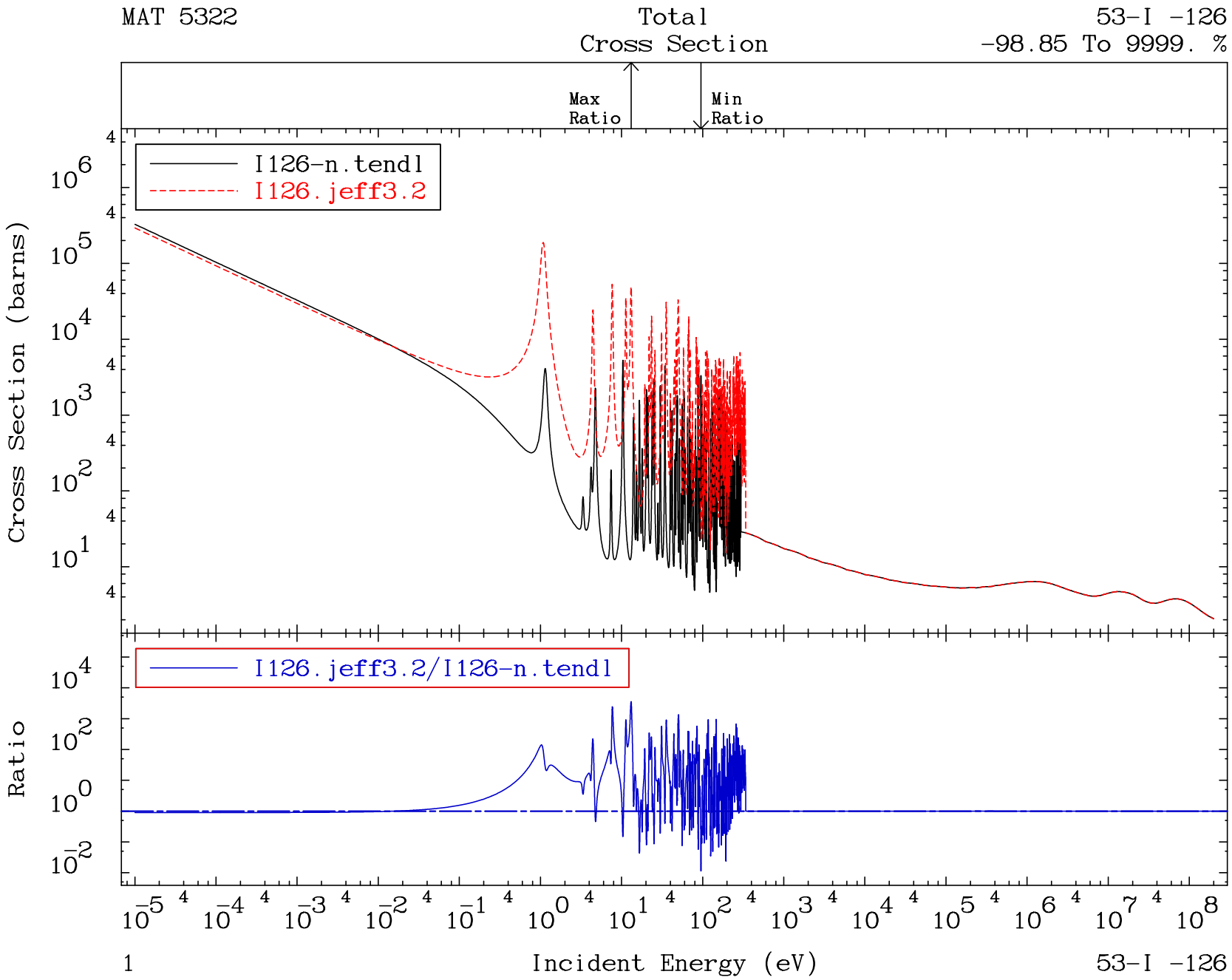
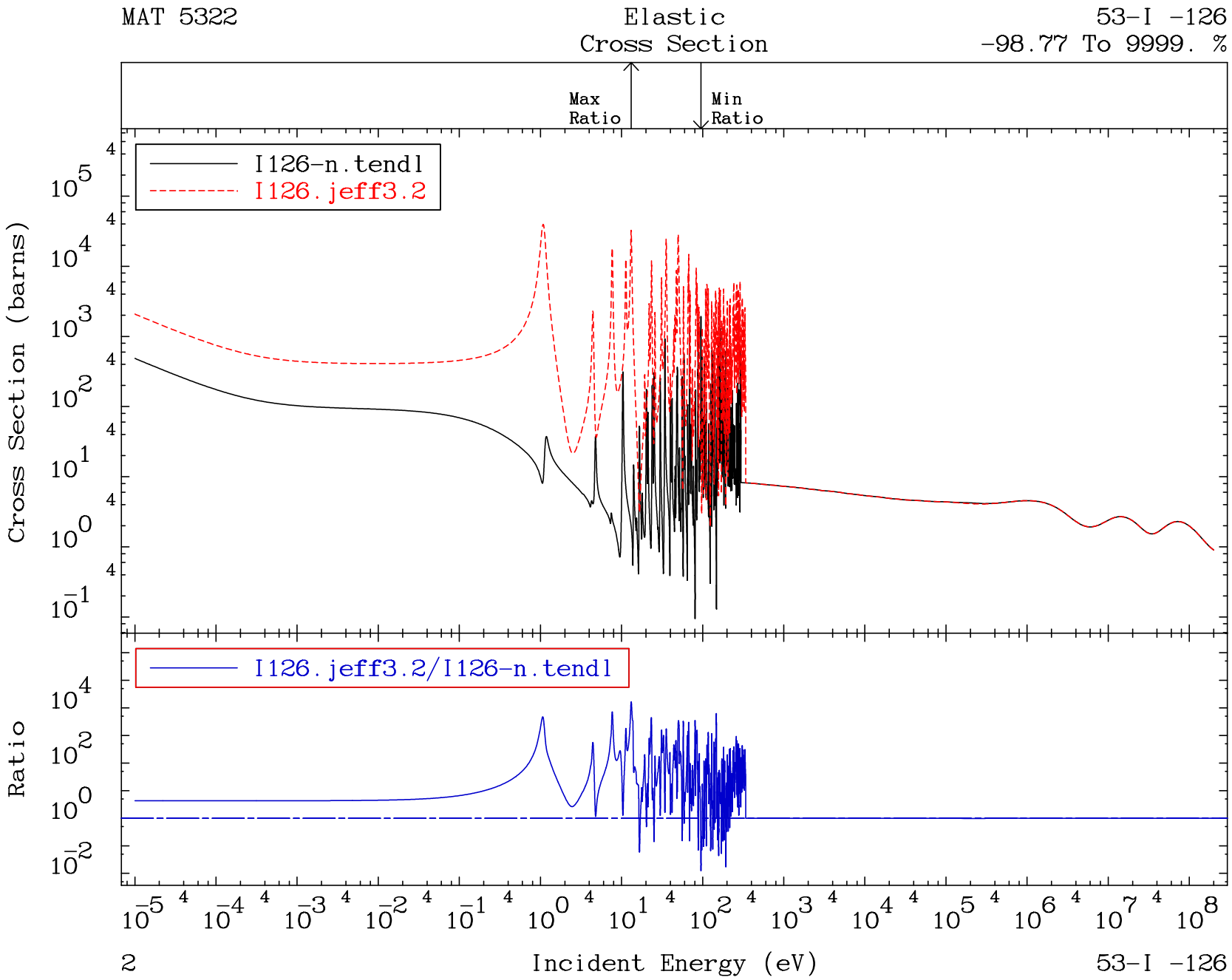
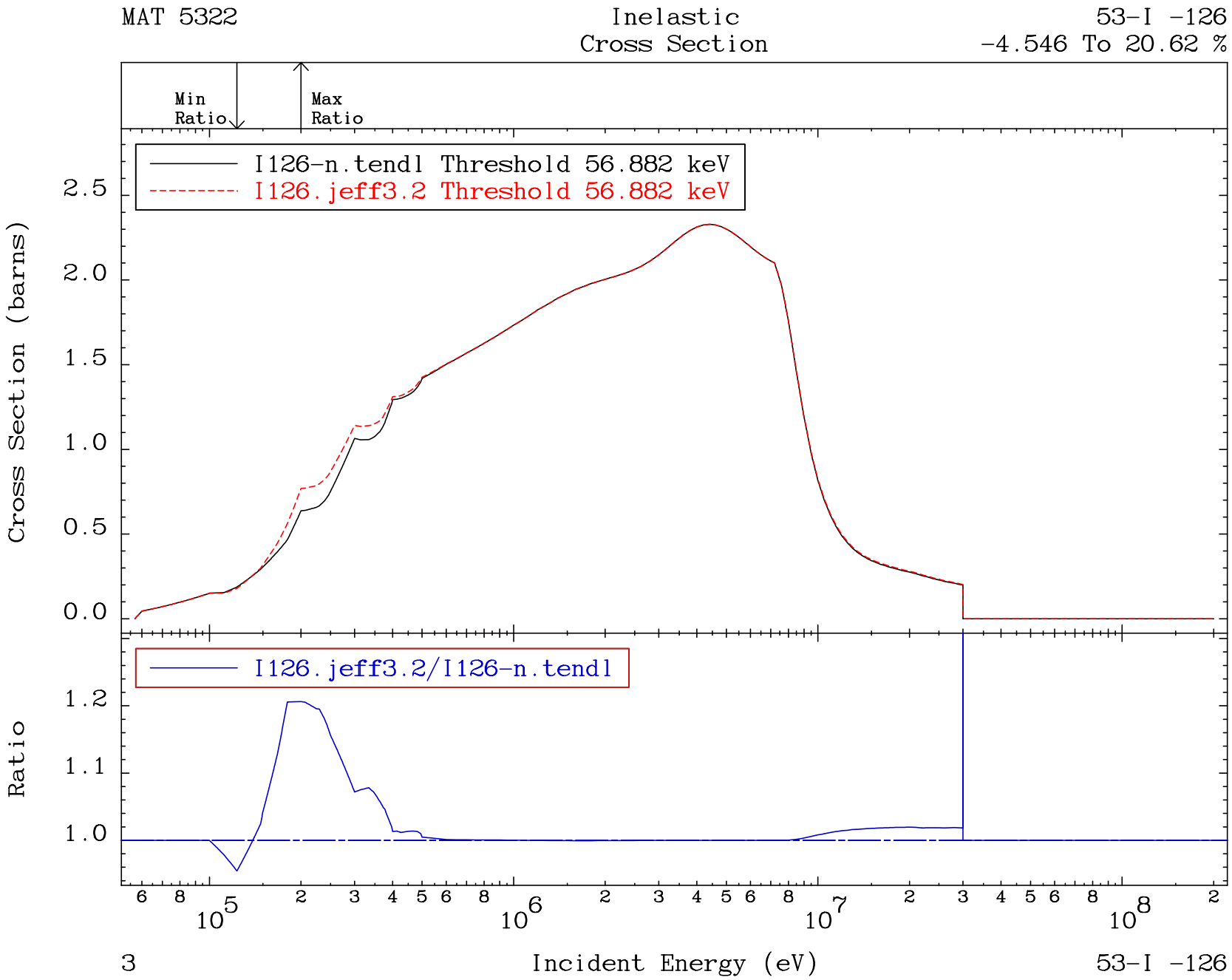
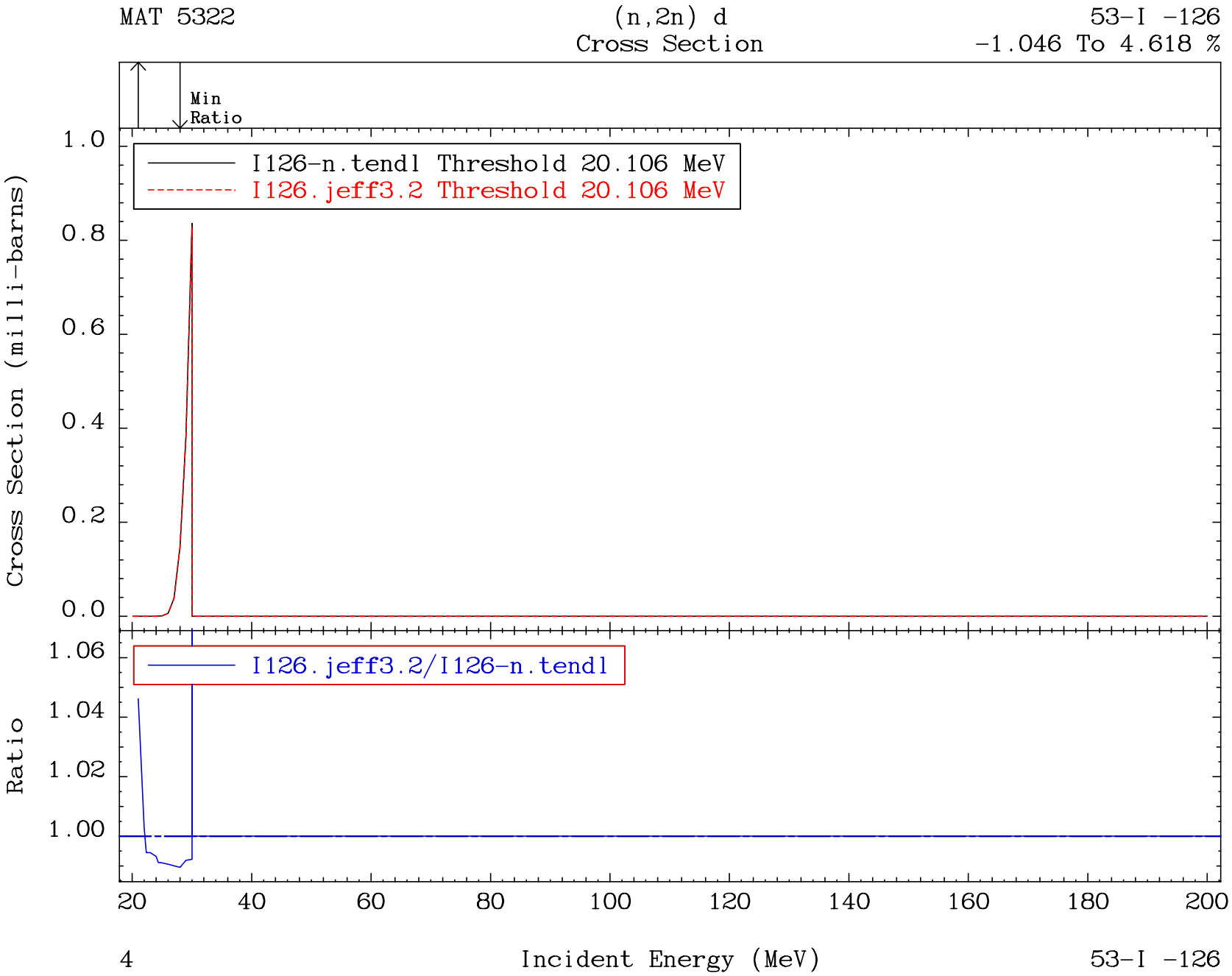
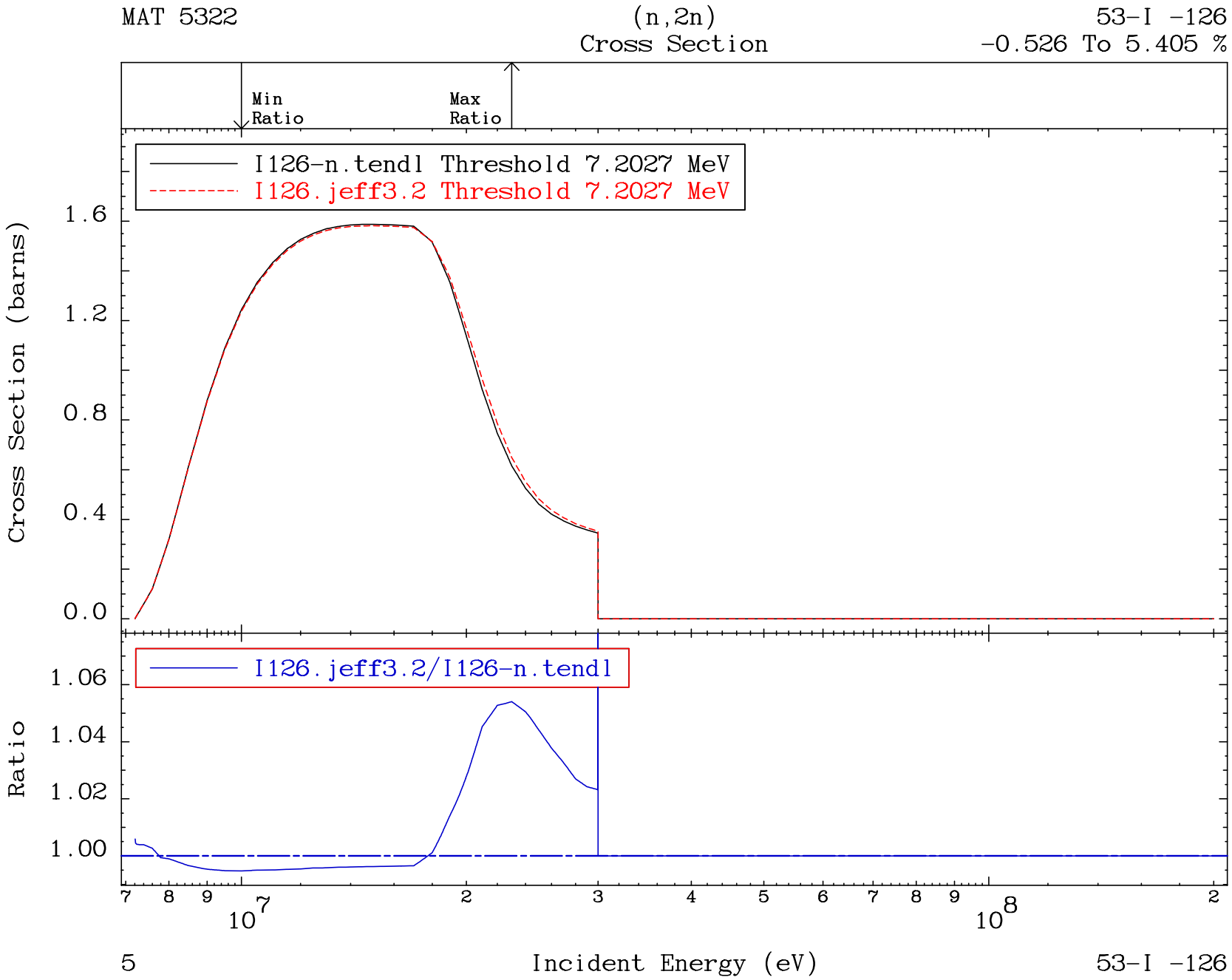
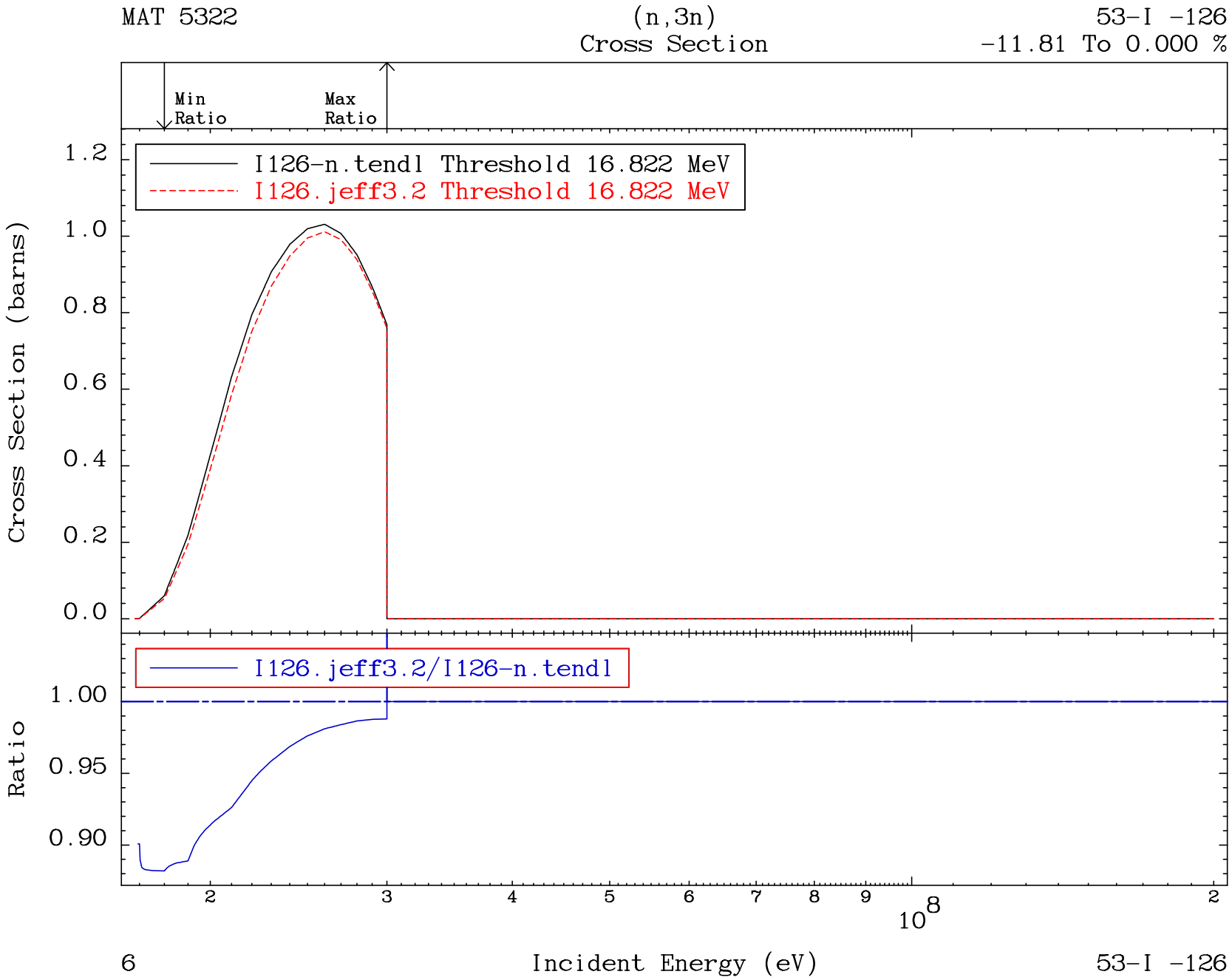

MAT 5322
Total
Cross Section
53-I -126
-98.85 To 9999. %
Max
Ratio
Min
Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
1
53-I -126

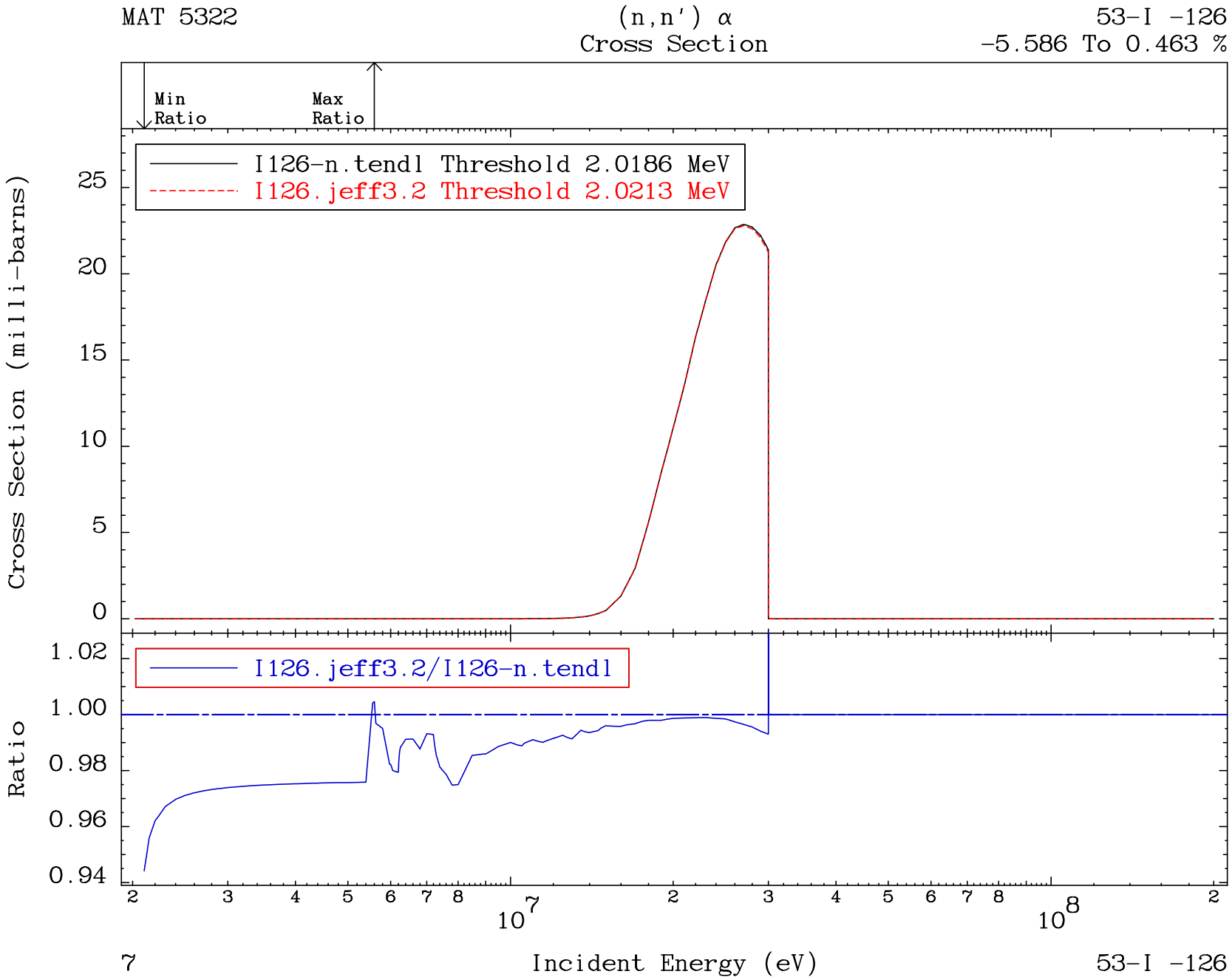

MAT 5322
Elastic
Cross Section
53-I -126
-98.77 To 9999. %
Max
Ratio
Min
Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
2
53-I -126

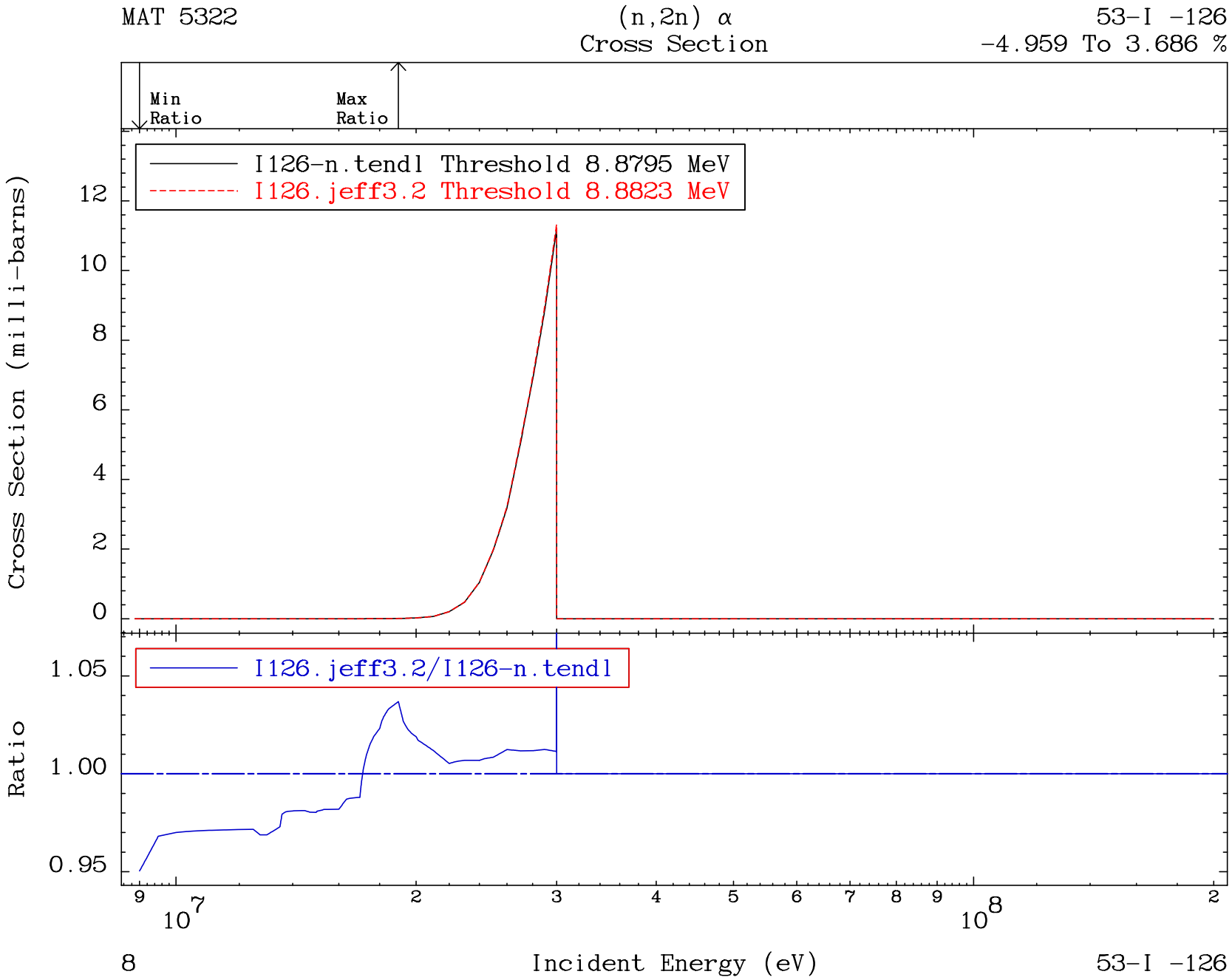

MAT 5322
Inelastic
Cross Section
53-I -126
-4.546 To 20.62 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 56.882 keV
I126.jeff3.2 Threshold 56.882 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.2
1.1
1.0
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
3
53-I -126

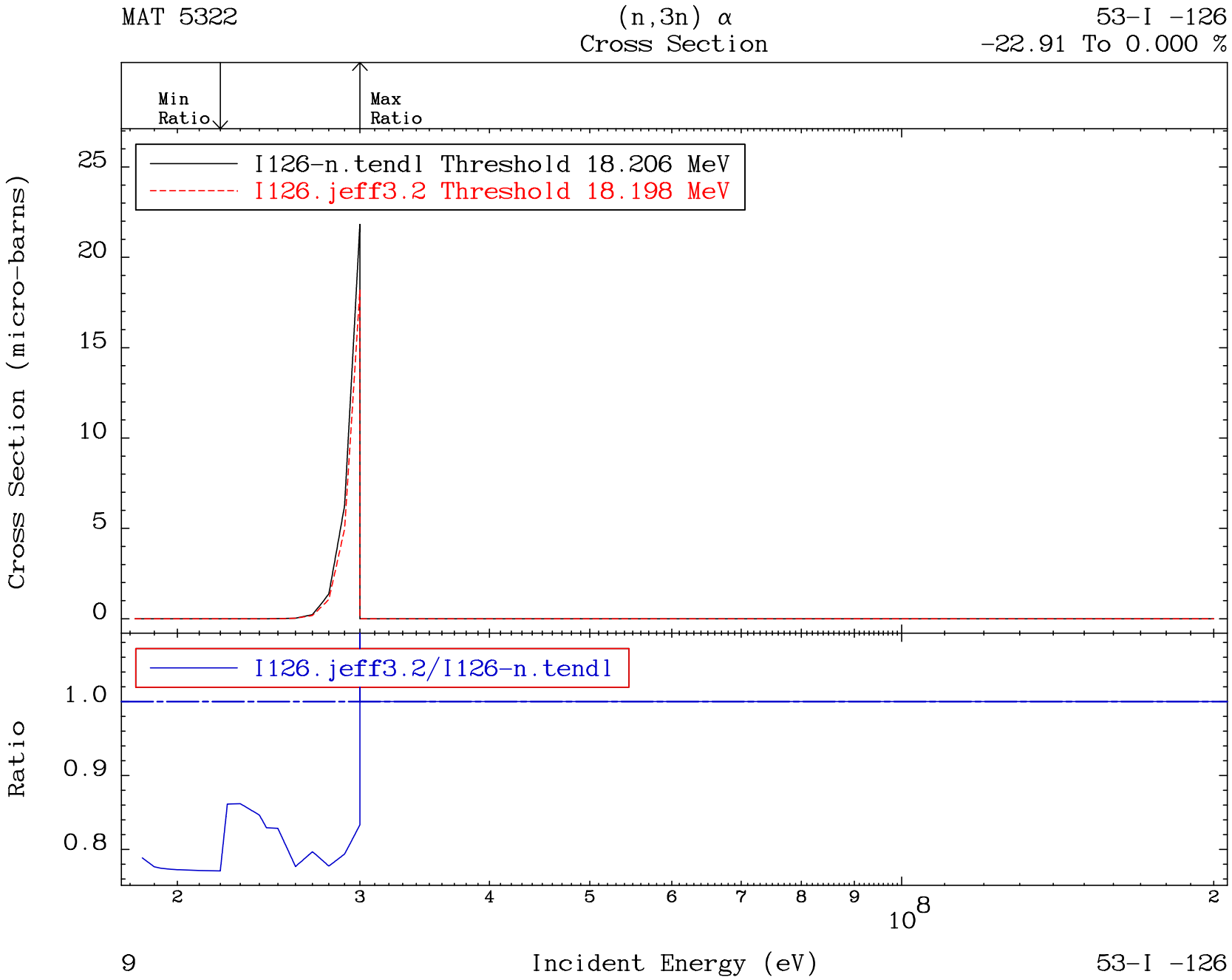

MAT 5322
(n,2n) d
Cross Section
53-I -126
-1.046 To 4.618 %
Min
Ratio
I126-n.tendl Threshold 20.106 MeV
I126.jeff3.2 Threshold 20.106 MeV
Cross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.06
1.04
1.02
1.00
20
40
60
80
100
120
140
160
180
200
4
Incident Energy (MeV)
53-I -126

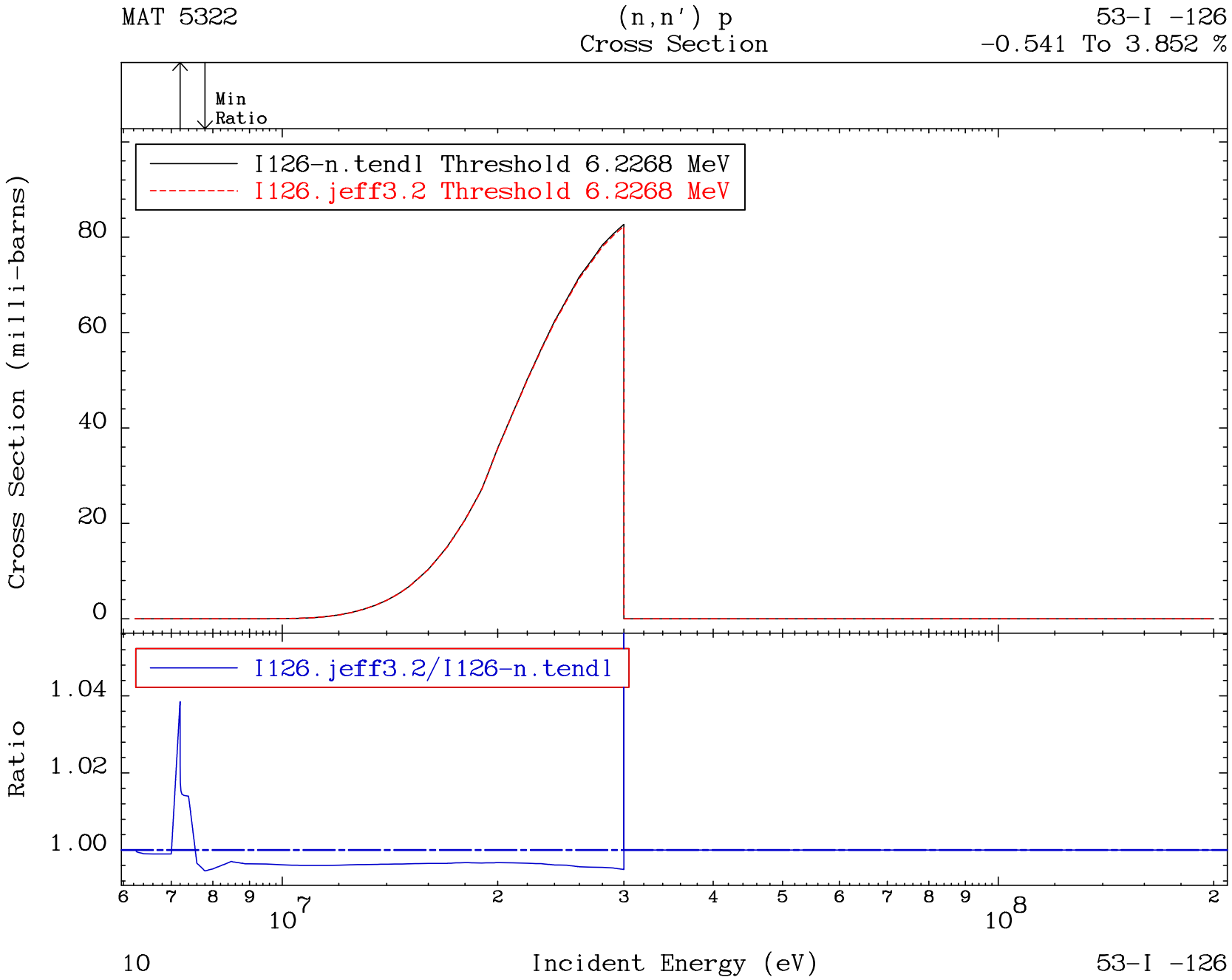

MAT 5322
(n,2n)
Cross Section
53-I -126
-0.526 To 5.405 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 7.2027 MeV
I126.jeff3.2 Threshold 7.2027 MeV
Cross Section (barns)
1.6
1.2
0.8
0.4
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.06
1.04
1.02
1.00
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
5
Incident Energy (eV)
53-I -126

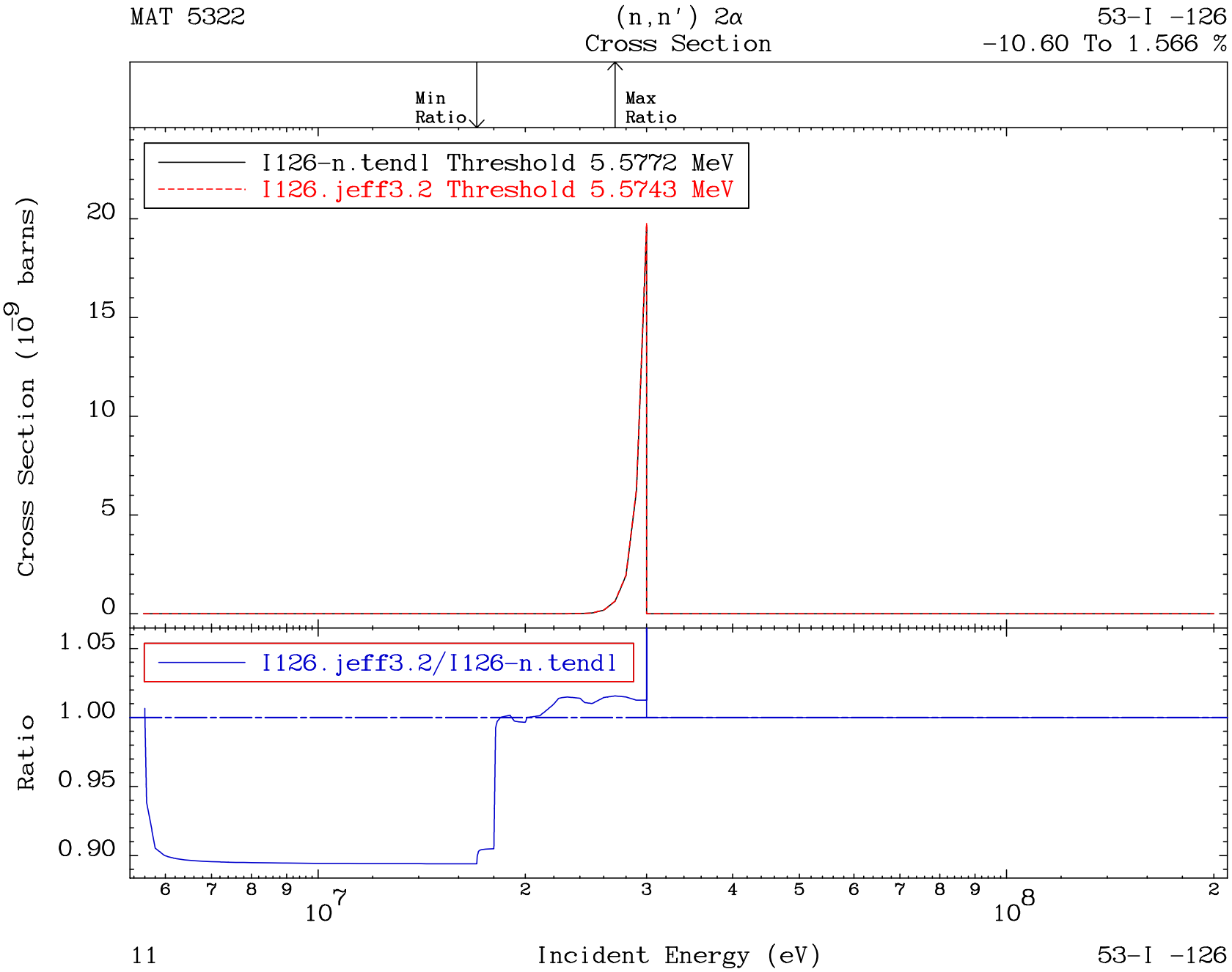

MAT 5322
(n,3n)
Cross Section
53-I -126
-11.81 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 16.822 MeV
I126.jeff3.2 Threshold 16.822 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.95
0.90
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
53-I -126

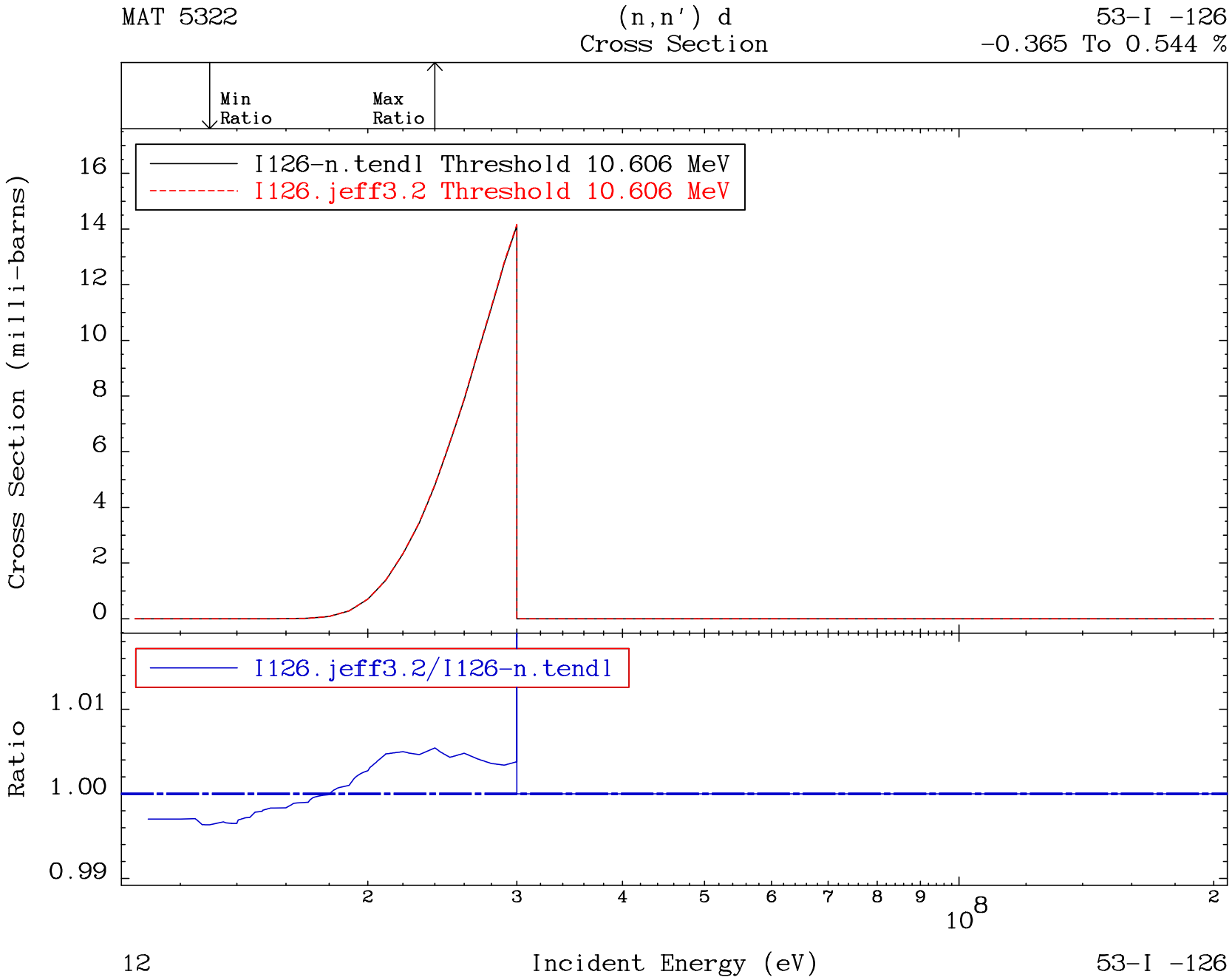

MAT 5322
(n,n') α
Cross Section
53-I -126
-5.586 To 0.463 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 2.0186 MeV
I126.jeff3.2 Threshold 2.0213 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
1.02
1.00
0.98
0.96
0.94
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
7
Incident Energy (eV)
53-I -126

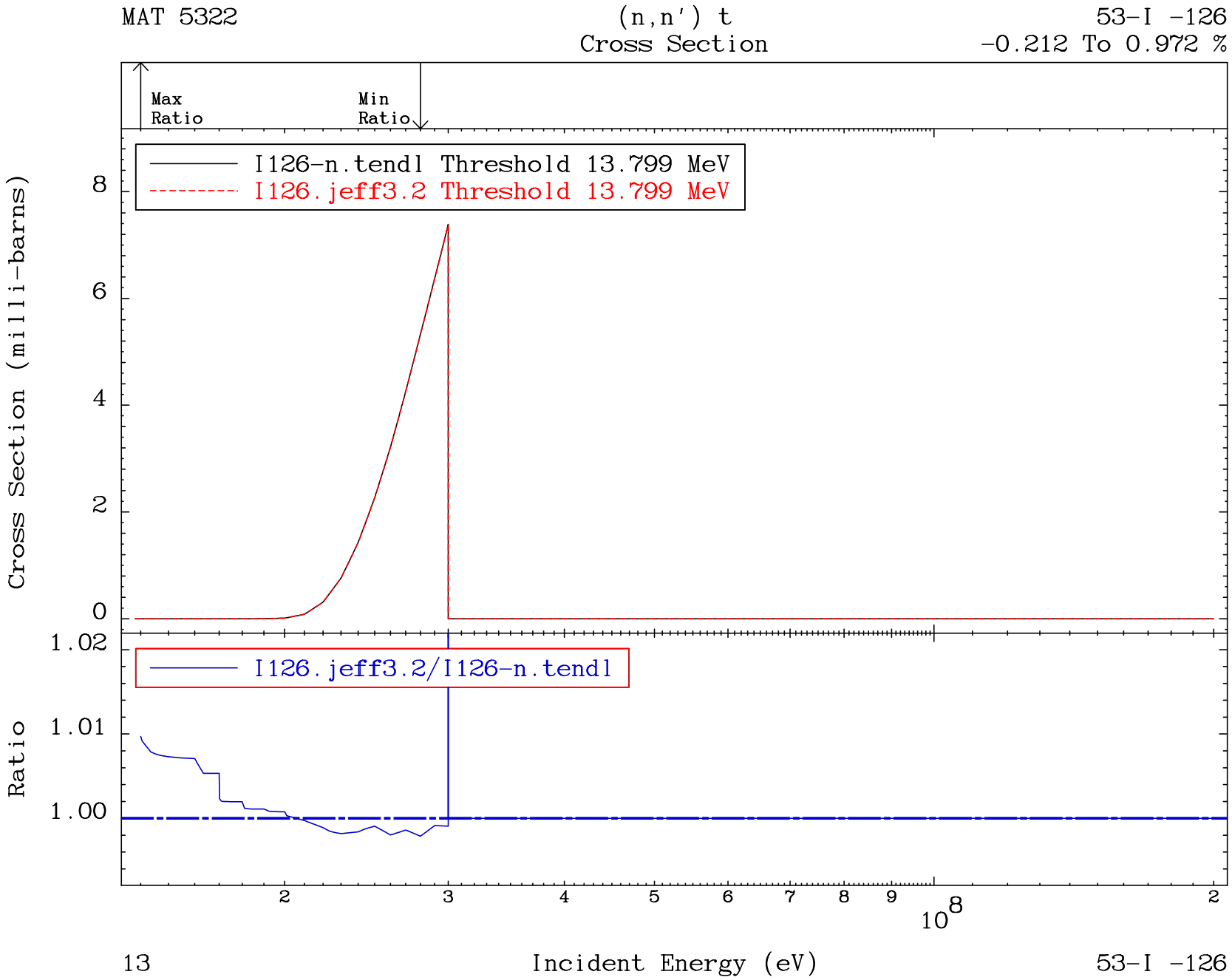

MAT 5322
(n,2n) α
Cross Section
53-I -126
-4.959 To 3.686 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 8.8795 MeV
I126.jeff3.2 Threshold 8.8823 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
I126.jeff3.2/I126-n.tendl
Ratio
1.05
1.00
0.95
9
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
53-I -126

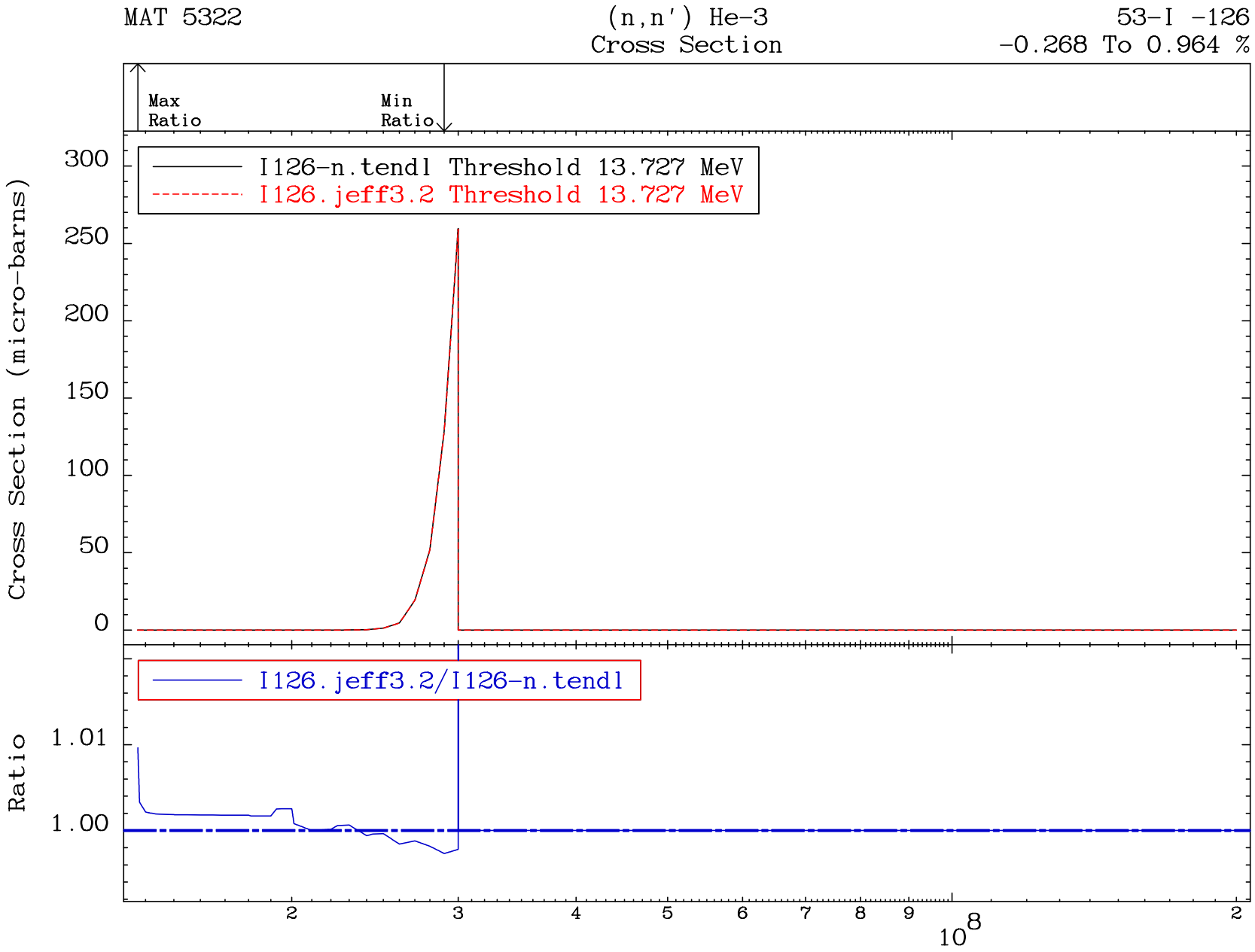

MAT 5322
(n,3n) α
Cross Section
53-I -126
-22.91 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 18.206 MeV
I126.jeff3.2 Threshold 18.198 MeV
Cross Section (micro-barns)
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
53-I -126

