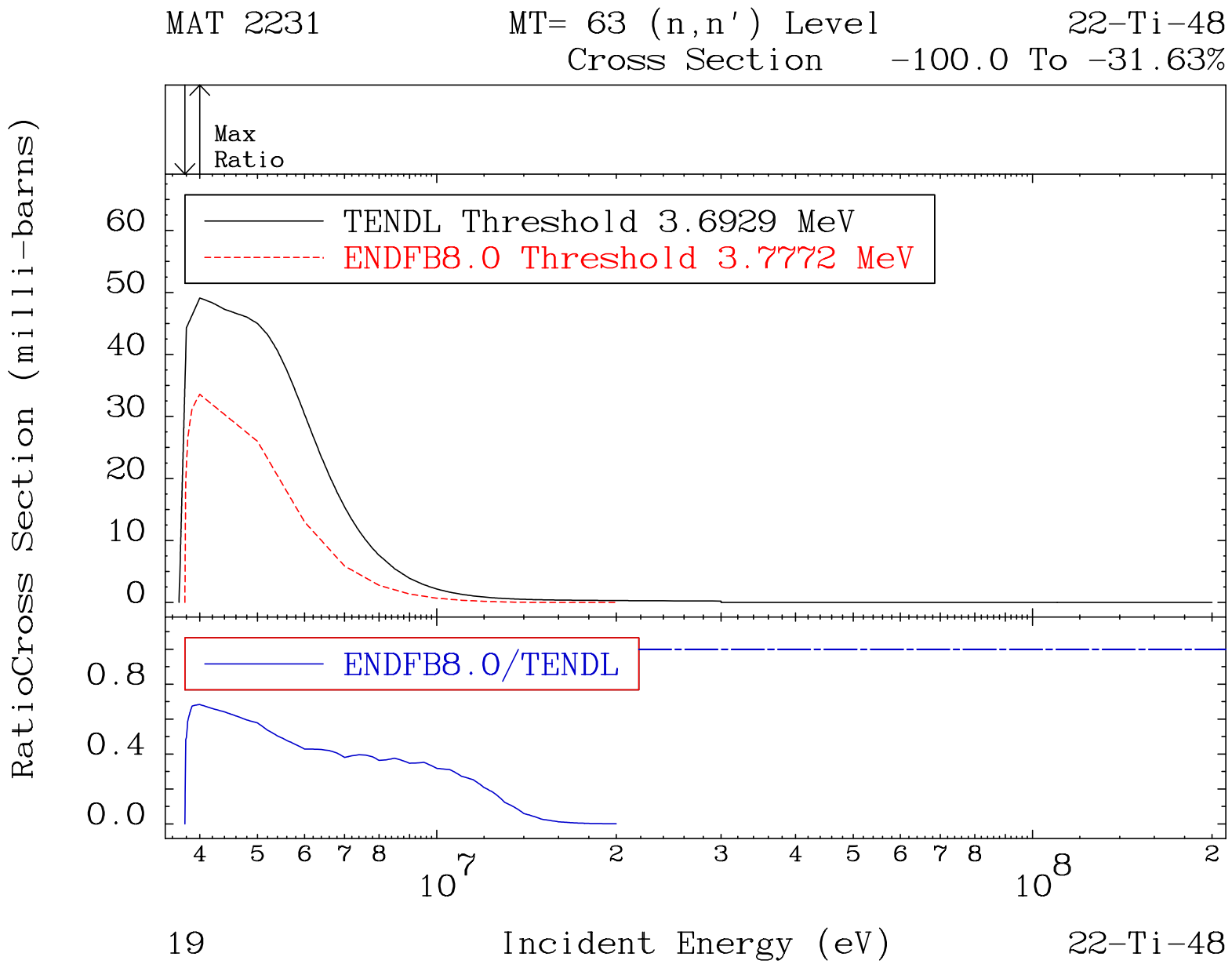

MAT 2231
MT= 58 (n,n') Level
22-Ti-48
Cross Section -100.0 To 8707. %
Min Ratio
Max Ratio
TENDL Threshold 3.3079 MeV
ENDFB8.0 Threshold 3.4295 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
22-Ti-48

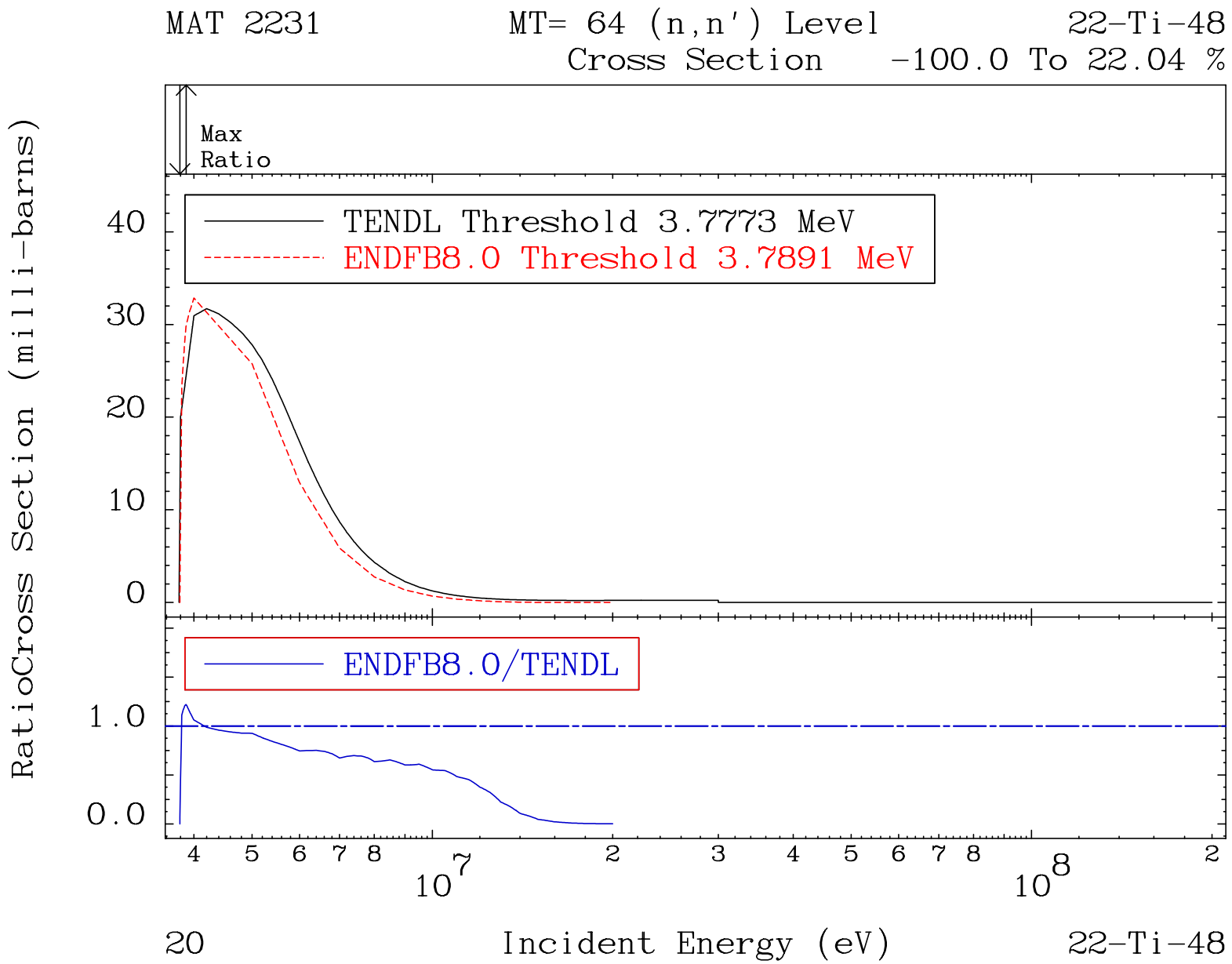

MAT 2231
MT= 59 (n,n') Level
22-Ti-48
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 3.4033 MeV
ENDFB8.0 Threshold 3.4418 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
300
200
100
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
22-Ti-48

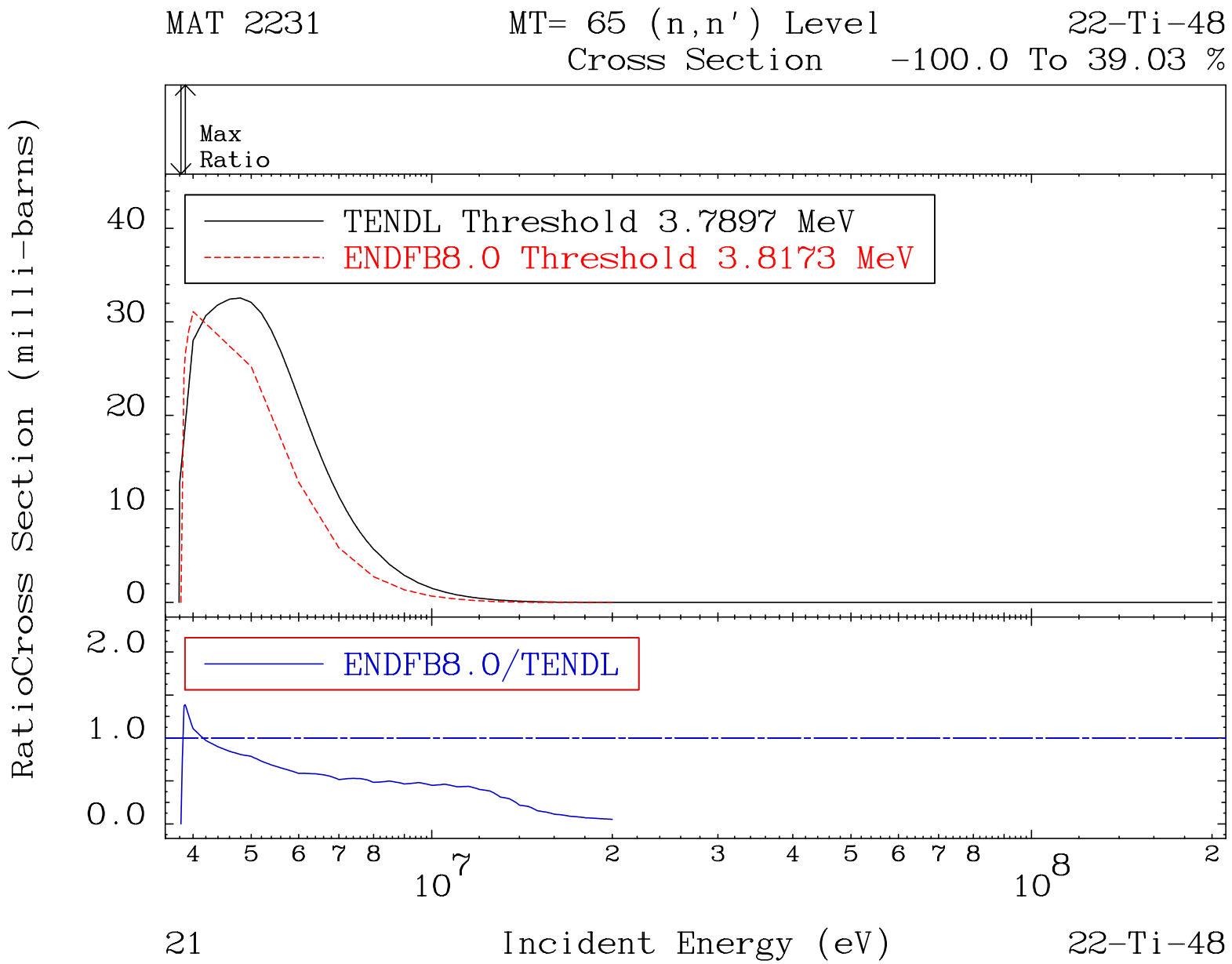

MAT 2231
MT= 60 (n,n') Level
22-Ti-48
Cross Section -100.0 To -93.19%
Min Ratio
Max Ratio
TENDL Threshold 3.4295 MeV
ENDFB8.0 Threshold 3.5823 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
0.10
0.05
0.00
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
22-Ti-48

