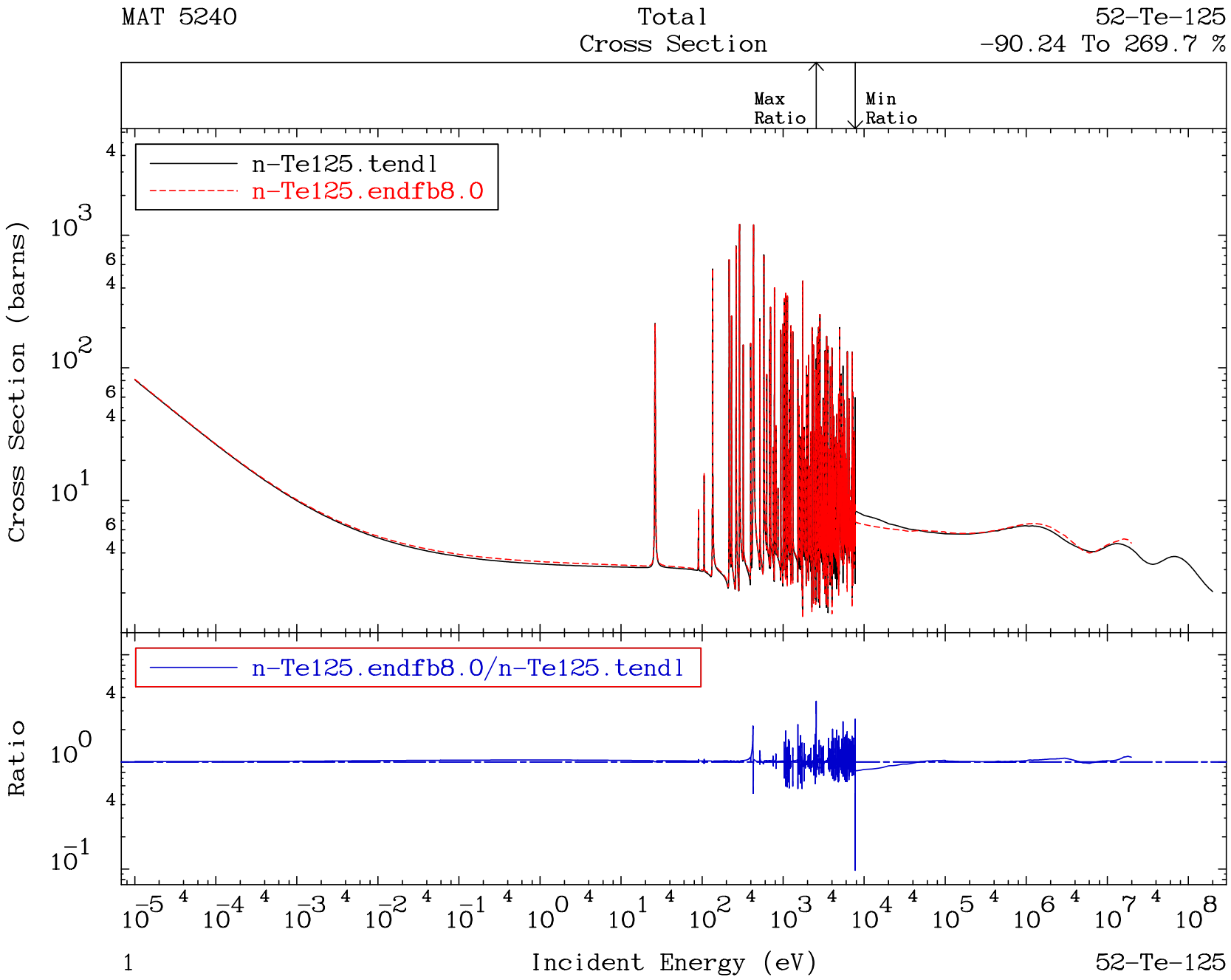
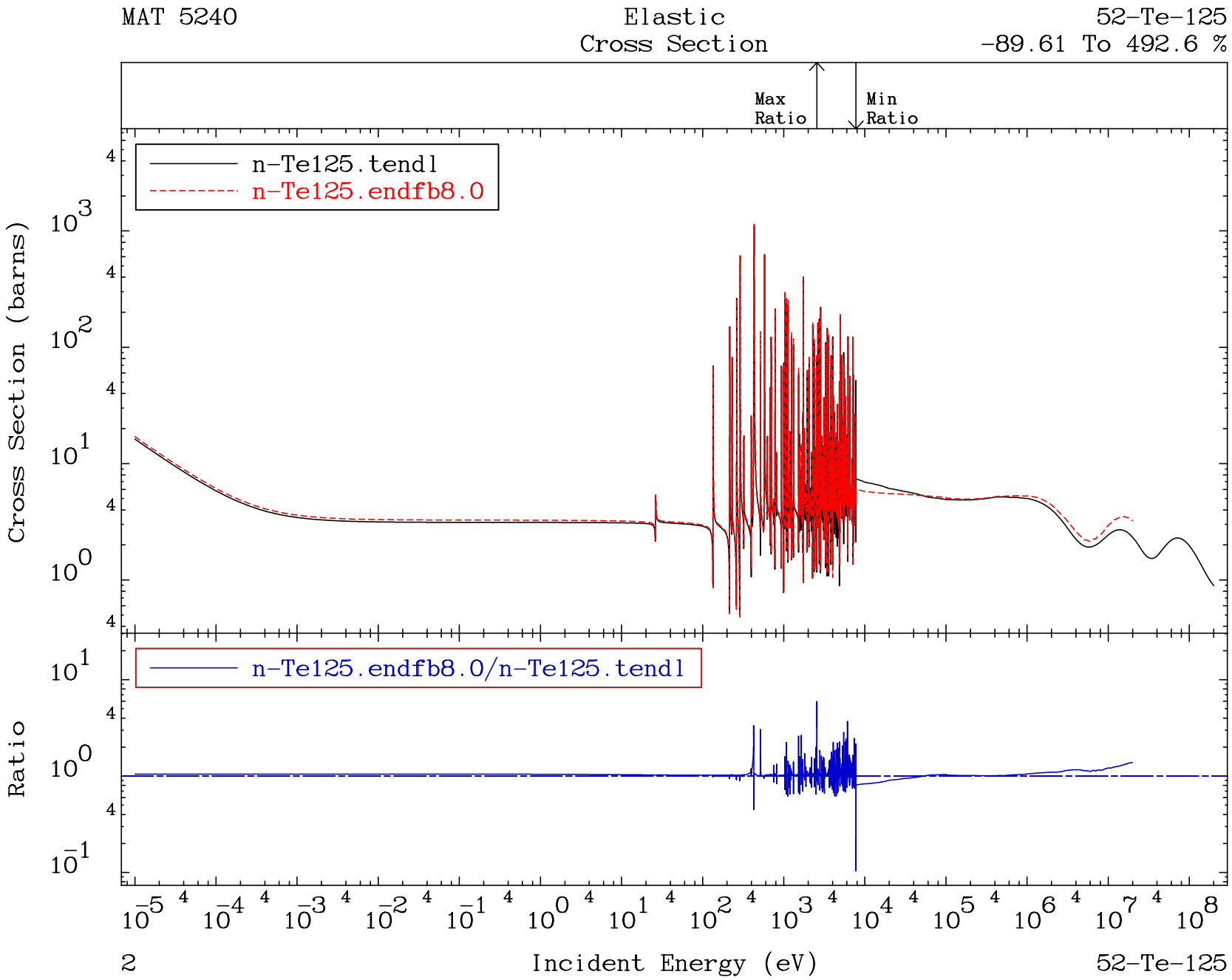
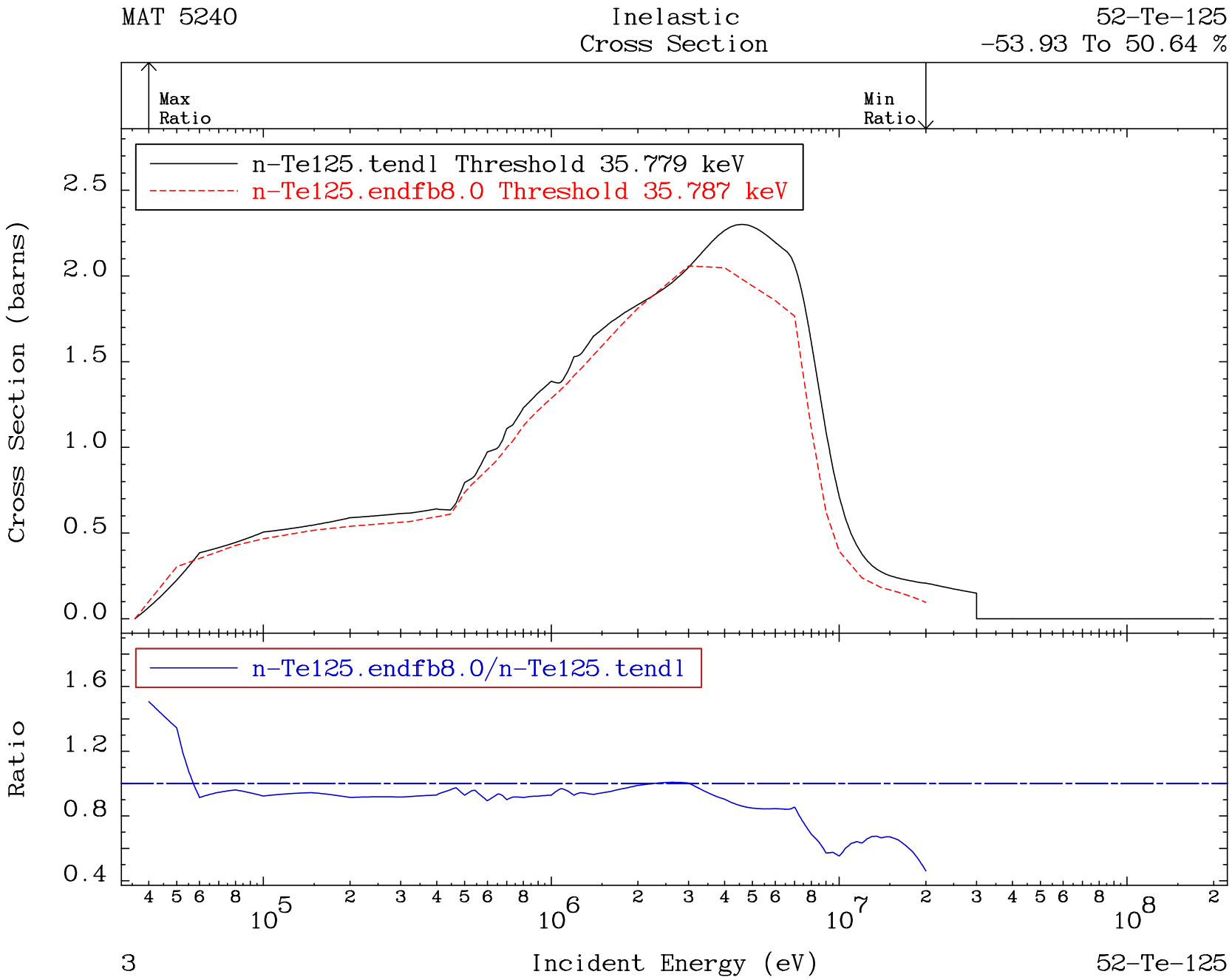
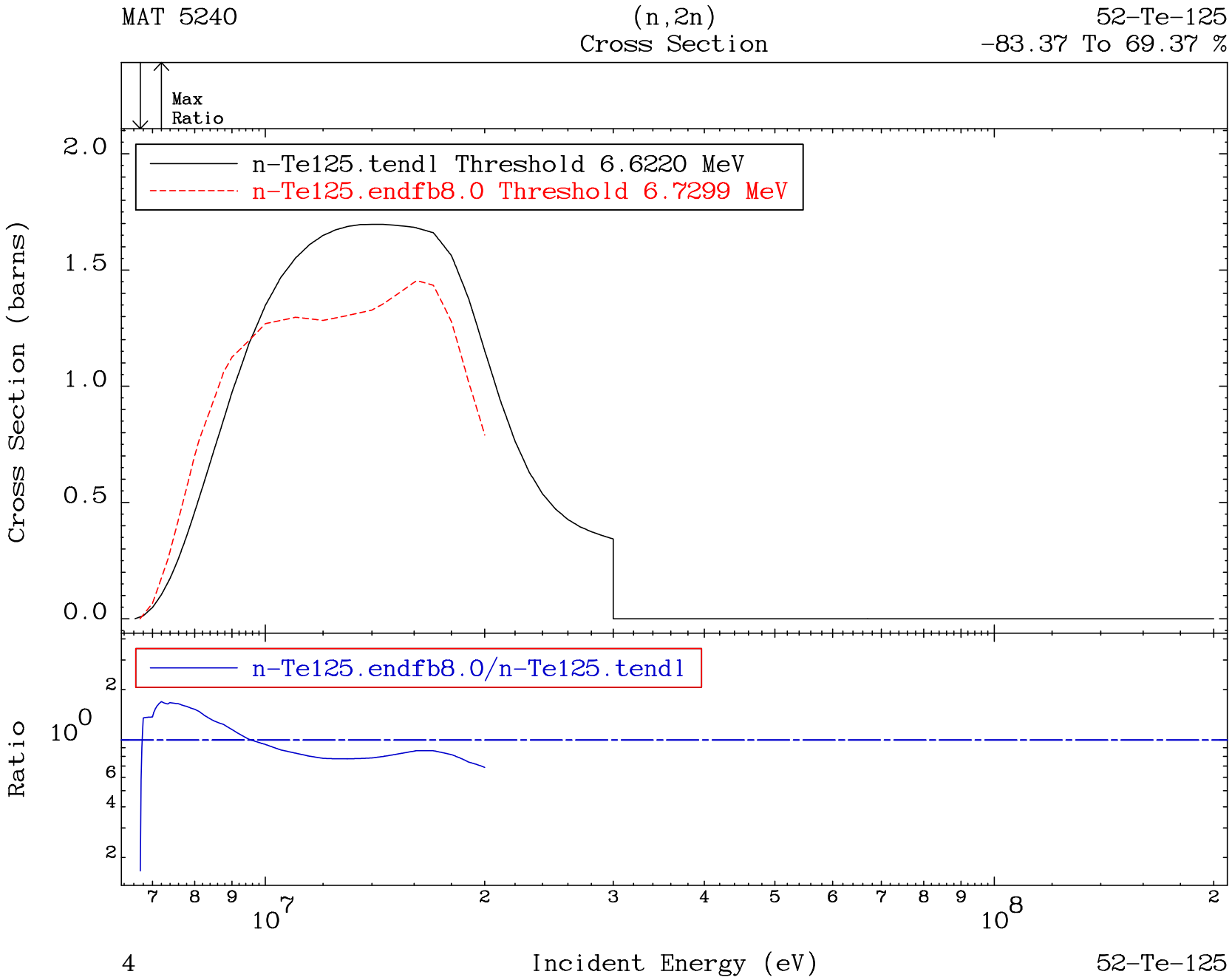
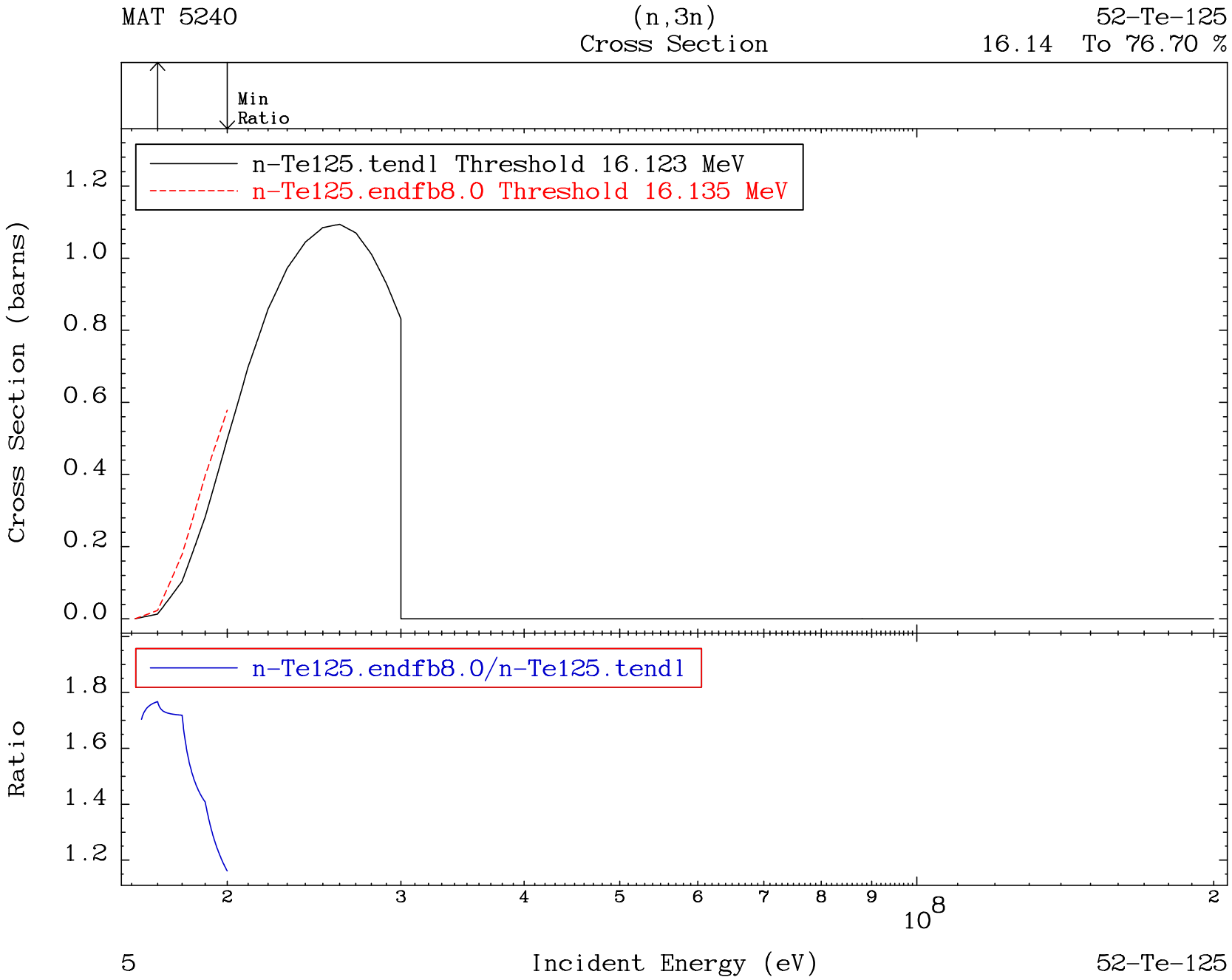
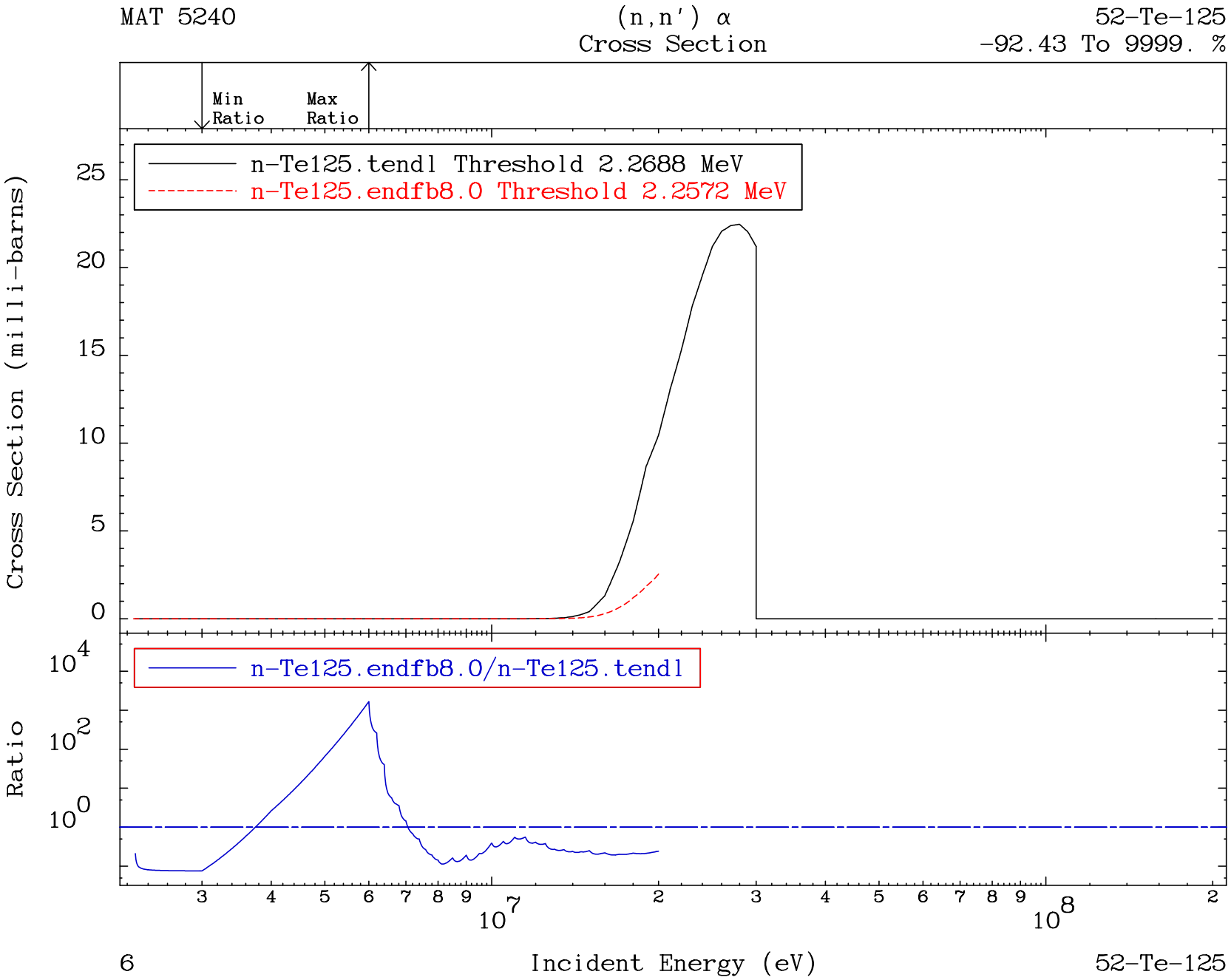

MAT 5240
Total
Cross Section
52-Te-125
-90.24 To 269.7 %
Max
Ratio
Min
Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
1
52-Te-125

