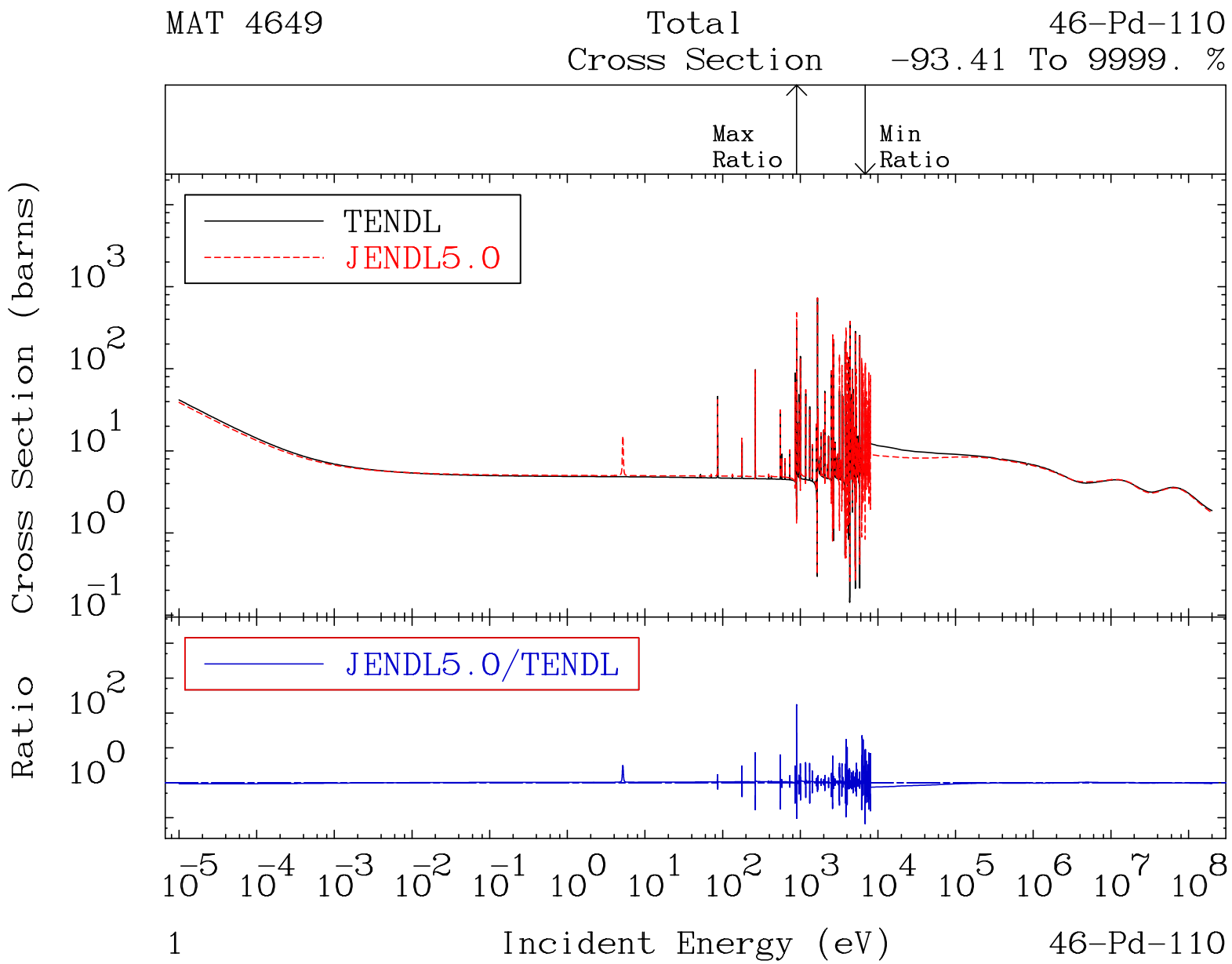
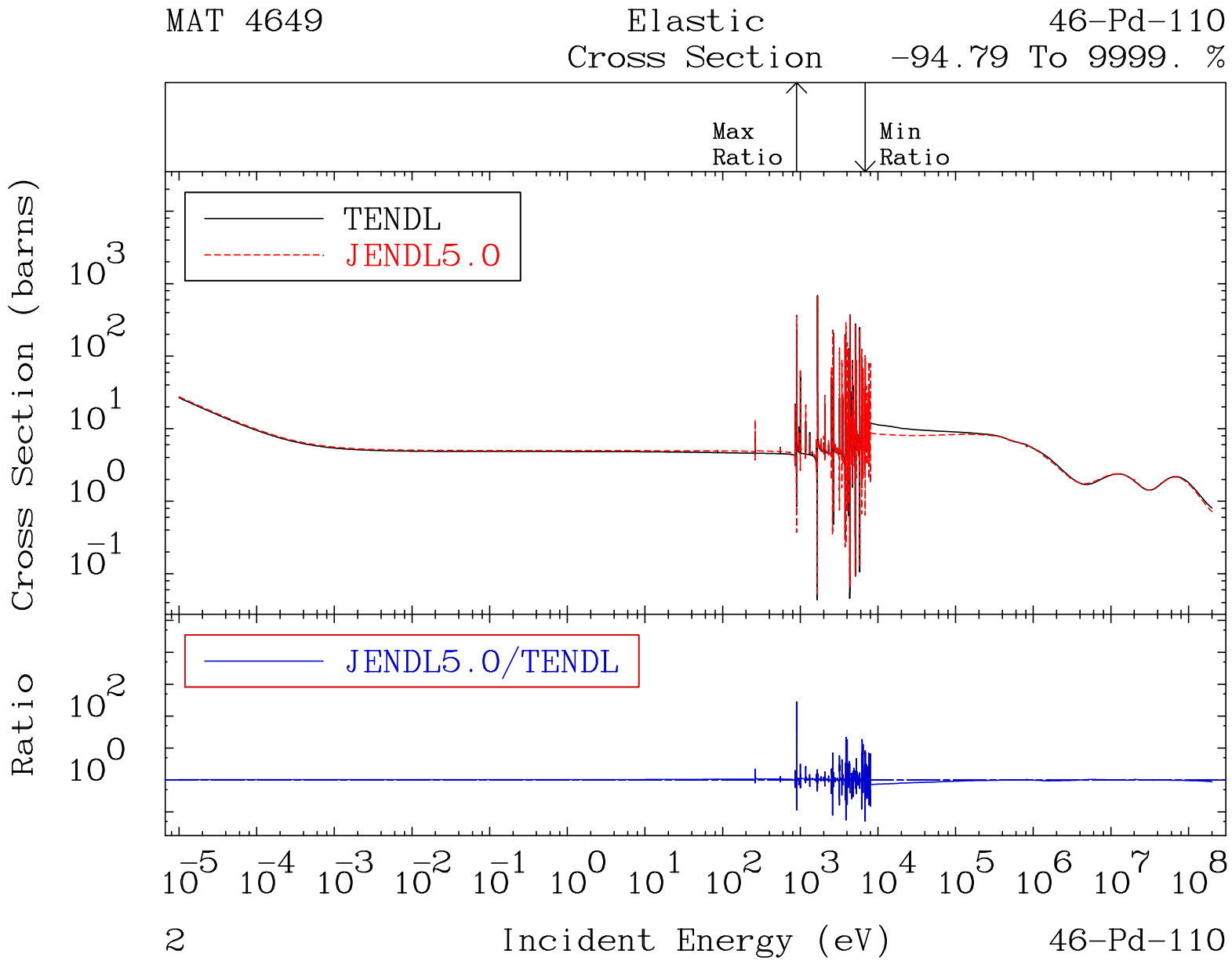
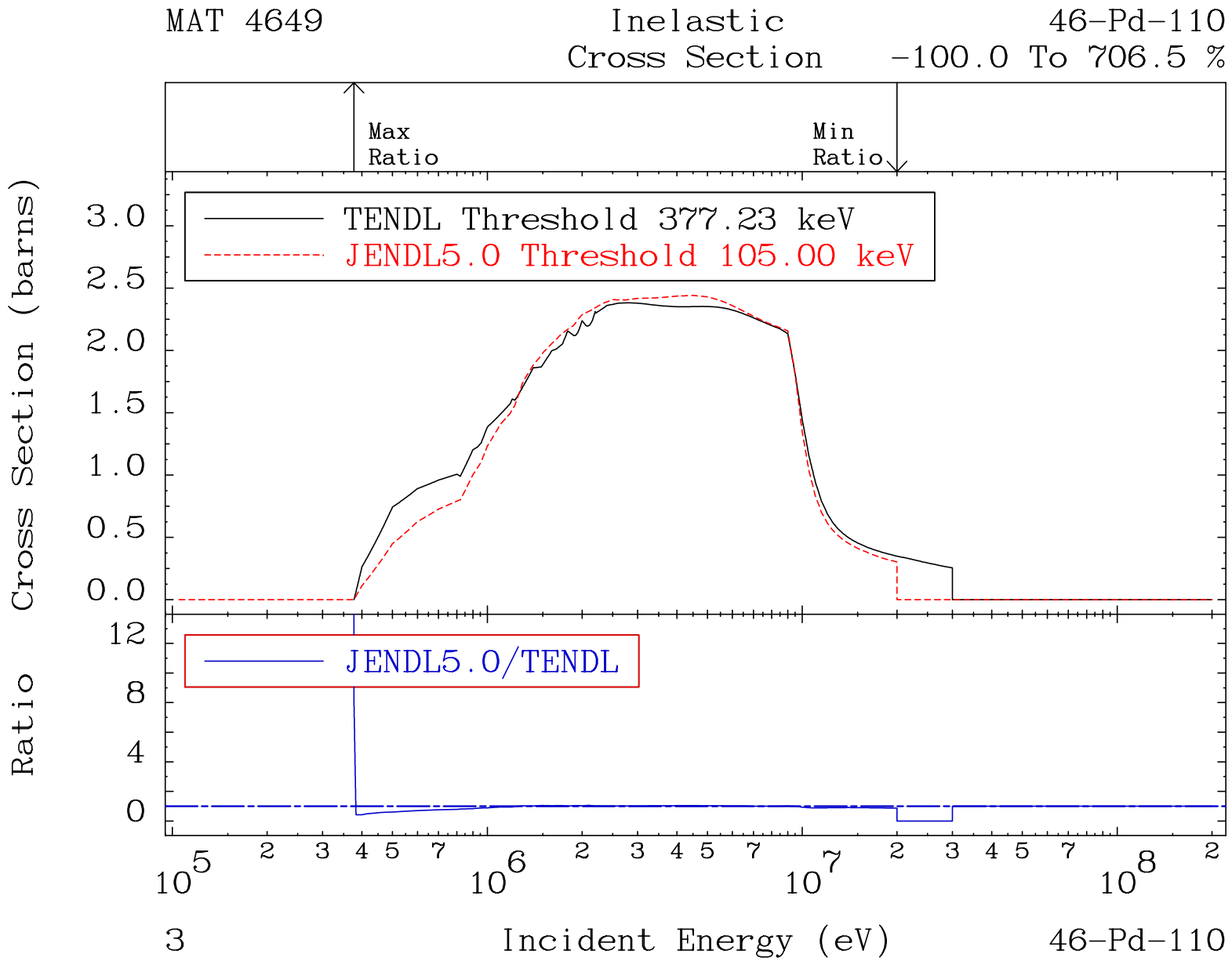
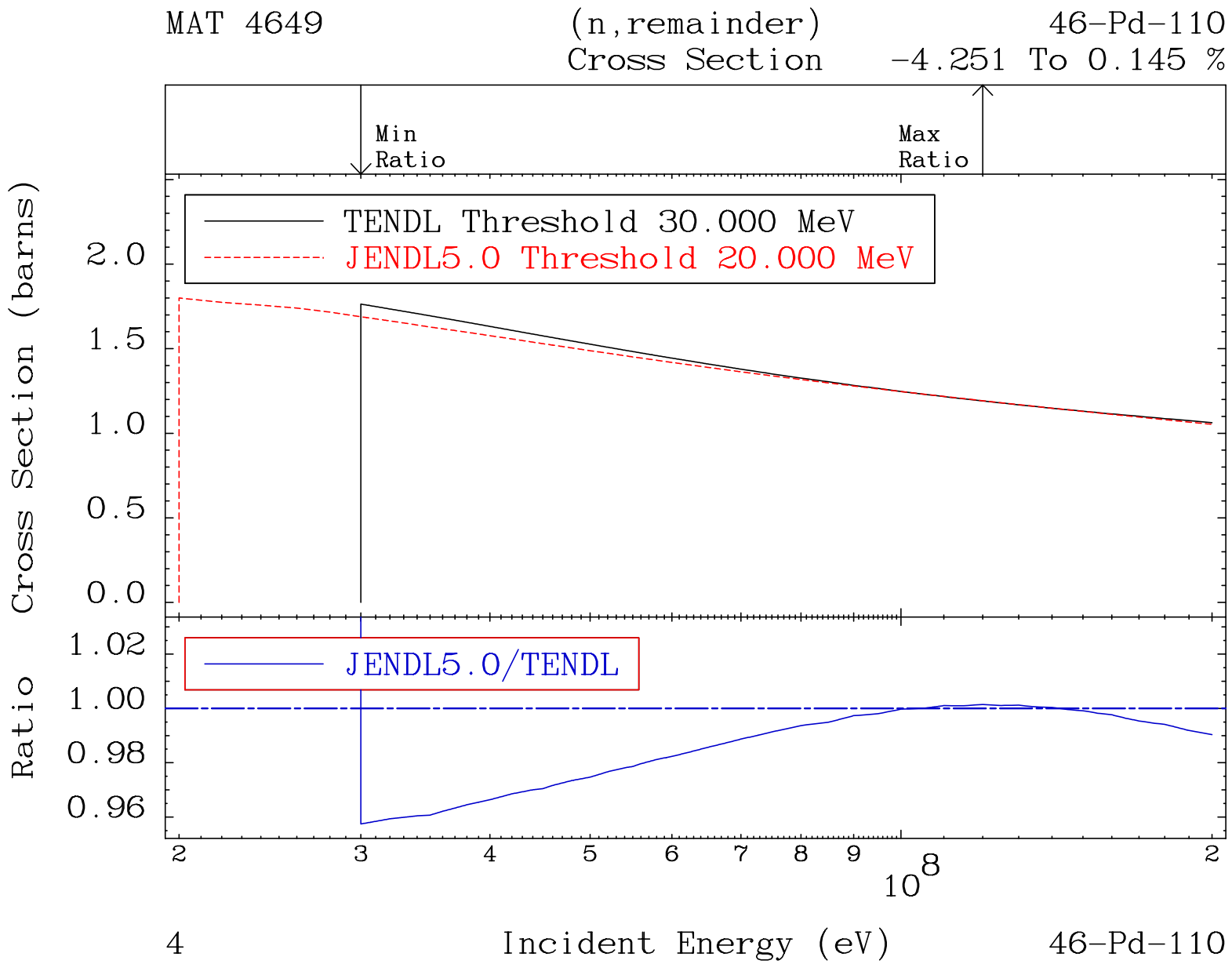
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

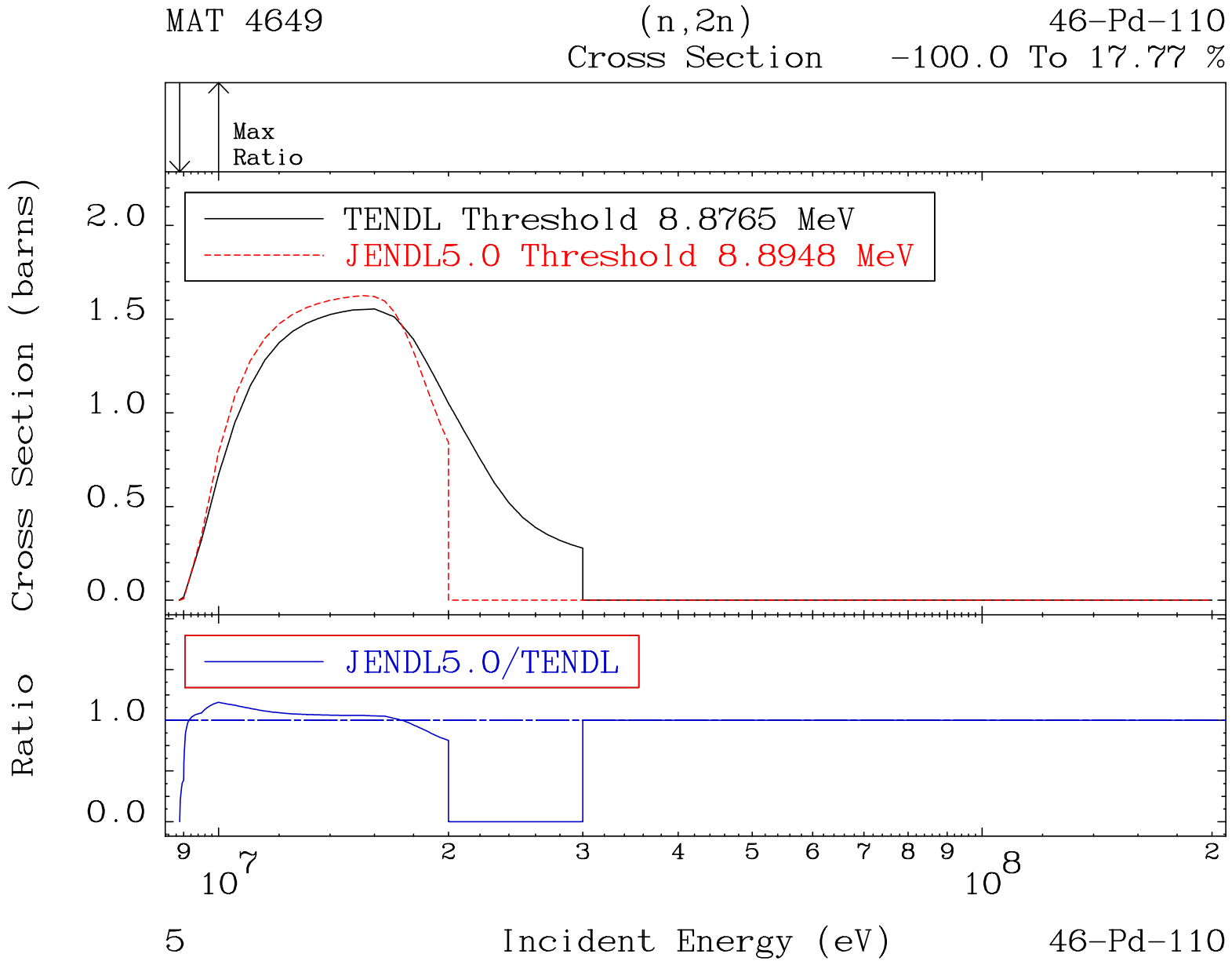
Press Mouse Button to Start

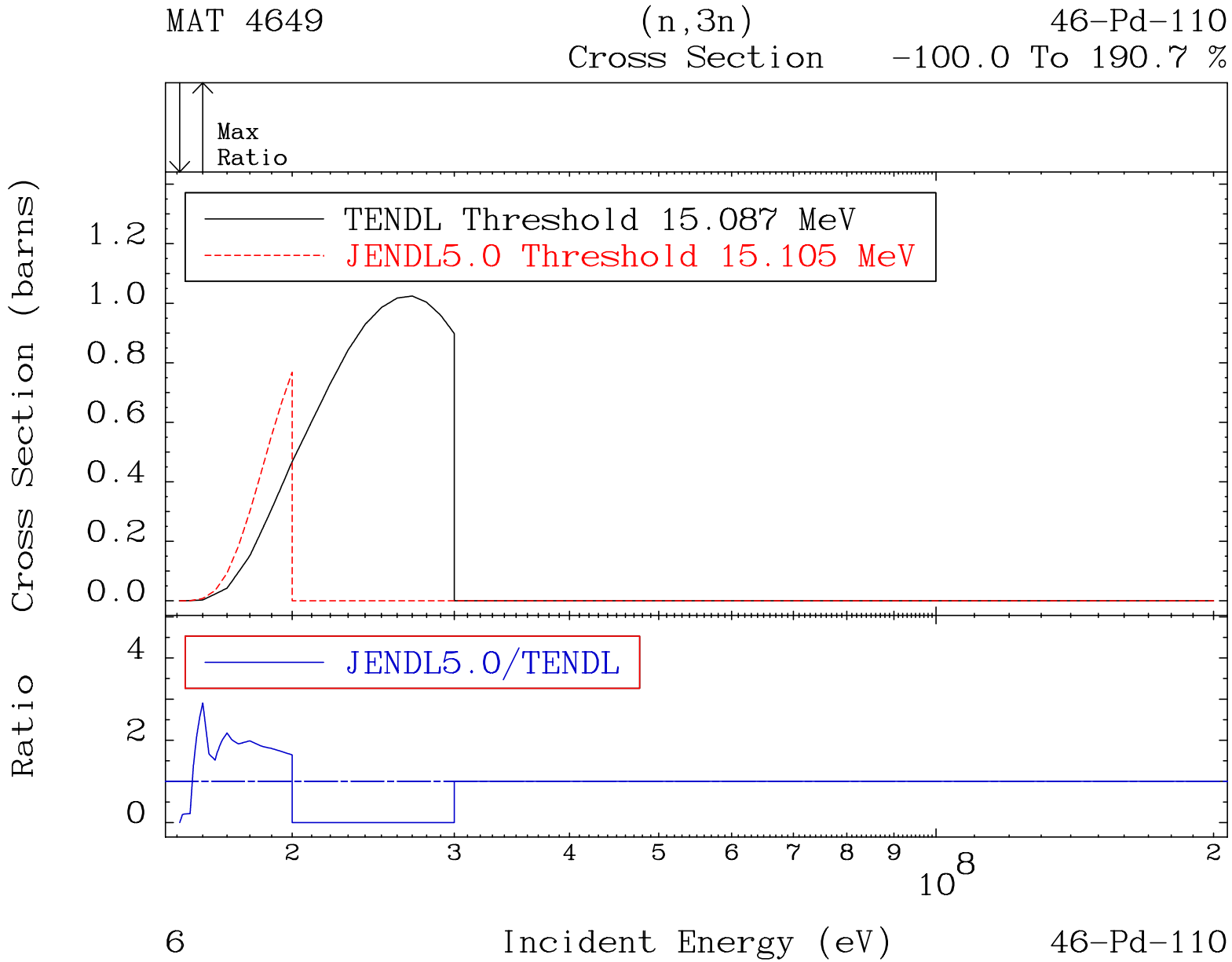

MAT 4649
Total
Cross Section
46-Pd-110
-93.41 To 9999. %
Max
Ratio
Min
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
46-Pd-110

