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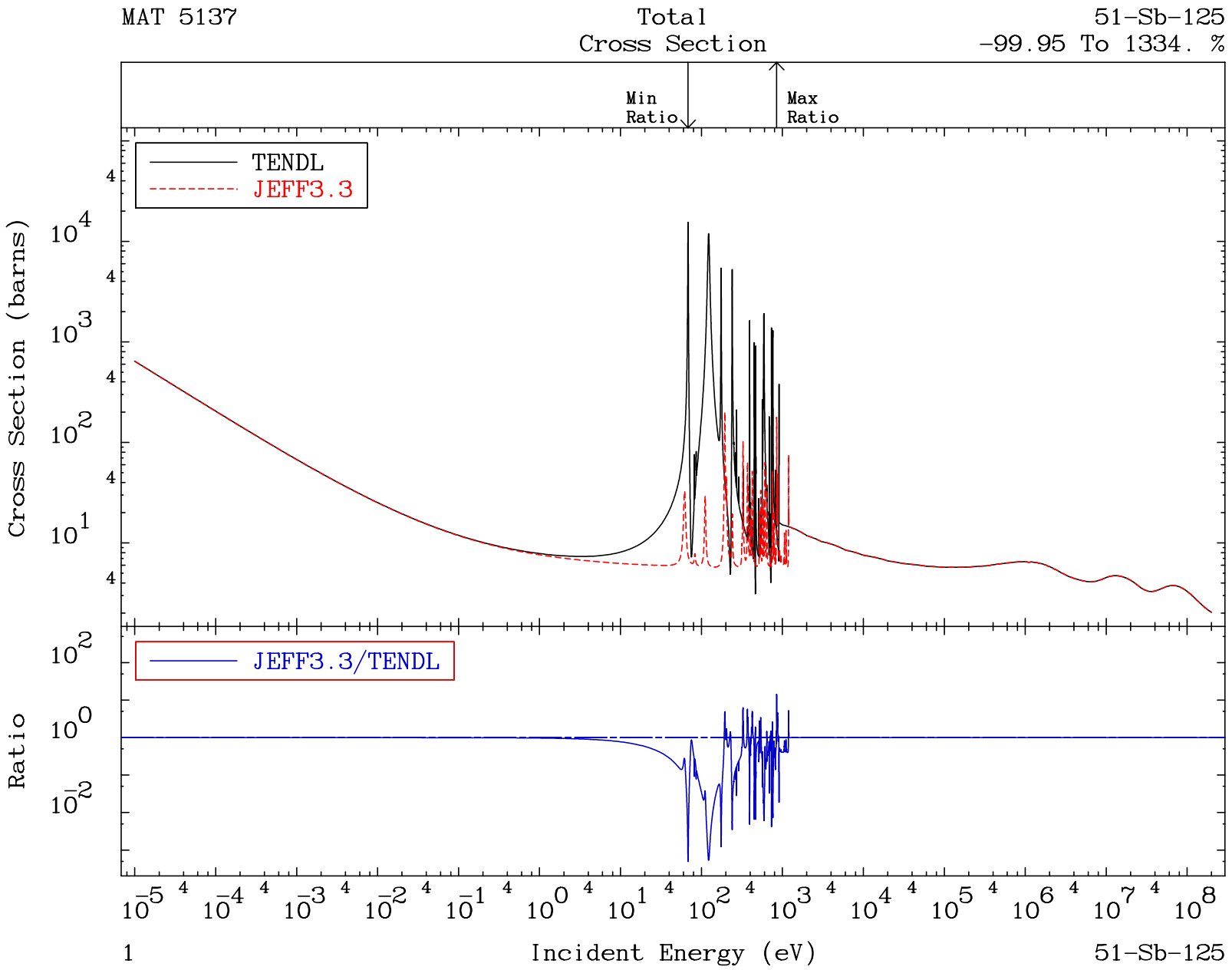
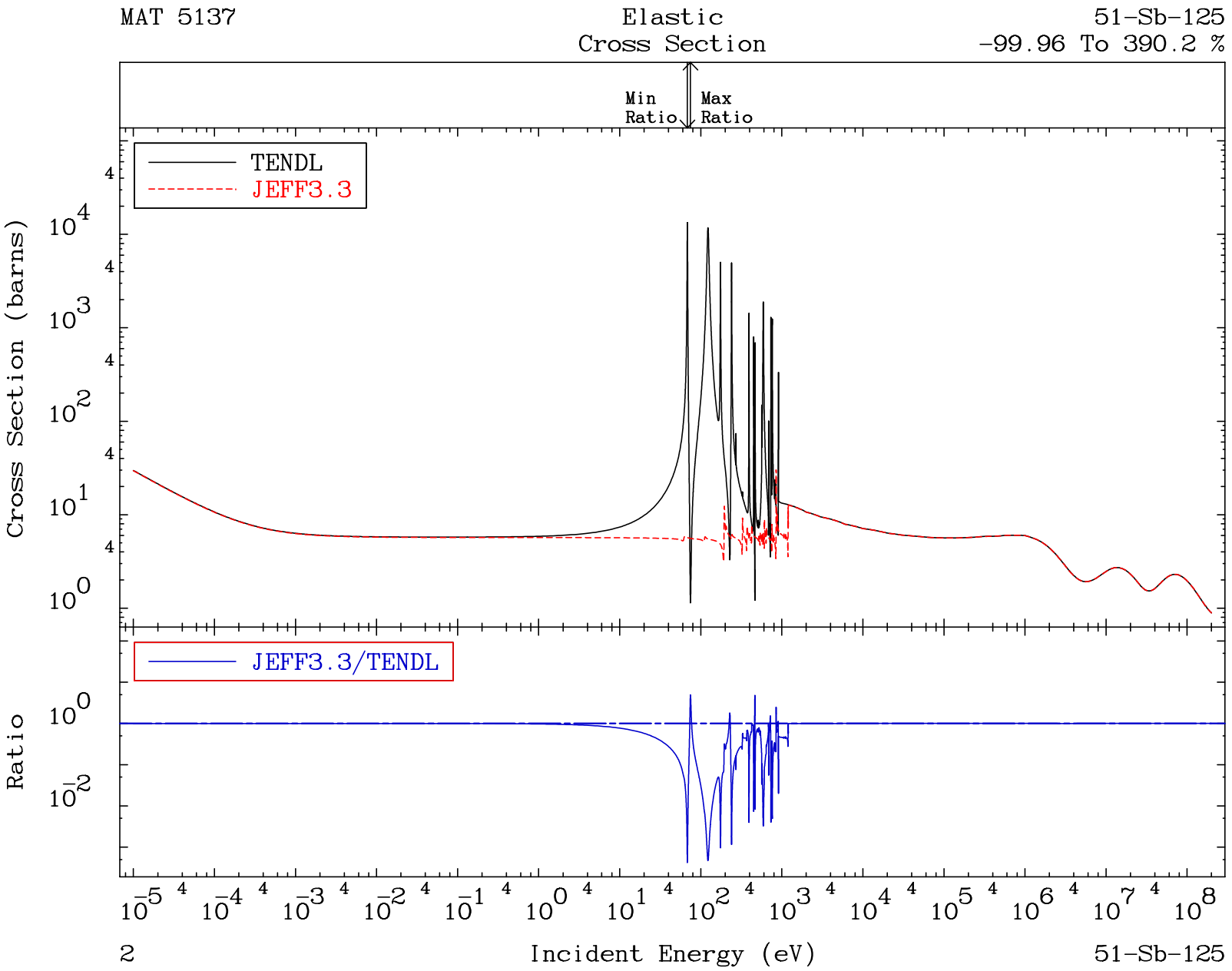
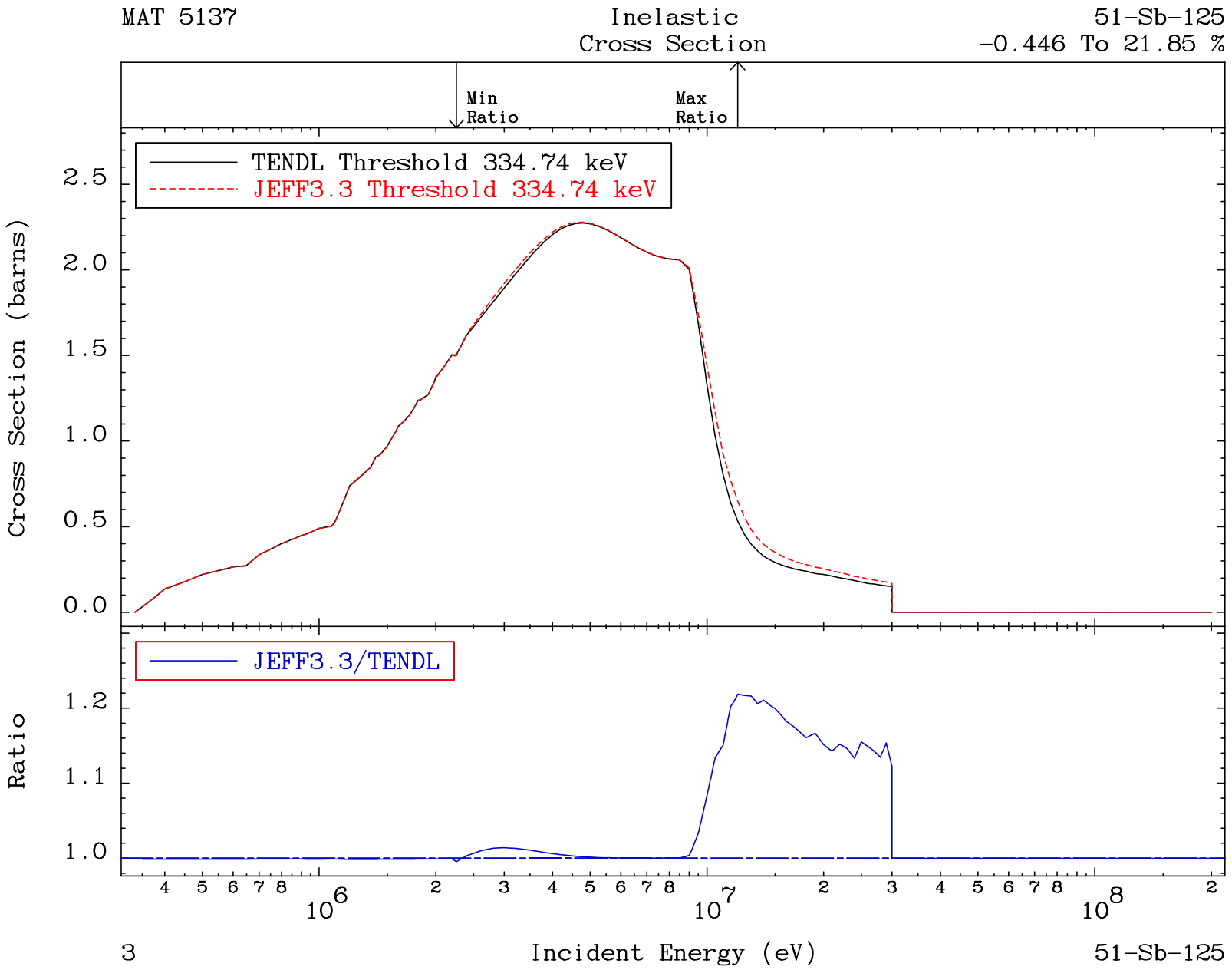
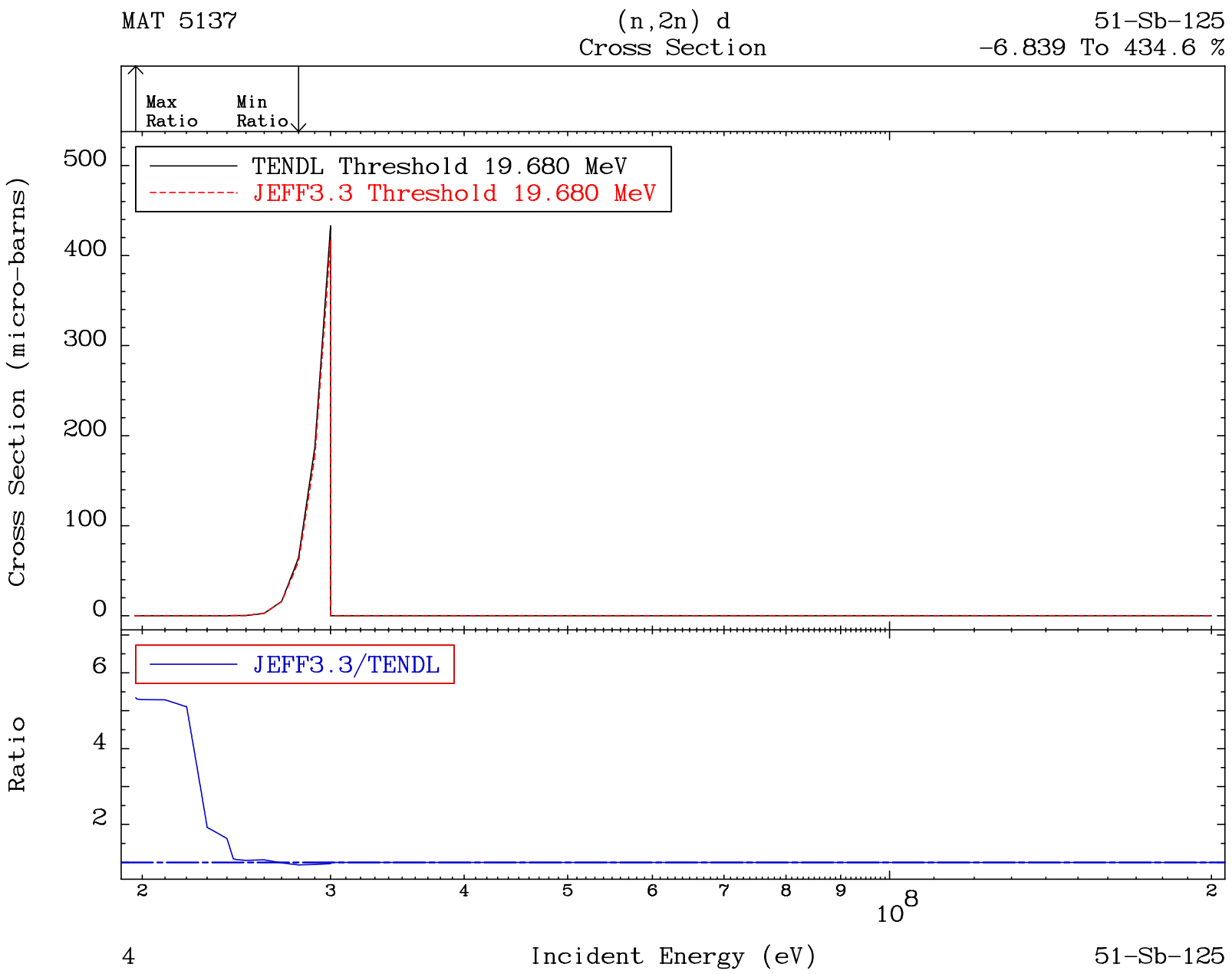
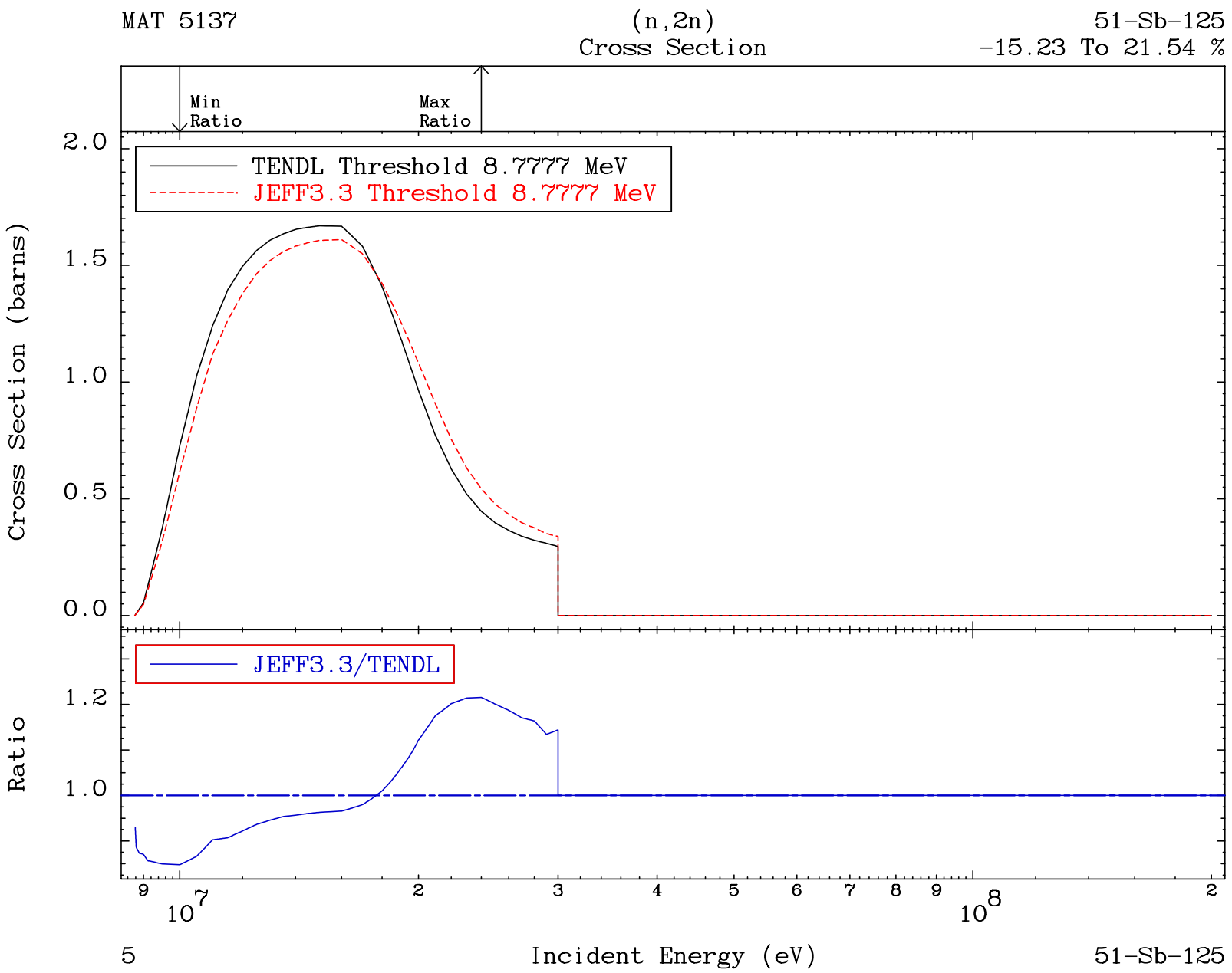
Press Mouse Button to Start

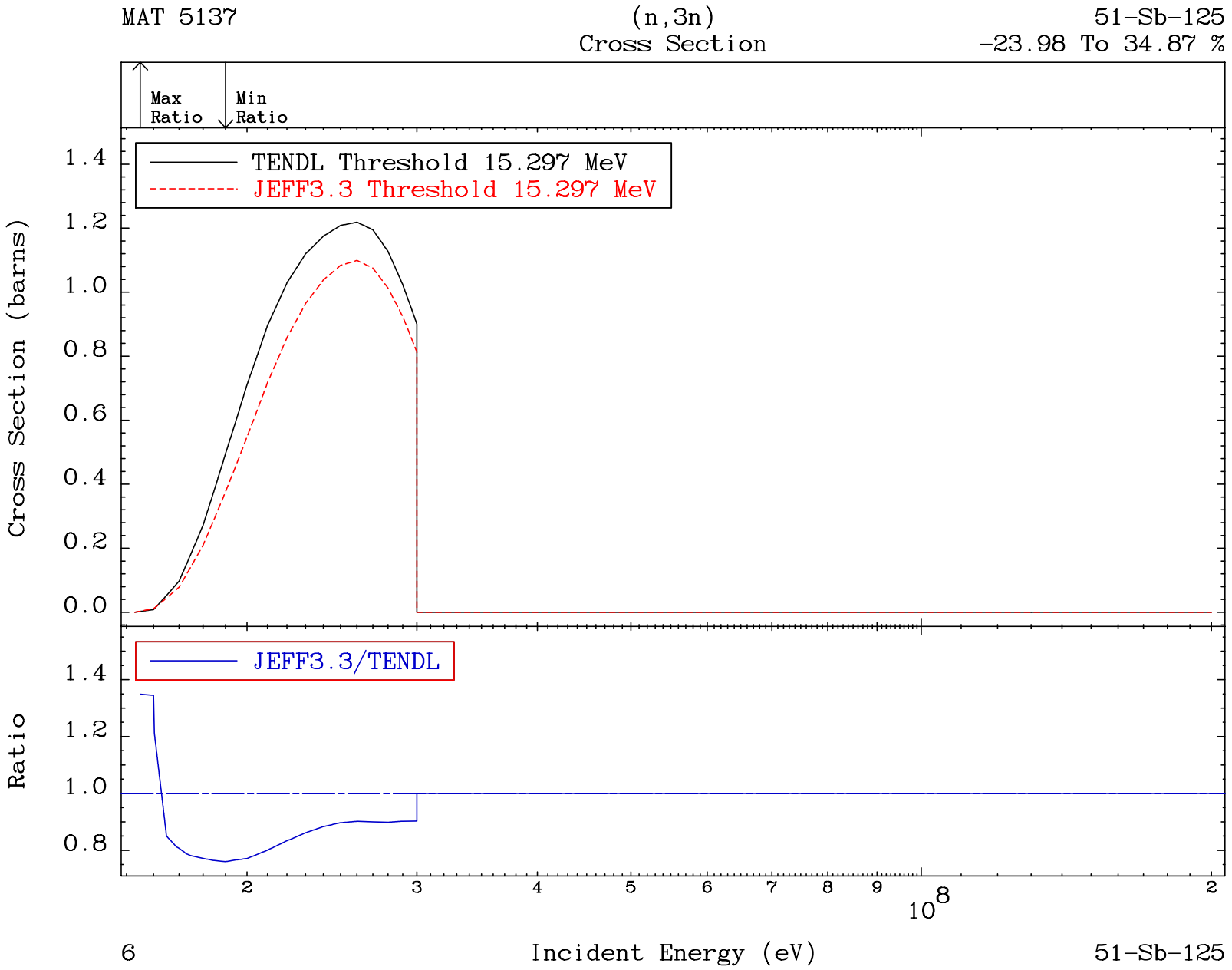

MAT 5137
Total
Cross Section
51-Sb-125
-99.95 To 1334. %
Min
Ratio
Max
Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
1
51-Sb-125

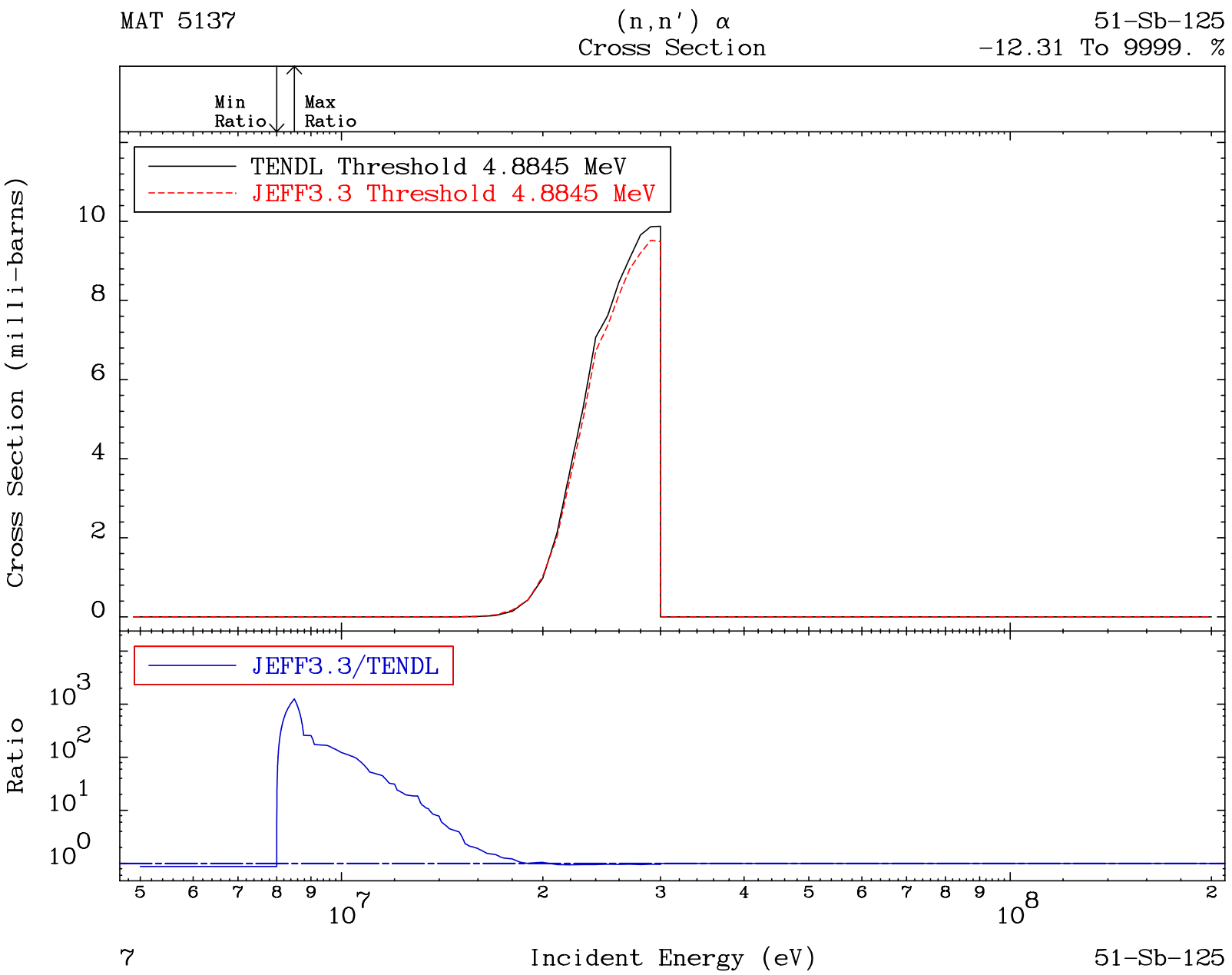

MAT 5137
Elastic
Cross Section
51-Sb-125
-99.96 To 390.2 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
2
51-Sb-125

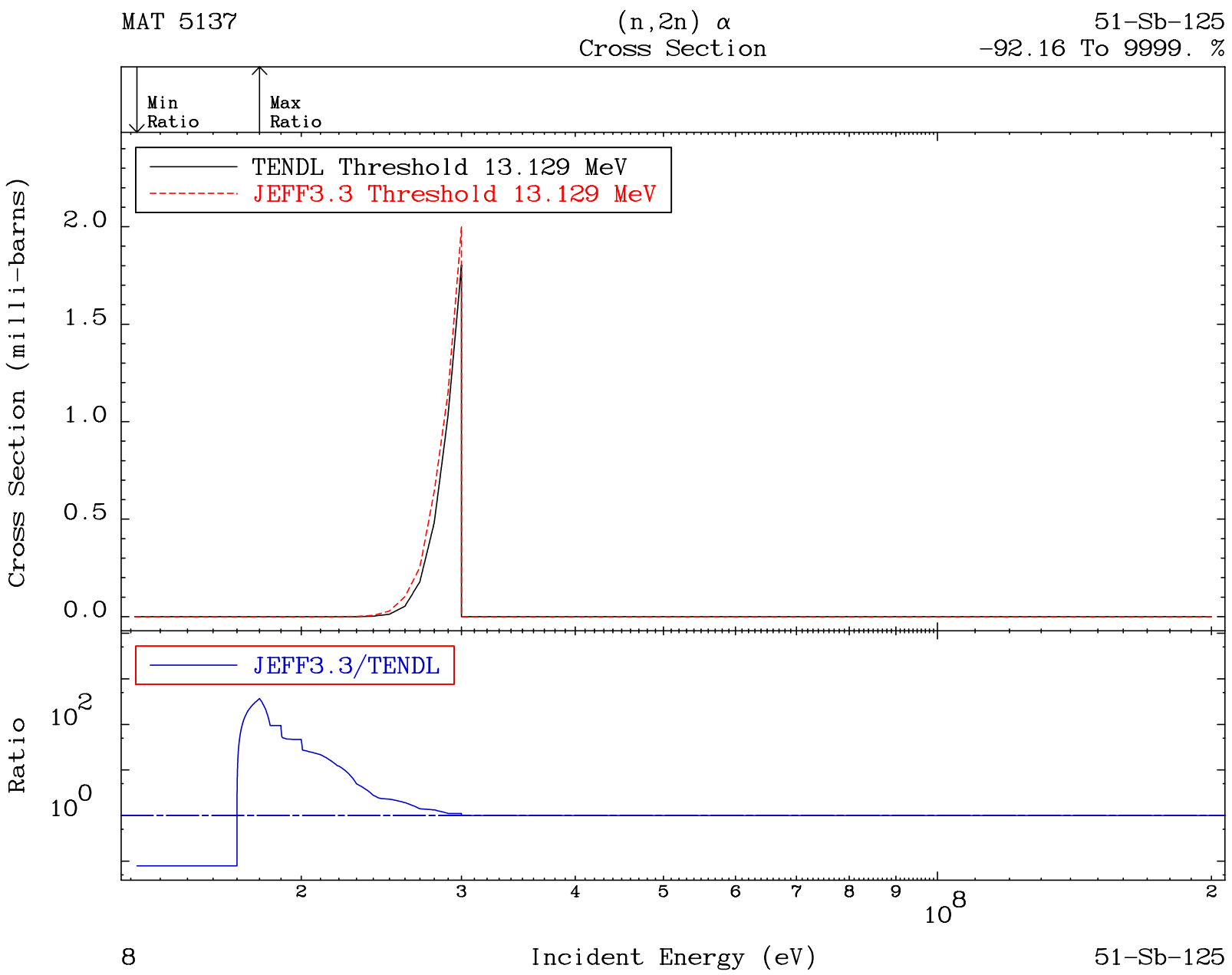

MAT 5137
Inelastic
Cross Section
51-Sb-125
-0.446 To 21.85 %
Min
Ratio
Max
Ratio
TENDL Threshold 334.74 keV
JEFF3.3 Threshold 334.74 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
3
Incident Energy (eV)
51-Sb-125

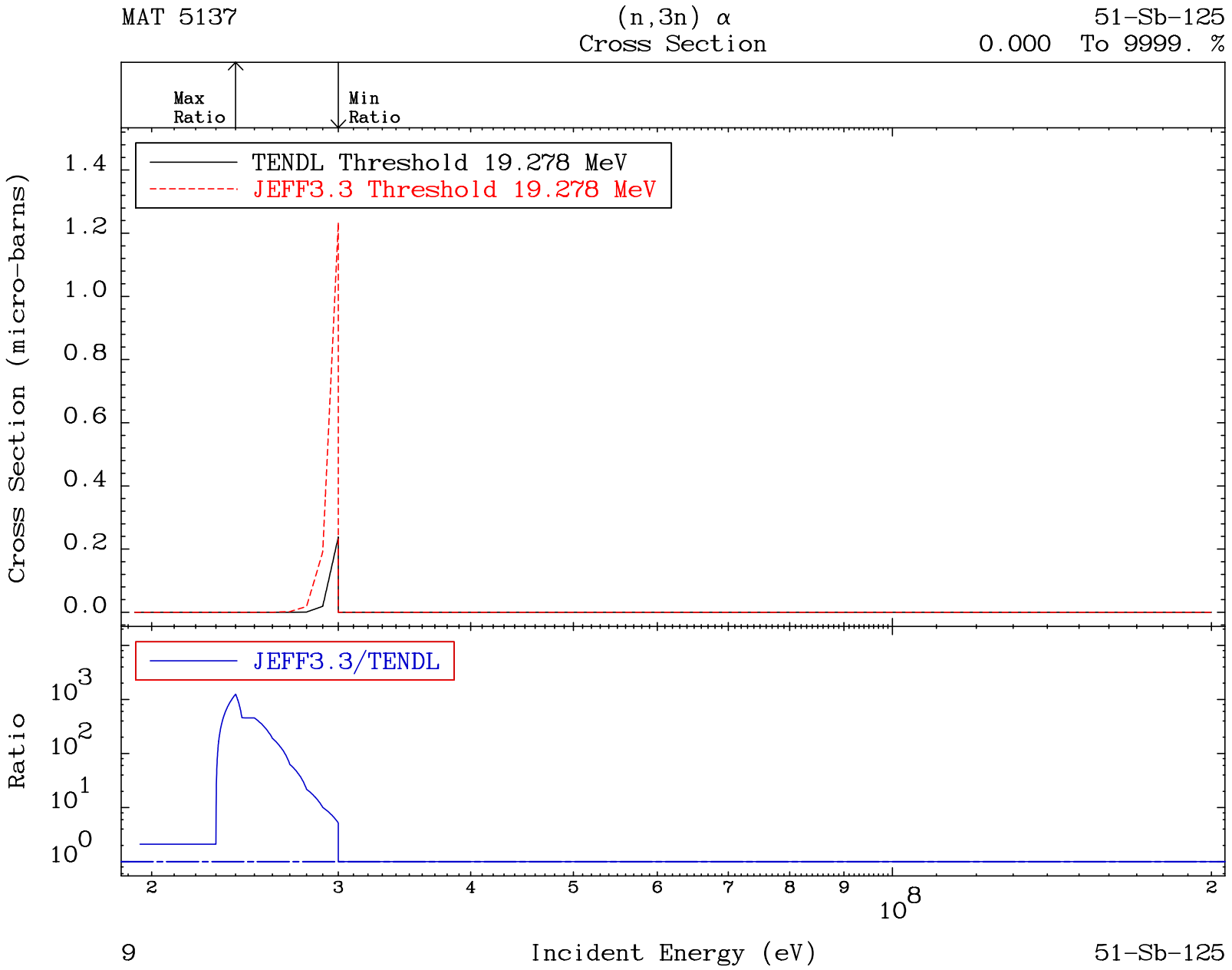

MAT 5137
(n,2n) d
Cross Section
51-Sb-125
-6.839 To 434.6 %
Max Ratio
Min Ratio
TENDL Threshold 19.680 MeV
JEFF3.3 Threshold 19.680 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
51-Sb-125

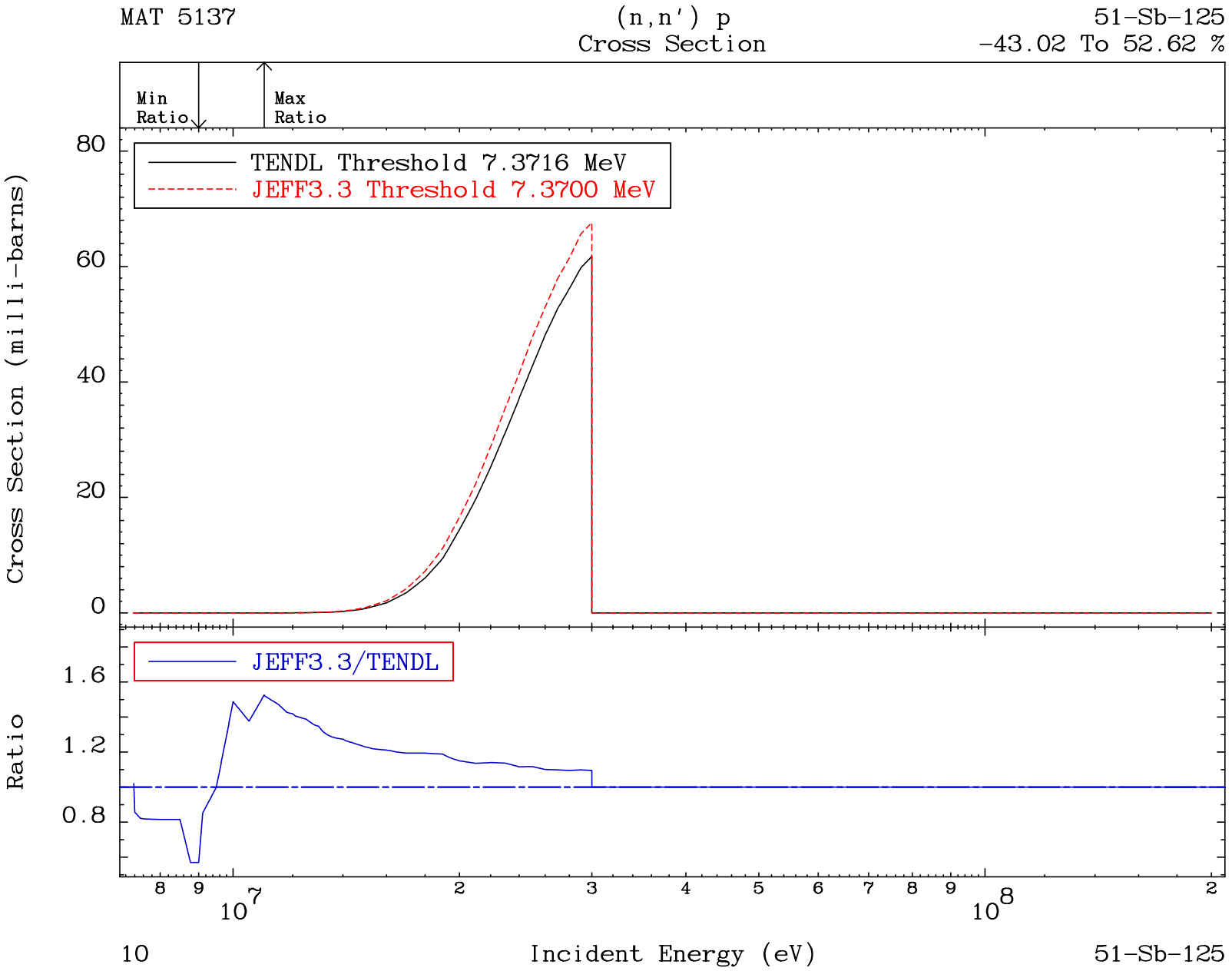

MAT 5137
(n,2n)
Cross Section
51-Sb-125
-15.23 To 21.54 %
Min Ratio
Max Ratio
TENDL Threshold 8.7777 MeV
JEFF3.3 Threshold 8.7777 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
51-Sb-125

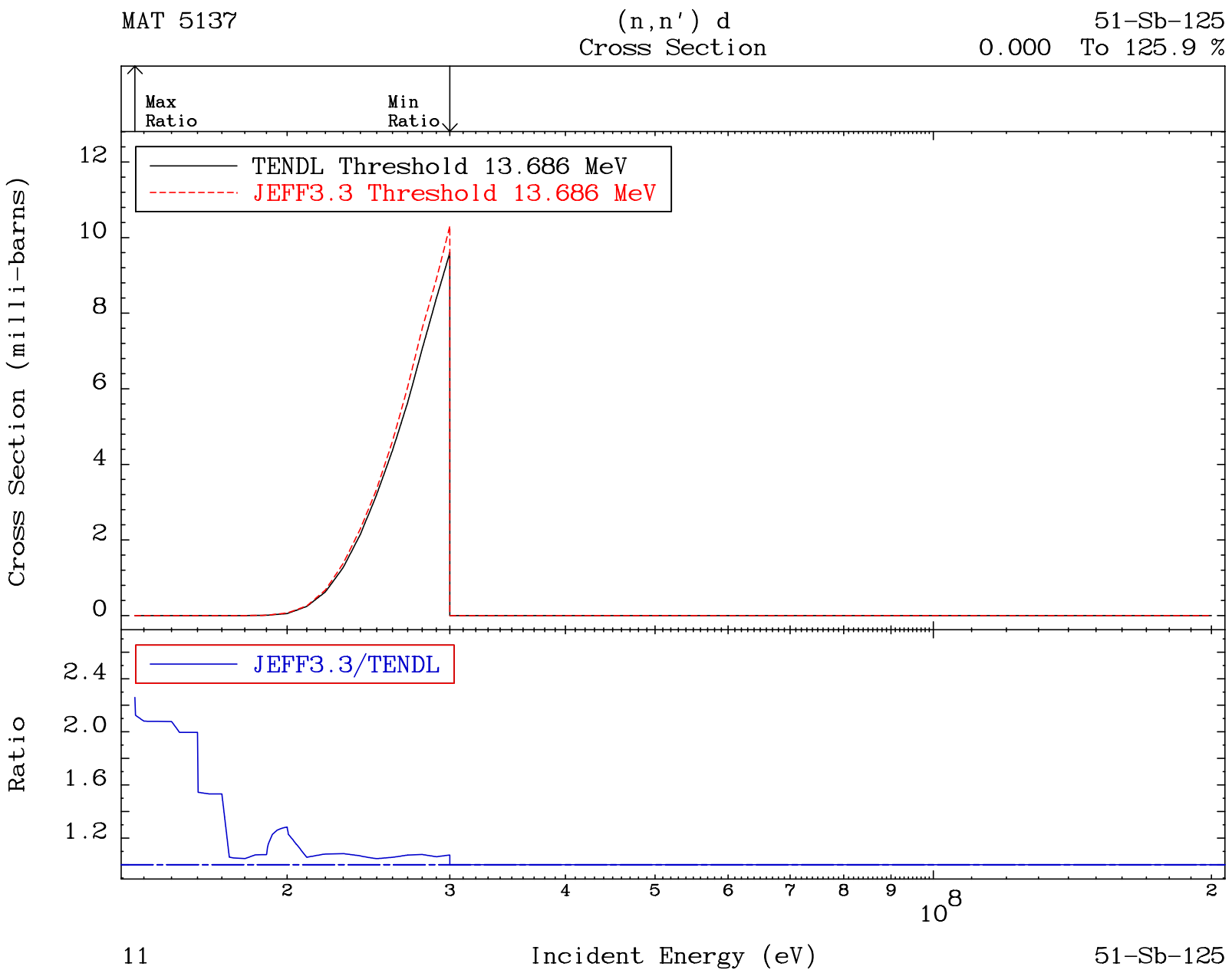

MAT 5137
(n,3n)
Cross Section
51-Sb-125
-23.98 To 34.87 %
Max Ratio
Min Ratio
TENDL Threshold 15.297 MeV
JEFF3.3 Threshold 15.297 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
0.8
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
51-Sb-125

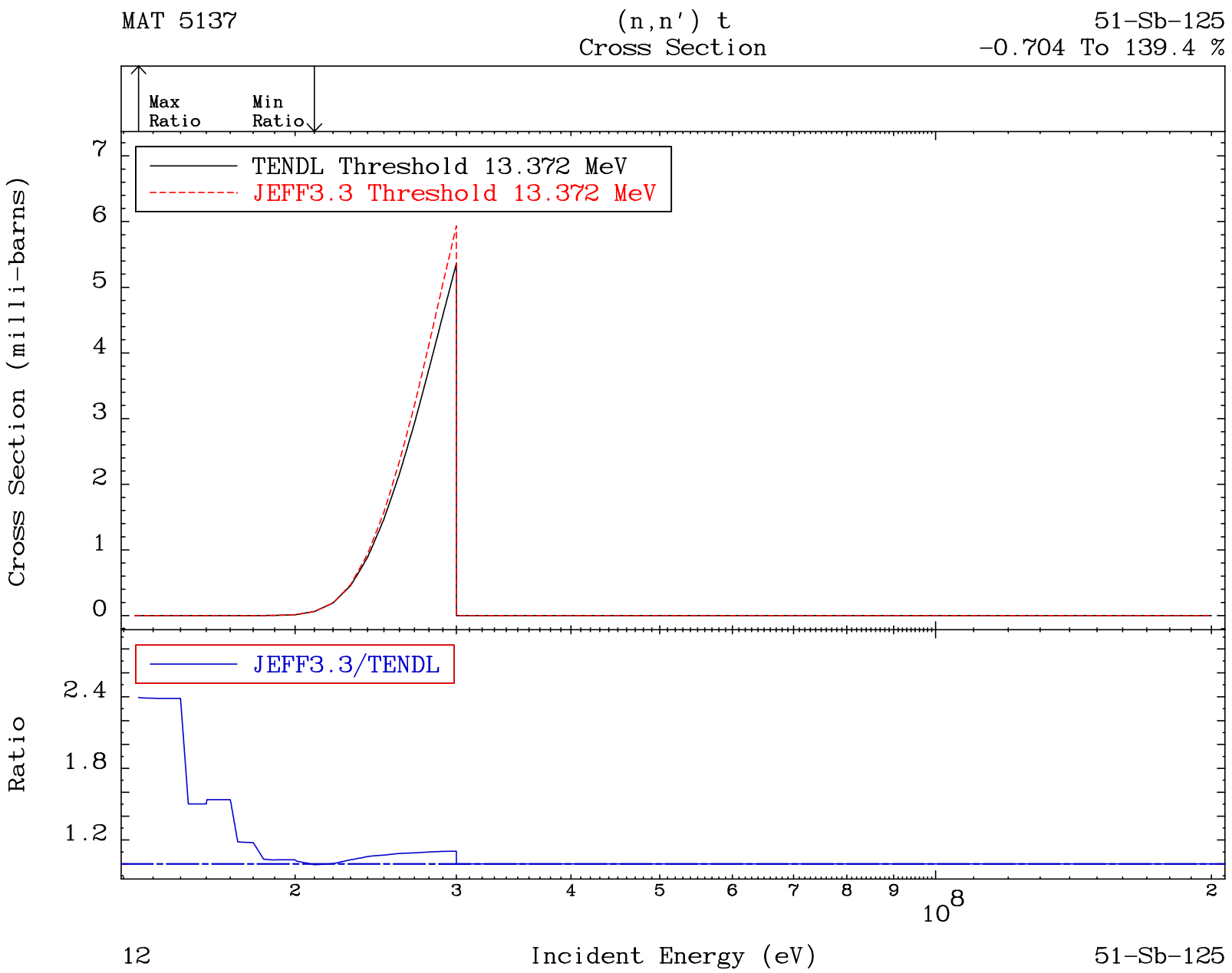

MAT 5137
(n,n') α
Cross Section
51-Sb-125
-12.31 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.8845 MeV
JEFF3.3 Threshold 4.8845 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
7
51-Sb-125

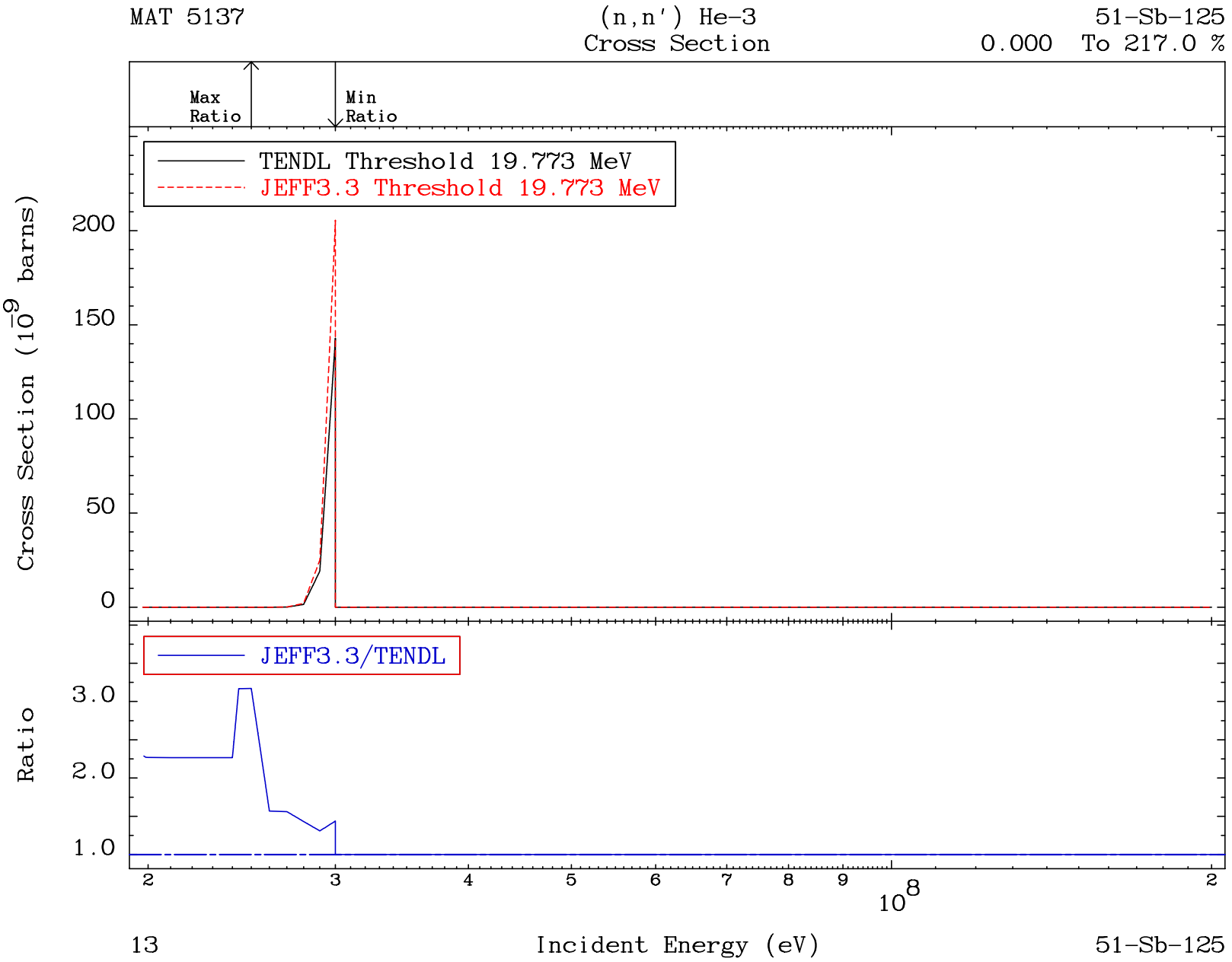

MAT 5137
(n,2n) α
Cross Section
51-Sb-125
-92.16 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 13.129 MeV
JEFF3.3 Threshold 13.129 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
51-Sb-125

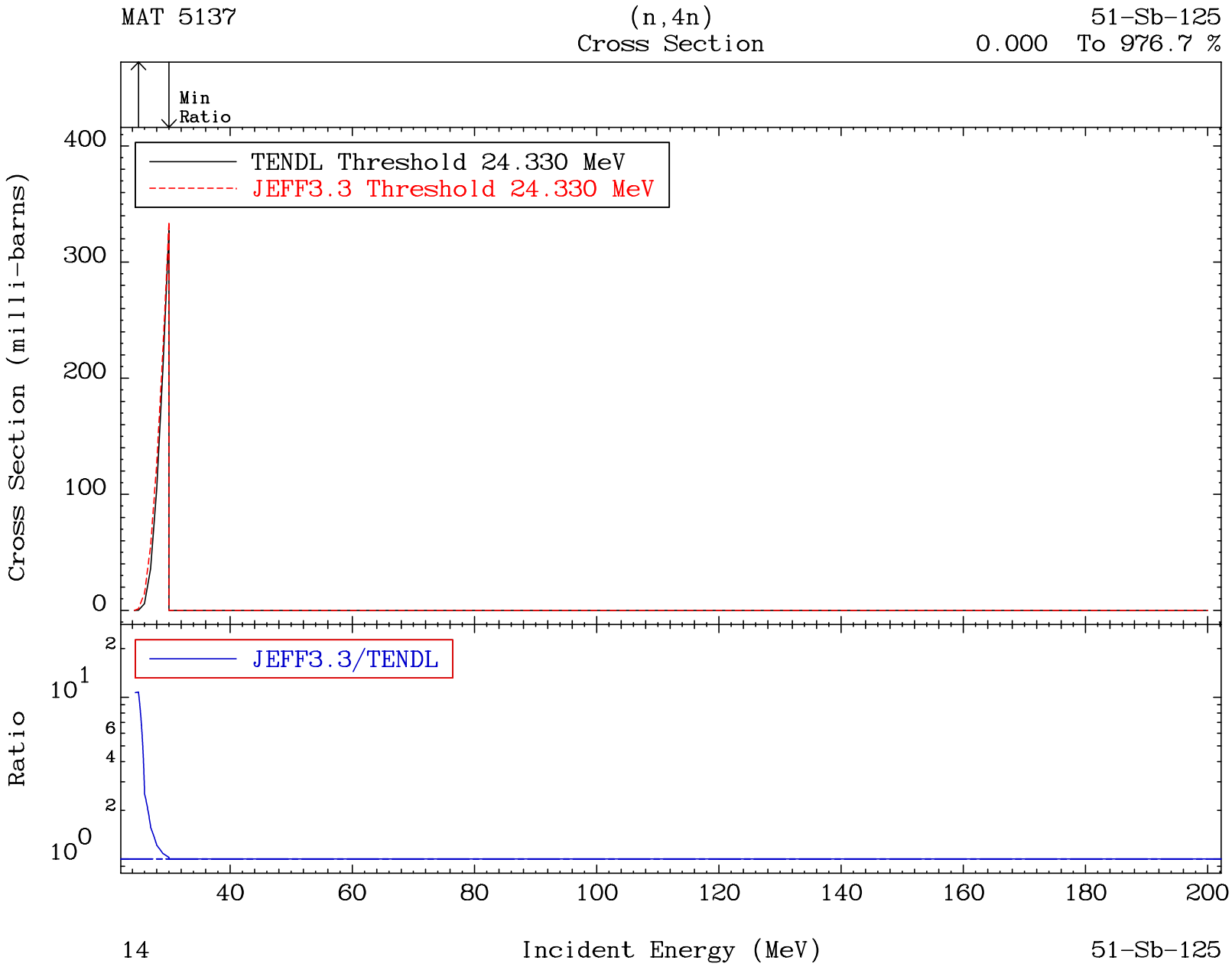

MAT 5137
(n,3n) α
Cross Section
51-Sb-125
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.278 MeV
JEFF3.3 Threshold 19.278 MeV
Cross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
51-Sb-125