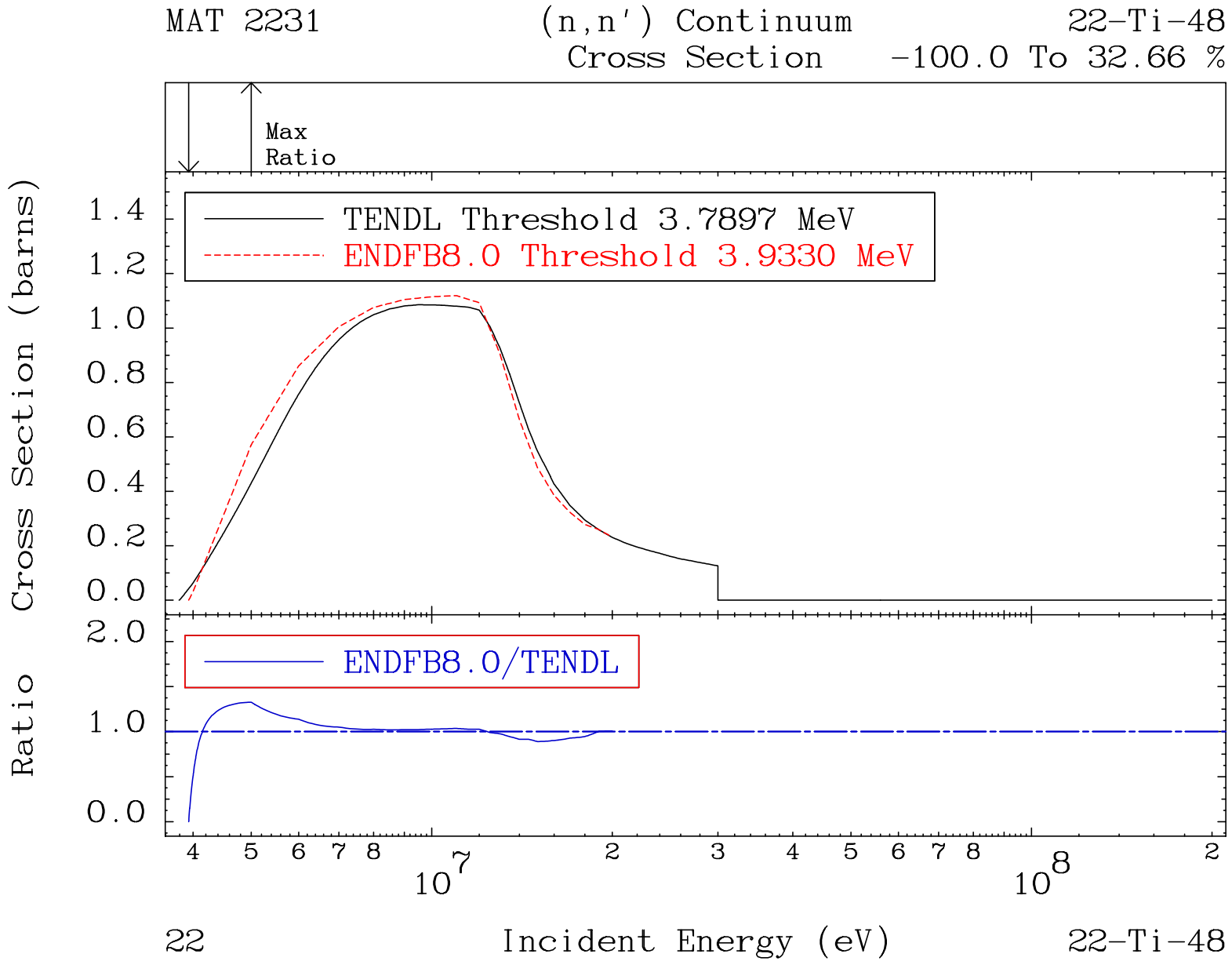

MAT 2231
MT= 61 (n,n') Level
22-Ti-48
Cross Section -100.0 To 2340. %
Min Ratio
Max Ratio
TENDL Threshold 3.4418 MeV
ENDFB8.0 Threshold 3.6929 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
20
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
22-Ti-48

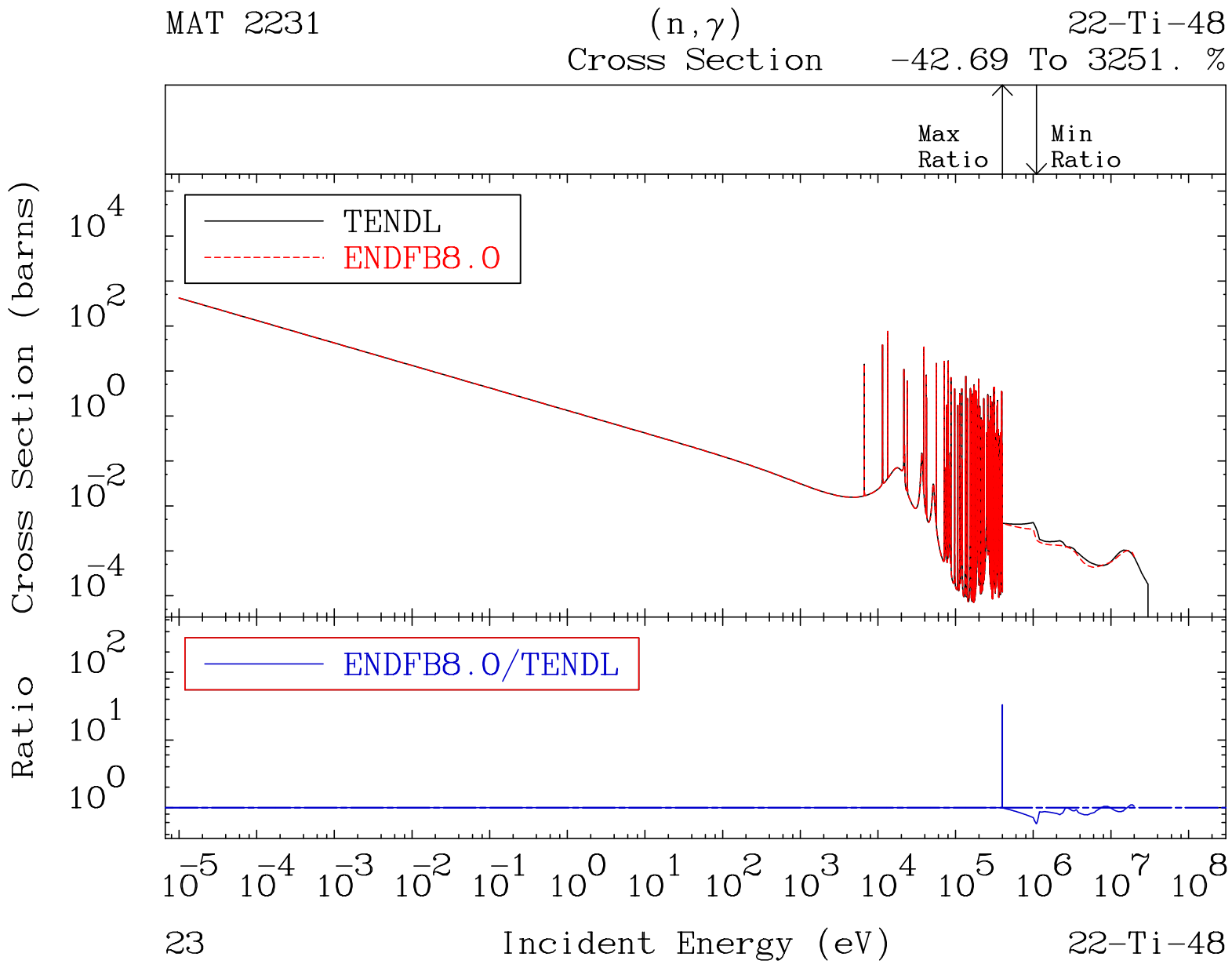

MAT 2231
MT= 62 (n,n') Level
22-Ti-48
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 3.5824 MeV
ENDFB8.0 Threshold 3.7100 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
100
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
22-Ti-48

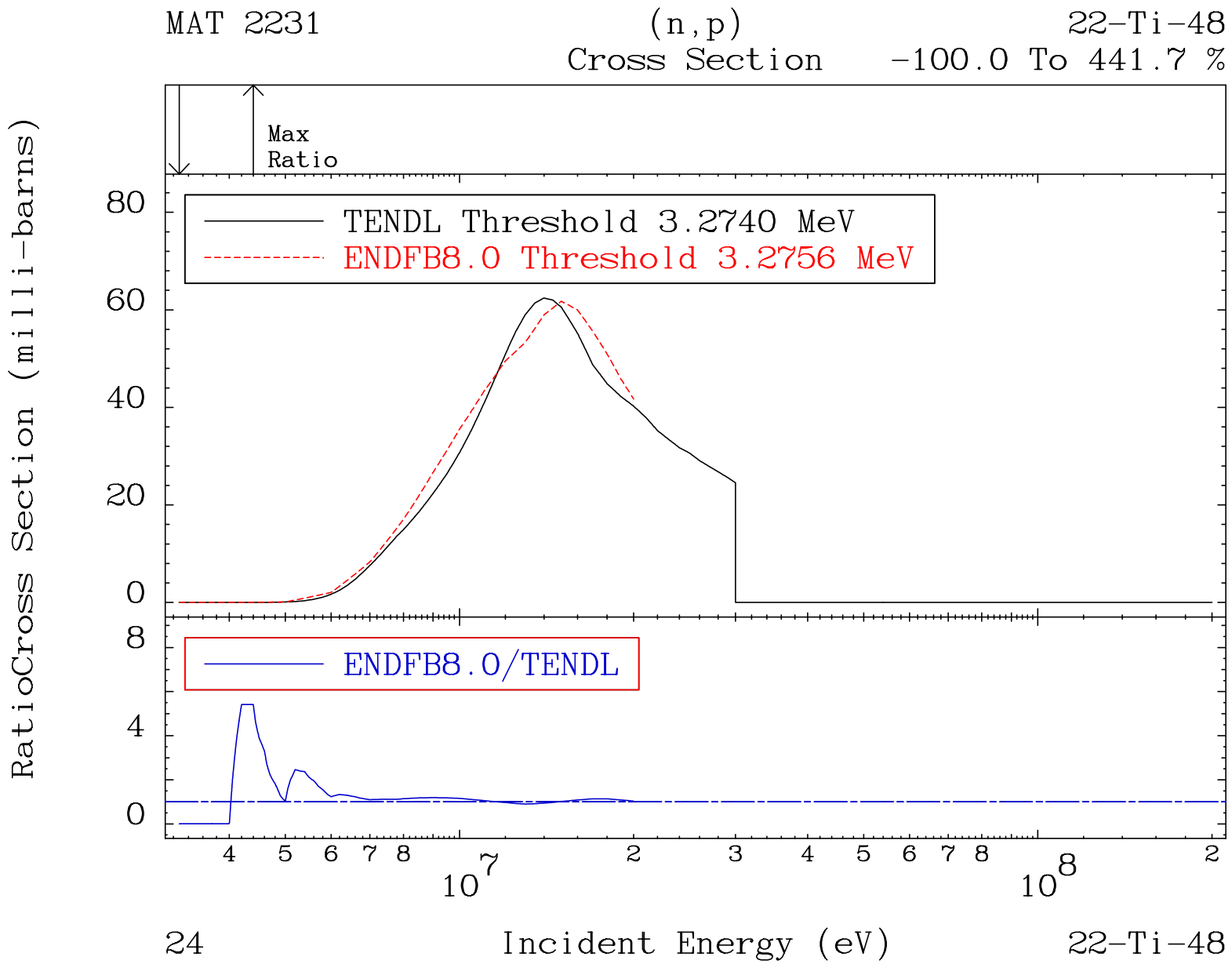

MAT 2231
MT= 63 (n,n') Level
22-Ti-48
Cross Section -100.0 To -31.63%
Max
Ratio
TENDL Threshold 3.6929 MeV
ENDFB8.0 Threshold 3.7772 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
0.8
0.4
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
22-Ti-48

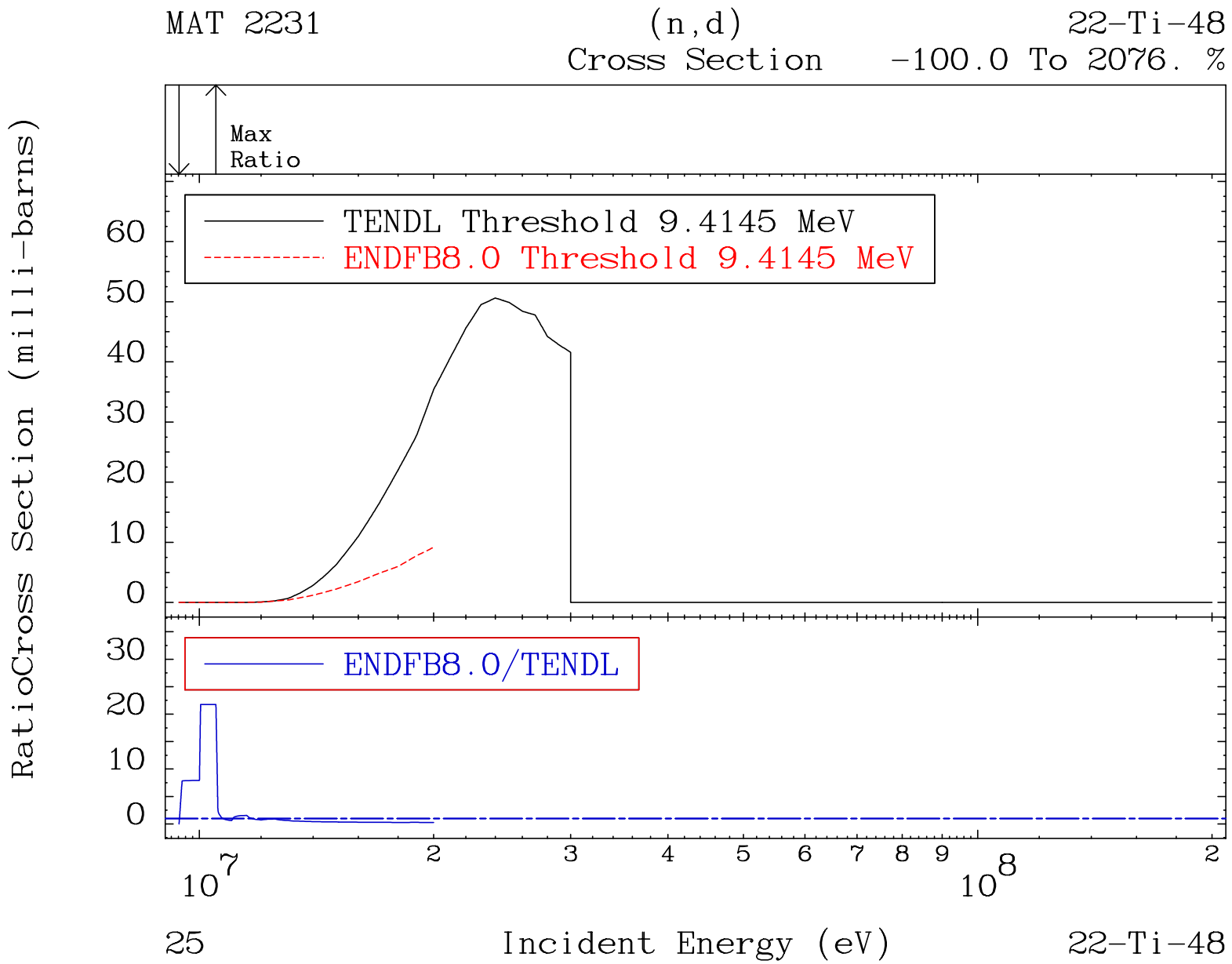

MAT 2231
MT= 64 (n,n') Level
22-Ti-48
Cross Section
-100.0 To 22.04 %
Max
Ratio
TENDL Threshold 3.7773 MeV
ENDFB8.0 Threshold 3.7891 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
22-Ti-48

