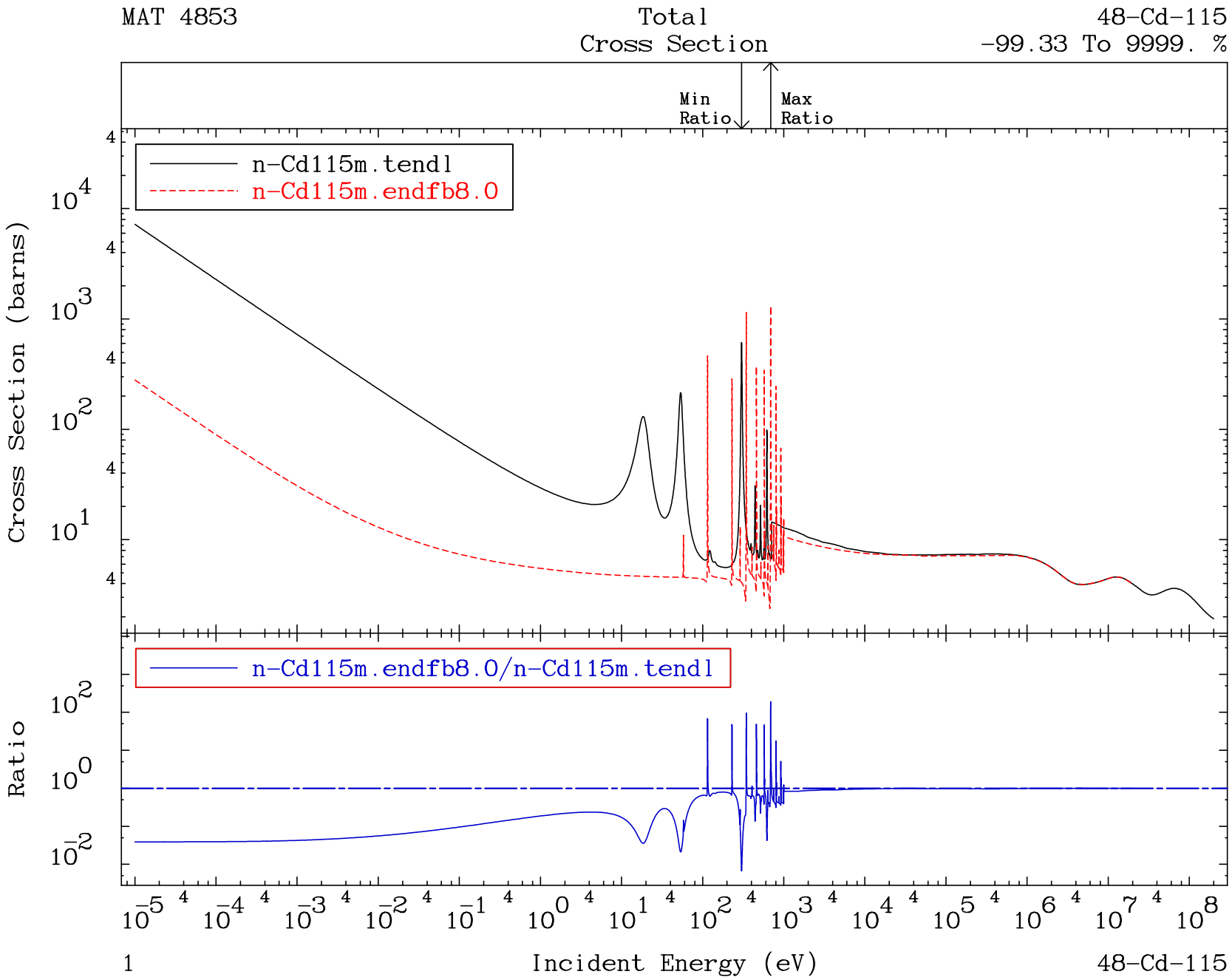
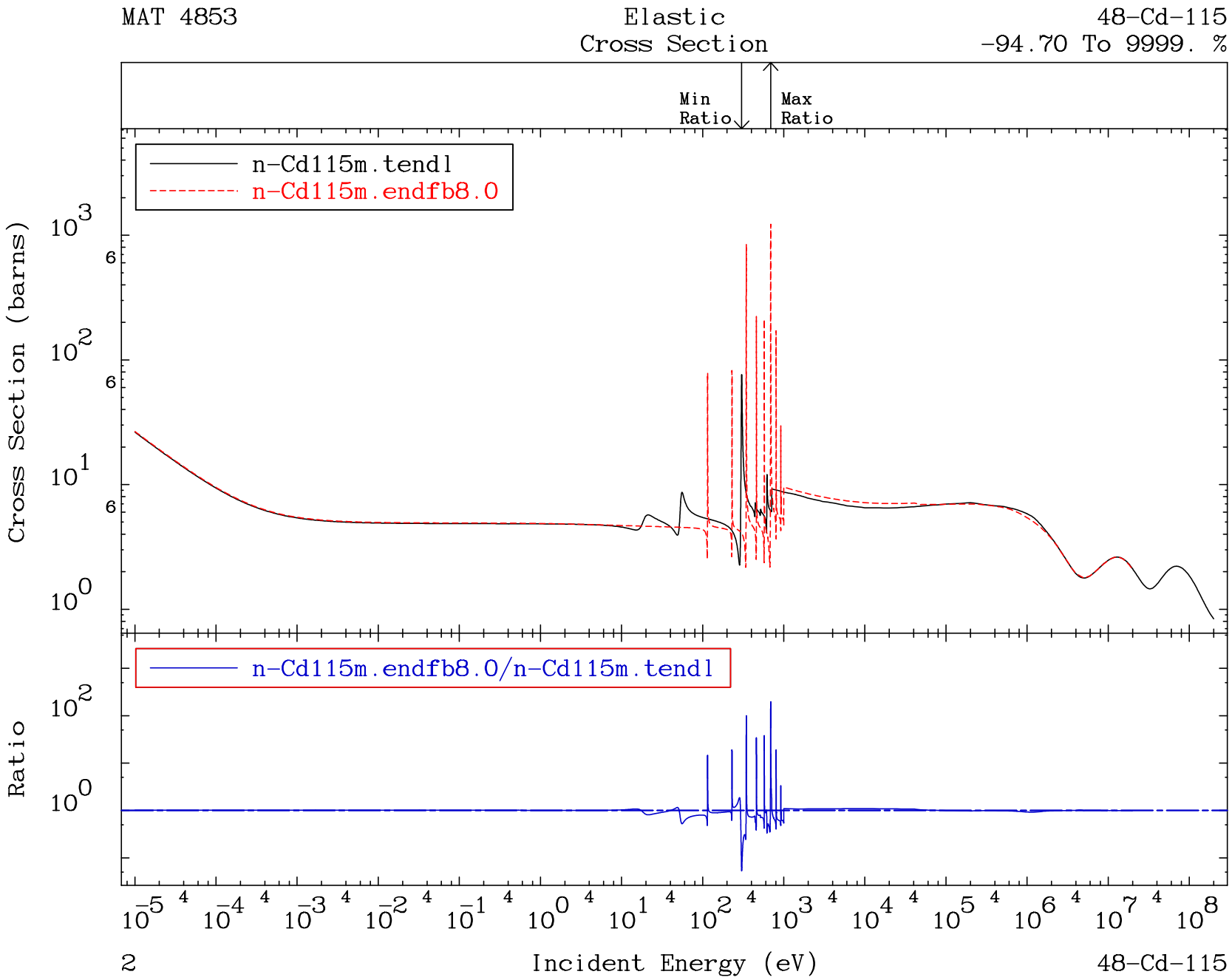
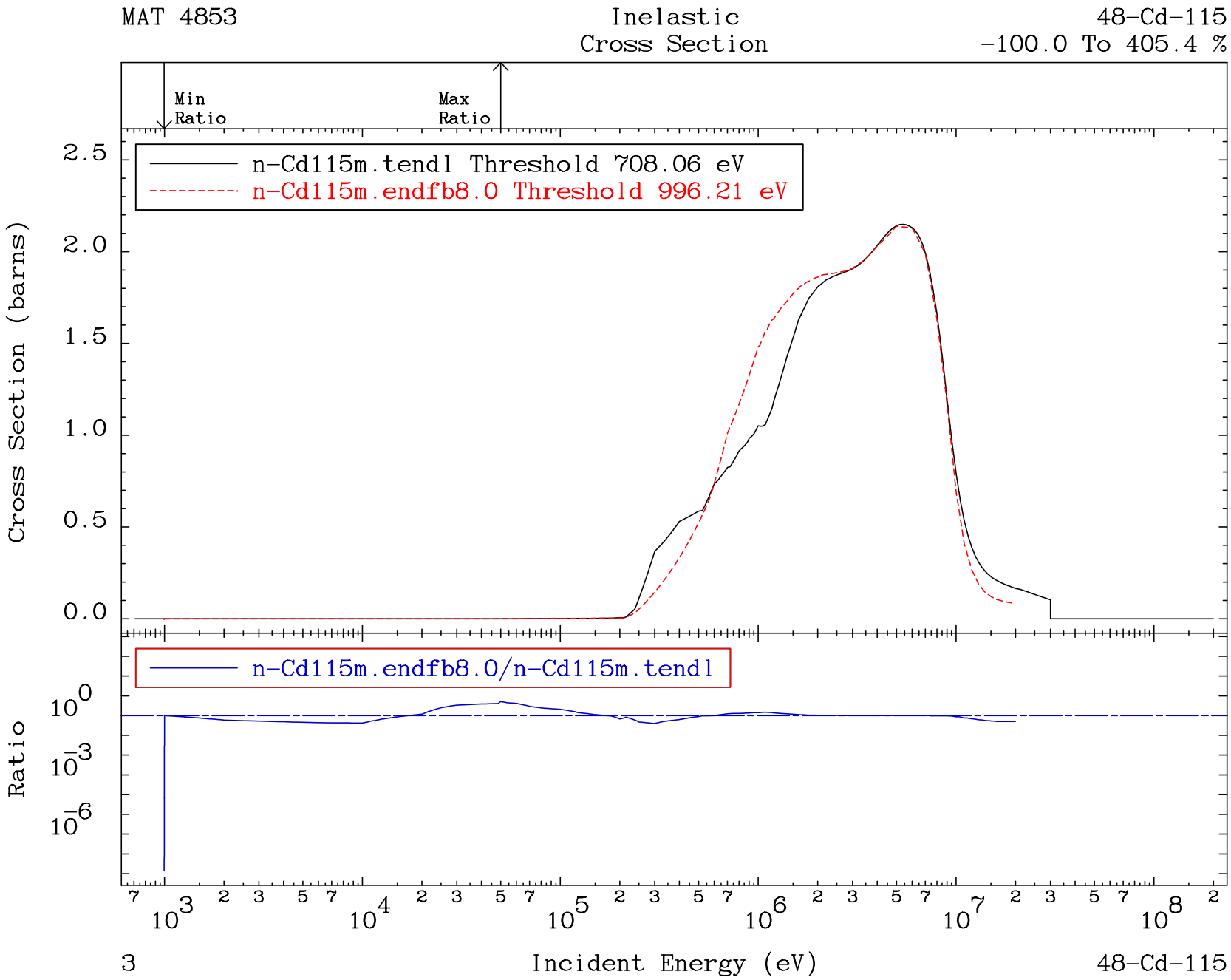
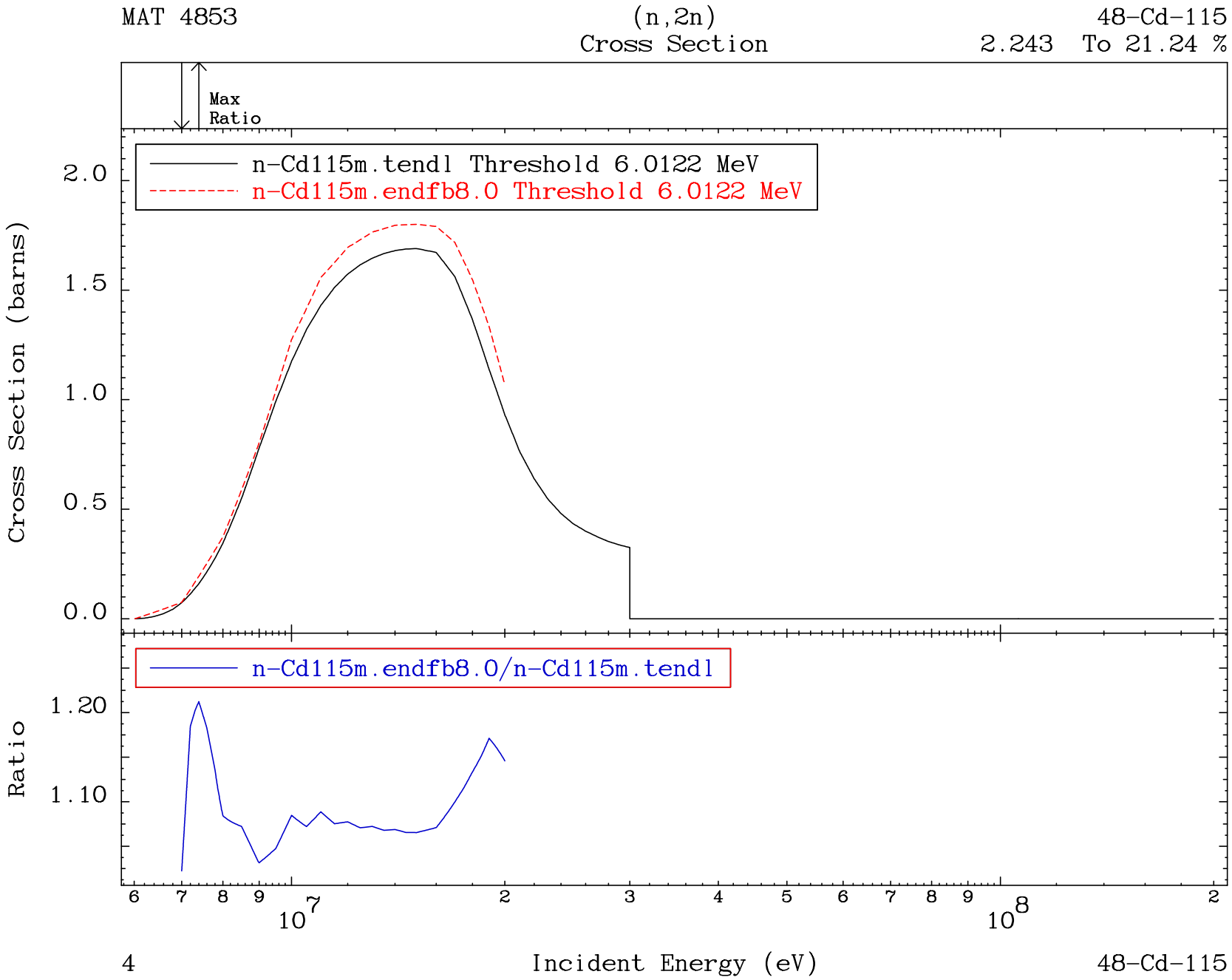
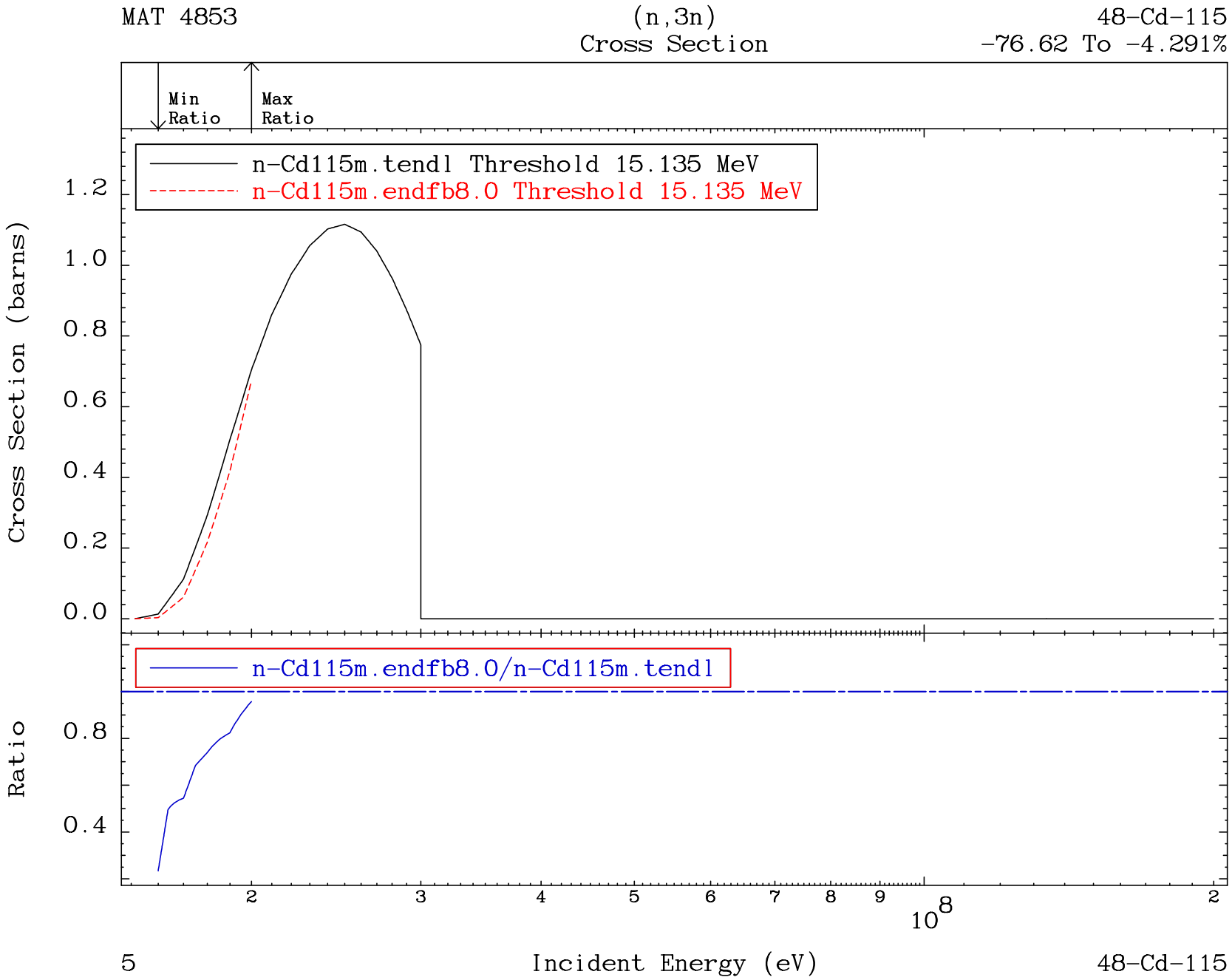
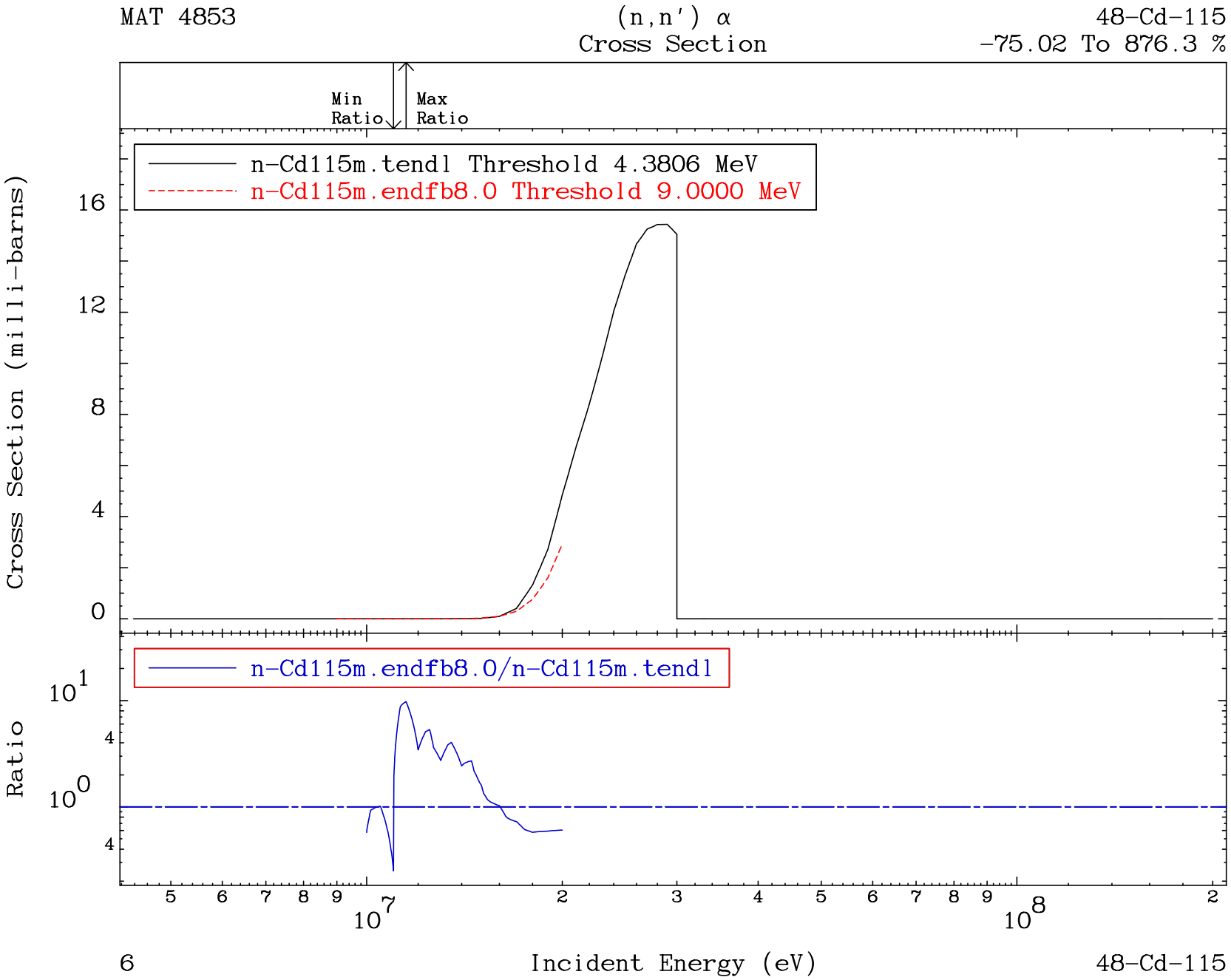

