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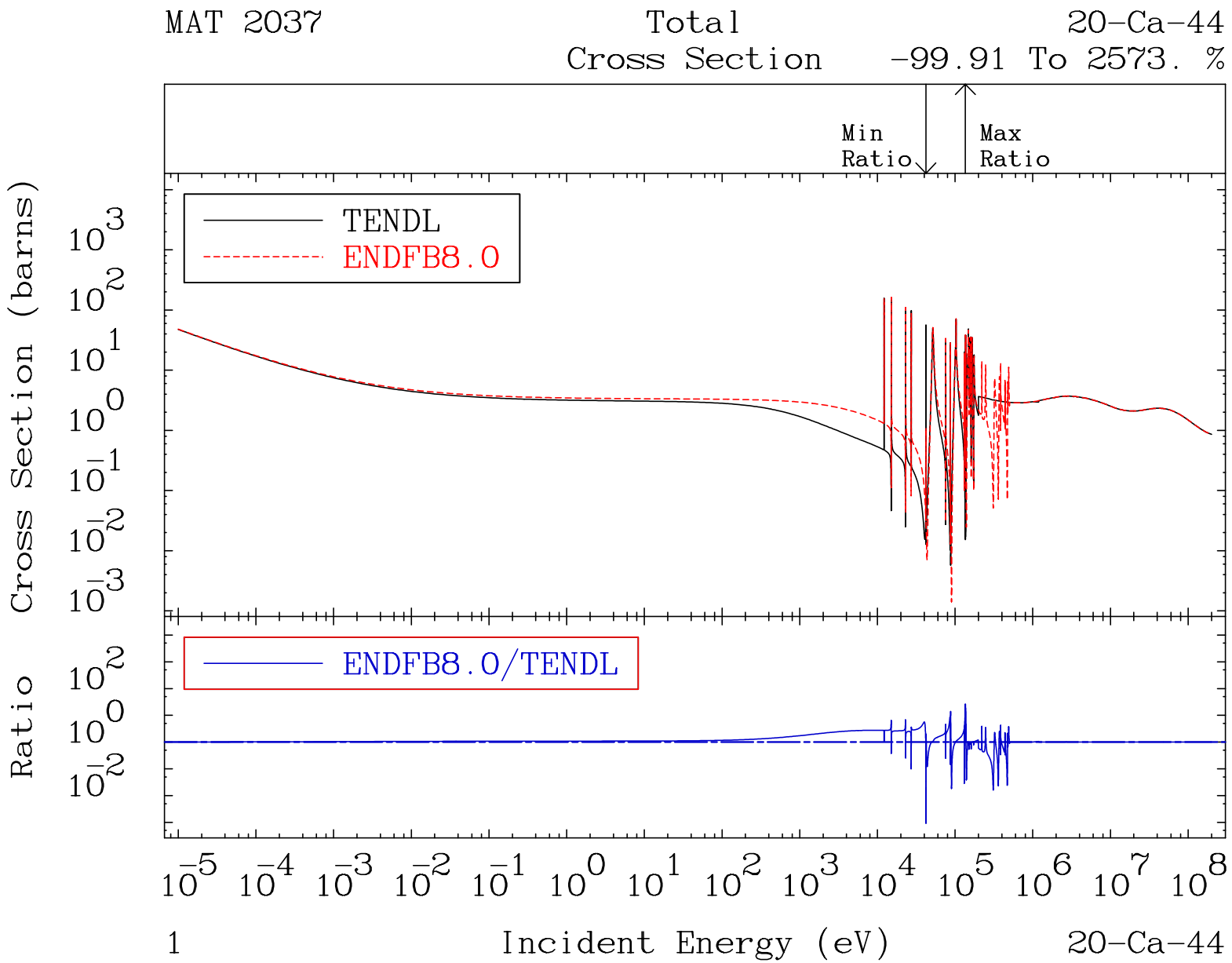
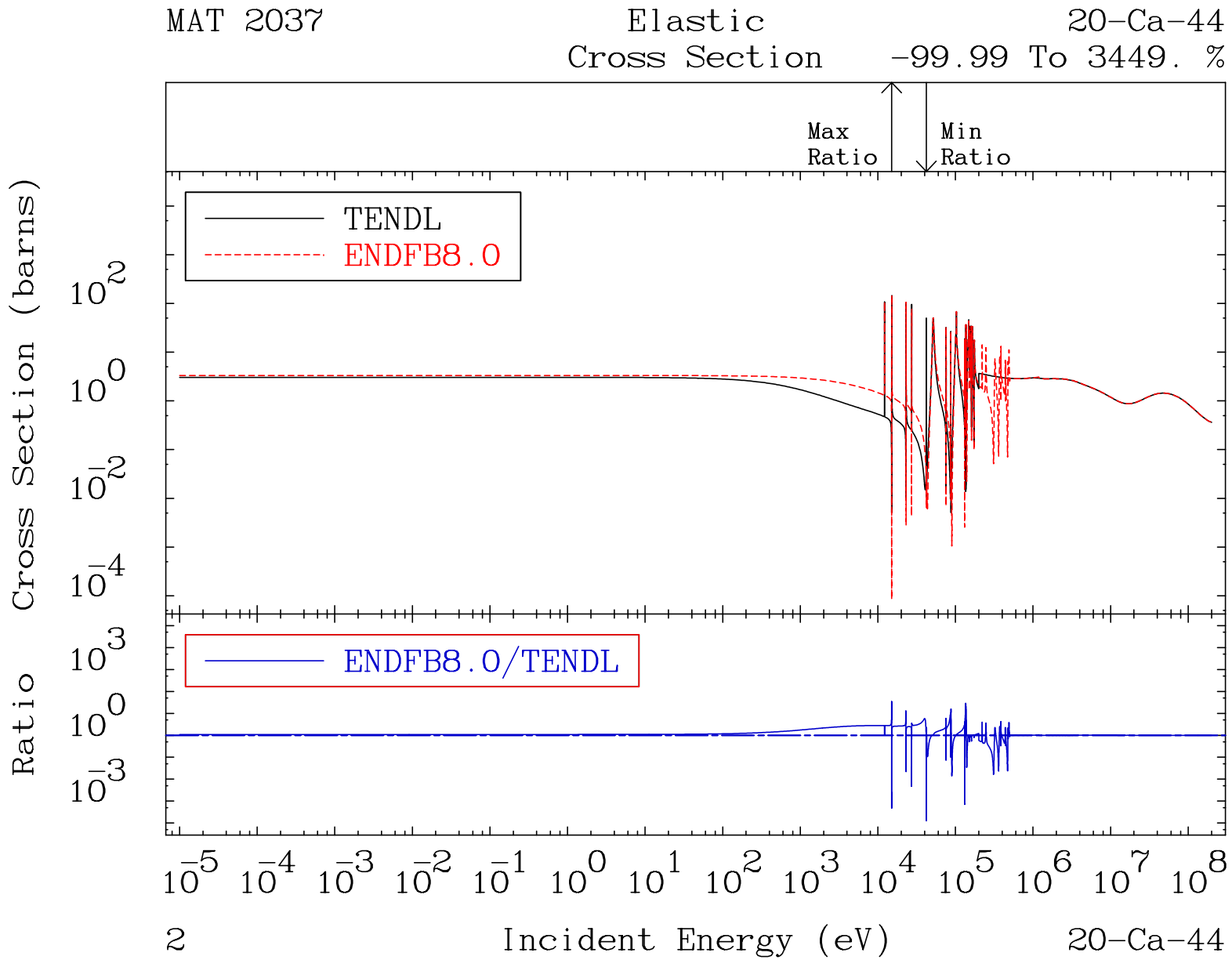
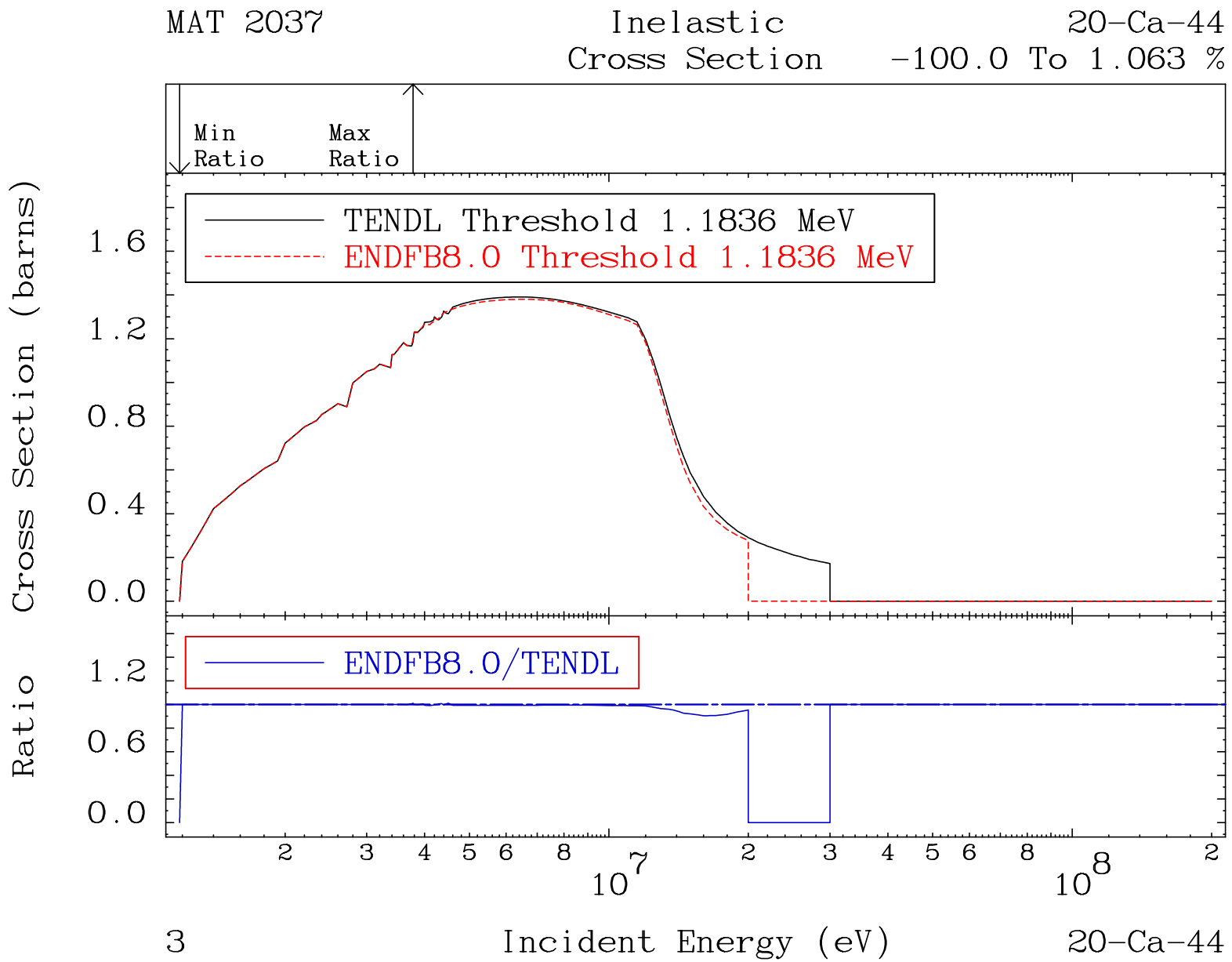
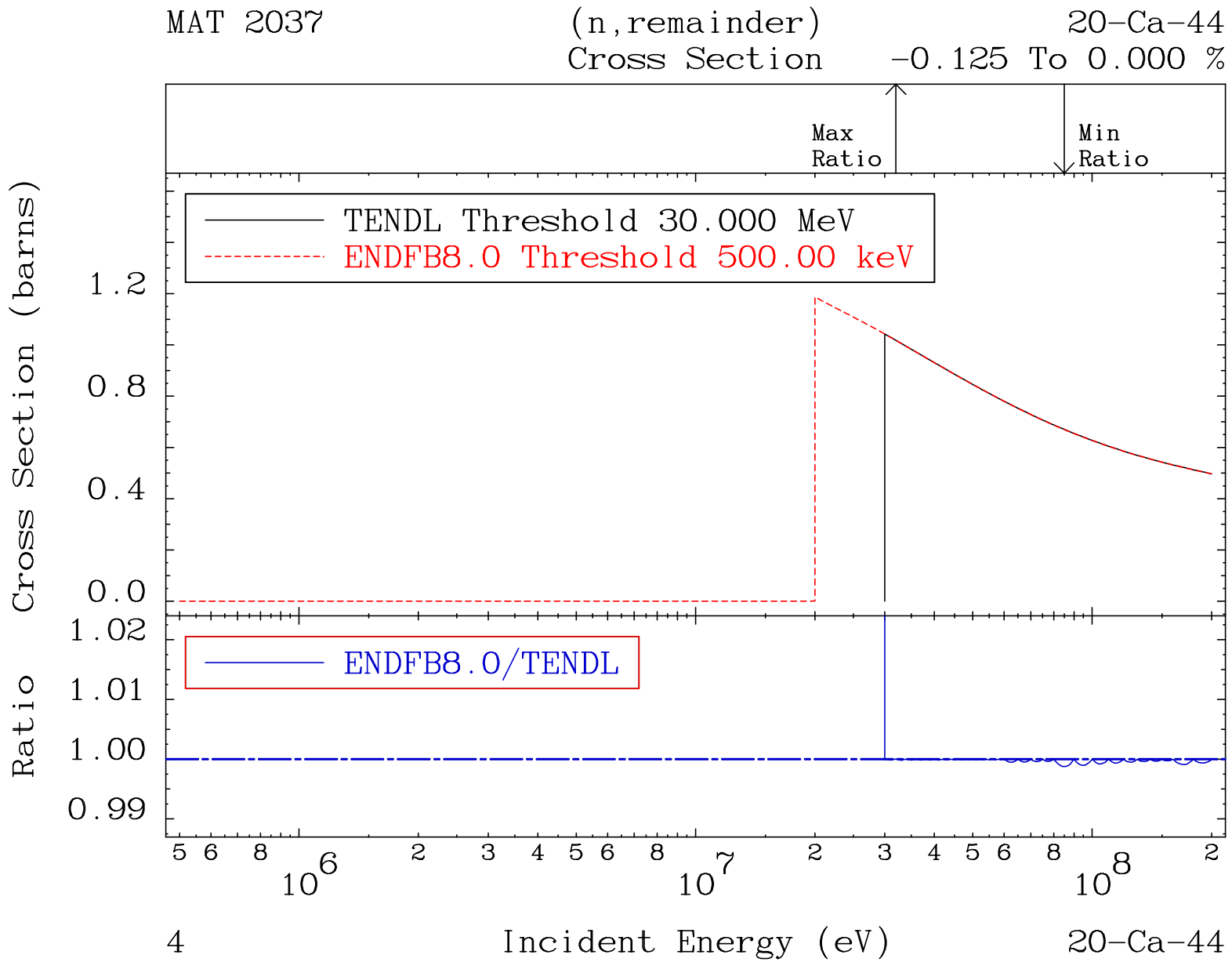
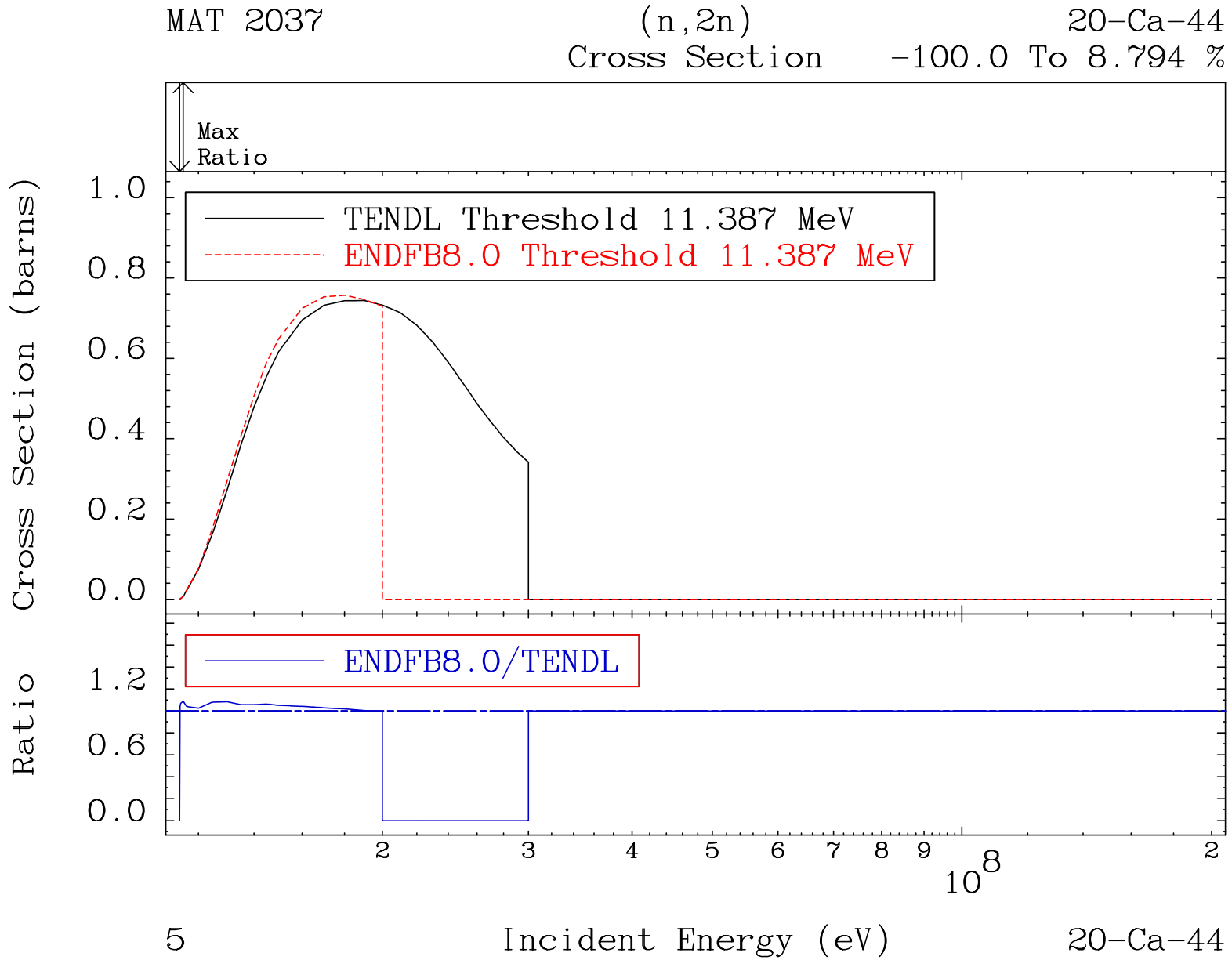
Press Mouse Button to Start

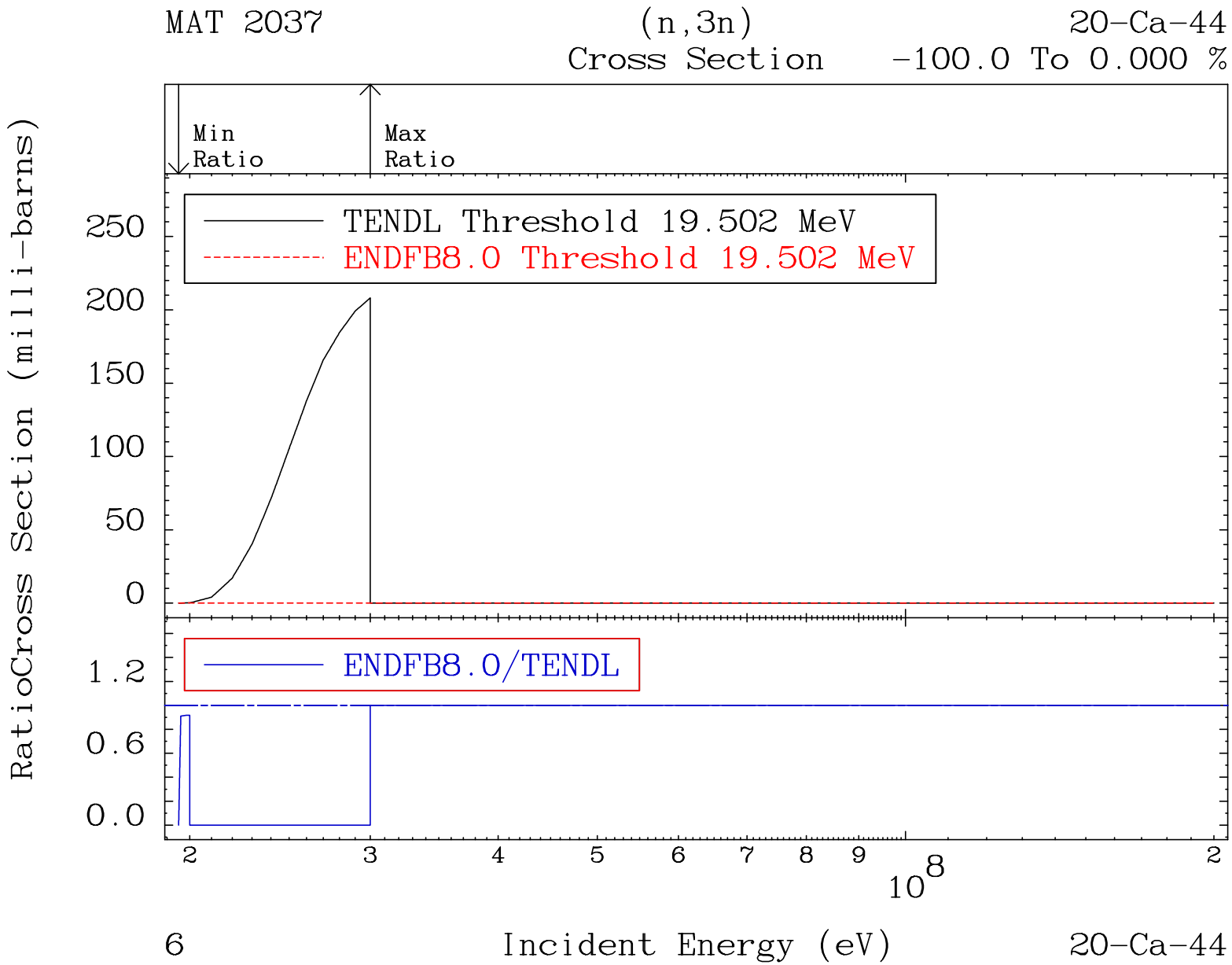

MAT 2037
Total
Cross Section
20-Ca-44
-99.91 To 2573. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
20-Ca-44

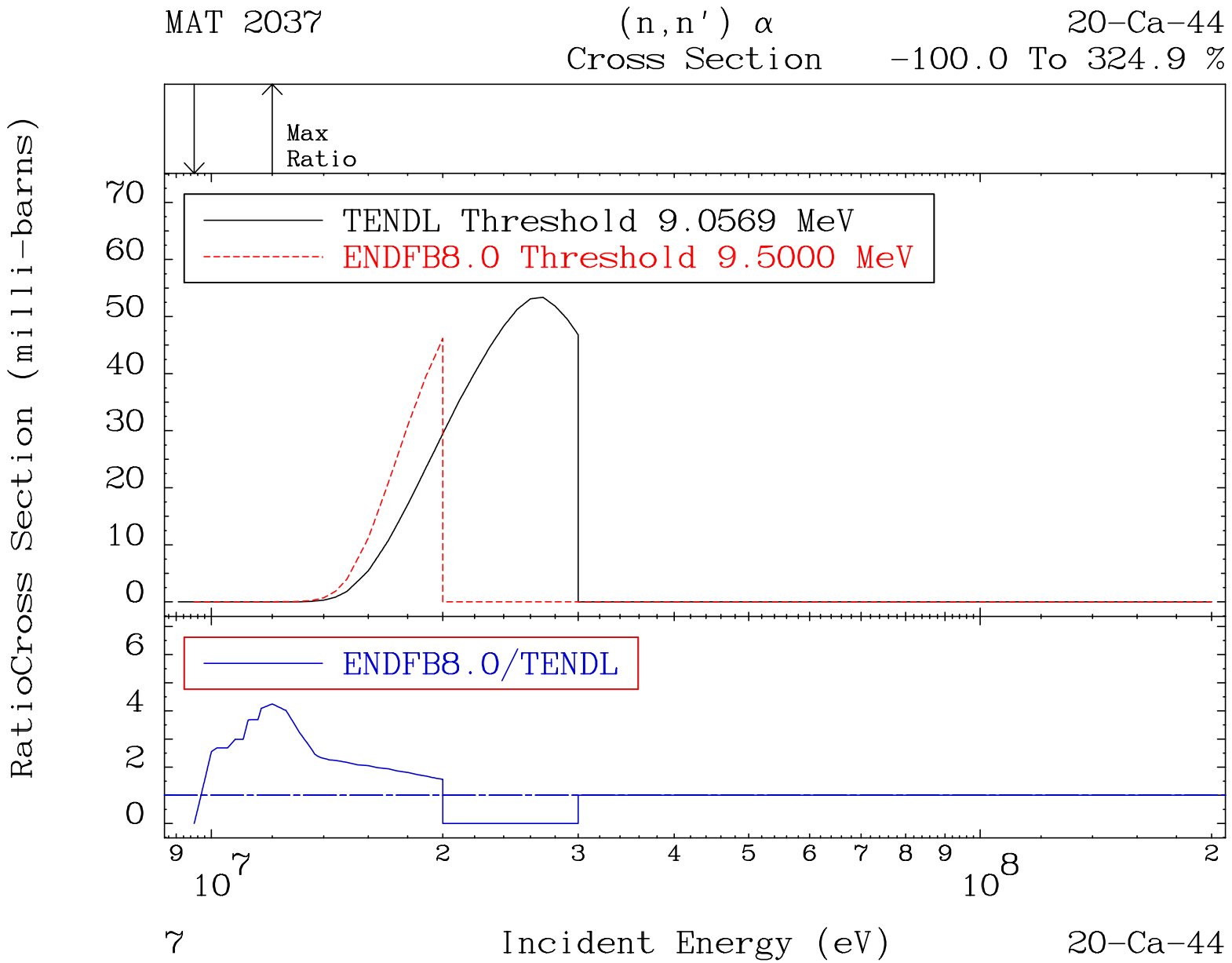

MAT 2037
Elastic
Cross Section
20-Ca-44
-99.99 To 3449. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Ratio Cross Section (barns)
Incident Energy (eV)
2
20-Ca-44

