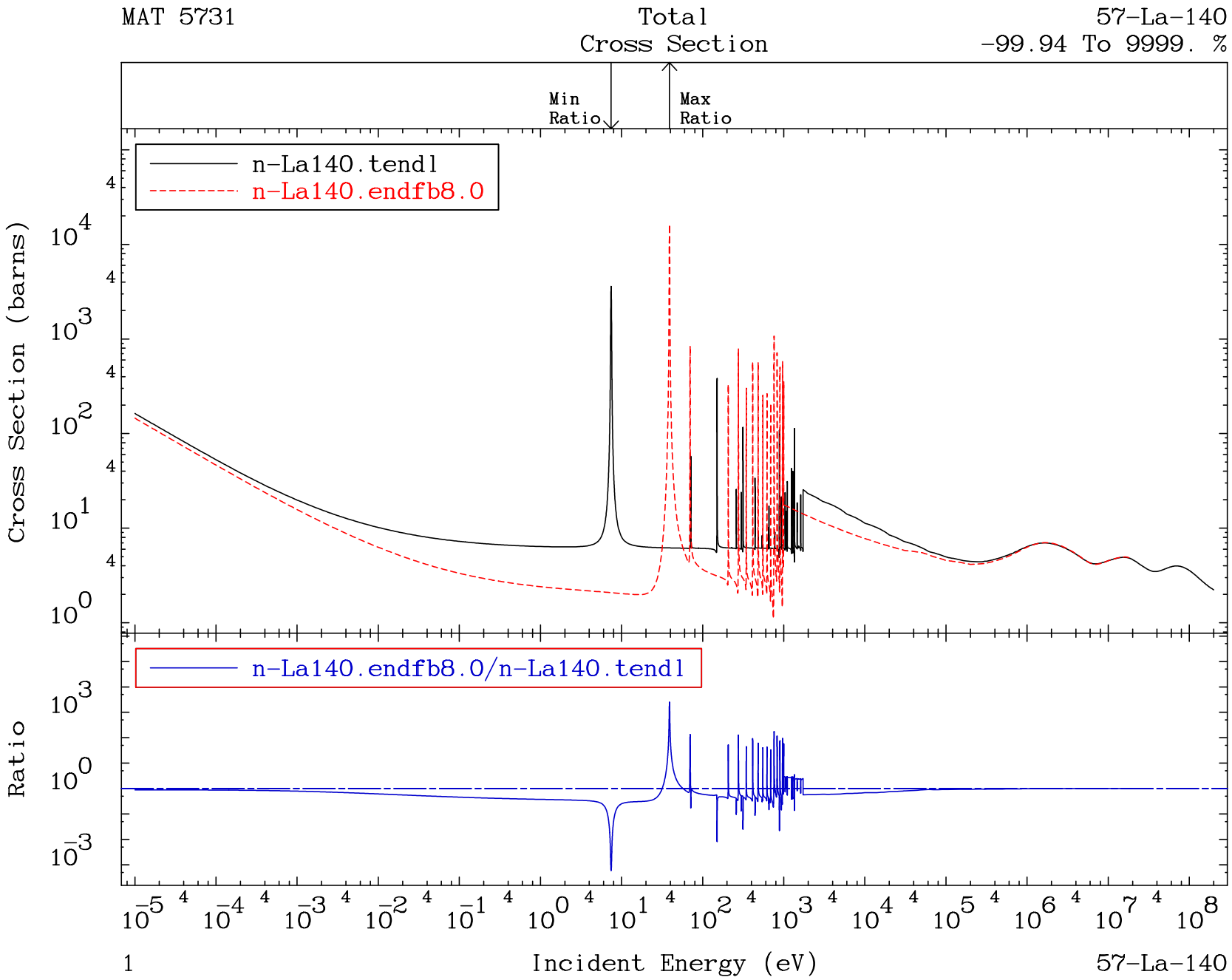
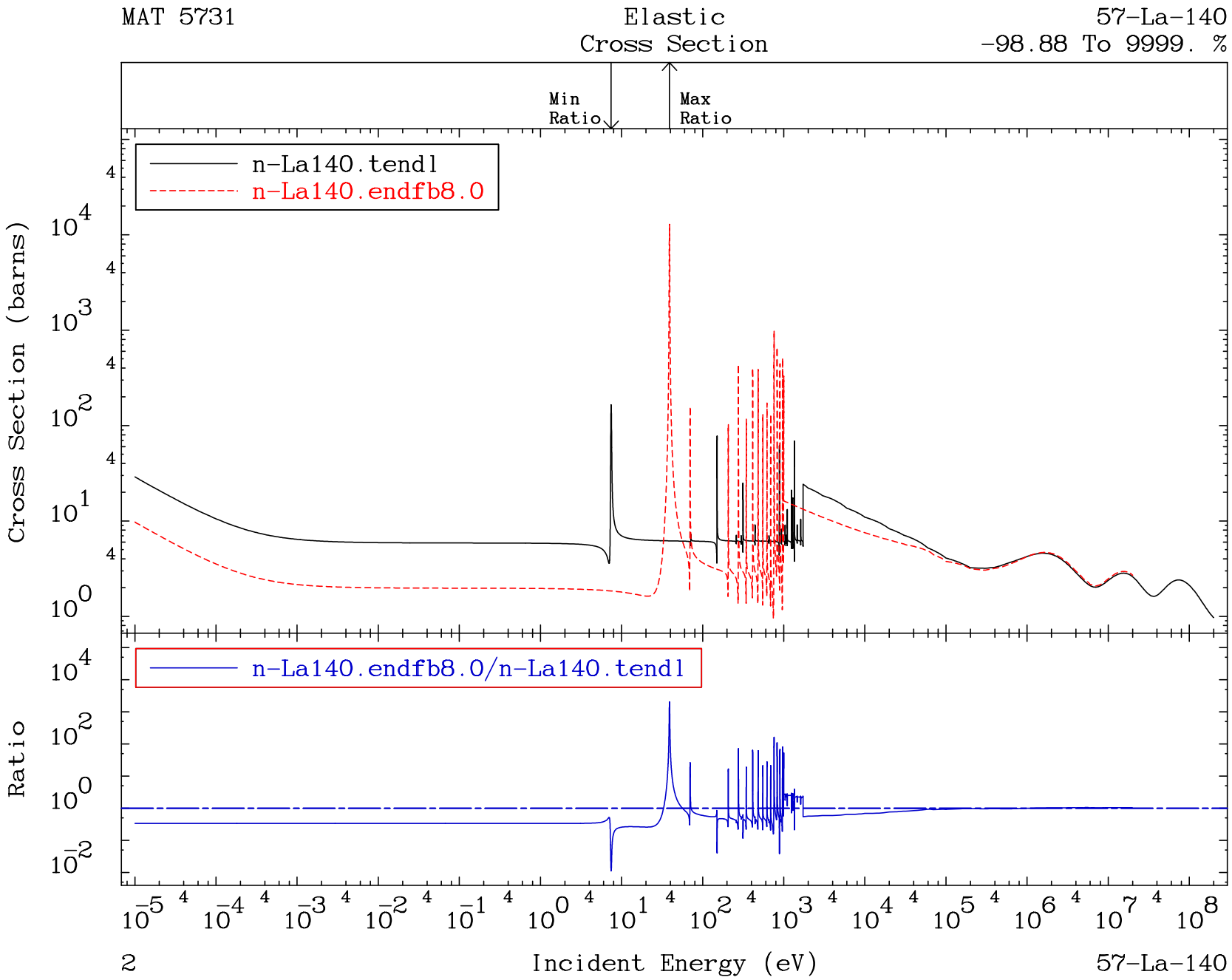
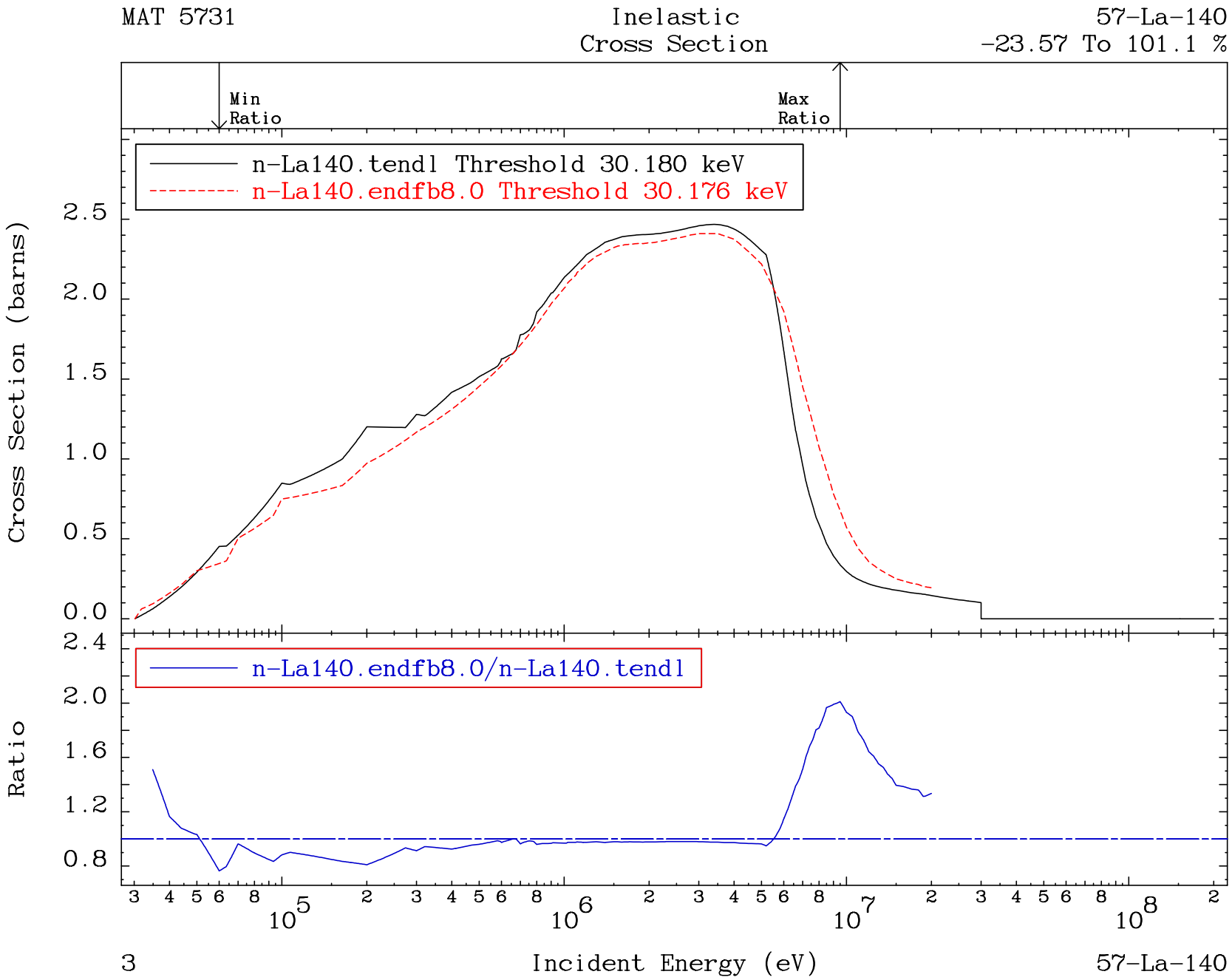
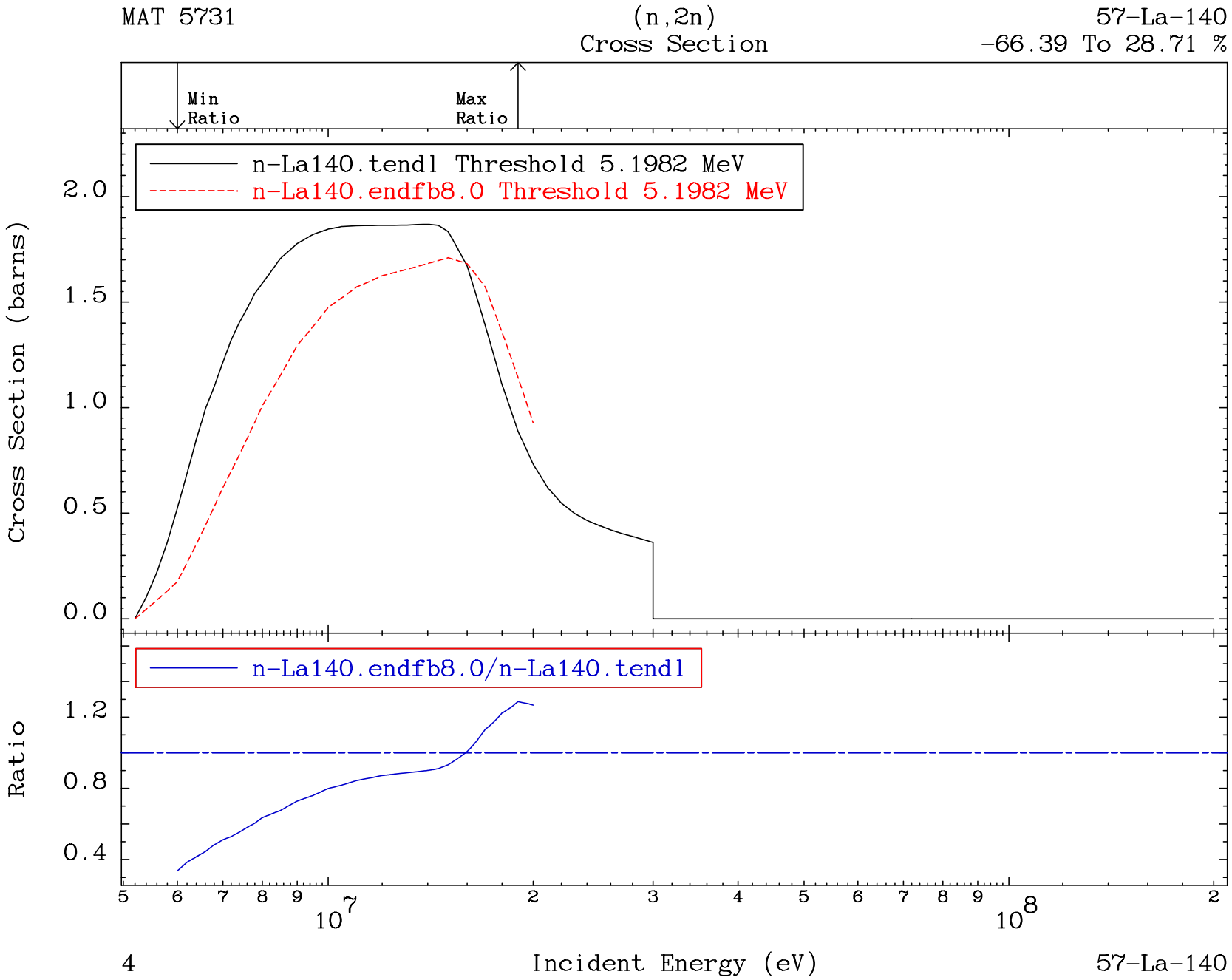
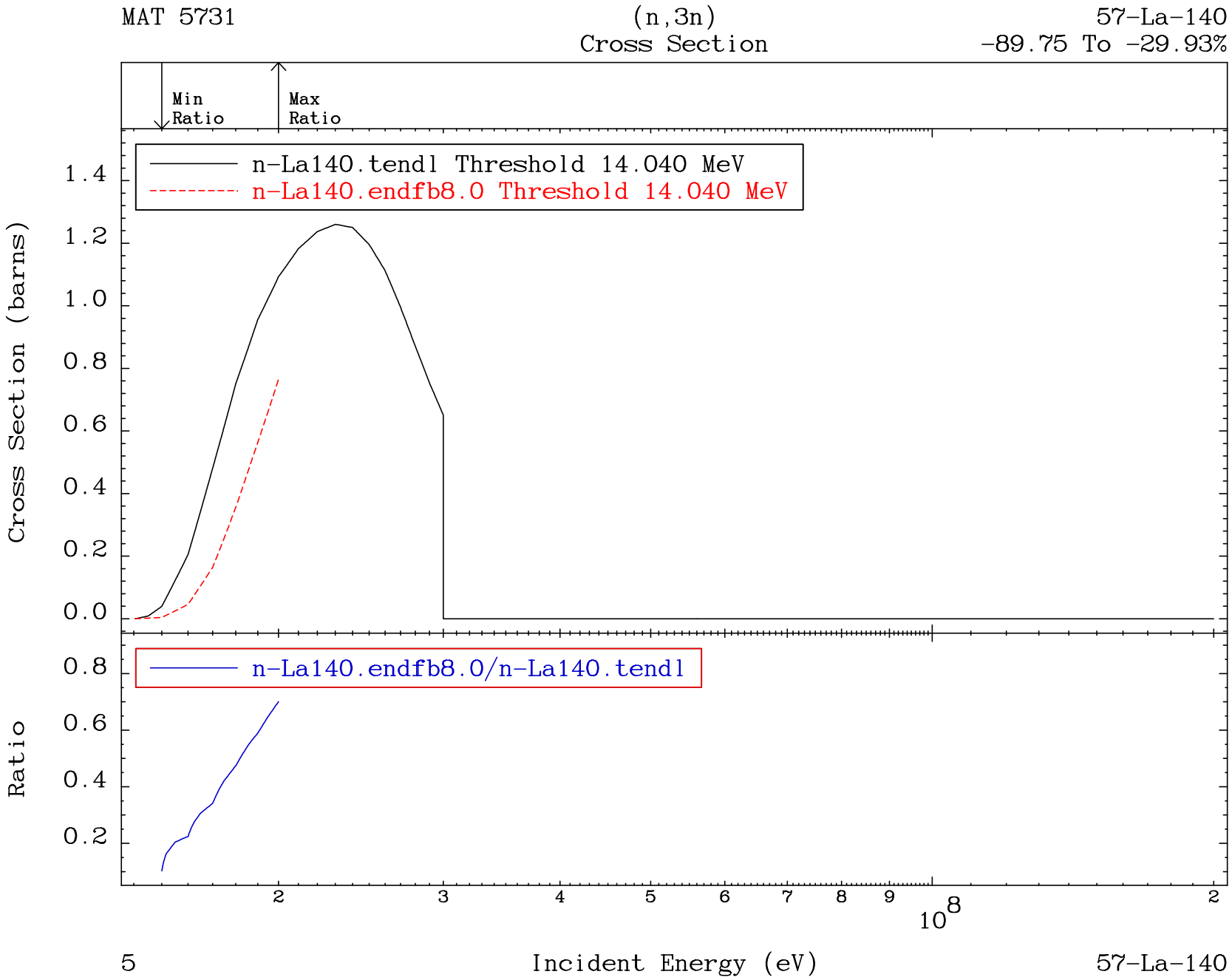
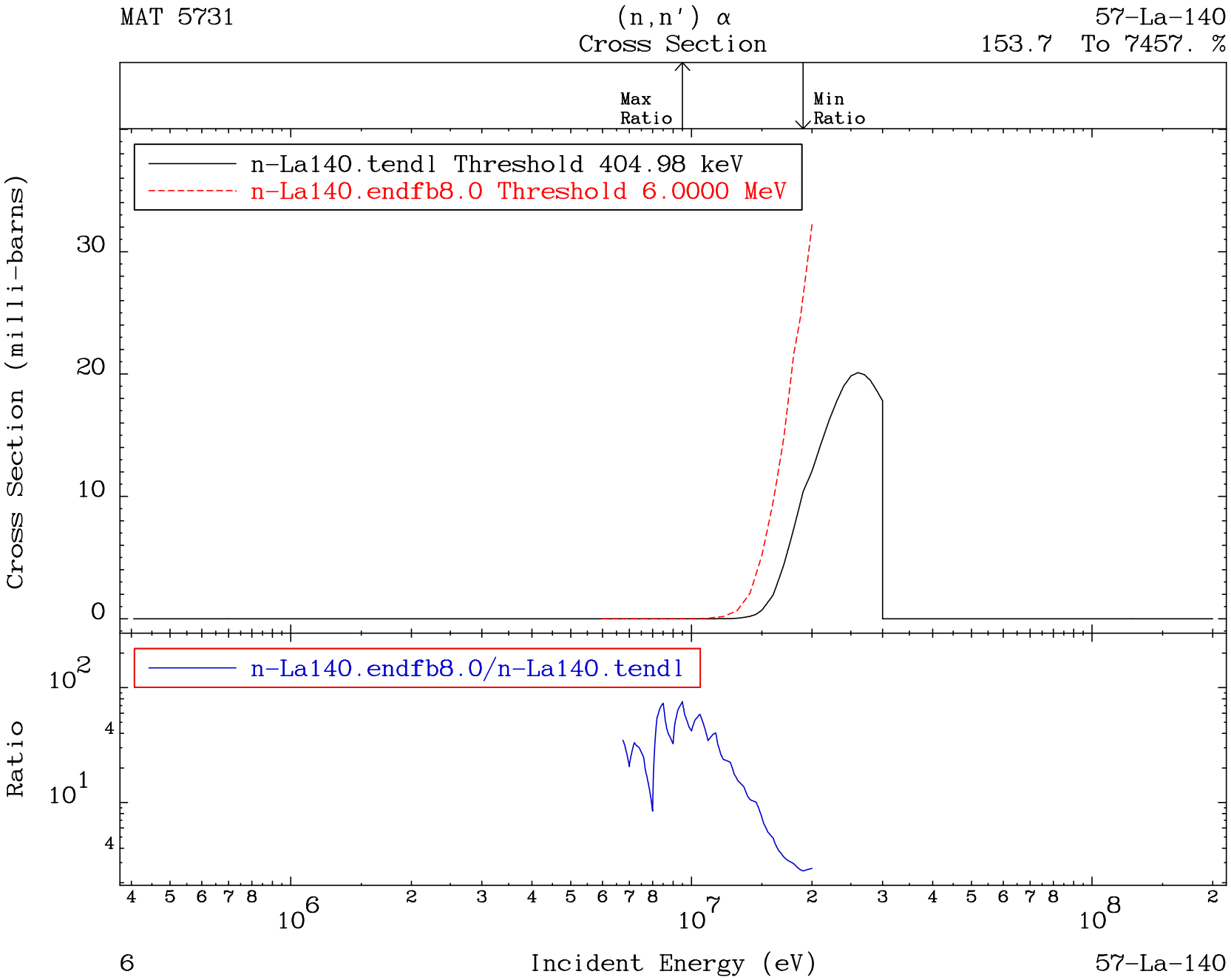