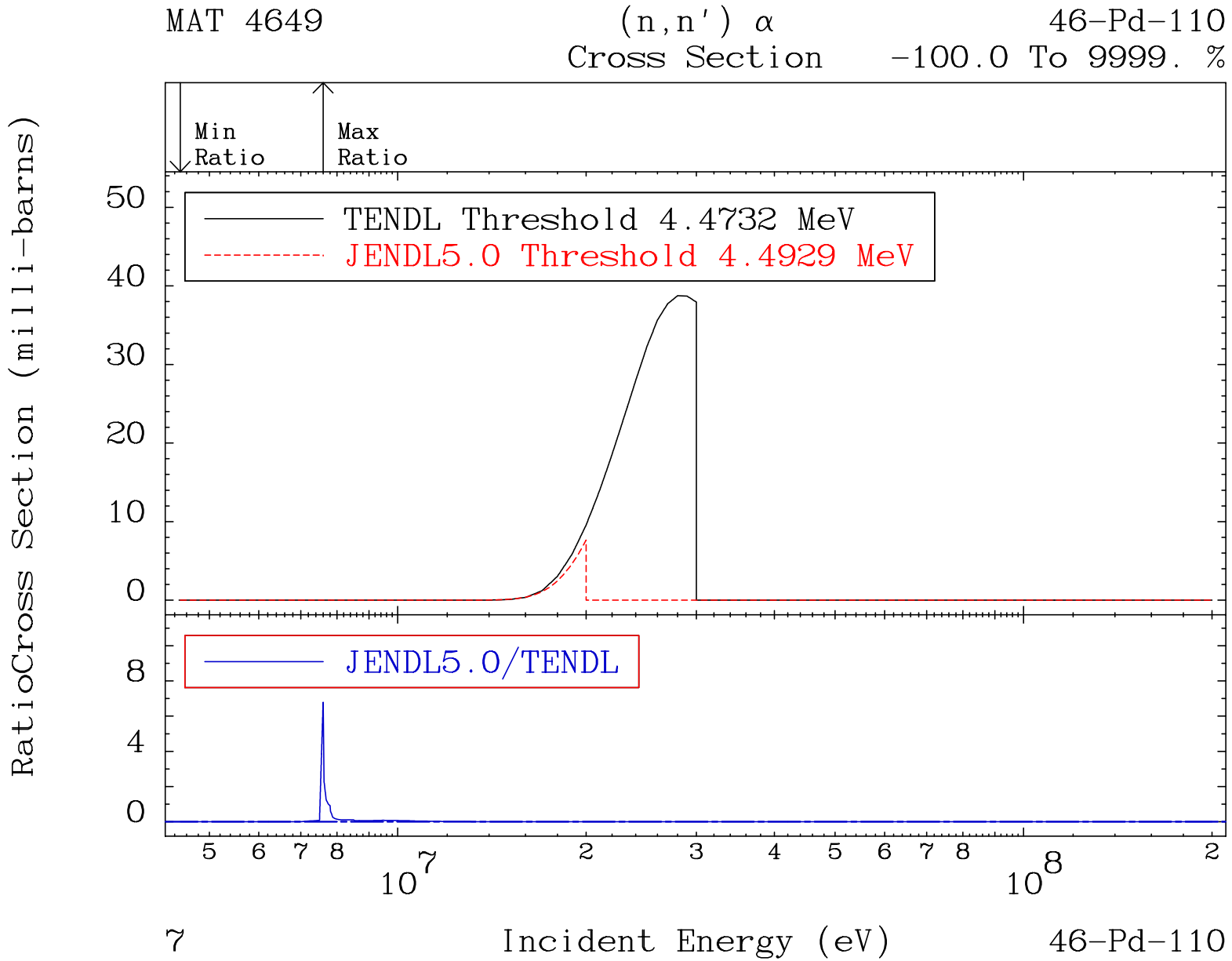

MAT 4649
Elastic
Cross Section
46-Pd-110
-94.79 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
2
46-Pd-110

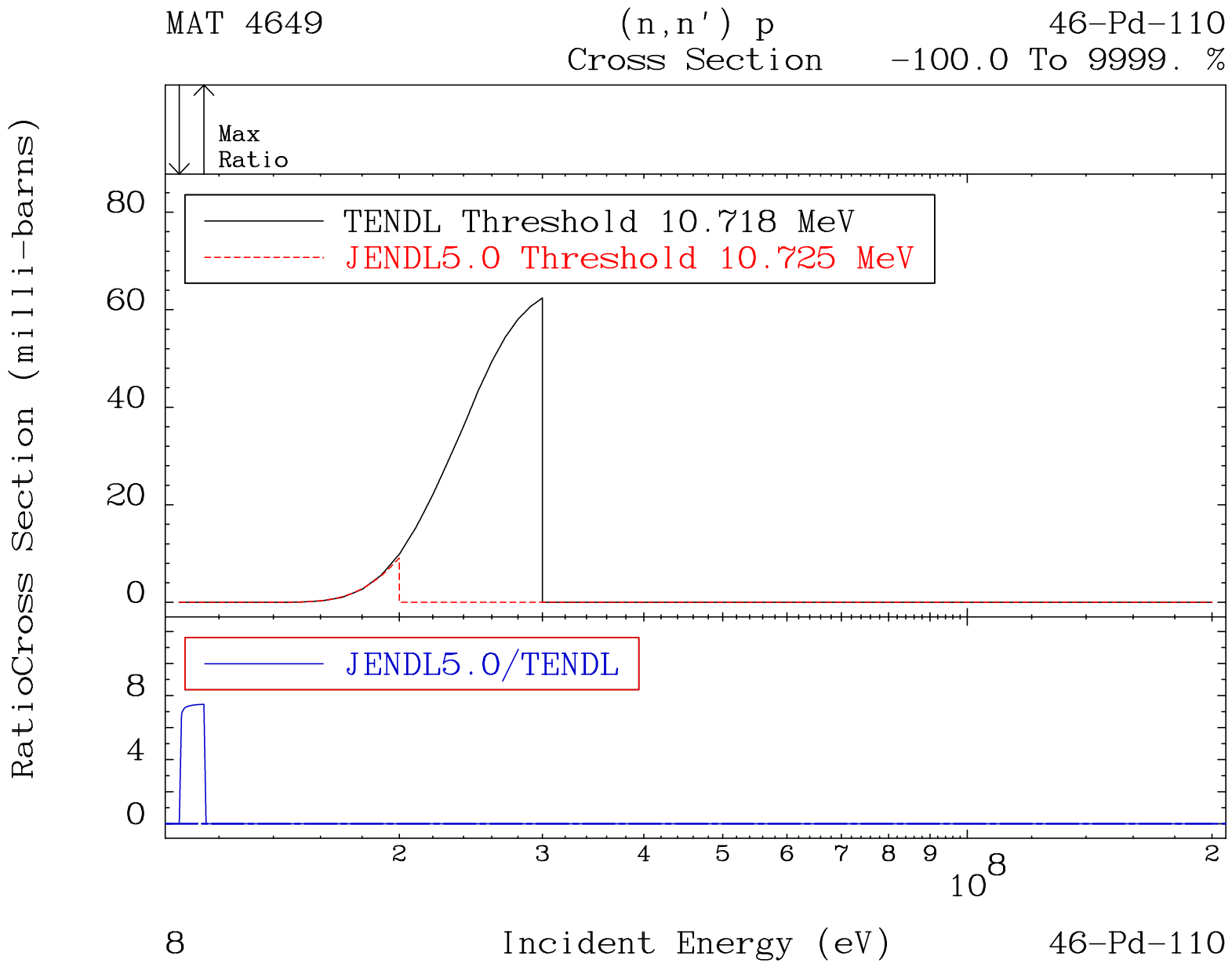

MAT 4649
Inelastic
Cross Section
46-Pd-110
-100.0 To 706.5 %
Max
Ratio
Min
Ratio
TENDL Threshold 377.23 keV
JENDL5.0 Threshold 105.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
3
46-Pd-110

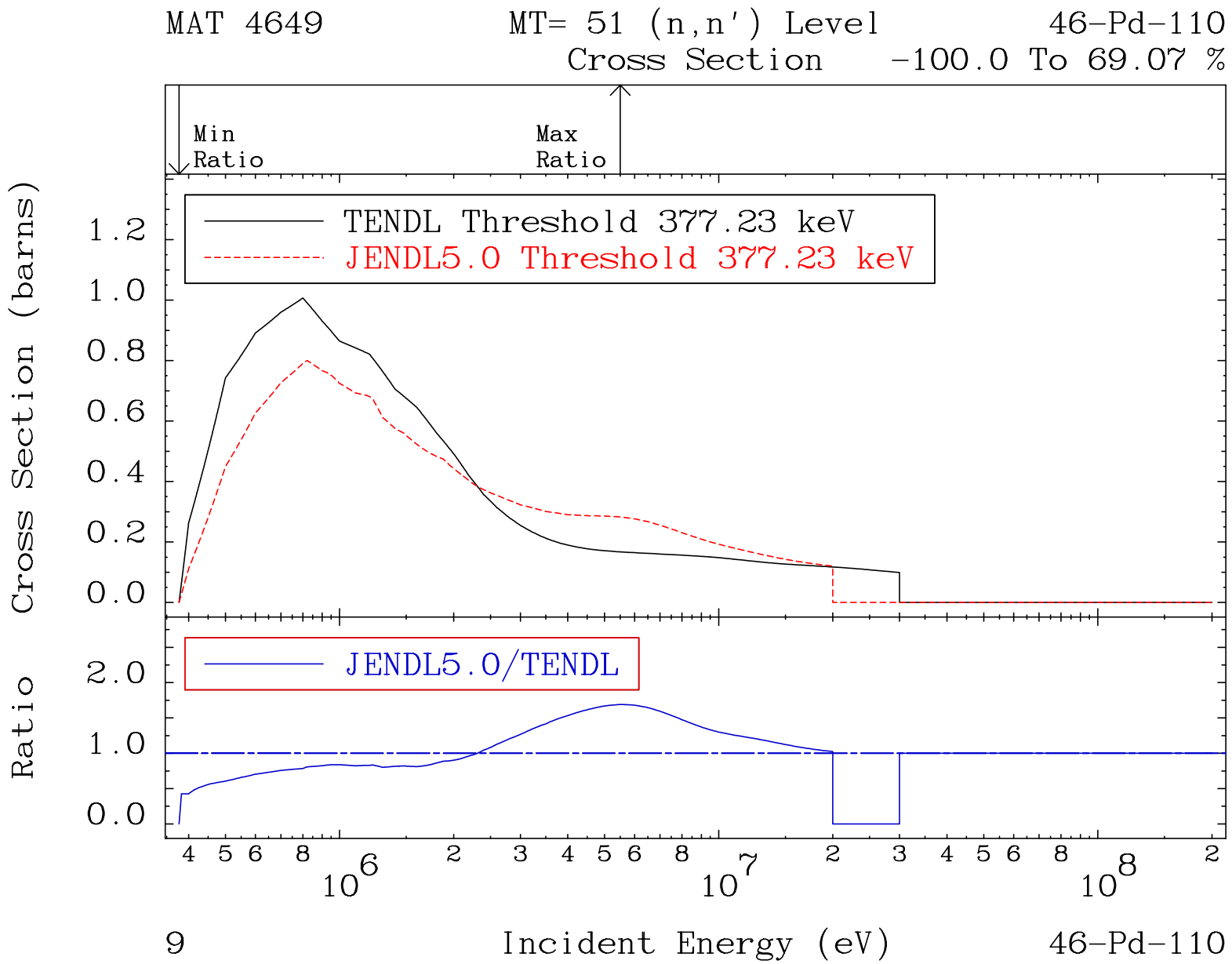

MAT 4649
(n,remainder)
Cross Section
46-Pd-110
-4.251 To 0.145 %
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
Cross Section (barns)
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.02
1.00
0.98
0.96
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
46-Pd-110

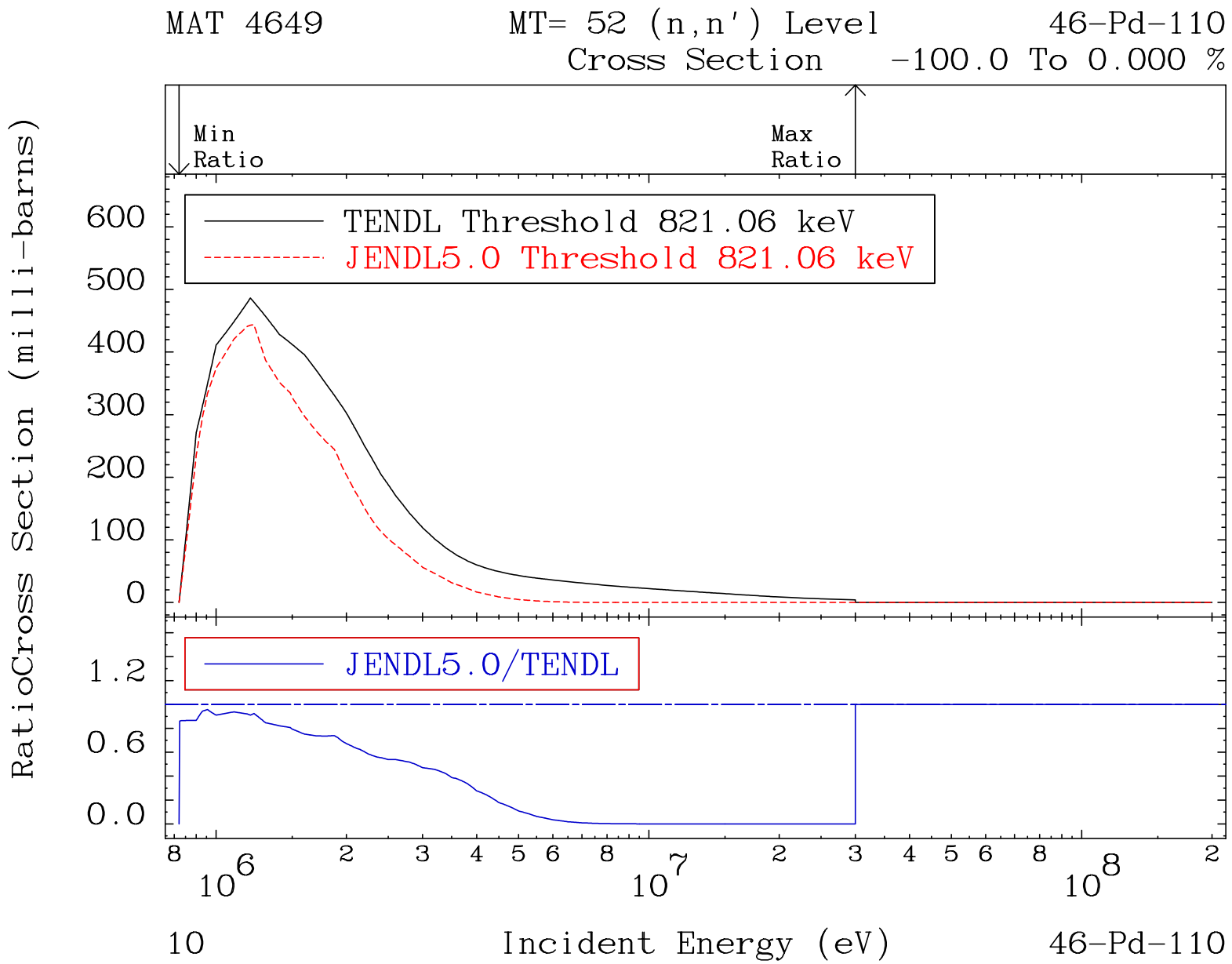

MAT 4649
(n,2n)
Cross Section
46-Pd-110
-100.0 To 17.77 %
Max
Ratio
TENDL Threshold 8.8765 MeV
JENDL5.0 Threshold 8.8948 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
1.0
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
5
Incident Energy (eV)
46-Pd-110

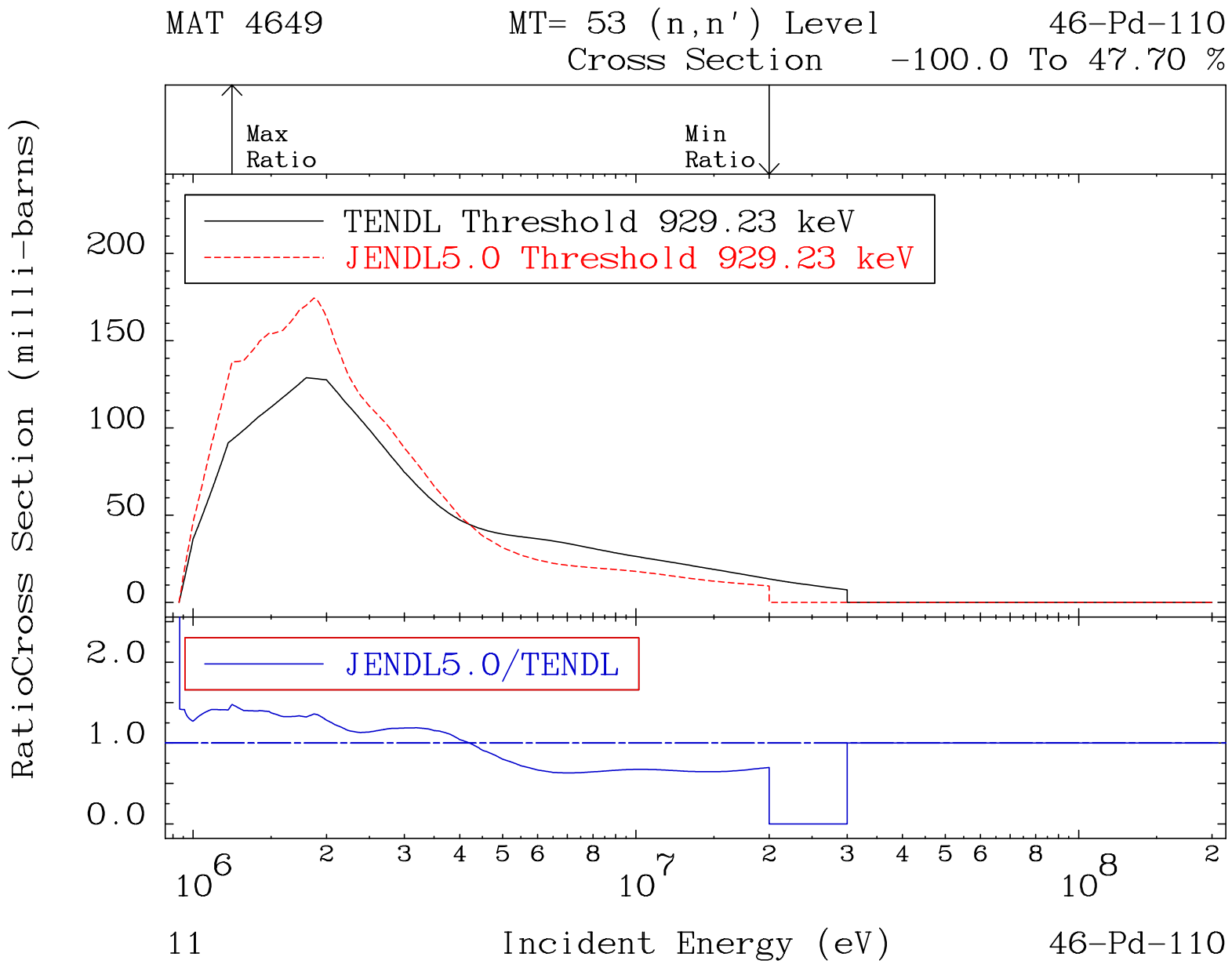

MAT 4649
(n,3n)
46-Pd-110
Cross Section
-100.0 To 190.7 %
Max
Ratio
TENDL Threshold 15.087 MeV
JENDL5.0 Threshold 15.105 MeV
Cross Section (barns)
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
4
2
0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
46-Pd-110

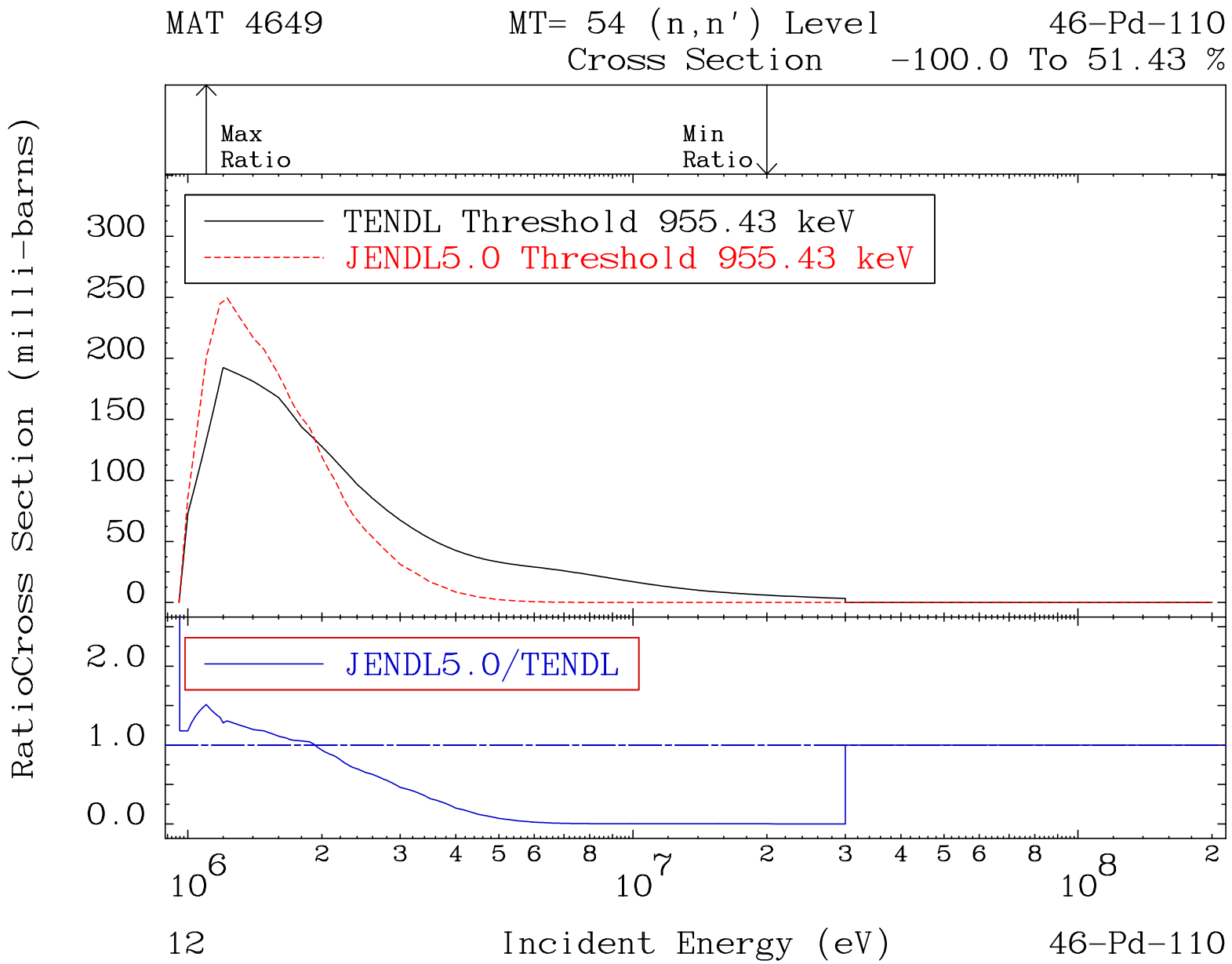

MAT 4649
(n,n') α
Cross Section
46-Pd-110
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 4.4732 MeV
JENDL5.0 Threshold 4.4929 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
46-Pd-110
50
40
30
20
10
0
8
4
0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
7

