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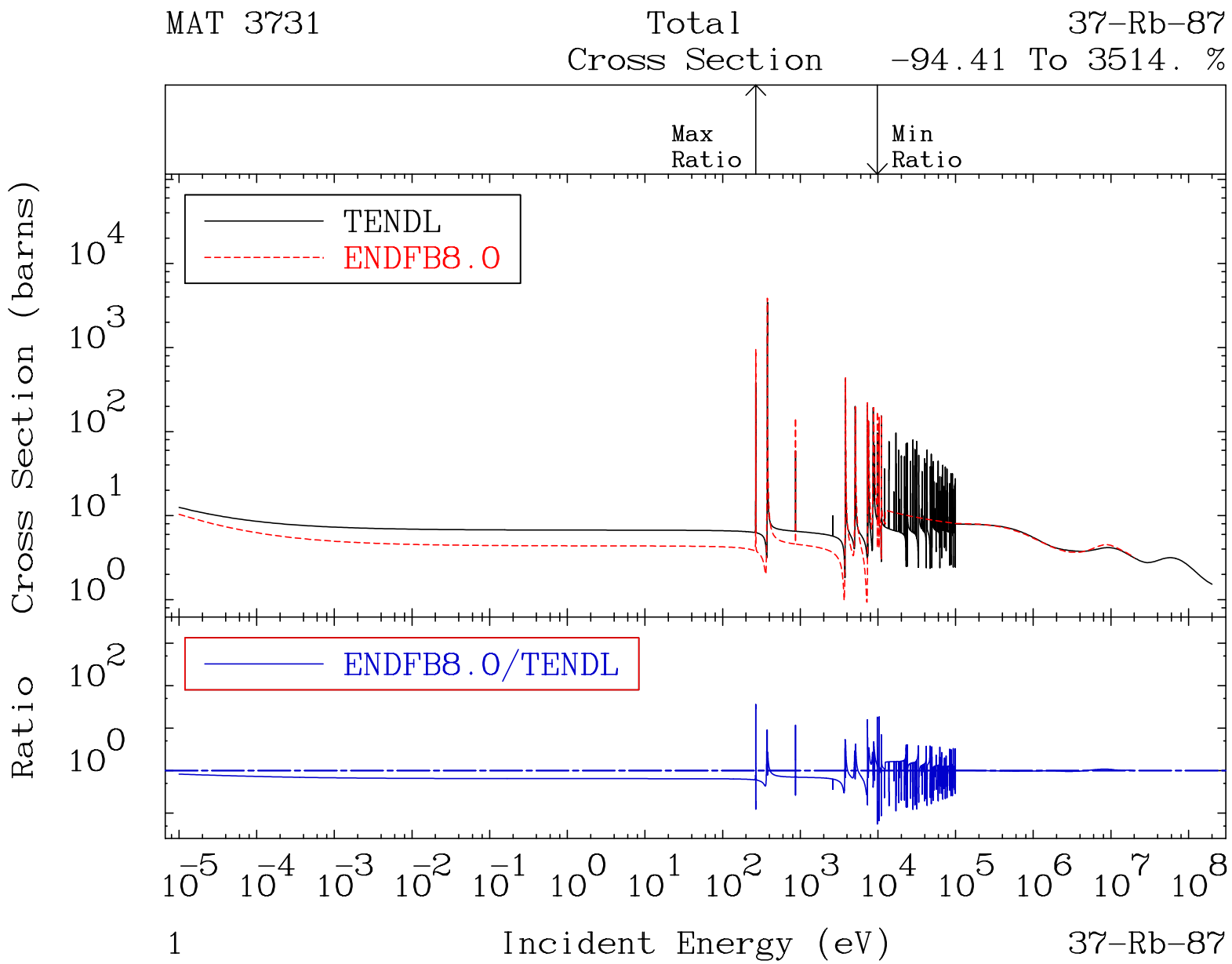
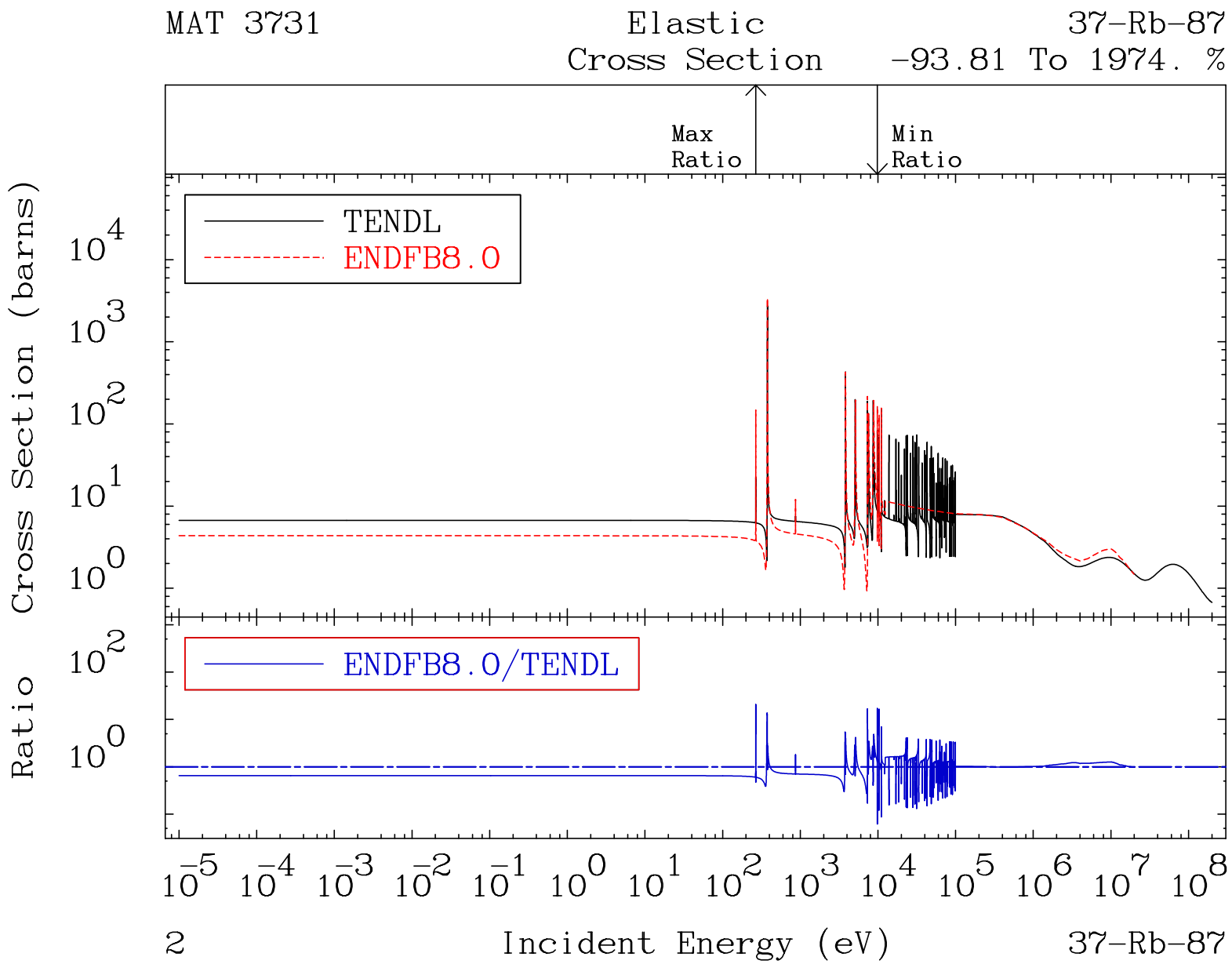
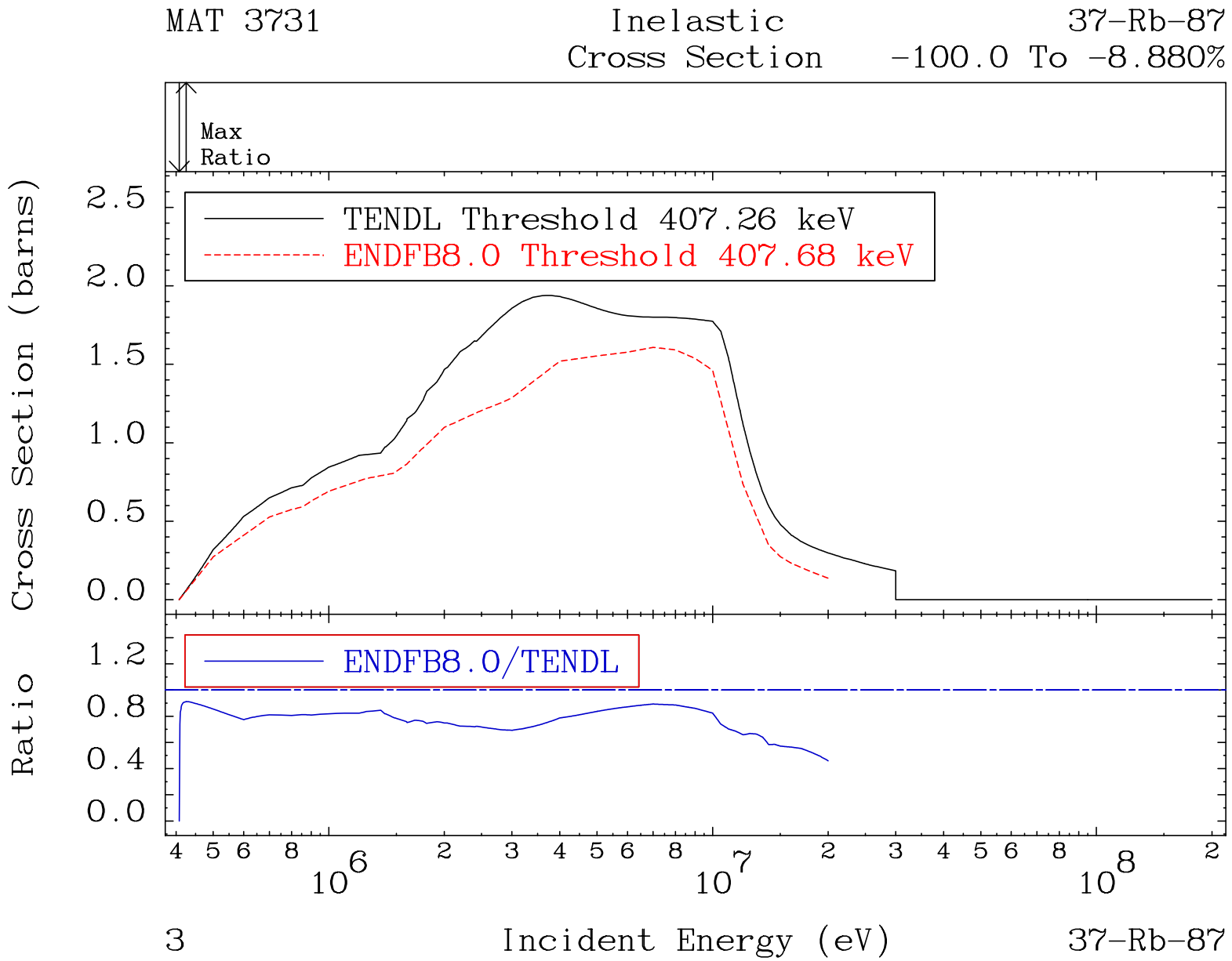
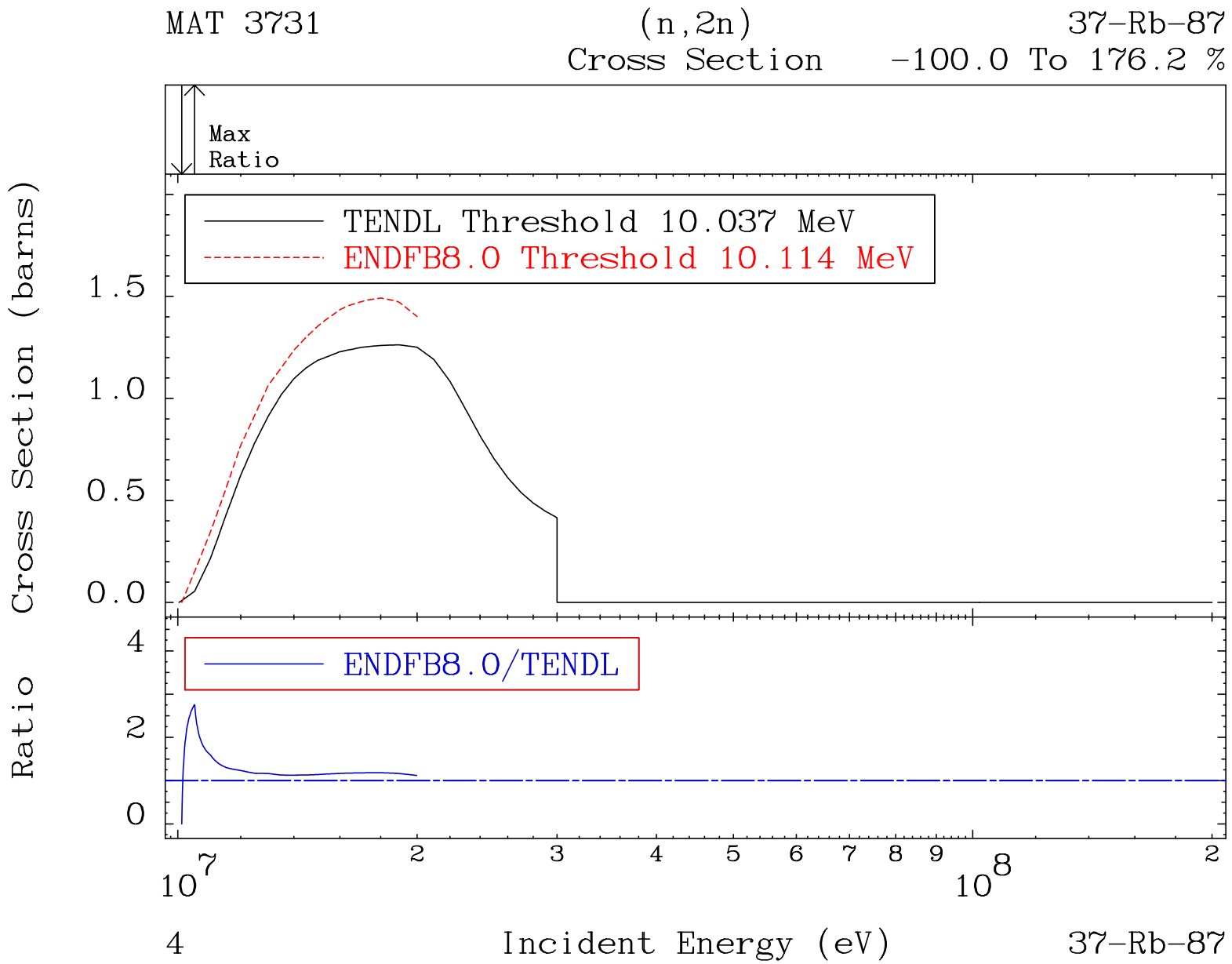
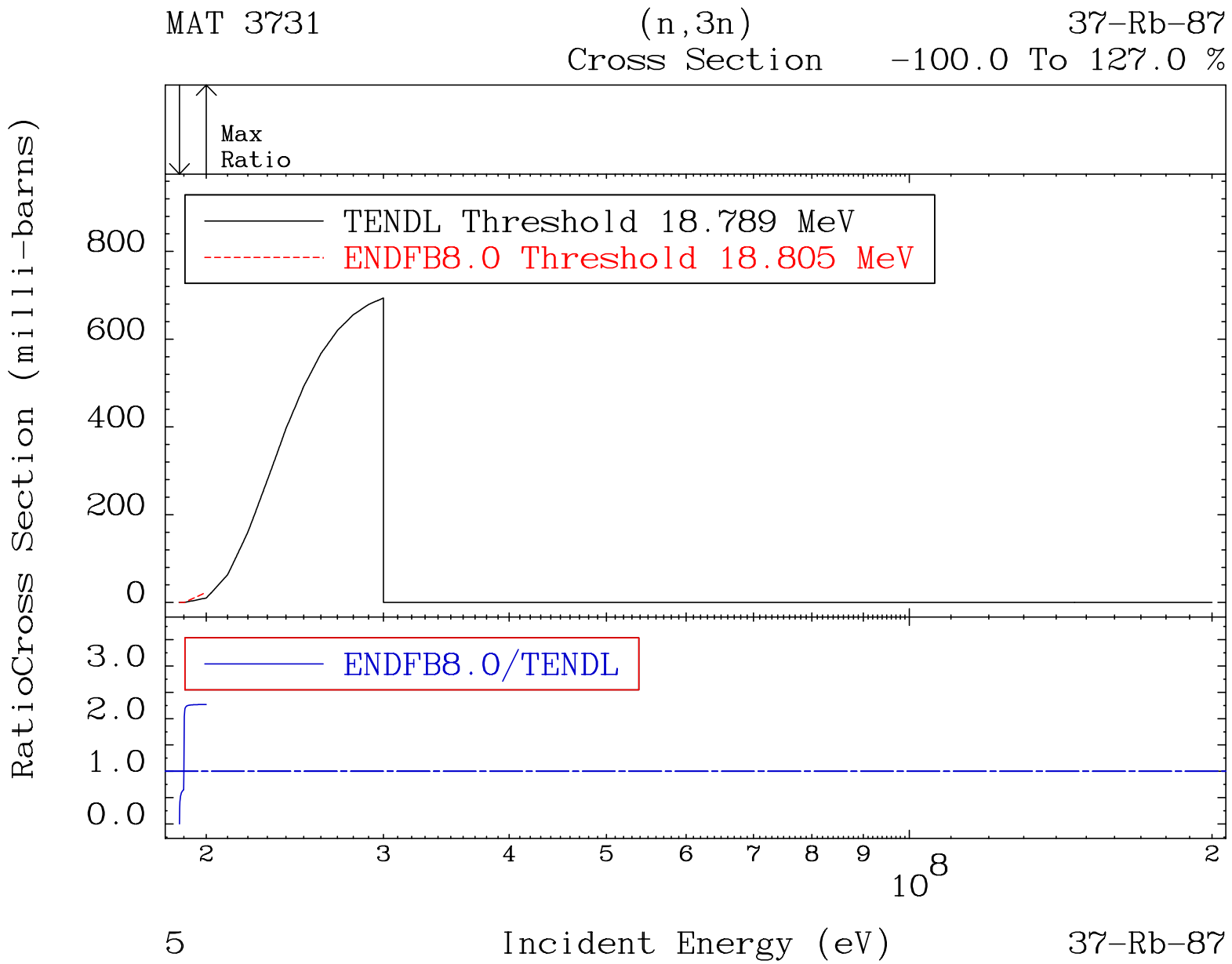
Press Mouse Button to Start

