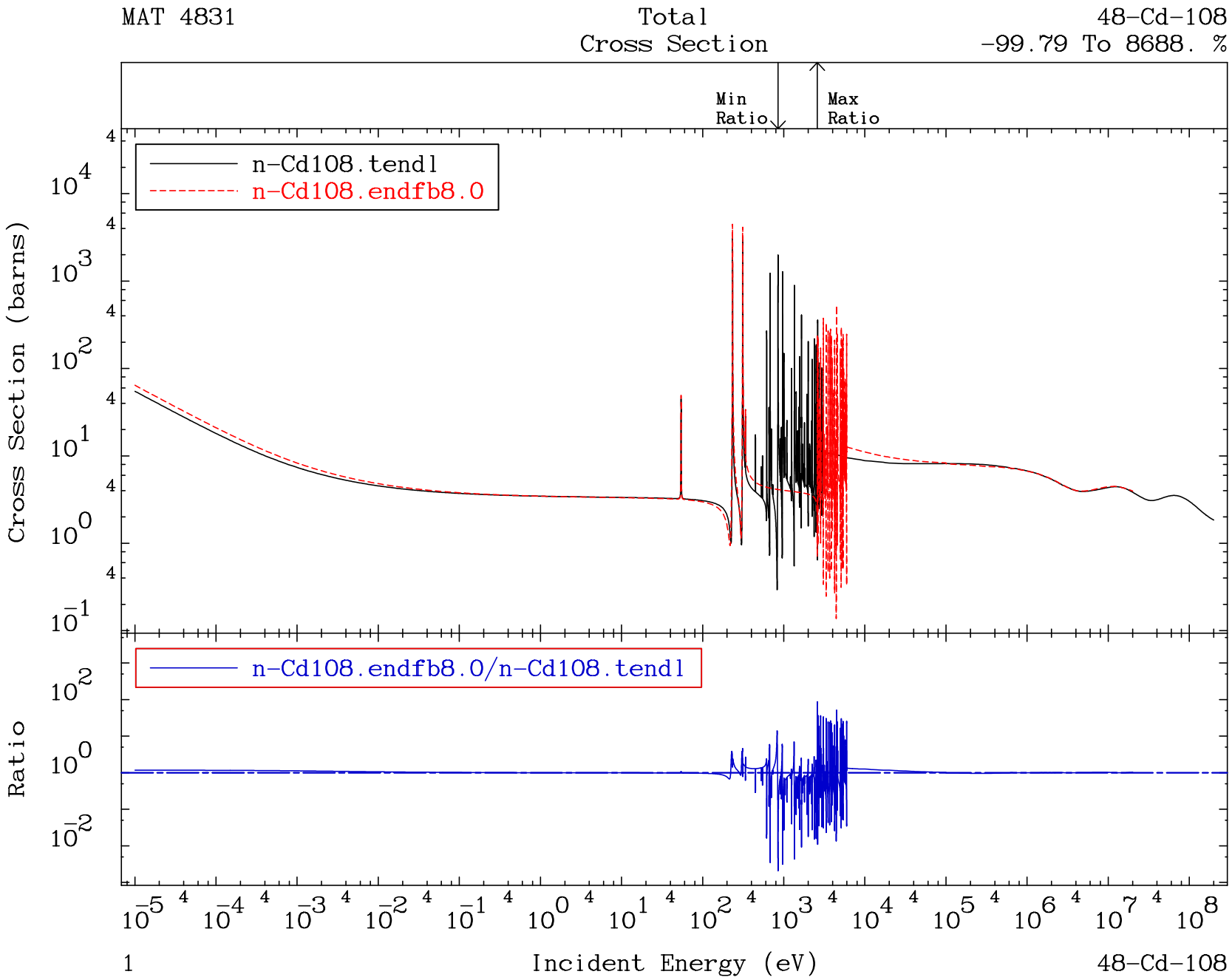
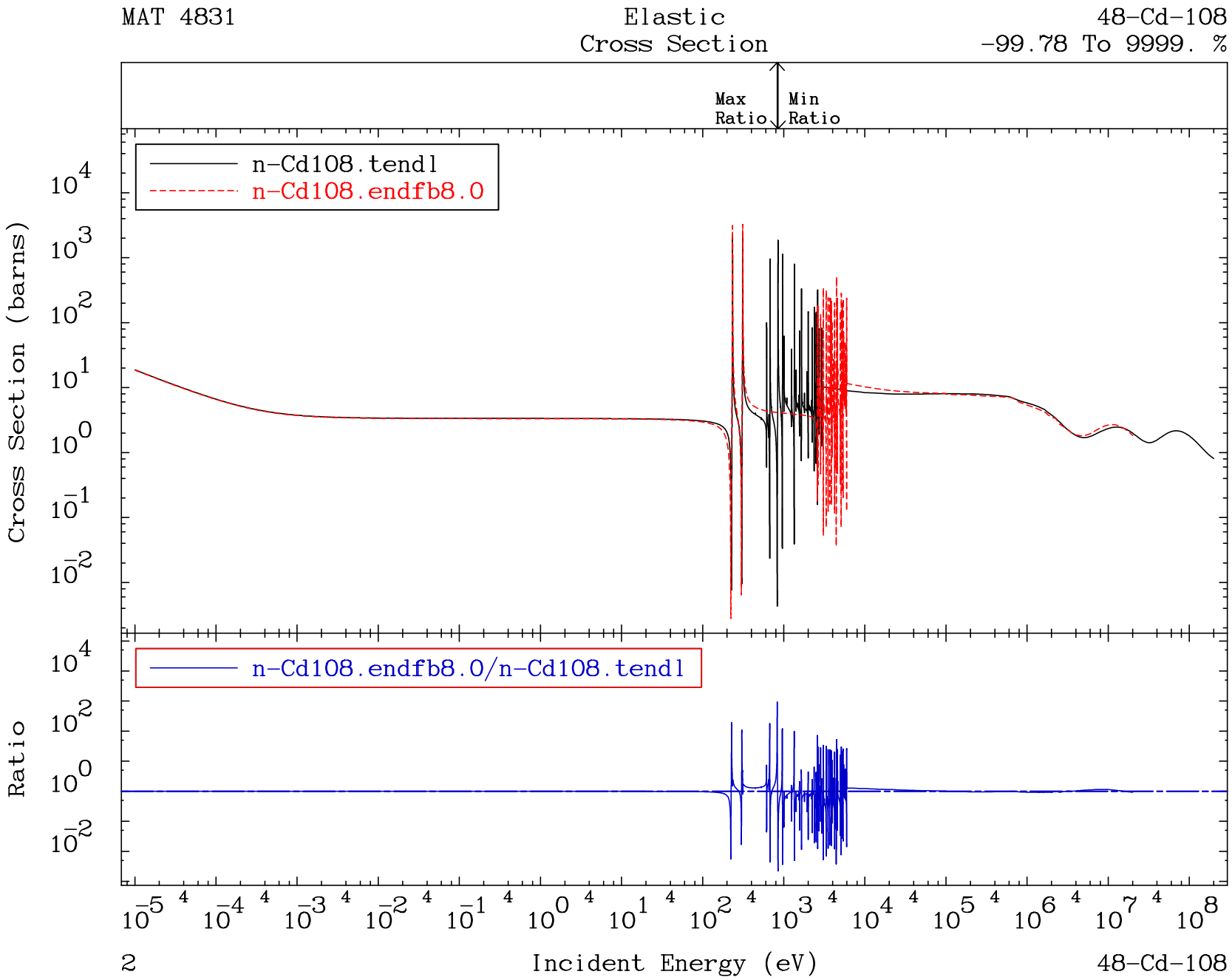
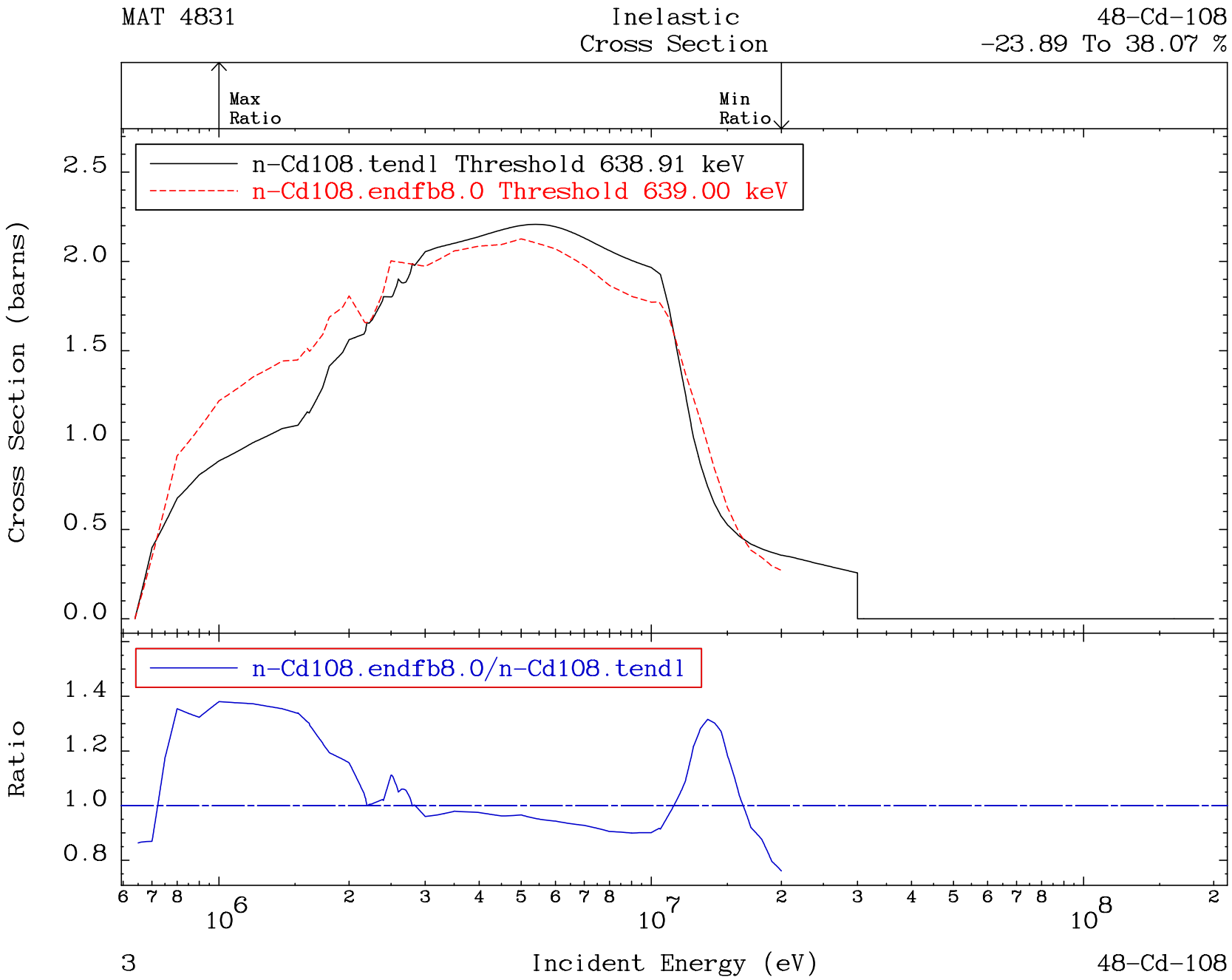
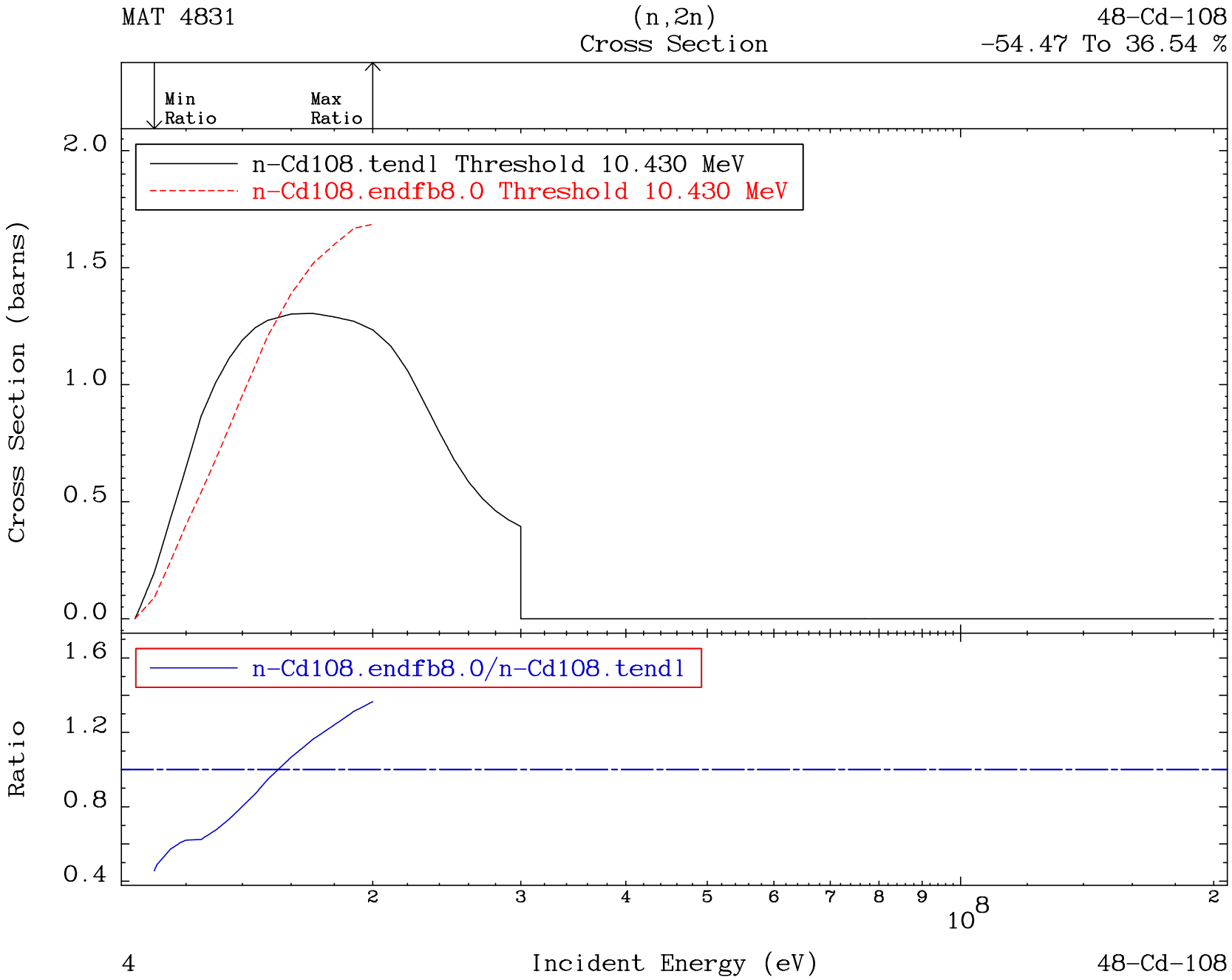
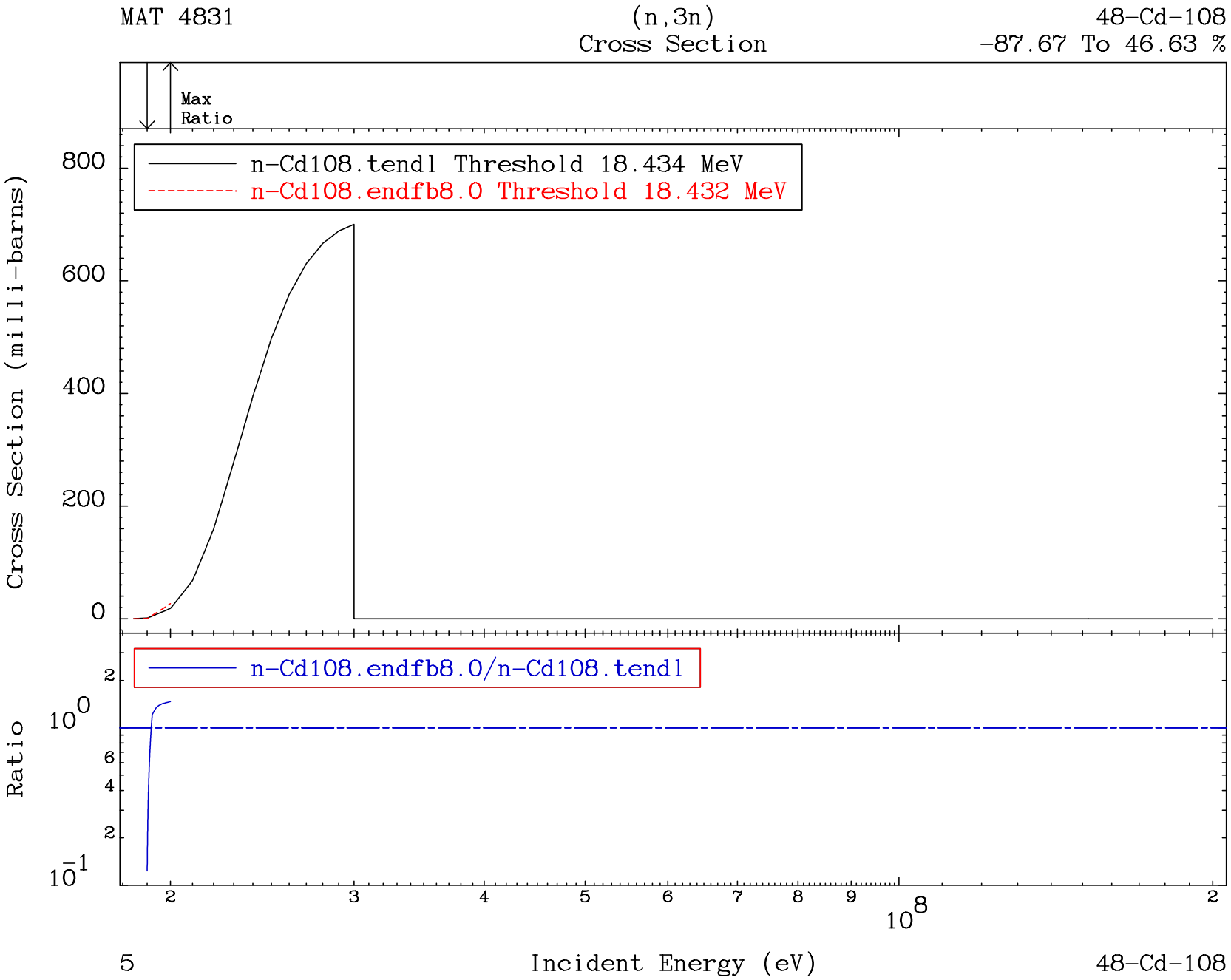
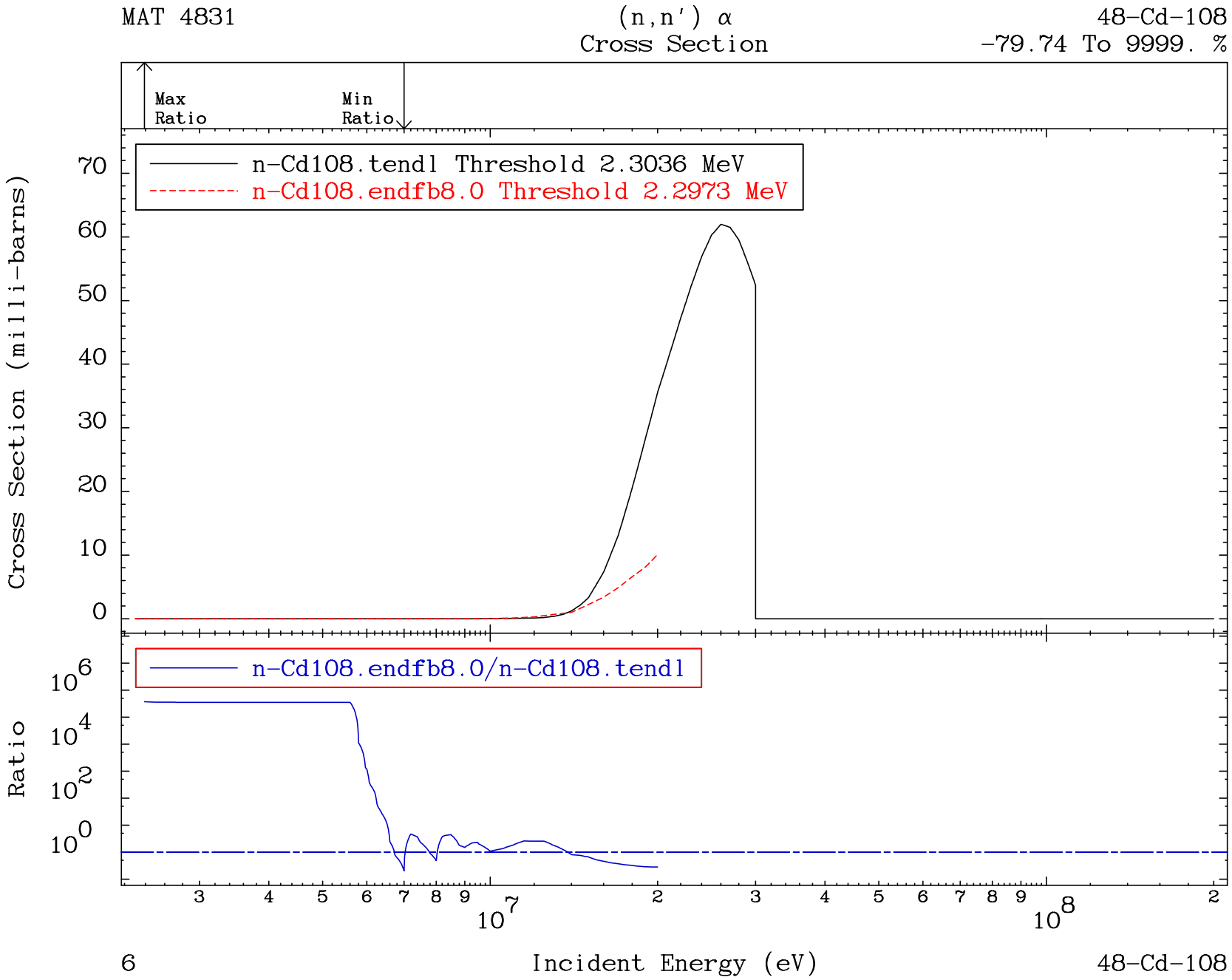

