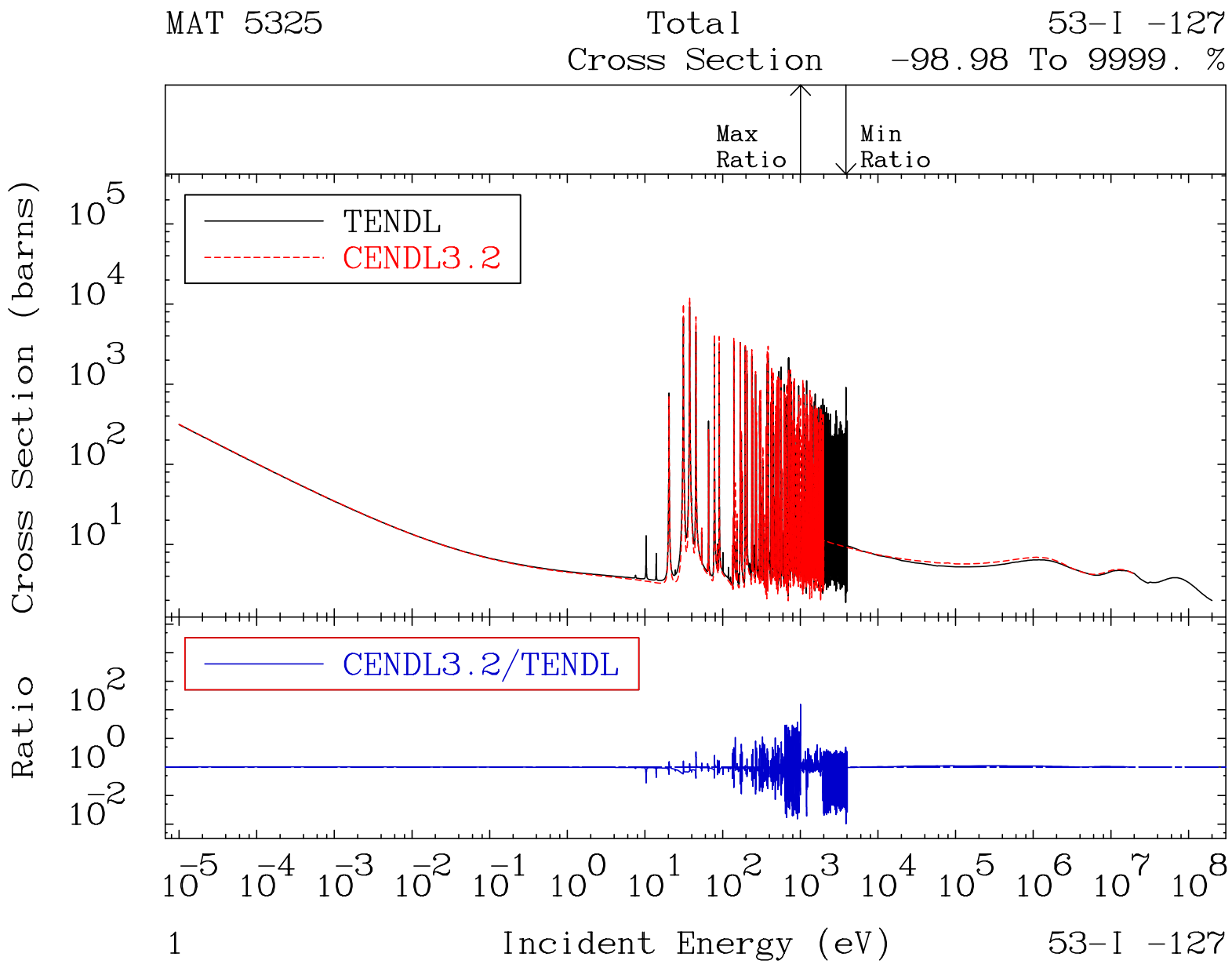
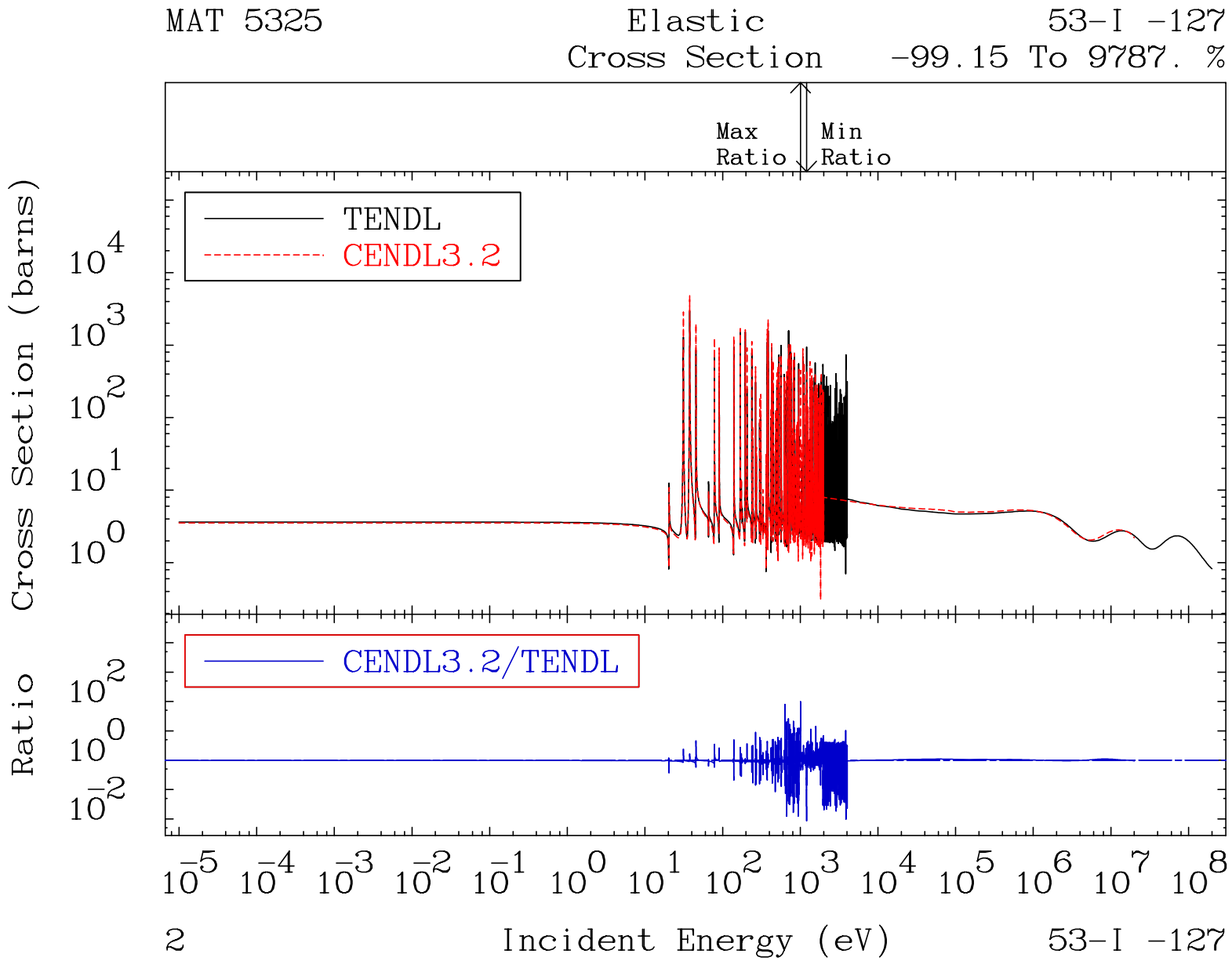
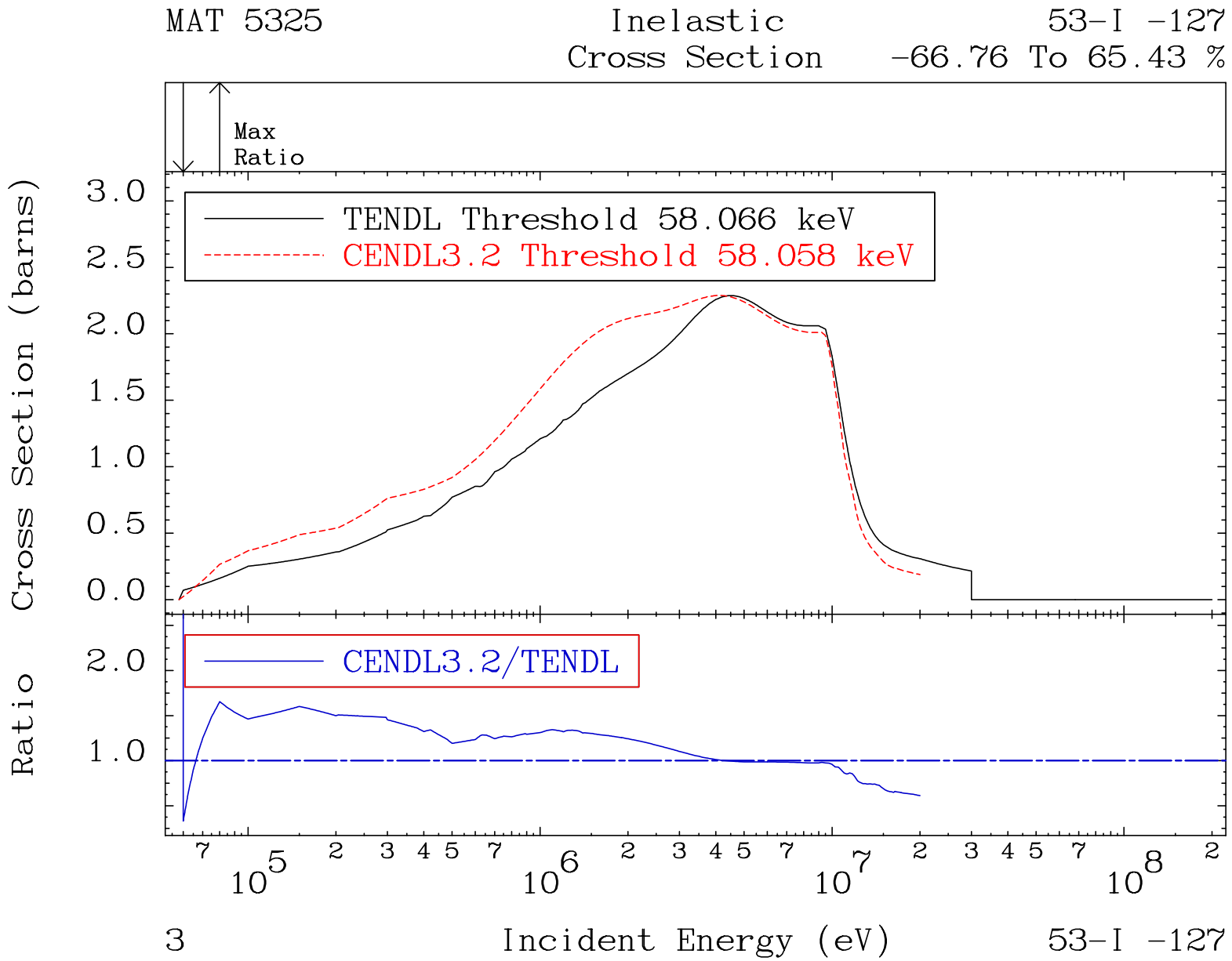
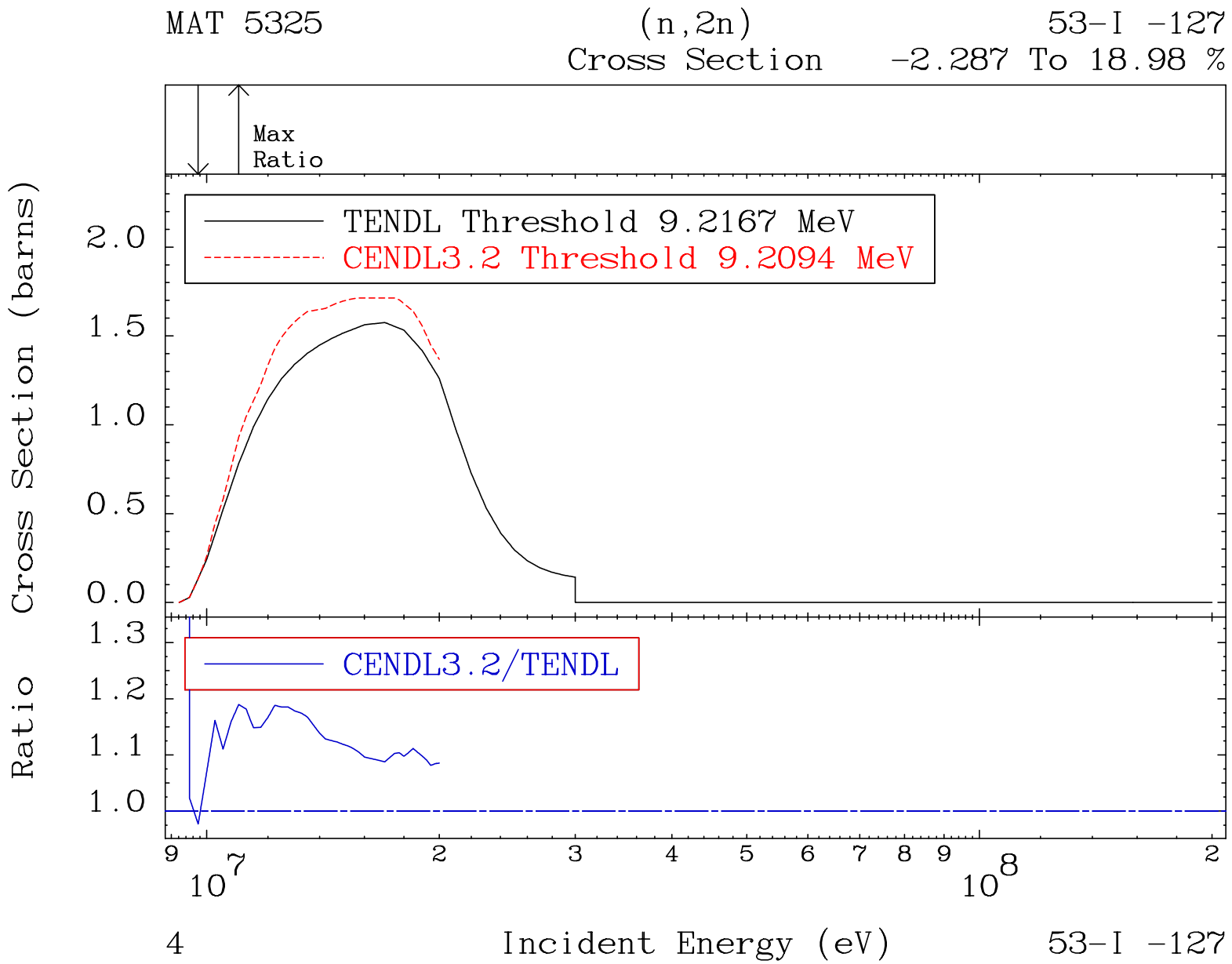
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

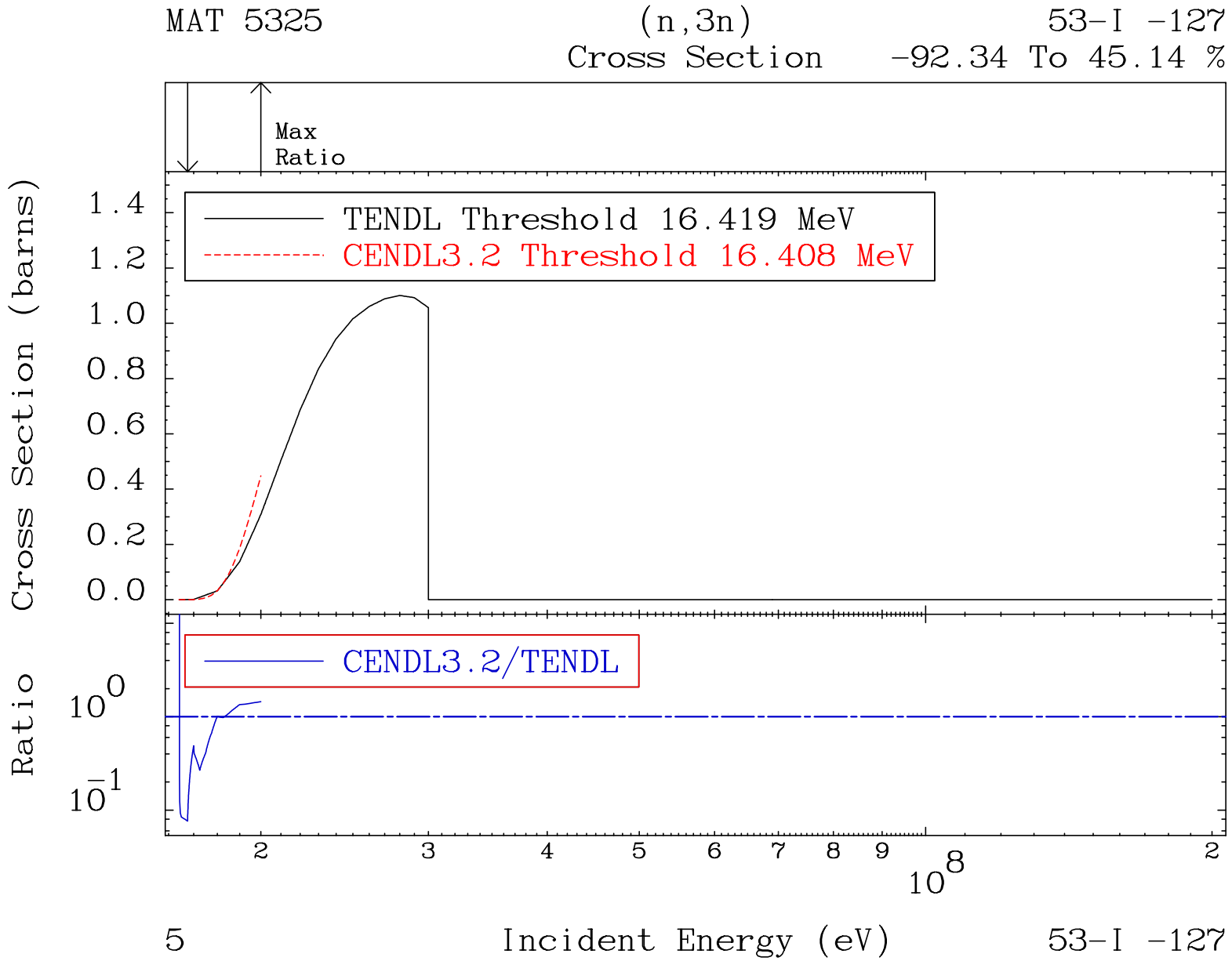
Press Mouse Button to Start

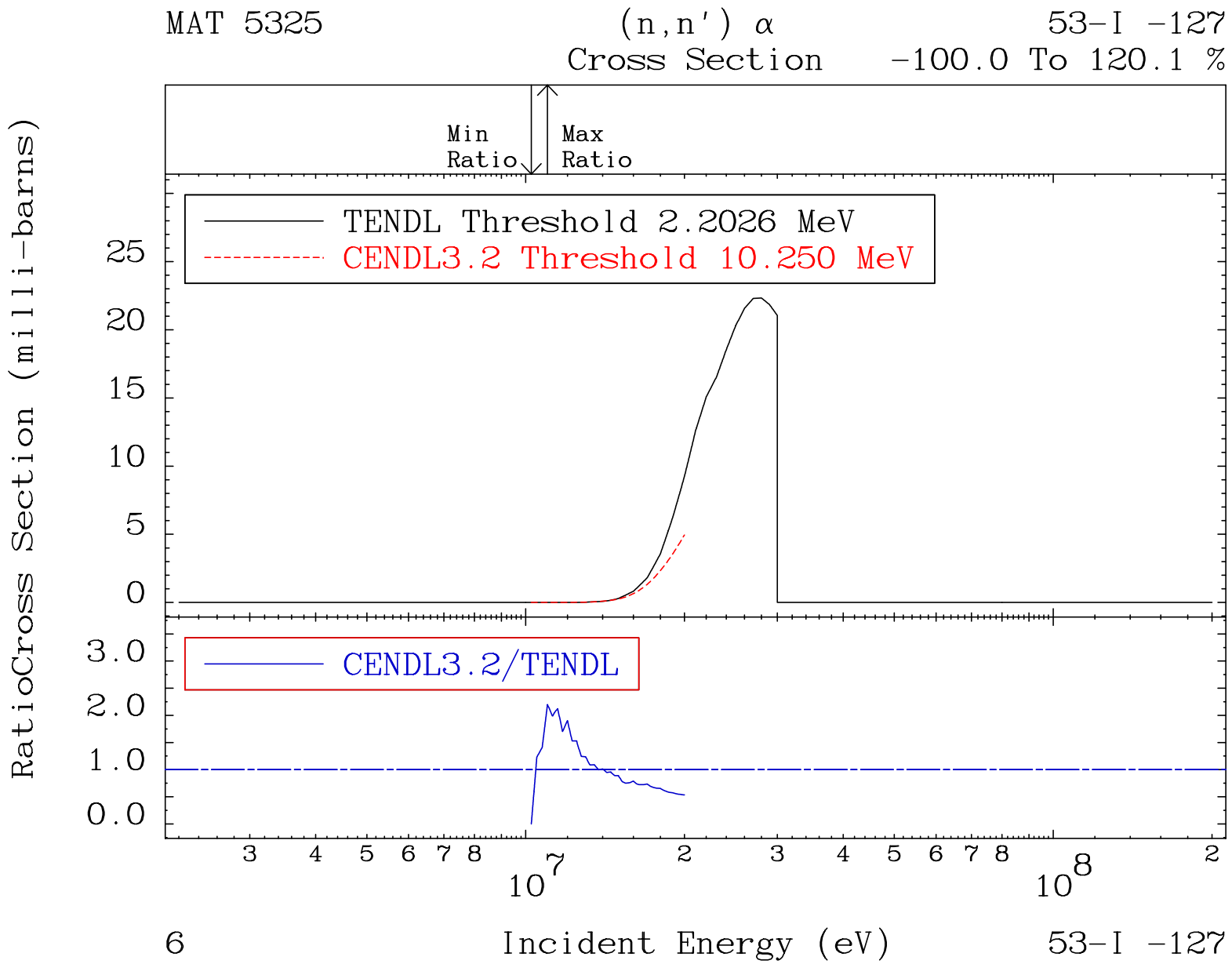

MAT 5325
Total
Cross Section
53-I -127
-98.98 To 9999. %
Max
Ratio
Min
Ratio
TENDL
CENDL3.2
Cross Section (barns)
Ratio
CENDL3.2/TENDL
Incident Energy (eV)
1
53-I -127

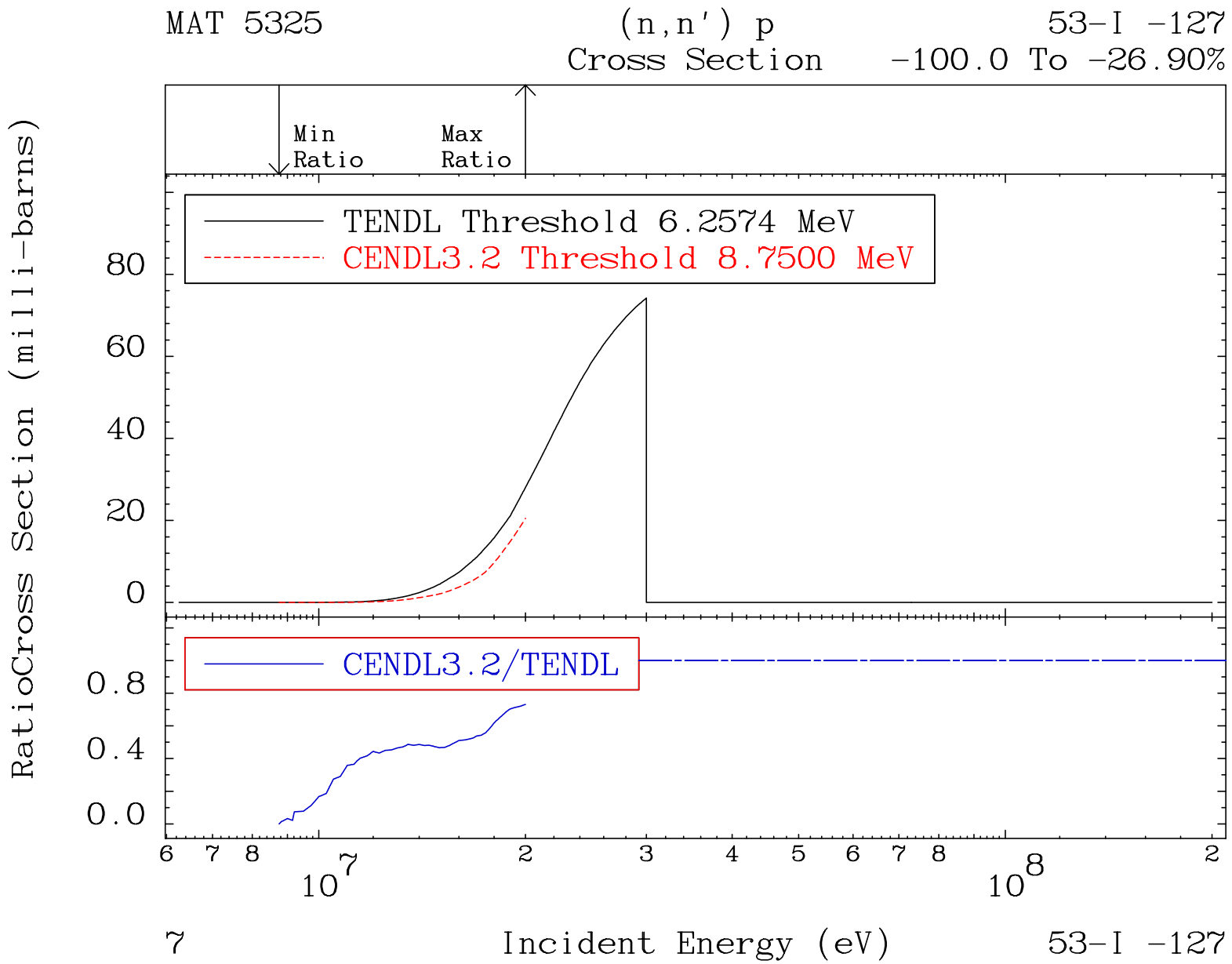

MAT 5325
Elastic
Cross Section
53-I -127
-99.15 To 9787. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
2
53-I -127

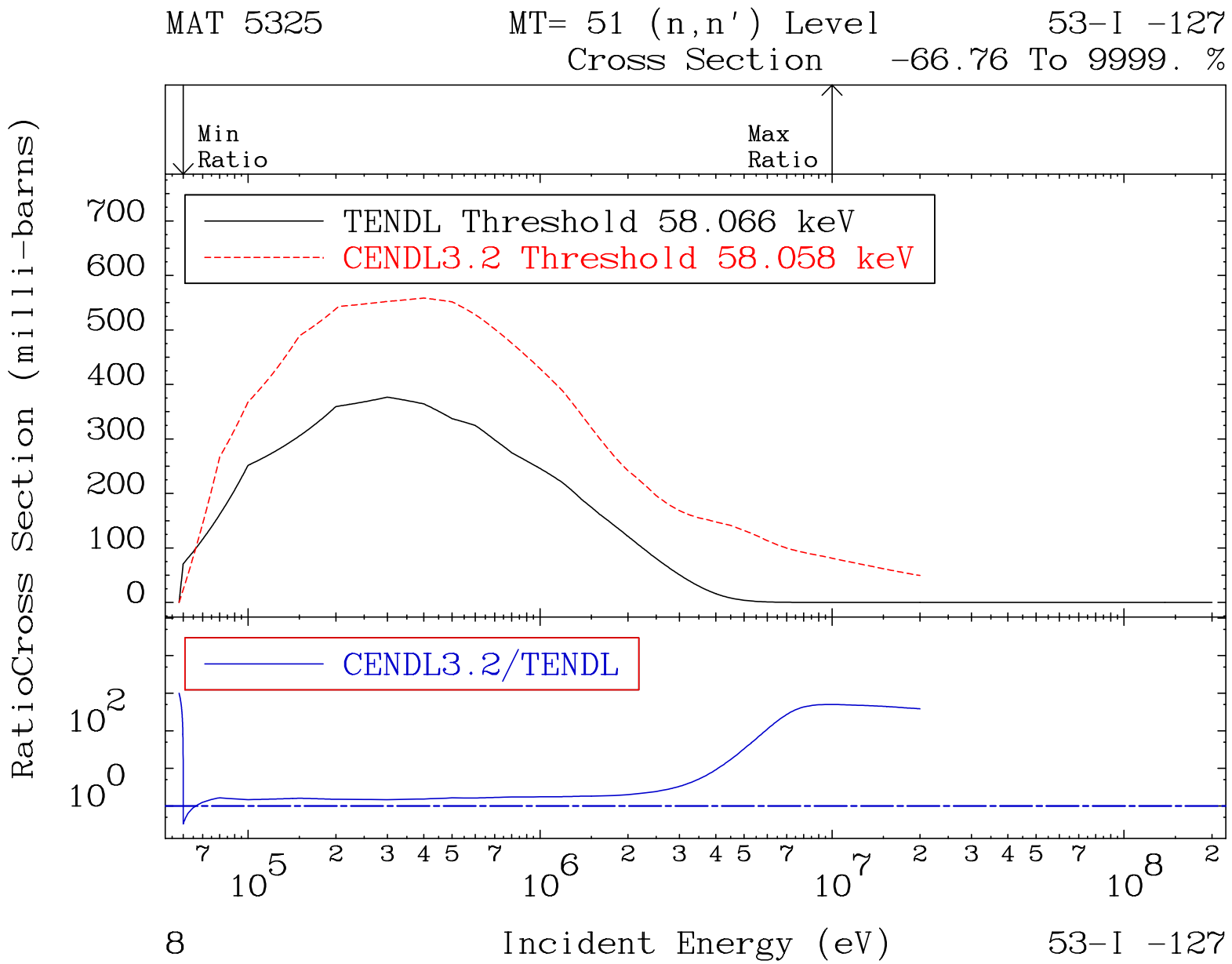

MAT 5325
Inelastic
Cross Section
53-I -127
-66.76 To 65.43 %
Max
Ratio
TENDL Threshold 58.066 keV
CENDL3.2 Threshold 58.058 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
53-I -127

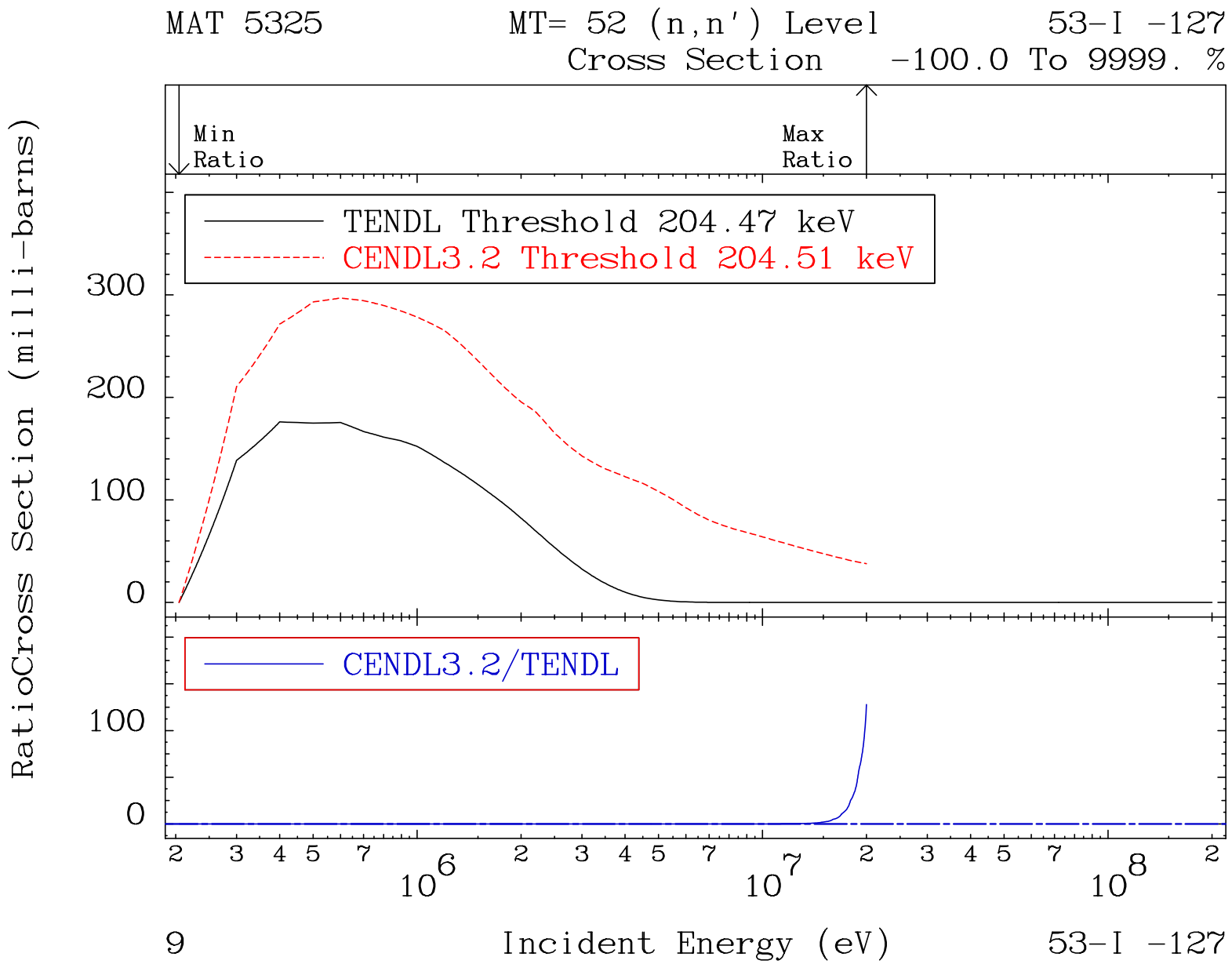

MAT 5325
(n,2n)
Cross Section
53-I -127
-2.287 To 18.98 %
Max
Ratio
TENDL Threshold 9.2167 MeV
CENDL3.2 Threshold 9.2094 MeV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.3
1.2
1.1
1.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
Incident Energy (eV)
4
53-I -127

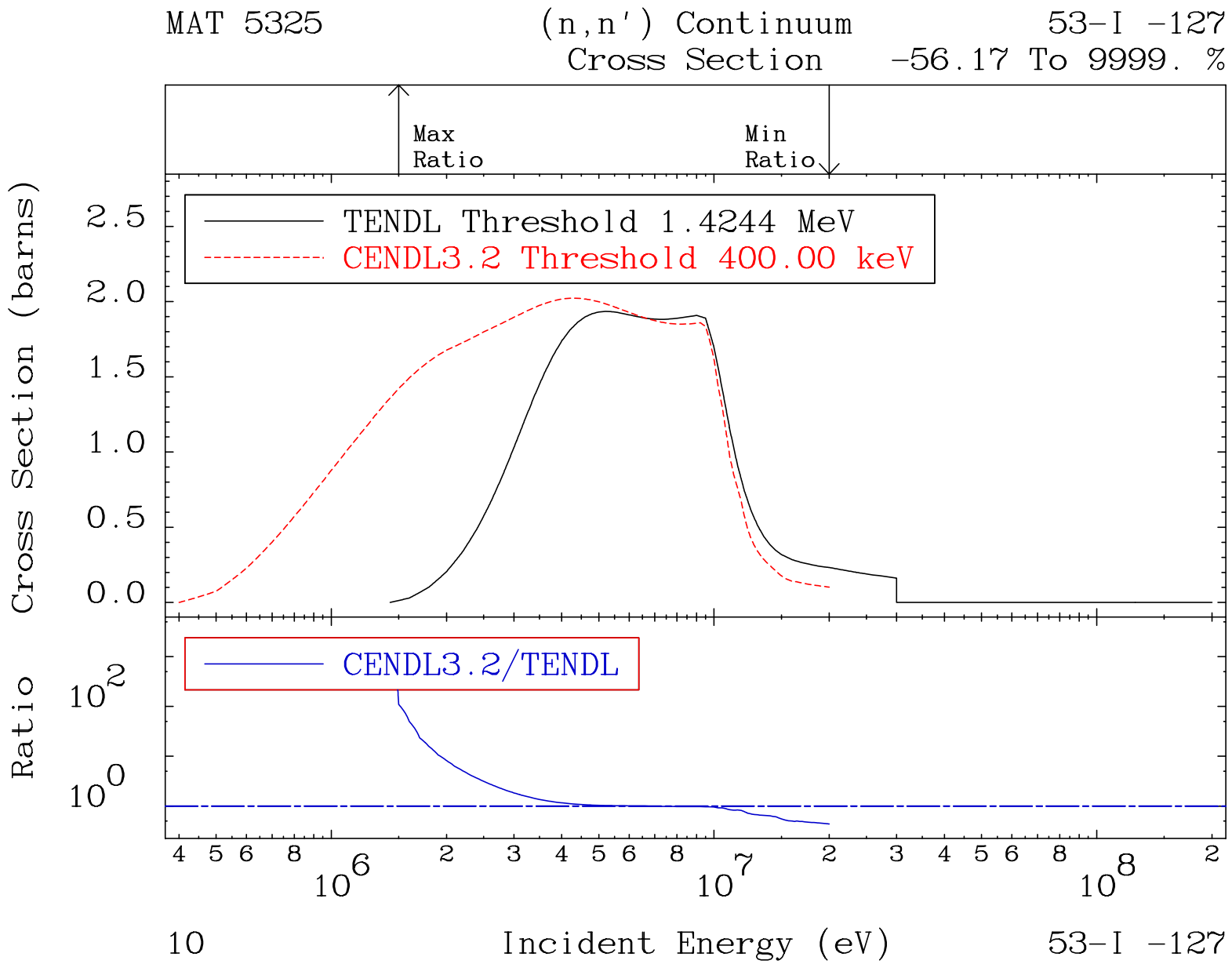

MAT 5325
(n,3n)
Cross Section
53-I -127
-92.34 To 45.14 %
Max
Ratio
TENDL Threshold 16.419 MeV
CENDL3.2 Threshold 16.408 MeV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
CENDL3.2/TENDL
Ratio
10^0
10^-1
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
53-I -127

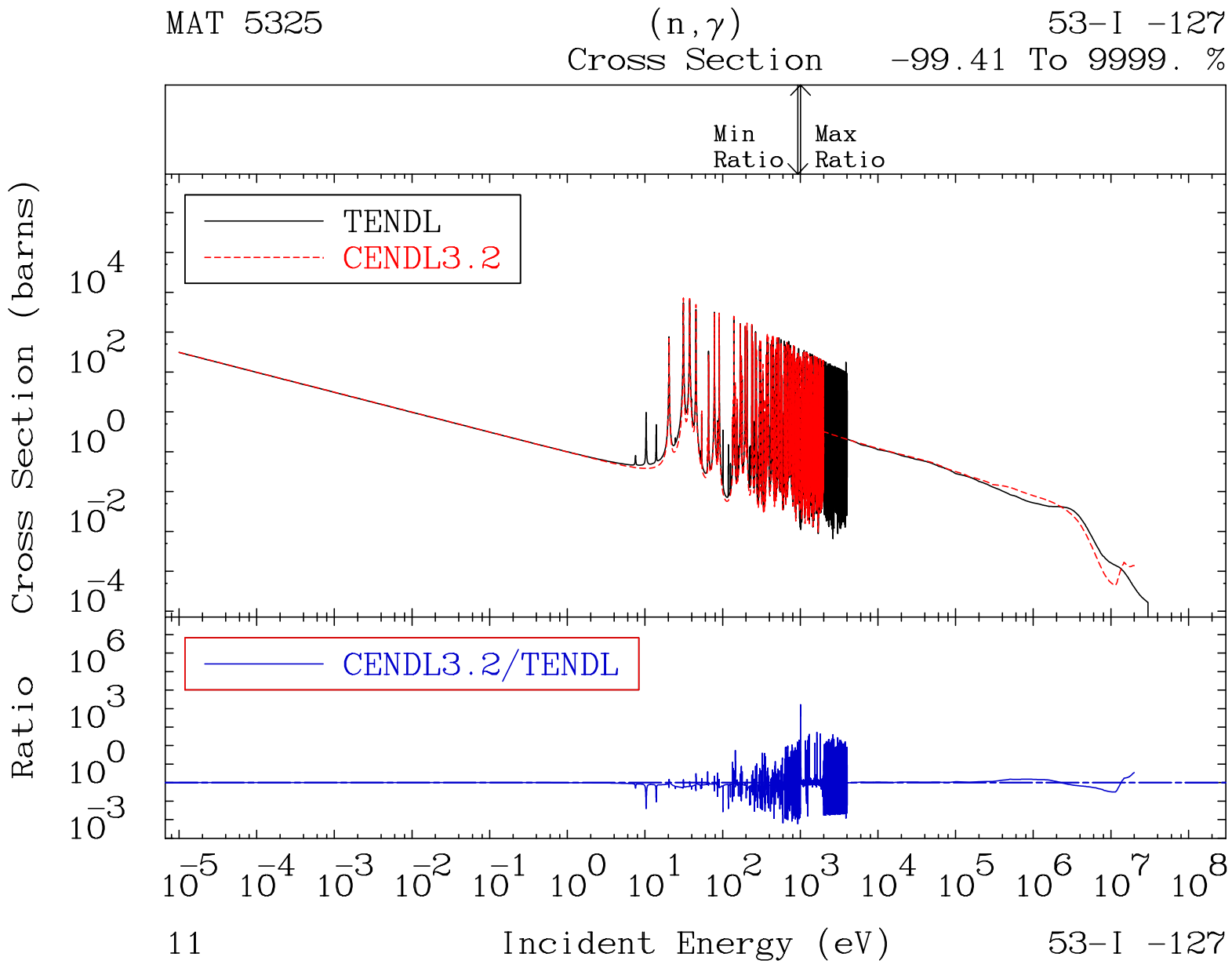

MAT 5325
(n,n') α
Cross Section
53-I -127
-100.0 To 120.1 %
Min Ratio
Max Ratio
TENDL Threshold 2.2026 MeV
CENDL3.2 Threshold 10.250 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
3.0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
6
Incident Energy (eV)
53-I -127

