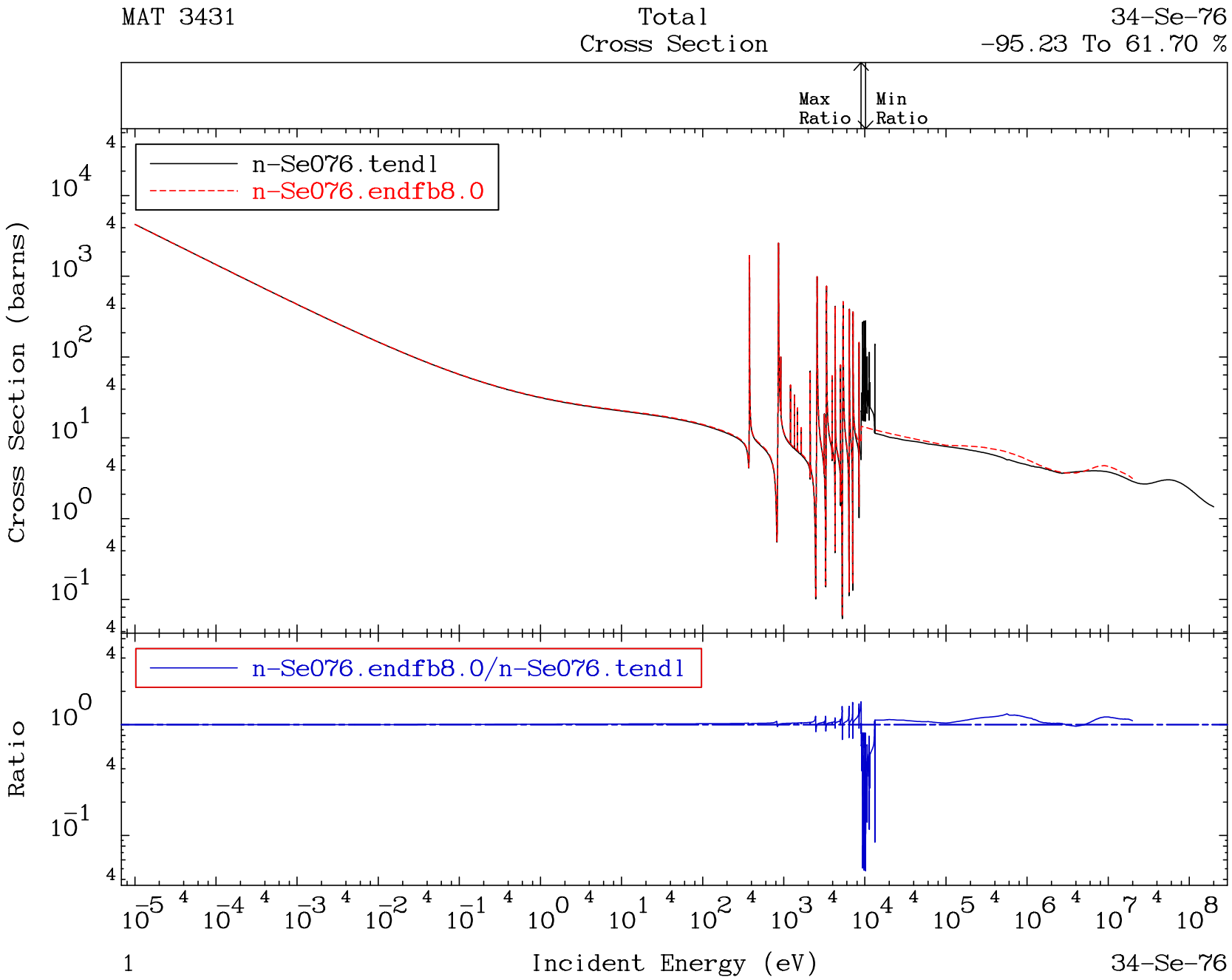
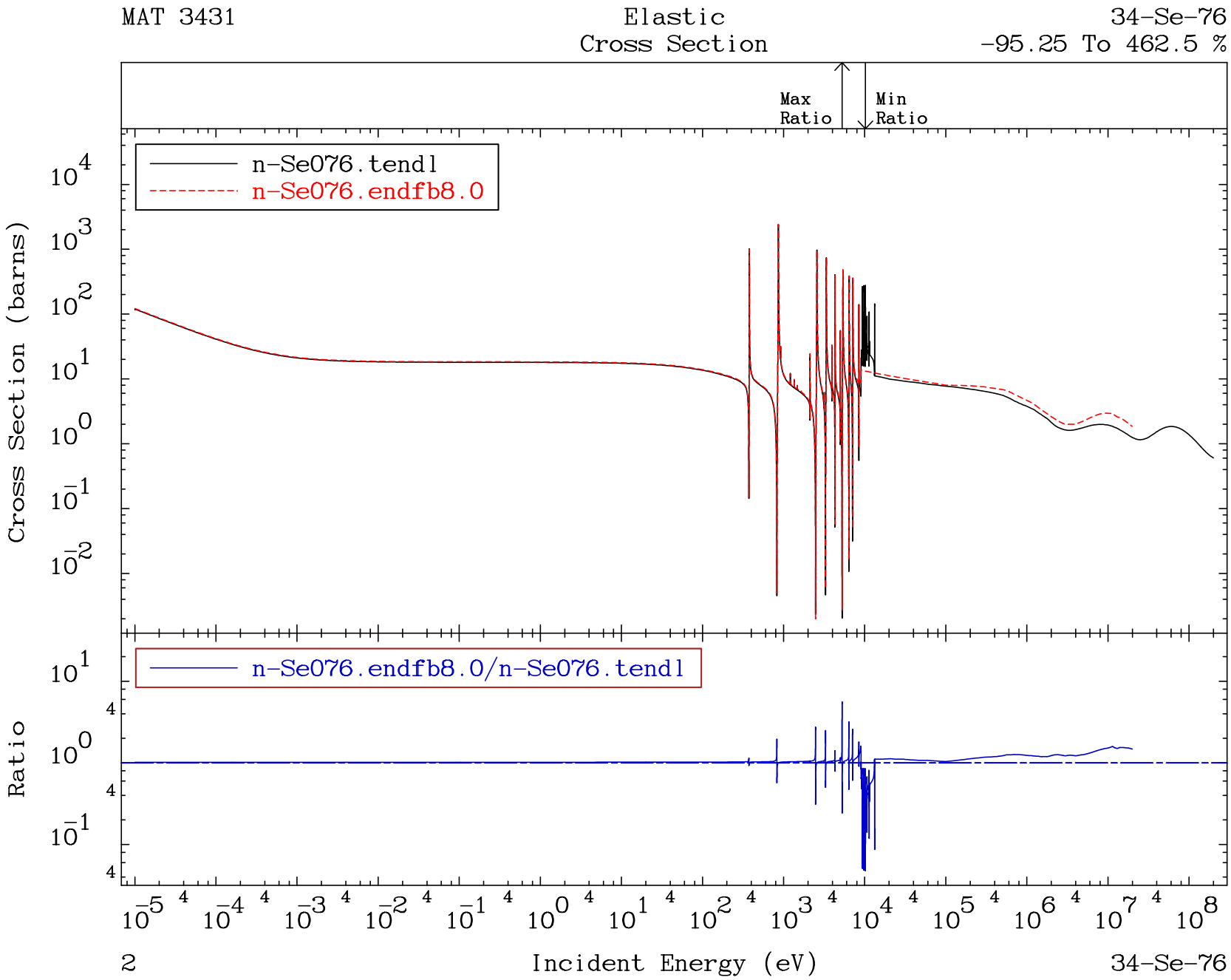
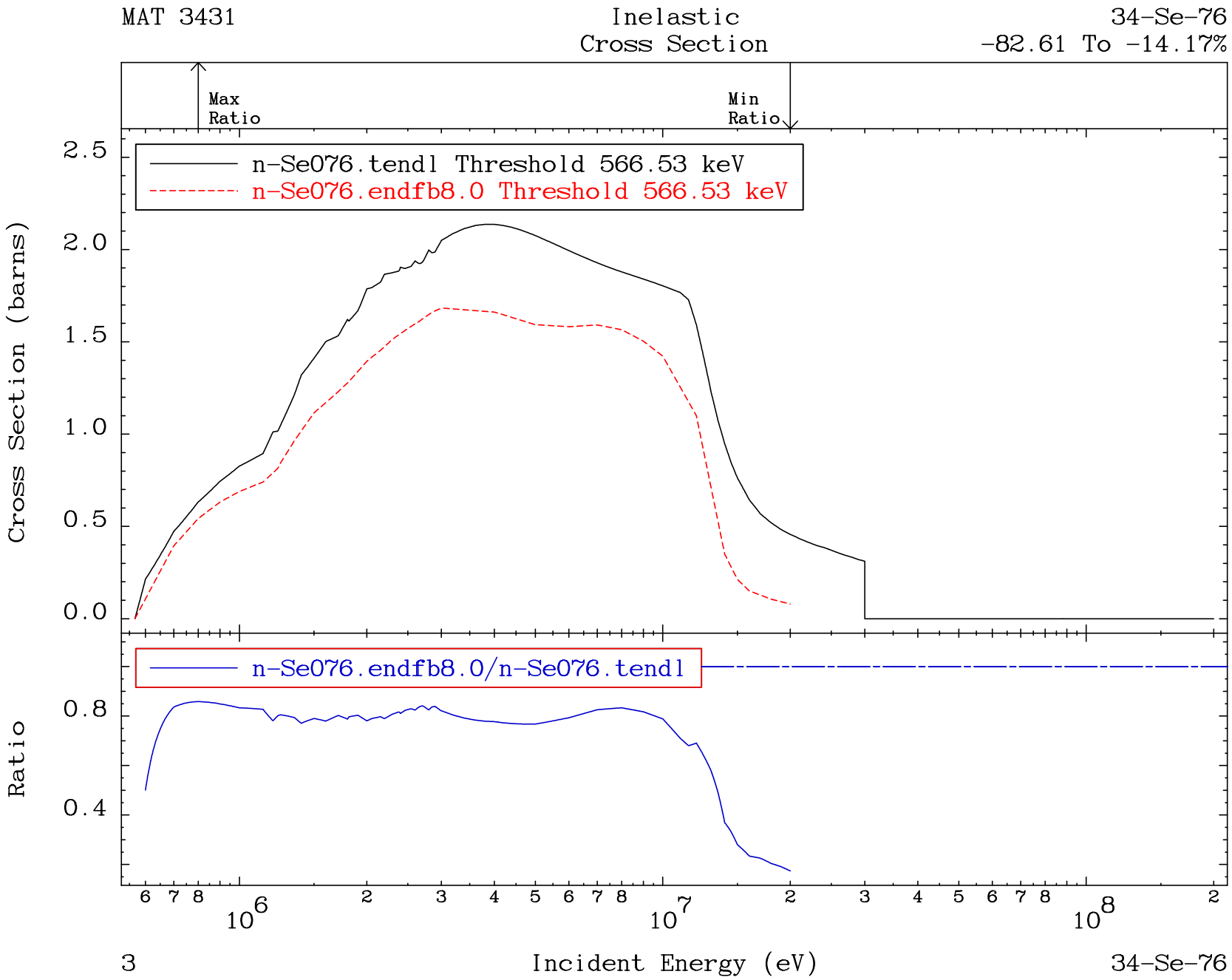
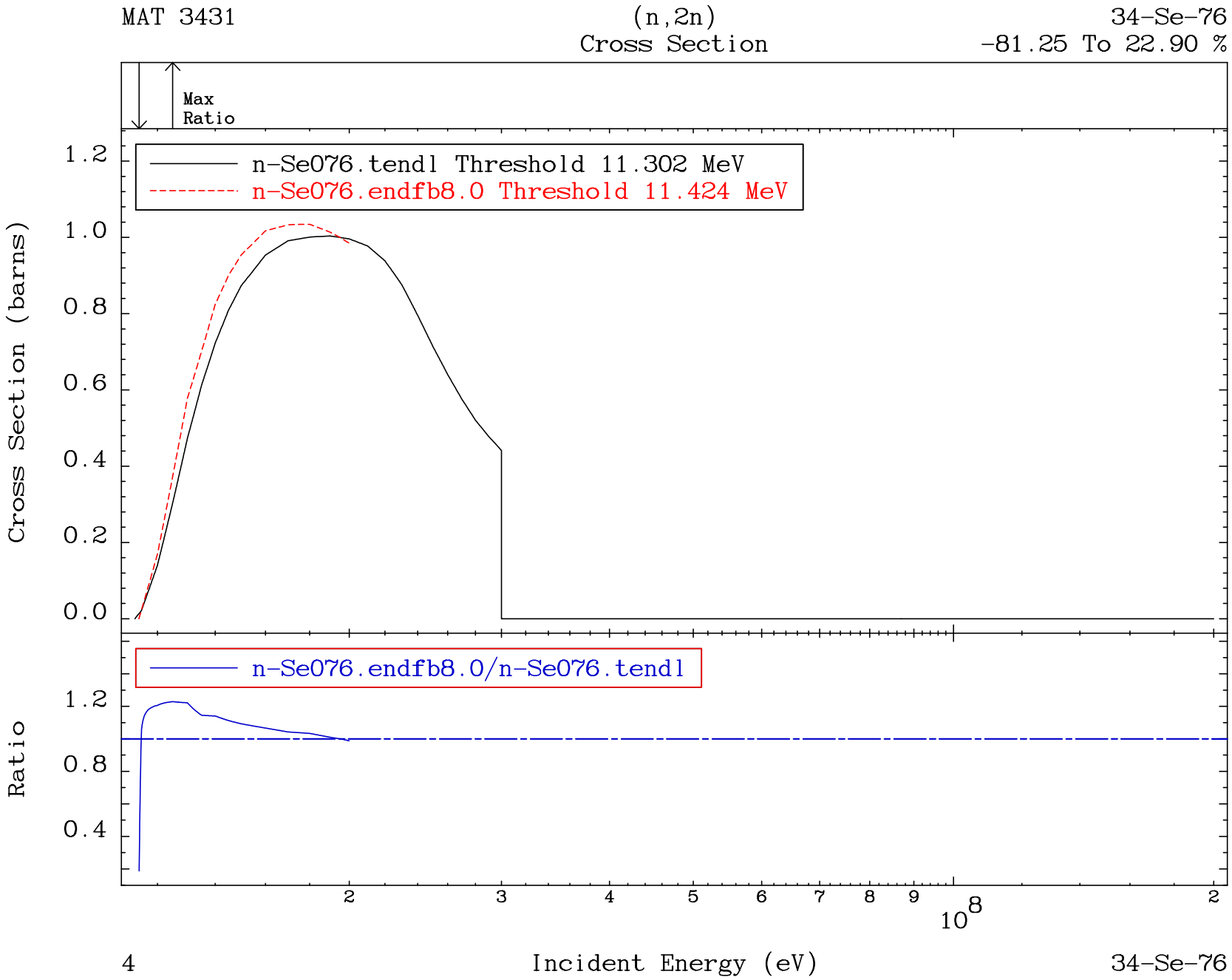
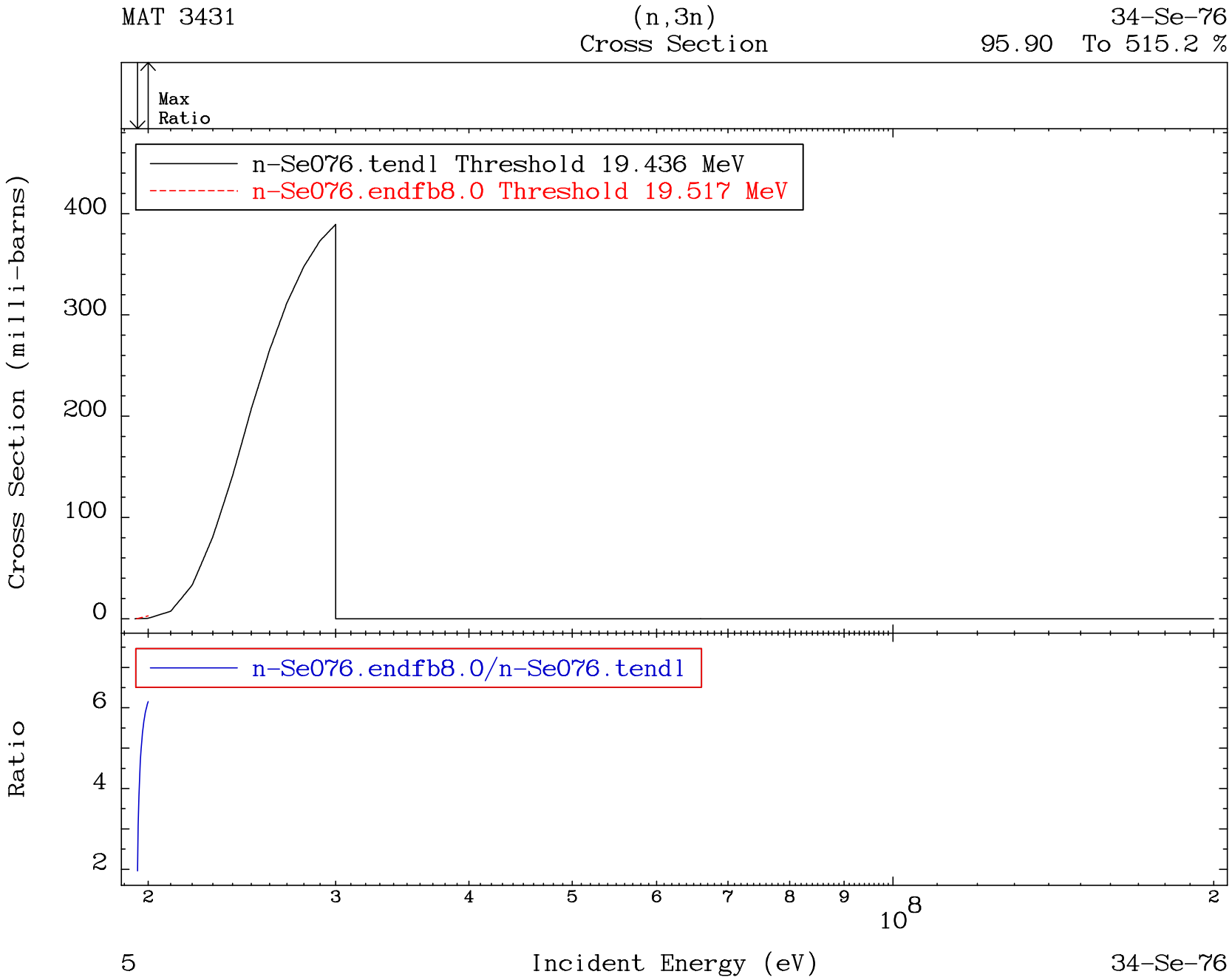
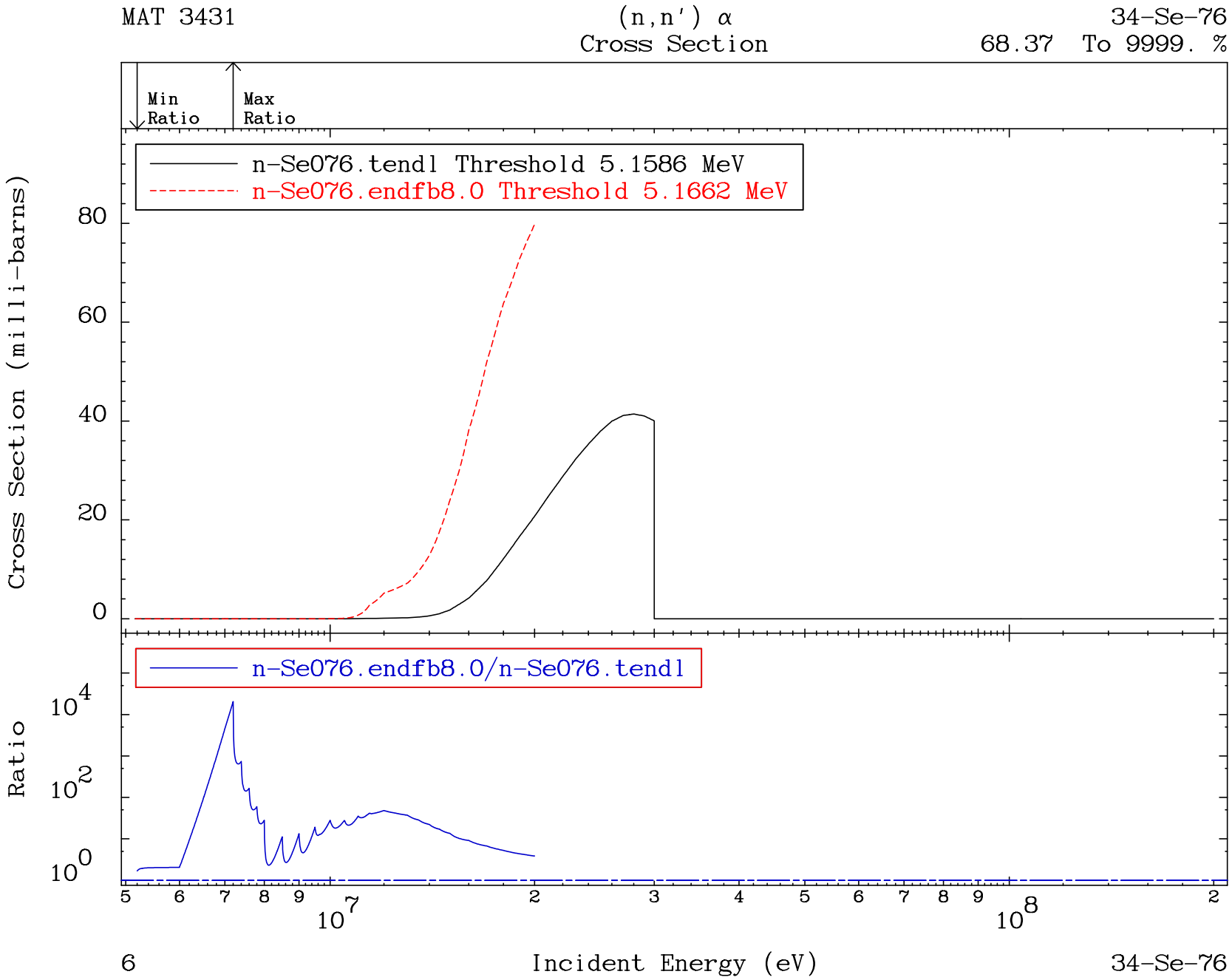

MAT 3431
Total
Cross Section
34-Se-76
-95.23 To 61.70 %
Max Ratio
Min Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
1
34-Se-76

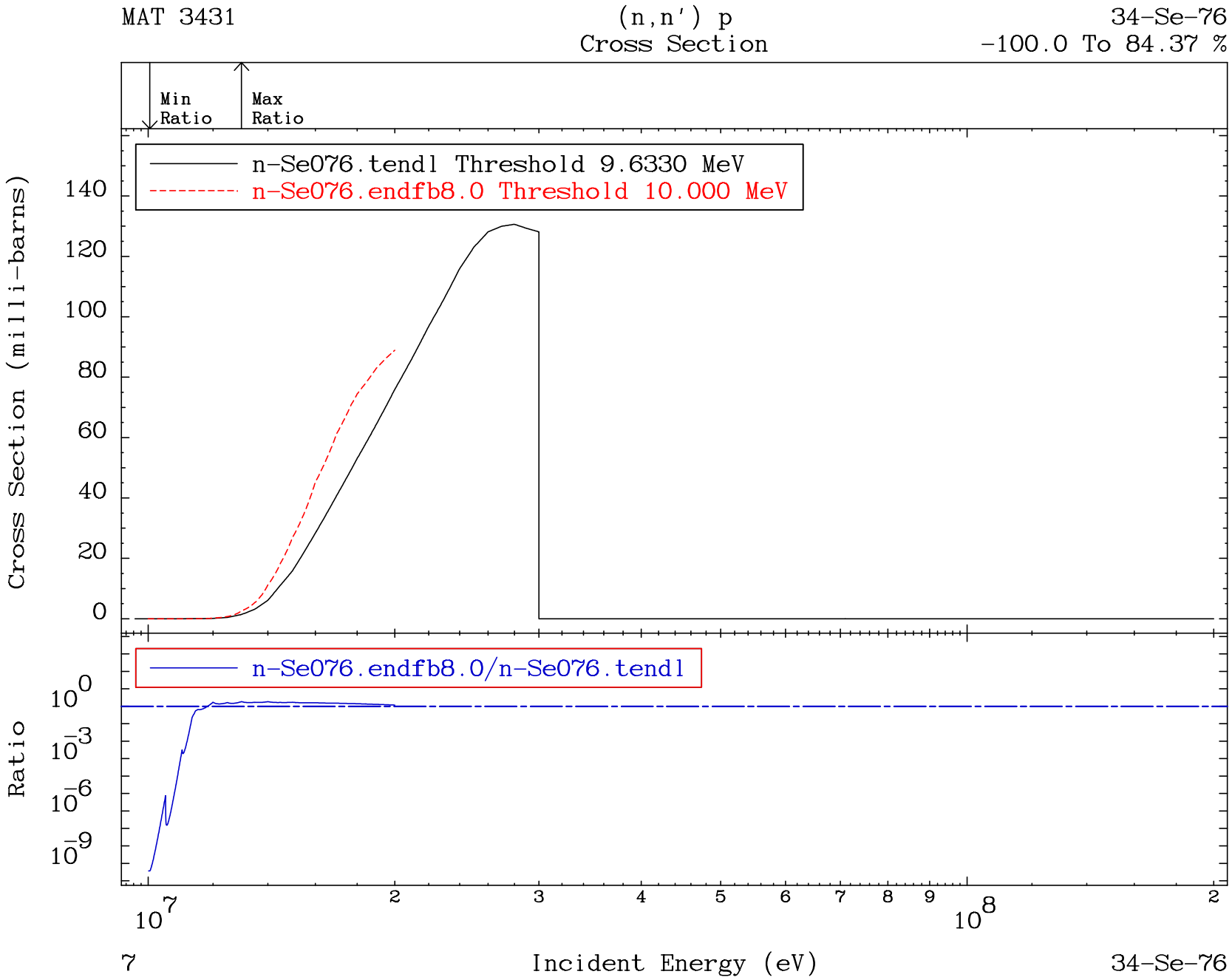

MAT 3431
Elastic
Cross Section
34-Se-76
-95.25 To 462.5 %
Max
Ratio
Min
Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
2
34-Se-76

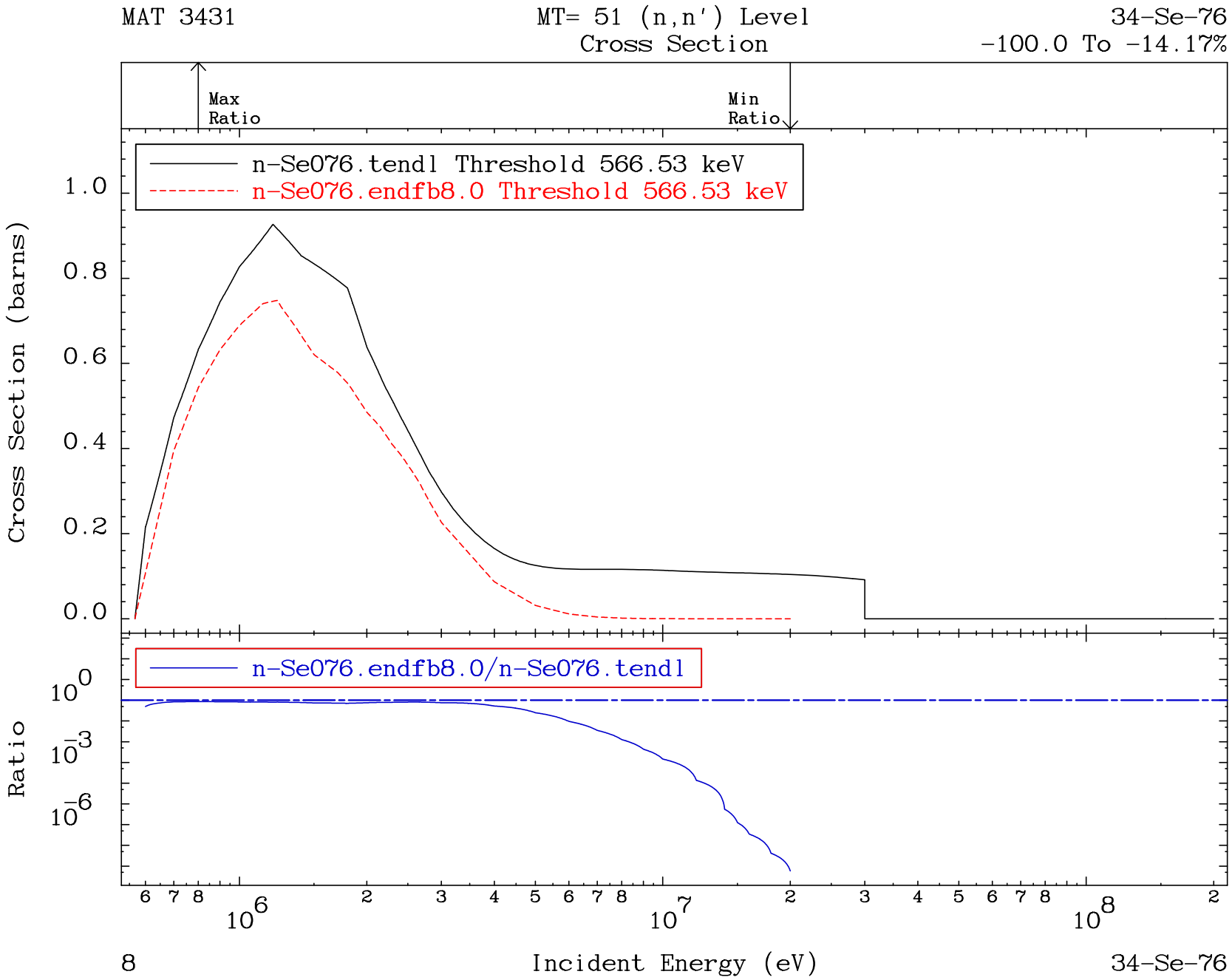

MAT 3431
Inelastic
Cross Section
34-Se-76
-82.61 To -14.17%
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 566.53 keV
n-Se076.endfb8.0 Threshold 566.53 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
0.8
0.4
6 7 8
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
34-Se-76