MAT 4831
Total
Cross Section
48-Cd-108
-99.79 To 8688. %
Min
Ratio
Max
Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
1
48-Cd-108

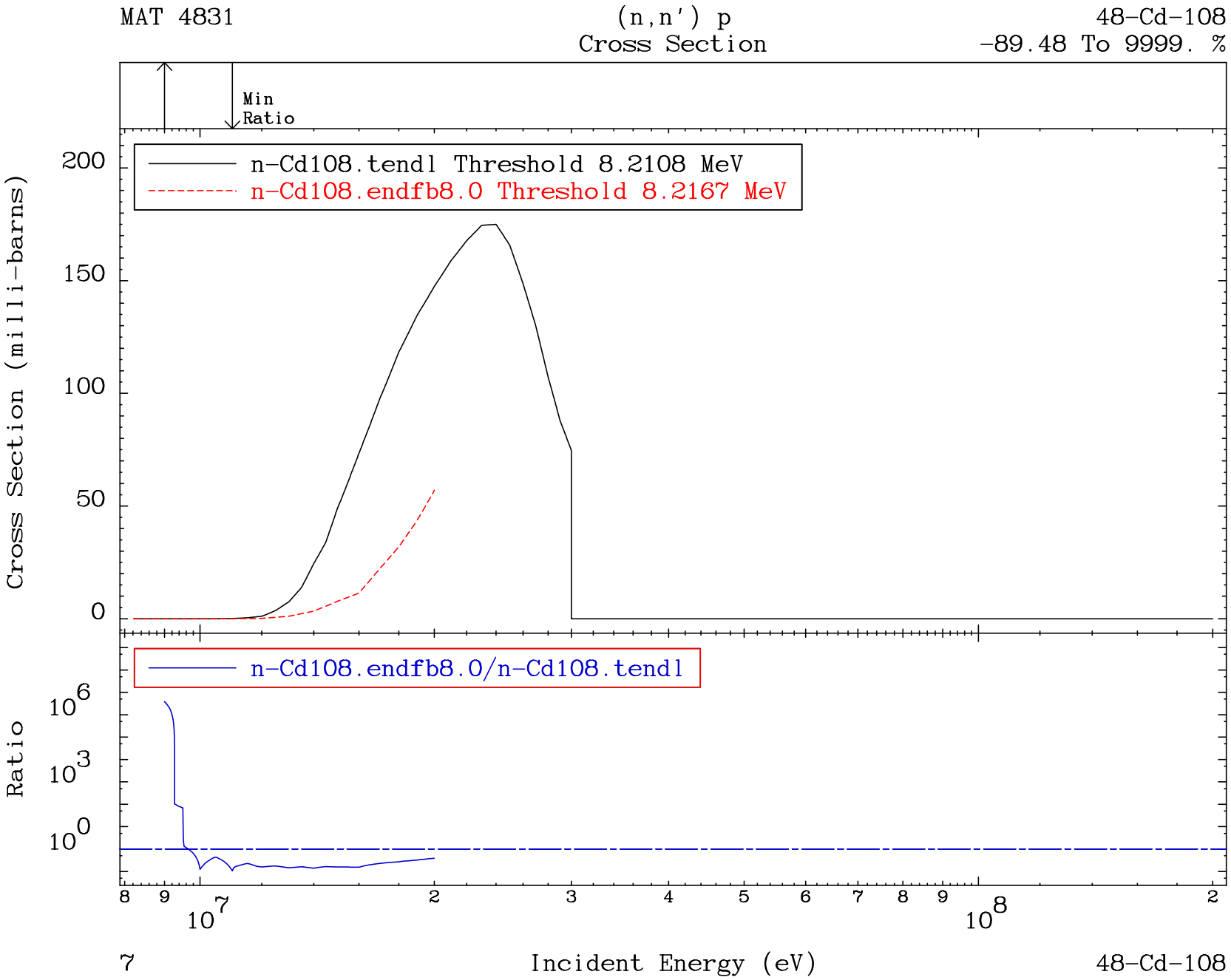

MAT 4831
Elastic
Cross Section
48-Cd-108
-99.78 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
2
48-Cd-108

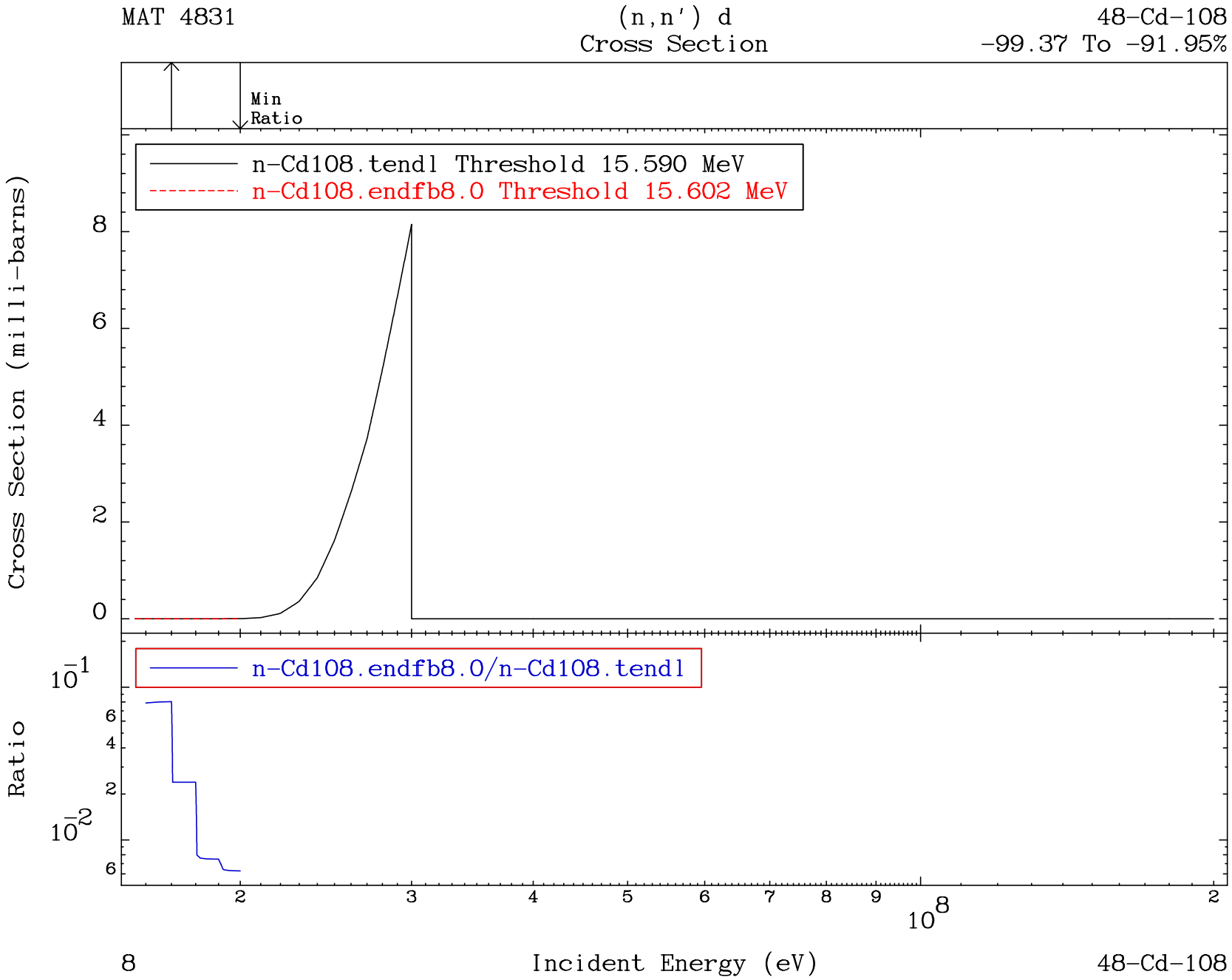

MAT 4831
Inelastic
Cross Section
48-Cd-108
-23.89 To 38.07 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 638.91 keV
n-Cd108.endfb8.0 Threshold 639.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.4
1.2
1.0
0.8
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
3
Incident Energy (eV)
48-Cd-108

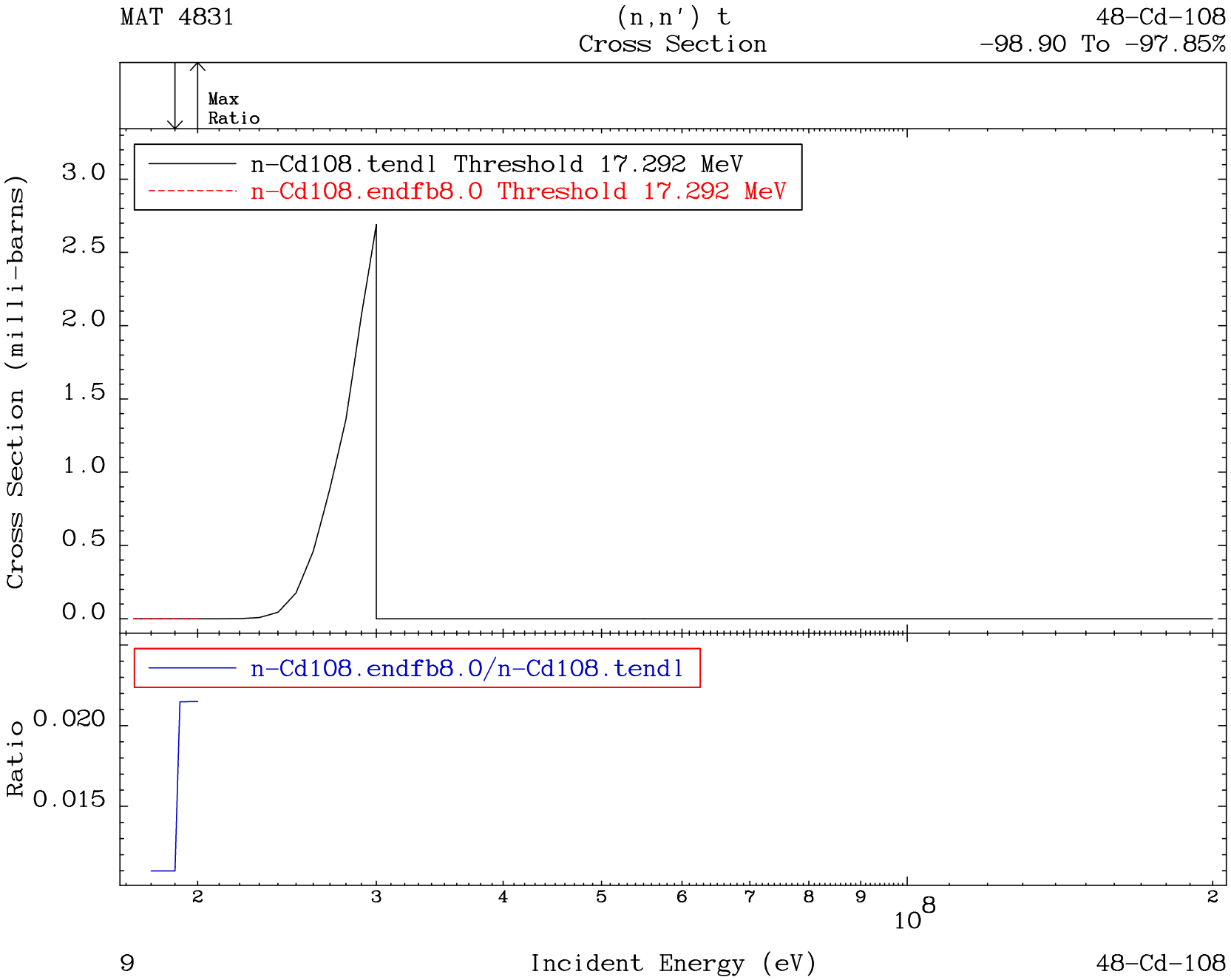

MAT 4831
(n,2n)
Cross Section
48-Cd-108
-54.47 To 36.54 %
Min Ratio
Max Ratio
n-Cd108.tendl Threshold 10.430 MeV
n-Cd108.endfb8.0 Threshold 10.430 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.6
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
4
Incident Energy (eV)
48-Cd-108

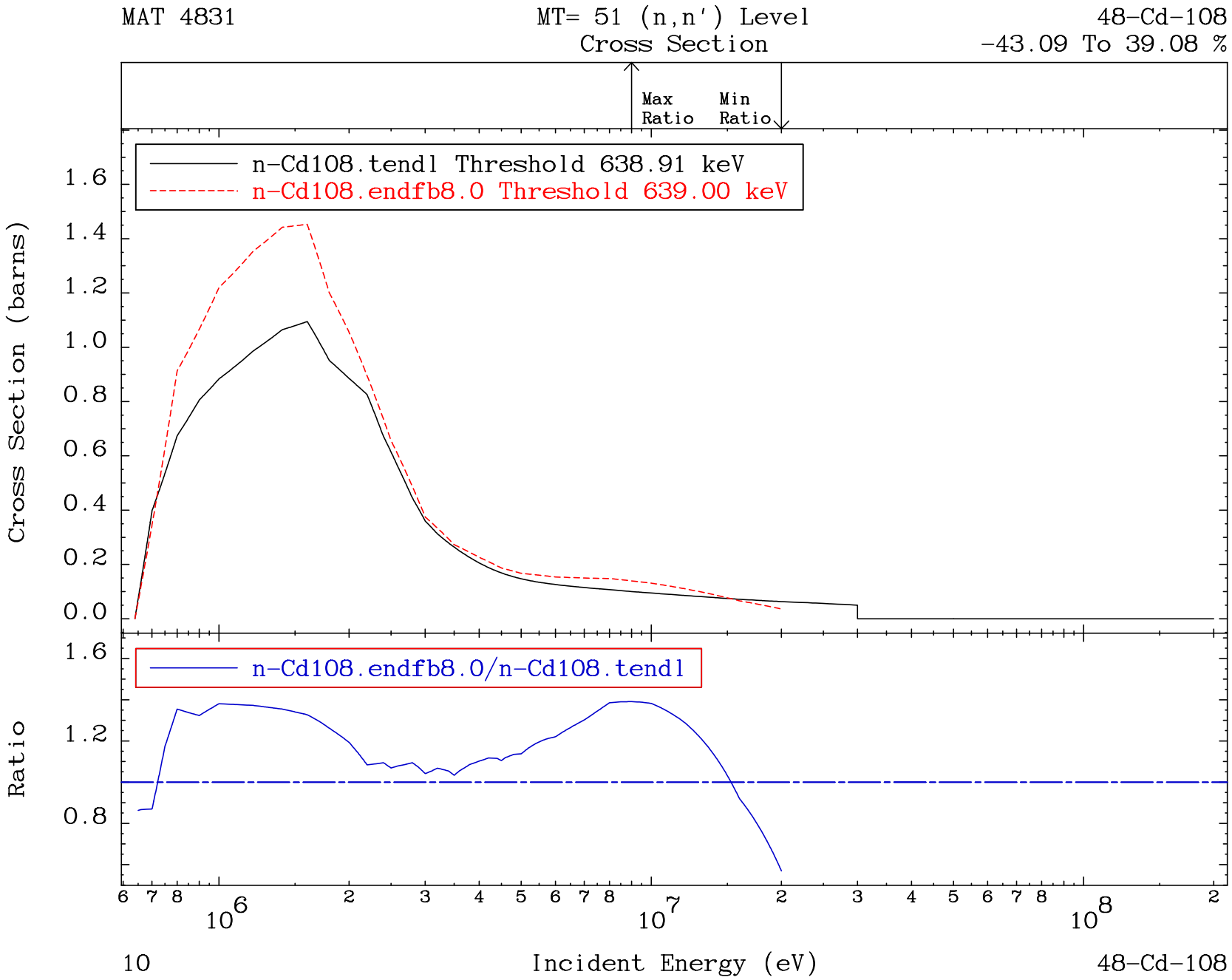

MAT 4831
(n,3n)
Cross Section
48-Cd-108
-87.67 To 46.63 %
Max
Ratio
n-Cd108.tendl Threshold 18.434 MeV
n-Cd108.endfb8.0 Threshold 18.432 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^0
10^-1
2
6
4
2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
48-Cd-108

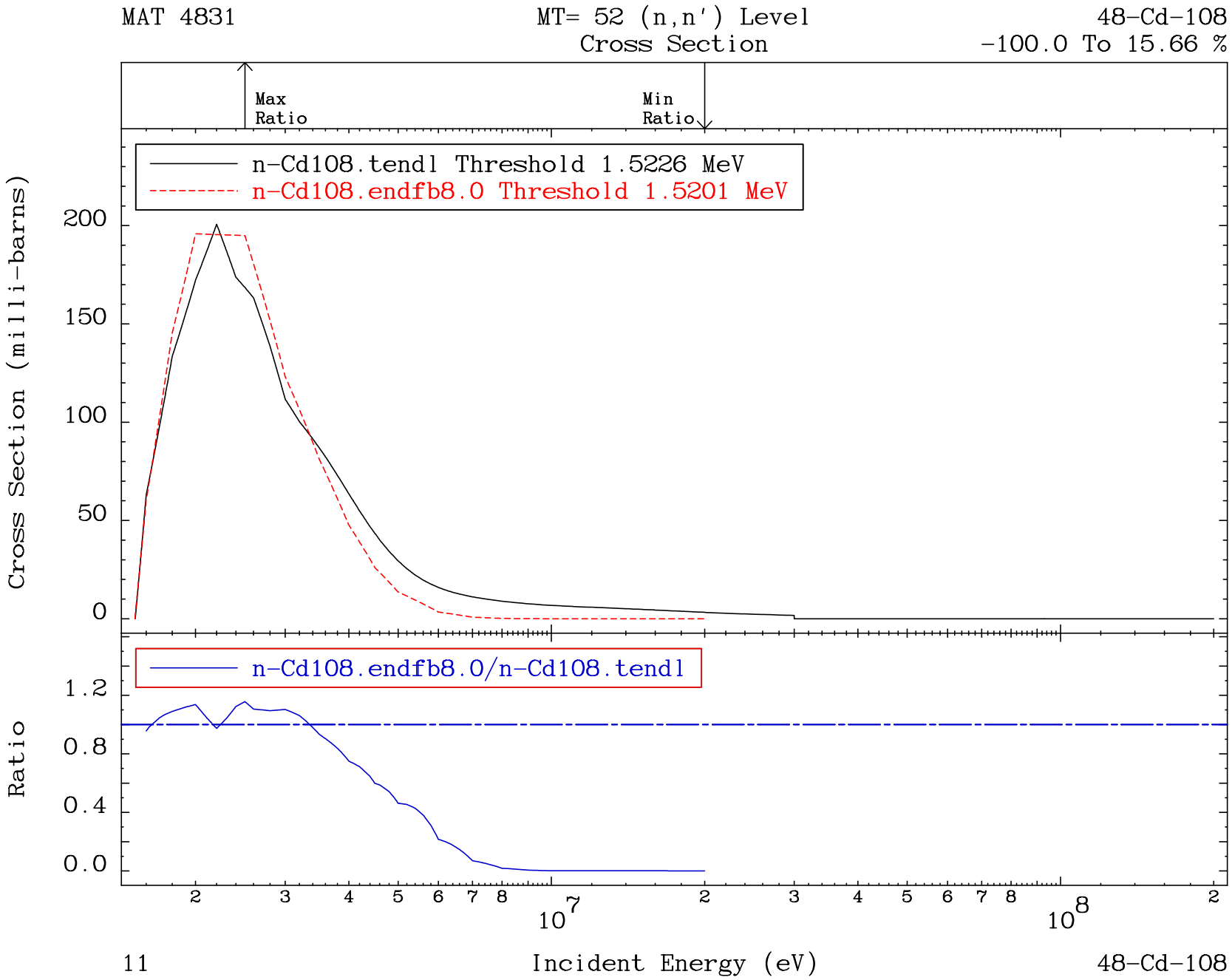

MAT 4831
(n,n') α
Cross Section
48-Cd-108
-79.74 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 2.3036 MeV
n-Cd108.endfb8.0 Threshold 2.2973 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^6
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
6
Incident Energy (eV)
48-Cd-108