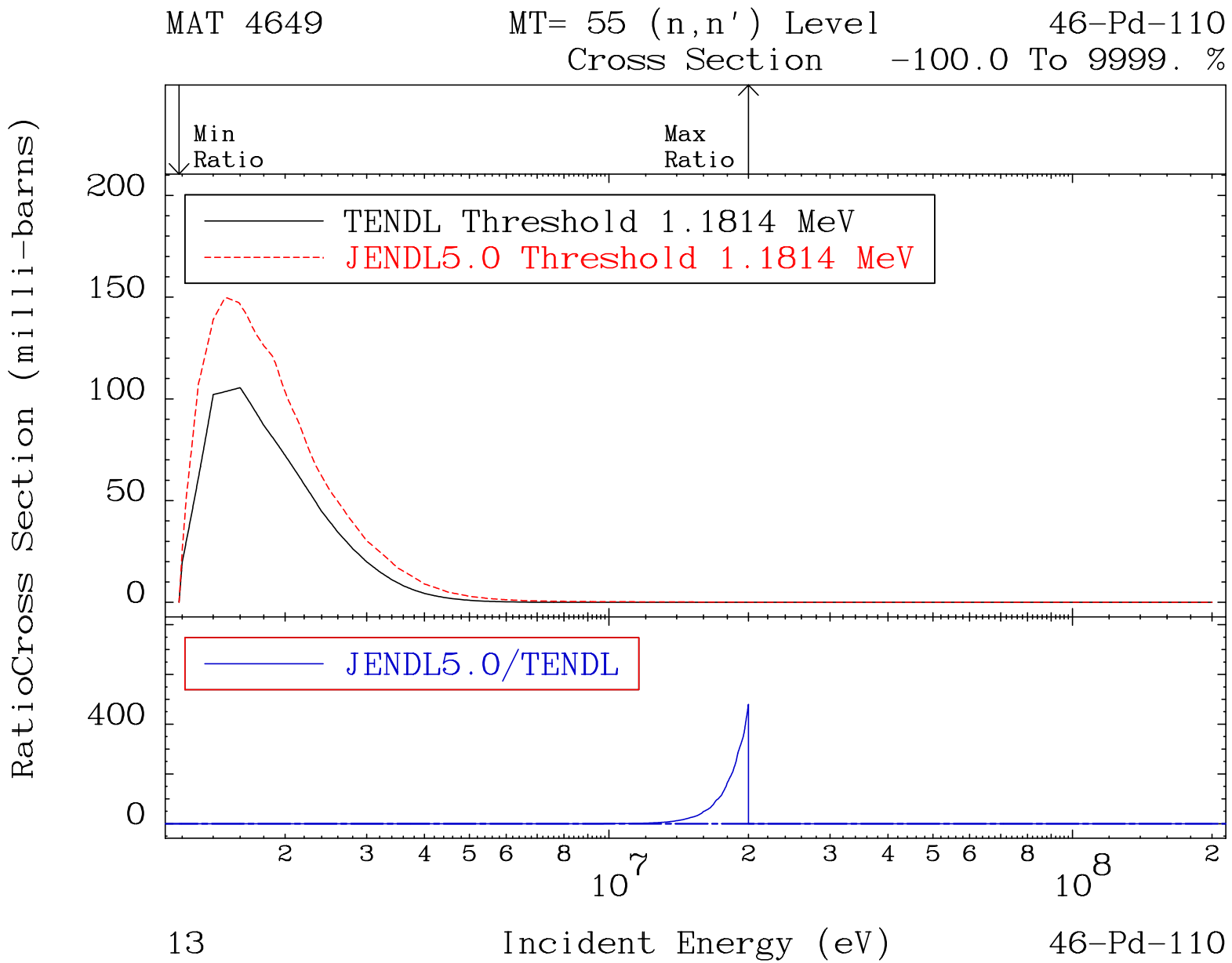

MAT 4649
(n,n') p
Cross Section
46-Pd-110
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 10.718 MeV
JENDL5.0 Threshold 10.725 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
8
4
0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
46-Pd-110

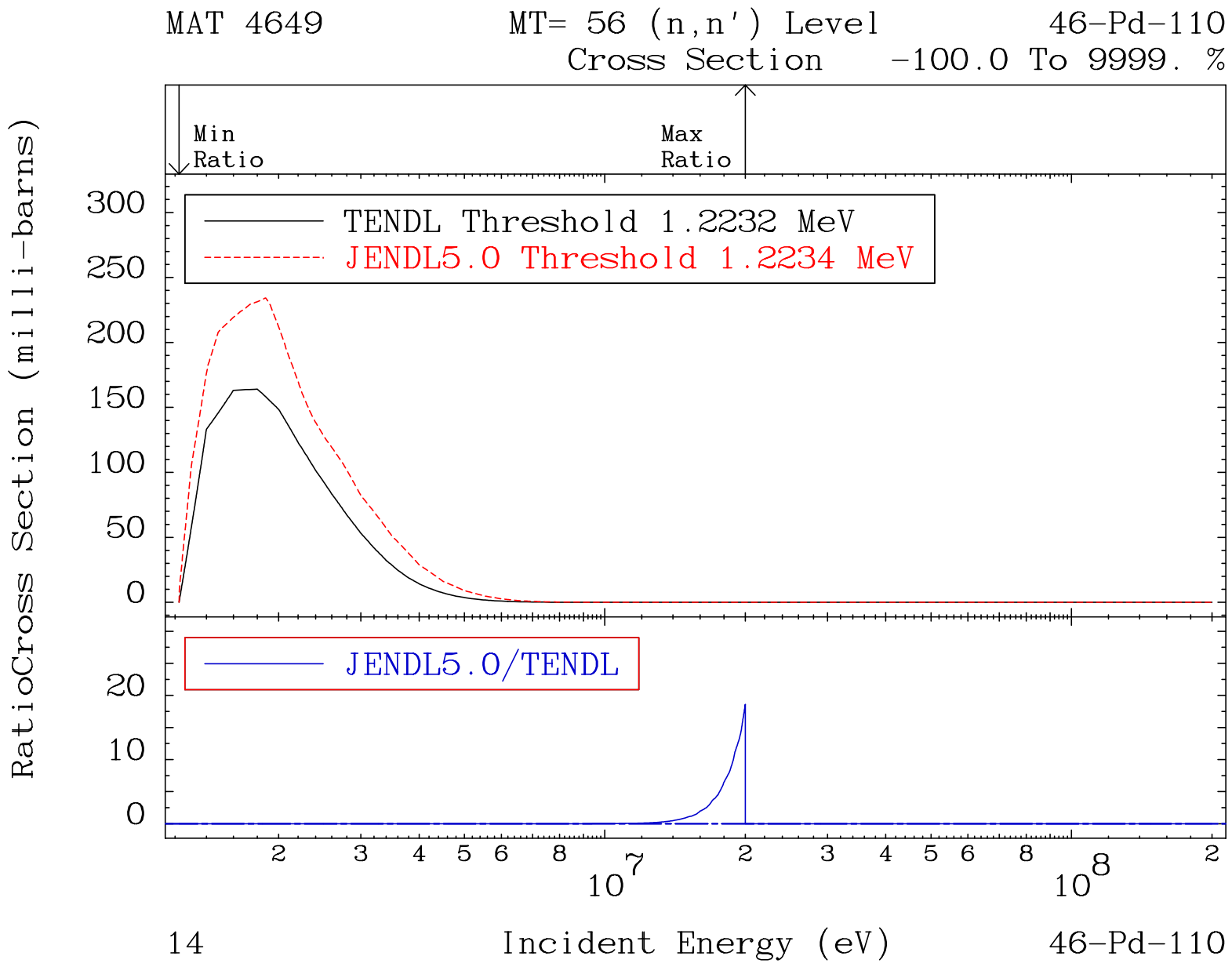

MAT 4649
MT= 51 (n,n') Level
46-Pd-110
Cross Section -100.0 To 69.07 %
Min Ratio
Max Ratio
TENDL Threshold 377.23 keV
JENDL5.0 Threshold 377.23 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
9
46-Pd-110

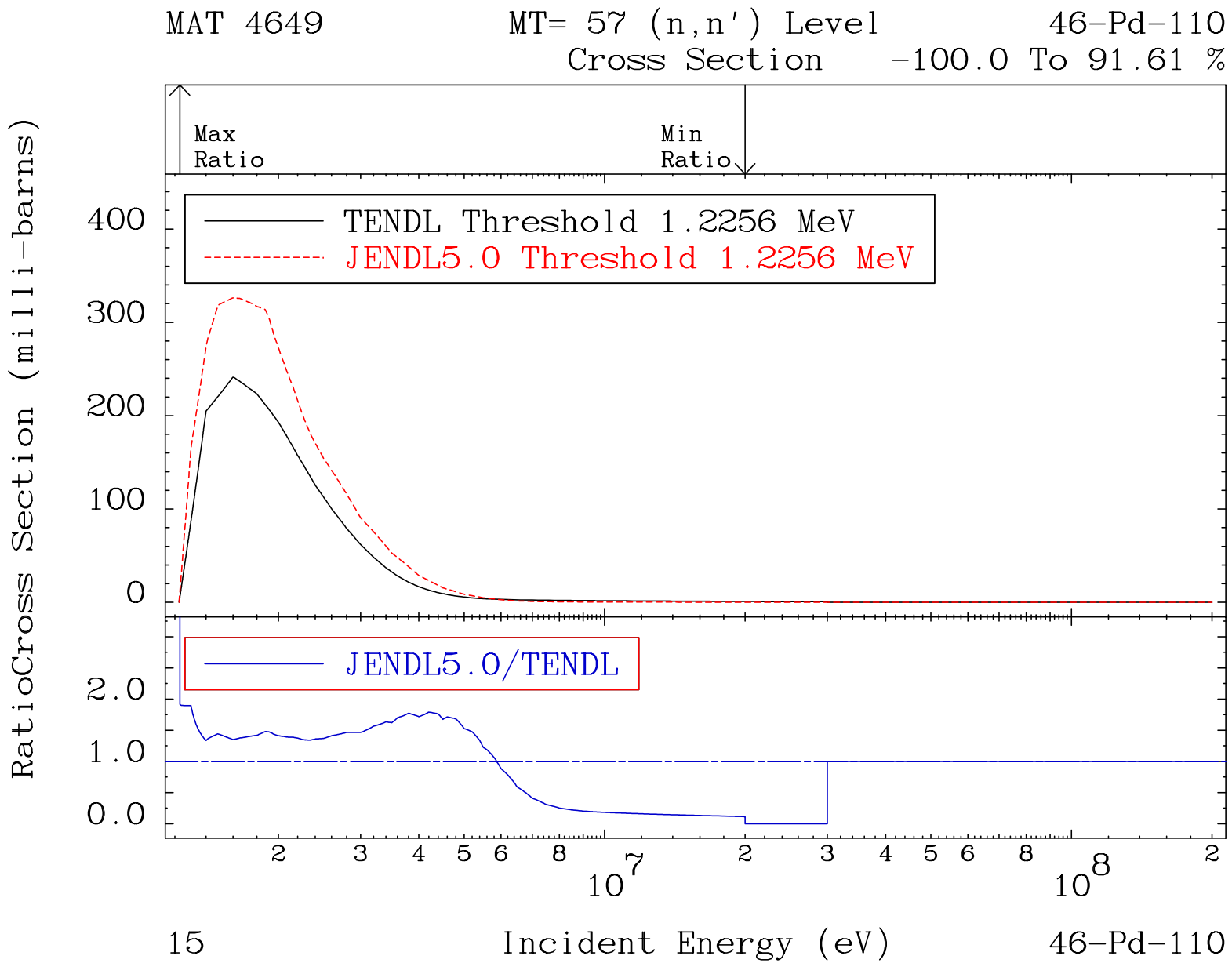

MAT 4649
MT= 52 (n,n') Level
Cross Section
46-Pd-110
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 821.06 keV
JENDL5.0 Threshold 821.06 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
500
400
300
200
100
0
1.2
0.6
0.0
8
2
3
4
5
6
8
2
3
4
5
6
8
2
10^6
10^7
10^8
10
Incident Energy (eV)
46-Pd-110

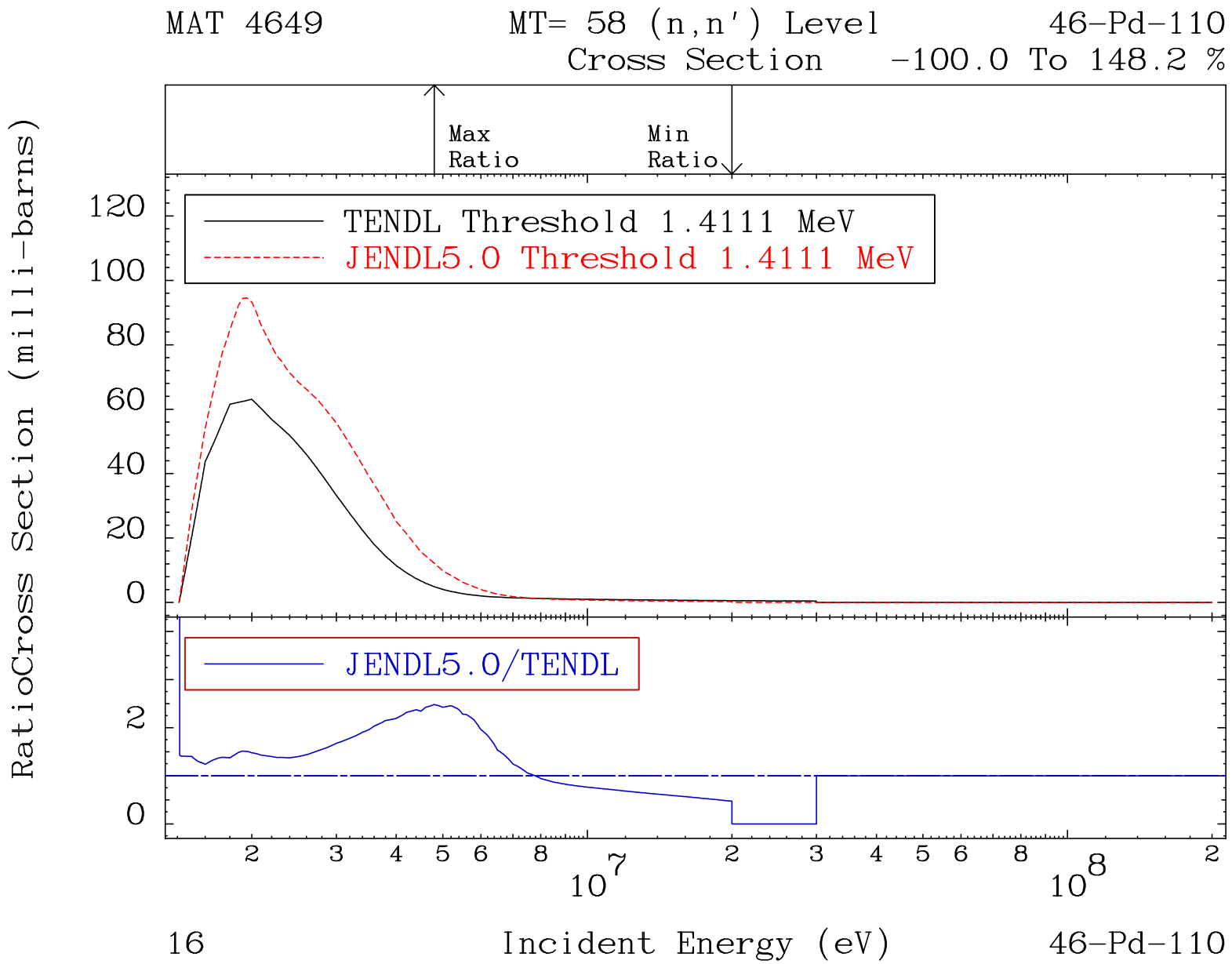

MAT 4649
MT= 53 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 47.70 %
Max Ratio
Min Ratio
TENDL Threshold 929.23 keV
JENDL5.0 Threshold 929.23 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
2.0
1.0
0.0
10^6
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
11
Incident Energy (eV)
46-Pd-110

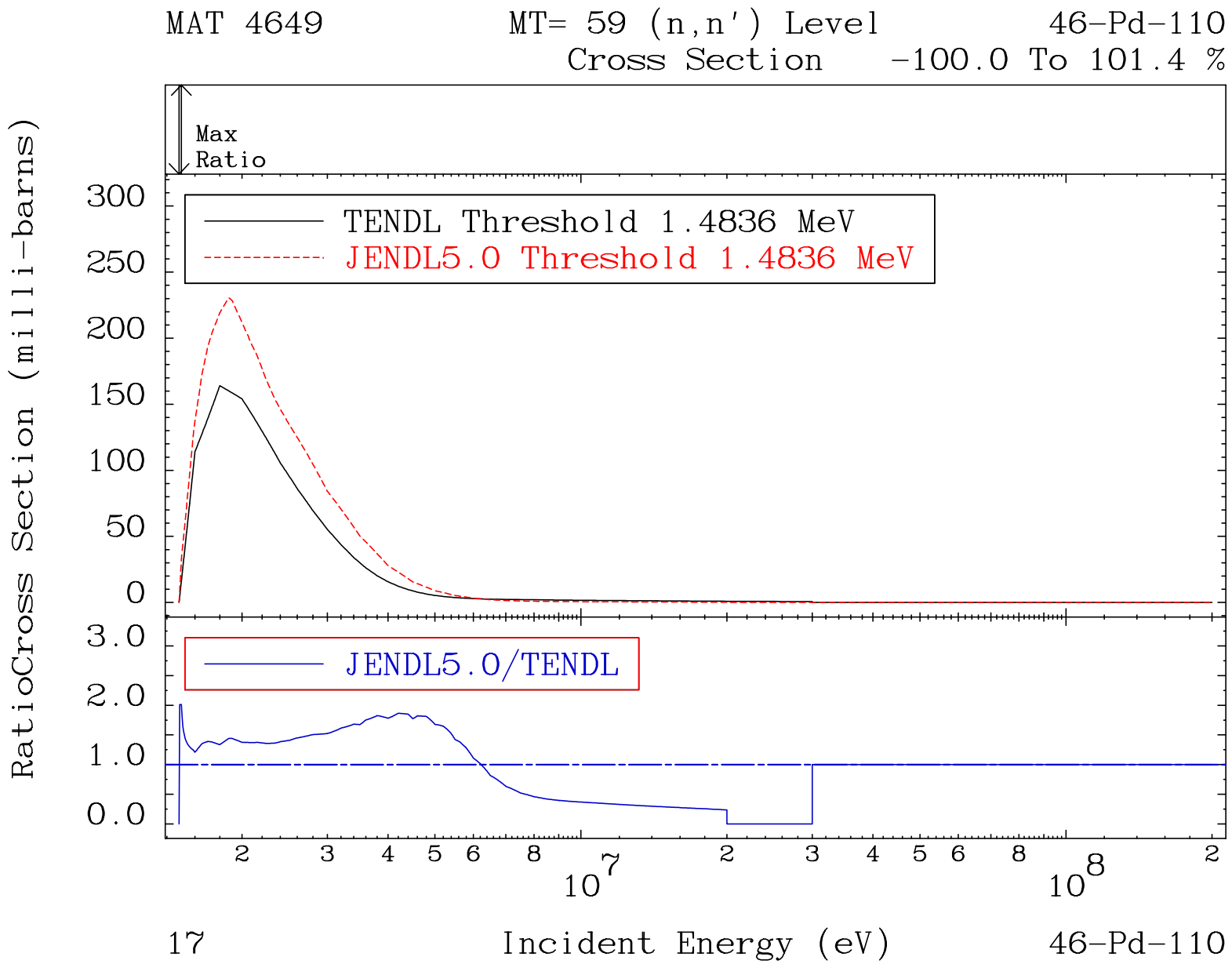

MAT 4649
MT= 54 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 51.43 %
Max Ratio
Min Ratio
TENDL Threshold 955.43 keV
JENDL5.0 Threshold 955.43 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
2.0
1.0
0.0
10^6
10^7
10^8
Incident Energy (eV)
12
46-Pd-110

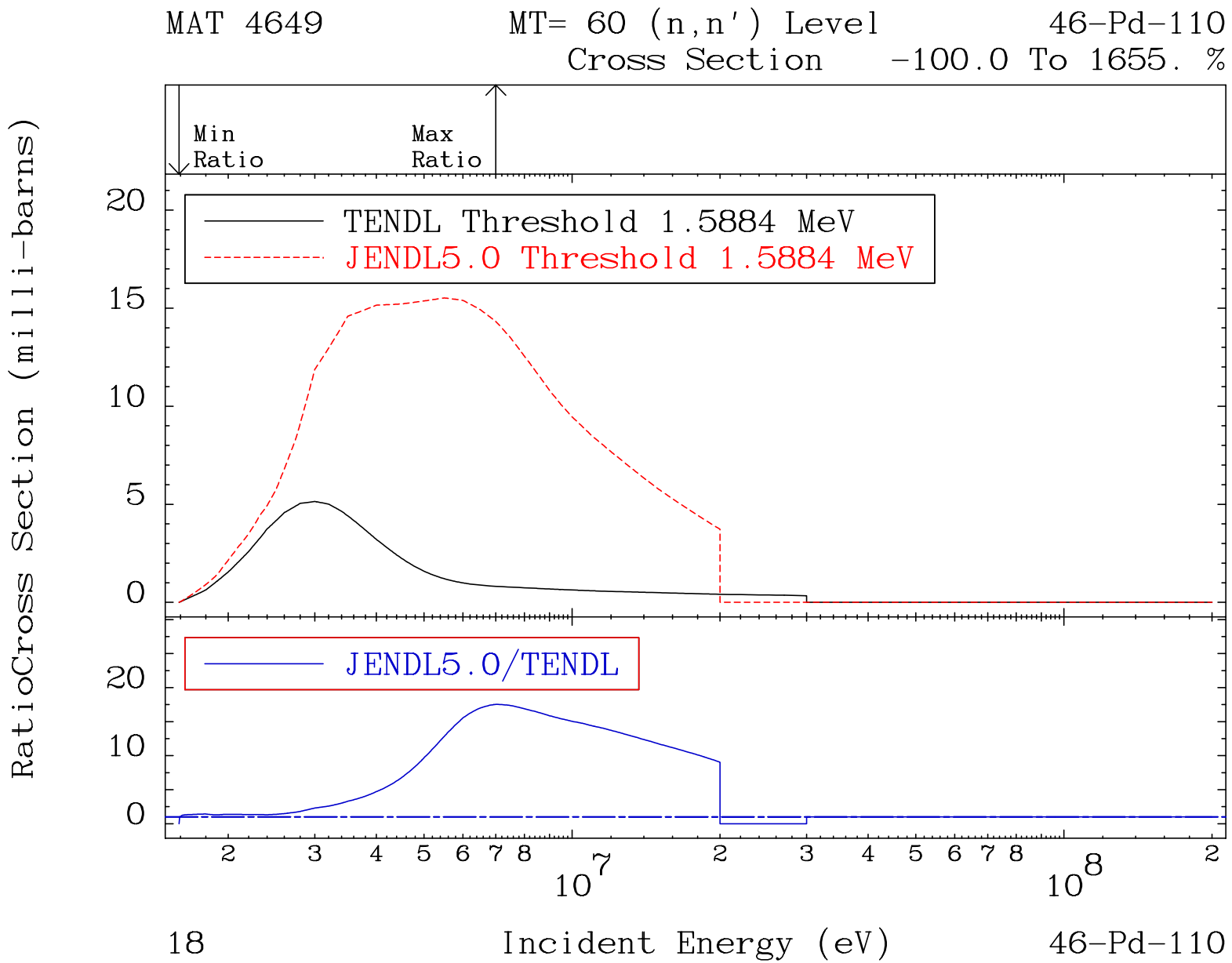

MAT 4649
MT= 55 (n,n') Level
46-Pd-110
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.1814 MeV
JENDL5.0 Threshold 1.1814 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
400
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
13
Incident Energy (eV)
46-Pd-110