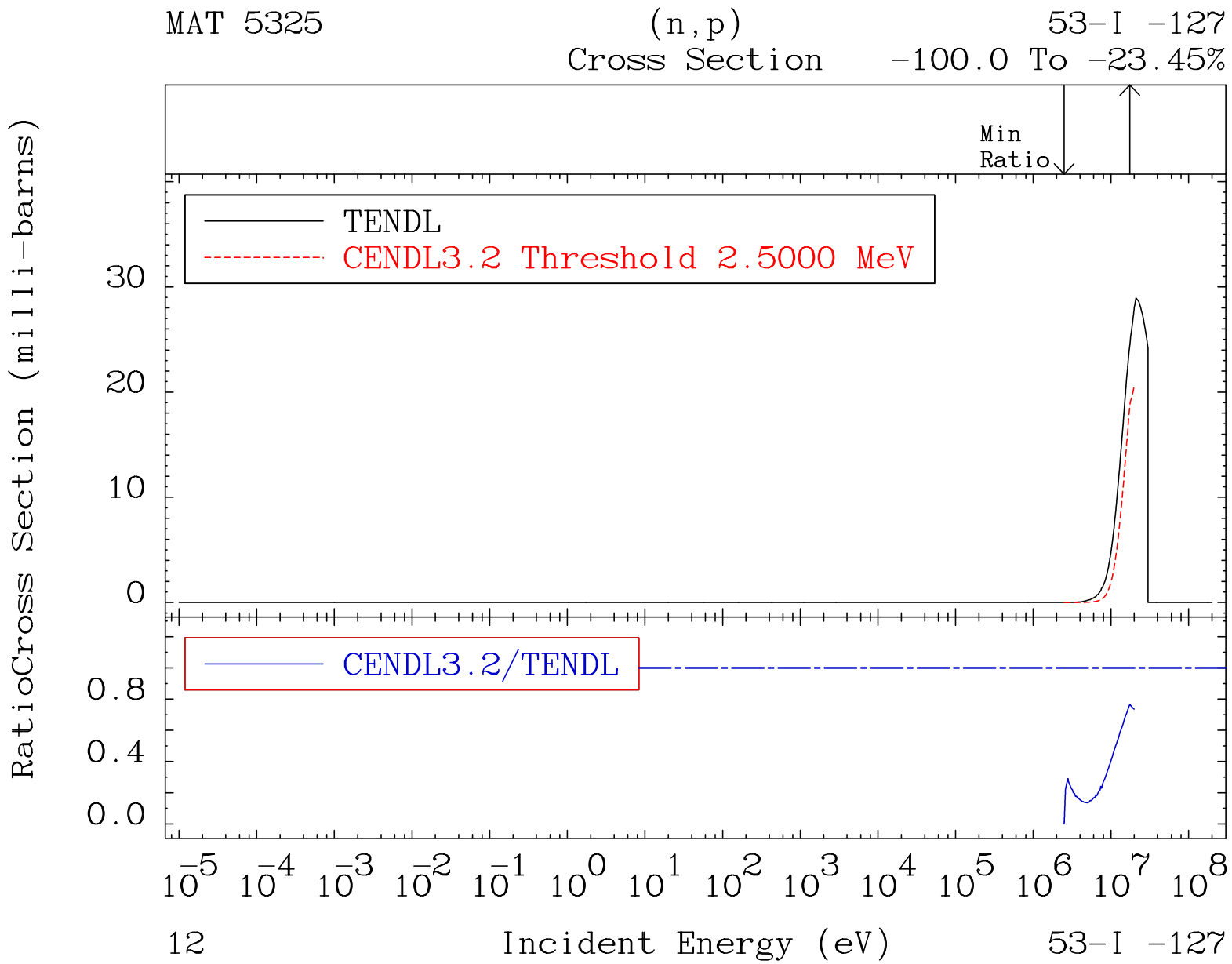

MAT 5325
(n,n') p
Cross Section
53-I -127
-100.0 To -26.90%
Min Ratio
Max Ratio
TENDL Threshold 6.2574 MeV
CENDL3.2 Threshold 8.7500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
0.8
0.4
0.0
6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
7
Incident Energy (eV)
53-I -127

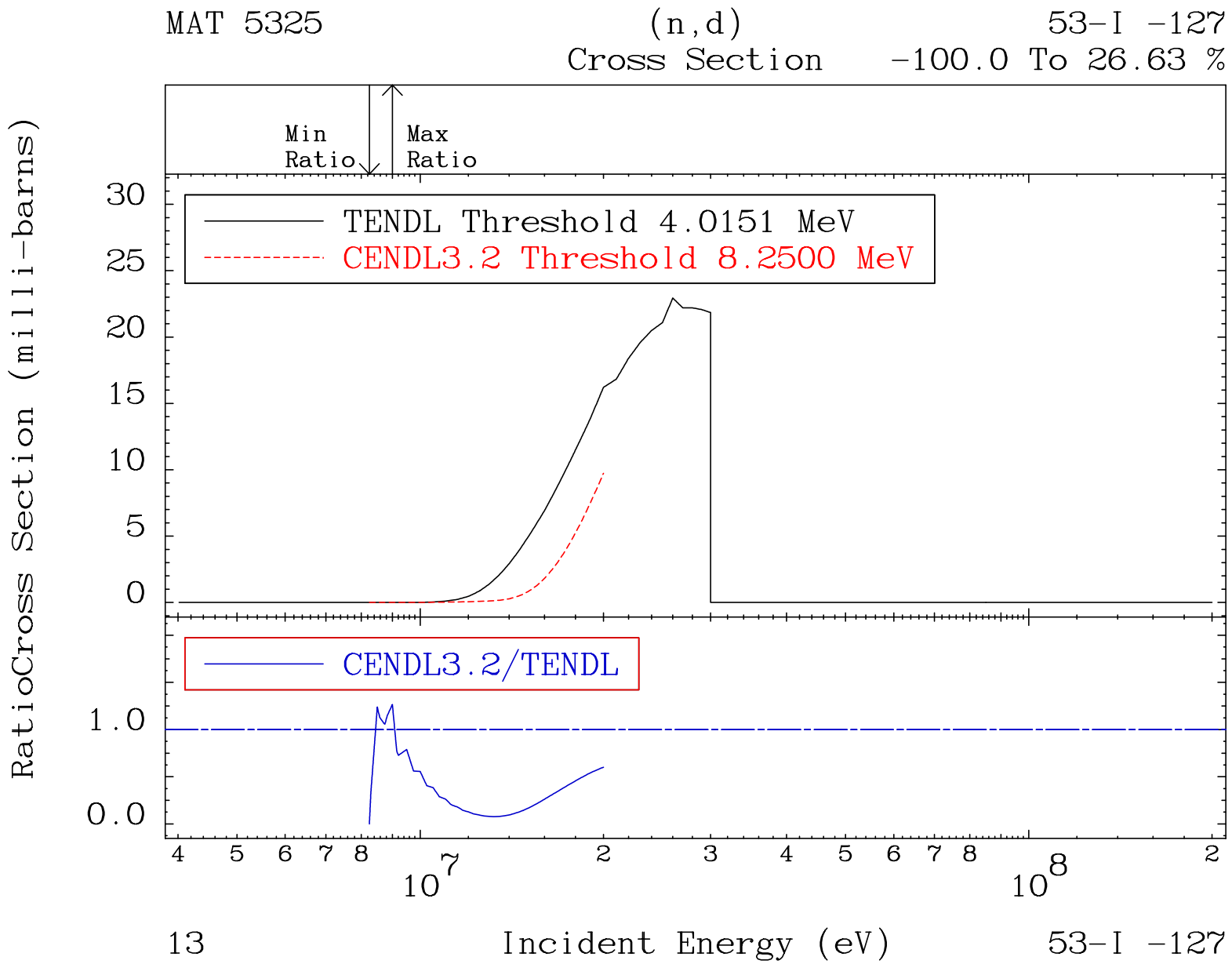

MAT 5325
MT= 51 (n,n') Level
53-I -127
Cross Section -66.76 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 58.066 keV
CENDL3.2 Threshold 58.058 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
700
600
500
400
300
200
100
0
10^2
10^0
10^5
10^6
10^7
10^8
Incident Energy (eV)
8
53-I -127

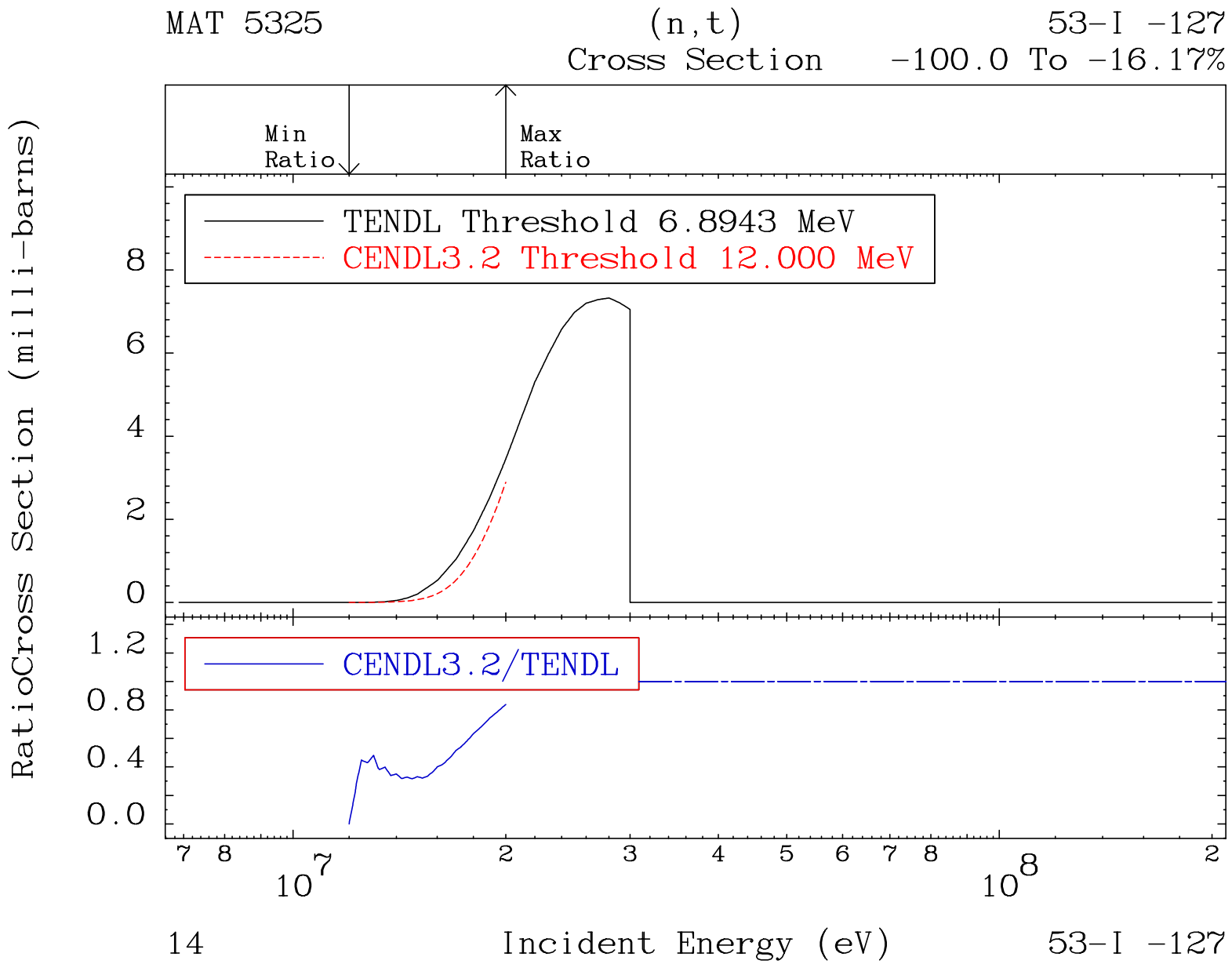

MAT 5325
MT= 52 (n,n') Level
53-I -127
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 204.47 keV
CENDL3.2 Threshold 204.51 keV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
300
200
100
0
100
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
Incident Energy (eV)
9
53-I -127

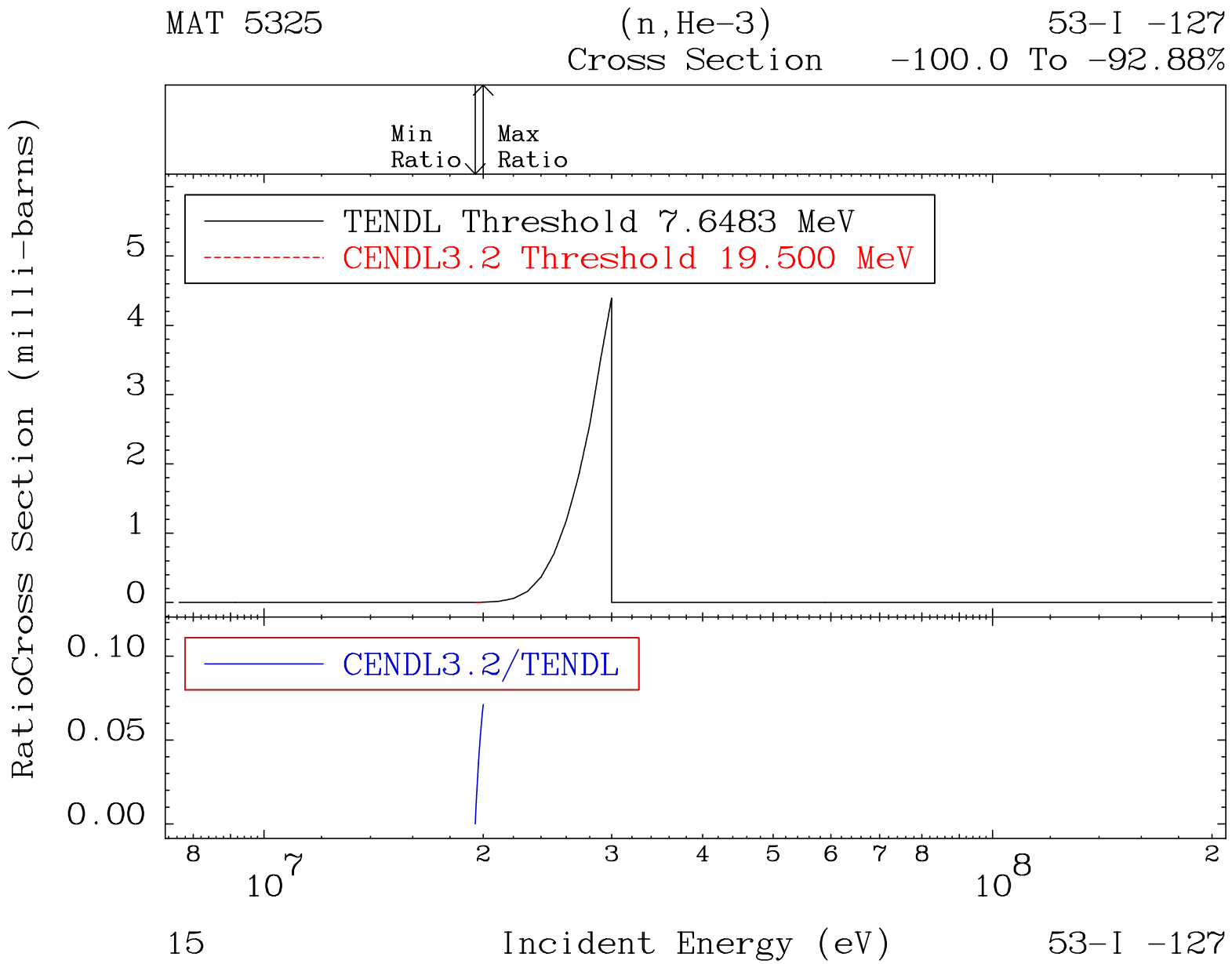

MAT 5325
(n,n') Continuum
Cross Section
53-I -127
-56.17 To 9999. %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4244 MeV
CENDL3.2 Threshold 400.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
CENDL3.2/TENDL
Ratio
10^2
10^0
4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
10
Incident Energy (eV)
53-I -127

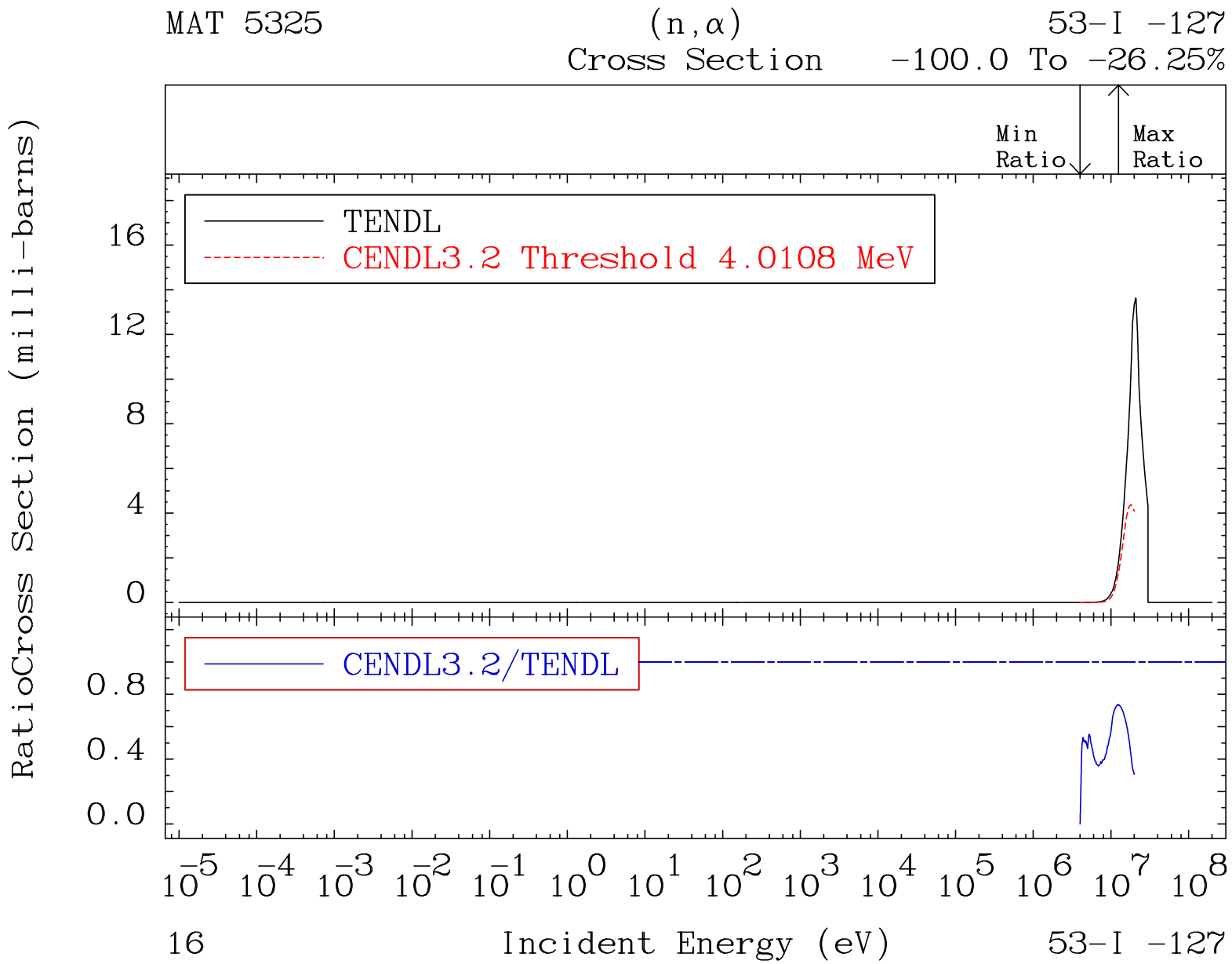

MAT 5325
(n,γ)
Cross Section
53-I -127
-99.41 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
11
53-I -127

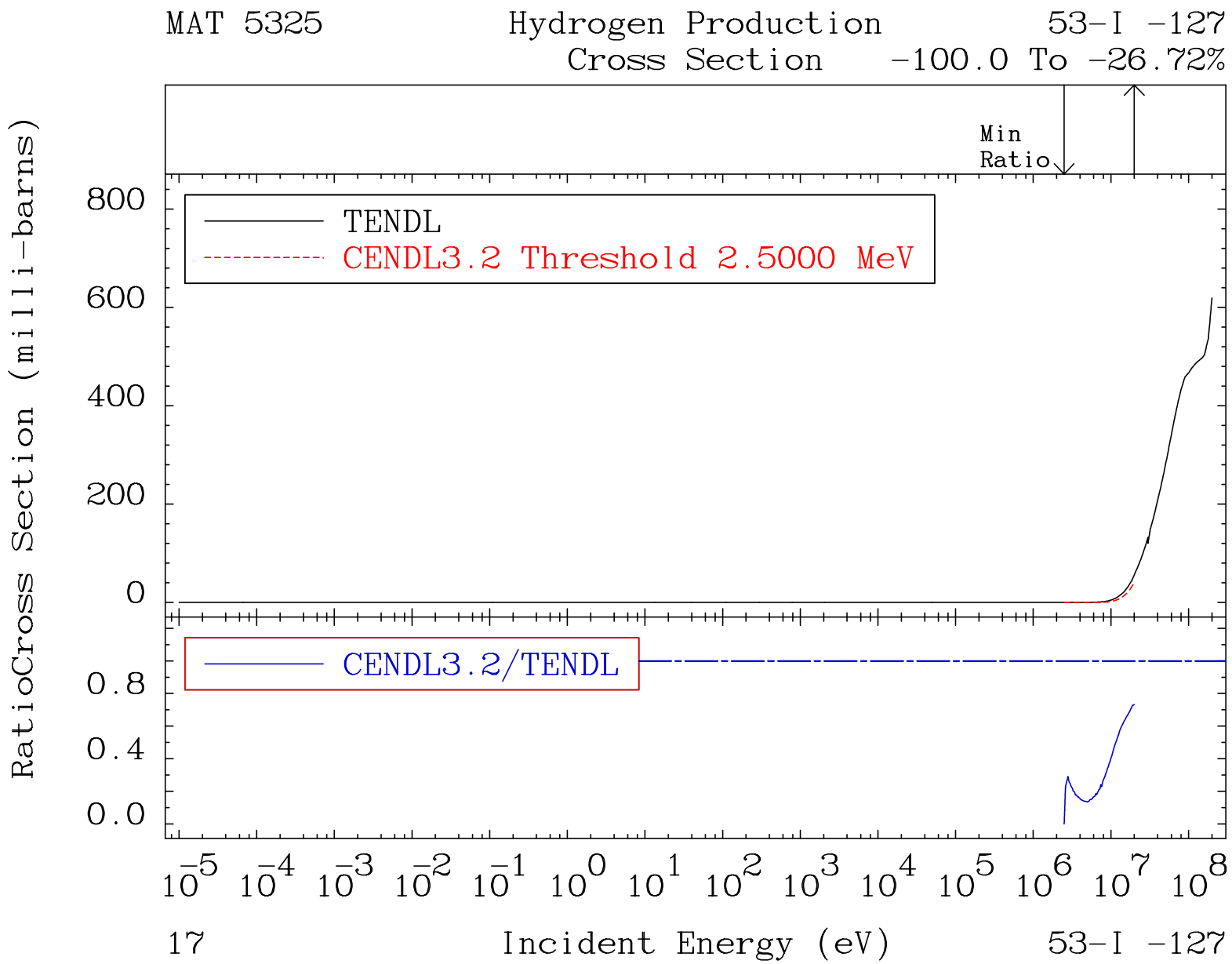

MAT 5325
(n,p)
Cross Section
53-I -127
-100.0 To -23.45%
Min
Ratio
TENDL
CENDL3.2 Threshold 2.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
20
10
0
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
12
Incident Energy (eV)
53-I -127

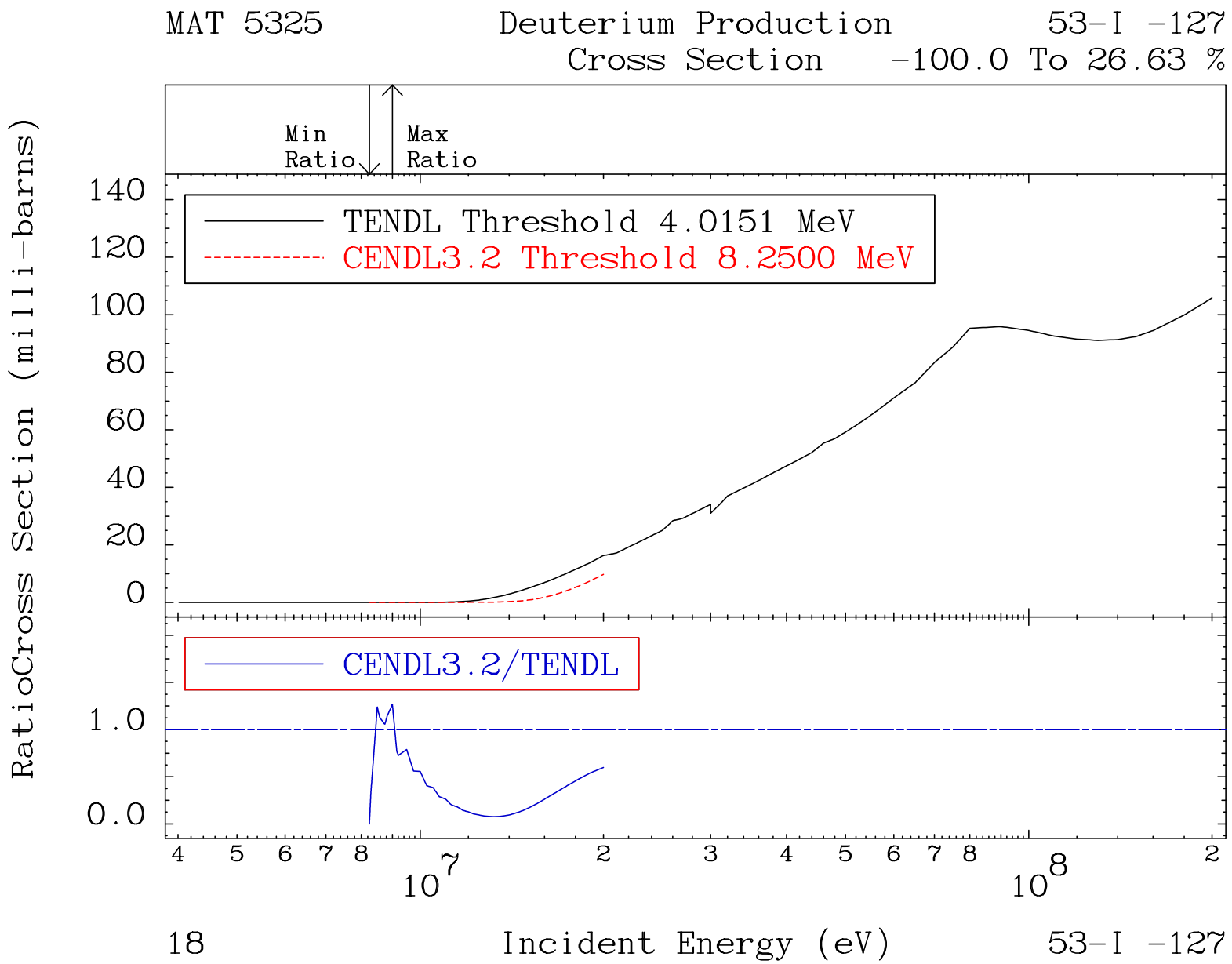

MAT 5325
(n,d)
Cross Section
53-I -127
-100.0 To 26.63 %
Min Ratio
Max Ratio
TENDL Threshold 4.0151 MeV
CENDL3.2 Threshold 8.2500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
13
Incident Energy (eV)
53-I -127

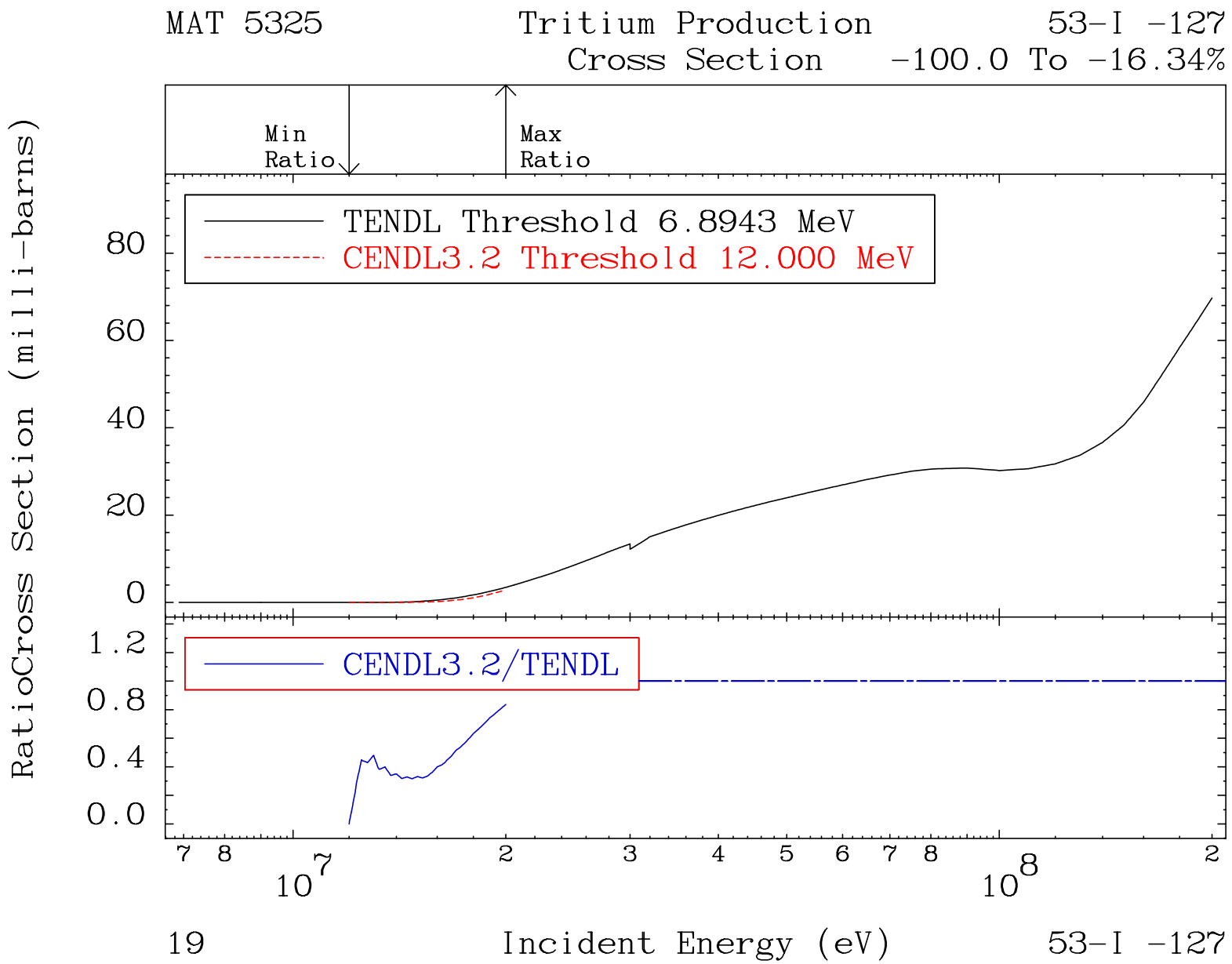

MAT 5325
(n,t)
Cross Section
53-I -127
-100.0 To -16.17%
Min Ratio
Max Ratio
TENDL Threshold 6.8943 MeV
CENDL3.2 Threshold 12.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
14
53-I -127

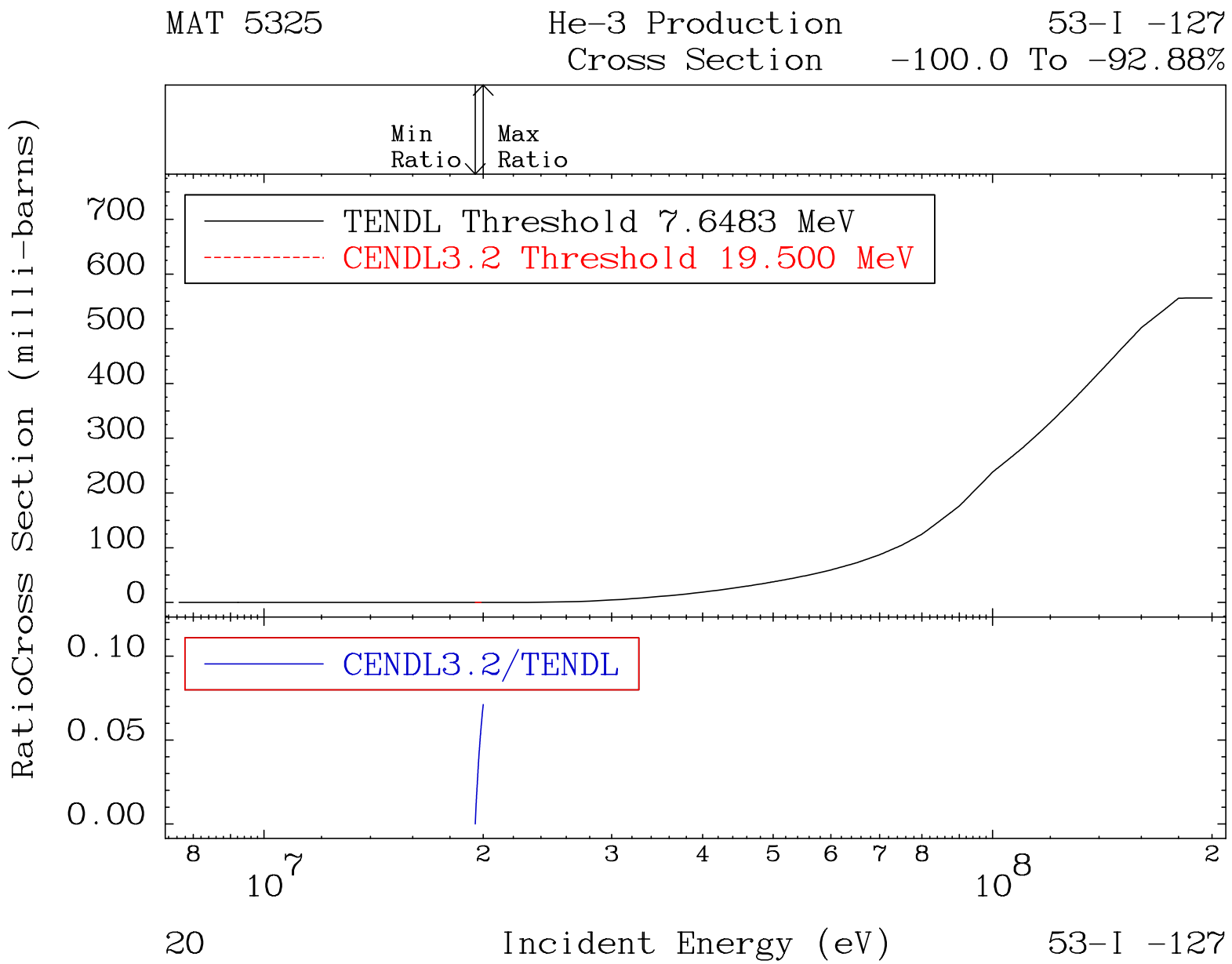

MAT 5325
(n,He-3)
53-I -127
Cross Section
-100.0 To -92.88%
Min Ratio
Max Ratio
TENDL Threshold 7.6483 MeV
CENDL3.2 Threshold 19.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
0
1
2
3
4
5
0.00
0.05
0.10
8
2
3
4
5
6
7
8
2
10^7
10^8
15
Incident Energy (eV)
53-I -127

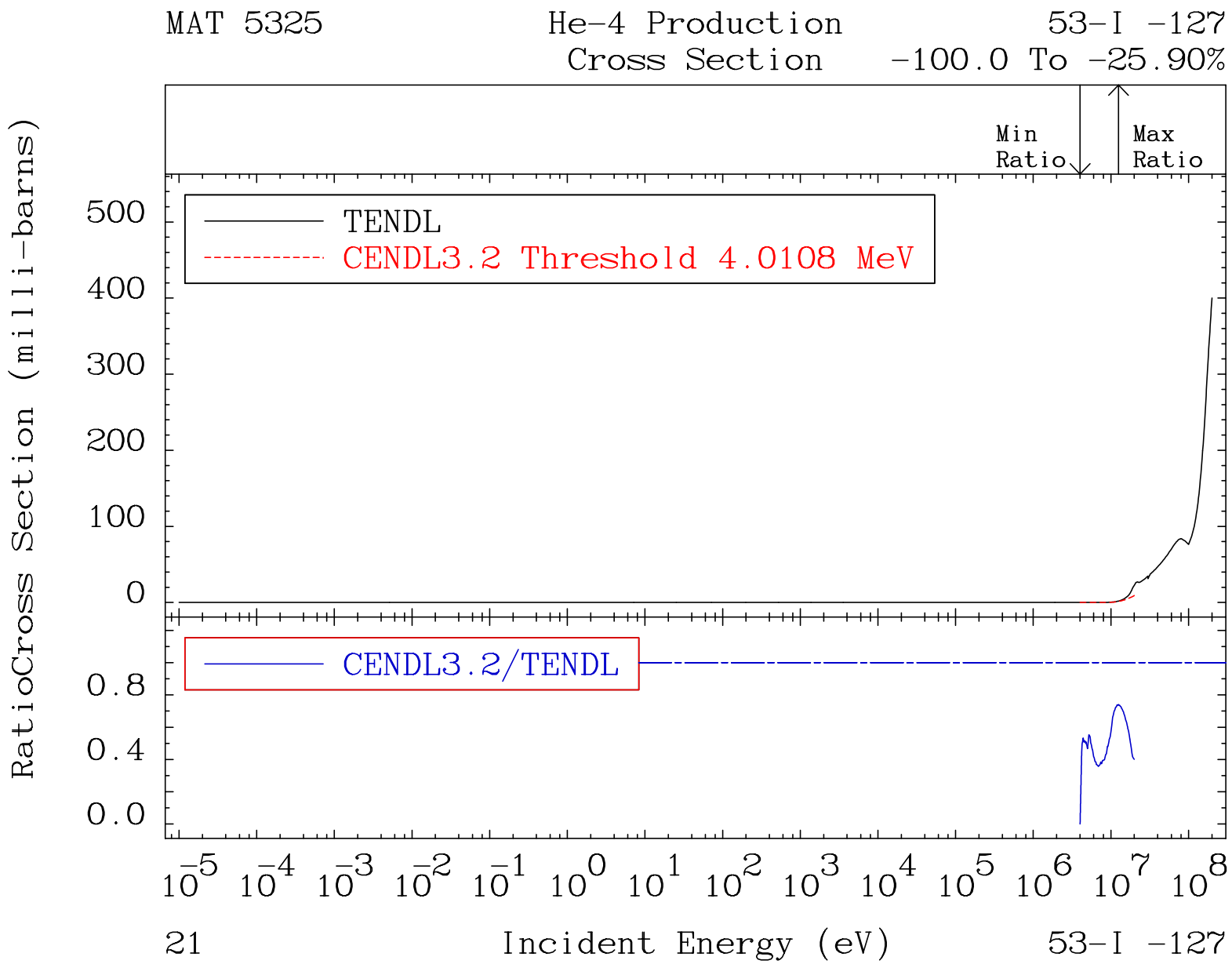

MAT 5325
(n,α)
Cross Section
53-I -127
-100.0 To -26.25%
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 4.0108 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
16
53-I -127