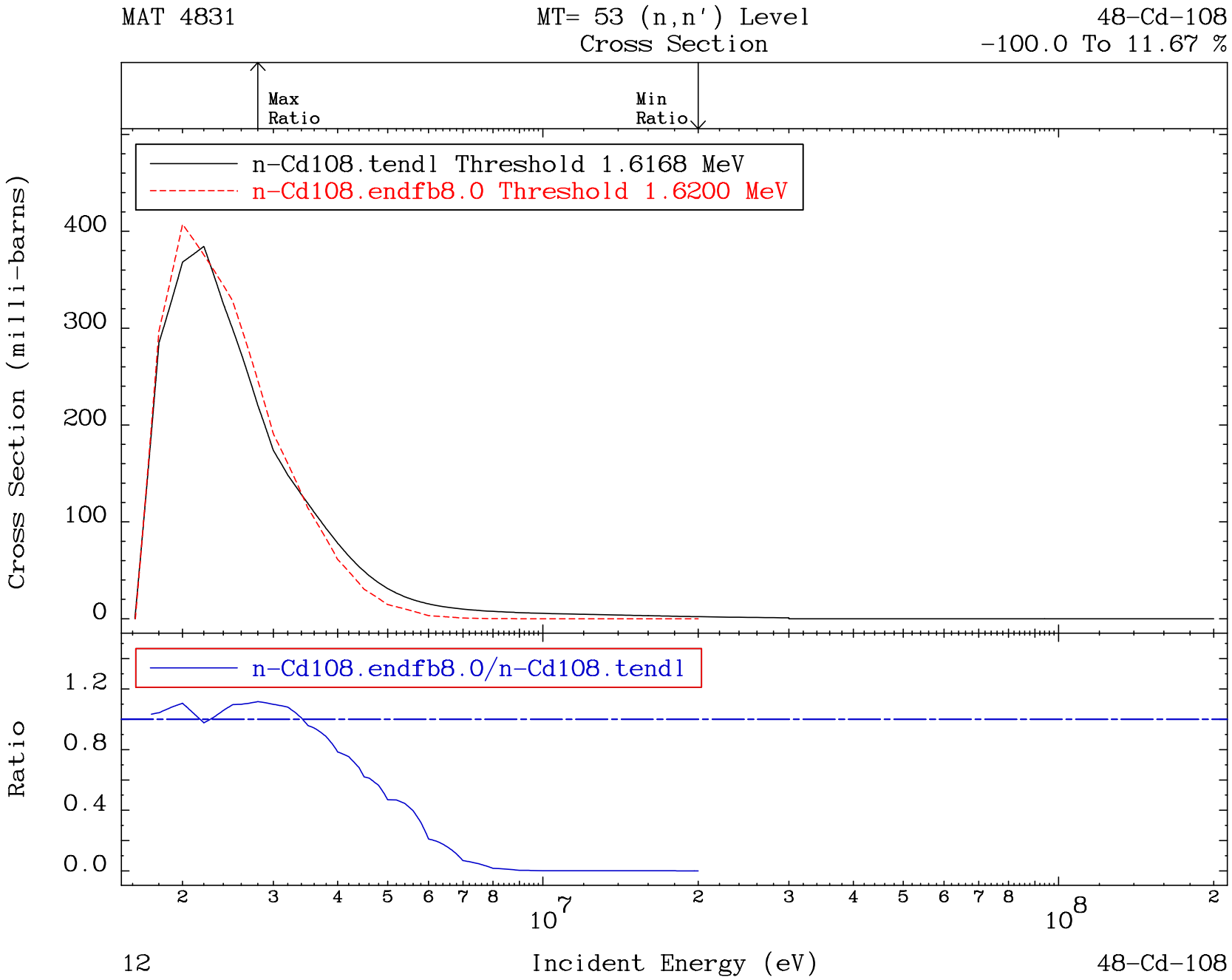

MAT 4831
(n,n') p
Cross Section
48-Cd-108
-89.48 To 9999. %
Min
Ratio
n-Cd108.tendl Threshold 8.2108 MeV
n-Cd108.endfb8.0 Threshold 8.2167 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^6
10^3
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
48-Cd-108

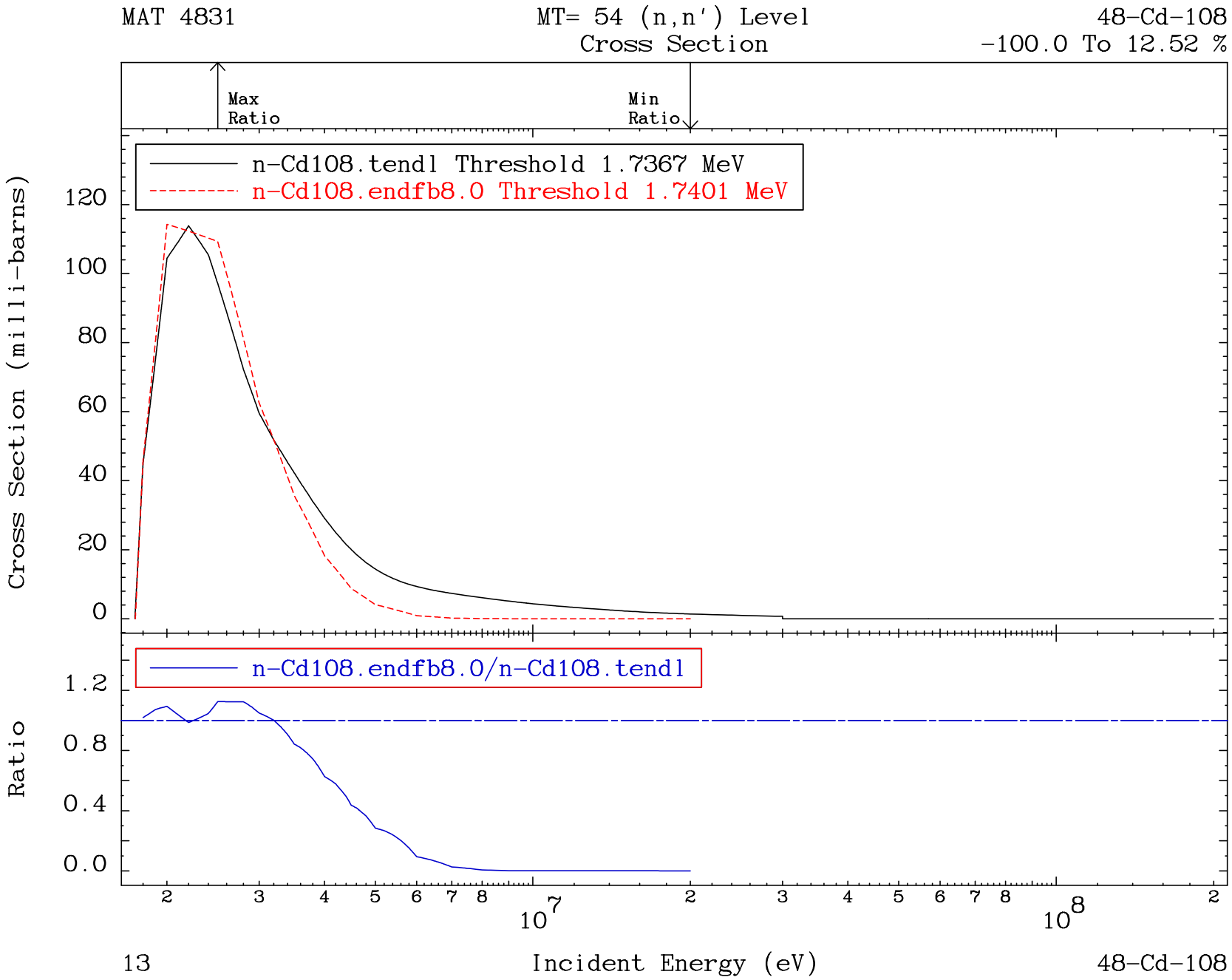

MAT 4831
(n,n') d
Cross Section
48-Cd-108
-99.37 To -91.95%
Min
Ratio
n-Cd108.tendl Threshold 15.590 MeV
n-Cd108.endfb8.0 Threshold 15.602 MeV
Cross Section (milli-barns)
0
2
4
6
8
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10-1
10-2
2
3
4
5
6
7
8
9
108
2
8
Incident Energy (eV)
48-Cd-108

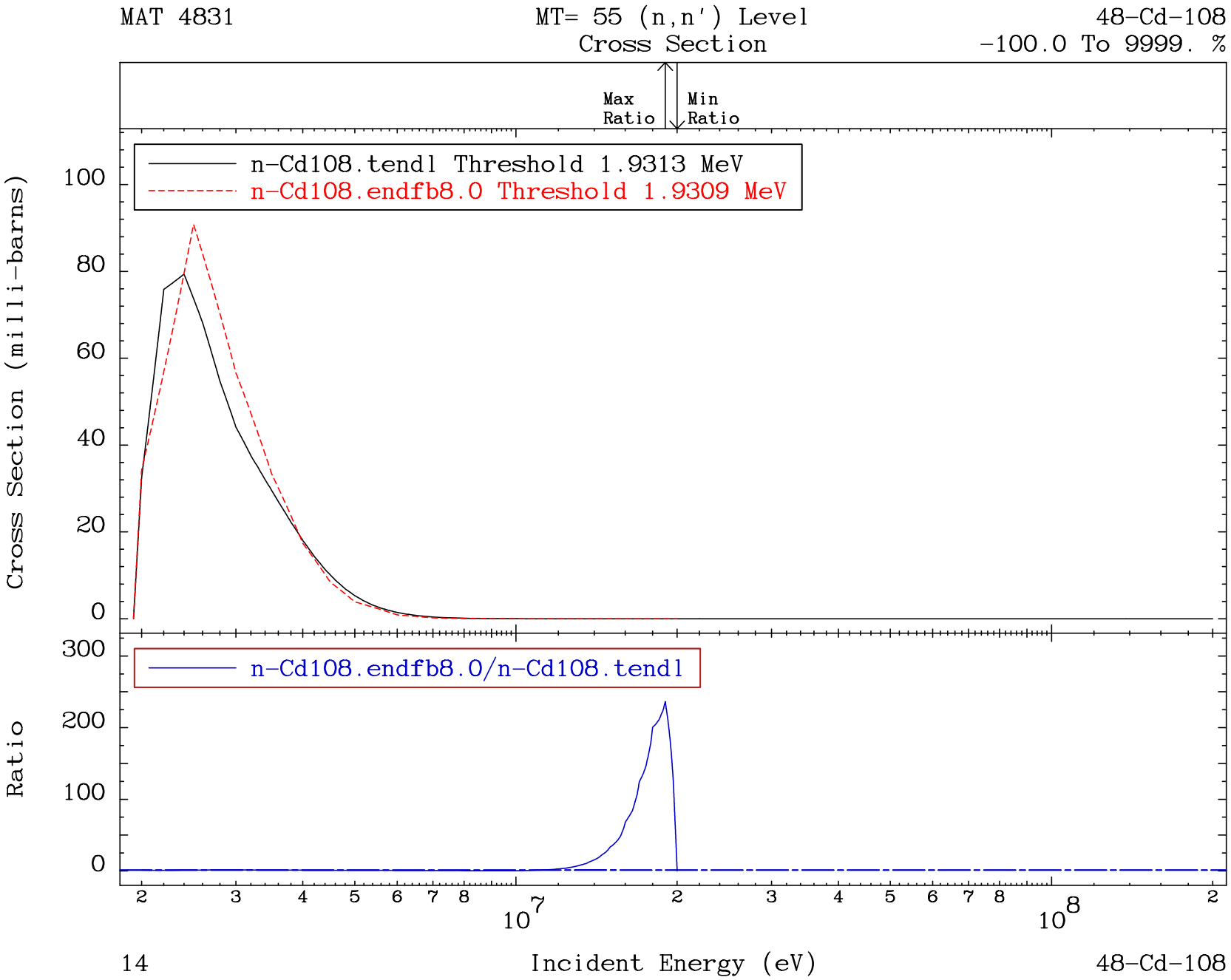

MAT 4831
(n,n') t
Cross Section
48-Cd-108
-98.90 To -97.85%
Max
Ratio
n-Cd108.tendl Threshold 17.292 MeV
n-Cd108.endfb8.0 Threshold 17.292 MeV
Cross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
0.020
0.015
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
48-Cd-108

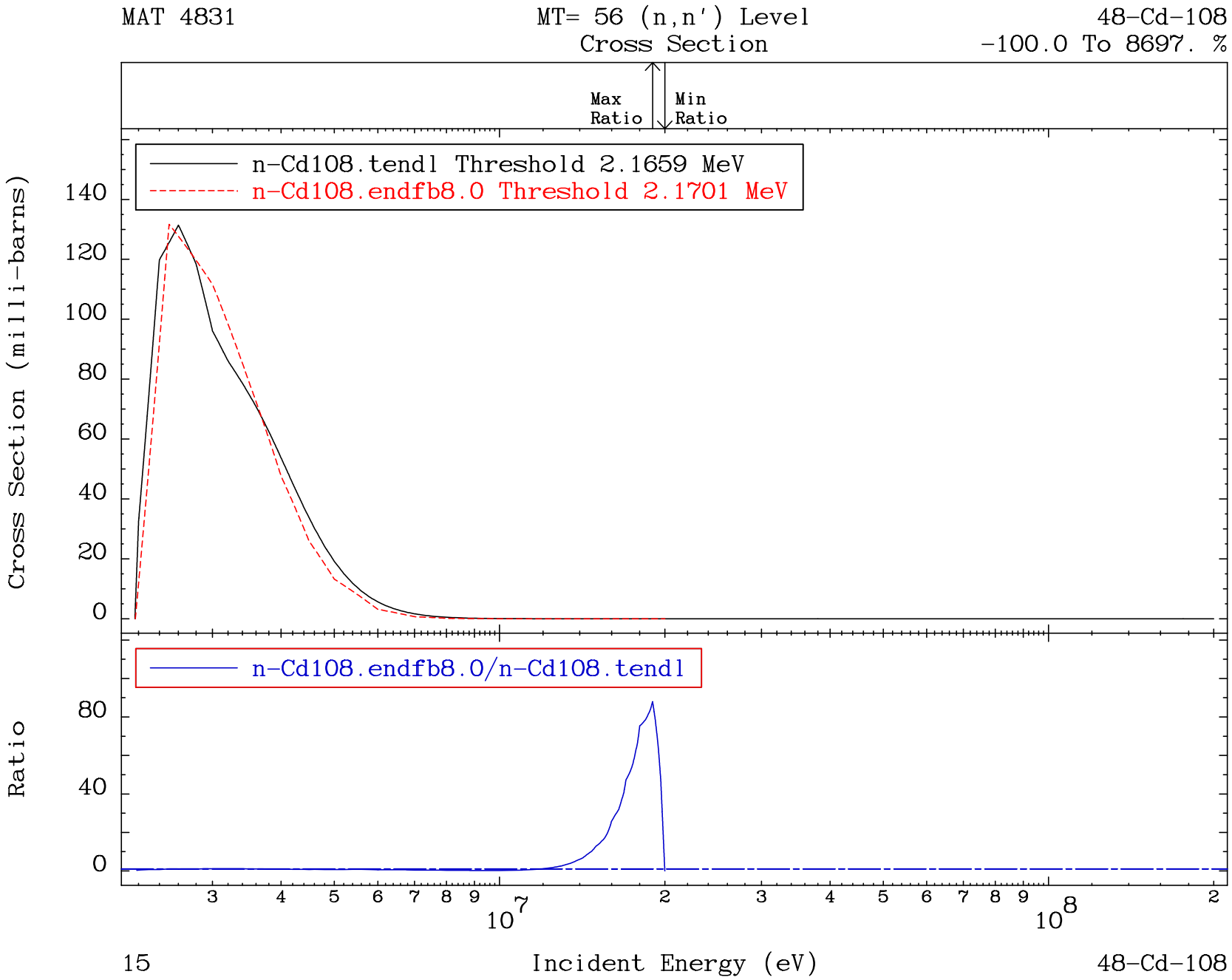

MAT 4831
MT= 51 (n,n') Level
Cross Section
48-Cd-108
-43.09 To 39.08 %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 638.91 keV
n-Cd108.endfb8.0 Threshold 639.00 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.6
1.2
0.8
6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
10
Incident Energy (eV)
48-Cd-108

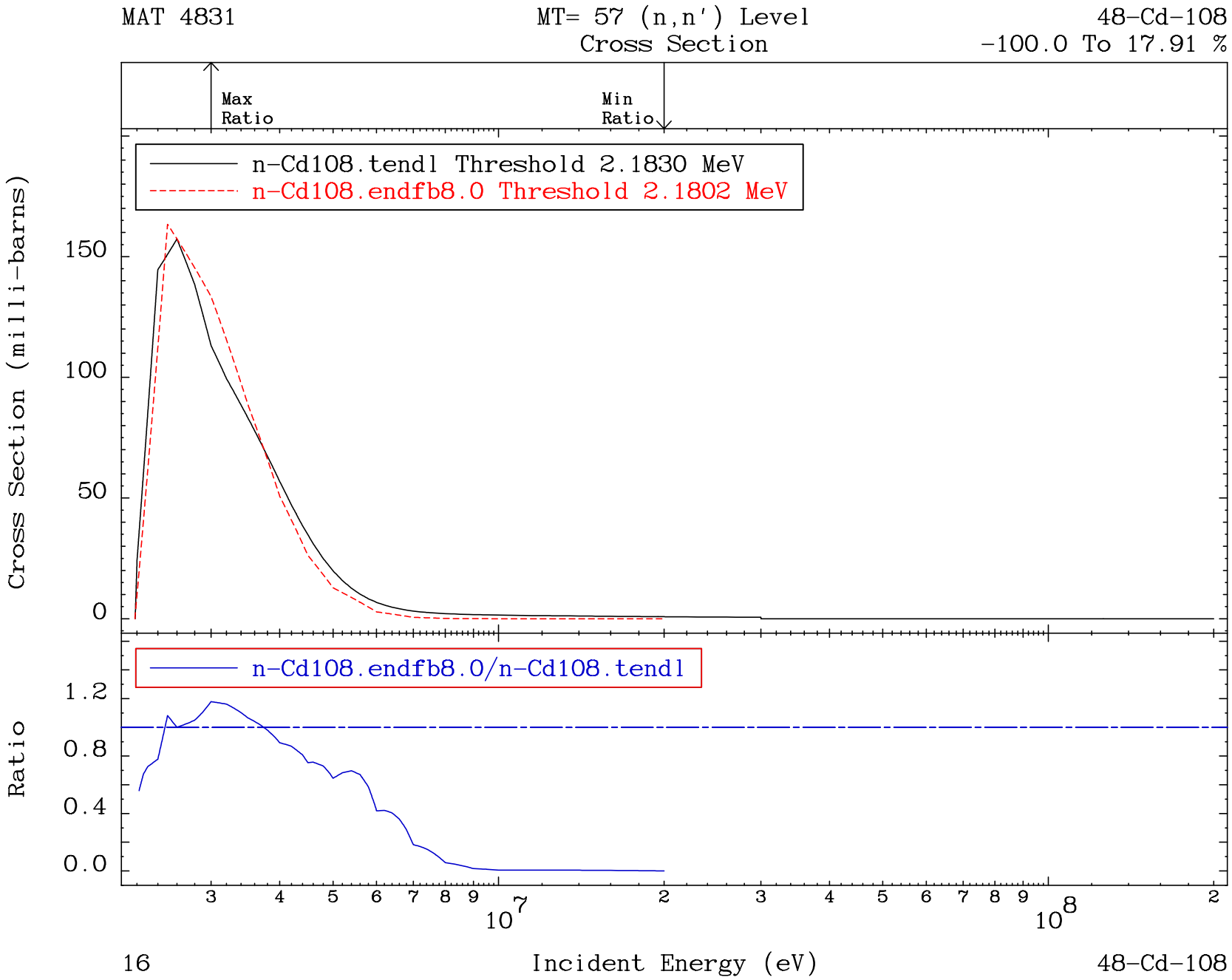

MAT 4831
MT= 52 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 15.66 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 1.5226 MeV
n-Cd108.endfb8.0 Threshold 1.5201 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
11
Incident Energy (eV)
48-Cd-108