MAT 5731
Total
Cross Section
57-La-140
-99.94 To 9999. %
Min
Ratio
Max
Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
1
57-La-140

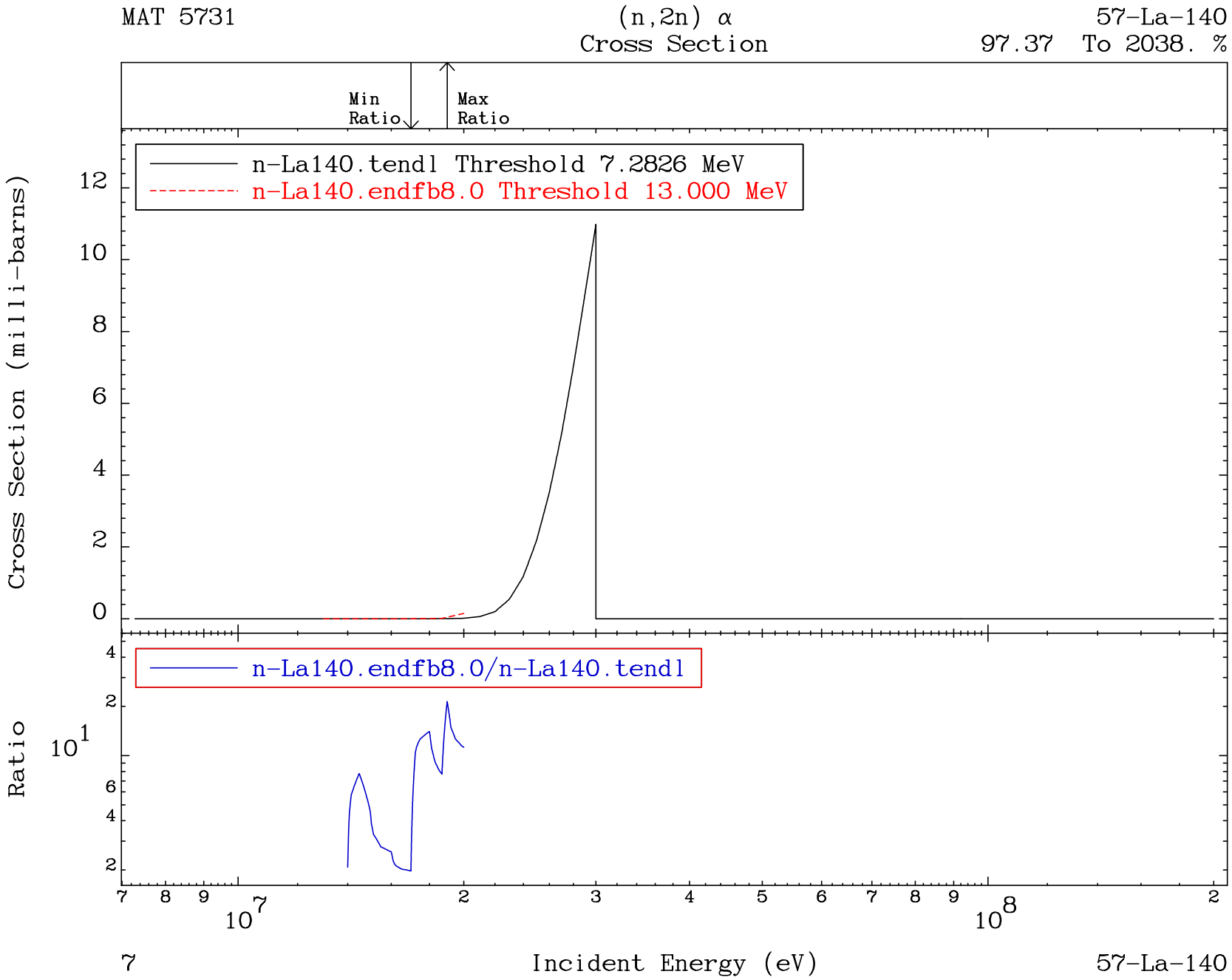

MAT 5731
Elastic
Cross Section
57-La-140
-98.88 To 9999. %
Min
Ratio
Max
Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
2
57-La-140

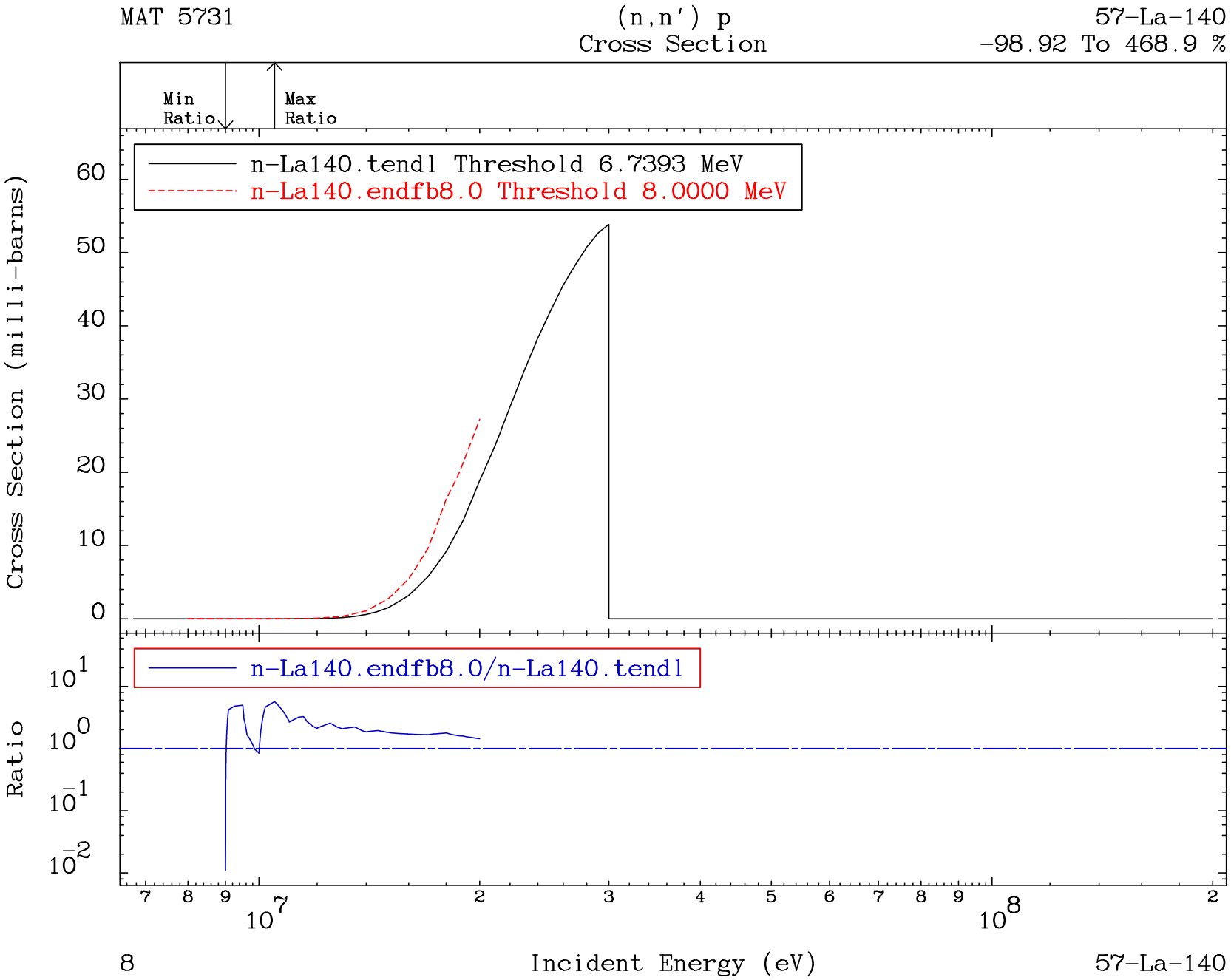

MAT 5731
Inelastic
Cross Section
57-La-140
-23.57 To 101.1 %
Min
Ratio
Max
Ratio
n-La140.tendl Threshold 30.180 keV
n-La140.endfb8.0 Threshold 30.176 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-La140.endfb8.0/n-La140.tendl
Ratio
2.4
2.0
1.6
1.2
0.8
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
3
57-La-140

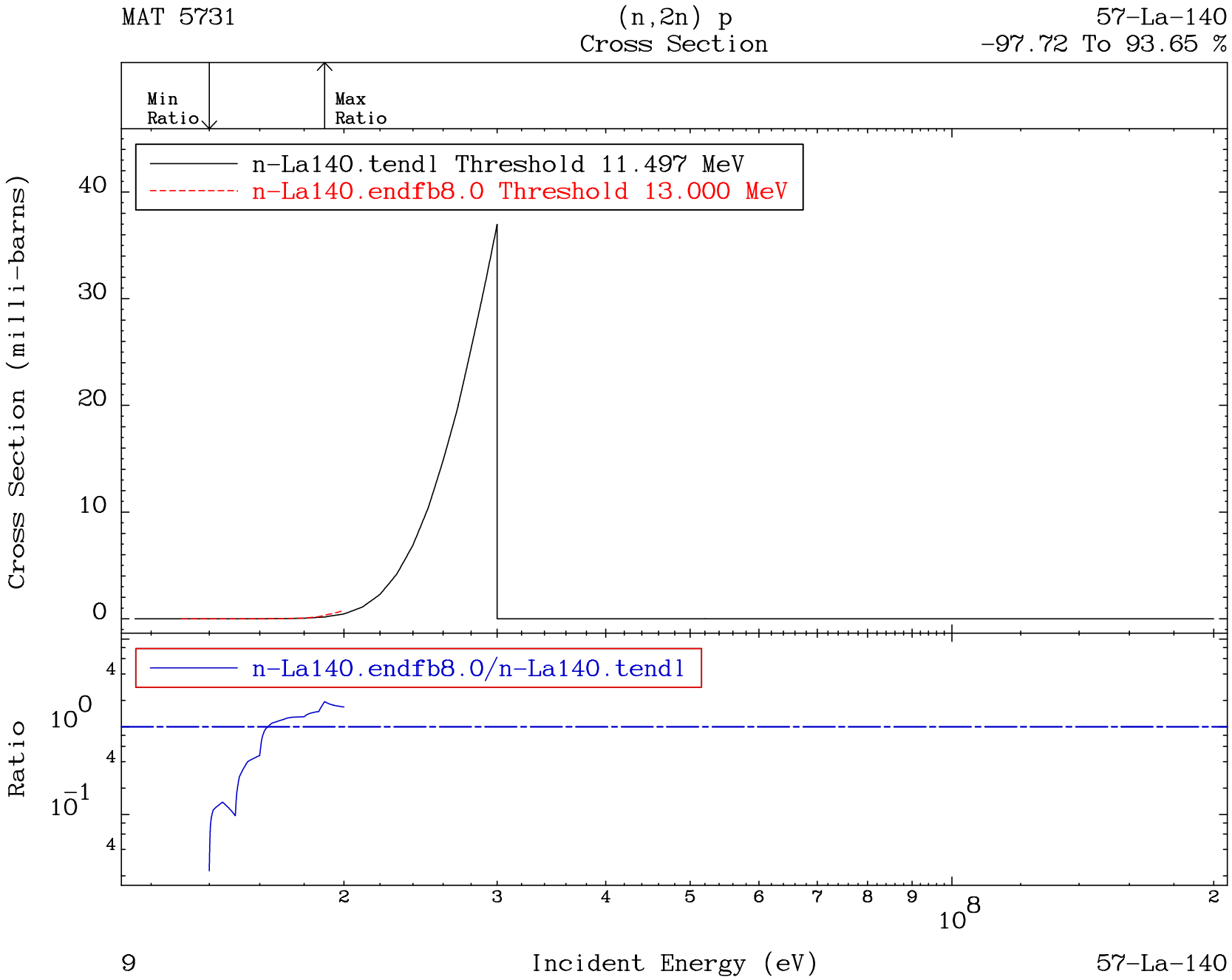

MAT 5731
(n,2n)
Cross Section
57-La-140
-66.39 To 28.71 %
Min Ratio
Max Ratio
n-La140.tendl Threshold 5.1982 MeV
n-La140.endfb8.0 Threshold 5.1982 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-La140.endfb8.0/n-La140.tendl
Ratio
1.2
0.8
0.4
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
57-La-140