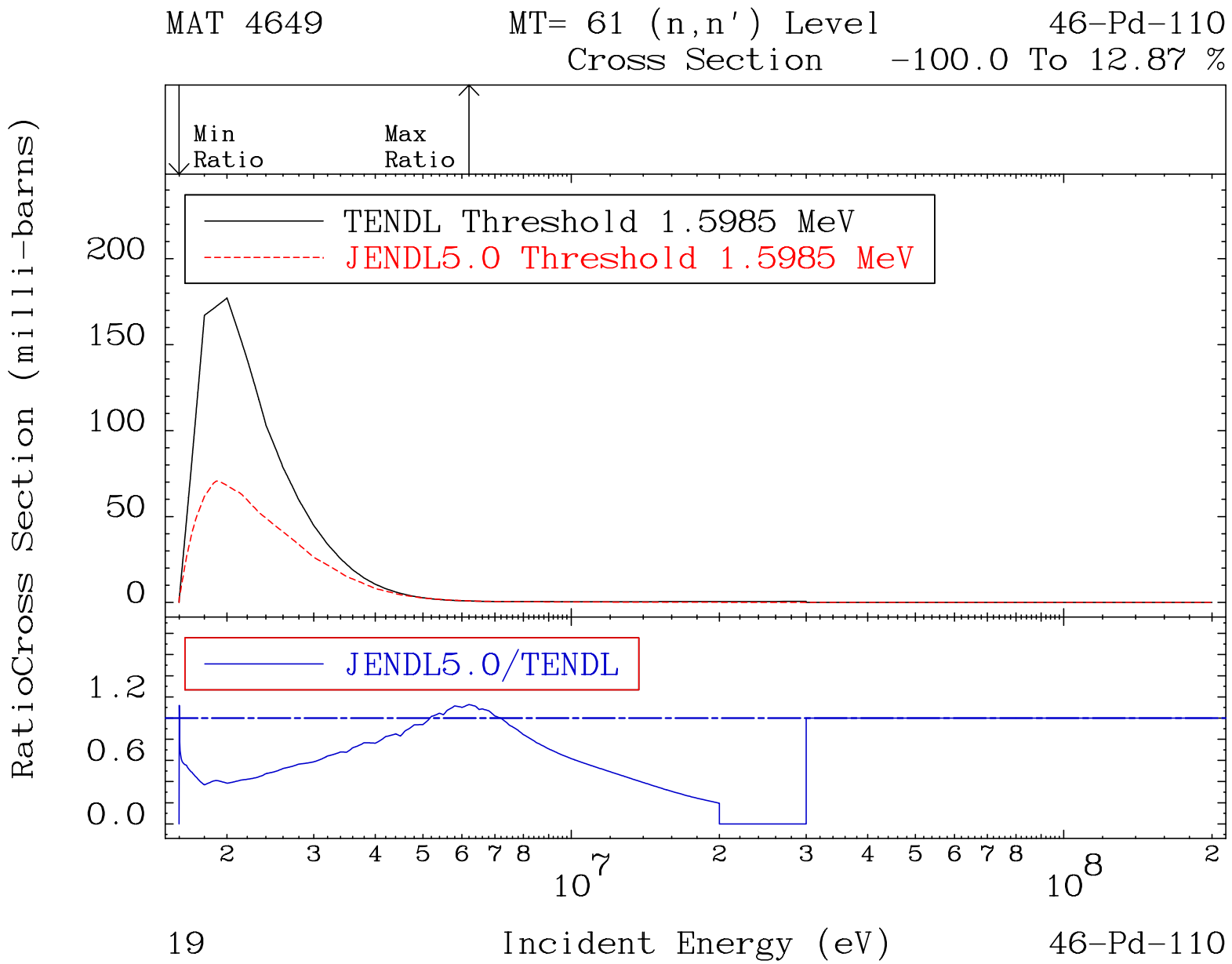

MAT 4649
MT= 56 (n,n') Level
46-Pd-110
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.2232 MeV
JENDL5.0 Threshold 1.2234 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
20
10
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
46-Pd-110

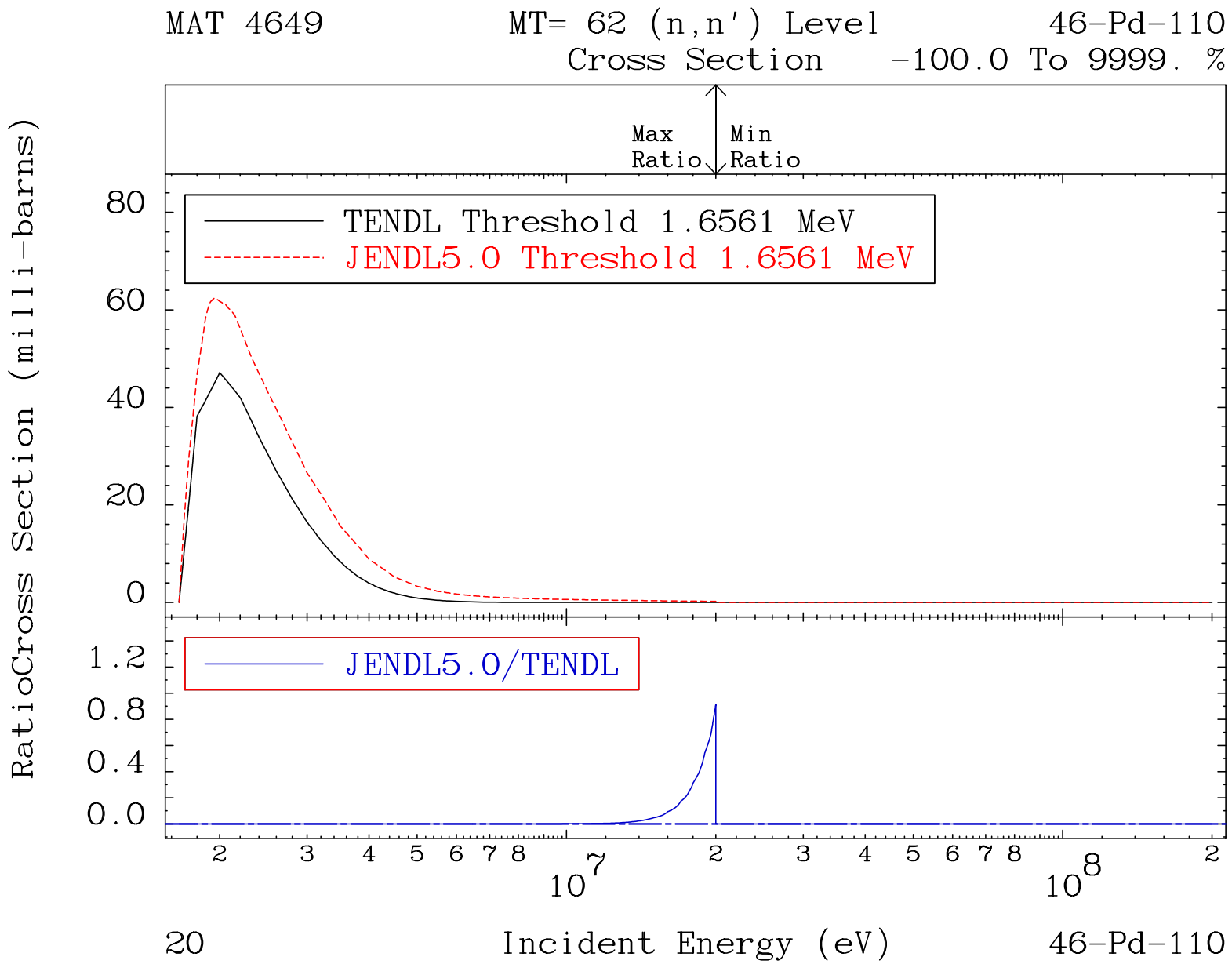

MAT 4649
MT= 57 (n,n') Level
46-Pd-110
Cross Section -100.0 To 91.61 %
Max Ratio
Min Ratio
TENDL Threshold 1.2256 MeV
JENDL5.0 Threshold 1.2256 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
2.0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
46-Pd-110

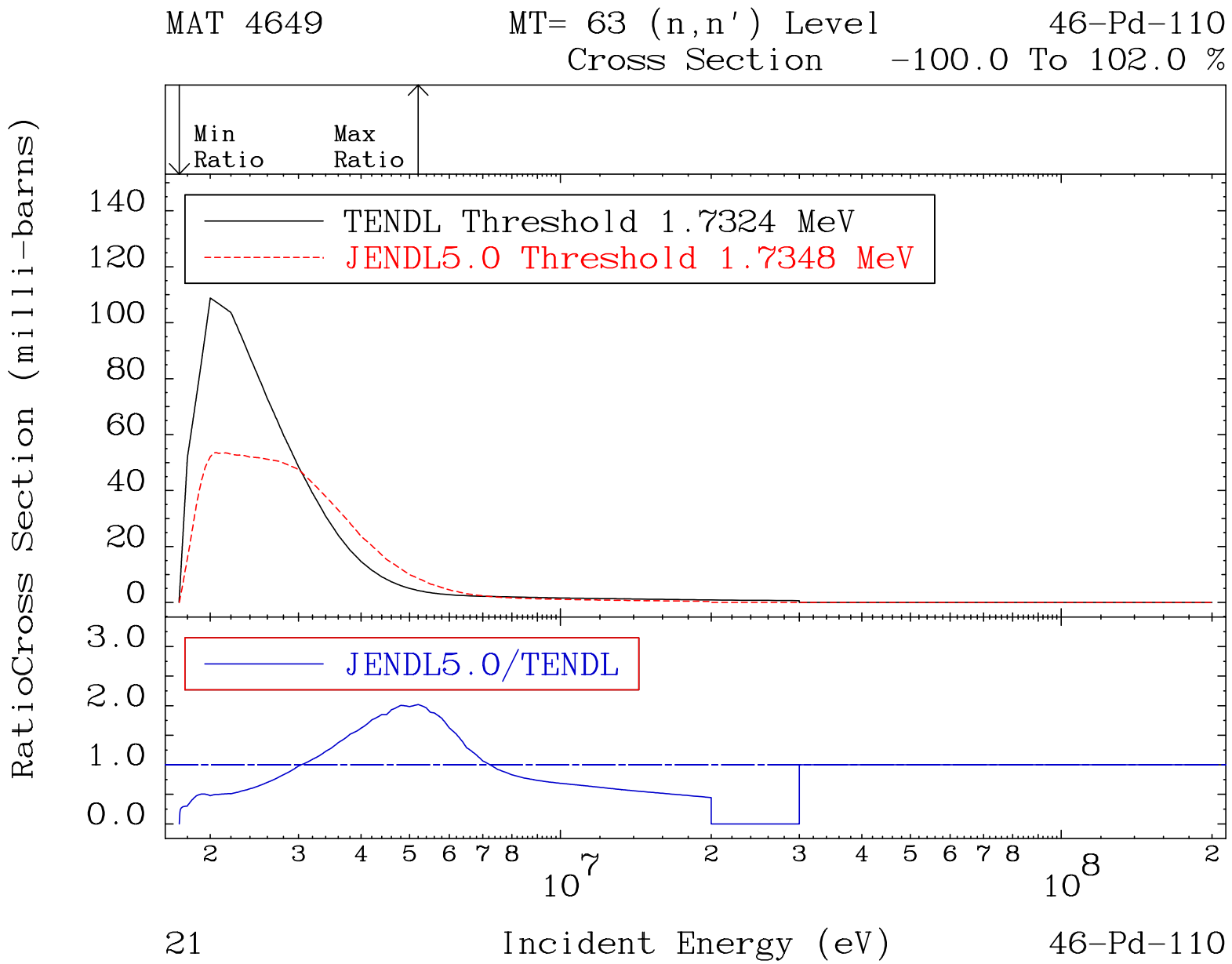

MAT 4649
MT= 58 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 148.2 %
Max Ratio
Min Ratio
TENDL Threshold 1.4111 MeV
JENDL5.0 Threshold 1.4111 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2
0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
16
Incident Energy (eV)
46-Pd-110

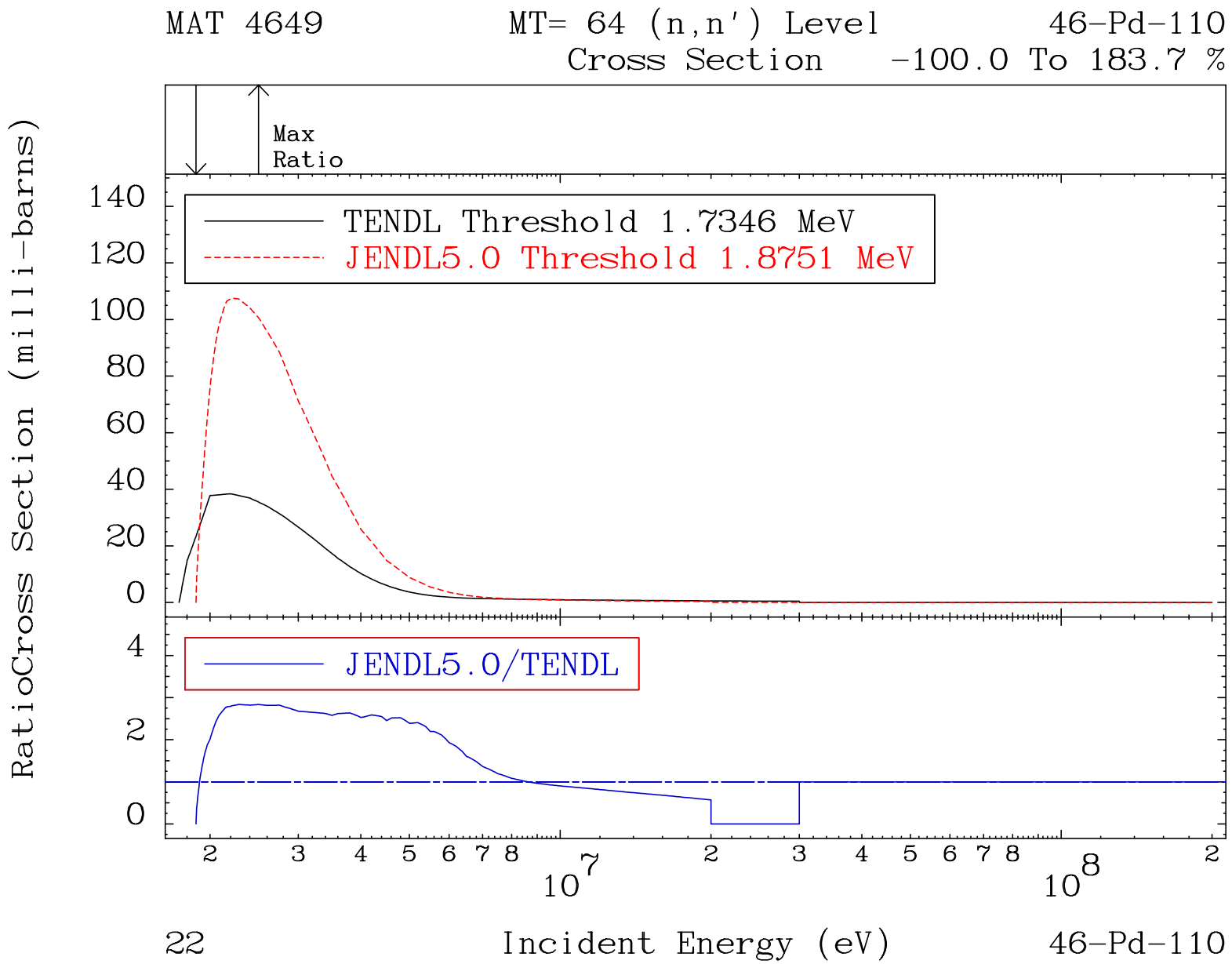

MAT 4649
MT= 59 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 101.4 %
Max
Ratio
TENDL Threshold 1.4836 MeV
JENDL5.0 Threshold 1.4836 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
3.0
2.0
1.0
0.0
2
3
4
5
6
8
10^7
2
3
4
5
6
8
10^8
2
17
Incident Energy (eV)
46-Pd-110

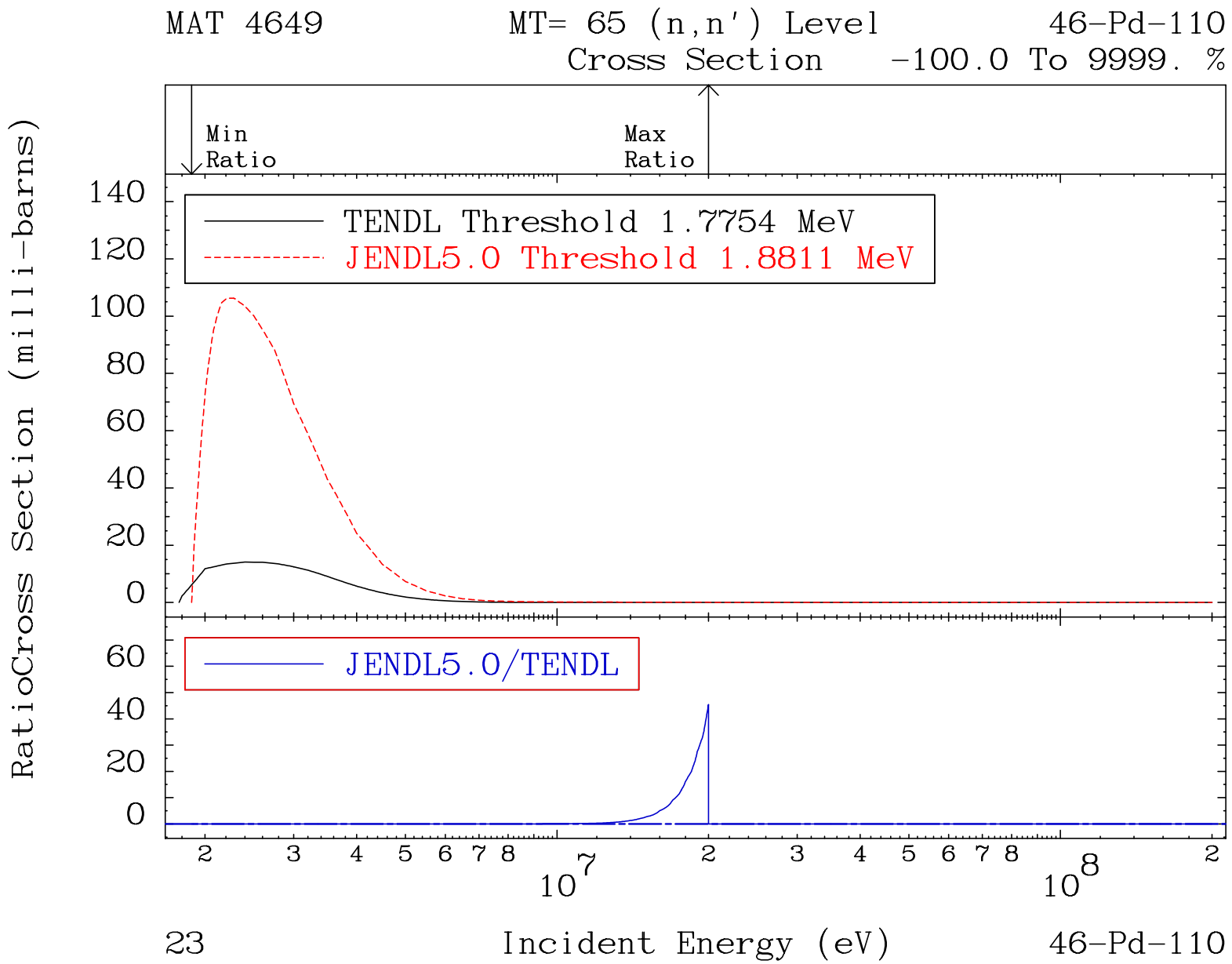

MAT 4649
MT= 60 (n,n') Level
46-Pd-110
Cross Section -100.0 To 1655. %
Min Ratio
Max Ratio
TENDL Threshold 1.5884 MeV
JENDL5.0 Threshold 1.5884 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
18
46-Pd-110

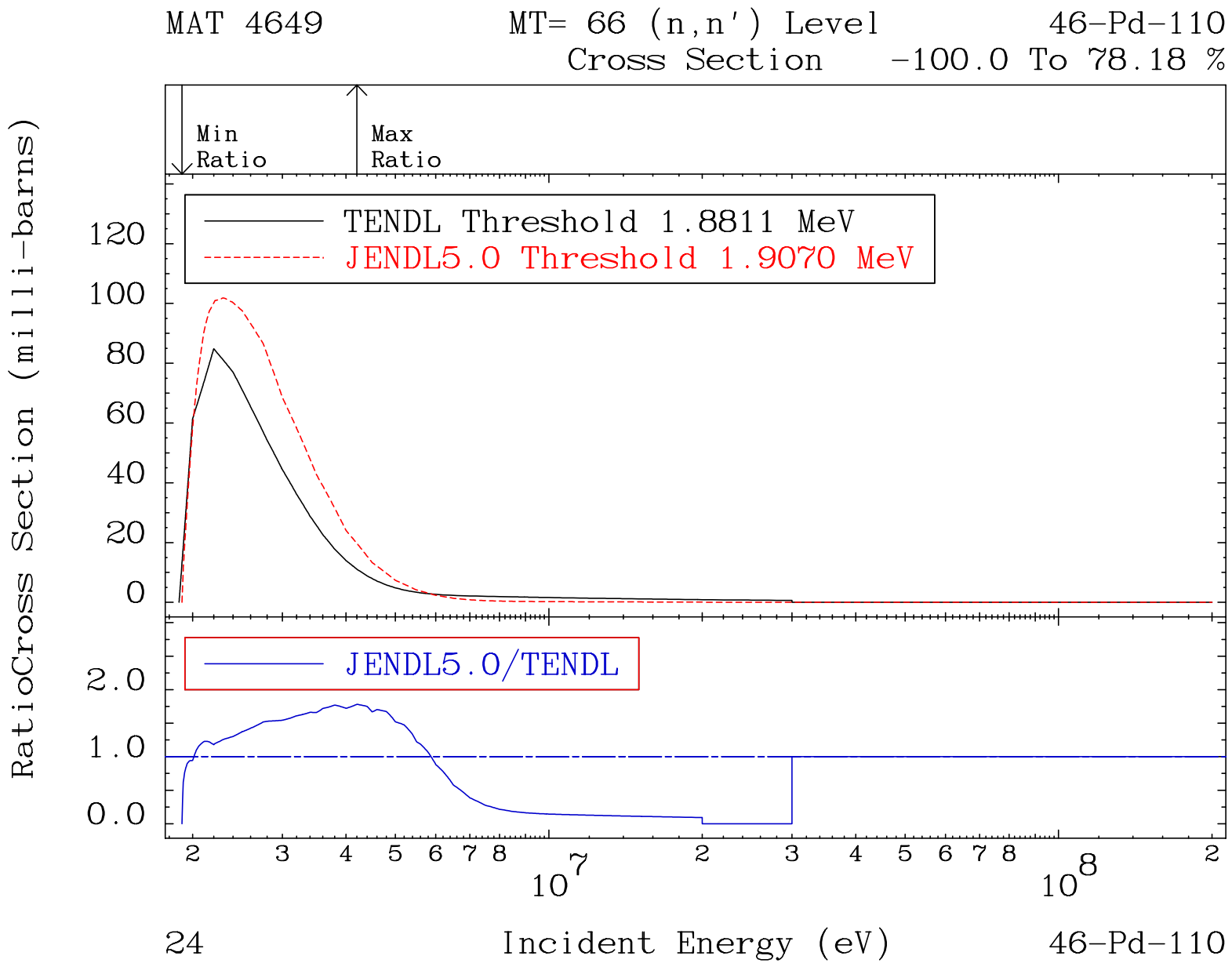

MAT 4649
MT= 61 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 12.87 %
Min Ratio
Max Ratio
TENDL Threshold 1.5985 MeV
JENDL5.0 Threshold 1.5985 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
19
Incident Energy (eV)
46-Pd-110