MAT 4853
Total
Cross Section
48-Cd-115
-99.33 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
1
48-Cd-115

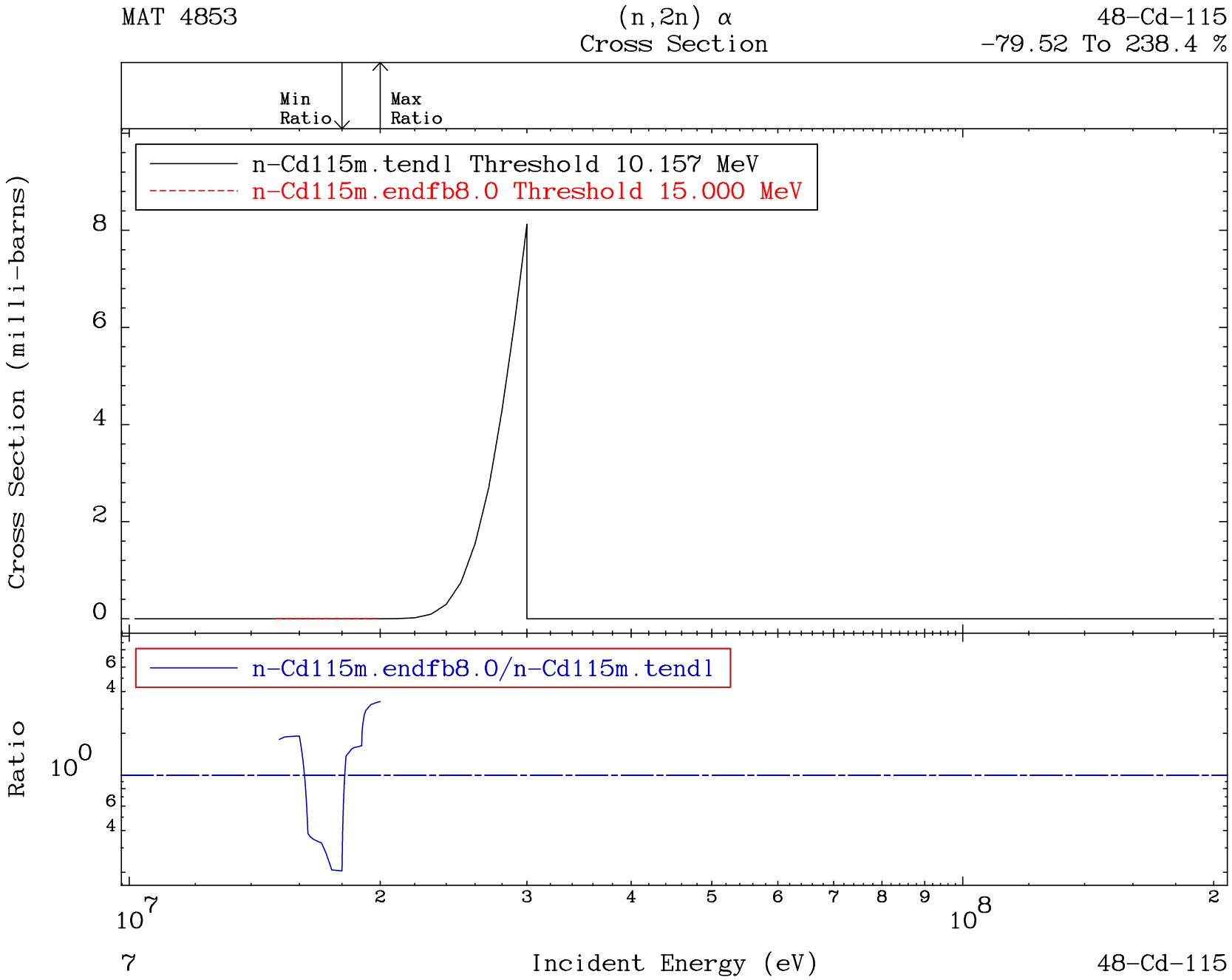

MAT 4853
Elastic
Cross Section
48-Cd-115
-94.70 To 9999. %
Min Ratio
Max Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
2
48-Cd-115

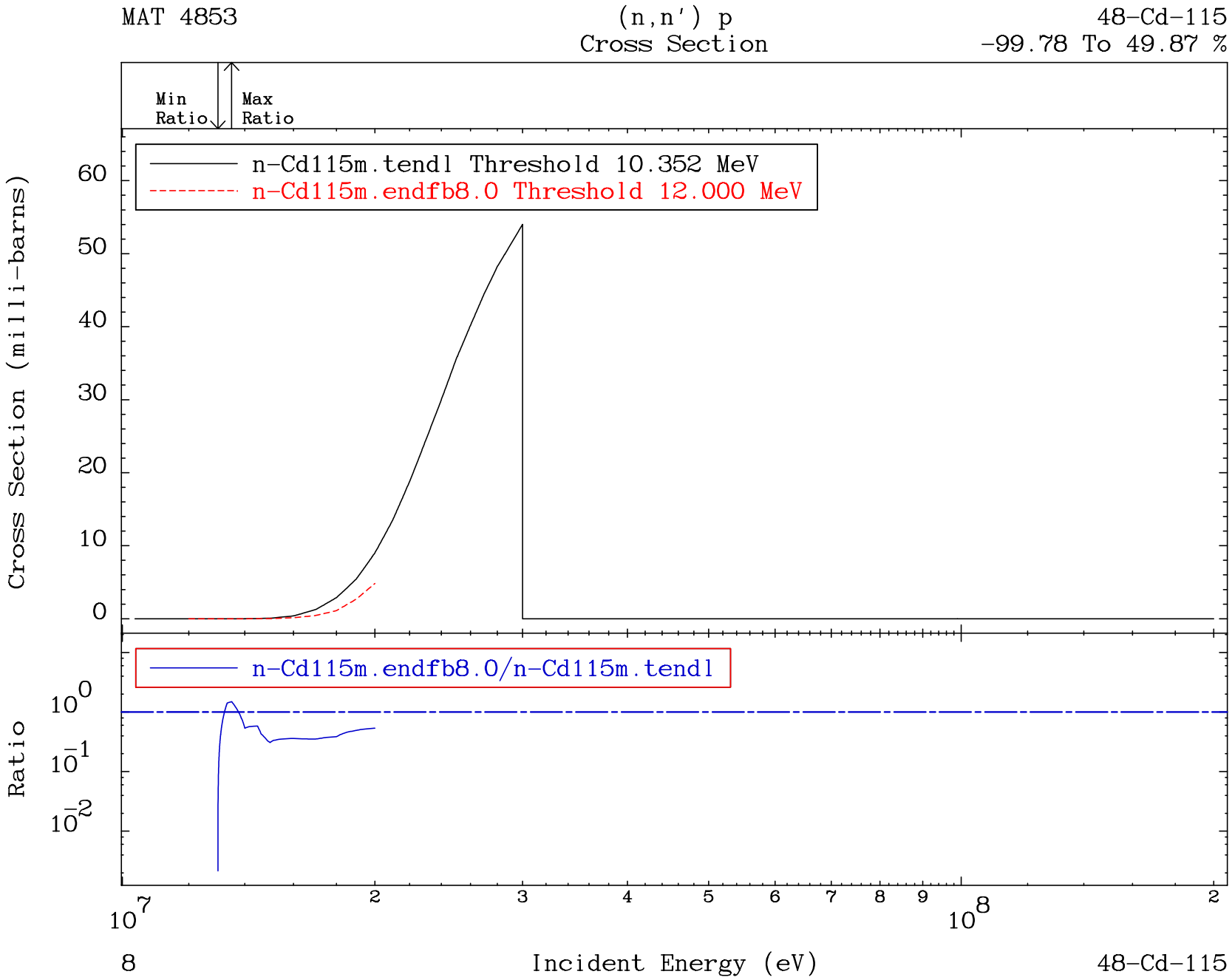

MAT 4853
Inelastic
Cross Section
48-Cd-115
-100.0 To 405.4 %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 708.06 eV
n-Cd115m.endfb8.0 Threshold 996.21 eV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^0
10^-3
10^-6
7 2 3 5 7 2 3 5 7 2 3 5 7 2 3 5 7 2 3 5 7 2
10^3
10^4
10^5
10^6
10^7
10^8
3
Incident Energy (eV)
48-Cd-115

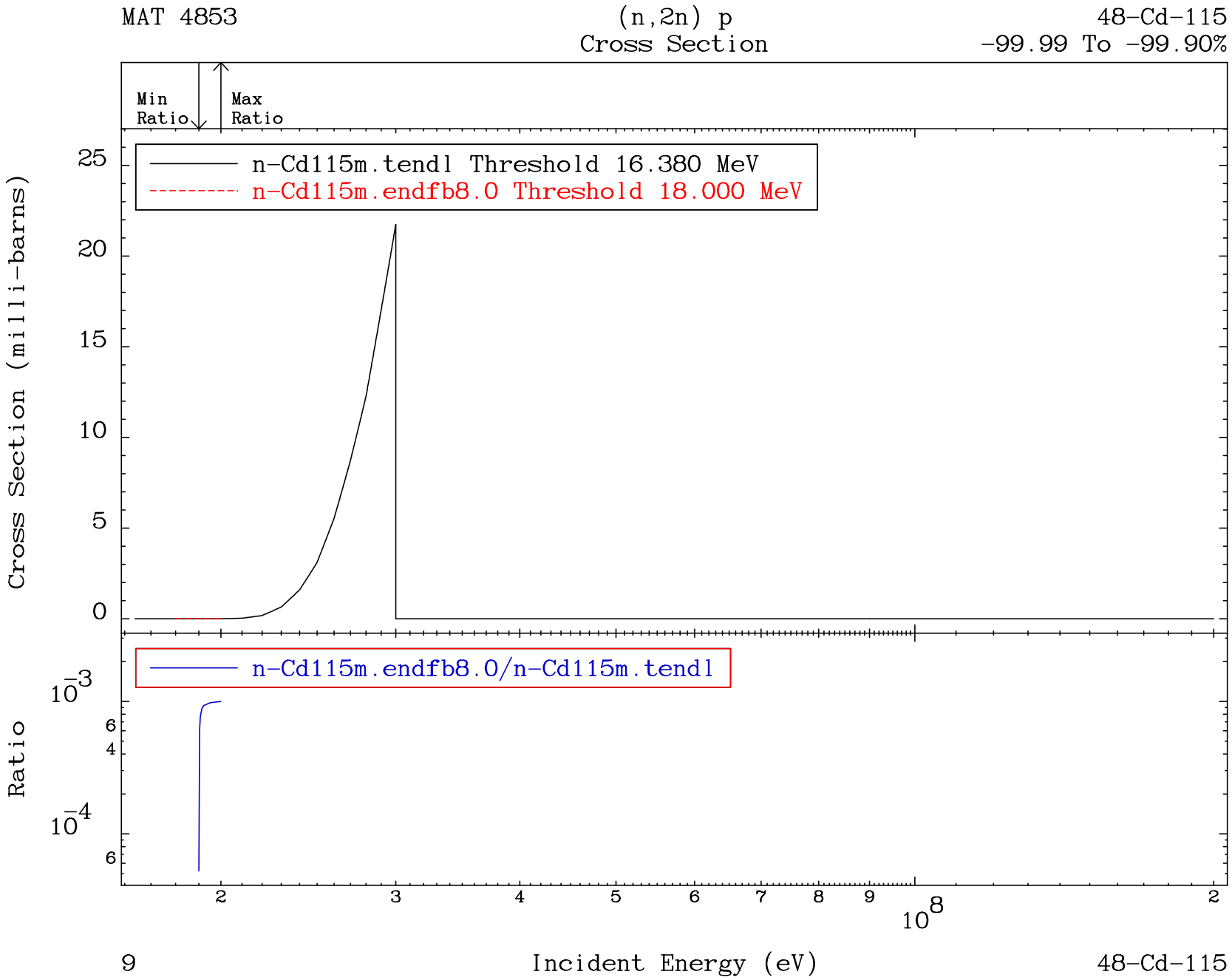

MAT 4853
(n,2n)
Cross Section
48-Cd-115
2.243 To 21.24 %
Max
Ratio
n-Cd115m.tendl Threshold 6.0122 MeV
n-Cd115m.endfb8.0 Threshold 6.0122 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
1.20
1.10
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
4
Incident Energy (eV)
48-Cd-115

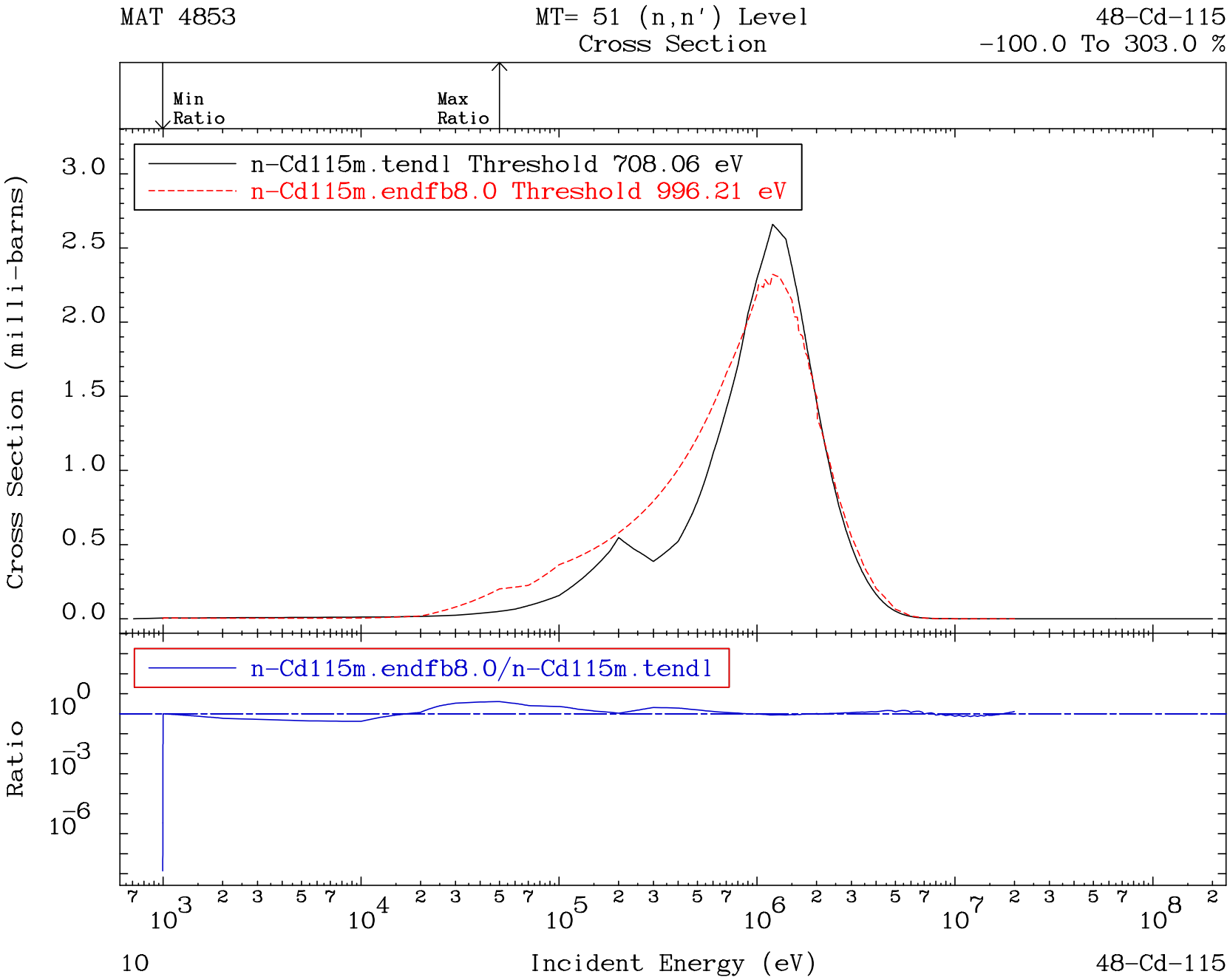

MAT 4853
(n,3n)
Cross Section
48-Cd-115
-76.62 To -4.291%
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 15.135 MeV
n-Cd115m.endfb8.0 Threshold 15.135 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
48-Cd-115