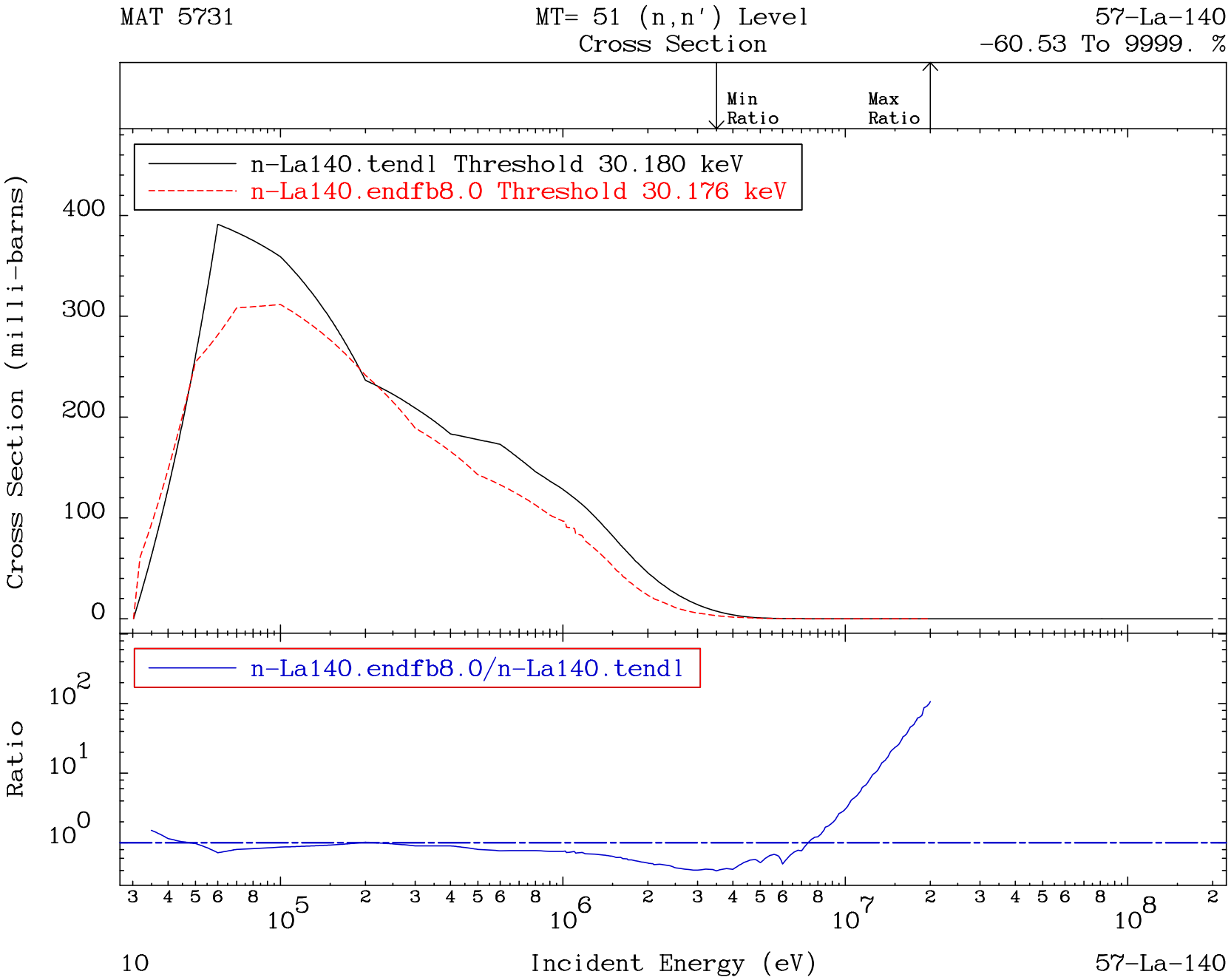

MAT 5731
(n,3n)
Cross Section
57-La-140
-89.75 To -29.93%
Min Ratio
Max Ratio
n-La140.tendl Threshold 14.040 MeV
n-La140.endfb8.0 Threshold 14.040 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-La140.endfb8.0/n-La140.tendl
Ratio
0.8
0.6
0.4
0.2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
57-La-140

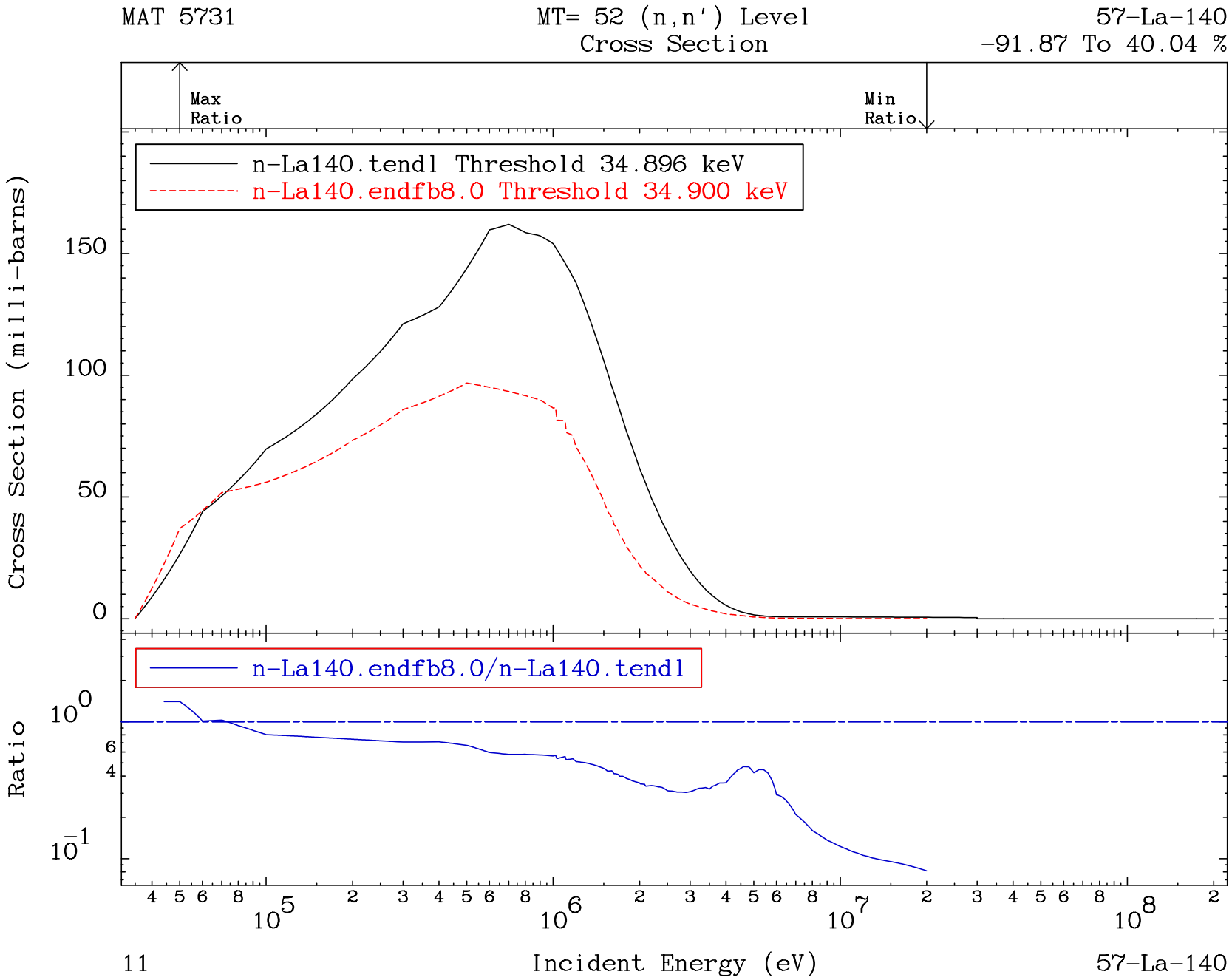

MAT 5731
(n,n') α
Cross Section
57-La-140
153.7 To 7457. %
Max Ratio
Min Ratio
n-La140.tendl Threshold 404.98 keV
n-La140.endfb8.0 Threshold 6.0000 MeV
Cross Section (milli-barns)
30
20
10
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
4
10^1
4
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
6
Incident Energy (eV)
57-La-140

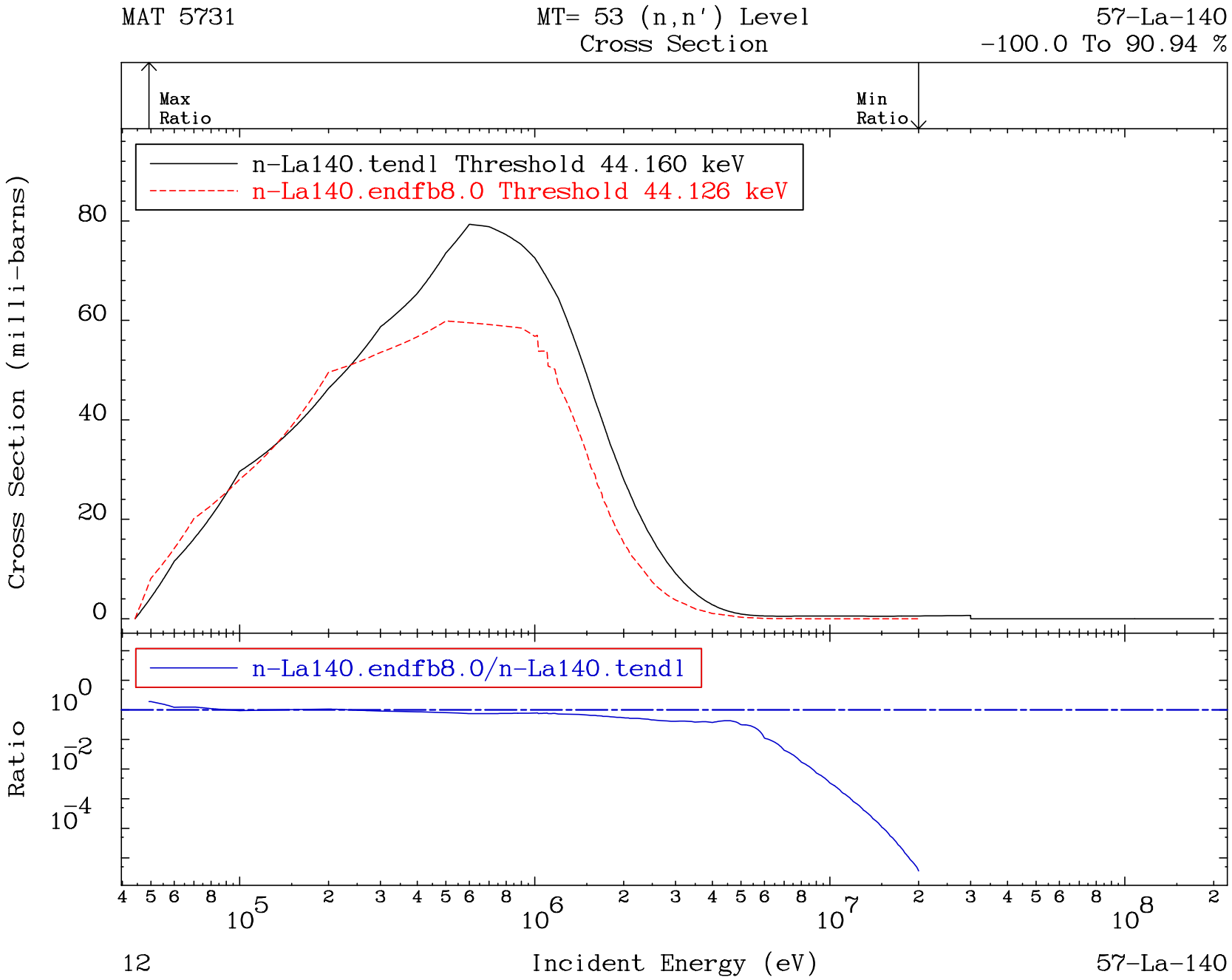

MAT 5731
(n,2n) α
Cross Section
57-La-140
97.37 To 2038. %
Min Ratio
Max Ratio
n-La140.tendl Threshold 7.2826 MeV
n-La140.endfb8.0 Threshold 13.000 MeV
Cross Section (milli-barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
57-La-140

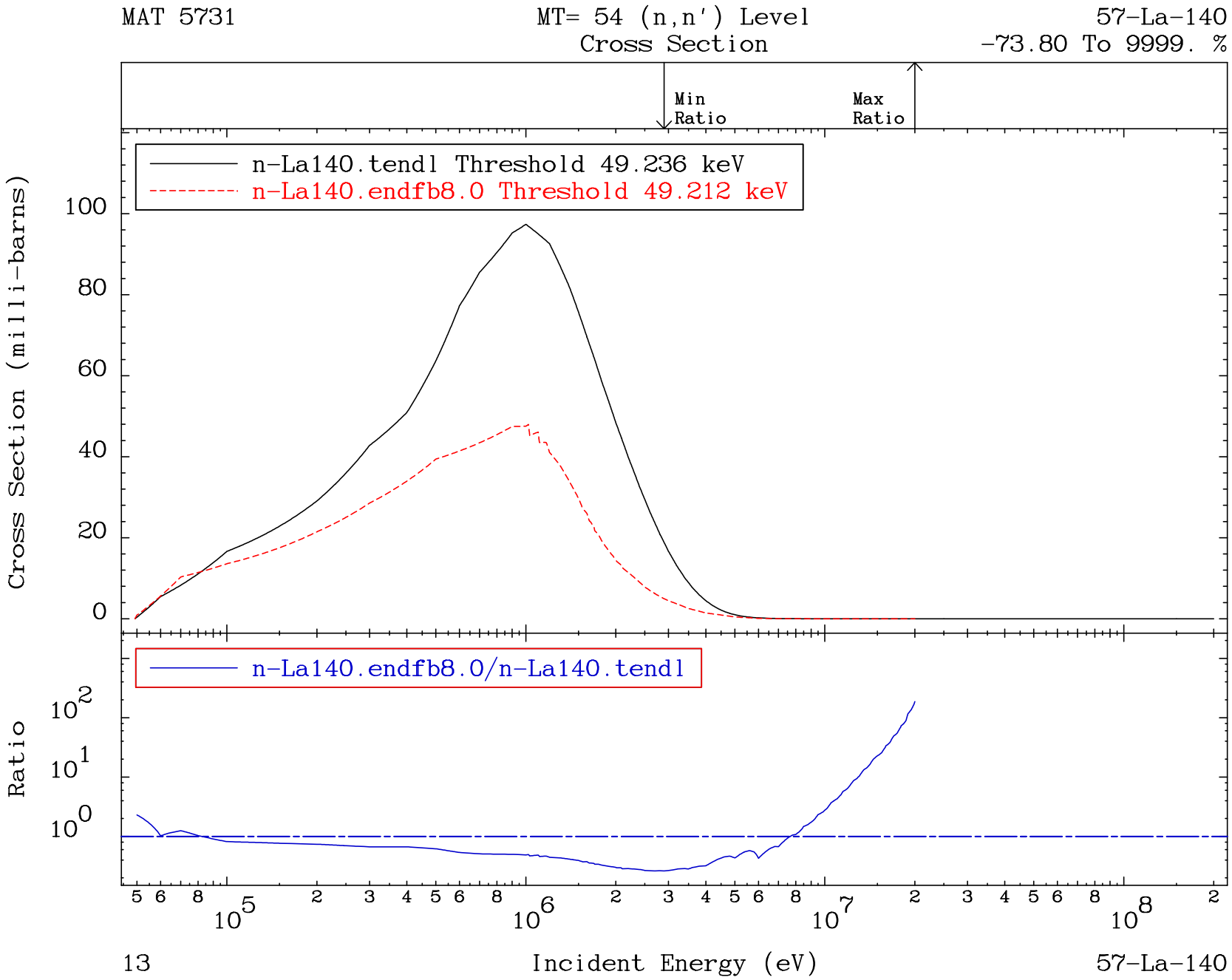

MAT 5731
(n,n') p
Cross Section
57-La-140
-98.92 To 468.9 %
Min Ratio
Max Ratio
n-La140.tendl Threshold 6.7393 MeV
n-La140.endfb8.0 Threshold 8.0000 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^1
10^0
10^-1
10^-2
7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
57-La-140