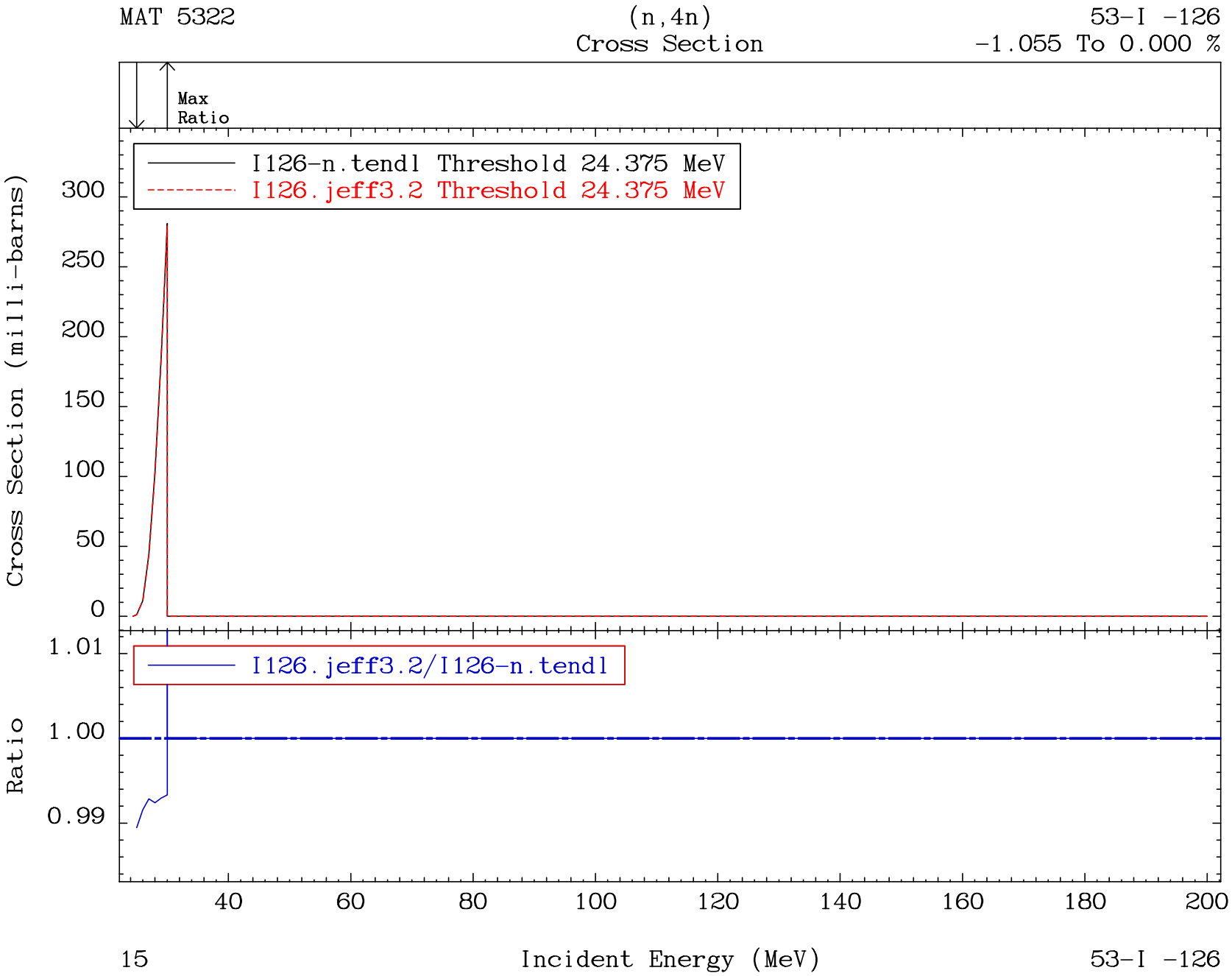

MAT 5322
(n,n') p
Cross Section
53-I -126
-0.541 To 3.852 %
Min
Ratio
I126-n.tendl Threshold 6.2268 MeV
I126.jeff3.2 Threshold 6.2268 MeV
Cross Section (milli-barns)
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
1.04
1.02
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
53-I -126

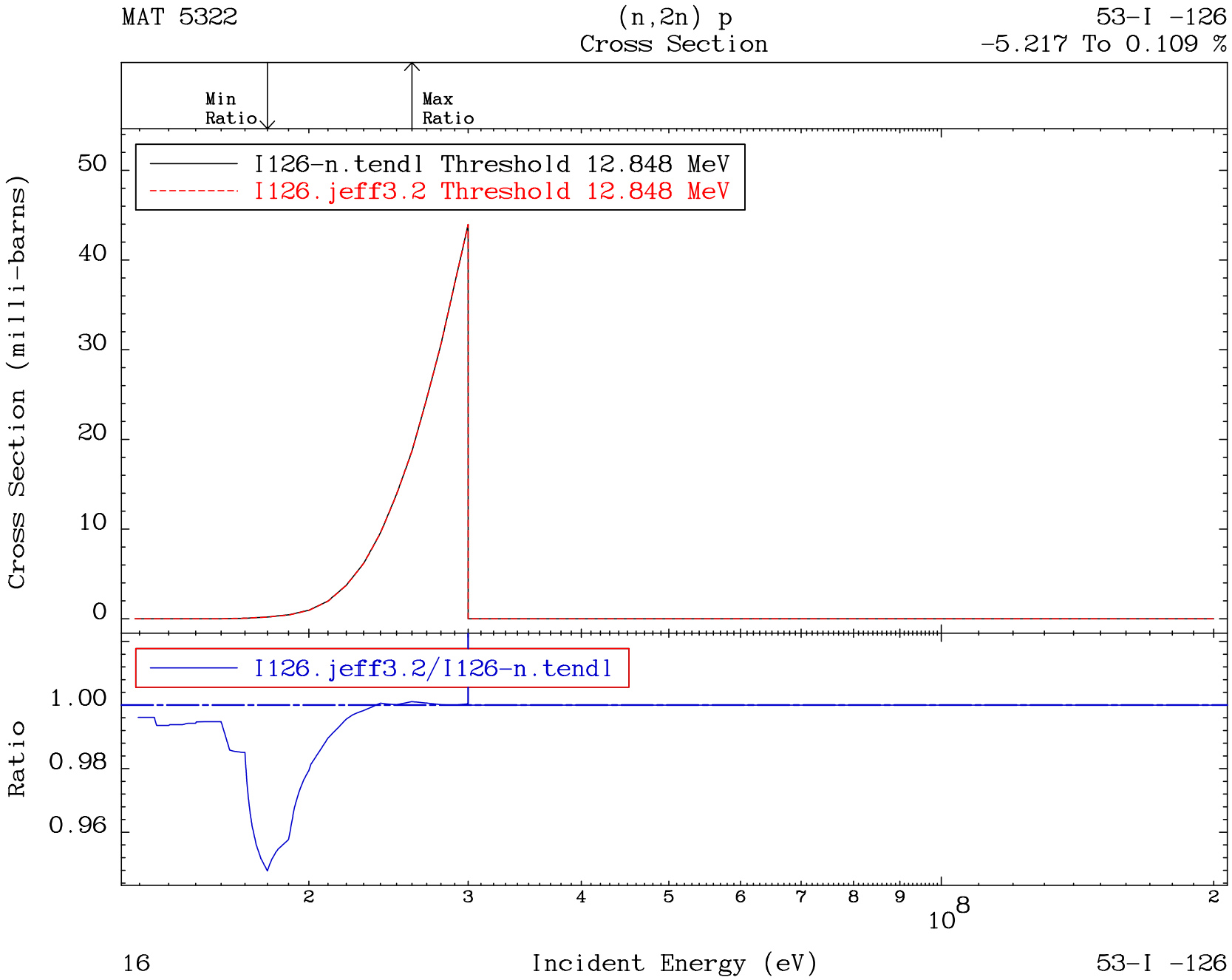

MAT 5322
(n,n') 2α
Cross Section
53-I -126
-10.60 To 1.566 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 5.5772 MeV
I126.jeff3.2 Threshold 5.5743 MeV
Cross Section (10^-9 barns)
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
1.05
1.00
0.95
0.90
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
53-I -126

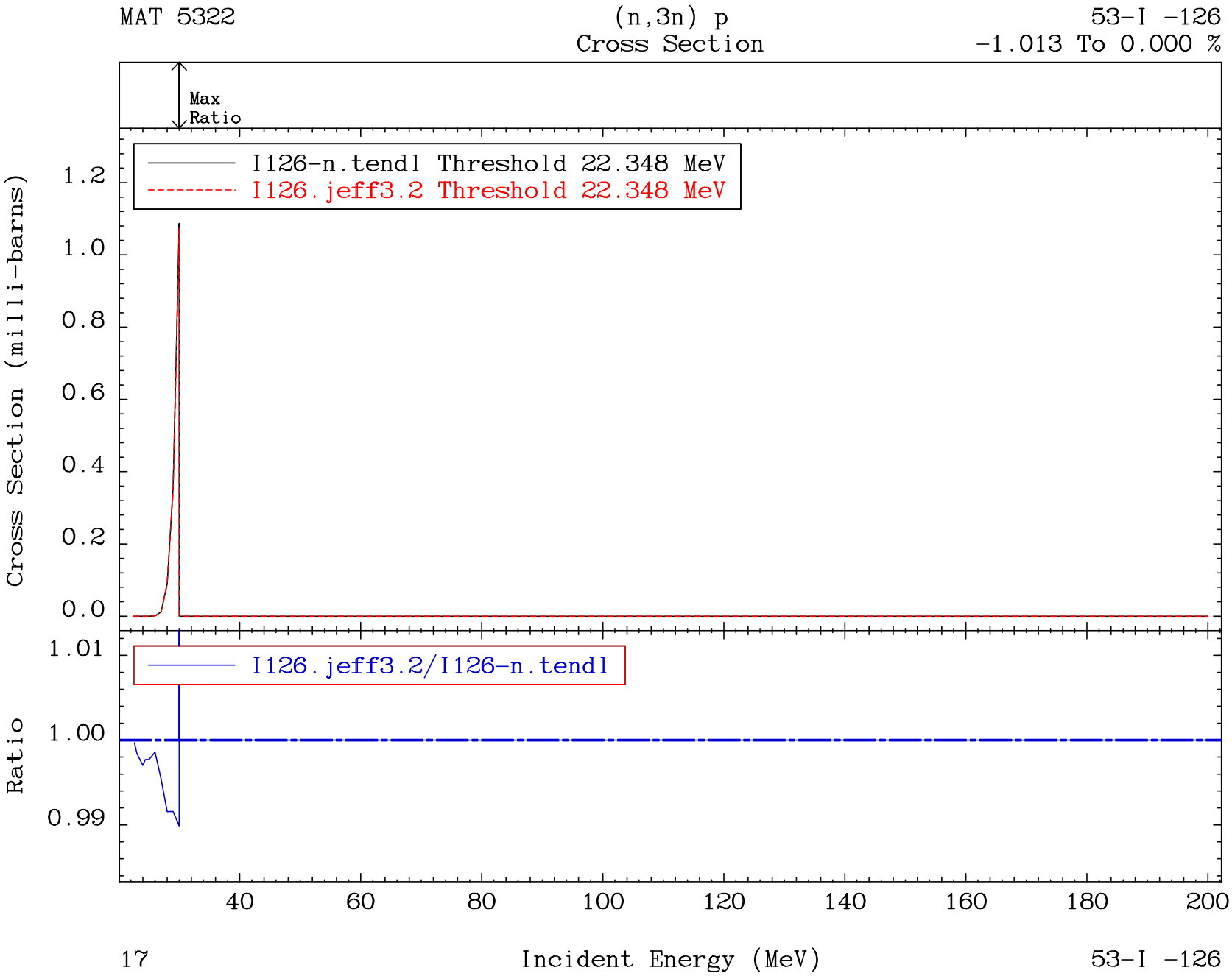

MAT 5322
(n,n') d
Cross Section
53-I -126
-0.365 To 0.544 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 10.606 MeV
I126.jeff3.2 Threshold 10.606 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
53-I -126

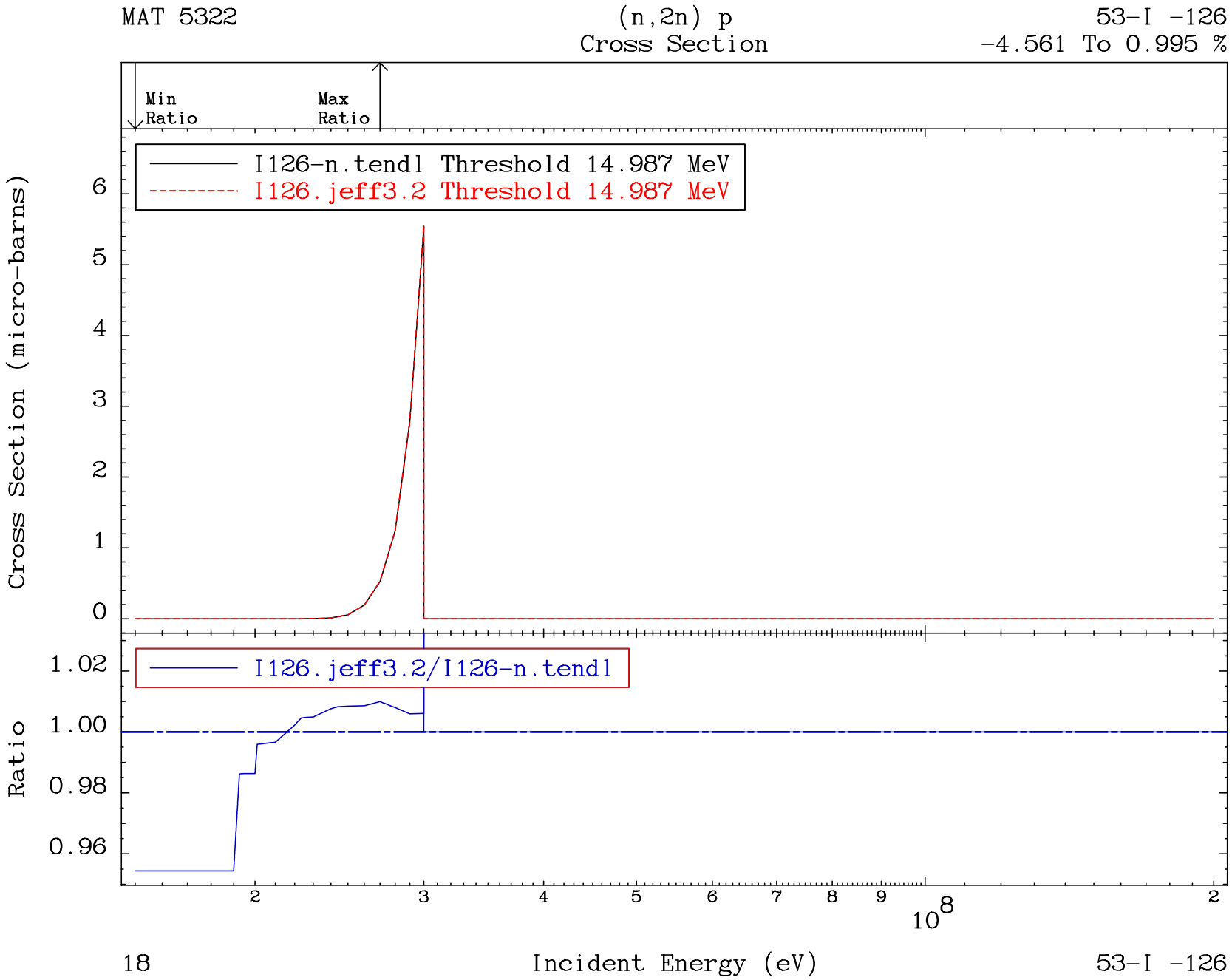

MAT 5322
(n,n') t
Cross Section
53-I -126
-0.212 To 0.972 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 13.799 MeV
I126.jeff3.2 Threshold 13.799 MeV
Cross Section (milli-barns)
0
2
4
6
8
I126.jeff3.2/I126-n.tendl
Ratio
1.00
1.01
1.02
2
3
4
5
6
7
8
9
10^8
2
13
Incident Energy (eV)
53-I -126

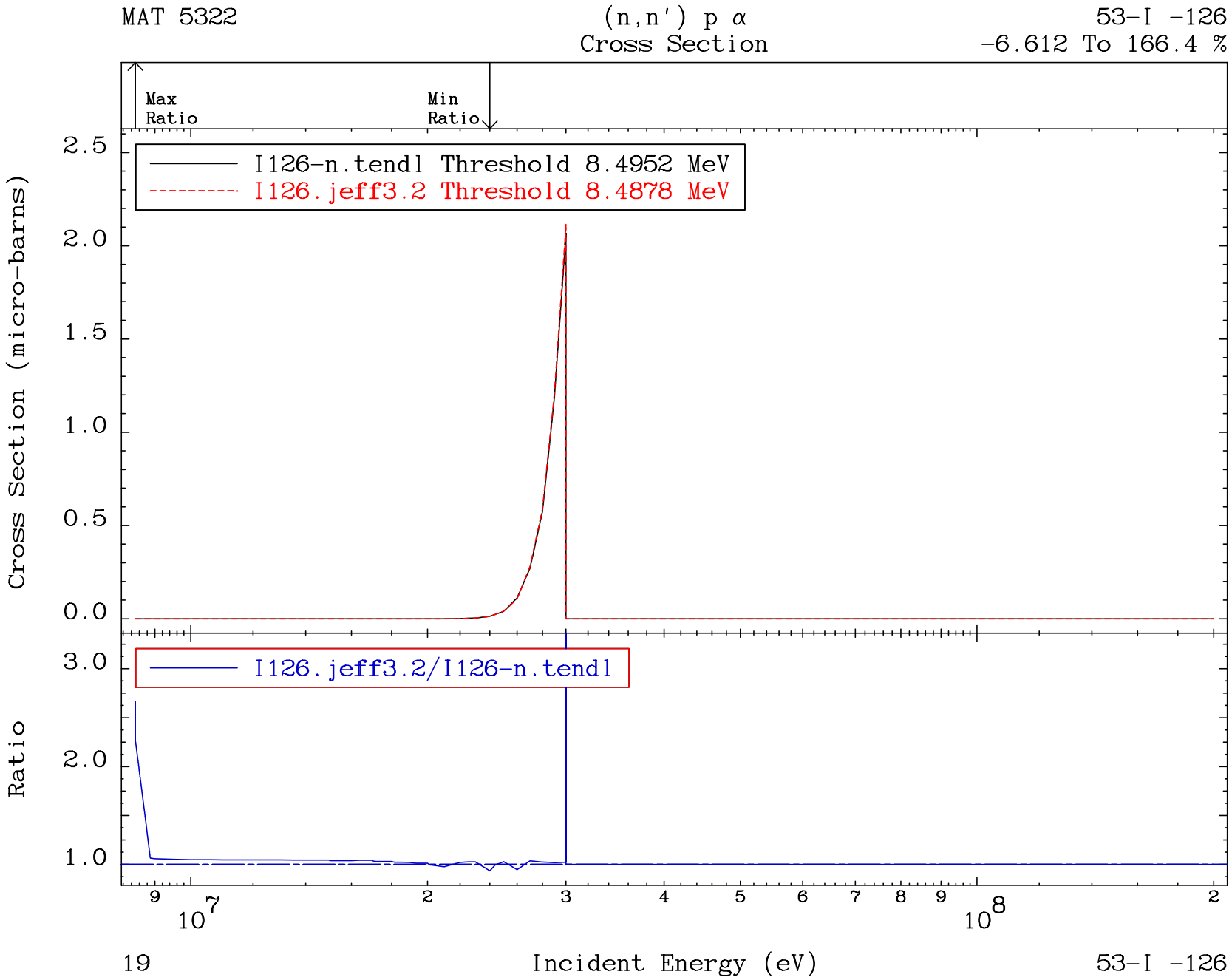

MAT 5322
(n,n') He-3
Cross Section
53-I -126
-0.268 To 0.964 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 13.727 MeV
I126.jeff3.2 Threshold 13.727 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
14
Incident Energy (eV)
53-I -126

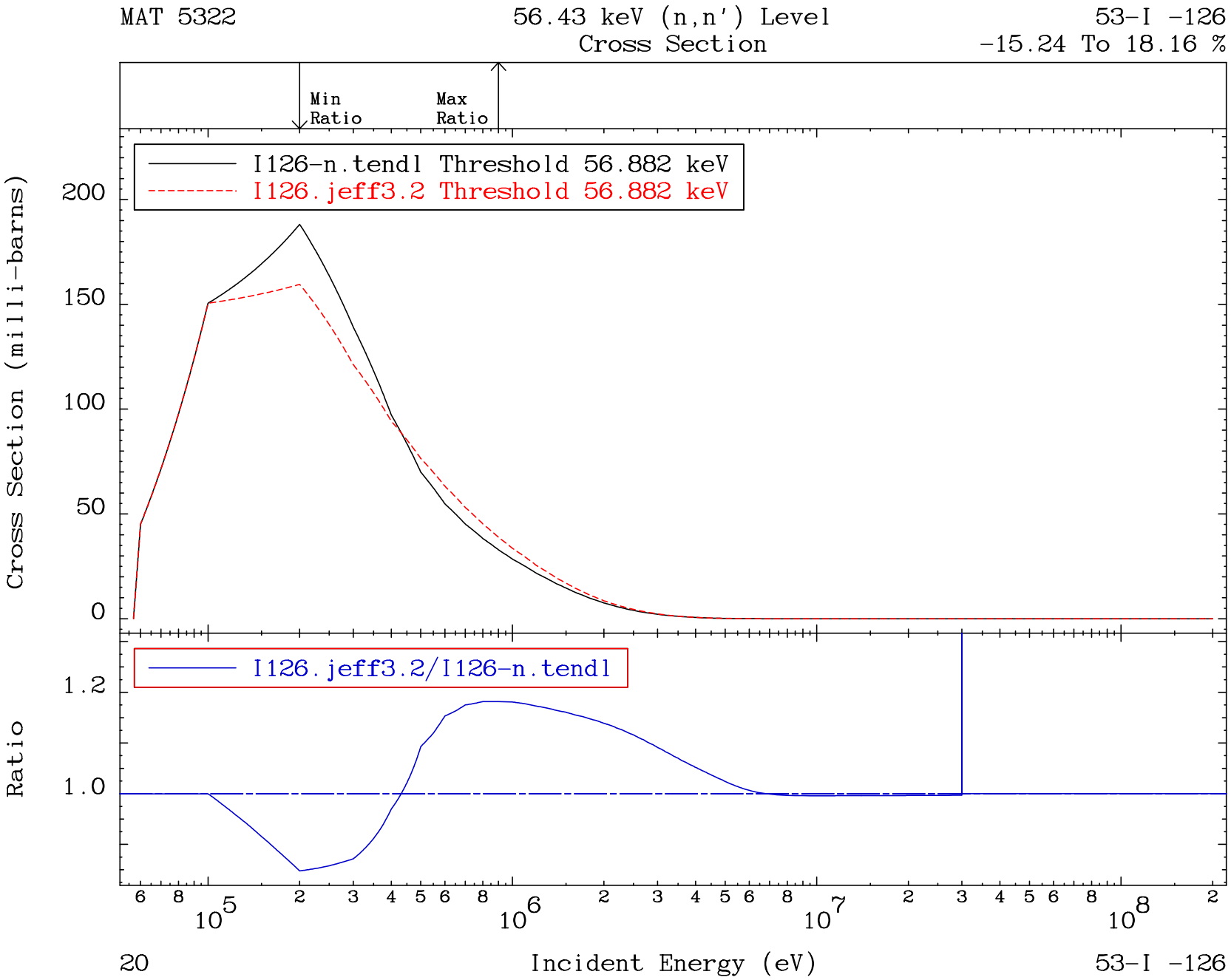

MAT 5322
(n,4n)
Cross Section
53-I -126
-1.055 To 0.000 %
Max
Ratio
I126-n.tendl Threshold 24.375 MeV
I126.jeff3.2 Threshold 24.375 MeV
Cross Section (milli-barns)
300
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
15
Incident Energy (MeV)
53-I -126

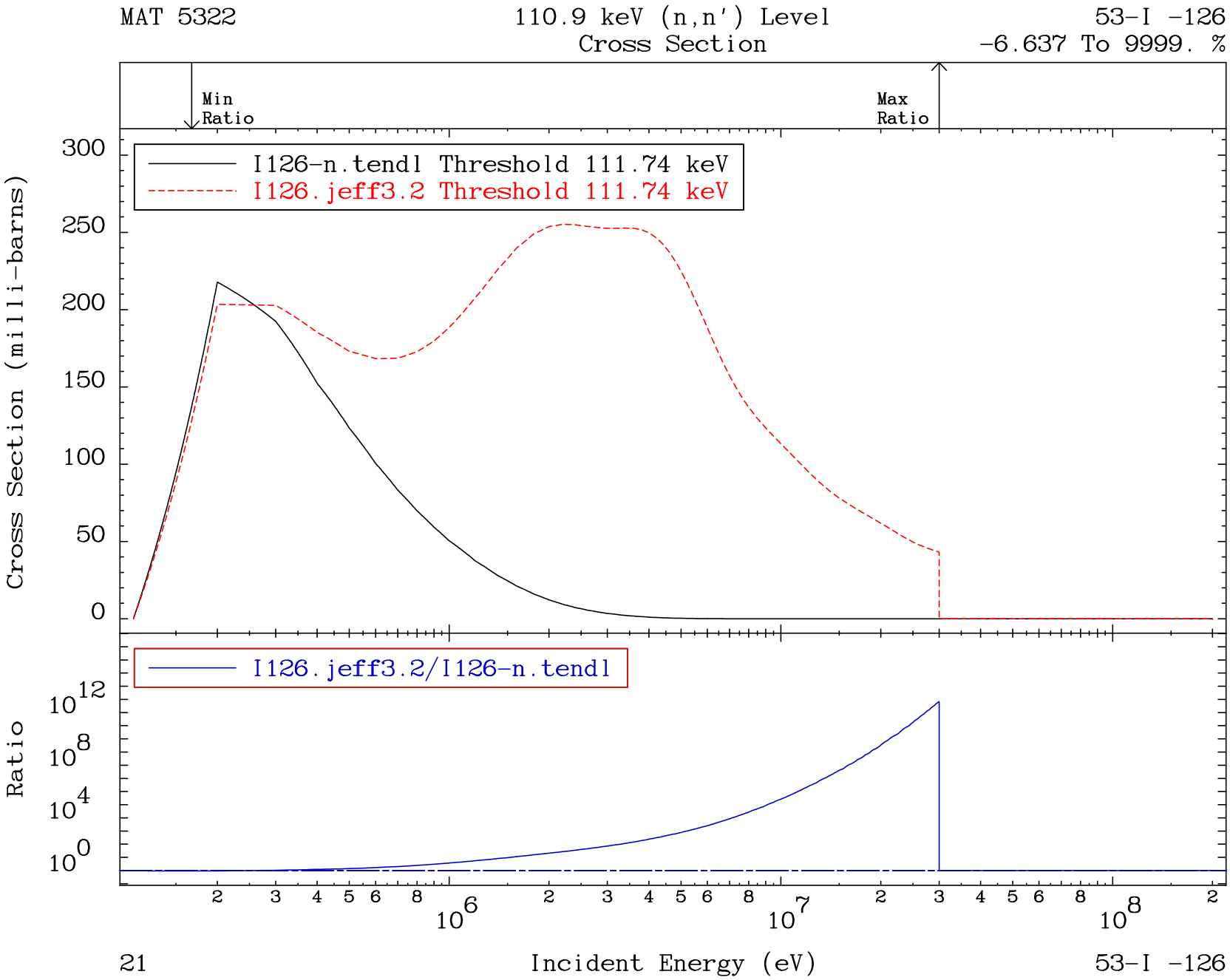

MAT 5322
(n,2n) p
Cross Section
53-I -126
-5.217 To 0.109 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 12.848 MeV
I126.jeff3.2 Threshold 12.848 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.98
0.96
2
3
4
5
6
7
8
9
2
10^8
16
Incident Energy (eV)
53-I -126

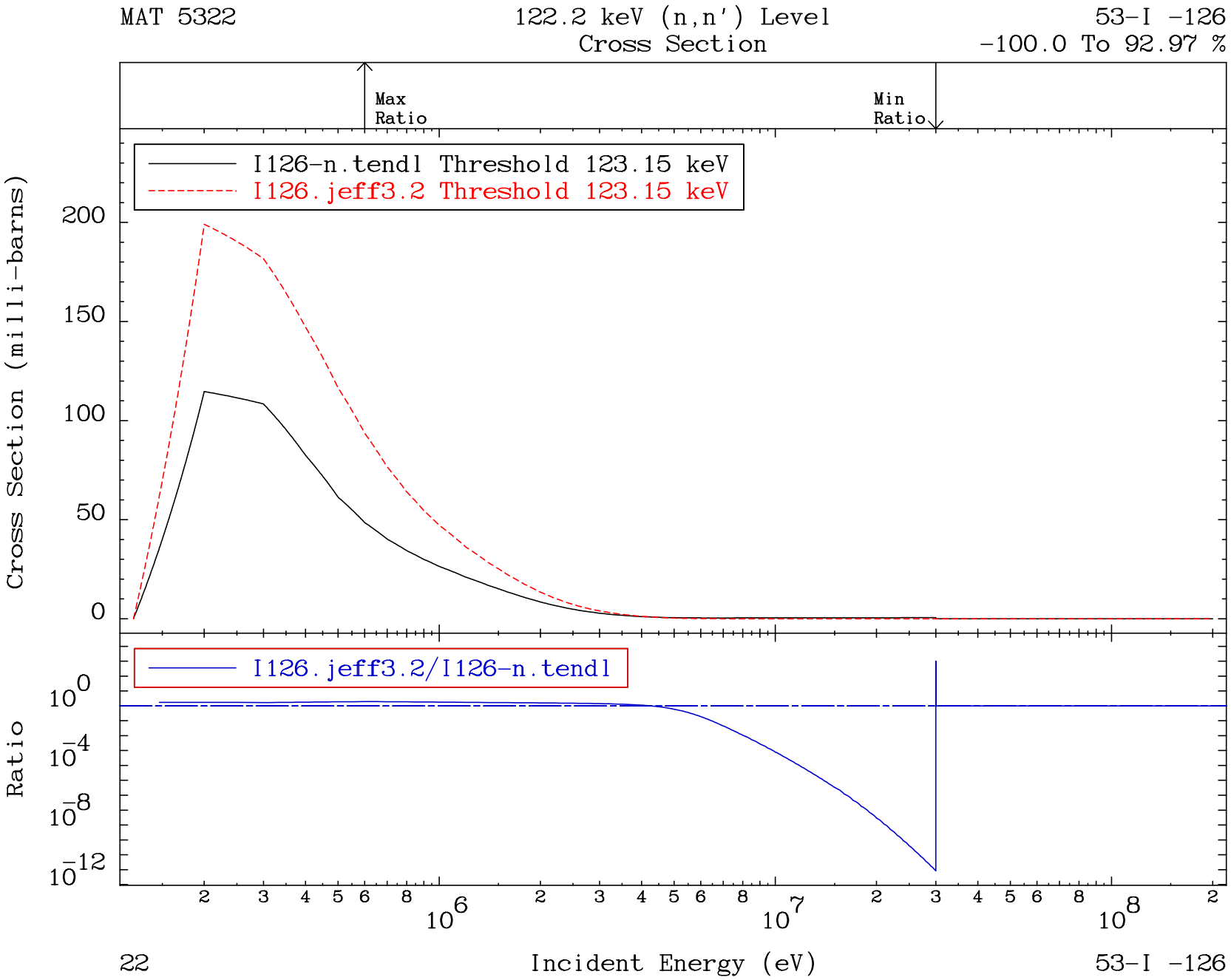

MAT 5322
(n,3n) p
Cross Section
53-I -126
-1.013 To 0.000 %
Max
Ratio
I126-n.tendl Threshold 22.348 MeV
I126.jeff3.2 Threshold 22.348 MeV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
17
Incident Energy (MeV)
53-I -126

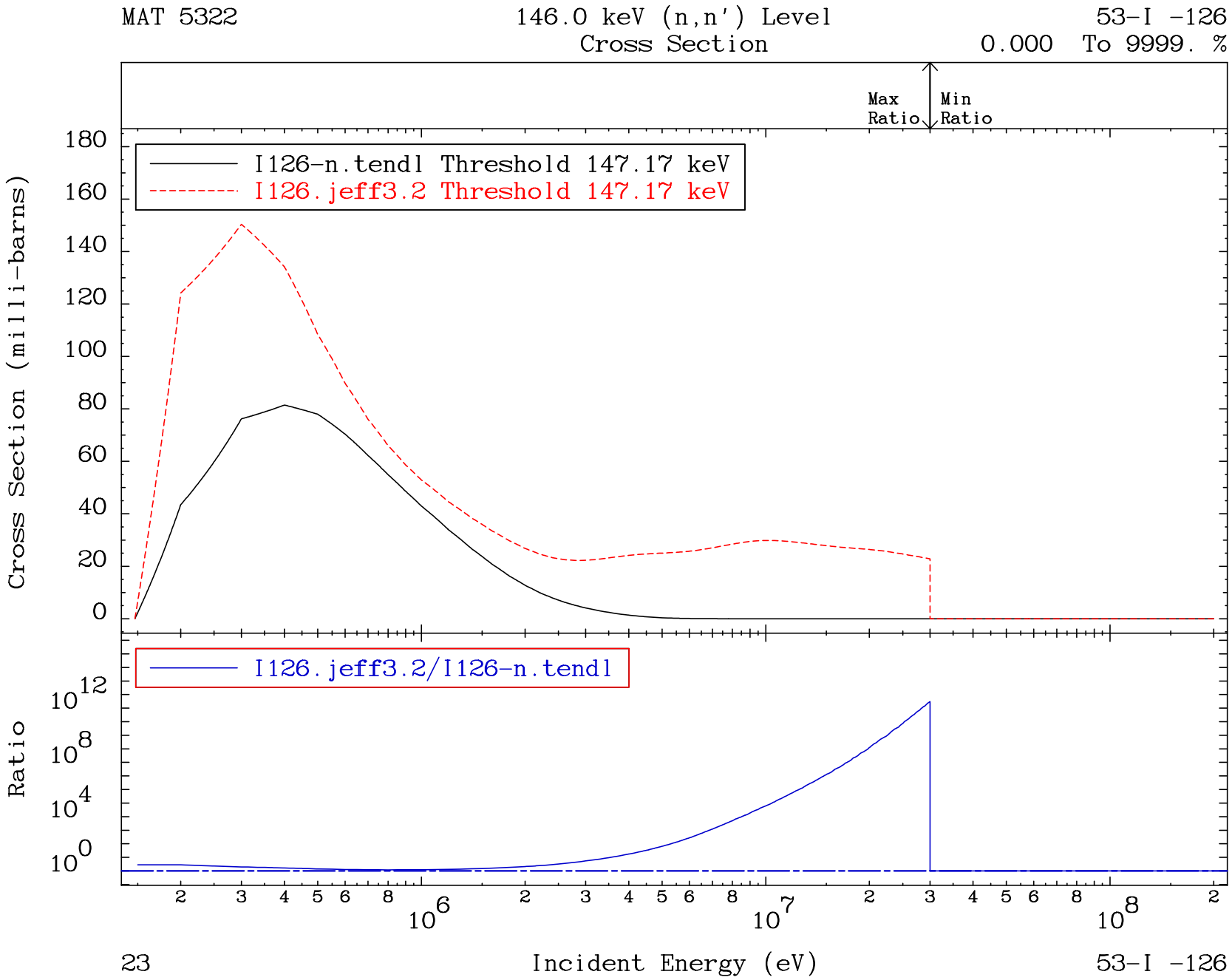

MAT 5322
(n,2n) p
Cross Section
53-I -126
-4.561 To 0.995 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 14.987 MeV
I126.jeff3.2 Threshold 14.987 MeV
Cross Section (micro-barns)
0
1
2
3
4
5
6
I126.jeff3.2/I126-n.tendl
Ratio
0.96
0.98
1.00
1.02
2
3
4
5
6
7
8
9
2
10^8
18
Incident Energy (eV)
53-I -126

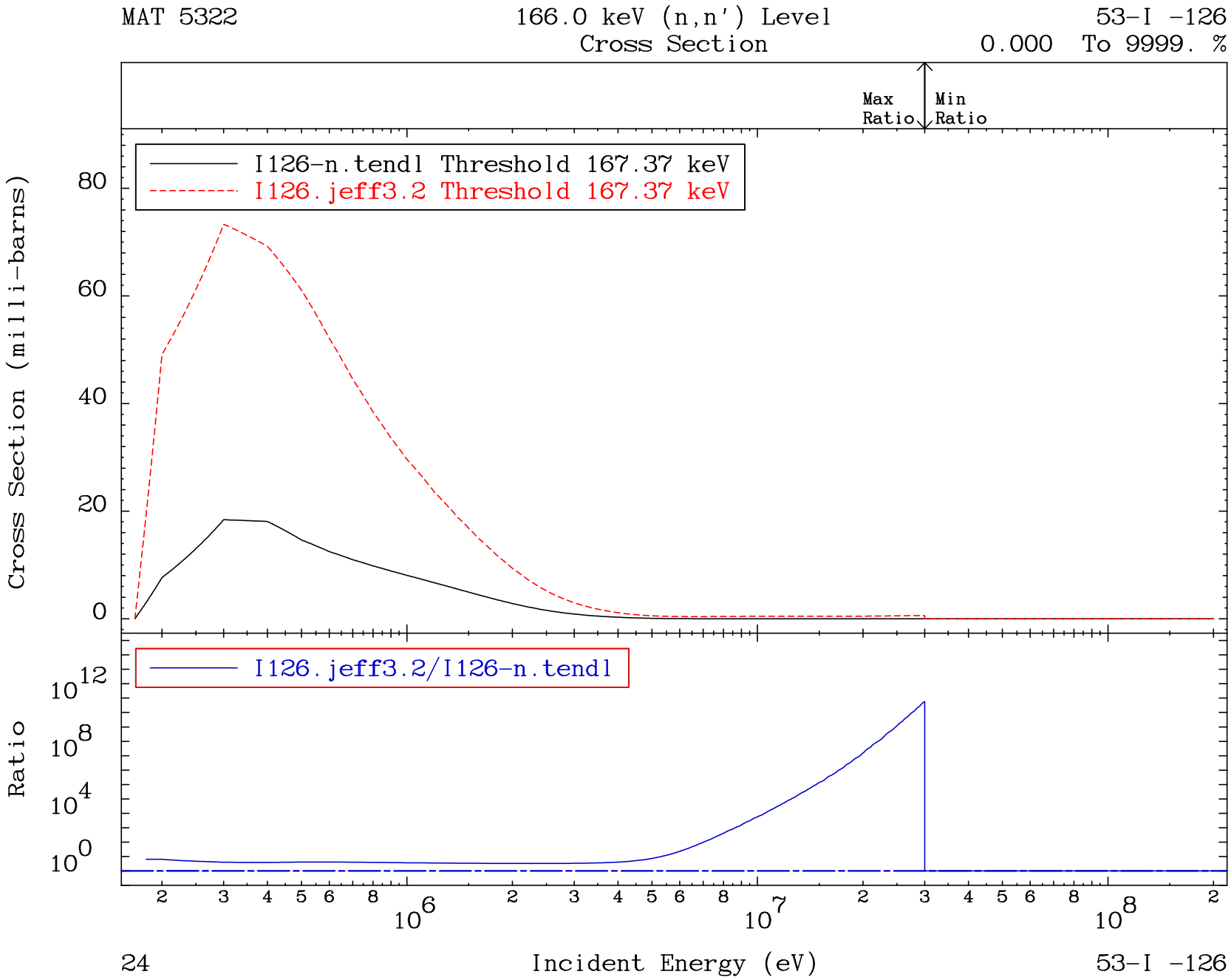

MAT 5322
(n,n') p α
Cross Section
53-I -126
-6.612 To 166.4 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 8.4952 MeV
I126.jeff3.2 Threshold 8.4878 MeV
Cross Section (micro-barns)
2.5
2.0
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
3.0
2.0
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
53-I -126

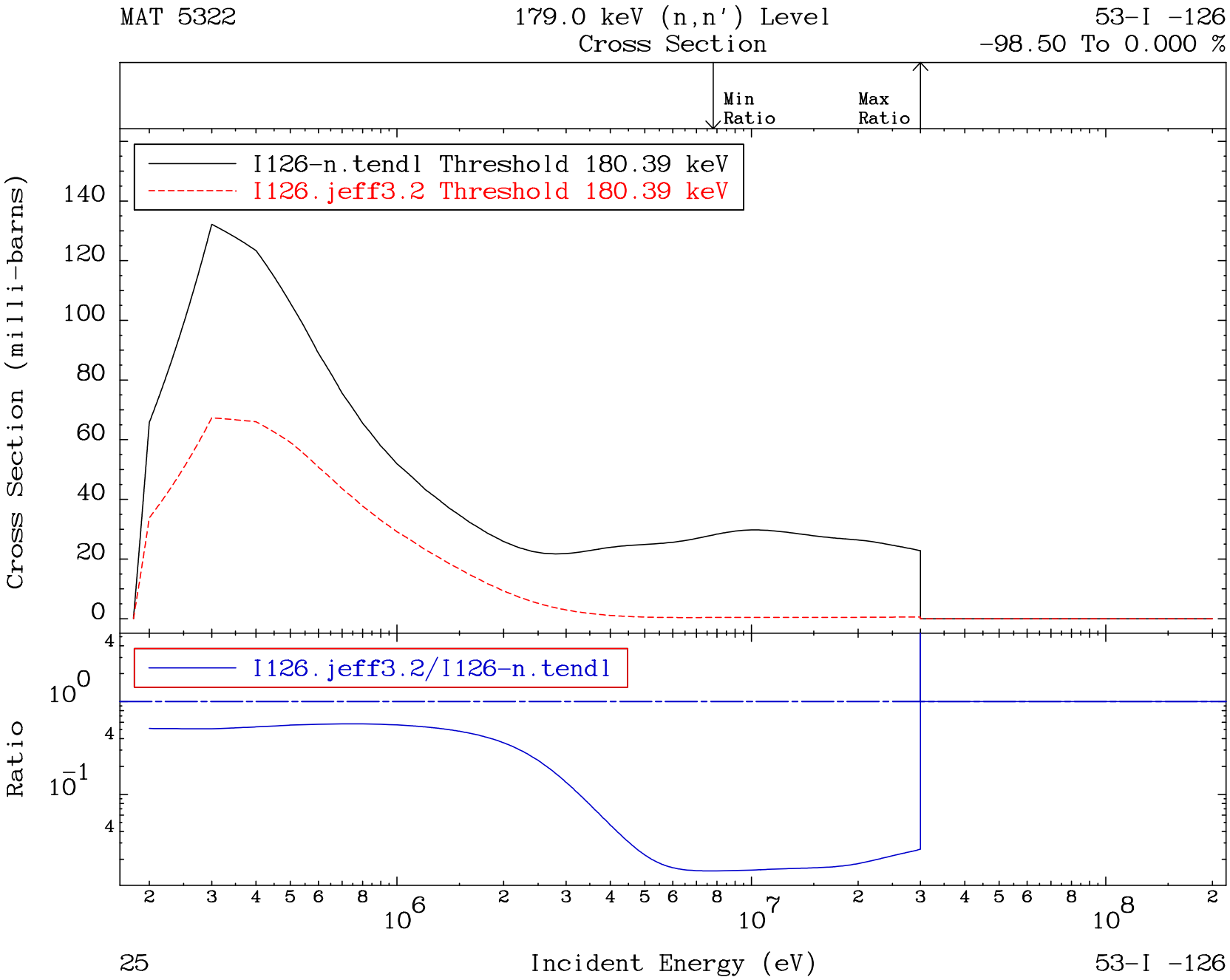

MAT 5322
56.43 keV (n,n') Level
Cross Section
53-I -126
-15.24 To 18.16 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 56.882 keV
I126.jeff3.2 Threshold 56.882 keV
Cross Section (milli-barns)
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.2
1.0
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
20
Incident Energy (eV)
53-I -126

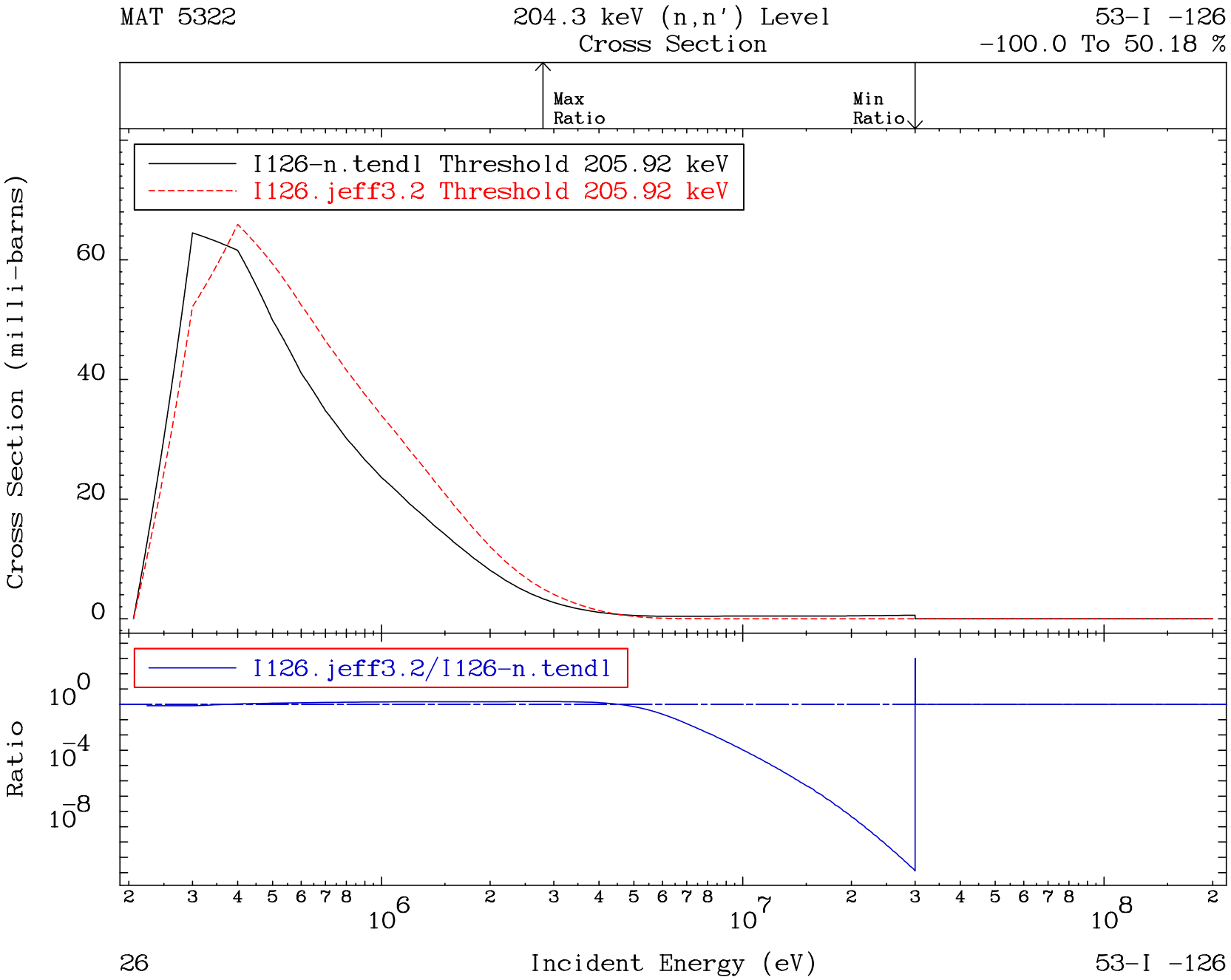

MAT 5322
110.9 keV (n,n') Level
Cross Section
53-I -126
-6.637 To 9999. %
Min Ratio
Max Ratio
I126-n.tendl Threshold 111.74 keV
I126.jeff3.2 Threshold 111.74 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
$10^{12}$
$10^{8}$
$10^{4}$
$10^{0}$
2 3 4 5 6 8 $10^{6}$ 2 3 4 5 6 8 $10^{7}$ 2 3 4 5 6 8 $10^{8}$ 2
21
Incident Energy (eV)
53-I -126

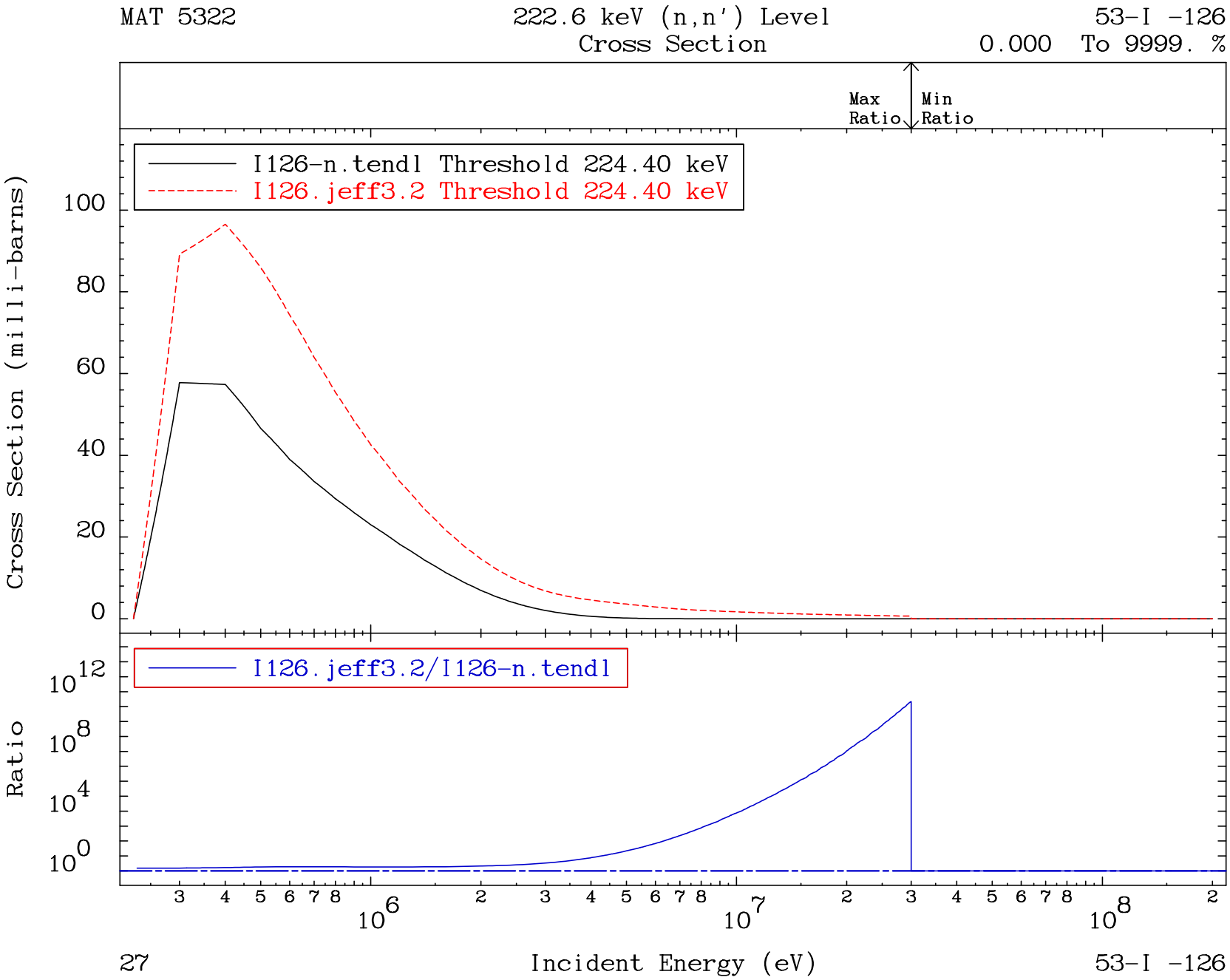

MAT 5322
122.2 keV (n,n') Level
Cross Section
53-I -126
-100.0 To 92.97 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 123.15 keV
I126.jeff3.2 Threshold 123.15 keV
Cross Section (milli-barns)
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-4
10^-8
10^-12
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
22
Incident Energy (eV)
53-I -126

