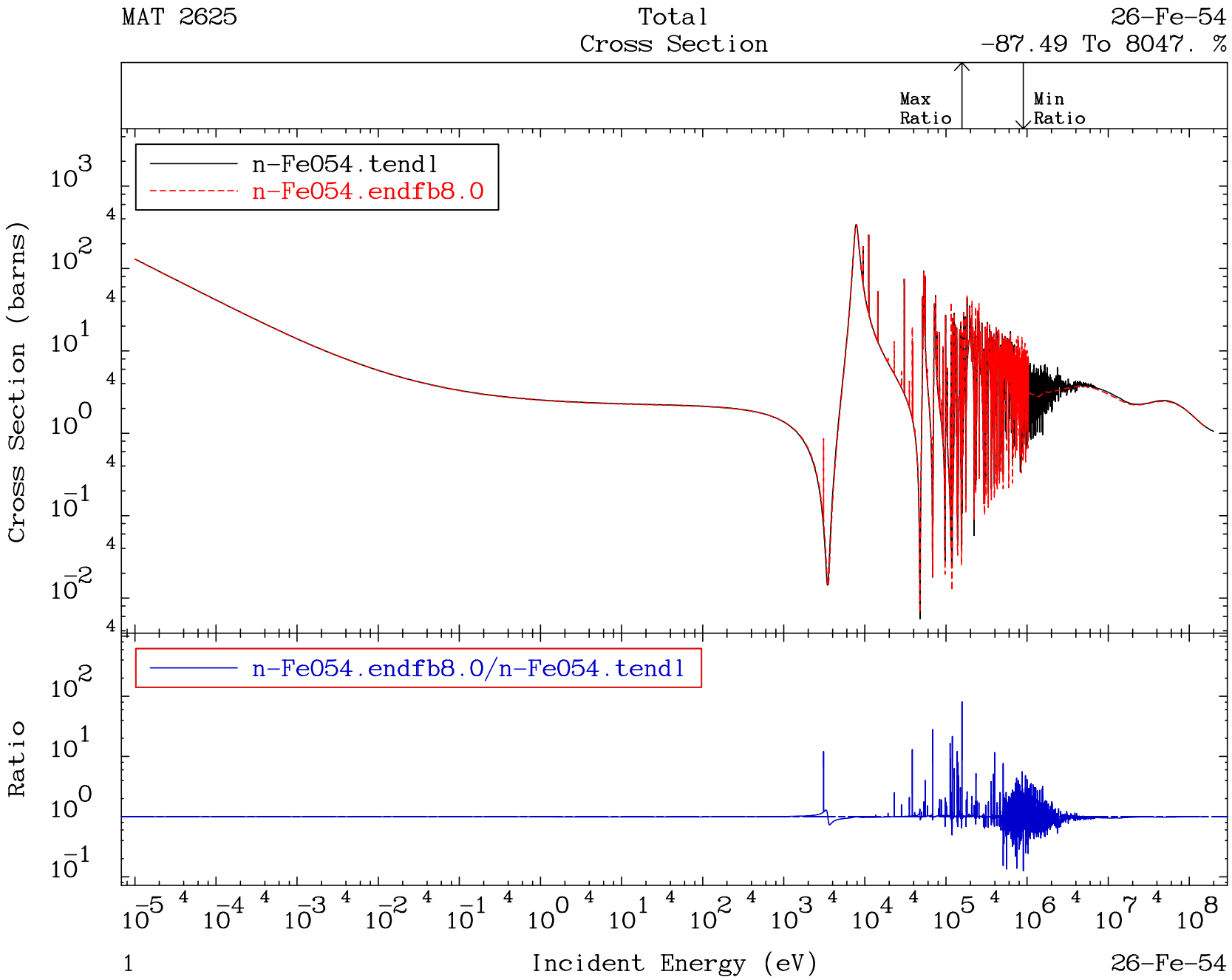
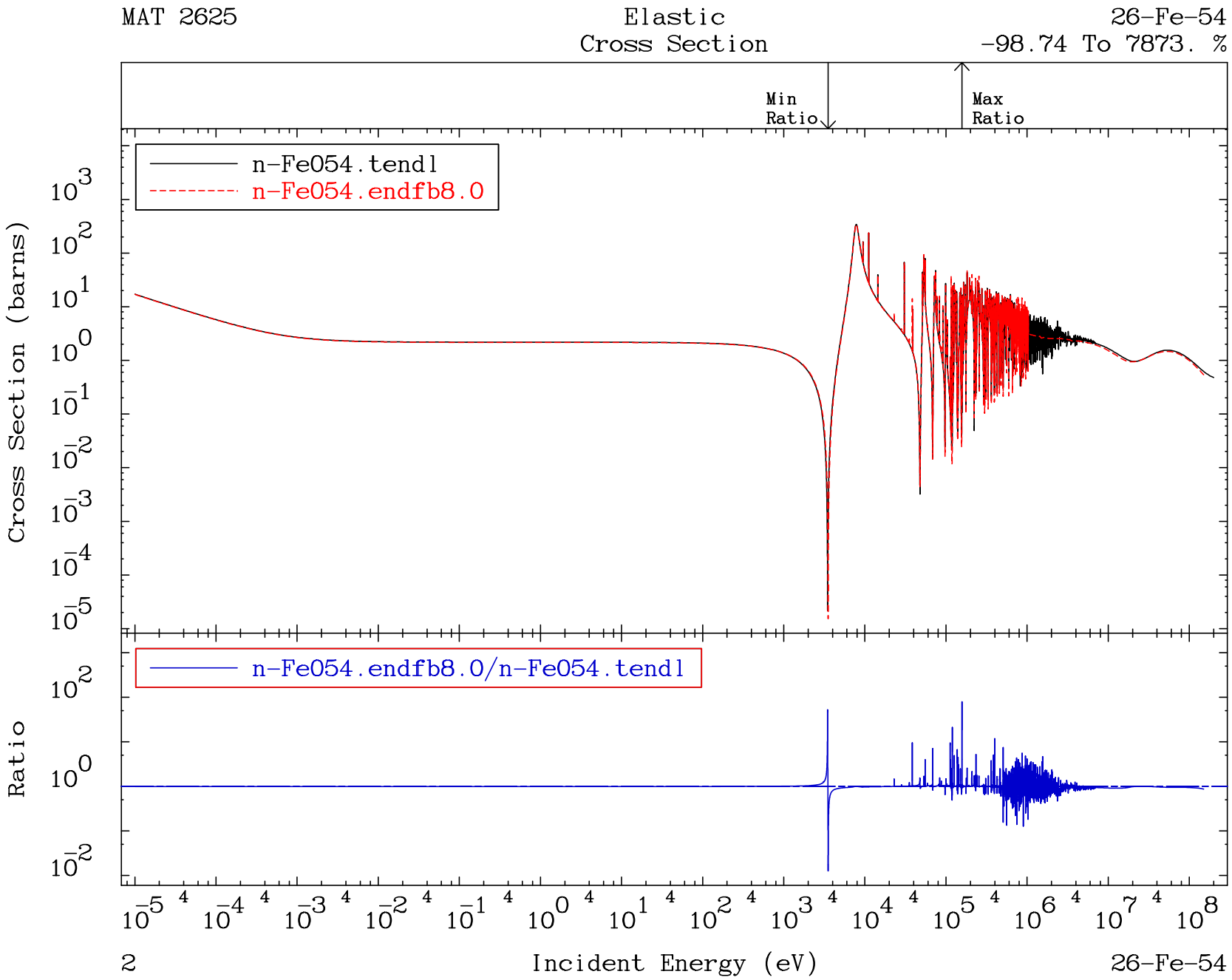
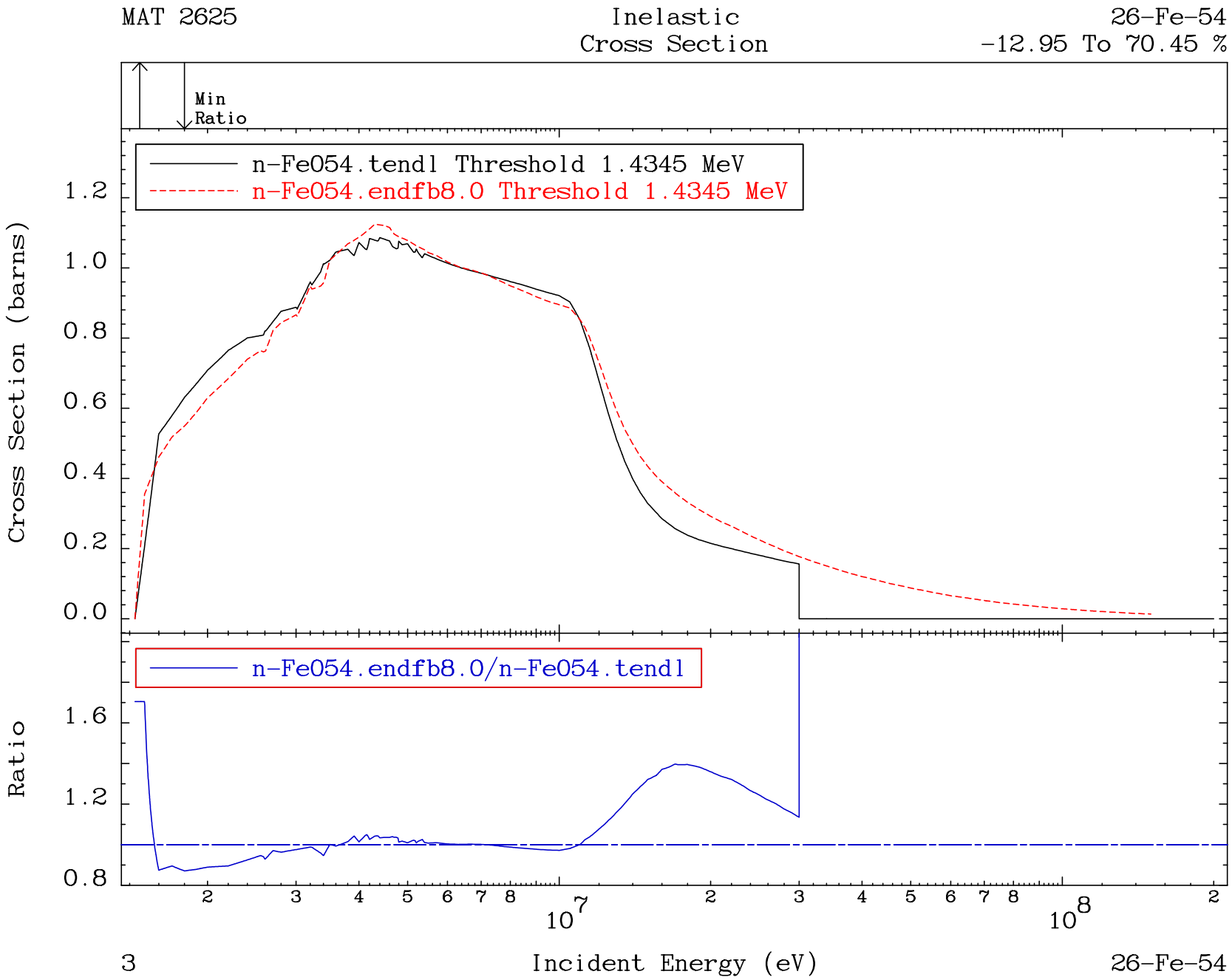
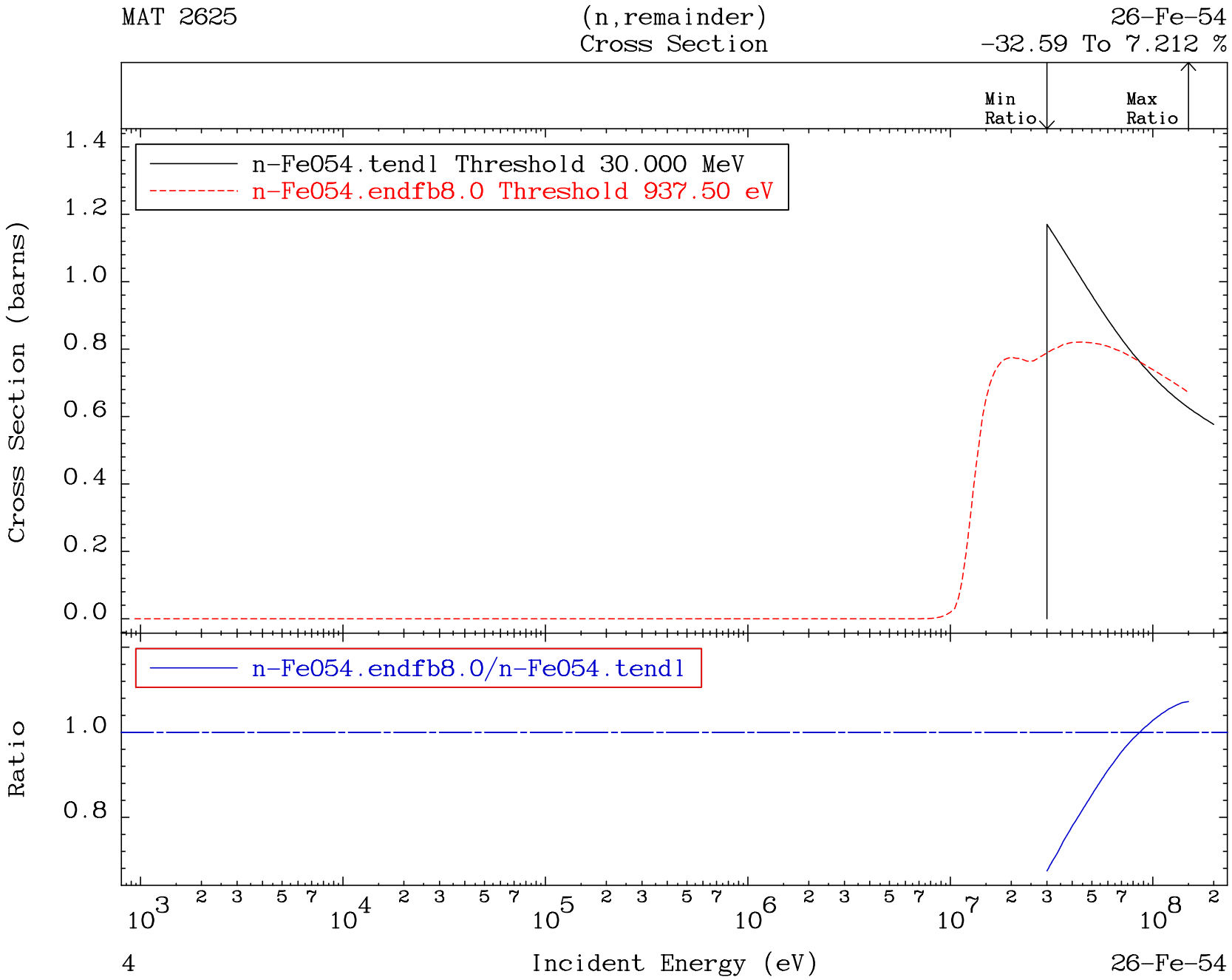
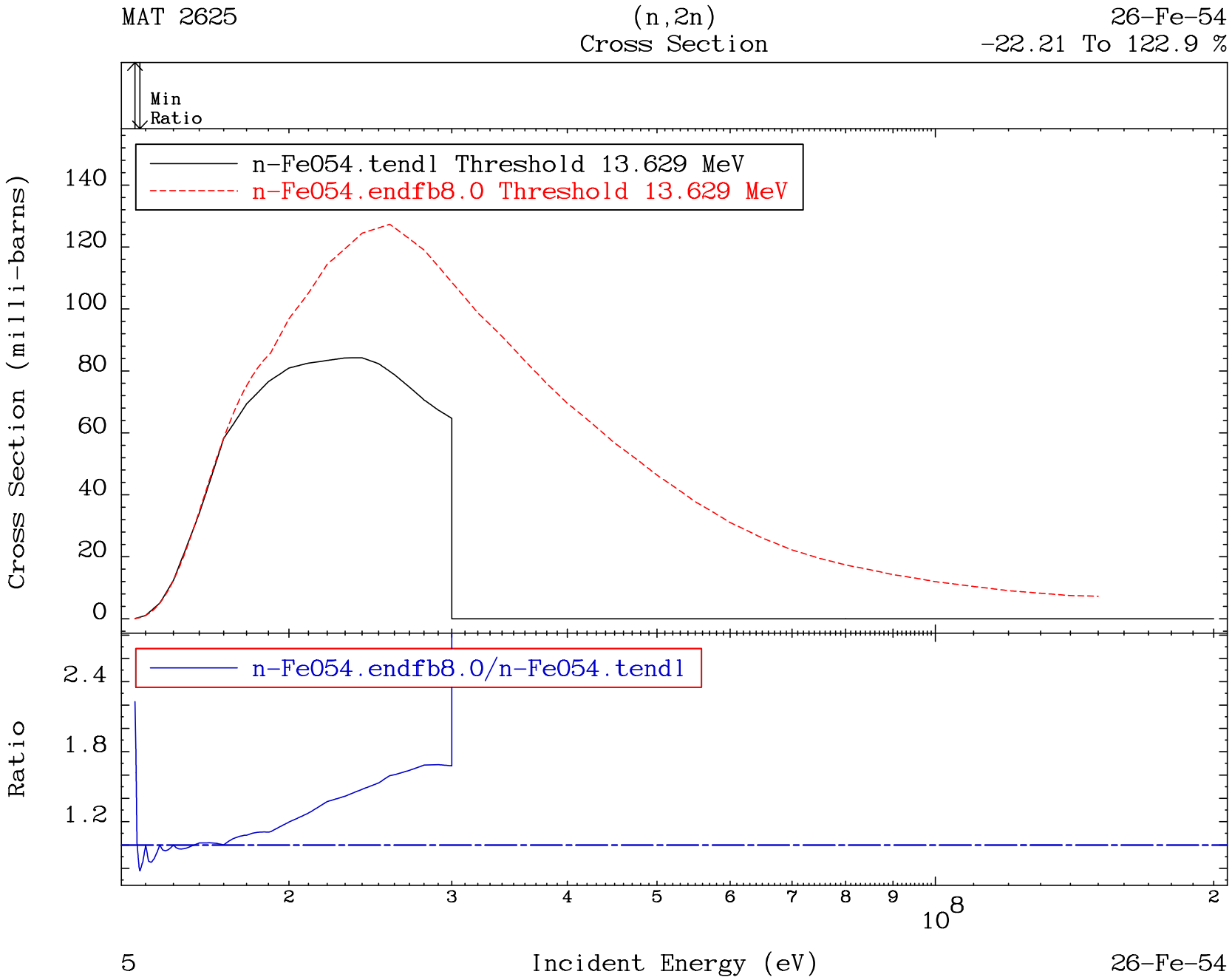
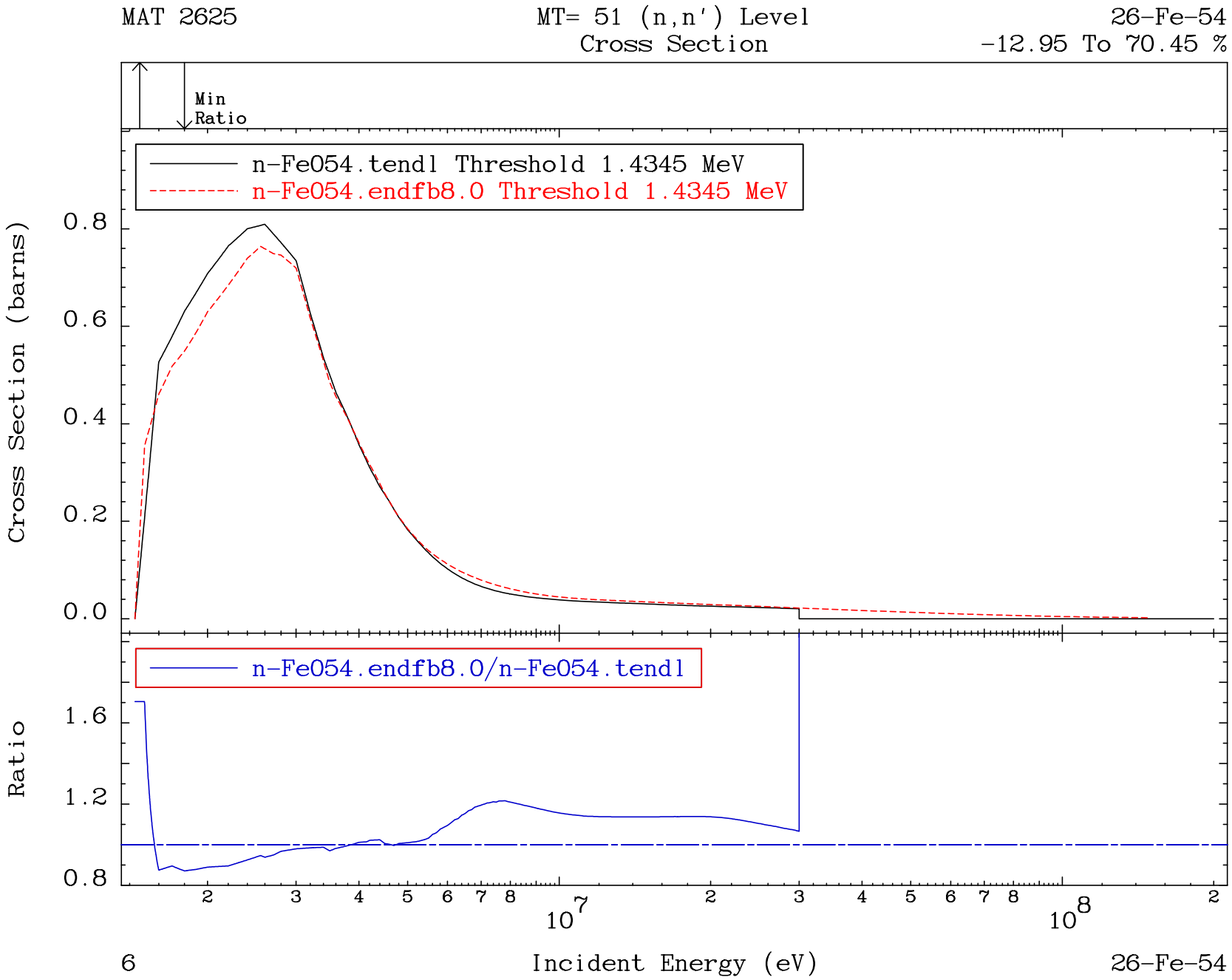