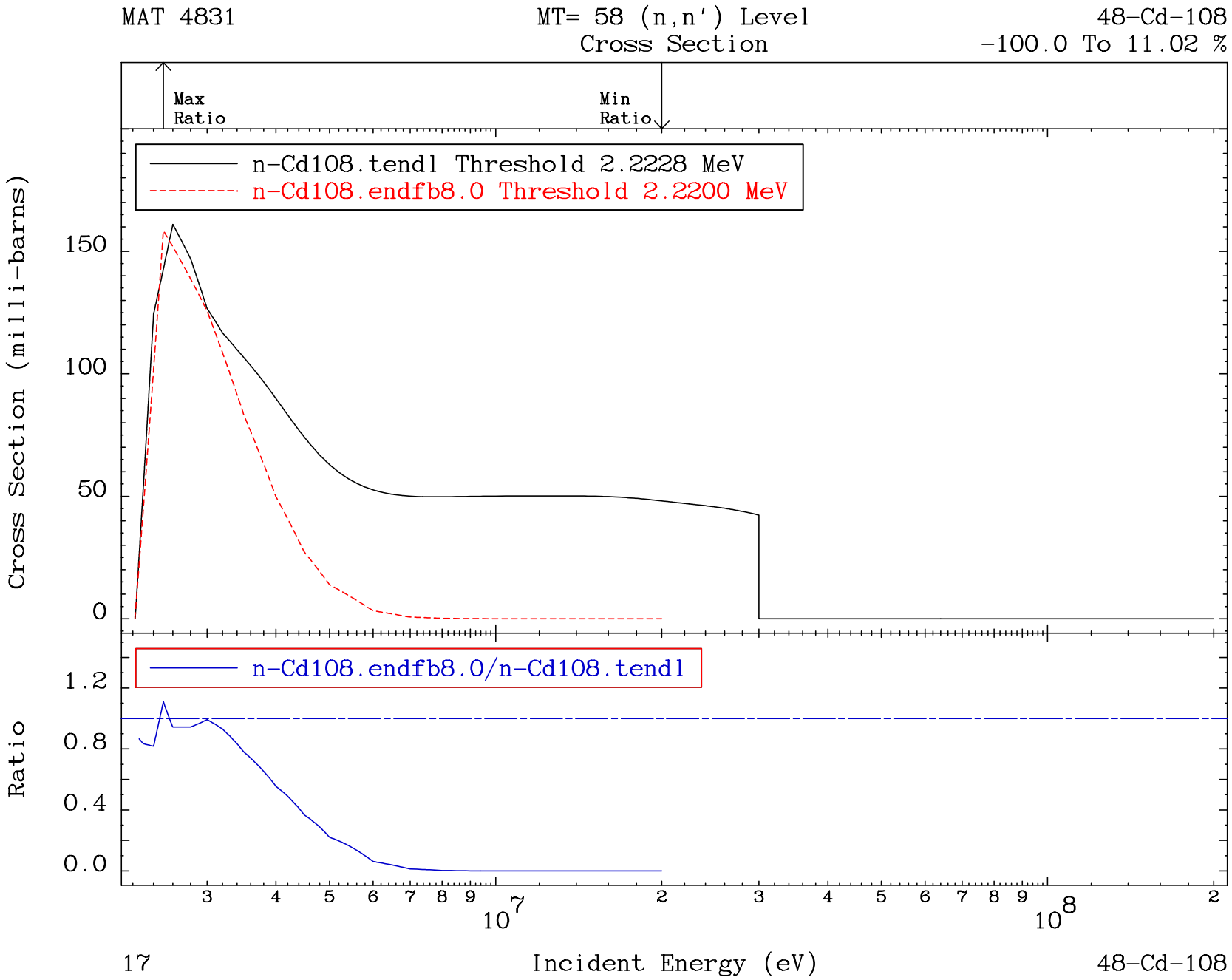

MAT 4831
MT= 53 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 11.67 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 1.6168 MeV
n-Cd108.endfb8.0 Threshold 1.6200 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
12
Incident Energy (eV)
48-Cd-108

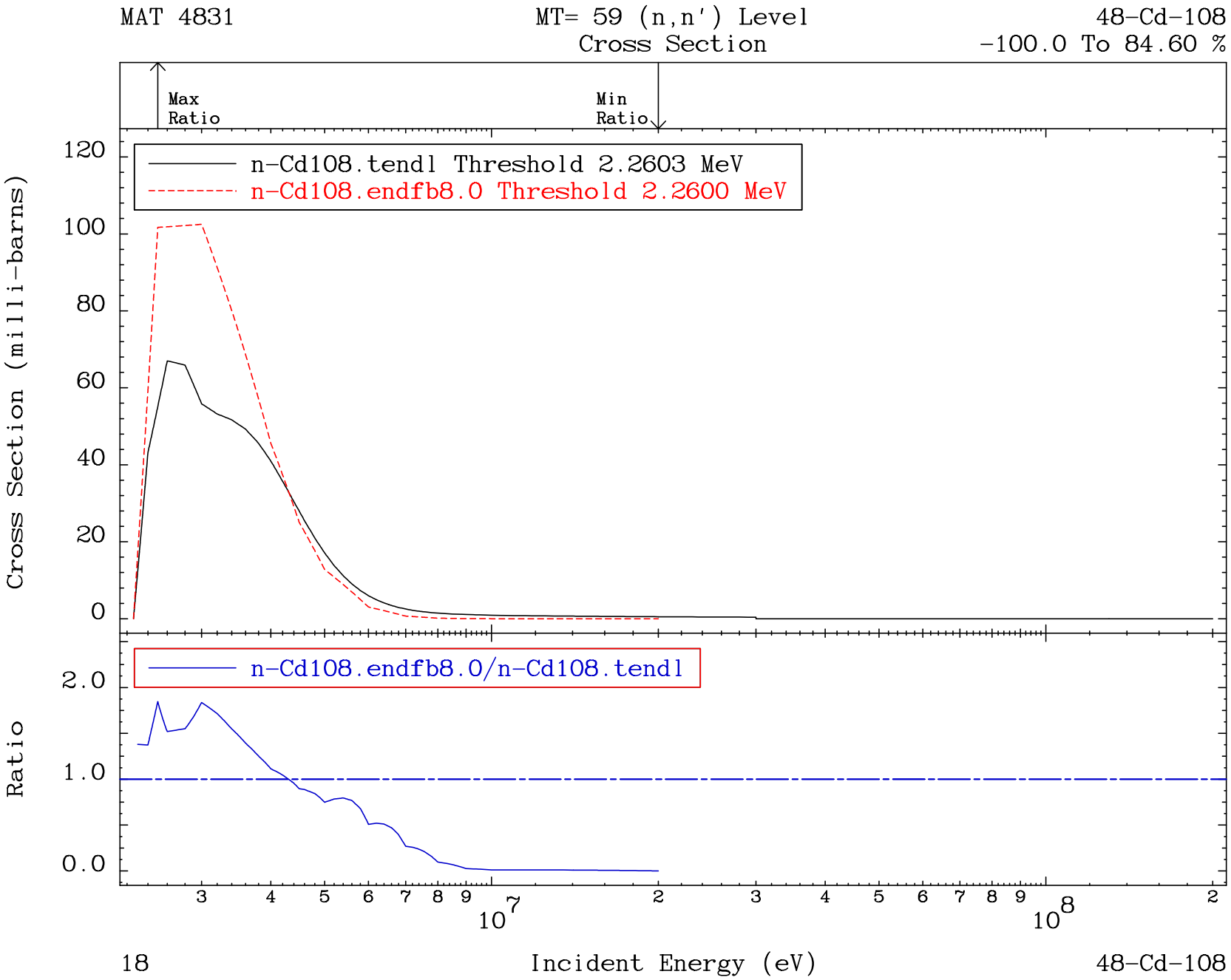

MAT 4831
MT= 54 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 12.52 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 1.7367 MeV
n-Cd108.endfb8.0 Threshold 1.7401 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.2
0.8
0.4
0.0
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
13
Incident Energy (eV)
48-Cd-108

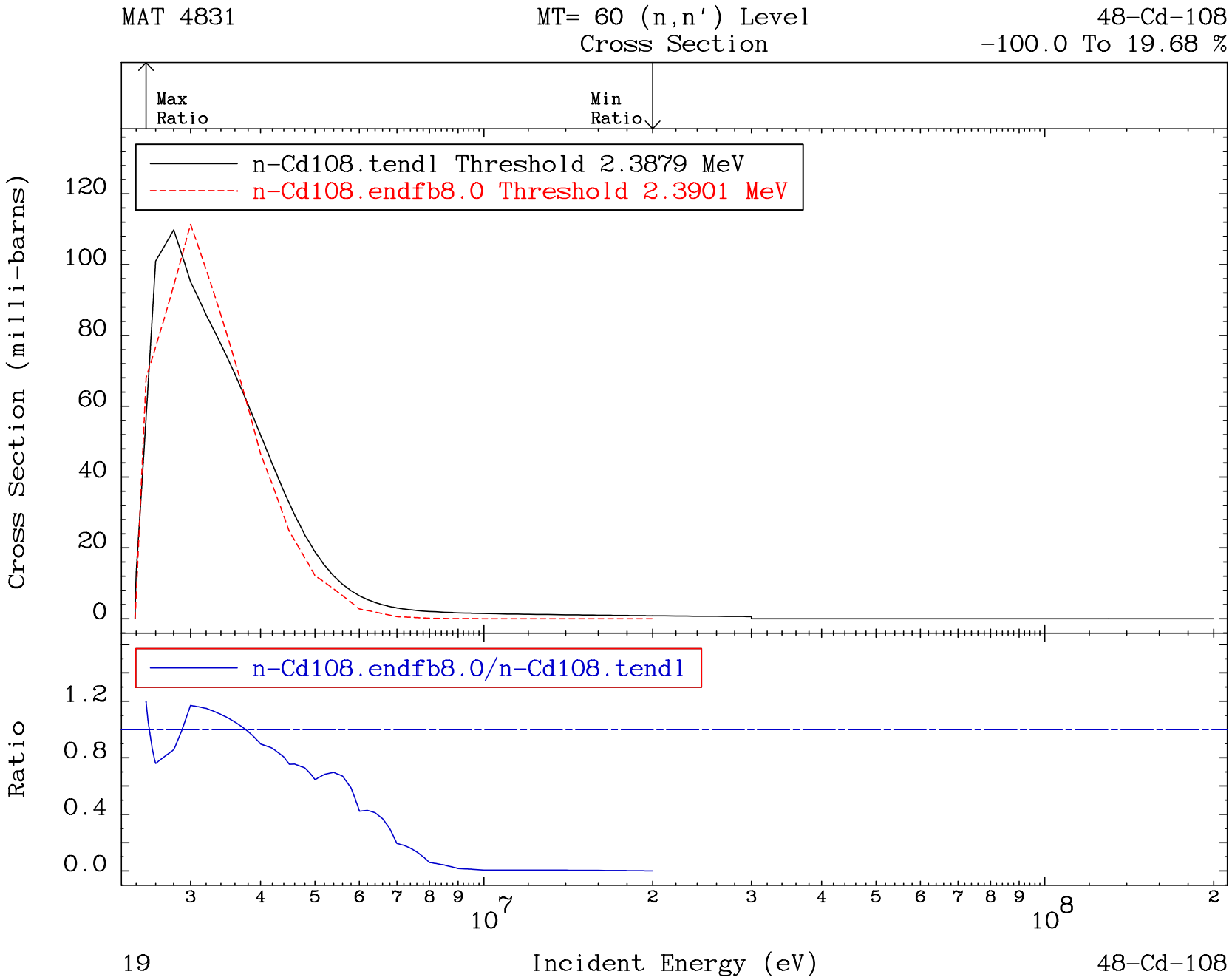

MAT 4831
MT= 55 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 1.9313 MeV
n-Cd108.endfb8.0 Threshold 1.9309 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
300
200
100
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
14
Incident Energy (eV)
48-Cd-108

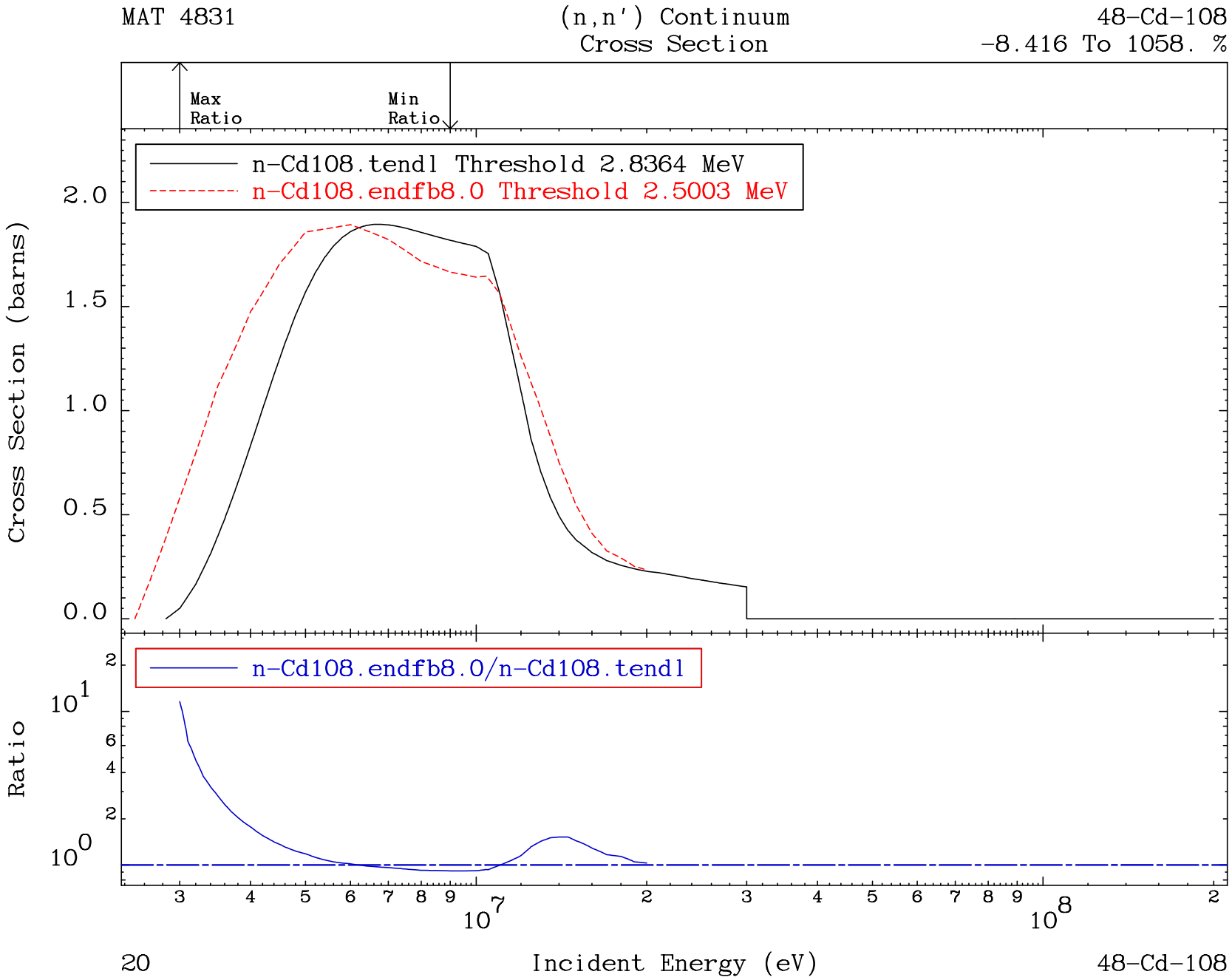

MAT 4831
MT= 56 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 8697. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 2.1659 MeV
n-Cd108.endfb8.0 Threshold 2.1701 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
80
40
0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
15
Incident Energy (eV)
48-Cd-108

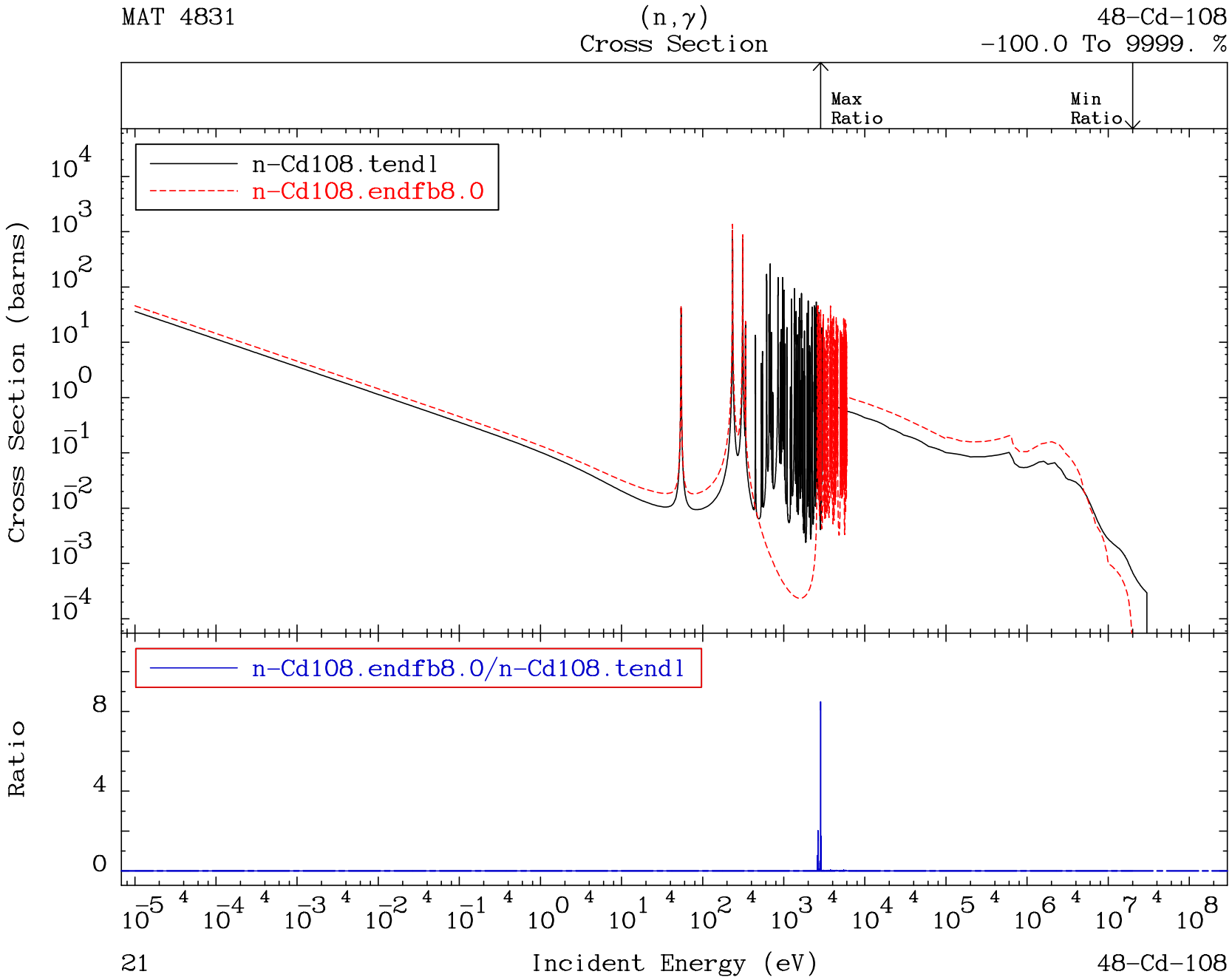

MAT 4831
MT= 57 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 17.91 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 2.1830 MeV
n-Cd108.endfb8.0 Threshold 2.1802 MeV
Cross Section (milli-barns)
150
100
50
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.2
0.8
0.4
0.0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
16
Incident Energy (eV)
48-Cd-108

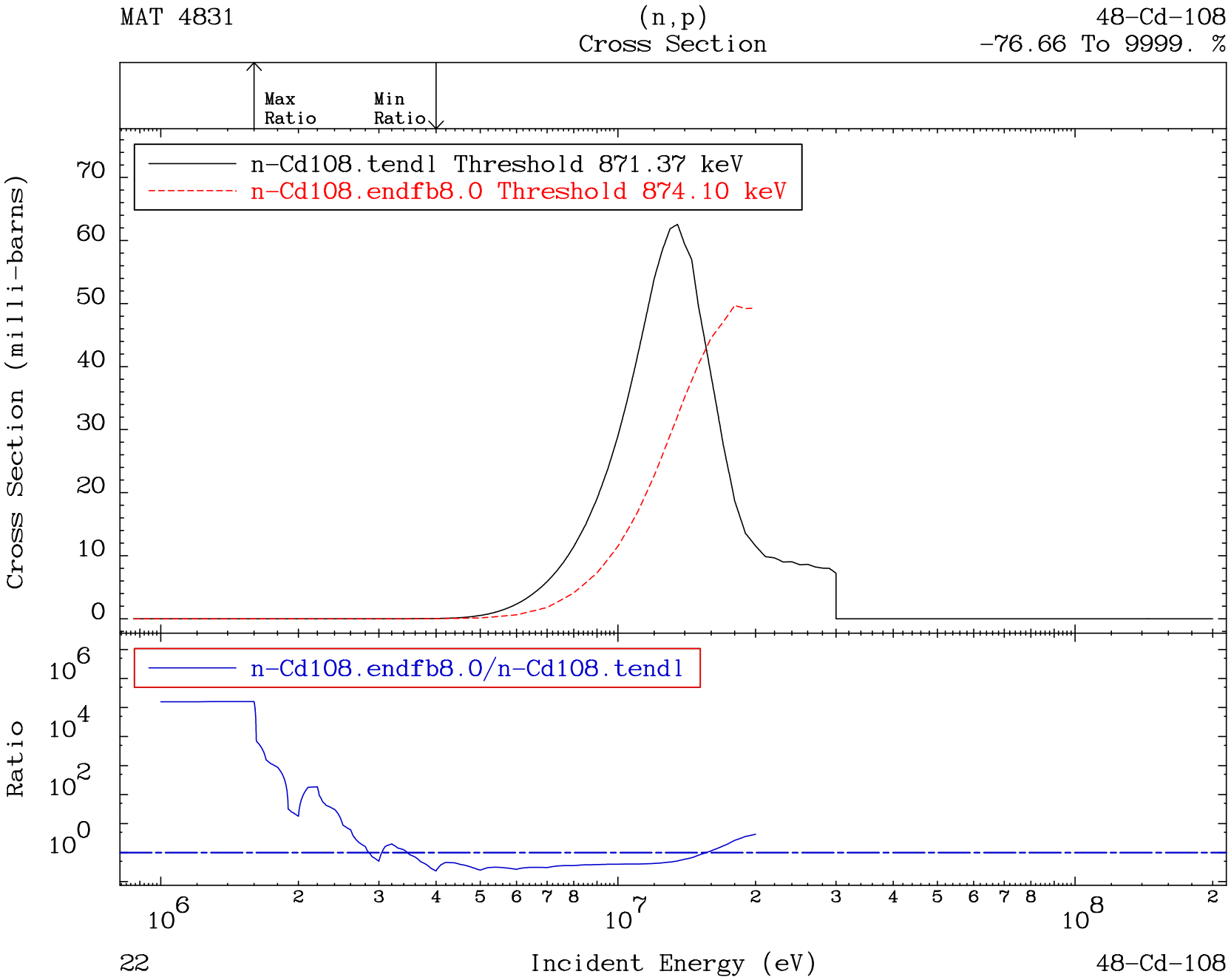

MAT 4831
MT= 58 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 11.02 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 2.2228 MeV
n-Cd108.endfb8.0 Threshold 2.2200 MeV
Cross Section (milli-barns)
150
100
50
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.2
0.8
0.4
0.0
3 4 5 6 7 8 9
10^7
2 3 4 5 6 7 8 9
10^8
2
17
Incident Energy (eV)
48-Cd-108