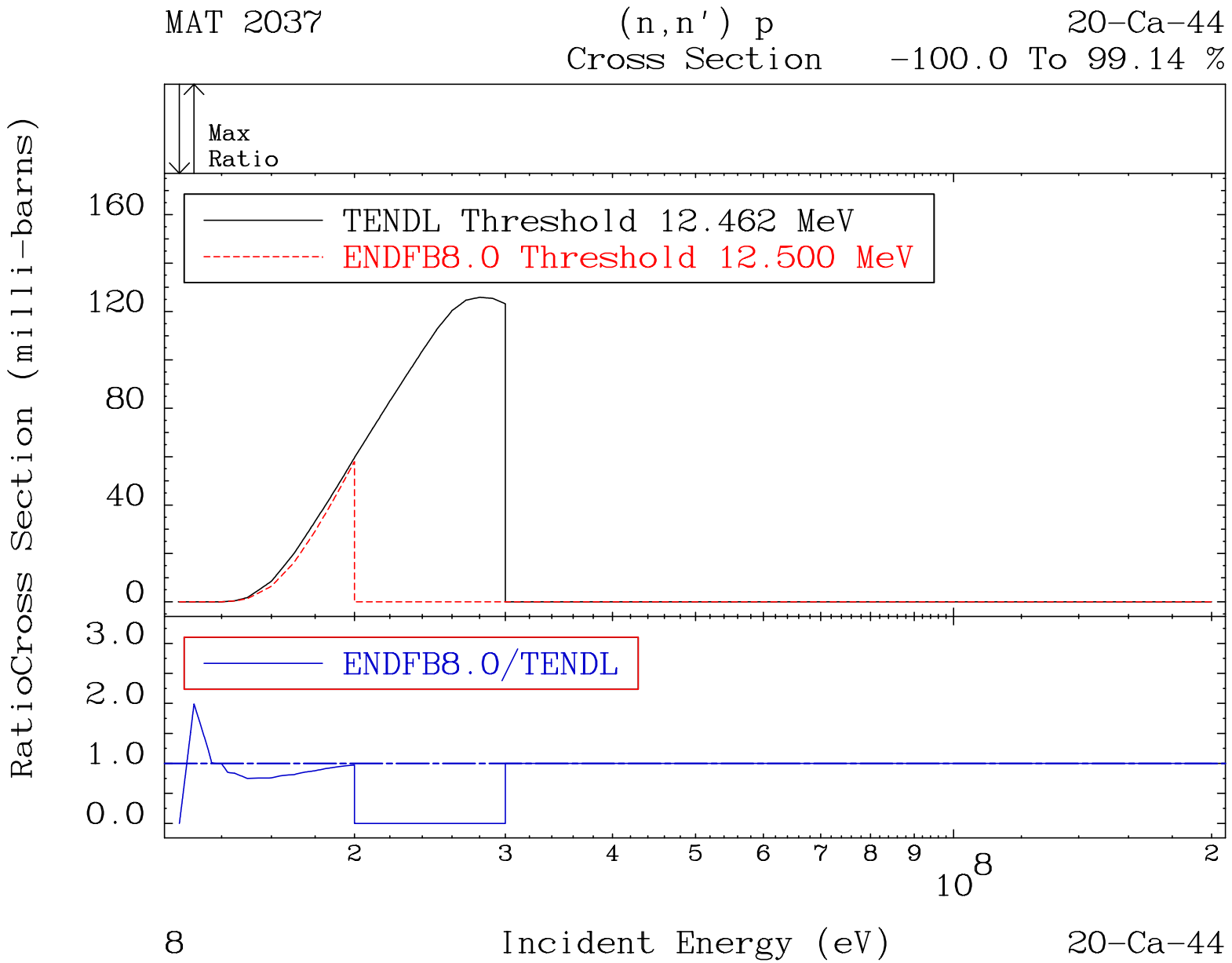

MAT 2037
Inelastic
Cross Section
20-Ca-44
-100.0 To 1.063 %
Min Ratio
Max Ratio
TENDL Threshold 1.1836 MeV
ENDFB8.0 Threshold 1.1836 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
ENDFB8.0/TENDL
Ratio
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
20-Ca-44

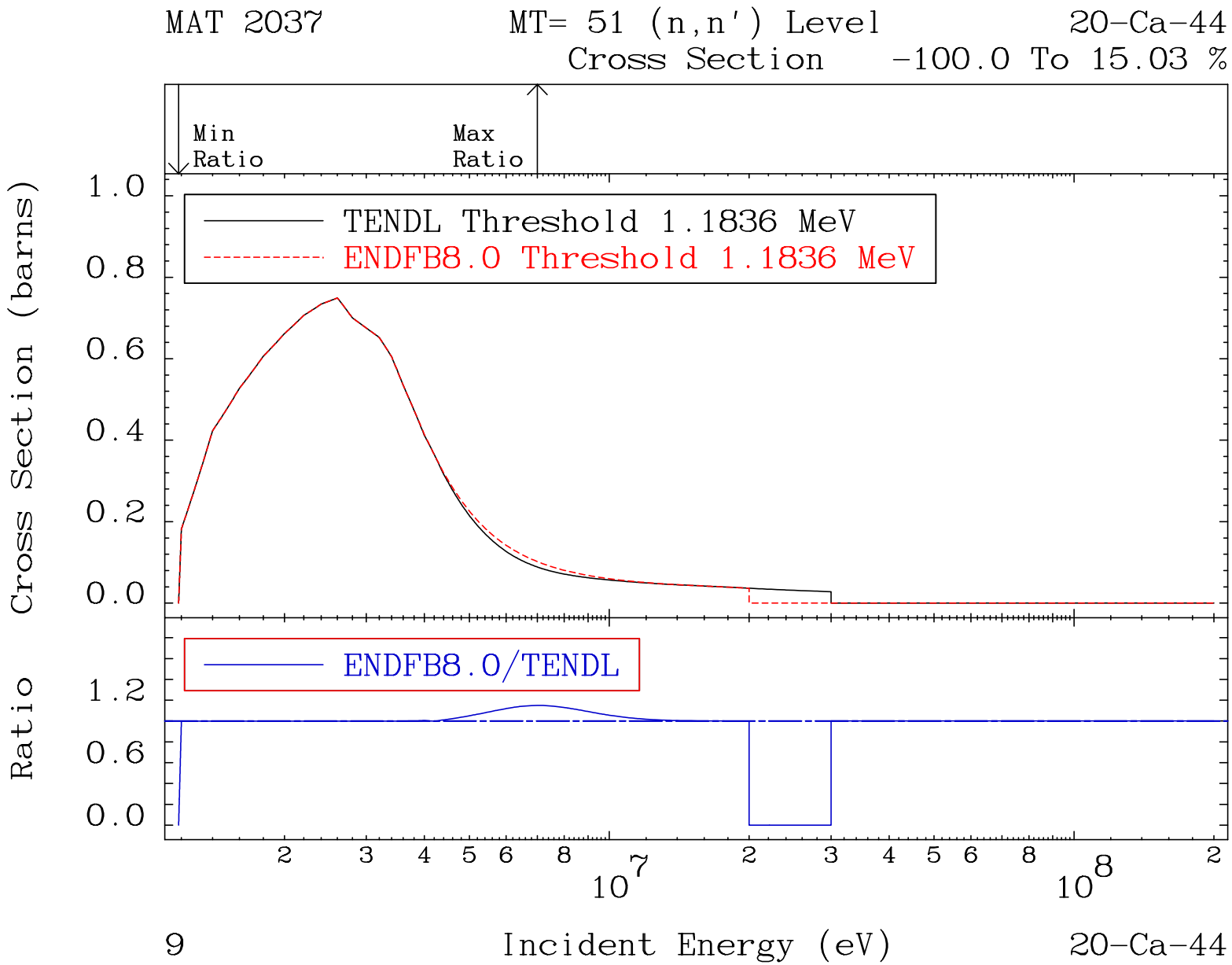

MAT 2037
(n,remainder)
Cross Section
20-Ca-44
-0.125 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 30.000 MeV
ENDFB8.0 Threshold 500.00 keV
Cross Section (barns)
1.2
0.8
0.4
0.0
ENDFB8.0/TENDL
Ratio
1.02
1.01
1.00
0.99
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
4
Incident Energy (eV)
20-Ca-44

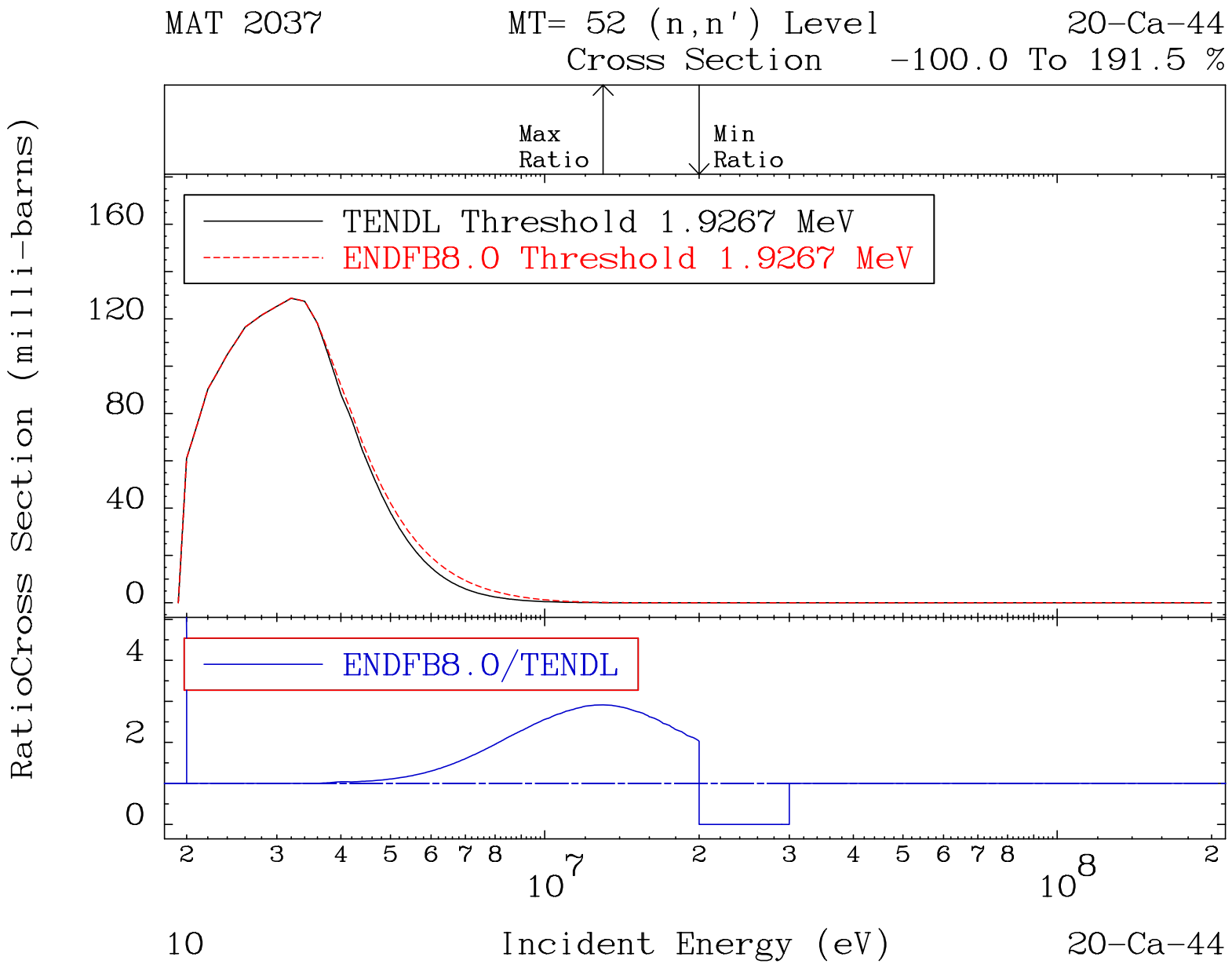

MAT 2037
(n,2n)
Cross Section
20-Ca-44
-100.0 To 8.794 %
Max
Ratio
TENDL Threshold 11.387 MeV
ENDFB8.0 Threshold 11.387 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
2
10^8
Incident Energy (eV)
5
20-Ca-44

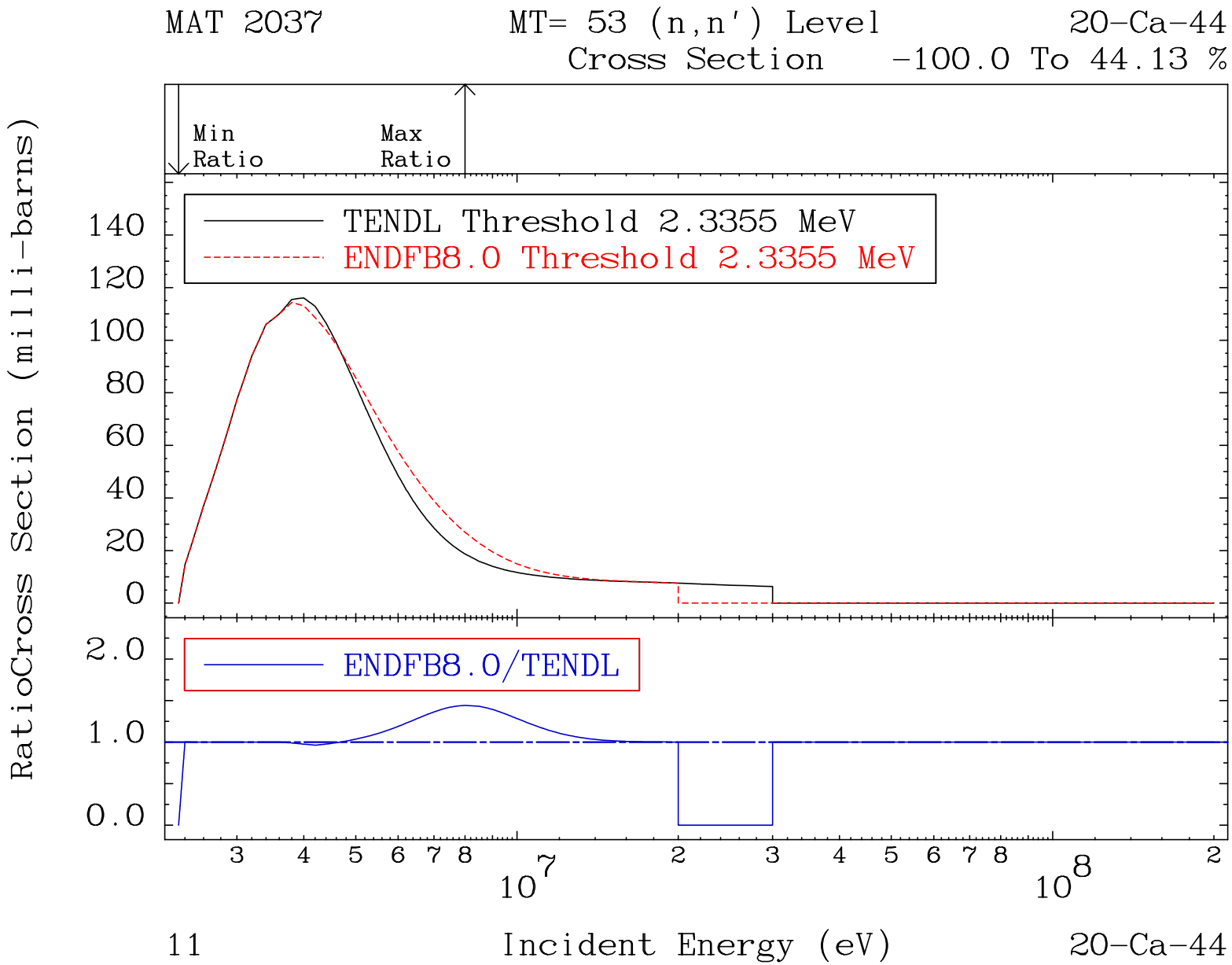

MAT 2037
(n,3n)
Cross Section
20-Ca-44
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 19.502 MeV
ENDFB8.0 Threshold 19.502 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
20-Ca-44

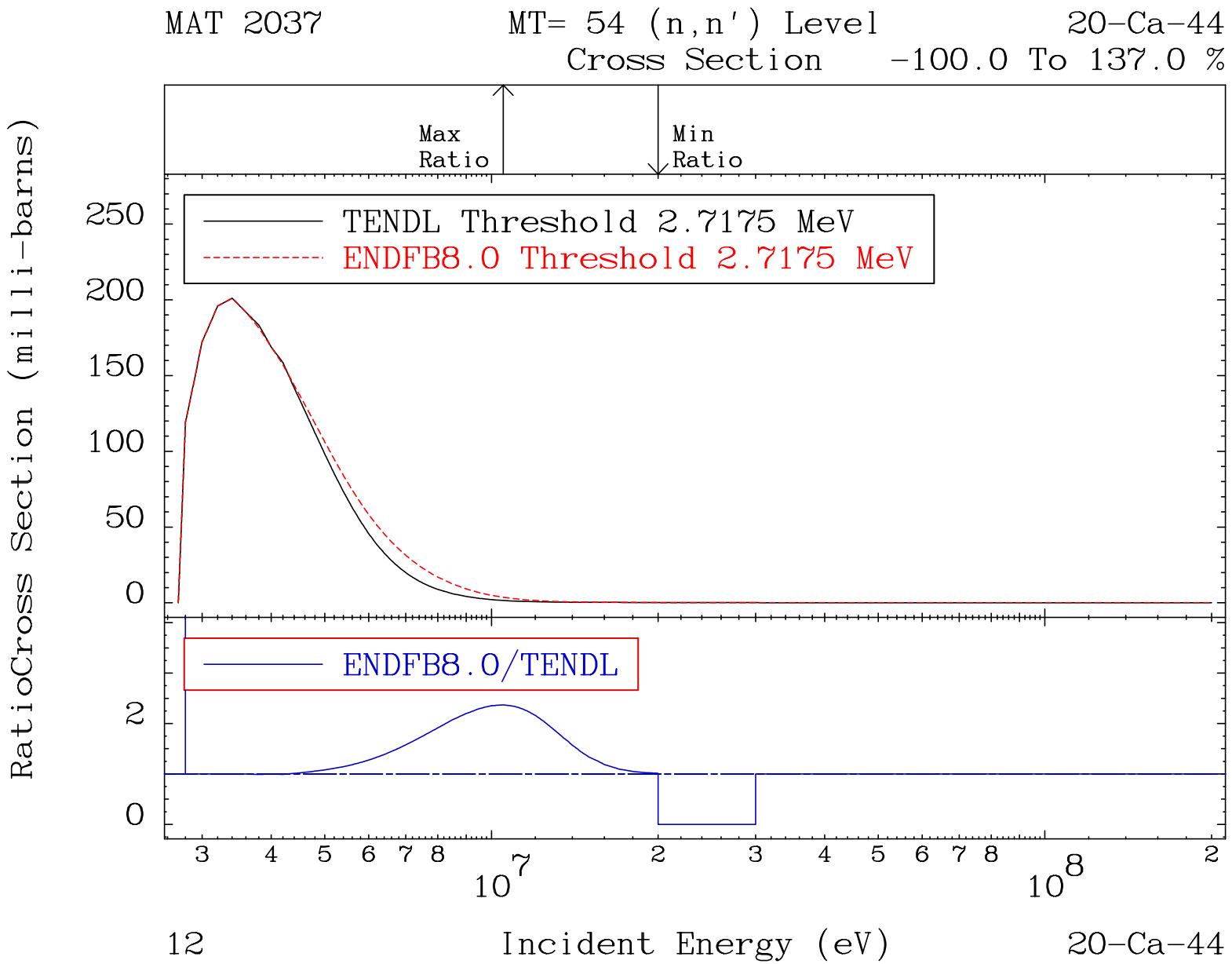

MAT 2037
(n,n') α
Cross Section
20-Ca-44
-100.0 To 324.9 %
Max
Ratio
TENDL Threshold 9.0569 MeV
ENDFB8.0 Threshold 9.5000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
20-Ca-44

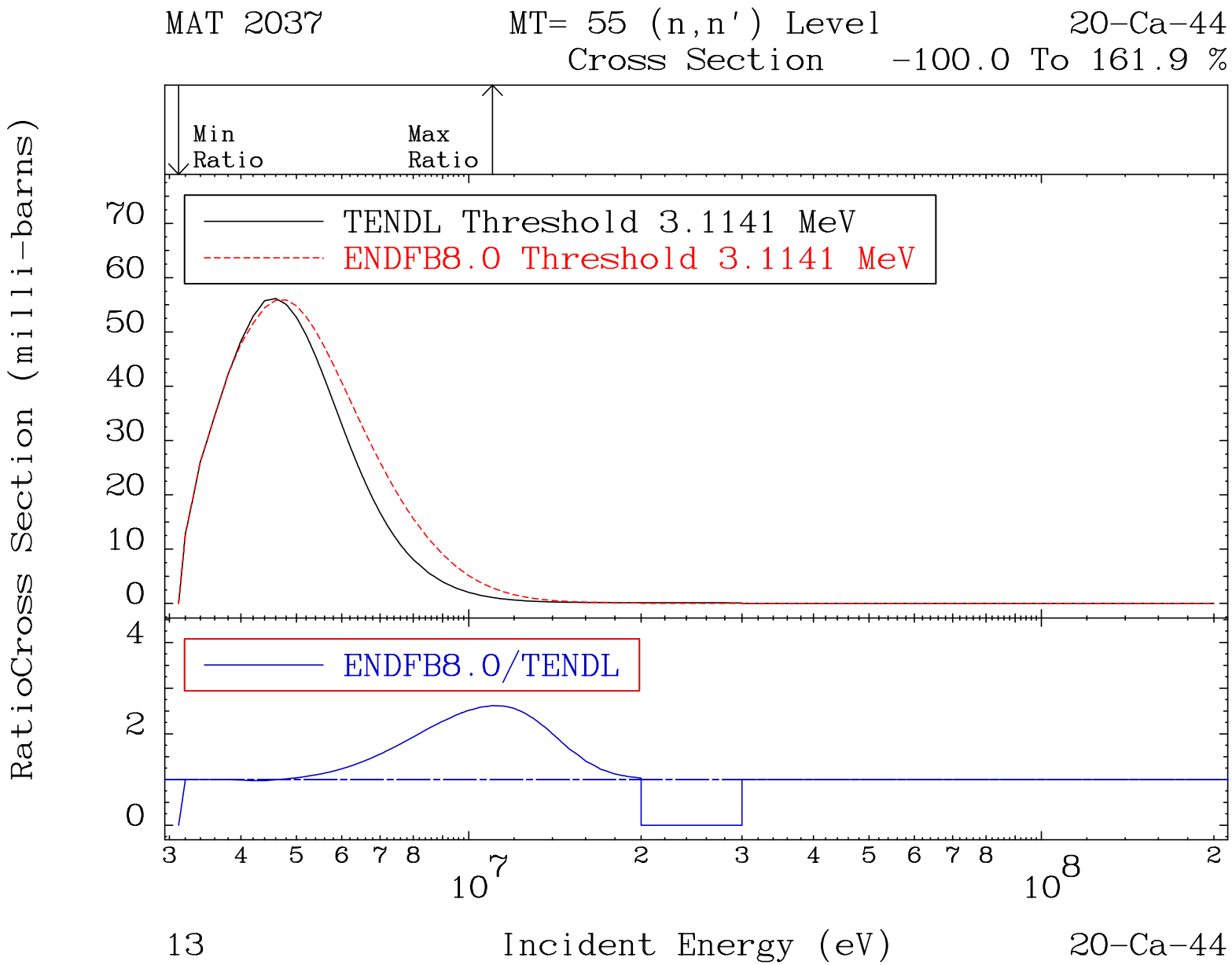

MAT 2037
(n,n') p
Cross Section
20-Ca-44
-100.0 To 99.14 %
Max
Ratio
TENDL Threshold 12.462 MeV
ENDFB8.0 Threshold 12.500 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
2
10^8
8
Incident Energy (eV)
20-Ca-44

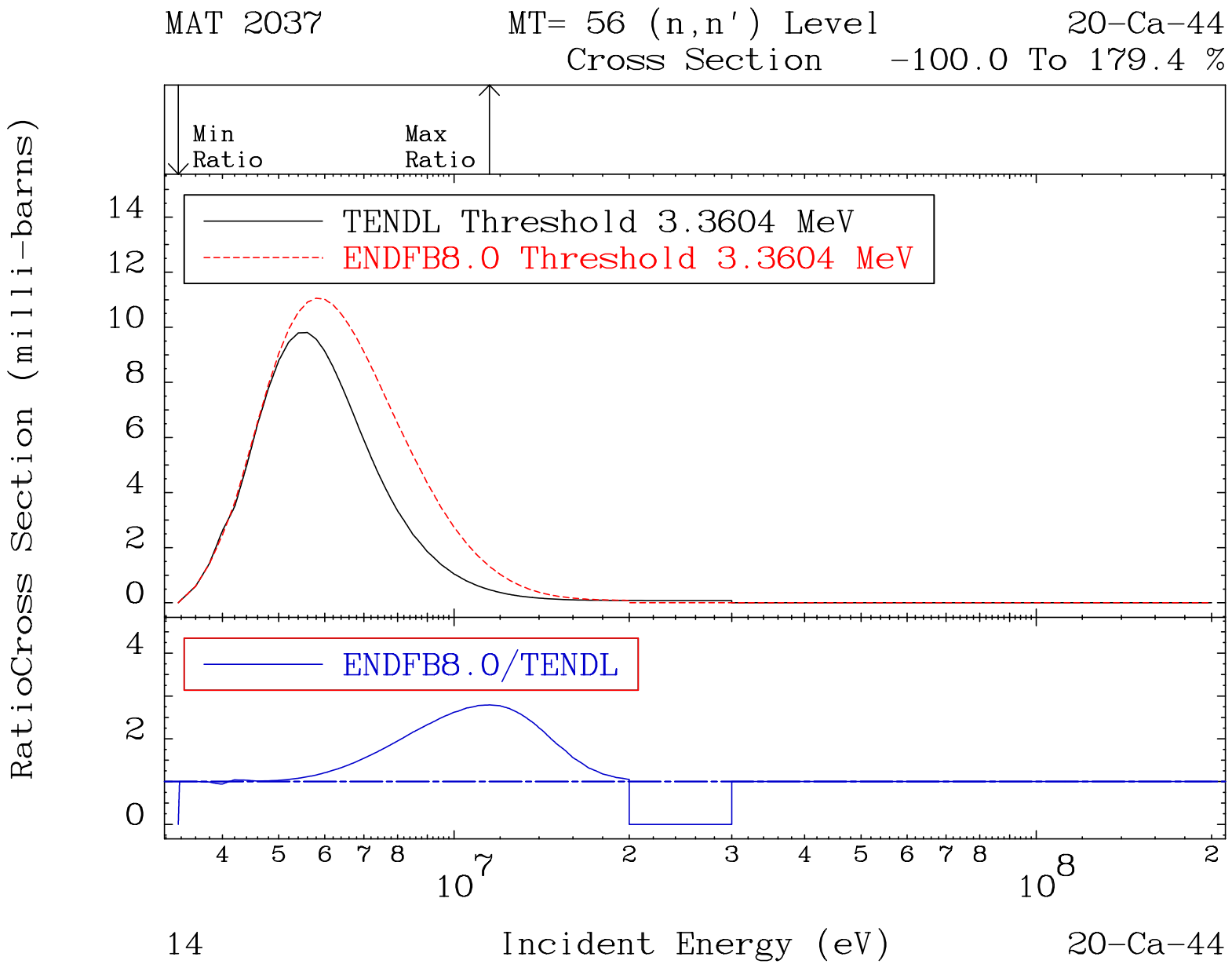

MAT 2037
MT= 51 (n,n') Level
20-Ca-44
Cross Section -100.0 To 15.03 %
Min Ratio
Max Ratio
TENDL Threshold 1.1836 MeV
ENDFB8.0 Threshold 1.1836 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
9
20-Ca-44