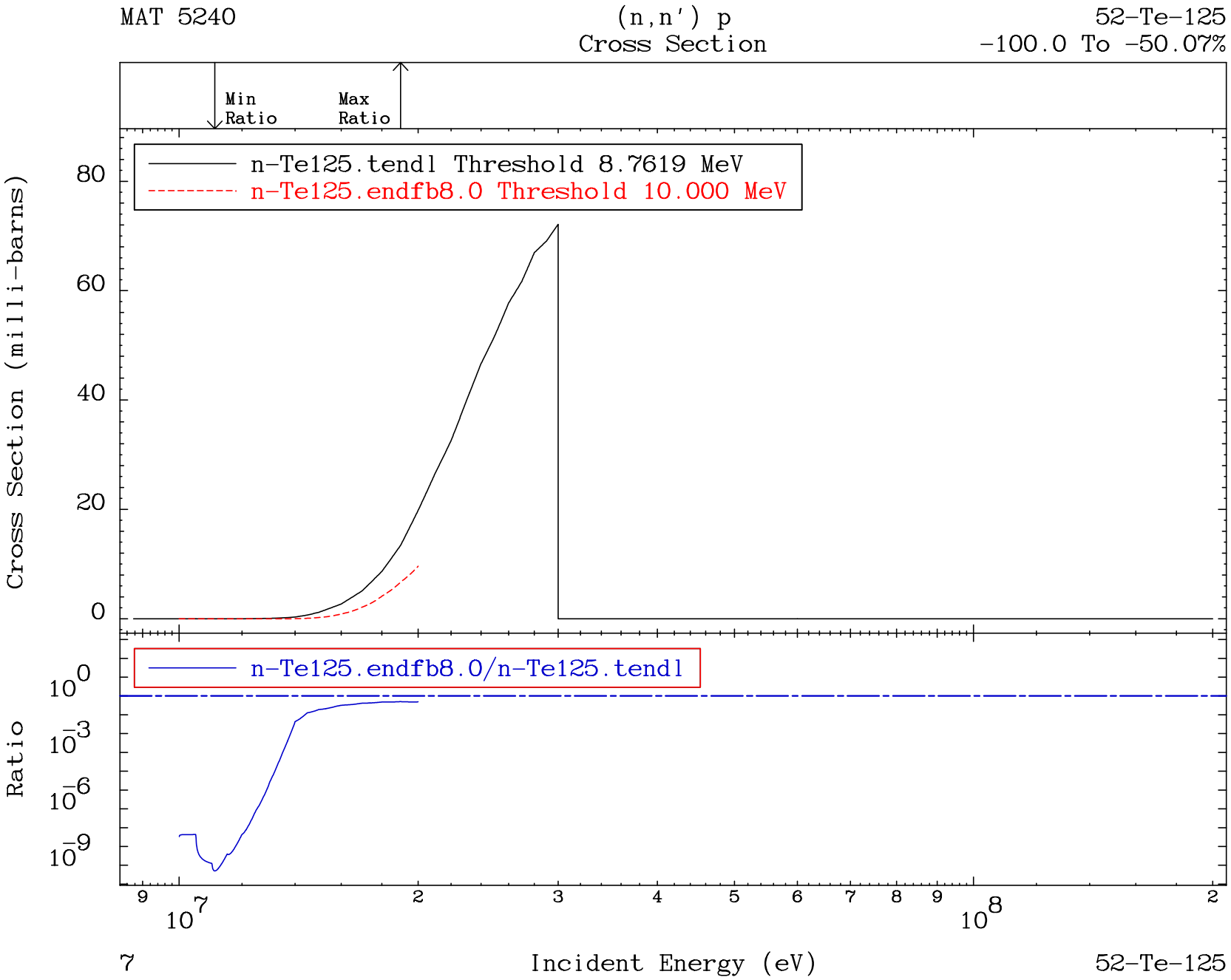

MAT 5240
Elastic
Cross Section
52-Te-125
-89.61 To 492.6 %
Max
Ratio
Min
Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
2
52-Te-125

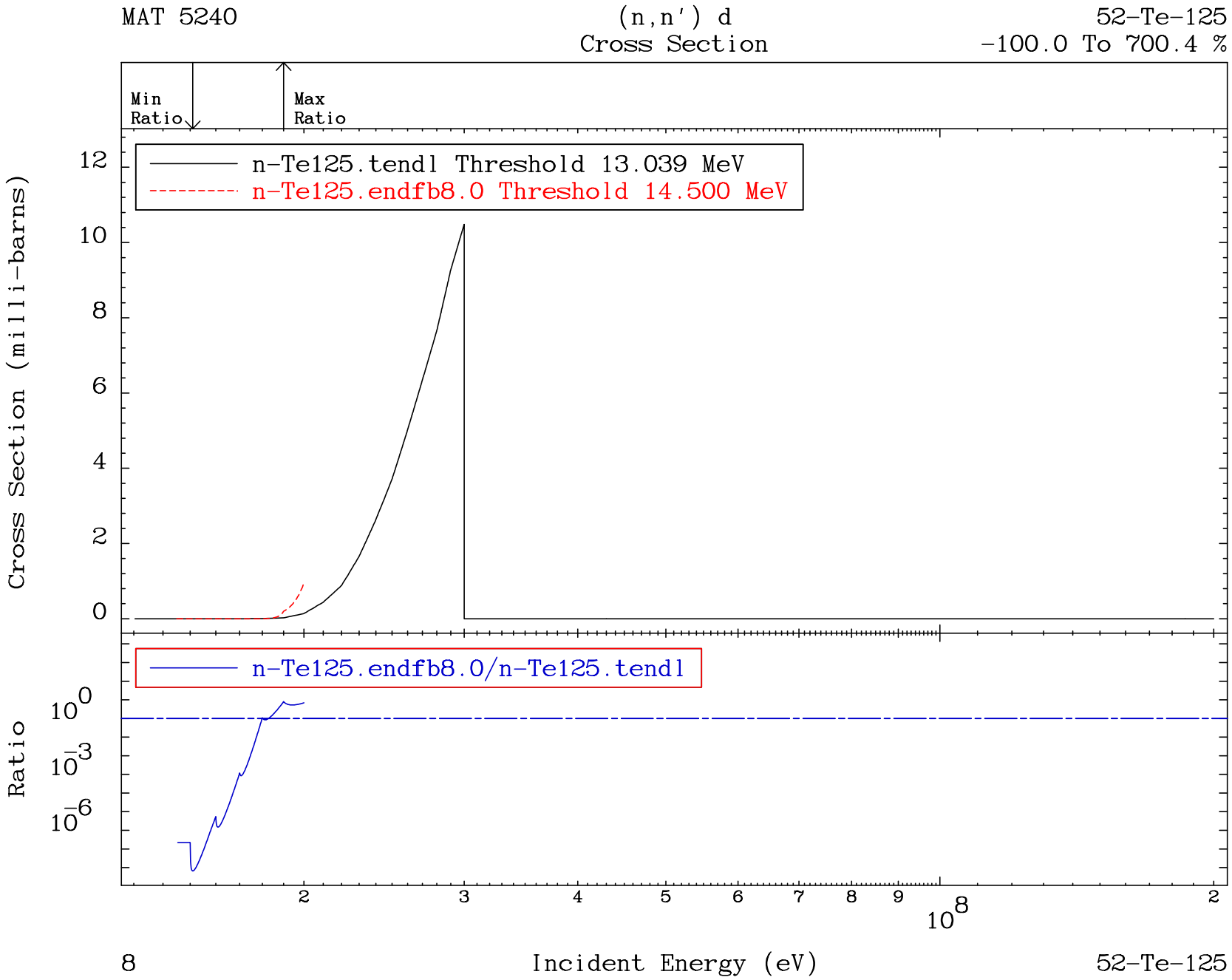

MAT 5240
Inelastic
Cross Section
52-Te-125
-53.93 To 50.64 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 35.779 keV
n-Te125.endfb8.0 Threshold 35.787 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
1.6
1.2
0.8
0.4
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
3
Incident Energy (eV)
52-Te-125

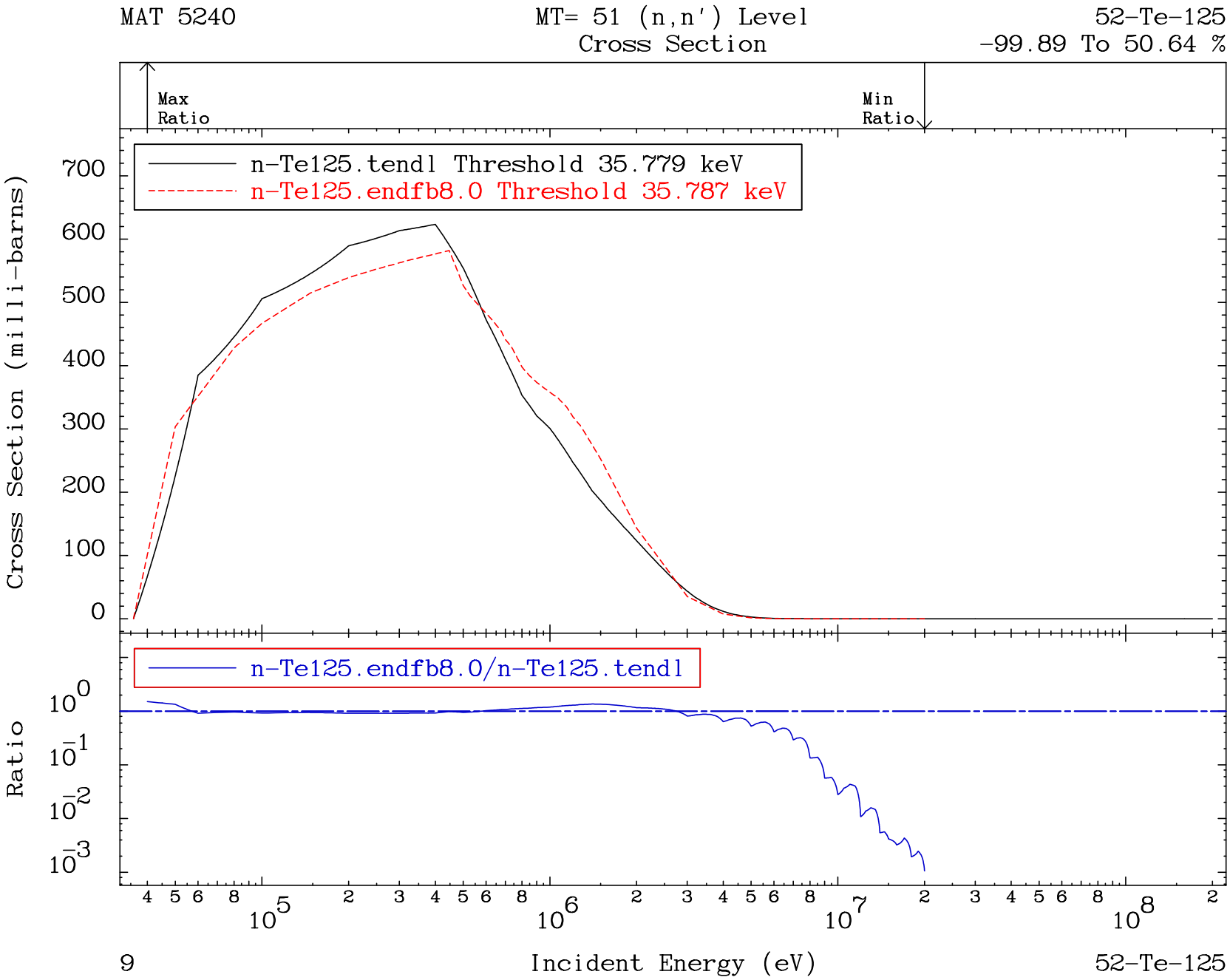

MAT 5240
(n,2n)
Cross Section
52-Te-125
-83.37 To 69.37 %
Max
Ratio
n-Te125.tendl Threshold 6.6220 MeV
n-Te125.endfb8.0 Threshold 6.7299 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
2
6
4
2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
4
52-Te-125

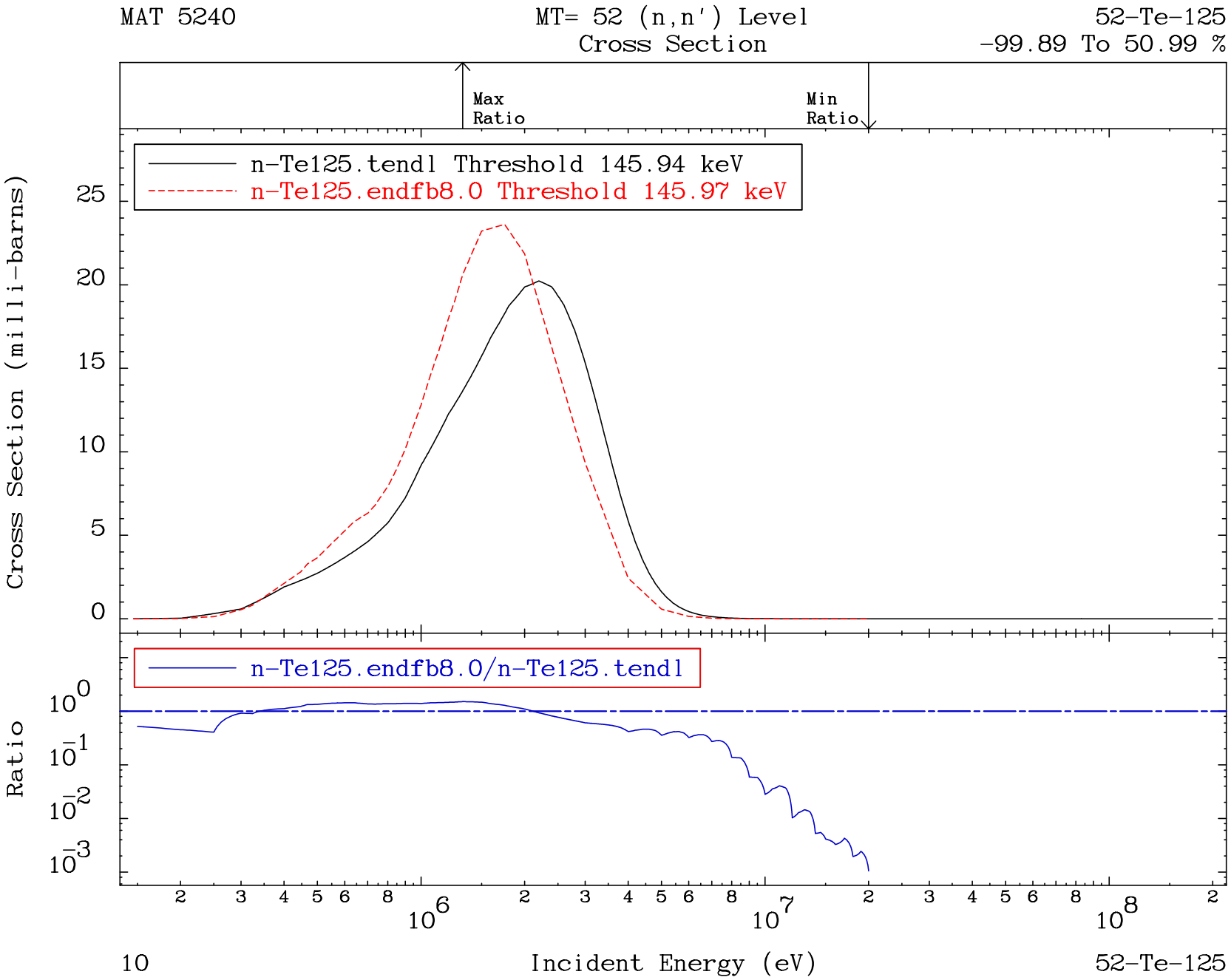

MAT 5240
(n,3n)
Cross Section
52-Te-125
16.14 To 76.70 %
Min
Ratio
n-Te125.tendl Threshold 16.123 MeV
n-Te125.endfb8.0 Threshold 16.135 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
1.8
1.6
1.4
1.2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
52-Te-125

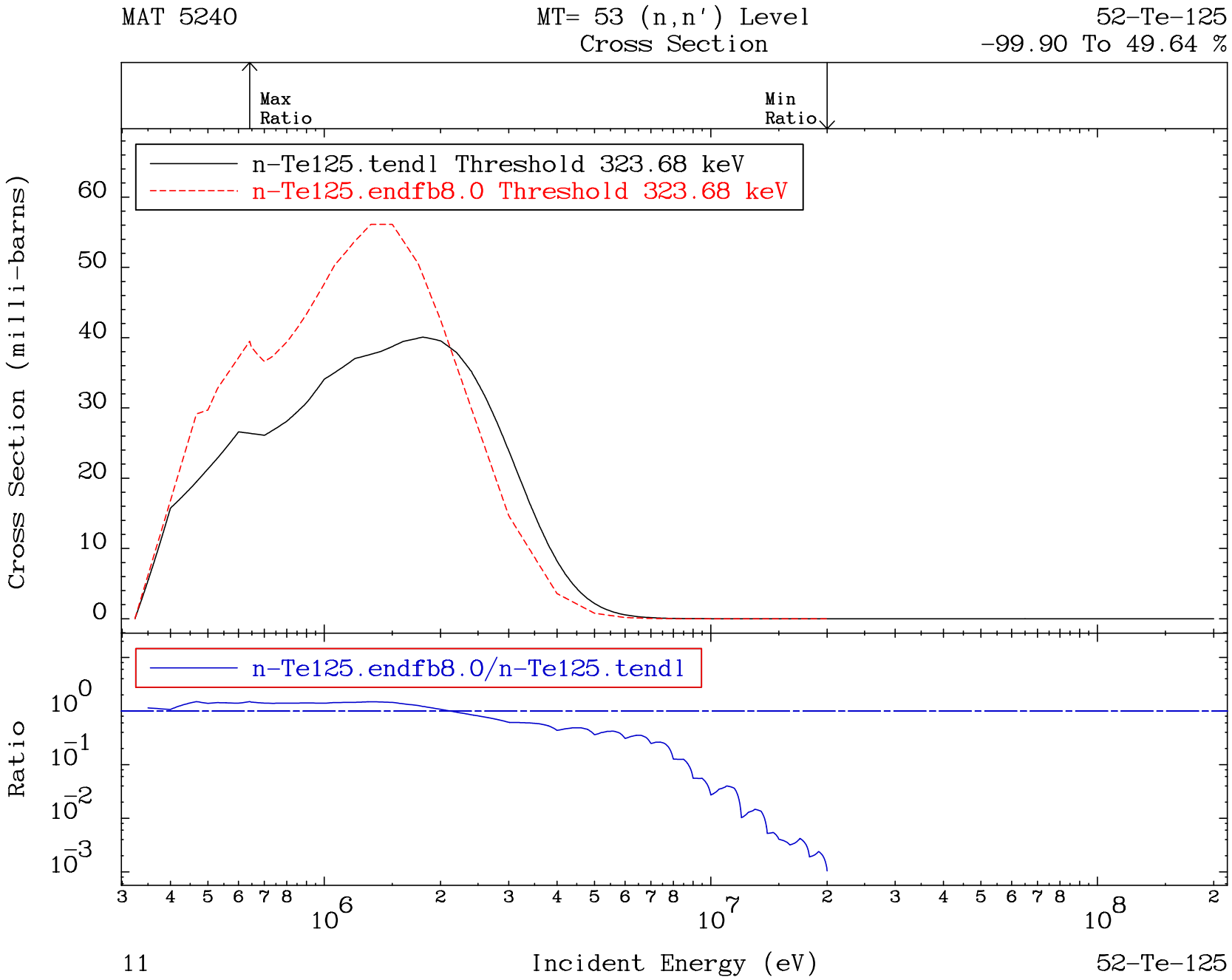

MAT 5240
(n,n') α
Cross Section
52-Te-125
-92.43 To 9999. %
Min Ratio
Max Ratio
n-Te125.tendl Threshold 2.2688 MeV
n-Te125.endfb8.0 Threshold 2.2572 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
52-Te-125

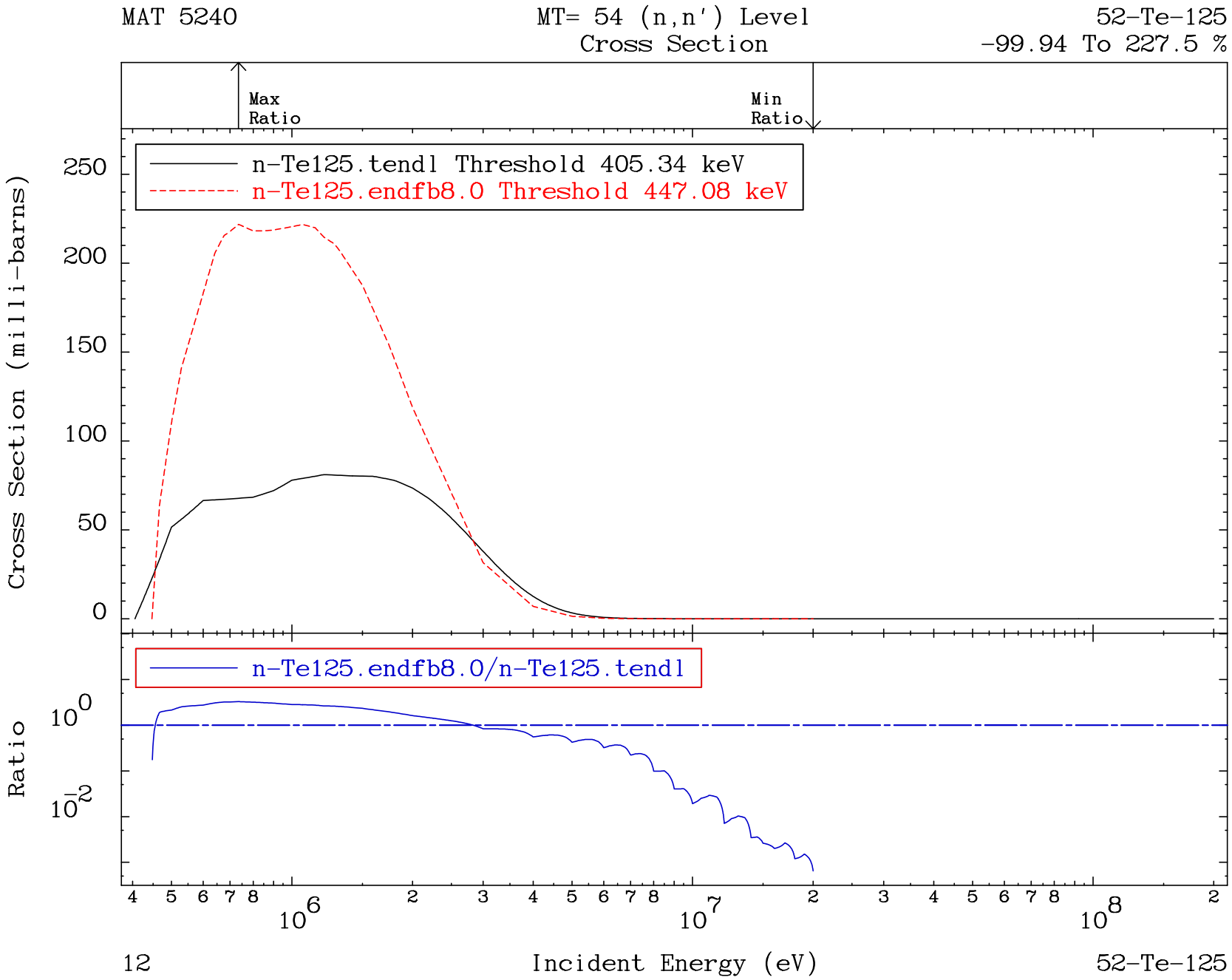

MAT 5240
(n,n') p
Cross Section
52-Te-125
-100.0 To -50.07%
Min Ratio
Max Ratio
n-Te125.tendl Threshold 8.7619 MeV
n-Te125.endfb8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-3
10^-6
10^-9
9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
52-Te-125