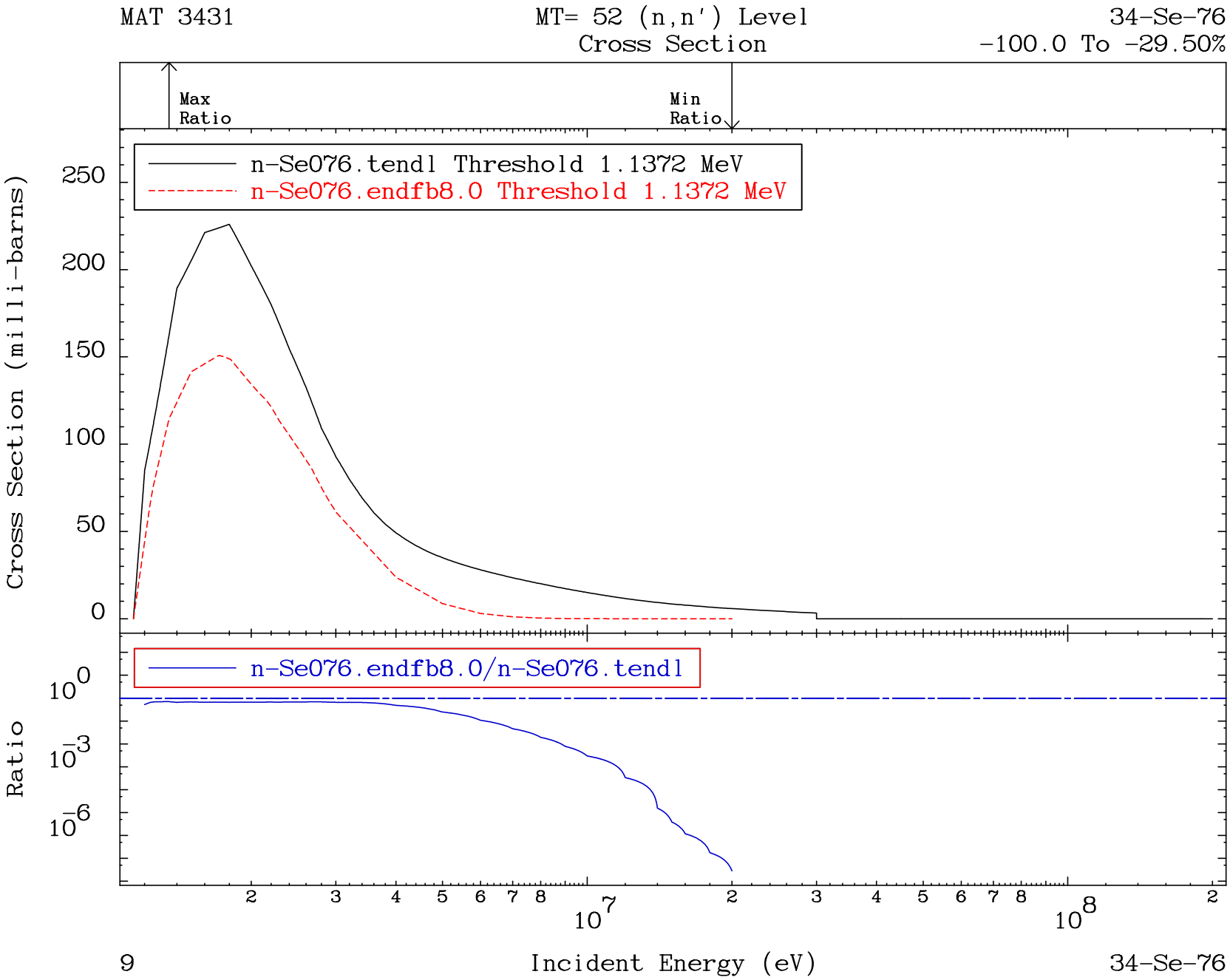

MAT 3431
(n,2n)
Cross Section
34-Se-76
-81.25 To 22.90 %
Max
Ratio
n-Se076.tendl Threshold 11.302 MeV
n-Se076.endfb8.0 Threshold 11.424 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
34-Se-76

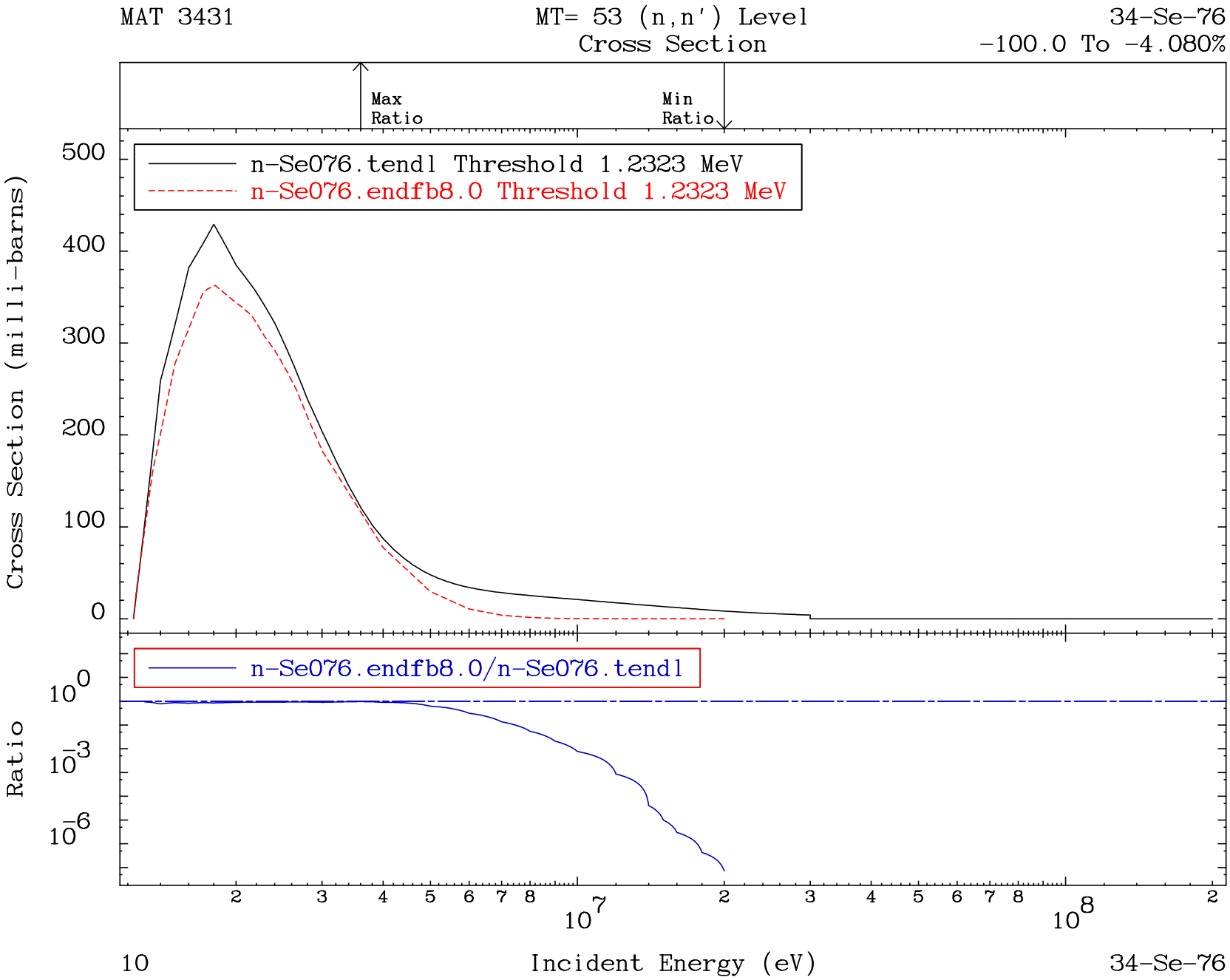

MAT 3431
(n,3n)
Cross Section
34-Se-76
95.90 To 515.2 %
Max
Ratio
n-Se076.tendl Threshold 19.436 MeV
n-Se076.endfb8.0 Threshold 19.517 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
6
4
2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
34-Se-76

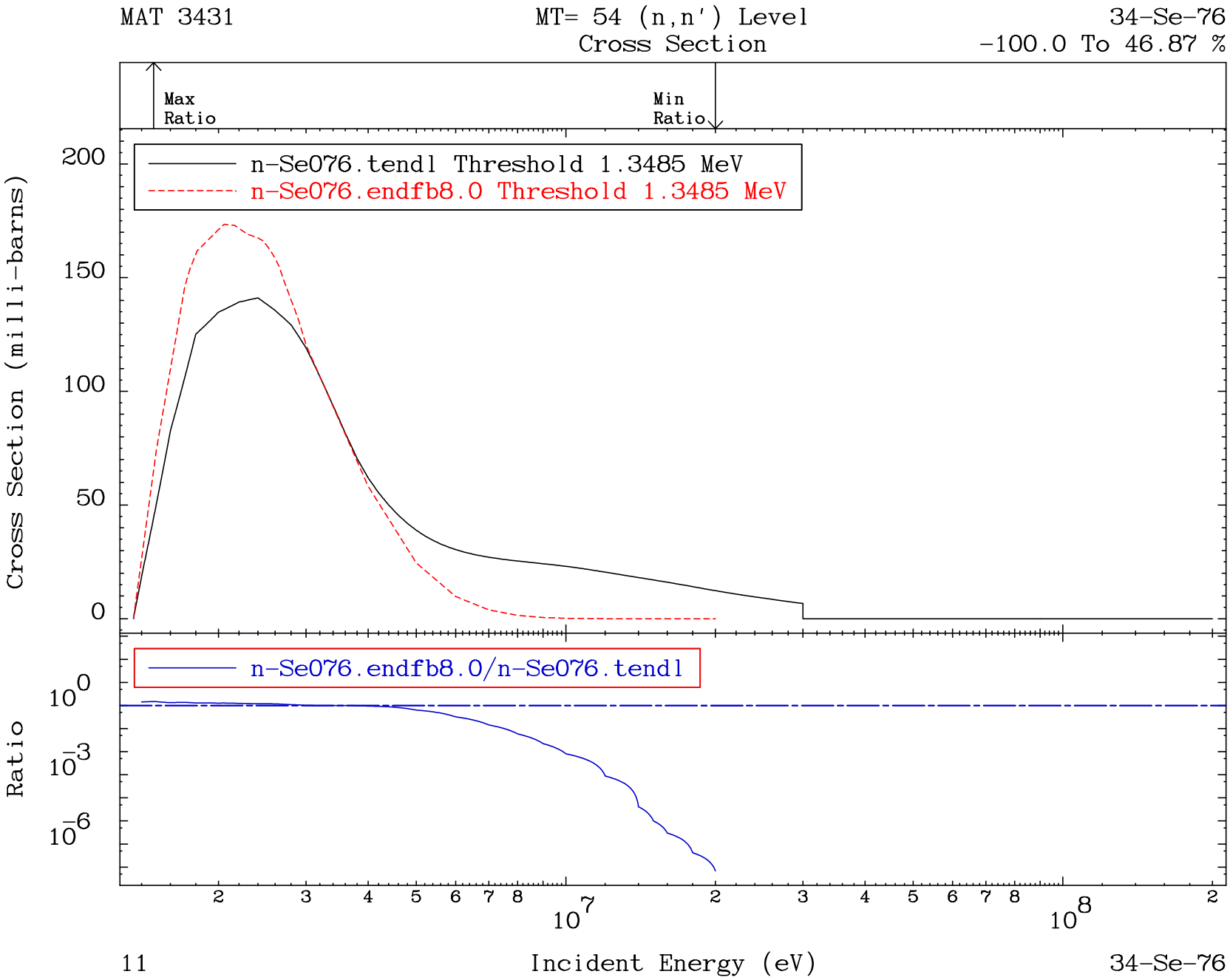

MAT 3431
(n,n') α
Cross Section
34-Se-76
68.37 To 9999. %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 5.1586 MeV
n-Se076.endfb8.0 Threshold 5.1662 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^4
10^2
10^0
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
34-Se-76

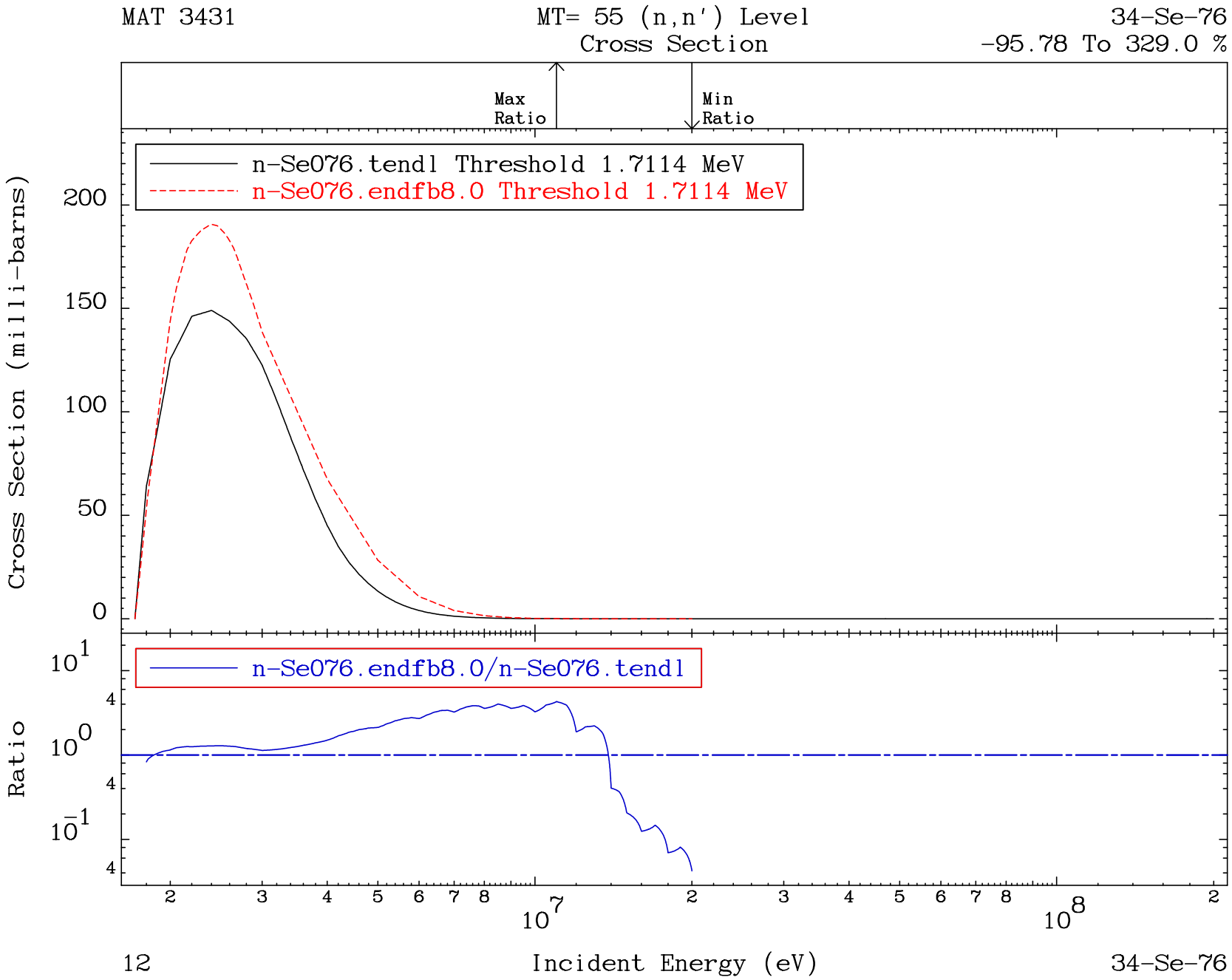

MAT 3431
(n,n') p
Cross Section
34-Se-76
-100.0 To 84.37 %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 9.6330 MeV
n-Se076.endfb8.0 Threshold 10.000 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-3
10^-6
10^-9
10^7
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
34-Se-76

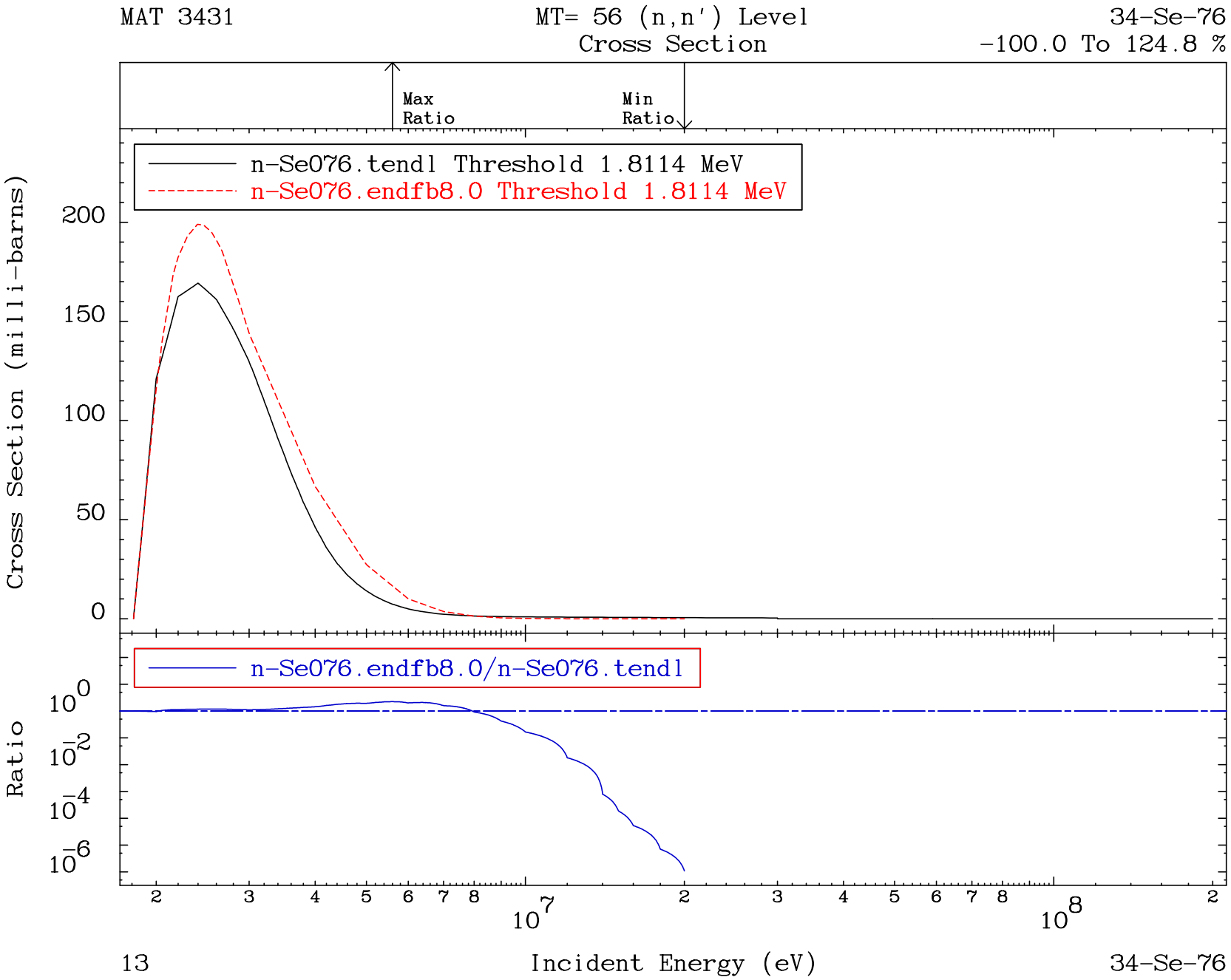

MAT 3431
MT= 51 (n,n') Level
Cross Section
34-Se-76
-100.0 To -14.17%
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 566.53 keV
n-Se076.endfb8.0 Threshold 566.53 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-3
10^-6
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
8
Incident Energy (eV)
34-Se-76

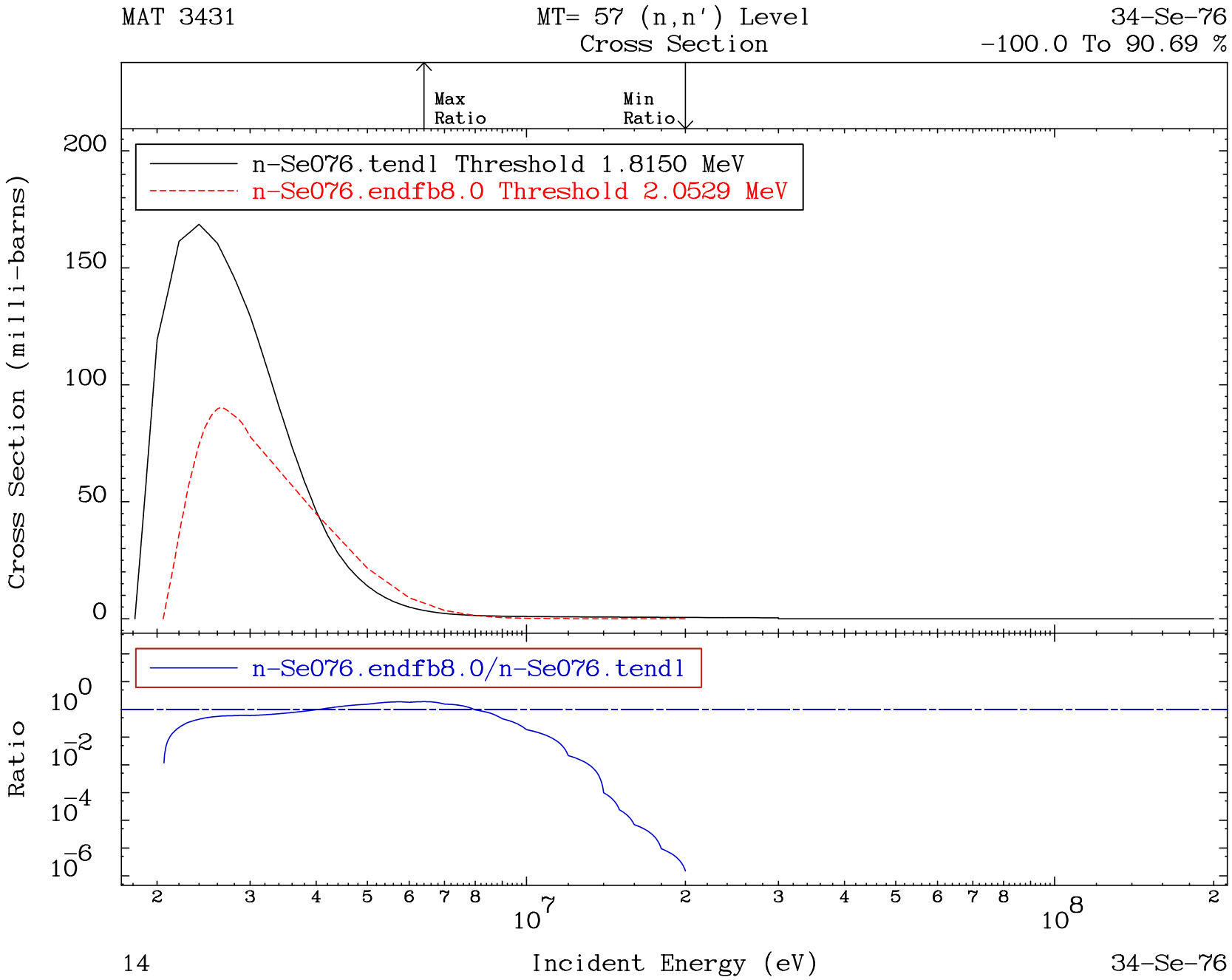

MAT 3431
MT= 52 (n,n') Level
Cross Section
34-Se-76
-100.0 To -29.50%
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 1.1372 MeV
n-Se076.endfb8.0 Threshold 1.1372 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
9
Incident Energy (eV)
34-Se-76

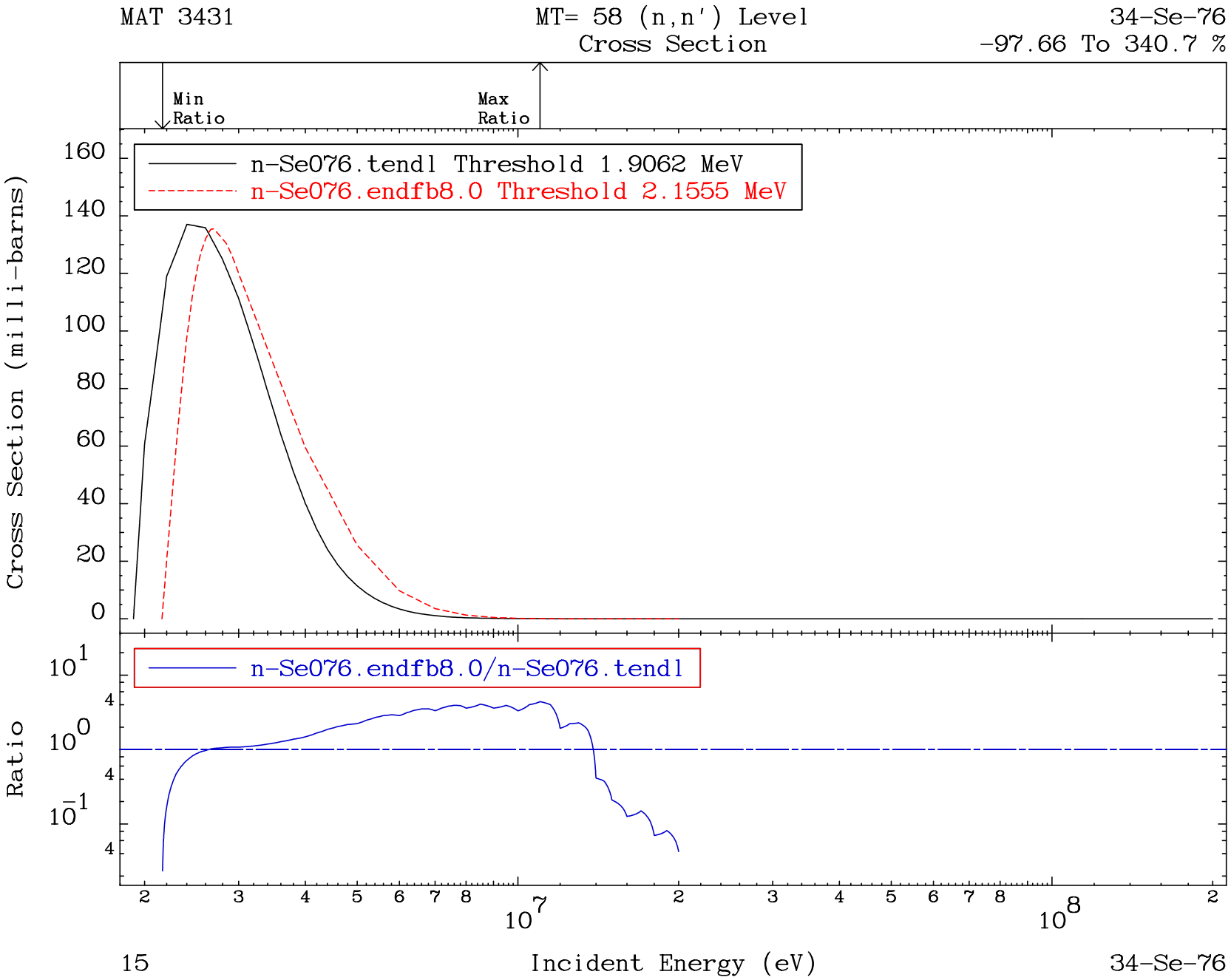

MAT 3431
MT= 53 (n,n') Level
Cross Section
34-Se-76
-100.0 To -4.080%
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 1.2323 MeV
n-Se076.endfb8.0 Threshold 1.2323 MeV
Cross Section (milli-barns)
500
400
300
200
100
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-3
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
10
Incident Energy (eV)
34-Se-76

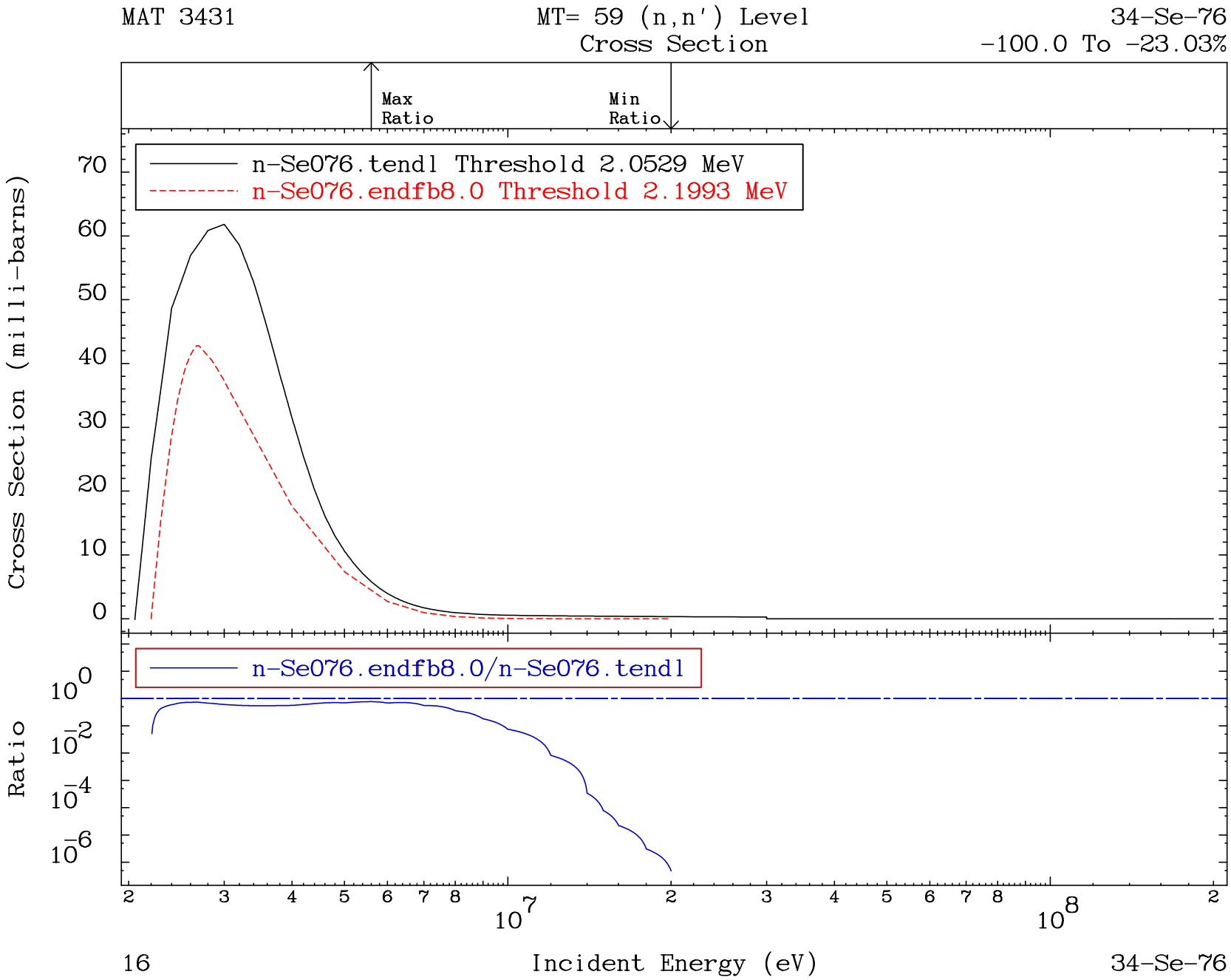

MAT 3431
MT= 54 (n,n') Level
Cross Section
34-Se-76
-100.0 To 46.87 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 1.3485 MeV
n-Se076.endfb8.0 Threshold 1.3485 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-3
10^-6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
34-Se-76

