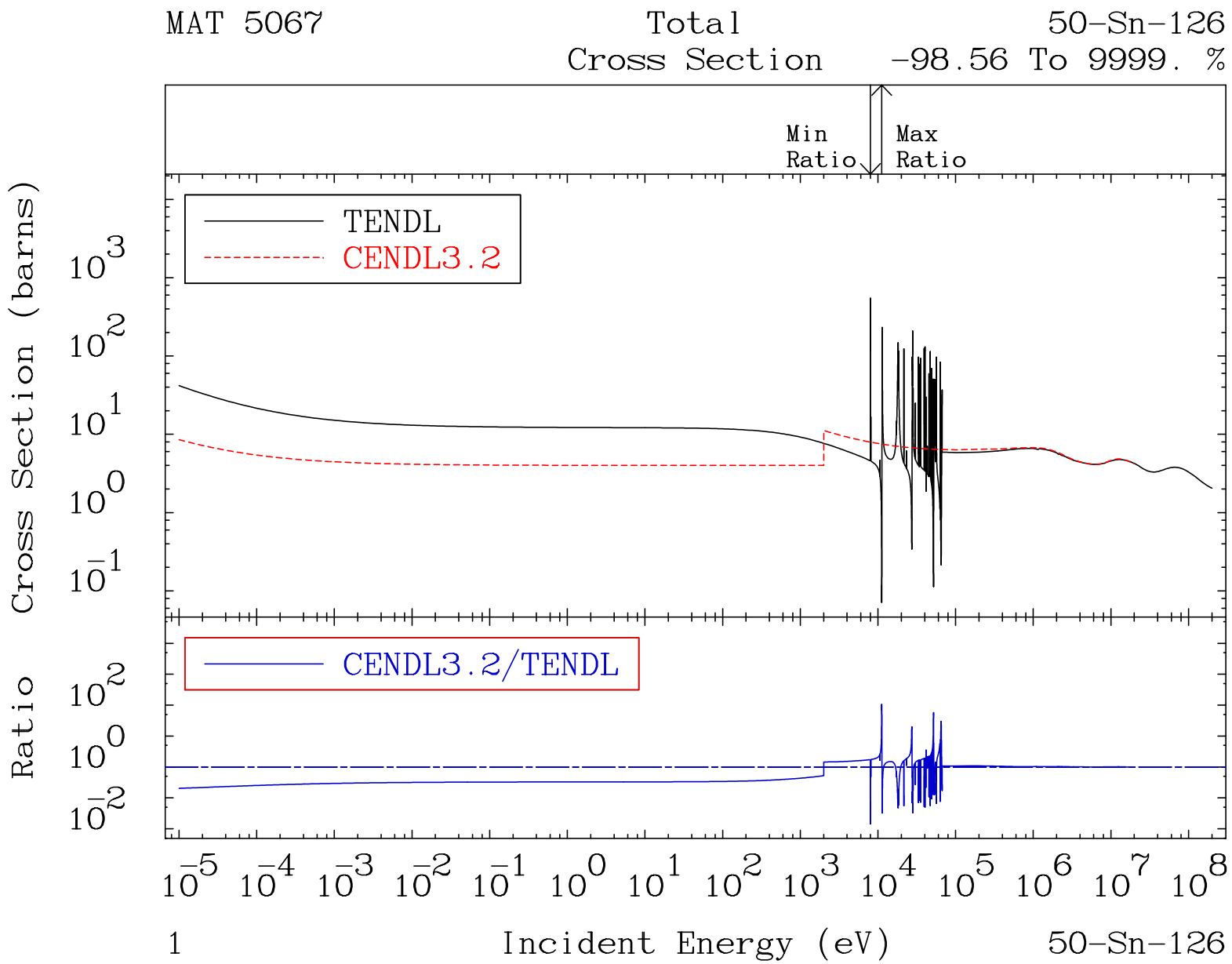
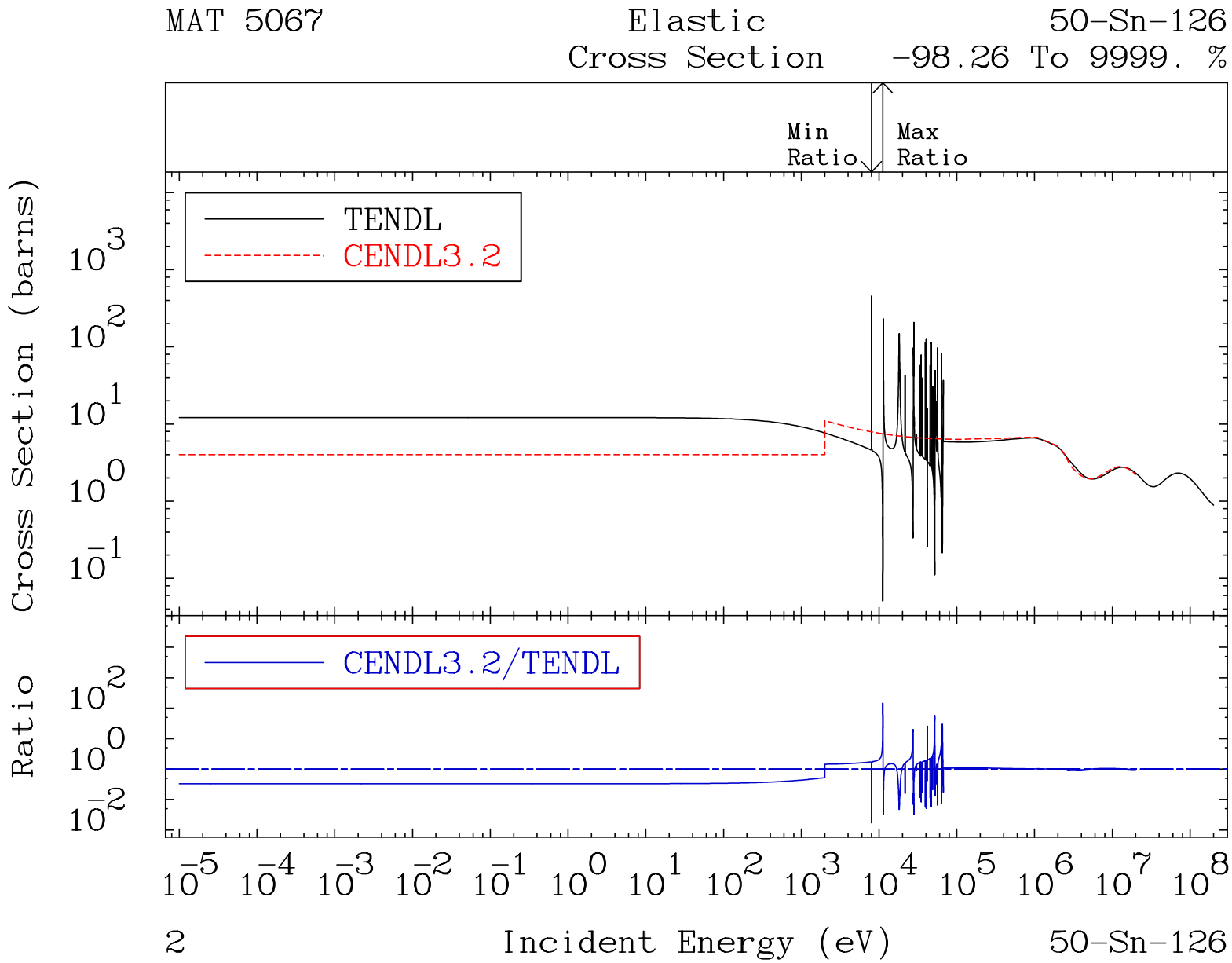
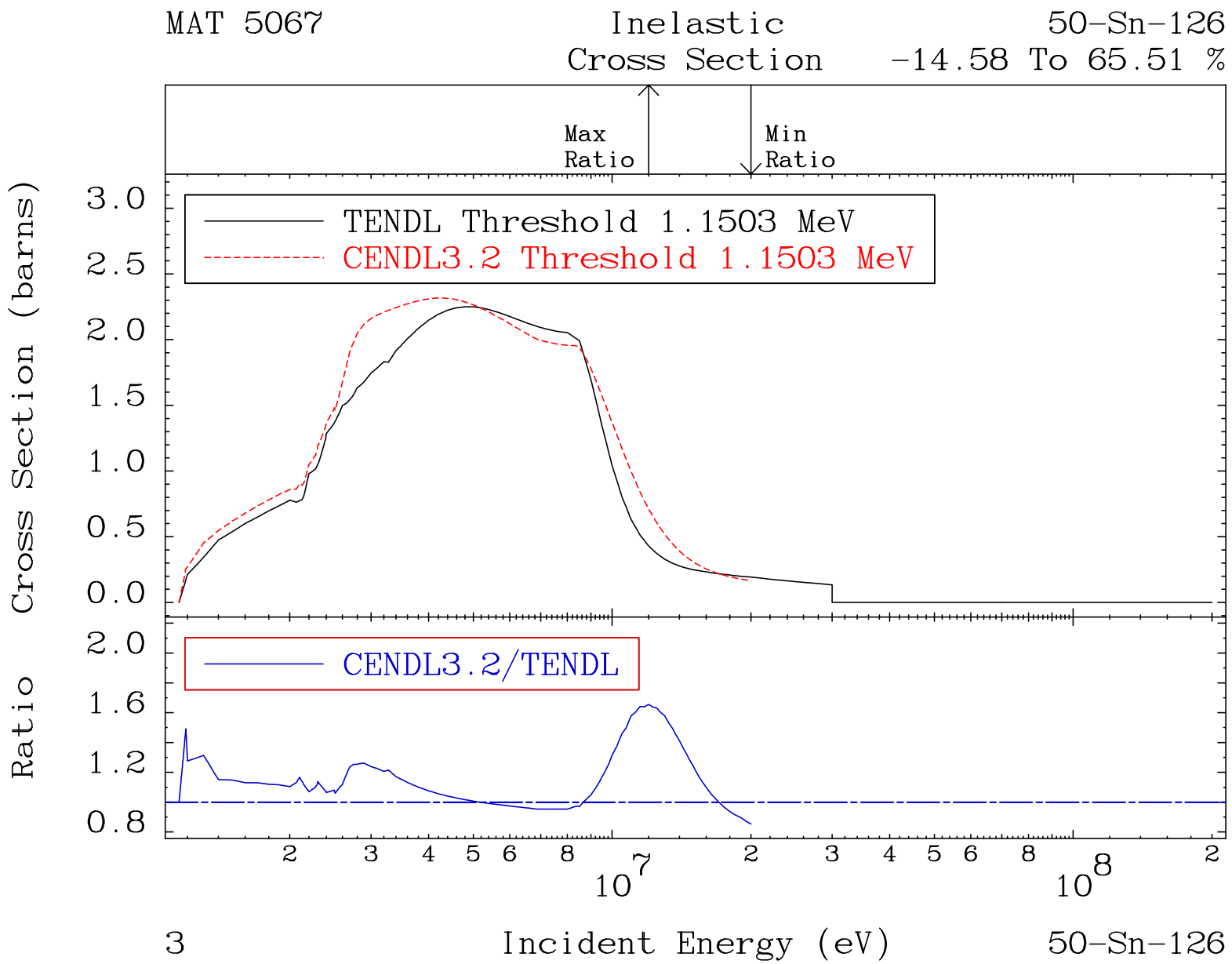
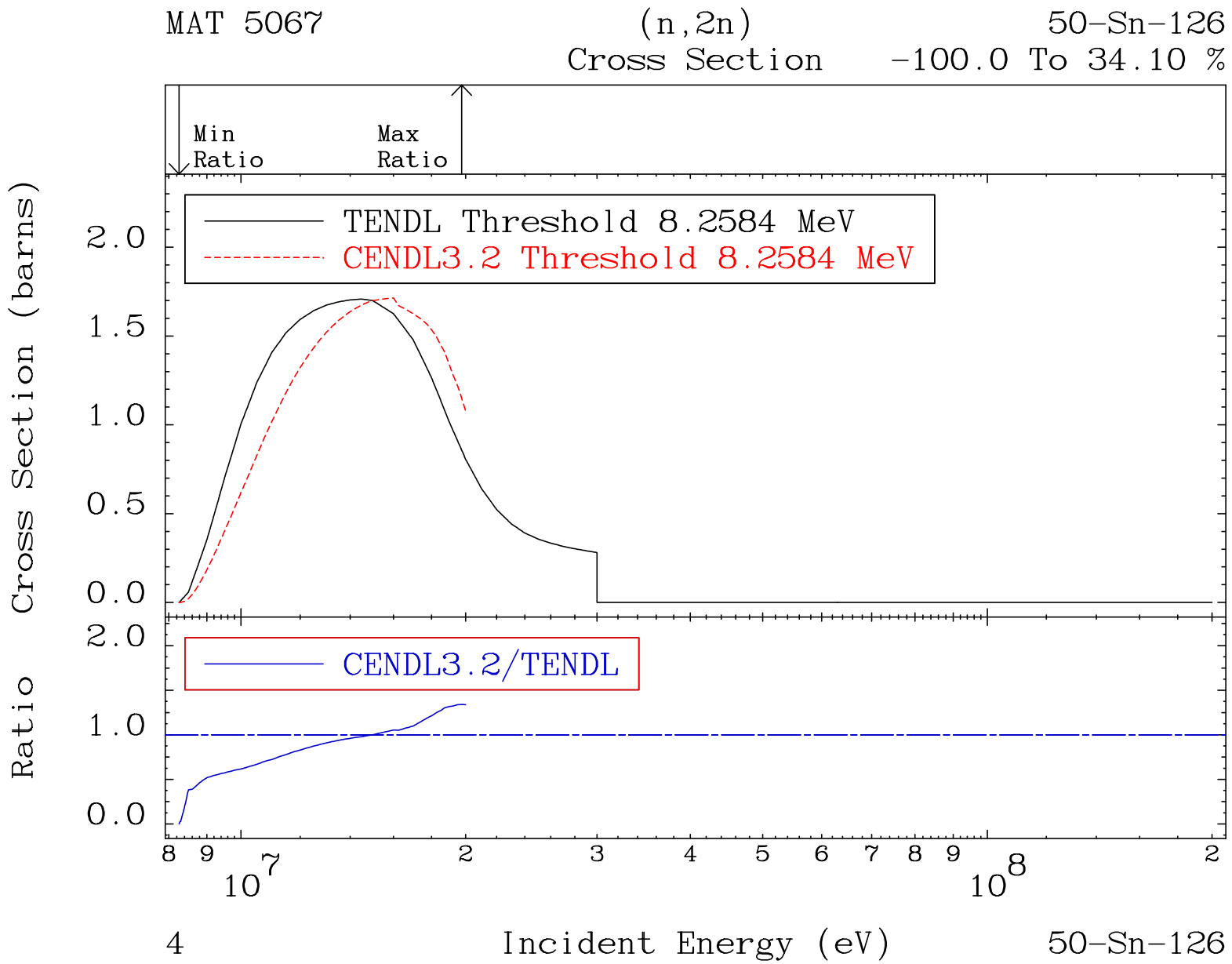
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

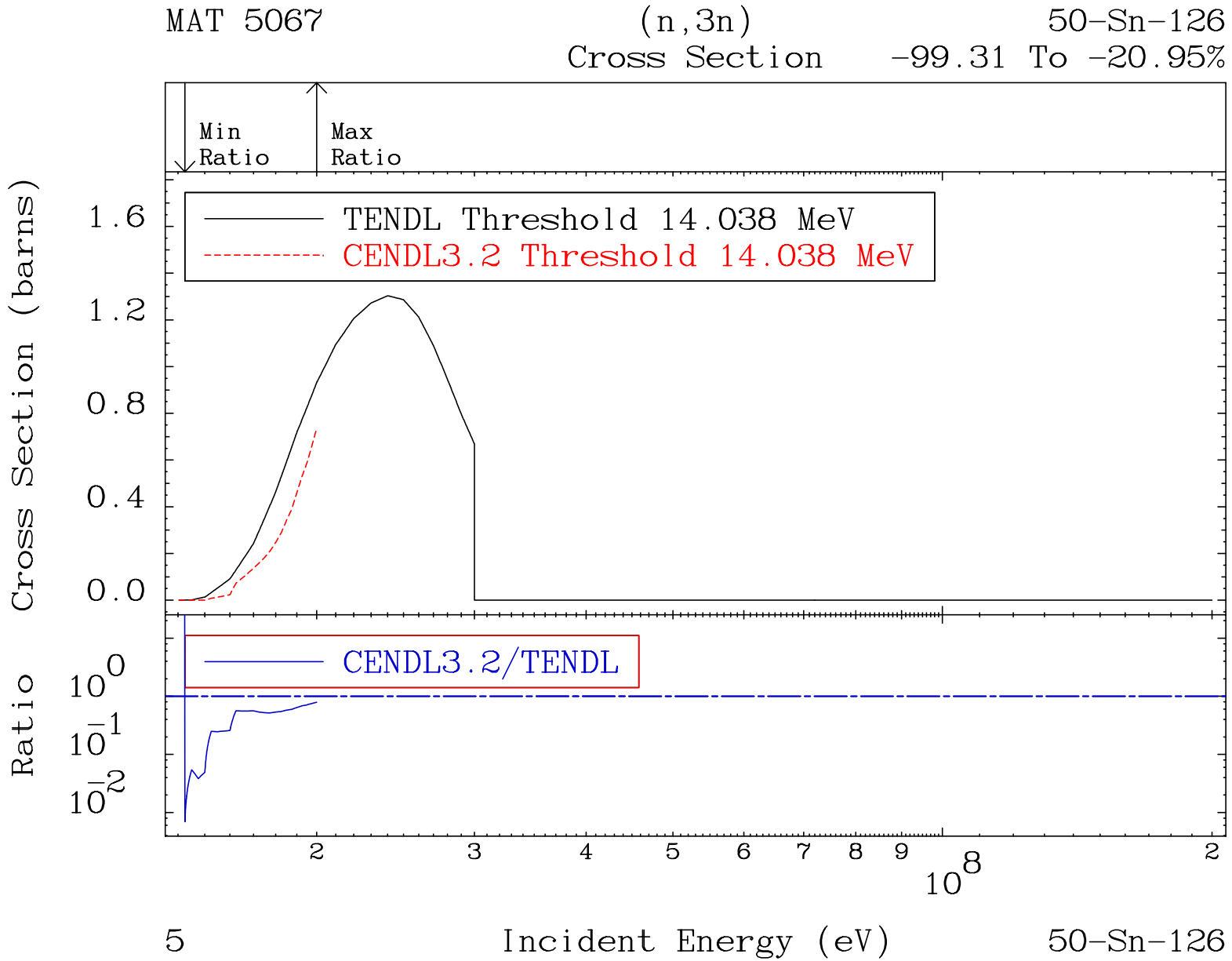
Press Mouse Button to Start

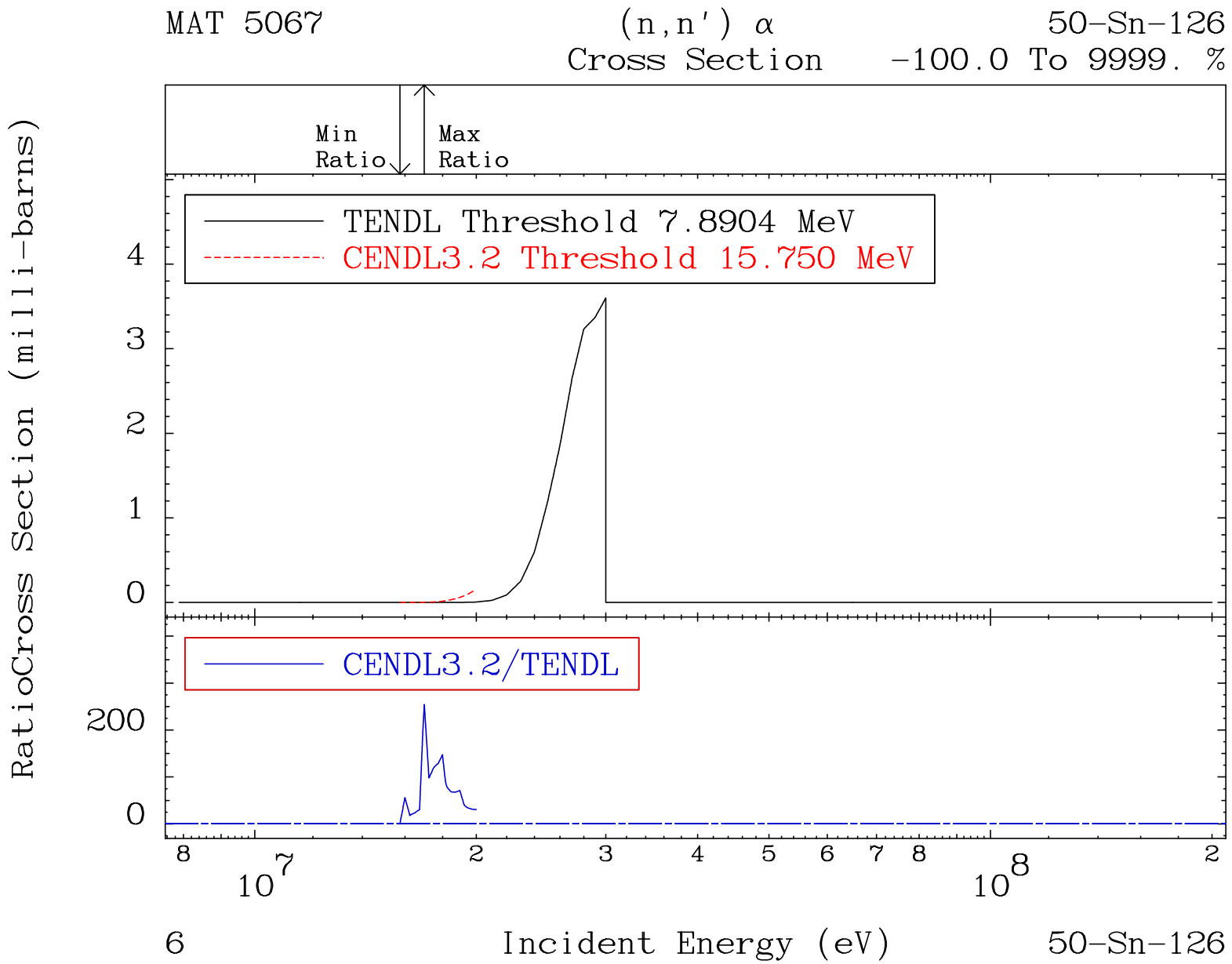

MAT 5067
Total
Cross Section
50-Sn-126
-98.56 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
1
50-Sn-126

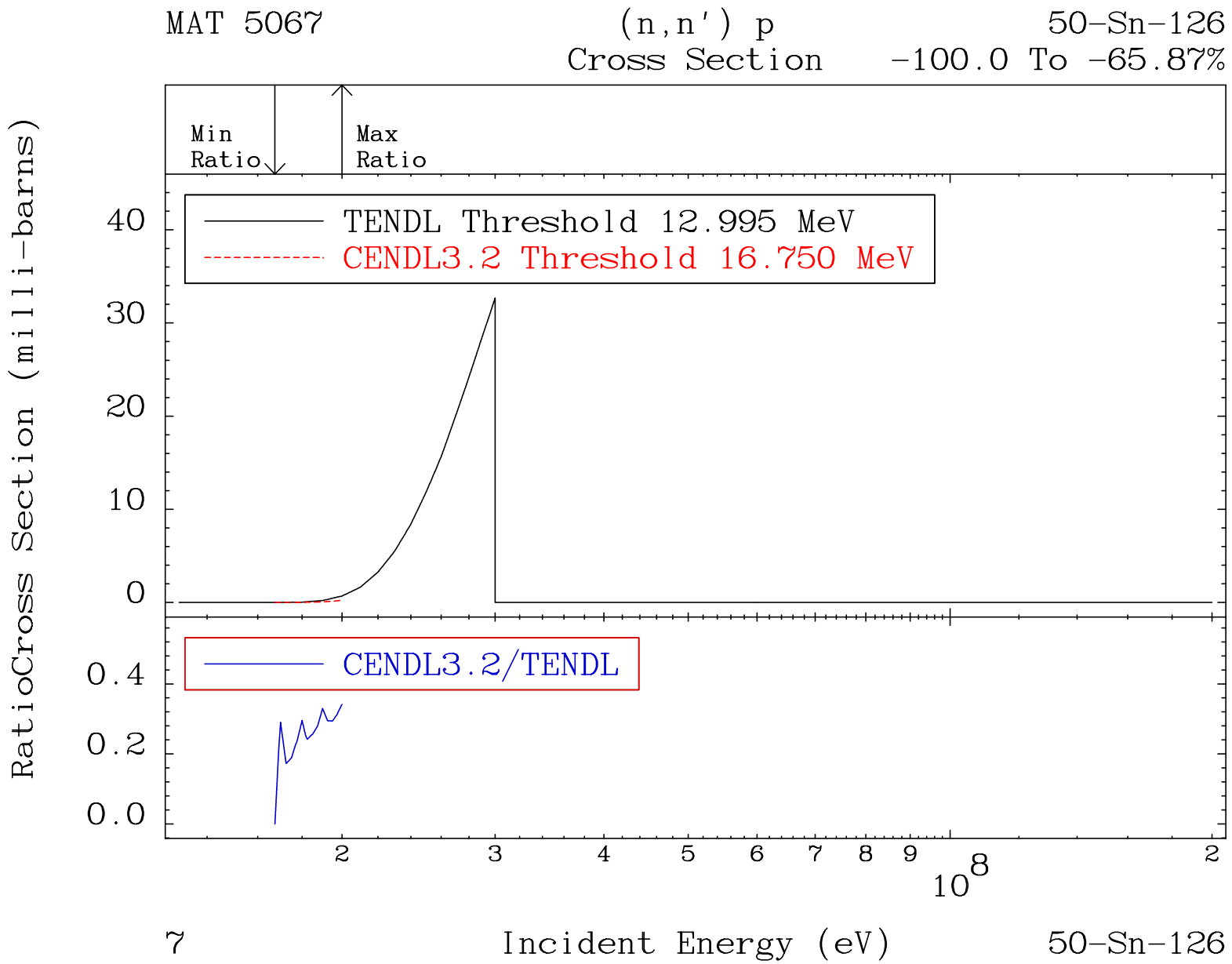

MAT 5067
Elastic
Cross Section
50-Sn-126
-98.26 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
2
50-Sn-126

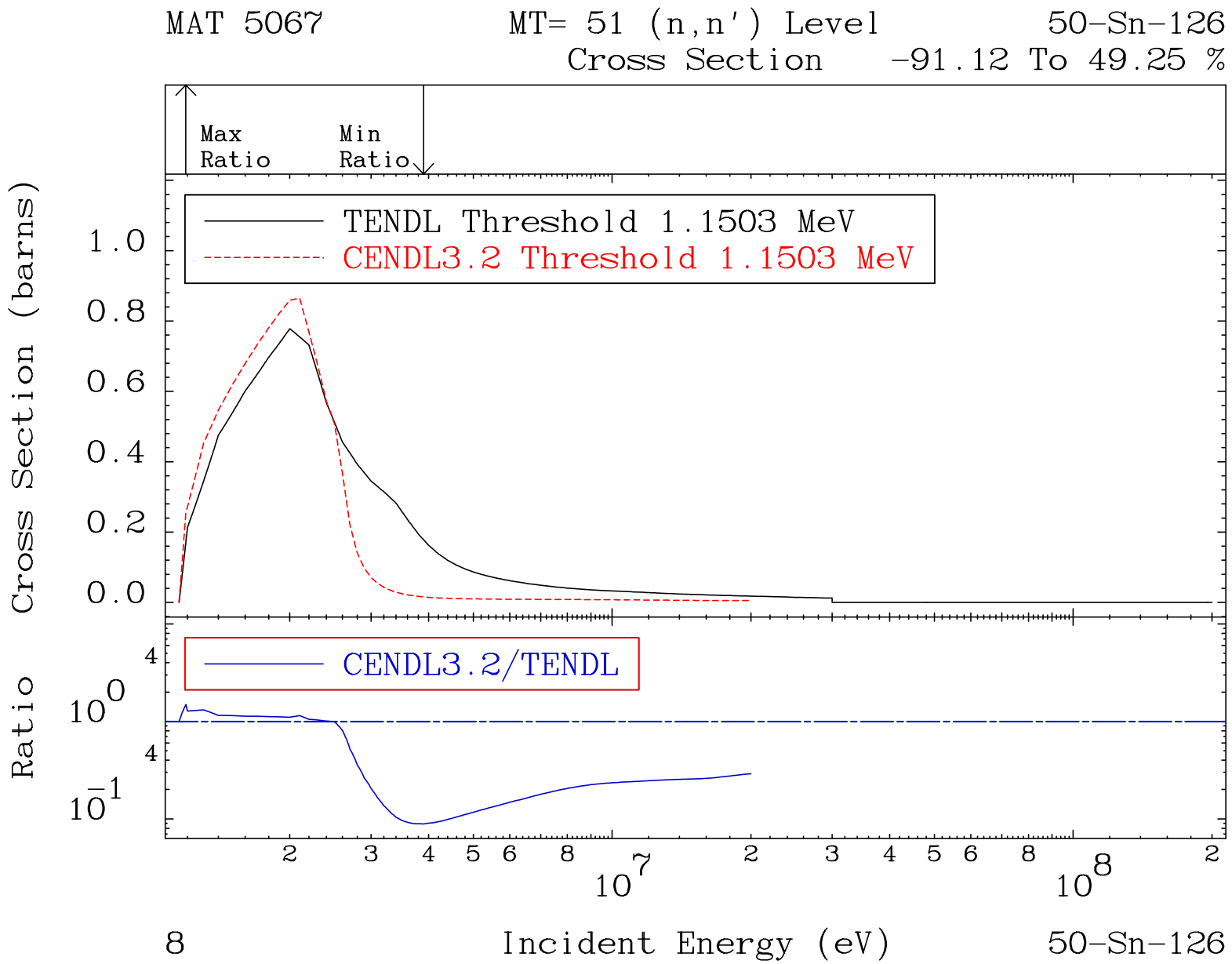

MAT 5067
Inelastic
Cross Section
50-Sn-126
-14.58 To 65.51 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.1503 MeV
CENDL3.2 Threshold 1.1503 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
3.0
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.6
1.2
0.8
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
3
Incident Energy (eV)
50-Sn-126

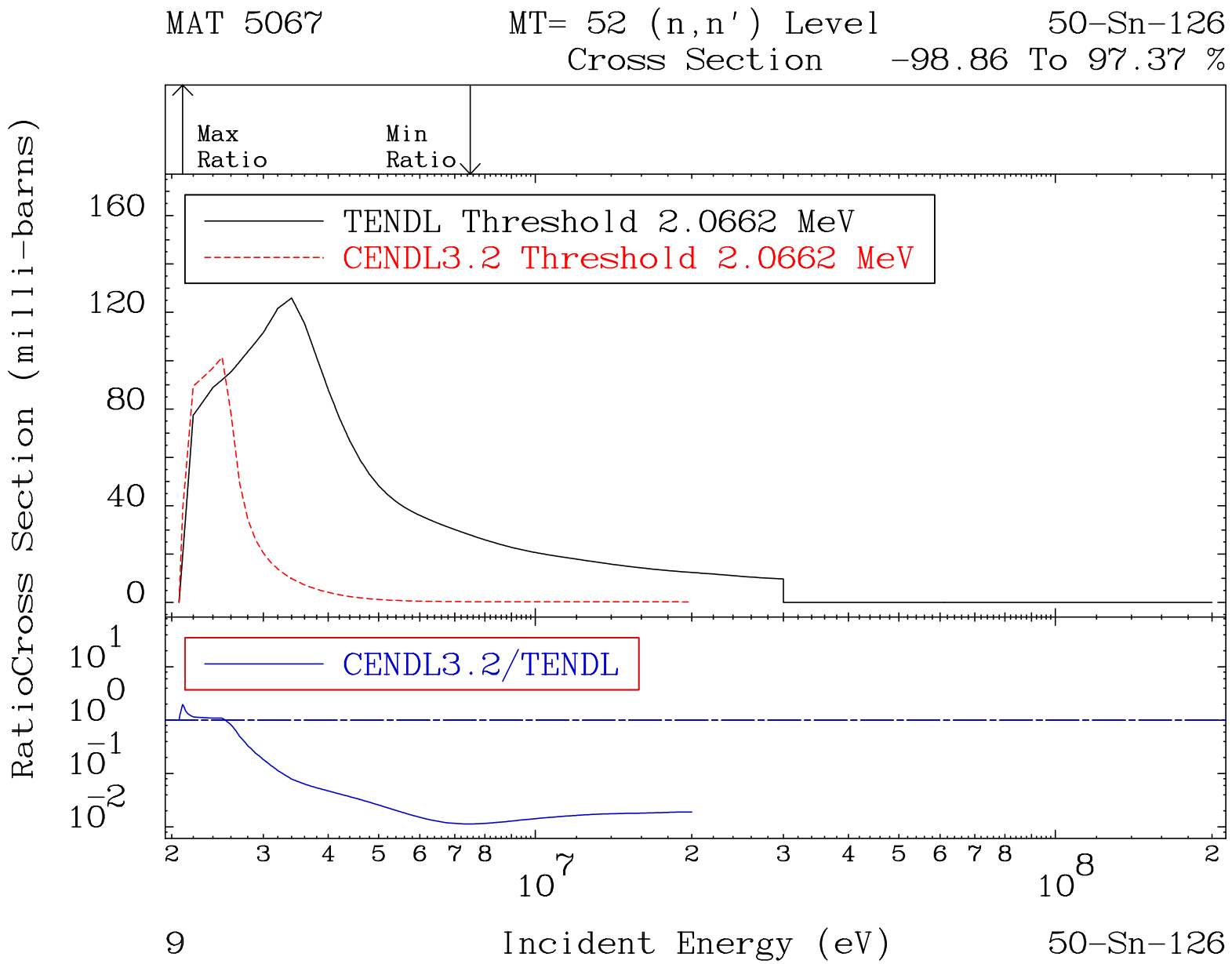

MAT 5067
(n,2n)
Cross Section
50-Sn-126
-100.0 To 34.10 %
Min Ratio
Max Ratio
TENDL Threshold 8.2584 MeV
CENDL3.2 Threshold 8.2584 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
Incident Energy (eV)
4
50-Sn-126

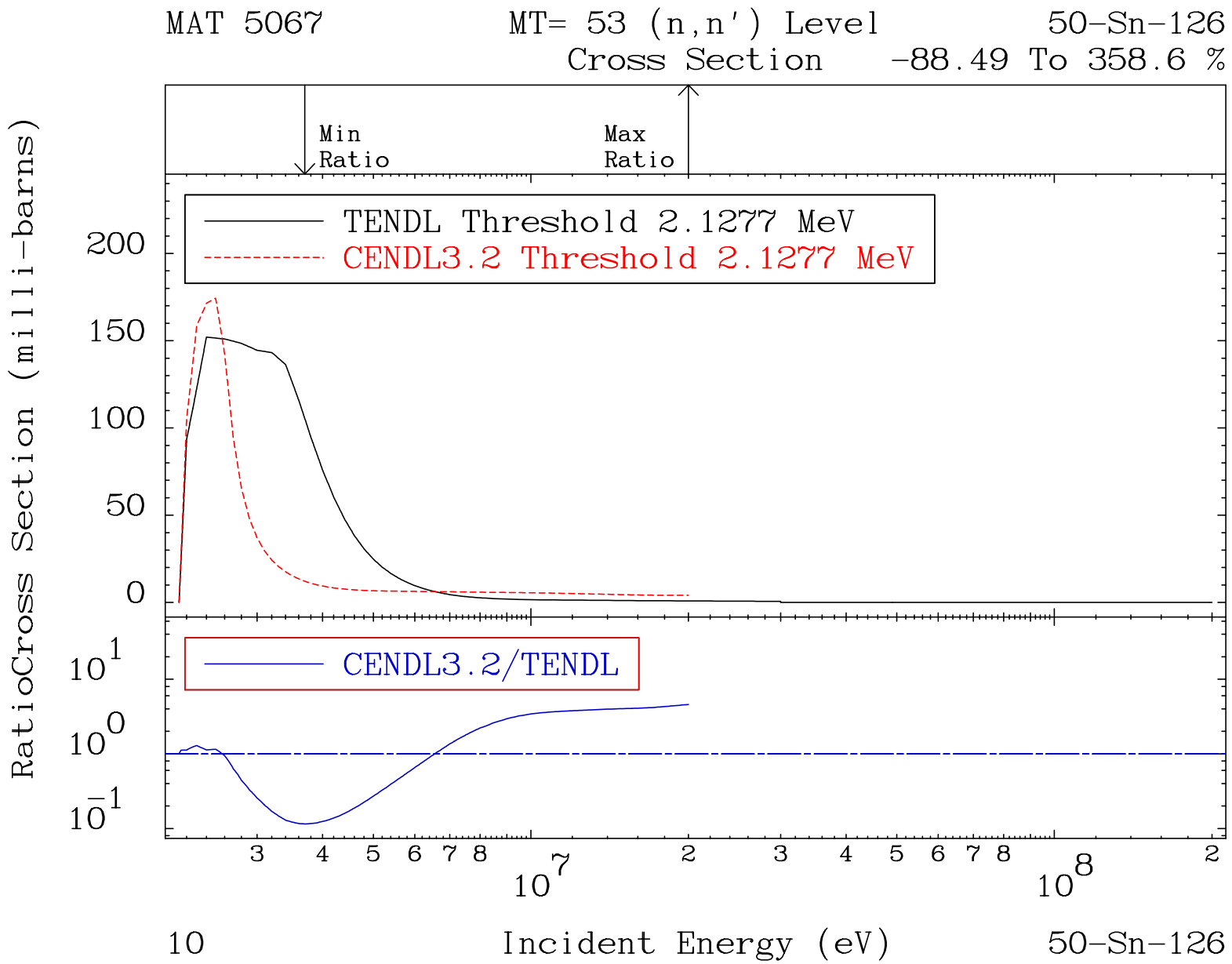

MAT 5067
(n,3n)
Cross Section
50-Sn-126
-99.31 To -20.95%
Min Ratio
Max Ratio
TENDL Threshold 14.038 MeV
CENDL3.2 Threshold 14.038 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
50-Sn-126

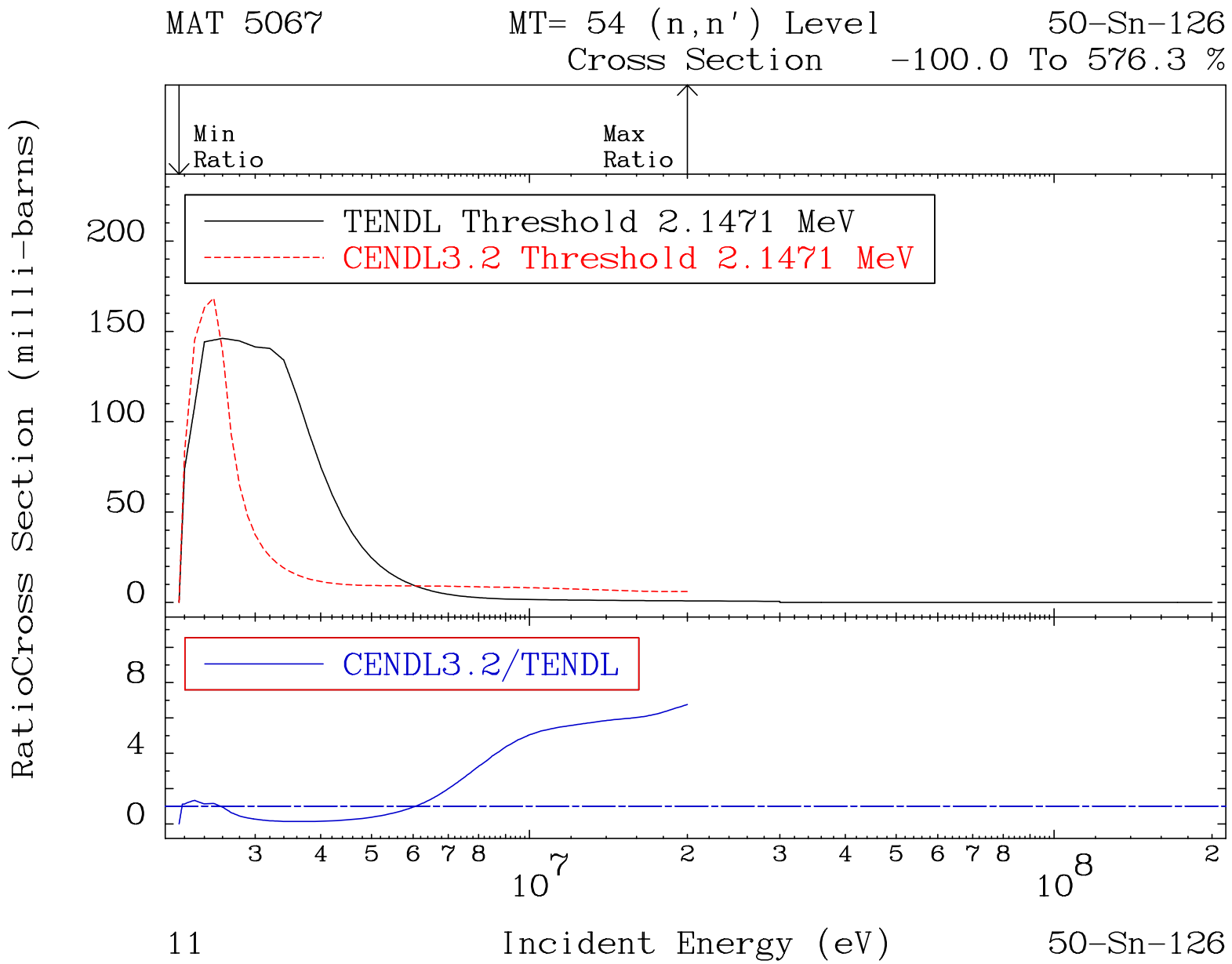

MAT 5067
(n,n') α
Cross Section
50-Sn-126
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 7.8904 MeV
CENDL3.2 Threshold 15.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
6
50-Sn-126

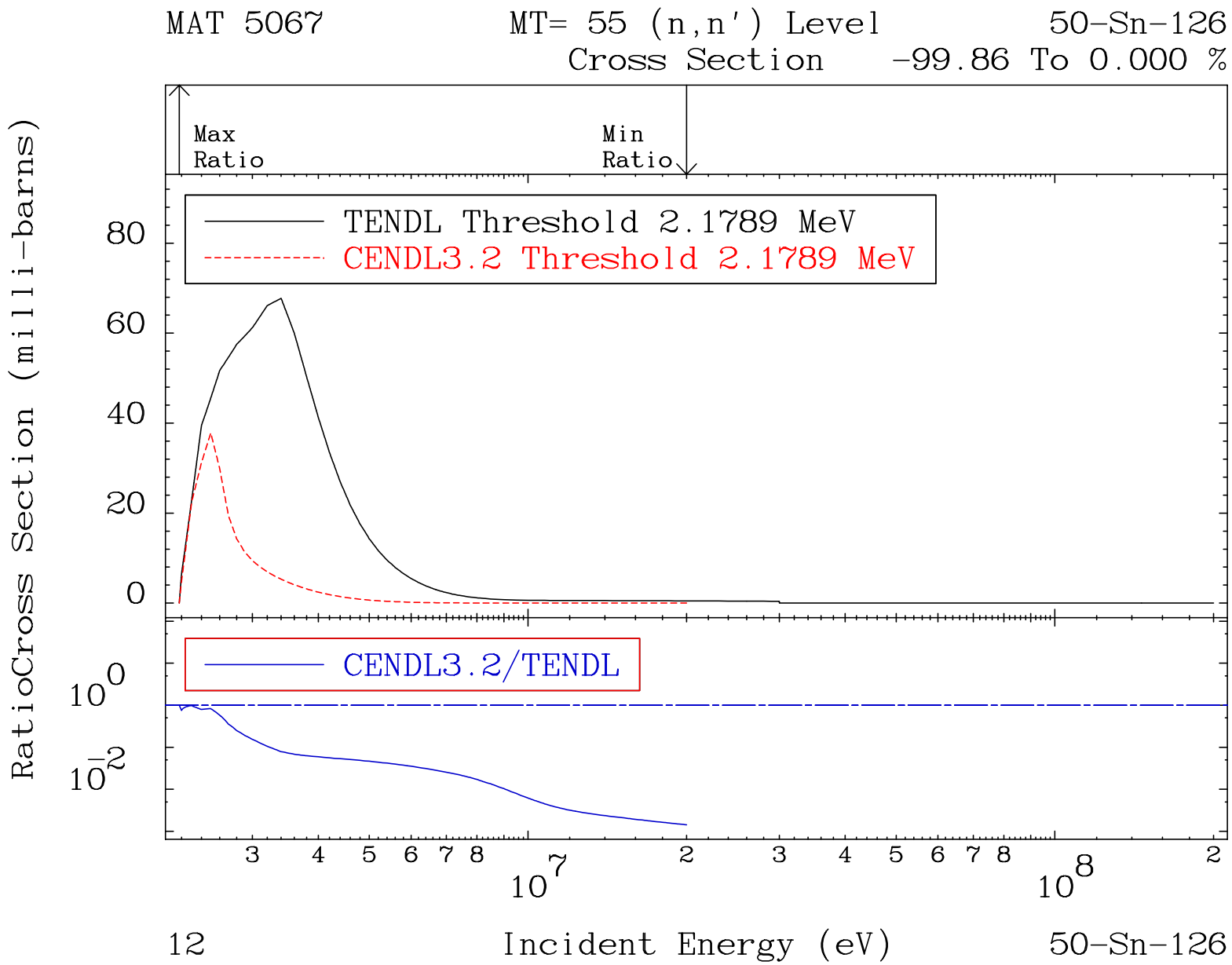

MAT 5067
(n,n') p
Cross Section
50-Sn-126
-100.0 To -65.87%
Min Ratio
Max Ratio
TENDL Threshold 12.995 MeV
CENDL3.2 Threshold 16.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
0.4
0.2
0.0
2
3
4
5
6
7
8
9
10^8
2
7
Incident Energy (eV)
50-Sn-126