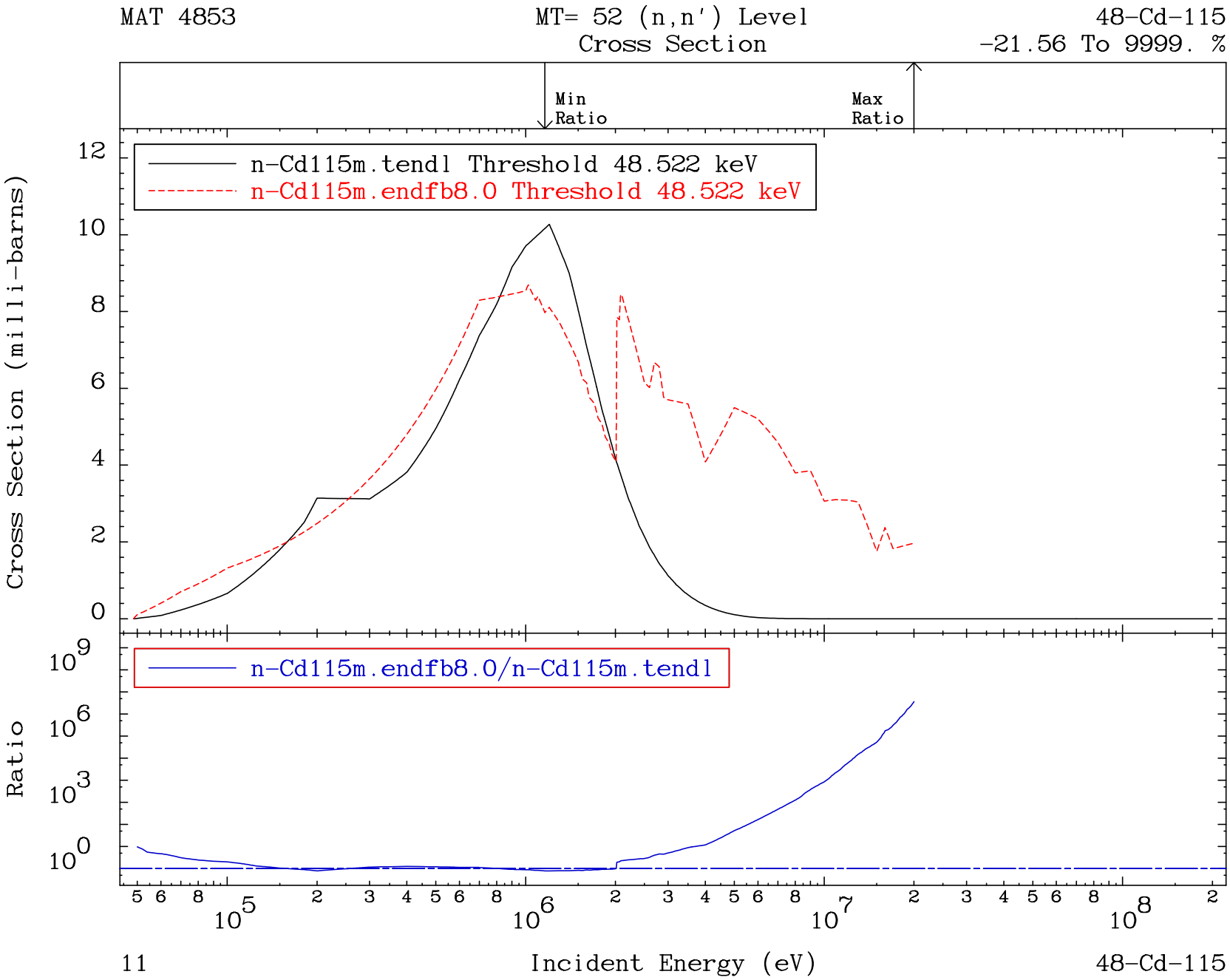

MAT 4853
(n,n') α
Cross Section
48-Cd-115
-75.02 To 876.3 %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 4.3806 MeV
n-Cd115m.endfb8.0 Threshold 9.0000 MeV
Cross Section (milli-barns)
16
12
8
4
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^1
4
10^0
4
5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
48-Cd-115

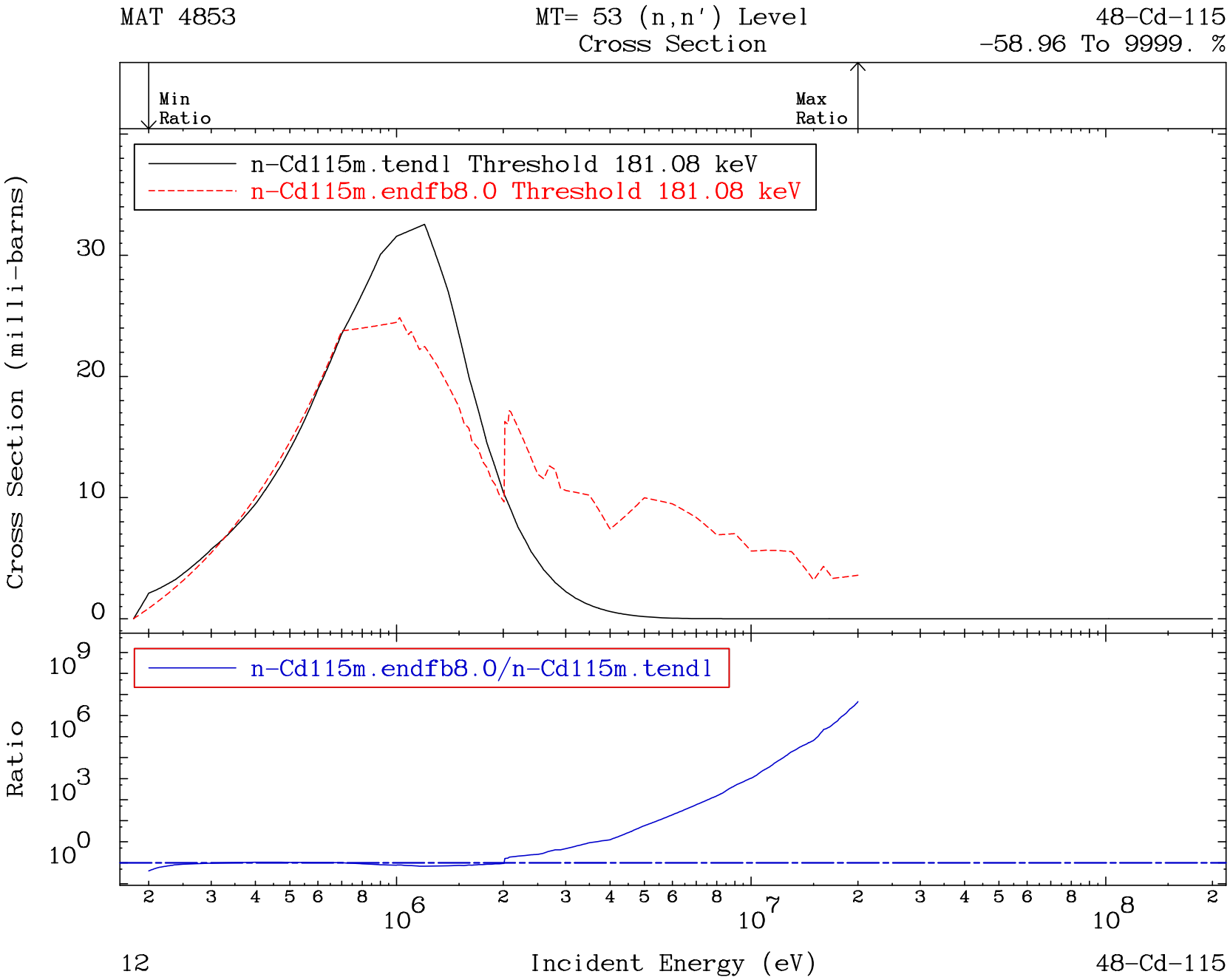

MAT 4853
(n,2n) α
Cross Section
48-Cd-115
-79.52 To 238.4 %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 10.157 MeV
n-Cd115m.endfb8.0 Threshold 15.000 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^0
6
4
6
4
10^7
7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
48-Cd-115

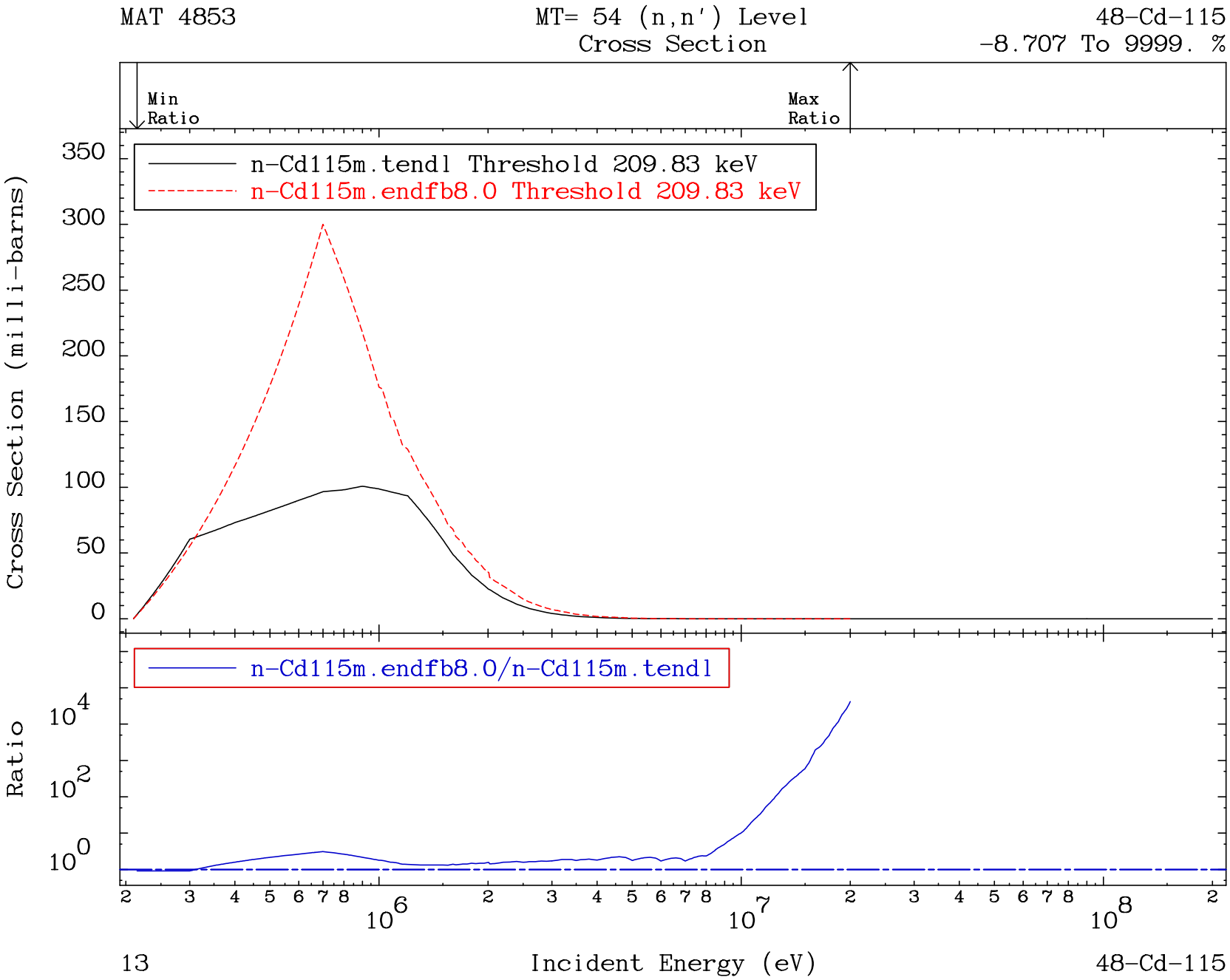

MAT 4853
(n,n') p
Cross Section
48-Cd-115
-99.78 To 49.87 %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 10.352 MeV
n-Cd115m.endfb8.0 Threshold 12.000 MeV
Cross Section (milli-barns)
60
50
40
30
20
10
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^0
10^-1
10^-2
10^7
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
48-Cd-115

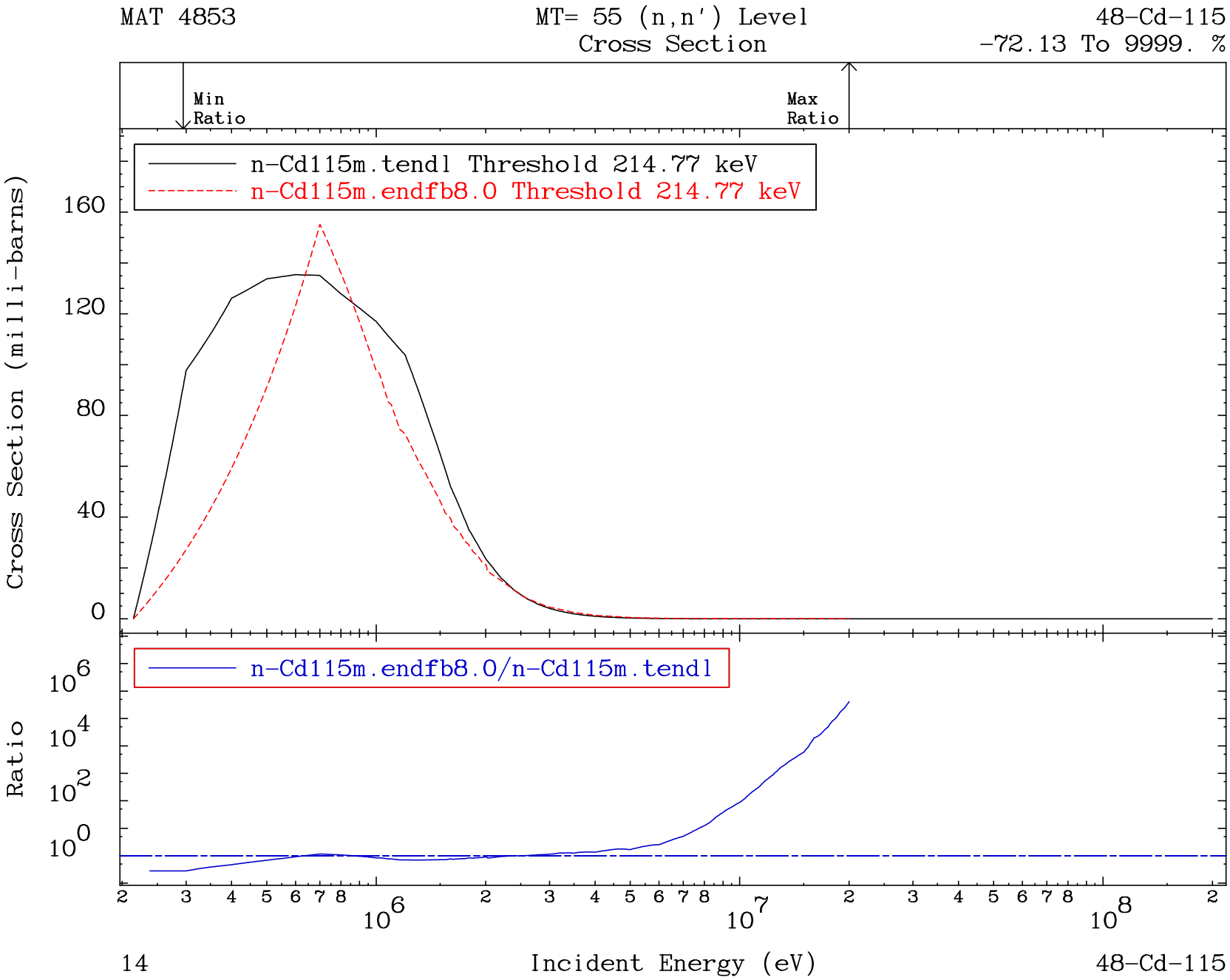

MAT 4853
(n,2n) p
Cross Section
48-Cd-115
-99.99 To -99.90%
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 16.380 MeV
n-Cd115m.endfb8.0 Threshold 18.000 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^-3
6
4
10^-4
6
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
48-Cd-115

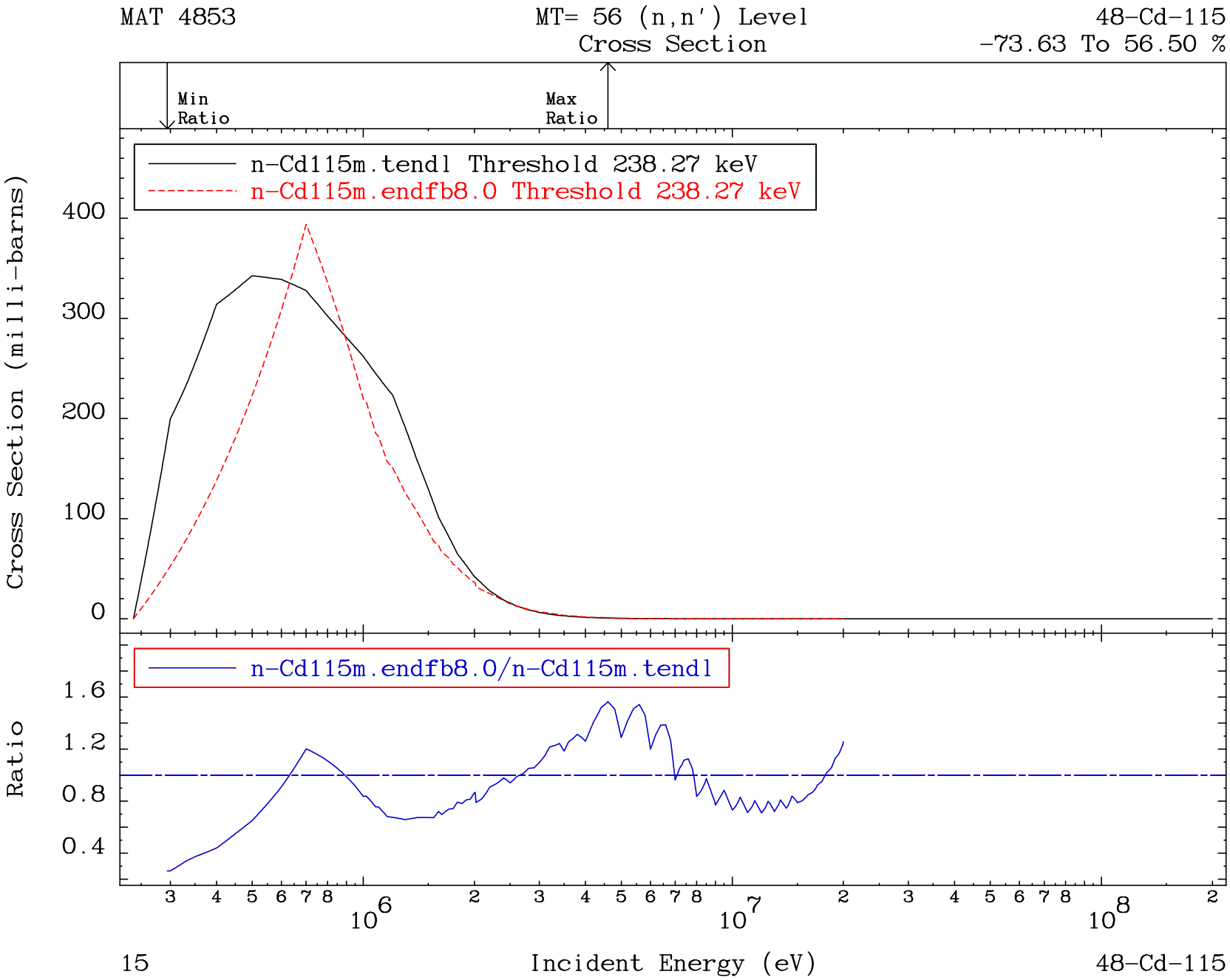

MAT 4853
MT= 51 (n,n') Level
Cross Section
48-Cd-115
-100.0 To 303.0 %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 708.06 eV
n-Cd115m.endfb8.0 Threshold 996.21 eV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^0
10^-3
10^-6
10^3
10^4
10^5
10^6
10^7
10^8
10
Incident Energy (eV)
48-Cd-115