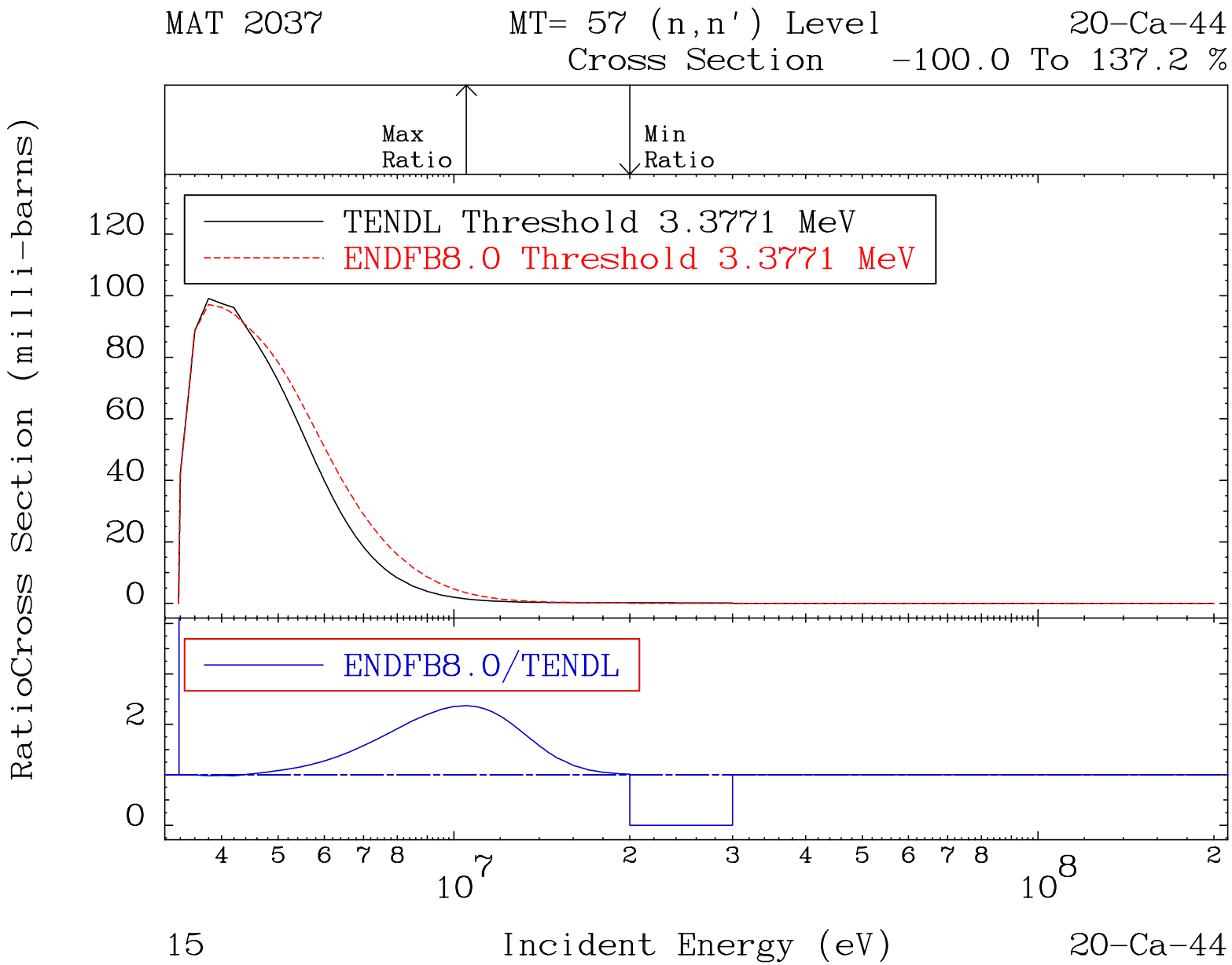

MAT 2037
MT= 52 (n,n') Level
20-Ca-44
Cross Section
-100.0 To 191.5 %
Max Ratio
Min Ratio
TENDL Threshold 1.9267 MeV
ENDFB8.0 Threshold 1.9267 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
10
Incident Energy (eV)
20-Ca-44

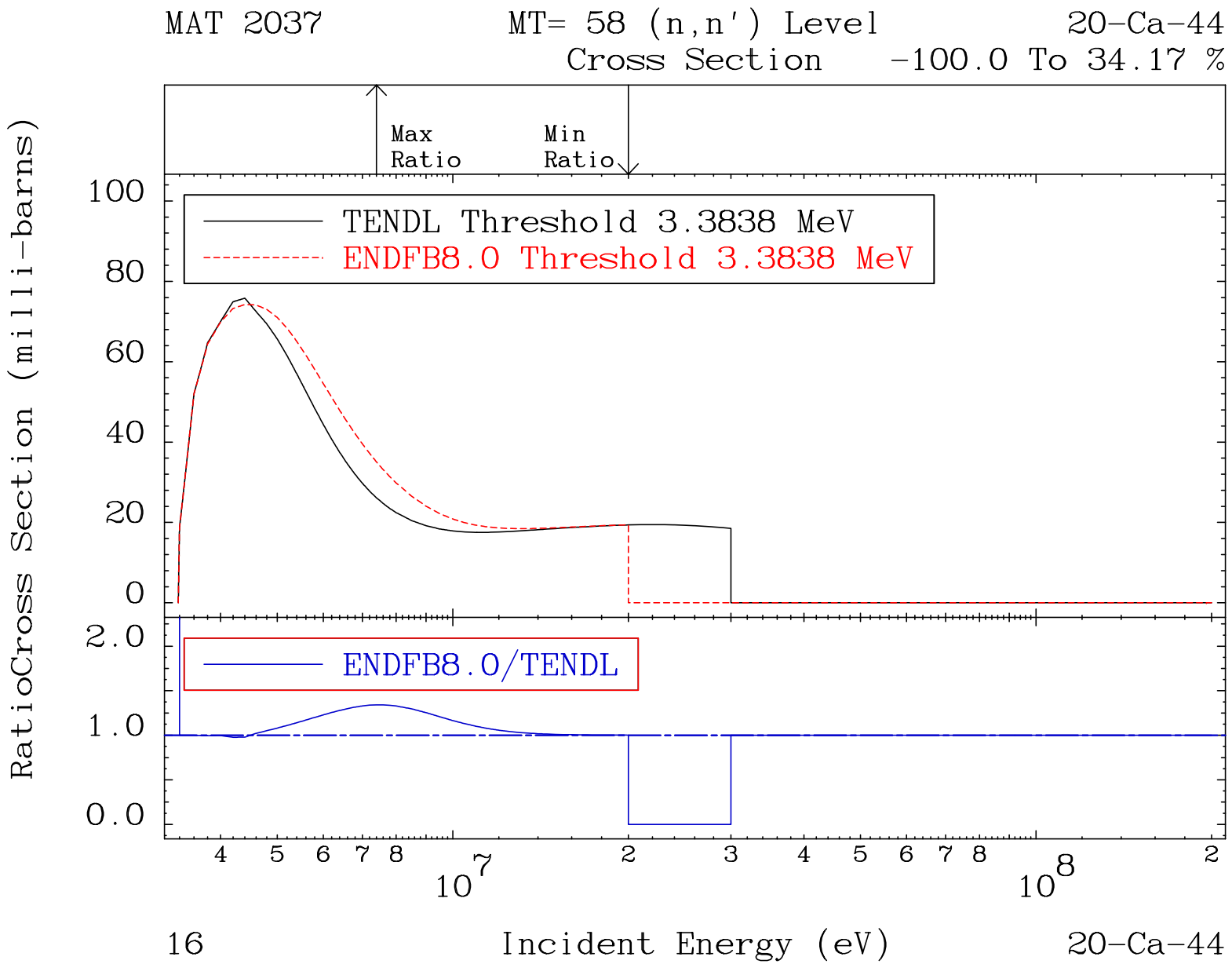

MAT 2037
MT= 53 (n,n') Level
20-Ca-44
Cross Section -100.0 To 44.13 %
Min Ratio
Max Ratio
TENDL Threshold 2.3355 MeV
ENDFB8.0 Threshold 2.3355 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
11
Incident Energy (eV)
20-Ca-44

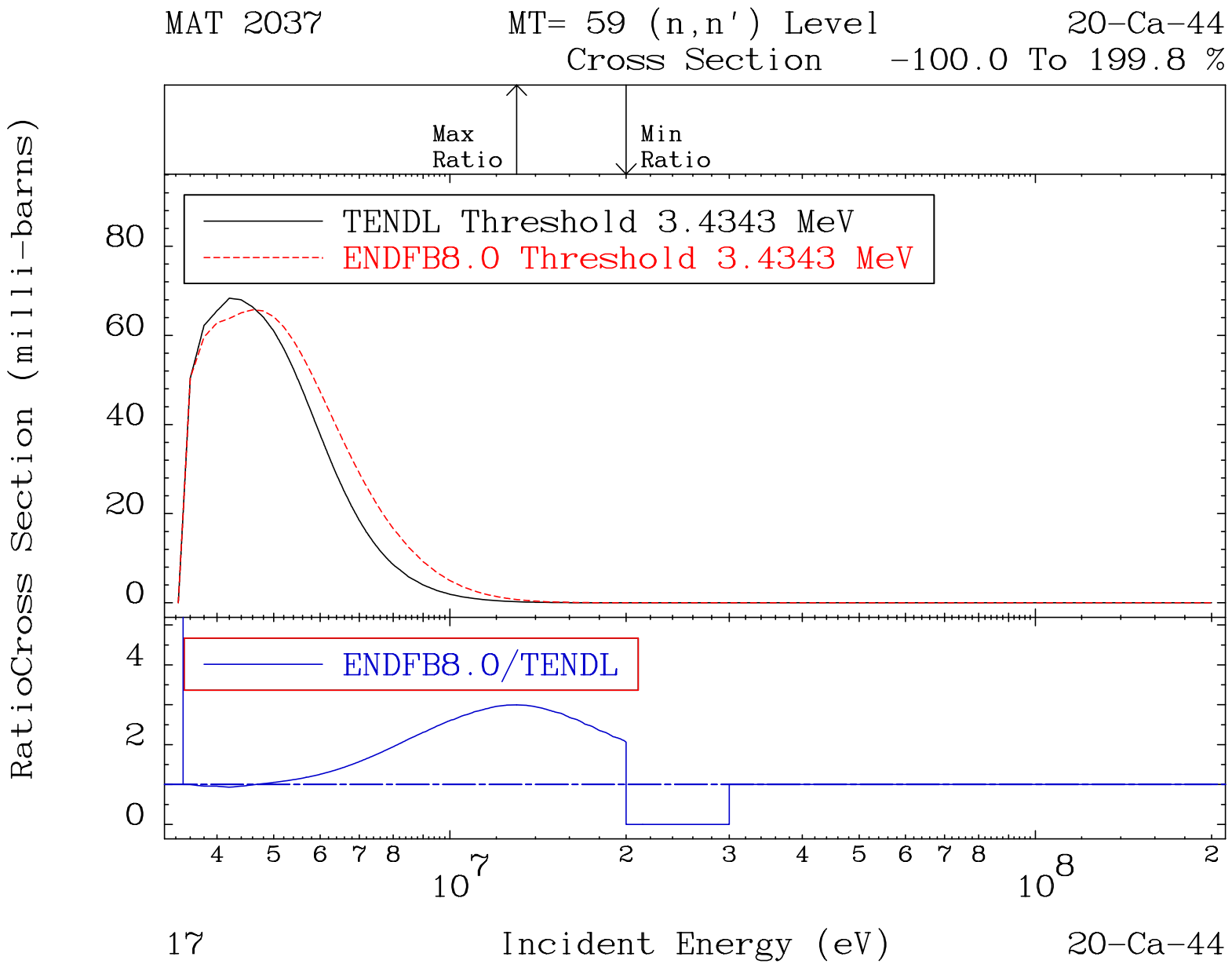

MAT 2037
MT= 54 (n,n') Level
20-Ca-44
Cross Section -100.0 To 137.0 %
Max Ratio
Min Ratio
TENDL Threshold 2.7175 MeV
ENDFB8.0 Threshold 2.7175 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
20-Ca-44

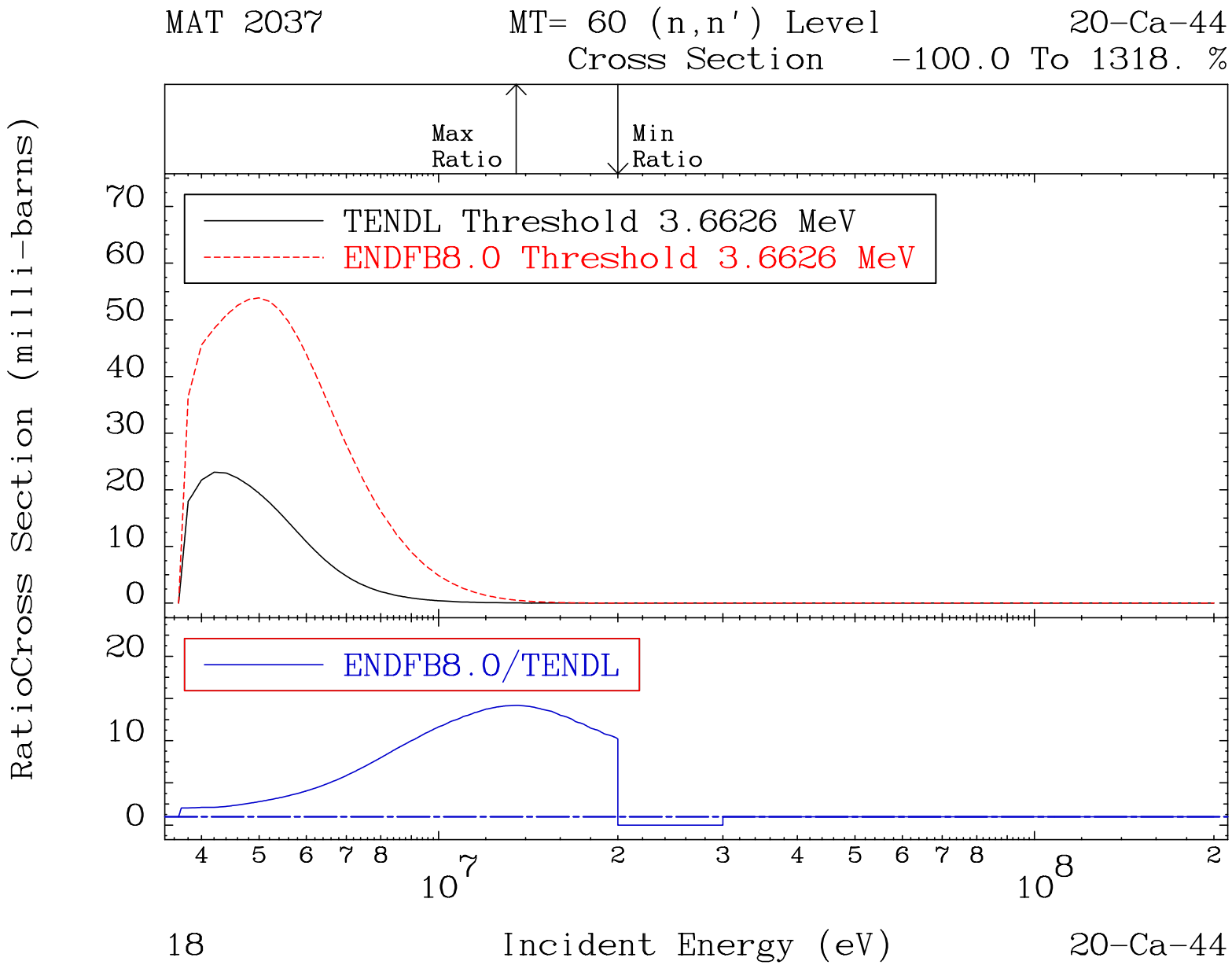

MAT 2037
MT= 55 (n,n') Level
20-Ca-44
Cross Section -100.0 To 161.9 %
Min Ratio
Max Ratio
TENDL Threshold 3.1141 MeV
ENDFB8.0 Threshold 3.1141 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
13
20-Ca-44

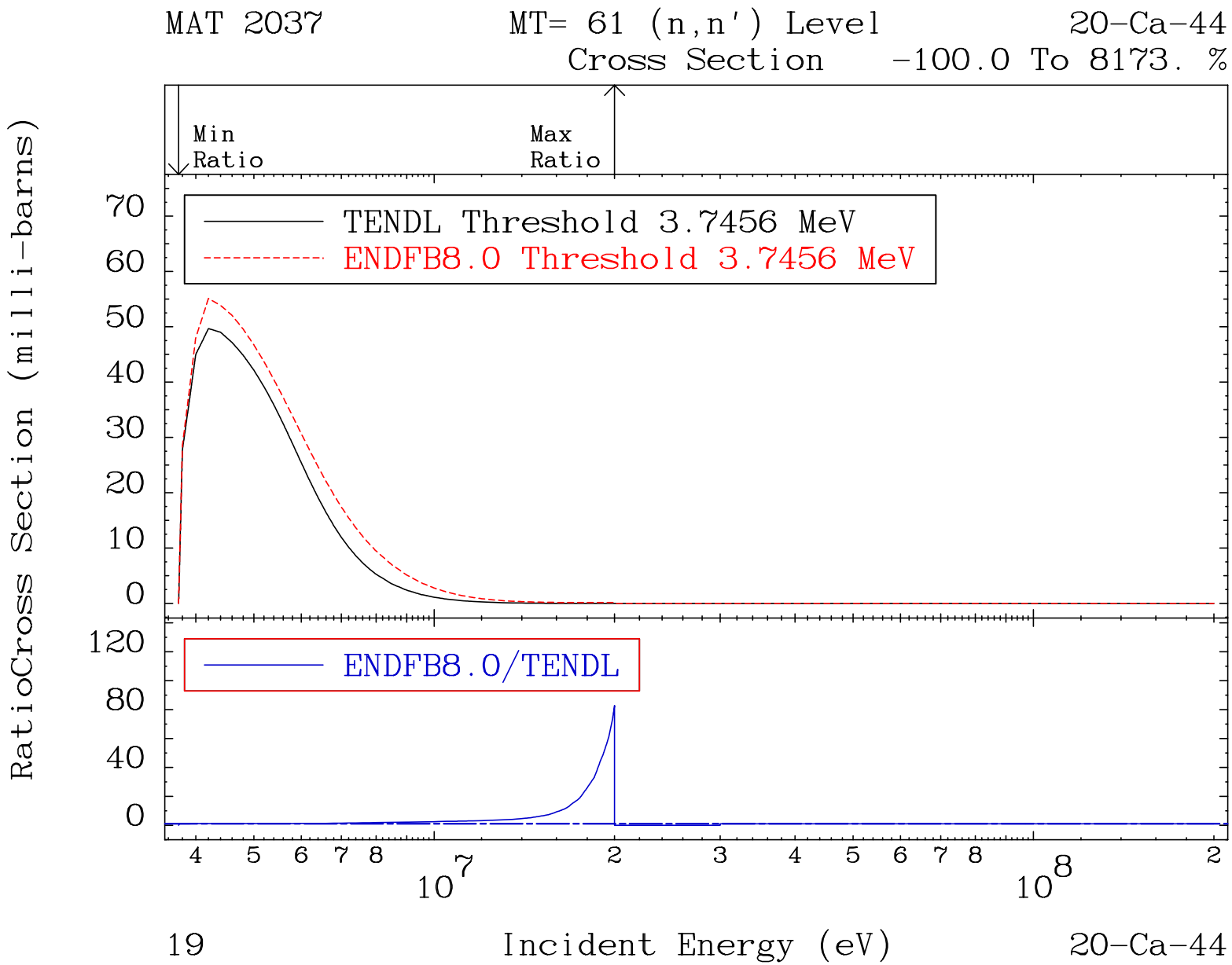

MAT 2037
MT= 56 (n,n') Level
20-Ca-44
Cross Section -100.0 To 179.4 %
Min Ratio
Max Ratio
TENDL Threshold 3.3604 MeV
ENDFB8.0 Threshold 3.3604 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
20-Ca-44

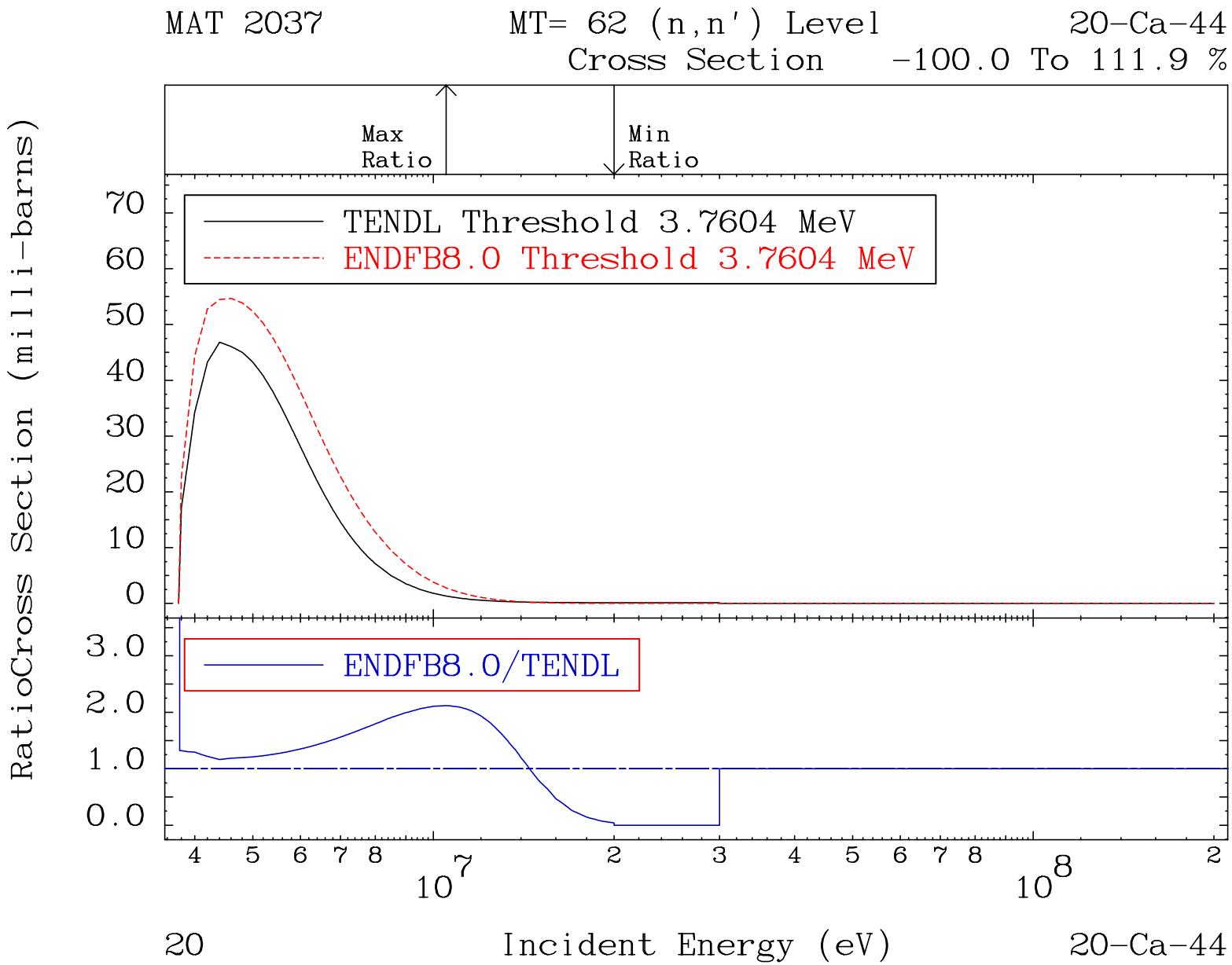

MAT 2037
MT= 57 (n,n') Level
20-Ca-44
Cross Section -100.0 To 137.2 %
Max Ratio
Min Ratio
TENDL Threshold 3.3771 MeV
ENDFB8.0 Threshold 3.3771 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
20-Ca-44

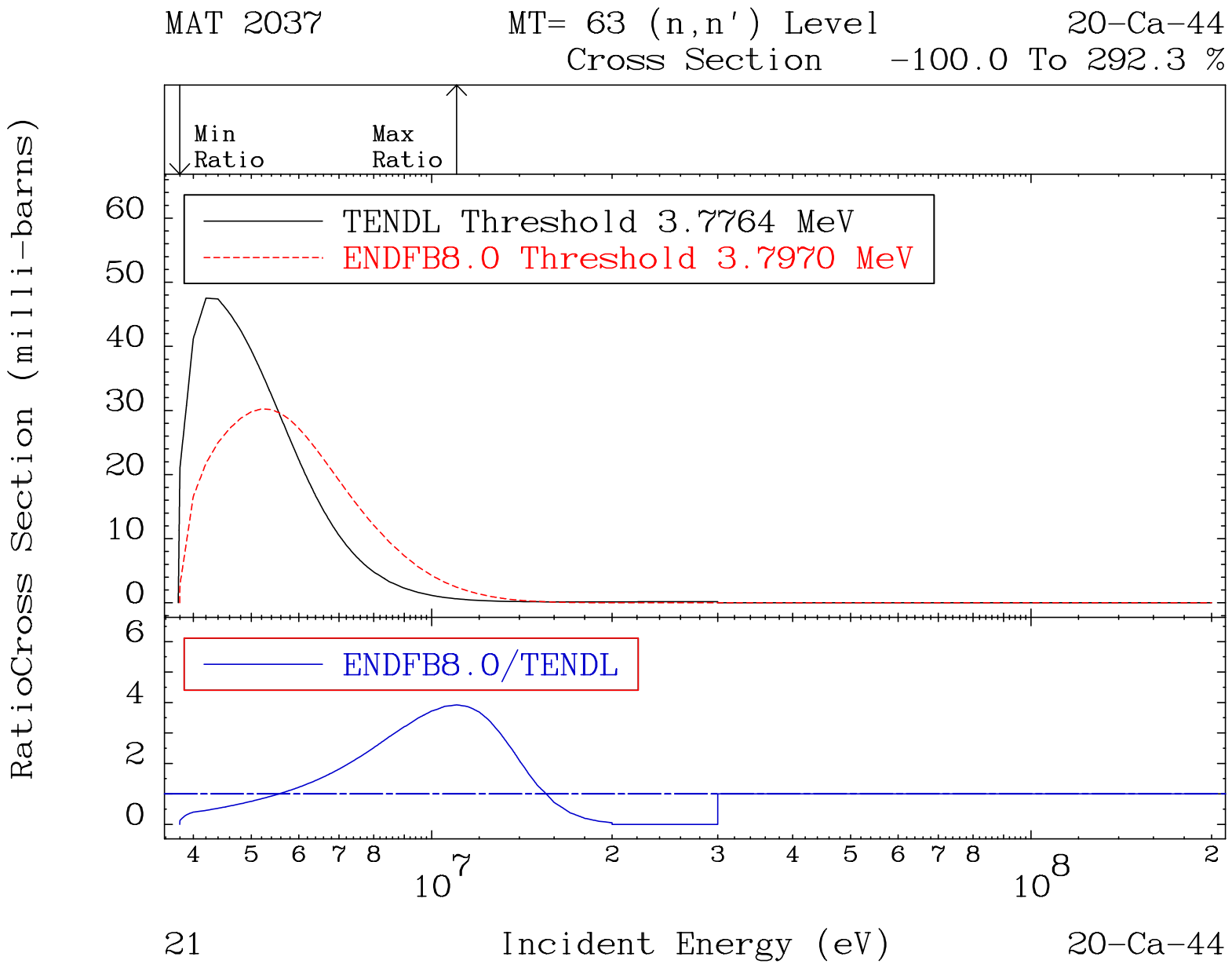

MAT 2037
MT= 58 (n,n') Level
20-Ca-44
Cross Section -100.0 To 34.17 %
Max Ratio
Min Ratio
TENDL Threshold 3.3838 MeV
ENDFB8.0 Threshold 3.3838 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
16
20-Ca-44

