Program Complot
(Version 2018-1)
by
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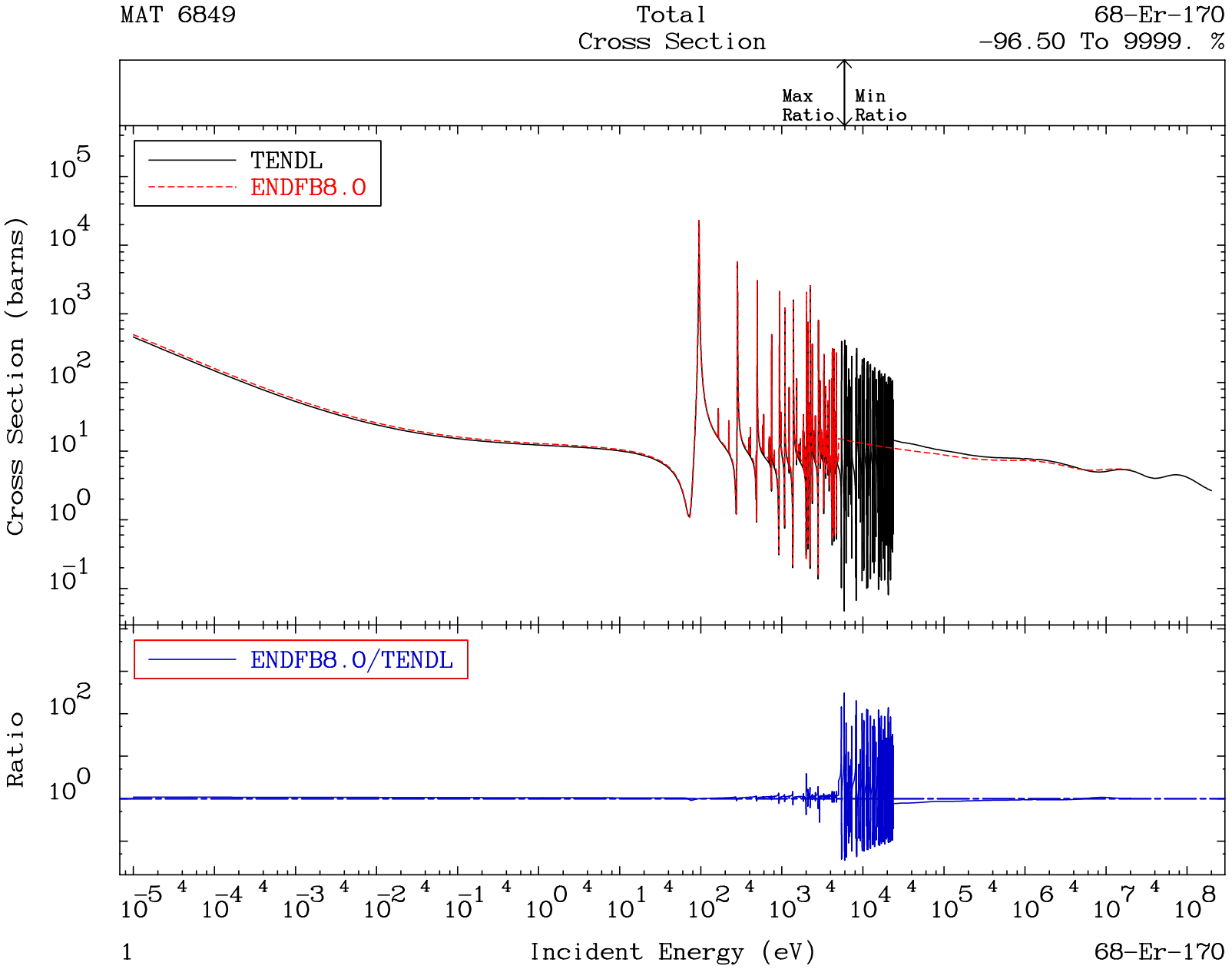
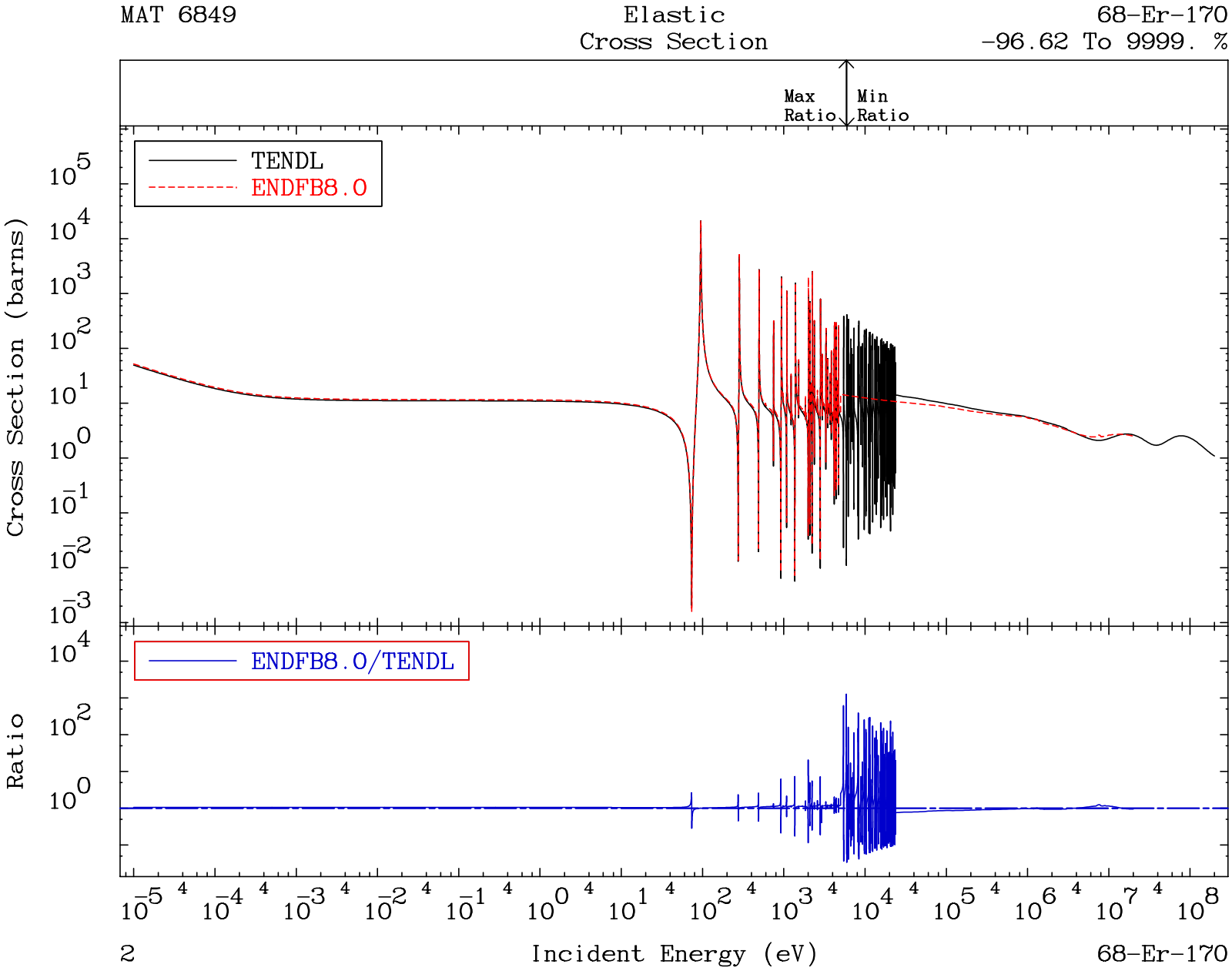
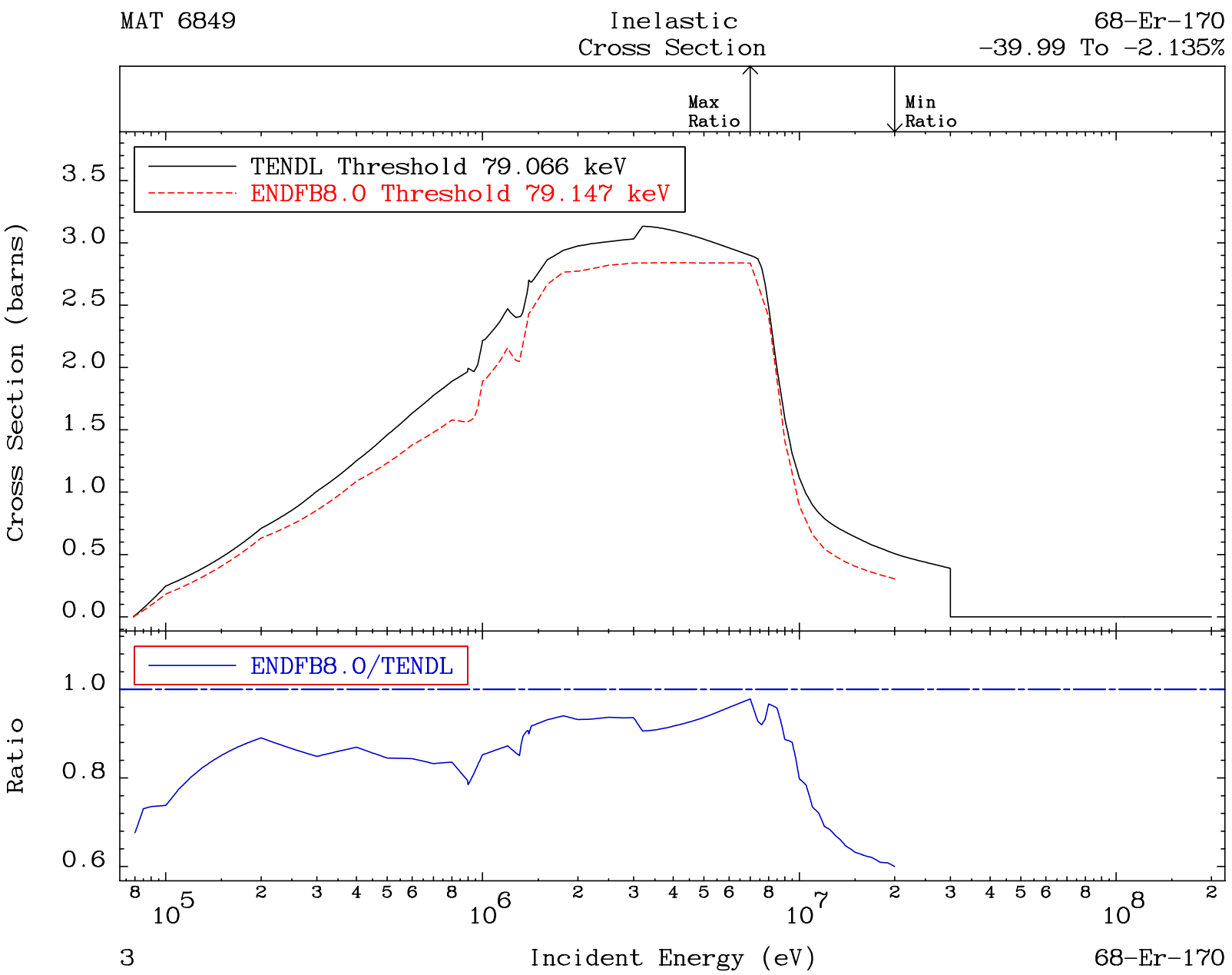
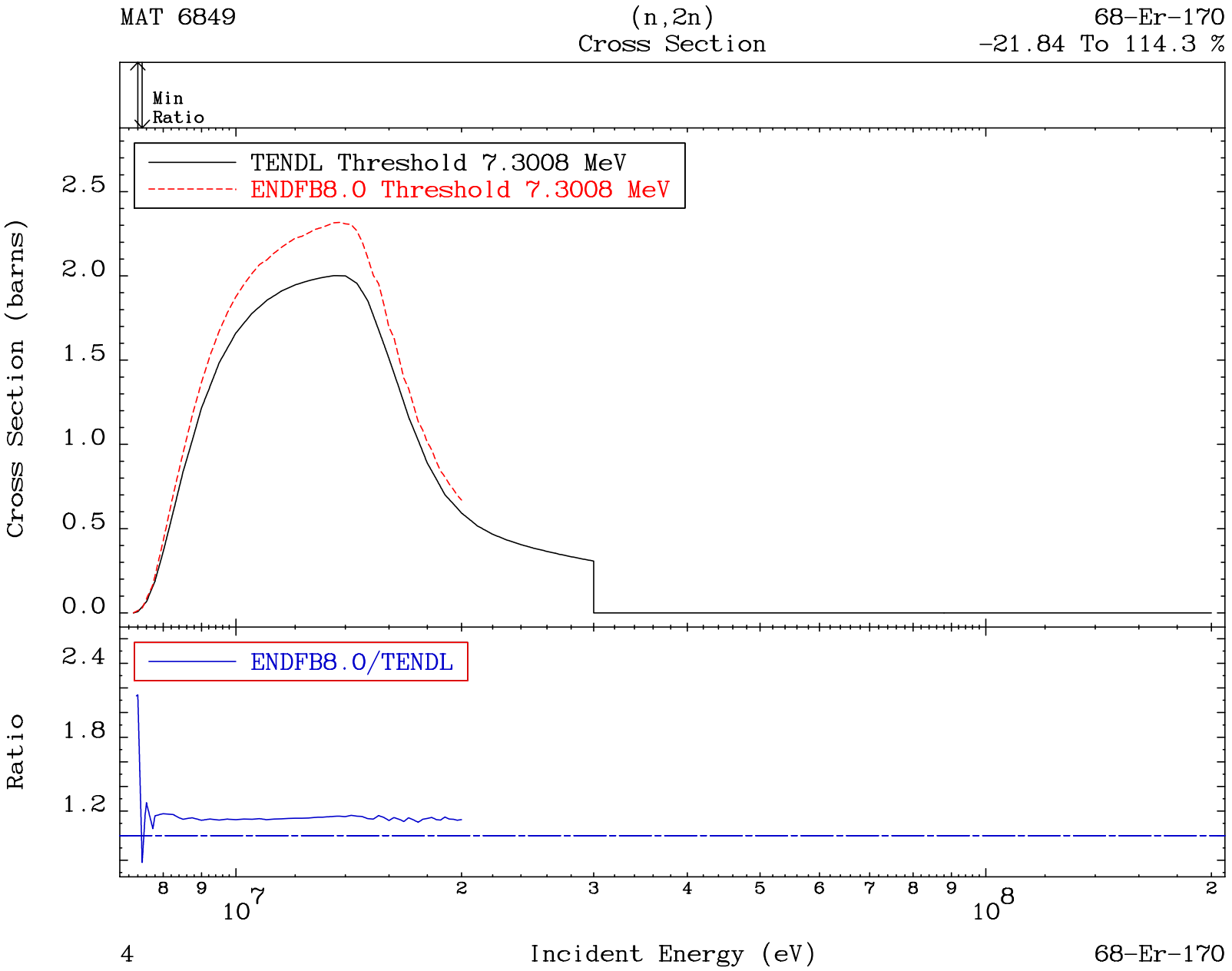
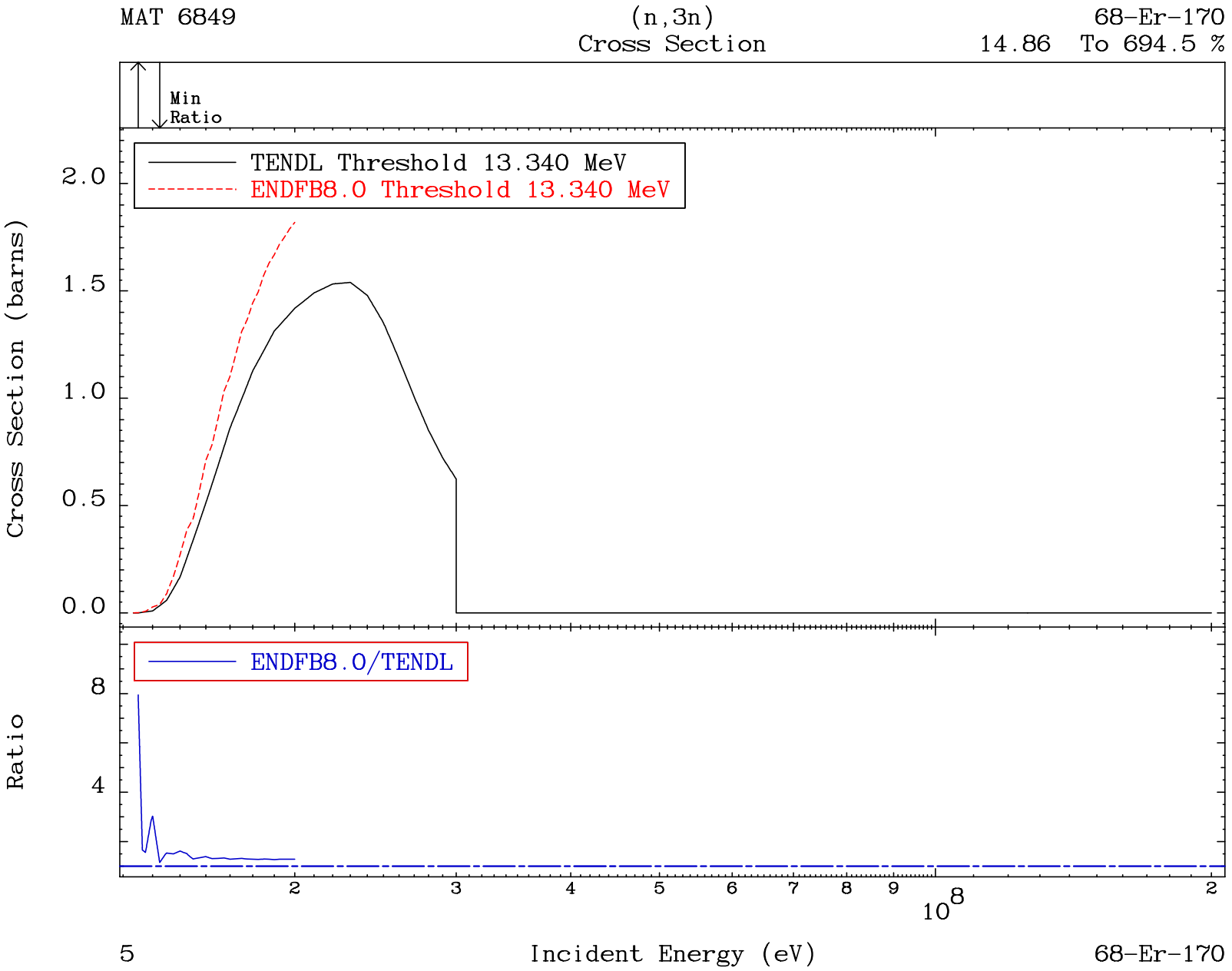
Press Mouse Button to Start

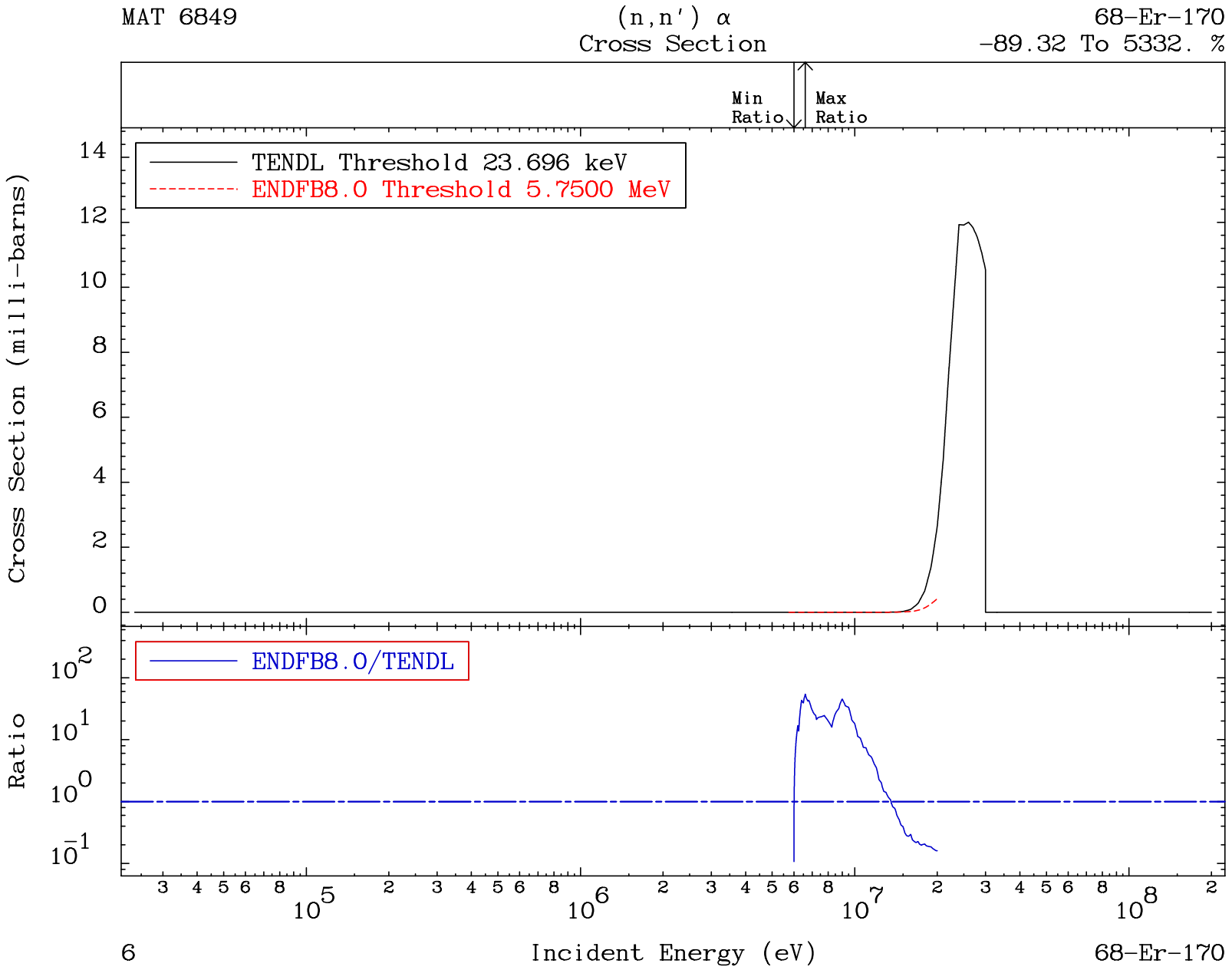

MAT 6849
Total
Cross Section
68-Er-170
-96.50 To 9999. %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
1
68-Er-170