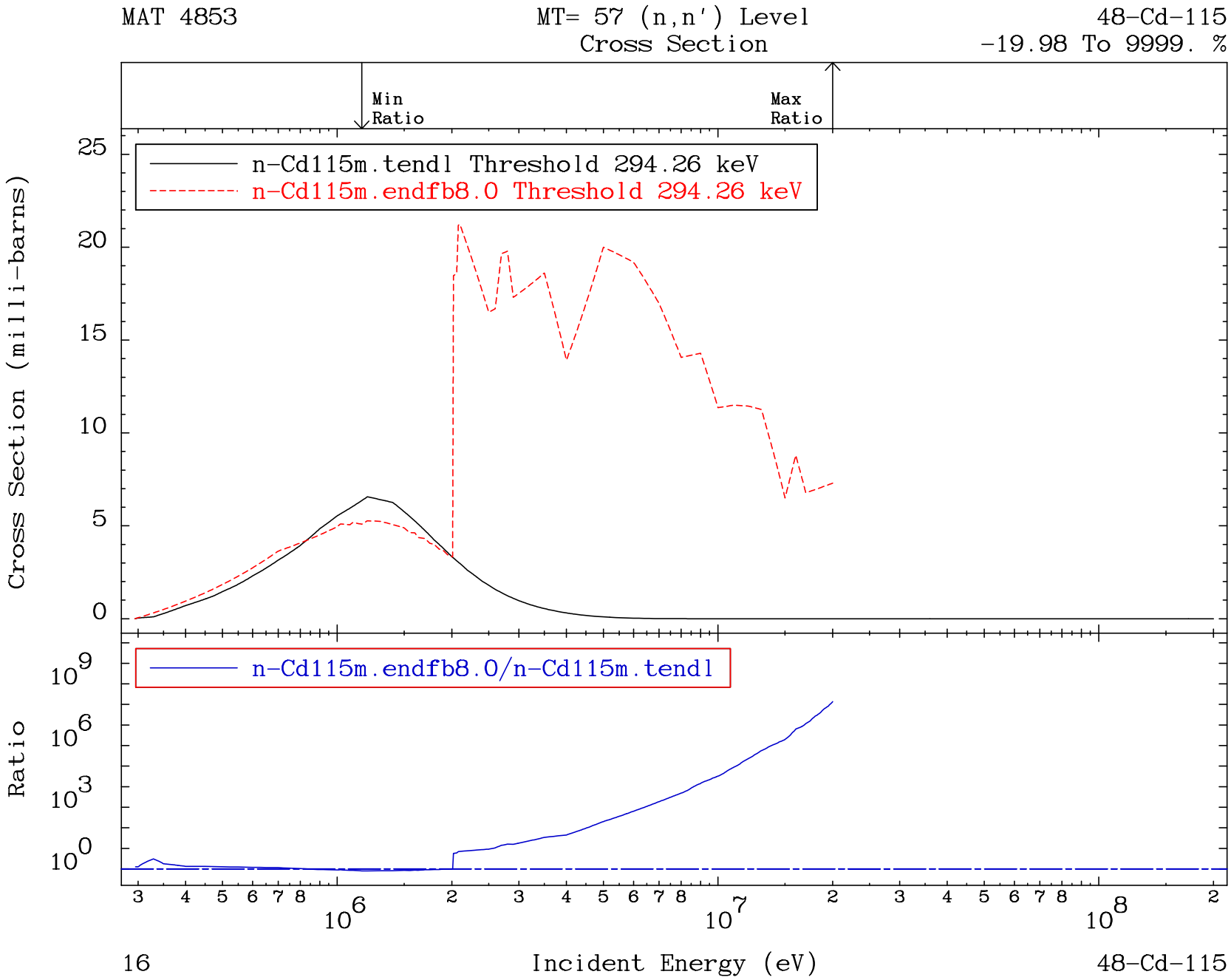

MAT 4853
MT= 52 (n,n') Level
Cross Section
48-Cd-115
-21.56 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 48.522 keV
n-Cd115m.endfb8.0 Threshold 48.522 keV
Cross Section (milli-barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
11
48-Cd-115

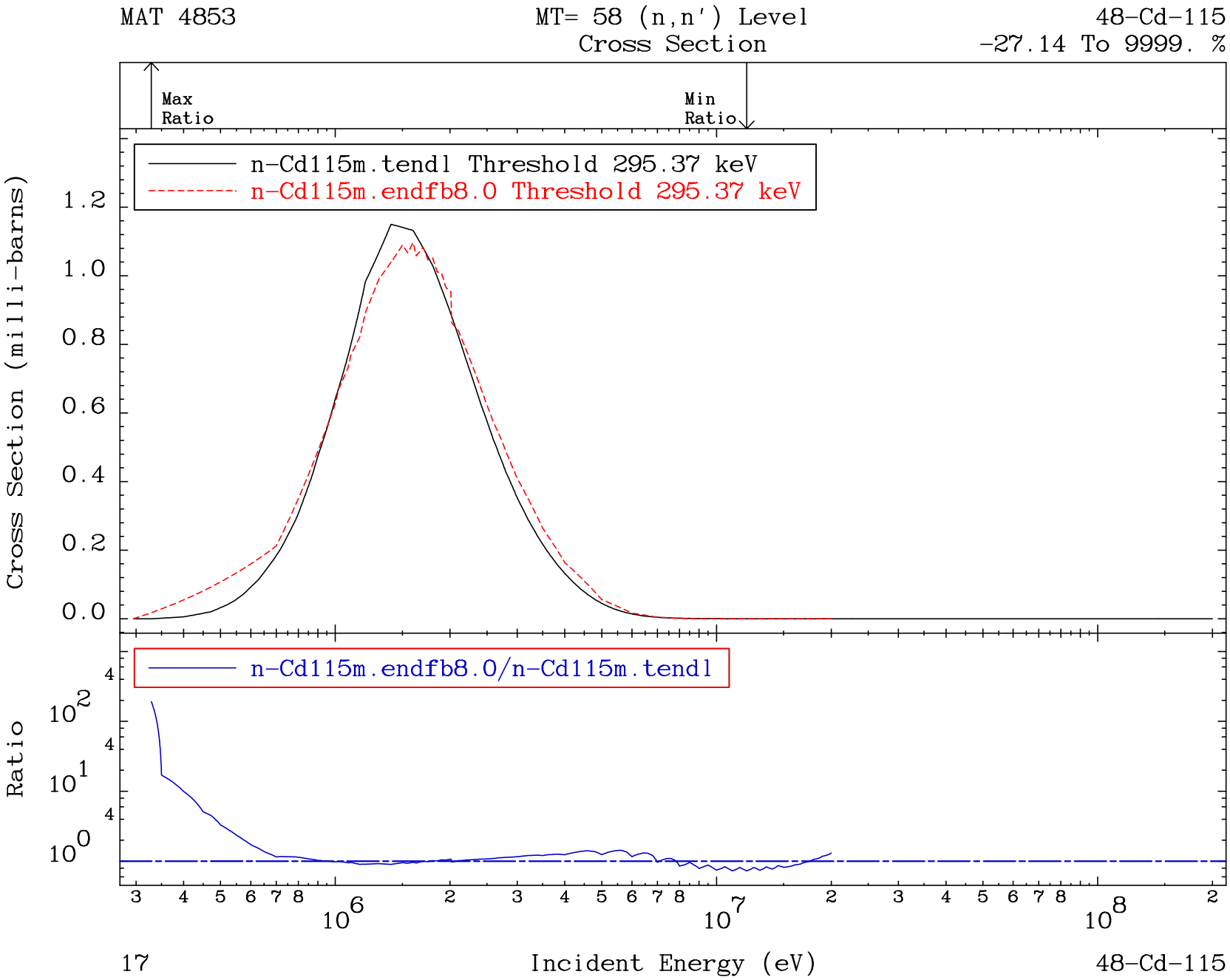

MAT 4853
MT= 53 (n,n') Level
Cross Section
48-Cd-115
-58.96 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 181.08 keV
n-Cd115m.endfb8.0 Threshold 181.08 keV
Cross Section (milli-barns)
30
20
10
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^9
10^6
10^3
10^0
2 3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
48-Cd-115

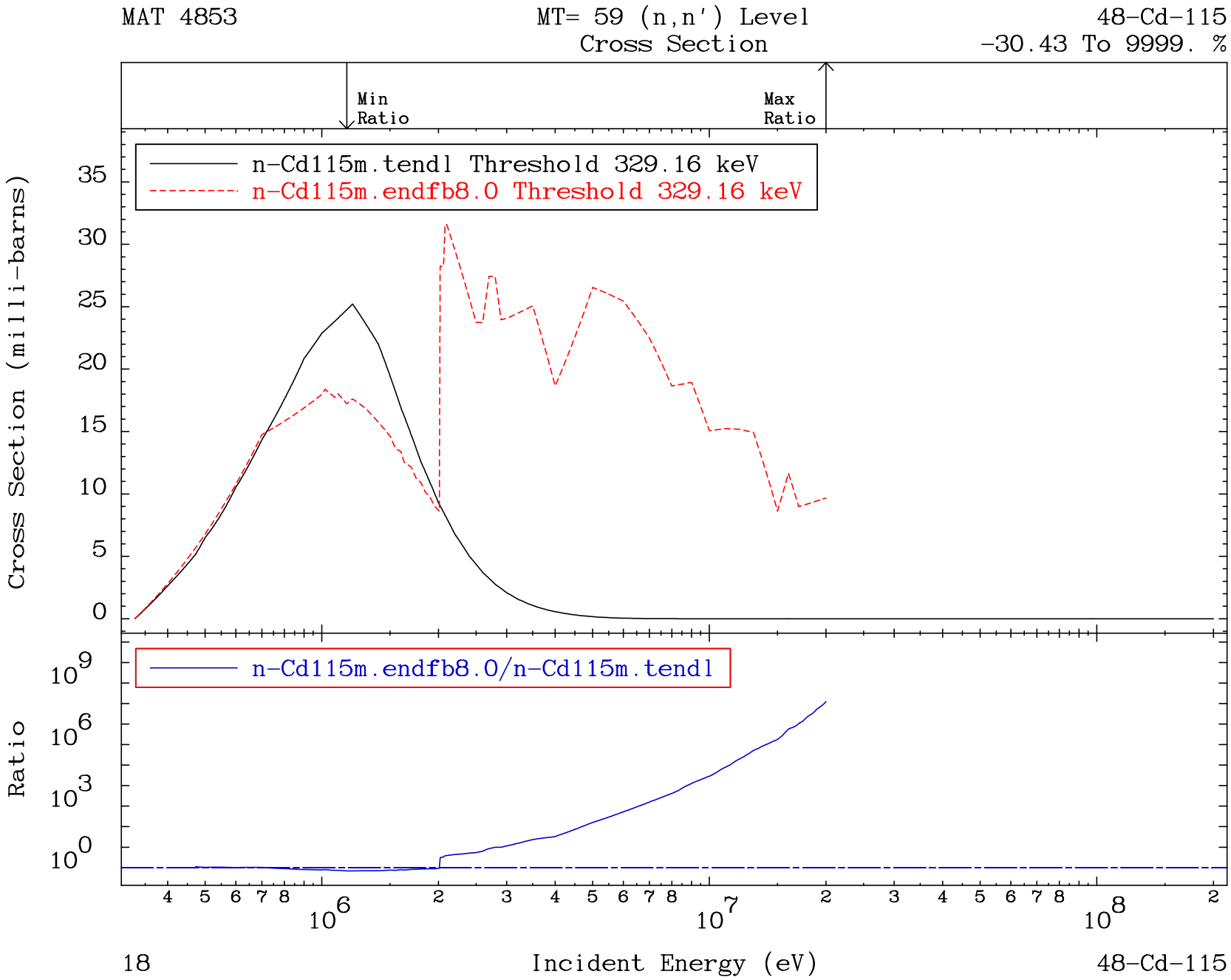

MAT 4853
MT= 54 (n,n') Level
Cross Section
48-Cd-115
-8.707 To 9999. %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 209.83 keV
n-Cd115m.endfb8.0 Threshold 209.83 keV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^4
10^2
10^0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
48-Cd-115

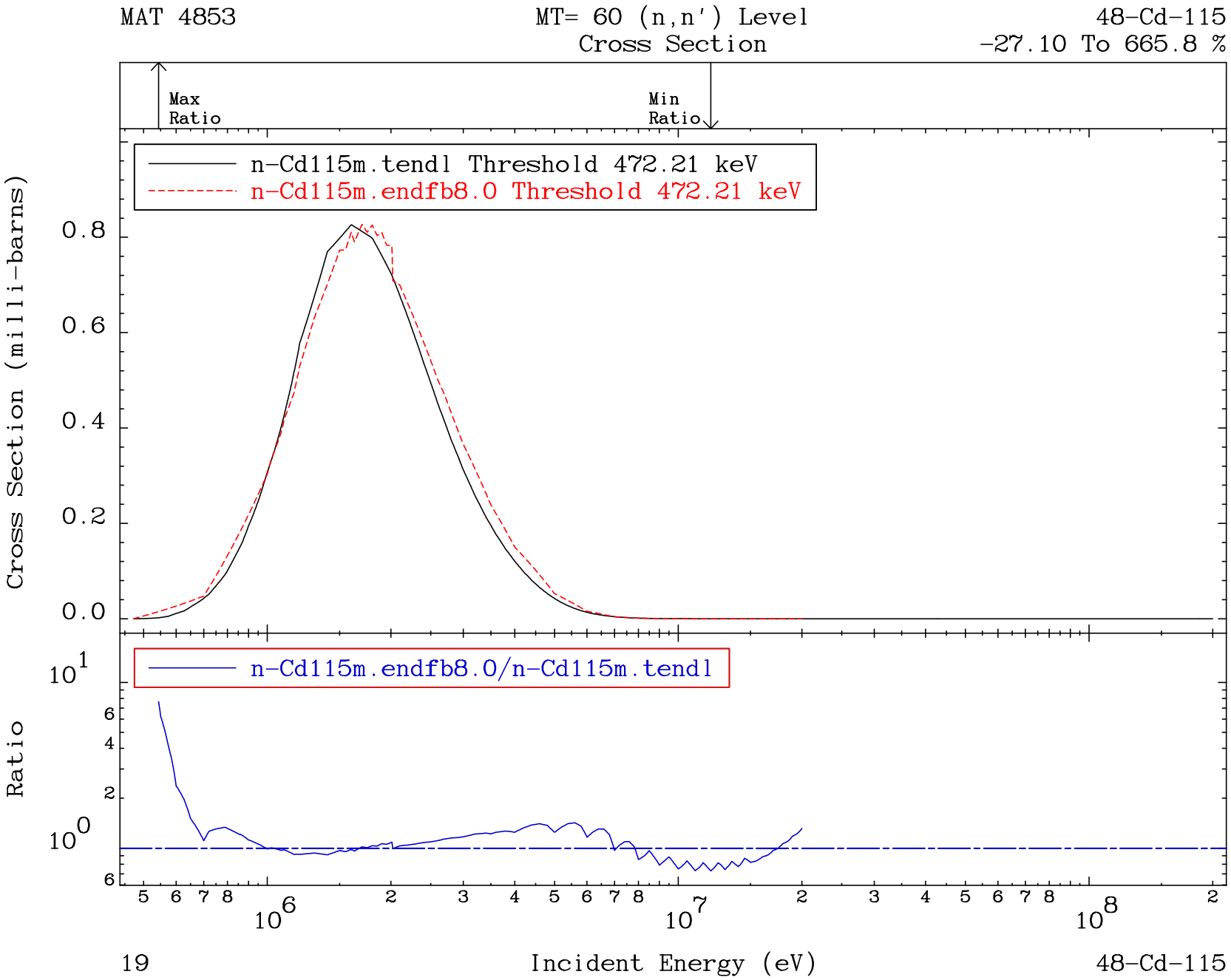

MAT 4853
MT= 55 (n,n') Level
Cross Section
48-Cd-115
-72.13 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 214.77 keV
n-Cd115m.endfb8.0 Threshold 214.77 keV
Cross Section (milli-barns)
160
120
80
40
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^6
10^4
10^2
10^0
2 3 4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
48-Cd-115

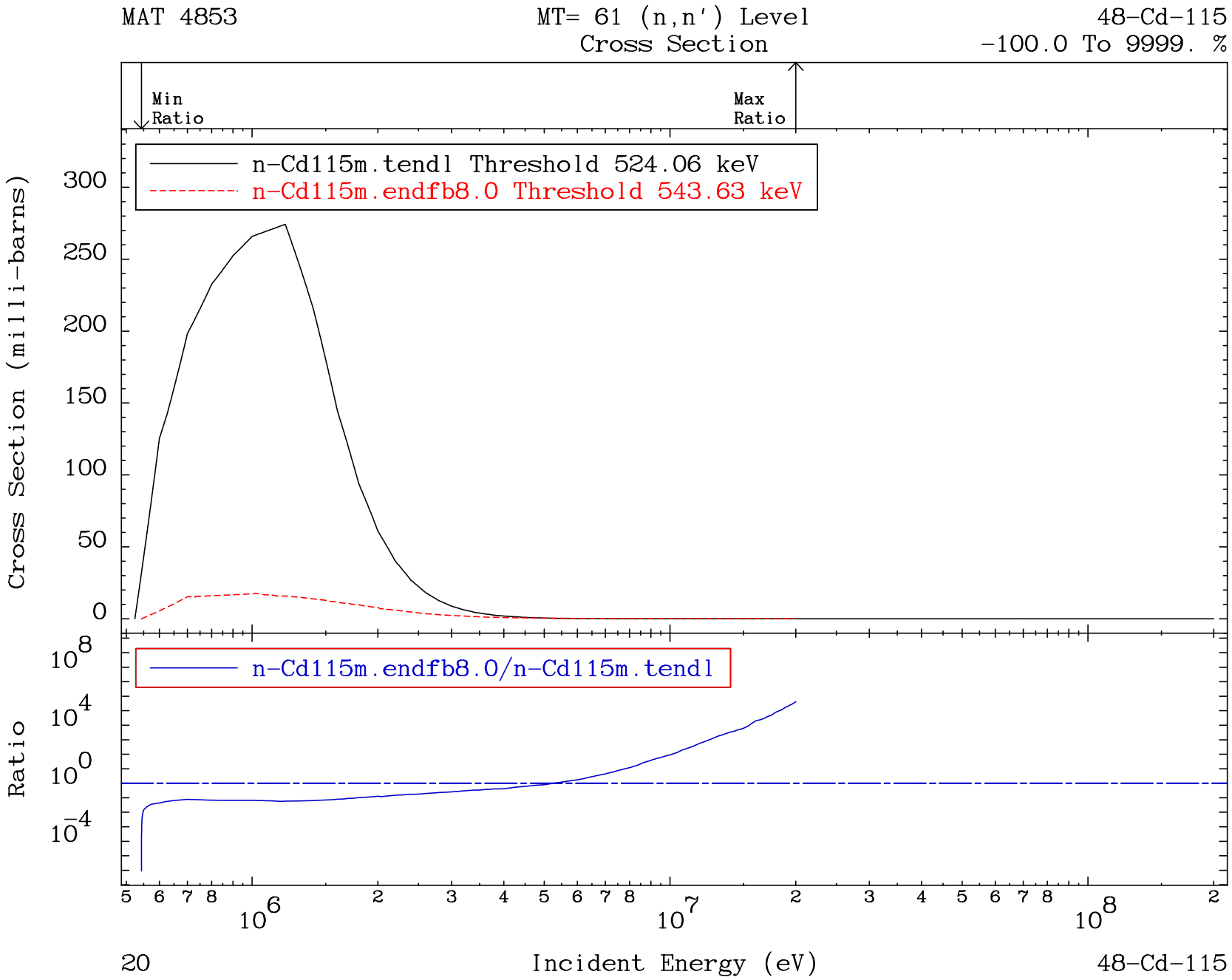

MAT 4853
MT= 56 (n,n') Level
Cross Section
48-Cd-115
-73.63 To 56.50 %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 238.27 keV
n-Cd115m.endfb8.0 Threshold 238.27 keV
Cross Section (milli-barns)
400
300
200
100
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
1.6
1.2
0.8
0.4
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
15
Incident Energy (eV)
48-Cd-115