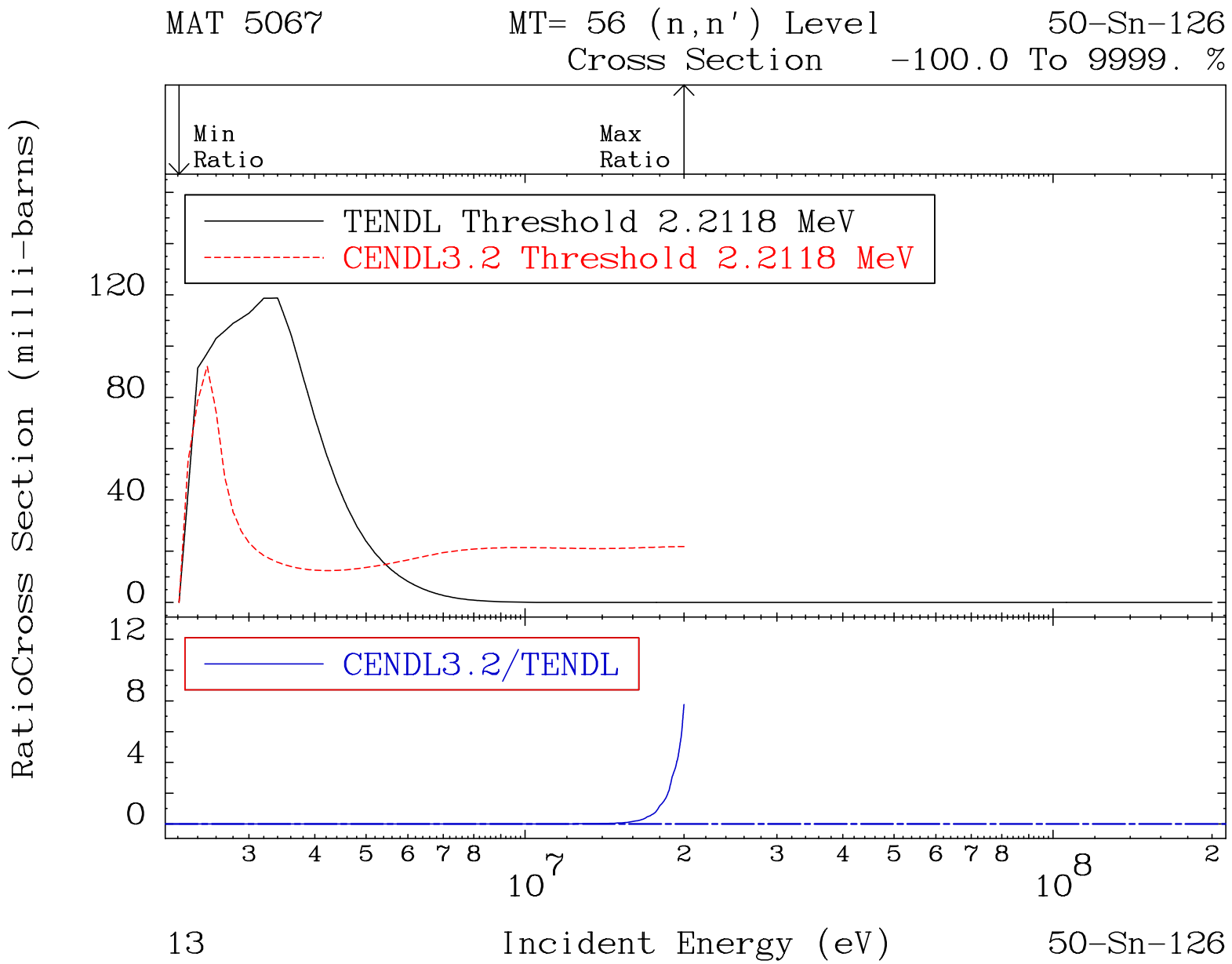

MAT 5067
MT= 51 (n,n') Level
50-Sn-126
Cross Section -91.12 To 49.25 %
Max Ratio
Min Ratio
TENDL Threshold 1.1503 MeV
CENDL3.2 Threshold 1.1503 MeV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
4
10^{0}
4
10^{-1}
2 3 4 5 6 8 10^{7} 2 3 4 5 6 8 10^{8} 2
Incident Energy (eV)
8
50-Sn-126

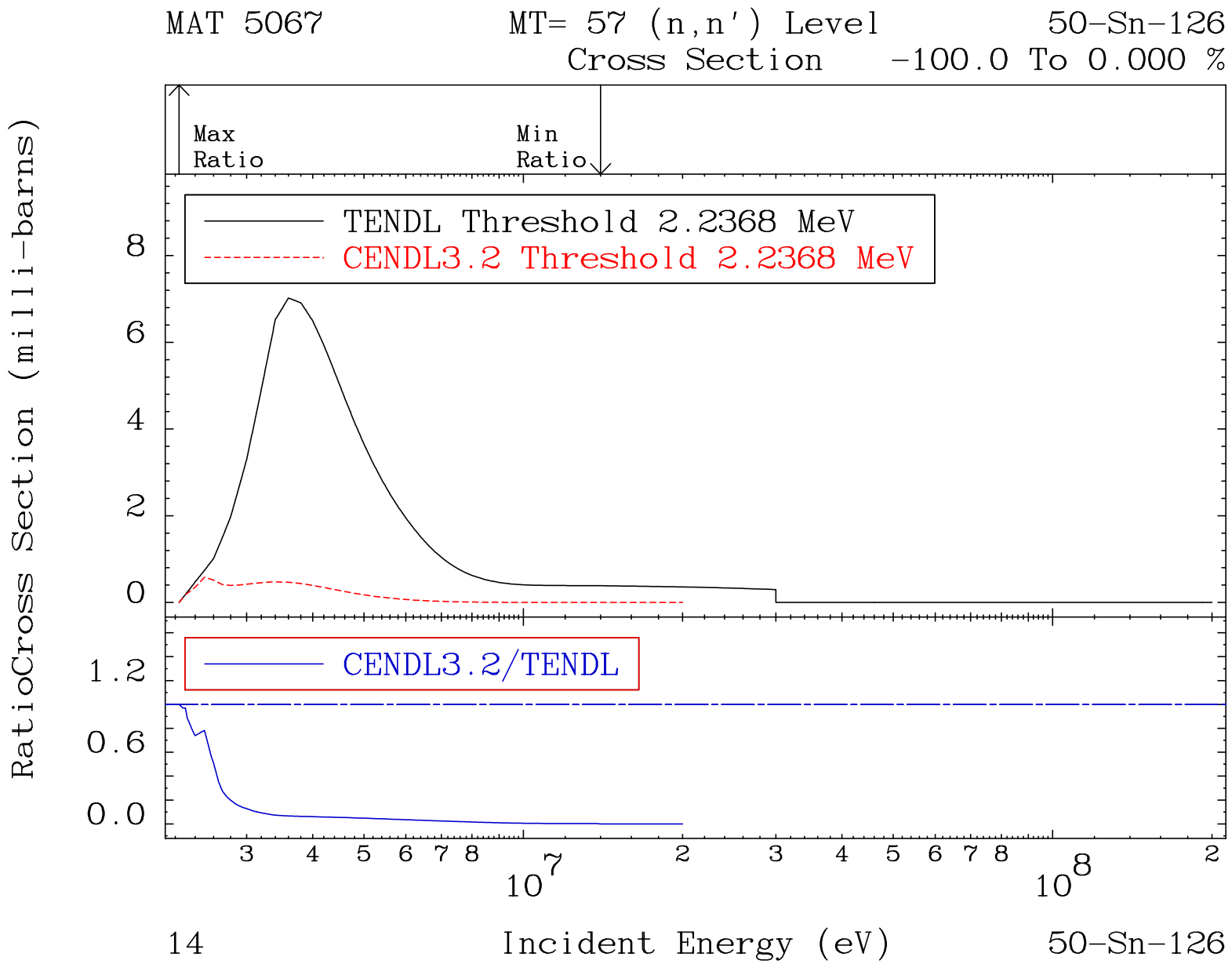

MAT 5067
MT= 52 (n,n') Level
50-Sn-126
Cross Section
-98.86 To 97.37 %
Max Ratio
Min Ratio
TENDL Threshold 2.0662 MeV
CENDL3.2 Threshold 2.0662 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
10^1
10^0
10^-1
10^-2
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
9
50-Sn-126

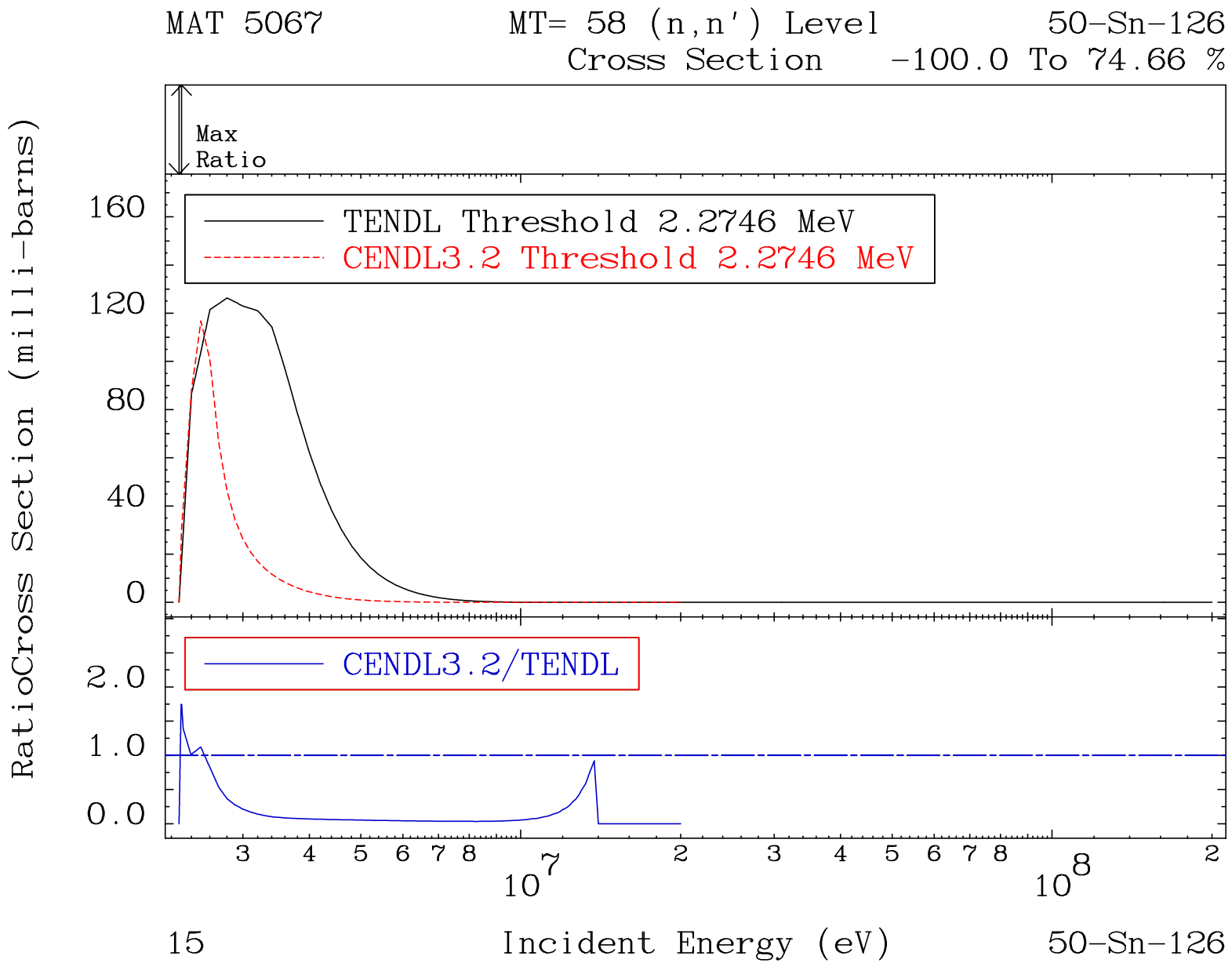

MAT 5067
MT= 53 (n,n') Level
50-Sn-126
Cross Section -88.49 To 358.6 %
Min Ratio
Max Ratio
TENDL Threshold 2.1277 MeV
CENDL3.2 Threshold 2.1277 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^{1}
10^{0}
10^{-1}
3 4 5 6 7 8 10^{7} 2 3 4 5 6 7 8 10^{8} 2
10
Incident Energy (eV)
50-Sn-126

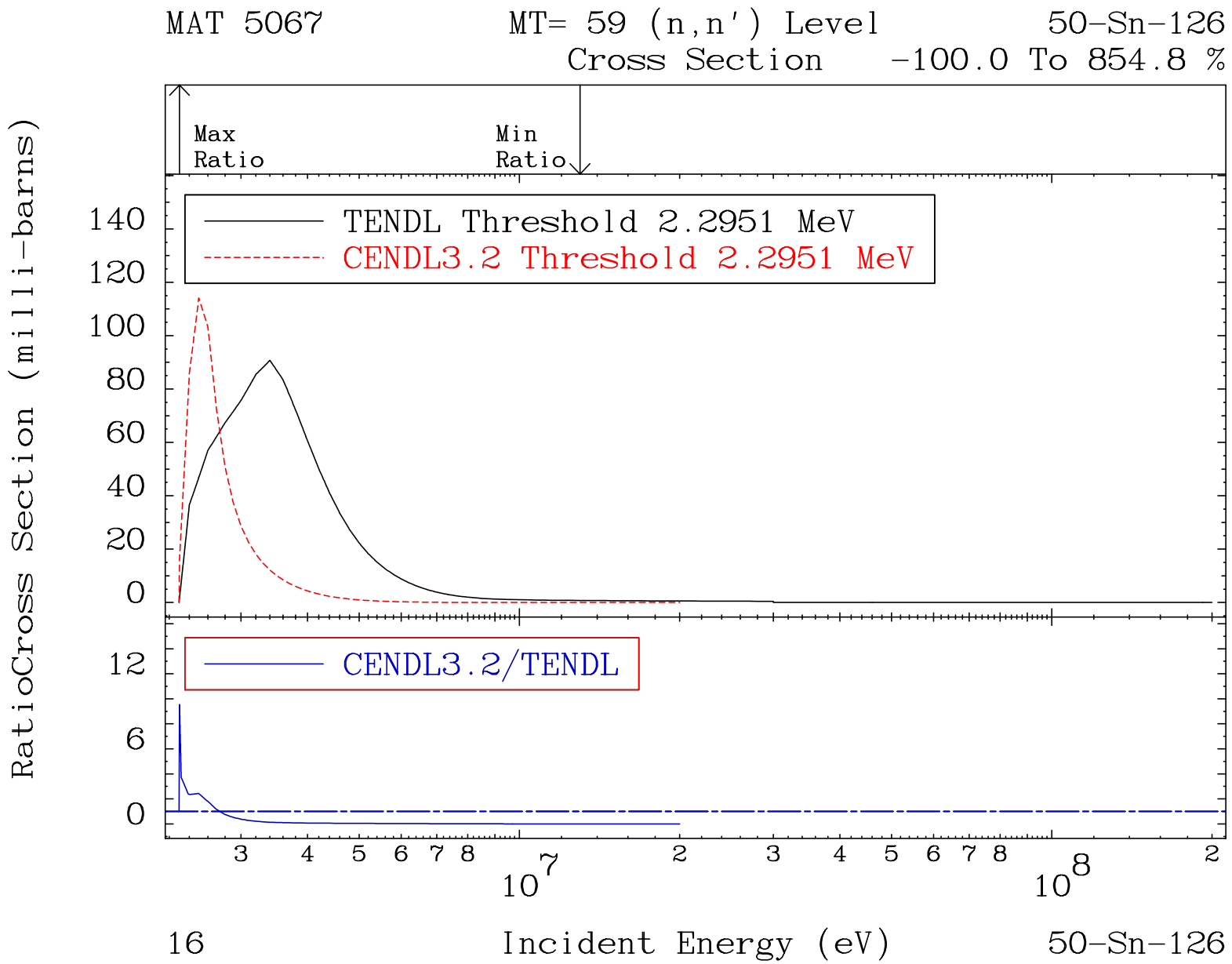

MAT 5067
MT= 54 (n,n') Level
50-Sn-126
Cross Section -100.0 To 576.3 %
Min Ratio
Max Ratio
TENDL Threshold 2.1471 MeV
CENDL3.2 Threshold 2.1471 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
8
4
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
11
Incident Energy (eV)
50-Sn-126

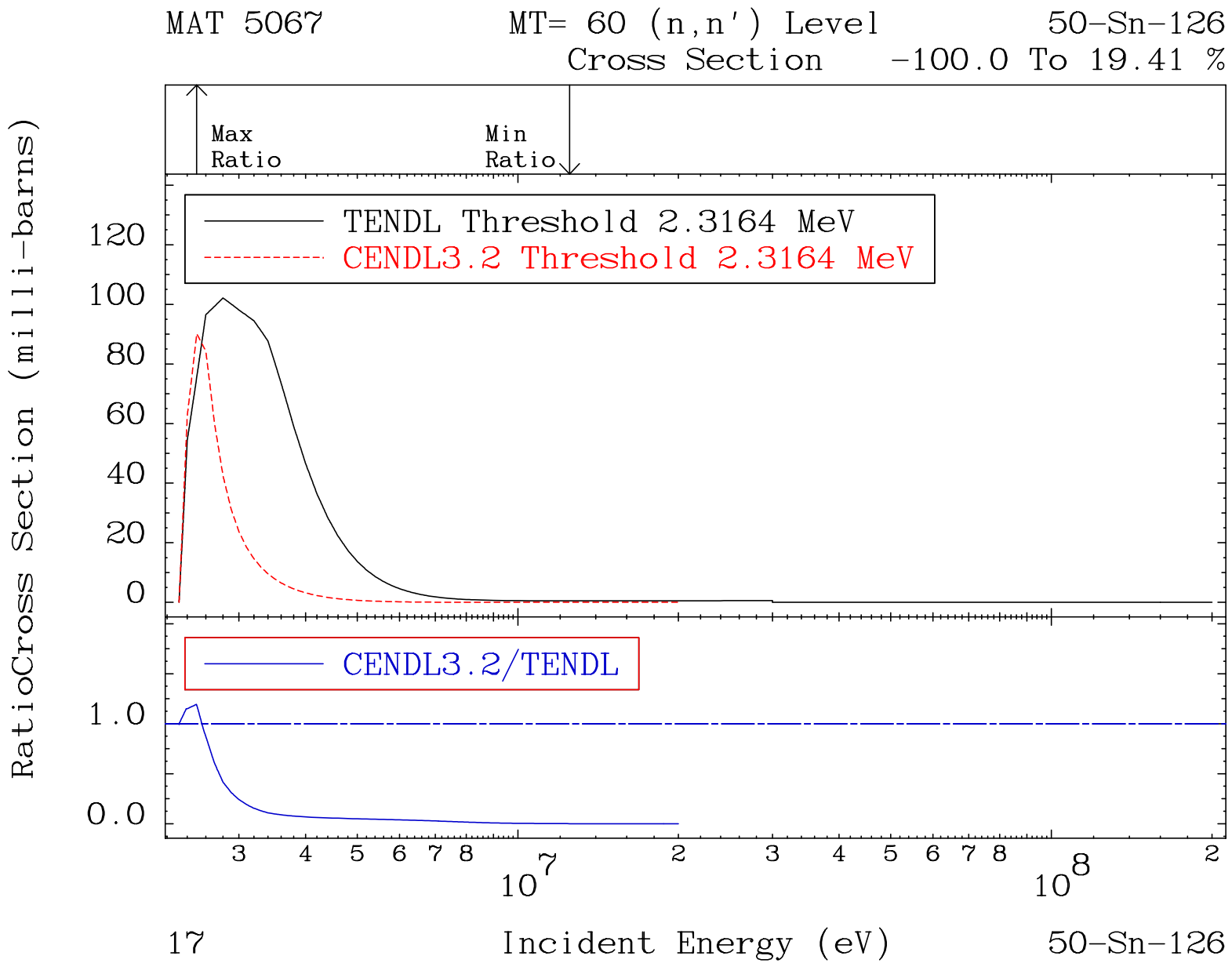

MAT 5067
MT= 55 (n,n') Level
50-Sn-126
Cross Section -99.86 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 2.1789 MeV
CENDL3.2 Threshold 2.1789 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^0
10^-2
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
12
Incident Energy (eV)
50-Sn-126

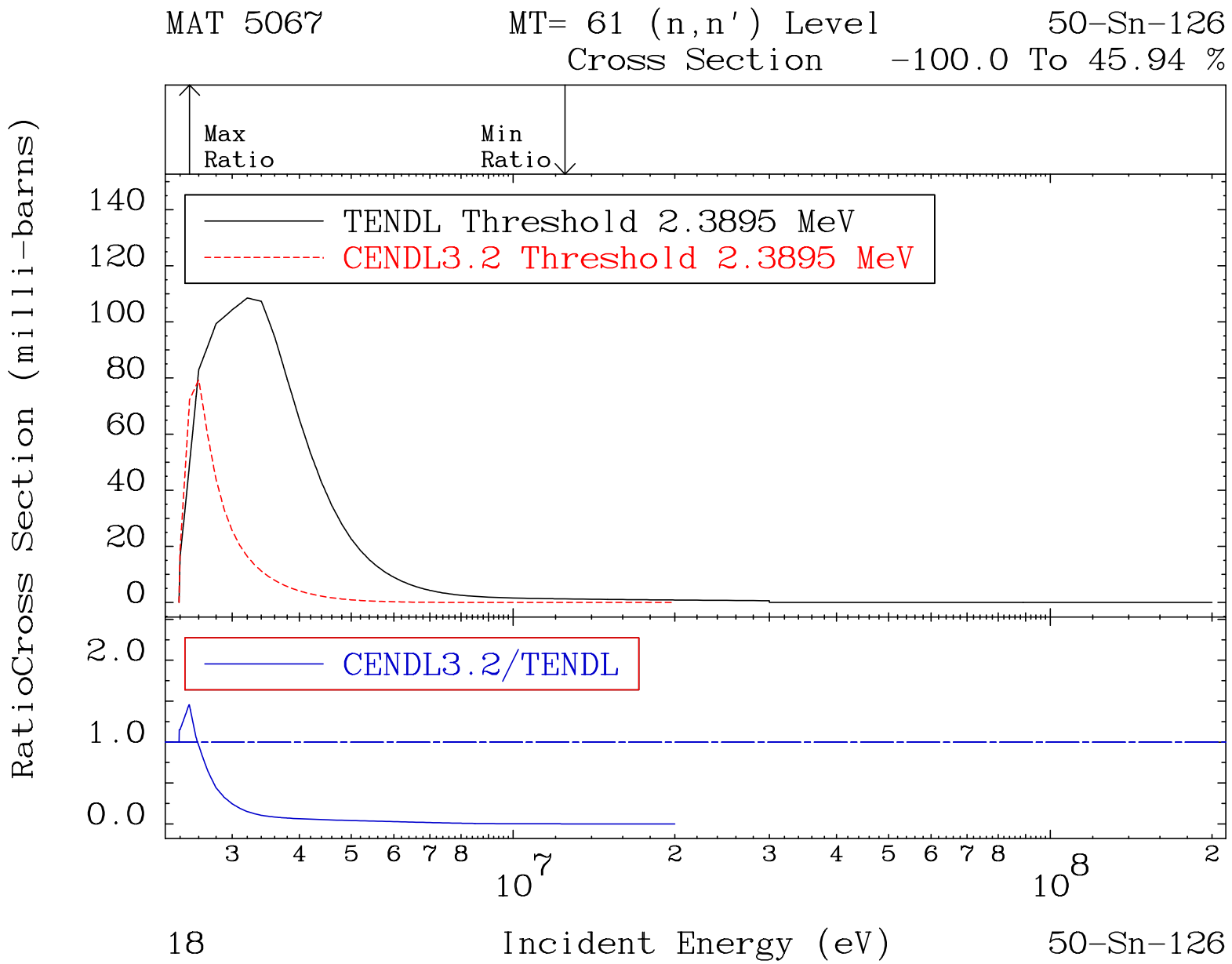

MAT 5067
MT= 56 (n,n') Level
50-Sn-126
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.2118 MeV
CENDL3.2 Threshold 2.2118 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
80
40
0
12
8
4
0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
13
Incident Energy (eV)
50-Sn-126

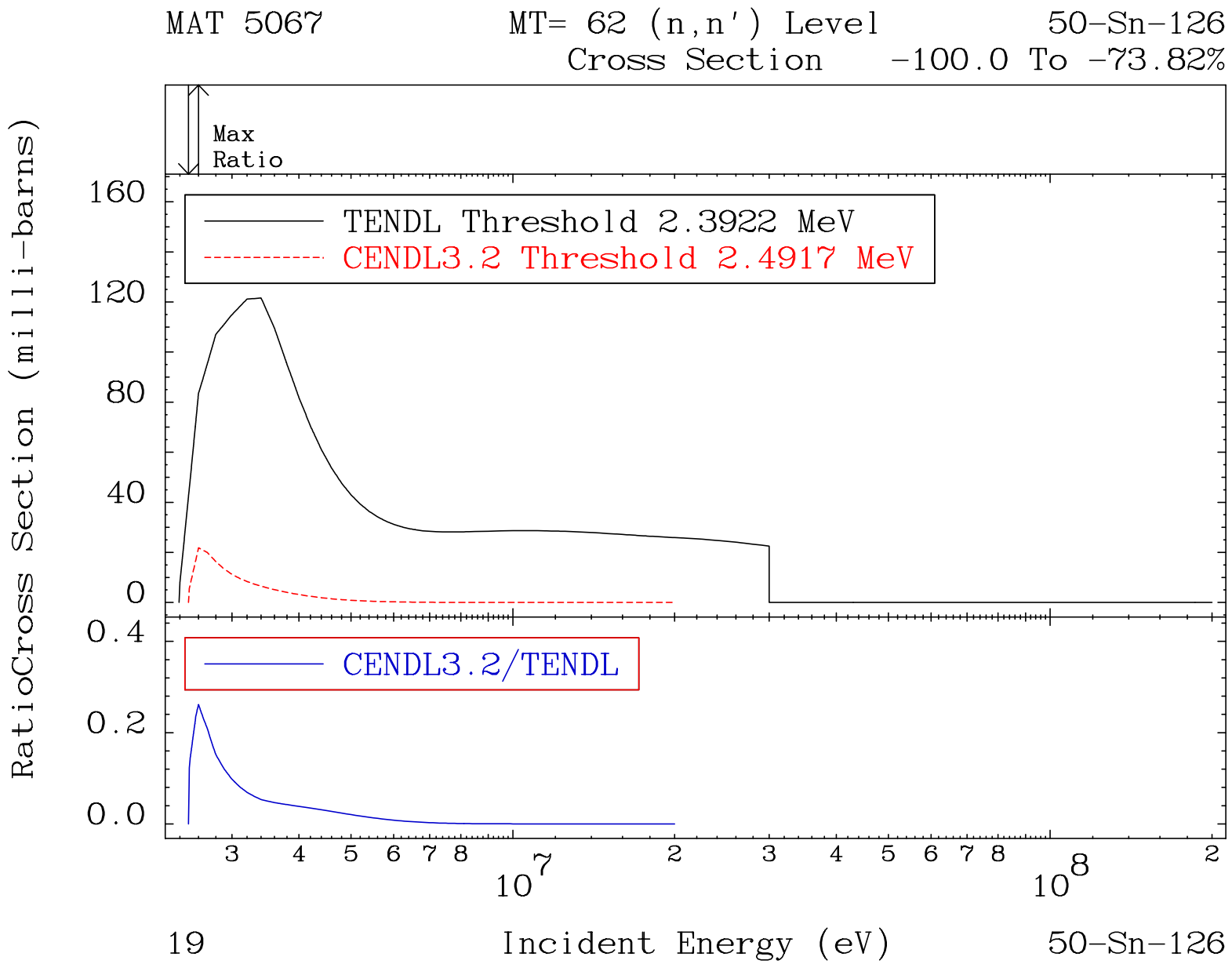

MAT 5067
MT= 57 (n,n') Level
50-Sn-126
Cross Section -100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 2.2368 MeV
CENDL3.2 Threshold 2.2368 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
50-Sn-126

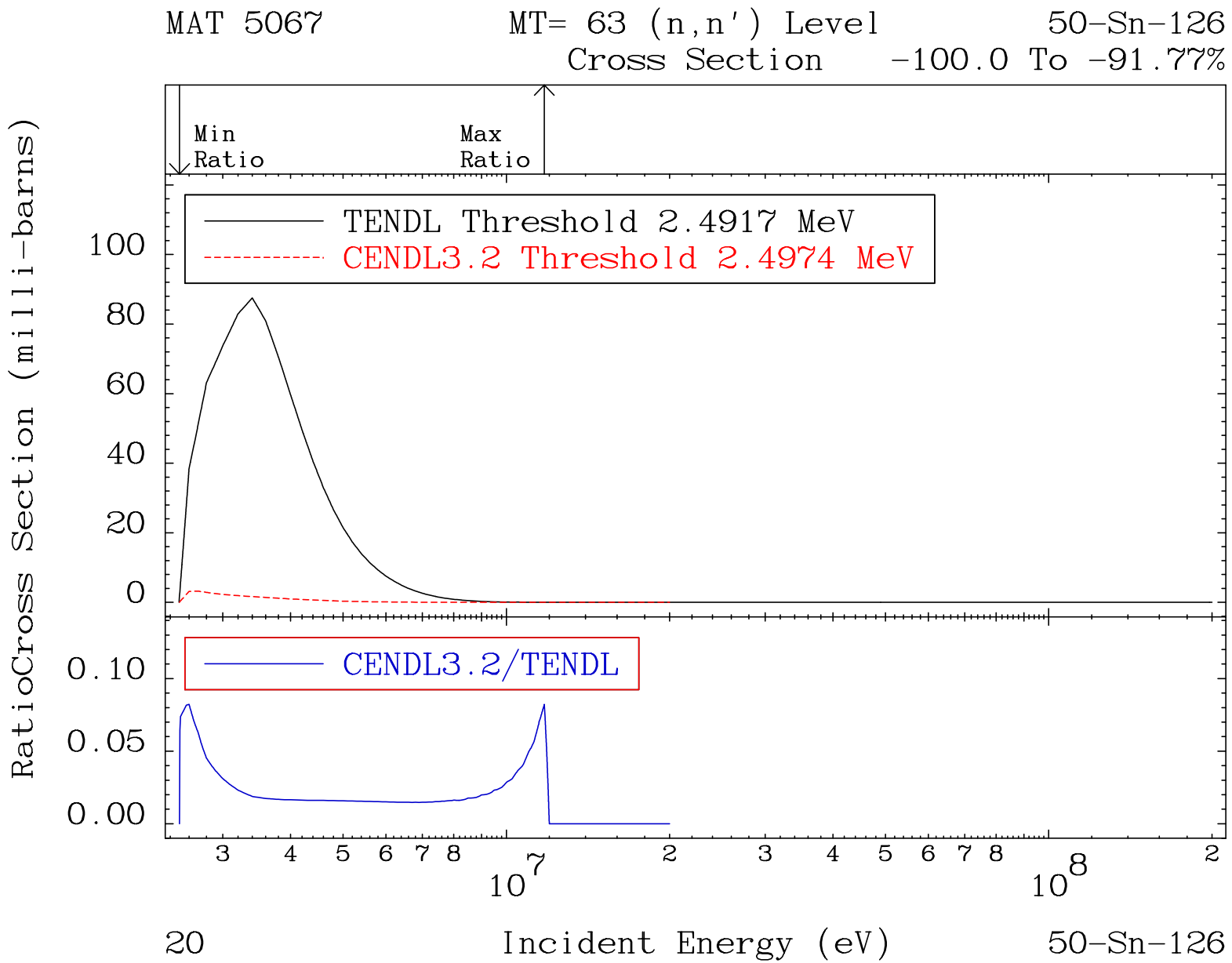

MAT 5067
MT= 58 (n,n') Level
50-Sn-126
Cross Section
-100.0 To 74.66 %
Max
Ratio
TENDL Threshold 2.2746 MeV
CENDL3.2 Threshold 2.2746 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
15
Incident Energy (eV)
50-Sn-126

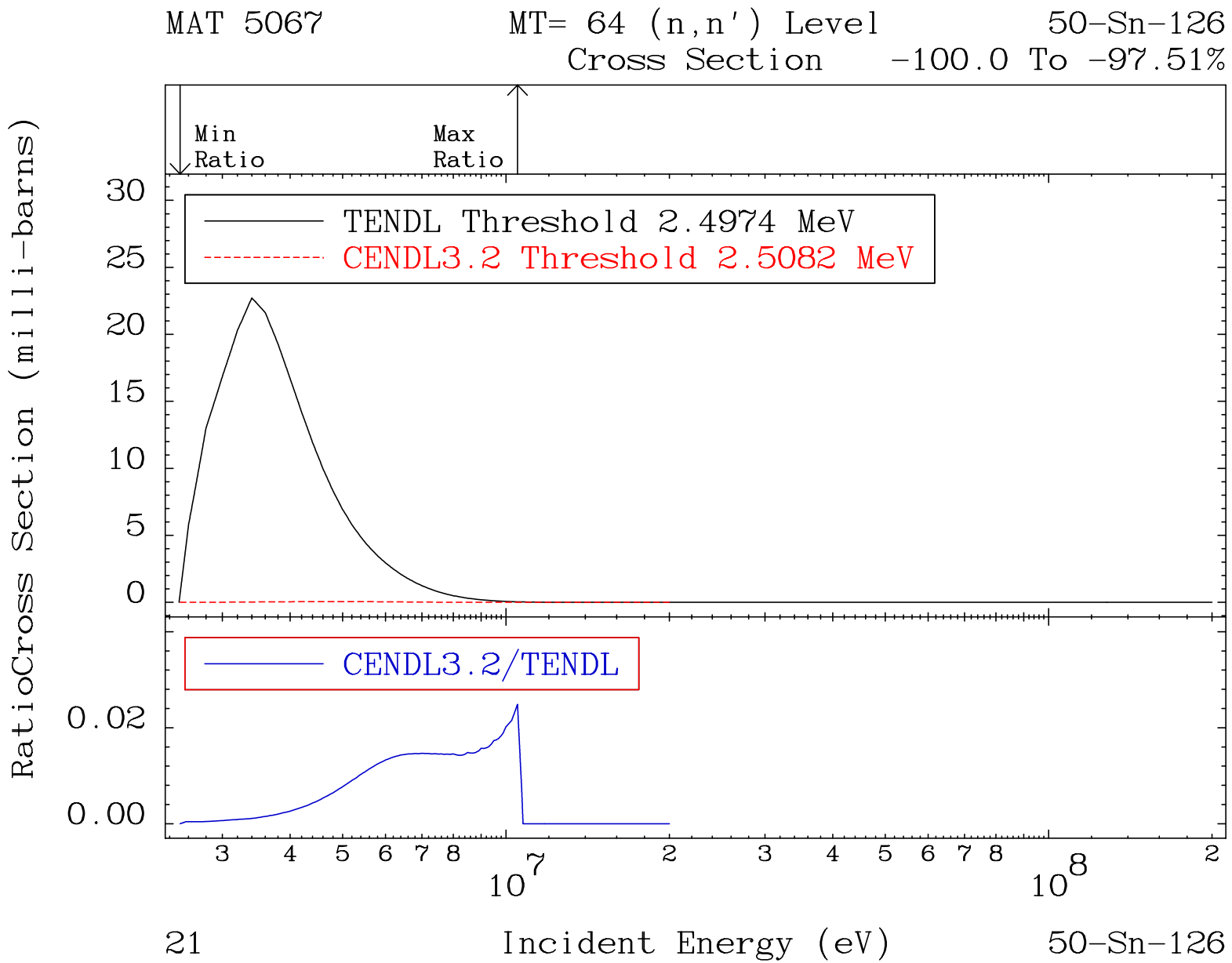

MAT 5067
MT= 59 (n,n') Level
50-Sn-126
Cross Section
-100.0 To 854.8 %
Max Ratio
Min Ratio
TENDL Threshold 2.2951 MeV
CENDL3.2 Threshold 2.2951 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
12
6
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
16
Incident Energy (eV)
50-Sn-126

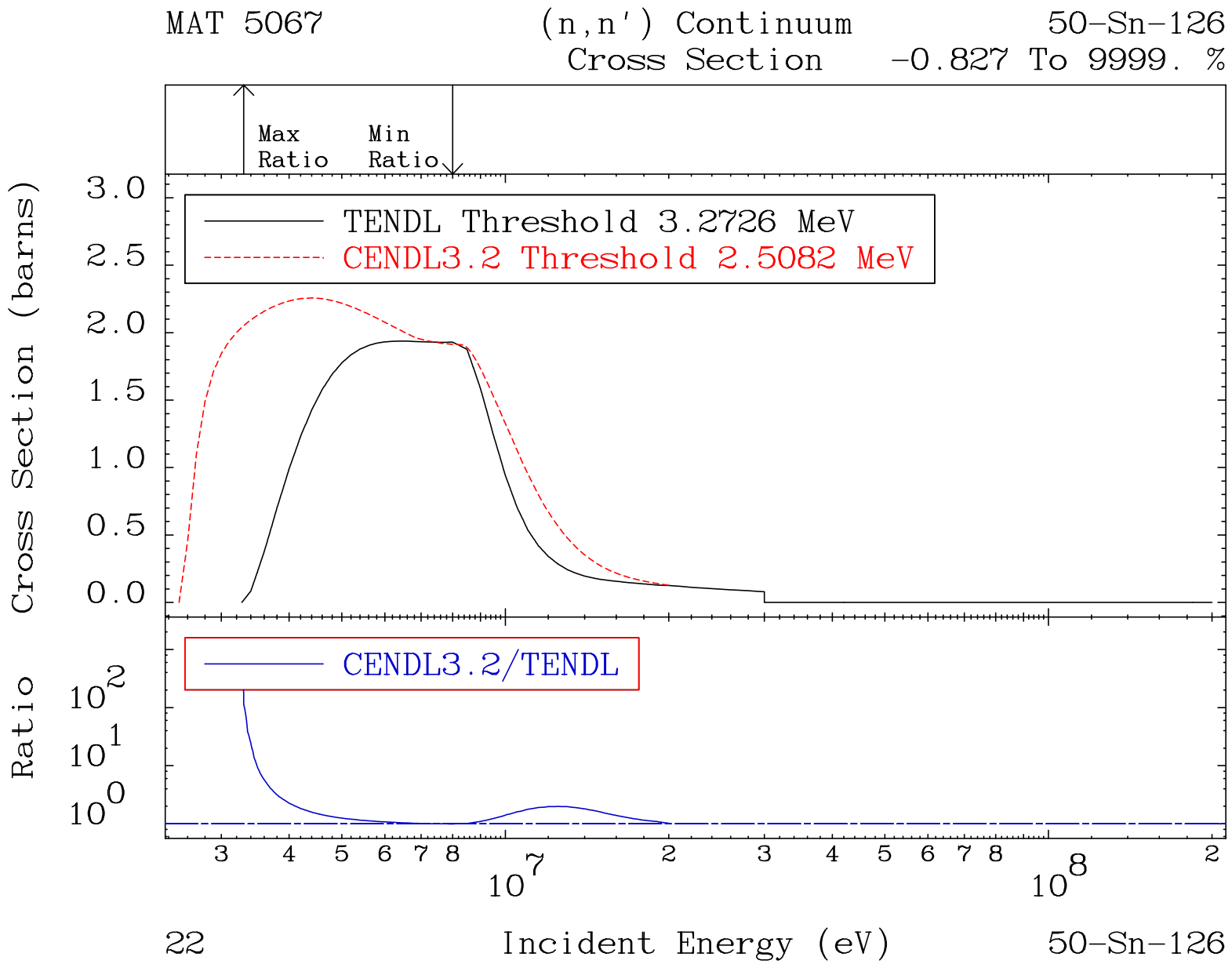

MAT 5067
MT= 60 (n,n') Level
50-Sn-126
Cross Section -100.0 To 19.41 %
Max Ratio
Min Ratio
TENDL Threshold 2.3164 MeV
CENDL3.2 Threshold 2.3164 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
17
Incident Energy (eV)
50-Sn-126

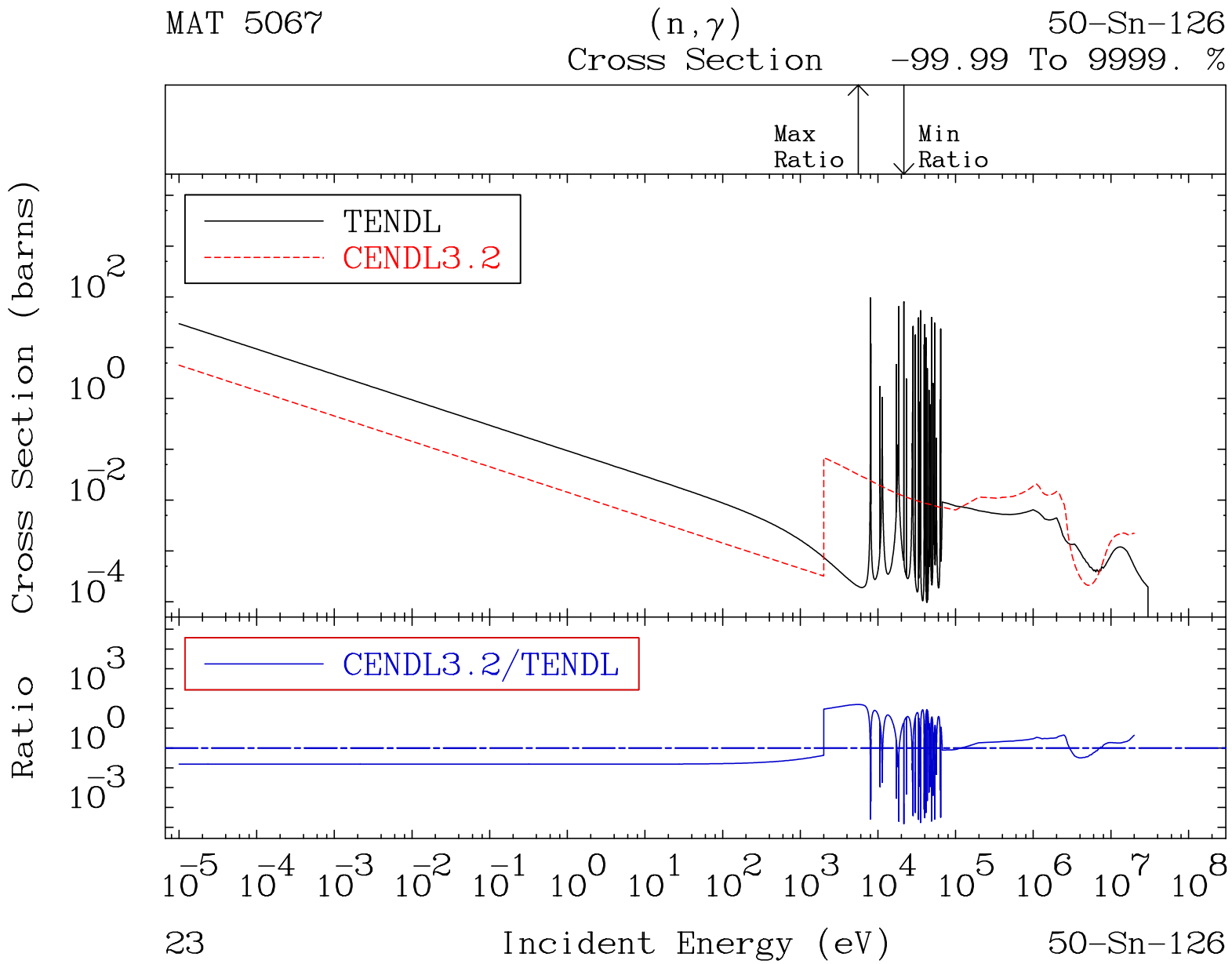

MAT 5067
MT= 61 (n,n') Level
50-Sn-126
Cross Section -100.0 To 45.94 %
Max Ratio
Min Ratio
TENDL Threshold 2.3895 MeV
CENDL3.2 Threshold 2.3895 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
50-Sn-126