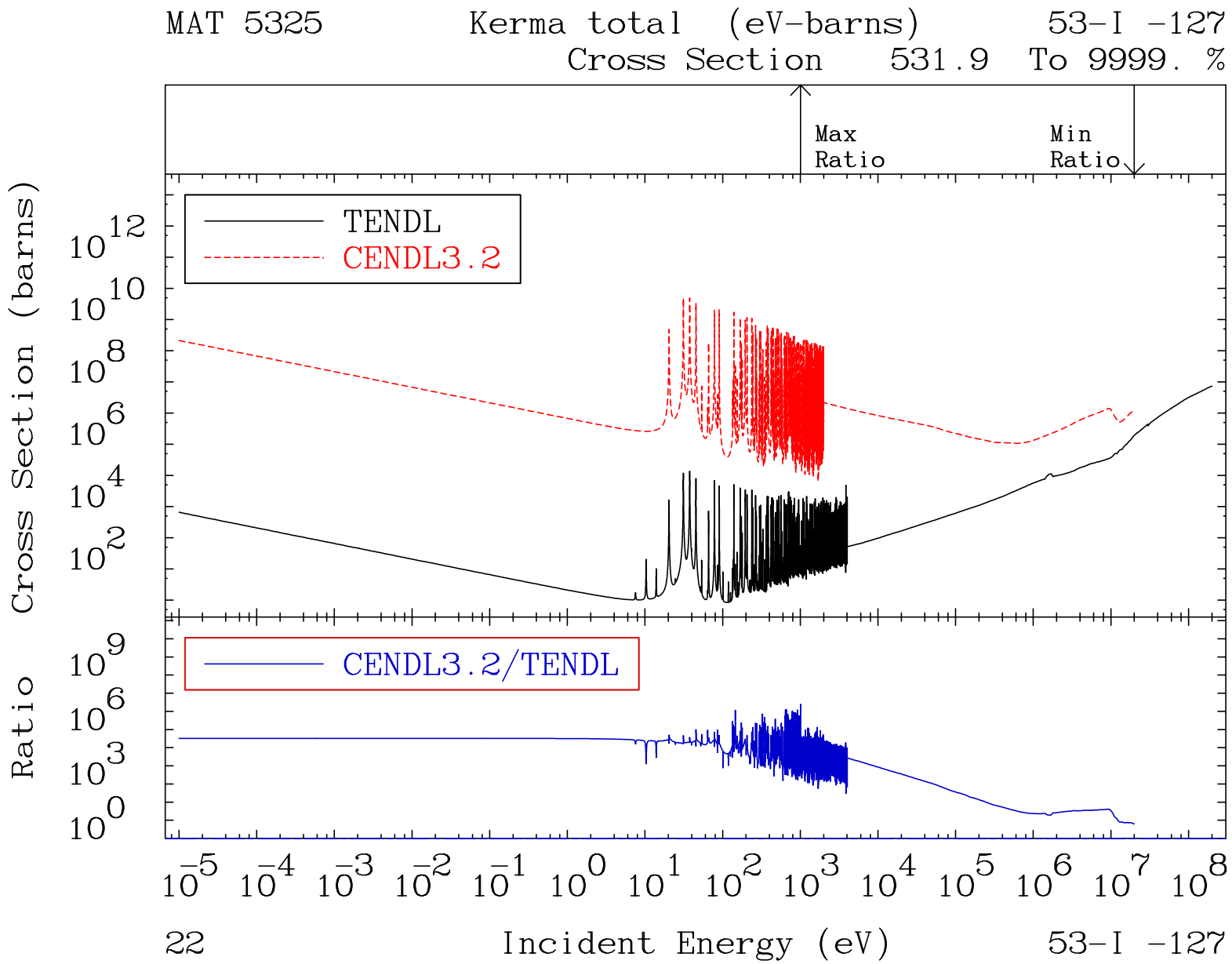

MAT 5325
Hydrogen Production
53-I -127
Cross Section
-100.0 To -26.72%
Min
Ratio
TENDL
CENDL3.2 Threshold 2.5000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
17
Incident Energy (eV)
53-I -127

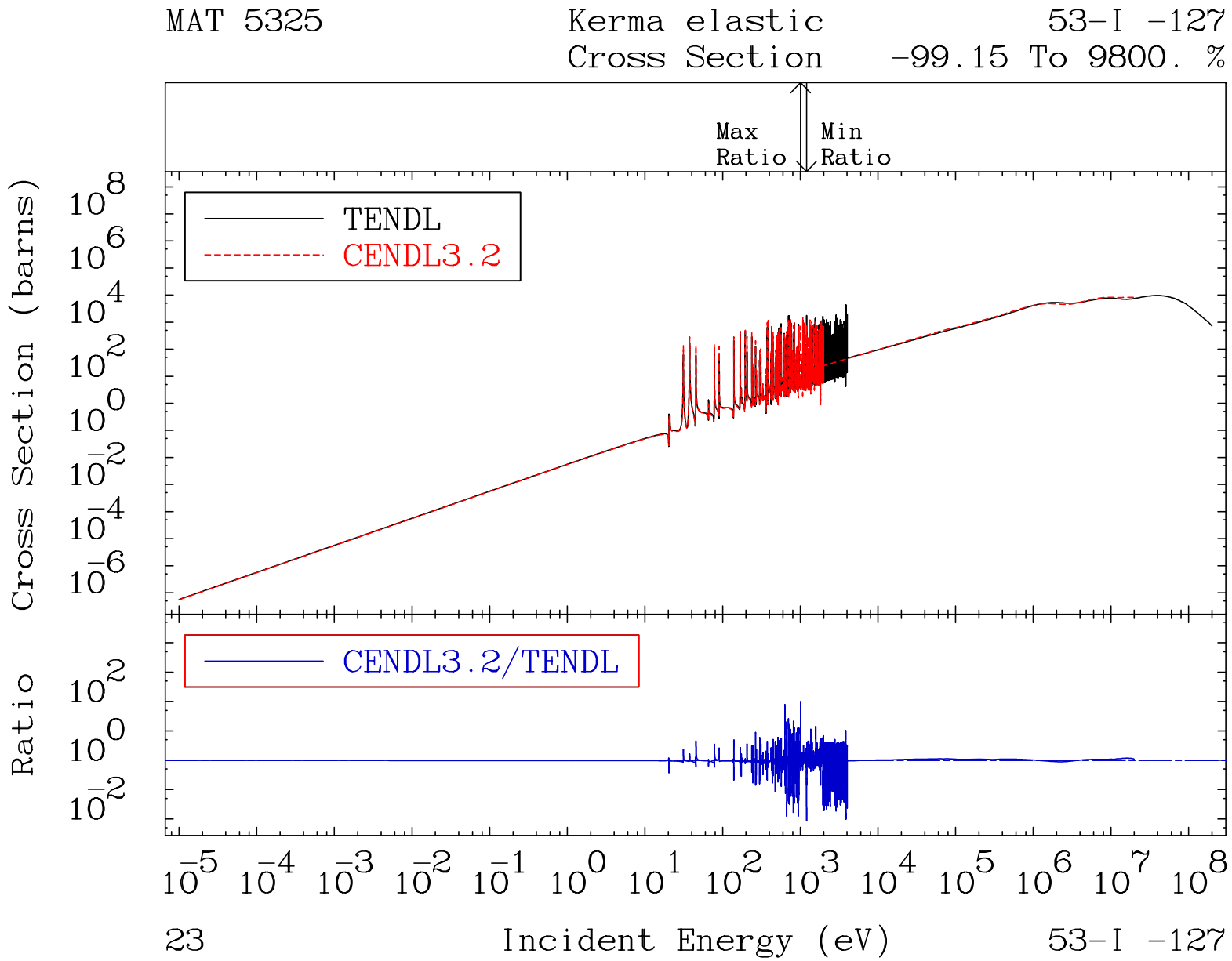

MAT 5325
Deuterium Production
53-I -127
Cross Section -100.0 To 26.63 %
Min Ratio
Max Ratio
TENDL Threshold 4.0151 MeV
CENDL3.2 Threshold 8.2500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
1.0
0.0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
18
Incident Energy (eV)
53-I -127

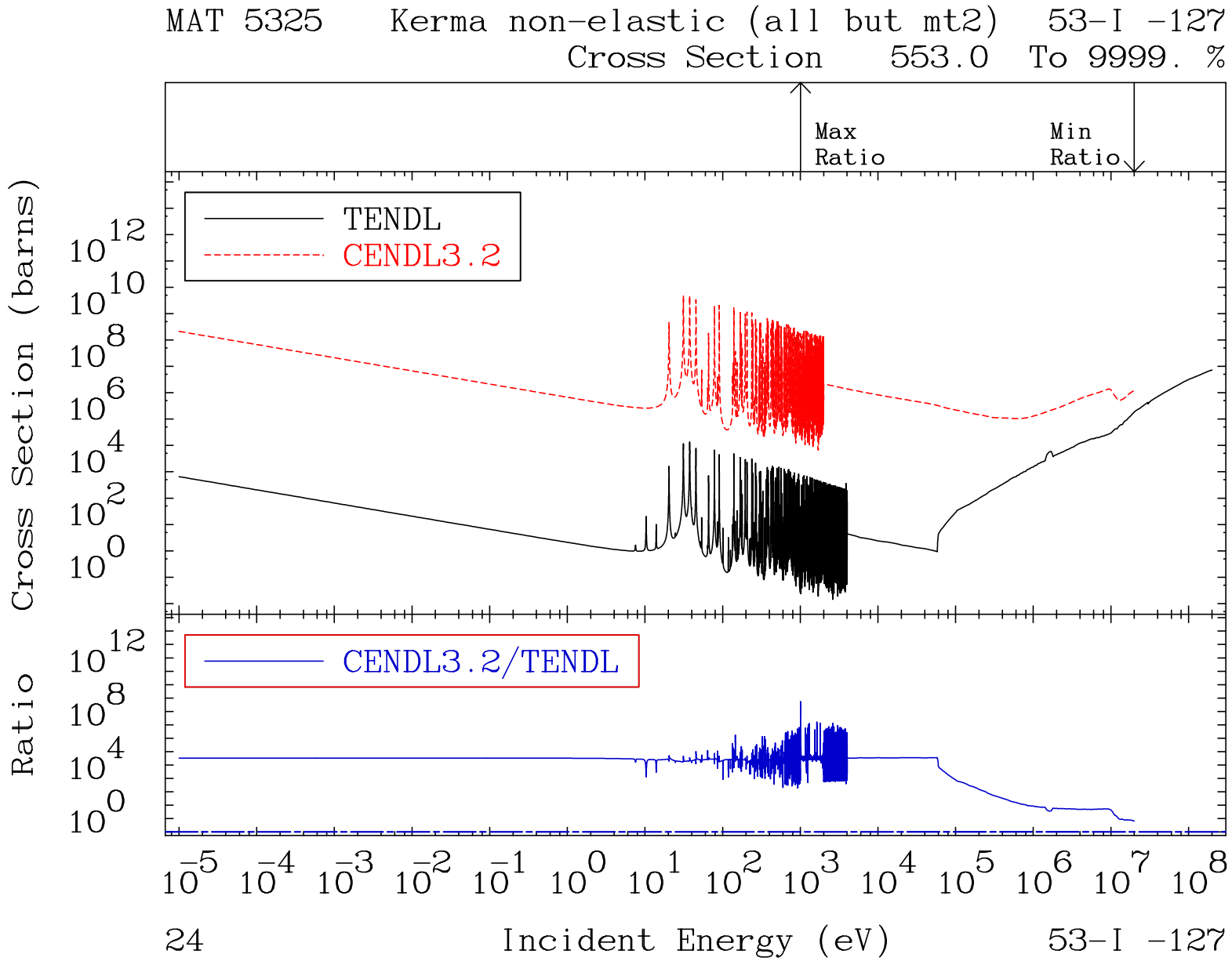

MAT 5325
Tritium Production
53-I -127
Cross Section
-100.0 To -16.34%
Min Ratio
Max Ratio
TENDL Threshold 6.8943 MeV
CENDL3.2 Threshold 12.000 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.8
0.4
0.0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
19
Incident Energy (eV)
53-I -127

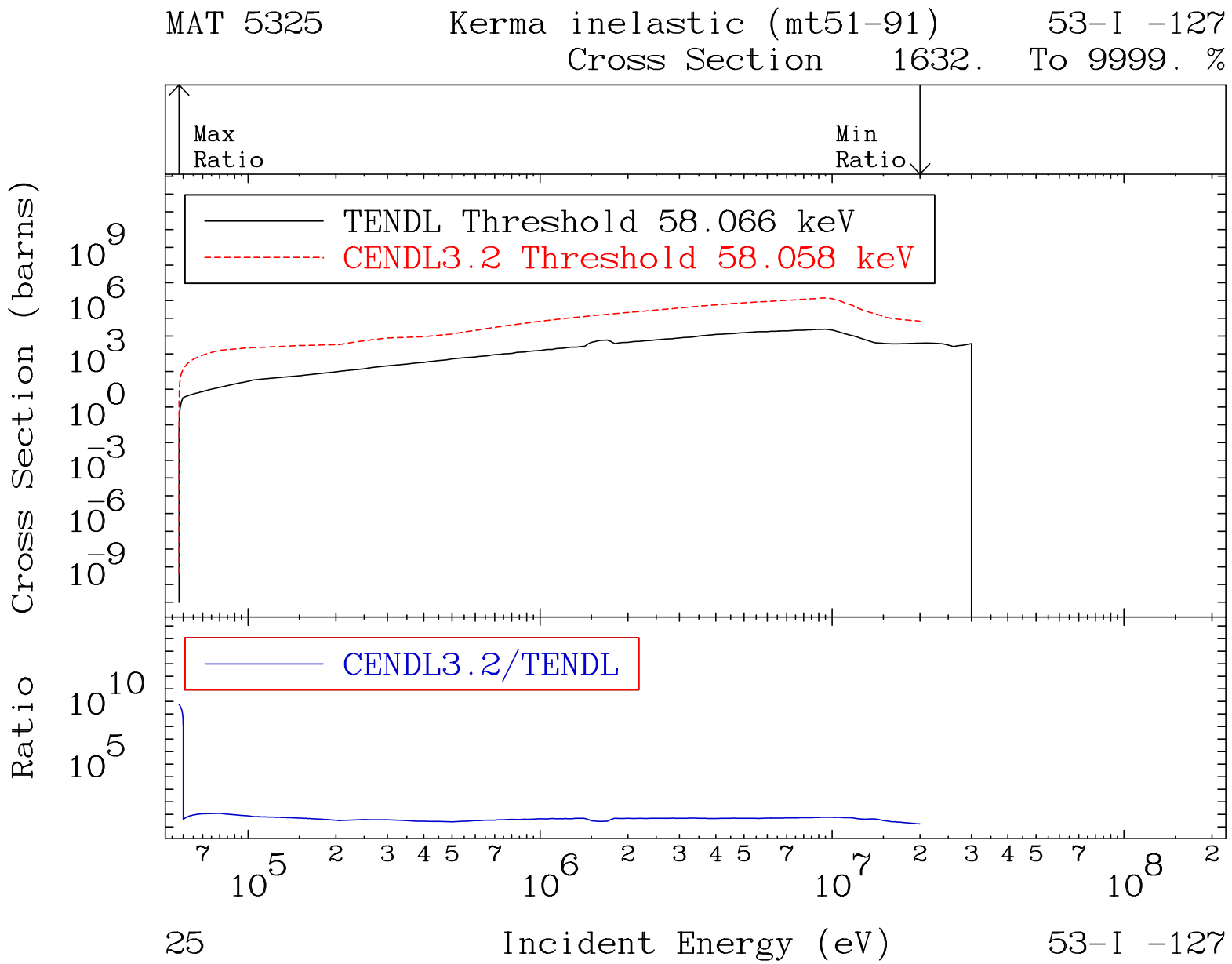

MAT 5325
He-3 Production
Cross Section
53-I -127
-100.0 To -92.88%
Min Ratio
Max Ratio
TENDL Threshold 7.6483 MeV
CENDL3.2 Threshold 19.500 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
700
600
500
400
300
200
100
0
0.10
0.05
0.00
8
2
3
4
5
6
7
8
2
10^7
10^8
20
Incident Energy (eV)
53-I -127

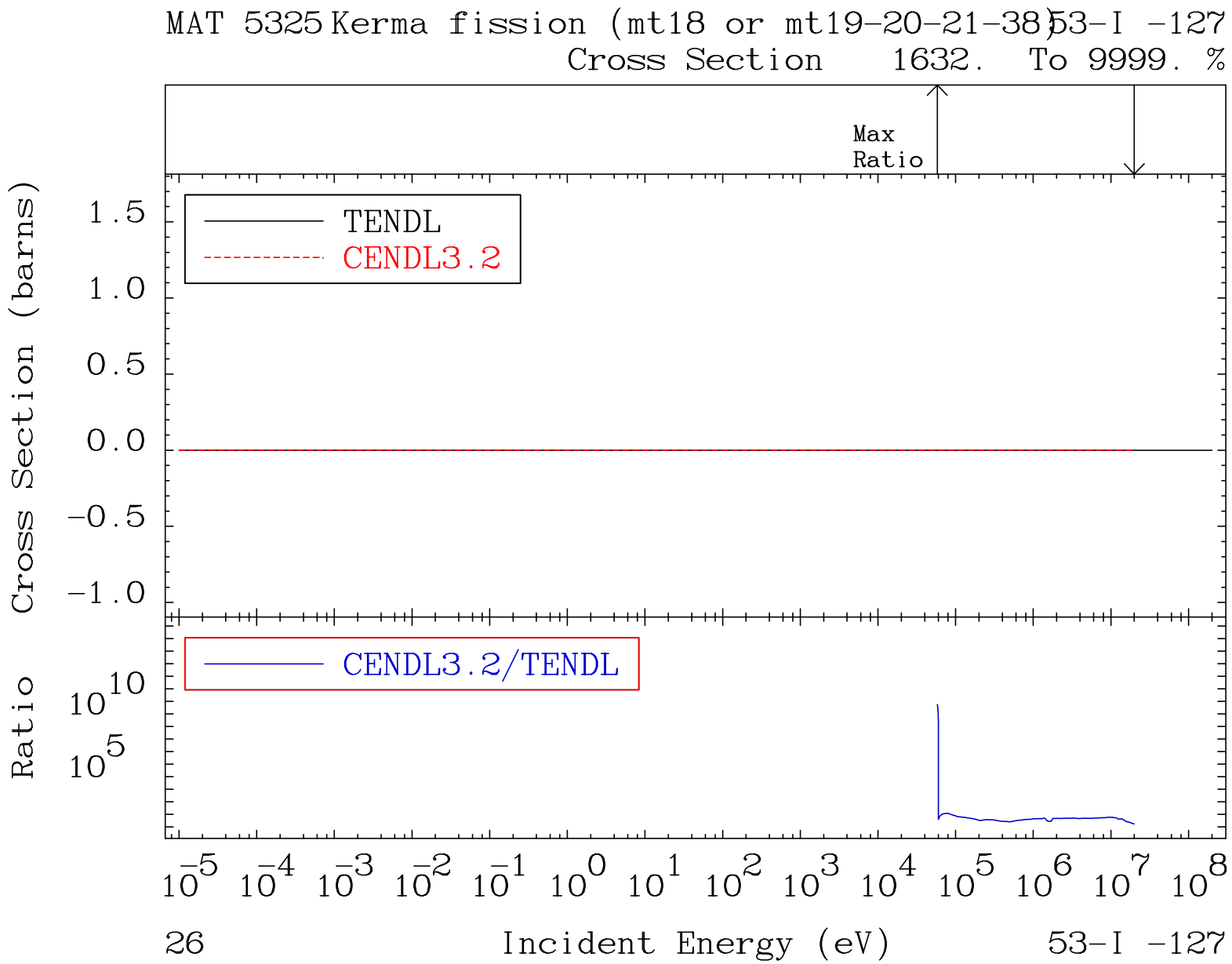

MAT 5325
He-4 Production
Cross Section
53-I -127
-100.0 To -25.90%
Min Ratio
Max Ratio
TENDL
CENDL3.2 Threshold 4.0108 MeV
CENDL3.2/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
0.8
0.4
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
21
Incident Energy (eV)
53-I -127

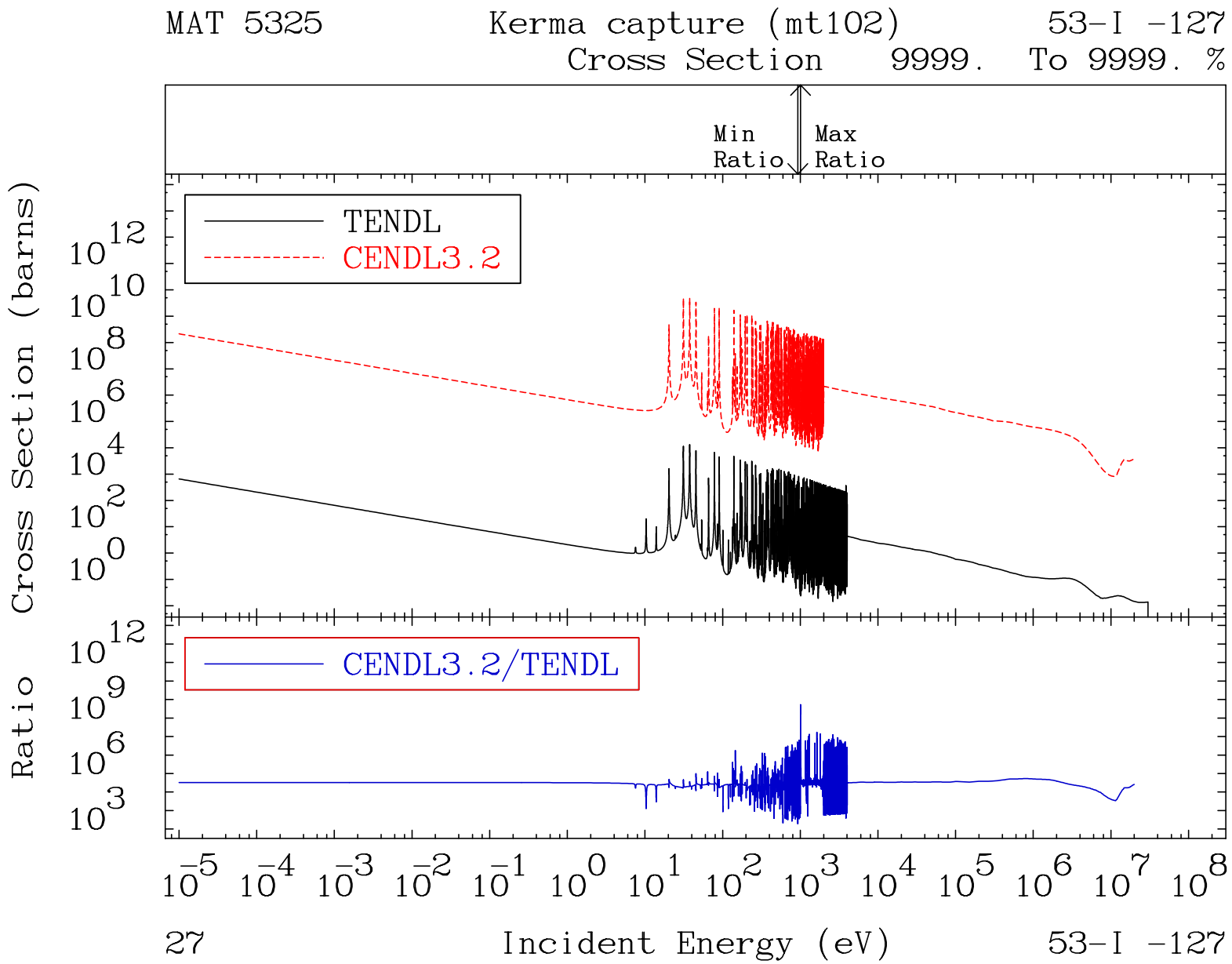

MAT 5325
Kerma total (eV-barns)
53-I -127
Cross Section 531.9 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
Ratio
CENDL3.2/TENDL
Incident Energy (eV)
22
53-I -127

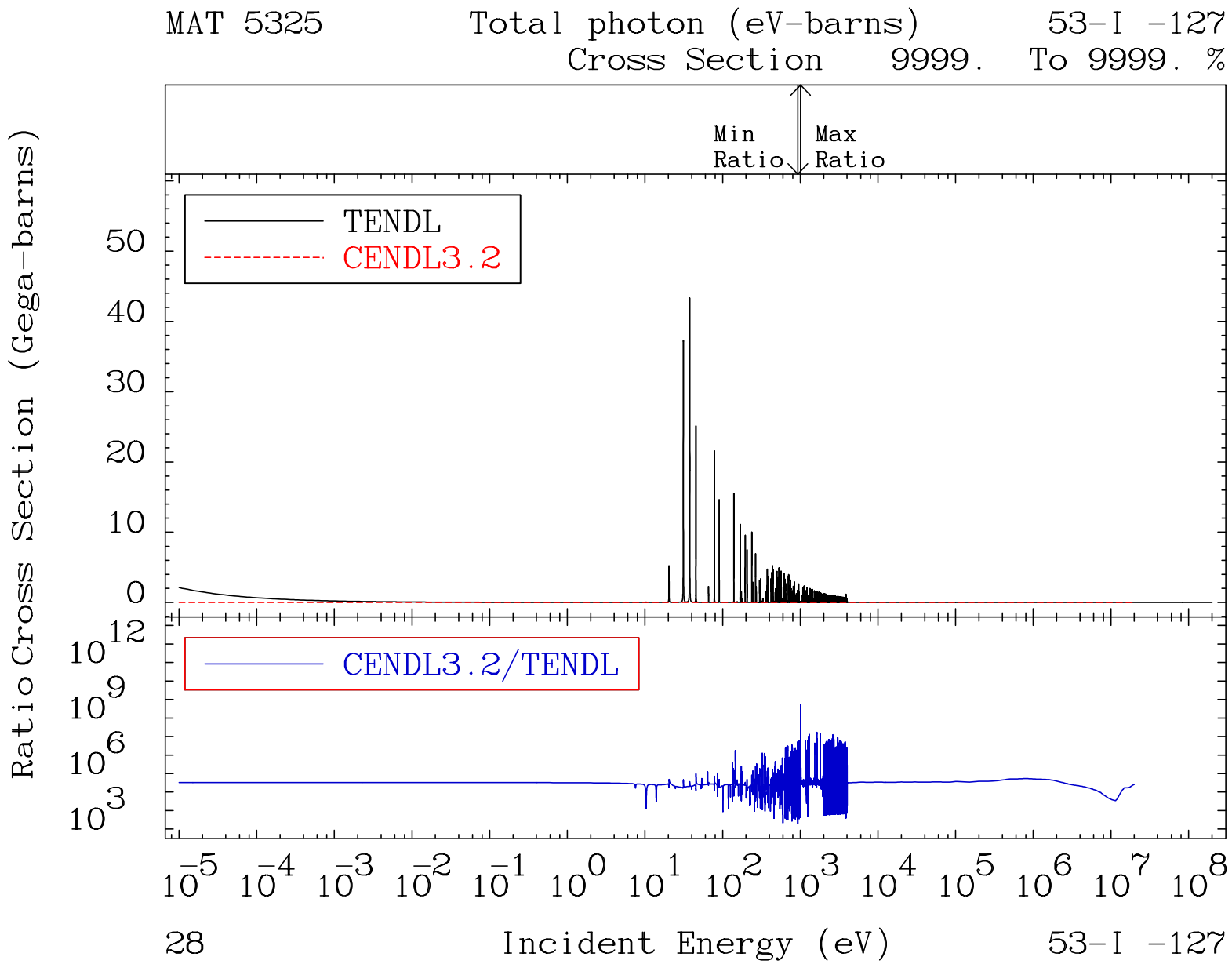

MAT 5325
Kerma elastic
Cross Section
53-I -127
-99.15 To 9800. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
23
53-I -127

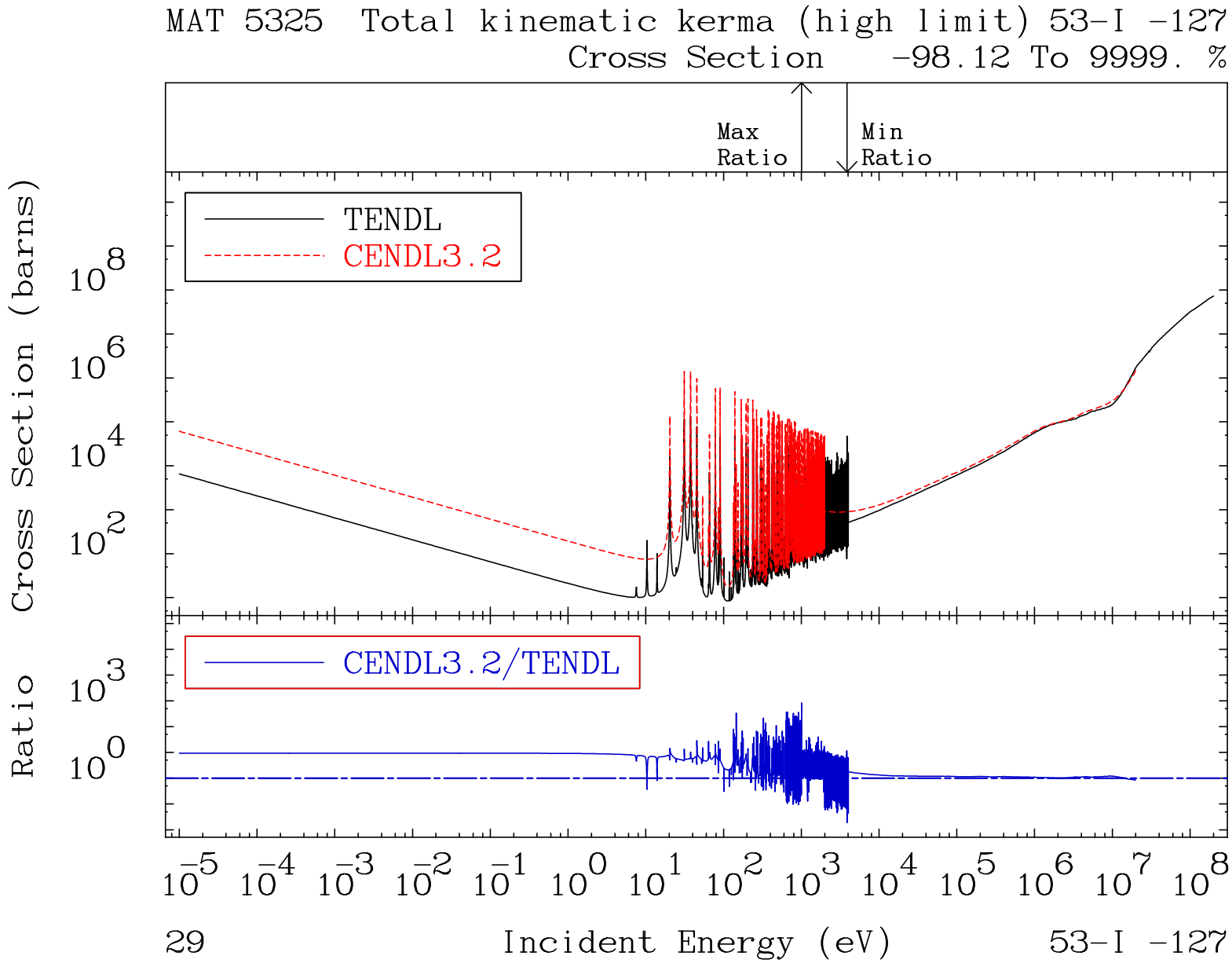

MAT 5325 Kerma non-elastic (all but mt2) 53-I -127
Cross Section 553.0 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
24
53-I -127

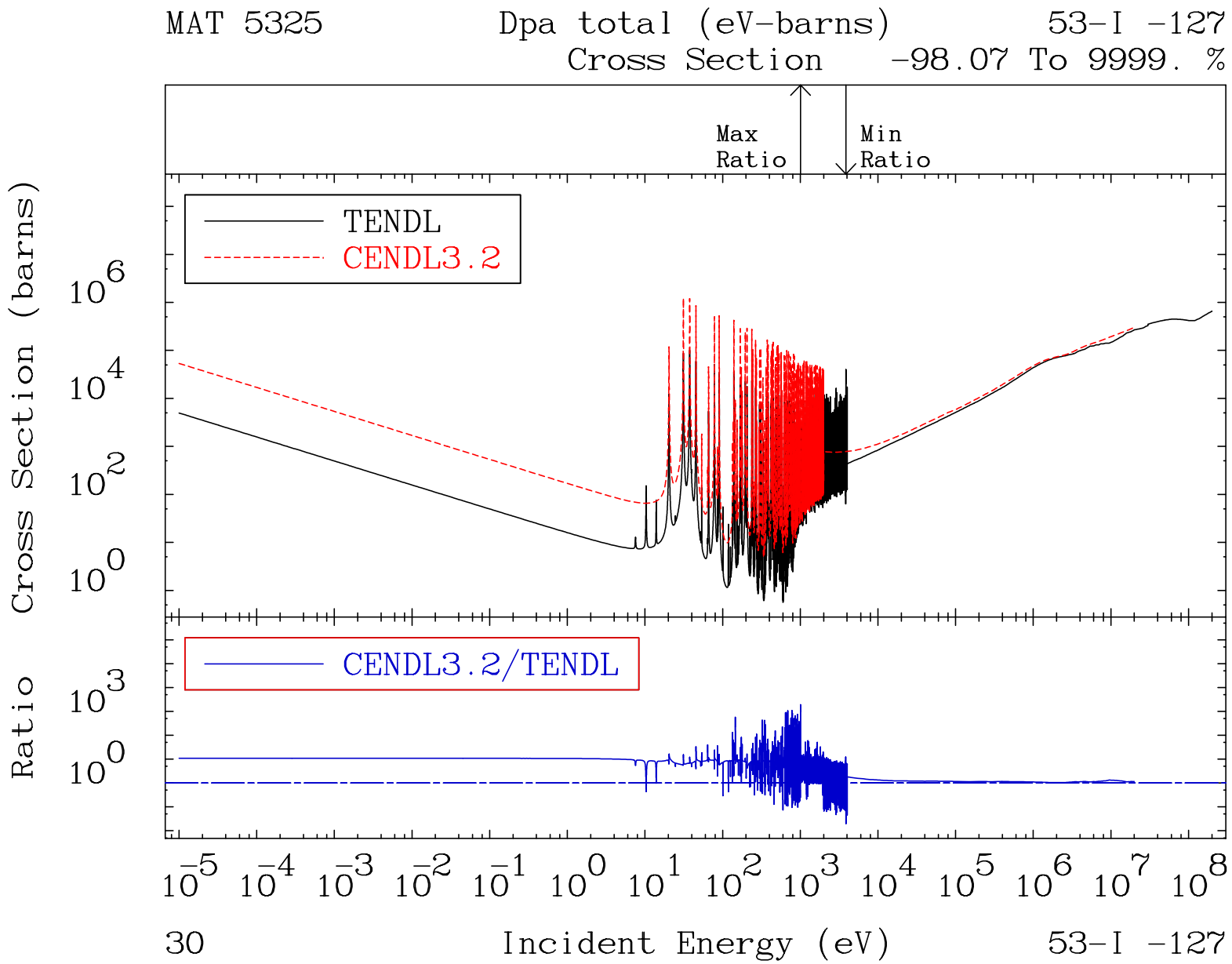

MAT 5325
Kerma inelastic (mt51-91)
53-I -127
Cross Section 1632. To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 58.066 keV
CENDL3.2 Threshold 58.058 keV
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
25
53-I -127

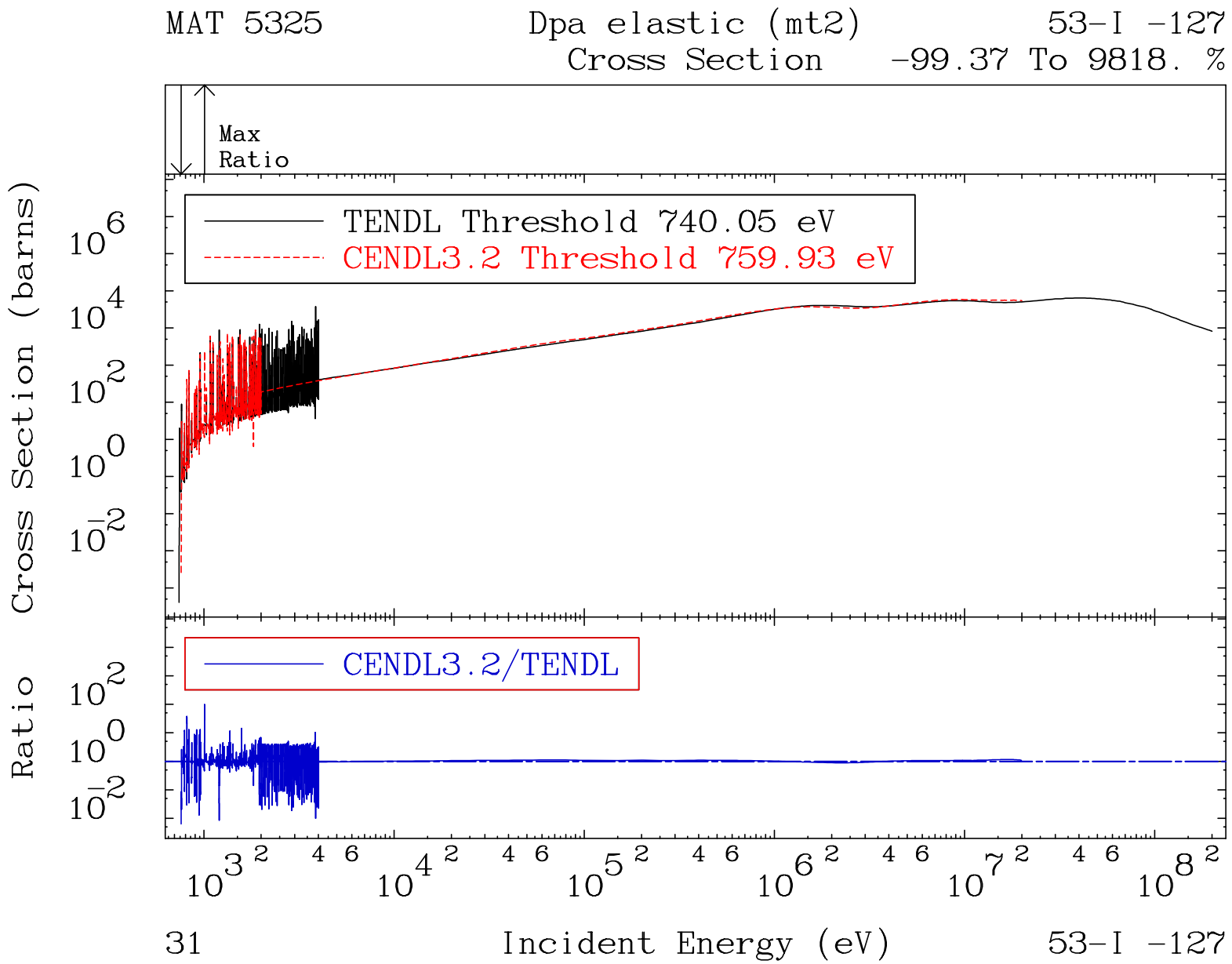

MAT 5325 Kerma fission (mt18 or mt19-20-21-38) 53-I -127
Cross Section 1632. To 9999. %
Max
Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
10^{10}
10^{5}
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
26
Incident Energy (eV)
53-I -127

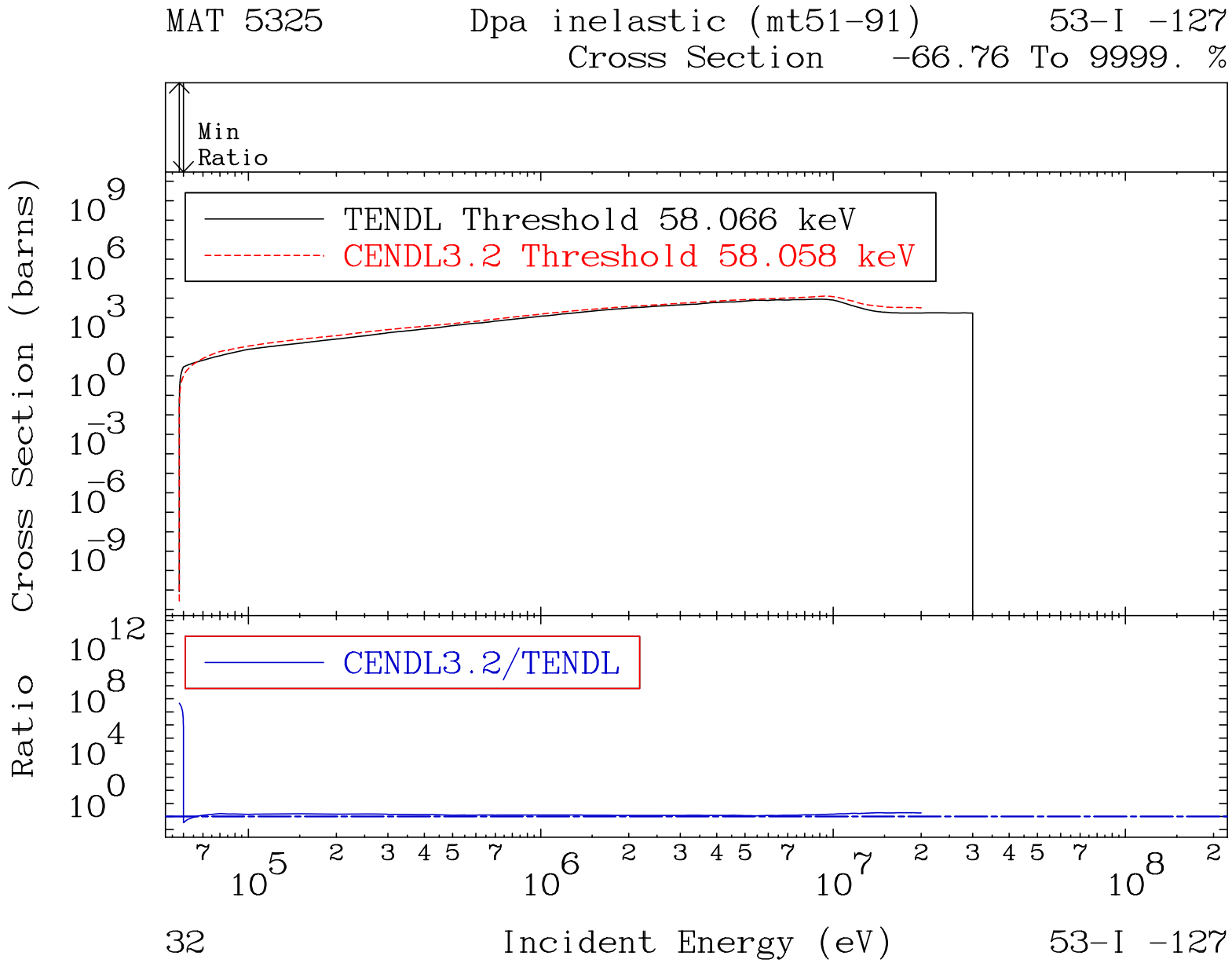

MAT 5325
Kerma capture (mt102)
53-I -127
Cross Section 9999. To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
27
53-I -127