MAT 2625
Total
Cross Section
26-Fe-54
-87.49 To 8047. %
Max
Ratio
Min
Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
1
26-Fe-54

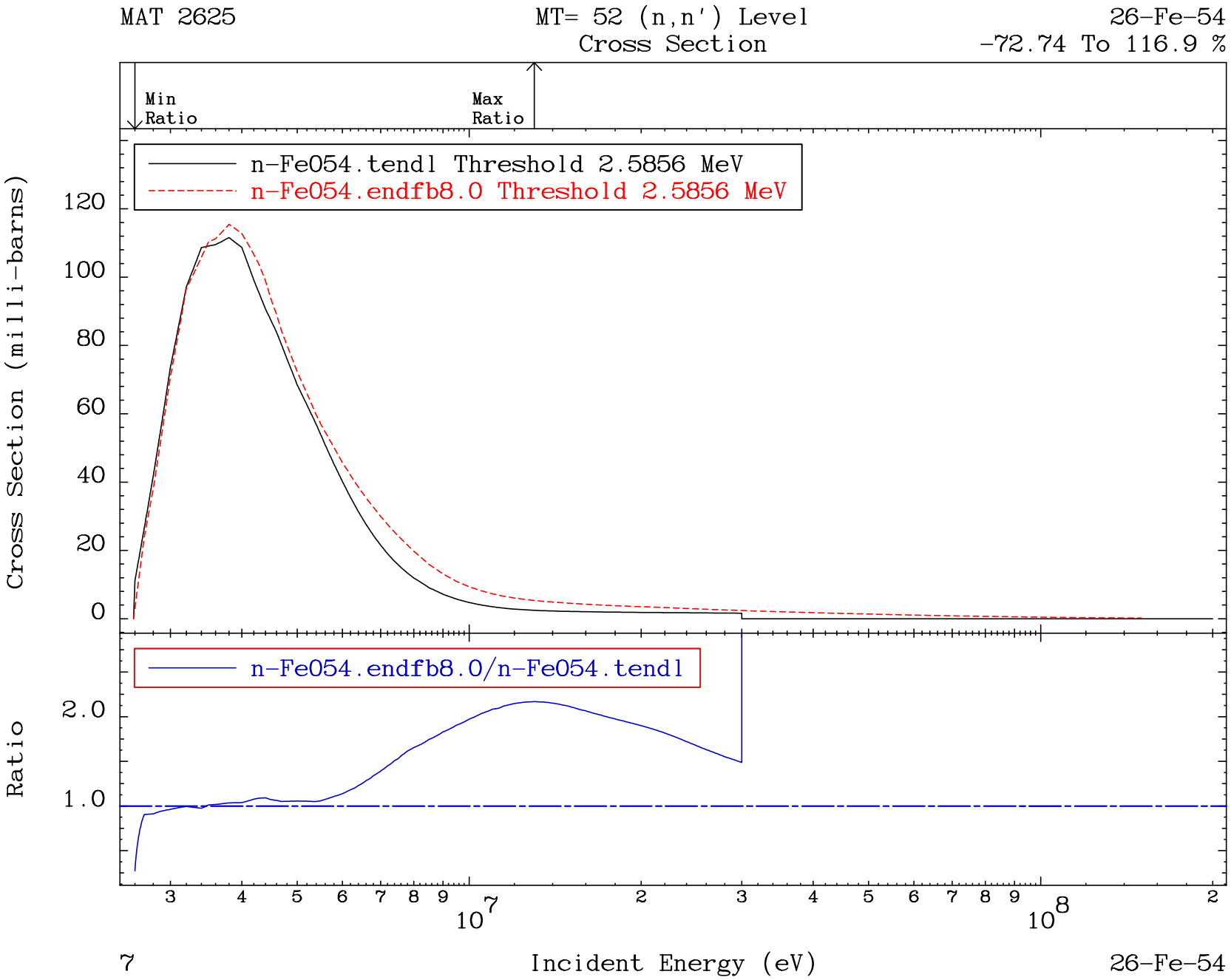

MAT 2625
Elastic
Cross Section
26-Fe-54
-98.74 To 7873. %
Min
Ratio
Max
Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
2
26-Fe-54

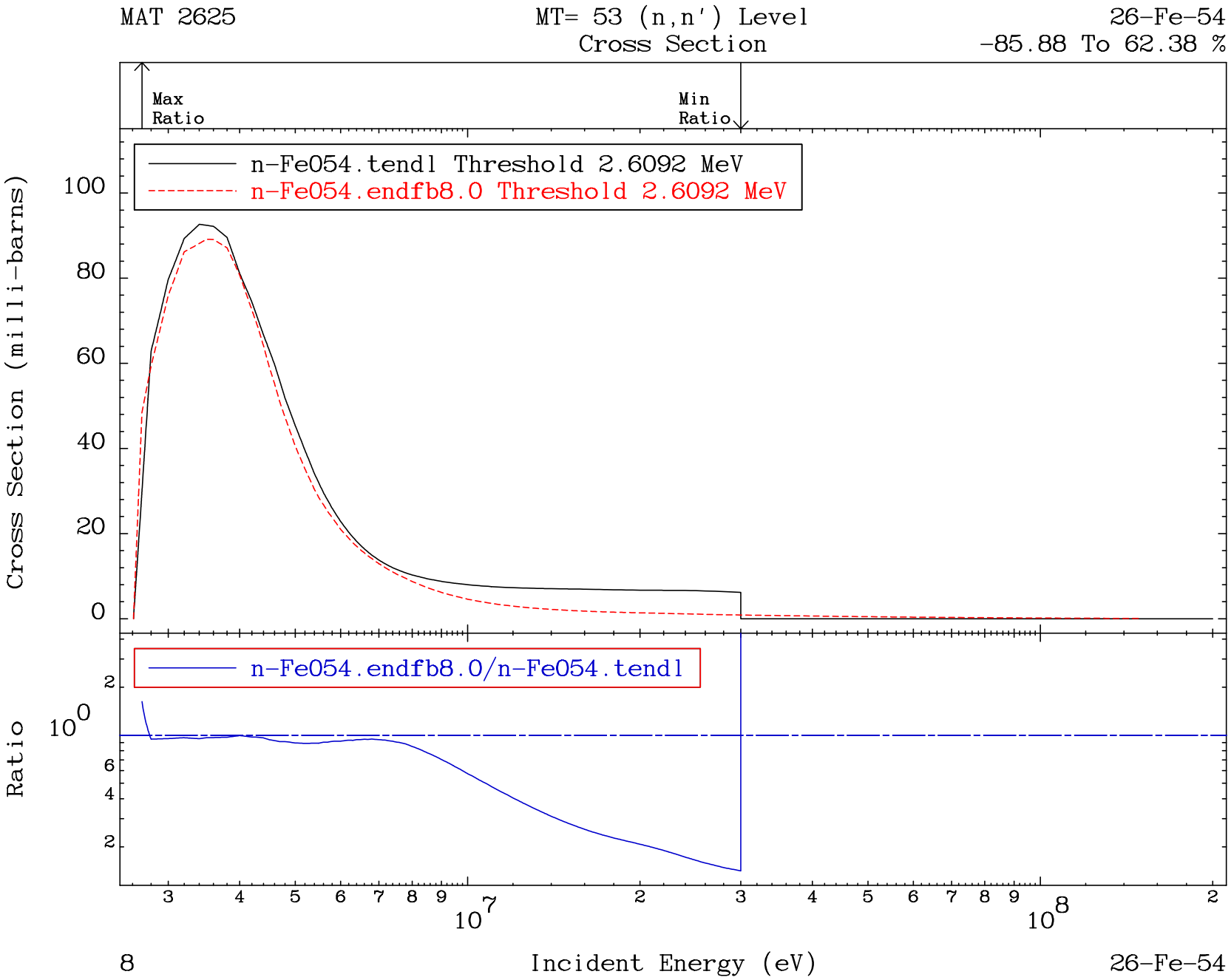

MAT 2625
Inelastic
Cross Section
26-Fe-54
-12.95 To 70.45 %
Min
Ratio
n-Fe054.tendl Threshold 1.4345 MeV
n-Fe054.endfb8.0 Threshold 1.4345 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
3
Incident Energy (eV)
26-Fe-54

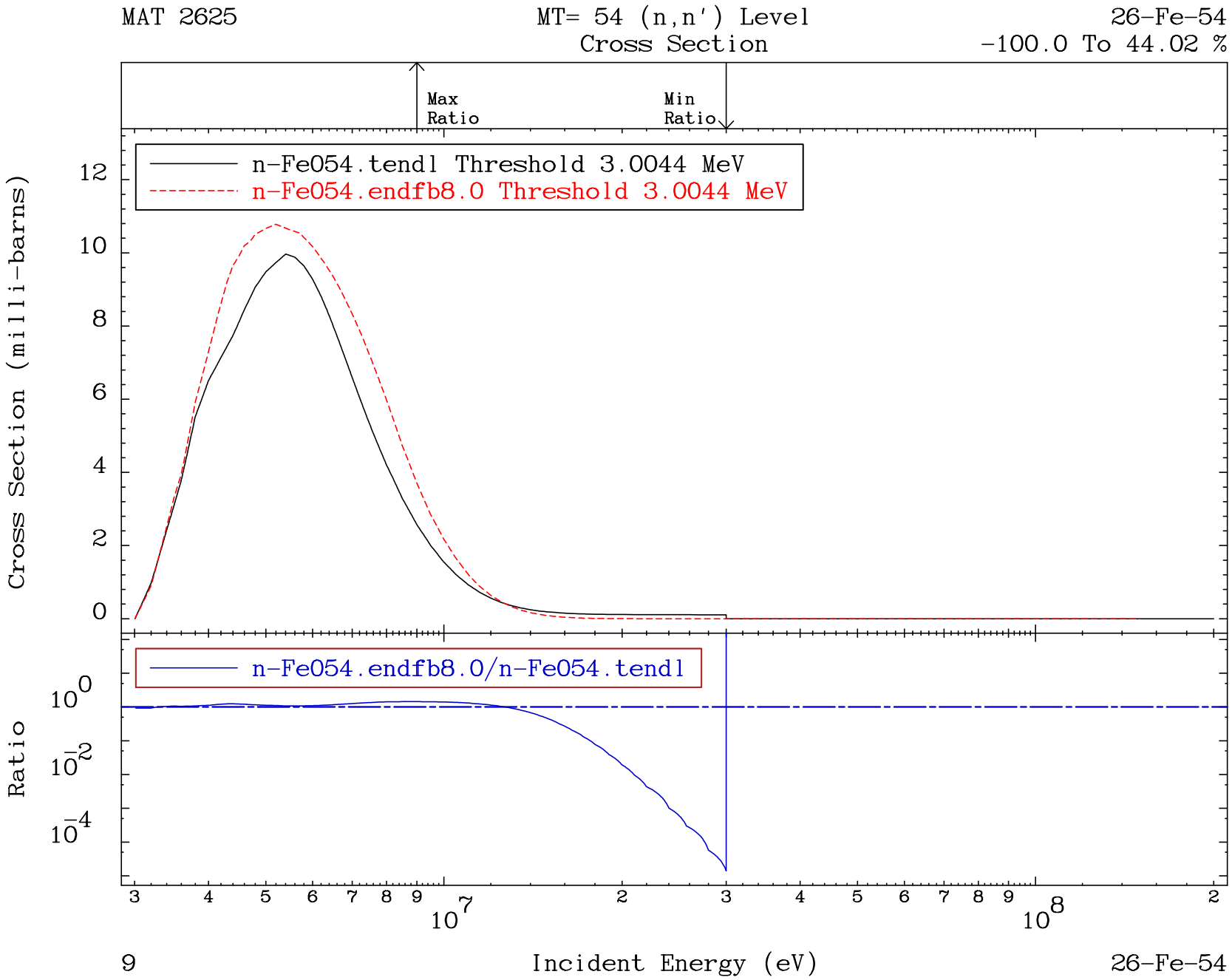

MAT 2625
(n,remainder)
Cross Section
26-Fe-54
-32.59 To 7.212 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 30.000 MeV
n-Fe054.endfb8.0 Threshold 937.50 eV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
1.0
0.8
10^3
10^4
10^5
10^6
10^7
10^8
Incident Energy (eV)
4
26-Fe-54

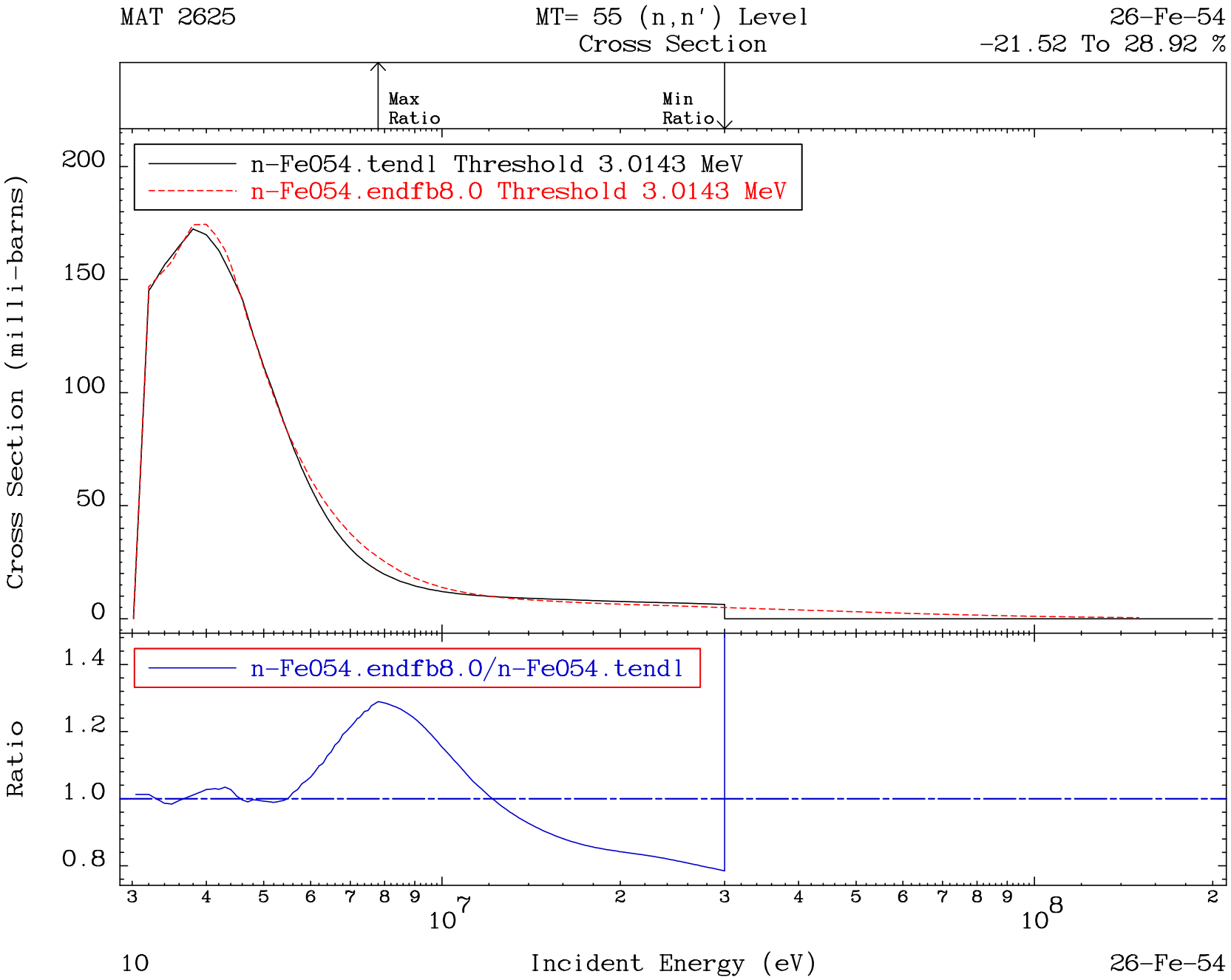

MAT 2625
(n,2n)
Cross Section
26-Fe-54
-22.21 To 122.9 %
Min
Ratio
n-Fe054.tendl Threshold 13.629 MeV
n-Fe054.endfb8.0 Threshold 13.629 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
26-Fe-54