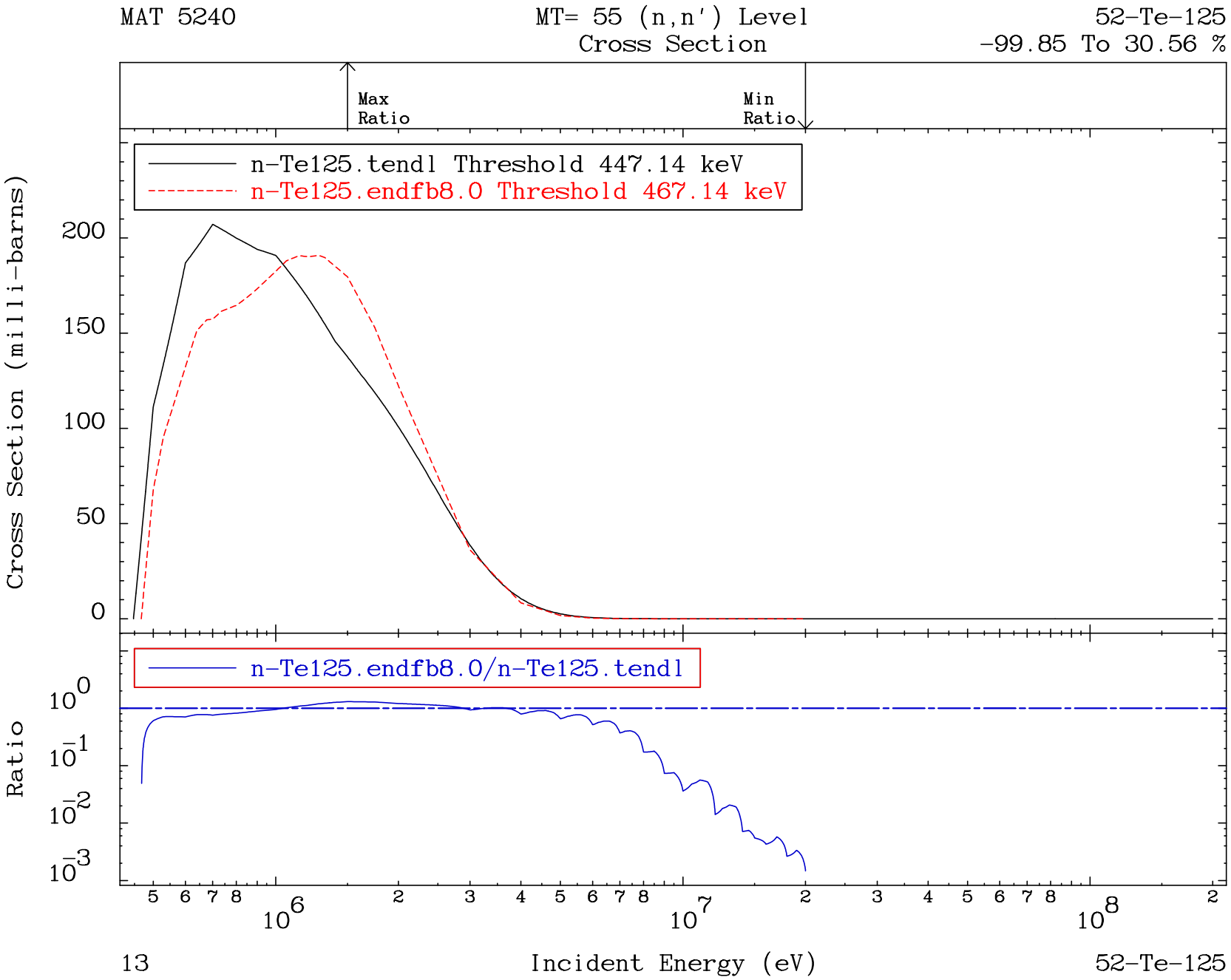

MAT 5240
(n,n') d
Cross Section
52-Te-125
-100.0 To 700.4 %
Min Ratio
Max Ratio
n-Te125.tendl Threshold 13.039 MeV
n-Te125.endfb8.0 Threshold 14.500 MeV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
52-Te-125

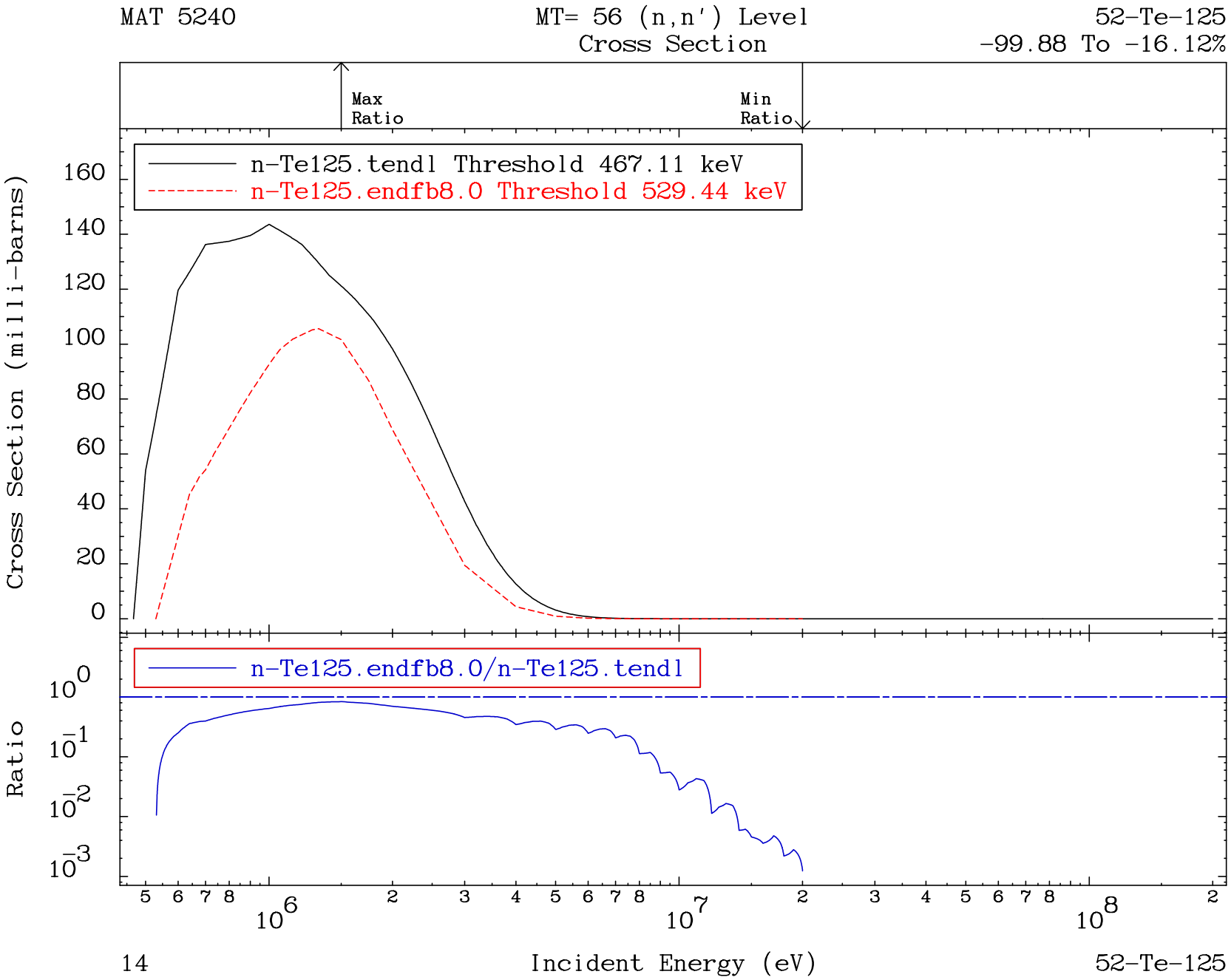

MAT 5240
MT= 51 (n,n') Level
Cross Section
52-Te-125
-99.89 To 50.64 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 35.779 keV
n-Te125.endfb8.0 Threshold 35.787 keV
Cross Section (milli-barns)
700
600
500
400
300
200
100
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
10^-3
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
9
Incident Energy (eV)
52-Te-125

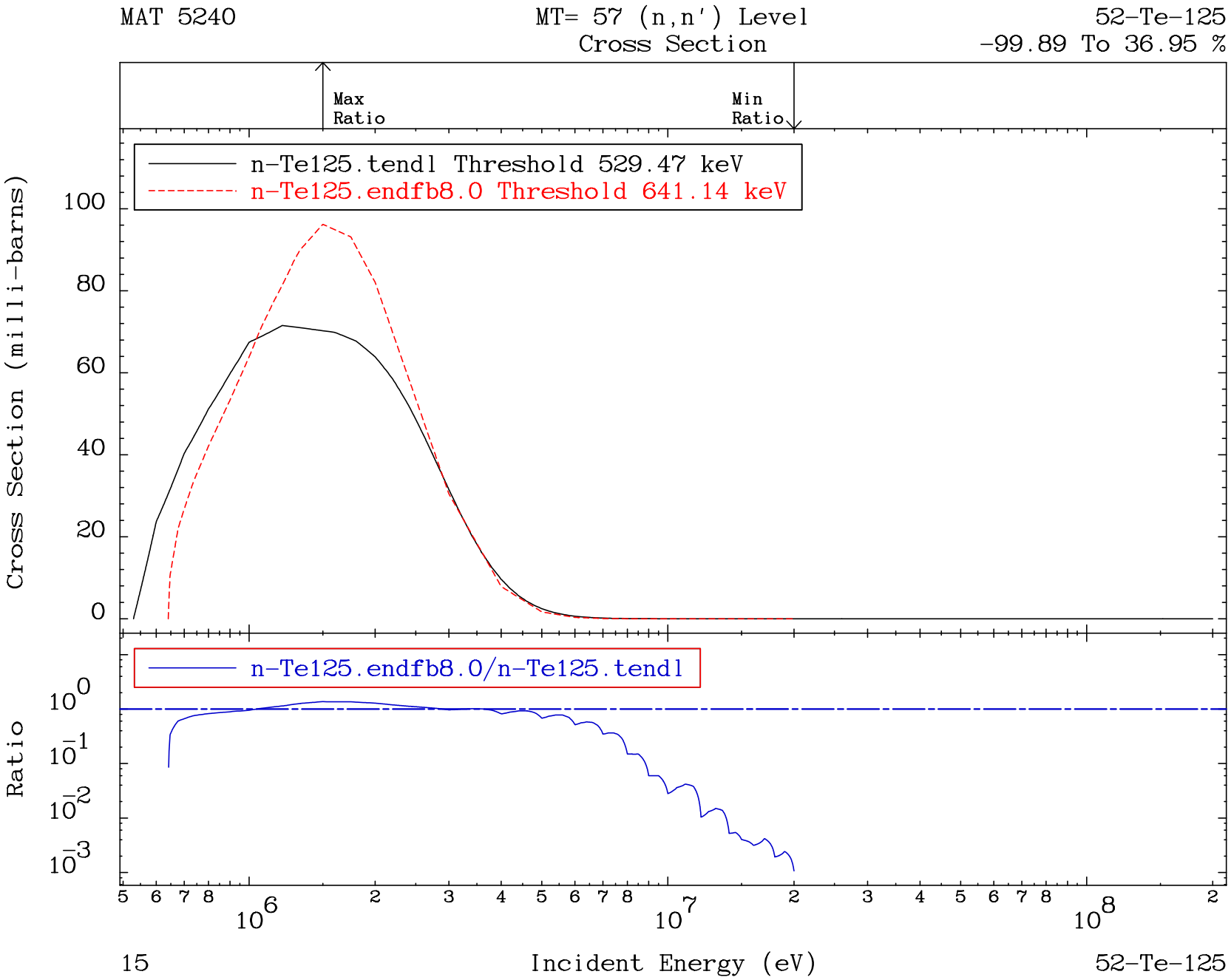

MAT 5240
MT= 52 (n,n') Level
Cross Section
52-Te-125
-99.89 To 50.99 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 145.94 keV
n-Te125.endfb8.0 Threshold 145.97 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
10^-3
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
52-Te-125

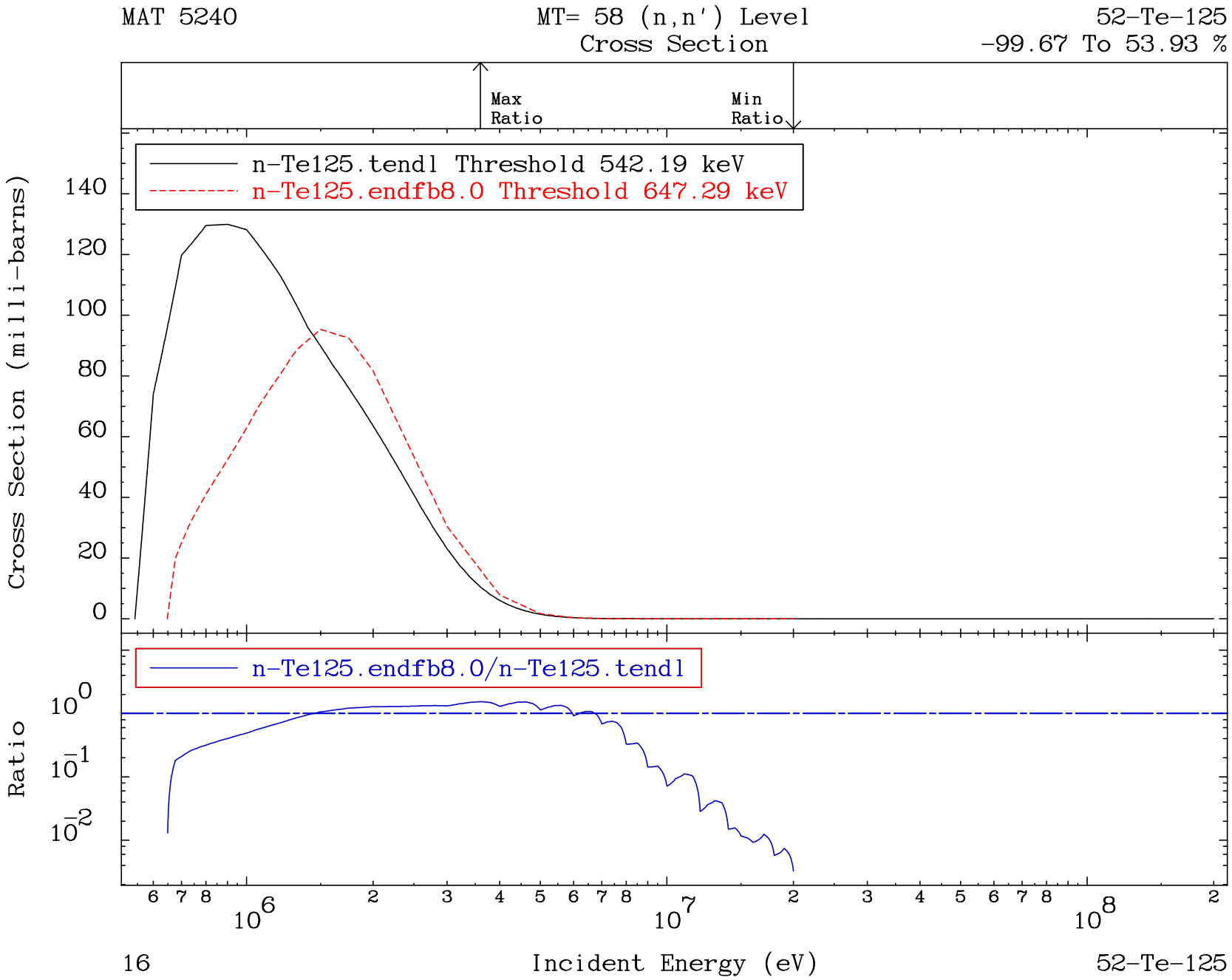

MAT 5240
MT= 53 (n,n') Level
Cross Section
52-Te-125
-99.90 To 49.64 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 323.68 keV
n-Te125.endfb8.0 Threshold 323.68 keV
Cross Section (milli-barns)
0
10
20
30
40
50
60
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^{0}
10^{-1}
10^{-2}
10^{-3}
3 4 5 6 7 8 10^{6} 2 3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
11
Incident Energy (eV)
52-Te-125

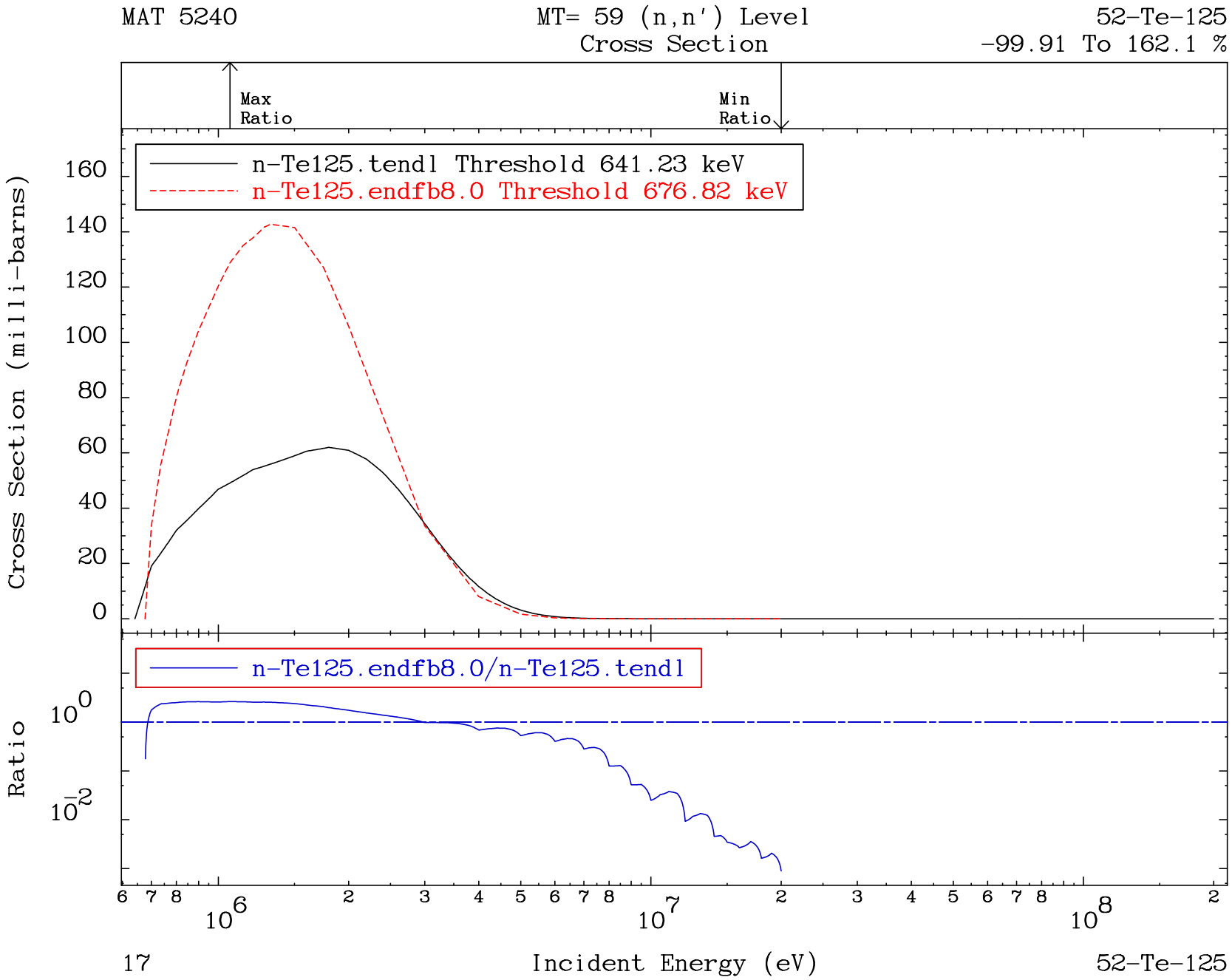

MAT 5240
MT= 54 (n,n') Level
Cross Section
52-Te-125
-99.94 To 227.5 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 405.34 keV
n-Te125.endfb8.0 Threshold 447.08 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
12
Incident Energy (eV)
52-Te-125

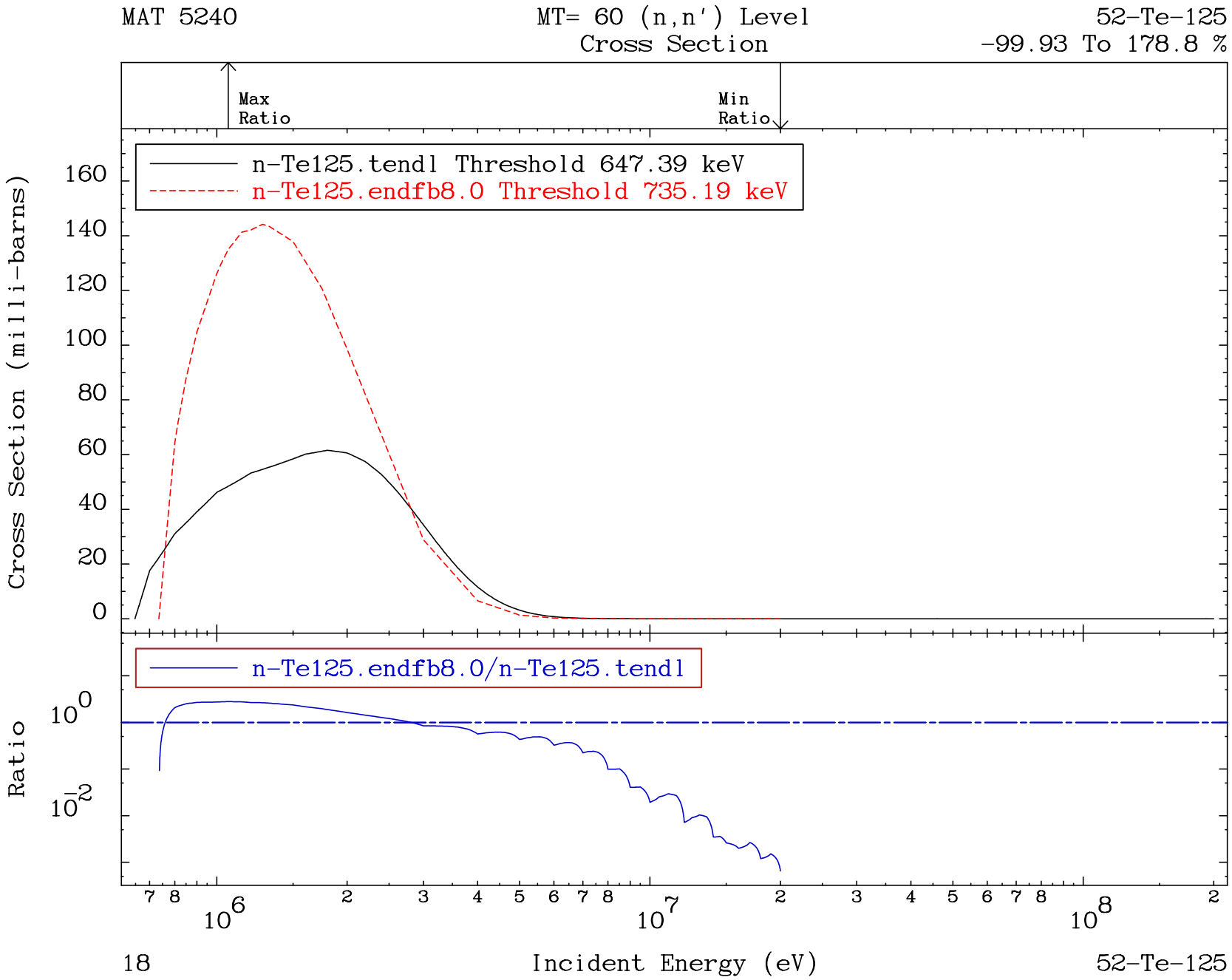

MAT 5240
MT= 55 (n,n') Level
Cross Section
52-Te-125
-99.85 To 30.56 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 447.14 keV
n-Te125.endfb8.0 Threshold 467.14 keV
Cross Section (milli-barns)
200
150
100
50
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
10^-3
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
52-Te-125