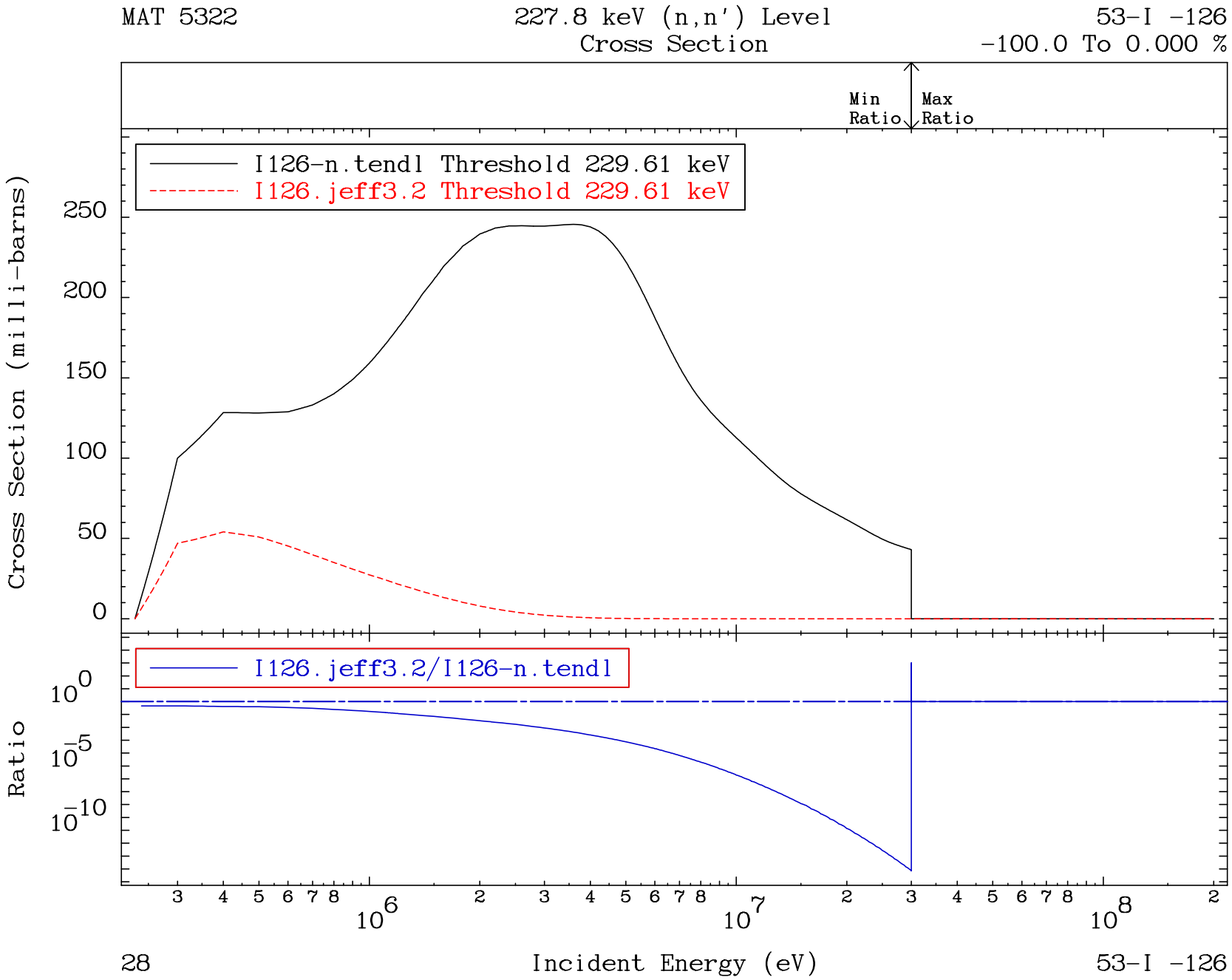

MAT 5322
146.0 keV (n,n') Level
Cross Section
53-I -126
0.000 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl Threshold 147.17 keV
I126.jeff3.2 Threshold 147.17 keV
Cross Section (milli-barns)
180
160
140
120
100
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
$10^{12}$
$10^{8}$
$10^{4}$
$10^{0}$
2 3 4 5 6 8 $10^{6}$ 2 3 4 5 6 8 $10^{7}$ 2 3 4 5 6 8 $10^{8}$ 2
23
Incident Energy (eV)
53-I -126

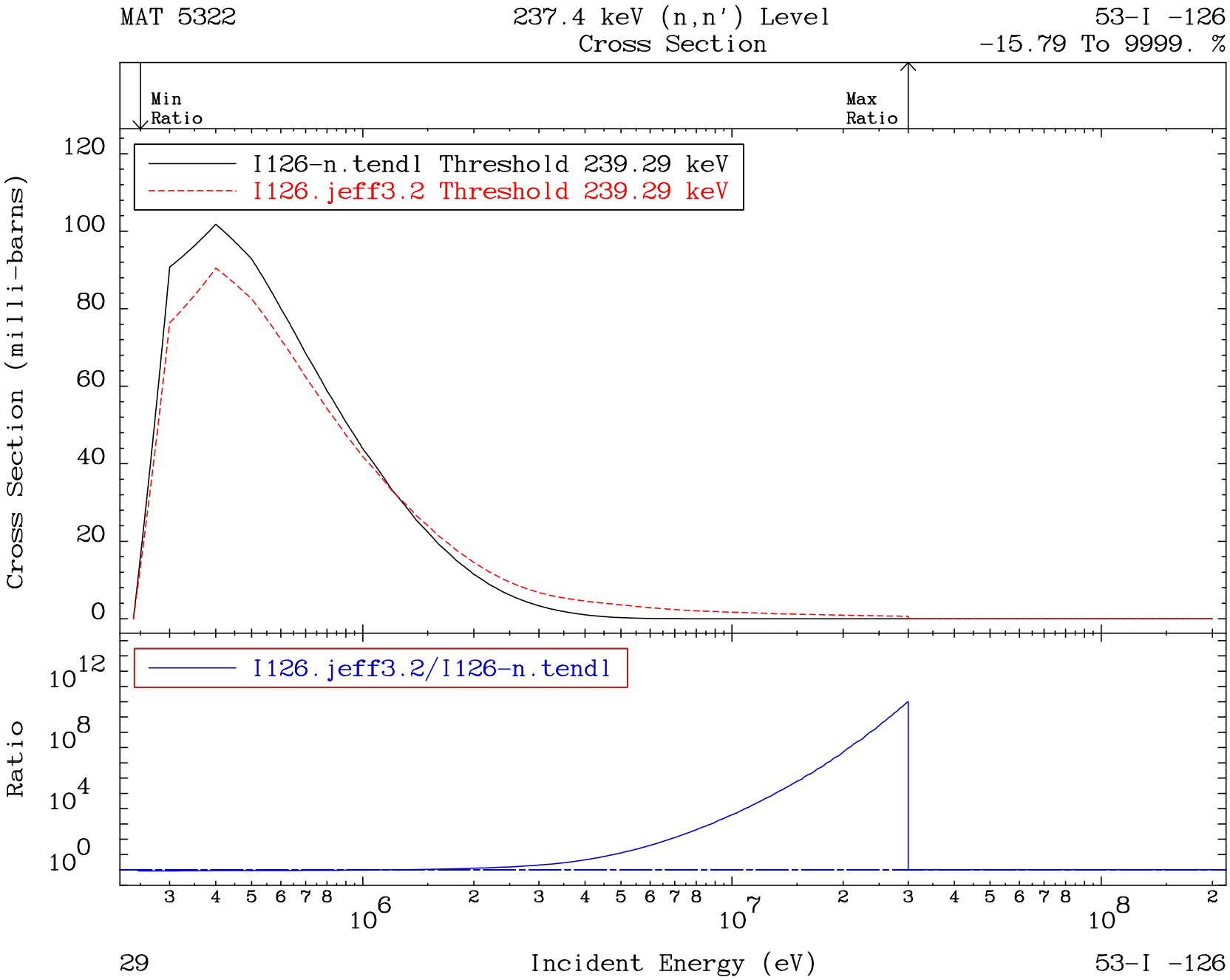

MAT 5322
166.0 keV (n,n') Level
Cross Section
53-I -126
0.000 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl Threshold 167.37 keV
I126.jeff3.2 Threshold 167.37 keV
Cross Section (milli-barns)
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
10^12
10^8
10^4
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
24
Incident Energy (eV)
53-I -126

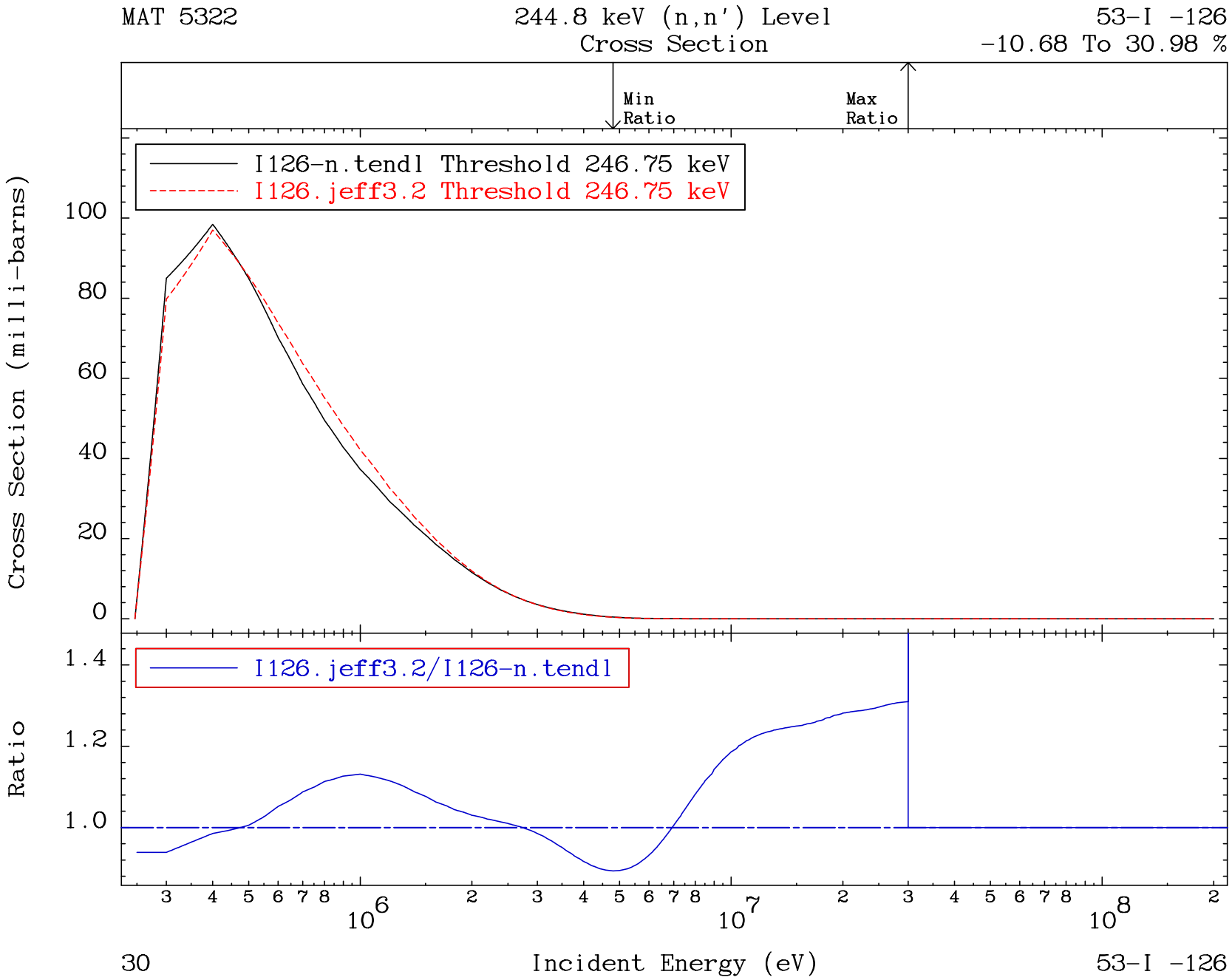

MAT 5322
179.0 keV (n,n') Level
Cross Section
53-I -126
-98.50 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 180.39 keV
I126.jeff3.2 Threshold 180.39 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
$10^0$
$10^{-1}$
$10^6$
$10^7$
$10^8$
25
Incident Energy (eV)
53-I -126

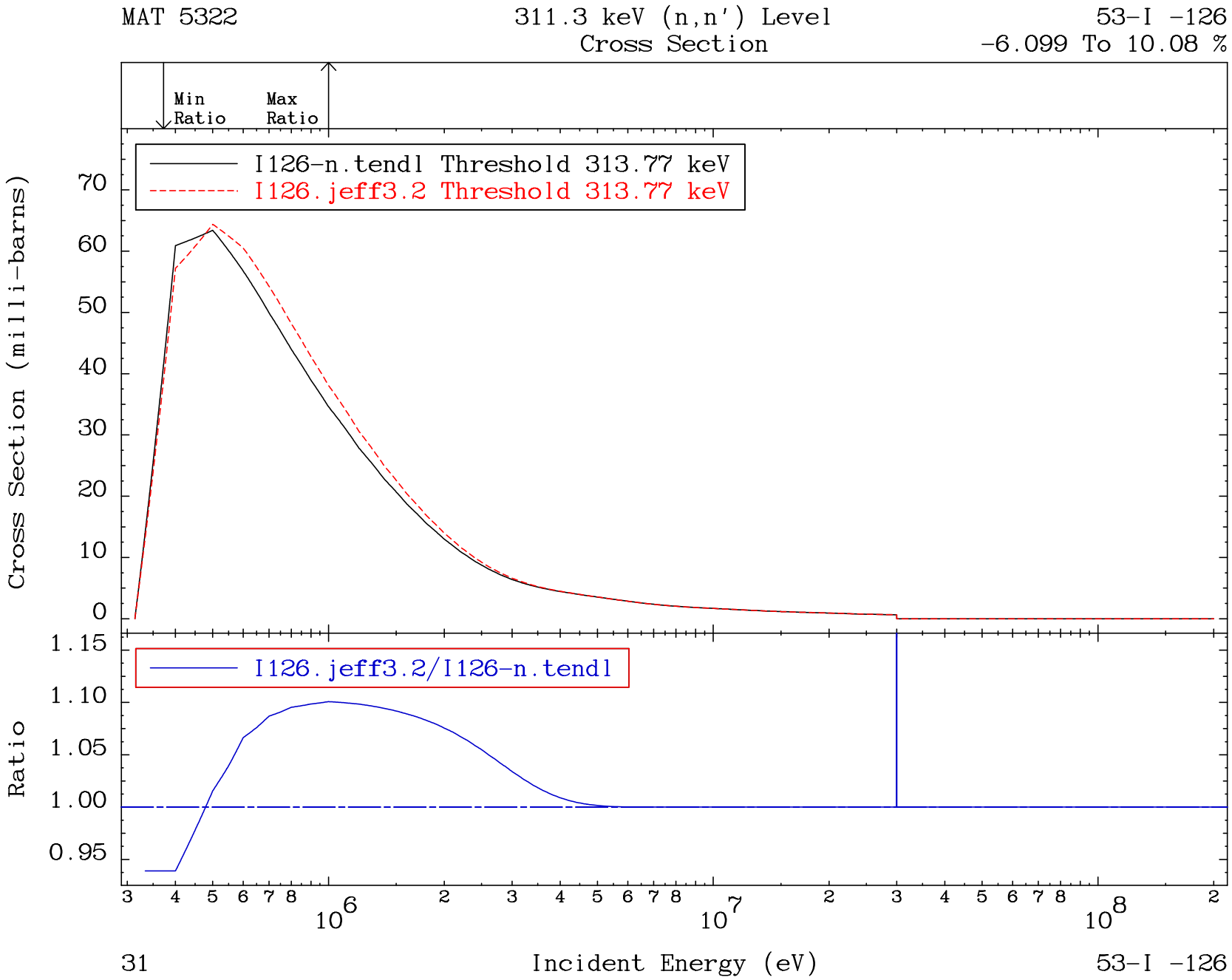

MAT 5322
204.3 keV (n,n') Level
Cross Section
53-I -126
-100.0 To 50.18 %
Max
Ratio
Min
Ratio
I126-n.tendl Threshold 205.92 keV
I126.jeff3.2 Threshold 205.92 keV
Cross Section (milli-barns)
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-4
10^-8
2 3 4 5 6 7 8
10^6
10^7
10^8
26
Incident Energy (eV)
53-I -126

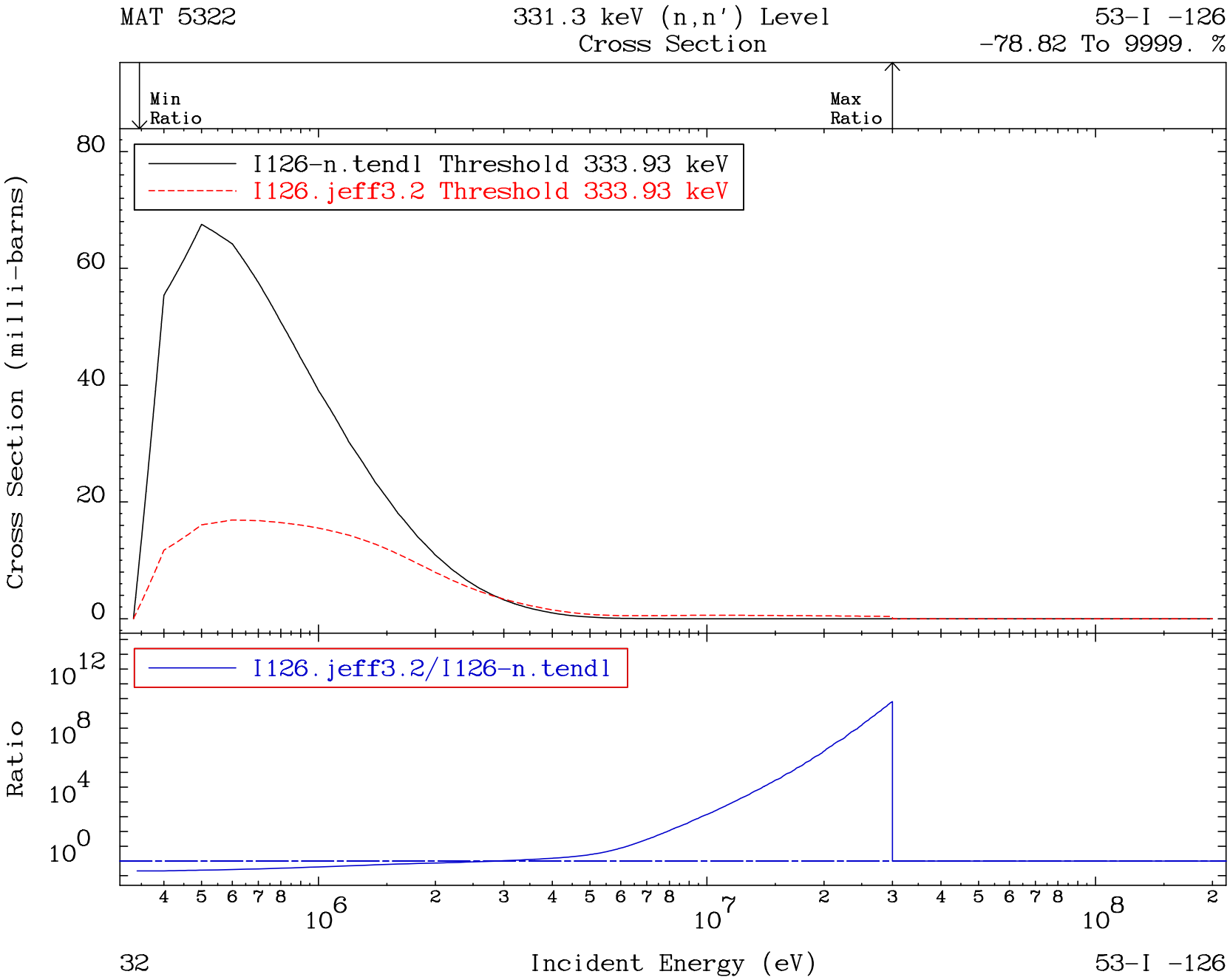

MAT 5322
222.6 keV (n,n') Level
Cross Section
53-I -126
0.000 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl Threshold 224.40 keV
I126.jeff3.2 Threshold 224.40 keV
Cross Section (milli-barns)
100
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
10^12
10^8
10^4
10^0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
27
Incident Energy (eV)
53-I -126

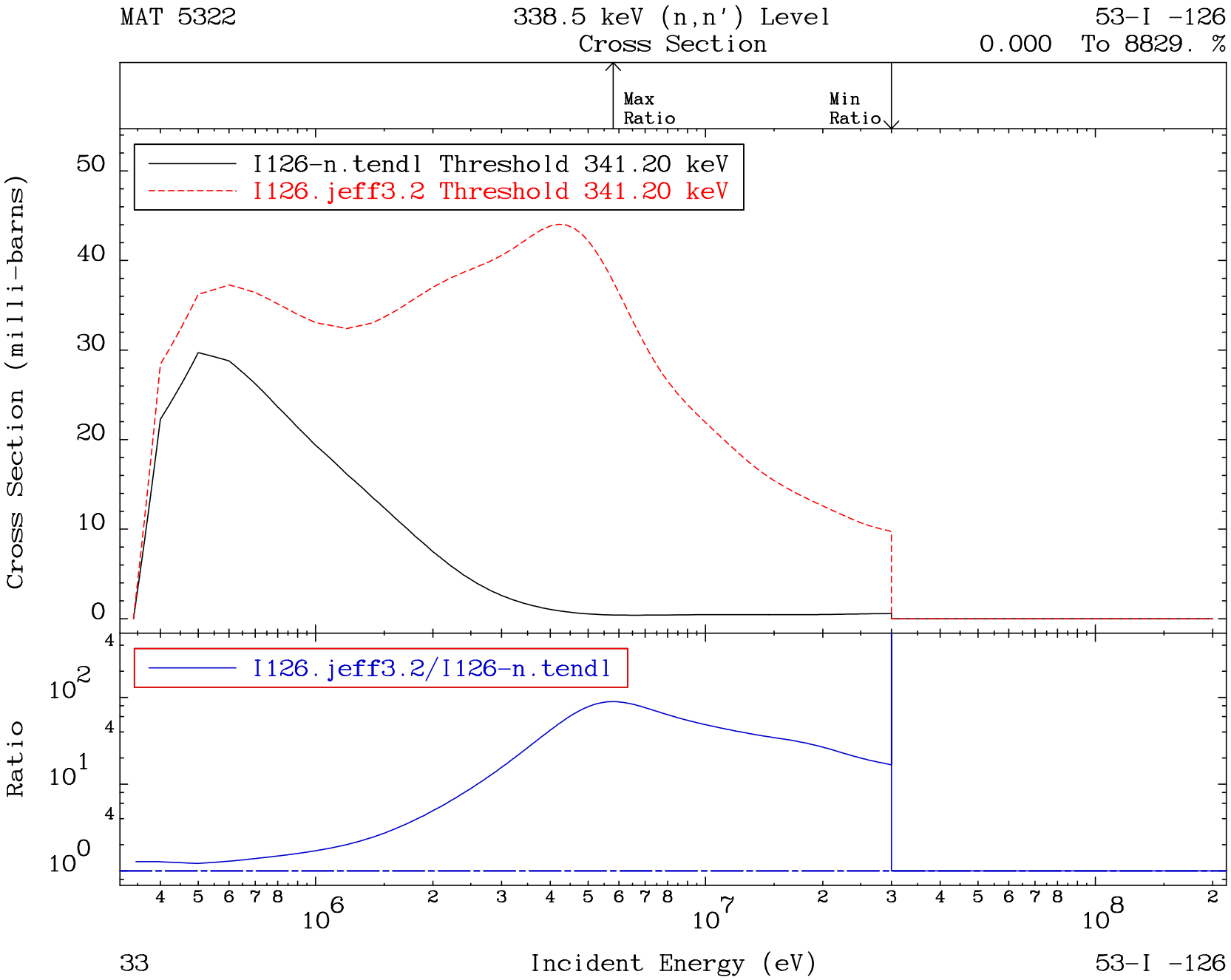

MAT 5322
227.8 keV (n,n') Level
Cross Section
53-I -126
-100.0 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 229.61 keV
I126.jeff3.2 Threshold 229.61 keV
Cross Section (milli-barns)
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-5
10^-10
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
53-I -126

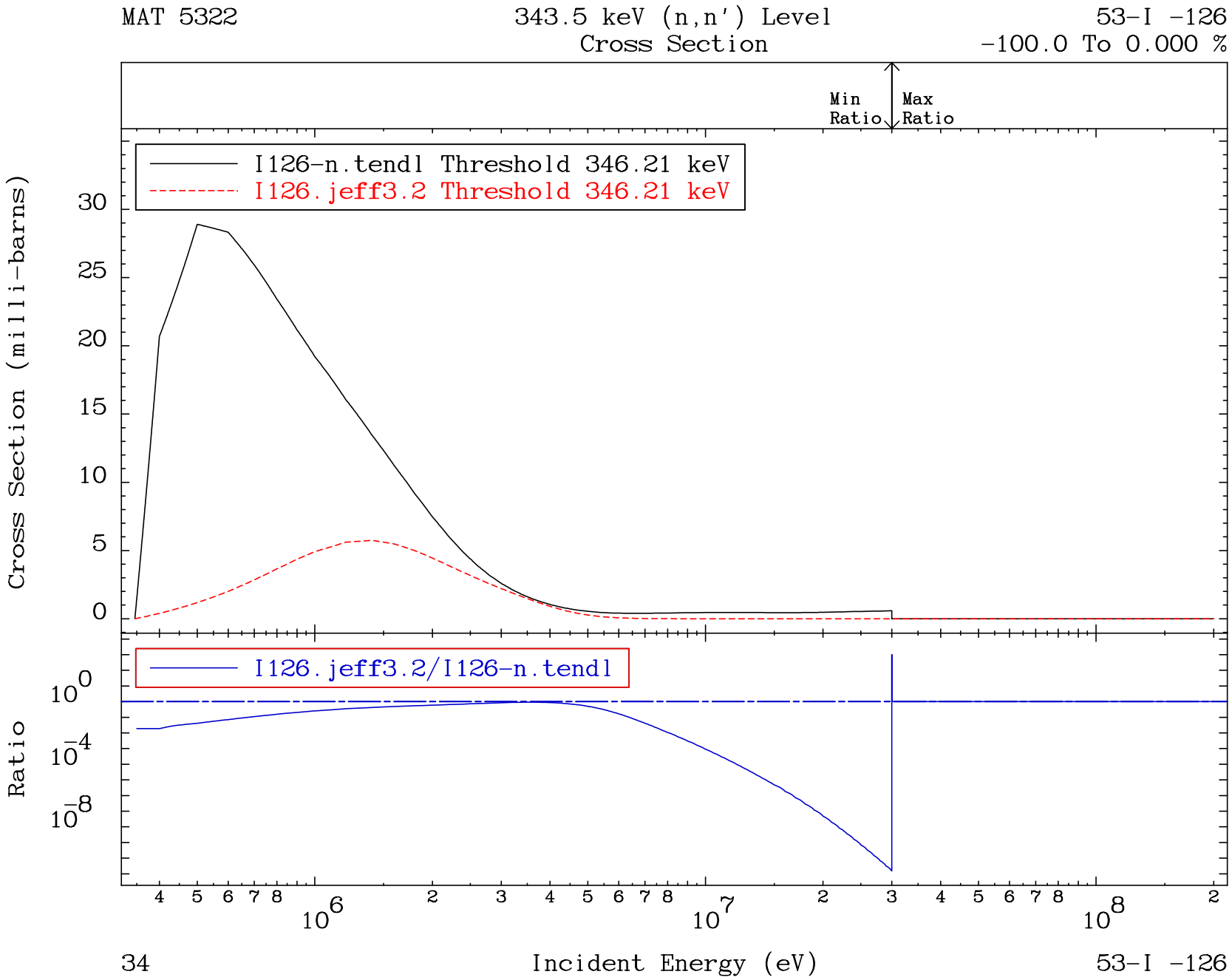

MAT 5322
237.4 keV (n,n') Level
Cross Section
53-I -126
-15.79 To 9999. %
Min
Ratio
Max
Ratio
I126-n.tendl Threshold 239.29 keV
I126.jeff3.2 Threshold 239.29 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
10^12
10^8
10^4
10^0
3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
29
Incident Energy (eV)
53-I -126

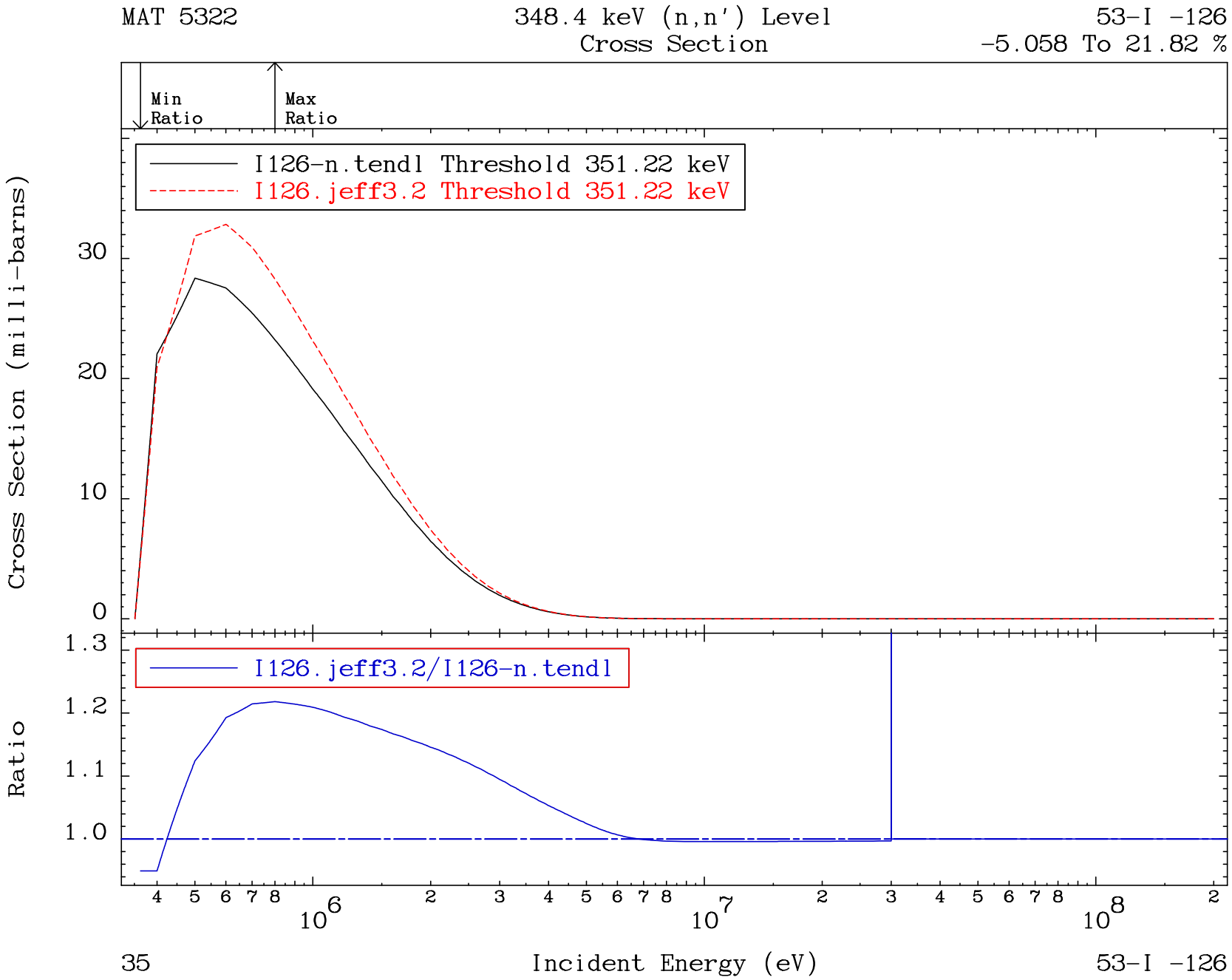

MAT 5322
244.8 keV (n,n') Level
Cross Section
53-I -126
-10.68 To 30.98 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 246.75 keV
I126.jeff3.2 Threshold 246.75 keV
Cross Section (milli-barns)
100
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
1.4
1.2
1.0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
53-I -126

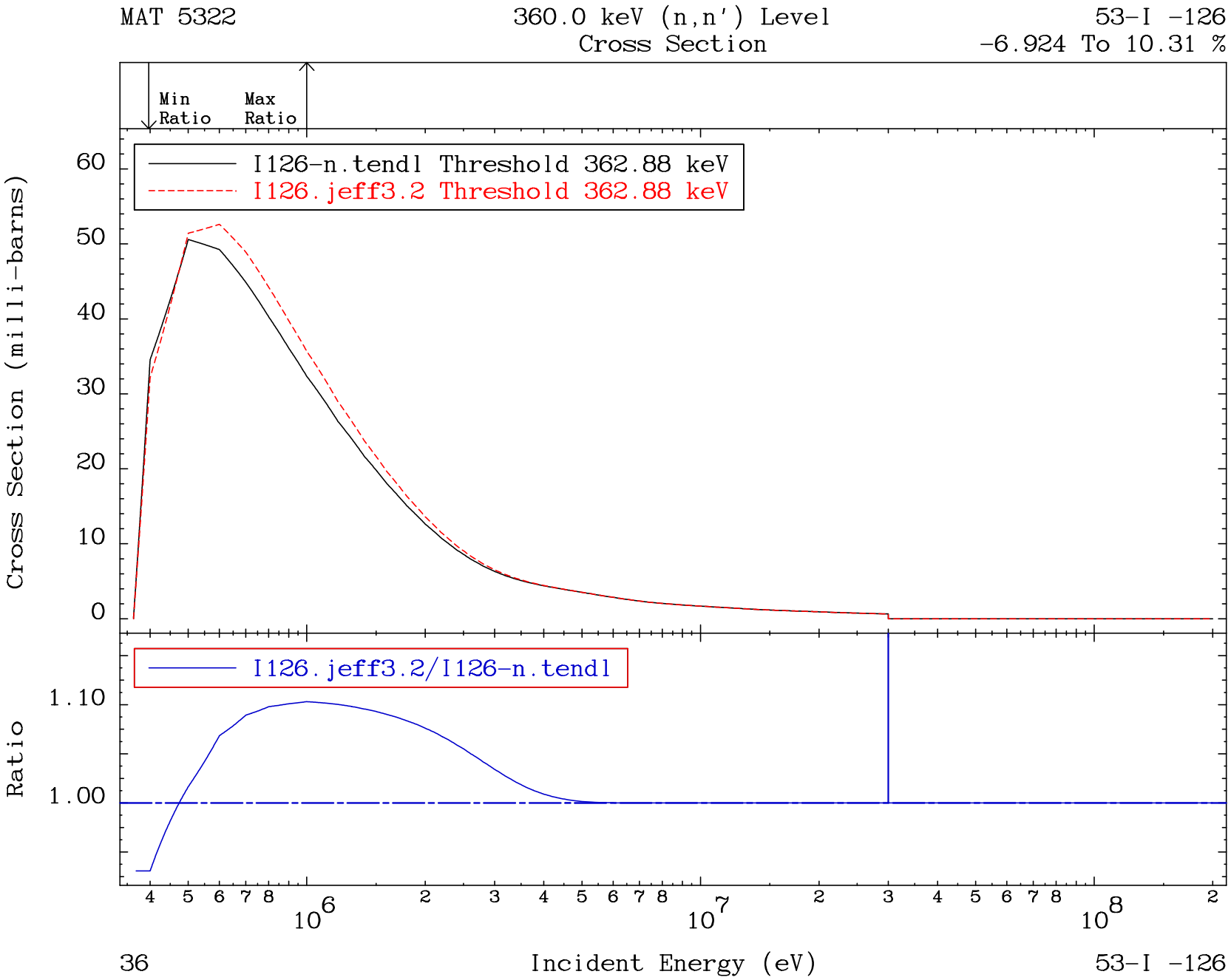

MAT 5322
311.3 keV (n,n') Level
Cross Section
53-I -126
-6.099 To 10.08 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 313.77 keV
I126.jeff3.2 Threshold 313.77 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.15
1.10
1.05
1.00
0.95
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
53-I -126

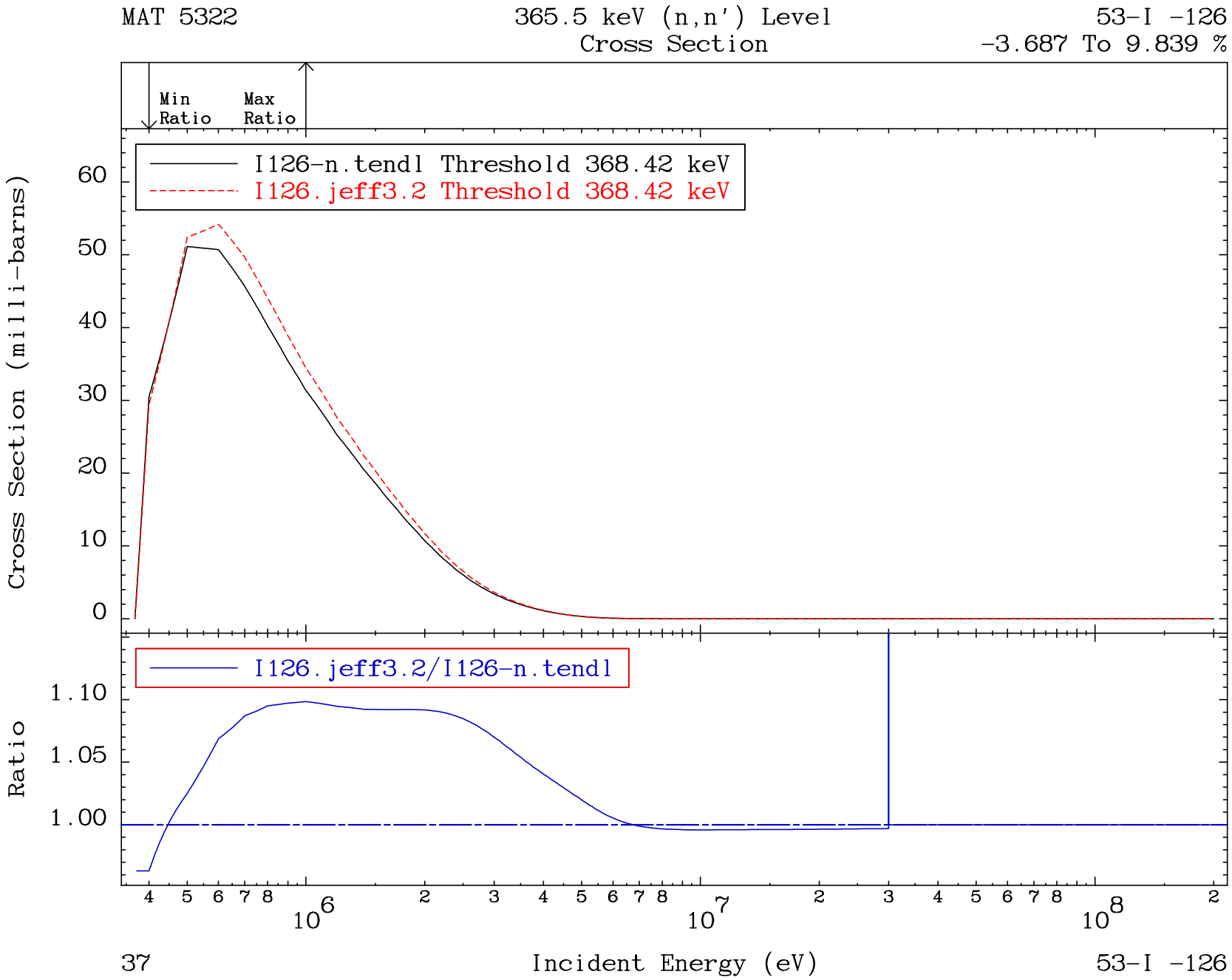

MAT 5322
331.3 keV (n,n') Level
Cross Section
53-I -126
-78.82 To 9999. %
Min Ratio
Max Ratio
I126-n.tendl Threshold 333.93 keV
I126.jeff3.2 Threshold 333.93 keV
Cross Section (milli-barns)
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
10^12
10^8
10^4
10^0
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
32
Incident Energy (eV)
53-I -126

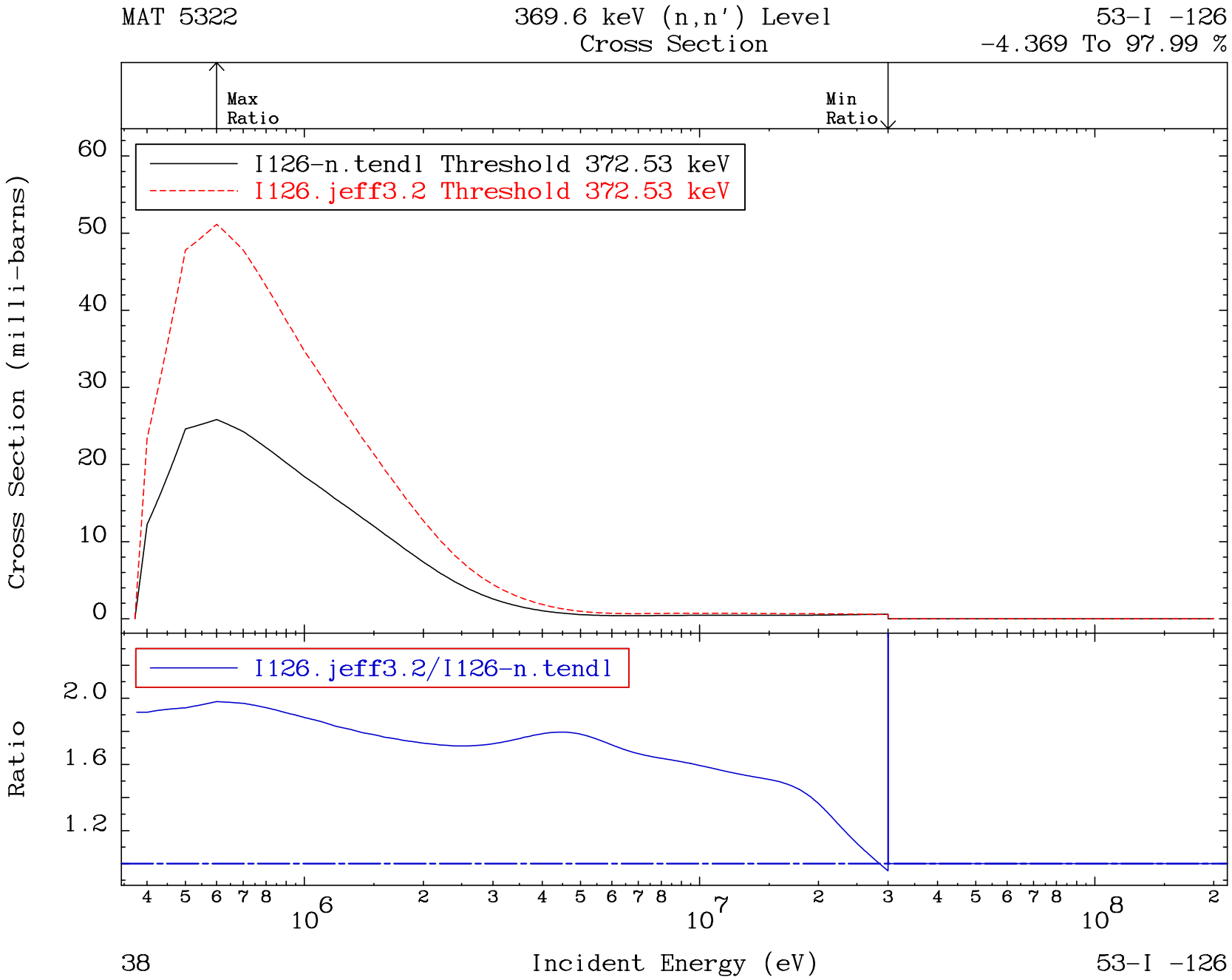

MAT 5322
338.5 keV (n,n') Level
Cross Section
53-I -126
0.000 To 8829. %
Max Ratio
Min Ratio
I126-n.tendl Threshold 341.20 keV
I126.jeff3.2 Threshold 341.20 keV
Cross Section (milli-barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
10^2
10^1
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
53-I -126

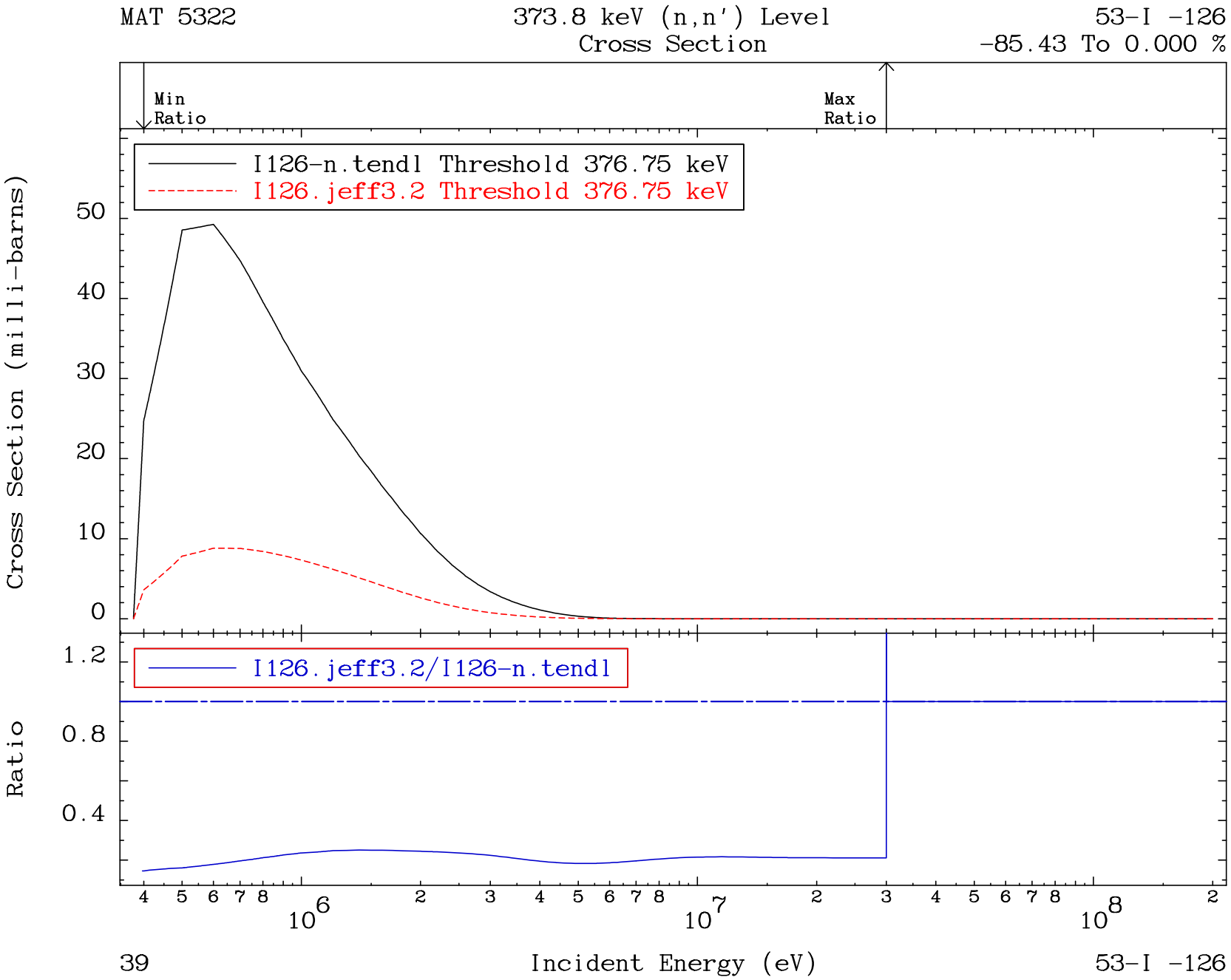

MAT 5322
343.5 keV (n,n') Level
Cross Section
53-I -126
-100.0 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 346.21 keV
I126.jeff3.2 Threshold 346.21 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-4
10^-8
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
53-I -126

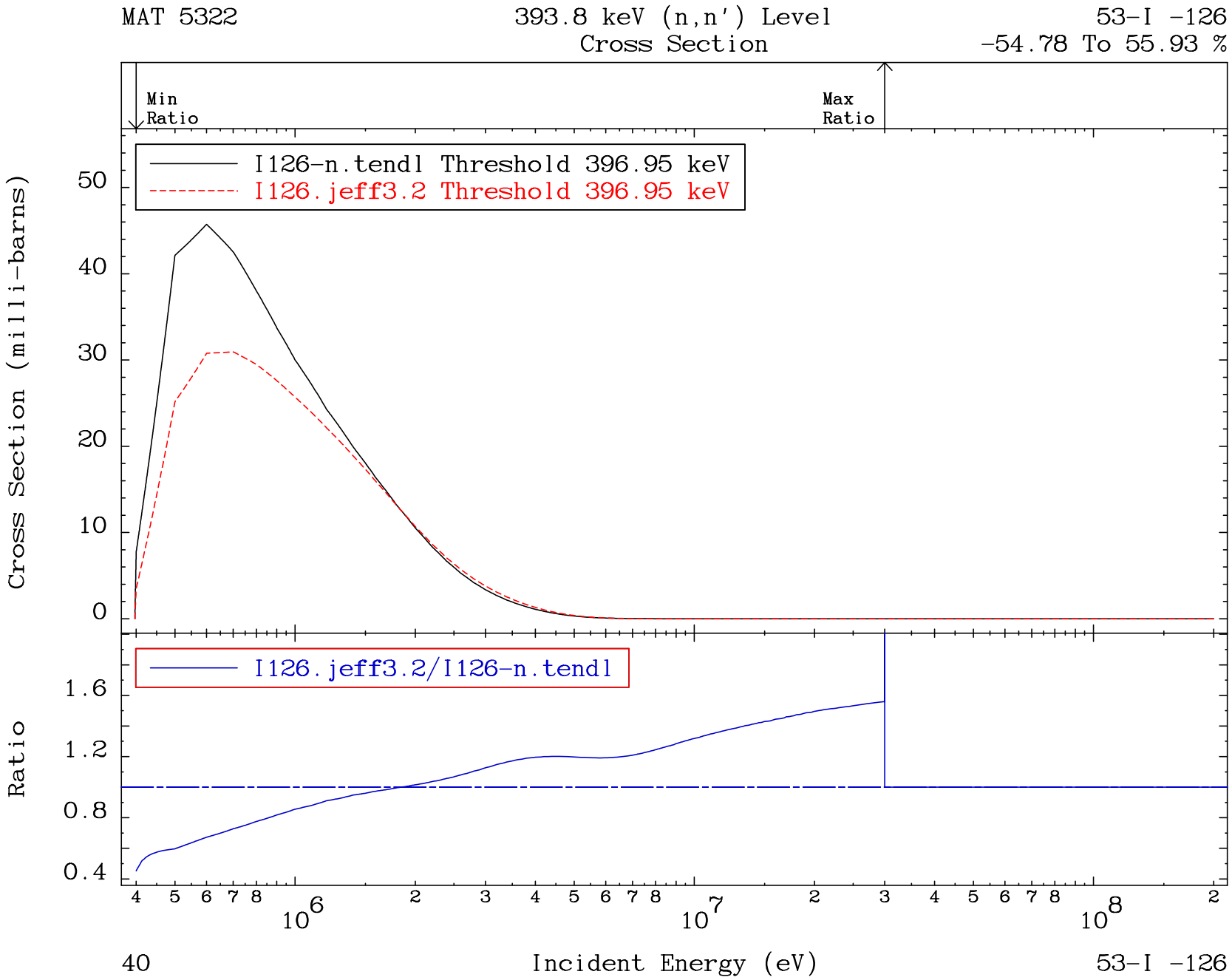

MAT 5322
348.4 keV (n,n') Level
Cross Section
53-I -126
-5.058 To 21.82 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 351.22 keV
I126.jeff3.2 Threshold 351.22 keV
Cross Section (milli-barns)
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.3
1.2
1.1
1.0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
53-I -126

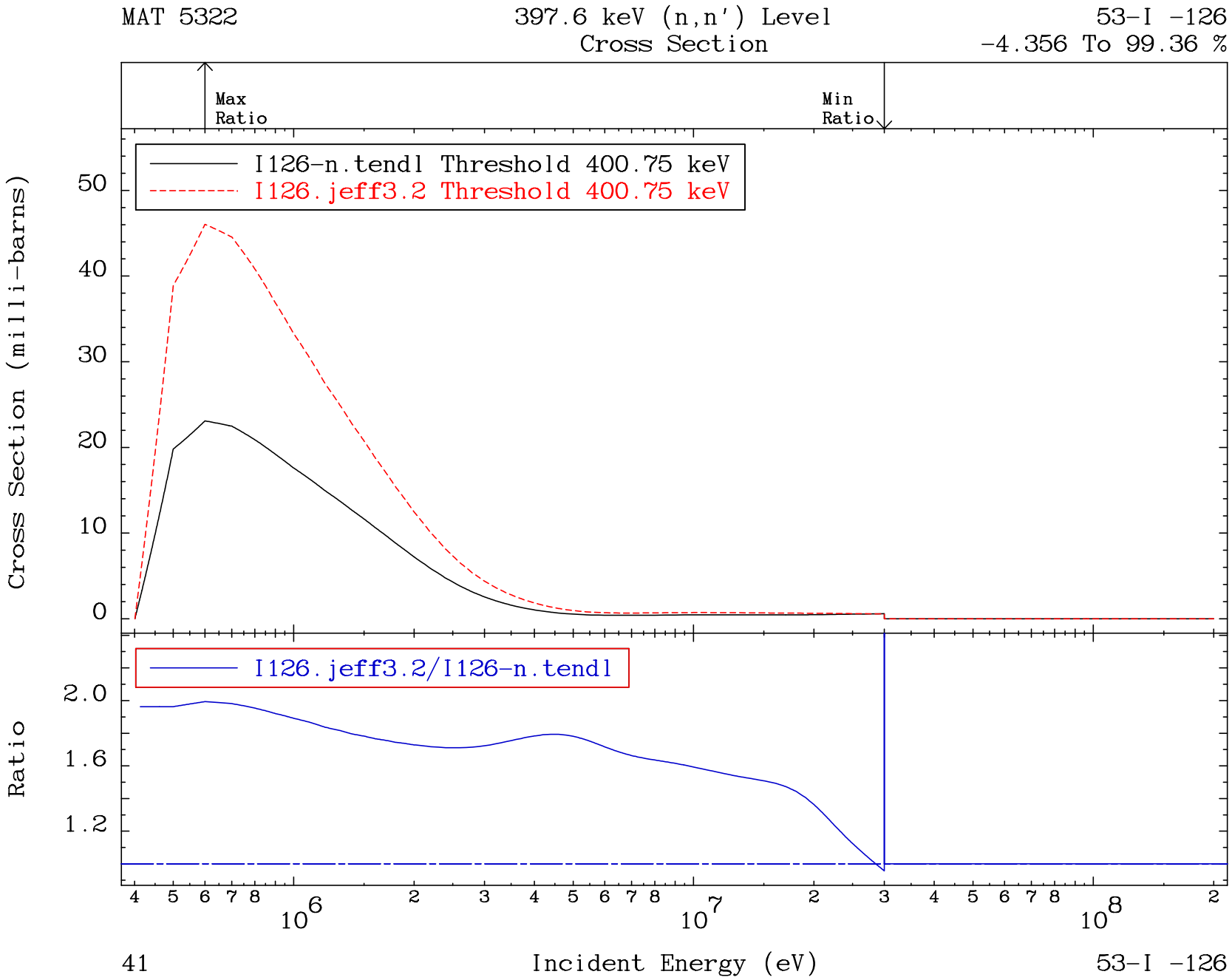

MAT 5322
360.0 keV (n,n') Level
Cross Section
53-I -126
-6.924 To 10.31 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 362.88 keV
I126.jeff3.2 Threshold 362.88 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.10
1.00
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
53-I -126