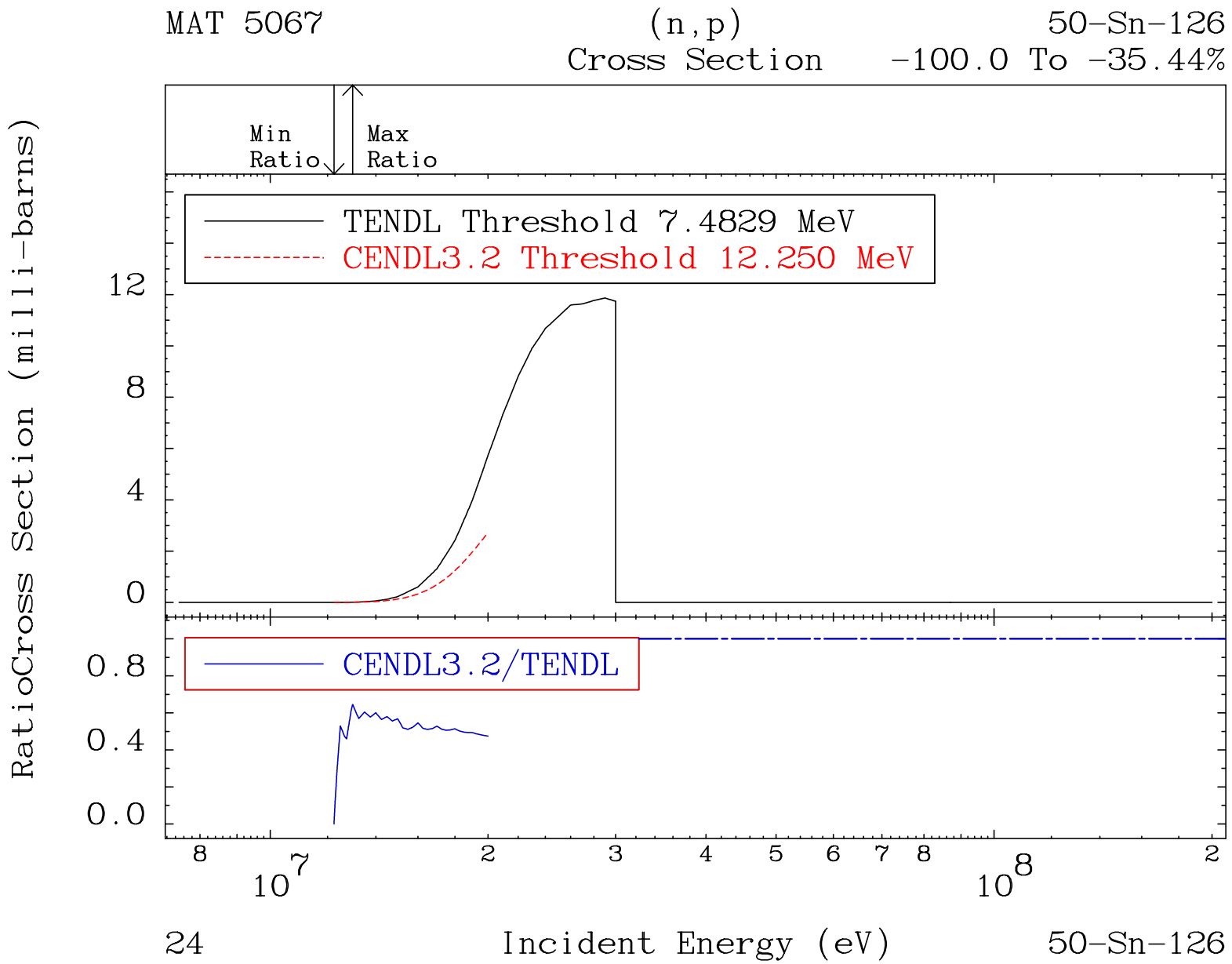

MAT 5067
MT= 62 (n,n') Level
50-Sn-126
Cross Section
-100.0 To -73.82%
Max
Ratio
TENDL Threshold 2.3922 MeV
CENDL3.2 Threshold 2.4917 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
0.4
0.2
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
50-Sn-126

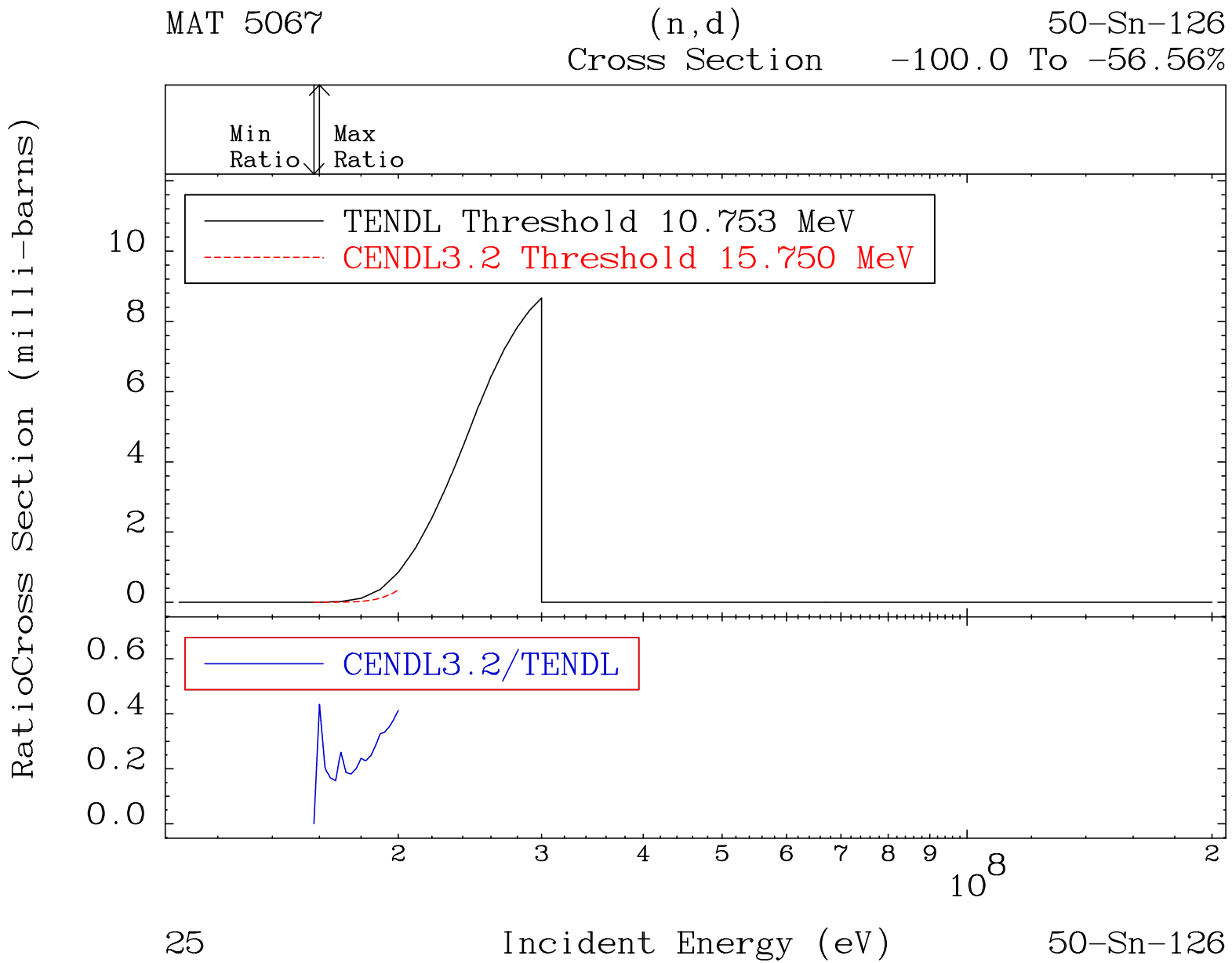

MAT 5067
MT= 63 (n,n') Level
50-Sn-126
Cross Section -100.0 To -91.77%
Min Ratio
Max Ratio
TENDL Threshold 2.4917 MeV
CENDL3.2 Threshold 2.4974 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
0.10
0.05
0.00
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
20
Incident Energy (eV)
50-Sn-126

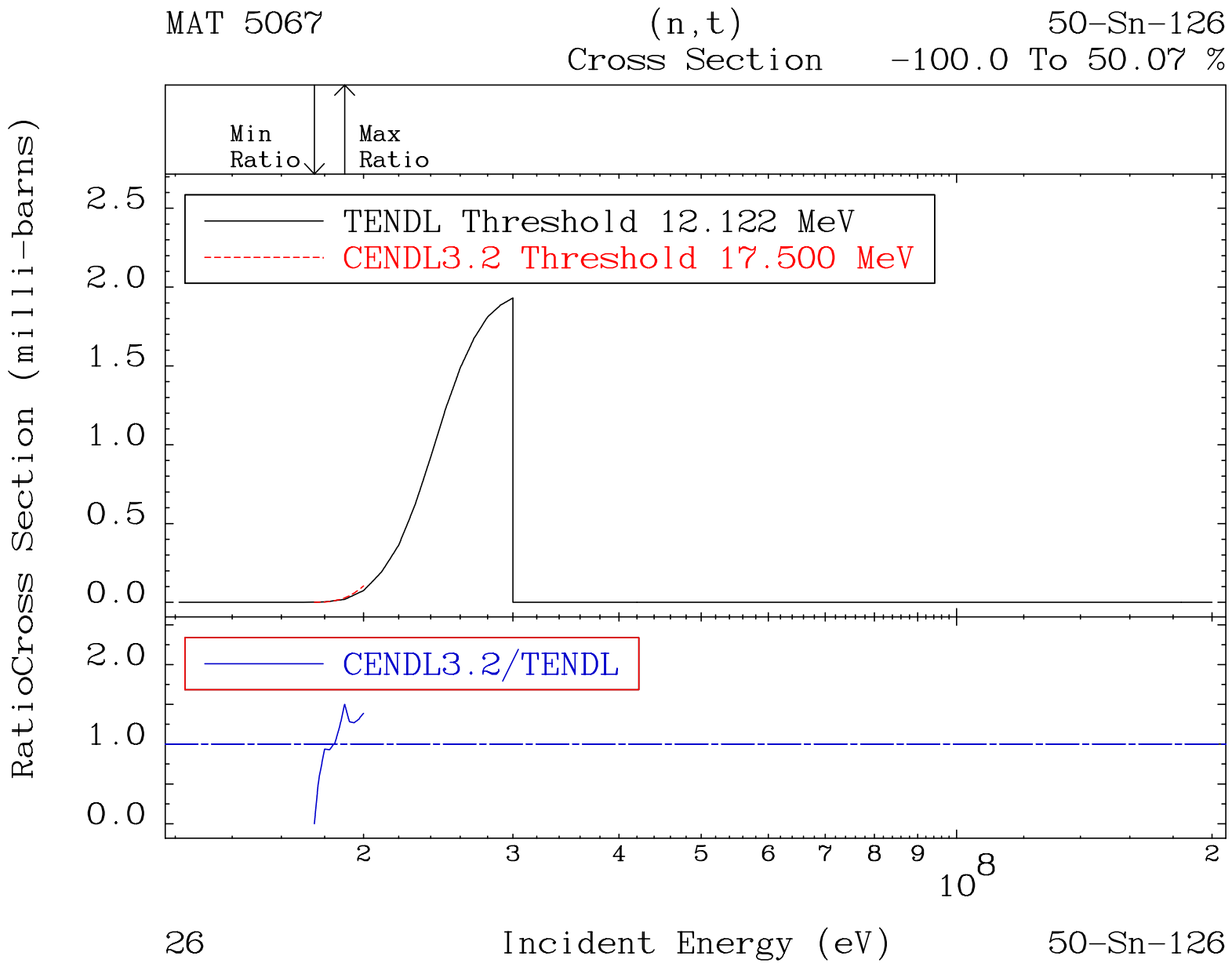

MAT 5067
MT= 64 (n,n') Level
50-Sn-126
Cross Section -100.0 To -97.51%
Min Ratio
Max Ratio
TENDL Threshold 2.4974 MeV
CENDL3.2 Threshold 2.5082 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
0.02
0.00
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
21
Incident Energy (eV)
50-Sn-126

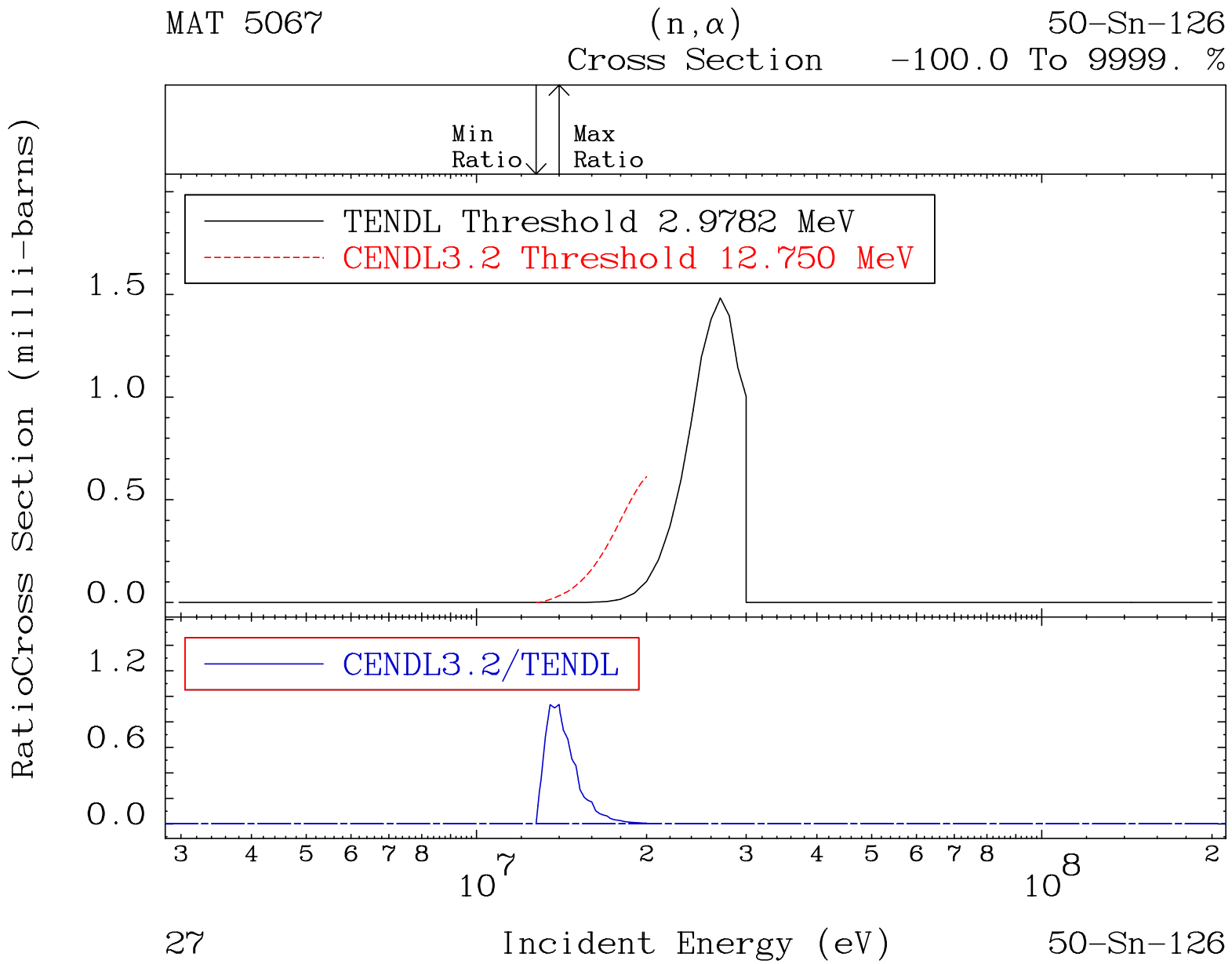

MAT 5067
(n,n') Continuum
Cross Section
50-Sn-126
-0.827 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 3.2726 MeV
CENDL3.2 Threshold 2.5082 MeV
Cross Section (barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
10^2
10^1
10^0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
50-Sn-126

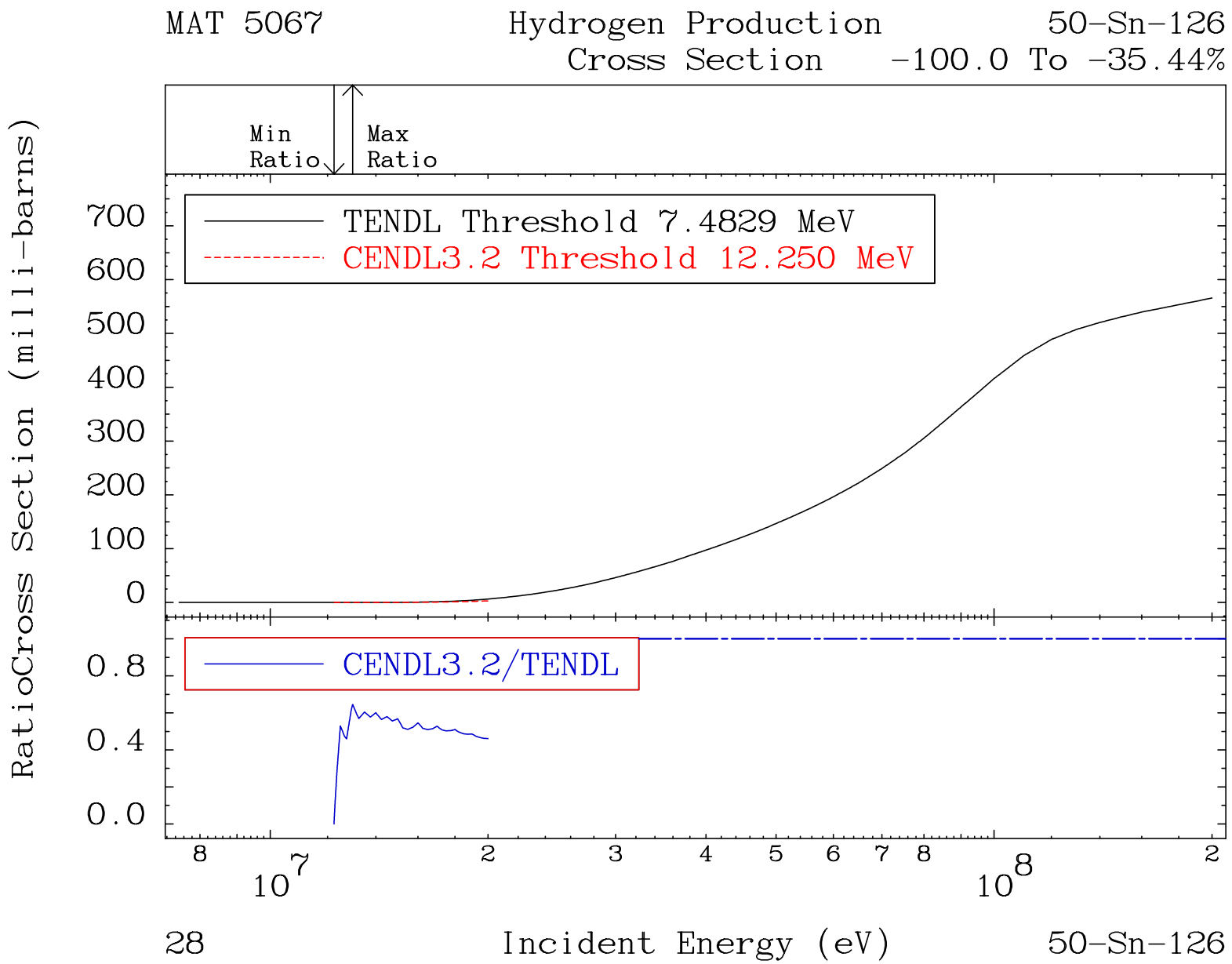

MAT 5067
(n,γ)
Cross Section
50-Sn-126
-99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
50-Sn-126

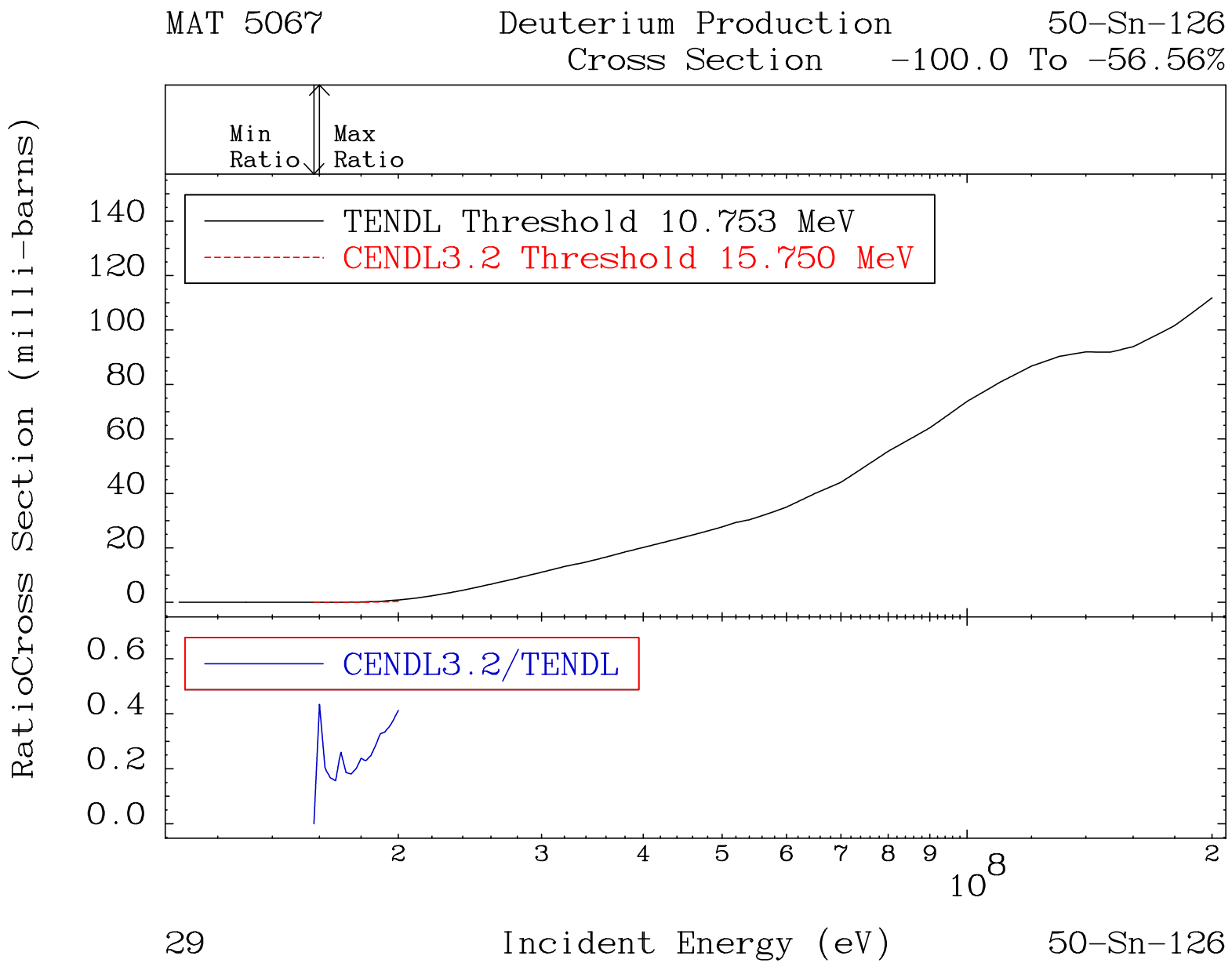

MAT 5067
(n,p)
Cross Section
50-Sn-126
-100.0 To -35.44%
Min Ratio
Max Ratio
TENDL Threshold 7.4829 MeV
CENDL3.2 Threshold 12.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
12
8
4
0
0.8
0.4
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
24
Incident Energy (eV)
50-Sn-126

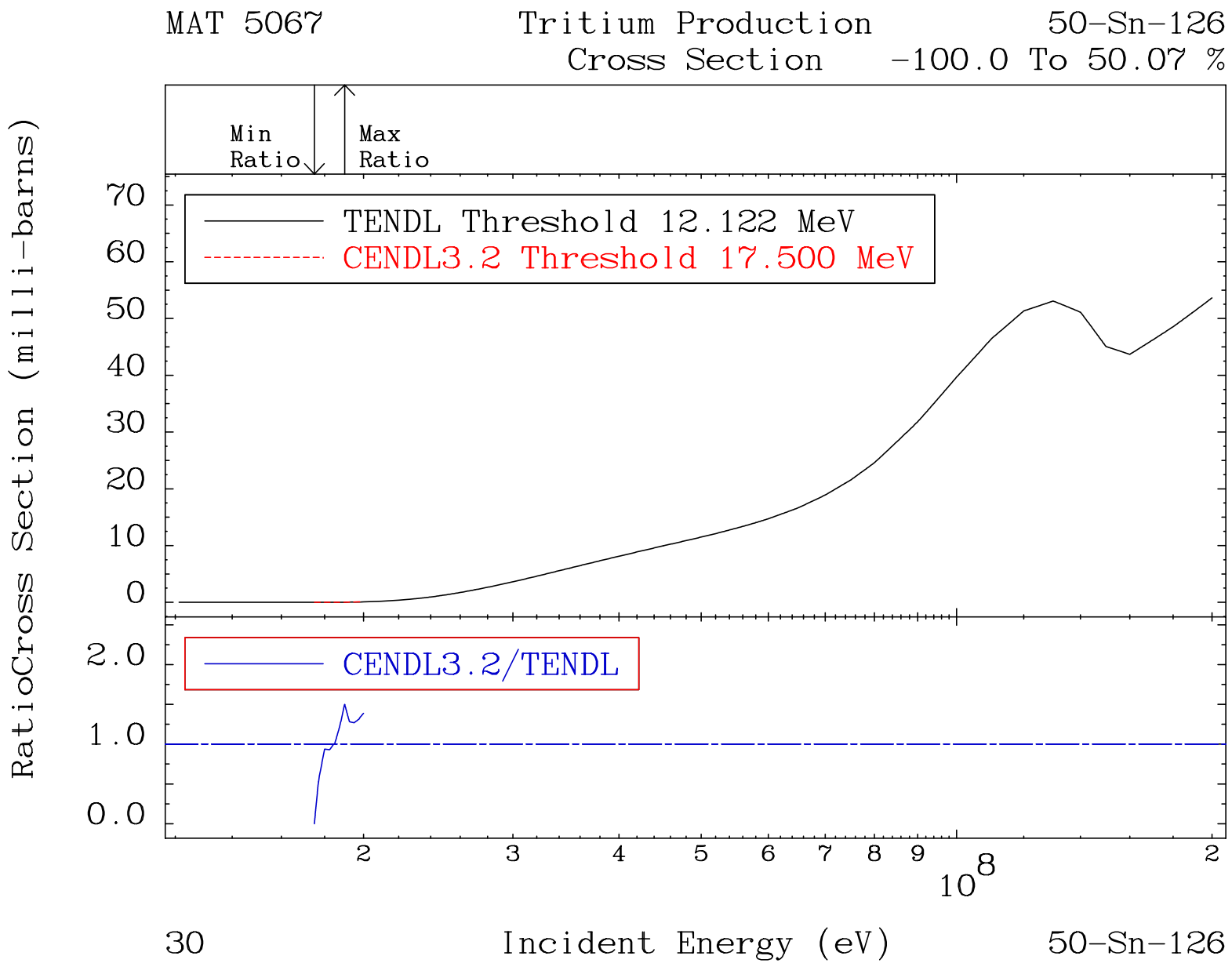

MAT 5067
(n,d)
50-Sn-126
Cross Section
-100.0 To -56.56%
Min Ratio
Max Ratio
TENDL Threshold 10.753 MeV
CENDL3.2 Threshold 15.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
0.6
0.4
0.2
0.0
2
3
4
5
6
7
8
9
10^8
2
25
Incident Energy (eV)
50-Sn-126

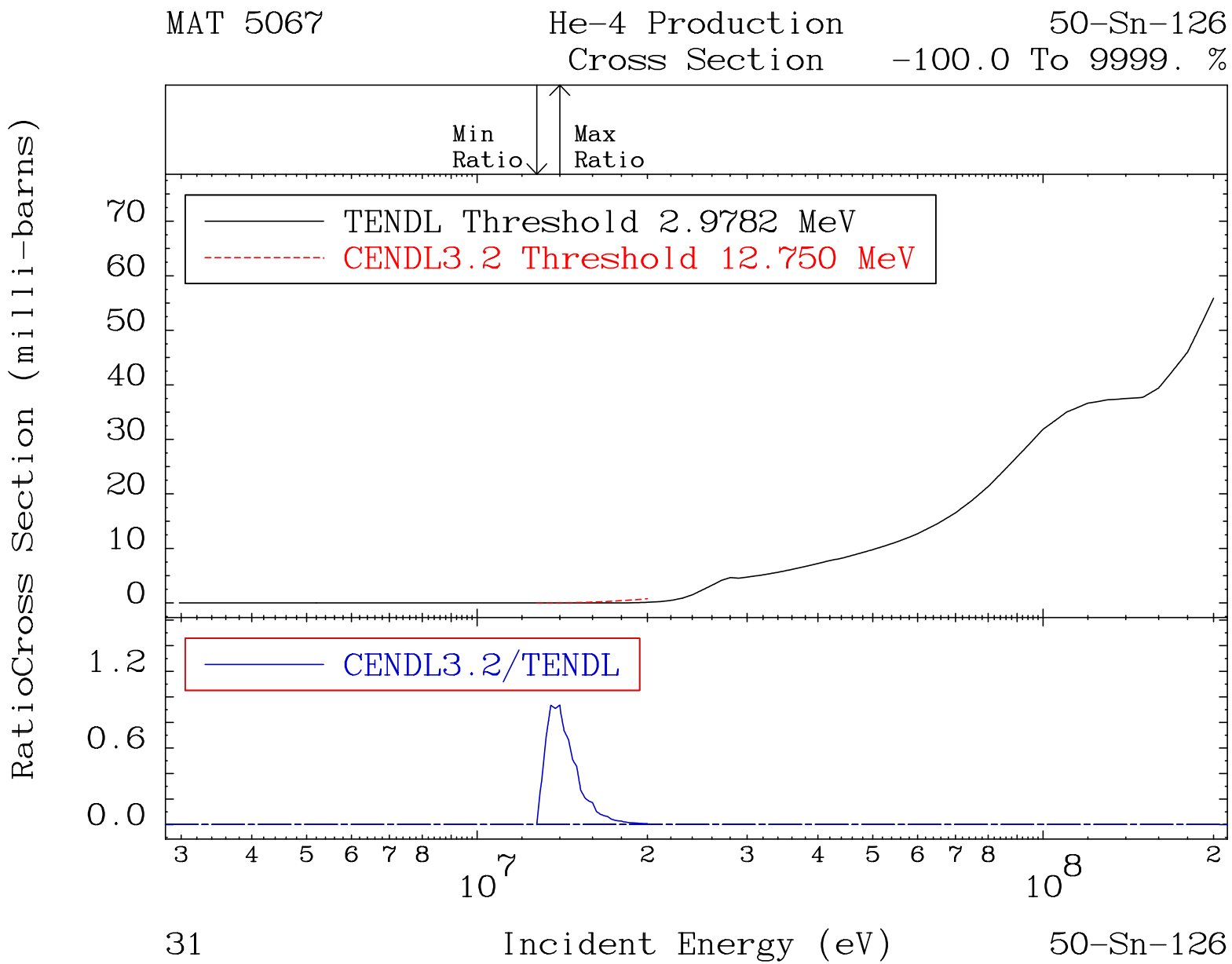

MAT 5067
(n,t)
Cross Section
50-Sn-126
-100.0 To 50.07 %
Min Ratio
Max Ratio
TENDL Threshold 12.122 MeV
CENDL3.2 Threshold 17.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
26
Incident Energy (eV)
50-Sn-126

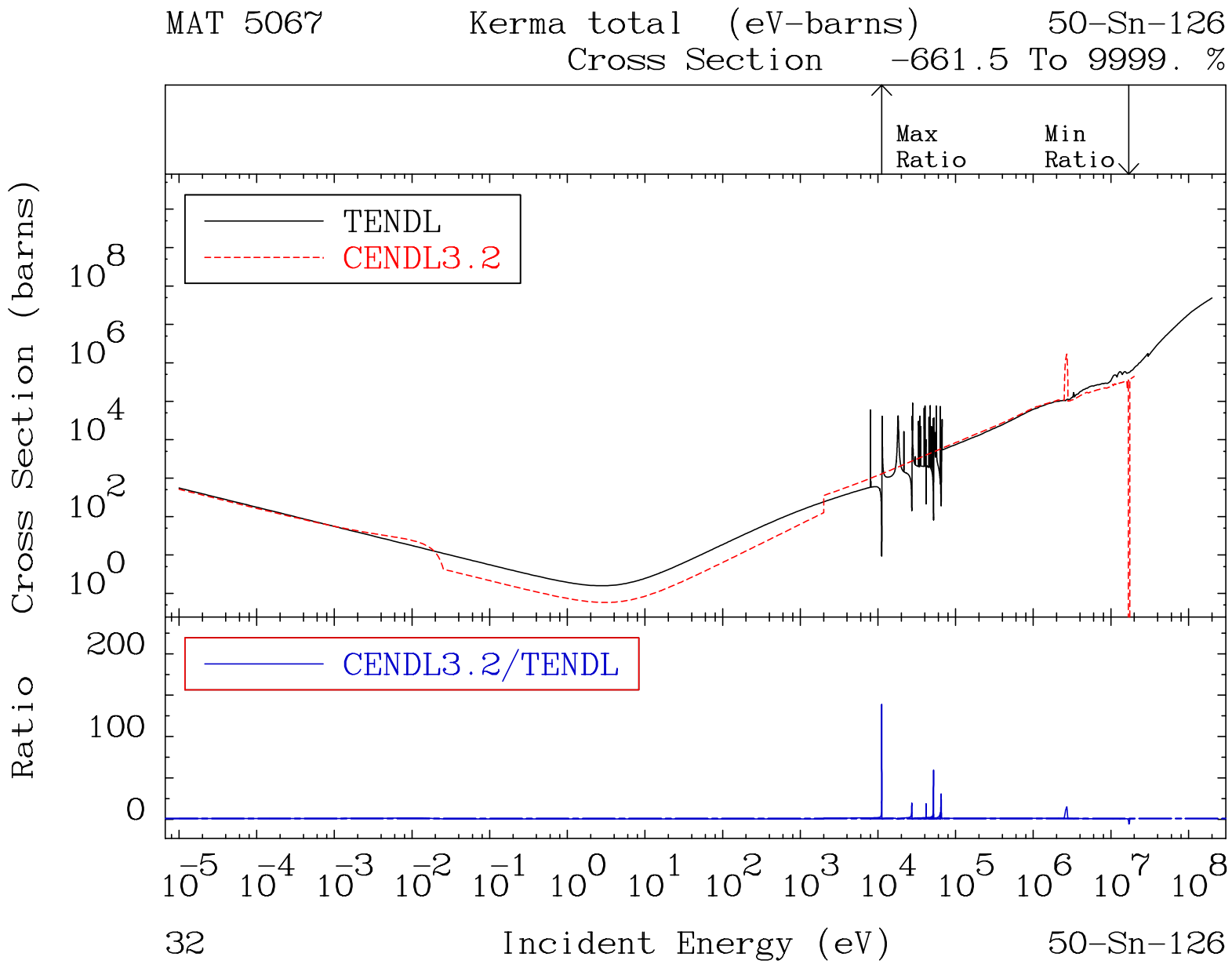

MAT 5067
(n,α)
50-Sn-126
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.9782 MeV
CENDL3.2 Threshold 12.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
1.5
1.0
0.5
0.0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
50-Sn-126

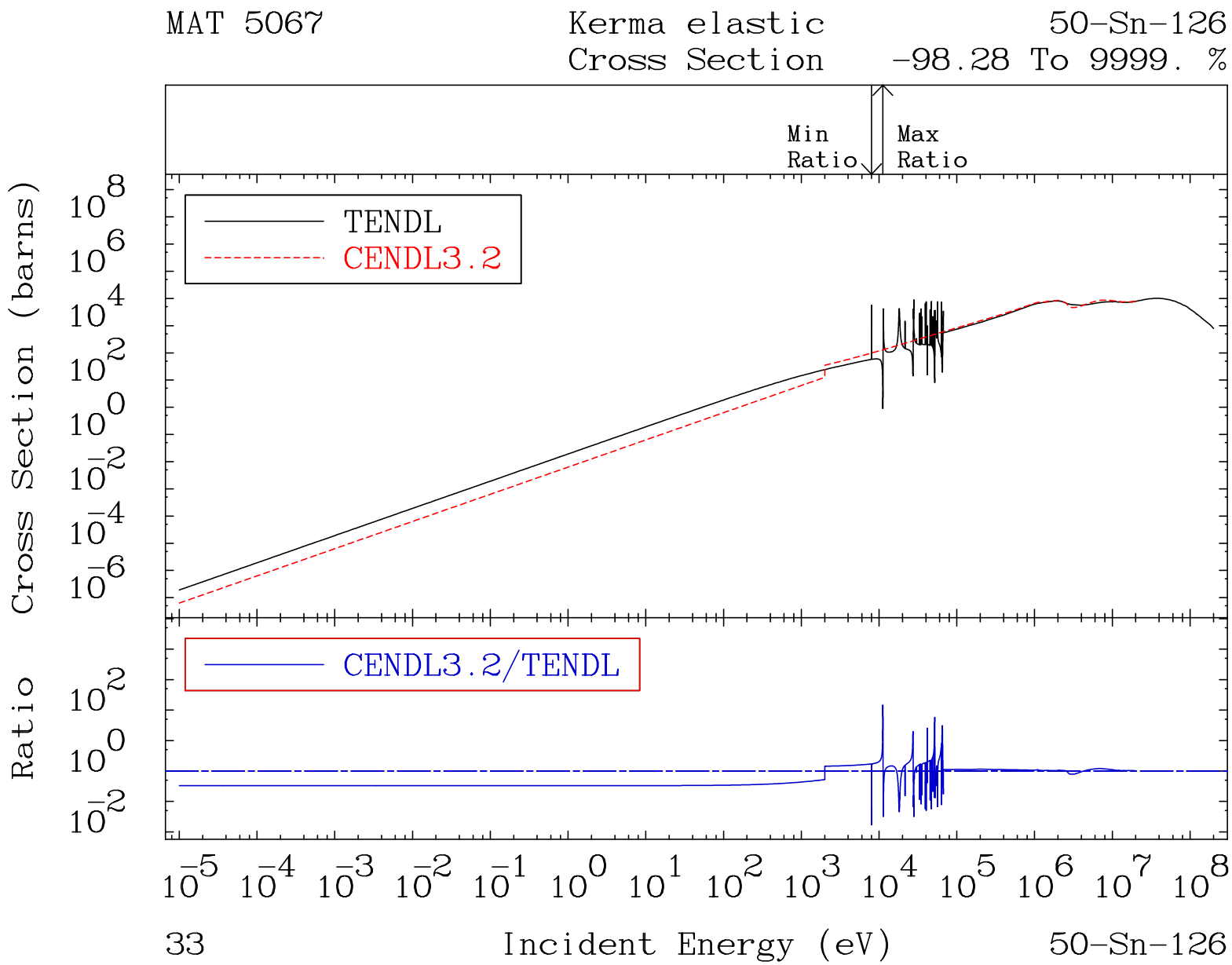

MAT 5067
Hydrogen Production
50-Sn-126
Cross Section
-100.0 To -35.44%
Min Ratio
Max Ratio
TENDL Threshold 7.4829 MeV
CENDL3.2 Threshold 12.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
700
600
500
400
300
200
100
0
0.8
0.4
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
28
Incident Energy (eV)
50-Sn-126

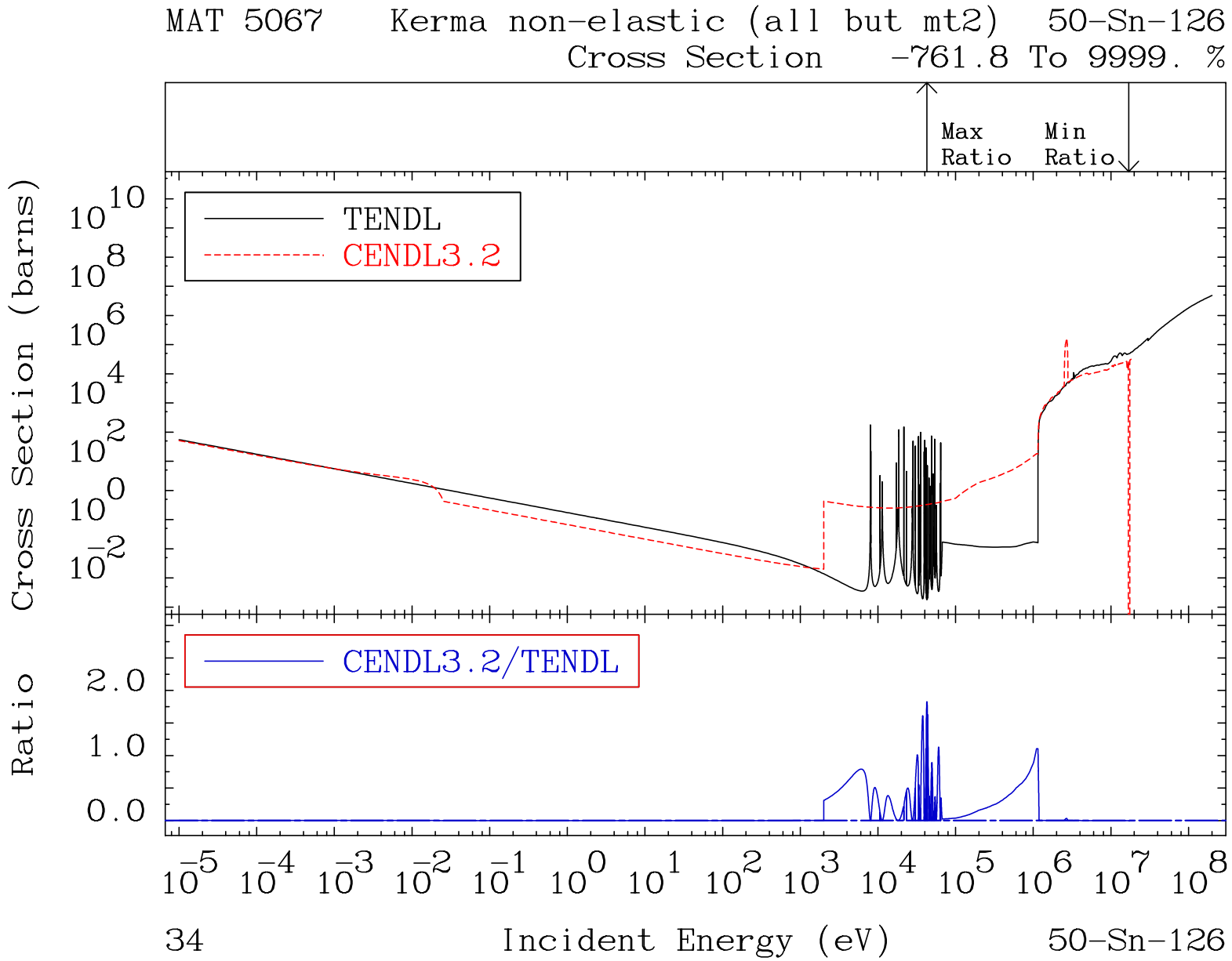

MAT 5067
Deuterium Production
50-Sn-126
Cross Section
-100.0 To -56.56%
Min Ratio
Max Ratio
TENDL Threshold 10.753 MeV
CENDL3.2 Threshold 15.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
0.6
0.4
0.2
0.0
2
3
4
5
6
7
8
9
10^8
2
29
Incident Energy (eV)
50-Sn-126

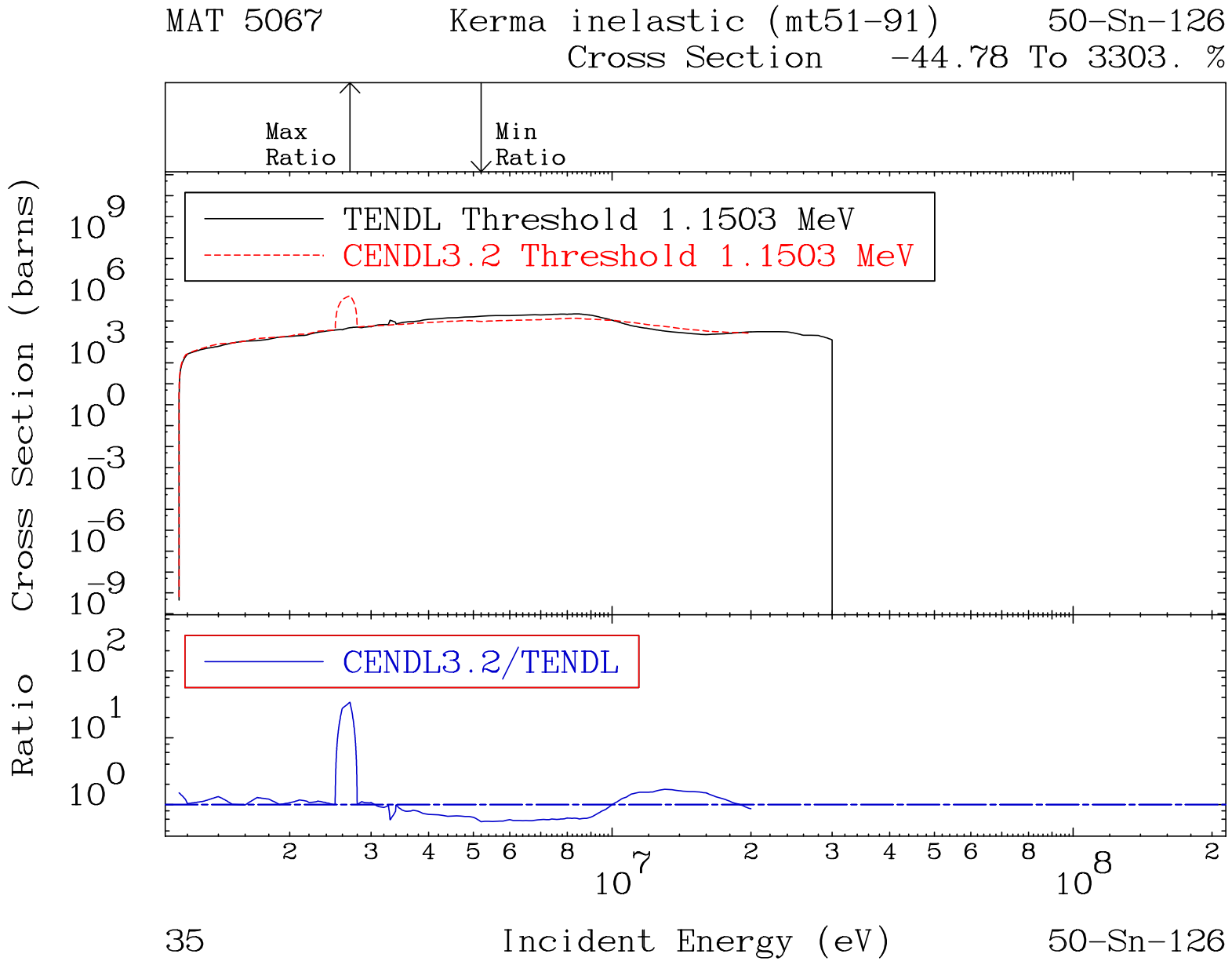

MAT 5067
Tritium Production
50-Sn-126
Cross Section
-100.0 To 50.07 %
Min Ratio
Max Ratio
TENDL Threshold 12.122 MeV
CENDL3.2 Threshold 17.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
30
Incident Energy (eV)
50-Sn-126

