Program Complot
(Version 2021-1)
by
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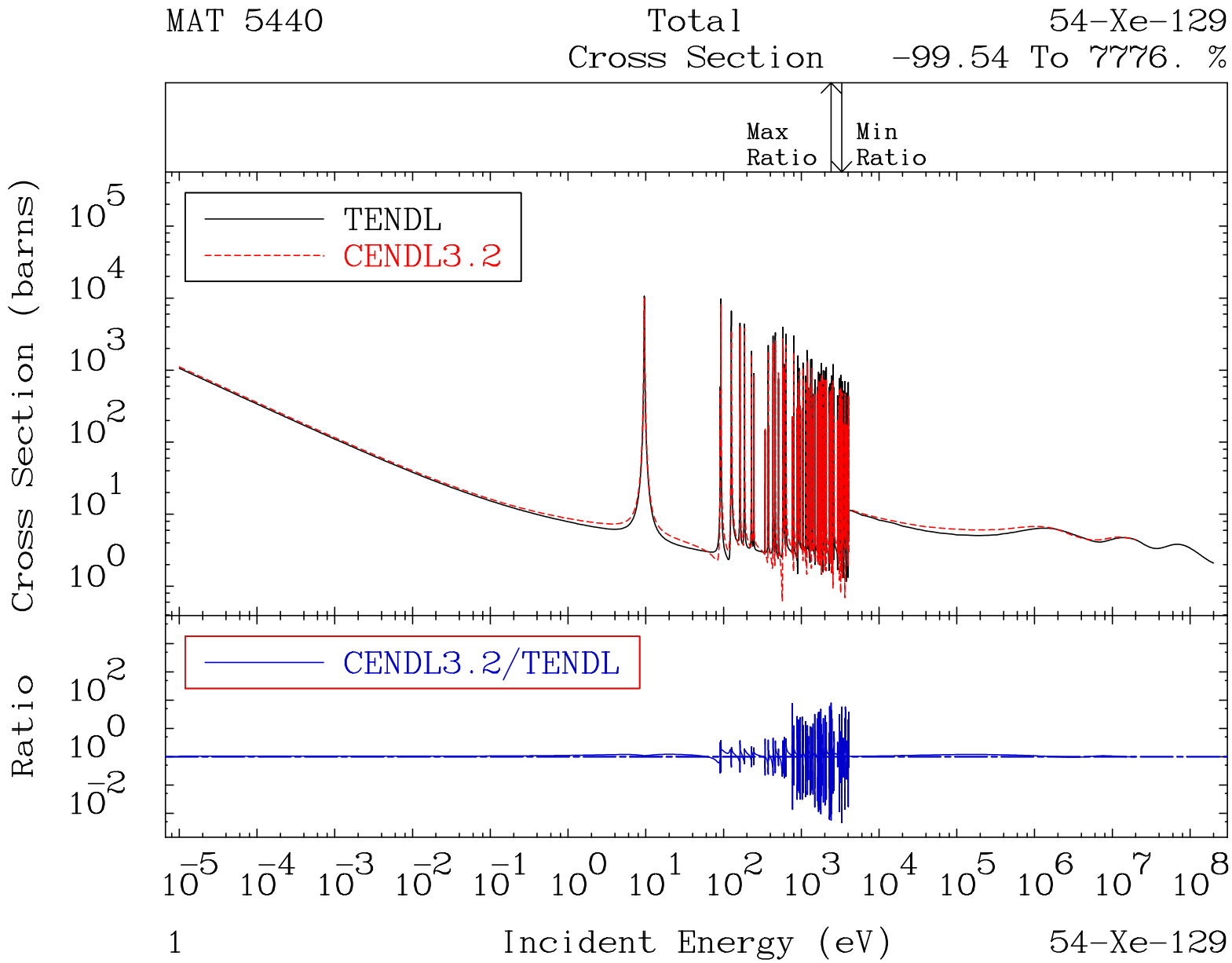
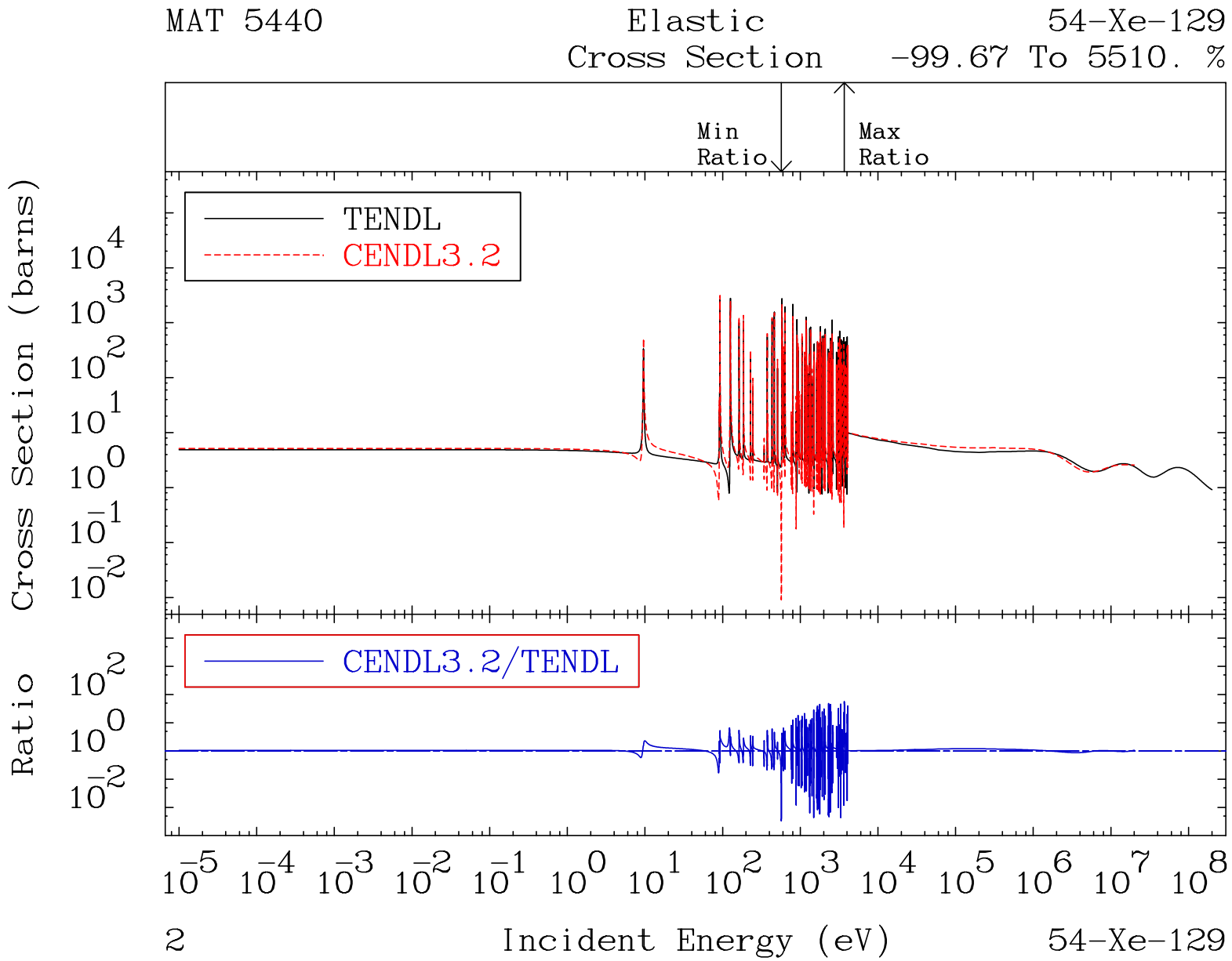
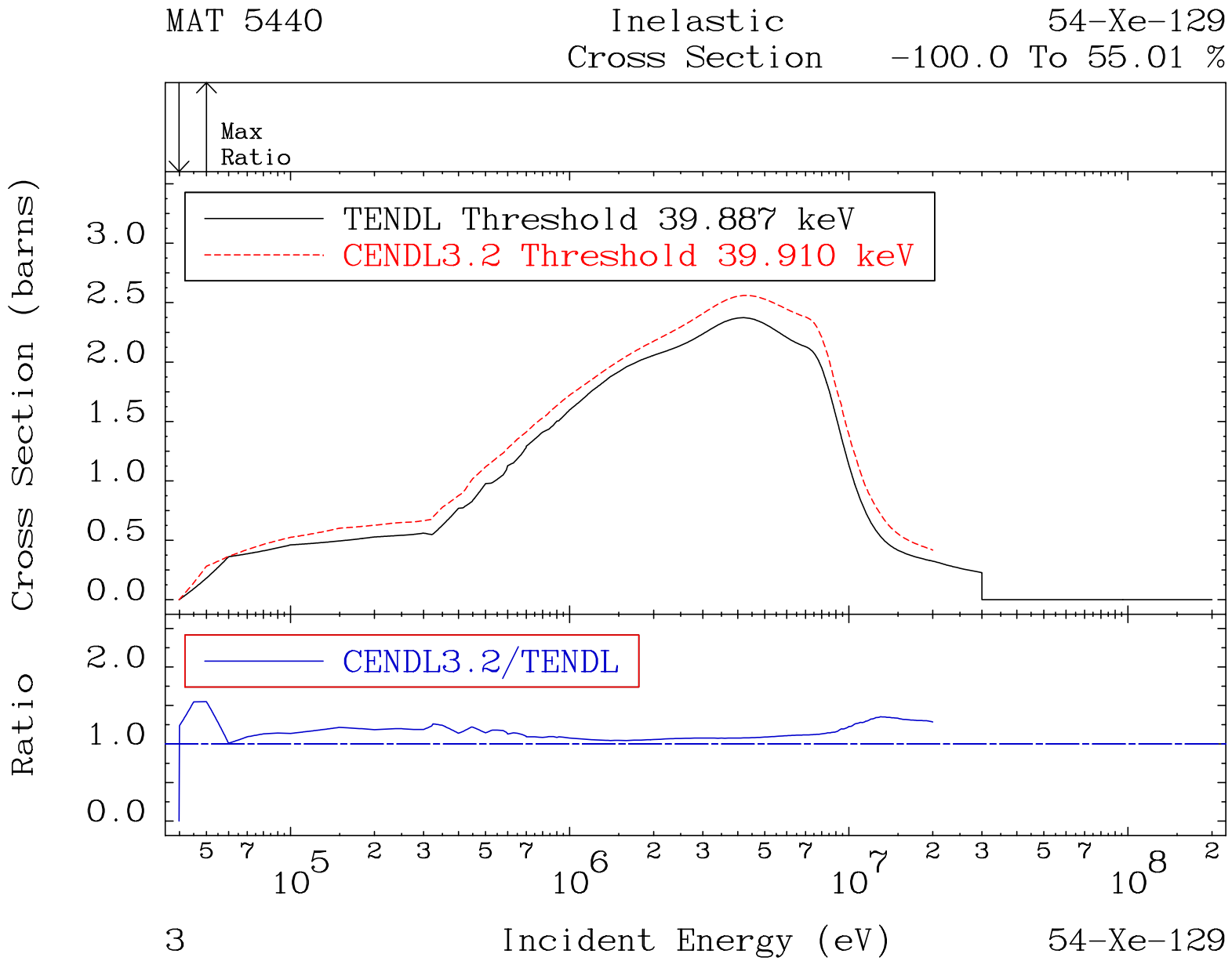
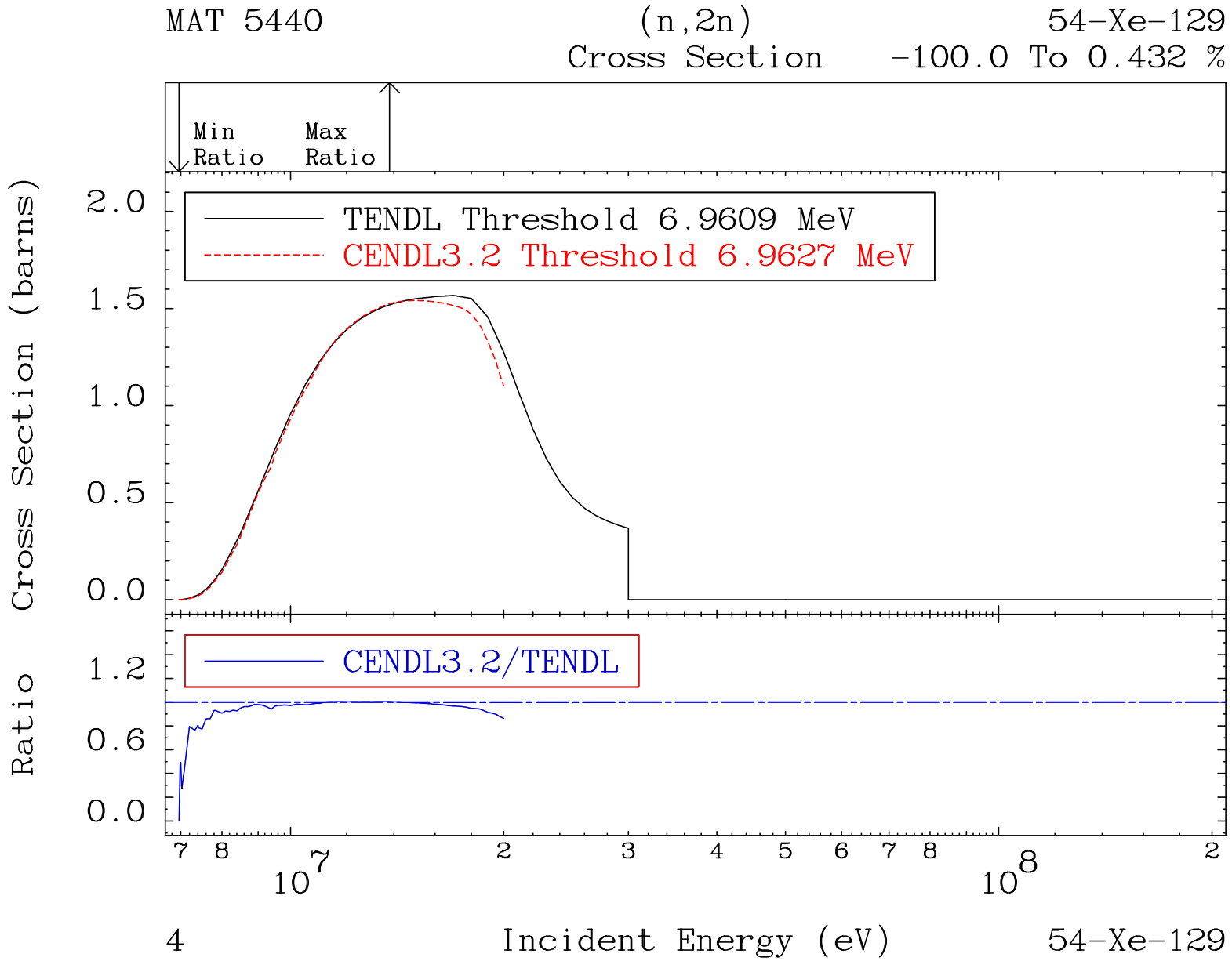
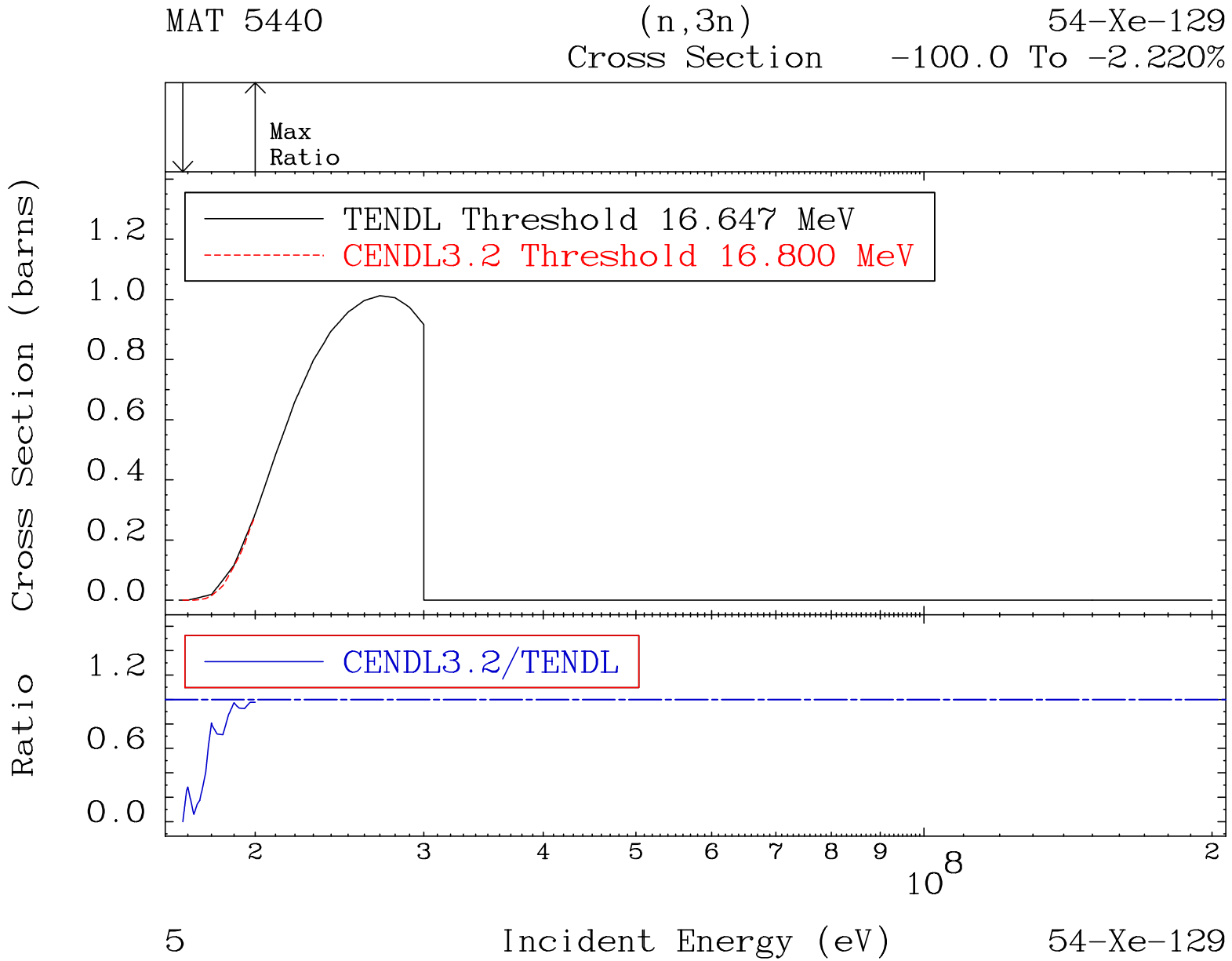
Press Mouse Button to Start

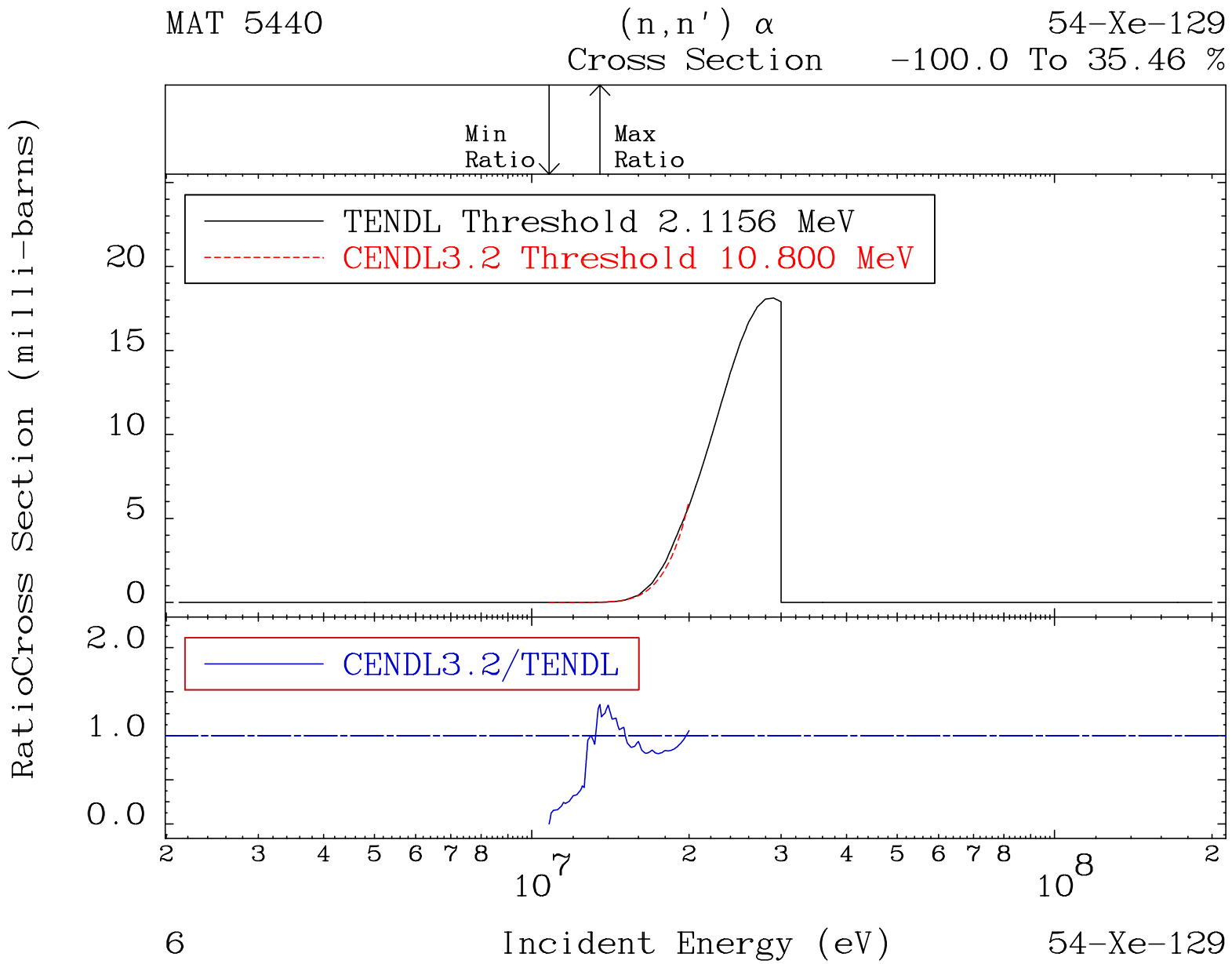

MAT 5440
Total
Cross Section
54-Xe-129
-99.54 To 7776. %
Max
Ratio
Min
Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
1
54-Xe-129

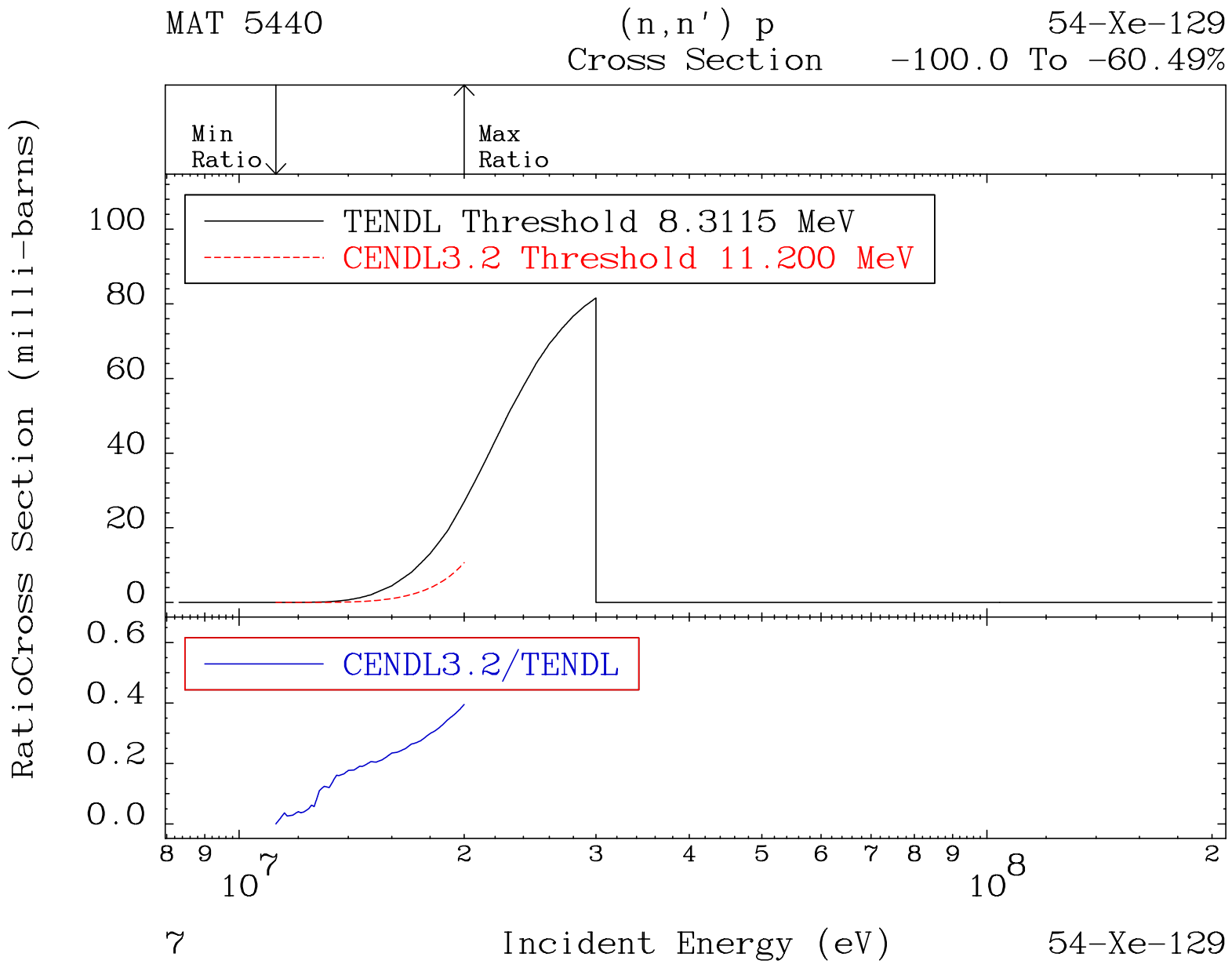

MAT 5440
Elastic
Cross Section
54-Xe-129
-99.67 To 5510. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
2
54-Xe-129