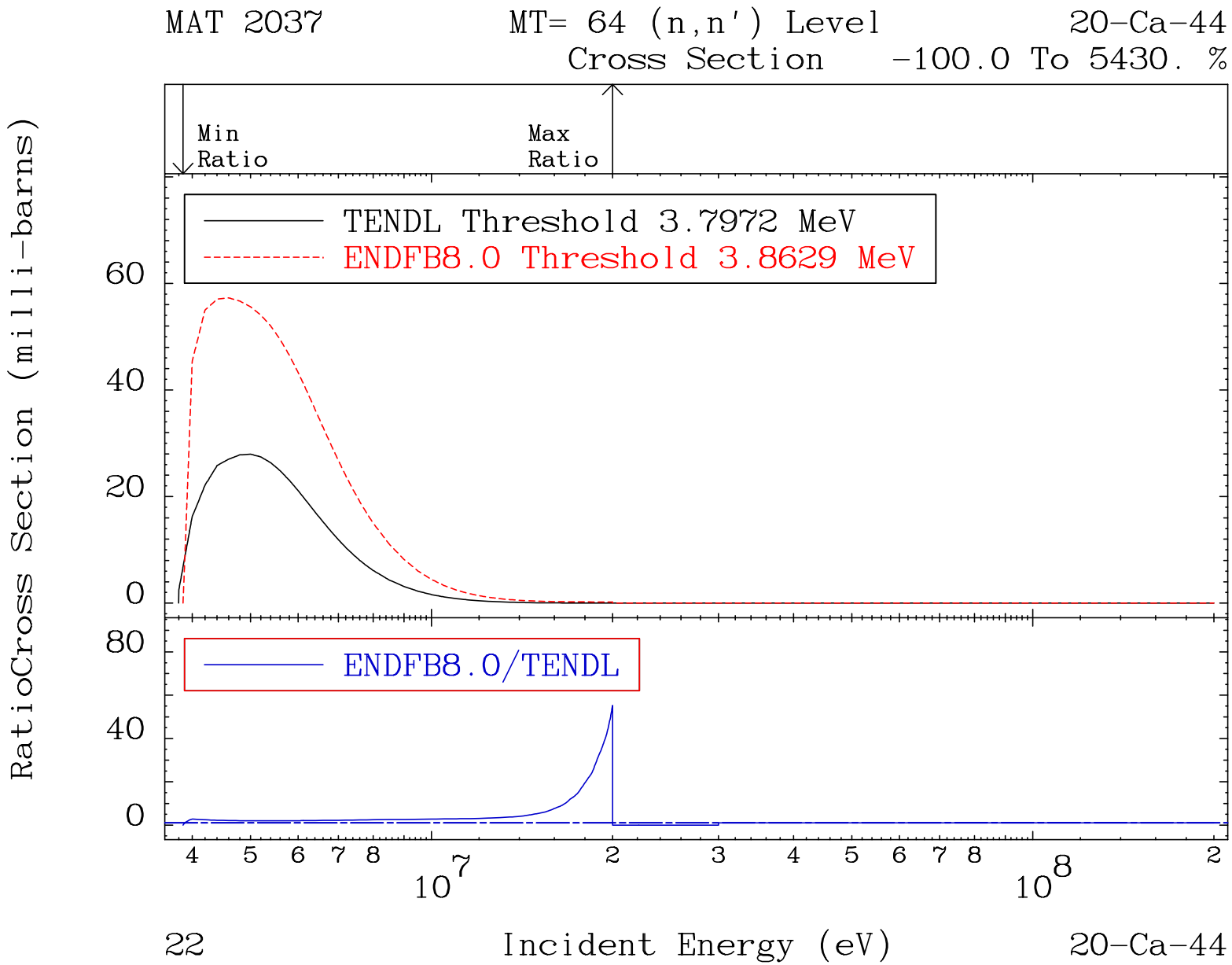

MAT 2037
MT= 59 (n,n') Level
20-Ca-44
Cross Section -100.0 To 199.8 %
Max Ratio
Min Ratio
TENDL Threshold 3.4343 MeV
ENDFB8.0 Threshold 3.4343 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
17
20-Ca-44

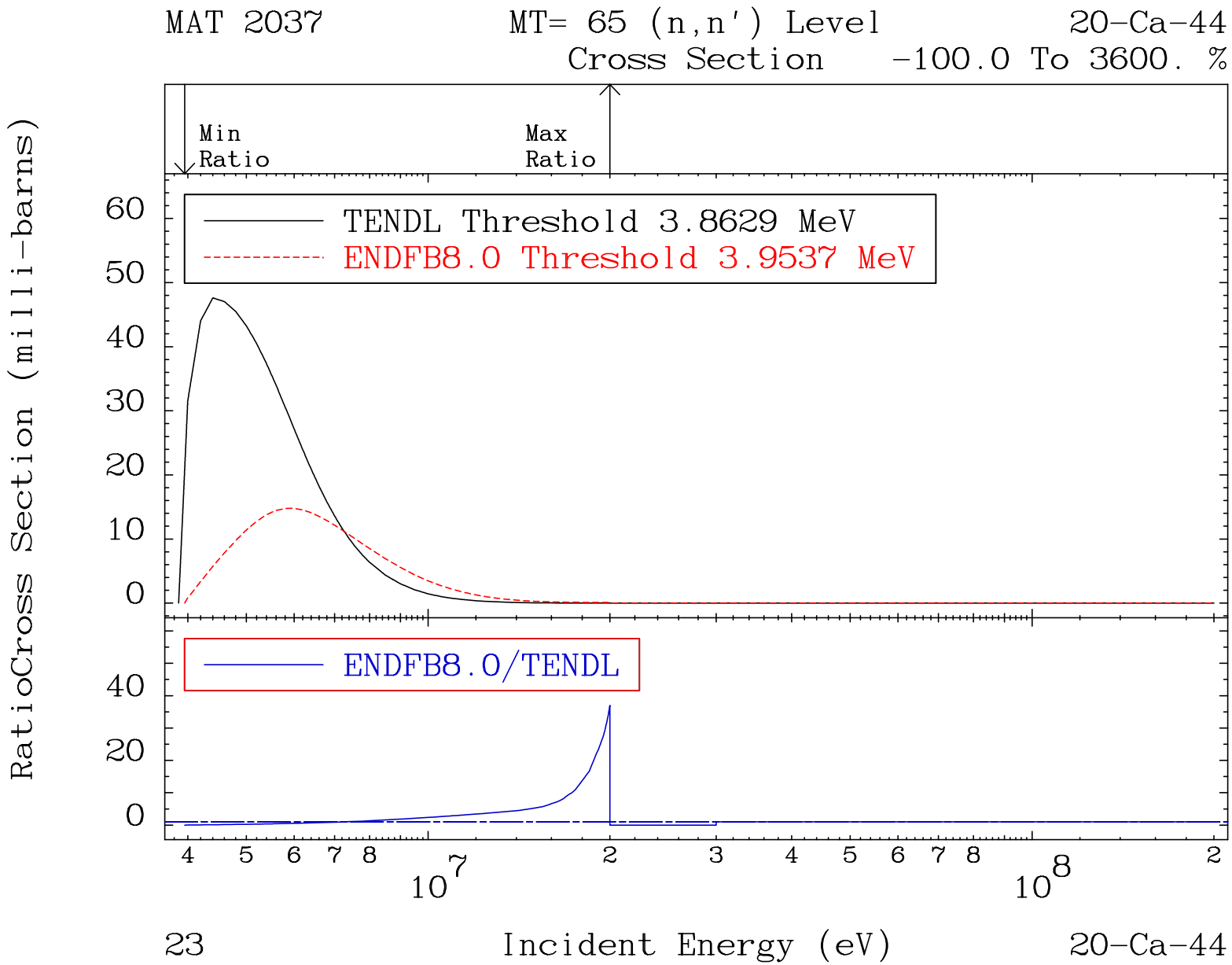

MAT 2037
MT= 60 (n,n') Level
20-Ca-44
Cross Section -100.0 To 1318. %
Max Ratio
Min Ratio
TENDL Threshold 3.6626 MeV
ENDFB8.0 Threshold 3.6626 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
18
20-Ca-44

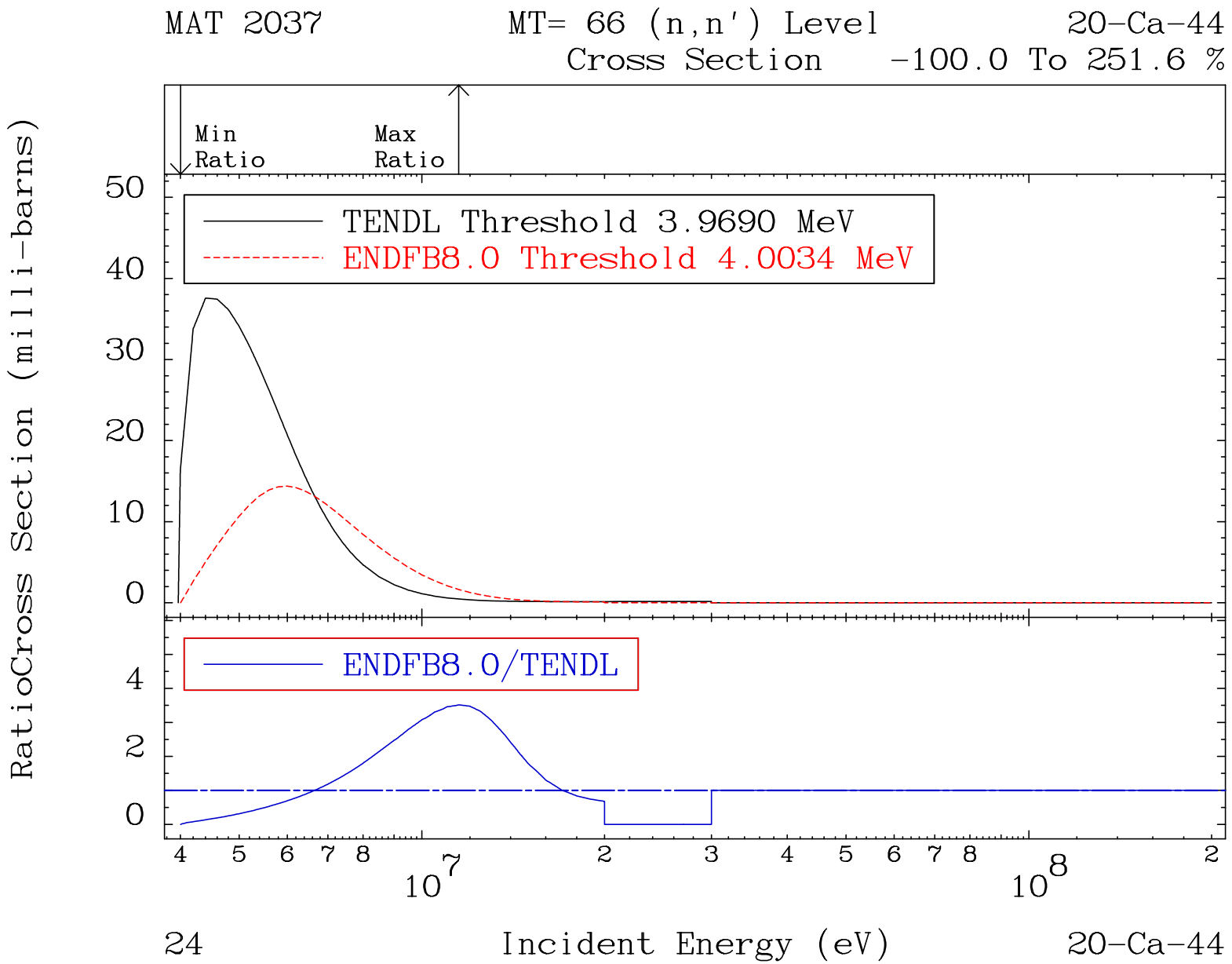

MAT 2037
MT= 61 (n,n') Level
20-Ca-44
Cross Section -100.0 To 8173. %
Min Ratio
Max Ratio
TENDL Threshold 3.7456 MeV
ENDFB8.0 Threshold 3.7456 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
120
80
40
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
19
20-Ca-44

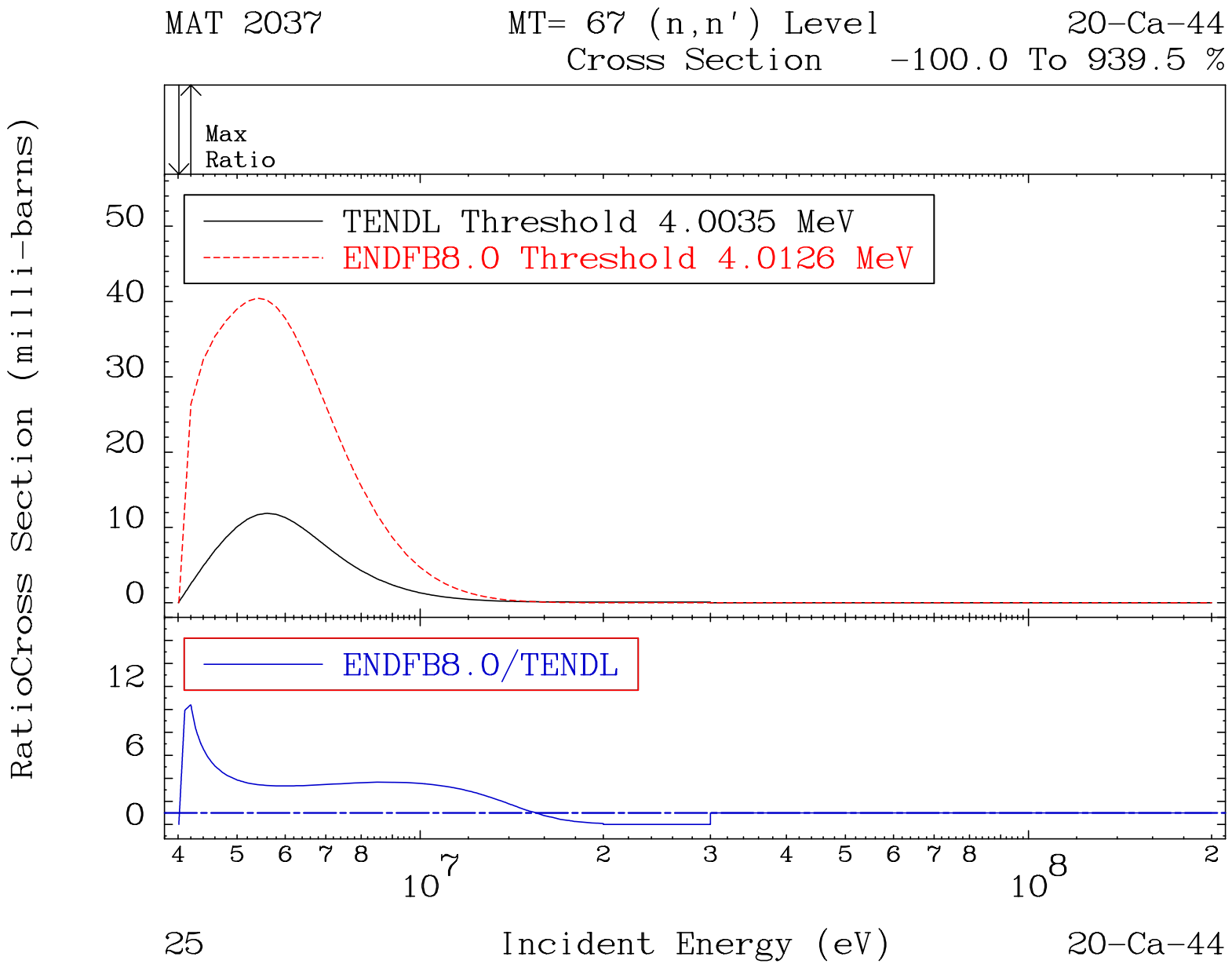

MAT 2037
MT= 62 (n,n') Level
20-Ca-44
Cross Section -100.0 To 111.9 %
Max Ratio
Min Ratio
TENDL Threshold 3.7604 MeV
ENDFB8.0 Threshold 3.7604 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
3.0
2.0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
20-Ca-44

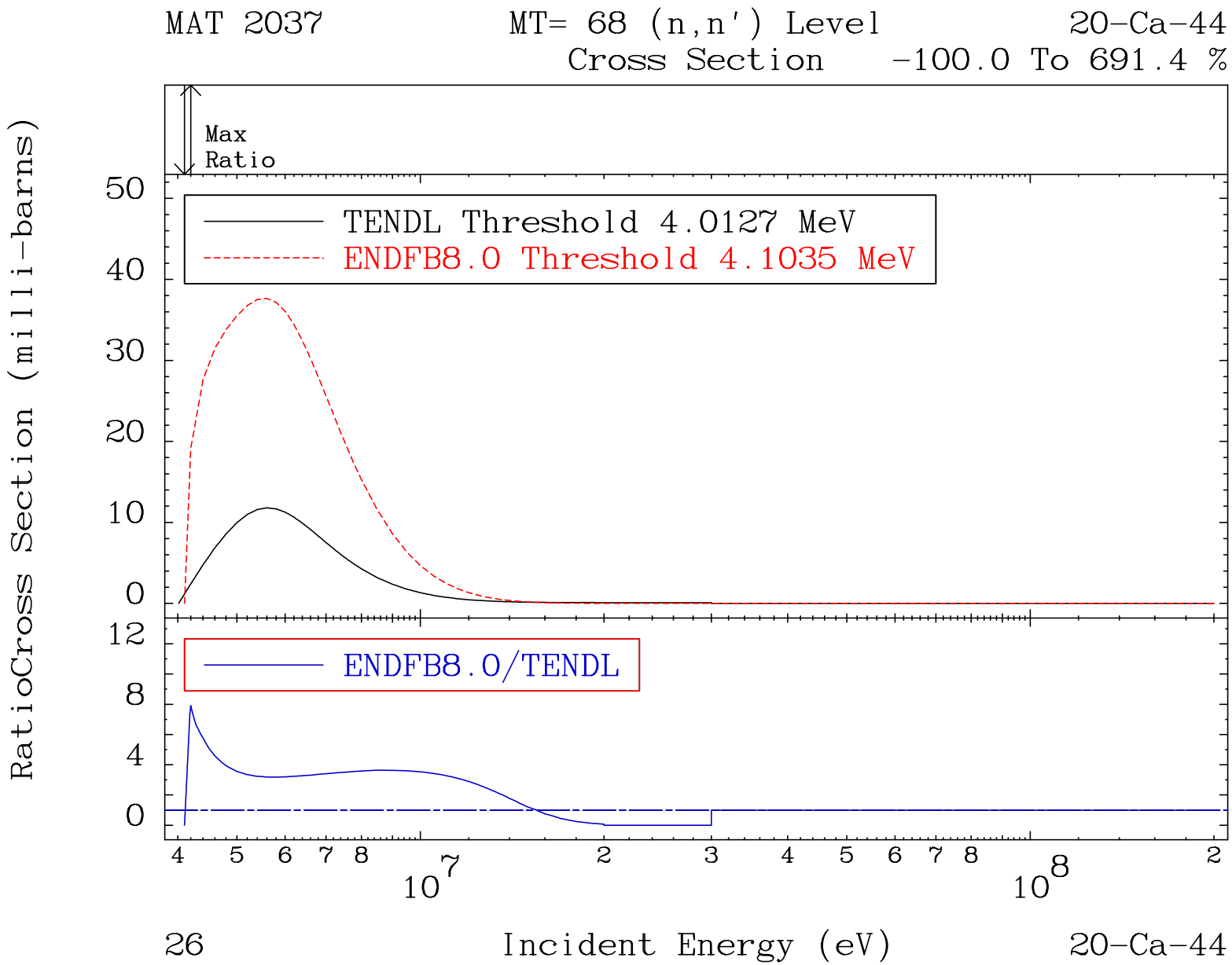

MAT 2037
MT= 63 (n,n') Level
20-Ca-44
Cross Section
-100.0 To 292.3 %
Min Ratio
Max Ratio
TENDL Threshold 3.7764 MeV
ENDFB8.0 Threshold 3.7970 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
21
20-Ca-44

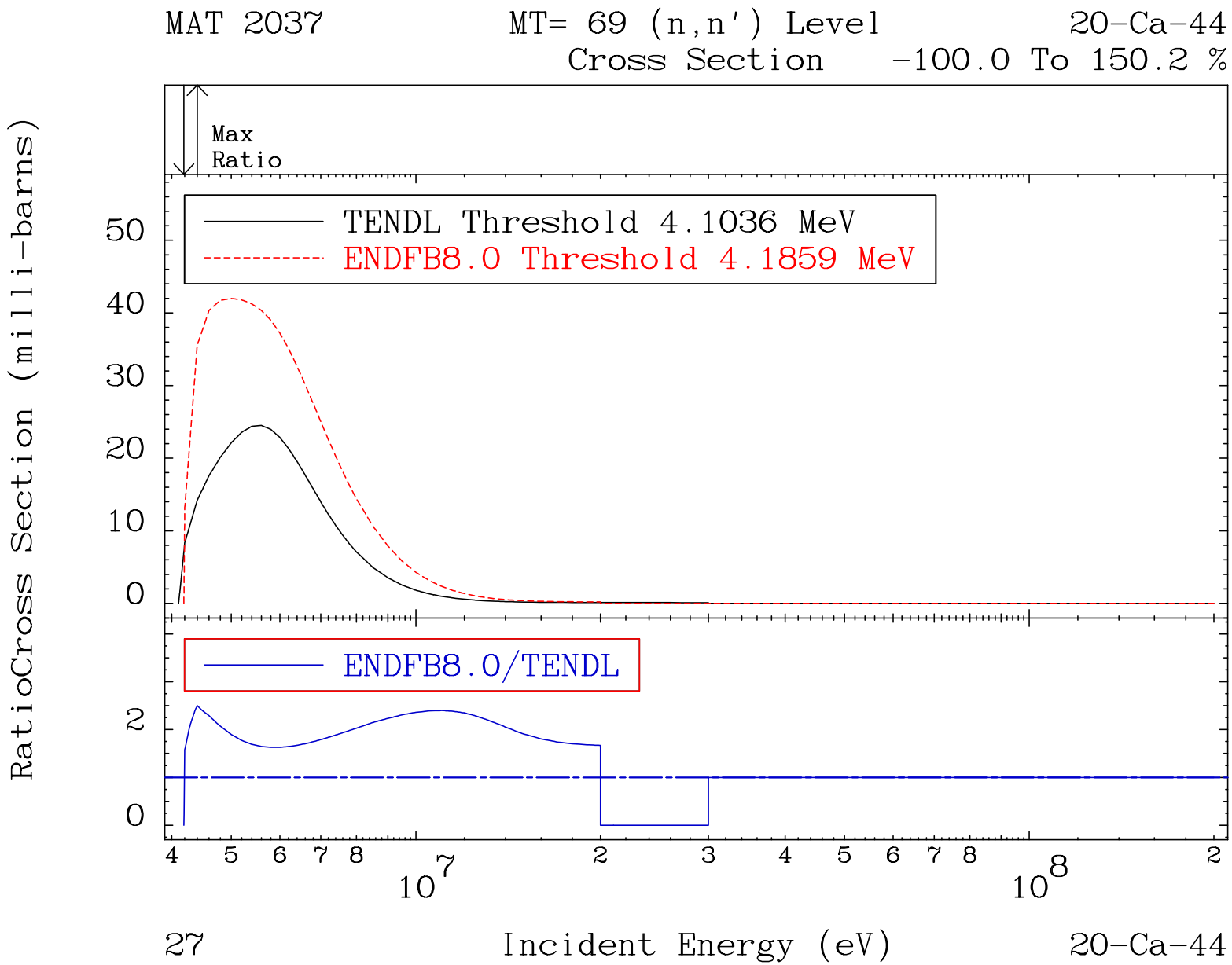

MAT 2037
MT= 64 (n,n') Level
20-Ca-44
Cross Section -100.0 To 5430. %
Min Ratio
Max Ratio
TENDL Threshold 3.7972 MeV
ENDFB8.0 Threshold 3.8629 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
80
40
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
20-Ca-44