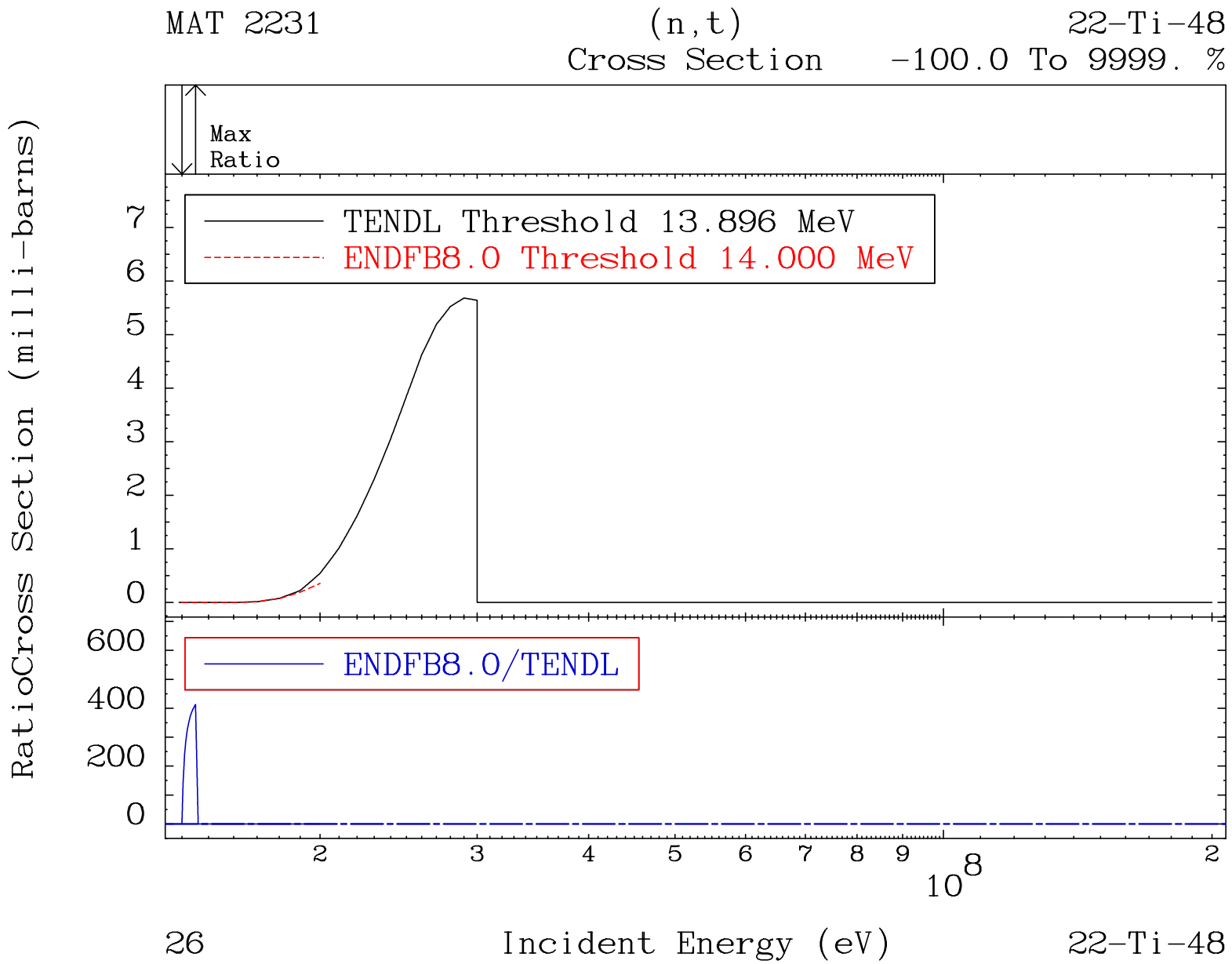

MAT 2231
MT= 65 (n,n') Level
22-Ti-48
Cross Section
-100.0 To 39.03 %
Max
Ratio
TENDL Threshold 3.7897 MeV
ENDFB8.0 Threshold 3.8173 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
22-Ti-48

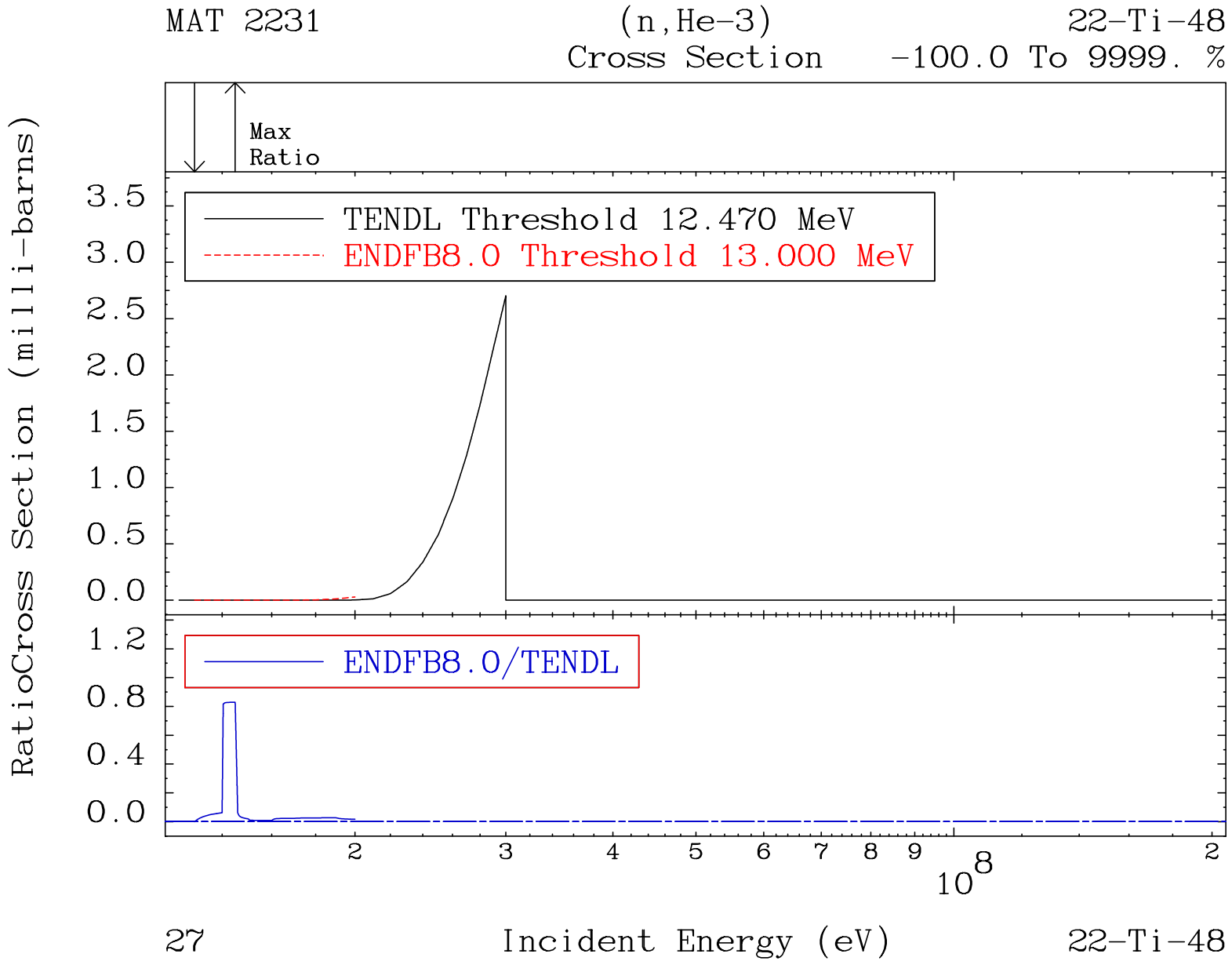

MAT 2231
(n,n') Continuum
Cross Section
22-Ti-48
-100.0 To 32.66 %
Max
Ratio
TENDL Threshold 3.7897 MeV
ENDFB8.0 Threshold 3.9330 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
22-Ti-48

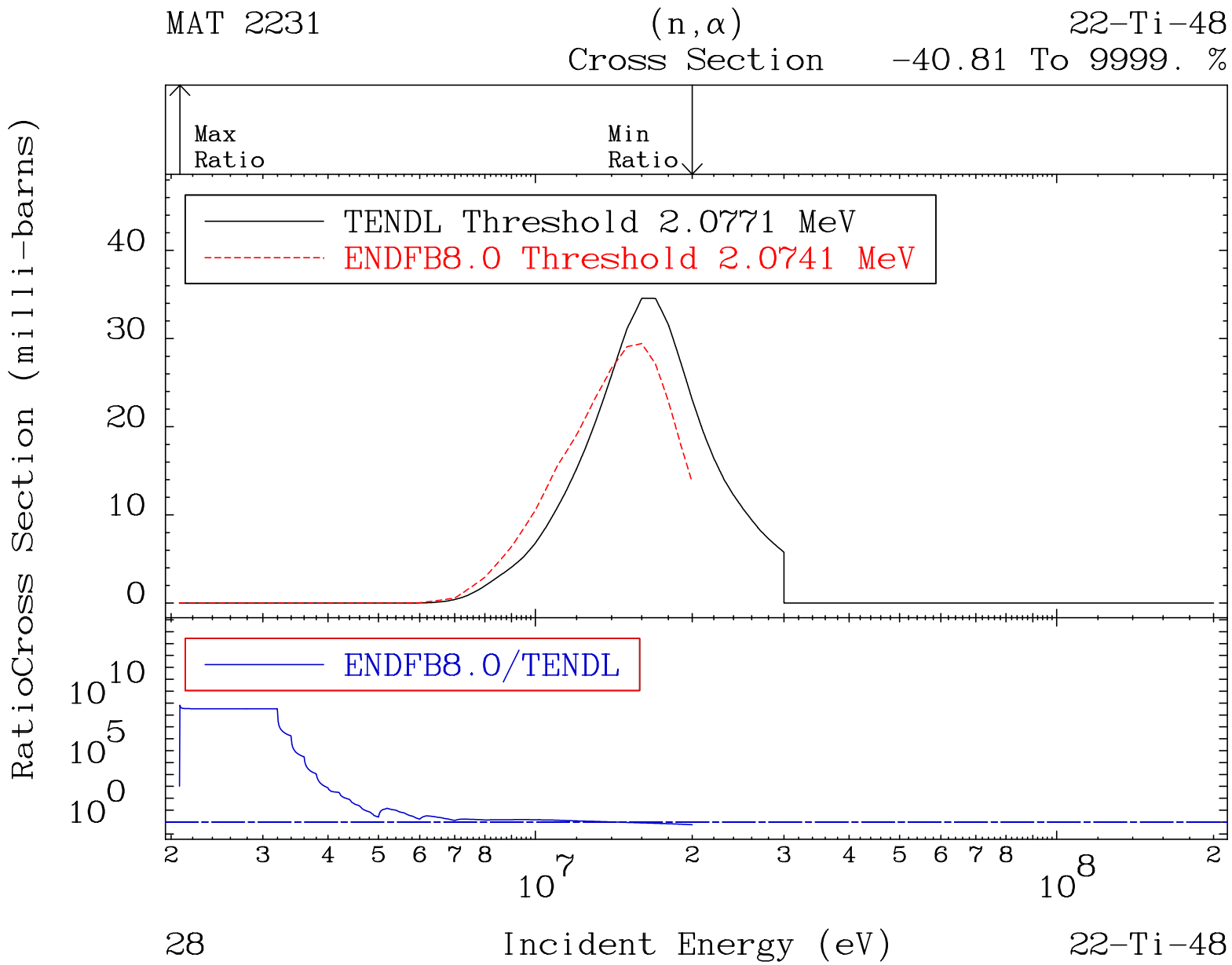

MAT 2231
(n,γ)
Cross Section
22-Ti-48
-42.69 To 3251. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
22-Ti-48