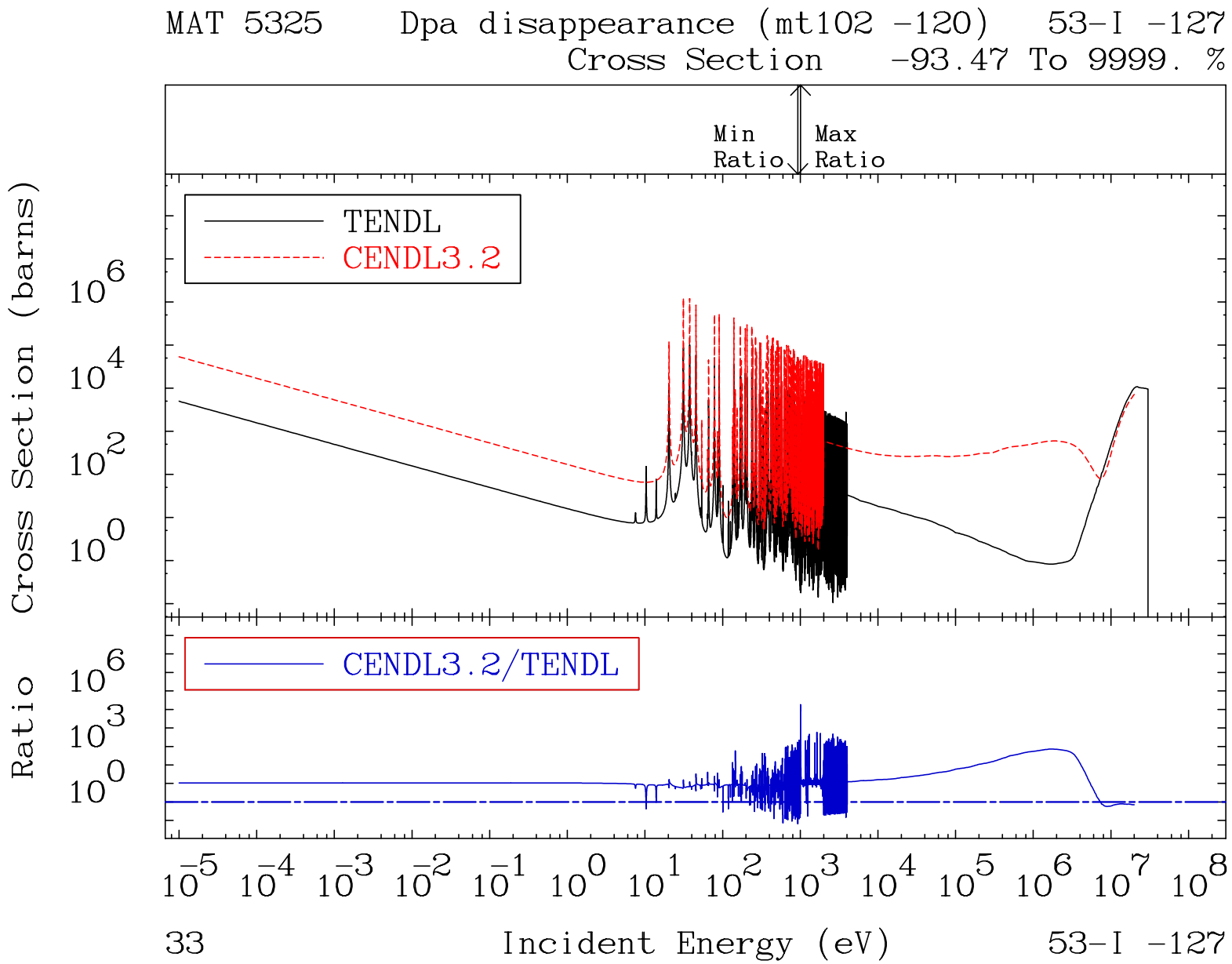

MAT 5325
Total photon (eV-barns)
53-I -127
Cross Section 9999. To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
CENDL3.2/TENDL
Ratio Cross Section (Giga-barns)
Incident Energy (eV)
28
53-I -127

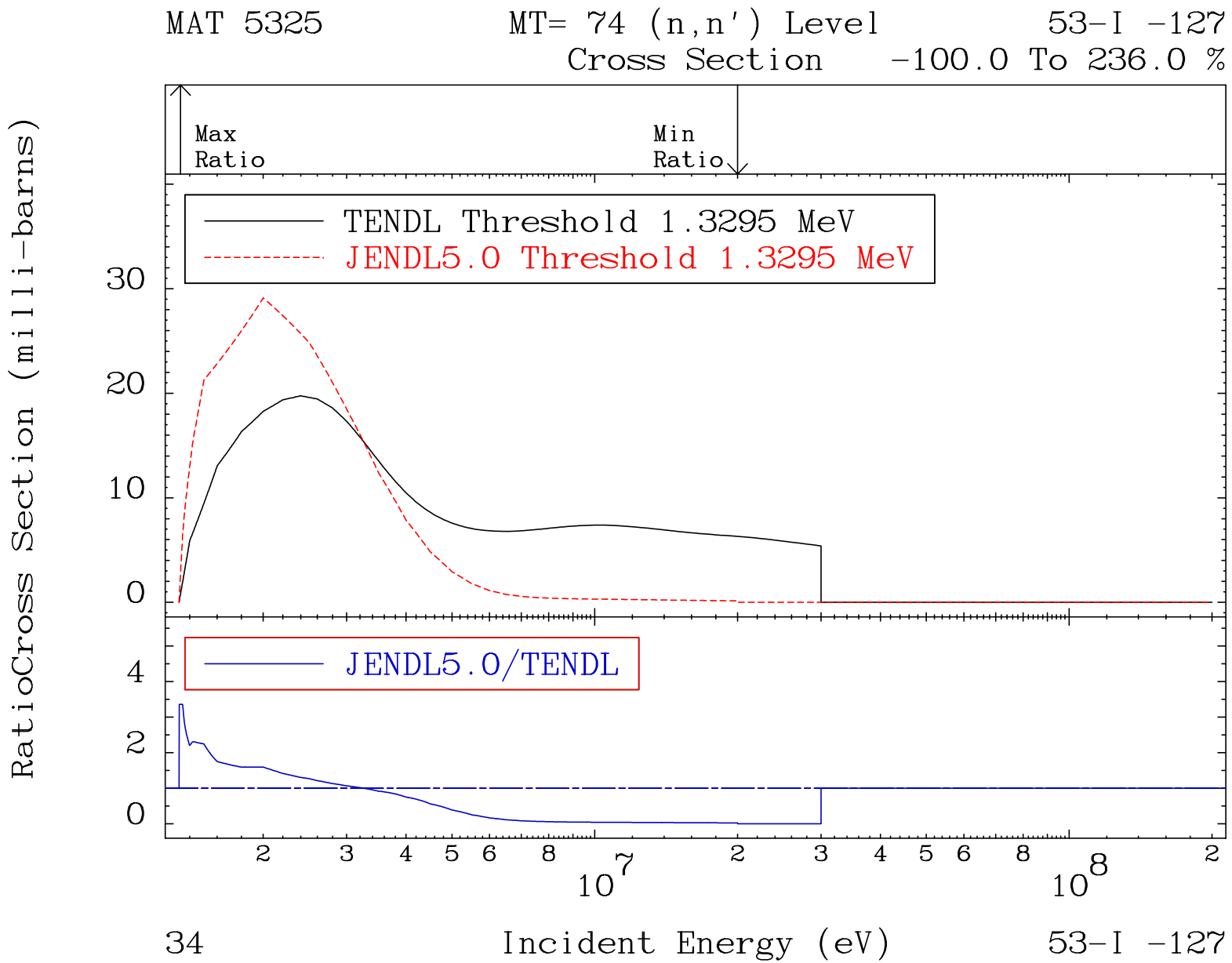

MAT 5325 Total kinematic kerma (high limit) 53-I -127
Cross Section -98.12 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^8
10^6
10^4
10^2
CENDL3.2/TENDL
Ratio
10^3
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
29
Incident Energy (eV)
53-I -127

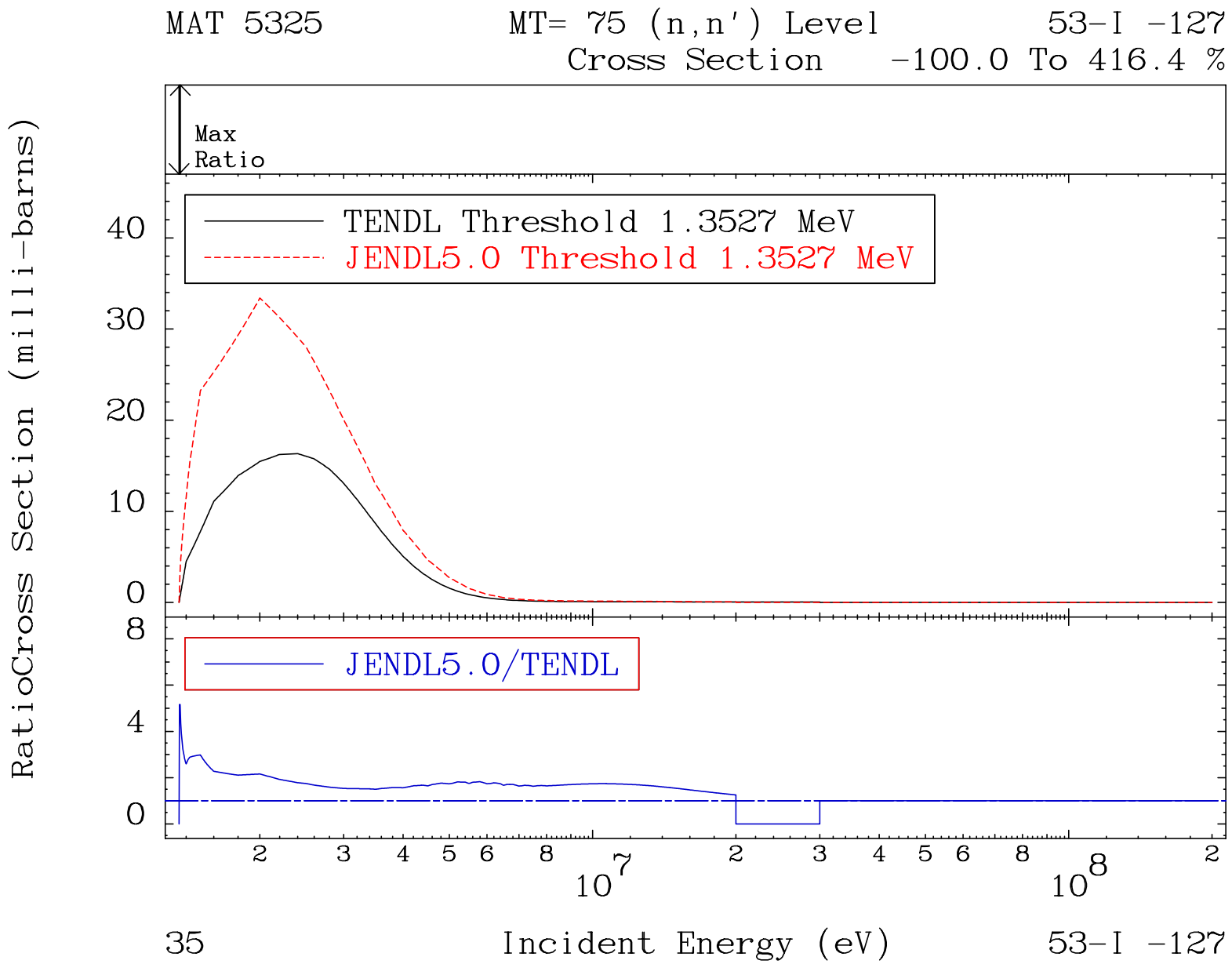

MAT 5325
Dpa total (eV-barns)
53-I -127
Cross Section -98.07 To 9999. %
Max Ratio
Min Ratio
TENDL
CENDL3.2
Cross Section (barns)
10^6
10^4
10^2
10^0
CENDL3.2/TENDL
Ratio
10^3
10^0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
Incident Energy (eV)
30
53-I -127

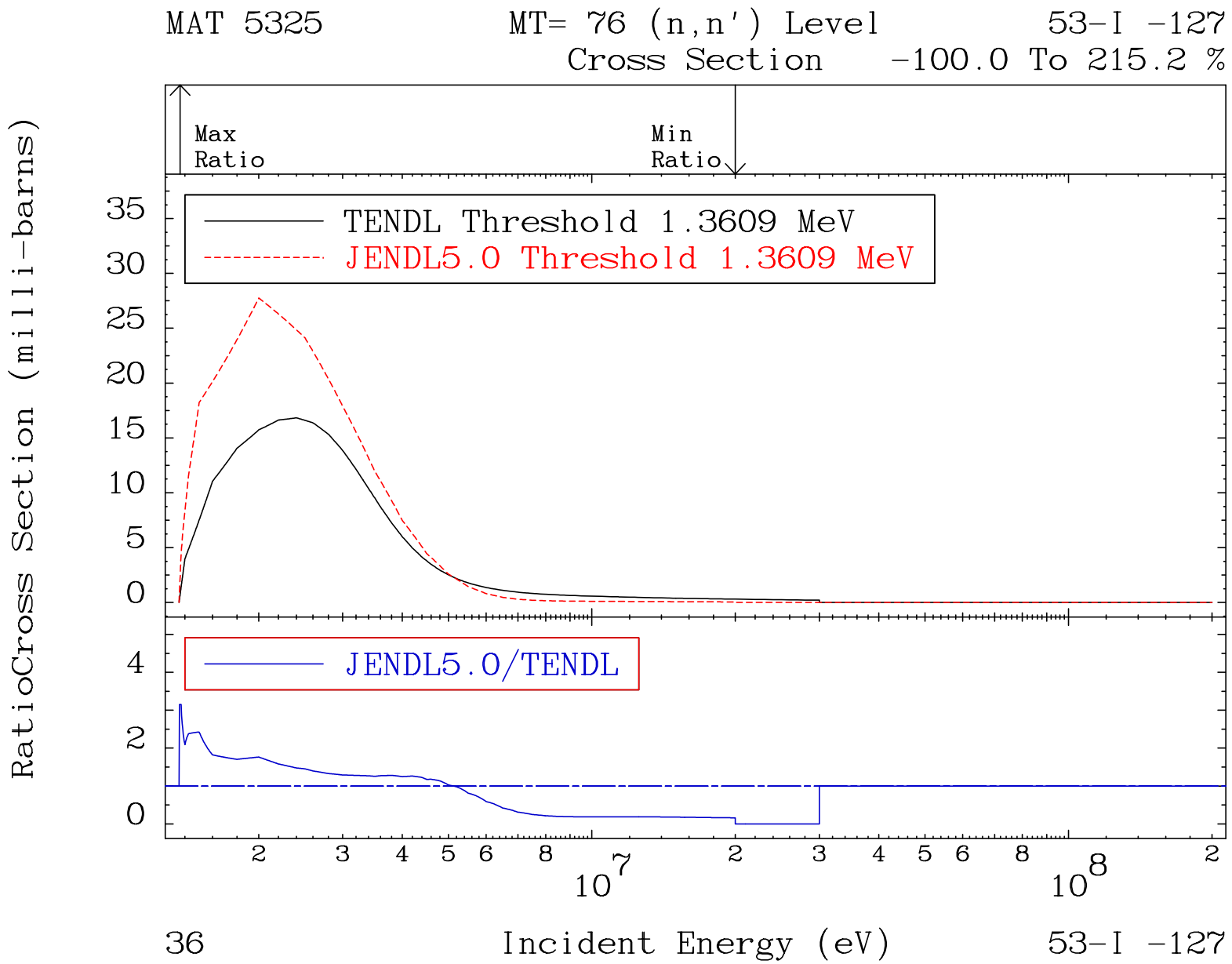

MAT 5325
Dpa elastic (mt2)
Cross Section
53-I -127
-99.37 To 9818. %
Max
Ratio
TENDL Threshold 740.05 eV
CENDL3.2 Threshold 759.93 eV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
31
53-I -127

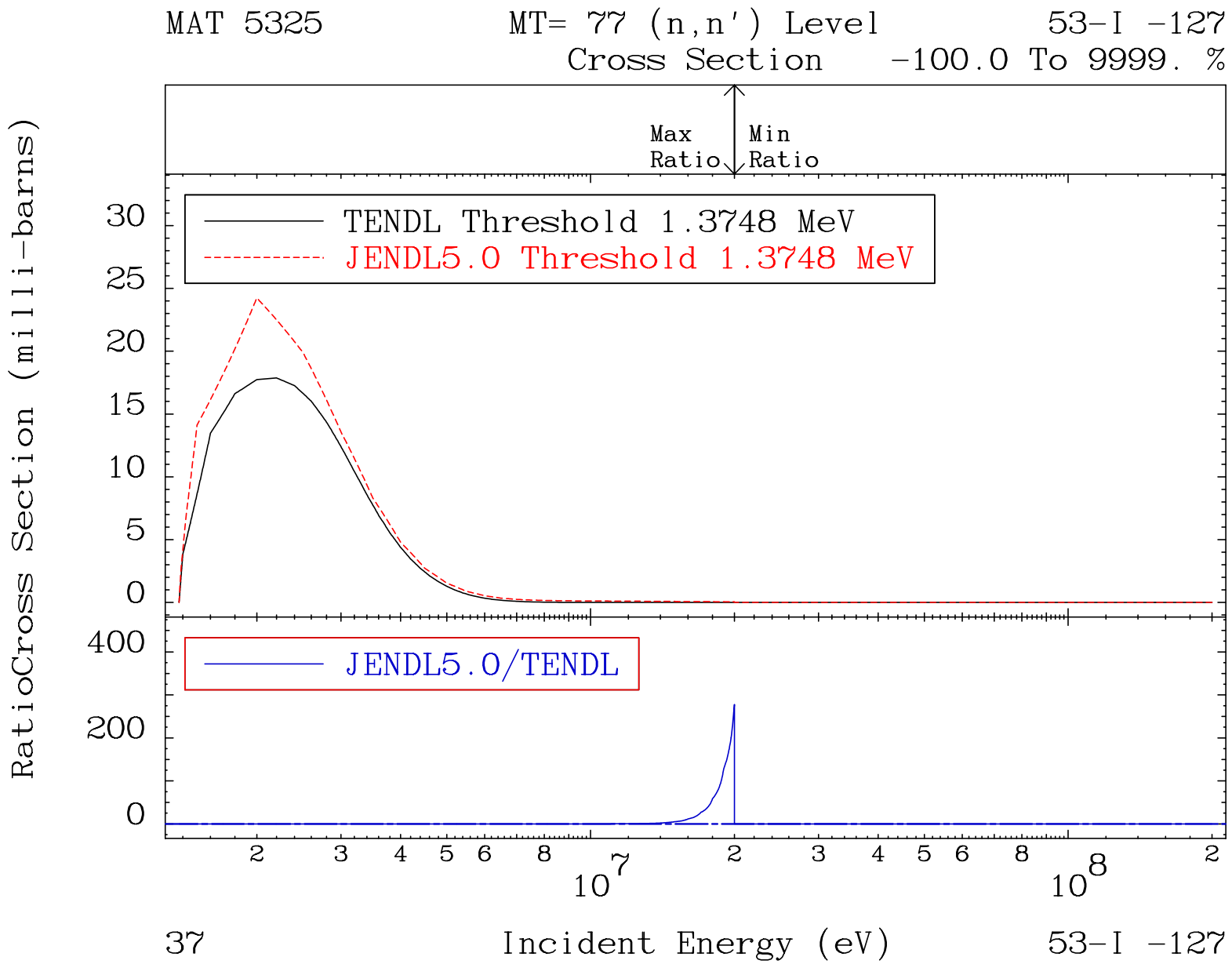

MAT 5325
Dpa inelastic (mt51-91)
53-I -127
Cross Section -66.76 To 9999. %
Min
Ratio
TENDL Threshold 58.066 keV
CENDL3.2 Threshold 58.058 keV
CENDL3.2/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
32
53-I -127

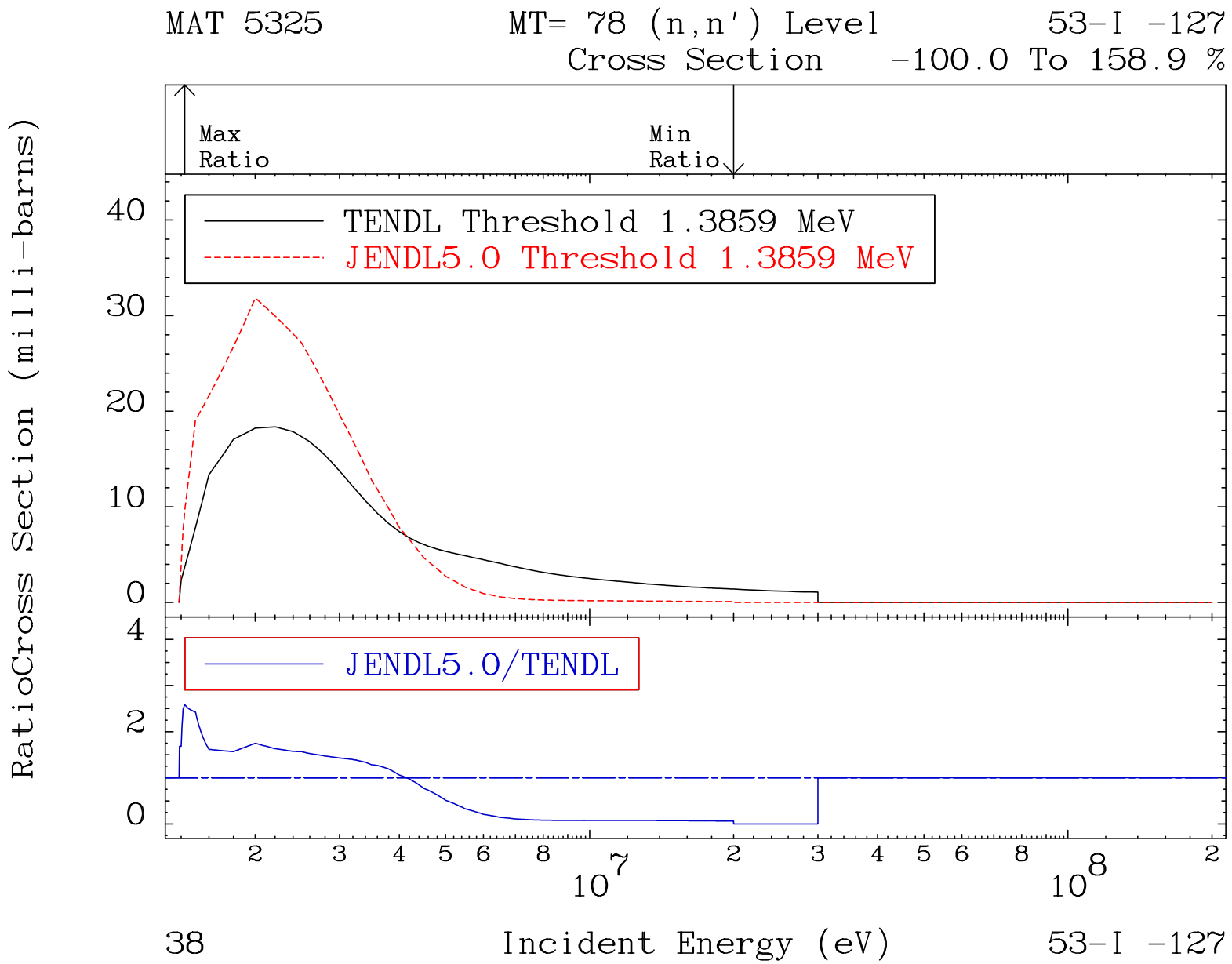

MAT 5325 Dpa disappearance (mt102 -120) 53-I -127
Cross Section -93.47 To 9999. %
Min Ratio
Max Ratio
TENDL
CENDL3.2
Cross Section (barns)
CENDL3.2/TENDL
Ratio
Incident Energy (eV)
33
53-I -127

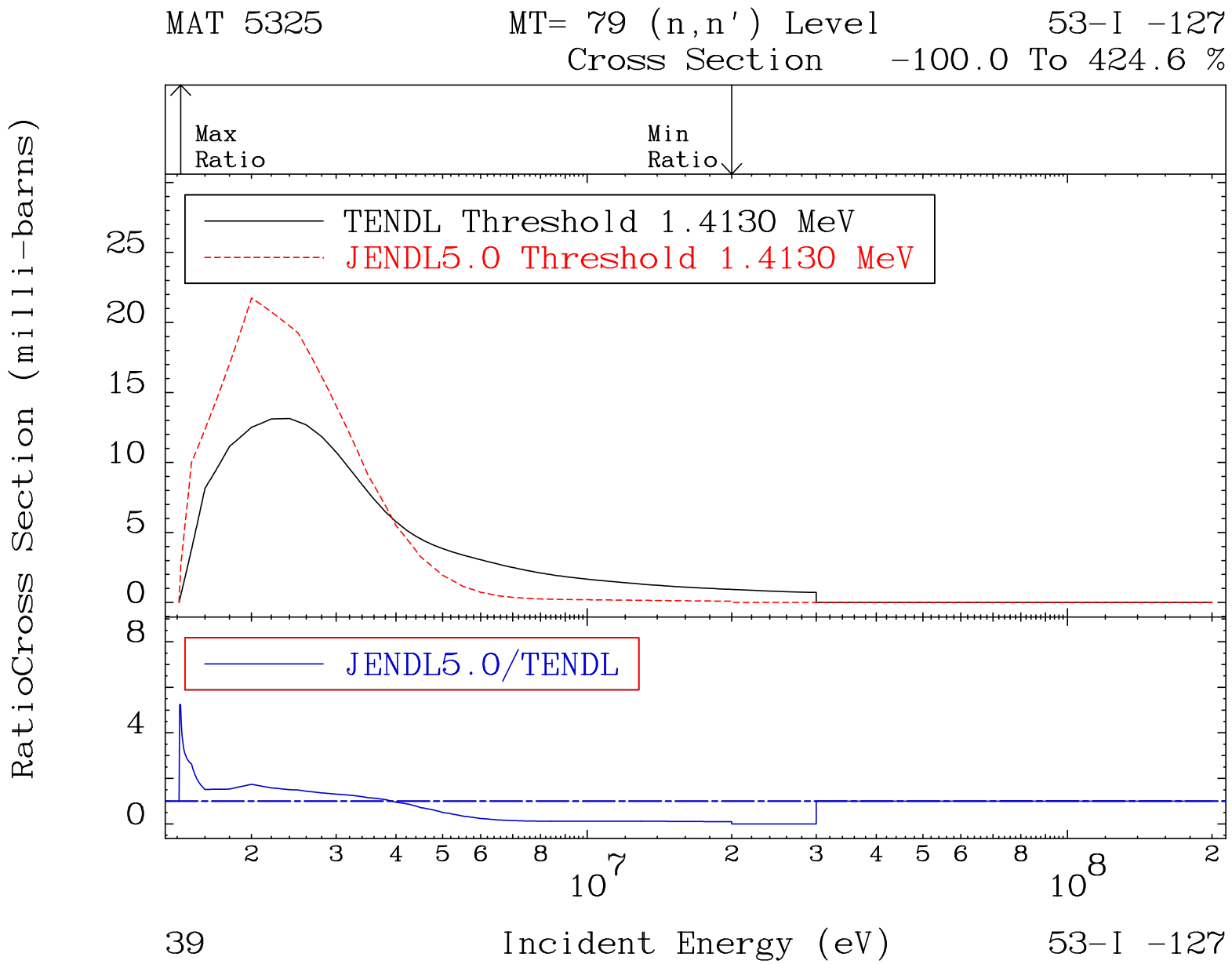

MAT 5325
MT= 74 (n,n') Level
53-I -127
Cross Section -100.0 To 236.0 %
Max Ratio
Min Ratio
TENDL Threshold 1.3295 MeV
JENDL5.0 Threshold 1.3295 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
4
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
34
Incident Energy (eV)
53-I -127

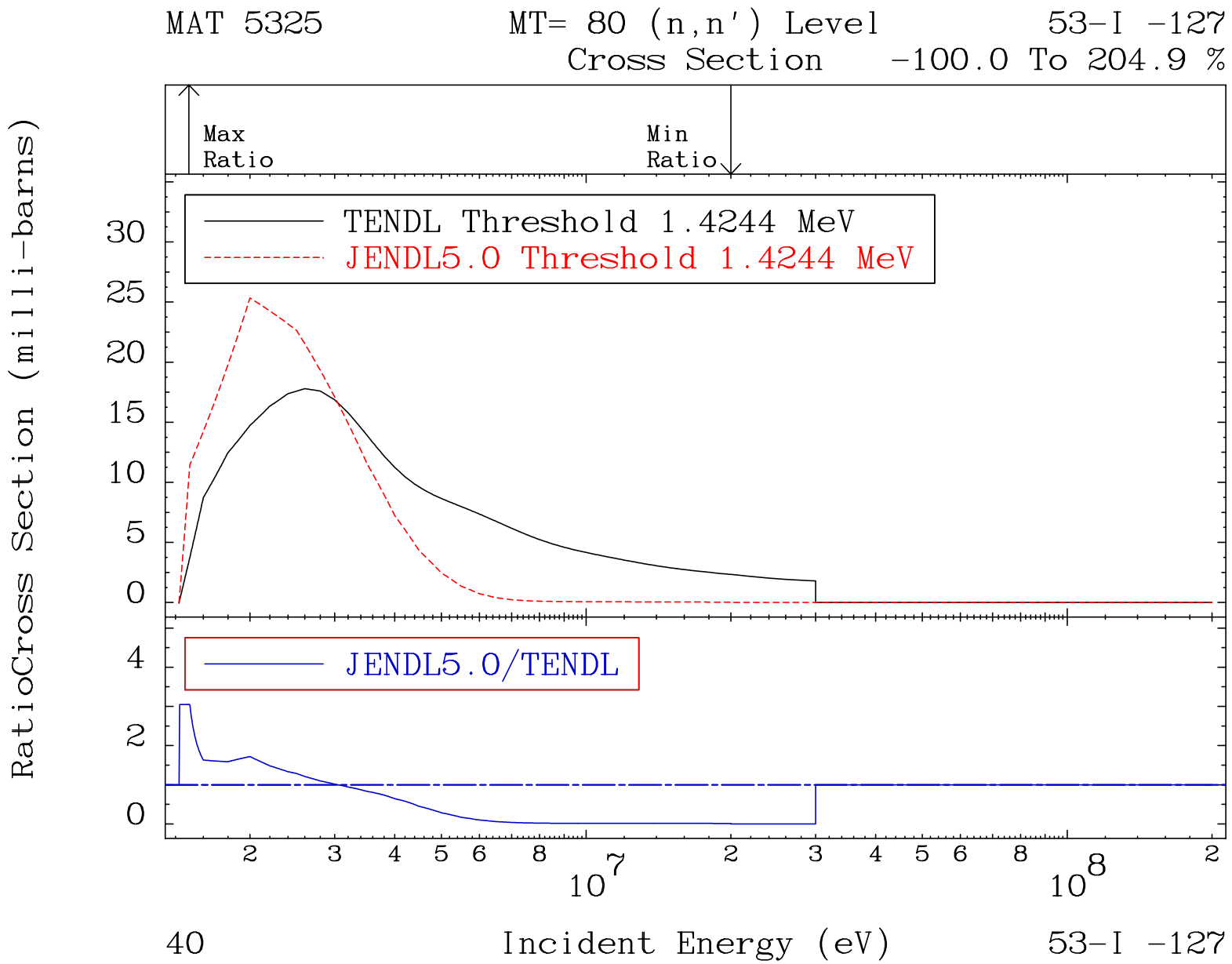

MAT 5325
MT= 75 (n,n') Level
53-I -127
Cross Section
-100.0 To 416.4 %
Max
Ratio
TENDL Threshold 1.3527 MeV
JENDL5.0 Threshold 1.3527 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
8
4
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
35
Incident Energy (eV)
53-I -127

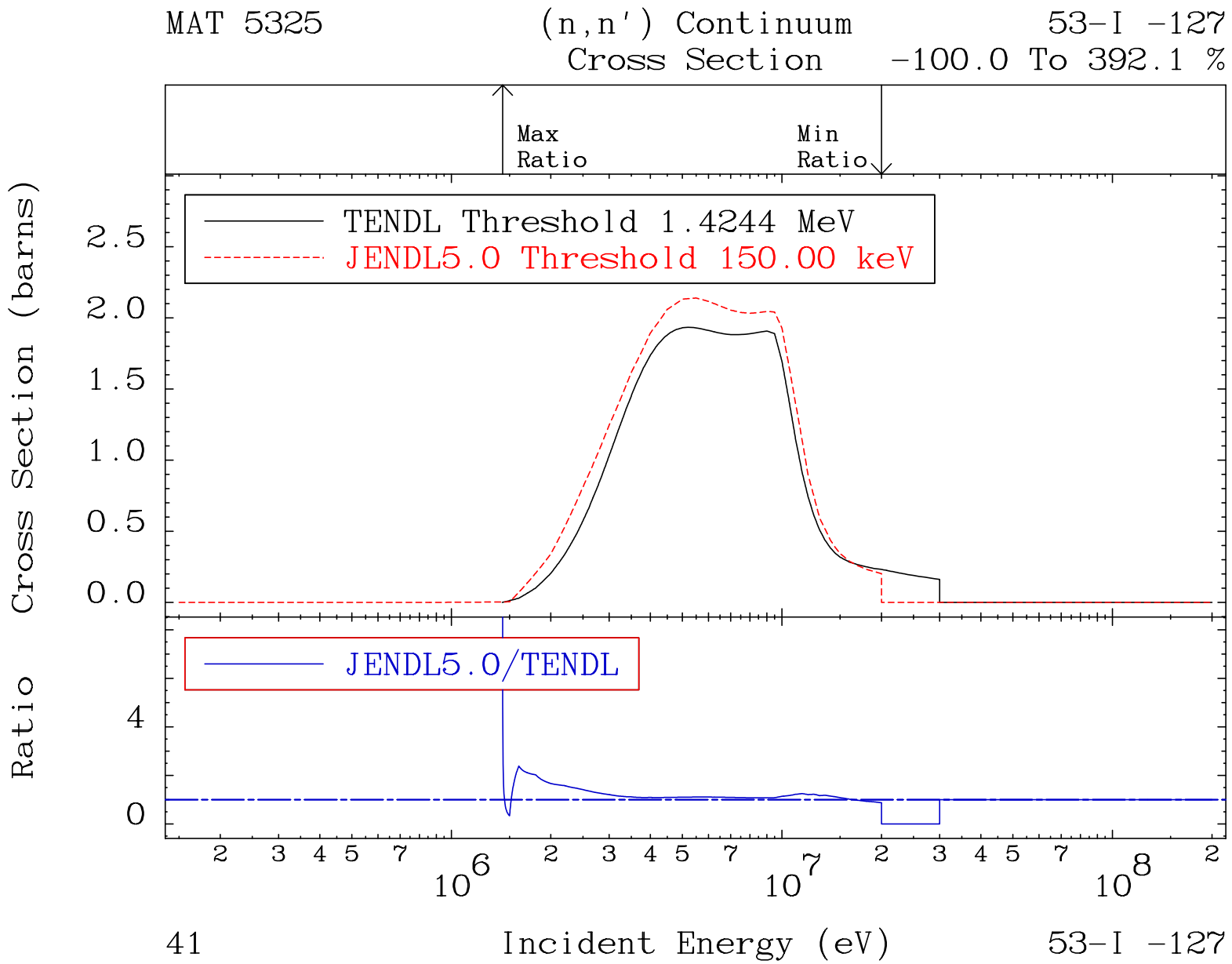

MAT 5325
MT= 76 (n,n') Level
53-I -127
Cross Section
-100.0 To 215.2 %
Max Ratio
Min Ratio
TENDL Threshold 1.3609 MeV
JENDL5.0 Threshold 1.3609 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
36
53-I -127

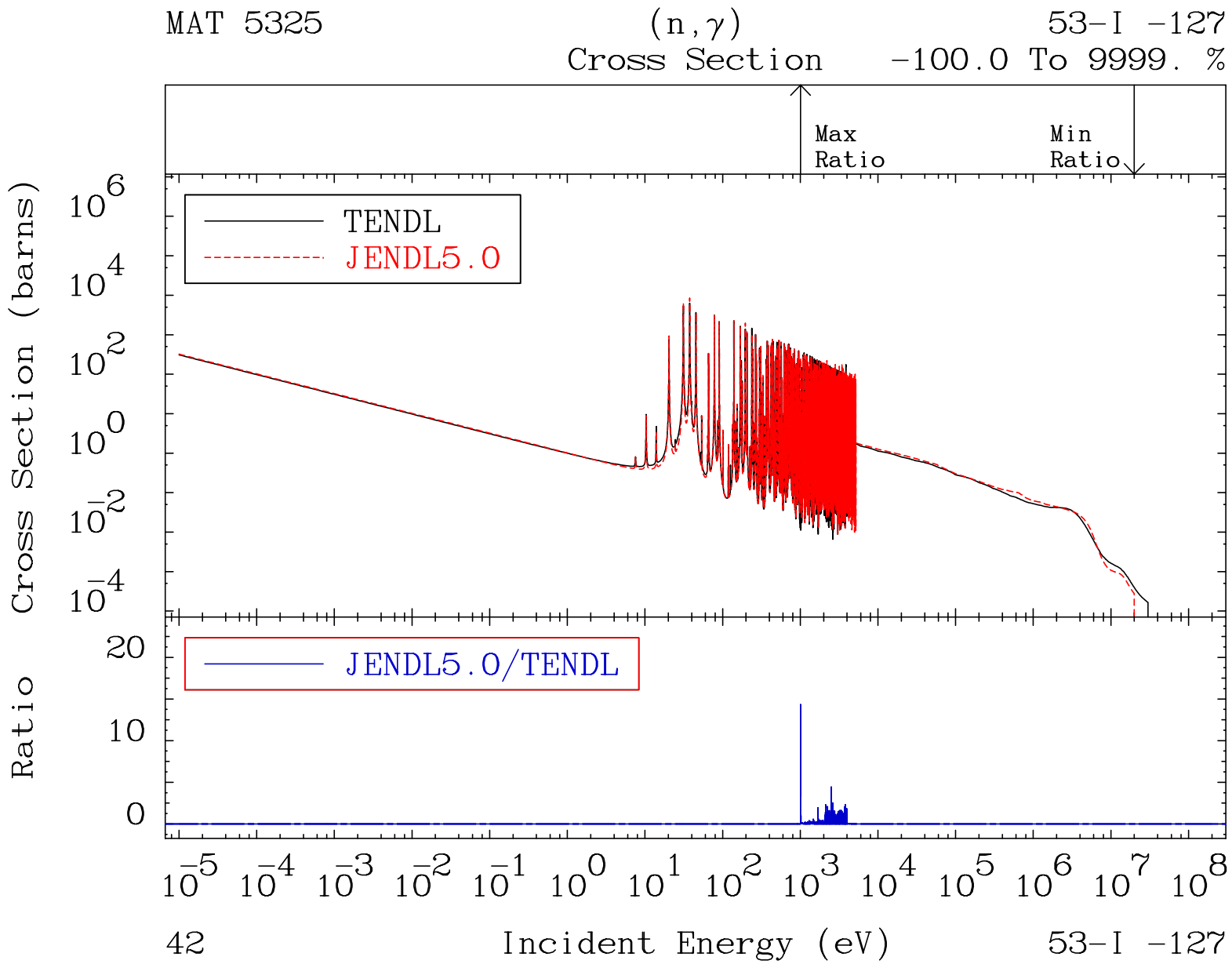

MAT 5325
MT= 77 (n,n') Level
53-I -127
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.3748 MeV
JENDL5.0 Threshold 1.3748 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
400
200
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
37
Incident Energy (eV)
53-I -127

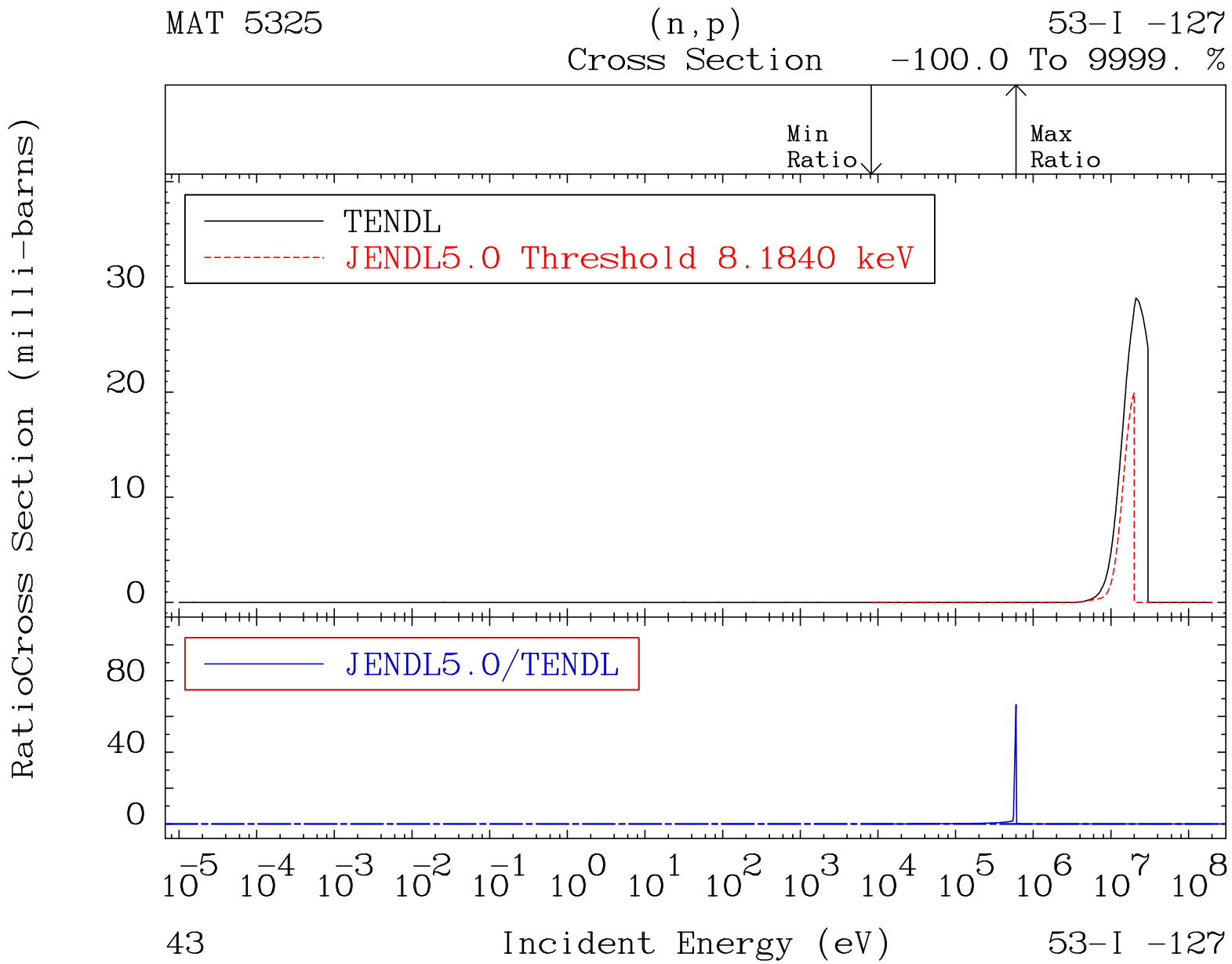

MAT 5325
MT= 78 (n,n') Level
53-I -127
Cross Section -100.0 To 158.9 %
Max Ratio
Min Ratio
TENDL Threshold 1.3859 MeV
JENDL5.0 Threshold 1.3859 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
38
Incident Energy (eV)
53-I -127