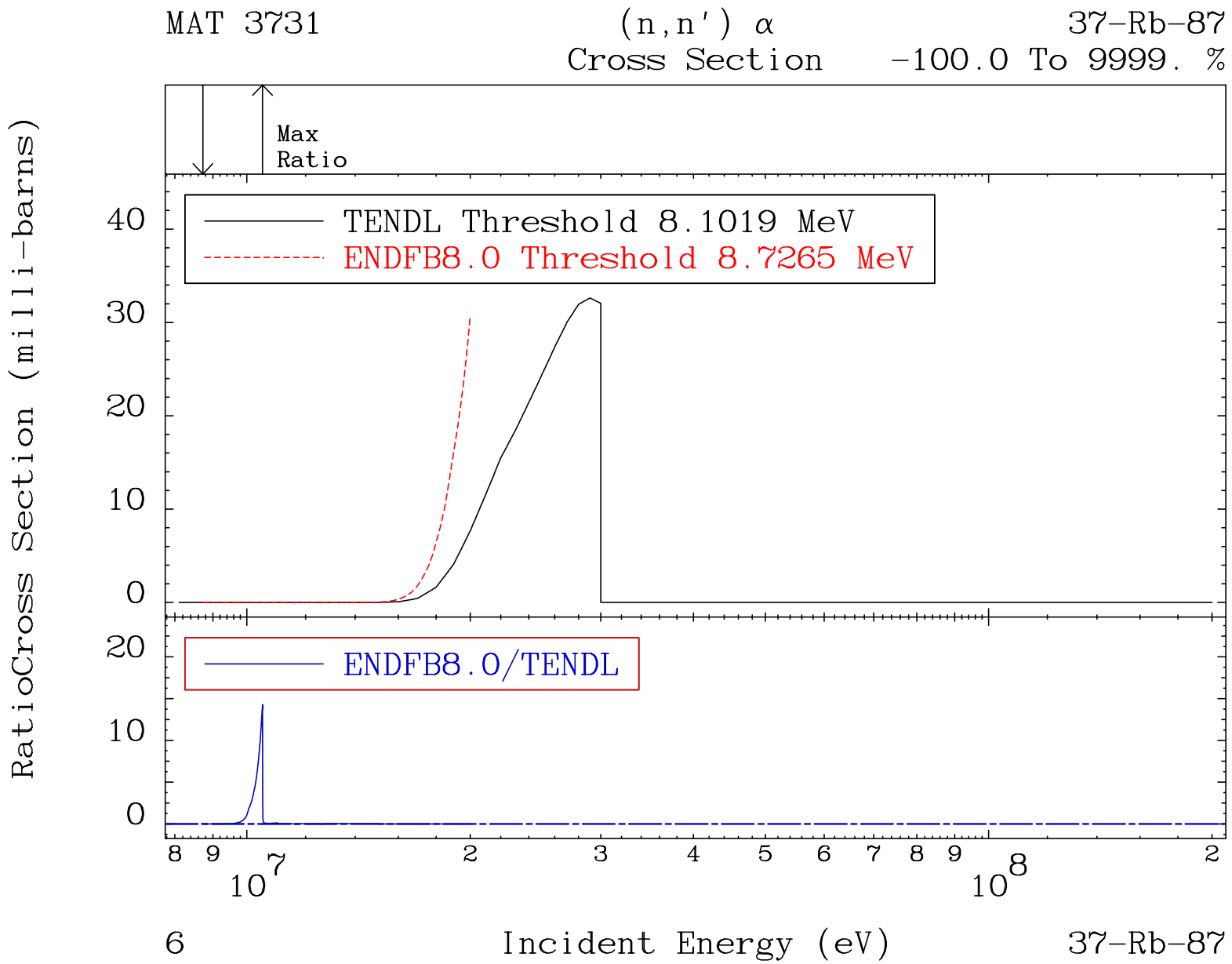

MAT 3731
Total
Cross Section
37-Rb-87
-94.41 To 3514. %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
37-Rb-87

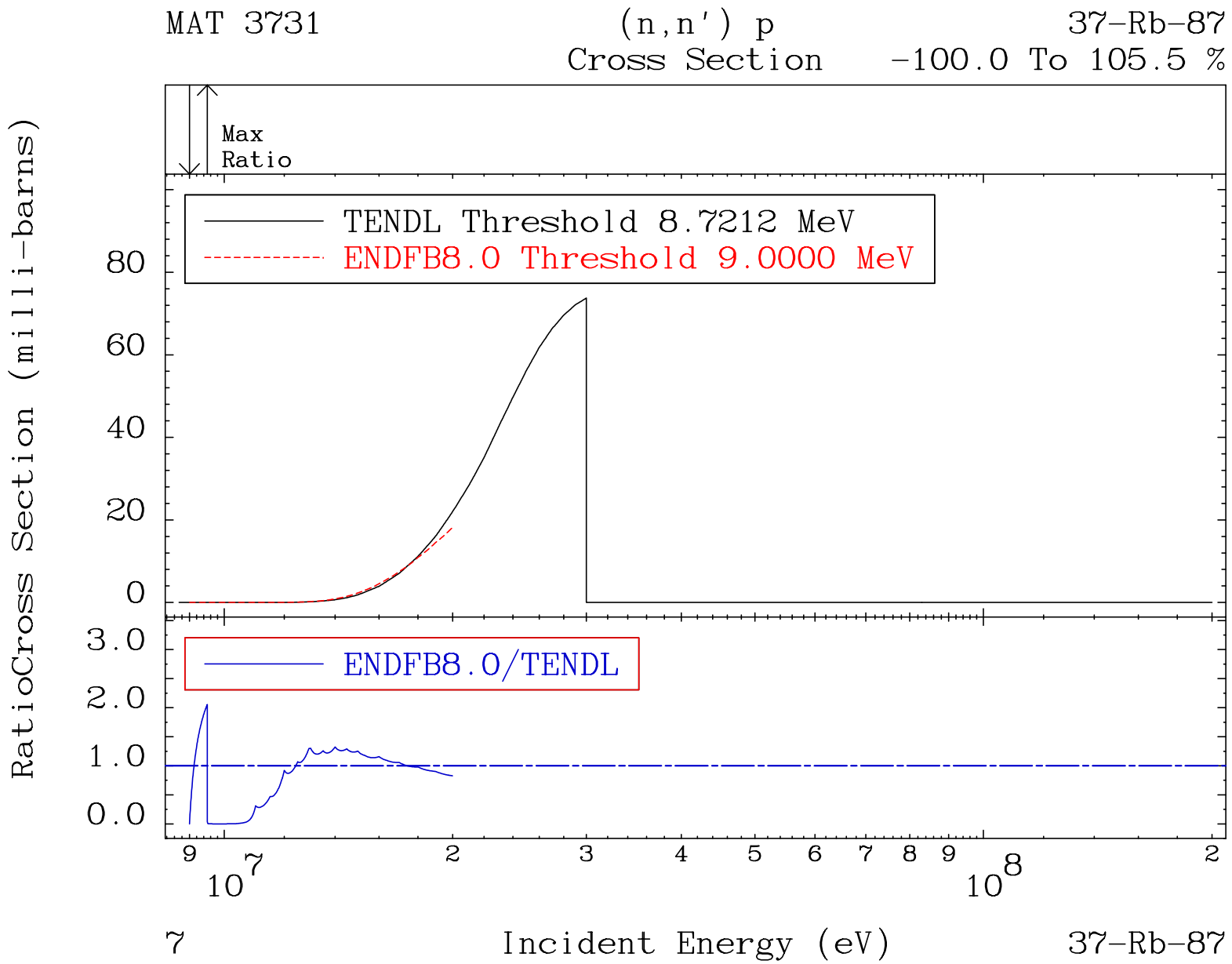

MAT 3731
Elastic
Cross Section
37-Rb-87
-93.81 To 1974. %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
37-Rb-87

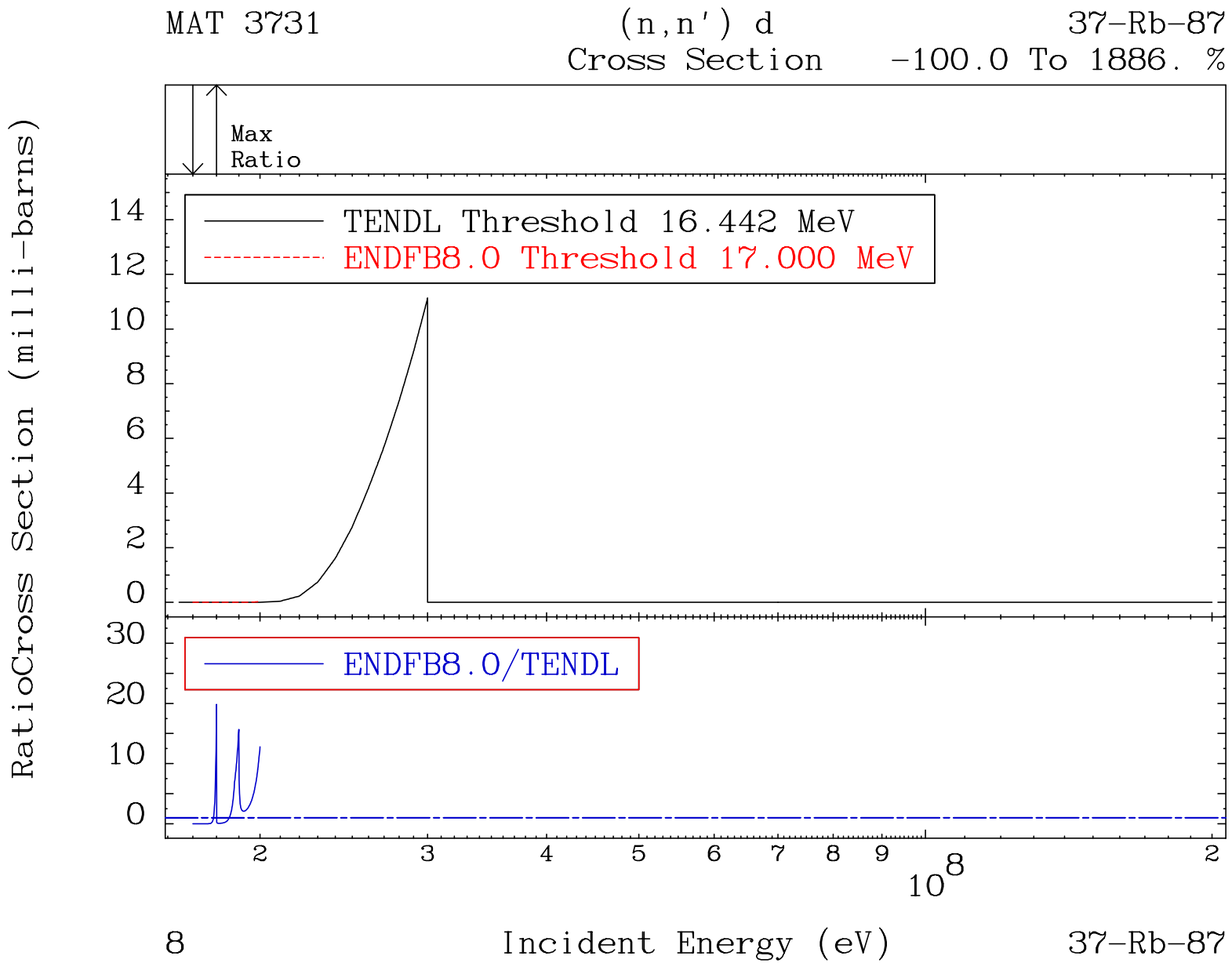

MAT 3731
Inelastic
Cross Section
37-Rb-87
-100.0 To -8.880%
Max
Ratio
TENDL Threshold 407.26 keV
ENDFB8.0 Threshold 407.68 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.8
0.4
0.0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
3
37-Rb-87

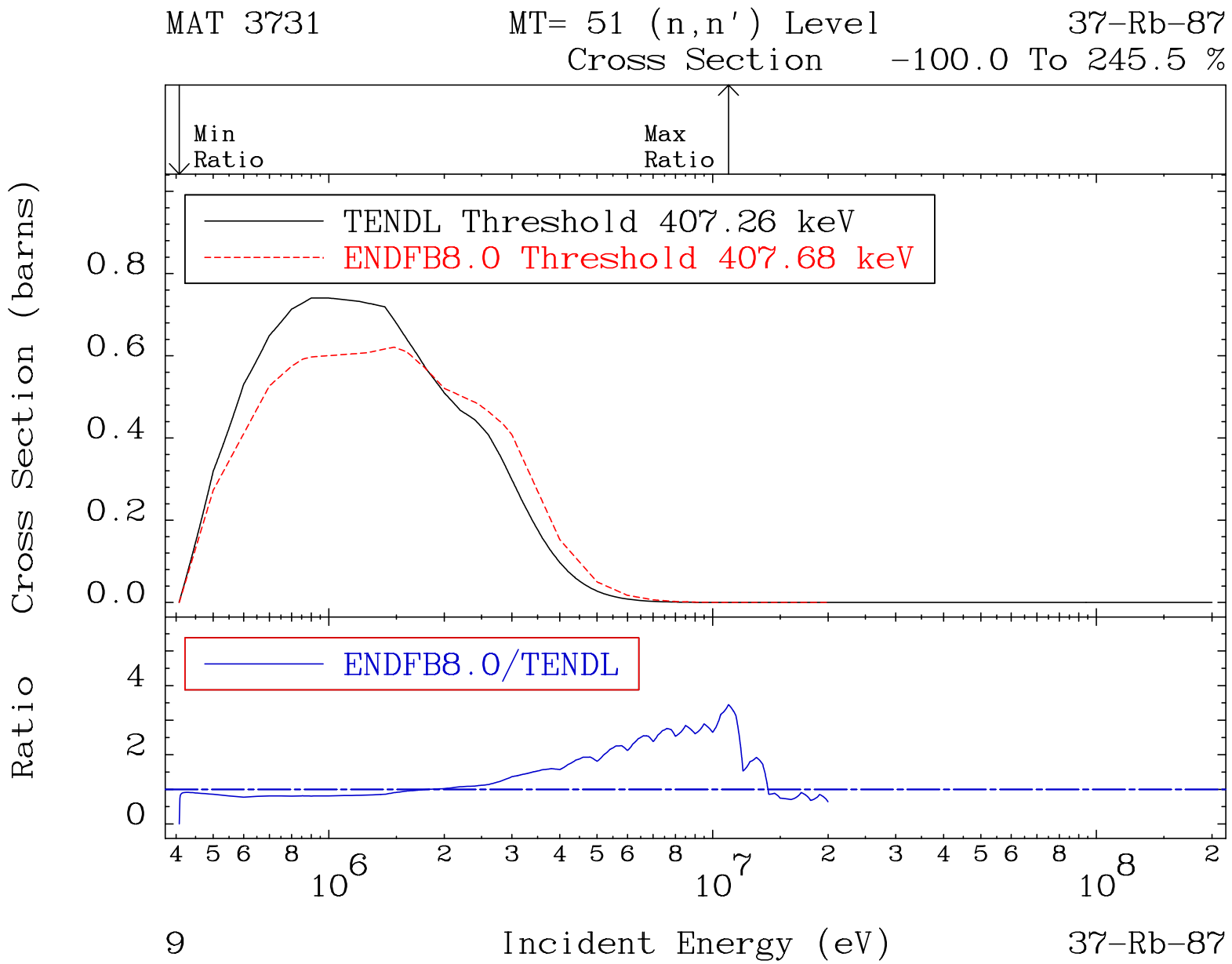

MAT 3731
(n,2n)
Cross Section
37-Rb-87
-100.0 To 176.2 %
Max
Ratio
TENDL Threshold 10.037 MeV
ENDFB8.0 Threshold 10.114 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
4
2
0
10^7
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
37-Rb-87

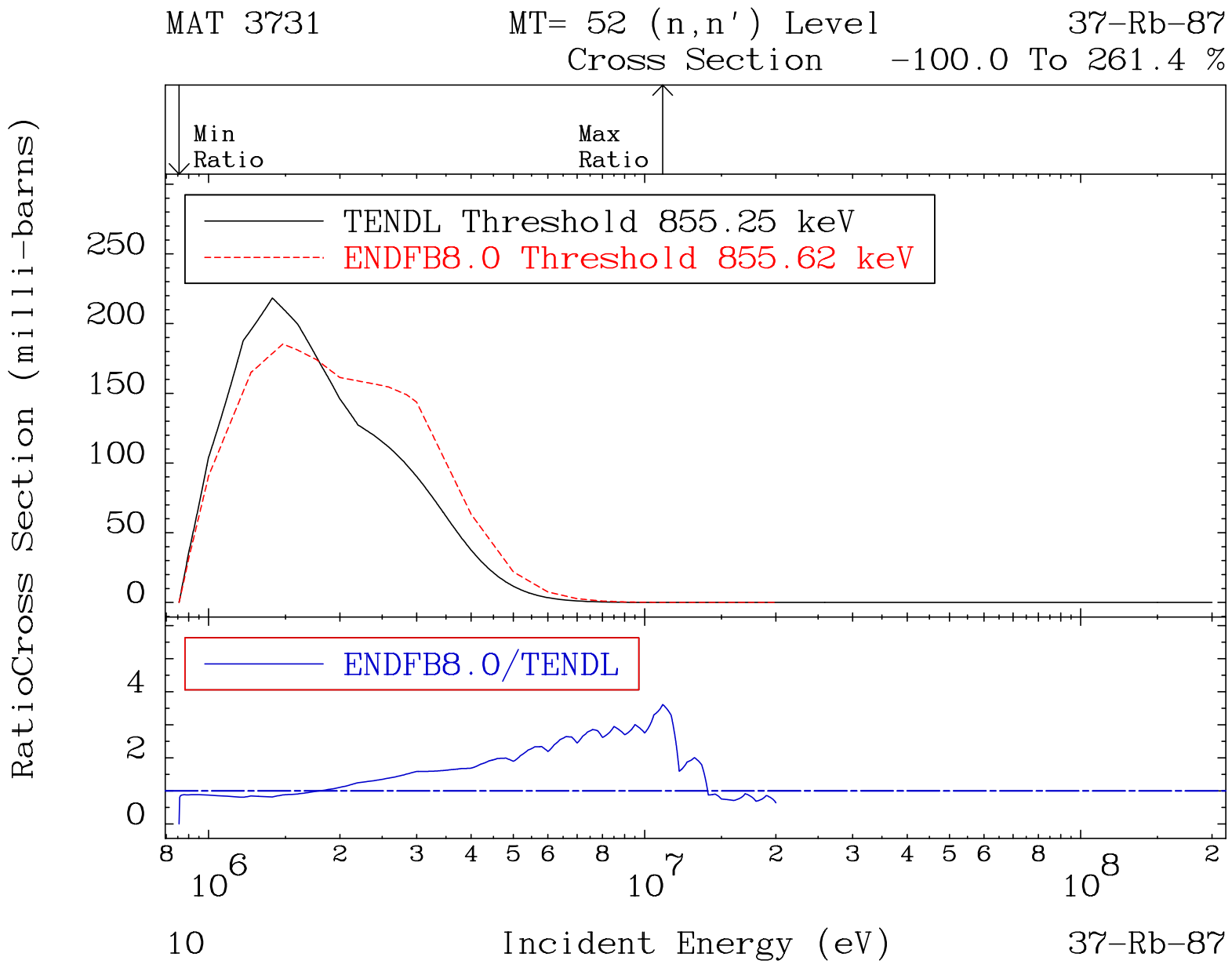

MAT 3731
(n,3n)
37-Rb-87
Cross Section
-100.0 To 127.0 %
Max
Ratio
TENDL Threshold 18.789 MeV
ENDFB8.0 Threshold 18.805 MeV
800
600
400
200
0
ENDFB8.0/TENDL
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
5
Incident Energy (eV)
37-Rb-87