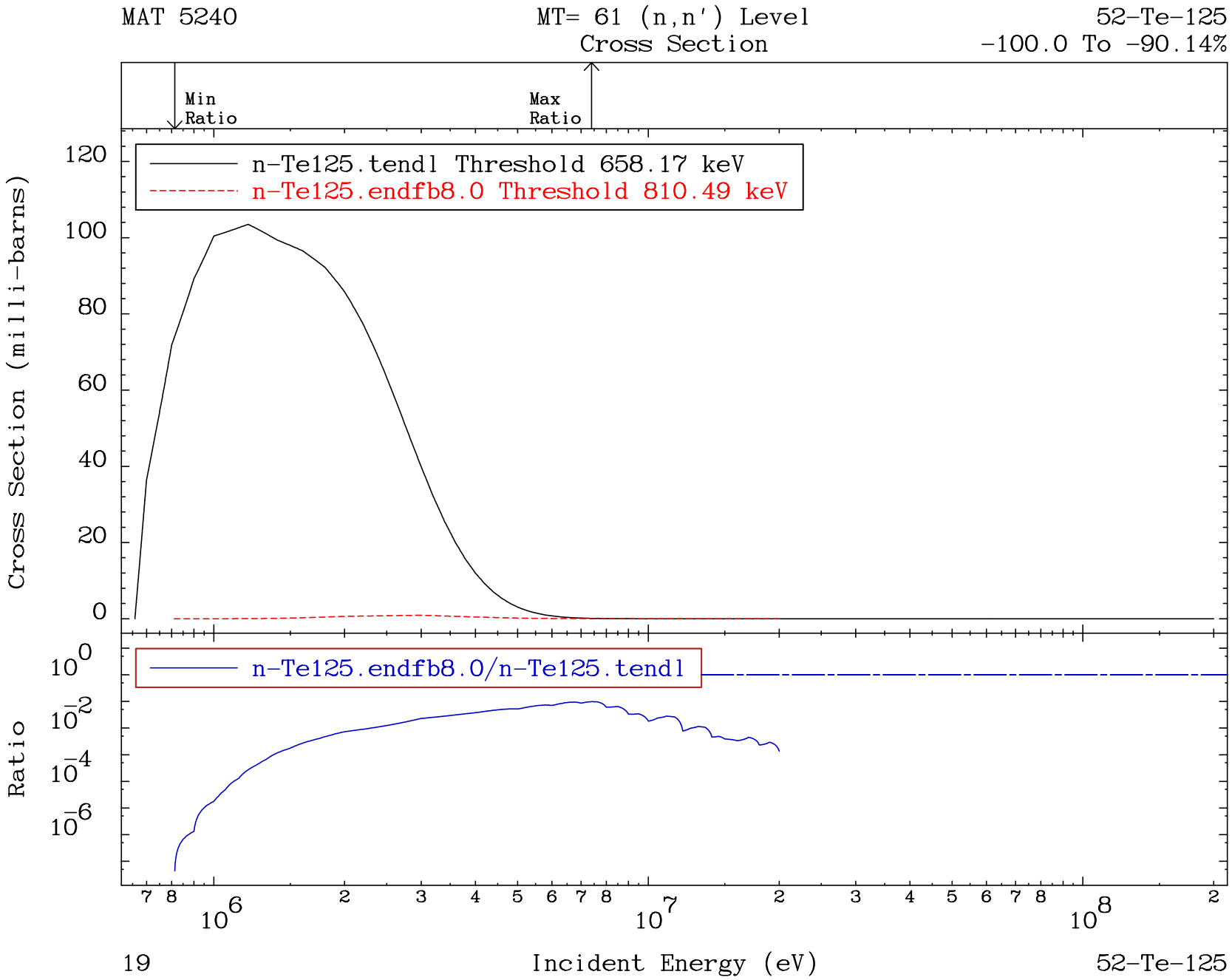

MAT 5240
MT= 56 (n,n') Level
Cross Section
52-Te-125
-99.88 To -16.12%
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 467.11 keV
n-Te125.endfb8.0 Threshold 529.44 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
10^-3
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
52-Te-125

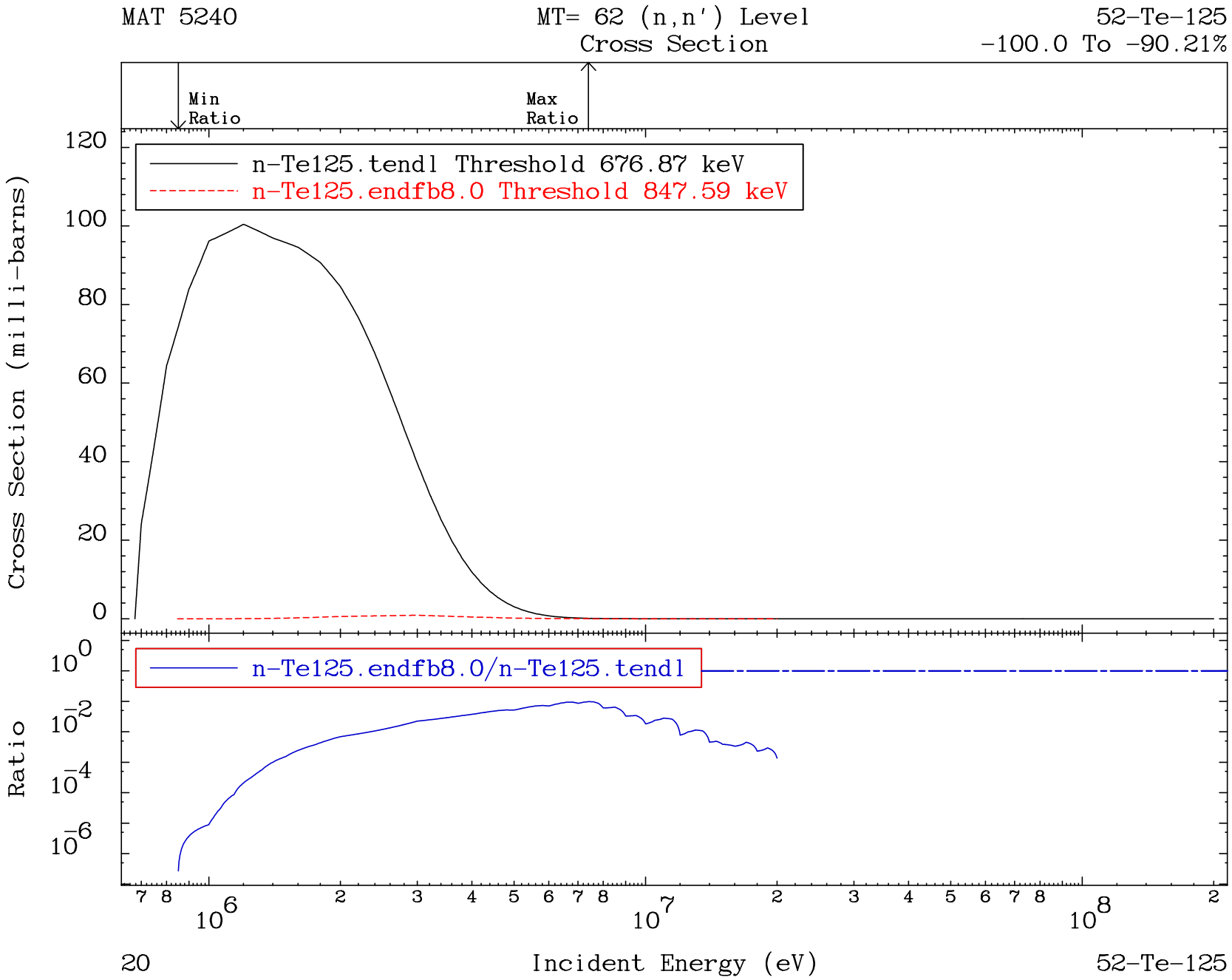

MAT 5240
MT= 57 (n,n') Level
Cross Section
52-Te-125
-99.89 To 36.95 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 529.47 keV
n-Te125.endfb8.0 Threshold 641.14 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
10^-3
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
52-Te-125

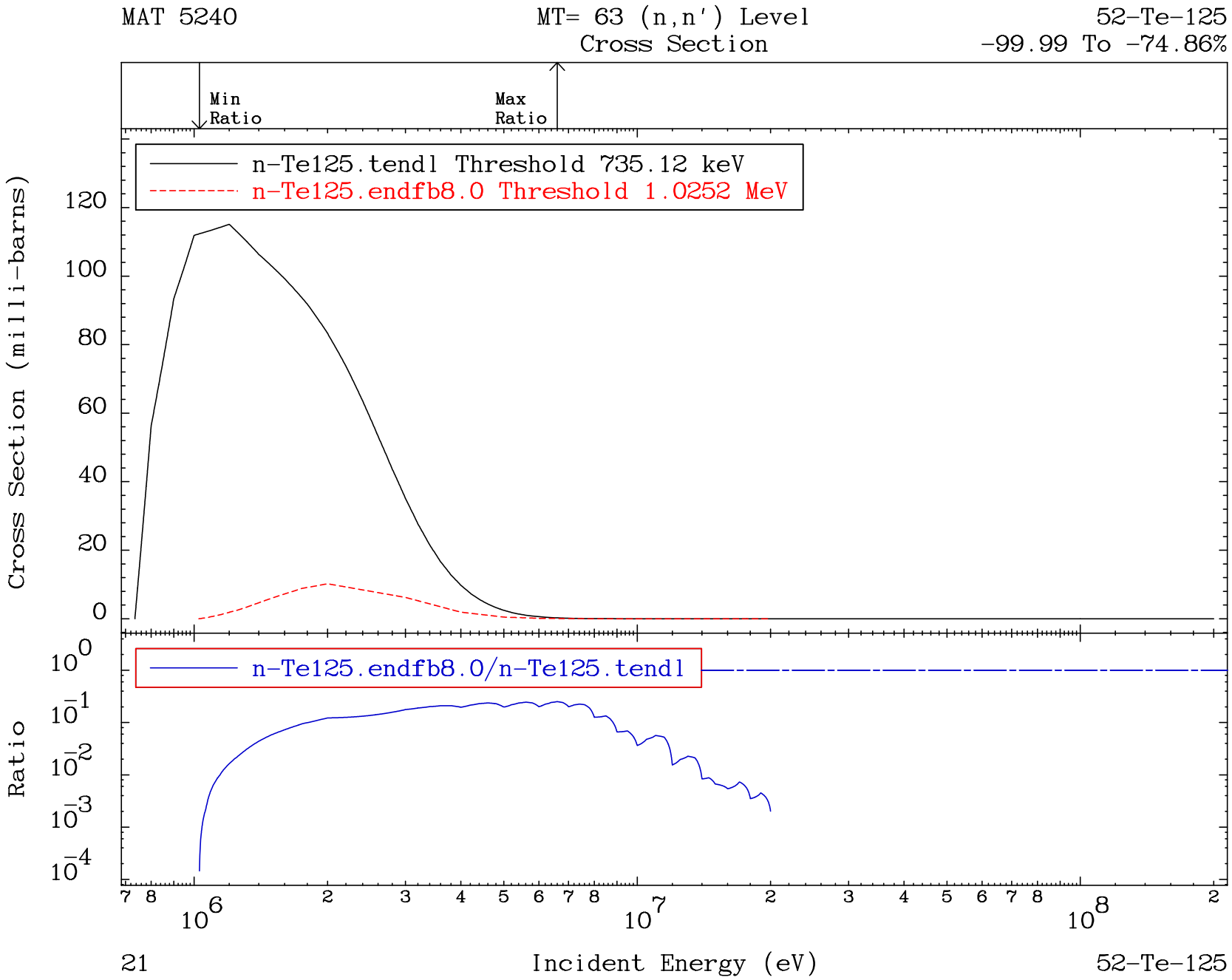

MAT 5240
MT= 58 (n,n') Level
Cross Section
52-Te-125
-99.67 To 53.93 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 542.19 keV
n-Te125.endfb8.0 Threshold 647.29 keV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
16
Incident Energy (eV)
52-Te-125

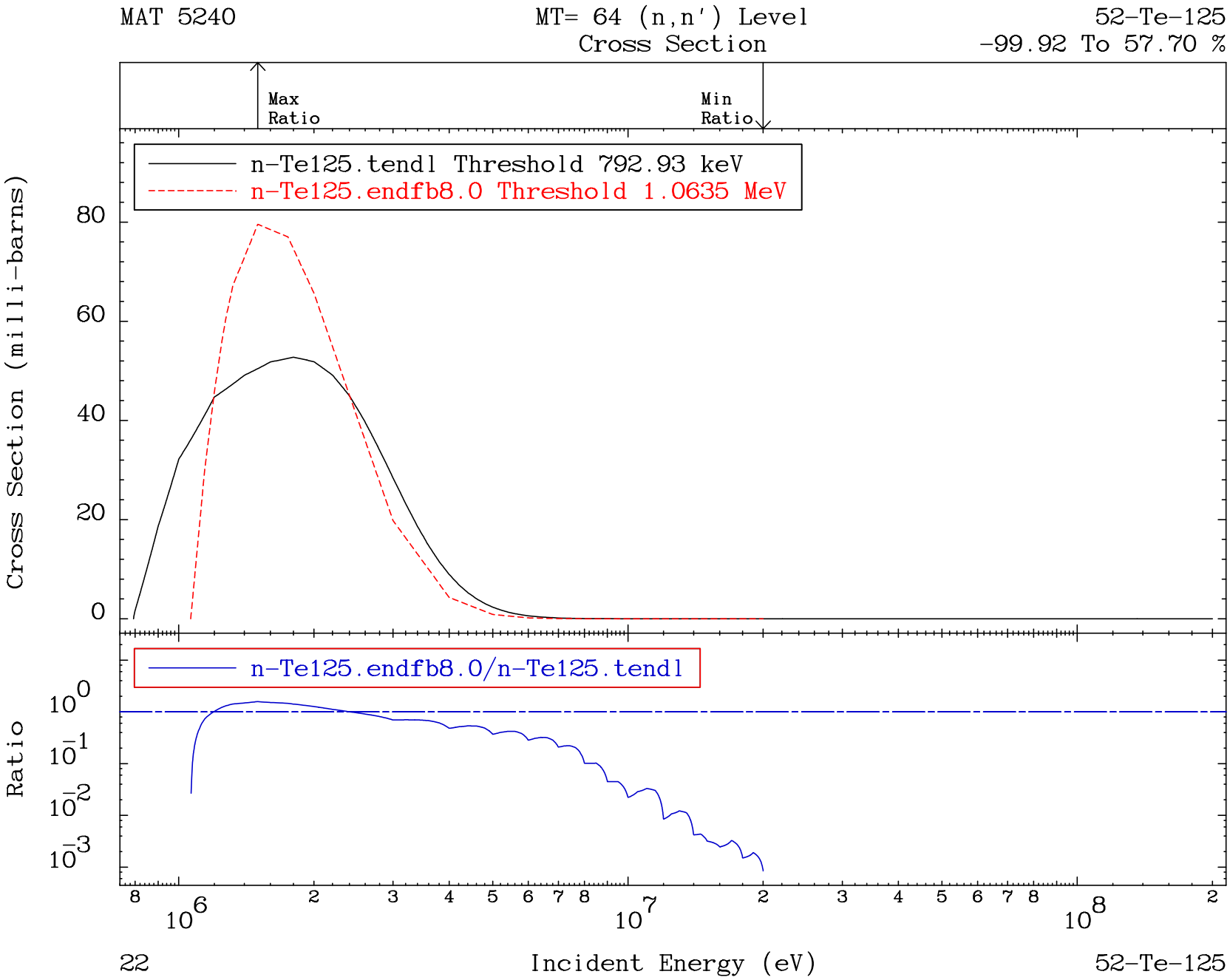

MAT 5240
MT= 59 (n,n') Level
Cross Section
52-Te-125
-99.91 To 162.1 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 641.23 keV
n-Te125.endfb8.0 Threshold 676.82 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
52-Te-125

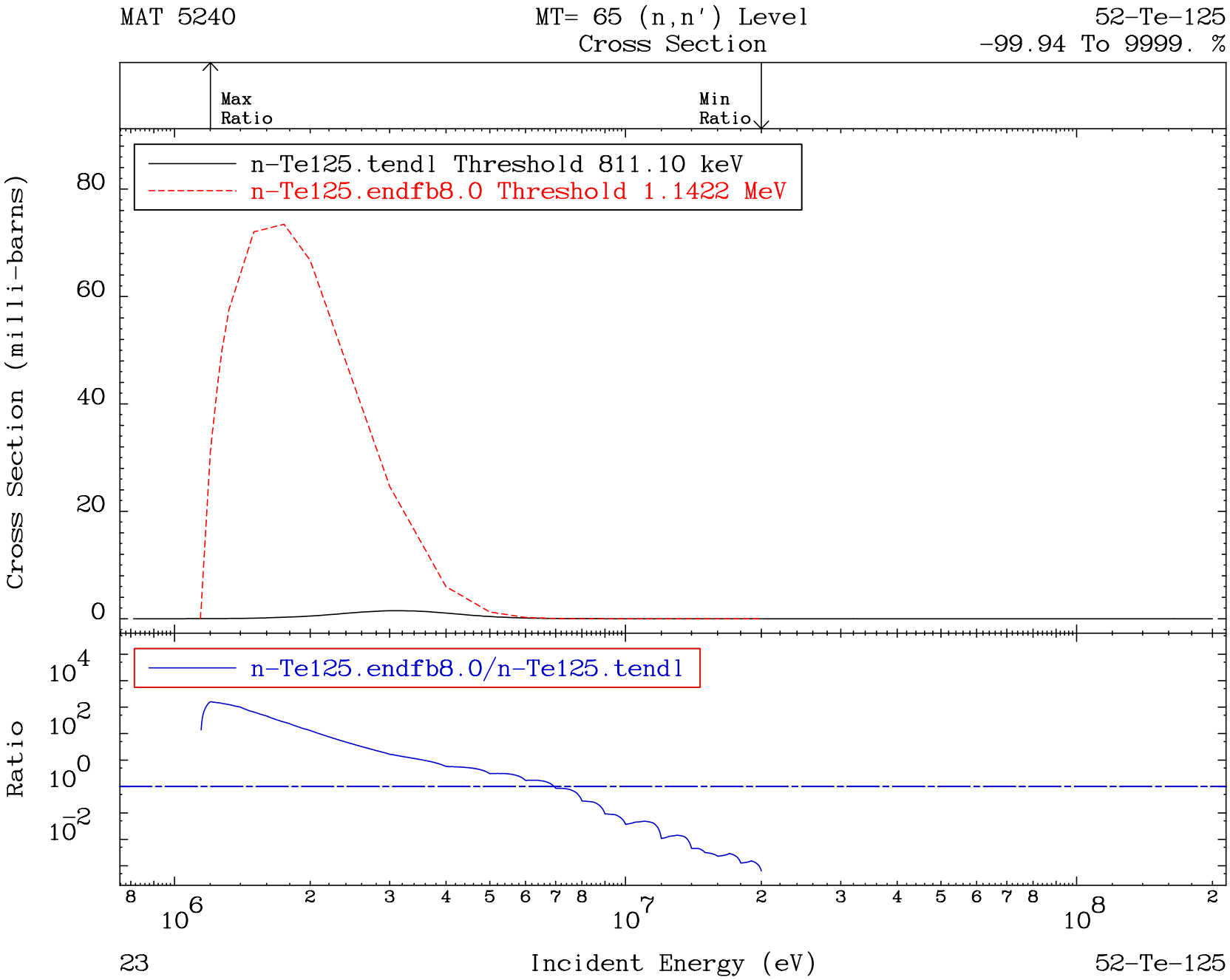

MAT 5240
MT= 60 (n,n') Level
Cross Section
52-Te-125
-99.93 To 178.8 %
Max Ratio
Min Ratio
n-Te125.tendl Threshold 647.39 keV
n-Te125.endfb8.0 Threshold 735.19 keV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
52-Te-125

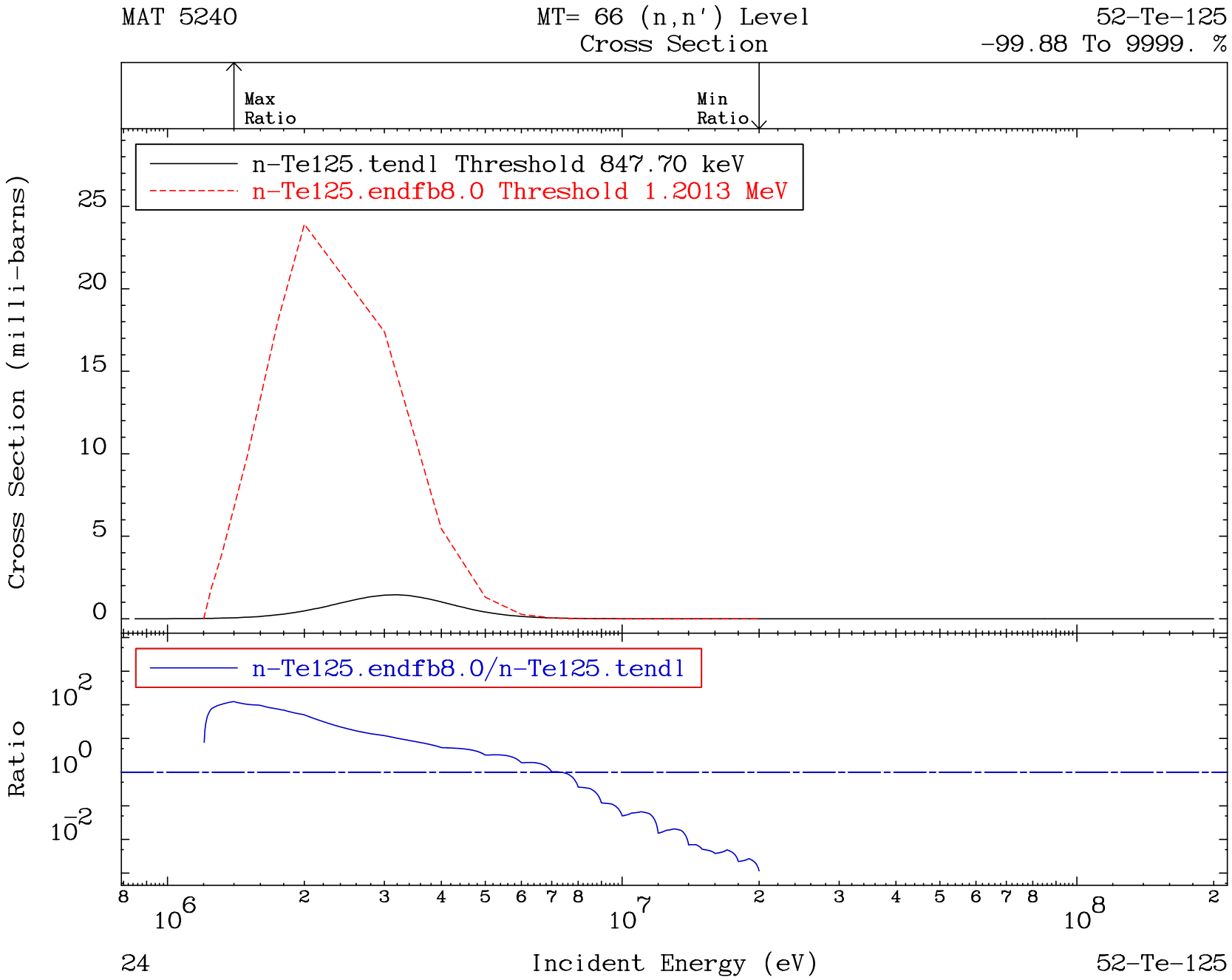

MAT 5240
MT= 61 (n,n') Level
Cross Section
52-Te-125
-100.0 To -90.14%
Min Ratio
Max Ratio
n-Te125.tendl Threshold 658.17 keV
n-Te125.endfb8.0 Threshold 810.49 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
10^-4
10^-6
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
52-Te-125