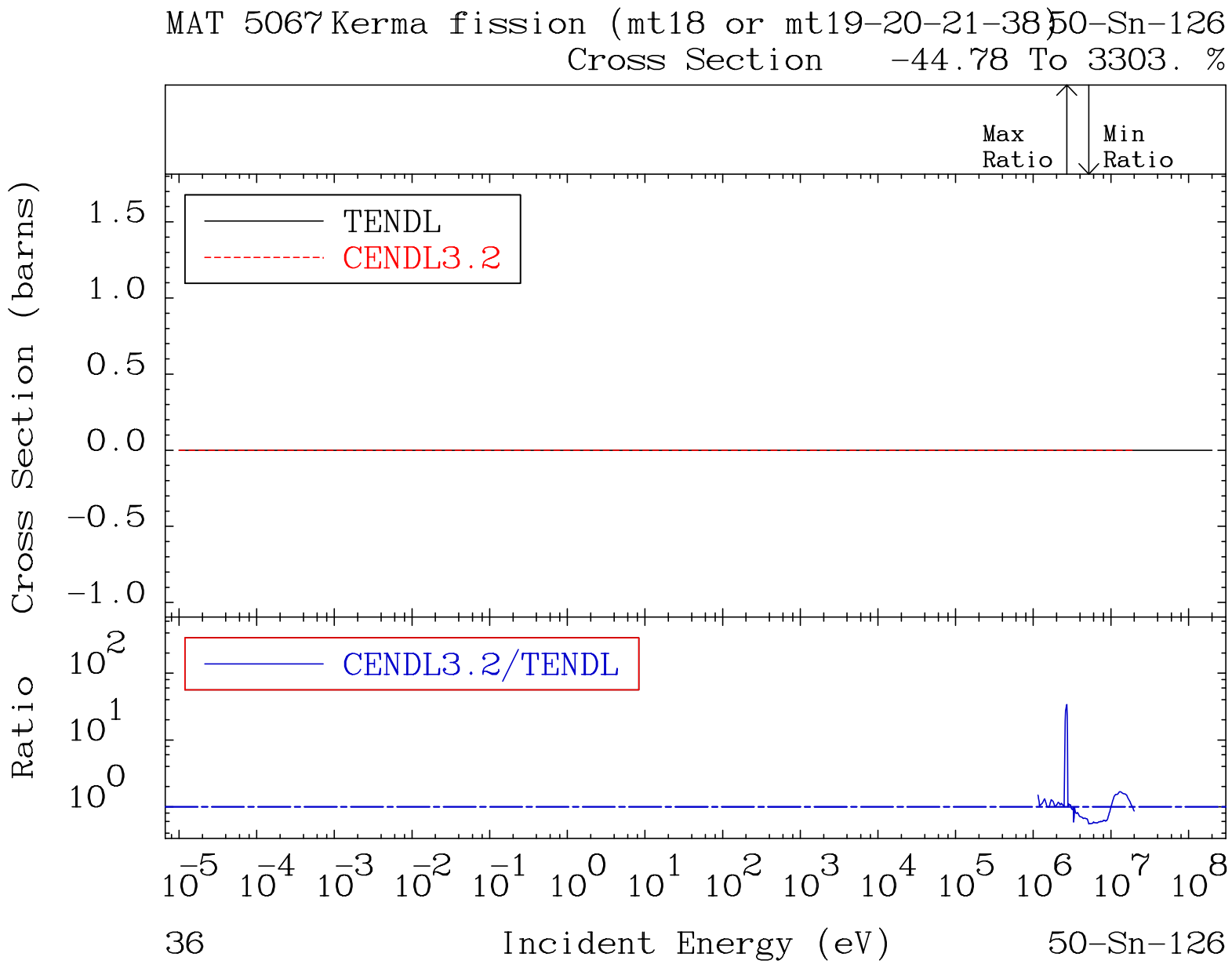

MAT 5067
He-4 Production
Cross Section
50-Sn-126
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.9782 MeV
CENDL3.2 Threshold 12.750 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
31
Incident Energy (eV)
50-Sn-126

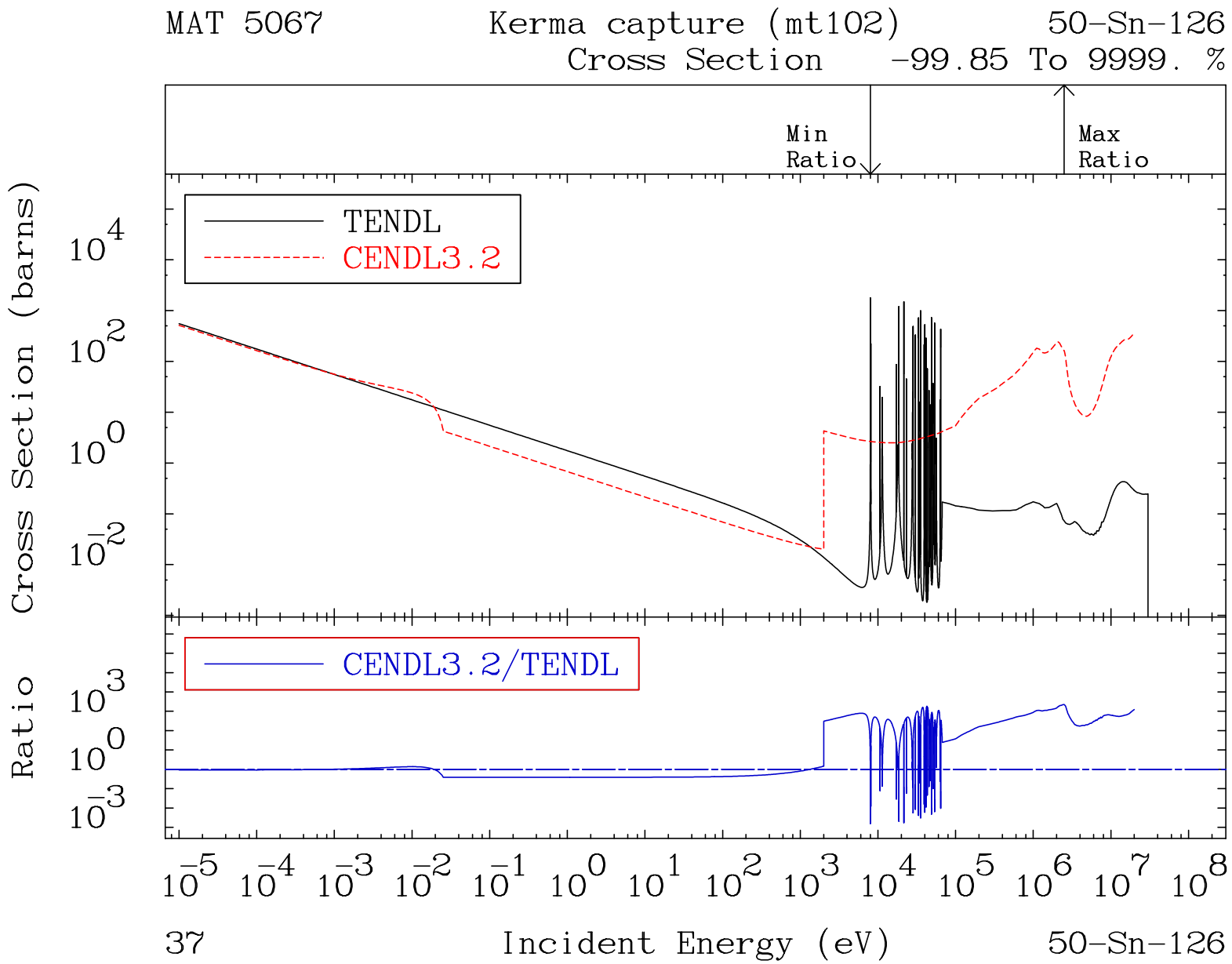

MAT 5067
Kerma total (eV-barns)
50-Sn-126
Cross Section -661.5 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^8
10^6
10^4
10^2
10^0
CENDL3.2/TENDL
Ratio
200
100
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
32
Incident Energy (eV)
50-Sn-126

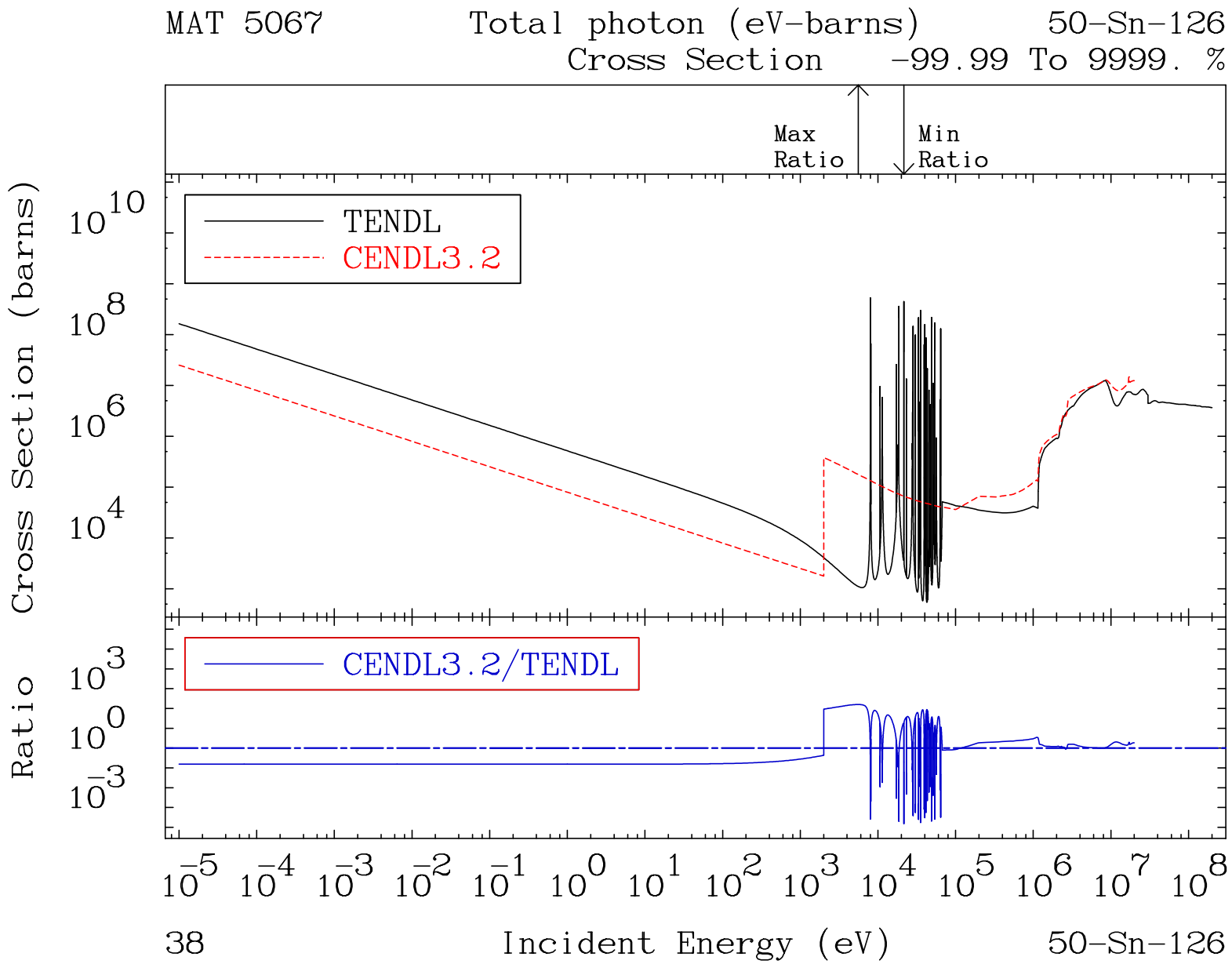

MAT 5067
Kerma elastic
Cross Section
50-Sn-126
-98.28 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
33
50-Sn-126

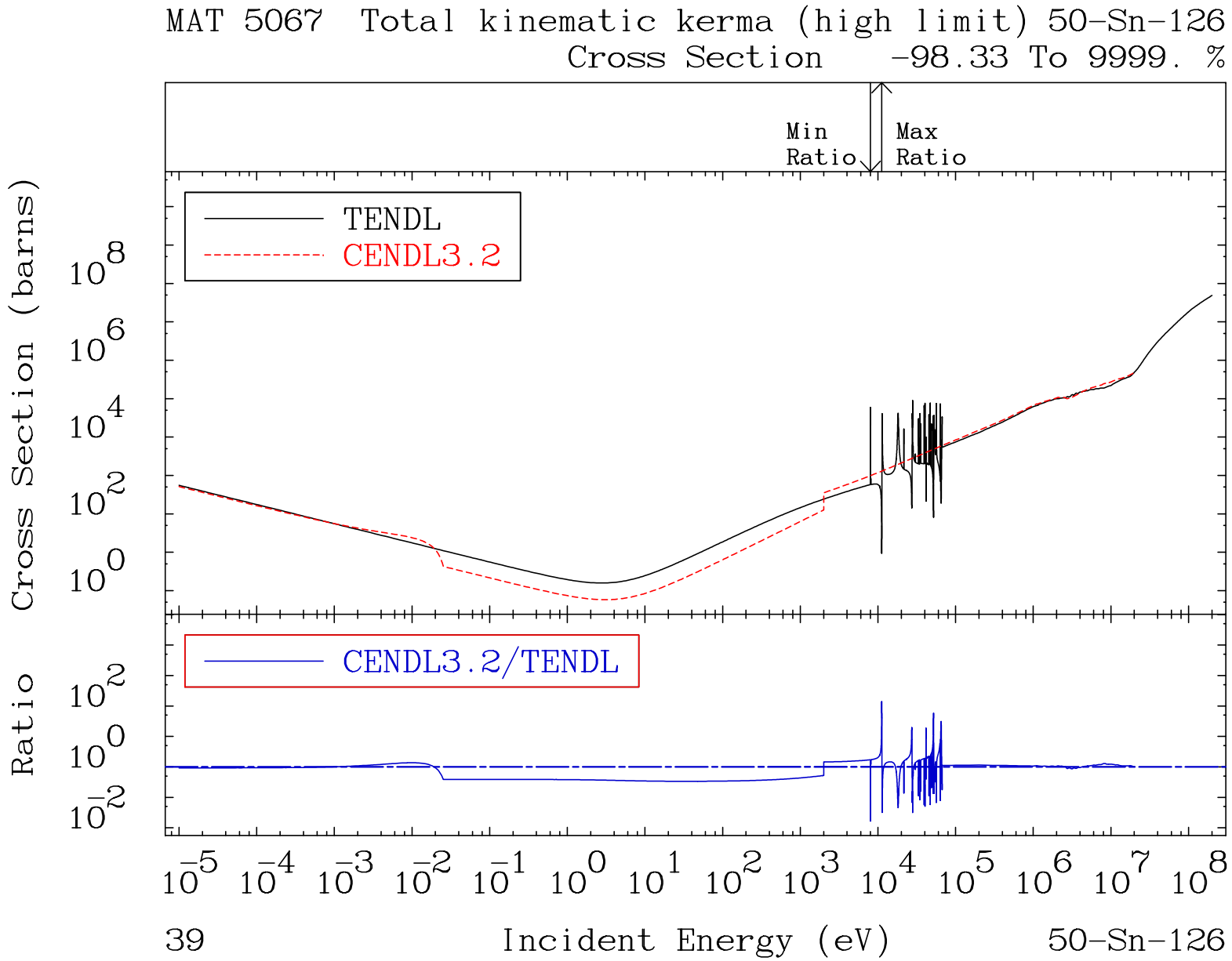

MAT 5067 Kerma non-elastic (all but mt2) 50-Sn-126
Cross Section -761.8 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
34
50-Sn-126

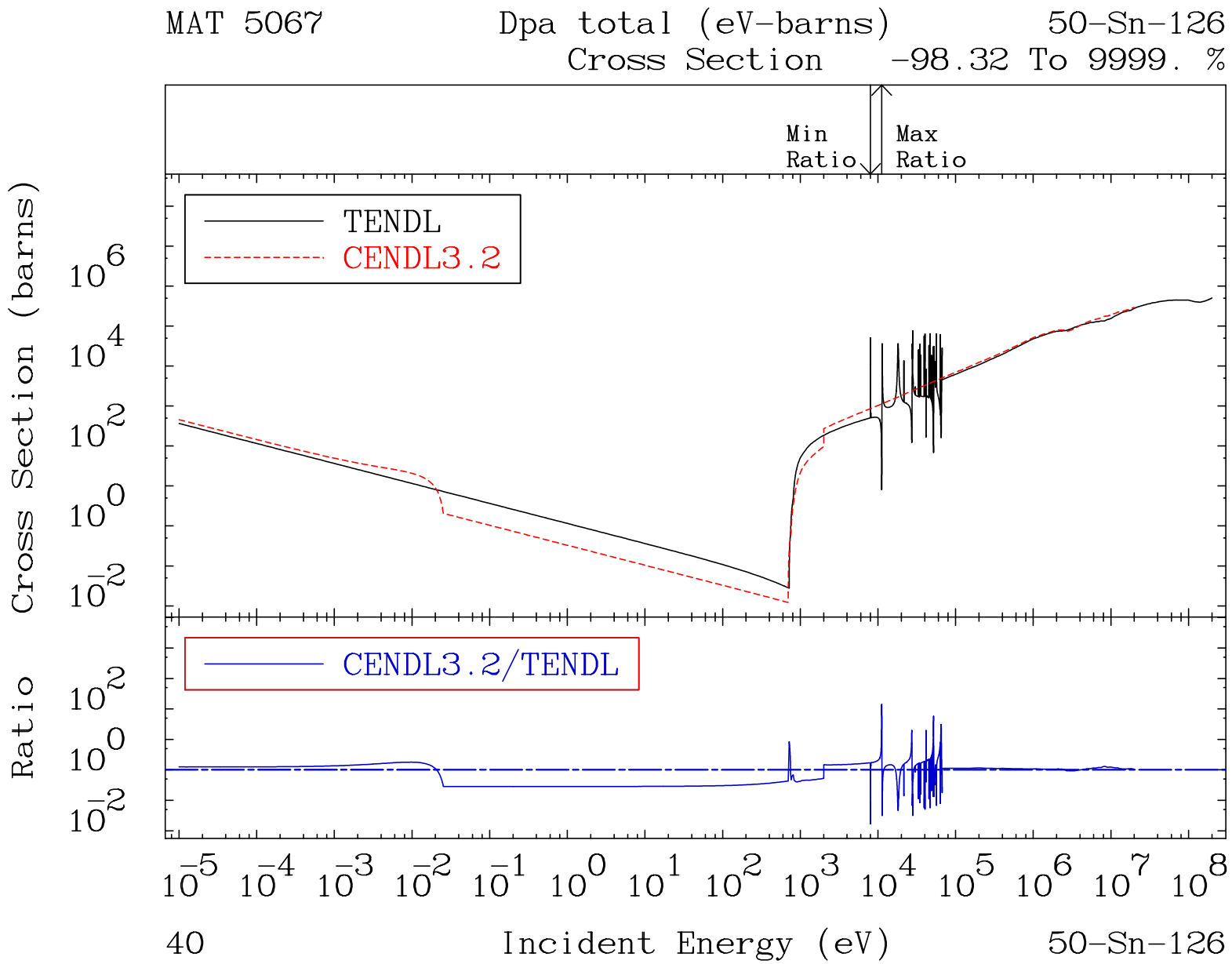

MAT 5067
Kerma inelastic (mt51-91)
50-Sn-126
Cross Section -44.78 To 3303. %
Max Ratio
Min Ratio
TENDL Threshold 1.1503 MeV
CENDL3.2 Threshold 1.1503 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
35
50-Sn-126

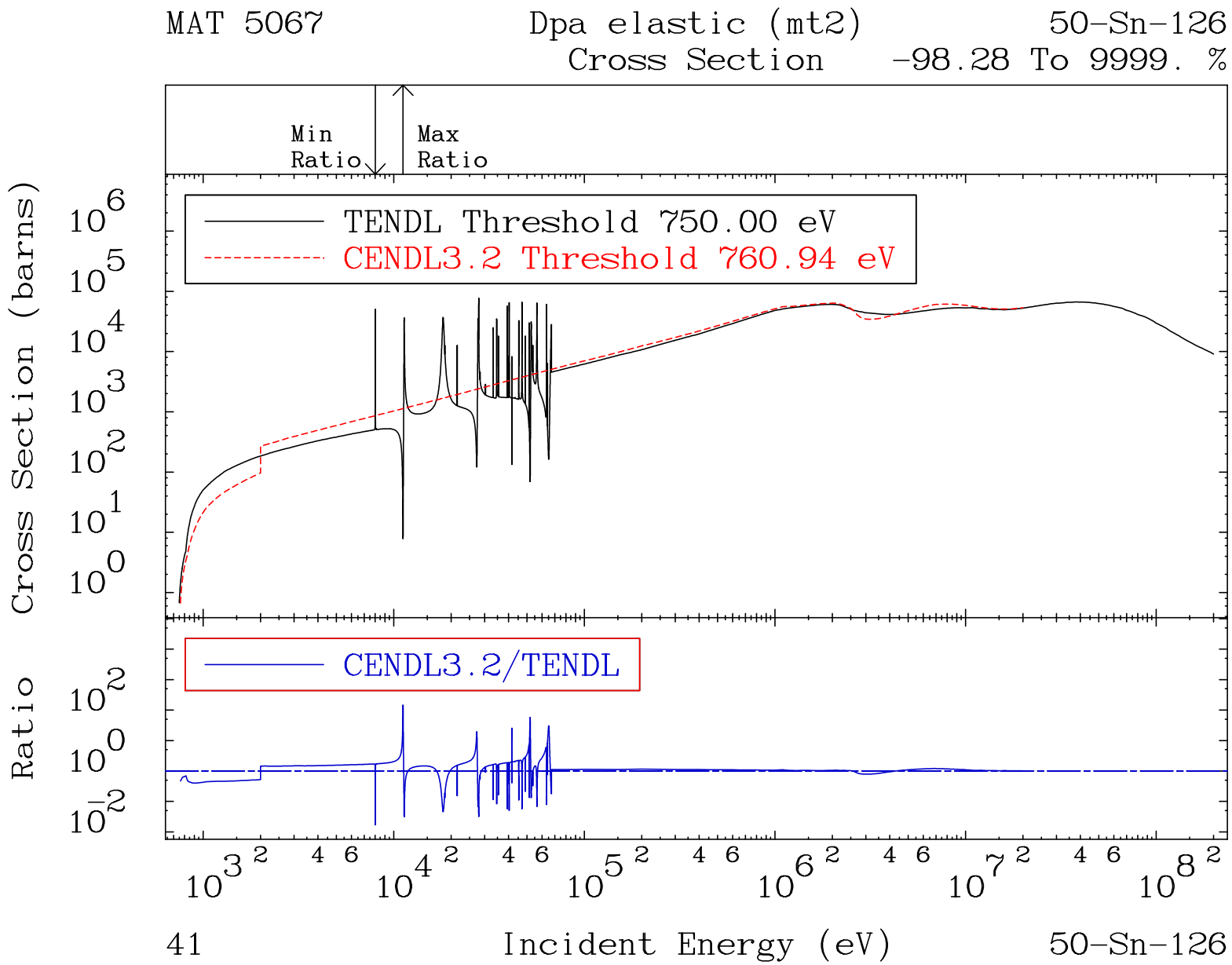

MAT 5067 Kerma fission (mt18 or mt19-20-21-38) 50-Sn-126
Cross Section -44.78 To 3303. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^2
10^1
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
36
Incident Energy (eV)
50-Sn-126

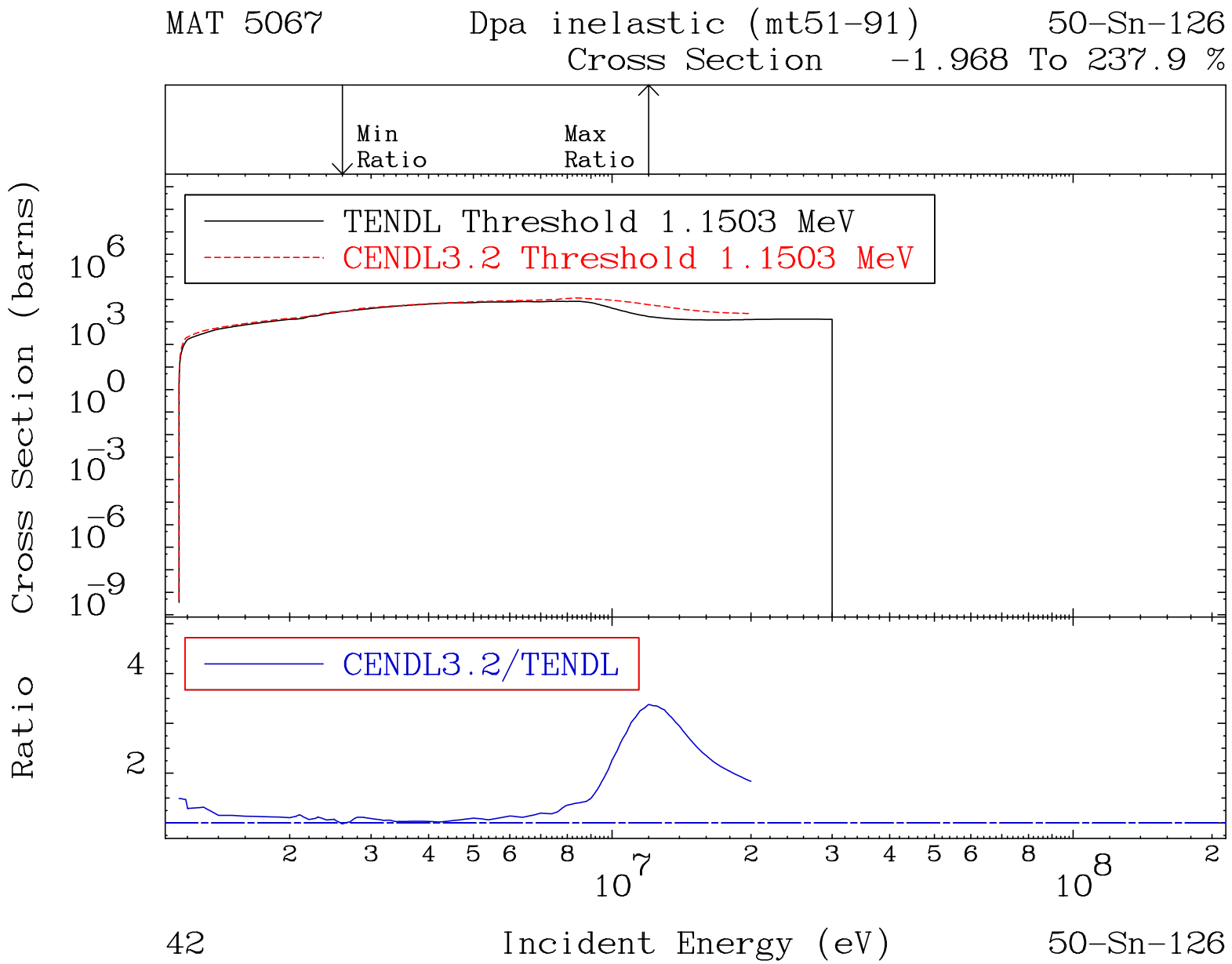

MAT 5067
Kerma capture (mt102)
50-Sn-126
Cross Section -99.85 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
37
50-Sn-126

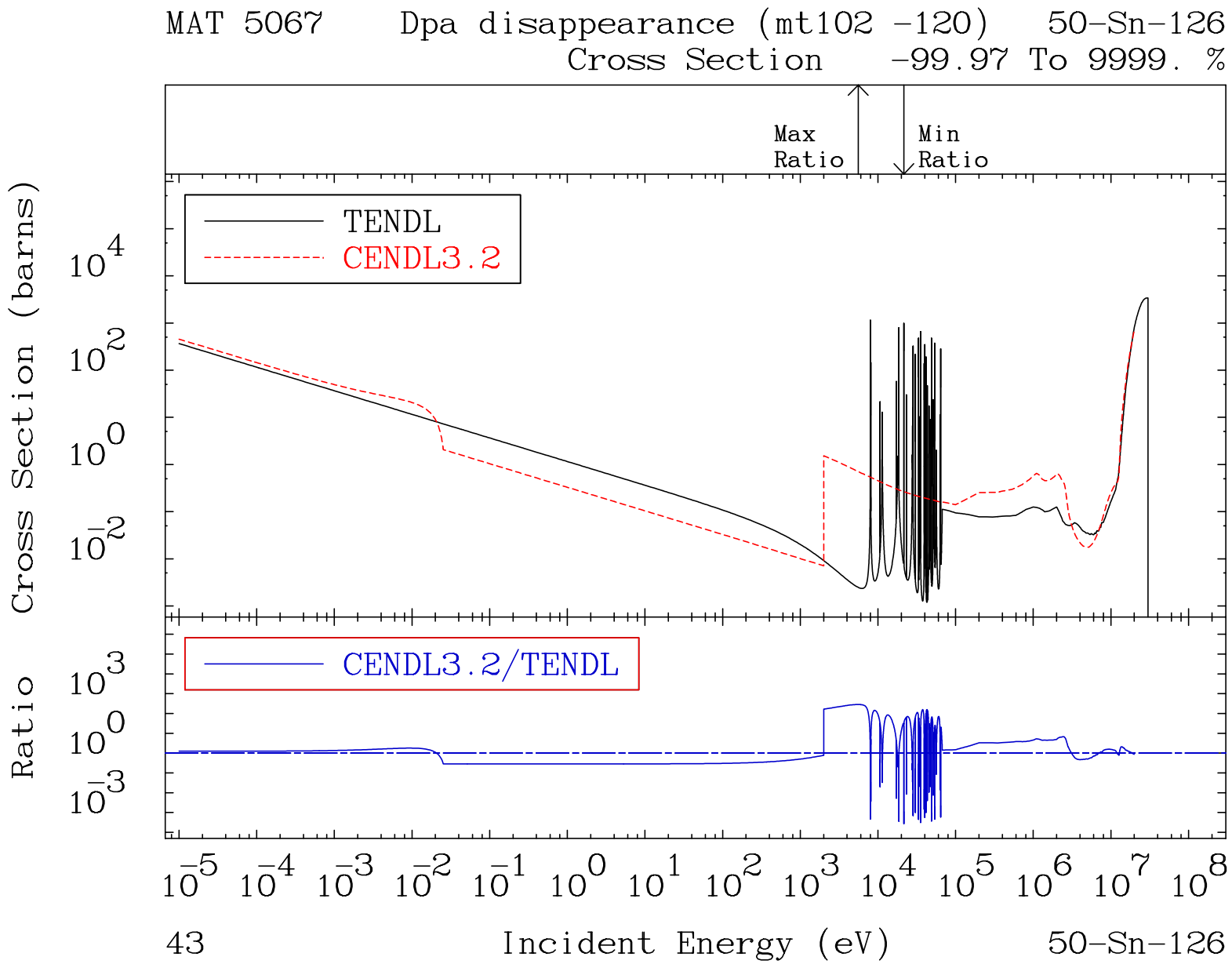

MAT 5067
Total photon (eV-barns)
50-Sn-126
Cross Section -99.99 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
38
50-Sn-126

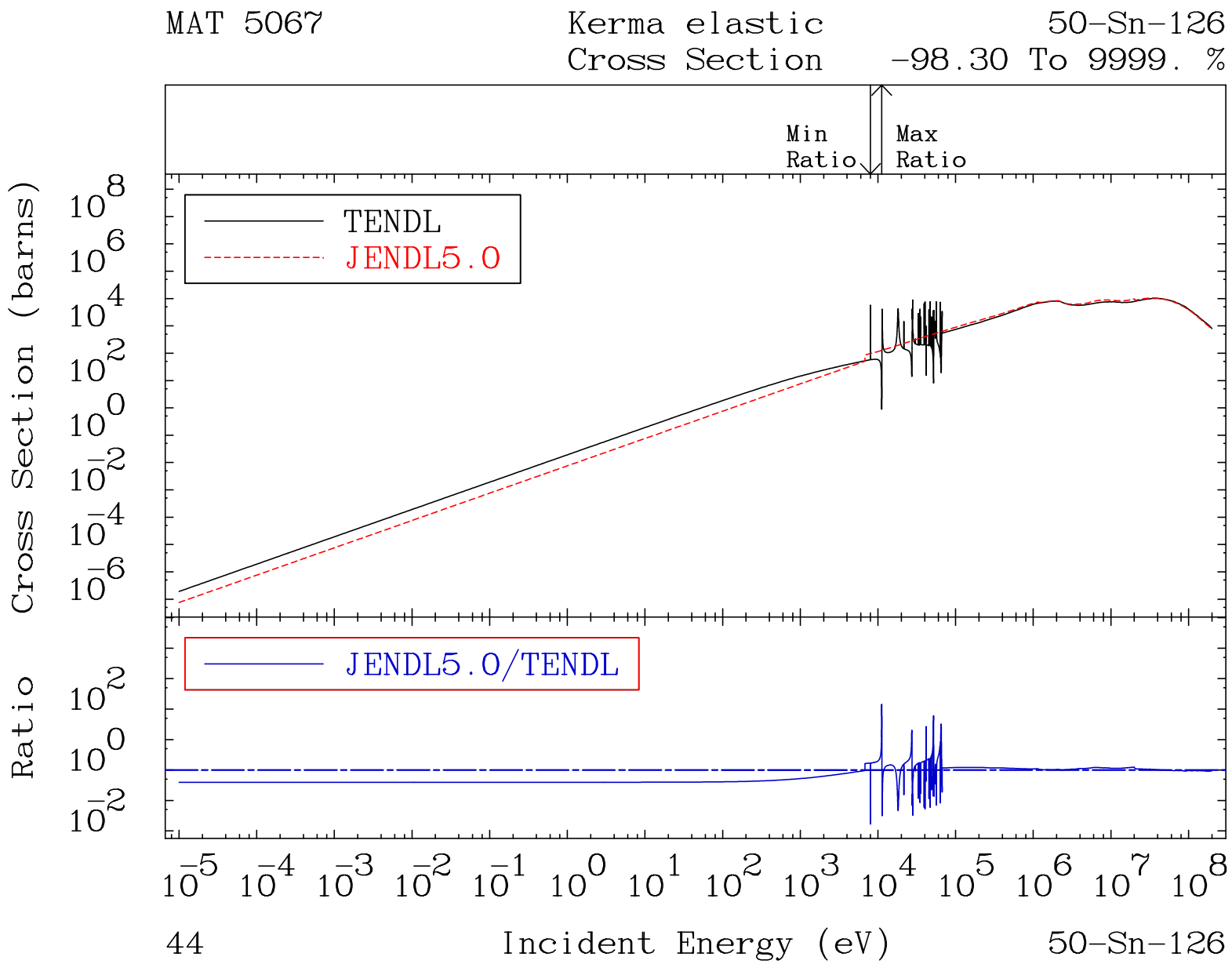

MAT 5067 Total kinematic kerma (high limit) 50-Sn-126
Cross Section -98.33 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
39
50-Sn-126

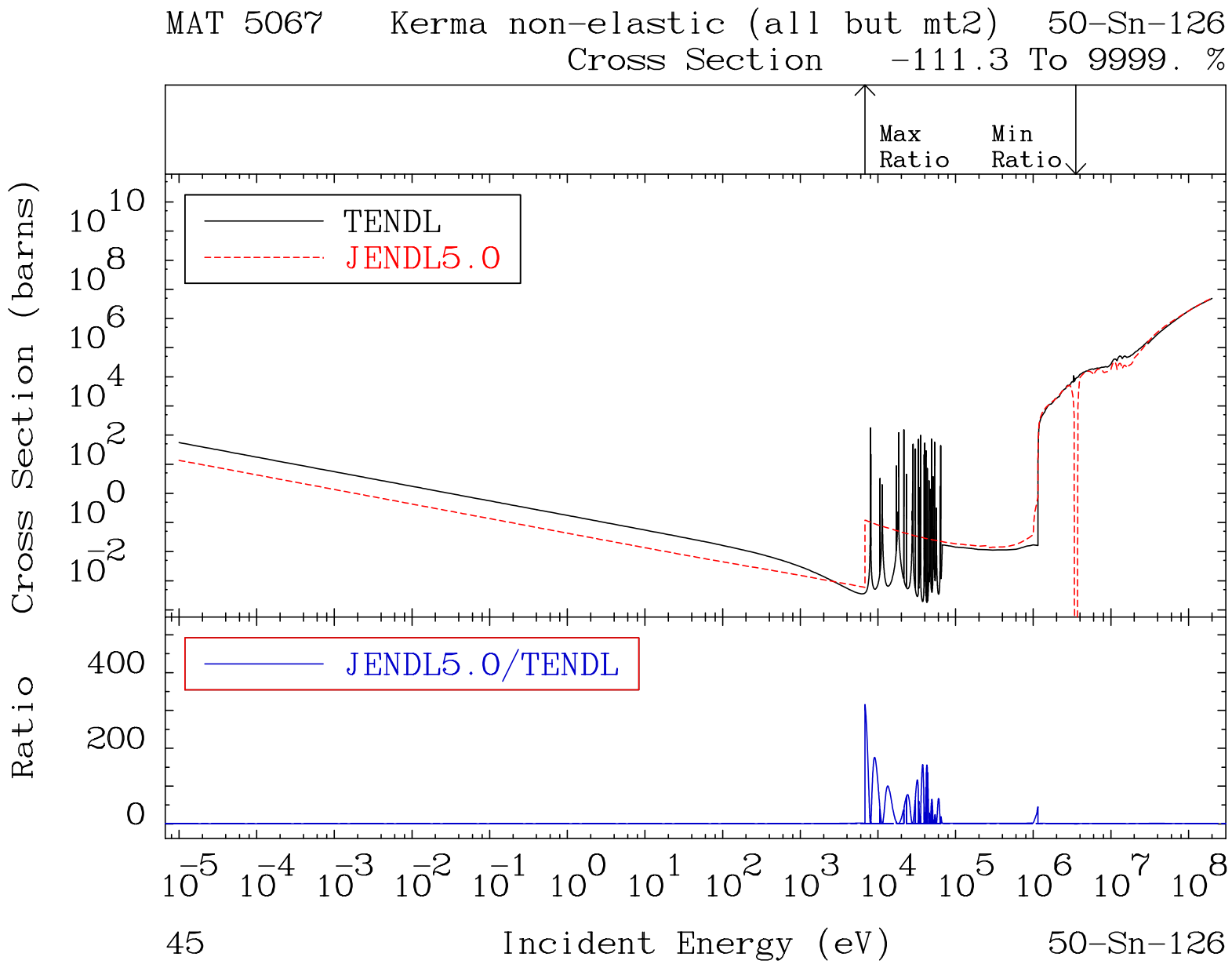

MAT 5067
Dpa total (eV-barns)
50-Sn-126
Cross Section -98.32 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
40
50-Sn-126

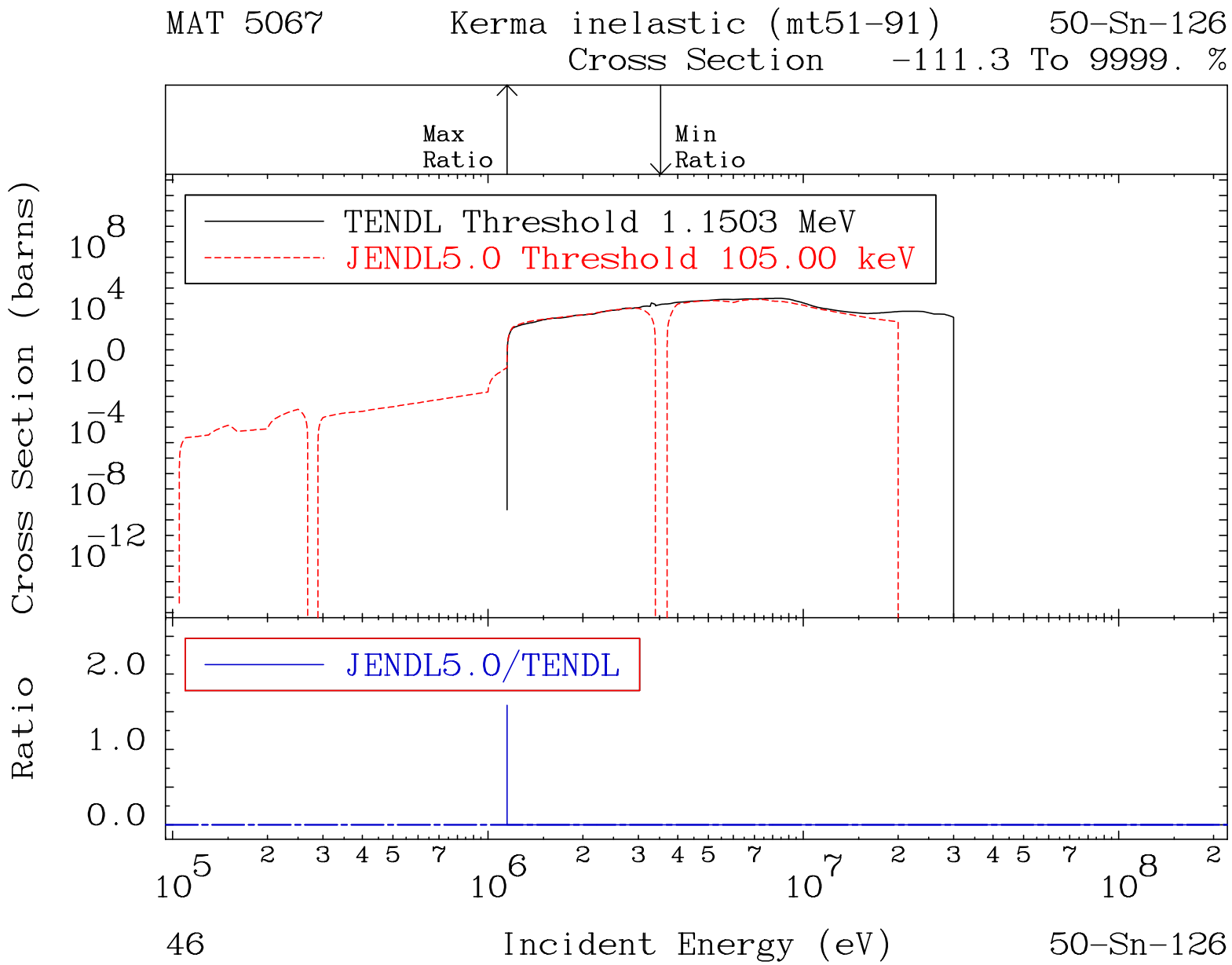

MAT 5067
Dpa elastic (mt2)
Cross Section
50-Sn-126
-98.28 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 750.00 eV
CENDL3.2 Threshold 760.94 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
41
50-Sn-126

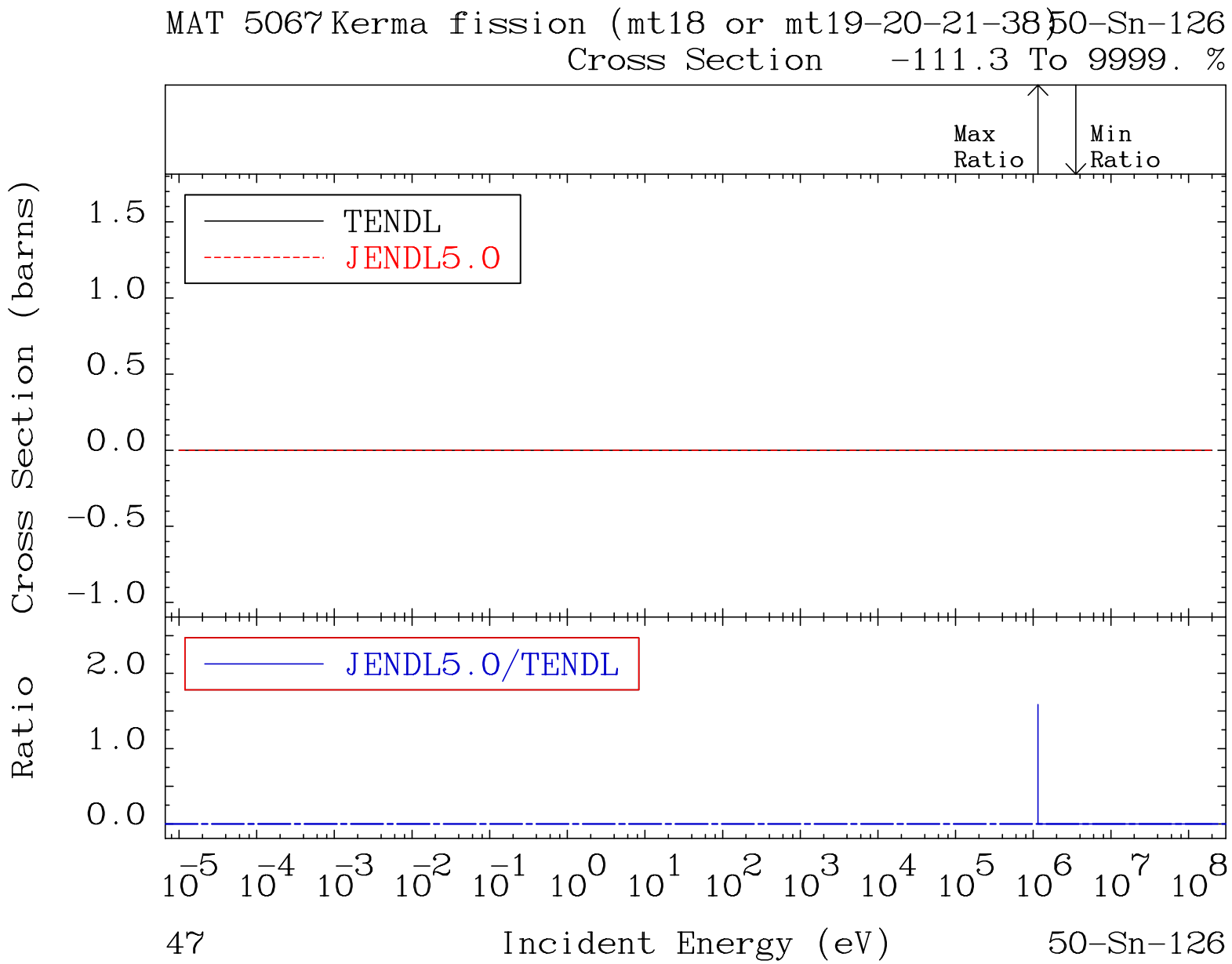

MAT 5067
Dpa inelastic (mt51-91)
50-Sn-126
Cross Section -1.968 To 237.9 %
Min Ratio
Max Ratio
TENDL Threshold 1.1503 MeV
CENDL3.2 Threshold 1.1503 MeV
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
42
50-Sn-126