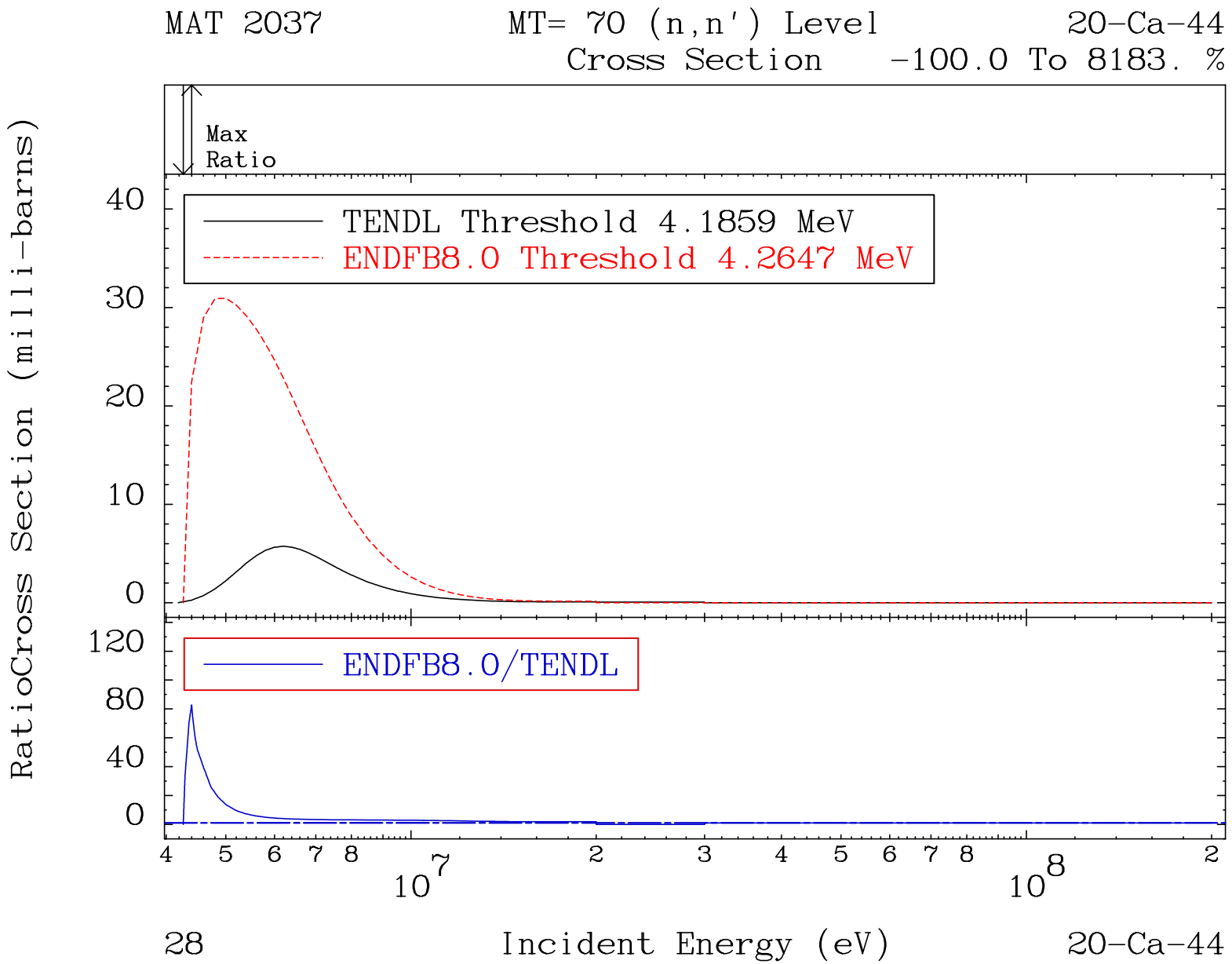

MAT 2037
MT= 65 (n,n') Level
20-Ca-44
Cross Section -100.0 To 3600. %
Min Ratio
Max Ratio
TENDL Threshold 3.8629 MeV
ENDFB8.0 Threshold 3.9537 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
40
20
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
20-Ca-44

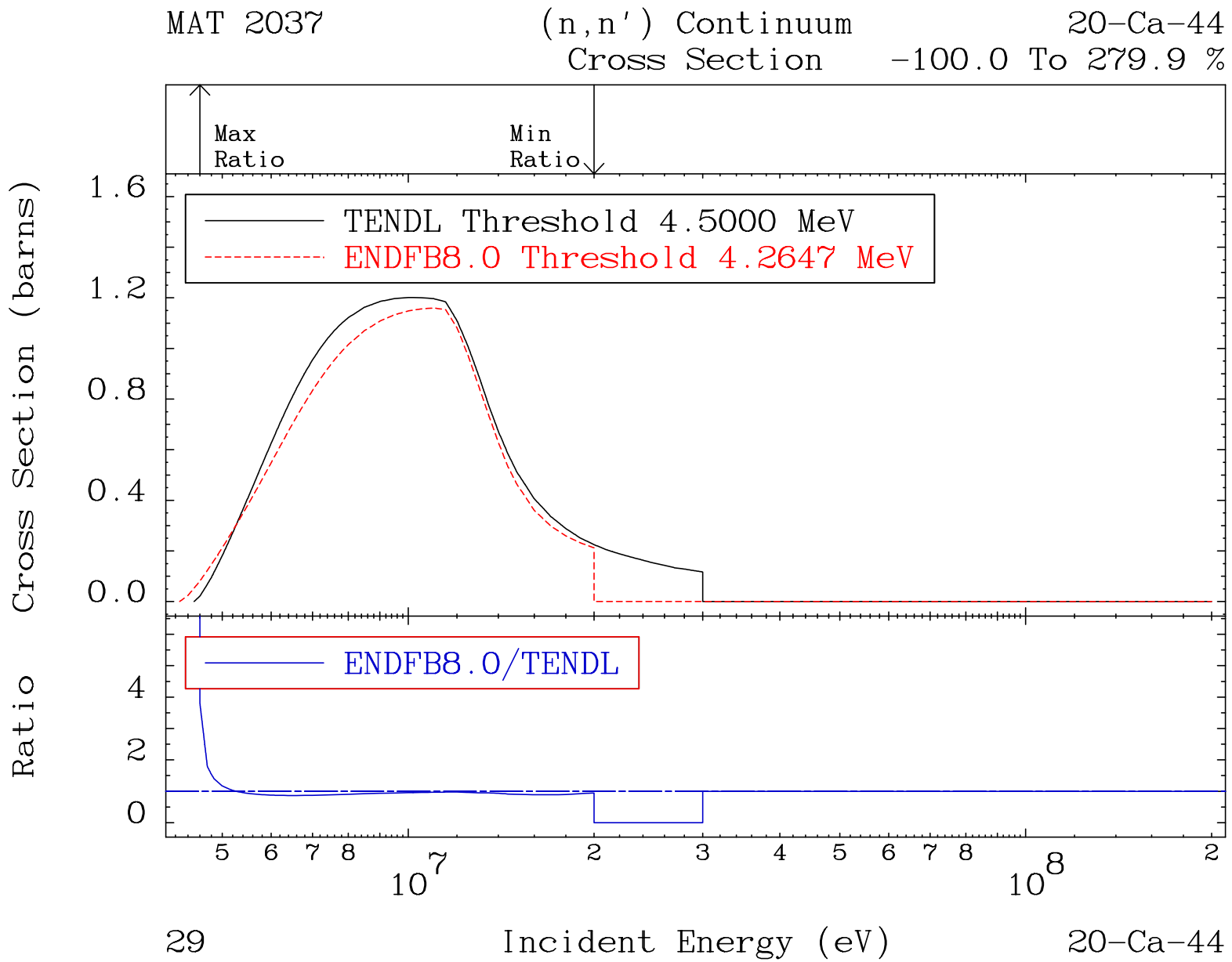

MAT 2037
MT= 66 (n,n') Level
20-Ca-44
Cross Section
-100.0 To 251.6 %
Min Ratio
Max Ratio
TENDL Threshold 3.9690 MeV
ENDFB8.0 Threshold 4.0034 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
20-Ca-44

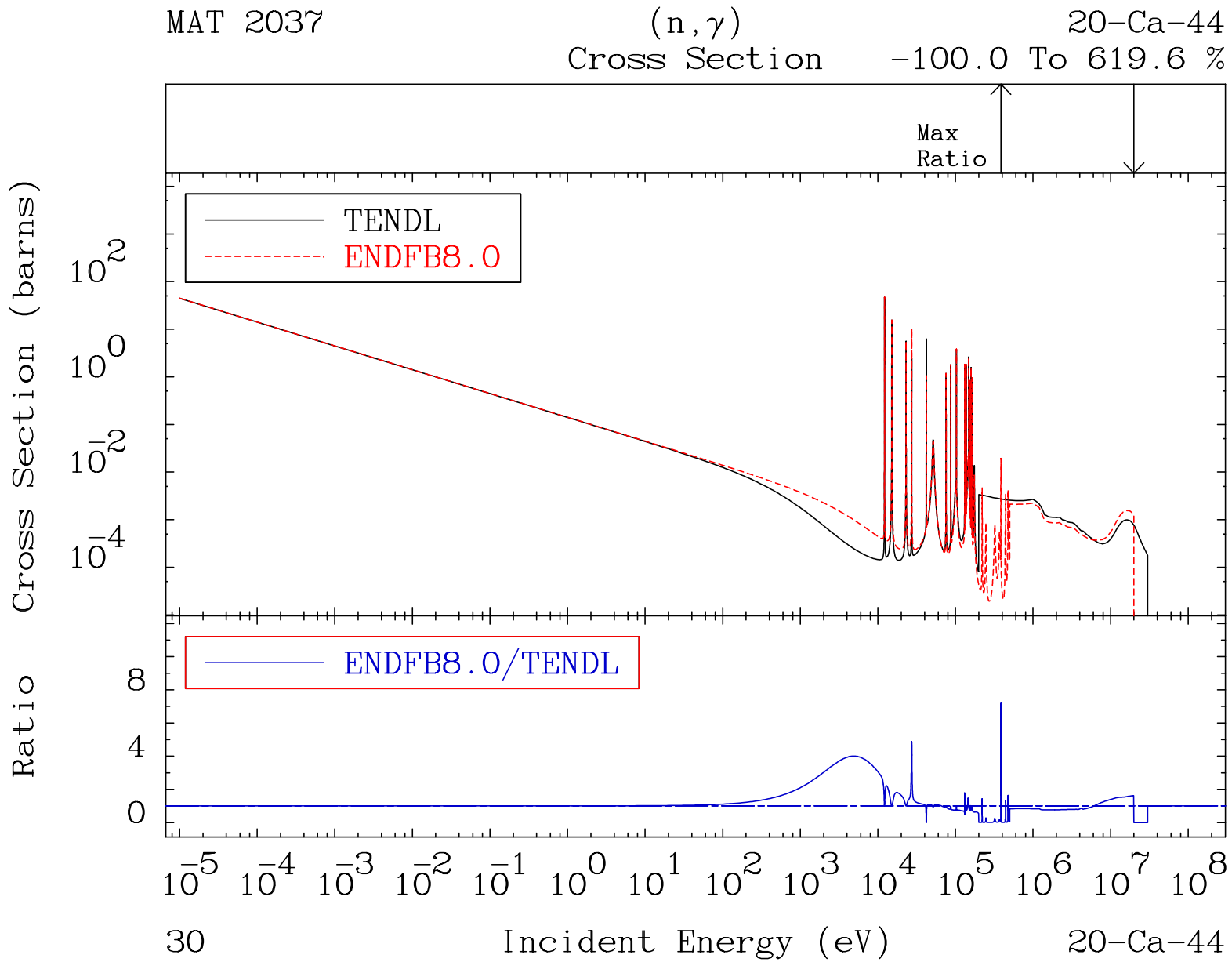

MAT 2037
MT= 67 (n,n') Level
20-Ca-44
Cross Section
-100.0 To 939.5 %
Max
Ratio
TENDL Threshold 4.0035 MeV
ENDFB8.0 Threshold 4.0126 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
12
6
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
20-Ca-44

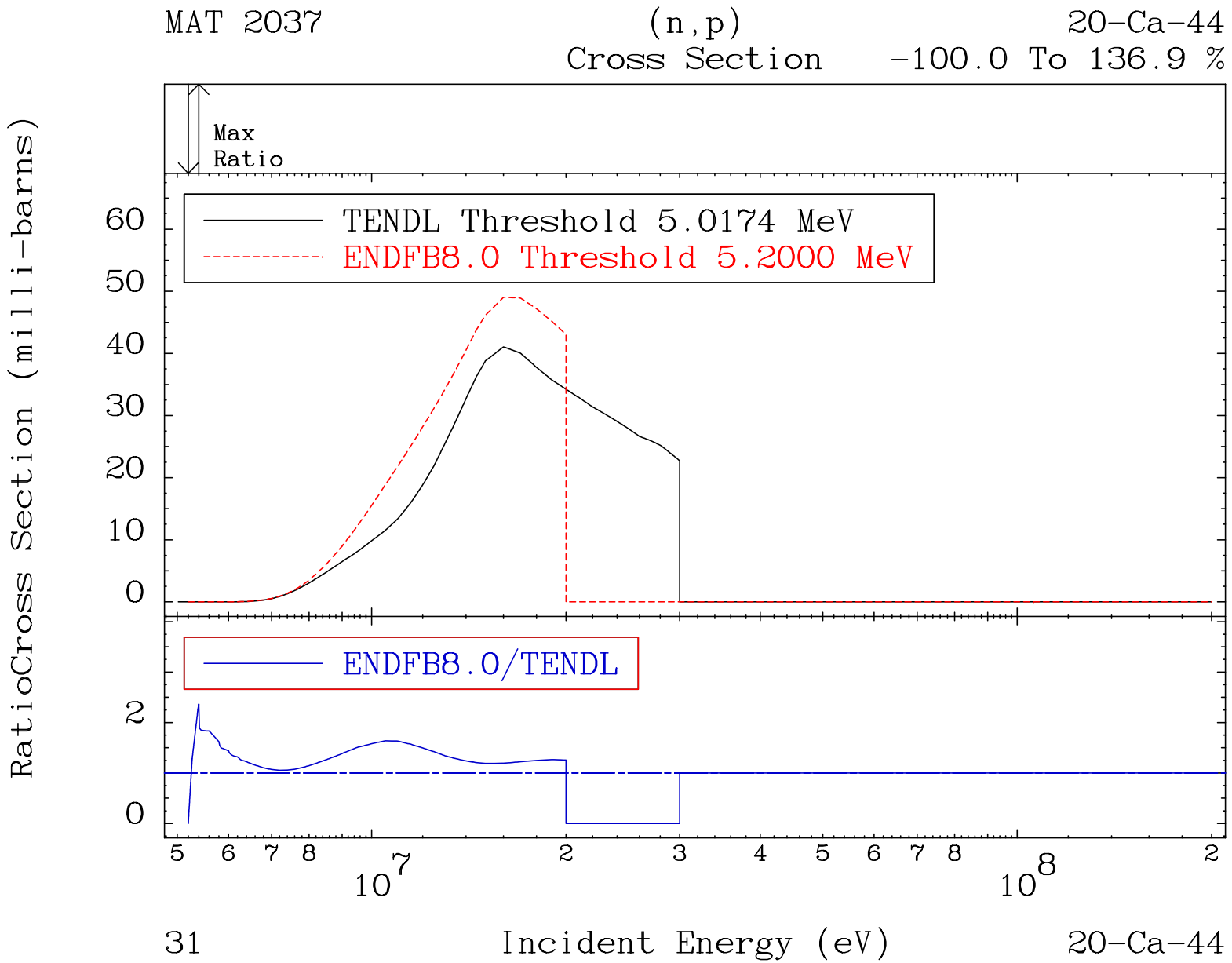

MAT 2037
MT= 68 (n,n') Level
20-Ca-44
Cross Section -100.0 To 691.4 %
Max
Ratio
TENDL Threshold 4.0127 MeV
ENDFB8.0 Threshold 4.1035 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
26
20-Ca-44

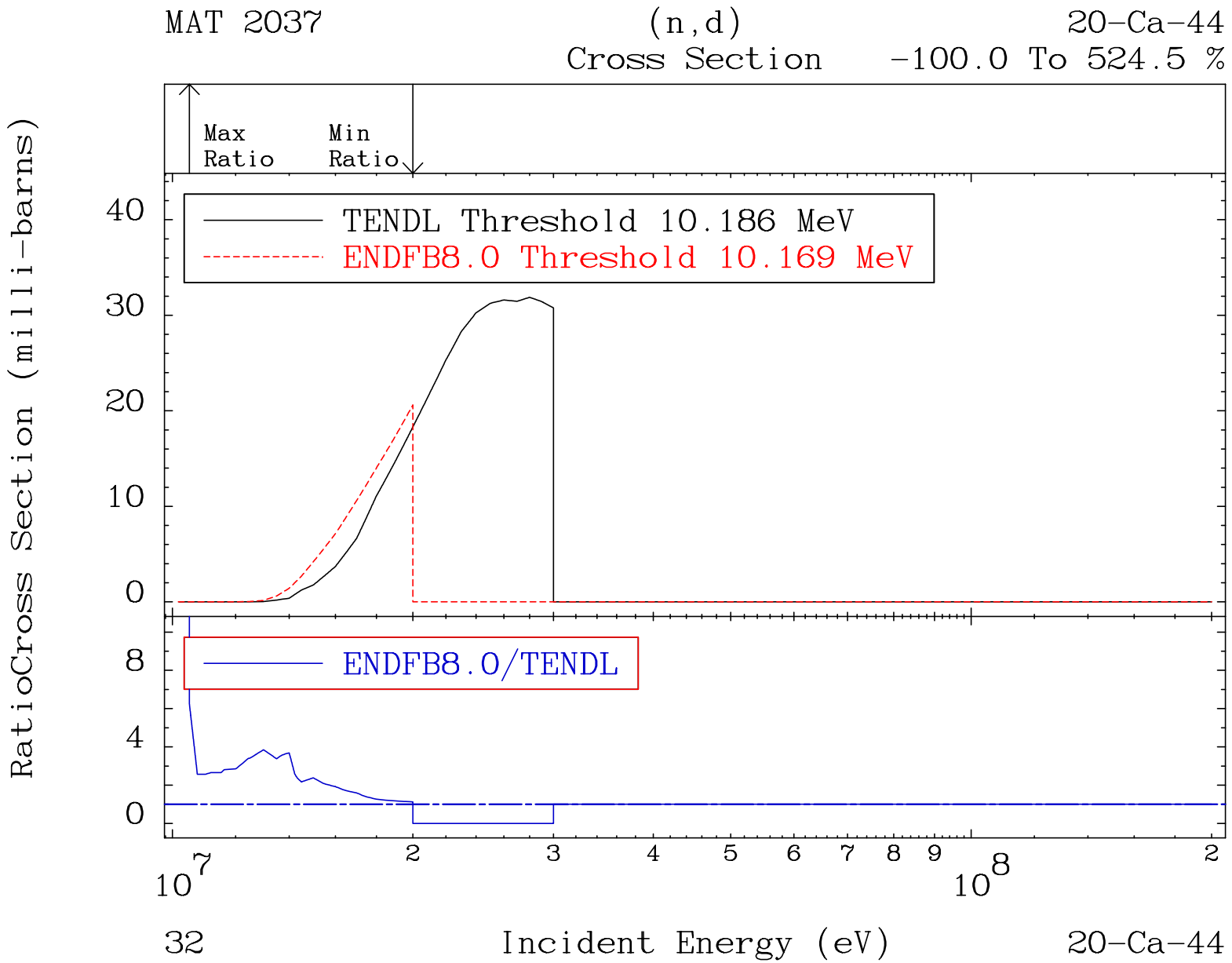

MAT 2037
MT= 69 (n,n') Level
Cross Section
20-Ca-44
-100.0 To 150.2 %
Max
Ratio
TENDL Threshold 4.1036 MeV
ENDFB8.0 Threshold 4.1859 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27
20-Ca-44

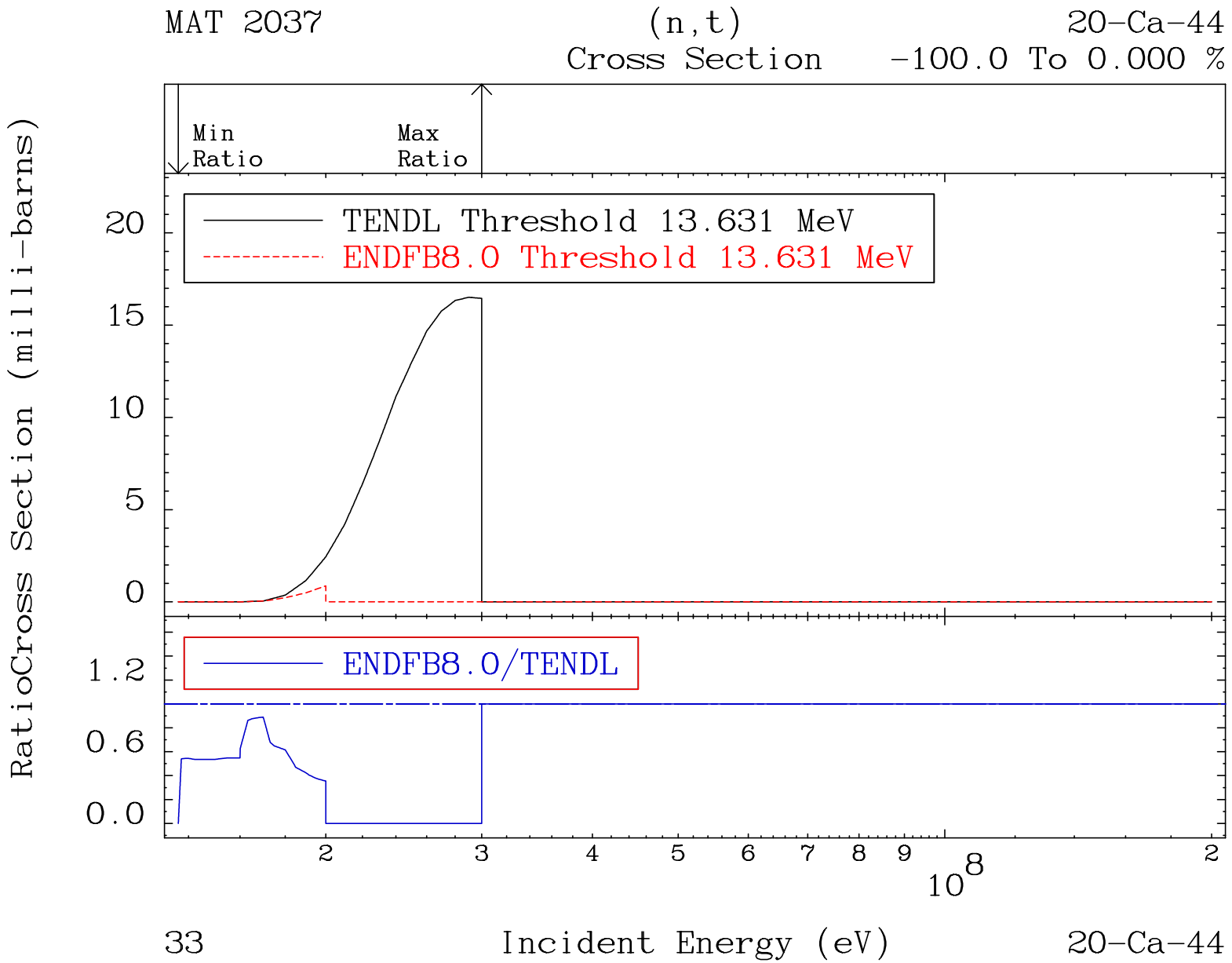

MAT 2037
MT= 70 (n,n') Level
20-Ca-44
Cross Section -100.0 To 8183. %
Max
Ratio
TENDL Threshold 4.1859 MeV
ENDFB8.0 Threshold 4.2647 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
120
80
40
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
28
Incident Energy (eV)
20-Ca-44

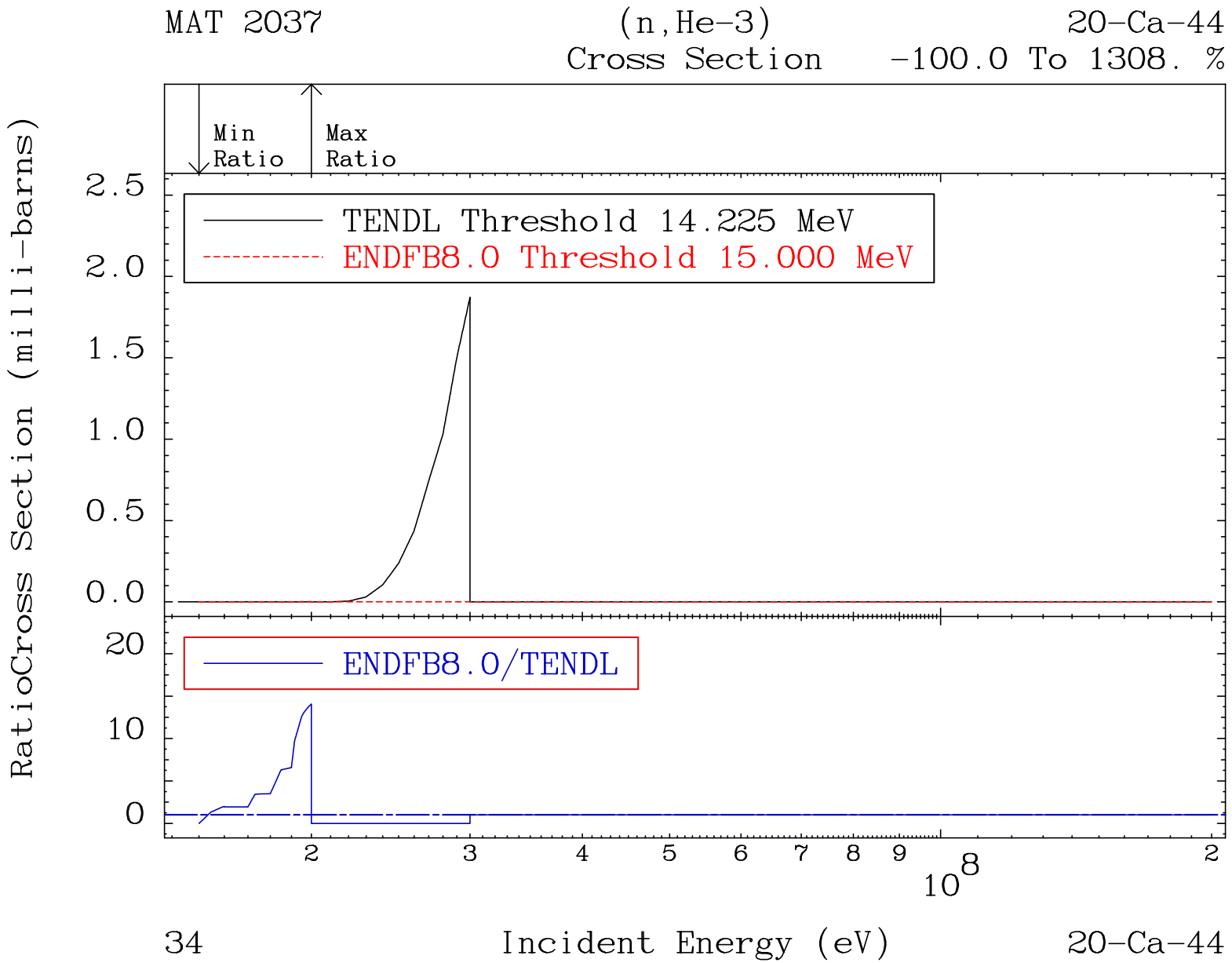

MAT 2037
(n,n') Continuum
Cross Section
20-Ca-44
-100.0 To 279.9 %
Max Ratio
Min Ratio
TENDL Threshold 4.5000 MeV
ENDFB8.0 Threshold 4.2647 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
4
2
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
20-Ca-44