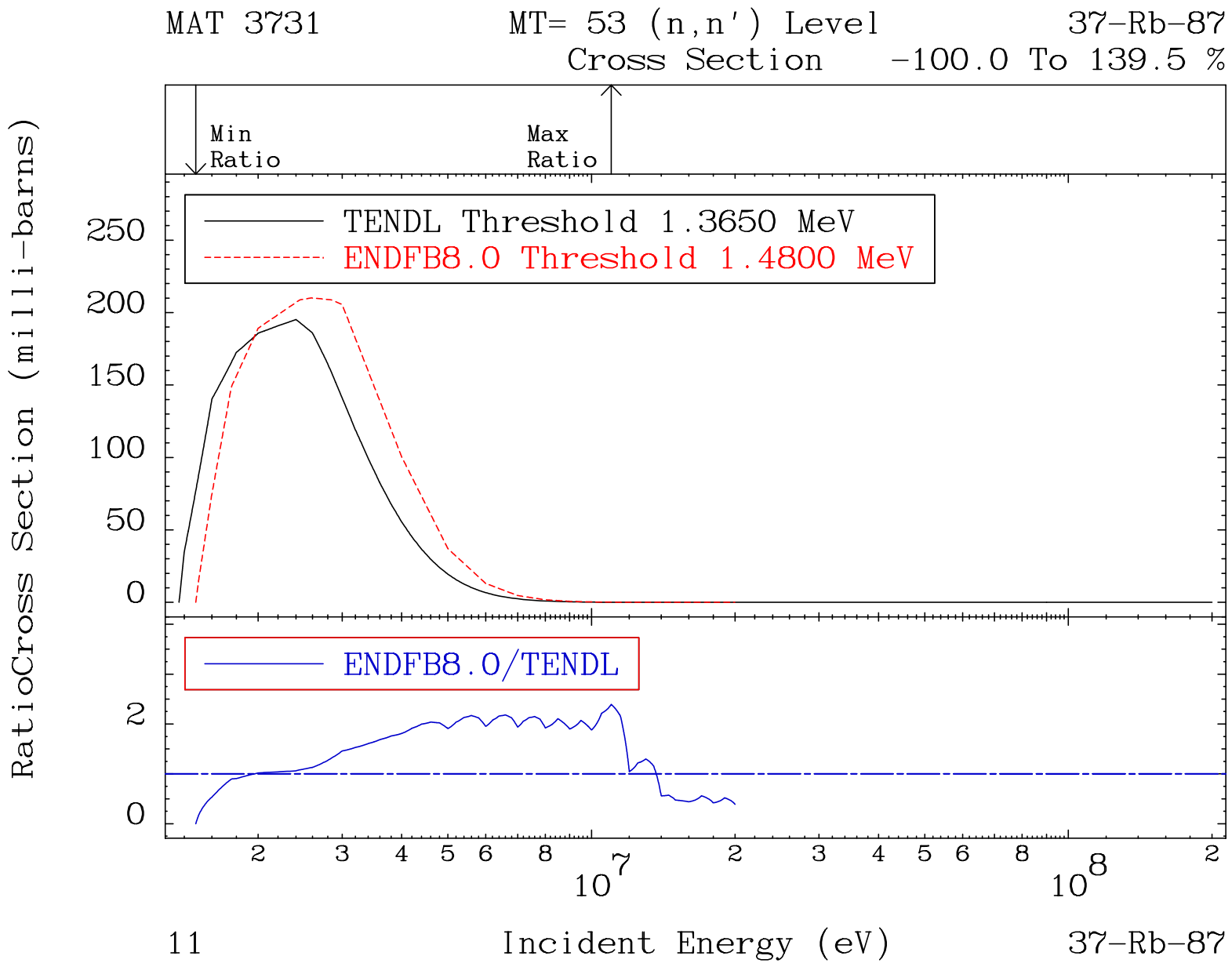

MAT 3731
(n,n') α
Cross Section
37-Rb-87
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.1019 MeV
ENDFB8.0 Threshold 8.7265 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
20
10
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
37-Rb-87

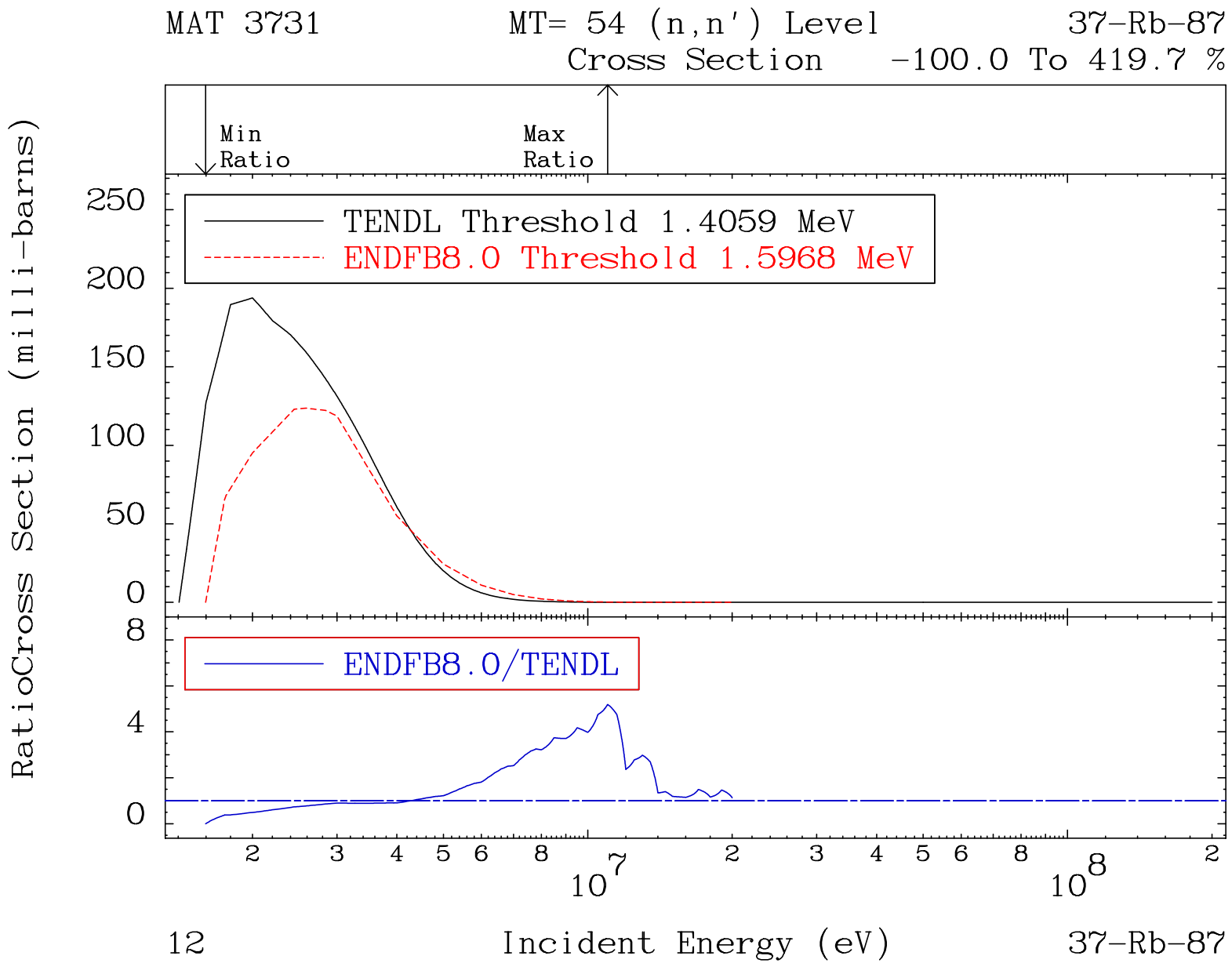

MAT 3731
(n,n') p
Cross Section
37-Rb-87
-100.0 To 105.5 %
Max
Ratio
TENDL Threshold 8.7212 MeV
ENDFB8.0 Threshold 9.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
37-Rb-87

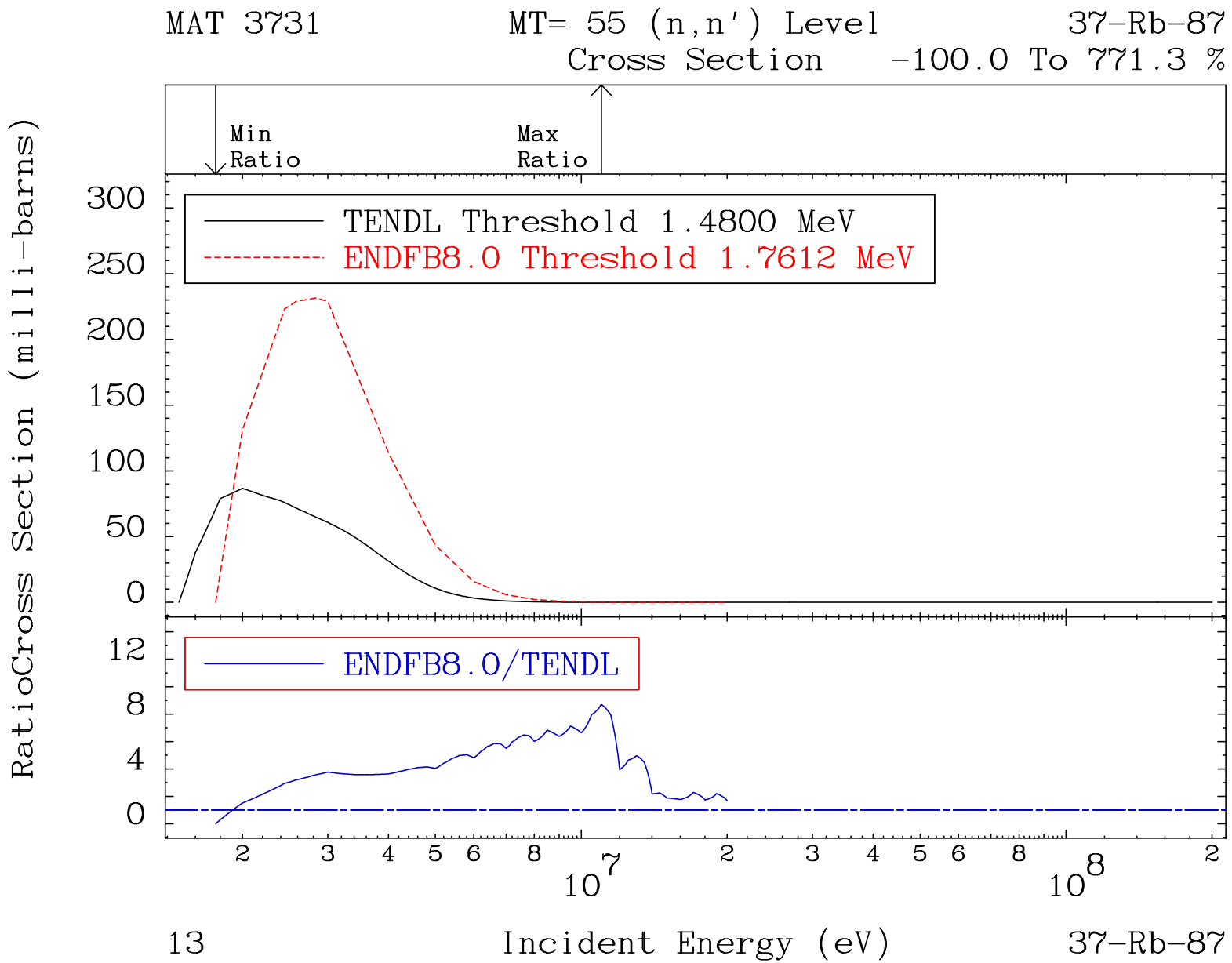

MAT 3731
(n,n') d
Cross Section
37-Rb-87
-100.0 To 1886. %
Max
Ratio
TENDL Threshold 16.442 MeV
ENDFB8.0 Threshold 17.000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
8
37-Rb-87

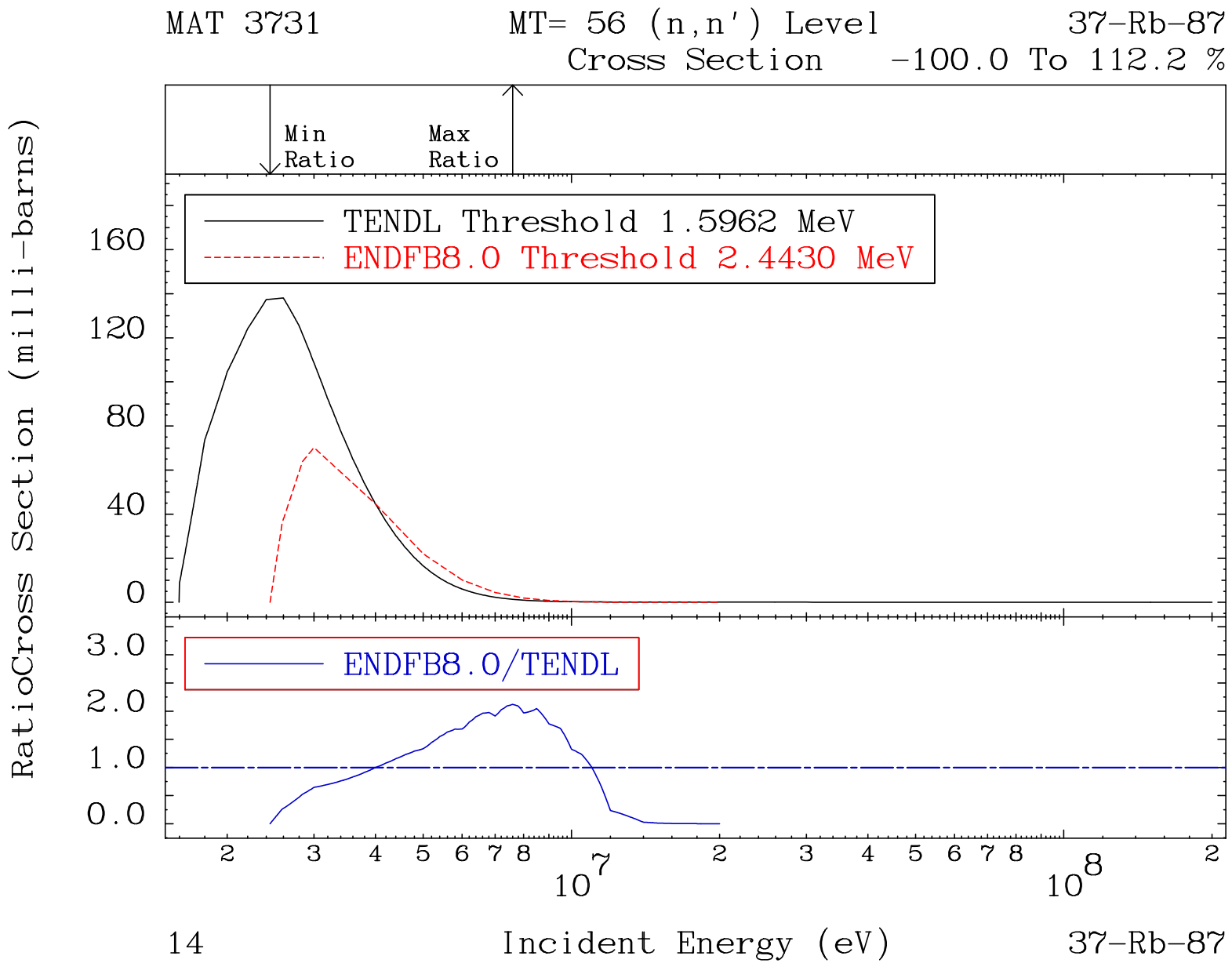

MAT 3731
MT= 51 (n,n') Level
37-Rb-87
Cross Section -100.0 To 245.5 %
Min Ratio
Max Ratio
TENDL Threshold 407.26 keV
ENDFB8.0 Threshold 407.68 keV
Cross Section (barns)
0.8
0.6
0.4
0.2
0.0
ENDFB8.0/TENDL
Ratio
4
2
0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
9
37-Rb-87