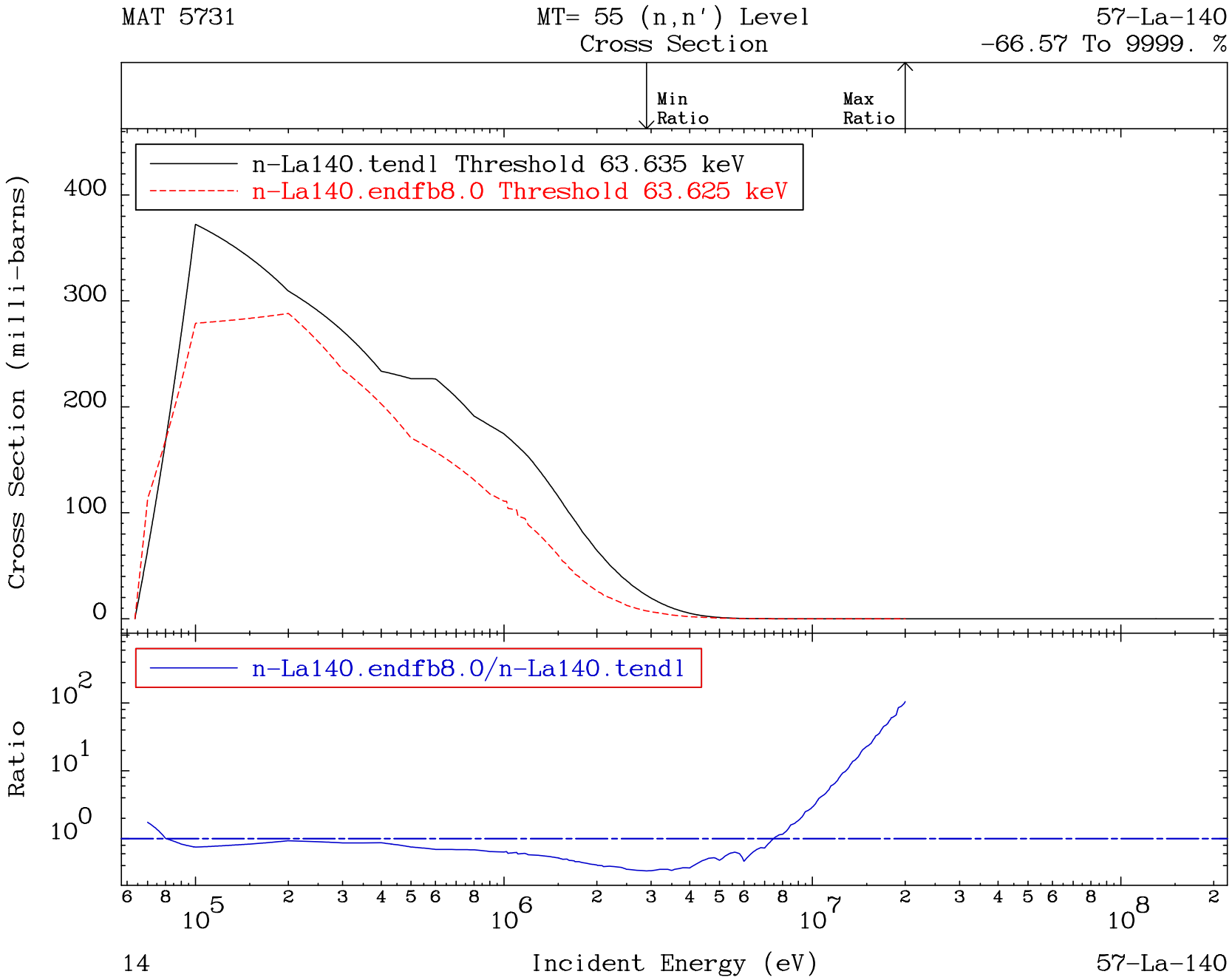

MAT 5731
(n,2n) p
Cross Section
57-La-140
-97.72 To 93.65 %
Min Ratio
Max Ratio
n-La140.tendl Threshold 11.497 MeV
n-La140.endfb8.0 Threshold 13.000 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
57-La-140

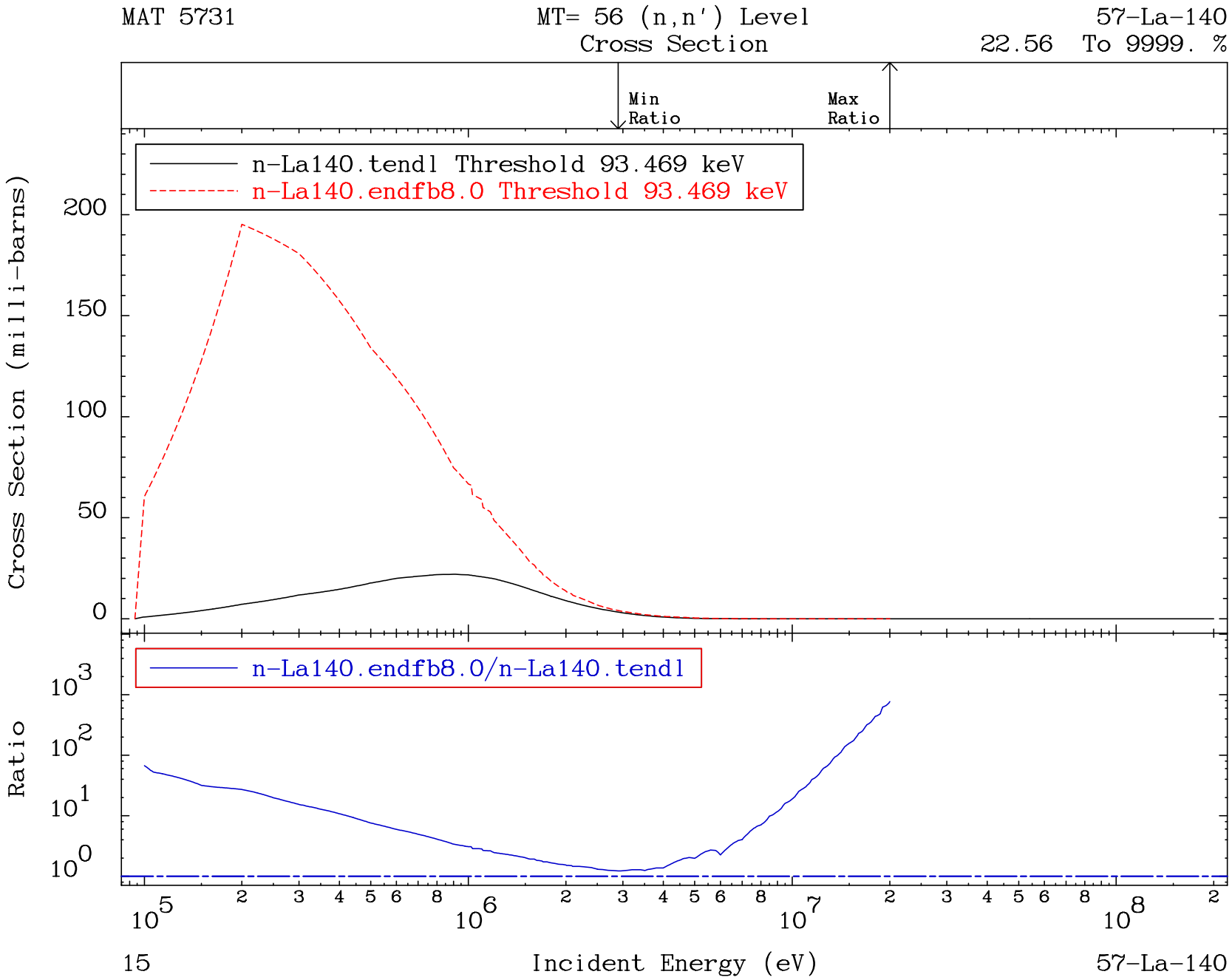

MAT 5731
MT= 51 (n,n') Level
Cross Section
57-La-140
-60.53 To 9999. %
Min Ratio
Max Ratio
n-La140.tendl Threshold 30.180 keV
n-La140.endfb8.0 Threshold 30.176 keV
Cross Section (milli-barns)
400
300
200
100
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
10^1
10^0
3 4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
57-La-140

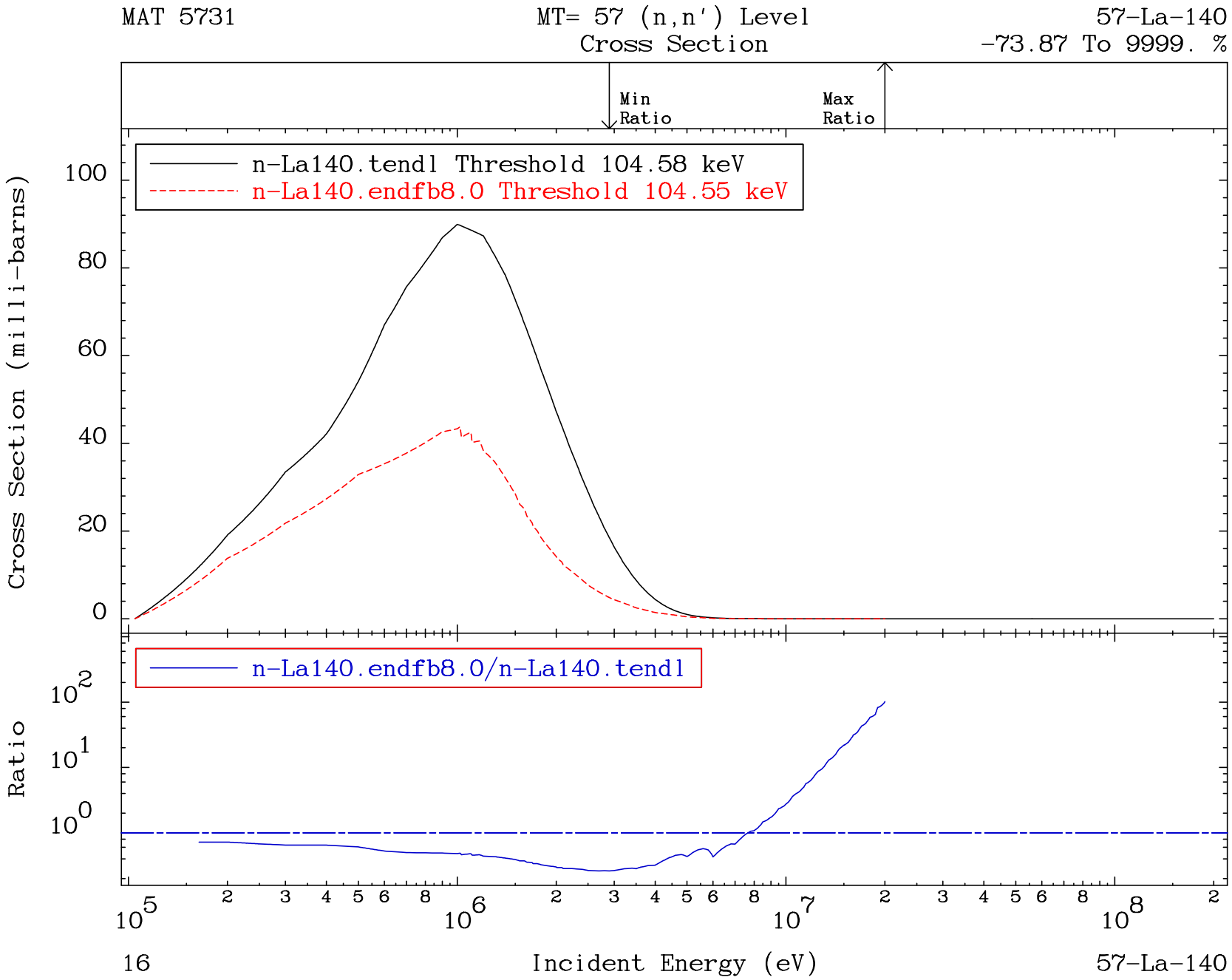

MAT 5731
MT= 52 (n,n') Level
Cross Section
57-La-140
-91.87 To 40.04 %
Max Ratio
Min Ratio
n-La140.tendl Threshold 34.896 keV
n-La140.endfb8.0 Threshold 34.900 keV
Cross Section (milli-barns)
150
100
50
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^0
6
4
10^-1
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
57-La-140

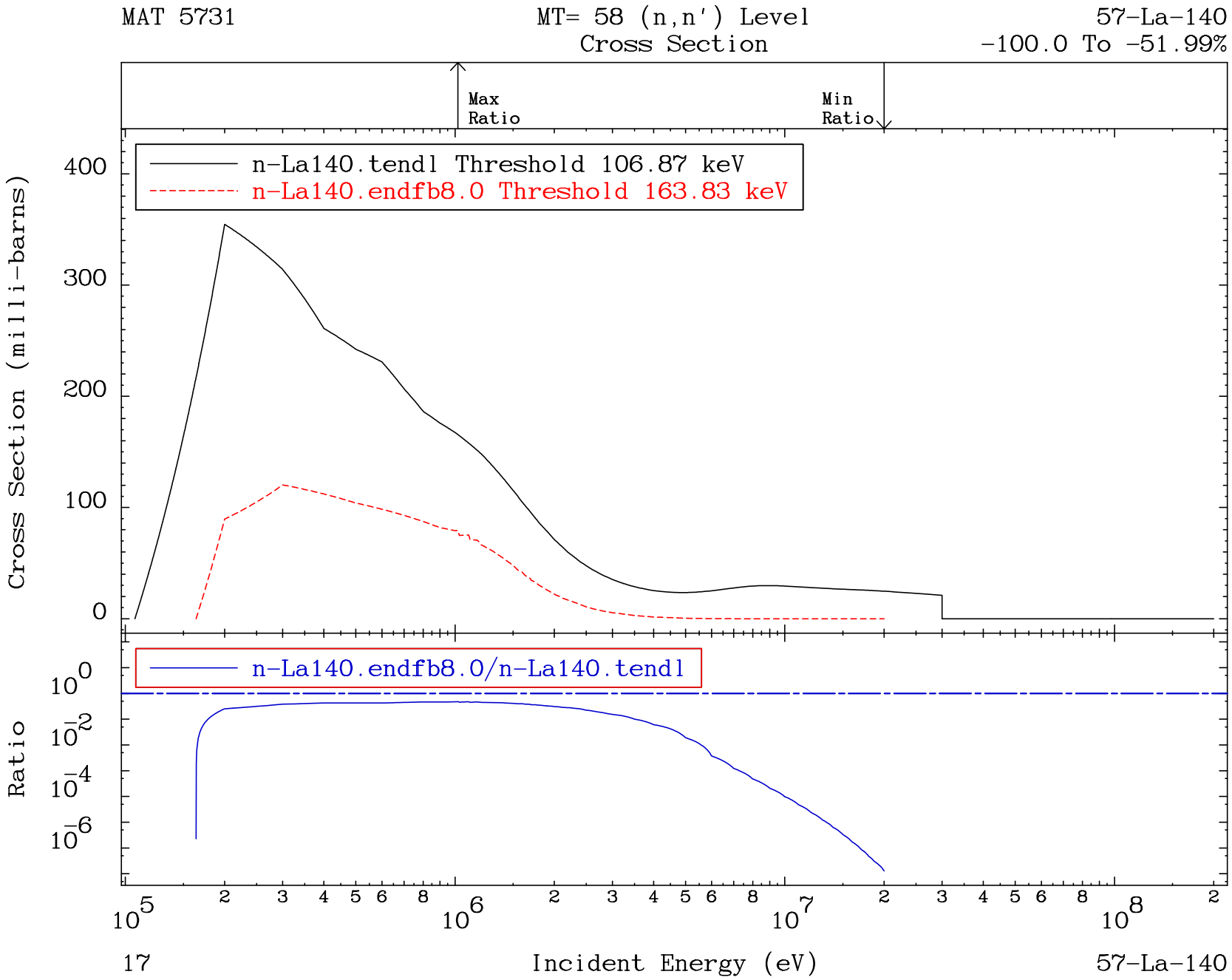

MAT 5731
MT= 53 (n,n') Level
Cross Section
57-La-140
-100.0 To 90.94 %
Max
Ratio
Min
Ratio
n-La140.tendl Threshold 44.160 keV
n-La140.endfb8.0 Threshold 44.126 keV
Cross Section (milli-barns)
80
60
40
20
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^0
10^-2
10^-4
4 5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
57-La-140

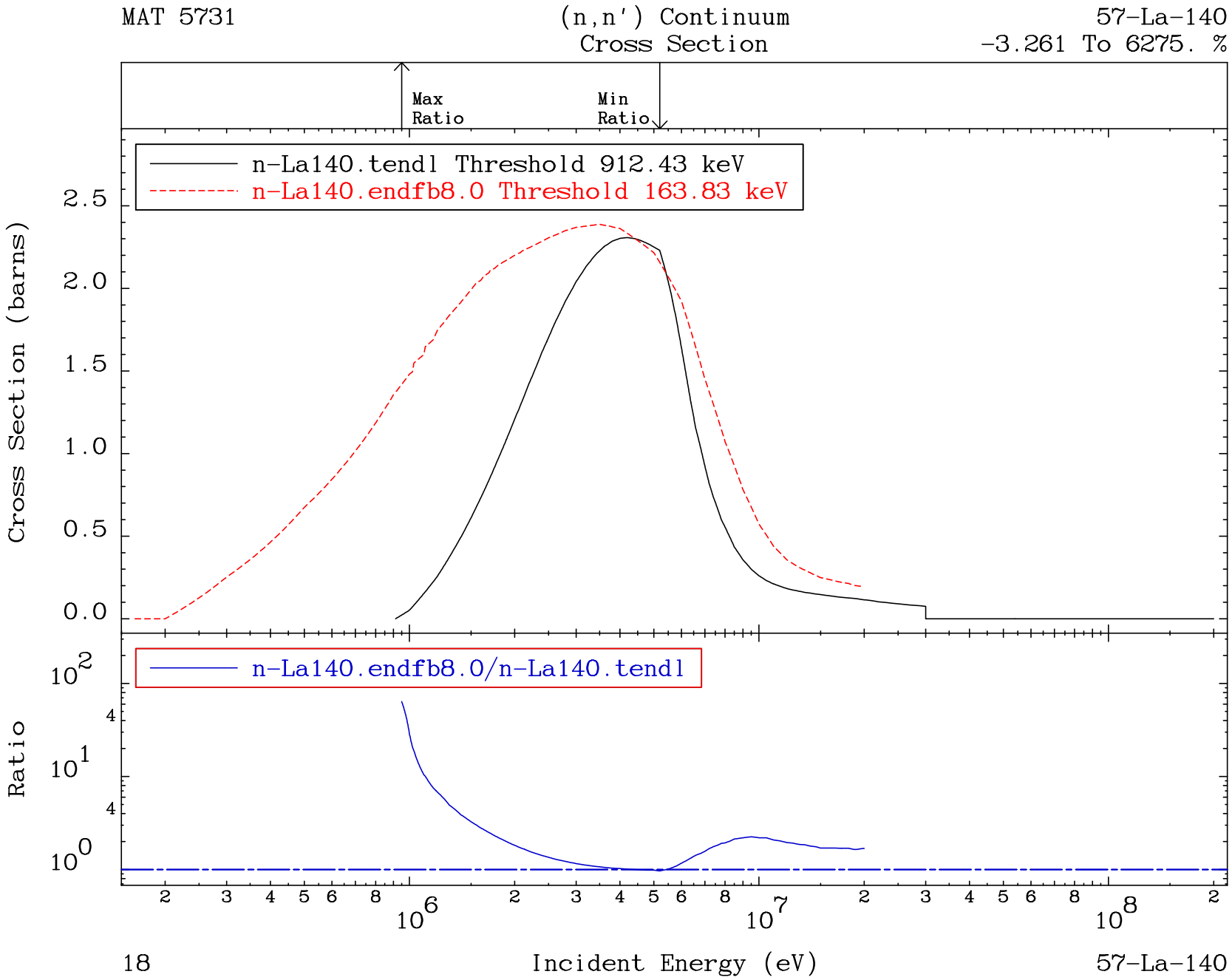

MAT 5731
MT= 54 (n,n') Level
Cross Section
57-La-140
-73.80 To 9999. %
Min Ratio
Max Ratio
n-La140.tendl Threshold 49.236 keV
n-La140.endfb8.0 Threshold 49.212 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
10^1
10^0
5 6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
57-La-140