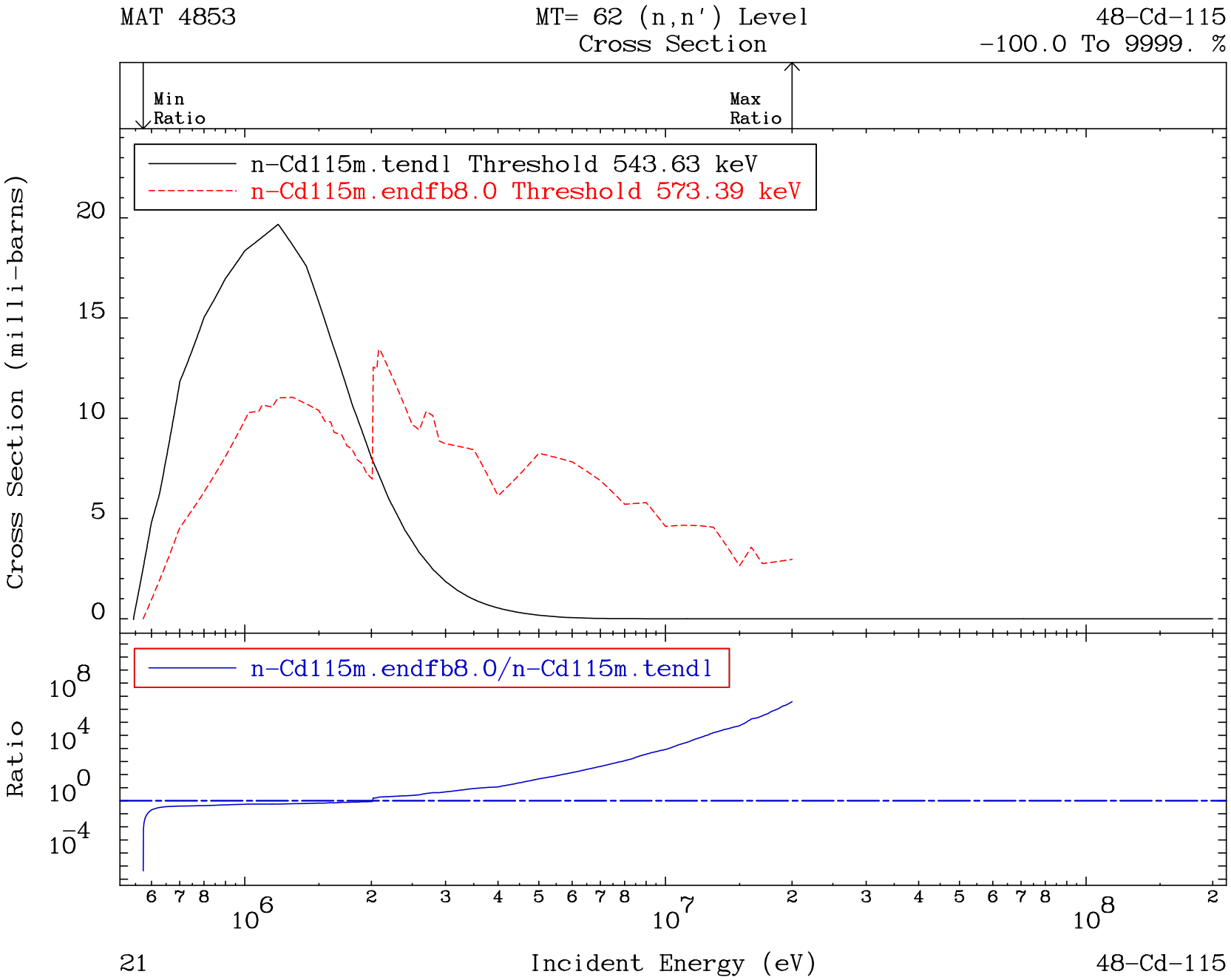

MAT 4853
MT= 57 (n,n') Level
Cross Section
48-Cd-115
-19.98 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 294.26 keV
n-Cd115m.endfb8.0 Threshold 294.26 keV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^9
10^6
10^3
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
48-Cd-115

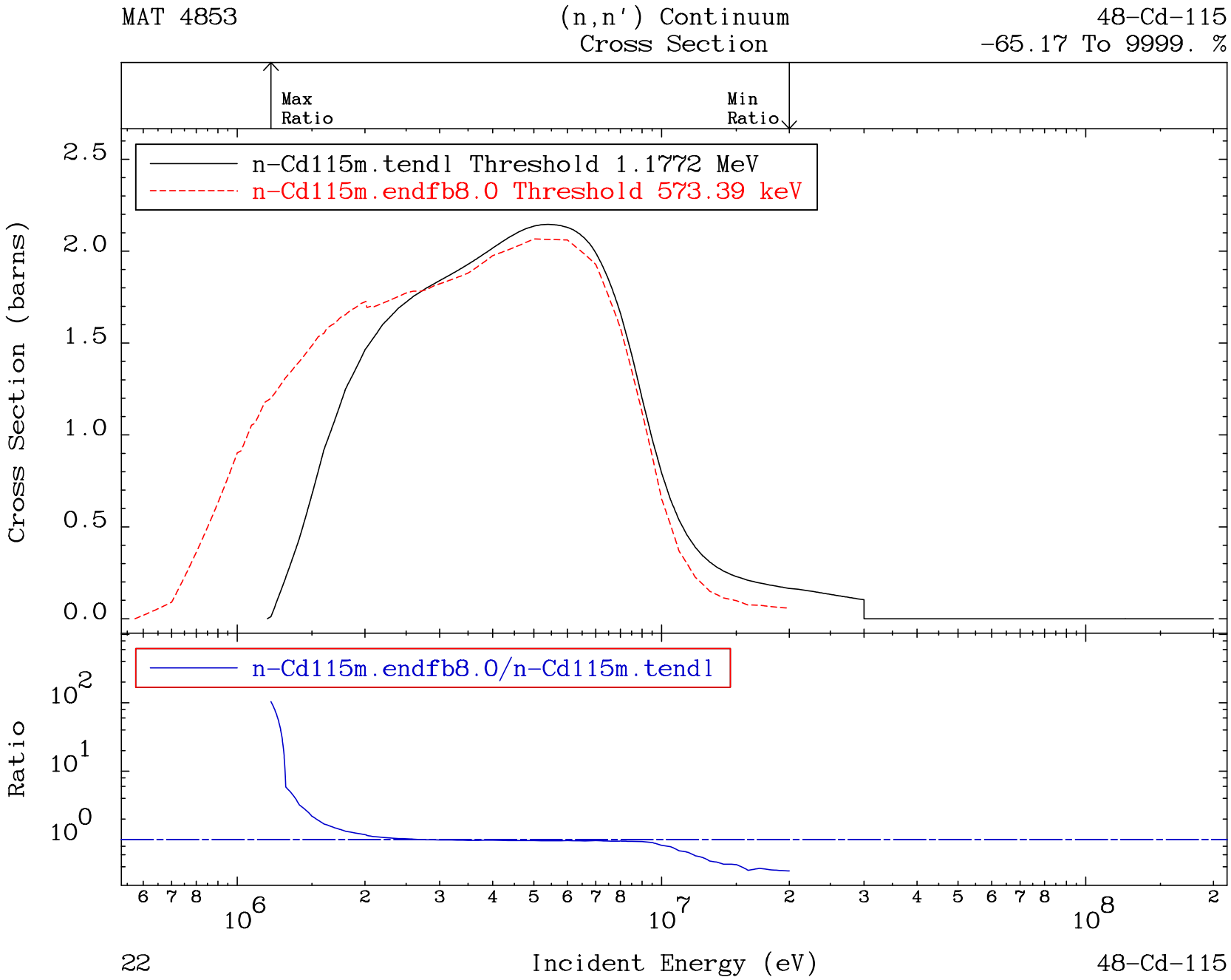

MAT 4853
MT= 58 (n,n') Level
Cross Section
48-Cd-115
-27.14 To 9999. %
Max
Ratio
Min
Ratio
n-Cd115m.tendl Threshold 295.37 keV
n-Cd115m.endfb8.0 Threshold 295.37 keV
Cross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^2
10^1
10^0
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
48-Cd-115

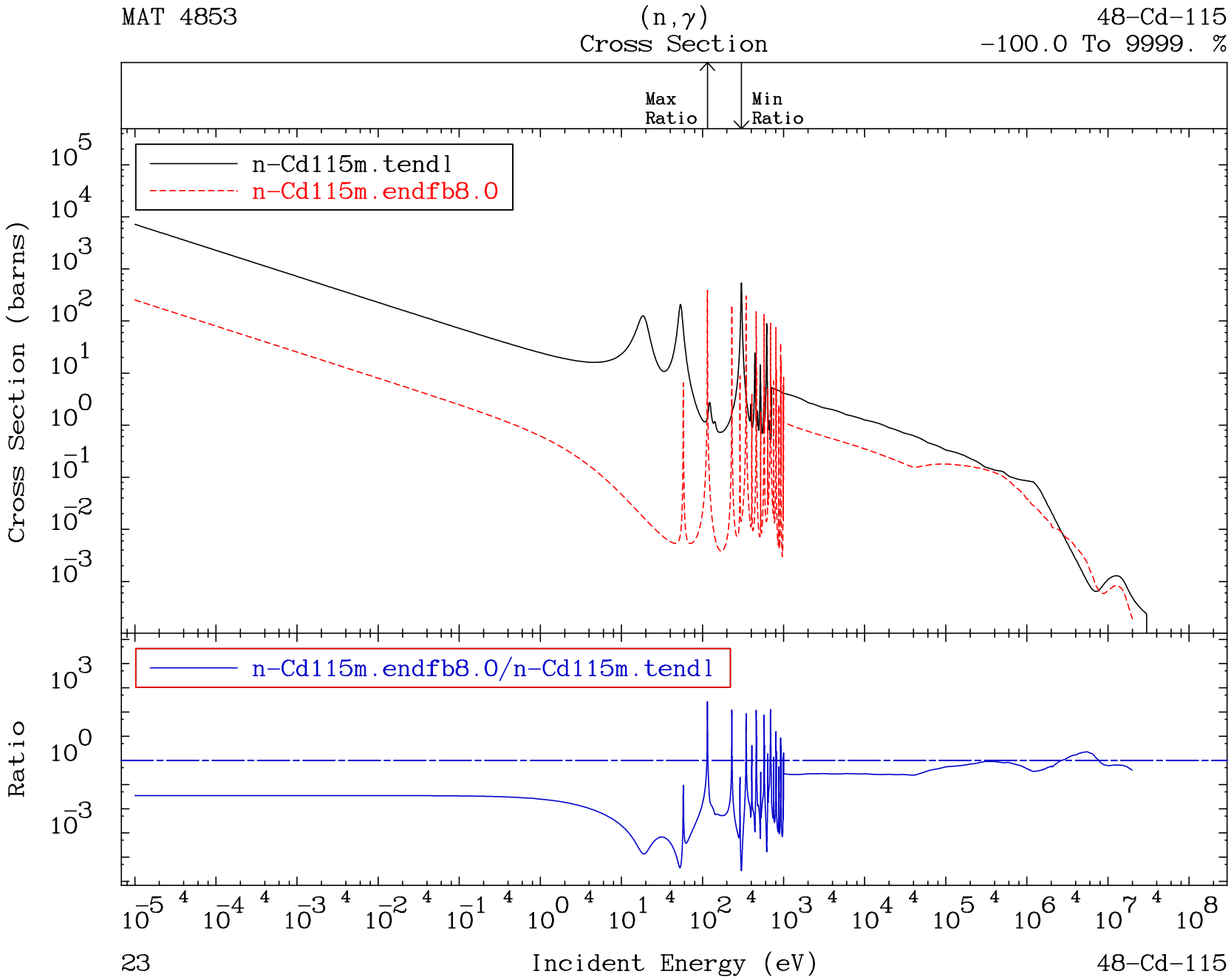

MAT 4853
MT= 59 (n,n') Level
Cross Section
48-Cd-115
-30.43 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 329.16 keV
n-Cd115m.endfb8.0 Threshold 329.16 keV
Cross Section (milli-barns)
35
30
25
20
15
10
5
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^9
10^6
10^3
10^0
4 5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
18
Incident Energy (eV)
48-Cd-115

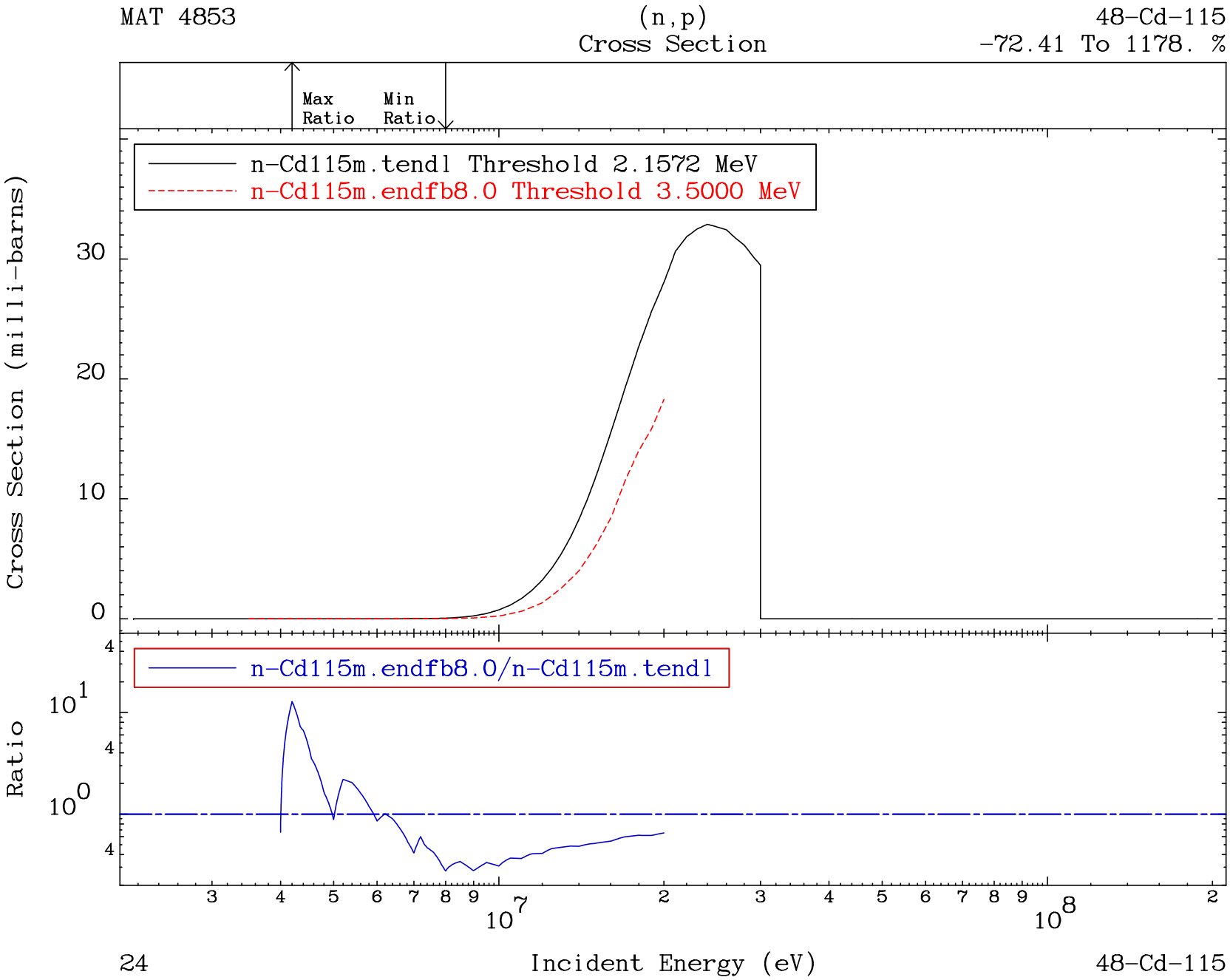

MAT 4853
MT= 60 (n,n') Level
Cross Section
48-Cd-115
-27.10 To 665.8 %
Max
Ratio
Min
Ratio
n-Cd115m.tendl Threshold 472.21 keV
n-Cd115m.endfb8.0 Threshold 472.21 keV
Cross Section (milli-barns)
0.0
0.2
0.4
0.6
0.8
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^1
10^0
6
4
2
6
5 6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
48-Cd-115

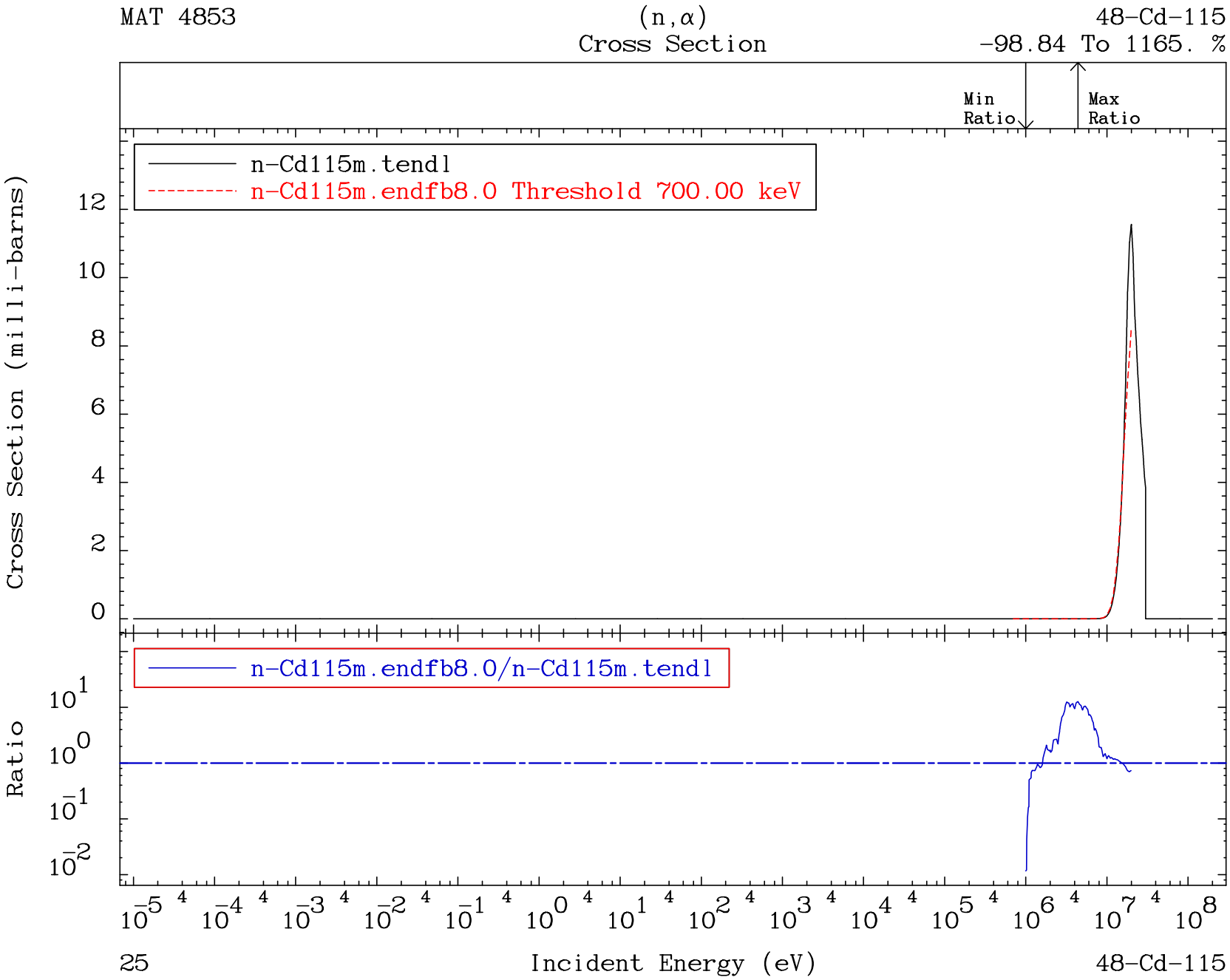

MAT 4853
MT= 61 (n,n') Level
Cross Section
48-Cd-115
-100.0 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 524.06 keV
n-Cd115m.endfb8.0 Threshold 543.63 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^8
10^4
10^0
10^-4
5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
48-Cd-115