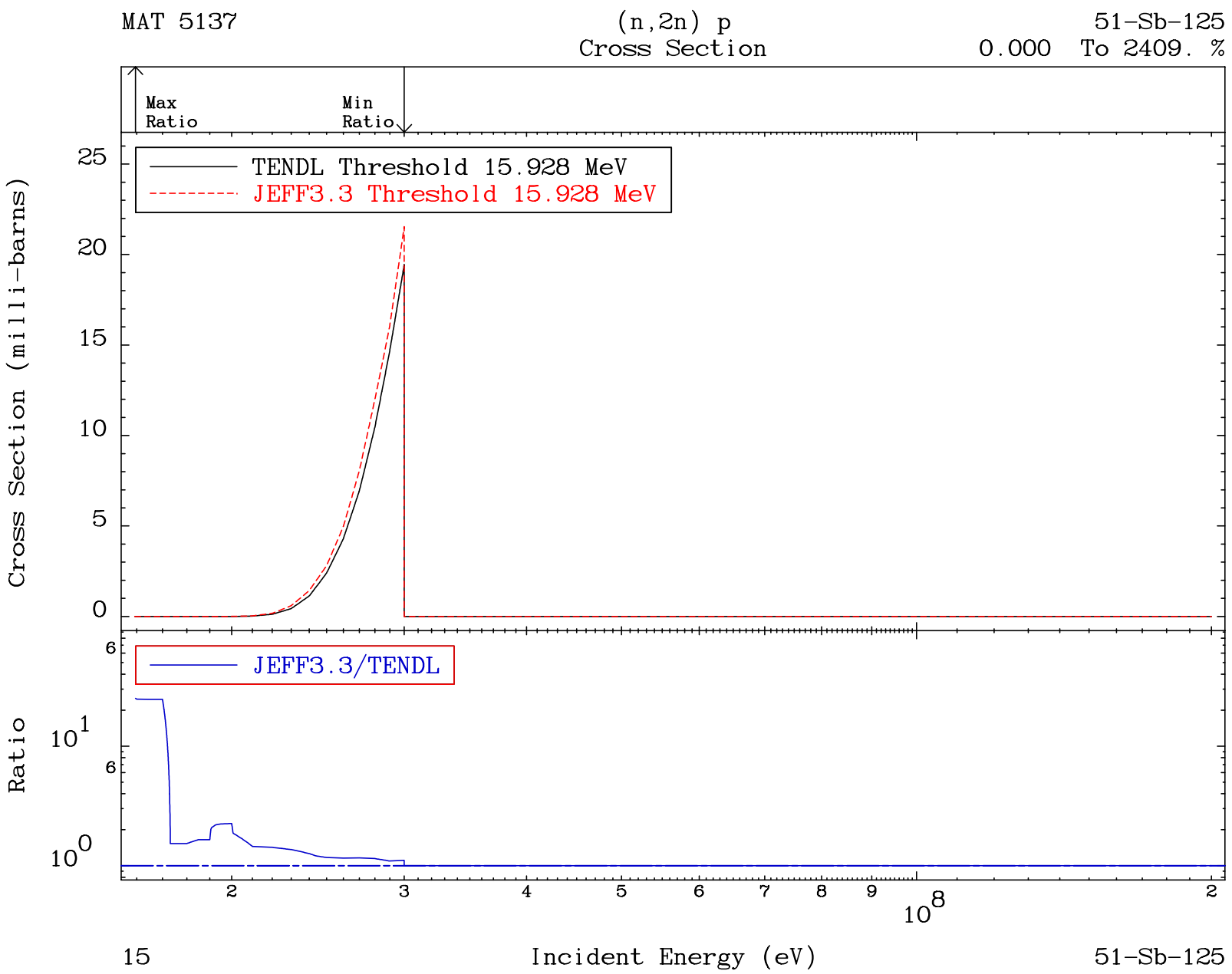

MAT 5137
(n,n') p
Cross Section
51-Sb-125
-43.02 To 52.62 %
Min Ratio
Max Ratio
TENDL Threshold 7.3716 MeV
JEFF3.3 Threshold 7.3700 MeV
Cross Section (milli-barns)
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.6
1.2
0.8
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
51-Sb-125

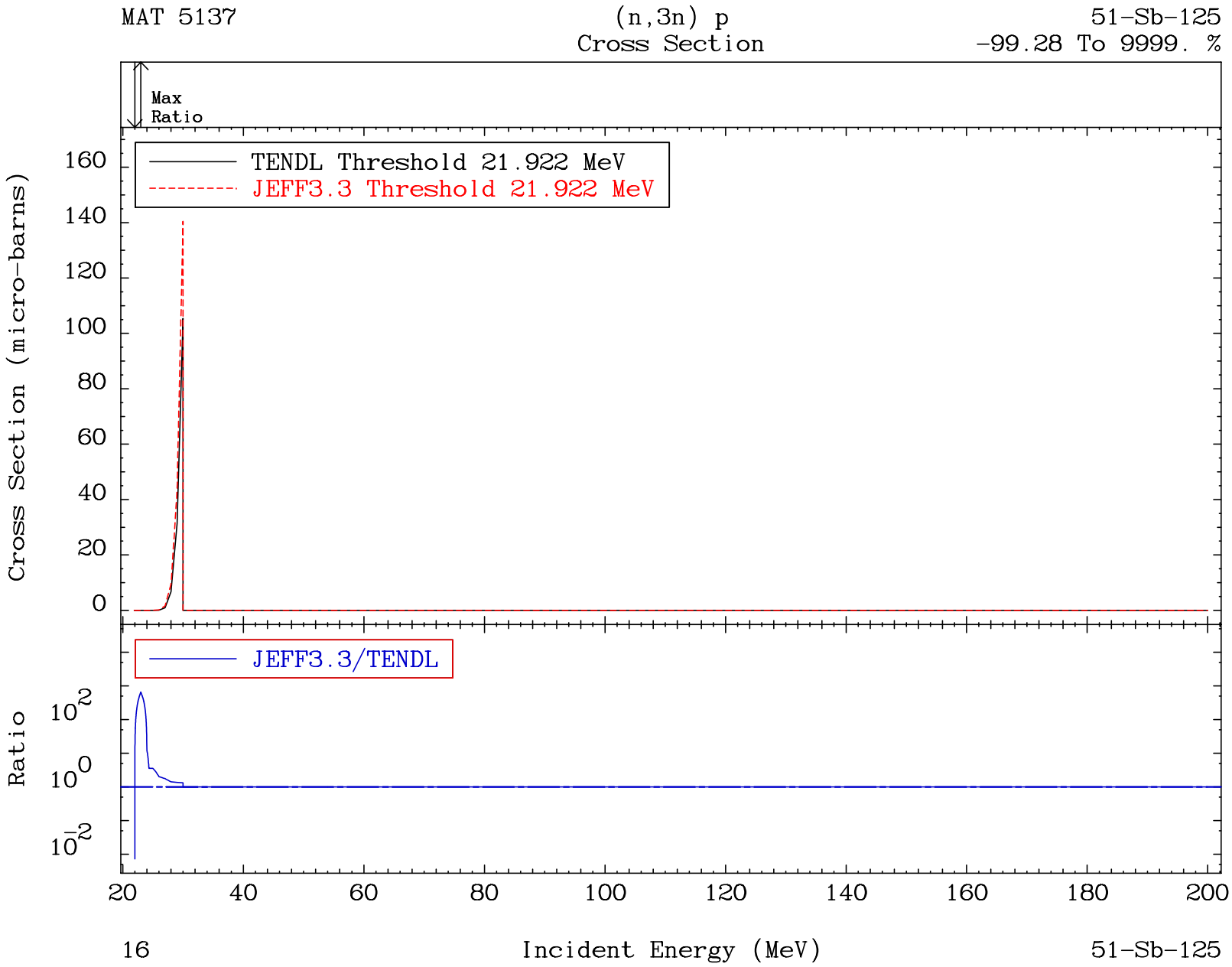

MAT 5137
(n,n') d
Cross Section
51-Sb-125
0.000 To 125.9 %
Max Ratio
Min Ratio
TENDL Threshold 13.686 MeV
JEFF3.3 Threshold 13.686 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
51-Sb-125

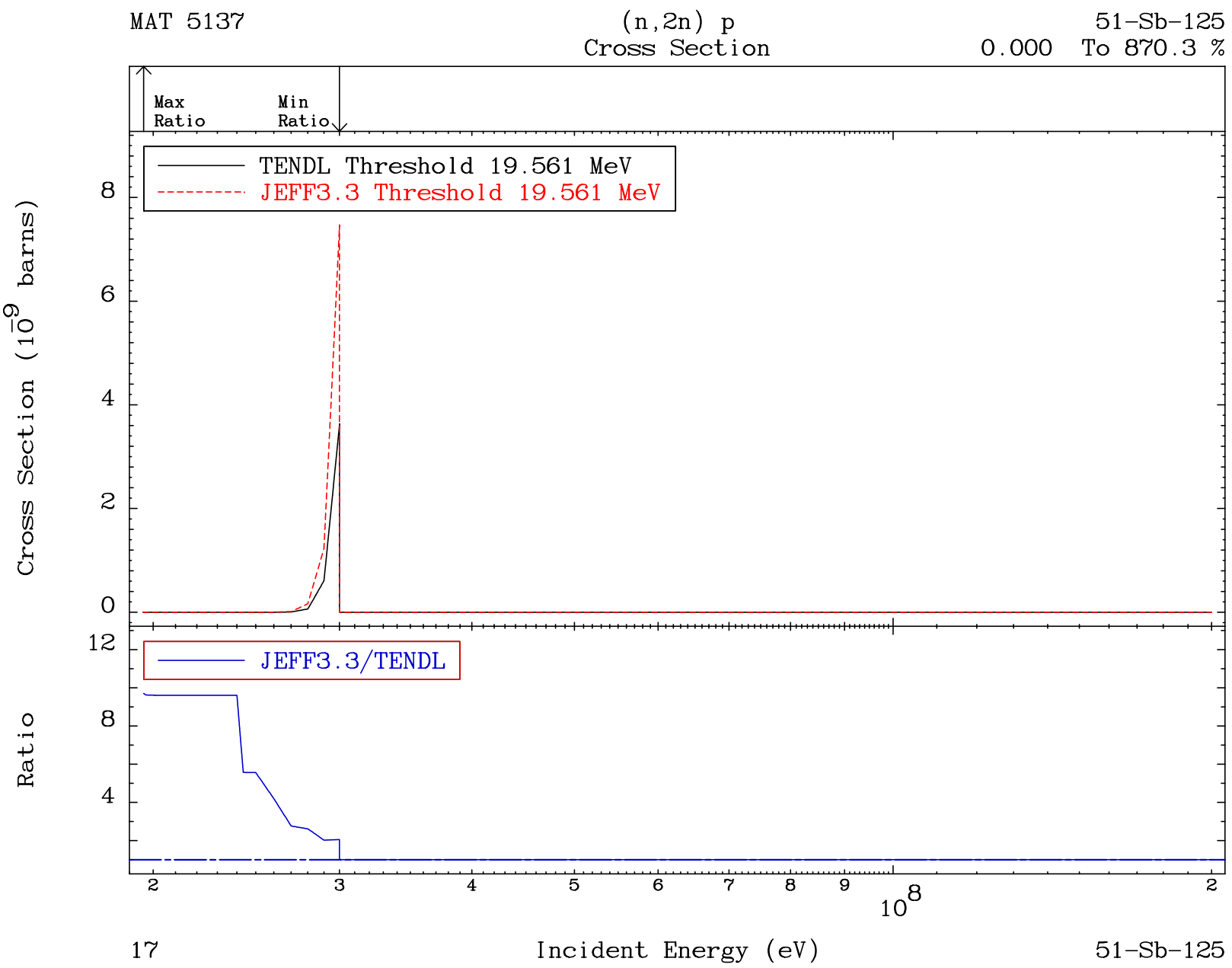

MAT 5137
(n,n') t
Cross Section
51-Sb-125
-0.704 To 139.4 %
Max Ratio
Min Ratio
TENDL Threshold 13.372 MeV
JEFF3.3 Threshold 13.372 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
JEFF3.3/TENDL
Ratio
1.2
1.8
2.4
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
51-Sb-125

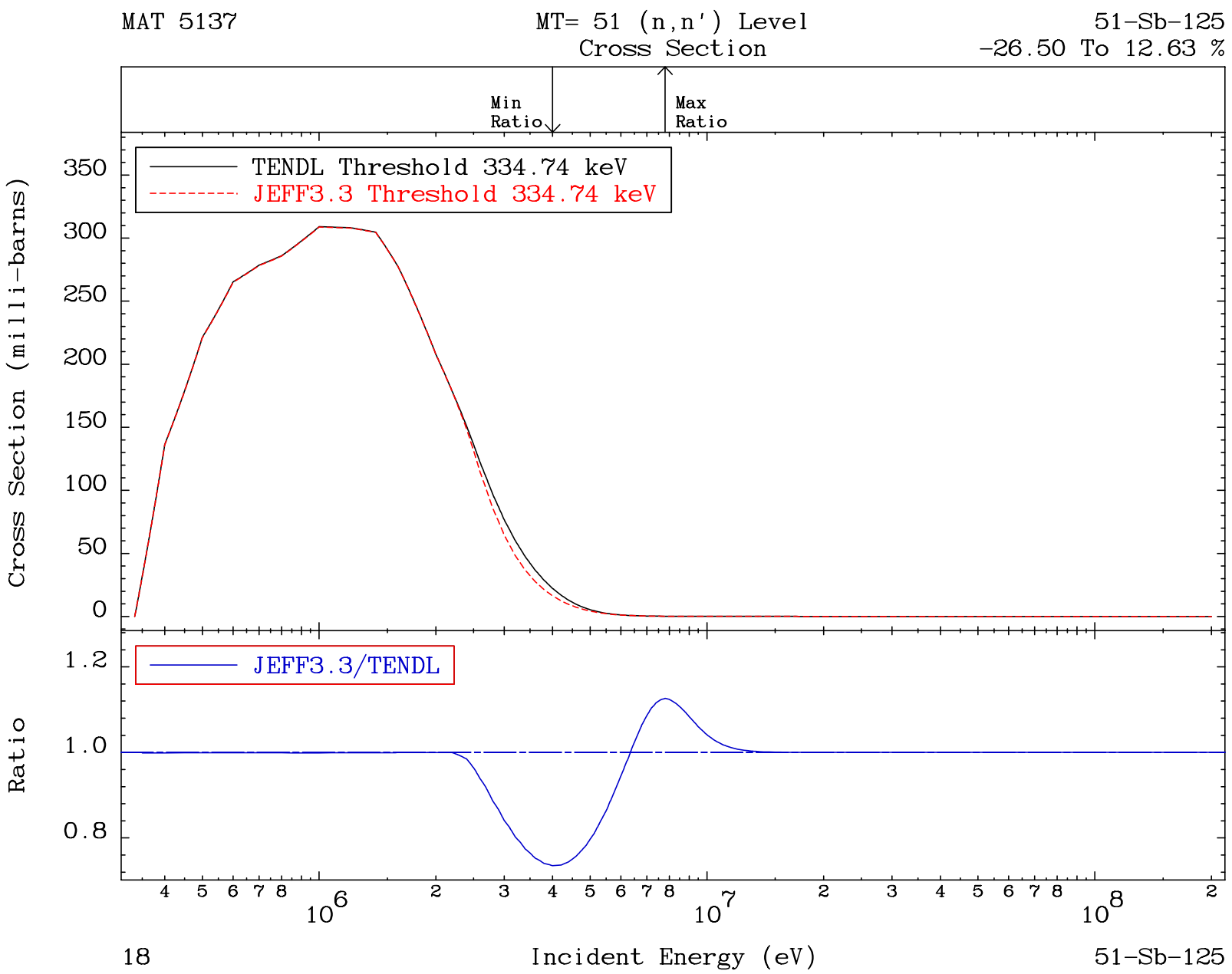

MAT 5137
(n,n') He-3
Cross Section
51-Sb-125
0.000 To 217.0 %
Max Ratio
Min Ratio
TENDL Threshold 19.773 MeV
JEFF3.3 Threshold 19.773 MeV
Cross Section (10^{-9} barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
51-Sb-125

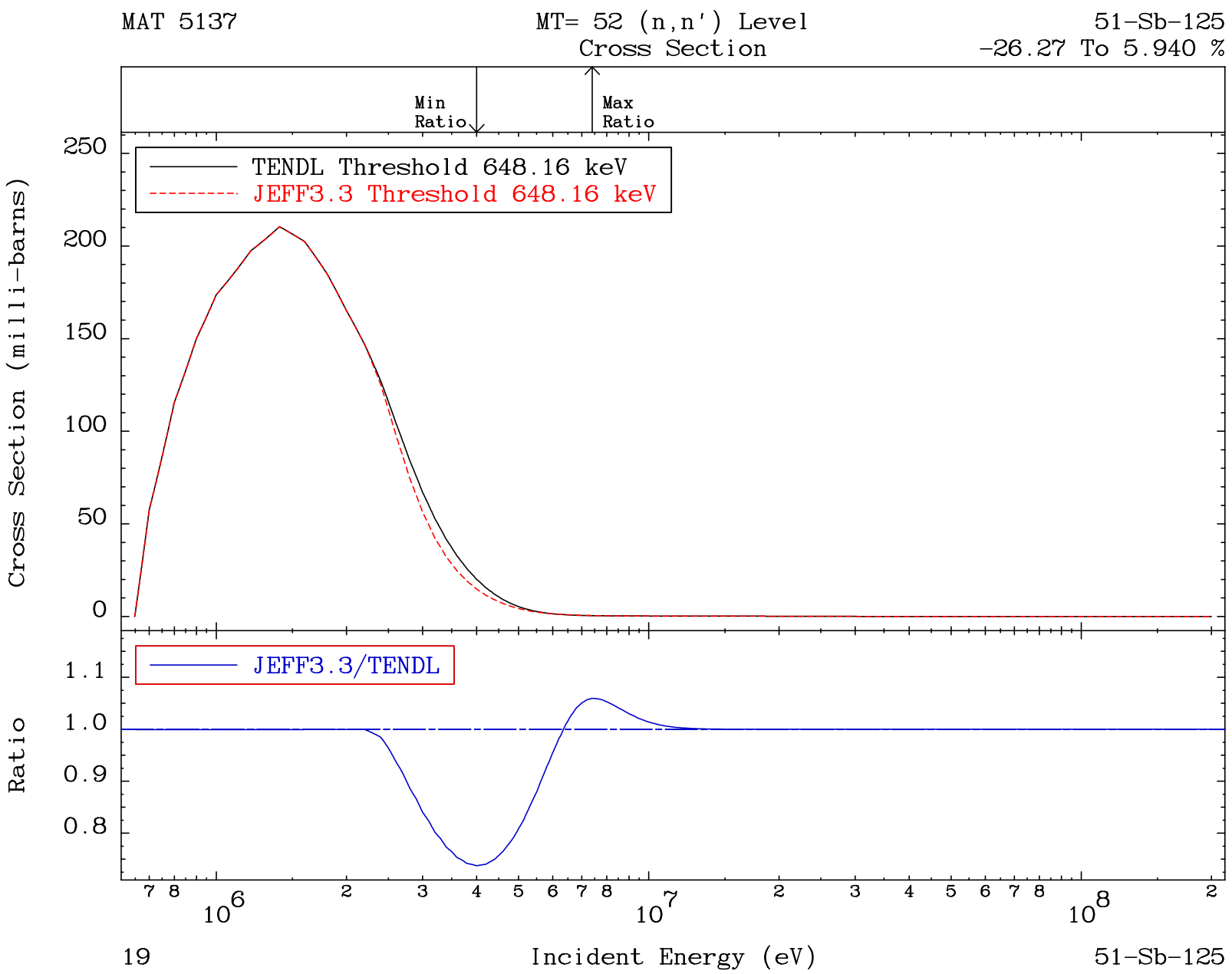

MAT 5137
(n,4n)
Cross Section
51-Sb-125
0.000 To 976.7 %
Min
Ratio
TENDL Threshold 24.330 MeV
JEFF3.3 Threshold 24.330 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
40
60
80
100
120
140
160
180
200
14
Incident Energy (MeV)
51-Sb-125

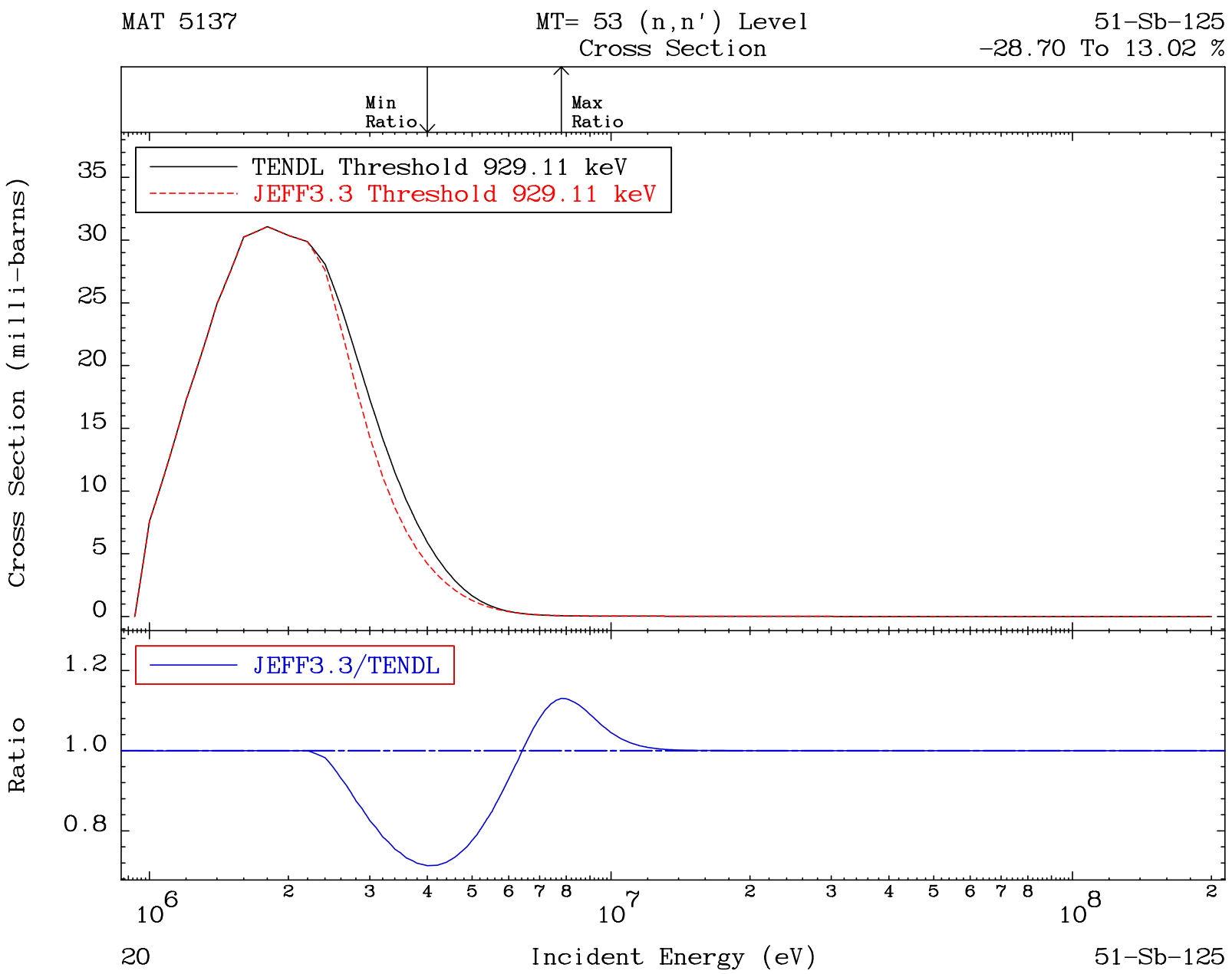

MAT 5137
(n,2n) p
Cross Section
51-Sb-125
0.000 To 2409. %
Max Ratio
Min Ratio
TENDL Threshold 15.928 MeV
JEFF3.3 Threshold 15.928 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
6
10^1
6
10^0
2
3
4
5
6
7
8
9
10^8
2
15
Incident Energy (eV)
51-Sb-125

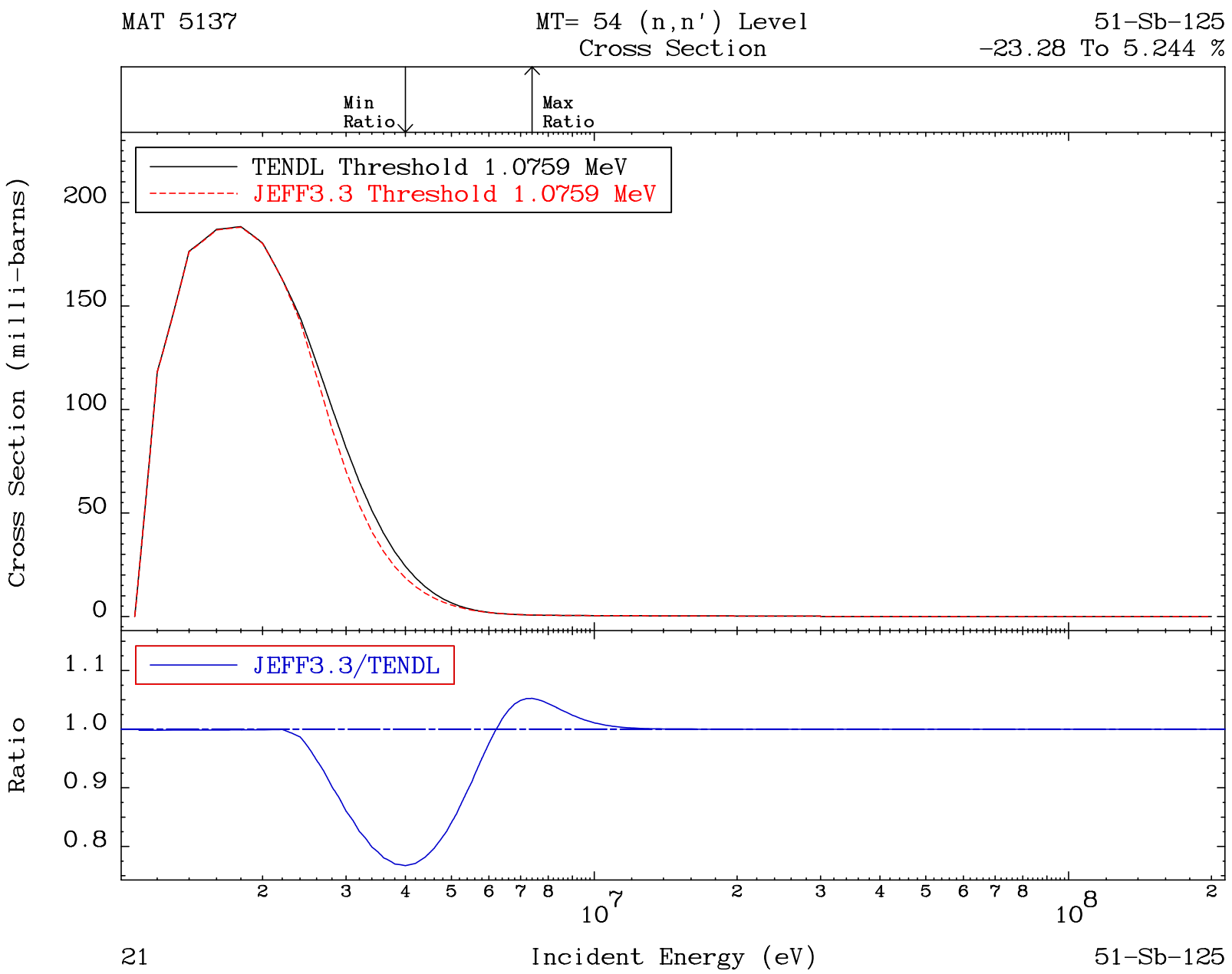

MAT 5137
(n,3n) p
Cross Section
51-Sb-125
-99.28 To 9999. %
Max
Ratio
TENDL Threshold 21.922 MeV
JEFF3.3 Threshold 21.922 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^2
10^0
10^-2
20
40
60
80
100
120
140
160
180
200
16
Incident Energy (MeV)
51-Sb-125

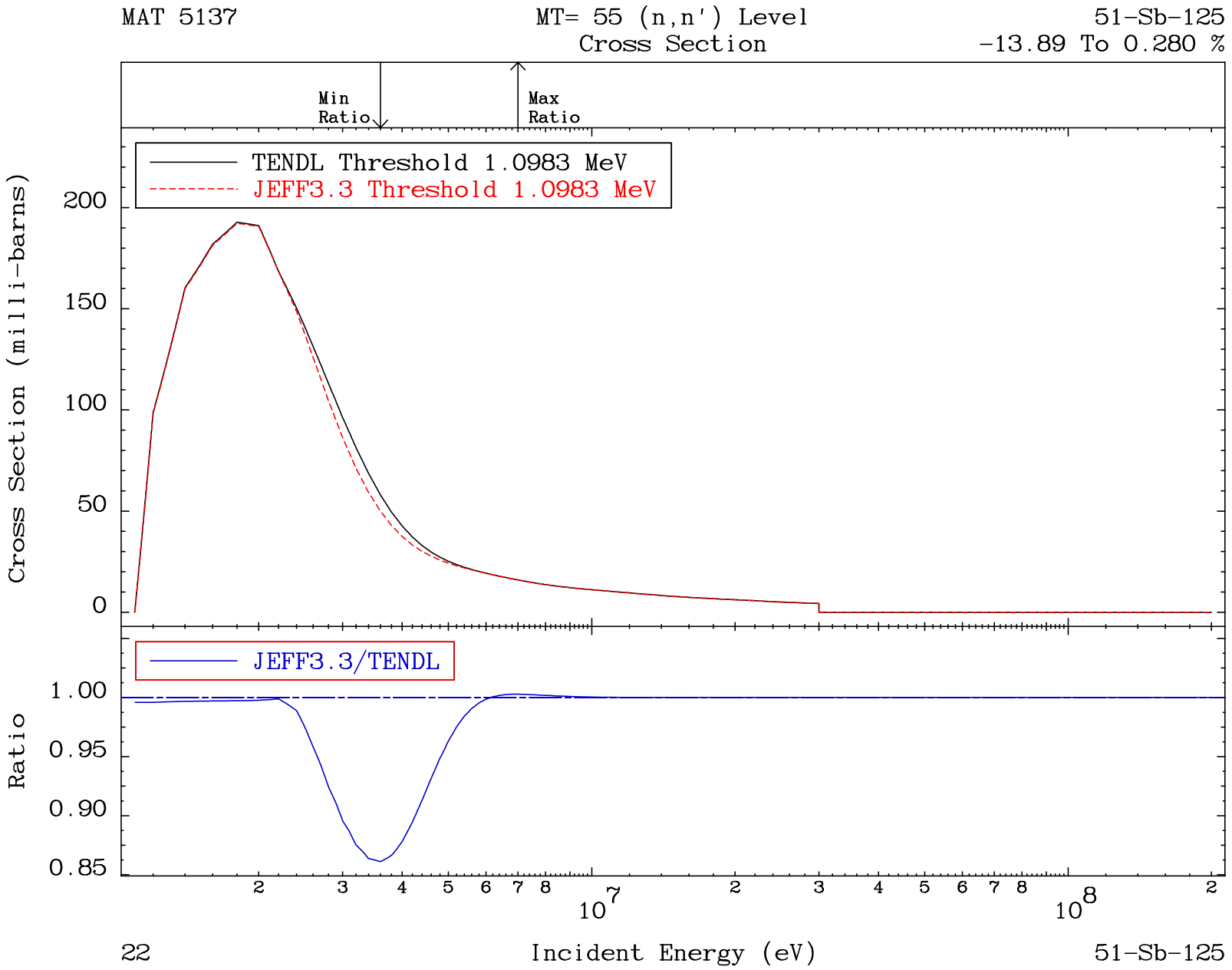

MAT 5137
(n,2n) p
Cross Section
51-Sb-125
0.000 To 870.3 %
Max Ratio
Min Ratio
TENDL Threshold 19.561 MeV
JEFF3.3 Threshold 19.561 MeV
Cross Section (10^{-9} barns)
0
2
4
6
8
JEFF3.3/TENDL
Ratio
4
8
12
2
3
4
5
6
7
8
9
10^8
2
17
Incident Energy (eV)
51-Sb-125

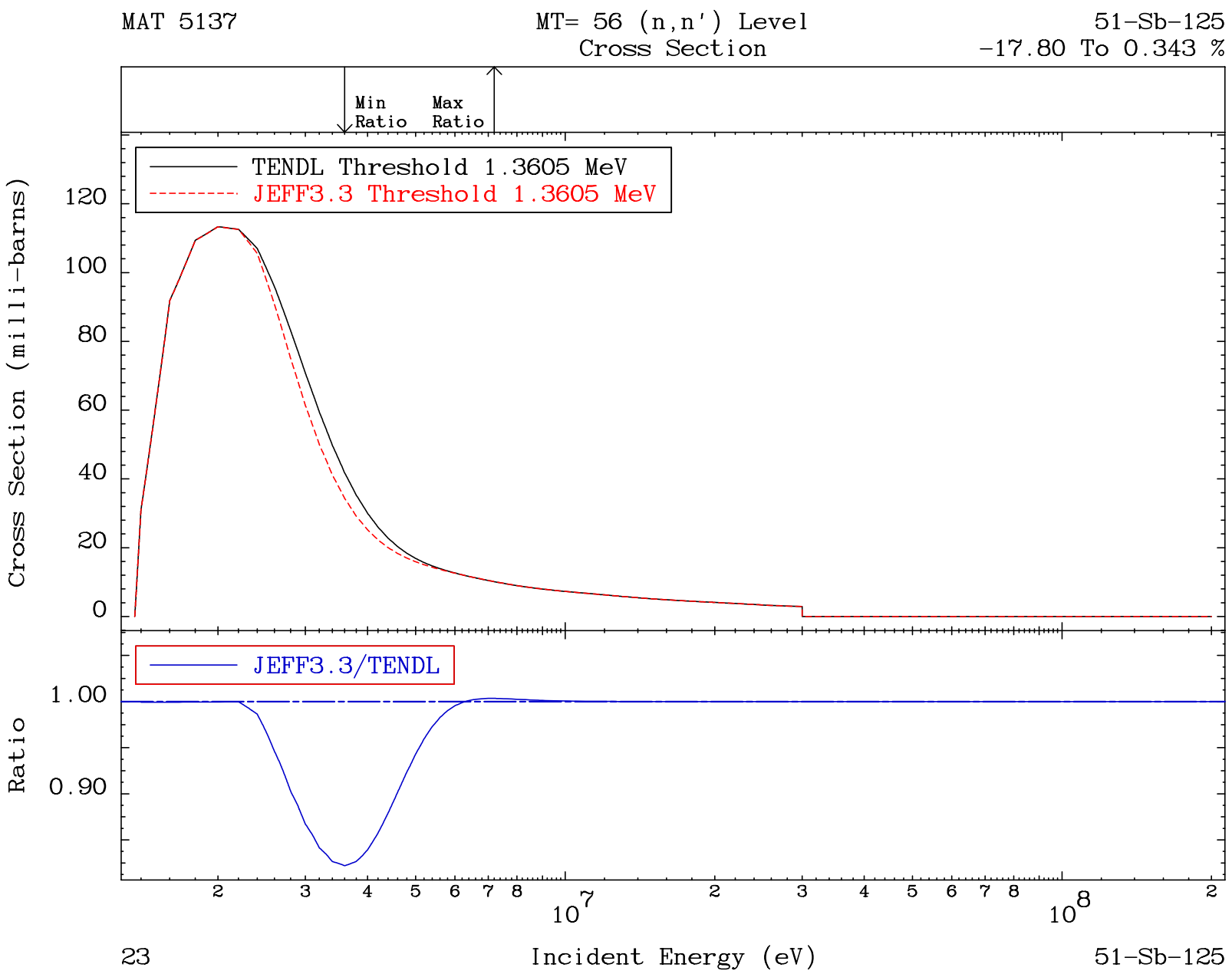

MAT 5137
MT= 51 (n,n') Level
Cross Section
51-Sb-125
-26.50 To 12.63 %
Min Ratio
Max Ratio
TENDL Threshold 334.74 keV
JEFF3.3 Threshold 334.74 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.2
1.0
0.8
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
51-Sb-125

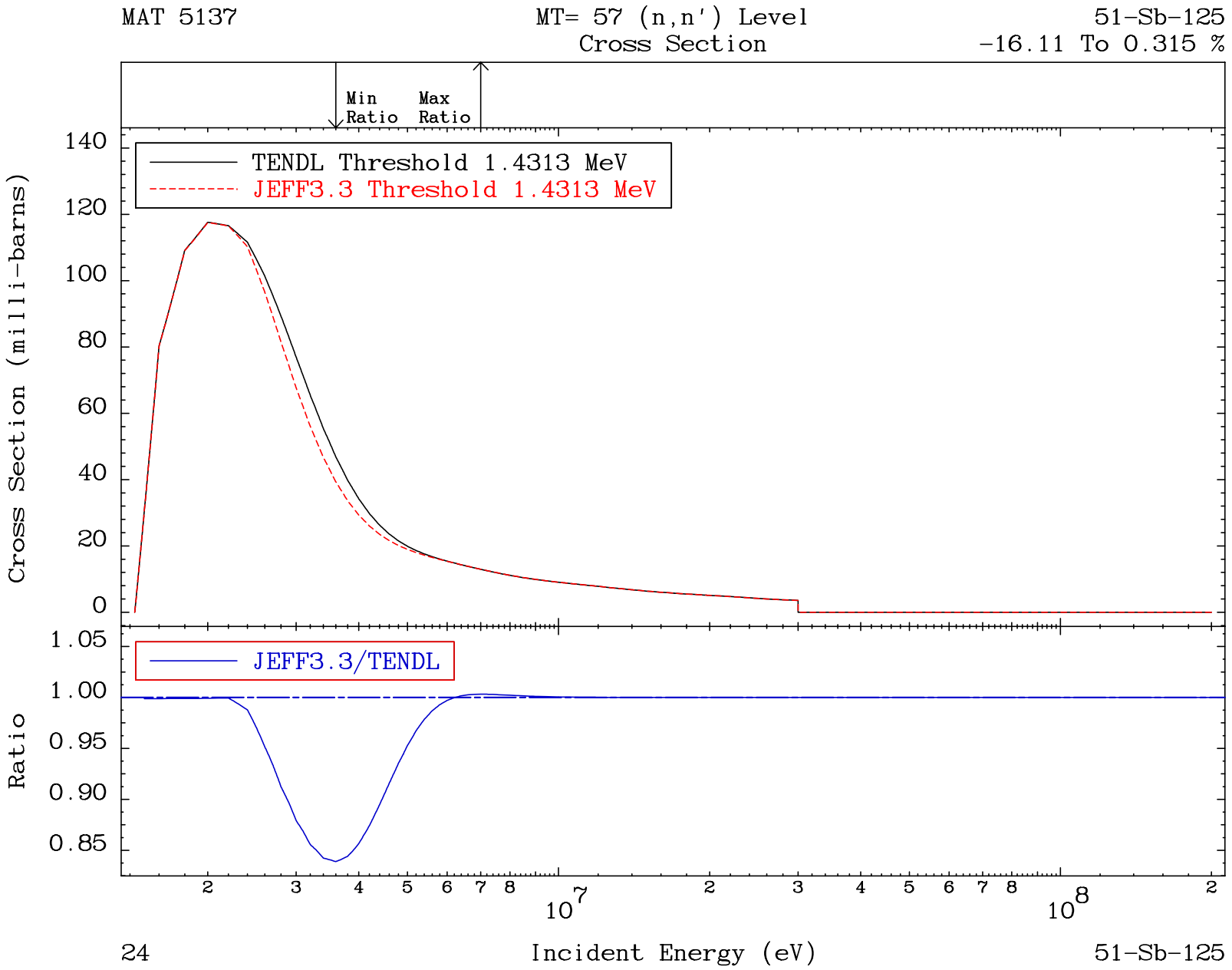

MAT 5137
MT= 52 (n,n') Level
Cross Section
51-Sb-125
-26.27 To 5.940 %
Min Ratio
Max Ratio
TENDL Threshold 648.16 keV
JEFF3.3 Threshold 648.16 keV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
51-Sb-125

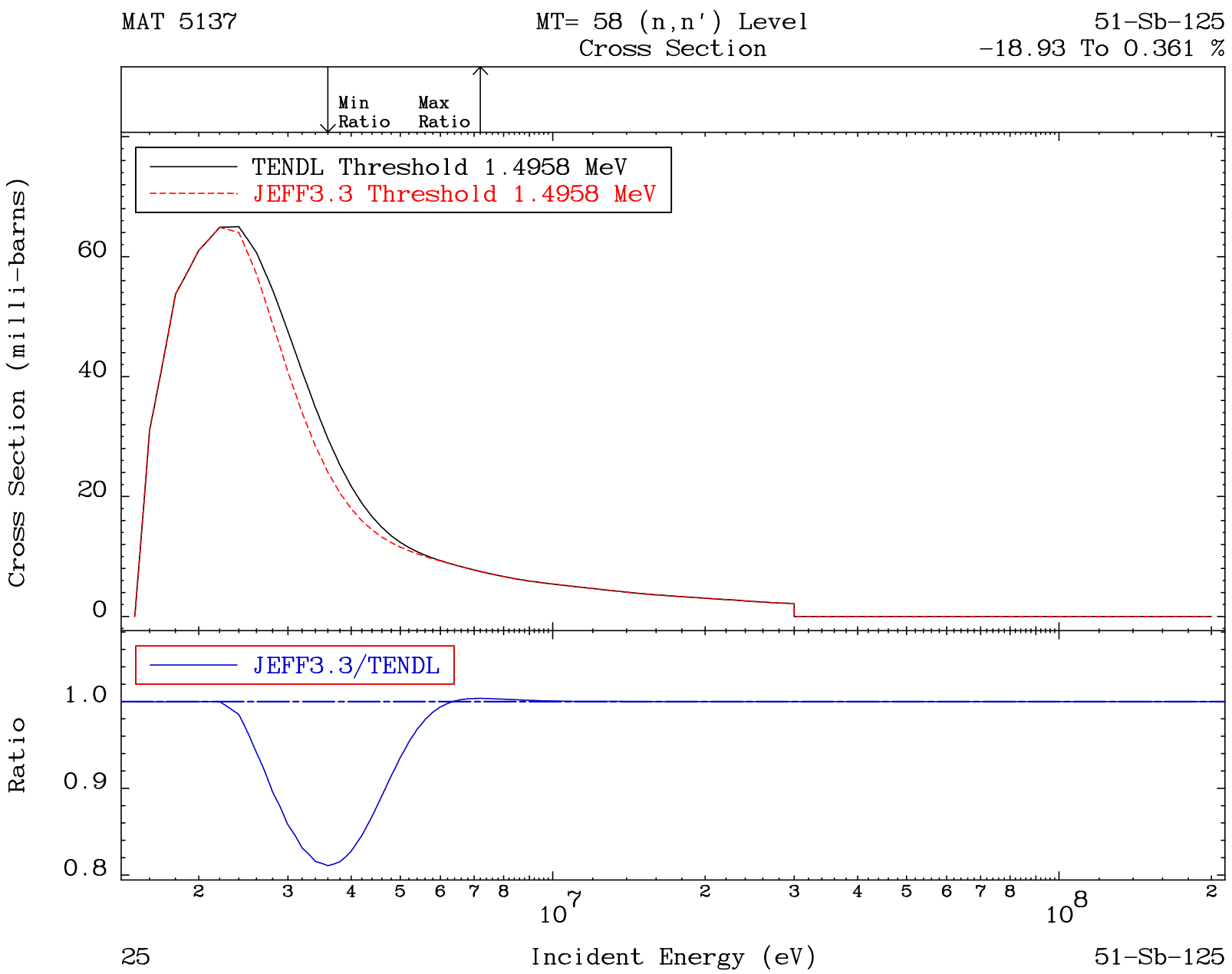

MAT 5137
MT= 53 (n,n') Level
Cross Section
51-Sb-125
-28.70 To 13.02 %
Min Ratio
Max Ratio
TENDL Threshold 929.11 keV
JEFF3.3 Threshold 929.11 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.2
1.0
0.8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
51-Sb-125

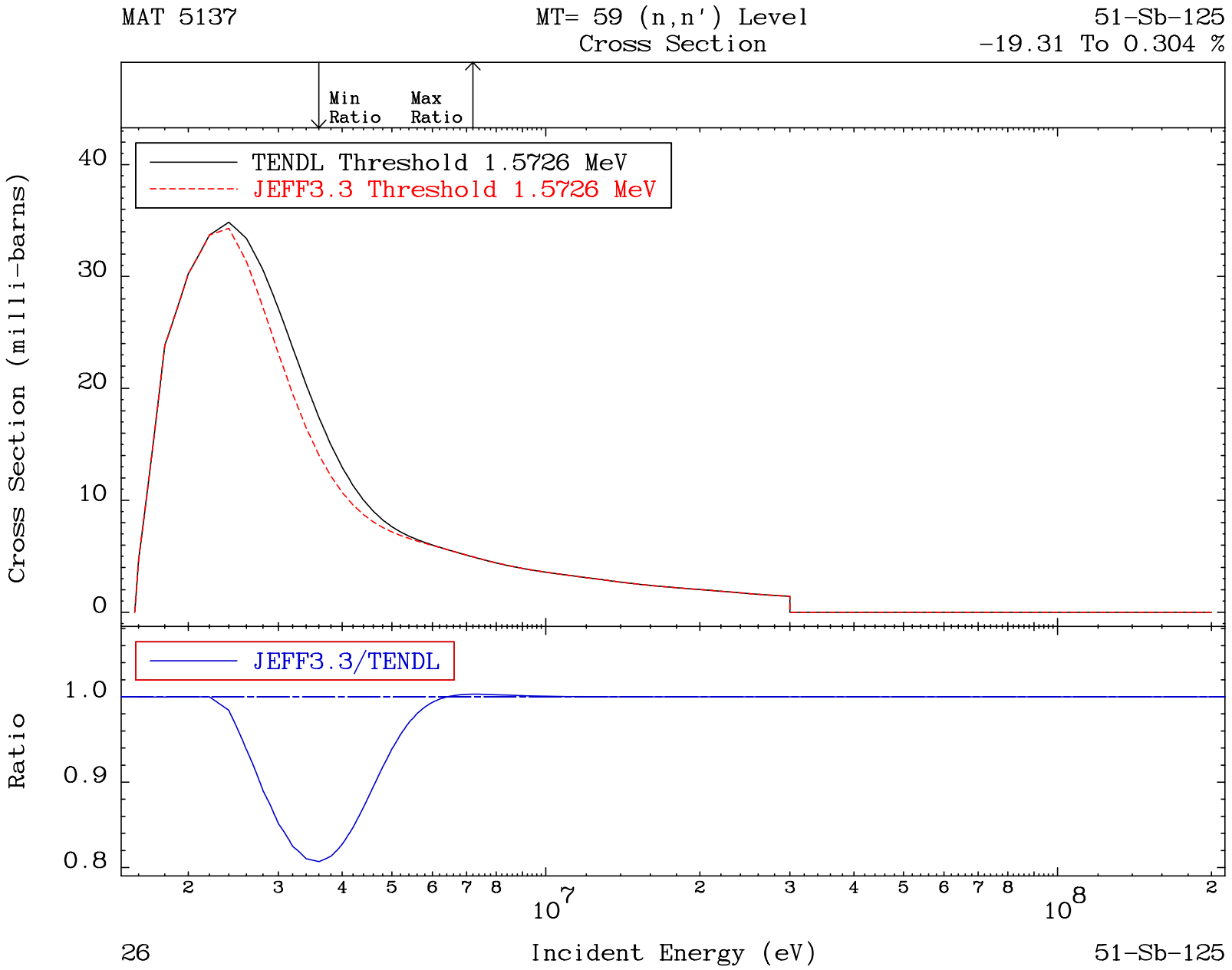

MAT 5137
MT= 54 (n,n') Level
Cross Section
51-Sb-125
-23.28 To 5.244 %
Min Ratio
Max Ratio
TENDL Threshold 1.0759 MeV
JEFF3.3 Threshold 1.0759 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
51-Sb-125