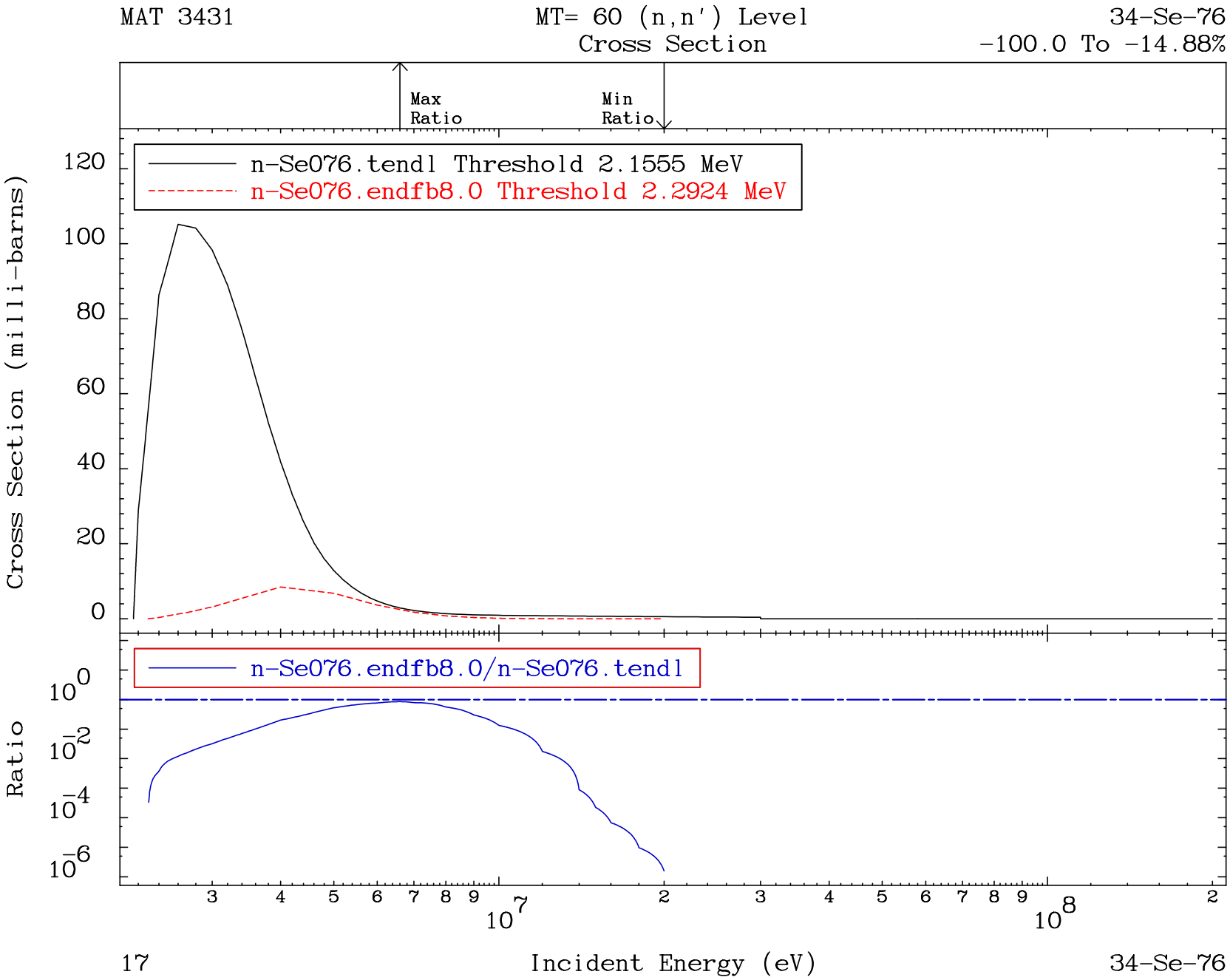

MAT 3431
MT= 55 (n,n') Level
Cross Section
34-Se-76
-95.78 To 329.0 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 1.7114 MeV
n-Se076.endfb8.0 Threshold 1.7114 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^-1
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
34-Se-76

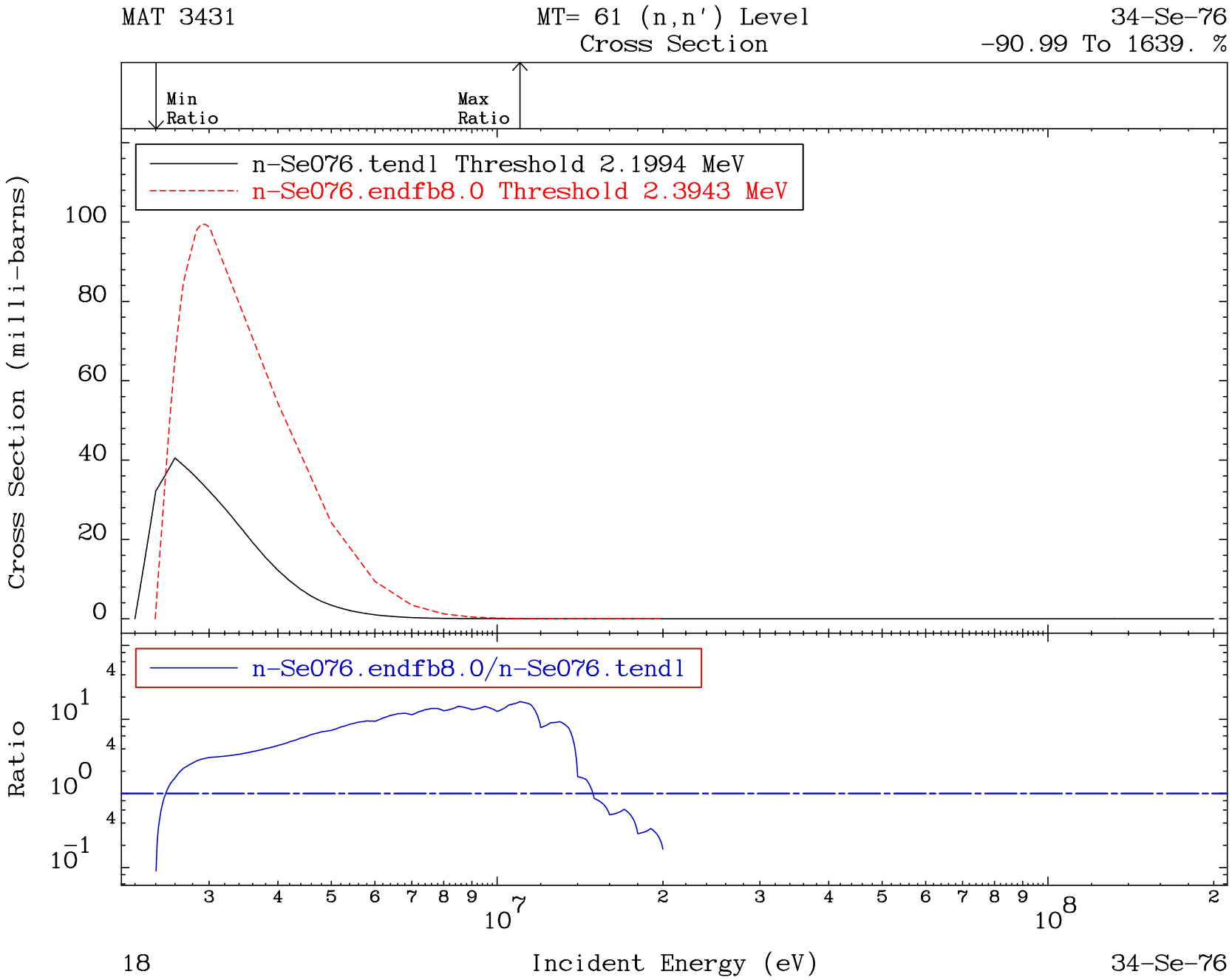

MAT 3431
MT= 56 (n,n') Level
Cross Section
34-Se-76
-100.0 To 124.8 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 1.8114 MeV
n-Se076.endfb8.0 Threshold 1.8114 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
34-Se-76

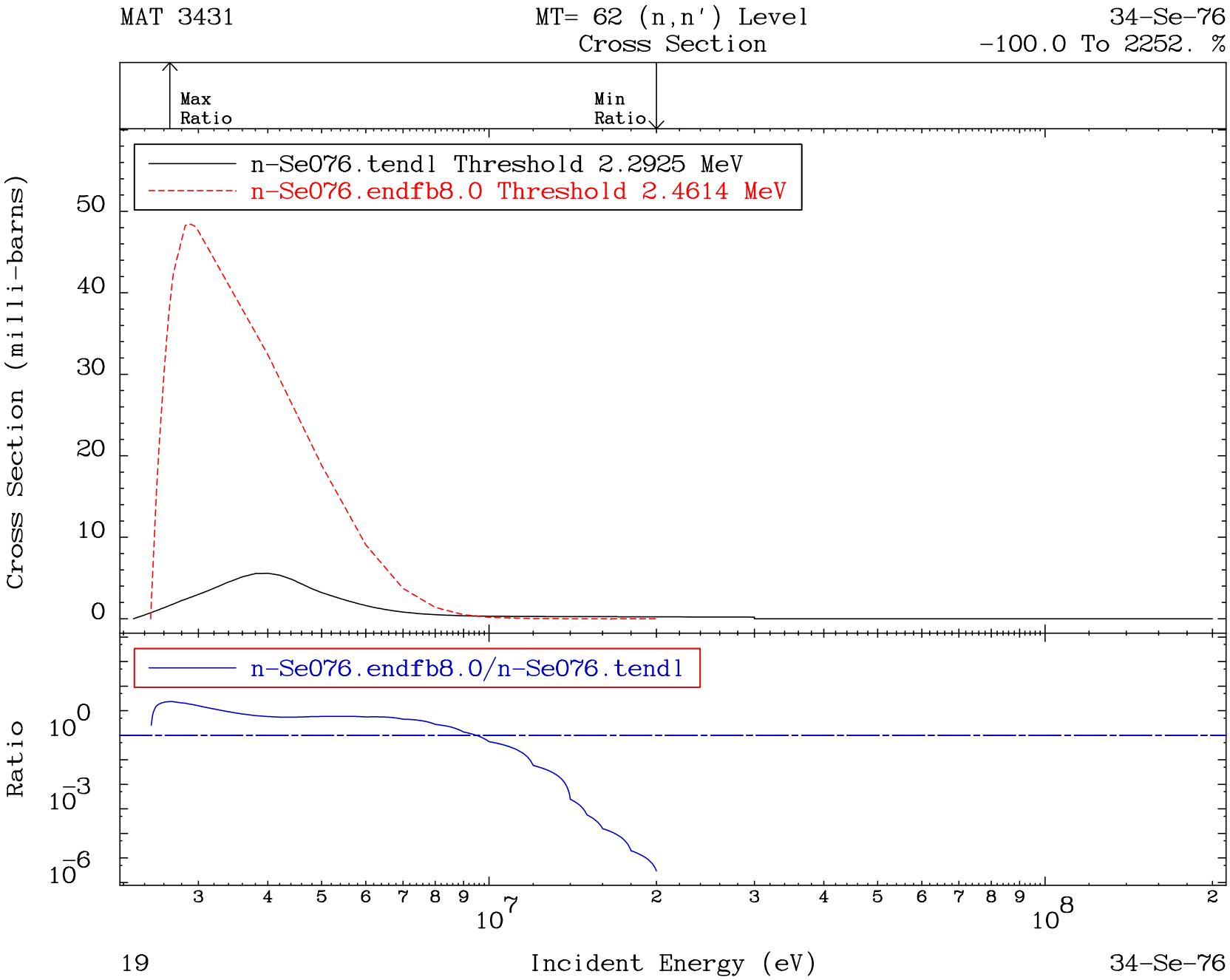

MAT 3431
MT= 57 (n,n') Level
Cross Section
34-Se-76
-100.0 To 90.69 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 1.8150 MeV
n-Se076.endfb8.0 Threshold 2.0529 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
14
Incident Energy (eV)
34-Se-76

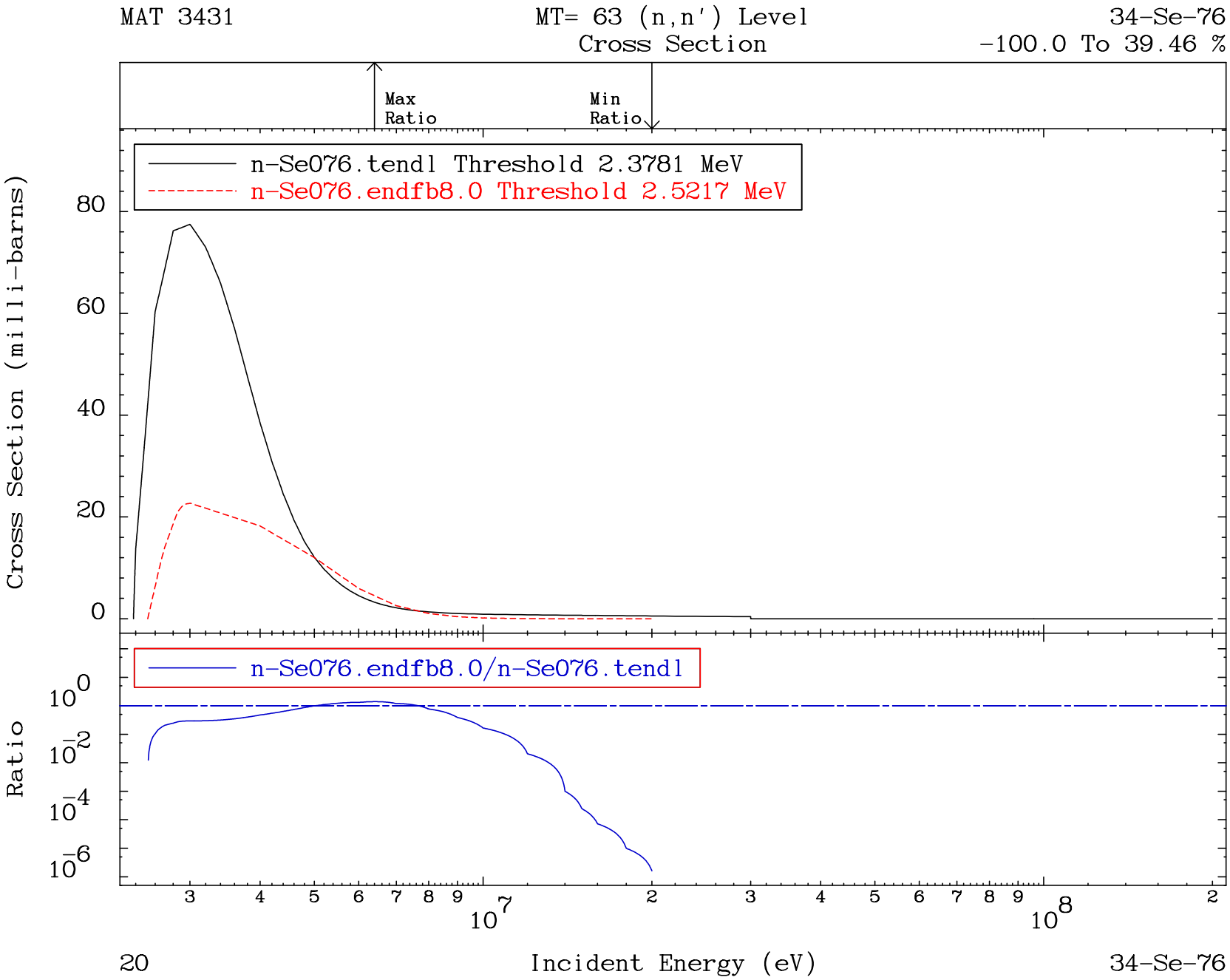

MAT 3431
MT= 58 (n,n') Level
Cross Section
34-Se-76
-97.66 To 340.7 %
Min
Ratio
Max
Ratio
n-Se076.tendl Threshold 1.9062 MeV
n-Se076.endfb8.0 Threshold 2.1555 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^-1
2
3
4
5
6
7
8
10^7
10^8
15
Incident Energy (eV)
34-Se-76

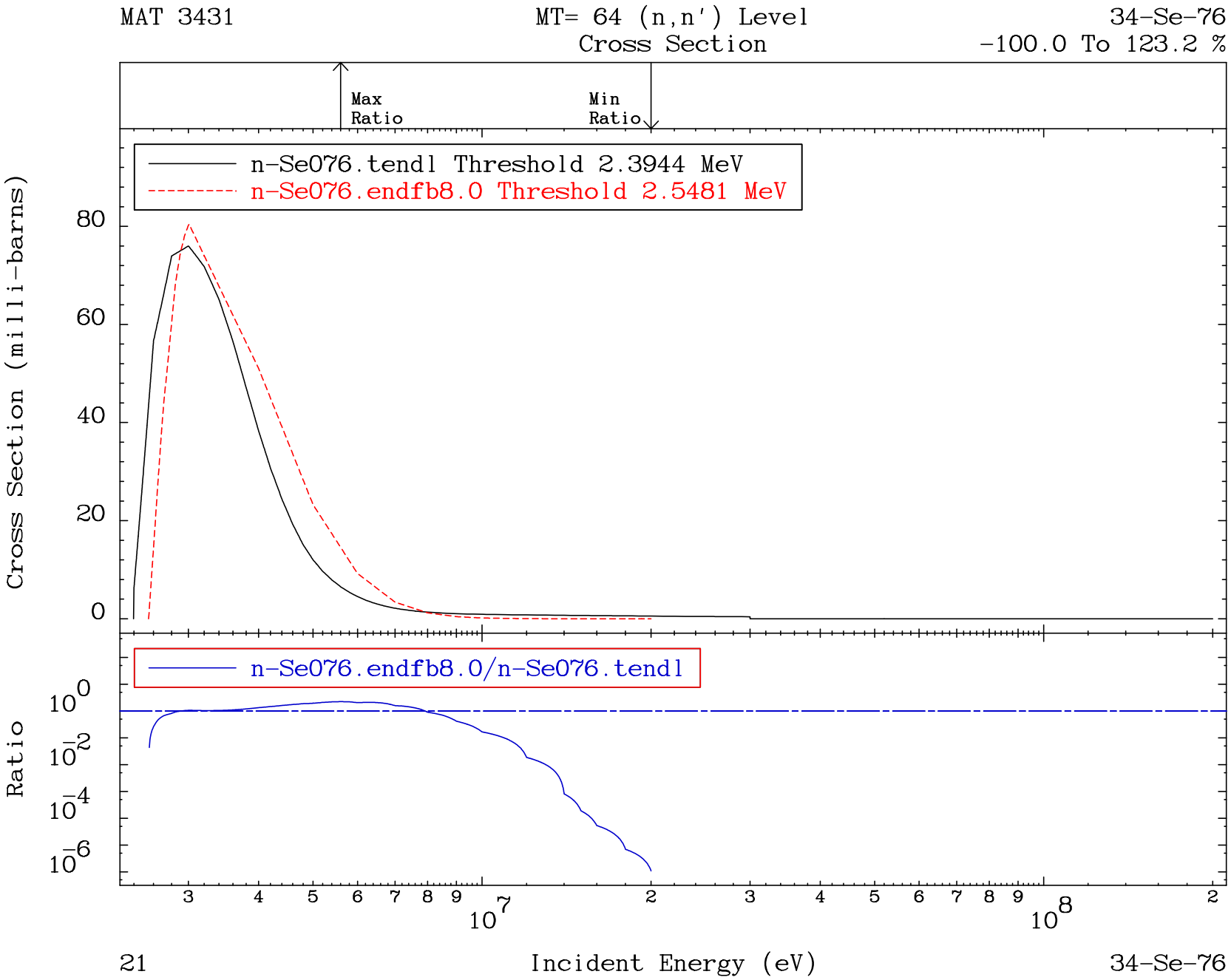

MAT 3431
MT= 59 (n,n') Level
Cross Section
34-Se-76
-100.0 To -23.03%
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.0529 MeV
n-Se076.endfb8.0 Threshold 2.1993 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
34-Se-76

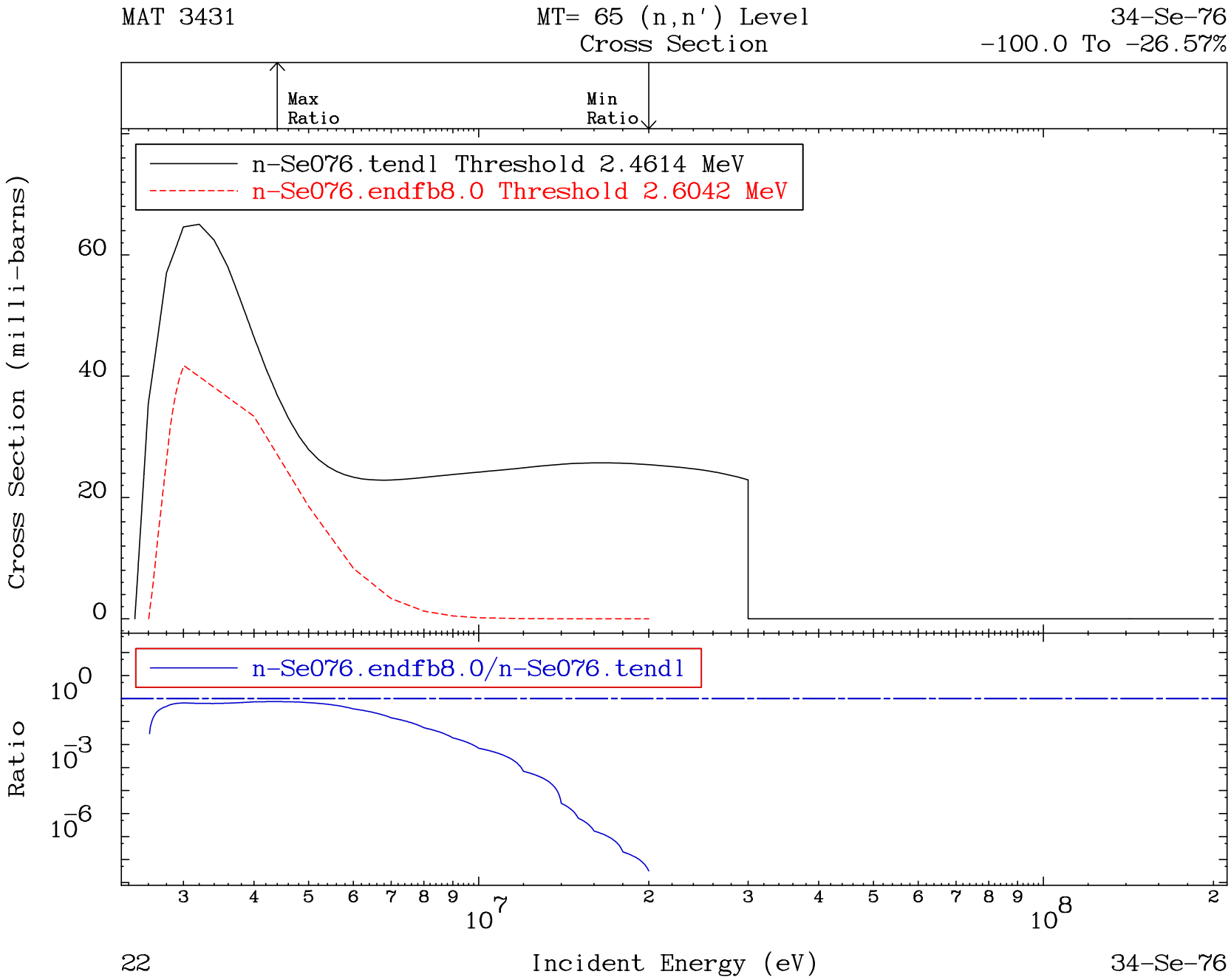

MAT 3431
MT= 60 (n,n') Level
Cross Section
34-Se-76
-100.0 To -14.88%
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.1555 MeV
n-Se076.endfb8.0 Threshold 2.2924 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
17
Incident Energy (eV)
34-Se-76

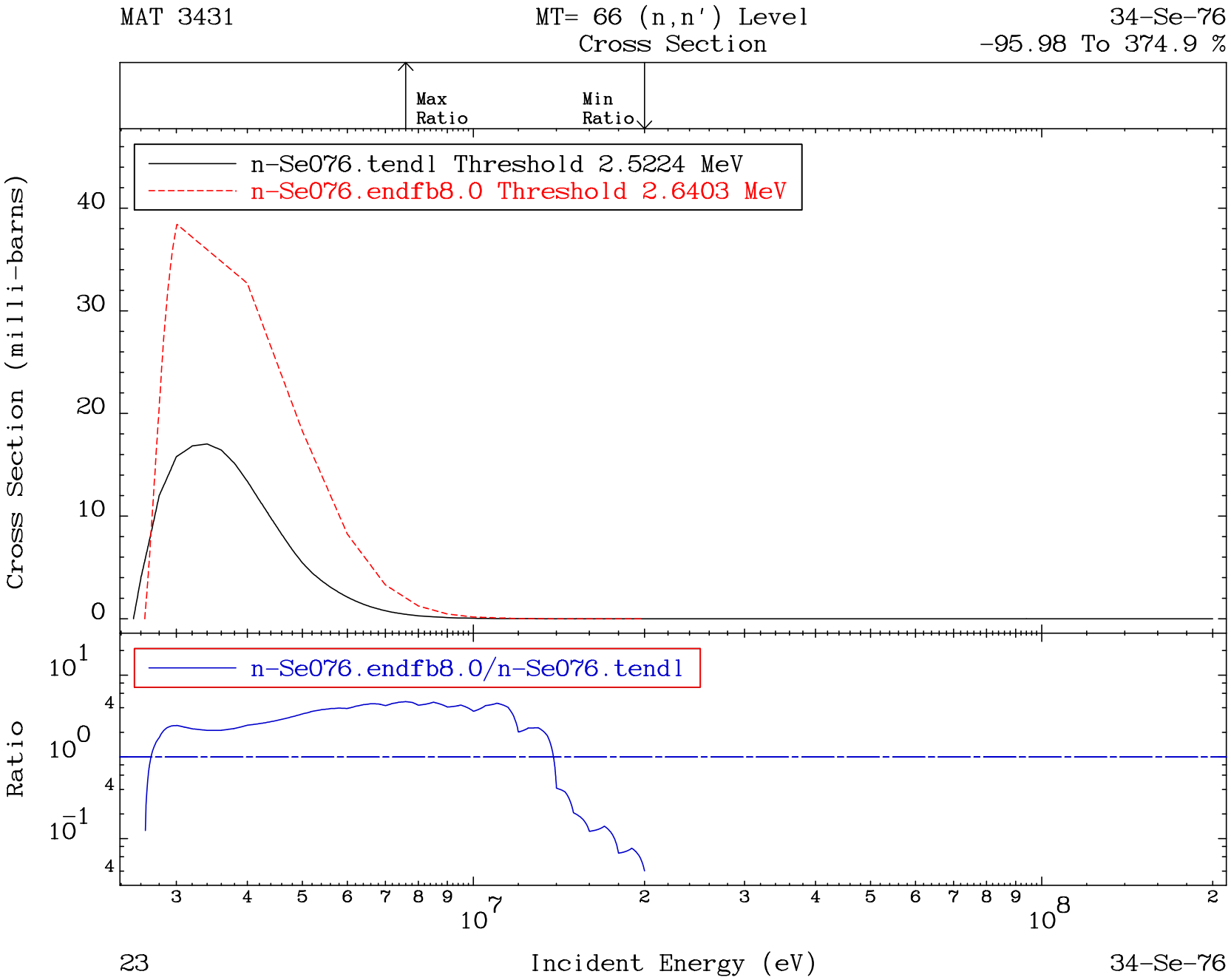

MAT 3431
MT= 61 (n,n') Level
Cross Section
34-Se-76
-90.99 To 1639. %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 2.1994 MeV
n-Se076.endfb8.0 Threshold 2.3943 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
18
Incident Energy (eV)
34-Se-76