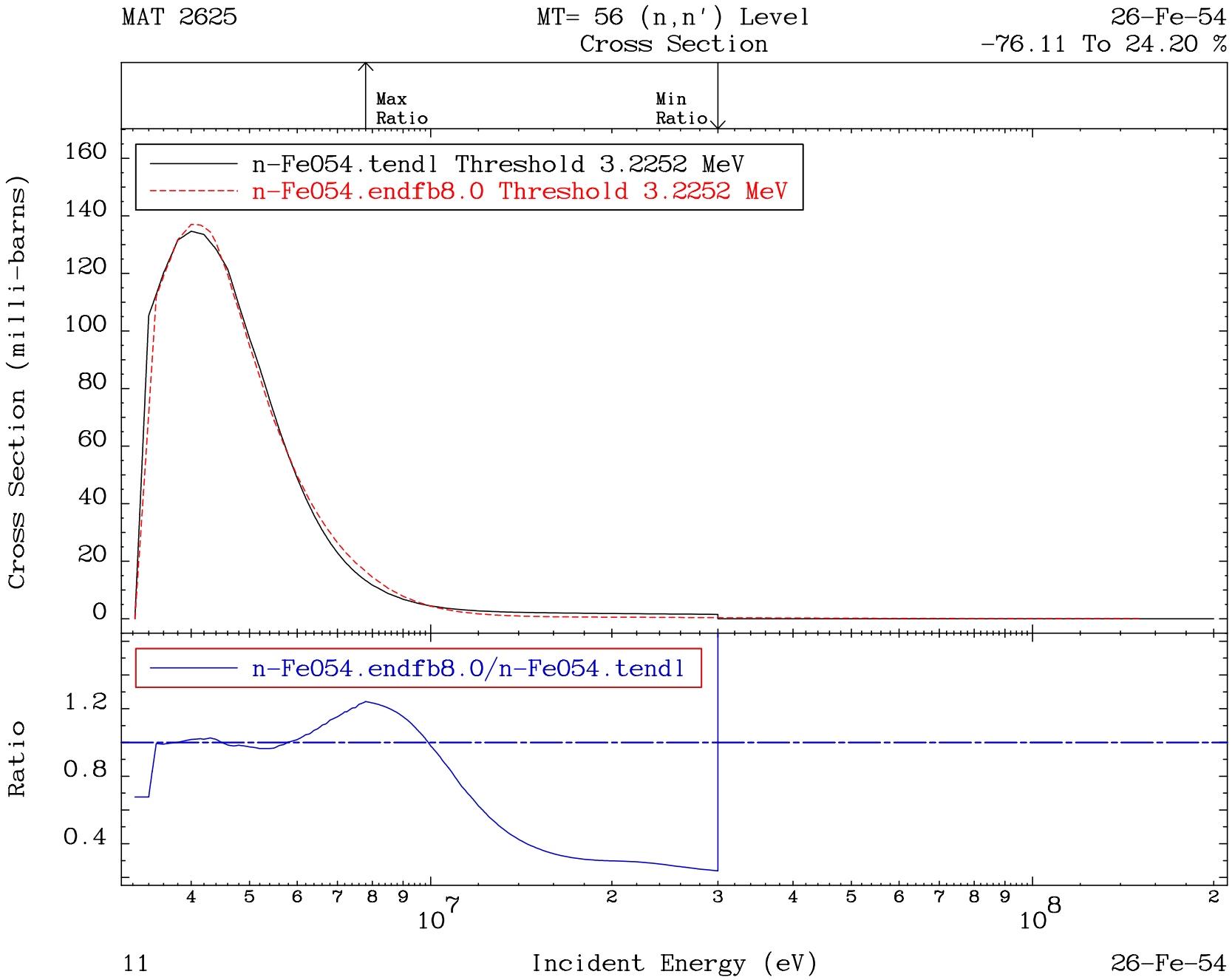

MAT 2625
MT= 51 (n,n') Level
Cross Section
26-Fe-54
-12.95 To 70.45 %
Min
Ratio
n-Fe054.tendl Threshold 1.4345 MeV
n-Fe054.endfb8.0 Threshold 1.4345 MeV
Cross Section (barns)
0.8
0.6
0.4
0.2
0.0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
2
3
4
5
6
7
8
10^7
2
3
4
5
6
7
8
10^8
2
6
Incident Energy (eV)
26-Fe-54

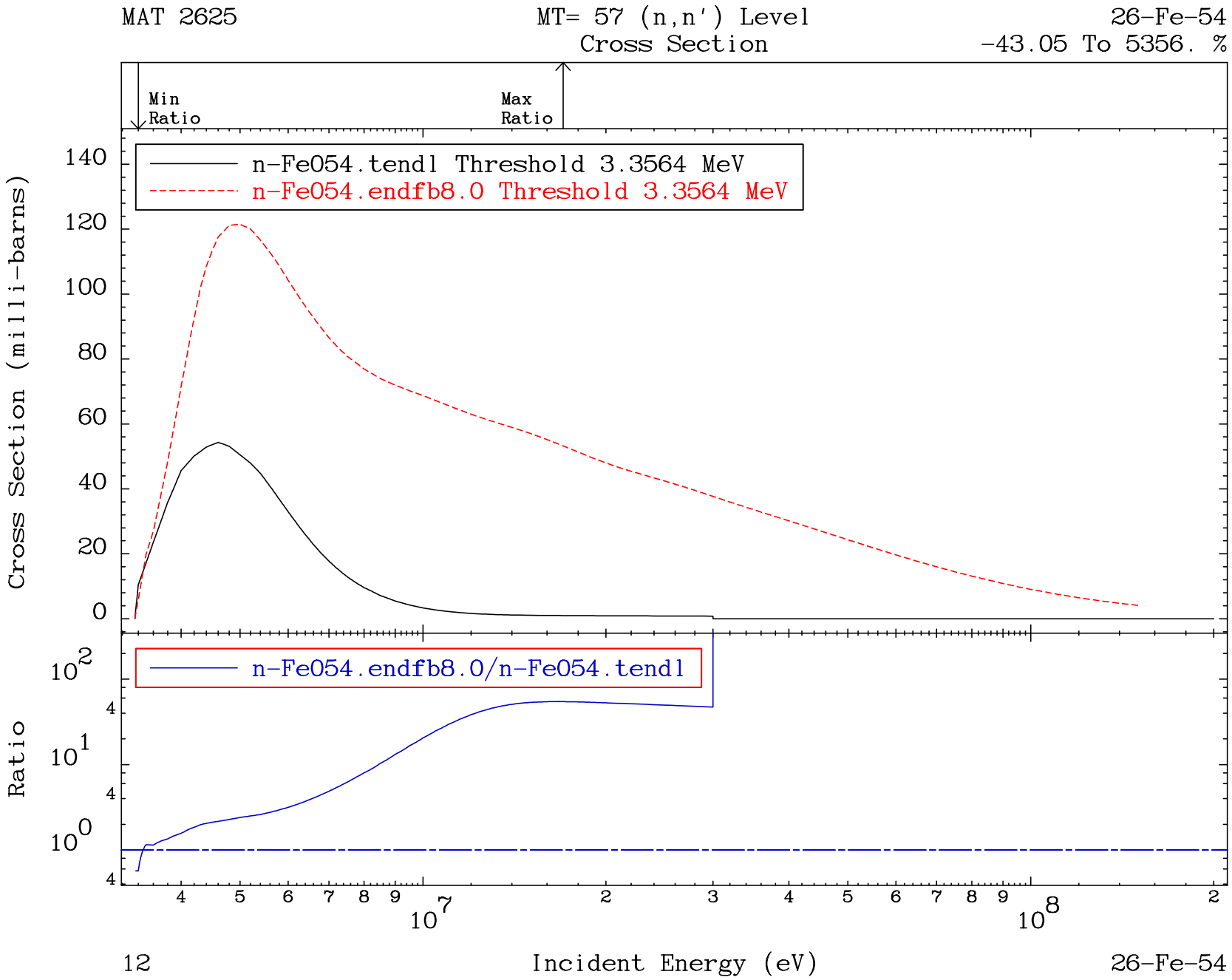

MAT 2625
MT= 52 (n,n') Level
Cross Section
26-Fe-54
-72.74 To 116.9 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 2.5856 MeV
n-Fe054.endfb8.0 Threshold 2.5856 MeV
Cross Section (milli-barns)
120
100
80
60
40
20
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
2.0
1.0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
26-Fe-54

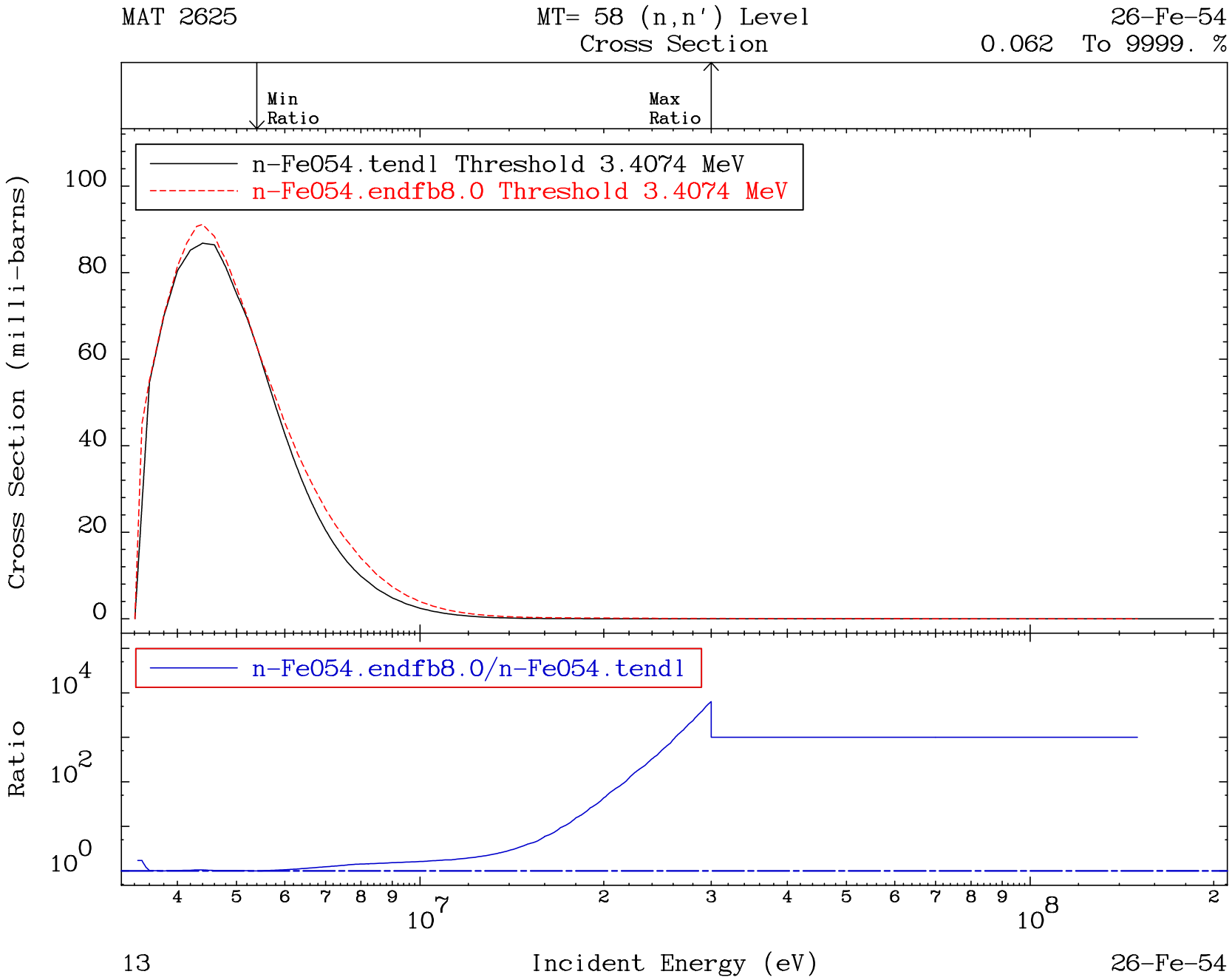

MAT 2625
MT= 53 (n,n') Level
Cross Section
26-Fe-54
-85.88 To 62.38 %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 2.6092 MeV
n-Fe054.endfb8.0 Threshold 2.6092 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^0
2
6
4
2
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
8
Incident Energy (eV)
26-Fe-54

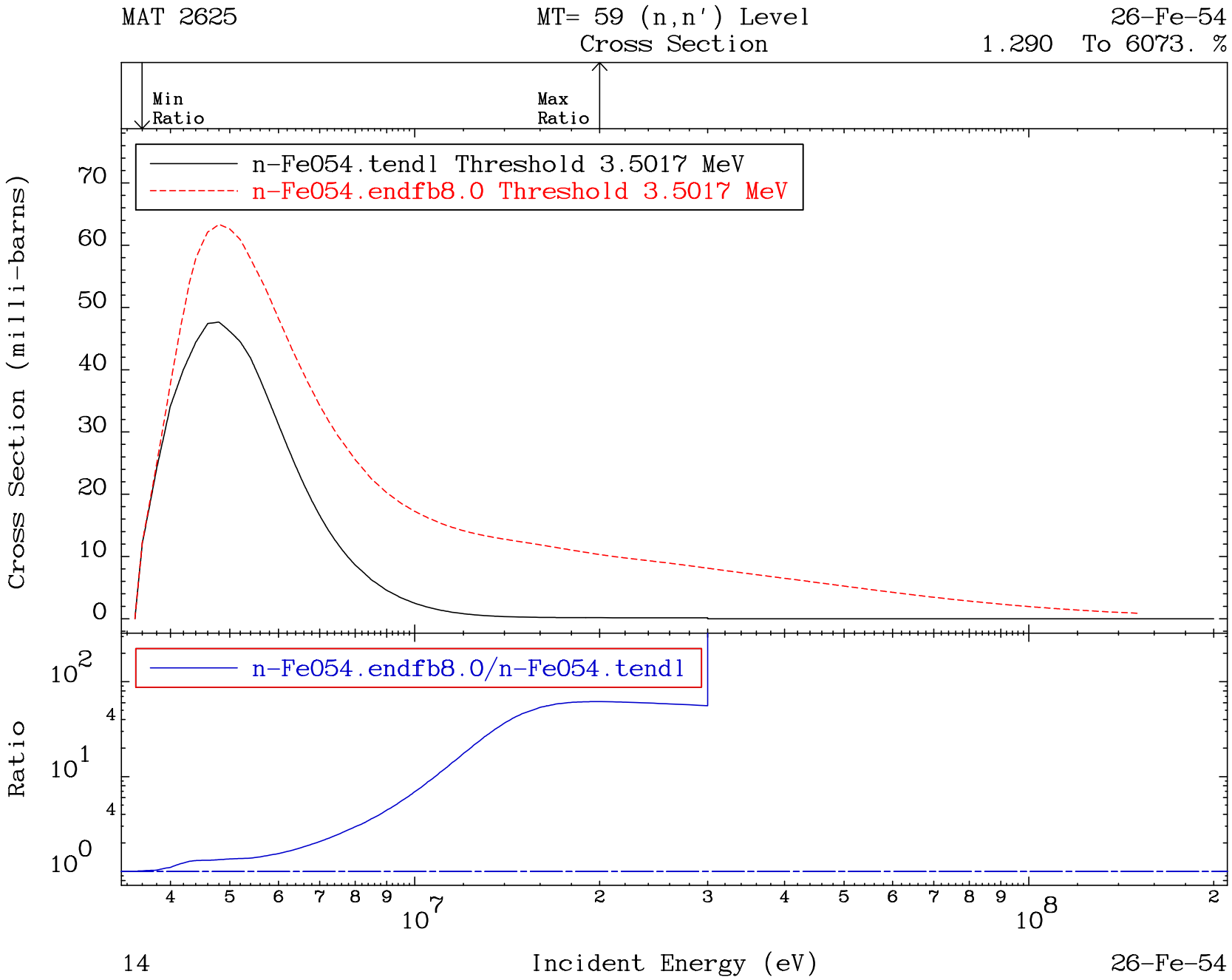

MAT 2625
MT= 54 (n,n') Level
Cross Section
26-Fe-54
-100.0 To 44.02 %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 3.0044 MeV
n-Fe054.endfb8.0 Threshold 3.0044 MeV
Cross Section (milli-barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
9
26-Fe-54