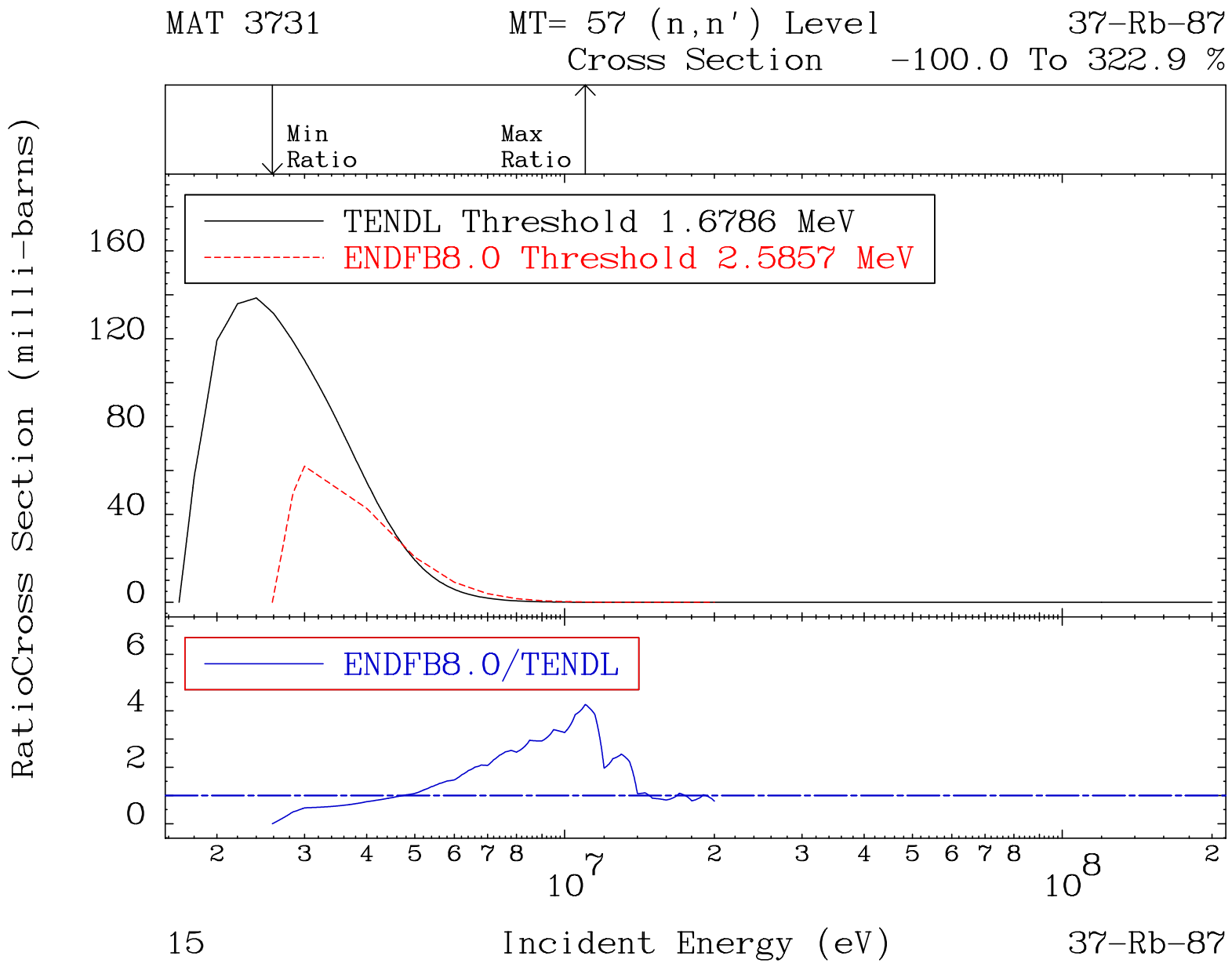

MAT 3731
MT= 52 (n,n') Level
37-Rb-87
Cross Section -100.0 To 261.4 %
Min Ratio
Max Ratio
TENDL Threshold 855.25 keV
ENDFB8.0 Threshold 855.62 keV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
37-Rb-87

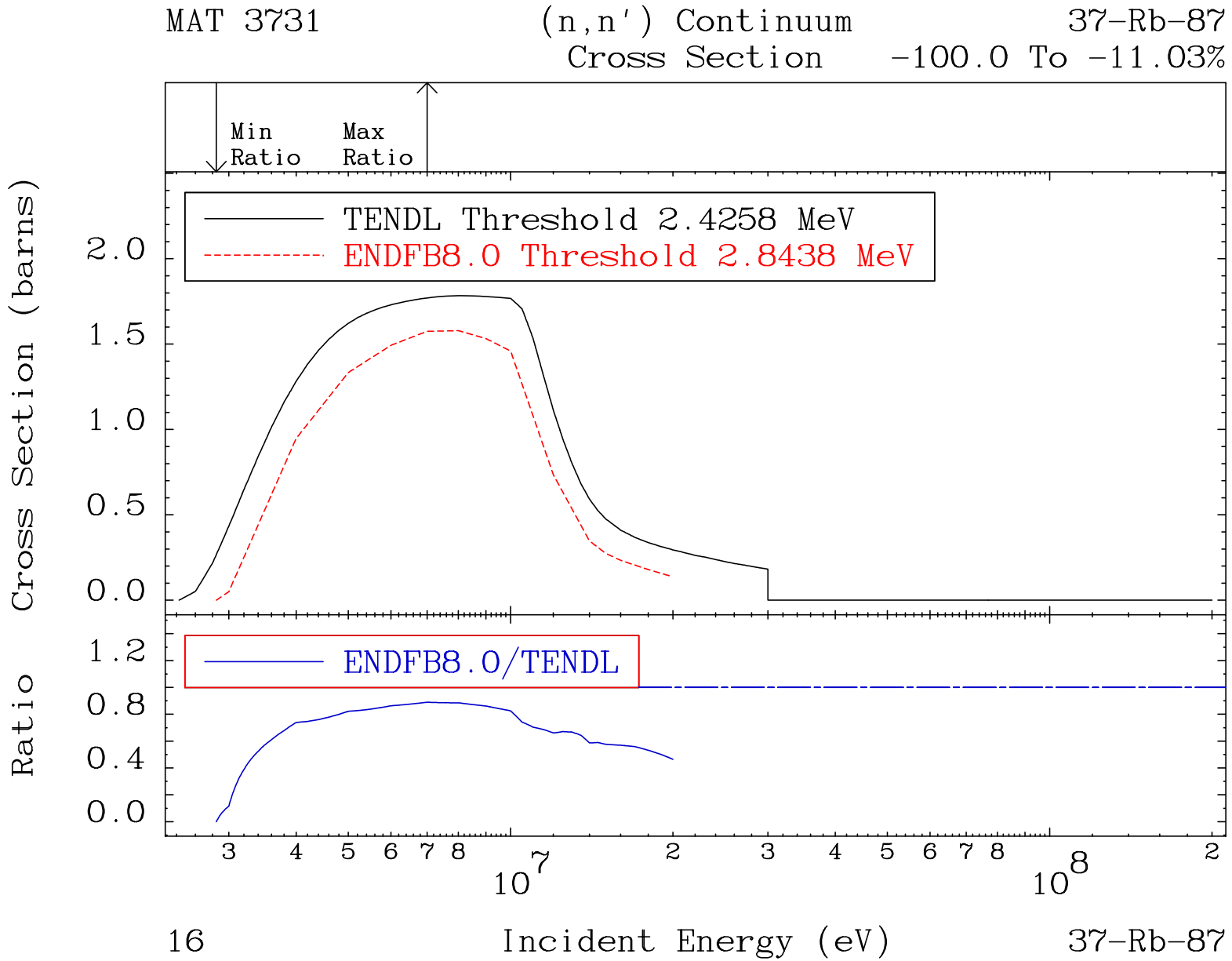

MAT 3731
MT= 53 (n,n') Level
37-Rb-87
Cross Section -100.0 To 139.5 %
Min Ratio
Max Ratio
TENDL Threshold 1.3650 MeV
ENDFB8.0 Threshold 1.4800 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
37-Rb-87

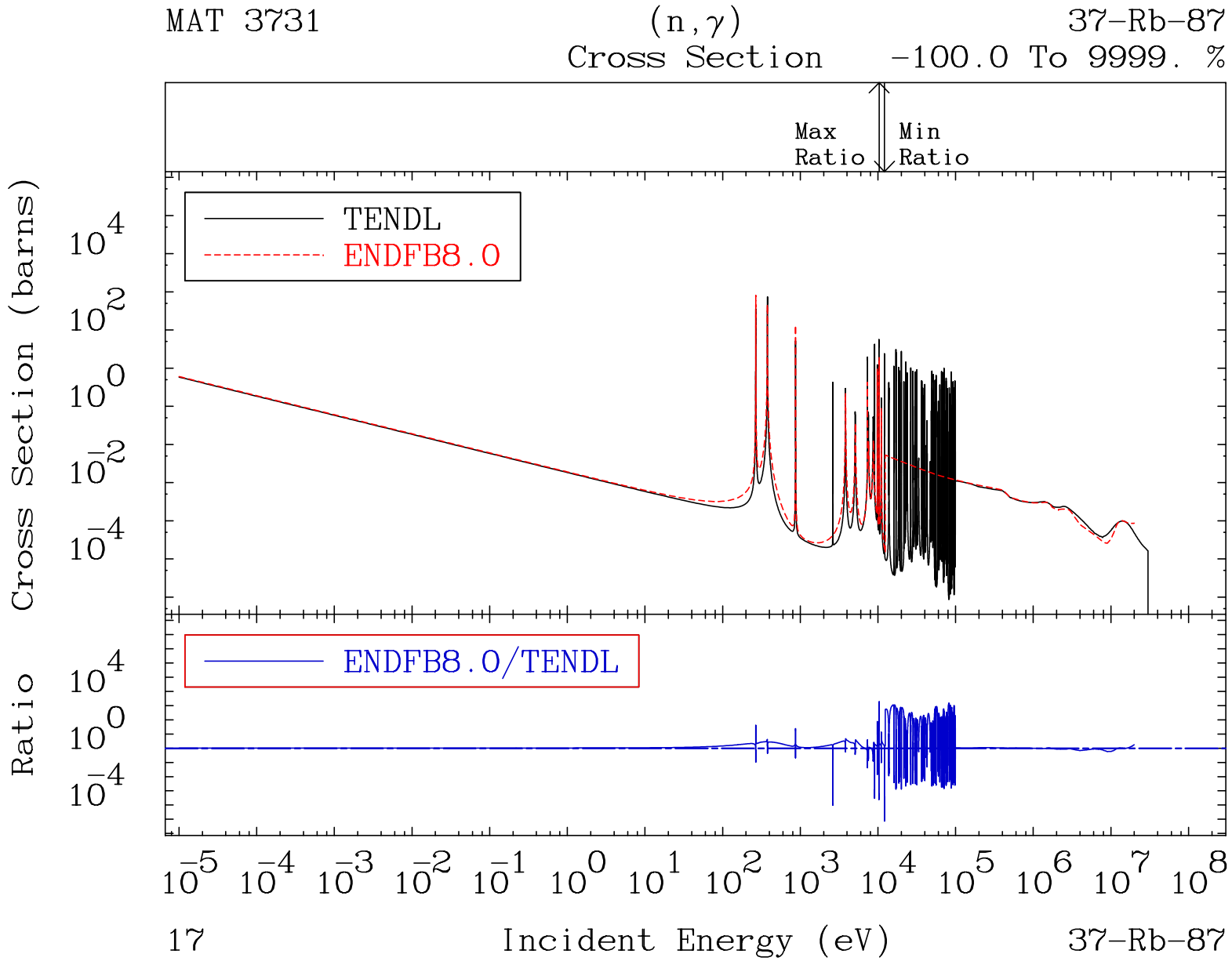

MAT 3731
MT= 54 (n,n') Level
37-Rb-87
Cross Section -100.0 To 419.7 %
Min Ratio
Max Ratio
TENDL Threshold 1.4059 MeV
ENDFB8.0 Threshold 1.5968 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
8
4
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
37-Rb-87

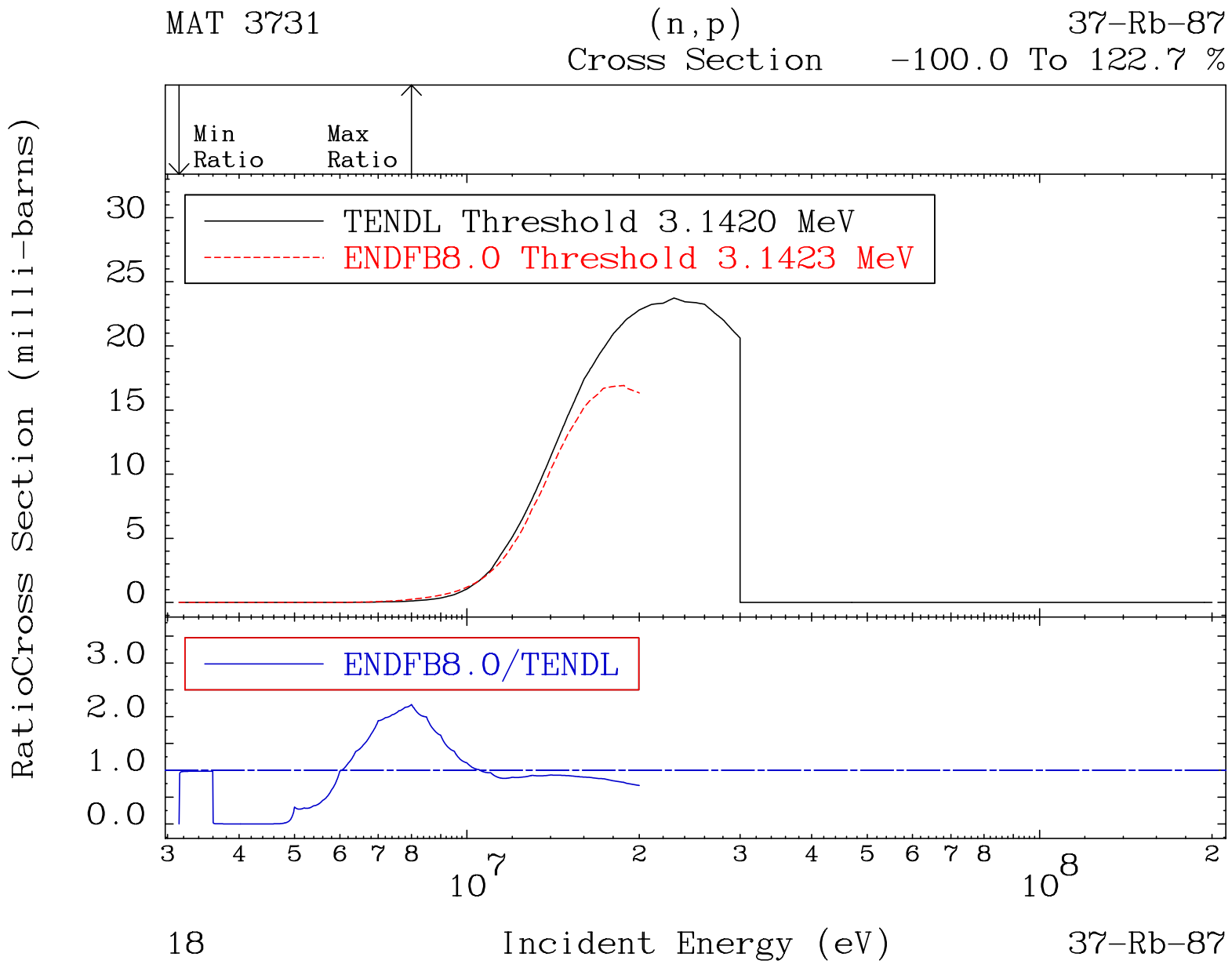

MAT 3731
MT= 55 (n,n') Level
37-Rb-87
Cross Section -100.0 To 771.3 %
Min Ratio
Max Ratio
TENDL Threshold 1.4800 MeV
ENDFB8.0 Threshold 1.7612 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
12
8
4
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
37-Rb-87

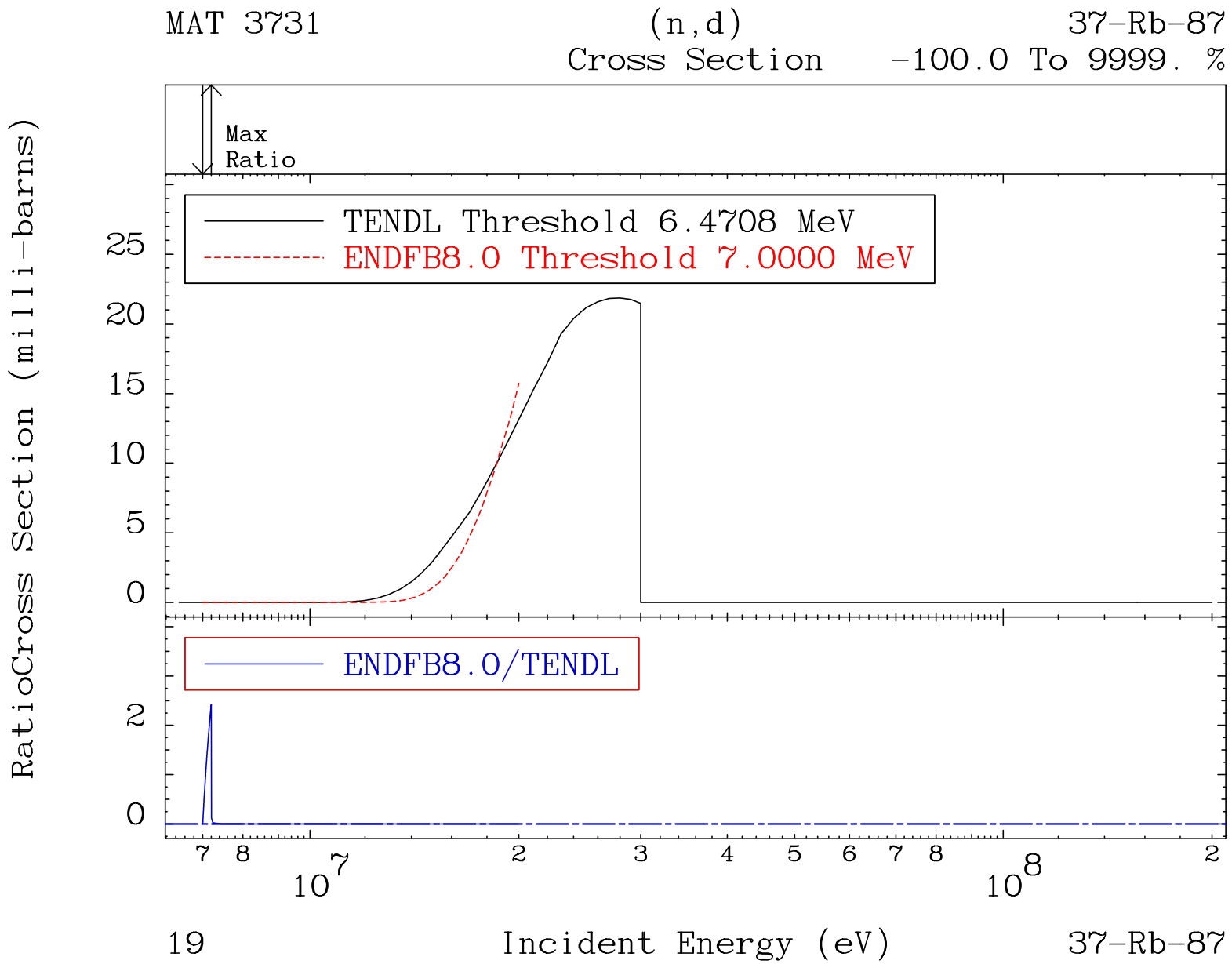

MAT 3731
MT= 56 (n,n') Level
37-Rb-87
Cross Section -100.0 To 112.2 %
Min Ratio
Max Ratio
TENDL Threshold 1.5962 MeV
ENDFB8.0 Threshold 2.4430 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
37-Rb-87