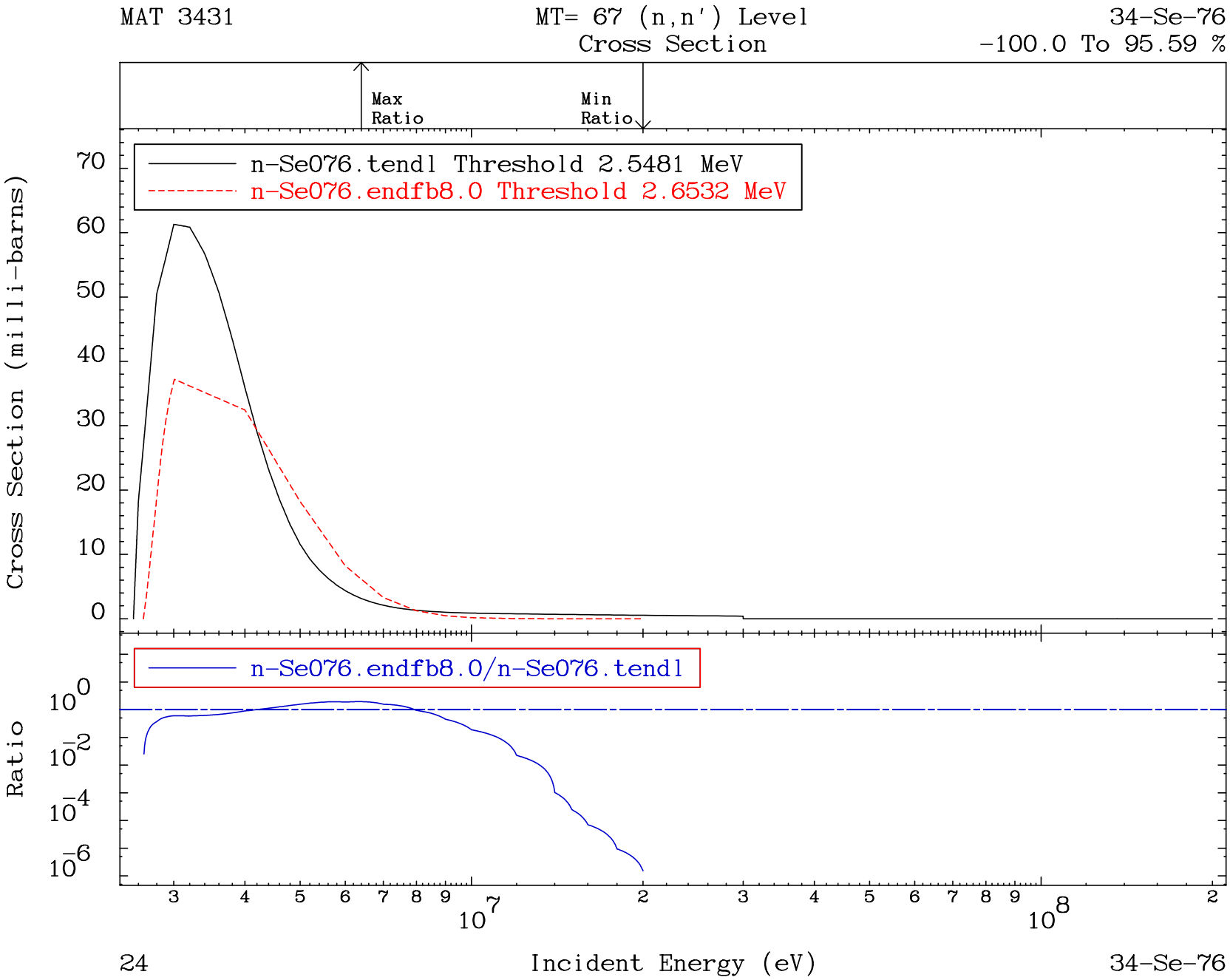

MAT 3431
MT= 62 (n,n') Level
Cross Section
34-Se-76
-100.0 To 2252. %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.2925 MeV
n-Se076.endfb8.0 Threshold 2.4614 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
19
Incident Energy (eV)
34-Se-76

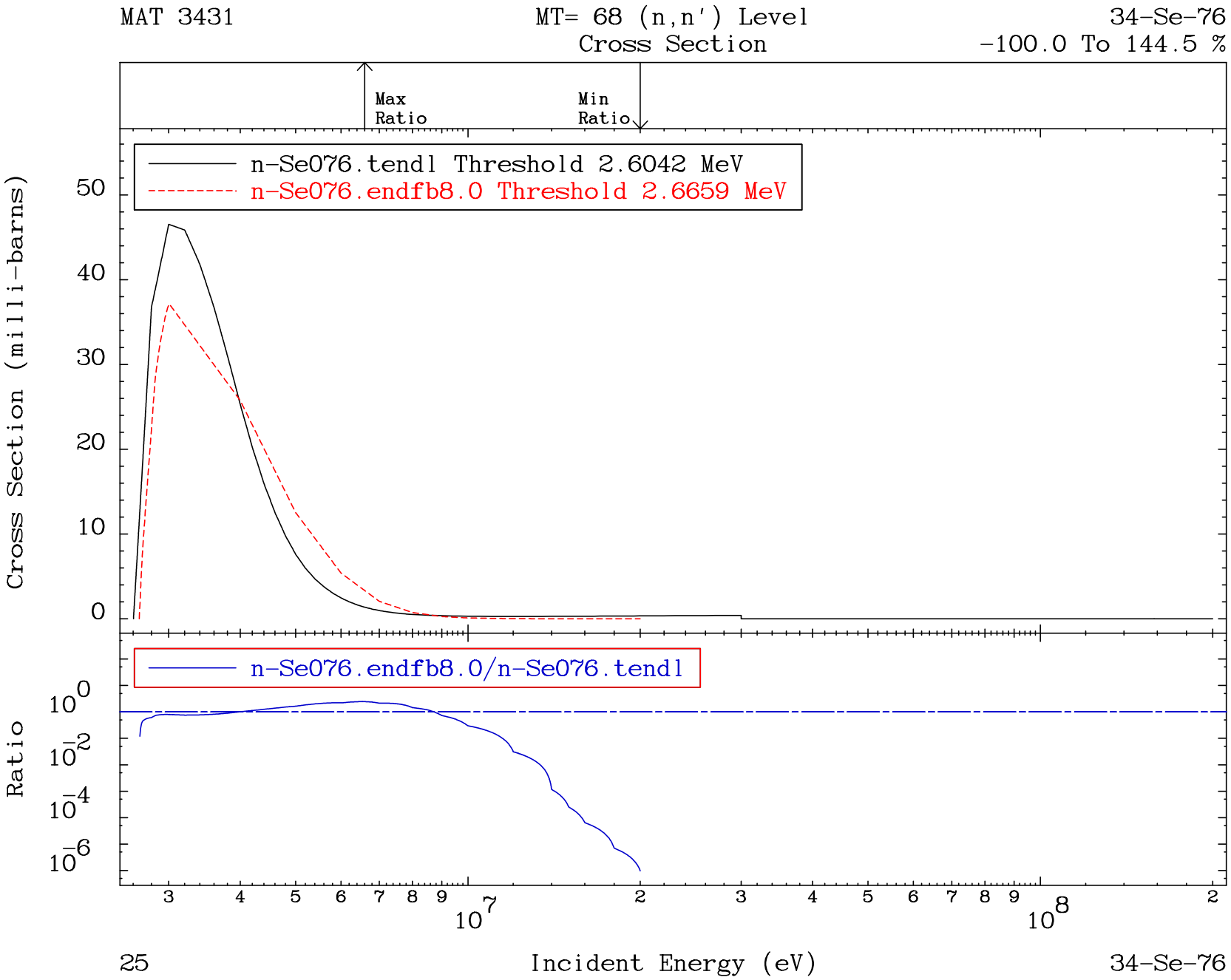

MAT 3431
MT= 63 (n,n') Level
Cross Section
34-Se-76
-100.0 To 39.46 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.3781 MeV
n-Se076.endfb8.0 Threshold 2.5217 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
34-Se-76

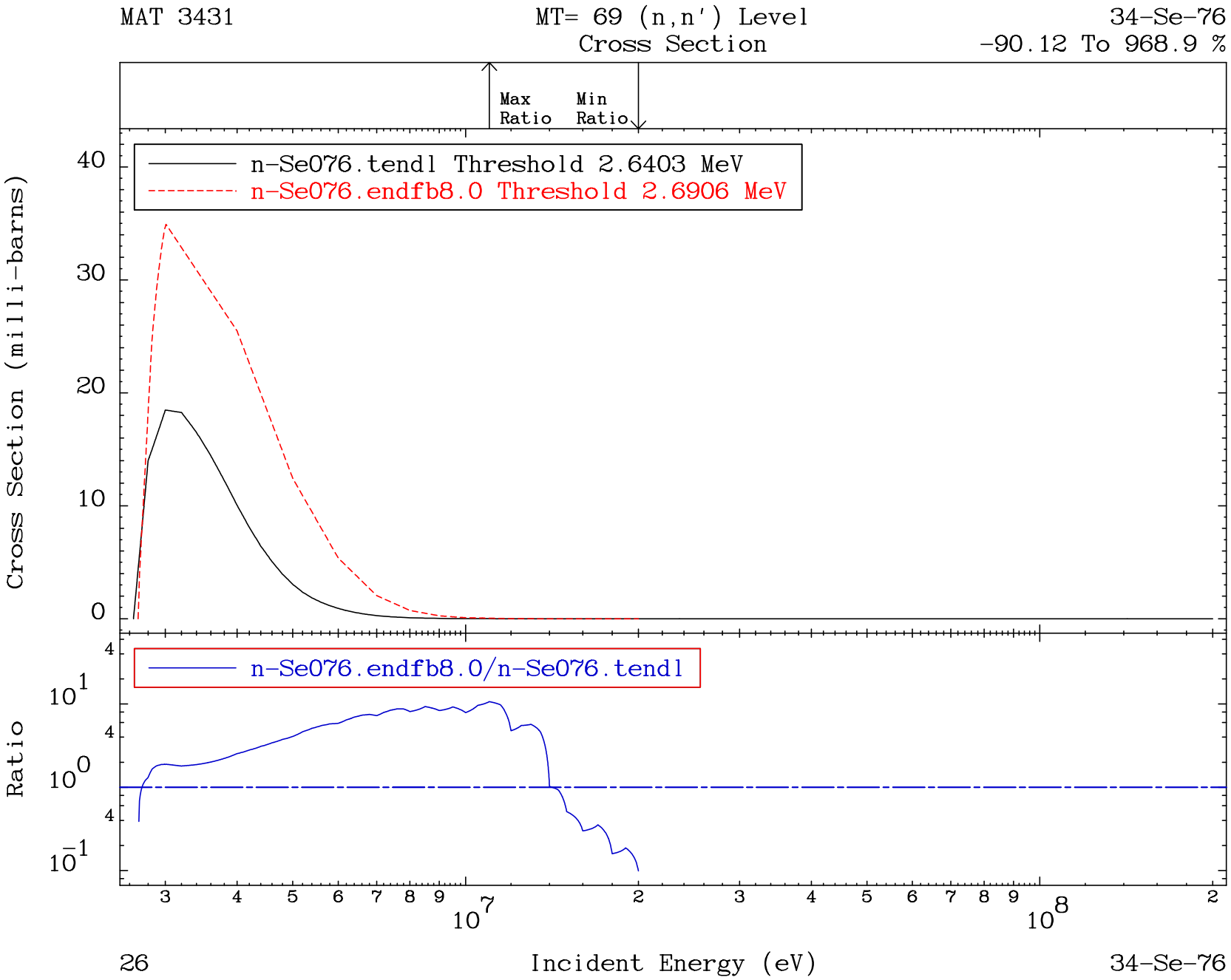

MAT 3431
MT= 64 (n,n') Level
Cross Section
34-Se-76
-100.0 To 123.2 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.3944 MeV
n-Se076.endfb8.0 Threshold 2.5481 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
21
Incident Energy (eV)
34-Se-76

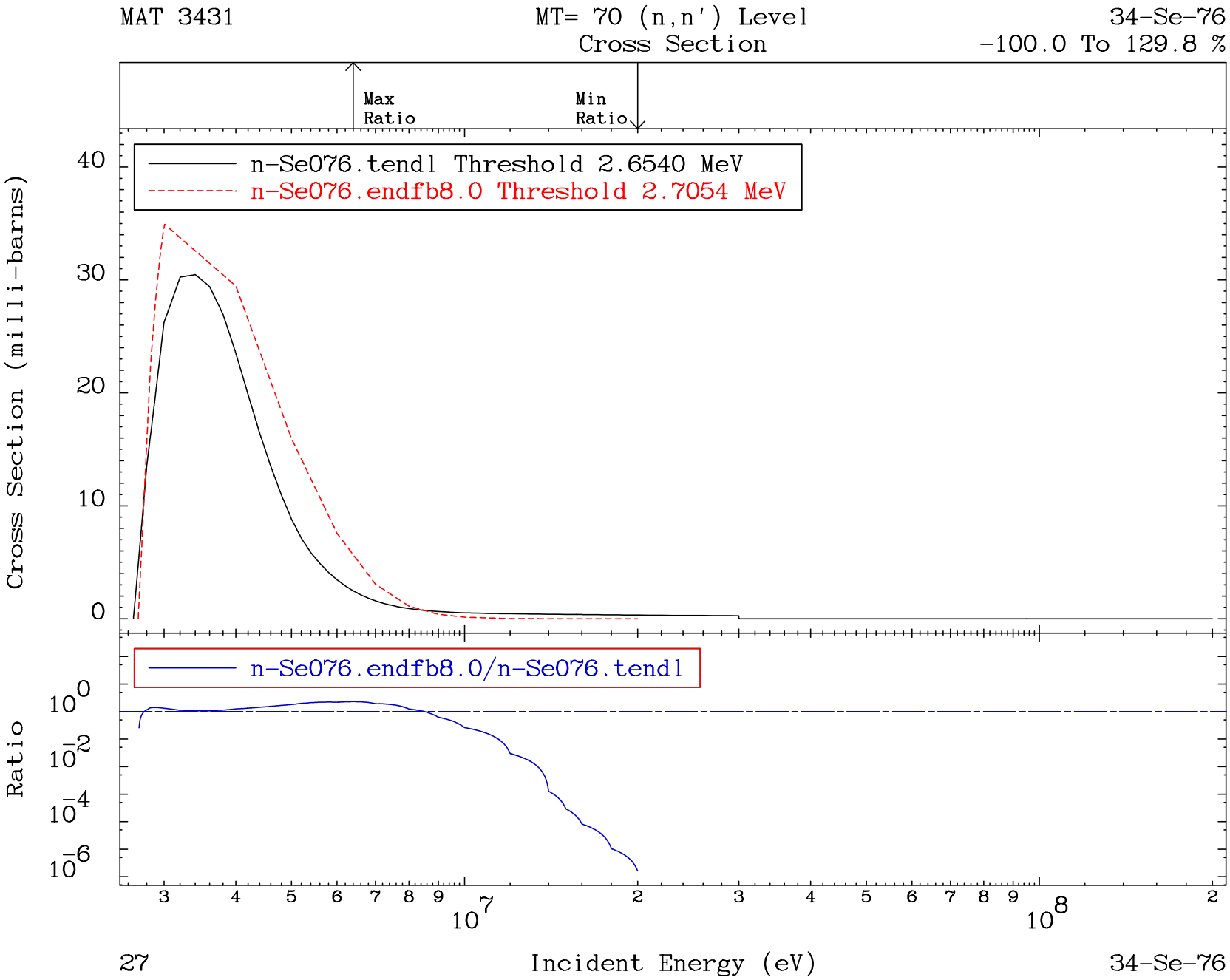

MAT 3431
MT= 65 (n,n') Level
Cross Section
34-Se-76
-100.0 To -26.57%
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.4614 MeV
n-Se076.endfb8.0 Threshold 2.6042 MeV
Cross Section (milli-barns)
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-3
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
34-Se-76

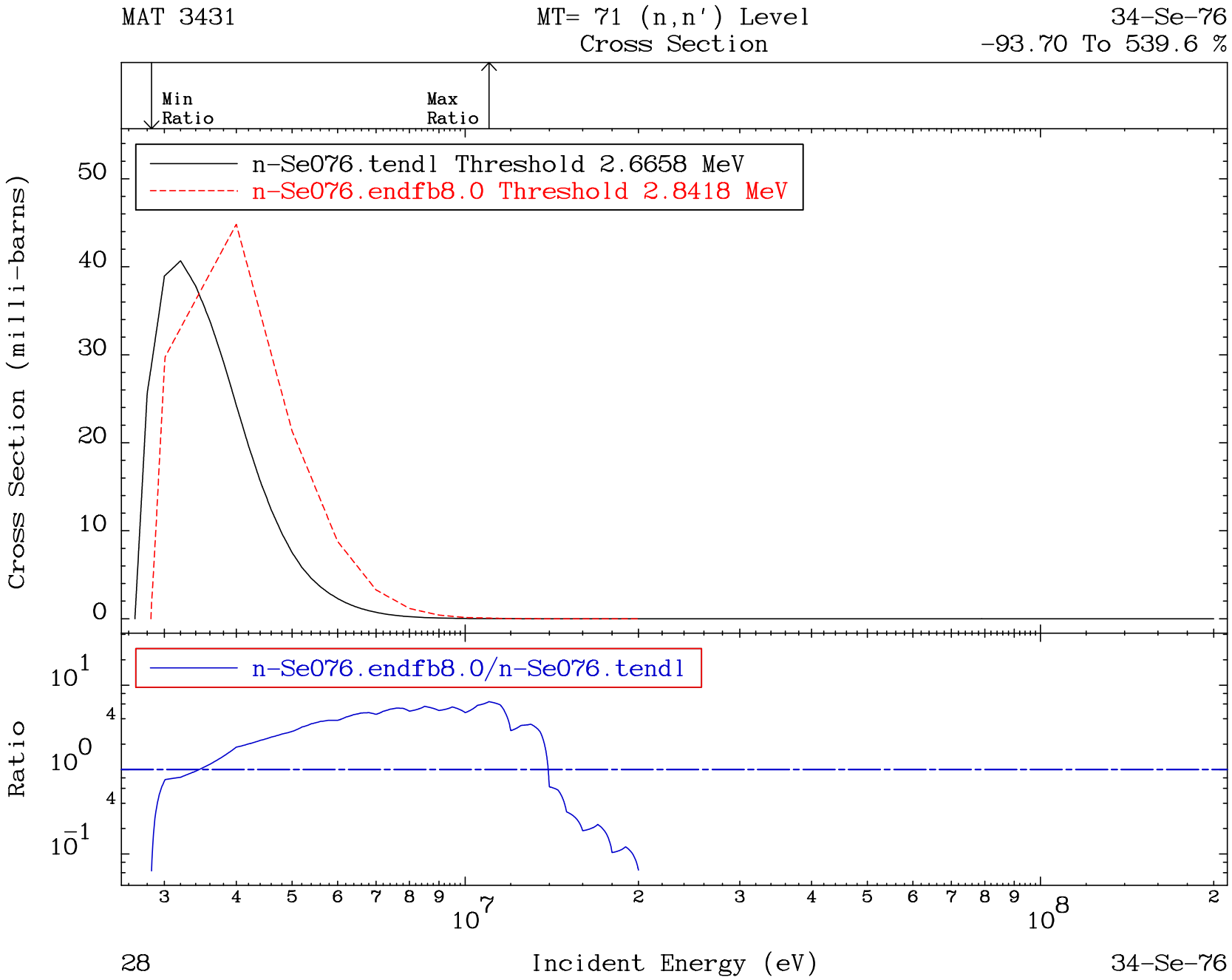

MAT 3431
MT= 66 (n,n') Level
Cross Section
34-Se-76
-95.98 To 374.9 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.5224 MeV
n-Se076.endfb8.0 Threshold 2.6403 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^-1
4
4
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
34-Se-76

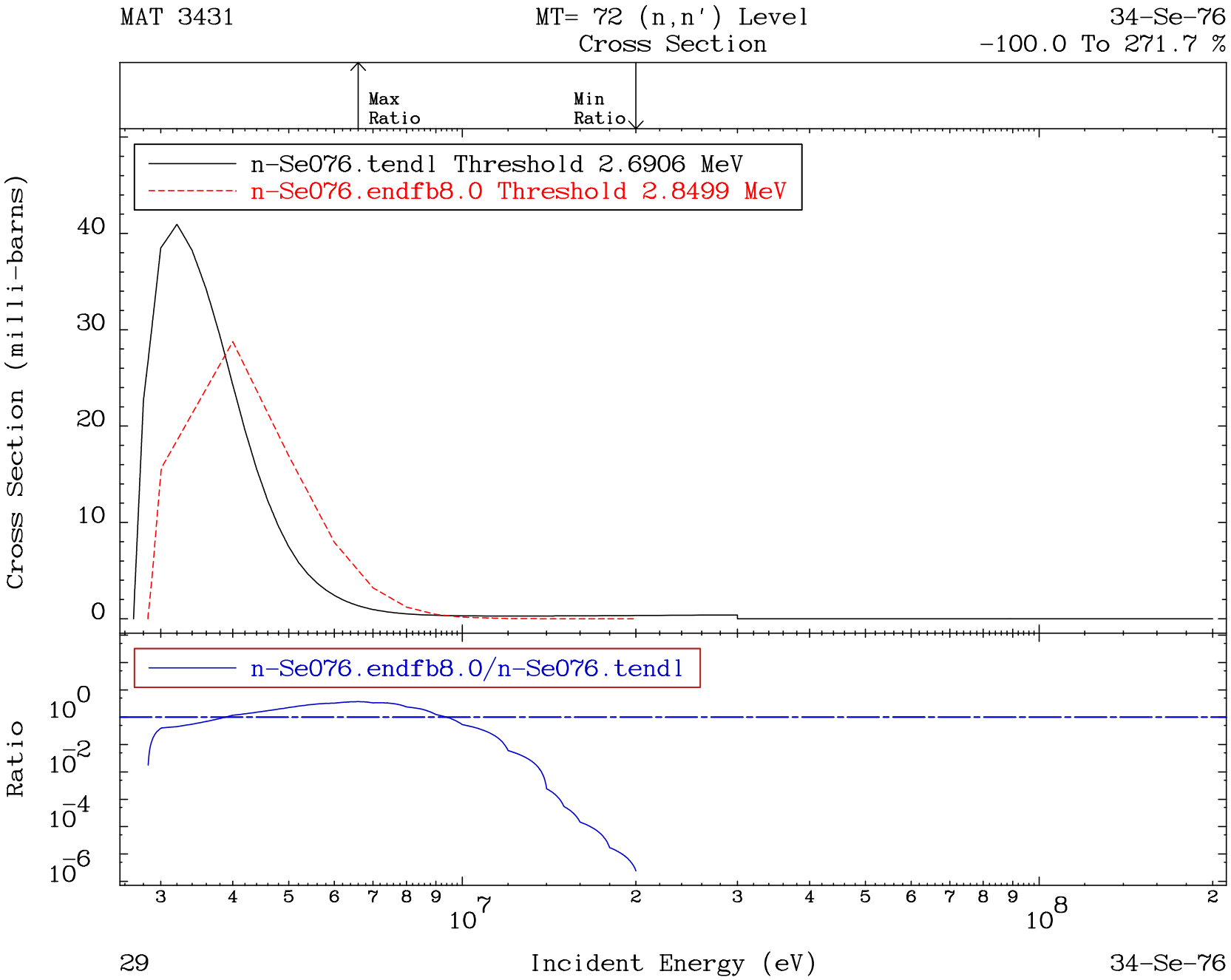

MAT 3431
MT= 67 (n,n') Level
Cross Section
34-Se-76
-100.0 To 95.59 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.5481 MeV
n-Se076.endfb8.0 Threshold 2.6532 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
34-Se-76

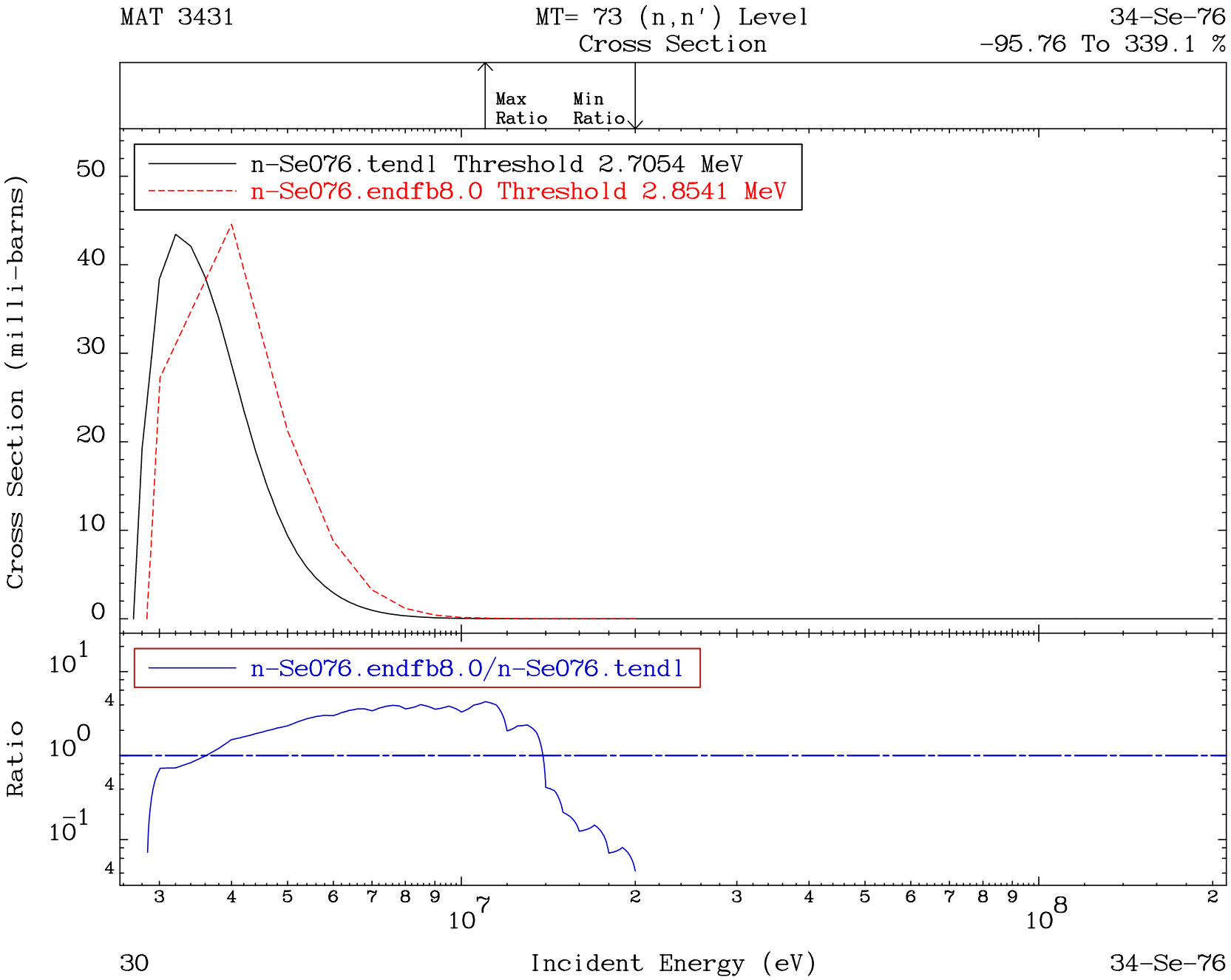

MAT 3431
MT= 68 (n,n') Level
Cross Section
34-Se-76
-100.0 To 144.5 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.6042 MeV
n-Se076.endfb8.0 Threshold 2.6659 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
34-Se-76

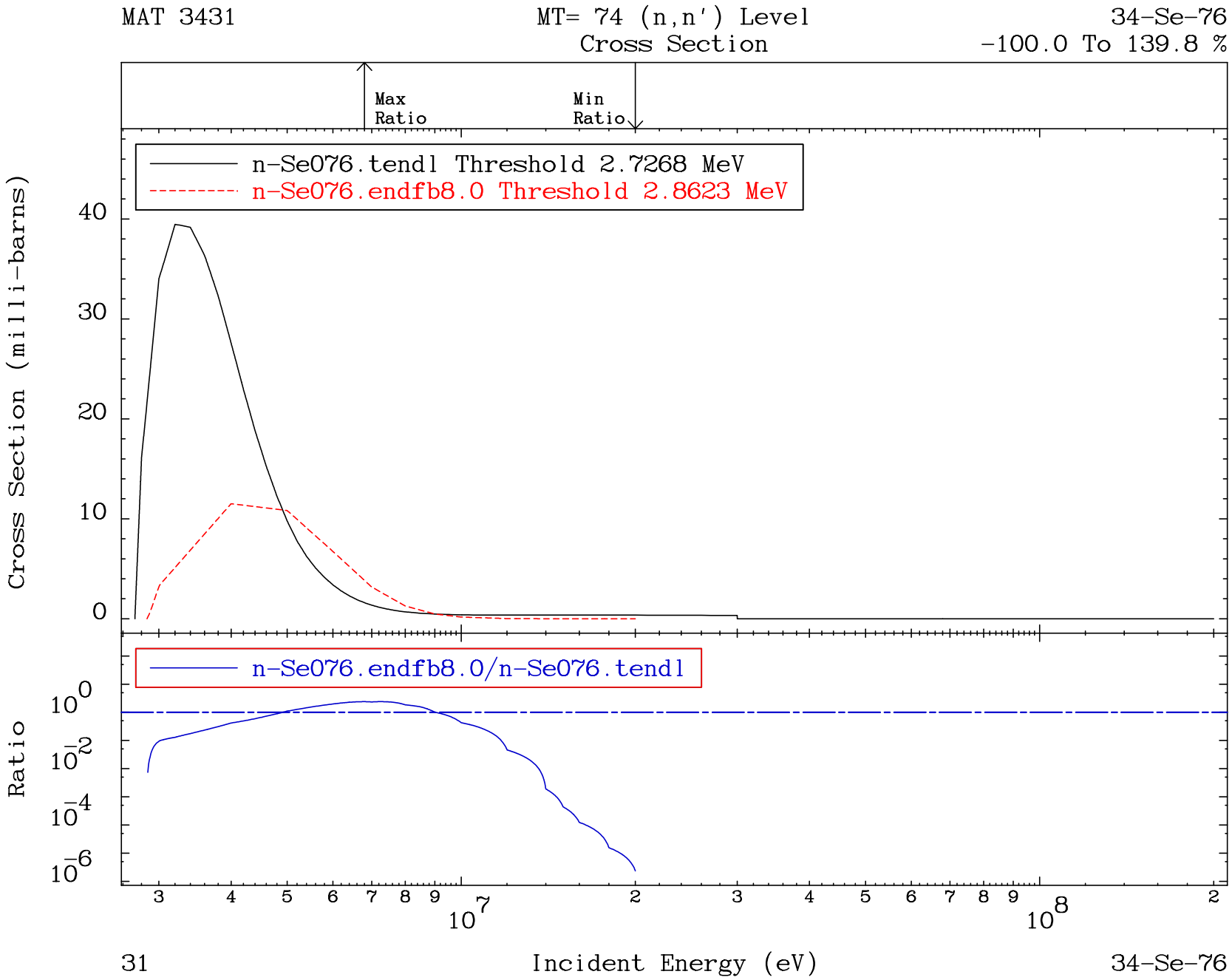

MAT 3431
MT= 69 (n,n') Level
Cross Section
34-Se-76
-90.12 To 968.9 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.6403 MeV
n-Se076.endfb8.0 Threshold 2.6906 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^{-1}
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
34-Se-76