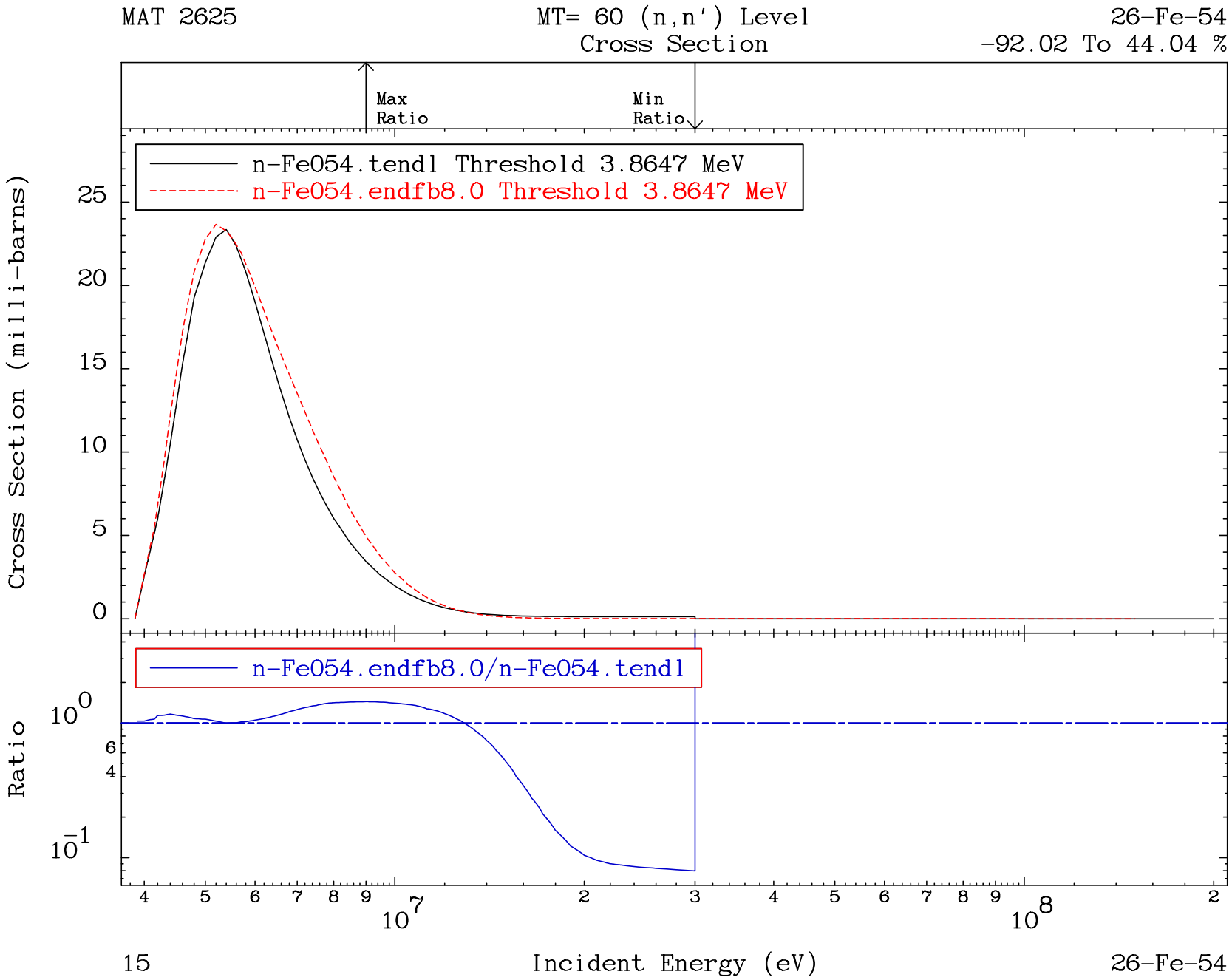

MAT 2625
MT= 55 (n,n') Level
Cross Section
26-Fe-54
-21.52 To 28.92 %
Max
Ratio
Min
Ratio
n-Fe054.tendl Threshold 3.0143 MeV
n-Fe054.endfb8.0 Threshold 3.0143 MeV
Cross Section (milli-barns)
200
150
100
50
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
1.4
1.2
1.0
0.8
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
10
Incident Energy (eV)
26-Fe-54

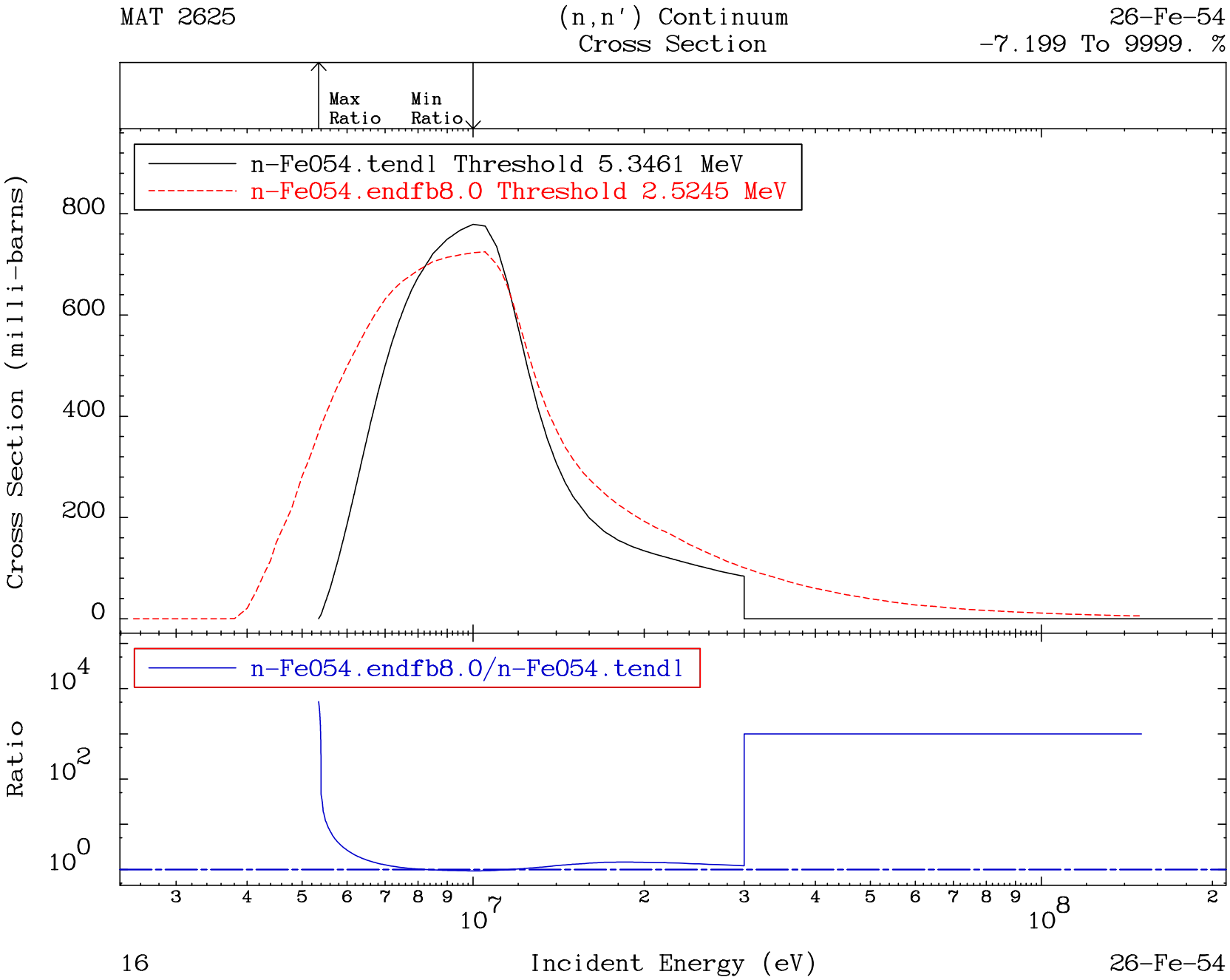

MAT 2625
MT= 56 (n,n') Level
Cross Section
26-Fe-54
-76.11 To 24.20 %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 3.2252 MeV
n-Fe054.endfb8.0 Threshold 3.2252 MeV
Cross Section (milli-barns)
160
140
120
100
80
60
40
20
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
1.2
0.8
0.4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
11
Incident Energy (eV)
26-Fe-54

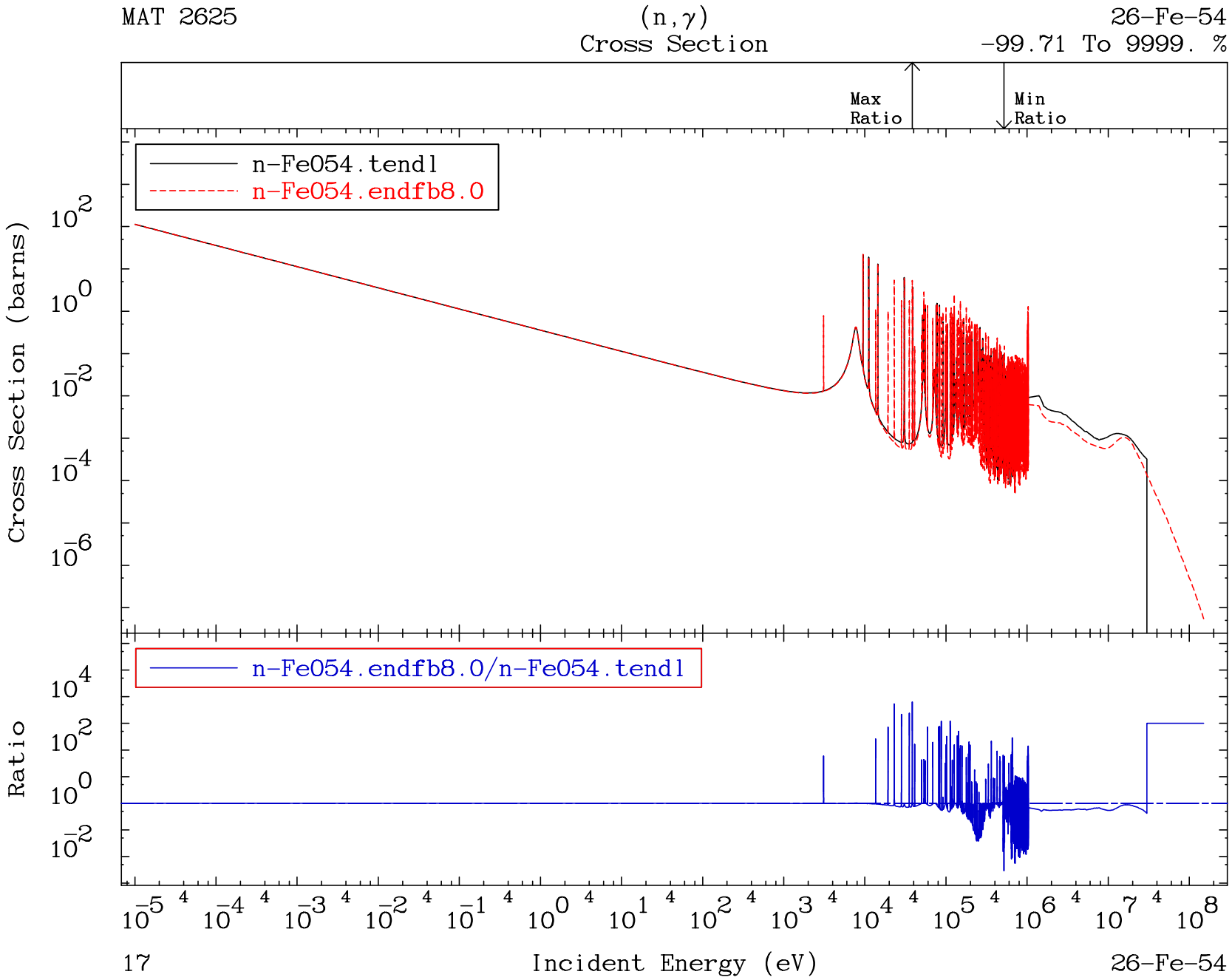

MAT 2625
MT= 57 (n,n') Level
Cross Section
26-Fe-54
-43.05 To 5356. %
Min
Ratio
Max
Ratio
n-Fe054.tendl Threshold 3.3564 MeV
n-Fe054.endfb8.0 Threshold 3.3564 MeV
Cross Section (milli-barns)
140
120
100
80
60
40
20
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^2
10^1
10^0
4
4
4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
12
Incident Energy (eV)
26-Fe-54

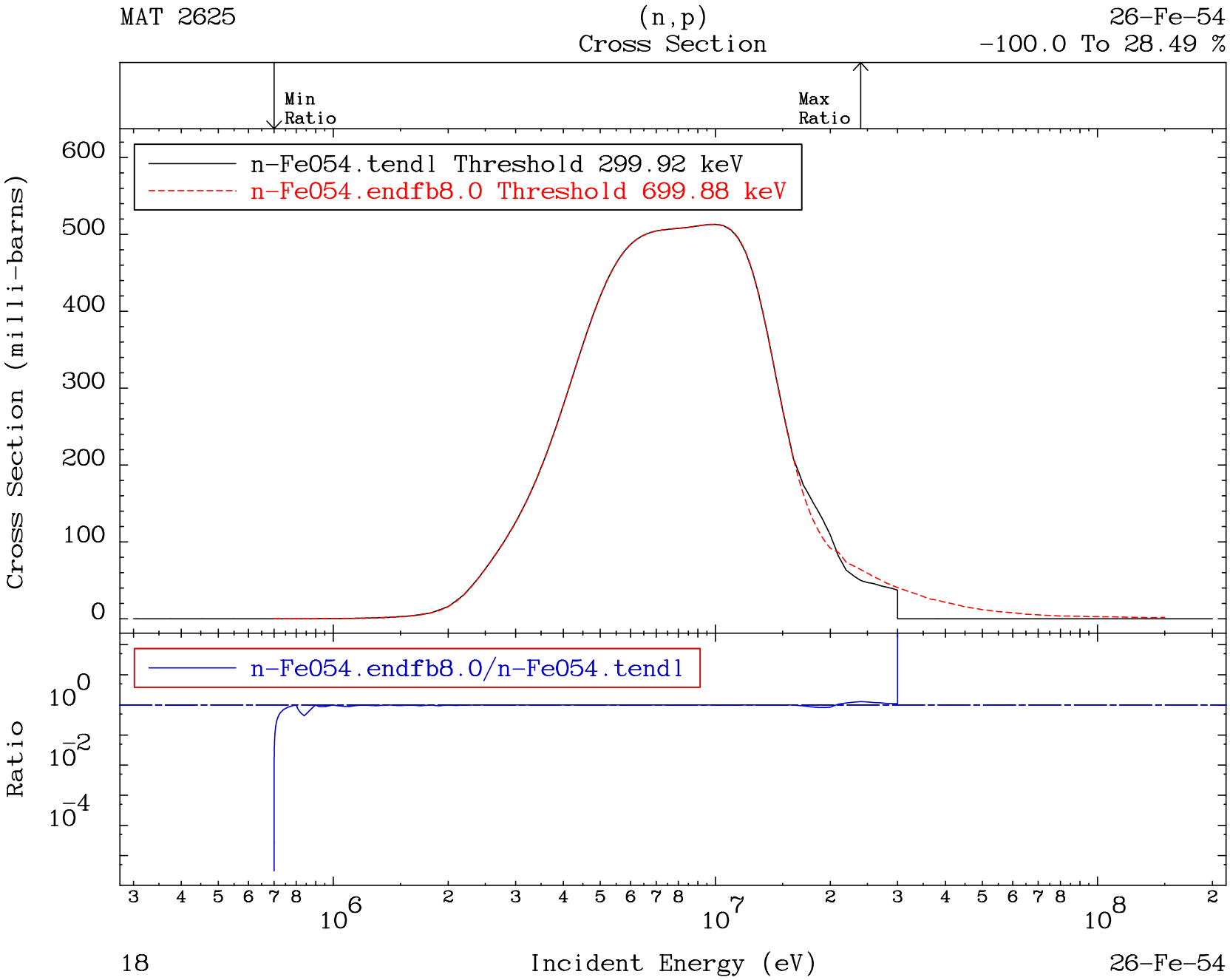

MAT 2625
MT= 58 (n,n') Level
Cross Section
26-Fe-54
0.062 To 9999. %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.4074 MeV
n-Fe054.endfb8.0 Threshold 3.4074 MeV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^4
10^2
10^0
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
13
Incident Energy (eV)
26-Fe-54

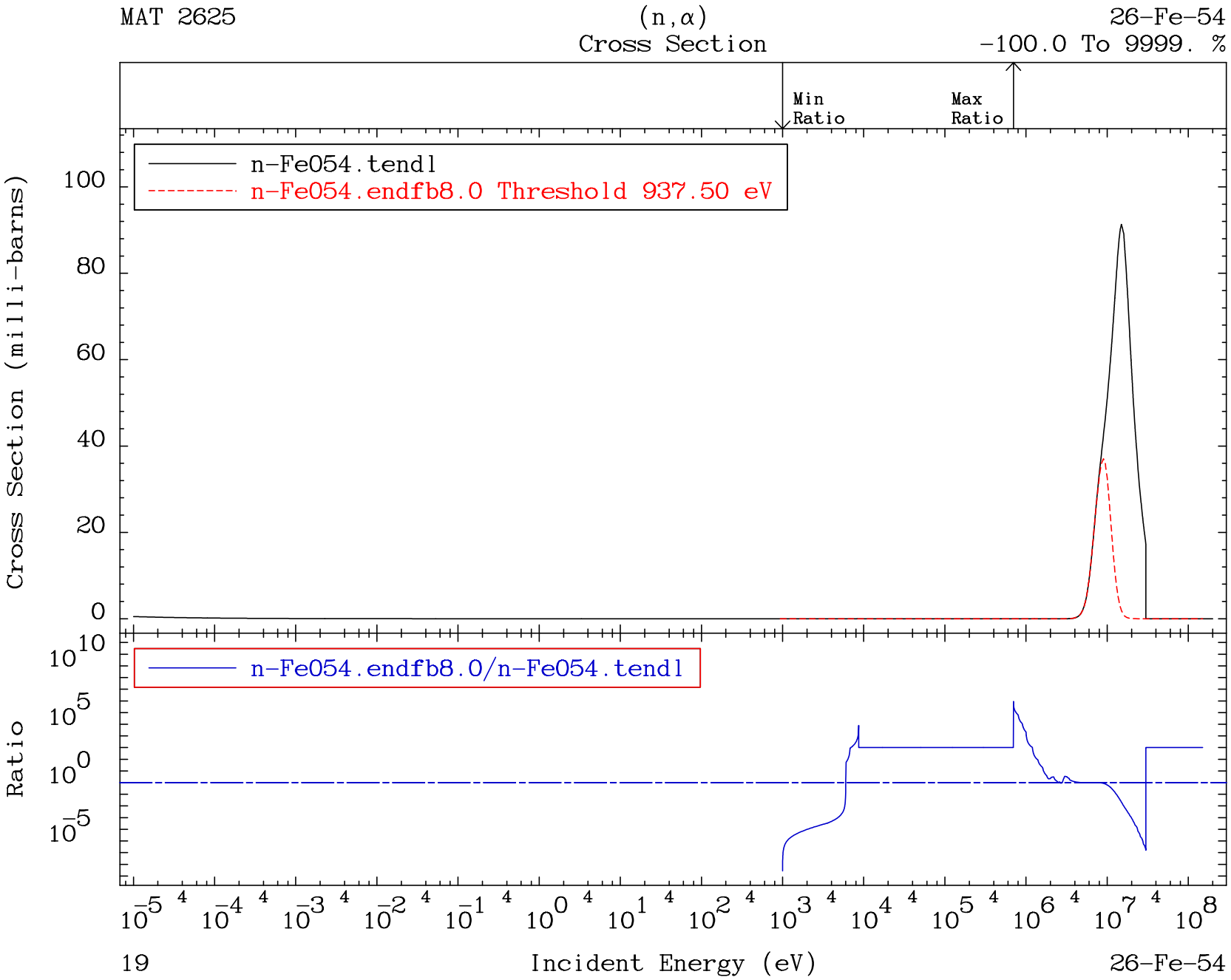

MAT 2625
MT= 59 (n,n') Level
Cross Section
26-Fe-54
1.290 To 6073. %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 3.5017 MeV
n-Fe054.endfb8.0 Threshold 3.5017 MeV
Cross Section (milli-barns)
70
60
50
40
30
20
10
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^2
10^1
10^0
4
4
4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
14
Incident Energy (eV)
26-Fe-54