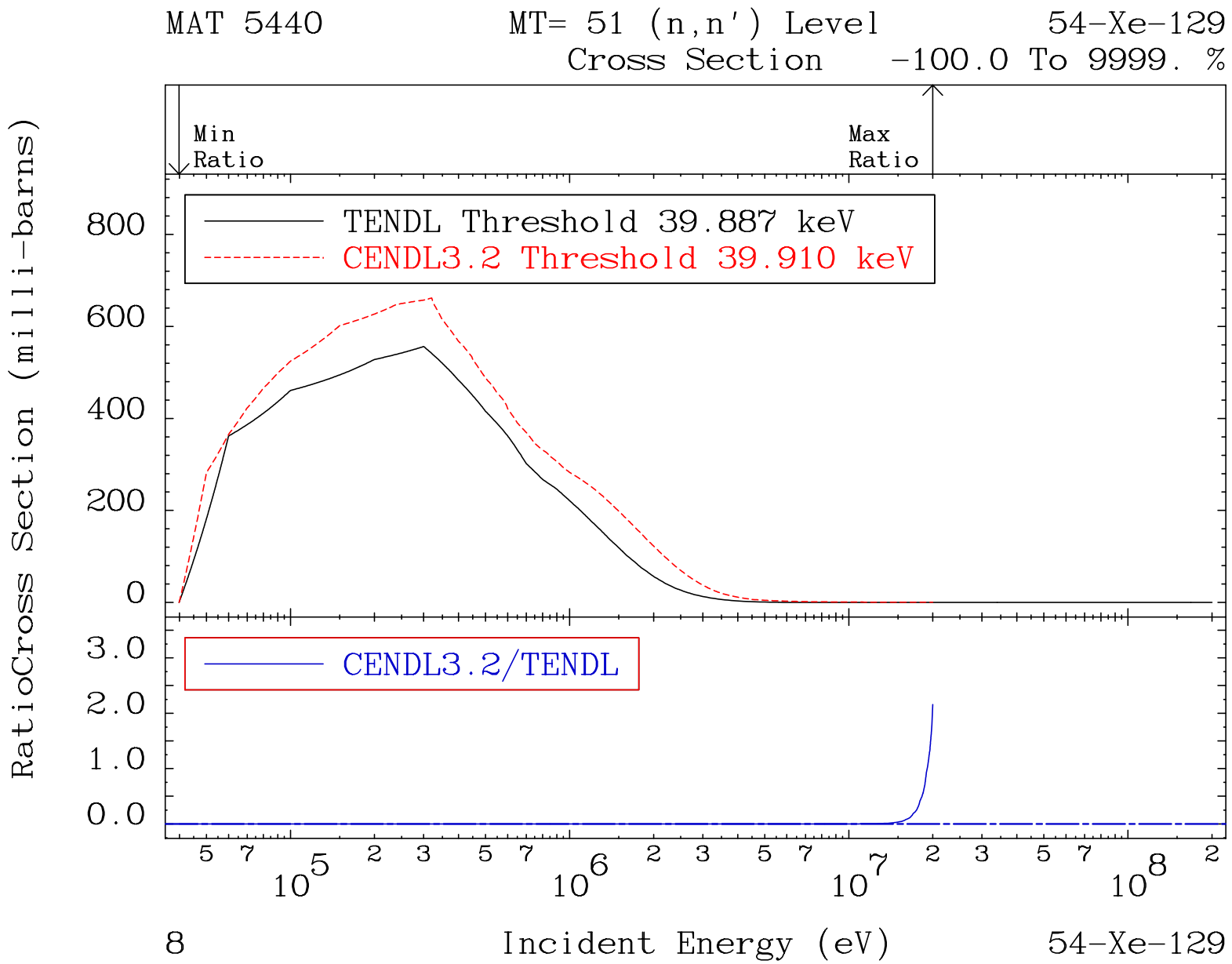

MAT 5440
Inelastic
Cross Section
54-Xe-129
-100.0 To 55.01 %
Max
Ratio
TENDL Threshold 39.887 keV
CENDL3.2 Threshold 39.910 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
3
Incident Energy (eV)
54-Xe-129

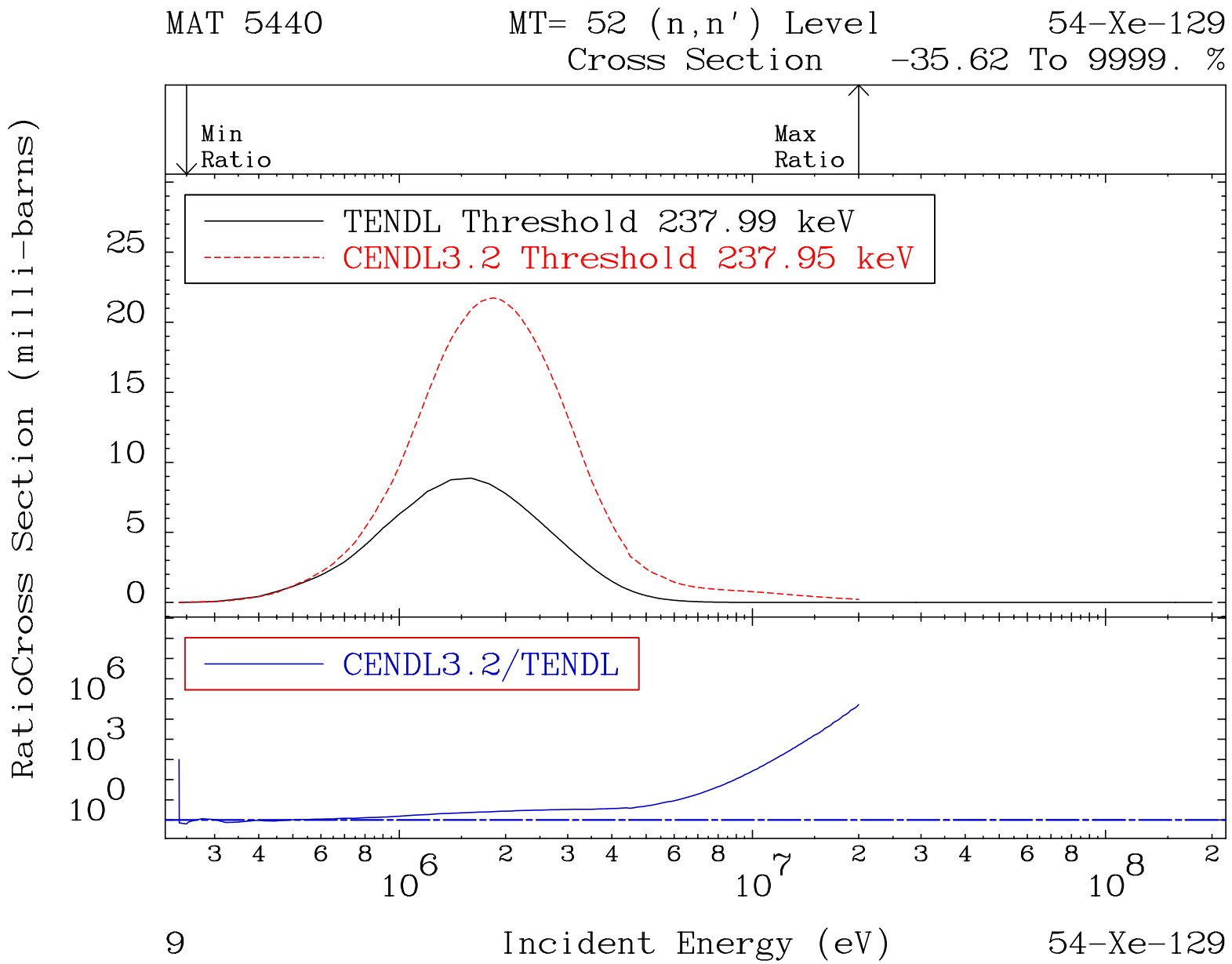

MAT 5440
(n,2n)
54-Xe-129
Cross Section
-100.0 To 0.432 %
Min Ratio
Max Ratio
TENDL Threshold 6.9609 MeV
CENDL3.2 Threshold 6.9627 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.2
0.6
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
4
Incident Energy (eV)
54-Xe-129

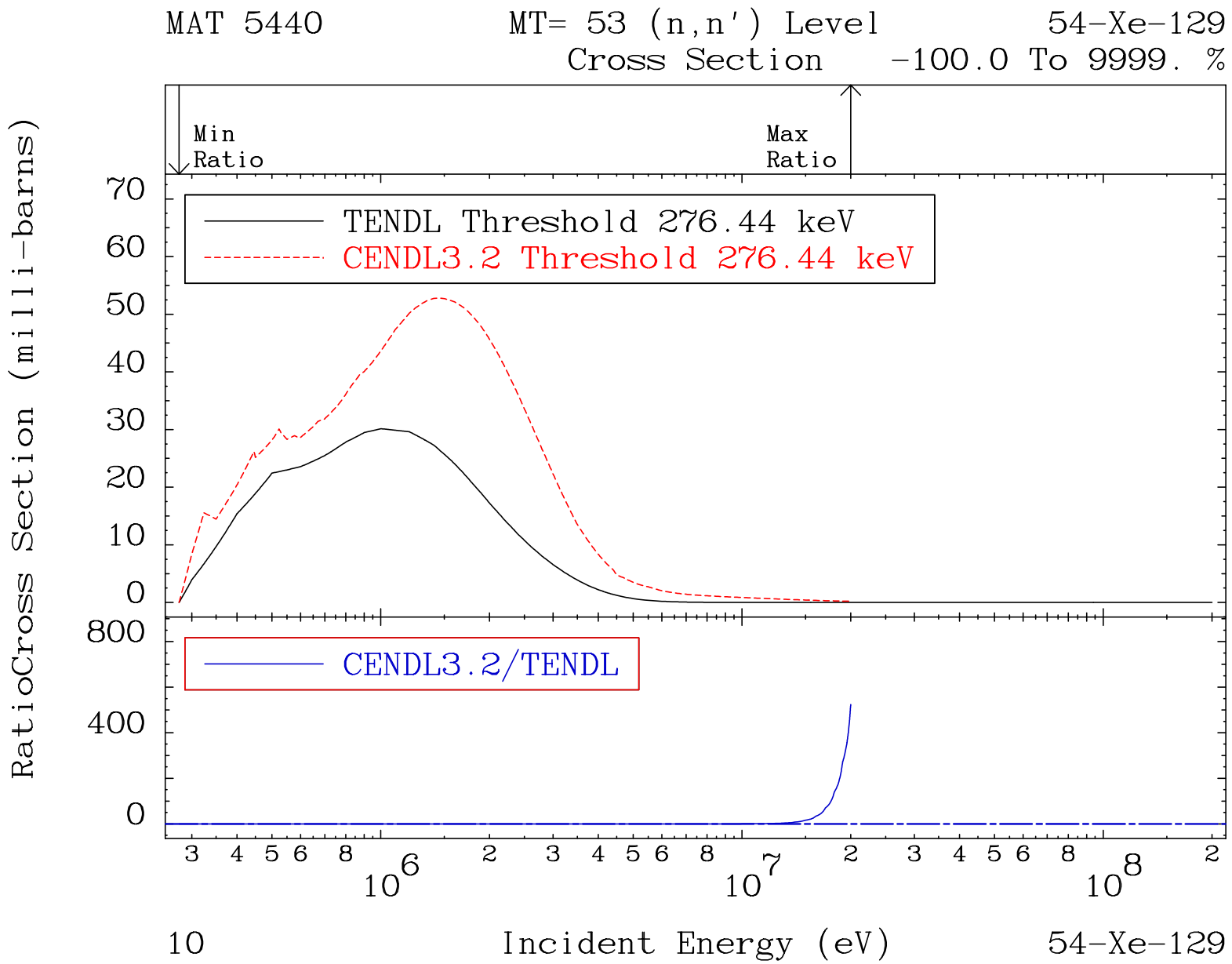

MAT 5440
(n,3n)
54-Xe-129
Cross Section
-100.0 To -2.220%
Max
Ratio
TENDL Threshold 16.647 MeV
CENDL3.2 Threshold 16.800 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
54-Xe-129

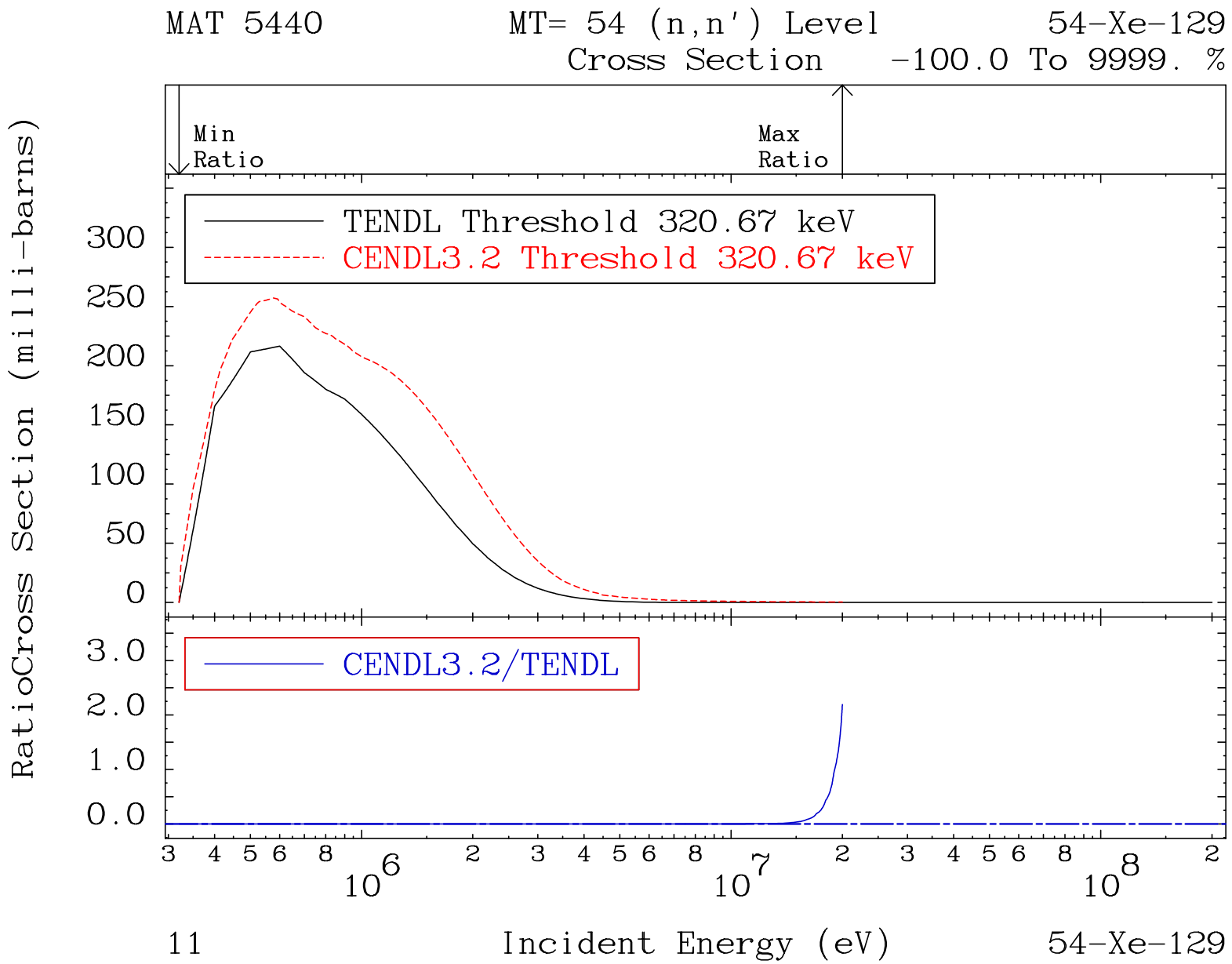

MAT 5440
(n,n') α
Cross Section
54-Xe-129
-100.0 To 35.46 %
Min Ratio
Max Ratio
TENDL Threshold 2.1156 MeV
CENDL3.2 Threshold 10.800 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
6
Incident Energy (eV)
54-Xe-129

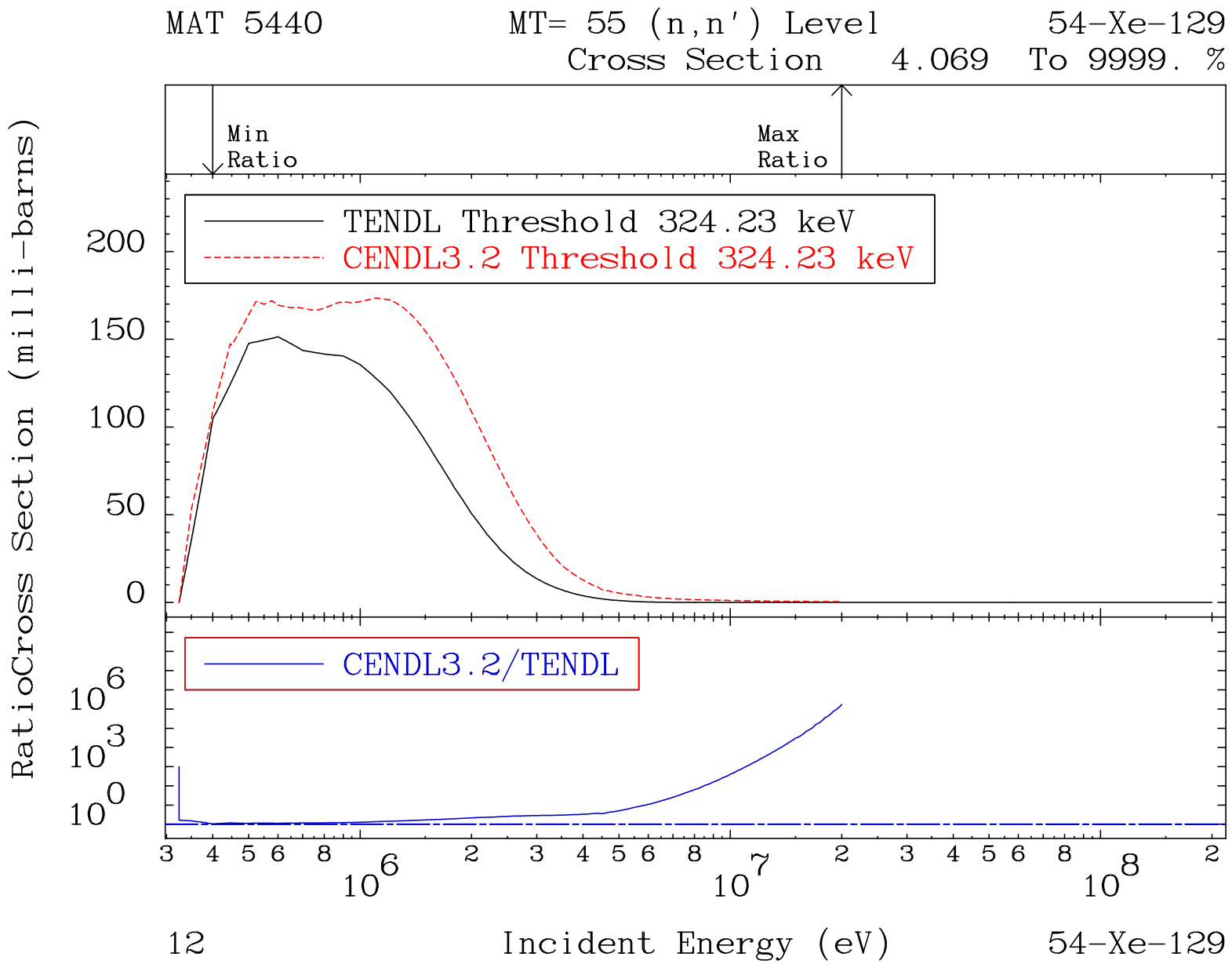

MAT 5440
(n,n') p
Cross Section
54-Xe-129
-100.0 To -60.49%
Min Ratio
Max Ratio
TENDL Threshold 8.3115 MeV
CENDL3.2 Threshold 11.200 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
0.6
0.4
0.2
0.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
7
Incident Energy (eV)
54-Xe-129

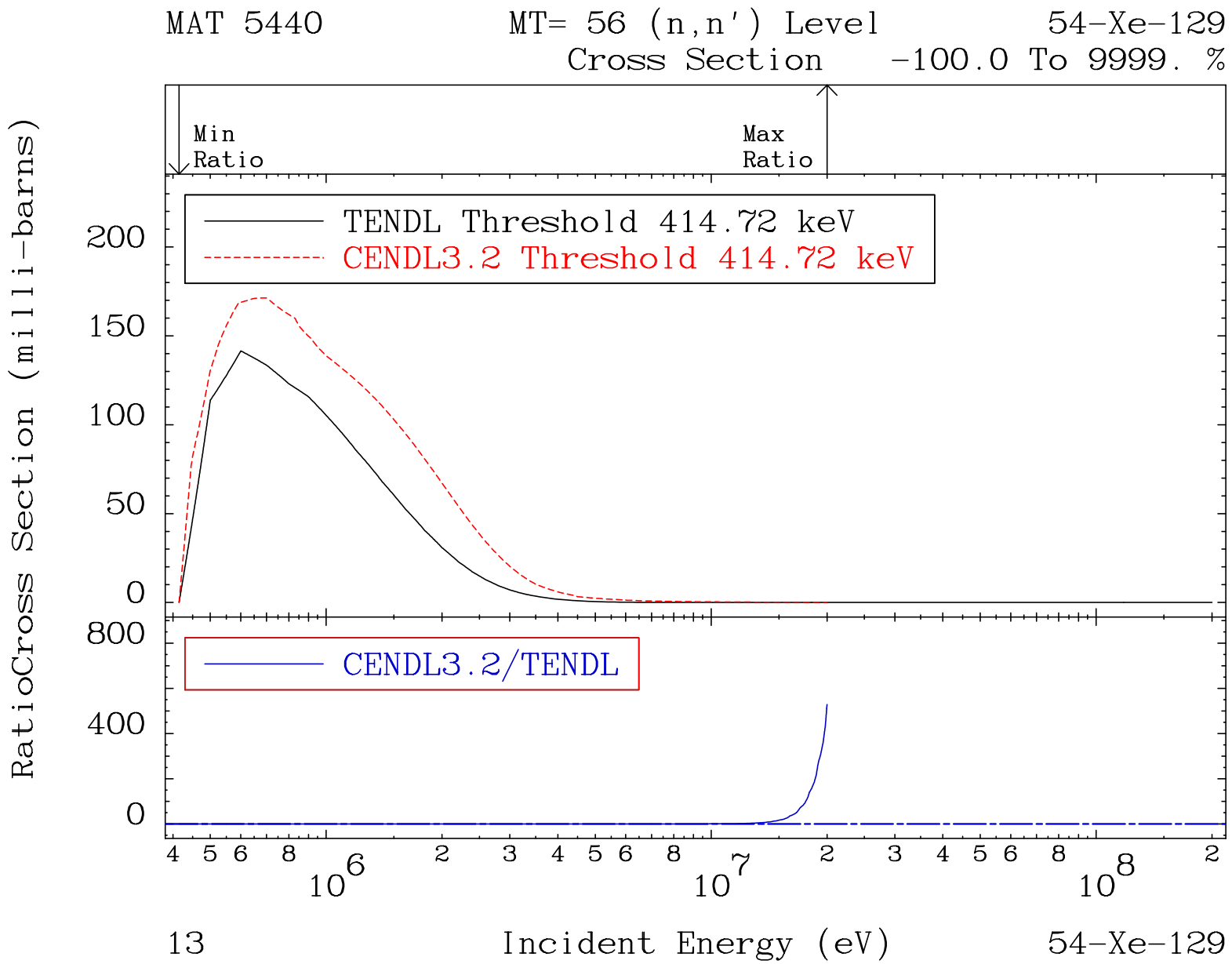

MAT 5440
MT= 51 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 39.887 keV
CENDL3.2 Threshold 39.910 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
3.0
2.0
1.0
0.0
5 7 10^5 2 3 5 7 10^6 2 3 5 7 10^7 2 3 5 7 10^8 2
8
Incident Energy (eV)
54-Xe-129