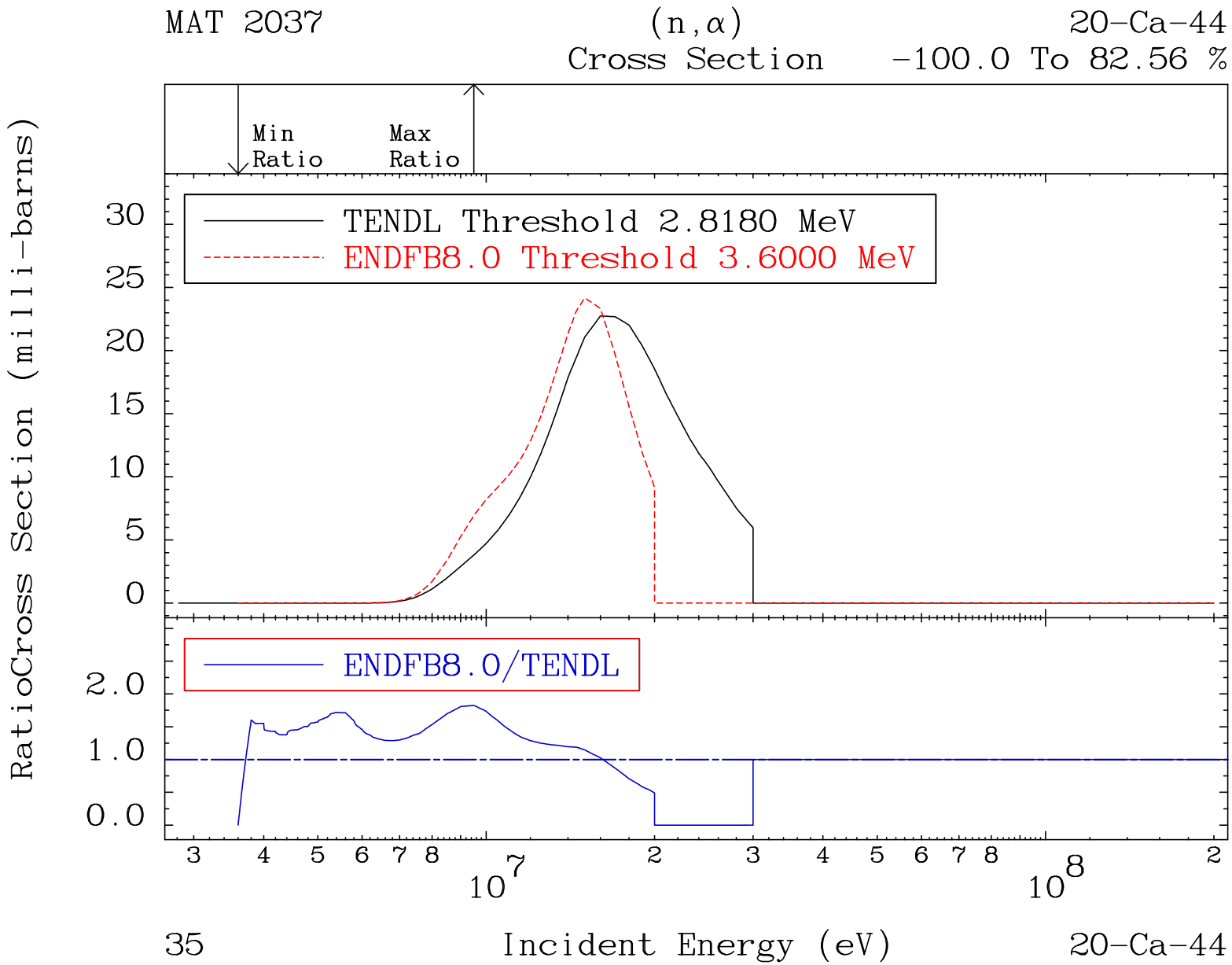

MAT 2037
(n,γ)
Cross Section
20-Ca-44
-100.0 To 619.6 %
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
10^2
10^0
10^-2
10^-4
ENDFB8.0/TENDL
Ratio
8
4
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
30
Incident Energy (eV)
20-Ca-44

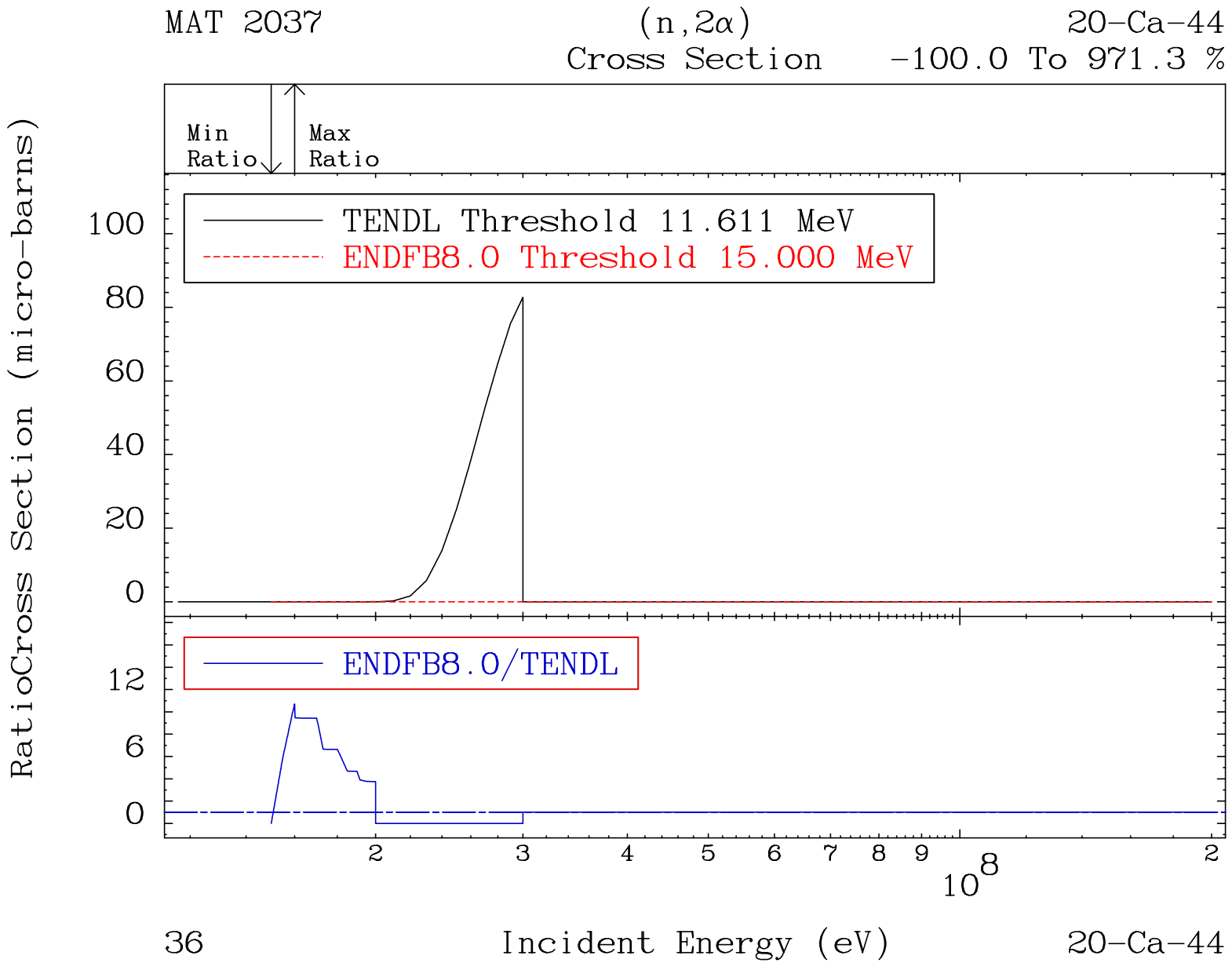

MAT 2037
(n,p)
Cross Section
20-Ca-44
-100.0 To 136.9 %
Max
Ratio
TENDL Threshold 5.0174 MeV
ENDFB8.0 Threshold 5.2000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
2
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
20-Ca-44

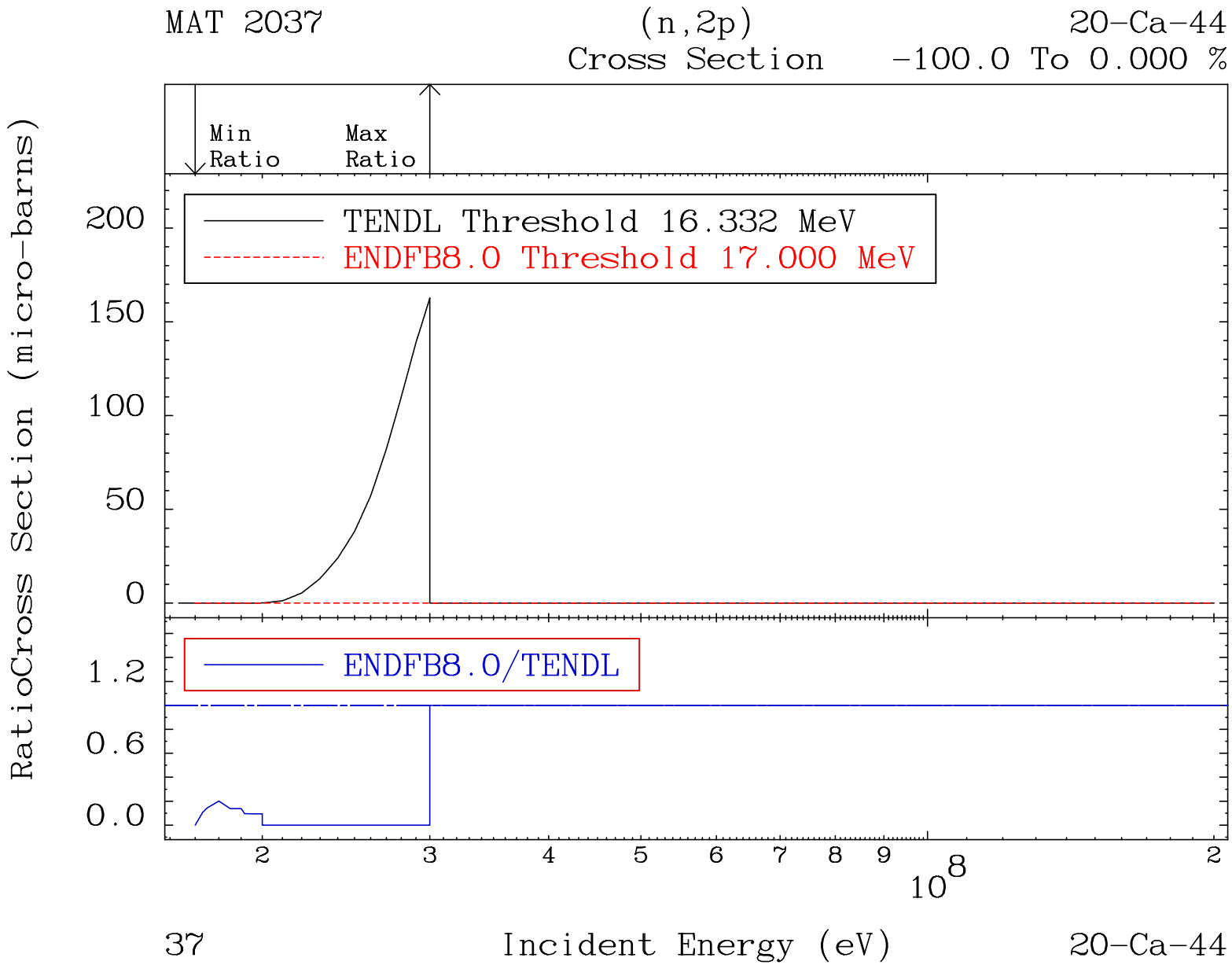

MAT 2037
(n,d)
Cross Section
20-Ca-44
-100.0 To 524.5 %
Max Ratio
Min Ratio
TENDL Threshold 10.186 MeV
ENDFB8.0 Threshold 10.169 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
8
4
0
10^7
2
3
4
5
6
7
8
9
10^8
2
32
Incident Energy (eV)
20-Ca-44

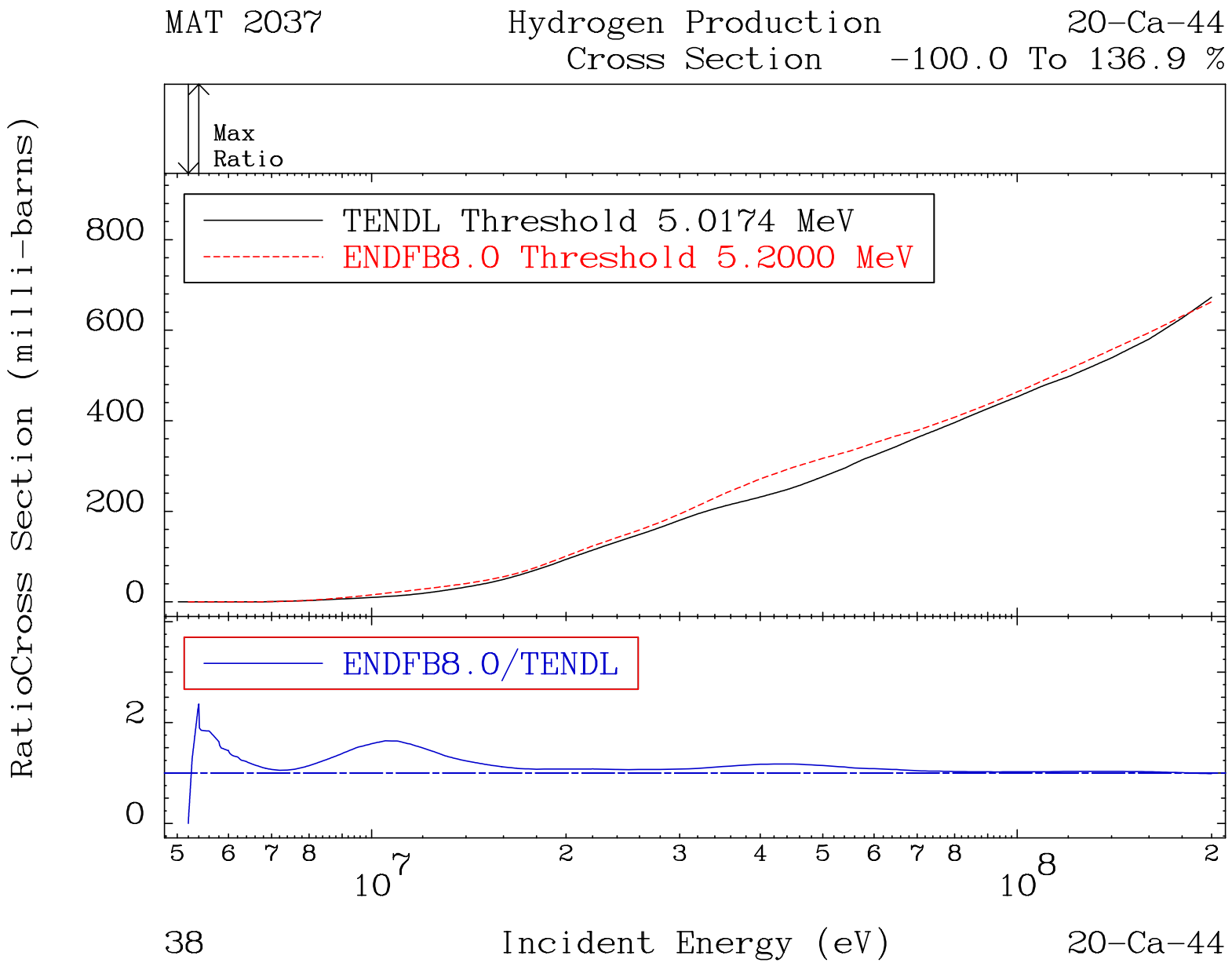

MAT 2037
(n,t)
Cross Section
20-Ca-44
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 13.631 MeV
ENDFB8.0 Threshold 13.631 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
33
Incident Energy (eV)
20-Ca-44

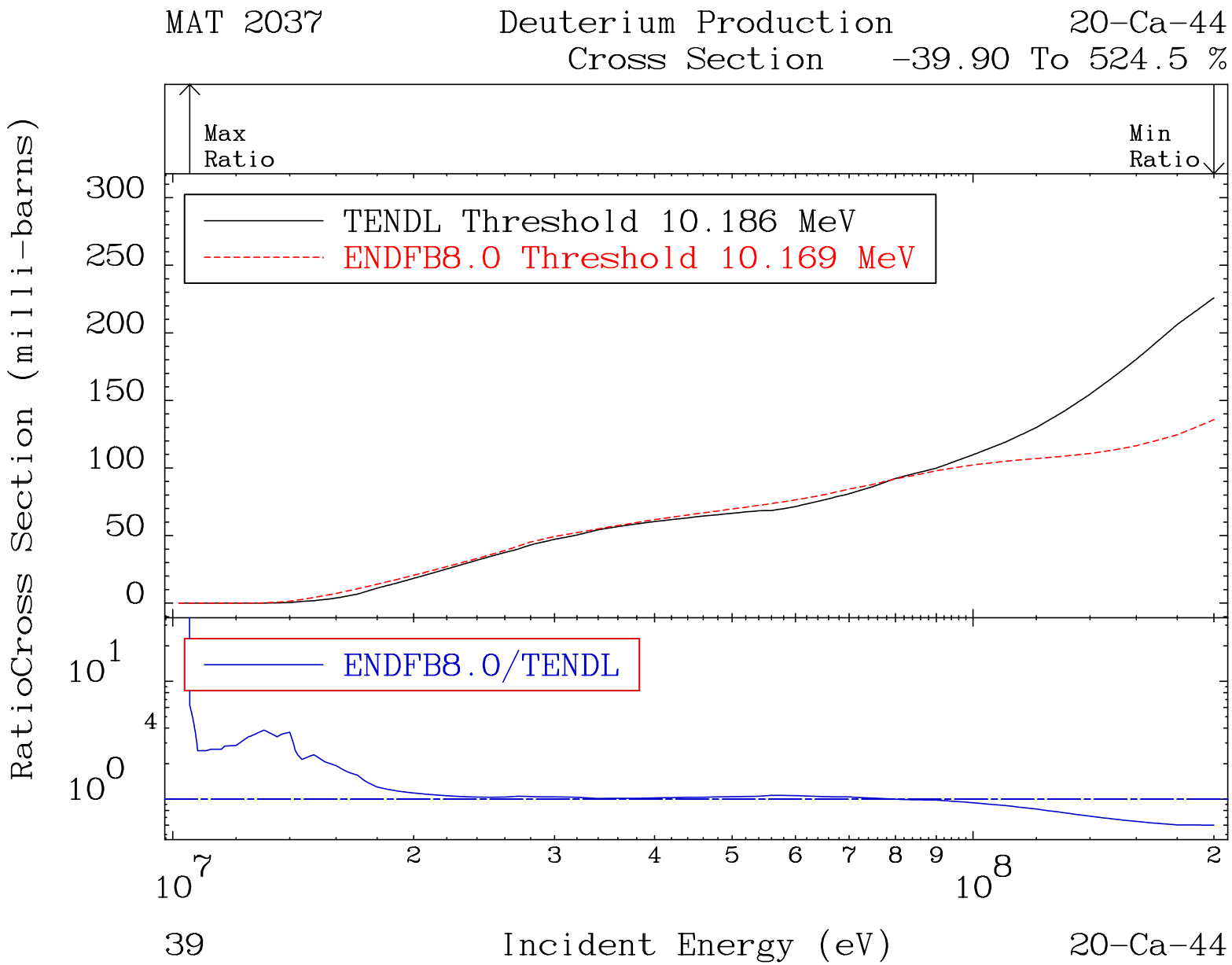

MAT 2037
(n,He-3)
Cross Section
20-Ca-44
-100.0 To 1308. %
Min Ratio
Max Ratio
TENDL Threshold 14.225 MeV
ENDFB8.0 Threshold 15.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
20
10
0
2
3
4
5
6
7
8
9
10^8
2
34
Incident Energy (eV)
20-Ca-44

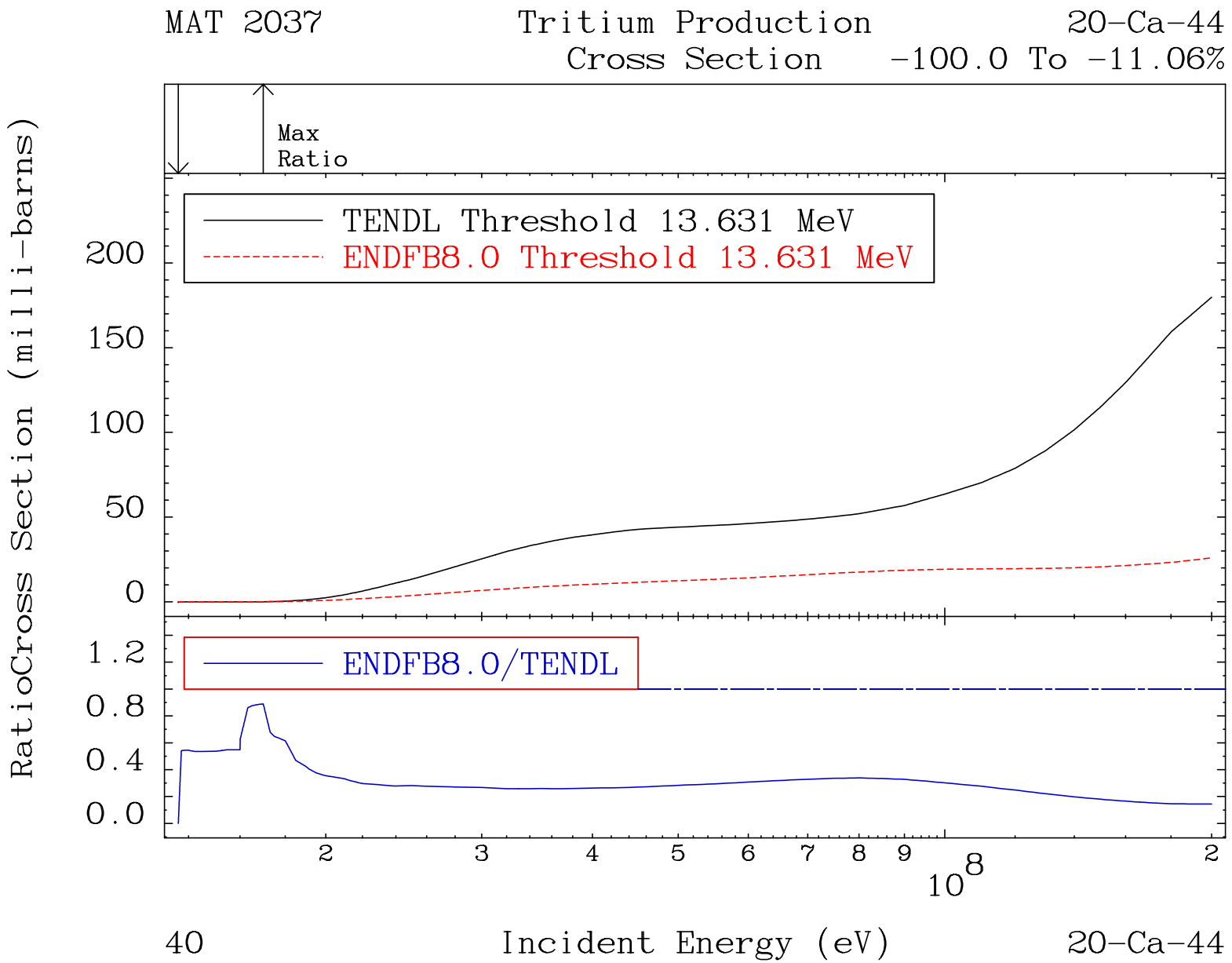

MAT 2037
(n,α)
Cross Section
20-Ca-44
-100.0 To 82.56 %
Min Ratio
Max Ratio
TENDL Threshold 2.8180 MeV
ENDFB8.0 Threshold 3.6000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
20-Ca-44

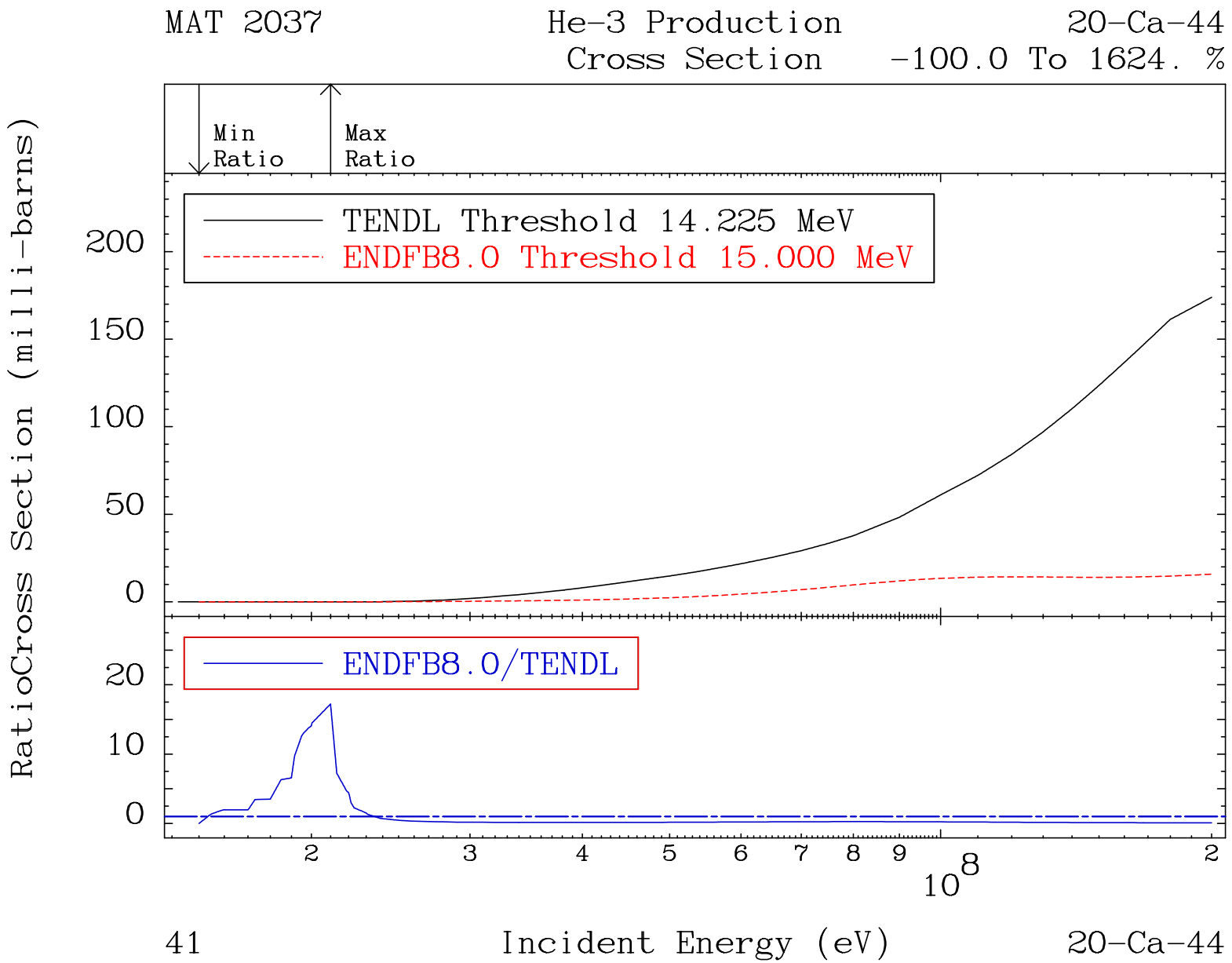

MAT 2037
(n,2α)
20-Ca-44
Cross Section
-100.0 To 971.3 %
Min Ratio
Max Ratio
TENDL Threshold 11.611 MeV
ENDFB8.0 Threshold 15.000 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
36
Incident Energy (eV)
20-Ca-44