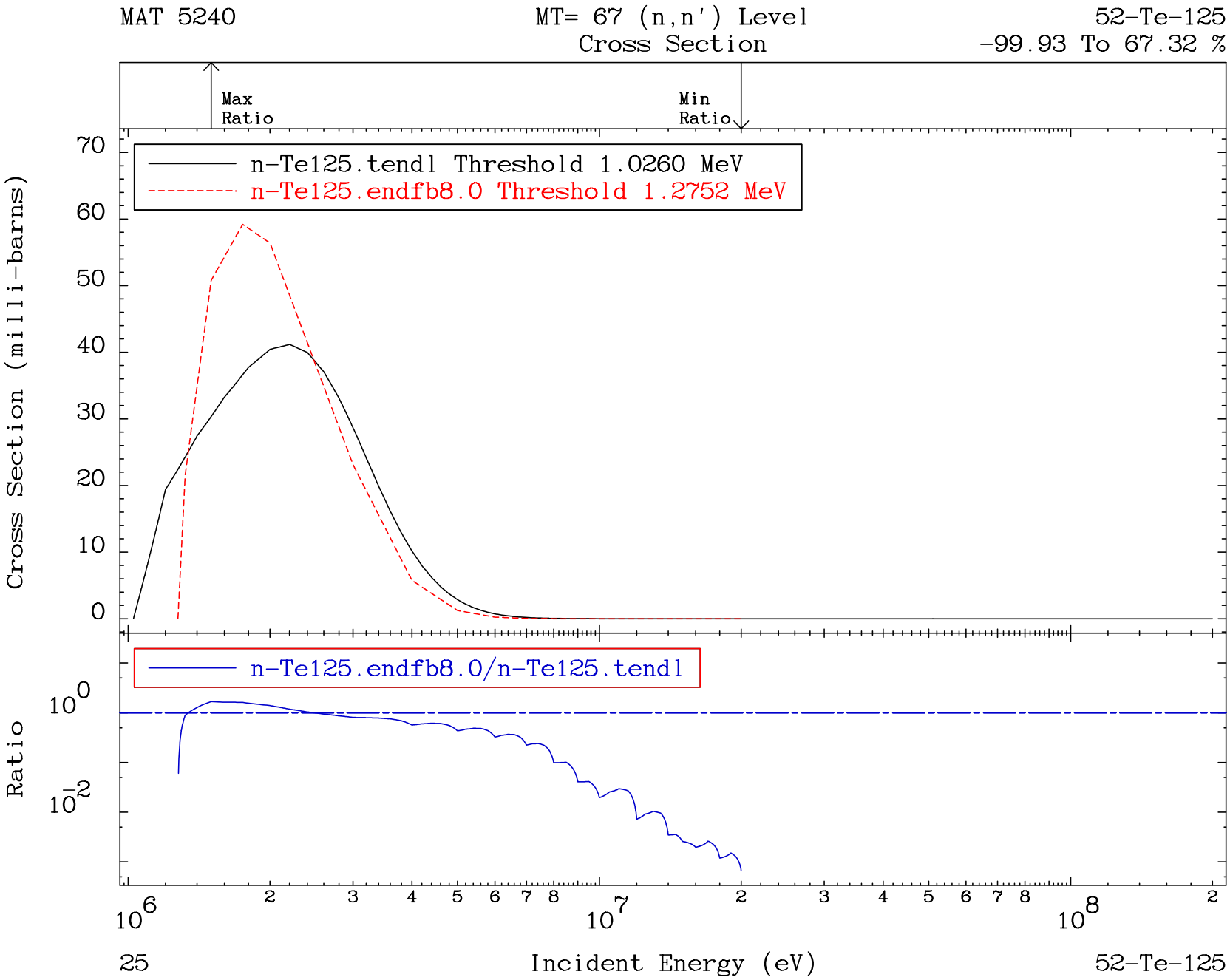

MAT 5240
MT= 62 (n,n') Level
Cross Section
52-Te-125
-100.0 To -90.21%
Min
Ratio
Max
Ratio
n-Te125.tendl Threshold 676.87 keV
n-Te125.endfb8.0 Threshold 847.59 keV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
10^-4
10^-6
7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
20
Incident Energy (eV)
52-Te-125

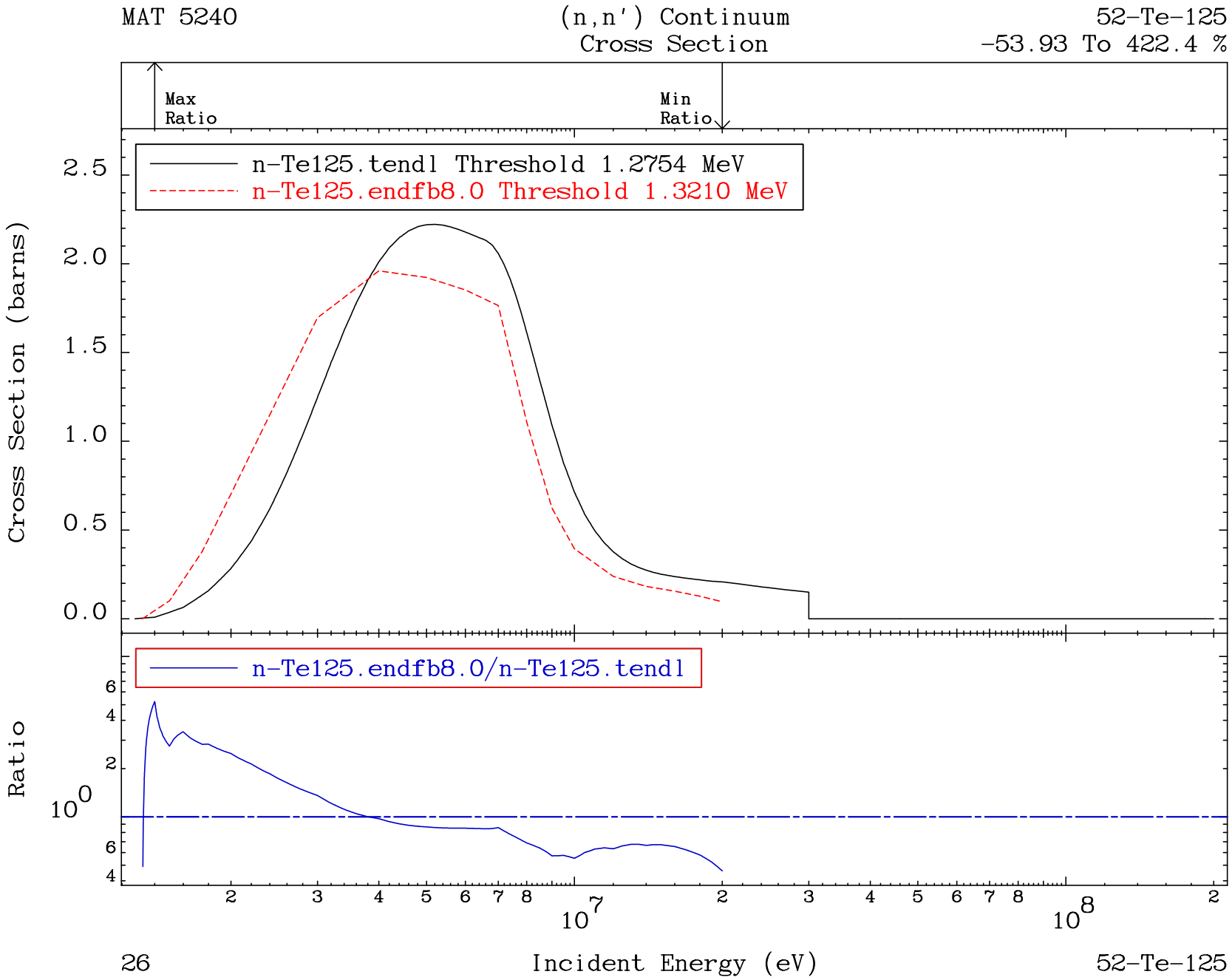

MAT 5240
MT= 63 (n,n') Level
Cross Section
52-Te-125
-99.99 To -74.86%
Min
Ratio
Max
Ratio
n-Te125.tendl Threshold 735.12 keV
n-Te125.endfb8.0 Threshold 1.0252 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
10^-3
10^-4
7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
52-Te-125

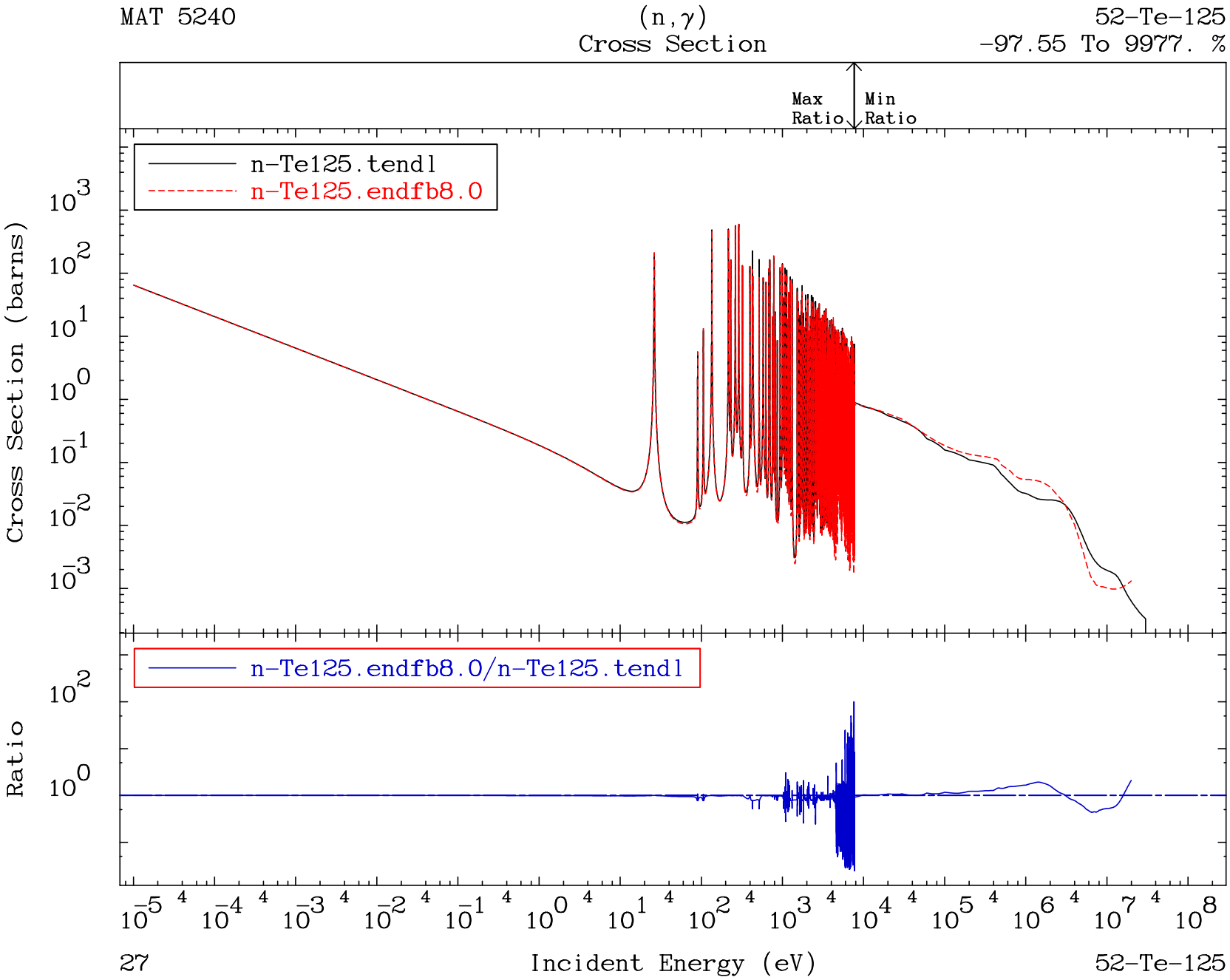

MAT 5240
MT= 64 (n,n') Level
Cross Section
52-Te-125
-99.92 To 57.70 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 792.93 keV
n-Te125.endfb8.0 Threshold 1.0635 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-1
10^-2
10^-3
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
52-Te-125

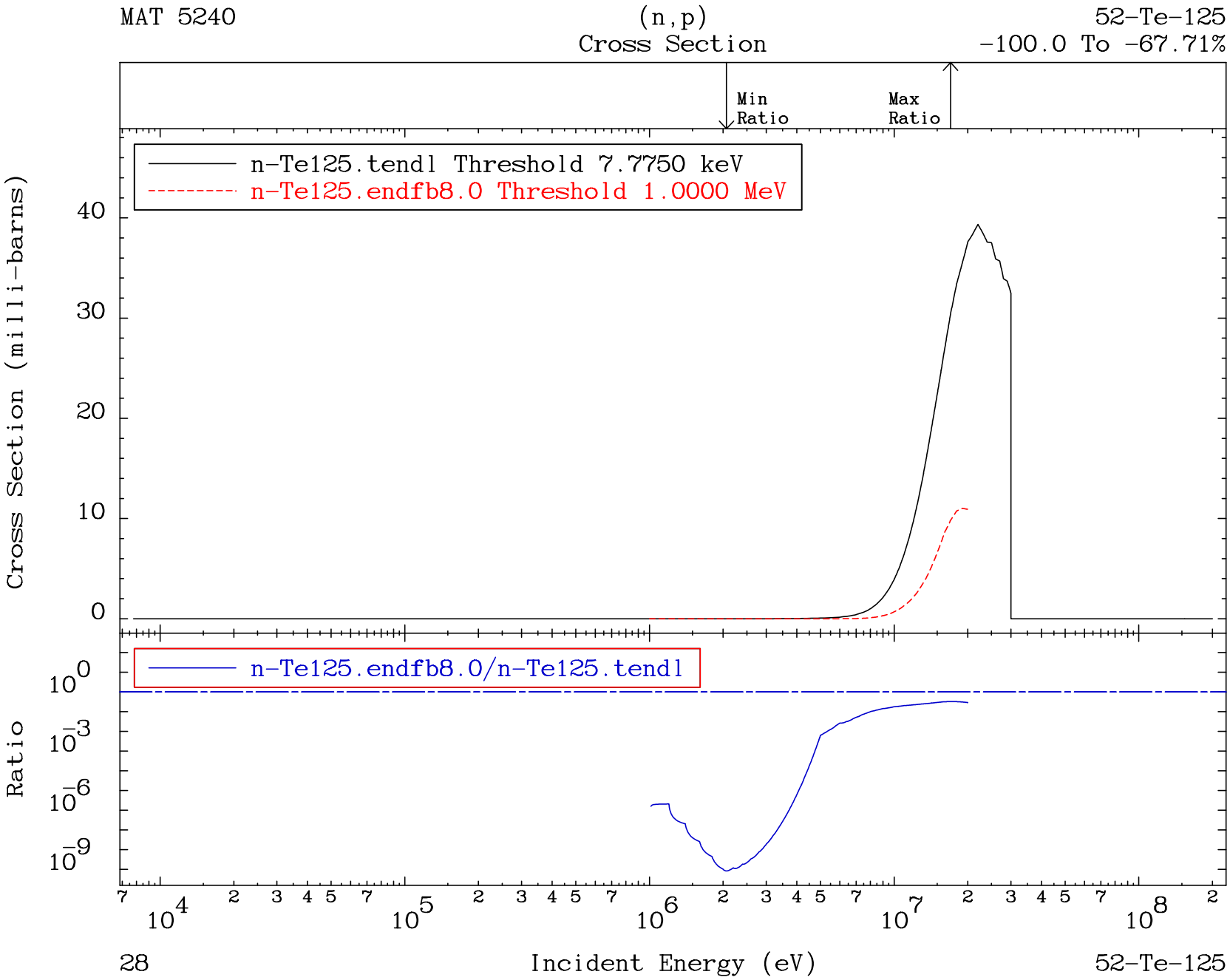

MAT 5240
MT= 65 (n,n') Level
Cross Section
52-Te-125
-99.94 To 9999. %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 811.10 keV
n-Te125.endfb8.0 Threshold 1.1422 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^4
10^2
10^0
10^-2
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
23
Incident Energy (eV)
52-Te-125

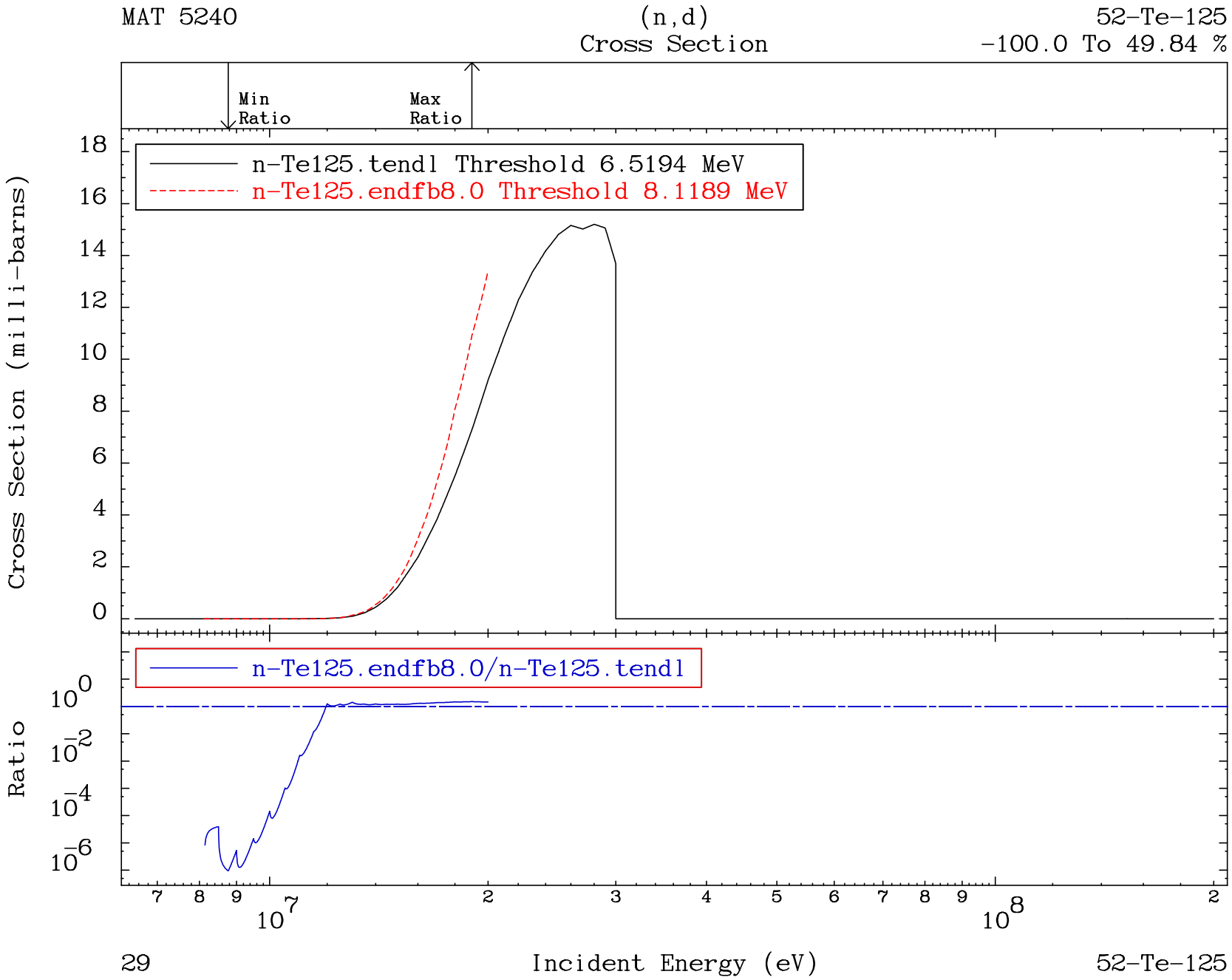

MAT 5240
MT= 66 (n,n') Level
Cross Section
52-Te-125
-99.88 To 9999. %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 847.70 keV
n-Te125.endfb8.0 Threshold 1.2013 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^2
10^0
10^-2
8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
52-Te-125

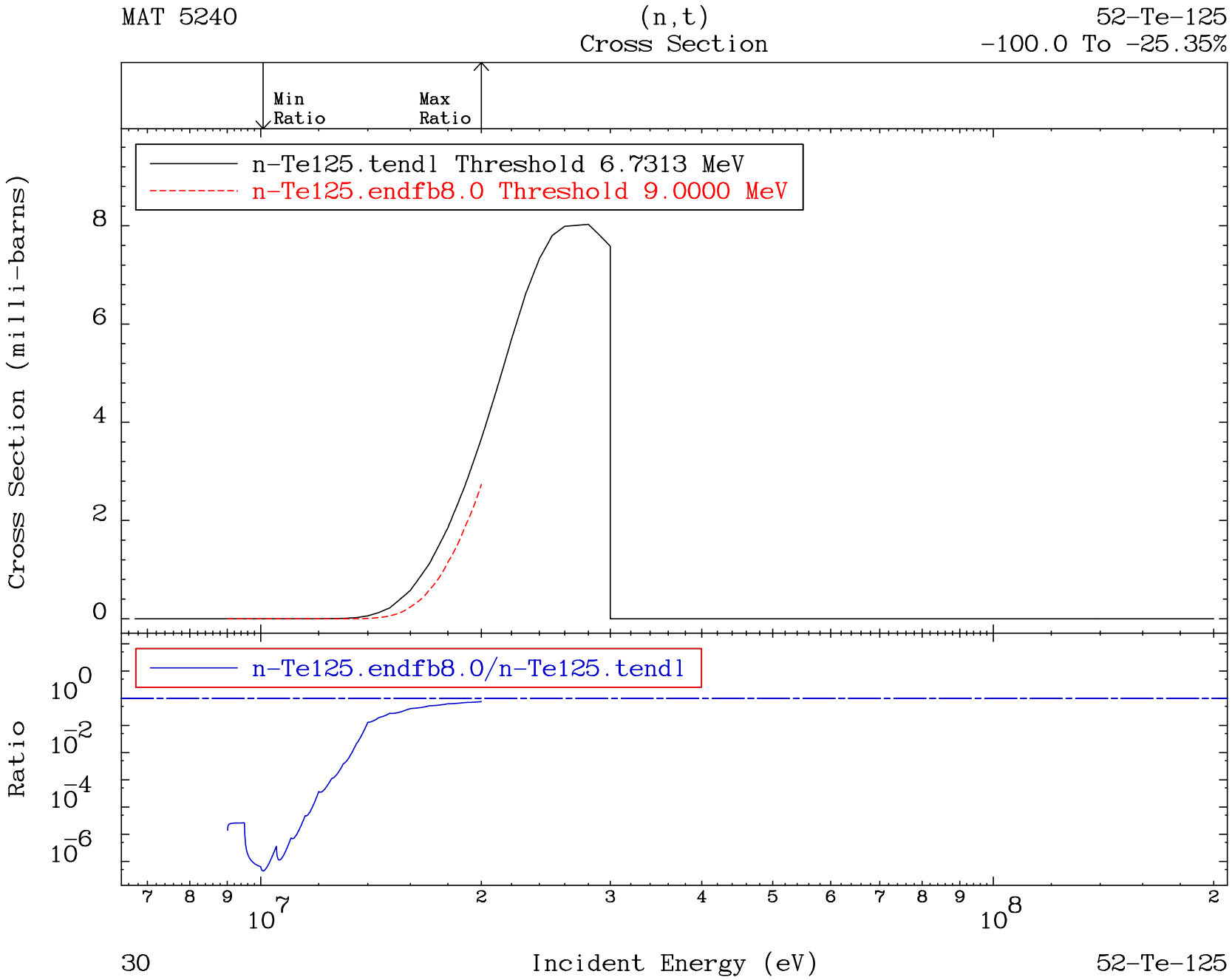

MAT 5240
MT= 67 (n,n') Level
Cross Section
52-Te-125
-99.93 To 67.32 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 1.0260 MeV
n-Te125.endfb8.0 Threshold 1.2752 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
25
Incident Energy (eV)
52-Te-125