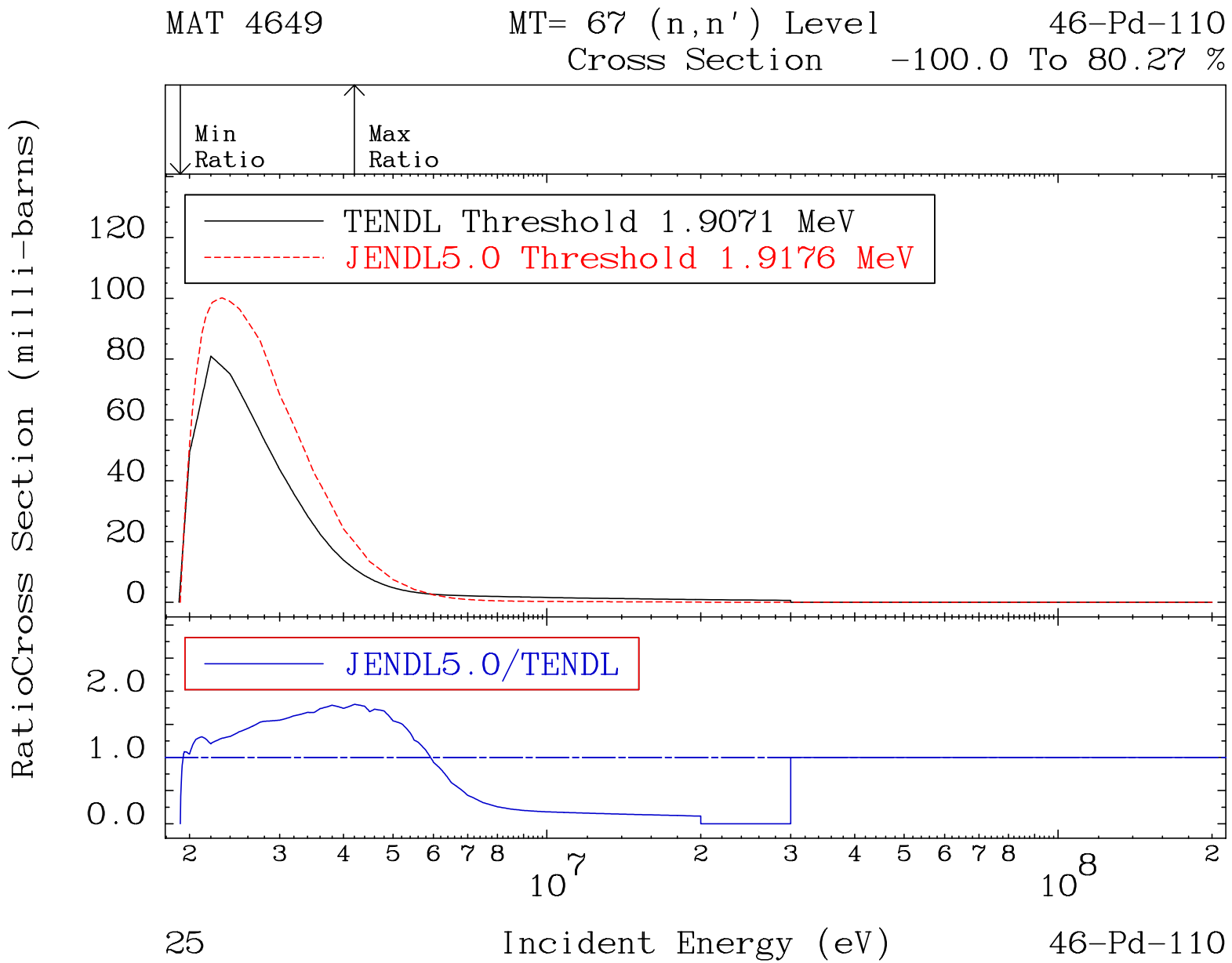

MAT 4649
MT= 62 (n,n') Level
46-Pd-110
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.6561 MeV
JENDL5.0 Threshold 1.6561 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.8
0.4
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
20
Incident Energy (eV)
46-Pd-110

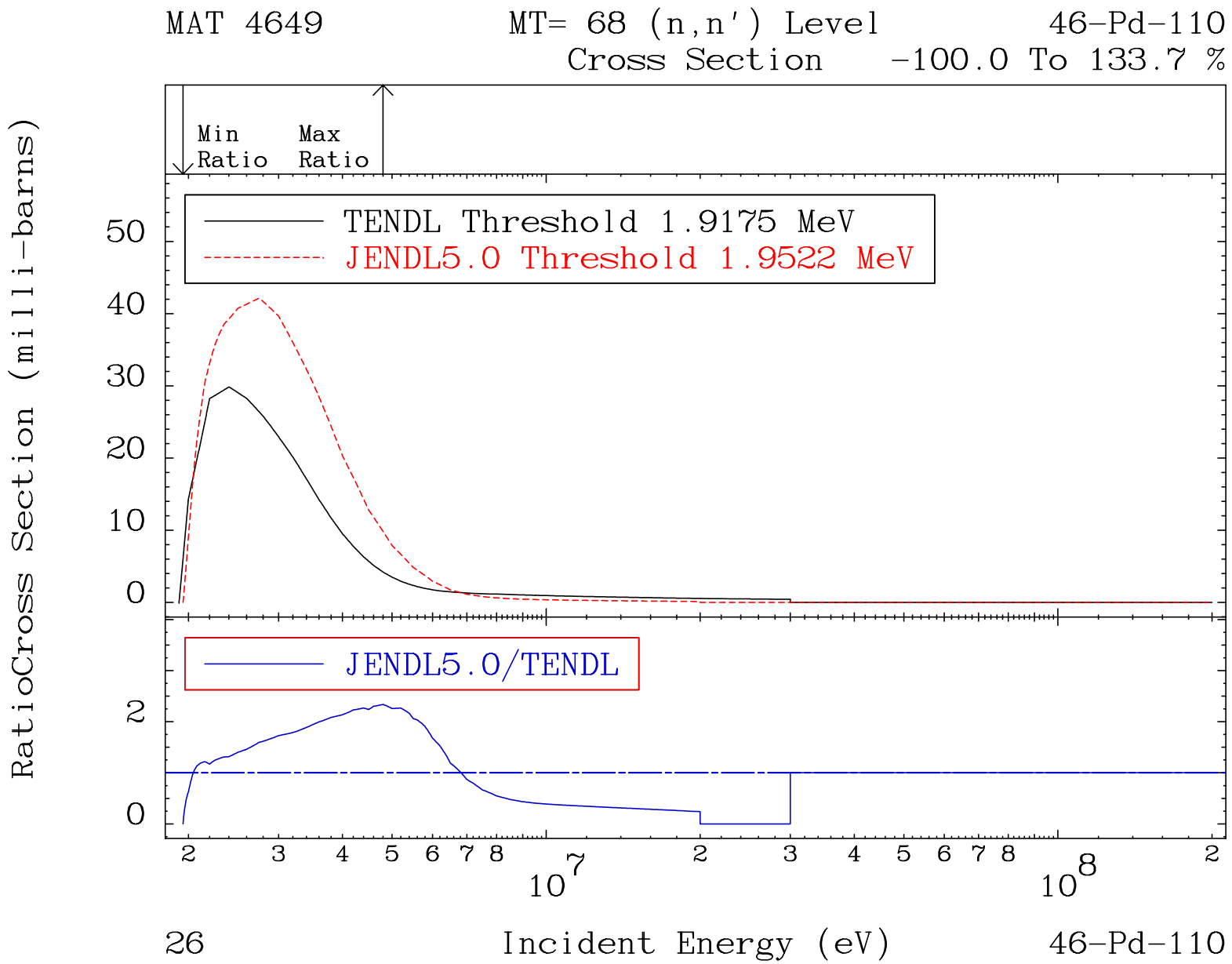

MAT 4649
MT= 63 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 102.0 %
Min Ratio
Max Ratio
TENDL Threshold 1.7324 MeV
JENDL5.0 Threshold 1.7348 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
21
Incident Energy (eV)
46-Pd-110

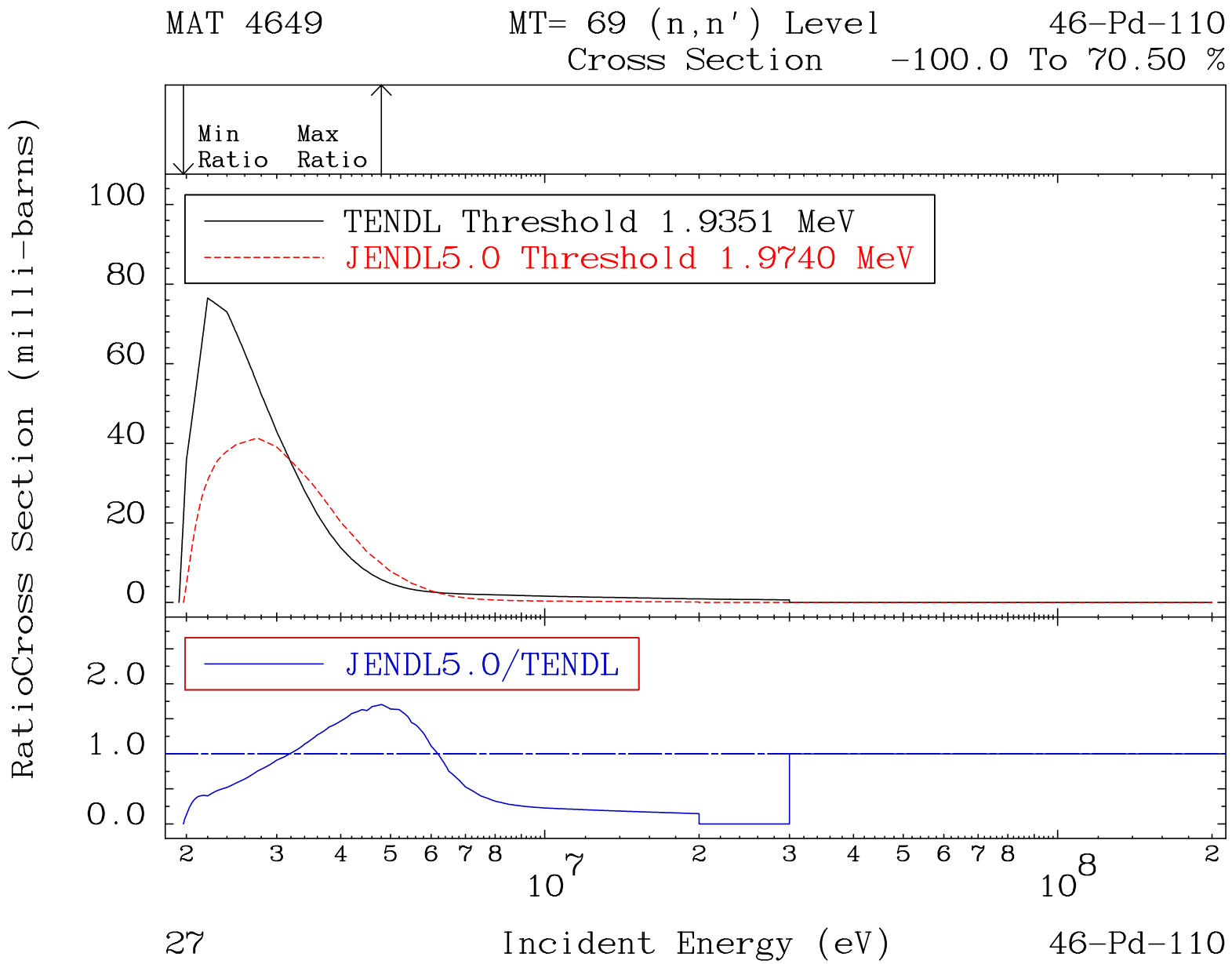

MAT 4649
MT= 64 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 183.7 %
Max
Ratio
TENDL Threshold 1.7346 MeV
JENDL5.0 Threshold 1.8751 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
22
Incident Energy (eV)
46-Pd-110

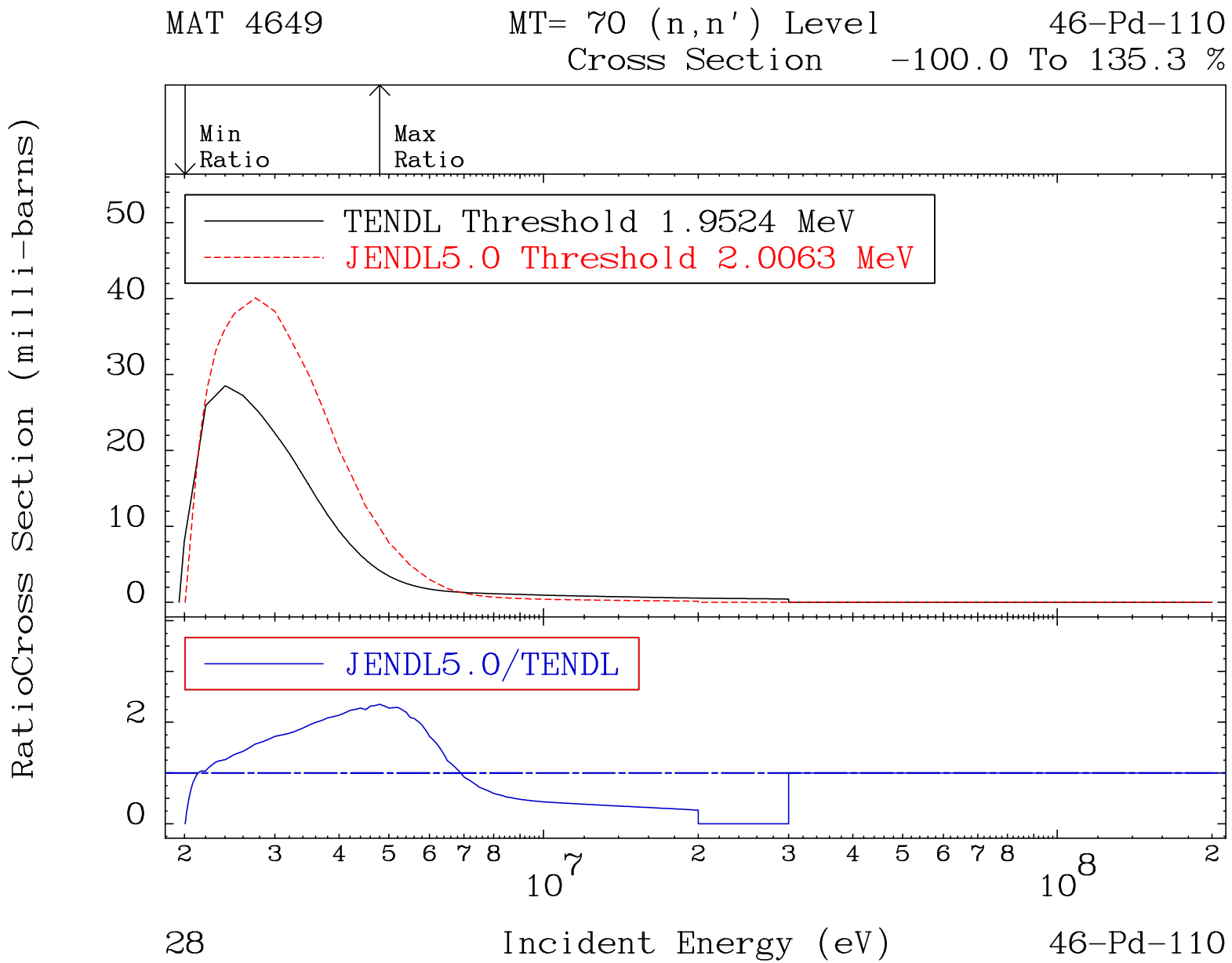

MAT 4649
MT= 65 (n,n') Level
46-Pd-110
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 1.7754 MeV
JENDL5.0 Threshold 1.8811 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
60
40
20
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
23
Incident Energy (eV)
46-Pd-110

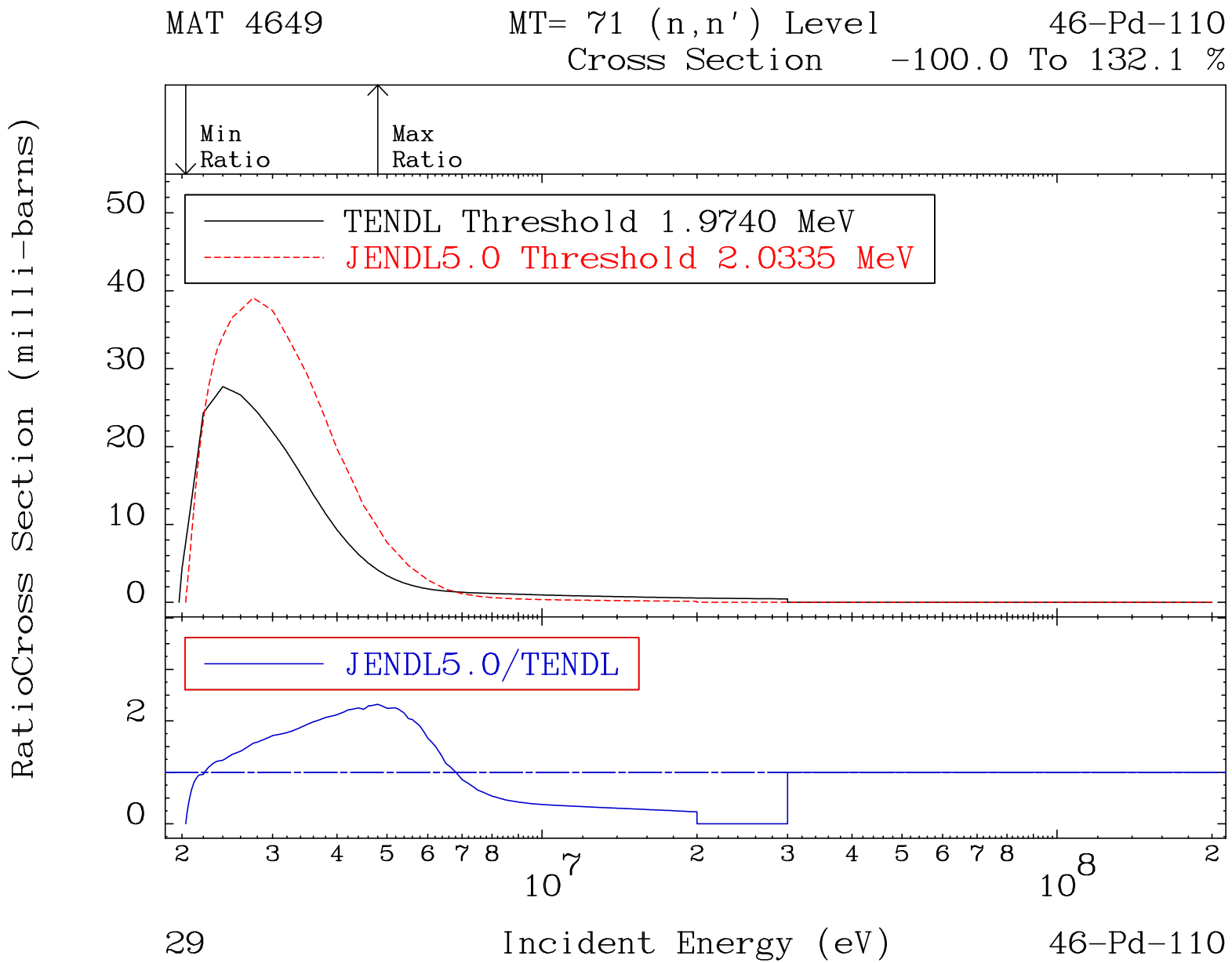

MAT 4649
MT= 66 (n,n') Level
46-Pd-110
Cross Section -100.0 To 78.18 %
Min Ratio
Max Ratio
TENDL Threshold 1.8811 MeV
JENDL5.0 Threshold 1.9070 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2.0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
24
Incident Energy (eV)
46-Pd-110

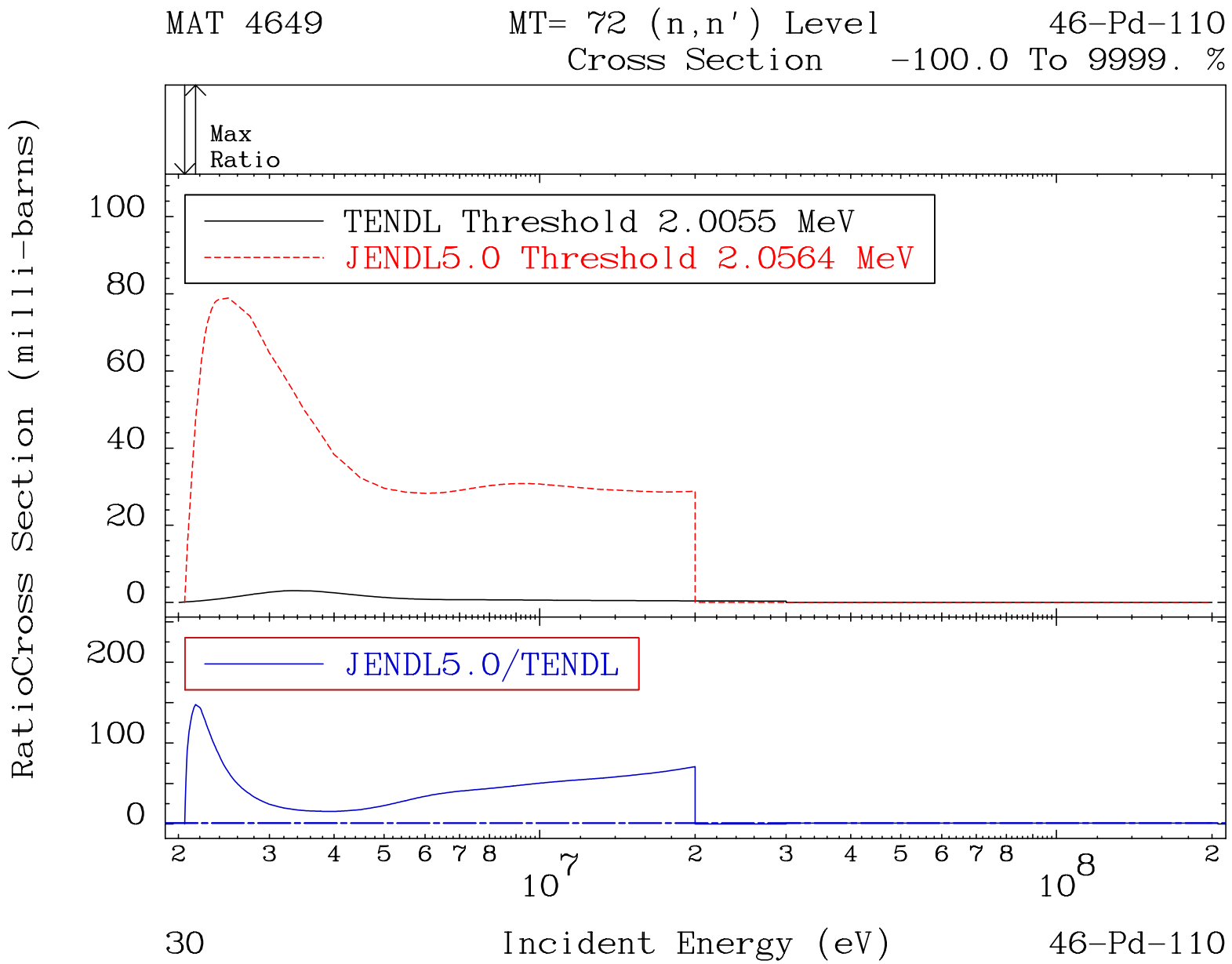

MAT 4649
MT= 67 (n,n') Level
46-Pd-110
Cross Section -100.0 To 80.27 %
Min Ratio
Max Ratio
TENDL Threshold 1.9071 MeV
JENDL5.0 Threshold 1.9176 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
2.0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
25
Incident Energy (eV)
46-Pd-110