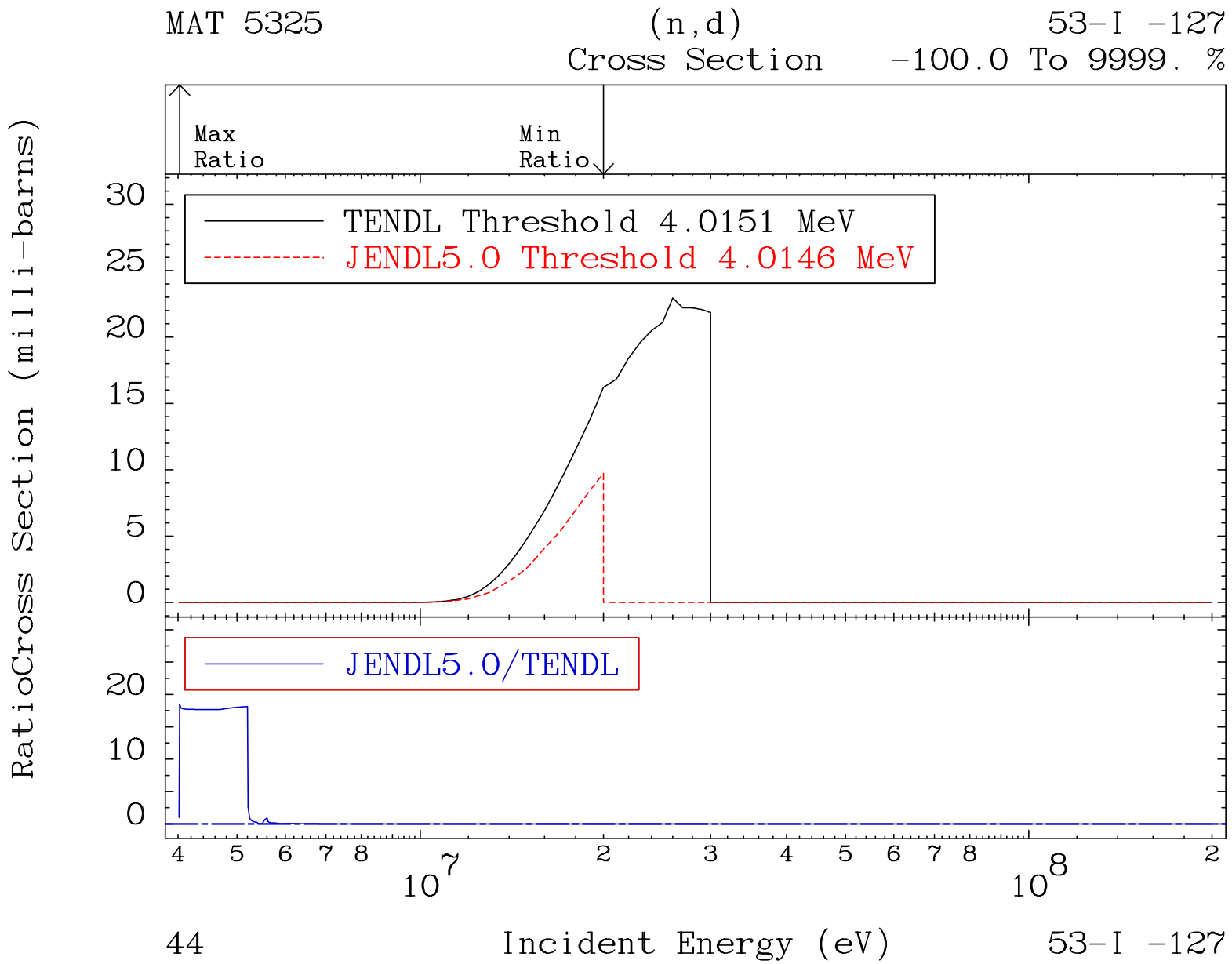

MAT 5325
MT= 79 (n,n') Level
53-I -127
Cross Section -100.0 To 424.6 %
Max Ratio
Min Ratio
TENDL Threshold 1.4130 MeV
JENDL5.0 Threshold 1.4130 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
25
20
15
10
5
0
8
4
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
39
Incident Energy (eV)
53-I -127

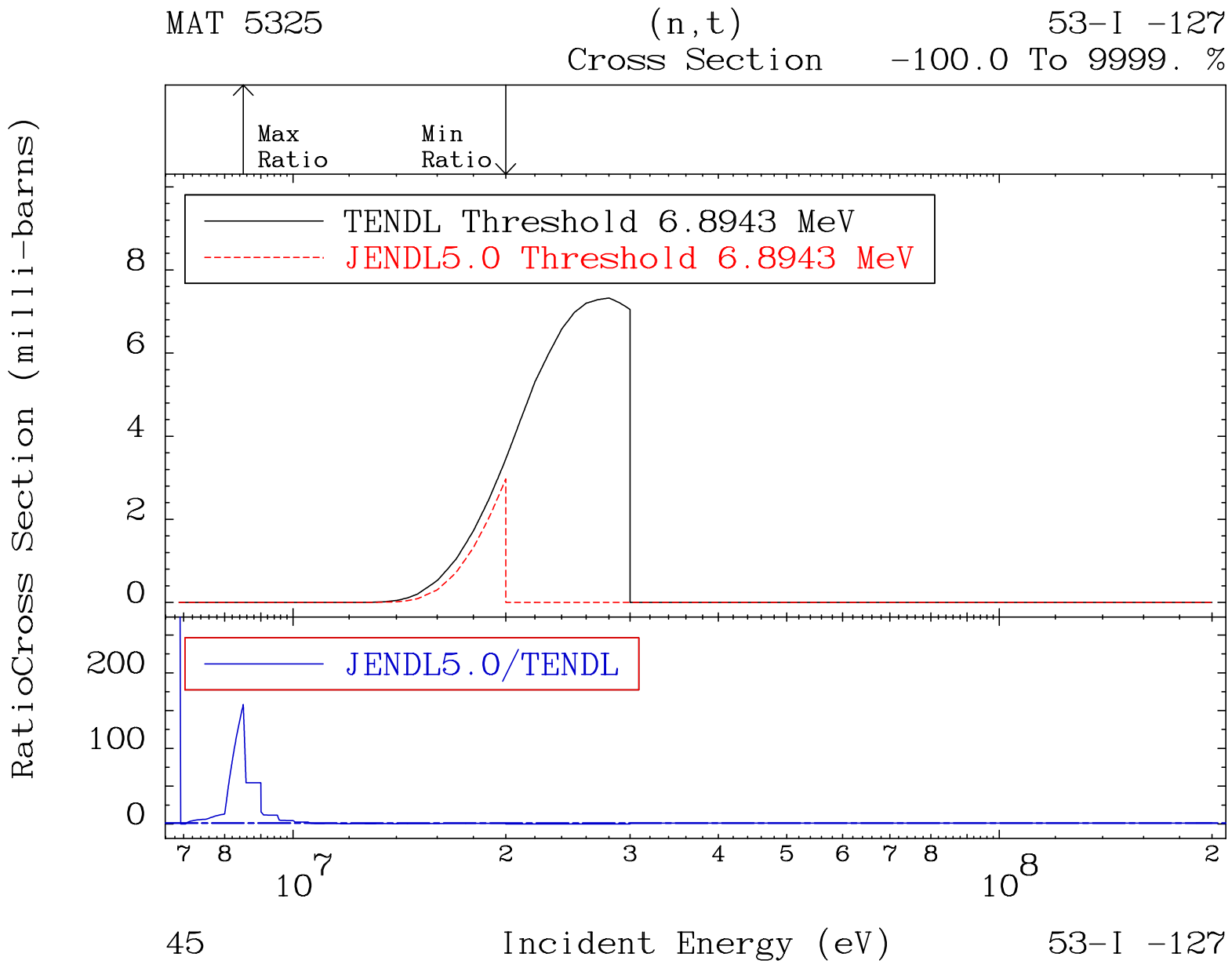

MAT 5325
MT= 80 (n,n') Level
53-I -127
Cross Section -100.0 To 204.9 %
Max Ratio
Min Ratio
TENDL Threshold 1.4244 MeV
JENDL5.0 Threshold 1.4244 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
40
Incident Energy (eV)
53-I -127

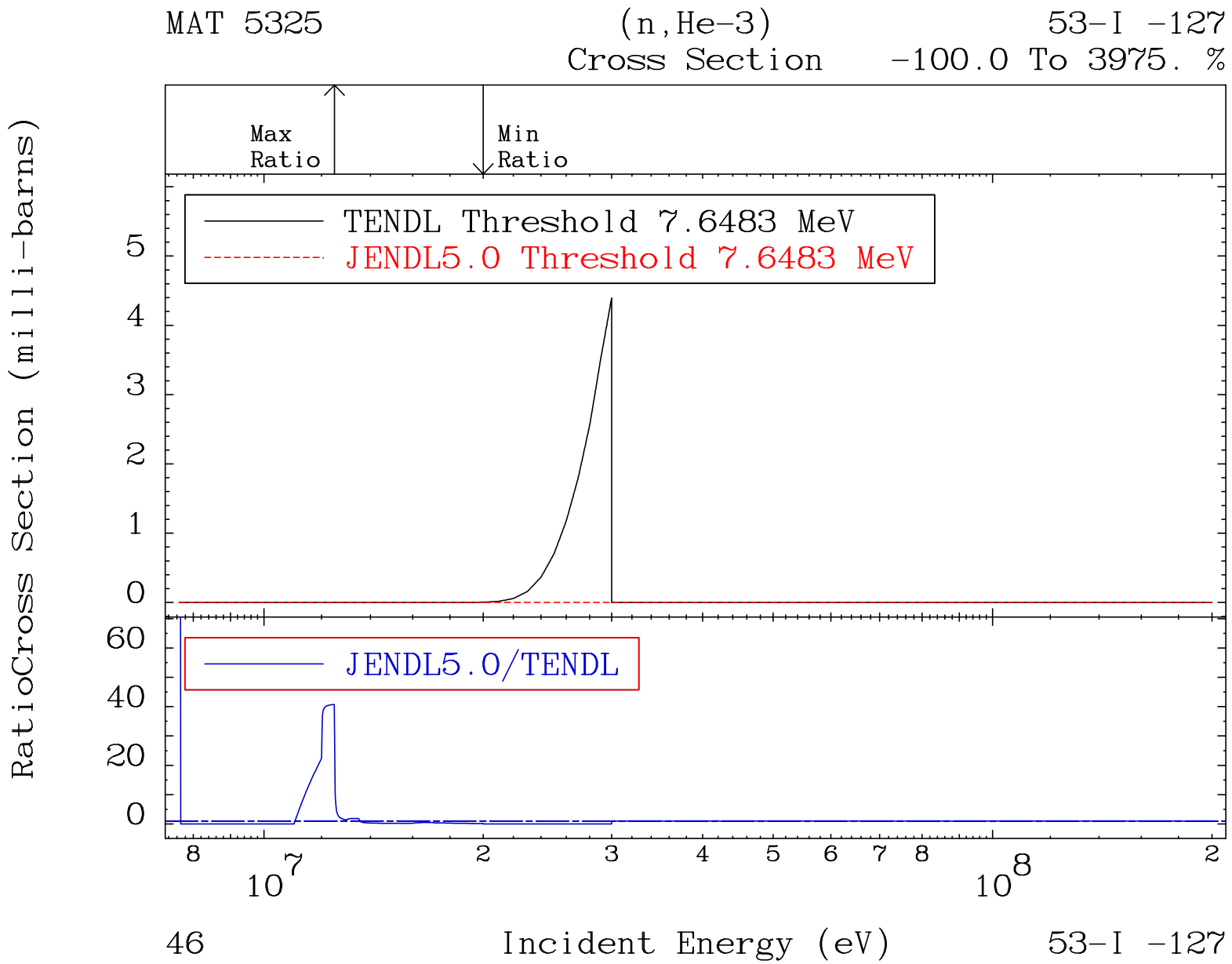

MAT 5325
(n,n') Continuum
Cross Section
53-I -127
-100.0 To 392.1 %
Max
Ratio
Min
Ratio
TENDL Threshold 1.4244 MeV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
4
0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
41
Incident Energy (eV)
53-I -127

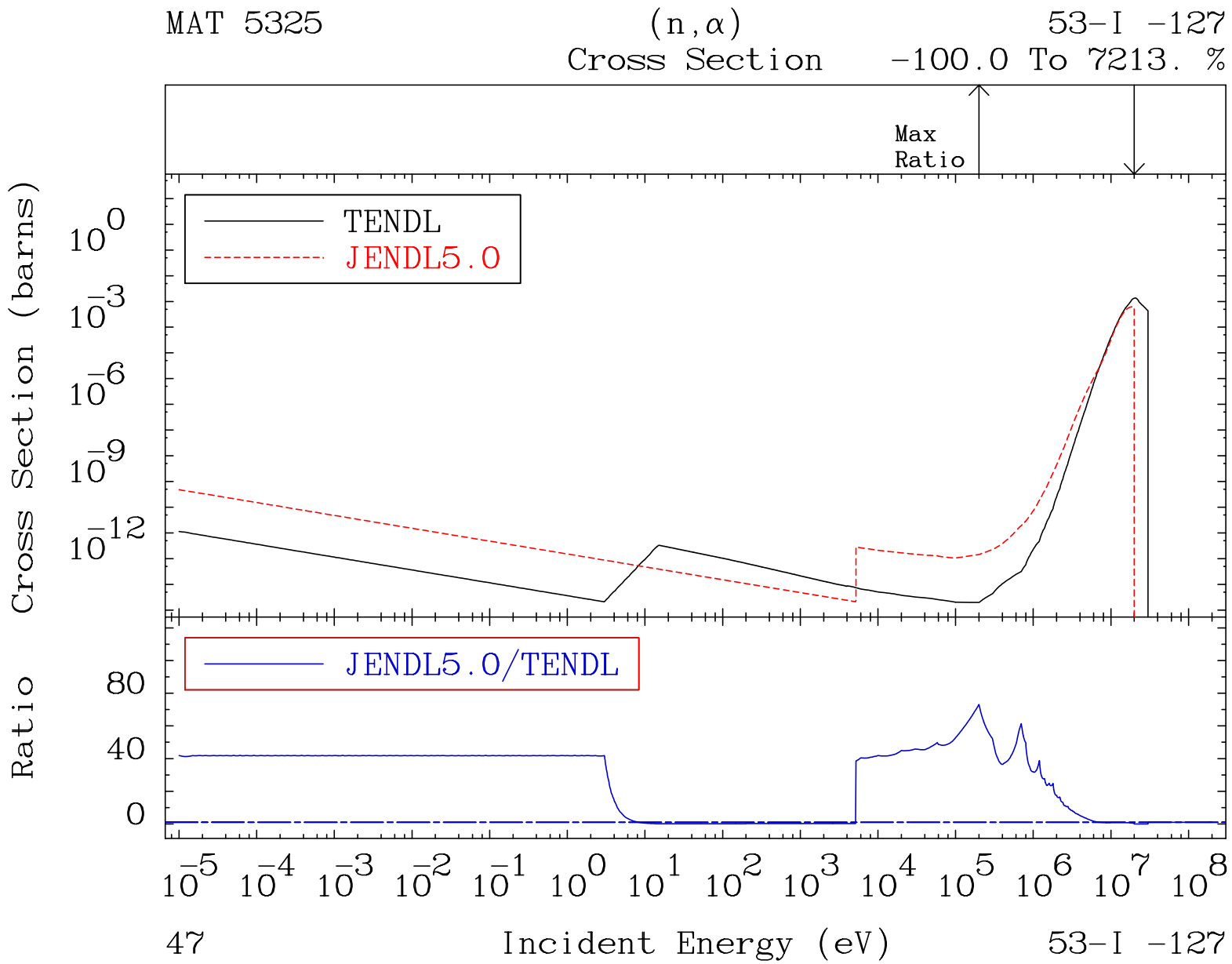

MAT 5325
(n,γ)
Cross Section
53-I -127
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
42
53-I -127

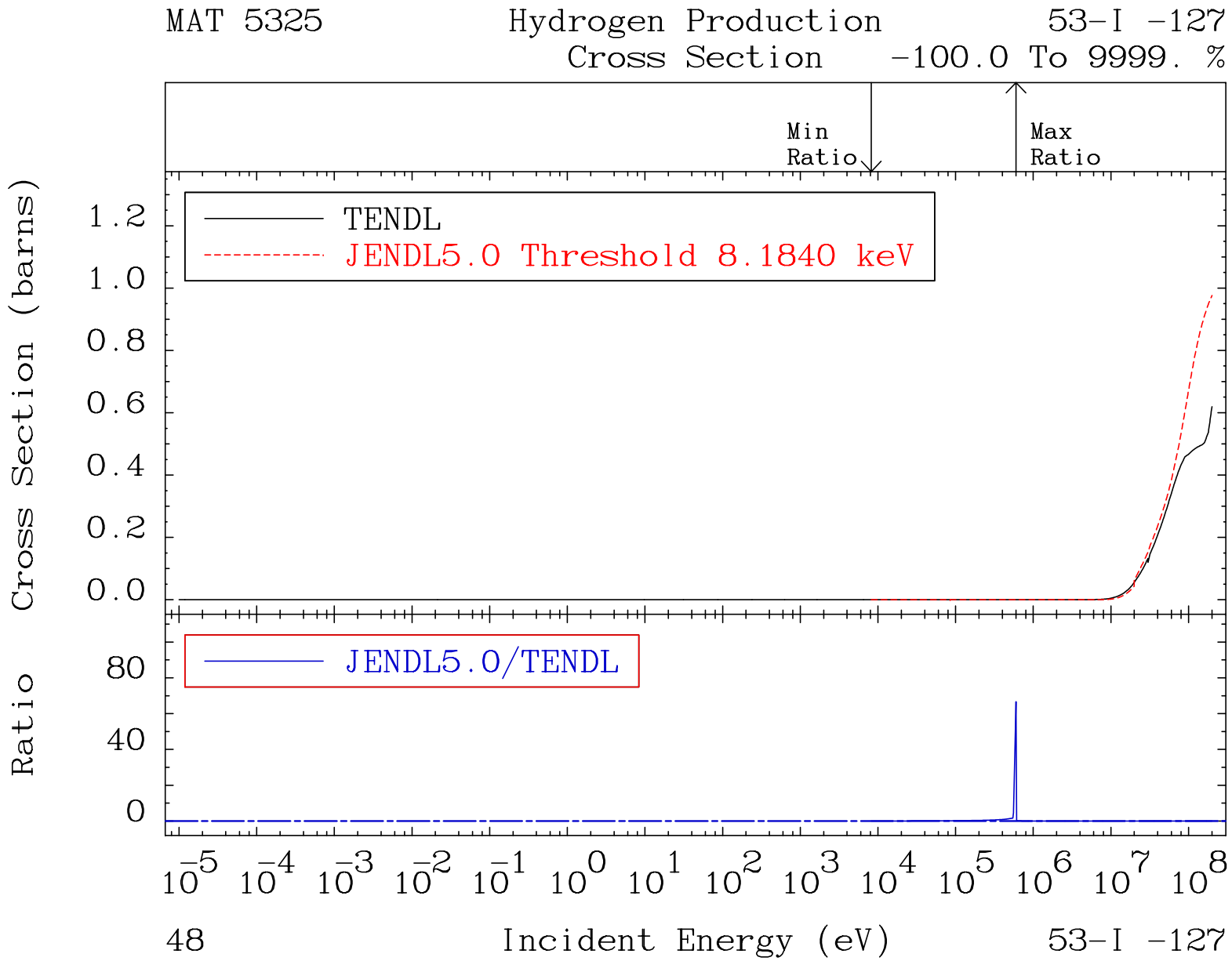

MAT 5325
(n,p)
53-I -127
Cross Section
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 8.1840 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
20
10
0
80
40
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
43
Incident Energy (eV)
53-I -127

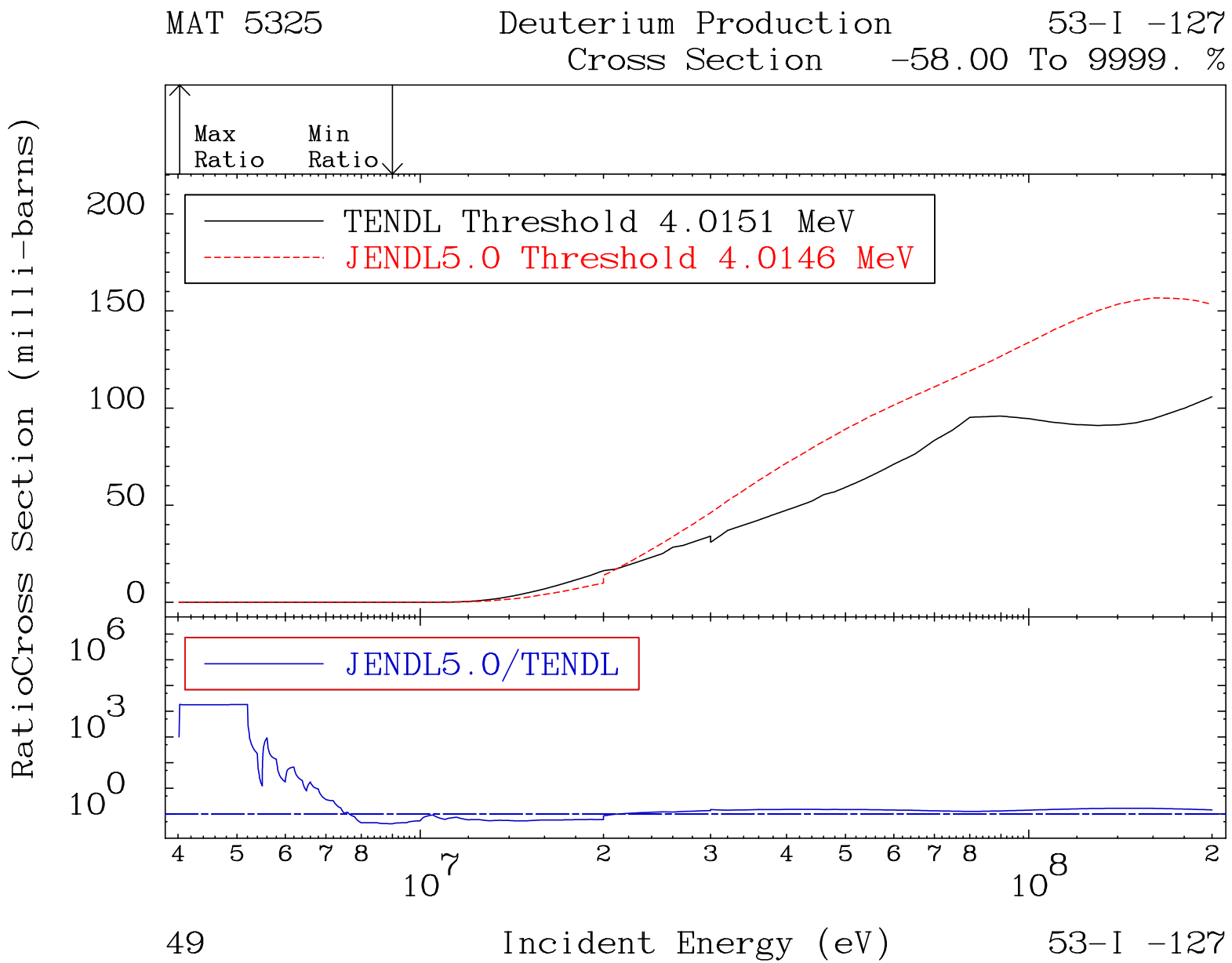

MAT 5325
(n,d)
53-I -127
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.0151 MeV
JENDL5.0 Threshold 4.0146 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
20
10
0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
Incident Energy (eV)
44
53-I -127

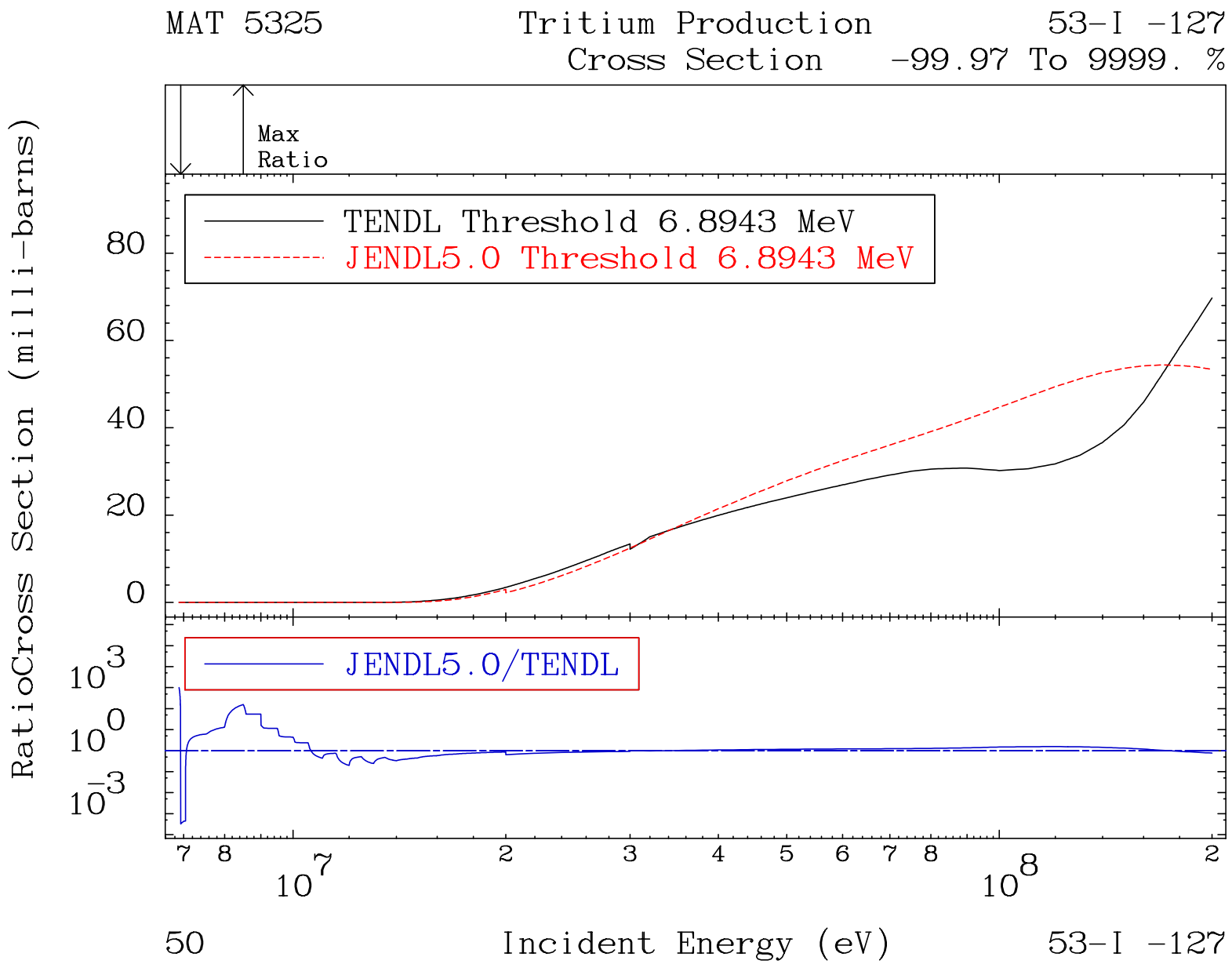

MAT 5325
(n,t)
Cross Section
53-I -127
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8943 MeV
JENDL5.0 Threshold 6.8943 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
200
100
0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
45
Incident Energy (eV)
53-I -127

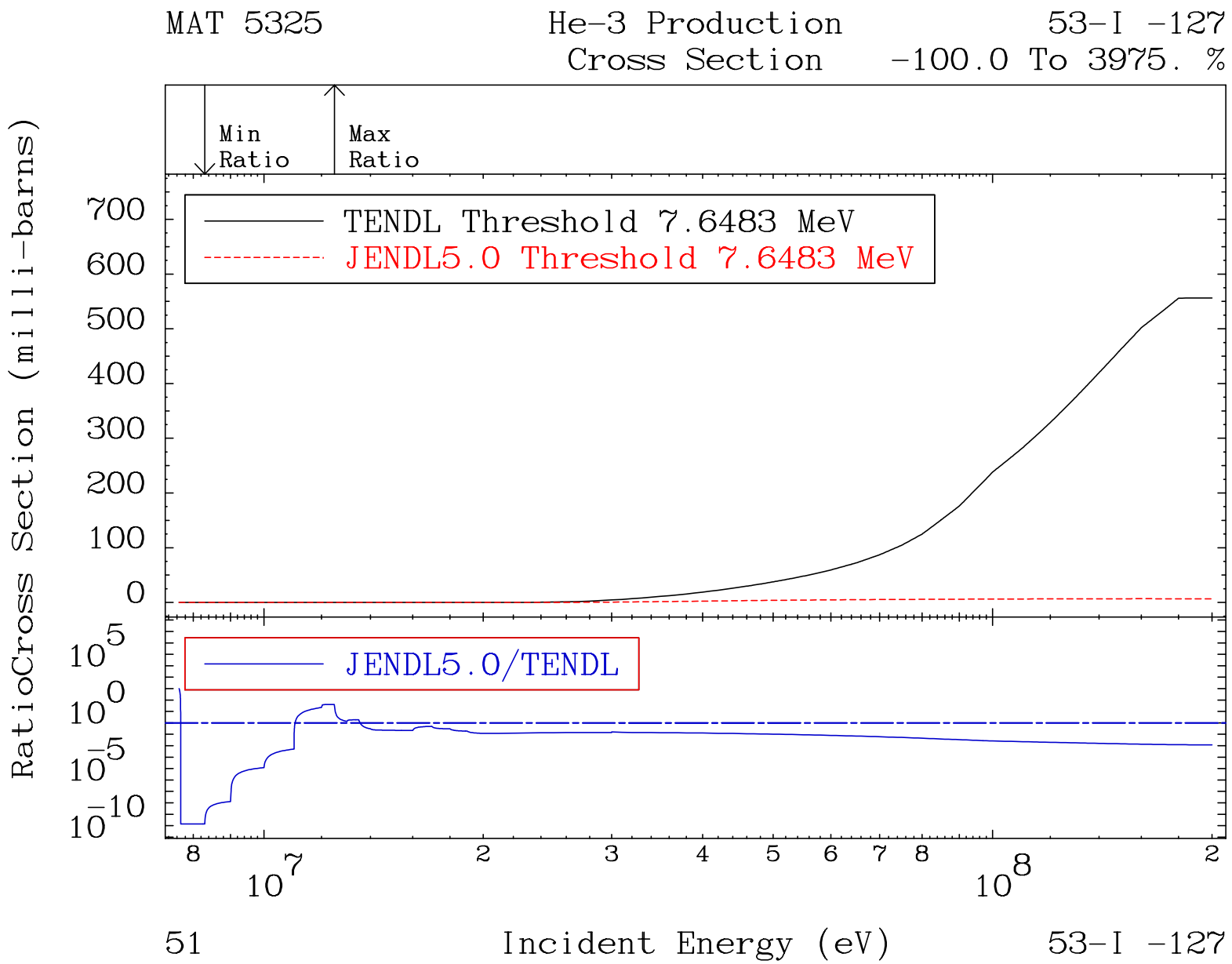

MAT 5325
(n,He-3)
53-I -127
Cross Section
-100.0 To 3975. %
Max Ratio
Min Ratio
TENDL Threshold 7.6483 MeV
JENDL5.0 Threshold 7.6483 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
0
1
2
3
4
5
0
20
40
60
8
2
3
4
5
6
7
8
2
10^7
10^8
46
Incident Energy (eV)
53-I -127

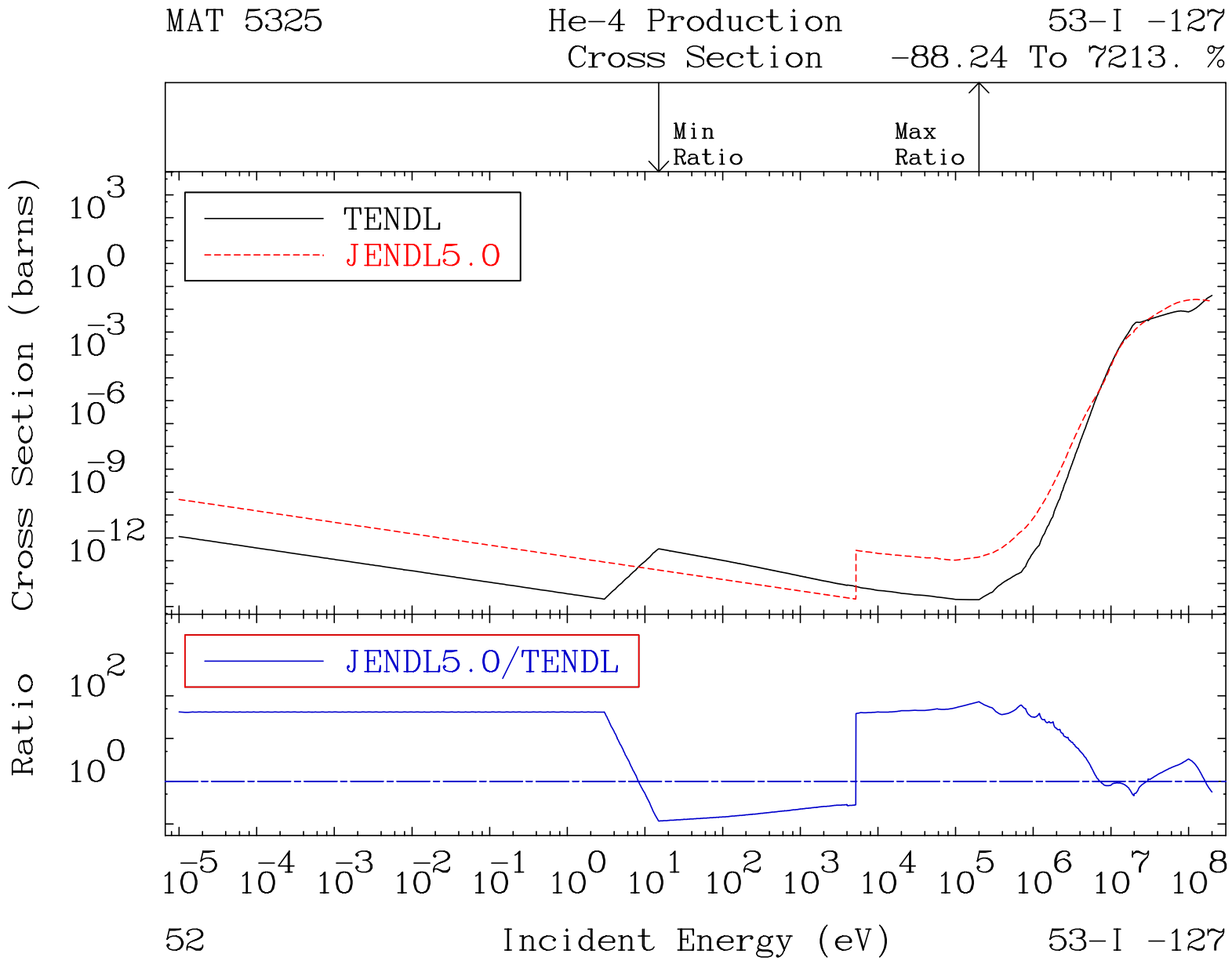

MAT 5325
(n,α)
Cross Section
53-I -127
-100.0 To 7213. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
53-I -127

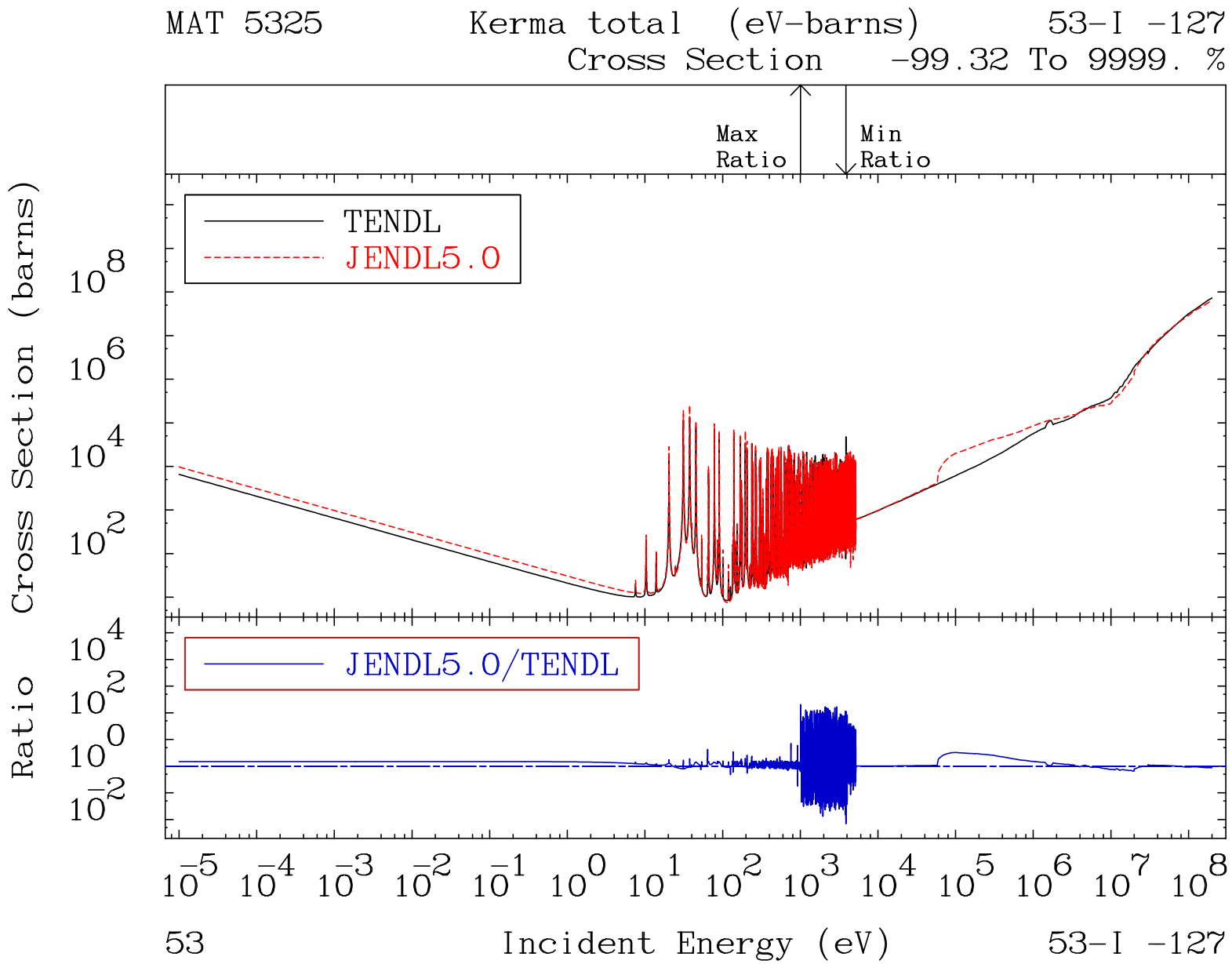

MAT 5325
Hydrogen Production
53-I -127
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JENDL5.0 Threshold 8.1840 keV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
80
40
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
48
Incident Energy (eV)
53-I -127