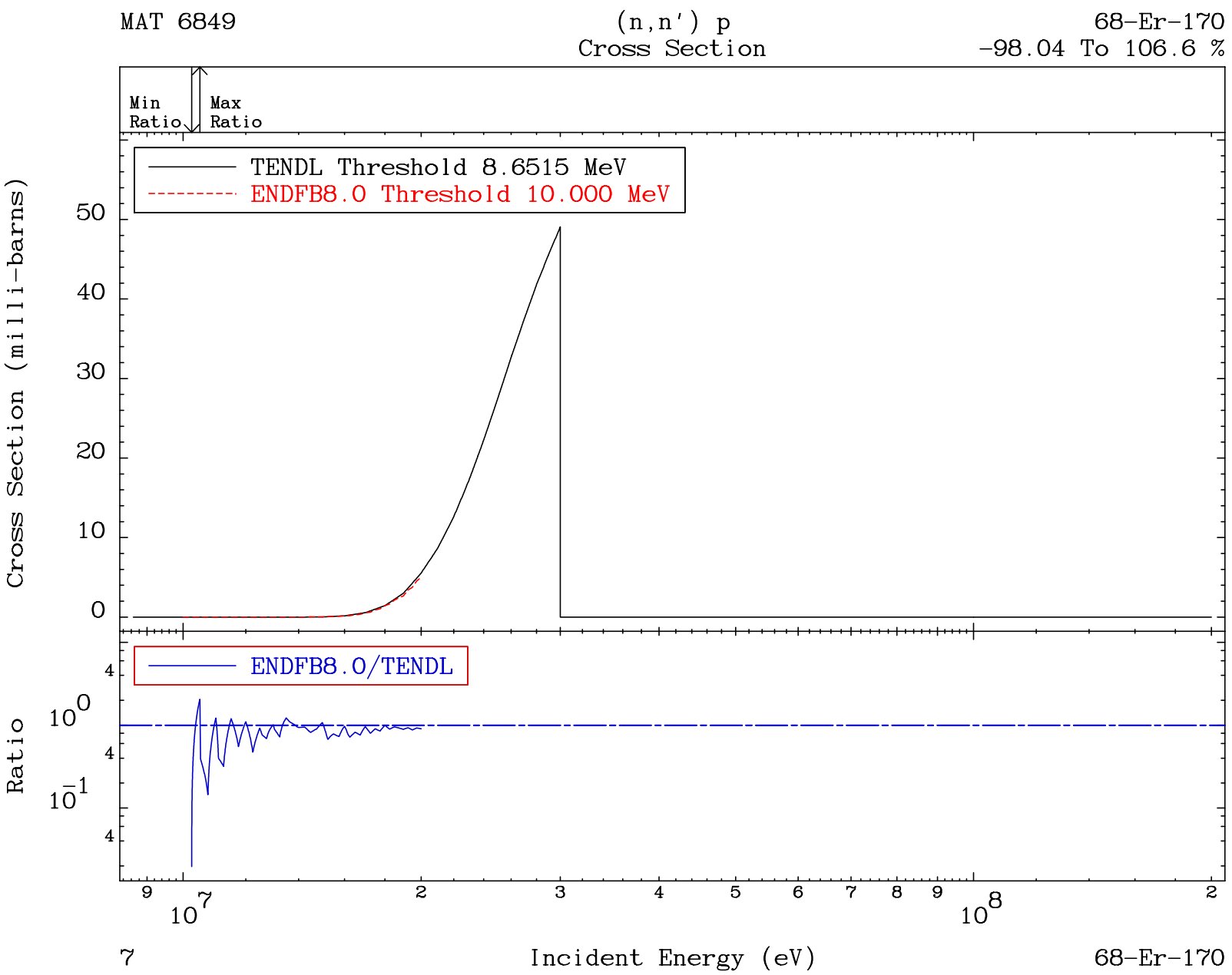

MAT 6849
Elastic
Cross Section
68-Er-170
-96.62 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
2
68-Er-170

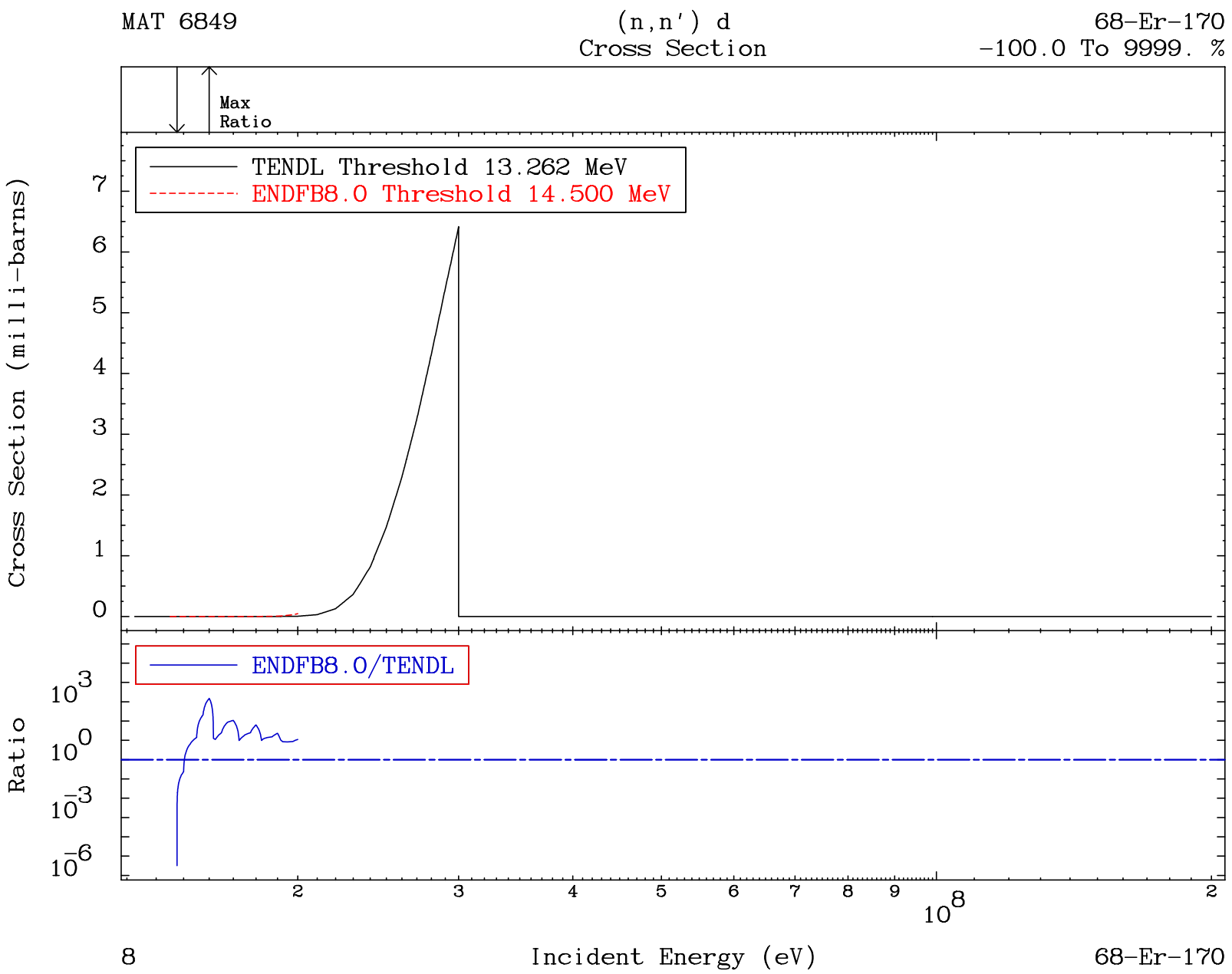

MAT 6849
Inelastic
Cross Section
68-Er-170
-39.99 To -2.135%
Max
Ratio
Min
Ratio
TENDL Threshold 79.066 keV
ENDFB8.0 Threshold 79.147 keV
Cross Section (barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
1.0
0.8
0.6
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
68-Er-170

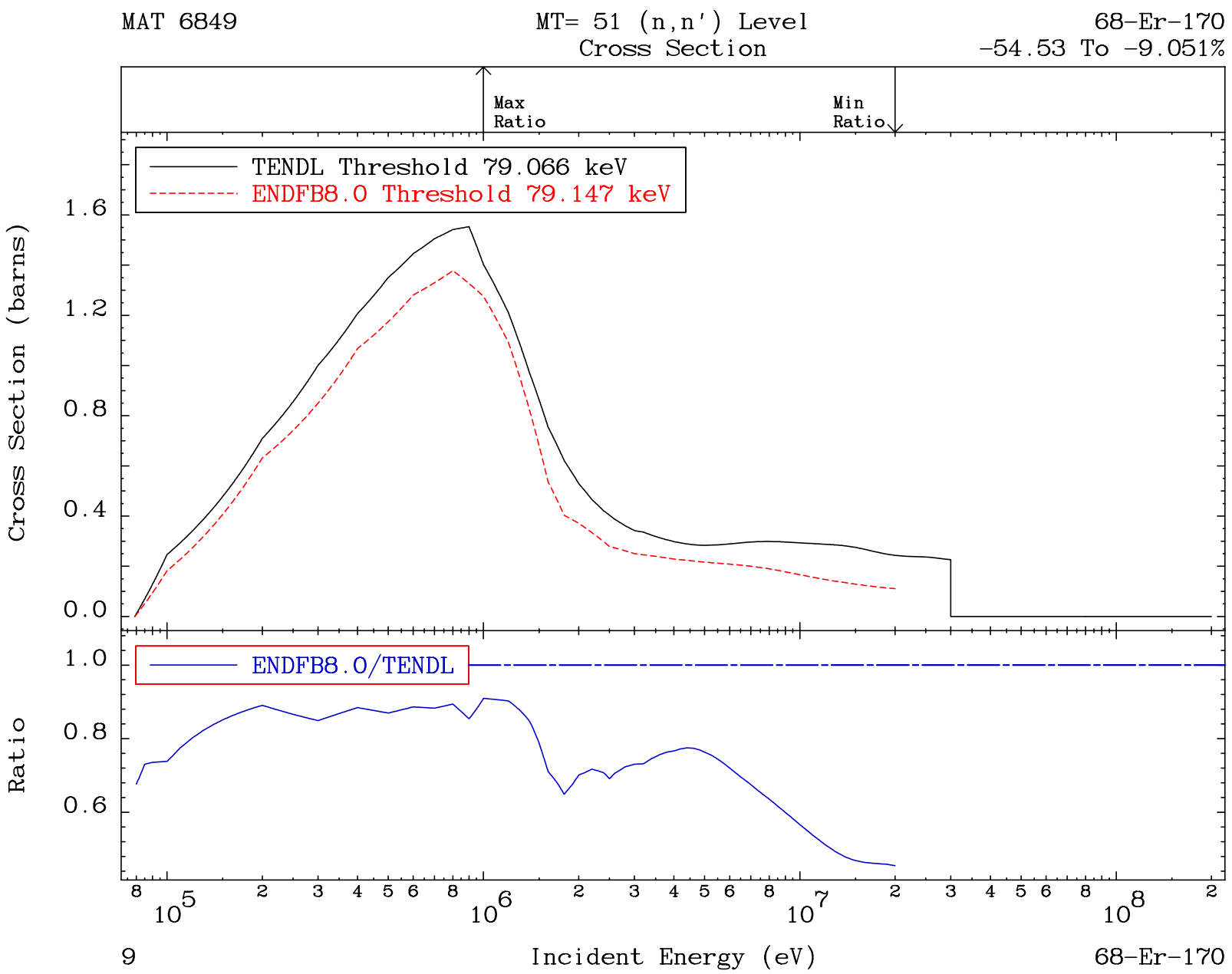

MAT 6849
(n,2n)
Cross Section
68-Er-170
-21.84 To 114.3 %
Min
Ratio
TENDL Threshold 7.3008 MeV
ENDFB8.0 Threshold 7.3008 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
2.4
1.8
1.2
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
68-Er-170

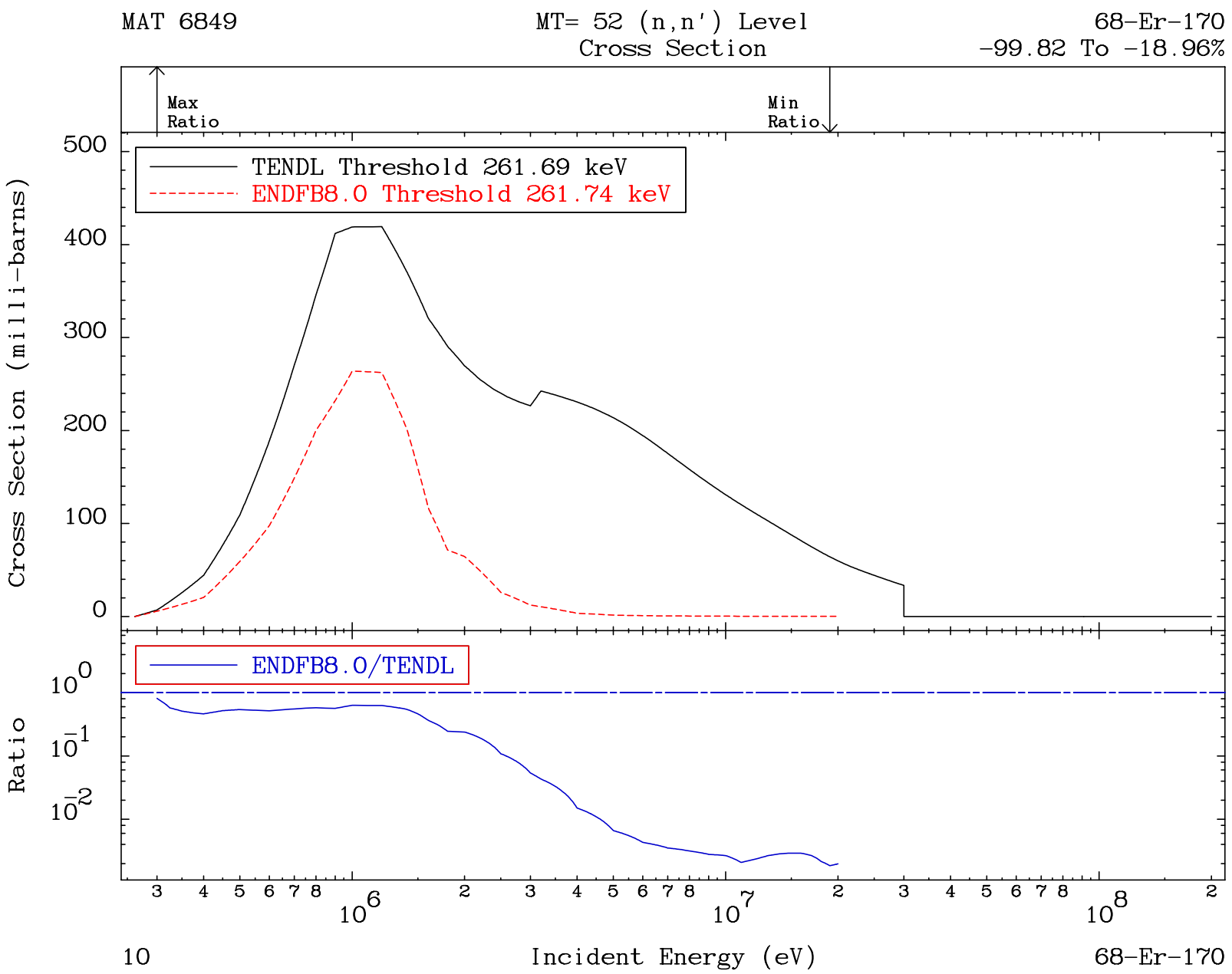

MAT 6849
(n,3n)
Cross Section
68-Er-170
14.86 To 694.5 %
Min
Ratio
TENDL Threshold 13.340 MeV
ENDFB8.0 Threshold 13.340 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
8
4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
68-Er-170

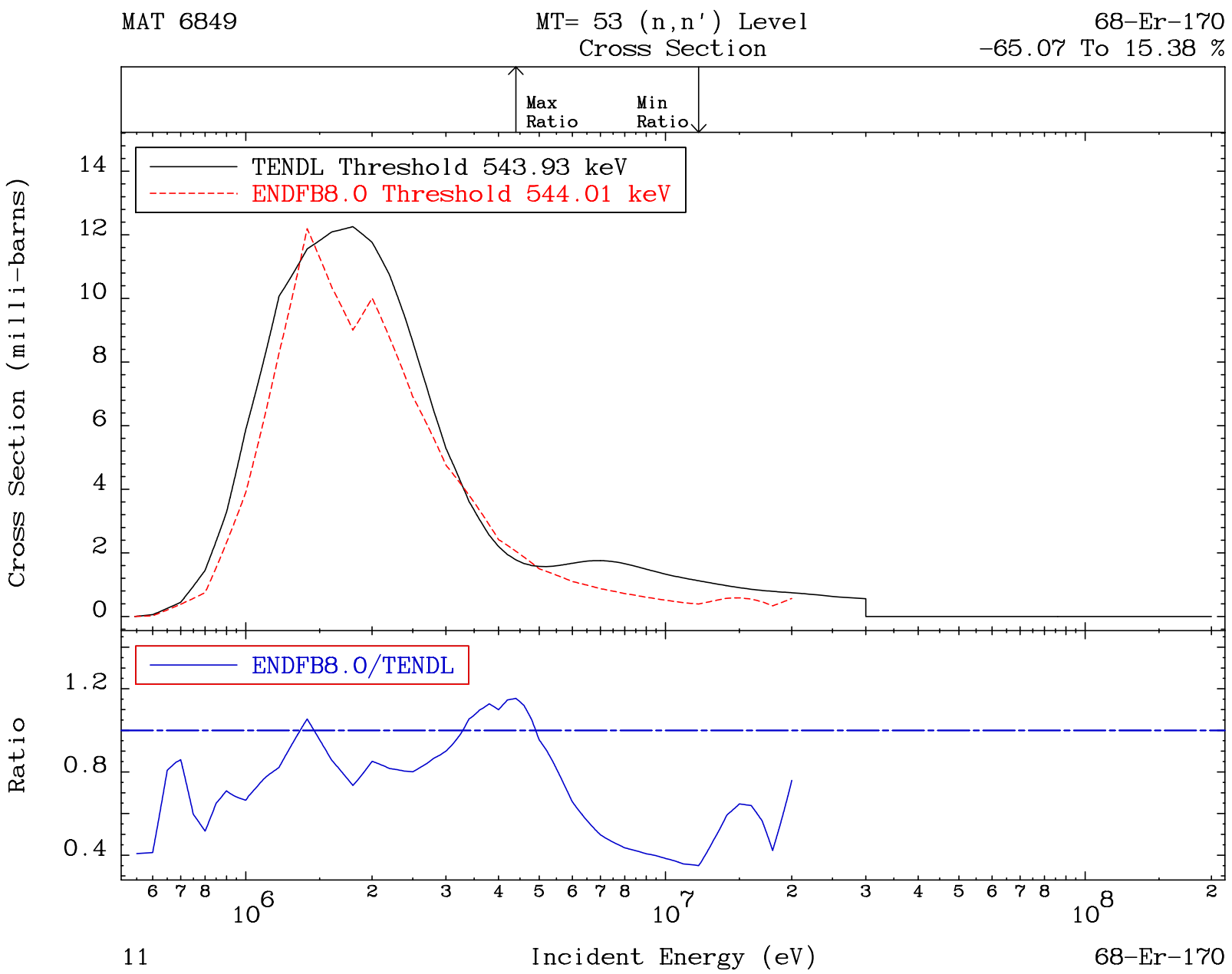

MAT 6849
(n,n') α
Cross Section
68-Er-170
-89.32 To 5332. %
Min Ratio
Max Ratio
TENDL Threshold 23.696 keV
ENDFB8.0 Threshold 5.7500 MeV
Cross Section (milli-barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
6
68-Er-170