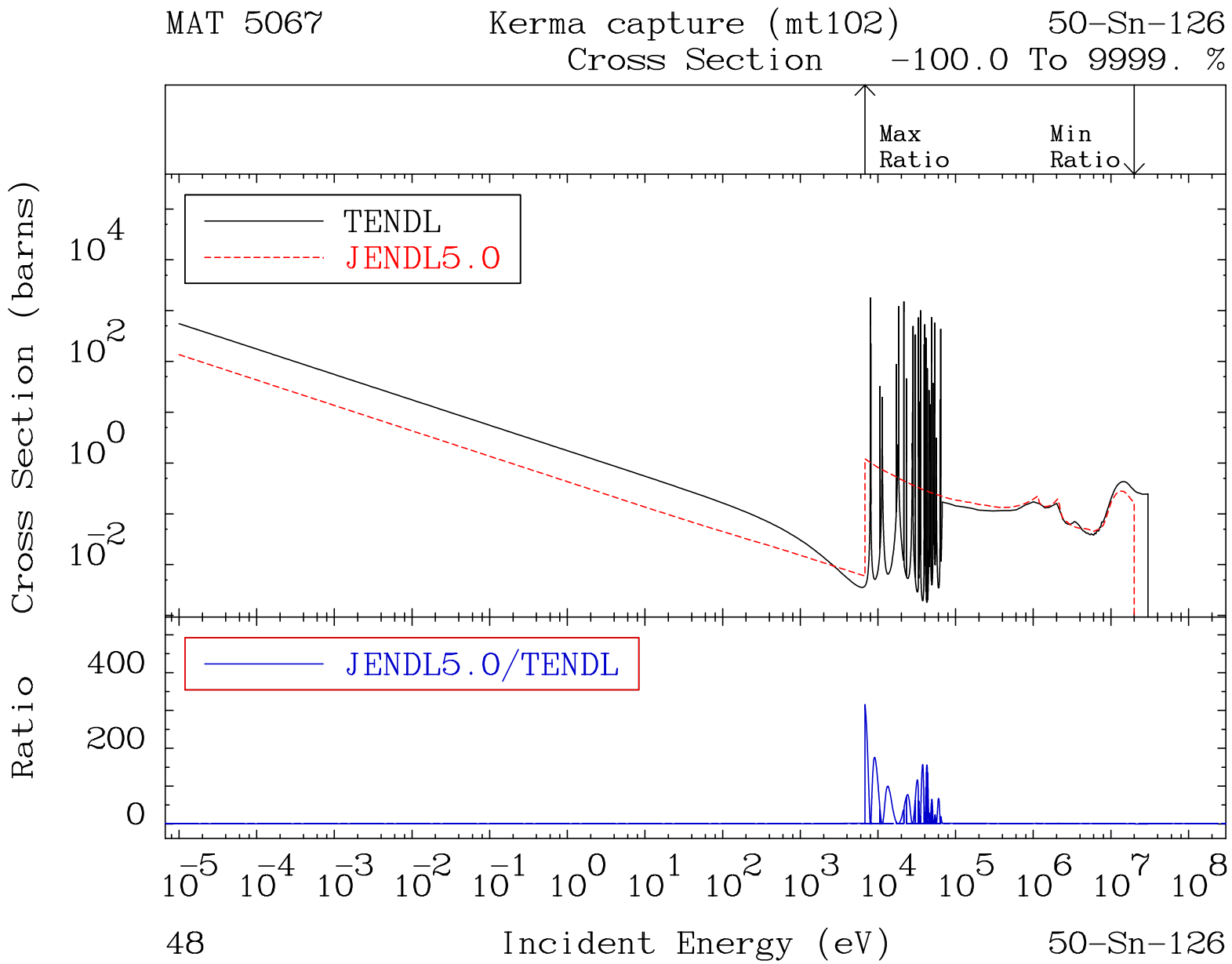

MAT 5067 Dpa disappearance (mt102 -120) 50-Sn-126
Cross Section -99.97 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
43
50-Sn-126

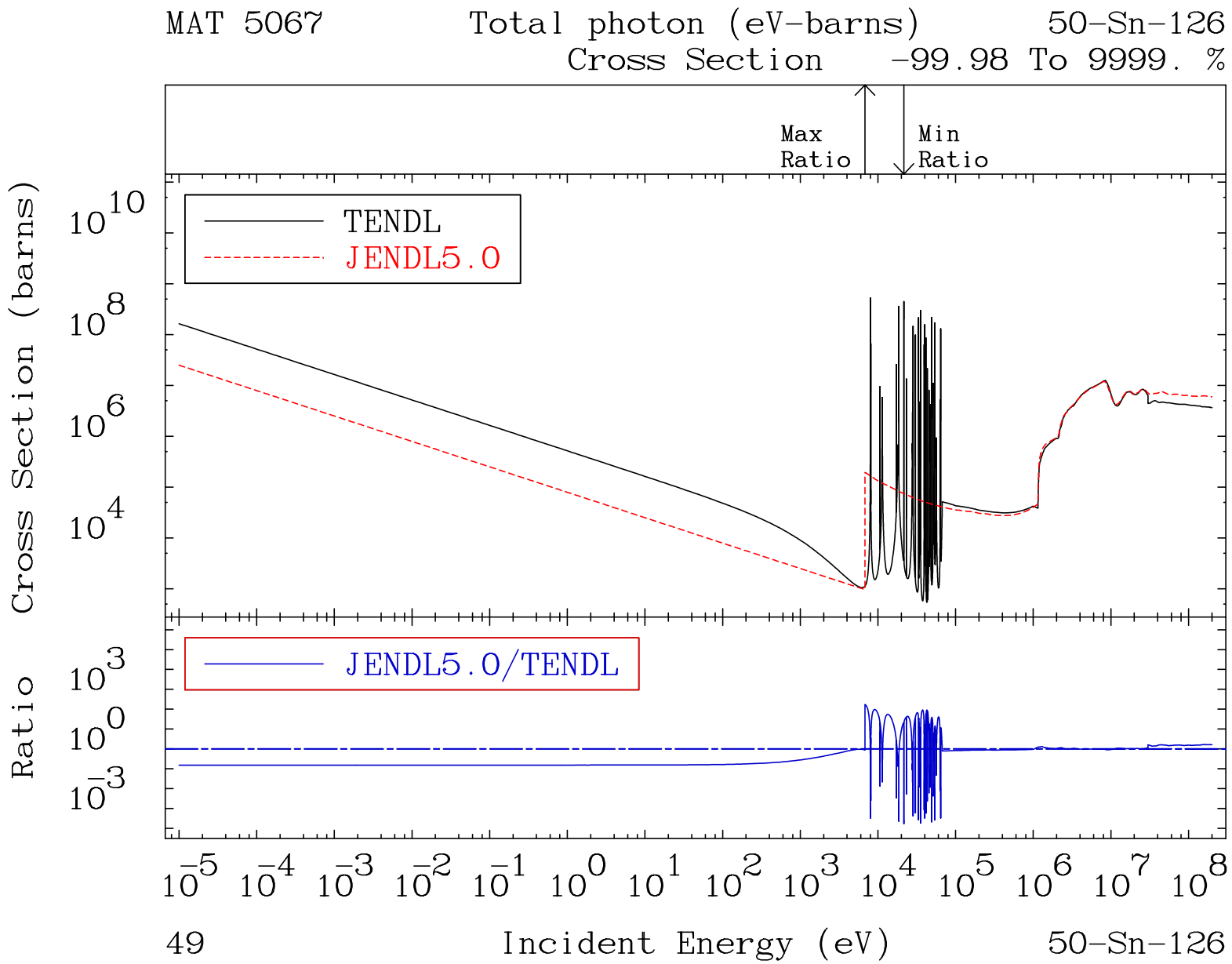

MAT 5067
Kerma elastic
Cross Section
50-Sn-126
-98.30 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
44
50-Sn-126

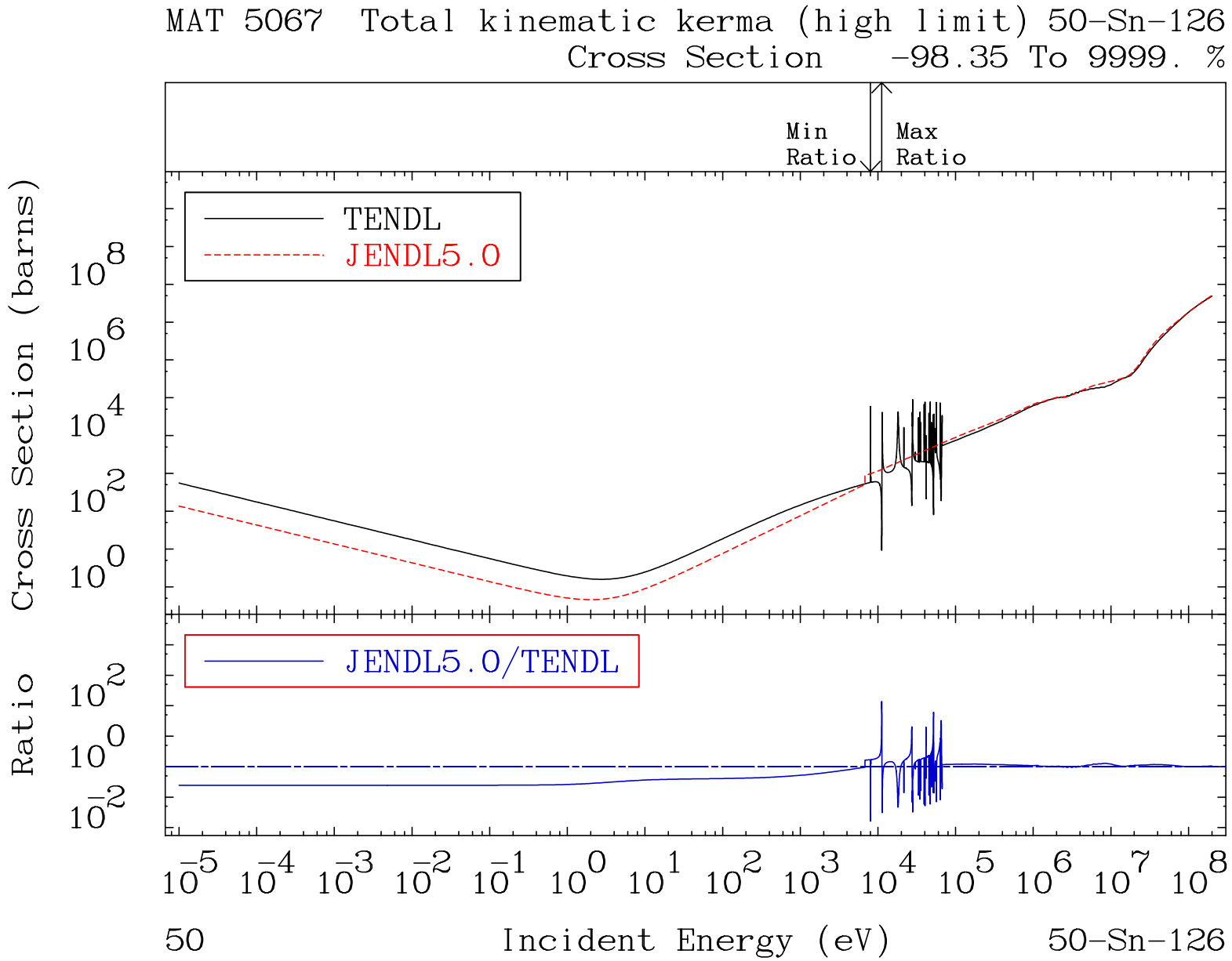

MAT 5067 Kerma non-elastic (all but mt2) 50-Sn-126
Cross Section -111.3 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
45
50-Sn-126

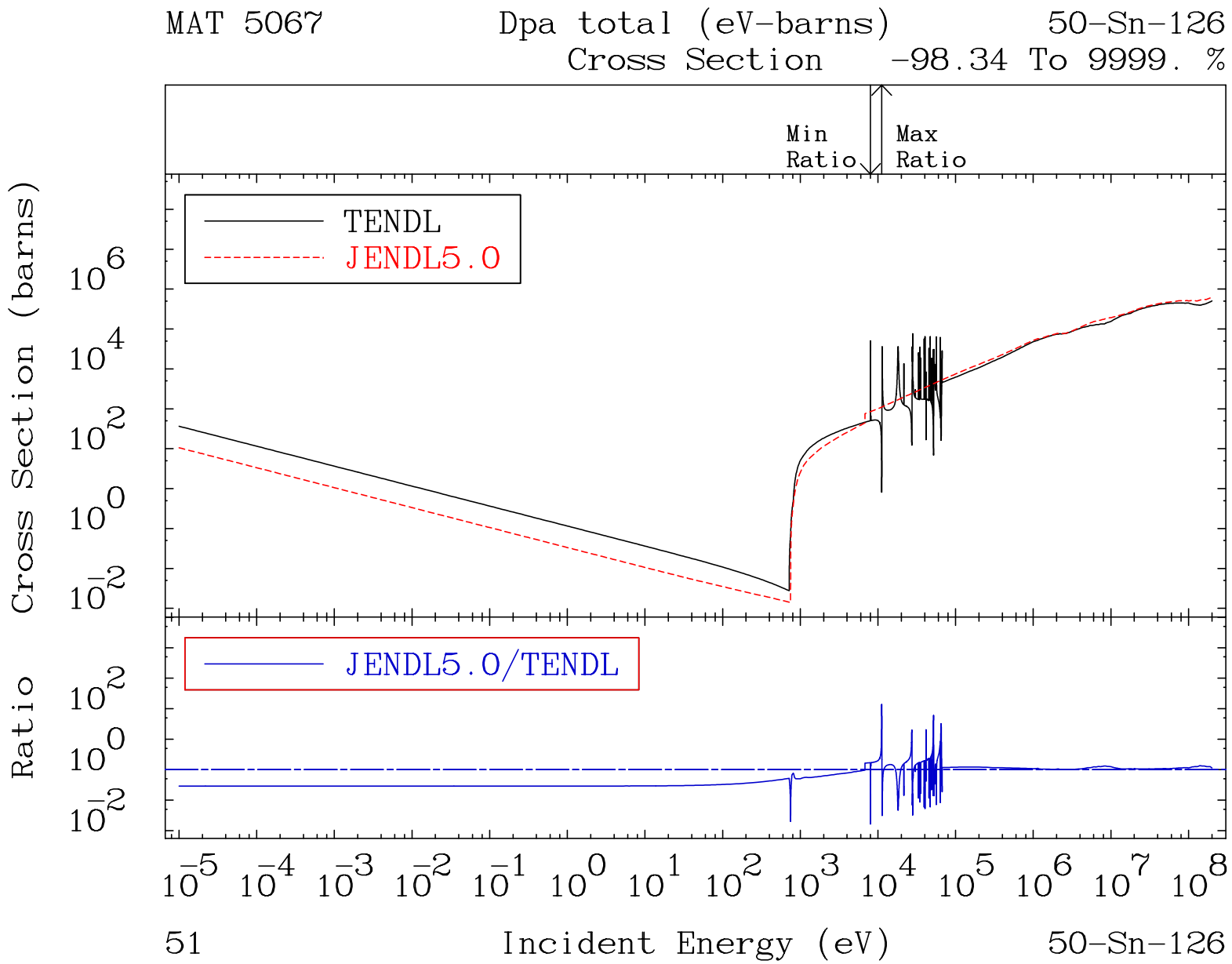

MAT 5067
Kerma inelastic (mt51-91)
50-Sn-126
Cross Section -111.3 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1503 MeV
JENDL5.0 Threshold 105.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
46
50-Sn-126

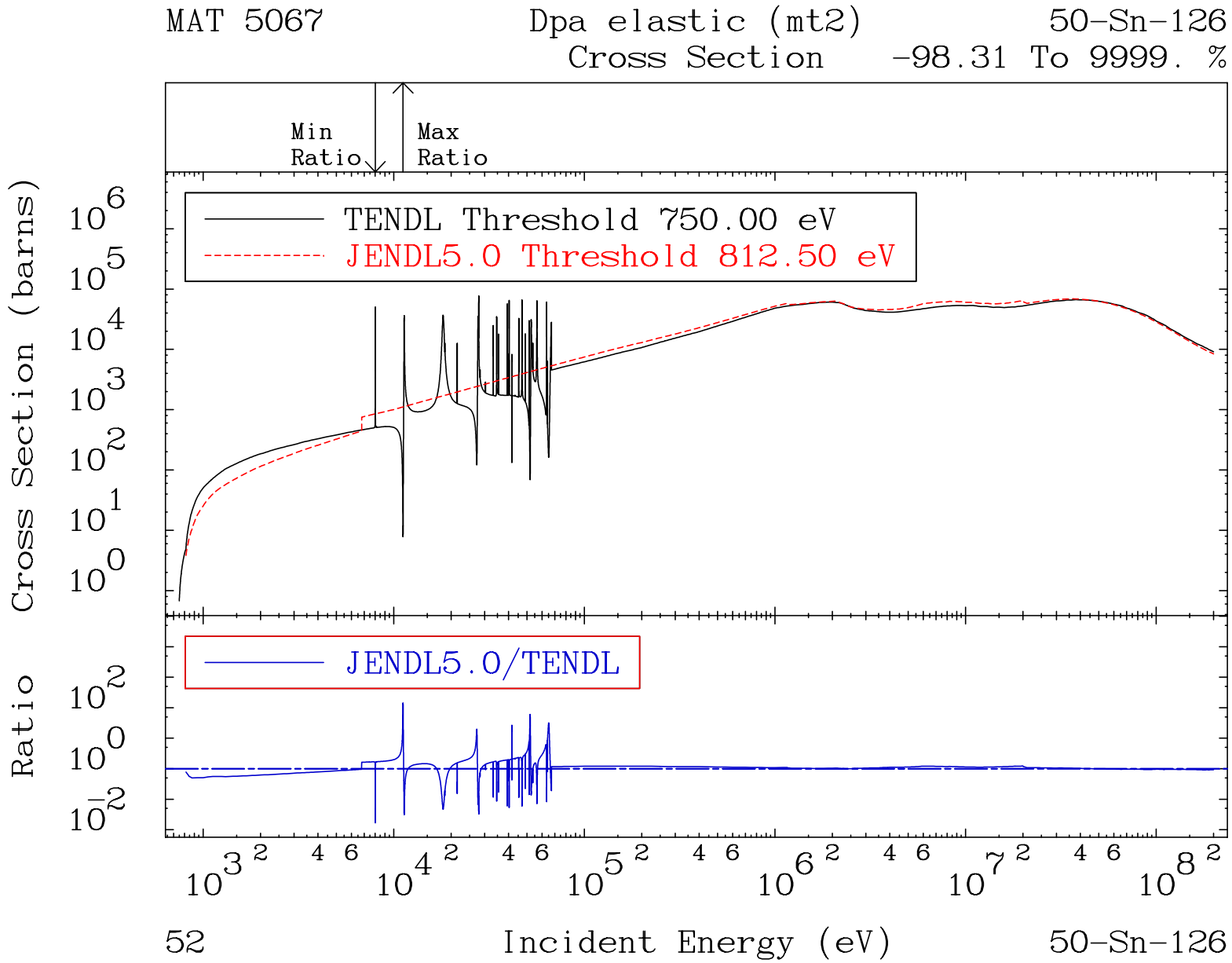

MAT 5067 Kerma fission (mt18 or mt19-20-21-38) 50-Sn-126
Cross Section -111.3 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
2.0
1.0
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
47
Incident Energy (eV)
50-Sn-126

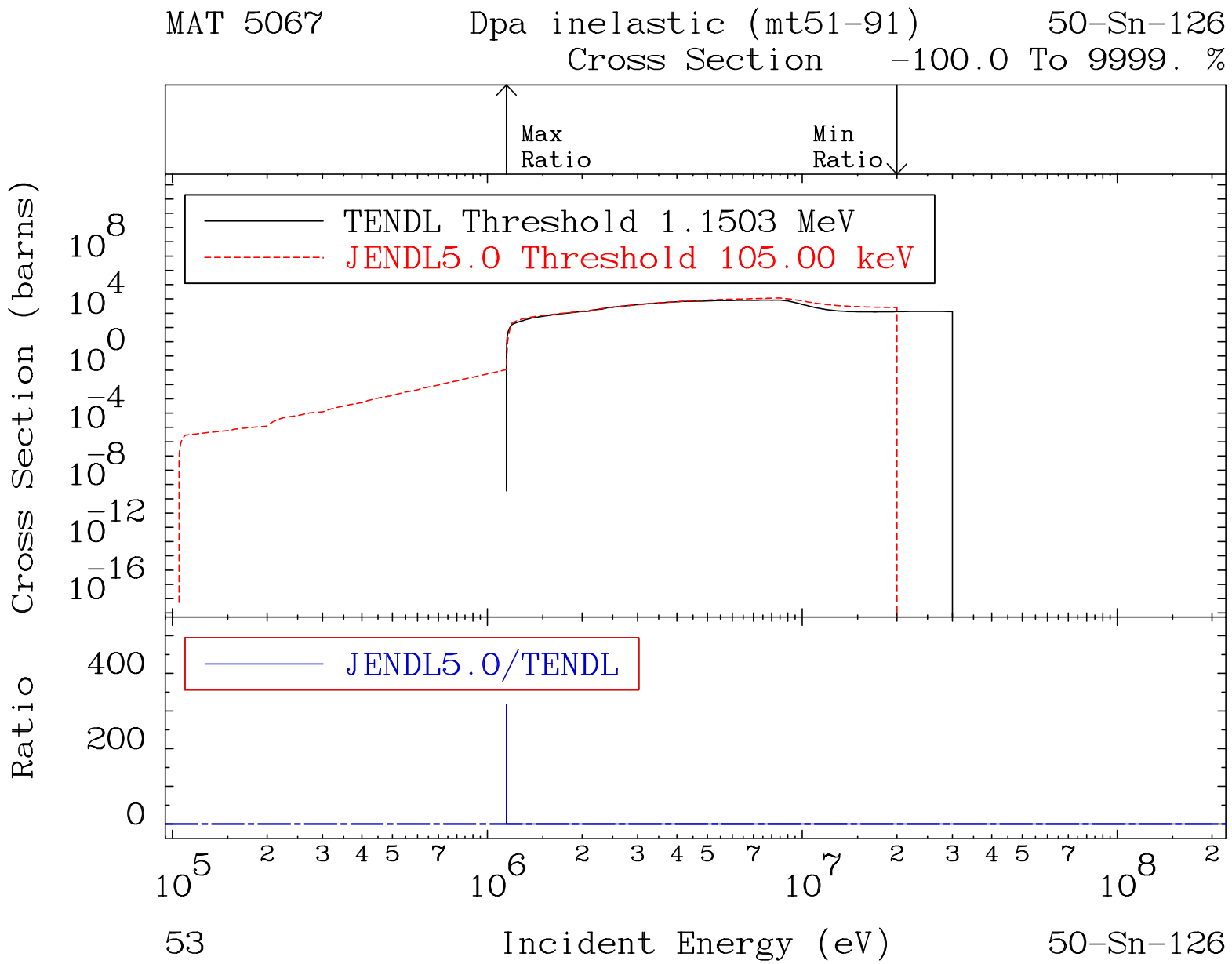

MAT 5067
Kerma capture (mt102)
50-Sn-126
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
48
50-Sn-126

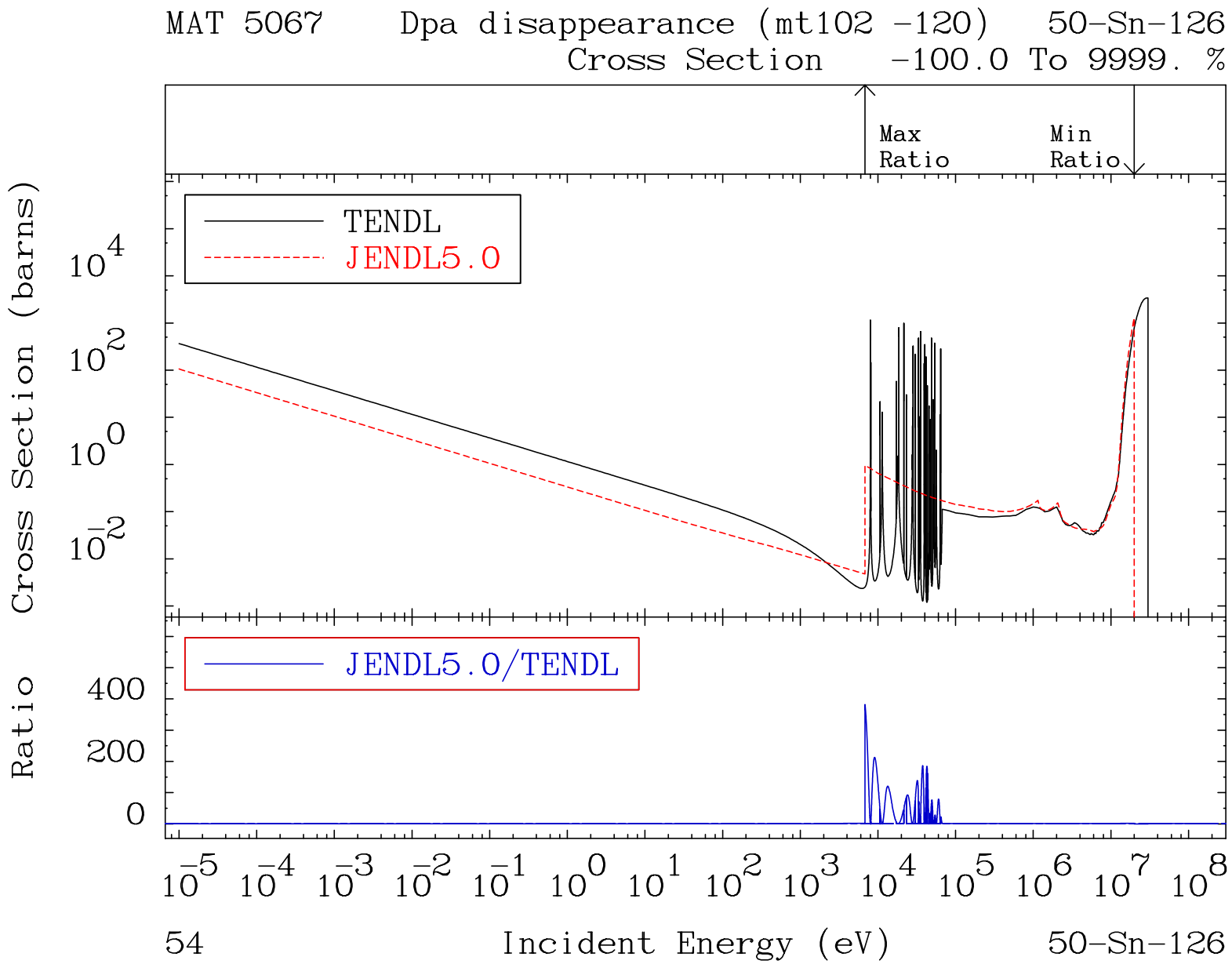

MAT 5067
Total photon (eV-barns)
50-Sn-126
Cross Section -99.98 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
49
50-Sn-126

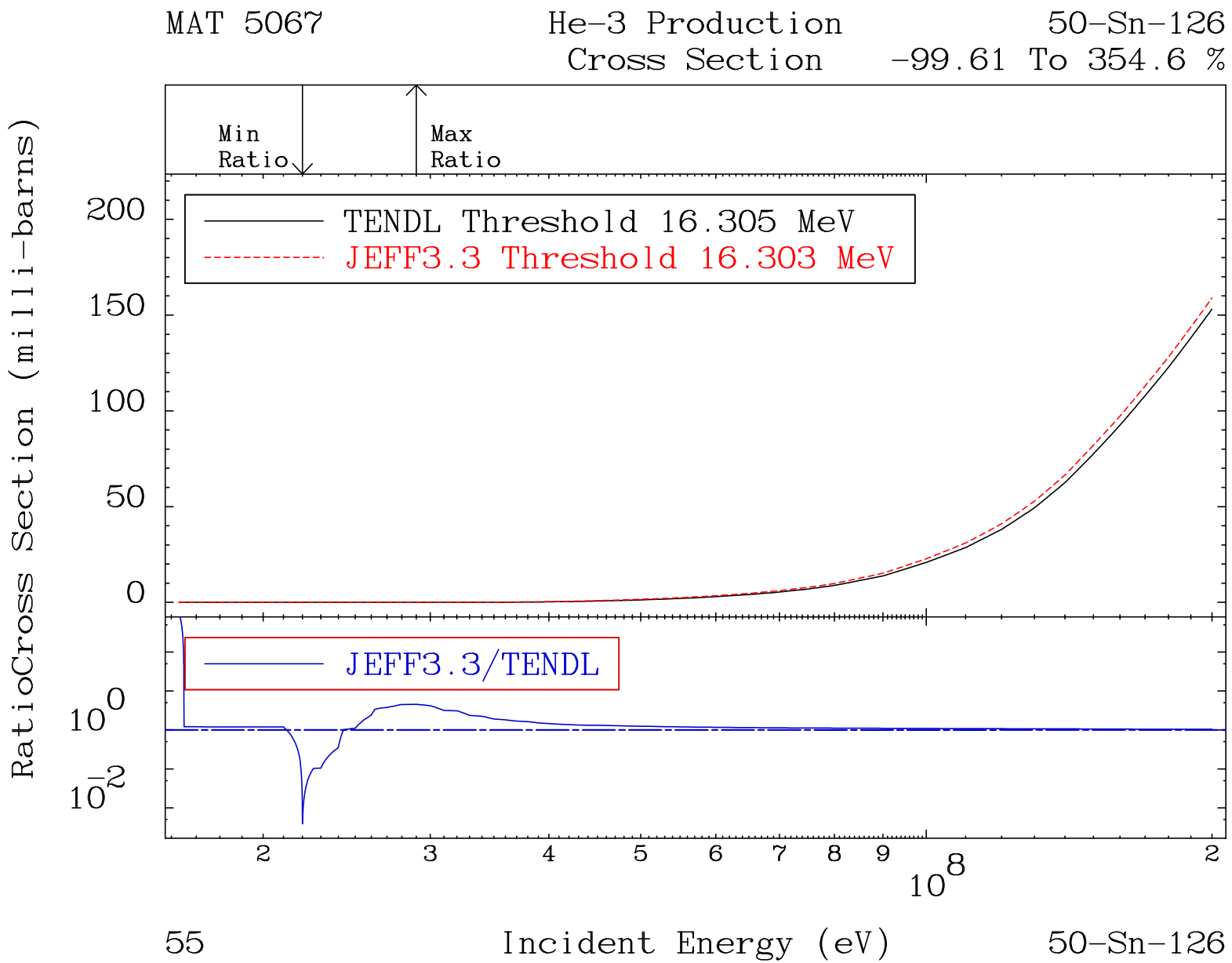

MAT 5067 Total kinematic kerma (high limit) 50-Sn-126
Cross Section -98.35 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
50
50-Sn-126

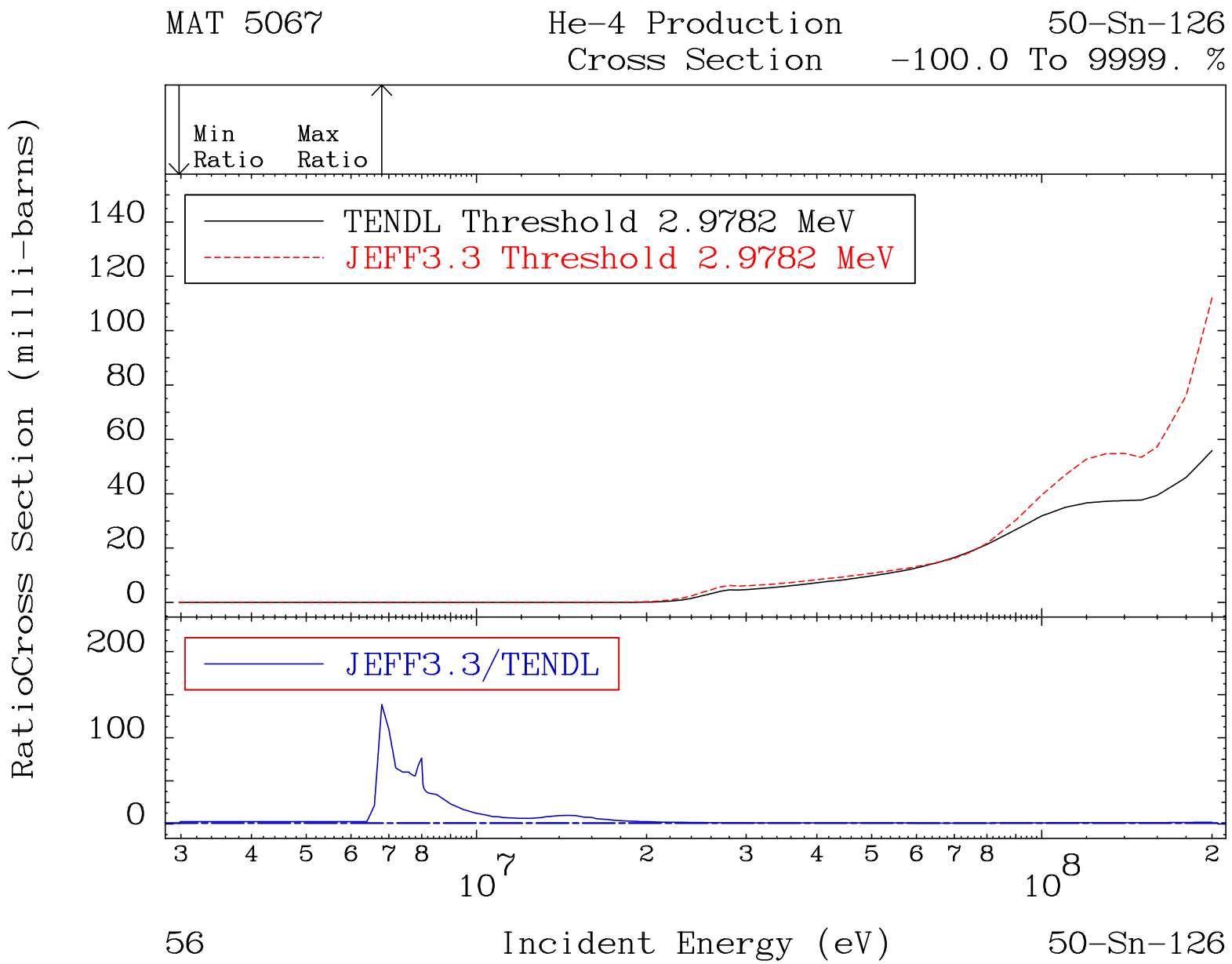

MAT 5067
Dpa total (eV-barns)
50-Sn-126
Cross Section
-98.34 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
51
50-Sn-126

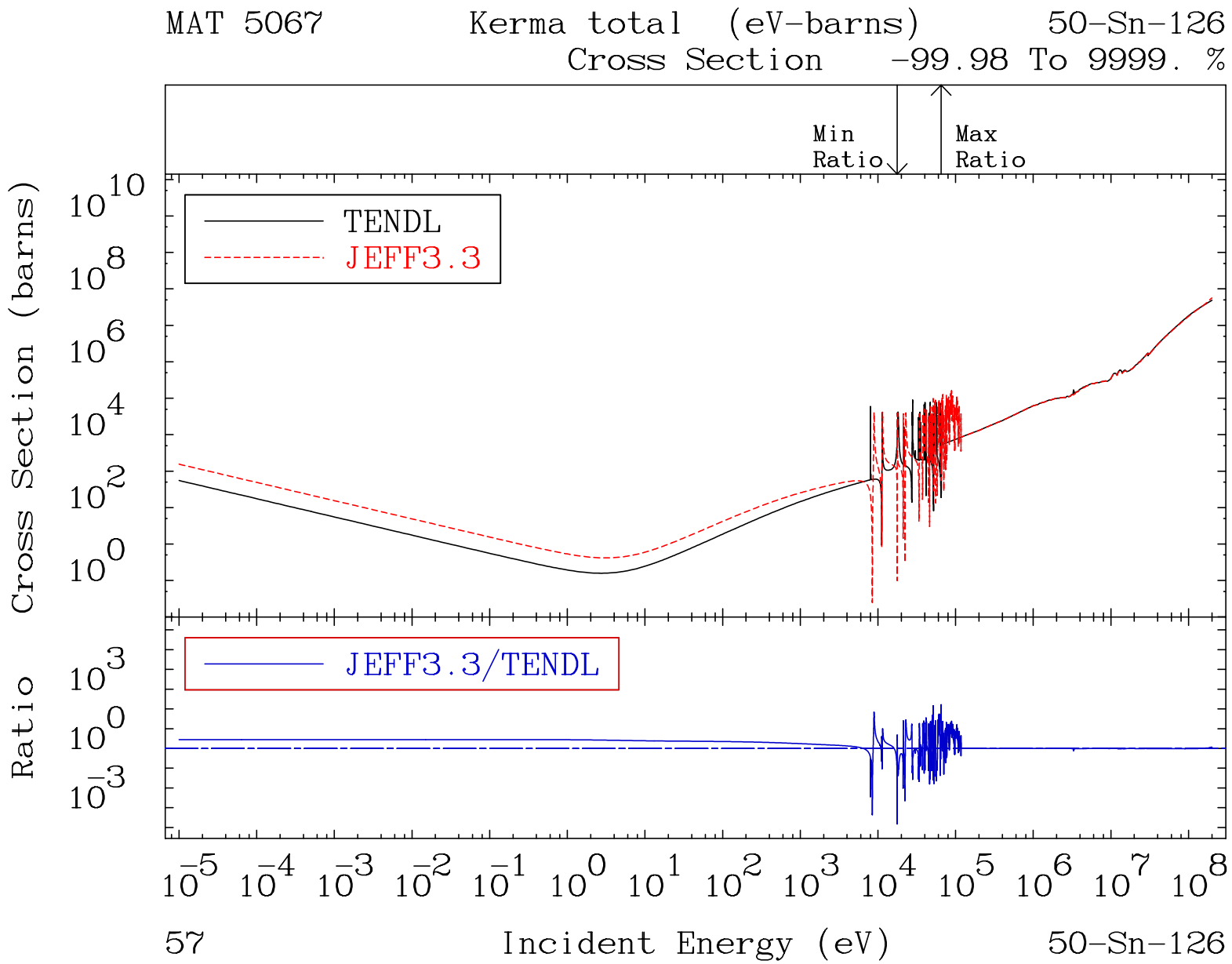

MAT 5067
Dpa elastic (mt2)
Cross Section
50-Sn-126
-98.31 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 750.00 eV
JENDL5.0 Threshold 812.50 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
50-Sn-126

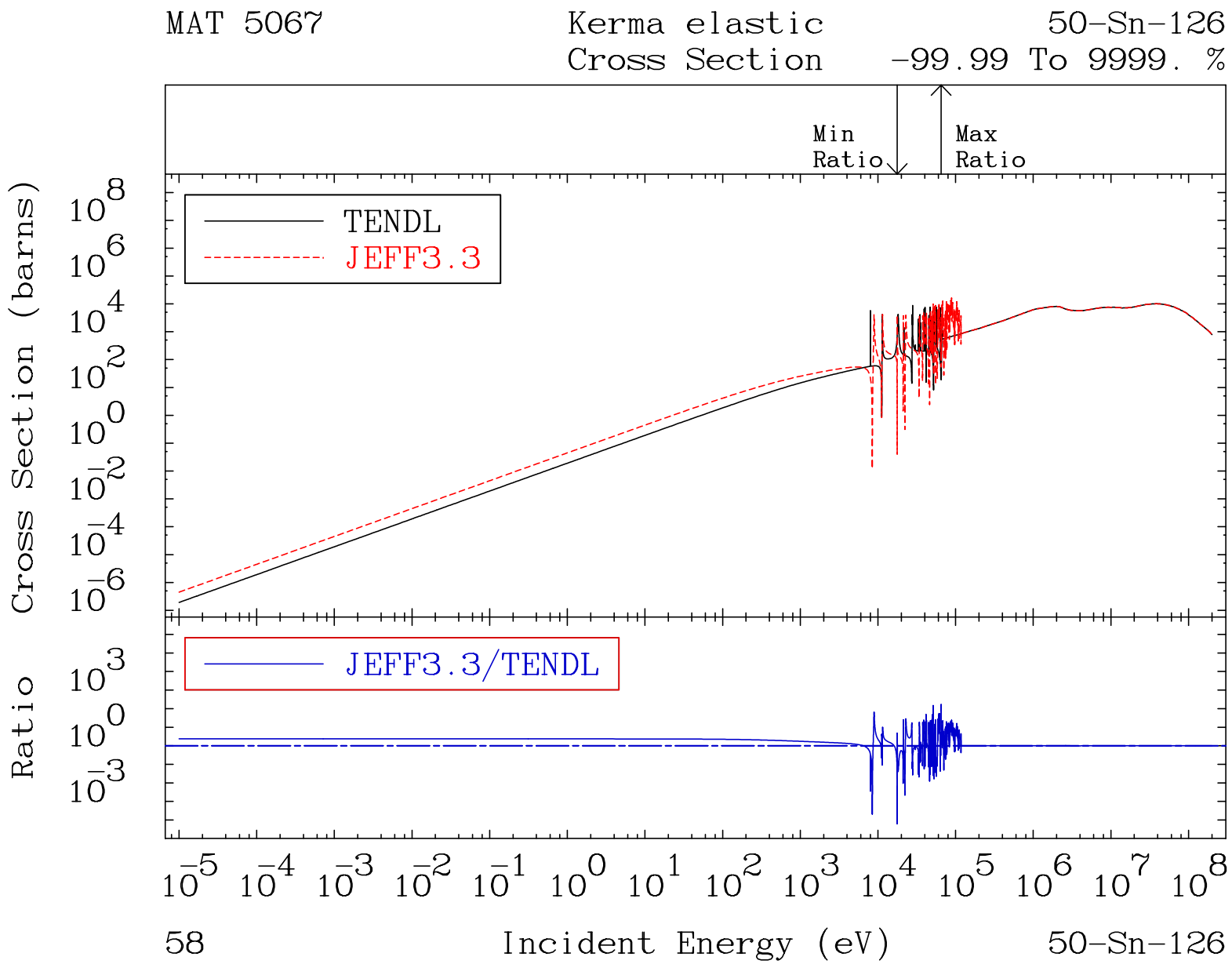

MAT 5067
Dpa inelastic (mt51-91)
50-Sn-126
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1503 MeV
JENDL5.0 Threshold 105.00 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
53
50-Sn-126

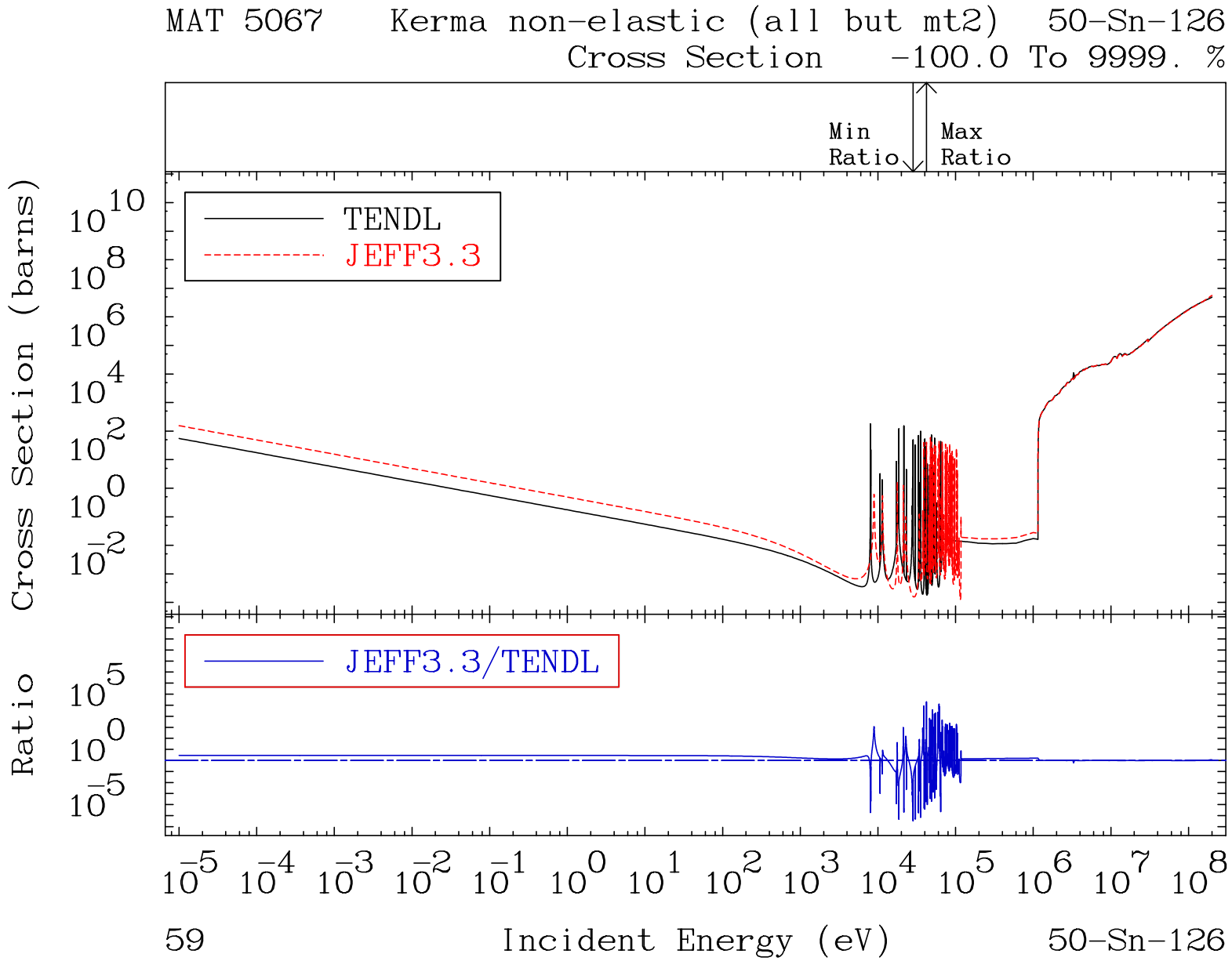

MAT 5067 Dpa disappearance (mt102 -120) 50-Sn-126
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
54
50-Sn-126