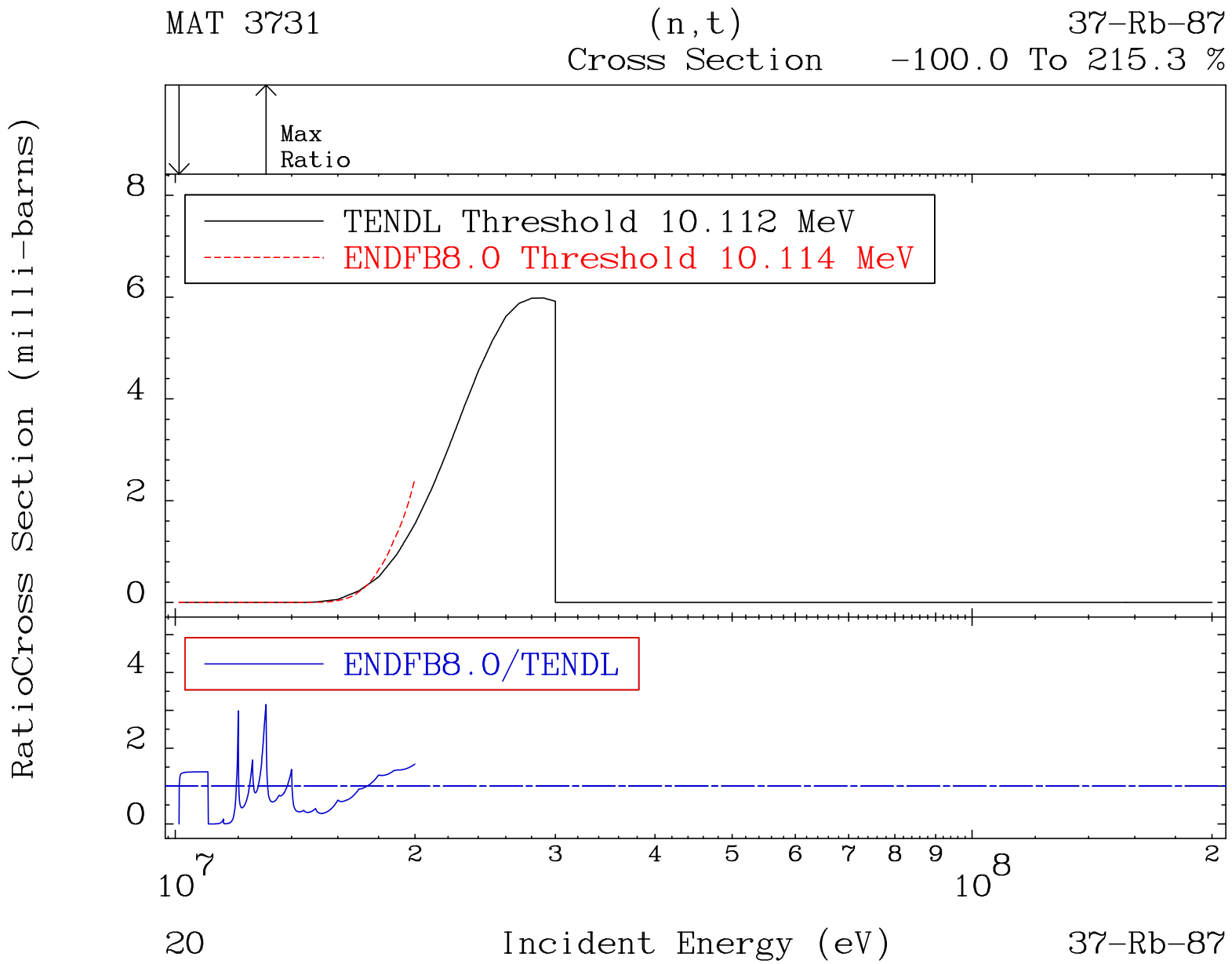

MAT 3731
MT= 57 (n,n') Level
37-Rb-87
Cross Section -100.0 To 322.9 %
Min Ratio
Max Ratio
TENDL Threshold 1.6786 MeV
ENDFB8.0 Threshold 2.5857 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
6
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
37-Rb-87

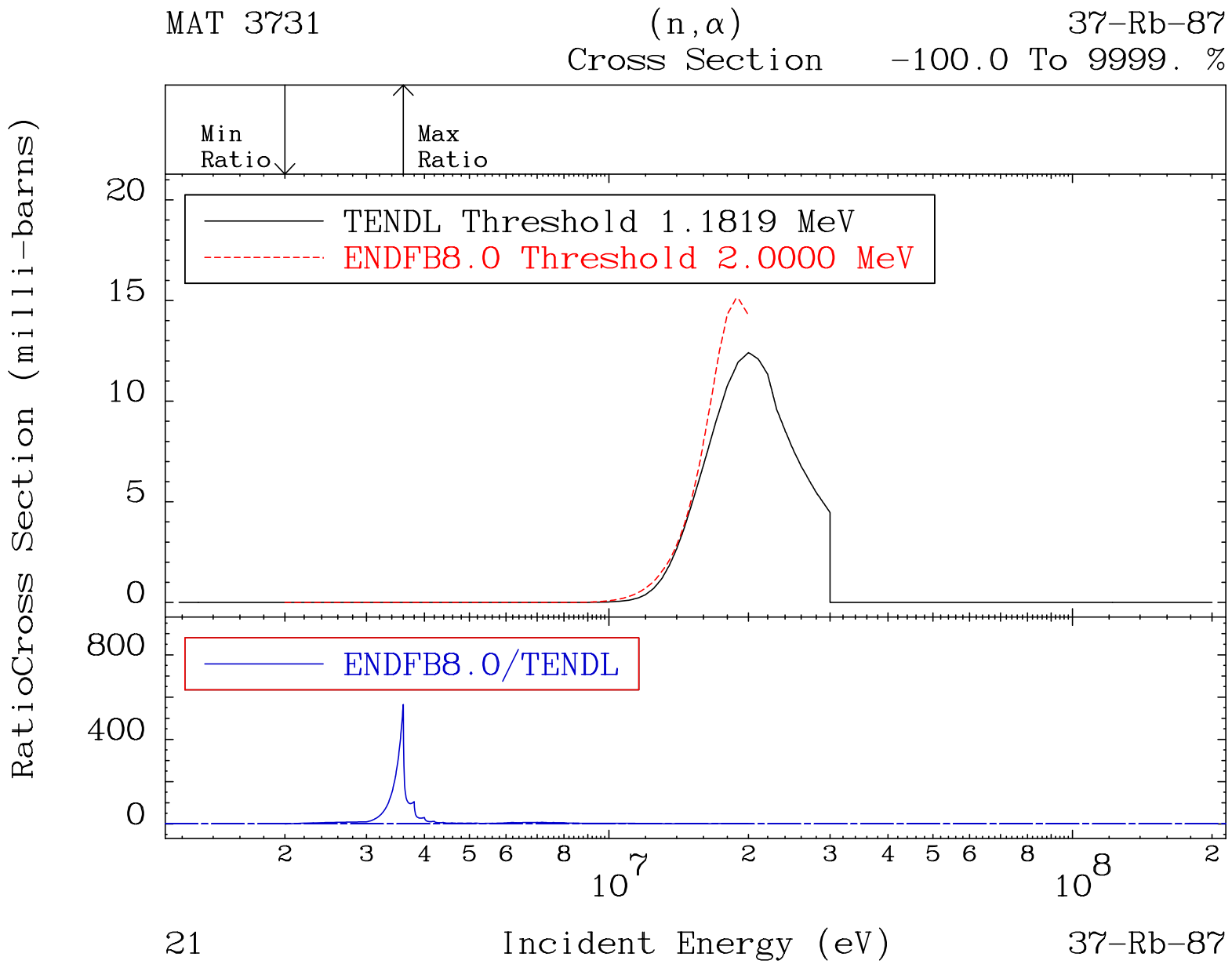

MAT 3731
(n,n') Continuum
Cross Section
37-Rb-87
-100.0 To -11.03%
Min Ratio
Max Ratio
TENDL Threshold 2.4258 MeV
ENDFB8.0 Threshold 2.8438 MeV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.2
0.8
0.4
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
37-Rb-87

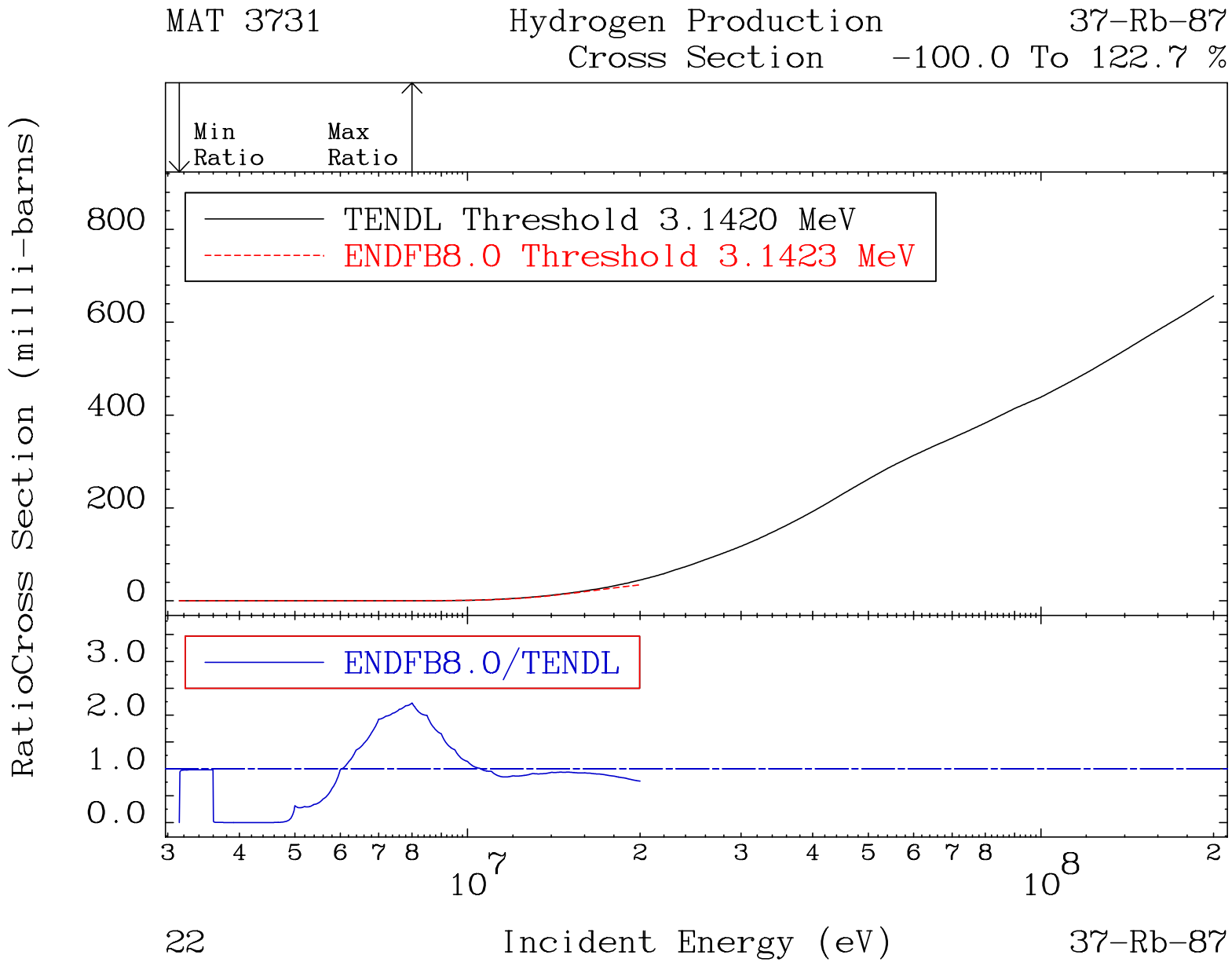

MAT 3731
(n,γ)
Cross Section
37-Rb-87
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
17
37-Rb-87

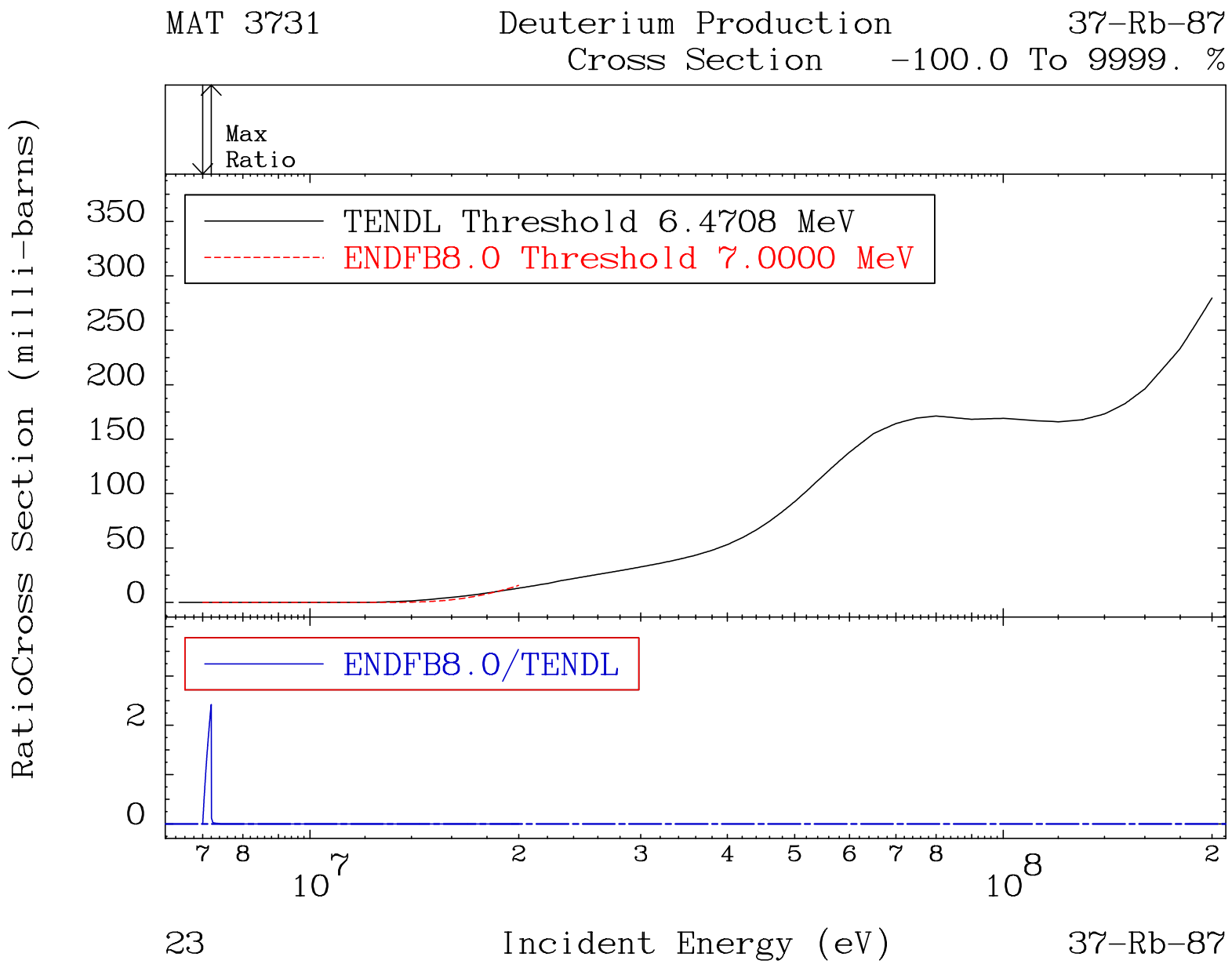

MAT 3731
(n,p)
37-Rb-87
Cross Section
-100.0 To 122.7 %
Min Ratio
Max Ratio
TENDL Threshold 3.1420 MeV
ENDFB8.0 Threshold 3.1423 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
37-Rb-87