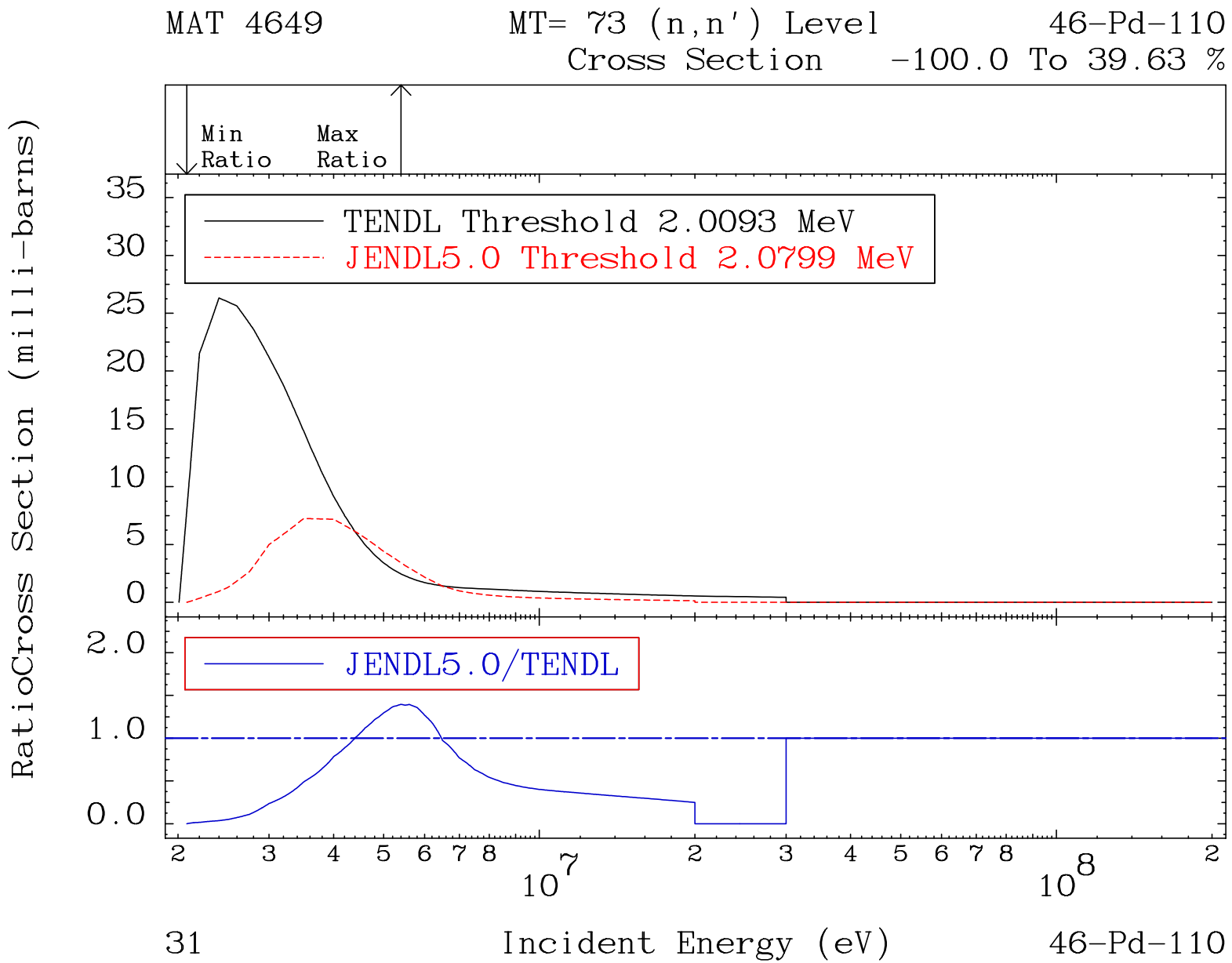

MAT 4649
MT= 68 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 133.7 %
Min Ratio
Max Ratio
TENDL Threshold 1.9175 MeV
JENDL5.0 Threshold 1.9522 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
26
Incident Energy (eV)
46-Pd-110

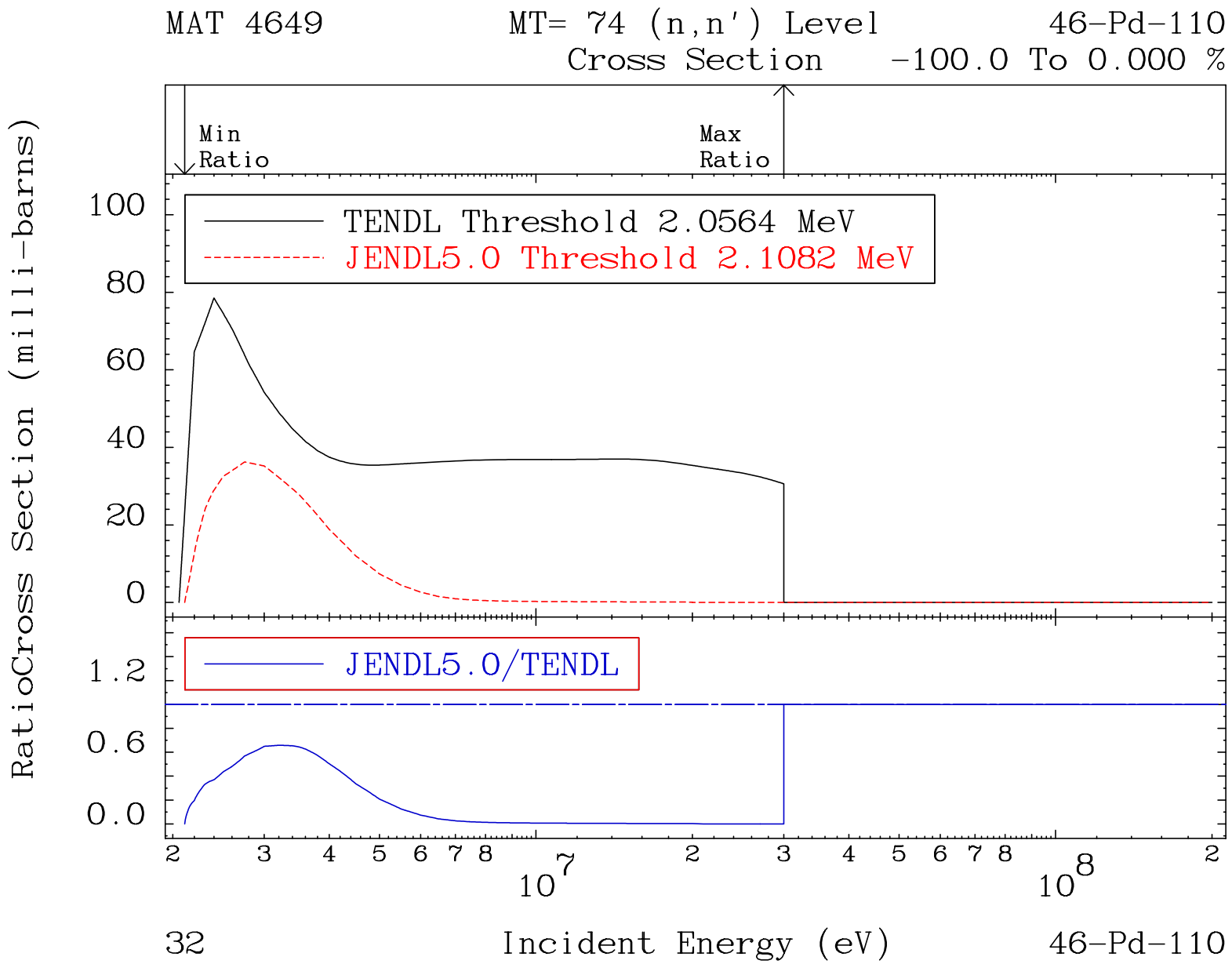

MAT 4649
MT= 69 (n,n') Level
46-Pd-110
Cross Section -100.0 To 70.50 %
Min Ratio
Max Ratio
TENDL Threshold 1.9351 MeV
JENDL5.0 Threshold 1.9740 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
2.0
1.0
0.0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
27
Incident Energy (eV)
46-Pd-110

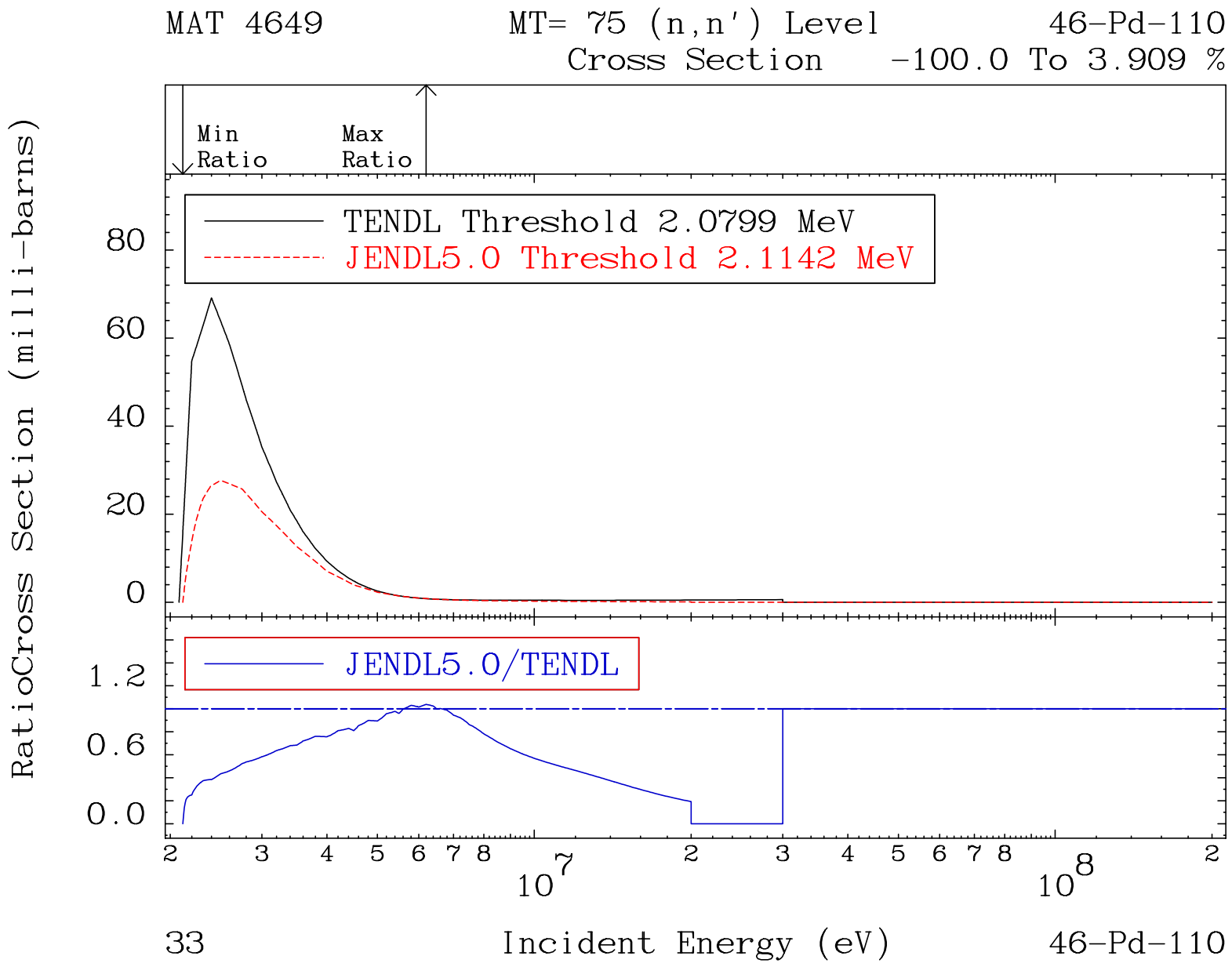

MAT 4649
MT= 70 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 135.3 %
Min Ratio
Max Ratio
TENDL Threshold 1.9524 MeV
JENDL5.0 Threshold 2.0063 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
28
Incident Energy (eV)
46-Pd-110

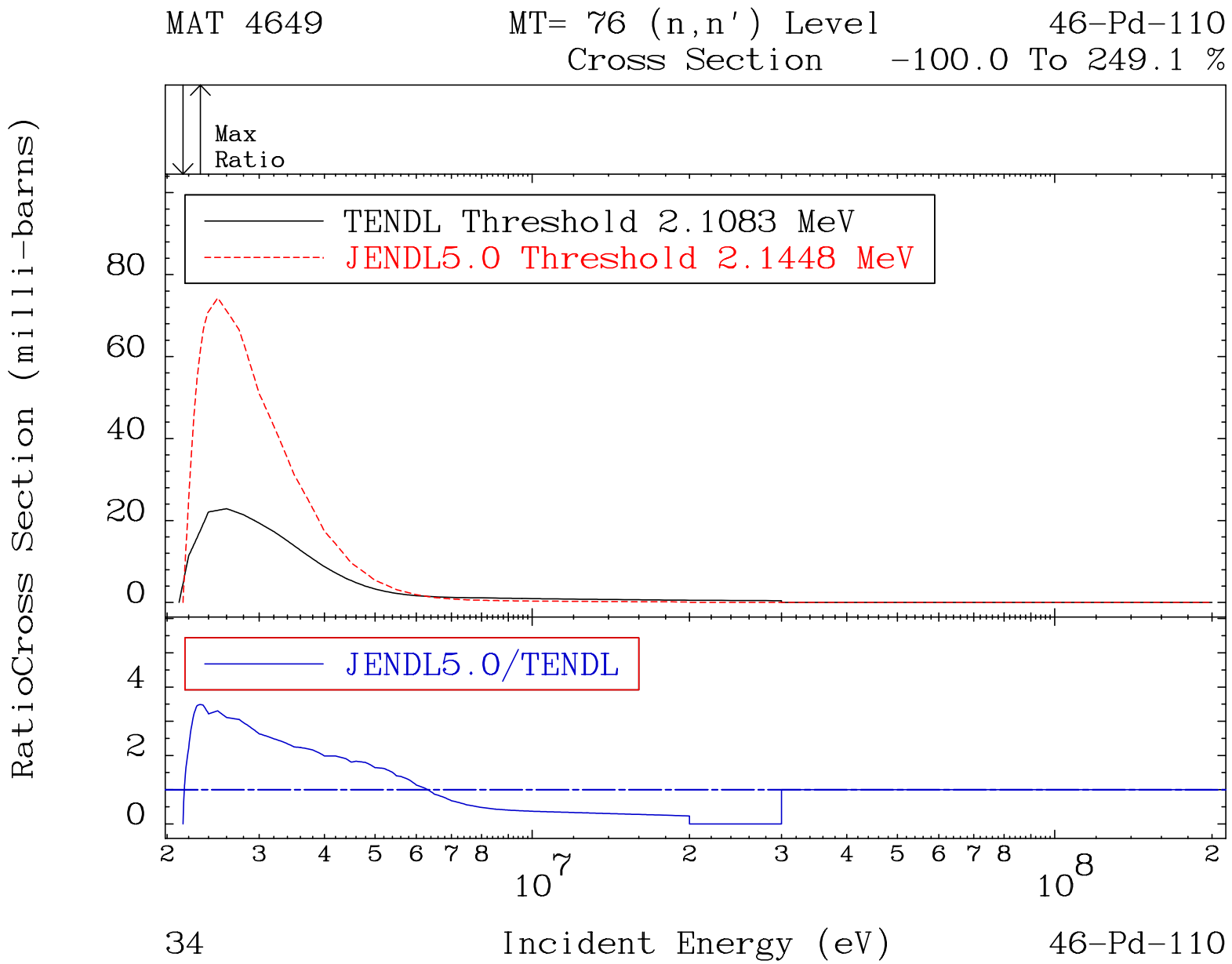

MAT 4649
MT= 71 (n,n') Level
46-Pd-110
Cross Section -100.0 To 132.1 %
Min Ratio
Max Ratio
TENDL Threshold 1.9740 MeV
JENDL5.0 Threshold 2.0335 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
29
Incident Energy (eV)
46-Pd-110

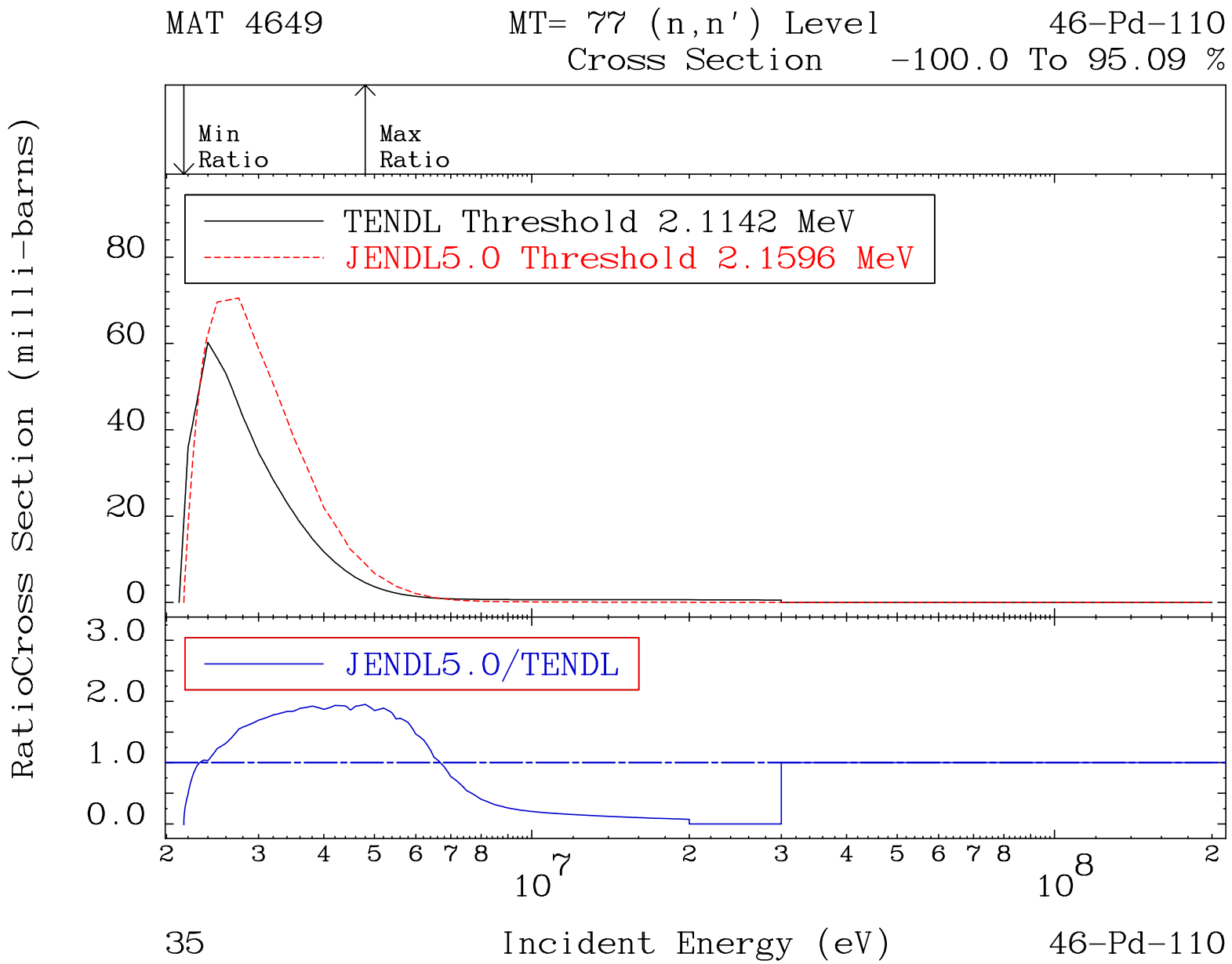

MAT 4649
MT= 72 (n,n') Level
46-Pd-110
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 2.0055 MeV
JENDL5.0 Threshold 2.0564 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
200
100
0
2 3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
30
Incident Energy (eV)
46-Pd-110

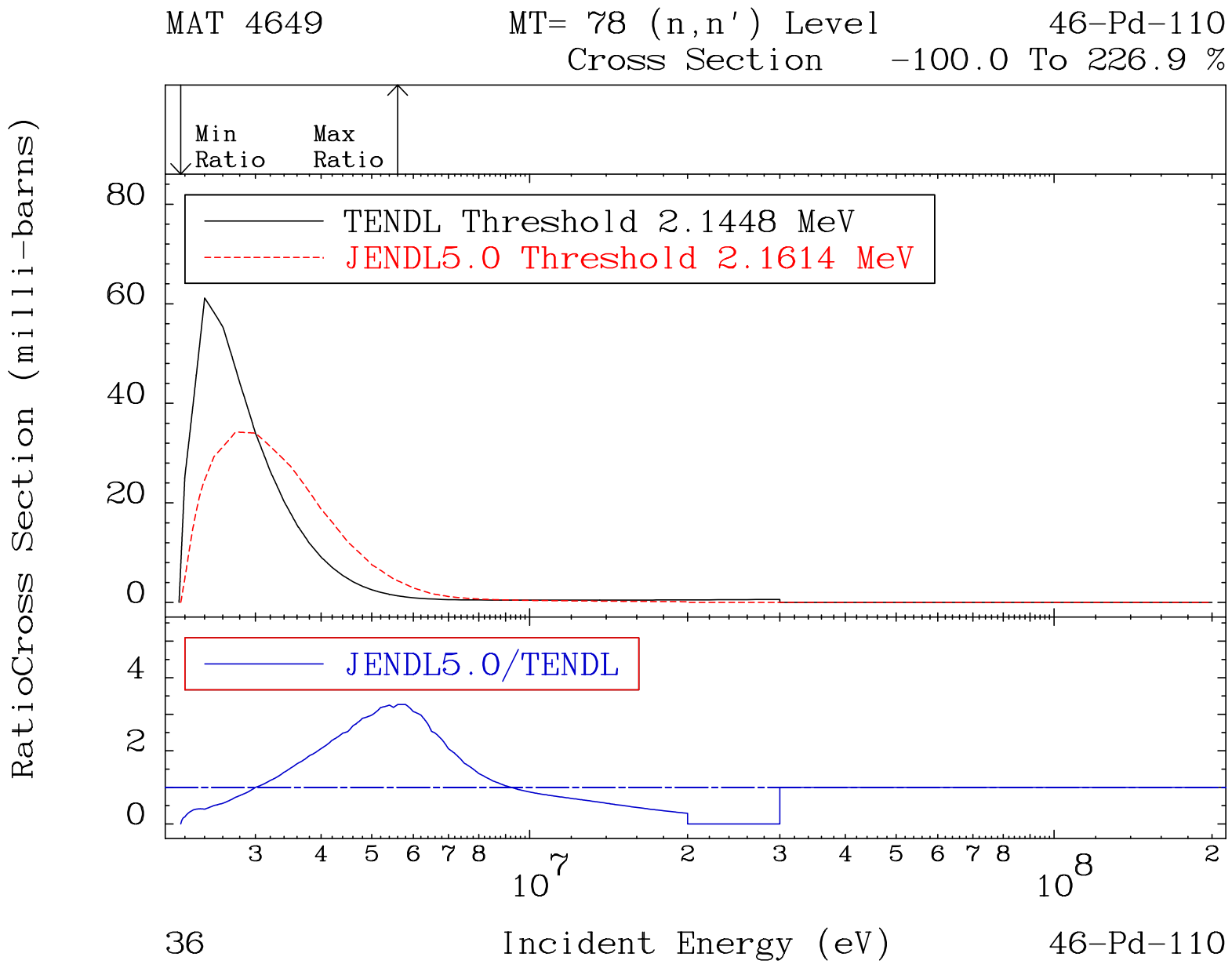

MAT 4649
MT= 73 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 39.63 %
Min Ratio
Max Ratio
TENDL Threshold 2.0093 MeV
JENDL5.0 Threshold 2.0799 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
31
Incident Energy (eV)
46-Pd-110