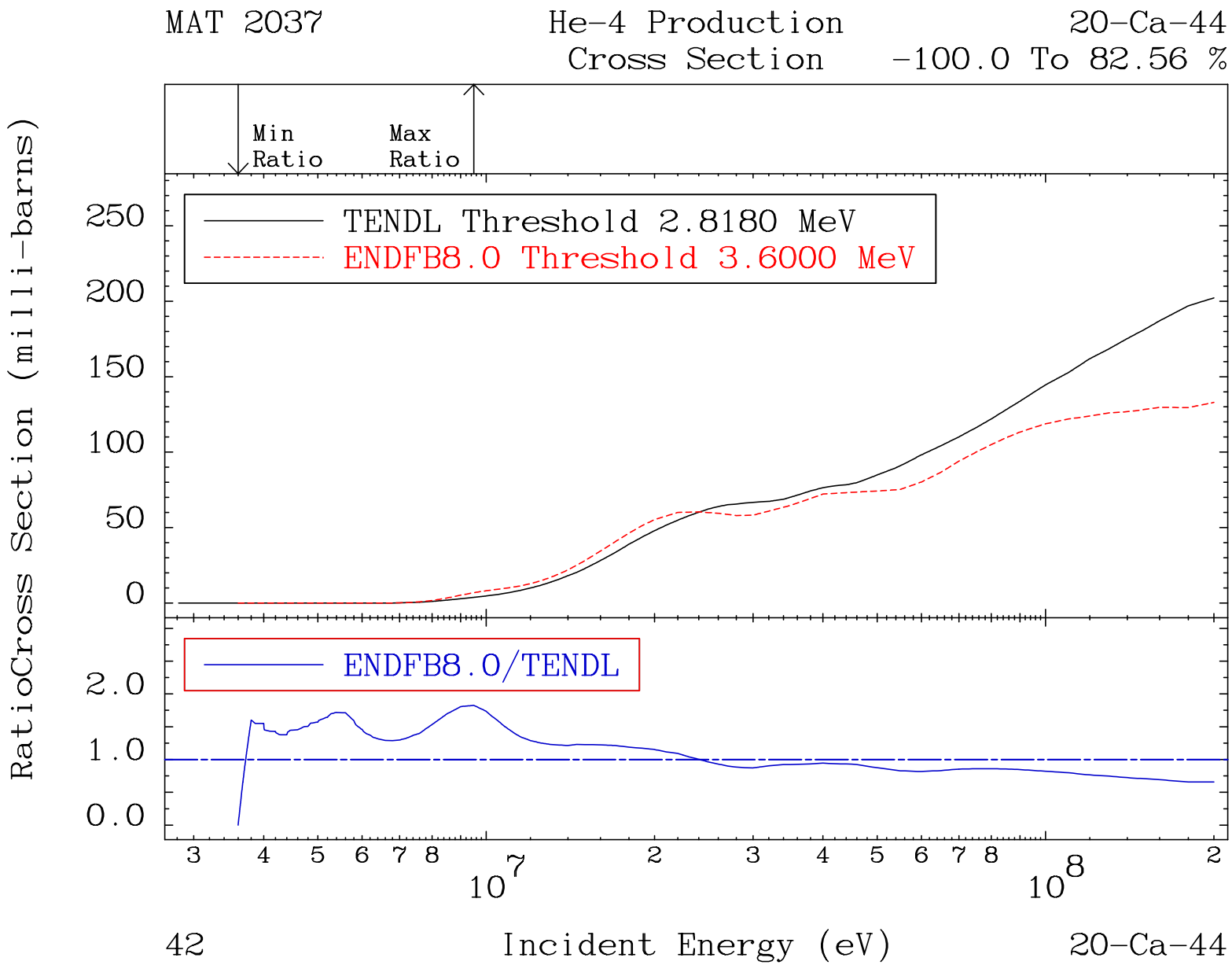

MAT 2037
(n,2p)
Cross Section
20-Ca-44
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 16.332 MeV
ENDFB8.0 Threshold 17.000 MeV
ENDFB8.0/TENDL
RatioCross Section (micro-barns)
200
150
100
50
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
37
Incident Energy (eV)
20-Ca-44

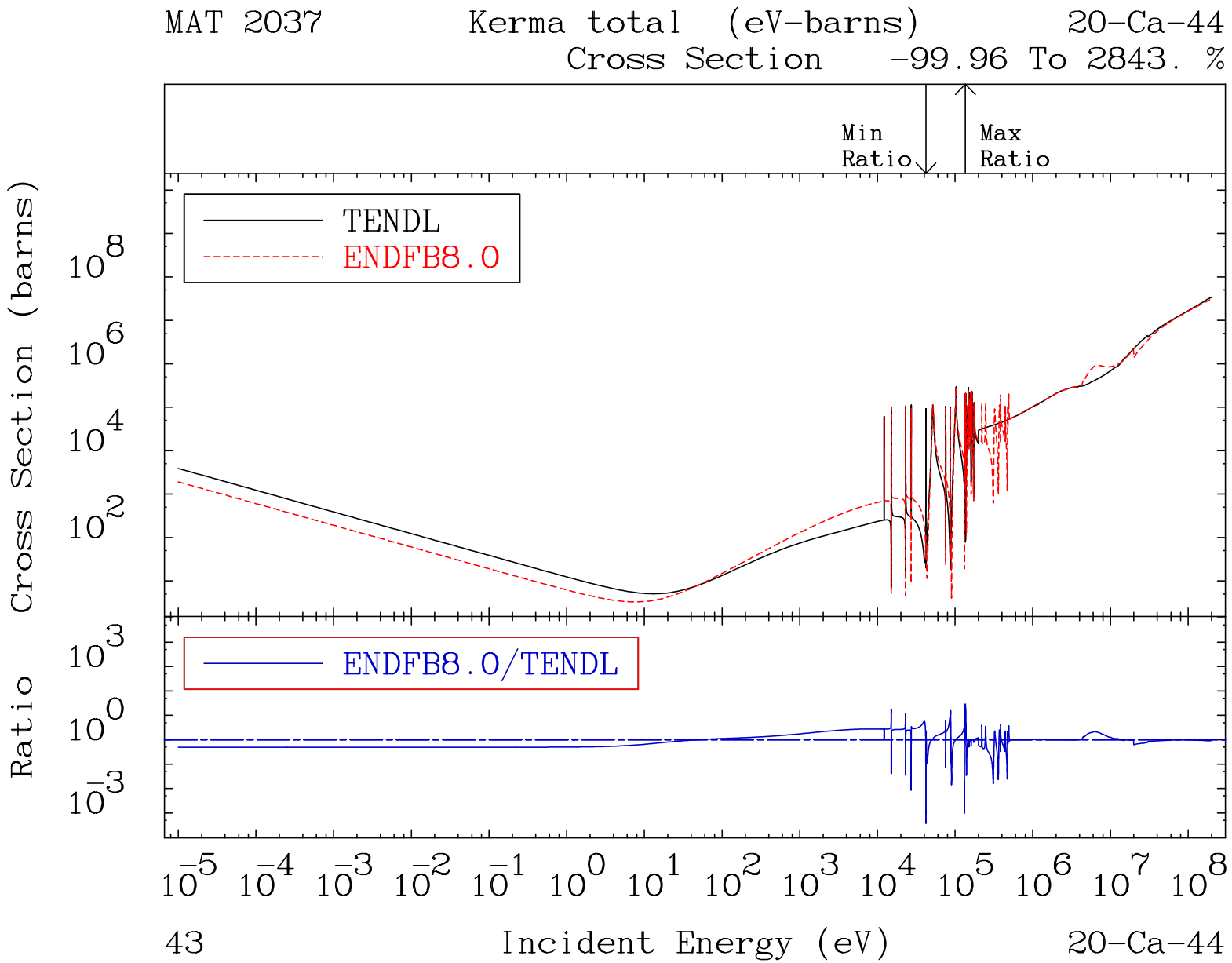

MAT 2037
Hydrogen Production
20-Ca-44
Cross Section
-100.0 To 136.9 %
Max
Ratio
TENDL Threshold 5.0174 MeV
ENDFB8.0 Threshold 5.2000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
2
0
5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
20-Ca-44

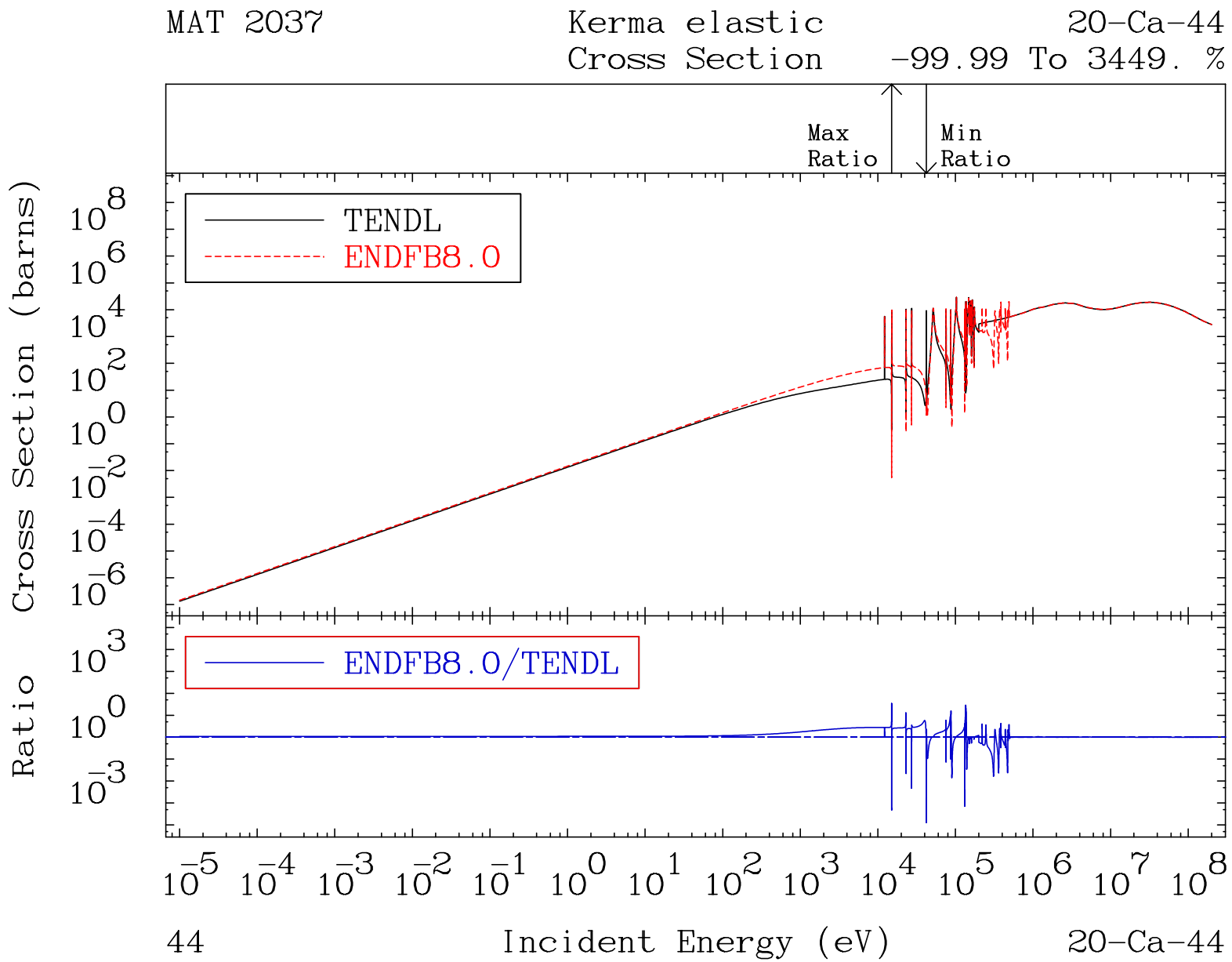

MAT 2037
Deuterium Production
20-Ca-44
Cross Section
-39.90 To 524.5 %
Max Ratio
Min Ratio
TENDL Threshold 10.186 MeV
ENDFB8.0 Threshold 10.169 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^1
4
10^0
10^7
2
3
4
5
6
7
8
9
10^8
2
39
Incident Energy (eV)
20-Ca-44

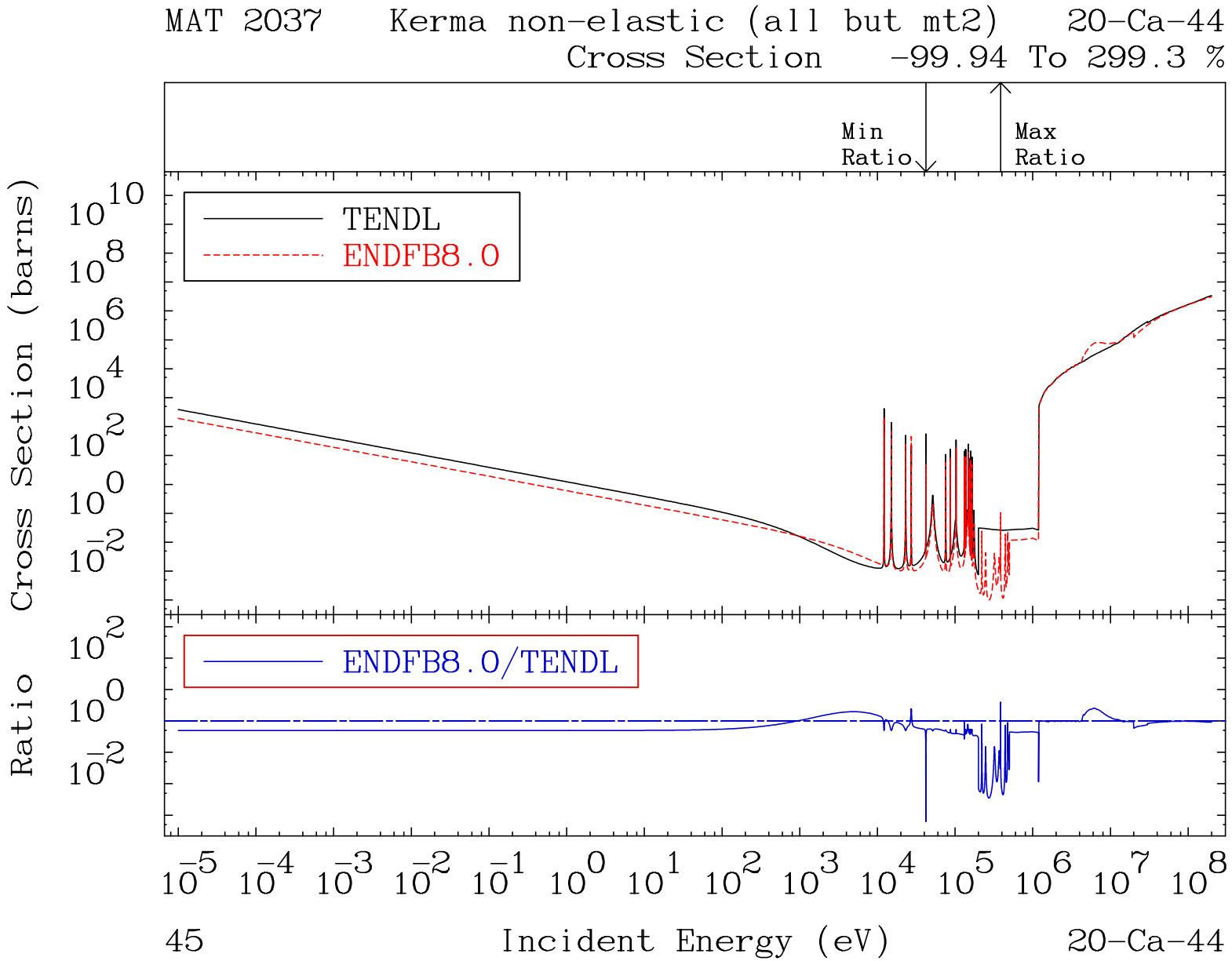

MAT 2037
Tritium Production
Cross Section
20-Ca-44
-100.0 To -11.06%
Max
Ratio
TENDL Threshold 13.631 MeV
ENDFB8.0 Threshold 13.631 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
9
10^8
2
40
Incident Energy (eV)
20-Ca-44

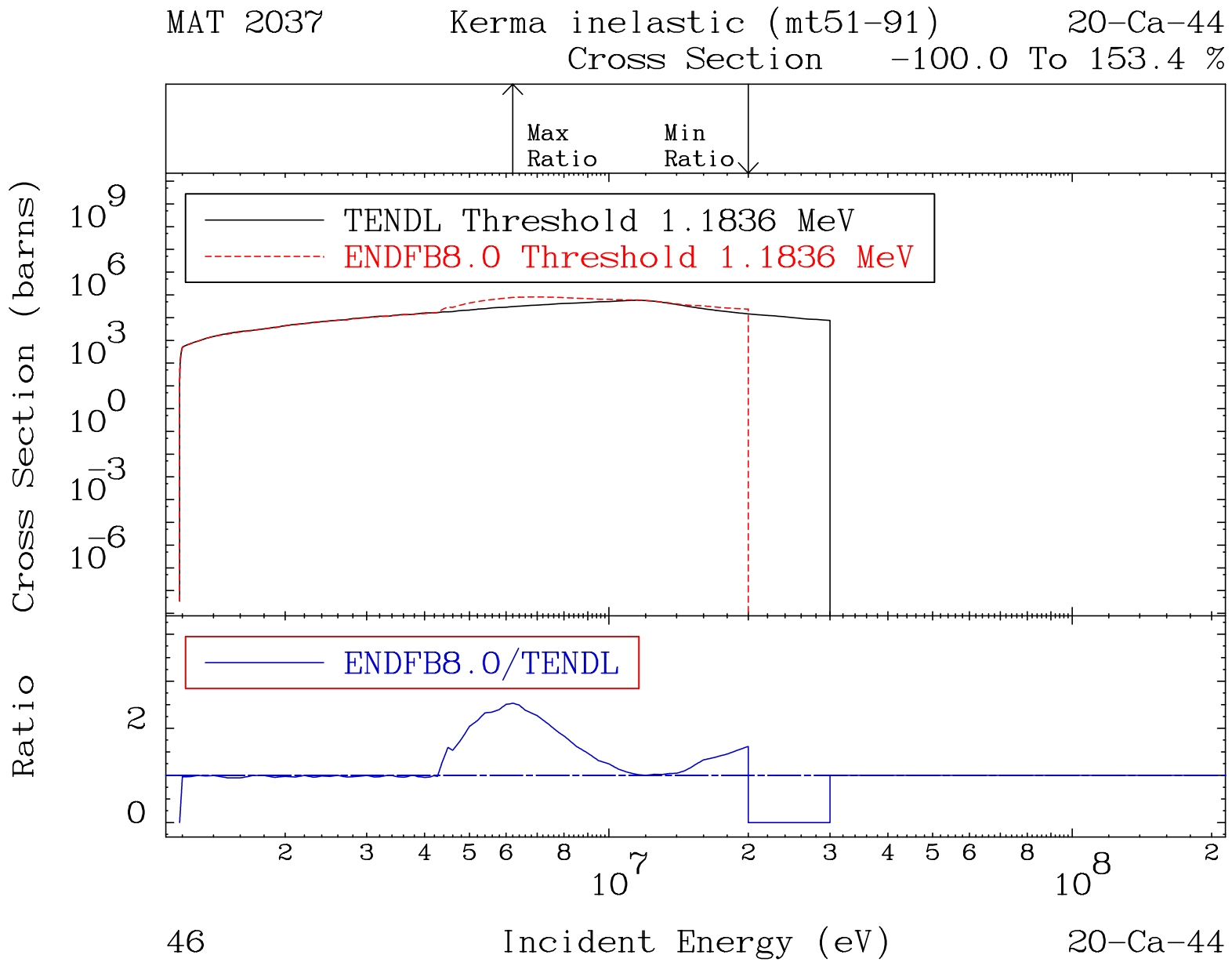

MAT 2037
He-3 Production
Cross Section
20-Ca-44
-100.0 To 1624. %
Min Ratio
Max Ratio
TENDL Threshold 14.225 MeV
ENDFB8.0 Threshold 15.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
20
10
0
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
20-Ca-44

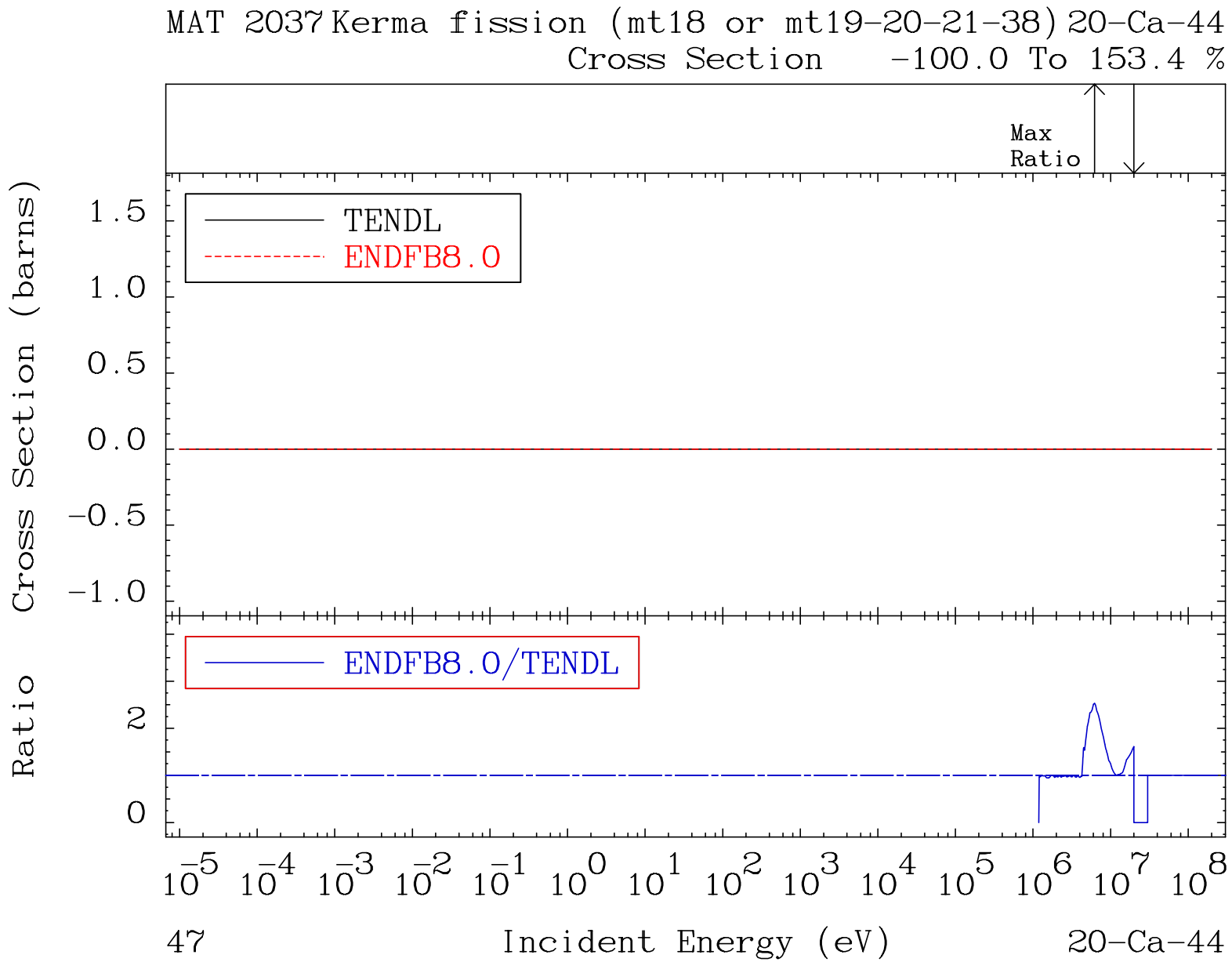

MAT 2037
He-4 Production
Cross Section
20-Ca-44
-100.0 To 82.56 %
Min Ratio
Max Ratio
TENDL Threshold 2.8180 MeV
ENDFB8.0 Threshold 3.6000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
42
Incident Energy (eV)
20-Ca-44