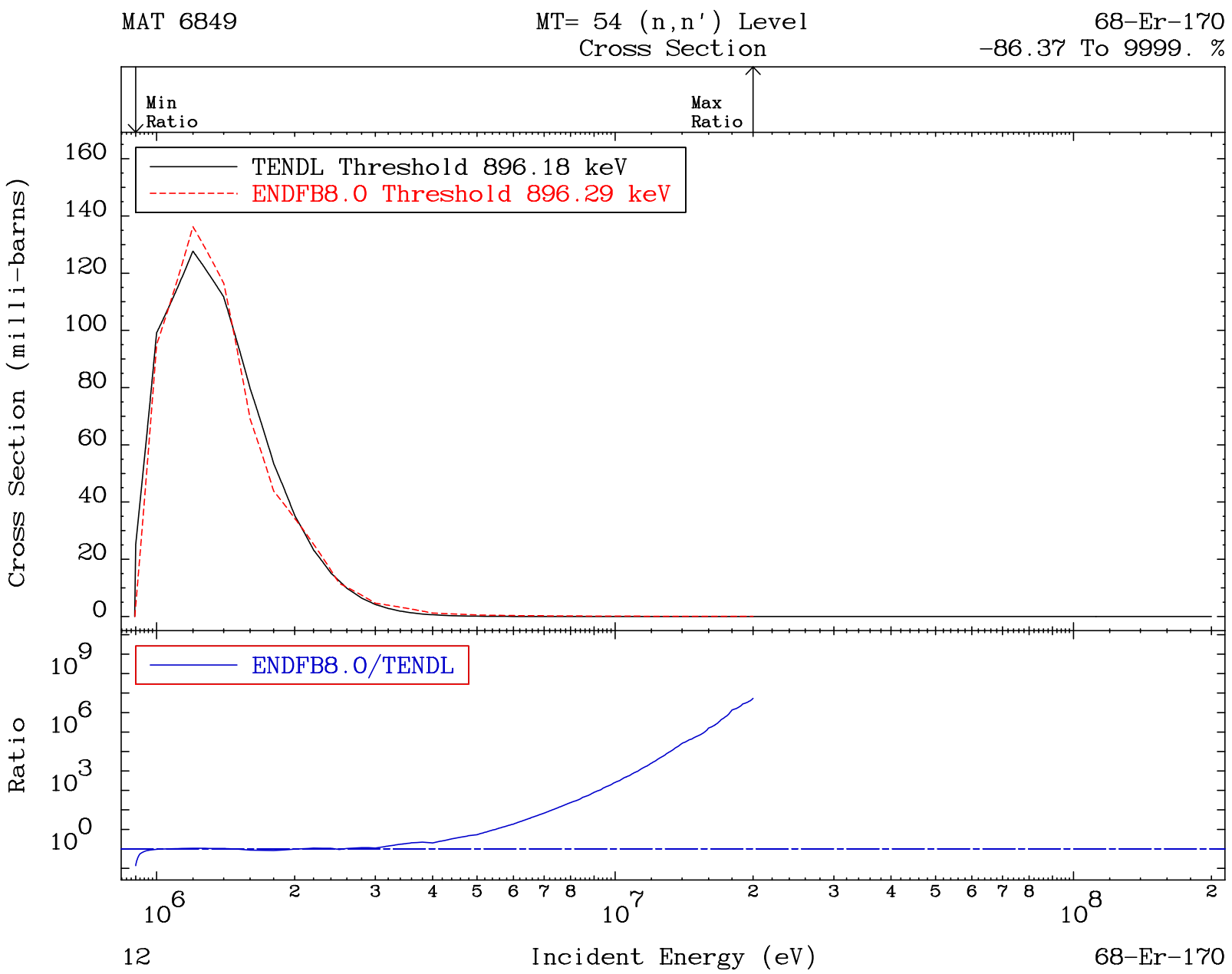

MAT 6849
(n,n') p
Cross Section
68-Er-170
-98.04 To 106.6 %
Min Ratio
Max Ratio
TENDL Threshold 8.6515 MeV
ENDFB8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^0
10^-1
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
68-Er-170

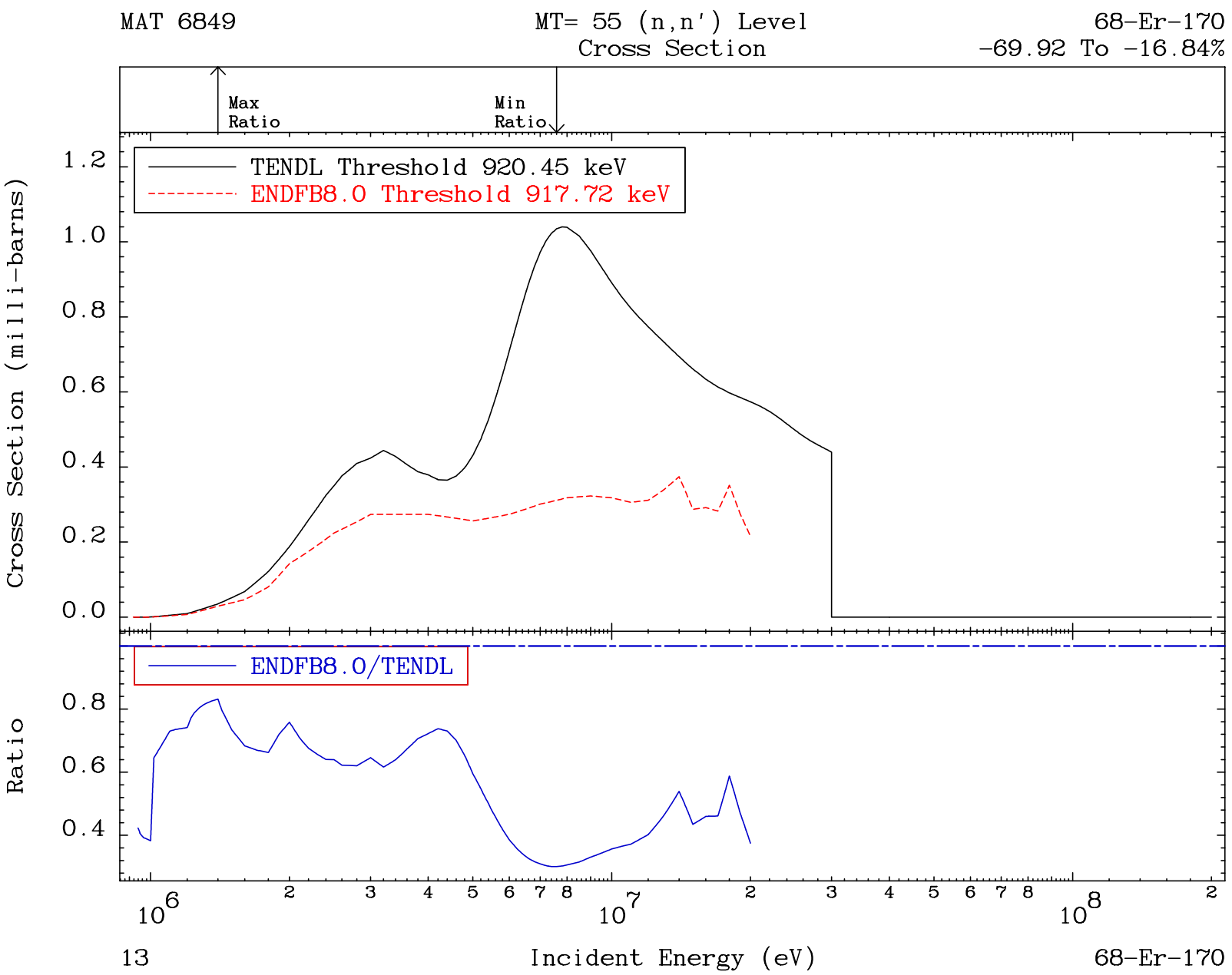

MAT 6849
(n,n') d
Cross Section
68-Er-170
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 13.262 MeV
ENDFB8.0 Threshold 14.500 MeV
Cross Section (milli-barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
8
68-Er-170

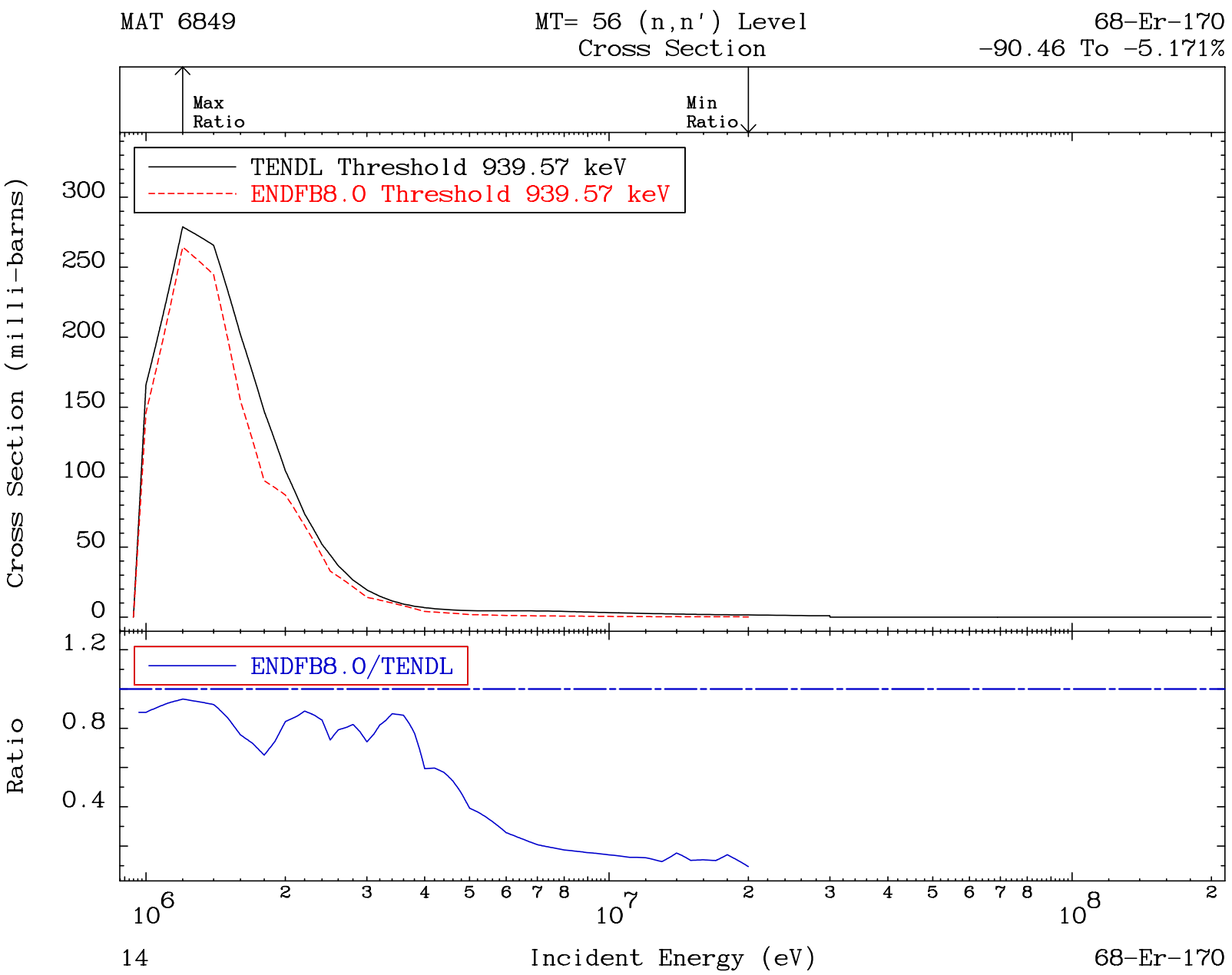

MAT 6849
MT= 51 (n,n') Level
Cross Section
68-Er-170
-54.53 To -9.051%
Max
Ratio
Min
Ratio
TENDL Threshold 79.066 keV
ENDFB8.0 Threshold 79.147 keV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
ENDFB8.0/TENDL
Ratio
1.0
0.8
0.6
8
10^5
2
3
4
5
6
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
9
Incident Energy (eV)
68-Er-170

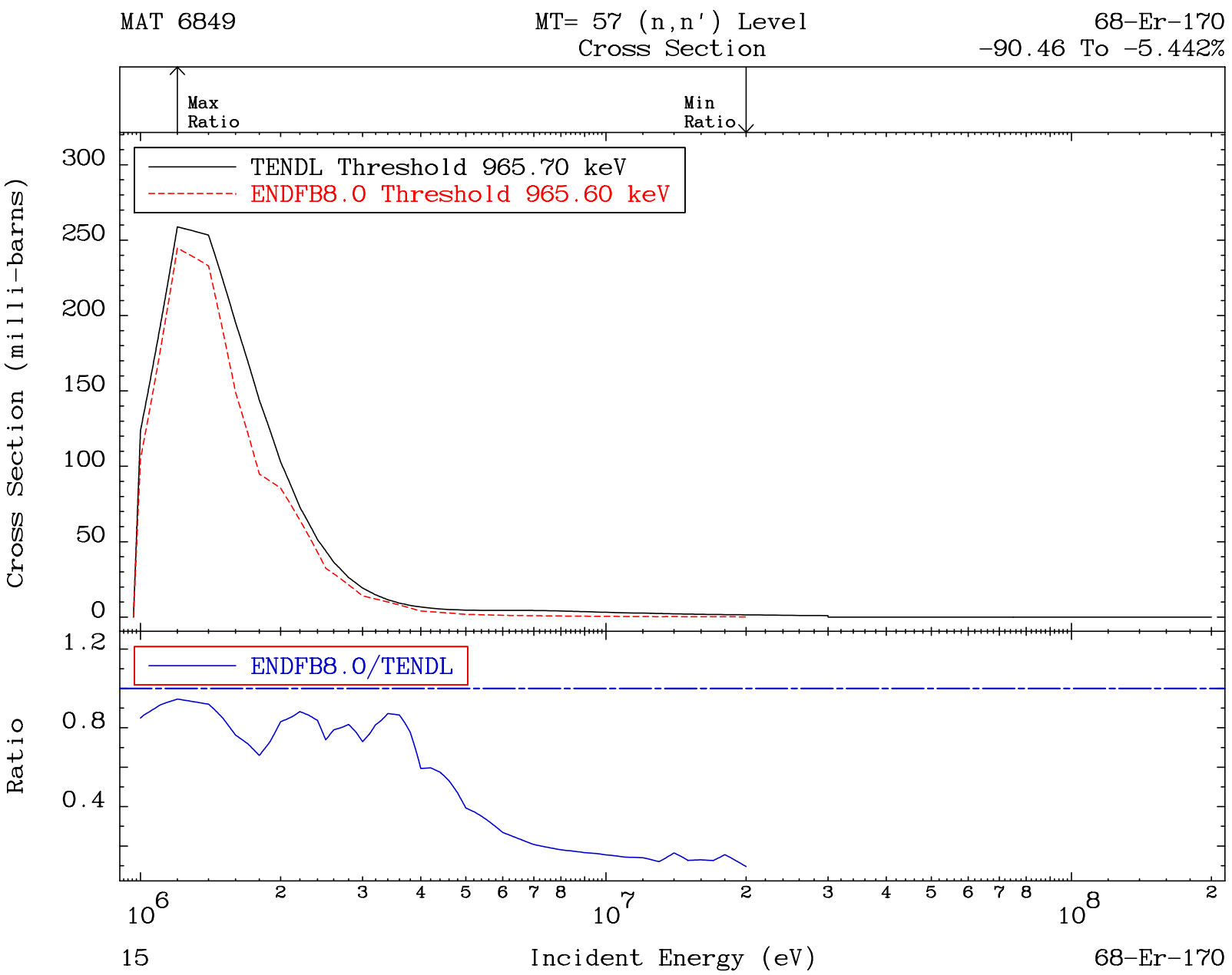

MAT 6849
MT= 52 (n,n') Level
Cross Section
68-Er-170
-99.82 To -18.96%
Max
Ratio
Min
Ratio
TENDL Threshold 261.69 keV
ENDFB8.0 Threshold 261.74 keV
Cross Section (milli-barns)
500
400
300
200
100
0
ENDFB8.0/TENDL
Ratio
10^0
10^-1
10^-2
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
68-Er-170

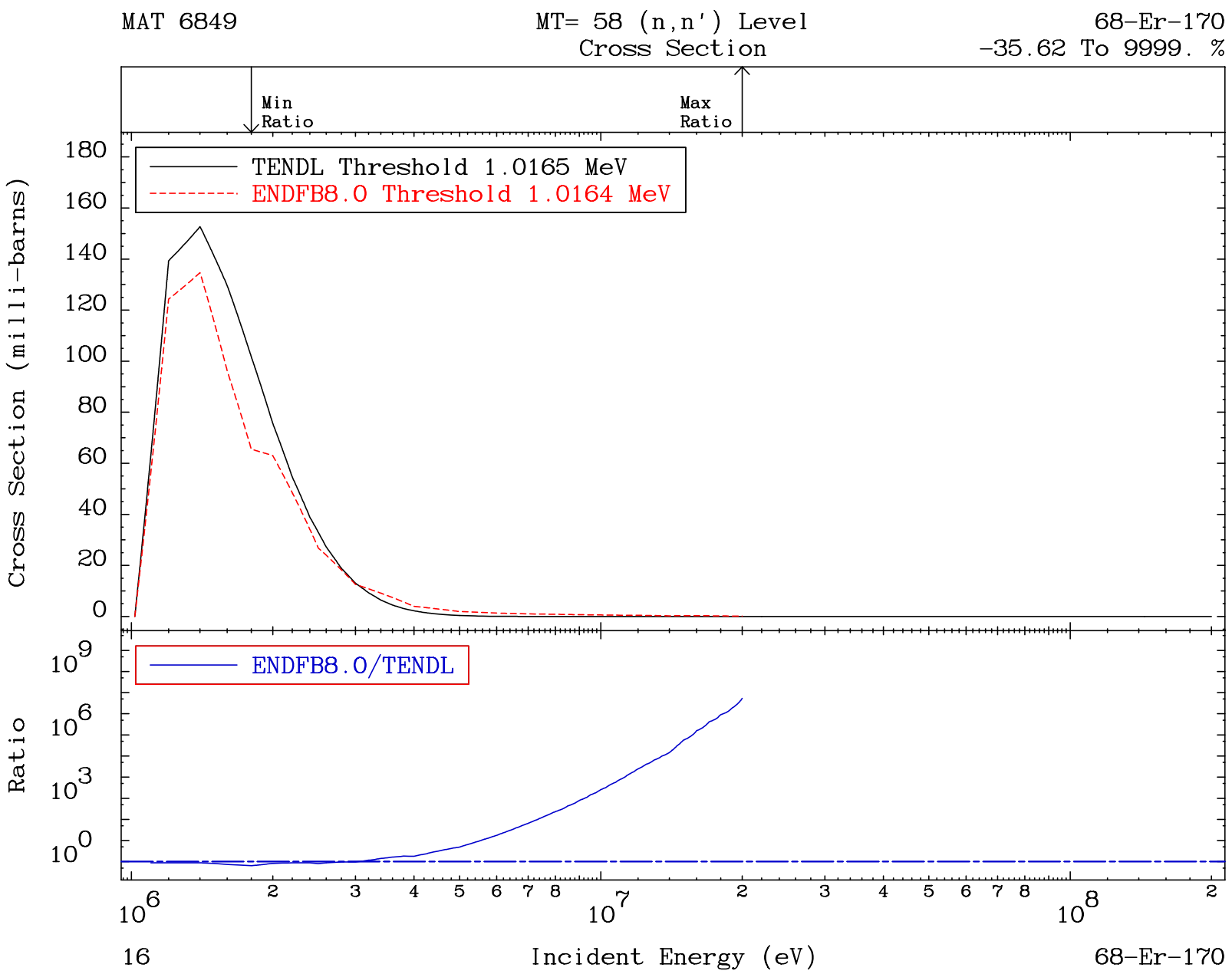

MAT 6849
MT= 53 (n,n') Level
Cross Section
68-Er-170
-65.07 To 15.38 %
Max Ratio
Min Ratio
TENDL Threshold 543.93 keV
ENDFB8.0 Threshold 544.01 keV
Cross Section (milli-barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
11
68-Er-170

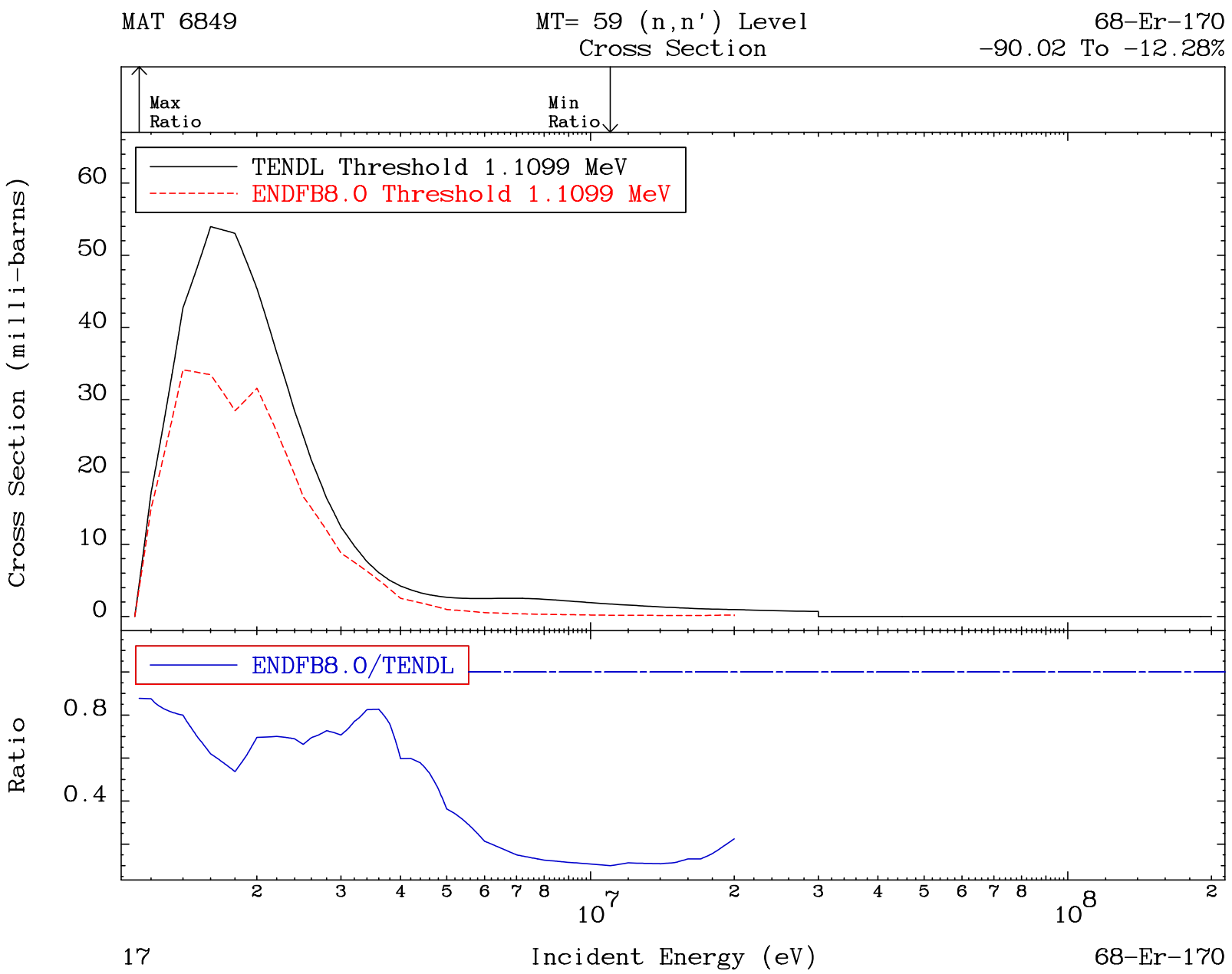

MAT 6849
MT= 54 (n,n') Level
Cross Section
68-Er-170
-86.37 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 896.18 keV
ENDFB8.0 Threshold 896.29 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^9
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
68-Er-170