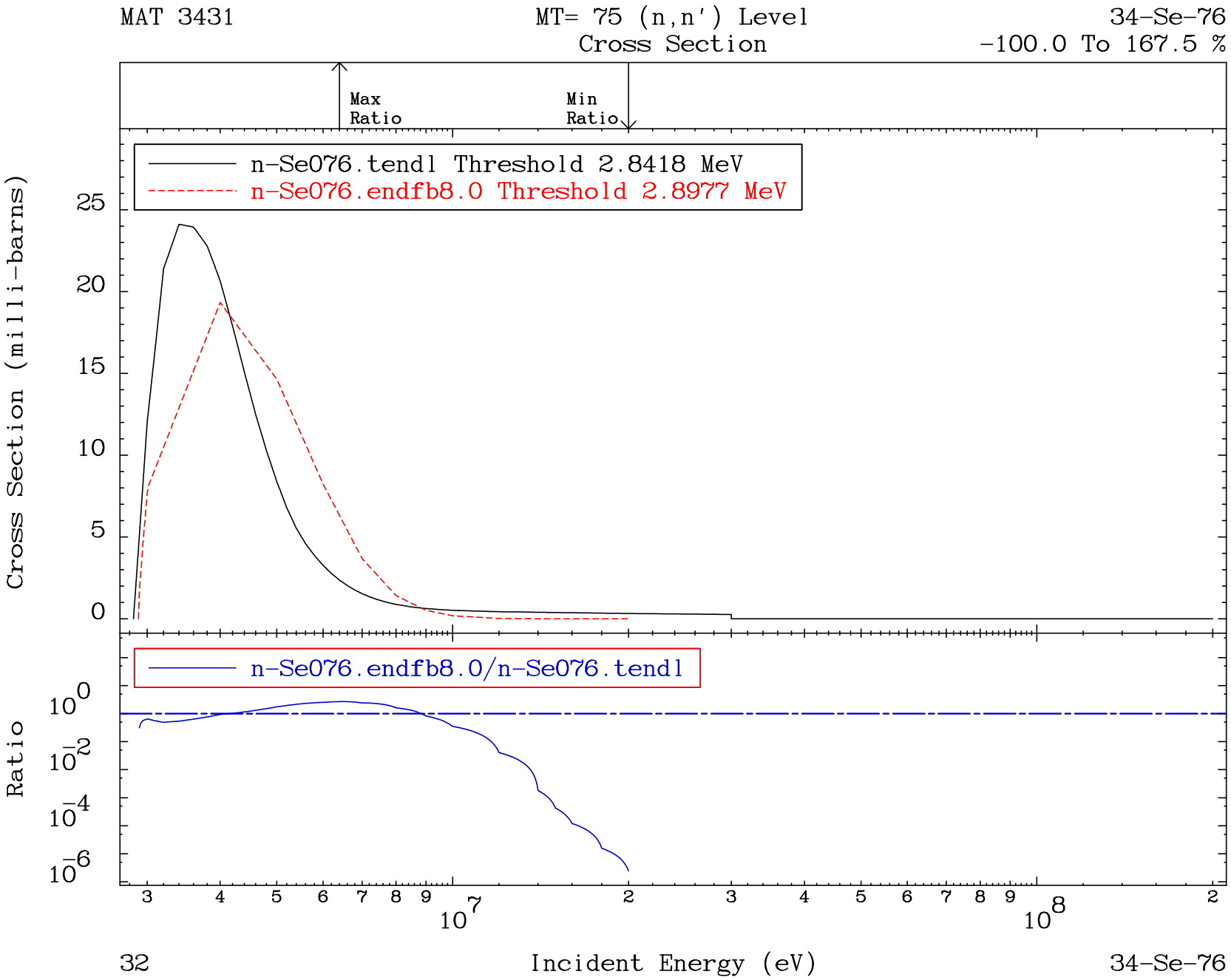

MAT 3431
MT= 70 (n,n') Level
Cross Section
34-Se-76
-100.0 To 129.8 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.6540 MeV
n-Se076.endfb8.0 Threshold 2.7054 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
27
Incident Energy (eV)
34-Se-76

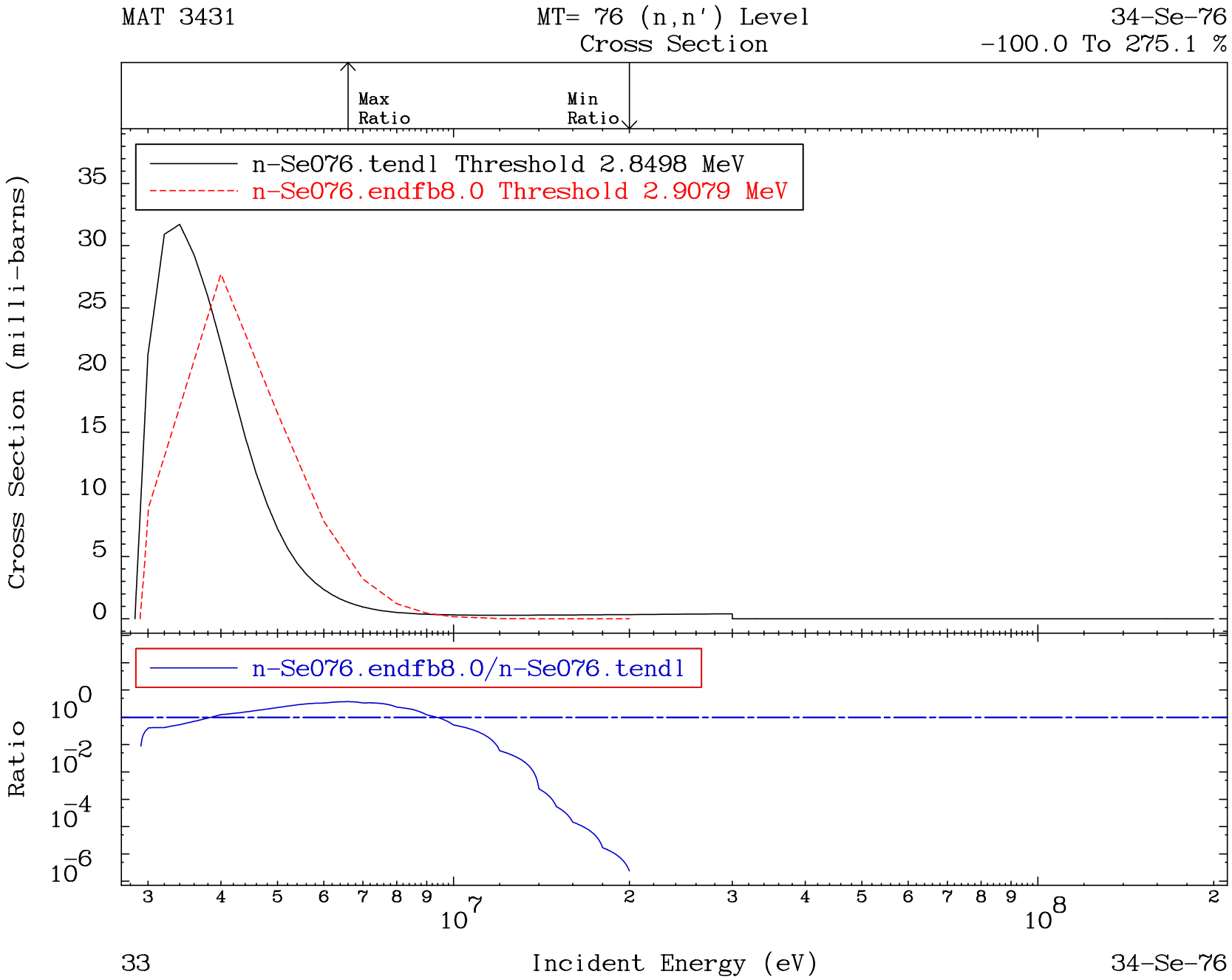

MAT 3431
MT= 71 (n,n') Level
Cross Section
34-Se-76
-93.70 To 539.6 %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 2.6658 MeV
n-Se076.endfb8.0 Threshold 2.8418 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
34-Se-76

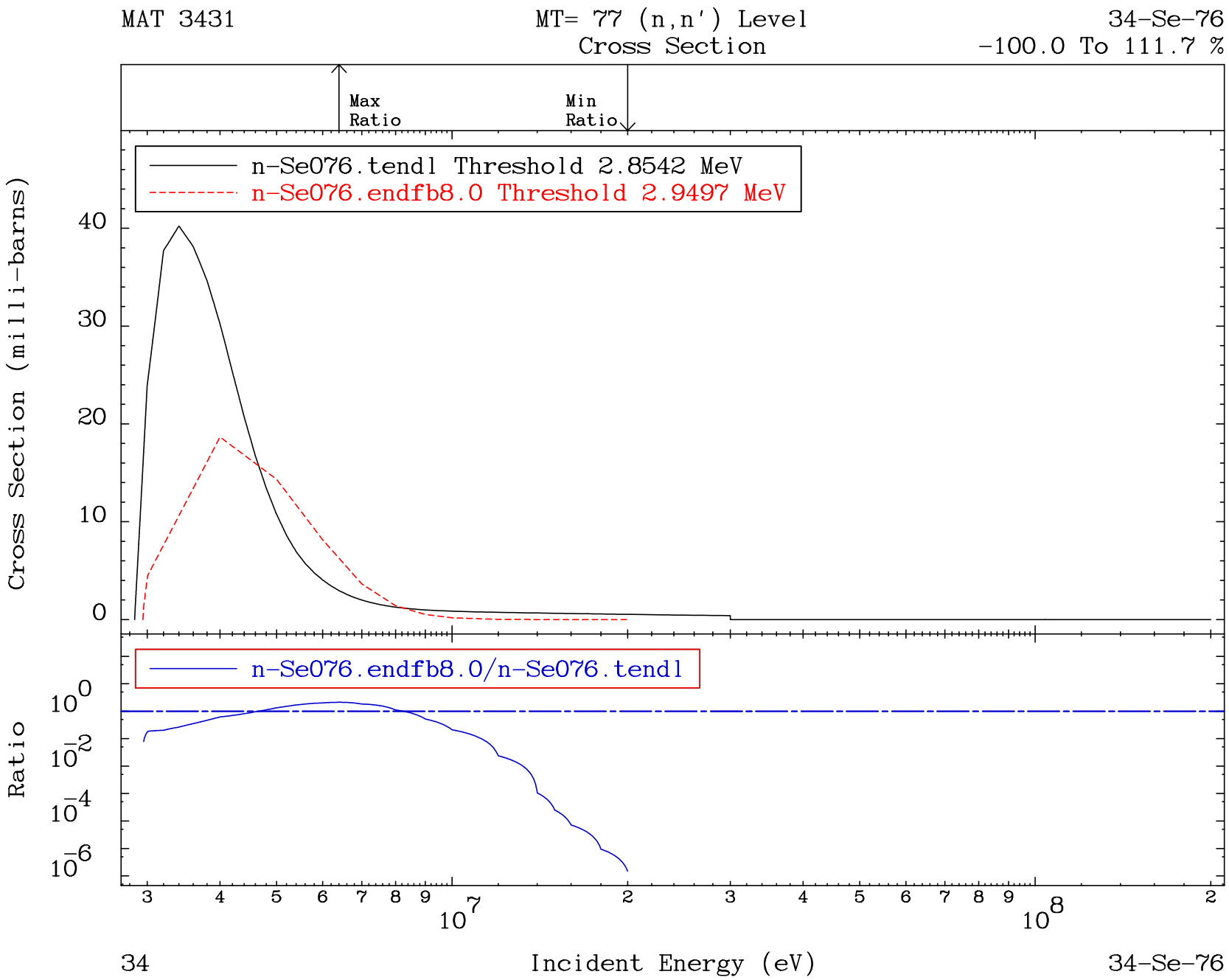

MAT 3431
MT= 72 (n,n') Level
Cross Section
34-Se-76
-100.0 To 271.7 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.6906 MeV
n-Se076.endfb8.0 Threshold 2.8499 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
29
Incident Energy (eV)
34-Se-76

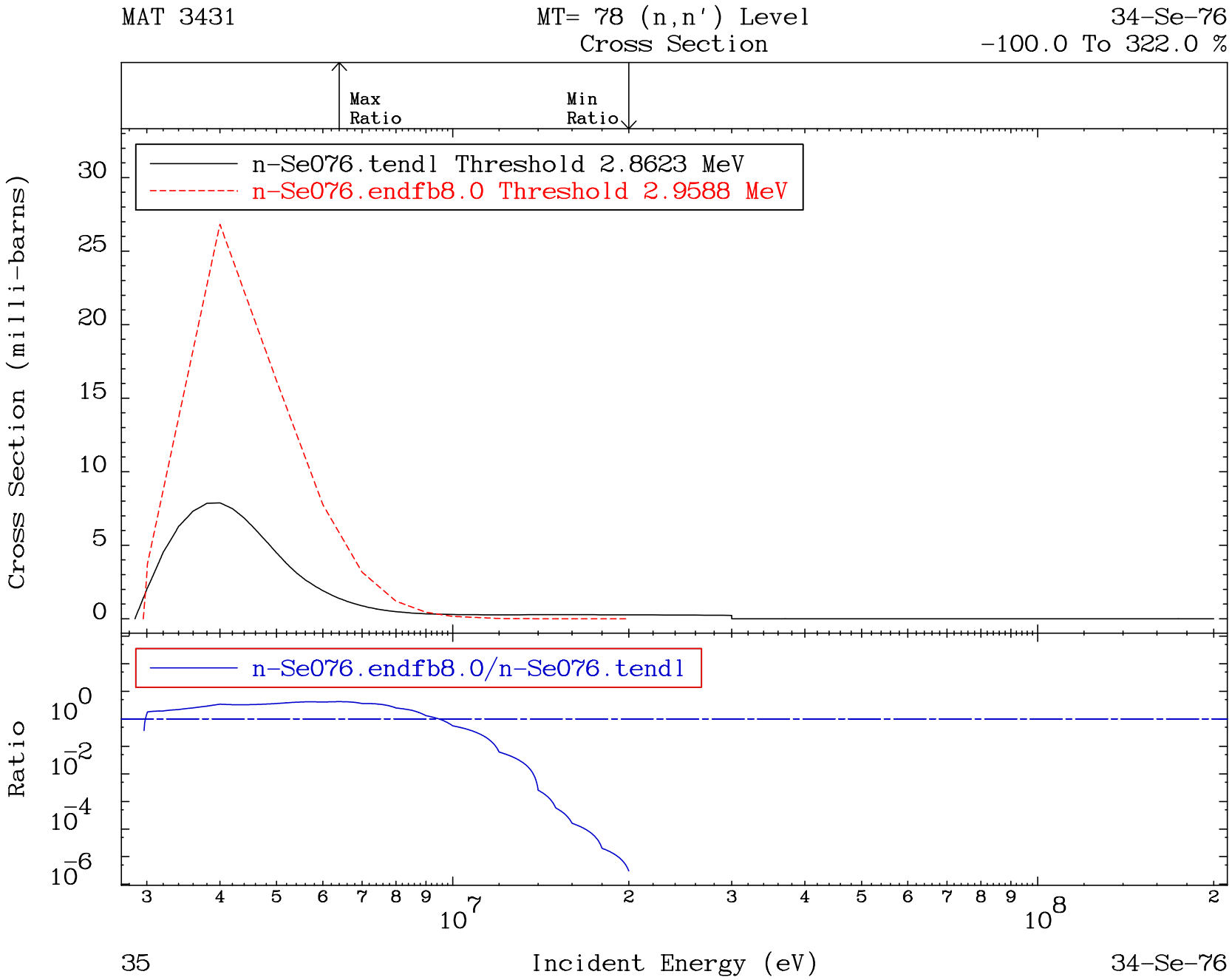

MAT 3431
MT= 73 (n,n') Level
Cross Section
34-Se-76
-95.76 To 339.1 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.7054 MeV
n-Se076.endfb8.0 Threshold 2.8541 MeV
Cross Section (milli-barns)
50
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^-1
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
34-Se-76

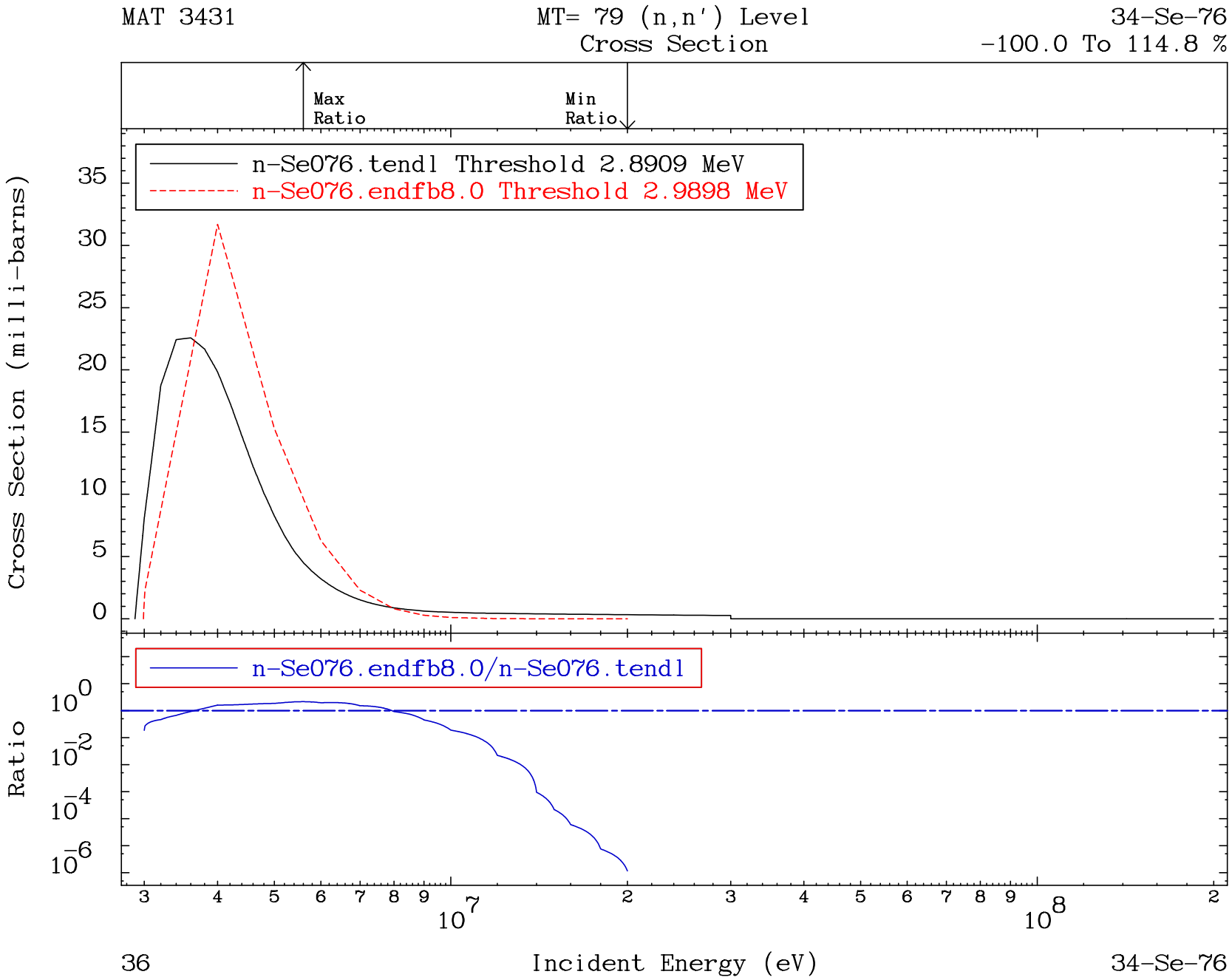

MAT 3431
MT= 74 (n,n') Level
Cross Section
34-Se-76
-100.0 To 139.8 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 2.7268 MeV
n-Se076.endfb8.0 Threshold 2.8623 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
31
Incident Energy (eV)
34-Se-76

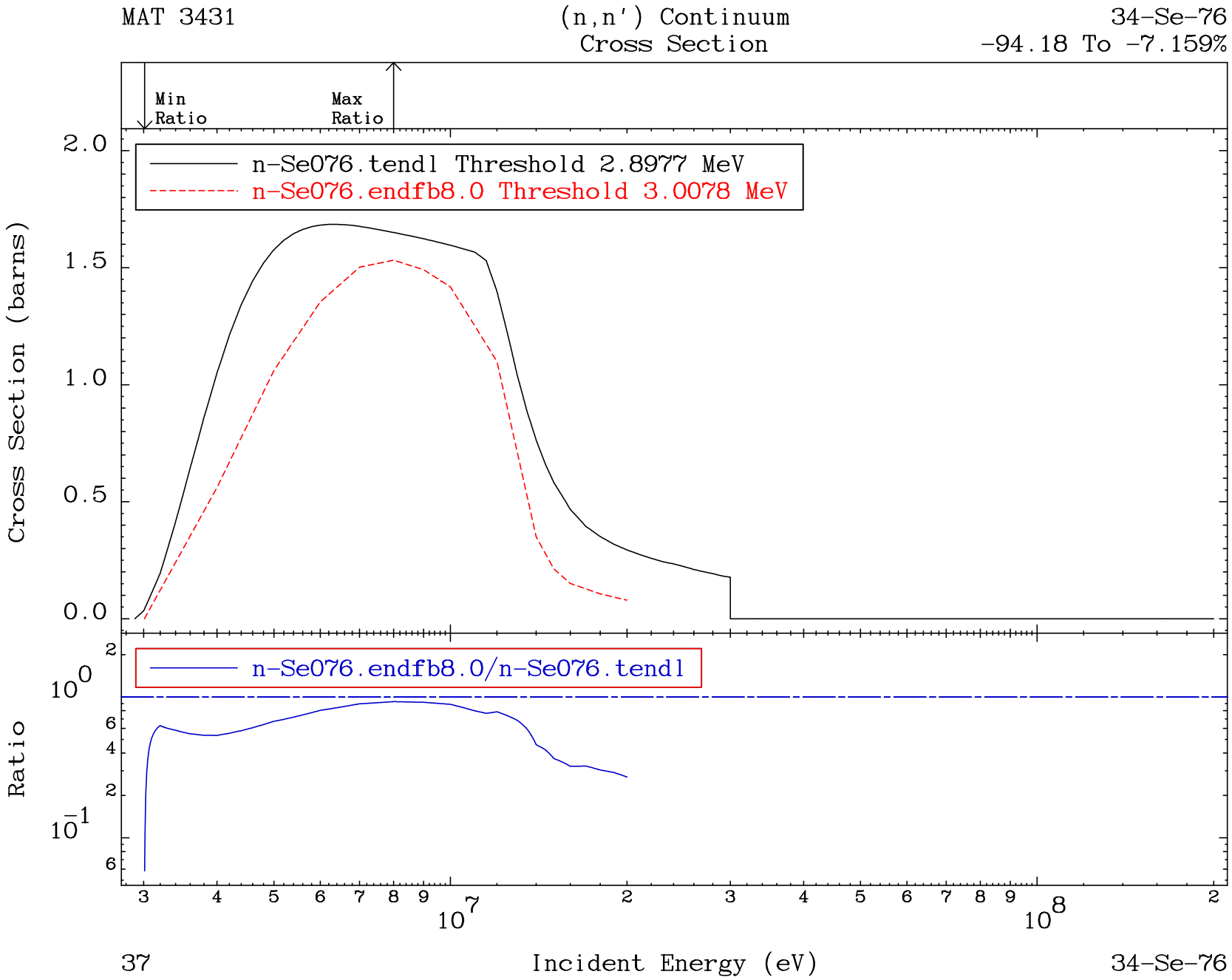

MAT 3431
MT= 75 (n,n') Level
Cross Section
34-Se-76
-100.0 To 167.5 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.8418 MeV
n-Se076.endfb8.0 Threshold 2.8977 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
32
Incident Energy (eV)
34-Se-76

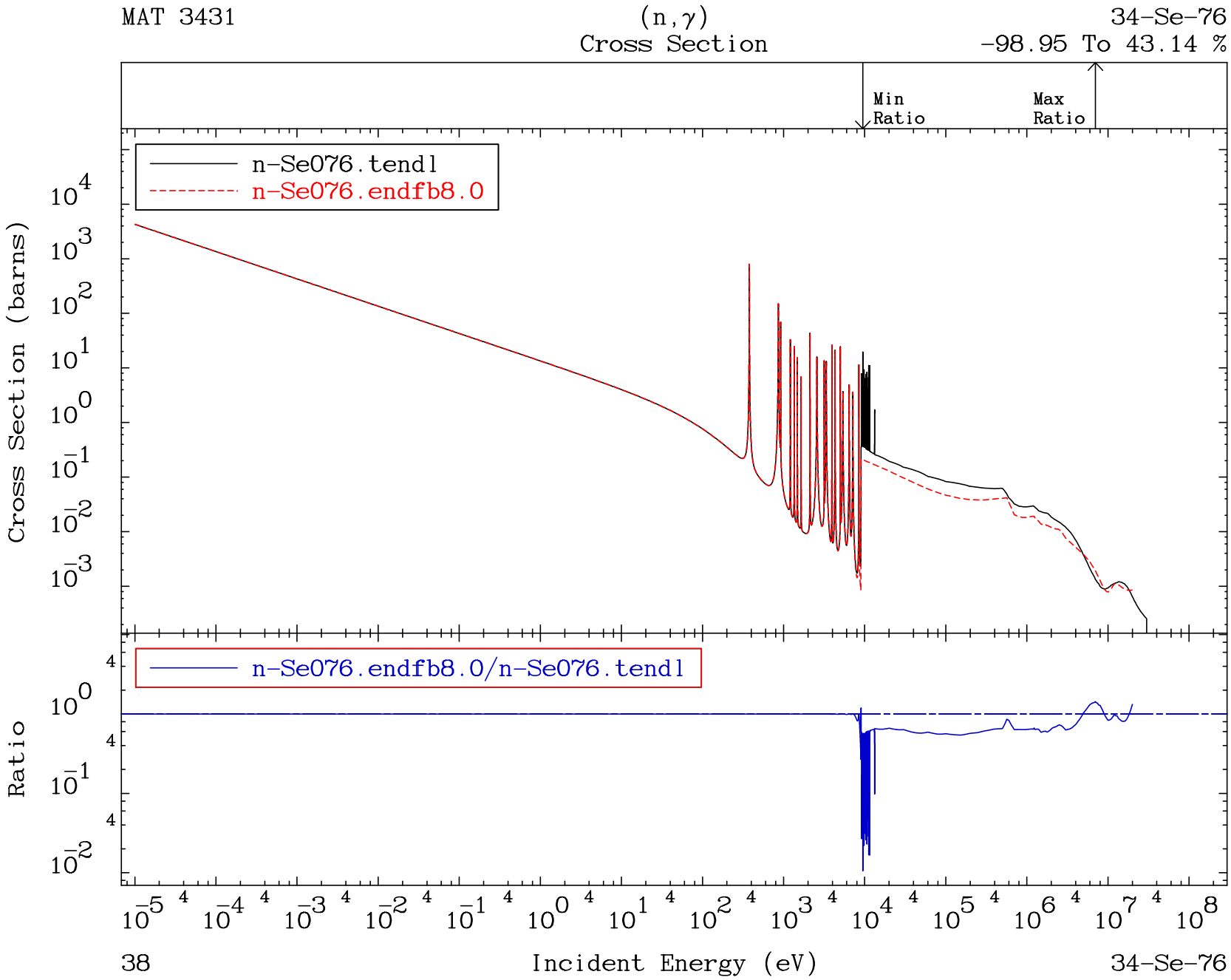

MAT 3431
MT= 76 (n,n') Level
Cross Section
34-Se-76
-100.0 To 275.1 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.8498 MeV
n-Se076.endfb8.0 Threshold 2.9079 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
33
Incident Energy (eV)
34-Se-76

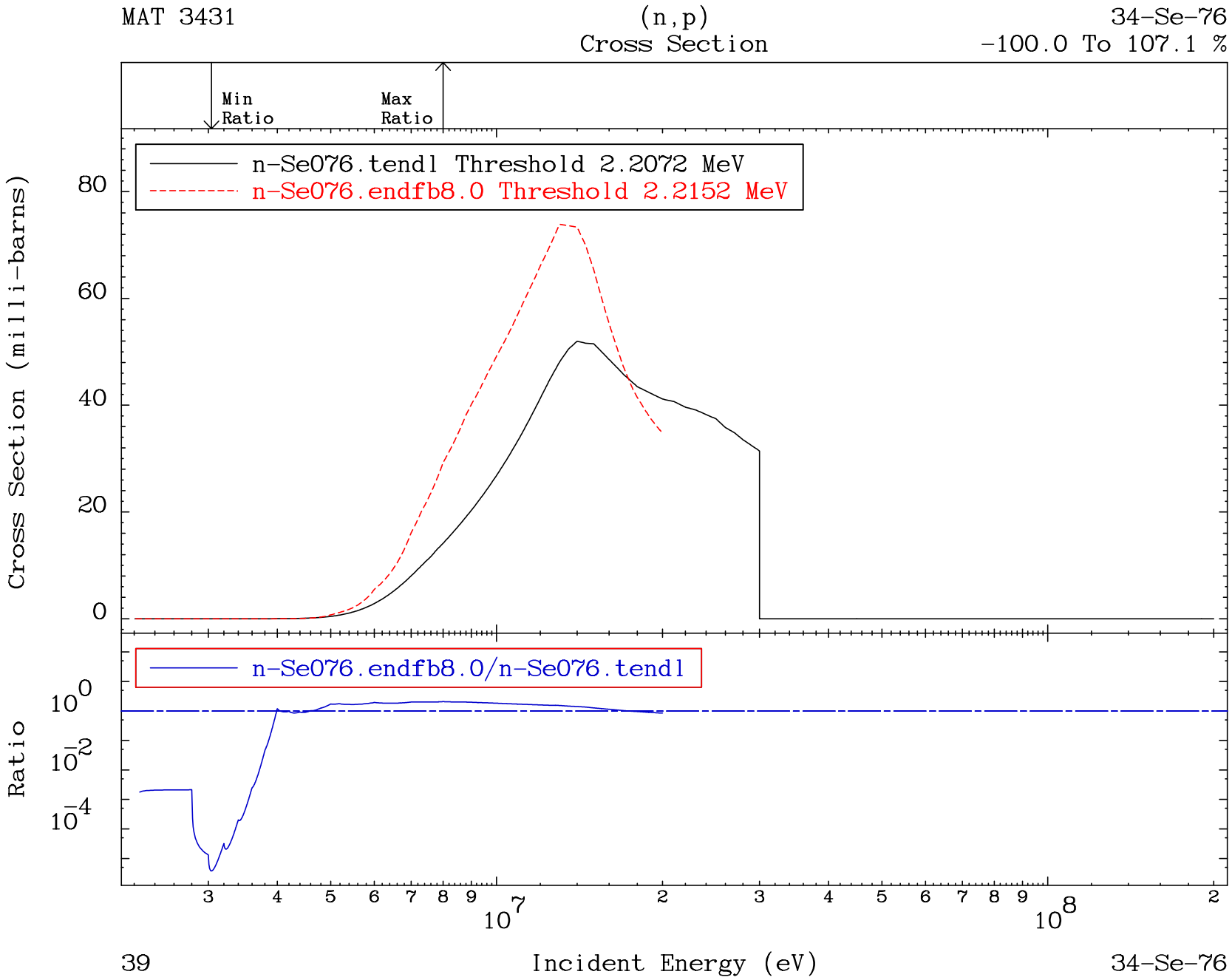

MAT 3431
MT= 77 (n,n') Level
Cross Section
34-Se-76
-100.0 To 111.7 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.8542 MeV
n-Se076.endfb8.0 Threshold 2.9497 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
34
Incident Energy (eV)
34-Se-76