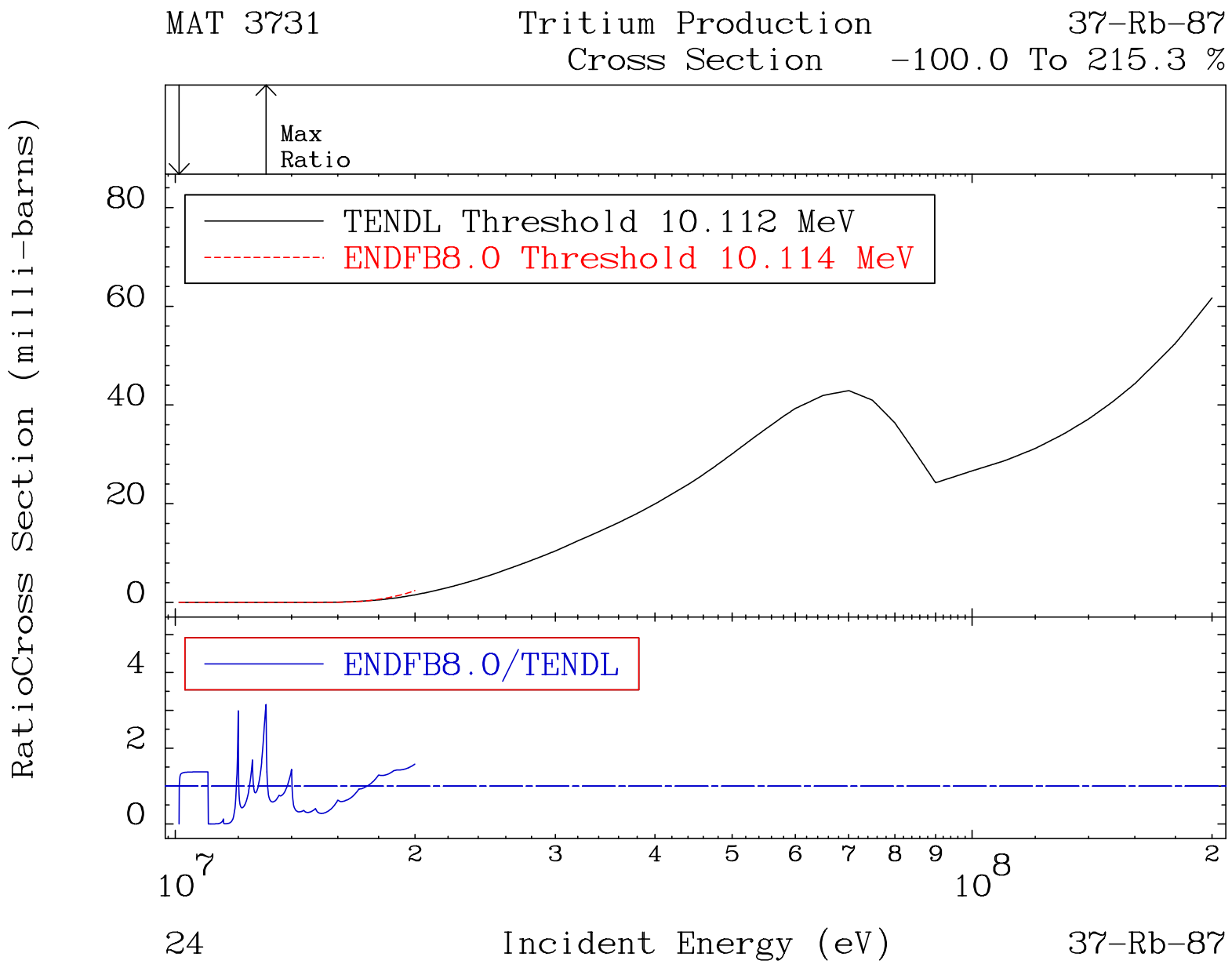

MAT 3731
(n,d)
37-Rb-87
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.4708 MeV
ENDFB8.0 Threshold 7.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
2
0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
37-Rb-87

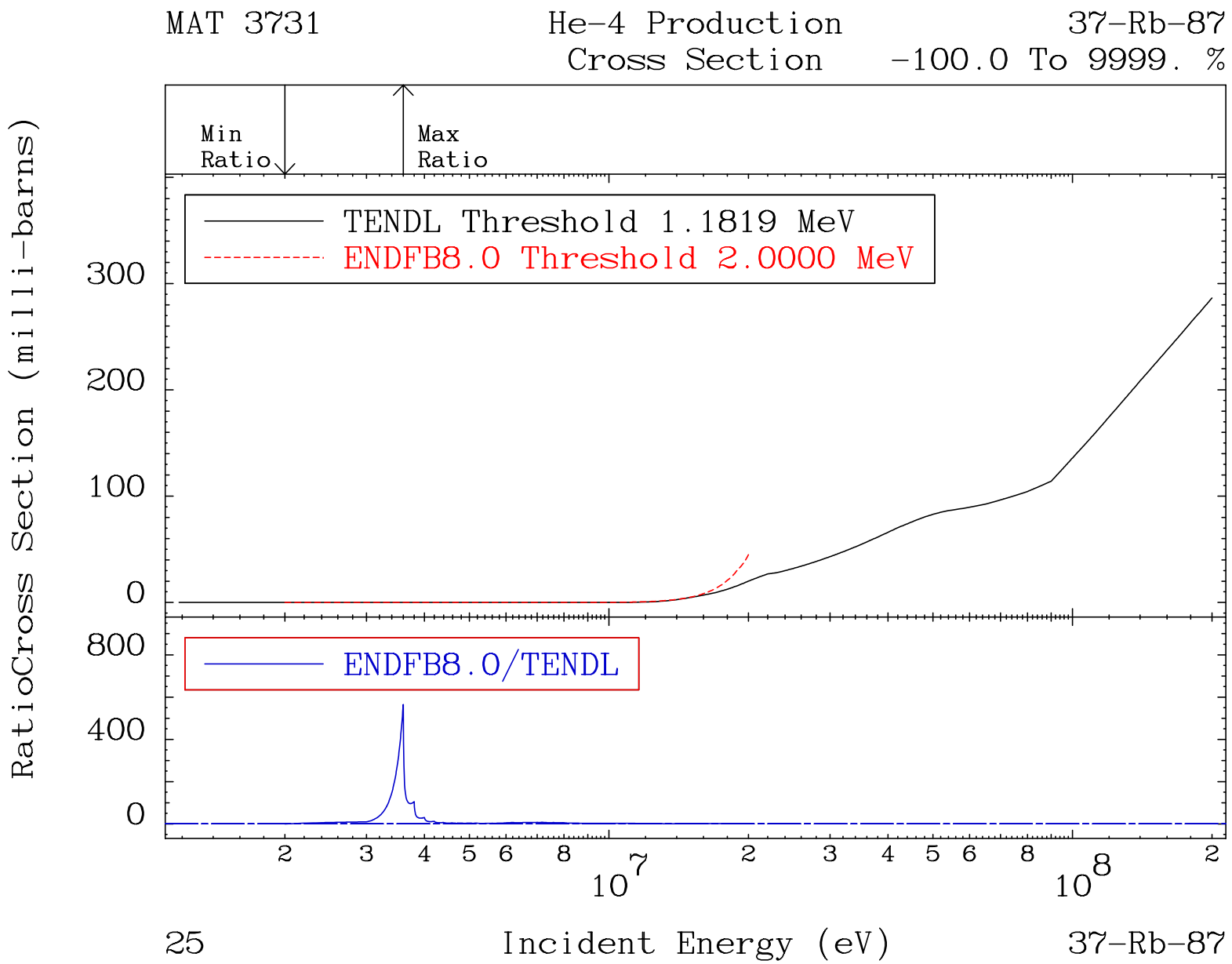

MAT 3731
(n,t)
Cross Section
37-Rb-87
-100.0 To 215.3 %
Max
Ratio
TENDL Threshold 10.112 MeV
ENDFB8.0 Threshold 10.114 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
37-Rb-87
20

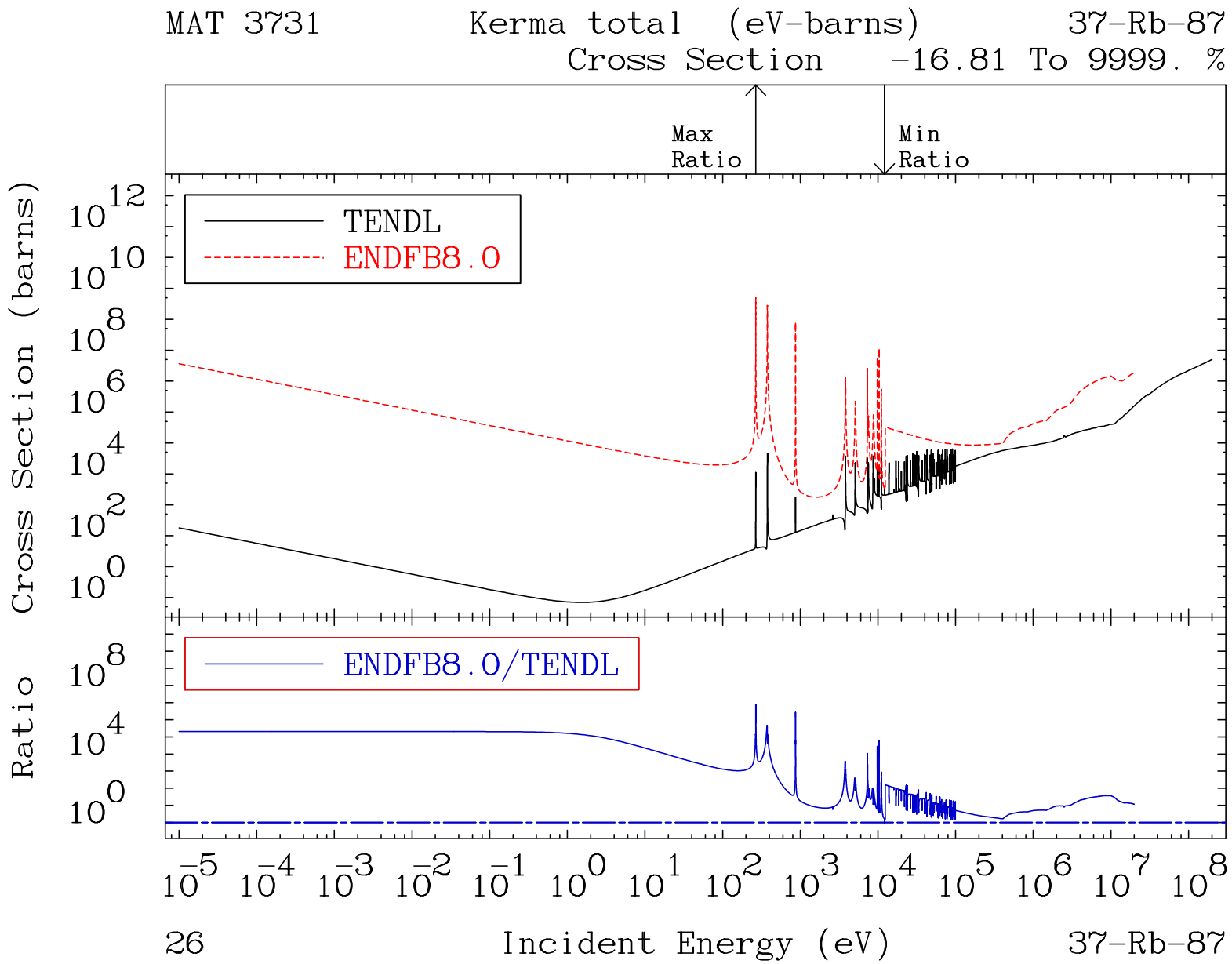

MAT 3731
(n,α)
37-Rb-87
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.1819 MeV
ENDFB8.0 Threshold 2.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
800
400
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
21
Incident Energy (eV)
37-Rb-87

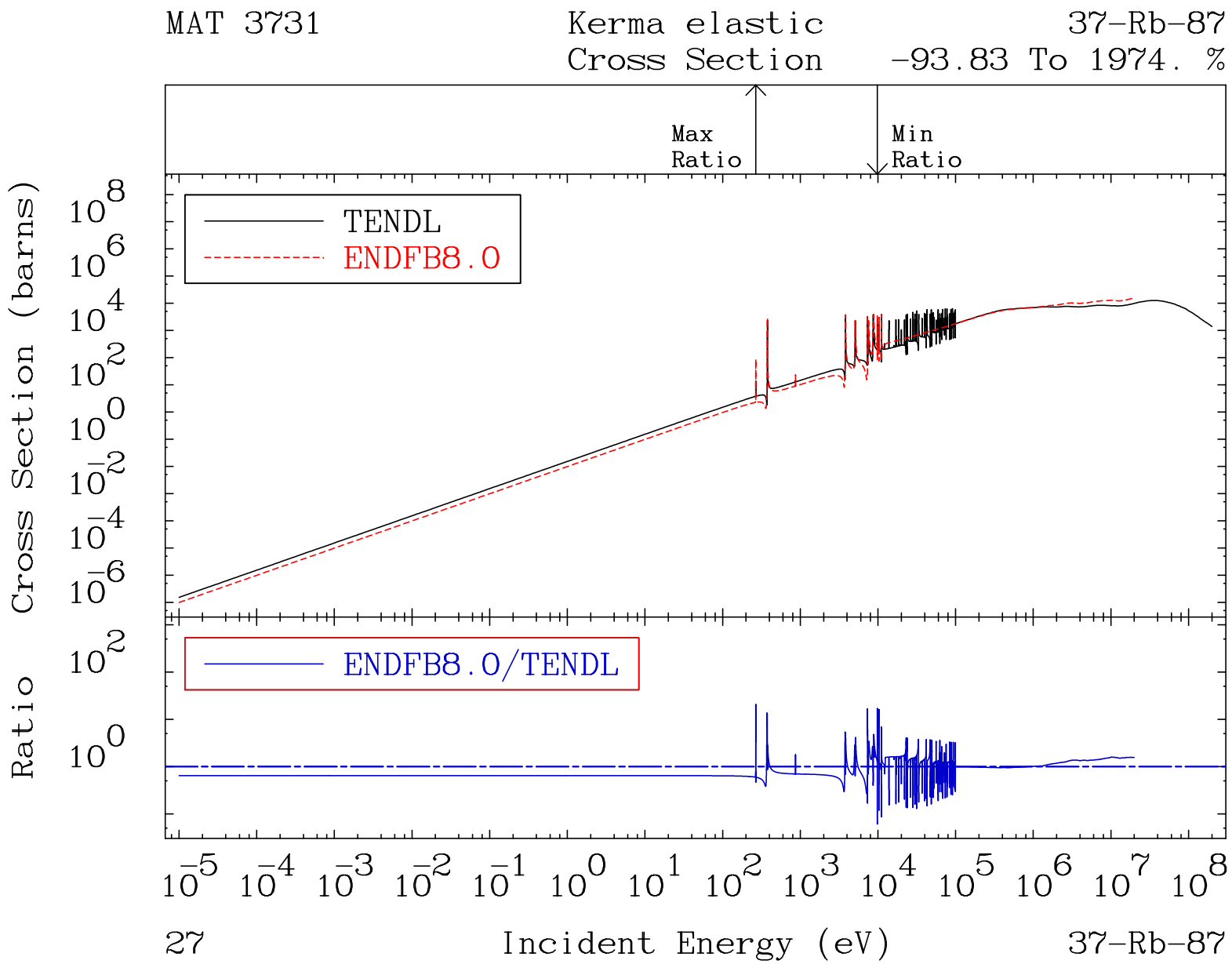

MAT 3731
Hydrogen Production
37-Rb-87
Cross Section -100.0 To 122.7 %
Min Ratio
Max Ratio
TENDL Threshold 3.1420 MeV
ENDFB8.0 Threshold 3.1423 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
22
Incident Energy (eV)
37-Rb-87

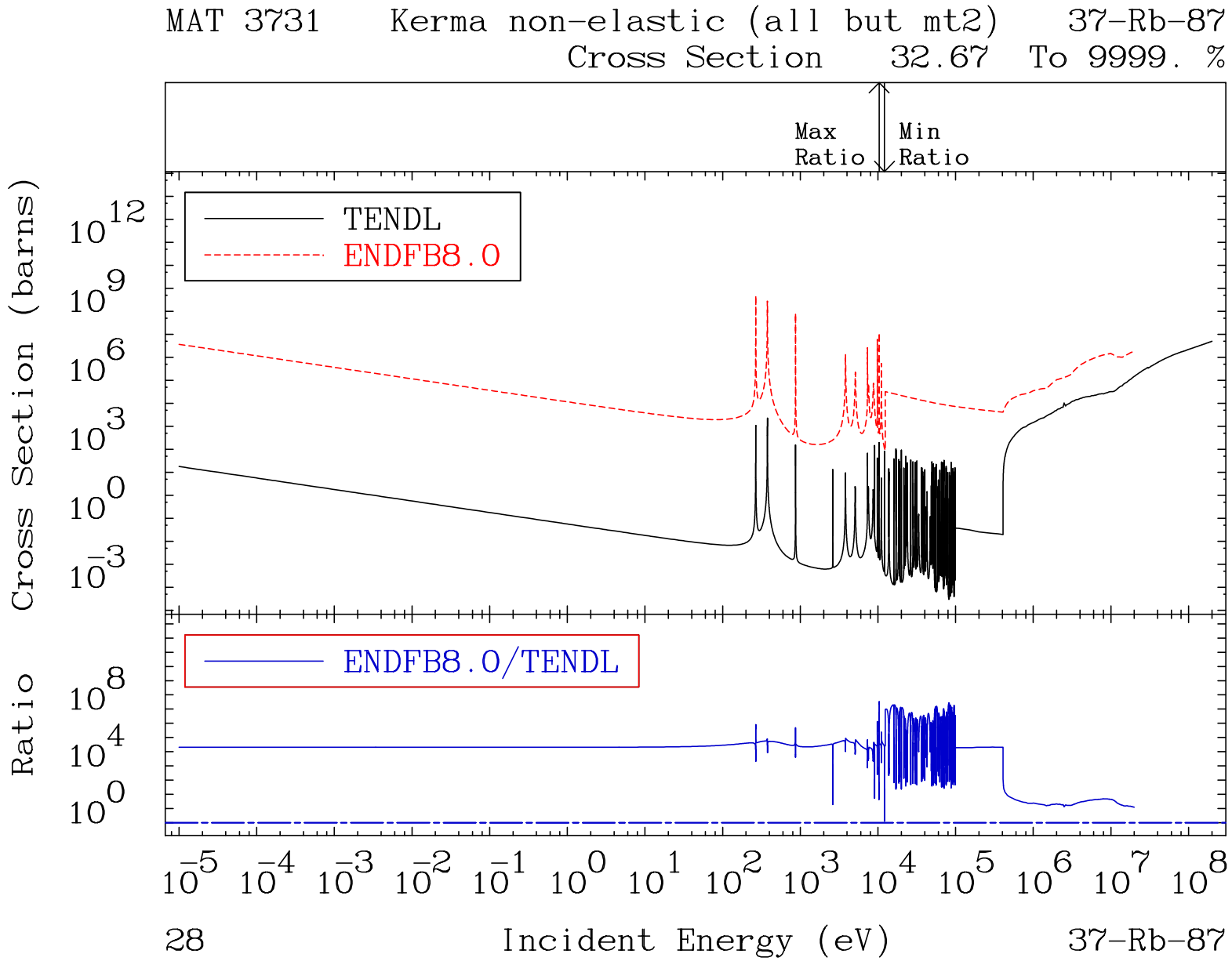

MAT 3731
Deuterium Production
37-Rb-87
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.4708 MeV
ENDFB8.0 Threshold 7.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
23
Incident Energy (eV)
37-Rb-87