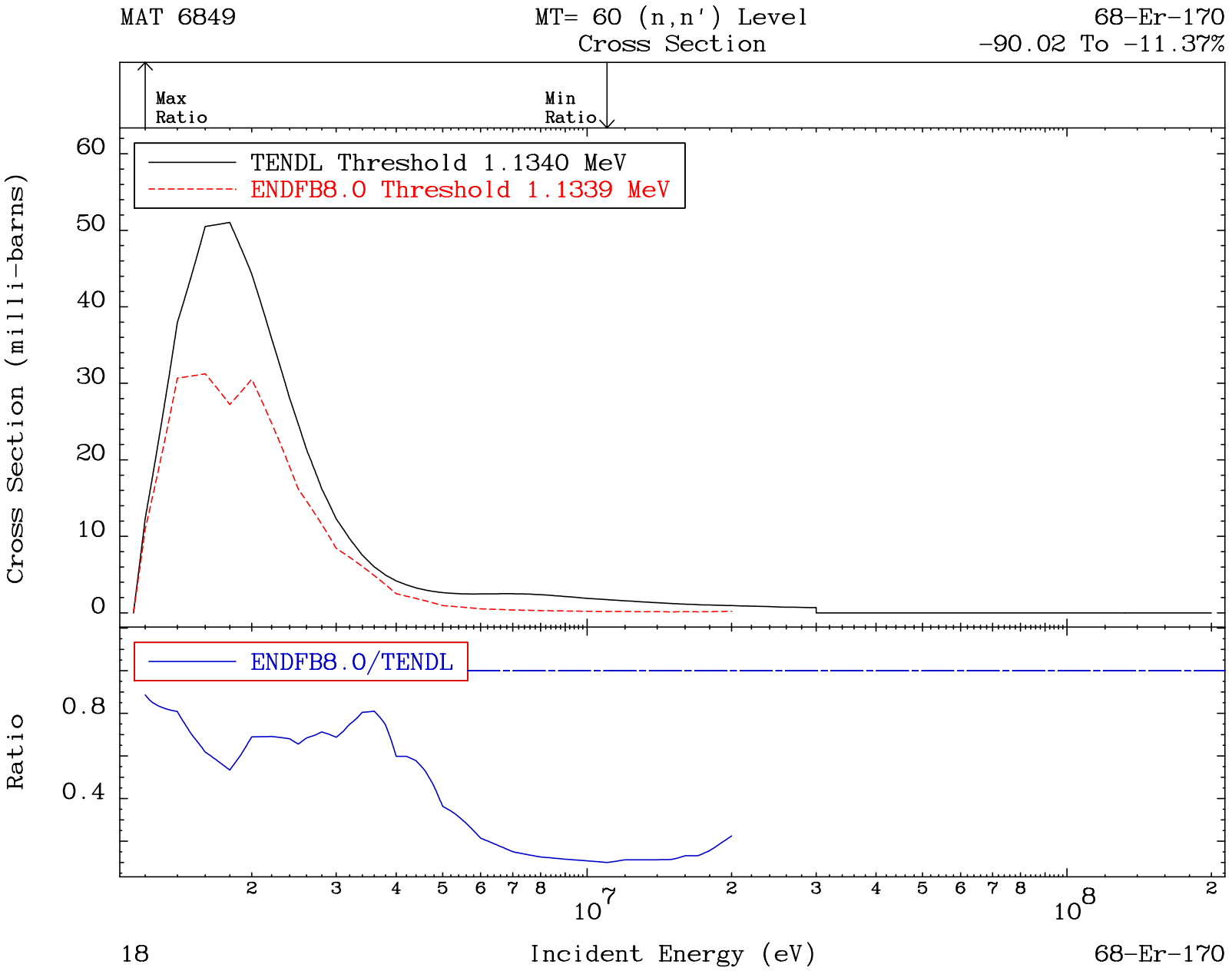

MAT 6849
MT= 55 (n,n') Level
Cross Section
68-Er-170
-69.92 To -16.84%
Max
Ratio
Min
Ratio
TENDL Threshold 920.45 keV
ENDFB8.0 Threshold 917.72 keV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
0.8
0.6
0.4
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
68-Er-170

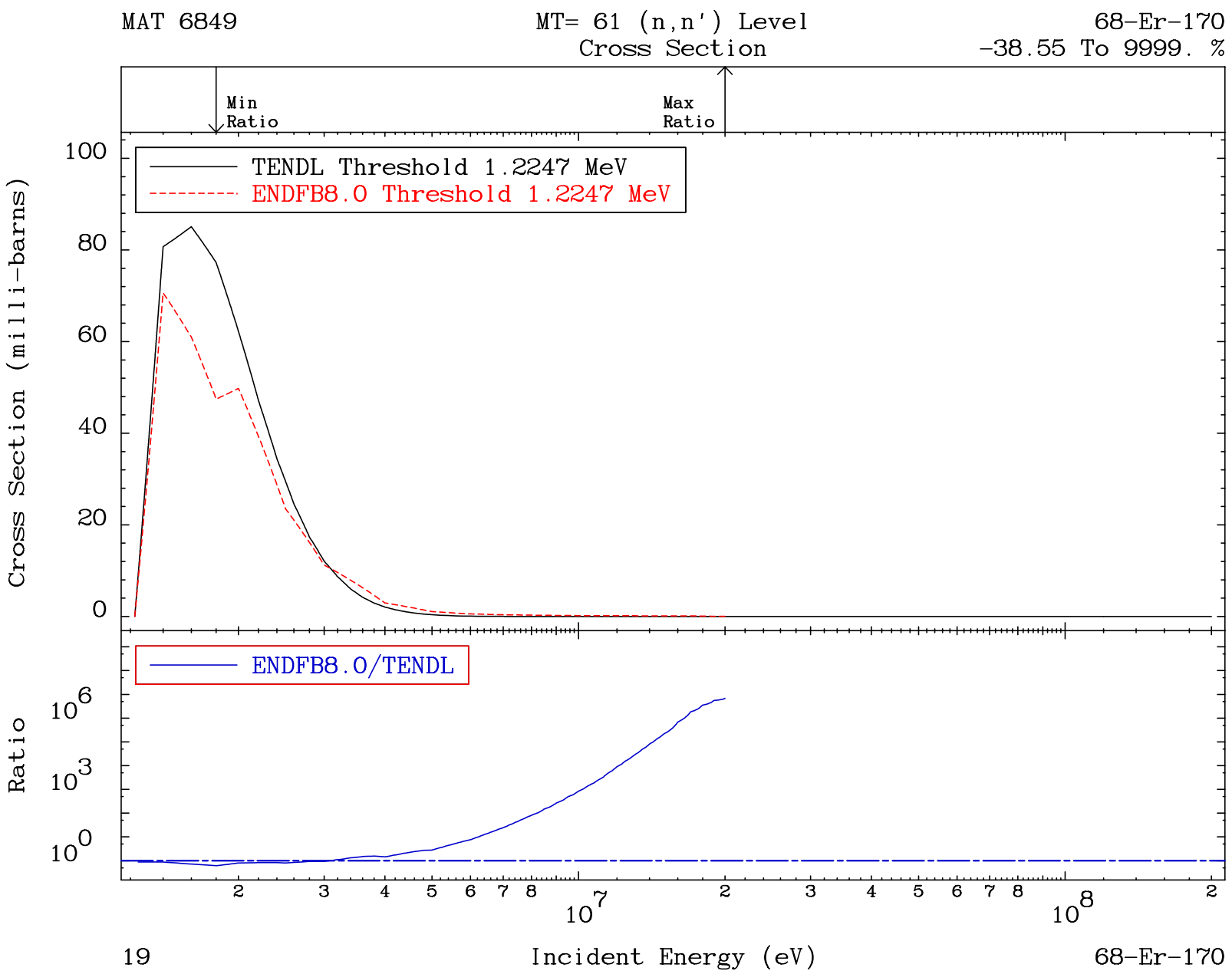

MAT 6849
MT= 56 (n,n') Level
Cross Section
68-Er-170
-90.46 To -5.171%
Max
Ratio
Min
Ratio
TENDL Threshold 939.57 keV
ENDFB8.0 Threshold 939.57 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
1.2
ENDFB8.0/TENDL
Ratio
0.8
0.4
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
68-Er-170

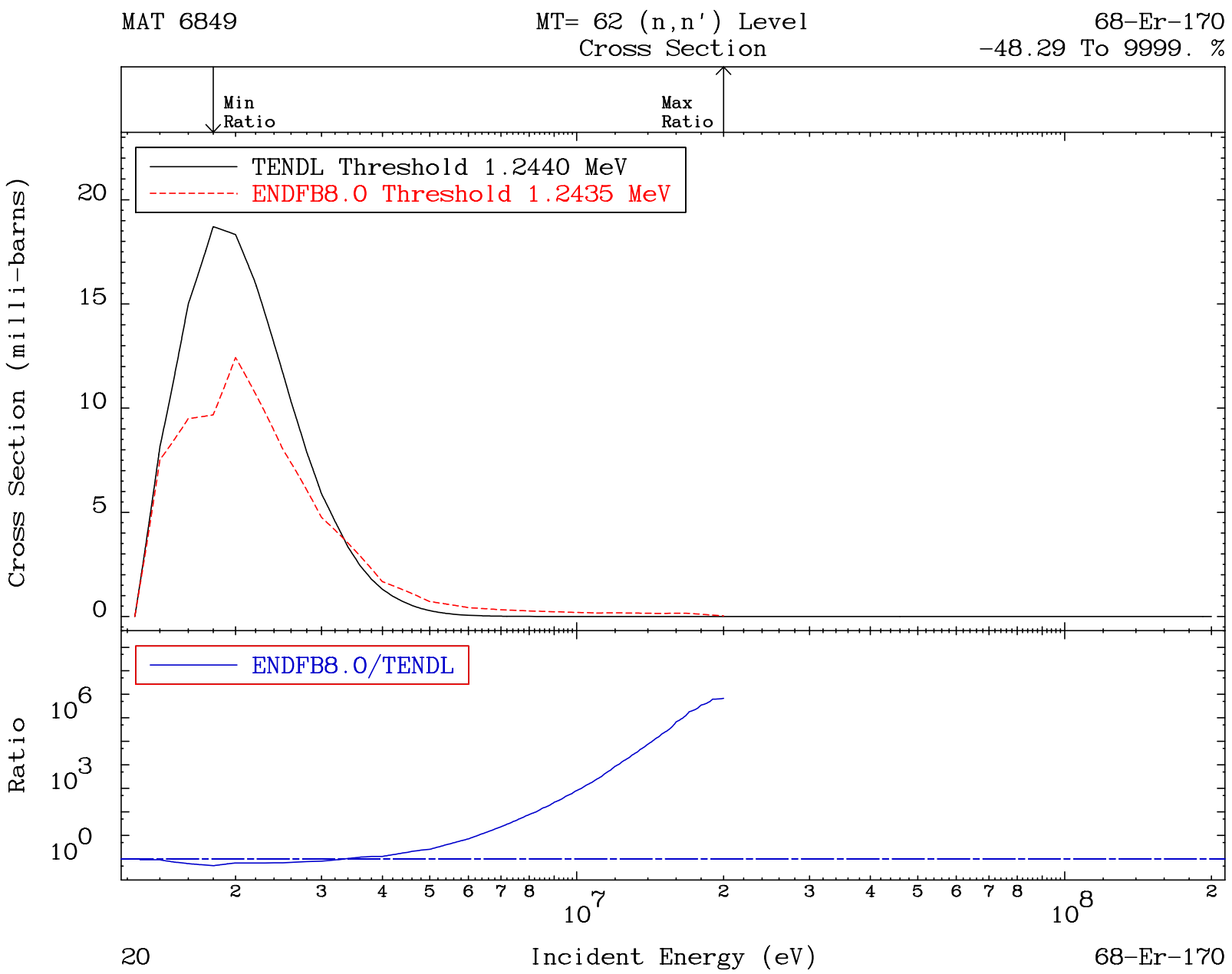

MAT 6849
MT= 57 (n,n') Level
Cross Section
68-Er-170
-90.46 To -5.442%
Max
Ratio
Min
Ratio
TENDL Threshold 965.70 keV
ENDFB8.0 Threshold 965.60 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
1.2
0.8
0.4
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
15
Incident Energy (eV)
68-Er-170

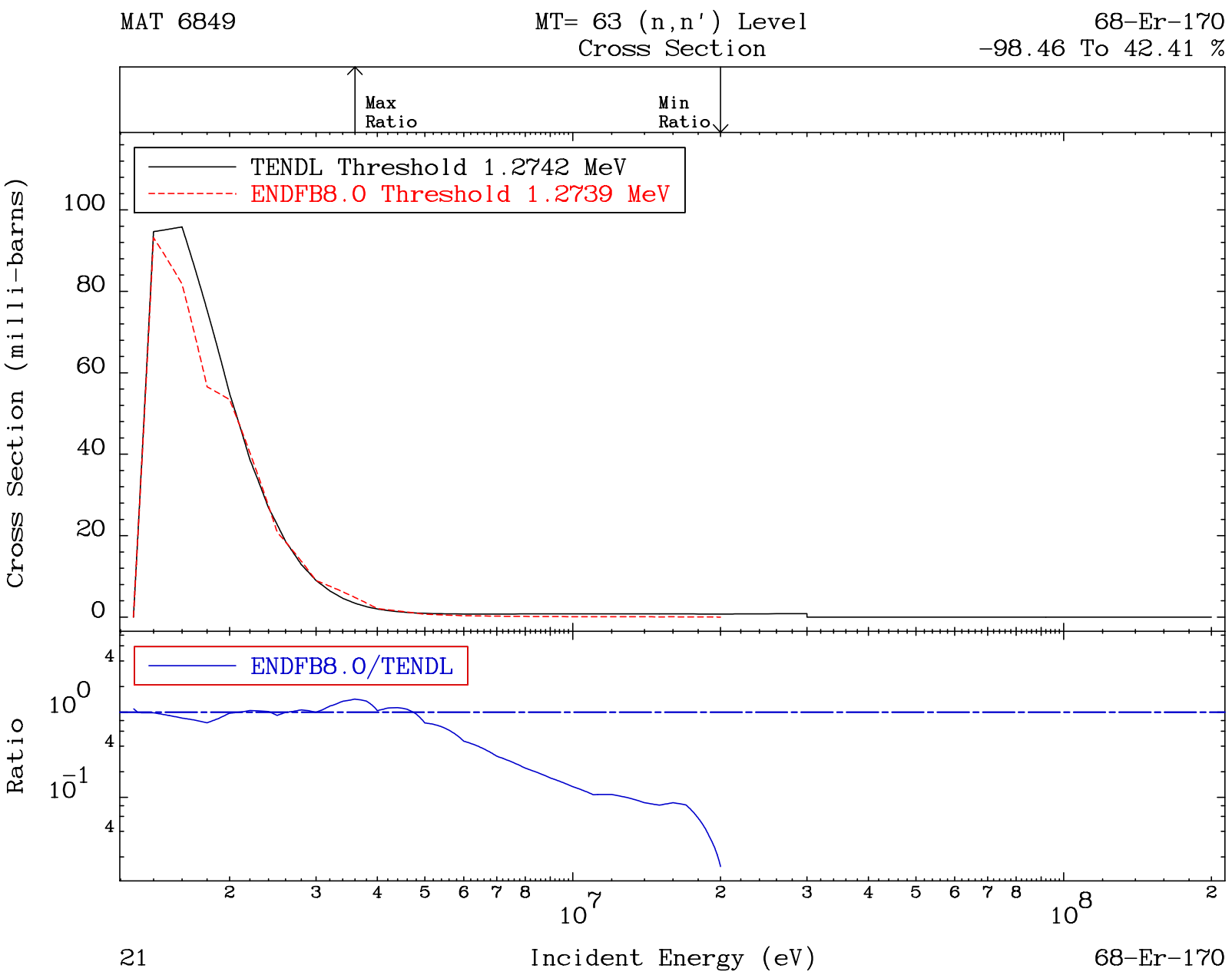

MAT 6849
MT= 58 (n,n') Level
Cross Section
68-Er-170
-35.62 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.0165 MeV
ENDFB8.0 Threshold 1.0164 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^9
10^6
10^3
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
16
Incident Energy (eV)
68-Er-170

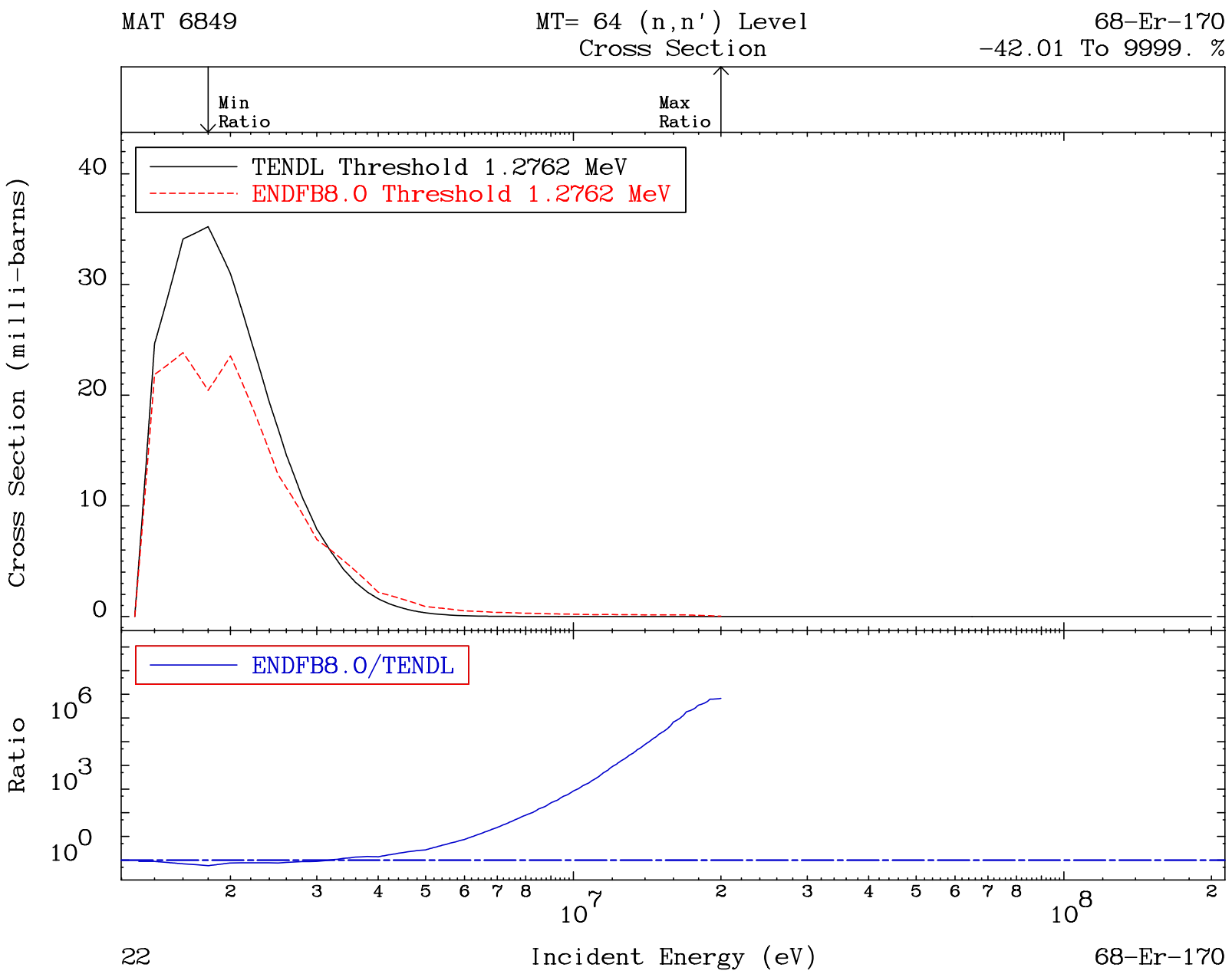

MAT 6849
MT= 59 (n,n') Level
Cross Section
68-Er-170
-90.02 To -12.28%
Max
Ratio
Min
Ratio
TENDL Threshold 1.1099 MeV
ENDFB8.0 Threshold 1.1099 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
0.8
0.4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
17
Incident Energy (eV)
68-Er-170