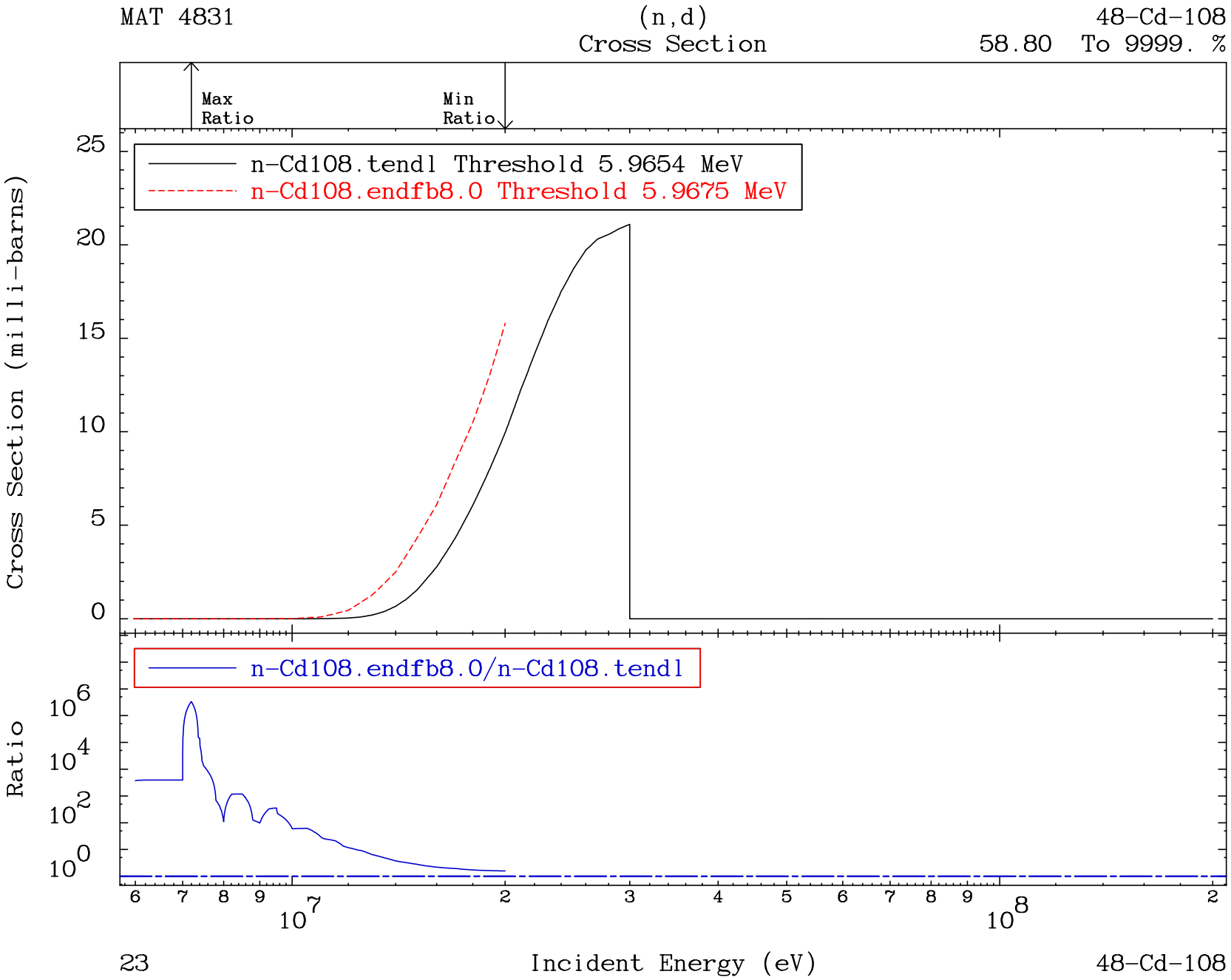

MAT 4831
MT= 59 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 84.60 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 2.2603 MeV
n-Cd108.endfb8.0 Threshold 2.2600 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
2.0
1.0
0.0
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
18
Incident Energy (eV)
48-Cd-108

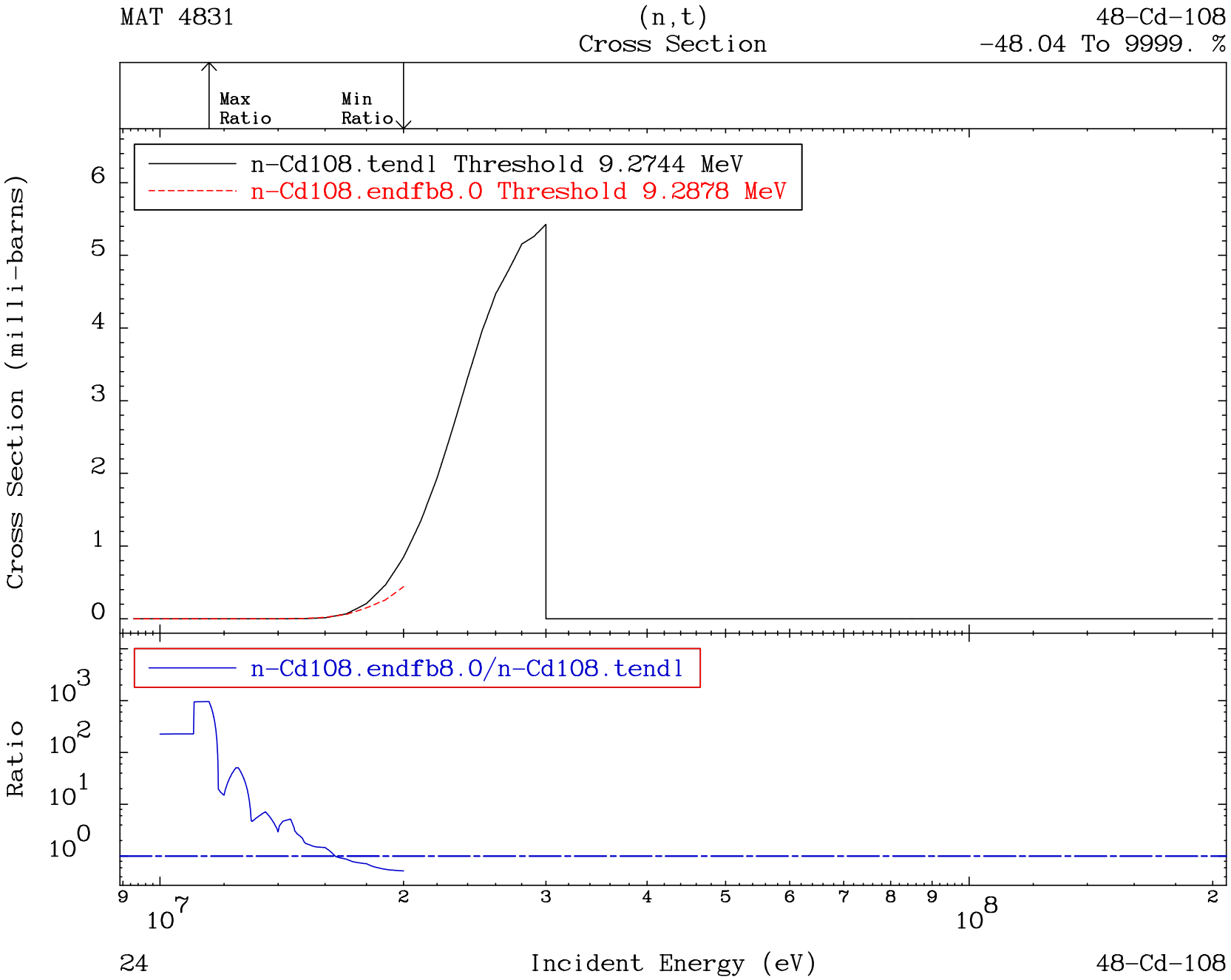

MAT 4831
MT= 60 (n,n') Level
Cross Section
48-Cd-108
-100.0 To 19.68 %
Max
Ratio
Min
Ratio
n-Cd108.tendl Threshold 2.3879 MeV
n-Cd108.endfb8.0 Threshold 2.3901 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
1.2
0.8
0.4
0.0
3
4
5
6
7
8
9
10^7
2
3
4
5
6
7
8
9
10^8
2
19
Incident Energy (eV)
48-Cd-108

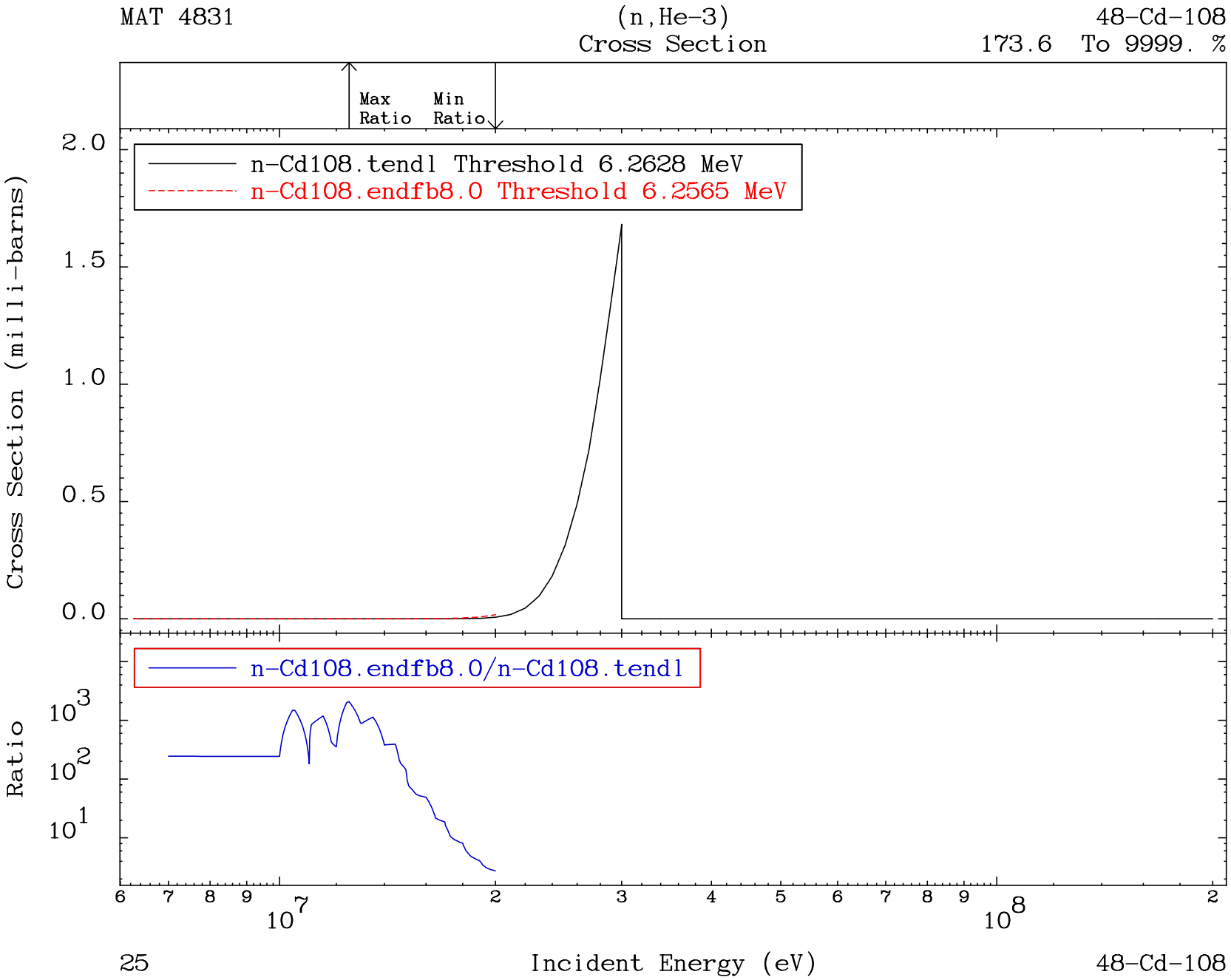

MAT 4831
(n,n') Continuum
Cross Section
48-Cd-108
-8.416 To 1058. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 2.8364 MeV
n-Cd108.endfb8.0 Threshold 2.5003 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^1
10^0
10^7
10^8
20
Incident Energy (eV)
48-Cd-108

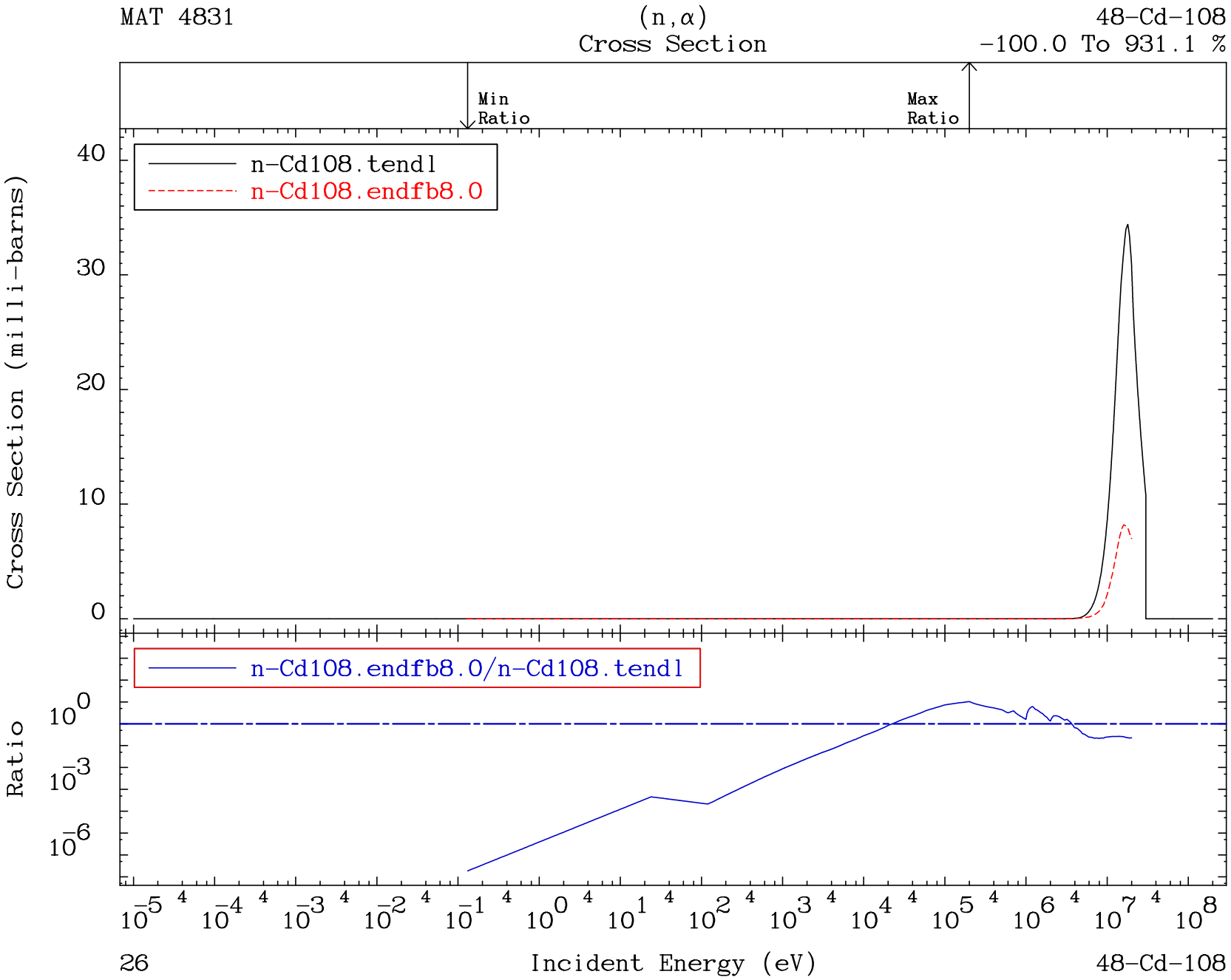

MAT 4831
(n,γ)
Cross Section
48-Cd-108
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
21
48-Cd-108

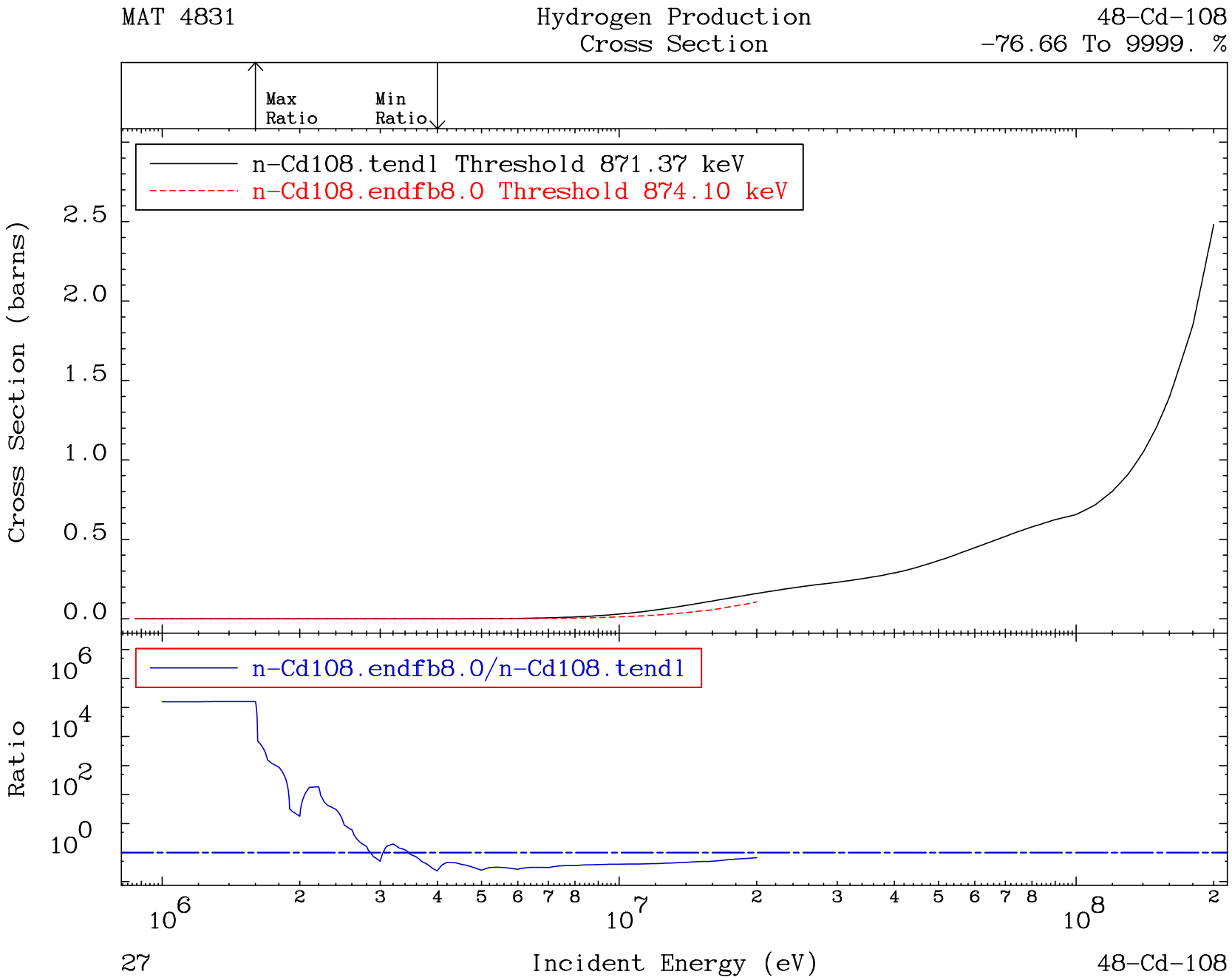

MAT 4831
(n,p)
Cross Section
48-Cd-108
-76.66 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 871.37 keV
n-Cd108.endfb8.0 Threshold 874.10 keV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
22
Incident Energy (eV)
48-Cd-108