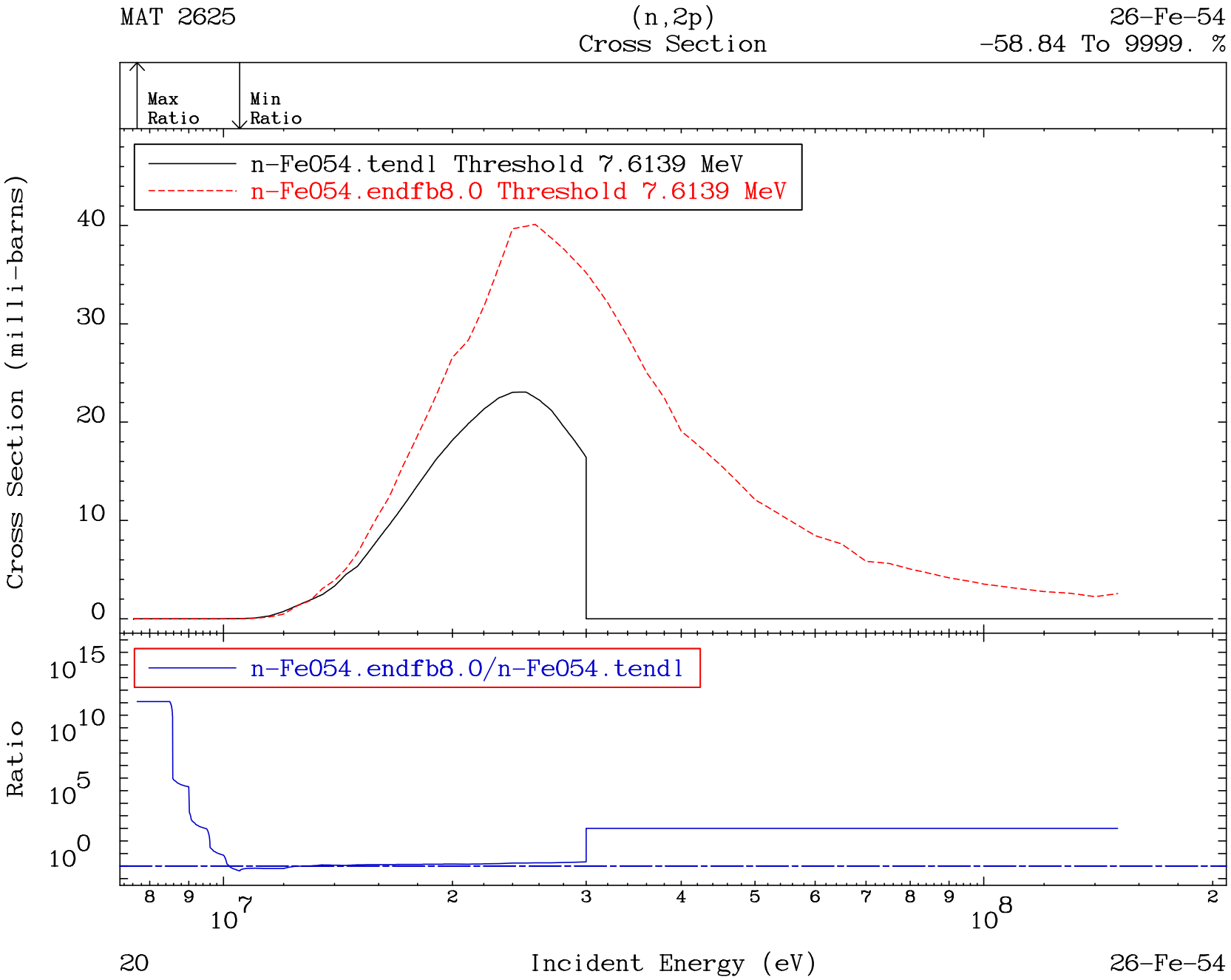

MAT 2625
MT= 60 (n,n') Level
Cross Section
26-Fe-54
-92.02 To 44.04 %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 3.8647 MeV
n-Fe054.endfb8.0 Threshold 3.8647 MeV
Cross Section (milli-barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
15
26-Fe-54

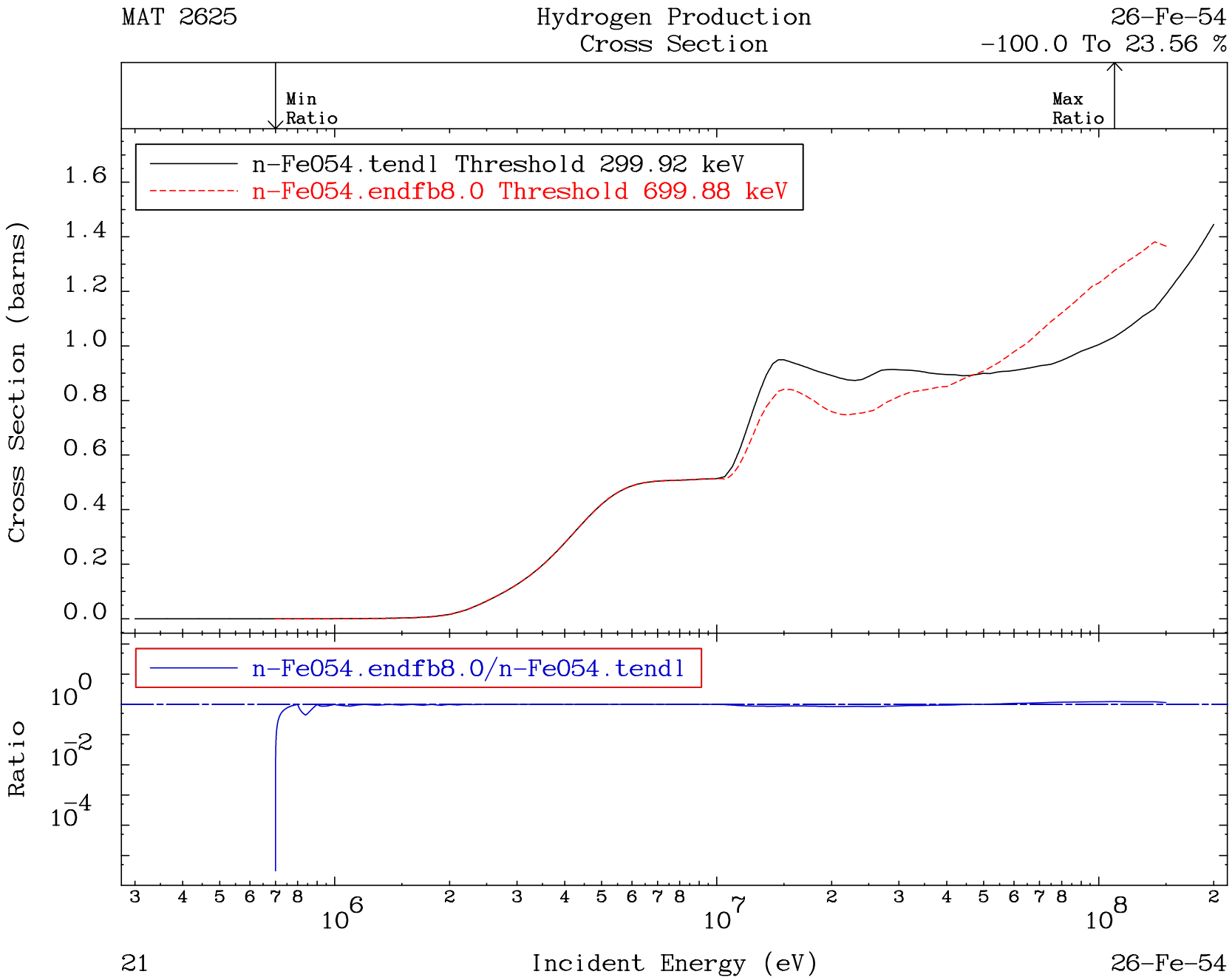

MAT 2625
(n,n') Continuum
Cross Section
26-Fe-54
-7.199 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 5.3461 MeV
n-Fe054.endfb8.0 Threshold 2.5245 MeV
Cross Section (milli-barns)
800
600
400
200
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^4
10^2
10^0
3 4 5 6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
16
Incident Energy (eV)
26-Fe-54

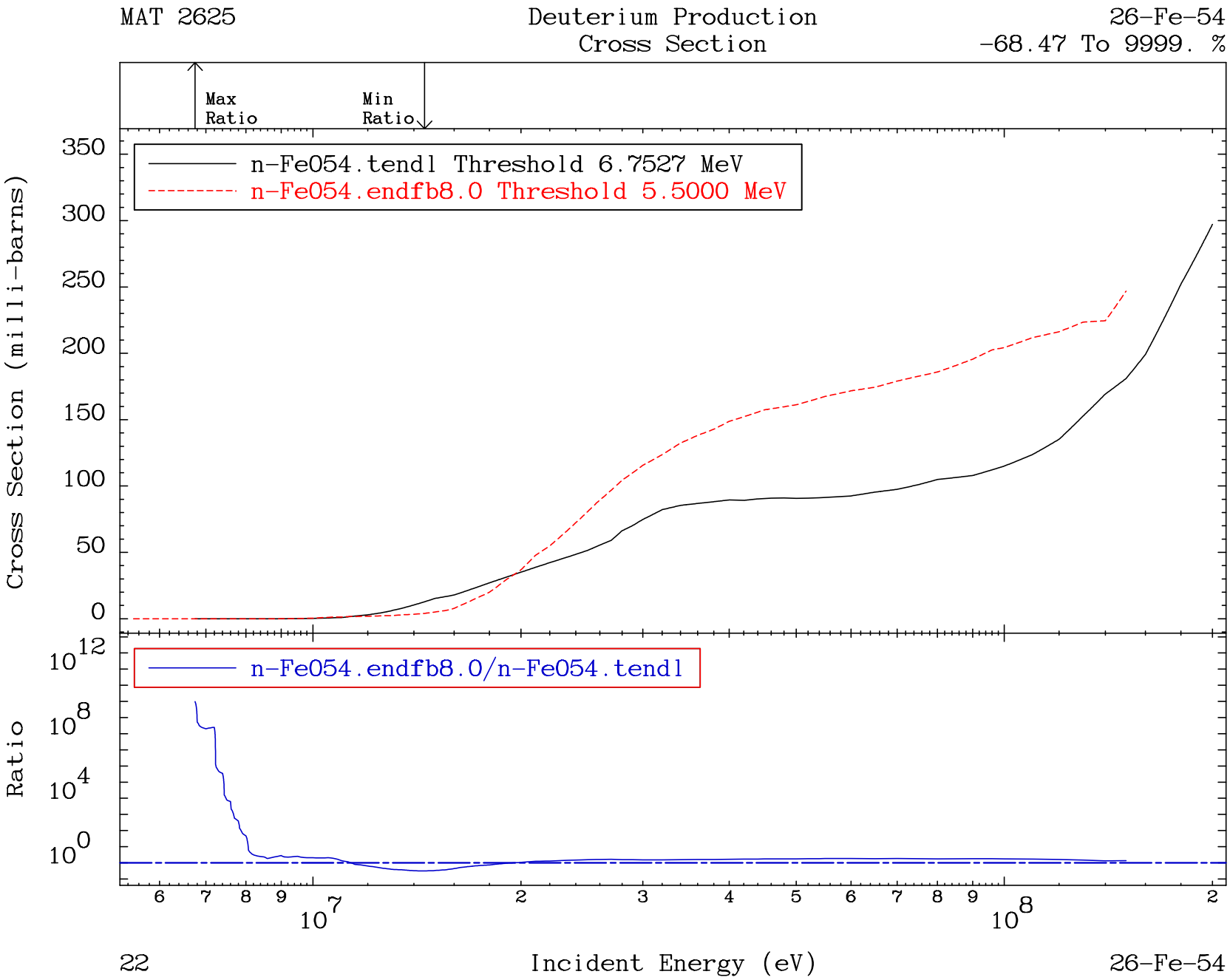

MAT 2625
(n,γ)
Cross Section
26-Fe-54
-99.71 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
17
26-Fe-54

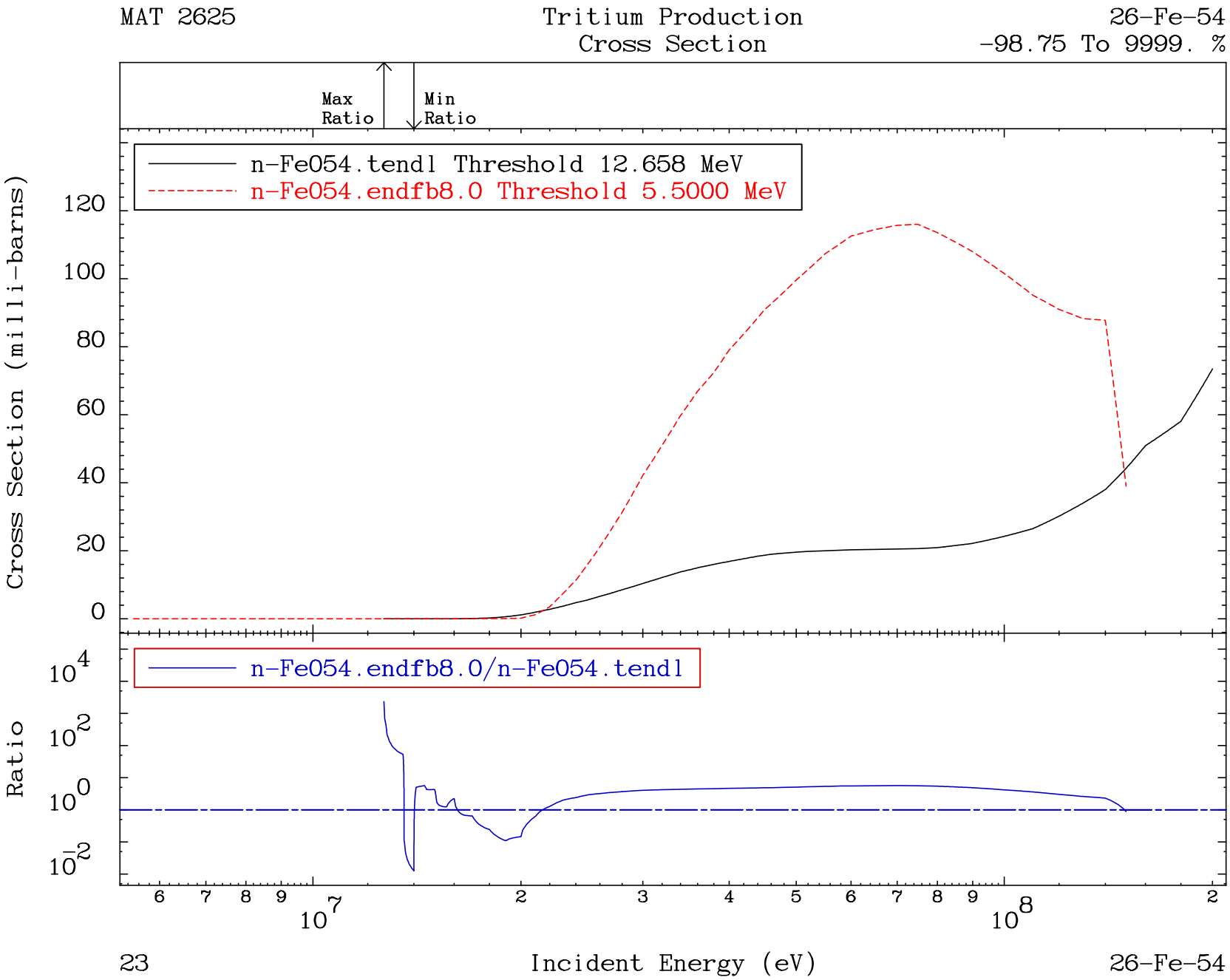

MAT 2625
(n,p)
Cross Section
26-Fe-54
-100.0 To 28.49 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 299.92 keV
n-Fe054.endfb8.0 Threshold 699.88 keV
Cross Section (milli-barns)
600
500
400
300
200
100
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^0
10^-2
10^-4
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
26-Fe-54