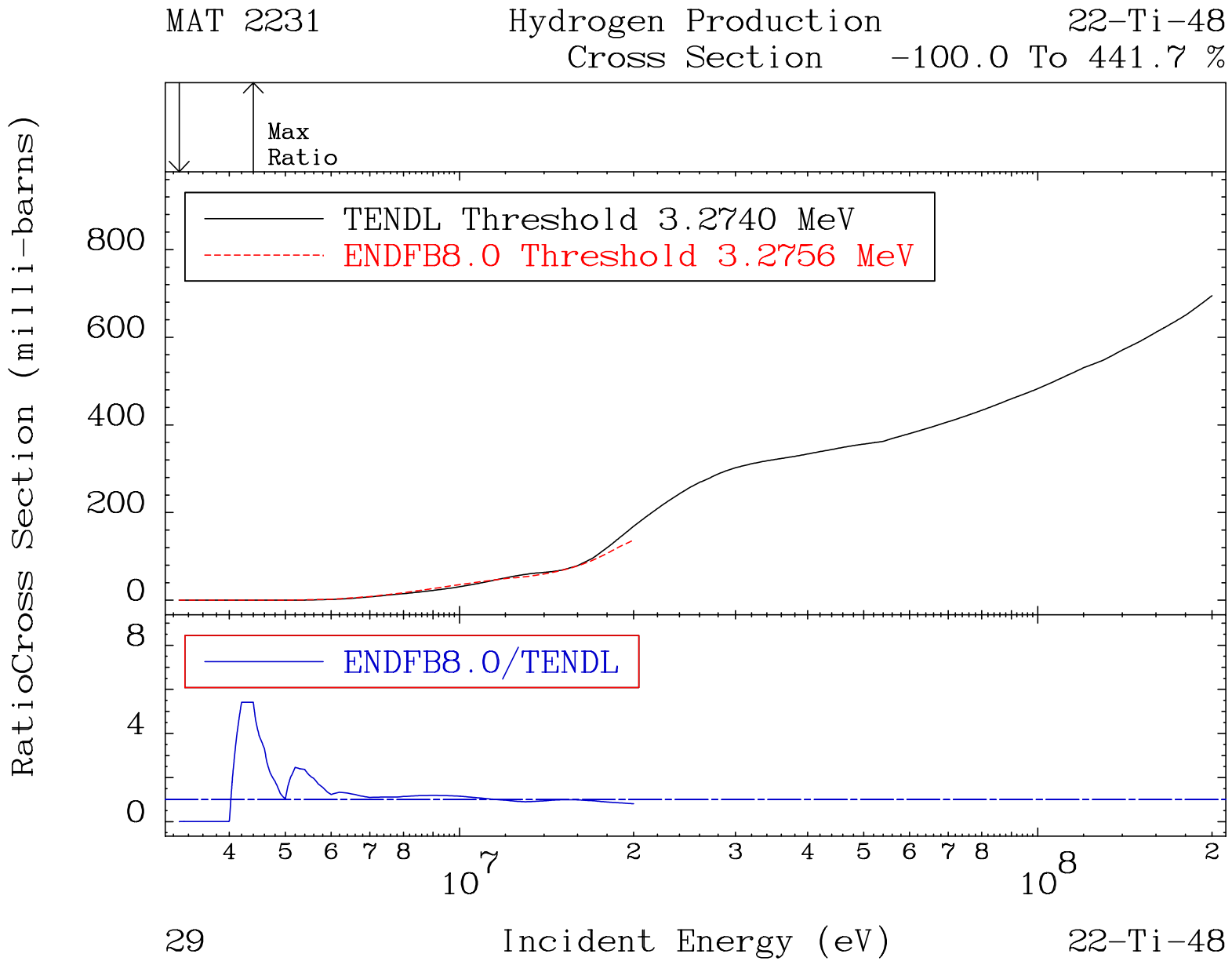

MAT 2231
(n,p)
22-Ti-48
Cross Section
-100.0 To 441.7 %
Max
Ratio
TENDL Threshold 3.2740 MeV
ENDFB8.0 Threshold 3.2756 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
8
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
24
Incident Energy (eV)
22-Ti-48

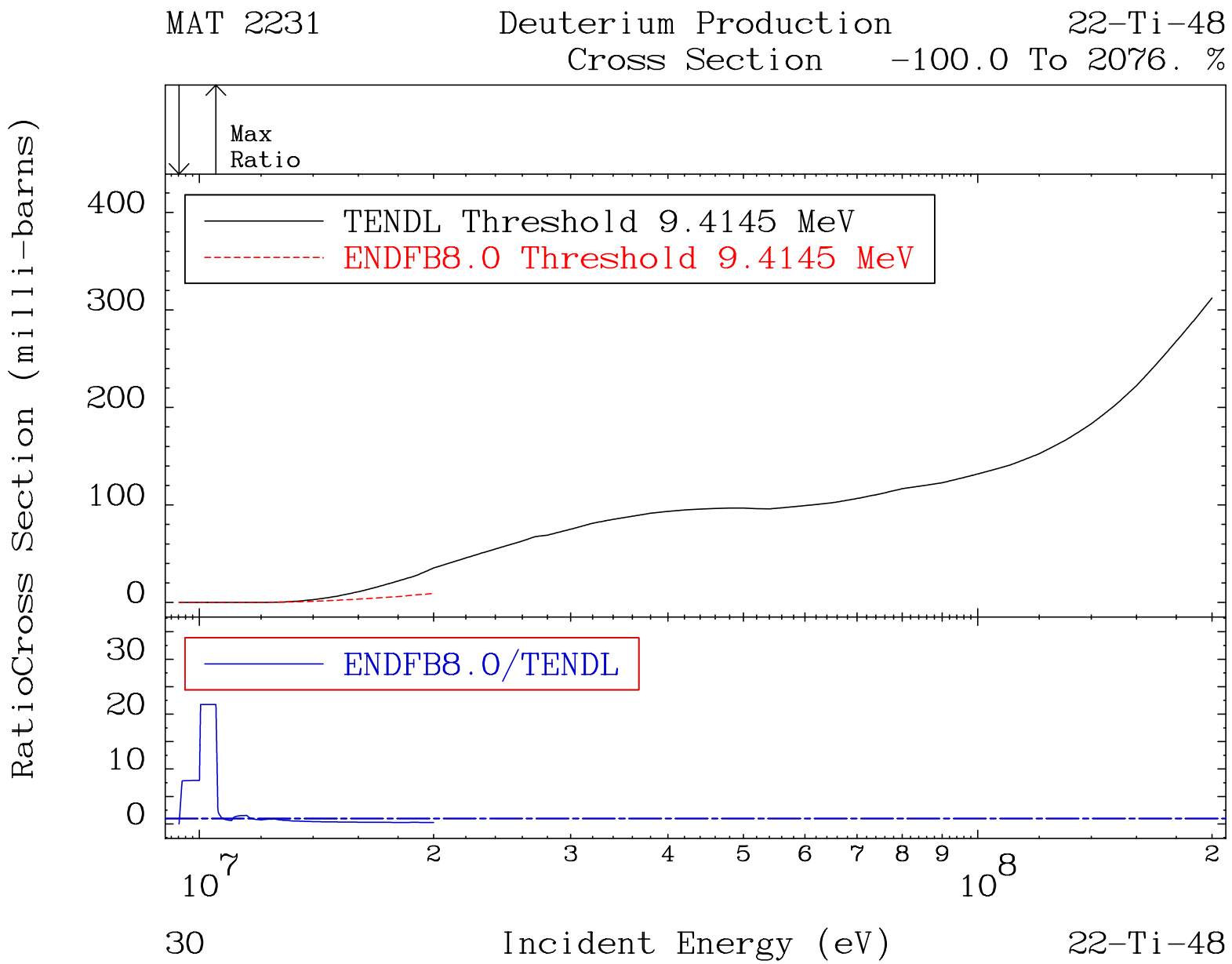

MAT 2231
(n,d)
22-Ti-48
Cross Section
-100.0 To 2076. %
Max
Ratio
TENDL Threshold 9.4145 MeV
ENDFB8.0 Threshold 9.4145 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
30
20
10
0
10^7
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
22-Ti-48

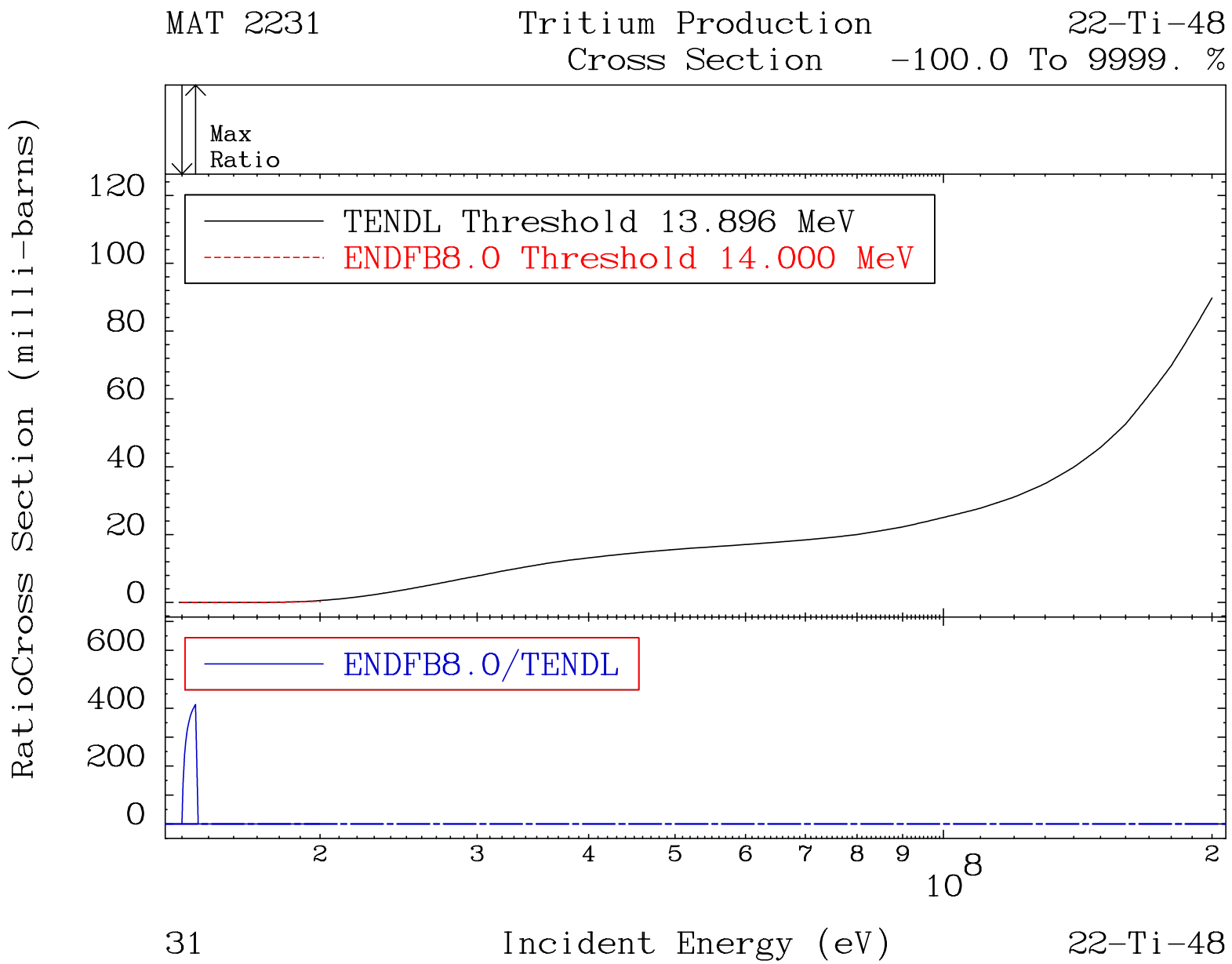

MAT 2231
(n,t)
22-Ti-48
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 13.896 MeV
ENDFB8.0 Threshold 14.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
7
6
5
4
3
2
1
0
600
400
200
0
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
22-Ti-48

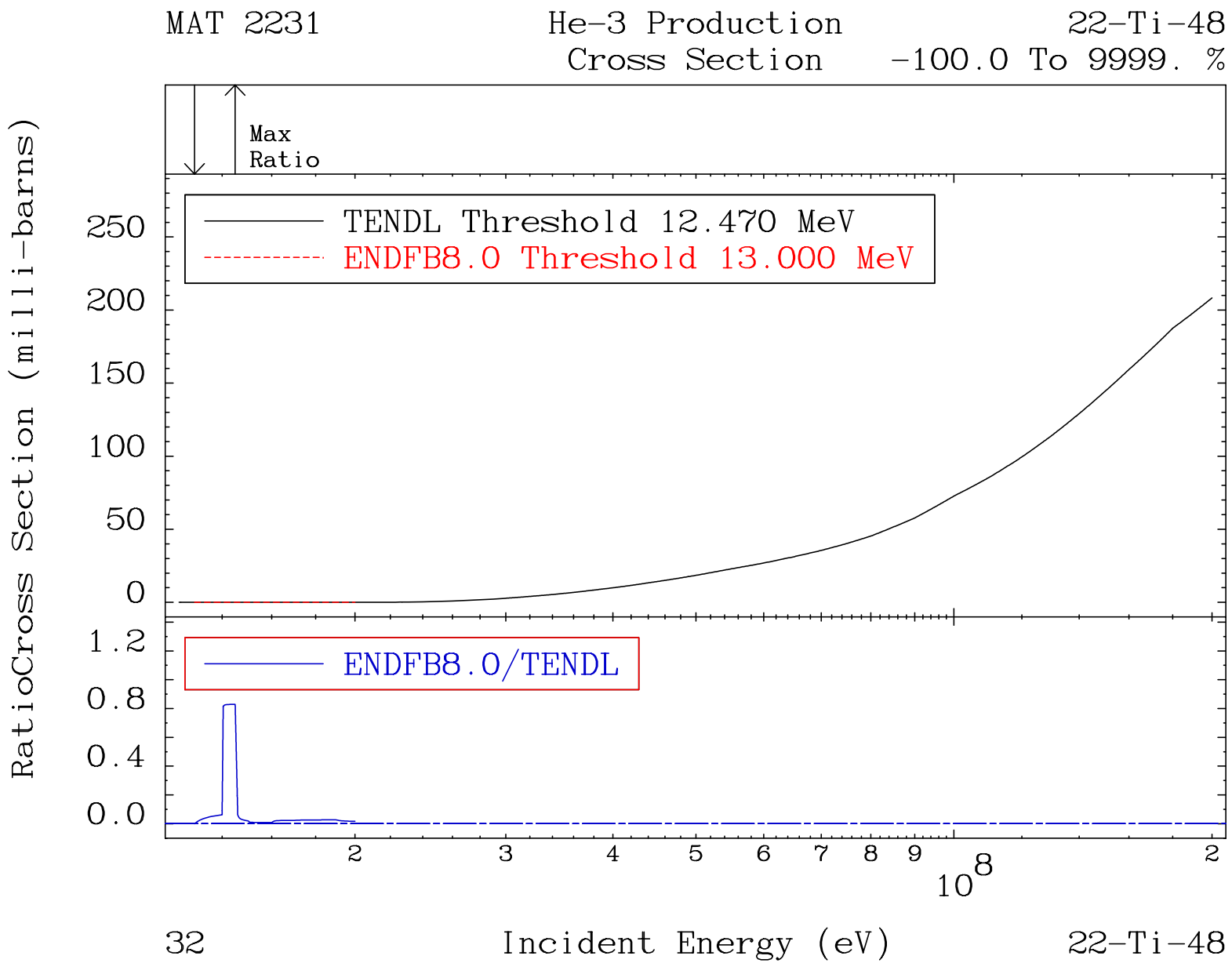

MAT 2231
(n,He-3)
Cross Section
22-Ti-48
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.470 MeV
ENDFB8.0 Threshold 13.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
27
Incident Energy (eV)
22-Ti-48