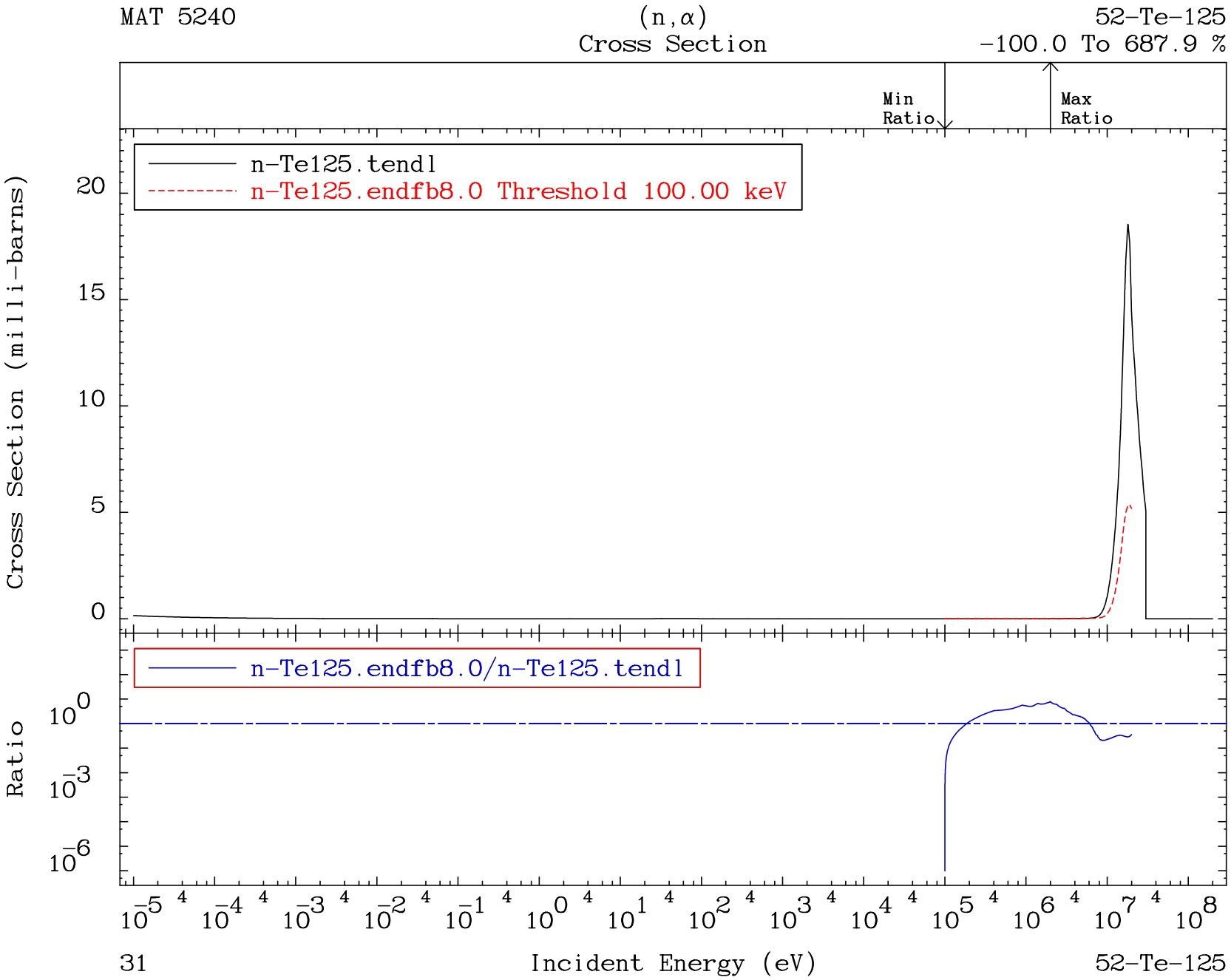

MAT 5240
(n,n') Continuum
Cross Section
52-Te-125
-53.93 To 422.4 %
Max
Ratio
Min
Ratio
n-Te125.tendl Threshold 1.2754 MeV
n-Te125.endfb8.0 Threshold 1.3210 MeV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
6
4
2
10^0
6
4
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
26
Incident Energy (eV)
52-Te-125

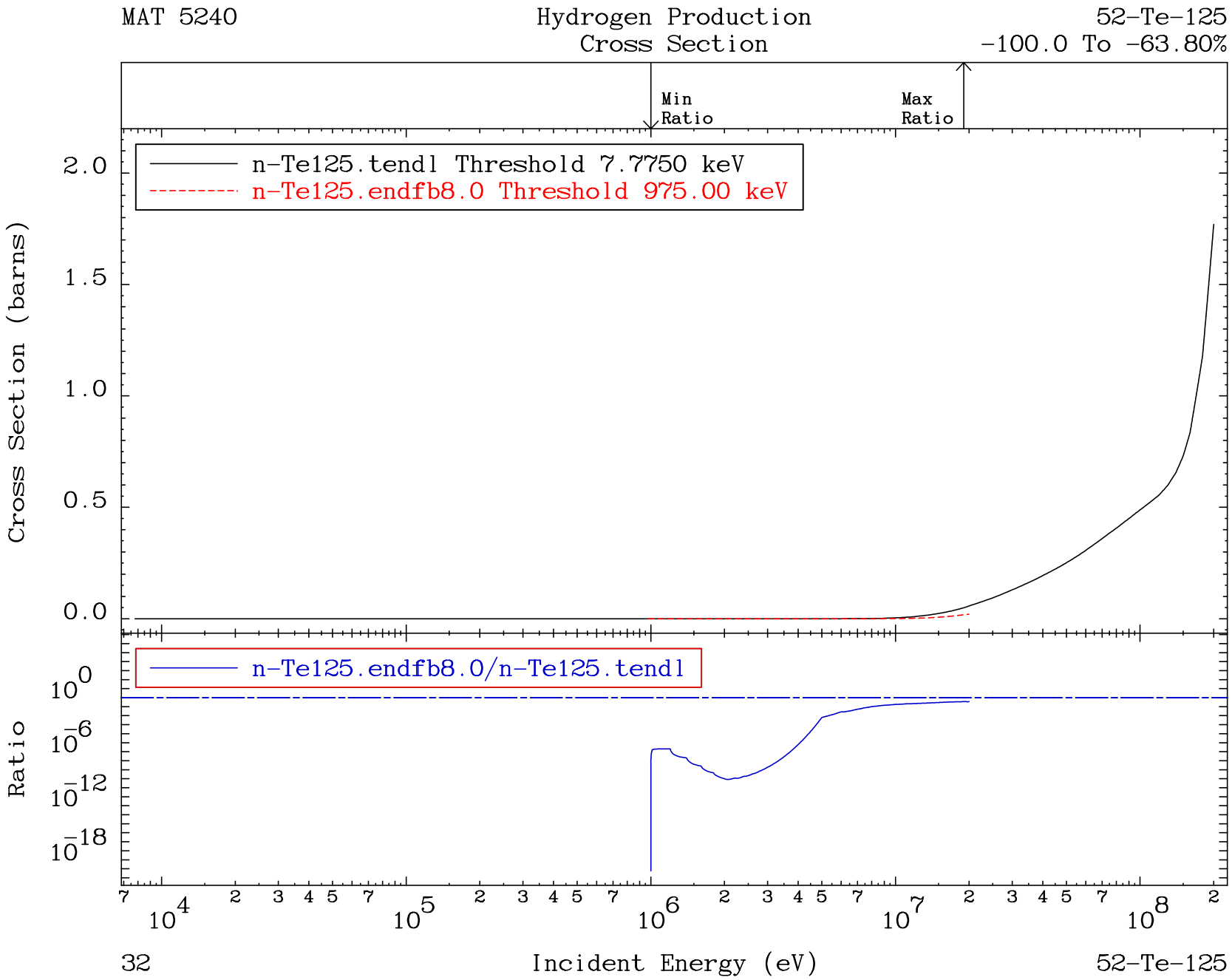

MAT 5240
(n,γ)
Cross Section
52-Te-125
-97.55 To 9977. %
Max Ratio
Min Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
27
52-Te-125

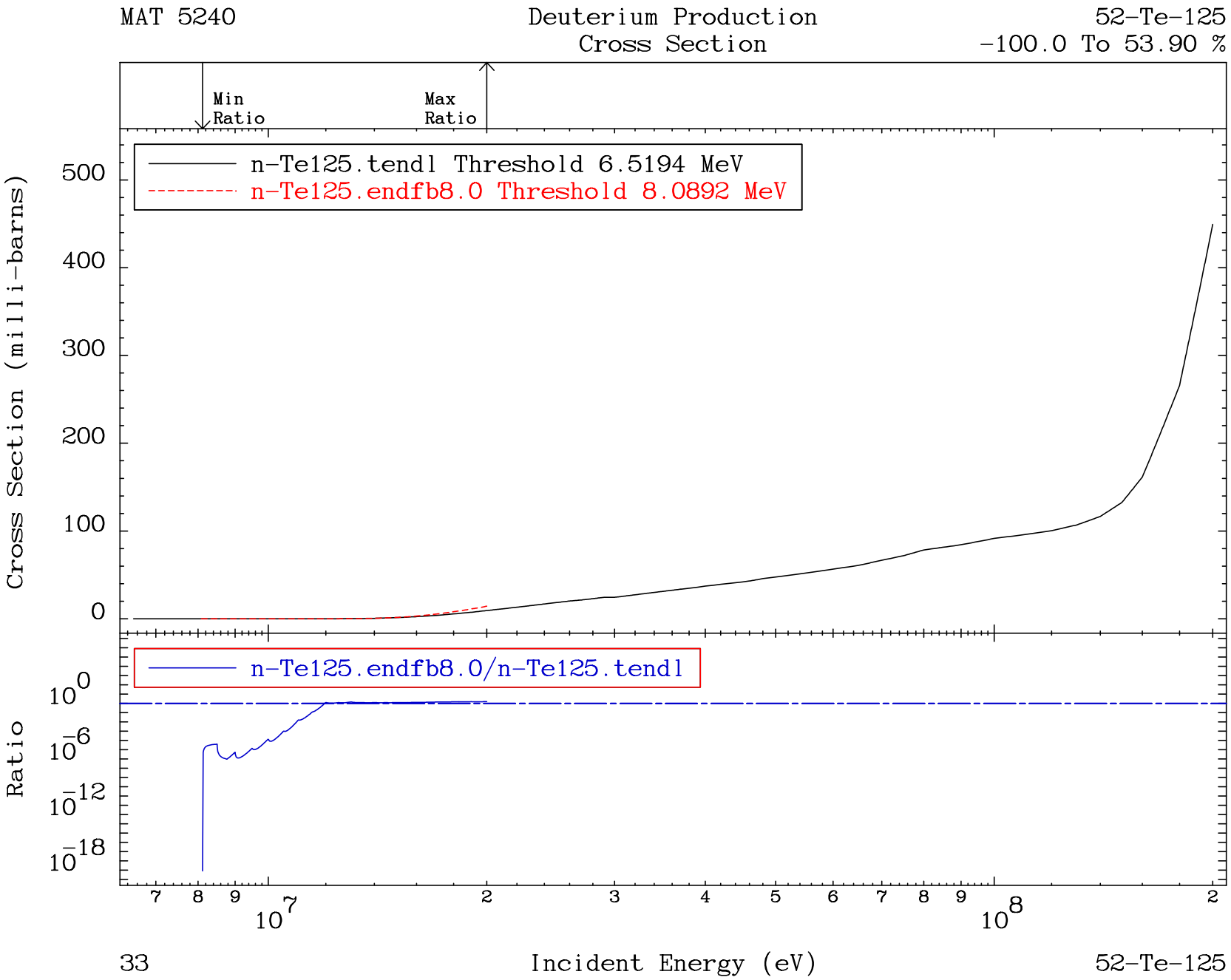

MAT 5240
(n,p)
Cross Section
52-Te-125
-100.0 To -67.71%
Min Ratio
Max Ratio
n-Te125.tendl Threshold 7.7750 keV
n-Te125.endfb8.0 Threshold 1.0000 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^4
10^5
10^6
10^7
10^8
28
Incident Energy (eV)
52-Te-125

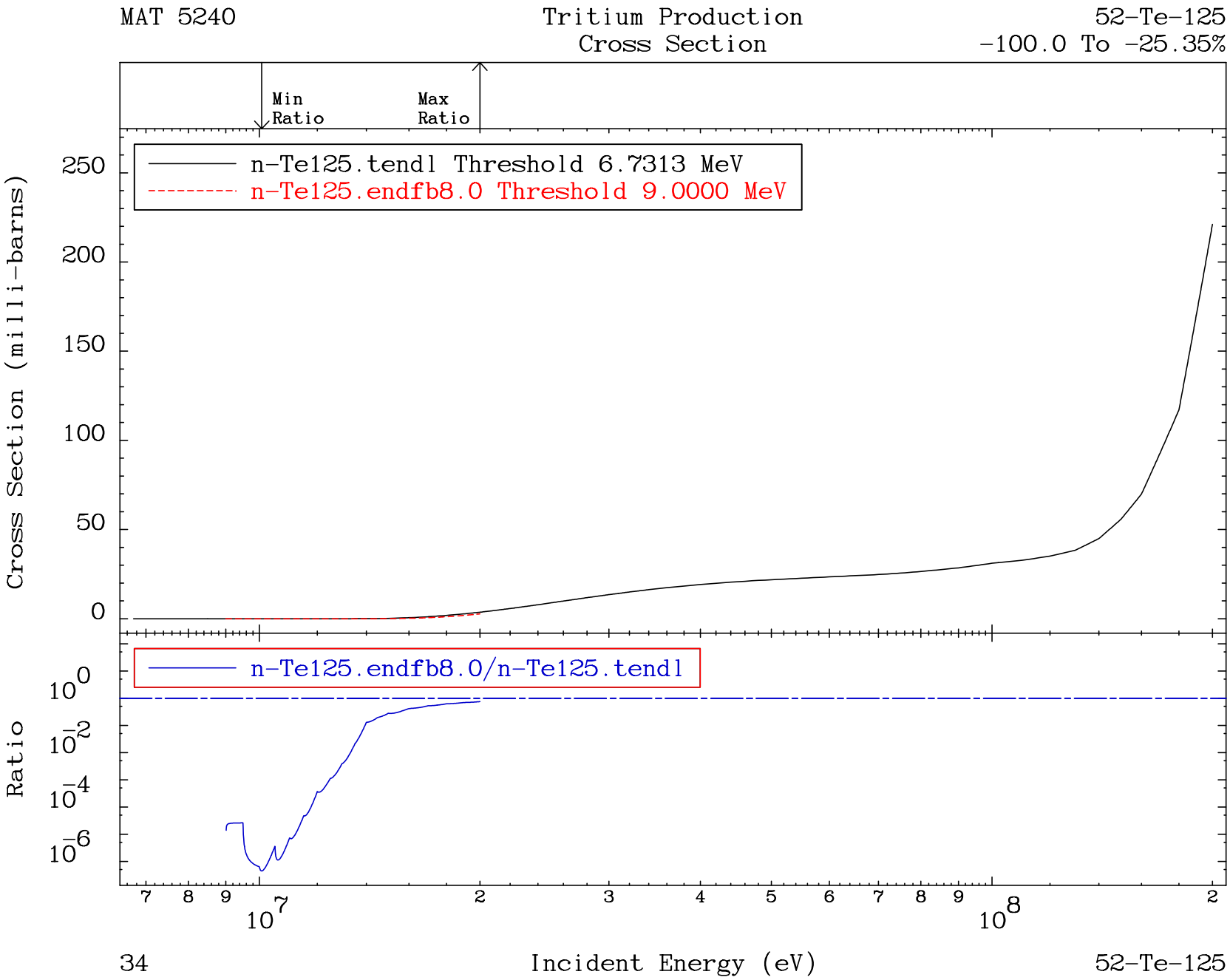

MAT 5240
(n,d)
Cross Section
52-Te-125
-100.0 To 49.84 %
Min Ratio
Max Ratio
n-Te125.tendl Threshold 6.5194 MeV
n-Te125.endfb8.0 Threshold 8.1189 MeV
Cross Section (milli-barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
29
52-Te-125

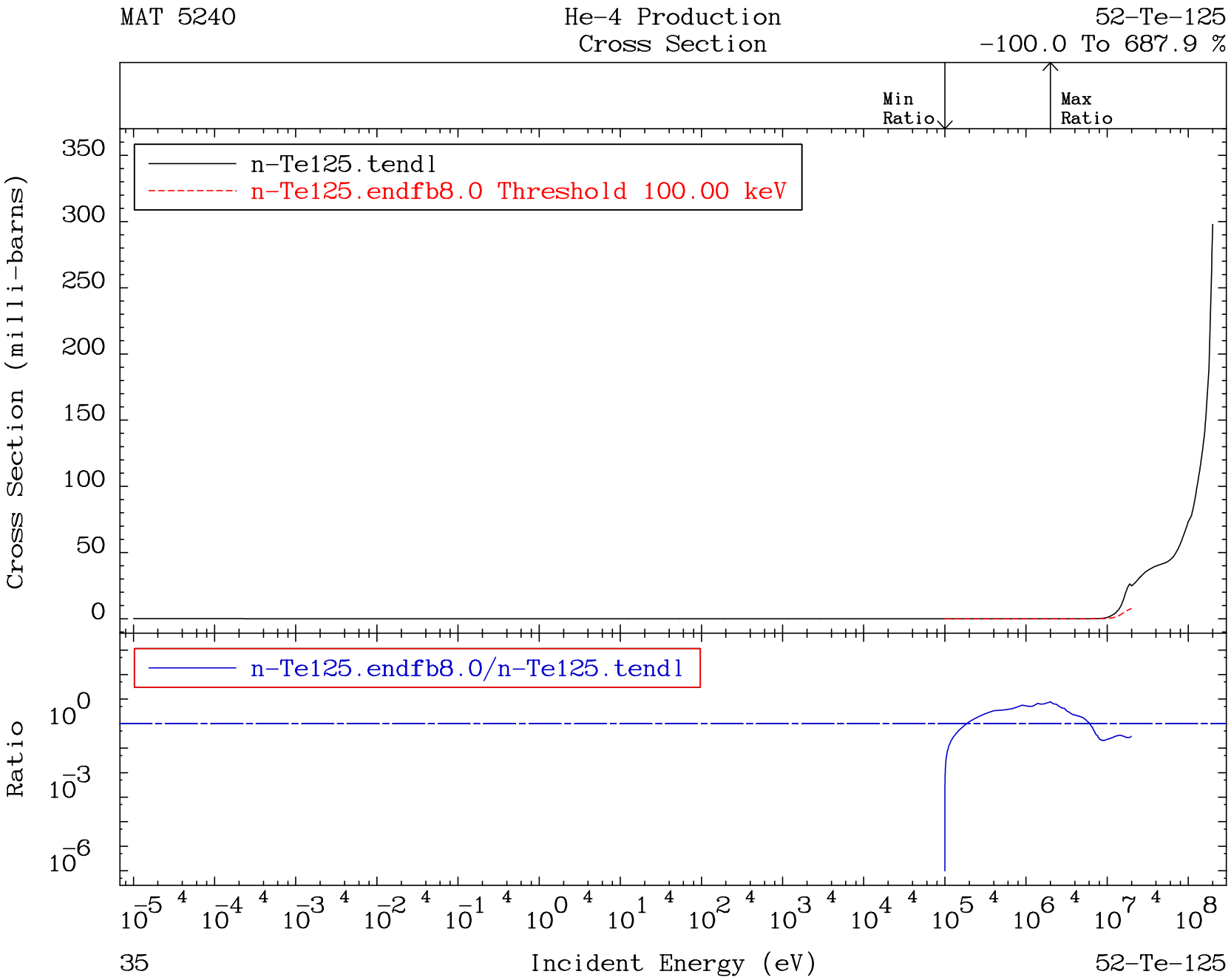

MAT 5240
(n,t)
Cross Section
52-Te-125
-100.0 To -25.35%
Min Ratio
Max Ratio
n-Te125.tendl Threshold 6.7313 MeV
n-Te125.endfb8.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
10^-4
10^-6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
52-Te-125

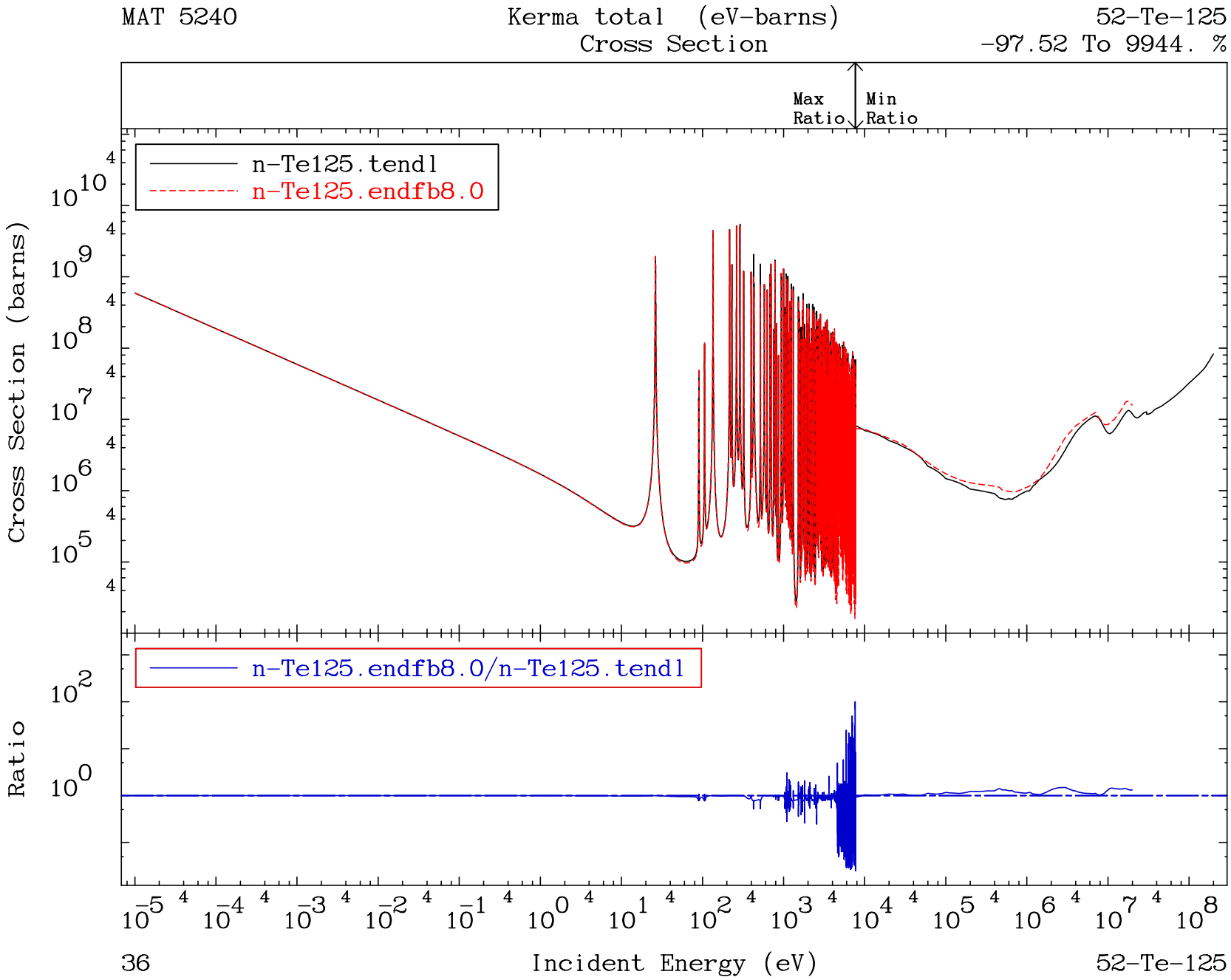

MAT 5240
(n,α)
Cross Section
52-Te-125
-100.0 To 687.9 %
Min Ratio
Max Ratio
n-Te125.tendl
n-Te125.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-3
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
31
Incident Energy (eV)
52-Te-125