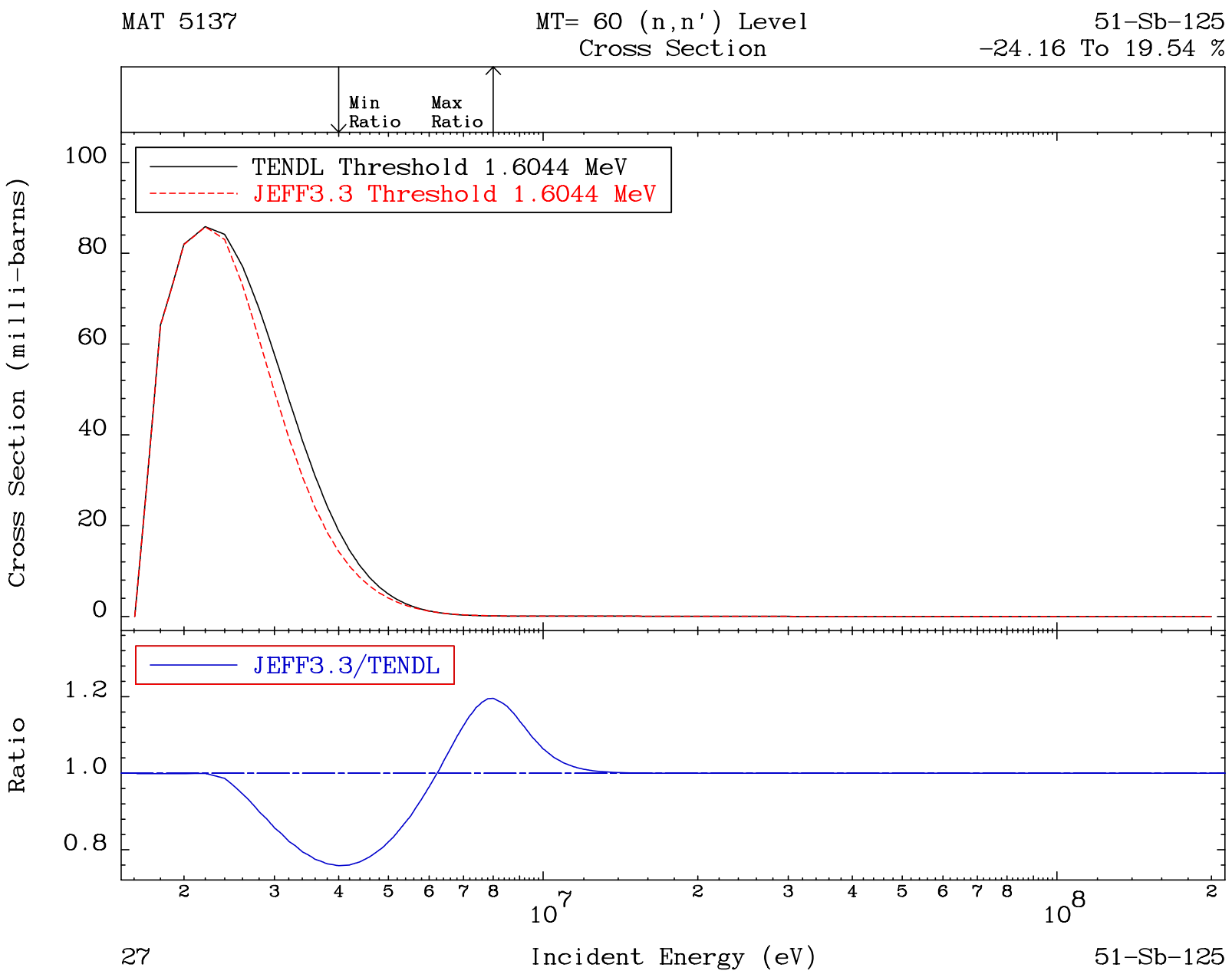

MAT 5137
MT= 55 (n,n') Level
Cross Section
51-Sb-125
-13.89 To 0.280 %
Min Ratio
Max Ratio
TENDL Threshold 1.0983 MeV
JEFF3.3 Threshold 1.0983 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
0.85
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
51-Sb-125

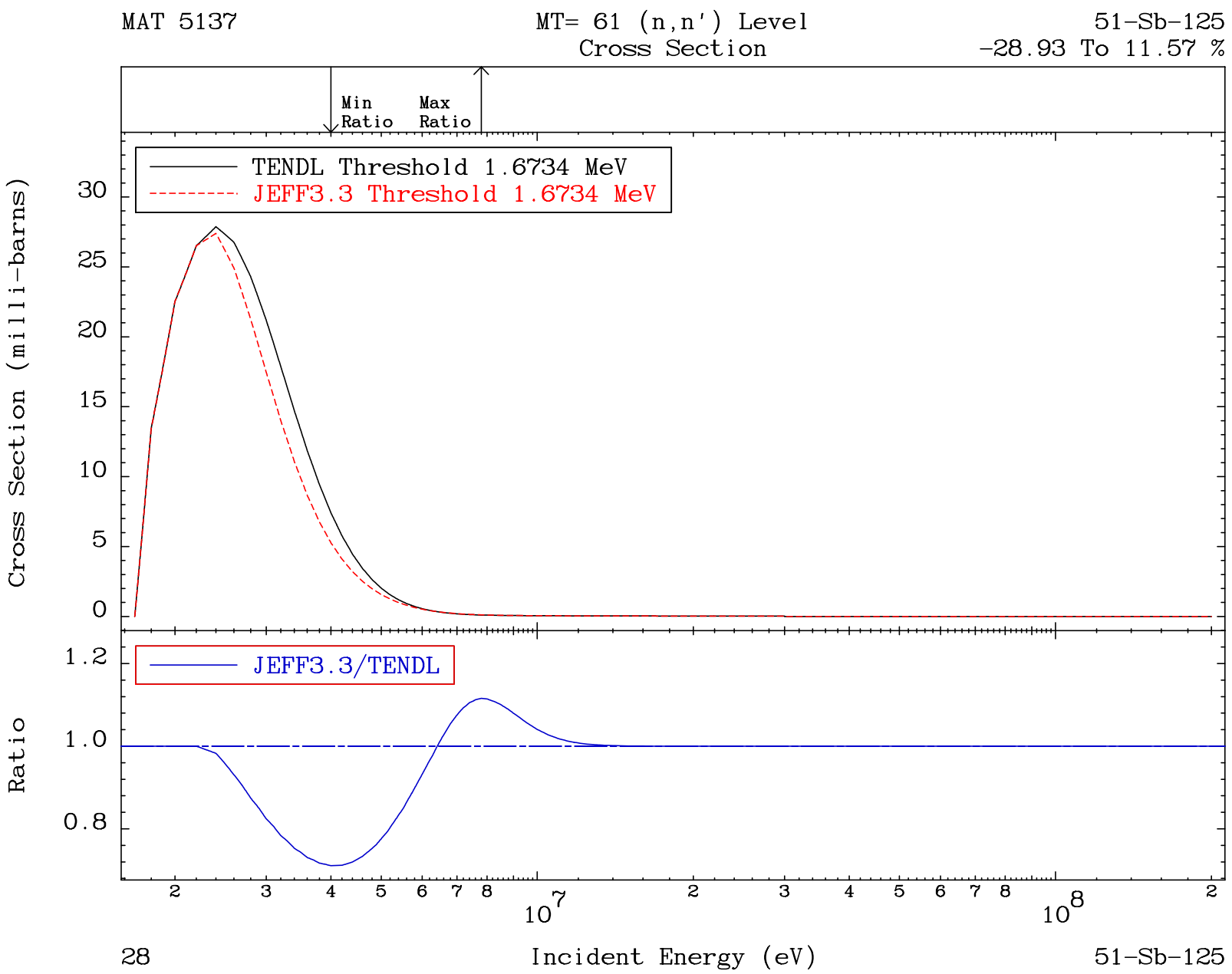

MAT 5137
MT= 56 (n,n') Level
Cross Section
51-Sb-125
-17.80 To 0.343 %
Min Ratio
Max Ratio
TENDL Threshold 1.3605 MeV
JEFF3.3 Threshold 1.3605 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.00
0.90
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
51-Sb-125

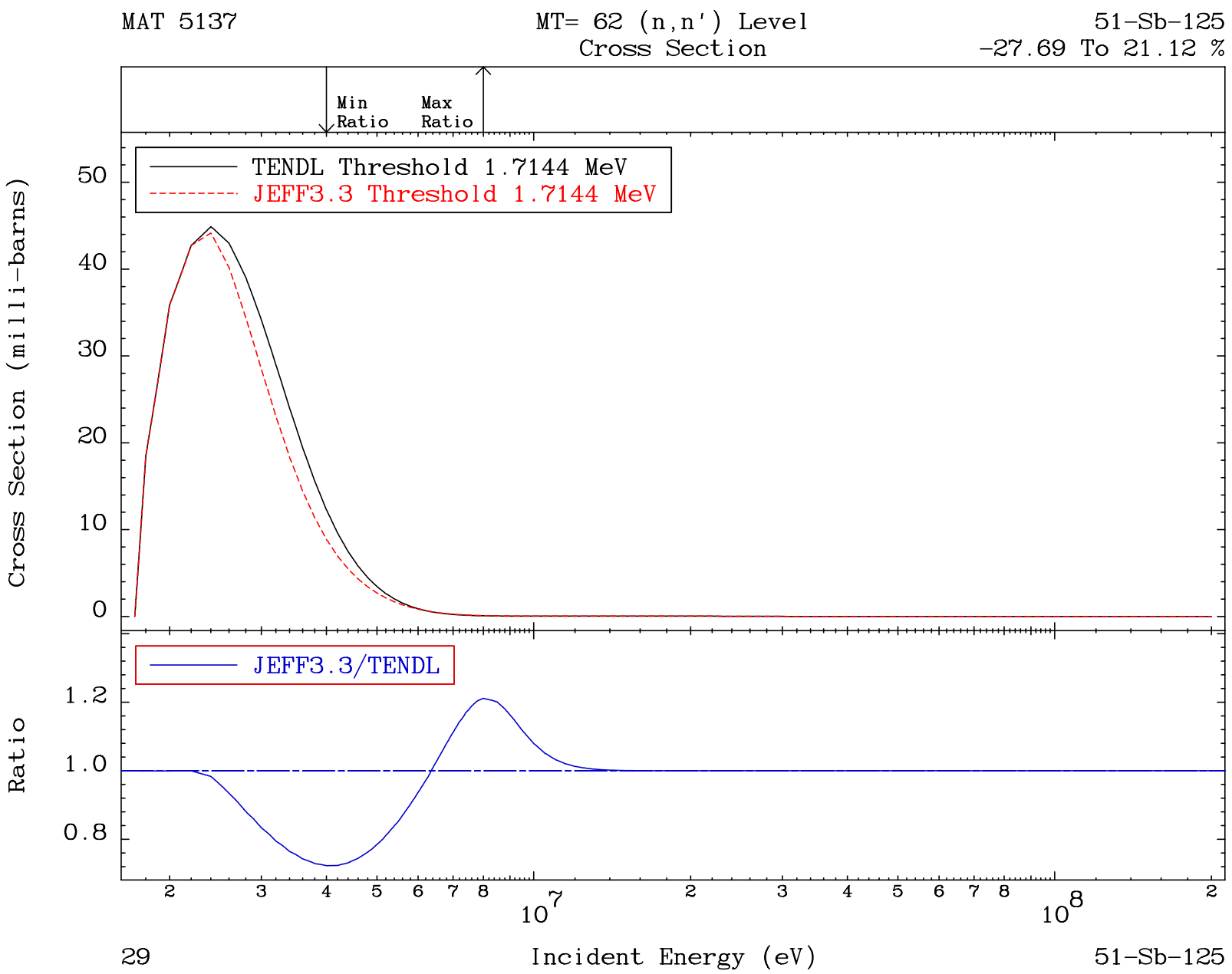

MAT 5137
MT= 57 (n,n') Level
Cross Section
51-Sb-125
-16.11 To 0.315 %
Min Ratio
Max Ratio
TENDL Threshold 1.4313 MeV
JEFF3.3 Threshold 1.4313 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
0.85
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
51-Sb-125

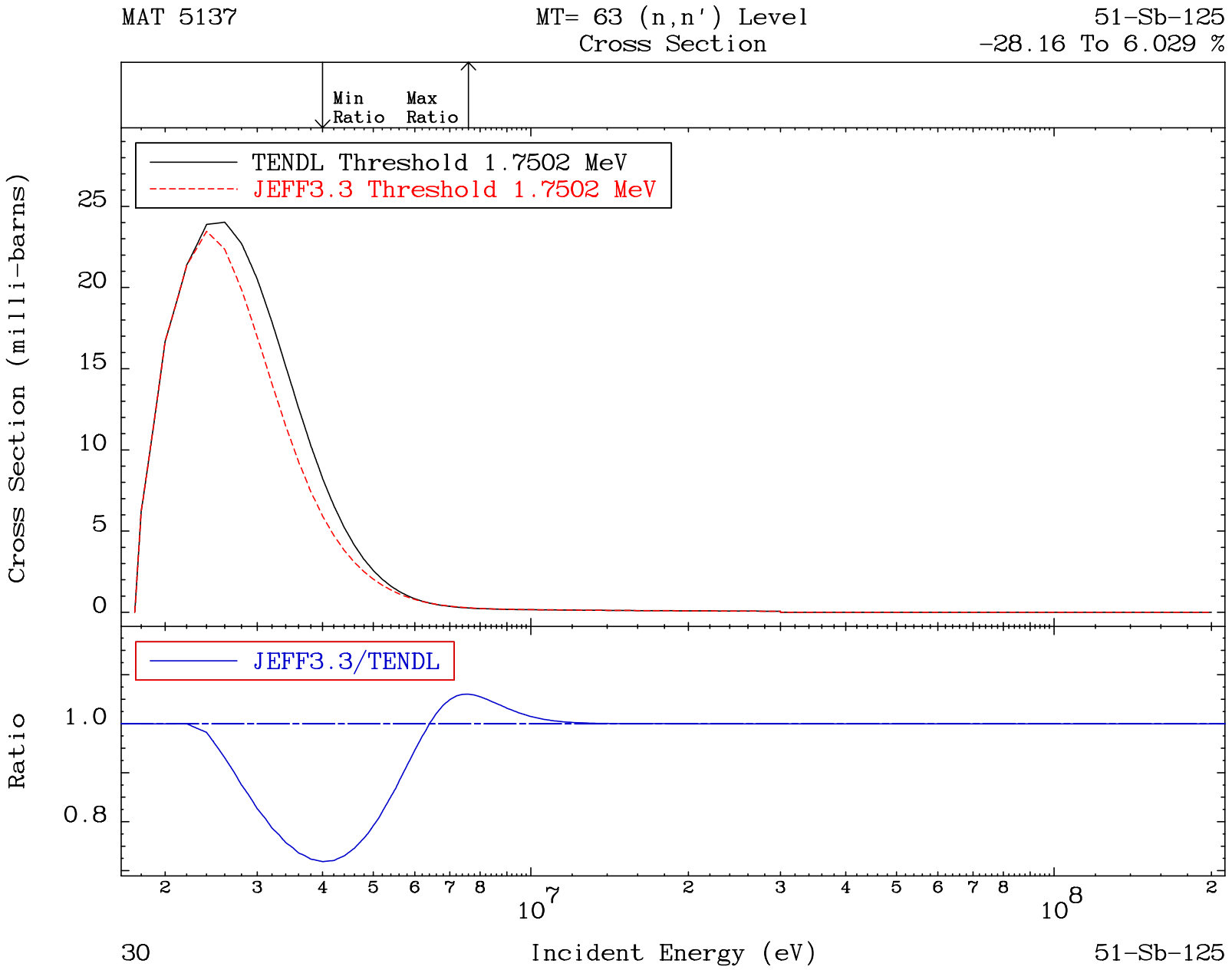

MAT 5137
MT= 58 (n,n') Level
Cross Section
51-Sb-125
-18.93 To 0.361 %
Min Ratio
Max Ratio
TENDL Threshold 1.4958 MeV
JEFF3.3 Threshold 1.4958 MeV
Cross Section (milli-barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
25
Incident Energy (eV)
51-Sb-125

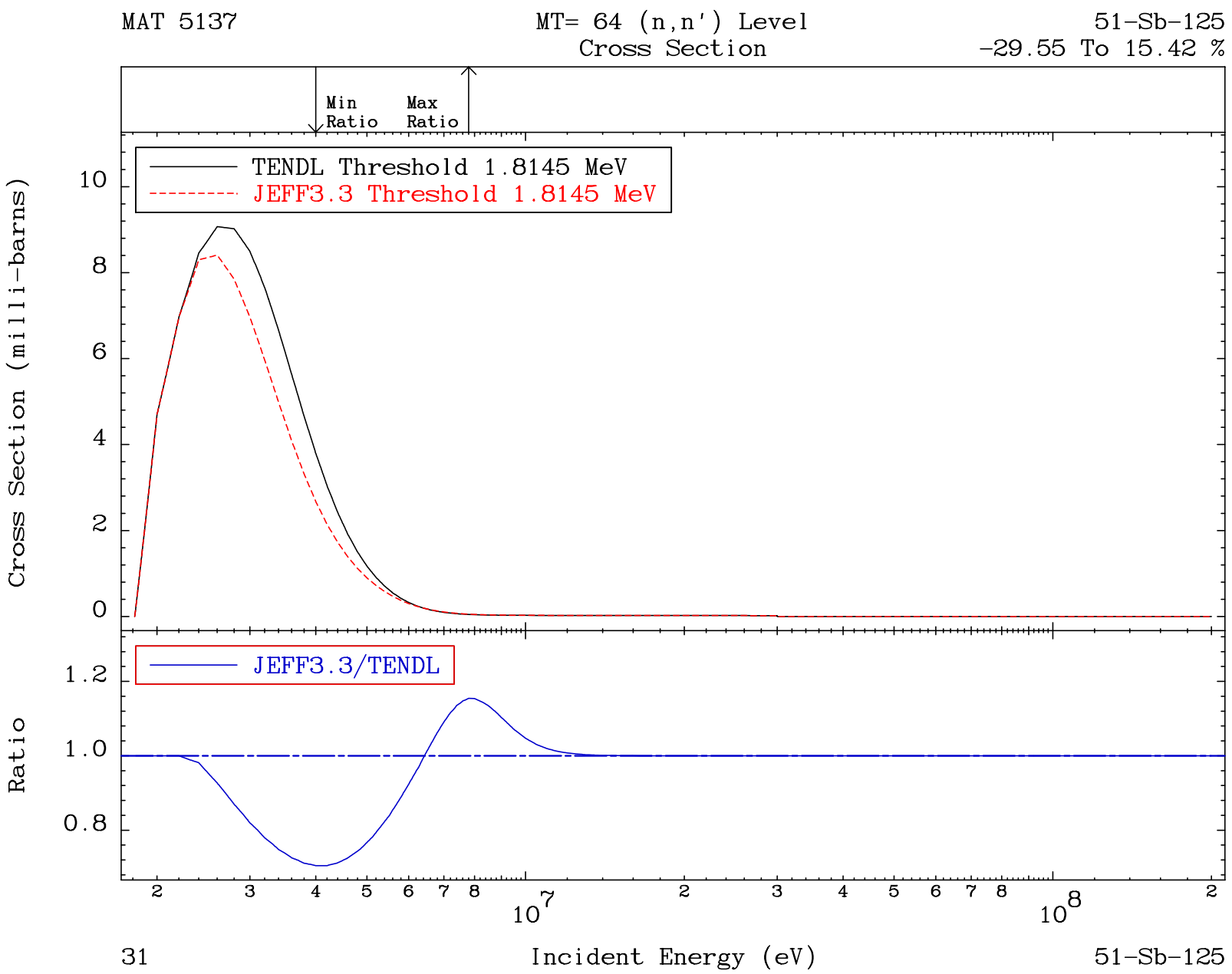

MAT 5137
MT= 59 (n,n') Level
Cross Section
51-Sb-125
-19.31 To 0.304 %
Min Ratio
Max Ratio
TENDL Threshold 1.5726 MeV
JEFF3.3 Threshold 1.5726 MeV
Cross Section (milli-barns)
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
51-Sb-125

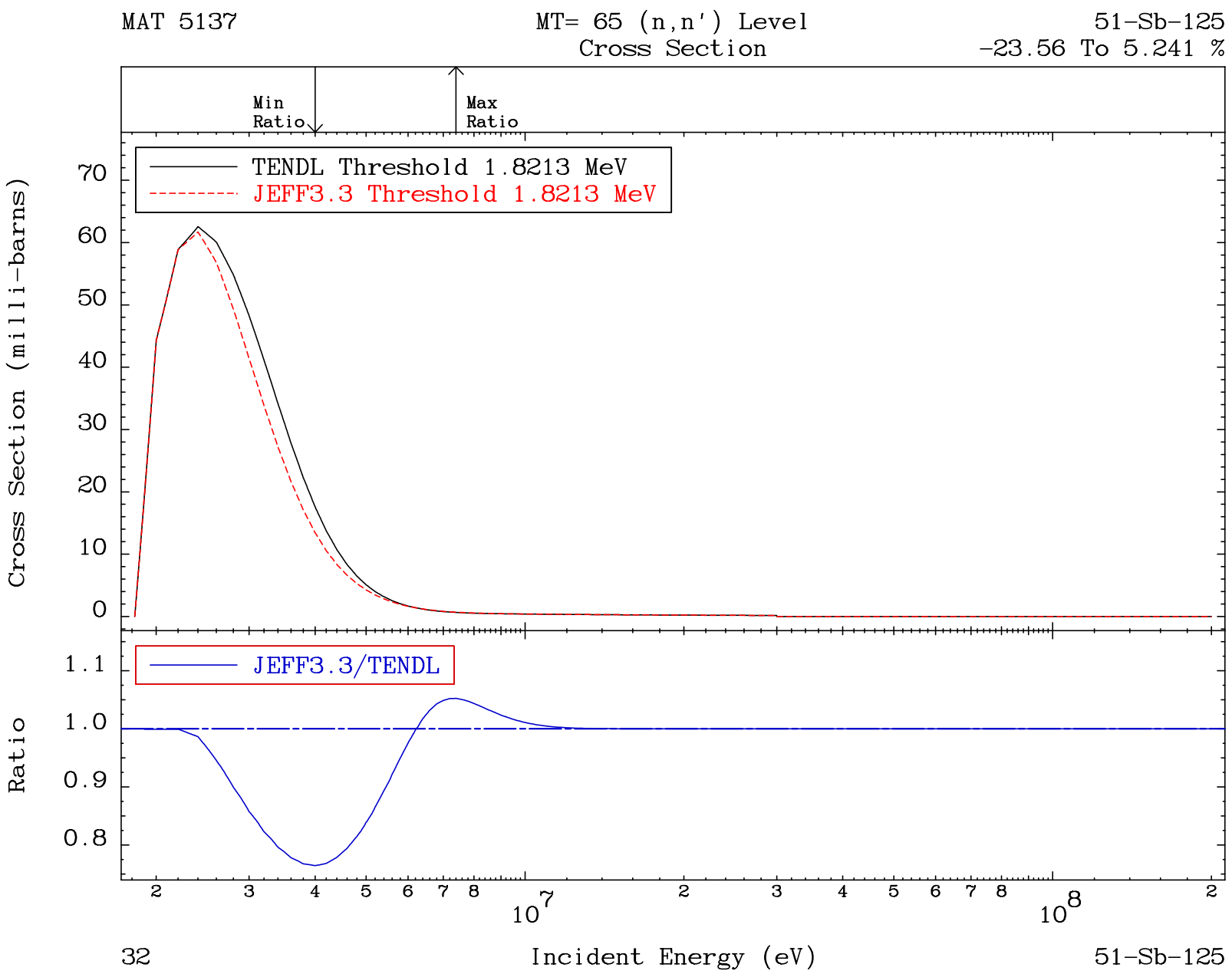

MAT 5137
MT= 60 (n,n') Level
Cross Section
51-Sb-125
-24.16 To 19.54 %
Min Ratio
Max Ratio
TENDL Threshold 1.6044 MeV
JEFF3.3 Threshold 1.6044 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
1.2
1.0
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
51-Sb-125

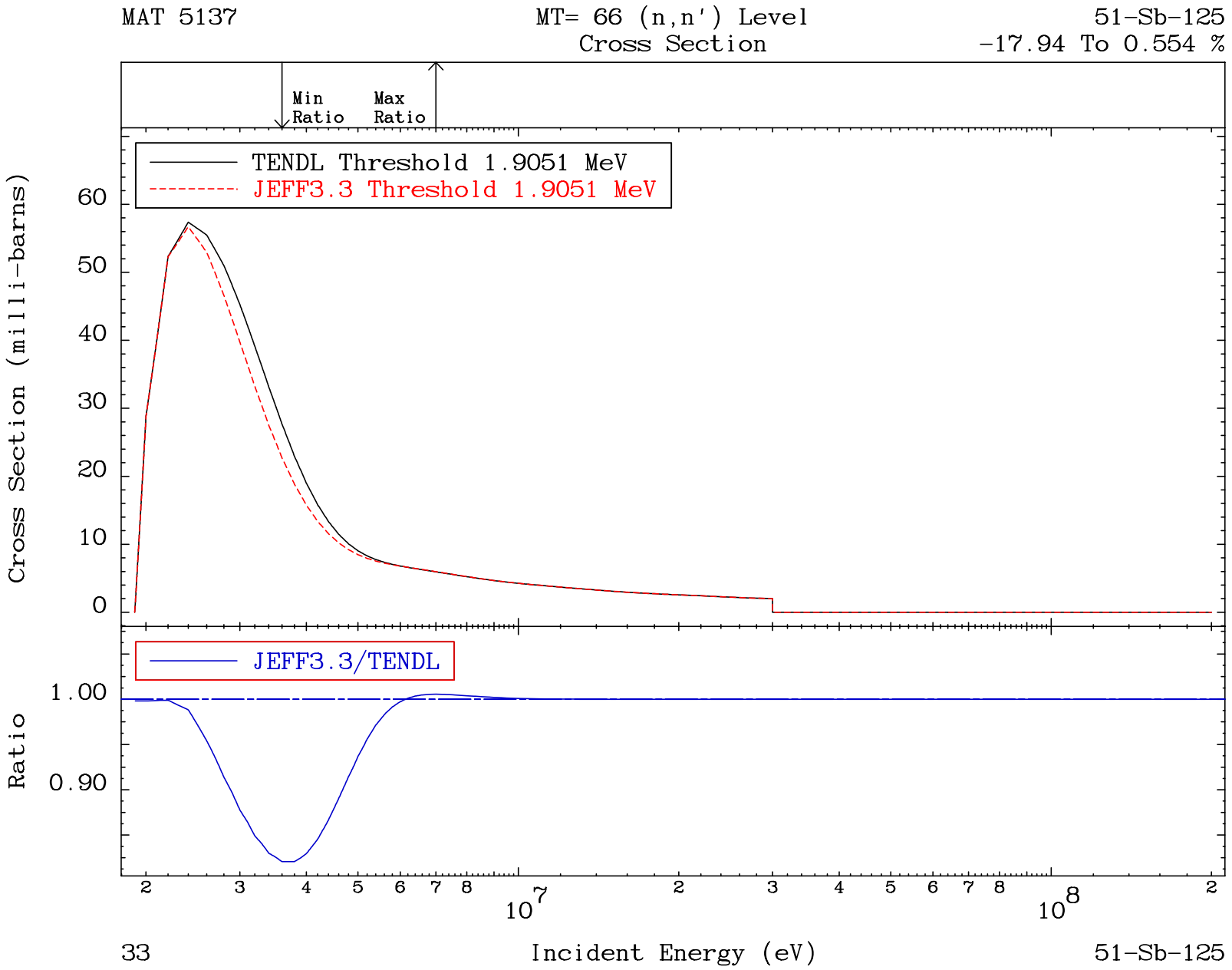

MAT 5137
MT= 61 (n,n') Level
Cross Section
51-Sb-125
-28.93 To 11.57 %
Min Ratio
Max Ratio
TENDL Threshold 1.6734 MeV
JEFF3.3 Threshold 1.6734 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.2
1.0
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
51-Sb-125

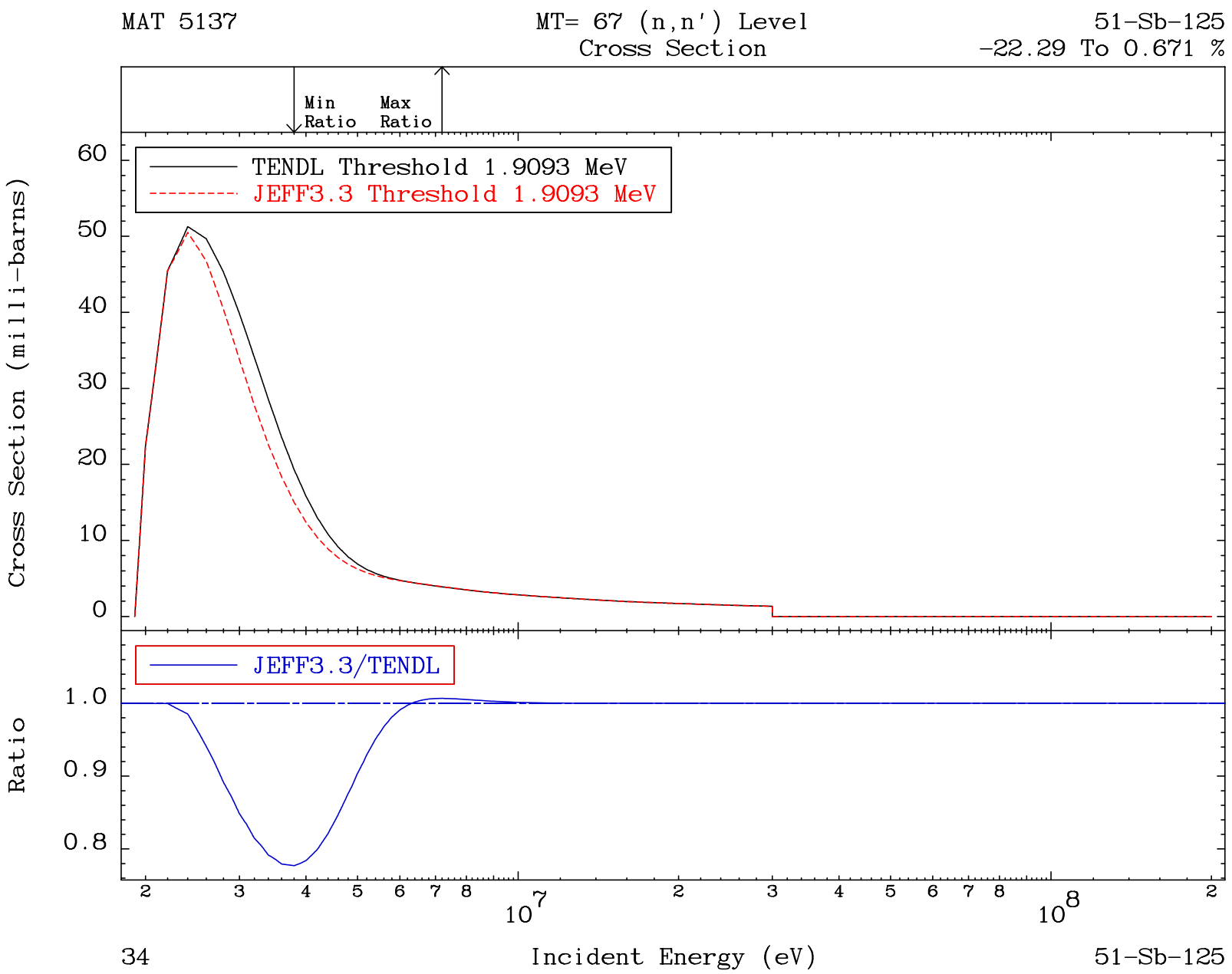

MAT 5137
MT= 62 (n,n') Level
Cross Section
51-Sb-125
-27.69 To 21.12 %
Min Ratio
Max Ratio
TENDL Threshold 1.7144 MeV
JEFF3.3 Threshold 1.7144 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.2
1.0
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
29
Incident Energy (eV)
51-Sb-125

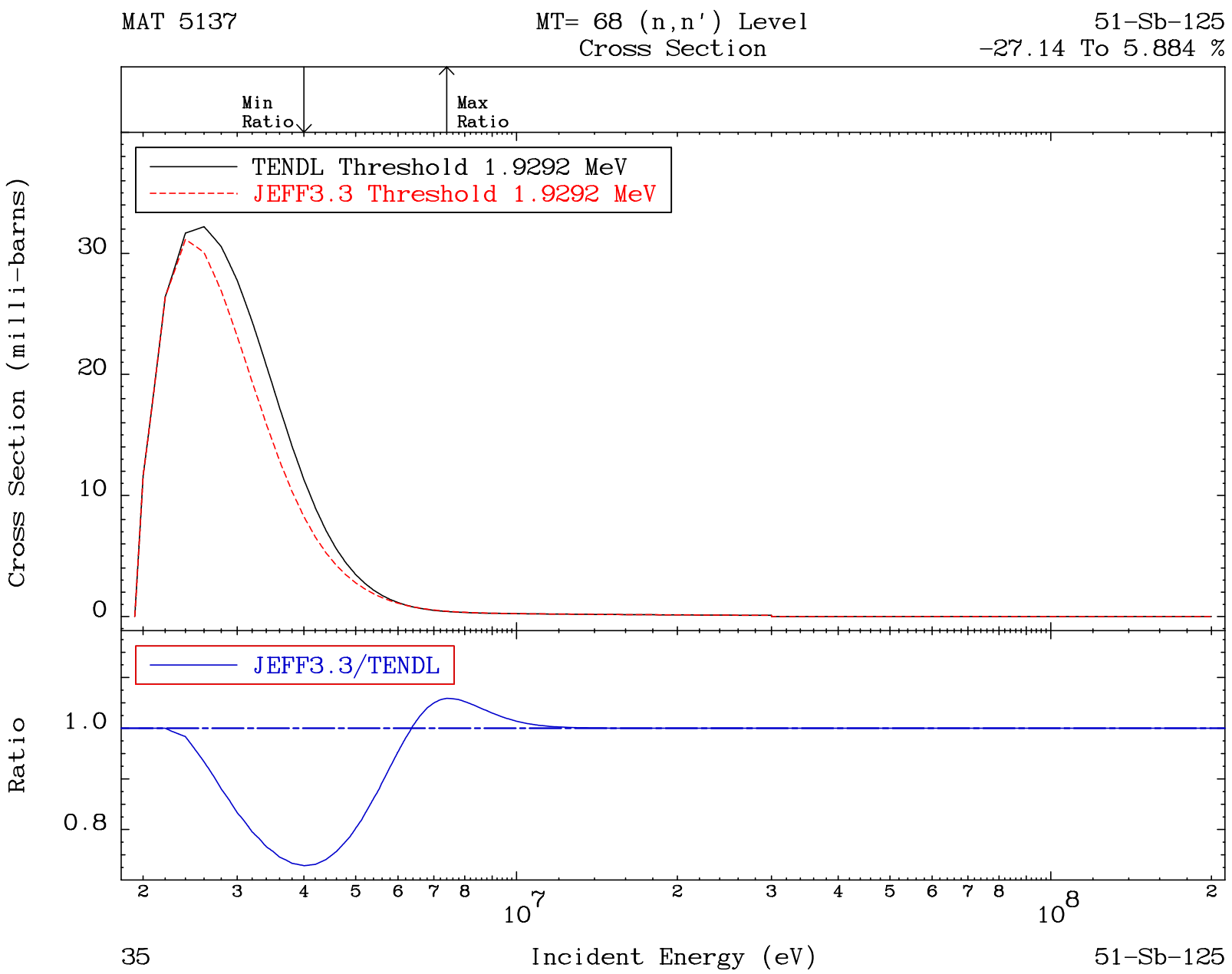

MAT 5137
MT= 63 (n,n') Level
Cross Section
51-Sb-125
-28.16 To 6.029 %
Min Ratio
Max Ratio
TENDL Threshold 1.7502 MeV
JEFF3.3 Threshold 1.7502 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.0
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
30
Incident Energy (eV)
51-Sb-125

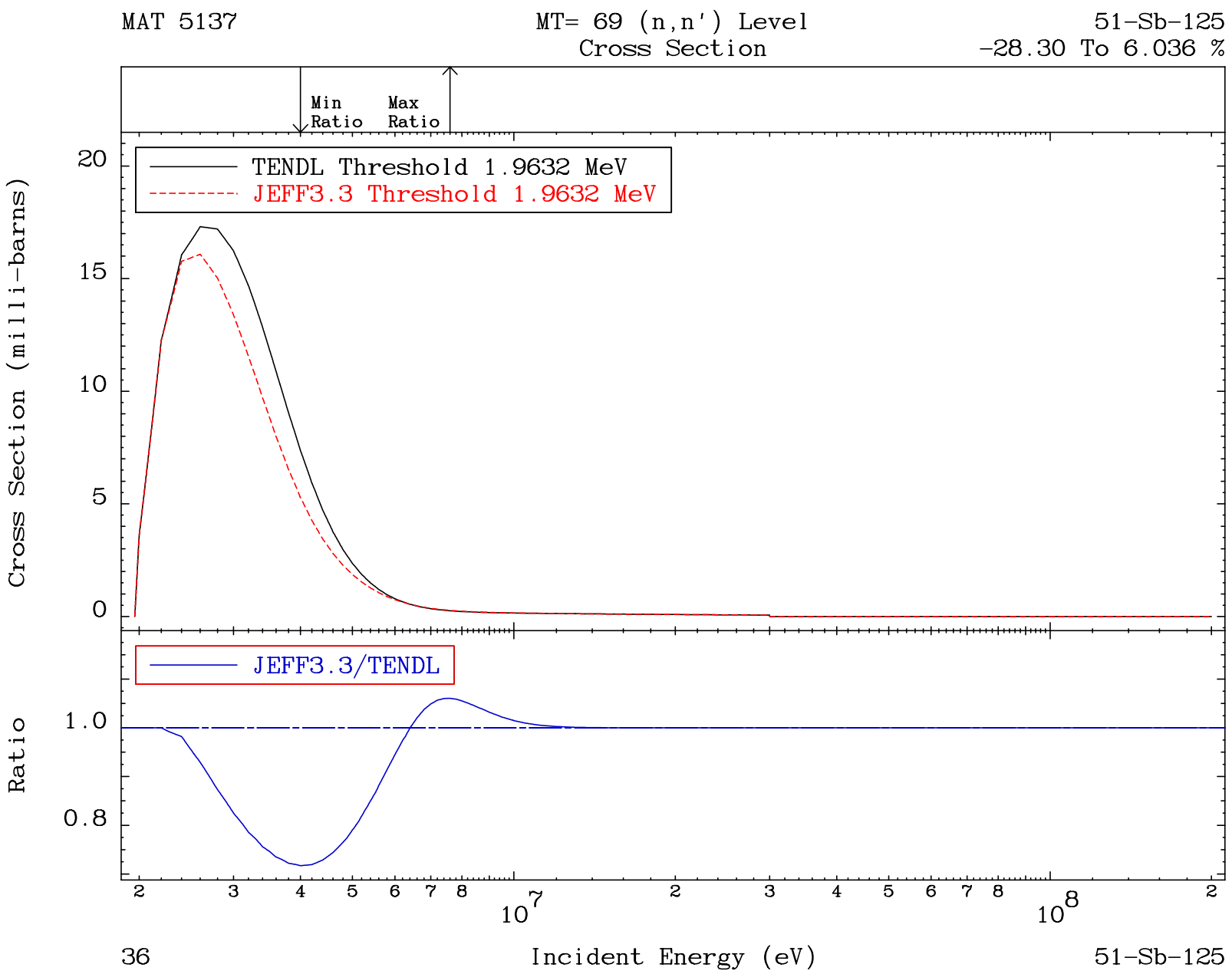

MAT 5137
MT= 64 (n,n') Level
Cross Section
51-Sb-125
-29.55 To 15.42 %
Min Ratio
Max Ratio
TENDL Threshold 1.8145 MeV
JEFF3.3 Threshold 1.8145 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
31
51-Sb-125

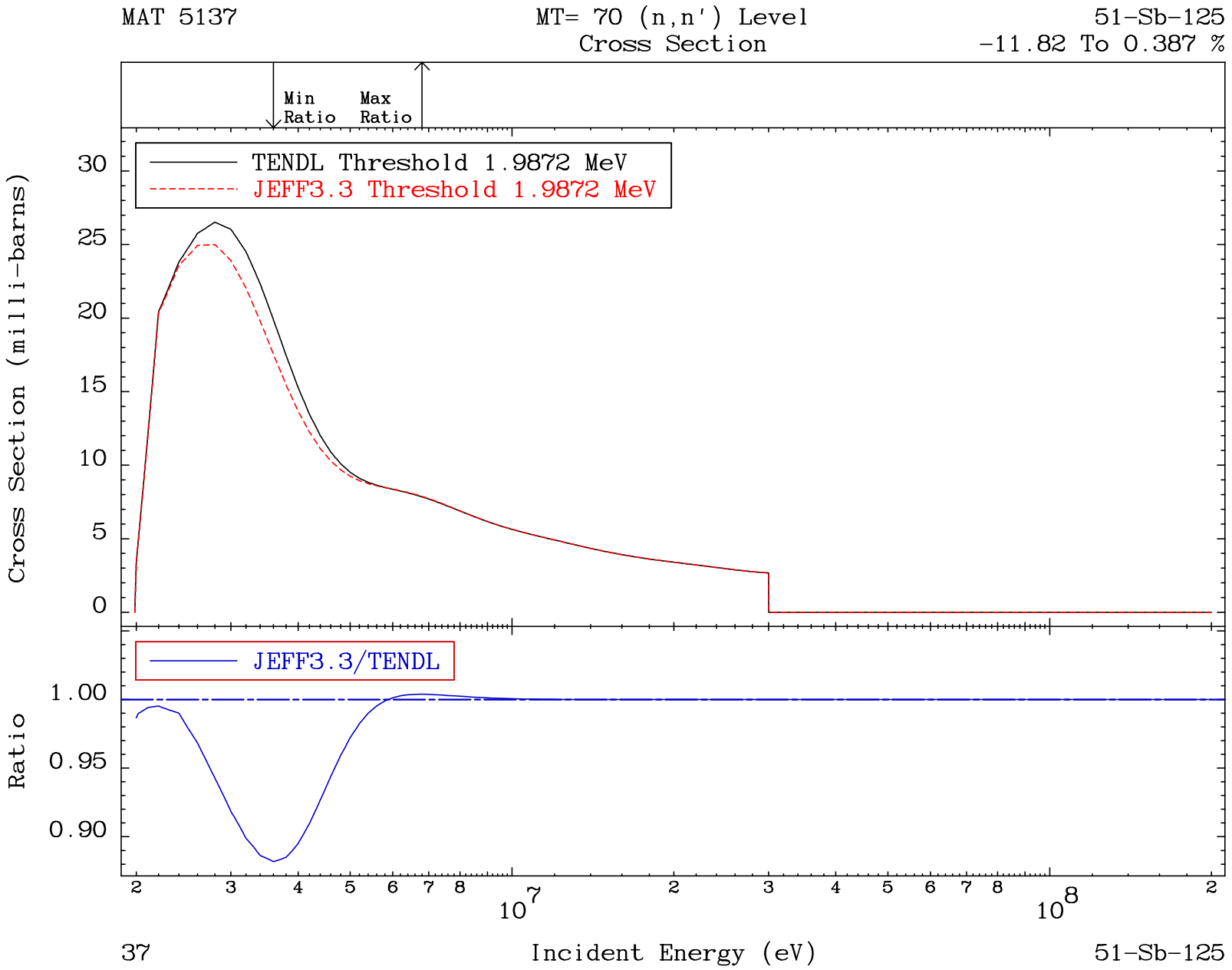

MAT 5137
MT= 65 (n,n') Level
Cross Section
51-Sb-125
-23.56 To 5.241 %
Min Ratio
Max Ratio
TENDL Threshold 1.8213 MeV
JEFF3.3 Threshold 1.8213 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
32
Incident Energy (eV)
51-Sb-125

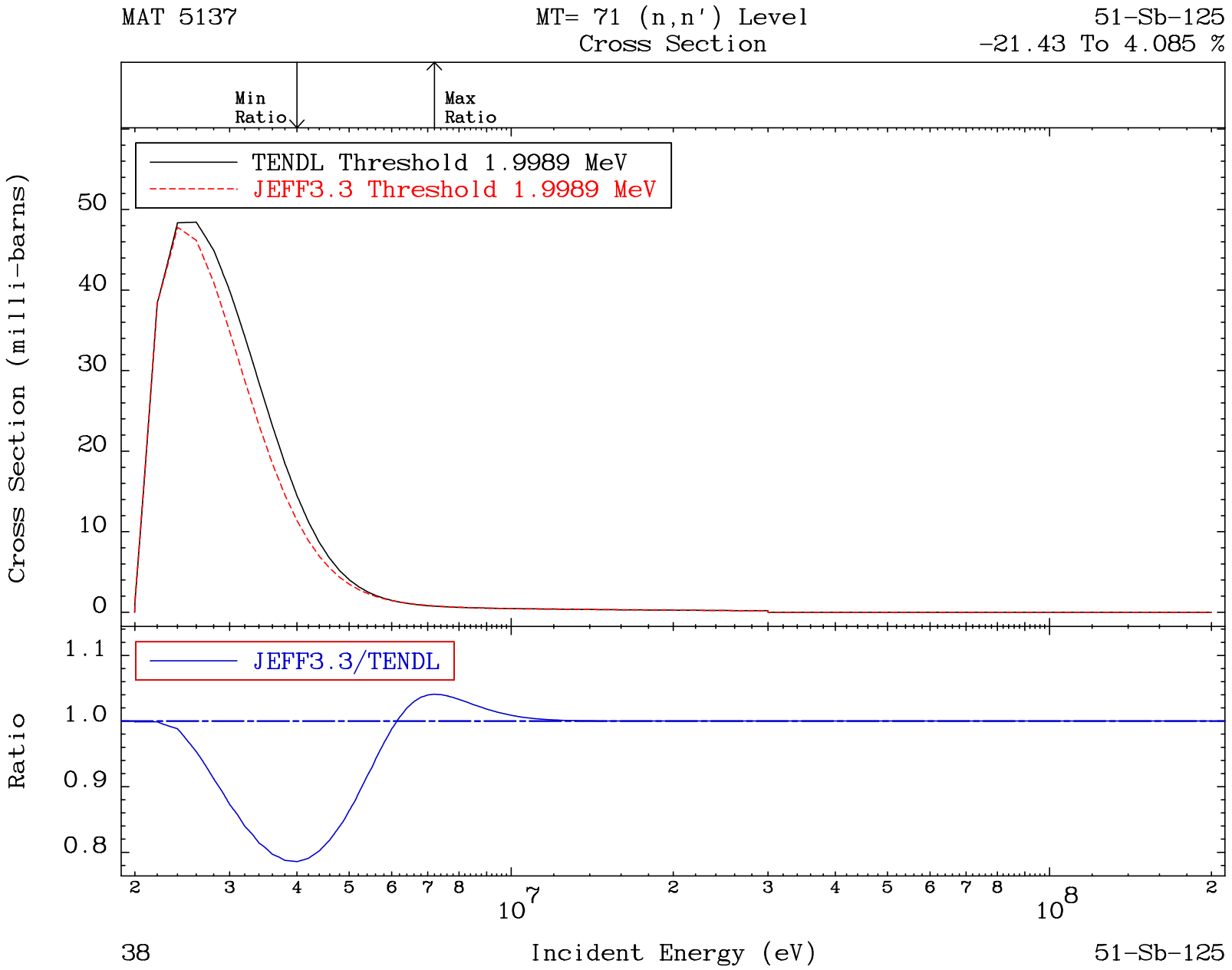

MAT 5137
MT= 66 (n,n') Level
Cross Section
51-Sb-125
-17.94 To 0.554 %
Min Ratio
Max Ratio
TENDL Threshold 1.9051 MeV
JEFF3.3 Threshold 1.9051 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.00
0.90
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
33
Incident Energy (eV)
51-Sb-125

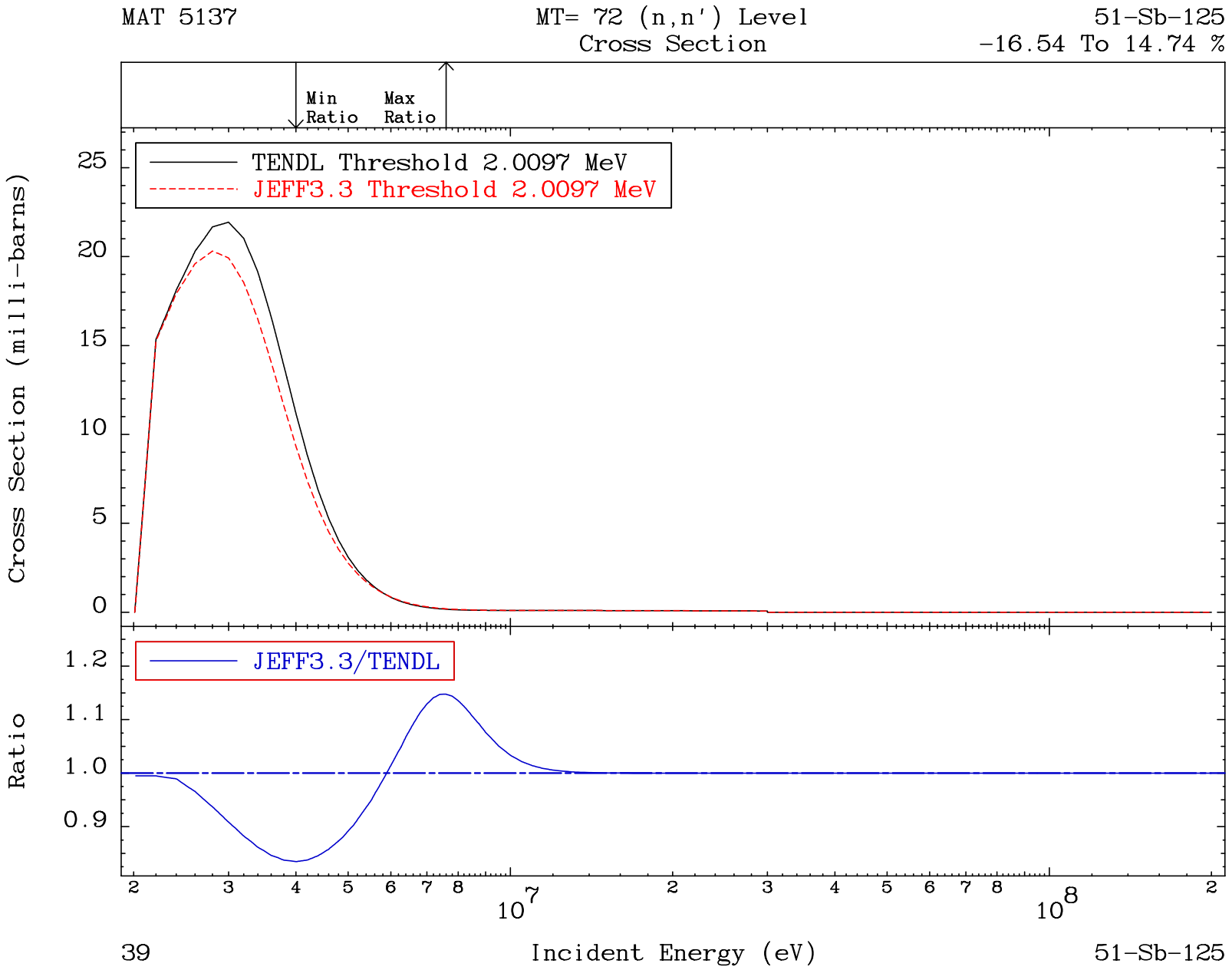

MAT 5137
MT= 67 (n,n') Level
Cross Section
51-Sb-125
-22.29 To 0.671 %
Min Ratio
Max Ratio
TENDL Threshold 1.9093 MeV
JEFF3.3 Threshold 1.9093 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
51-Sb-125