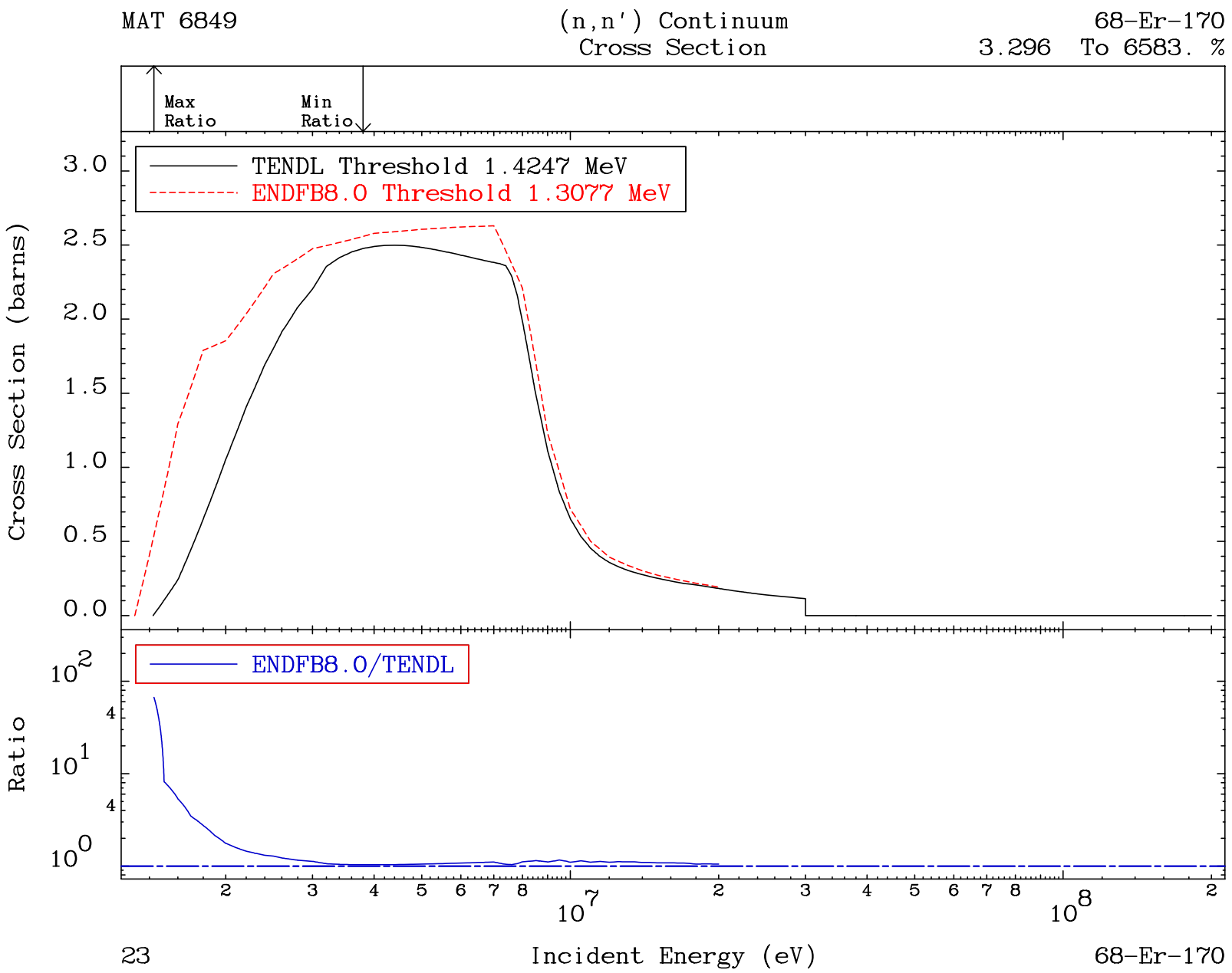

MAT 6849
MT= 60 (n,n') Level
Cross Section
68-Er-170
-90.02 To -11.37%
Max
Ratio
Min
Ratio
TENDL Threshold 1.1340 MeV
ENDFB8.0 Threshold 1.1339 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
0.8
0.4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
18
Incident Energy (eV)
68-Er-170

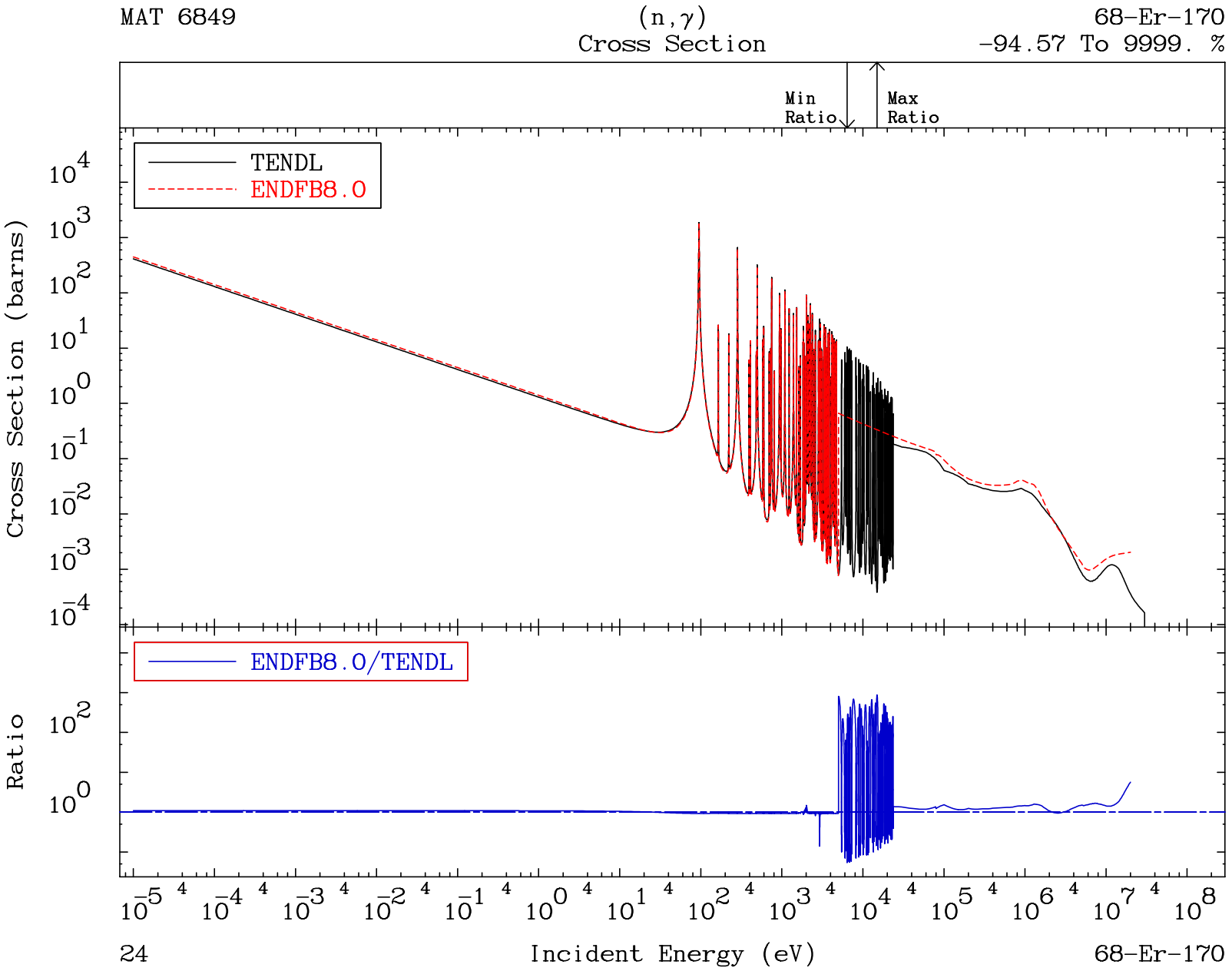

MAT 6849
MT= 61 (n,n') Level
Cross Section
68-Er-170
-38.55 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.2247 MeV
ENDFB8.0 Threshold 1.2247 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^6
10^3
10^0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
19
Incident Energy (eV)
68-Er-170

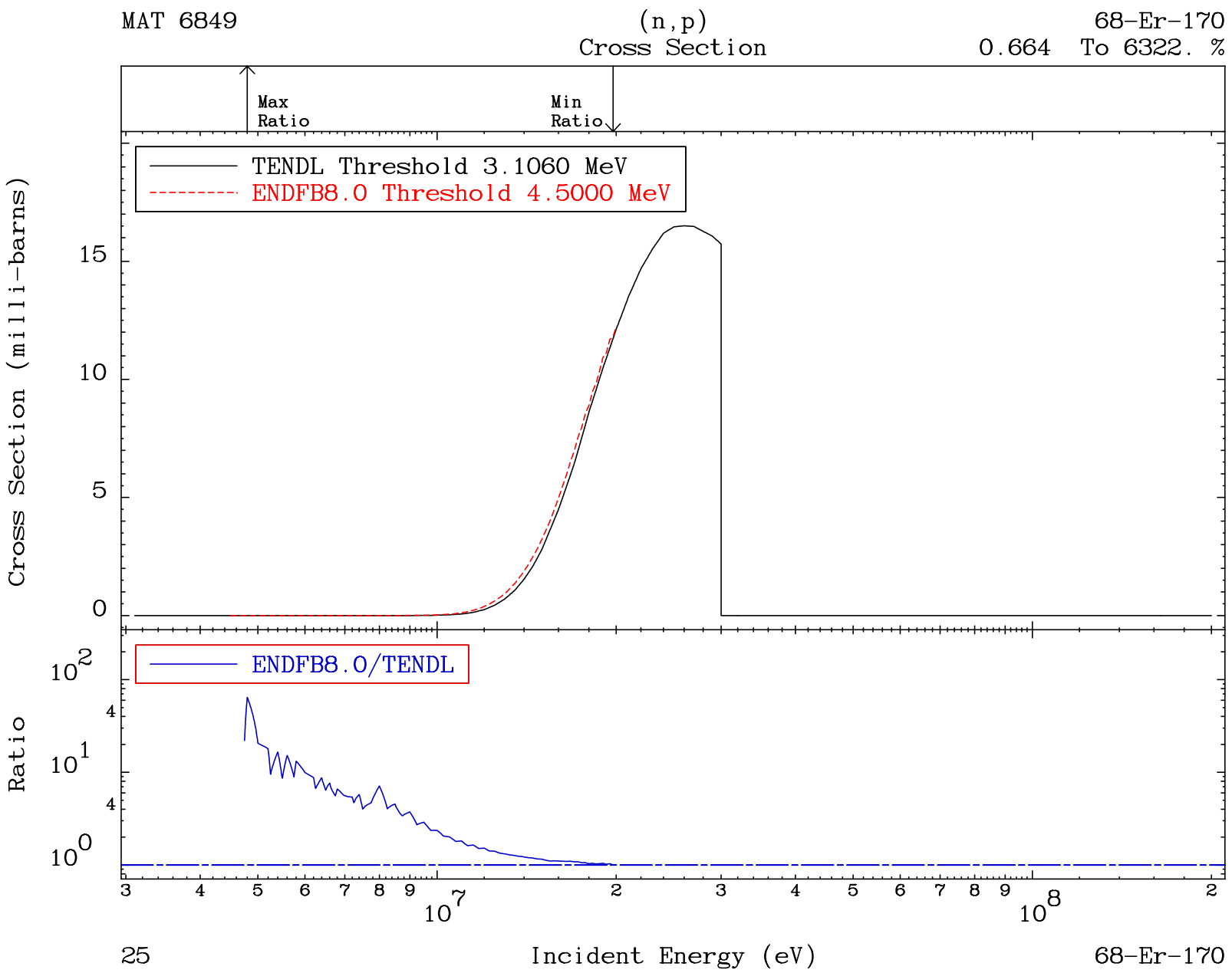

MAT 6849
MT= 62 (n,n') Level
Cross Section
68-Er-170
-48.29 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.2440 MeV
ENDFB8.0 Threshold 1.2435 MeV
Cross Section (milli-barns)
20
15
10
5
0
ENDFB8.0/TENDL
Ratio
10^6
10^3
10^0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
68-Er-170

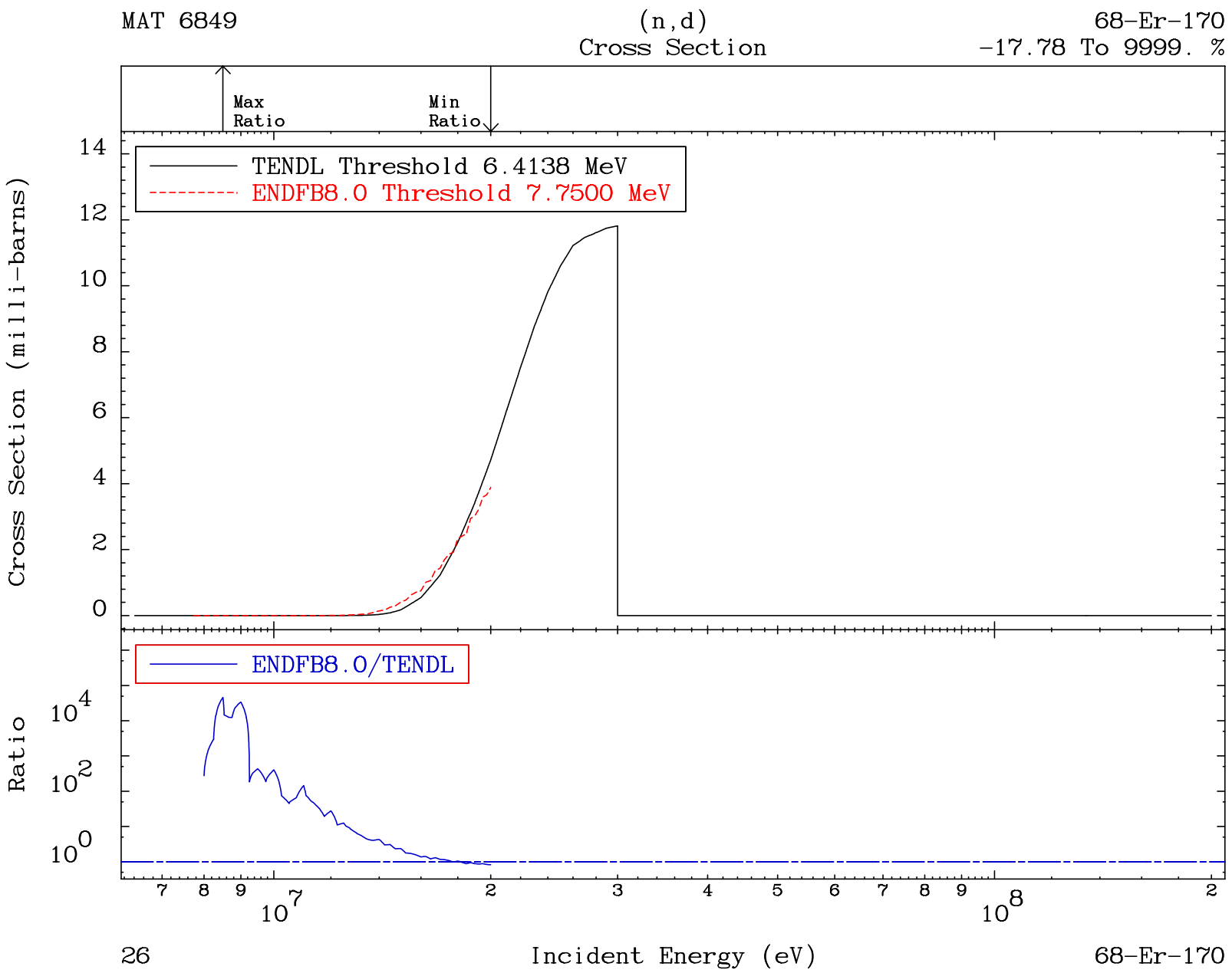

MAT 6849
MT= 63 (n,n') Level
Cross Section
68-Er-170
-98.46 To 42.41 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.2742 MeV
ENDFB8.0 Threshold 1.2739 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^0
10^-1
2
3
4
5
6
7
8
10^7
10^8
21
Incident Energy (eV)
68-Er-170

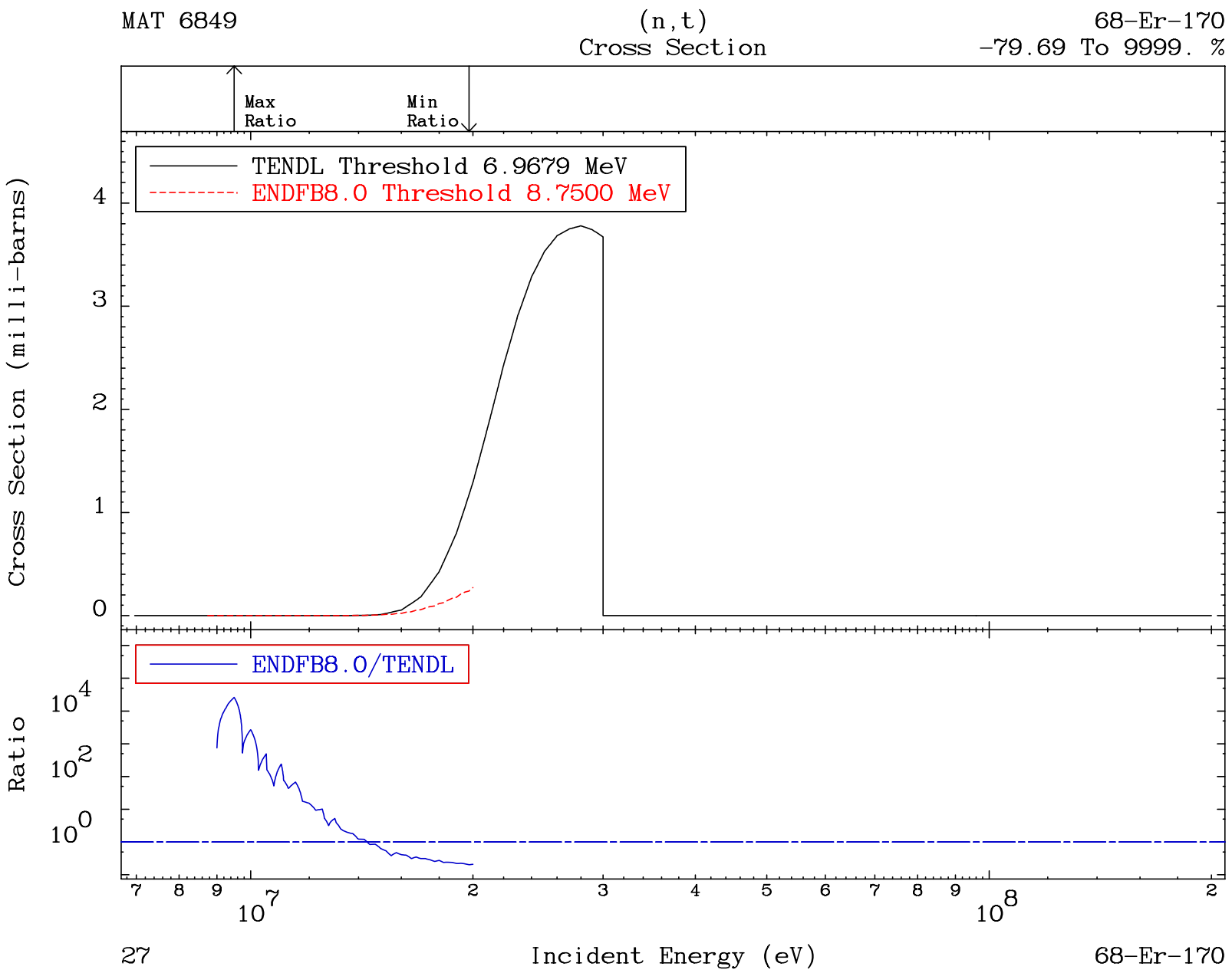

MAT 6849
MT= 64 (n,n') Level
Cross Section
68-Er-170
-42.01 To 9999. %
Min
Ratio
Max
Ratio
TENDL Threshold 1.2762 MeV
ENDFB8.0 Threshold 1.2762 MeV
Cross Section (milli-barns)
40
30
20
10
0
ENDFB8.0/TENDL
Ratio
10^6
10^3
10^0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
68-Er-170

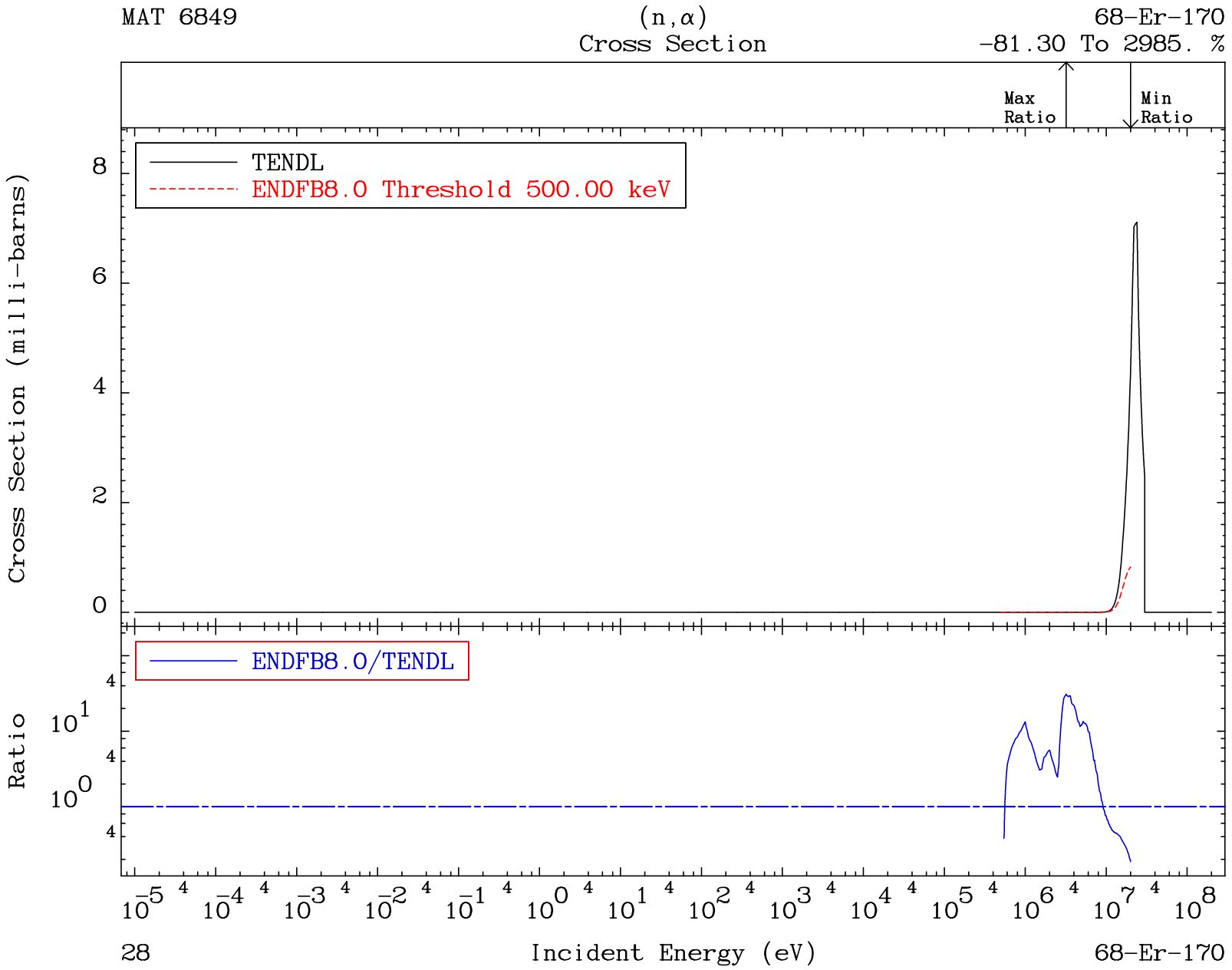

MAT 6849
(n,n') Continuum
Cross Section
68-Er-170
3.296 To 6583. %
Max Ratio
Min Ratio
TENDL Threshold 1.4247 MeV
ENDFB8.0 Threshold 1.3077 MeV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
ENDFB8.0/TENDL
Ratio
$10^2$
4
$10^1$
4
$10^0$
2 3 4 5 6 7 8 $10^7$ 2 3 4 5 6 7 8 $10^8$ 2
23
Incident Energy (eV)
68-Er-170