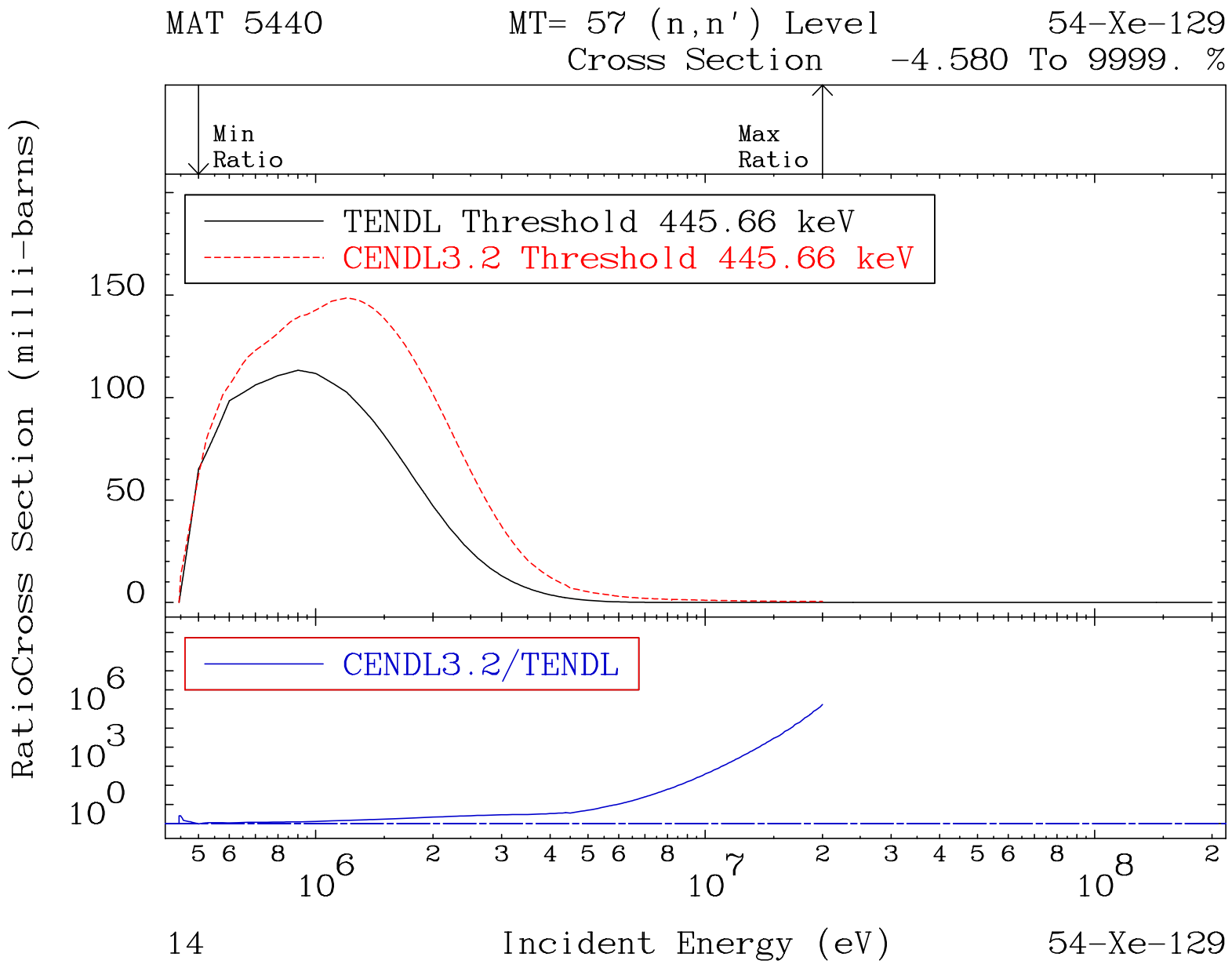

MAT 5440
MT= 52 (n,n') Level
54-Xe-129
Cross Section
-35.62 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 237.99 keV
CENDL3.2 Threshold 237.95 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
9
54-Xe-129

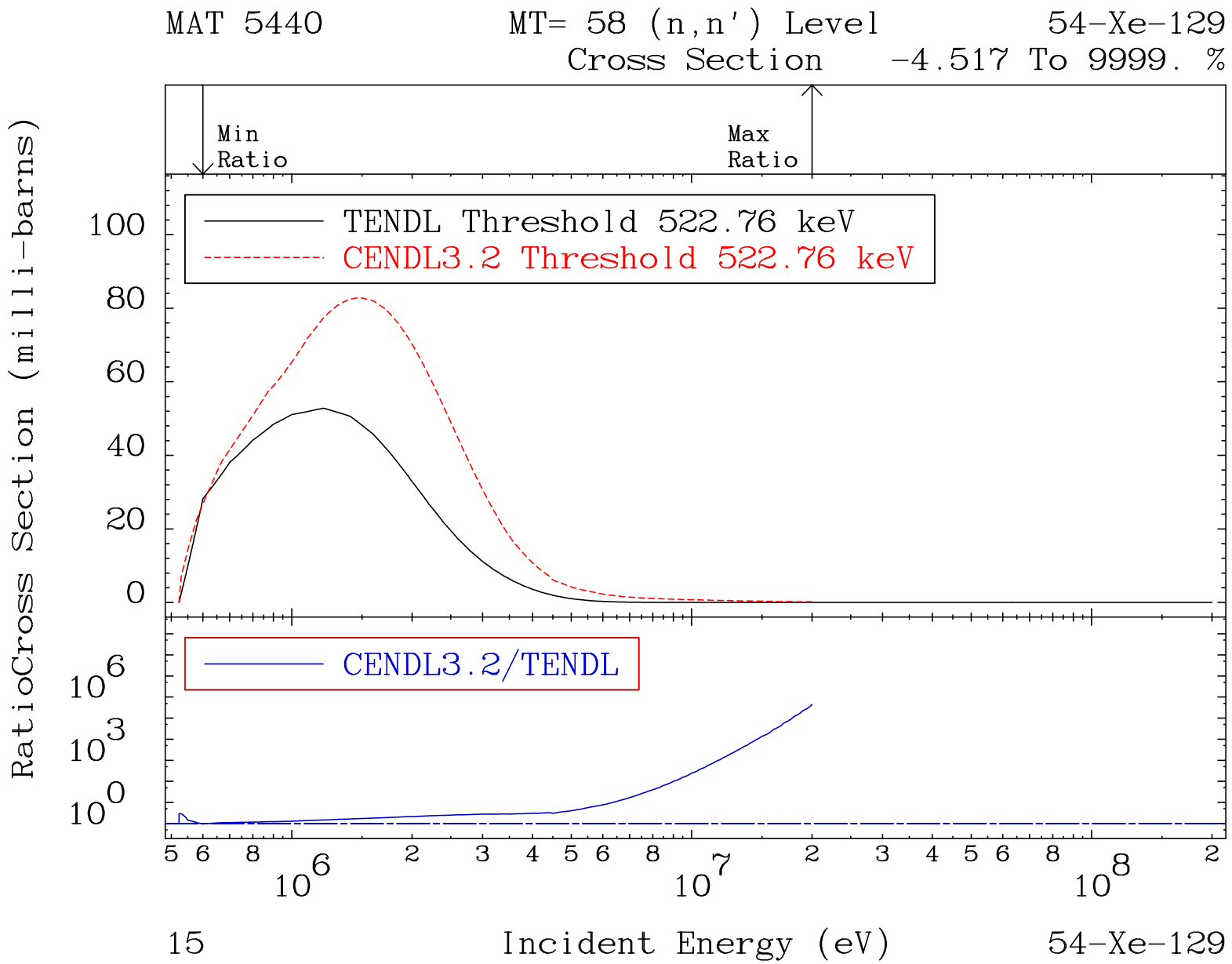

MAT 5440
MT= 53 (n,n') Level
54-Xe-129
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 276.44 keV
CENDL3.2 Threshold 276.44 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
10
54-Xe-129

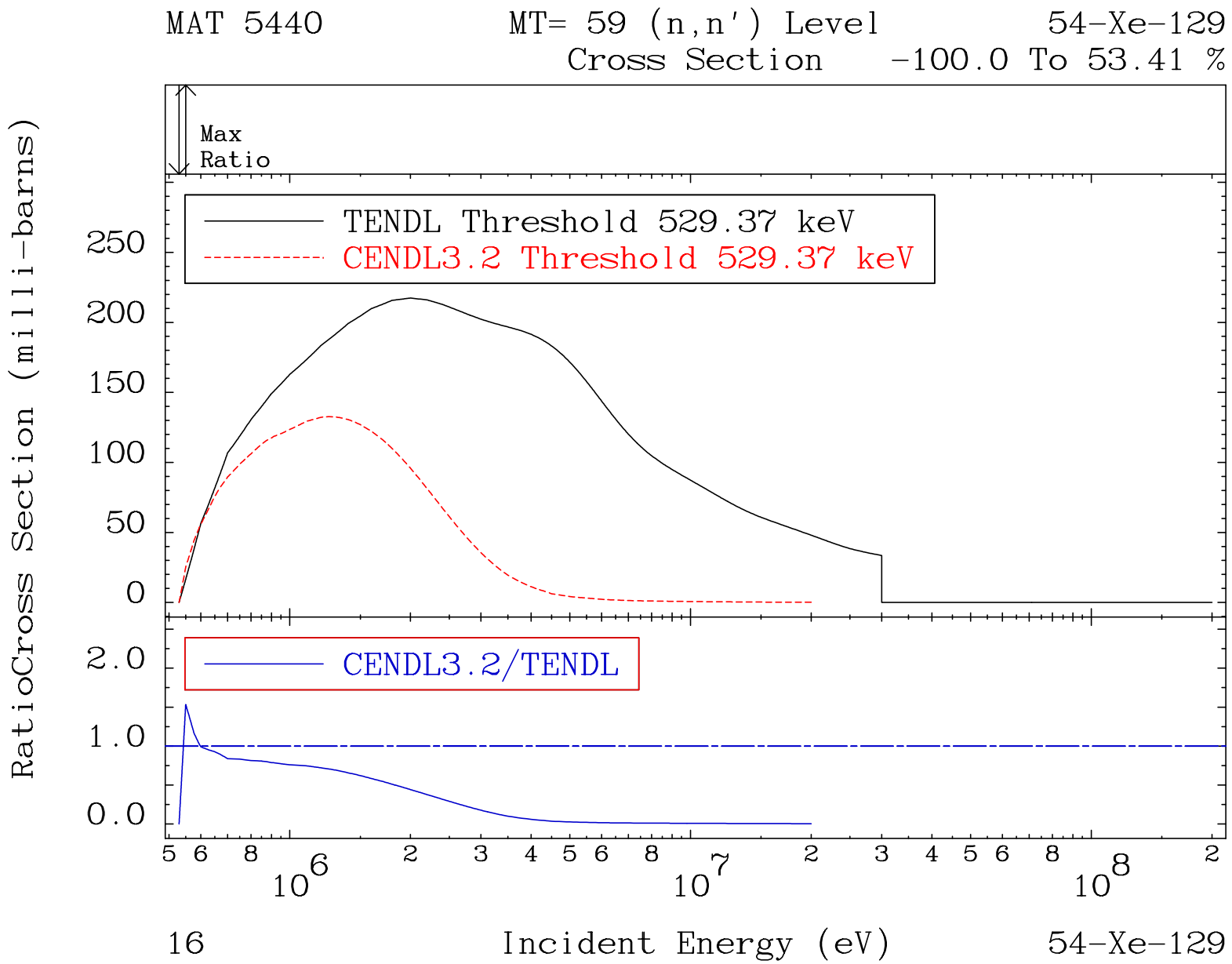

MAT 5440
MT= 54 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 320.67 keV
CENDL3.2 Threshold 320.67 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
3.0
2.0
1.0
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
11
Incident Energy (eV)
54-Xe-129

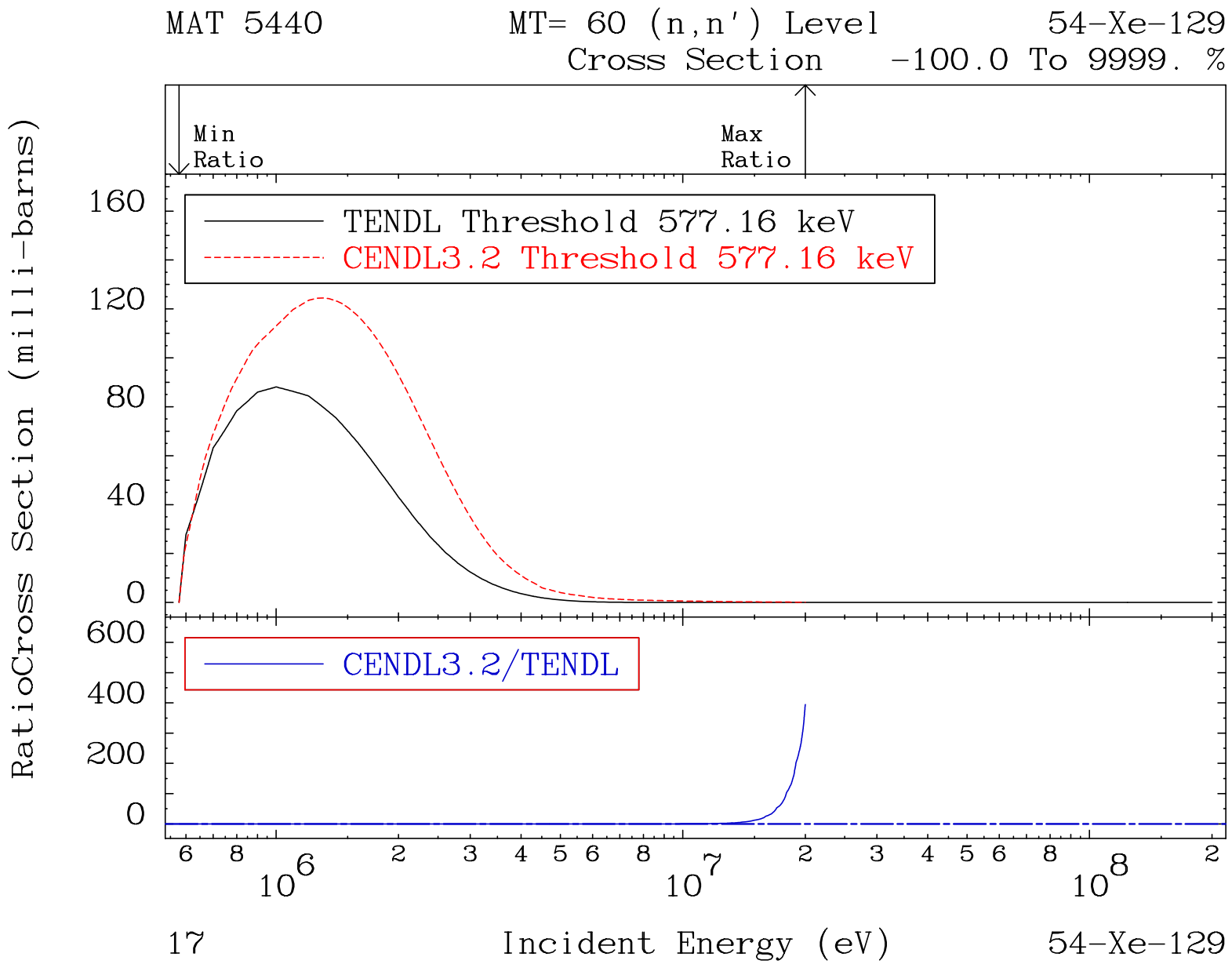

MAT 5440
MT= 55 (n,n') Level
54-Xe-129
Cross Section 4.069 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 324.23 keV
CENDL3.2 Threshold 324.23 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^6
10^3
10^0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
12
Incident Energy (eV)
54-Xe-129

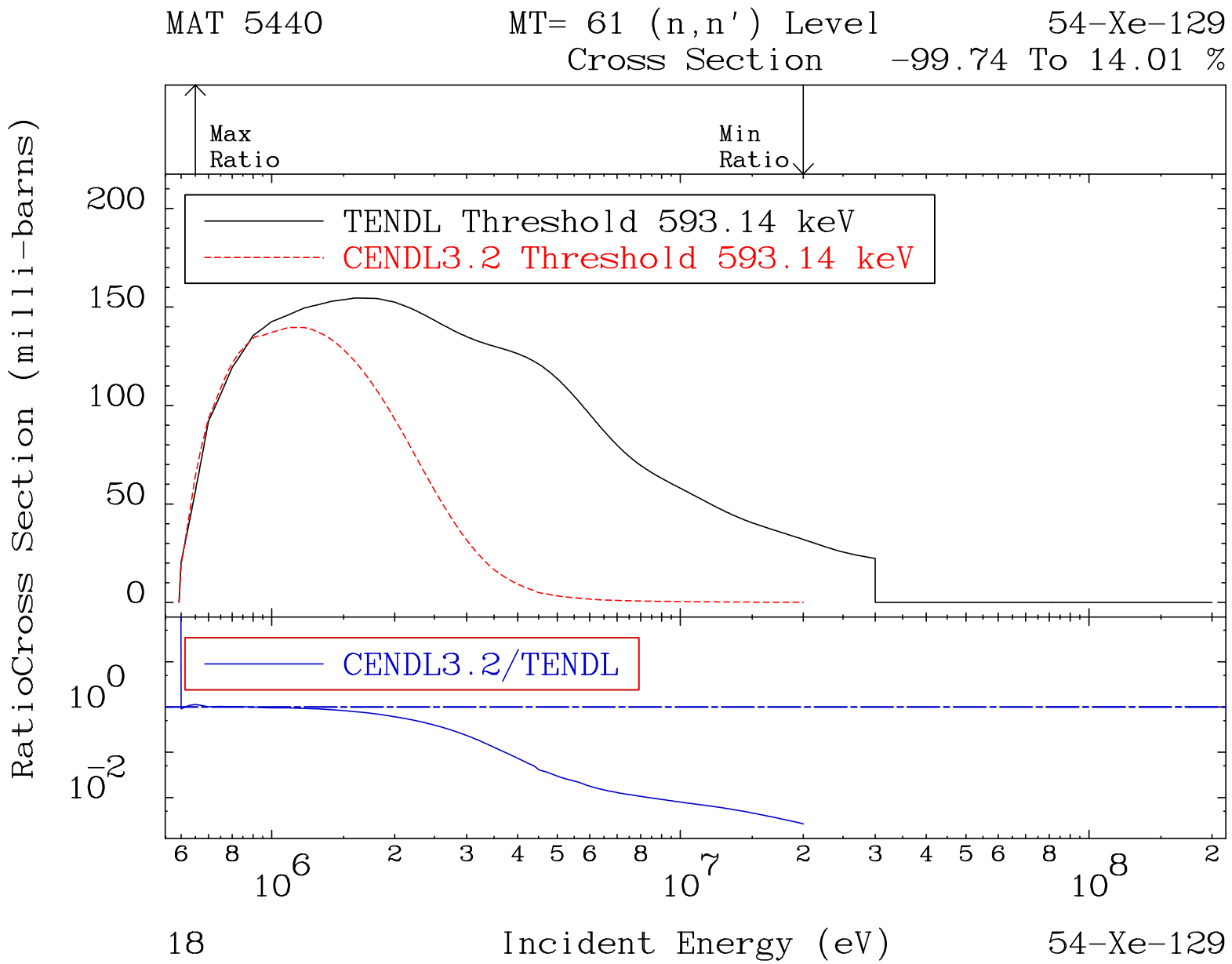

MAT 5440
MT= 56 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 414.72 keV
CENDL3.2 Threshold 414.72 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
800
400
0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
54-Xe-129

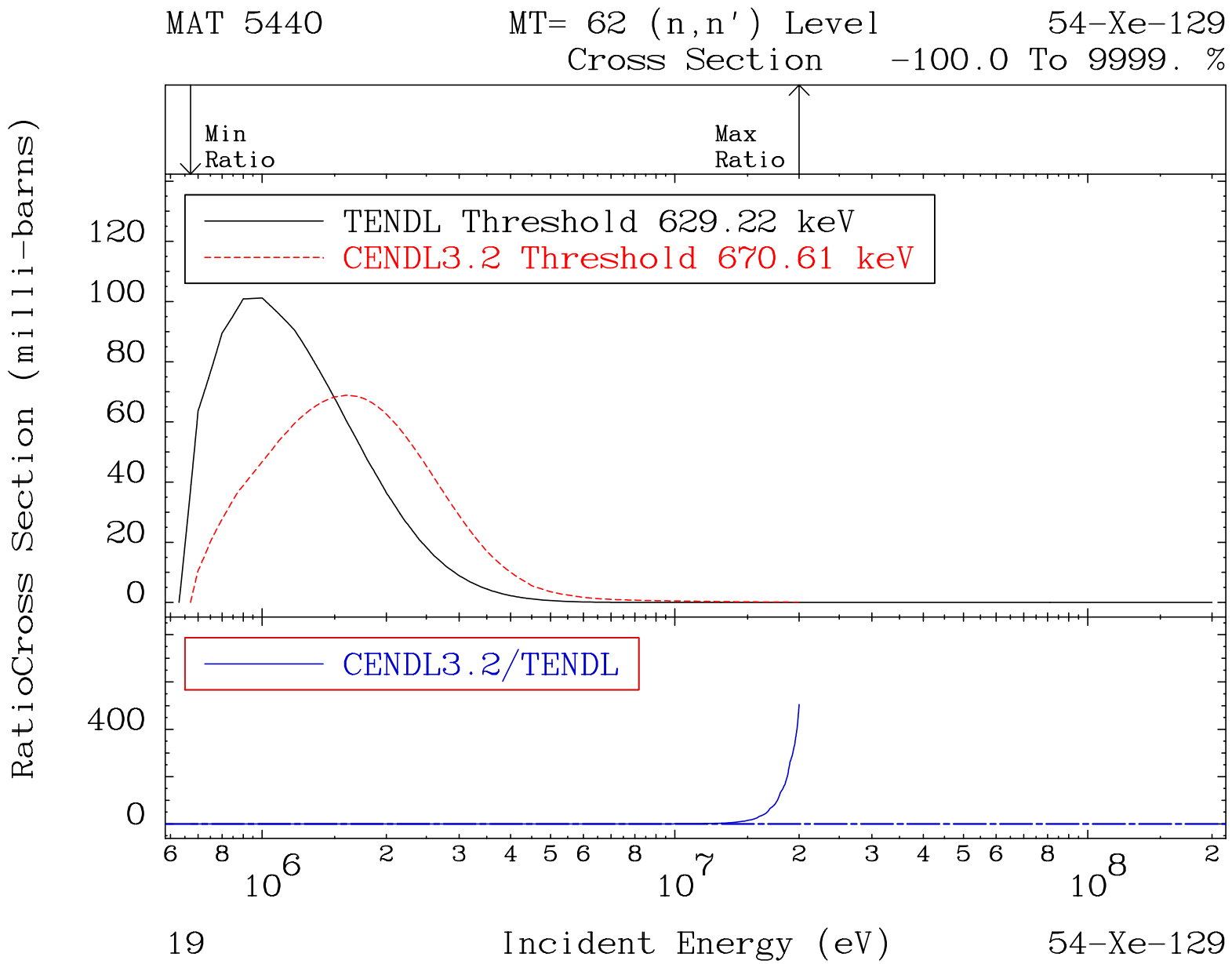

MAT 5440
MT= 57 (n,n') Level
54-Xe-129
Cross Section -4.580 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 445.66 keV
CENDL3.2 Threshold 445.66 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
150
100
50
0
10^6
10^3
10^0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
54-Xe-129