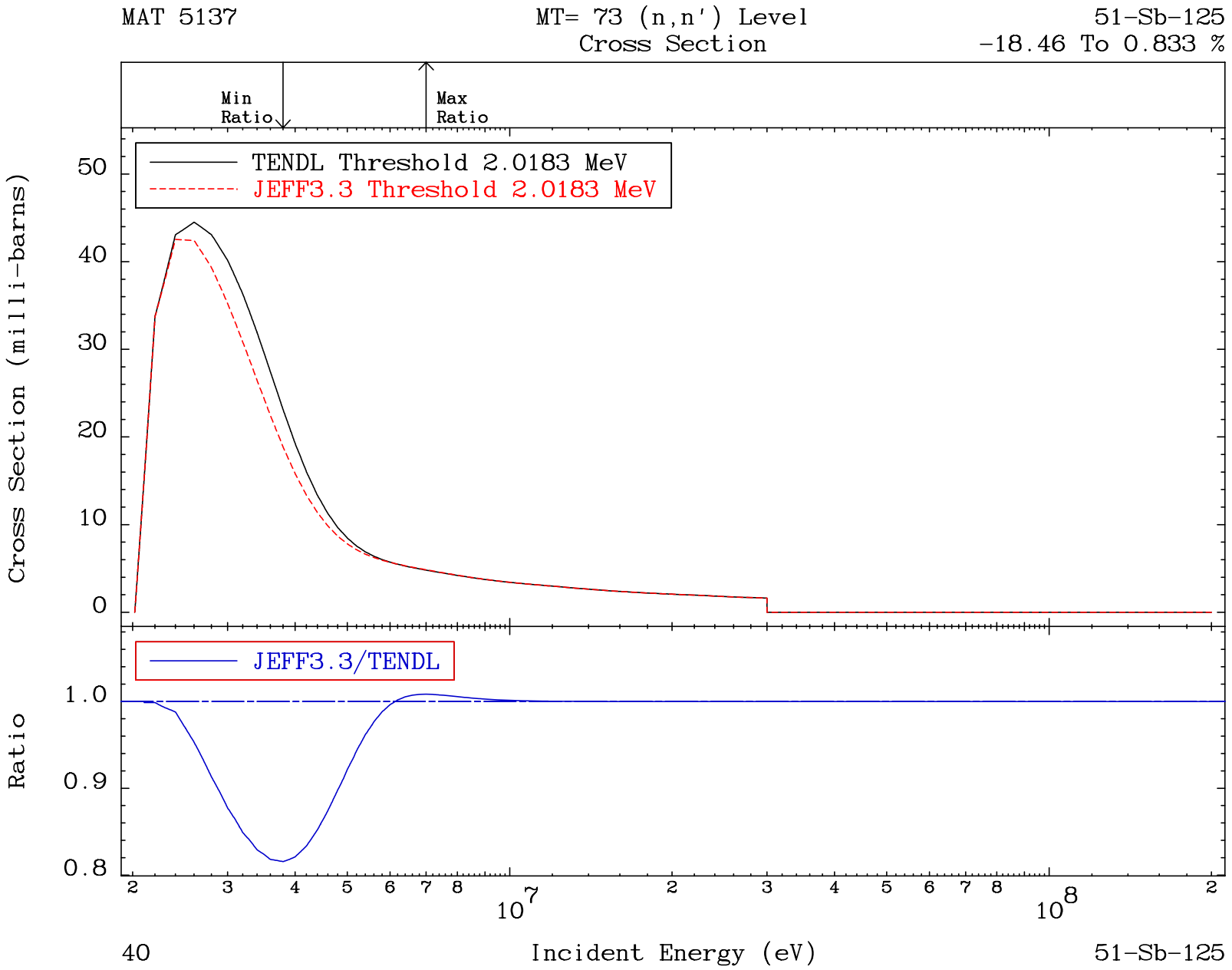

MAT 5137
MT= 68 (n,n') Level
Cross Section
51-Sb-125
-27.14 To 5.884 %
Min Ratio
Max Ratio
TENDL Threshold 1.9292 MeV
JEFF3.3 Threshold 1.9292 MeV
Cross Section (milli-barns)
30
20
10
0
JEFF3.3/TENDL
Ratio
1.0
0.8
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
35
Incident Energy (eV)
51-Sb-125

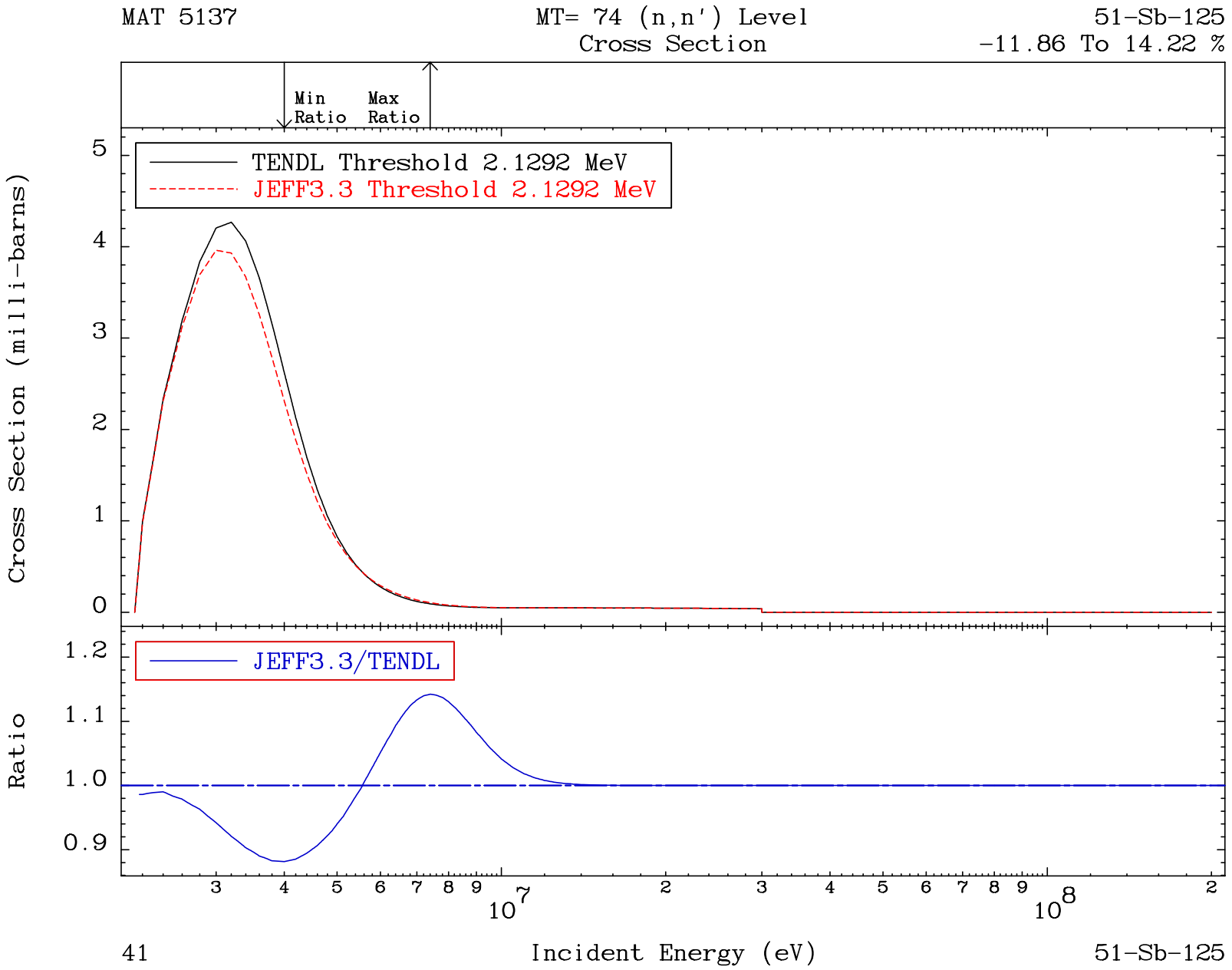

MAT 5137
MT= 69 (n,n') Level
Cross Section
51-Sb-125
-28.30 To 6.036 %
Min Ratio
Max Ratio
TENDL Threshold 1.9632 MeV
JEFF3.3 Threshold 1.9632 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.0
0.8
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
36
51-Sb-125

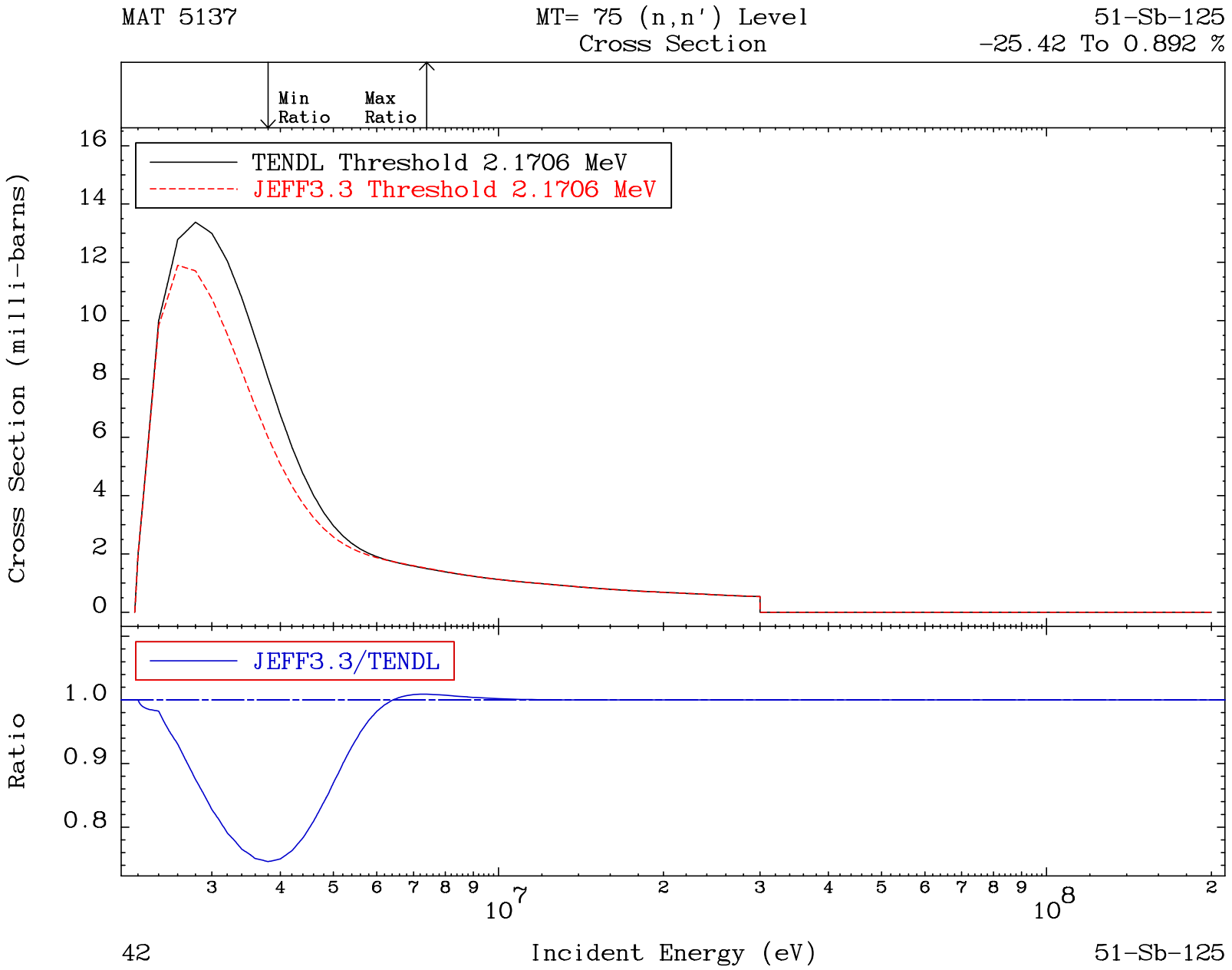

MAT 5137
MT= 70 (n,n') Level
Cross Section
51-Sb-125
-11.82 To 0.387 %
Min Ratio
Max Ratio
TENDL Threshold 1.9872 MeV
JEFF3.3 Threshold 1.9872 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
51-Sb-125

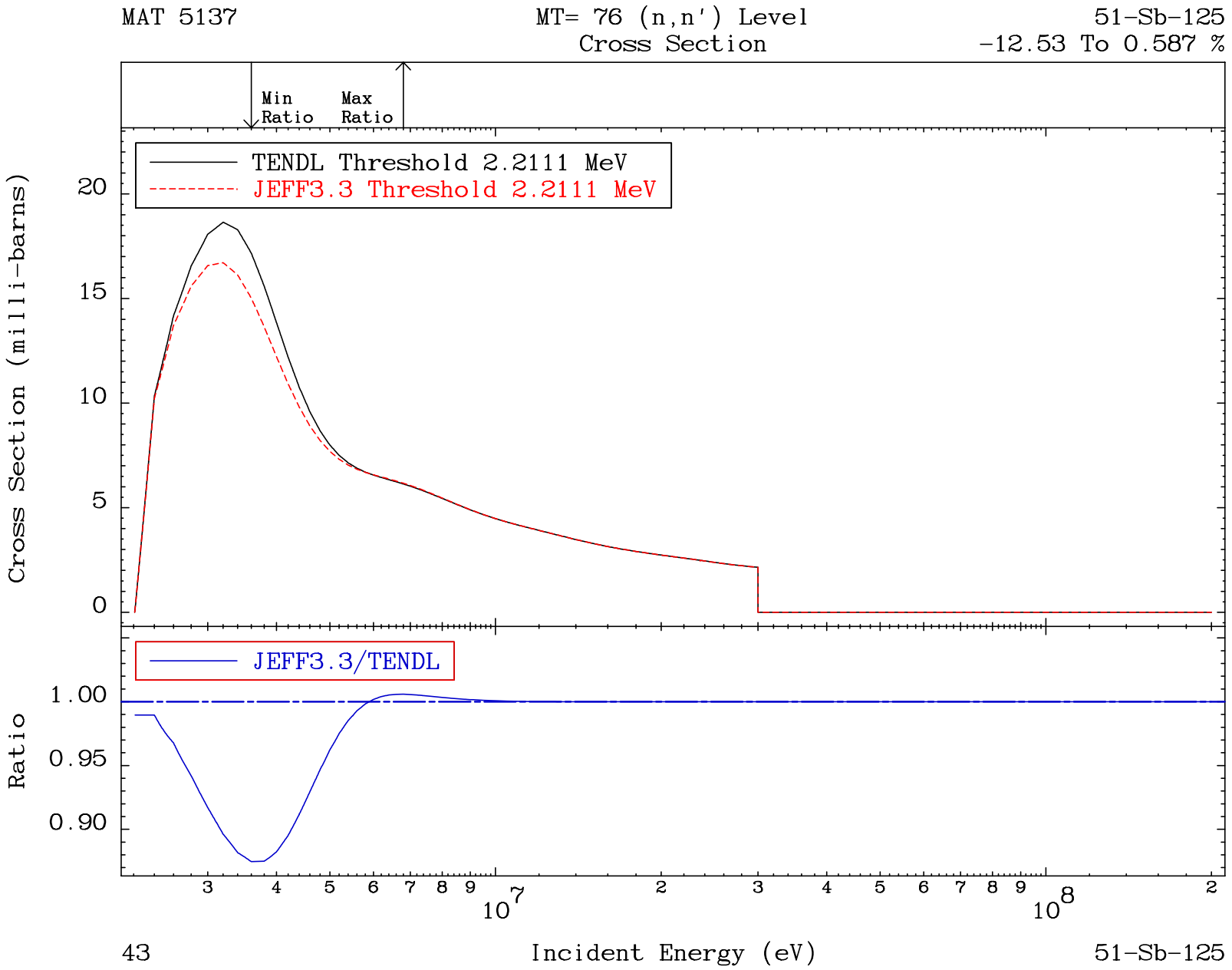

MAT 5137
MT= 71 (n,n') Level
Cross Section
51-Sb-125
-21.43 To 4.085 %
Min Ratio
Max Ratio
TENDL Threshold 1.9989 MeV
JEFF3.3 Threshold 1.9989 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.1
1.0
0.9
0.8
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
51-Sb-125

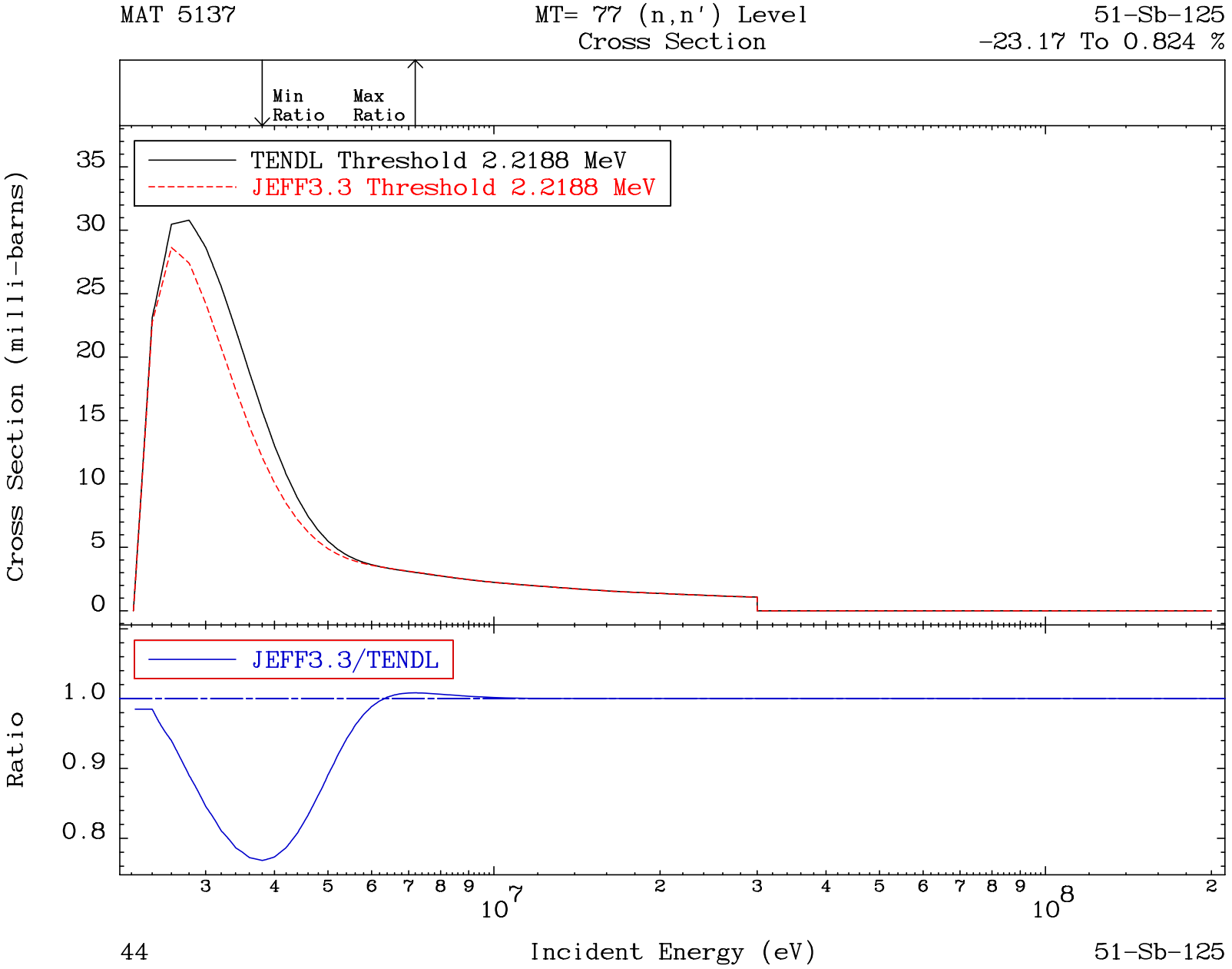

MAT 5137
MT= 72 (n,n') Level
Cross Section
51-Sb-125
-16.54 To 14.74 %
Min Ratio
Max Ratio
TENDL Threshold 2.0097 MeV
JEFF3.3 Threshold 2.0097 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.2
1.1
1.0
0.9
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
51-Sb-125

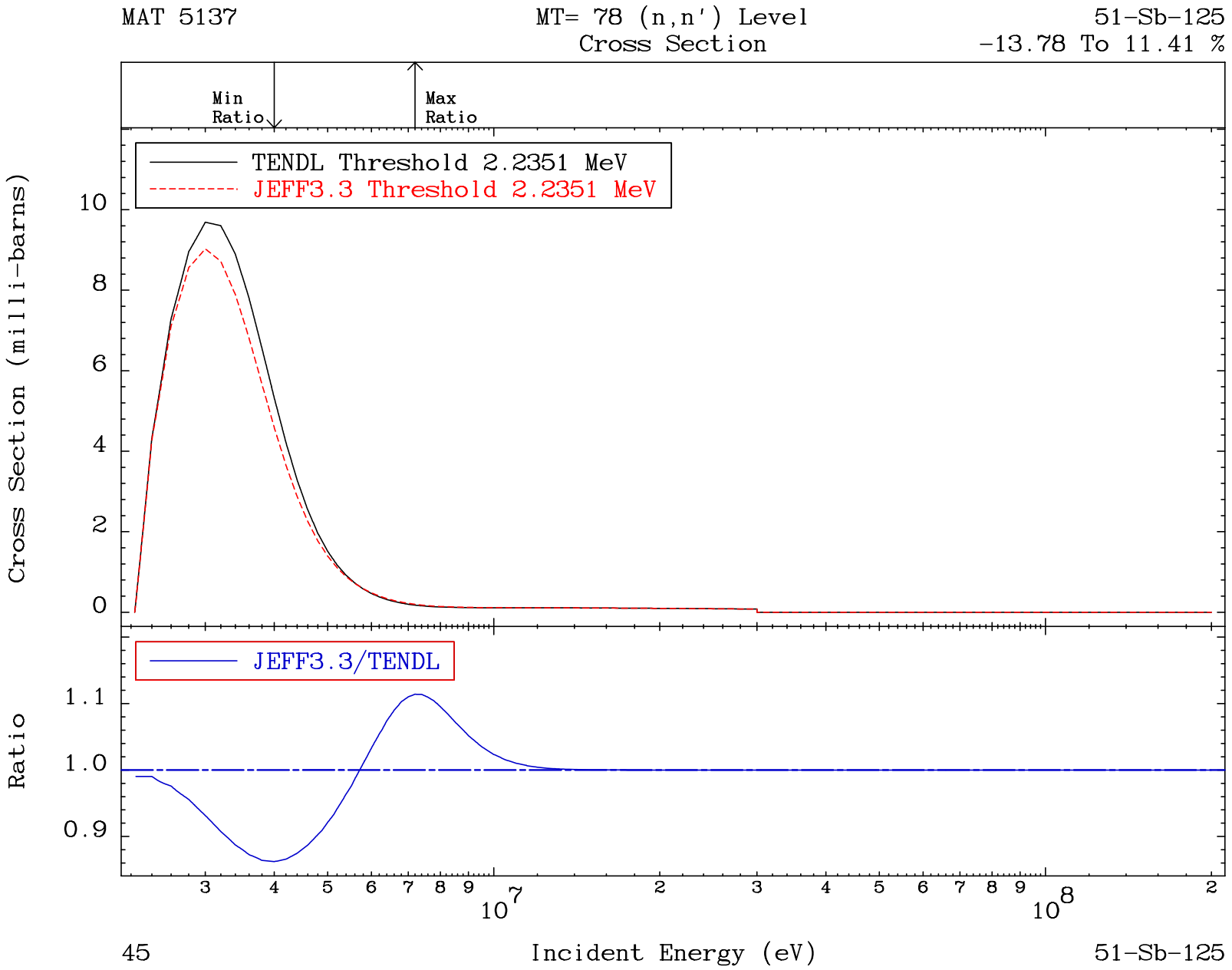

MAT 5137
MT= 73 (n,n') Level
Cross Section
51-Sb-125
-18.46 To 0.833 %
Min Ratio
Max Ratio
TENDL Threshold 2.0183 MeV
JEFF3.3 Threshold 2.0183 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
40
Incident Energy (eV)
51-Sb-125

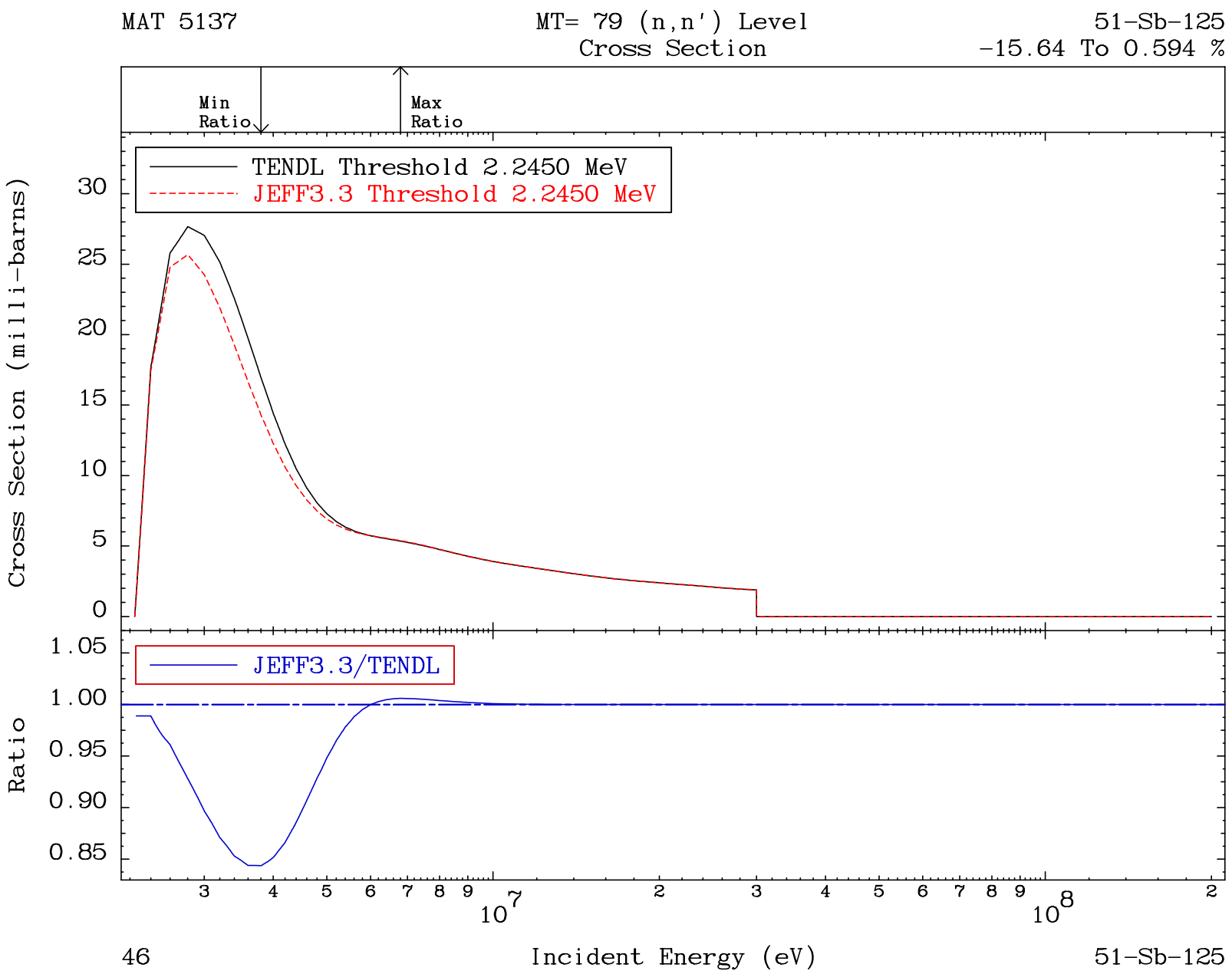

MAT 5137
MT= 74 (n,n') Level
Cross Section
51-Sb-125
-11.86 To 14.22 %
Min Ratio
Max Ratio
TENDL Threshold 2.1292 MeV
JEFF3.3 Threshold 2.1292 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
41
51-Sb-125

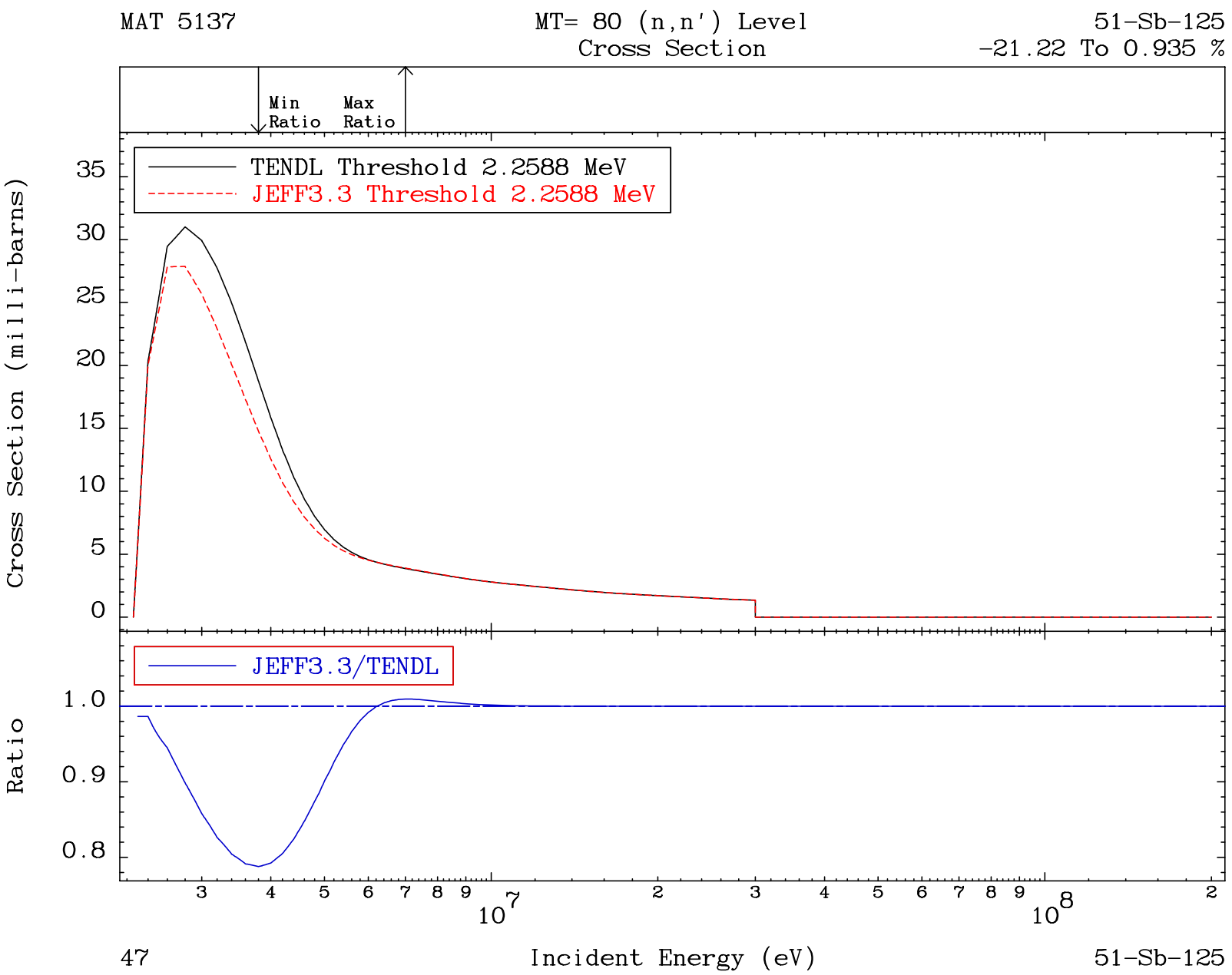

MAT 5137
MT= 75 (n,n') Level
Cross Section
51-Sb-125
-25.42 To 0.892 %
Min Ratio
Max Ratio
TENDL Threshold 2.1706 MeV
JEFF3.3 Threshold 2.1706 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
42
51-Sb-125

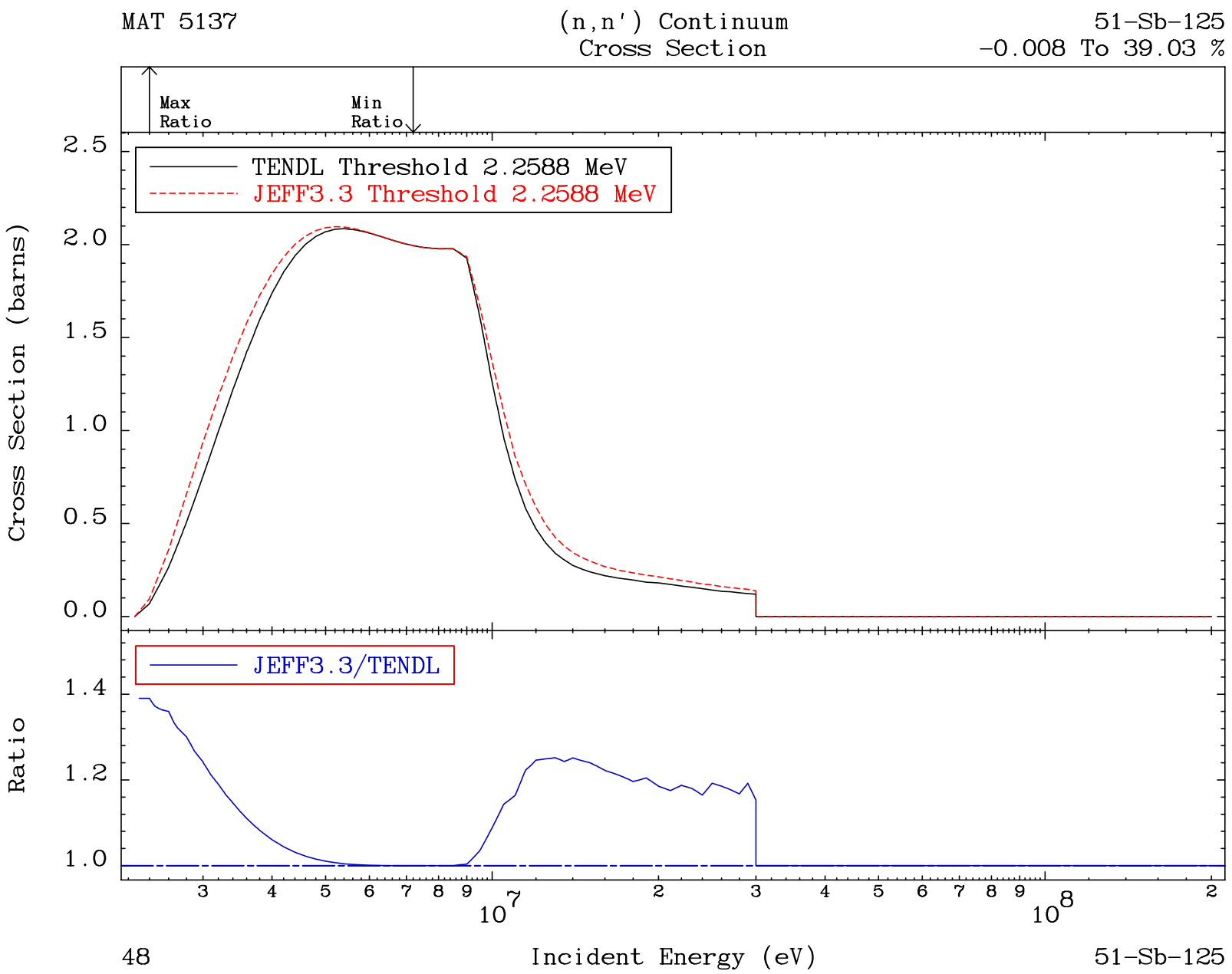

MAT 5137
MT= 76 (n,n') Level
Cross Section
51-Sb-125
-12.53 To 0.587 %
Min Ratio
Max Ratio
TENDL Threshold 2.2111 MeV
JEFF3.3 Threshold 2.2111 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.00
0.95
0.90
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
43
Incident Energy (eV)
51-Sb-125

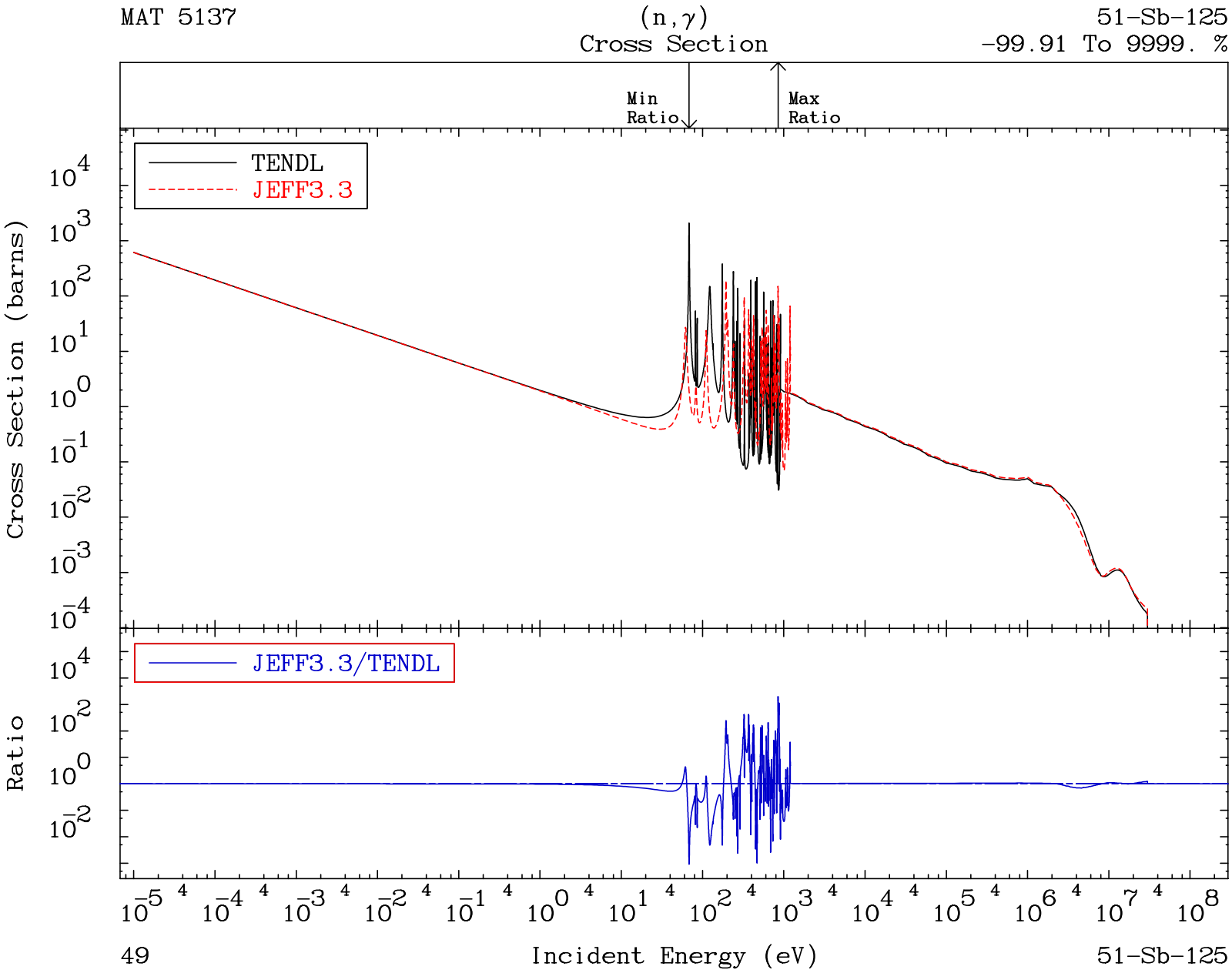

MAT 5137
MT= 77 (n,n') Level
Cross Section
51-Sb-125
-23.17 To 0.824 %
Min Ratio
Max Ratio
TENDL Threshold 2.2188 MeV
JEFF3.3 Threshold 2.2188 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
44
Incident Energy (eV)
51-Sb-125

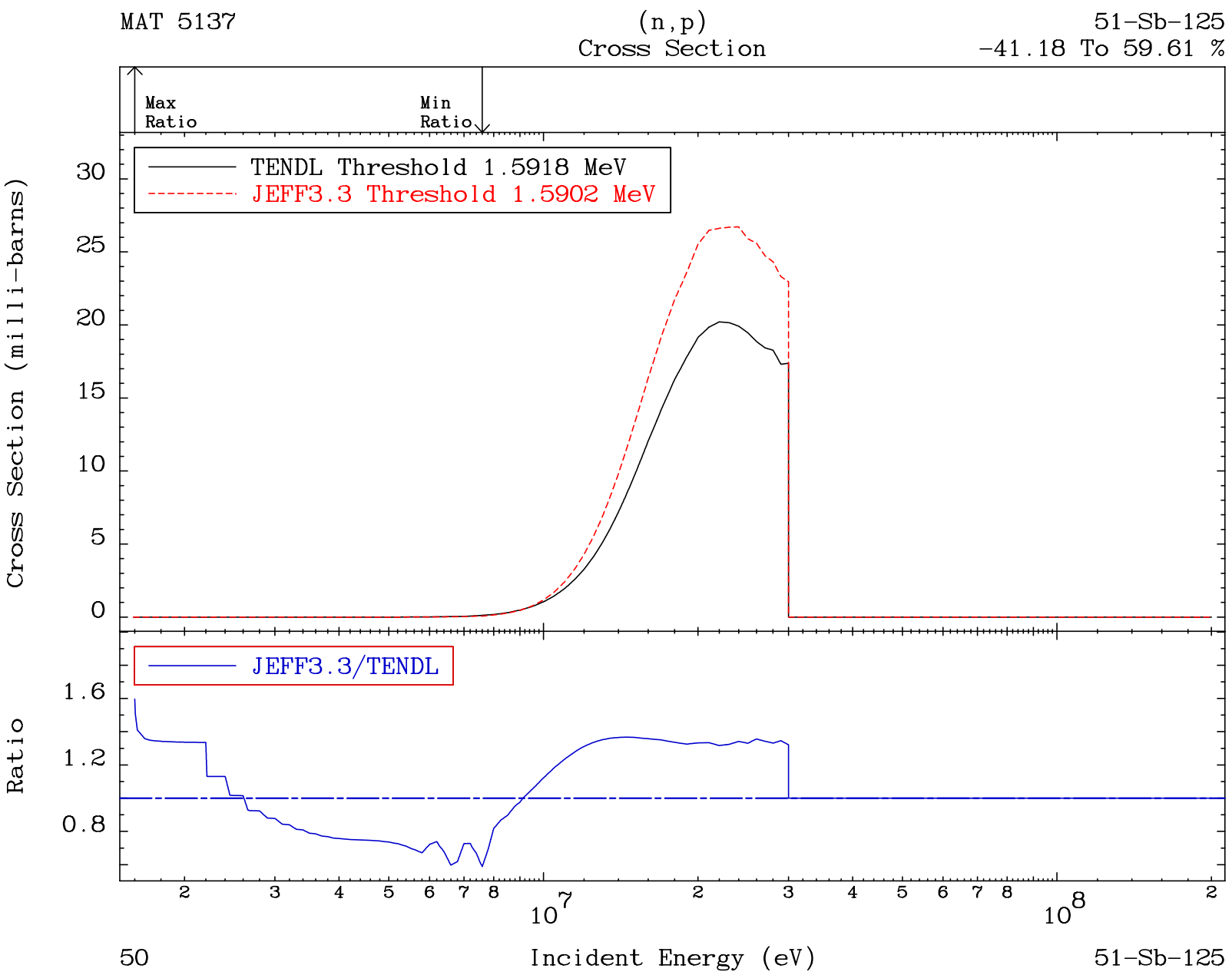

MAT 5137
MT= 78 (n,n') Level
Cross Section
51-Sb-125
-13.78 To 11.41 %
Min Ratio
Max Ratio
TENDL Threshold 2.2351 MeV
JEFF3.3 Threshold 2.2351 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
45
51-Sb-125

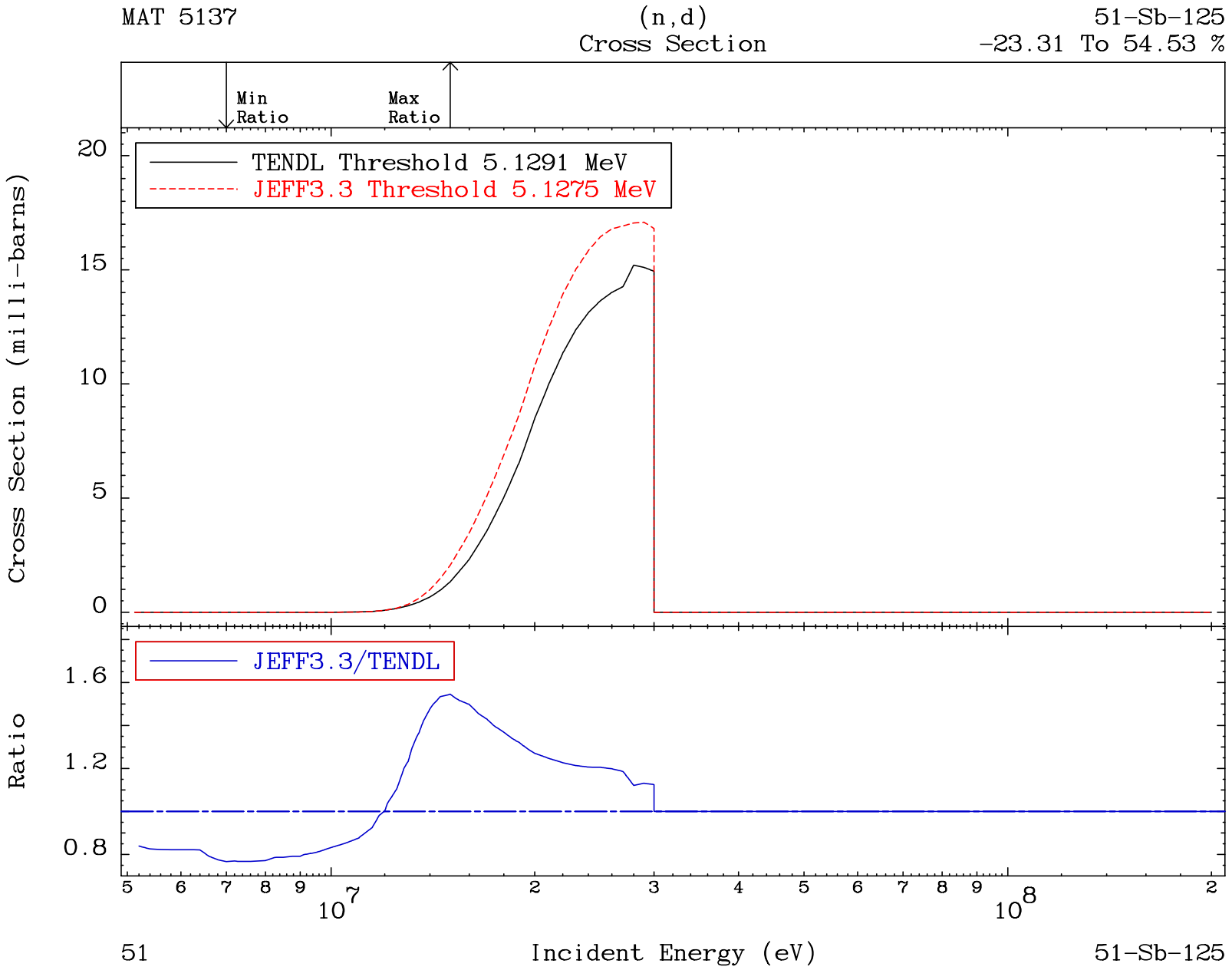

MAT 5137
MT= 79 (n,n') Level
Cross Section
51-Sb-125
-15.64 To 0.594 %
Min Ratio
Max Ratio
TENDL Threshold 2.2450 MeV
JEFF3.3 Threshold 2.2450 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.05
1.00
0.95
0.90
0.85
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
46
51-Sb-125

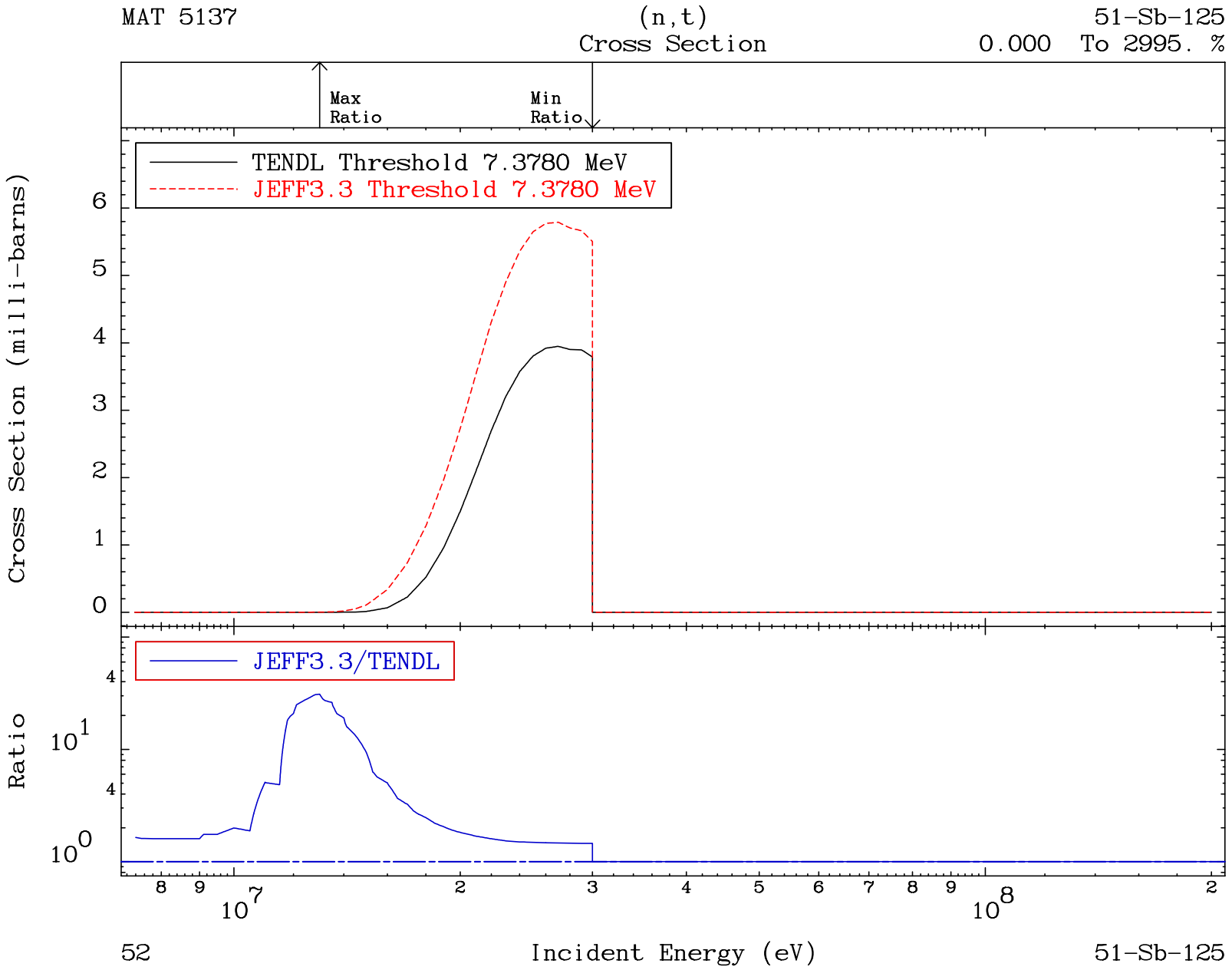

MAT 5137
MT= 80 (n,n') Level
Cross Section
51-Sb-125
-21.22 To 0.935 %
Min Ratio
Max Ratio
TENDL Threshold 2.2588 MeV
JEFF3.3 Threshold 2.2588 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.0
0.9
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
47
Incident Energy (eV)
51-Sb-125