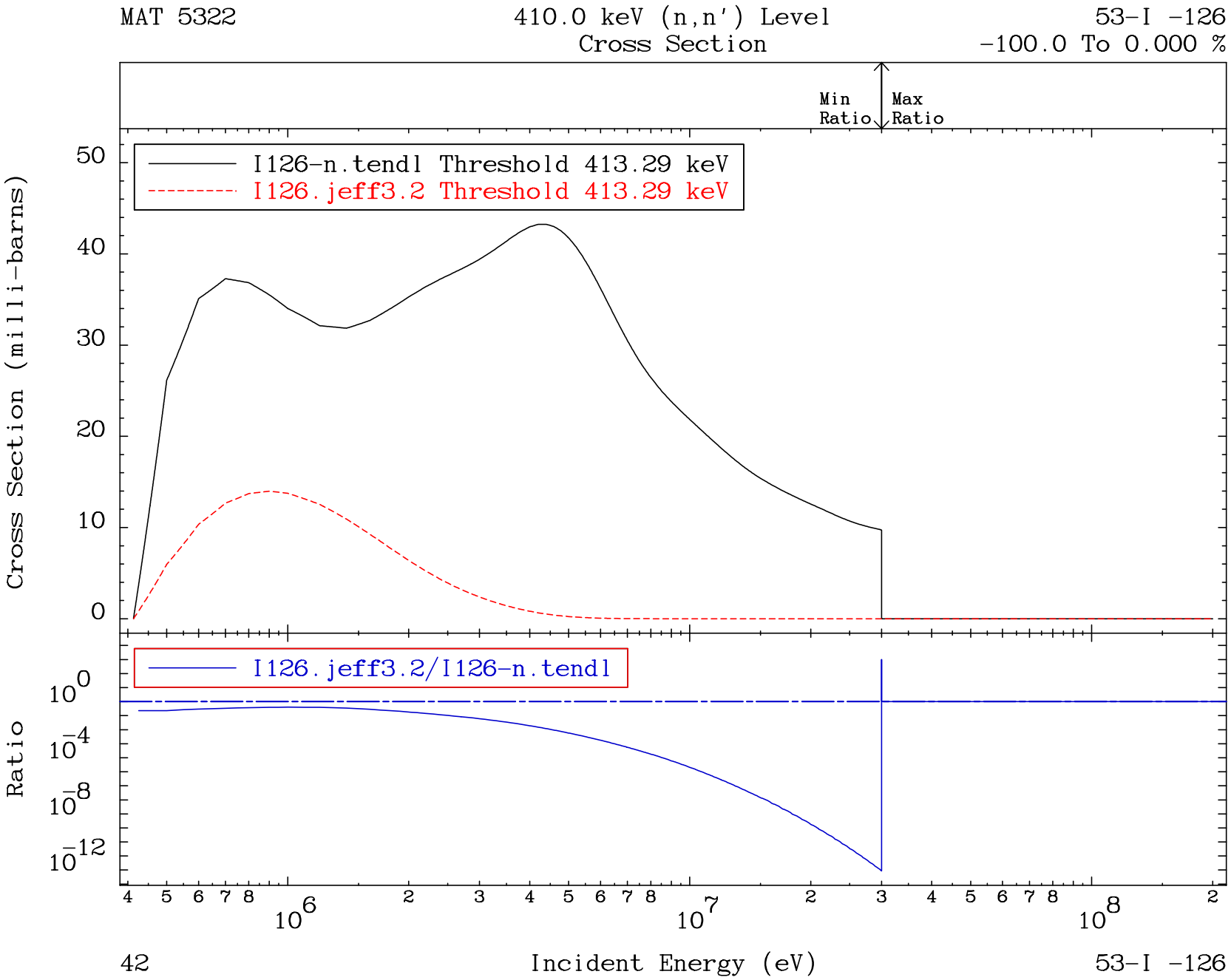

MAT 5322
365.5 keV (n,n') Level
Cross Section
53-I -126
-3.687 To 9.839 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 368.42 keV
I126.jeff3.2 Threshold 368.42 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.10
1.05
1.00
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
53-I -126

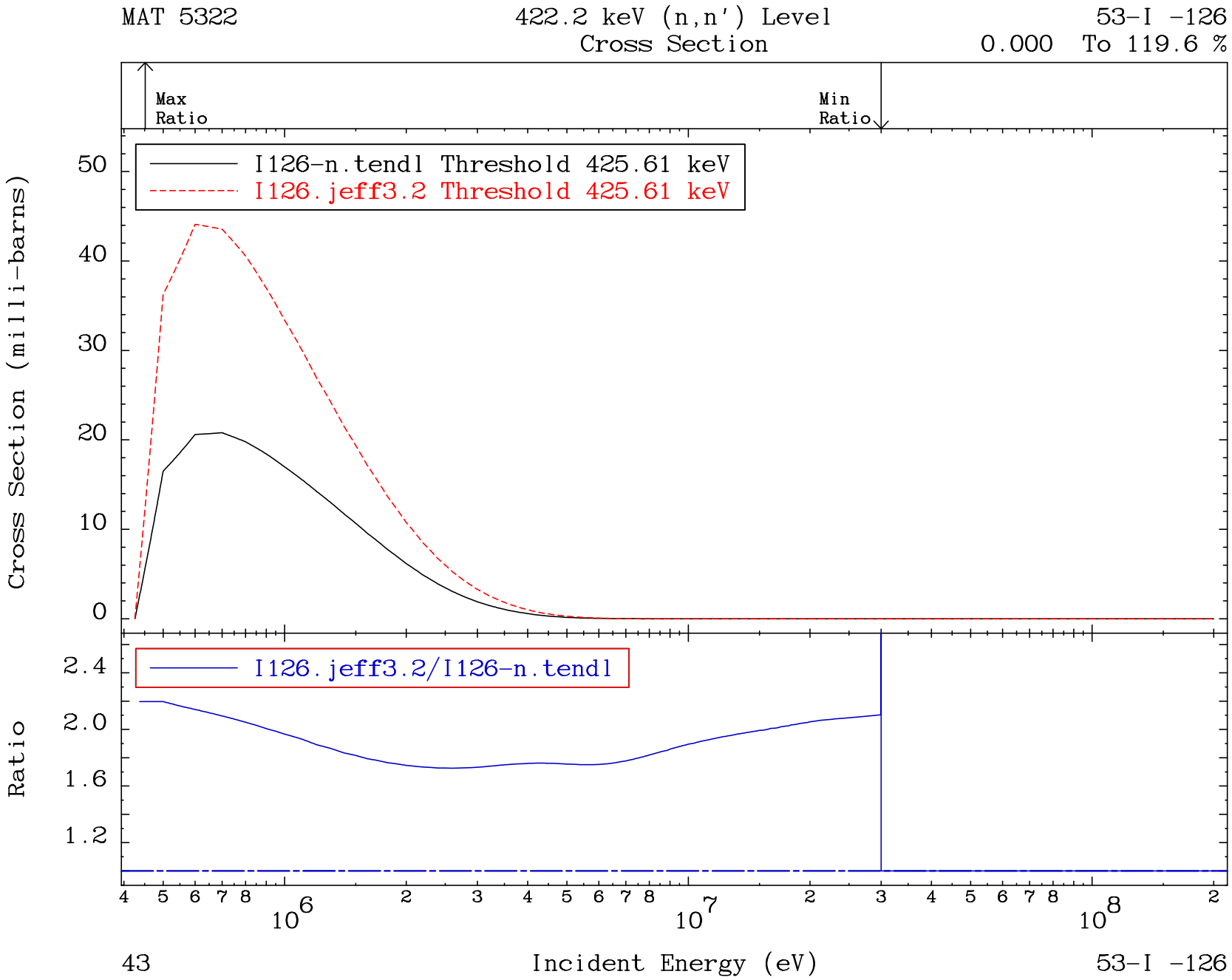

MAT 5322
369.6 keV (n,n') Level
Cross Section
53-I -126
-4.369 To 97.99 %
Max
Ratio
Min
Ratio
I126-n.tendl Threshold 372.53 keV
I126.jeff3.2 Threshold 372.53 keV
Cross Section (milli-barns)
60
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
2.0
1.6
1.2
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
53-I -126

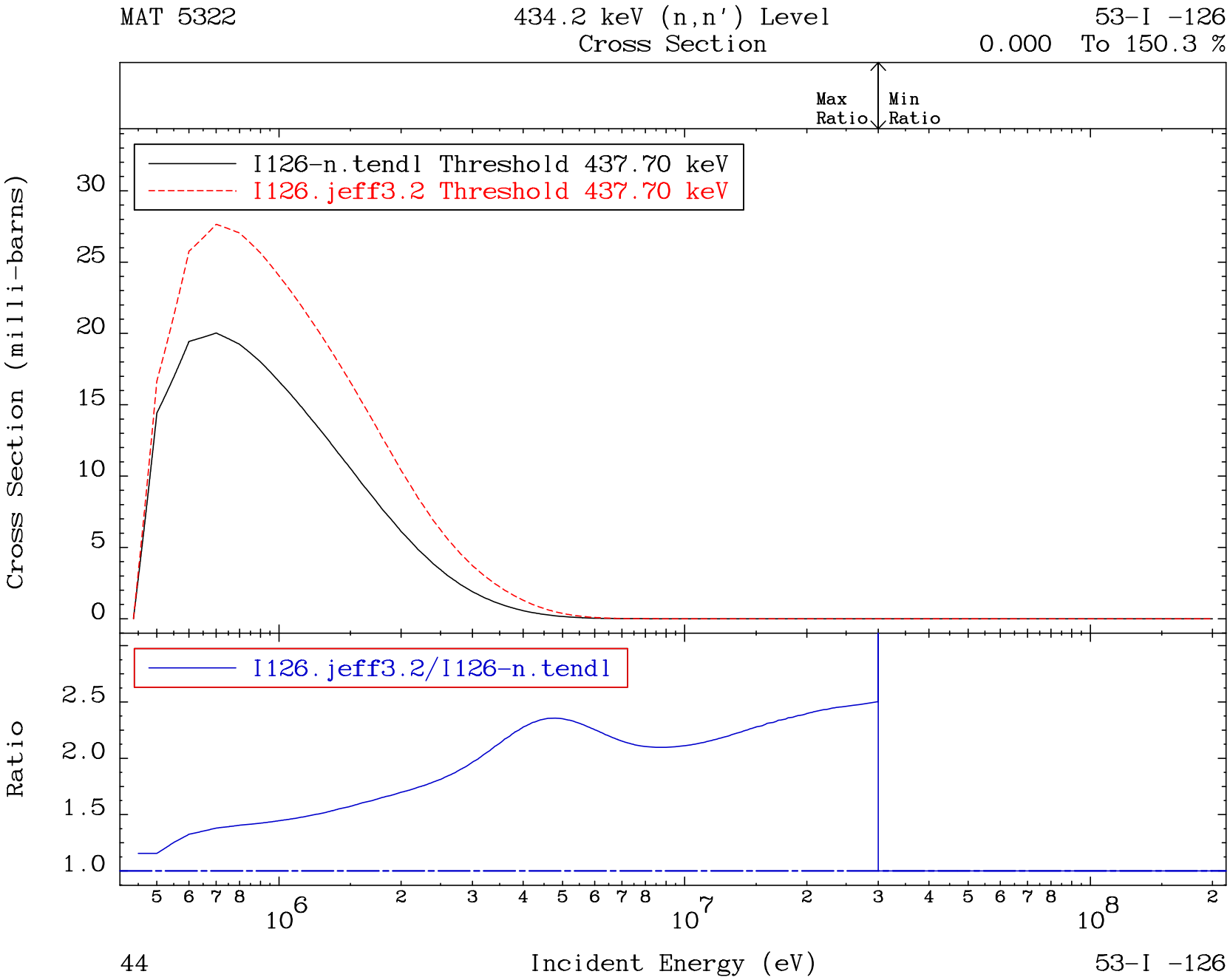

MAT 5322
373.8 keV (n,n') Level
Cross Section
53-I -126
-85.43 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 376.75 keV
I126.jeff3.2 Threshold 376.75 keV
Cross Section (milli-barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.2
0.8
0.4
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
39
Incident Energy (eV)
53-I -126

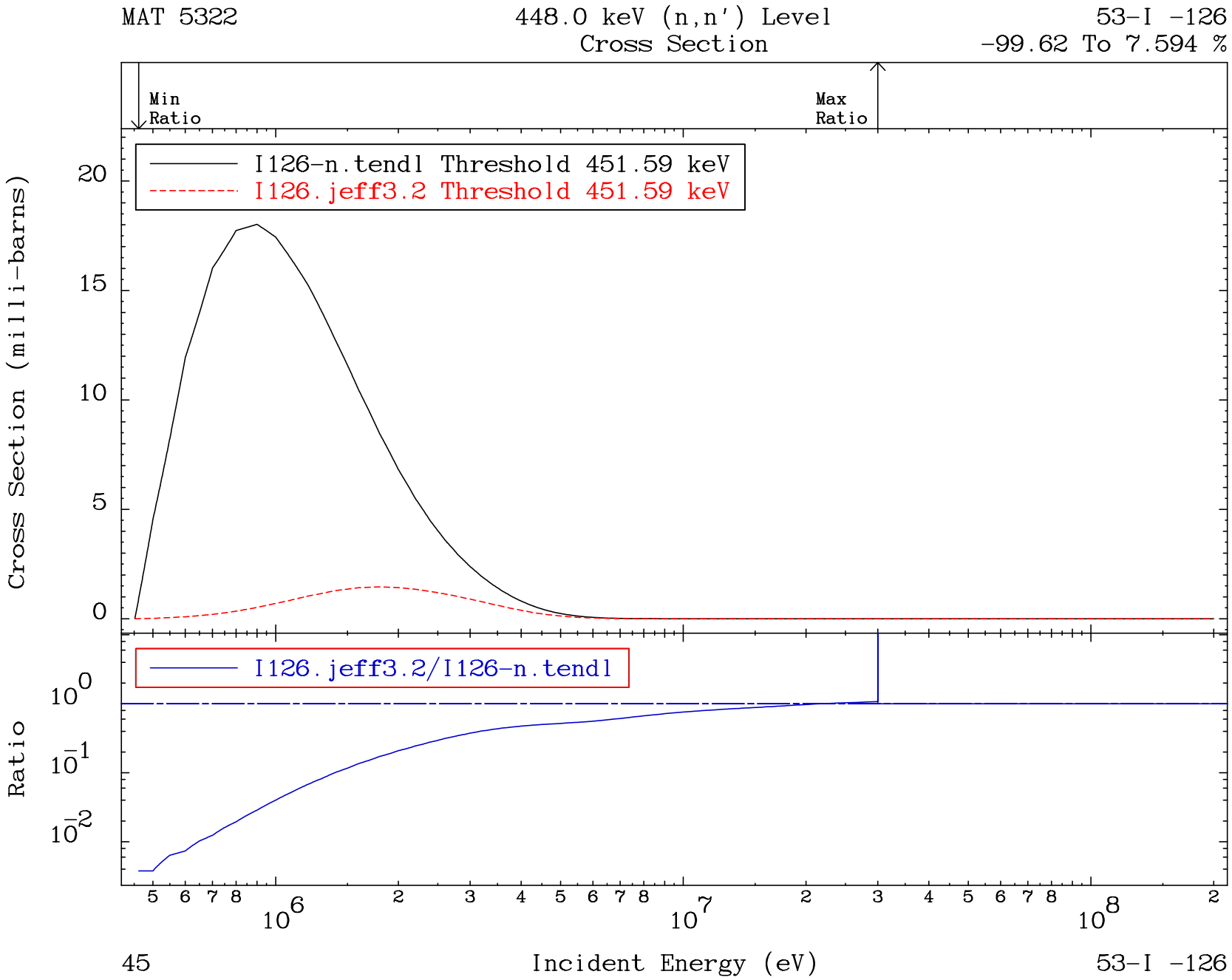

MAT 5322
393.8 keV (n,n') Level
Cross Section
53-I -126
-54.78 To 55.93 %
Min
Ratio
Max
Ratio
I126-n.tendl Threshold 396.95 keV
I126.jeff3.2 Threshold 396.95 keV
Cross Section (milli-barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.6
1.2
0.8
0.4
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
40
Incident Energy (eV)
53-I -126

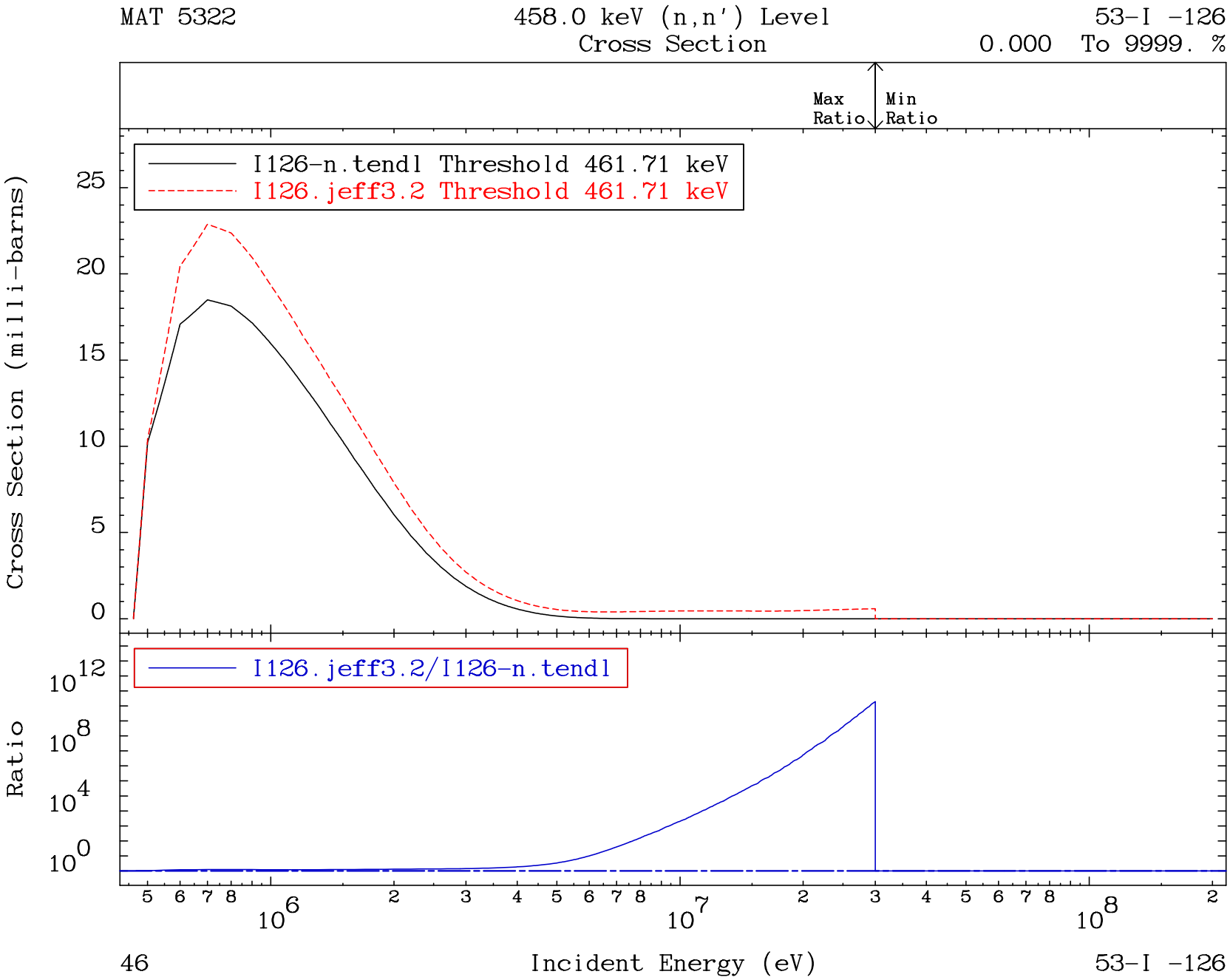

MAT 5322
397.6 keV (n,n') Level
Cross Section
53-I -126
-4.356 To 99.36 %
Max
Ratio
Min
Ratio
I126-n.tendl Threshold 400.75 keV
I126.jeff3.2 Threshold 400.75 keV
Cross Section (milli-barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
2.0
1.6
1.2
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
53-I -126

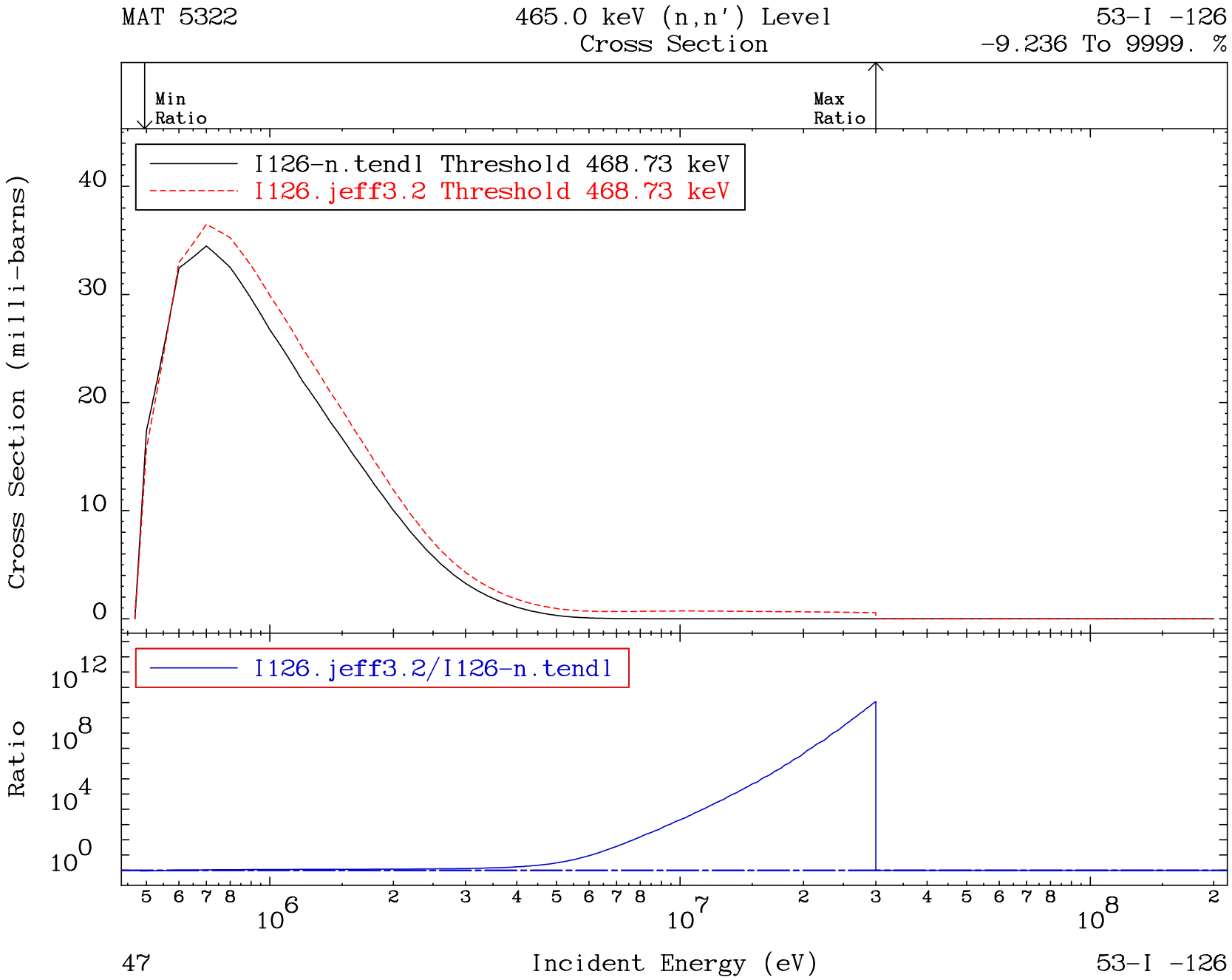

MAT 5322
410.0 keV (n,n') Level
Cross Section
53-I -126
-100.0 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 413.29 keV
I126.jeff3.2 Threshold 413.29 keV
Cross Section (milli-barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-4
10^-8
10^-12
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
42
Incident Energy (eV)
53-I -126

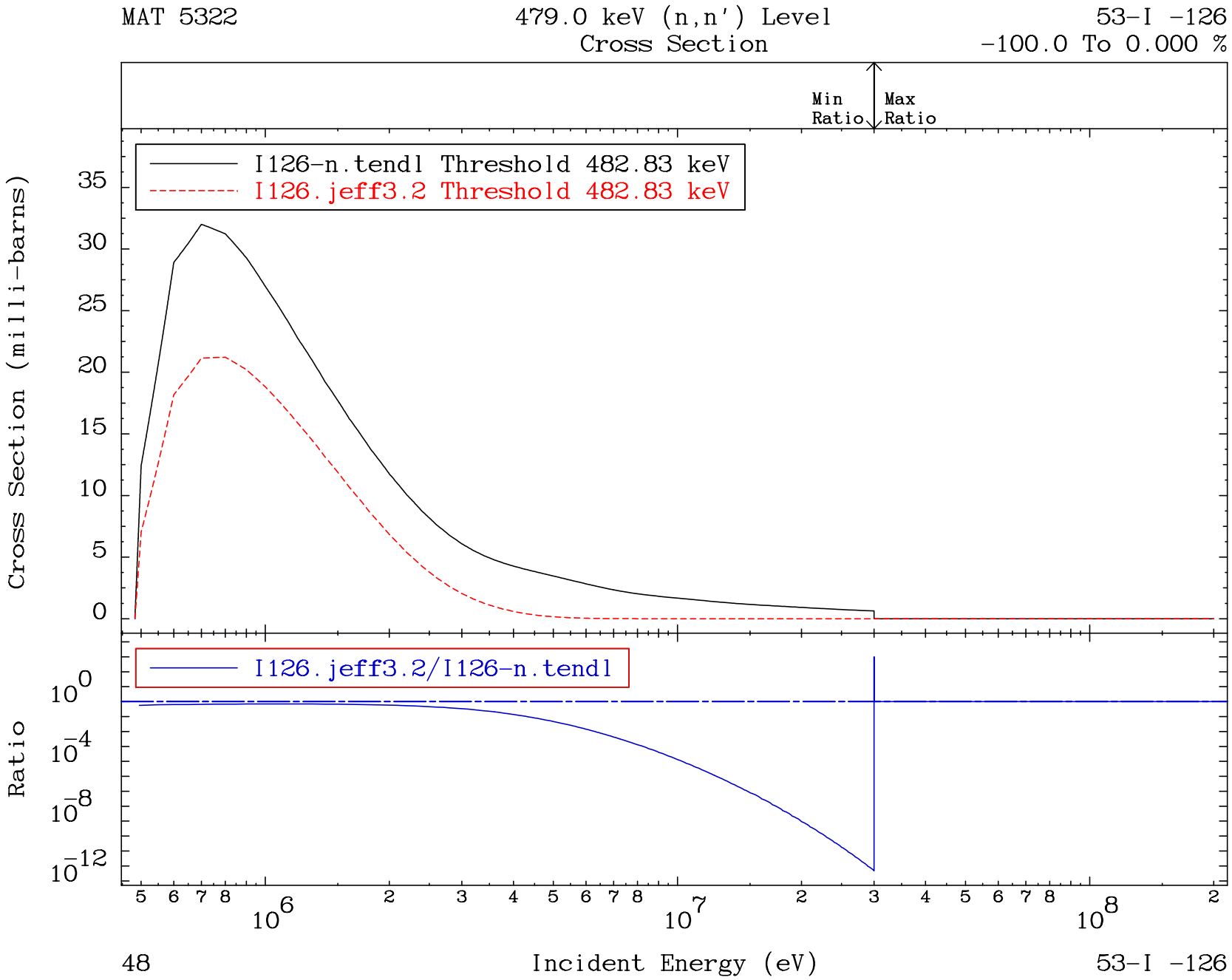

MAT 5322
422.2 keV (n,n') Level
Cross Section
53-I -126
0.000 To 119.6 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 425.61 keV
I126.jeff3.2 Threshold 425.61 keV
Cross Section (milli-barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
2.4
2.0
1.6
1.2
4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
43
Incident Energy (eV)
53-I -126

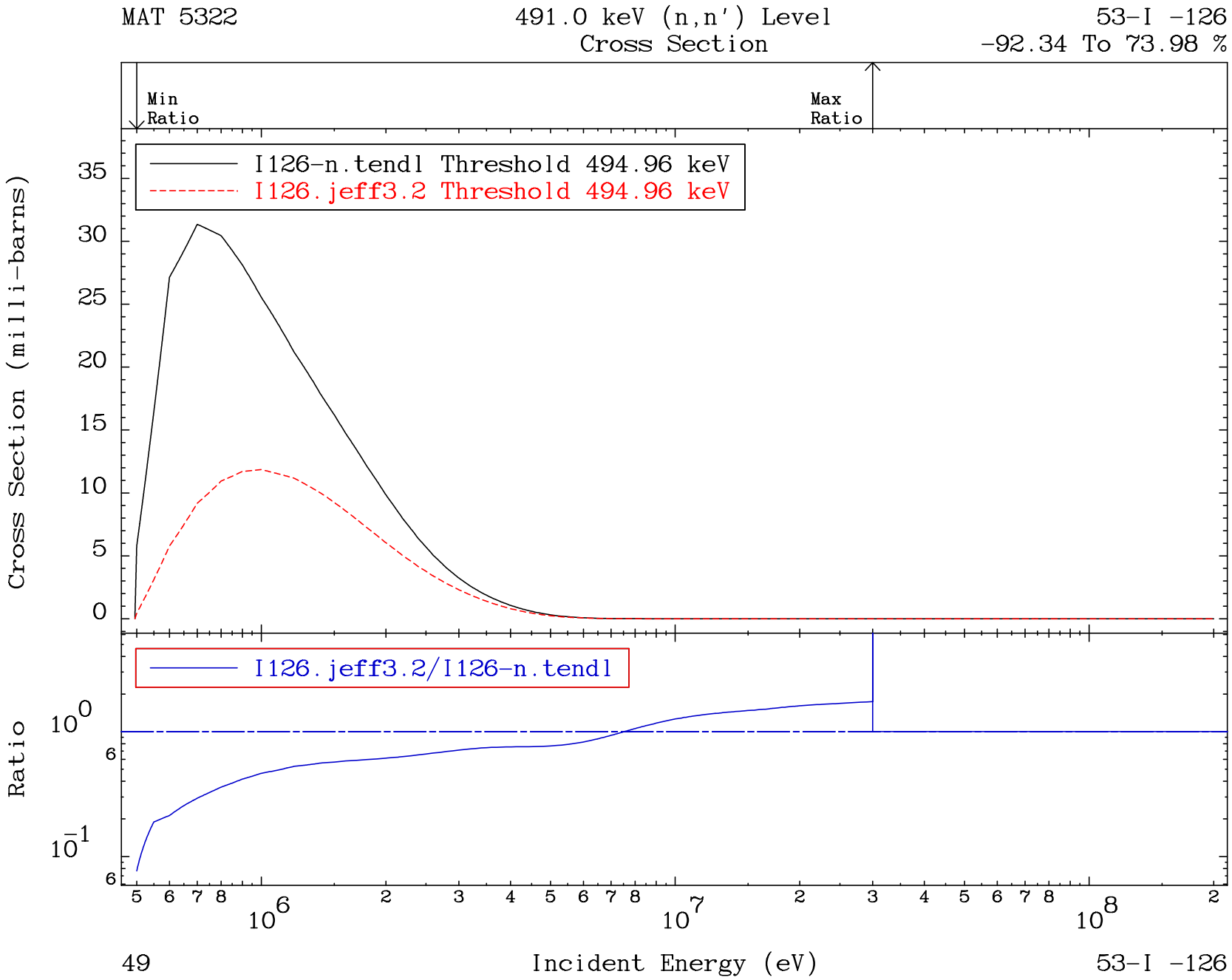

MAT 5322
434.2 keV (n,n') Level
Cross Section
53-I -126
0.000 To 150.3 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 437.70 keV
I126.jeff3.2 Threshold 437.70 keV
Cross Section (milli-barns)
30
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
2.5
2.0
1.5
1.0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
44
Incident Energy (eV)
53-I -126

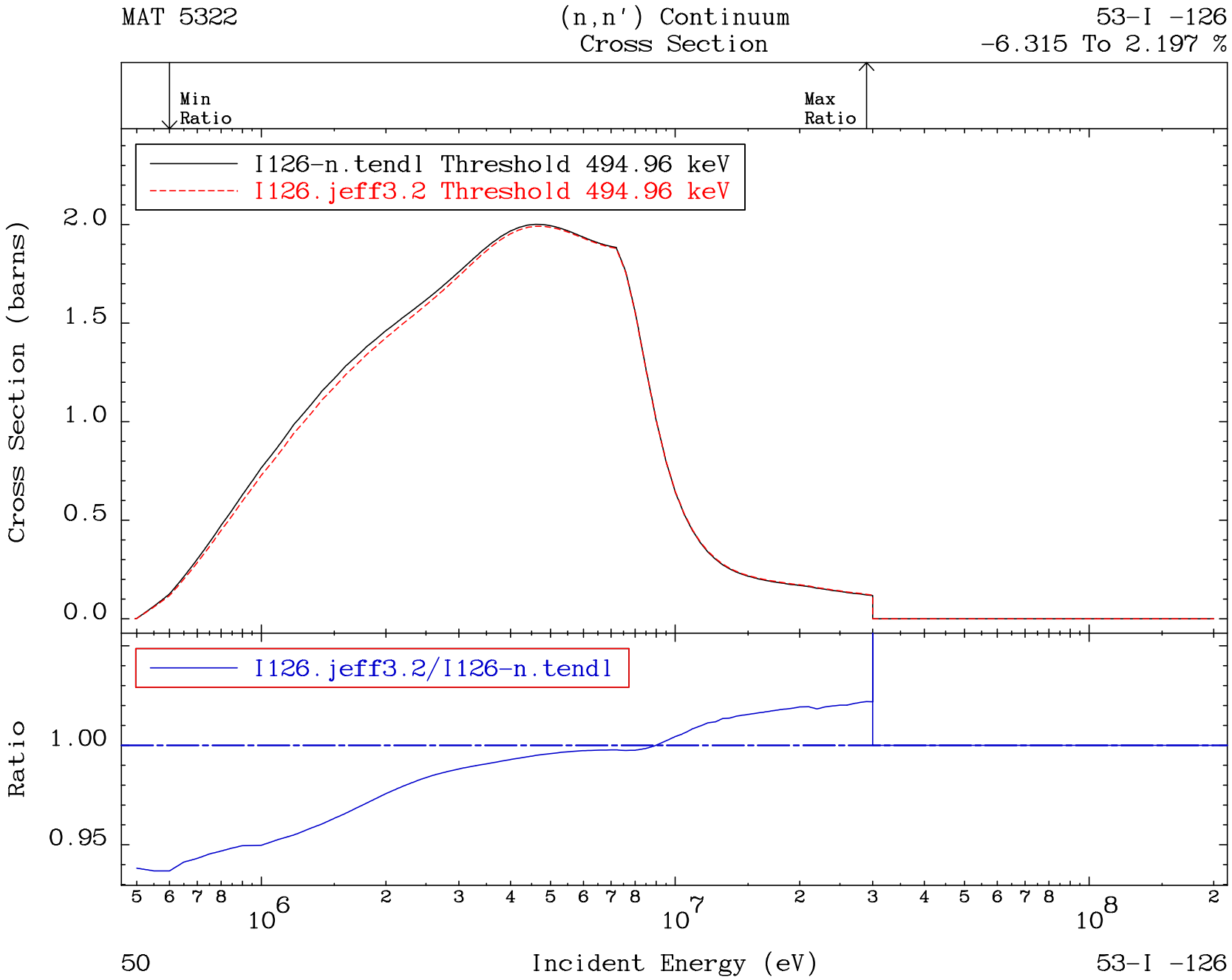

MAT 5322
448.0 keV (n,n') Level
Cross Section
53-I -126
-99.62 To 7.594 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 451.59 keV
I126.jeff3.2 Threshold 451.59 keV
Cross Section (milli-barns)
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-1
10^-2
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
45
Incident Energy (eV)
53-I -126

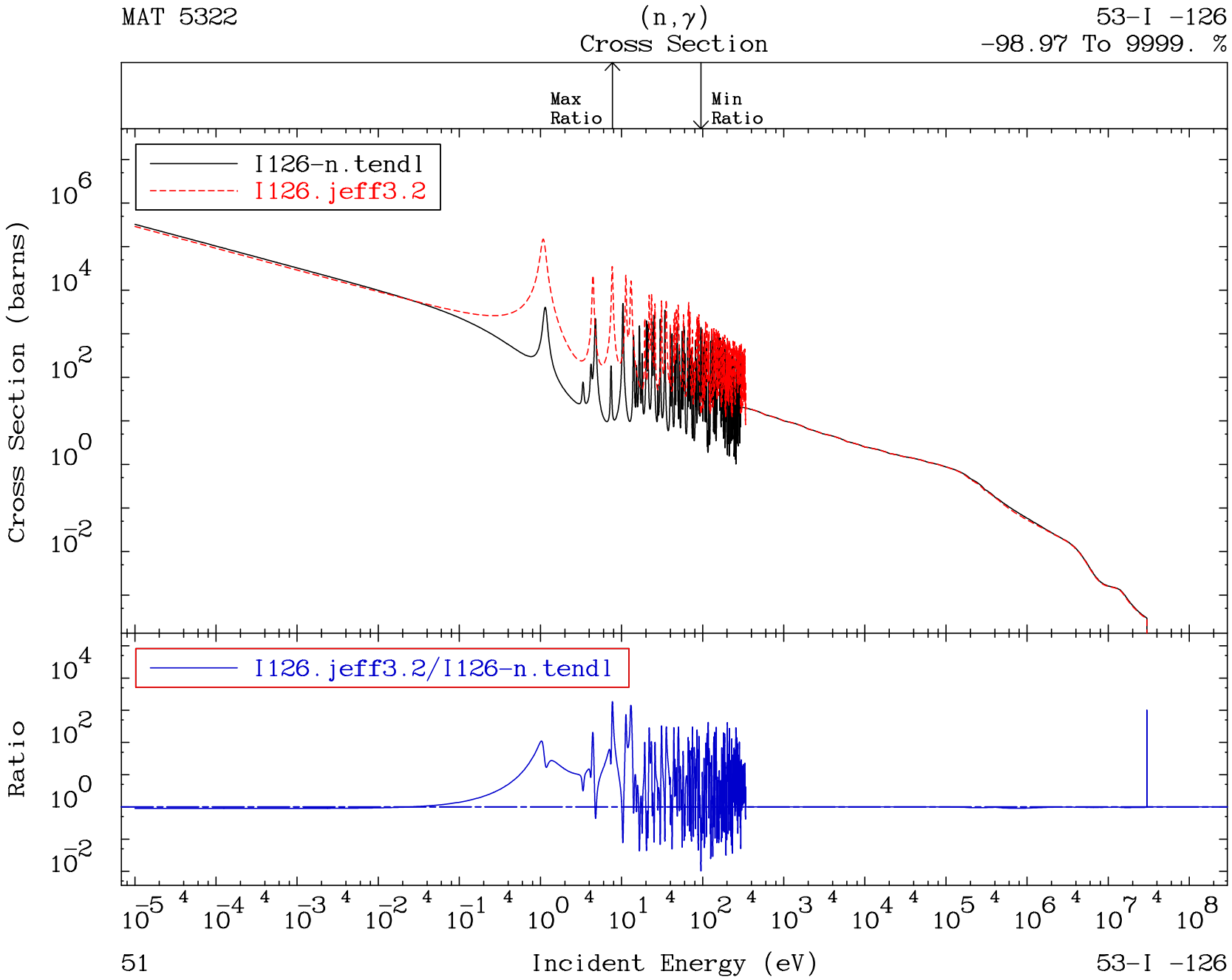

MAT 5322
458.0 keV (n,n') Level
Cross Section
53-I -126
0.000 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl Threshold 461.71 keV
I126.jeff3.2 Threshold 461.71 keV
Cross Section (milli-barns)
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
10^12
10^8
10^4
10^0
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
53-I -126

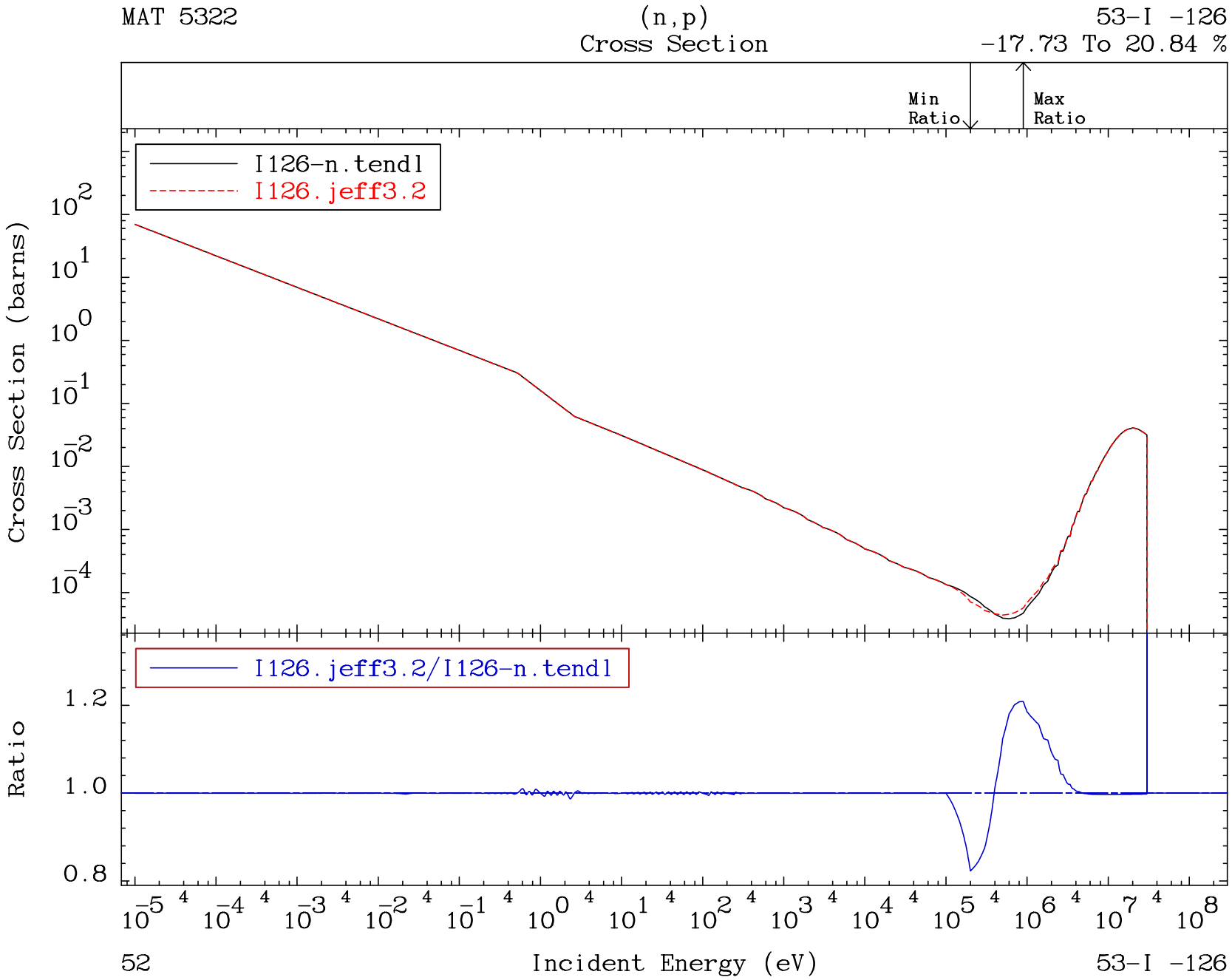

MAT 5322
465.0 keV (n,n') Level
Cross Section
53-I -126
-9.236 To 9999. %
Min Ratio
Max Ratio
I126-n.tendl Threshold 468.73 keV
I126.jeff3.2 Threshold 468.73 keV
Cross Section (milli-barns)
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
$10^{12}$
$10^{8}$
$10^{4}$
$10^{0}$
5 6 7 8 $10^{6}$ 2 3 4 5 6 7 8 $10^{7}$ 2 3 4 5 6 7 8 $10^{8}$ 2
47
Incident Energy (eV)
53-I -126

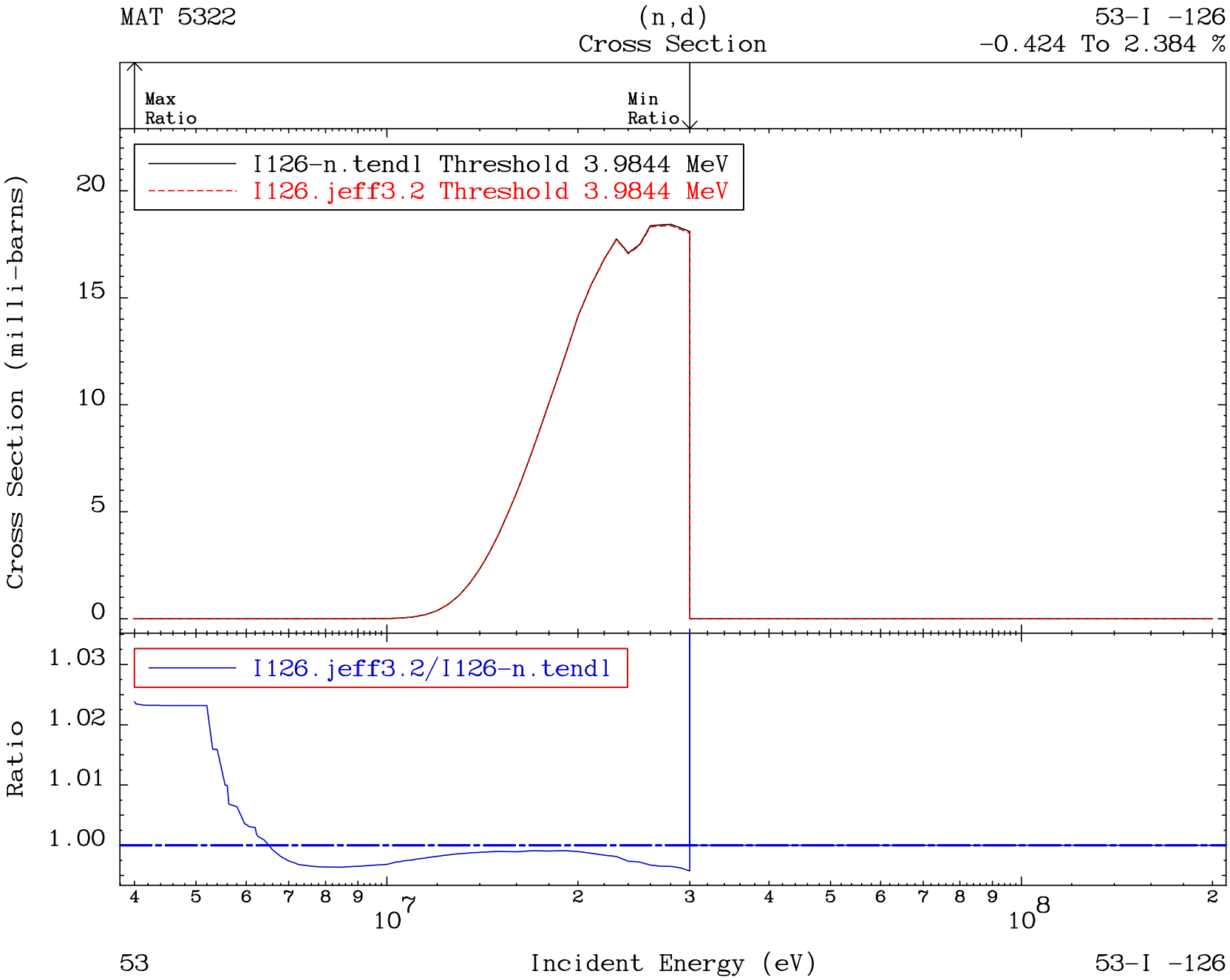

MAT 5322
479.0 keV (n,n') Level
Cross Section
53-I -126
-100.0 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 482.83 keV
I126.jeff3.2 Threshold 482.83 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-4
10^-8
10^-12
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
53-I -126

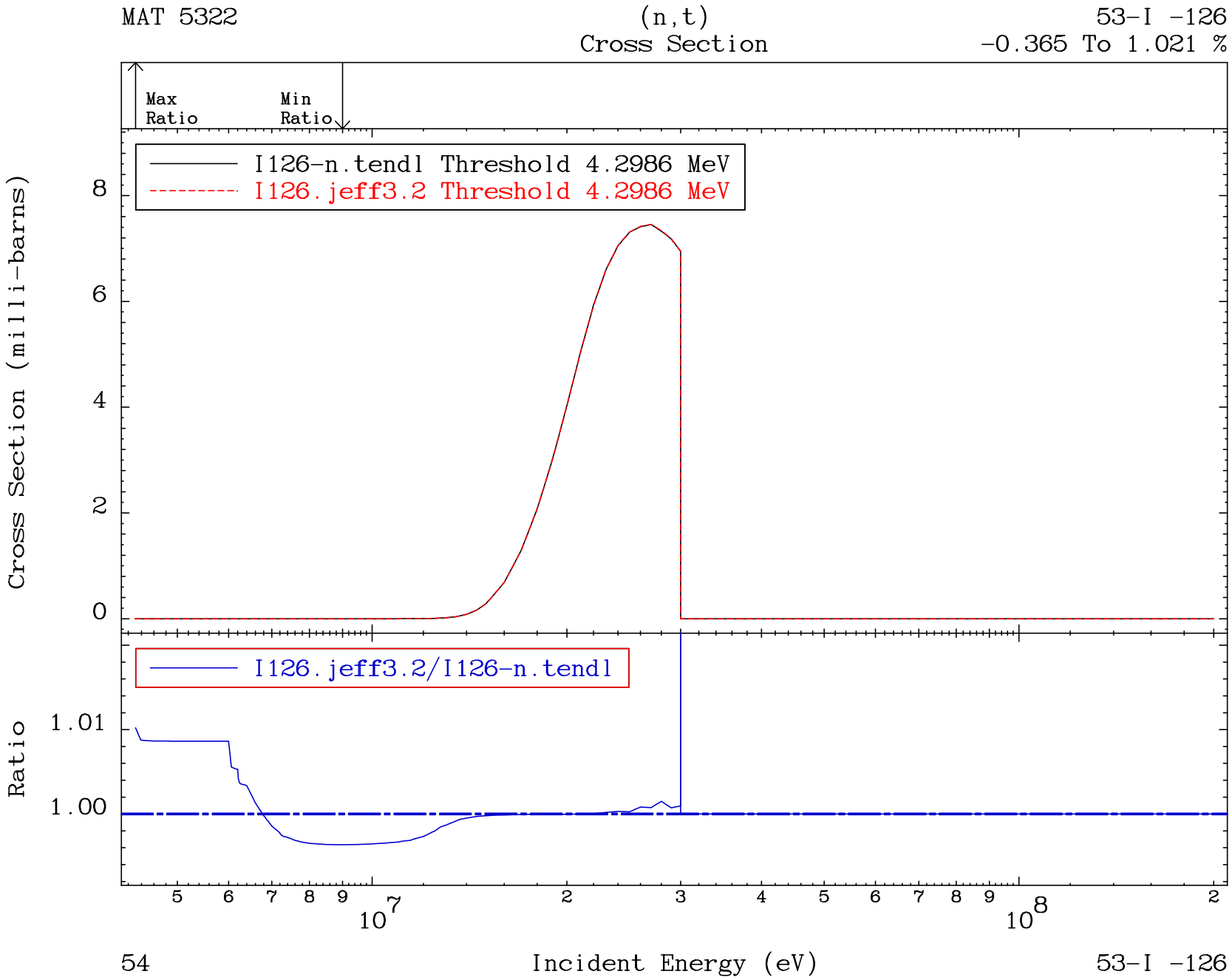

MAT 5322
491.0 keV (n,n') Level
Cross Section
53-I -126
-92.34 To 73.98 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 494.96 keV
I126.jeff3.2 Threshold 494.96 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
10^0
10^-1
6
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
49
Incident Energy (eV)
53-I -126