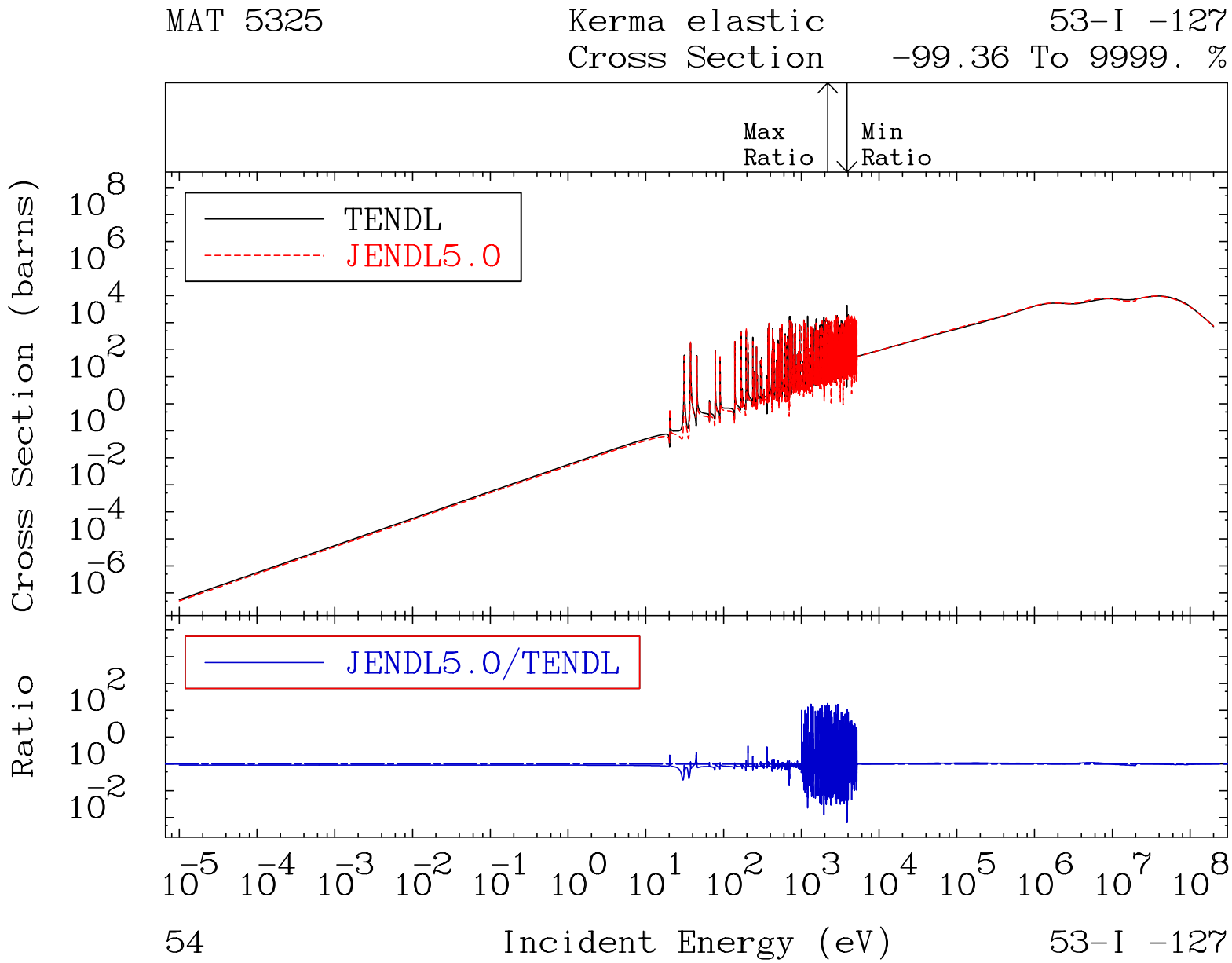

MAT 5325
Deuterium Production
53-I -127
Cross Section -58.00 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 4.0151 MeV
JENDL5.0 Threshold 4.0146 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
10^6
10^3
10^0
4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
49
Incident Energy (eV)
53-I -127

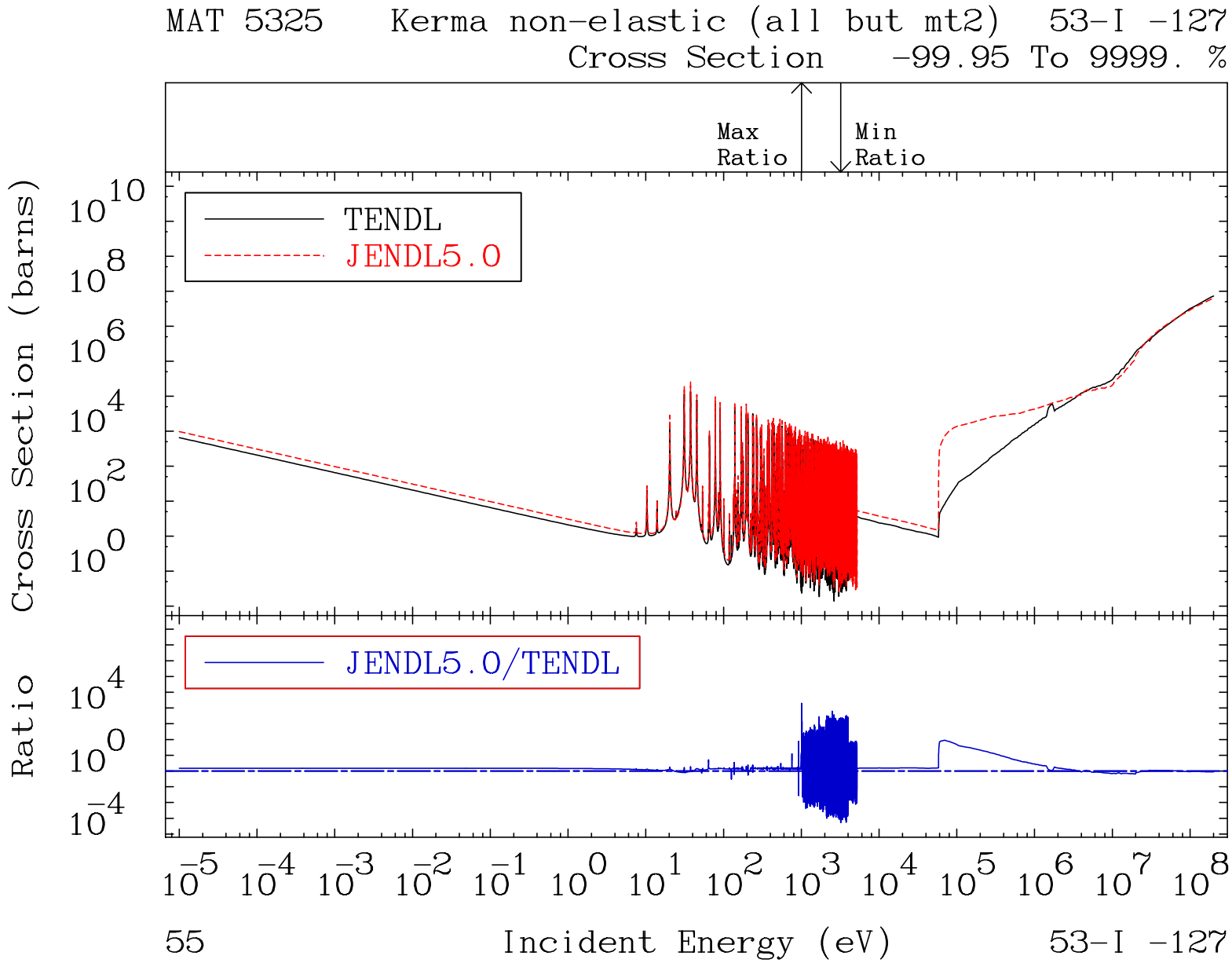

MAT 5325
Tritium Production
53-I -127
Cross Section
-99.97 To 9999. %
Max
Ratio
TENDL Threshold 6.8943 MeV
JENDL5.0 Threshold 6.8943 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
10^3
10^0
10^-3
7 8
10^7
2 3 4 5 6 7 8
10^8
2
50
Incident Energy (eV)
53-I -127

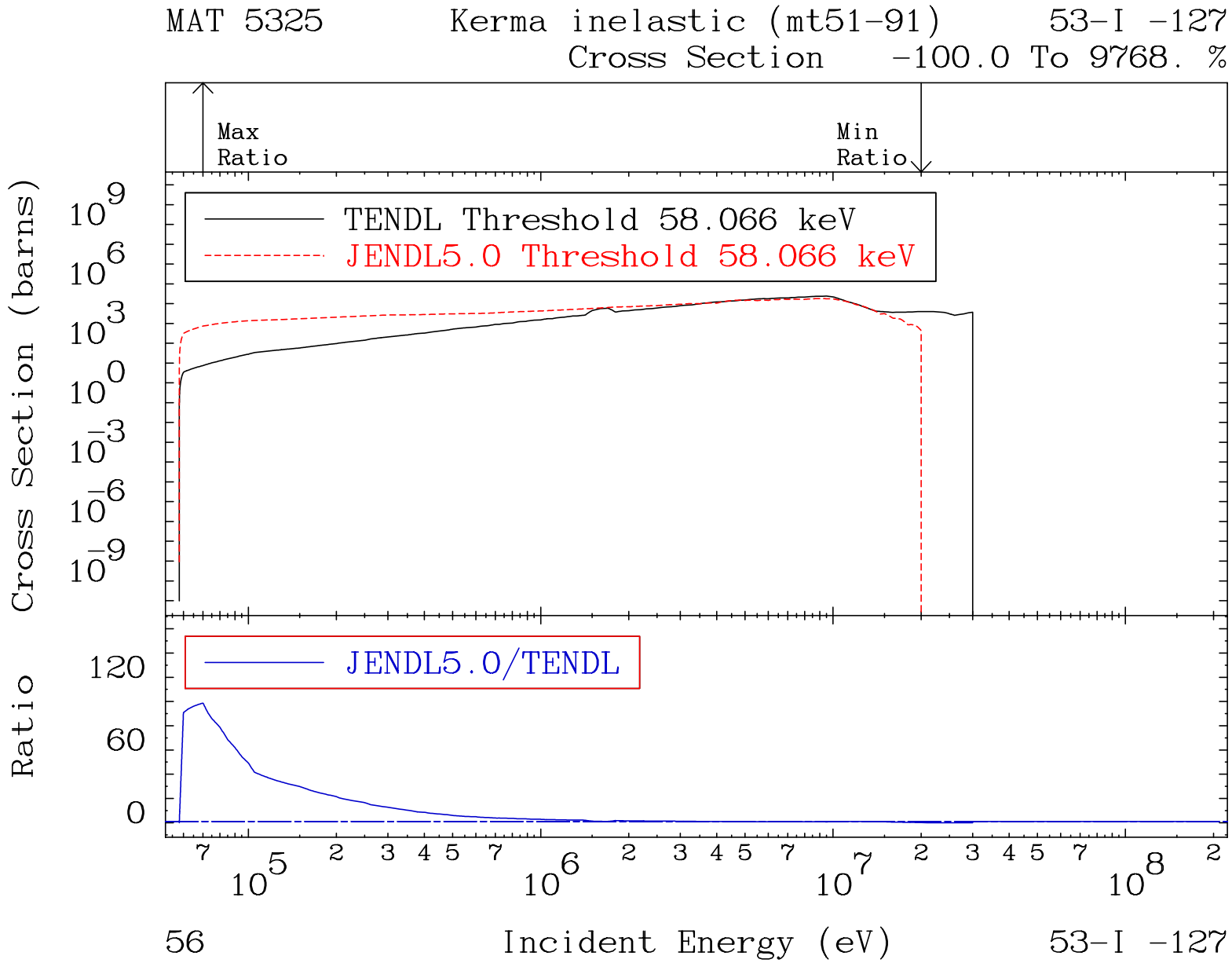

MAT 5325
He-3 Production
Cross Section
53-I -127
-100.0 To 3975. %
Min Ratio
Max Ratio
TENDL Threshold 7.6483 MeV
JENDL5.0 Threshold 7.6483 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
51
53-I -127

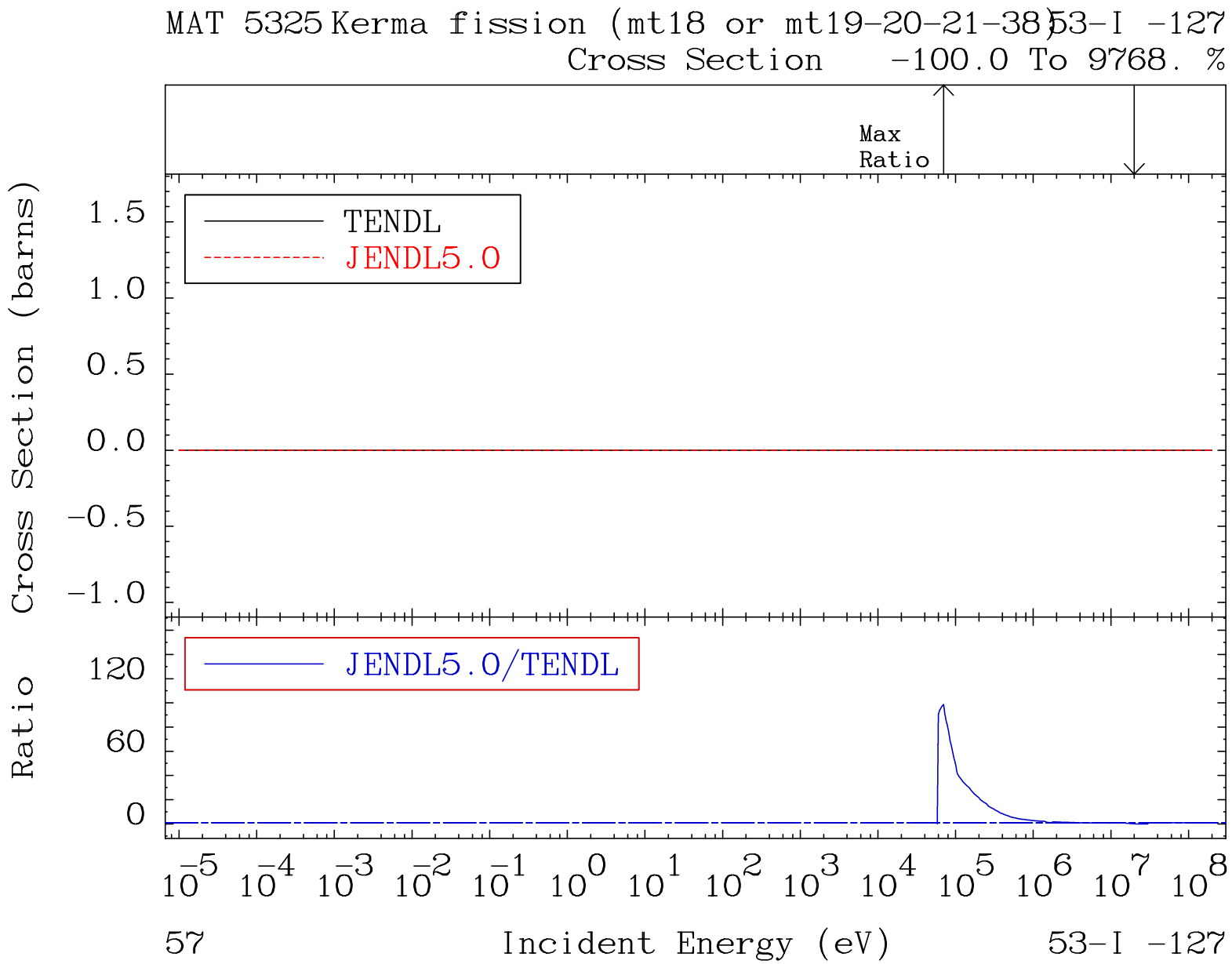

MAT 5325
He-4 Production
Cross Section
53-I -127
-88.24 To 7213. %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
52
53-I -127

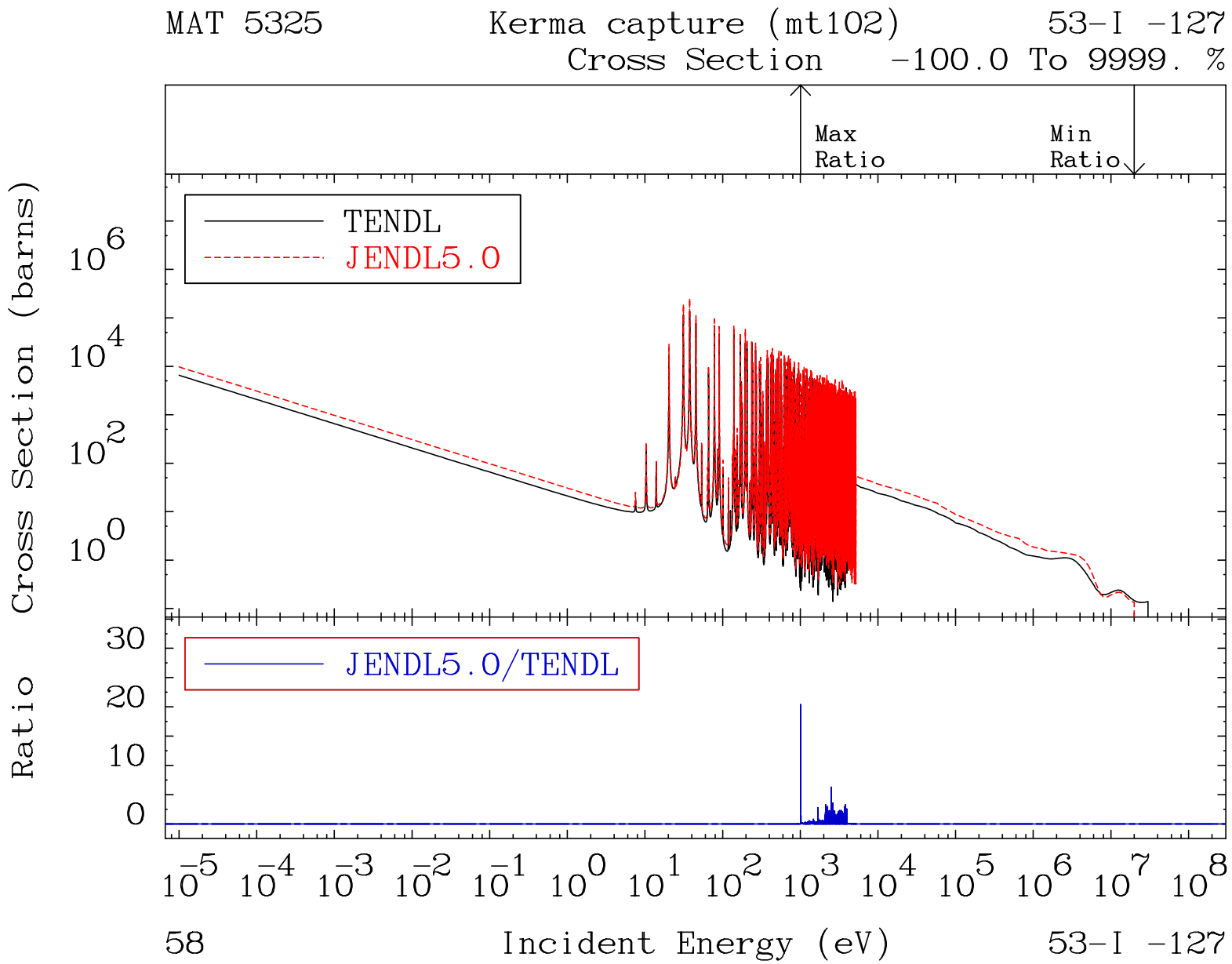

MAT 5325
Kerma total (eV-barns)
53-I -127
Cross Section -99.32 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
53-I -127

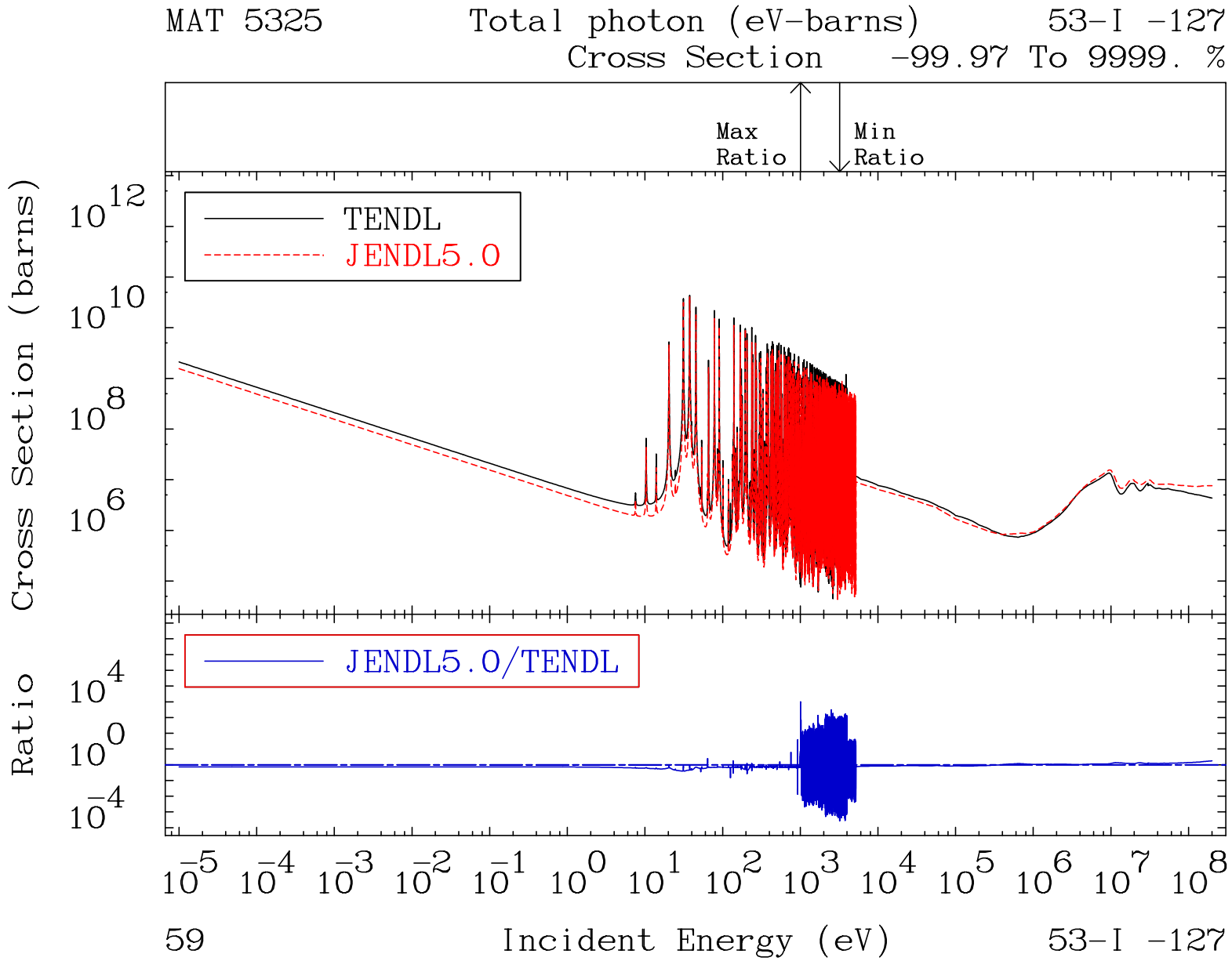

MAT 5325
Kerma elastic
Cross Section
53-I -127
-99.36 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
53-I -127

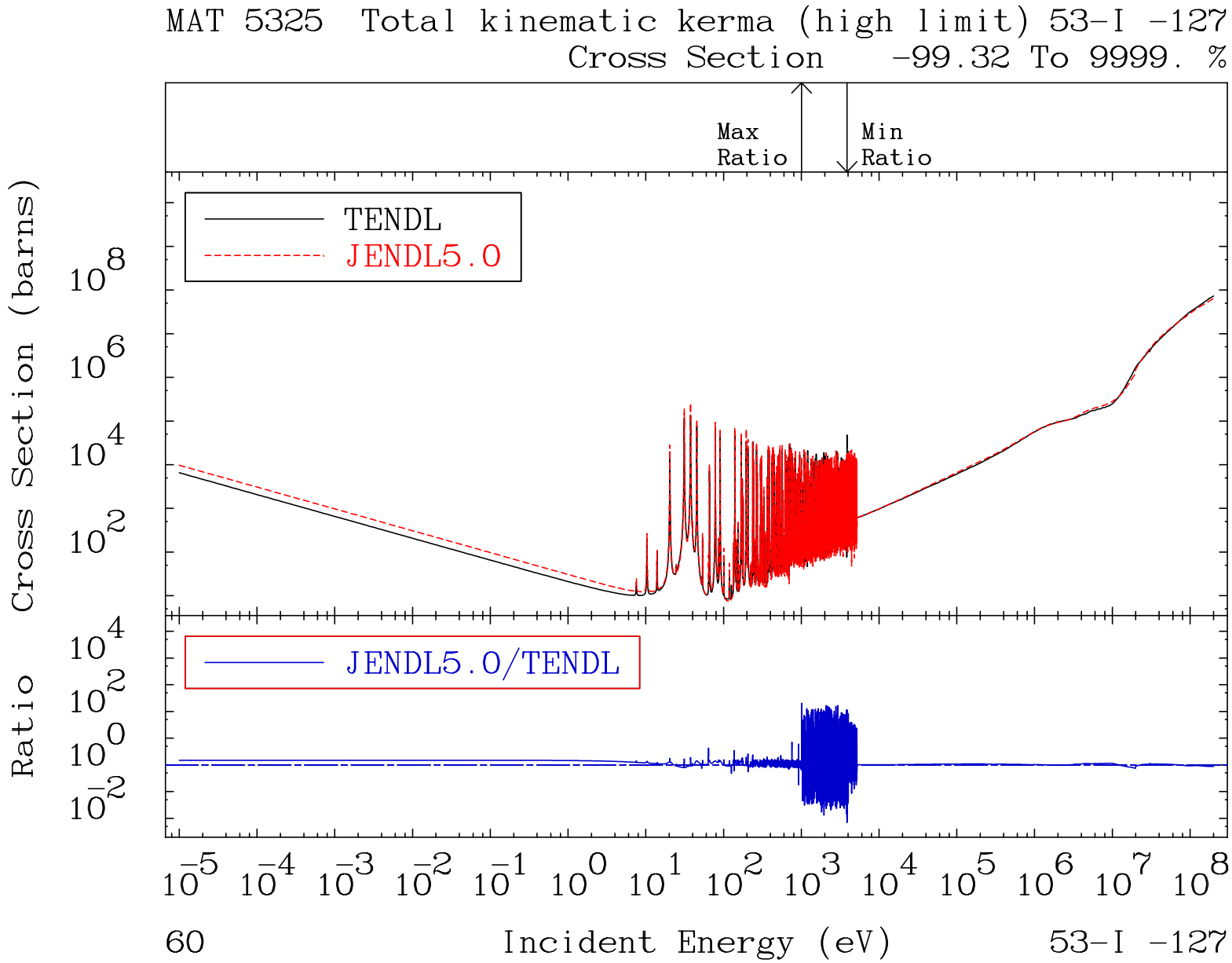

MAT 5325 Kerma non-elastic (all but mt2) 53-I -127
Cross Section -99.95 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
53-I -127

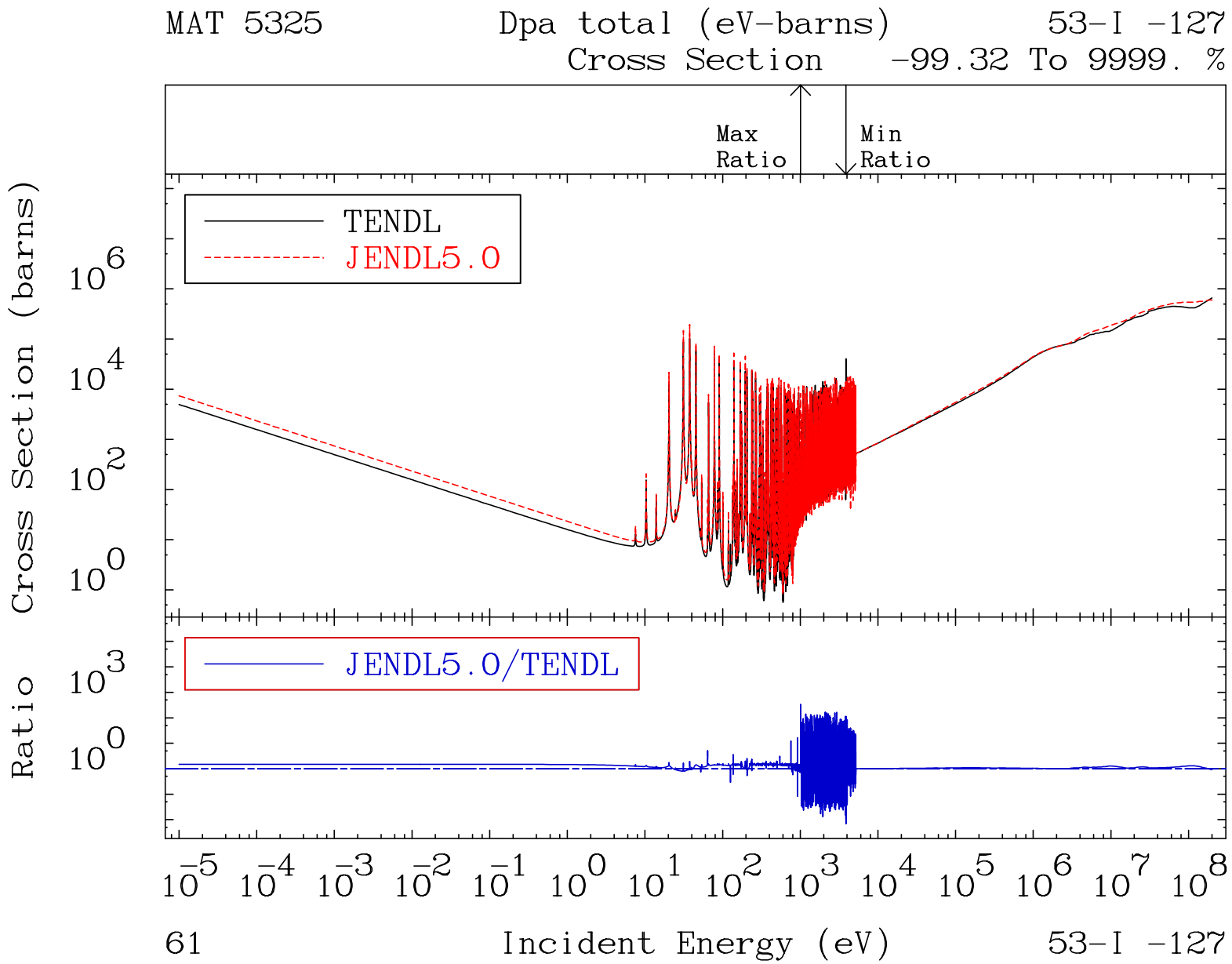

MAT 5325
Kerma inelastic (mt51-91)
53-I -127
Cross Section -100.0 To 9768. %
Max Ratio
Min Ratio
TENDL Threshold 58.066 keV
JENDL5.0 Threshold 58.066 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
56
53-I -127

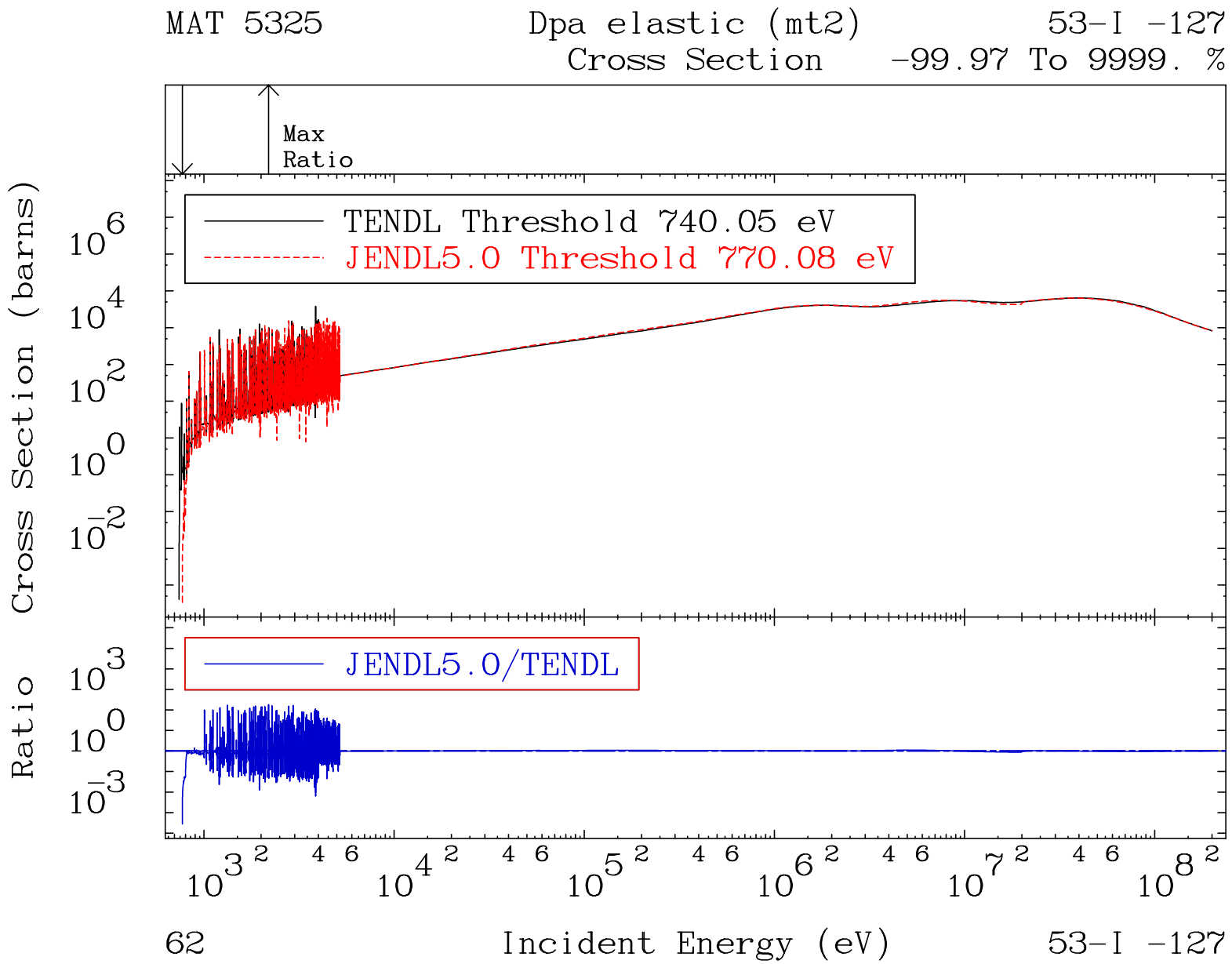

MAT 5325 Kerma fission (mt18 or mt19-20-21-38) 53-I -127
Cross Section -100.0 To 9768. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
120
60
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
57
Incident Energy (eV)
53-I -127

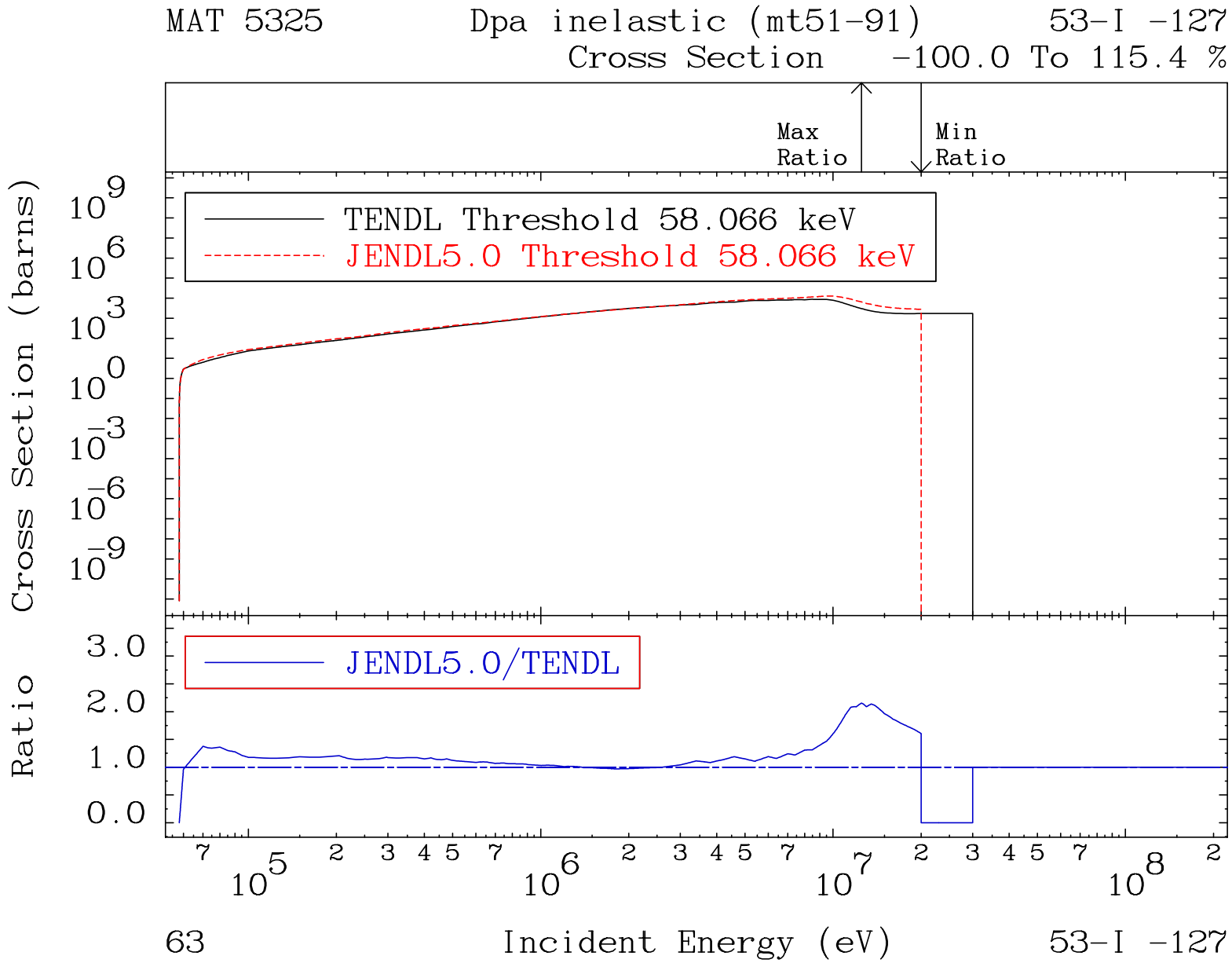

MAT 5325
Kerma capture (mt102)
53-I -127
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
58
53-I -127

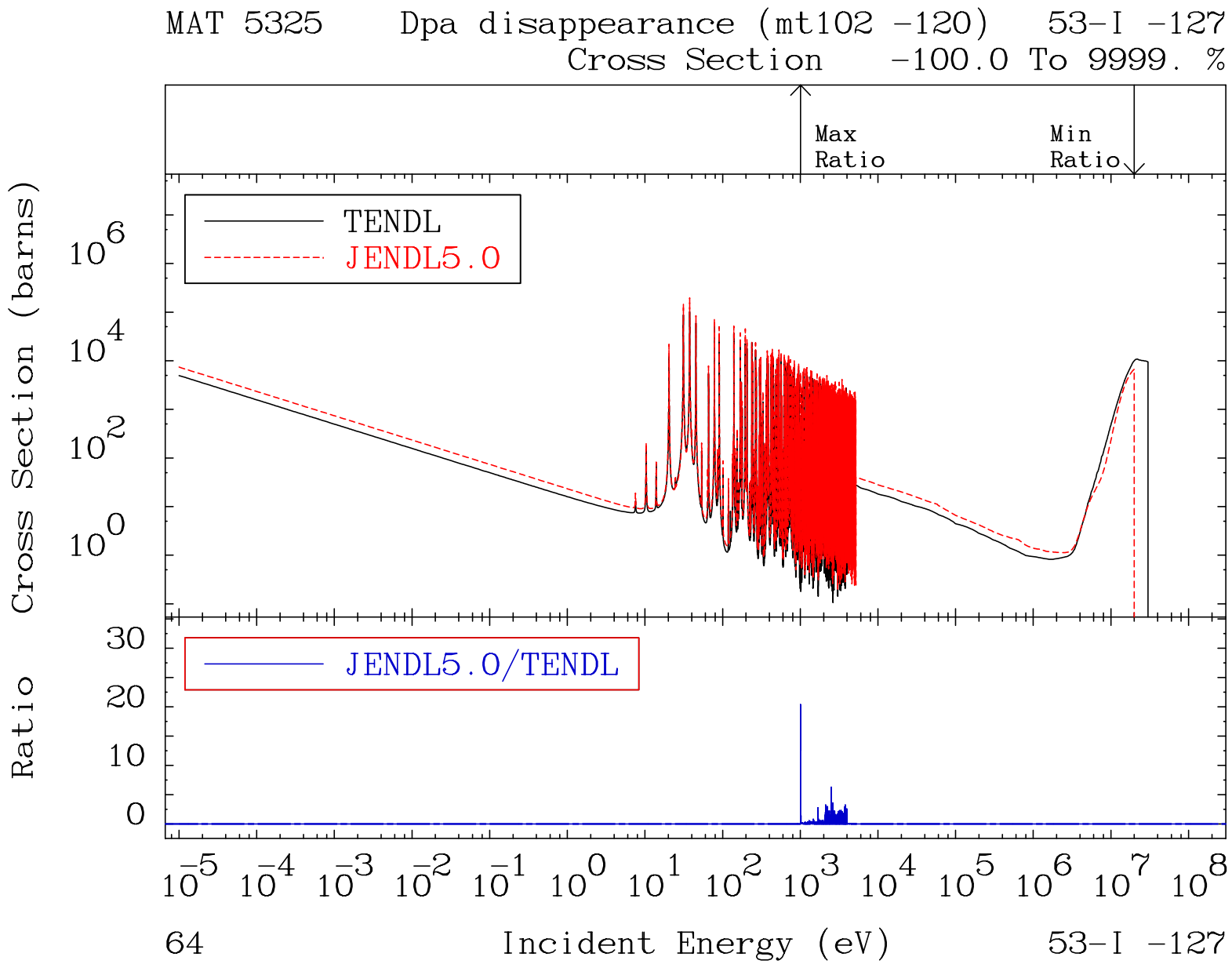

MAT 5325
Total photon (eV-barns)
53-I -127
Cross Section -99.97 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
59
53-I -127