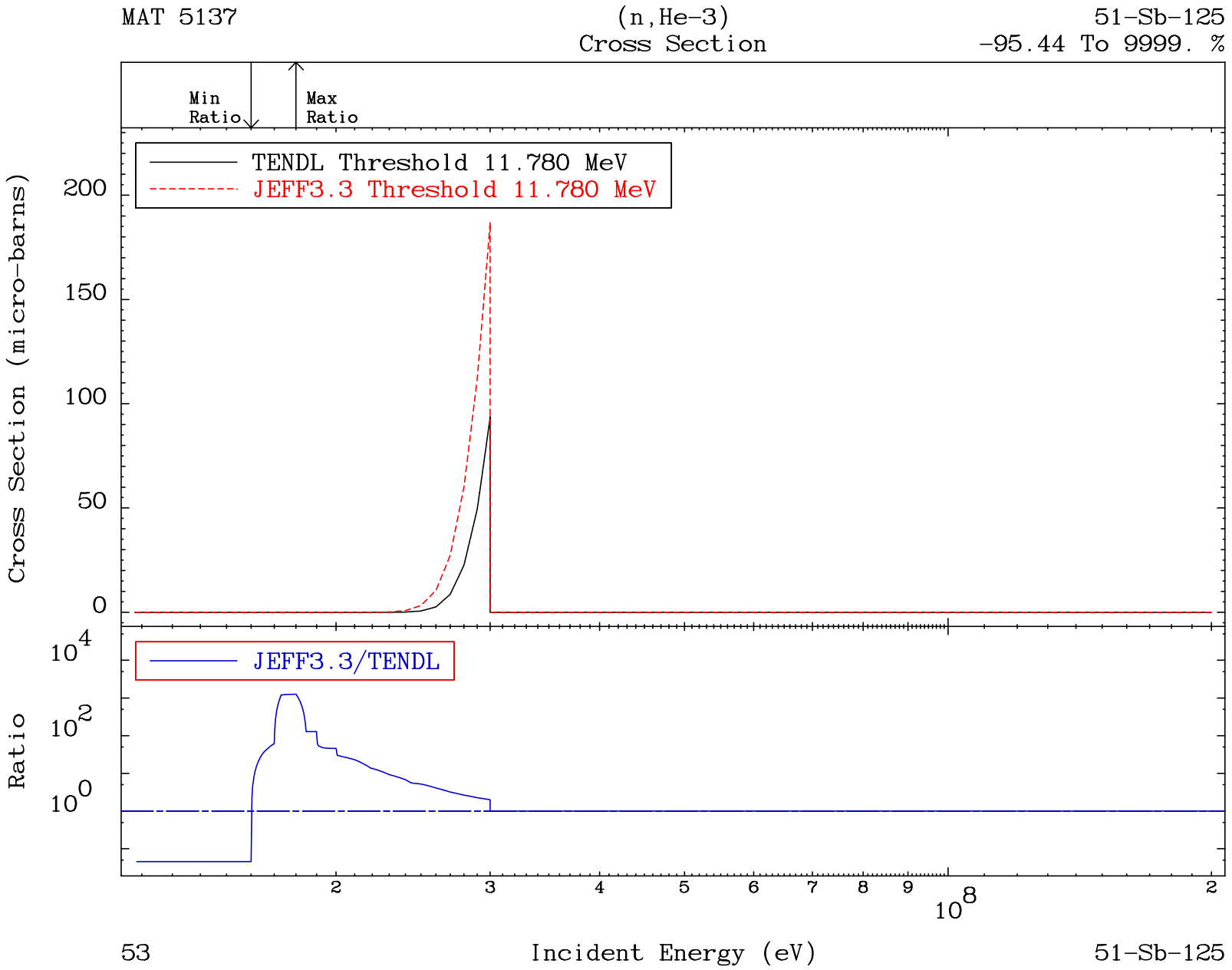

MAT 5137
(n,n') Continuum
Cross Section
51-Sb-125
-0.008 To 39.03 %
Max Ratio
Min Ratio
TENDL Threshold 2.2588 MeV
JEFF3.3 Threshold 2.2588 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
1.4
1.2
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
48
Incident Energy (eV)
51-Sb-125

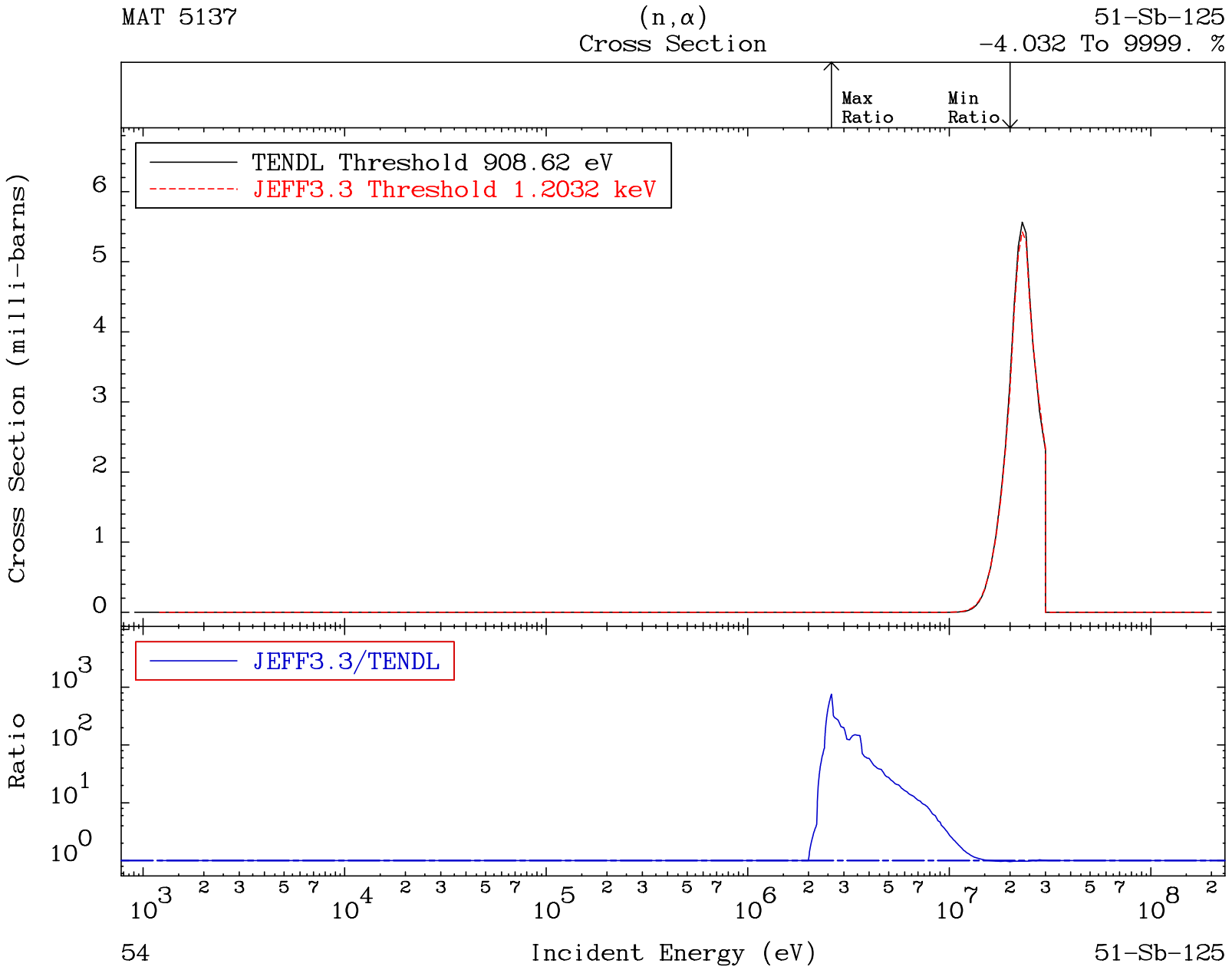

MAT 5137
(n,γ)
Cross Section
51-Sb-125
-99.91 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
49
51-Sb-125

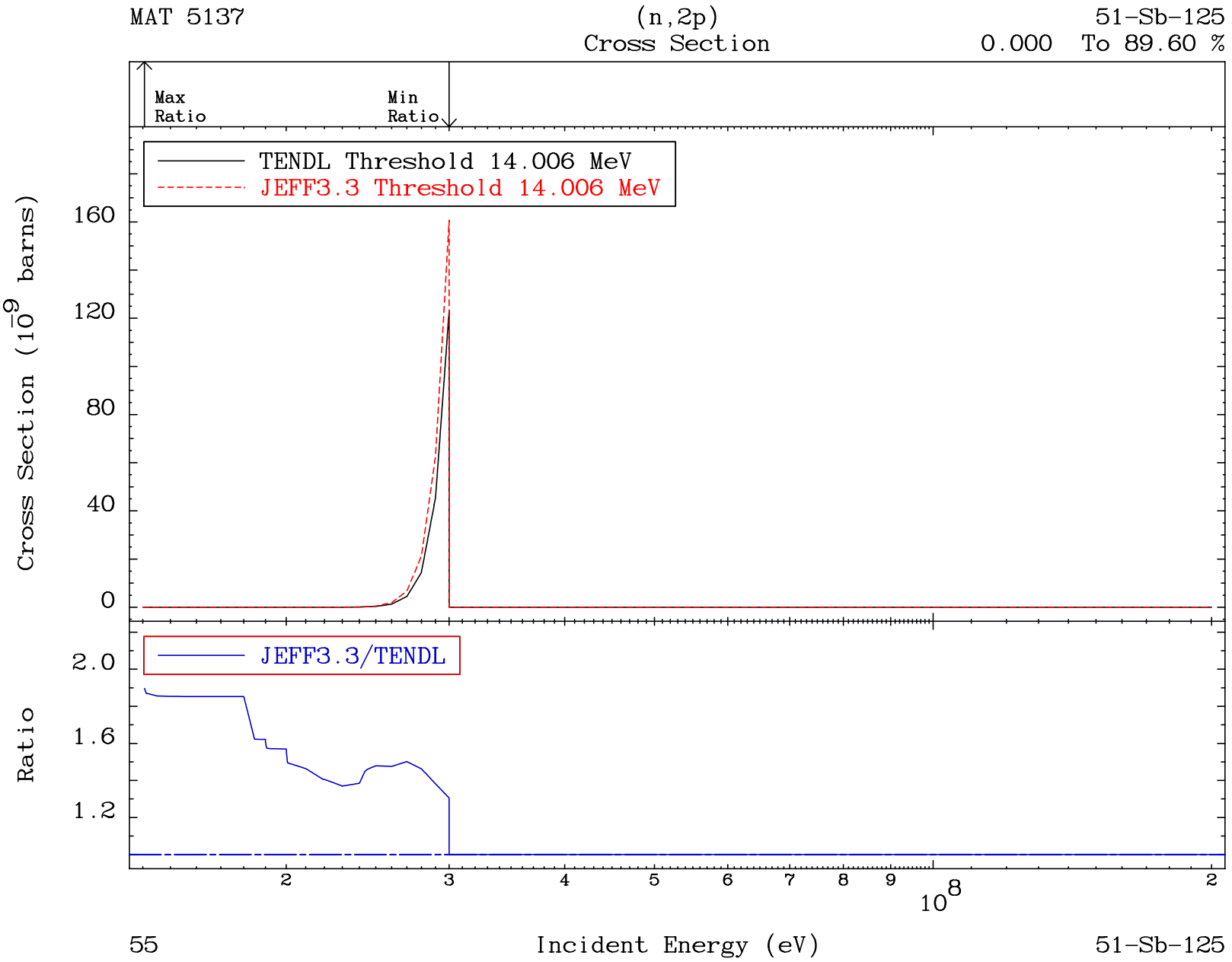

MAT 5137
(n,p)
Cross Section
51-Sb-125
-41.18 To 59.61 %
Max Ratio
Min Ratio
TENDL Threshold 1.5918 MeV
JEFF3.3 Threshold 1.5902 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
50
Incident Energy (eV)
51-Sb-125

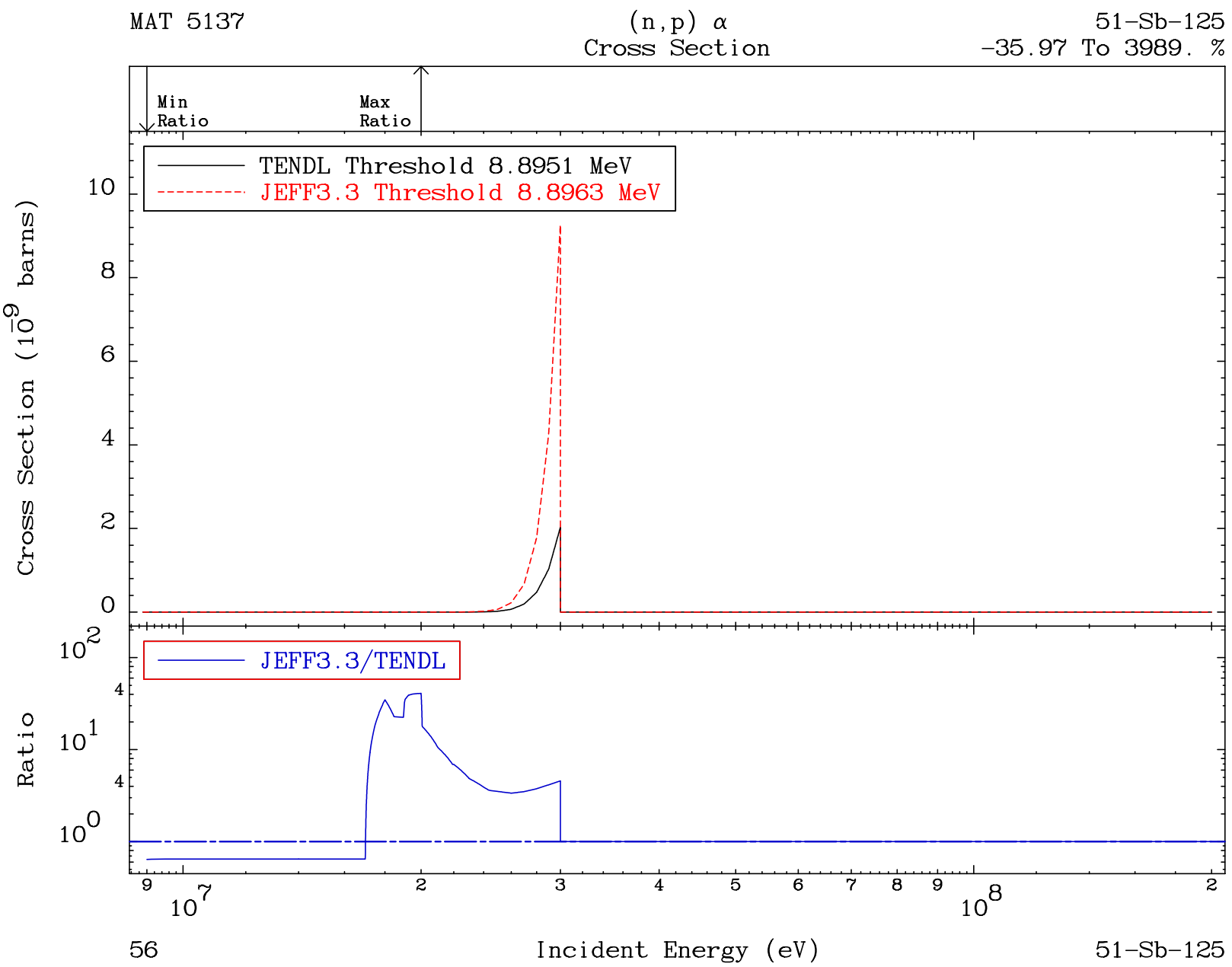

MAT 5137
(n,d)
Cross Section
51-Sb-125
-23.31 To 54.53 %
Min Ratio
Max Ratio
TENDL Threshold 5.1291 MeV
JEFF3.3 Threshold 5.1275 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.6
1.2
0.8
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
51
Incident Energy (eV)
51-Sb-125

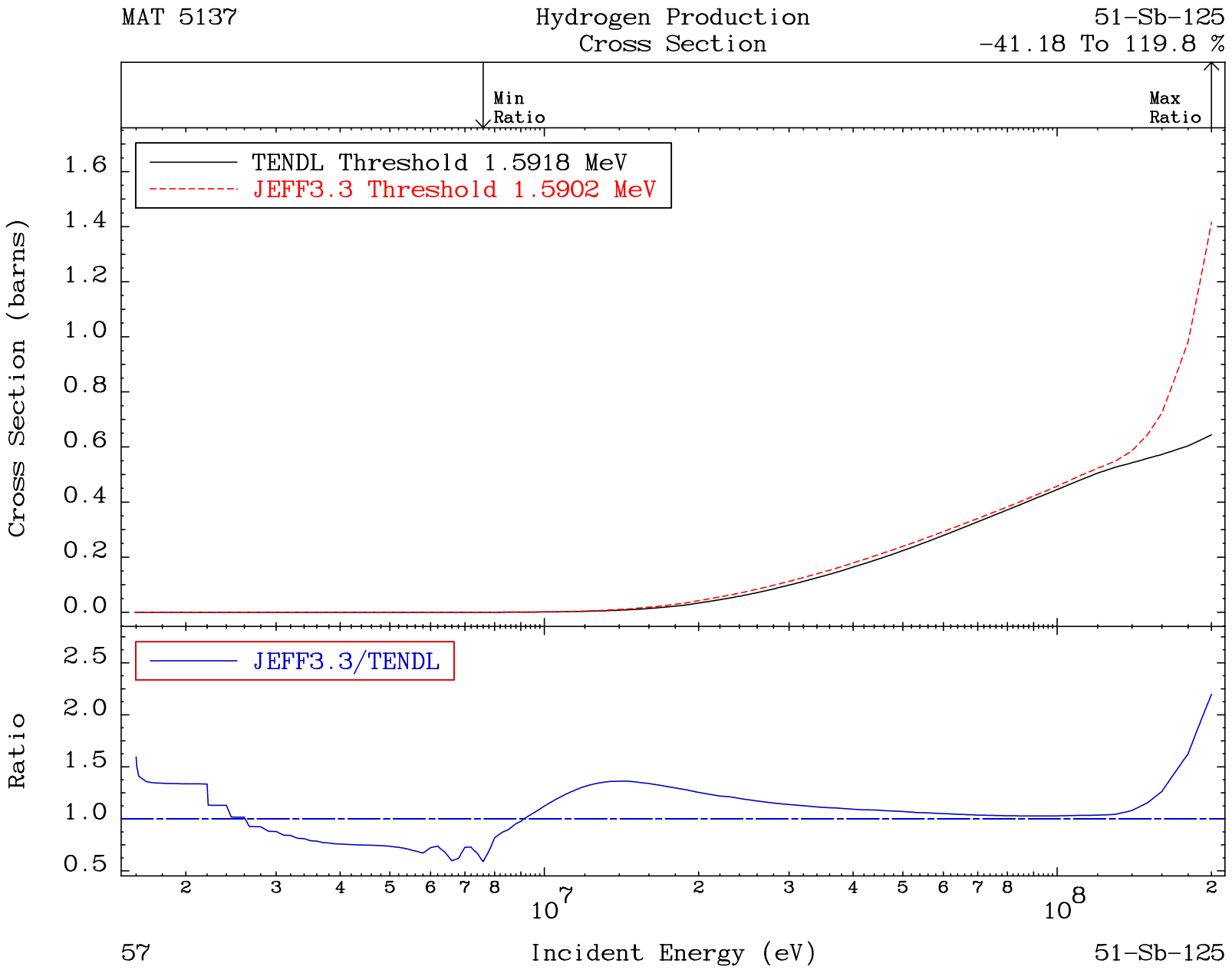

MAT 5137
(n,t)
Cross Section
51-Sb-125
0.000 To 2995. %
Max Ratio
Min Ratio
TENDL Threshold 7.3780 MeV
JEFF3.3 Threshold 7.3780 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
52
51-Sb-125

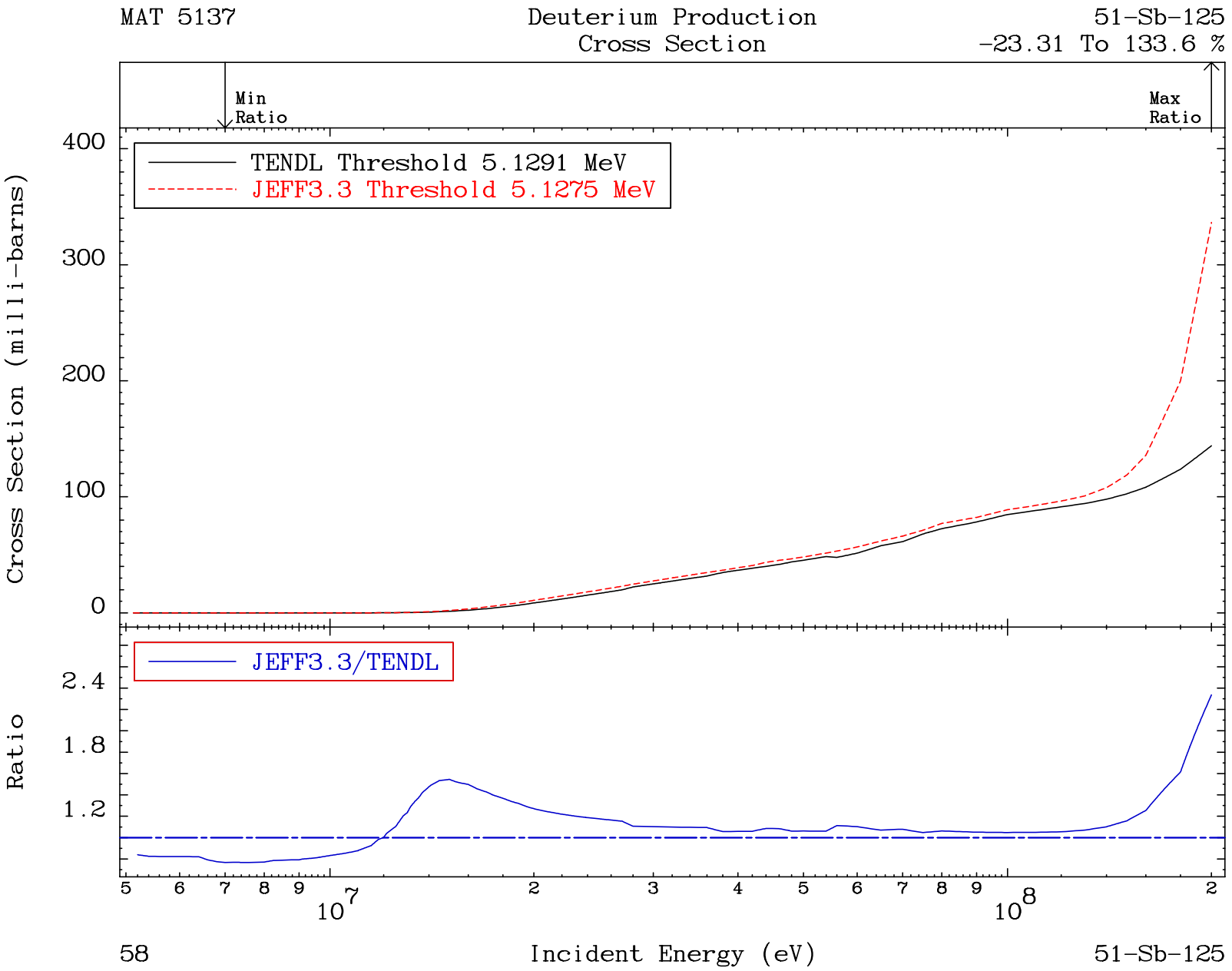

MAT 5137
(n,He-3)
Cross Section
51-Sb-125
-95.44 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.780 MeV
JEFF3.3 Threshold 11.780 MeV
Cross Section (micro-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
53
Incident Energy (eV)
51-Sb-125

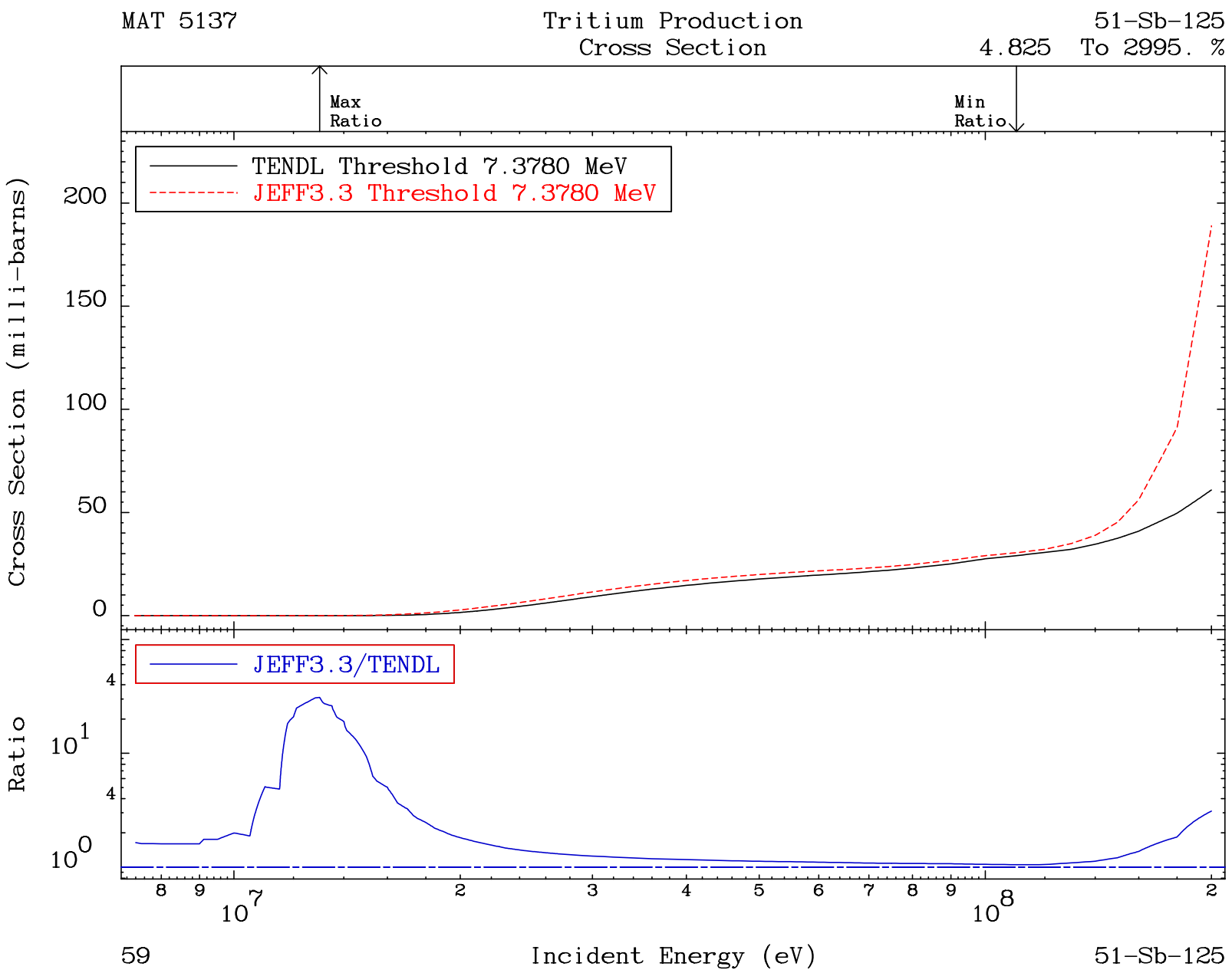

MAT 5137
(n,α)
Cross Section
51-Sb-125
-4.032 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 908.62 eV
JEFF3.3 Threshold 1.2032 keV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
54
51-Sb-125

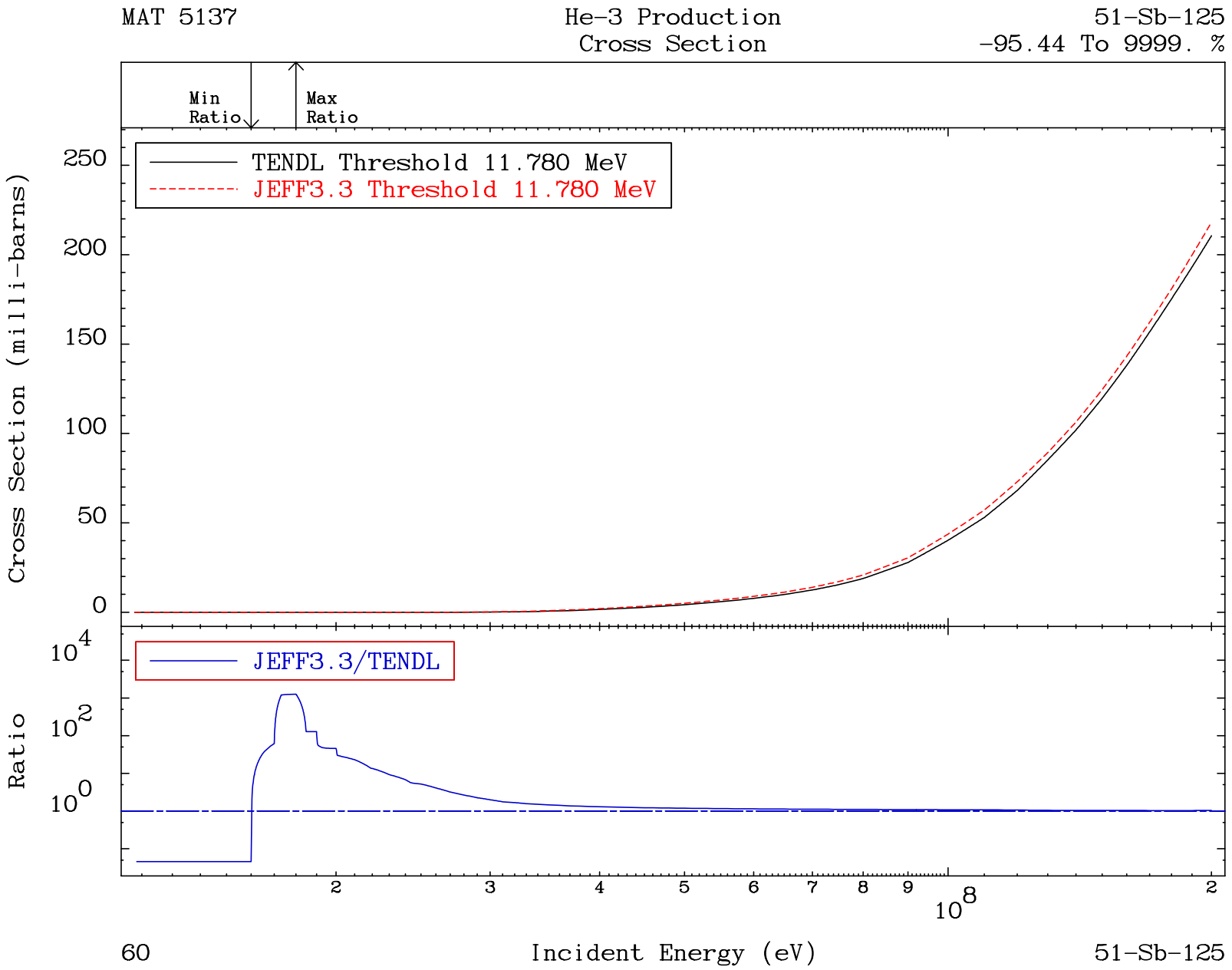

MAT 5137
(n,2p)
Cross Section
51-Sb-125
0.000 To 89.60 %
Max Ratio
Min Ratio
TENDL Threshold 14.006 MeV
JEFF3.3 Threshold 14.006 MeV
Cross Section (10^{-9} barns)
160
120
80
40
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
51-Sb-125

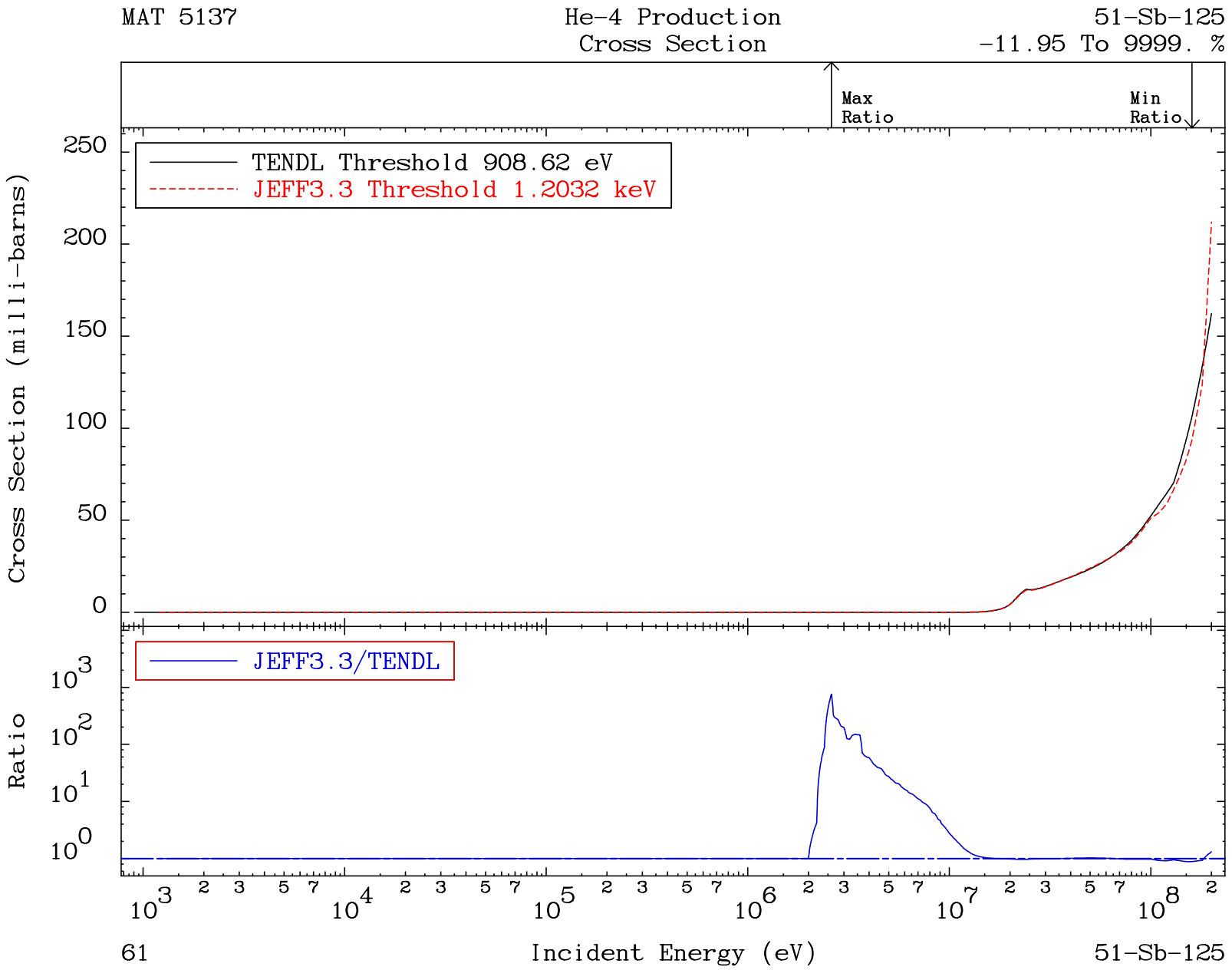

MAT 5137
(n,p) α
Cross Section
51-Sb-125
-35.97 To 3989. %
Min Ratio
Max Ratio
TENDL Threshold 8.8951 MeV
JEFF3.3 Threshold 8.8963 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
56
51-Sb-125

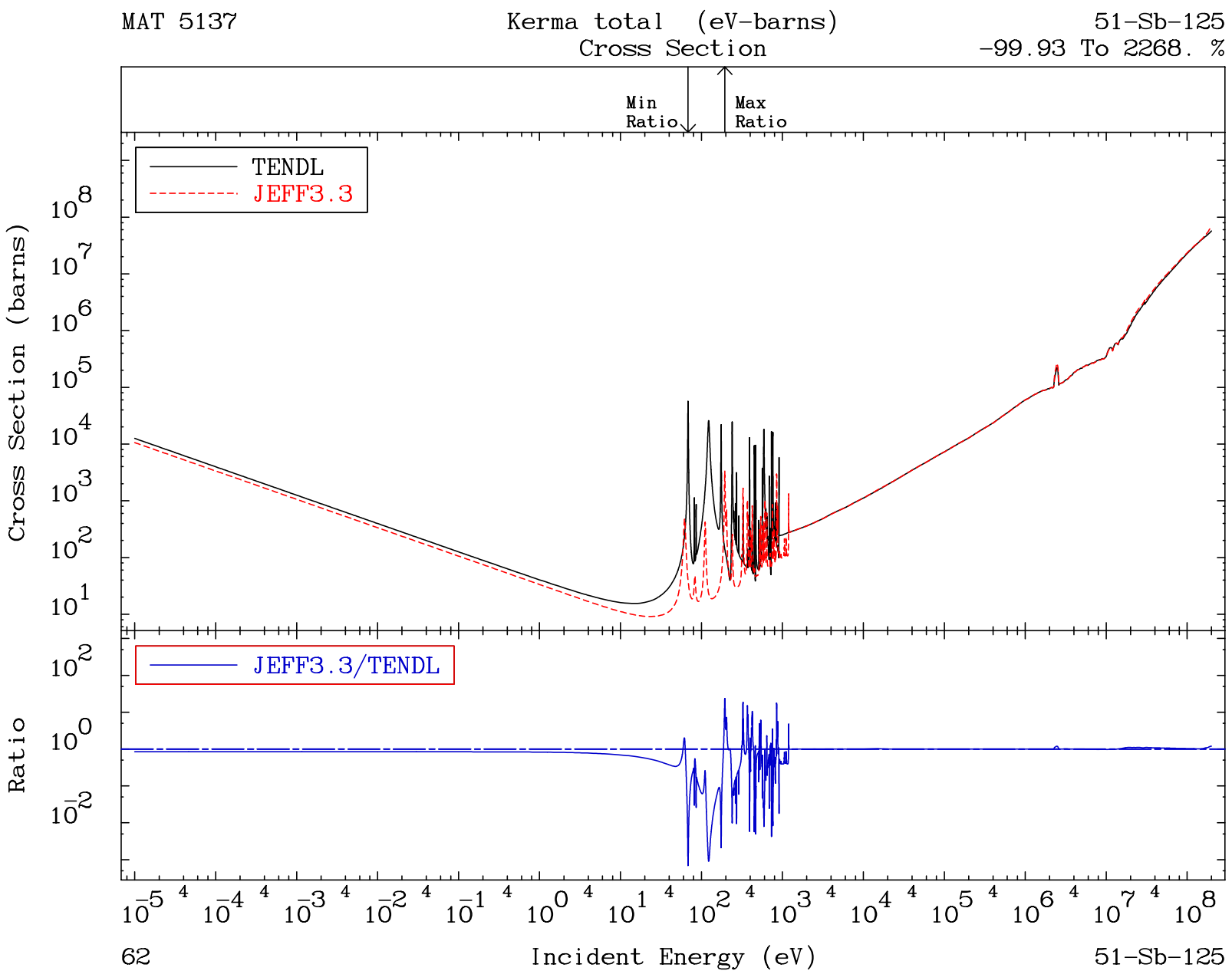

MAT 5137
Hydrogen Production
Cross Section
51-Sb-125
-41.18 To 119.8 %
Min Ratio
Max Ratio
TENDL Threshold 1.5918 MeV
JEFF3.3 Threshold 1.5902 MeV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
2.5
2.0
1.5
1.0
0.5
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
57
Incident Energy (eV)
51-Sb-125

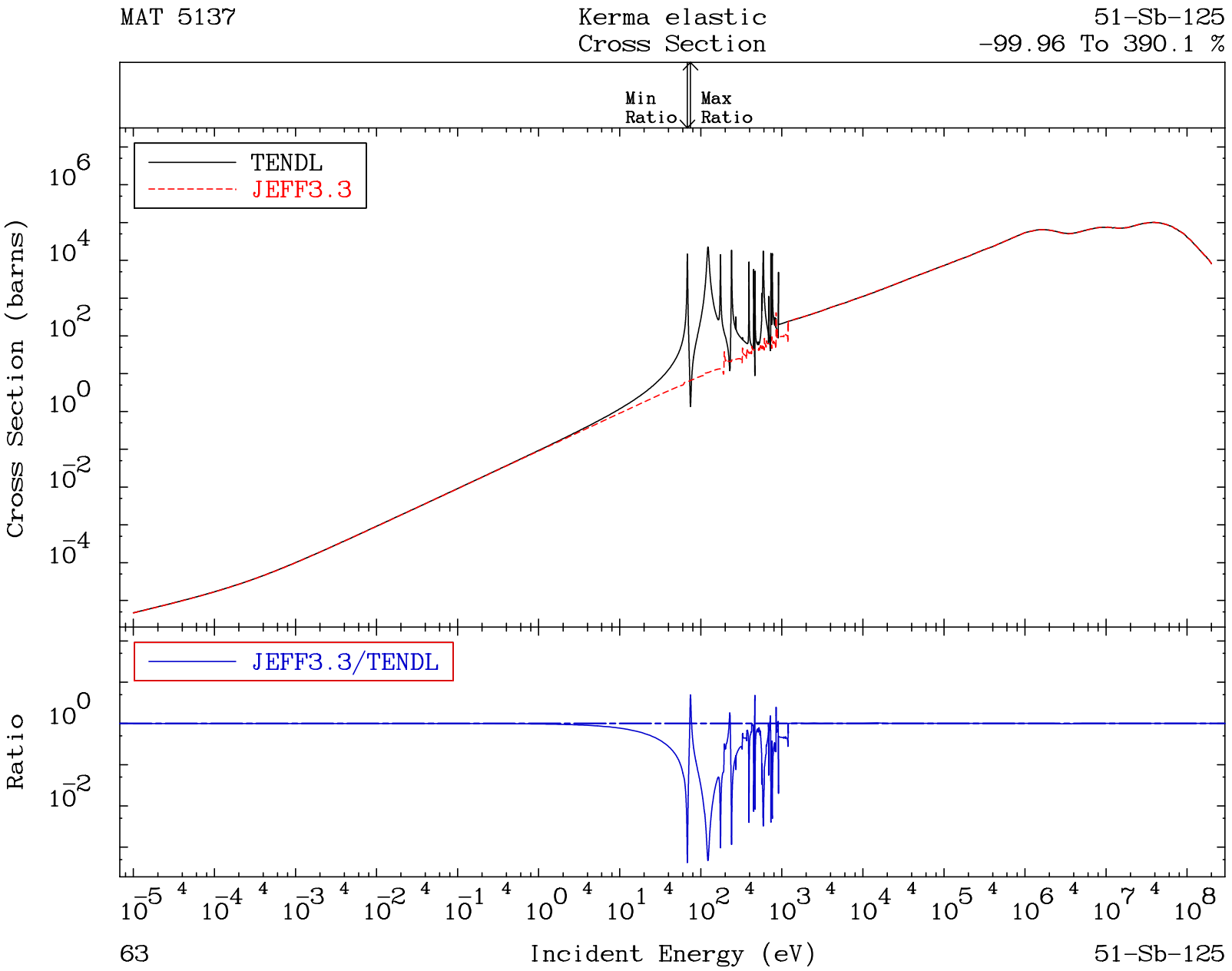

MAT 5137
Deuterium Production
Cross Section
51-Sb-125
-23.31 To 133.6 %
Min Ratio
Max Ratio
TENDL Threshold 5.1291 MeV
JEFF3.3 Threshold 5.1275 MeV
Cross Section (milli-barns)
400
300
200
100
0
JEFF3.3/TENDL
Ratio
2.4
1.8
1.2
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
51-Sb-125

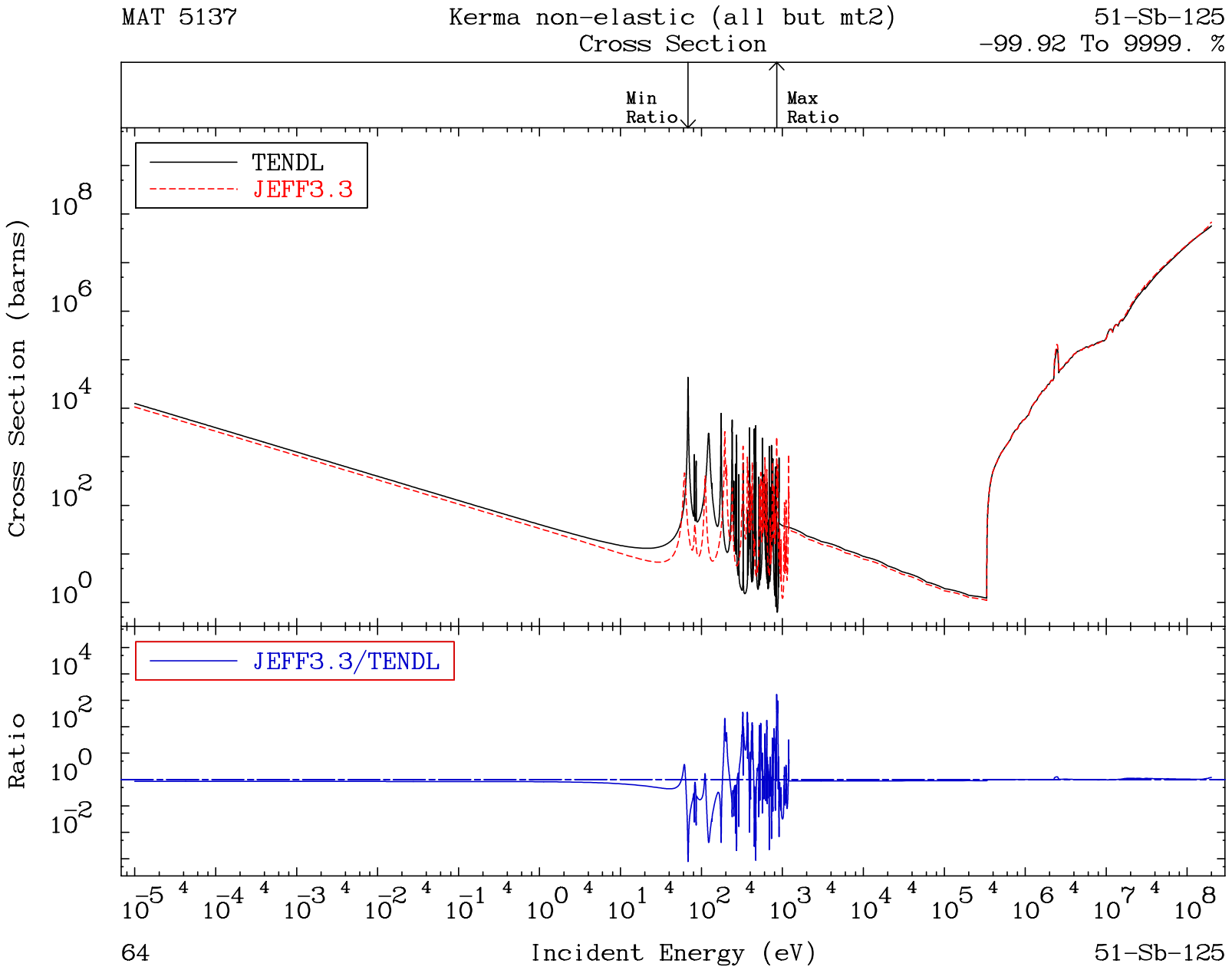

MAT 5137
Tritium Production
Cross Section
51-Sb-125
4.825 To 2995. %
Max Ratio
Min Ratio
TENDL Threshold 7.3780 MeV
JEFF3.3 Threshold 7.3780 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
4
10^1
4
10^0
8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
59
Incident Energy (eV)
51-Sb-125

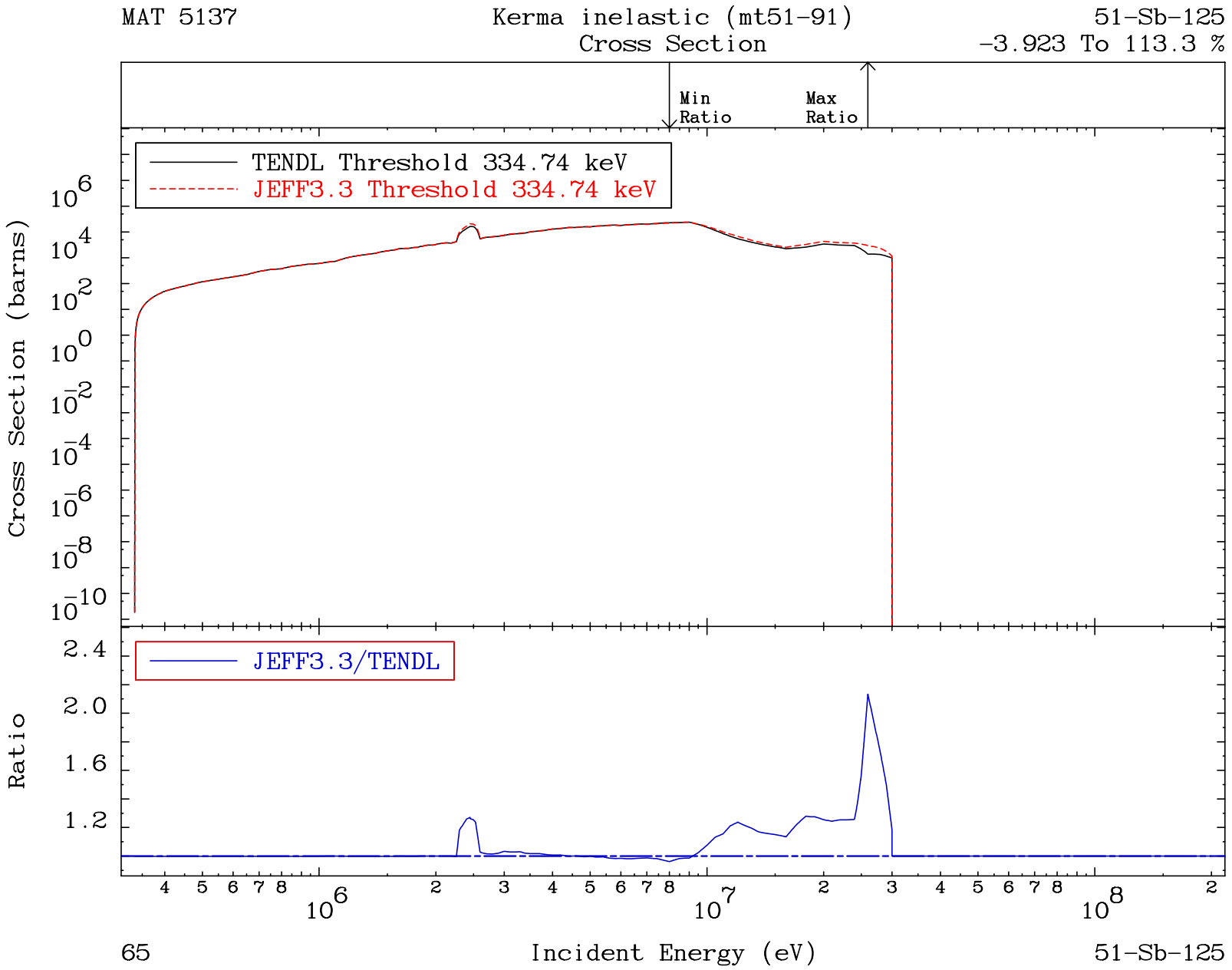

MAT 5137
He-3 Production
Cross Section
51-Sb-125
-95.44 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 11.780 MeV
JEFF3.3 Threshold 11.780 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
60
Incident Energy (eV)
51-Sb-125