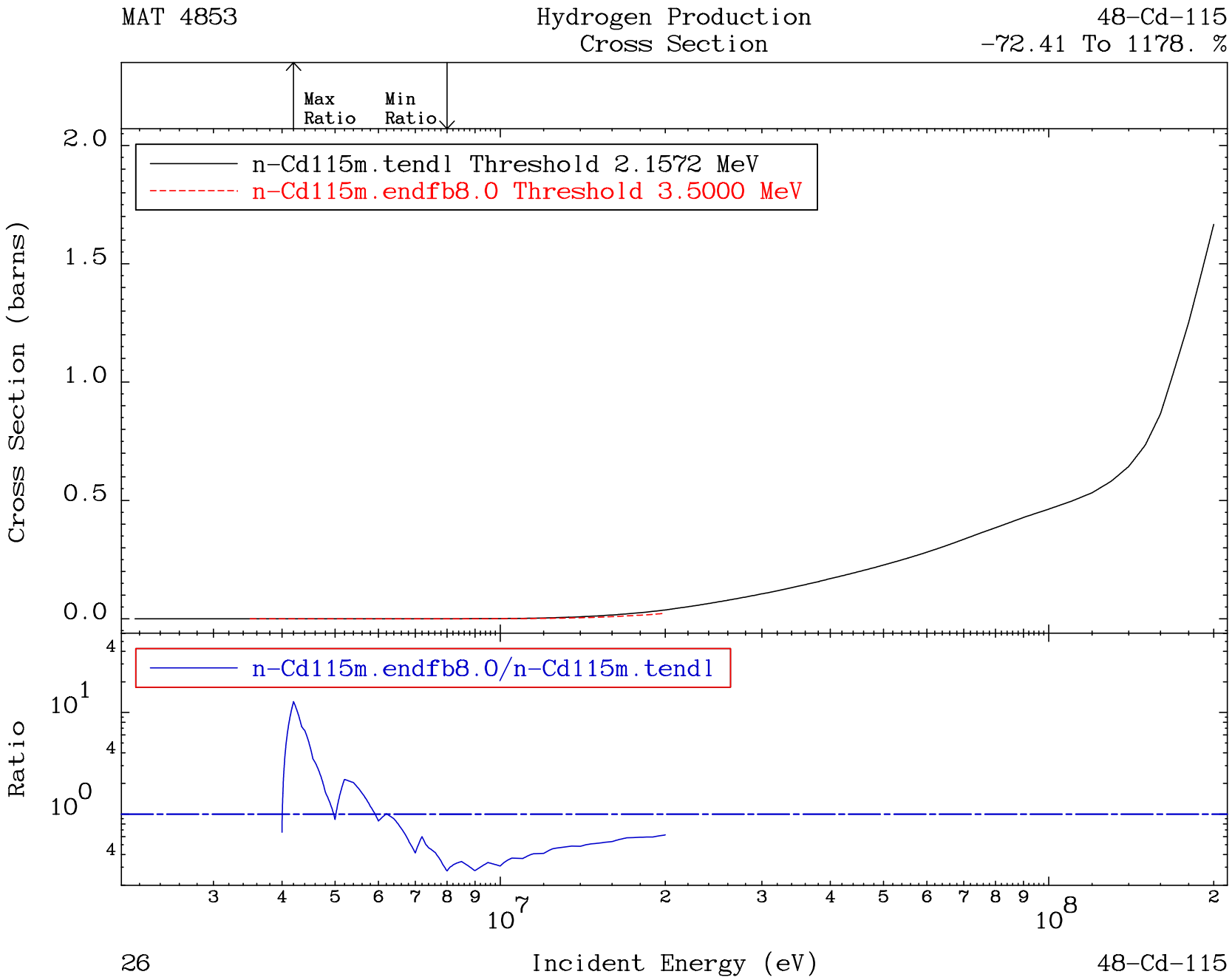

MAT 4853
MT= 62 (n,n') Level
Cross Section
48-Cd-115
-100.0 To 9999. %
Min
Ratio
Max
Ratio
n-Cd115m.tendl Threshold 543.63 keV
n-Cd115m.endfb8.0 Threshold 573.39 keV
Cross Section (milli-barns)
20
15
10
5
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^8
10^4
10^0
10^-4
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
48-Cd-115

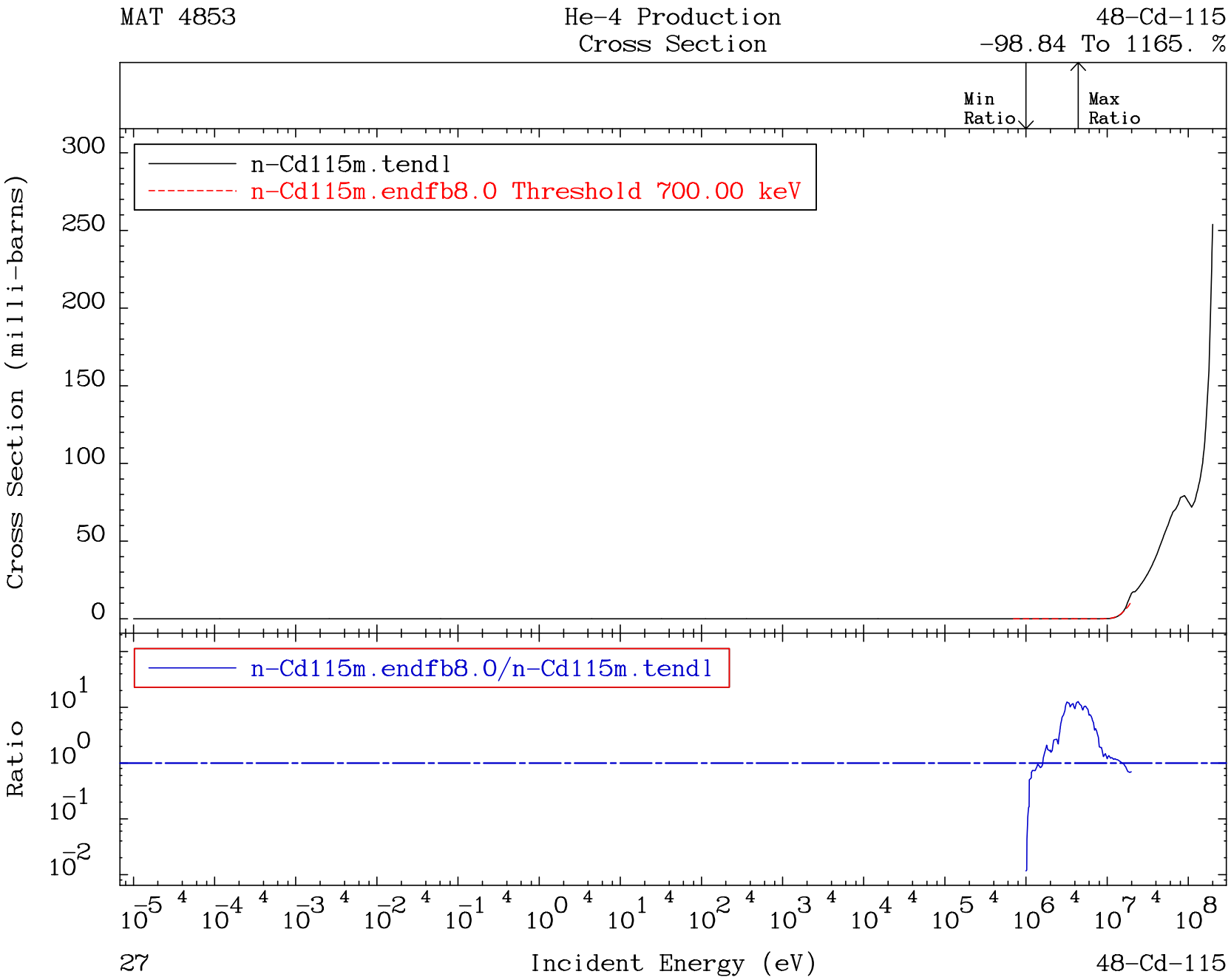

MAT 4853
(n,n') Continuum
Cross Section
48-Cd-115
-65.17 To 9999. %
Max
Ratio
Min
Ratio
n-Cd115m.tendl Threshold 1.1772 MeV
n-Cd115m.endfb8.0 Threshold 573.39 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^2
10^1
10^0
6 7 8
10^6
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
48-Cd-115

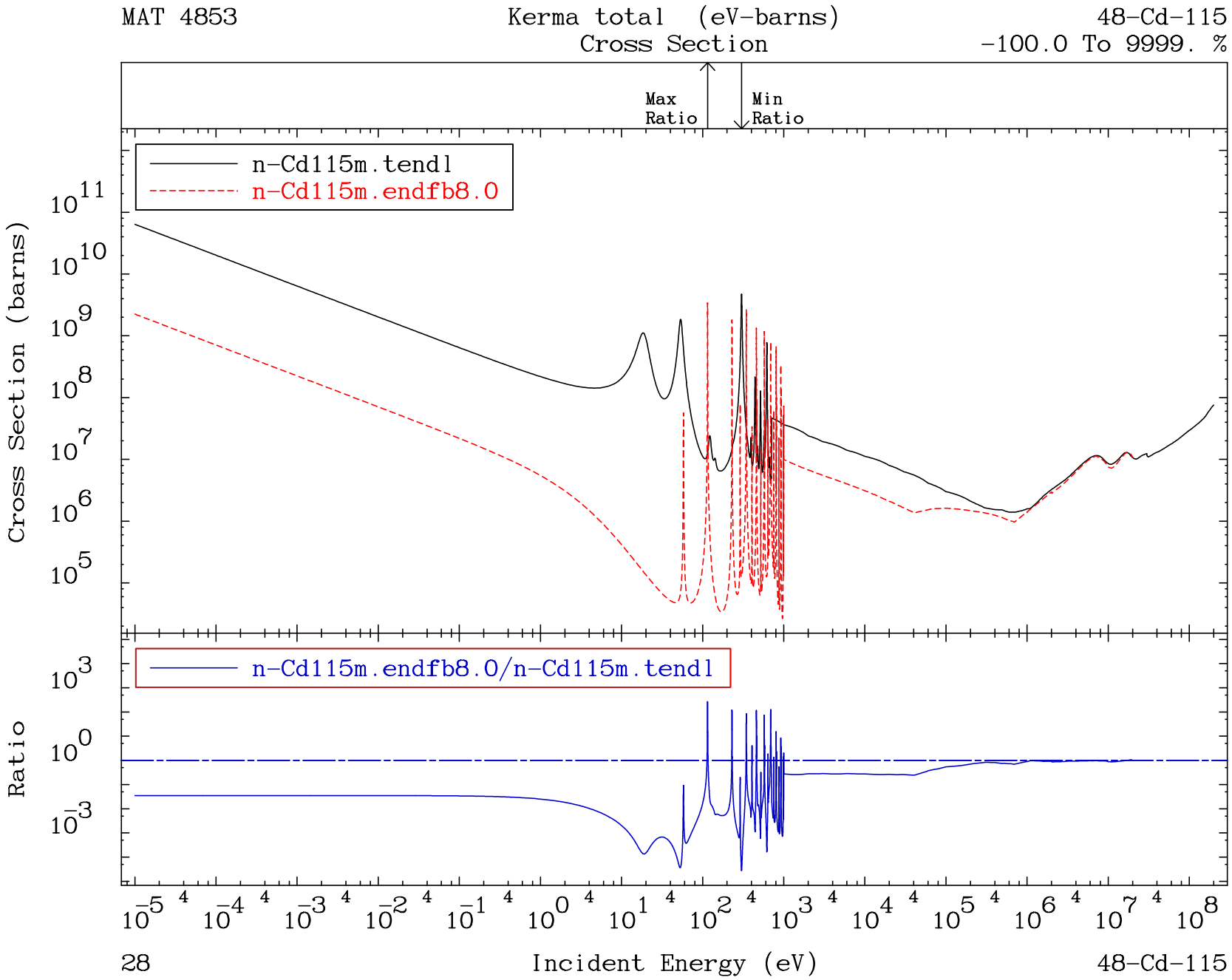

MAT 4853
(n,γ)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
23
48-Cd-115

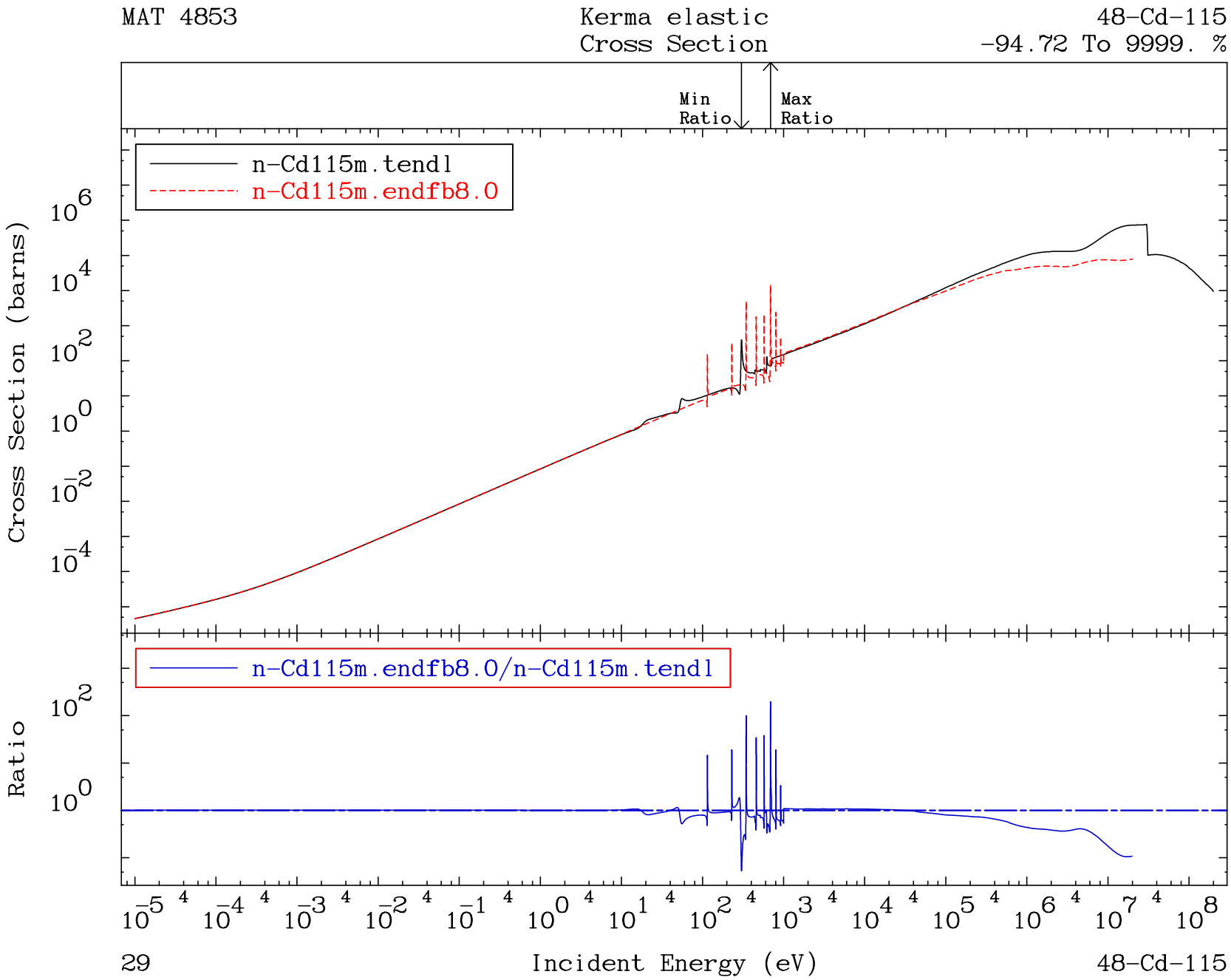

MAT 4853
(n,p)
Cross Section
48-Cd-115
-72.41 To 1178. %
Max Ratio
Min Ratio
n-Cd115m.tendl Threshold 2.1572 MeV
n-Cd115m.endfb8.0 Threshold 3.5000 MeV
Cross Section (milli-barns)
30
20
10
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^1
10^0
4
4
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
48-Cd-115