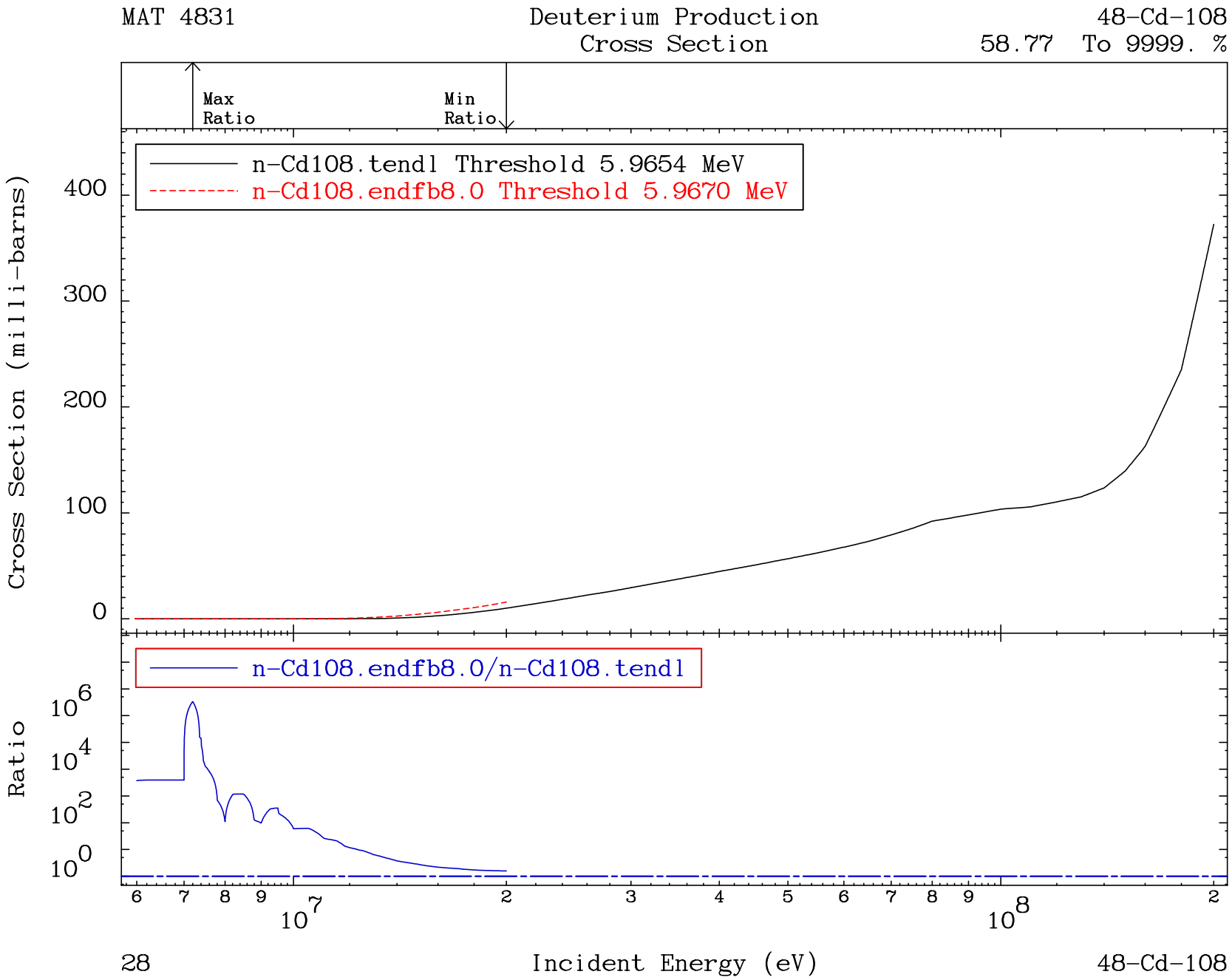

MAT 4831
(n,d)
Cross Section
48-Cd-108
58.80 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 5.9654 MeV
n-Cd108.endfb8.0 Threshold 5.9675 MeV
Cross Section (milli-barns)
25
20
15
10
5
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^6
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
48-Cd-108

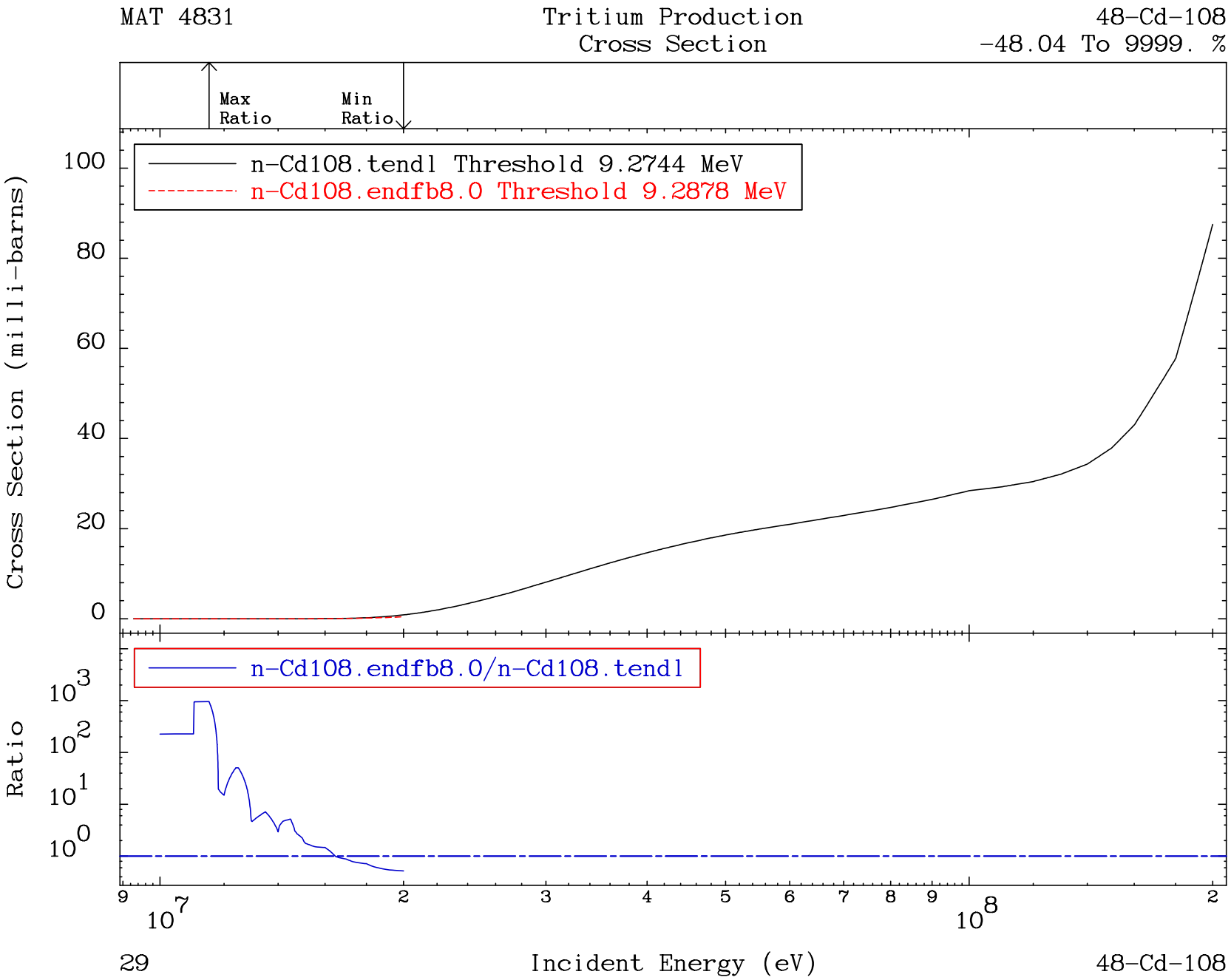

MAT 4831
(n,t)
Cross Section
48-Cd-108
-48.04 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 9.2744 MeV
n-Cd108.endfb8.0 Threshold 9.2878 MeV
Cross Section (milli-barns)
0
1
2
3
4
5
6
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^3
10^2
10^1
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
24
Incident Energy (eV)
48-Cd-108

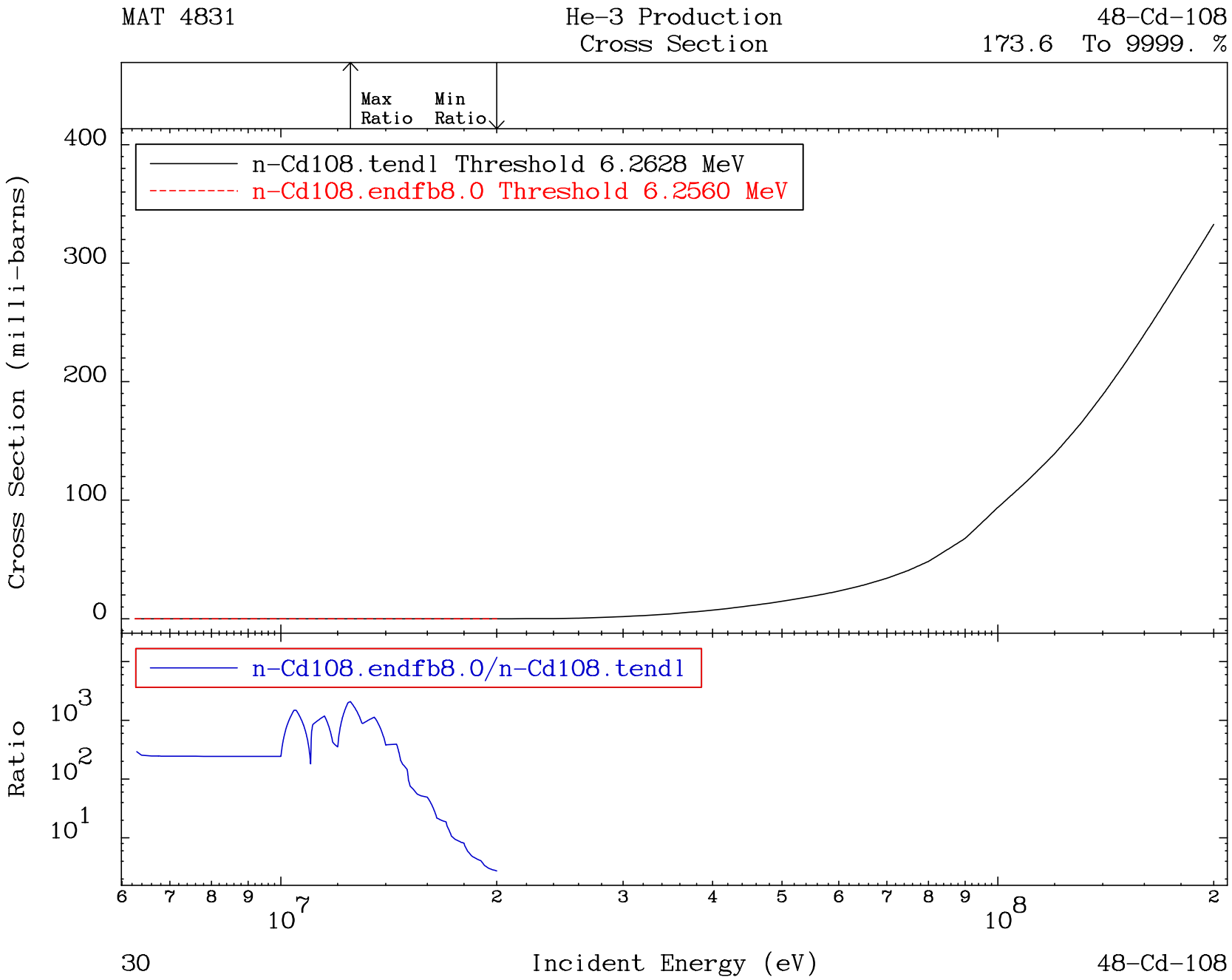

MAT 4831
(n,He-3)
Cross Section
48-Cd-108
173.6 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 6.2628 MeV
n-Cd108.endfb8.0 Threshold 6.2565 MeV
Cross Section (milli-barns)
2.0
1.5
1.0
0.5
0.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^3
10^2
10^1
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
25
Incident Energy (eV)
48-Cd-108

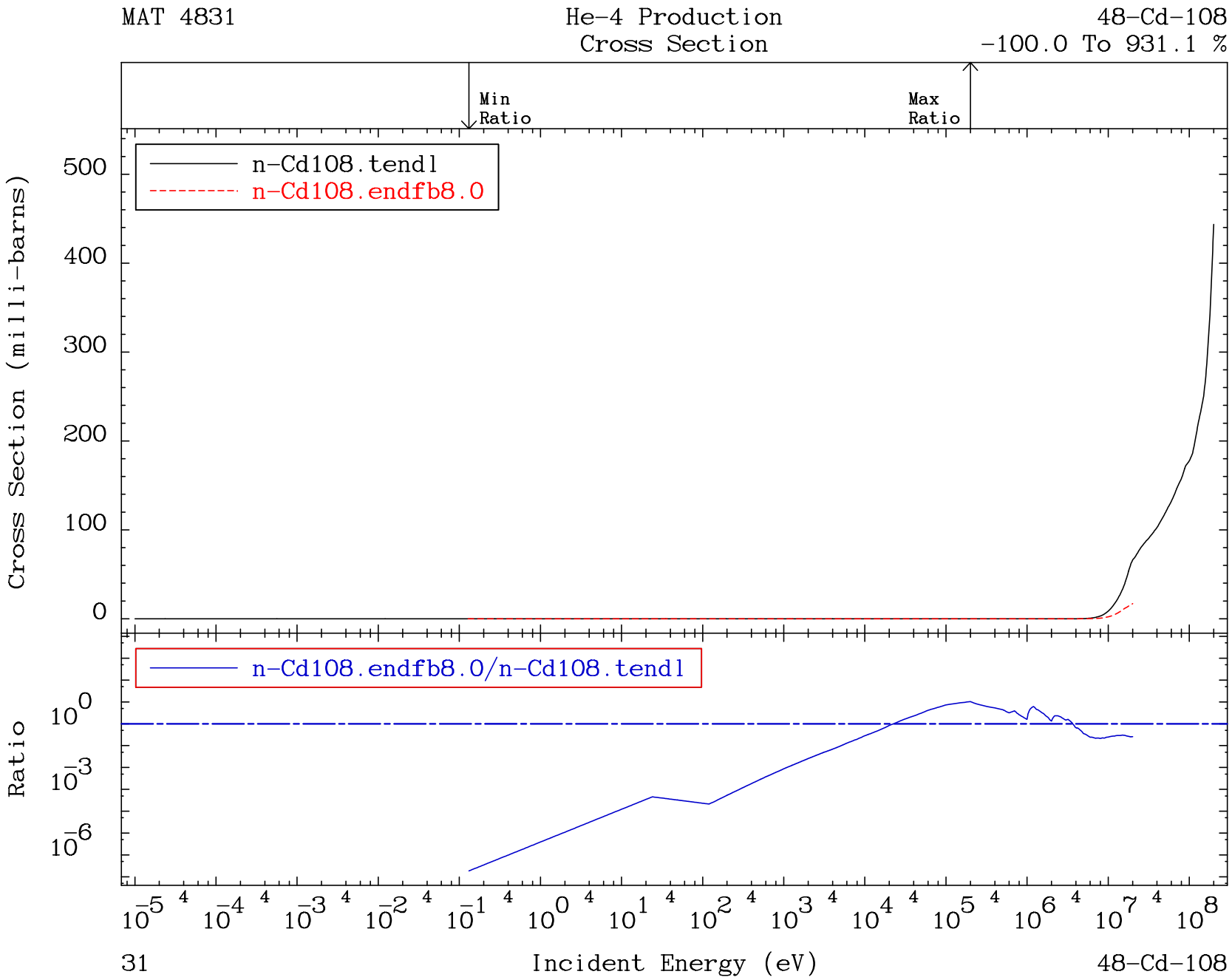

MAT 4831
(n,α)
Cross Section
48-Cd-108
-100.0 To 931.1 %
Min Ratio
Max Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (milli-barns)
40
30
20
10
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^0
10^-3
10^-6
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
26
Incident Energy (eV)
48-Cd-108

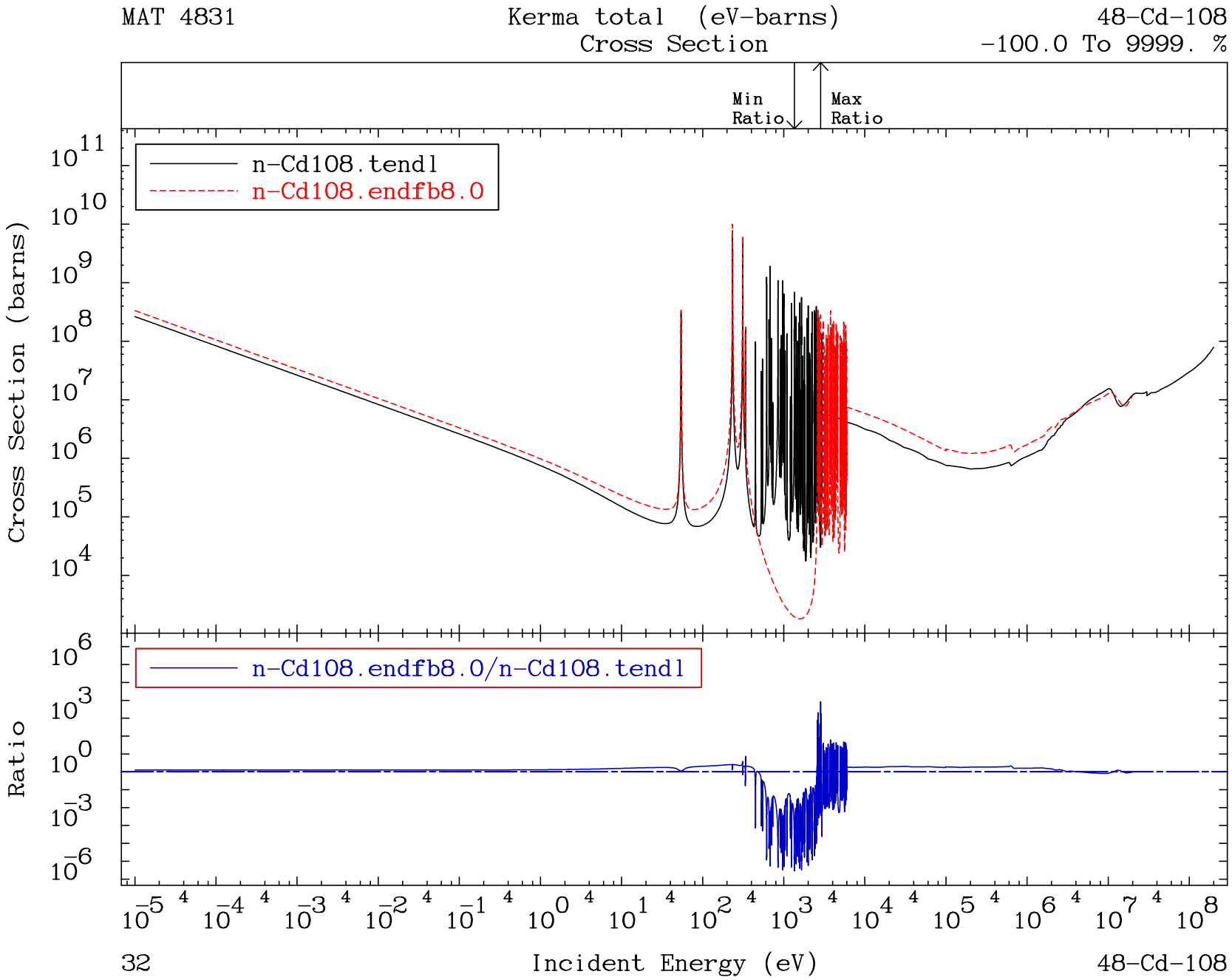

MAT 4831
Hydrogen Production
Cross Section
48-Cd-108
-76.66 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 871.37 keV
n-Cd108.endfb8.0 Threshold 874.10 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^6
10^4
10^2
10^0
10^6
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
27
Incident Energy (eV)
48-Cd-108