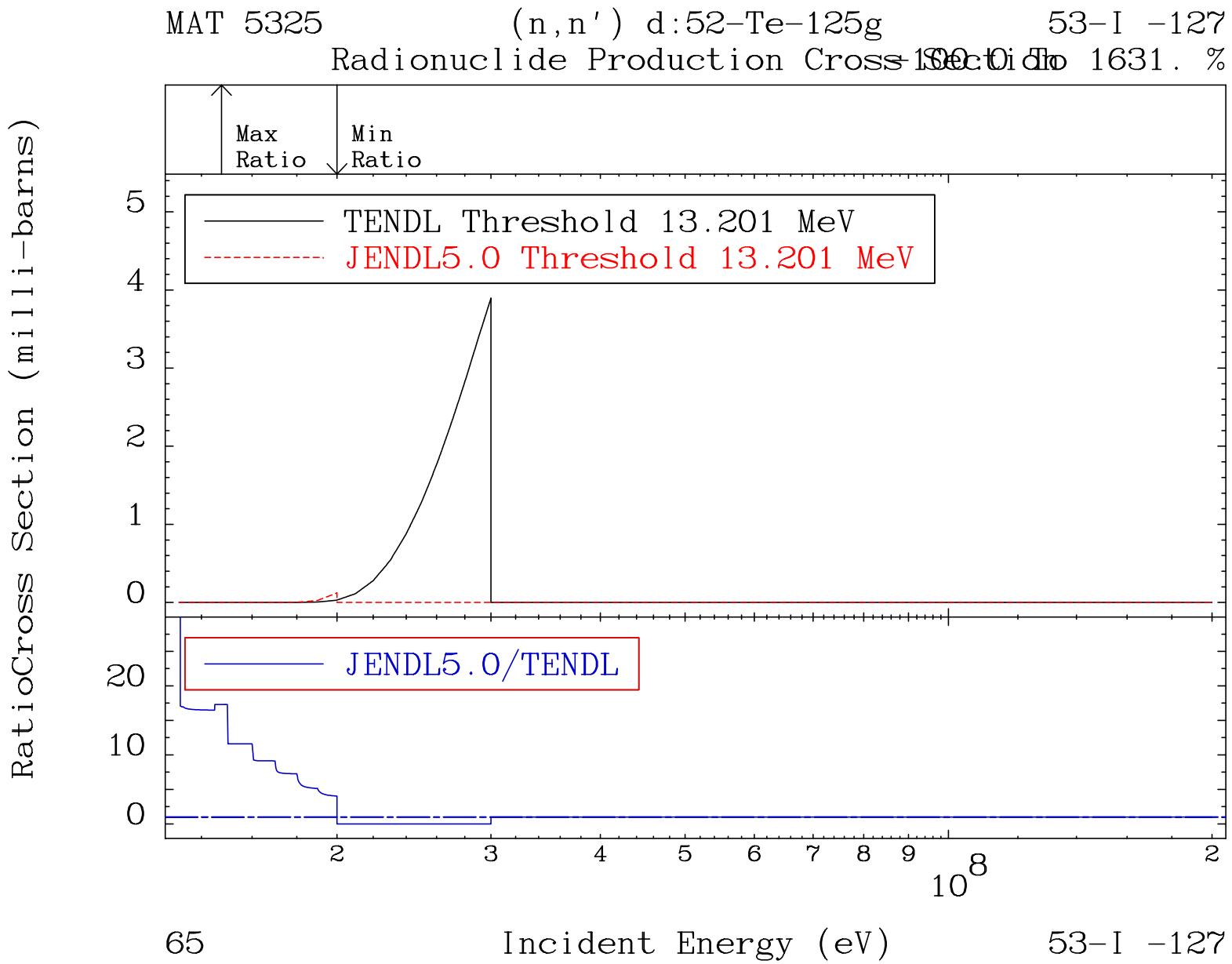

MAT 5325 Total kinematic kerma (high limit) 53-I -127
Cross Section -99.32 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
53-I -127

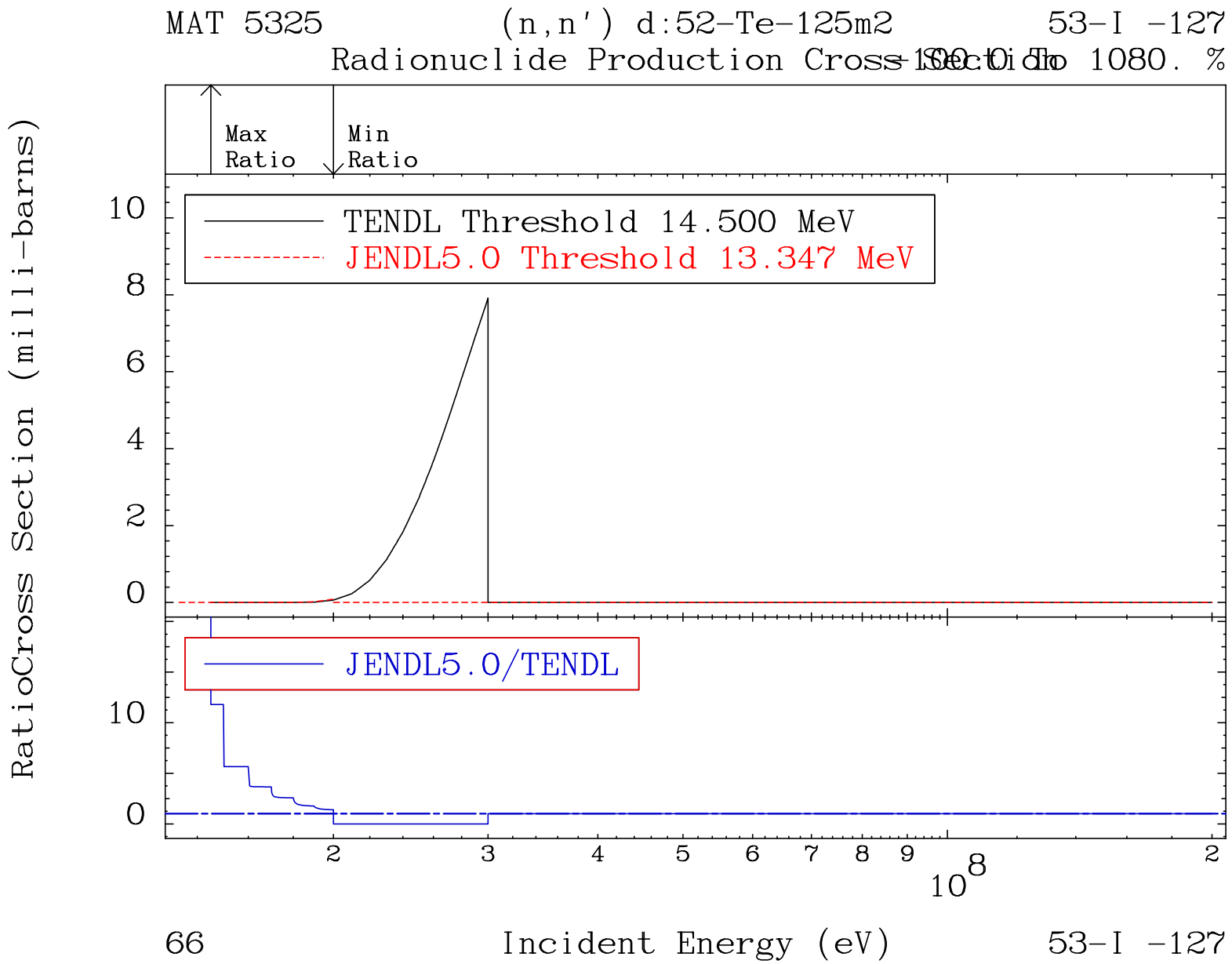

MAT 5325
Dpa total (eV-barns)
53-I -127
Cross Section -99.32 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
61
53-I -127

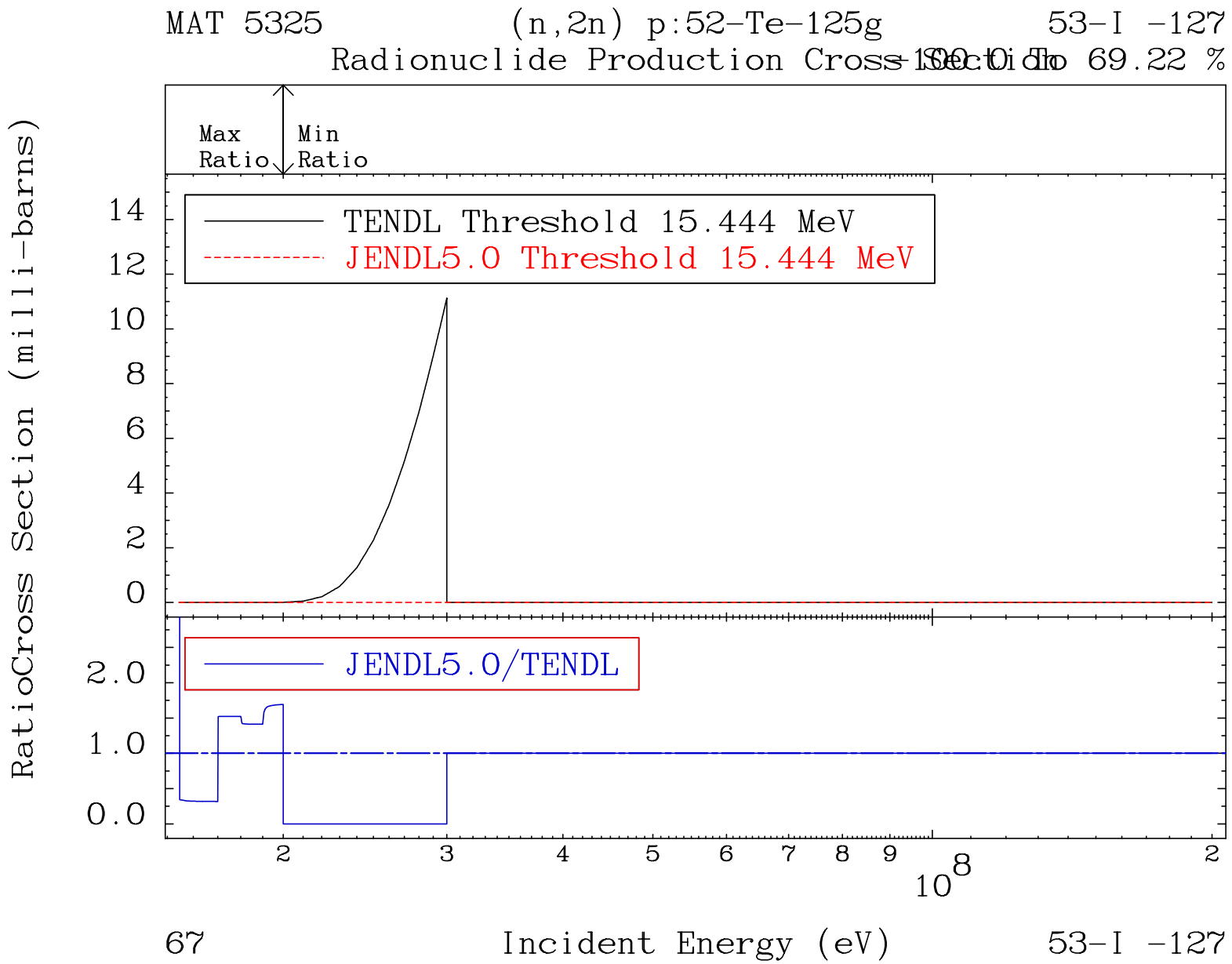

MAT 5325
Dpa elastic (mt2)
Cross Section
53-I -127
-99.97 To 9999. %
Max
Ratio
TENDL Threshold 740.05 eV
JENDL5.0 Threshold 770.08 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
62
53-I -127

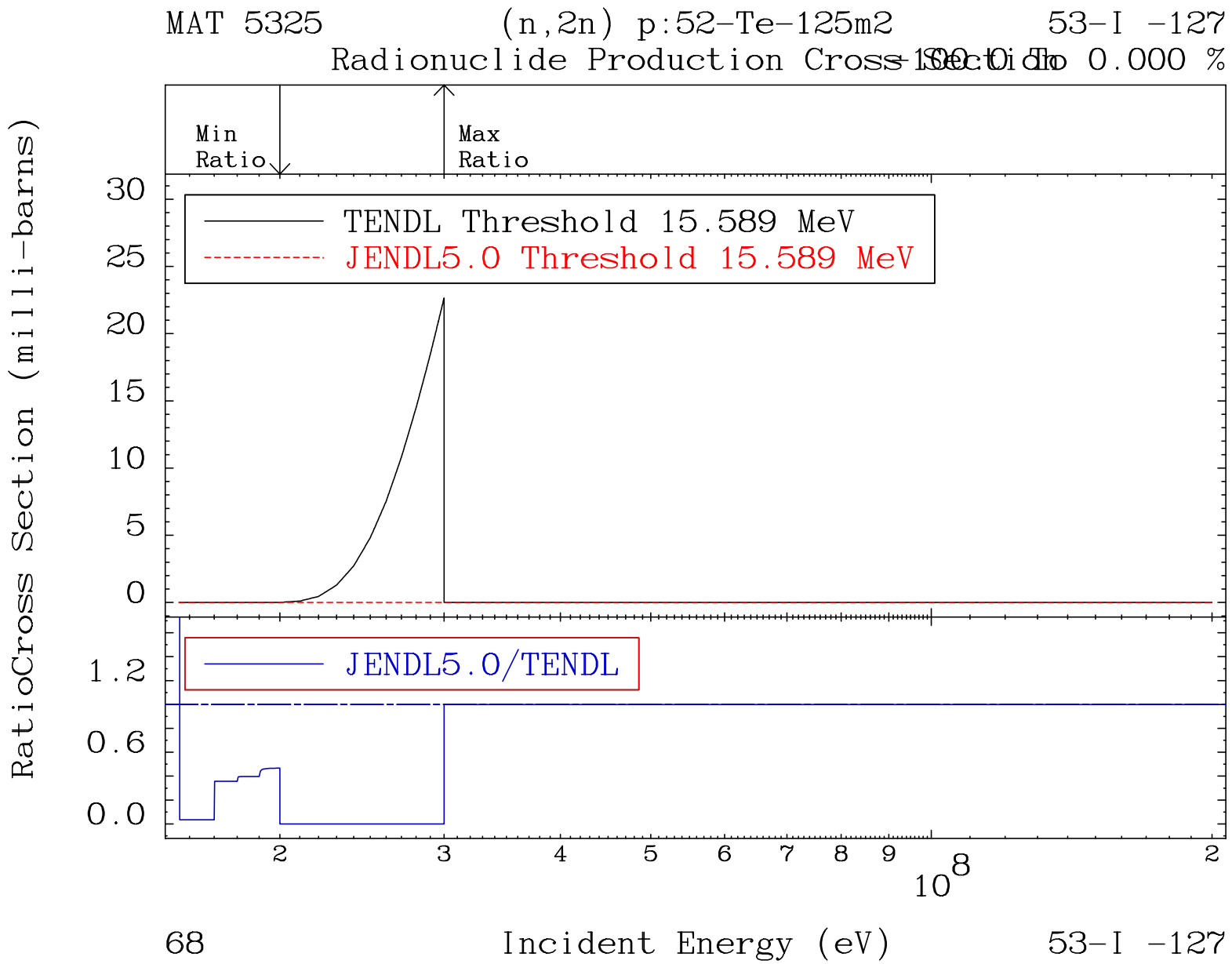

MAT 5325
Dpa inelastic (mt51-91)
53-I -127
Cross Section -100.0 To 115.4 %
Max Ratio
Min Ratio
TENDL Threshold 58.066 keV
JENDL5.0 Threshold 58.066 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
63
53-I -127

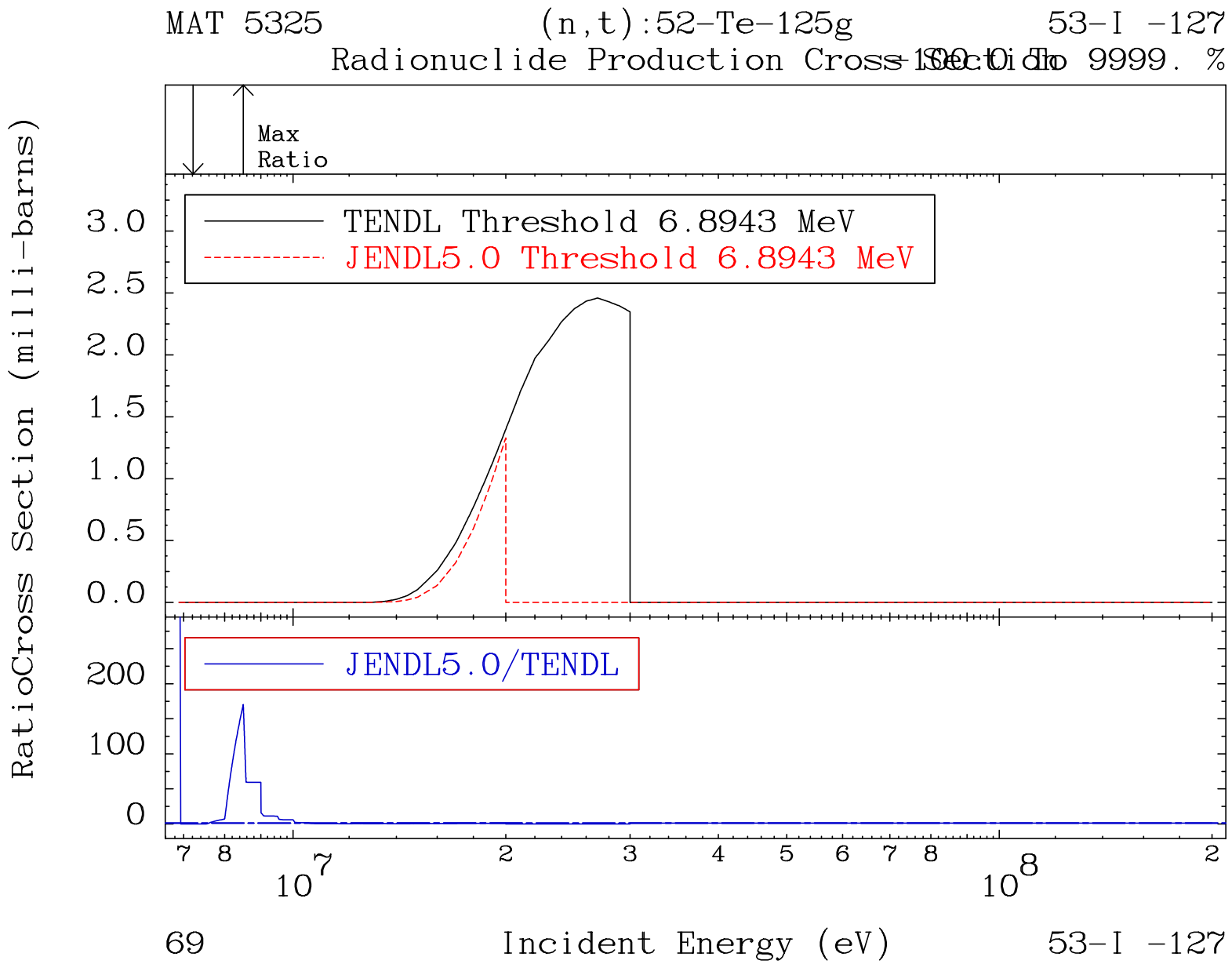

MAT 5325 Dpa disappearance (mt102 -120) 53-I -127
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
64
53-I -127

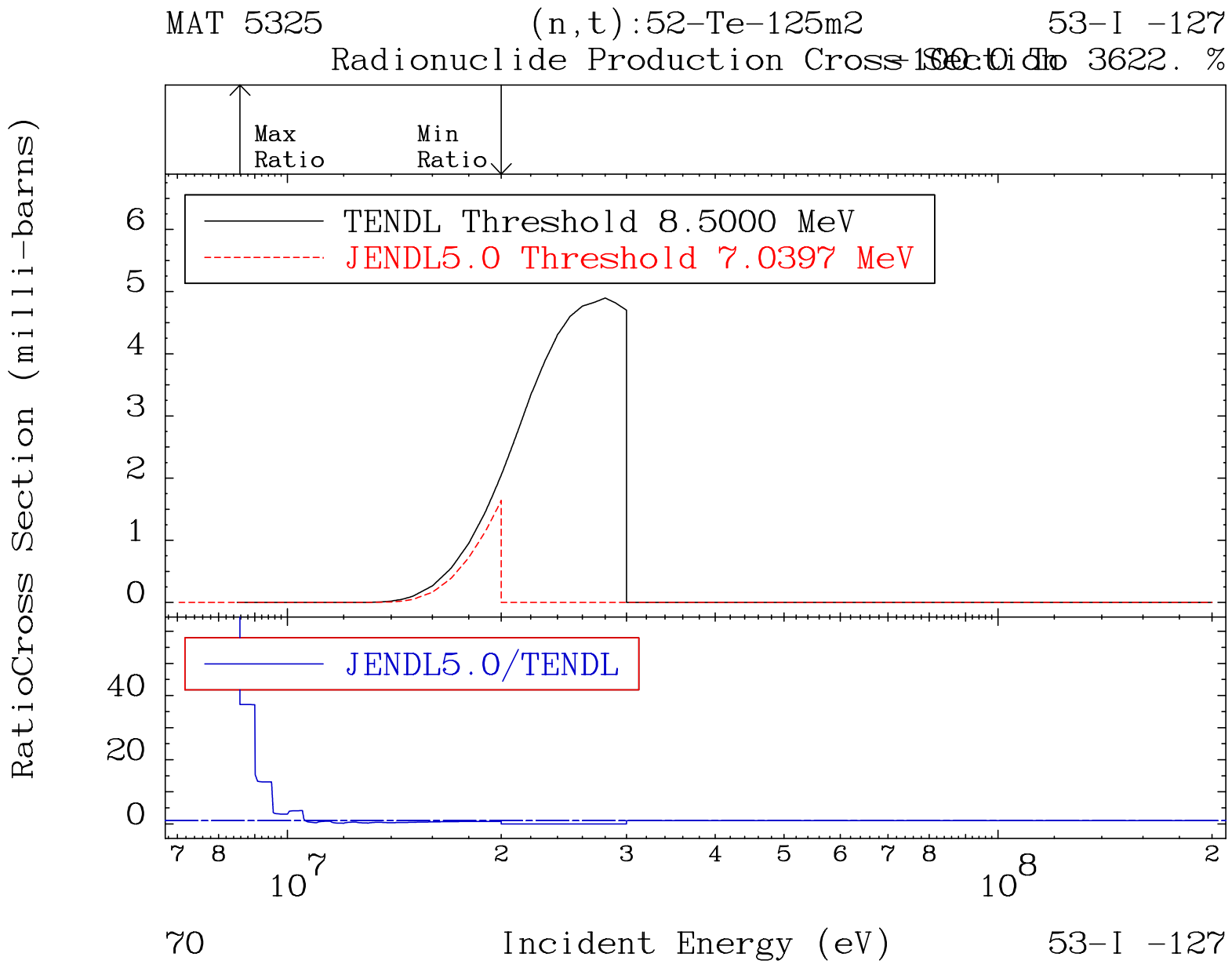

MAT 5325
(n,n') d:52-Te-125g
53-I -127
Radionuclide Production Cross Section To 1631. %
Max Ratio
Min Ratio
TENDL Threshold 13.201 MeV
JENDL5.0 Threshold 13.201 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
65
53-I -127

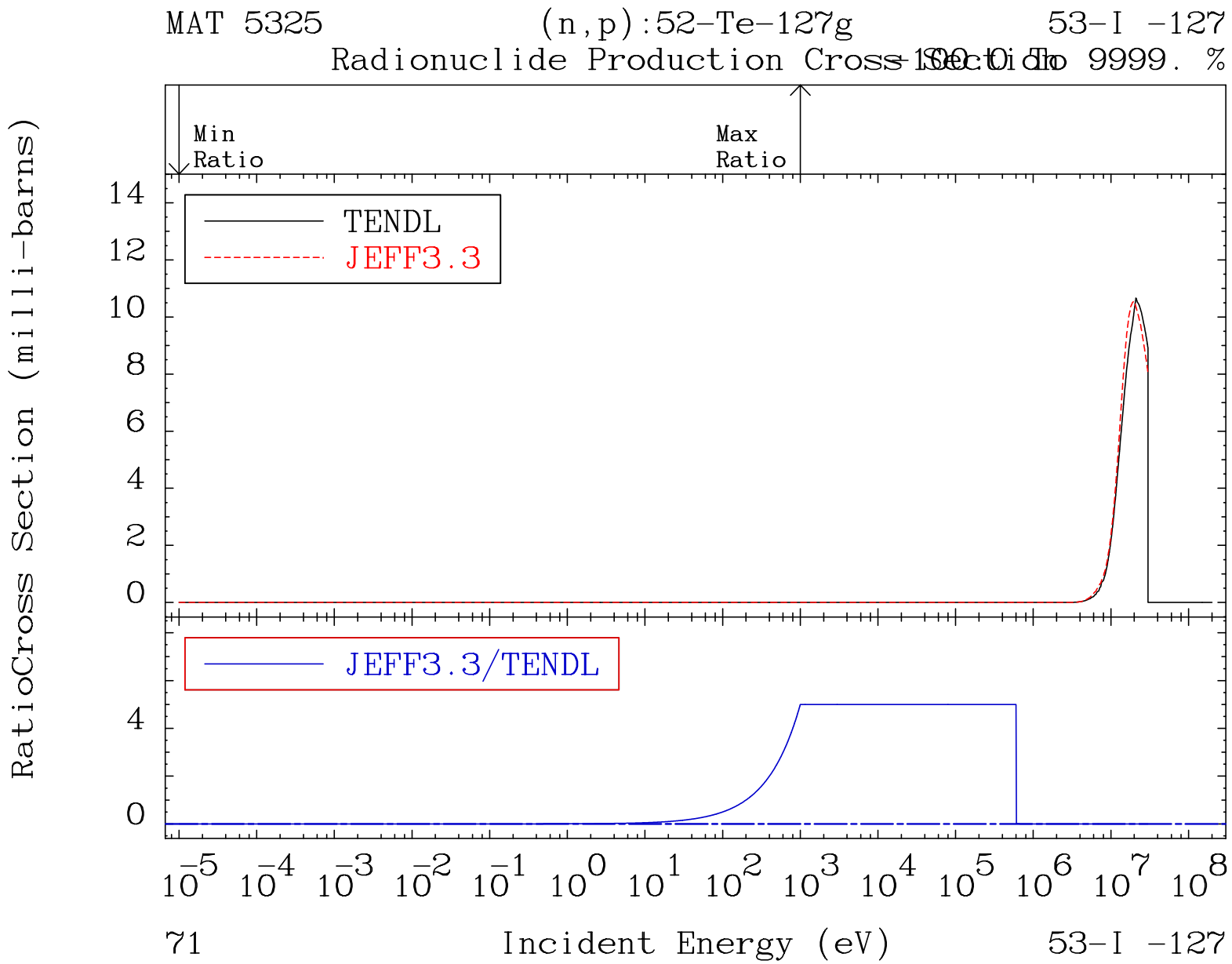

MAT 5325
(n,n') d:52-Te-125m2
53-I -127
Radionuclide Production Cross Section To 1080. %
Max Ratio
Min Ratio
TENDL Threshold 14.500 MeV
JENDL5.0 Threshold 13.347 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
10
0
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
53-I -127

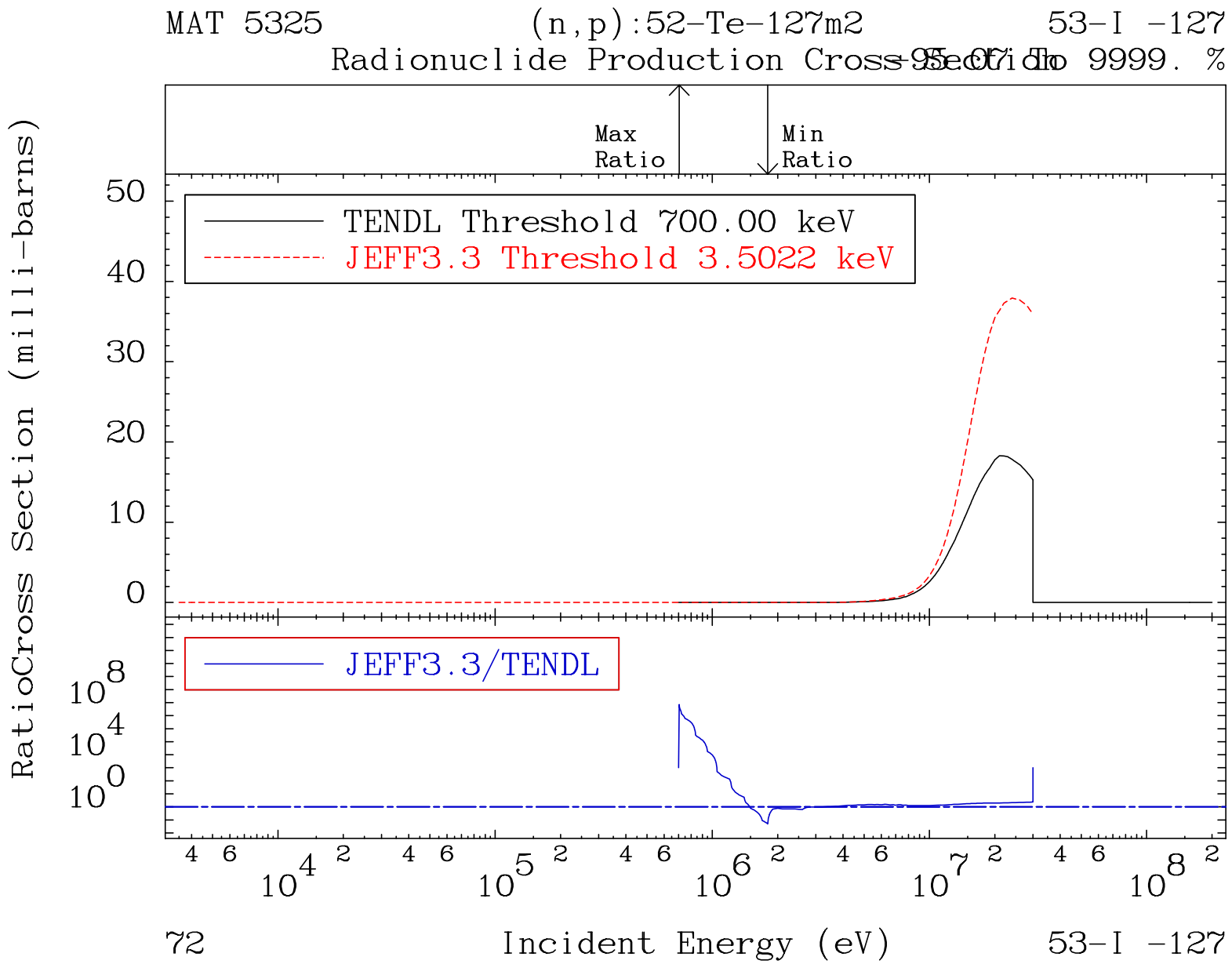

MAT 5325
(n,2n) p:52-Te-125g
53-I -127
Radionuclide Production Cross Section To 69.22 %
Max Ratio
Min Ratio
TENDL Threshold 15.444 MeV
JENDL5.0 Threshold 15.444 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
67
53-I -127

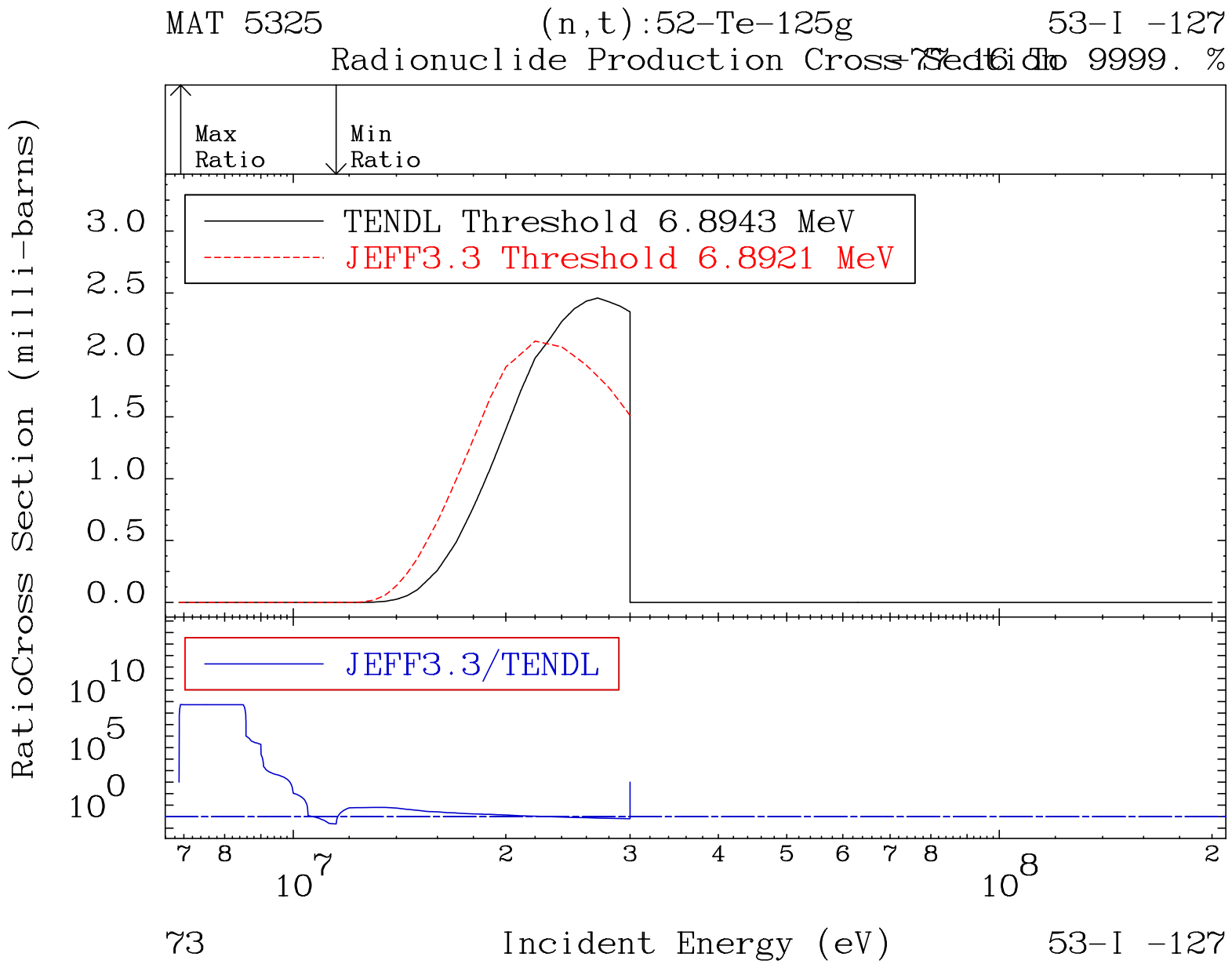

MAT 5325
(n,2n) p:52-Te-125m2
53-I -127
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 15.589 MeV
JENDL5.0 Threshold 15.589 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
53-I -127

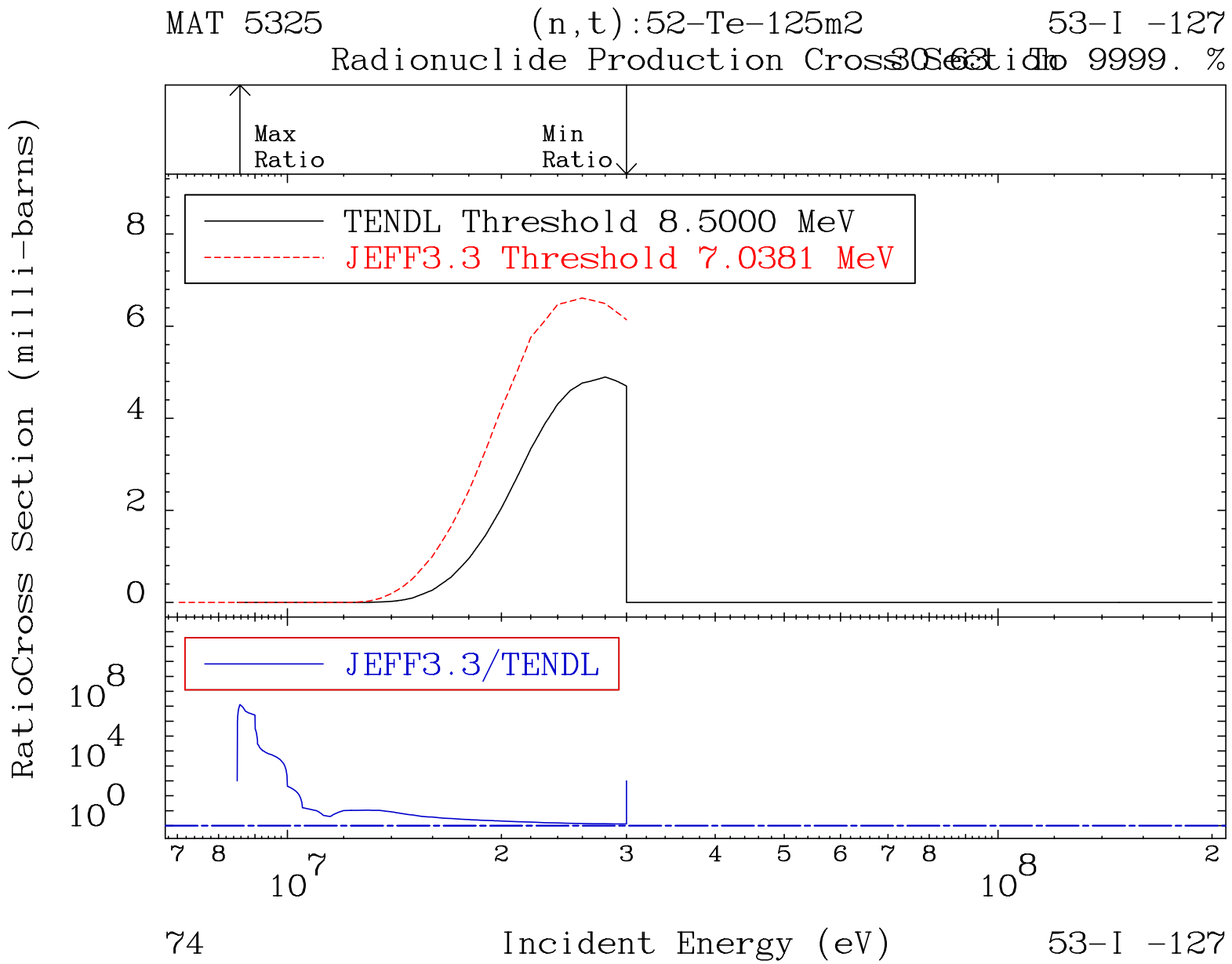

MAT 5325
(n,t):52-Te-125g
53-I -127
Radionuclide Production Cross Section To 9999. %
Max
Ratio
TENDL Threshold 6.8943 MeV
JENDL5.0 Threshold 6.8943 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
200
100
0
7 8
10^7
2
3
4
5
6
7
8
10^8
2
69
Incident Energy (eV)
53-I -127

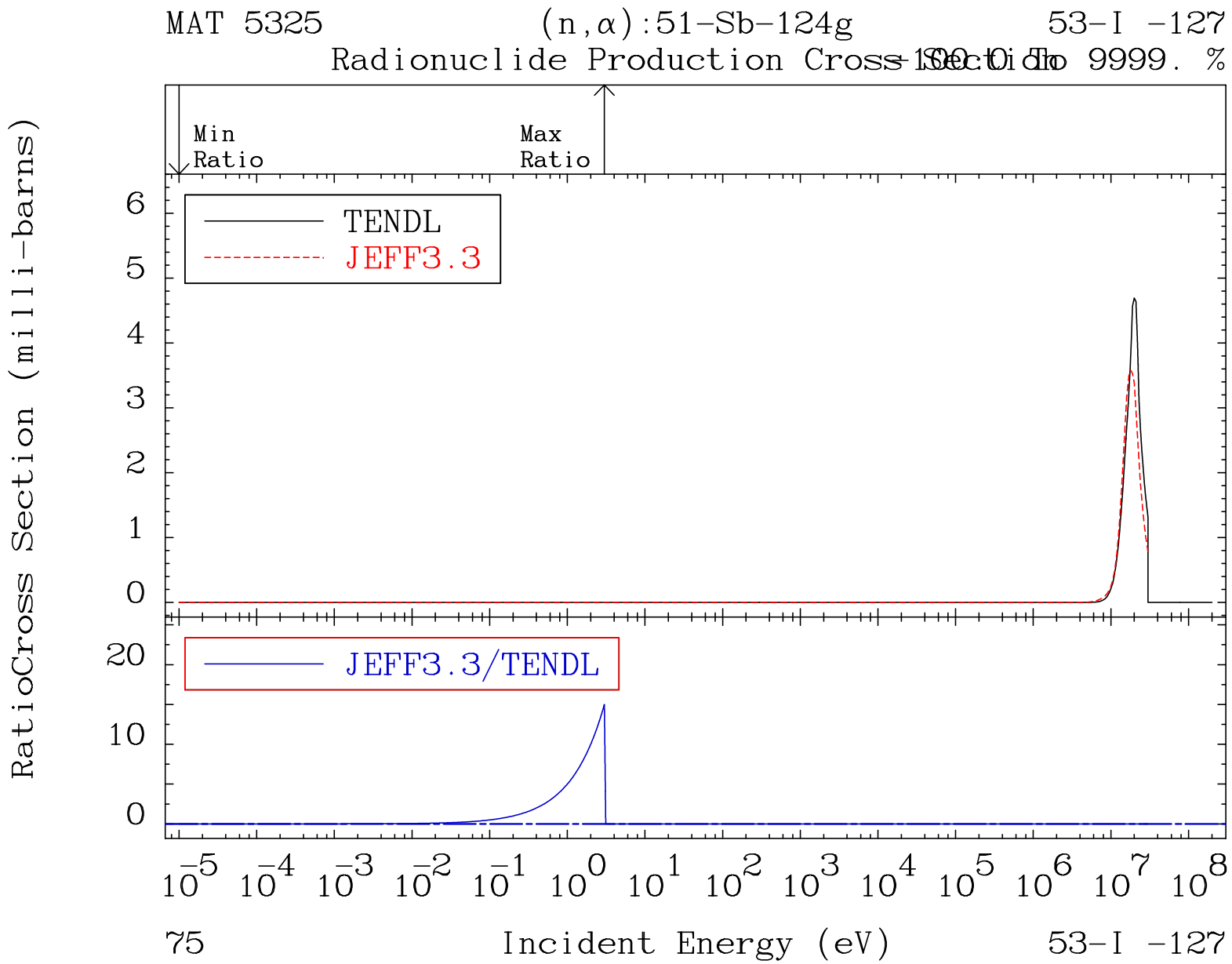

MAT 5325
(n,t):52-Te-125m2
53-I -127
Radionuclide Production Cross Section To
Max Ratio
Min Ratio
TENDL Threshold 8.5000 MeV
JENDL5.0 Threshold 7.0397 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
70
53-I -127