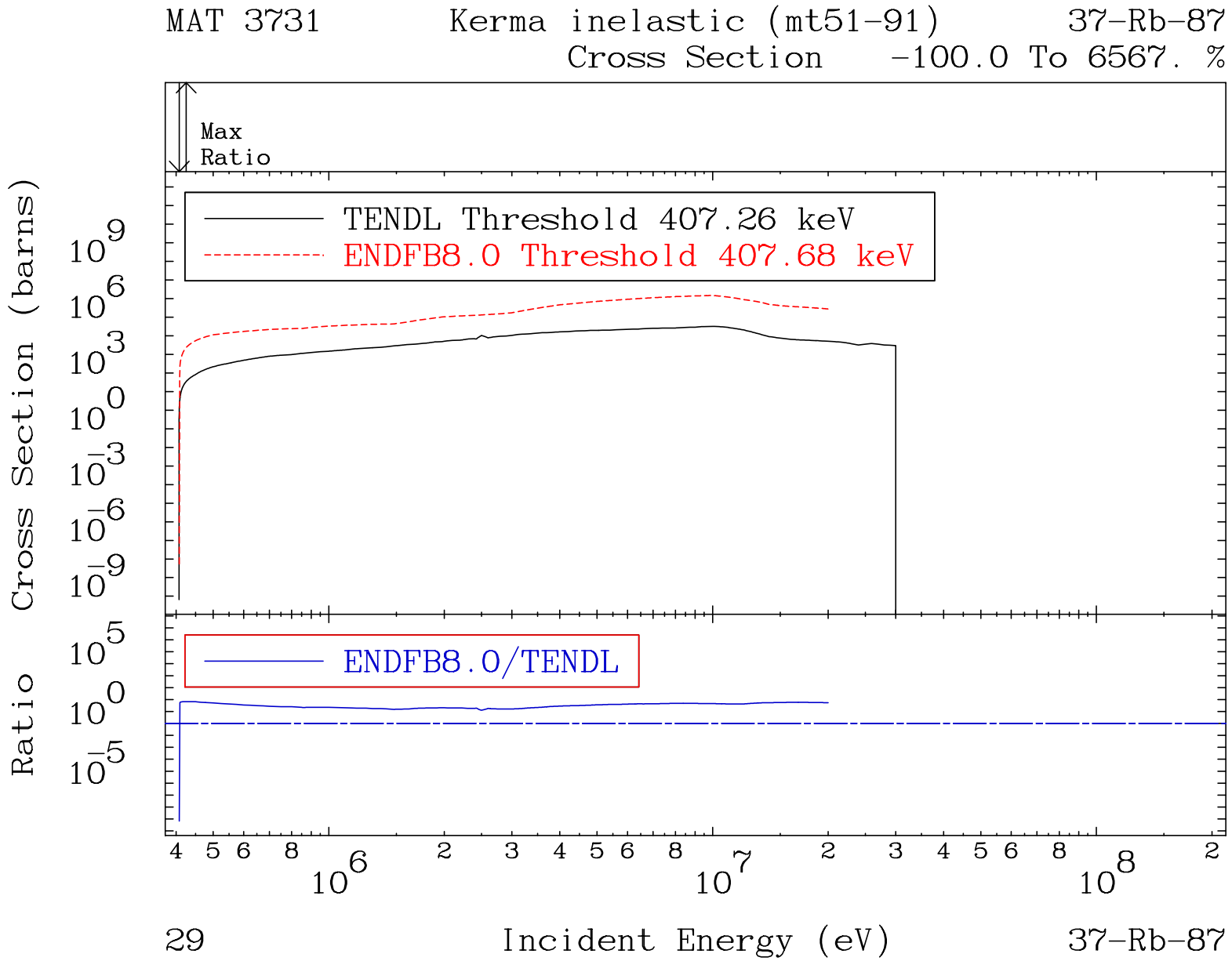

MAT 3731
Tritium Production
37-Rb-87
Cross Section
-100.0 To 215.3 %
Max
Ratio
TENDL Threshold 10.112 MeV
ENDFB8.0 Threshold 10.114 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
4
2
0
10^7
2
3
4
5
6
7
8
9
10^8
2
24
Incident Energy (eV)
37-Rb-87

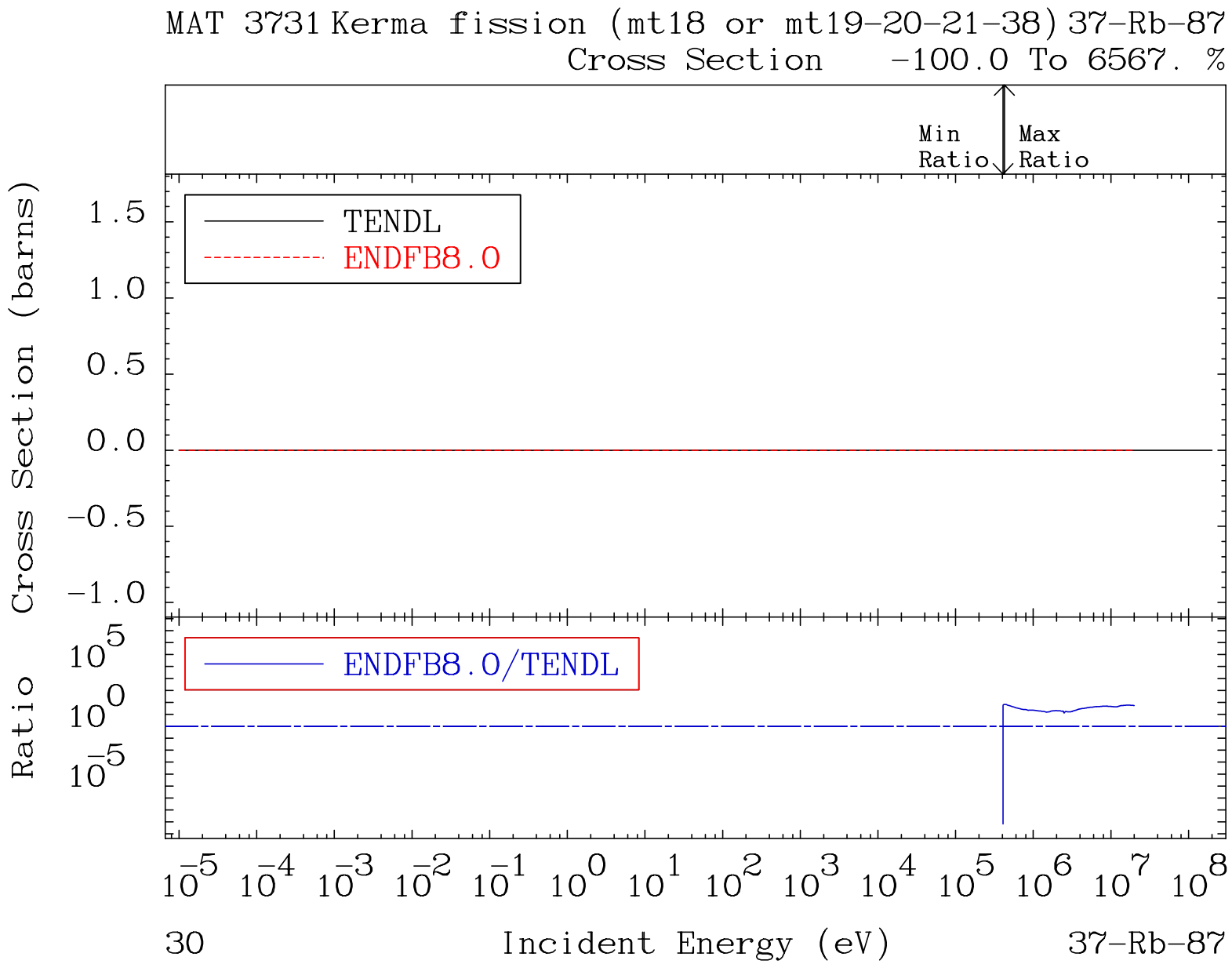

MAT 3731
He-4 Production
Cross Section
37-Rb-87
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.1819 MeV
ENDFB8.0 Threshold 2.0000 MeV
ENDFB8.0/TENDL
RatioCross Section (milli-barns)
300
200
100
0
800
400
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
25
Incident Energy (eV)
37-Rb-87

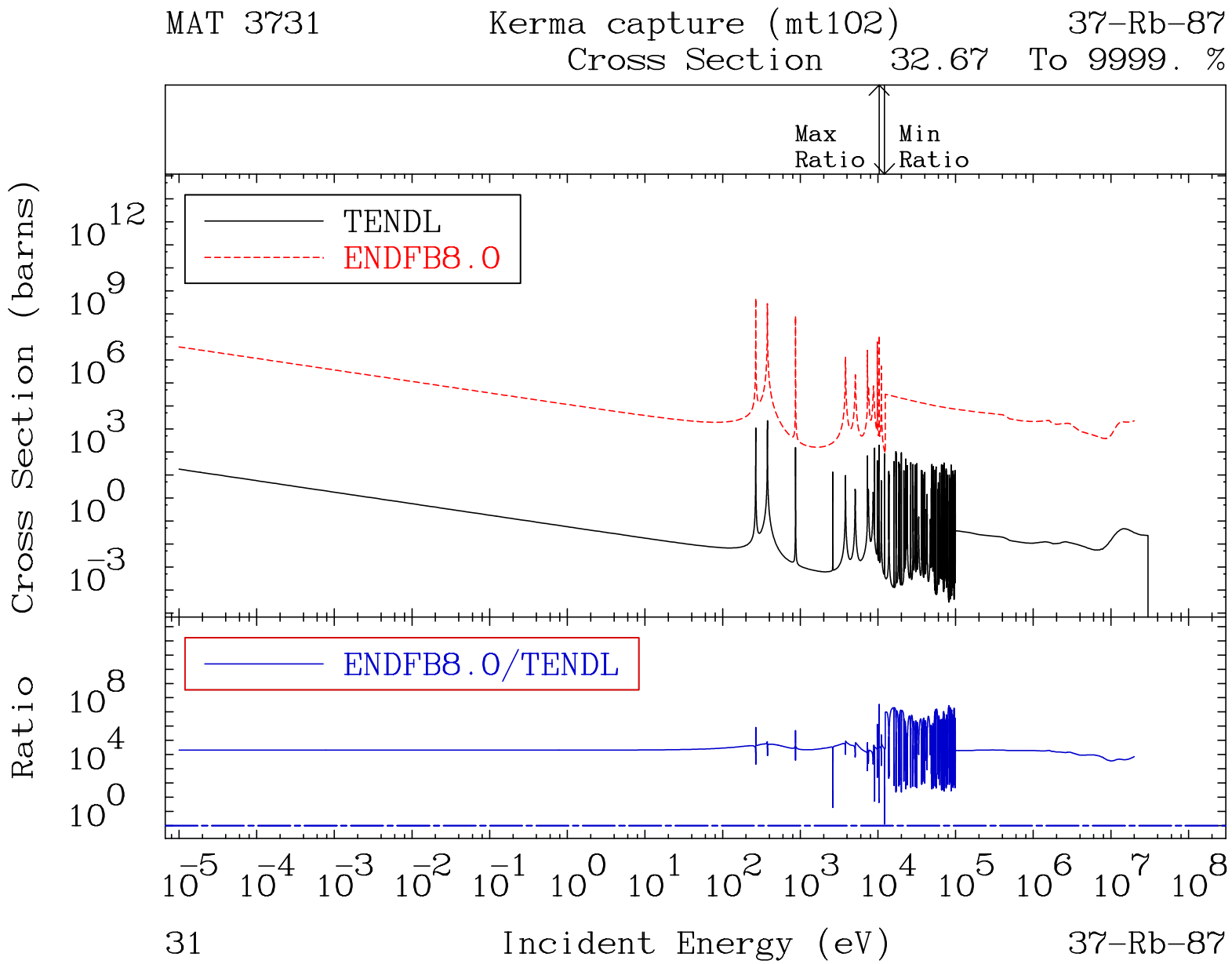

MAT 3731
Kerma total (eV-barns)
37-Rb-87
Cross Section -16.81 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
26
37-Rb-87

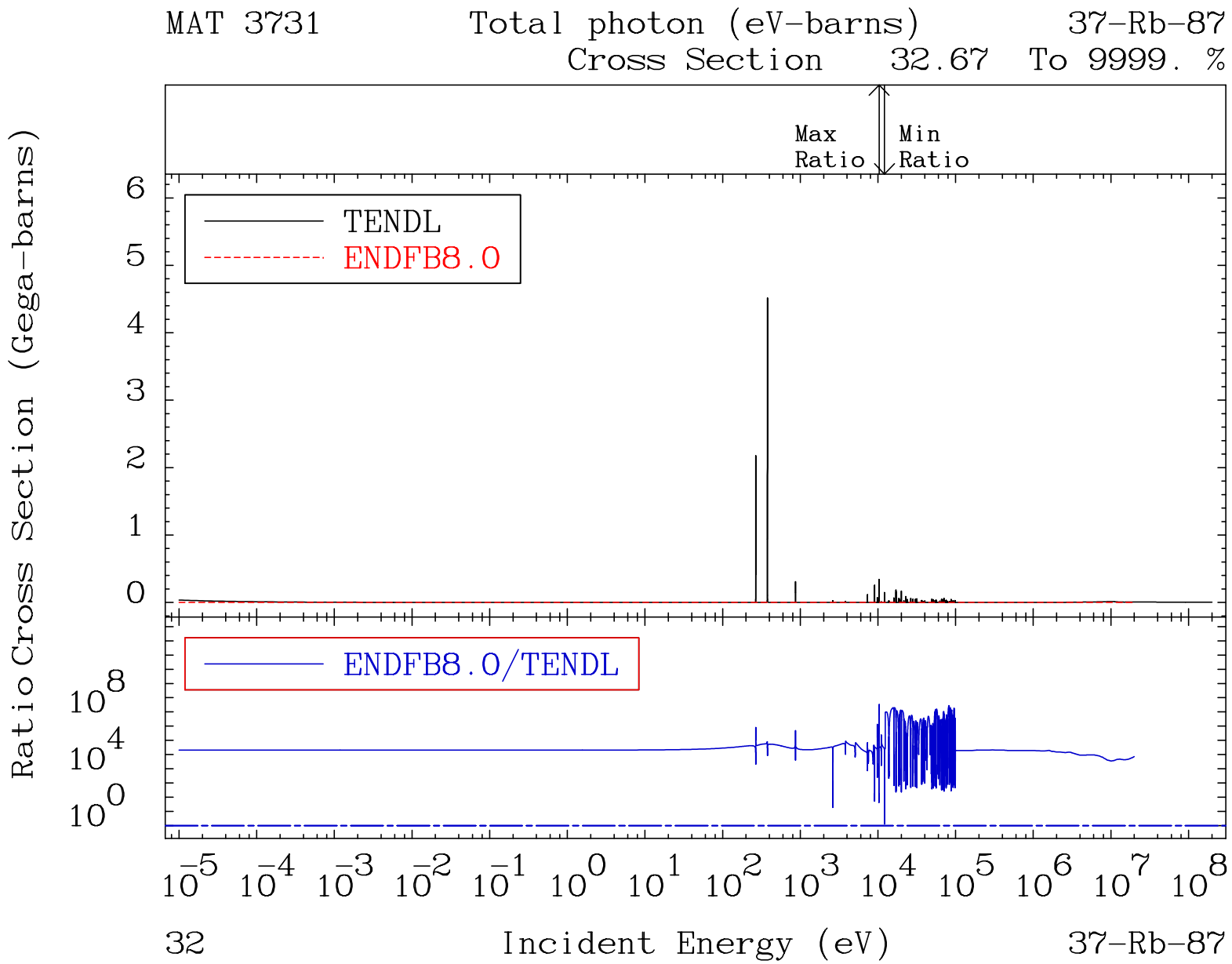

MAT 3731
Kerma elastic
Cross Section
37-Rb-87
-93.83 To 1974. %
Max
Ratio
Min
Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
27
37-Rb-87

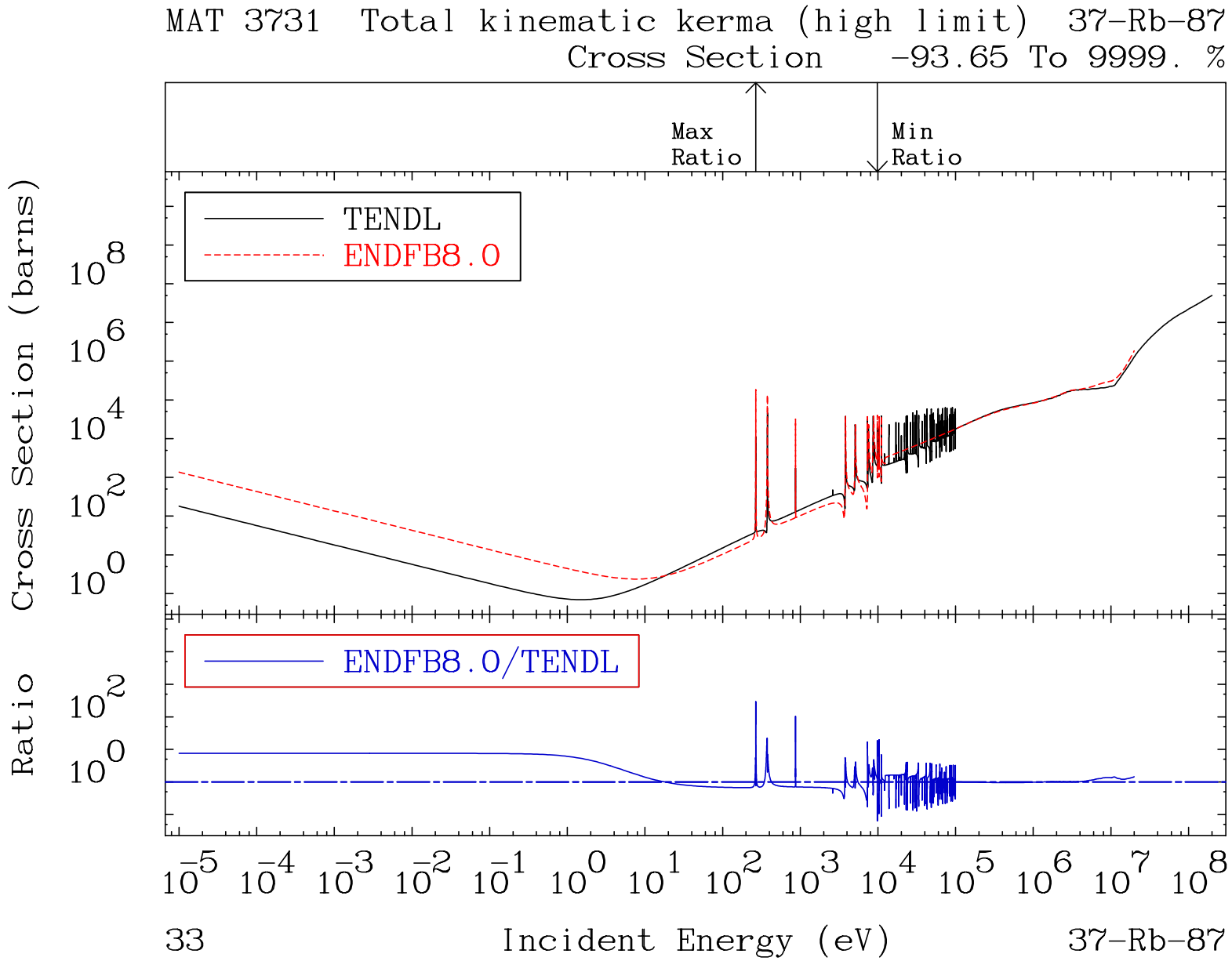

MAT 3731 Kerma non-elastic (all but mt2) 37-Rb-87
Cross Section 32.67 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
28
37-Rb-87