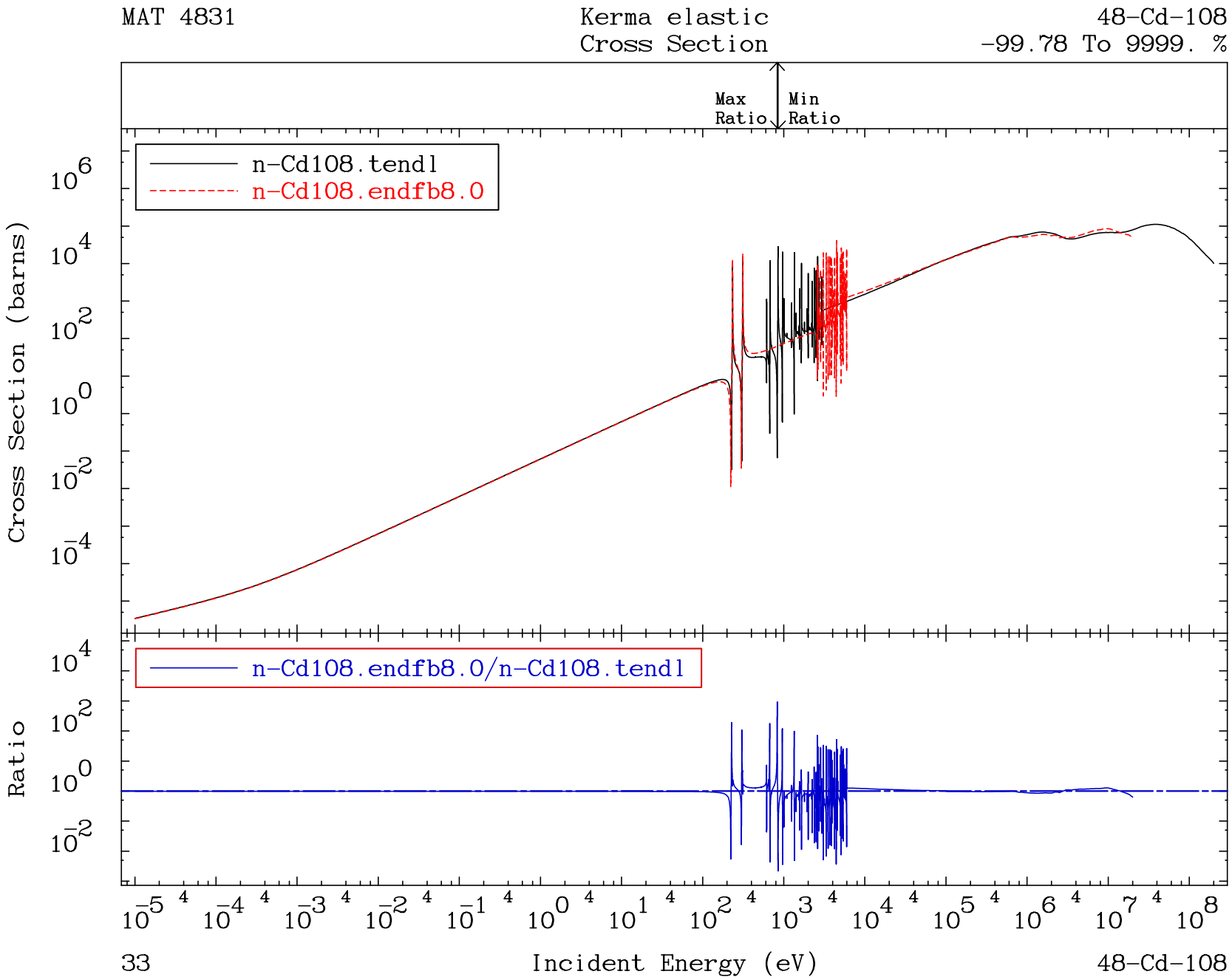

MAT 4831
Deuterium Production
Cross Section
48-Cd-108
58.77 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 5.9654 MeV
n-Cd108.endfb8.0 Threshold 5.9670 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^6
10^4
10^2
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
28
Incident Energy (eV)
48-Cd-108

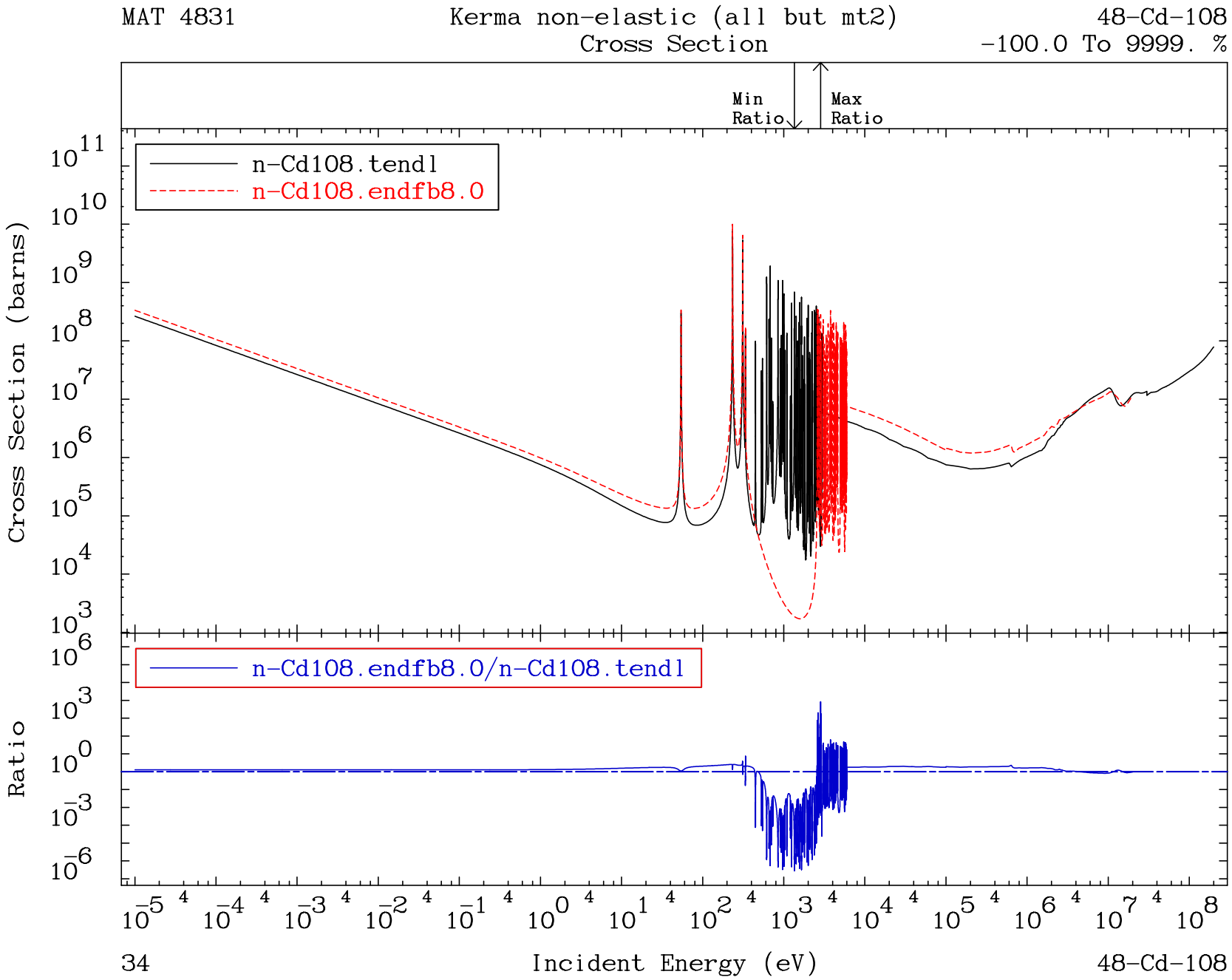

MAT 4831
Tritium Production
Cross Section
48-Cd-108
-48.04 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 9.2744 MeV
n-Cd108.endfb8.0 Threshold 9.2878 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^3
10^2
10^1
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
29
Incident Energy (eV)
48-Cd-108

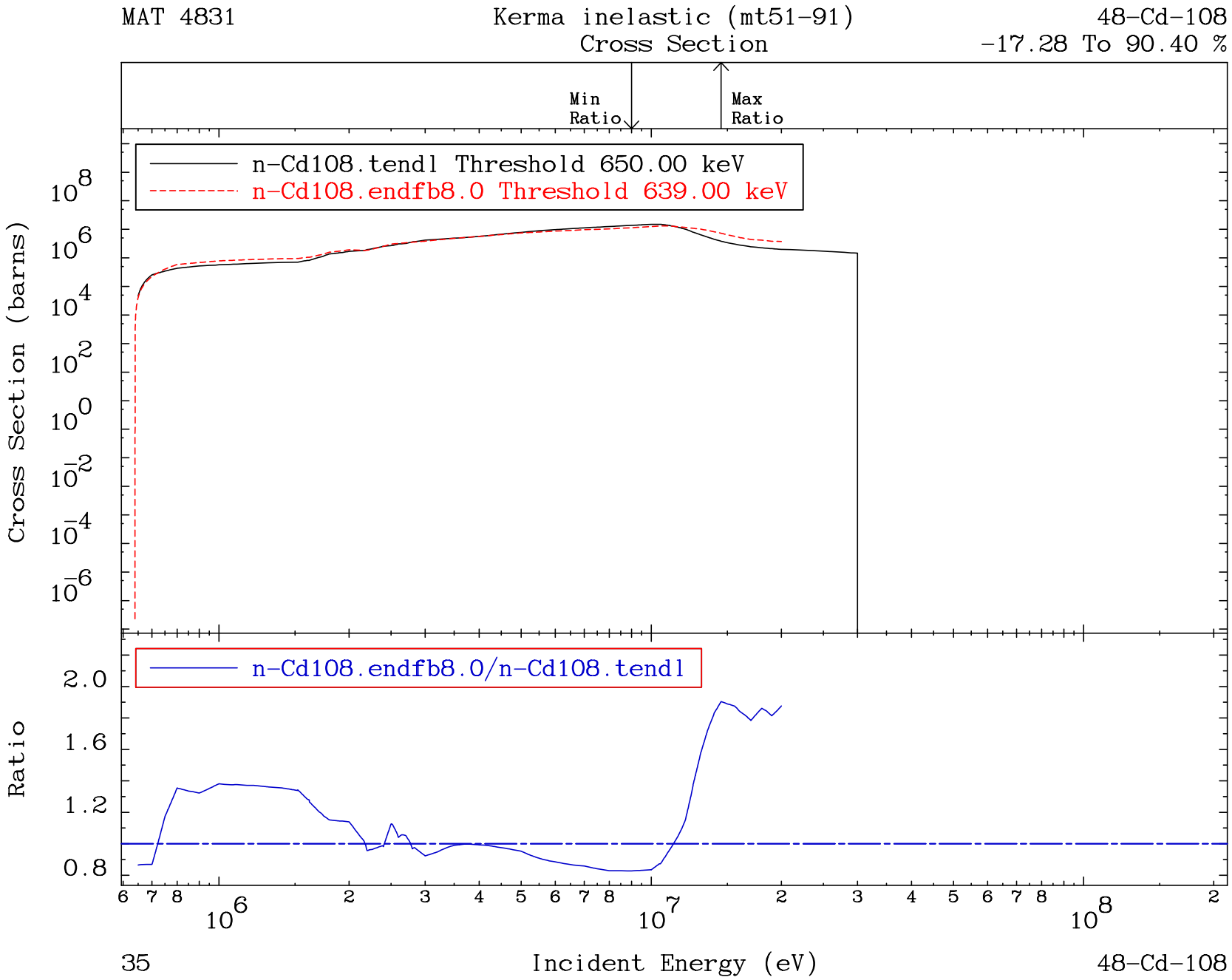

MAT 4831
He-3 Production
Cross Section
48-Cd-108
173.6 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl Threshold 6.2628 MeV
n-Cd108.endfb8.0 Threshold 6.2560 MeV
Cross Section (milli-barns)
400
300
200
100
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^3
10^2
10^1
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
30
Incident Energy (eV)
48-Cd-108

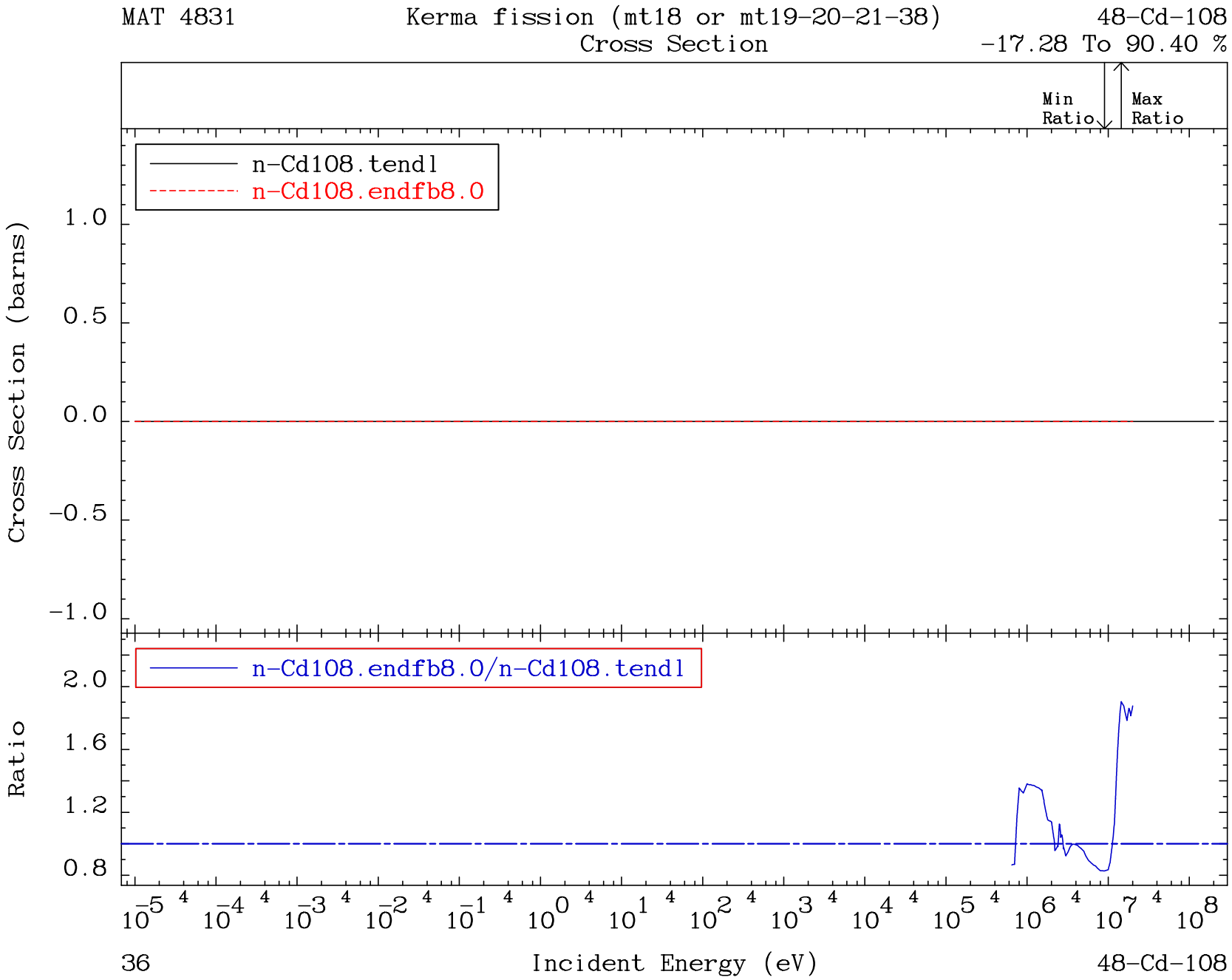

MAT 4831
He-4 Production
Cross Section
48-Cd-108
-100.0 To 931.1 %
Min
Ratio
Max
Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (milli-barns)
500
400
300
200
100
0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
10^0
10^-3
10^-6
10^-5
10^-4
10^-3
10^-2
10^-1
10^0
10^1
10^2
10^3
10^4
10^5
10^6
10^7
10^8
31
Incident Energy (eV)
48-Cd-108

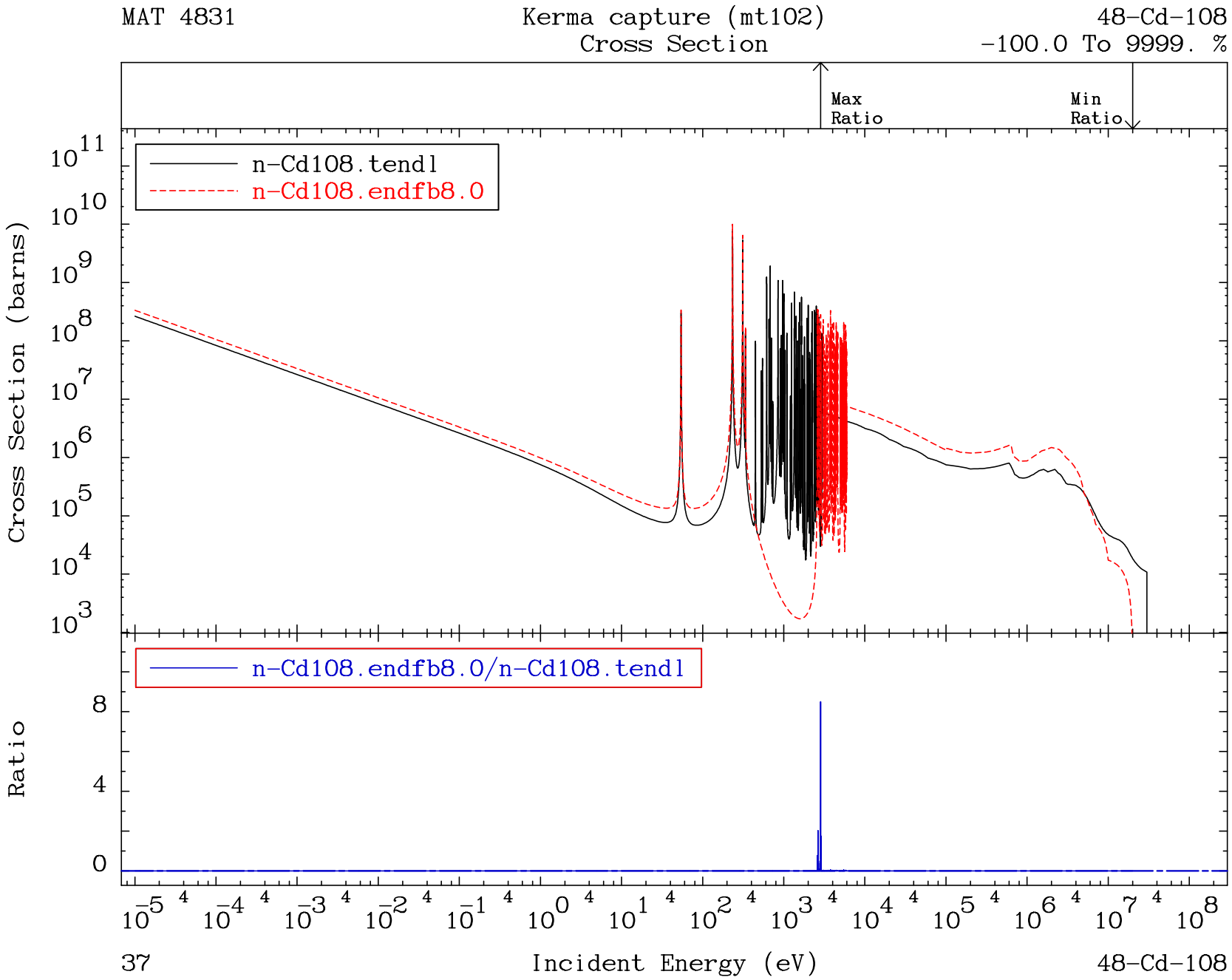

MAT 4831
Kerma total (eV-barns)
Cross Section
48-Cd-108
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
32
48-Cd-108

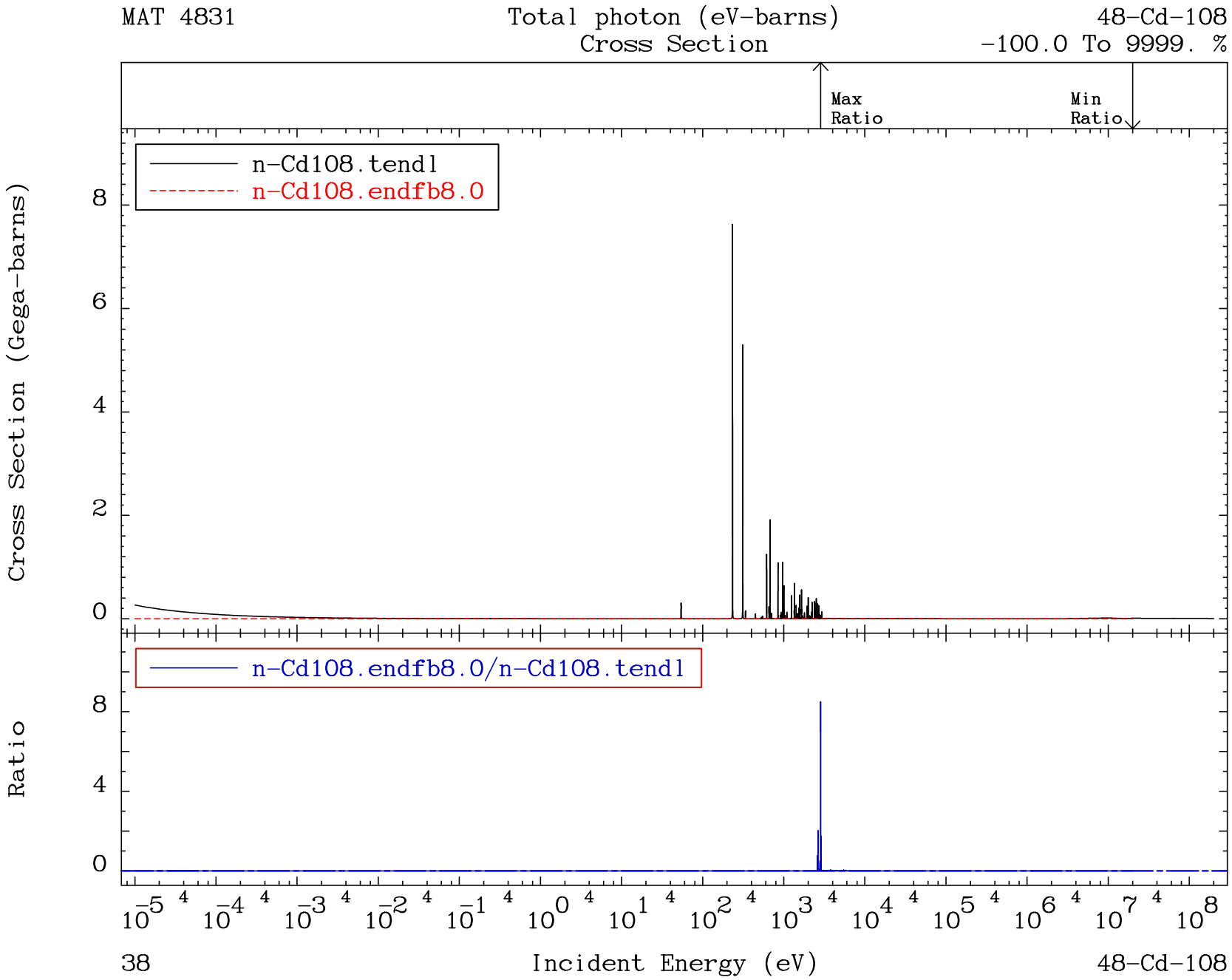

MAT 4831
Kerma elastic
Cross Section
48-Cd-108
-99.78 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
33
48-Cd-108