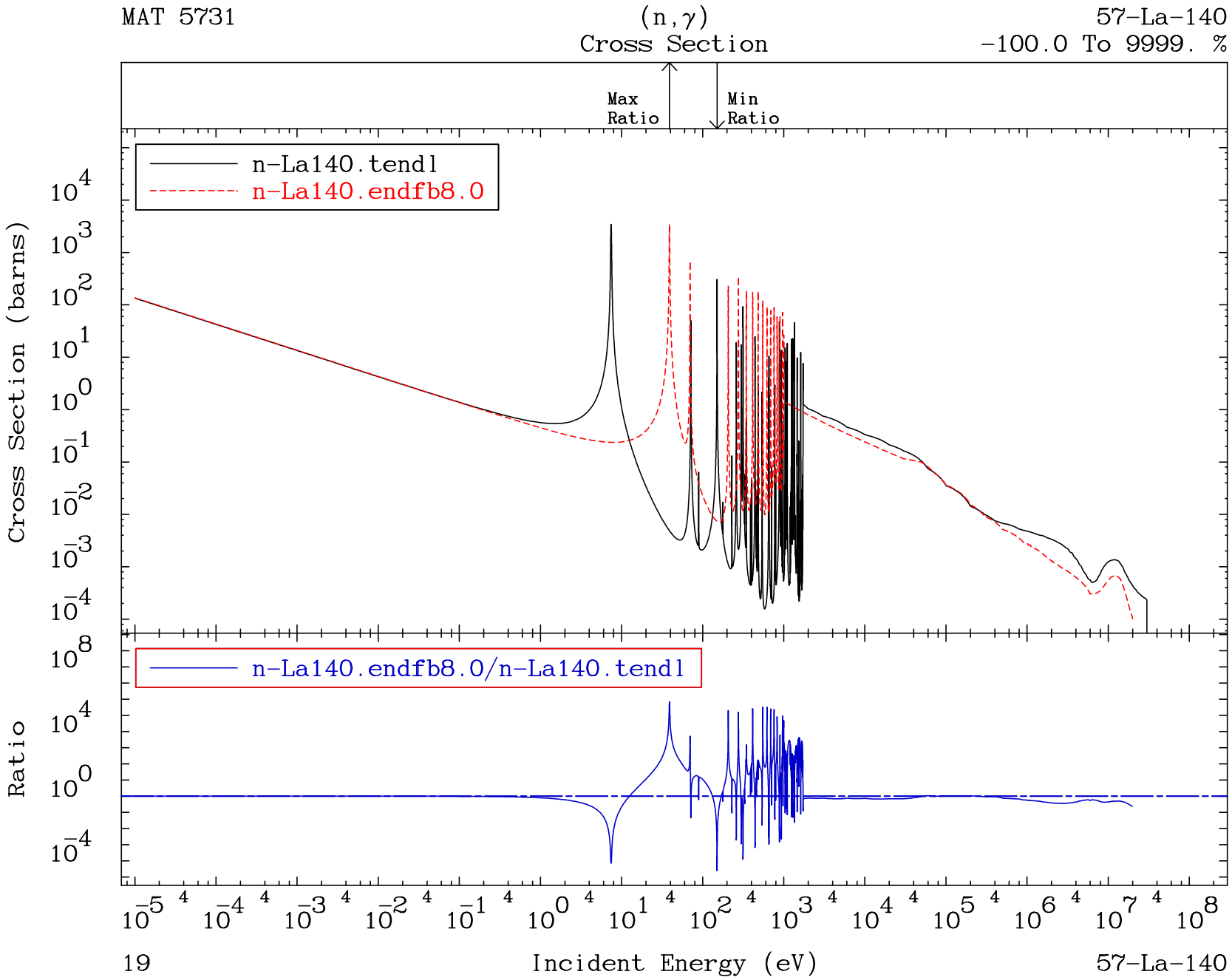

MAT 5731
MT= 55 (n,n') Level
Cross Section
57-La-140
-66.57 To 9999. %
Min Ratio
Max Ratio
n-La140.tendl Threshold 63.635 keV
n-La140.endfb8.0 Threshold 63.625 keV
Cross Section (milli-barns)
400
300
200
100
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
10^1
10^0
6 8 10^5 2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
57-La-140

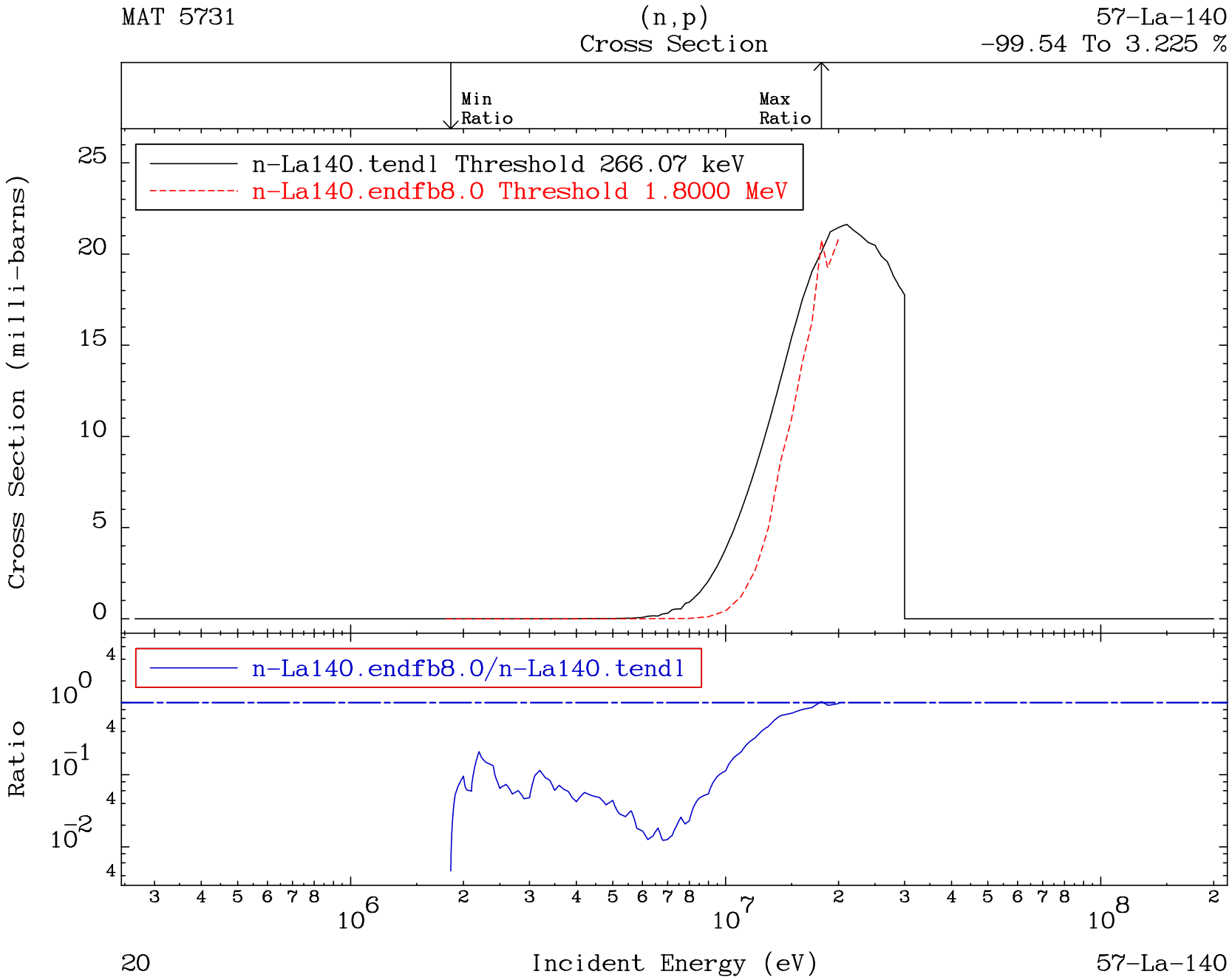

MAT 5731
MT= 56 (n,n') Level
Cross Section
57-La-140
22.56 To 9999. %
Min Ratio
Max Ratio
n-La140.tendl Threshold 93.469 keV
n-La140.endfb8.0 Threshold 93.469 keV
Cross Section (milli-barns)
200
150
100
50
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^3
10^2
10^1
10^0
10^5
10^6
10^7
10^8
Incident Energy (eV)
15
57-La-140

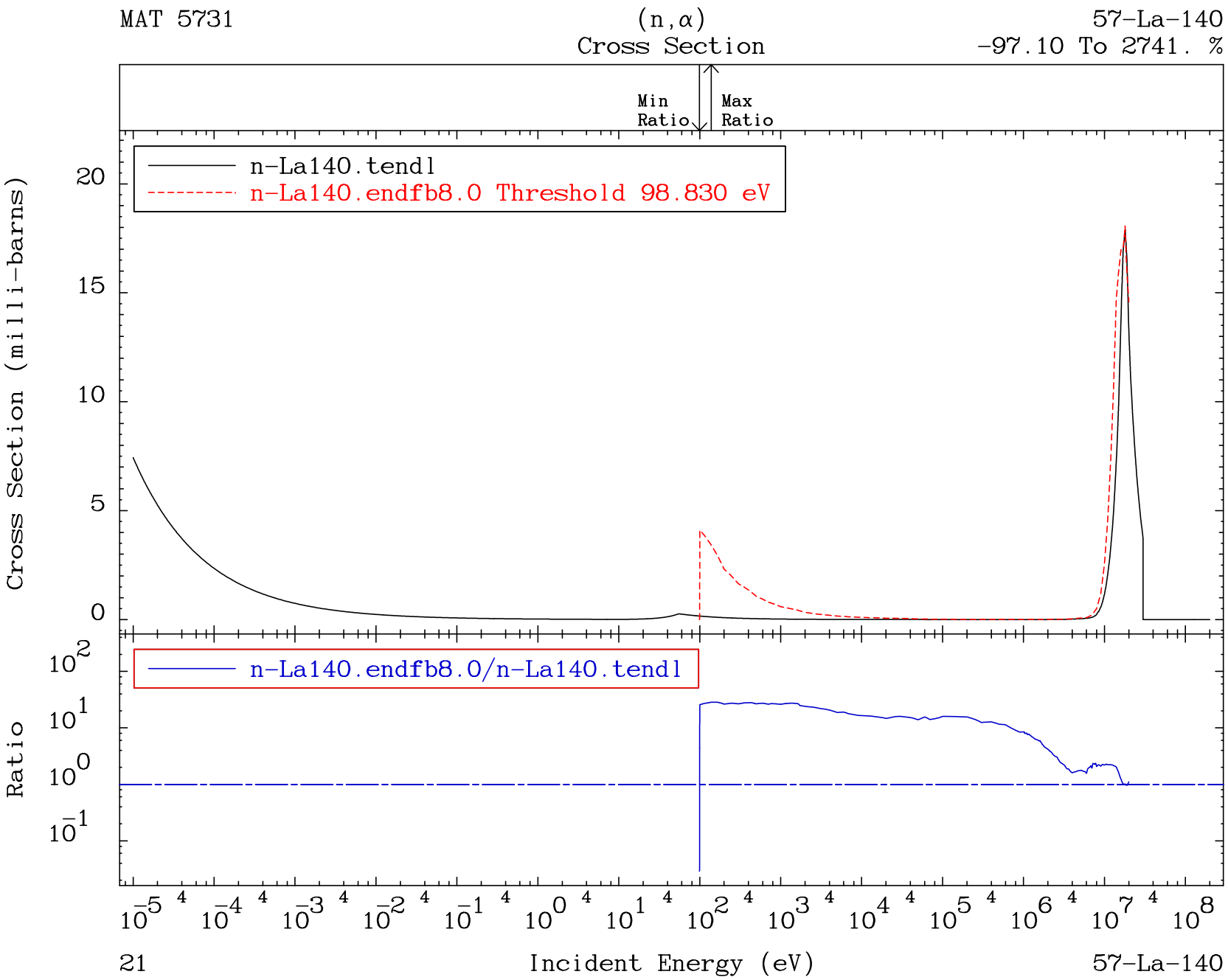

MAT 5731
MT= 57 (n,n') Level
Cross Section
57-La-140
-73.87 To 9999. %
Min
Ratio
Max
Ratio
n-La140.tendl Threshold 104.58 keV
n-La140.endfb8.0 Threshold 104.55 keV
Cross Section (milli-barns)
100
80
60
40
20
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
10^1
10^0
10^5
10^6
10^7
10^8
Incident Energy (eV)
16
57-La-140

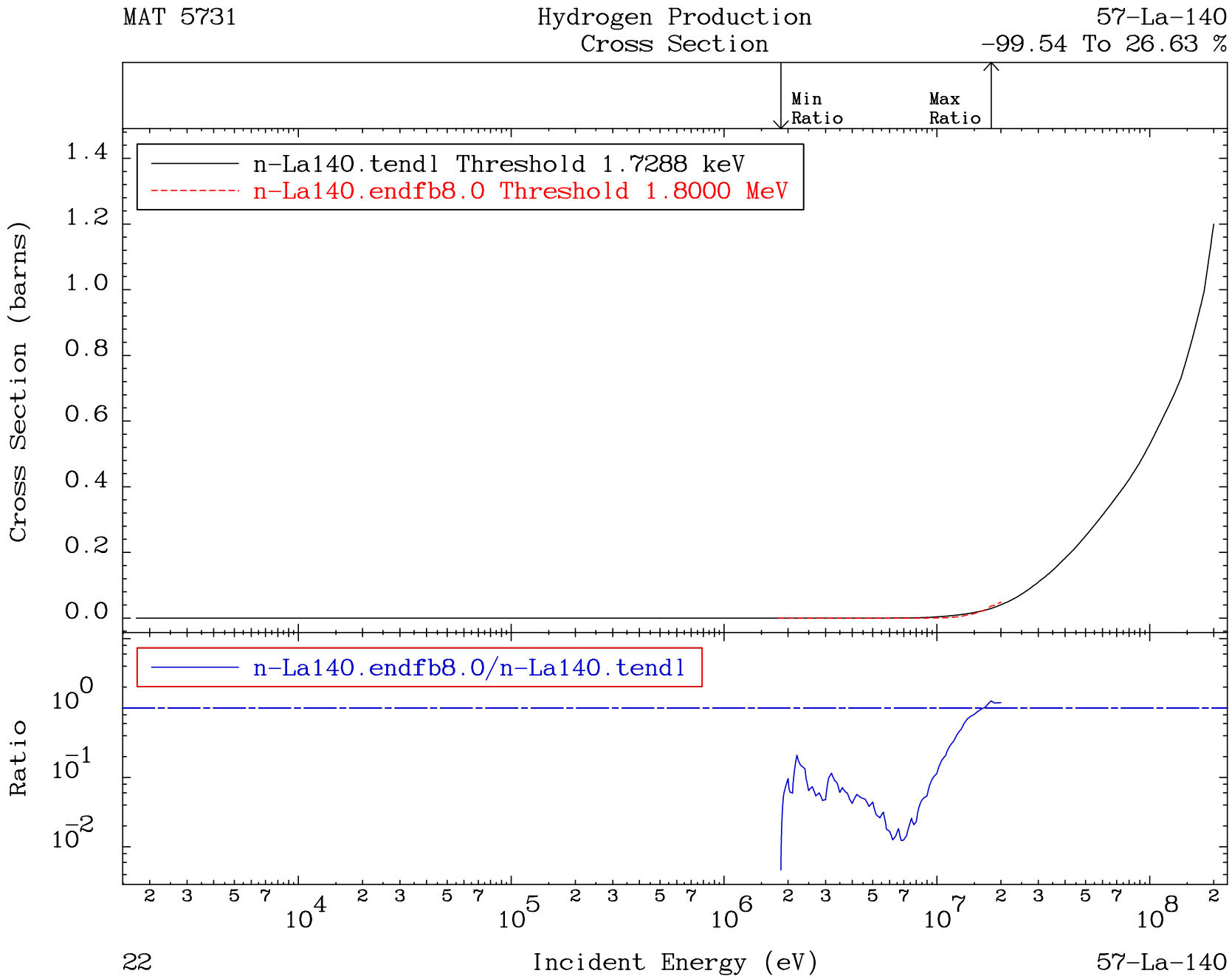

MAT 5731
MT= 58 (n,n') Level
Cross Section
57-La-140
-100.0 To -51.99%
Max
Ratio
Min
Ratio
n-La140.tendl Threshold 106.87 keV
n-La140.endfb8.0 Threshold 163.83 keV
Cross Section (milli-barns)
400
300
200
100
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^0
10^-2
10^-4
10^-6
10^5
10^6
10^7
10^8
2
3
4
5
6
8
17
Incident Energy (eV)
57-La-140