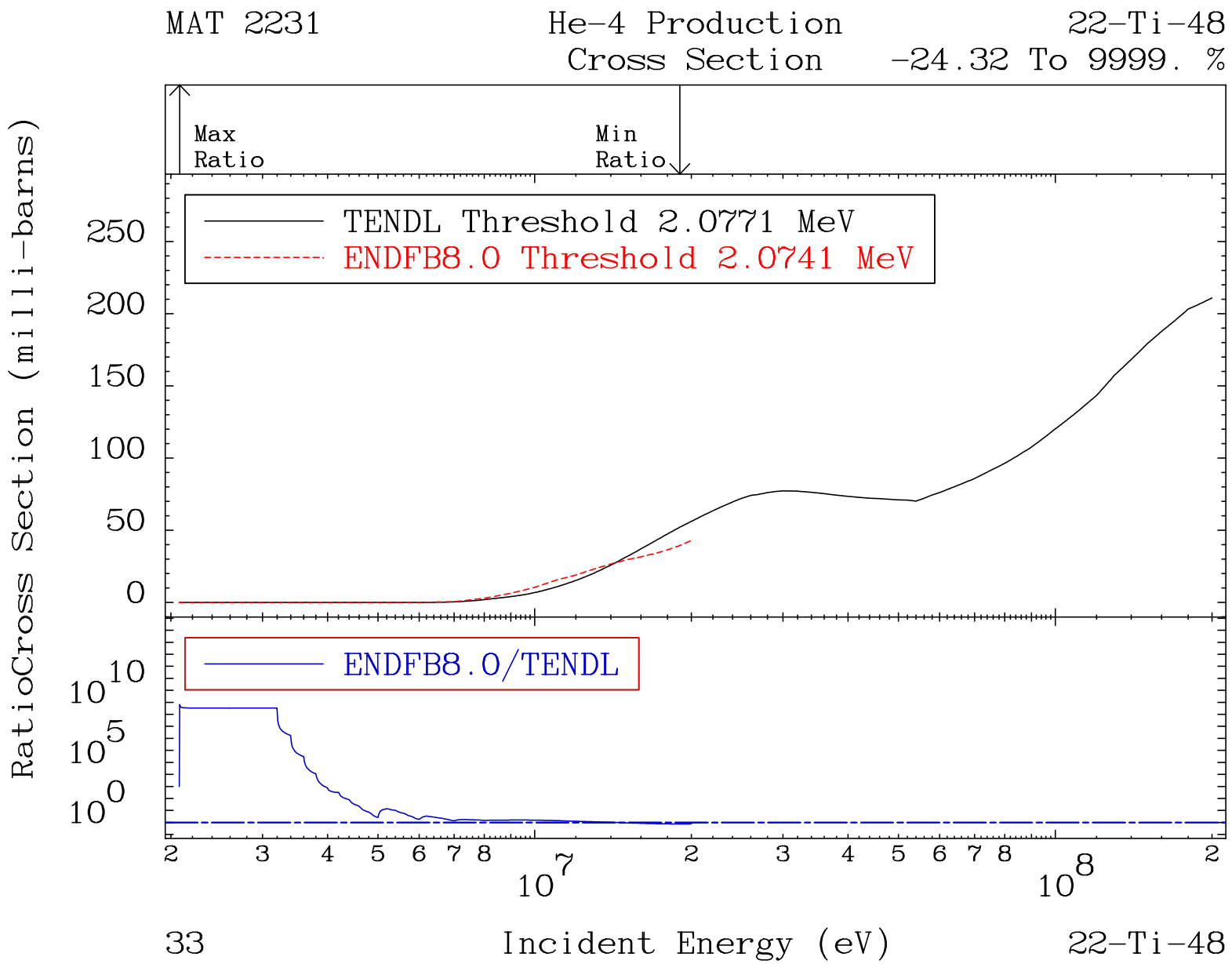

MAT 2231
(n,α)
22-Ti-48
Cross Section
-40.81 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.0771 MeV
ENDFB8.0 Threshold 2.0741 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
10^10
10^5
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
22-Ti-48

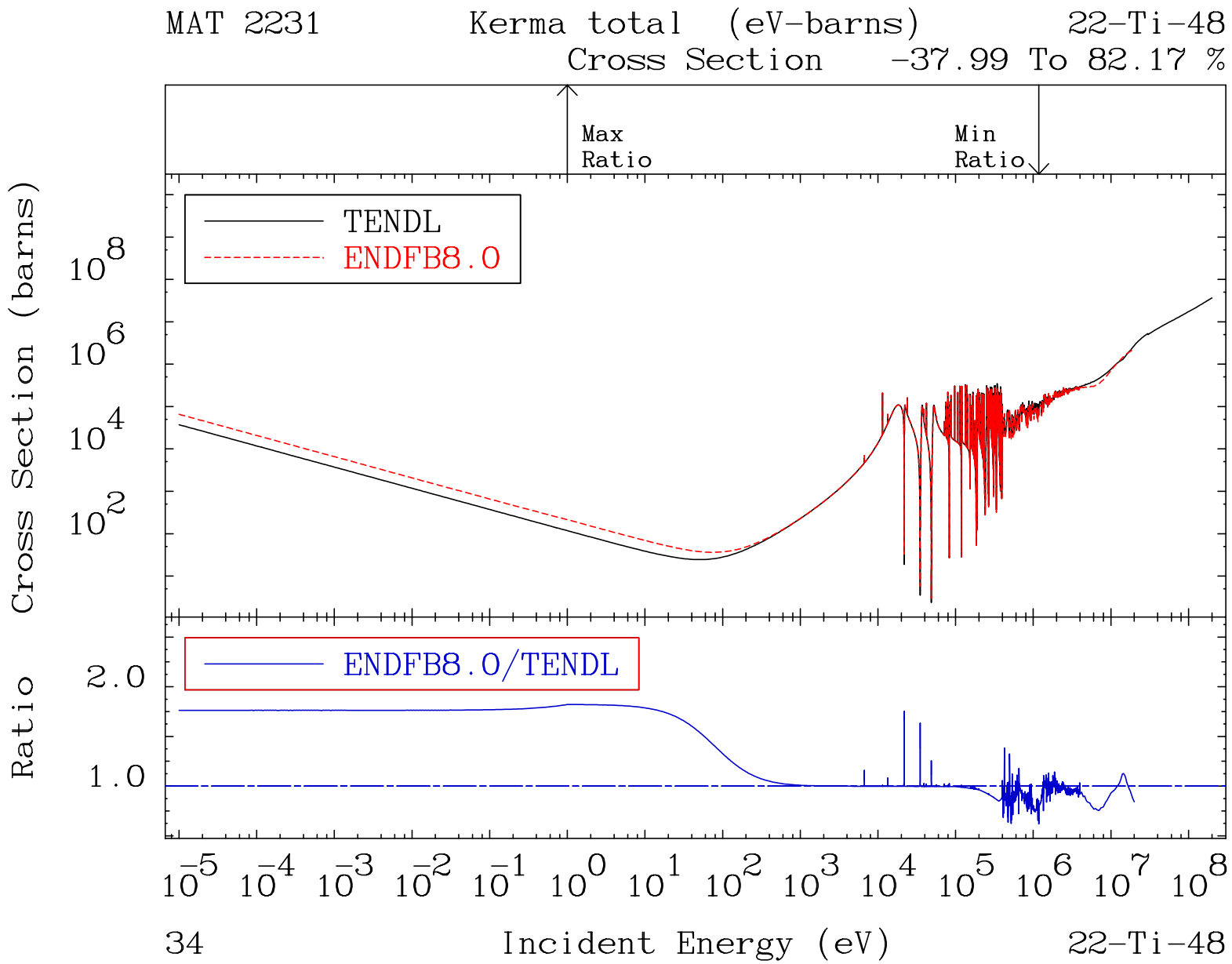

MAT 2231
Hydrogen Production
22-Ti-48
Cross Section
-100.0 To 441.7 %
Max
Ratio
TENDL Threshold 3.2740 MeV
ENDFB8.0 Threshold 3.2756 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
8
4
0
4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
22-Ti-48

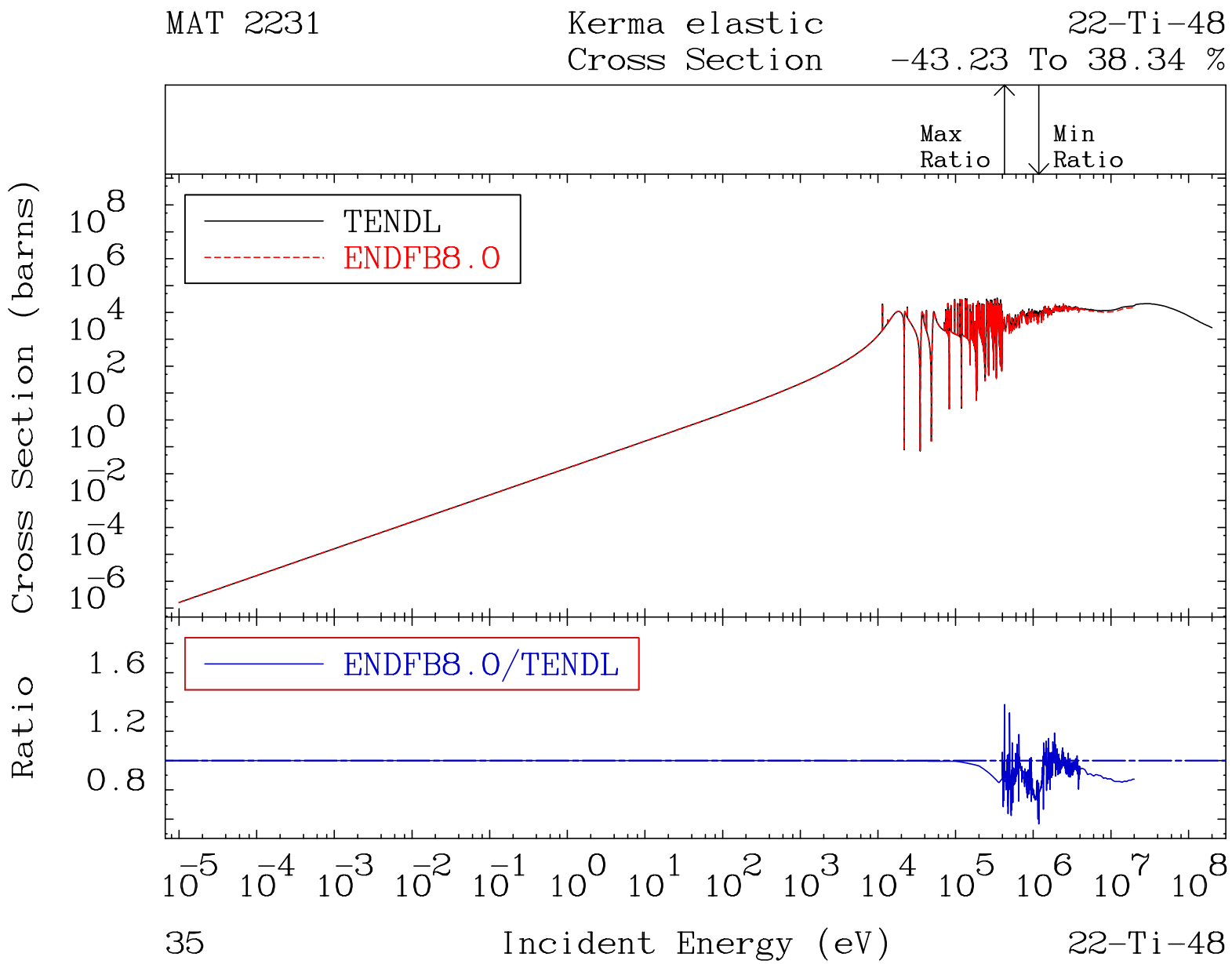

MAT 2231
Deuterium Production
22-Ti-48
Cross Section
-100.0 To 2076. %
Max
Ratio
TENDL Threshold 9.4145 MeV
ENDFB8.0 Threshold 9.4145 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
30
20
10
0
10^7
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
22-Ti-48