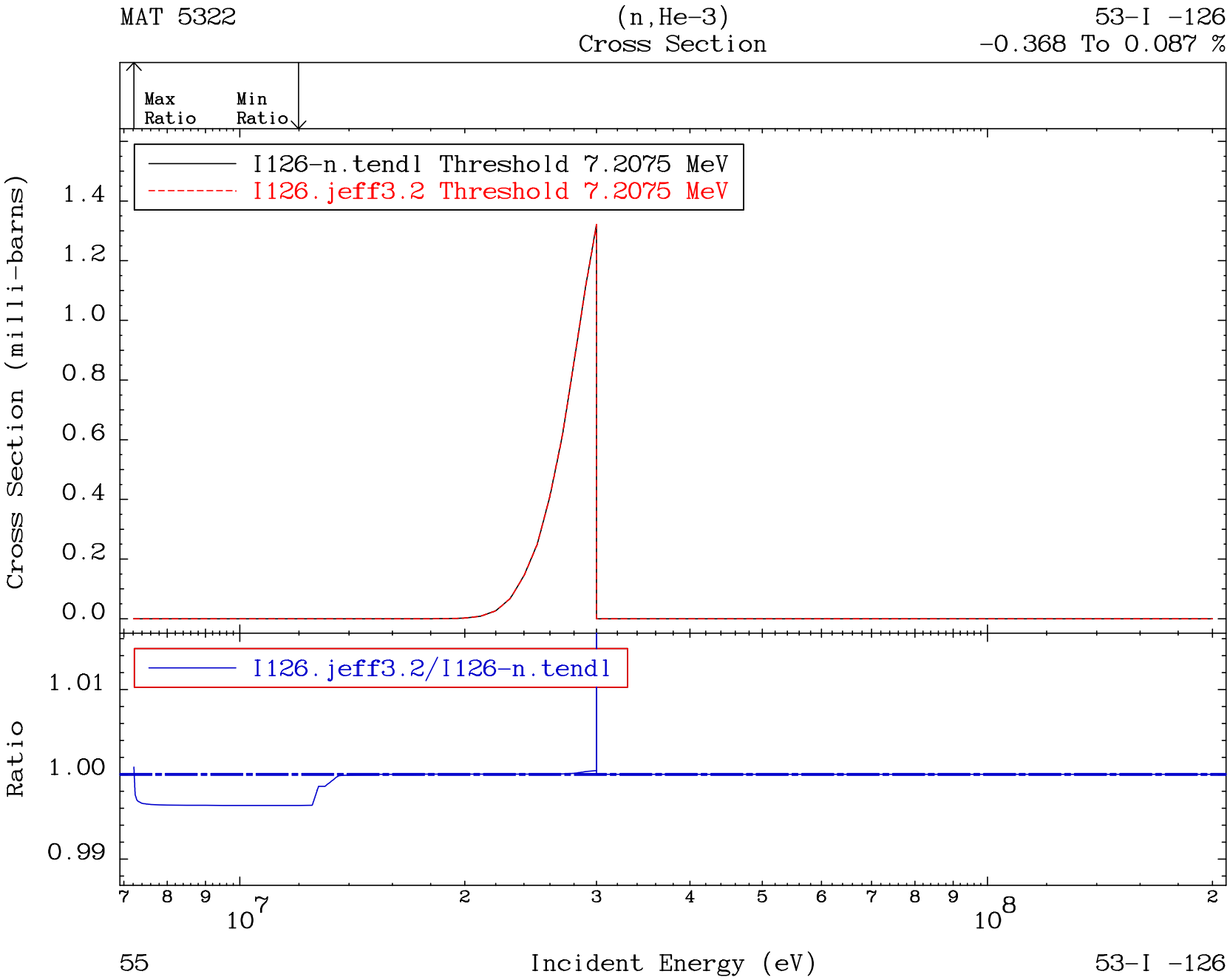

MAT 5322
(n,n') Continuum
Cross Section
53-I -126
-6.315 To 2.197 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 494.96 keV
I126.jeff3.2 Threshold 494.96 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.95
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
50
Incident Energy (eV)
53-I -126

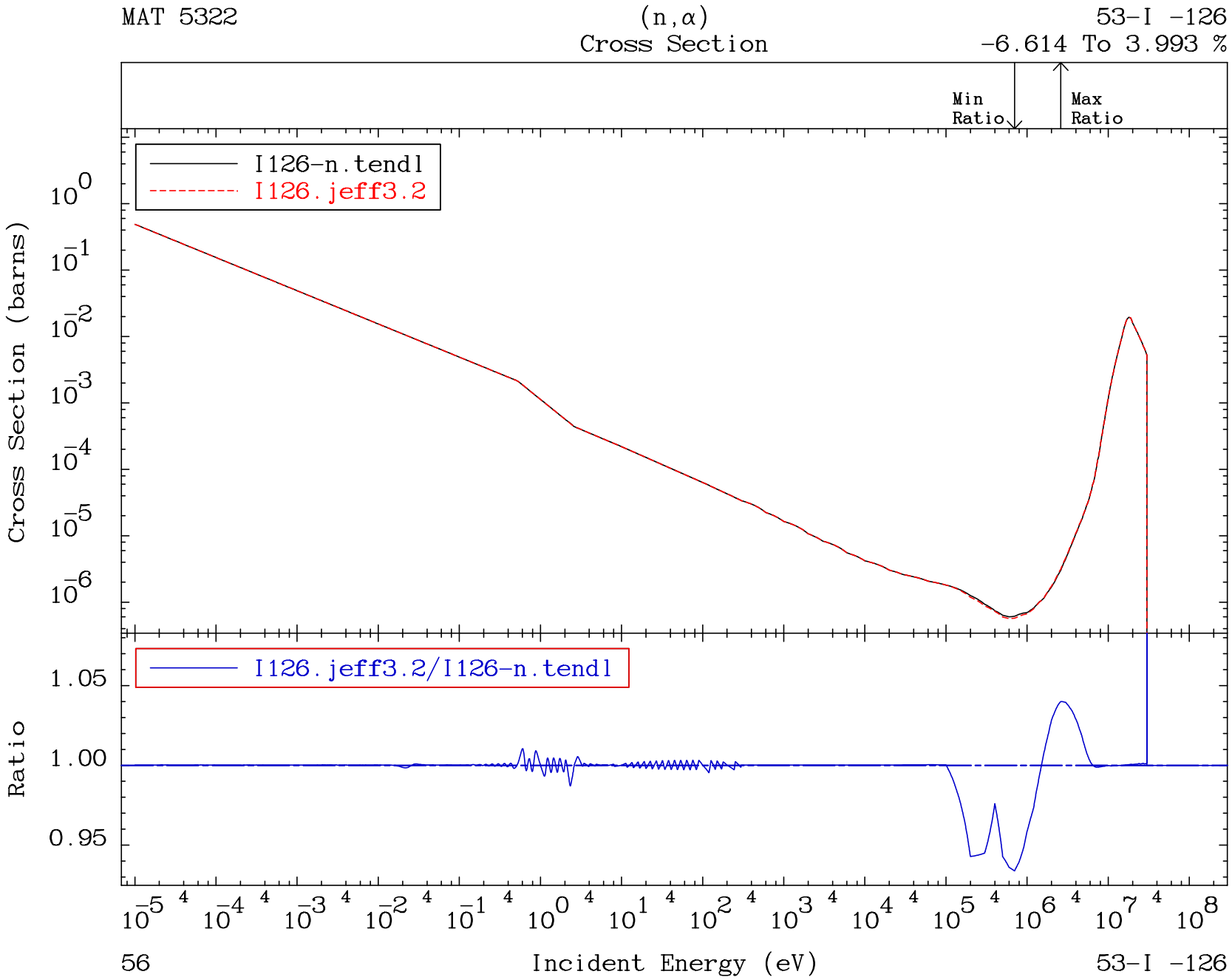

MAT 5322
(n,γ)
Cross Section
53-I -126
-98.97 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
51
53-I -126

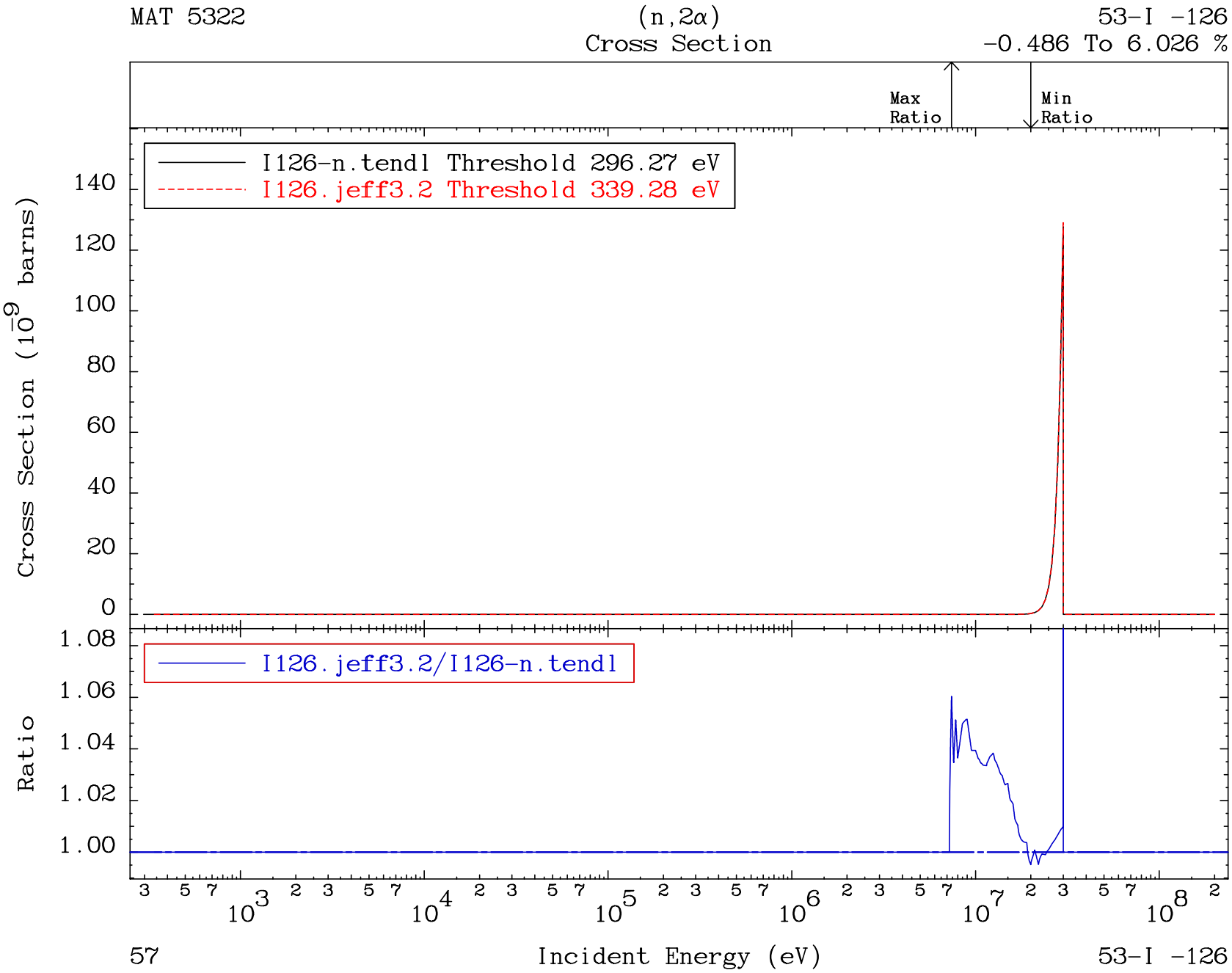

MAT 5322
(n,p)
Cross Section
53-I -126
-17.73 To 20.84 %
Min Ratio
Max Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
52
53-I -126

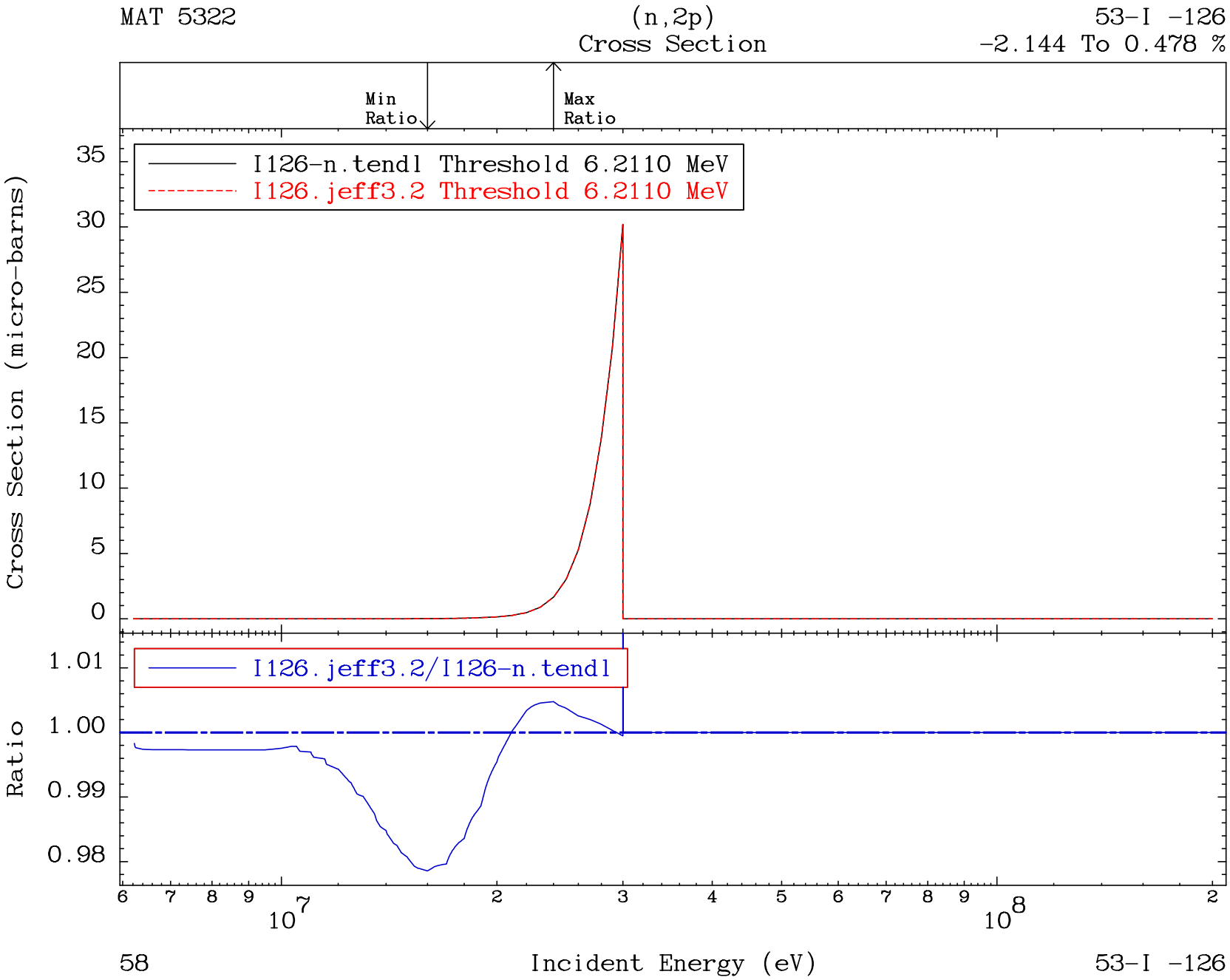

MAT 5322
(n,d)
Cross Section
53-I -126
-0.424 To 2.384 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 3.9844 MeV
I126.jeff3.2 Threshold 3.9844 MeV
Cross Section (milli-barns)
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
1.03
1.02
1.01
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
53
Incident Energy (eV)
53-I -126

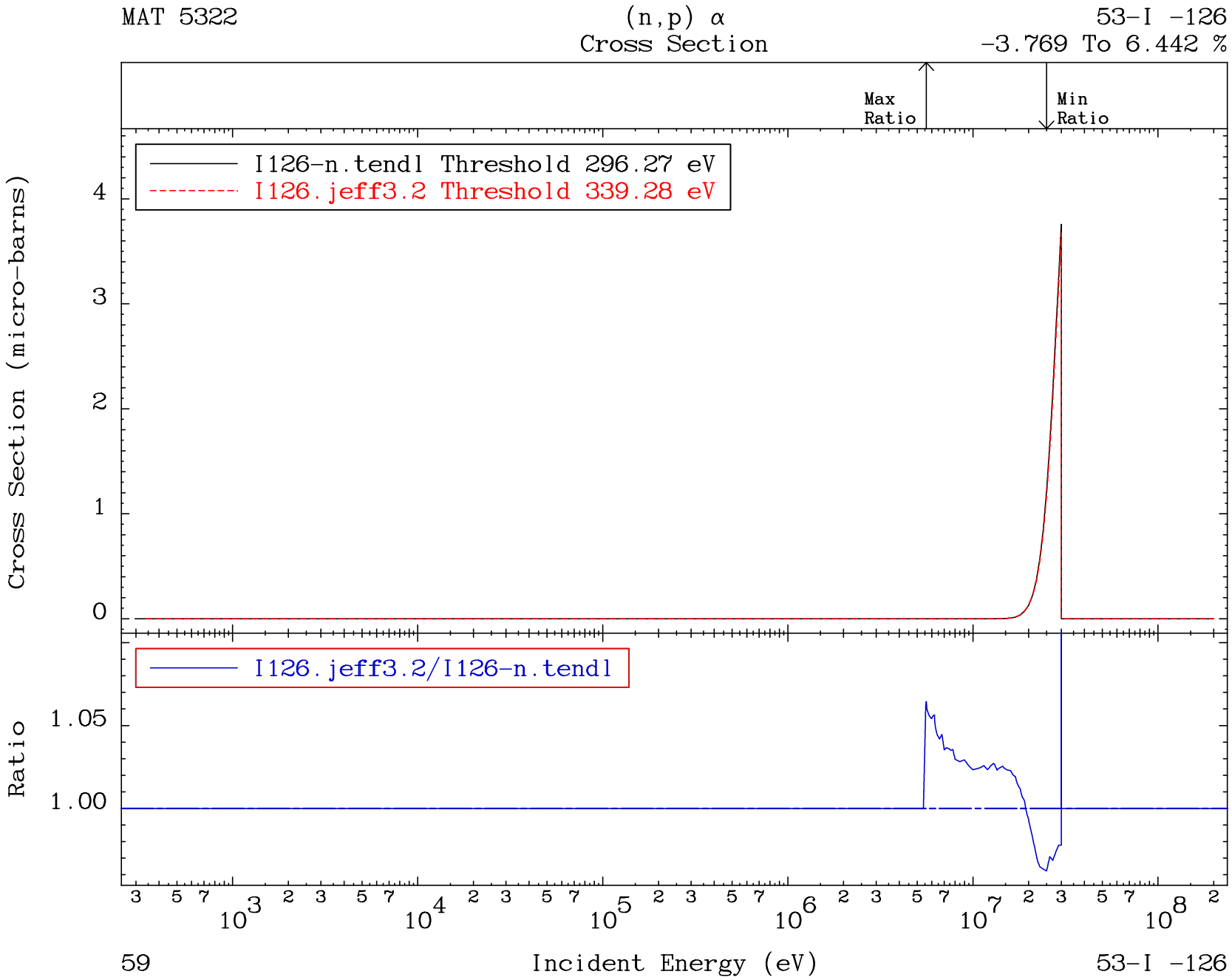

MAT 5322
(n,t)
Cross Section
53-I -126
-0.365 To 1.021 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 4.2986 MeV
I126.jeff3.2 Threshold 4.2986 MeV
Cross Section (milli-barns)
0
2
4
6
8
I126.jeff3.2/I126-n.tendl
Ratio
1.00
1.01
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
54
Incident Energy (eV)
53-I -126

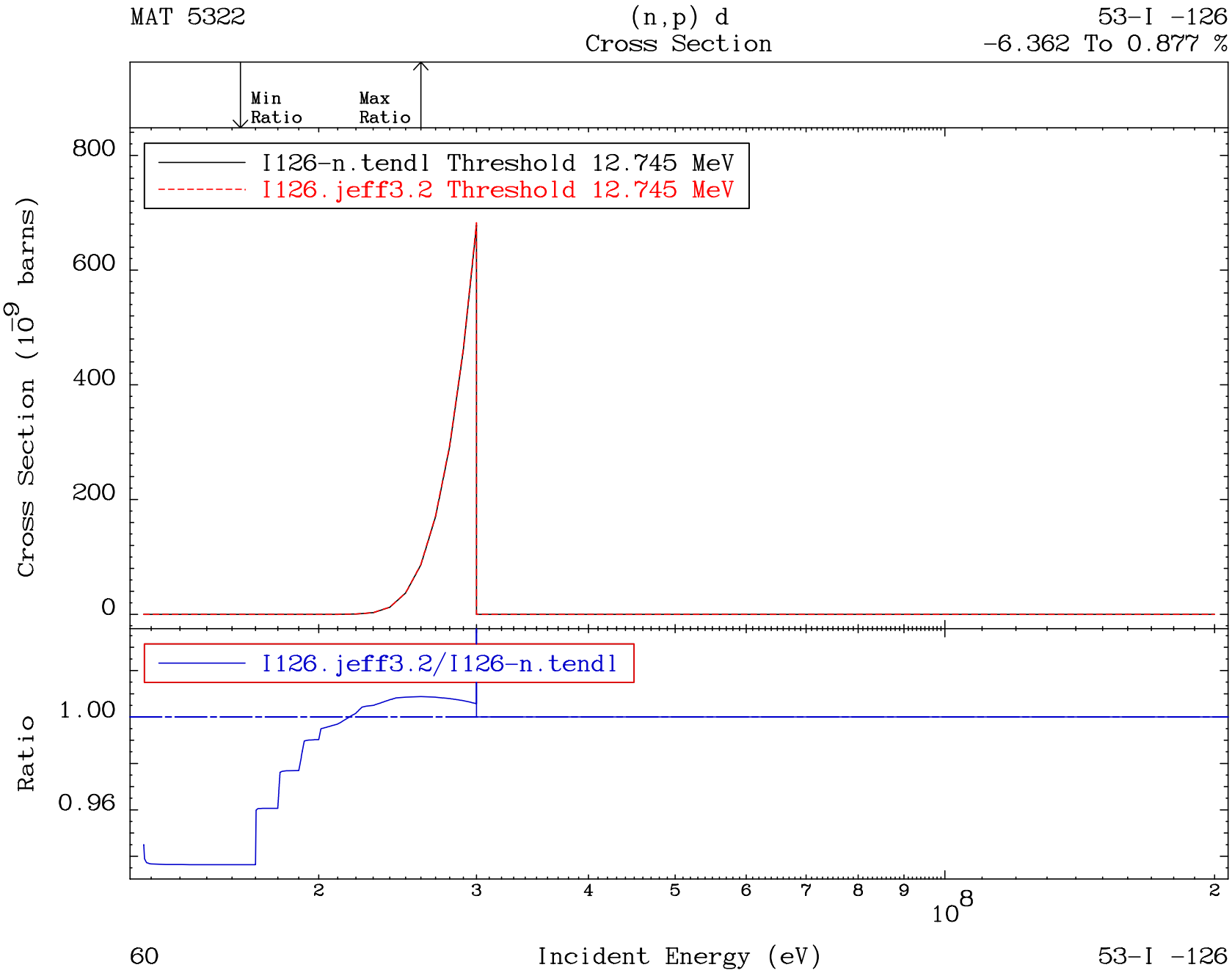

MAT 5322
(n,He-3)
Cross Section
53-I -126
-0.368 To 0.087 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 7.2075 MeV
I126.jeff3.2 Threshold 7.2075 MeV
Cross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
55
Incident Energy (eV)
53-I -126

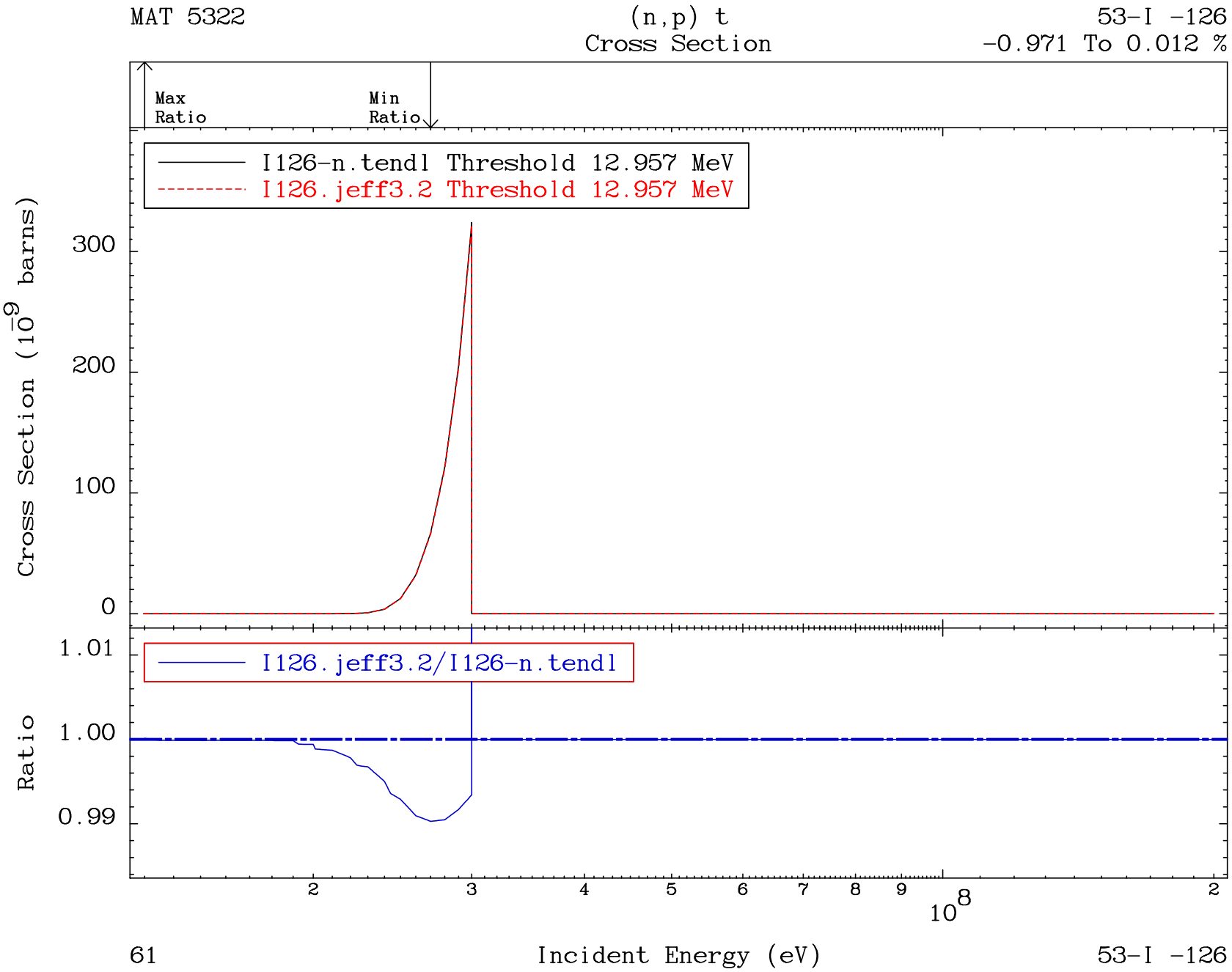

MAT 5322
(n,α)
Cross Section
53-I -126
-6.614 To 3.993 %
Min Ratio
Max Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
56
53-I -126

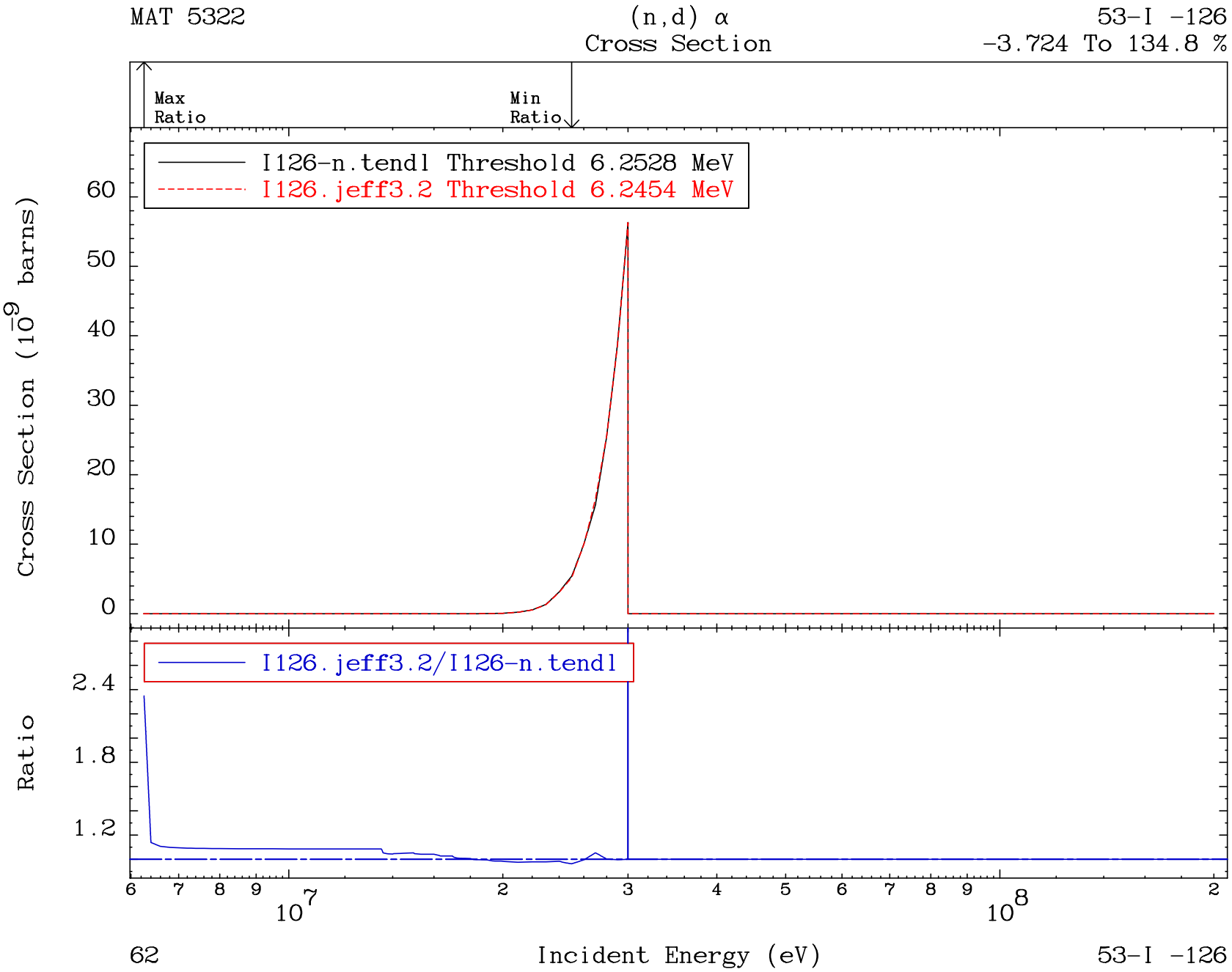

MAT 5322
(n,2α)
Cross Section
53-I -126
-0.486 To 6.026 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 296.27 eV
I126.jeff3.2 Threshold 339.28 eV
Cross Section ($10^{-9}$ barns)
140
120
100
80
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
1.08
1.06
1.04
1.02
1.00
3 5 7 $10^3$ 2 3 5 7 $10^4$ 2 3 5 7 $10^5$ 2 3 5 7 $10^6$ 2 3 5 7 $10^7$ 2 3 5 7 $10^8$ 2
57
Incident Energy (eV)
53-I -126

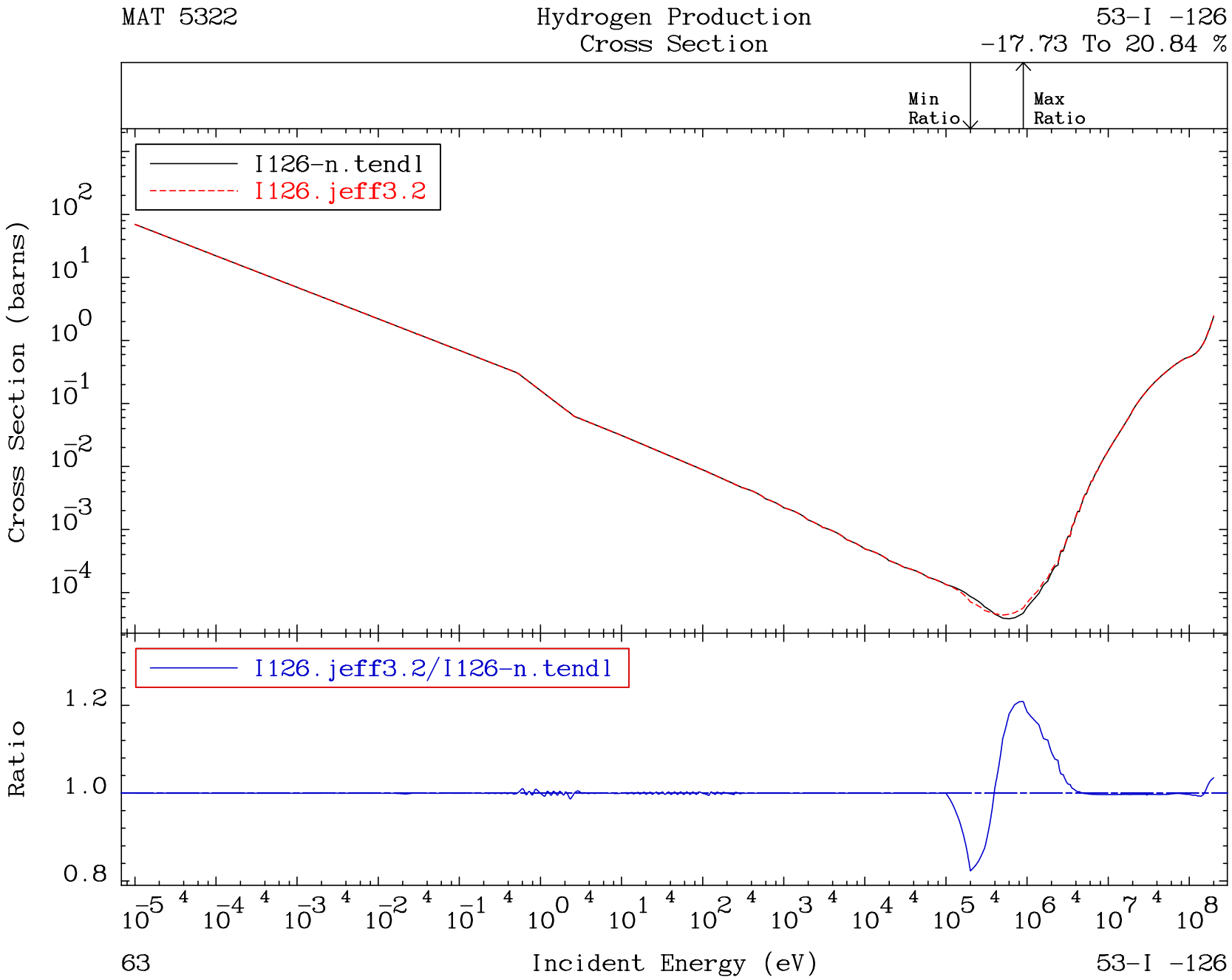

MAT 5322
(n,2p)
Cross Section
53-I -126
-2.144 To 0.478 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 6.2110 MeV
I126.jeff3.2 Threshold 6.2110 MeV
Cross Section (micro-barns)
35
30
25
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
0.98
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
58
Incident Energy (eV)
53-I -126

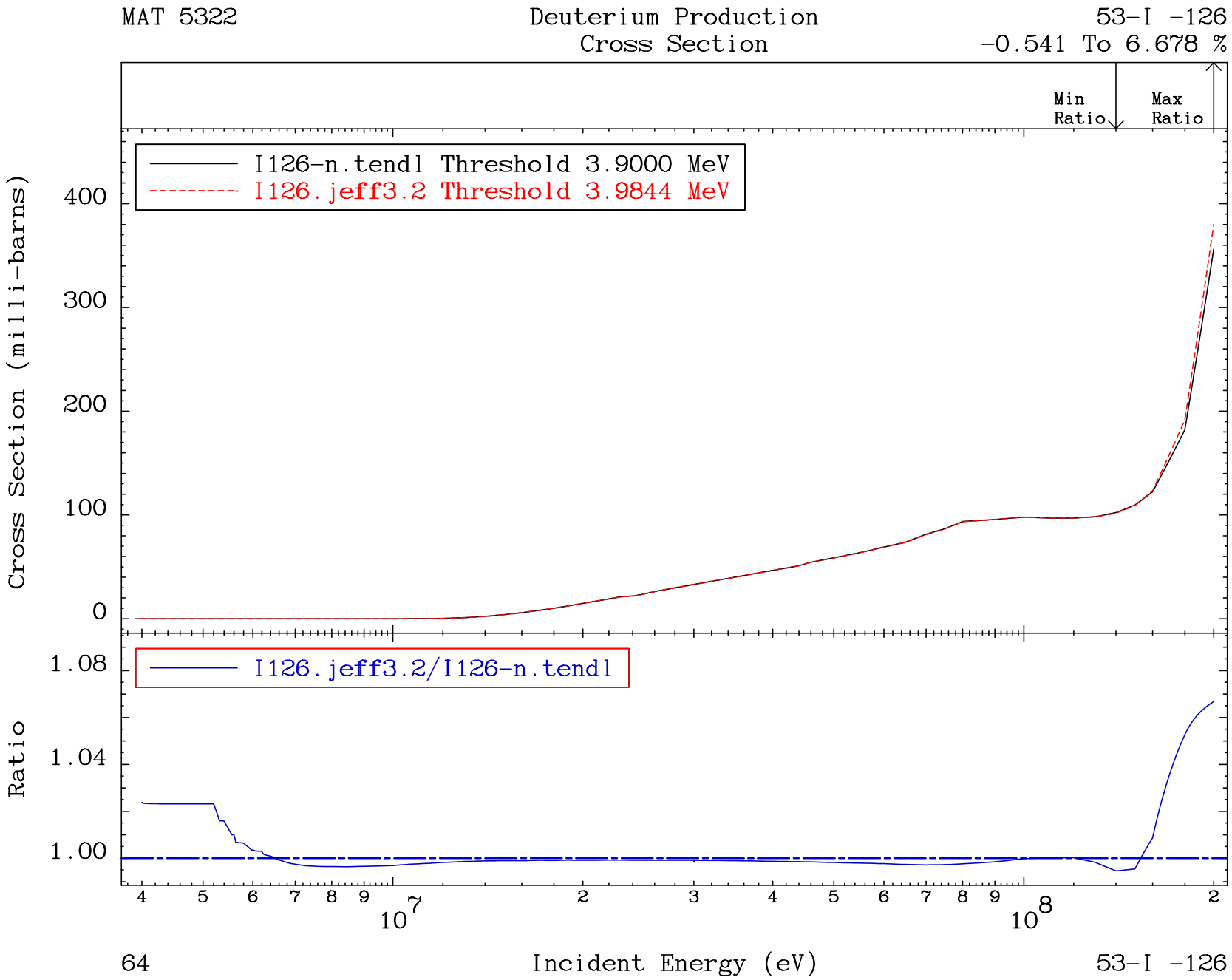

MAT 5322
(n,p) α
Cross Section
53-I -126
-3.769 To 6.442 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 296.27 eV
I126.jeff3.2 Threshold 339.28 eV
Cross Section (micro-barns)
0
1
2
3
4
I126.jeff3.2/I126-n.tendl
Ratio
1.00
1.05
10^3
10^4
10^5
10^6
10^7
10^8
59
Incident Energy (eV)
53-I -126

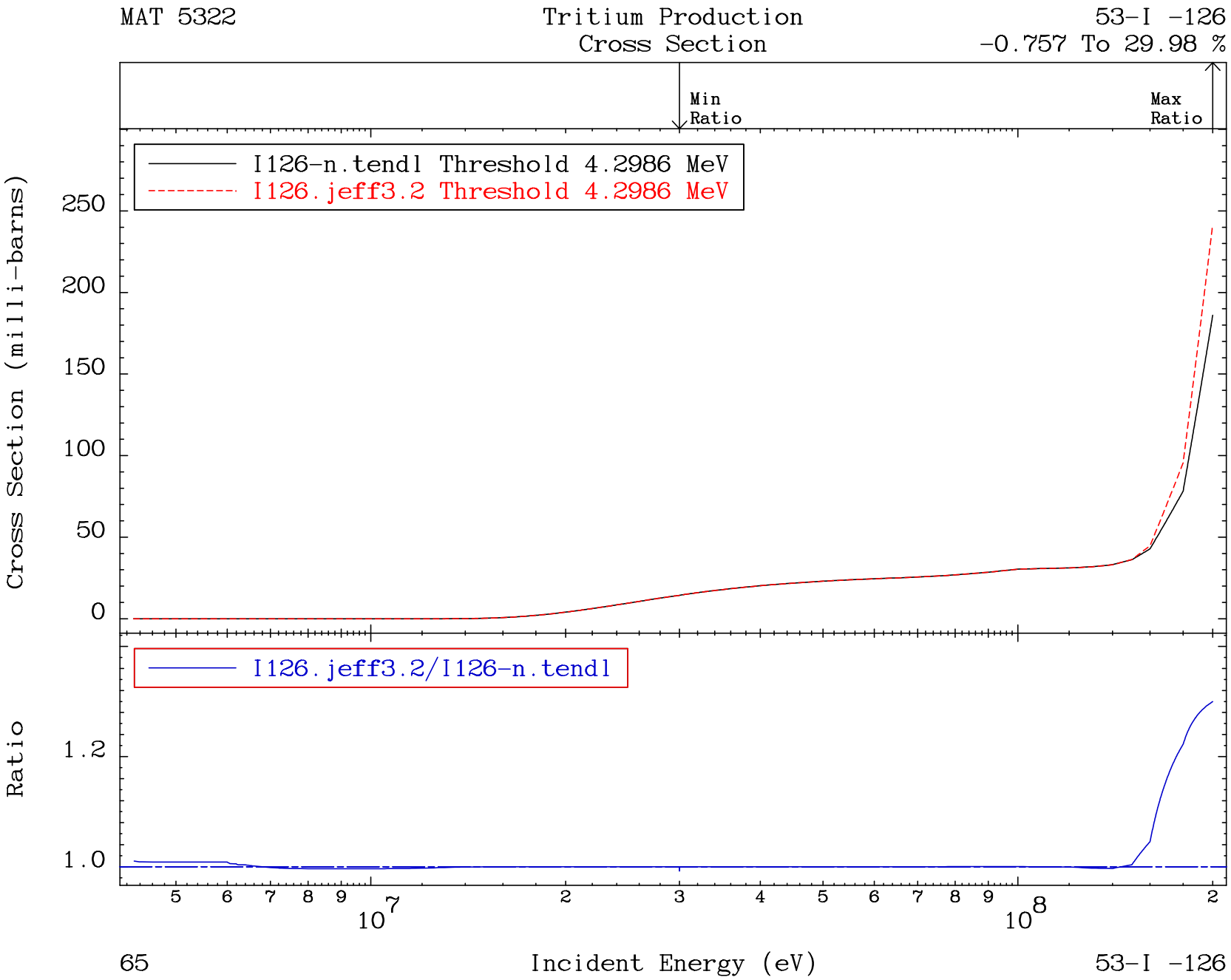

MAT 5322
(n,p) d
Cross Section
53-I -126
-6.362 To 0.877 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 12.745 MeV
I126.jeff3.2 Threshold 12.745 MeV
Cross Section (10-9 barns)
800
600
400
200
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.96
2
3
4
5
6
7
8
9
10 8
2
60
Incident Energy (eV)
53-I -126

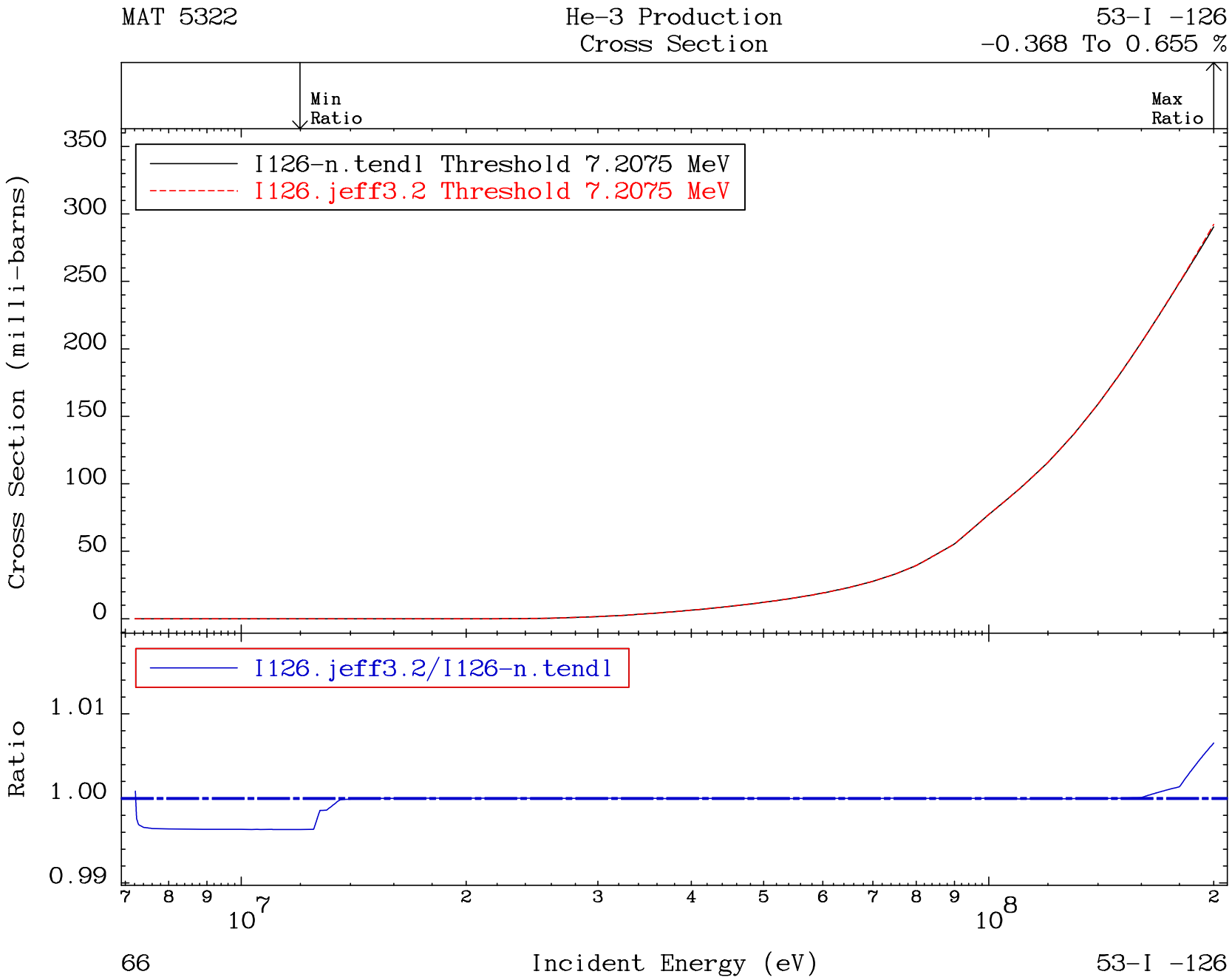

MAT 5322
(n,p) t
Cross Section
53-I -126
-0.971 To 0.012 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 12.957 MeV
I126.jeff3.2 Threshold 12.957 MeV
Cross Section ($10^{-9}$ barns)
300
200
100
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
2
3
4
5
6
7
8
9
$10^8$
2
61
Incident Energy (eV)
53-I -126

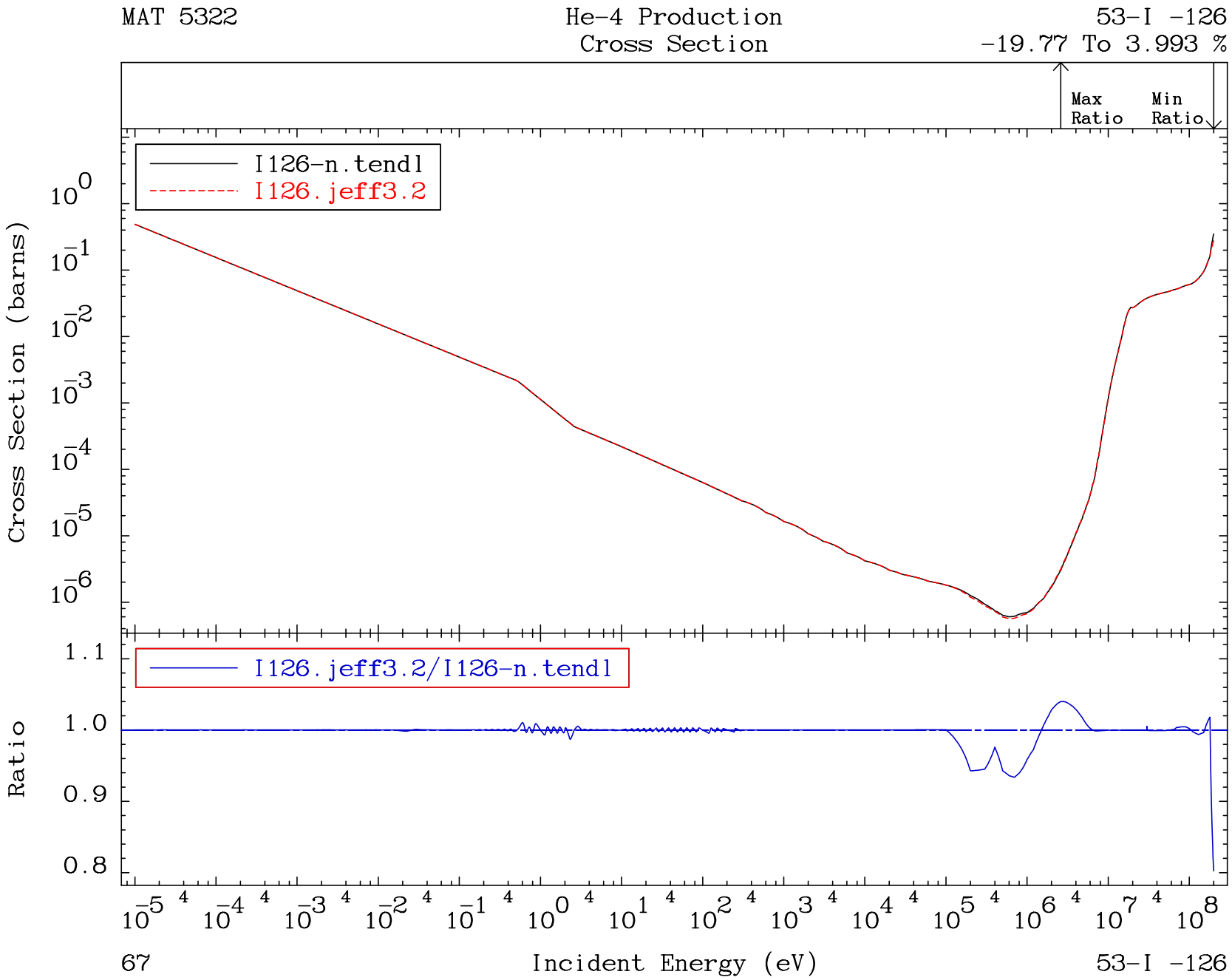

MAT 5322
(n,d) α
Cross Section
53-I -126
-3.724 To 134.8 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 6.2528 MeV
I126.jeff3.2 Threshold 6.2454 MeV
Cross Section (10^-9 barns)
60
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
2.4
1.8
1.2
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
62
Incident Energy (eV)
53-I -126