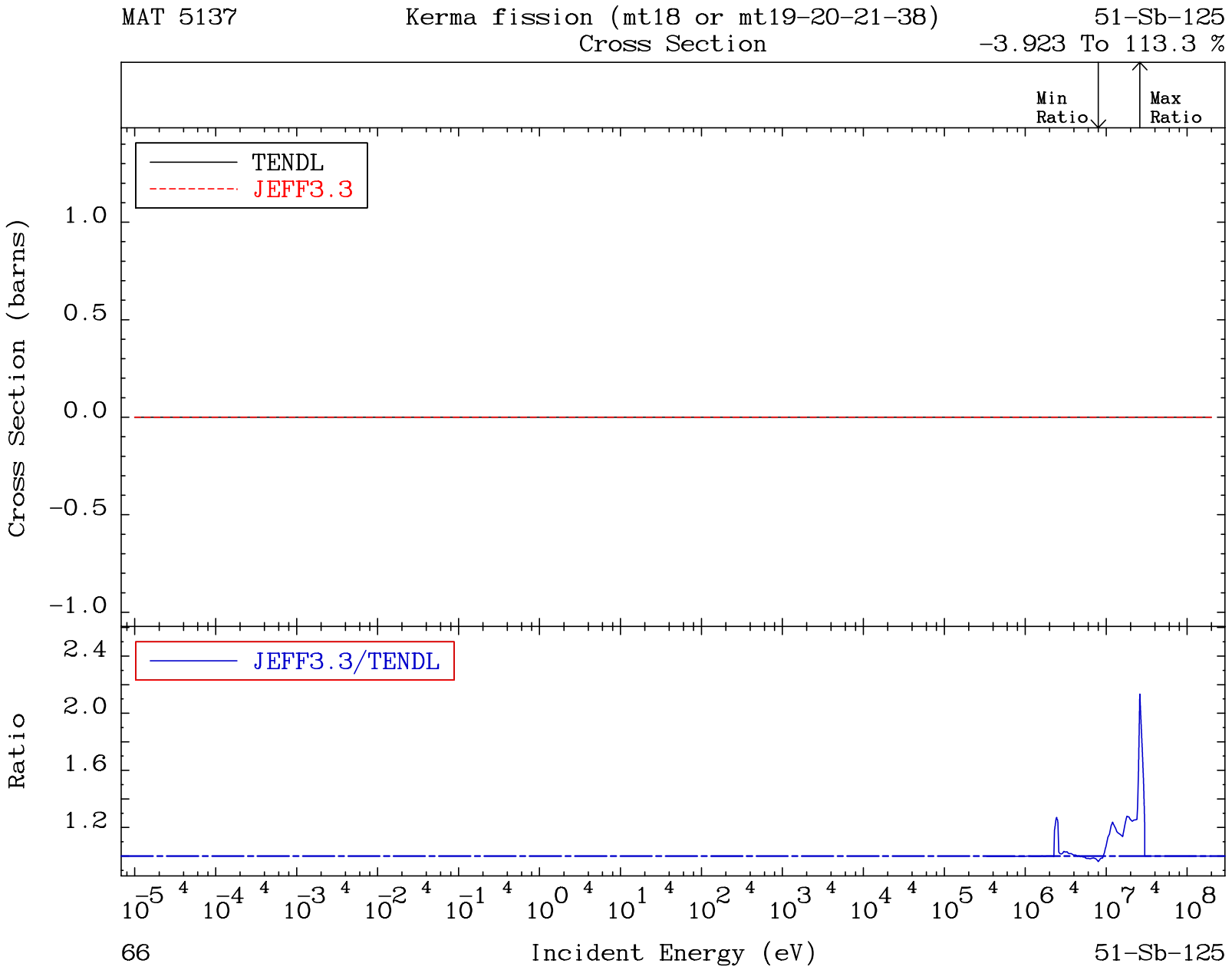

MAT 5137
He-4 Production
Cross Section
51-Sb-125
-11.95 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 908.62 eV
JEFF3.3 Threshold 1.2032 keV
Cross Section (milli-barns)
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
10^3 2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
61
Incident Energy (eV)
51-Sb-125

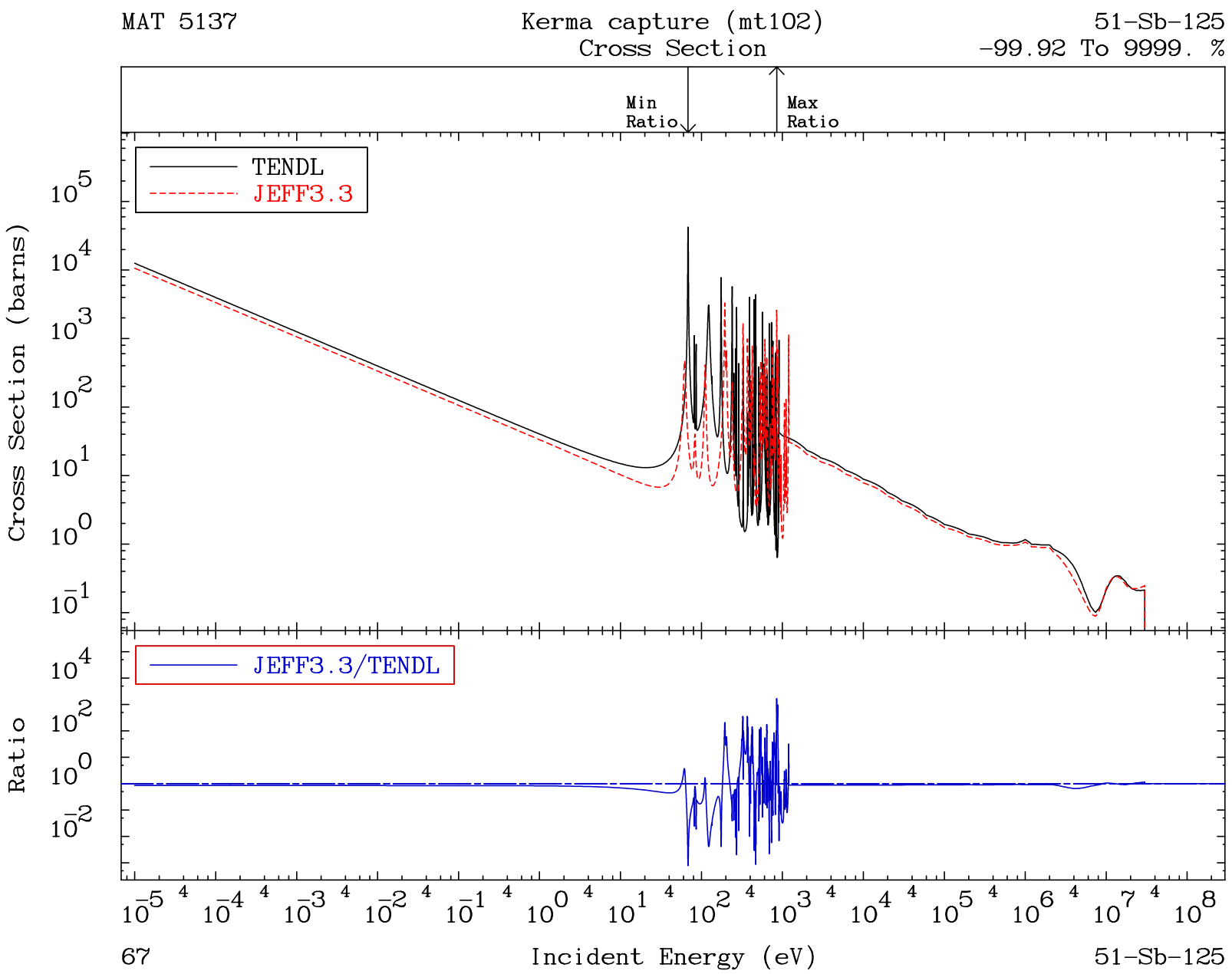

MAT 5137
Kerma total (eV-barns)
Cross Section
51-Sb-125
-99.93 To 2268. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
62
51-Sb-125

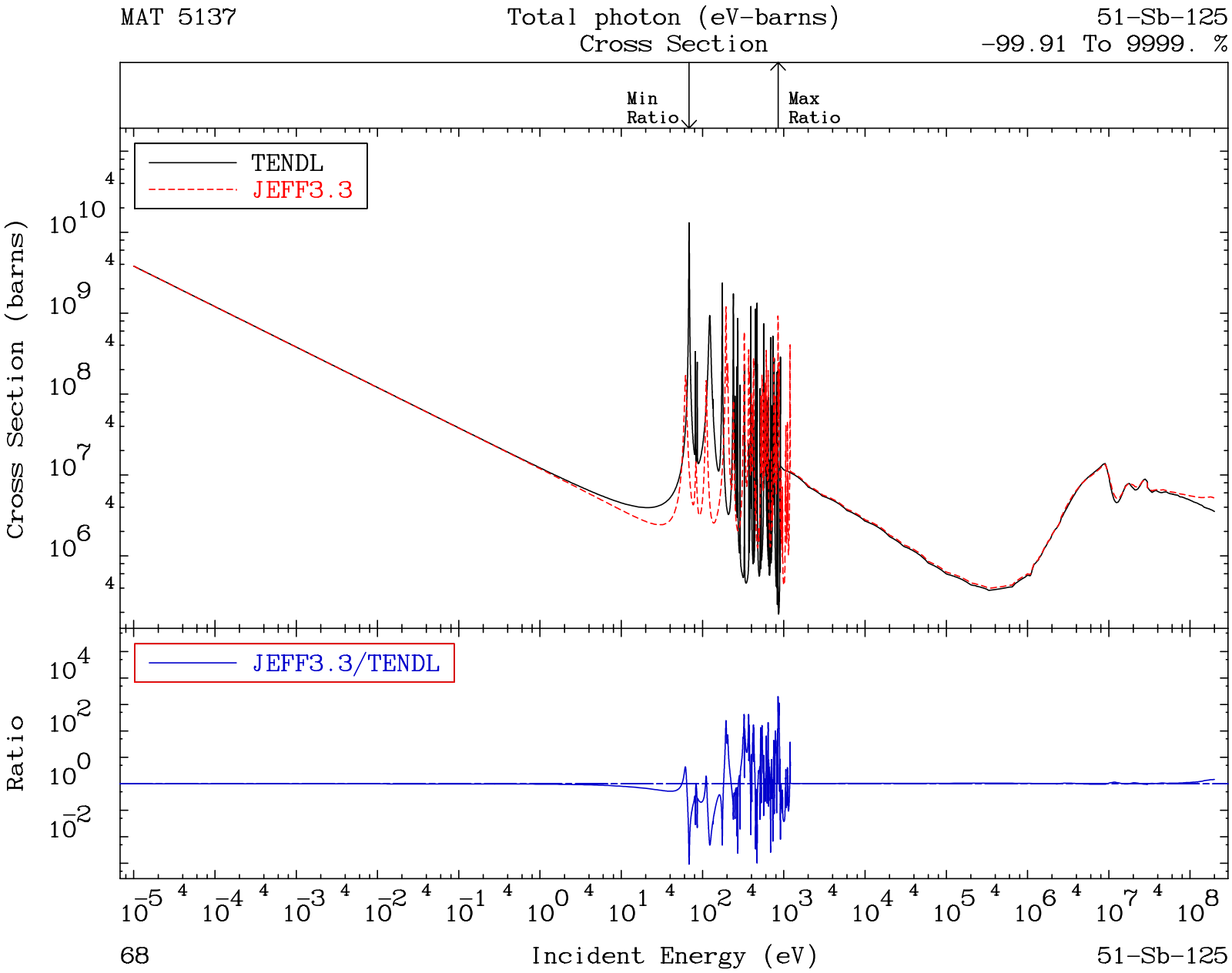

MAT 5137
Kerma elastic
Cross Section
51-Sb-125
-99.96 To 390.1 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
63
51-Sb-125

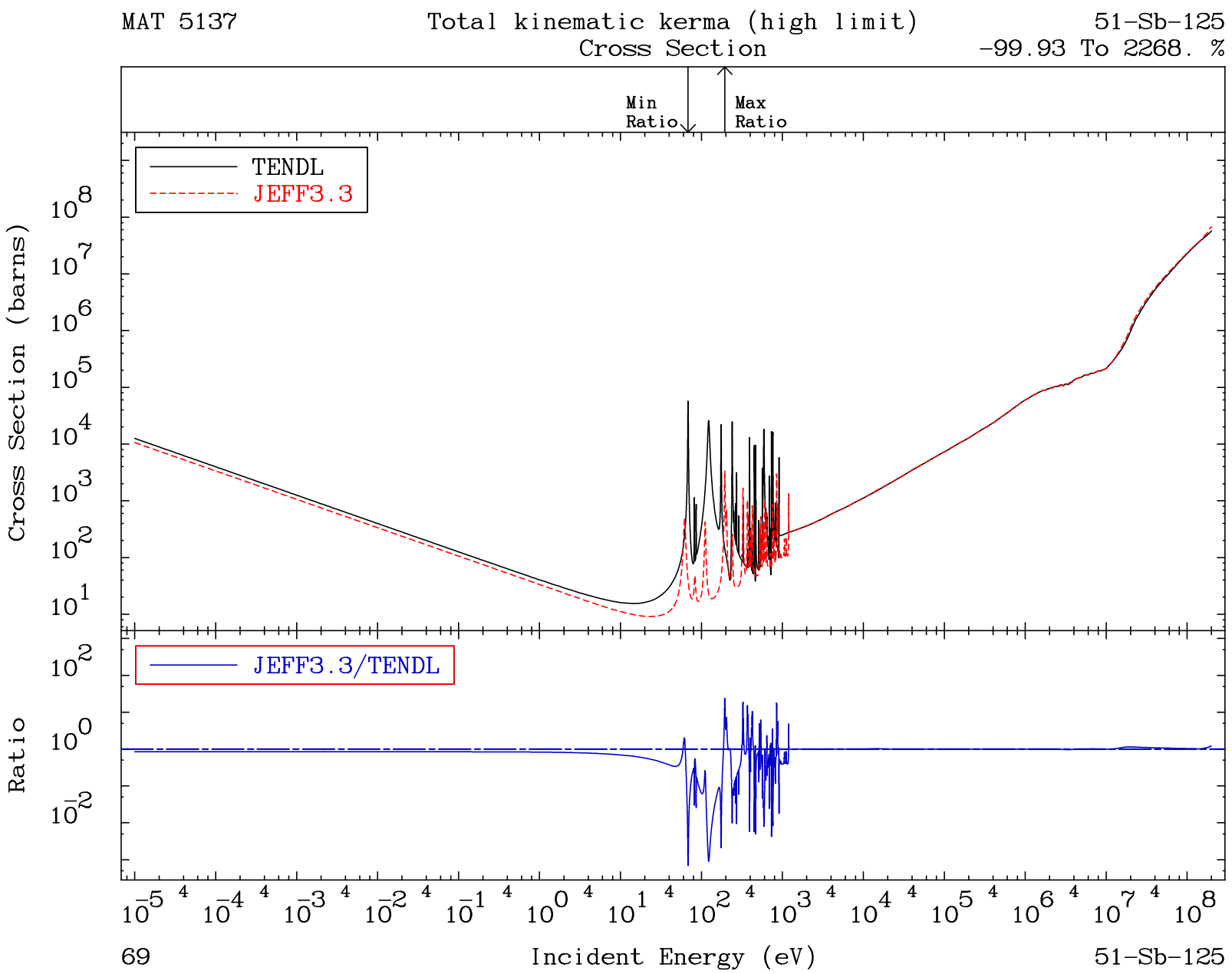

MAT 5137
Kerma non-elastic (all but mt2)
Cross Section
51-Sb-125
-99.92 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
64
51-Sb-125

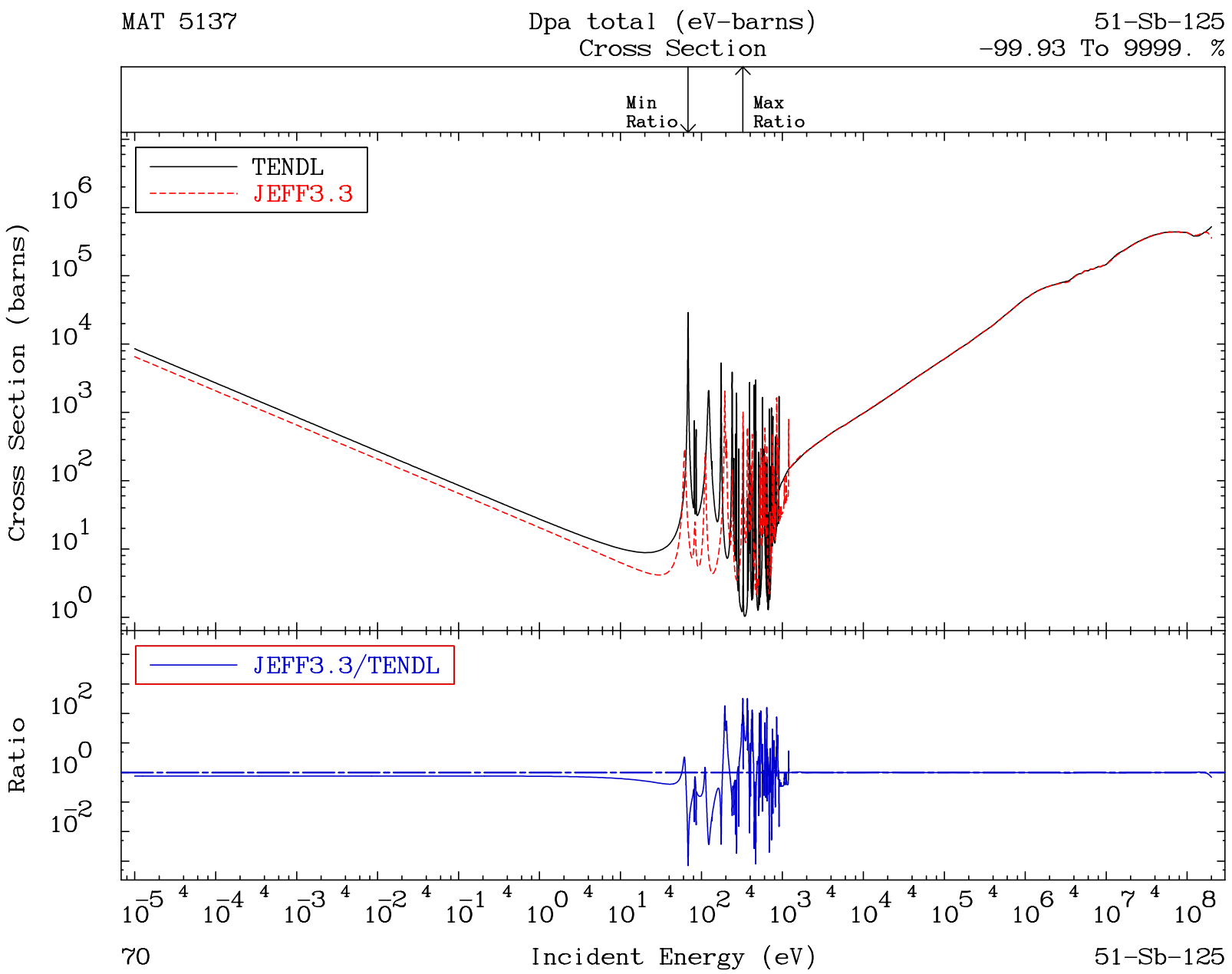

MAT 5137
Kerma inelastic (mt51-91)
Cross Section
51-Sb-125
-3.923 To 113.3 %
Min Ratio
Max Ratio
TENDL Threshold 334.74 keV
JEFF3.3 Threshold 334.74 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
65
51-Sb-125

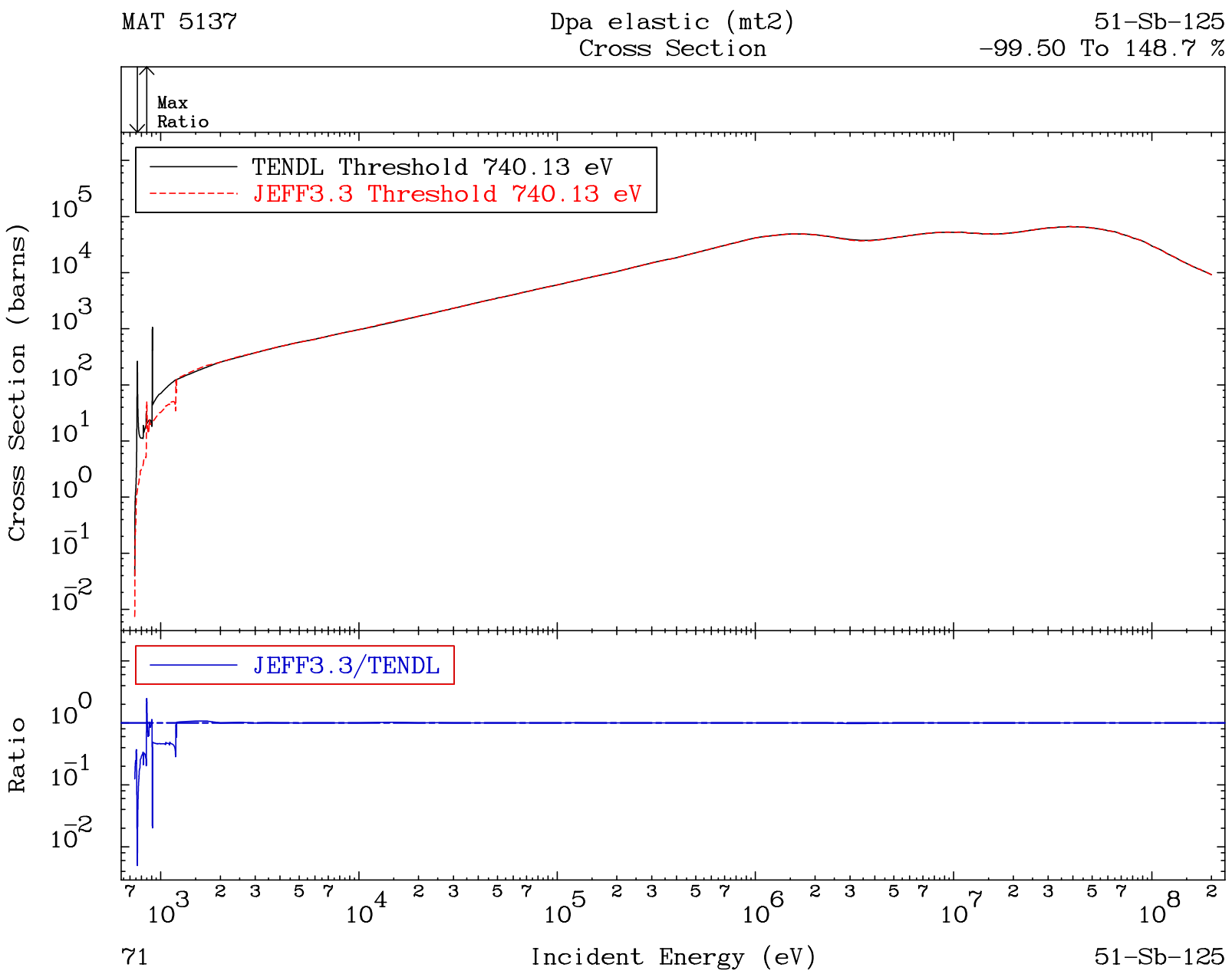

MAT 5137
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
51-Sb-125
-3.923 To 113.3 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
JEFF3.3/TENDL
Ratio
2.4
2.0
1.6
1.2
10-5 4 10-4 4 10-3 4 10-2 4 10-1 4 100 4 101 4 102 4 103 4 104 4 105 4 106 4 107 4 108
66
Incident Energy (eV)
51-Sb-125

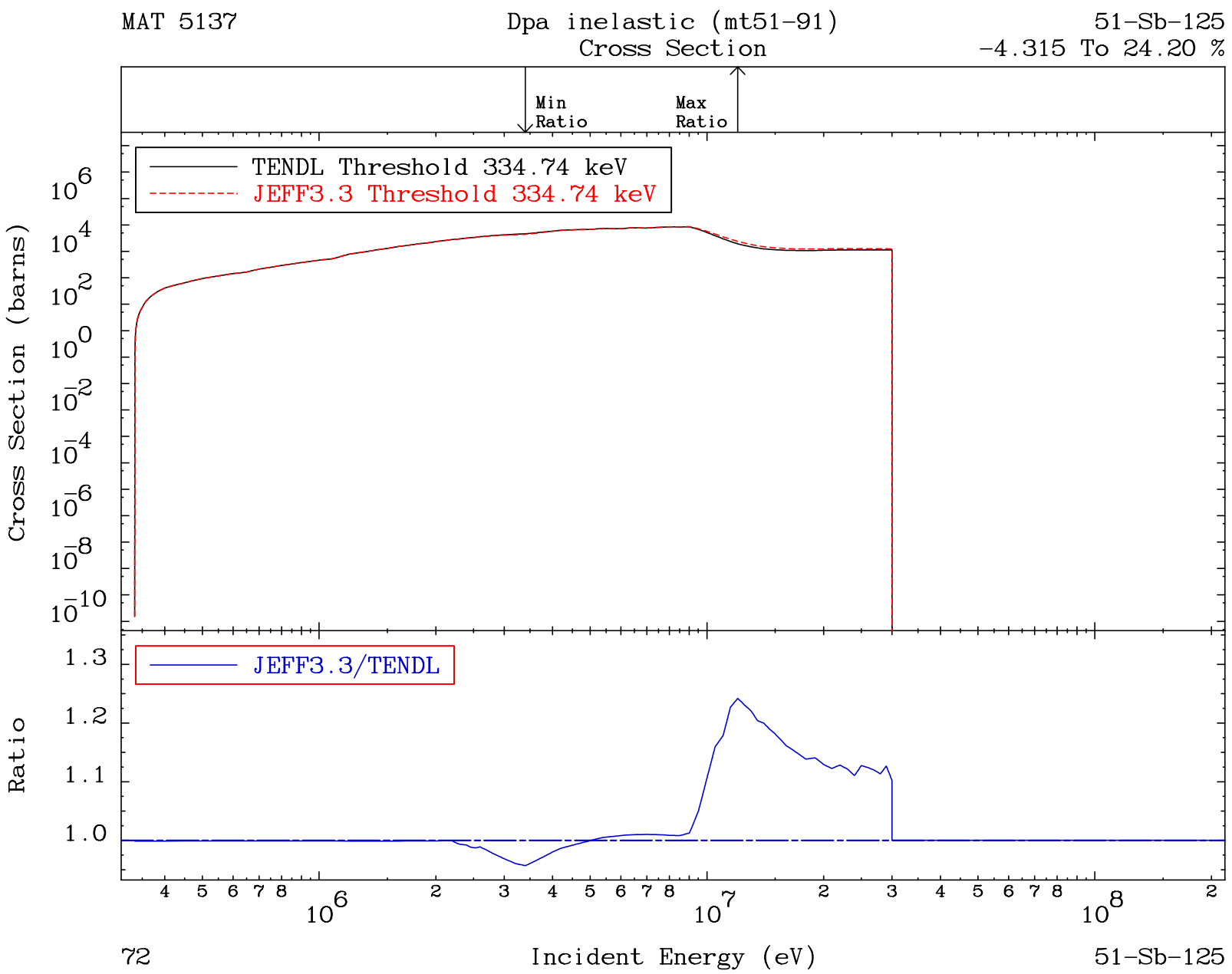

MAT 5137
Kerma capture (mt102)
Cross Section
51-Sb-125
-99.92 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
67
51-Sb-125

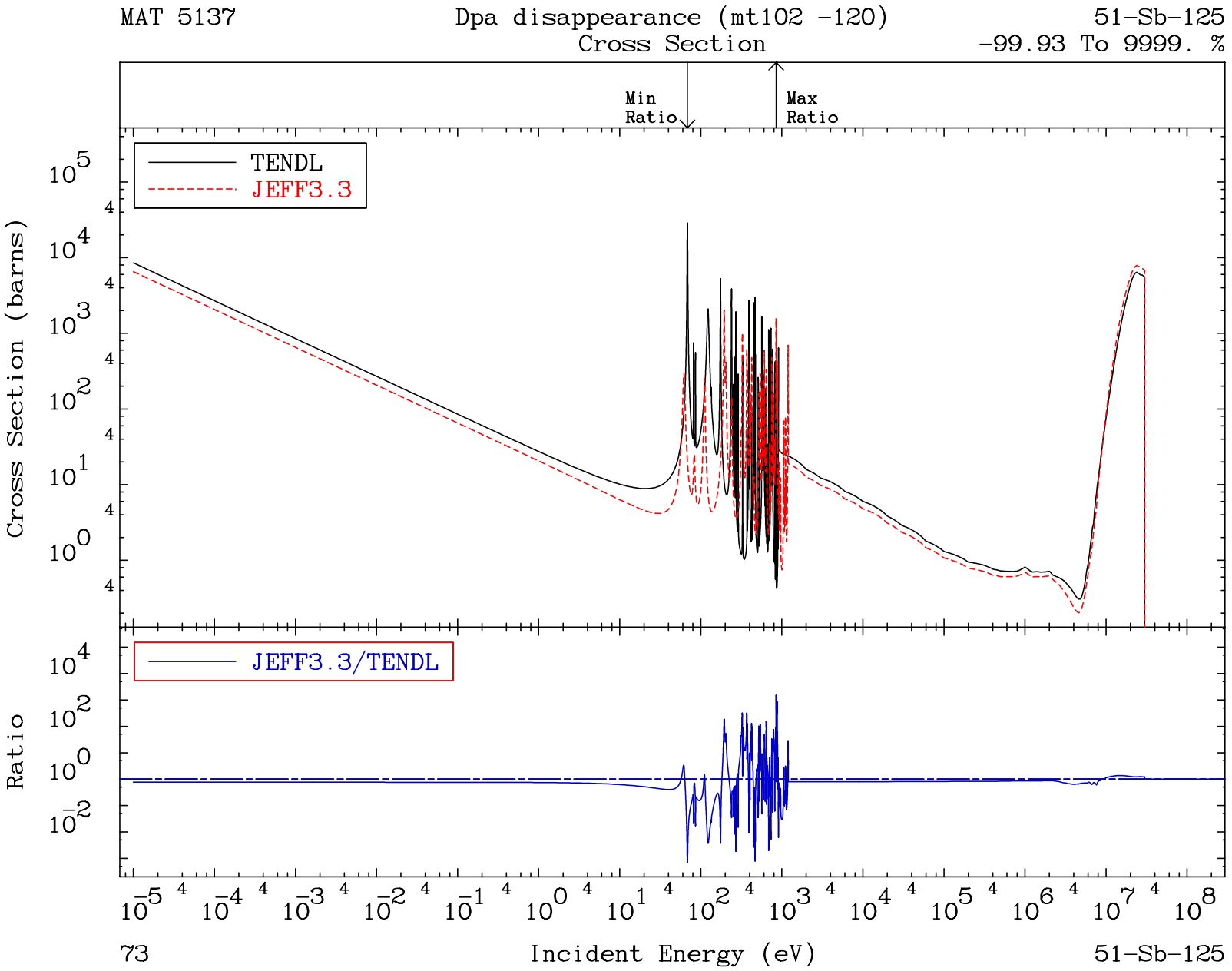

MAT 5137
Total photon (eV-barns)
Cross Section
51-Sb-125
-99.91 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
68
51-Sb-125

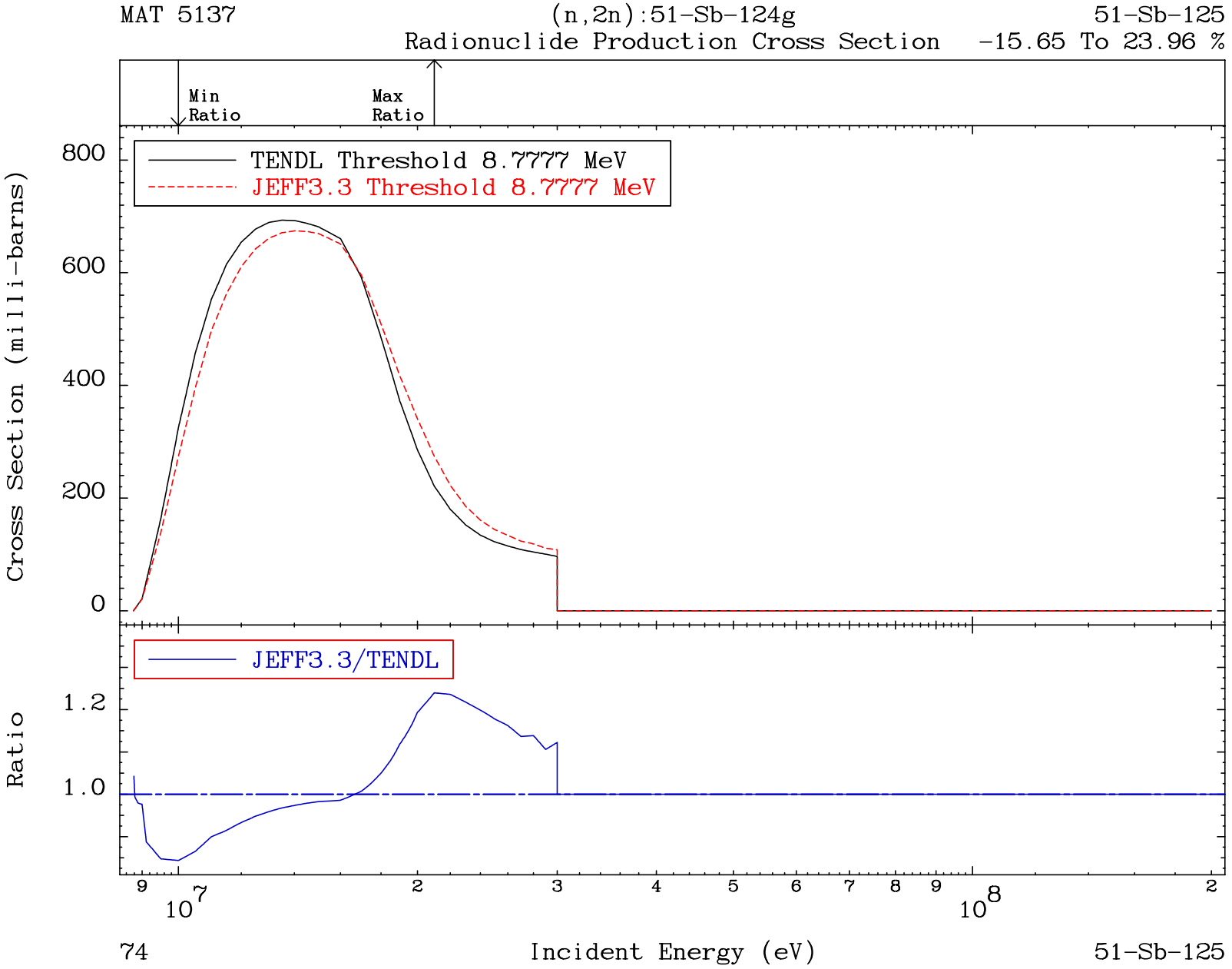

MAT 5137
Total kinematic kerma (high limit)
Cross Section
51-Sb-125
-99.93 To 2268. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
69
51-Sb-125

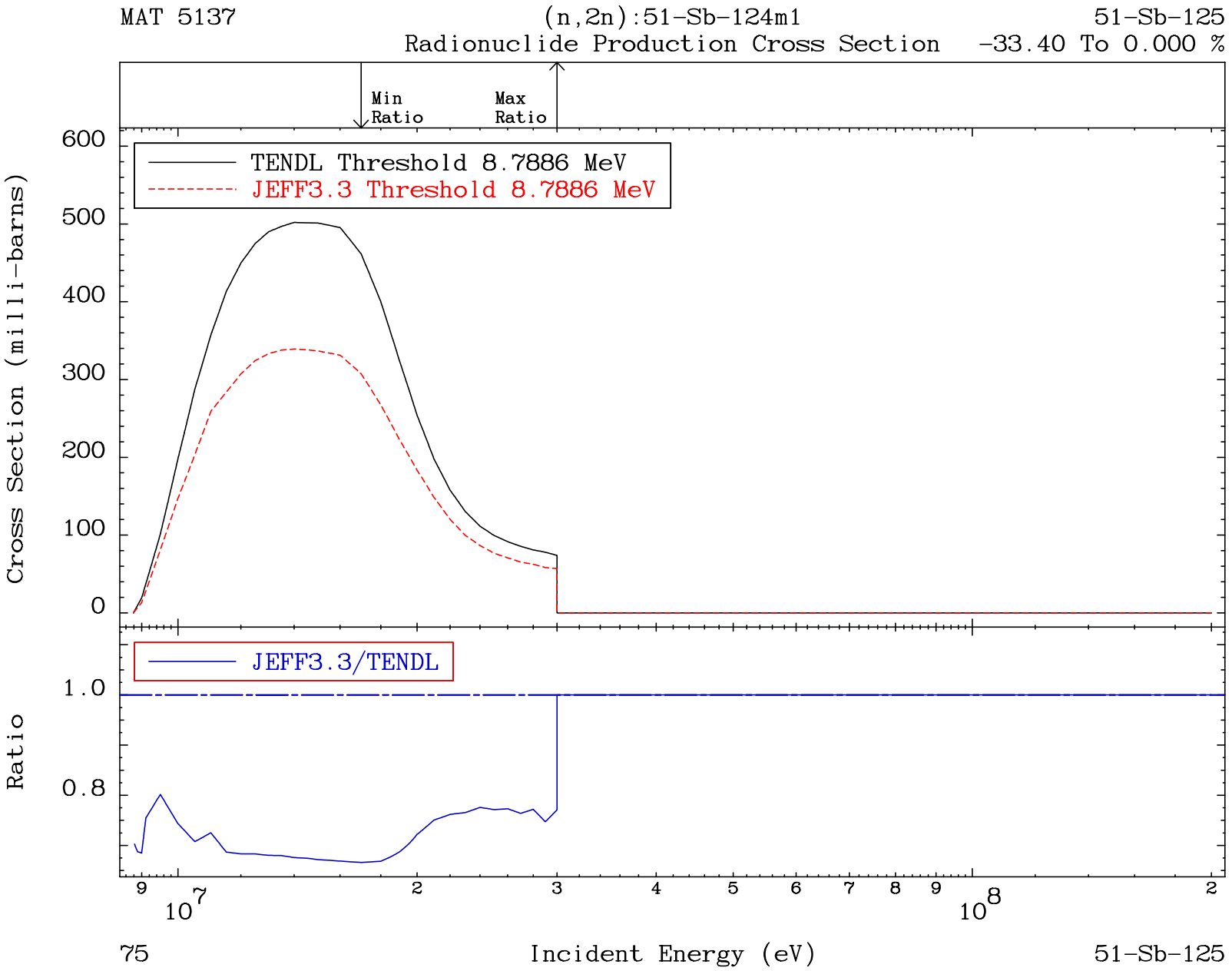

MAT 5137
Dpa total (eV-barns)
Cross Section
51-Sb-125
-99.93 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
70
51-Sb-125

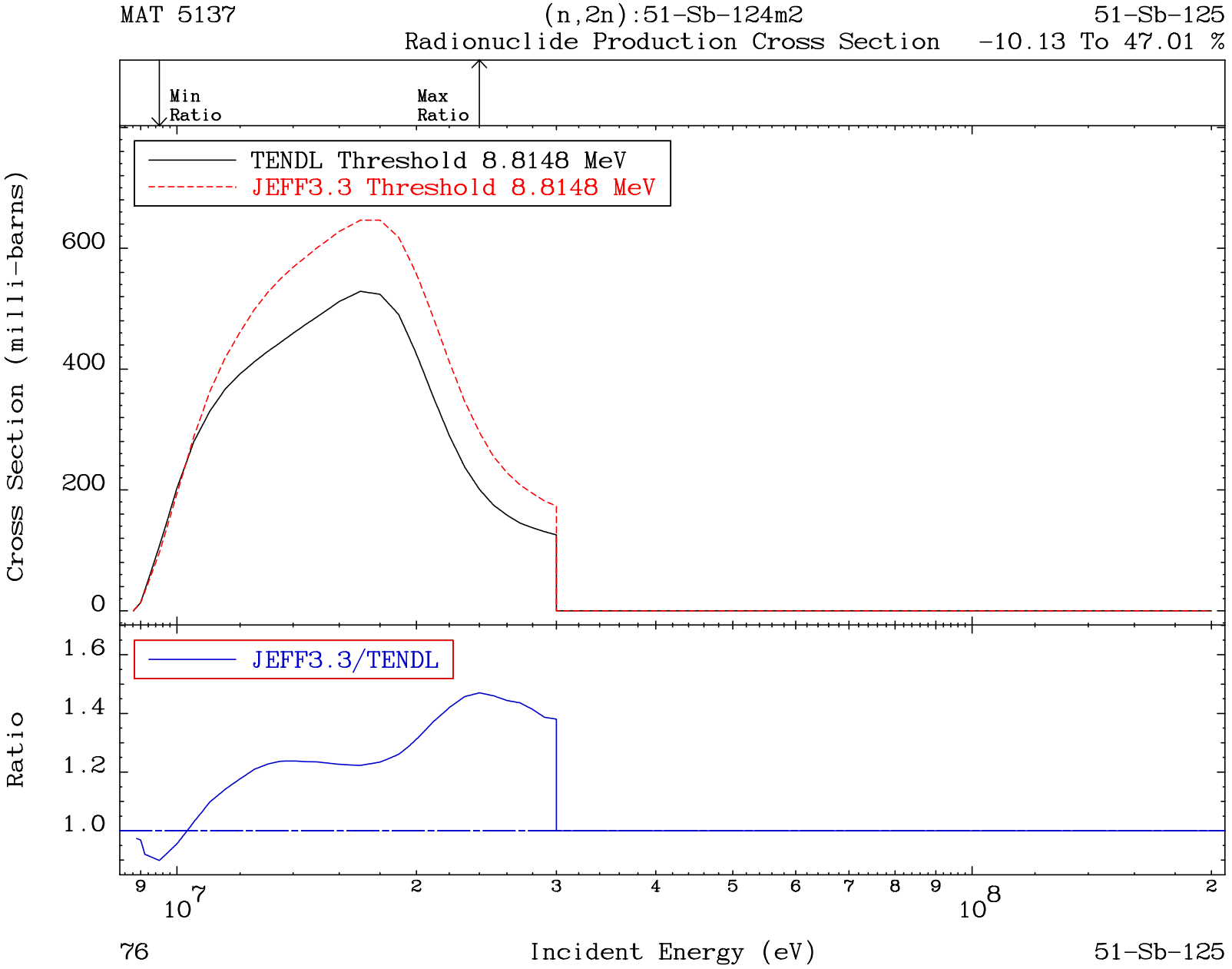

MAT 5137
Dpa elastic (mt2)
Cross Section
51-Sb-125
-99.50 To 148.7 %
Max
Ratio
TENDL Threshold 740.13 eV
JEFF3.3 Threshold 740.13 eV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
71
51-Sb-125

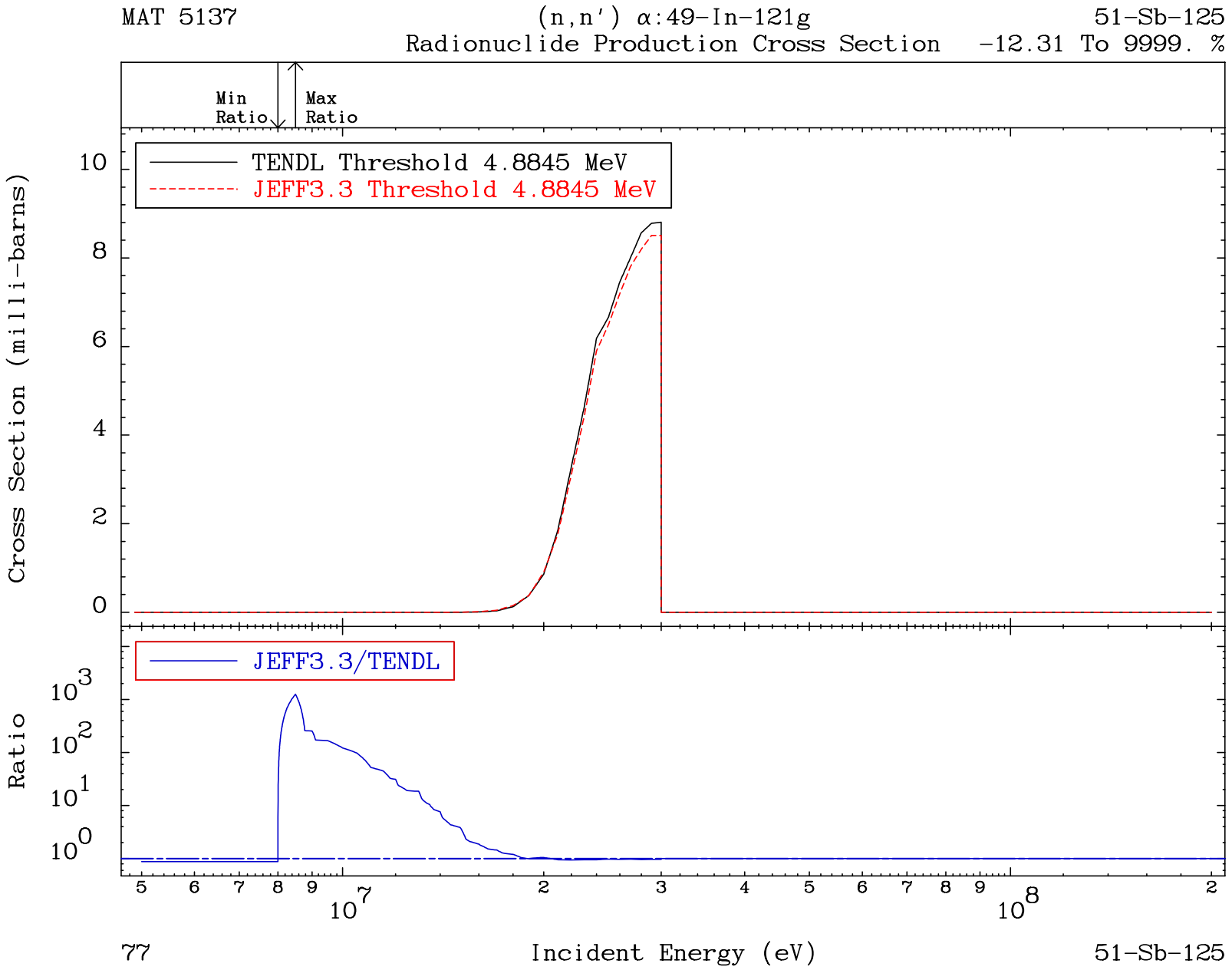

MAT 5137
Dpa inelastic (mt51-91)
Cross Section
51-Sb-125
-4.315 To 24.20 %
Min Ratio
Max Ratio
TENDL Threshold 334.74 keV
JEFF3.3 Threshold 334.74 keV
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
72
51-Sb-125

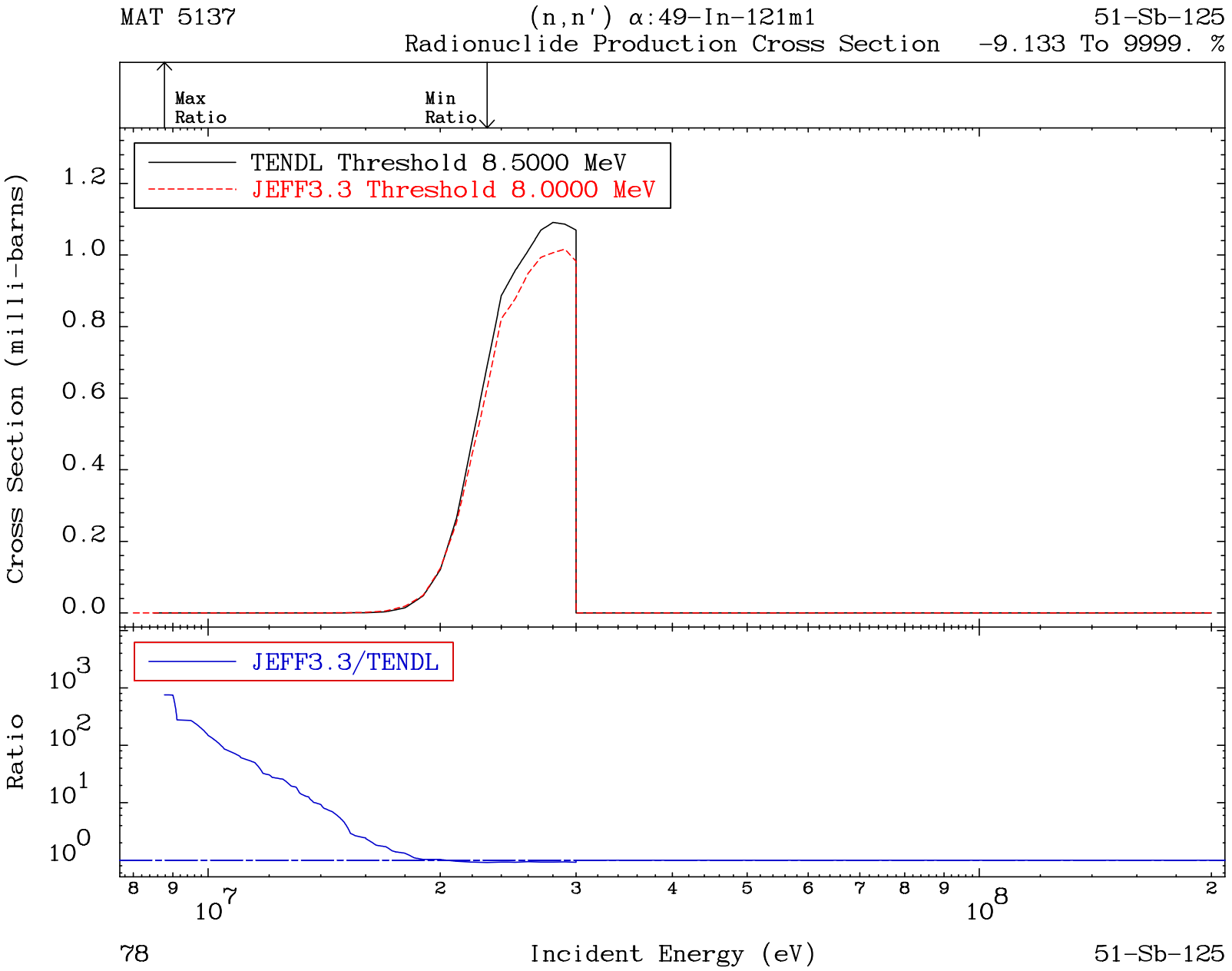

MAT 5137
Dpa disappearance (mt102 -120)
Cross Section
51-Sb-125
-99.93 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
73
51-Sb-125

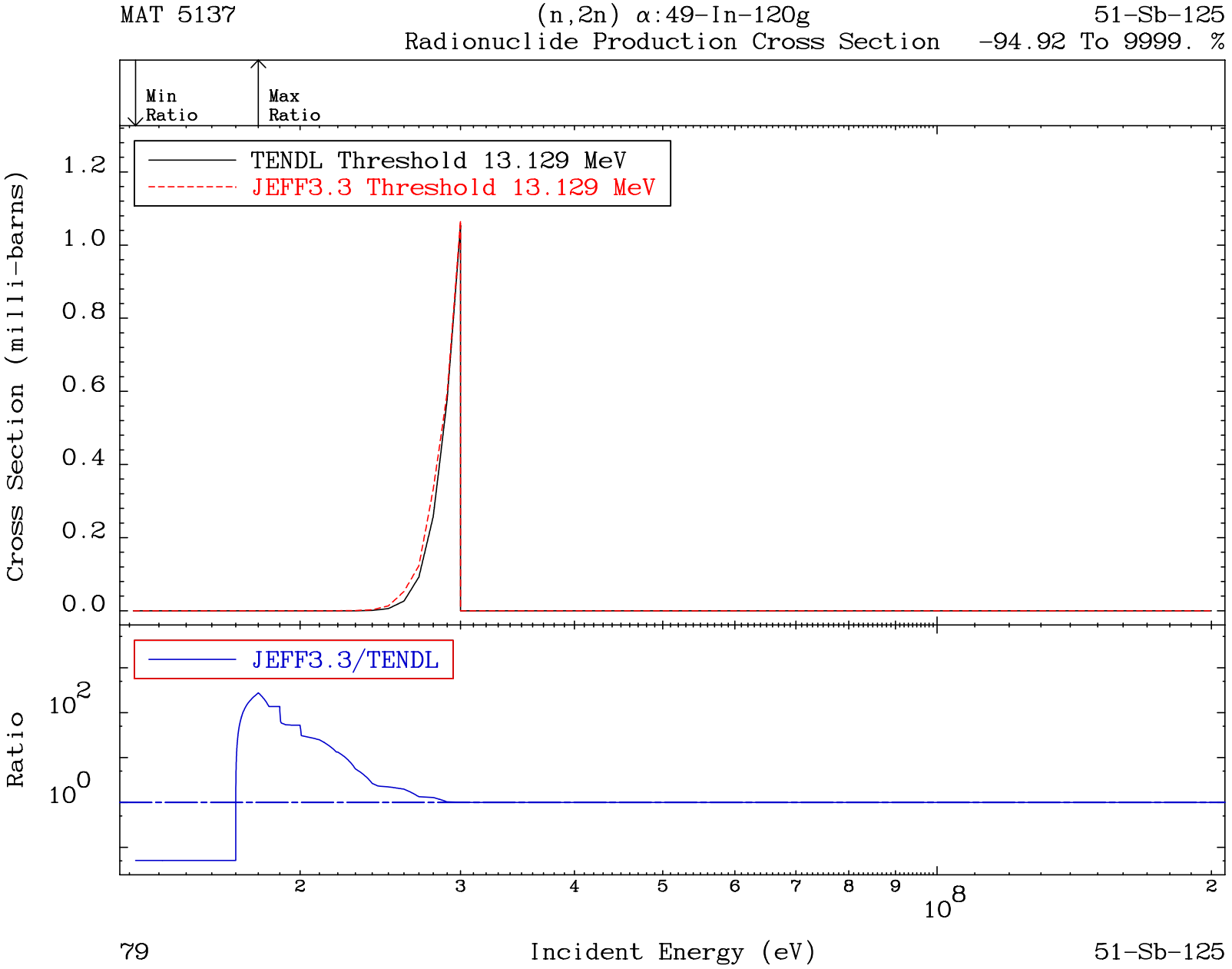

MAT 5137
(n,2n):51-Sb-124g
51-Sb-125
Radionuclide Production Cross Section
-15.65 To 23.96 %
Min Ratio
Max Ratio
TENDL Threshold 8.7777 MeV
JEFF3.3 Threshold 8.7777 MeV
Cross Section (milli-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
51-Sb-125