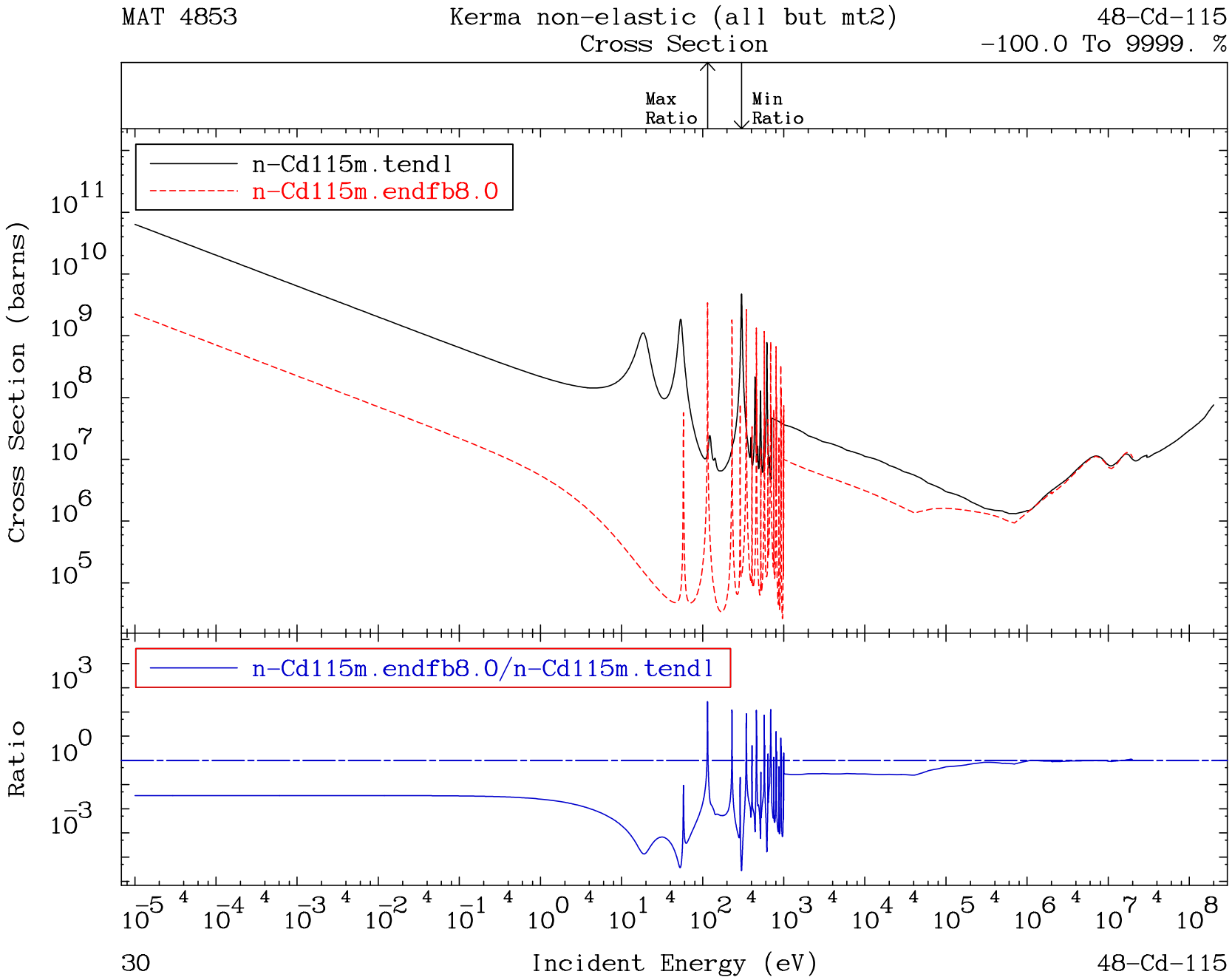

MAT 4853
(n,α)
Cross Section
48-Cd-115
-98.84 To 1165. %
Min Ratio
Max Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0 Threshold 700.00 keV
Cross Section (milli-barns)
0
2
4
6
8
10
12
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^1
10^0
10^-1
10^-2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
25
Incident Energy (eV)
48-Cd-115

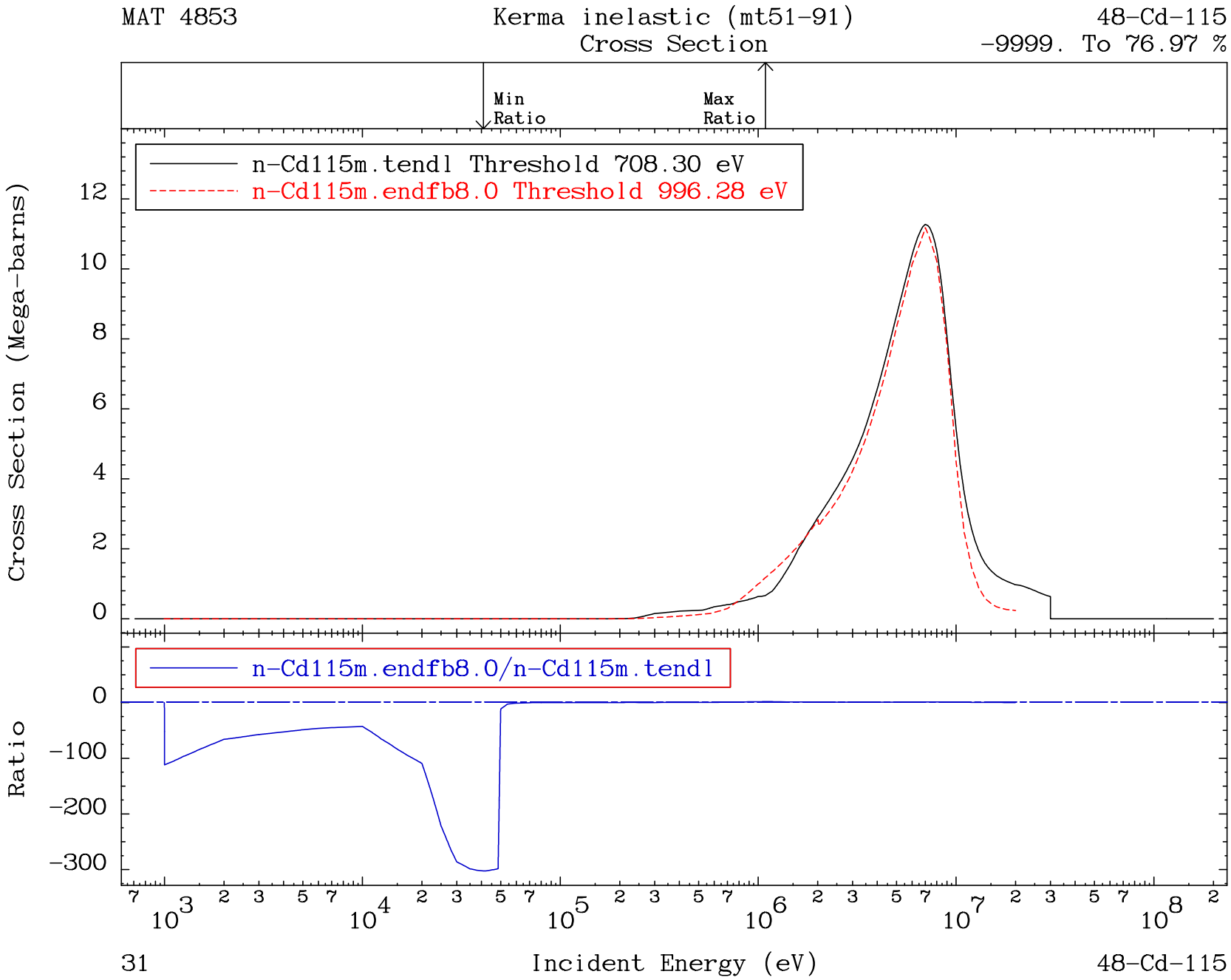

MAT 4853
Hydrogen Production
Cross Section
48-Cd-115
-72.41 To 1178. %
Max Ratio
Min Ratio
n-Cd115m.tendl Threshold 2.1572 MeV
n-Cd115m.endfb8.0 Threshold 3.5000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^1
10^0
4
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
26
Incident Energy (eV)
48-Cd-115

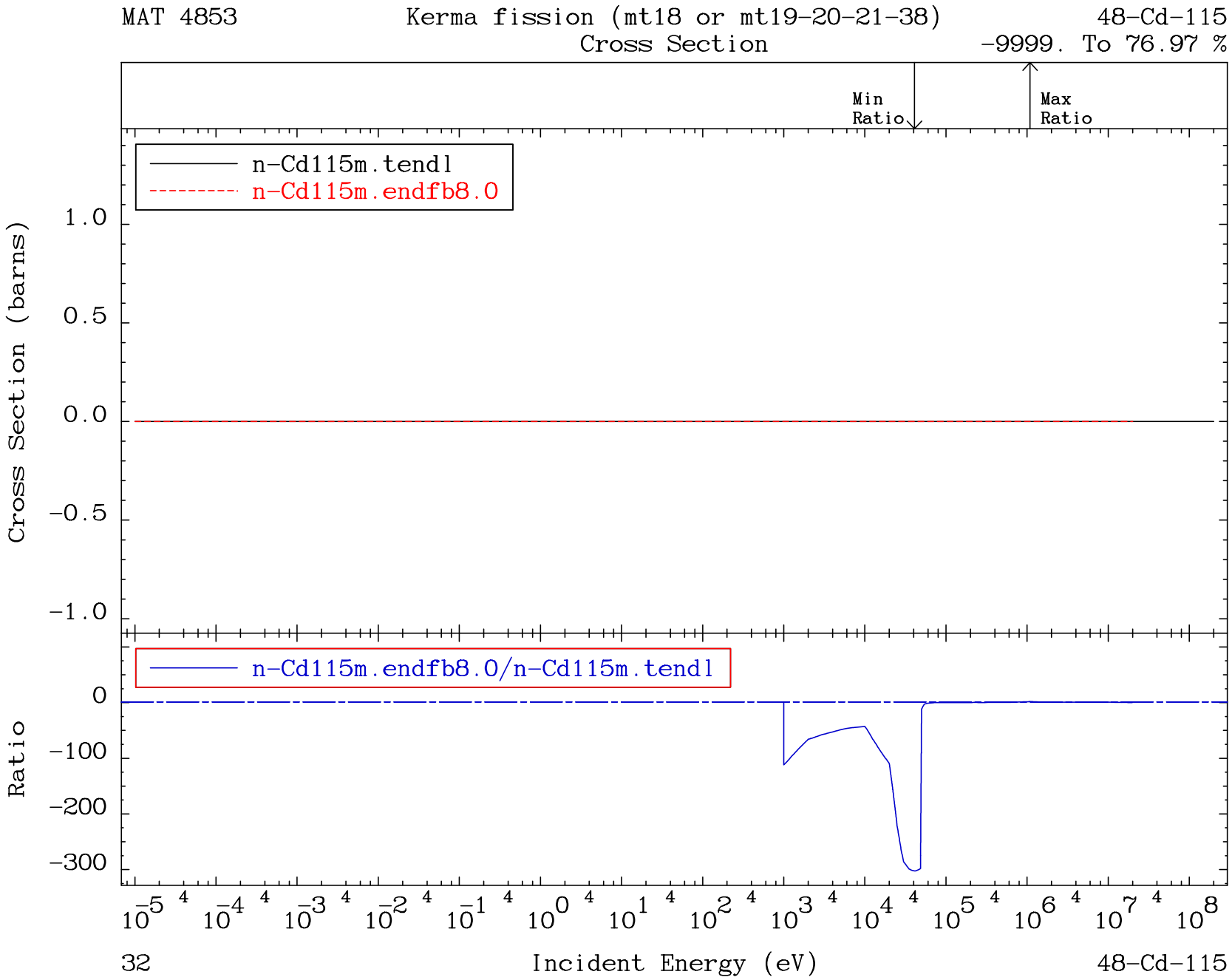

MAT 4853
He-4 Production
Cross Section
48-Cd-115
-98.84 To 1165. %
Min Ratio
Max Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0 Threshold 700.00 keV
Cross Section (milli-barns)
300
250
200
150
100
50
0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
10^1
10^0
10^-1
10^-2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
27
Incident Energy (eV)
48-Cd-115

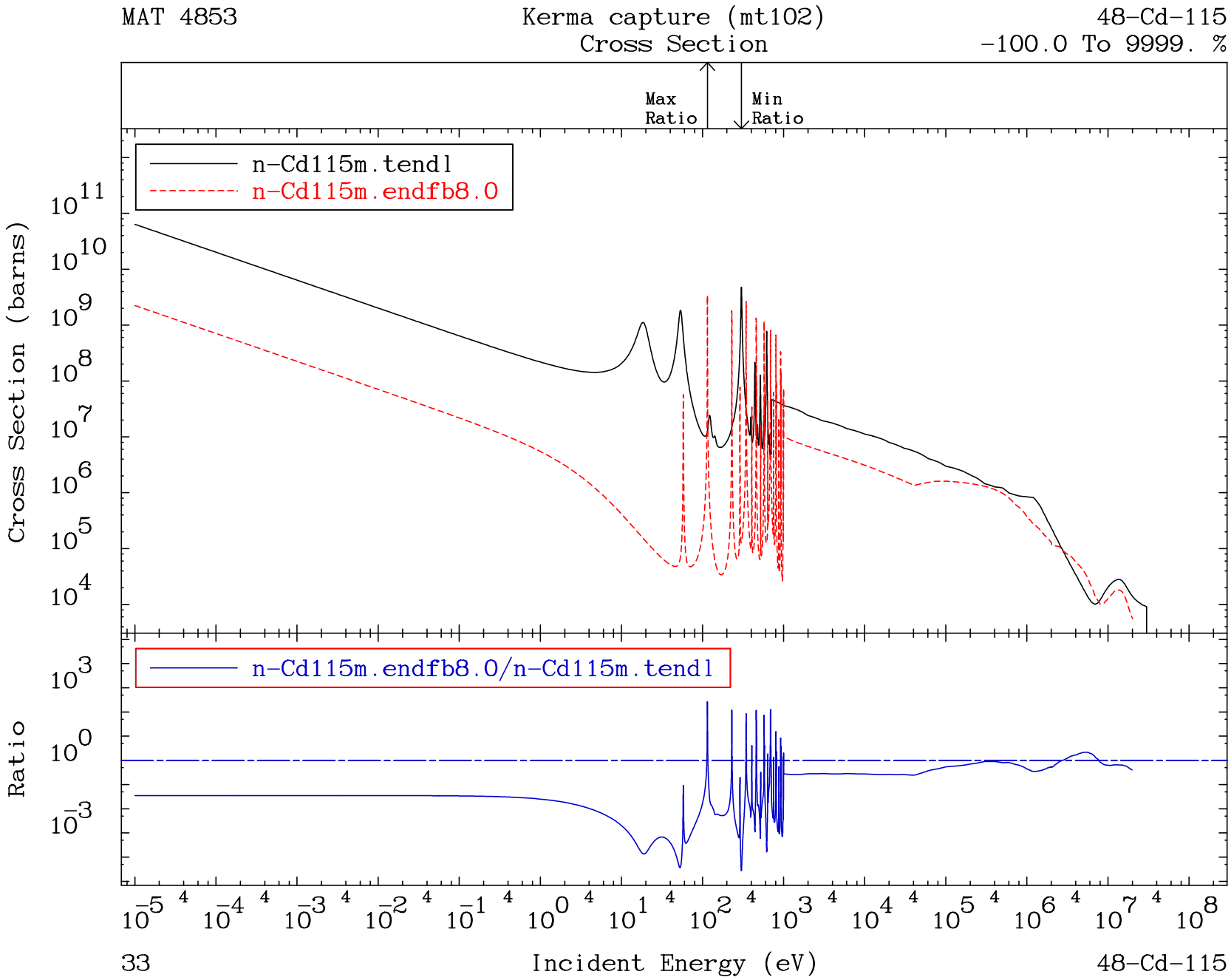

MAT 4853
Kerma total (eV-barns)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
28
48-Cd-115

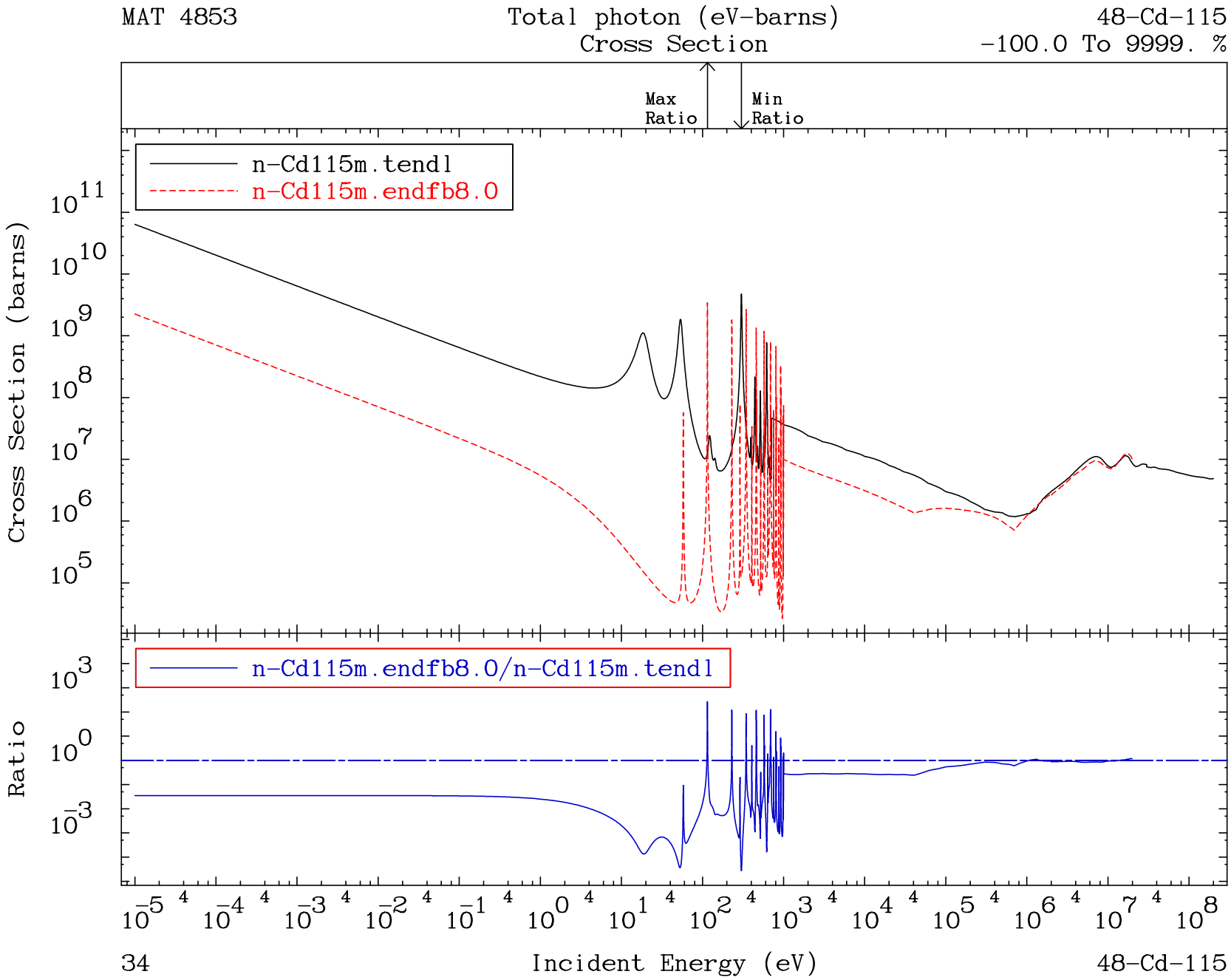

MAT 4853
Kerma elastic
Cross Section
48-Cd-115
-94.72 To 9999. %
Min Ratio
Max Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
Ratio
n-Cd115m.endfb8.0/n-Cd115m.tendl
Incident Energy (eV)
29
48-Cd-115