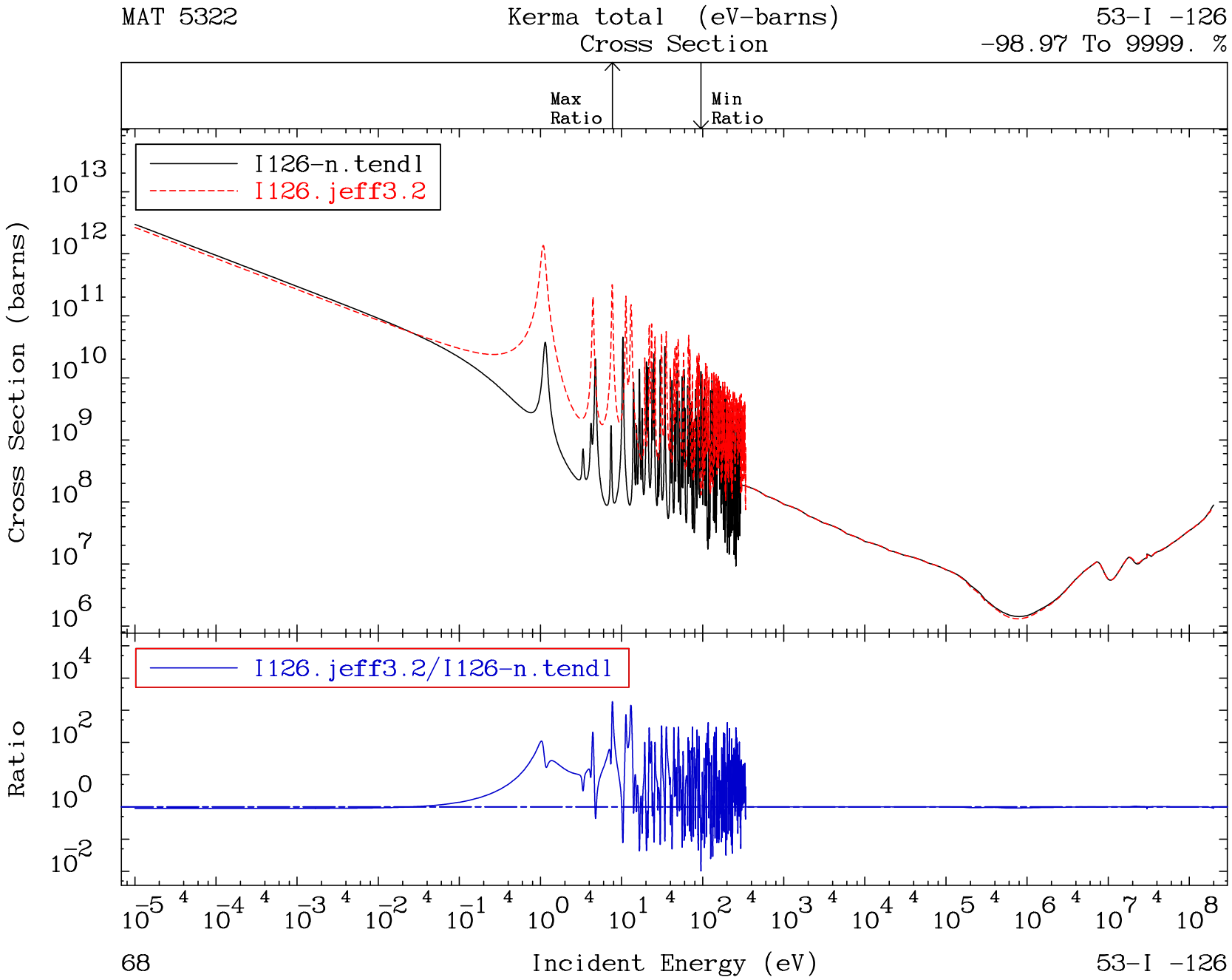

MAT 5322
Hydrogen Production
Cross Section
53-I -126
-17.73 To 20.84 %
Min Ratio
Max Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
63
53-I -126

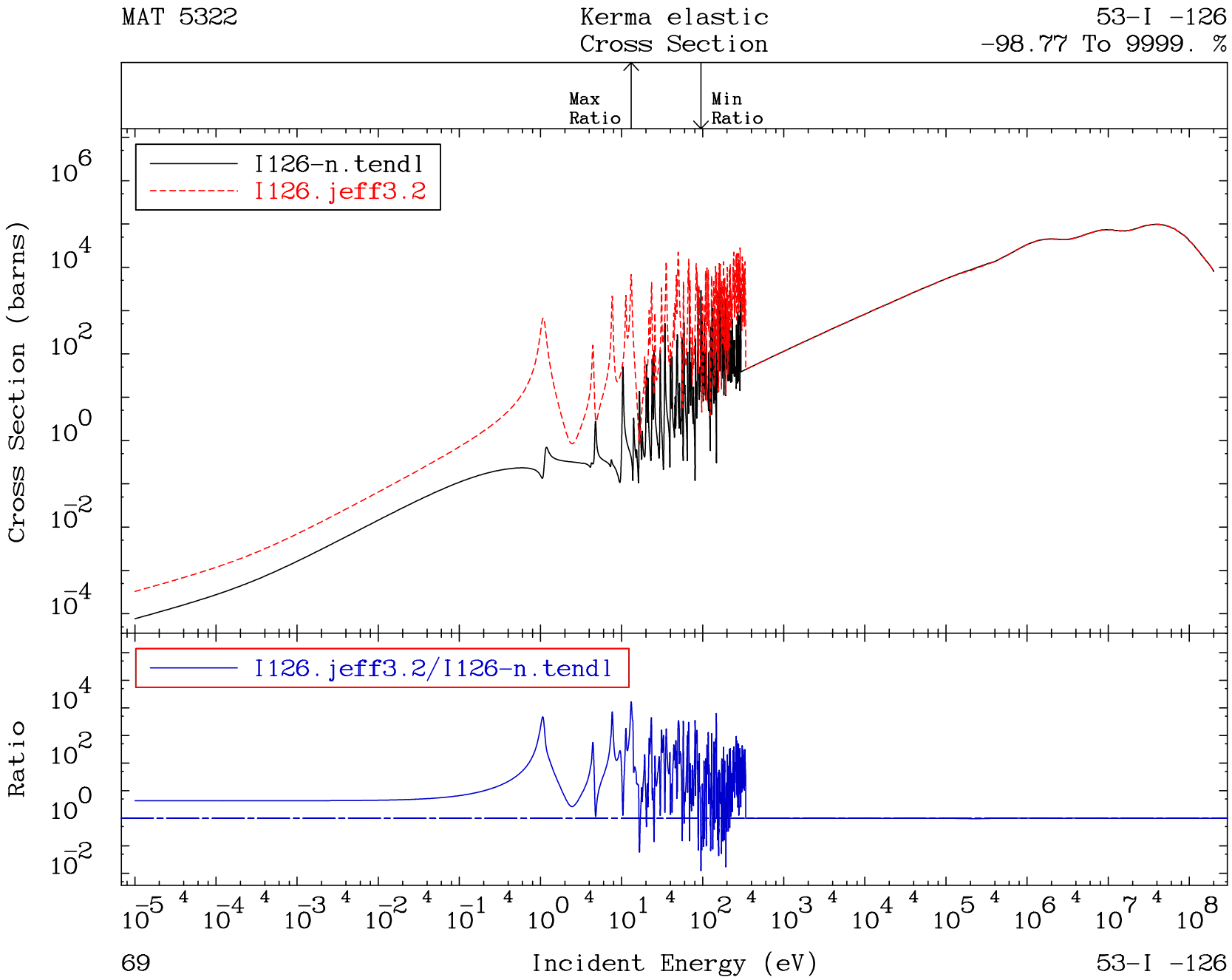

MAT 5322
Deuterium Production
Cross Section
53-I -126
-0.541 To 6.678 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 3.9000 MeV
I126.jeff3.2 Threshold 3.9844 MeV
Cross Section (milli-barns)
400
300
200
100
0
I126.jeff3.2/I126-n.tendl
Ratio
1.08
1.04
1.00
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
64
Incident Energy (eV)
53-I -126

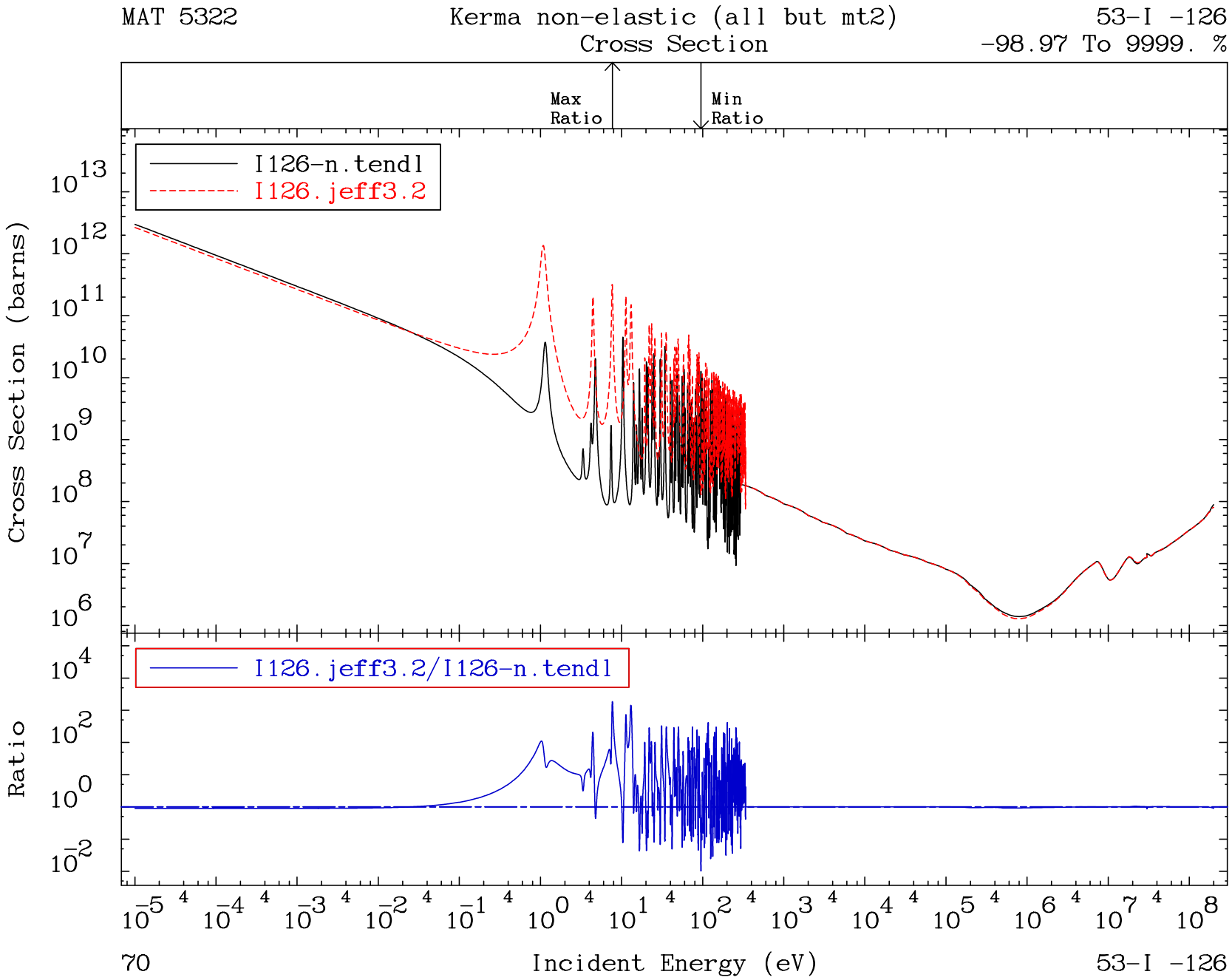

MAT 5322
Tritium Production
Cross Section
53-I -126
-0.757 To 29.98 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 4.2986 MeV
I126.jeff3.2 Threshold 4.2986 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.2
1.0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
65
Incident Energy (eV)
53-I -126

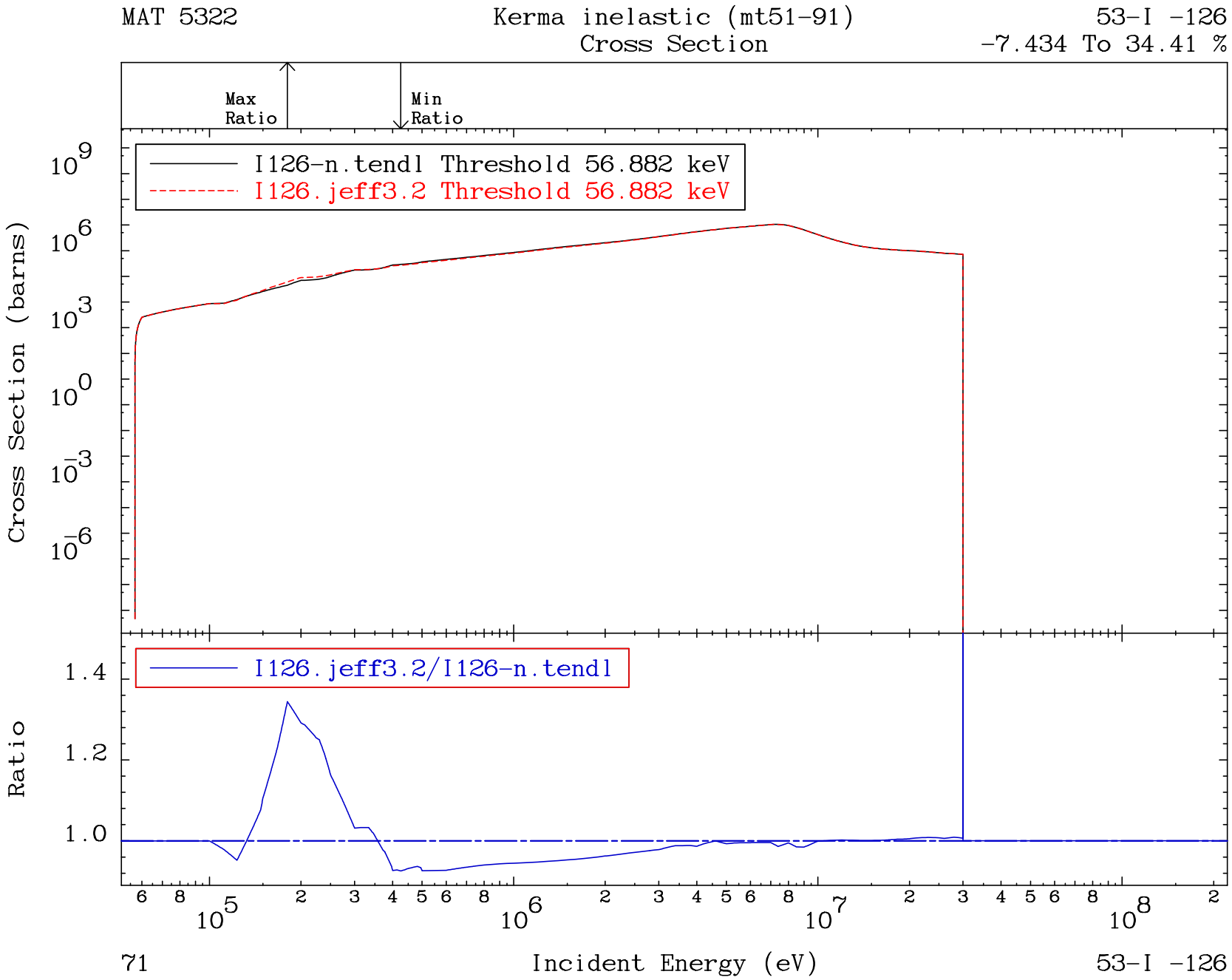

MAT 5322
He-3 Production
Cross Section
53-I -126
-0.368 To 0.655 %
Min
Ratio
Max
Ratio
I126-n.tendl Threshold 7.2075 MeV
I126.jeff3.2 Threshold 7.2075 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
66
Incident Energy (eV)
53-I -126

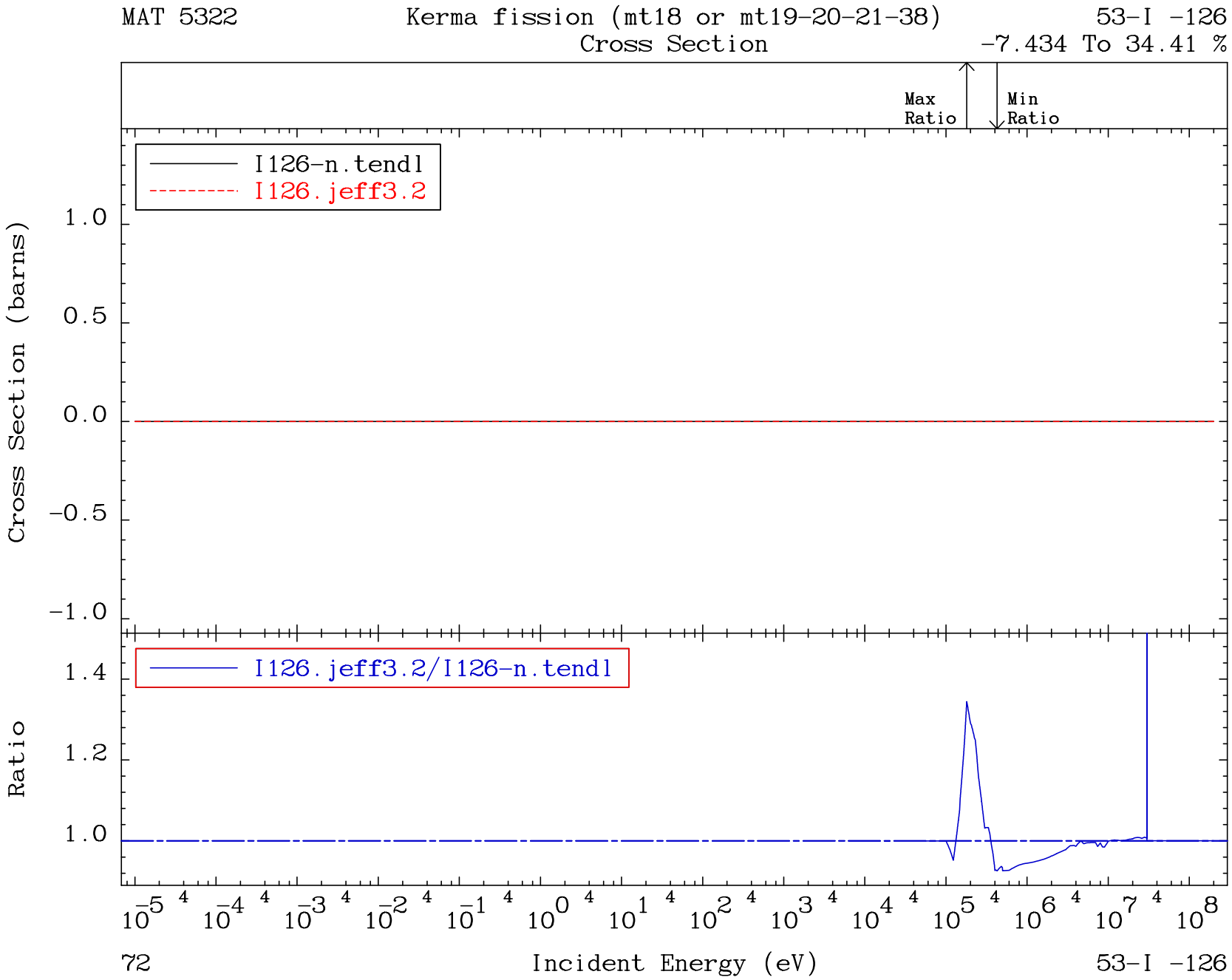

MAT 5322
He-4 Production
Cross Section
53-I -126
-19.77 To 3.993 %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
67
53-I -126

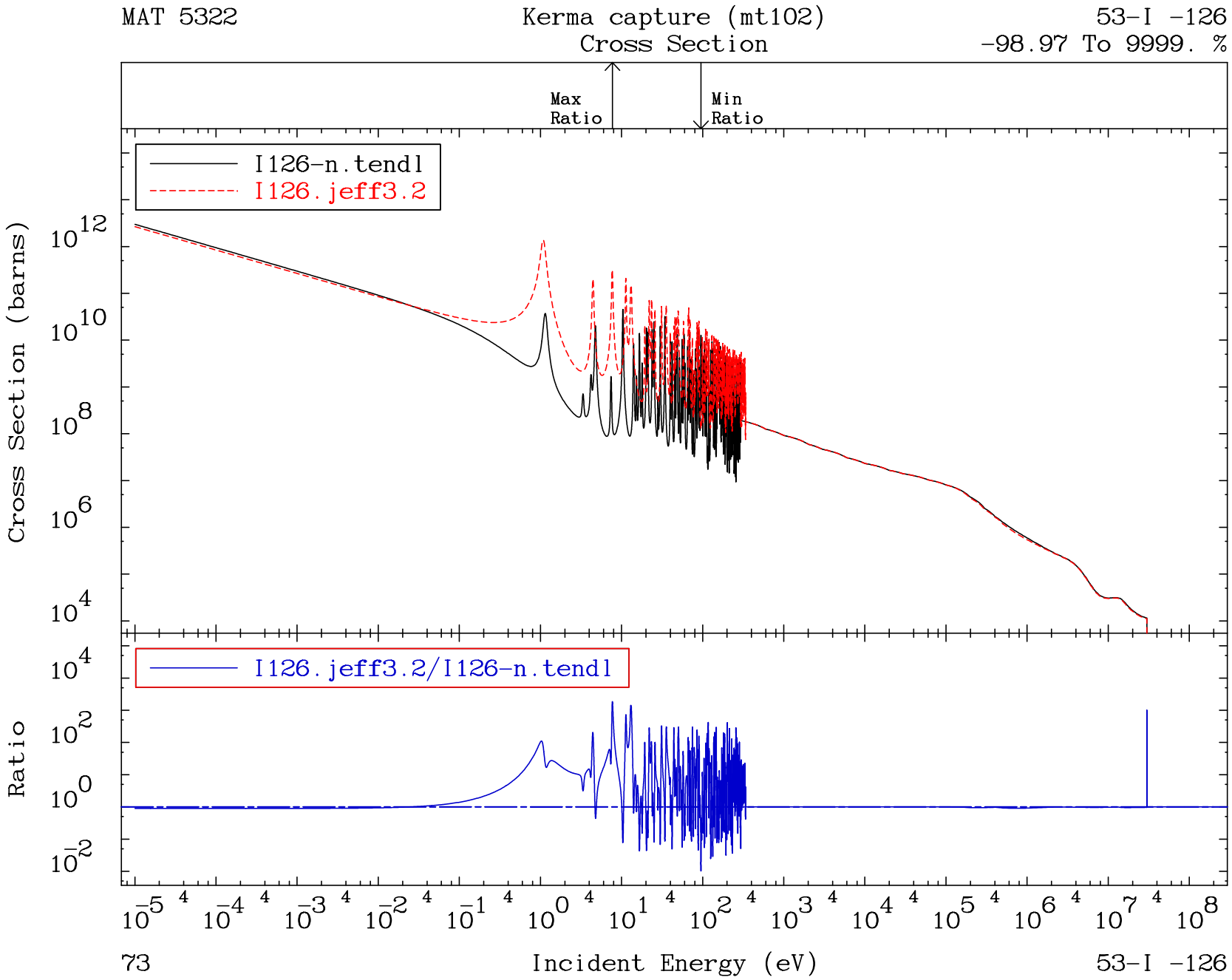

MAT 5322
Kerma total (eV-barns)
Cross Section
53-I -126
-98.97 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
68
53-I -126

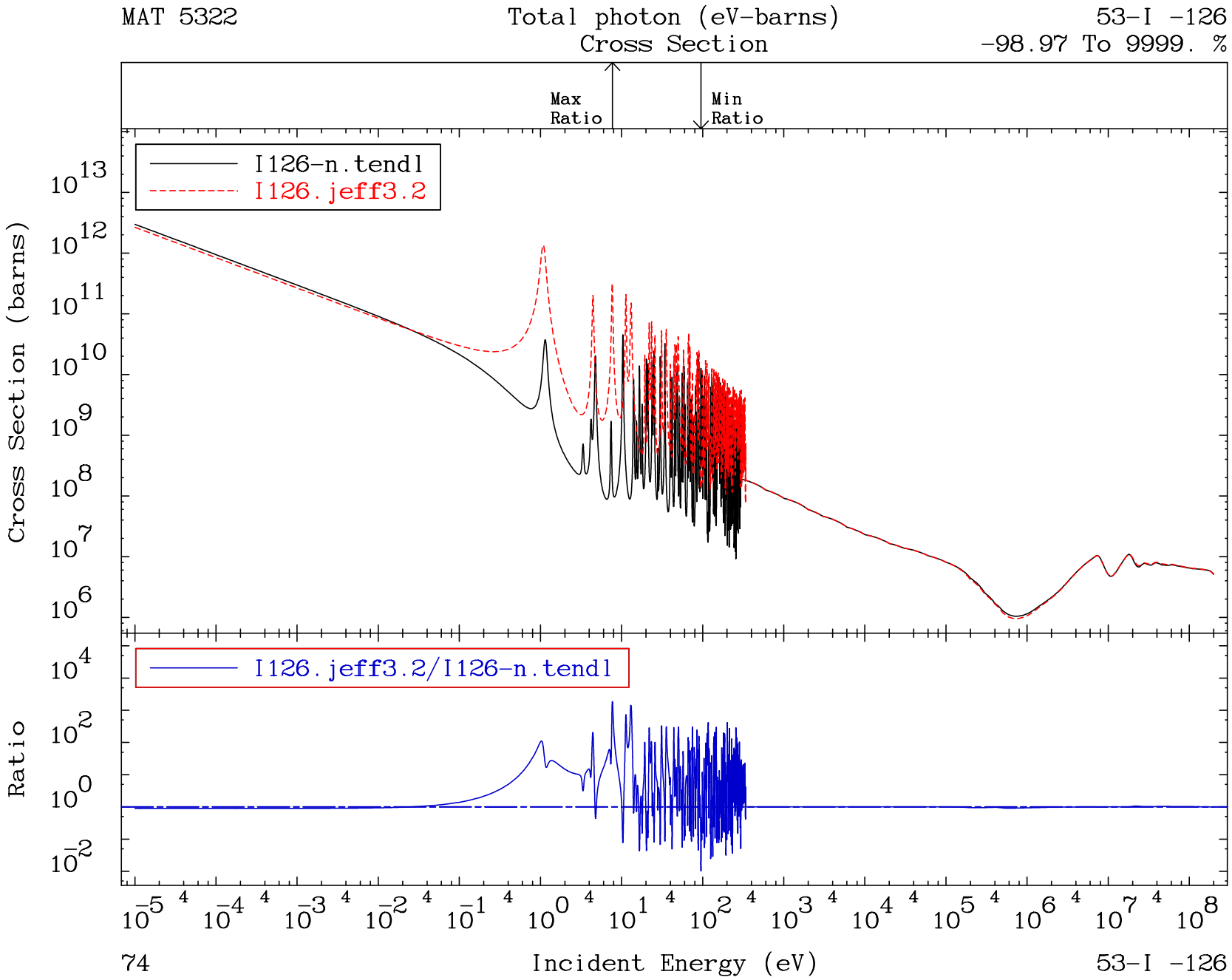

MAT 5322
Kerma elastic
Cross Section
53-I -126
-98.77 To 9999. %
Max
Ratio
Min
Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
69
53-I -126

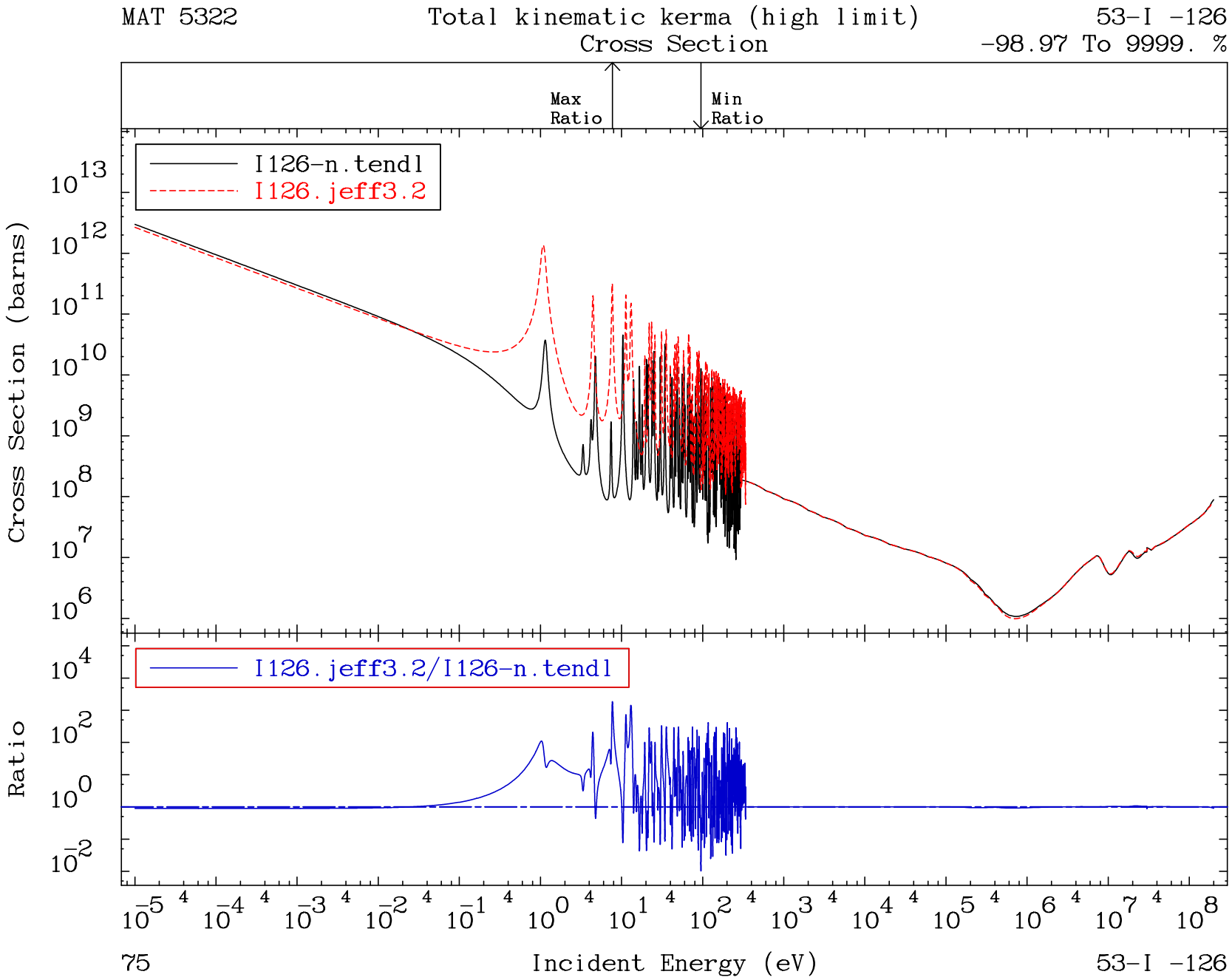

MAT 5322
Kerma non-elastic (all but mt2)
Cross Section
53-I -126
-98.97 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
70
53-I -126

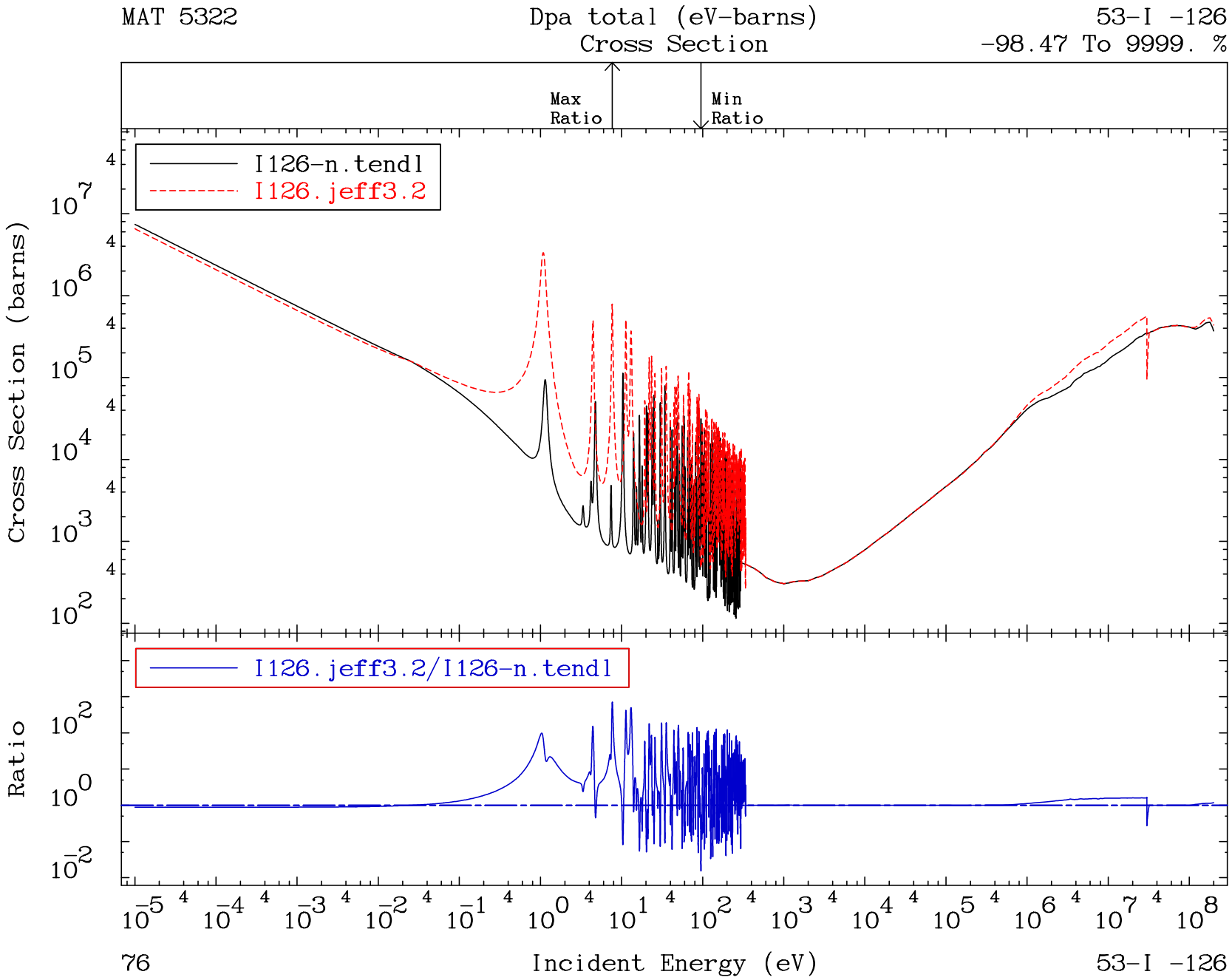

MAT 5322
Kerma inelastic (mt51-91)
Cross Section
53-I -126
-7.434 To 34.41 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 56.882 keV
I126.jeff3.2 Threshold 56.882 keV
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
71
53-I -126

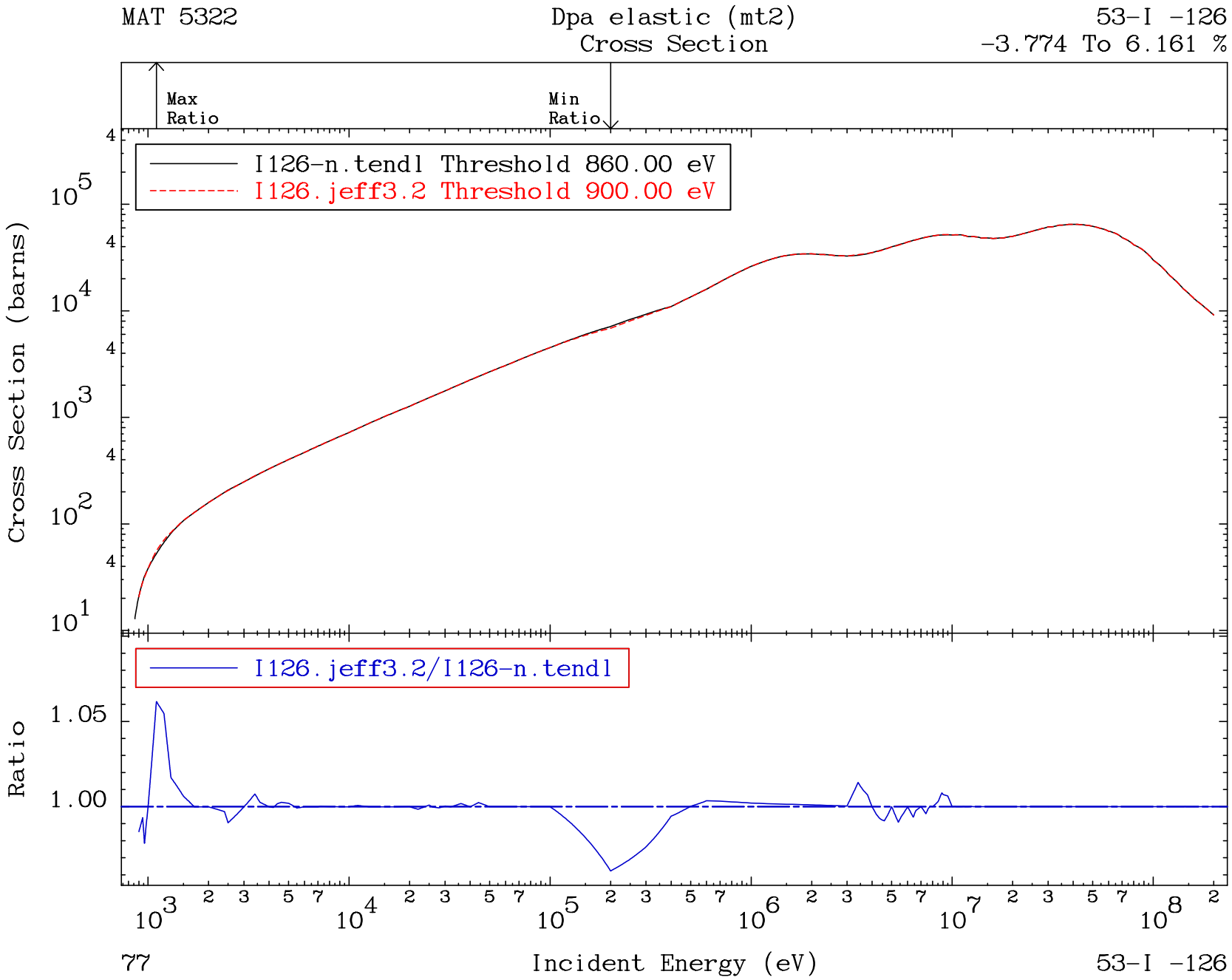

MAT 5322
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
53-I -126
-7.434 To 34.41 %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
I126.jeff3.2/I126-n.tendl
Ratio
1.4
1.2
1.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
72
Incident Energy (eV)
53-I -126

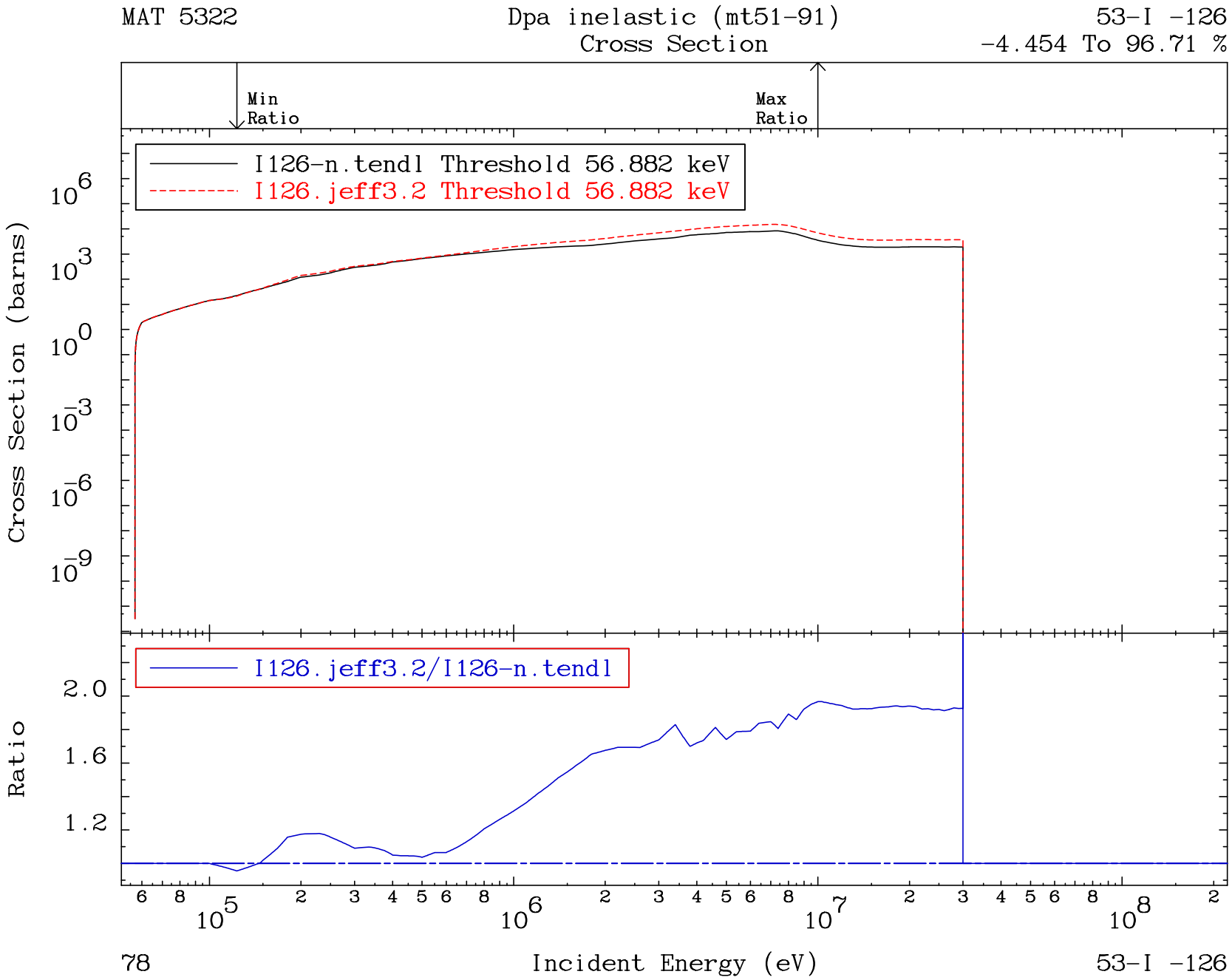

MAT 5322
Kerma capture (mt102)
Cross Section
53-I -126
-98.97 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
73
53-I -126

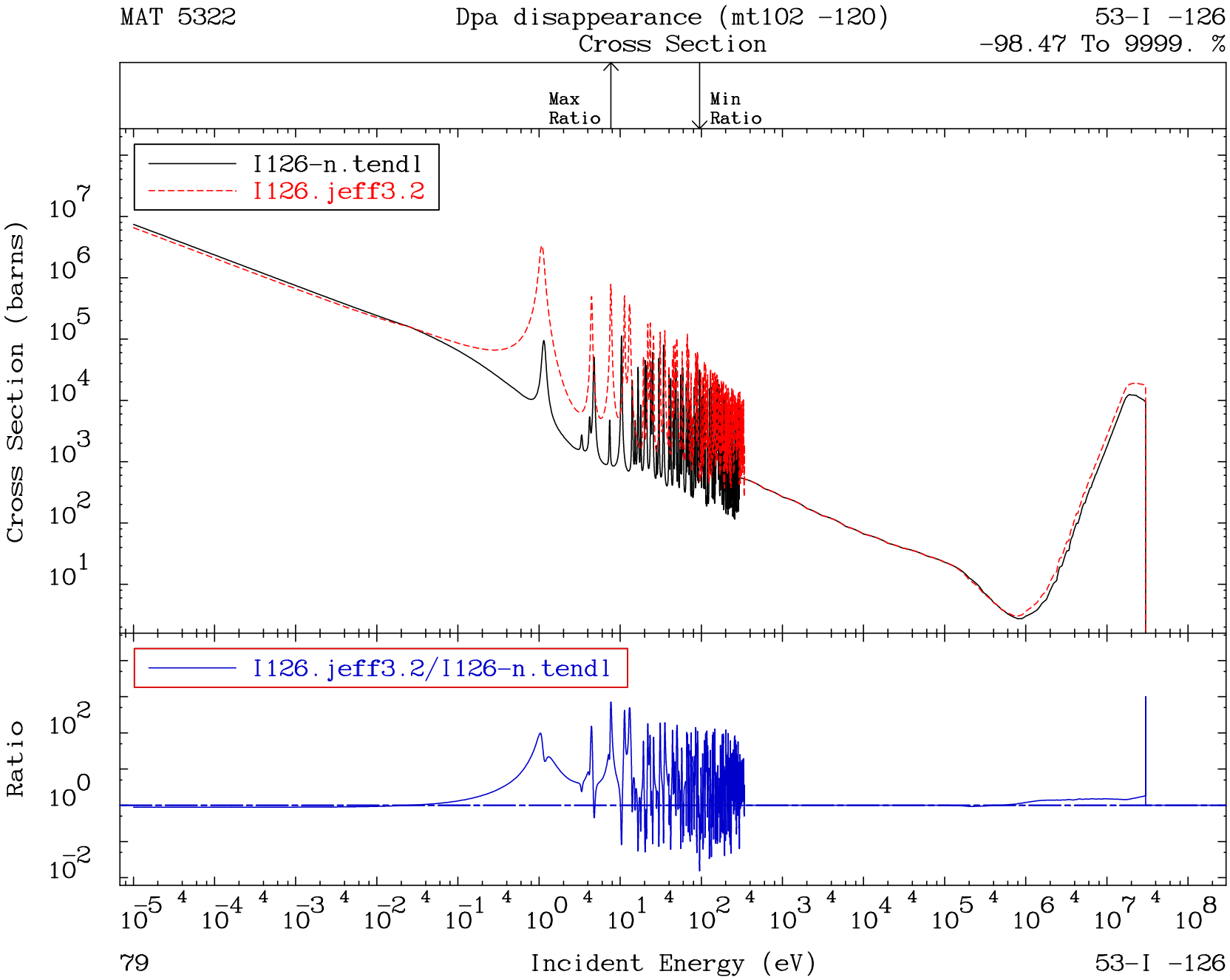

MAT 5322
Total photon (eV-barns)
Cross Section
53-I -126
-98.97 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
74
53-I -126

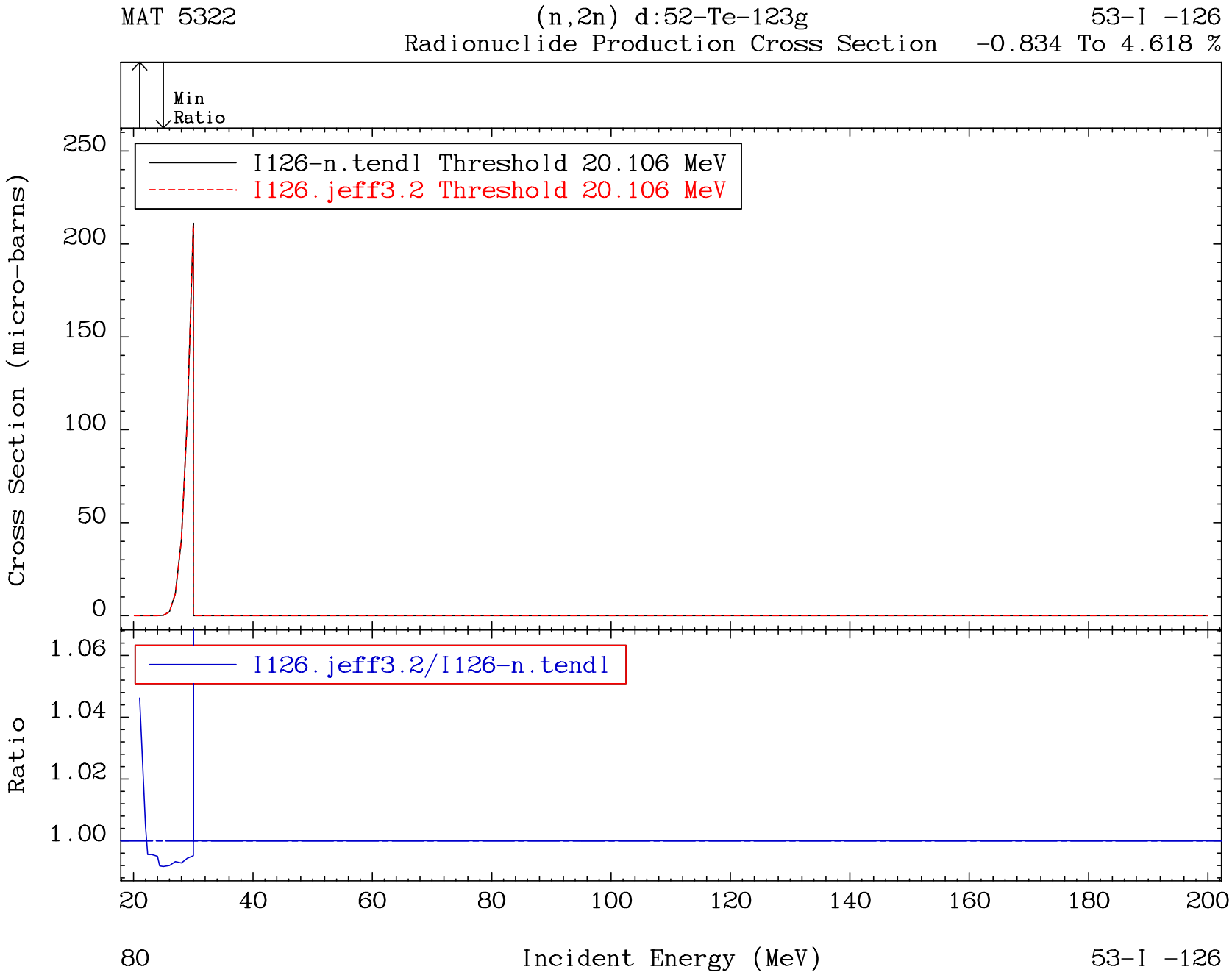

MAT 5322
Total kinematic kerma (high limit)
Cross Section
53-I -126
-98.97 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
75
53-I -126

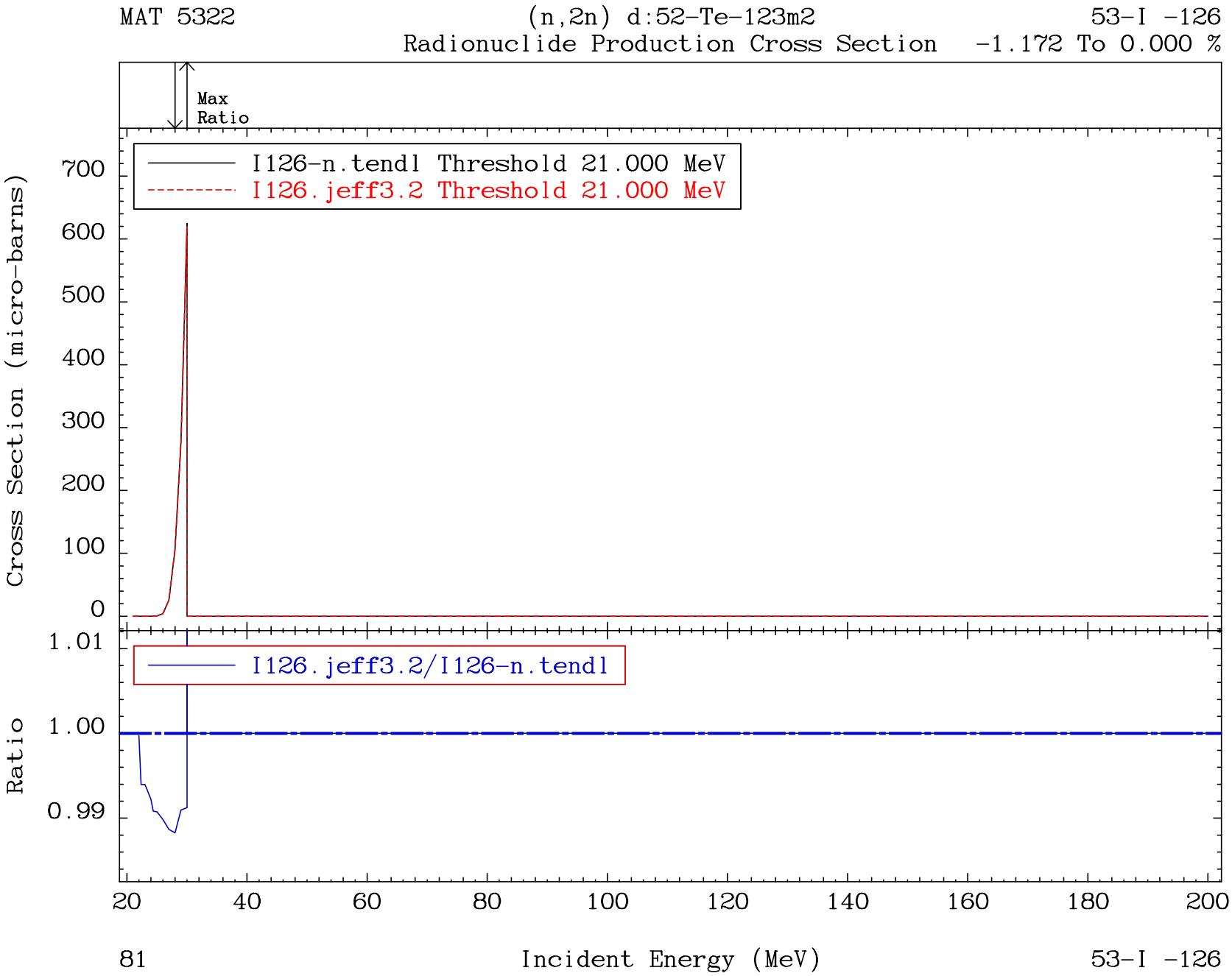

MAT 5322
Dpa total (eV-barns)
Cross Section
53-I -126
-98.47 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
76
53-I -126