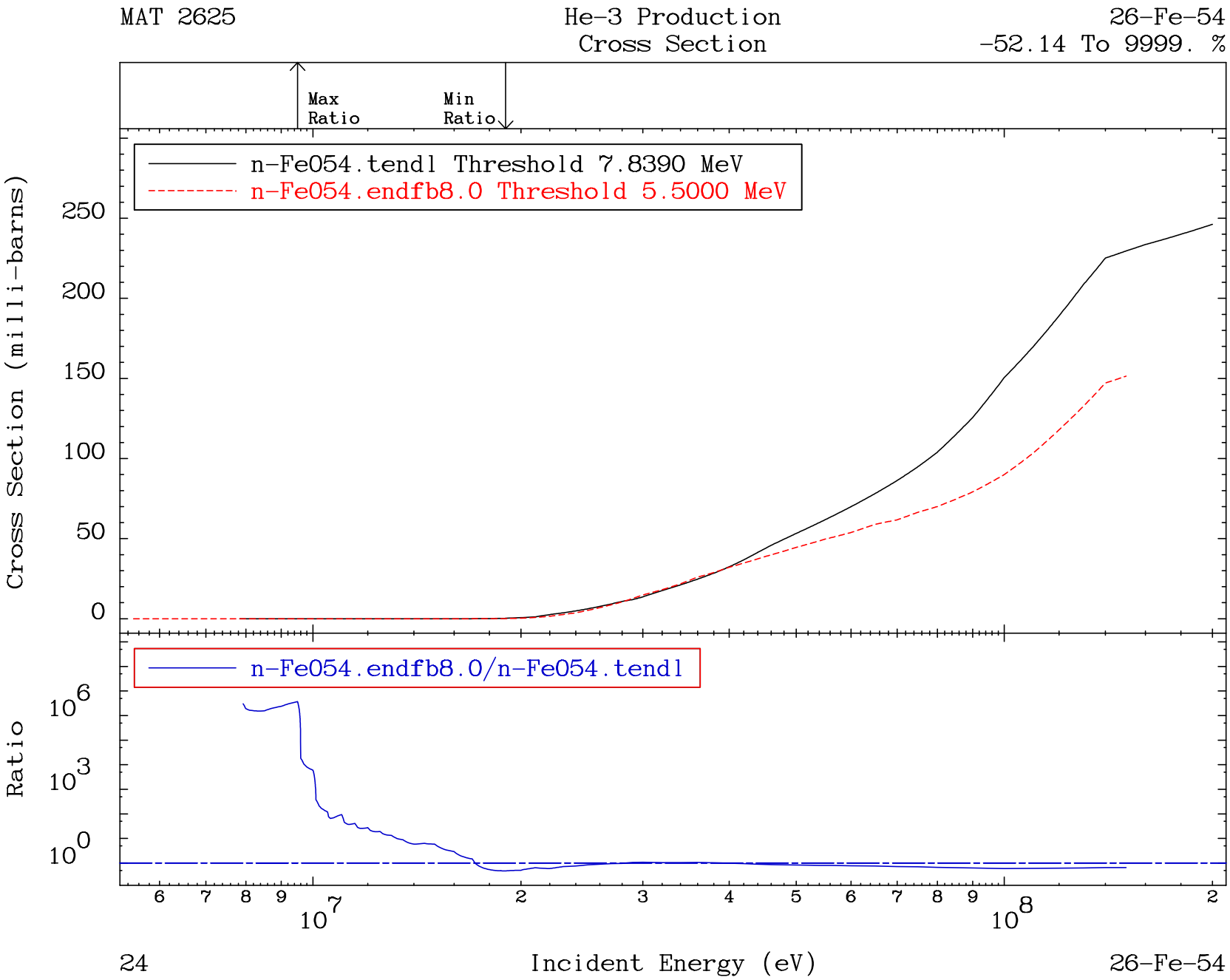

MAT 2625
(n,α)
Cross Section
26-Fe-54
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.endfb8.0 Threshold 937.50 eV
Cross Section (milli-barns)
100
80
60
40
20
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^10
10^5
10^0
10^-5
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
19
Incident Energy (eV)
26-Fe-54

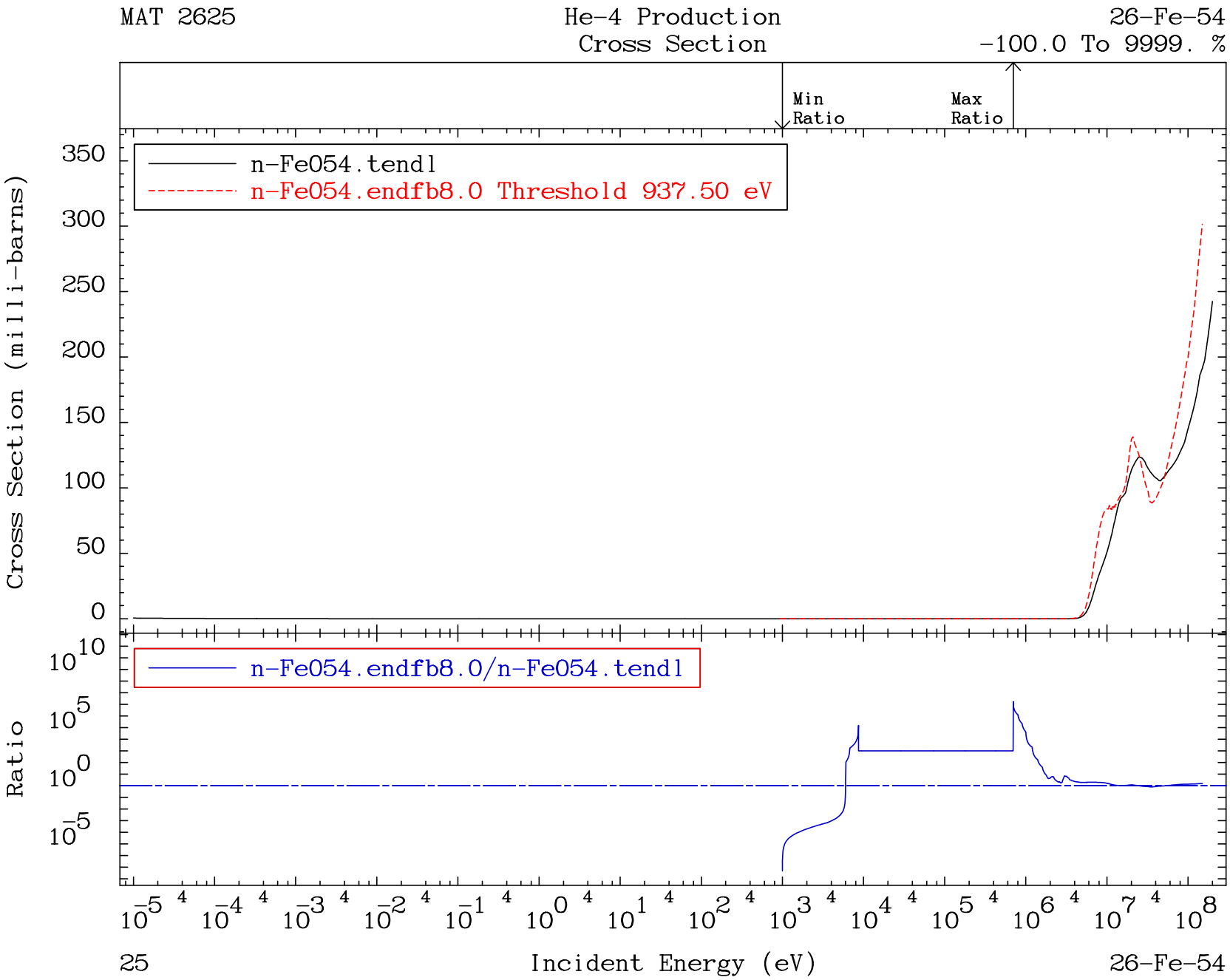

MAT 2625
(n,2p)
Cross Section
26-Fe-54
-58.84 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 7.6139 MeV
n-Fe054.endfb8.0 Threshold 7.6139 MeV
Cross Section (milli-barns)
40
30
20
10
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^15
10^10
10^5
10^0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
20
Incident Energy (eV)
26-Fe-54

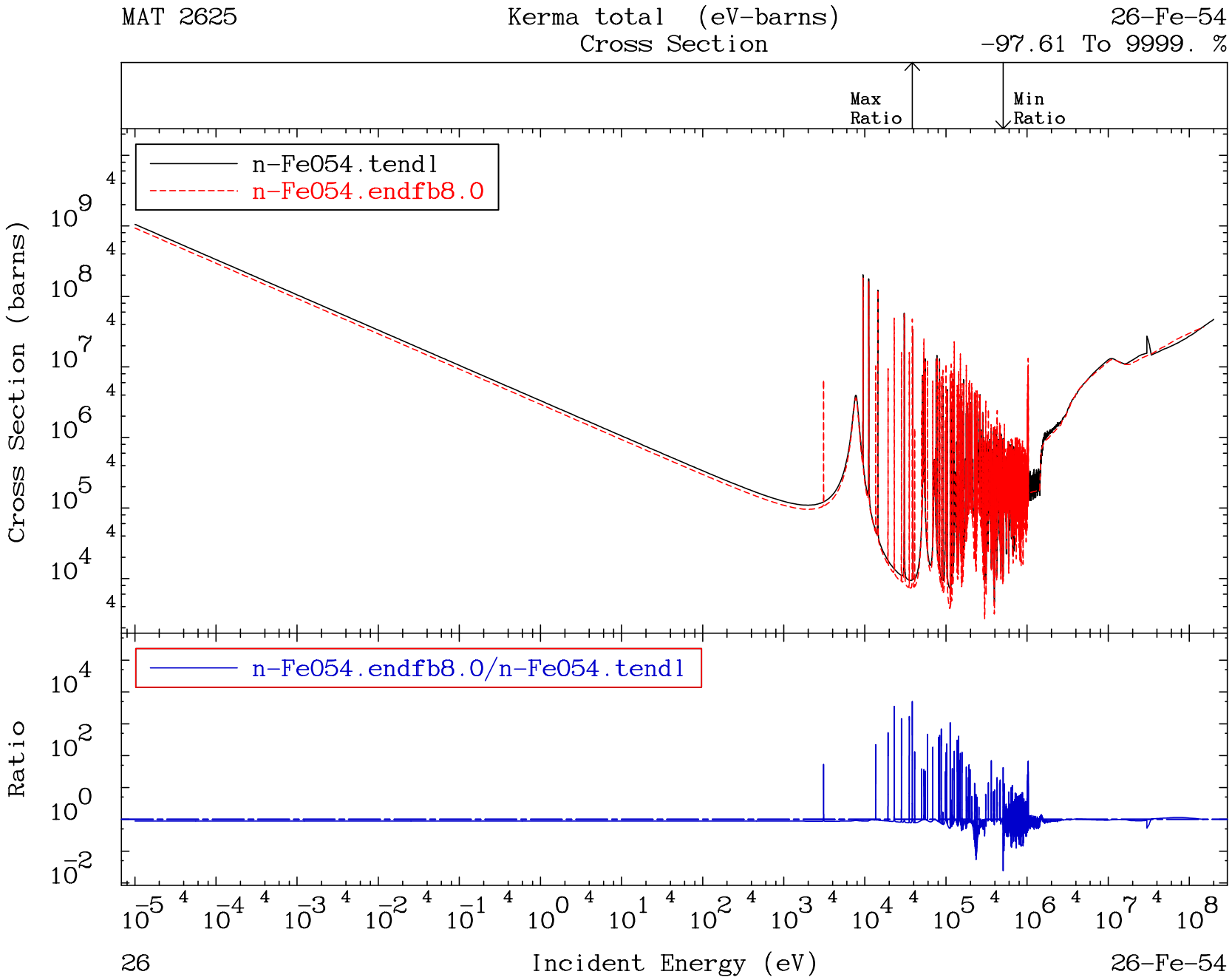

MAT 2625
Hydrogen Production
Cross Section
26-Fe-54
-100.0 To 23.56 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 299.92 keV
n-Fe054.endfb8.0 Threshold 699.88 keV
Cross Section (barns)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^0
10^-2
10^-4
3 4 5 6 7 8 10^6 2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
26-Fe-54

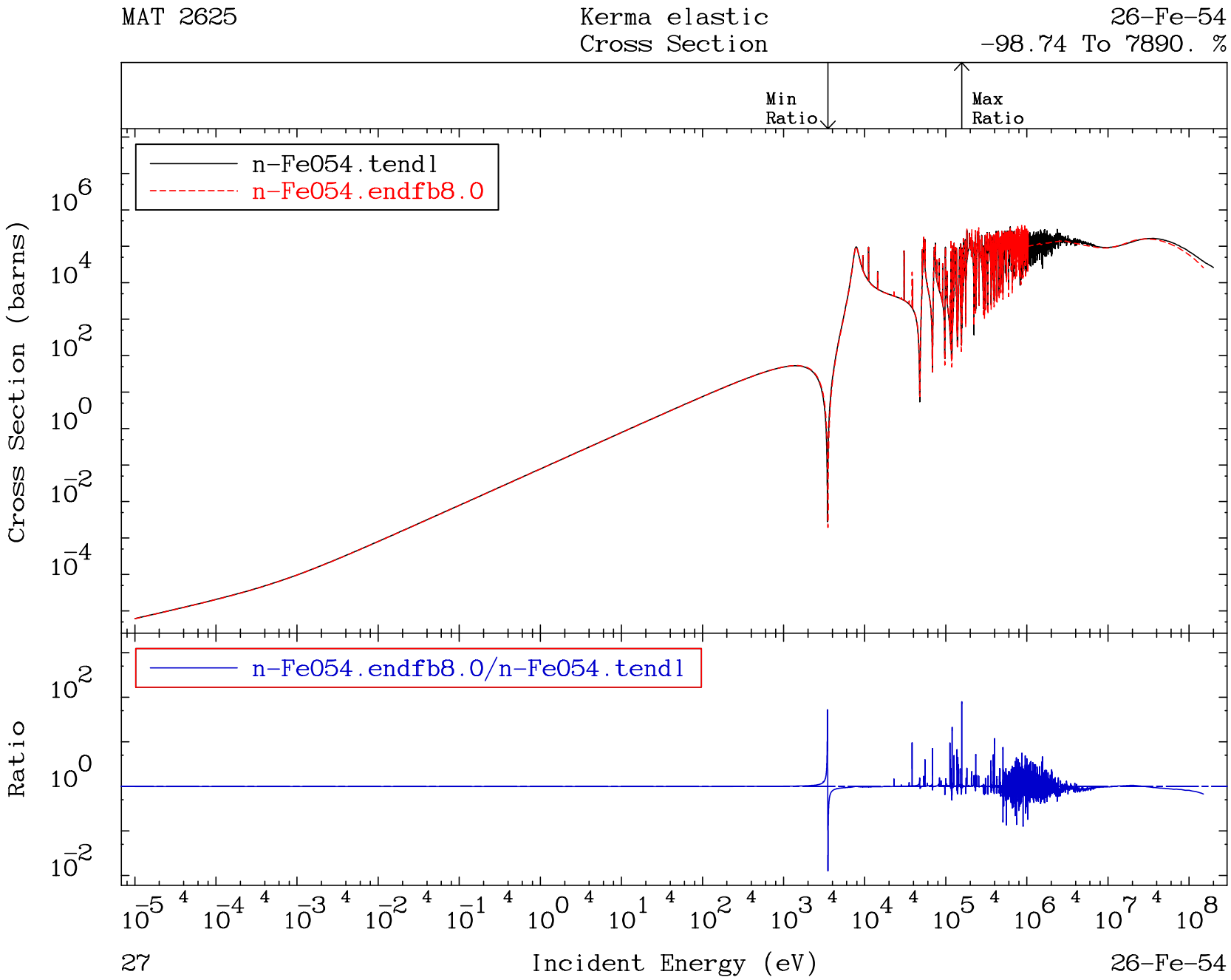

MAT 2625
Deuterium Production
Cross Section
26-Fe-54
-68.47 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 6.7527 MeV
n-Fe054.endfb8.0 Threshold 5.5000 MeV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^12
10^8
10^4
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
22
Incident Energy (eV)
26-Fe-54

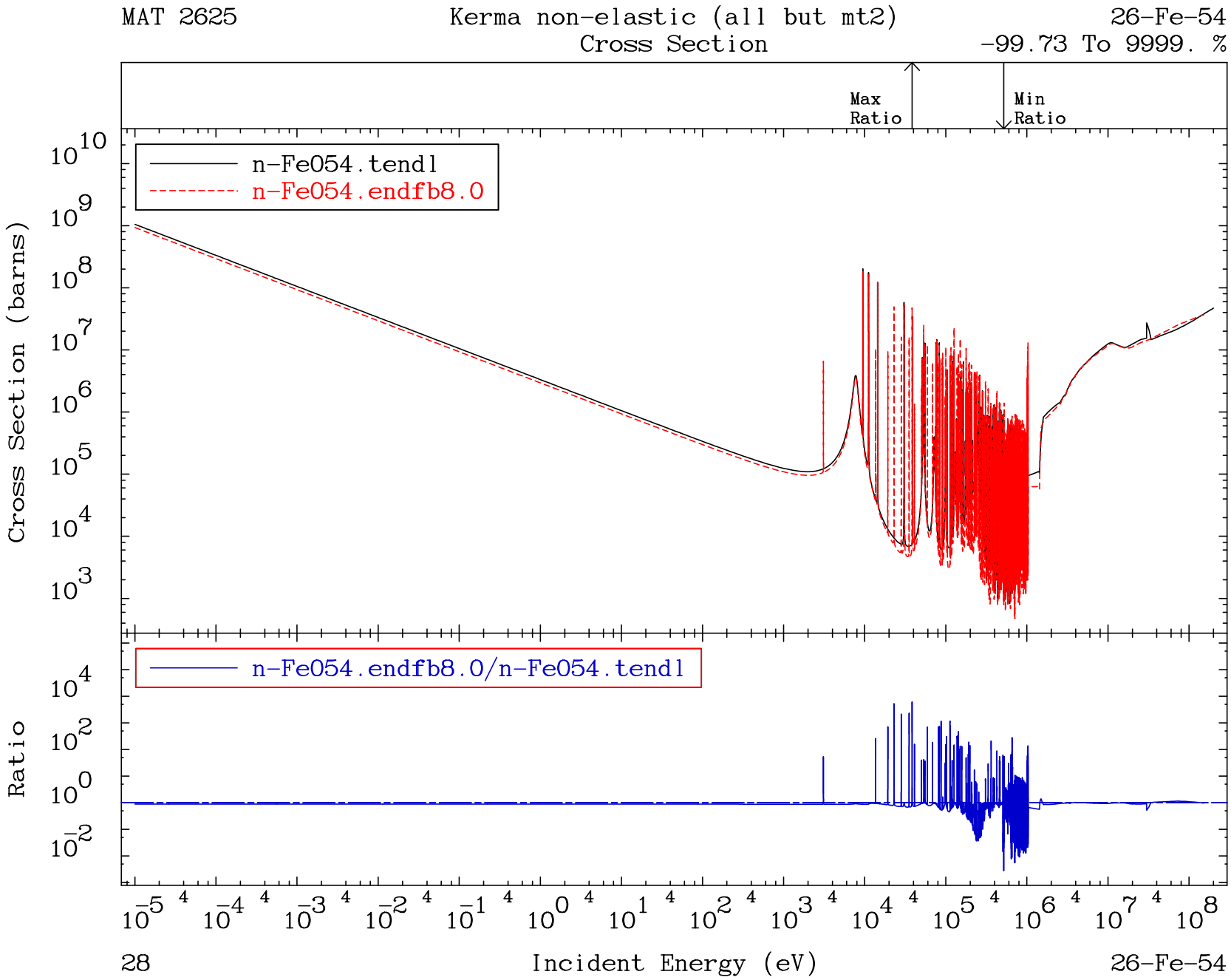

MAT 2625
Tritium Production
Cross Section
26-Fe-54
-98.75 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 12.658 MeV
n-Fe054.endfb8.0 Threshold 5.5000 MeV
Cross Section (milli-barns)
0
20
40
60
80
100
120
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^4
10^2
10^0
10^-2
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
23
Incident Energy (eV)
26-Fe-54