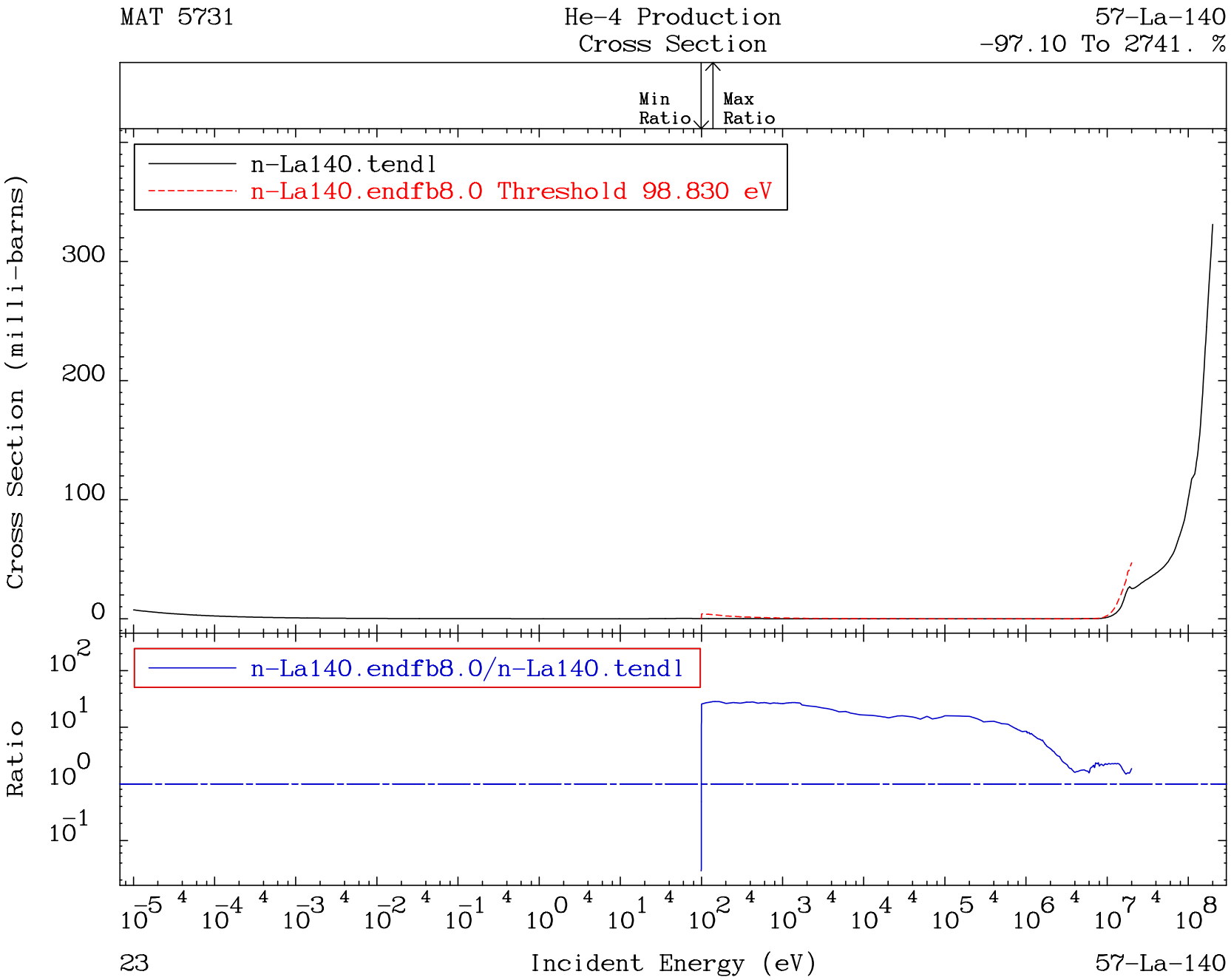

MAT 5731
(n,n') Continuum
Cross Section
57-La-140
-3.261 To 6275. %
Max
Ratio
Min
Ratio
n-La140.tendl Threshold 912.43 keV
n-La140.endfb8.0 Threshold 163.83 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
10^1
10^0
4
4
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
57-La-140

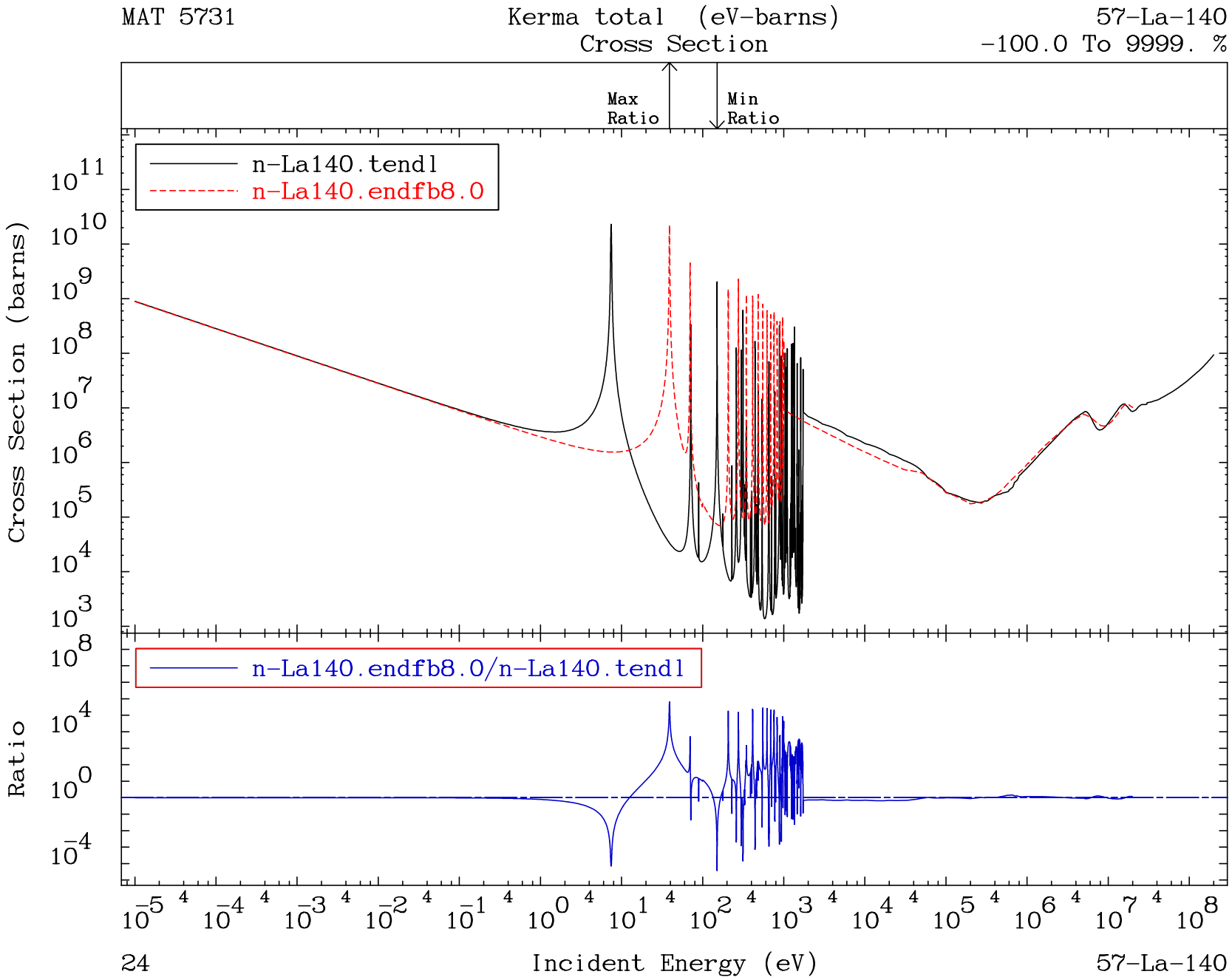

MAT 5731
(n,γ)
Cross Section
57-La-140
-100.0 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
19
57-La-140

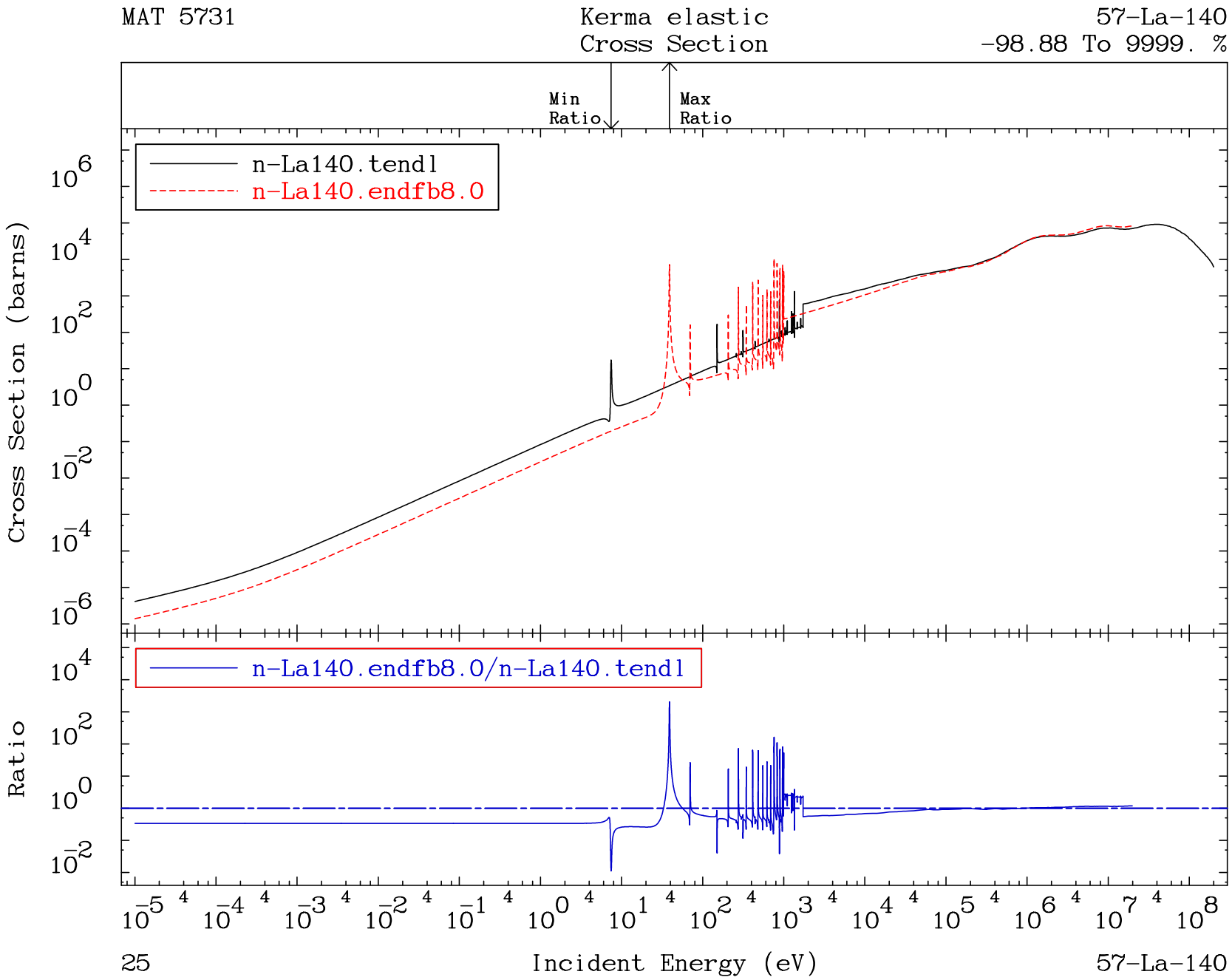

MAT 5731
(n,p)
Cross Section
57-La-140
-99.54 To 3.225 %
Min Ratio
Max Ratio
n-La140.tendl Threshold 266.07 keV
n-La140.endfb8.0 Threshold 1.8000 MeV
Cross Section (milli-barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
20
57-La-140

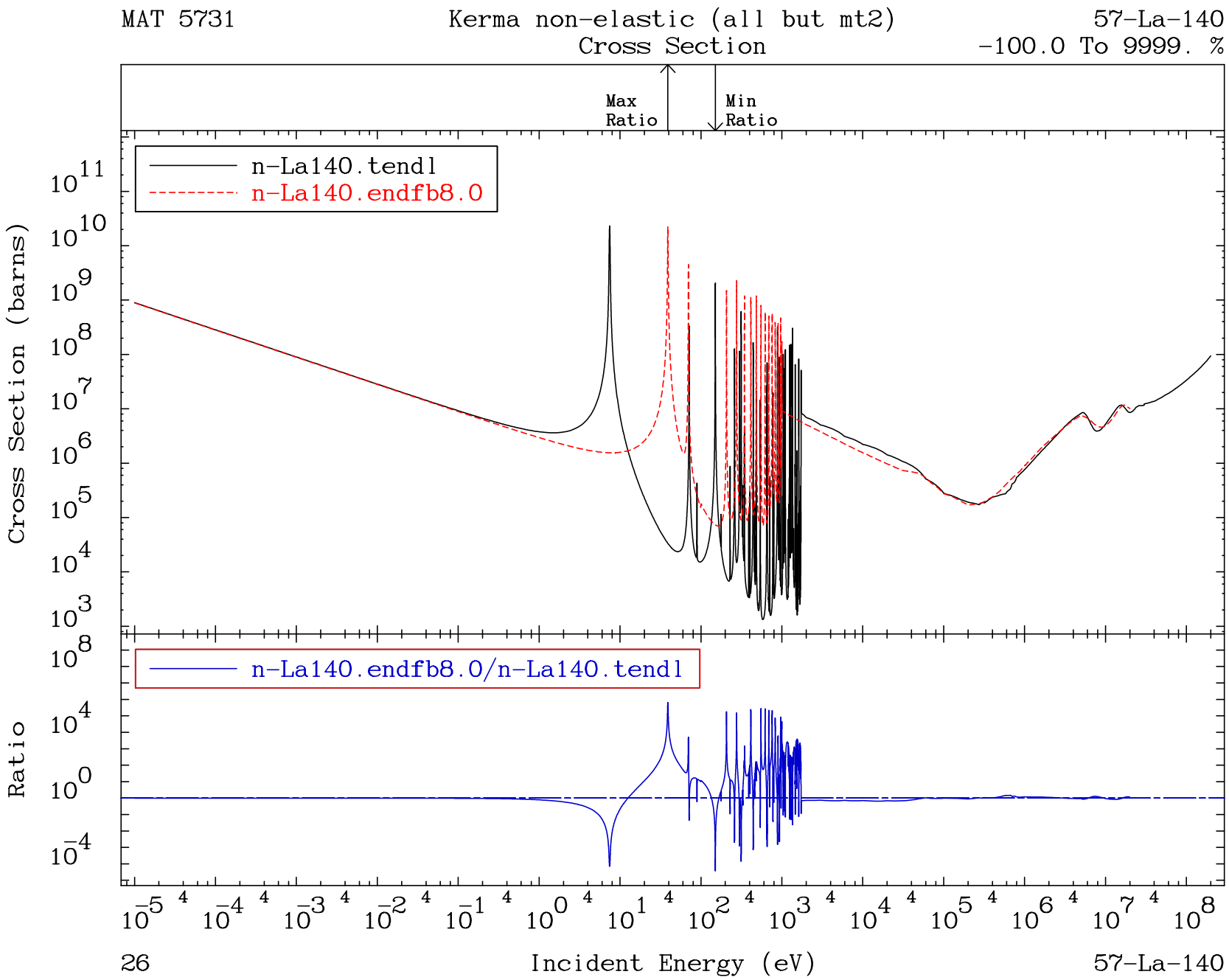

MAT 5731
(n,α)
Cross Section
57-La-140
-97.10 To 2741. %
Min Ratio
Max Ratio
n-La140.tendl
n-La140.endfb8.0 Threshold 98.830 eV
Cross Section (milli-barns)
20
15
10
5
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
10^1
10^0
10^-1
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
21
Incident Energy (eV)
57-La-140