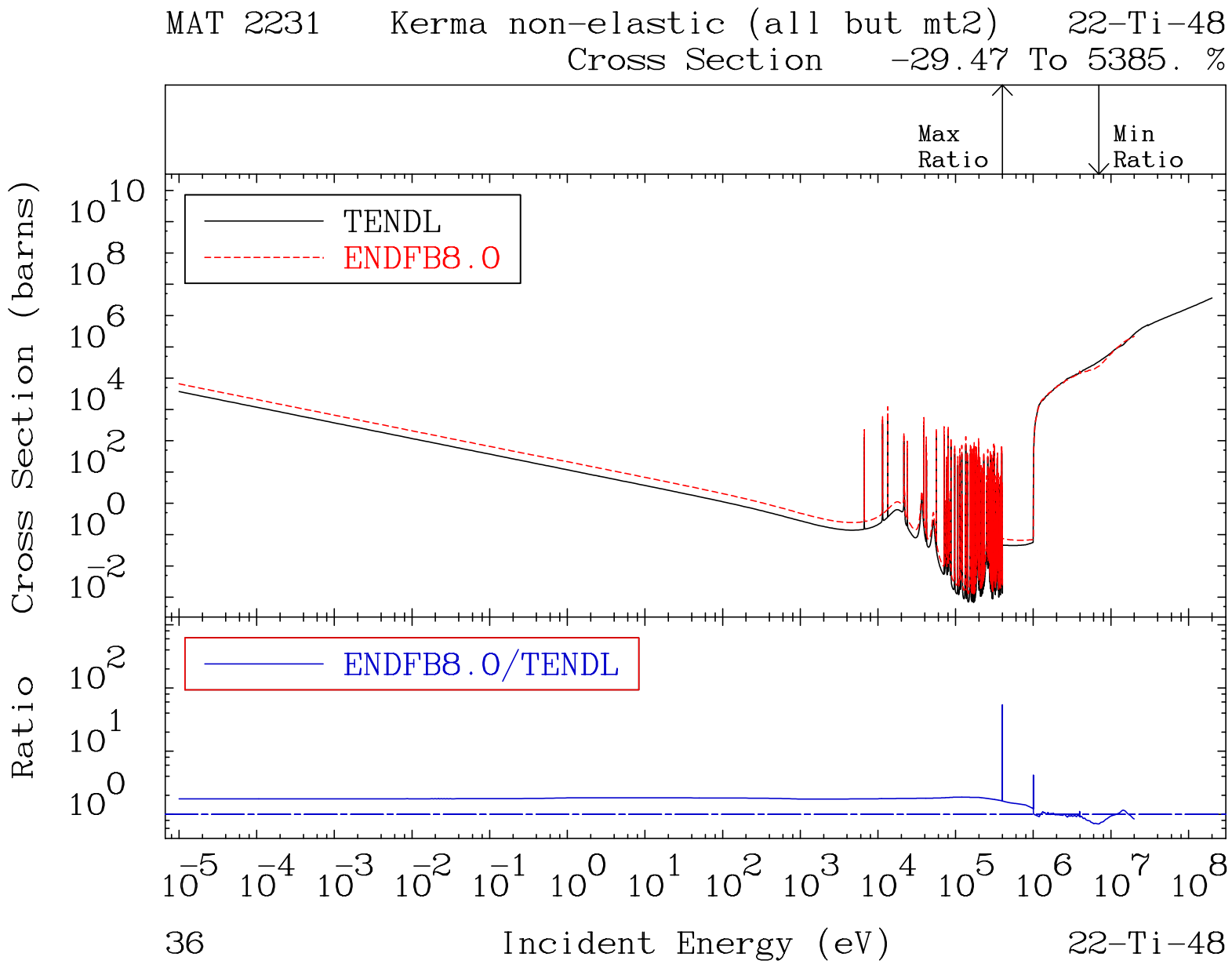

MAT 2231
Tritium Production
22-Ti-48
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 13.896 MeV
ENDFB8.0 Threshold 14.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
600
400
200
0
2
3
4
5
6
7
8
9
10^8
2
31
Incident Energy (eV)
22-Ti-48

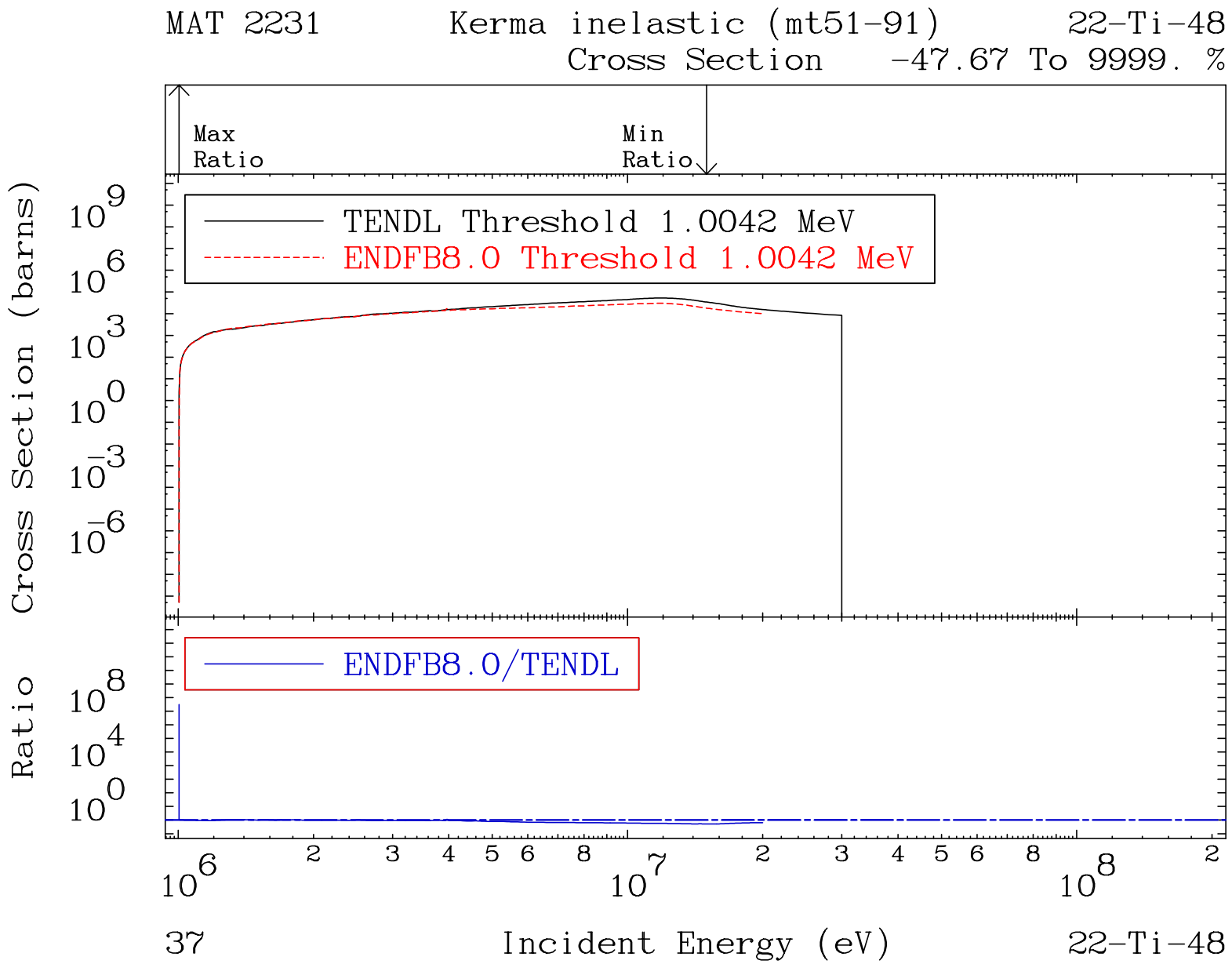

MAT 2231
He-3 Production
Cross Section
22-Ti-48
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 12.470 MeV
ENDFB8.0 Threshold 13.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
22-Ti-48

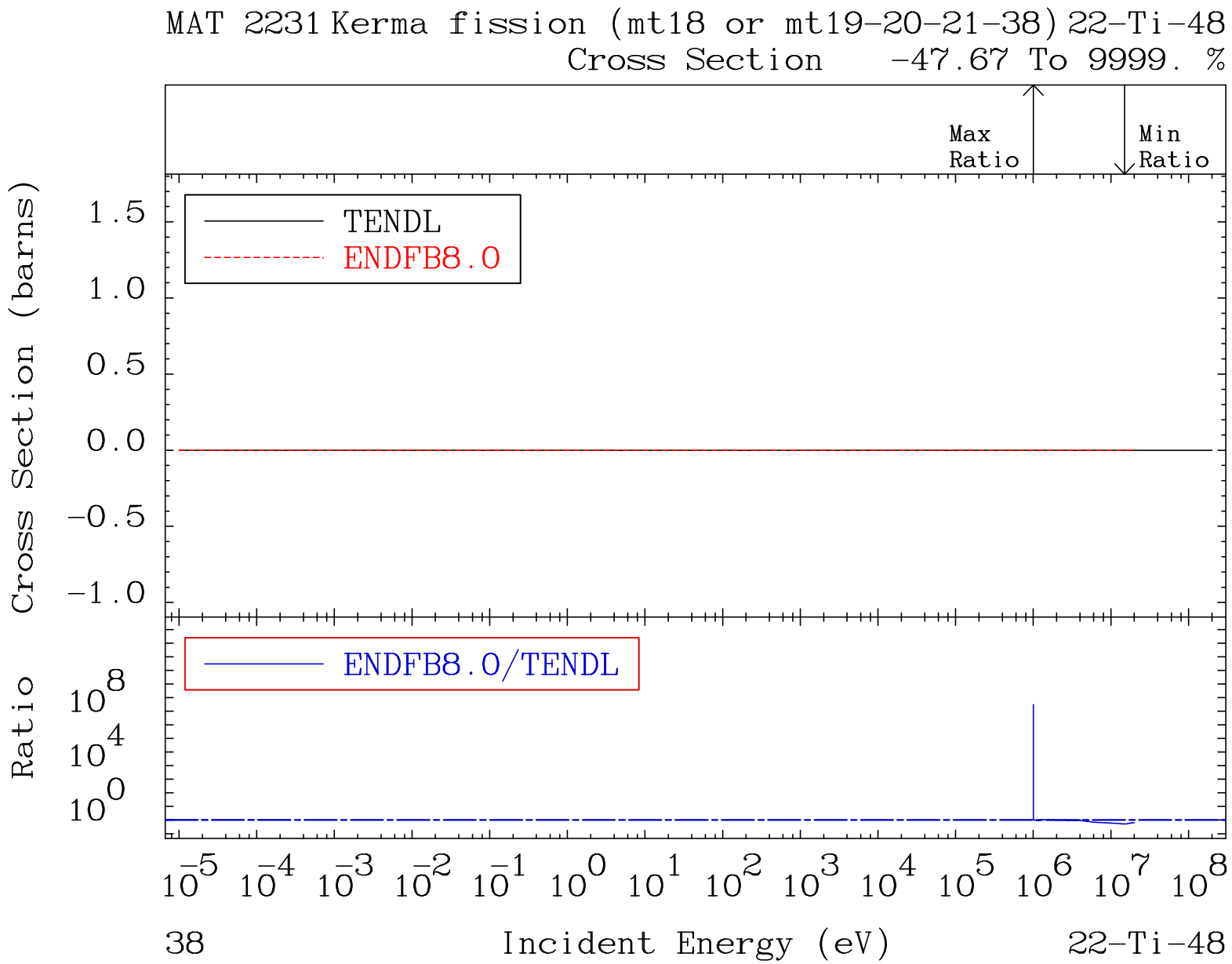

MAT 2231
He-4 Production
Cross Section
22-Ti-48
-24.32 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.0771 MeV
ENDFB8.0 Threshold 2.0741 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
10^10
10^5
10^0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
22-Ti-48