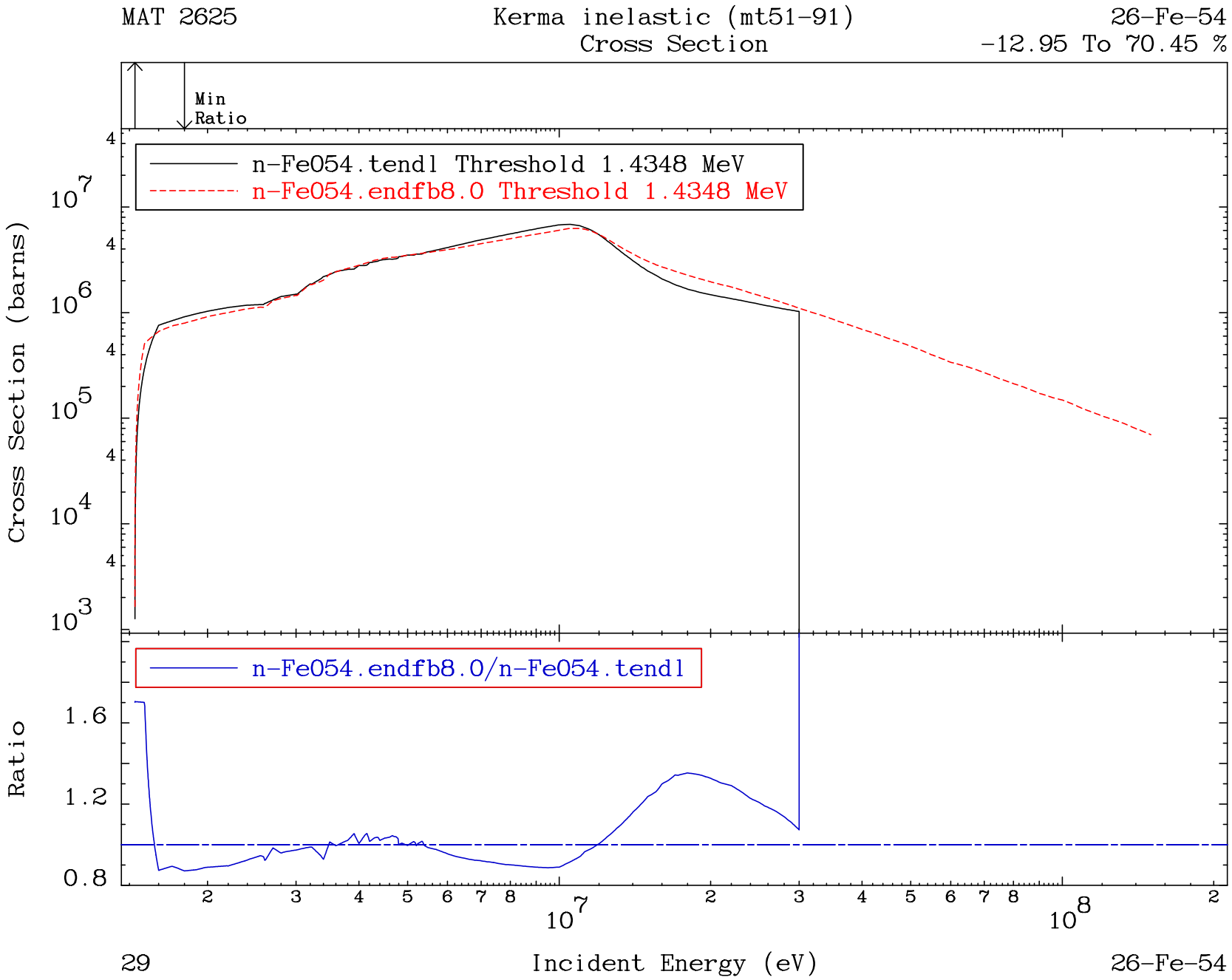

MAT 2625
He-3 Production
Cross Section
26-Fe-54
-52.14 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl Threshold 7.8390 MeV
n-Fe054.endfb8.0 Threshold 5.5000 MeV
Cross Section (milli-barns)
250
200
150
100
50
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^6
10^3
10^0
6 7 8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
24
Incident Energy (eV)
26-Fe-54

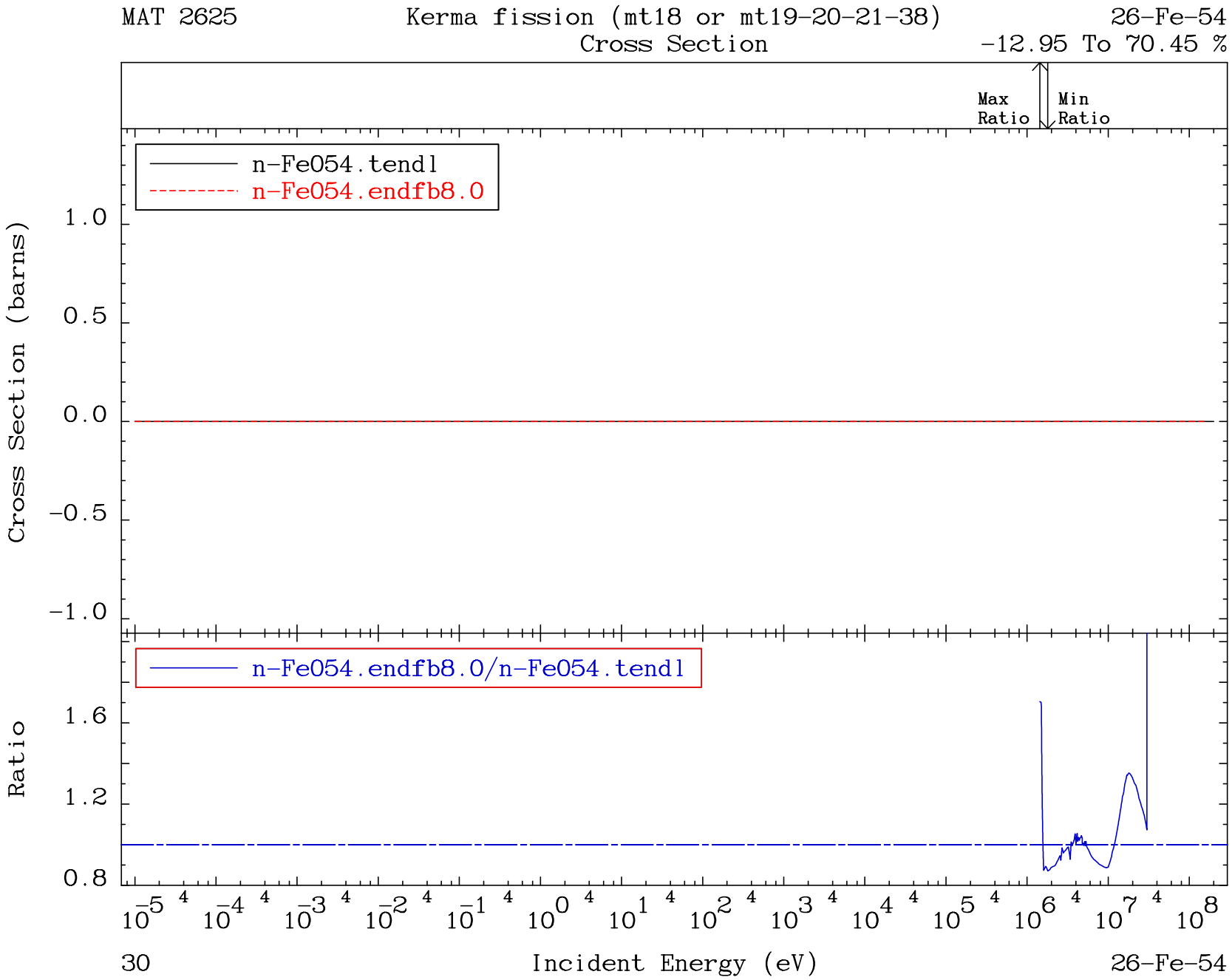

MAT 2625
He-4 Production
Cross Section
26-Fe-54
-100.0 To 9999. %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.endfb8.0 Threshold 937.50 eV
Cross Section (milli-barns)
350
300
250
200
150
100
50
0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
10^10
10^5
10^0
10^-5
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
25
Incident Energy (eV)
26-Fe-54

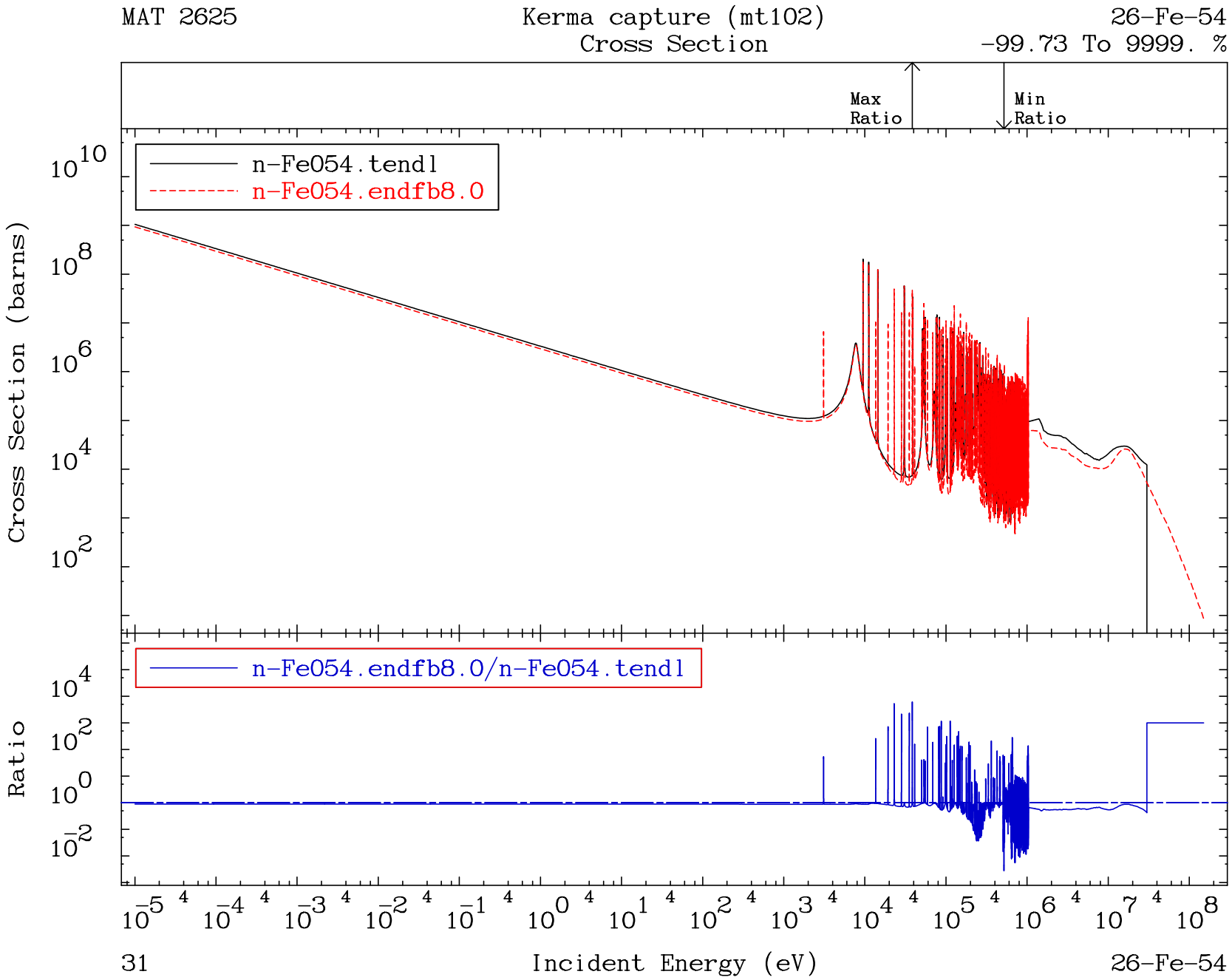

MAT 2625
Kerma total (eV-barns)
Cross Section
26-Fe-54
-97.61 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
26
26-Fe-54

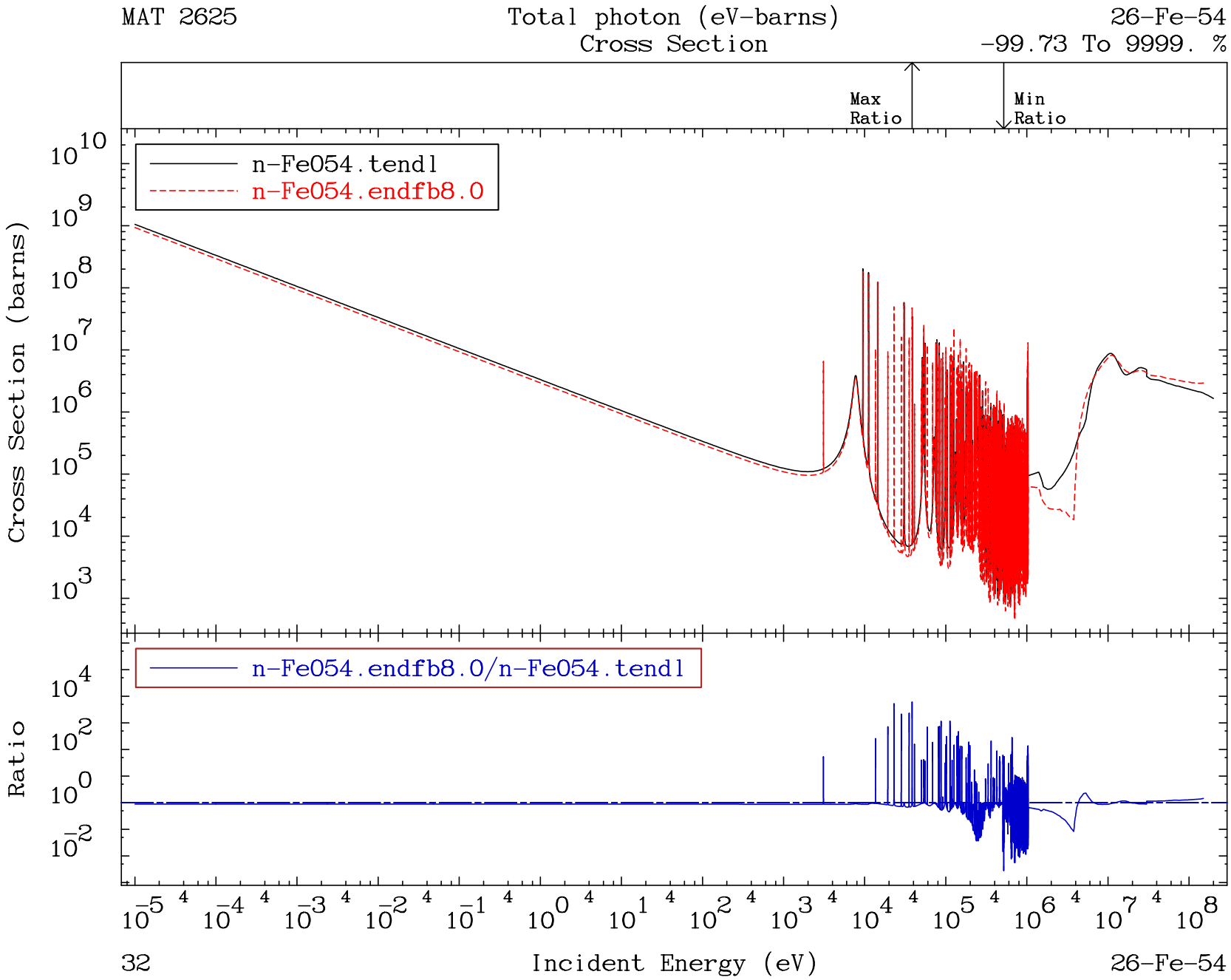

MAT 2625
Kerma elastic
Cross Section
26-Fe-54
-98.74 To 7890. %
Min Ratio
Max Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
27
26-Fe-54

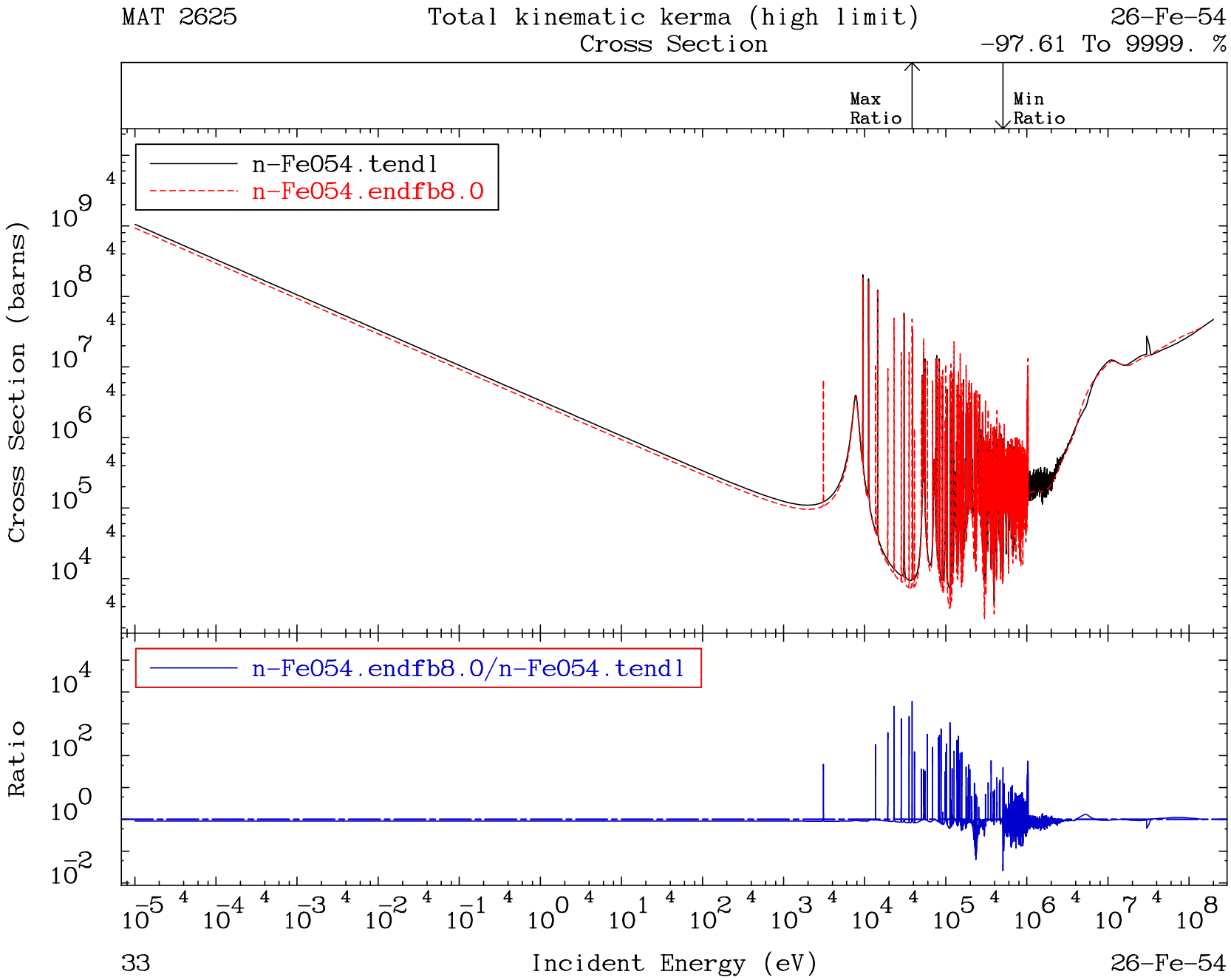

MAT 2625
Kerma non-elastic (all but mt2)
Cross Section
26-Fe-54
-99.73 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
28
26-Fe-54