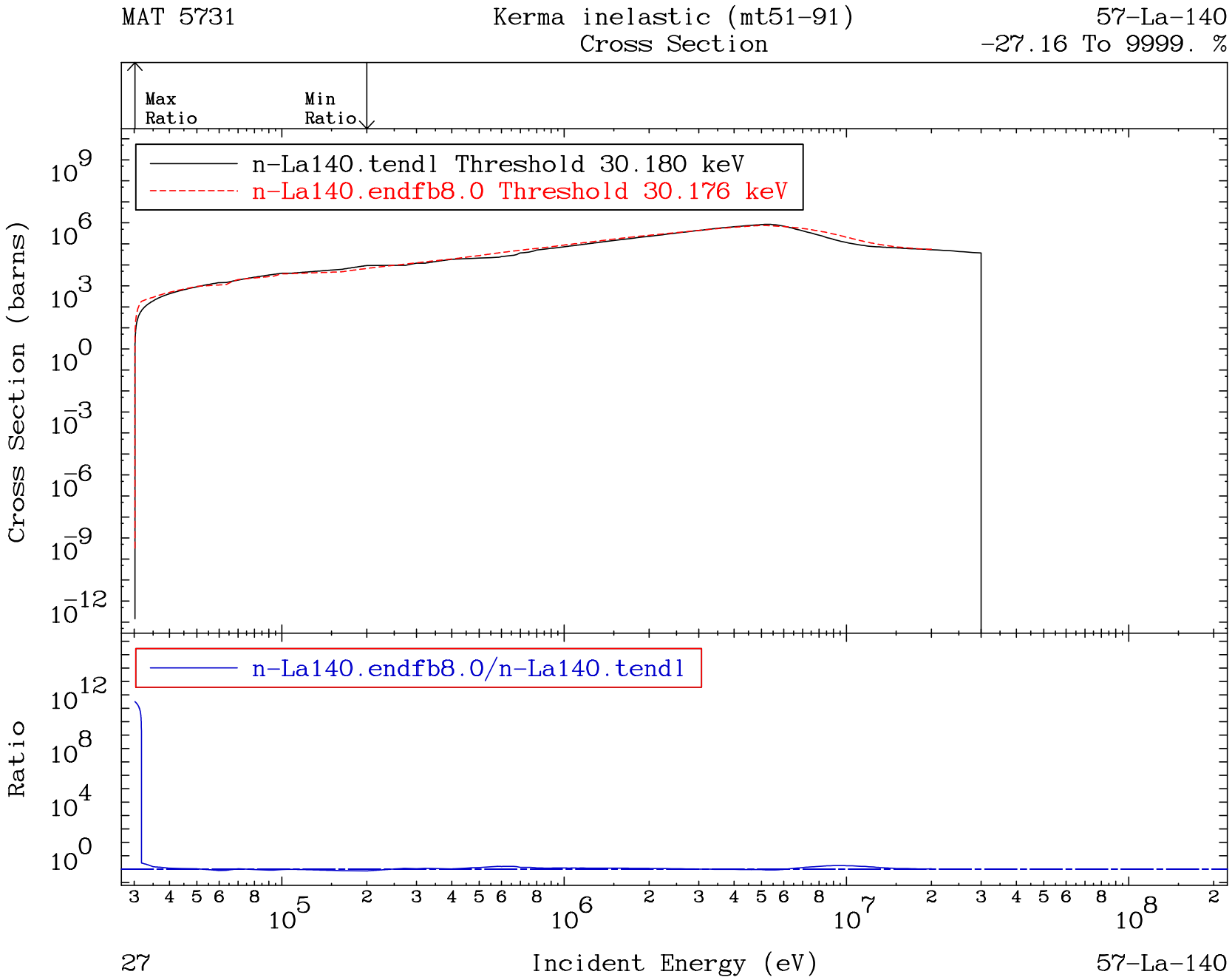

MAT 5731
Hydrogen Production
Cross Section
57-La-140
-99.54 To 26.63 %
Min Ratio
Max Ratio
n-La140.tendl Threshold 1.7288 keV
n-La140.endfb8.0 Threshold 1.8000 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^0
10^-1
10^-2
2 3 5 7 10^4 2 3 5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
22
Incident Energy (eV)
57-La-140

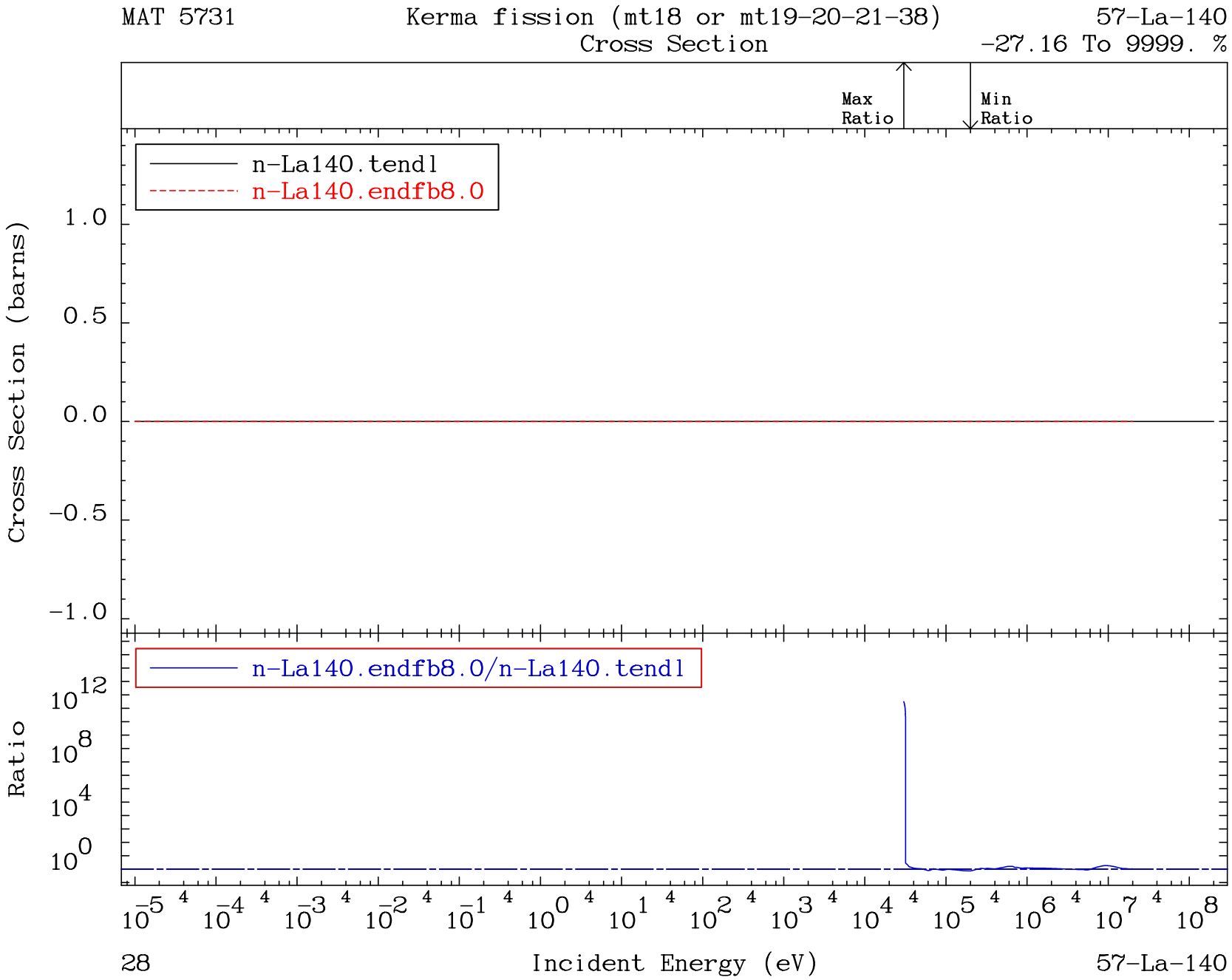

MAT 5731
He-4 Production
Cross Section
57-La-140
-97.10 To 2741. %
Min Ratio
Max Ratio
n-La140.tendl
n-La140.endfb8.0 Threshold 98.830 eV
Cross Section (milli-barns)
300
200
100
0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^2
10^1
10^0
10^-1
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
23
Incident Energy (eV)
57-La-140

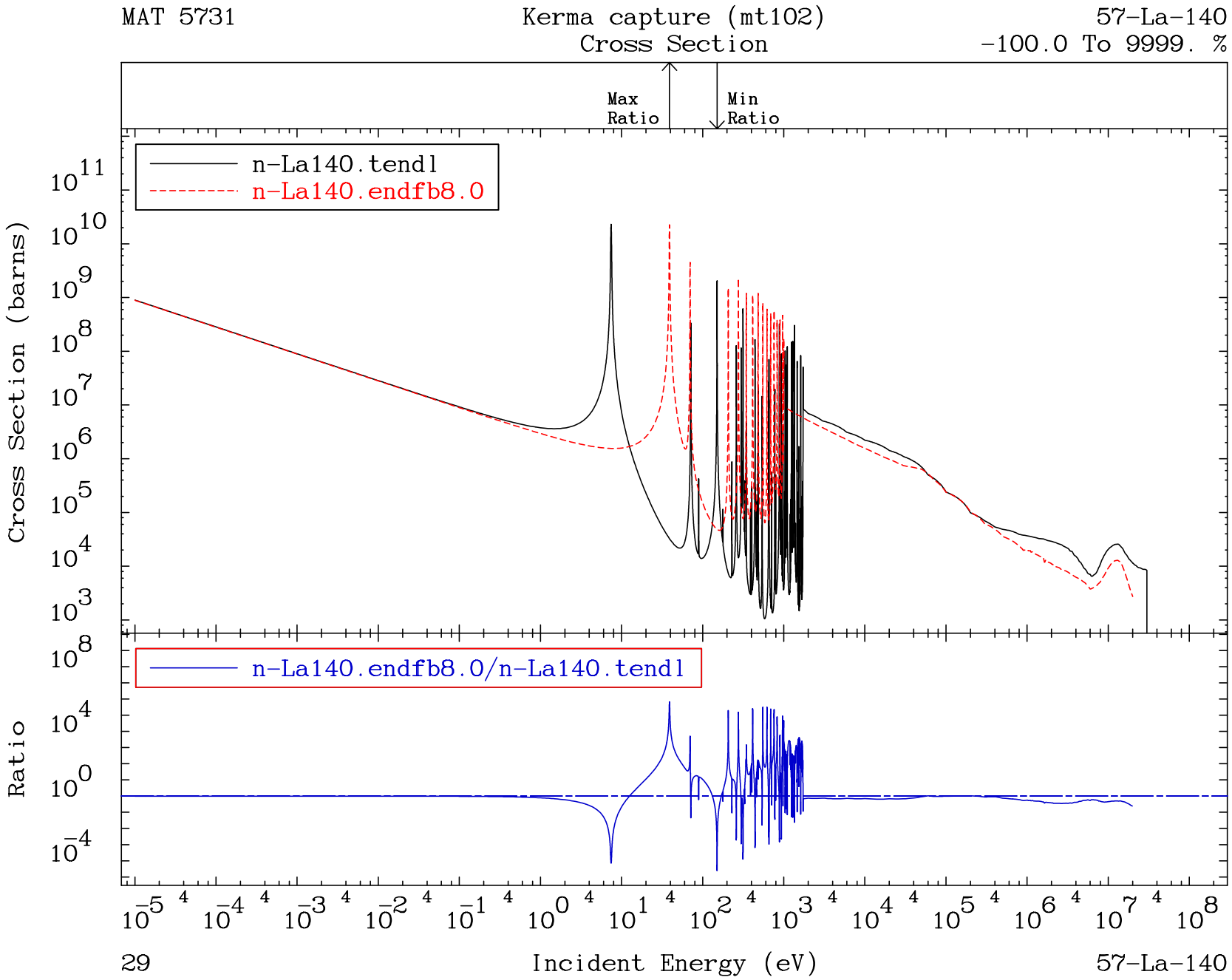

MAT 5731
Kerma total (eV-barns)
Cross Section
57-La-140
-100.0 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
24
57-La-140

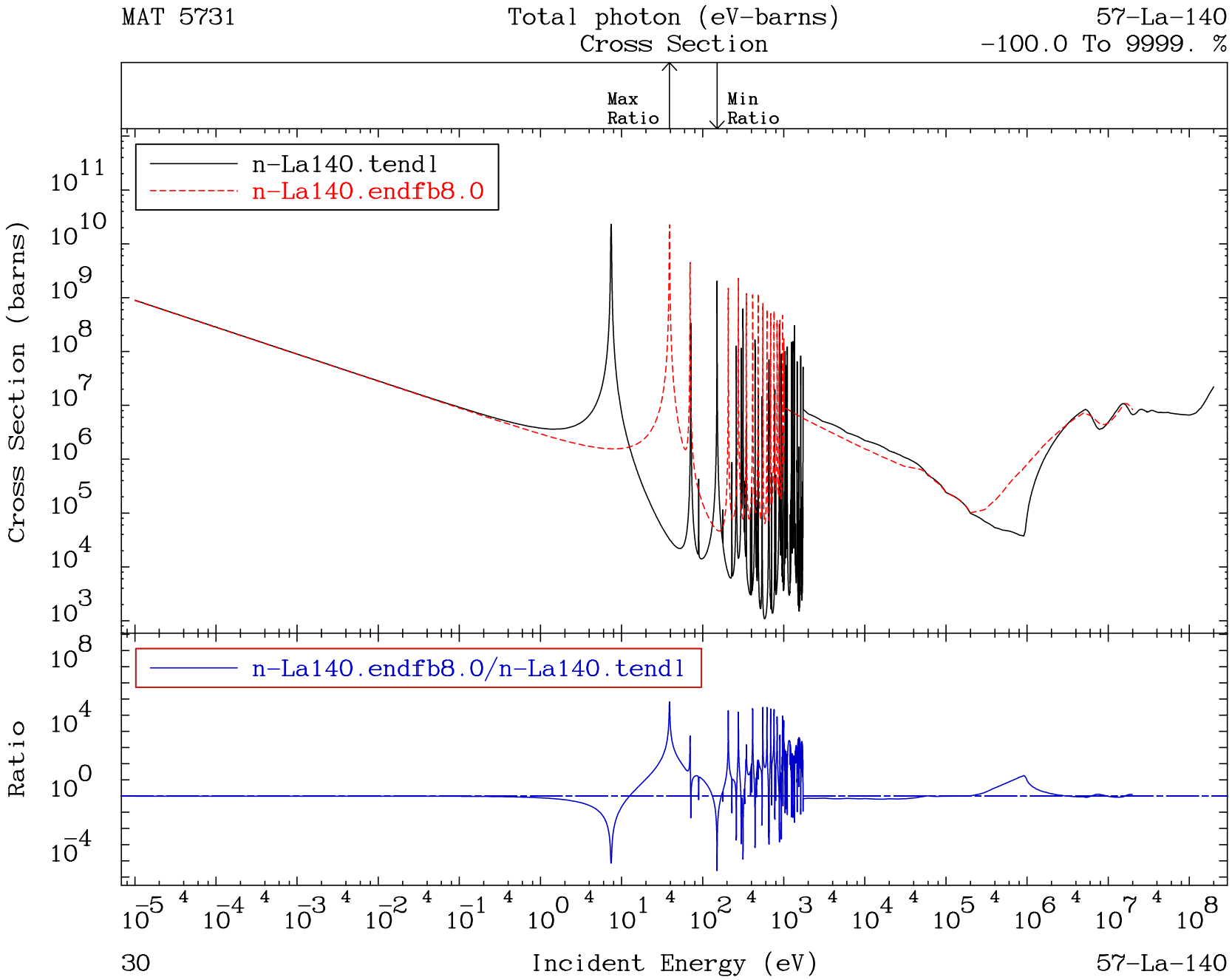

MAT 5731
Kerma elastic
Cross Section
57-La-140
-98.88 To 9999. %
Min
Ratio
Max
Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
Ratio
n-La140.endfb8.0/n-La140.tendl
Incident Energy (eV)
25
57-La-140

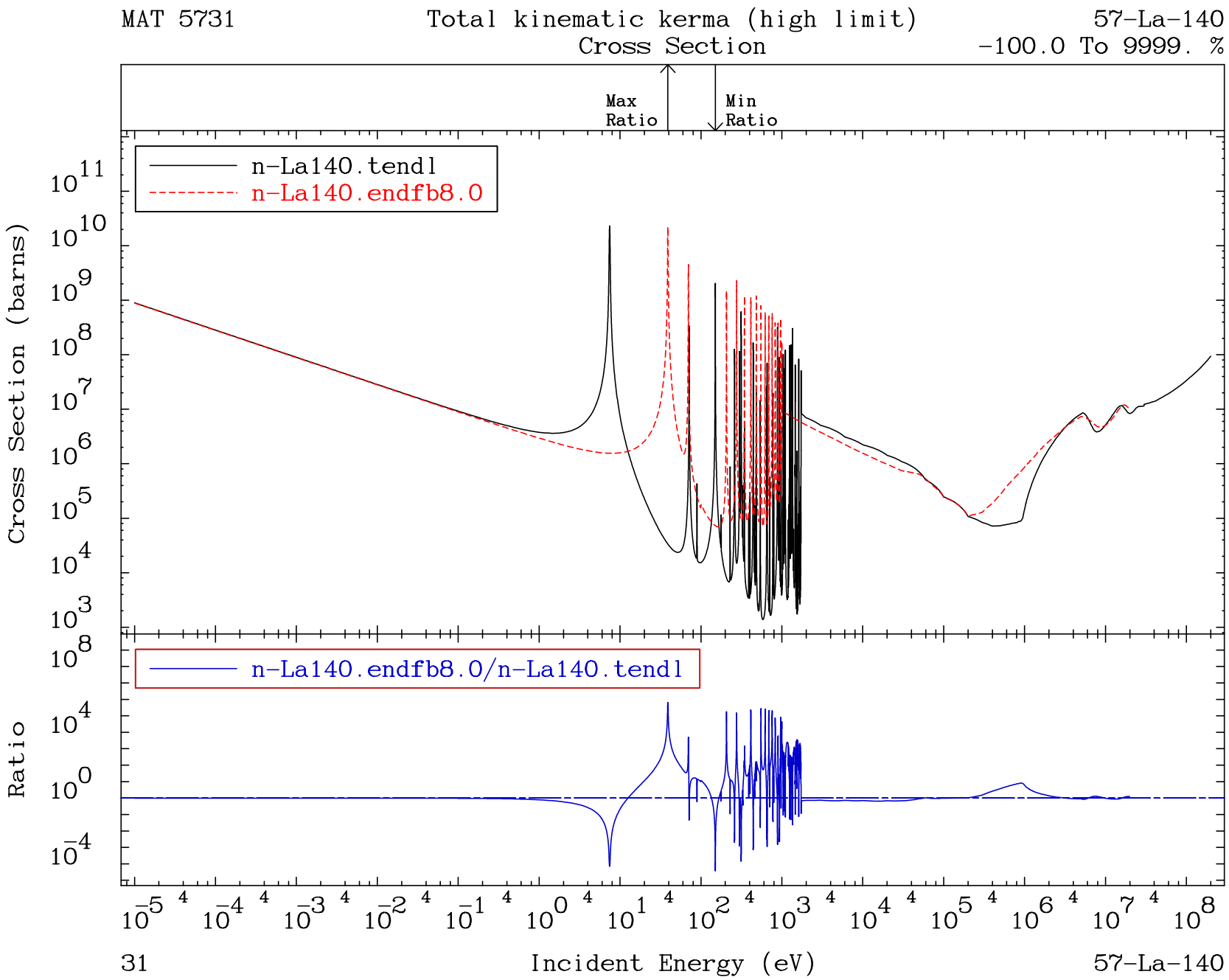

MAT 5731
Kerma non-elastic (all but mt2)
Cross Section
57-La-140
-100.0 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
26
57-La-140