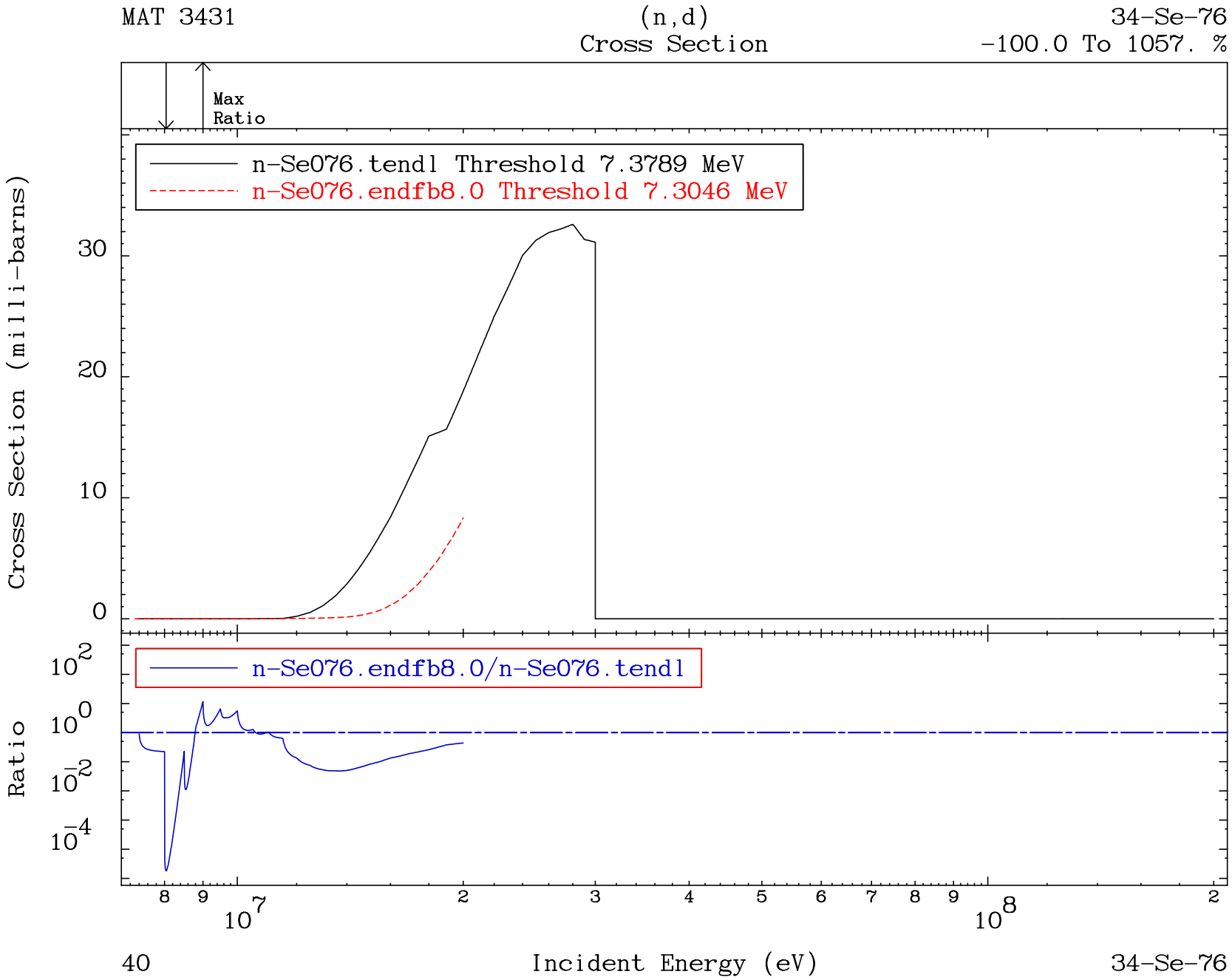

MAT 3431
MT= 78 (n,n') Level
Cross Section
34-Se-76
-100.0 To 322.0 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.8623 MeV
n-Se076.endfb8.0 Threshold 2.9588 MeV
Cross Section (milli-barns)
30
25
20
15
10
5
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
35
Incident Energy (eV)
34-Se-76

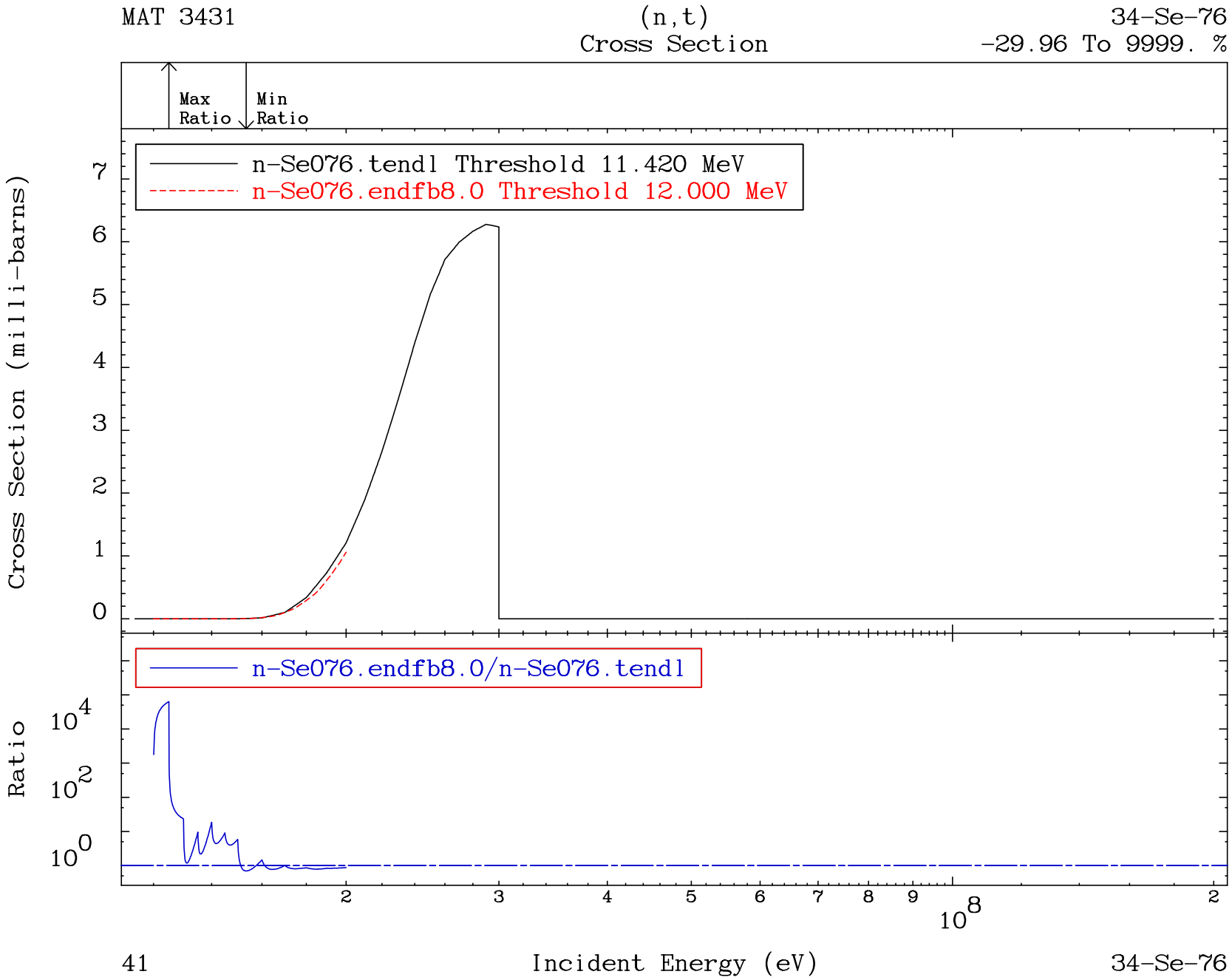

MAT 3431
MT= 79 (n,n') Level
Cross Section
34-Se-76
-100.0 To 114.8 %
Max
Ratio
Min
Ratio
n-Se076.tendl Threshold 2.8909 MeV
n-Se076.endfb8.0 Threshold 2.9898 MeV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
10^-6
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
36
Incident Energy (eV)
34-Se-76

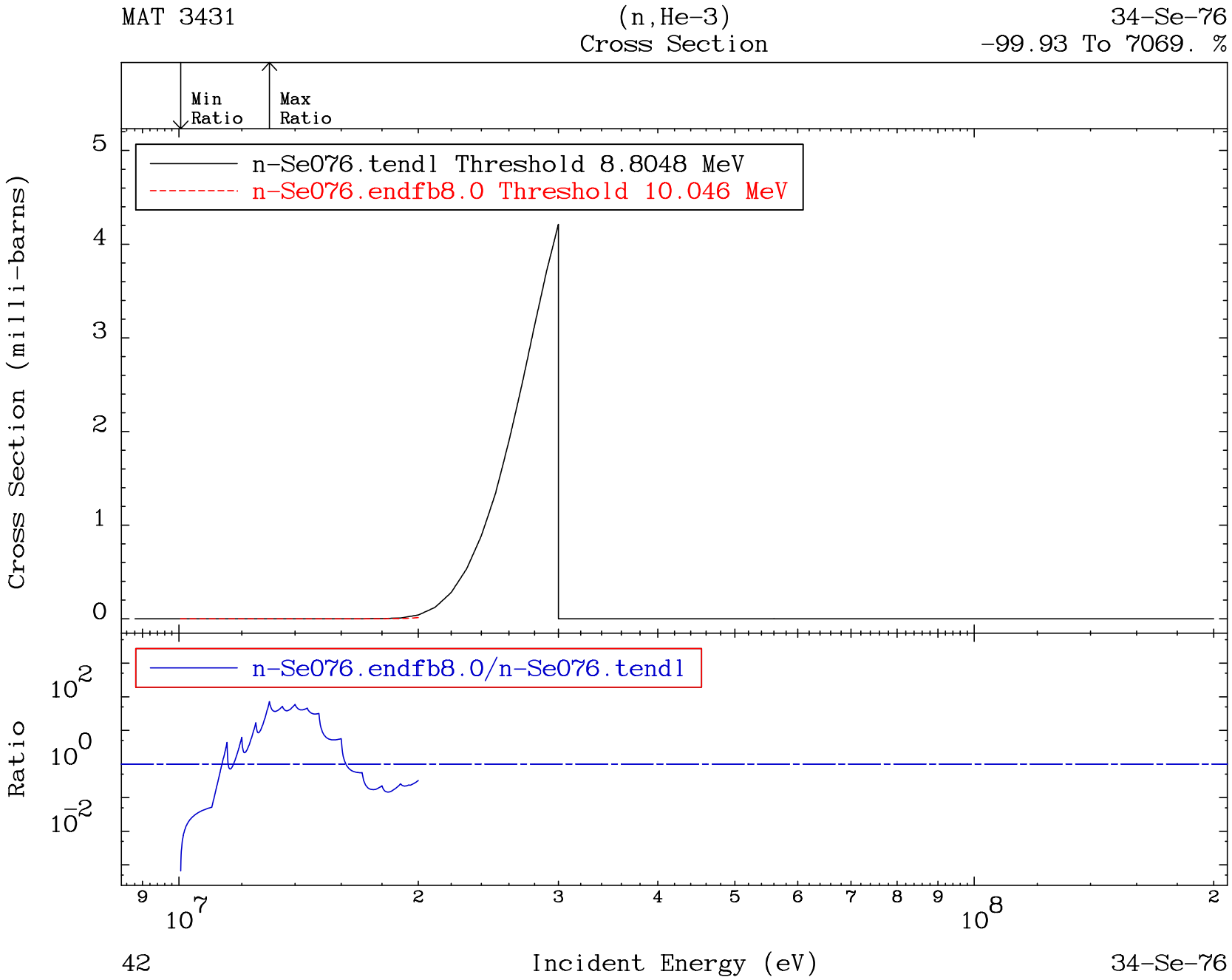

MAT 3431
(n,n') Continuum
Cross Section
34-Se-76
-94.18 To -7.159%
Min Ratio
Max Ratio
n-Se076.tendl Threshold 2.8977 MeV
n-Se076.endfb8.0 Threshold 3.0078 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-1
2
6
4
2
6
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
37
Incident Energy (eV)
34-Se-76

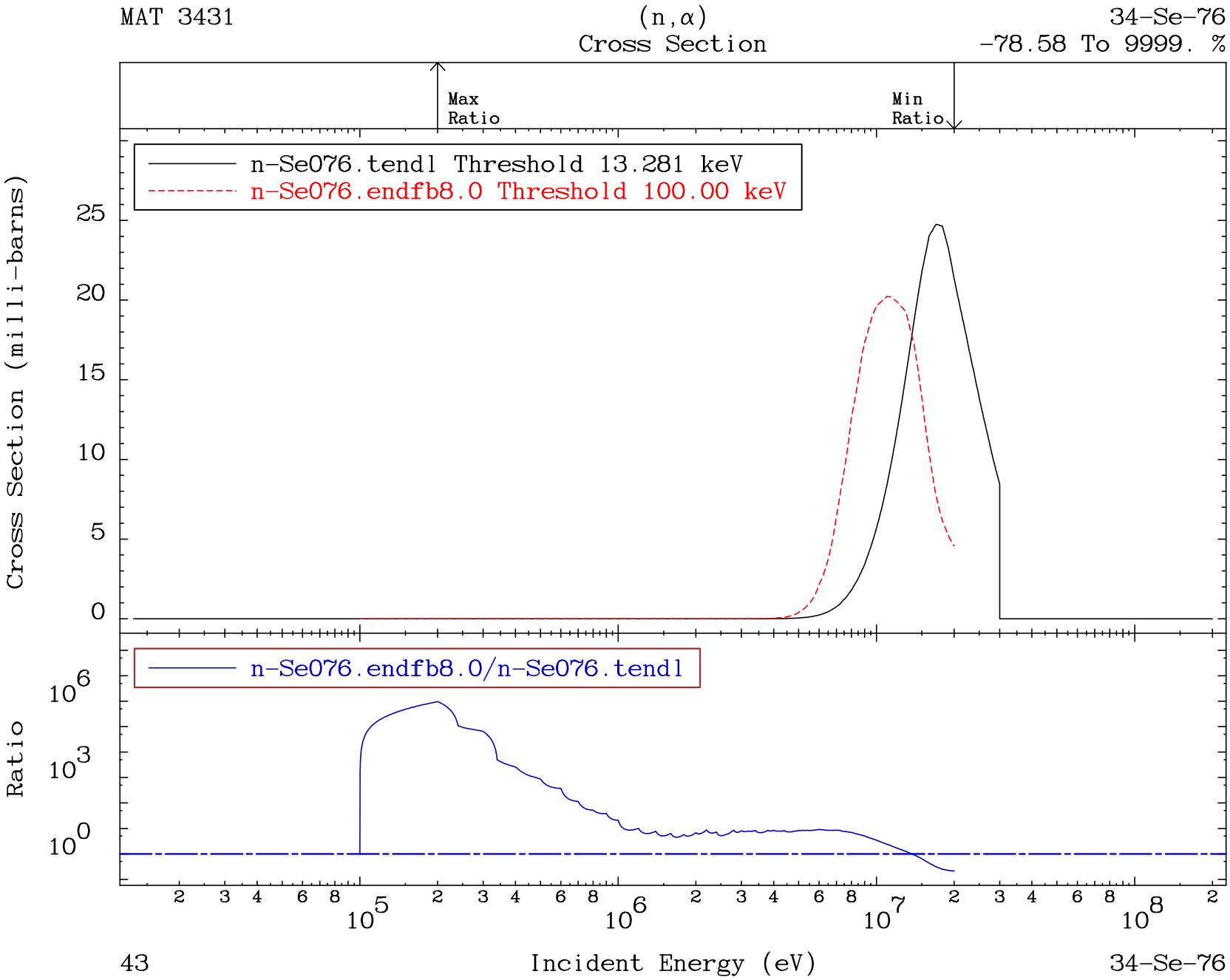

MAT 3431
(n,γ)
Cross Section
34-Se-76
-98.95 To 43.14 %
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
38
Incident Energy (eV)
34-Se-76

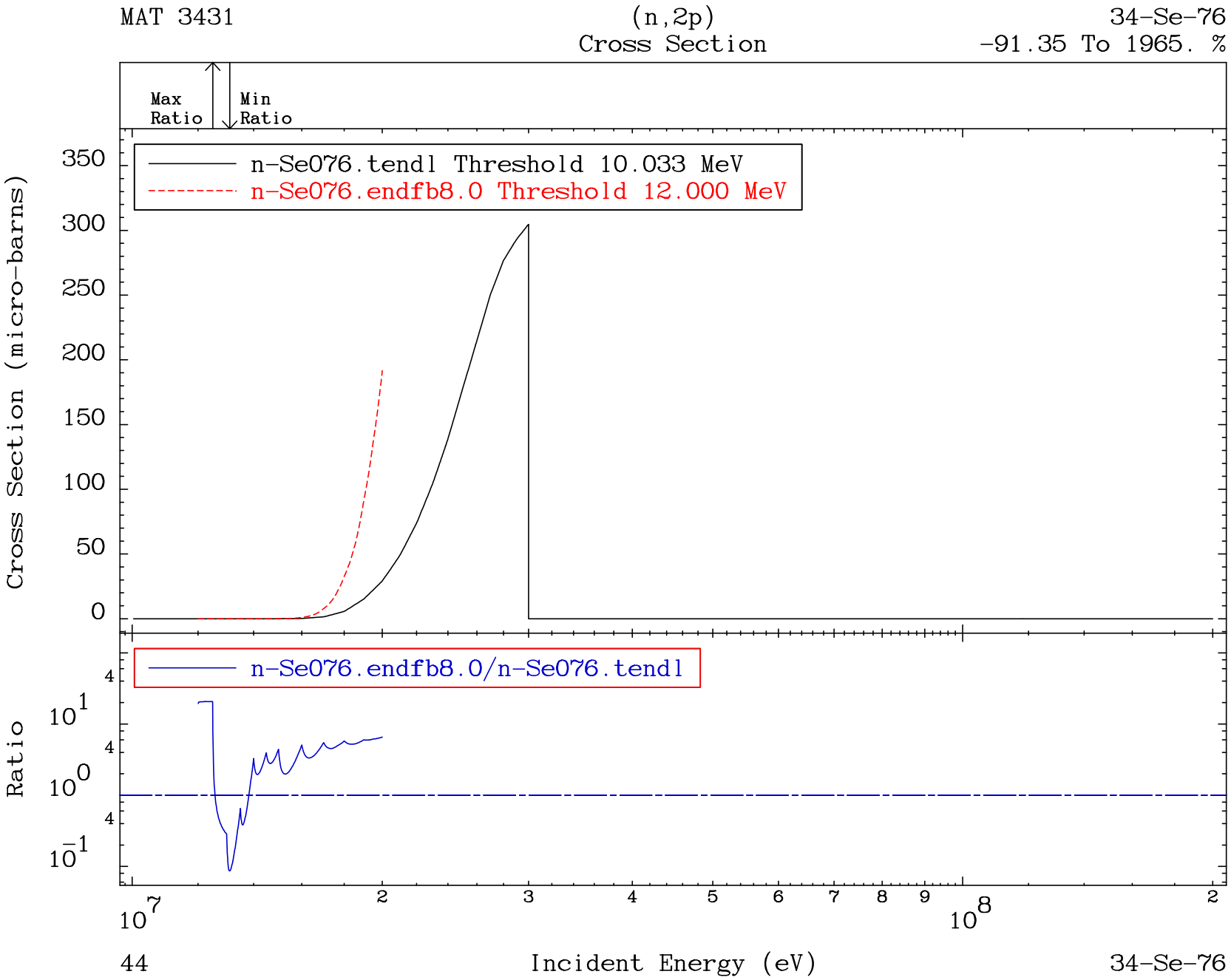

MAT 3431
(n,p)
Cross Section
34-Se-76
-100.0 To 107.1 %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 2.2072 MeV
n-Se076.endfb8.0 Threshold 2.2152 MeV
Cross Section (milli-barns)
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
39
Incident Energy (eV)
34-Se-76

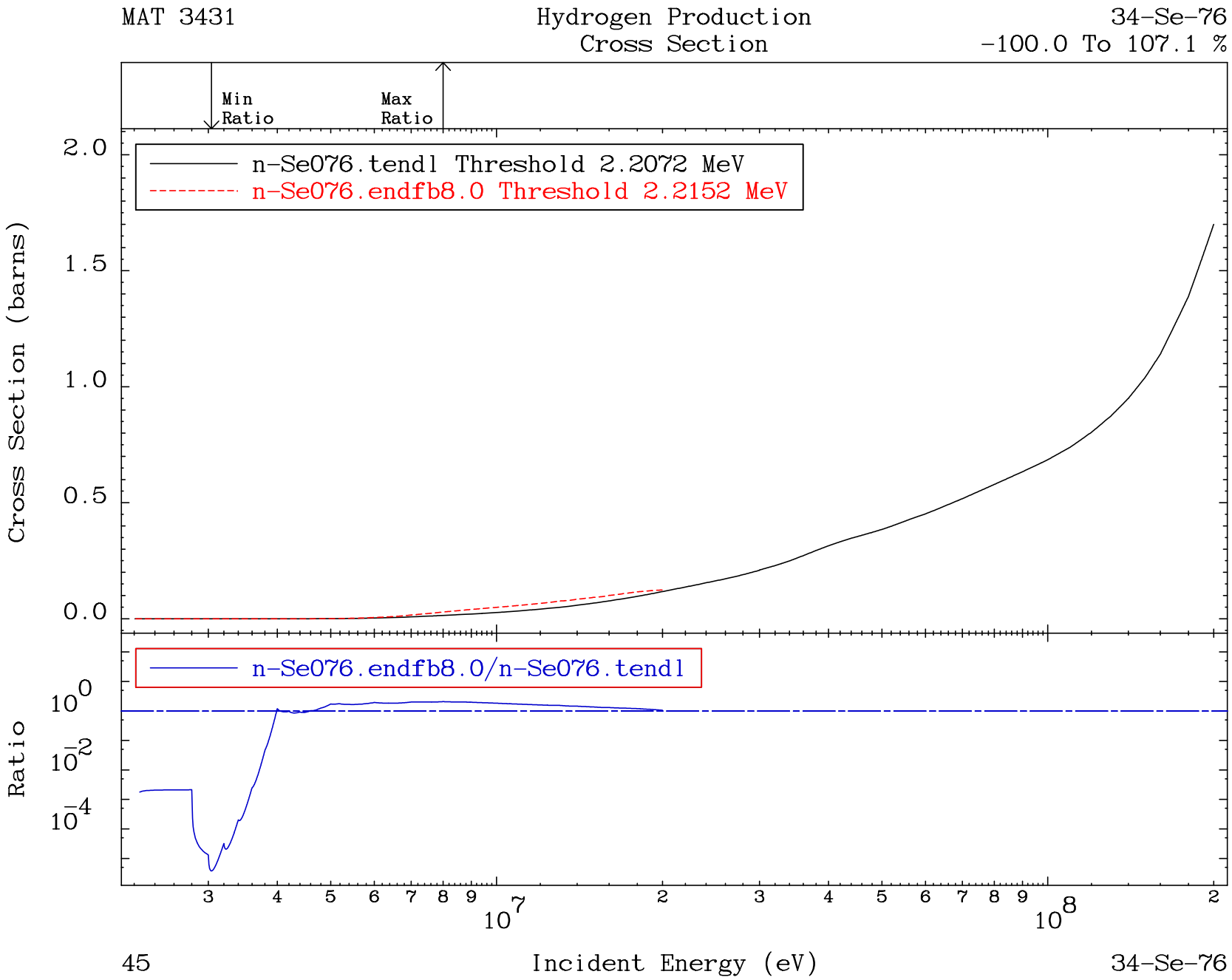

MAT 3431
(n,d)
Cross Section
34-Se-76
-100.0 To 1057. %
Max
Ratio
n-Se076.tendl Threshold 7.3789 MeV
n-Se076.endfb8.0 Threshold 7.3046 MeV
Cross Section (milli-barns)
30
20
10
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^2
10^0
10^-2
10^-4
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
40
Incident Energy (eV)
34-Se-76

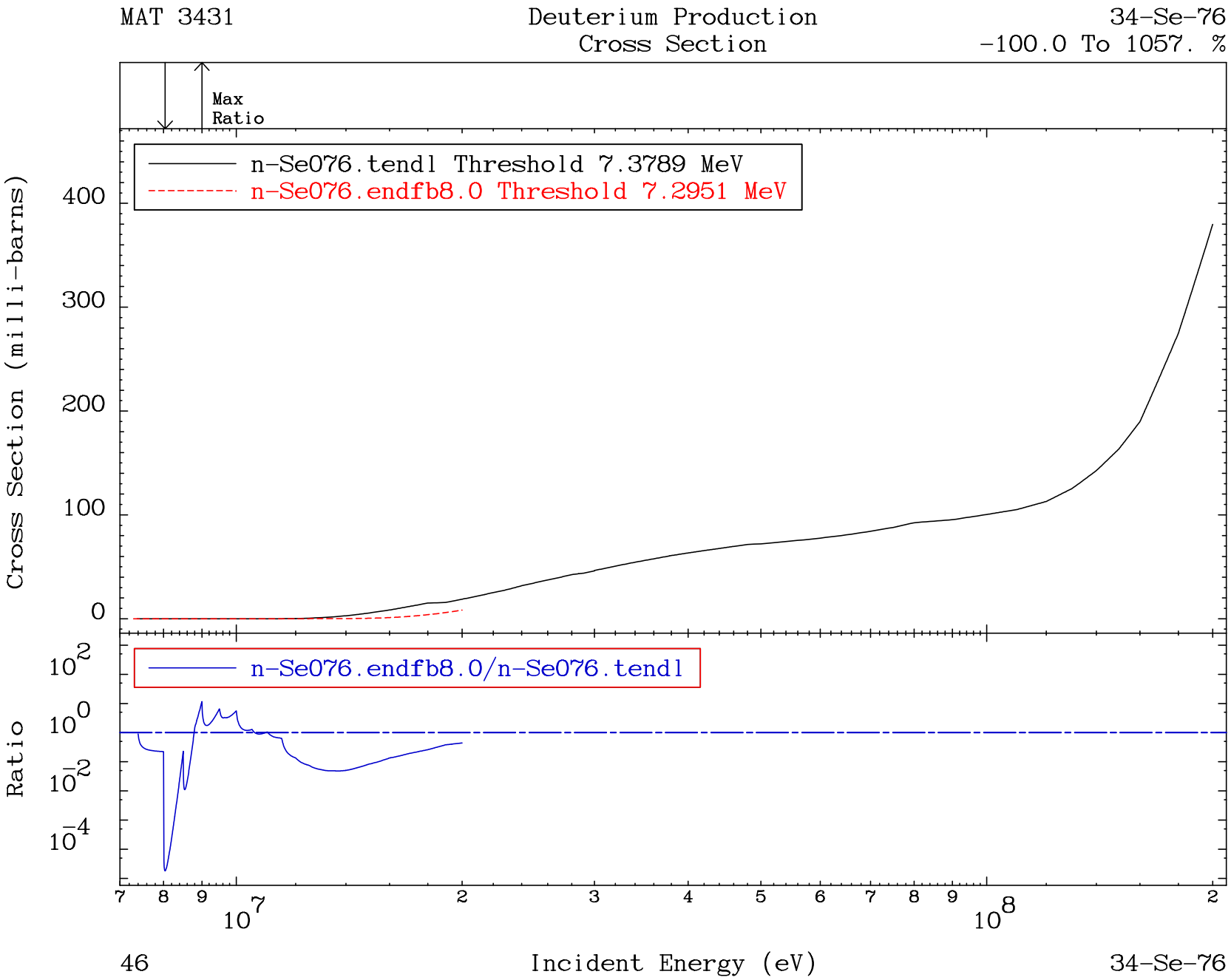

MAT 3431
(n,t)
Cross Section
34-Se-76
-29.96 To 9999. %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 11.420 MeV
n-Se076.endfb8.0 Threshold 12.000 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
7
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
41
Incident Energy (eV)
34-Se-76