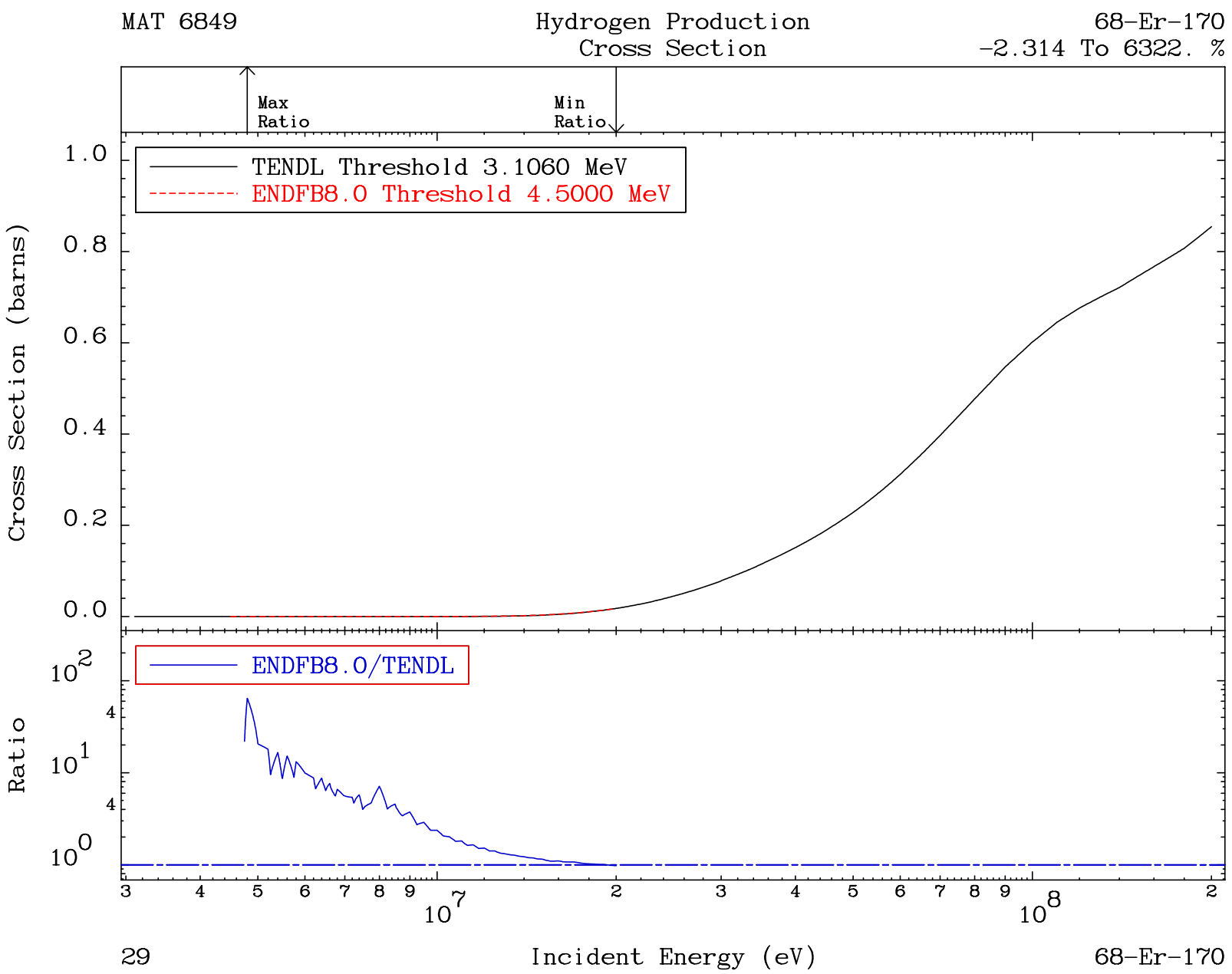

MAT 6849
(n,γ)
Cross Section
68-Er-170
-94.57 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
24
68-Er-170

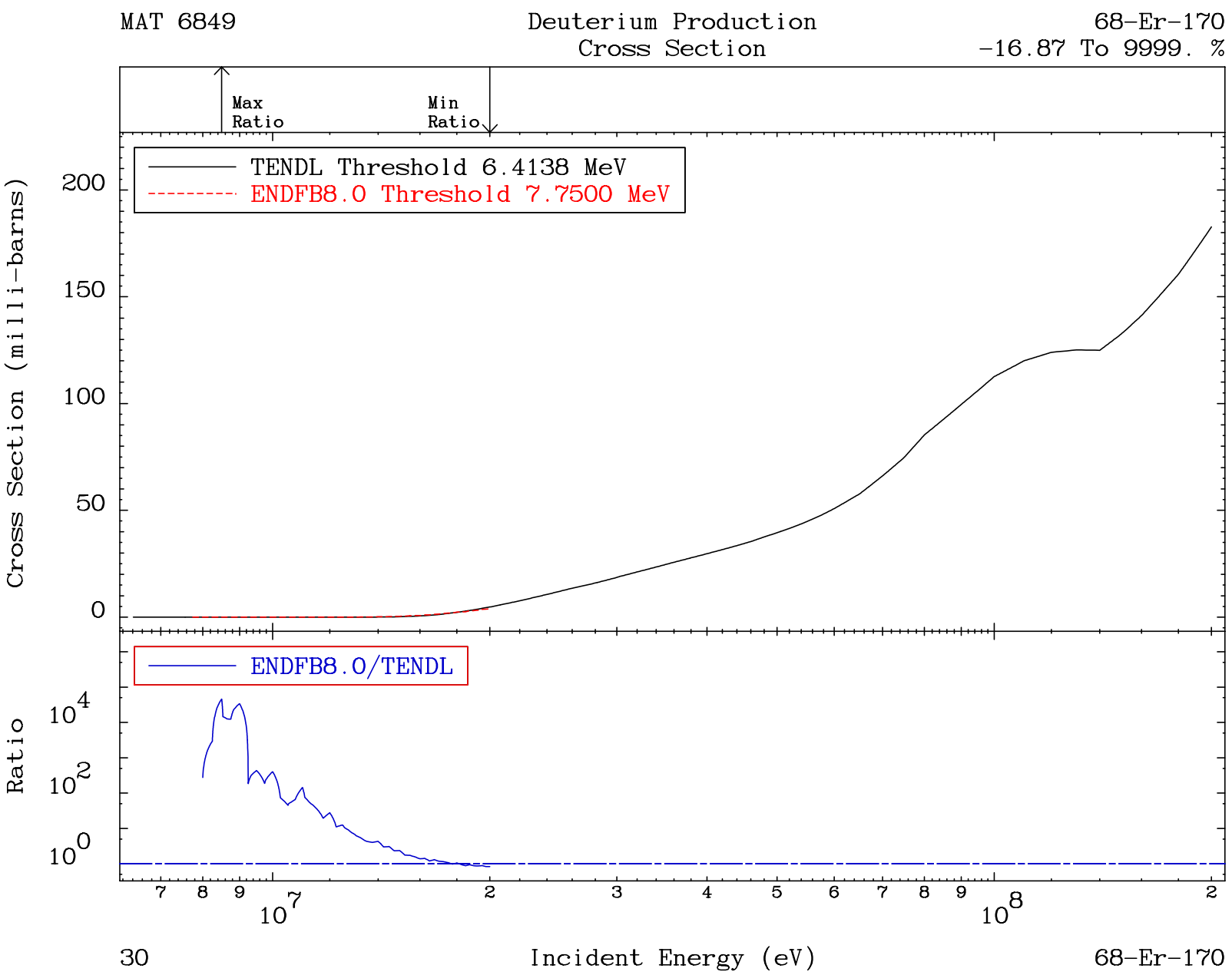

MAT 6849
(n,p)
Cross Section
68-Er-170
0.664 To 6322. %
Max Ratio
Min Ratio
TENDL Threshold 3.1060 MeV
ENDFB8.0 Threshold 4.5000 MeV
Cross Section (milli-barns)
15
10
5
0
ENDFB8.0/TENDL
Ratio
10^2
10^1
10^0
4
4
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
25
Incident Energy (eV)
68-Er-170

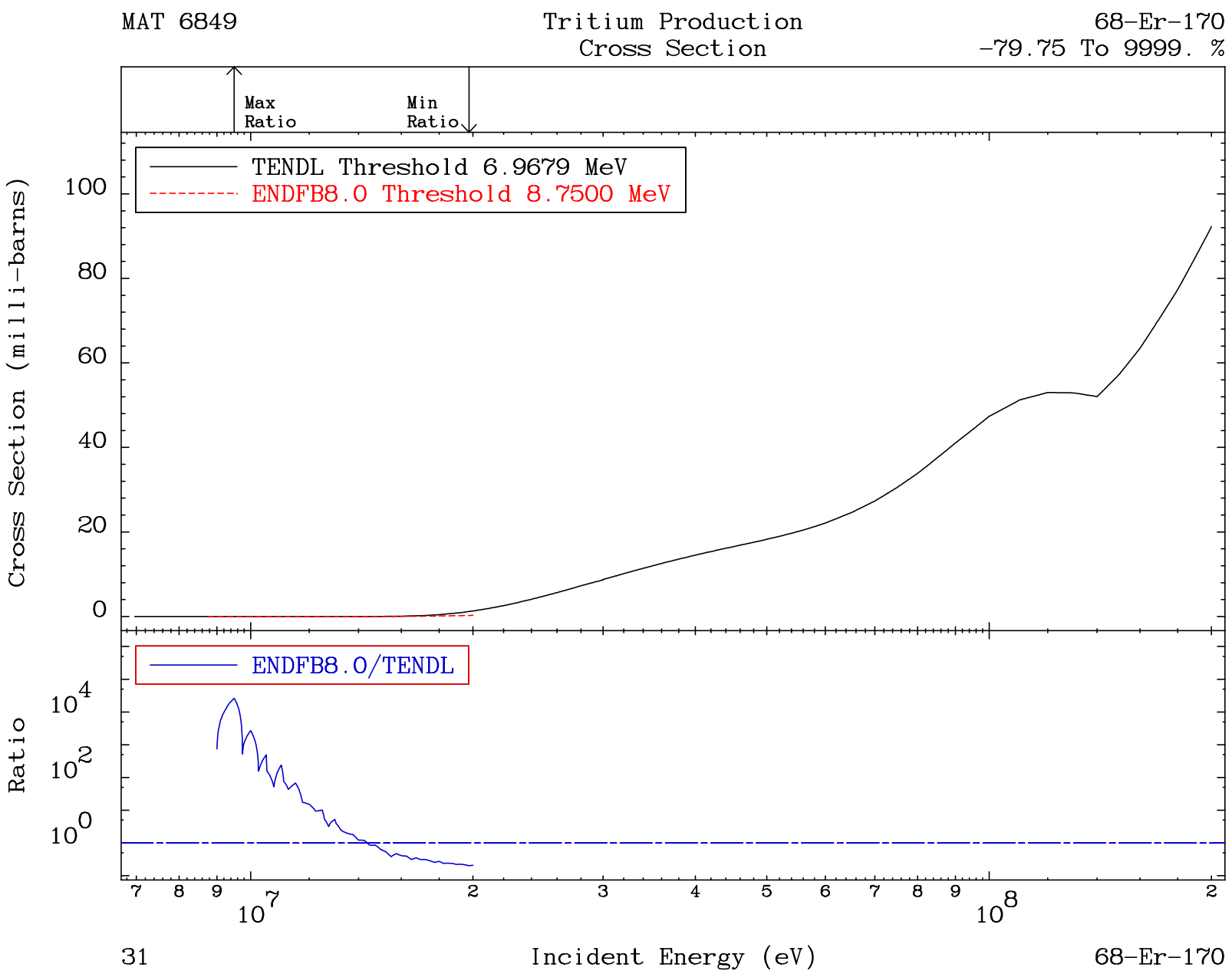

MAT 6849
(n,d)
Cross Section
68-Er-170
-17.78 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.4138 MeV
ENDFB8.0 Threshold 7.7500 MeV
Cross Section (milli-barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
26
68-Er-170

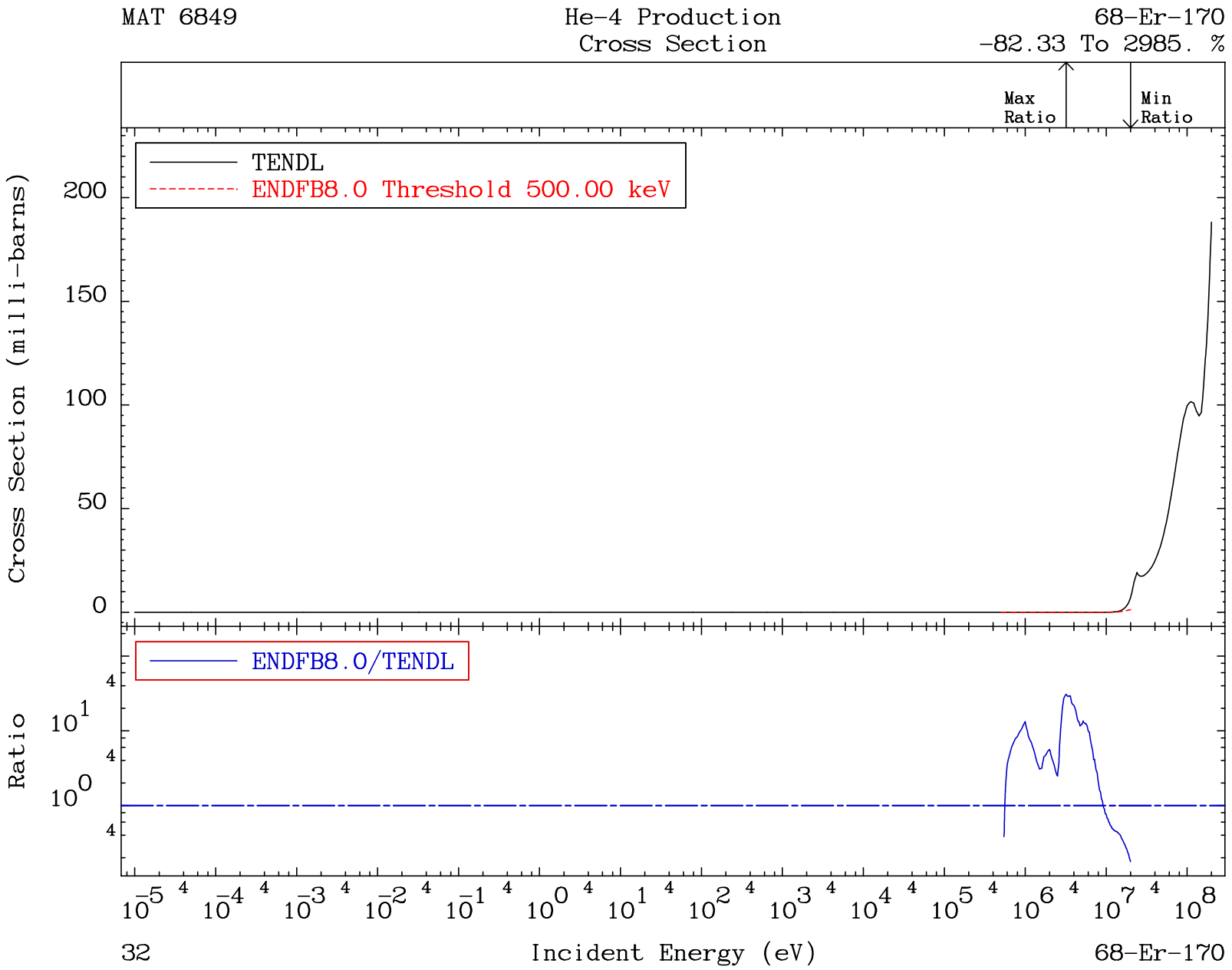

MAT 6849
(n,t)
Cross Section
68-Er-170
-79.69 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.9679 MeV
ENDFB8.0 Threshold 8.7500 MeV
Cross Section (milli-barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
27
68-Er-170

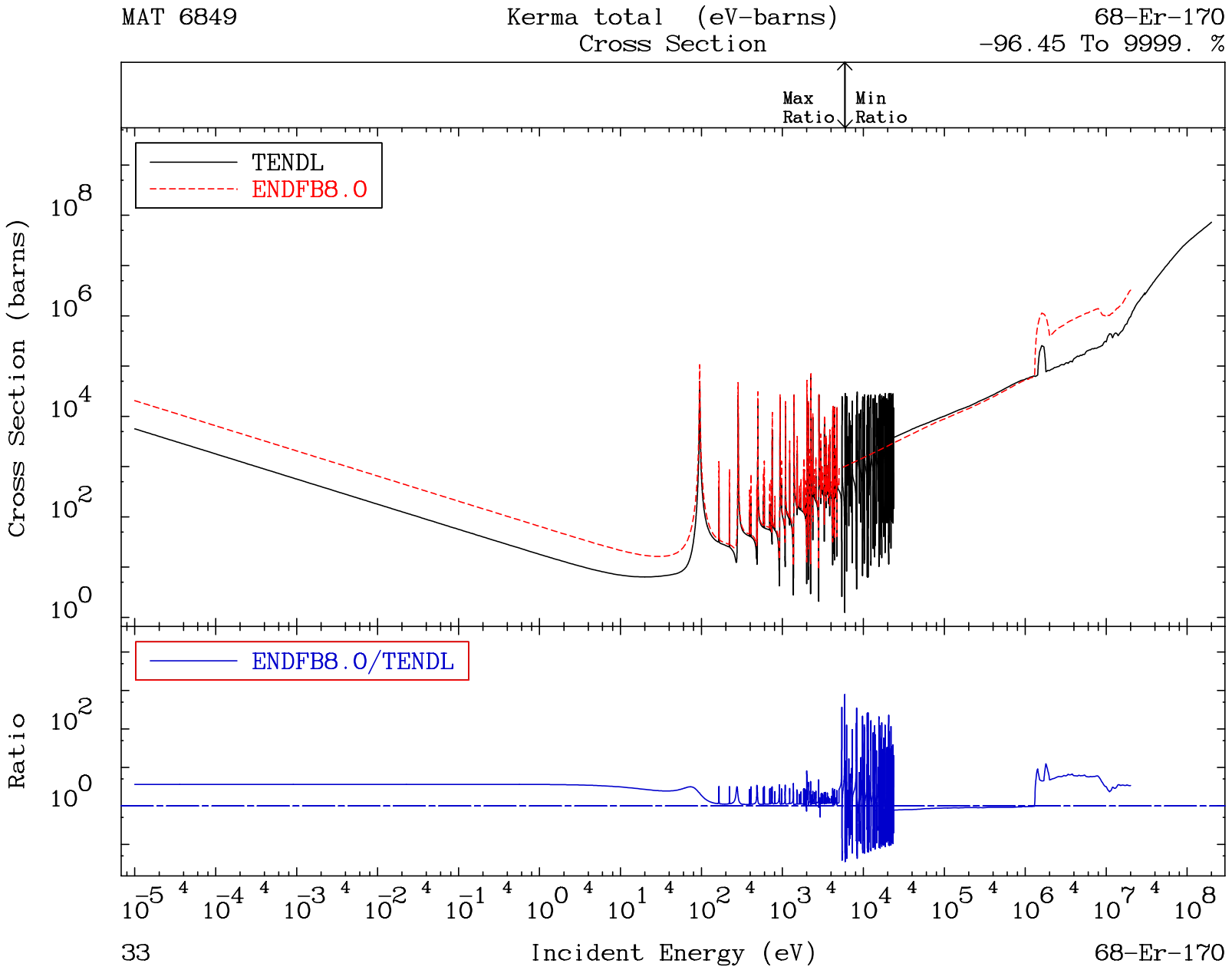

MAT 6849
(n,α)
Cross Section
68-Er-170
-81.30 To 2985. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0 Threshold 500.00 keV
Cross Section (milli-barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
28
68-Er-170