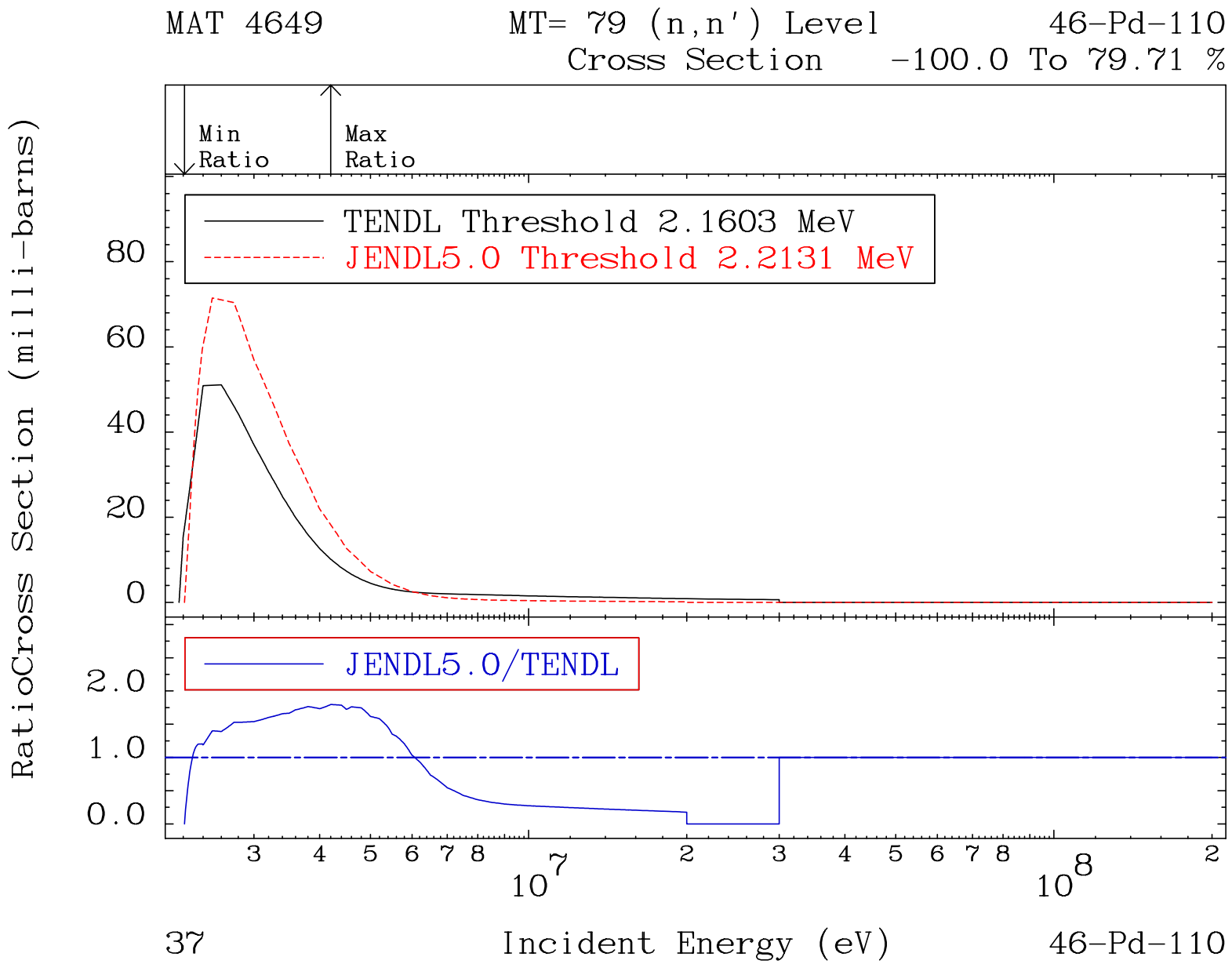

MAT 4649
MT= 74 (n,n') Level
46-Pd-110
Cross Section -100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 2.0564 MeV
JENDL5.0 Threshold 2.1082 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
32
Incident Energy (eV)
46-Pd-110

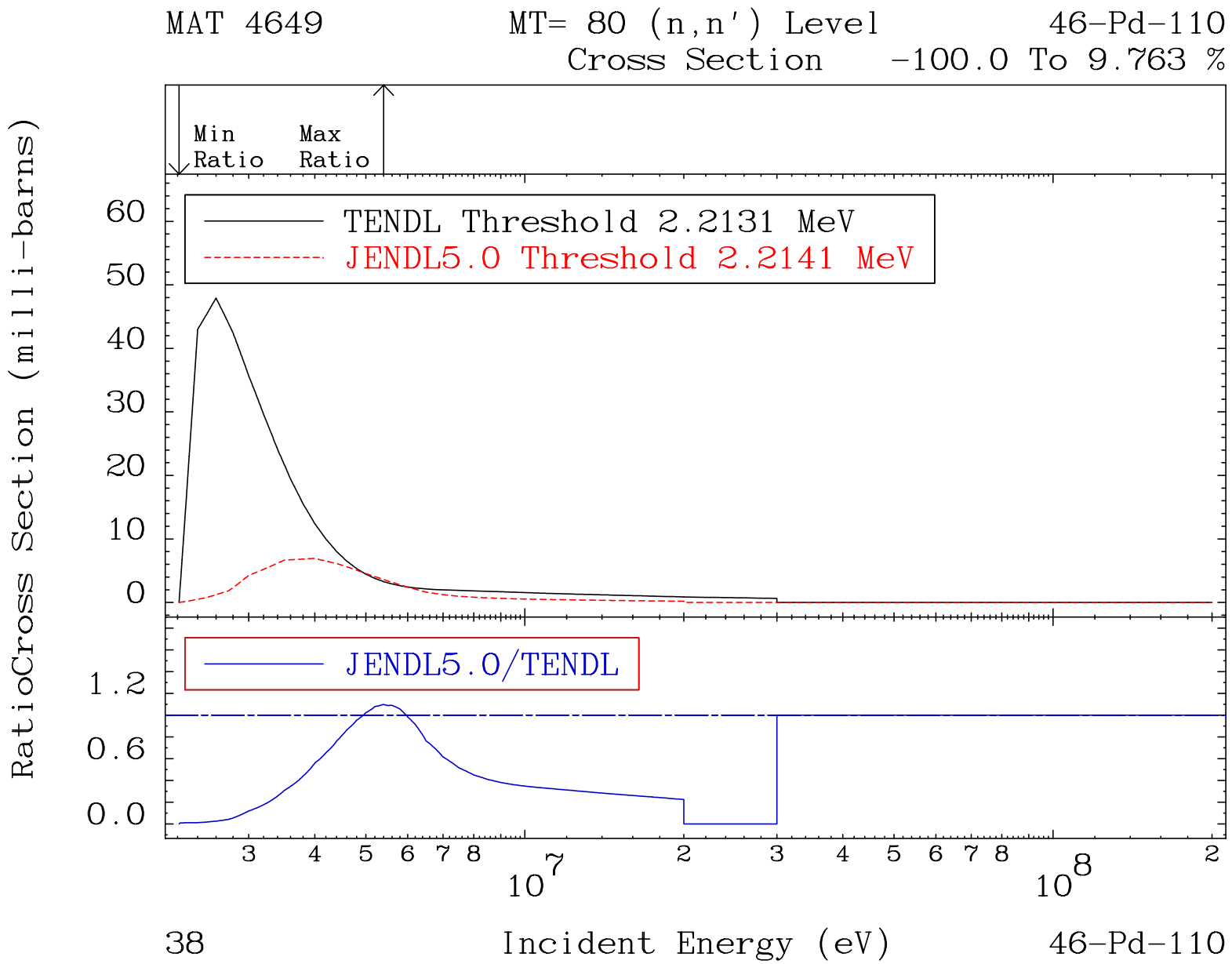

MAT 4649
MT= 75 (n,n') Level
46-Pd-110
Cross Section -100.0 To 3.909 %
Min Ratio
Max Ratio
TENDL Threshold 2.0799 MeV
JENDL5.0 Threshold 2.1142 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.2
0.6
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
33
Incident Energy (eV)
46-Pd-110

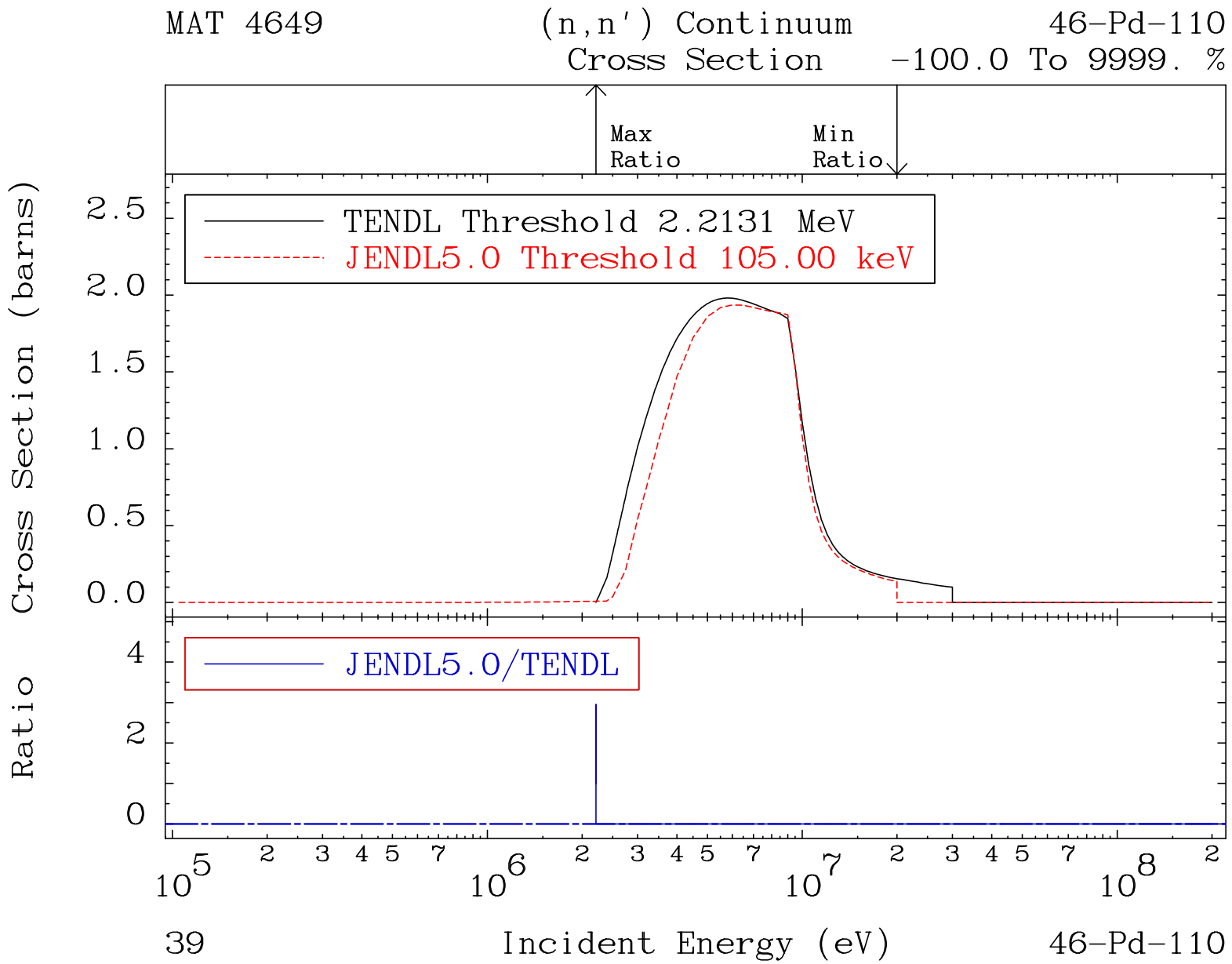

MAT 4649
MT= 76 (n,n') Level
Cross Section
46-Pd-110
-100.0 To 249.1 %
Max
Ratio
TENDL Threshold 2.1083 MeV
JENDL5.0 Threshold 2.1448 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
34
Incident Energy (eV)
46-Pd-110

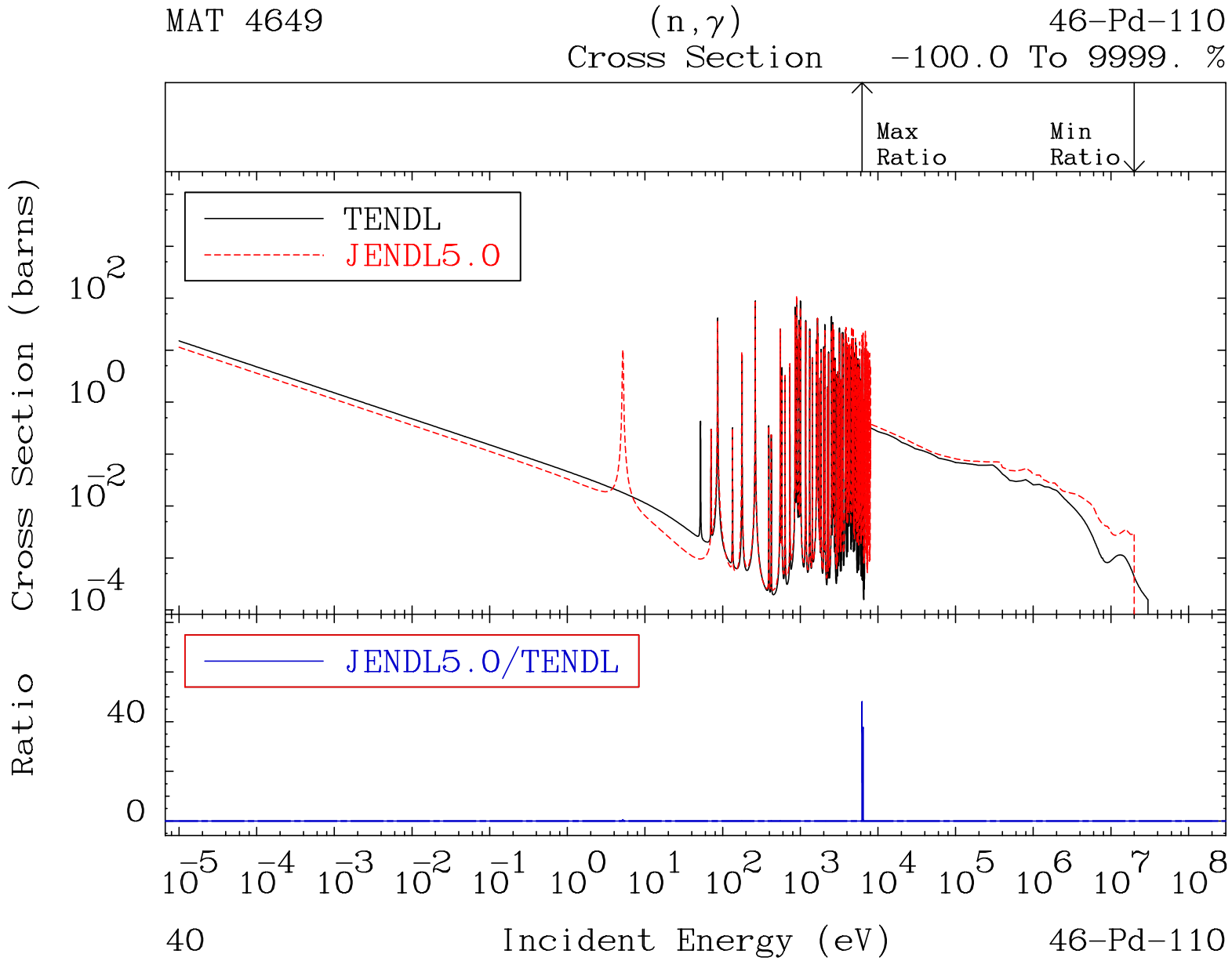

MAT 4649
MT= 77 (n,n') Level
46-Pd-110
Cross Section -100.0 To 95.09 %
Min Ratio
Max Ratio
TENDL Threshold 2.1142 MeV
JENDL5.0 Threshold 2.1596 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
3.0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
46-Pd-110

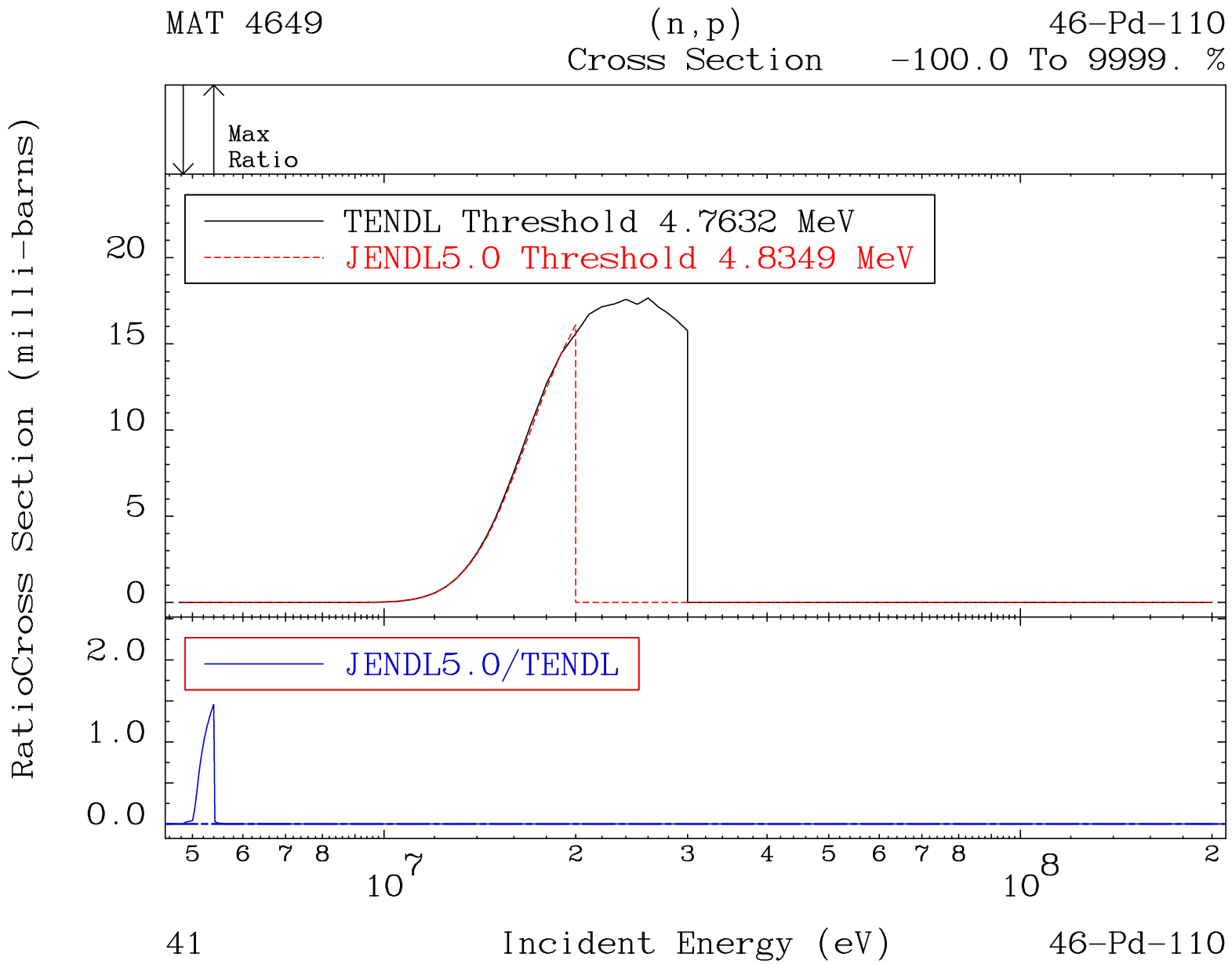

MAT 4649
MT= 78 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 226.9 %
Min Ratio
Max Ratio
TENDL Threshold 2.1448 MeV
JENDL5.0 Threshold 2.1614 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
36
46-Pd-110

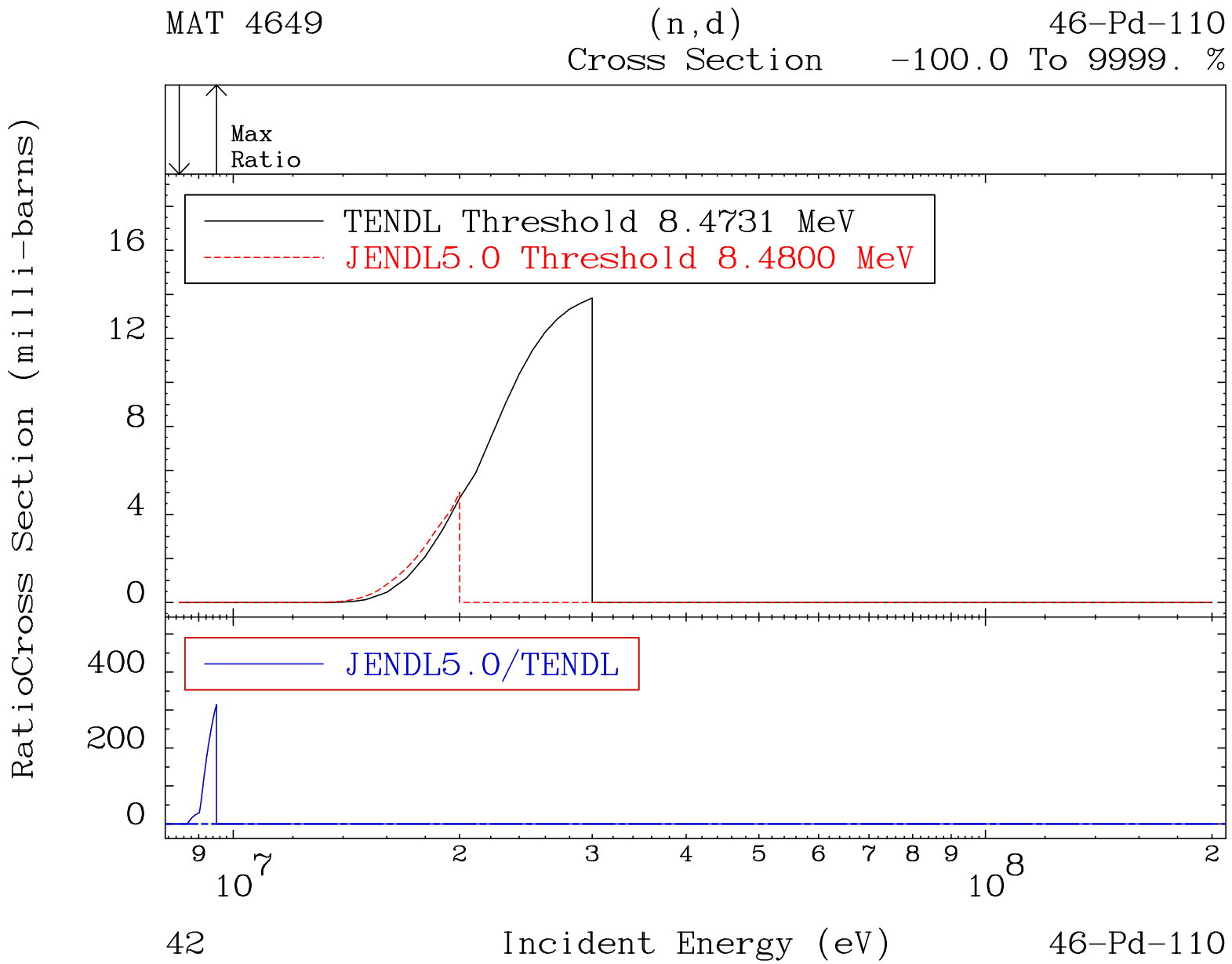

MAT 4649
MT= 79 (n,n') Level
46-Pd-110
Cross Section
-100.0 To 79.71 %
Min Ratio
Max Ratio
TENDL Threshold 2.1603 MeV
JENDL5.0 Threshold 2.2131 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
2.0
1.0
0.0
3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
37
Incident Energy (eV)
46-Pd-110