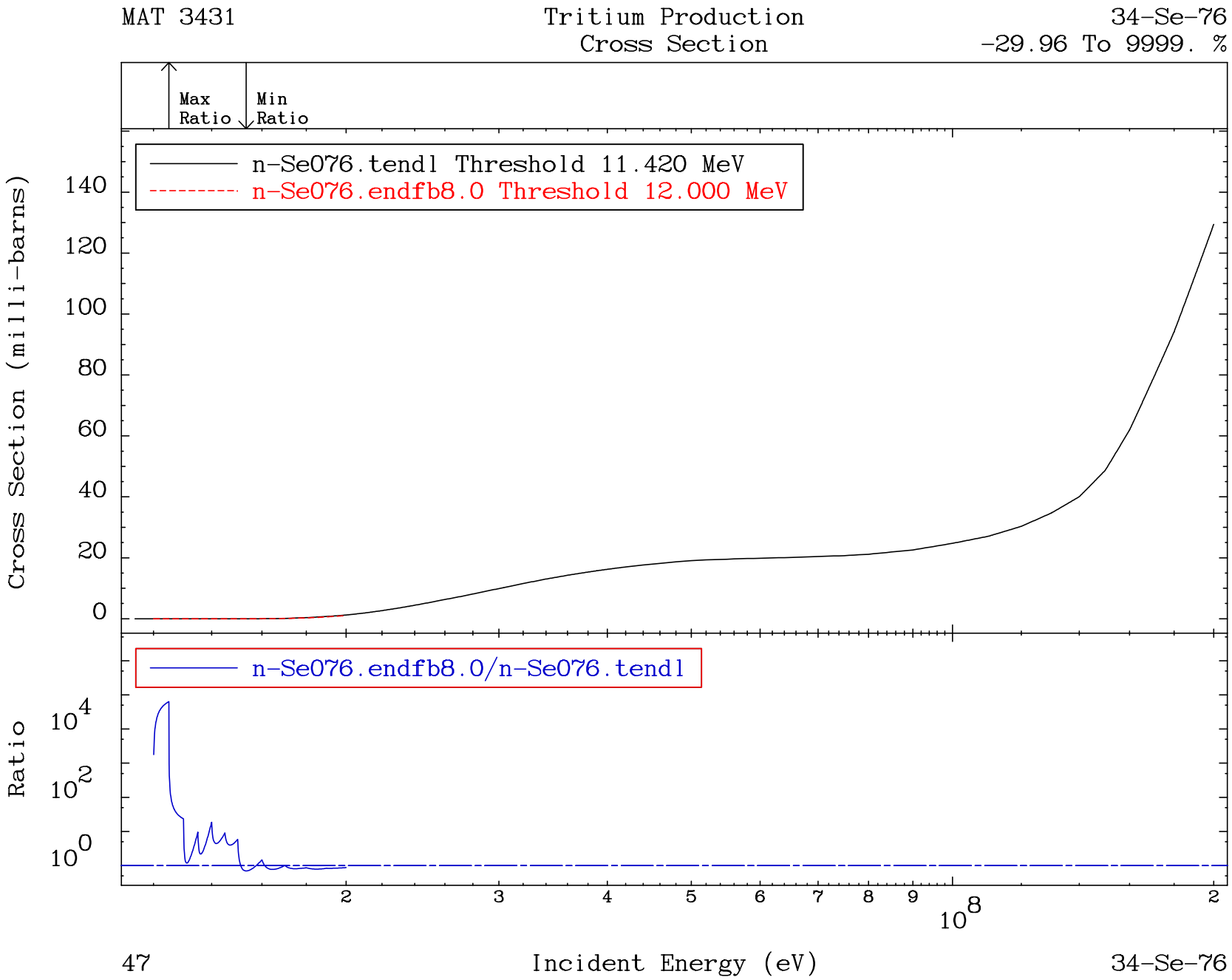

MAT 3431
(n,He-3)
Cross Section
34-Se-76
-99.93 To 7069. %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 8.8048 MeV
n-Se076.endfb8.0 Threshold 10.046 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^2
10^0
10^-2
9
10^7
2
3
4
5
6
7
8
9
10^8
2
42
Incident Energy (eV)
34-Se-76

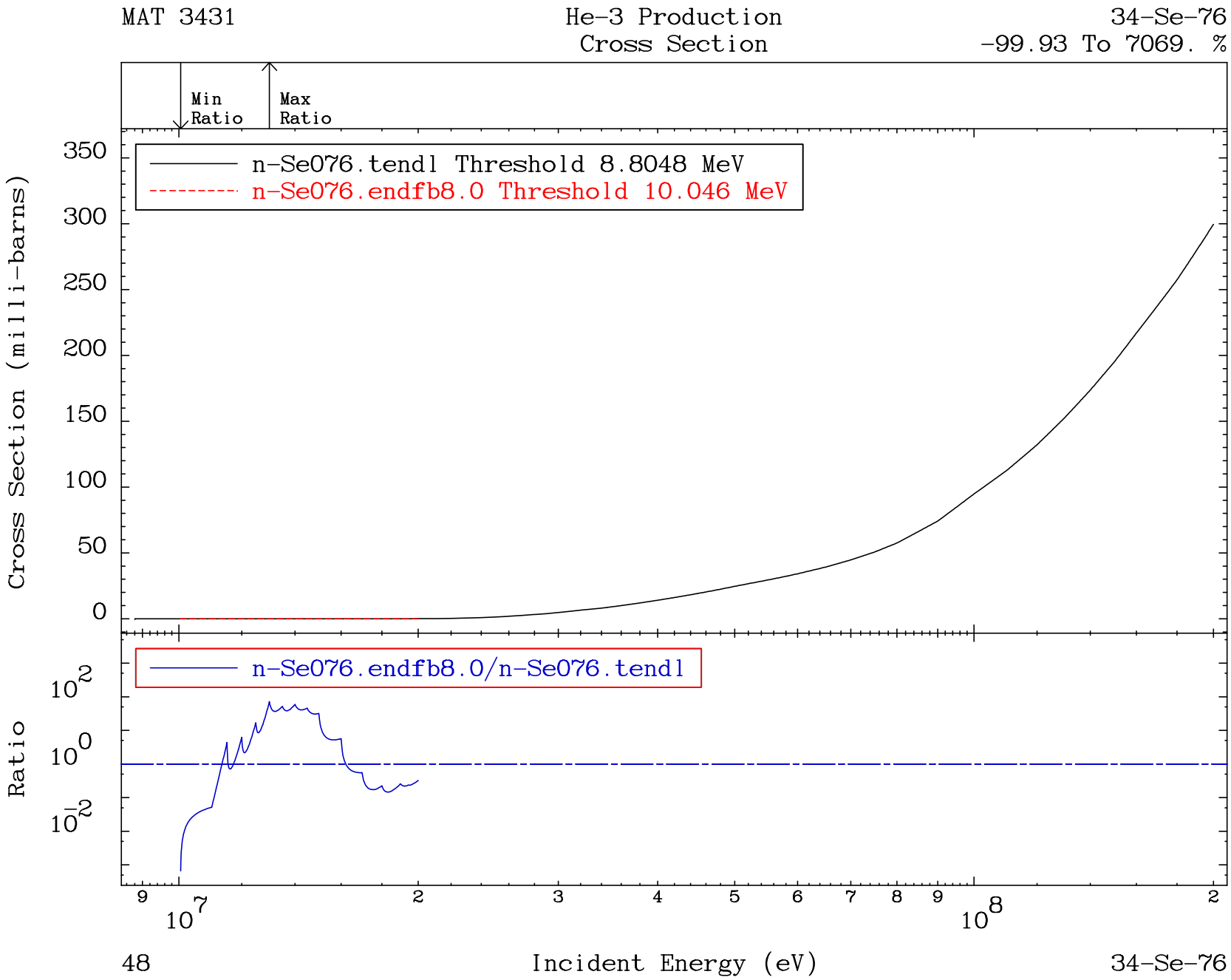

MAT 3431
(n,α)
Cross Section
34-Se-76
-78.58 To 9999. %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 13.281 keV
n-Se076.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
0
5
10
15
20
25
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^6
10^3
10^0
2 3 4 6 8 10^5 2 3 4 6 8 10^6 2 3 4 6 8 10^7 2 3 4 6 8 10^8 2
43
Incident Energy (eV)
34-Se-76

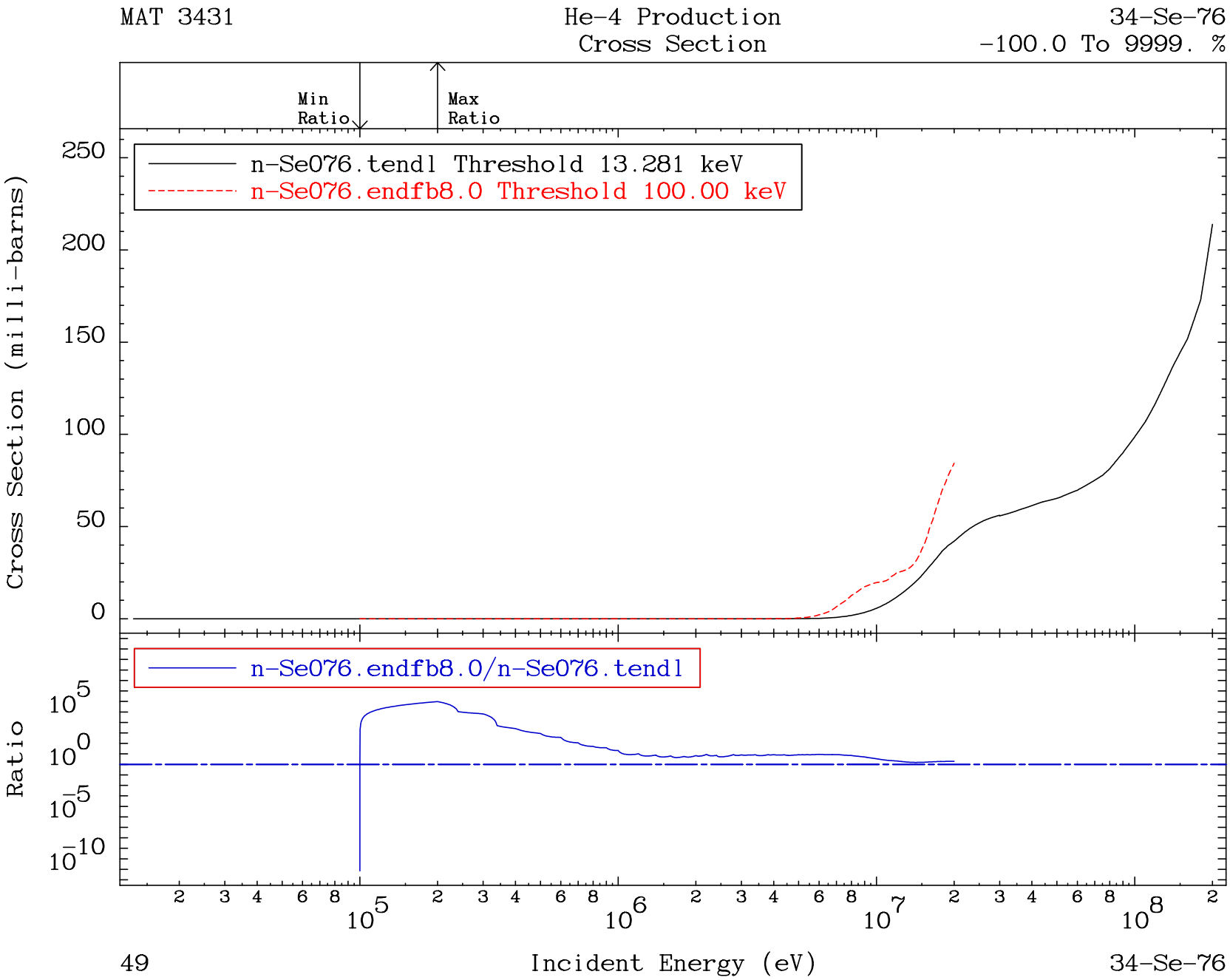

MAT 3431
(n,2p)
Cross Section
34-Se-76
-91.35 To 1965. %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 10.033 MeV
n-Se076.endfb8.0 Threshold 12.000 MeV
Cross Section (micro-barns)
350
300
250
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^1
10^0
10^-1
10^7
2
3
4
5
6
7
8
9
10^8
2
44
Incident Energy (eV)
34-Se-76

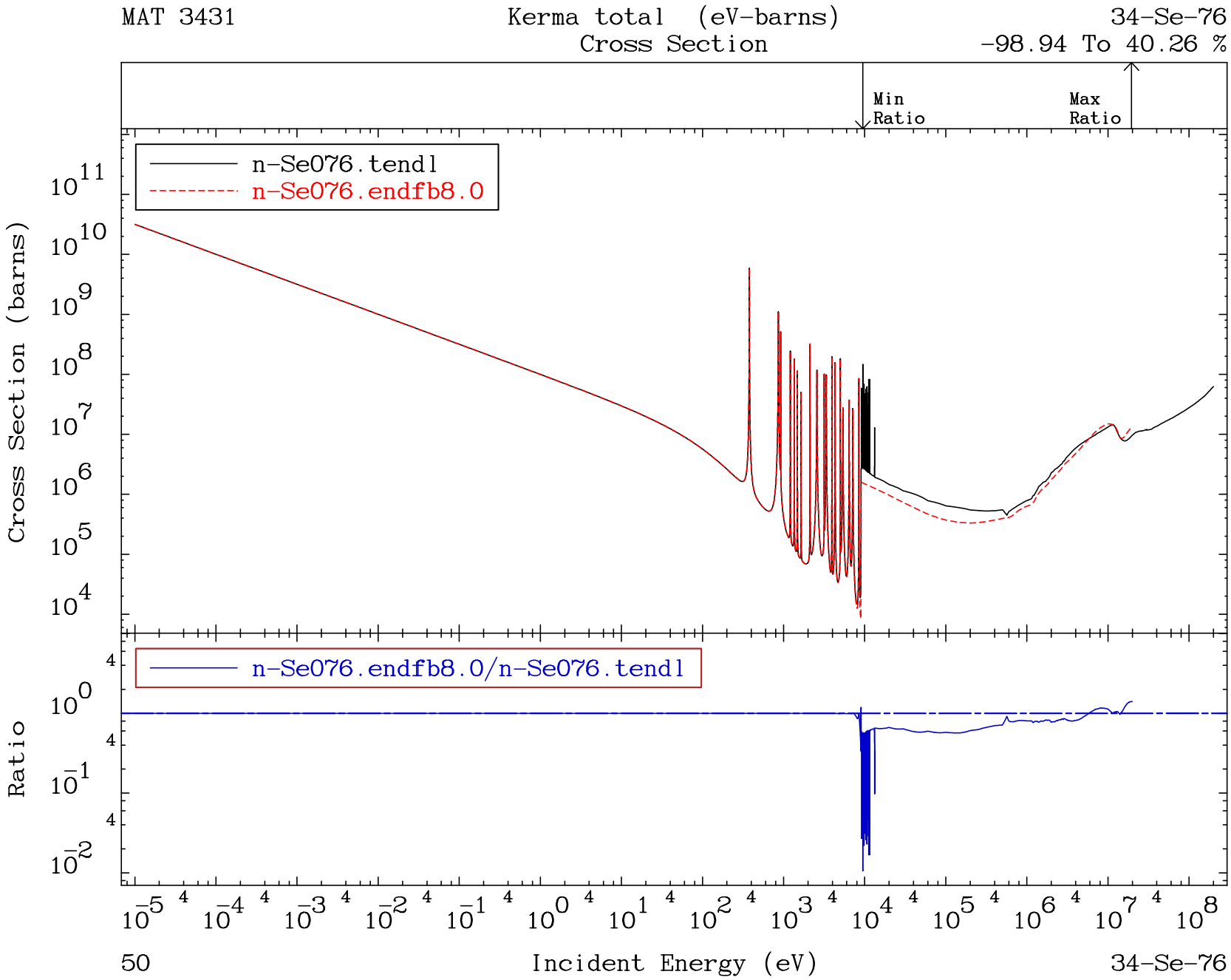

MAT 3431
Hydrogen Production
Cross Section
34-Se-76
-100.0 To 107.1 %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 2.2072 MeV
n-Se076.endfb8.0 Threshold 2.2152 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-2
10^-4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
45
Incident Energy (eV)
34-Se-76

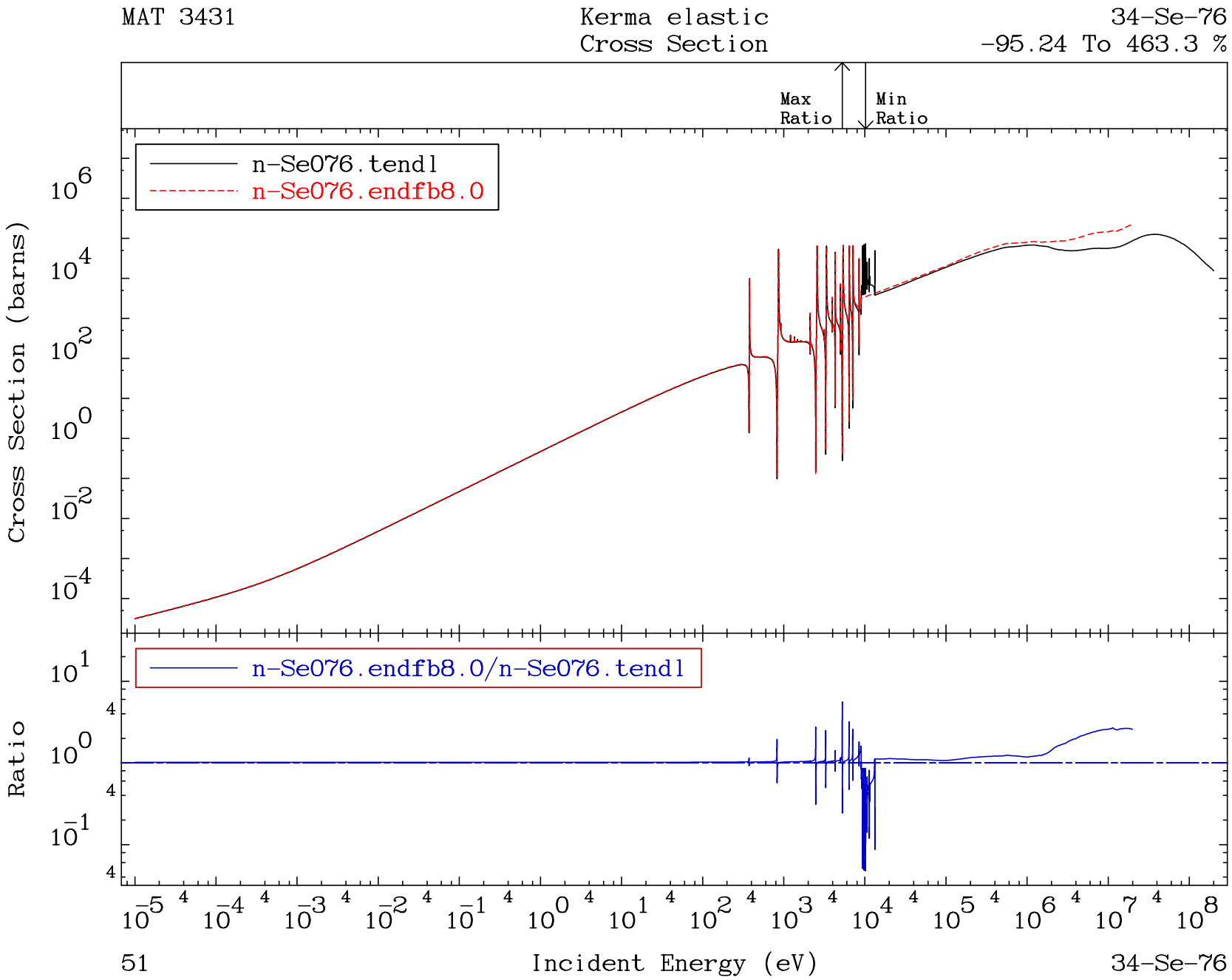

MAT 3431
Deuterium Production
Cross Section
34-Se-76
-100.0 To 1057. %
Max
Ratio
n-Se076.tendl Threshold 7.3789 MeV
n-Se076.endfb8.0 Threshold 7.2951 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^2
10^0
10^-2
10^-4
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
34-Se-76

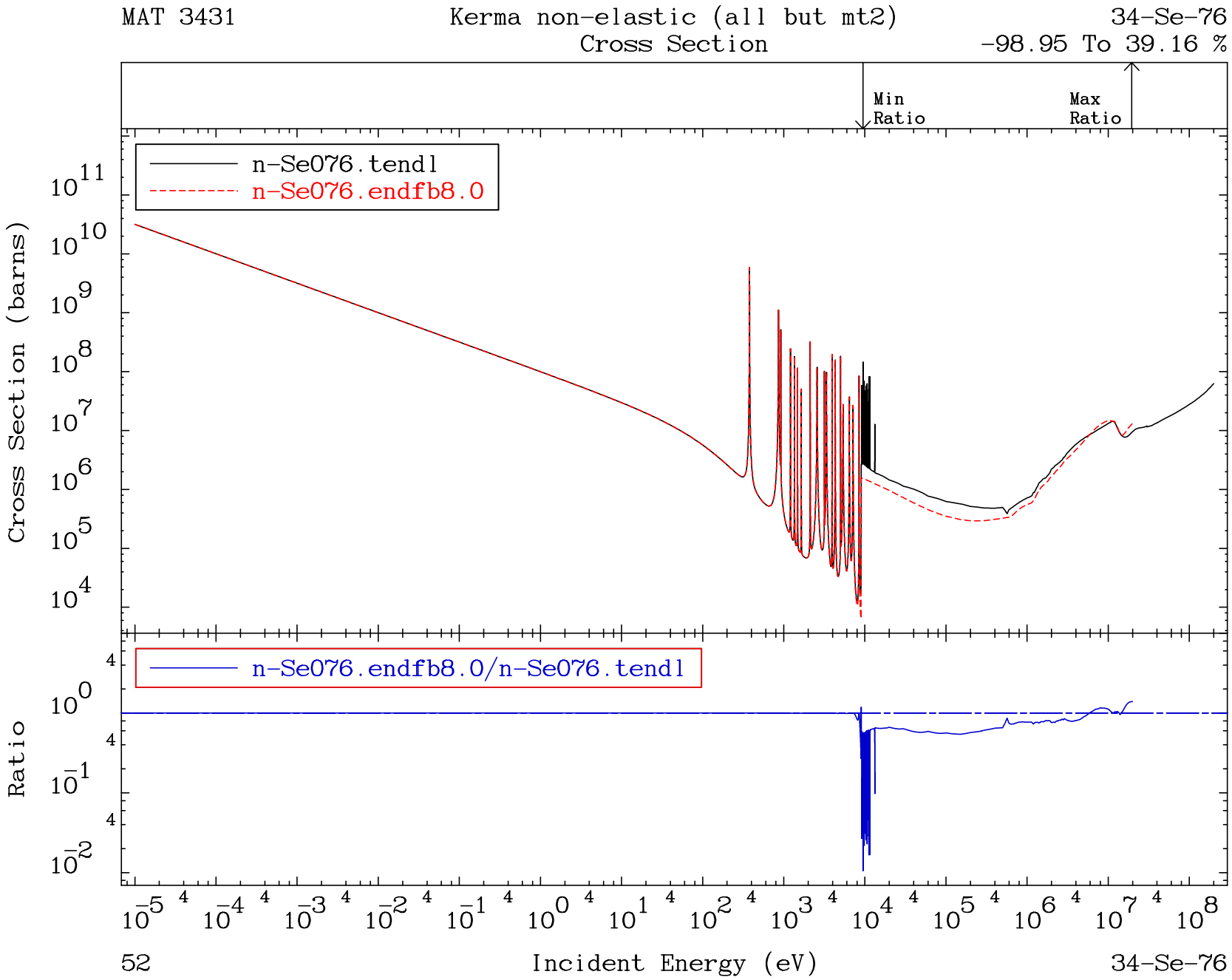

MAT 3431
Tritium Production
Cross Section
34-Se-76
-29.96 To 9999. %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 11.420 MeV
n-Se076.endfb8.0 Threshold 12.000 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^4
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
47
Incident Energy (eV)
34-Se-76

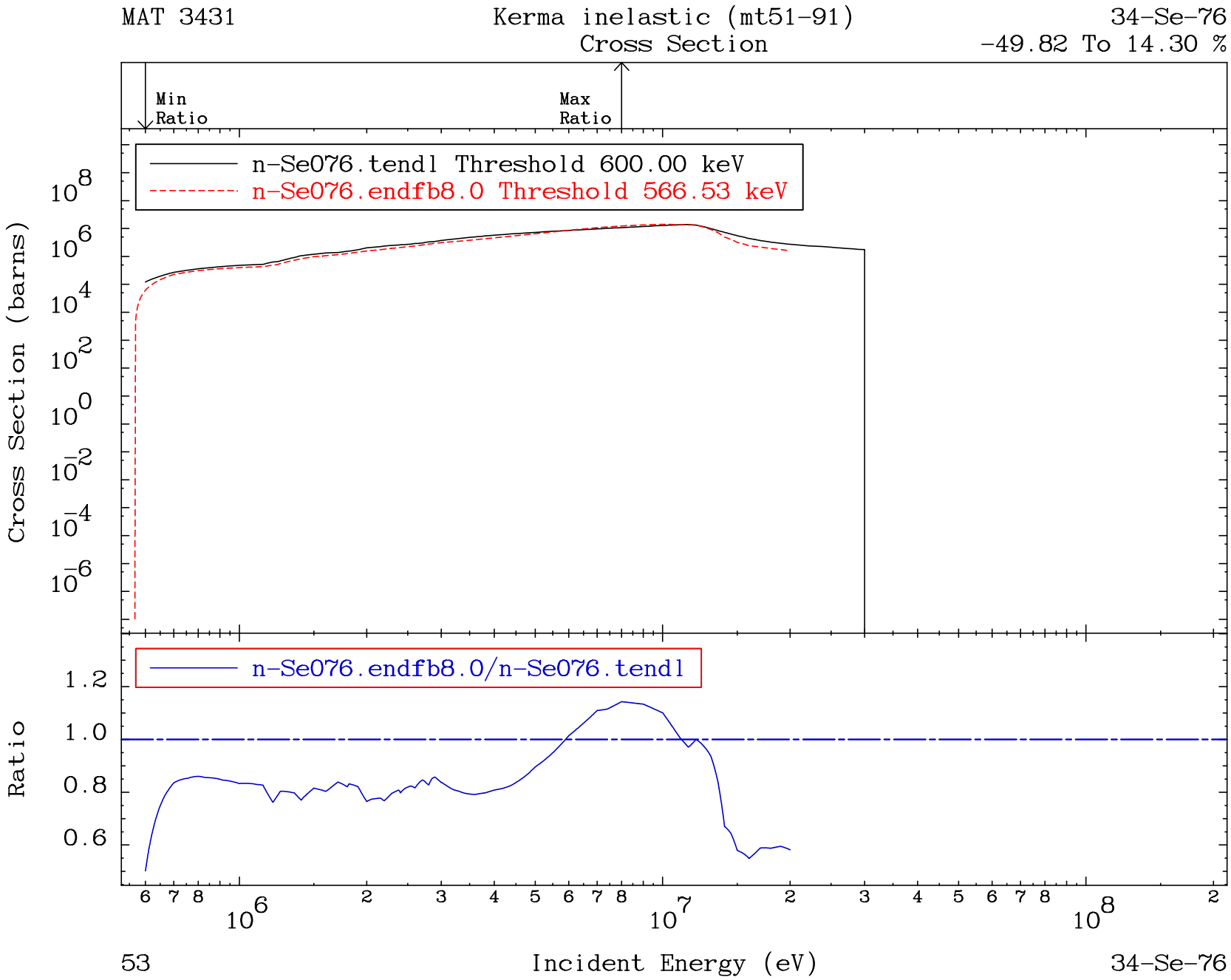

MAT 3431
He-3 Production
Cross Section
34-Se-76
-99.93 To 7069. %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 8.8048 MeV
n-Se076.endfb8.0 Threshold 10.046 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^2
10^0
10^-2
9
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
34-Se-76

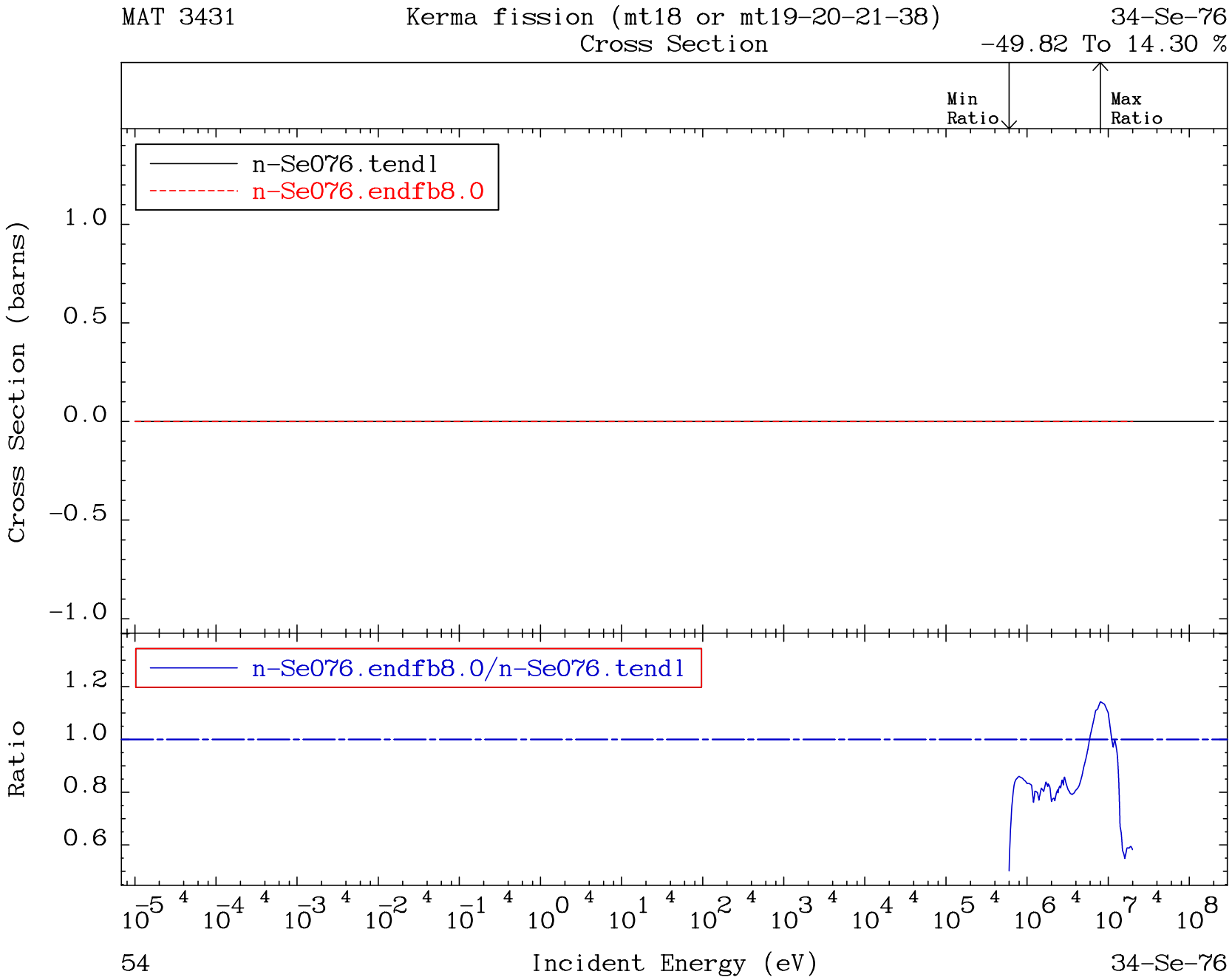

MAT 3431
He-4 Production
Cross Section
34-Se-76
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 13.281 keV
n-Se076.endfb8.0 Threshold 100.00 keV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^5
10^0
10^-5
10^-10
2 3 4 6 8 10^5 2 3 4 6 8 10^6 2 3 4 6 8 10^7 2 3 4 6 8 10^8 2
49
Incident Energy (eV)
34-Se-76