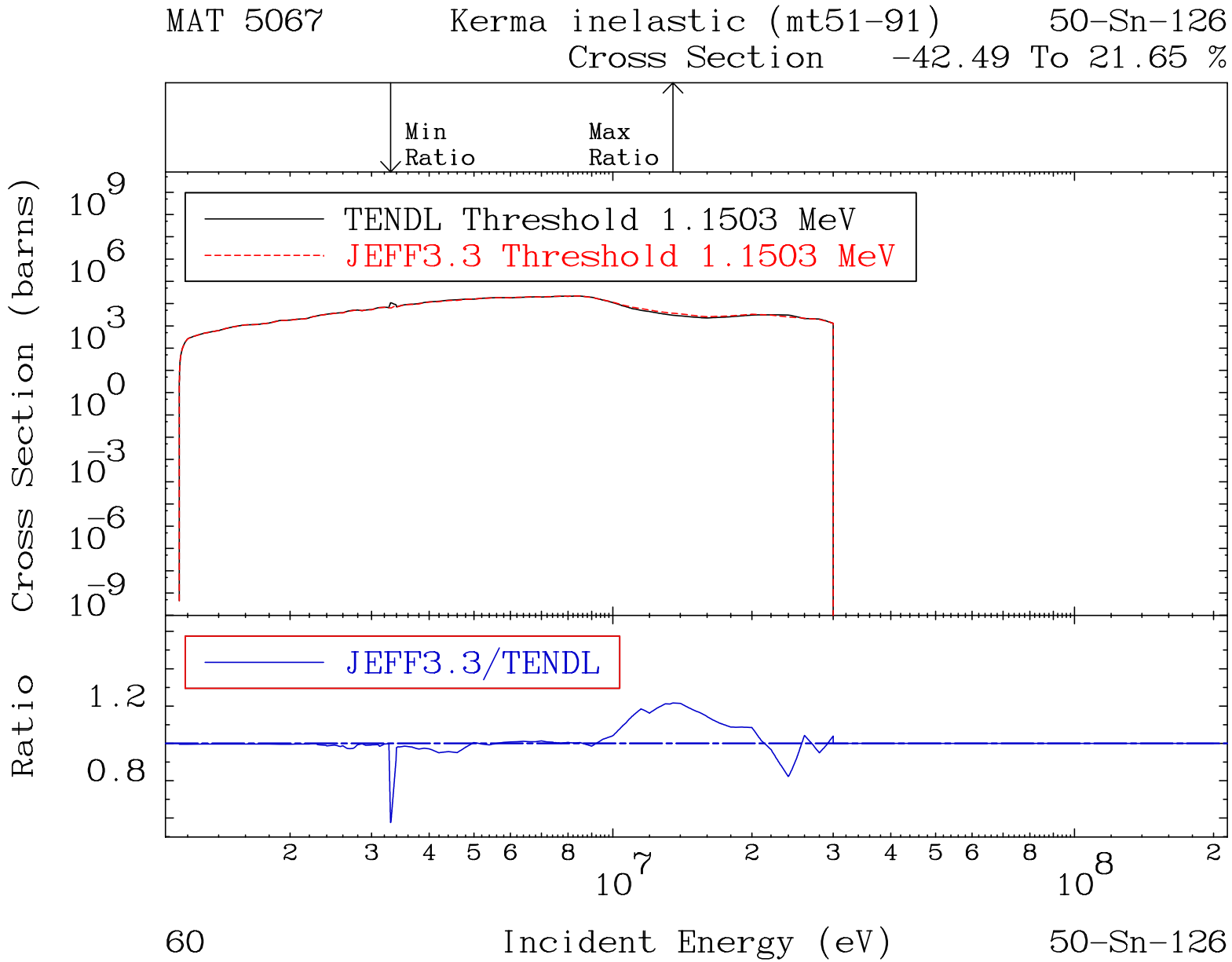

MAT 5067
He-3 Production
Cross Section
50-Sn-126
-99.61 To 354.6 %
Min Ratio
Max Ratio
TENDL Threshold 16.305 MeV
JEFF3.3 Threshold 16.303 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
55
Incident Energy (eV)
50-Sn-126

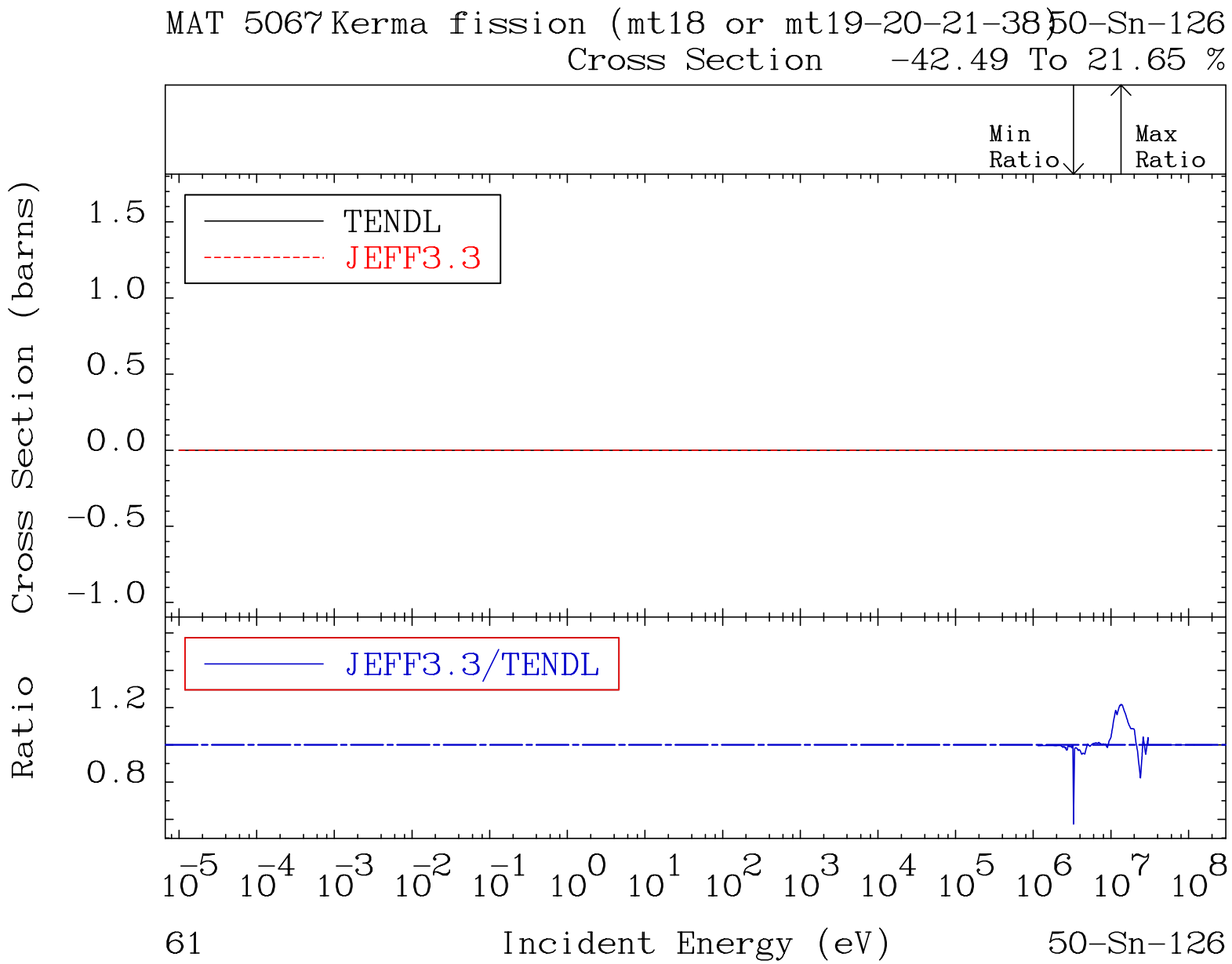

MAT 5067
He-4 Production
Cross Section
50-Sn-126
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 2.9782 MeV
JEFF3.3 Threshold 2.9782 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
200
100
0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
56
50-Sn-126

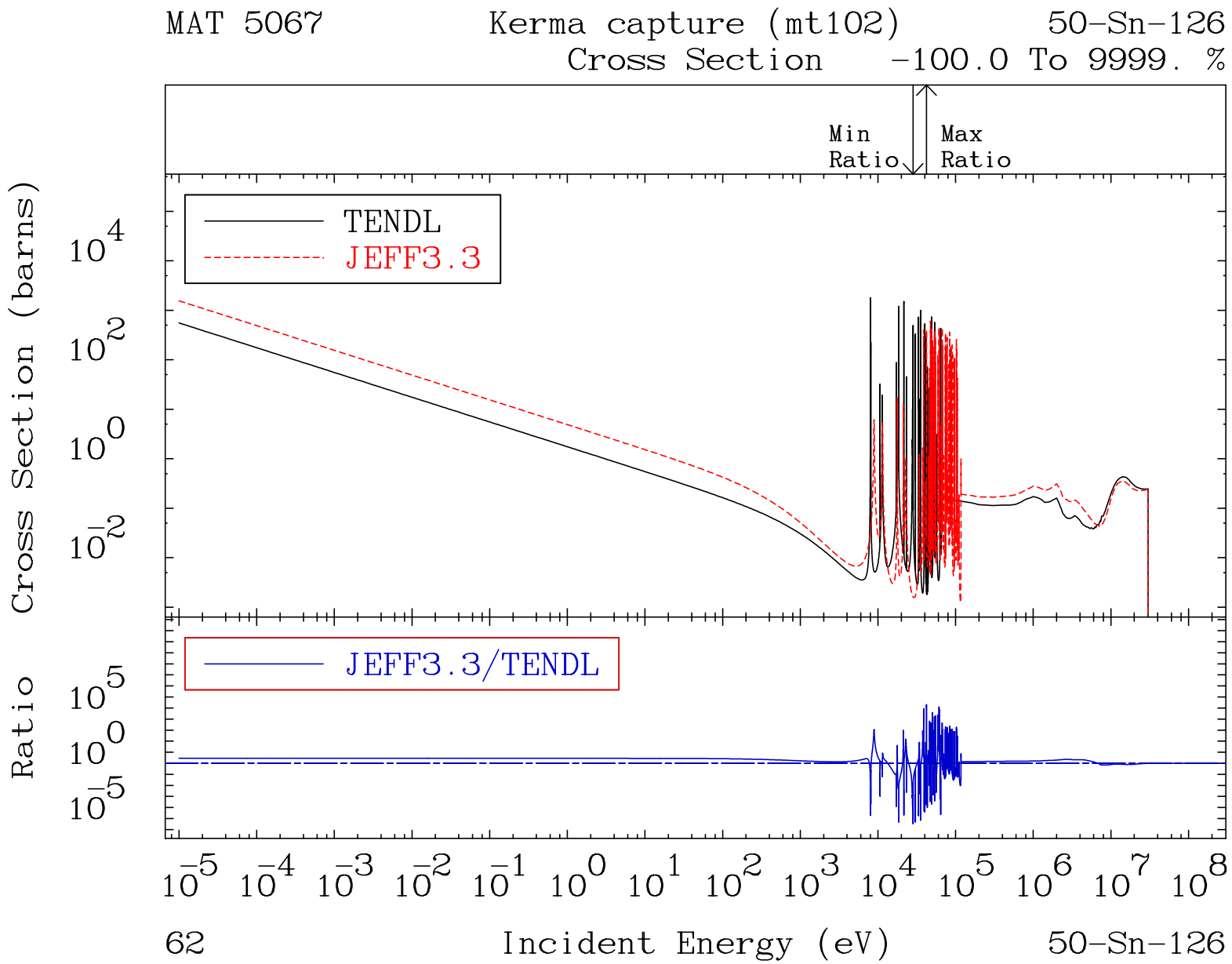

MAT 5067
Kerma total (eV-barns)
50-Sn-126
Cross Section -99.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
50-Sn-126

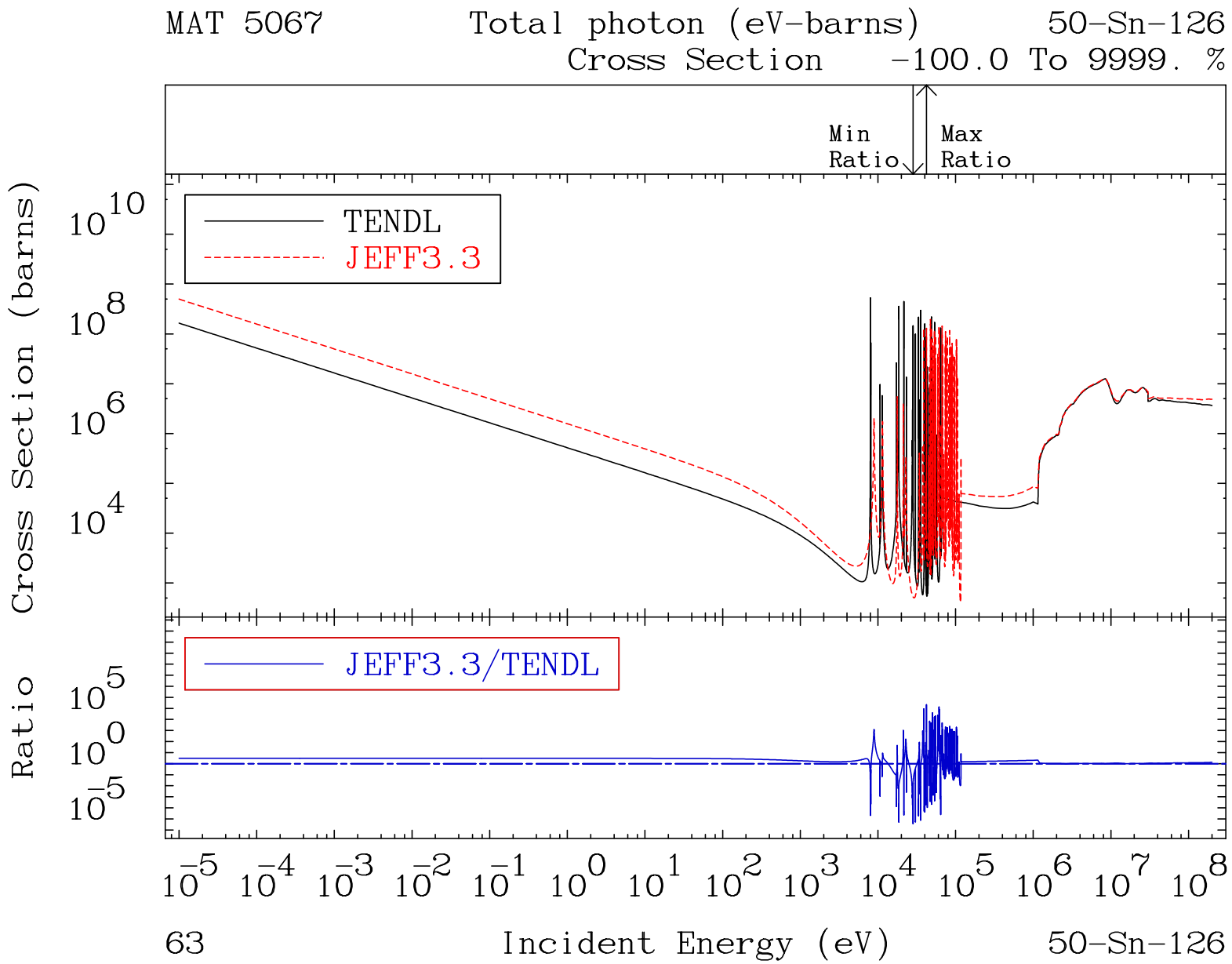

MAT 5067
Kerma elastic
Cross Section
50-Sn-126
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
50-Sn-126

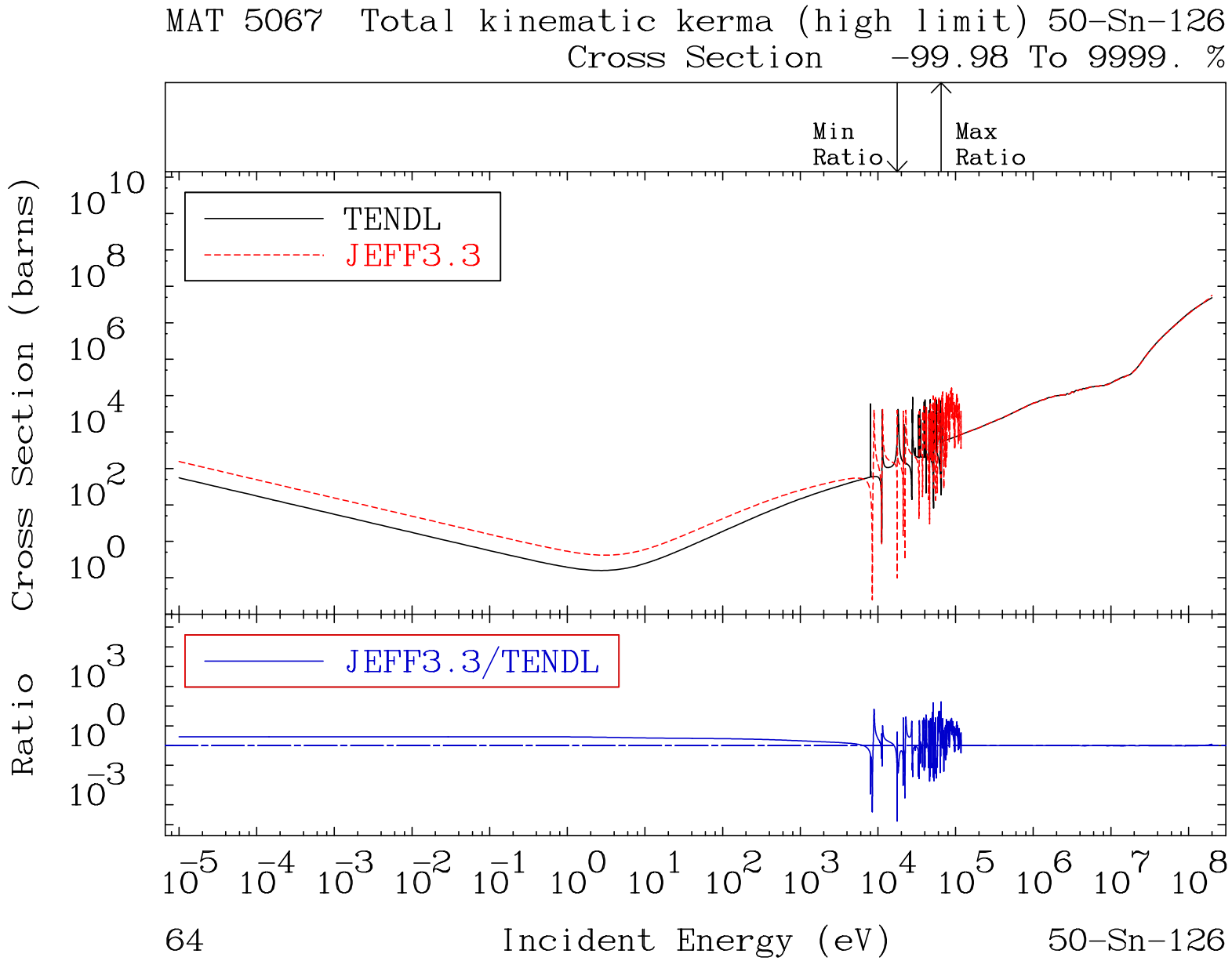

MAT 5067 Kerma non-elastic (all but mt2) 50-Sn-126
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
50-Sn-126

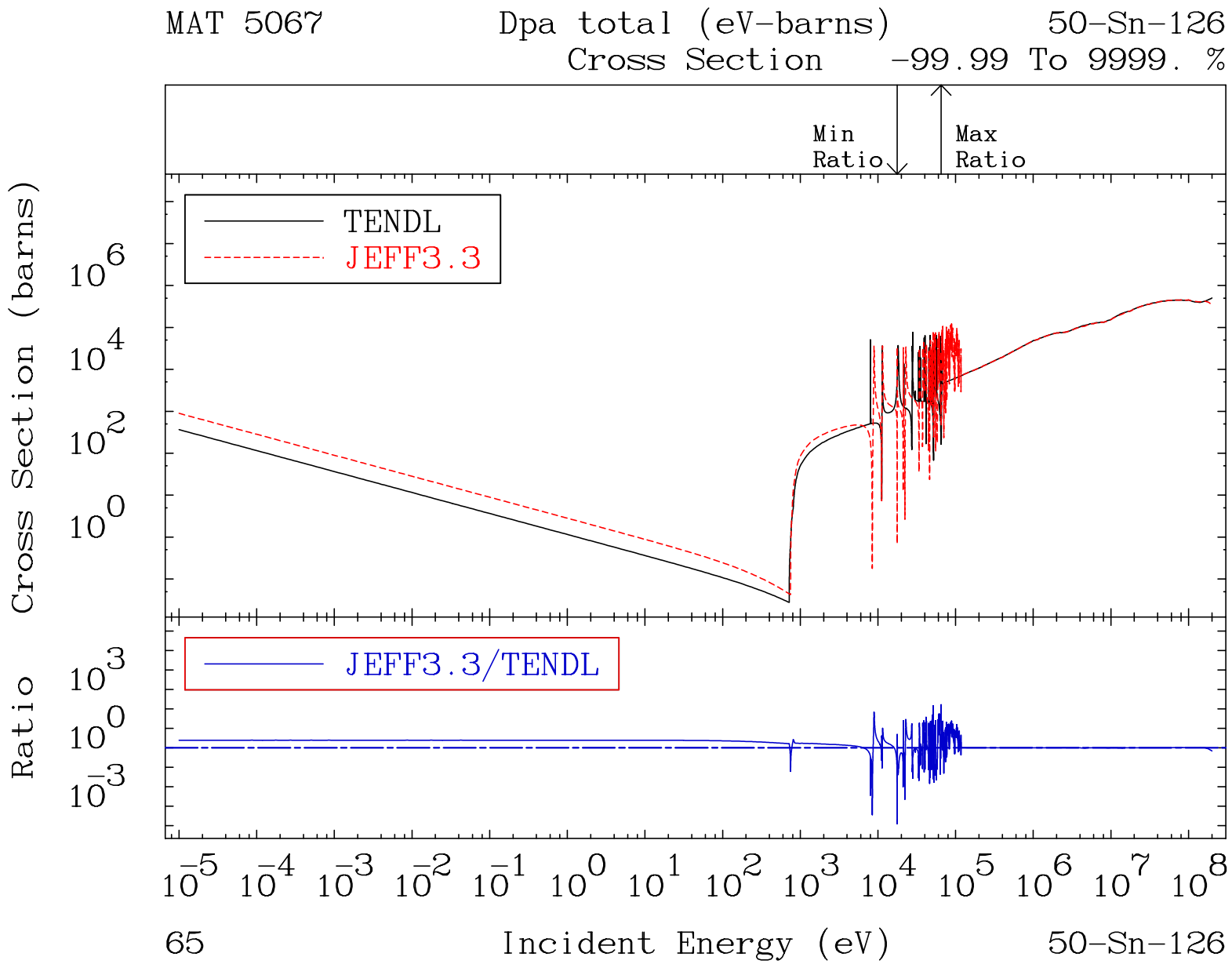

MAT 5067
Kerma inelastic (mt51-91)
50-Sn-126
Cross Section -42.49 To 21.65 %
Min Ratio
Max Ratio
TENDL Threshold 1.1503 MeV
JEFF3.3 Threshold 1.1503 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
50-Sn-126

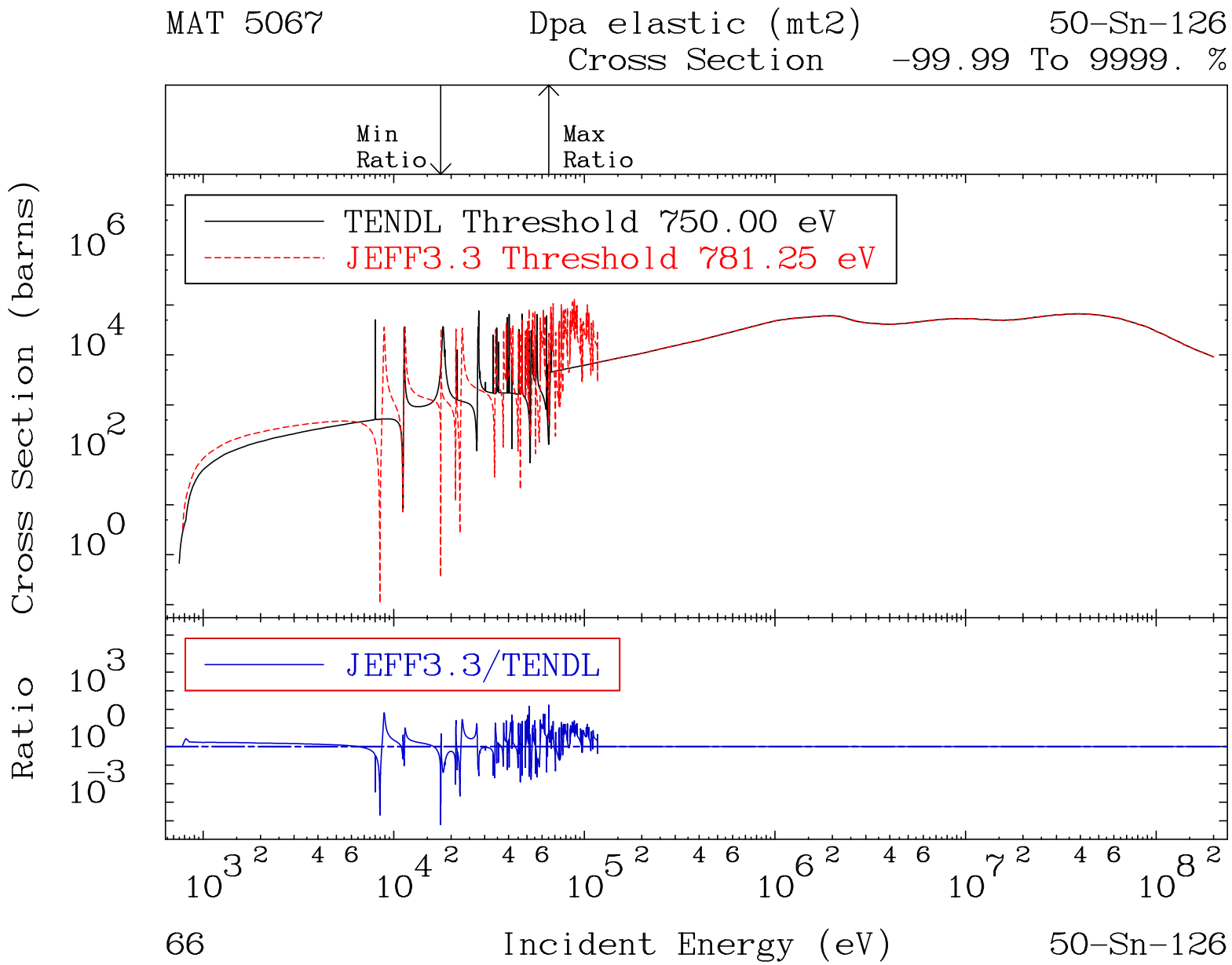

MAT 5067 Kerma fission (mt18 or mt19-20-21-38) 50-Sn-126
Cross Section -42.49 To 21.65 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
1.2
0.8
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
61
Incident Energy (eV)
50-Sn-126

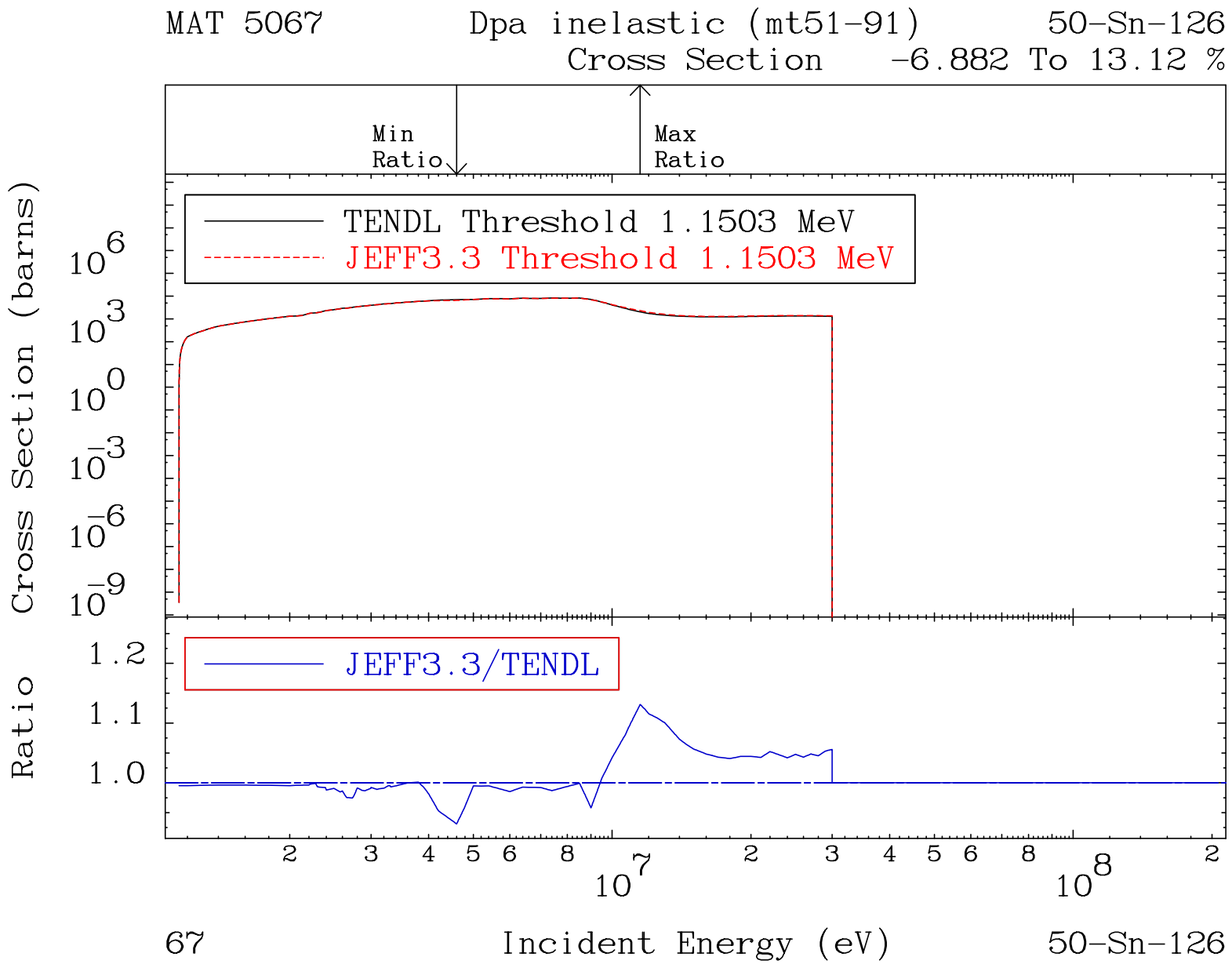

MAT 5067
Kerma capture (mt102)
50-Sn-126
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
62
50-Sn-126

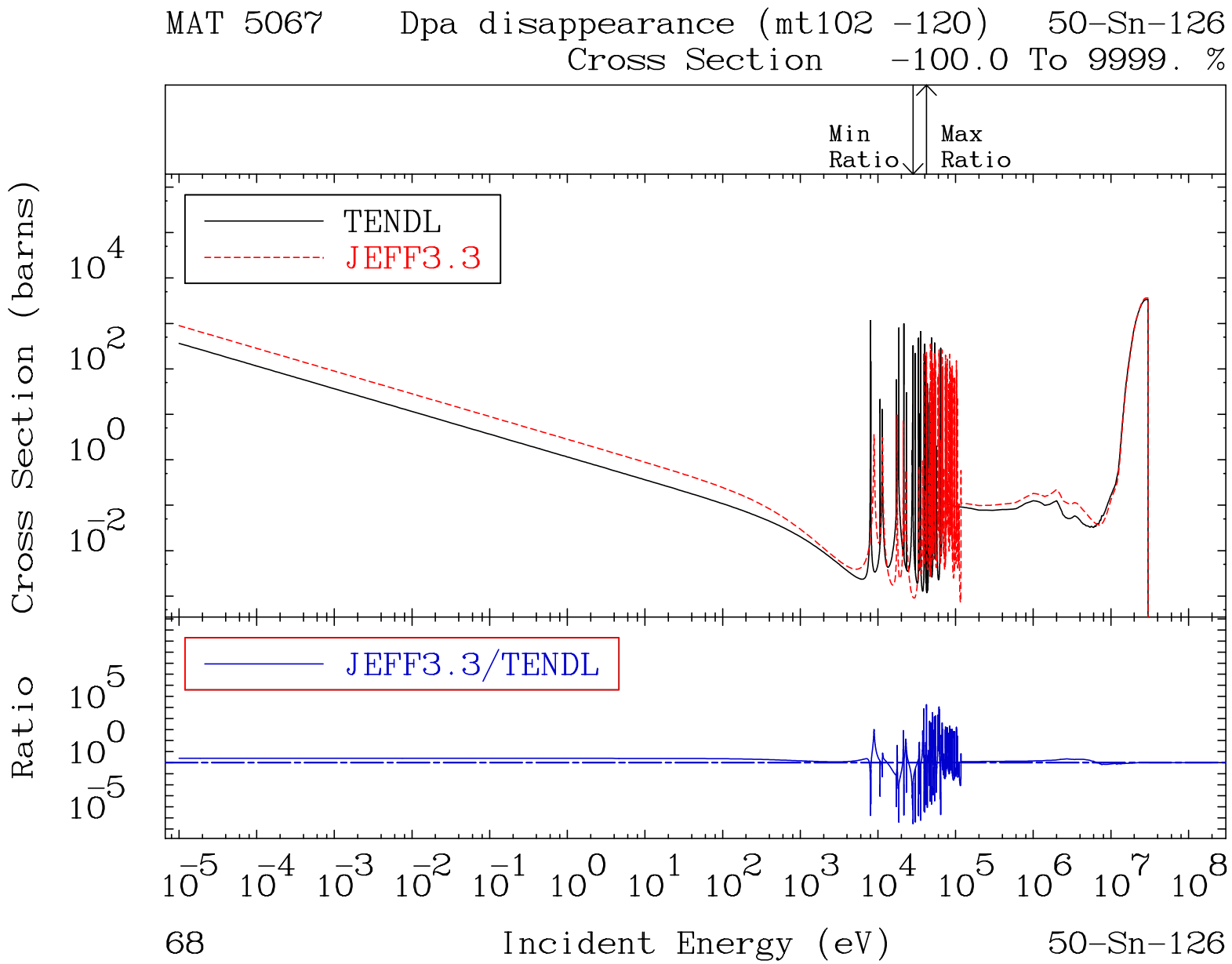

MAT 5067
Total photon (eV-barns)
50-Sn-126
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
63
50-Sn-126

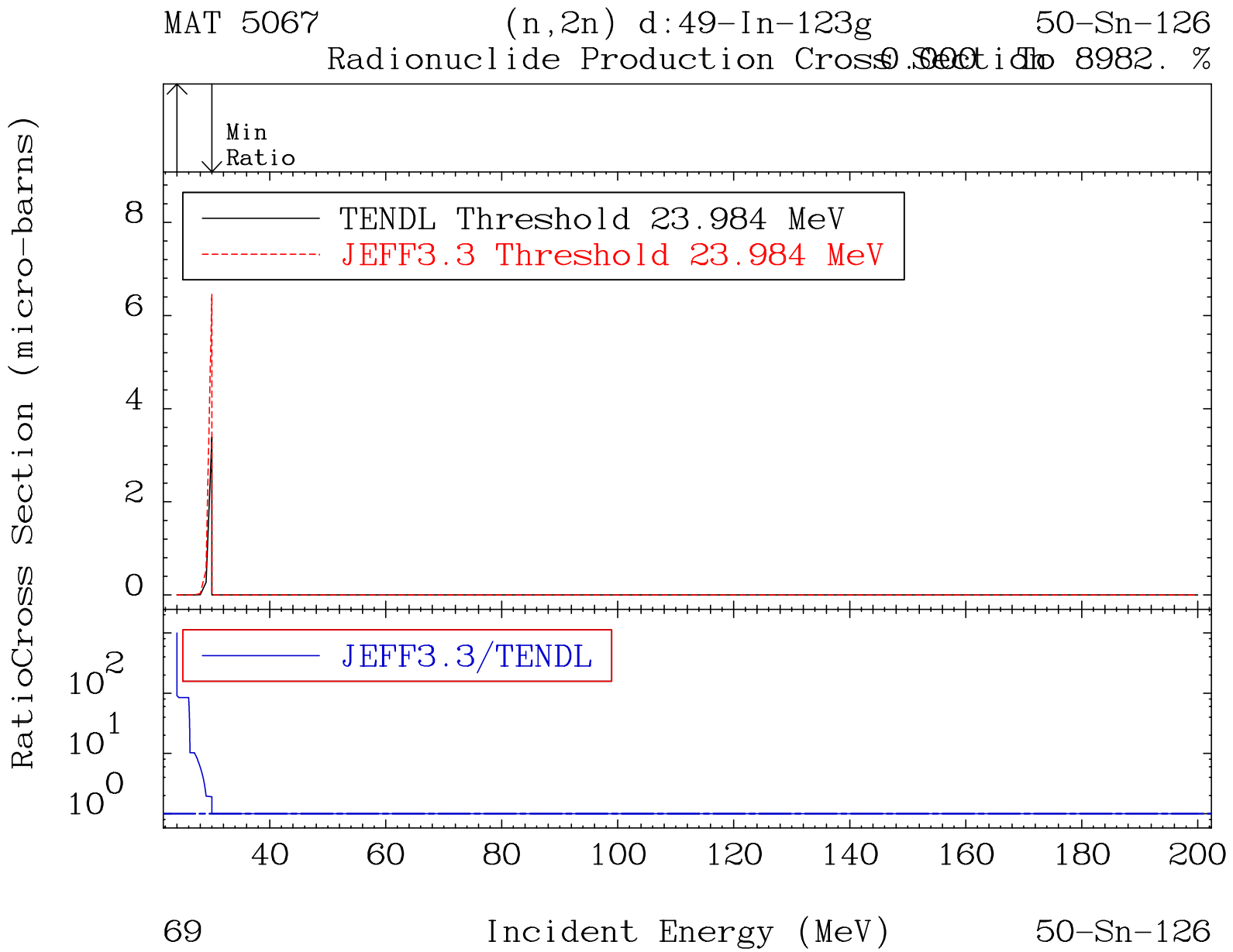

MAT 5067 Total kinematic kerma (high limit) 50-Sn-126
Cross Section -99.98 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
64
50-Sn-126

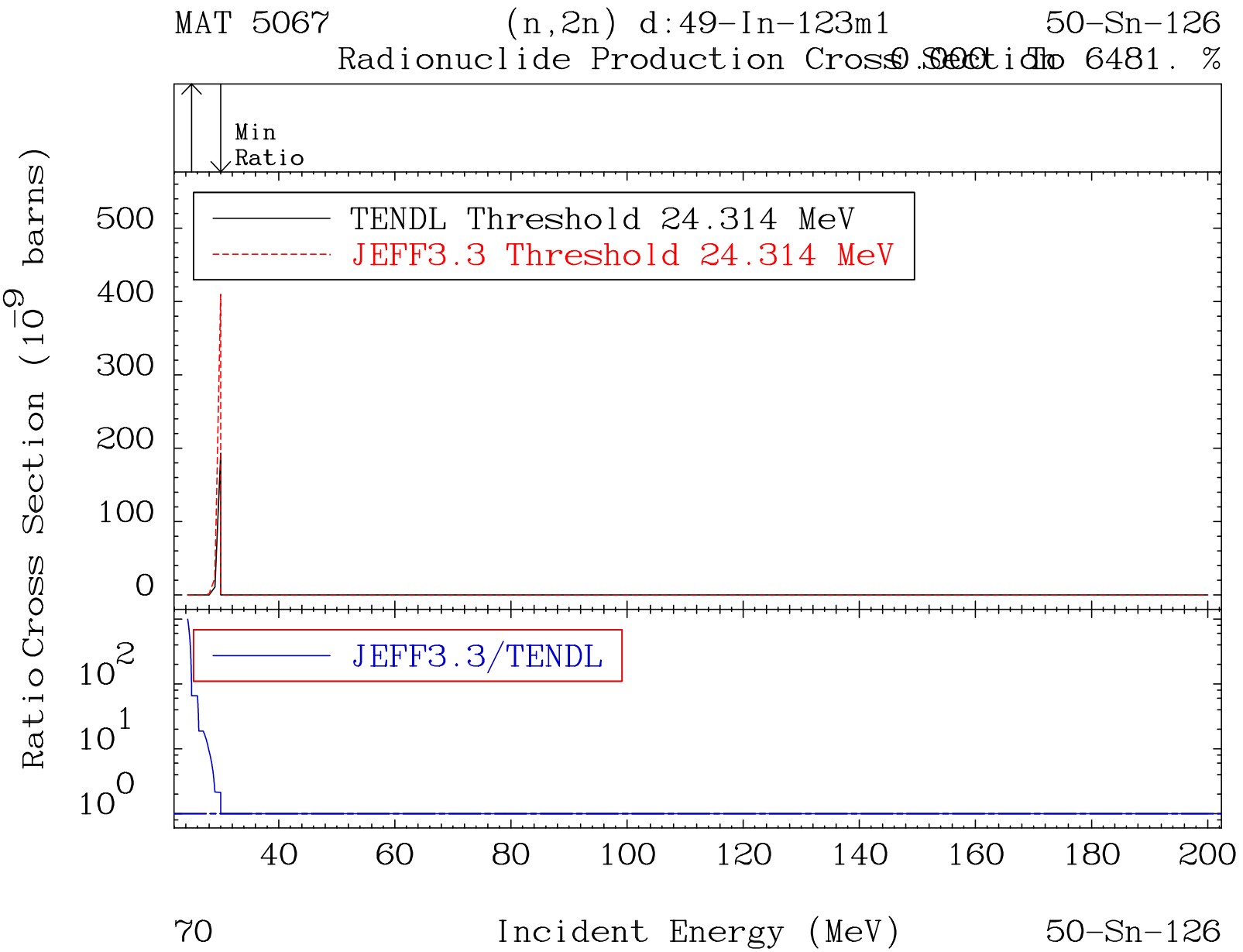

MAT 5067
Dpa total (eV-barns)
50-Sn-126
Cross Section -99.99 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
65
50-Sn-126