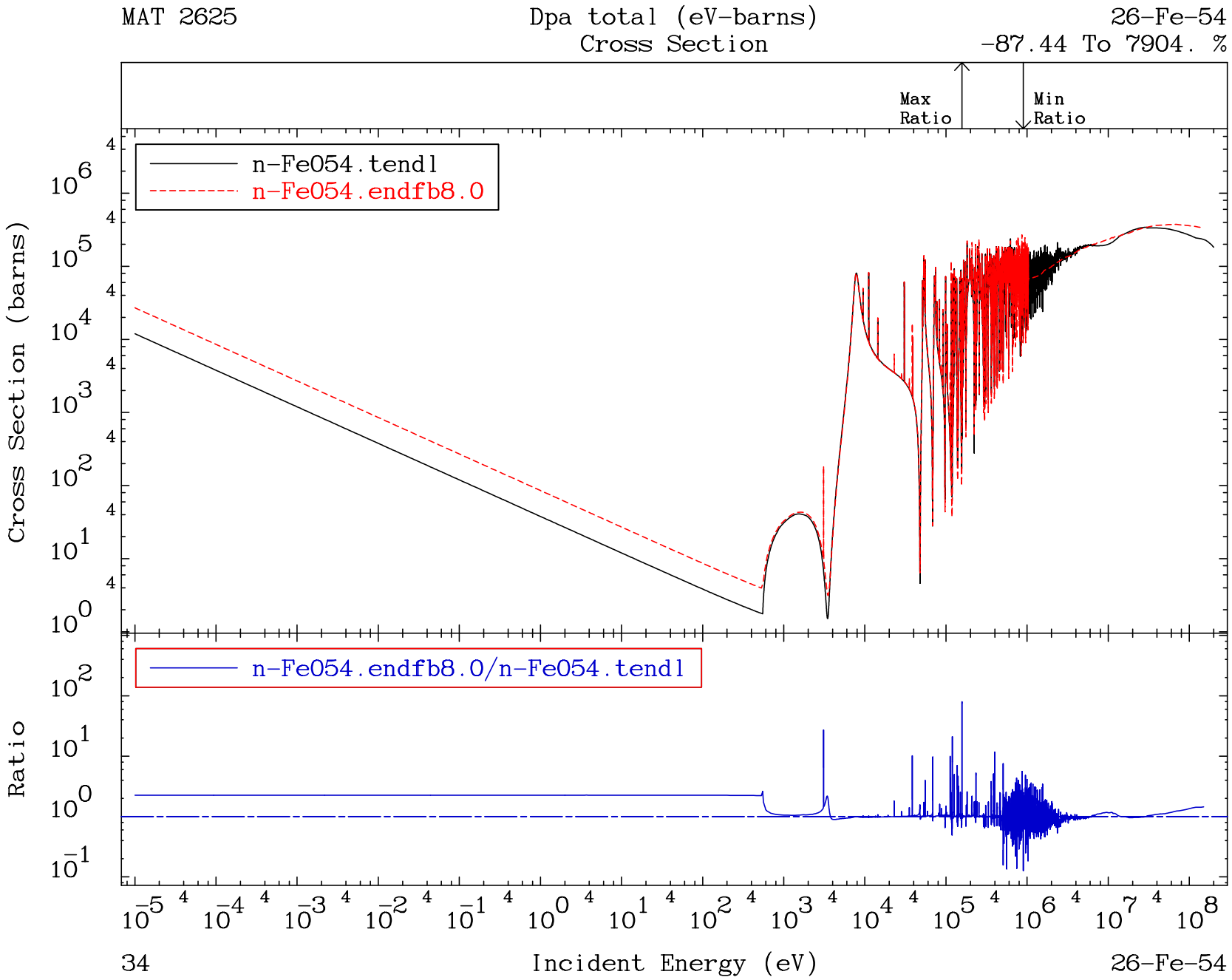

MAT 2625
Kerma inelastic (mt51-91)
Cross Section
26-Fe-54
-12.95 To 70.45 %
Min
Ratio
n-Fe054.tendl Threshold 1.4348 MeV
n-Fe054.endfb8.0 Threshold 1.4348 MeV
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
29
26-Fe-54

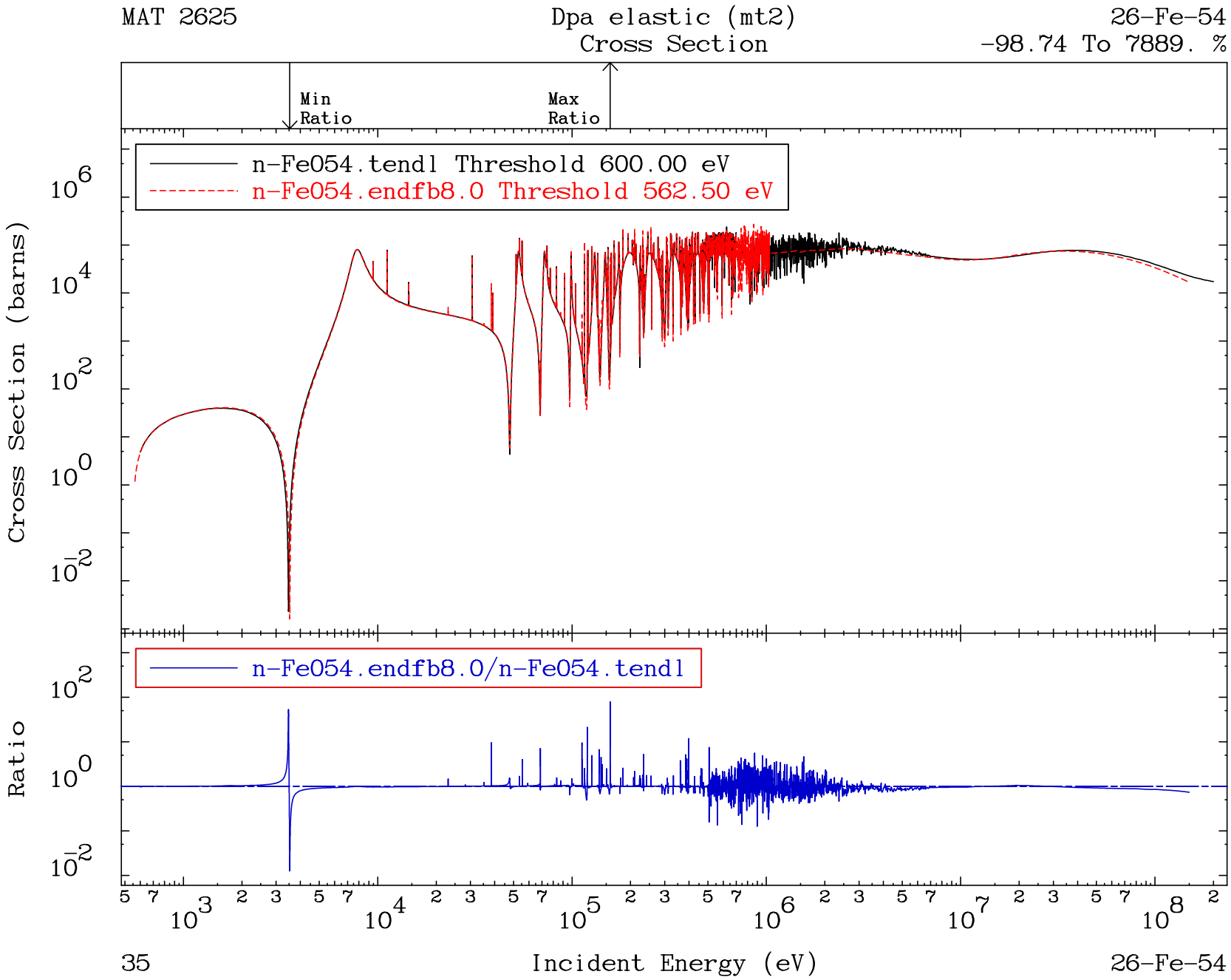

MAT 2625
Kerma fission (mt18 or mt19-20-21-38)
Cross Section
26-Fe-54
-12.95 To 70.45 %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
1.0
0.5
0.0
-0.5
-1.0
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
1.6
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
30
Incident Energy (eV)
26-Fe-54

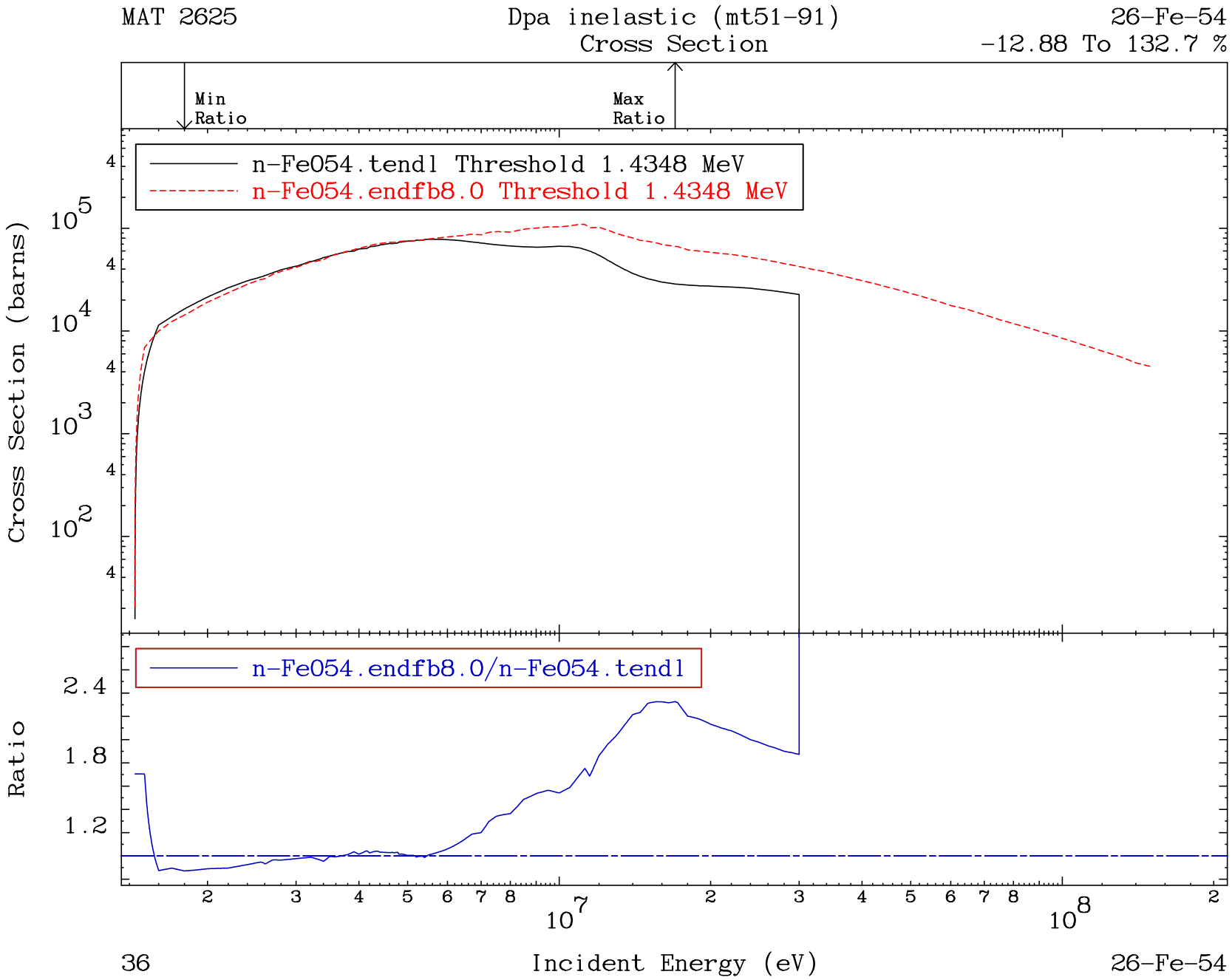

MAT 2625
Kerma capture (mt102)
Cross Section
26-Fe-54
-99.73 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
31
26-Fe-54

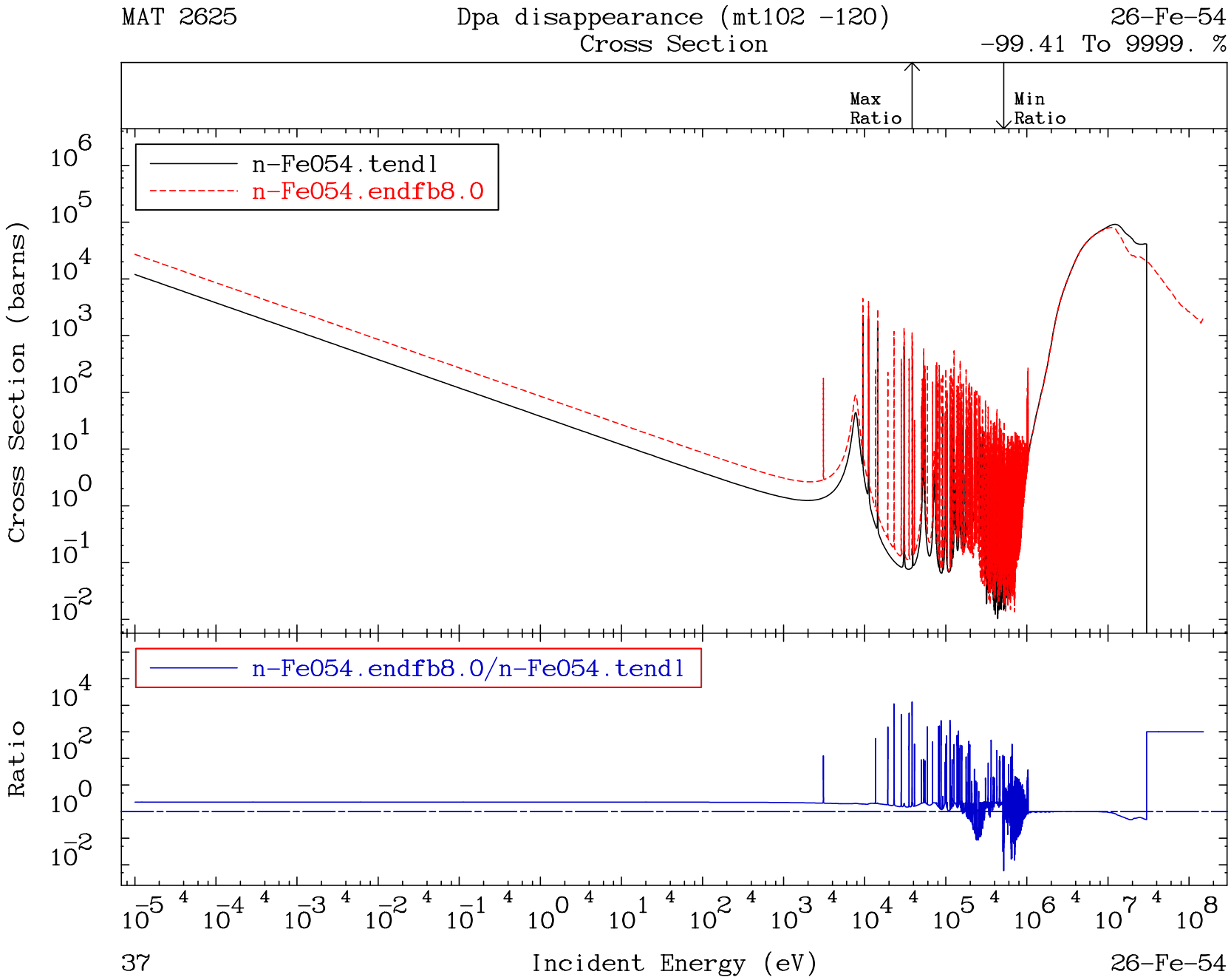

MAT 2625
Total photon (eV-barns)
Cross Section
26-Fe-54
-99.73 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
32
26-Fe-54


MAT 2625
Total kinematic kerma (high limit)
Cross Section
26-Fe-54
-97.61 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
33
26-Fe-54


MAT 2625
Dpa total (eV-barns)
Cross Section
26-Fe-54
-87.44 To 7904. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
34
Incident Energy (eV)
26-Fe-54


MAT 2625
Dpa elastic (mt2)
Cross Section
26-Fe-54
-98.74 To 7889. %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 600.00 eV
n-Fe054.endfb8.0 Threshold 562.50 eV
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
35
26-Fe-54


MAT 2625
Dpa inelastic (mt51-91)
Cross Section
26-Fe-54
-12.88 To 132.7 %
Min Ratio
Max Ratio
n-Fe054.tendl Threshold 1.4348 MeV
n-Fe054.endfb8.0 Threshold 1.4348 MeV
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
36
26-Fe-54


MAT 2625
Dpa disappearance (mt102 -120)
Cross Section
26-Fe-54
-99.41 To 9999. %
Max Ratio
Min Ratio
n-Fe054.tendl
n-Fe054.endfb8.0
Cross Section (barns)
n-Fe054.endfb8.0/n-Fe054.tendl
Ratio
Incident Energy (eV)
37
26-Fe-54