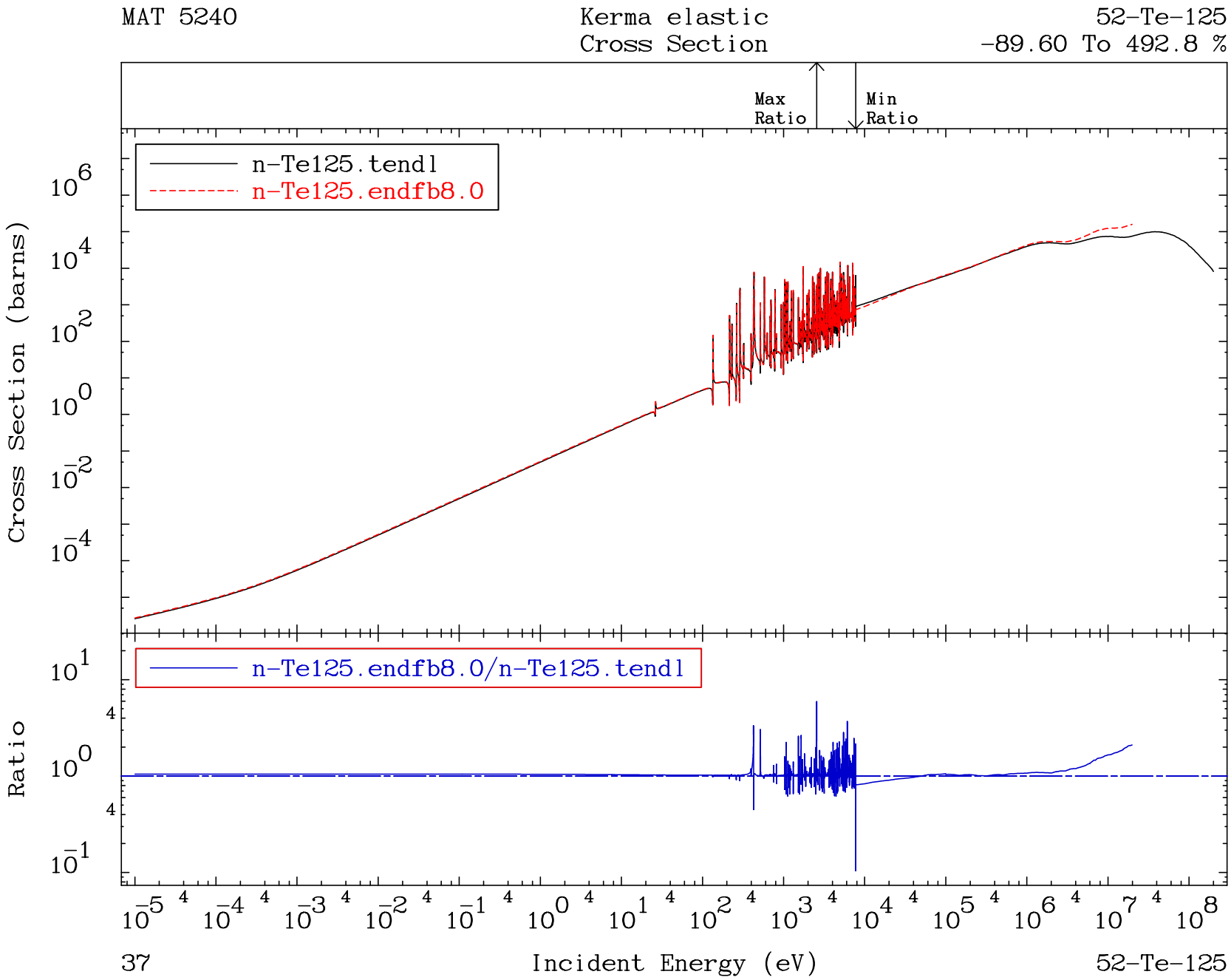

MAT 5240
Hydrogen Production
Cross Section
52-Te-125
-100.0 To -63.80%
Min
Ratio
Max
Ratio
n-Te125.tendl Threshold 7.7750 keV
n-Te125.endfb8.0 Threshold 975.00 keV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-6
10^-12
10^-18
10^4
10^5
10^6
10^7
10^8
32
Incident Energy (eV)
52-Te-125

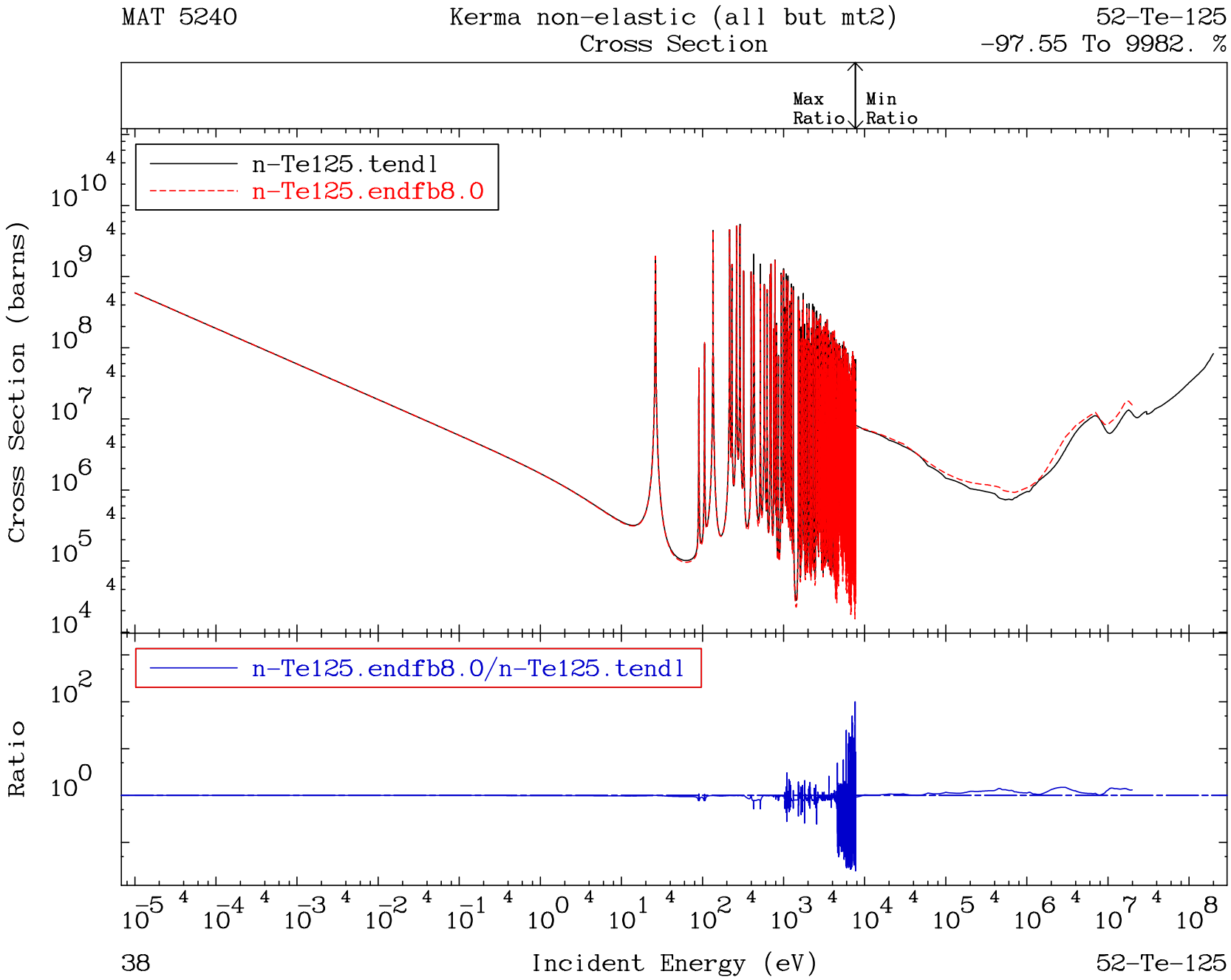

MAT 5240
Deuterium Production
Cross Section
52-Te-125
-100.0 To 53.90 %
Min Ratio
Max Ratio
n-Te125.tendl Threshold 6.5194 MeV
n-Te125.endfb8.0 Threshold 8.0892 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-6
10^-12
10^-18
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
33
Incident Energy (eV)
52-Te-125

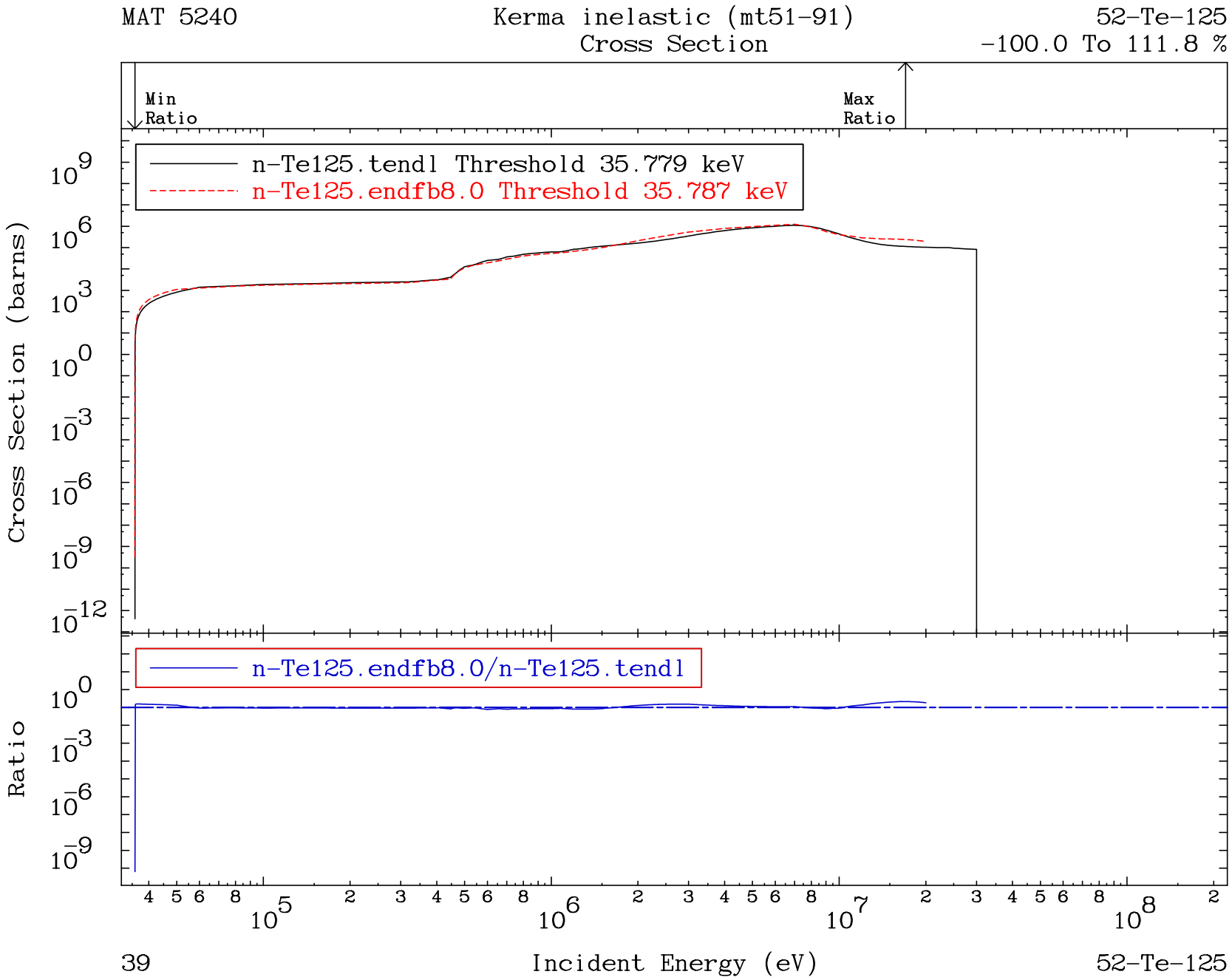

MAT 5240
Tritium Production
Cross Section
52-Te-125
-100.0 To -25.35%
Min Ratio
Max Ratio
n-Te125.tendl Threshold 6.7313 MeV
n-Te125.endfb8.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
10^-4
10^-6
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
52-Te-125

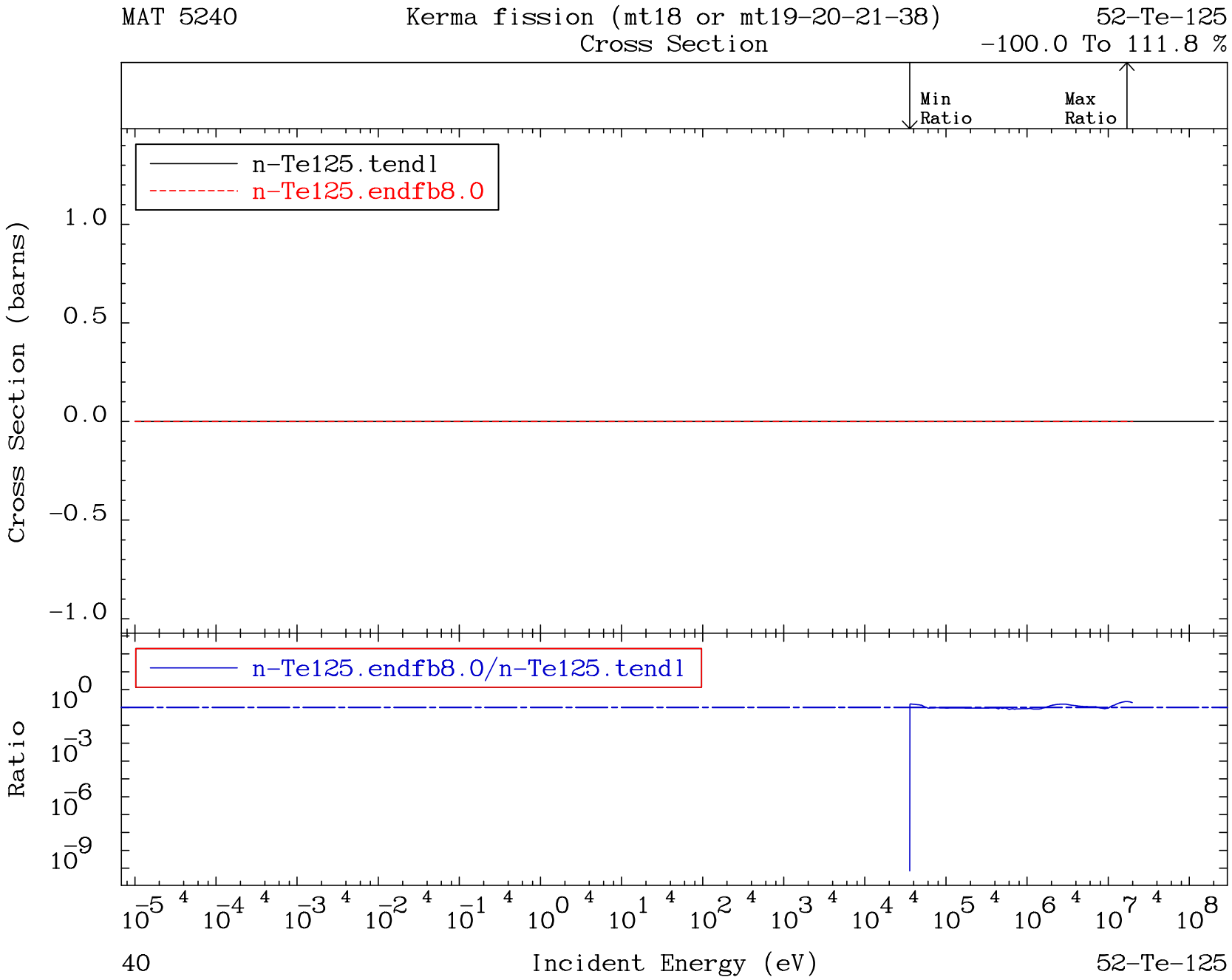

MAT 5240
He-4 Production
Cross Section
52-Te-125
-100.0 To 687.9 %
Min Ratio
Max Ratio
n-Te125.tendl
n-Te125.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-3
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
35
Incident Energy (eV)
52-Te-125

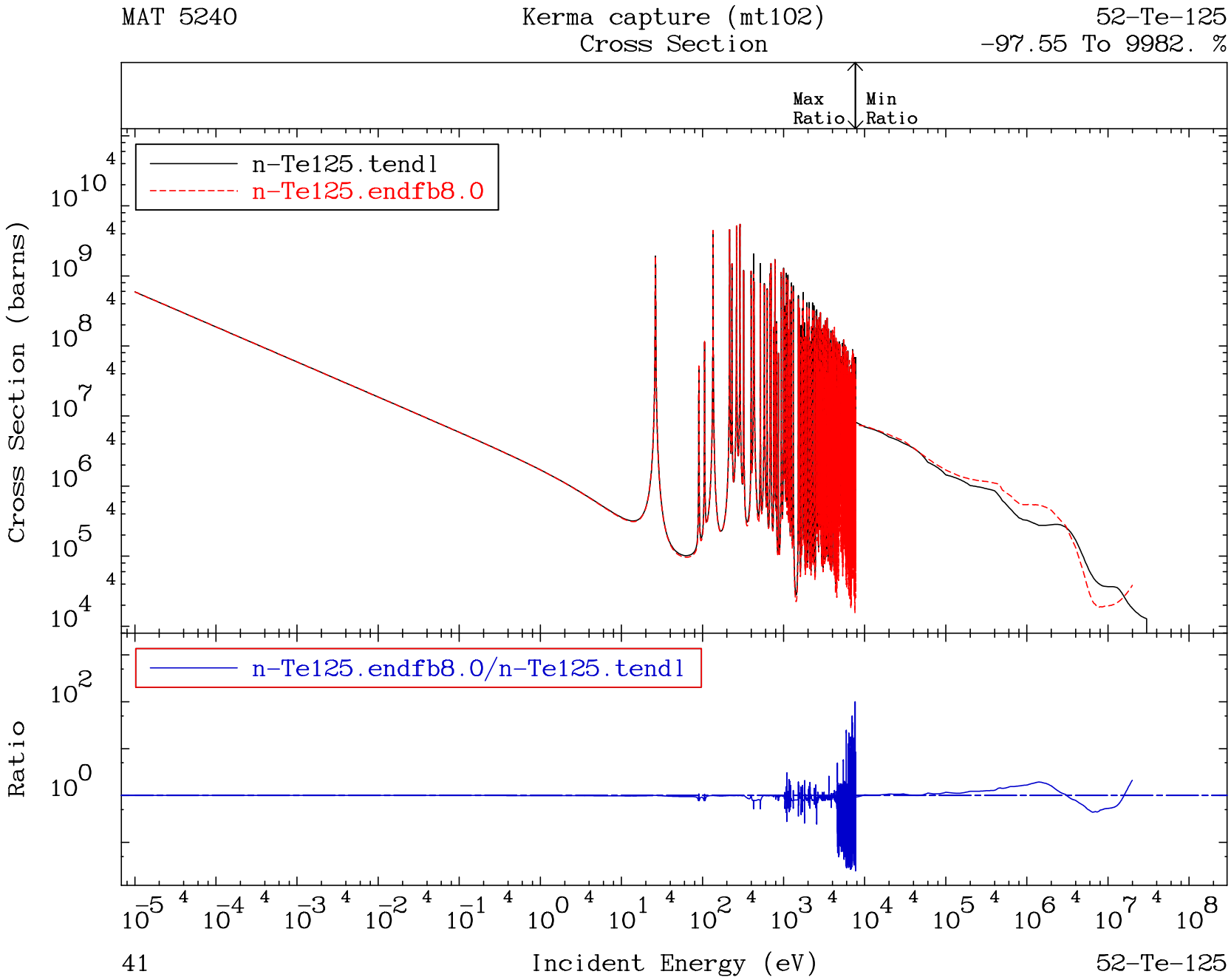

MAT 5240
Kerma total (eV-barns)
Cross Section
52-Te-125
-97.52 To 9944. %
Max Ratio
Min Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
36
52-Te-125