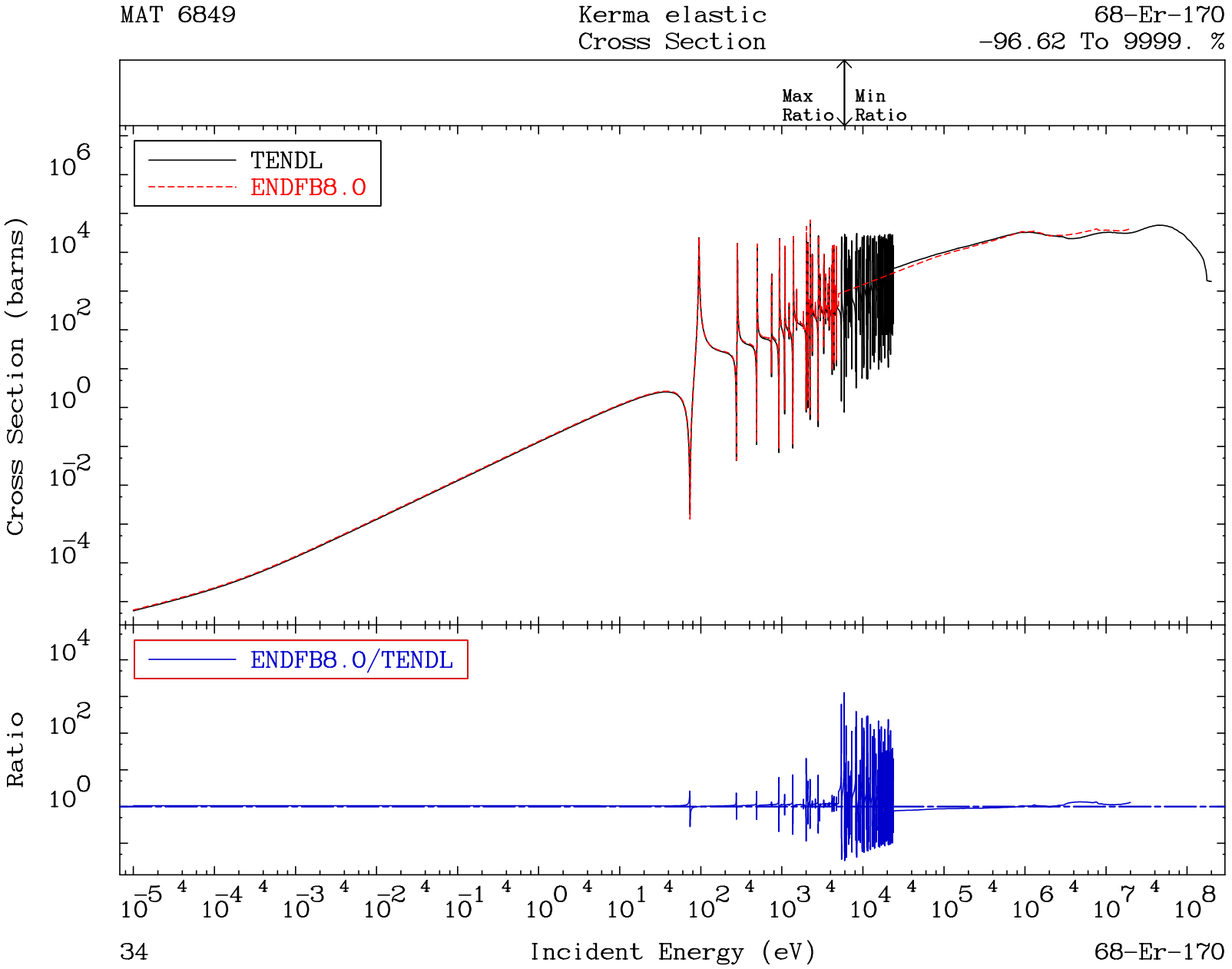

MAT 6849
Hydrogen Production
Cross Section
68-Er-170
-2.314 To 6322. %
Max Ratio
Min Ratio
TENDL Threshold 3.1060 MeV
ENDFB8.0 Threshold 4.5000 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
10^2
10^1
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
68-Er-170

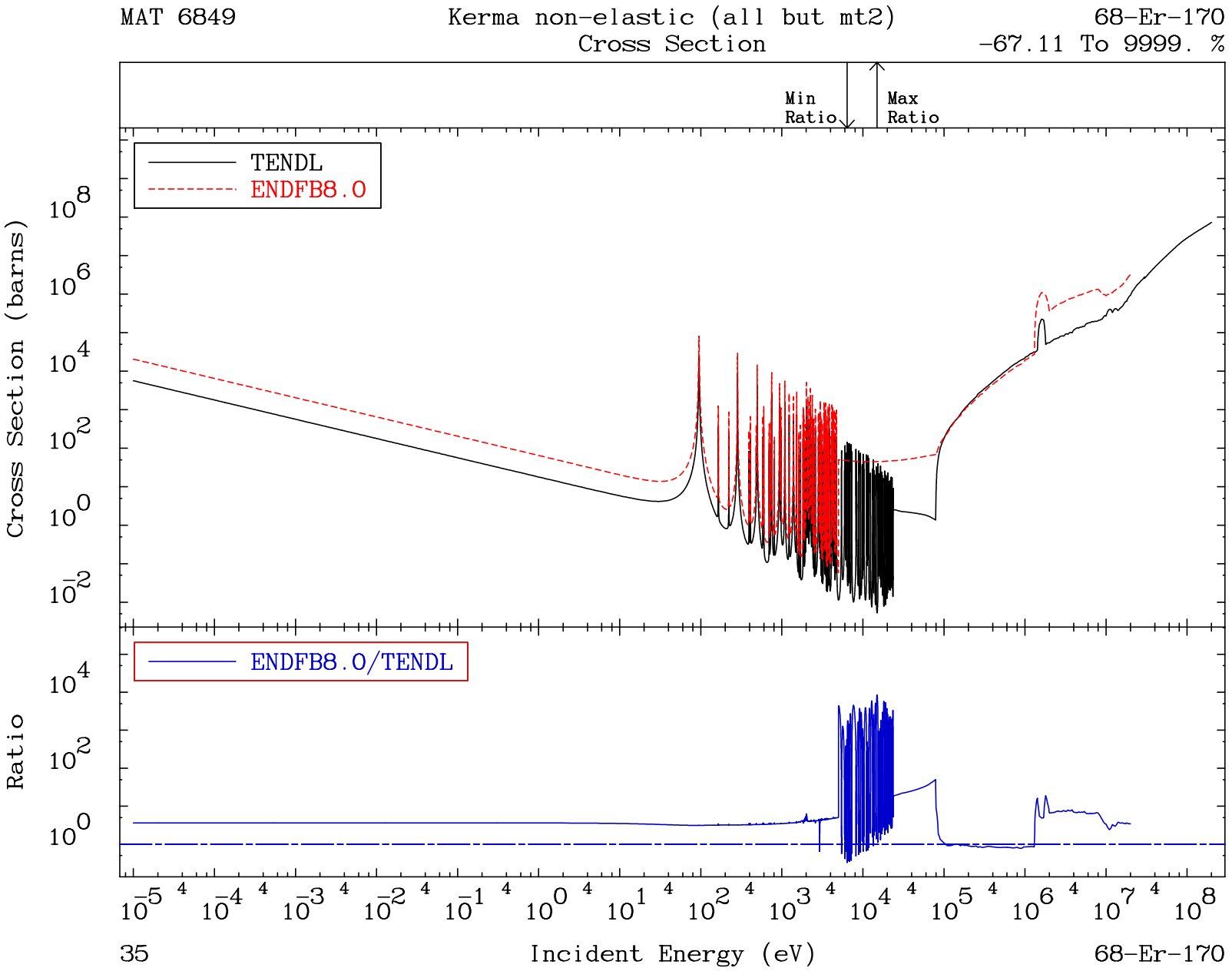

MAT 6849
Deuterium Production
Cross Section
68-Er-170
-16.87 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.4138 MeV
ENDFB8.0 Threshold 7.7500 MeV
Cross Section (milli-barns)
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
68-Er-170

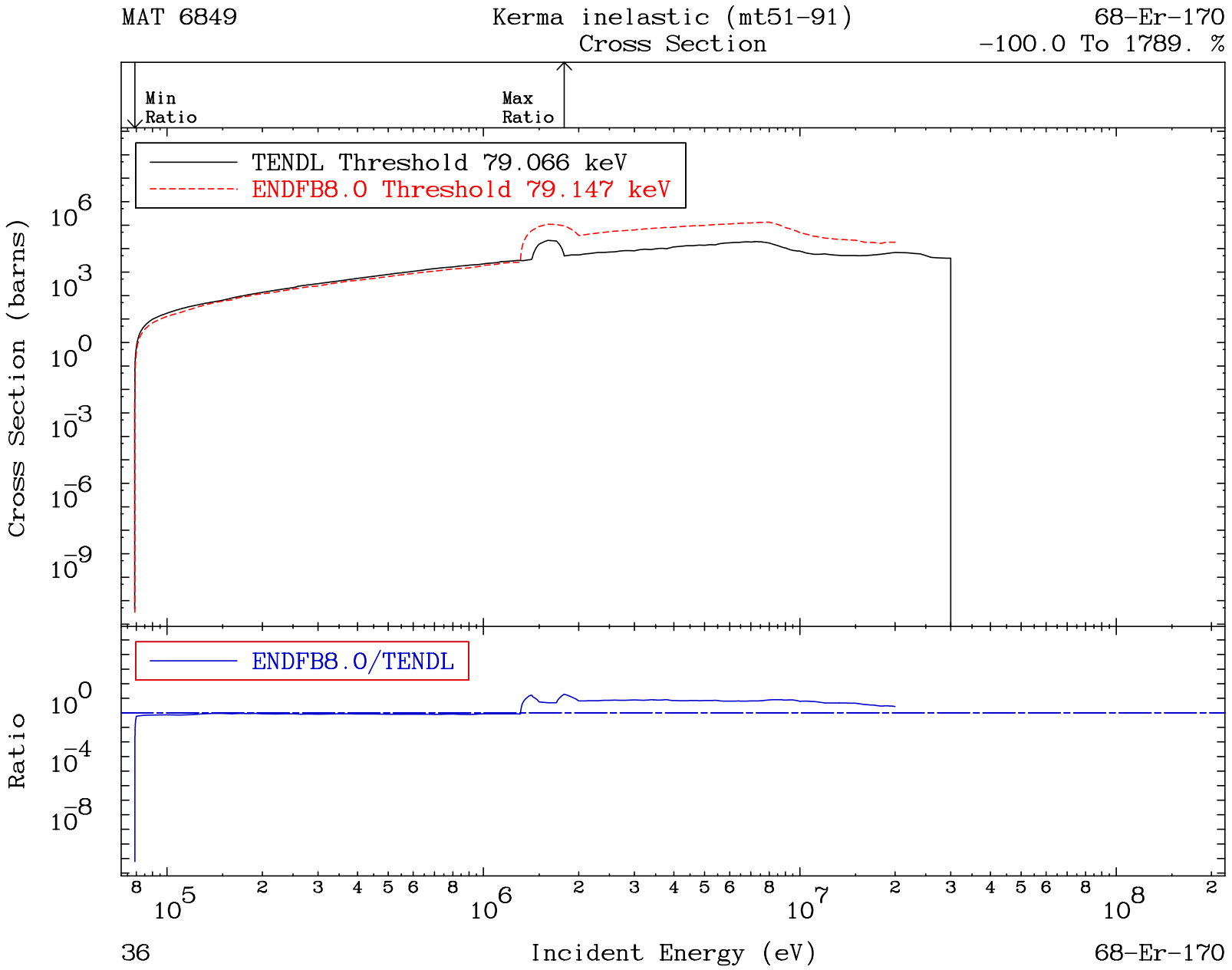

MAT 6849
Tritium Production
Cross Section
68-Er-170
-79.75 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.9679 MeV
ENDFB8.0 Threshold 8.7500 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
ENDFB8.0/TENDL
Ratio
10^4
10^2
10^0
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
68-Er-170

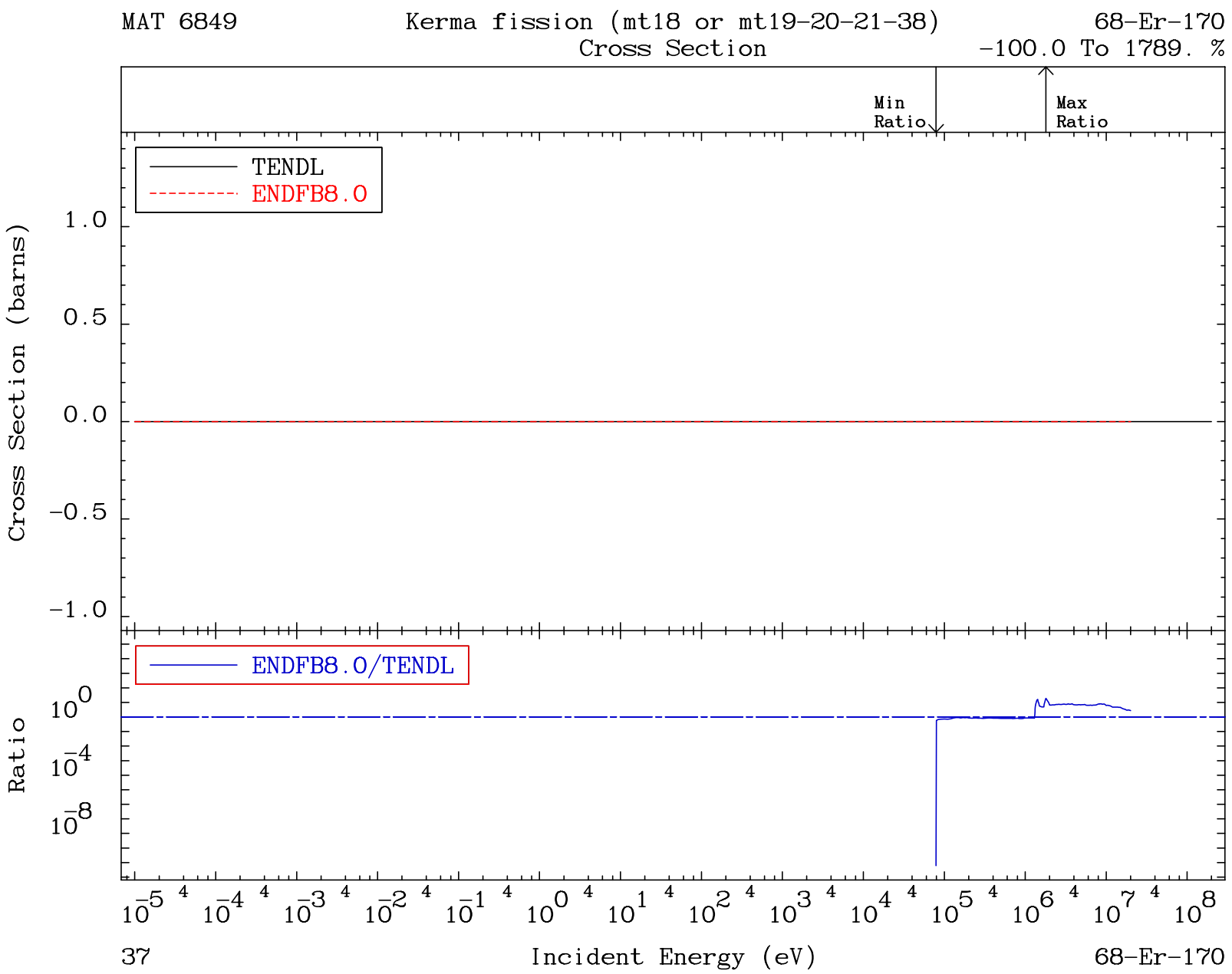

MAT 6849
He-4 Production
Cross Section
68-Er-170
-82.33 To 2985. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0 Threshold 500.00 keV
Cross Section (milli-barns)
200
150
100
50
0
ENDFB8.0/TENDL
Ratio
$10^1$
$10^0$
$10^{-5}$ $10^{-4}$ $10^{-3}$ $10^{-2}$ $10^{-1}$ $10^0$ $10^1$ $10^2$ $10^3$ $10^4$ $10^5$ $10^6$ $10^7$ $10^8$
32
Incident Energy (eV)
68-Er-170

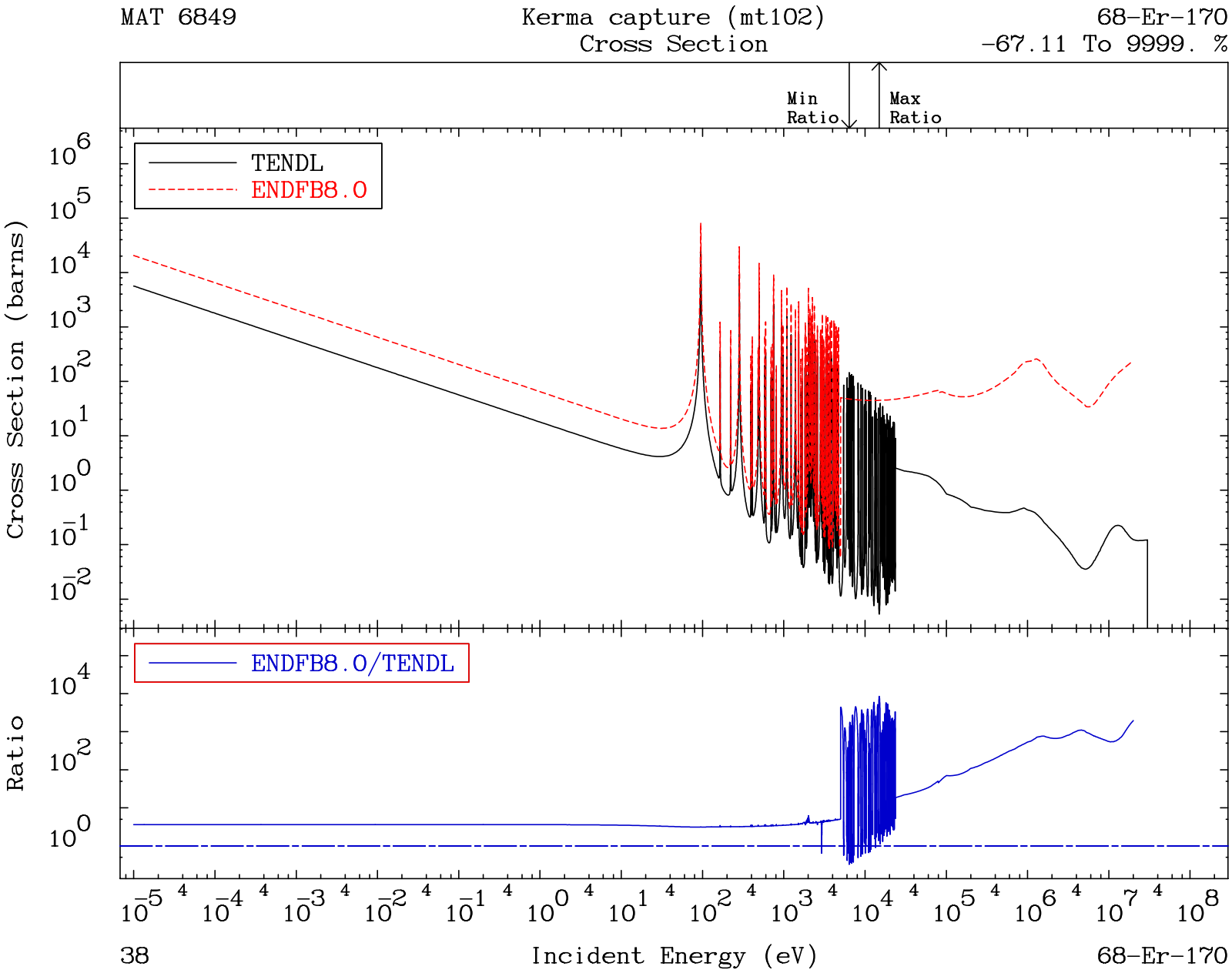

MAT 6849
Kerma total (eV-barns)
Cross Section
68-Er-170
-96.45 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
33
68-Er-170

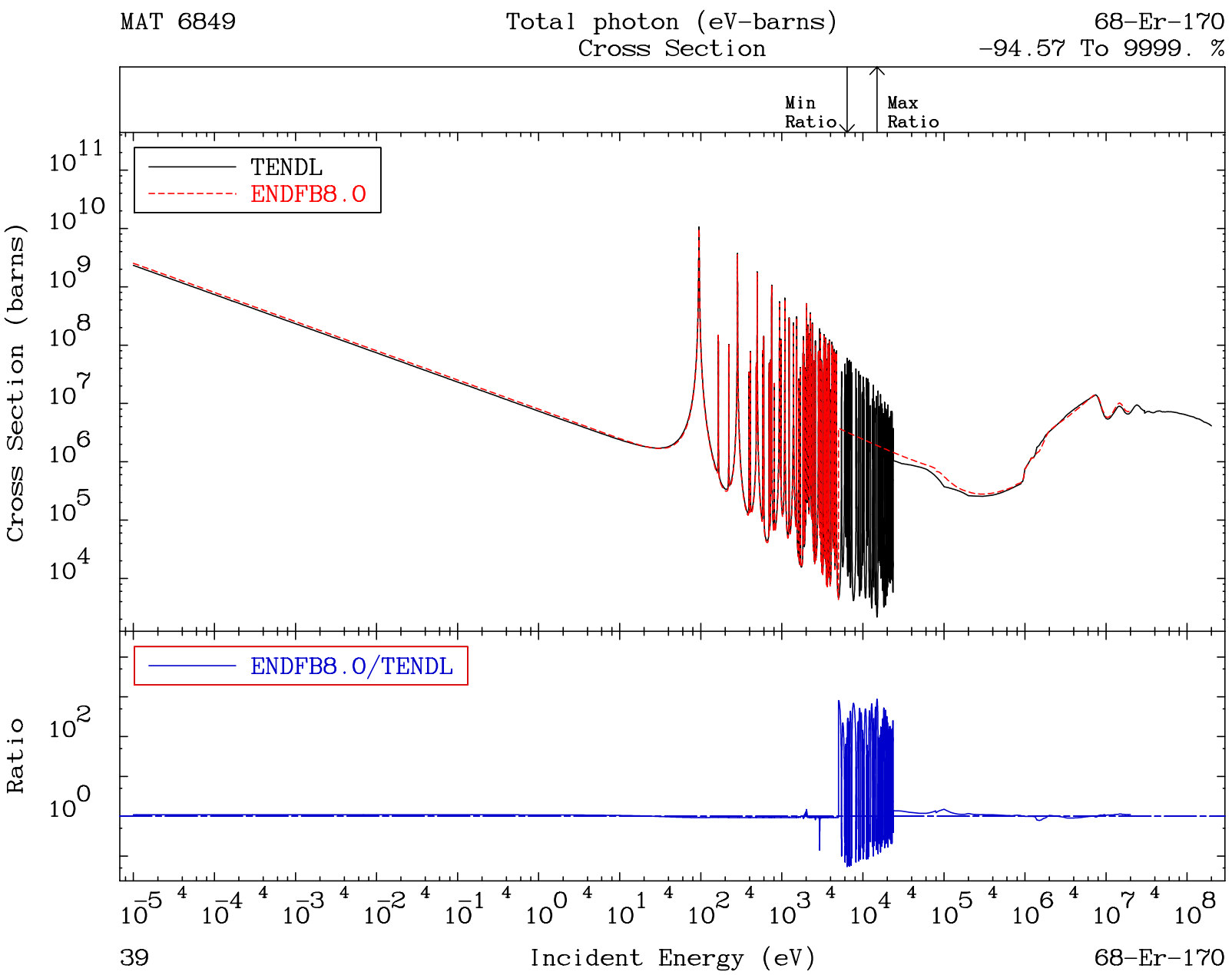

MAT 6849
Kerma elastic
Cross Section
68-Er-170
-96.62 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
34
68-Er-170