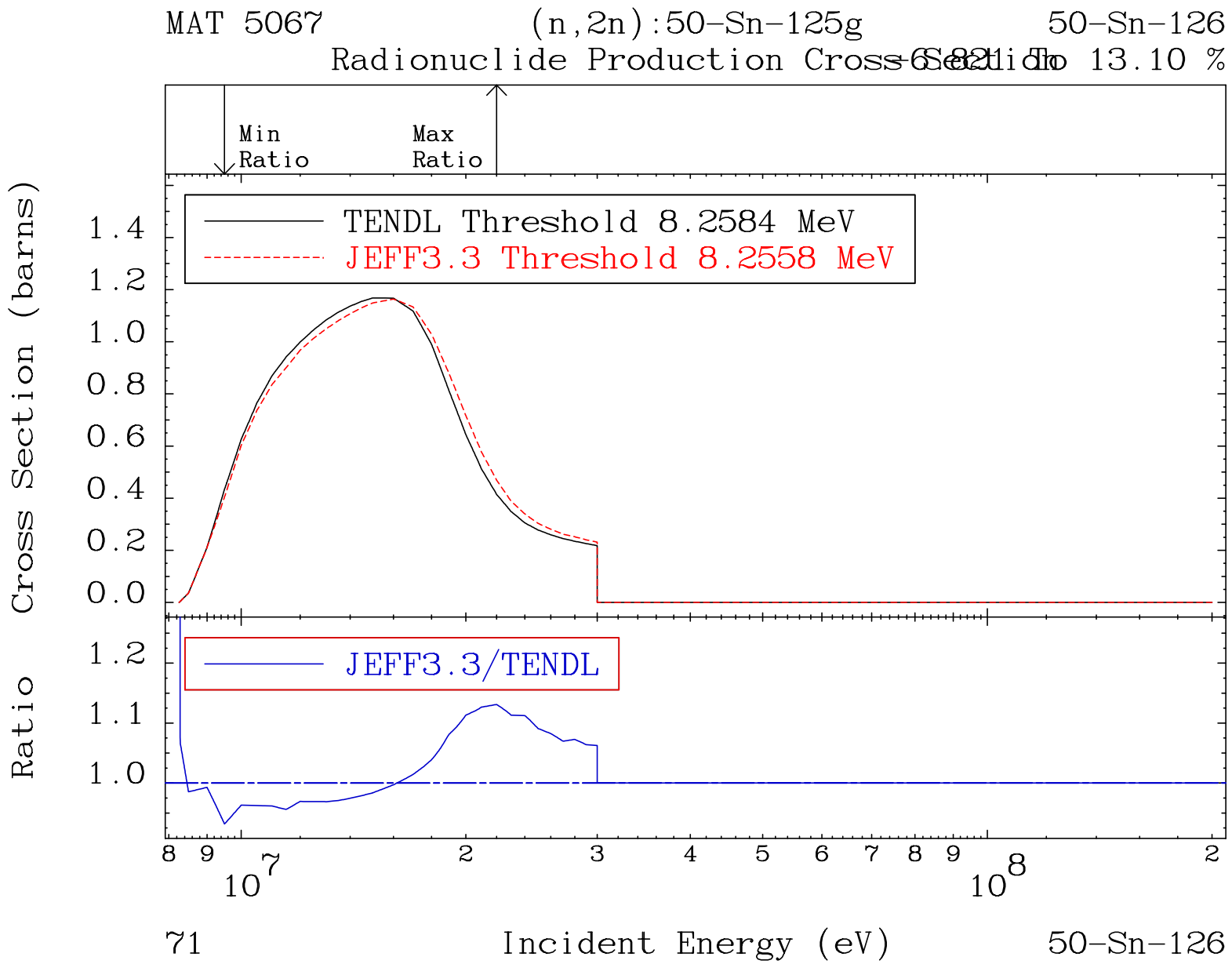

MAT 5067
Dpa elastic (mt2)
Cross Section
50-Sn-126
-99.99 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 750.00 eV
JEFF3.3 Threshold 781.25 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
66
50-Sn-126

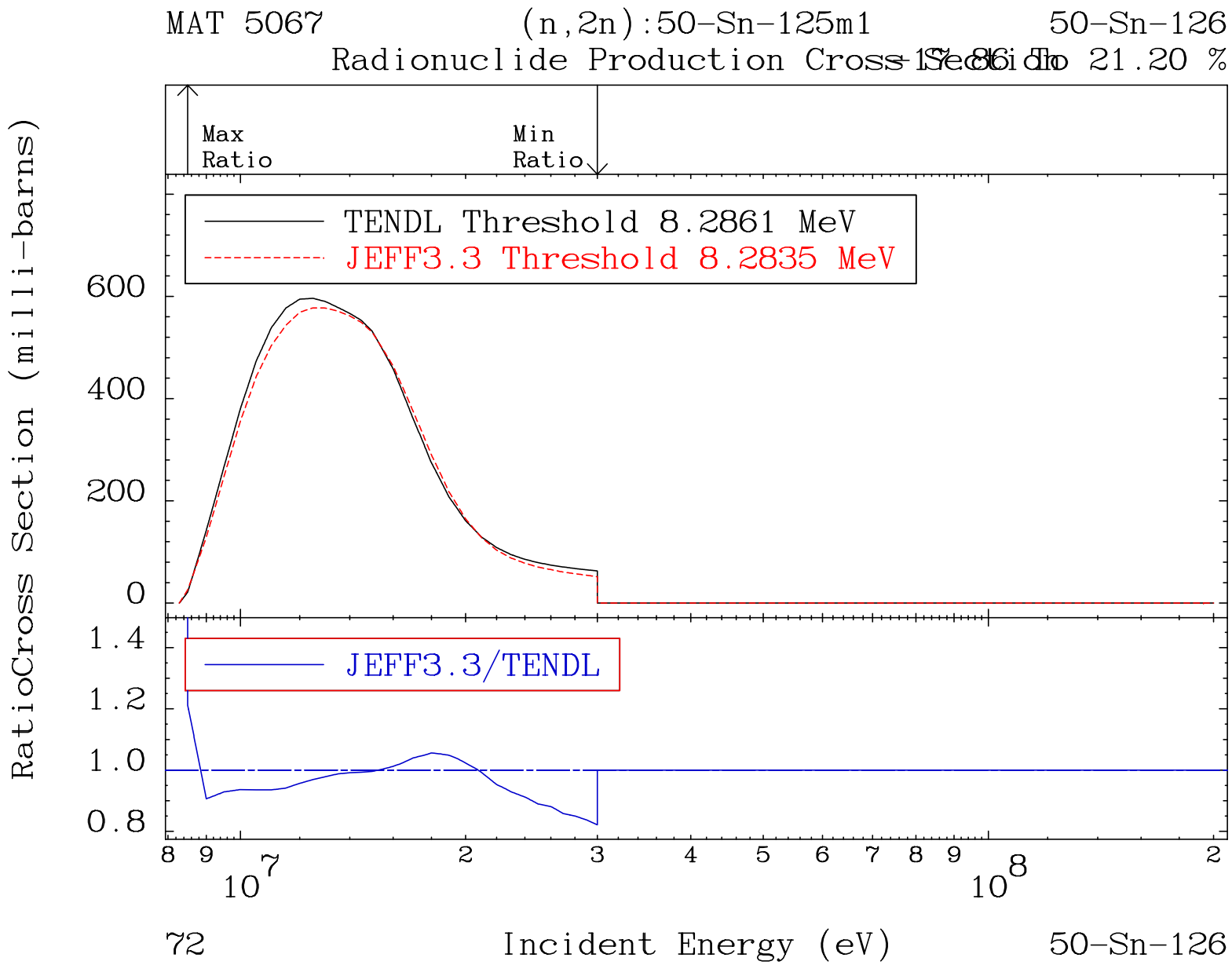

MAT 5067
Dpa inelastic (mt51-91)
50-Sn-126
Cross Section -6.882 To 13.12 %
Min Ratio
Max Ratio
TENDL Threshold 1.1503 MeV
JEFF3.3 Threshold 1.1503 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
67
50-Sn-126

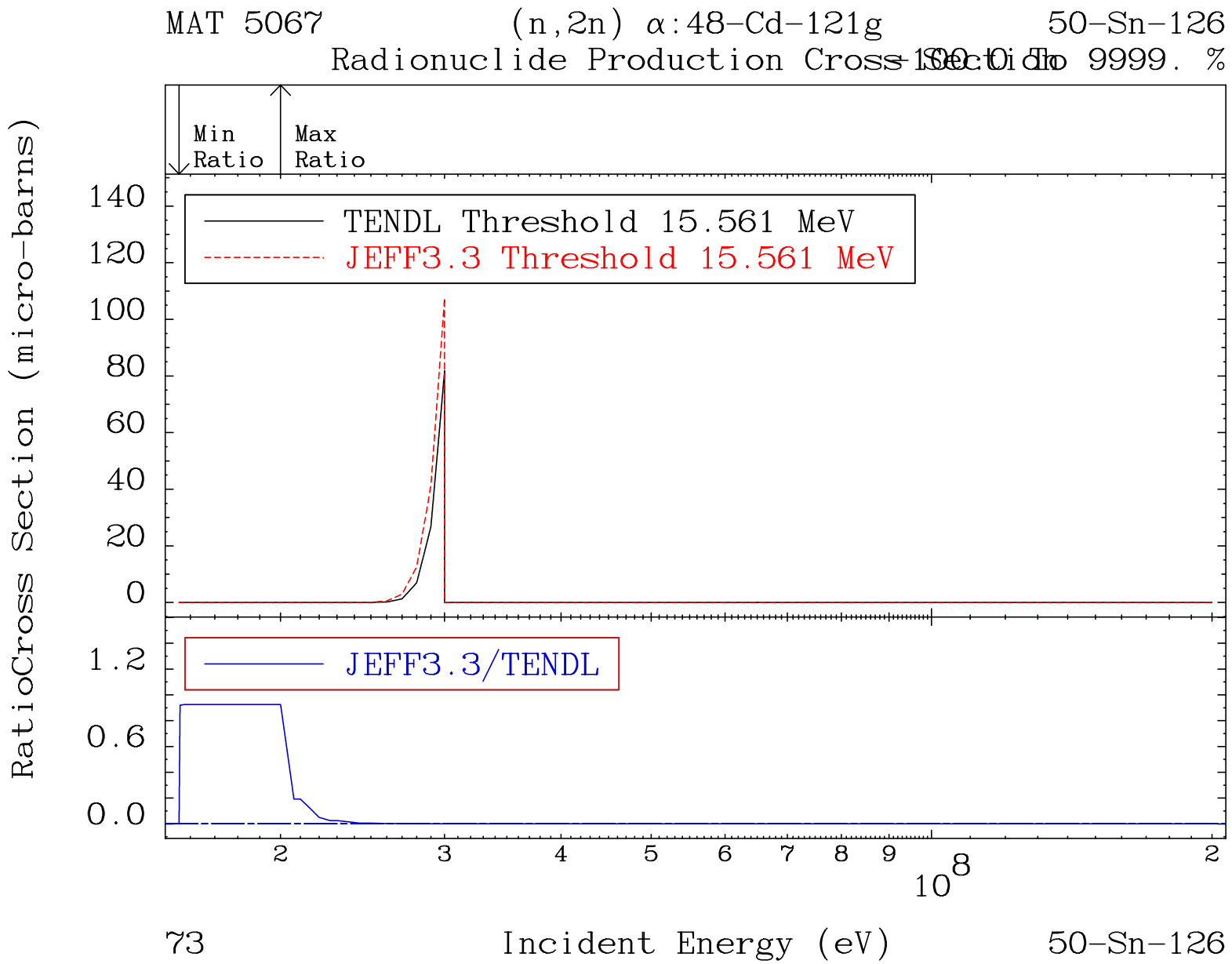

MAT 5067 Dpa disappearance (mt102 -120) 50-Sn-126
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
68
50-Sn-126

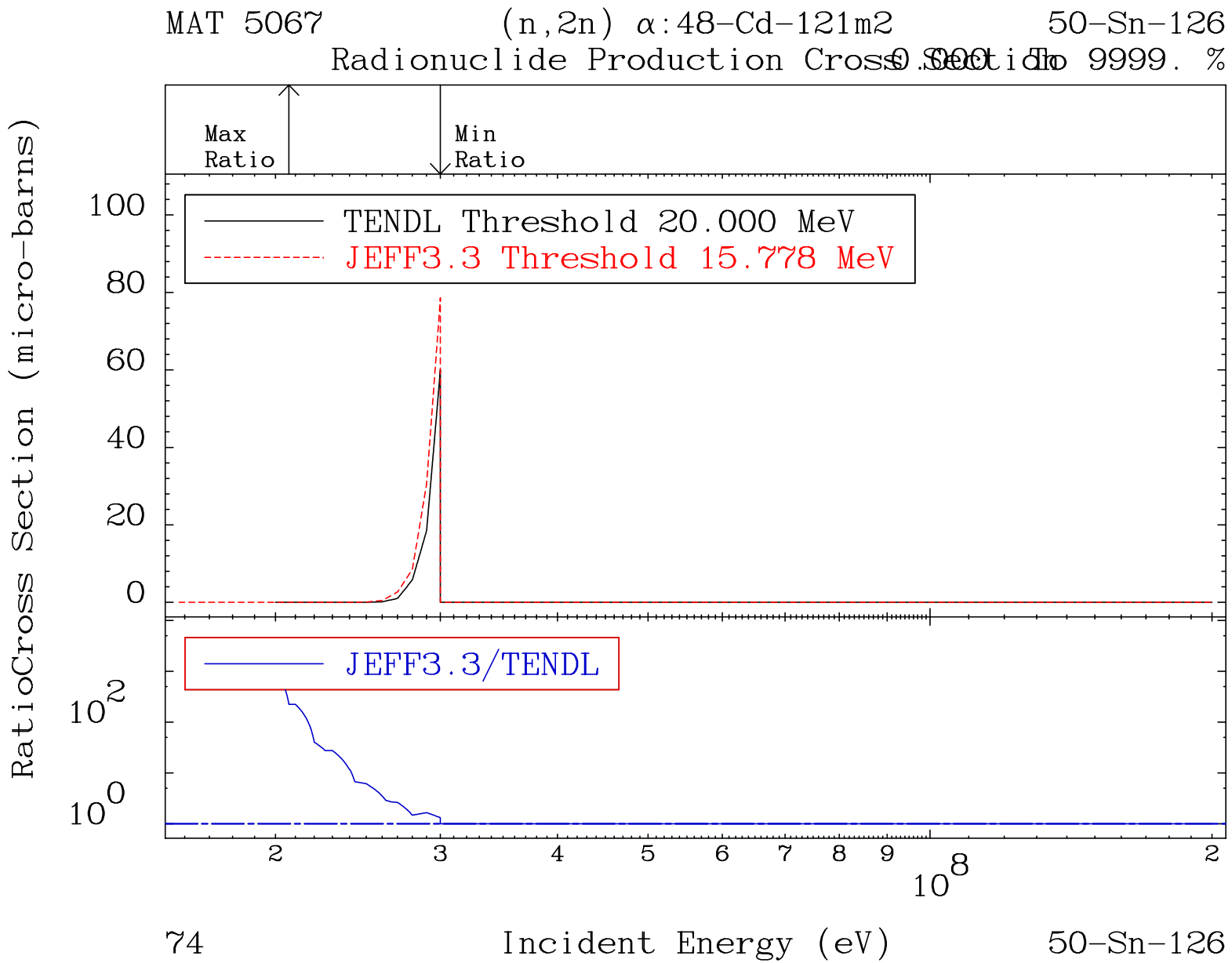

MAT 5067
(n,2n) d:49-In-123g
50-Sn-126
Radionuclide Production Cross Section
0.000 To 8982. %
Min
Ratio
TENDL Threshold 23.984 MeV
JEFF3.3 Threshold 23.984 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
0
2
4
6
8
10^0
10^1
10^2
40
60
80
100
120
140
160
180
200
69
Incident Energy (MeV)
50-Sn-126

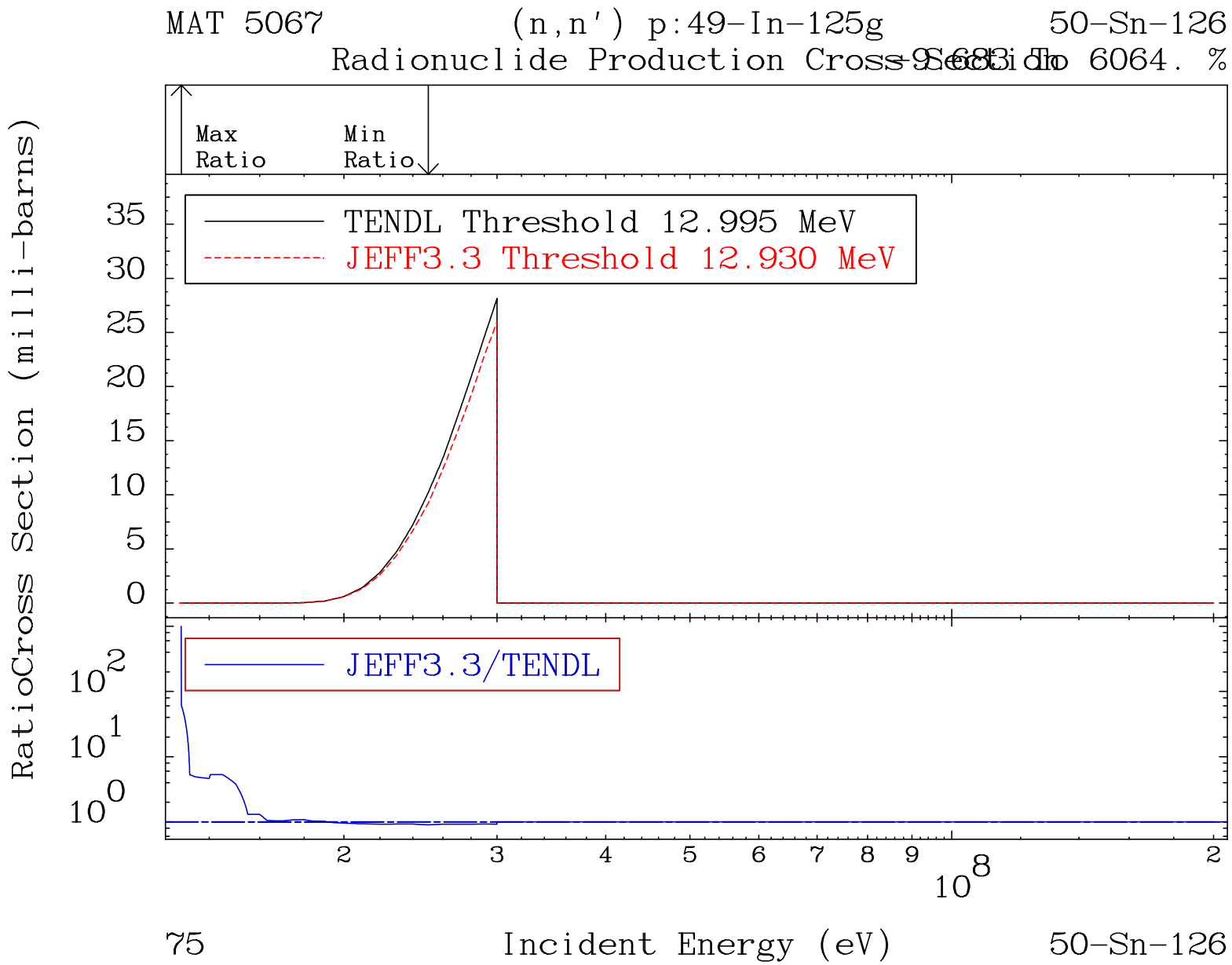

MAT 5067
(n,2n) d:49-In-123m1
50-Sn-126
Radionuclide Production Cross Section
0.000 To 6481. %
Min
Ratio
TENDL Threshold 24.314 MeV
JEFF3.3 Threshold 24.314 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
500
400
300
200
100
0
10^{2}
10^{1}
10^{0}
40
60
80
100
120
140
160
180
200
70
Incident Energy (MeV)
50-Sn-126

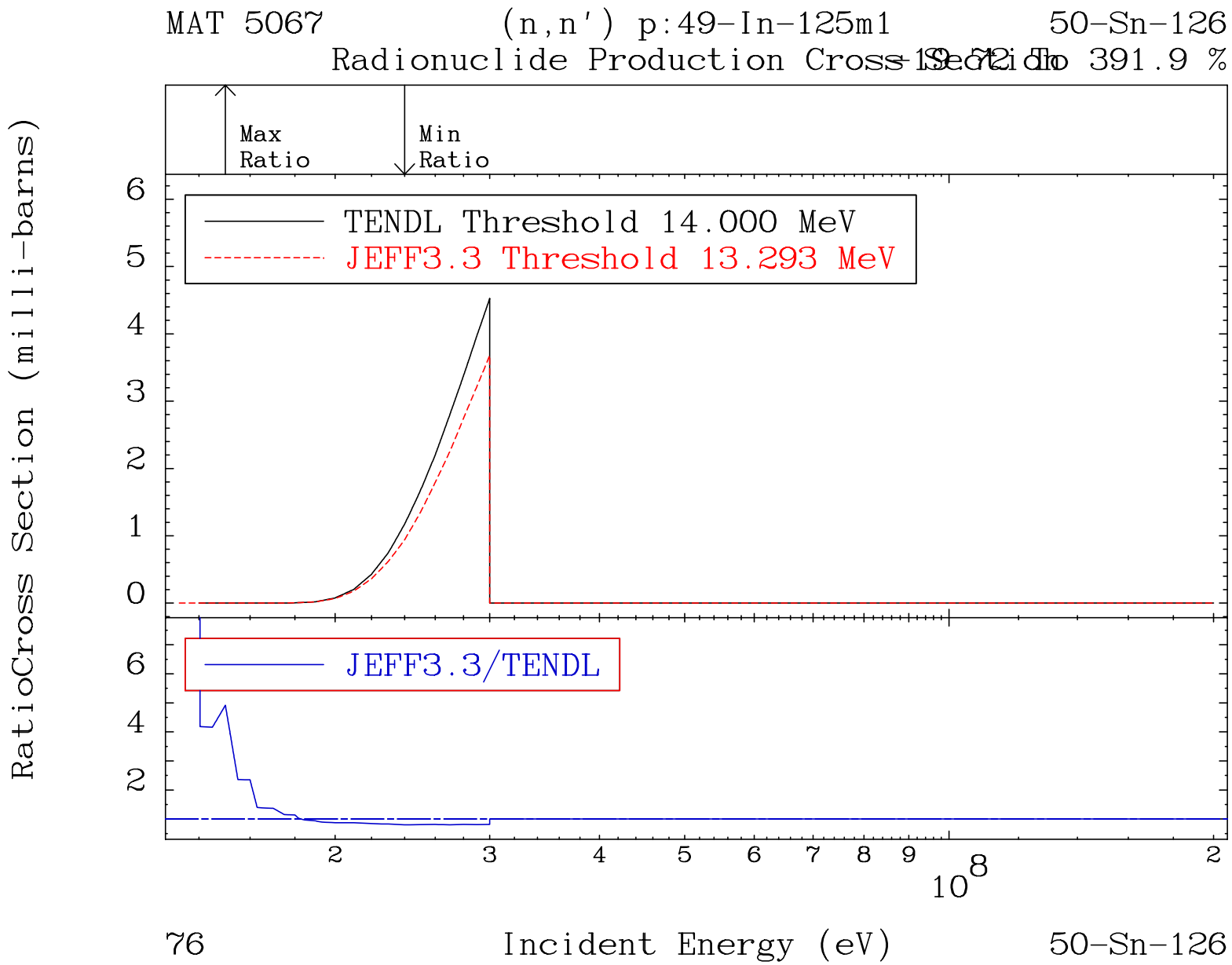

MAT 5067
(n,2n):50-Sn-125g
50-Sn-126
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 8.2584 MeV
JEFF3.3 Threshold 8.2558 MeV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
50-Sn-126

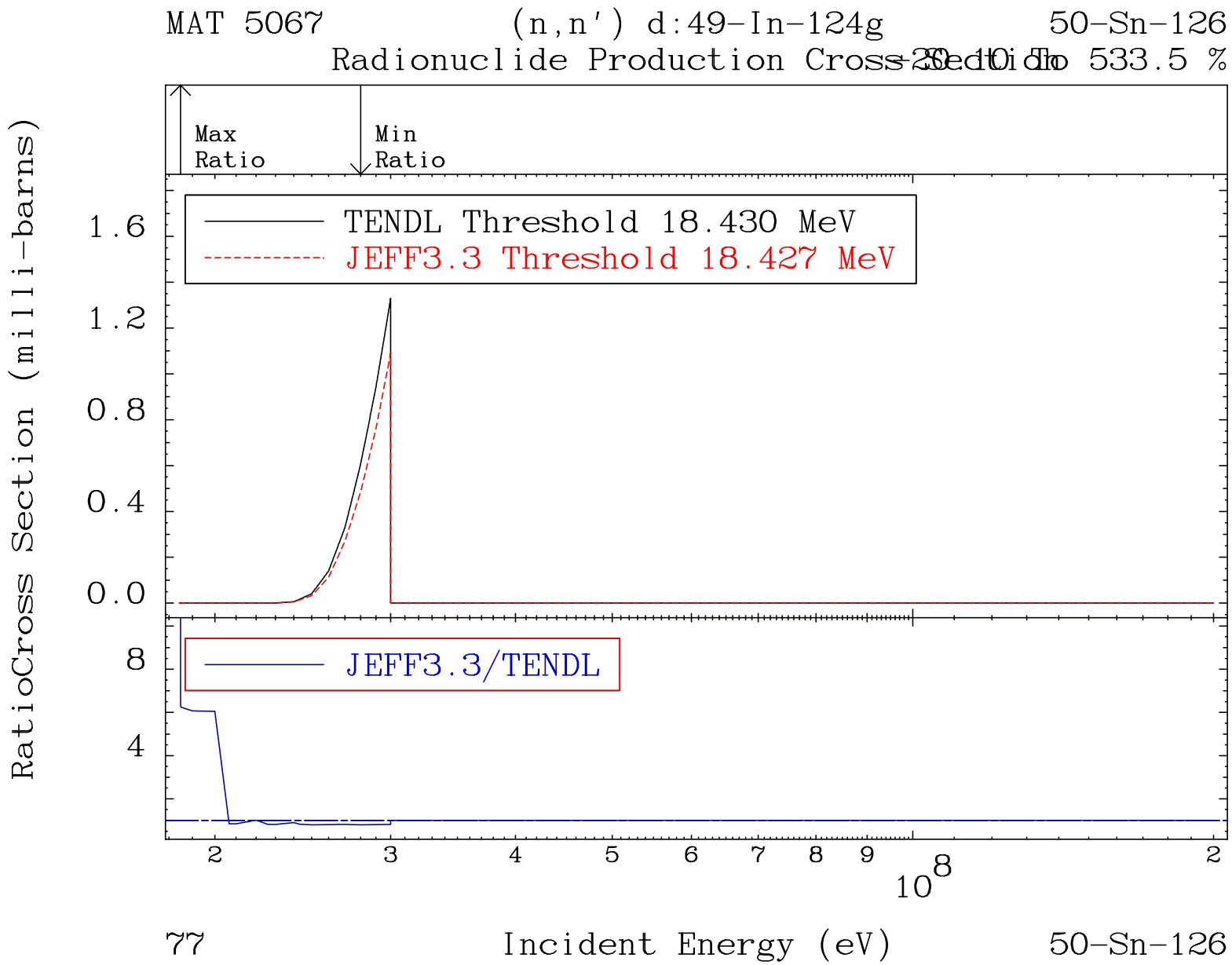

MAT 5067
(n,2n):50-Sn-125m1
50-Sn-126
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 8.2861 MeV
JEFF3.3 Threshold 8.2835 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
400
200
0
1.4
1.2
1.0
0.8
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
72
Incident Energy (eV)
50-Sn-126

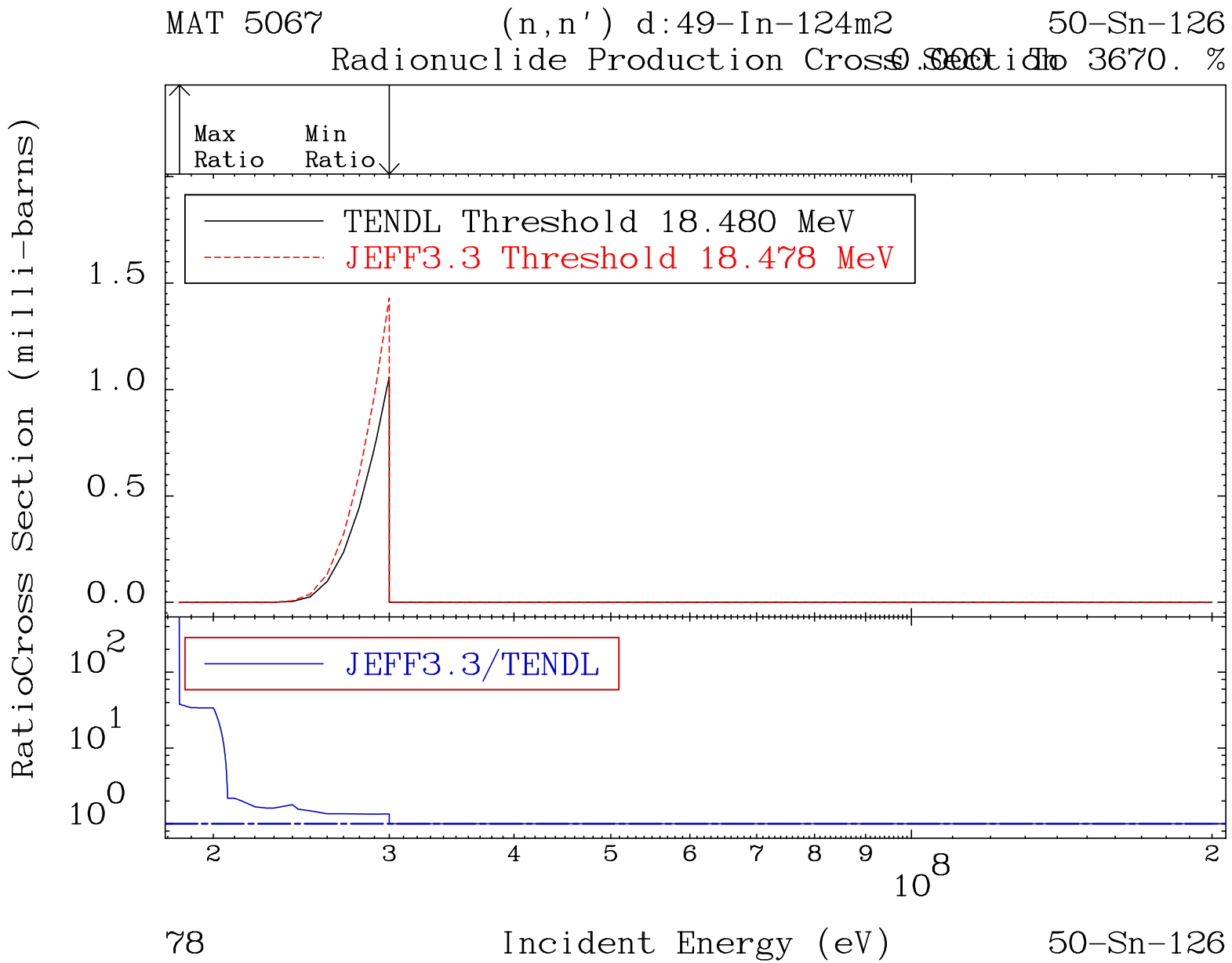

MAT 5067
(n,2n) α:48-Cd-121g
50-Sn-126
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 15.561 MeV
JEFF3.3 Threshold 15.561 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
140
120
100
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
73
Incident Energy (eV)
50-Sn-126

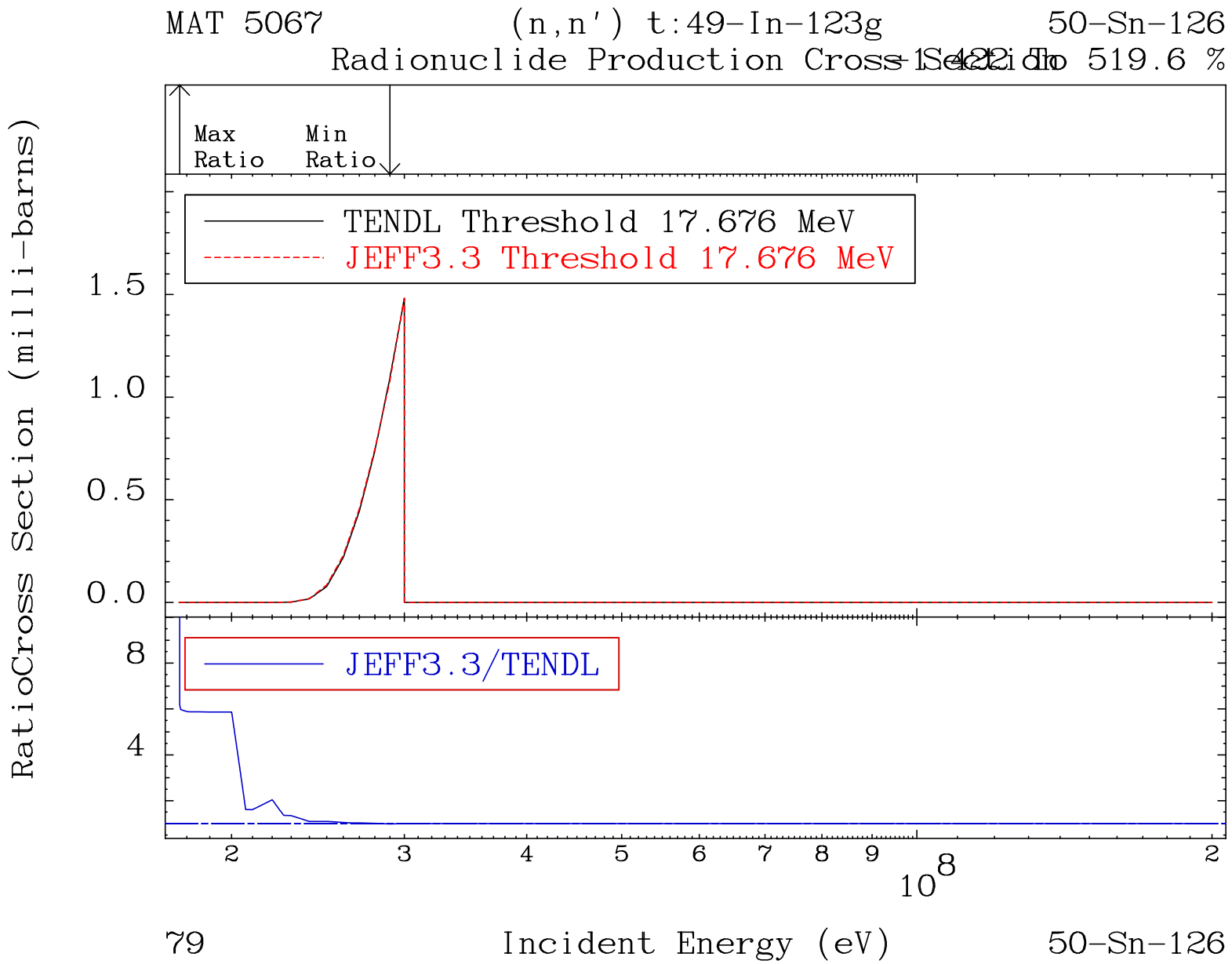

MAT 5067
(n,2n) α:48-Cd-121m2
50-Sn-126
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 20.000 MeV
JEFF3.3 Threshold 15.778 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
100
80
60
40
20
0
10^2
10^0
2
3
4
5
6
7
8
9
10^8
2
74
Incident Energy (eV)
50-Sn-126

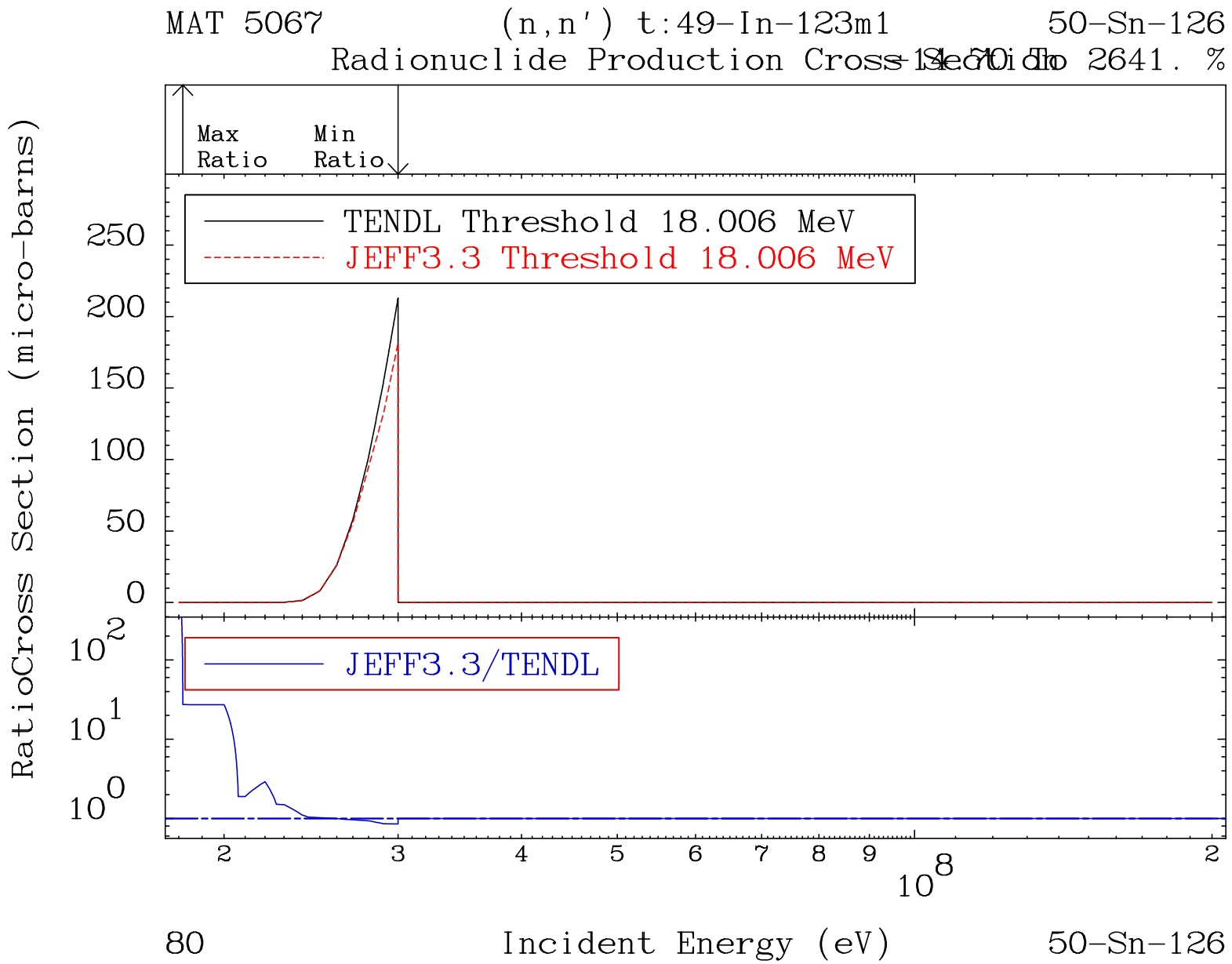

MAT 5067
(n,n') p:49-In-125g
50-Sn-126
Radionuclide Production Cross Section To 6064. %
Max Ratio
Min Ratio
TENDL Threshold 12.995 MeV
JEFF3.3 Threshold 12.930 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
75
50-Sn-126

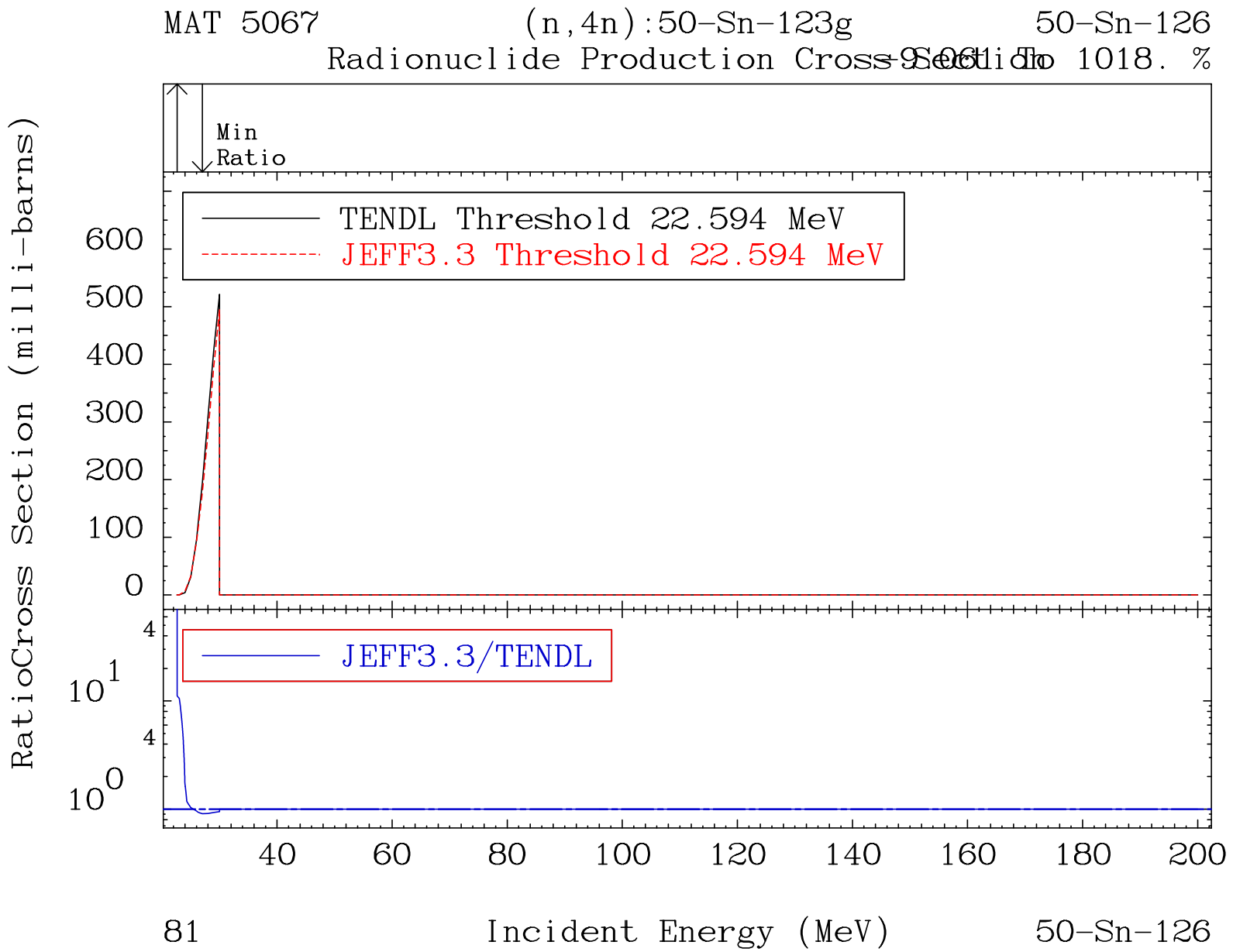

MAT 5067
(n,n') p:49-In-125m1
50-Sn-126
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 14.000 MeV
JEFF3.3 Threshold 13.293 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
76
50-Sn-126

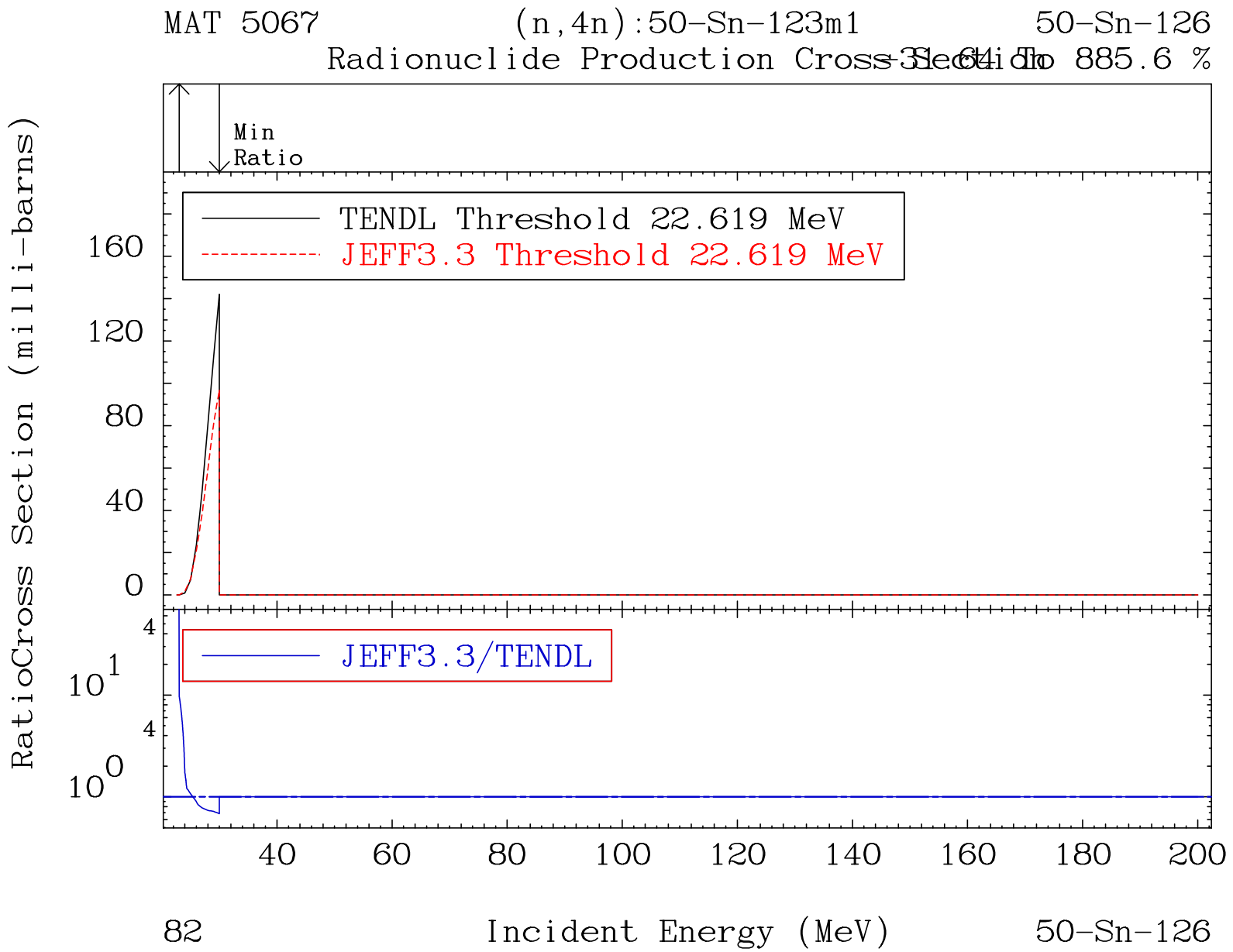

MAT 5067
(n,n') d:49-In-124g
50-Sn-126
Radionuclide Production Cross-Section To 533.5 %
Max Ratio
Min Ratio
TENDL Threshold 18.430 MeV
JEFF3.3 Threshold 18.427 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
8
4
2
3
4
5
6
7
8
9
2
10 8
77
Incident Energy (eV)
50-Sn-126