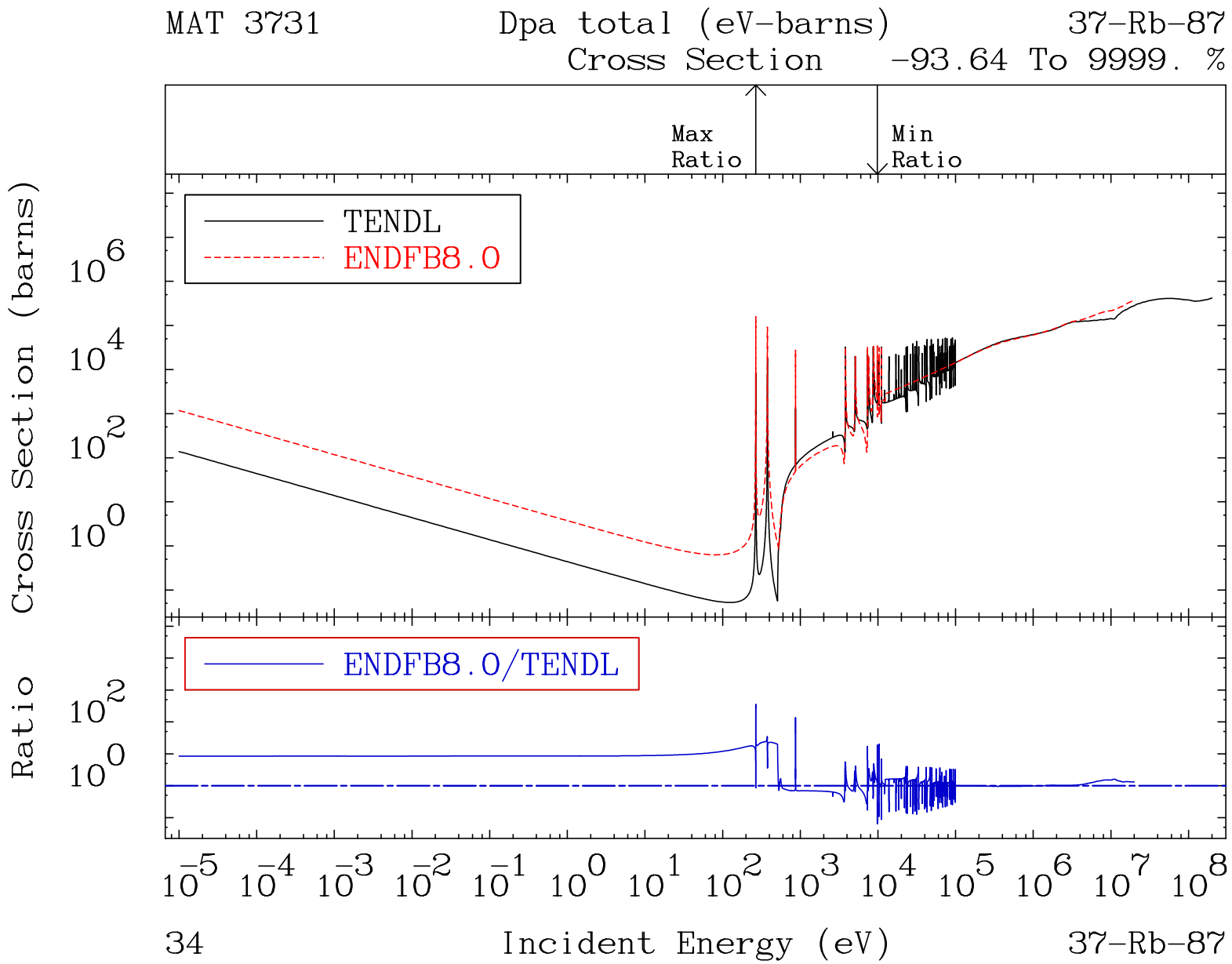

MAT 3731
Kerma inelastic (mt51-91)
37-Rb-87
Cross Section -100.0 To 6567. %
Max
Ratio
TENDL Threshold 407.26 keV
ENDFB8.0 Threshold 407.68 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
29
37-Rb-87

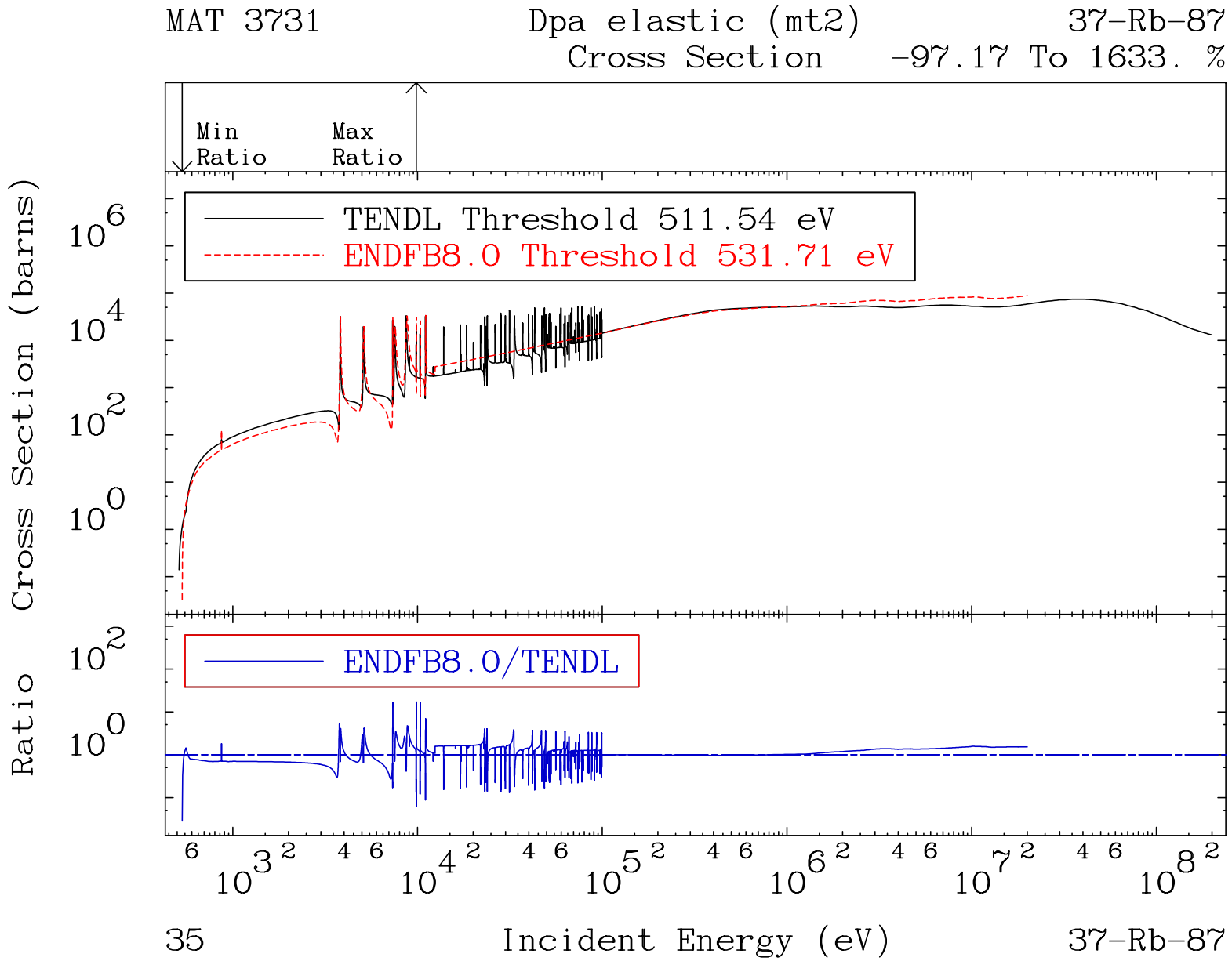

MAT 3731 Kerma fission (mt18 or mt19-20-21-38) 37-Rb-87
Cross Section -100.0 To 6567. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^5
10^0
10^-5
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
30
Incident Energy (eV)
37-Rb-87

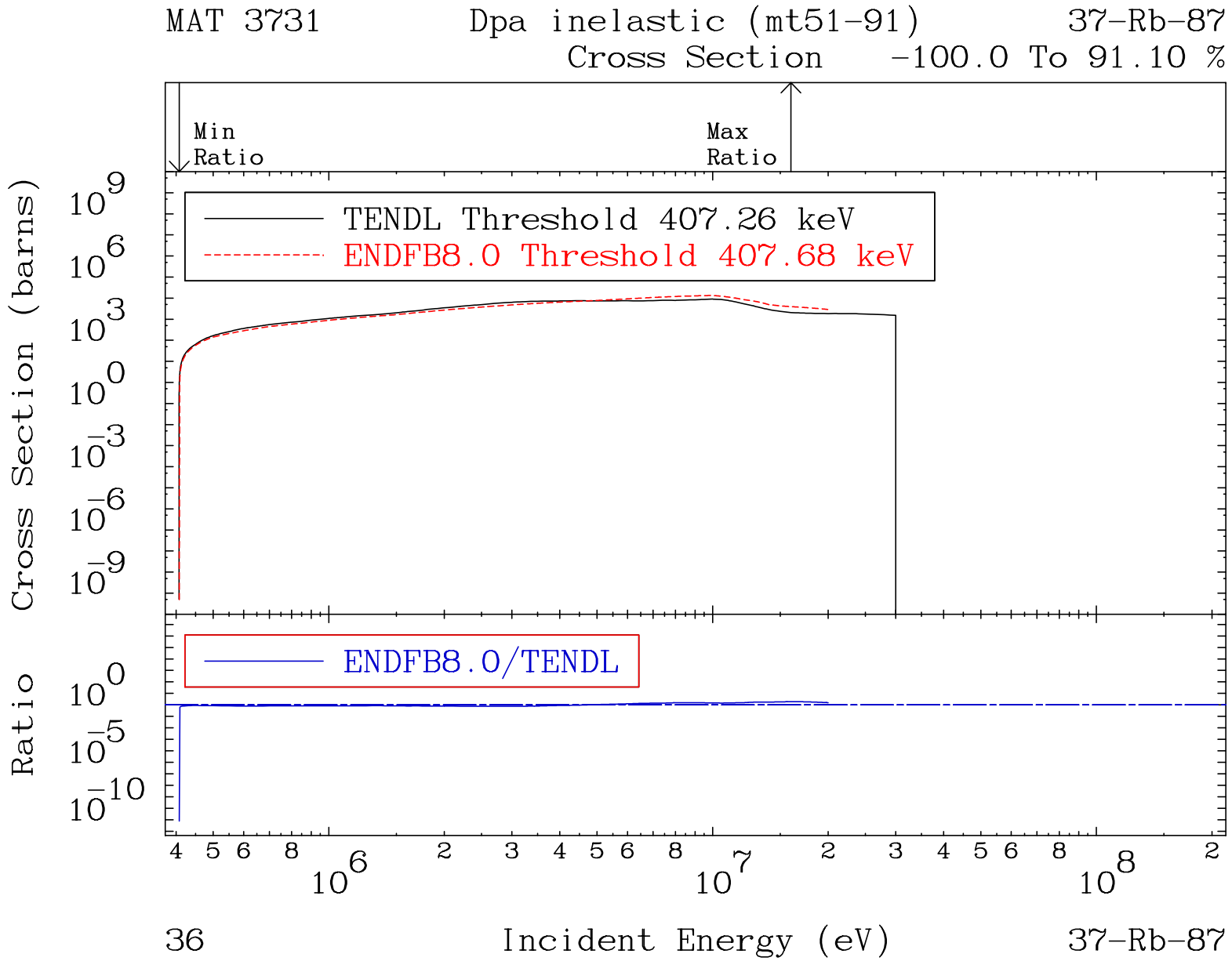

MAT 3731
Kerma capture (mt102)
37-Rb-87
Cross Section 32.67 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
31
37-Rb-87

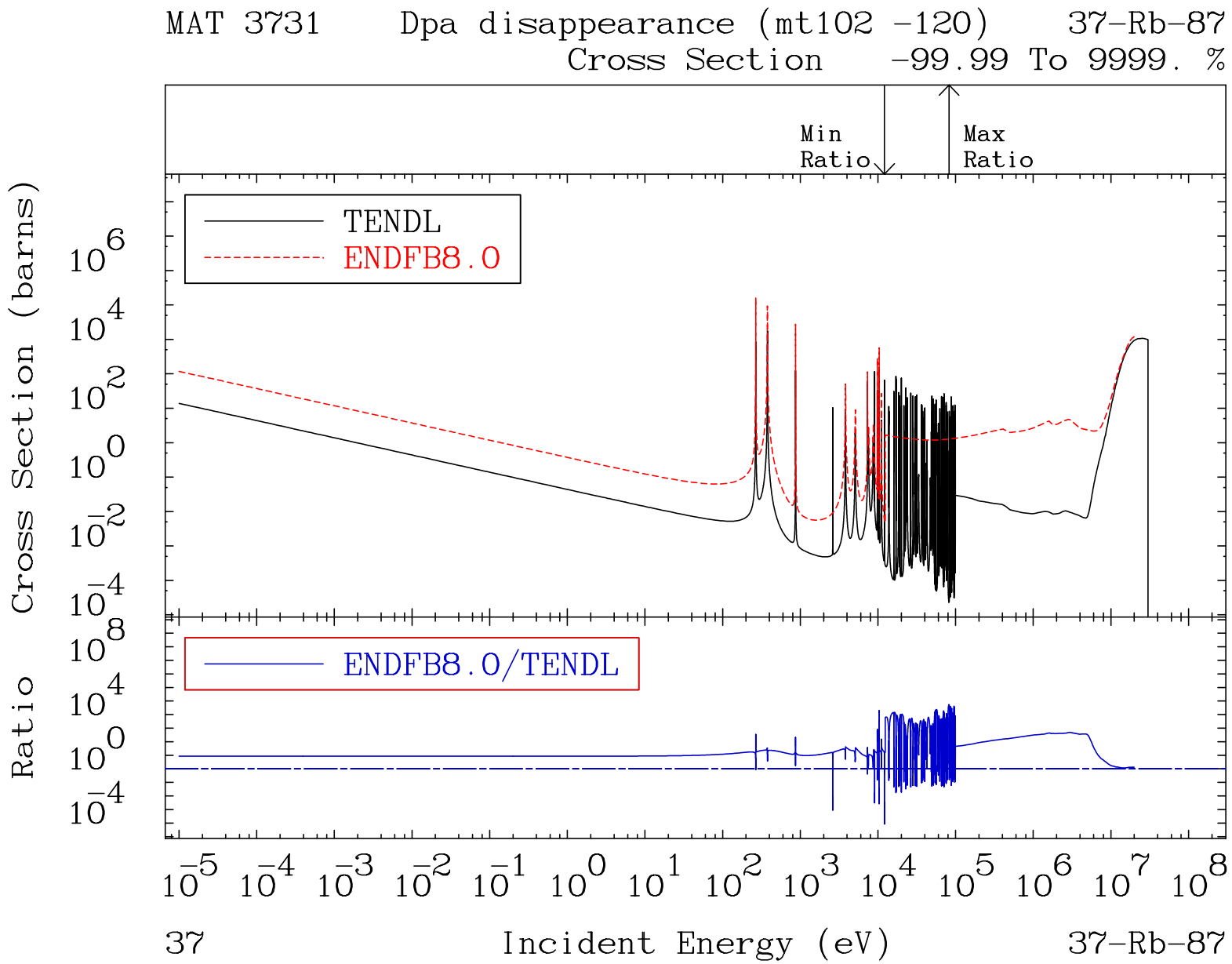

MAT 3731
Total photon (eV-barns)
37-Rb-87
Cross Section 32.67 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Ratio Cross Section (Giga-barns)
Incident Energy (eV)
32
37-Rb-87


MAT 3731 Total kinematic kerma (high limit) 37-Rb-87
Cross Section -93.65 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
33
37-Rb-87


MAT 3731
Dpa total (eV-barns)
37-Rb-87
Cross Section -93.64 To 9999. %
Max Ratio
Min Ratio
TENDL
ENDFB8.0
Cross Section (barns)
ENDFB8.0/TENDL
Ratio
Incident Energy (eV)
34
37-Rb-87


MAT 3731
Dpa elastic (mt2)
Cross Section
37-Rb-87
-97.17 To 1633. %
Min Ratio
Max Ratio
TENDL Threshold 511.54 eV
ENDFB8.0 Threshold 531.71 eV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
37-Rb-87


MAT 3731
Dpa inelastic (mt51-91)
37-Rb-87
Cross Section -100.0 To 91.10 %
Min Ratio
Max Ratio
TENDL Threshold 407.26 keV
ENDFB8.0 Threshold 407.68 keV
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
36
37-Rb-87


MAT 3731 Dpa disappearance (mt102 -120) 37-Rb-87
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
ENDFB8.0
ENDFB8.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
37-Rb-87