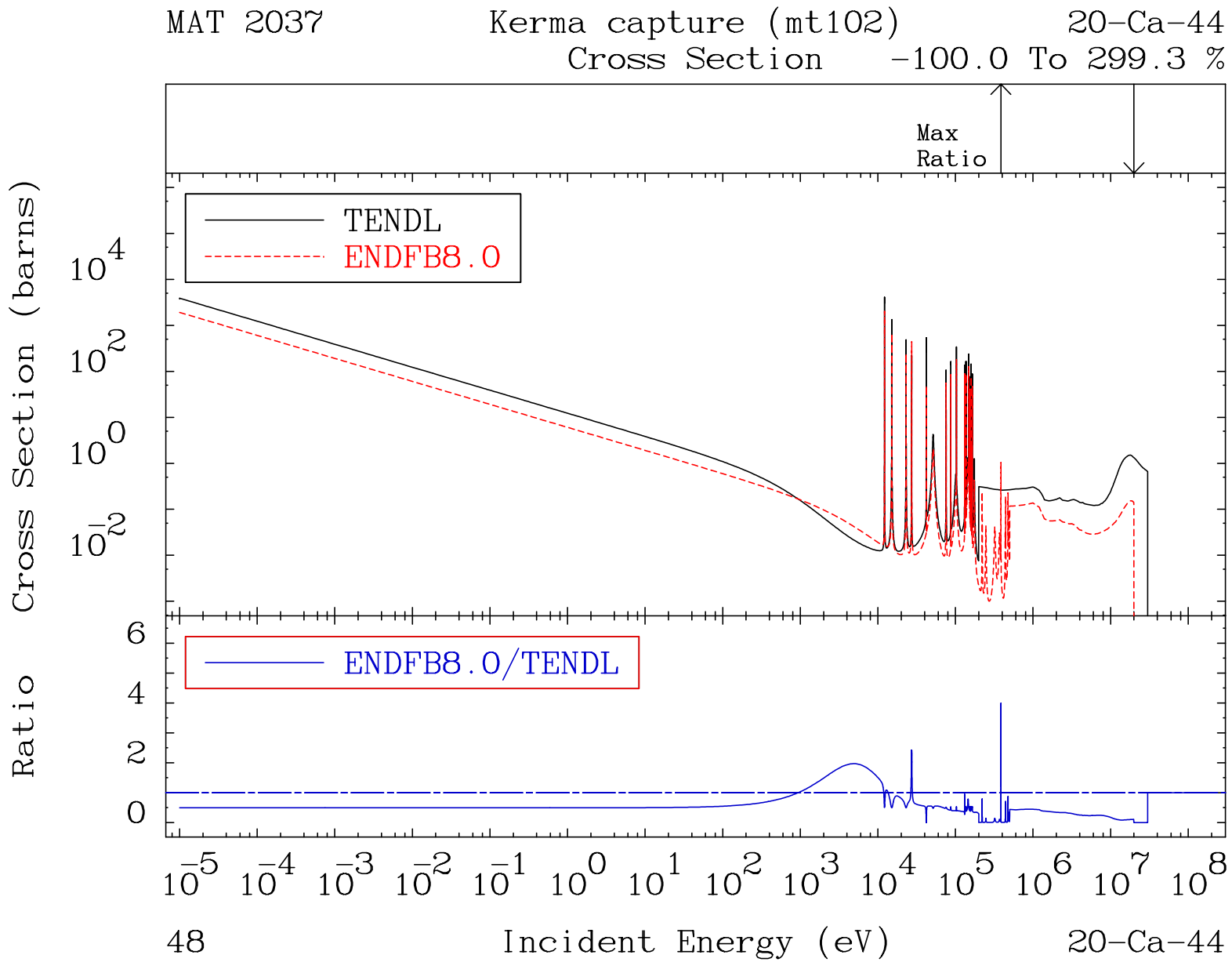

MAT 2037
Kerma total (eV-barns)
20-Ca-44
Cross Section -99.96 To 2843. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
20-Ca-44

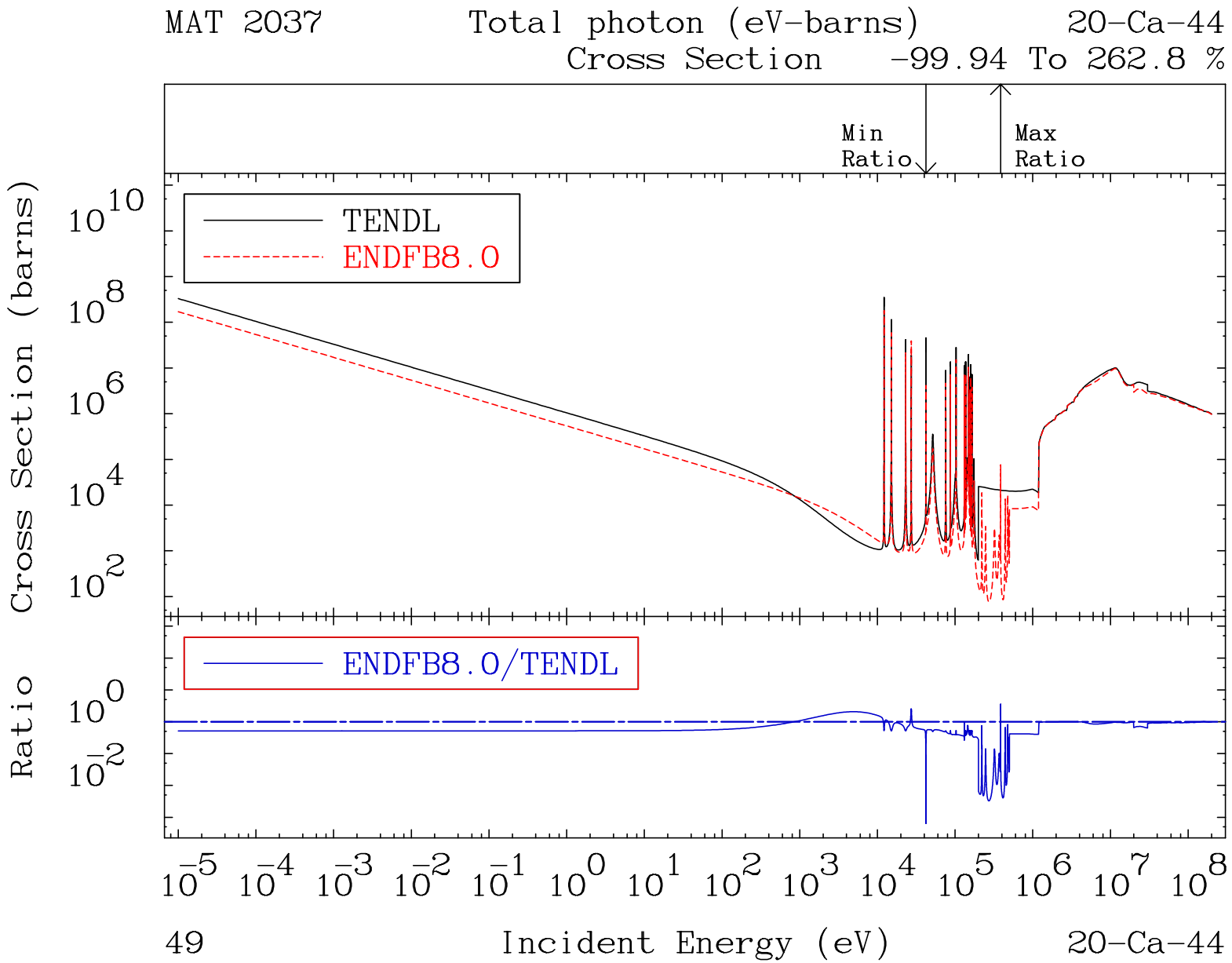

MAT 2037
Kerma elastic
Cross Section
20-Ca-44
-99.99 To 3449. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
20-Ca-44

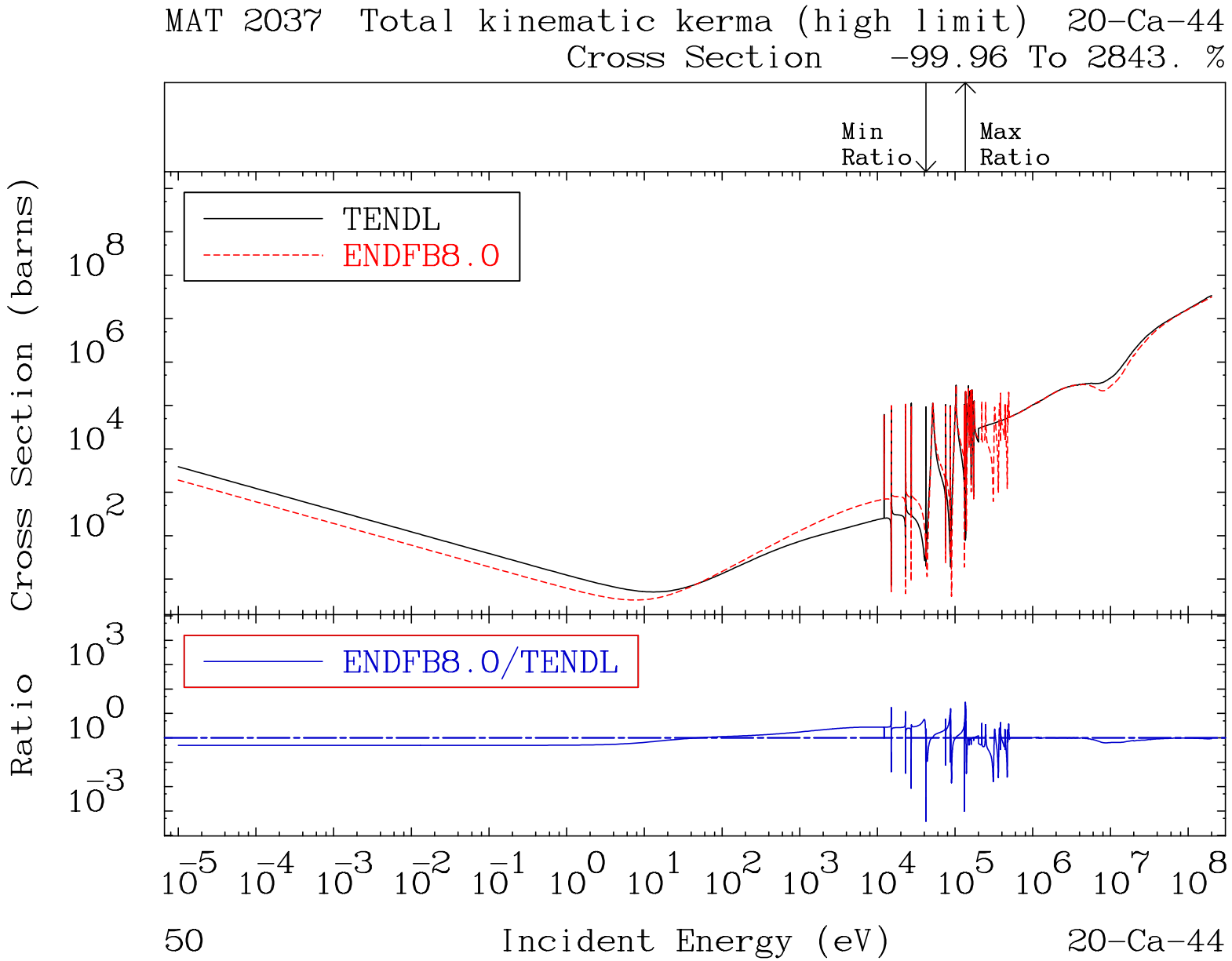

MAT 2037 Kerma non-elastic (all but mt2) 20-Ca-44
Cross Section -99.94 To 299.3 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
45
20-Ca-44

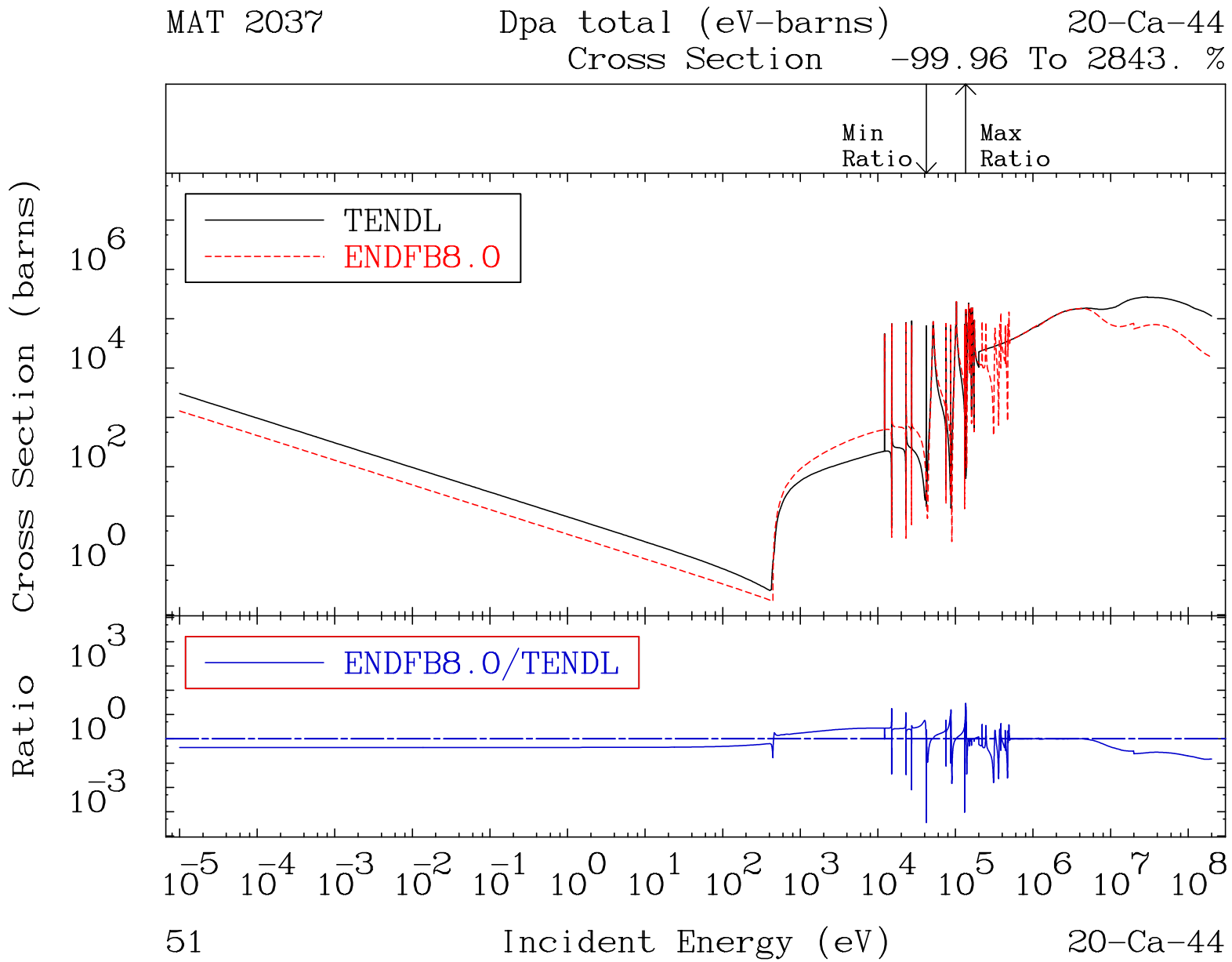

MAT 2037
Kerma inelastic (mt51-91)
20-Ca-44
Cross Section -100.0 To 153.4 %
Max Ratio
Min Ratio
TENDL Threshold 1.1836 MeV
ENDFB8.0 Threshold 1.1836 MeV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
46
20-Ca-44

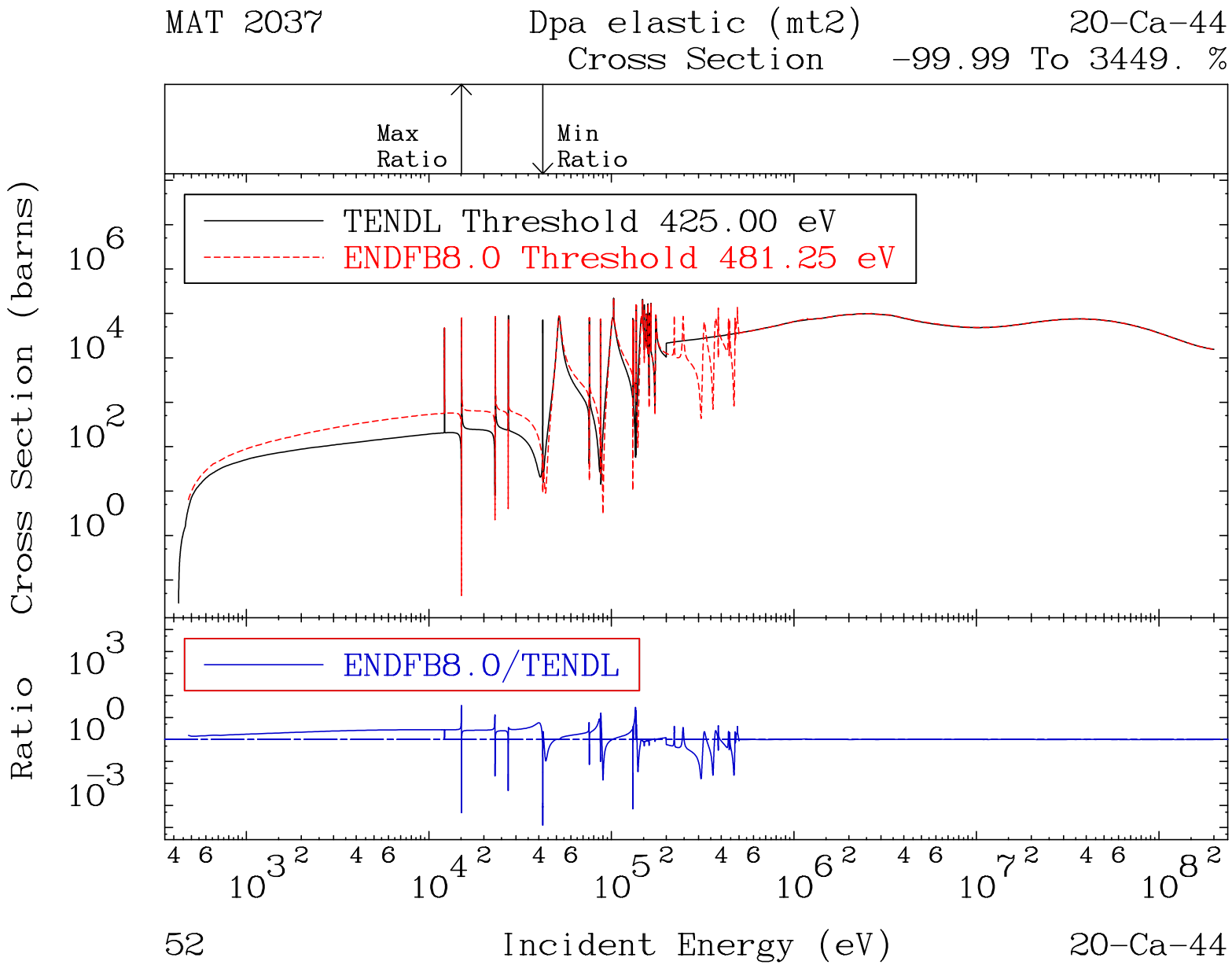

MAT 2037 Kerma fission (mt18 or mt19-20-21-38) 20-Ca-44
Cross Section -100.0 To 153.4 %
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
2
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
47
Incident Energy (eV)
20-Ca-44

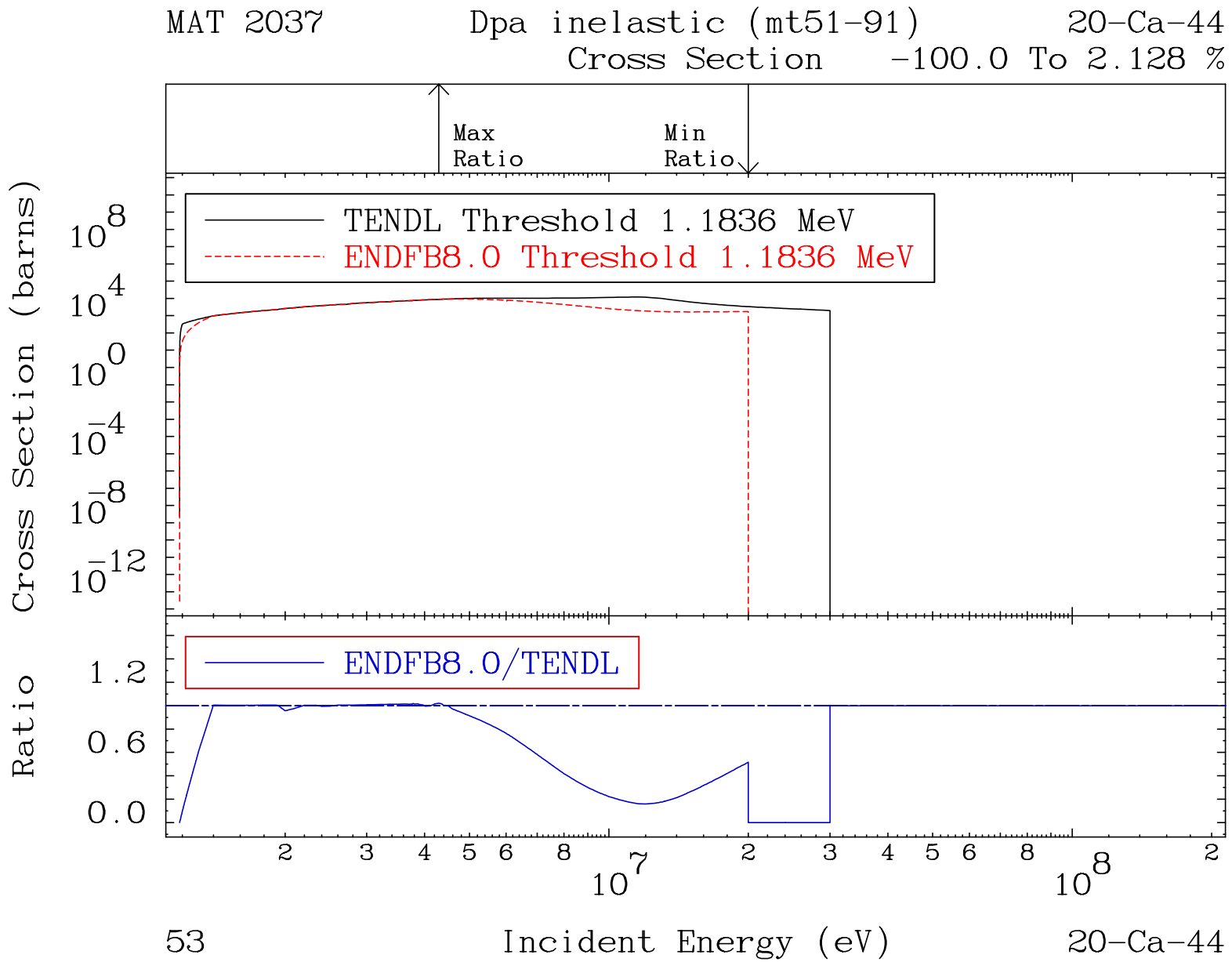

MAT 2037
Kerma capture (mt102)
20-Ca-44
Cross Section -100.0 To 299.3 %
Max
Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
48
20-Ca-44

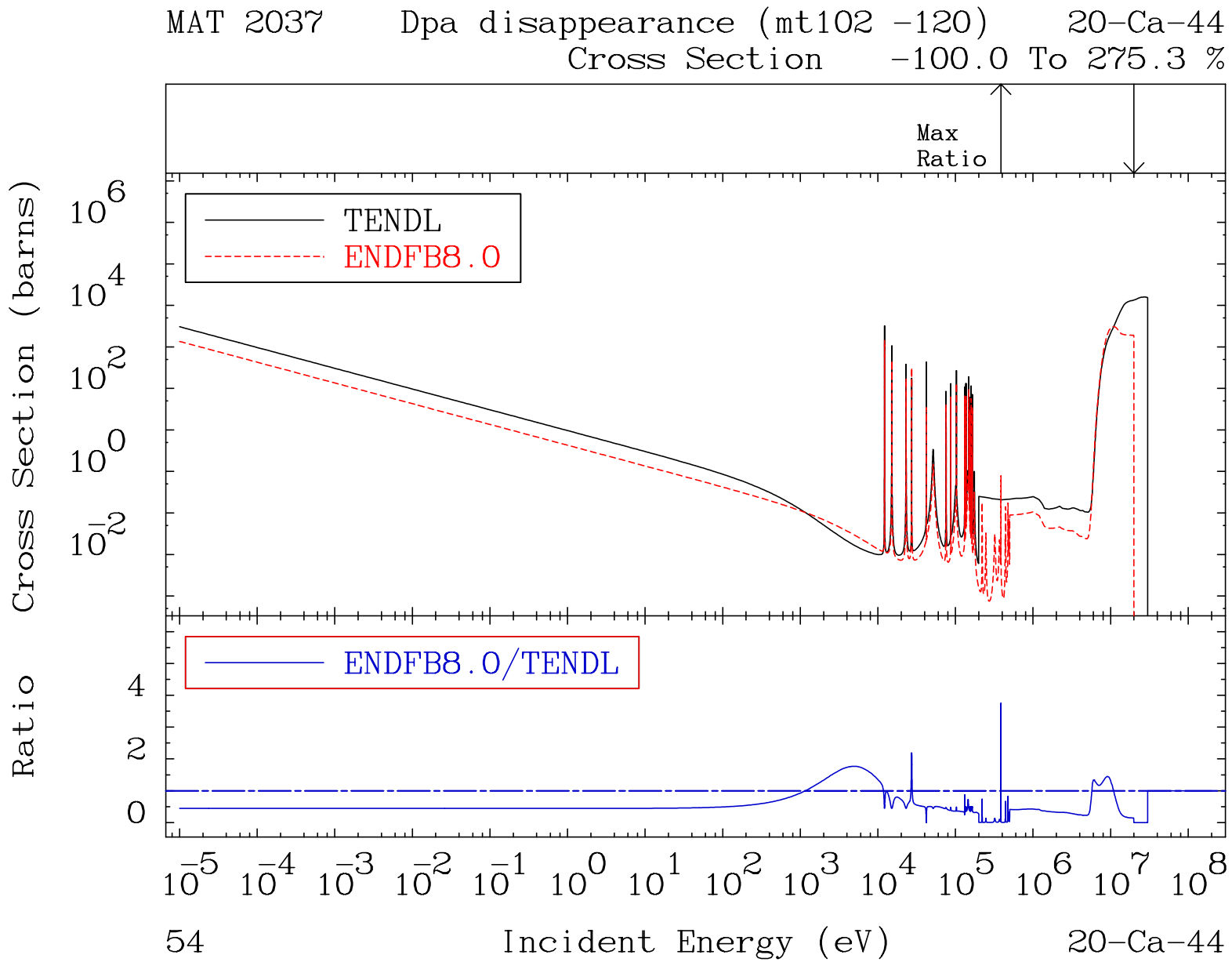

MAT 2037
Total photon (eV-barns)
20-Ca-44
Cross Section -99.94 To 262.8 %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
20-Ca-44


MAT 2037 Total kinematic kerma (high limit) 20-Ca-44
Cross Section -99.96 To 2843. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
20-Ca-44


MAT 2037
Dpa total (eV-barns)
20-Ca-44
Cross Section -99.96 To 2843. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
51
20-Ca-44


MAT 2037
Dpa elastic (mt2)
Cross Section
20-Ca-44
-99.99 To 3449. %
Max Ratio
Min Ratio
TENDL Threshold 425.00 eV
ENDFB8.0 Threshold 481.25 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
20-Ca-44


MAT 2037
Dpa inelastic (mt51-91)
20-Ca-44
Cross Section
-100.0 To 2.128 %
Max Ratio
Min Ratio
TENDL Threshold 1.1836 MeV
ENDFB8.0 Threshold 1.1836 MeV
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
53
20-Ca-44


MAT 2037 Dpa disappearance (mt102 -120) 20-Ca-44
Cross Section -100.0 To 275.3 %
Max
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
20-Ca-44