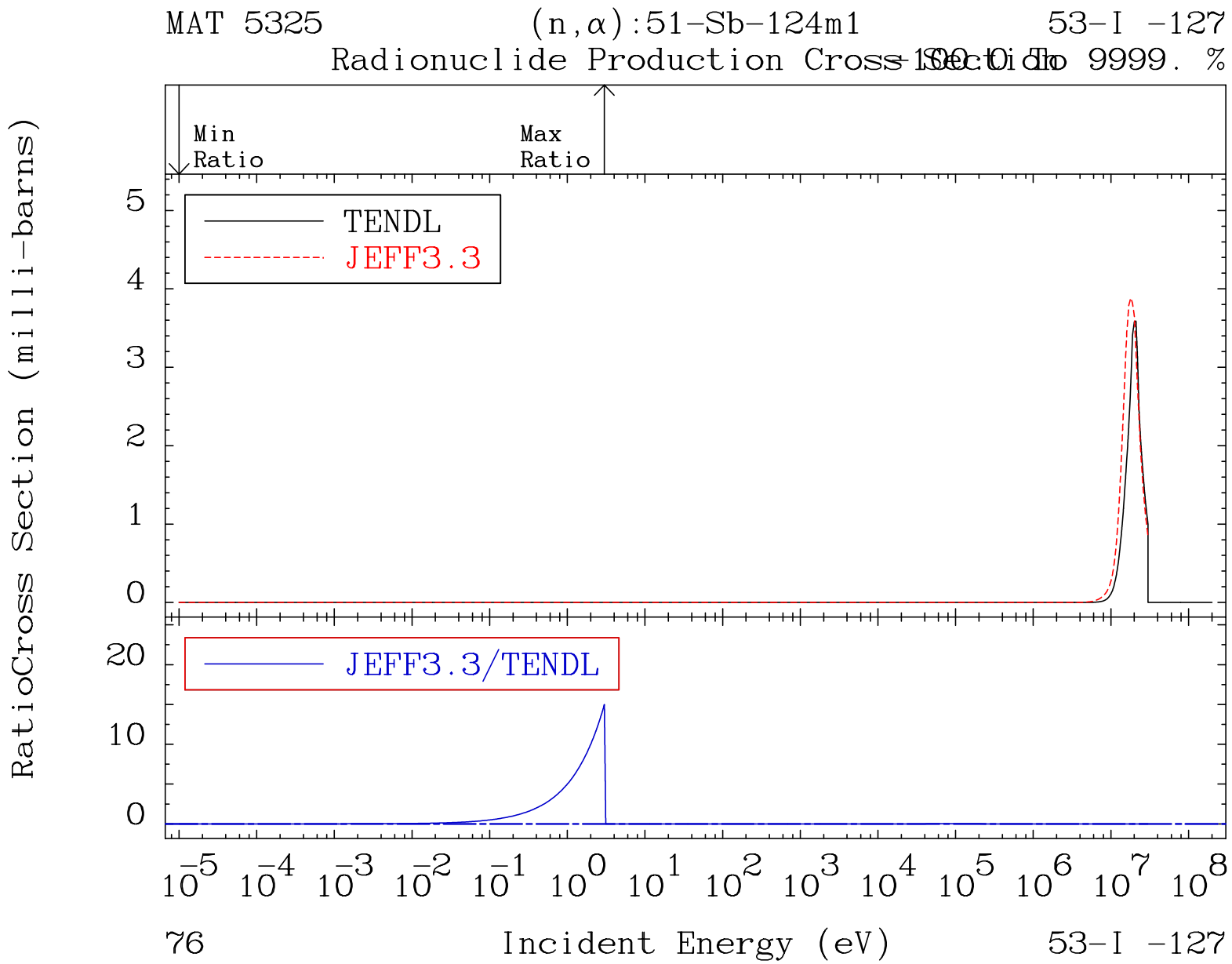

MAT 5325
(n,p):52-Te-127g
53-I -127
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
71
53-I -127

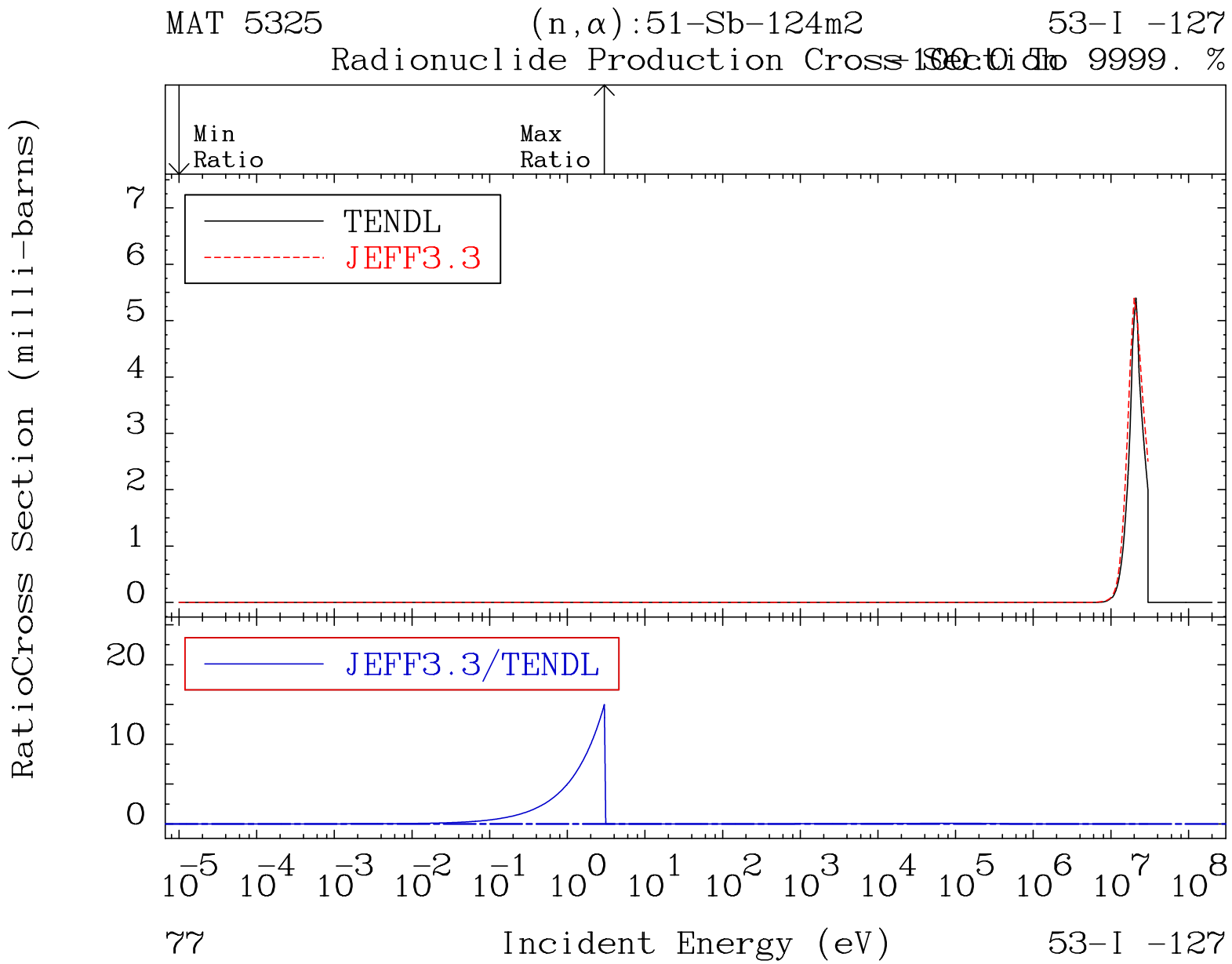

MAT 5325
(n,p):52-Te-127m2
53-I -127
Radionuclide Production Cross-Section
95.0% To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 700.00 keV
JEFF3.3 Threshold 3.5022 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
10^8
10^4
10^0
10^4
10^5
10^6
10^7
10^8
72
Incident Energy (eV)
53-I -127

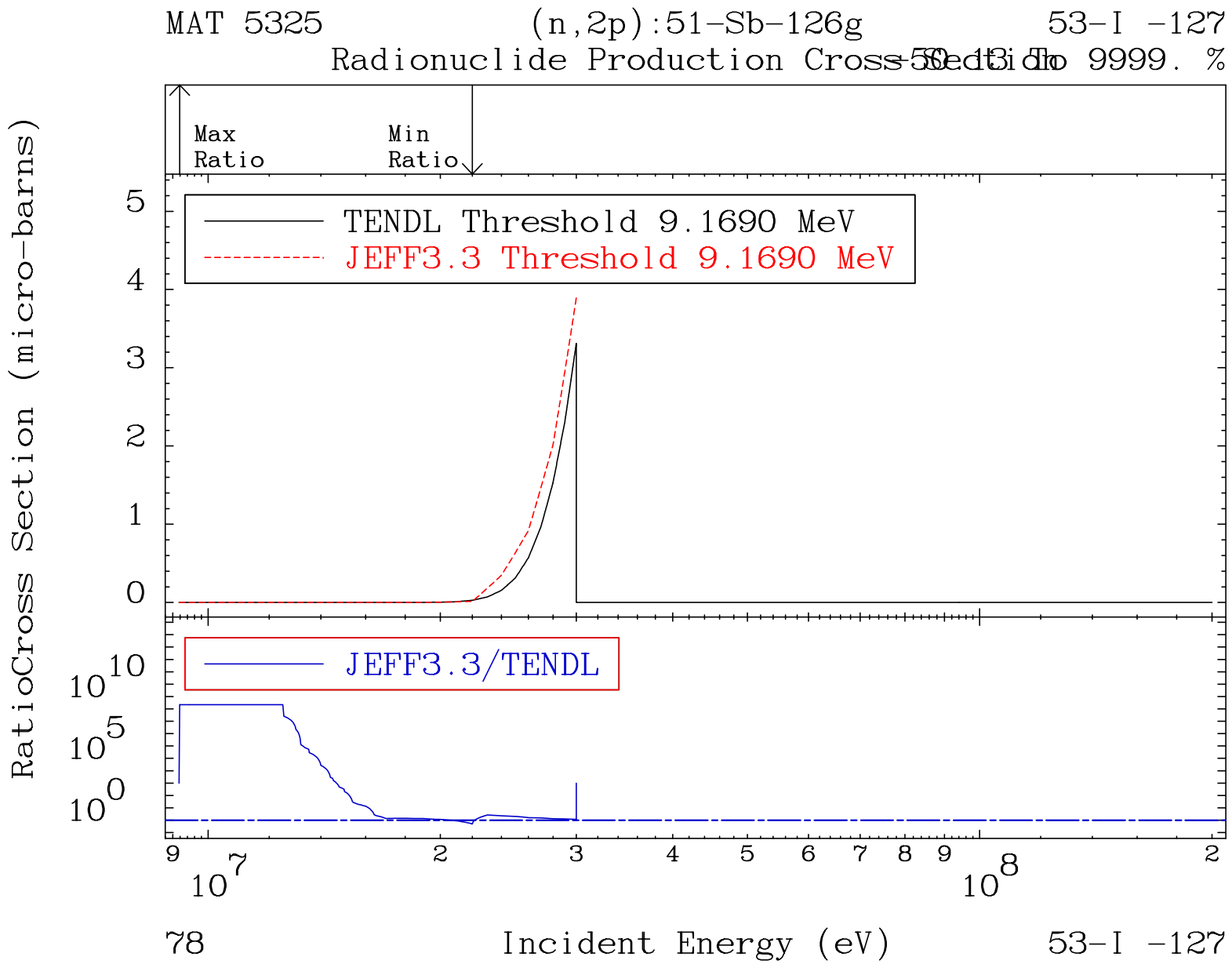

MAT 5325
(n,t):52-Te-125g
53-I -127
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.8943 MeV
JEFF3.3 Threshold 6.8921 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^10
10^5
10^0
7 8 10^7 2 3 4 5 6 7 8 10^8 2
73
Incident Energy (eV)
53-I -127

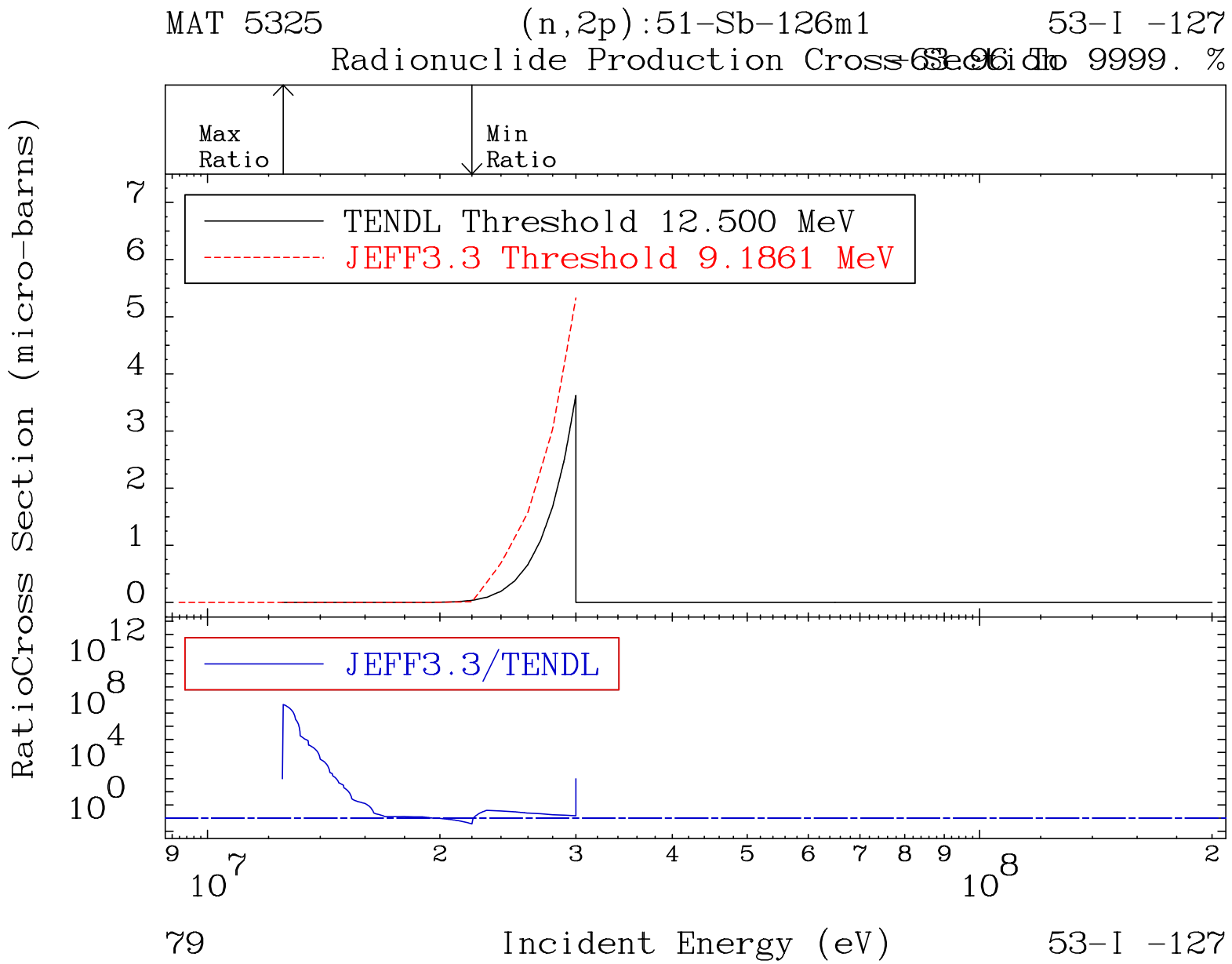

MAT 5325
(n,t):52-Te-125m2
53-I -127
Radionuclide Production Cross Section
30.63 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 8.5000 MeV
JEFF3.3 Threshold 7.0381 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
74
53-I -127

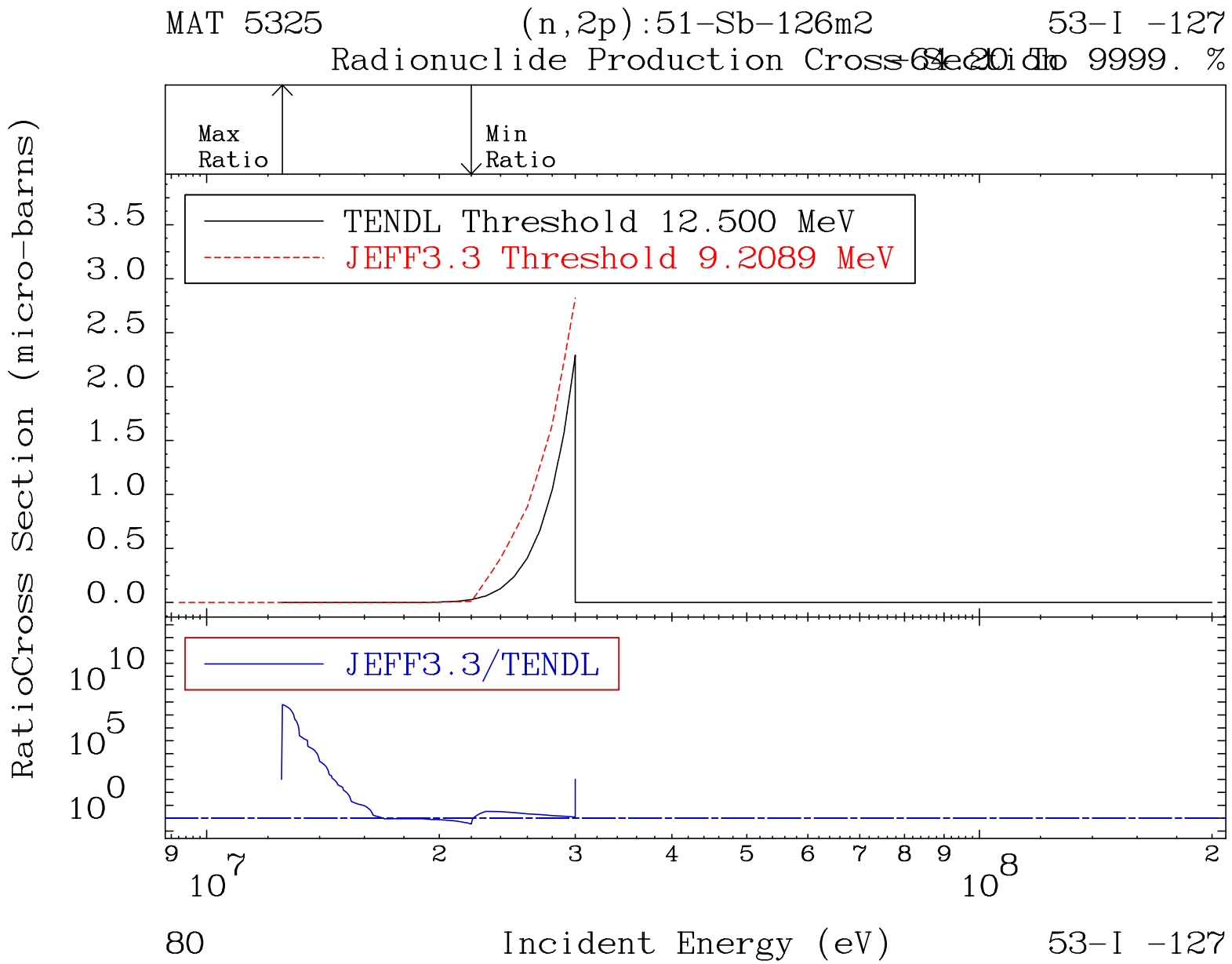

MAT 5325
(n,α):51-Sb-124g
53-I -127
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
75
53-I -127

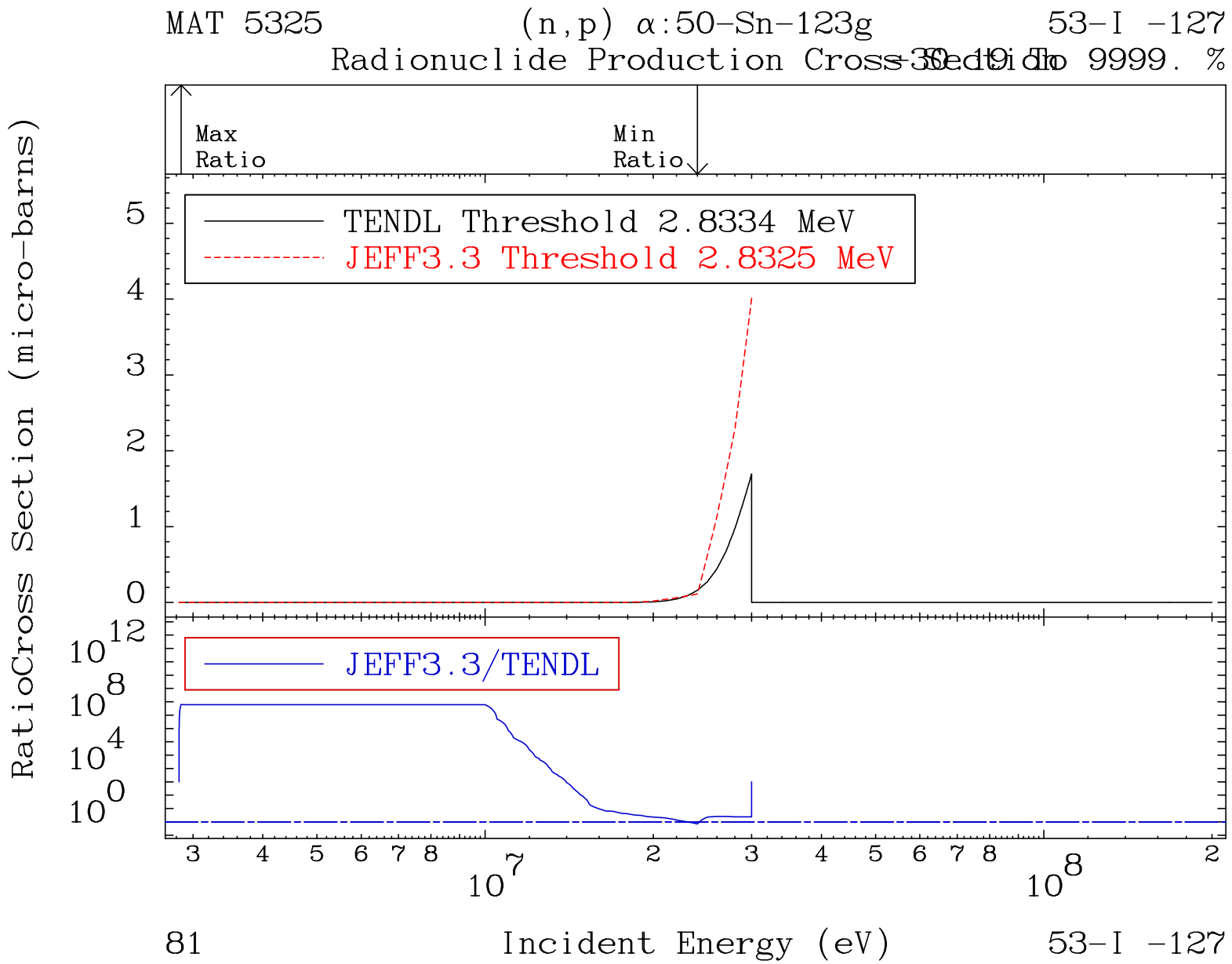

MAT 5325
(n,α):51-Sb-124m1
53-I -127
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
76
53-I -127

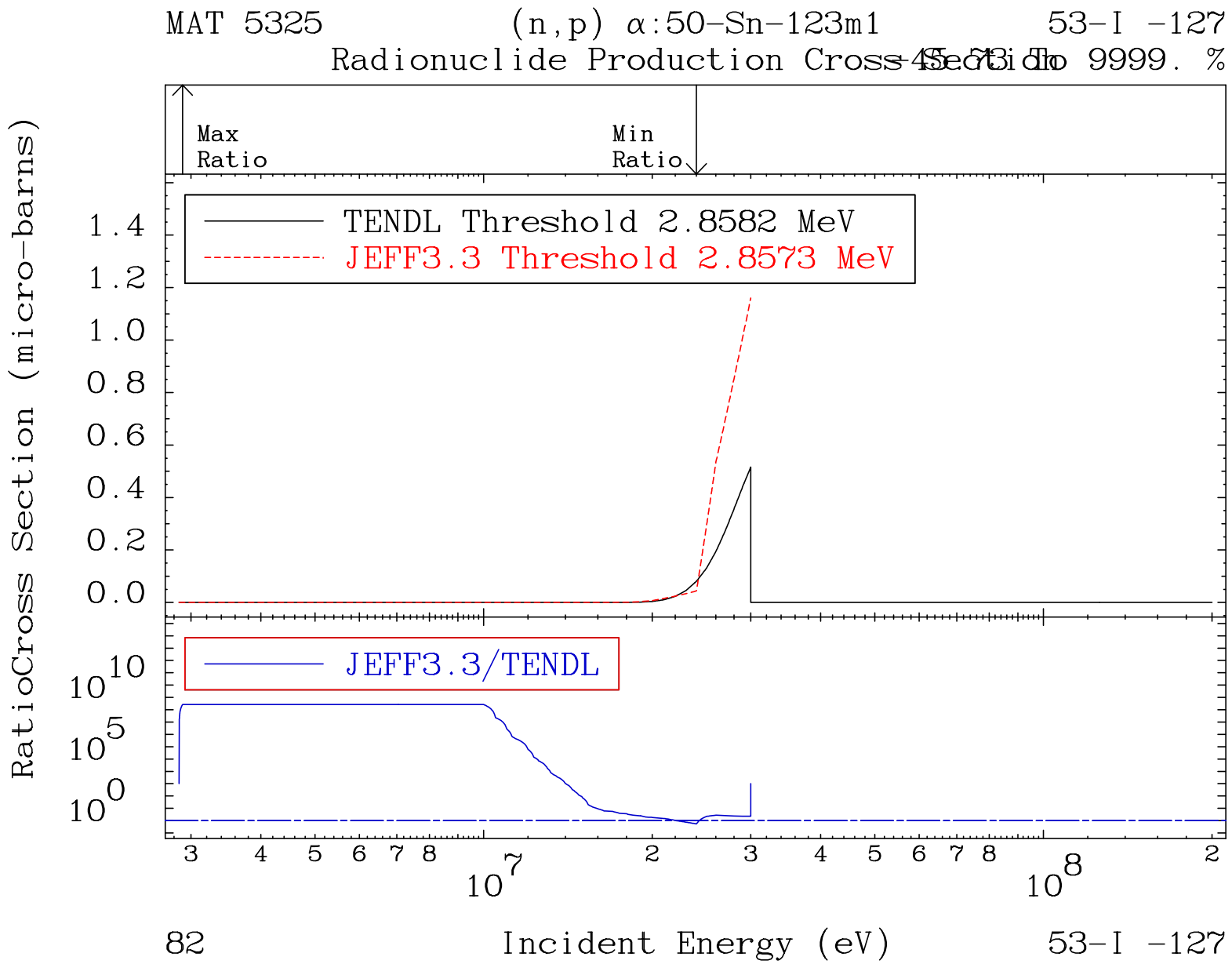

MAT 5325
(n,α):51-Sb-124m2
53-I -127
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
77
53-I -127

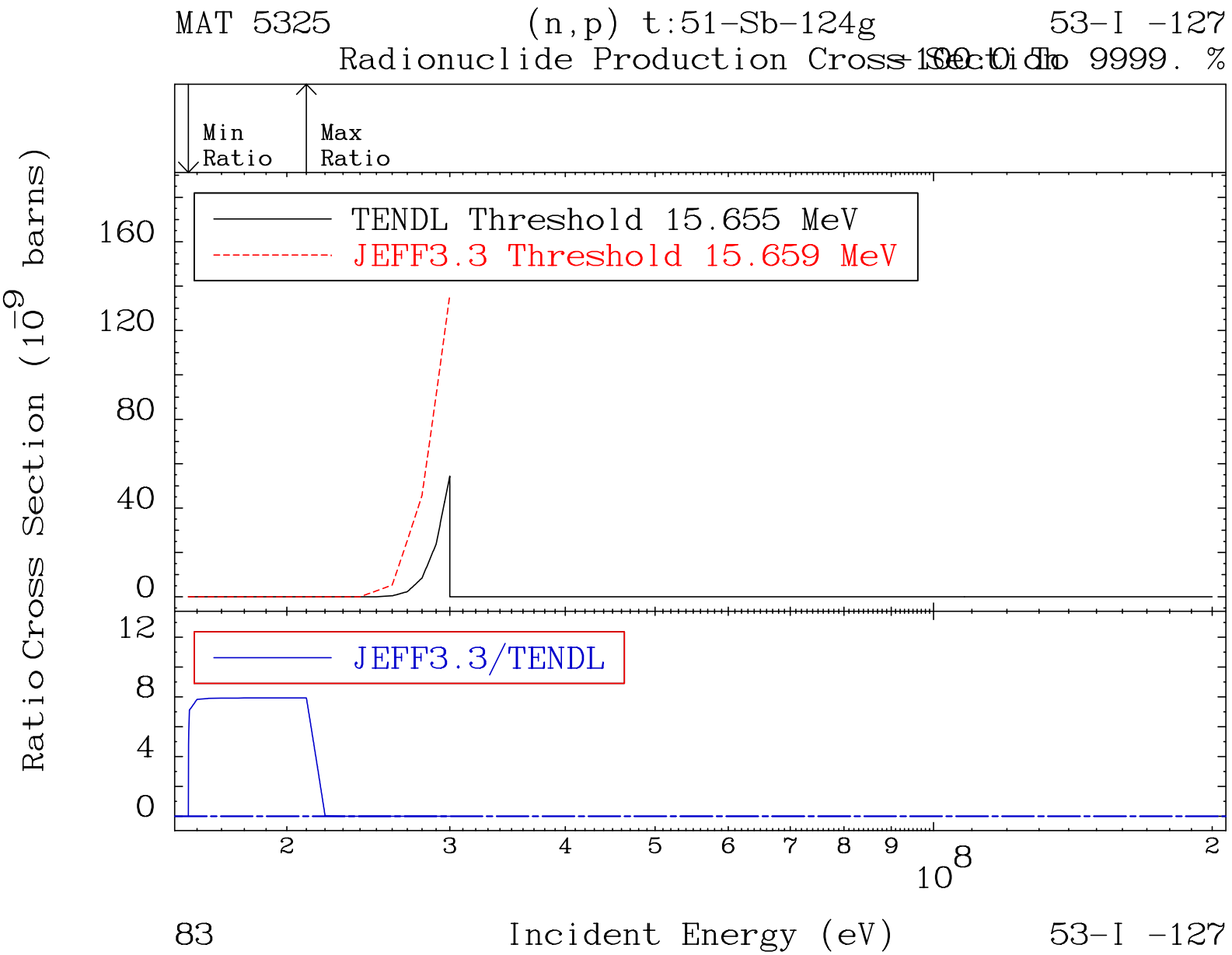

MAT 5325
(n,2p):51-Sb-126g
53-I -127
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 9.1690 MeV
JEFF3.3 Threshold 9.1690 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
78
53-I -127

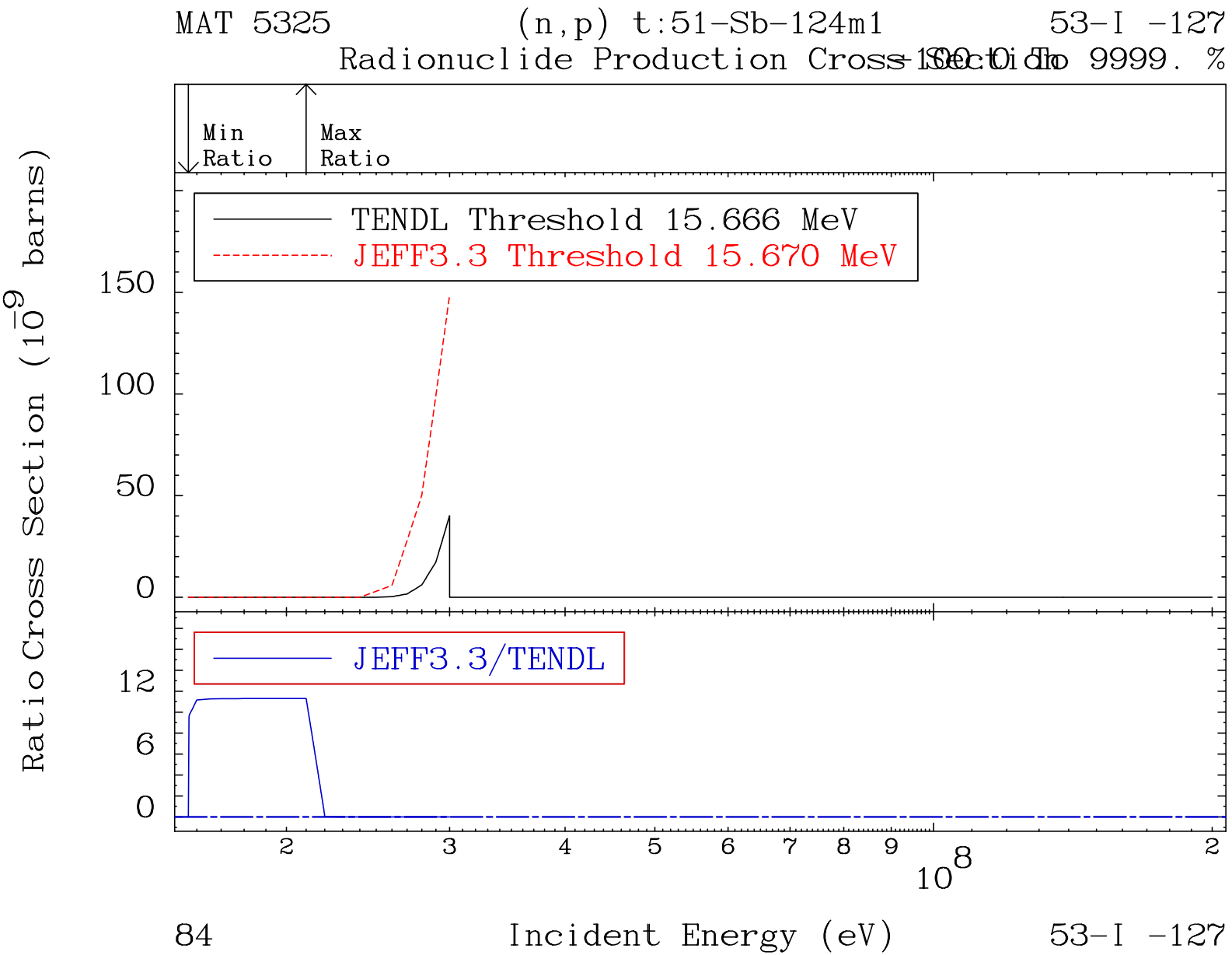

MAT 5325
(n,2p):51-Sb-126m1
53-I -127
Radionuclide Production Cross Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.500 MeV
JEFF3.3 Threshold 9.1861 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
79
53-I -127

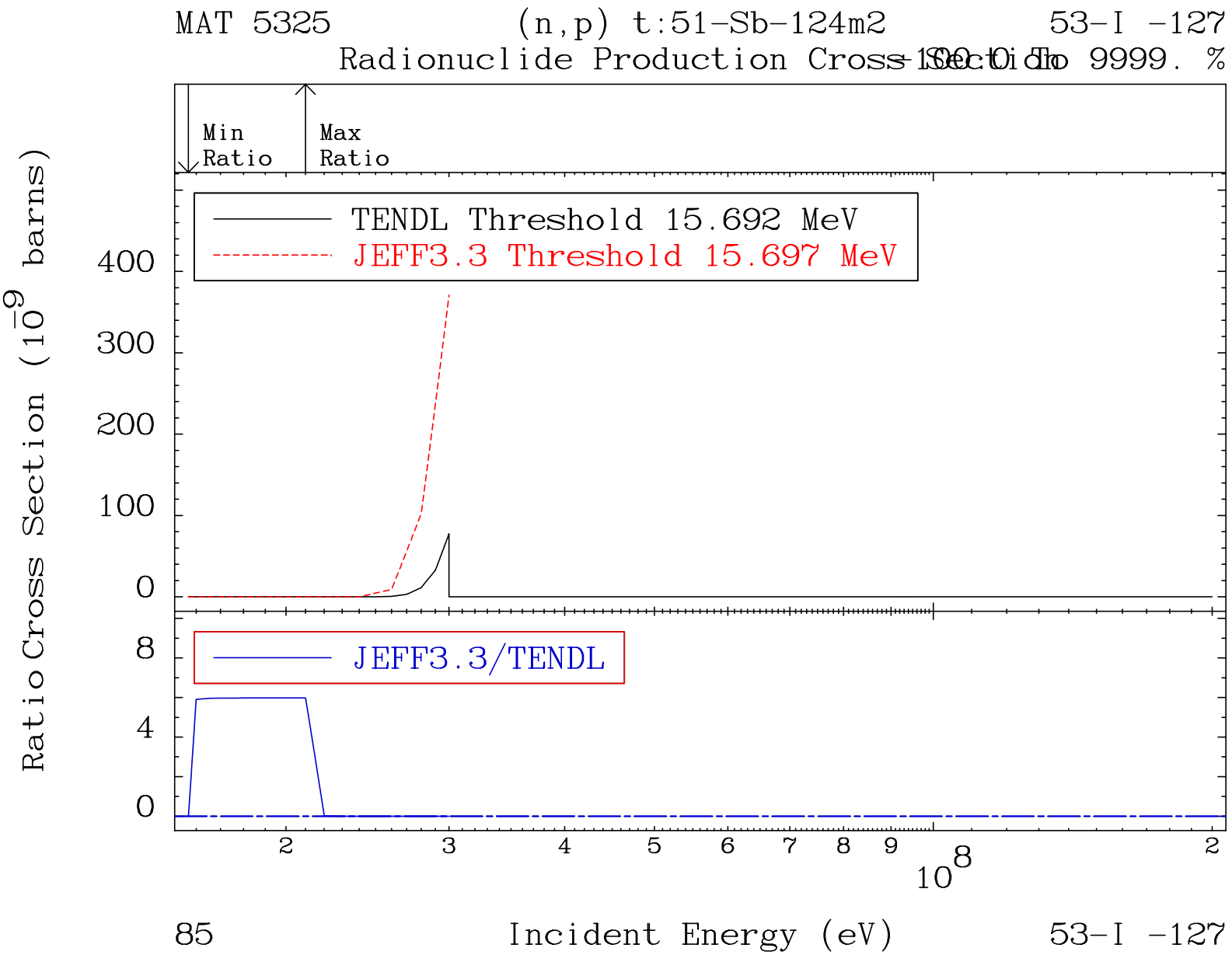

MAT 5325
(n,2p):51-Sb-126m2
53-I -127
Radionuclide Production Cross-Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 12.500 MeV
JEFF3.3 Threshold 9.2089 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
10^10
10^5
10^0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
80
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) α:50-Sn-123g
53-I -127
Radionuclide Production Cross-Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8334 MeV
JEFF3.3 Threshold 2.8325 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
81
53-I -127


MAT 5325
(n,p) α:50-Sn-123m1
53-I -127
Radionuclide Production Cross-Section To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.8582 MeV
JEFF3.3 Threshold 2.8573 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
10^10
10^5
10^0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
82
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) t:51-Sb-124g
53-I -127
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 15.655 MeV
JEFF3.3 Threshold 15.659 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
160
120
80
40
0
12
8
4
0
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) t:51-Sb-124m1
53-I -127
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 15.666 MeV
JEFF3.3 Threshold 15.670 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
150
100
50
0
12
6
0
2
3
4
5
6
7
8
9
10^8
2
84
Incident Energy (eV)
53-I -127


MAT 5325
(n,p) t:51-Sb-124m2
53-I -127
Radionuclide Production Cross Section To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 15.692 MeV
JEFF3.3 Threshold 15.697 MeV
JEFF3.3/TENDL
Ratio Cross Section (10^{-9} barns)
400
300
200
100
0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
85
Incident Energy (eV)
53-I -127