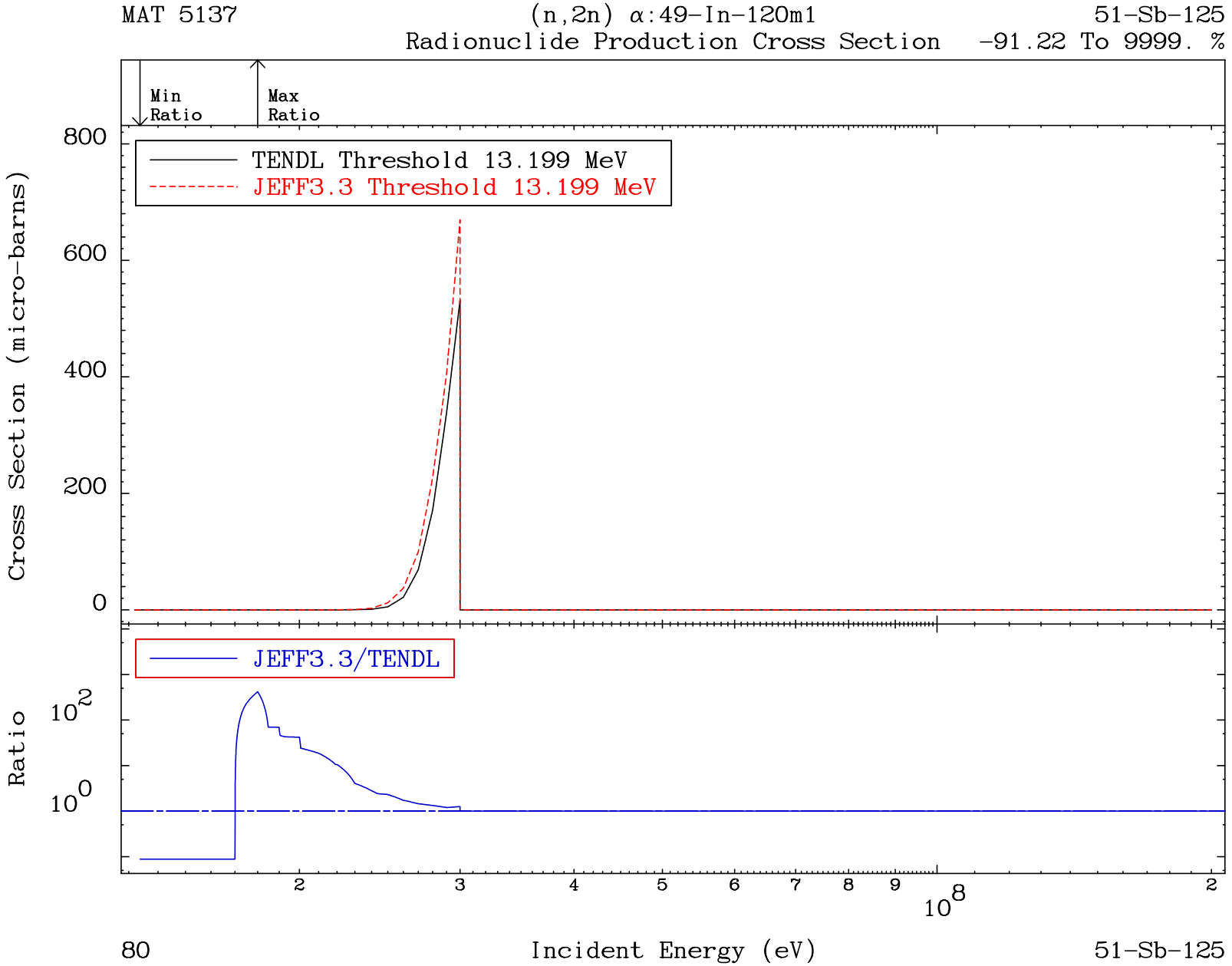

MAT 5137
(n,2n):51-Sb-124m1
51-Sb-125
Radionuclide Production Cross Section
-33.40 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 8.7886 MeV
JEFF3.3 Threshold 8.7886 MeV
Cross Section (milli-barns)
600
500
400
300
200
100
0
JEFF3.3/TENDL
Ratio
1.0
0.8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
75
Incident Energy (eV)
51-Sb-125

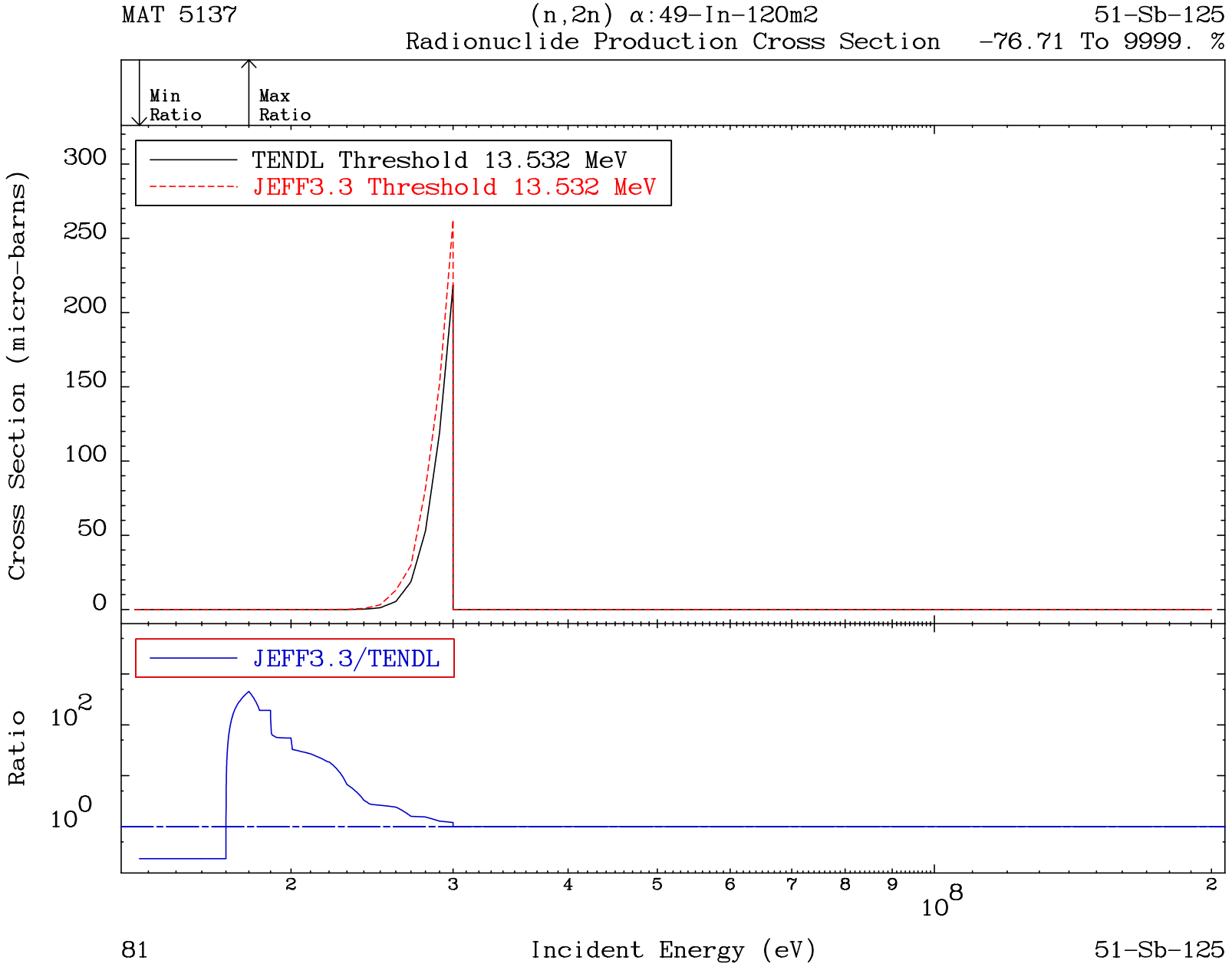

MAT 5137
(n,2n):51-Sb-124m2
51-Sb-125
Radionuclide Production Cross Section -10.13 To 47.01 %
Min Ratio
Max Ratio
TENDL Threshold 8.8148 MeV
JEFF3.3 Threshold 8.8148 MeV
Cross Section (milli-barns)
600
400
200
0
JEFF3.3/TENDL
Ratio
1.6
1.4
1.2
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
51-Sb-125

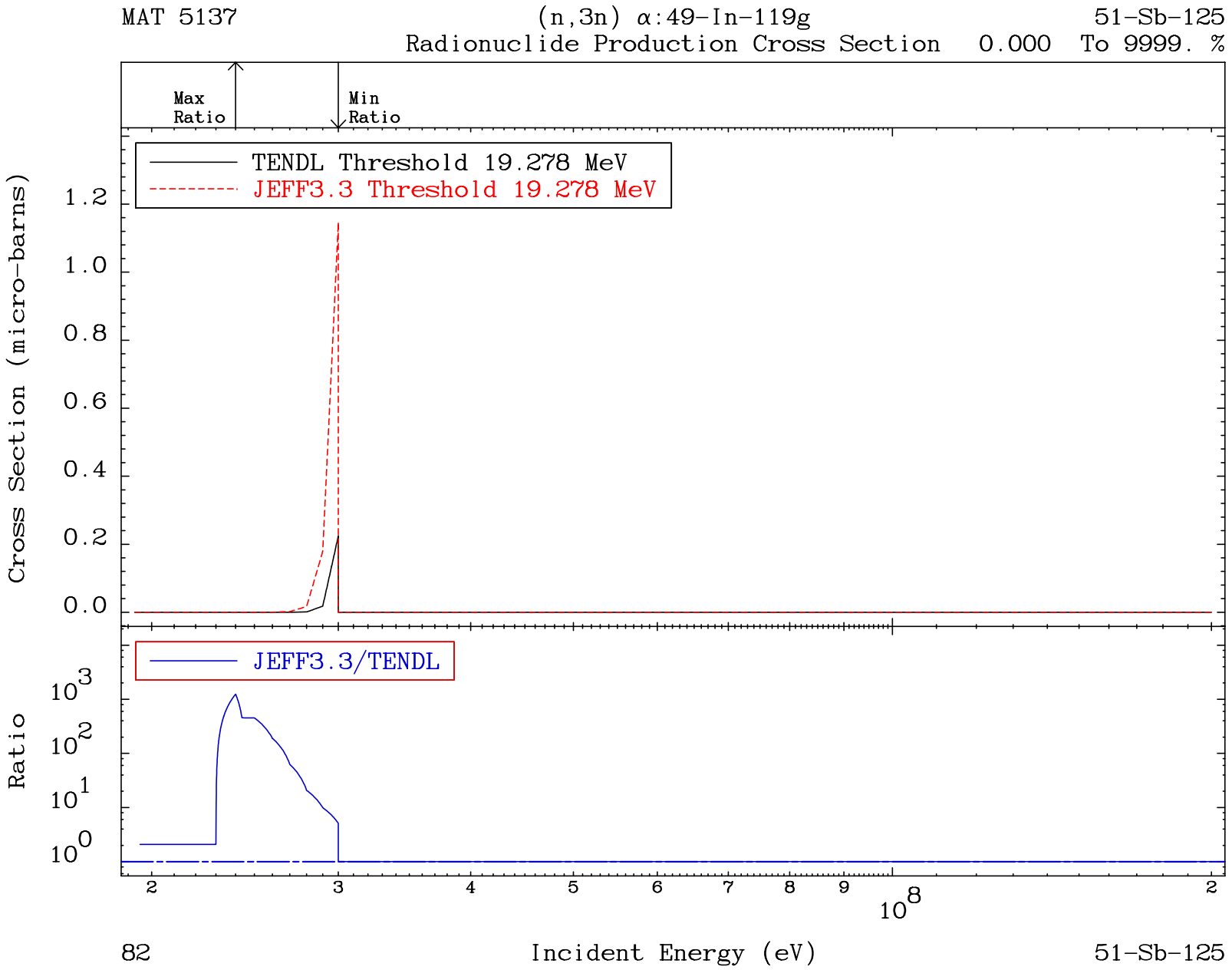

MAT 5137
(n,n') α:49-In-121g
51-Sb-125
Radionuclide Production Cross Section -12.31 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.8845 MeV
JEFF3.3 Threshold 4.8845 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
77
51-Sb-125

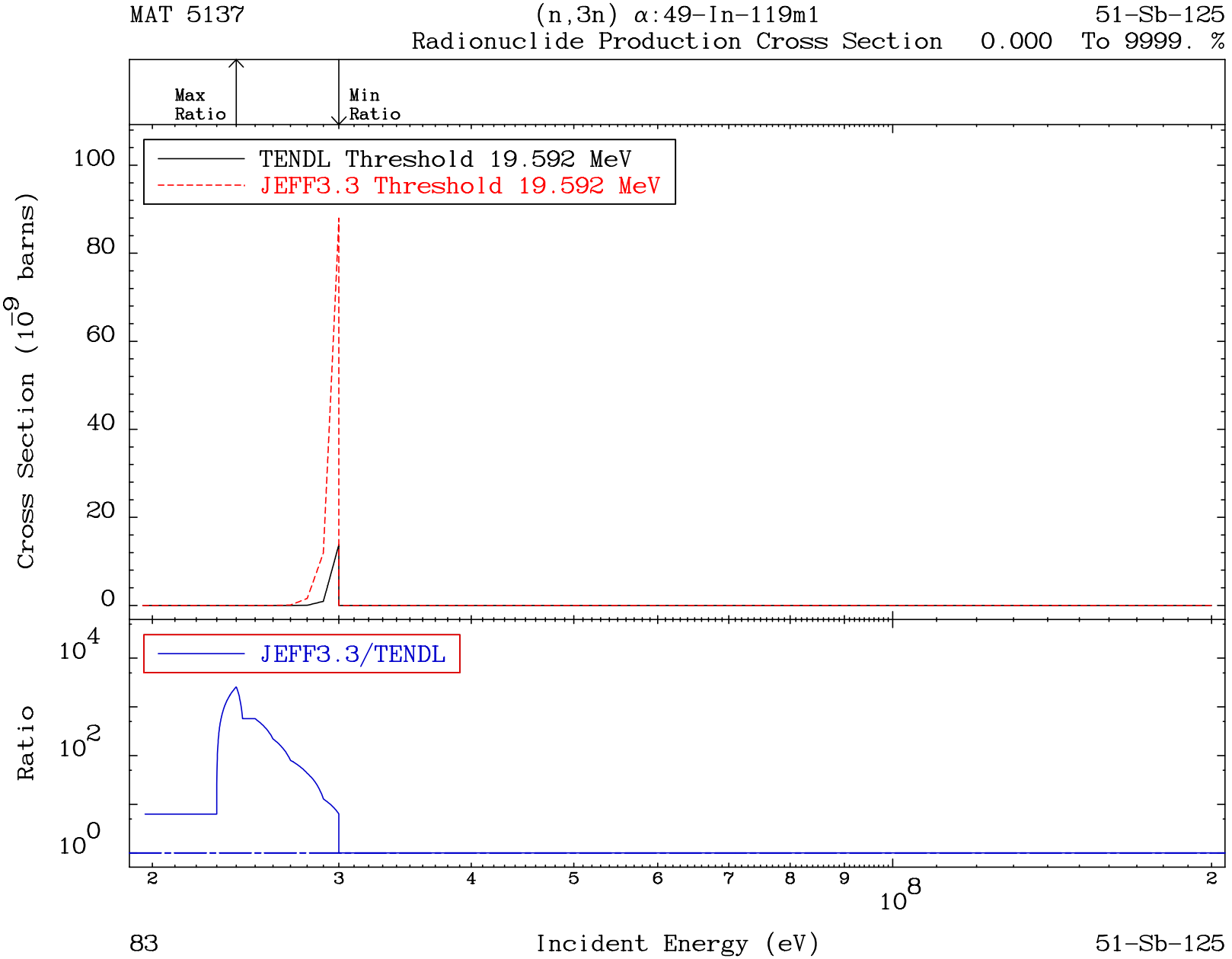

MAT 5137
(n,n') α:49-In-121m1
51-Sb-125
Radionuclide Production Cross Section -9.133 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.5000 MeV
JEFF3.3 Threshold 8.0000 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
78
Incident Energy (eV)
51-Sb-125

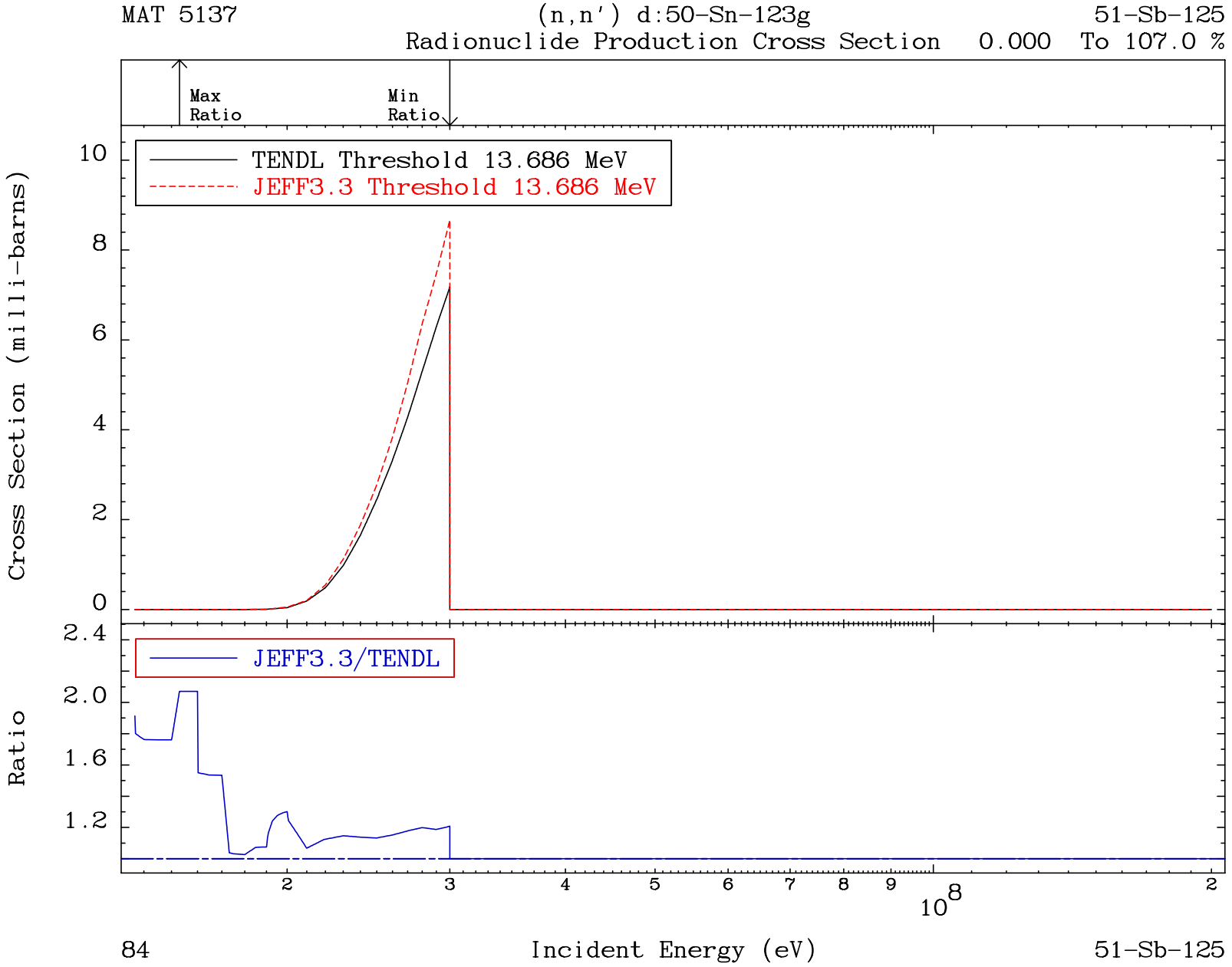

MAT 5137
(n,2n) α:49-In-120g
51-Sb-125
Radionuclide Production Cross Section
-94.92 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 13.129 MeV
JEFF3.3 Threshold 13.129 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
51-Sb-125

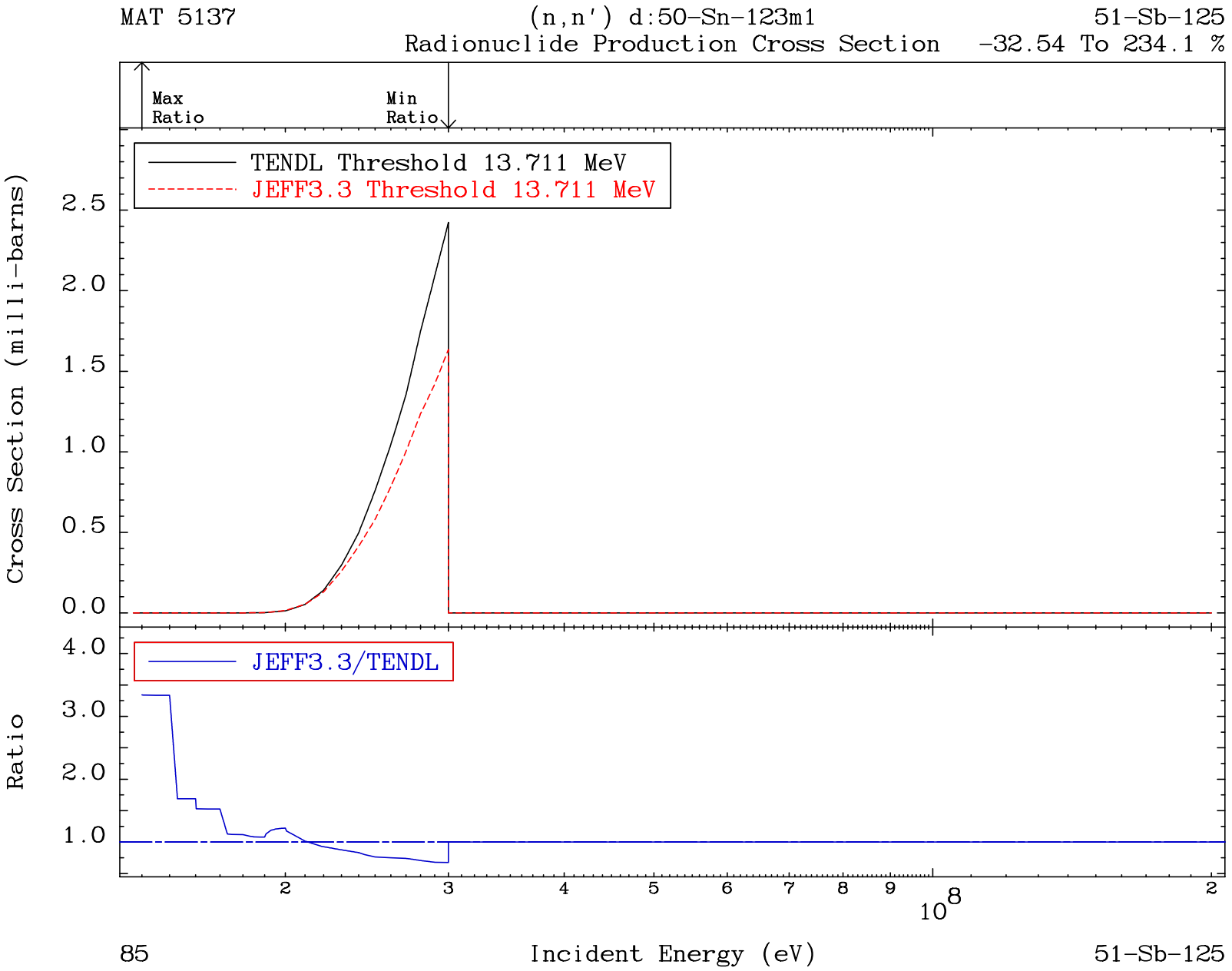

MAT 5137
(n,2n) α:49-In-120m1
51-Sb-125
Radionuclide Production Cross Section -91.22 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 13.199 MeV
JEFF3.3 Threshold 13.199 MeV
Cross Section (micro-barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
51-Sb-125

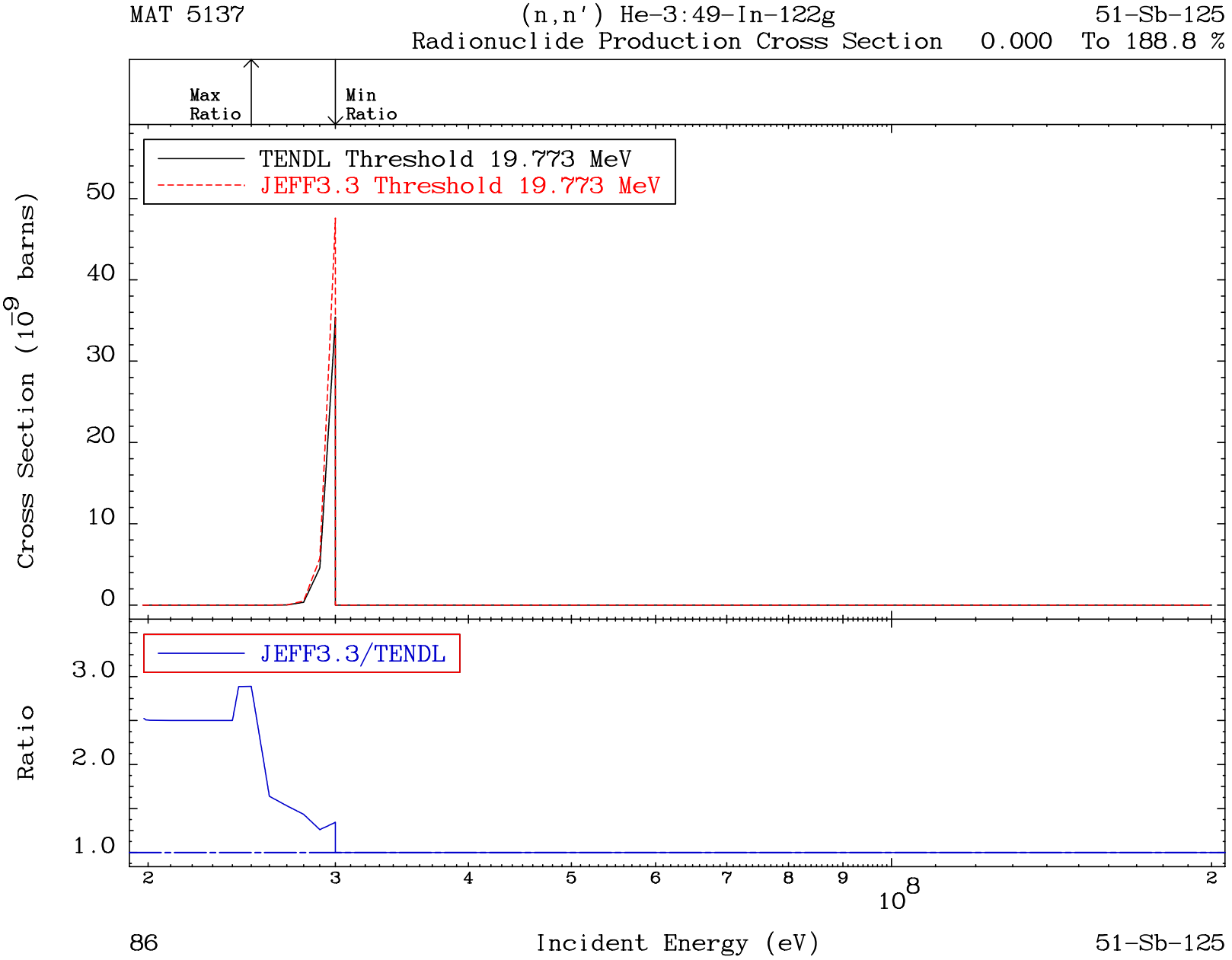

MAT 5137
(n,2n) α:49-In-120m2
51-Sb-125
Radionuclide Production Cross Section -76.71 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 13.532 MeV
JEFF3.3 Threshold 13.532 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
JEFF3.3/TENDL
Ratio
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
81
Incident Energy (eV)
51-Sb-125

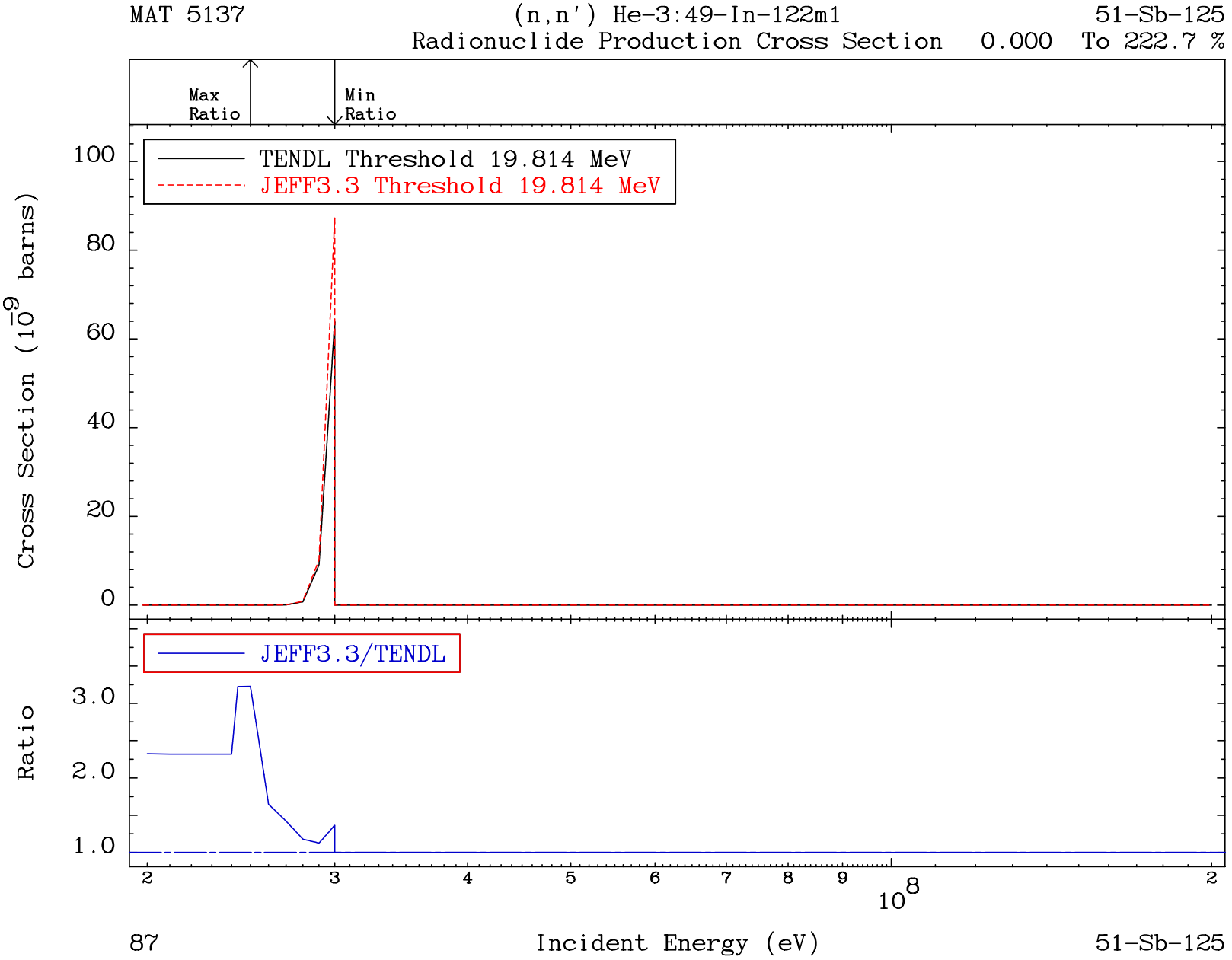

MAT 5137
(n,3n) α:49-In-119g
51-Sb-125
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.278 MeV
JEFF3.3 Threshold 19.278 MeV
Cross Section (micro-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^3
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
51-Sb-125

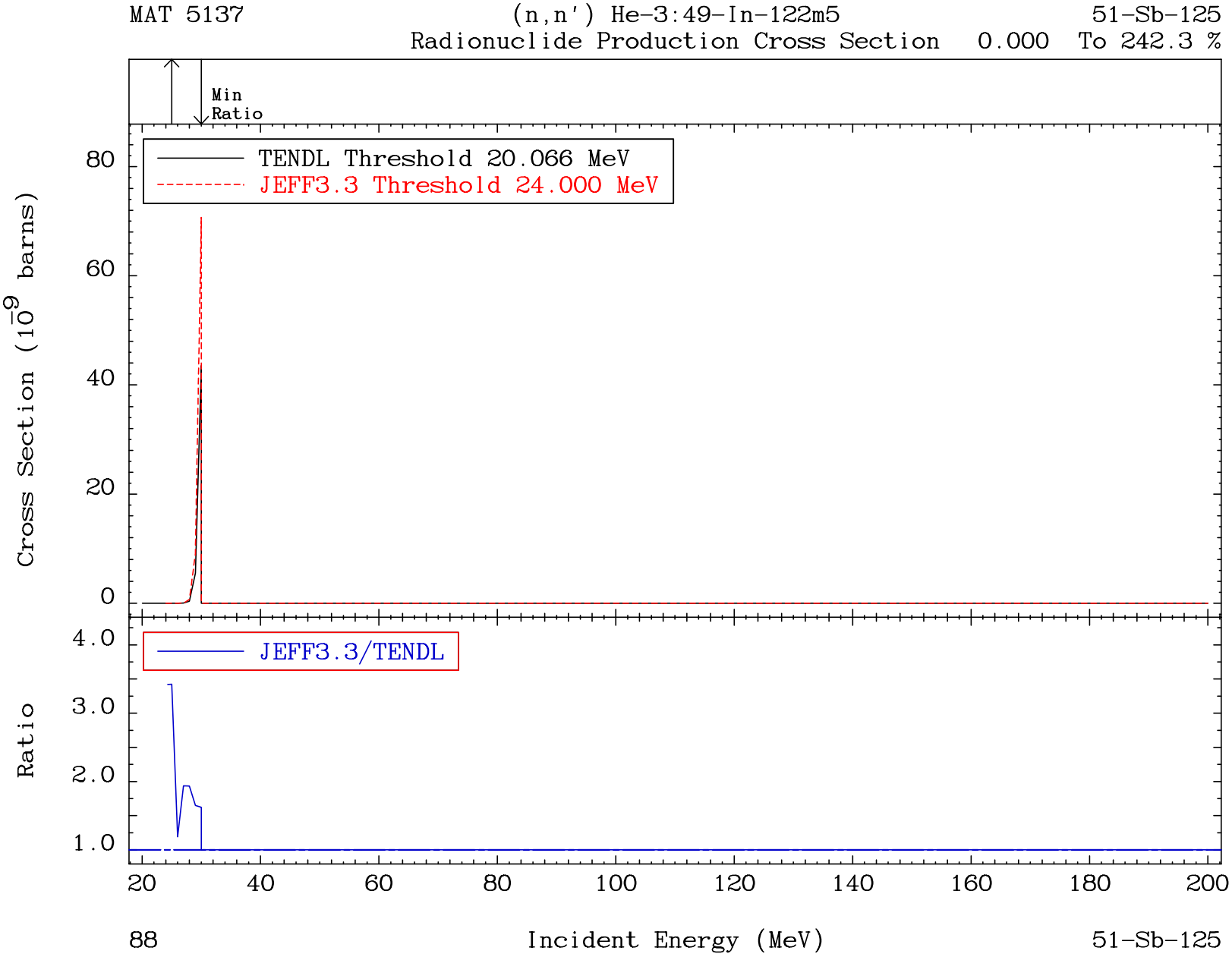

MAT 5137
(n,3n) α:49-In-119m1
51-Sb-125
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 19.592 MeV
JEFF3.3 Threshold 19.592 MeV
Cross Section (10^{-9} barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
51-Sb-125

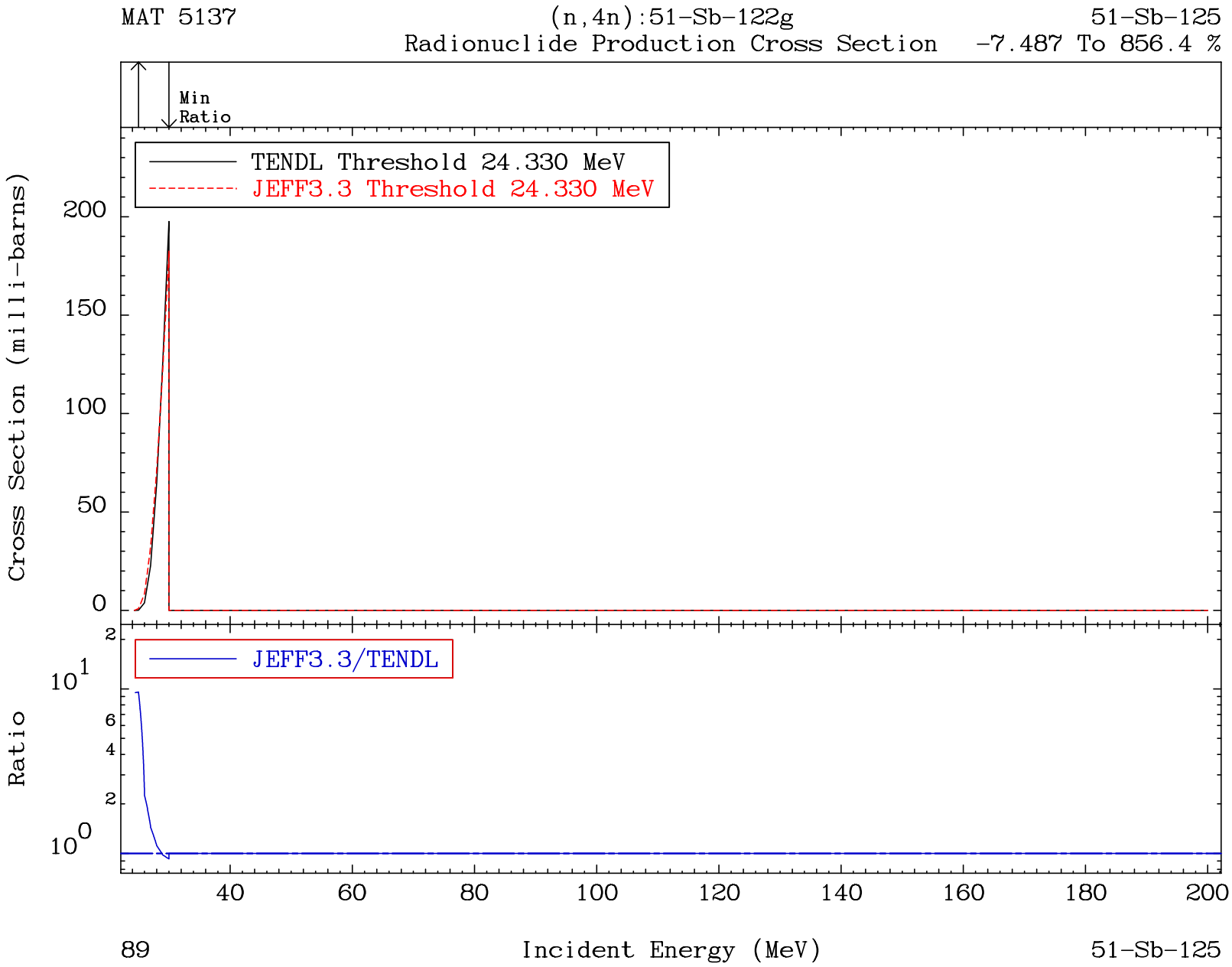

MAT 5137
(n,n') d:50-Sn-123g
51-Sb-125
Radionuclide Production Cross Section 0.000 To 107.0 %
Max Ratio
Min Ratio
TENDL Threshold 13.686 MeV
JEFF3.3 Threshold 13.686 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
84
51-Sb-125

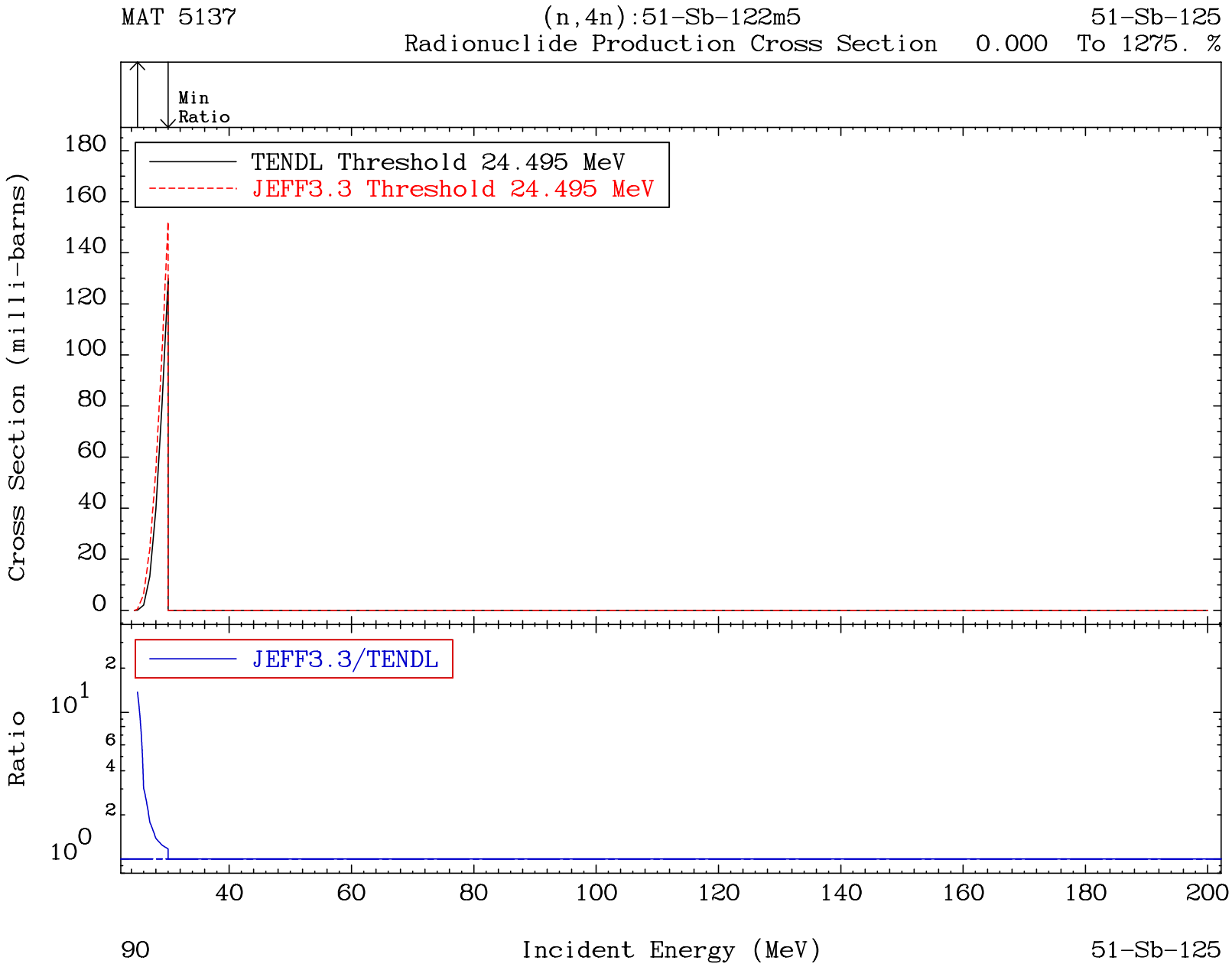

MAT 5137
(n,n') d:50-Sn-123m1
51-Sb-125
Radionuclide Production Cross Section -32.54 To 234.1 %
Max Ratio
Min Ratio
TENDL Threshold 13.711 MeV
JEFF3.3 Threshold 13.711 MeV
Cross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
4.0
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
51-Sb-125

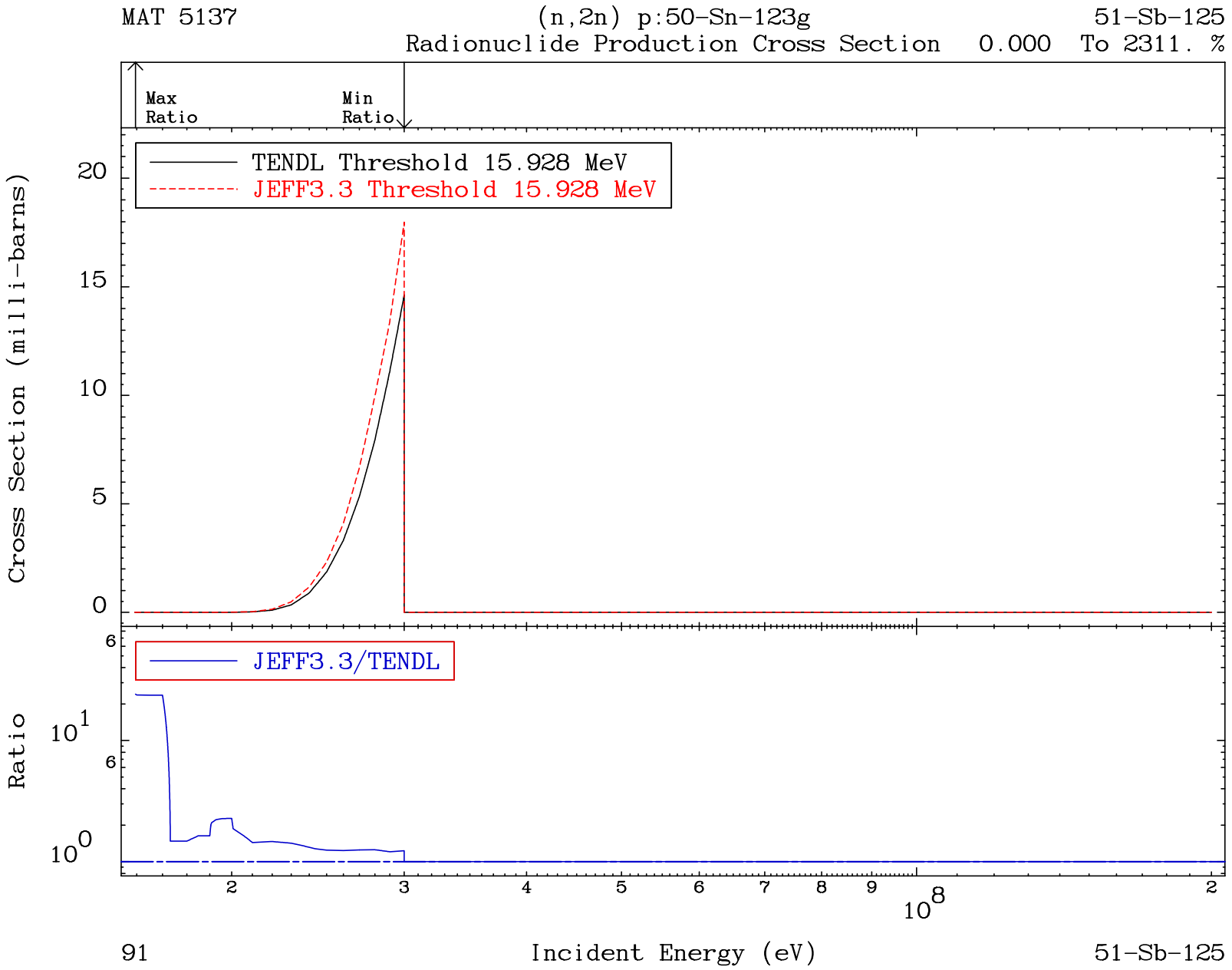

MAT 5137
(n,n') He-3:49-In-122g
51-Sb-125
Radionuclide Production Cross Section 0.000 To 188.8 %
Max Ratio
Min Ratio
TENDL Threshold 19.773 MeV
JEFF3.3 Threshold 19.773 MeV
Cross Section (10^{-9} barns)
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
86
Incident Energy (eV)
51-Sb-125

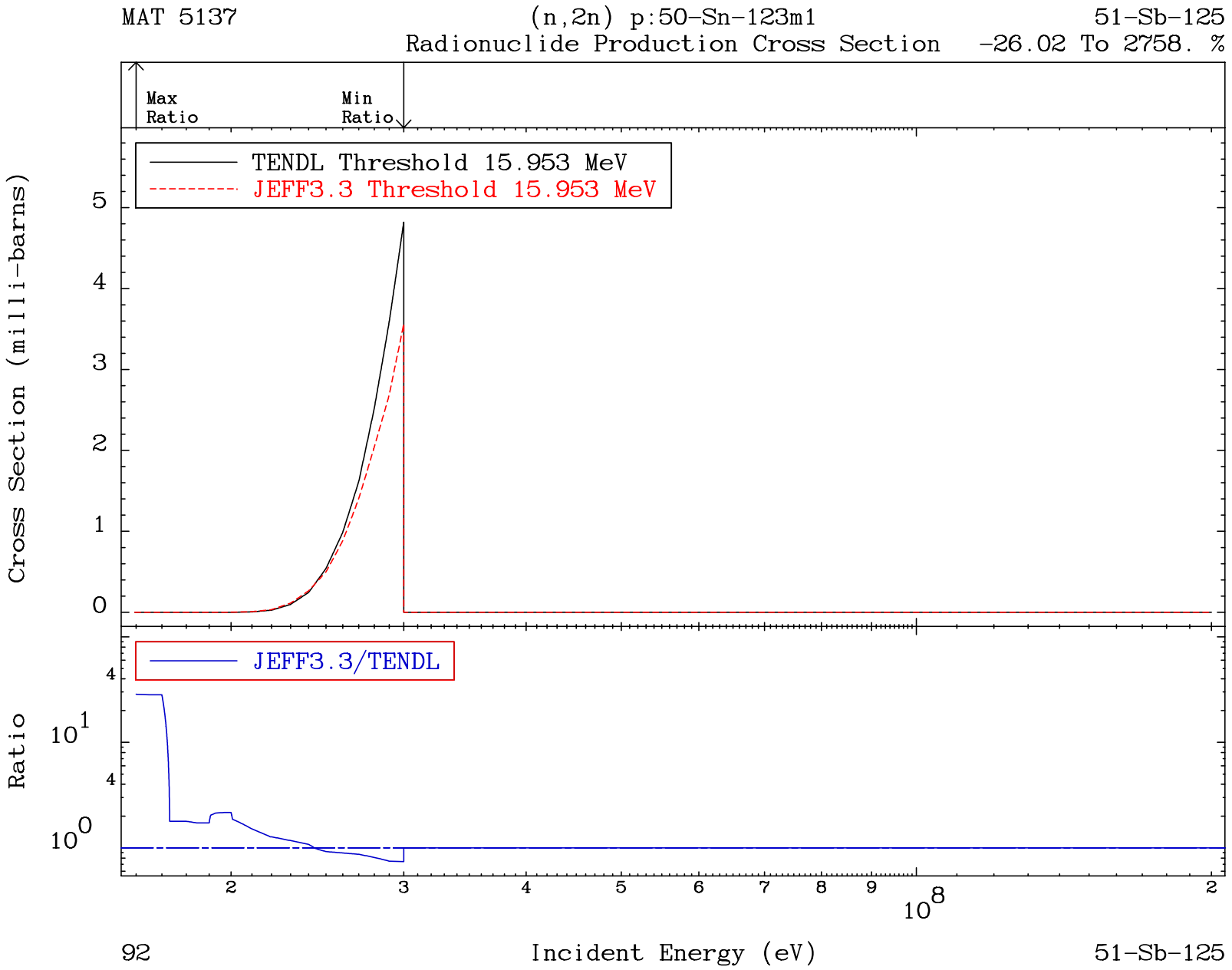

MAT 5137
(n,n') He-3:49-In-122m1
51-Sb-125
Radionuclide Production Cross Section 0.000 To 222.7 %
Max Ratio
Min Ratio
TENDL Threshold 19.814 MeV
JEFF3.3 Threshold 19.814 MeV
Cross Section (10^{-9} barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
3.0
2.0
1.0
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
51-Sb-125