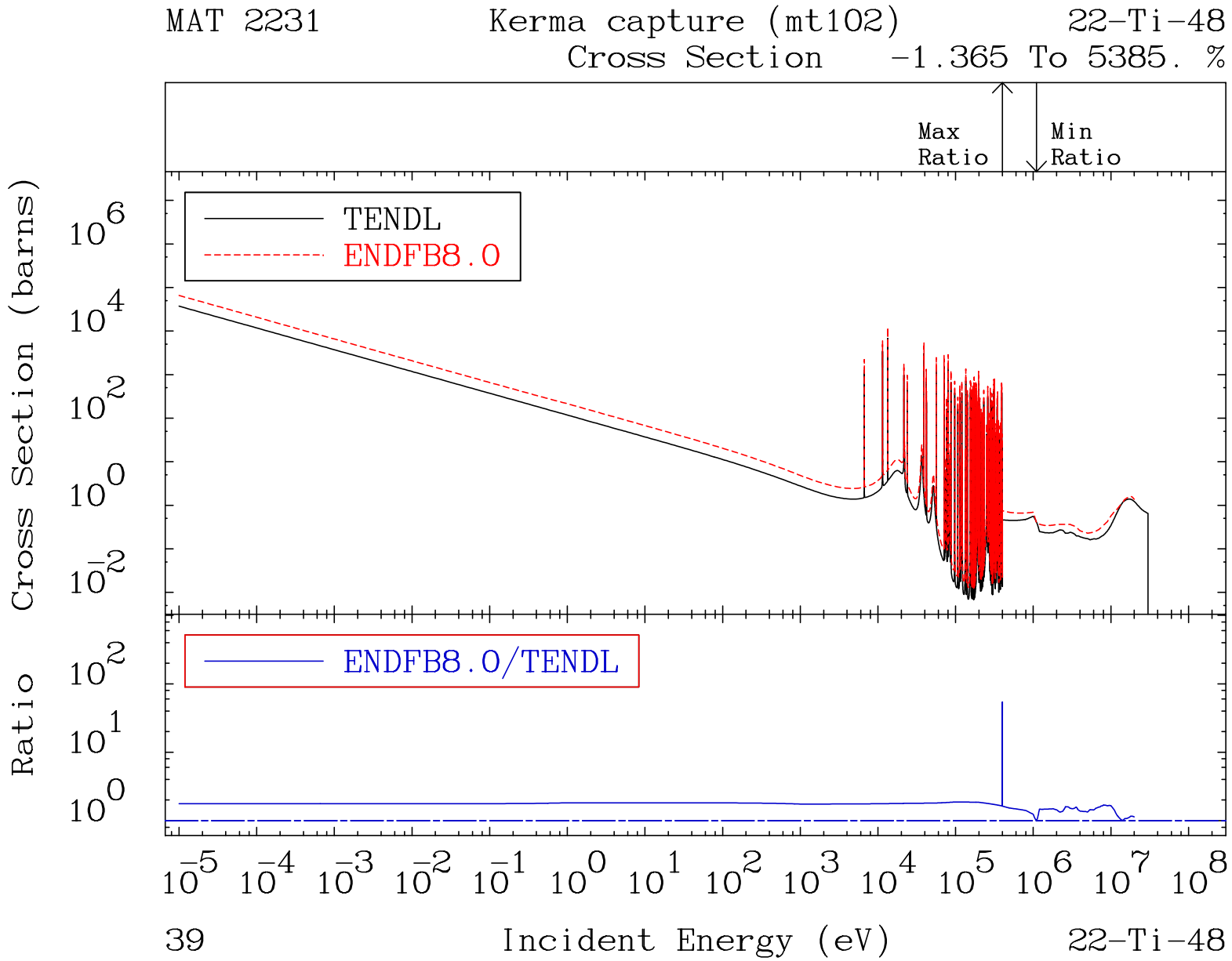

MAT 2231
Kerma total (eV-barns)
22-Ti-48
Cross Section -37.99 To 82.17 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
$10^8$
$10^6$
$10^4$
$10^2$
ENDFB8.0/TENDL
Ratio
2.0
1.0
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
34
Incident Energy (eV)
22-Ti-48

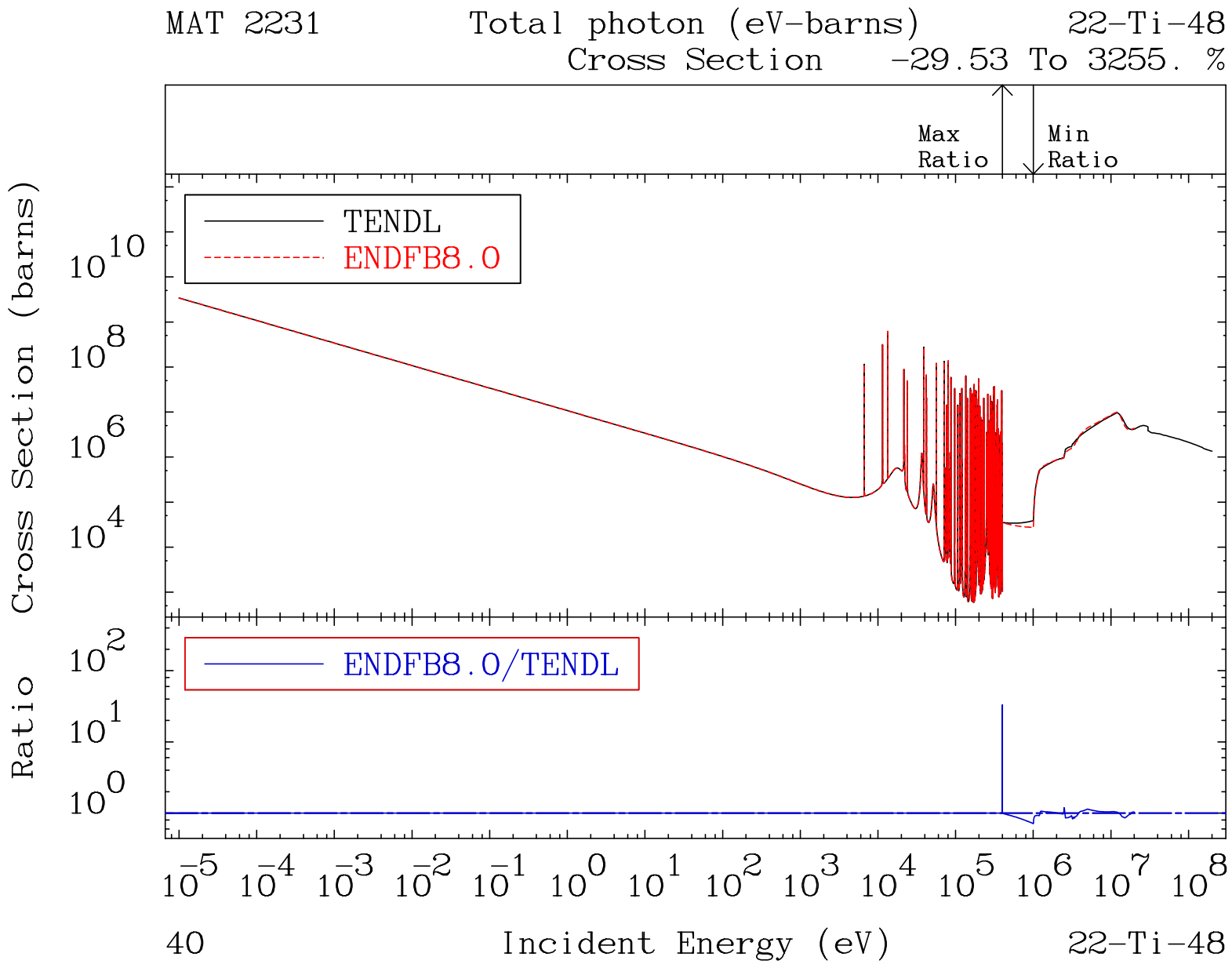

MAT 2231
Kerma elastic
Cross Section
22-Ti-48
-43.23 To 38.34 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
35
22-Ti-48

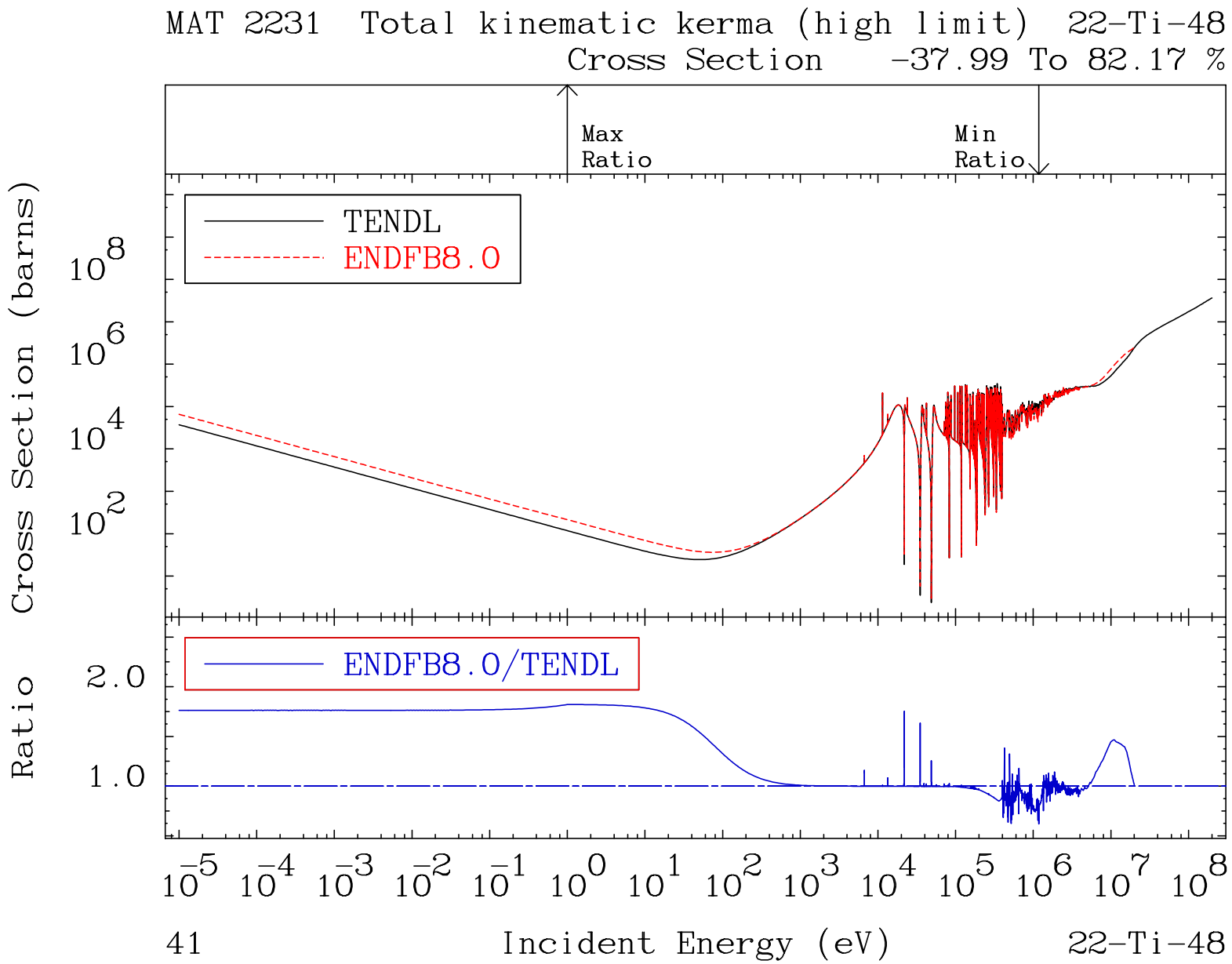

MAT 2231 Kerma non-elastic (all but mt2) 22-Ti-48
Cross Section -29.47 To 5385. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
22-Ti-48

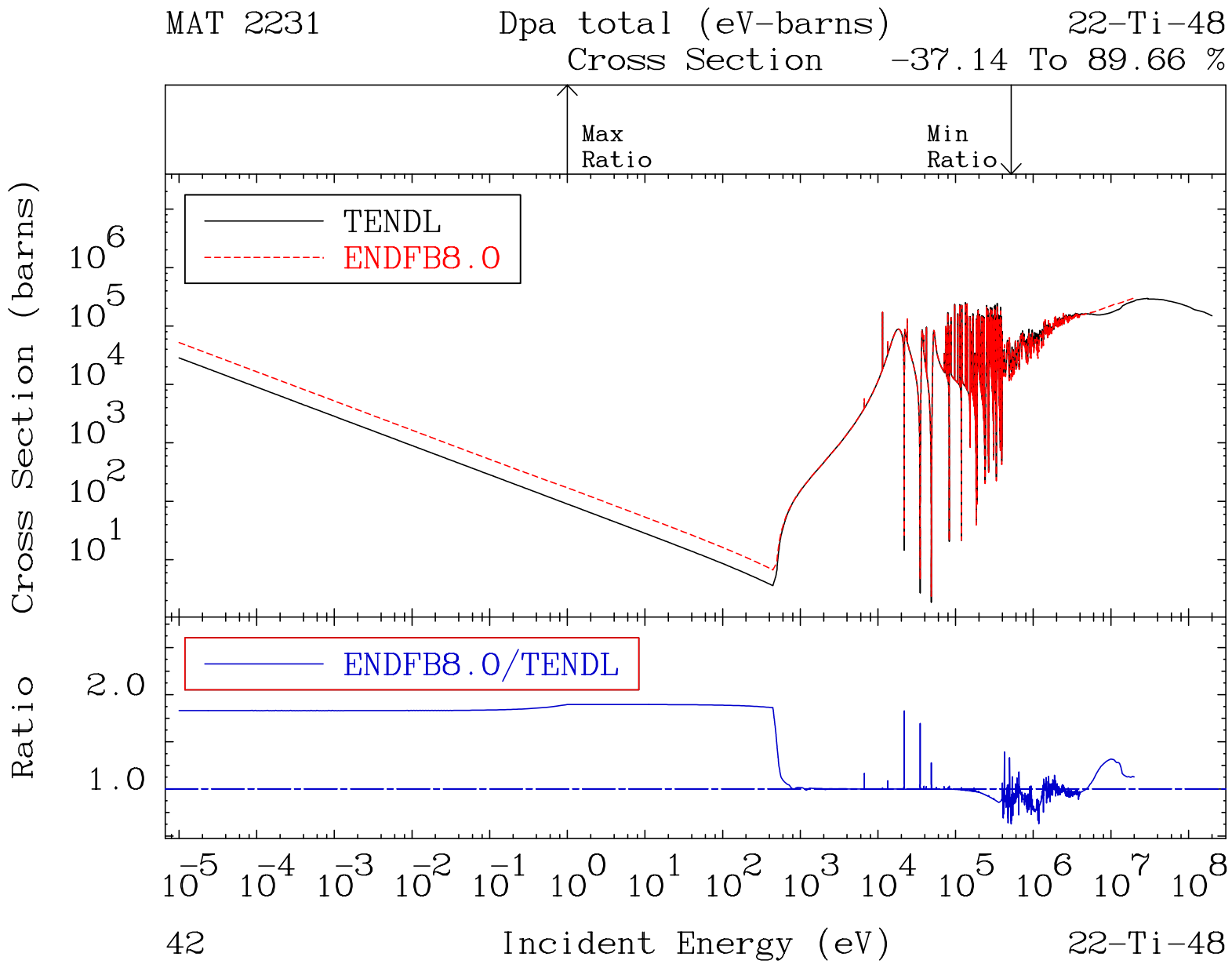

MAT 2231
Kerma inelastic (mt51-91)
22-Ti-48
Cross Section -47.67 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.0042 MeV
ENDFB8.0 Threshold 1.0042 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
22-Ti-48