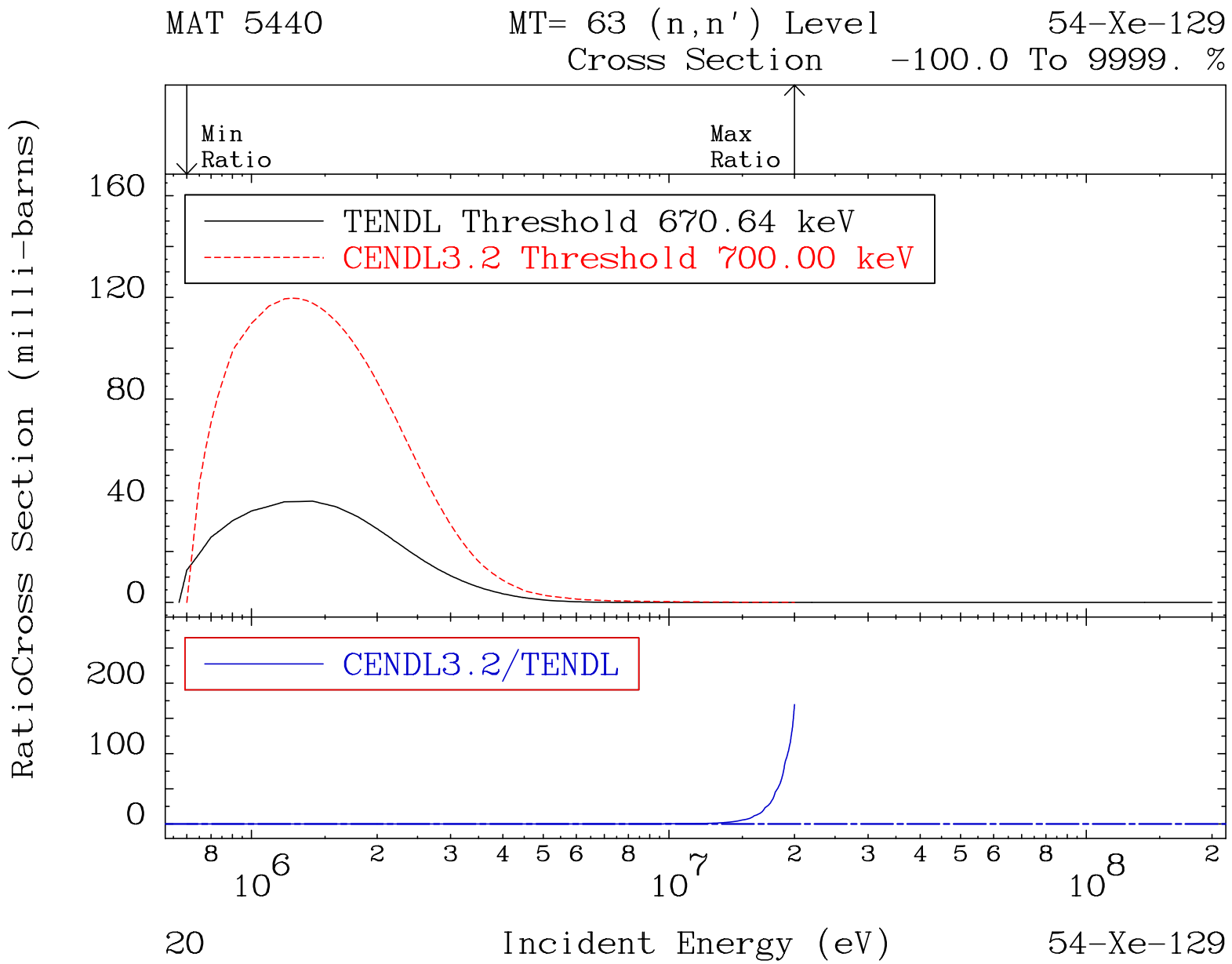

MAT 5440
MT= 58 (n,n') Level
54-Xe-129
Cross Section -4.517 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 522.76 keV
CENDL3.2 Threshold 522.76 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
10^6
10^3
10^0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
54-Xe-129

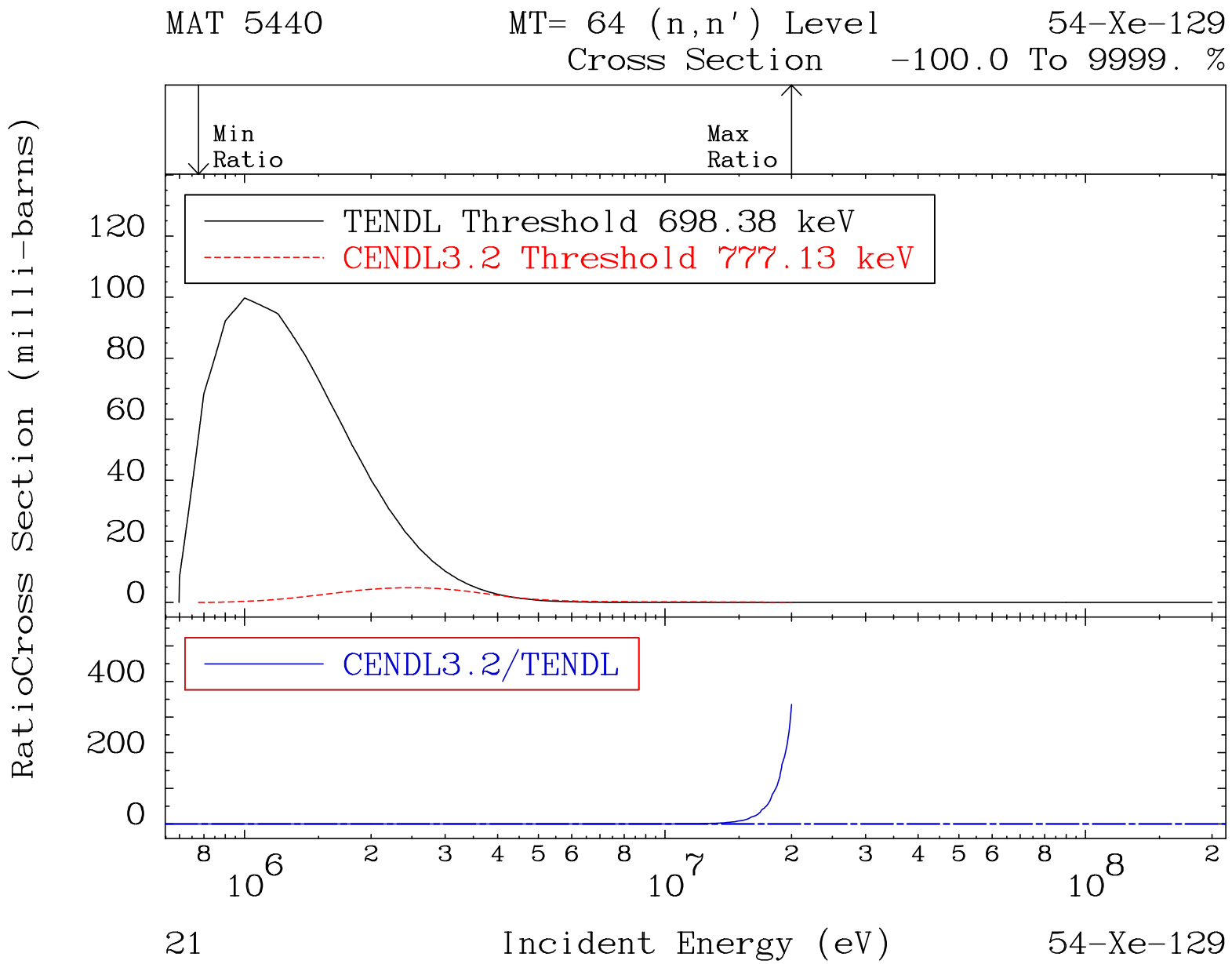

MAT 5440
MT= 59 (n,n') Level
54-Xe-129
Cross Section
-100.0 To 53.41 %
Max
Ratio
TENDL Threshold 529.37 keV
CENDL3.2 Threshold 529.37 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
2.0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
54-Xe-129

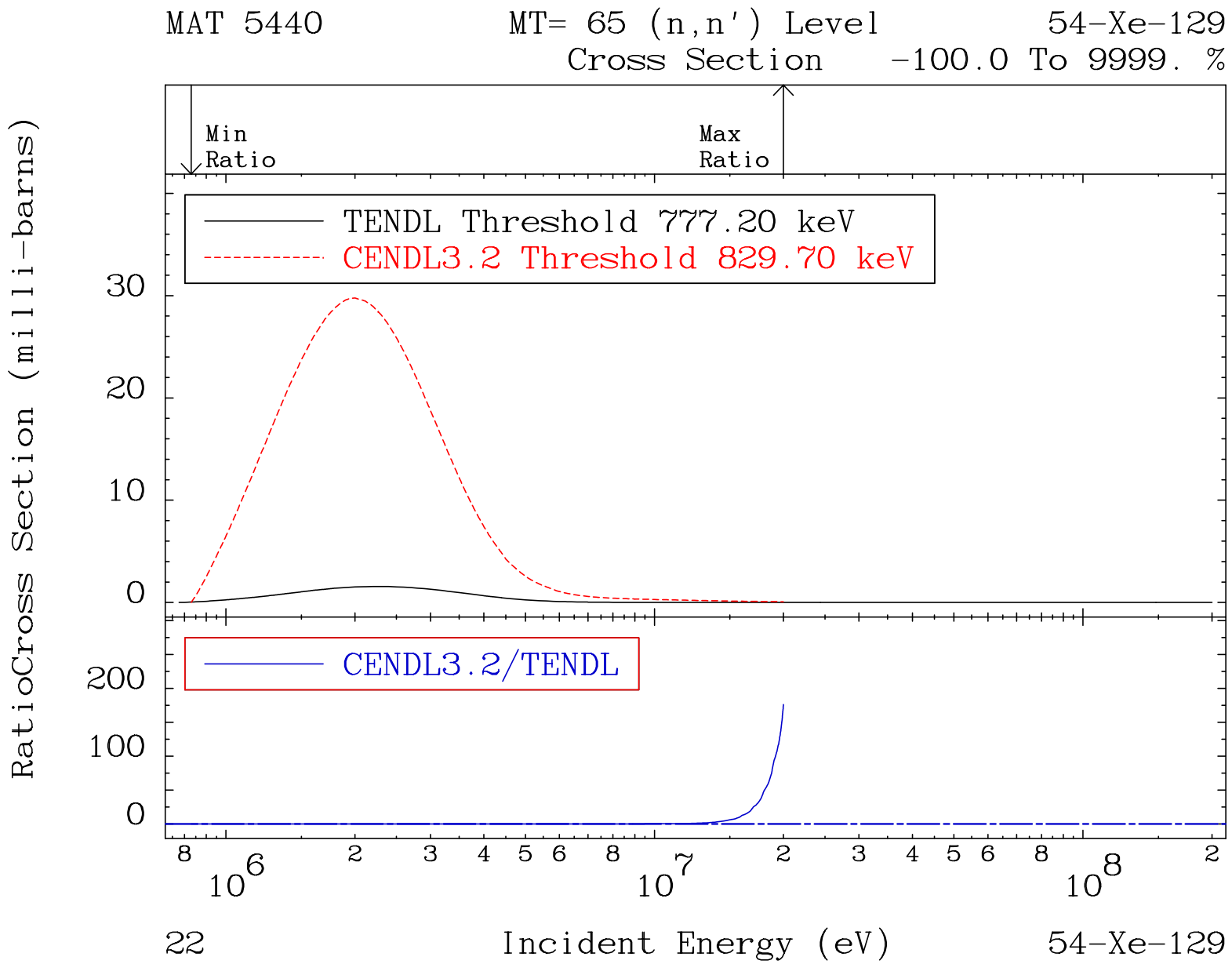

MAT 5440
MT= 60 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 577.16 keV
CENDL3.2 Threshold 577.16 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
600
400
200
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
54-Xe-129

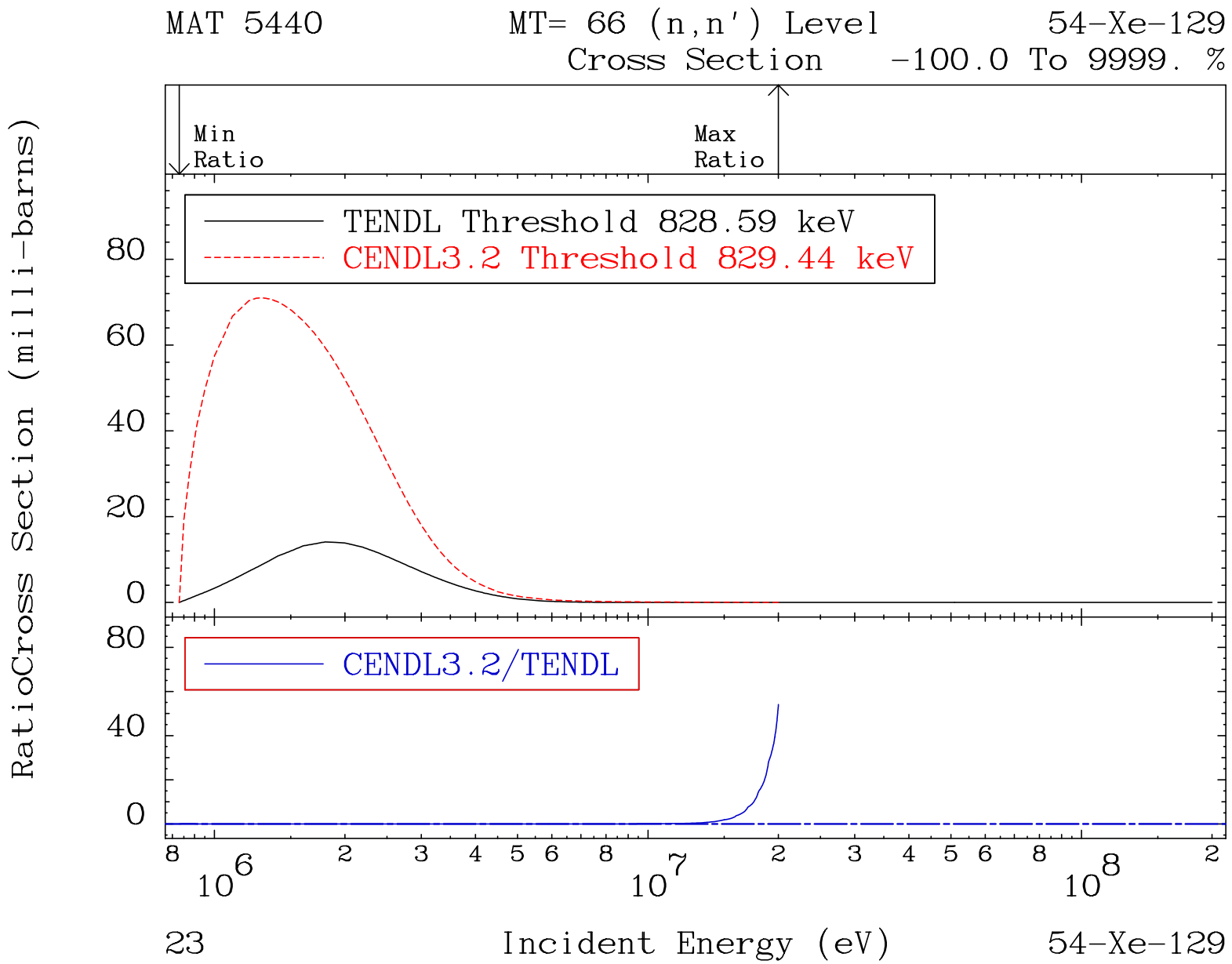

MAT 5440
MT= 61 (n,n') Level
54-Xe-129
Cross Section -99.74 To 14.01 %
Max Ratio
Min Ratio
TENDL Threshold 593.14 keV
CENDL3.2 Threshold 593.14 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^0
10^-2
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
Incident Energy (eV)
18
54-Xe-129

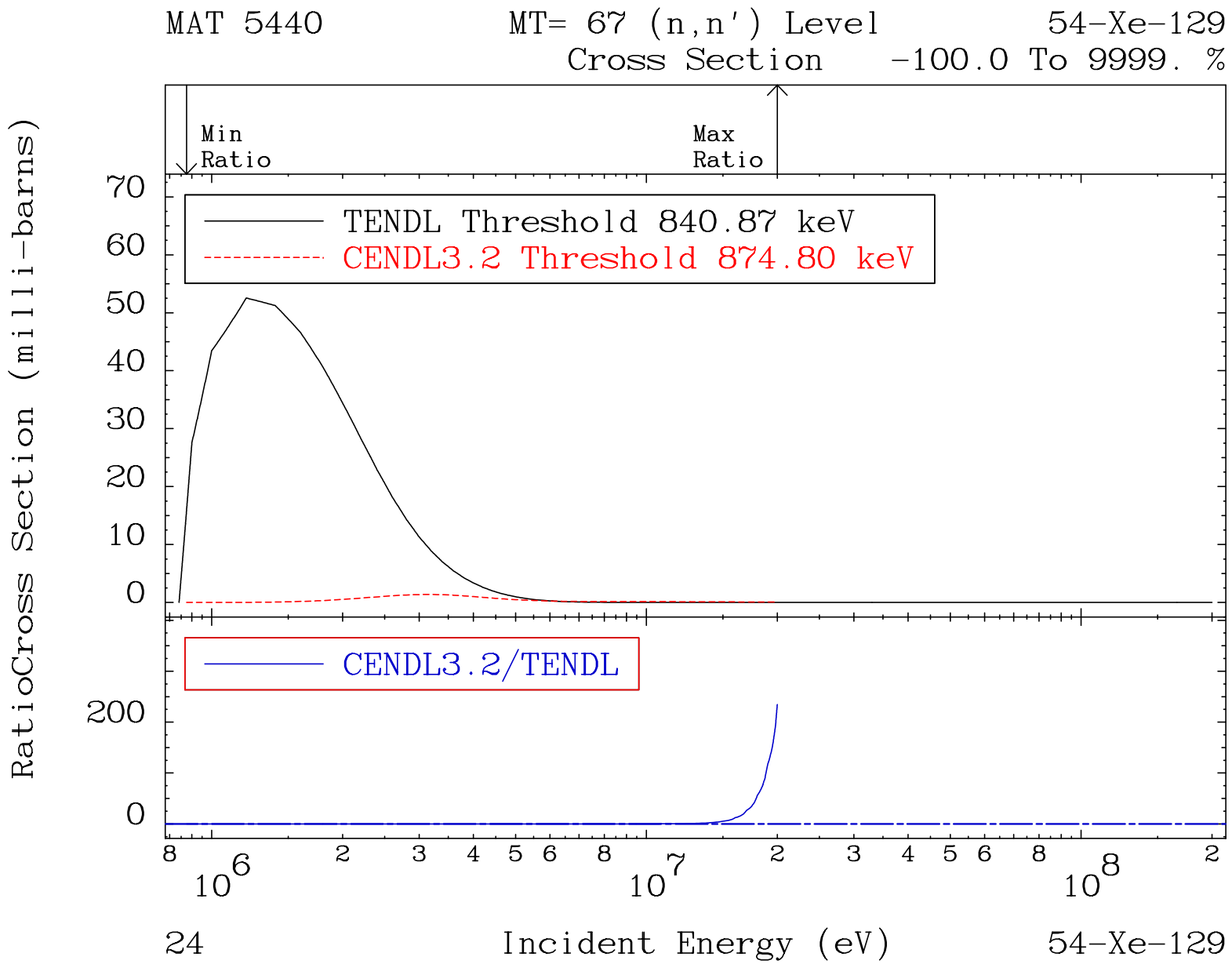

MAT 5440
MT= 62 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 629.22 keV
CENDL3.2 Threshold 670.61 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
400
0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
19
Incident Energy (eV)
54-Xe-129

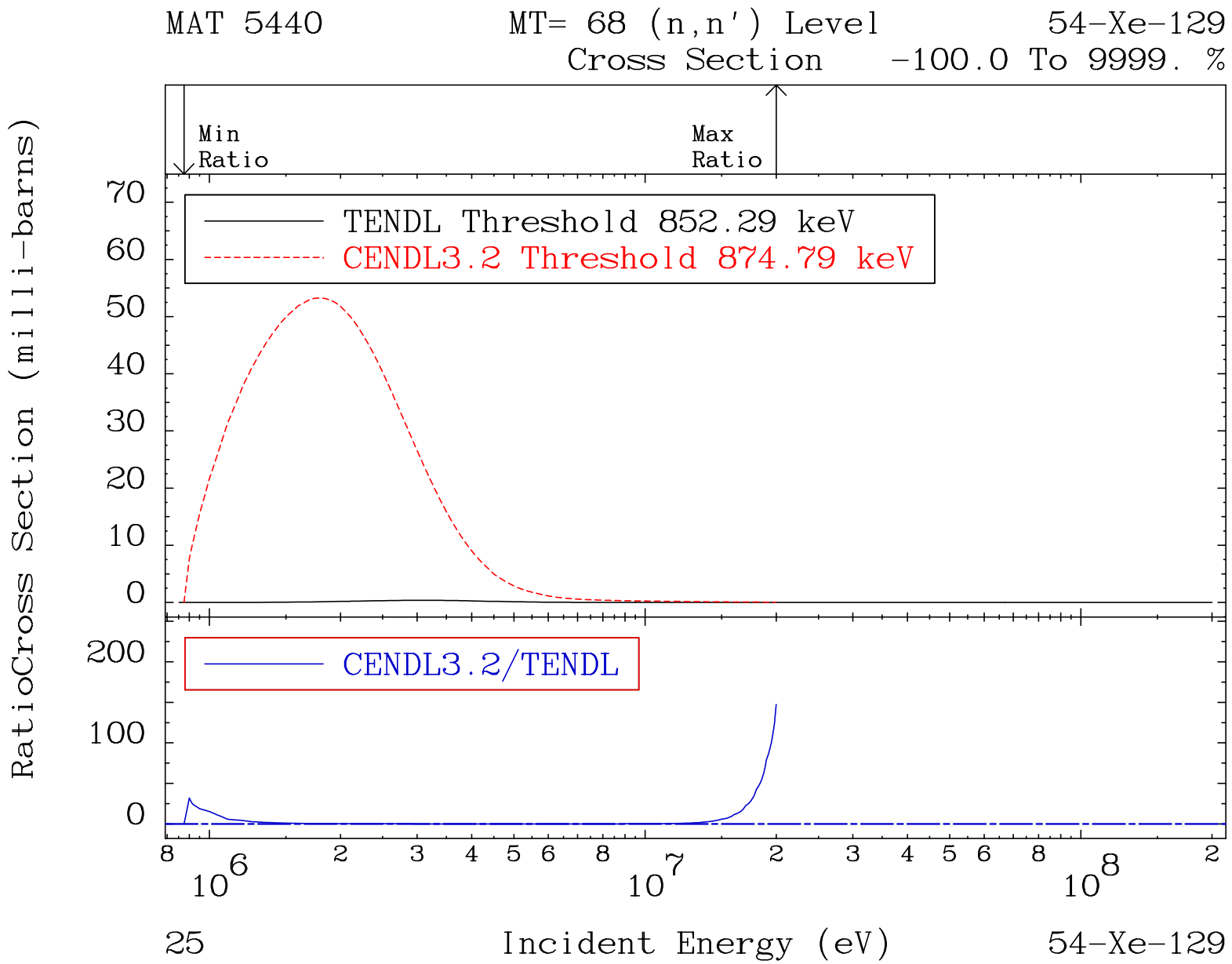

MAT 5440
MT= 63 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 670.64 keV
CENDL3.2 Threshold 700.00 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
200
100
0
8
2
3
4
5
6
8
10^6
10^7
10^8
20
Incident Energy (eV)
54-Xe-129

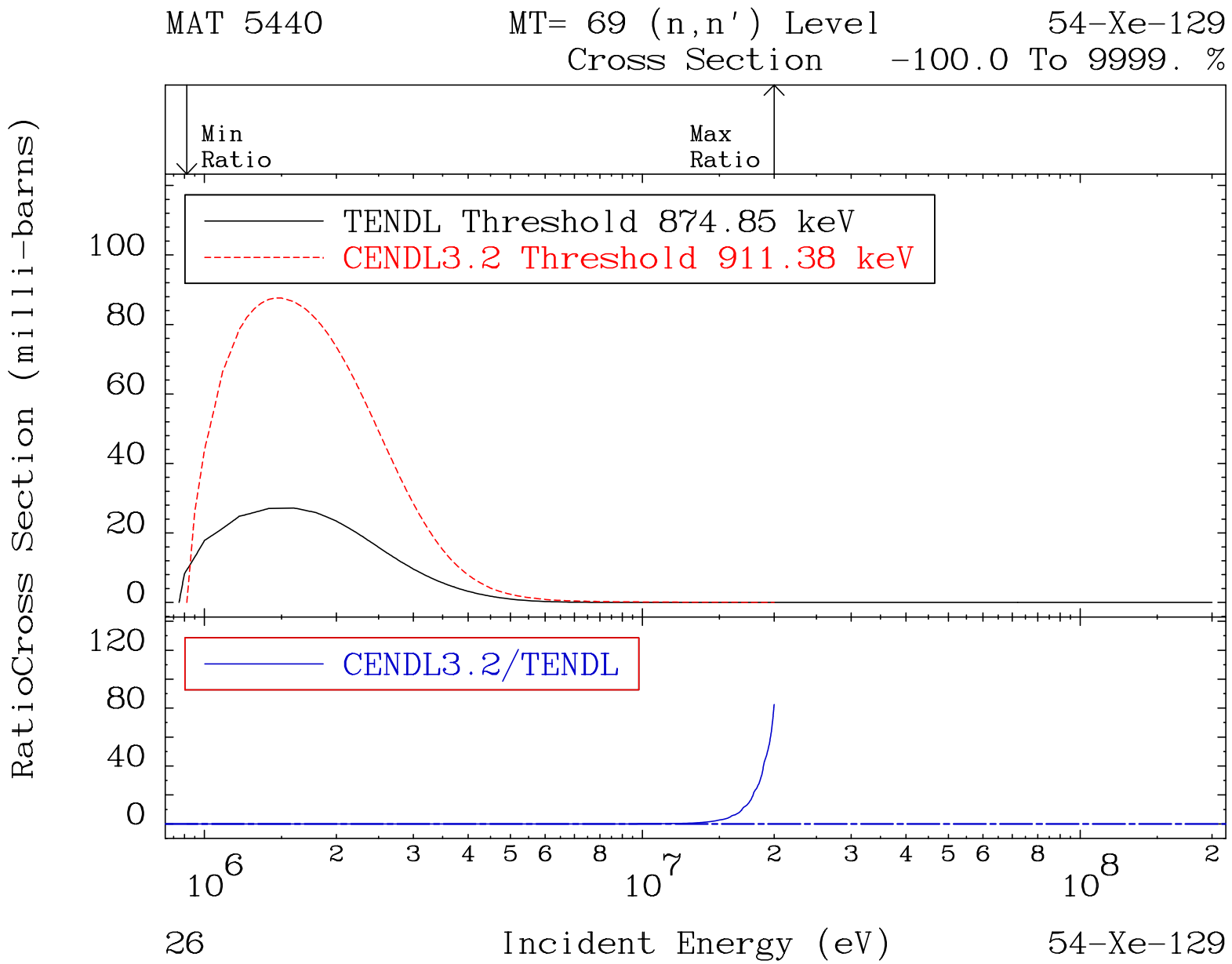

MAT 5440
MT= 64 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 698.38 keV
CENDL3.2 Threshold 777.13 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
400
200
0
8
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
21
Incident Energy (eV)
54-Xe-129