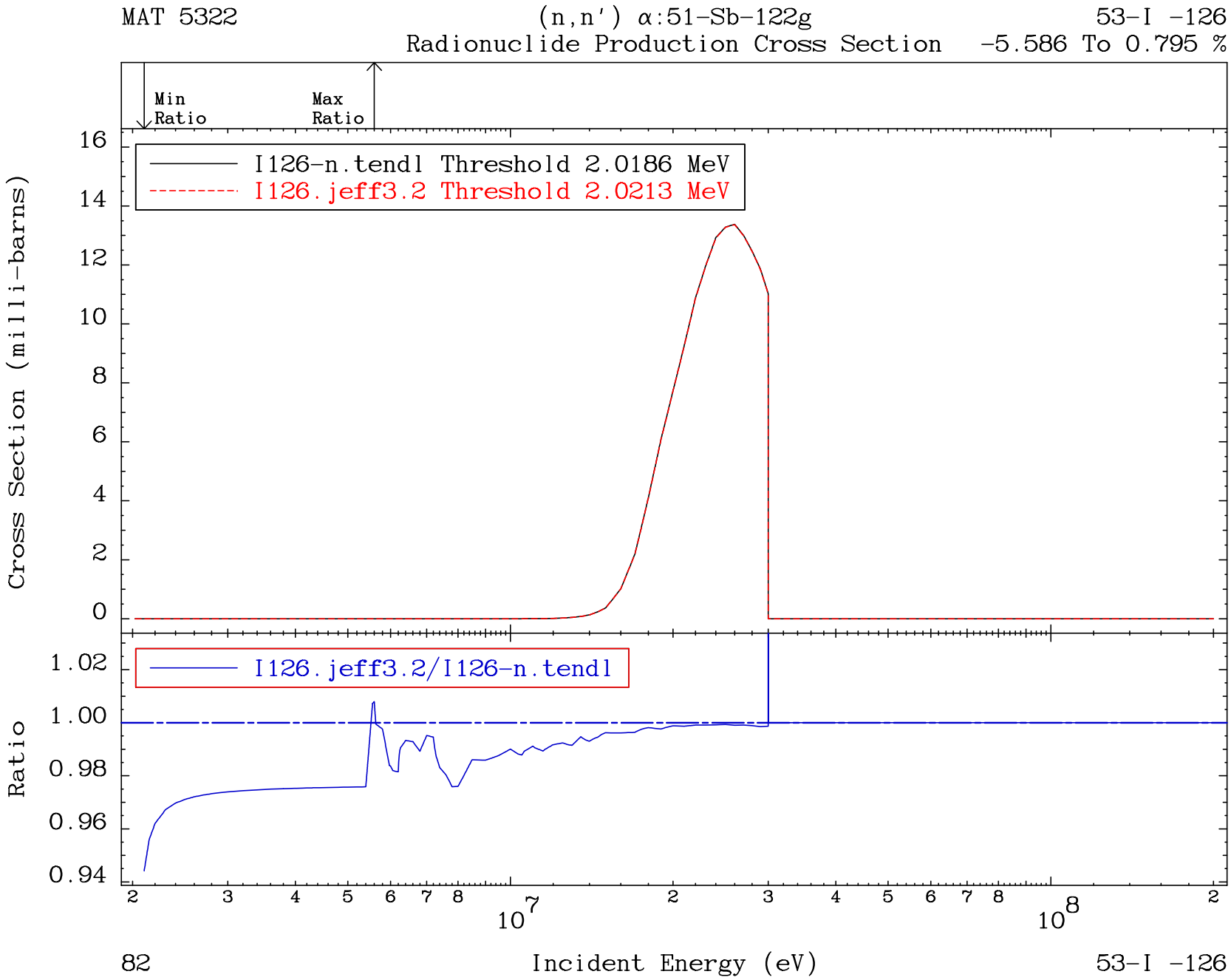

MAT 5322
Dpa elastic (mt2)
Cross Section
53-I -126
-3.774 To 6.161 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 860.00 eV
I126.jeff3.2 Threshold 900.00 eV
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
77
53-I -126

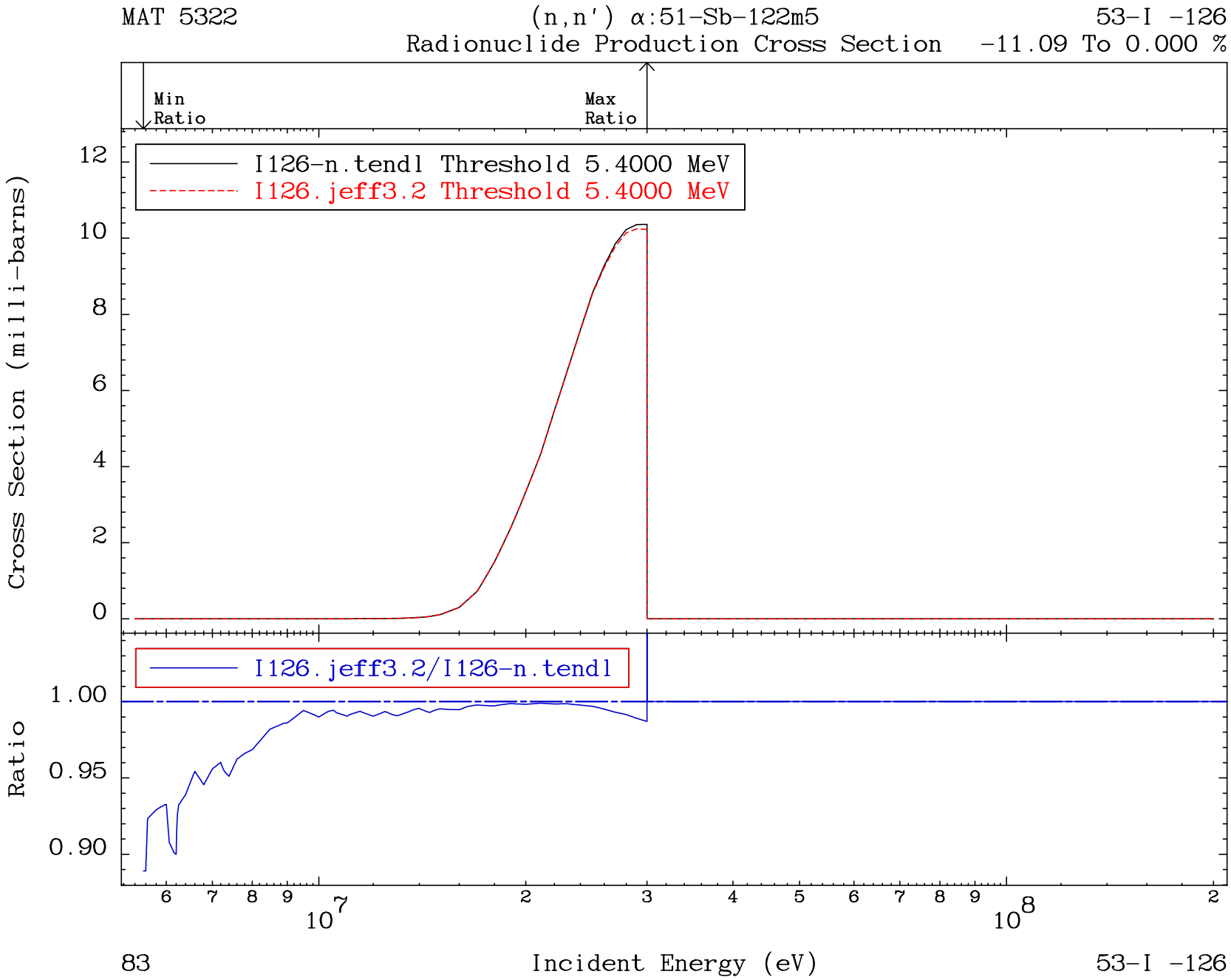

MAT 5322
Dpa inelastic (mt51-91)
Cross Section
53-I -126
-4.454 To 96.71 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 56.882 keV
I126.jeff3.2 Threshold 56.882 keV
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
78
53-I -126

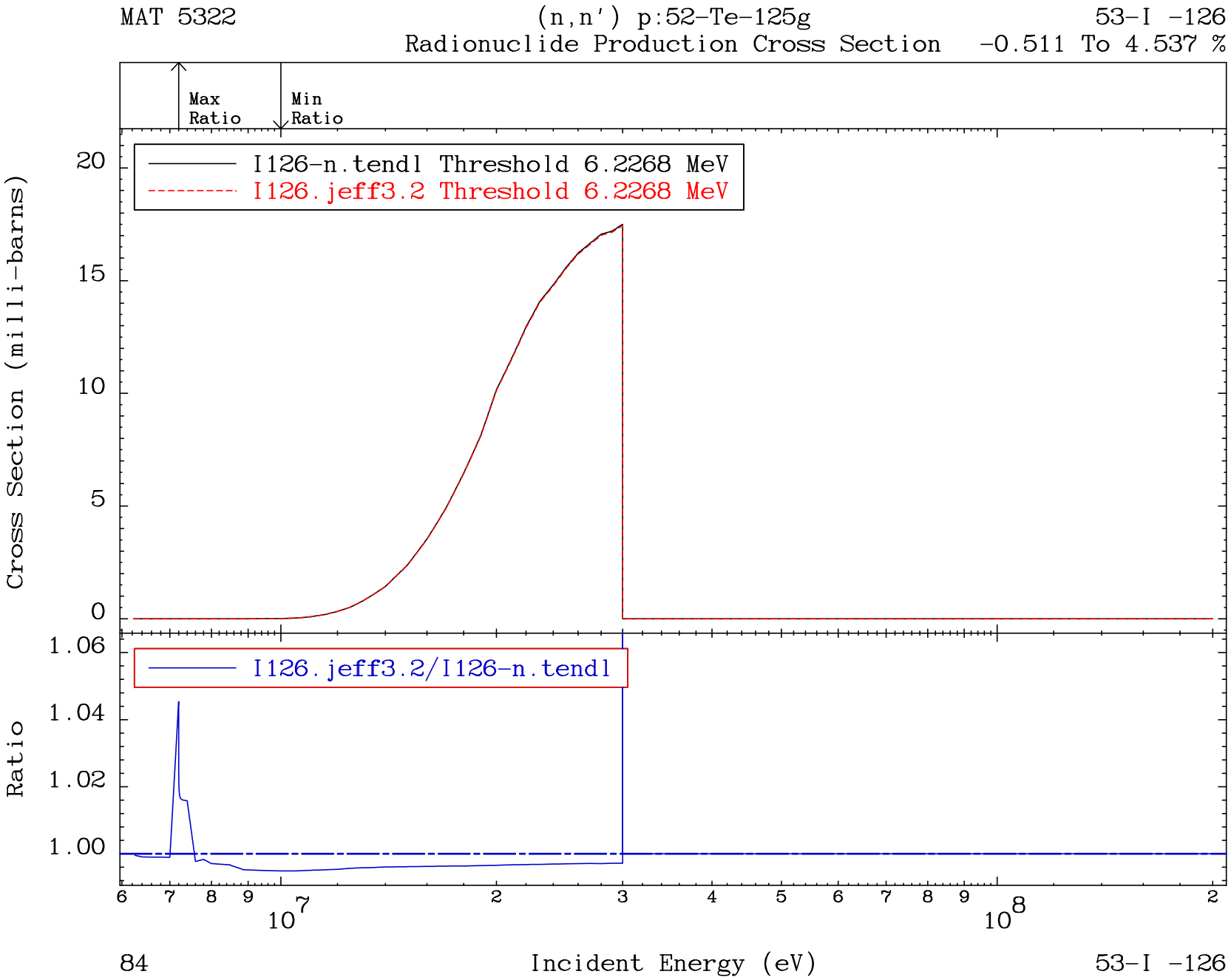

MAT 5322
Dpa disappearance (mt102 -120)
Cross Section
53-I -126
-98.47 To 9999. %
Max Ratio
Min Ratio
I126-n.tendl
I126.jeff3.2
Cross Section (barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
79
53-I -126

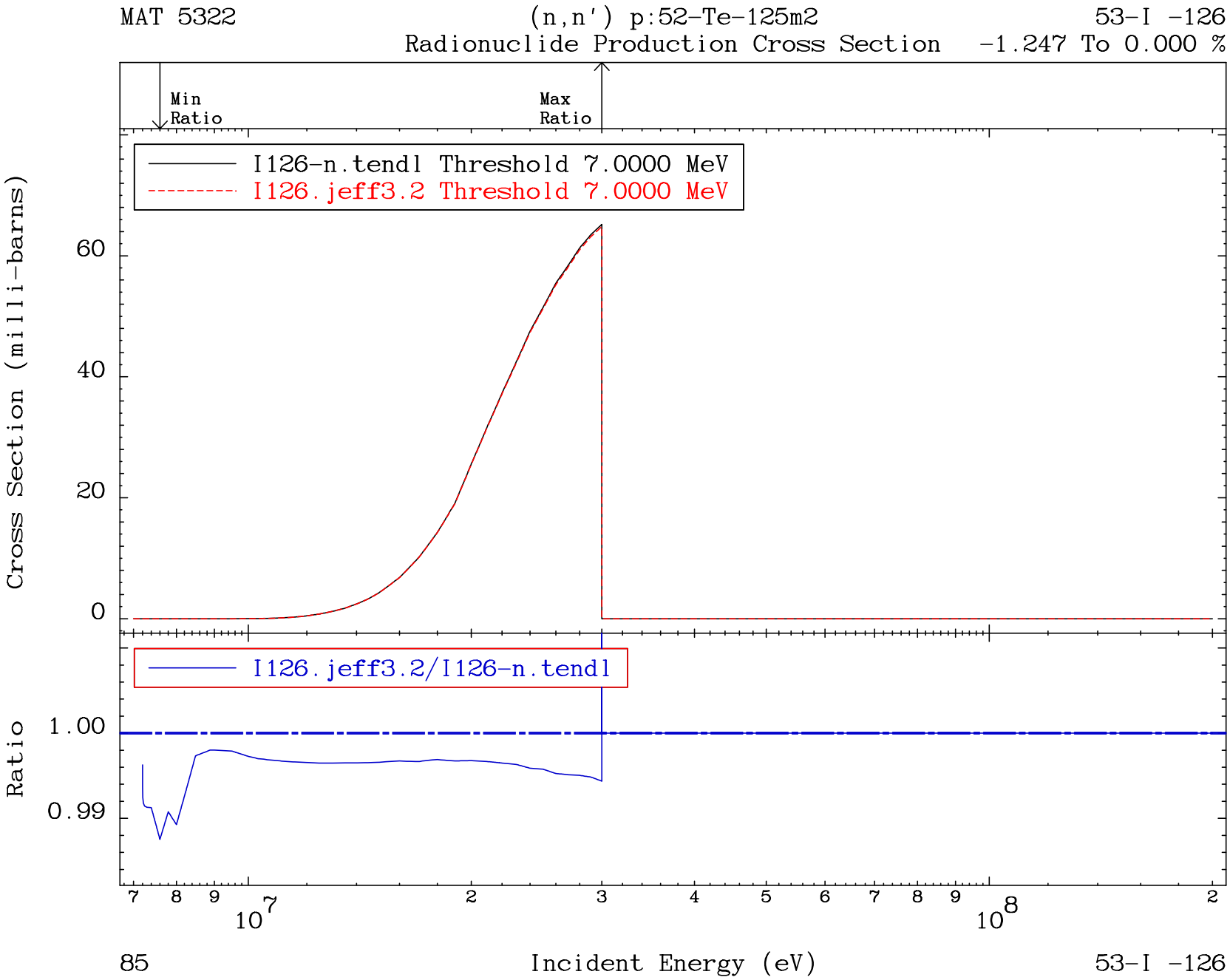

MAT 5322
(n,2n) d:52-Te-123g
53-I -126
Radionuclide Production Cross Section -0.834 To 4.618 %
Min
Ratio
I126-n.tendl Threshold 20.106 MeV
I126.jeff3.2 Threshold 20.106 MeV
Cross Section (micro-barns)
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.06
1.04
1.02
1.00
20
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
53-I -126

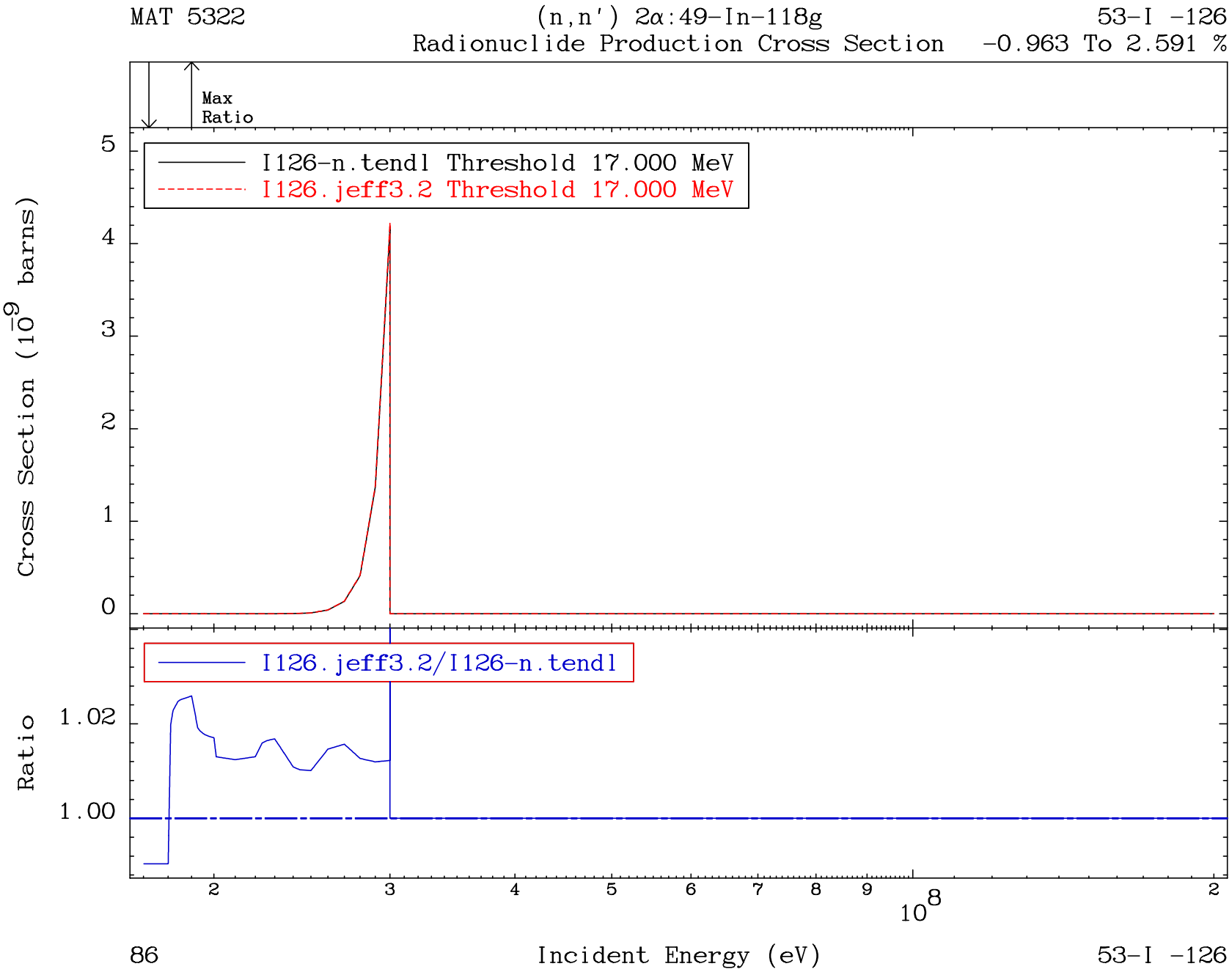

MAT 5322
(n,2n) d:52-Te-123m2
53-I -126
Radionuclide Production Cross Section -1.172 To 0.000 %
Max Ratio
I126-n.tendl Threshold 21.000 MeV
I126.jeff3.2 Threshold 21.000 MeV
Cross Section (micro-barns)
700
600
500
400
300
200
100
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
20
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
53-I -126

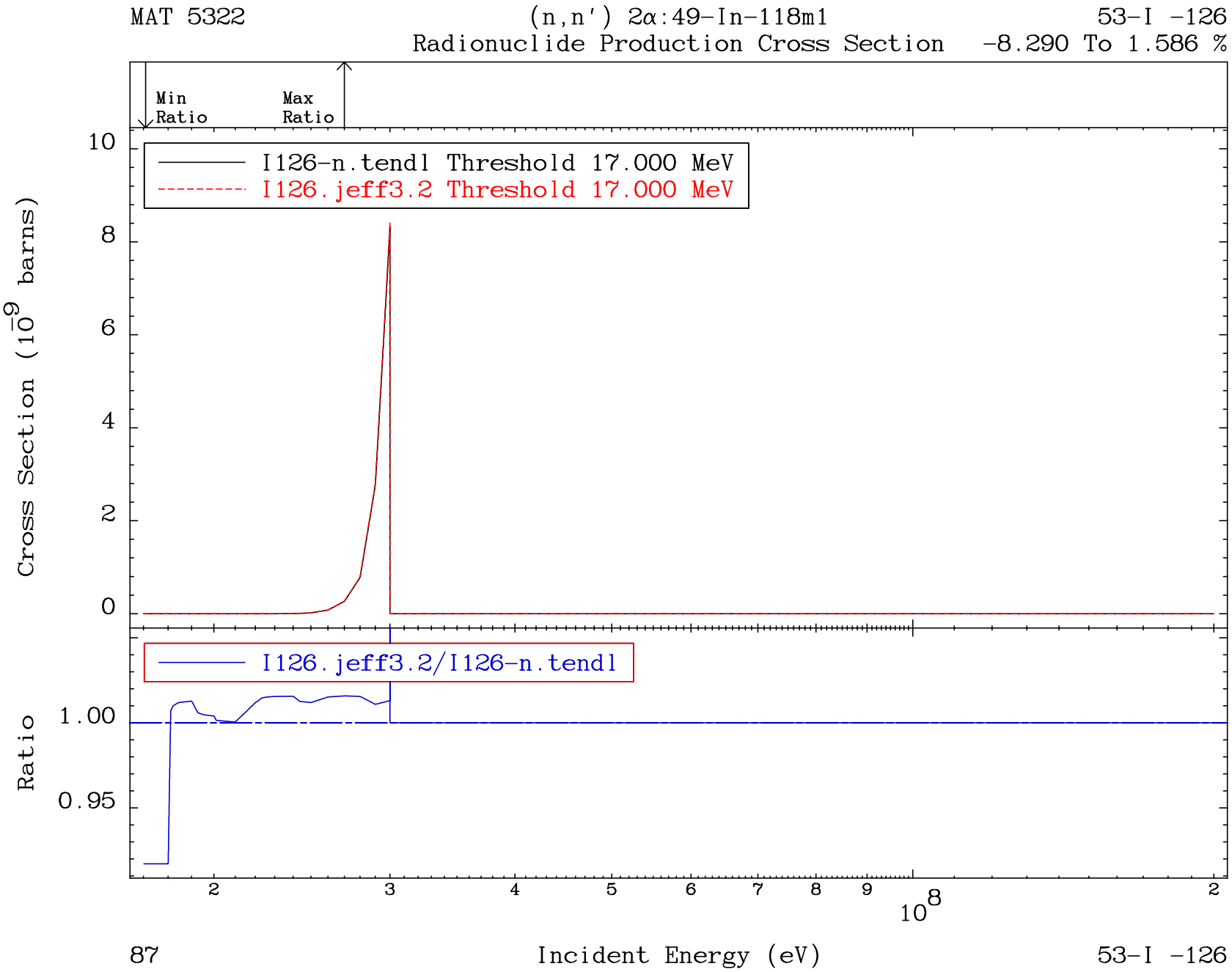

MAT 5322
(n,n') α:51-Sb-122g
53-I -126
Radionuclide Production Cross Section
-5.586 To 0.795 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 2.0186 MeV
I126.jeff3.2 Threshold 2.0213 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
I126.jeff3.2/I126-n.tendl
Ratio
1.02
1.00
0.98
0.96
0.94
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
82
Incident Energy (eV)
53-I -126

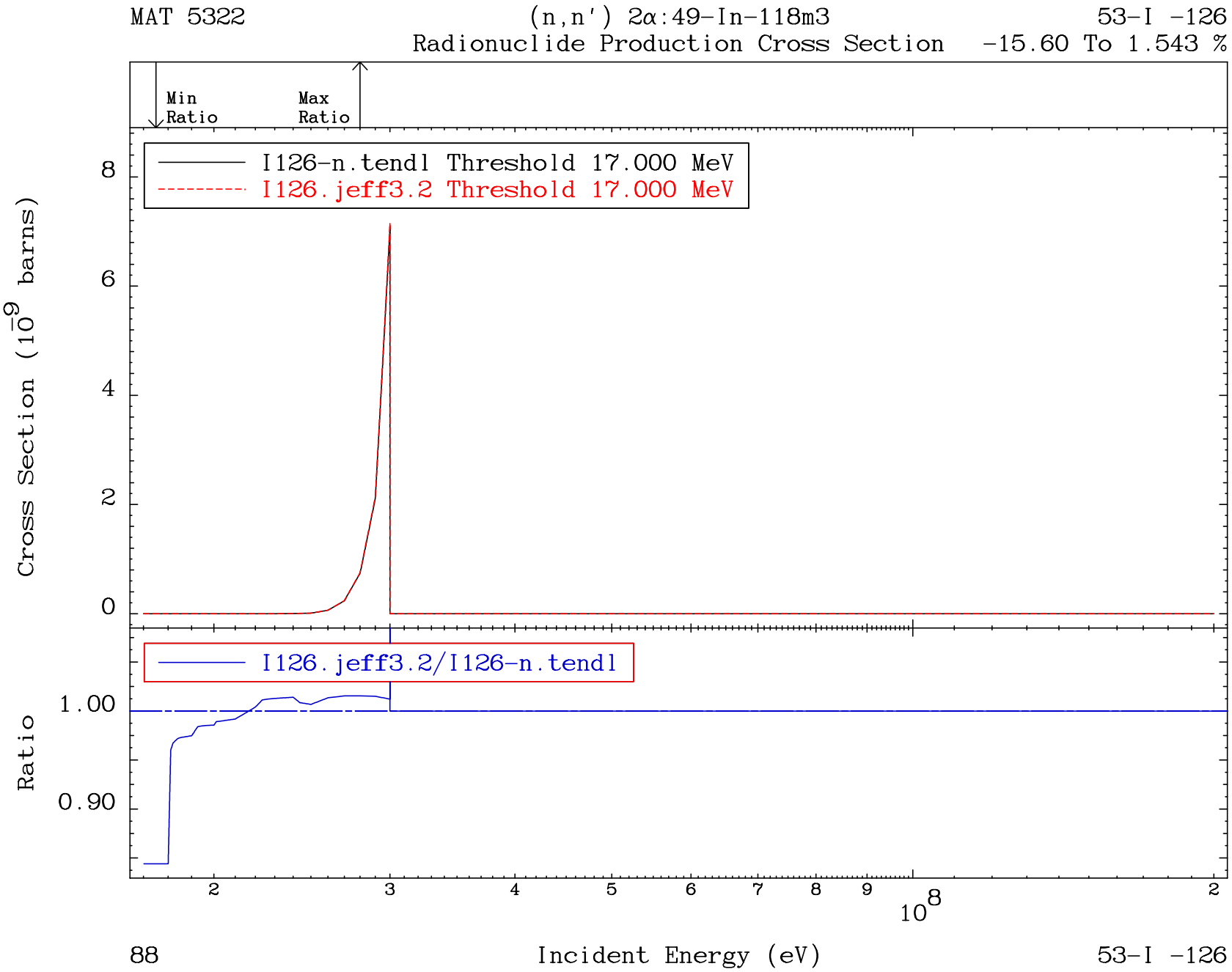

MAT 5322
(n,n') α:51-Sb-122m5
53-I -126
Radionuclide Production Cross Section -11.09 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 5.4000 MeV
I126.jeff3.2 Threshold 5.4000 MeV
Cross Section (milli-barns)
12
10
8
6
4
2
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.95
0.90
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
83
Incident Energy (eV)
53-I -126

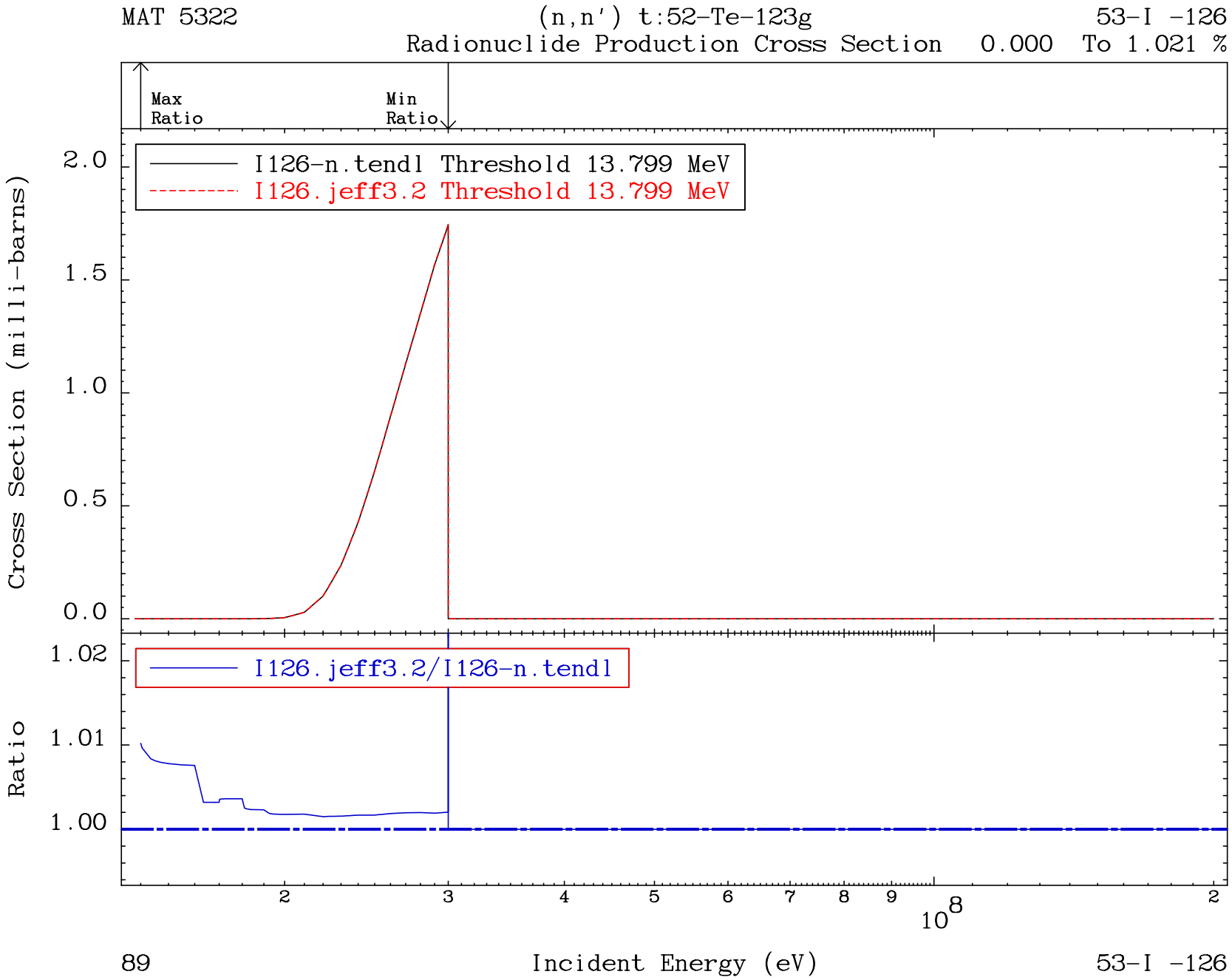

MAT 5322
(n,n') p:52-Te-125g
53-I -126
Radionuclide Production Cross Section -0.511 To 4.537 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 6.2268 MeV
I126.jeff3.2 Threshold 6.2268 MeV
Cross Section (milli-barns)
20
15
10
5
0
I126.jeff3.2/I126-n.tendl
Ratio
1.06
1.04
1.02
1.00
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
84
Incident Energy (eV)
53-I -126

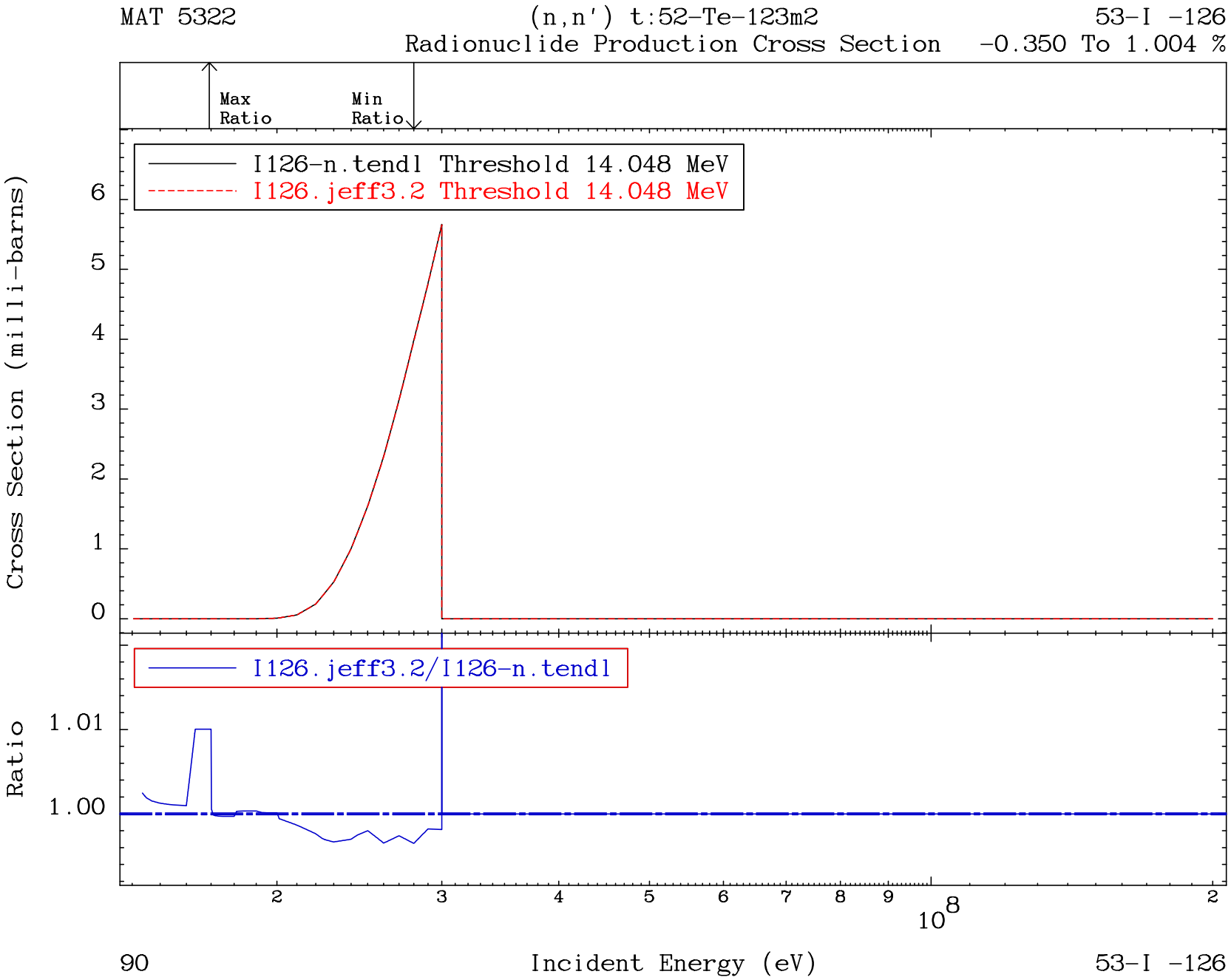

MAT 5322
(n,n') p:52-Te-125m2
53-I -126
Radionuclide Production Cross Section -1.247 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 7.0000 MeV
I126.jeff3.2 Threshold 7.0000 MeV
Cross Section (milli-barns)
60
40
20
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.99
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
85
Incident Energy (eV)
53-I -126

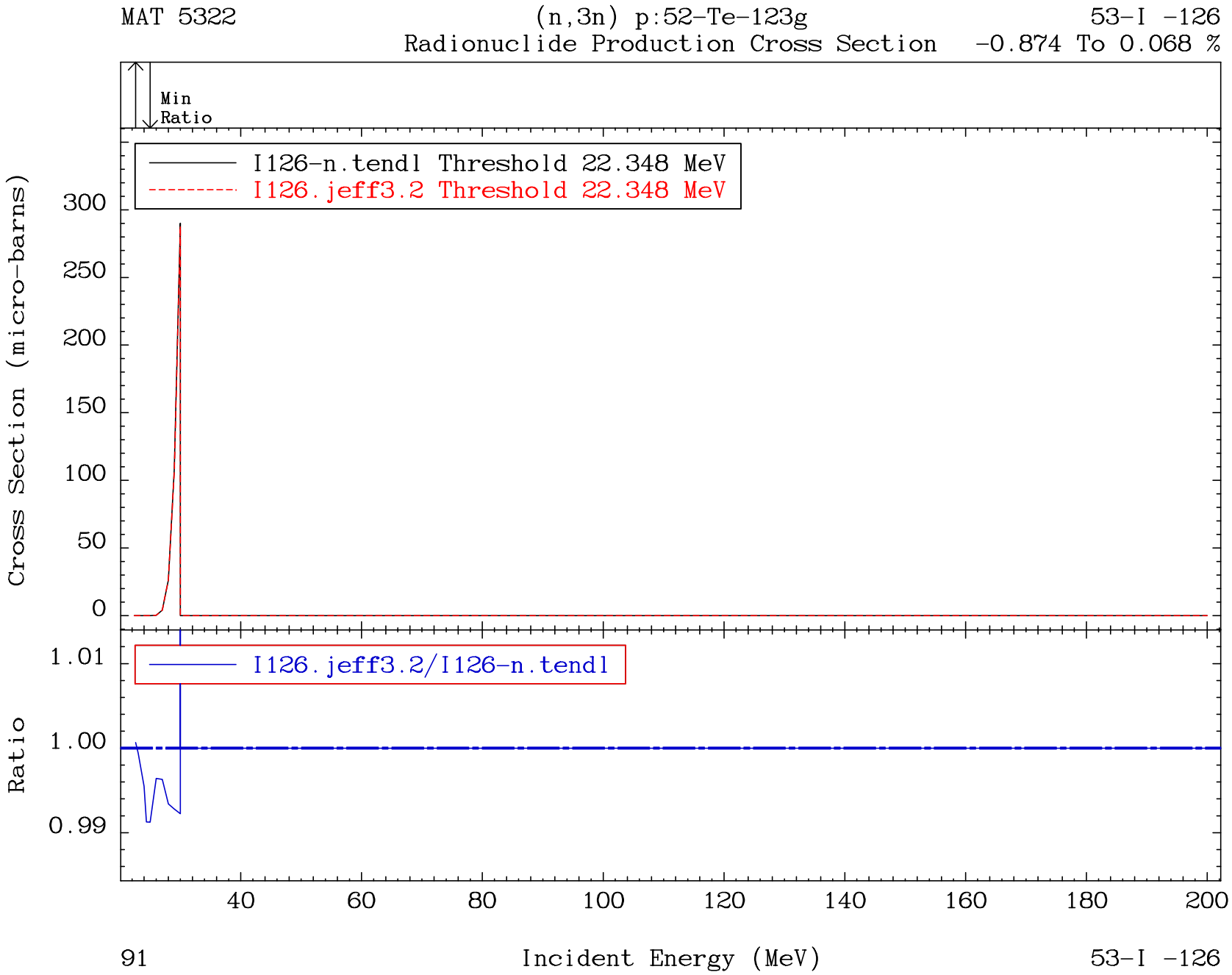

MAT 5322
(n,n') 2α:49-In-118g
53-I -126
Radionuclide Production Cross Section
-0.963 To 2.591 %
Max
Ratio
I126-n.tendl Threshold 17.000 MeV
I126.jeff3.2 Threshold 17.000 MeV
Cross Section (10^-9 barns)
I126.jeff3.2/I126-n.tendl
Ratio
1.02
1.00
10^8
86
Incident Energy (eV)
53-I -126

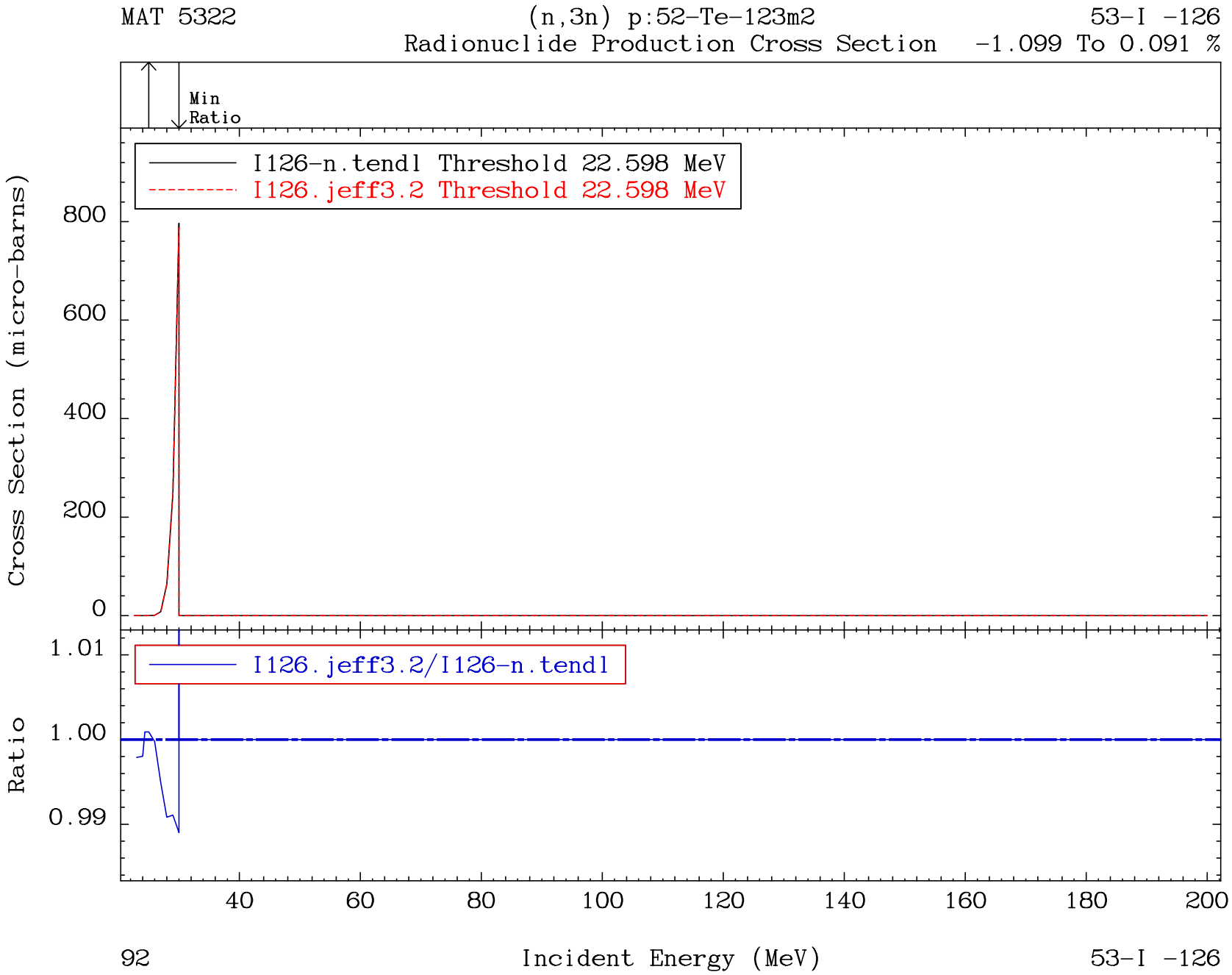

MAT 5322
(n,n') 2α:49-In-118m1
53-I -126
Radionuclide Production Cross Section
-8.290 To 1.586 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 17.000 MeV
I126.jeff3.2 Threshold 17.000 MeV
Cross Section ($10^{-9}$ barns)
10
8
6
4
2
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.95
2
3
4
5
6
7
8
9
$10^8$
2
87
Incident Energy (eV)
53-I -126

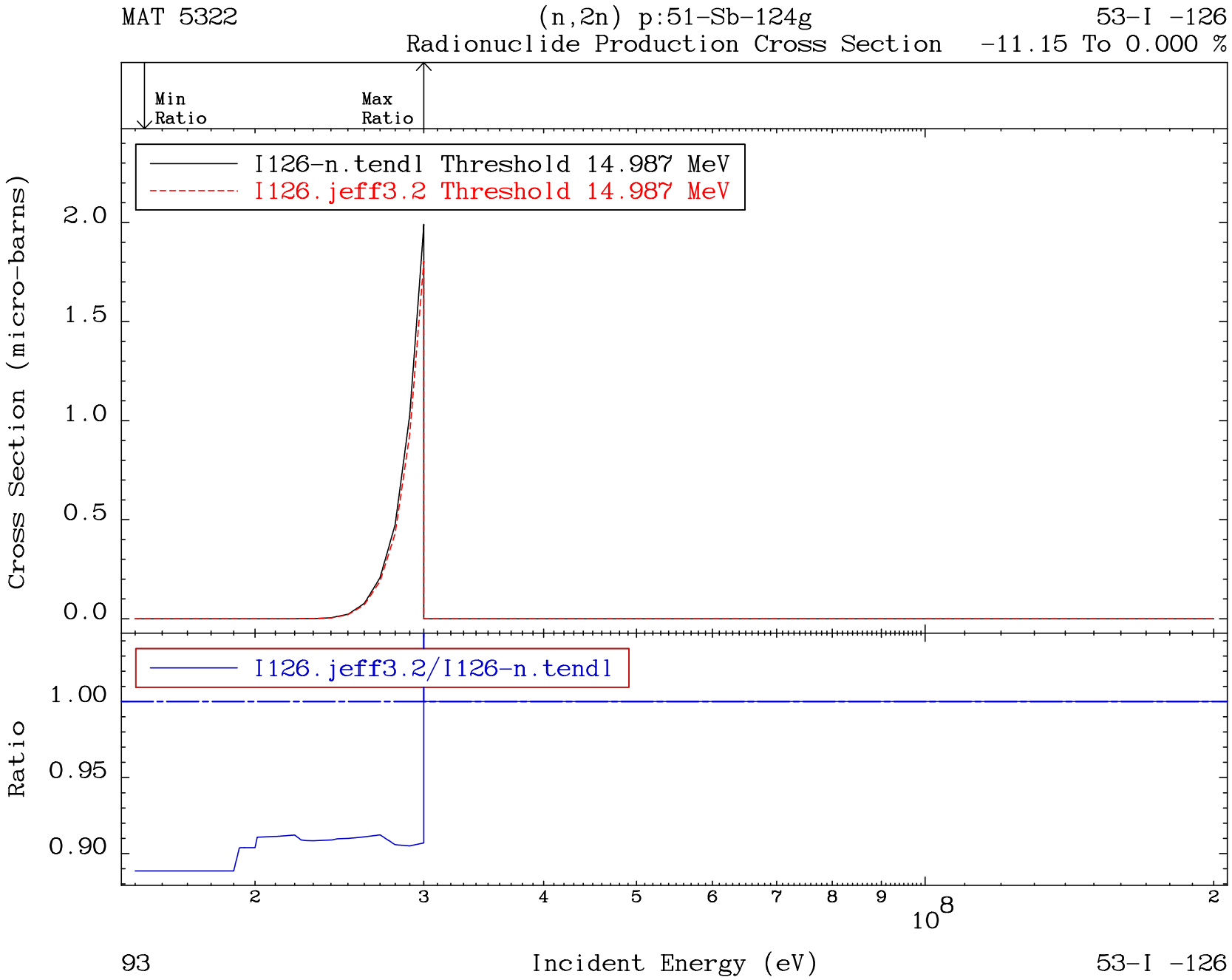

MAT 5322
(n,n') 2α:49-In-118m3
53-I -126
Radionuclide Production Cross Section -15.60 To 1.543 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 17.000 MeV
I126.jeff3.2 Threshold 17.000 MeV
Cross Section ($10^{-9}$ barns)
8
6
4
2
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.90
2
3
4
5
6
7
8
9
$10^8$
2
88
Incident Energy (eV)
53-I -126

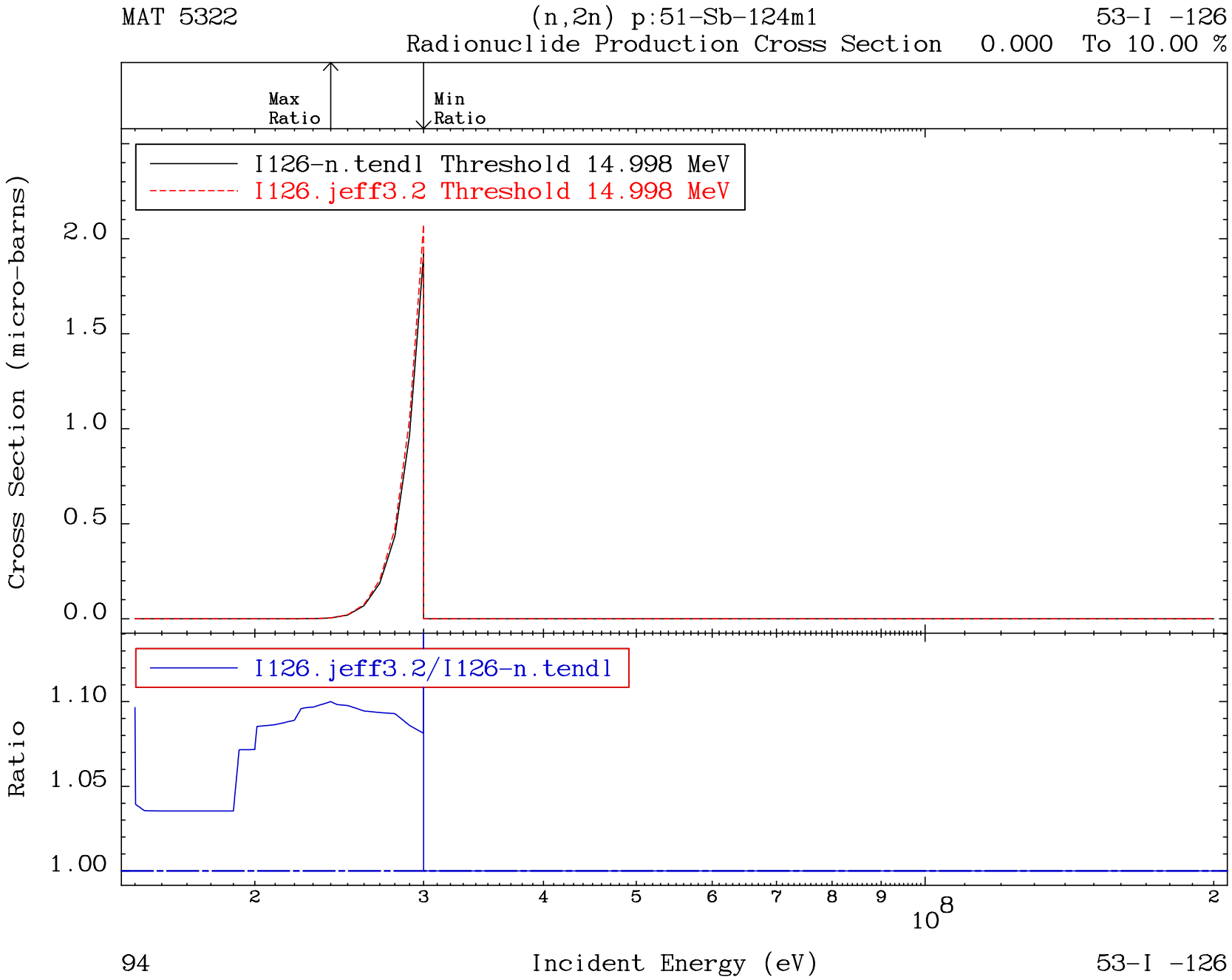

MAT 5322
(n,n') t:52-Te-123g
53-I -126
Radionuclide Production Cross Section 0.000 To 1.021 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 13.799 MeV
I126.jeff3.2 Threshold 13.799 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.02
1.01
1.00
2
3
4
5
6
7
8
9
10^8
2
89
Incident Energy (eV)
53-I -126