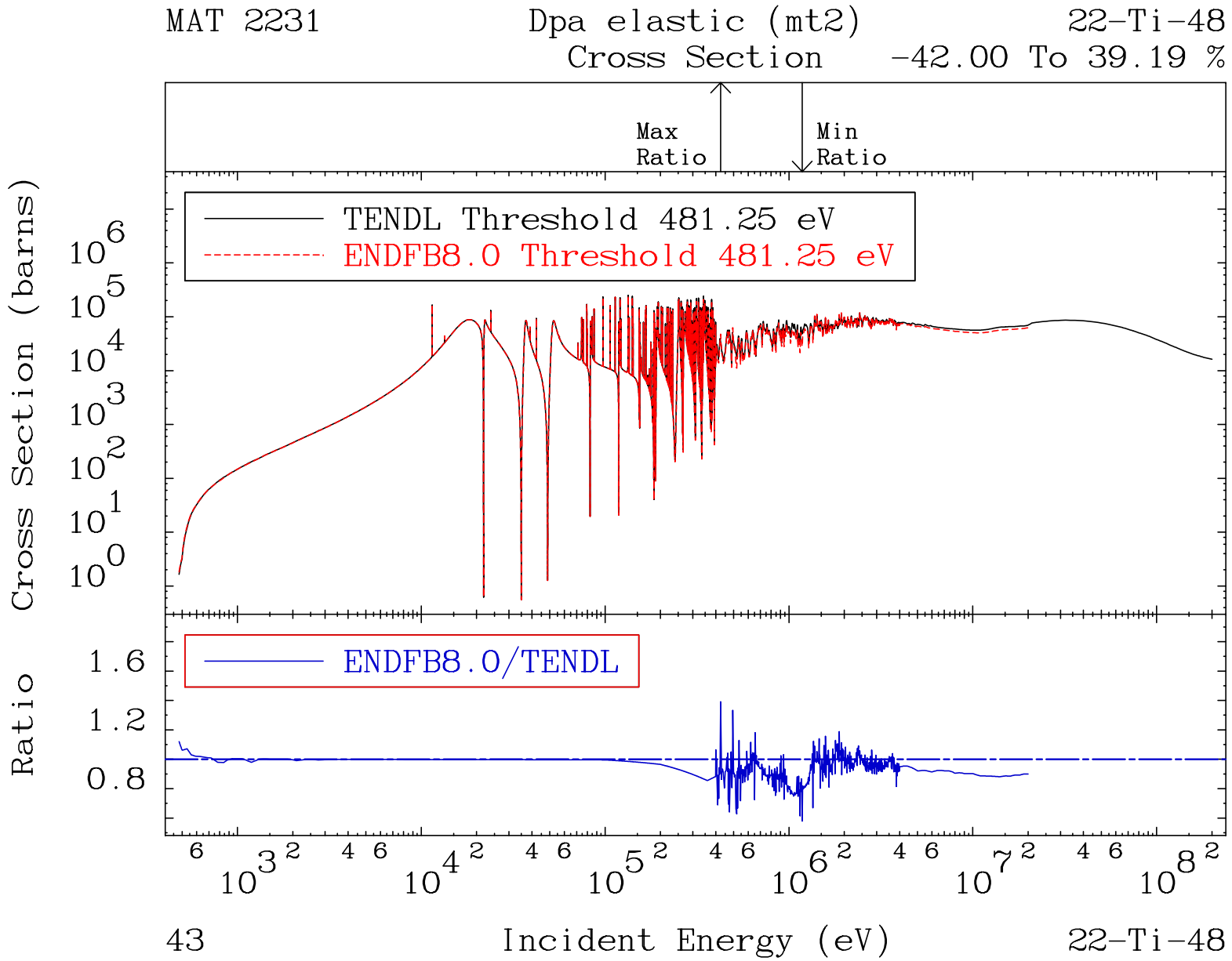

MAT 2231 Kerma fission (mt18 or mt19-20-21-38) 22-Ti-48
Cross Section -47.67 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
$10^{8}$
$10^{4}$
$10^{0}$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^{0}$ $10^{1}$ $10^{2}$ $10^{3}$ $10^{4}$ $10^{5}$ $10^{6}$ $10^{7}$ $10^{8}$
38
Incident Energy (eV)
22-Ti-48

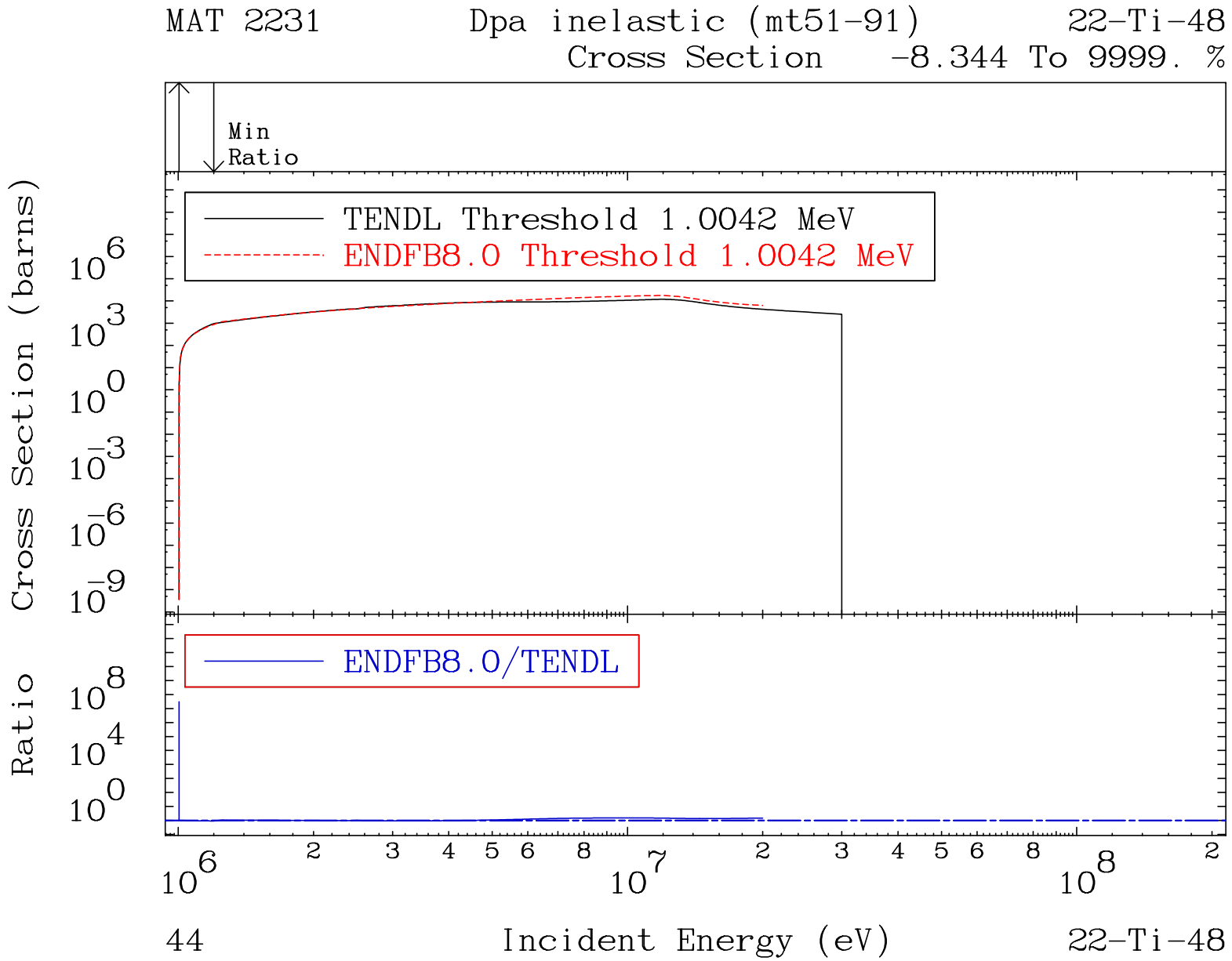

MAT 2231
Kerma capture (mt102)
22-Ti-48
Cross Section -1.365 To 5385. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
39
22-Ti-48

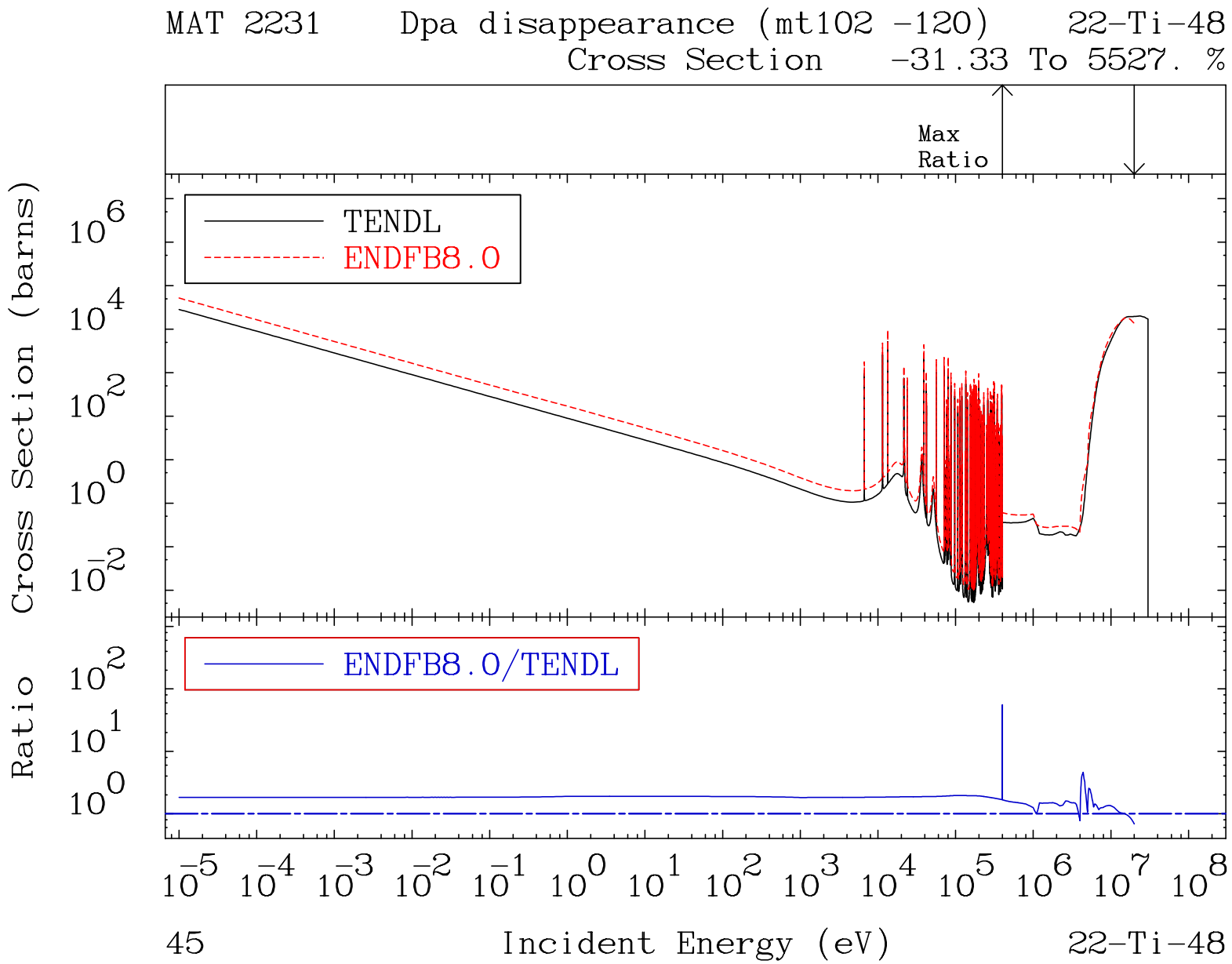

MAT 2231
Total photon (eV-barns)
22-Ti-48
Cross Section -29.53 To 3255. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
22-Ti-48


MAT 2231 Total kinematic kerma (high limit) 22-Ti-48
Cross Section -37.99 To 82.17 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
$10^8$
$10^6$
$10^4$
$10^2$
ENDFB8.0/TENDL
Ratio
2.0
1.0
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^0$ $10^1$ $10^2$ $10^3$ $10^4$ $10^5$ $10^6$ $10^7$ $10^8$
41
Incident Energy (eV)
22-Ti-48


MAT 2231
Dpa total (eV-barns)
22-Ti-48
Cross Section
-37.14 To 89.66 %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
10^6
10^5
10^4
10^3
10^2
10^1
ENDFB8.0/TENDL
Ratio
2.0
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
42
Incident Energy (eV)
22-Ti-48


MAT 2231
Dpa elastic (mt2)
Cross Section
22-Ti-48
-42.00 To 39.19 %
Max Ratio
Min Ratio
TENDL Threshold 481.25 eV
ENDFB8.0 Threshold 481.25 eV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
43
22-Ti-48


MAT 2231
Dpa inelastic (mt51-91)
22-Ti-48
Cross Section -8.344 To 9999. %
Min
Ratio
TENDL Threshold 1.0042 MeV
ENDFB8.0 Threshold 1.0042 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
22-Ti-48


MAT 2231 Dpa disappearance (mt102 -120) 22-Ti-48
Cross Section -31.33 To 5527. %
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
45
22-Ti-48