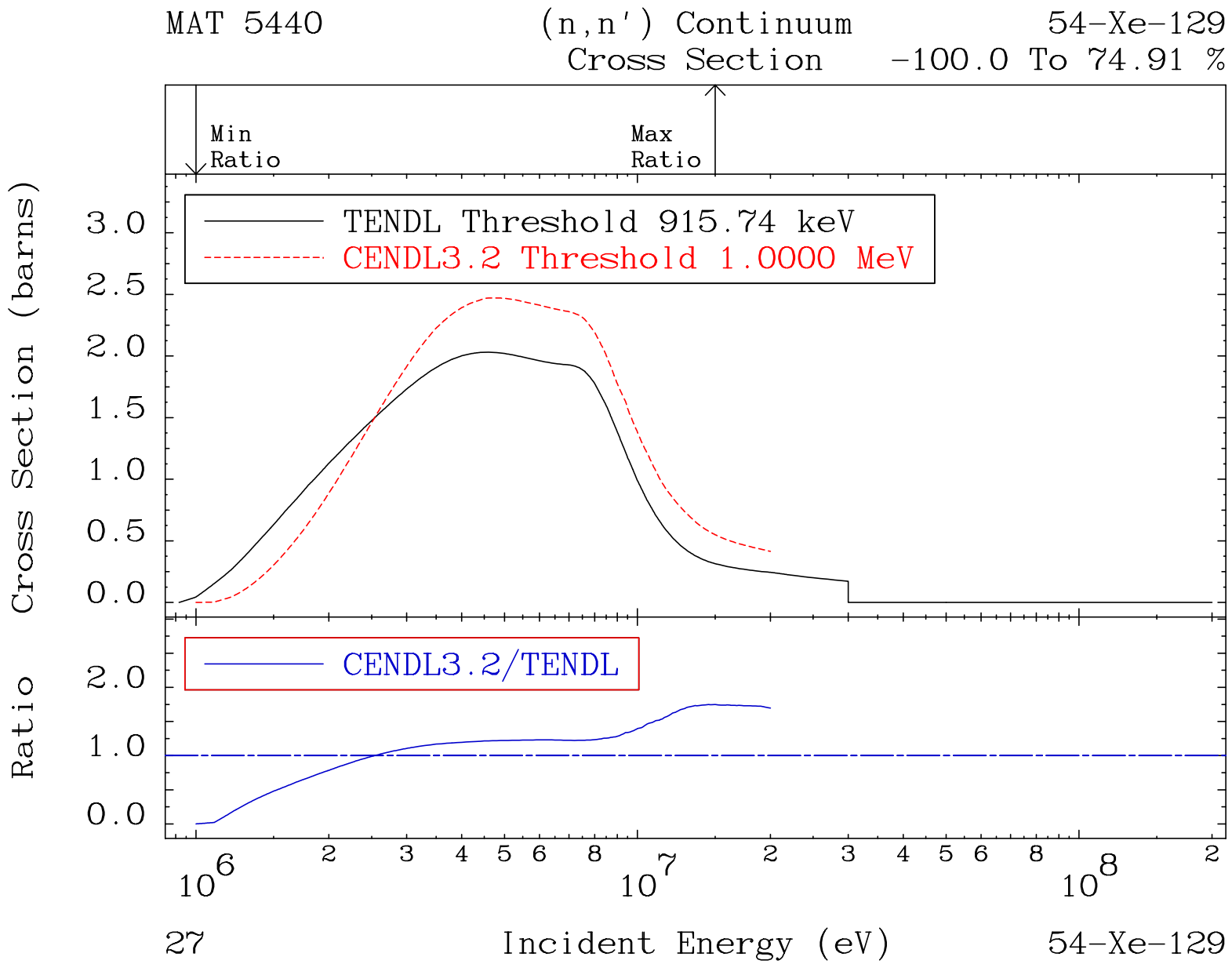

MAT 5440
MT= 65 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 777.20 keV
CENDL3.2 Threshold 829.70 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
20
10
0
200
100
0
8
2
3
4
5
6
8
10^6
10^7
10^8
22
Incident Energy (eV)
54-Xe-129

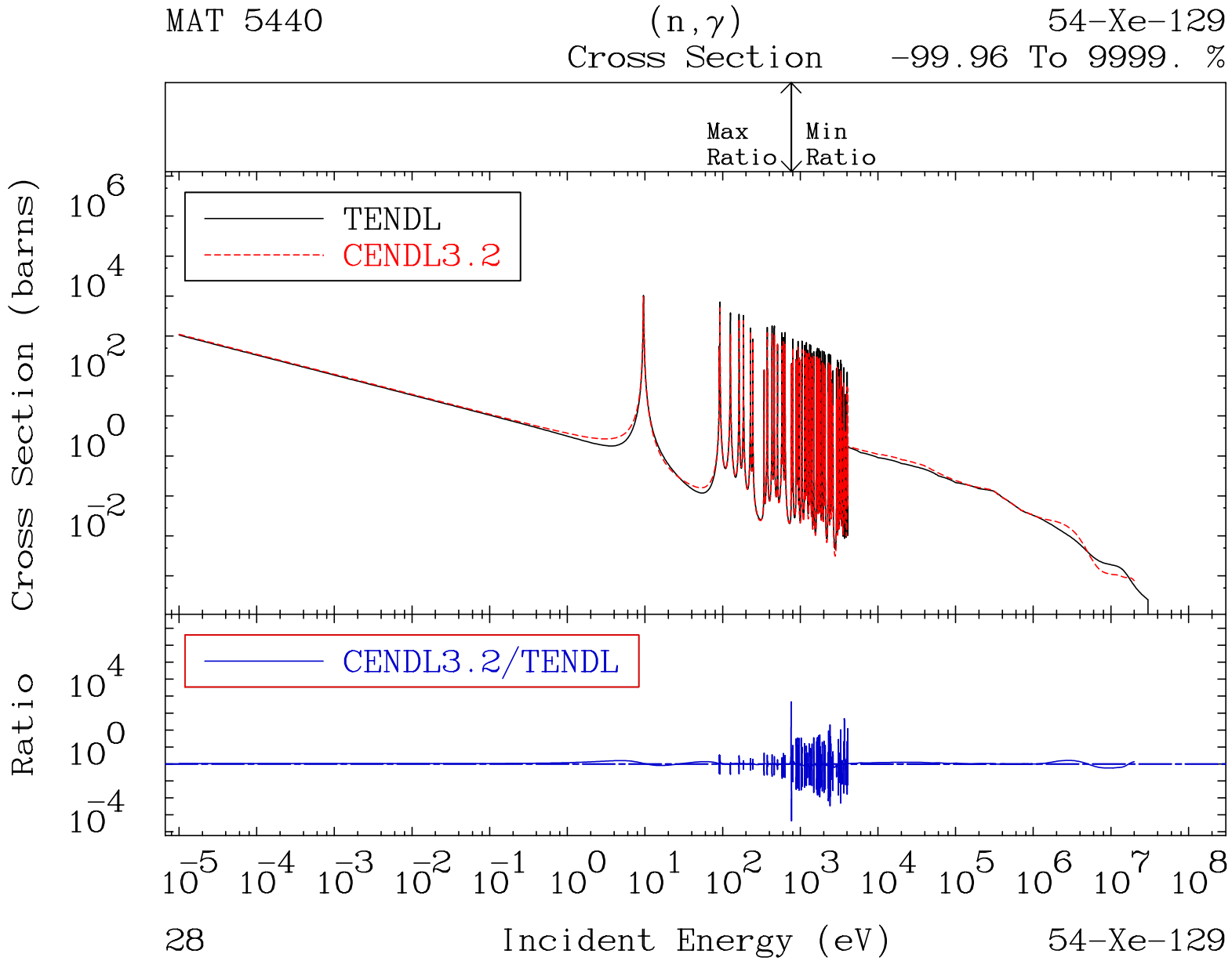

MAT 5440
MT= 66 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 828.59 keV
CENDL3.2 Threshold 829.44 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
80
40
0
8
2
3
4
5
6
8
10^6
10^7
10^8
23
Incident Energy (eV)
54-Xe-129

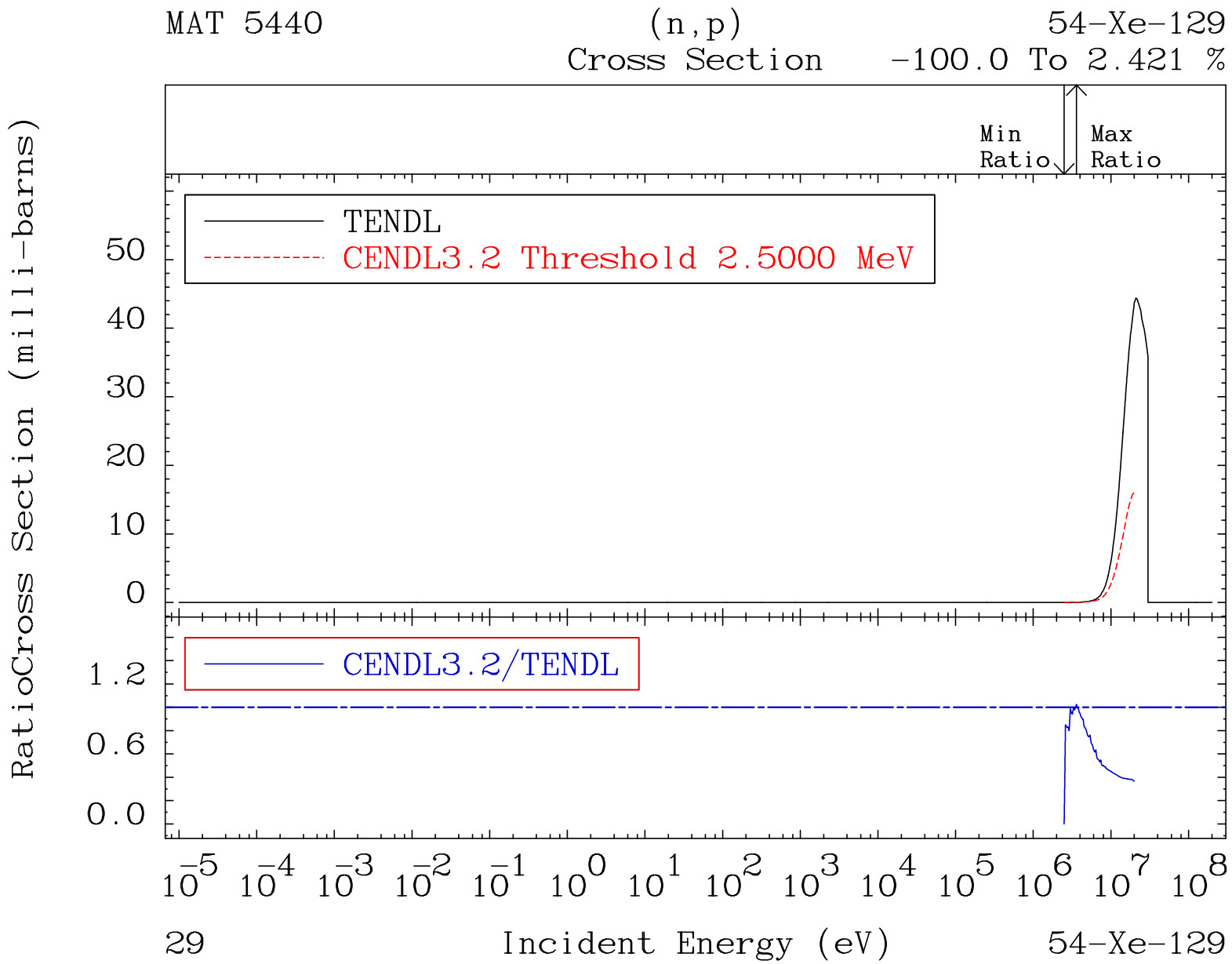

MAT 5440
MT= 67 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 840.87 keV
CENDL3.2 Threshold 874.80 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
200
0
8
2
3
4
5
6
8
10^6
10^7
10^8
24
Incident Energy (eV)
54-Xe-129

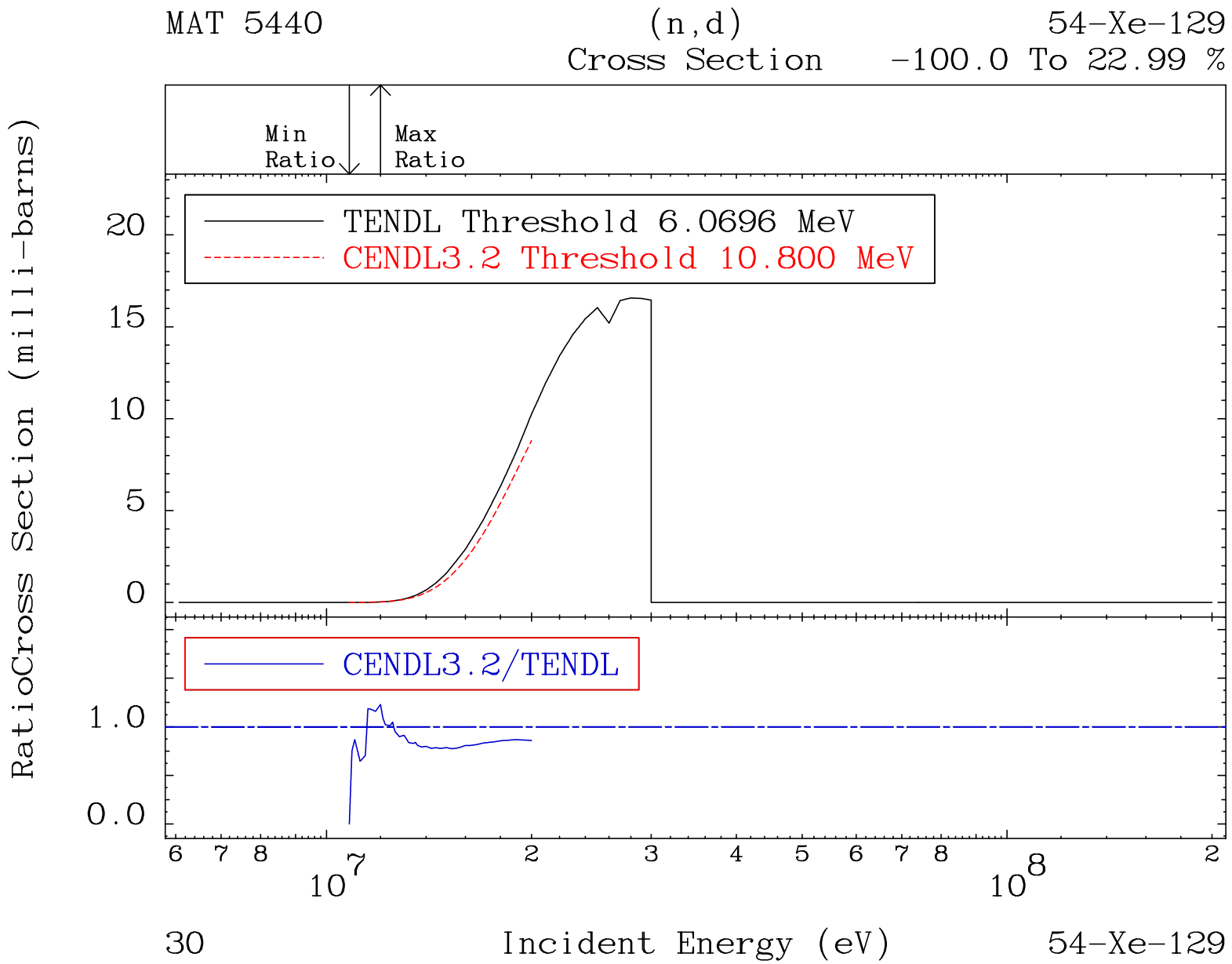

MAT 5440
MT= 68 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 852.29 keV
CENDL3.2 Threshold 874.79 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
200
100
0
8
2
3
4
5
6
8
10^6
10^7
10^8
25
Incident Energy (eV)
54-Xe-129

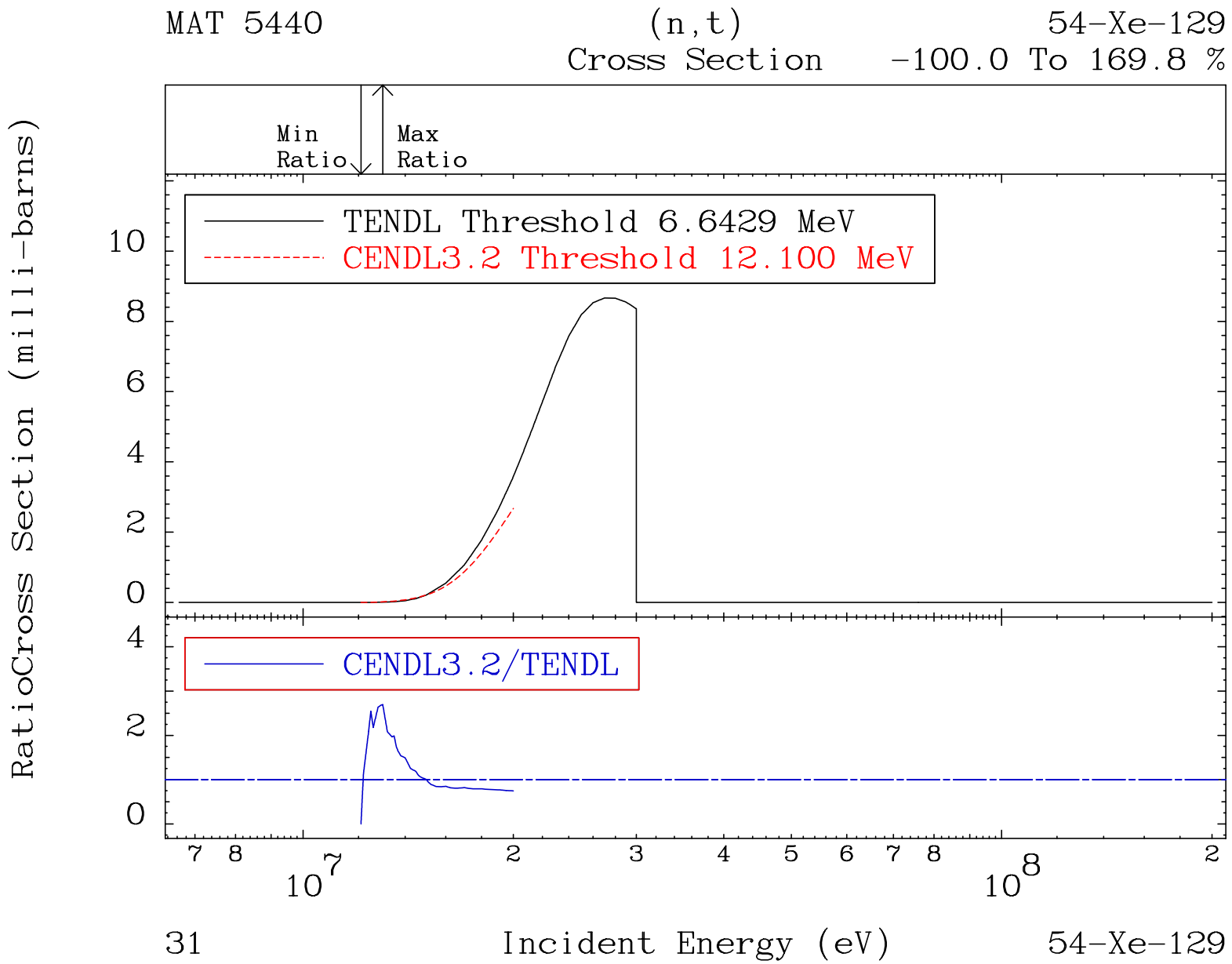

MAT 5440
MT= 69 (n,n') Level
54-Xe-129
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 874.85 keV
CENDL3.2 Threshold 911.38 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
120
80
40
0
10^6
10^7
10^8
2 3 4 5 6 8
26
Incident Energy (eV)
54-Xe-129

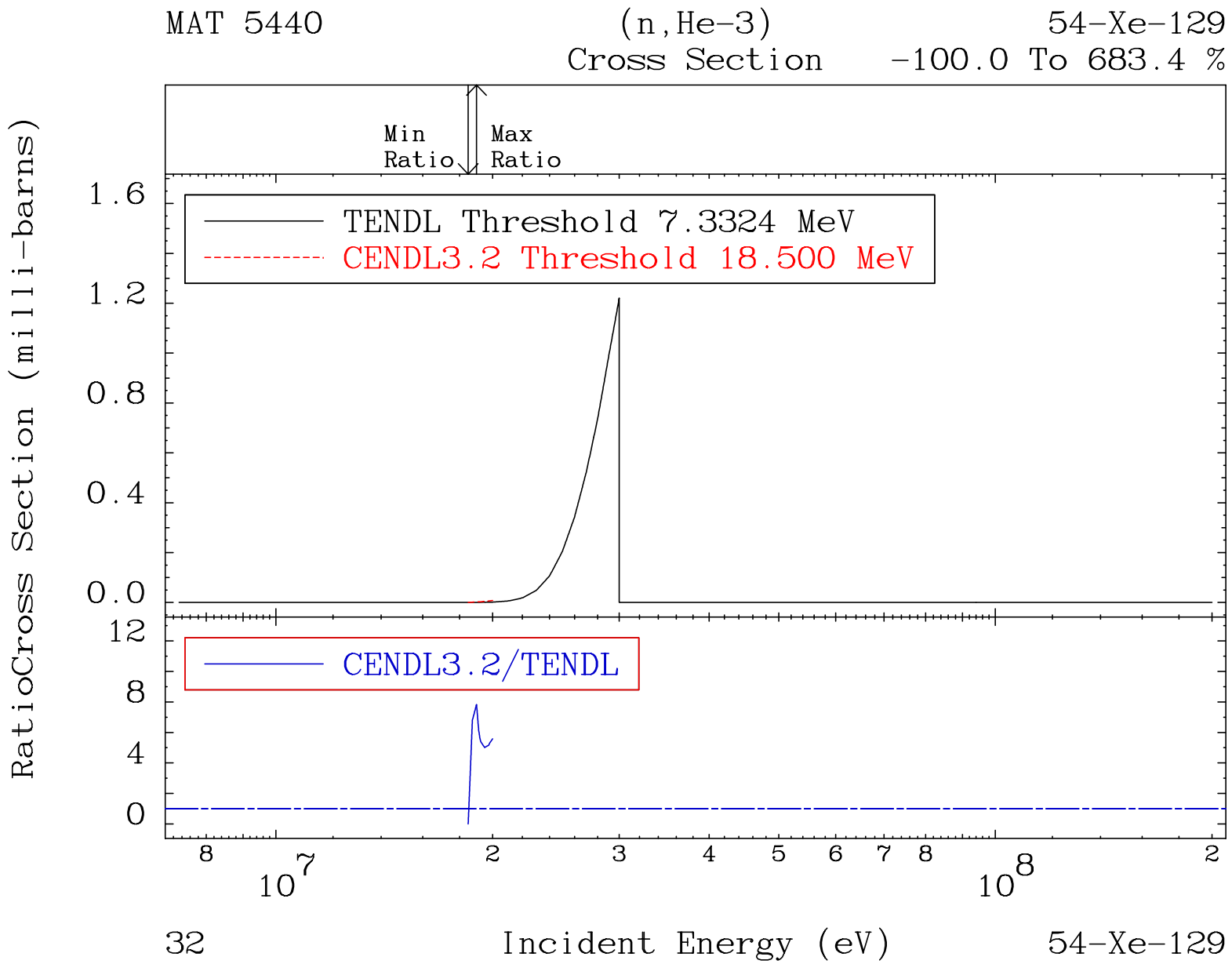

MAT 5440
(n,n') Continuum
Cross Section
54-Xe-129
-100.0 To 74.91 %
Min Ratio
Max Ratio
TENDL Threshold 915.74 keV
CENDL3.2 Threshold 1.0000 MeV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
2.0
1.0
0.0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
27
Incident Energy (eV)
54-Xe-129