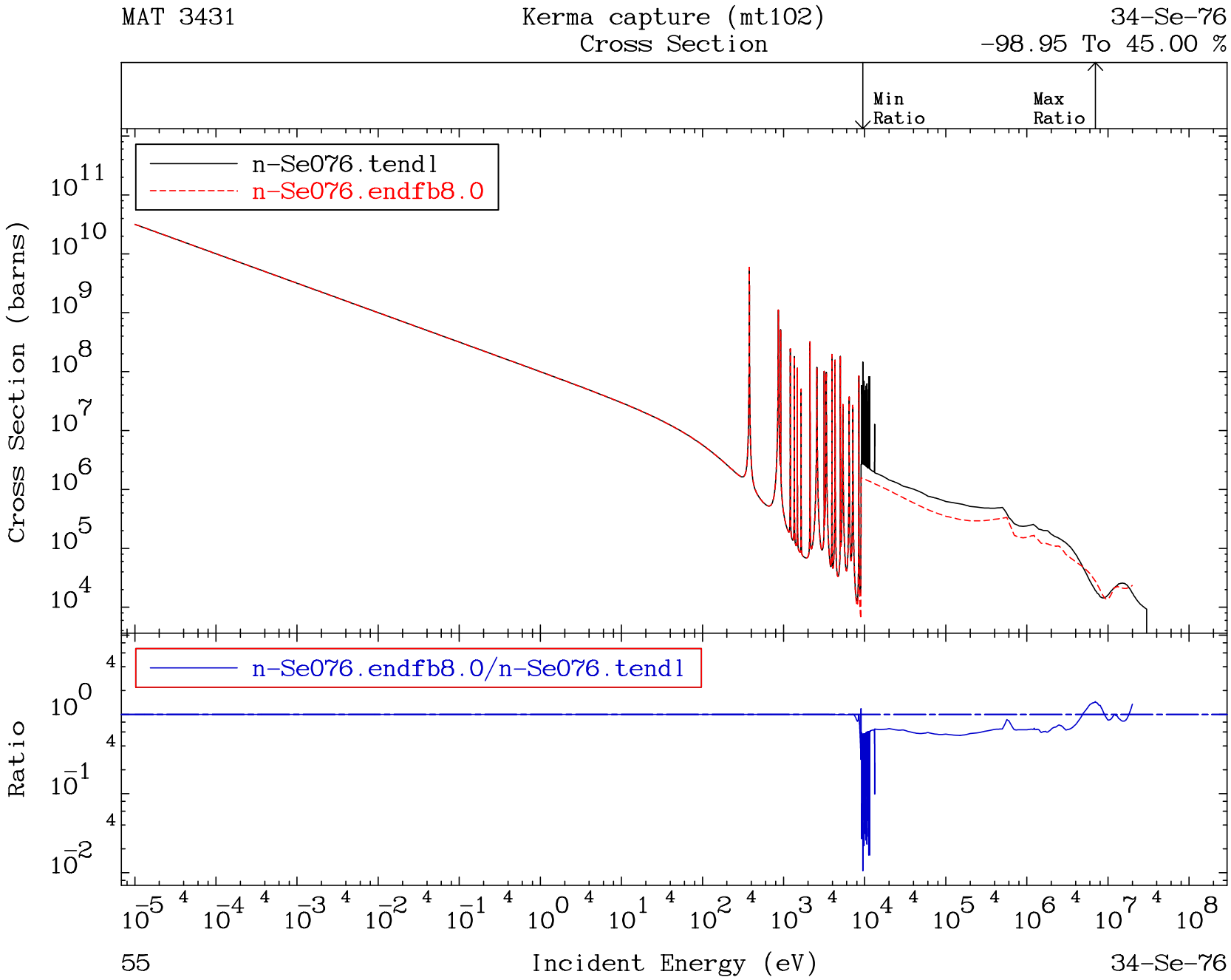

MAT 3431
Kerma total (eV-barns)
Cross Section
34-Se-76
-98.94 To 40.26 %
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
50
34-Se-76

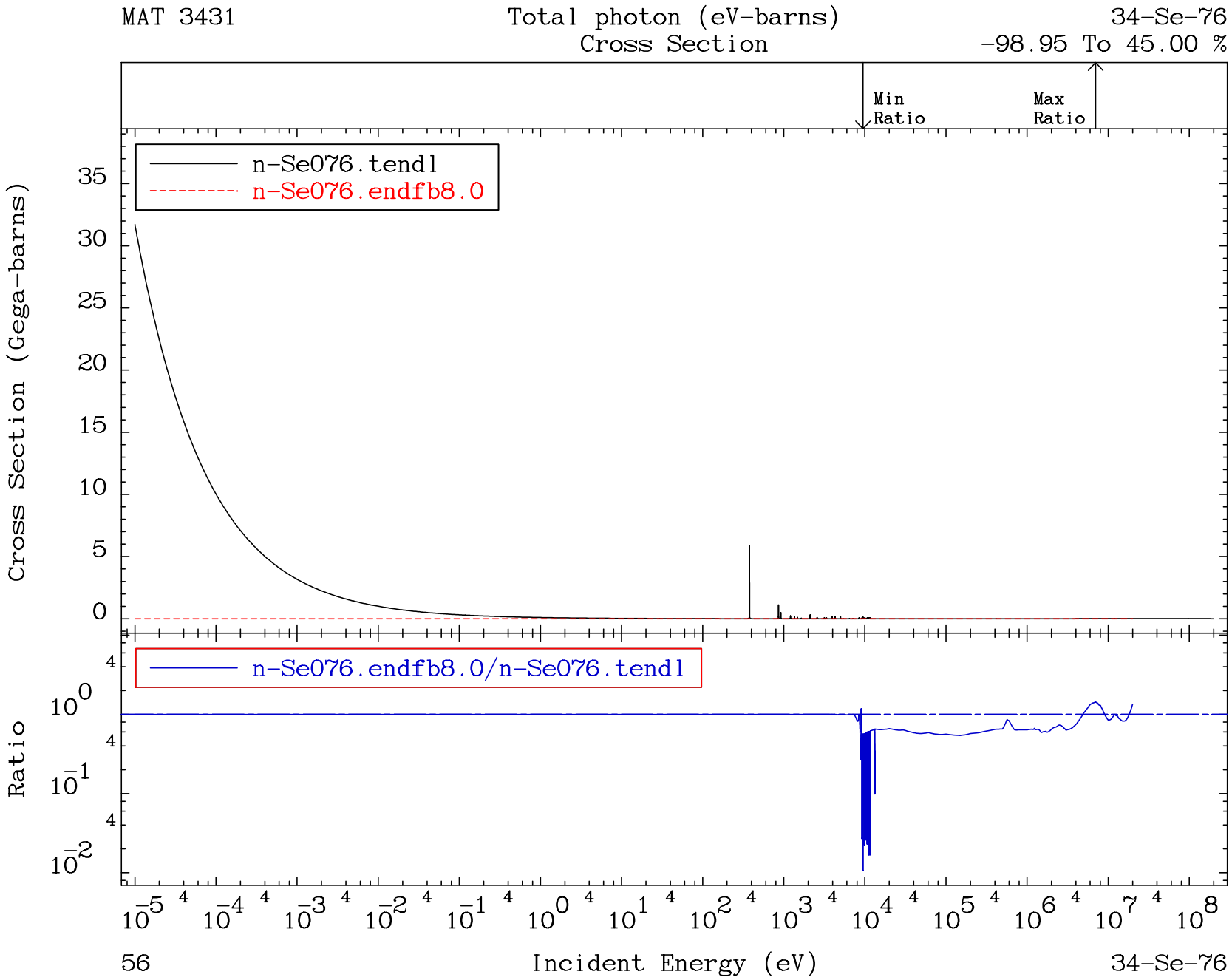

MAT 3431
Kerma elastic
Cross Section
34-Se-76
-95.24 To 463.3 %
Max Ratio
Min Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
51
34-Se-76

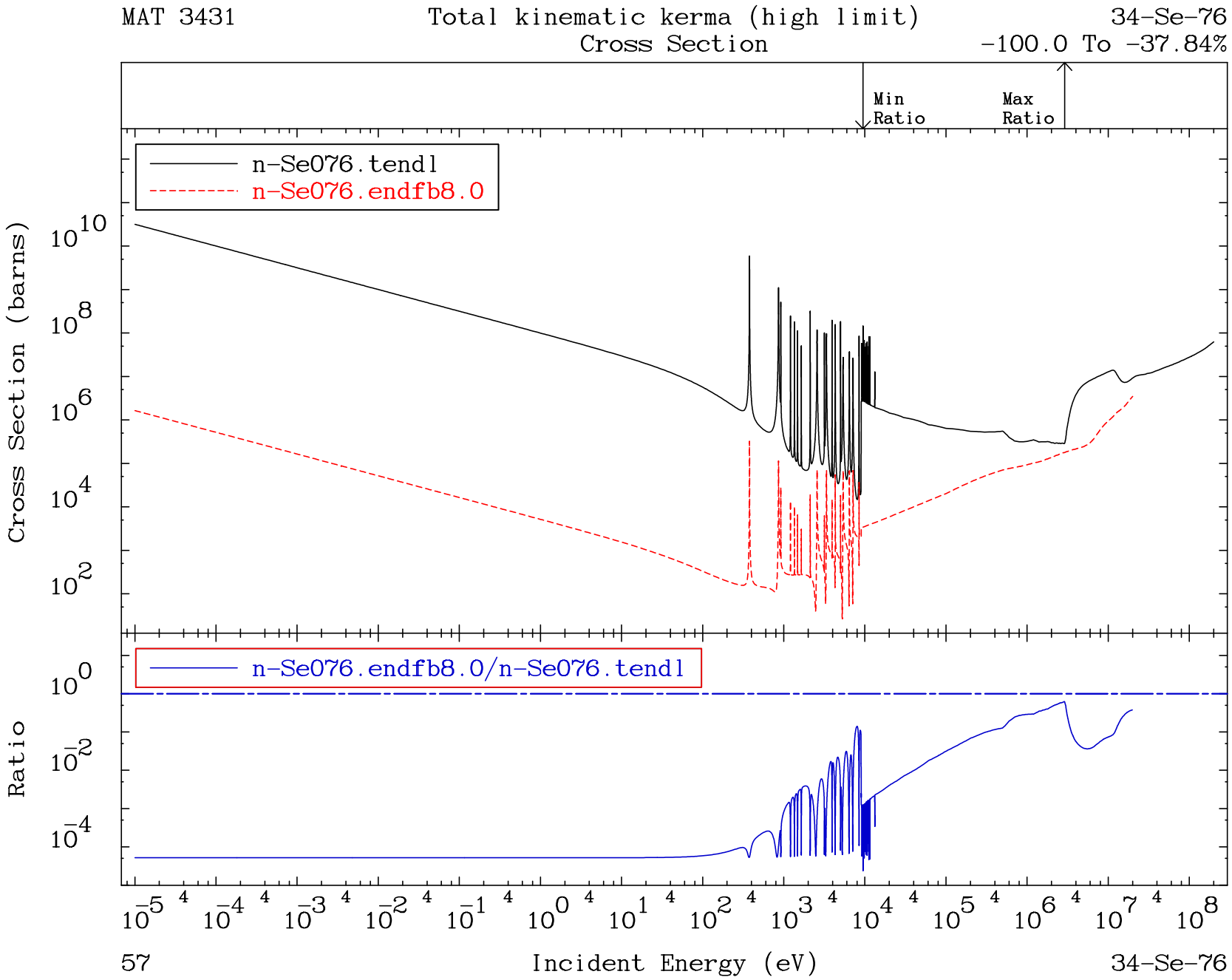

MAT 3431
Kerma non-elastic (all but mt2)
Cross Section
34-Se-76
-98.95 To 39.16 %
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
52
34-Se-76

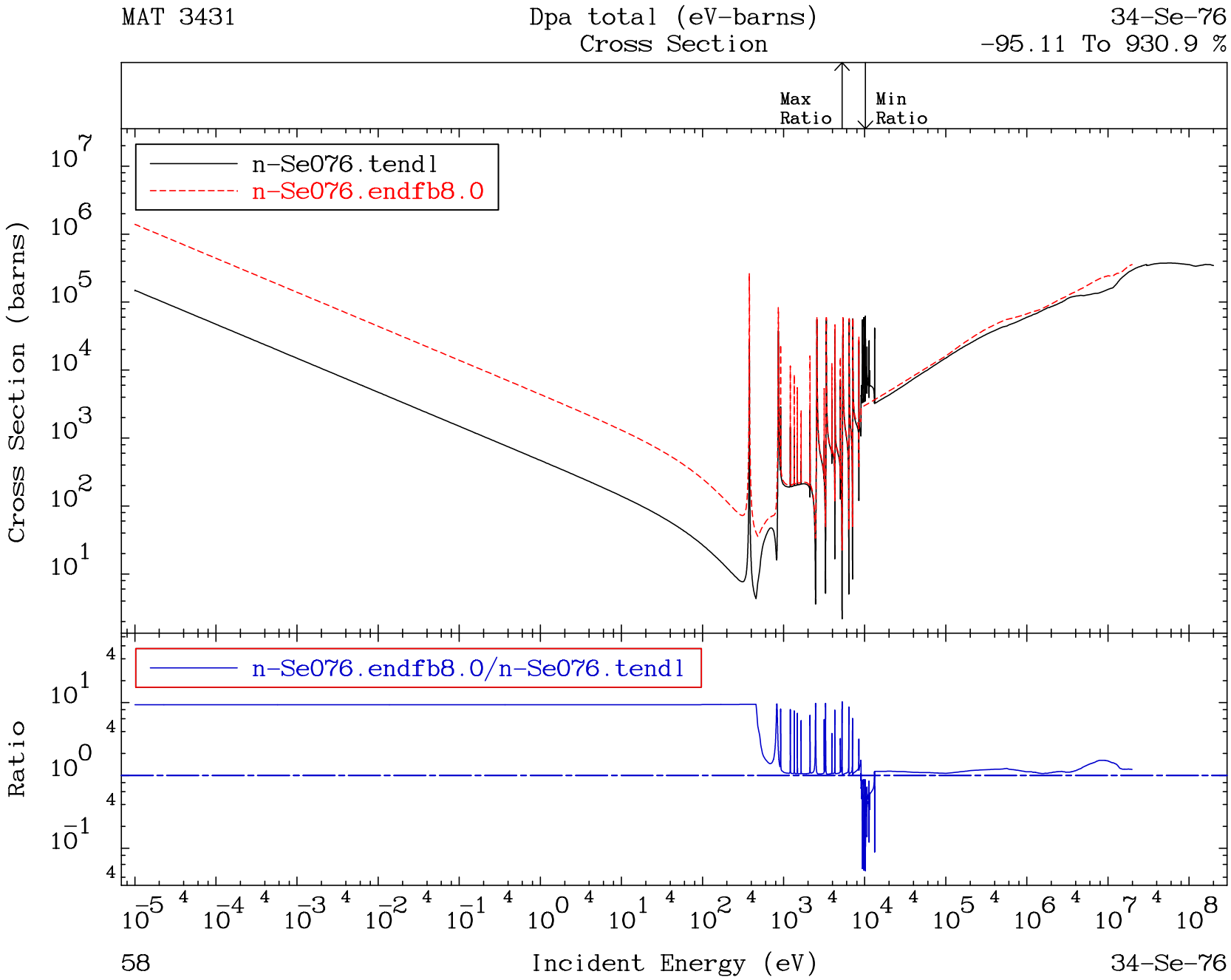

MAT 3431
Kerma inelastic (mt51-91)
Cross Section
34-Se-76
-49.82 To 14.30 %
Min Ratio
Max Ratio
n-Se076.tendl Threshold 600.00 keV
n-Se076.endfb8.0 Threshold 566.53 keV
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
53
34-Se-76

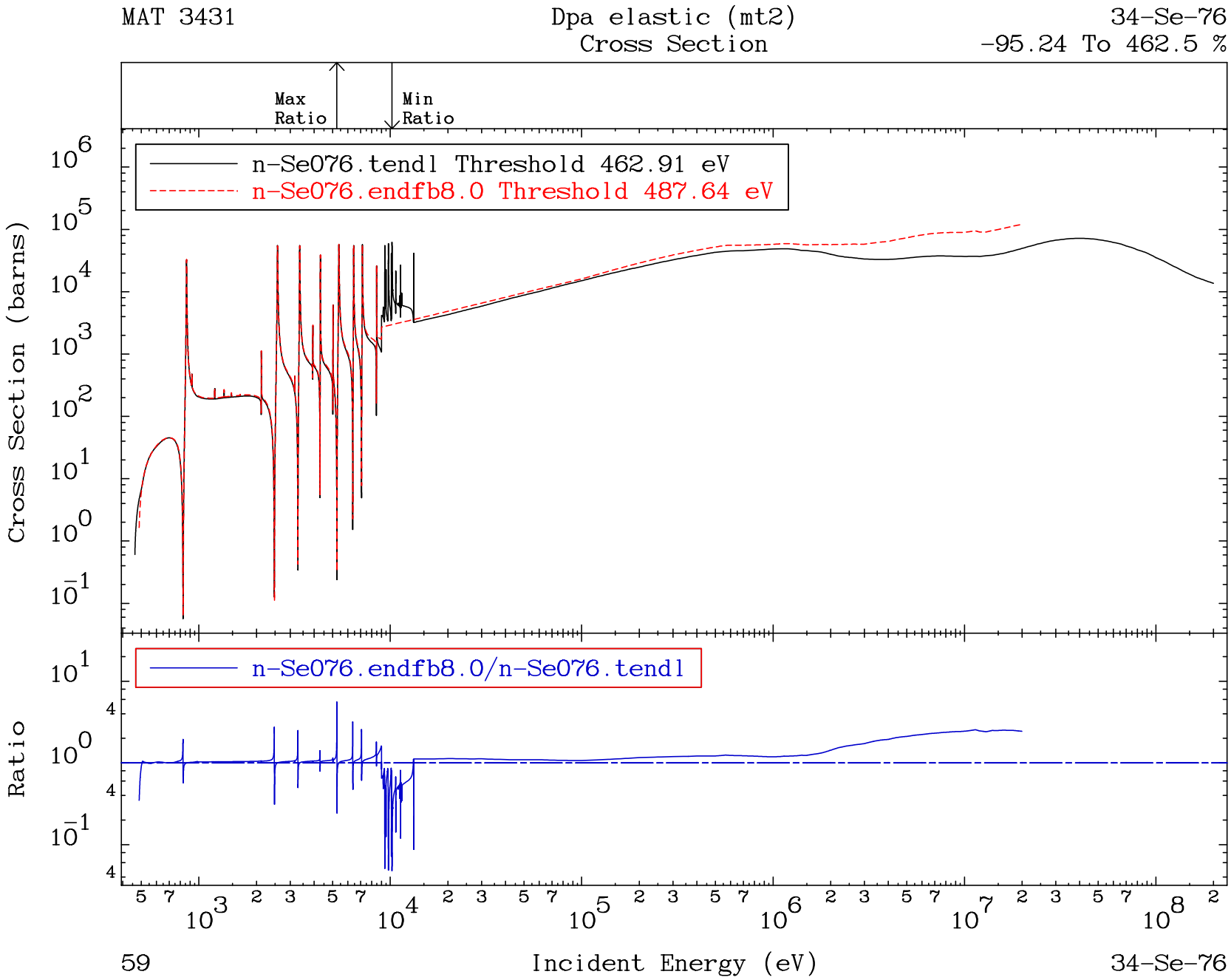

MAT 3431
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
34-Se-76
-49.82 To 14.30 %
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
1.2
1.0
0.8
0.6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
54
Incident Energy (eV)
34-Se-76

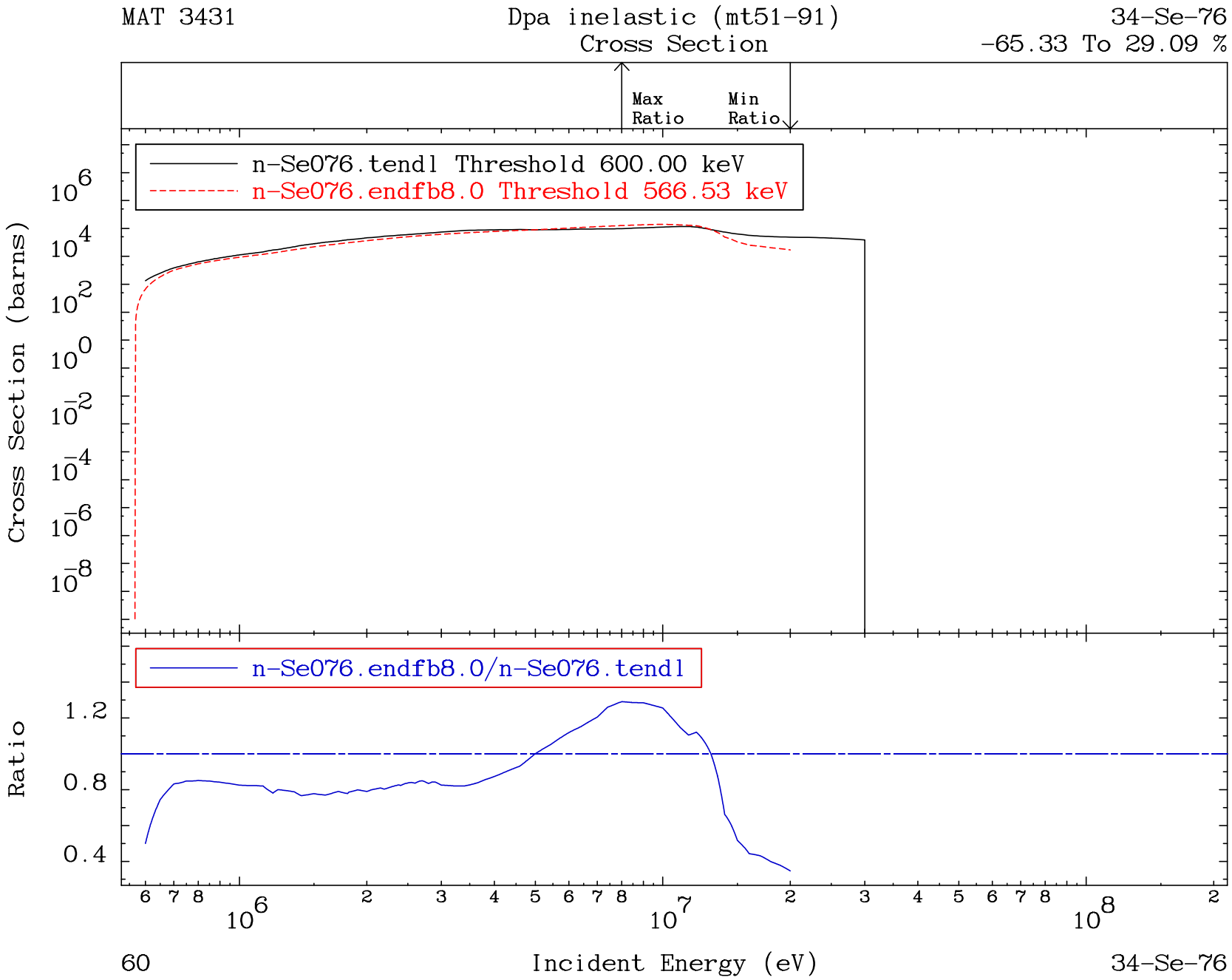

MAT 3431
Kerma capture (mt102)
Cross Section
34-Se-76
-98.95 To 45.00 %
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
55
34-Se-76

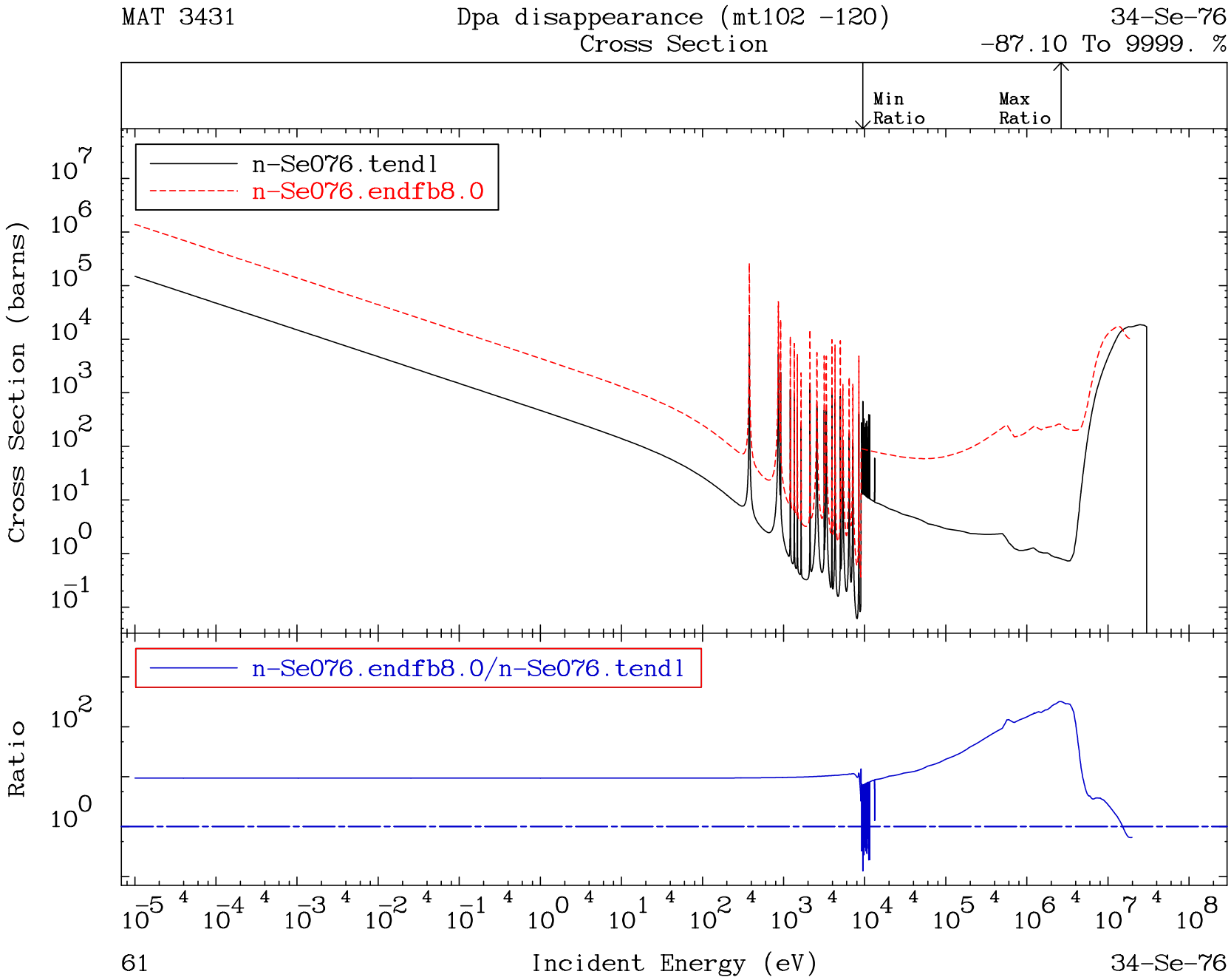

MAT 3431
Total photon (eV-barns)
Cross Section
34-Se-76
-98.95 To 45.00 %
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (Gega-barns)
35
30
25
20
15
10
5
0
n-Se076.endfb8.0/n-Se076.tendl
Ratio
10^0
10^-1
10^-2
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
56
Incident Energy (eV)
34-Se-76


MAT 3431
Total kinematic kerma (high limit)
Cross Section
34-Se-76
-100.0 To -37.84%
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
57
34-Se-76


MAT 3431
Dpa total (eV-barns)
Cross Section
34-Se-76
-95.11 To 930.9 %
Max Ratio
Min Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
58
34-Se-76


MAT 3431
Dpa elastic (mt2)
Cross Section
34-Se-76
-95.24 To 462.5 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 462.91 eV
n-Se076.endfb8.0 Threshold 487.64 eV
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
59
34-Se-76


MAT 3431
Dpa inelastic (mt51-91)
Cross Section
34-Se-76
-65.33 To 29.09 %
Max Ratio
Min Ratio
n-Se076.tendl Threshold 600.00 keV
n-Se076.endfb8.0 Threshold 566.53 keV
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
60
34-Se-76


MAT 3431
Dpa disappearance (mt102 -120)
Cross Section
34-Se-76
-87.10 To 9999. %
Min Ratio
Max Ratio
n-Se076.tendl
n-Se076.endfb8.0
Cross Section (barns)
n-Se076.endfb8.0/n-Se076.tendl
Ratio
Incident Energy (eV)
61
34-Se-76