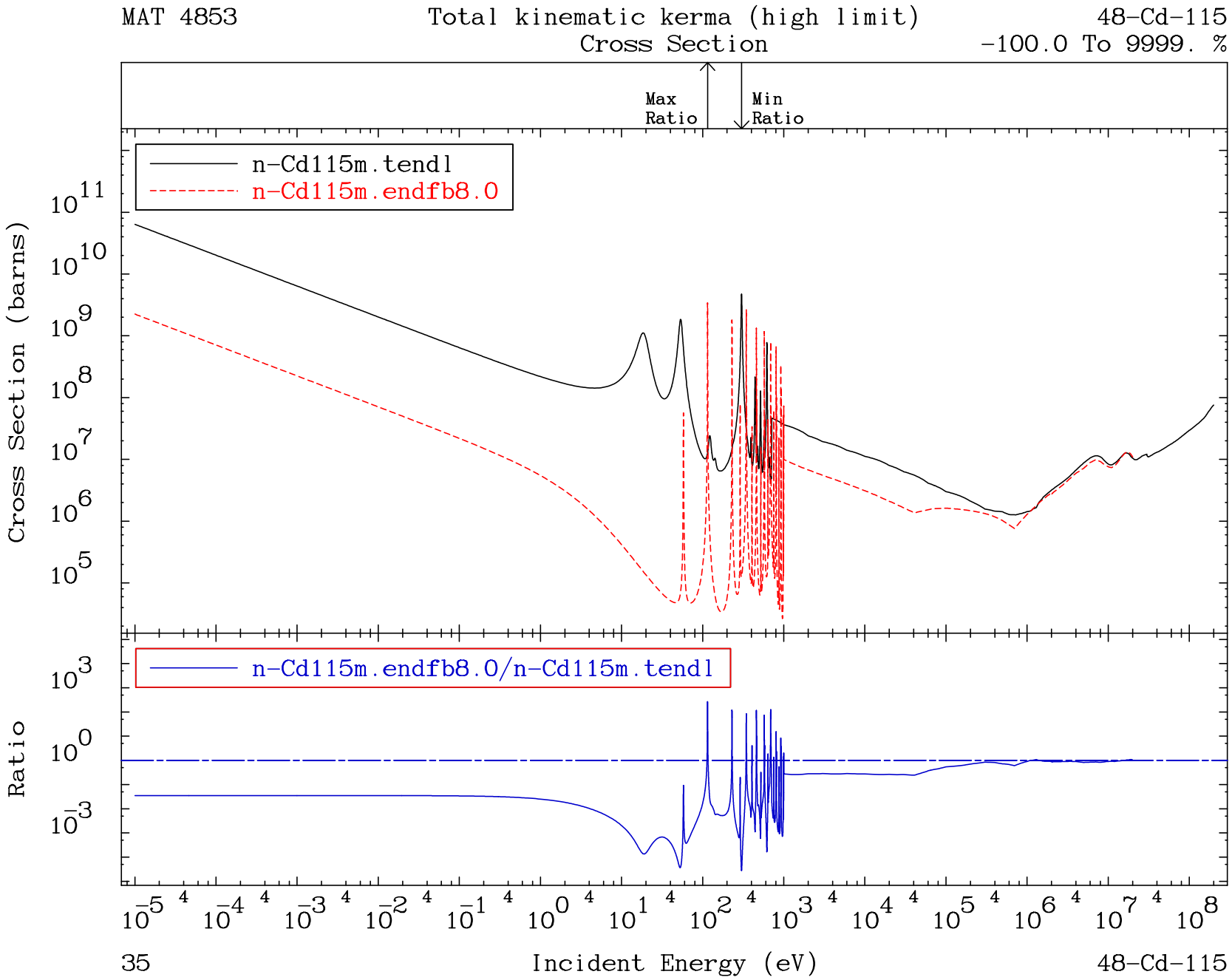

MAT 4853
Kerma non-elastic (all but mt2)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
30
48-Cd-115

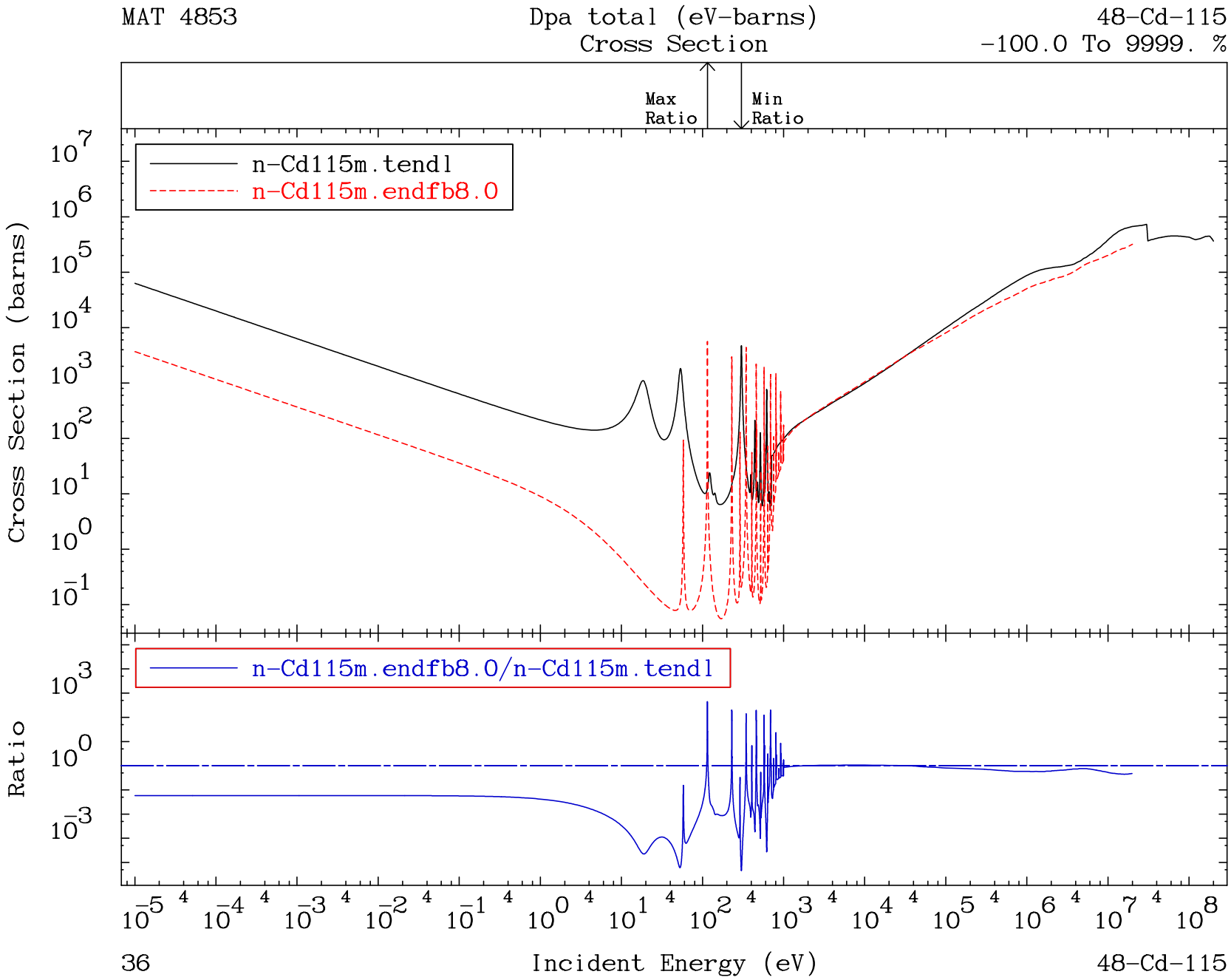

MAT 4853
Kerma inelastic (mt51-91)
Cross Section
48-Cd-115
-9999. To 76.97 %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 708.30 eV
n-Cd115m.endfb8.0 Threshold 996.28 eV
Cross Section (Mega-barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
31
48-Cd-115

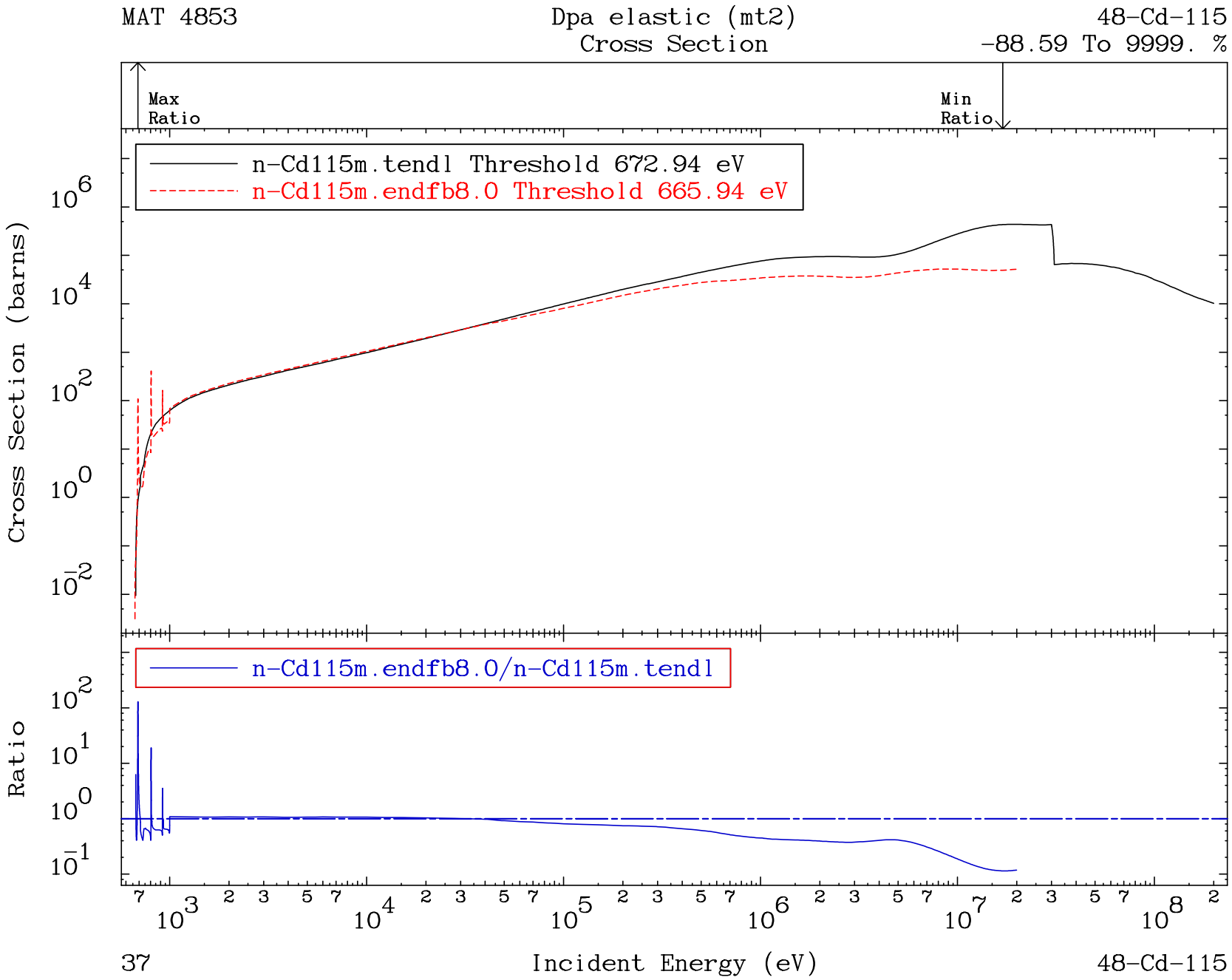

MAT 4853
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
48-Cd-115
-9999. To 76.97 %
Min Ratio
Max Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
0
-100
-200
-300
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
32
Incident Energy (eV)
48-Cd-115

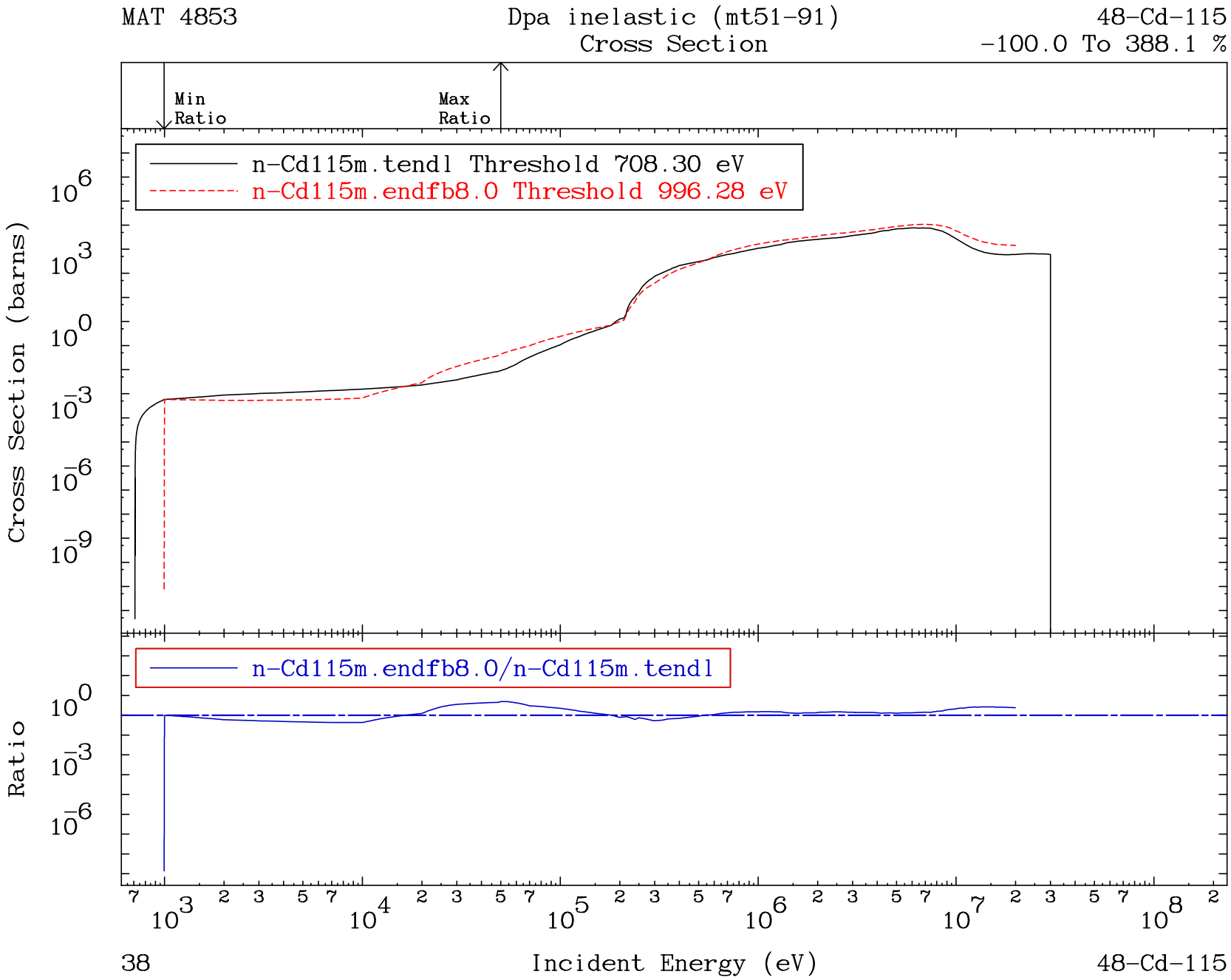

MAT 4853
Kerma capture (mt102)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
33
48-Cd-115

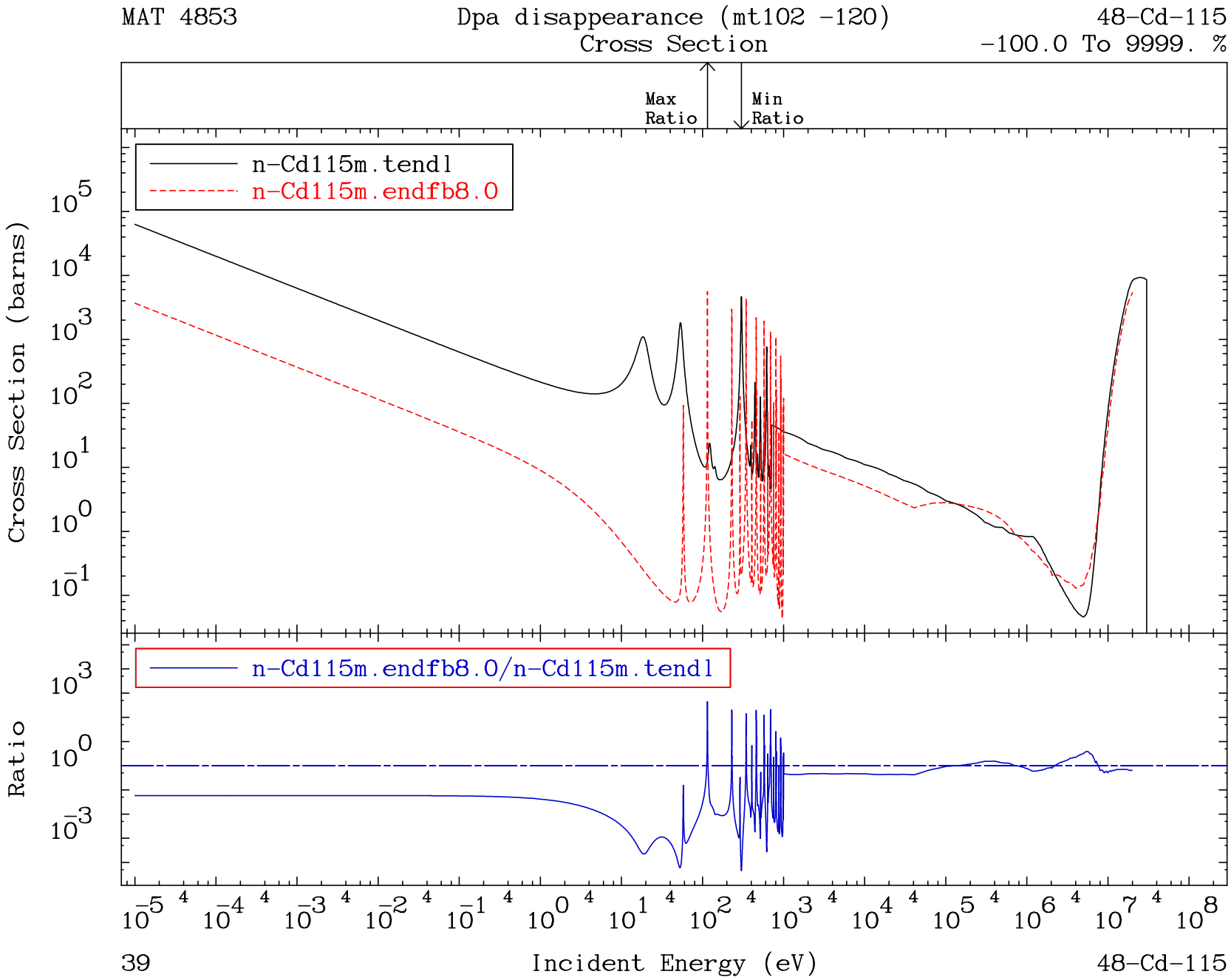

MAT 4853
Total photon (eV-barns)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
34
Incident Energy (eV)
48-Cd-115


MAT 4853
Total kinematic kerma (high limit)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
35
48-Cd-115


MAT 4853
Dpa total (eV-barns)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
36
Incident Energy (eV)
48-Cd-115


MAT 4853
Dpa elastic (mt2)
Cross Section
48-Cd-115
-88.59 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl Threshold 672.94 eV
n-Cd115m.endfb8.0 Threshold 665.94 eV
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
37
48-Cd-115


MAT 4853
Dpa inelastic (mt51-91)
Cross Section
48-Cd-115
-100.0 To 388.1 %
Min Ratio
Max Ratio
n-Cd115m.tendl Threshold 708.30 eV
n-Cd115m.endfb8.0 Threshold 996.28 eV
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
Incident Energy (eV)
38
48-Cd-115


MAT 4853
Dpa disappearance (mt102 -120)
Cross Section
48-Cd-115
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd115m.tendl
n-Cd115m.endfb8.0
Cross Section (barns)
n-Cd115m.endfb8.0/n-Cd115m.tendl
Ratio
39
Incident Energy (eV)
48-Cd-115