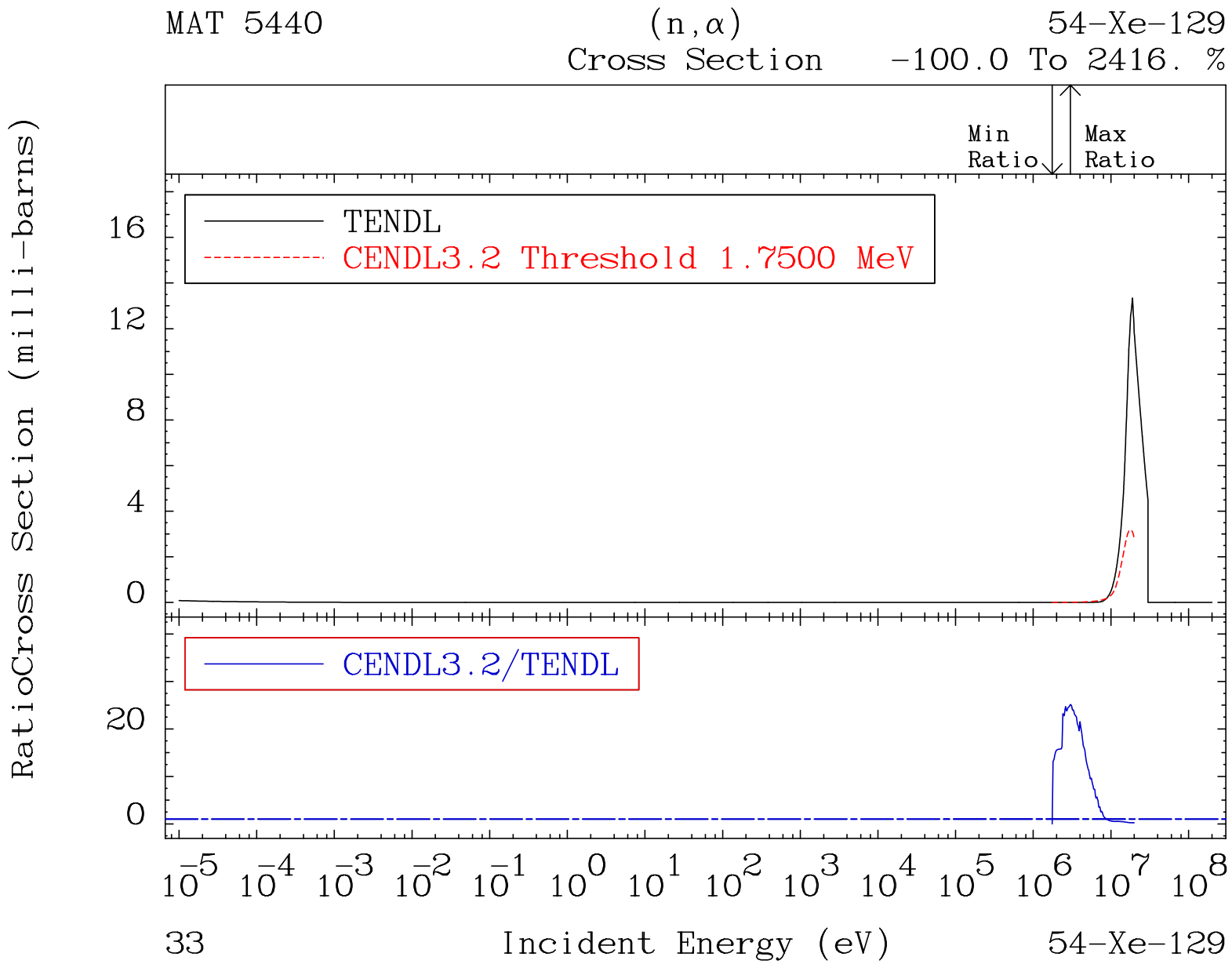

MAT 5440
(n,γ)
Cross Section
54-Xe-129
-99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
28
54-Xe-129

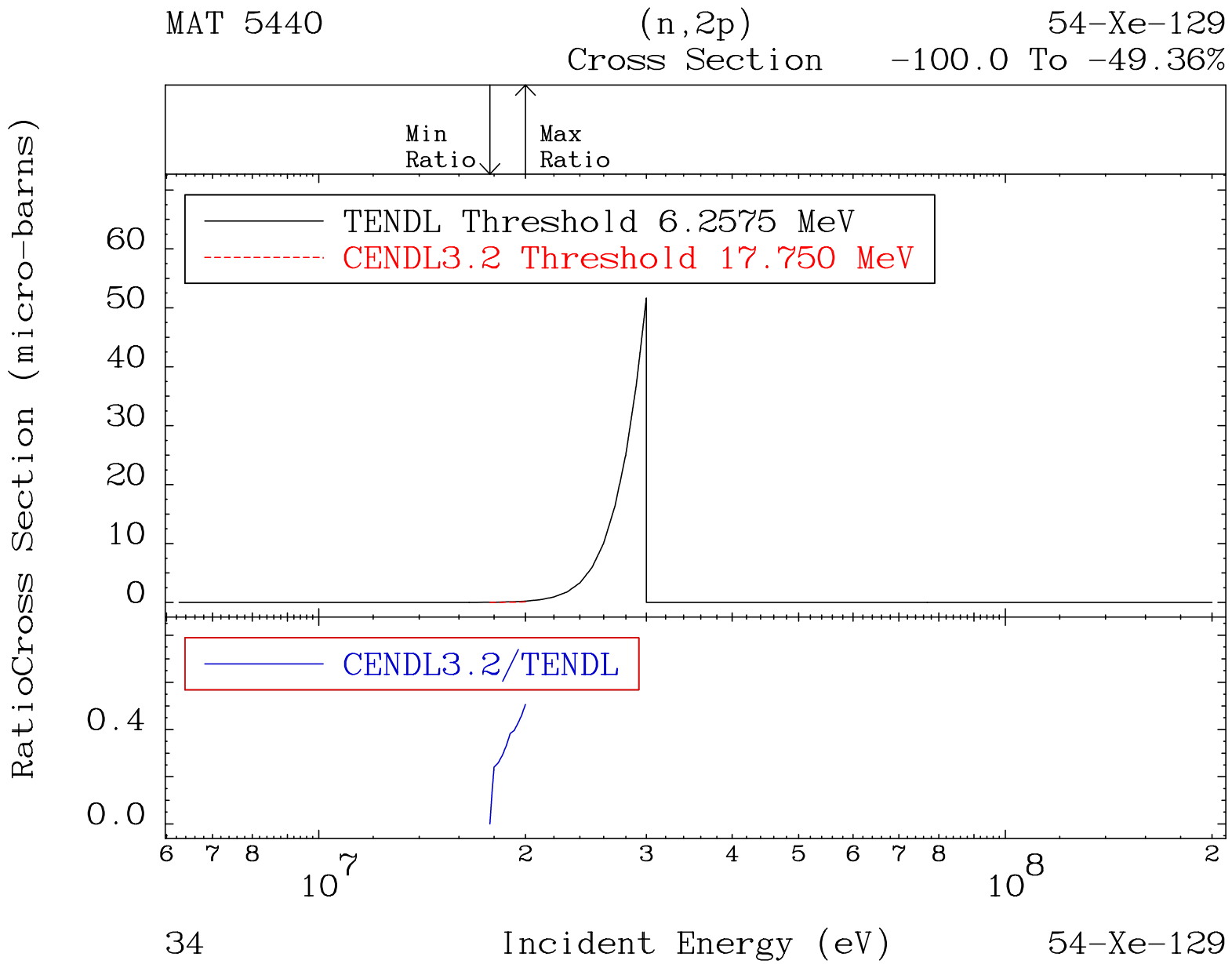

MAT 5440
(n,p)
54-Xe-129
Cross Section
-100.0 To 2.421 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 2.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
54-Xe-129

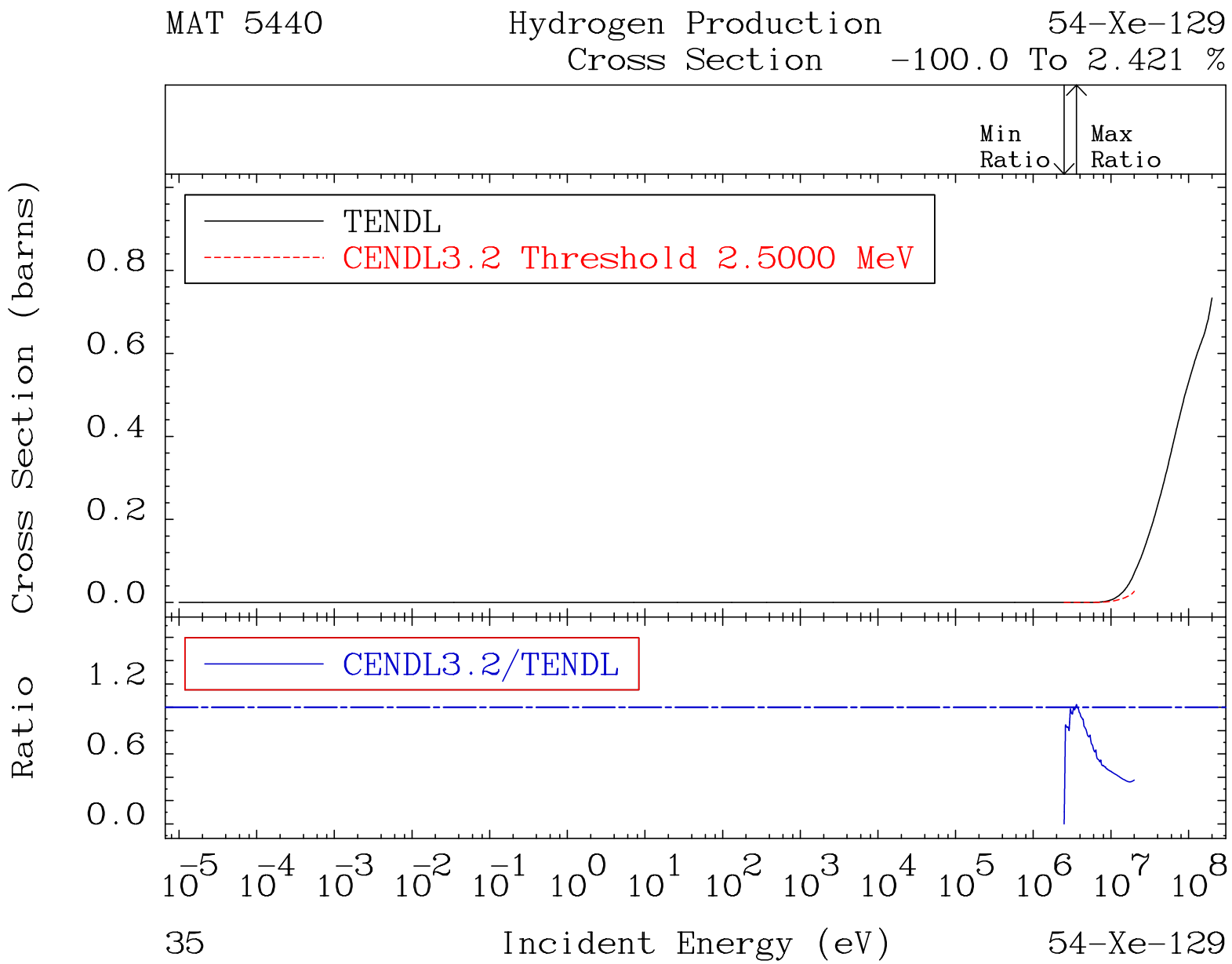

MAT 5440
(n,d)
54-Xe-129
Cross Section
-100.0 To 22.99 %
Min Ratio
Max Ratio
TENDL Threshold 6.0696 MeV
CENDL3.2 Threshold 10.800 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
1.0
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
54-Xe-129

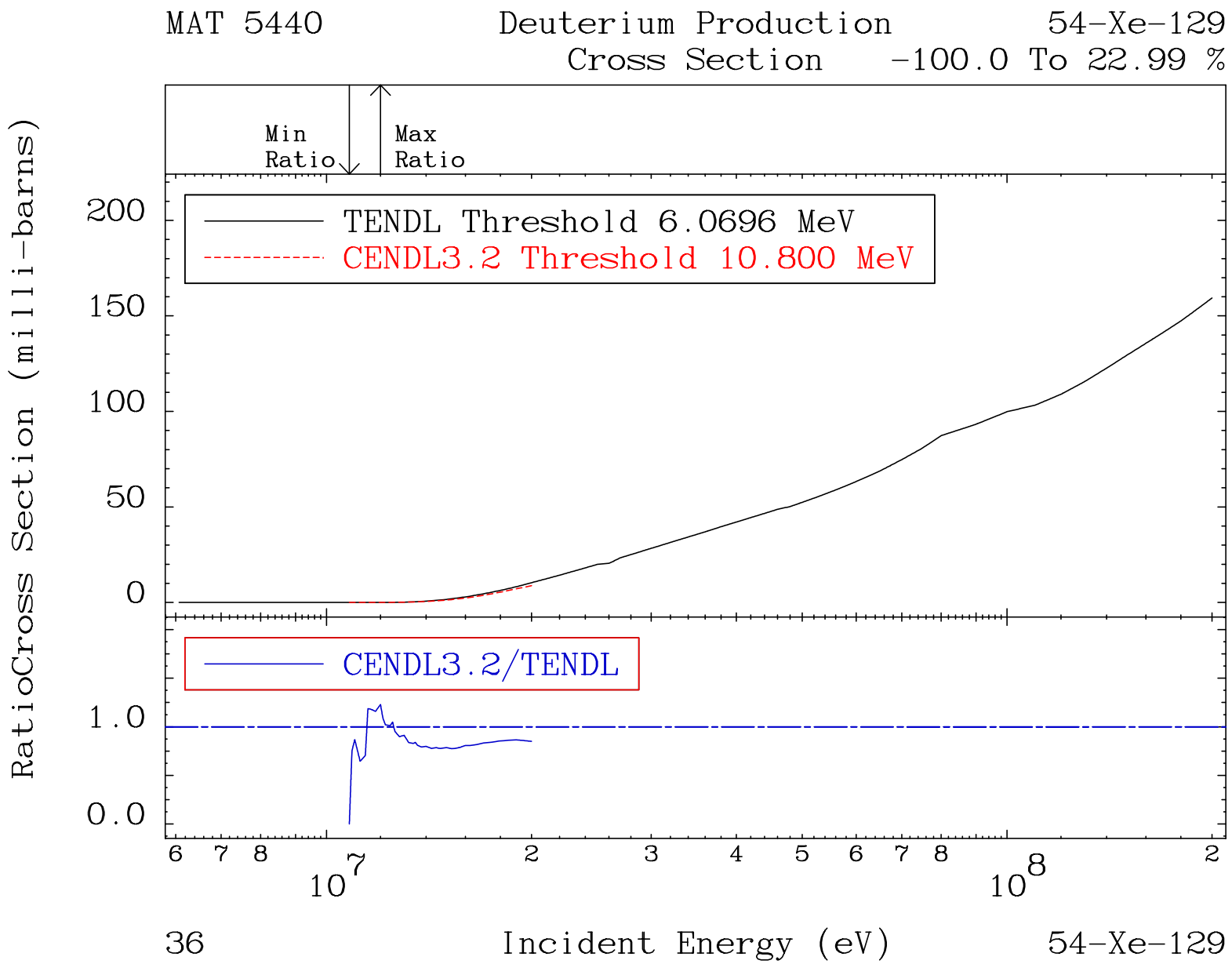

MAT 5440
(n,t)
Cross Section
54-Xe-129
-100.0 To 169.8 %
Min Ratio
Max Ratio
TENDL Threshold 6.6429 MeV
CENDL3.2 Threshold 12.100 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
31
54-Xe-129

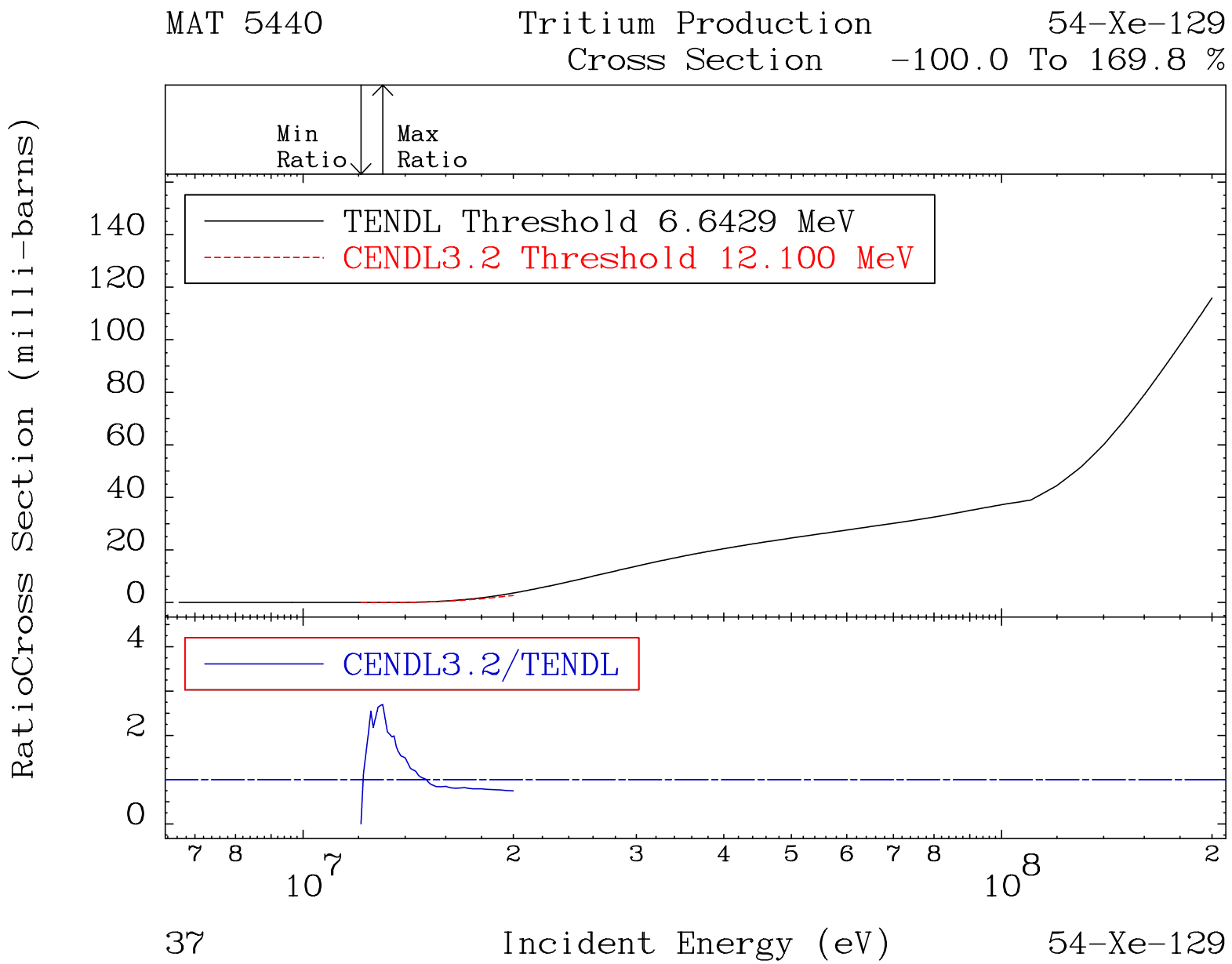

MAT 5440
(n,He-3)
54-Xe-129
Cross Section
-100.0 To 683.4 %
Min Ratio
Max Ratio
TENDL Threshold 7.3324 MeV
CENDL3.2 Threshold 18.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
12
8
4
0
8
10^7
2
3
4
5
6
7
8
10^8
2
32
Incident Energy (eV)
54-Xe-129

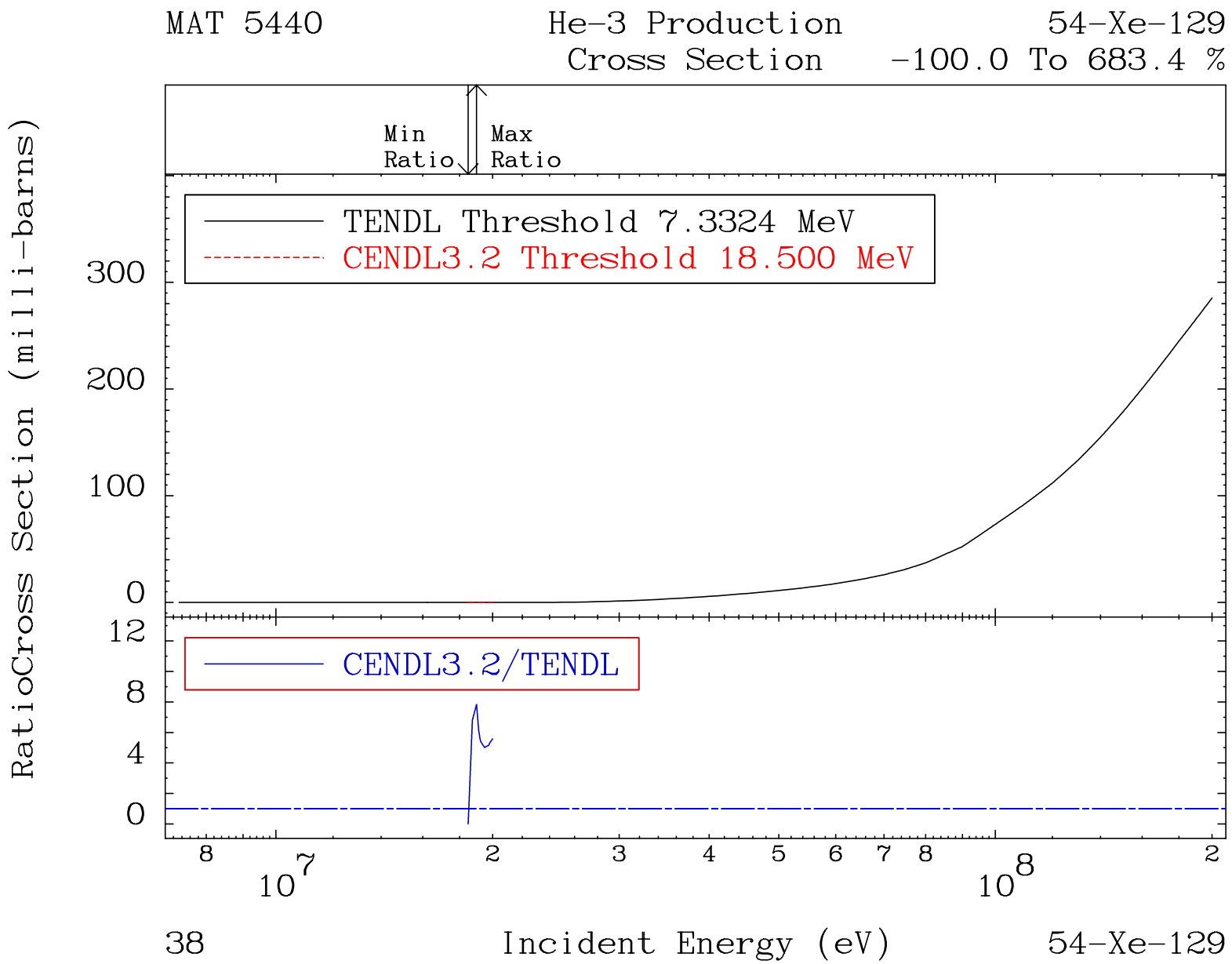

MAT 5440
(n,α)
54-Xe-129
Cross Section
-100.0 To 2416. %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1.7500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
20
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
33
Incident Energy (eV)
54-Xe-129