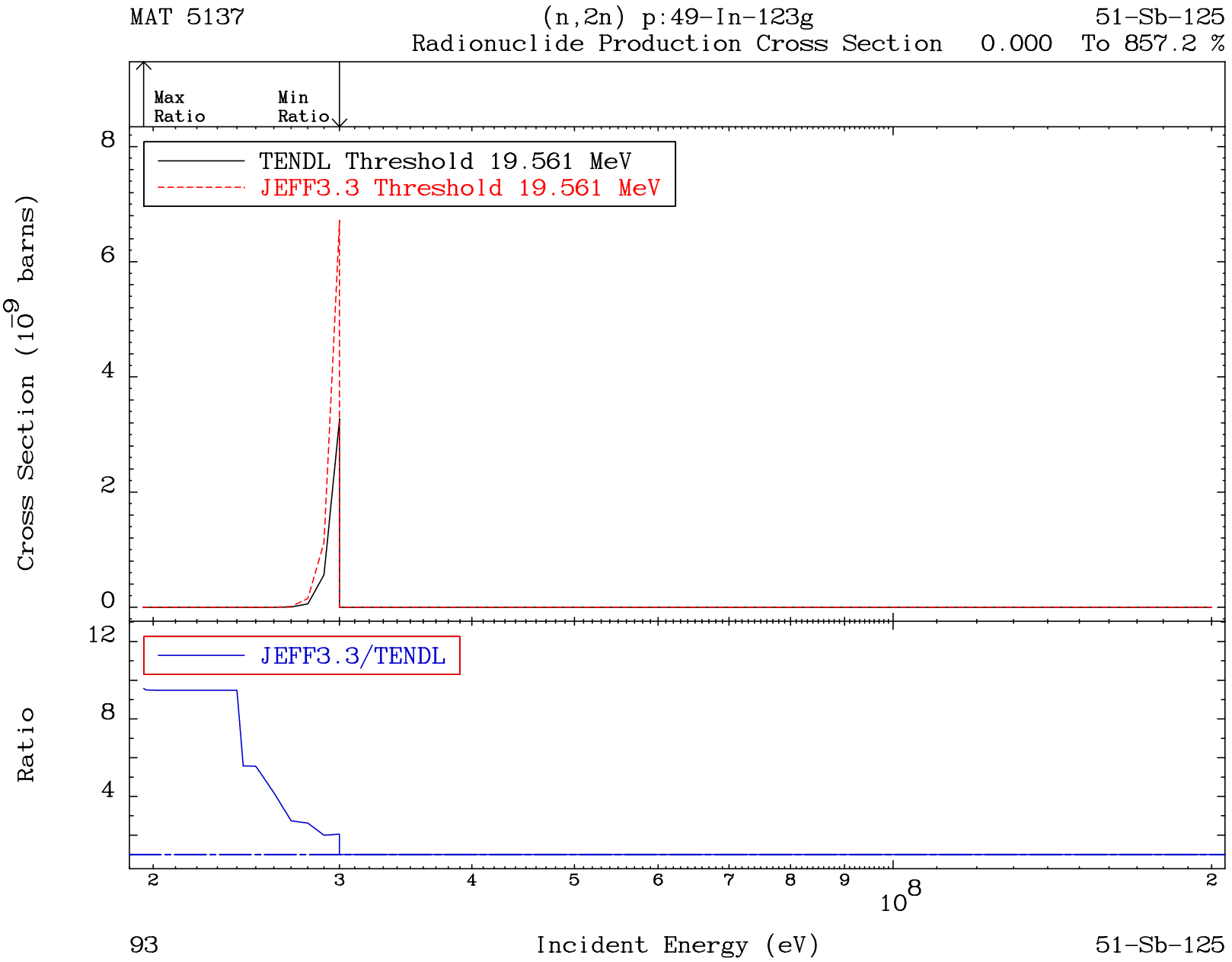

MAT 5137
(n,n') He-3:49-In-122m5
51-Sb-125
Radionuclide Production Cross Section 0.000 To 242.3 %
Min
Ratio
TENDL Threshold 20.066 MeV
JEFF3.3 Threshold 24.000 MeV
Cross Section (10^{-9} barns)
0
20
40
60
80
JEFF3.3/TENDL
Ratio
1.0
2.0
3.0
4.0
20
40
60
80
100
120
140
160
180
200
88
Incident Energy (MeV)
51-Sb-125

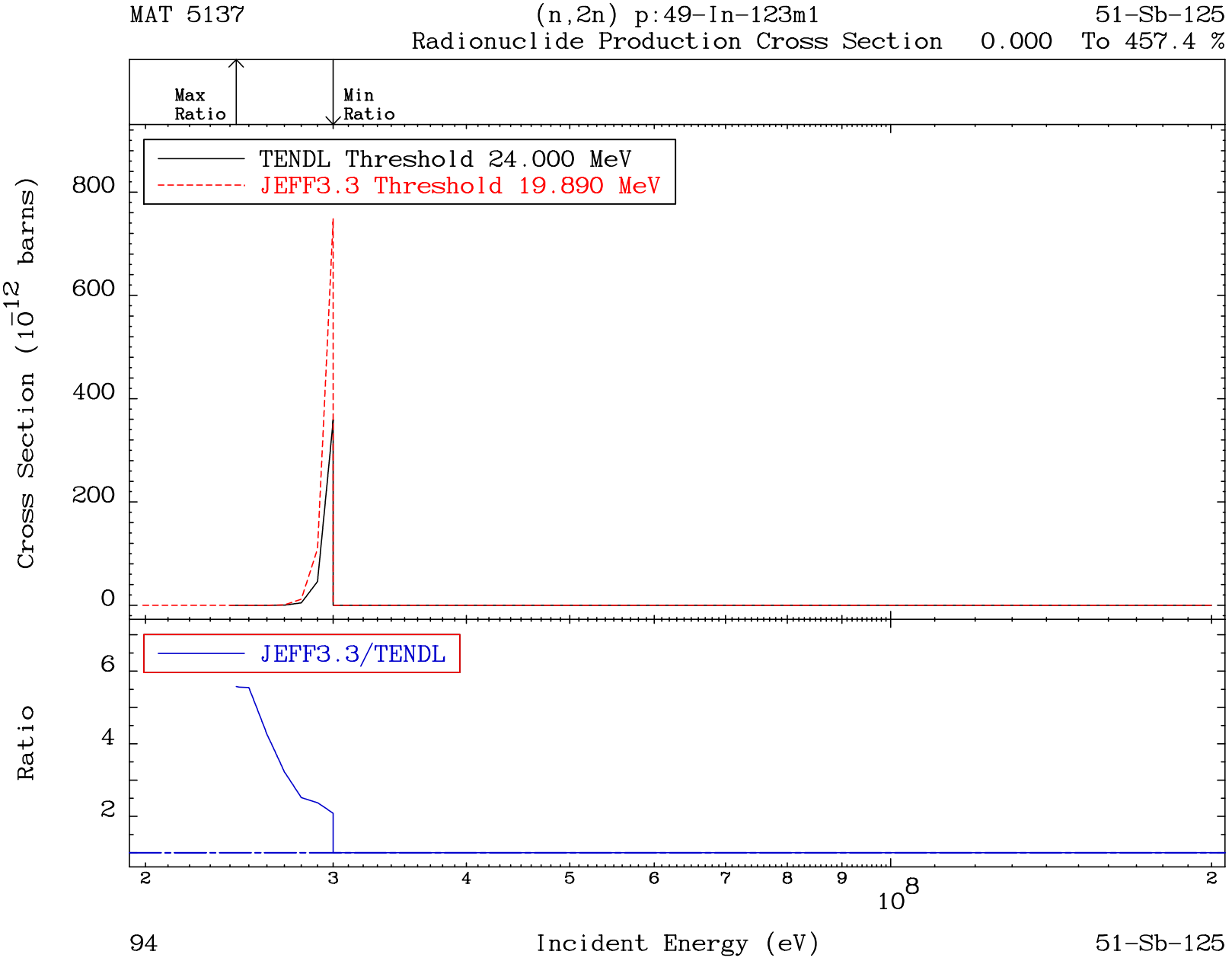

MAT 5137
(n,4n):51-Sb-122g
51-Sb-125
Radionuclide Production Cross Section
-7.487 To 856.4 %
Min
Ratio
TENDL Threshold 24.330 MeV
JEFF3.3 Threshold 24.330 MeV
Cross Section (milli-barns)
200
150
100
50
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
40
60
80
100
120
140
160
180
200
89
Incident Energy (MeV)
51-Sb-125

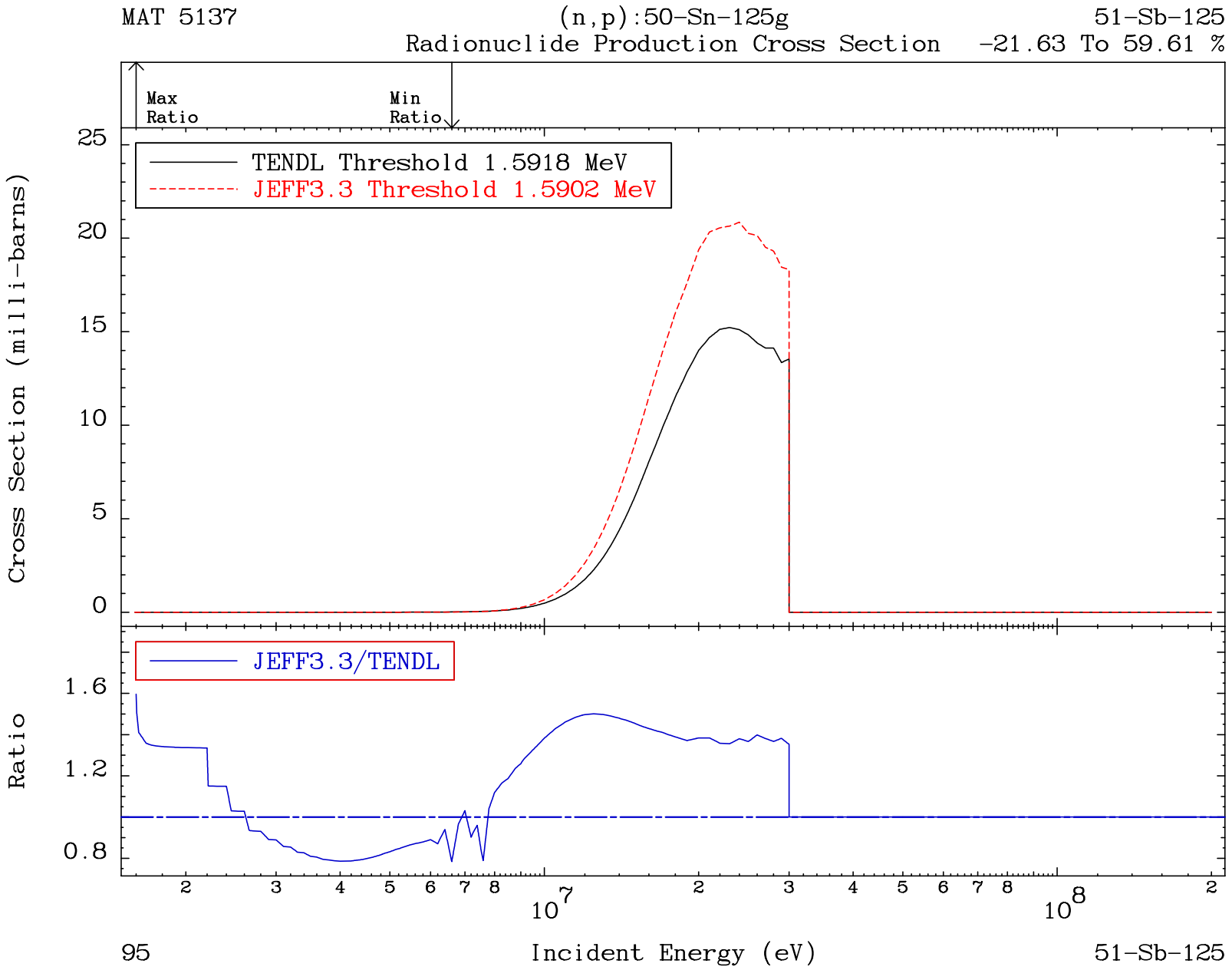

MAT 5137
(n,4n):51-Sb-122m5
51-Sb-125
Radionuclide Production Cross Section 0.000 To 1275. %
Min
Ratio
TENDL Threshold 24.495 MeV
JEFF3.3 Threshold 24.495 MeV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2
10^1
6
4
2
10^0
40
60
80
100
120
140
160
180
200
90
Incident Energy (MeV)
51-Sb-125

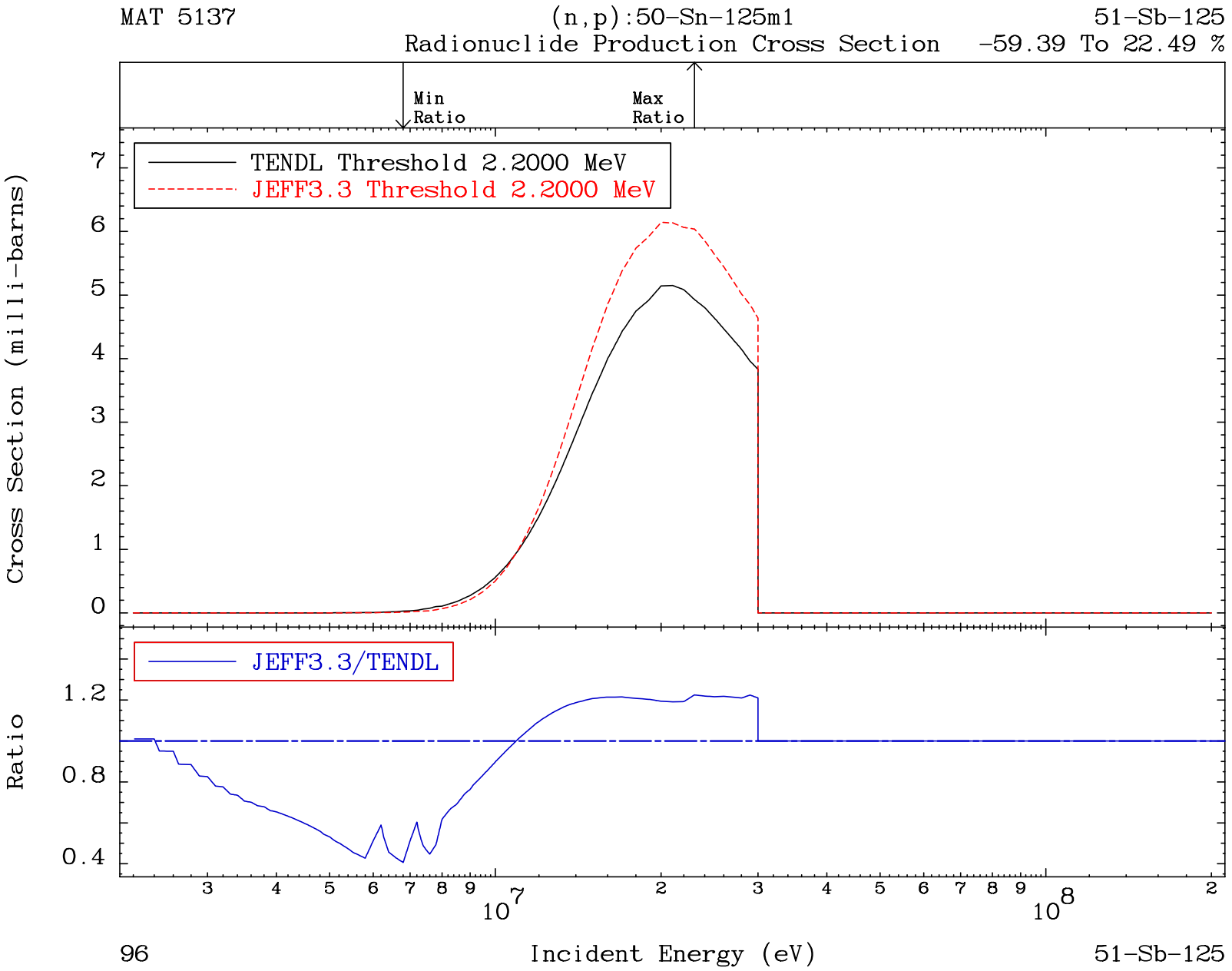

MAT 5137
(n,2n) p:50-Sn-123g
51-Sb-125
Radionuclide Production Cross Section 0.000 To 2311. %
Max Ratio
Min Ratio
TENDL Threshold 15.928 MeV
JEFF3.3 Threshold 15.928 MeV
Cross Section (milli-barns)
20
15
10
5
0
JEFF3.3/TENDL
Ratio
6
10^1
6
10^0
2
3
4
5
6
7
8
9
10^8
2
91
Incident Energy (eV)
51-Sb-125

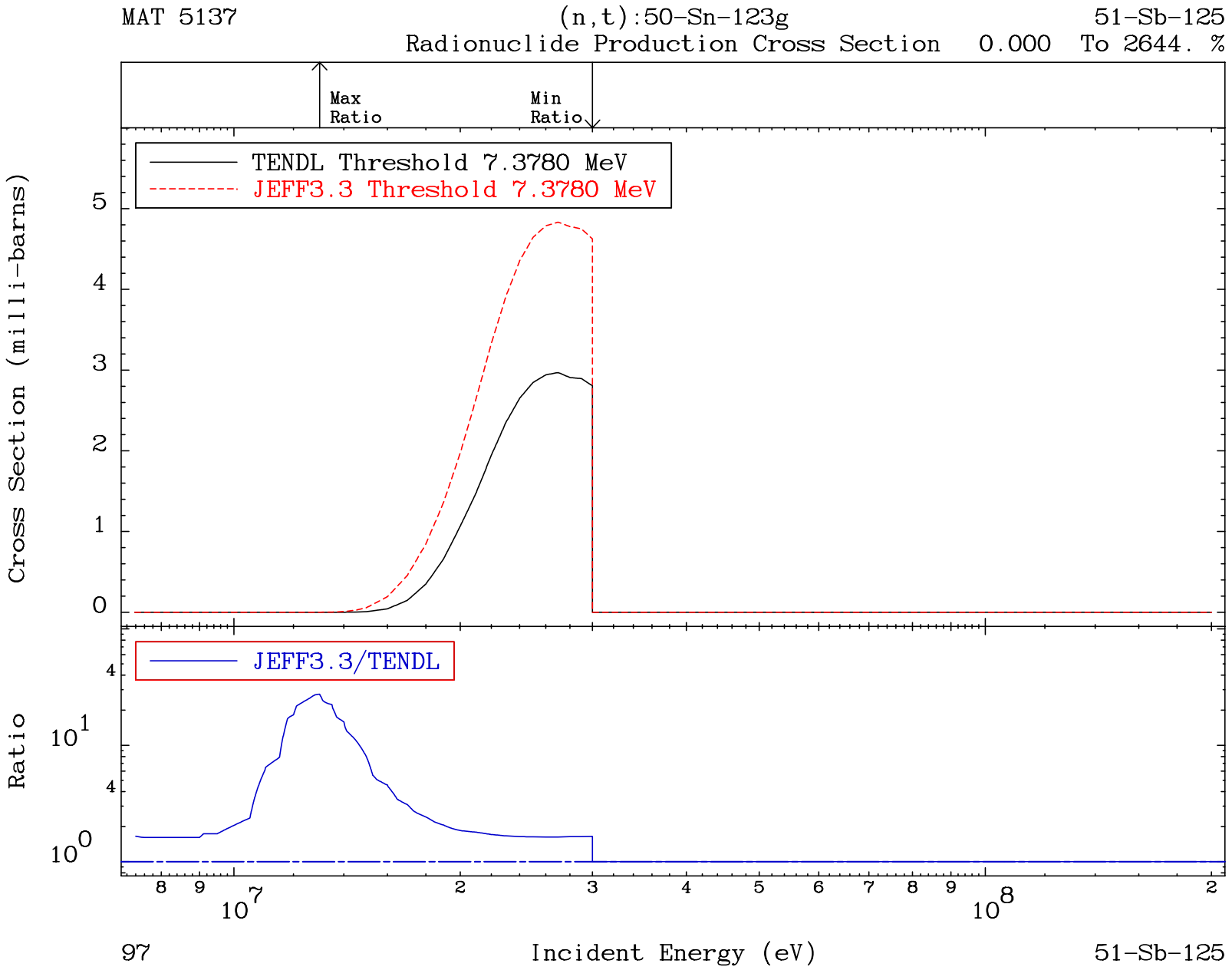

MAT 5137
(n,2n) p:50-Sn-123m1
51-Sb-125
Radionuclide Production Cross Section -26.02 To 2758. %
Max Ratio
Min Ratio
TENDL Threshold 15.953 MeV
JEFF3.3 Threshold 15.953 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
92
51-Sb-125

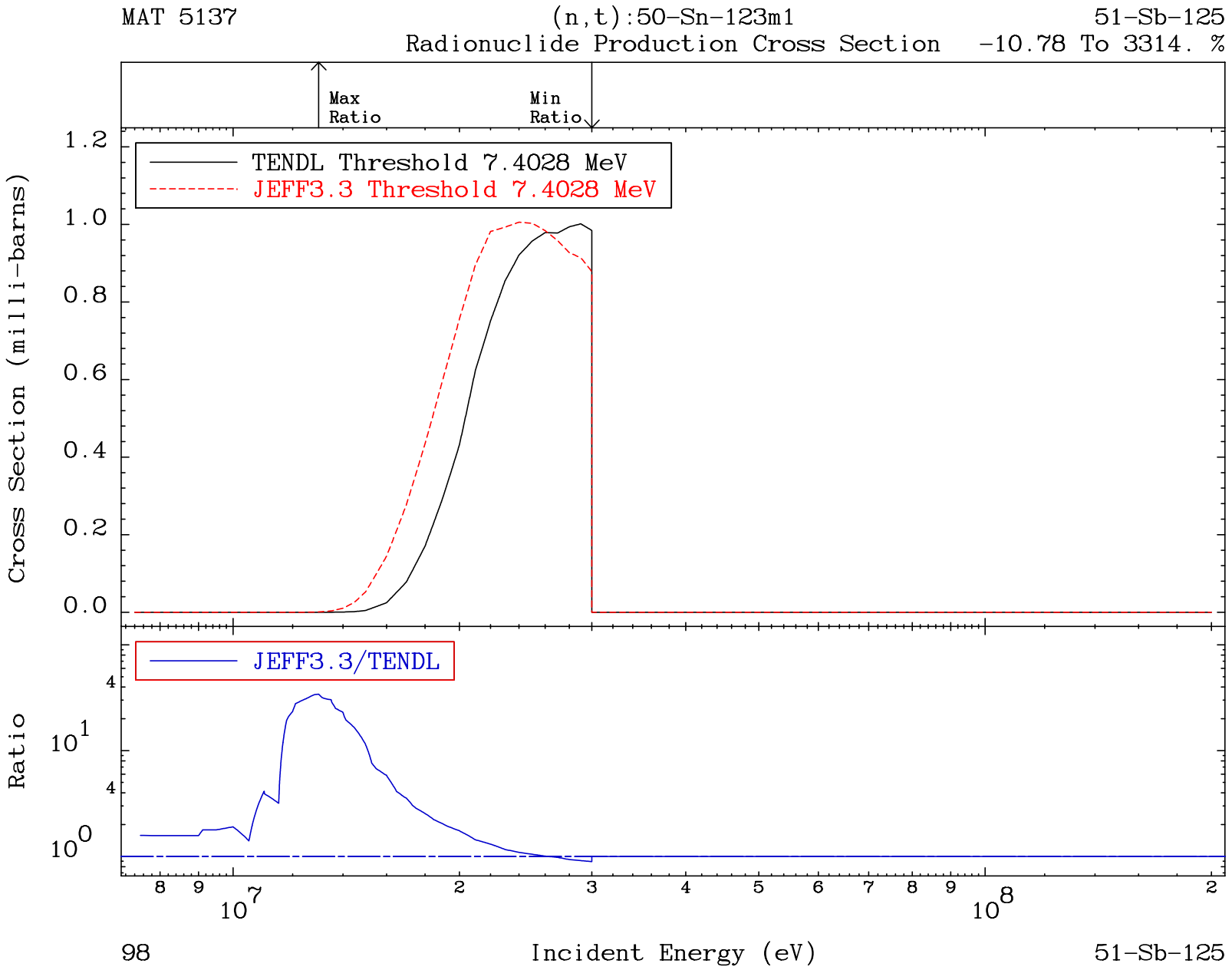

MAT 5137
(n,2n) p:49-In-123g
51-Sb-125
Radionuclide Production Cross Section 0.000 To 857.2 %
Max Ratio
Min Ratio
TENDL Threshold 19.561 MeV
JEFF3.3 Threshold 19.561 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
10^{8}
93
Incident Energy (eV)
51-Sb-125

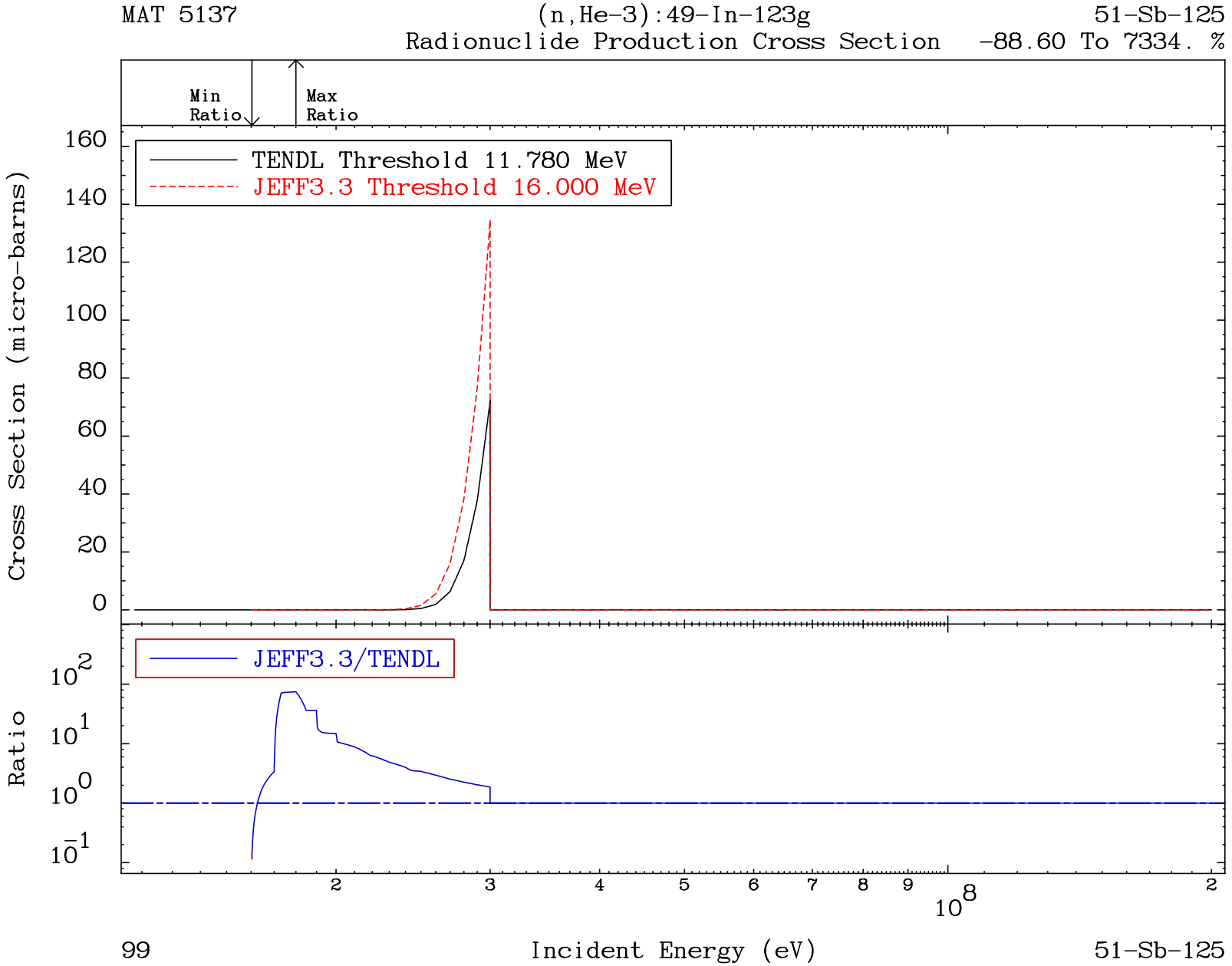

MAT 5137
(n,2n) p:49-In-123m1
51-Sb-125
Radionuclide Production Cross Section 0.000 To 457.4 %
Max Ratio
Min Ratio
TENDL Threshold 24.000 MeV
JEFF3.3 Threshold 19.890 MeV
Cross Section (10^{-12} barns)
800
600
400
200
0
JEFF3.3/TENDL
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
51-Sb-125

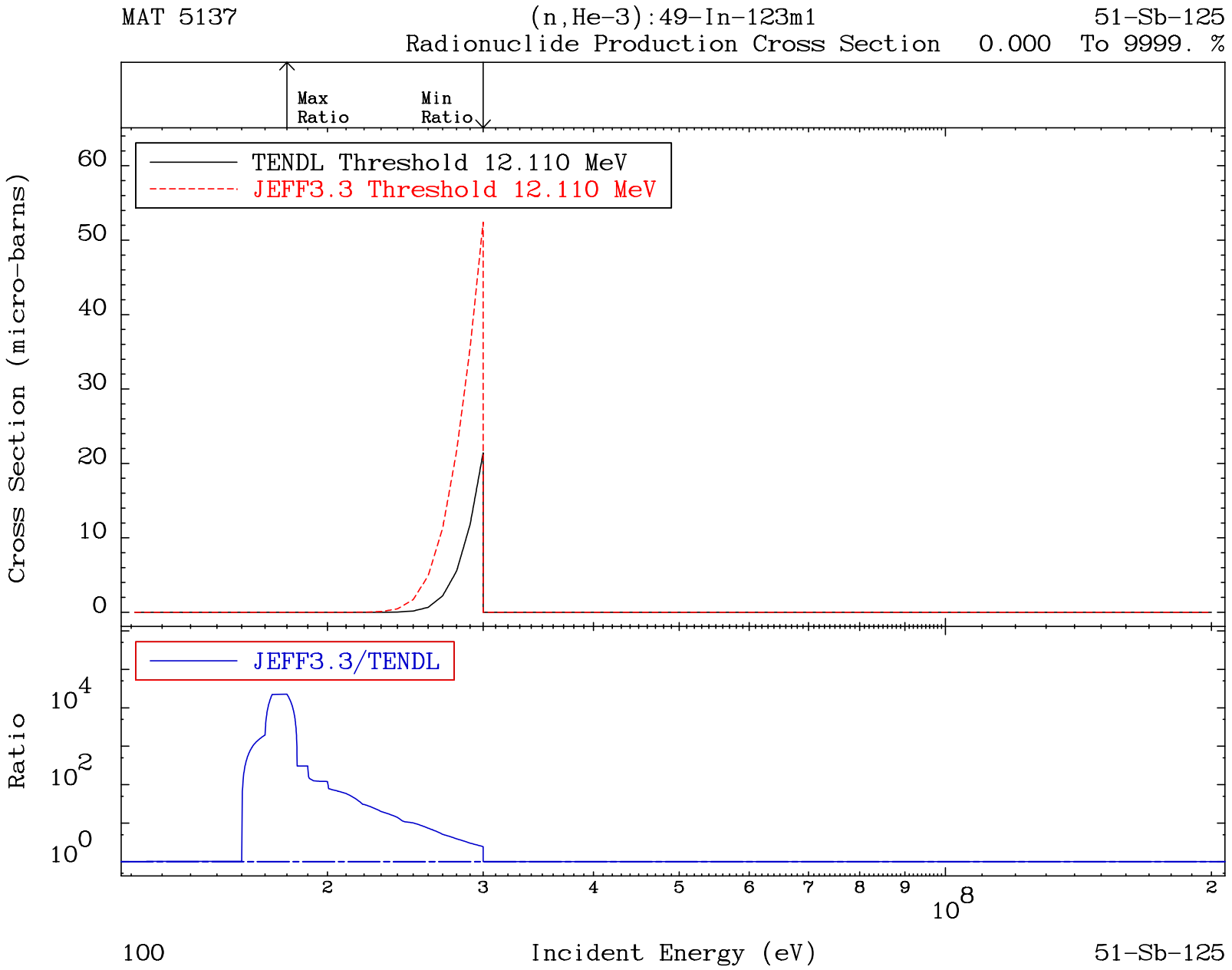

MAT 5137
(n,p):50-Sn-125g
51-Sb-125
Radionuclide Production Cross Section
-21.63 To 59.61 %
Max Ratio
Min Ratio
TENDL Threshold 1.5918 MeV
JEFF3.3 Threshold 1.5902 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
JEFF3.3/TENDL
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
95
Incident Energy (eV)
51-Sb-125

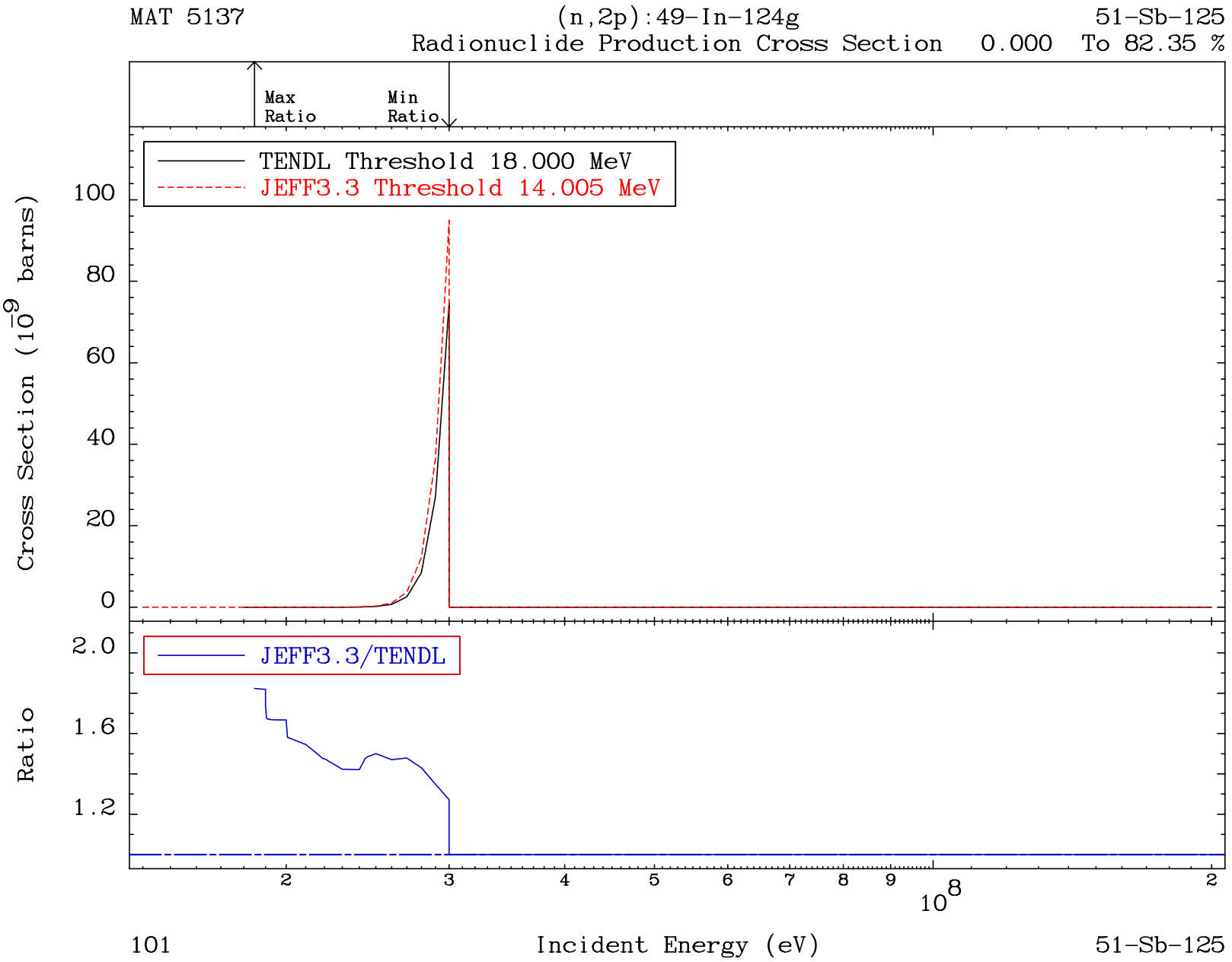

MAT 5137
(n,p):50-Sn-125m1
51-Sb-125
Radionuclide Production Cross Section -59.39 To 22.49 %
Min Ratio
Max Ratio
TENDL Threshold 2.2000 MeV
JEFF3.3 Threshold 2.2000 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
96
51-Sb-125

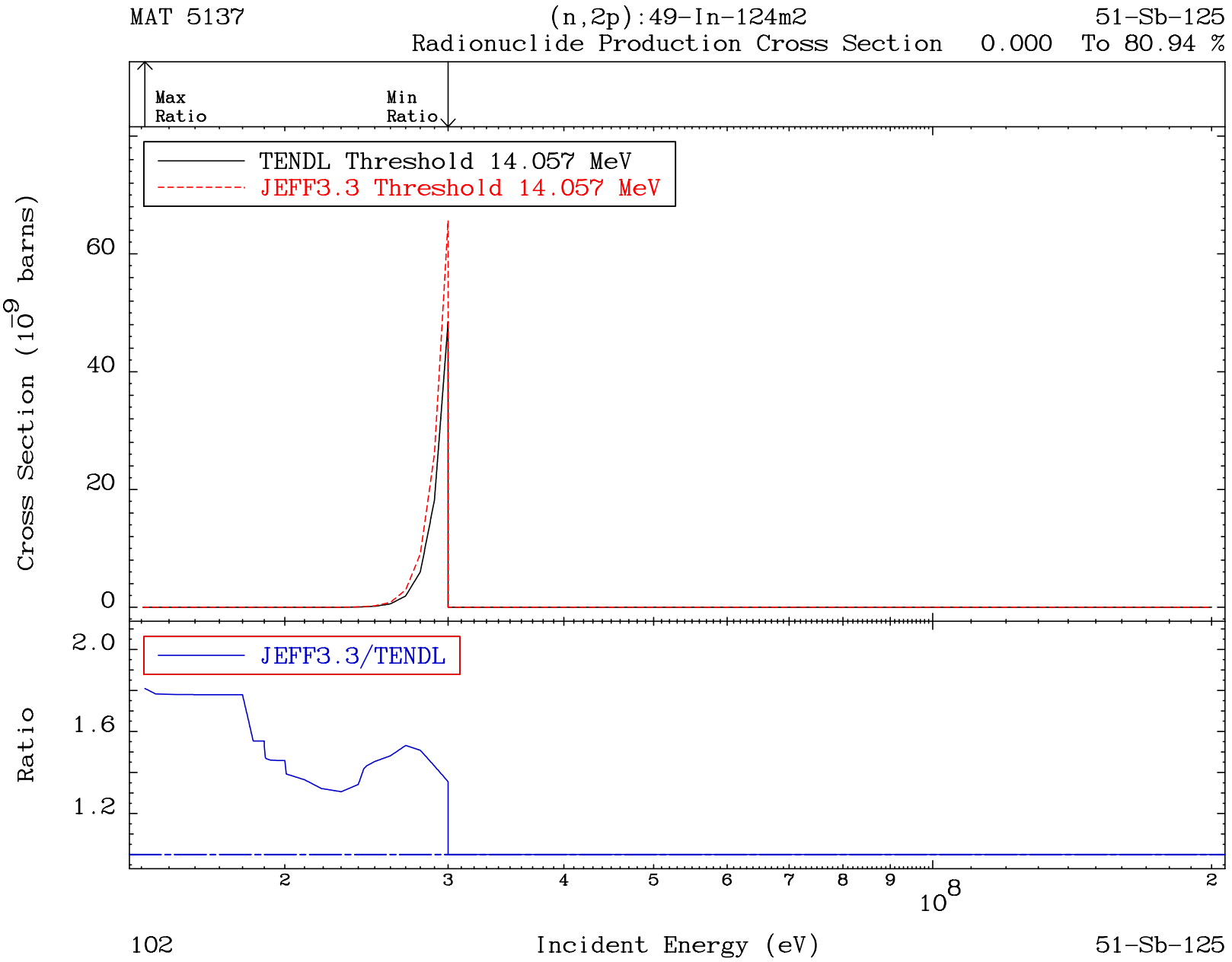

MAT 5137
(n,t):50-Sn-123g
51-Sb-125
Radionuclide Production Cross Section 0.000 To 2644. %
Max Ratio
Min Ratio
TENDL Threshold 7.3780 MeV
JEFF3.3 Threshold 7.3780 MeV
Cross Section (milli-barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
97
51-Sb-125

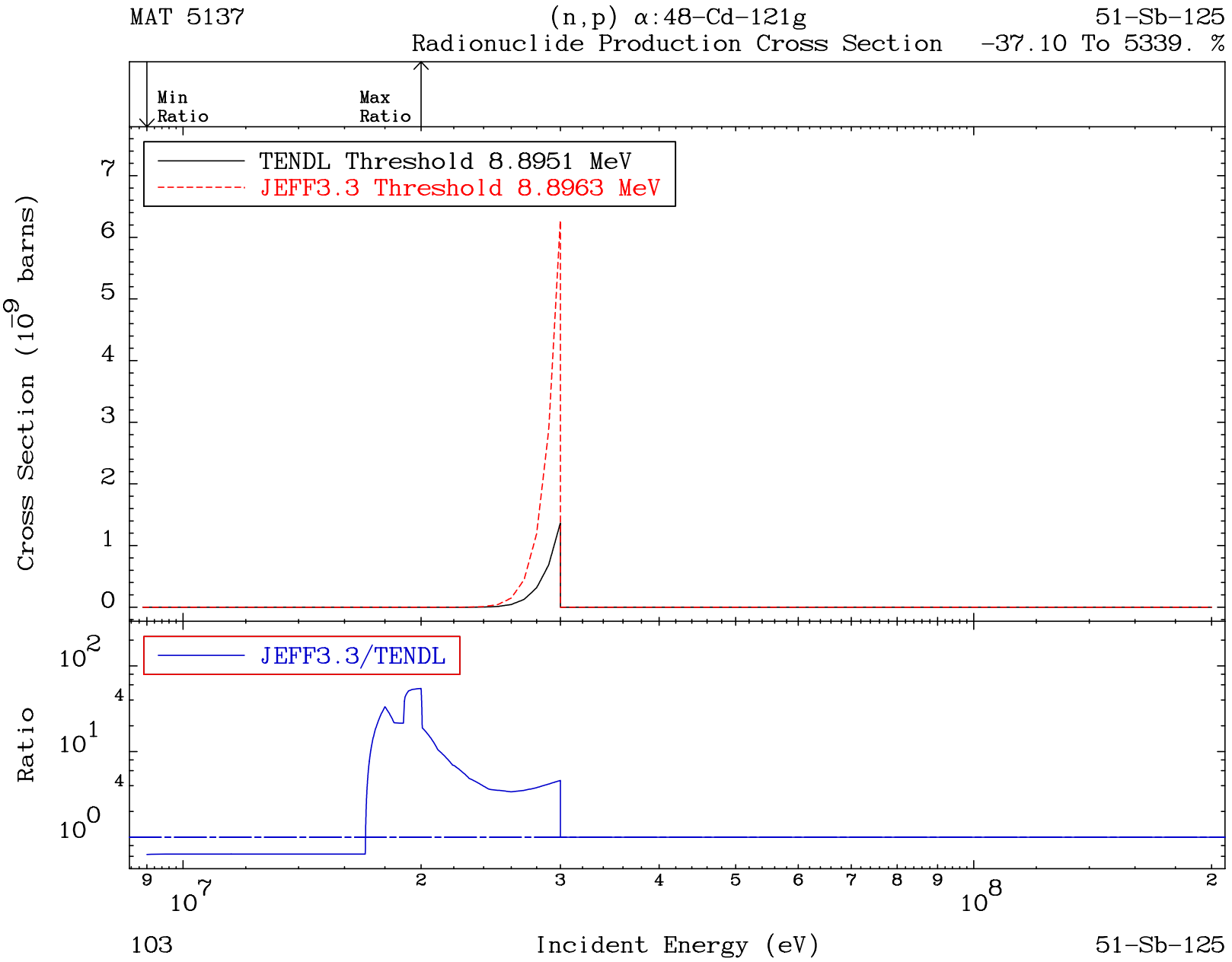

MAT 5137
(n,t):50-Sn-123m1
51-Sb-125
Radionuclide Production Cross Section -10.78 To 3314. %
Max Ratio
Min Ratio
TENDL Threshold 7.4028 MeV
JEFF3.3 Threshold 7.4028 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
10^1
10^0
10^7
10^8
Incident Energy (eV)
98
51-Sb-125

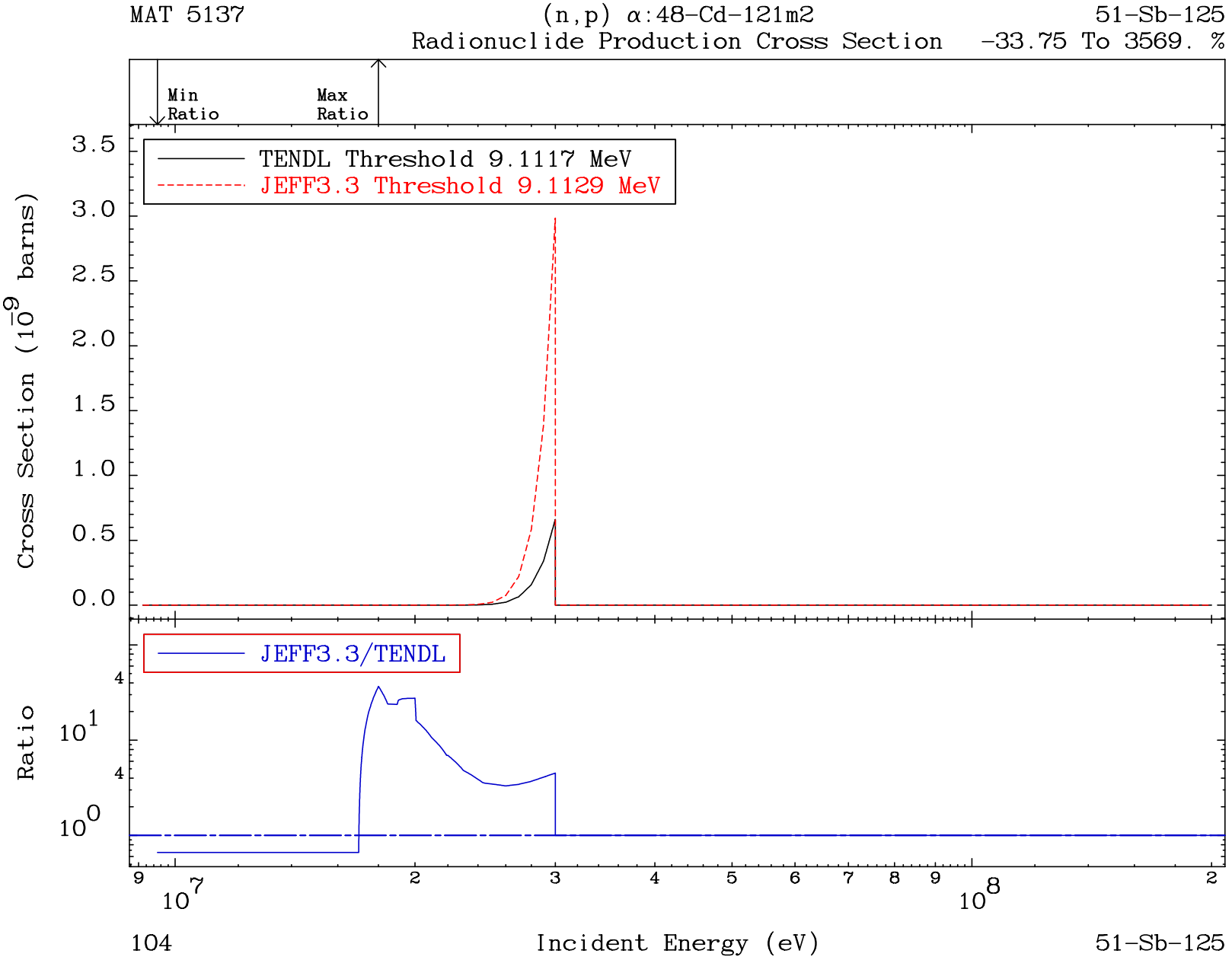

MAT 5137
(n,He-3):49-In-123g
51-Sb-125
Radionuclide Production Cross Section -88.60 To 7334. %
Min Ratio
Max Ratio
TENDL Threshold 11.780 MeV
JEFF3.3 Threshold 16.000 MeV
Cross Section (micro-barns)
160
140
120
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
10^2
10^1
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
2
99
Incident Energy (eV)
51-Sb-125


MAT 5137
(n,He-3):49-In-123m1
51-Sb-125
Radionuclide Production Cross Section 0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.110 MeV
JEFF3.3 Threshold 12.110 MeV
Cross Section (micro-barns)
60
50
40
30
20
10
0
JEFF3.3/TENDL
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
100
Incident Energy (eV)
51-Sb-125


MAT 5137
(n,2p):49-In-124g
51-Sb-125
Radionuclide Production Cross Section 0.000 To 82.35 %
Max Ratio
Min Ratio
TENDL Threshold 18.000 MeV
JEFF3.3 Threshold 14.005 MeV
Cross Section (10^{-9} barns)
100
80
60
40
20
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
101
Incident Energy (eV)
51-Sb-125


MAT 5137
(n,2p):49-In-124m2
51-Sb-125
Radionuclide Production Cross Section 0.000 To 80.94 %
Max Ratio
Min Ratio
TENDL Threshold 14.057 MeV
JEFF3.3 Threshold 14.057 MeV
Cross Section (10^{-9} barns)
60
40
20
0
JEFF3.3/TENDL
Ratio
2.0
1.6
1.2
2
3
4
5
6
7
8
9
10^8
2
102
Incident Energy (eV)
51-Sb-125


MAT 5137
(n,p) α:48-Cd-121g
51-Sb-125
Radionuclide Production Cross Section
-37.10 To 5339. %
Min Ratio
Max Ratio
TENDL Threshold 8.8951 MeV
JEFF3.3 Threshold 8.8963 MeV
Cross Section (10^{-9} barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
103
51-Sb-125


MAT 5137
(n,p) α:48-Cd-121m2
51-Sb-125
Radionuclide Production Cross Section -33.75 To 3569. %
Min Ratio
Max Ratio
TENDL Threshold 9.1117 MeV
JEFF3.3 Threshold 9.1129 MeV
Cross Section (10^{-9} barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
JEFF3.3/TENDL
Ratio
10^{1}
10^{0}
4
4
9
10^{7}
2
3
4
5
6
7
8
9
10^{8}
2
104
Incident Energy (eV)
51-Sb-125