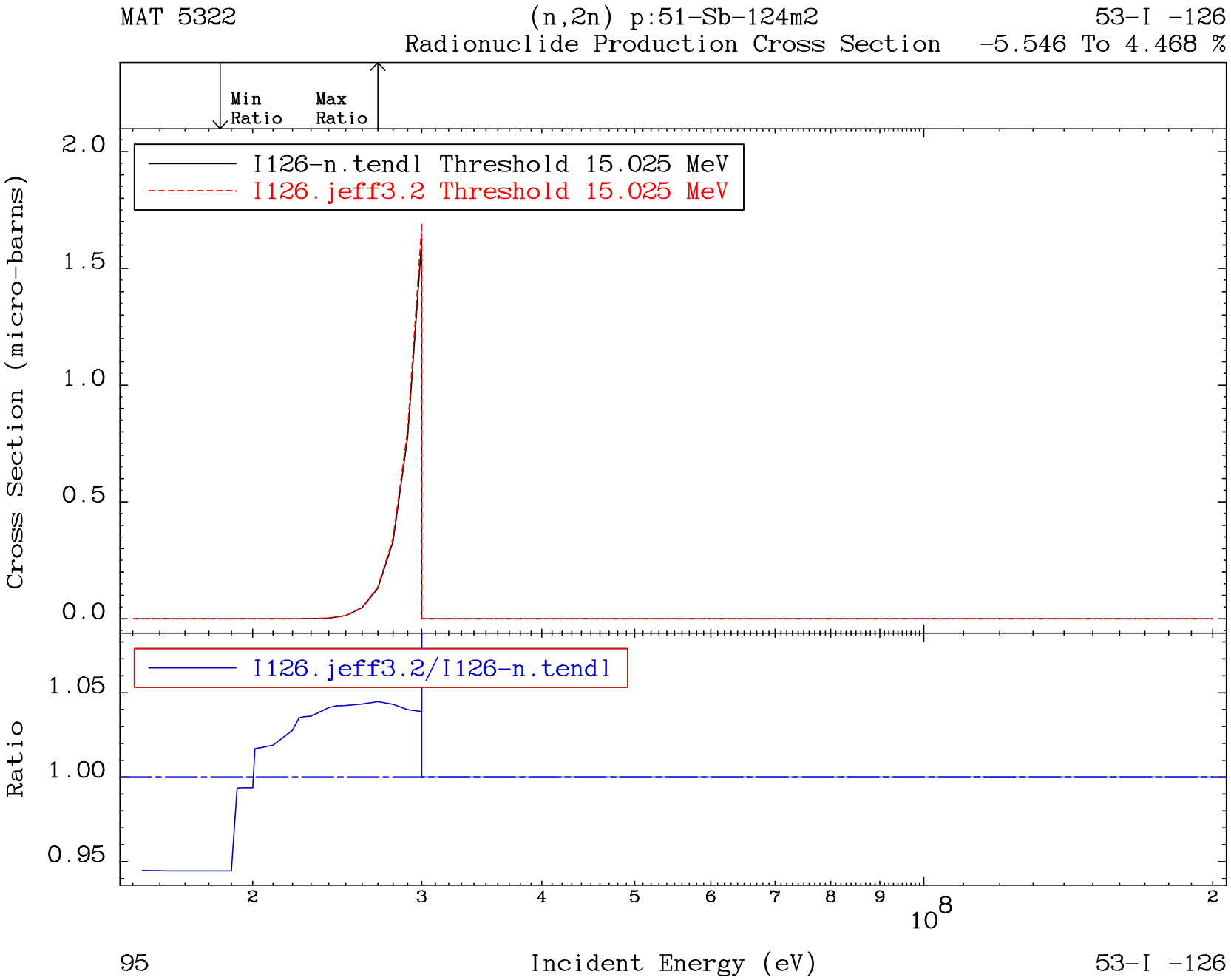

MAT 5322
(n,n') t:52-Te-123m2
53-I -126
Radionuclide Production Cross Section -0.350 To 1.004 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 14.048 MeV
I126.jeff3.2 Threshold 14.048 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
I126.jeff3.2/I126-n.tendl
Ratio
1.00
1.01
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
53-I -126

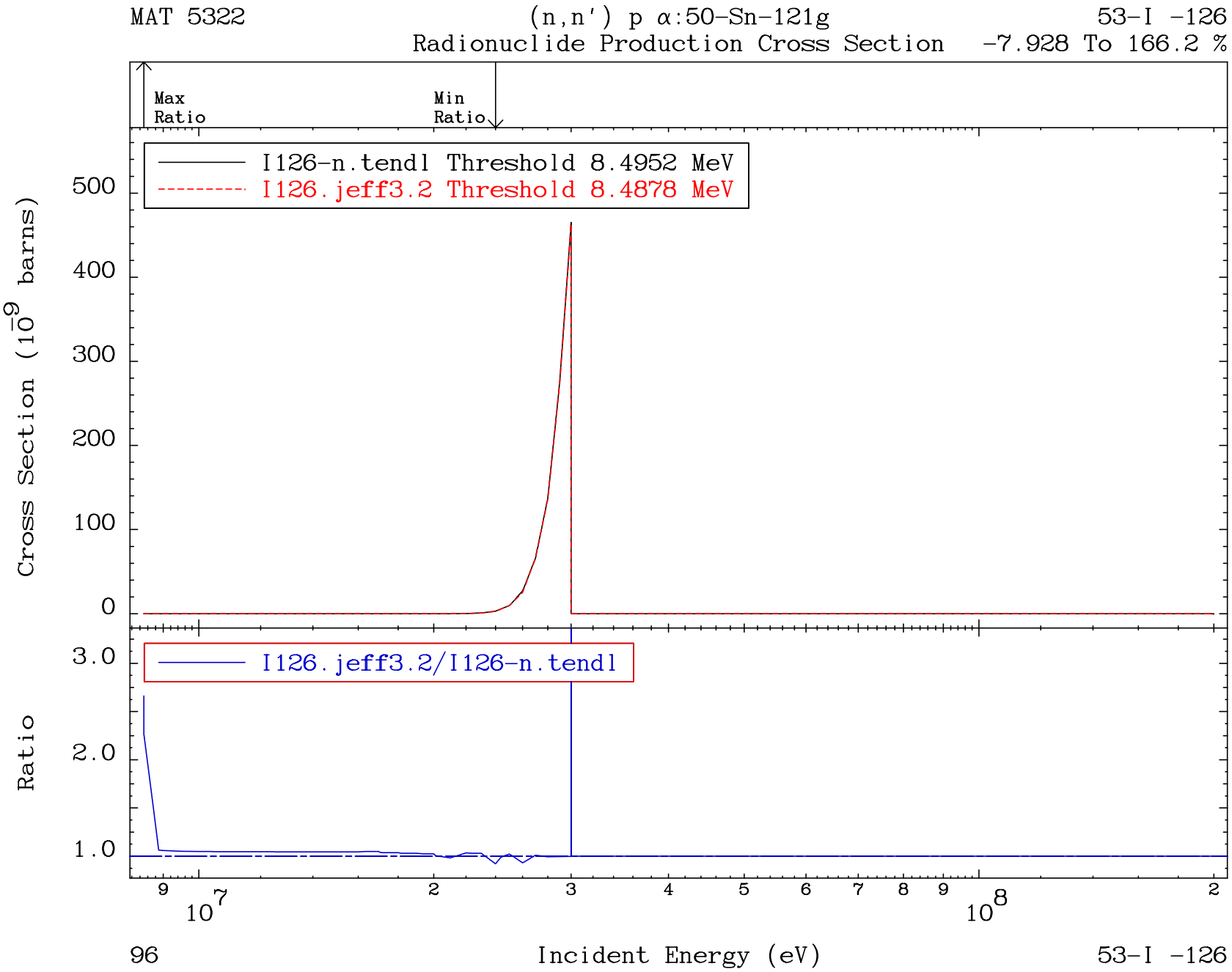

MAT 5322
(n,3n) p:52-Te-123g
53-I -126
Radionuclide Production Cross Section -0.874 To 0.068 %
Min
Ratio
I126-n.tendl Threshold 22.348 MeV
I126.jeff3.2 Threshold 22.348 MeV
Cross Section (micro-barns)
300
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
91
Incident Energy (MeV)
53-I -126

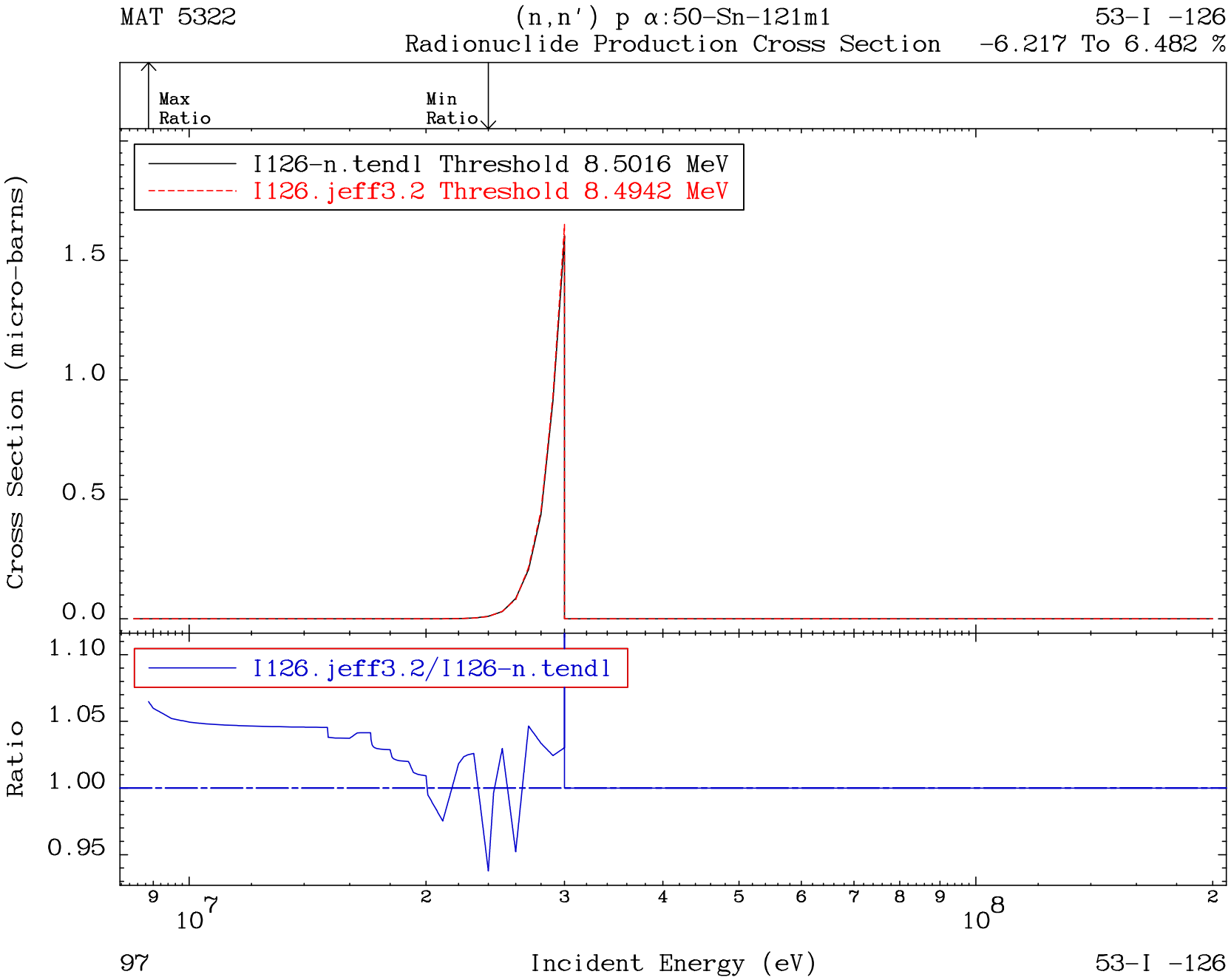

MAT 5322
(n,3n) p:52-Te-123m2
53-I -126
Radionuclide Production Cross Section -1.099 To 0.091 %
Min
Ratio
I126-n.tendl Threshold 22.598 MeV
I126.jeff3.2 Threshold 22.598 MeV
Cross Section (micro-barns)
800
600
400
200
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
40
60
80
100
120
140
160
180
200
92
Incident Energy (MeV)
53-I -126

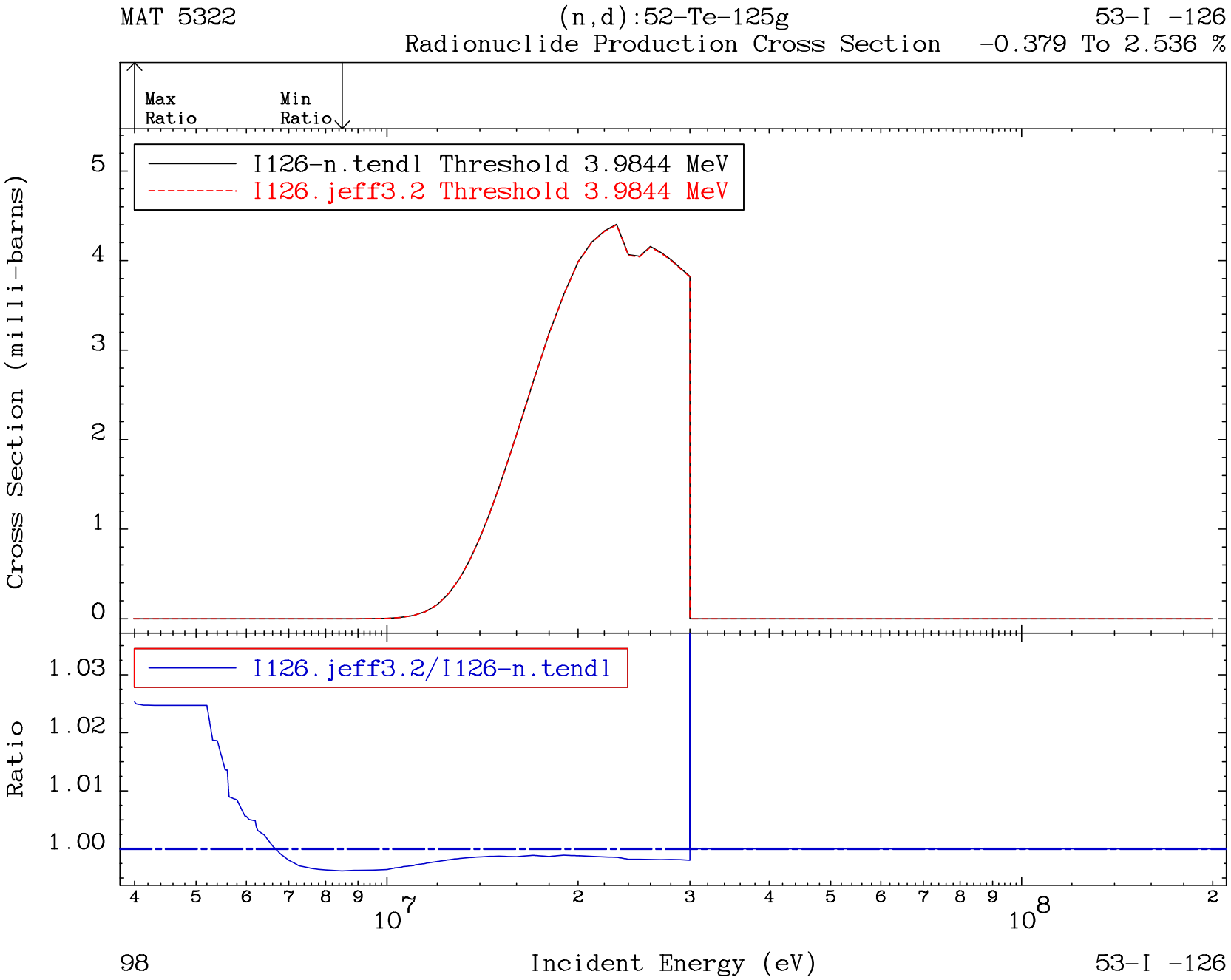

MAT 5322
(n,2n) p:51-Sb-124g
53-I -126
Radionuclide Production Cross Section -11.15 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 14.987 MeV
I126.jeff3.2 Threshold 14.987 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.95
0.90
2
3
4
5
6
7
8
9
10^8
2
93
Incident Energy (eV)
53-I -126

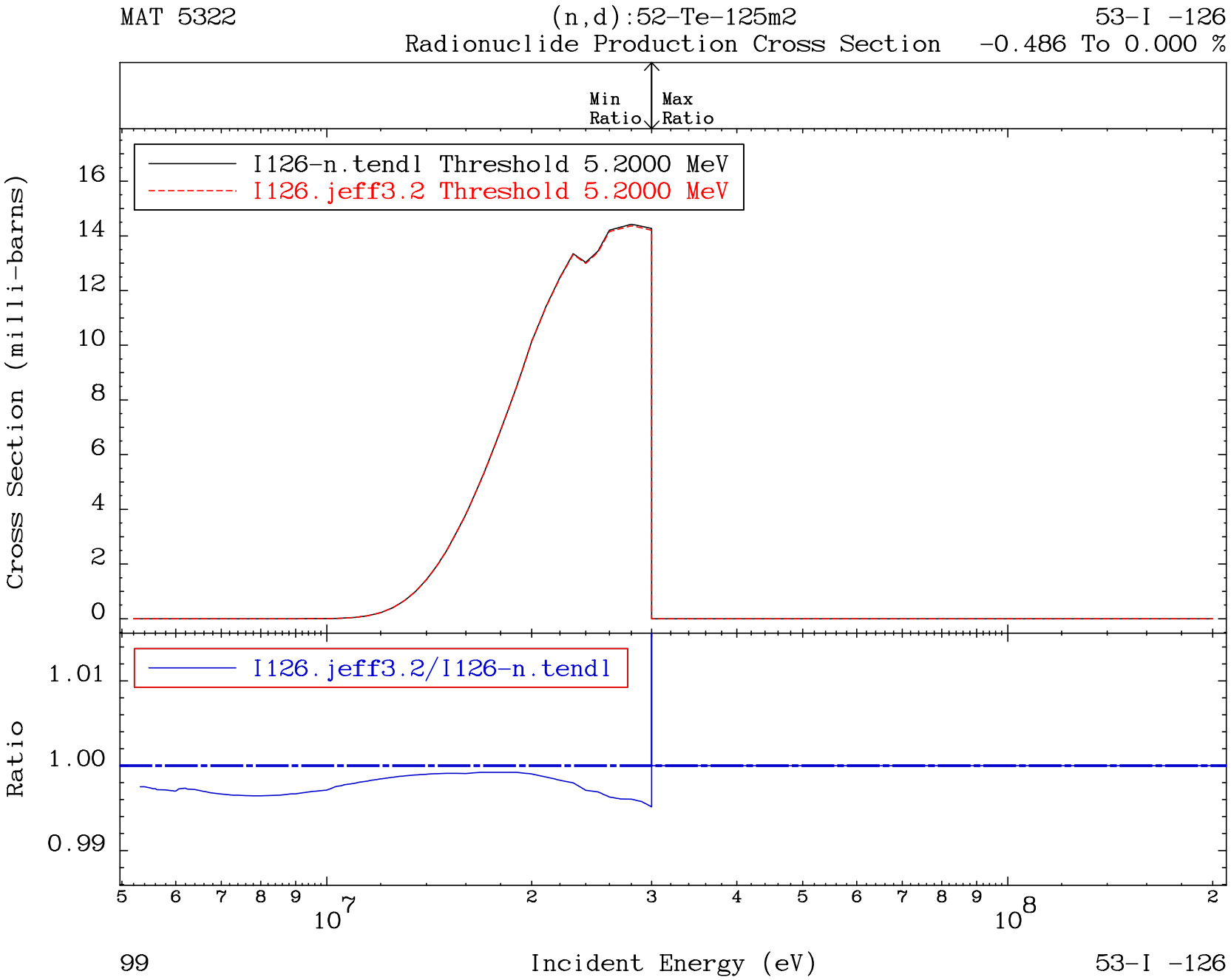

MAT 5322
(n,2n) p:51-Sb-124m1
53-I -126
Radionuclide Production Cross Section 0.000 To 10.00 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 14.998 MeV
I126.jeff3.2 Threshold 14.998 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
94
Incident Energy (eV)
53-I -126

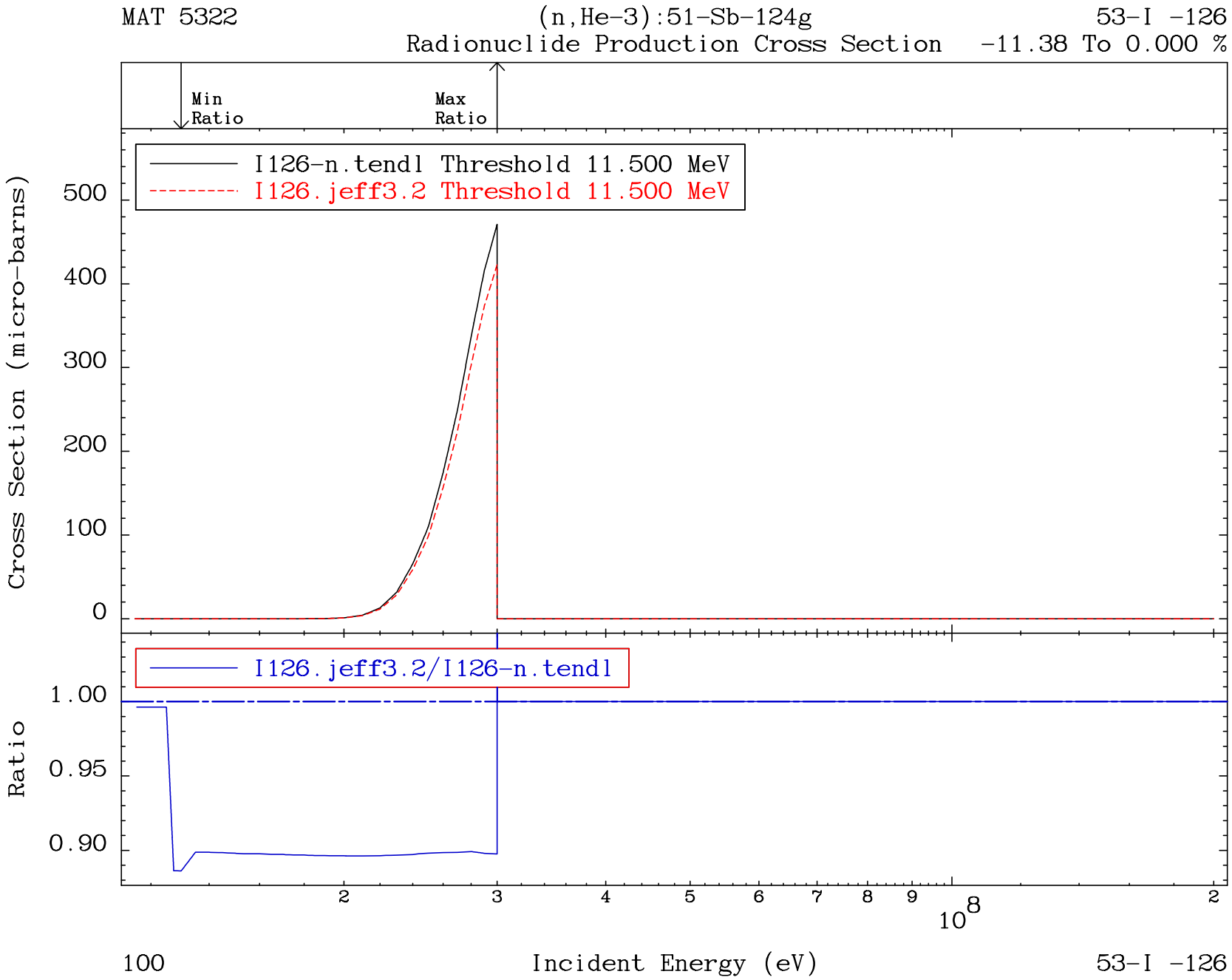

MAT 5322
(n,2n) p:51-Sb-124m2
53-I -126
Radionuclide Production Cross Section -5.546 To 4.468 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 15.025 MeV
I126.jeff3.2 Threshold 15.025 MeV
Cross Section (micro-barns)
2.0
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.05
1.00
0.95
2
3
4
5
6
7
8
9
10^8
2
95
Incident Energy (eV)
53-I -126

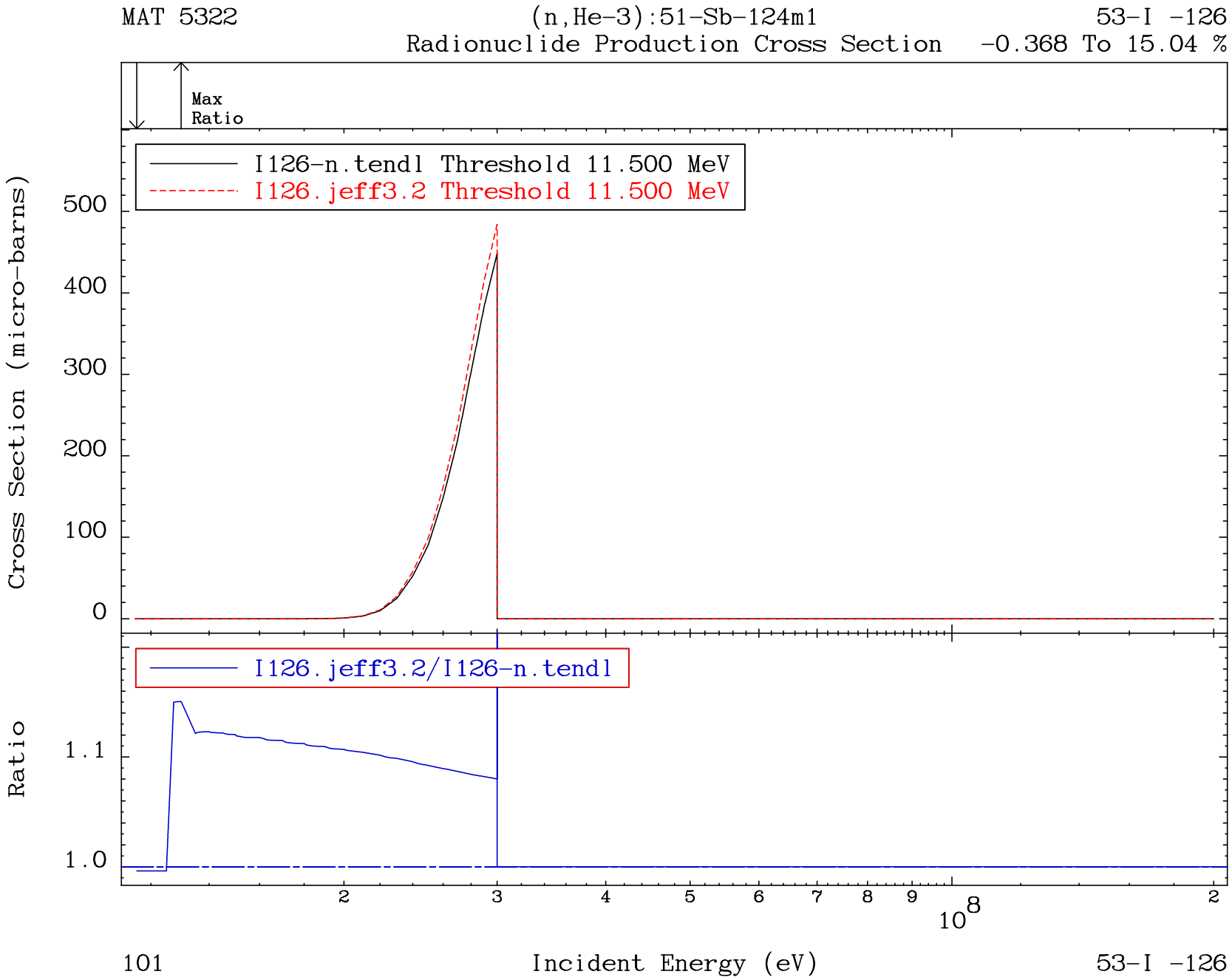

MAT 5322
(n,n') p α:50-Sn-121g
53-I -126
Radionuclide Production Cross Section -7.928 To 166.2 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 8.4952 MeV
I126.jeff3.2 Threshold 8.4878 MeV
Cross Section ($10^{-9}$ barns)
500
400
300
200
100
0
I126.jeff3.2/I126-n.tendl
Ratio
3.0
2.0
1.0
9
$10^7$
2
3
4
5
6
7
8
9
$10^8$
2
96
Incident Energy (eV)
53-I -126

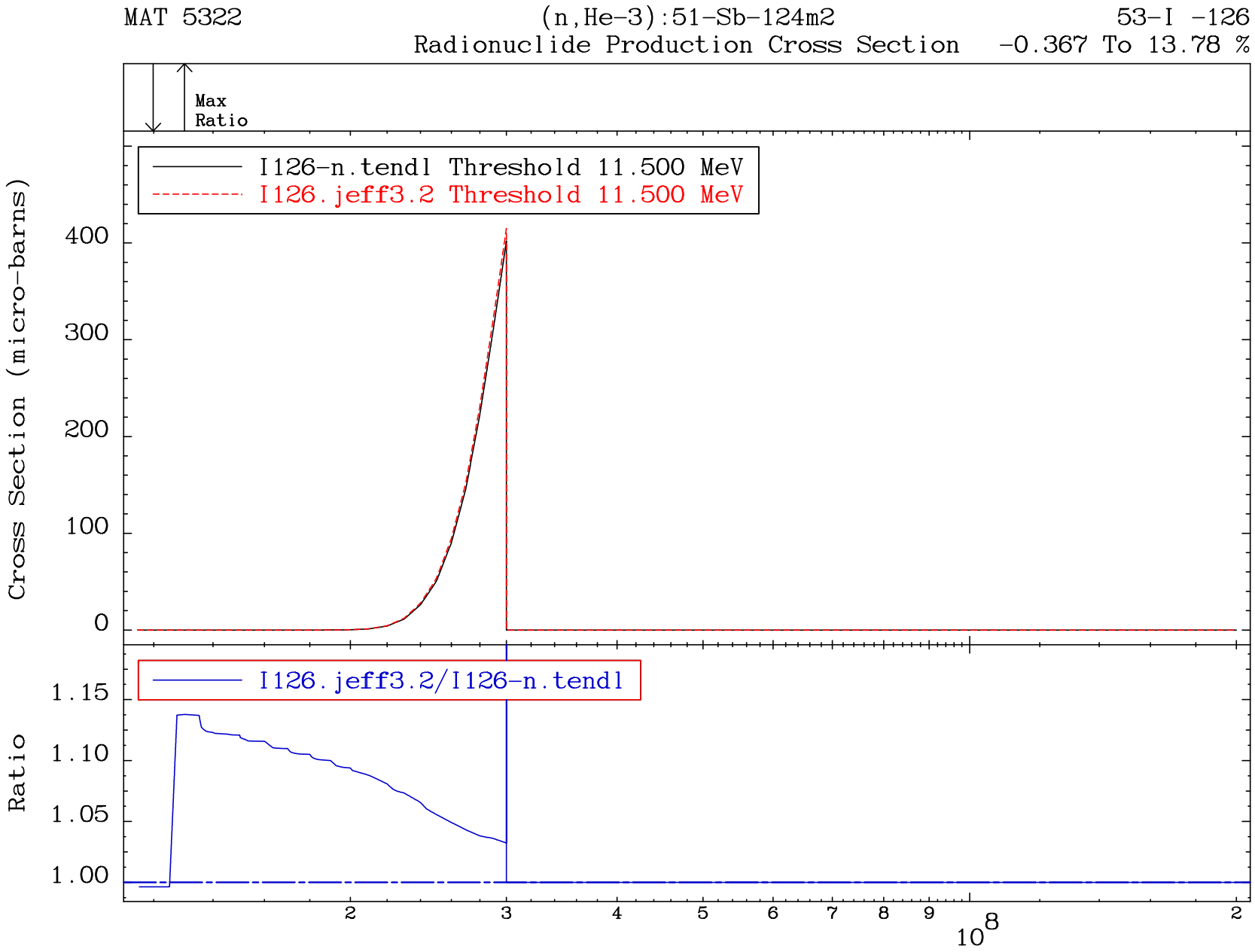

MAT 5322
(n,n') p α:50-Sn-121m1
53-I -126
Radionuclide Production Cross Section
-6.217 To 6.482 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 8.5016 MeV
I126.jeff3.2 Threshold 8.4942 MeV
Cross Section (micro-barns)
1.5
1.0
0.5
0.0
I126.jeff3.2/I126-n.tendl
Ratio
1.10
1.05
1.00
0.95
9
10^7
2
3
4
5
6
7
8
9
10^8
2
97
Incident Energy (eV)
53-I -126

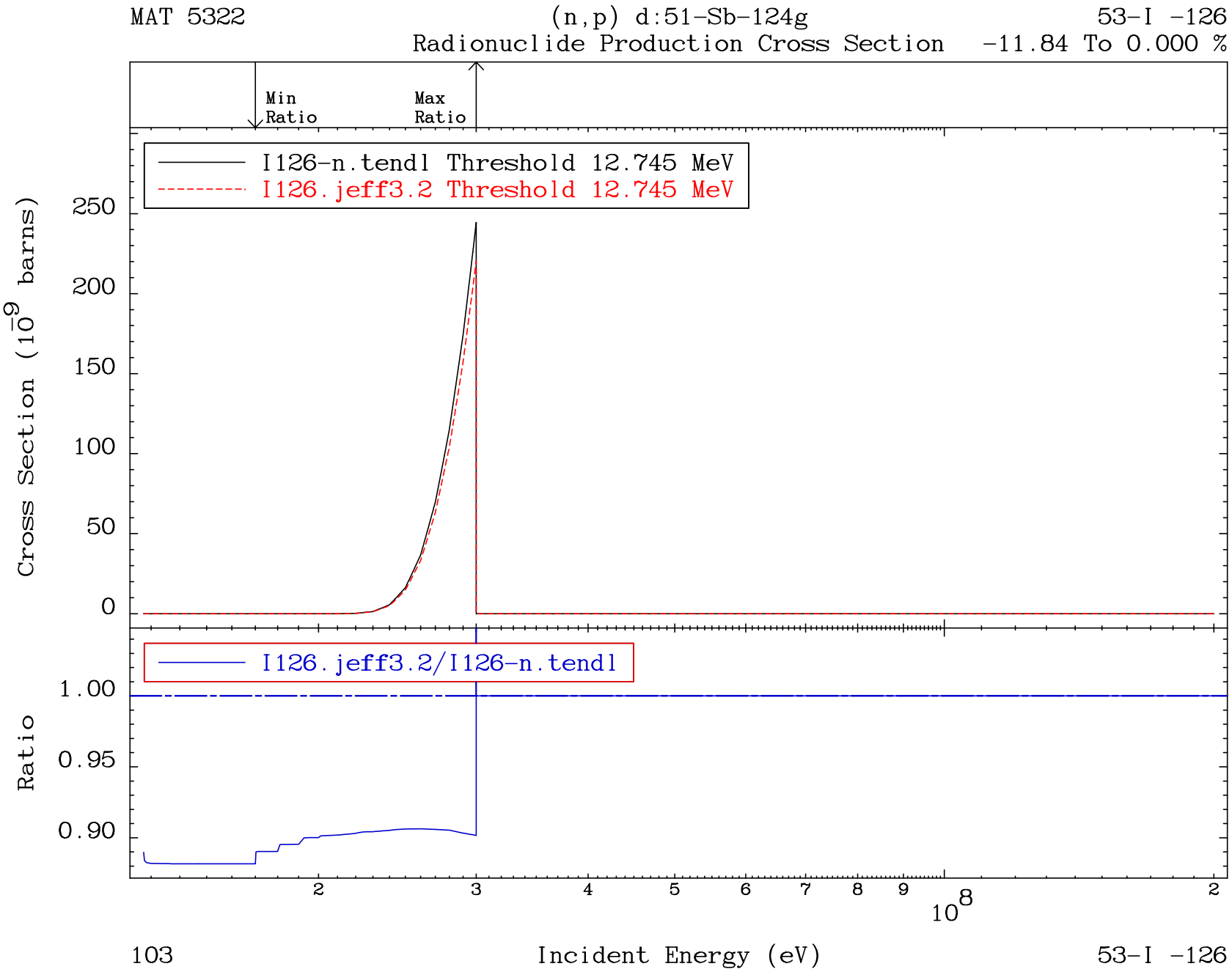

MAT 5322
(n,d):52-Te-125g
53-I -126
Radionuclide Production Cross Section
-0.379 To 2.536 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 3.9844 MeV
I126.jeff3.2 Threshold 3.9844 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
I126.jeff3.2/I126-n.tendl
Ratio
1.00
1.01
1.02
1.03
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
98
Incident Energy (eV)
53-I -126

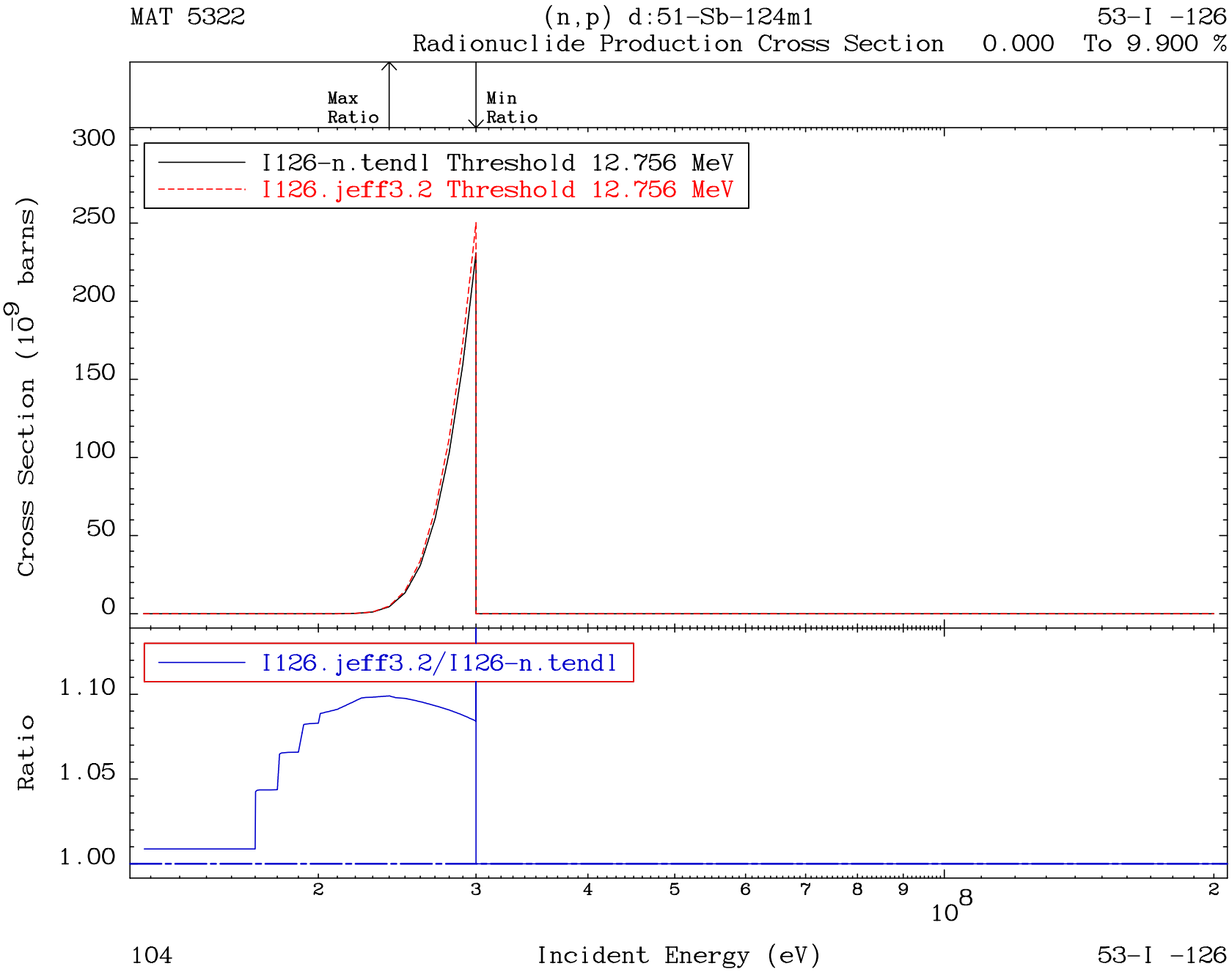

MAT 5322
(n,d):52-Te-125m2
53-I -126
Radionuclide Production Cross Section -0.486 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 5.2000 MeV
I126.jeff3.2 Threshold 5.2000 MeV
Cross Section (milli-barns)
16
14
12
10
8
6
4
2
0
I126.jeff3.2/I126-n.tendl
Ratio
1.01
1.00
0.99
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
99
Incident Energy (eV)
53-I -126

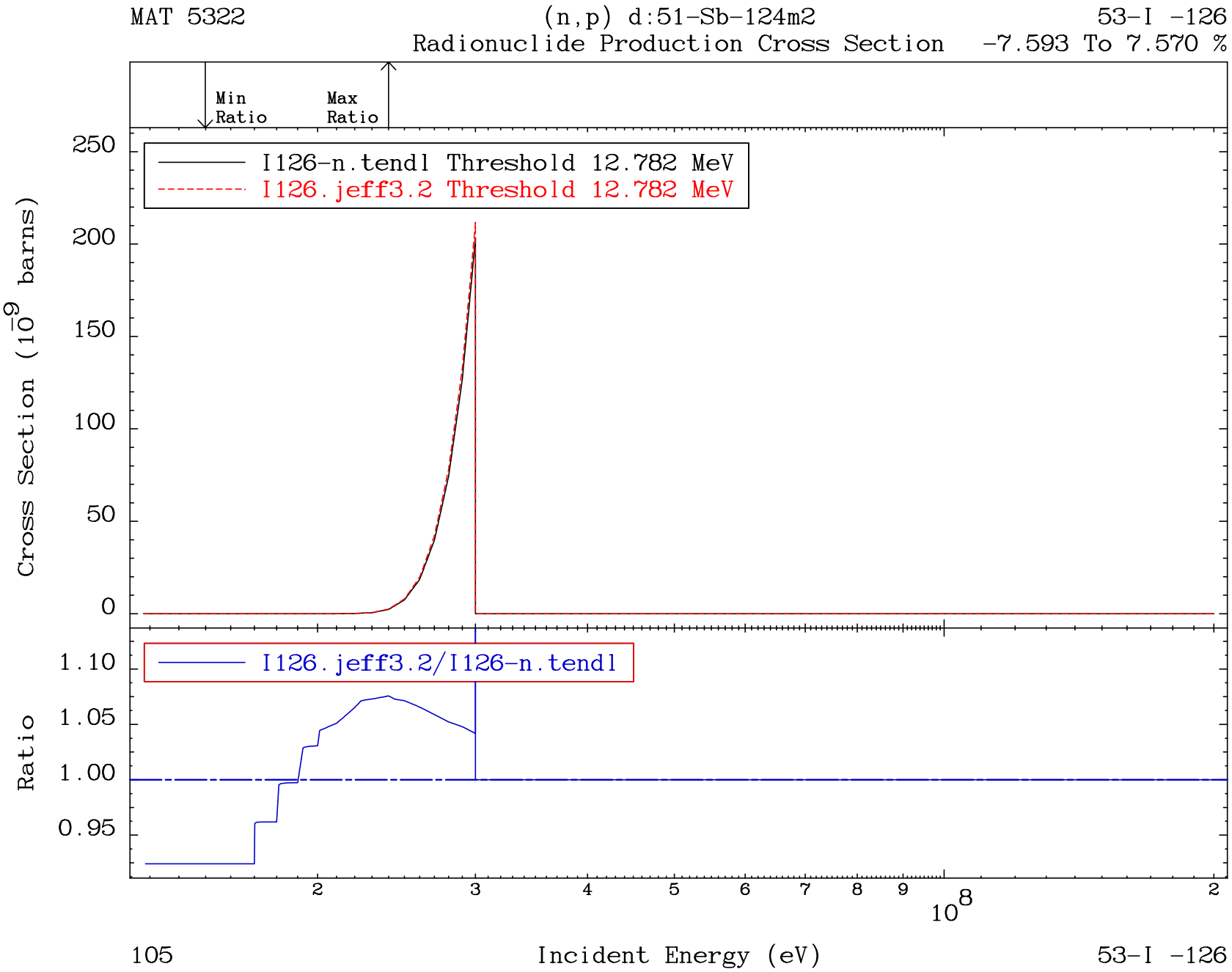

MAT 5322
(n,He-3):51-Sb-124g
53-I -126
Radionuclide Production Cross Section -11.38 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 11.500 MeV
I126.jeff3.2 Threshold 11.500 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.95
0.90
2
3
4
5
6
7
8
9
10^8
2
100
Incident Energy (eV)
53-I -126

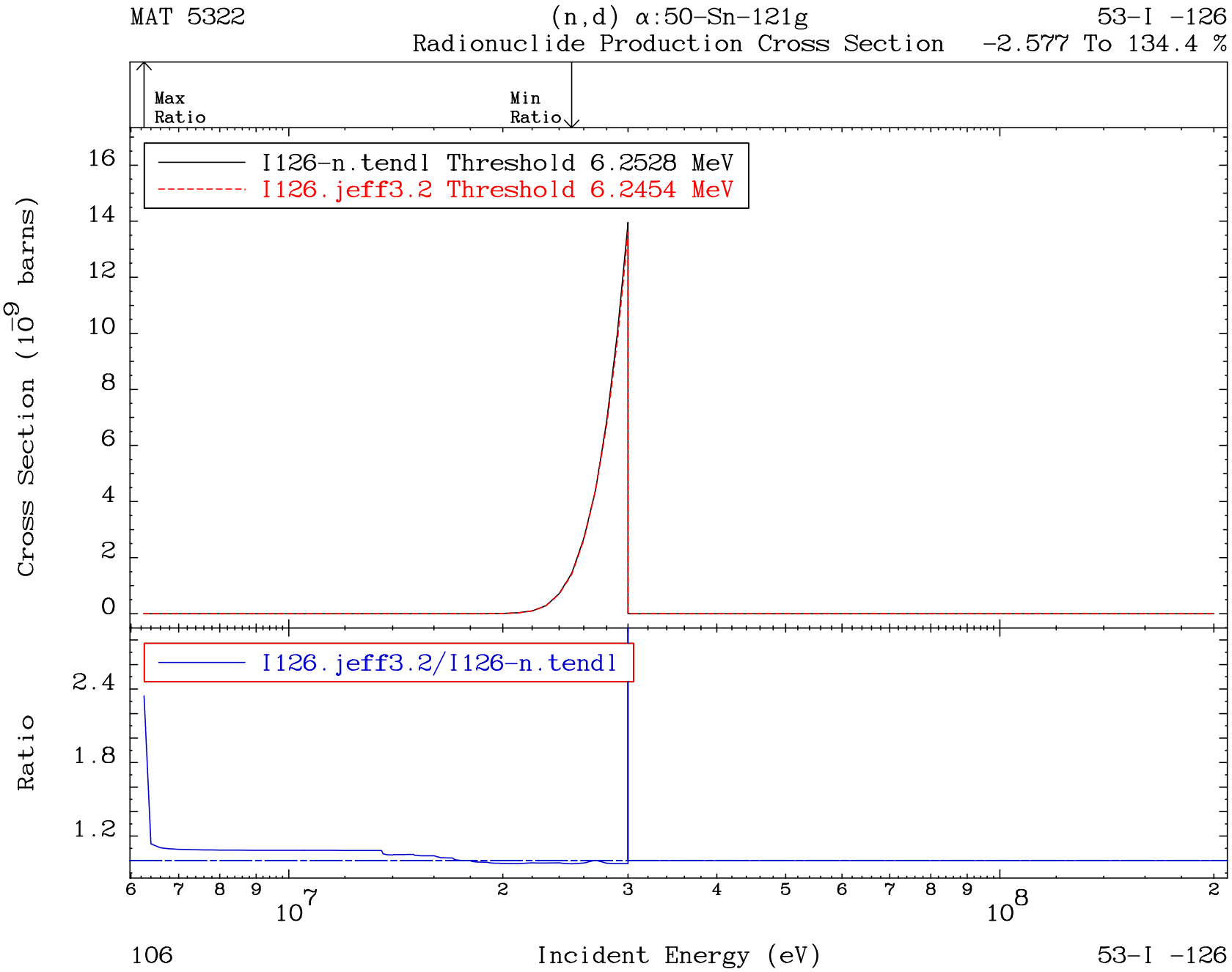

MAT 5322
(n,He-3):51-Sb-124m1
53-I -126
Radionuclide Production Cross Section -0.368 To 15.04 %
Max
Ratio
I126-n.tendl Threshold 11.500 MeV
I126.jeff3.2 Threshold 11.500 MeV
Cross Section (micro-barns)
500
400
300
200
100
0
I126.jeff3.2/I126-n.tendl
Ratio
1.1
1.0
2
3
4
5
6
7
8
9
2
10^8
101
Incident Energy (eV)
53-I -126

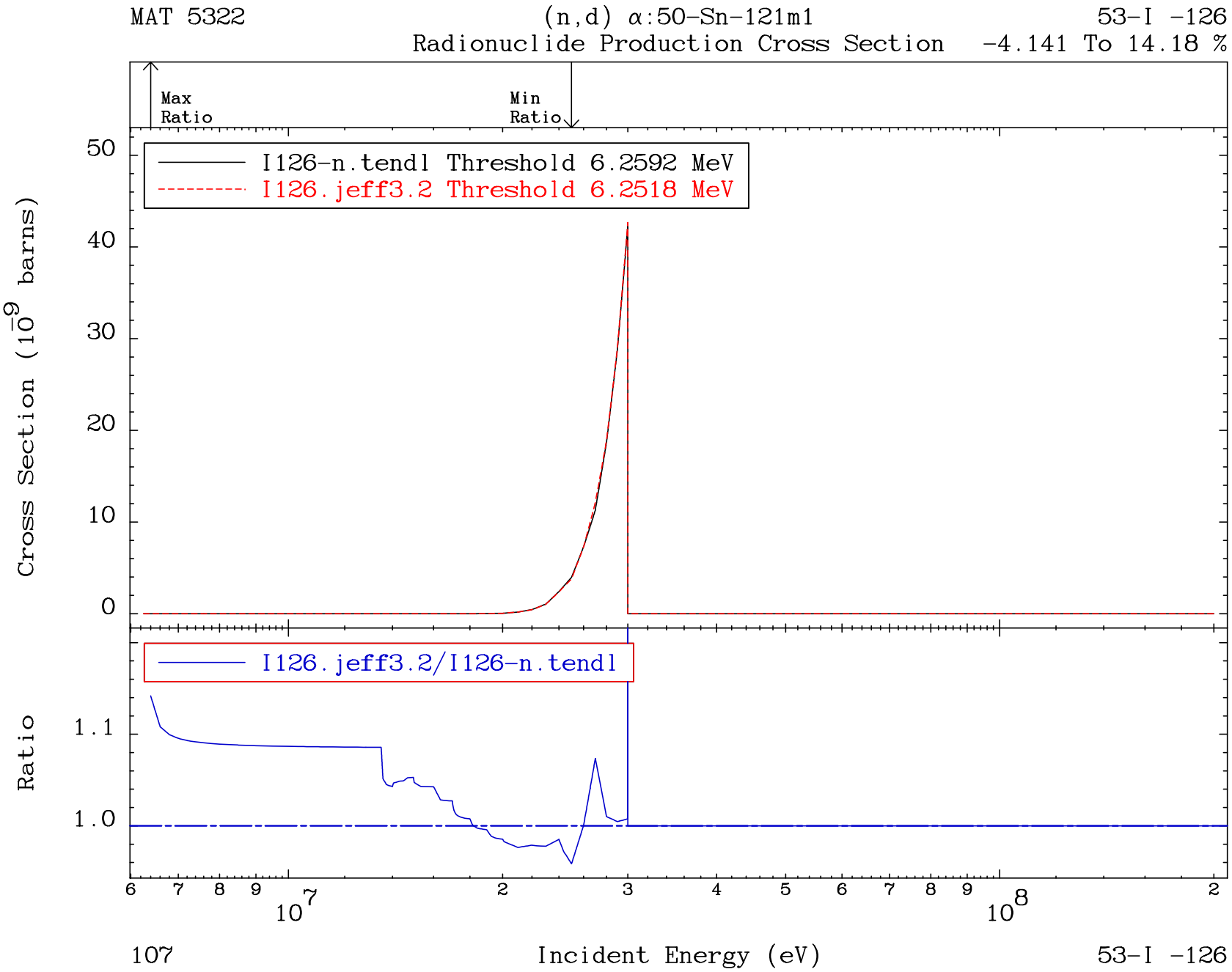

MAT 5322
(n,He-3):51-Sb-124m2
53-I -126
Radionuclide Production Cross Section -0.367 To 13.78 %
Max
Ratio
I126-n.tendl Threshold 11.500 MeV
I126.jeff3.2 Threshold 11.500 MeV
Cross Section (micro-barns)
400
300
200
100
0
I126.jeff3.2/I126-n.tendl
Ratio
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
10^8
2
102
Incident Energy (eV)
53-I -126


MAT 5322
(n,p) d:51-Sb-124g
53-I -126
Radionuclide Production Cross Section -11.84 To 0.000 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 12.745 MeV
I126.jeff3.2 Threshold 12.745 MeV
Cross Section ($10^{-9}$ barns)
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.00
0.95
0.90
2
3
4
5
6
7
8
9
$10^8$
2
103
Incident Energy (eV)
53-I -126


MAT 5322
(n,p) d:51-Sb-124m1
53-I -126
Radionuclide Production Cross Section 0.000 To 9.900 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 12.756 MeV
I126.jeff3.2 Threshold 12.756 MeV
Cross Section ($10^{-9}$ barns)
300
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.10
1.05
1.00
2
3
4
5
6
7
8
9
$10^8$
2
104
Incident Energy (eV)
53-I -126


MAT 5322
(n,p) d:51-Sb-124m2
53-I -126
Radionuclide Production Cross Section -7.593 To 7.570 %
Min Ratio
Max Ratio
I126-n.tendl Threshold 12.782 MeV
I126.jeff3.2 Threshold 12.782 MeV
Cross Section ($10^{-9}$ barns)
250
200
150
100
50
0
I126.jeff3.2/I126-n.tendl
Ratio
1.10
1.05
1.00
0.95
2
3
4
5
6
7
8
9
$10^8$
2
105
Incident Energy (eV)
53-I -126


MAT 5322
(n,d) α:50-Sn-121g
53-I -126
Radionuclide Production Cross Section -2.577 To 134.4 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 6.2528 MeV
I126.jeff3.2 Threshold 6.2454 MeV
Cross Section ($10^{-9}$ barns)
I126.jeff3.2/I126-n.tendl
Ratio
Incident Energy (eV)
106
53-I -126


MAT 5322
(n,d) α:50-Sn-121m1
53-I -126
Radionuclide Production Cross Section -4.141 To 14.18 %
Max Ratio
Min Ratio
I126-n.tendl Threshold 6.2592 MeV
I126.jeff3.2 Threshold 6.2518 MeV
Cross Section ($10^{-9}$ barns)
50
40
30
20
10
0
I126.jeff3.2/I126-n.tendl
Ratio
1.1
1.0
6 7 8 9 $10^7$ 2 3 4 5 6 7 8 9 $10^8$ 2
107
Incident Energy (eV)
53-I -126