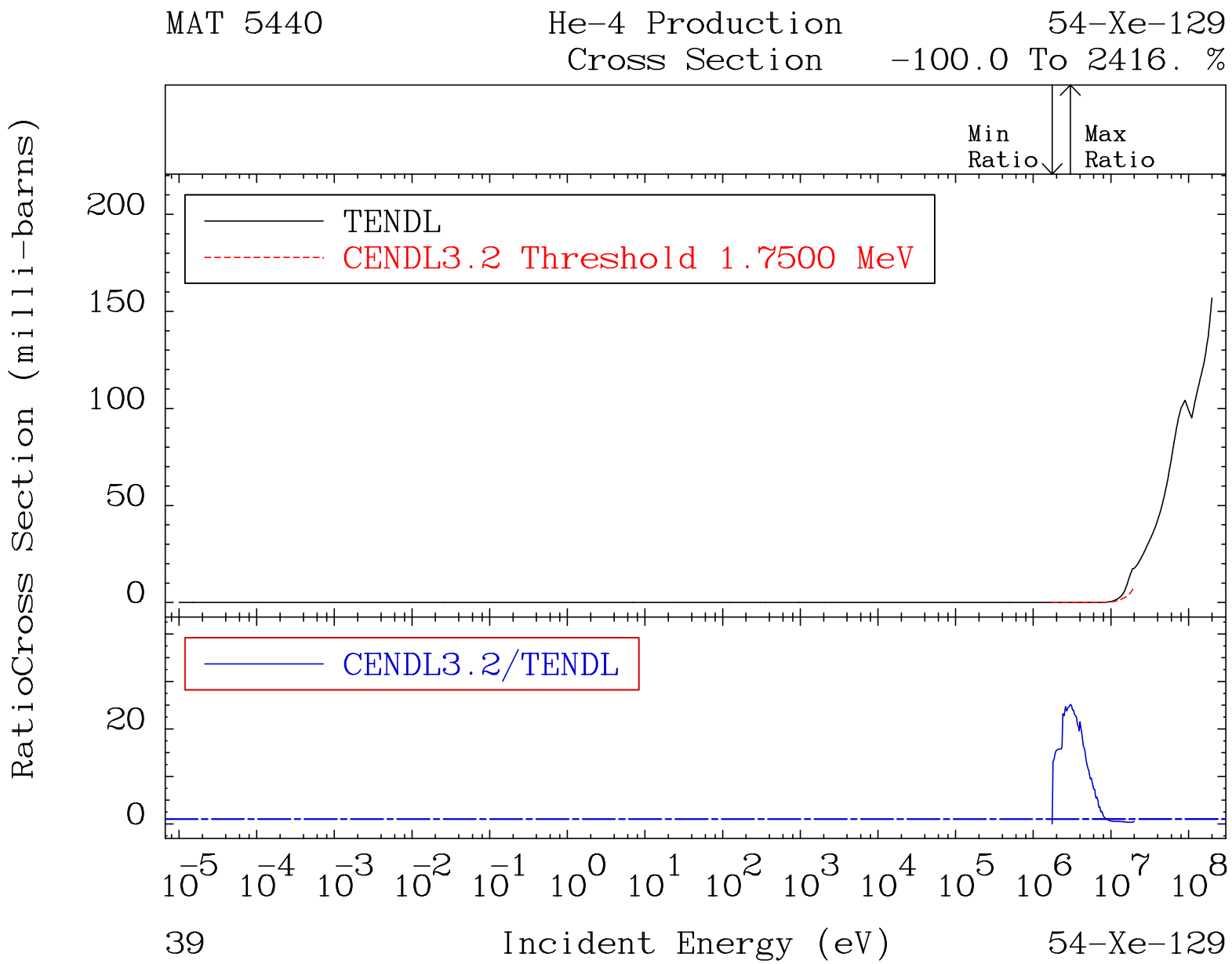

MAT 5440
(n,2p)
54-Xe-129
Cross Section
-100.0 To -49.36%
Min Ratio
Max Ratio
TENDL Threshold 6.2575 MeV
CENDL3.2 Threshold 17.750 MeV
CENDL3.2/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
0.4
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
34
Incident Energy (eV)
54-Xe-129

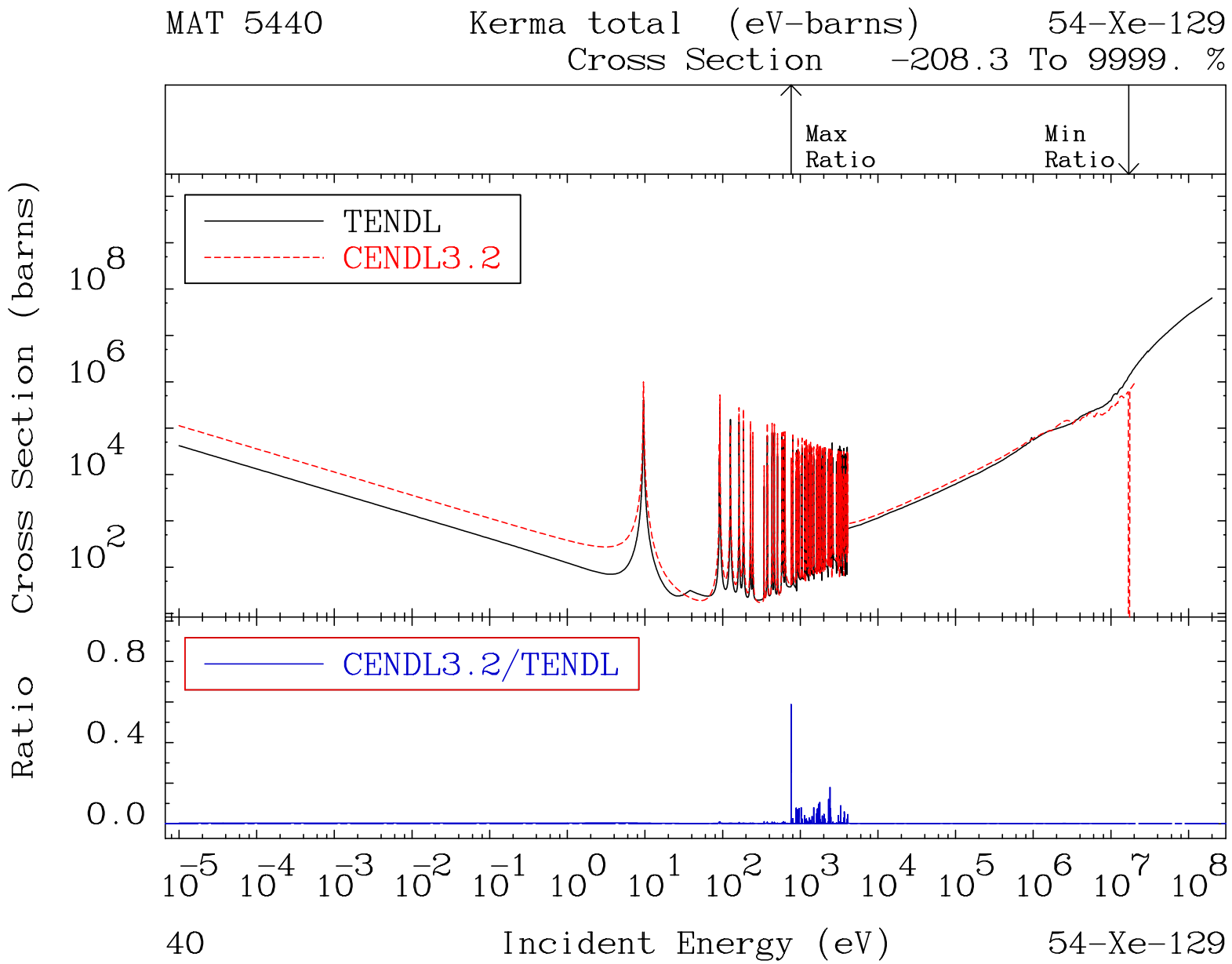

MAT 5440
Hydrogen Production
54-Xe-129
Cross Section
-100.0 To 2.421 %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 2.5000 MeV
Cross Section (barns)
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
35
Incident Energy (eV)
54-Xe-129

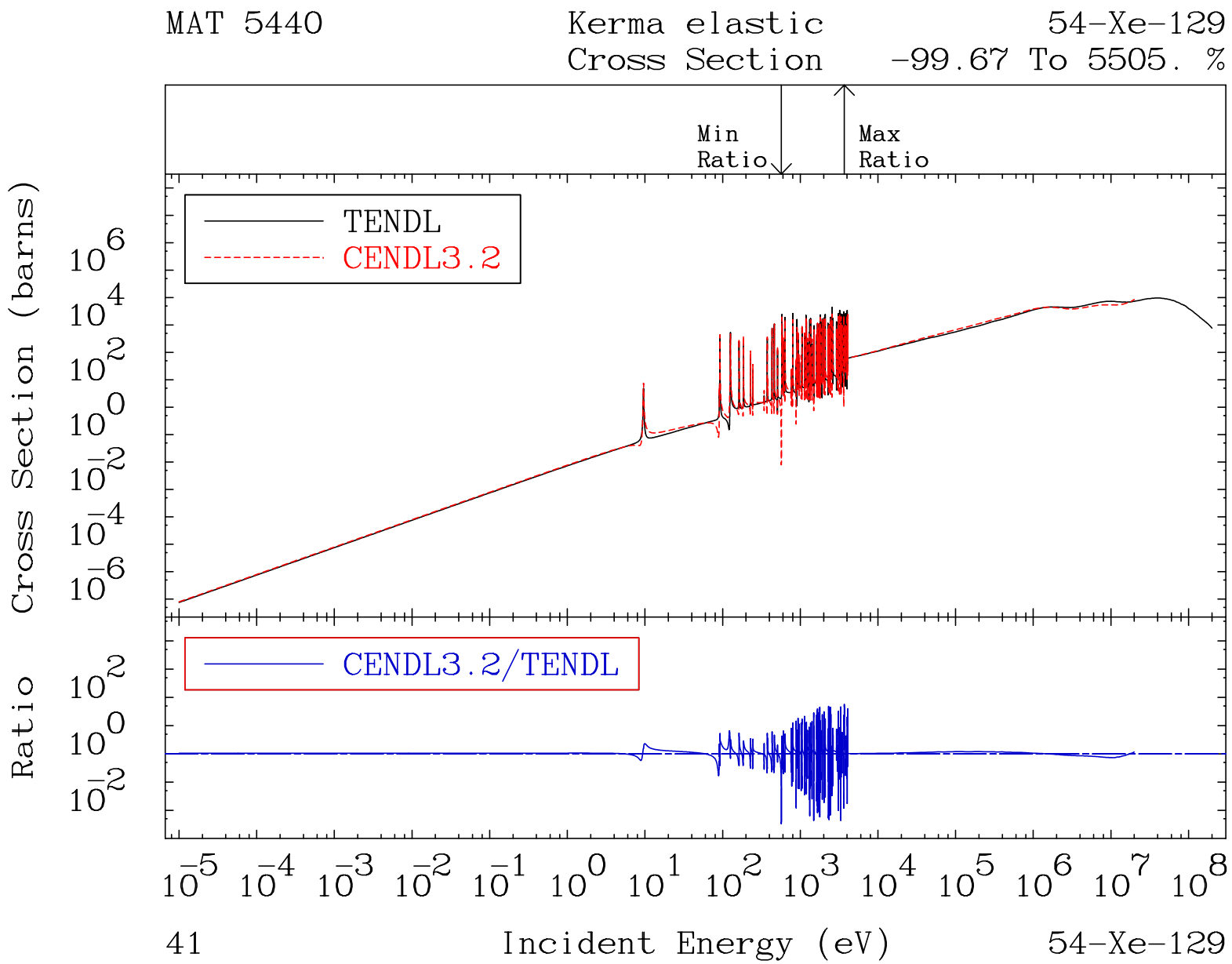

MAT 5440
Deuterium Production
54-Xe-129
Cross Section -100.0 To 22.99 %
Min Ratio
Max Ratio
TENDL Threshold 6.0696 MeV
CENDL3.2 Threshold 10.800 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.0
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
36
Incident Energy (eV)
54-Xe-129

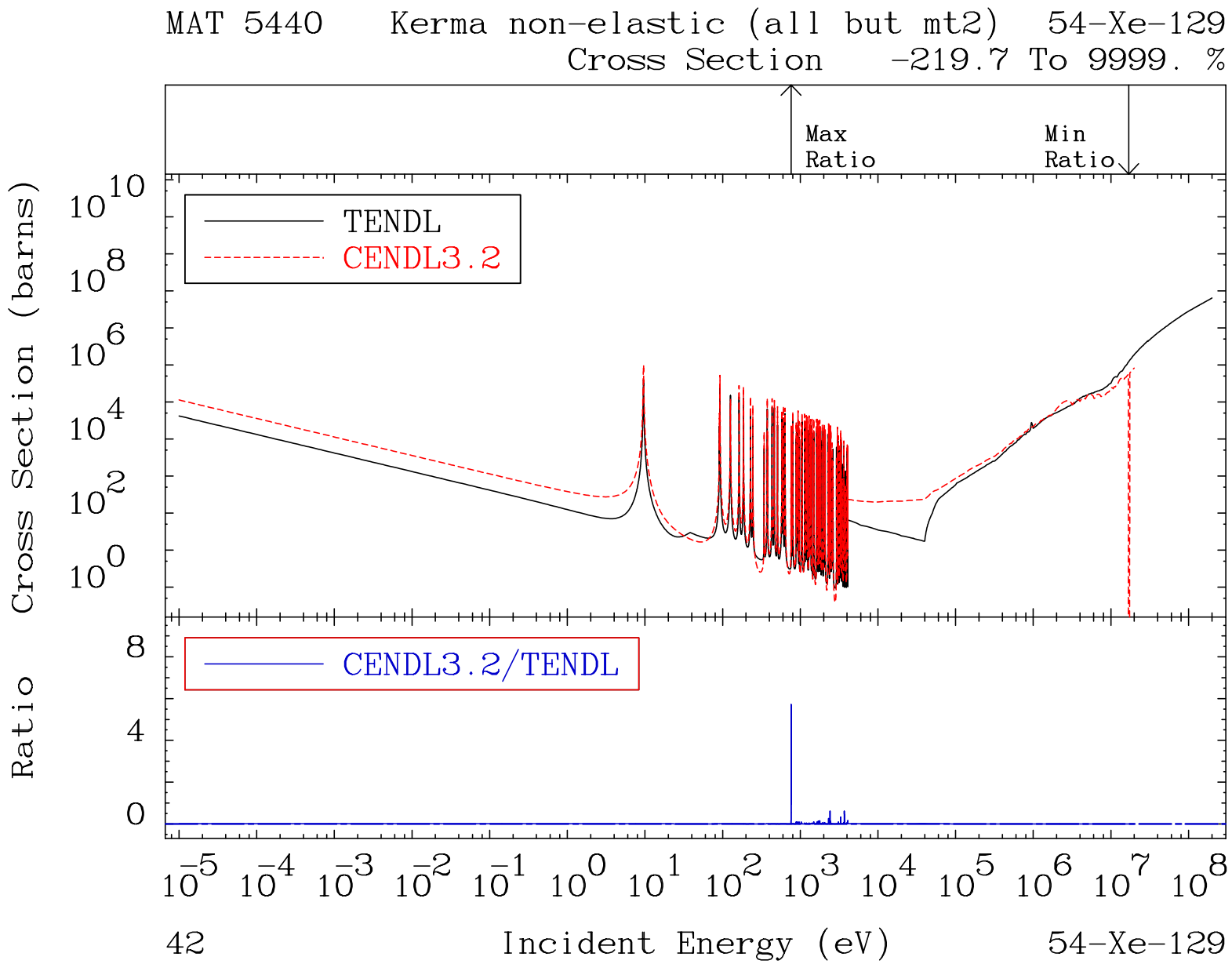

MAT 5440
Tritium Production
54-Xe-129
Cross Section
-100.0 To 169.8 %
Min Ratio
Max Ratio
TENDL Threshold 6.6429 MeV
CENDL3.2 Threshold 12.100 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
4
2
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
37
Incident Energy (eV)
54-Xe-129

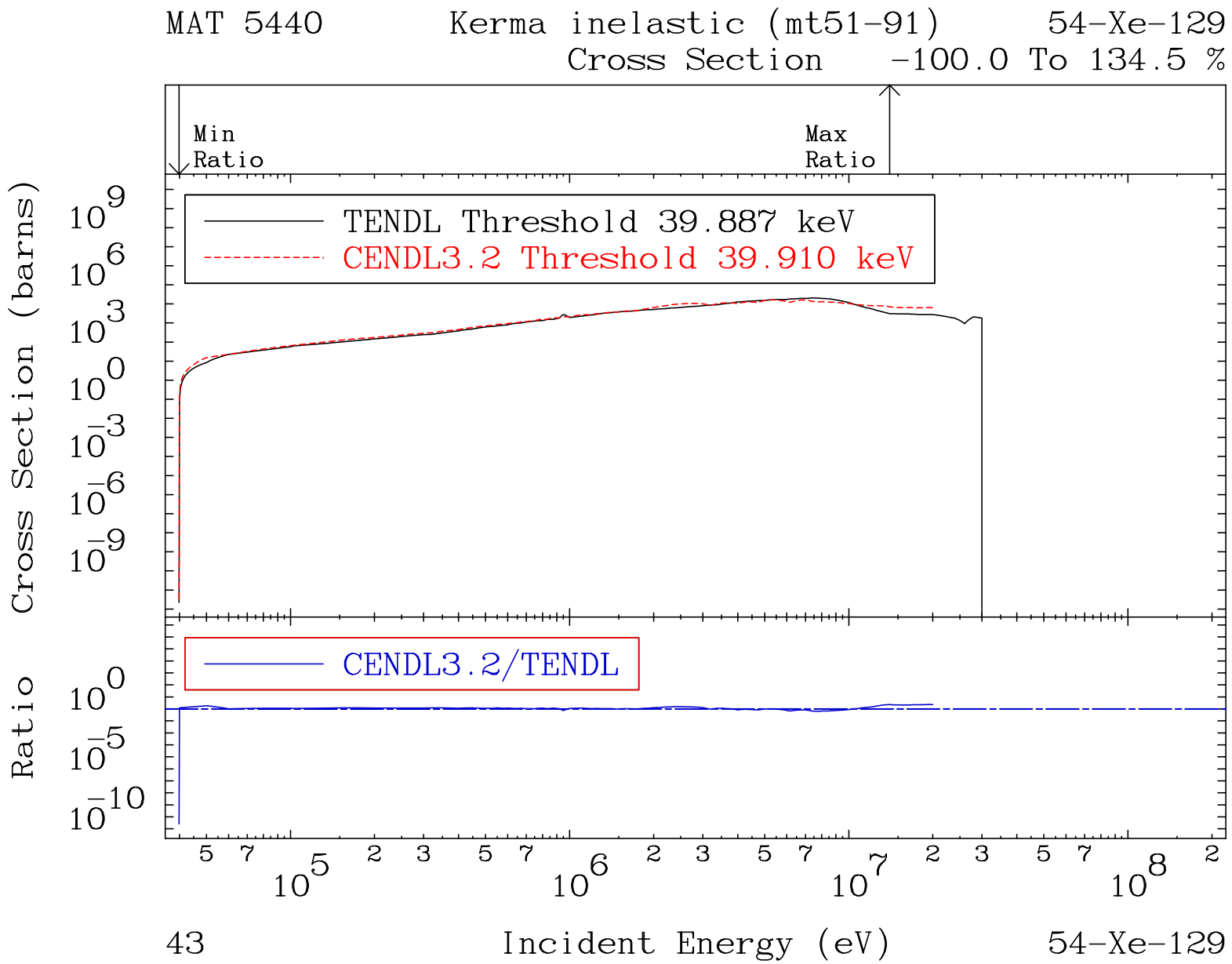

MAT 5440
He-3 Production
Cross Section
54-Xe-129
-100.0 To 683.4 %
Min Ratio
Max Ratio
TENDL Threshold 7.3324 MeV
CENDL3.2 Threshold 18.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
200
100
0
12
8
4
0
8
2
3
4
5
6
7
8
2
10^7
10^8
38
Incident Energy (eV)
54-Xe-129

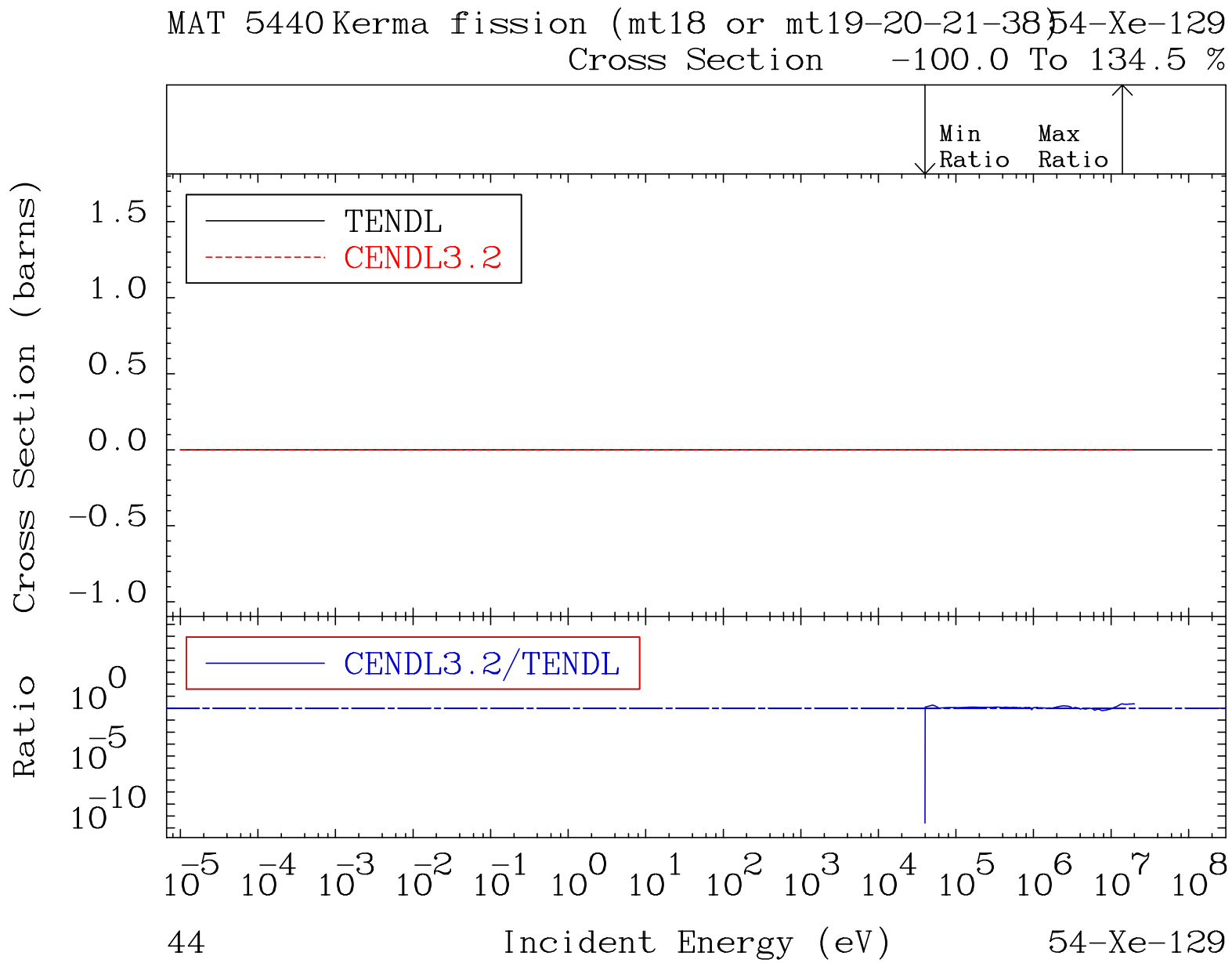

MAT 5440
He-4 Production
Cross Section
54-Xe-129
-100.0 To 2416. %
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 1.7500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
20
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
39
Incident Energy (eV)
54-Xe-129

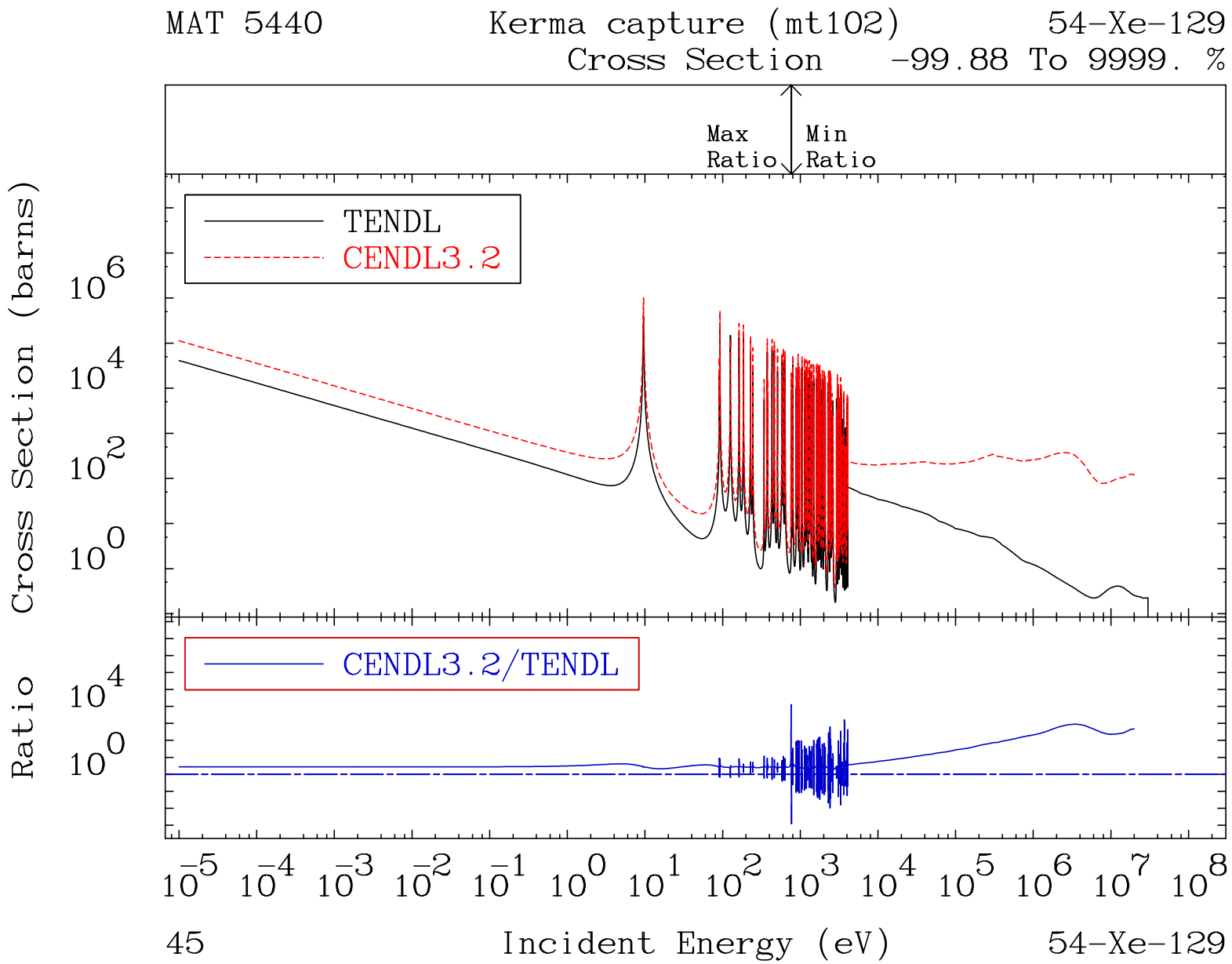

MAT 5440
Kerma total (eV-barns)
54-Xe-129
Cross Section -208.3 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^8
10^6
10^4
10^2
CENDL3.2/TENDL
Ratio
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
40
Incident Energy (eV)
54-Xe-129