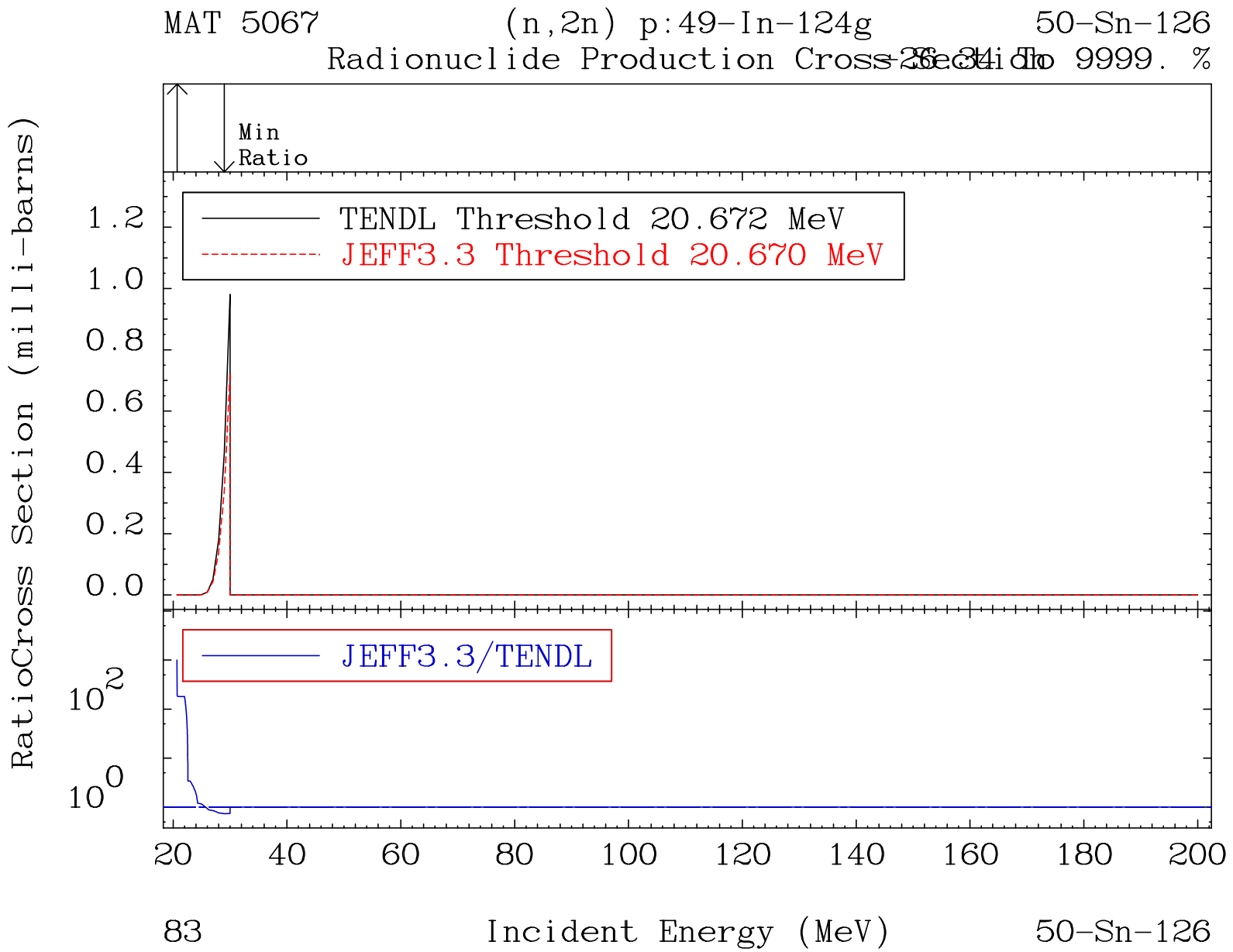

MAT 5067
(n,n') d:49-In-124m2
50-Sn-126
Radionuclide Production Cross Section
0.000 To 3670. %
Max Ratio
Min Ratio
TENDL Threshold 18.480 MeV
JEFF3.3 Threshold 18.478 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.5
1.0
0.5
0.0
10^2
10^1
10^0
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
50-Sn-126

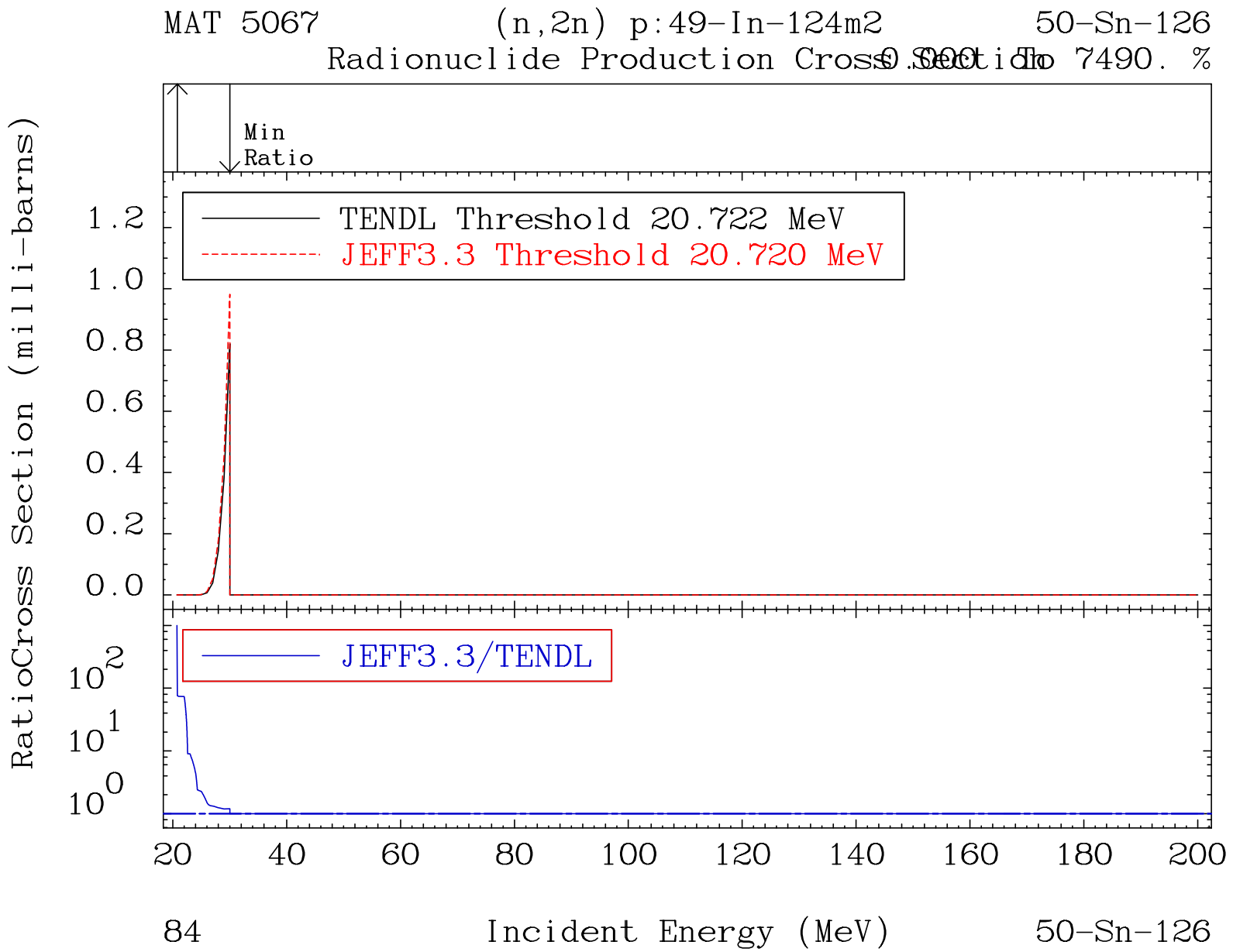

MAT 5067 (n,n') t:49-In-123g 50-Sn-126
Radionuclide Production Cross Section To 519.6 %
Max Ratio
Min Ratio
TENDL Threshold 17.676 MeV
JEFF3.3 Threshold 17.676 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.5
1.0
0.5
0.0
8
4
2
3
4
5
6
7
8
9
2
10^8
79
Incident Energy (eV)
50-Sn-126

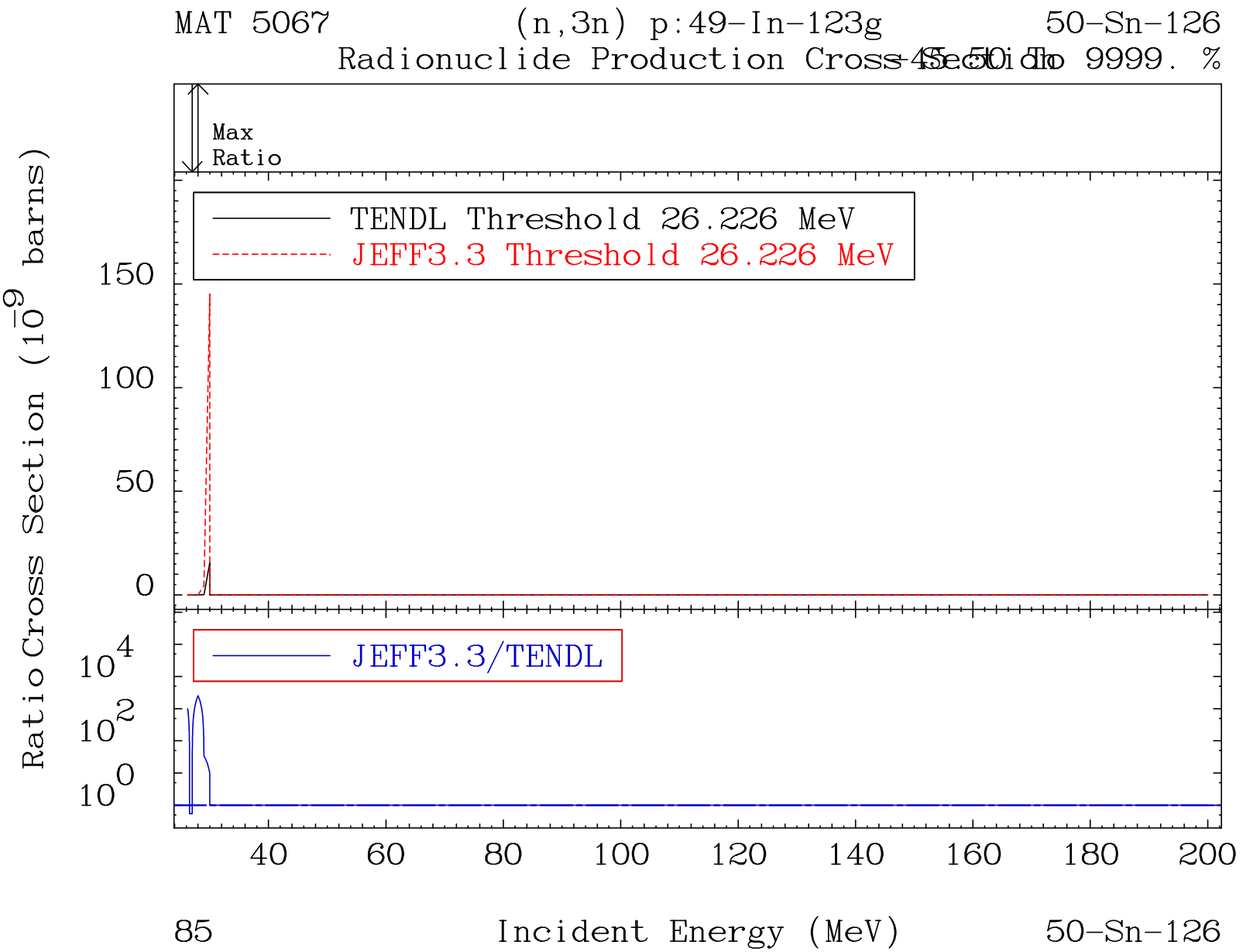

MAT 5067
(n,n') t:49-In-123m1
50-Sn-126
Radionuclide Production Cross Section
Max Ratio
Min Ratio
TENDL Threshold 18.006 MeV
JEFF3.3 Threshold 18.006 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
80
50-Sn-126

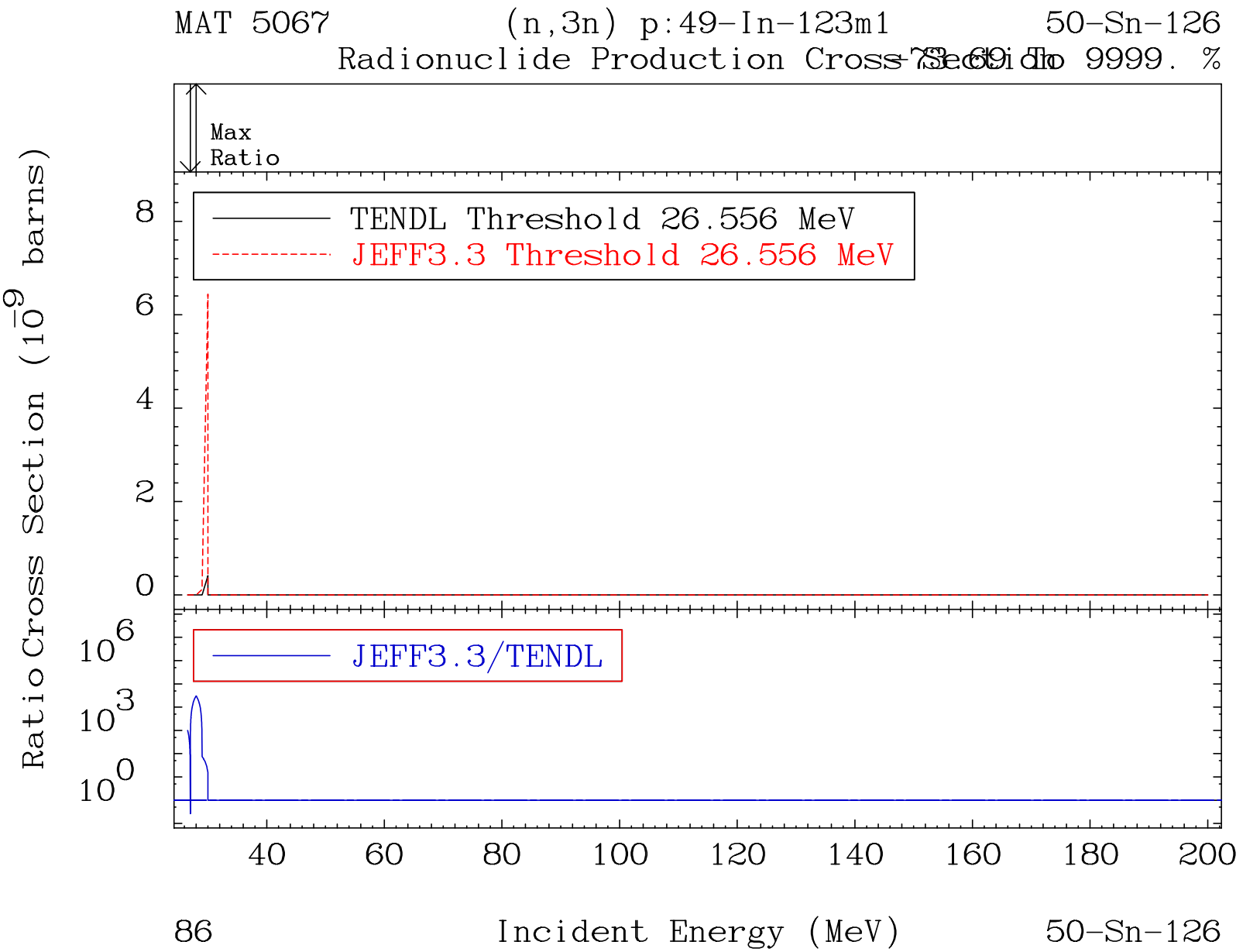

MAT 5067
(n,4n):50-Sn-123g
50-Sn-126
Radionuclide Production Cross Section
Min
Ratio
TENDL Threshold 22.594 MeV
JEFF3.3 Threshold 22.594 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
4
10^1
4
10^0
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
50-Sn-126

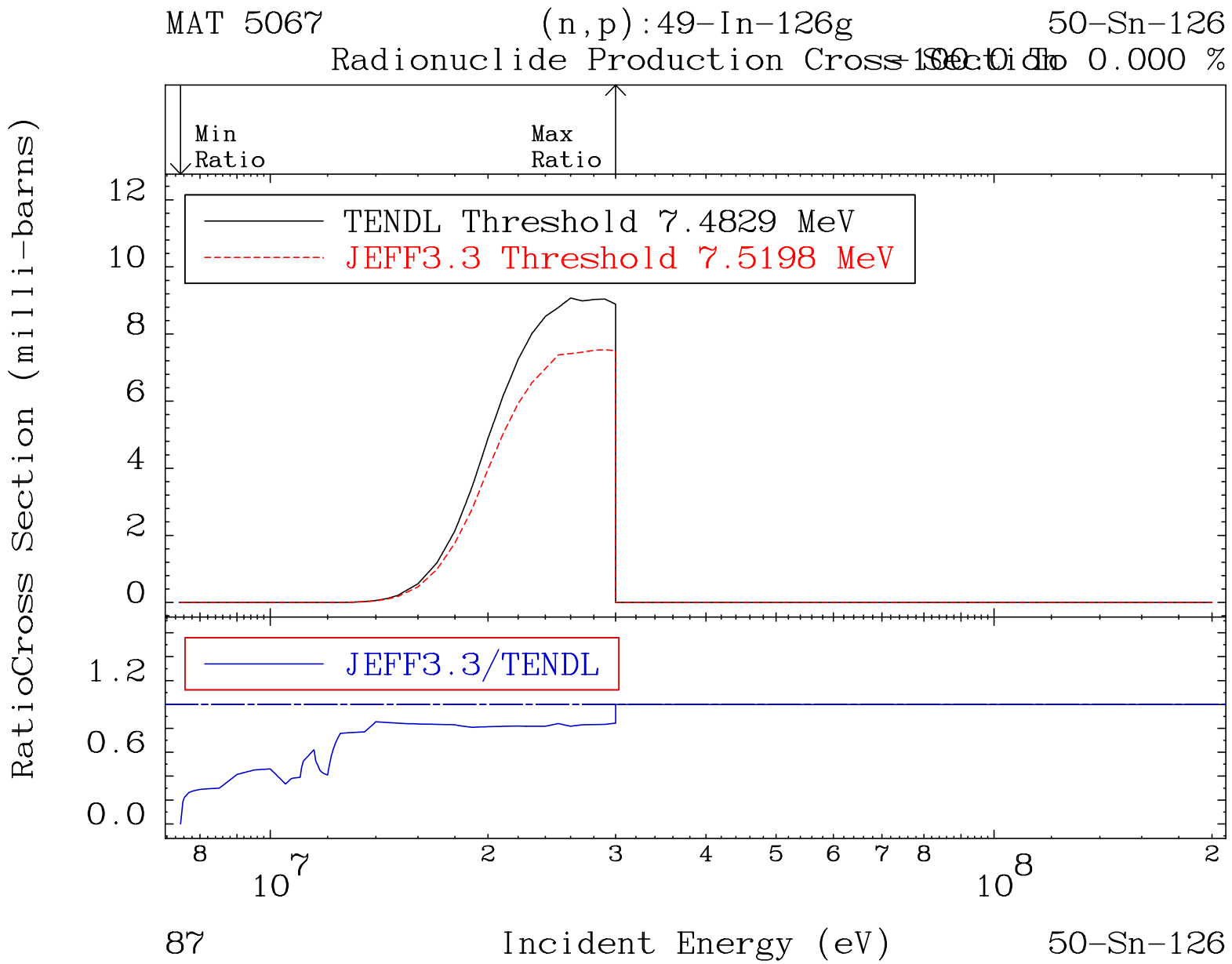

MAT 5067
(n,4n):50-Sn-123m1
50-Sn-126
Radionuclide Production Cross Section
Min
Ratio
TENDL Threshold 22.619 MeV
JEFF3.3 Threshold 22.619 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (MeV)
82
50-Sn-126

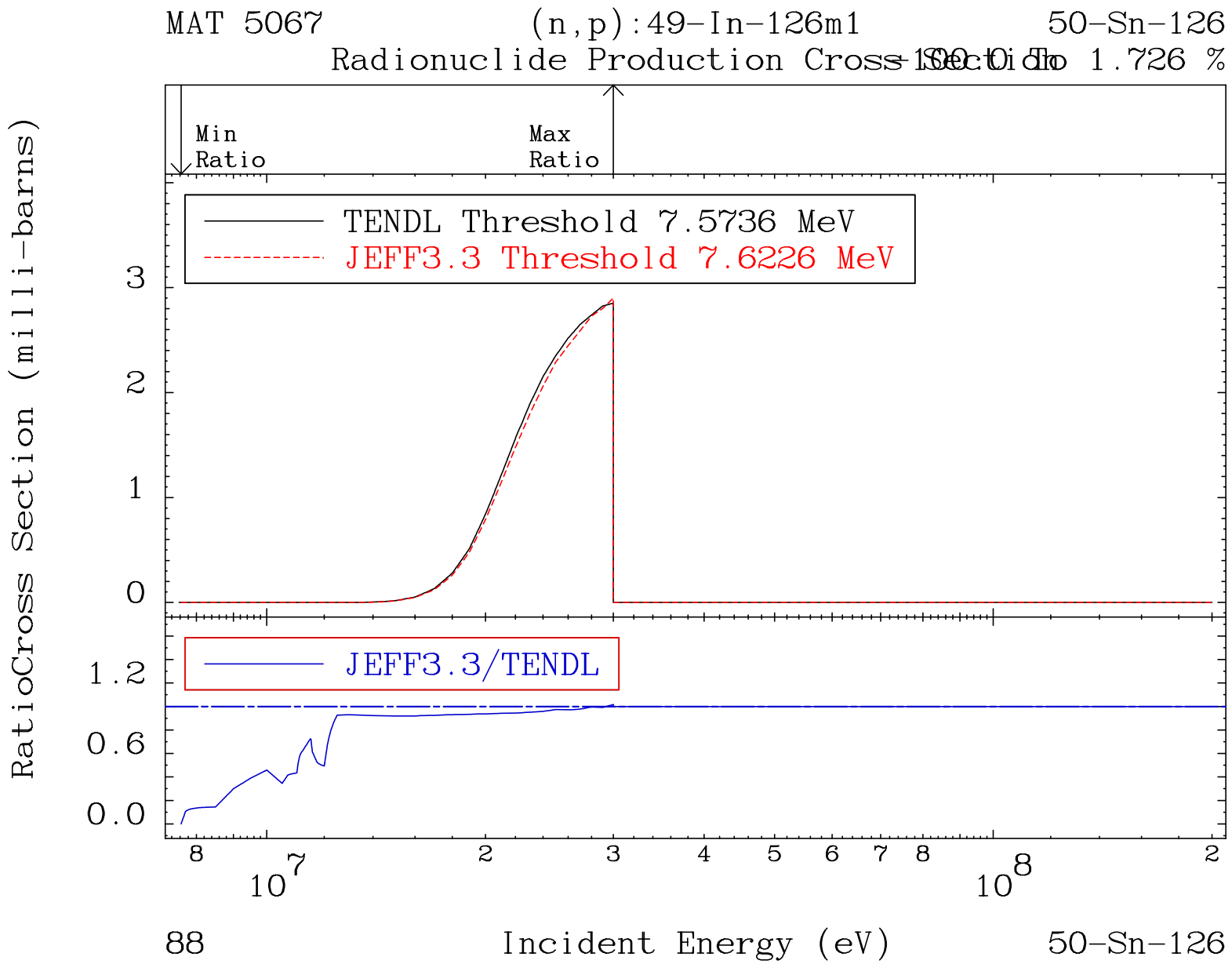

MAT 5067
(n,2n) p:49-In-124g
50-Sn-126
Radionuclide Production Cross Section To 9999. %
Min
Ratio
TENDL Threshold 20.672 MeV
JEFF3.3 Threshold 20.670 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^2
10^0
20
40
60
80
100
120
140
160
180
200
83
Incident Energy (MeV)
50-Sn-126

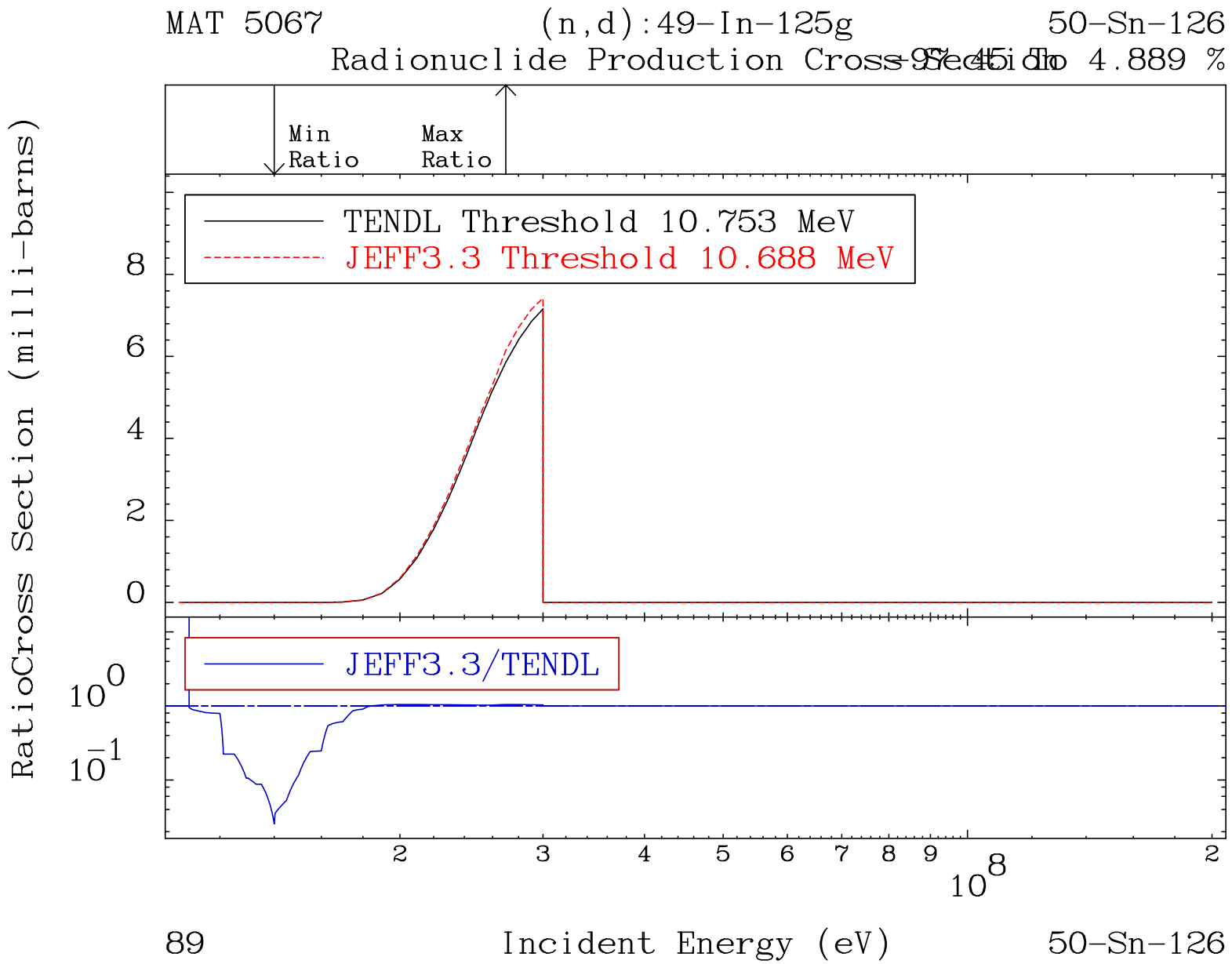

MAT 5067
(n,2n) p:49-In-124m2
50-Sn-126
Radionuclide Production Cross Section
0.000 To 7490. %
Min
Ratio
TENDL Threshold 20.722 MeV
JEFF3.3 Threshold 20.720 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^2
10^1
10^0
20
40
60
80
100
120
140
160
180
200
84
Incident Energy (MeV)
50-Sn-126

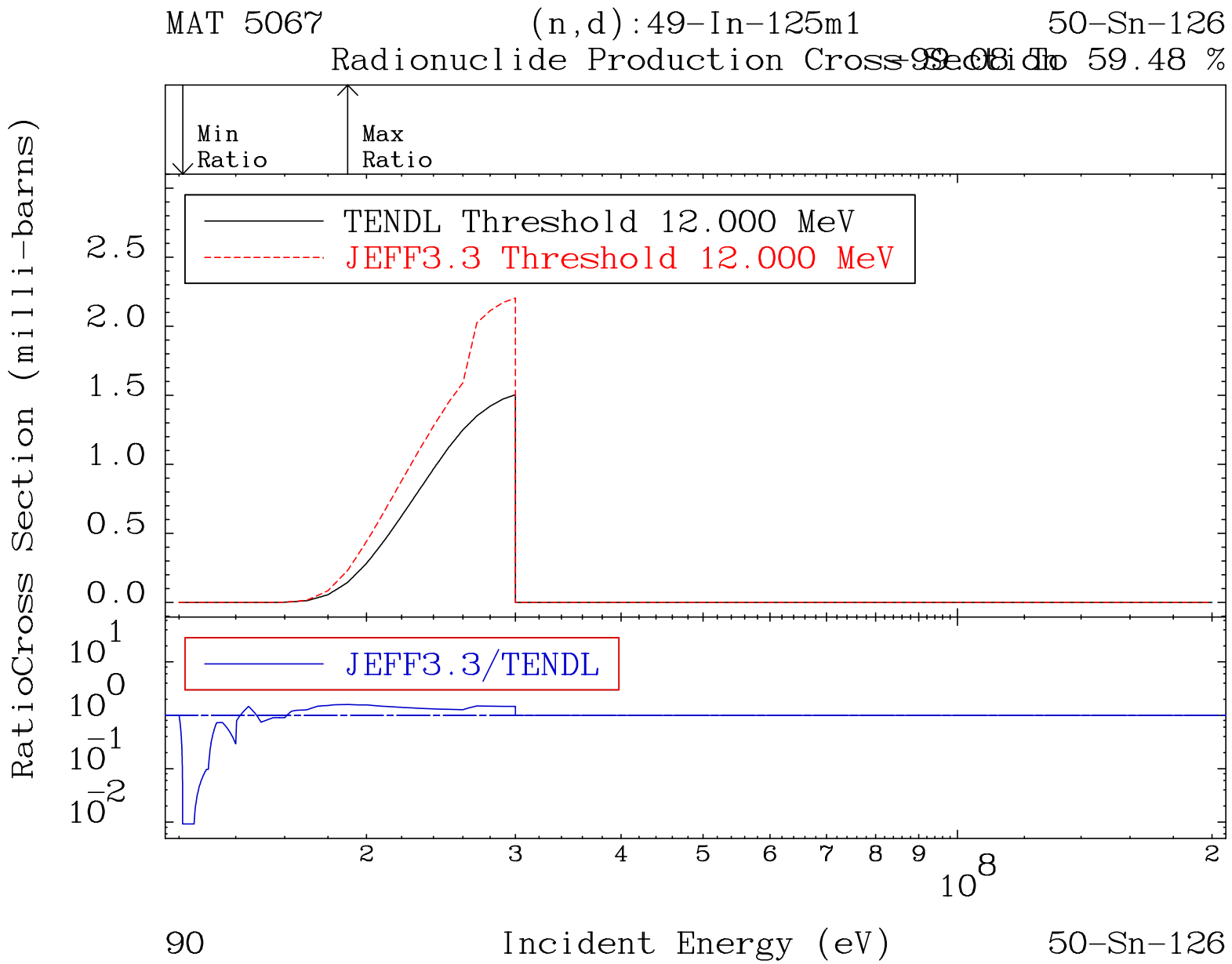

MAT 5067
(n,3n) p:49-In-123g
50-Sn-126
Radionuclide Production Cross-Section To 9999. %
Max
Ratio
TENDL Threshold 26.226 MeV
JEFF3.3 Threshold 26.226 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
150
100
50
0
10^{4}
10^{2}
10^{0}
40
60
80
100
120
140
160
180
200
85
Incident Energy (MeV)
50-Sn-126

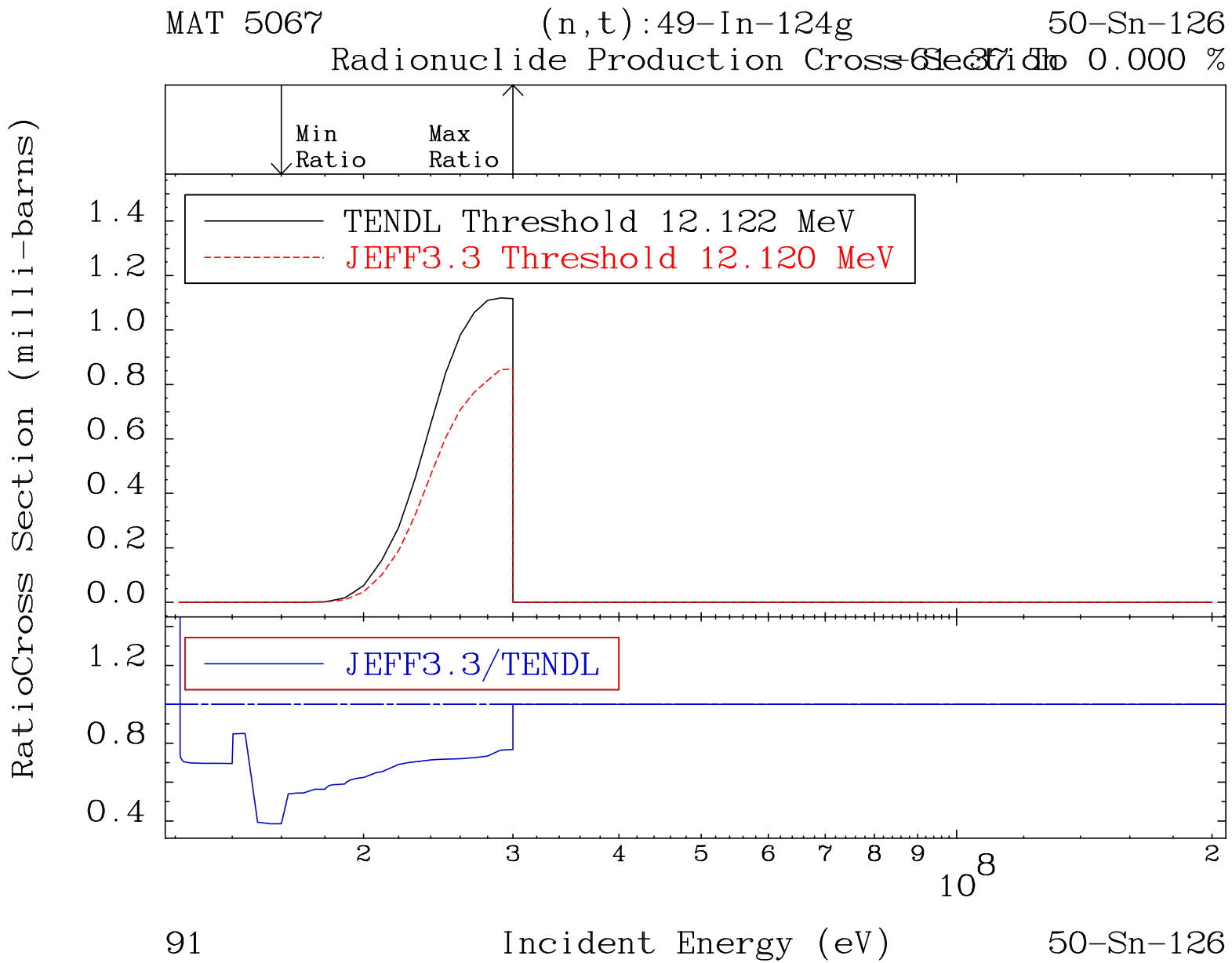

MAT 5067
(n,3n) p:49-In-123m1
50-Sn-126
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 26.556 MeV
JEFF3.3 Threshold 26.556 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
Incident Energy (MeV)
86
50-Sn-126

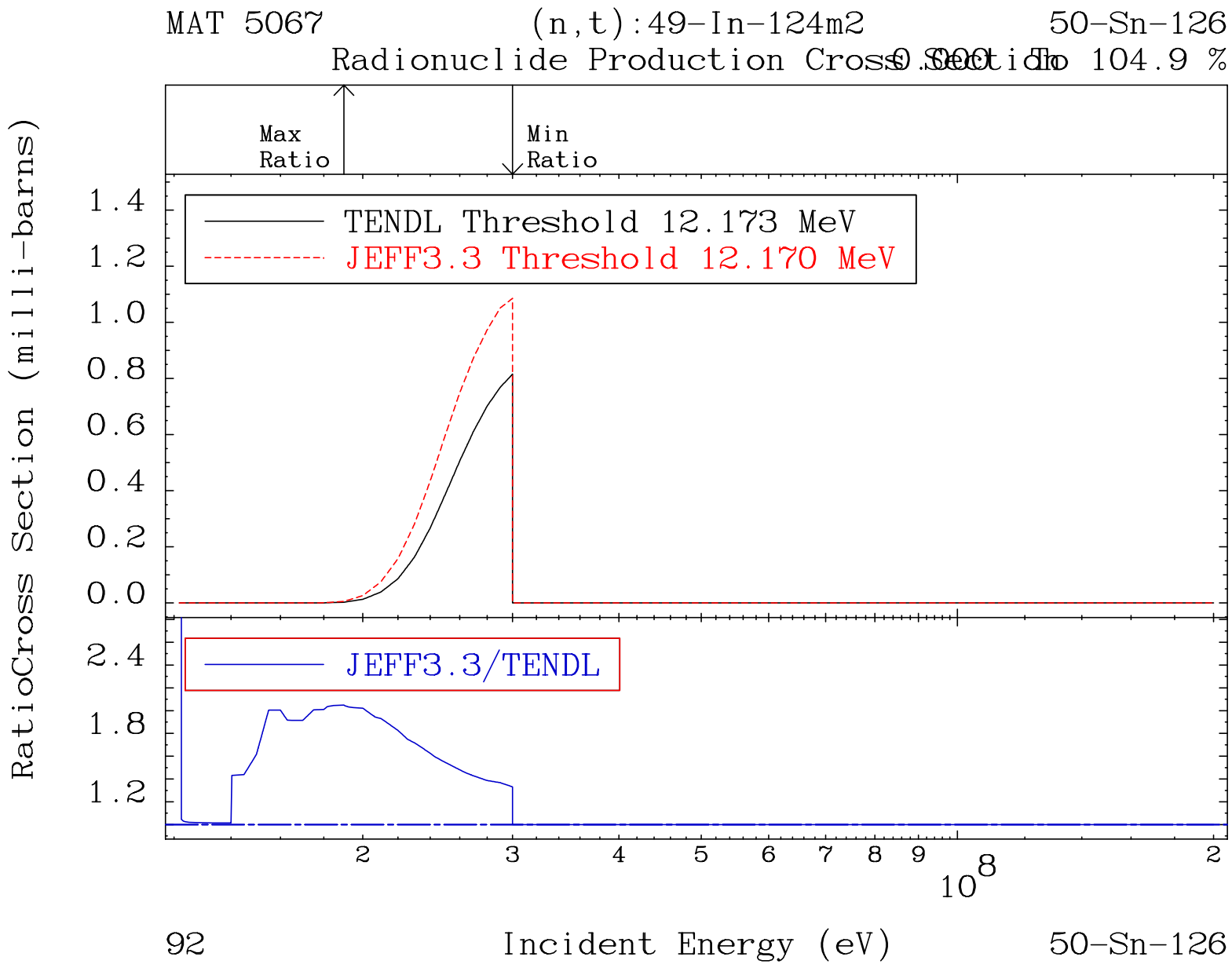

MAT 5067
(n,p):49-In-126g
50-Sn-126
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 7.4829 MeV
JEFF3.3 Threshold 7.5198 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
87
50-Sn-126

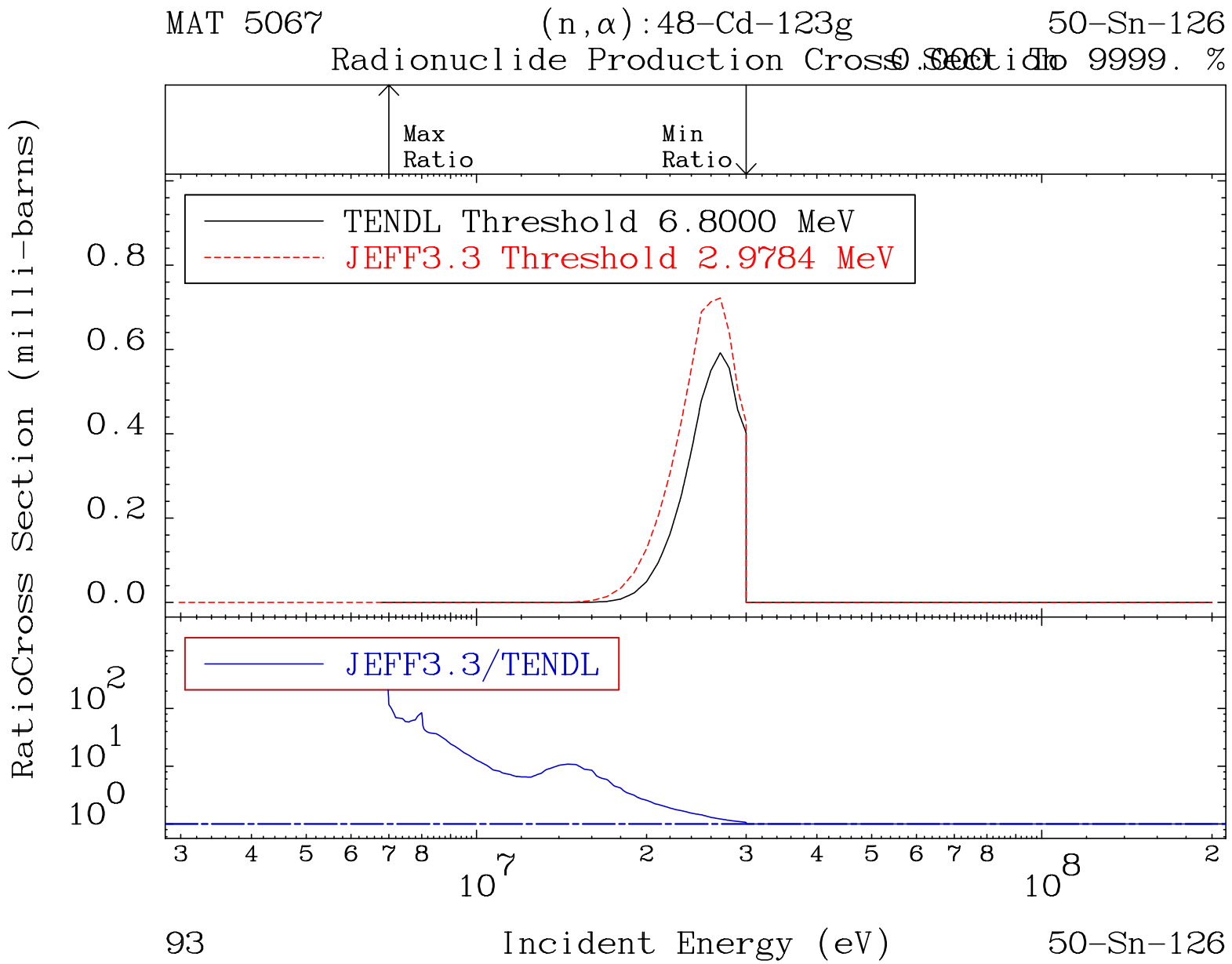

MAT 5067
(n,p):49-In-126m1
50-Sn-126
Radionuclide Production Cross Section To 1.726 %
Min Ratio
Max Ratio
TENDL Threshold 7.5736 MeV
JEFF3.3 Threshold 7.6226 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
88
50-Sn-126


MAT 5067
(n,d):49-In-125g
50-Sn-126
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 10.753 MeV
JEFF3.3 Threshold 10.688 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
89
50-Sn-126


MAT 5067
(n,d):49-In-125m1
50-Sn-126
Radionuclide Production Cross Section To 59.48 %
Min Ratio
Max Ratio
TENDL Threshold 12.000 MeV
JEFF3.3 Threshold 12.000 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
10^1
10^0
10^-1
10^-2
2
3
4
5
6
7
8
9
10^8
2
90
Incident Energy (eV)
50-Sn-126


MAT 5067
(n,t):49-In-124g
50-Sn-126
Radionuclide Production Cross Section To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 12.122 MeV
JEFF3.3 Threshold 12.120 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
2
10^8
91
Incident Energy (eV)
50-Sn-126


MAT 5067
(n,t):49-In-124m2
50-Sn-126
Radionuclide Production Cross Section
0.000 To 104.9 %
Max Ratio
Min Ratio
TENDL Threshold 12.173 MeV
JEFF3.3 Threshold 12.170 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.4
1.8
1.2
2
3
4
5
6
7
8
9
10^8
2
92
Incident Energy (eV)
50-Sn-126


MAT 5067
(n,α):48-Cd-123g
50-Sn-126
Radionuclide Production Cross Section
0.000 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8000 MeV
JEFF3.3 Threshold 2.9784 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
0.0
0.2
0.4
0.6
0.8
10^2
10^1
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
93
Incident Energy (eV)
50-Sn-126