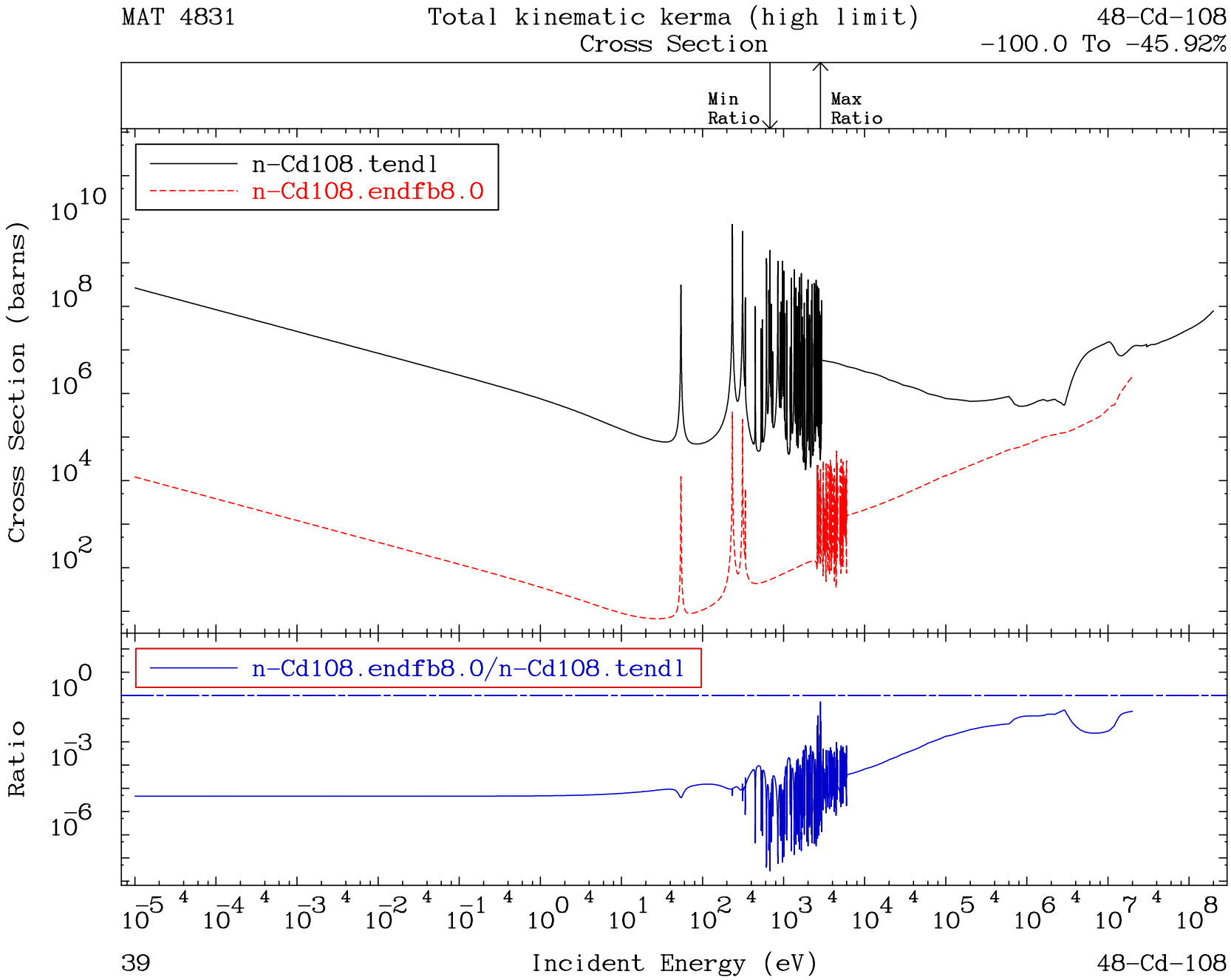

MAT 4831
Kerma non-elastic (all but mt2)
Cross Section
48-Cd-108
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
34
48-Cd-108

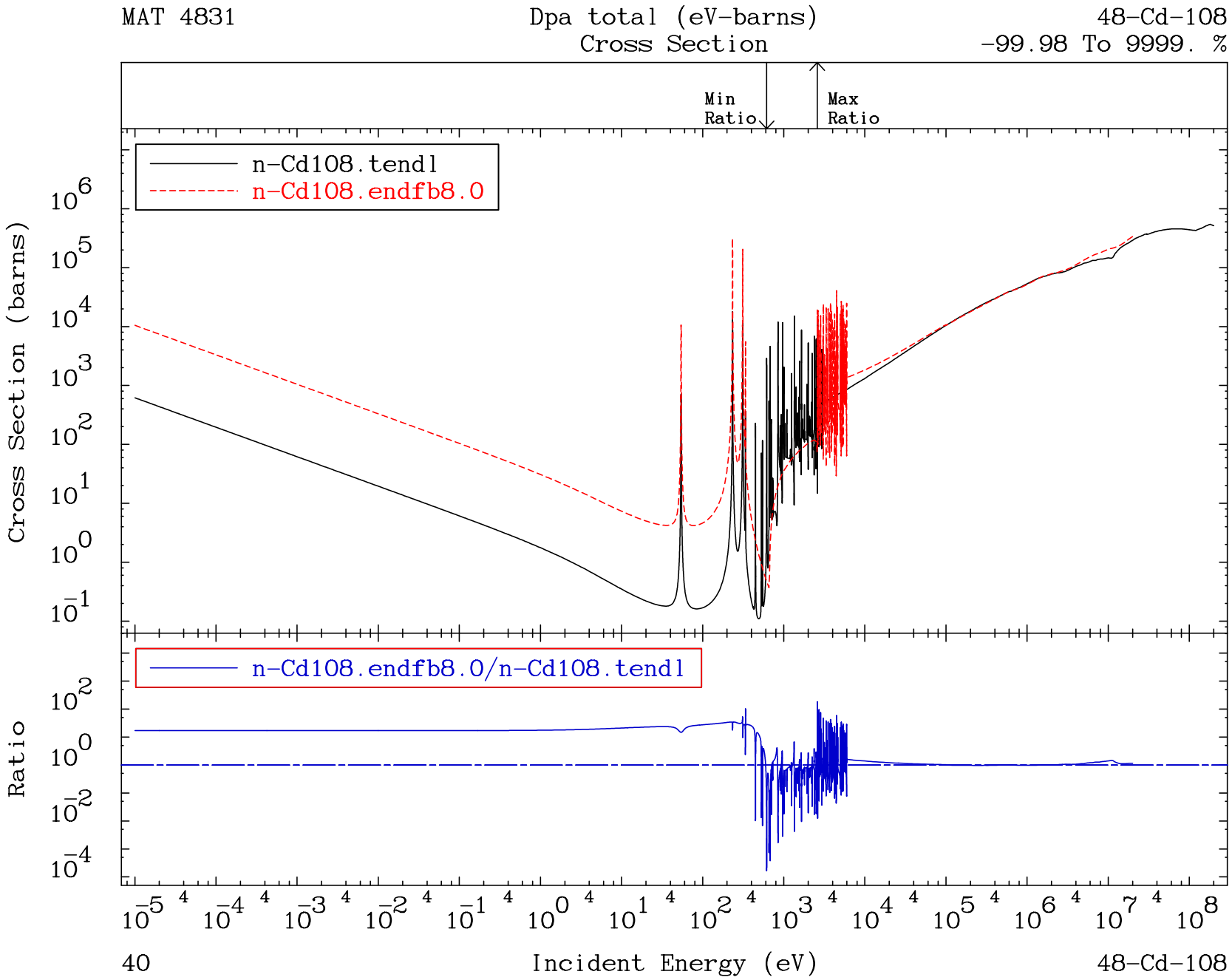

MAT 4831
Kerma inelastic (mt51-91)
Cross Section
48-Cd-108
-17.28 To 90.40 %
Min Ratio
Max Ratio
n-Cd108.tendl Threshold 650.00 keV
n-Cd108.endfb8.0 Threshold 639.00 keV
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
35
48-Cd-108

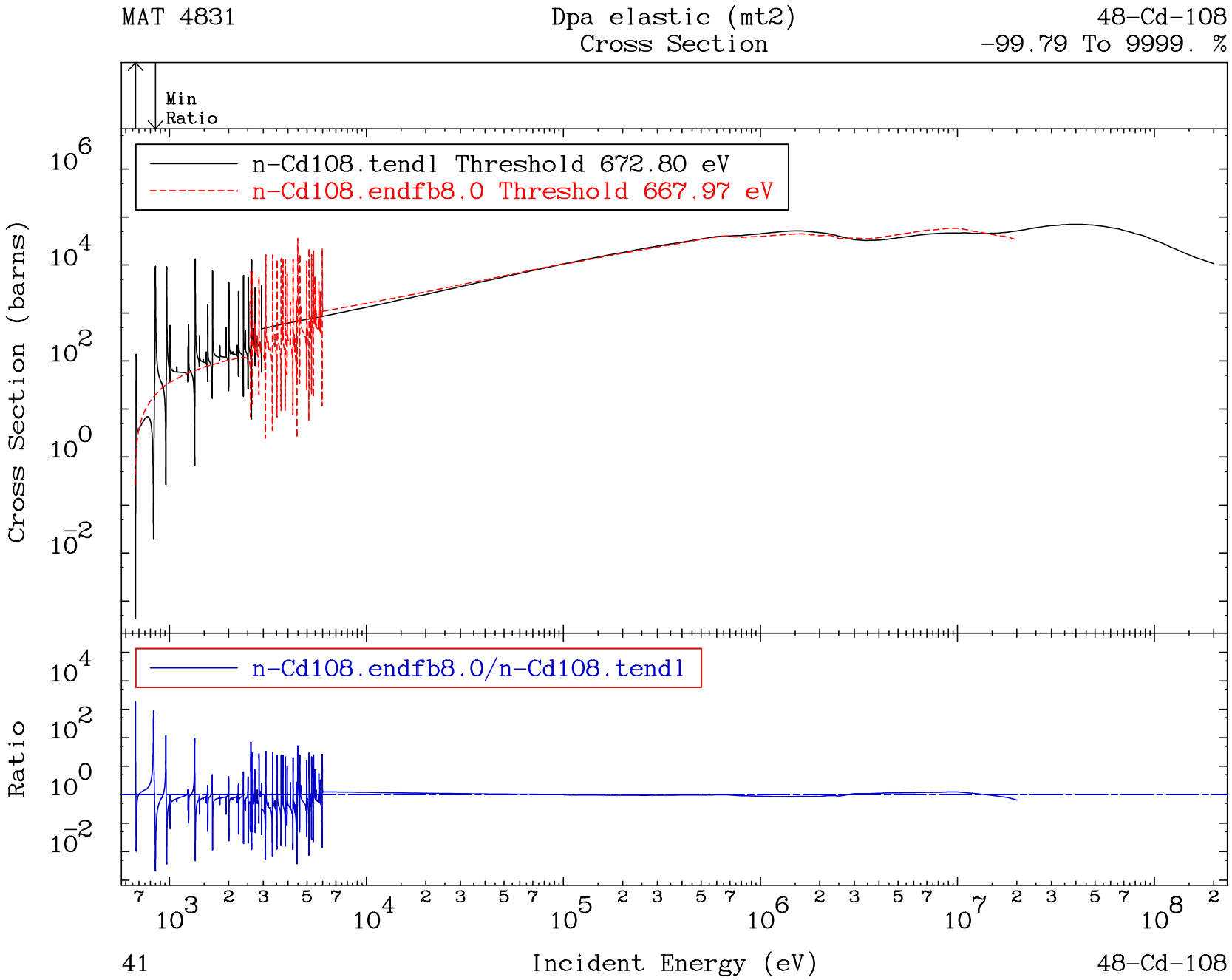

MAT 4831
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
48-Cd-108
-17.28 To 90.40 %
Min Ratio
Max Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
2.0
1.6
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
36
Incident Energy (eV)
48-Cd-108

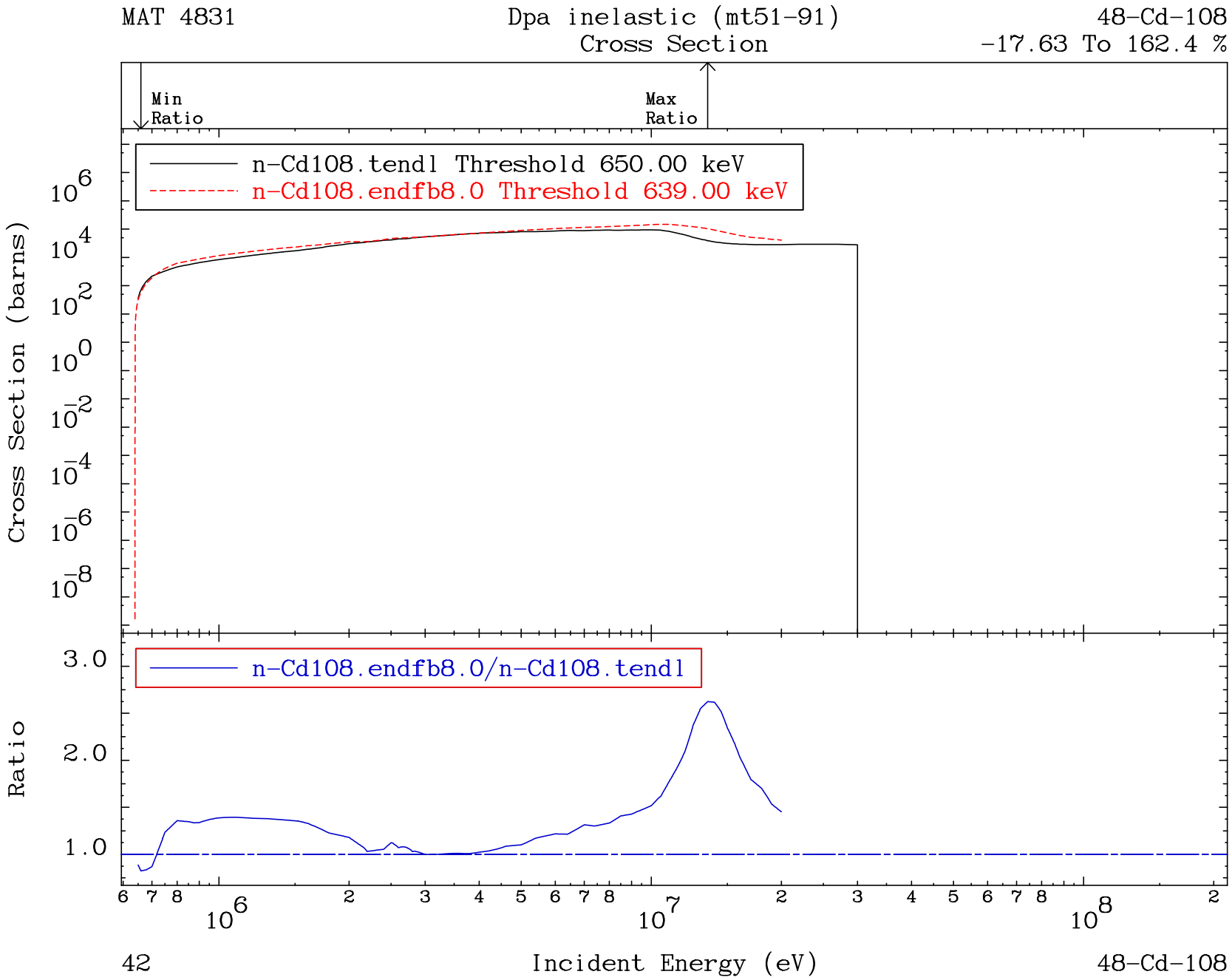

MAT 4831
Kerma capture (mt102)
Cross Section
48-Cd-108
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
37
48-Cd-108

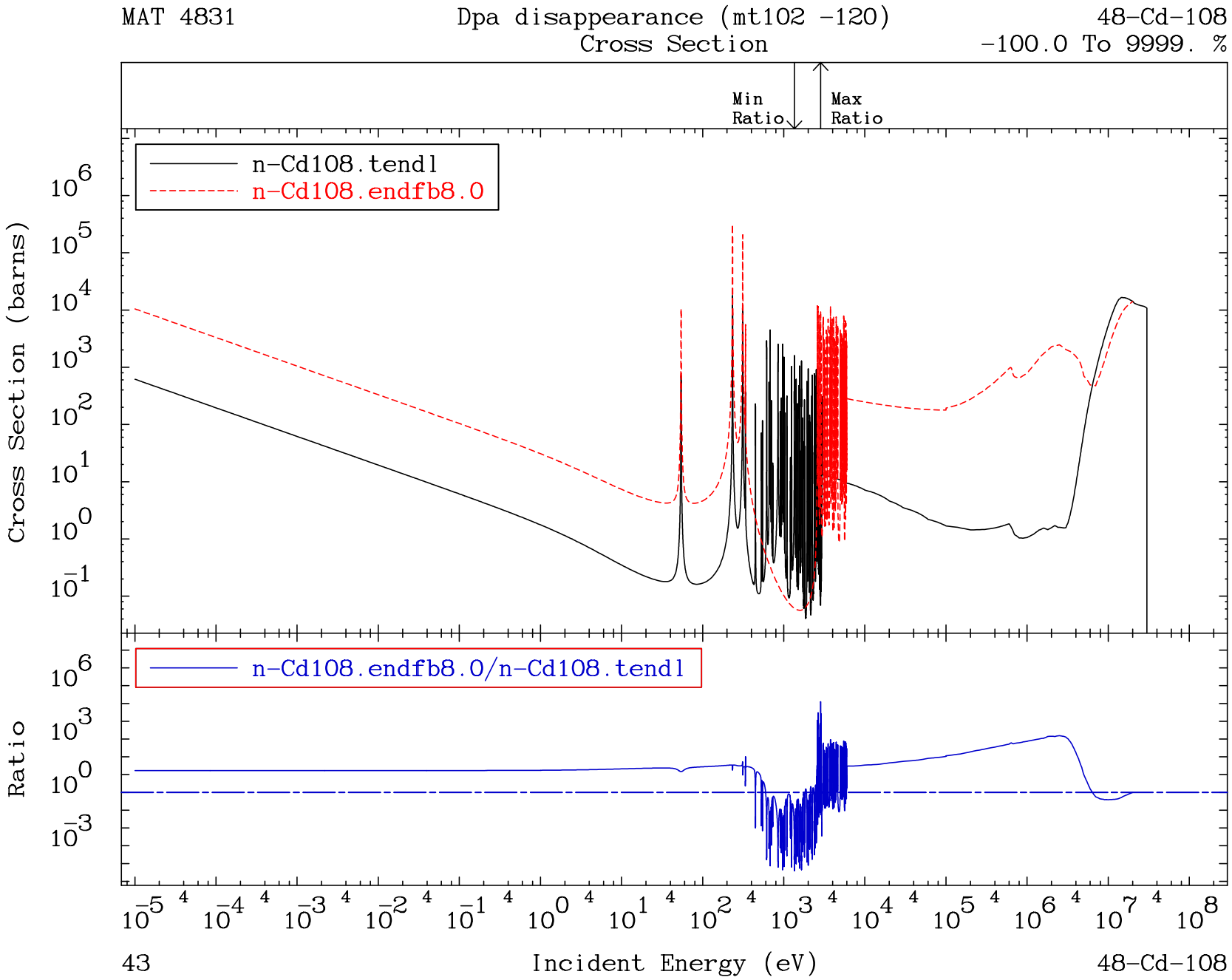

MAT 4831
Total photon (eV-barns)
Cross Section
48-Cd-108
-100.0 To 9999. %
Max Ratio
Min Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (Gega-barns)
0
2
4
6
8
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
0
4
8
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
38
Incident Energy (eV)
48-Cd-108


MAT 4831
Total kinematic kerma (high limit)
Cross Section
48-Cd-108
-100.0 To -45.92%
Min Ratio
Max Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
39
48-Cd-108


MAT 4831
Dpa total (eV-barns)
Cross Section
48-Cd-108
-99.98 To 9999. %
Min Ratio
Max Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
40
48-Cd-108


MAT 4831
Dpa elastic (mt2)
Cross Section
48-Cd-108
-99.79 To 9999. %
Min
Ratio
n-Cd108.tendl Threshold 672.80 eV
n-Cd108.endfb8.0 Threshold 667.97 eV
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
41
48-Cd-108


MAT 4831
Dpa inelastic (mt51-91)
Cross Section
48-Cd-108
-17.63 To 162.4 %
Min Ratio
Max Ratio
n-Cd108.tendl Threshold 650.00 keV
n-Cd108.endfb8.0 Threshold 639.00 keV
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
Incident Energy (eV)
42
48-Cd-108


MAT 4831
Dpa disappearance (mt102 -120)
Cross Section
48-Cd-108
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Cd108.tendl
n-Cd108.endfb8.0
Cross Section (barns)
n-Cd108.endfb8.0/n-Cd108.tendl
Ratio
43
Incident Energy (eV)
48-Cd-108