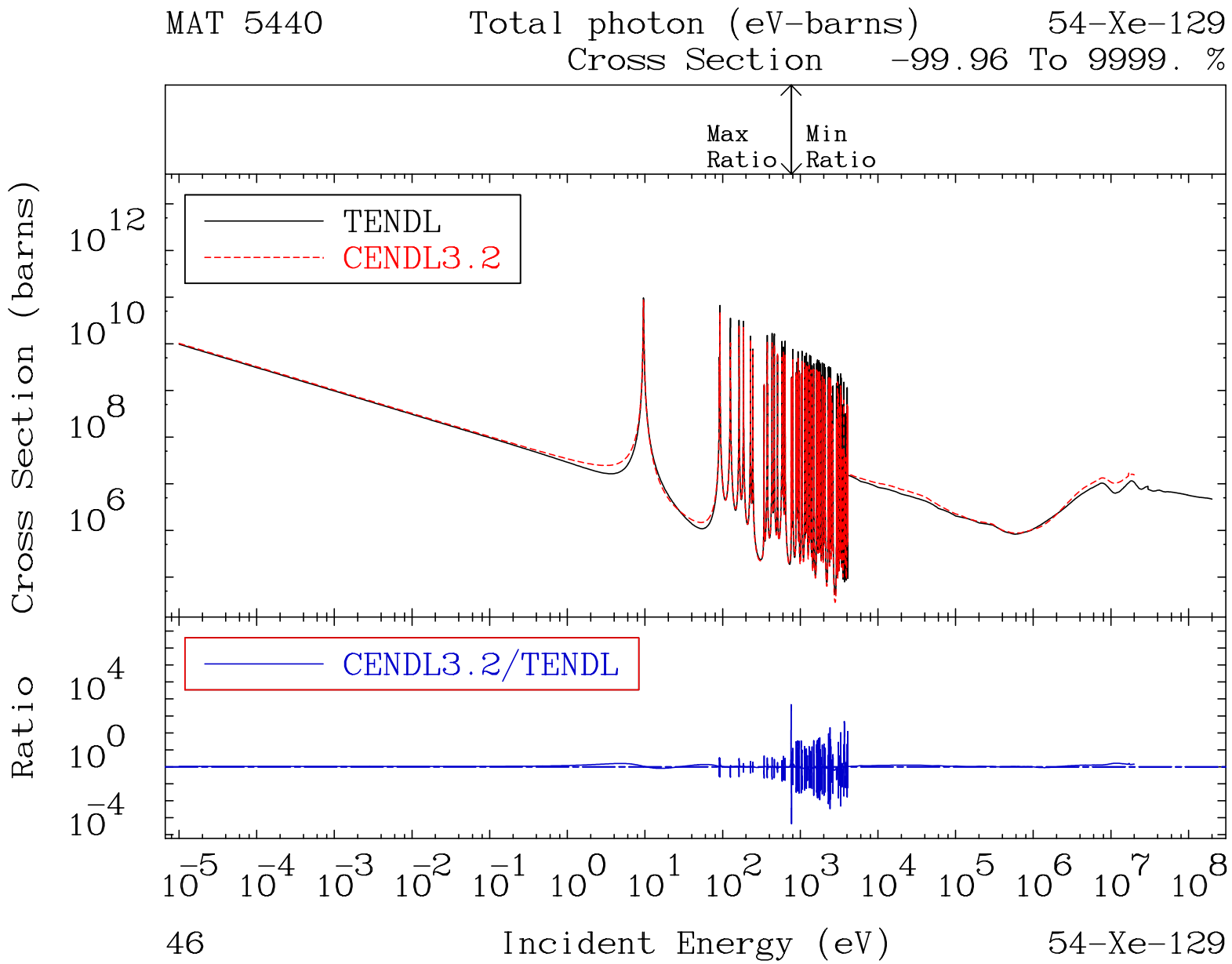

MAT 5440
Kerma elastic
Cross Section
54-Xe-129
-99.67 To 5505. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
54-Xe-129

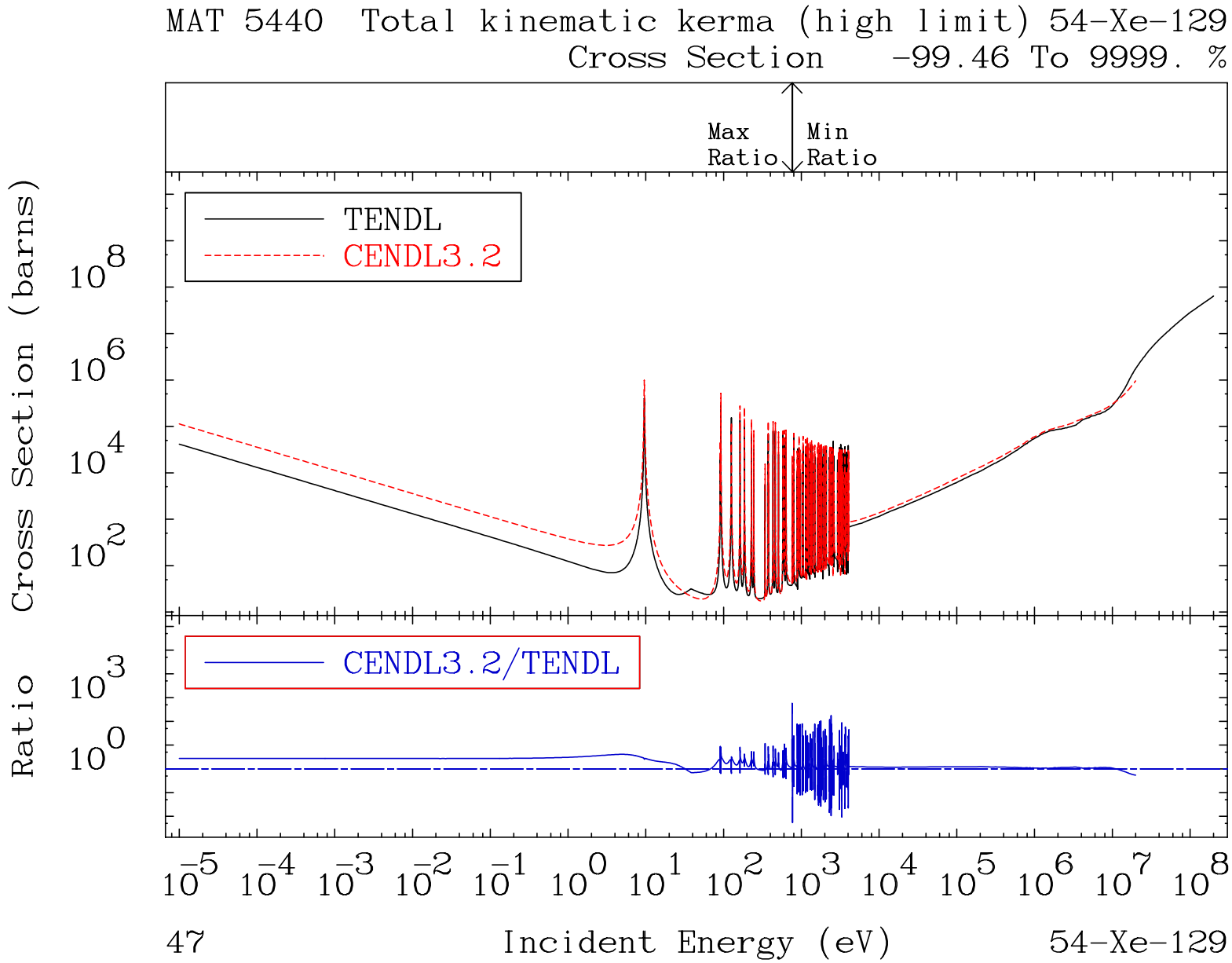

MAT 5440 Kerma non-elastic (all but mt2) 54-Xe-129
Cross Section -219.7 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
42
54-Xe-129

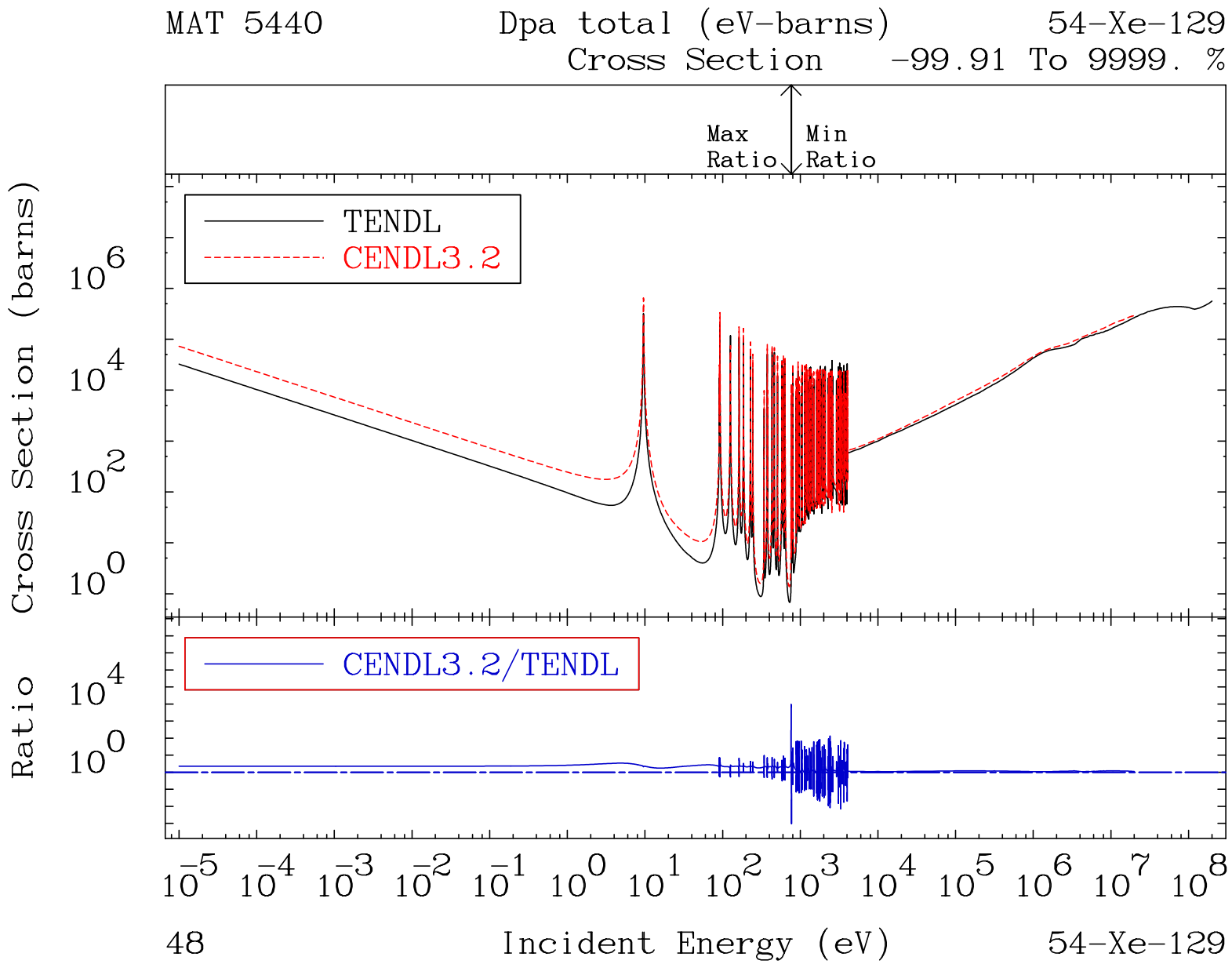

MAT 5440
Kerma inelastic (mt51-91)
54-Xe-129
Cross Section -100.0 To 134.5 %
Min Ratio
Max Ratio
TENDL Threshold 39.887 keV
CENDL3.2 Threshold 39.910 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
54-Xe-129

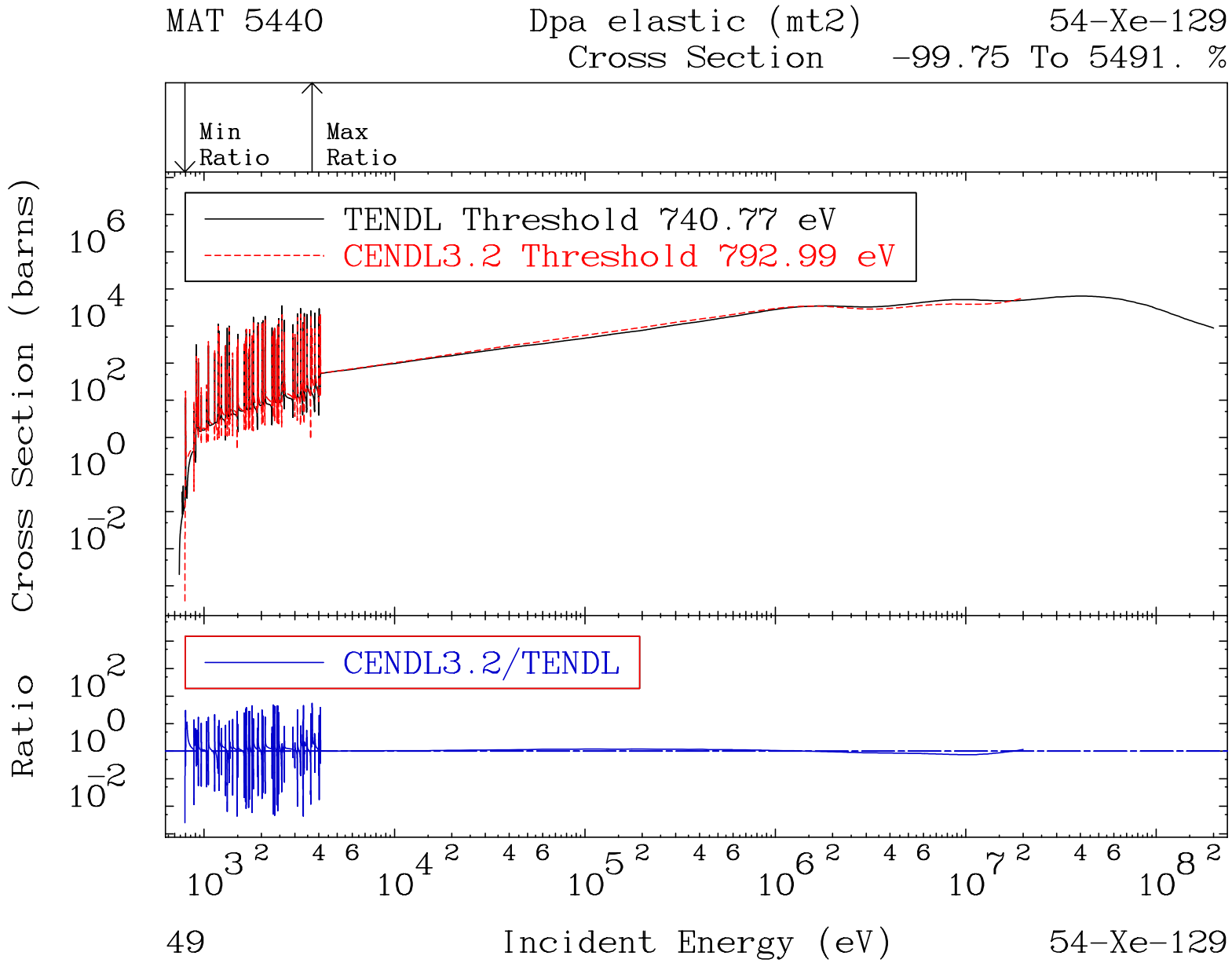

MAT 5440 Kerma fission (mt18 or mt19-20-21-38) 54-Xe-129
Cross Section -100.0 To 134.5 %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{0}
10^{-5}
10^{-10}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
44
Incident Energy (eV)
54-Xe-129

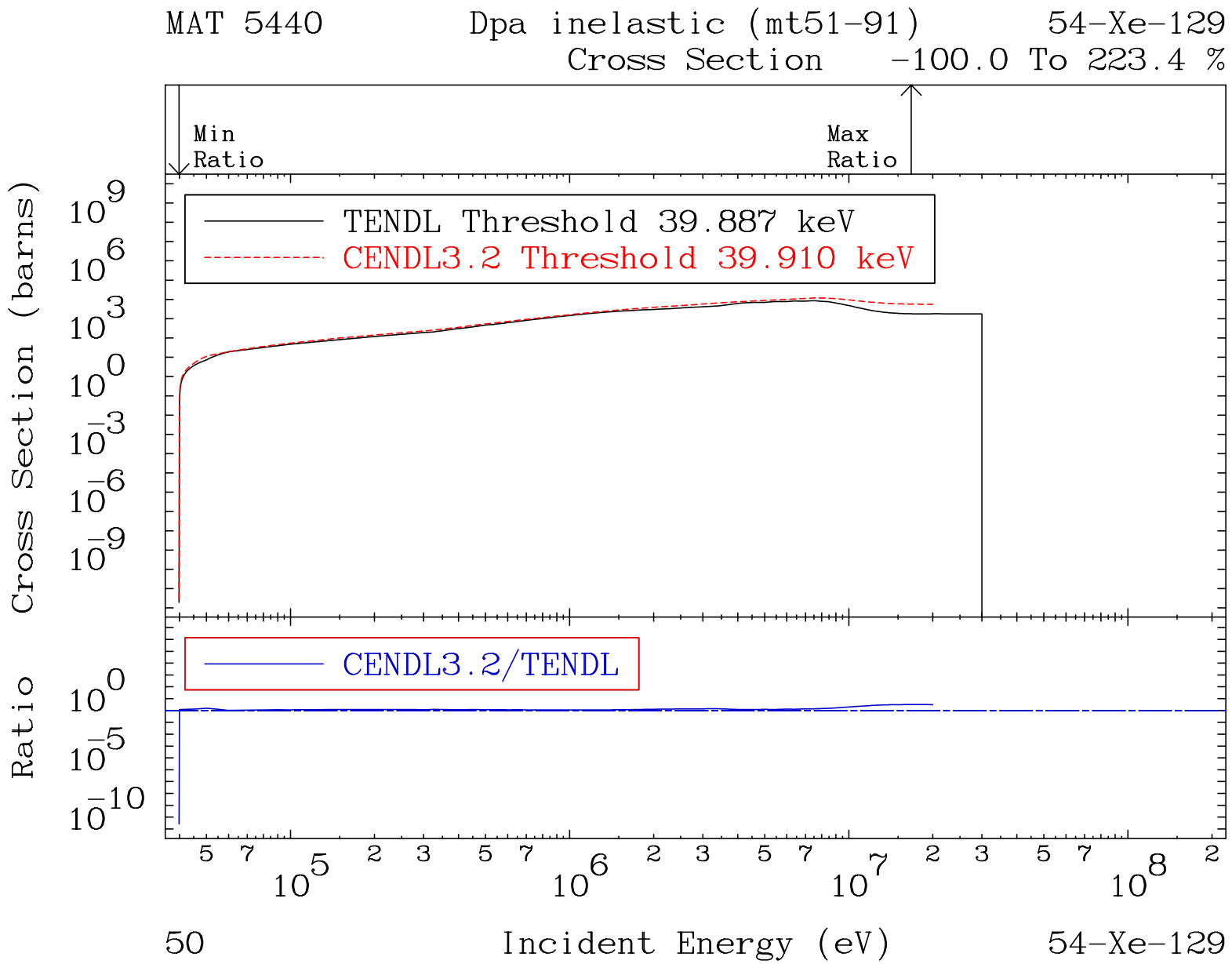

MAT 5440
Kerma capture (mt102)
54-Xe-129
Cross Section
-99.88 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^6
10^4
10^2
10^0
CENDL3.2/TENDL
Ratio
10^4
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
45
Incident Energy (eV)
54-Xe-129

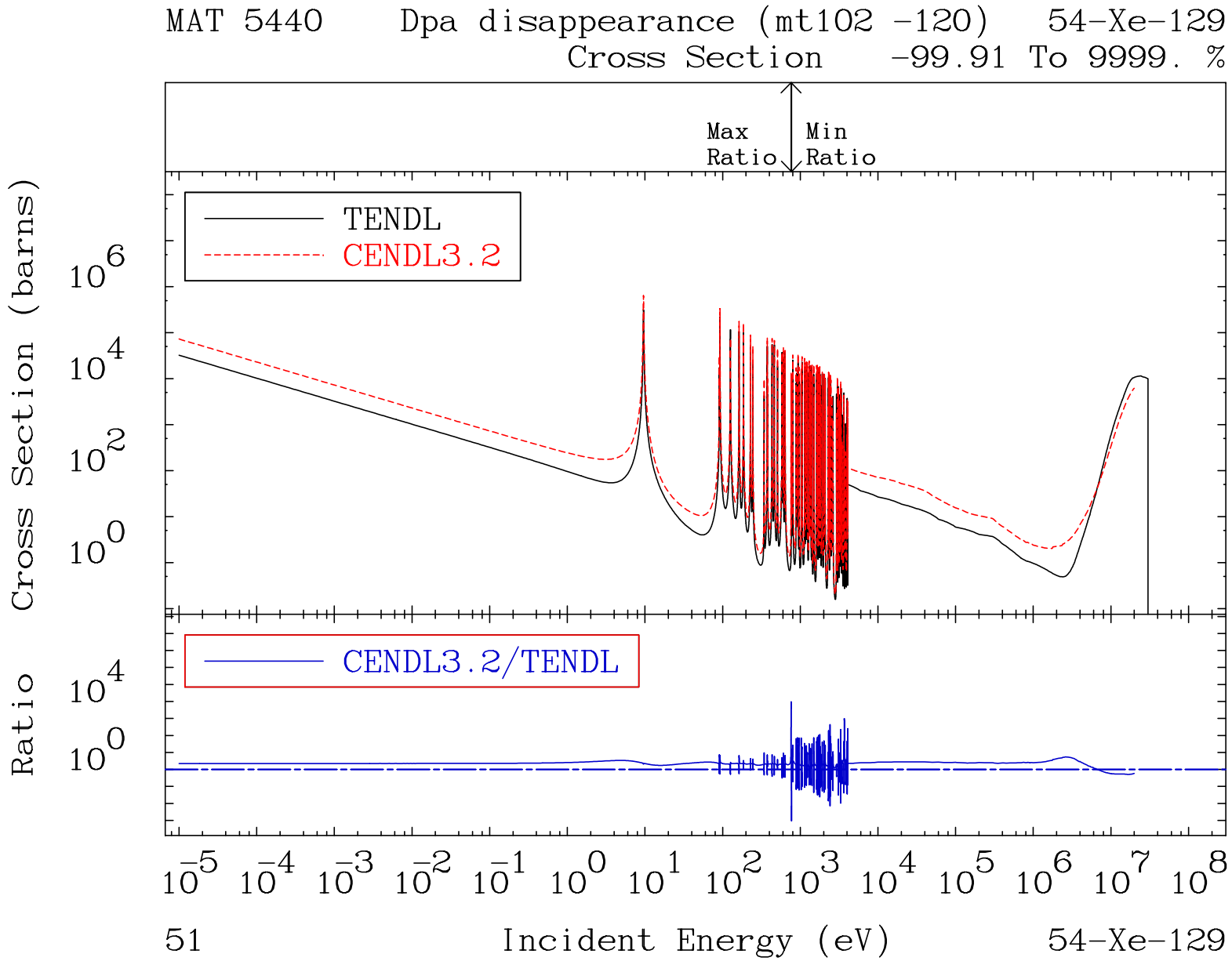

MAT 5440
Total photon (eV-barns)
54-Xe-129
Cross Section -99.96 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
46
54-Xe-129


MAT 5440 Total kinematic kerma (high limit) 54-Xe-129
Cross Section -99.46 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
47
54-Xe-129


MAT 5440
Dpa total (eV-barns)
54-Xe-129
Cross Section
-99.91 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
48
54-Xe-129


MAT 5440
Dpa elastic (mt2)
Cross Section
54-Xe-129
-99.75 To 5491. %
Min Ratio
Max Ratio
TENDL Threshold 740.77 eV
CENDL3.2 Threshold 792.99 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
54-Xe-129


MAT 5440
Dpa inelastic (mt51-91)
54-Xe-129
Cross Section -100.0 To 223.4 %
Min Ratio
Max Ratio
TENDL Threshold 39.887 keV
CENDL3.2 Threshold 39.910 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
50
54-Xe-129


MAT 5440 Dpa disappearance (mt102 -120) 54-Xe-129
Cross Section -99.91 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
51
54-Xe-129