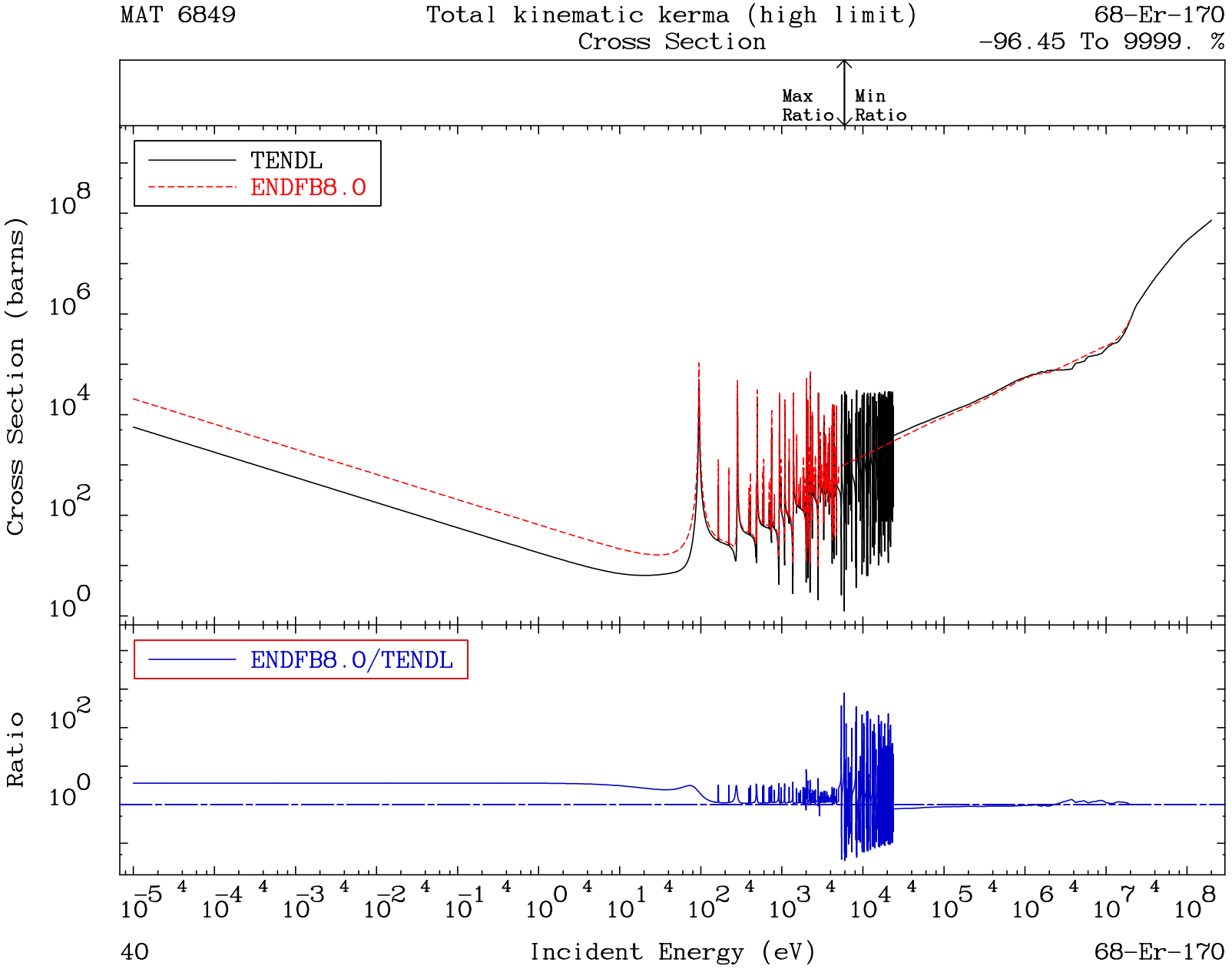

MAT 6849
Kerma non-elastic (all but mt2)
Cross Section
68-Er-170
-67.11 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
35
68-Er-170

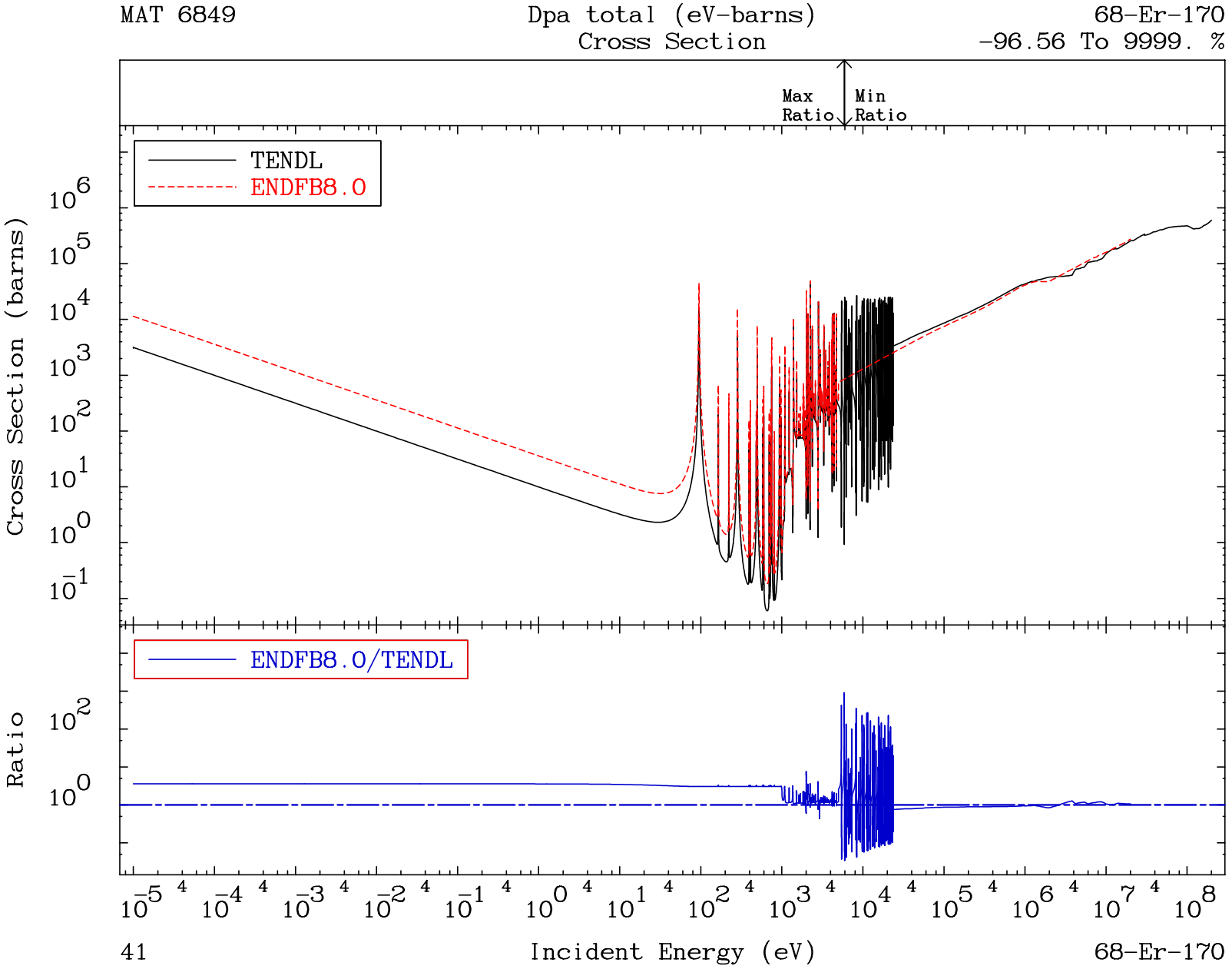

MAT 6849
Kerma inelastic (mt51-91)
Cross Section
68-Er-170
-100.0 To 1789. %
Min Ratio
Max Ratio
TENDL Threshold 79.066 keV
ENDFB8.0 Threshold 79.147 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
36
68-Er-170

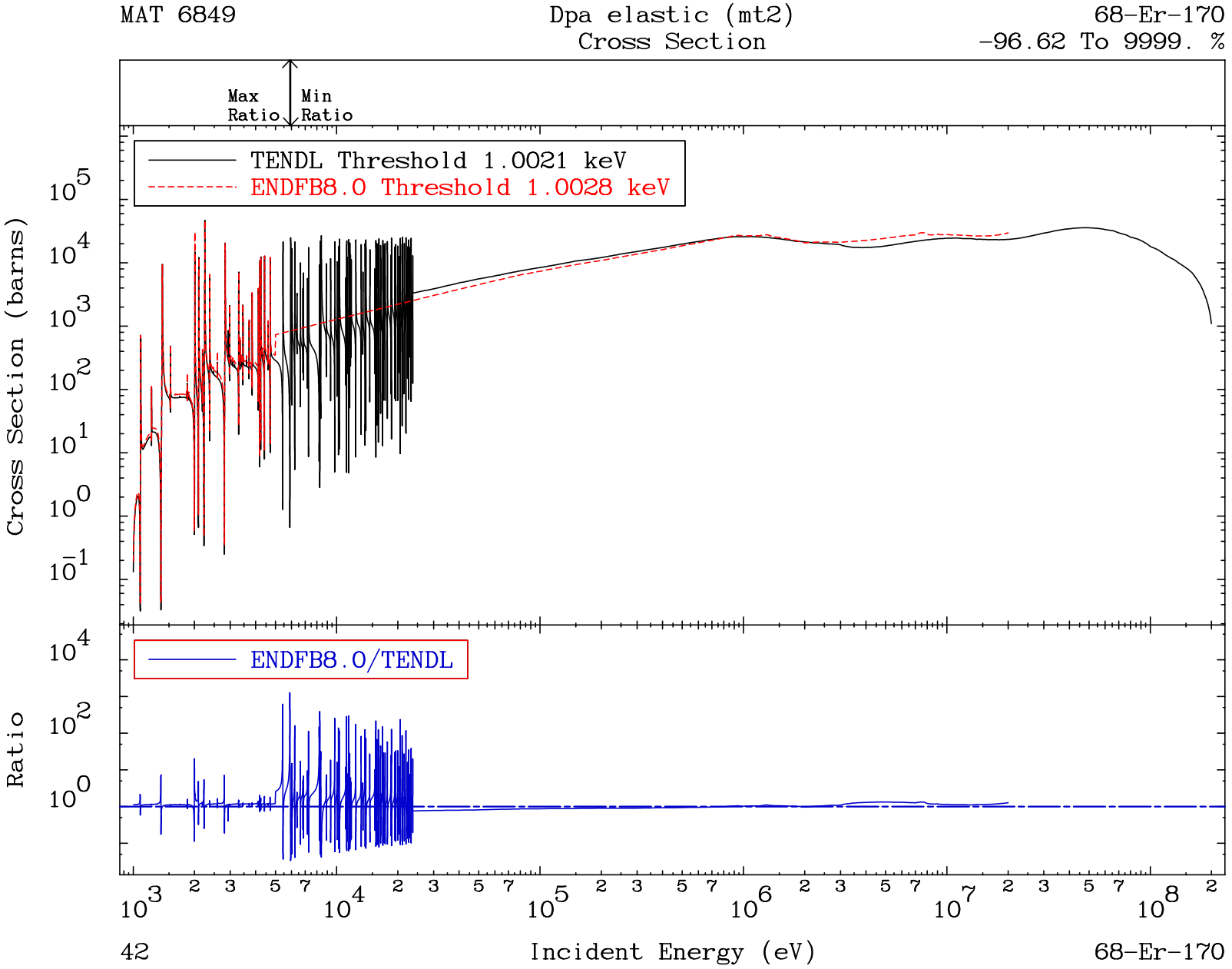

MAT 6849
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
68-Er-170
-100.0 To 1789. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
ENDFB8.0/TENDL
Ratio
10^0
10^-4
10^-8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
37
Incident Energy (eV)
68-Er-170

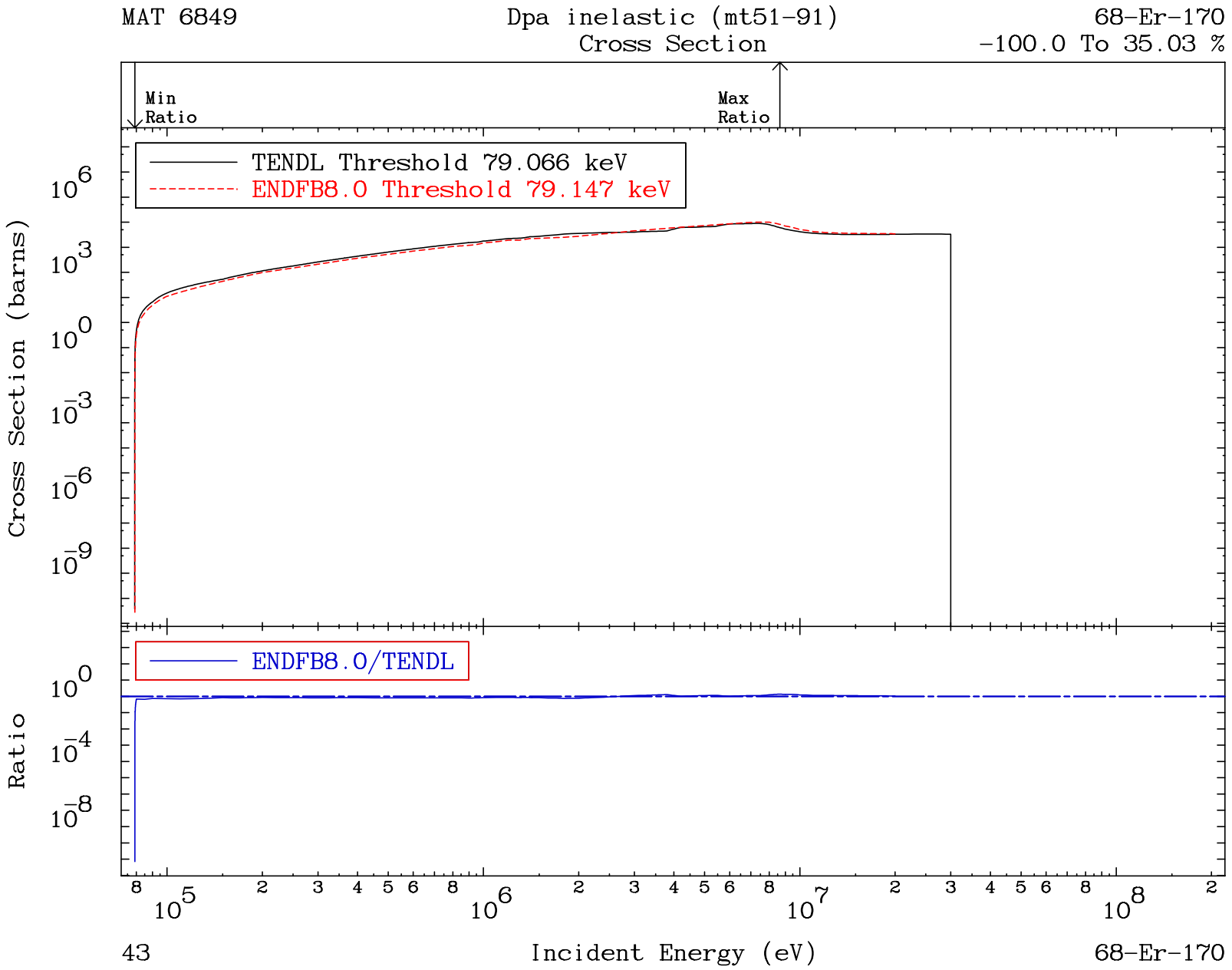

MAT 6849
Kerma capture (mt102)
Cross Section
68-Er-170
-67.11 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
38
68-Er-170

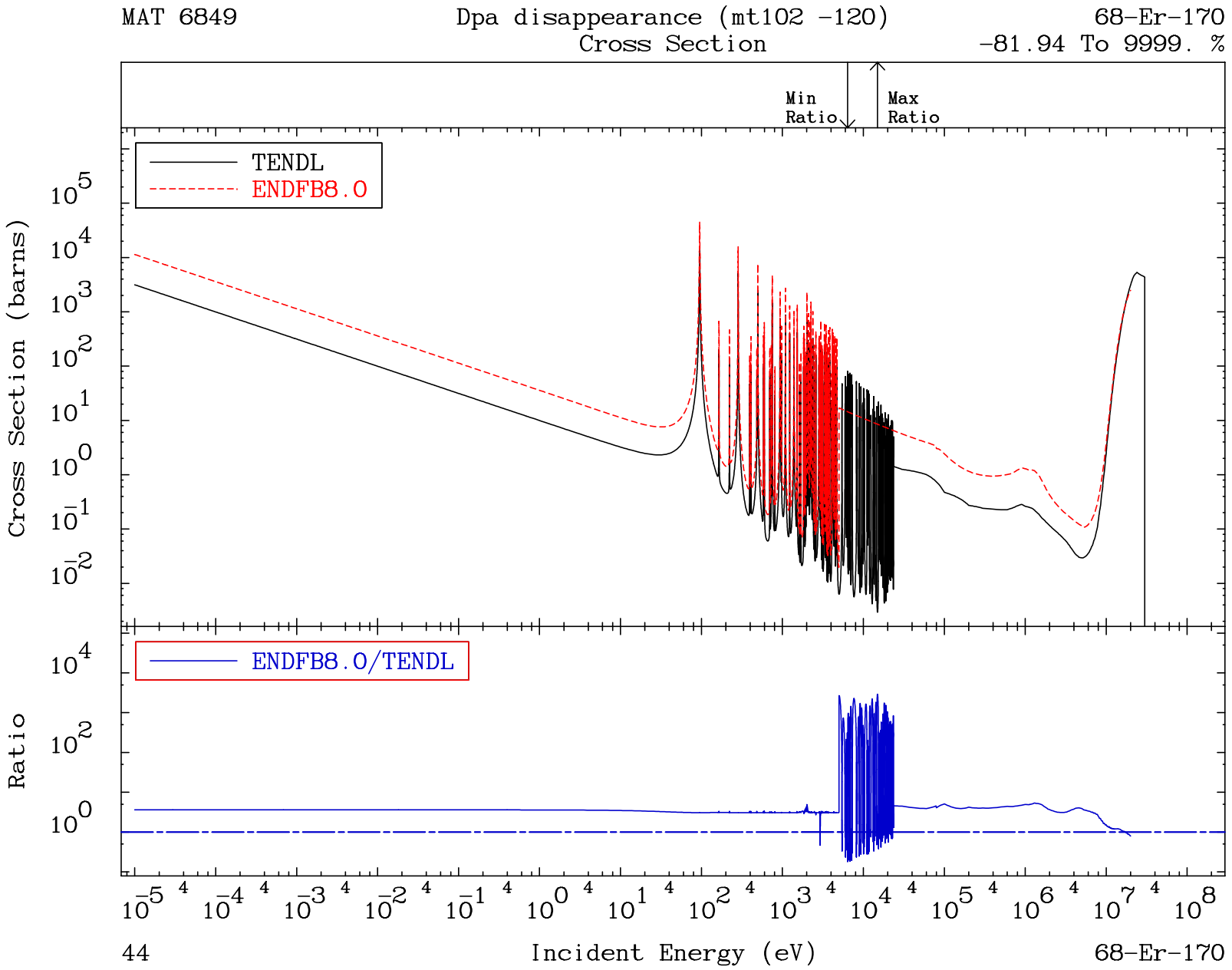

MAT 6849
Total photon (eV-barns)
Cross Section
68-Er-170
-94.57 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
39
68-Er-170


MAT 6849
Total kinematic kerma (high limit)
Cross Section
68-Er-170
-96.45 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
40
68-Er-170


MAT 6849
Dpa total (eV-barns)
Cross Section
68-Er-170
-96.56 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
41
68-Er-170


MAT 6849
Dpa elastic (mt2)
Cross Section
68-Er-170
-96.62 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.0021 keV
ENDFB8.0 Threshold 1.0028 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
42
68-Er-170


MAT 6849
Dpa inelastic (mt51-91)
Cross Section
68-Er-170
-100.0 To 35.03 %
Min Ratio
Max Ratio
TENDL Threshold 79.066 keV
ENDFB8.0 Threshold 79.147 keV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
43
68-Er-170


MAT 6849
Dpa disappearance (mt102 -120)
Cross Section
68-Er-170
-81.94 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
44
68-Er-170