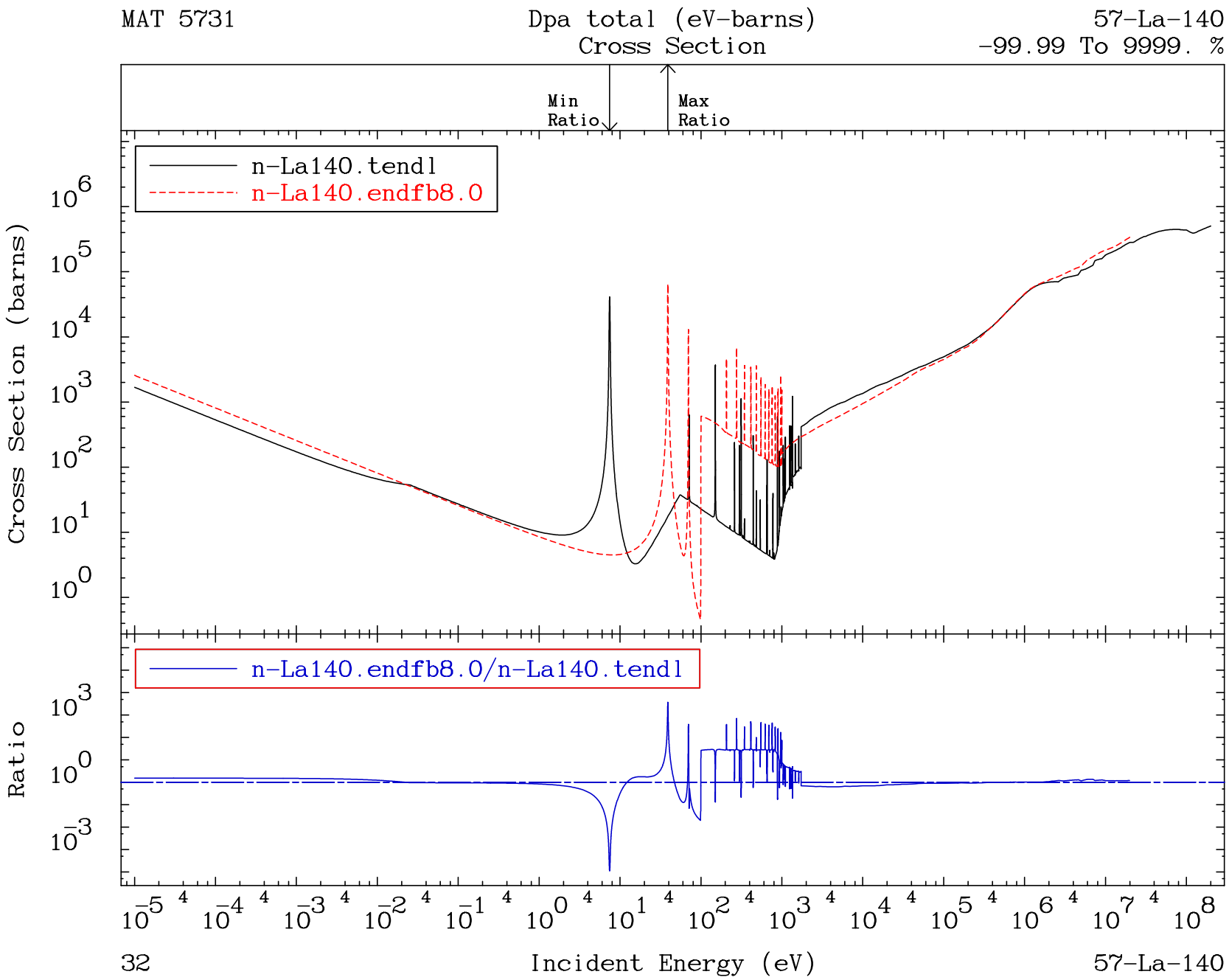

MAT 5731
Kerma inelastic (mt51-91)
Cross Section
57-La-140
-27.16 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl Threshold 30.180 keV
n-La140.endfb8.0 Threshold 30.176 keV
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
27
57-La-140

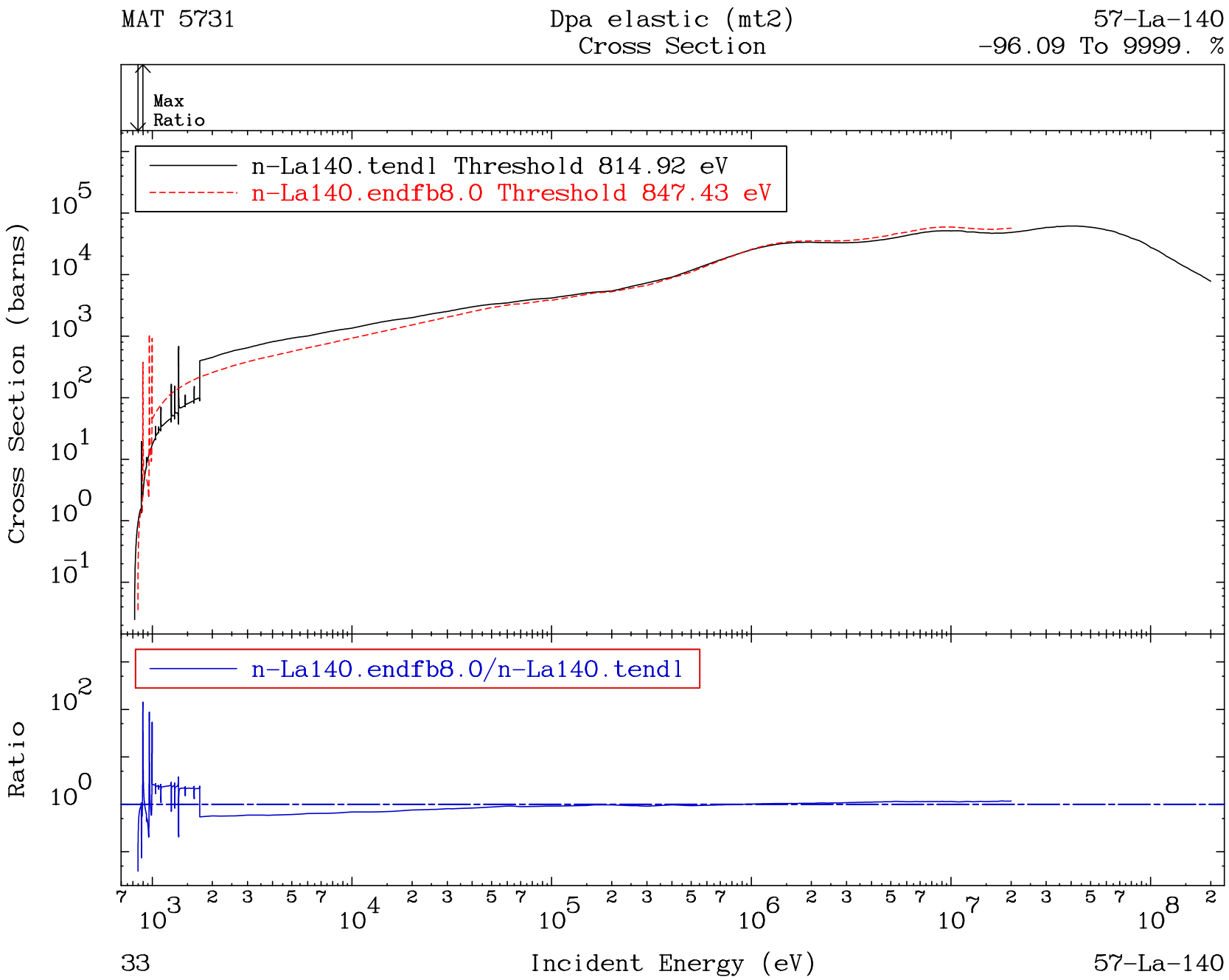

MAT 5731
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
57-La-140
-27.16 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-La140.endfb8.0/n-La140.tendl
Ratio
10^12
10^8
10^4
10^0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
28
Incident Energy (eV)
57-La-140

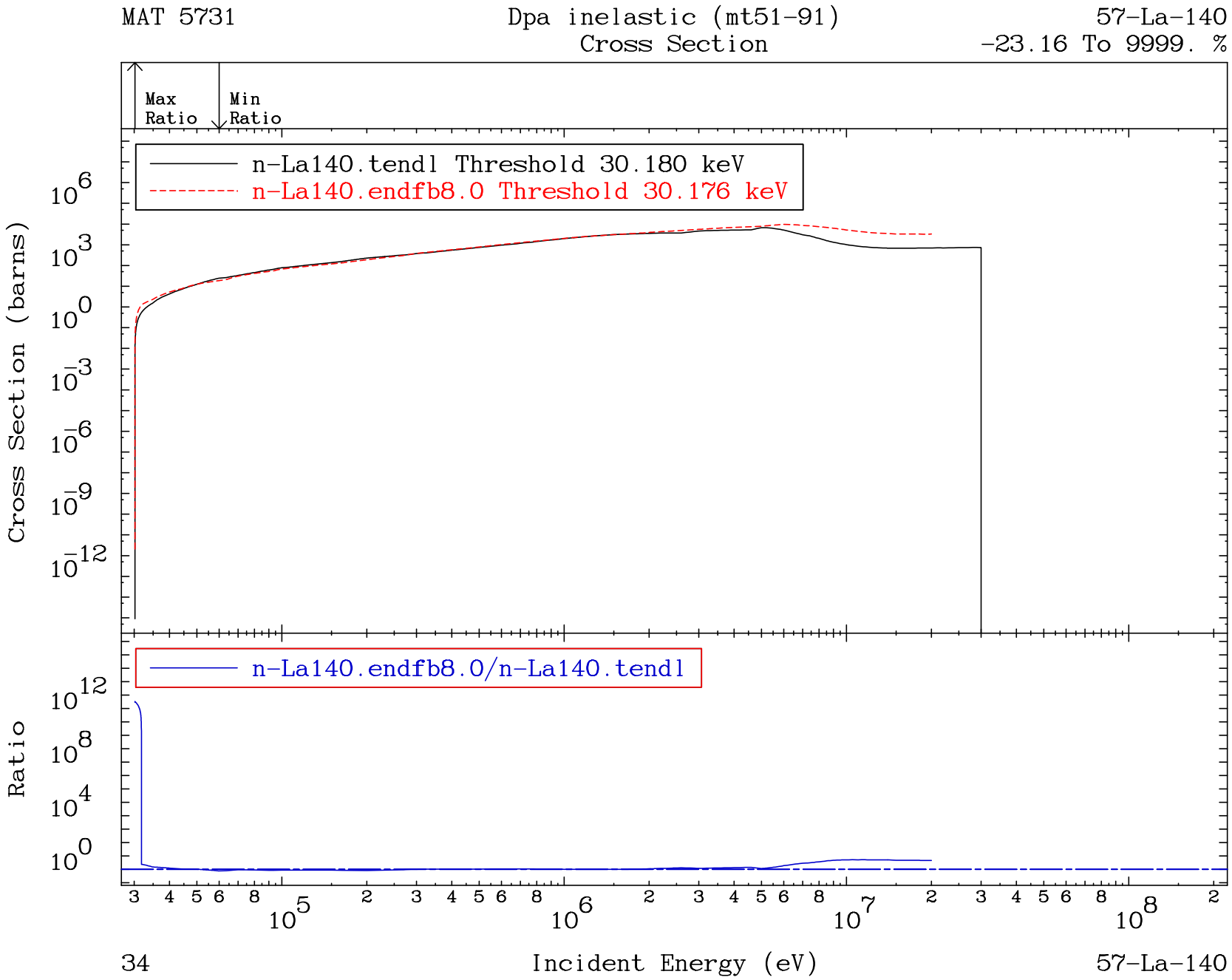

MAT 5731
Kerma capture (mt102)
Cross Section
57-La-140
-100.0 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
29
57-La-140

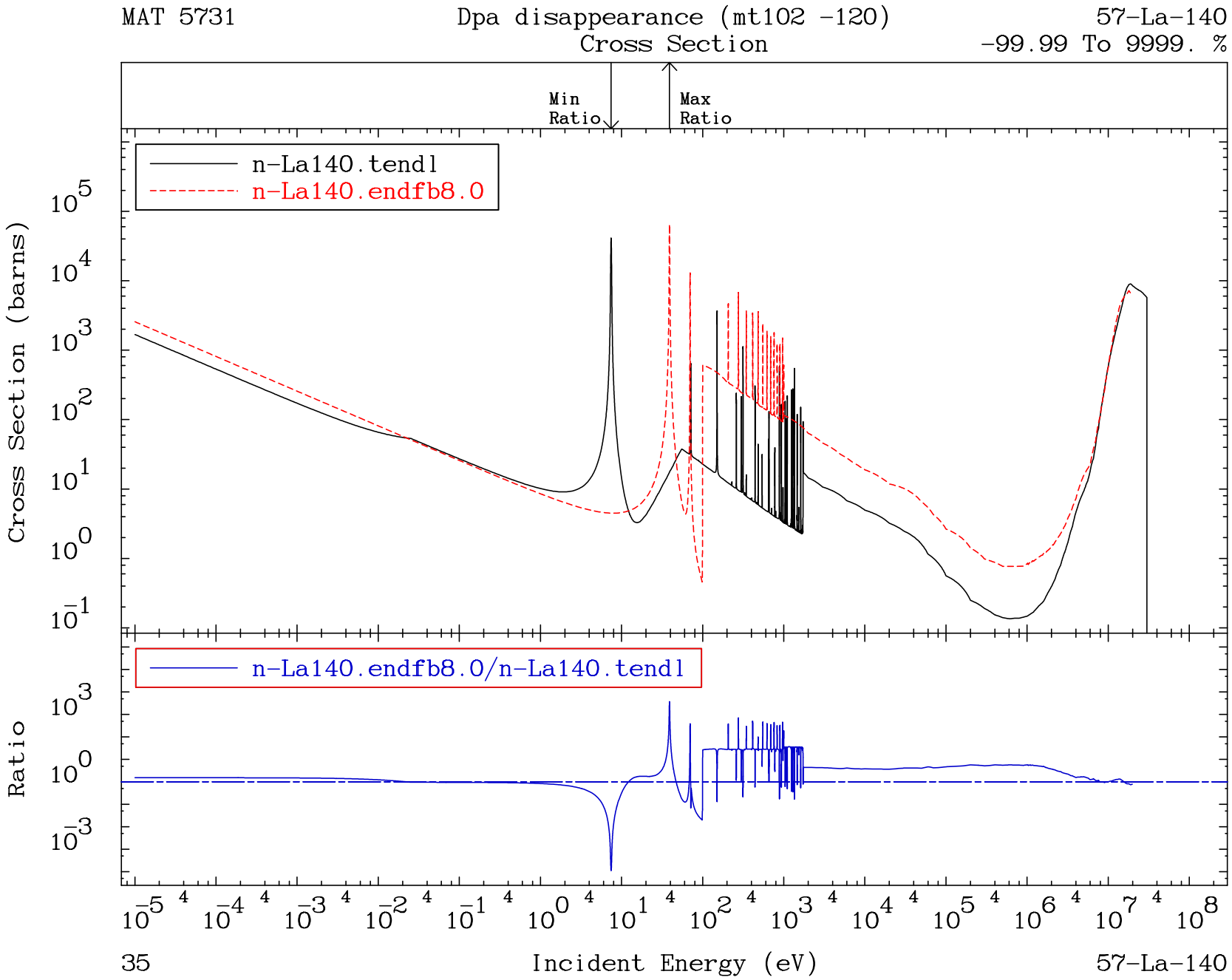

MAT 5731
Total photon (eV-barns)
Cross Section
57-La-140
-100.0 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
30
57-La-140


MAT 5731
Total kinematic kerma (high limit)
Cross Section
57-La-140
-100.0 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
31
57-La-140


MAT 5731
Dpa total (eV-barns)
Cross Section
57-La-140
-99.99 To 9999. %
Min Ratio
Max Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
32
57-La-140


MAT 5731
Dpa elastic (mt2)
Cross Section
57-La-140
-96.09 To 9999. %
Max
Ratio
n-La140.tendl Threshold 814.92 eV
n-La140.endfb8.0 Threshold 847.43 eV
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
33
Incident Energy (eV)
57-La-140


MAT 5731
Dpa inelastic (mt51-91)
Cross Section
57-La-140
-23.16 To 9999. %
Max Ratio
Min Ratio
n-La140.tendl Threshold 30.180 keV
n-La140.endfb8.0 Threshold 30.176 keV
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
34
57-La-140


MAT 5731
Dpa disappearance (mt102 -120)
Cross Section
57-La-140
-99.99 To 9999. %
Min Ratio
Max Ratio
n-La140.tendl
n-La140.endfb8.0
Cross Section (barns)
n-La140.endfb8.0/n-La140.tendl
Ratio
Incident Energy (eV)
35
57-La-140