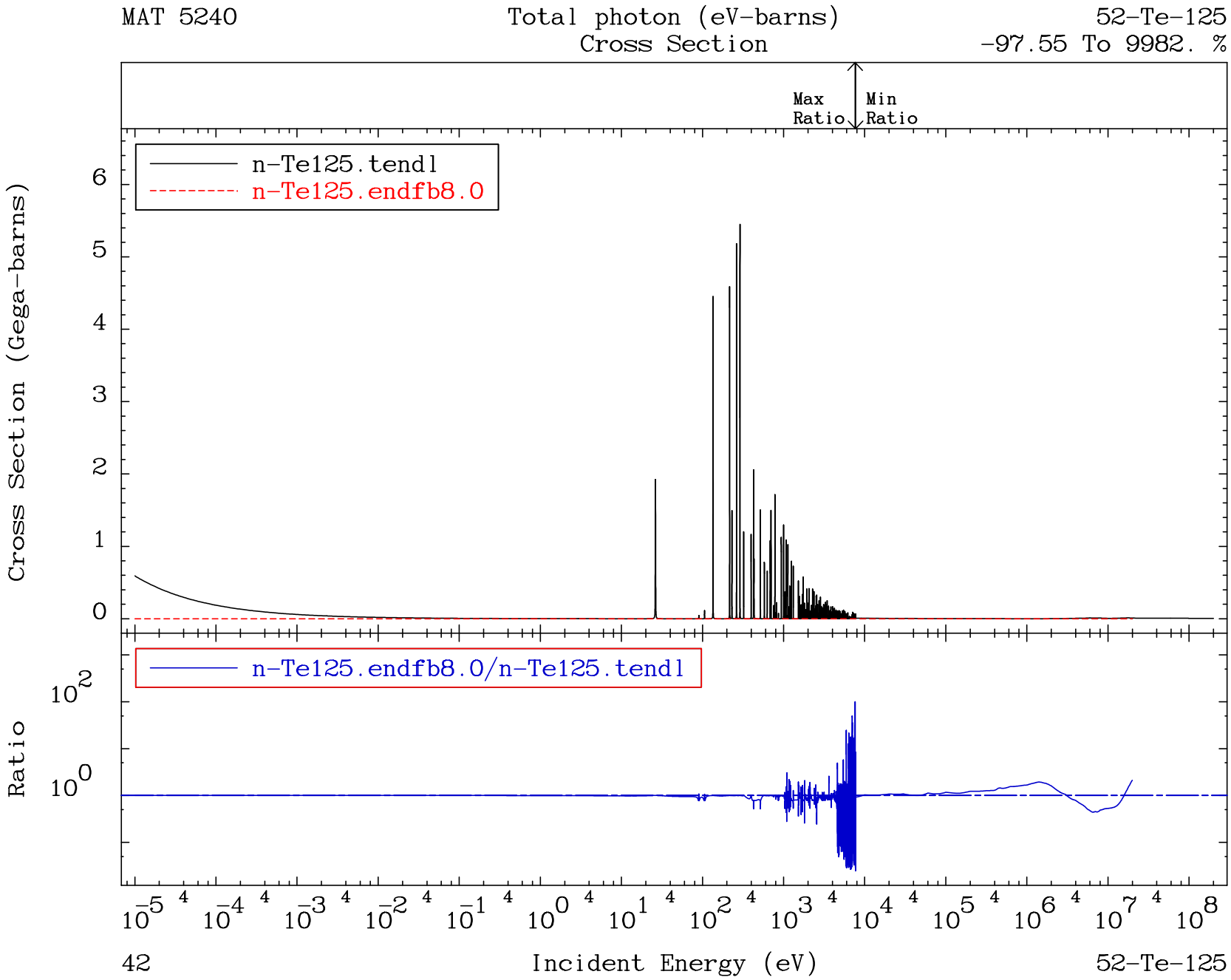

MAT 5240
Kerma elastic
Cross Section
52-Te-125
-89.60 To 492.8 %
Max
Ratio
Min
Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
37
52-Te-125

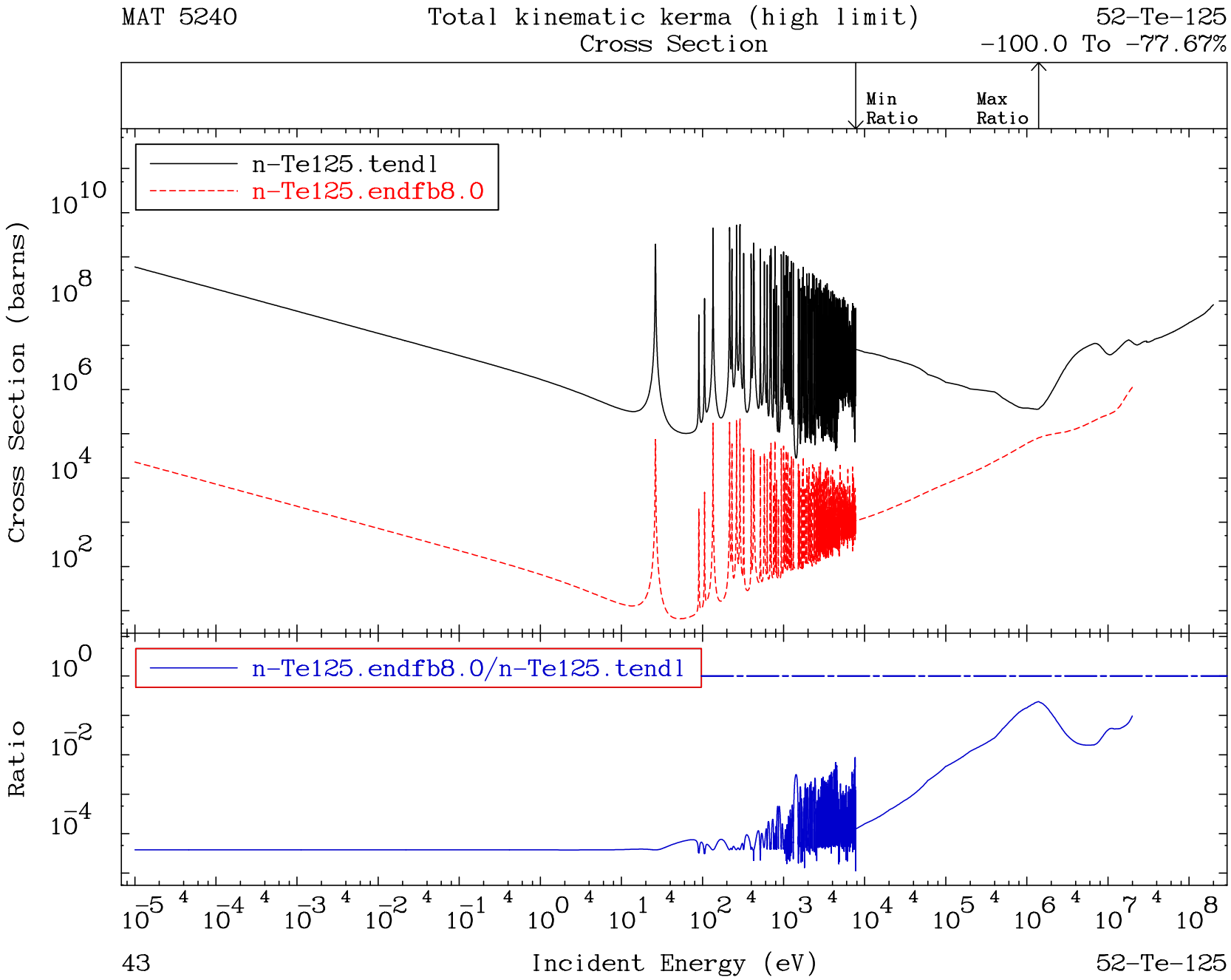

MAT 5240
Kerma non-elastic (all but mt2)
Cross Section
52-Te-125
-97.55 To 9982. %
Max Ratio
Min Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
38
52-Te-125

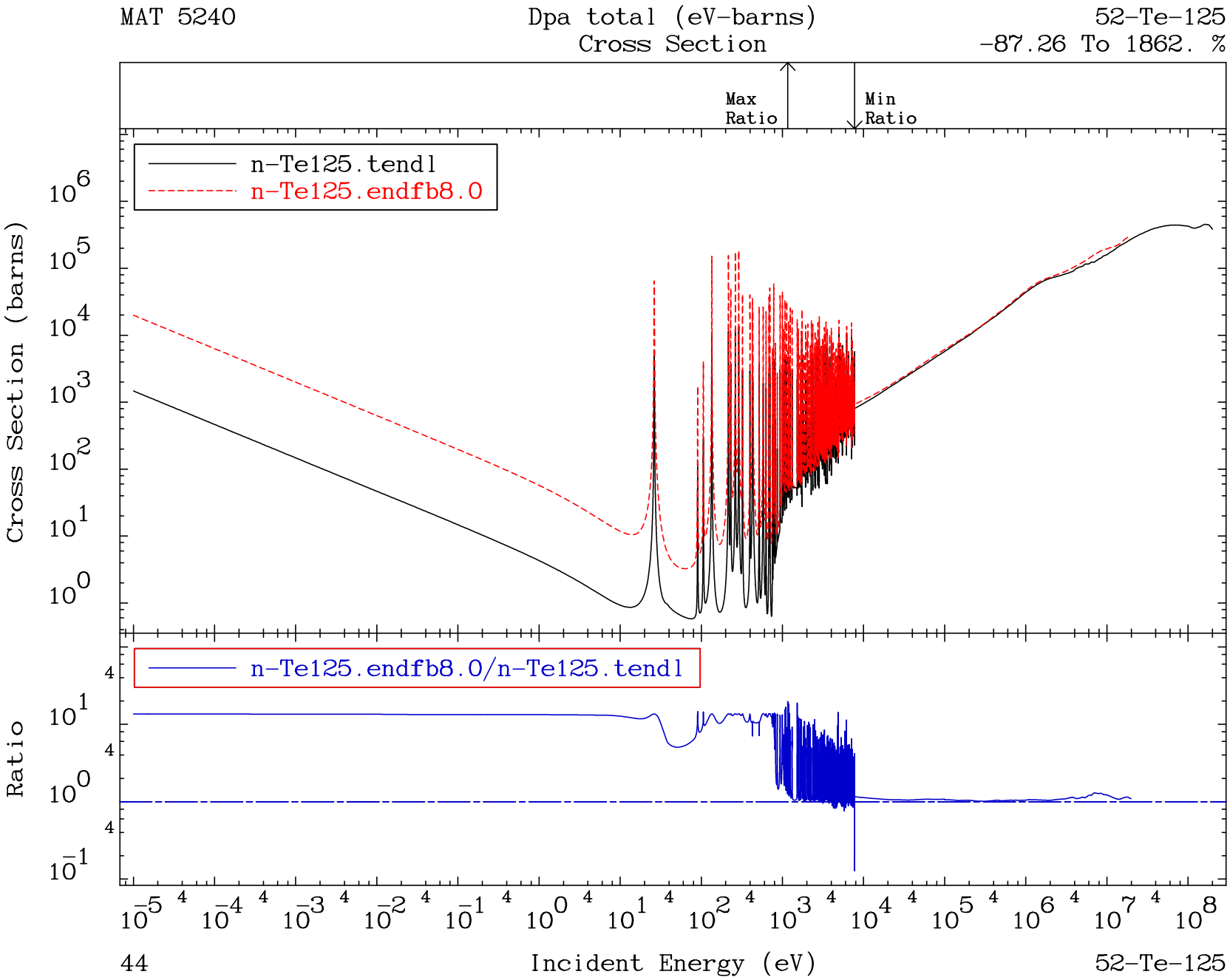

MAT 5240
Kerma inelastic (mt51-91)
Cross Section
52-Te-125
-100.0 To 111.8 %
Min Ratio
Max Ratio
n-Te125.tendl Threshold 35.779 keV
n-Te125.endfb8.0 Threshold 35.787 keV
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
39
52-Te-125

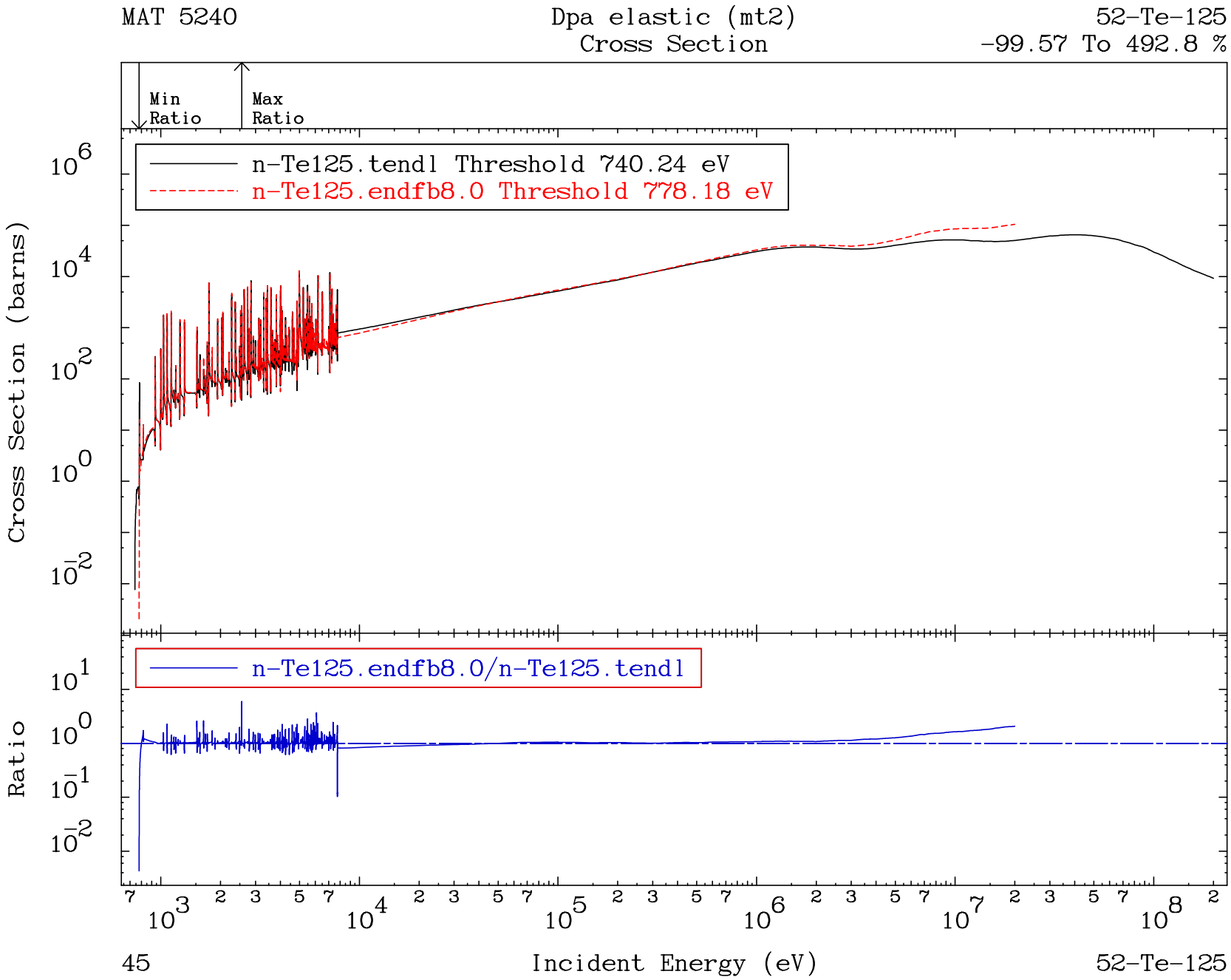

MAT 5240
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
52-Te-125
-100.0 To 111.8 %
Min Ratio
Max Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
40
Incident Energy (eV)
52-Te-125

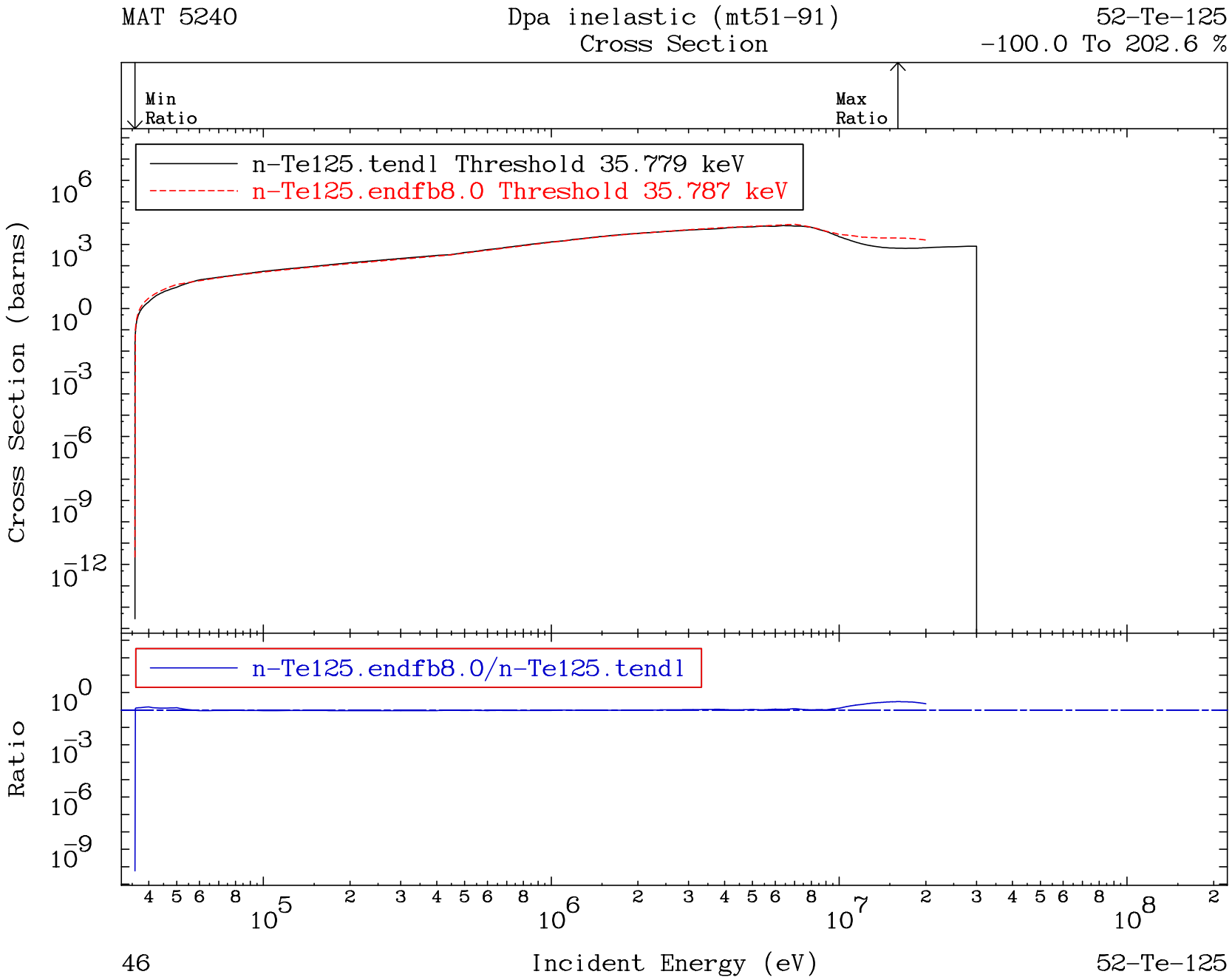

MAT 5240
Kerma capture (mt102)
Cross Section
52-Te-125
-97.55 To 9982. %
Max Ratio
Min Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
41
52-Te-125

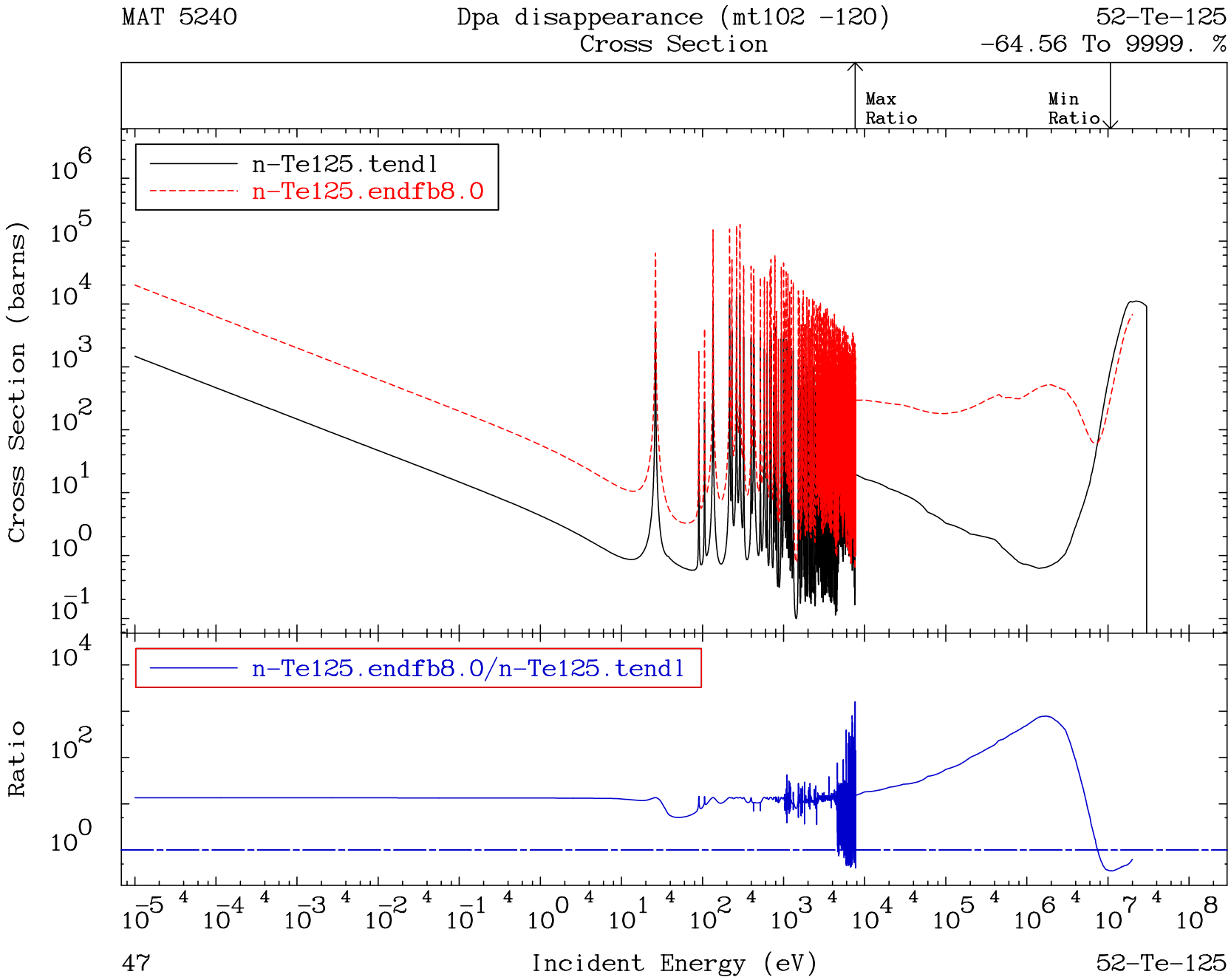

MAT 5240
Total photon (eV-barns)
Cross Section
52-Te-125
-97.55 To 9982. %
Max Ratio
Min Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (Giga-barns)
0
1
2
3
4
5
6
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^2
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
42
Incident Energy (eV)
52-Te-125


MAT 5240
Total kinematic kerma (high limit)
Cross Section
52-Te-125
-100.0 To -77.67%
Min Ratio
Max Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
10^10
10^8
10^6
10^4
10^2
n-Te125.endfb8.0/n-Te125.tendl
Ratio
10^0
10^-2
10^-4
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
43
Incident Energy (eV)
52-Te-125


MAT 5240
Dpa total (eV-barns)
Cross Section
52-Te-125
-87.26 To 1862. %
Max Ratio
Min Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
44
52-Te-125


MAT 5240
Dpa elastic (mt2)
Cross Section
52-Te-125
-99.57 To 492.8 %
Min Ratio
Max Ratio
n-Te125.tendl Threshold 740.24 eV
n-Te125.endfb8.0 Threshold 778.18 eV
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
45
52-Te-125


MAT 5240
Dpa inelastic (mt51-91)
Cross Section
52-Te-125
-100.0 To 202.6 %
Min Ratio
Max Ratio
n-Te125.tendl Threshold 35.779 keV
n-Te125.endfb8.0 Threshold 35.787 keV
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
46
52-Te-125


MAT 5240
Dpa disappearance (mt102 -120)
Cross Section
52-Te-125
-64.56 To 9999. %
Max Ratio
Min Ratio
n-Te125.tendl
n-Te125.endfb8.0
Cross Section (barns)
n-Te125.endfb8.0/n-Te125.tendl
Ratio
Incident Energy (eV)
47
52-Te-125