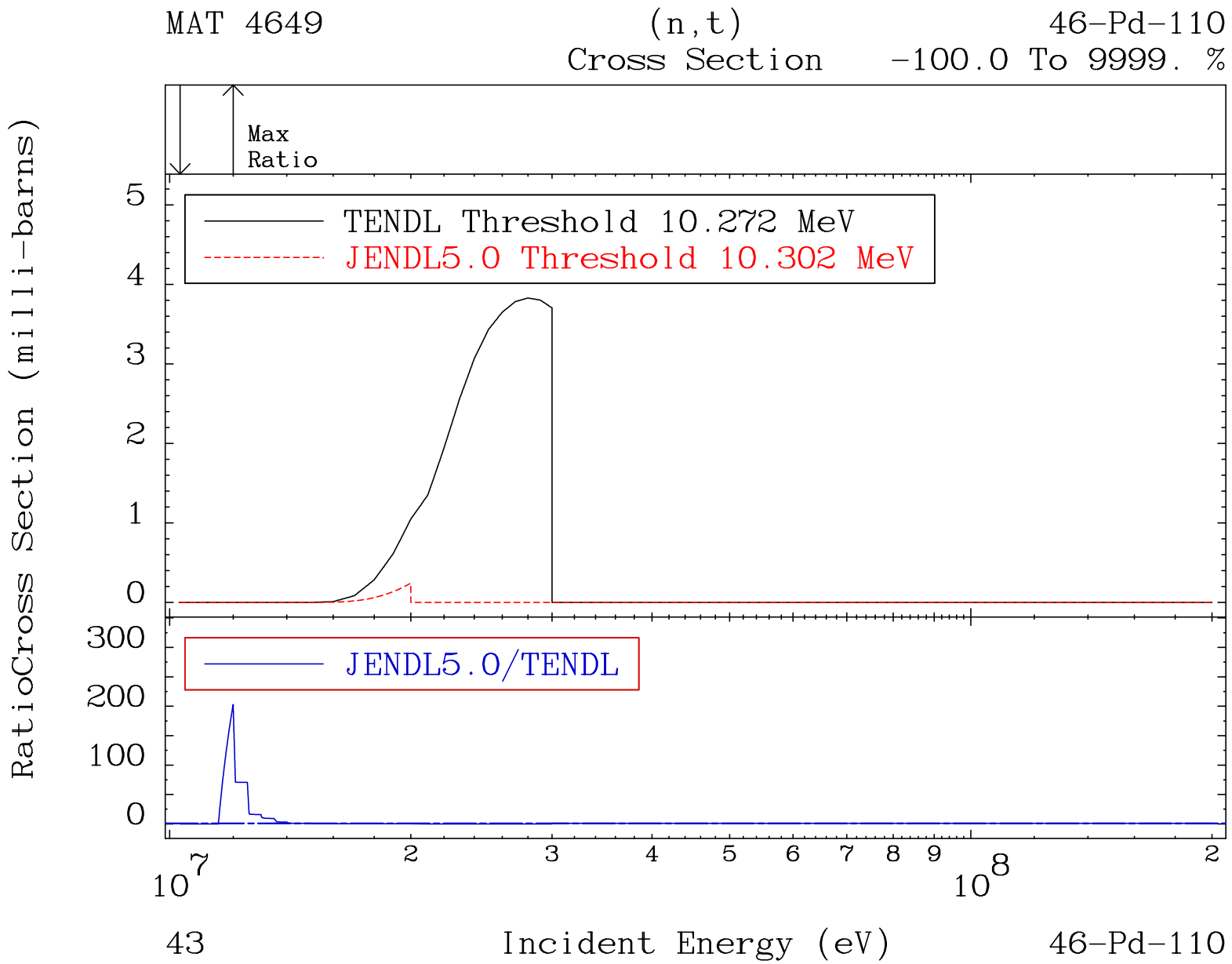

MAT 4649
MT= 80 (n,n') Level
46-Pd-110
Cross Section -100.0 To 9.763 %
Min Ratio
Max Ratio
TENDL Threshold 2.2131 MeV
JENDL5.0 Threshold 2.2141 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
50
40
30
20
10
0
1.2
0.6
0.0
3 4 5 6 7 8 10^7 2 3 4 5 6 7 8 10^8 2
38
Incident Energy (eV)
46-Pd-110

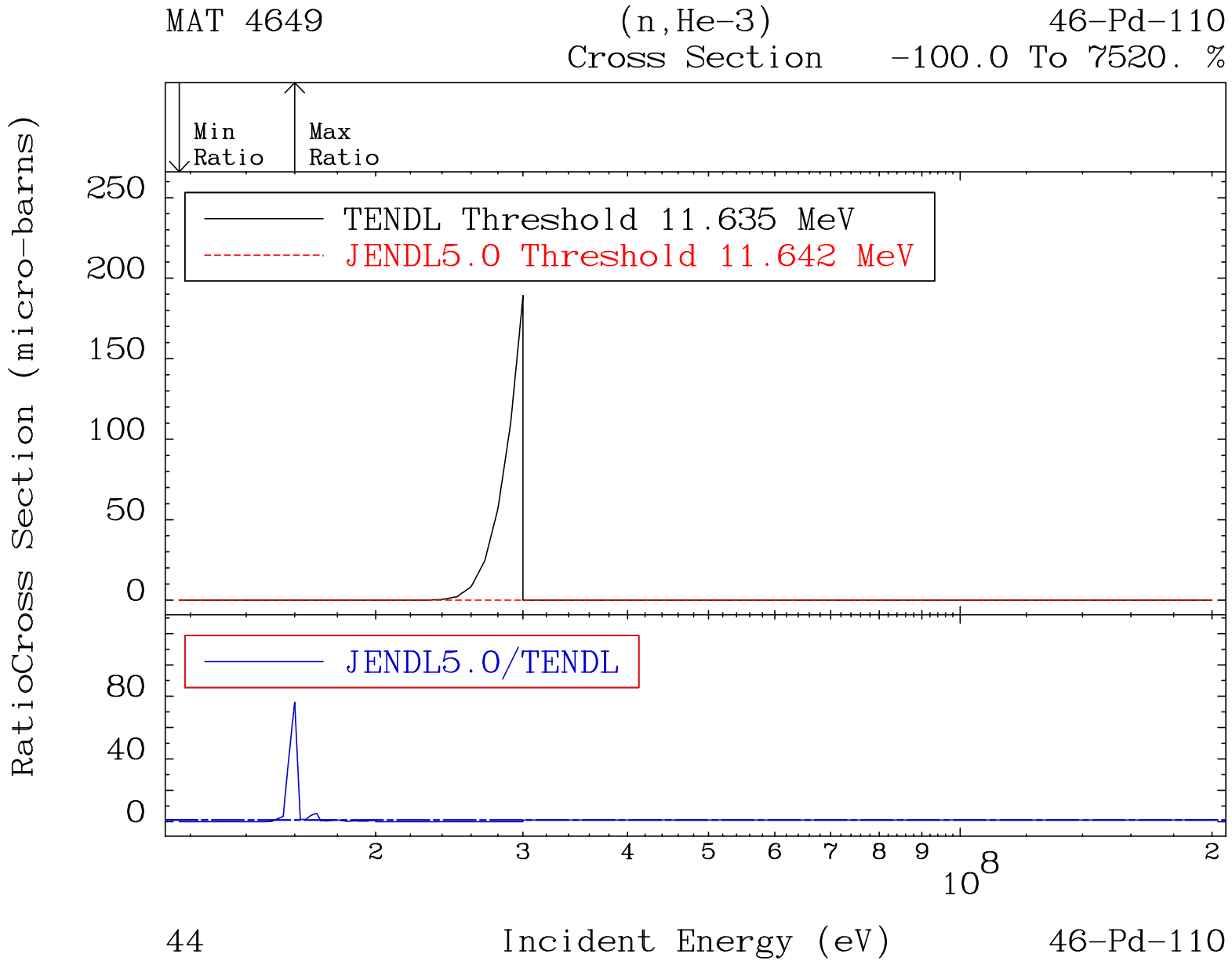

MAT 4649
(n,n') Continuum
Cross Section
46-Pd-110
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 2.2131 MeV
JENDL5.0 Threshold 105.00 keV
Cross Section (barns)
2.5
2.0
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
4
2
0
10^5
10^6
10^7
10^8
39
Incident Energy (eV)
46-Pd-110

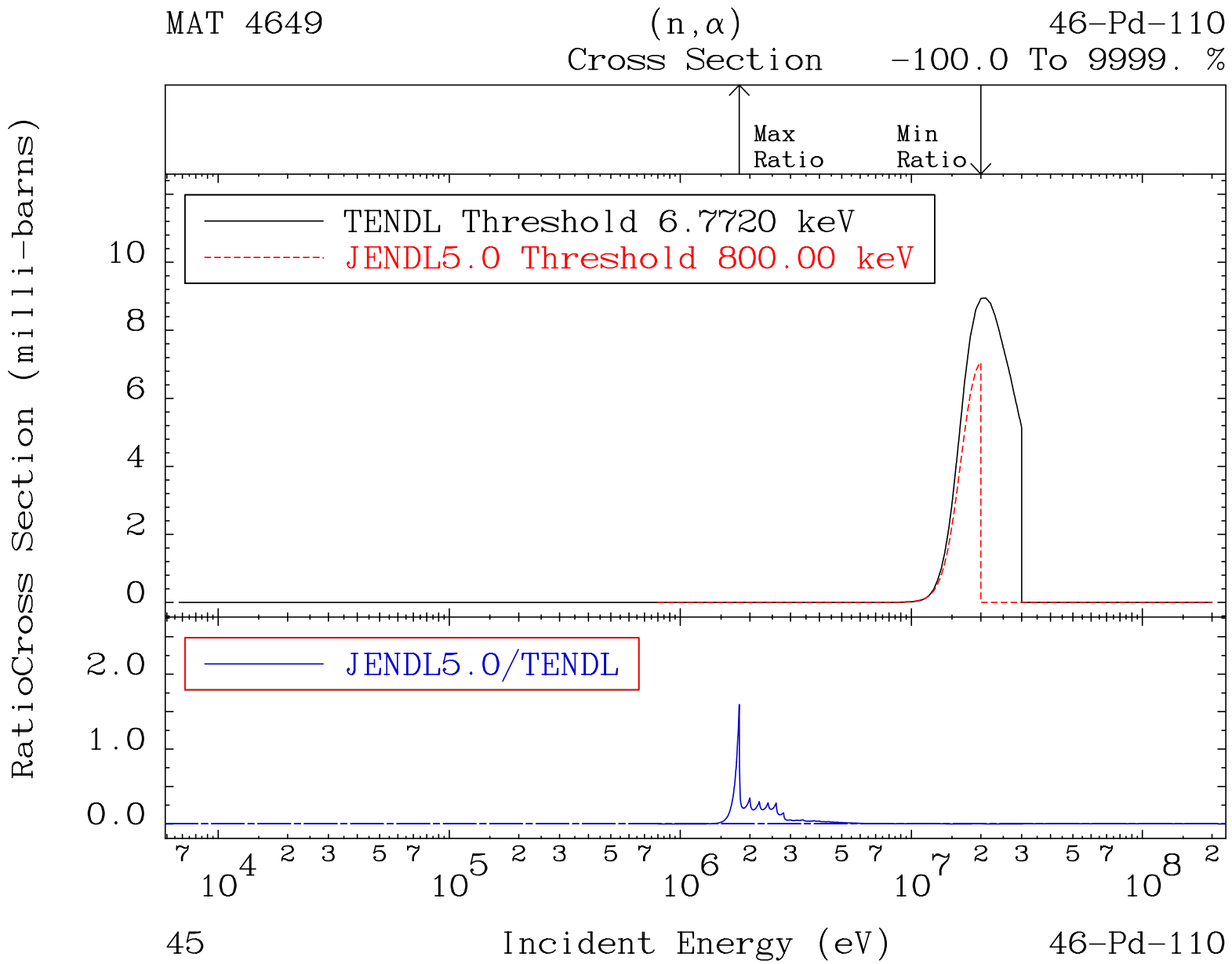

MAT 4649
(n,γ)
Cross Section
46-Pd-110
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^2
10^0
10^-2
10^-4
JENDL5.0/TENDL
Ratio
40
0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
40
Incident Energy (eV)
46-Pd-110

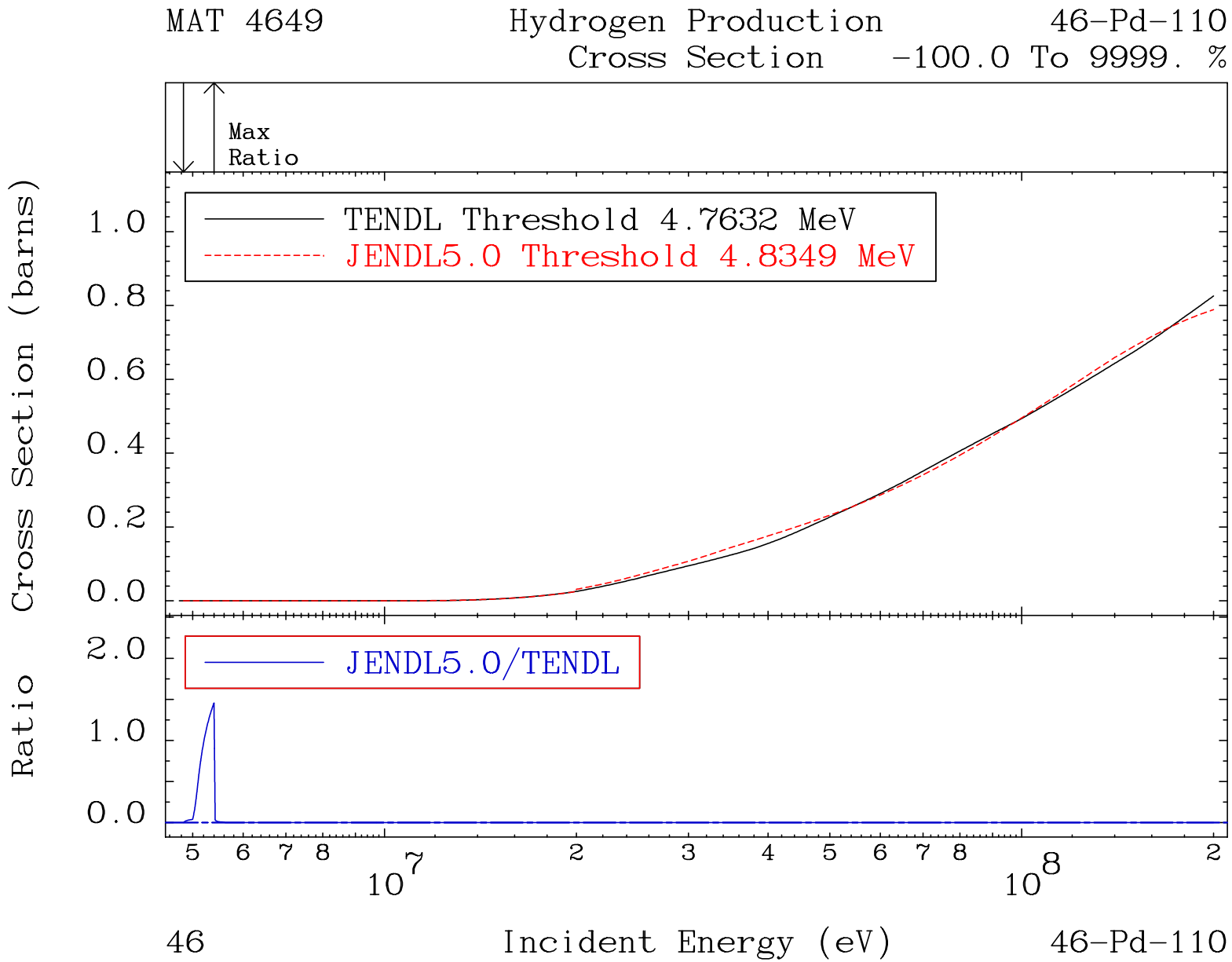

MAT 4649
(n,p)
46-Pd-110
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.7632 MeV
JENDL5.0 Threshold 4.8349 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
20
15
10
5
0
2.0
1.0
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
41
Incident Energy (eV)
46-Pd-110

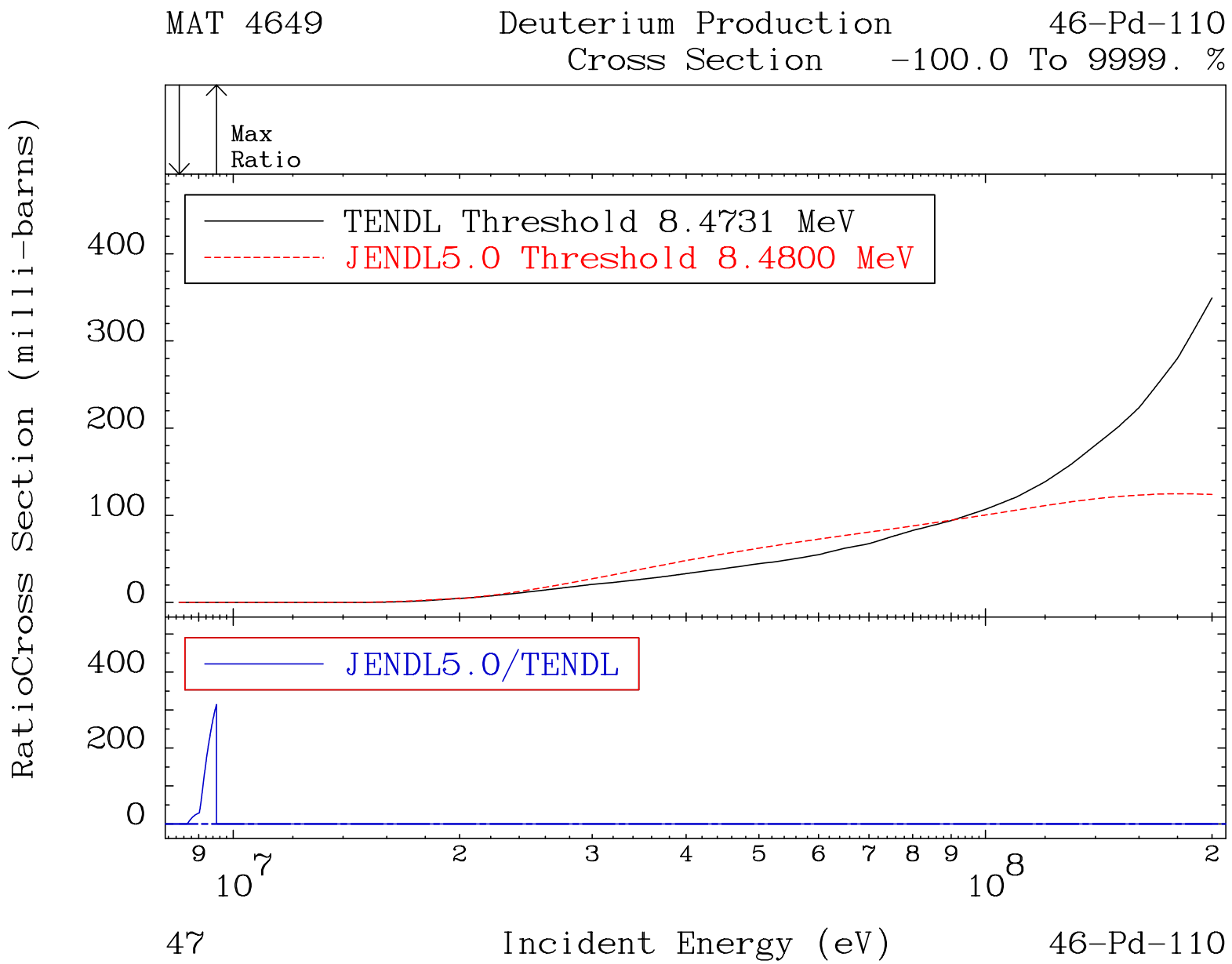

MAT 4649
(n,d)
46-Pd-110
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.4731 MeV
JENDL5.0 Threshold 8.4800 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
400
200
0
9
2
3
4
5
6
7
8
9
2
10^7
10^8
42
Incident Energy (eV)
46-Pd-110

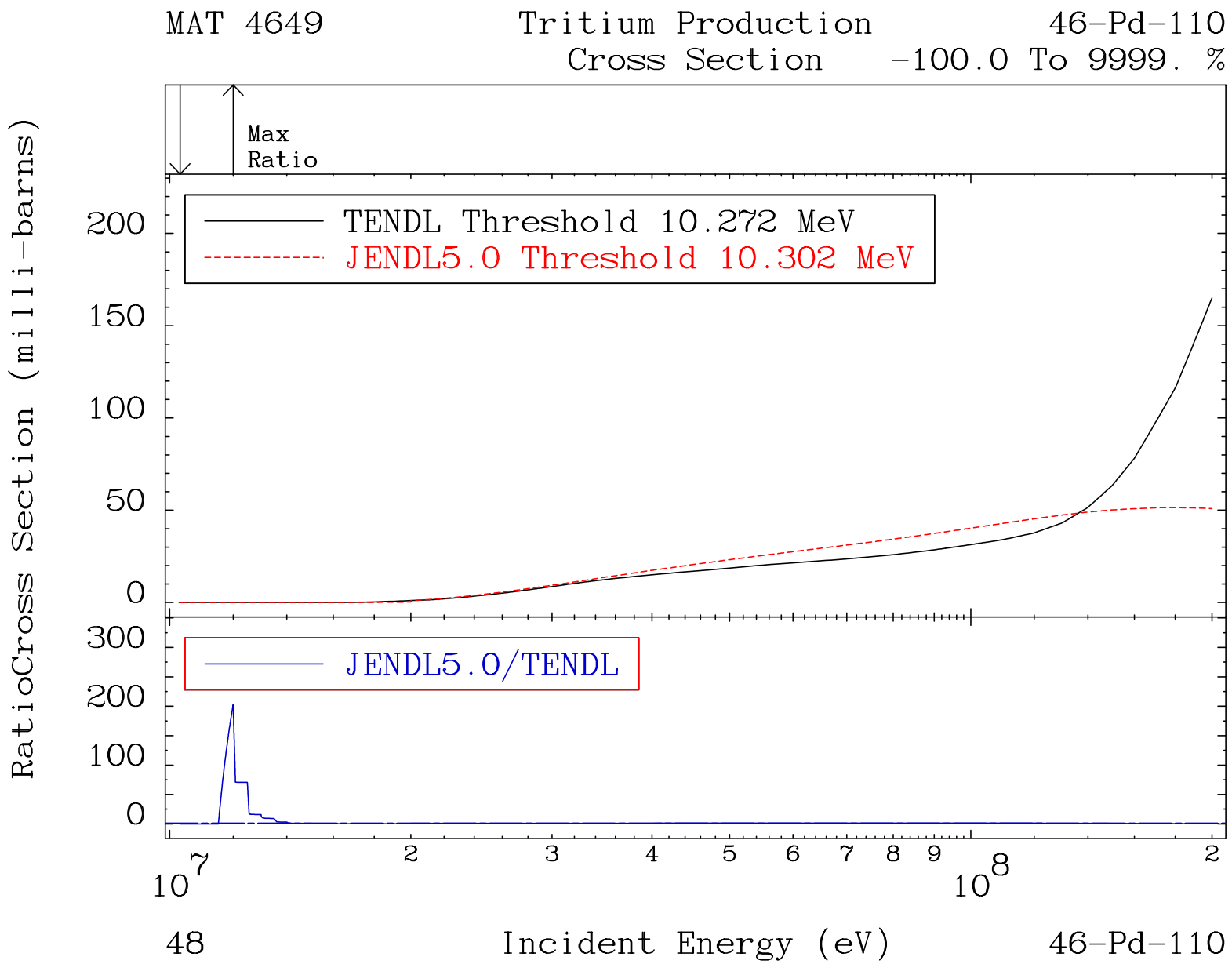

MAT 4649
(n,t)
46-Pd-110
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 10.272 MeV
JENDL5.0 Threshold 10.302 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
43
46-Pd-110

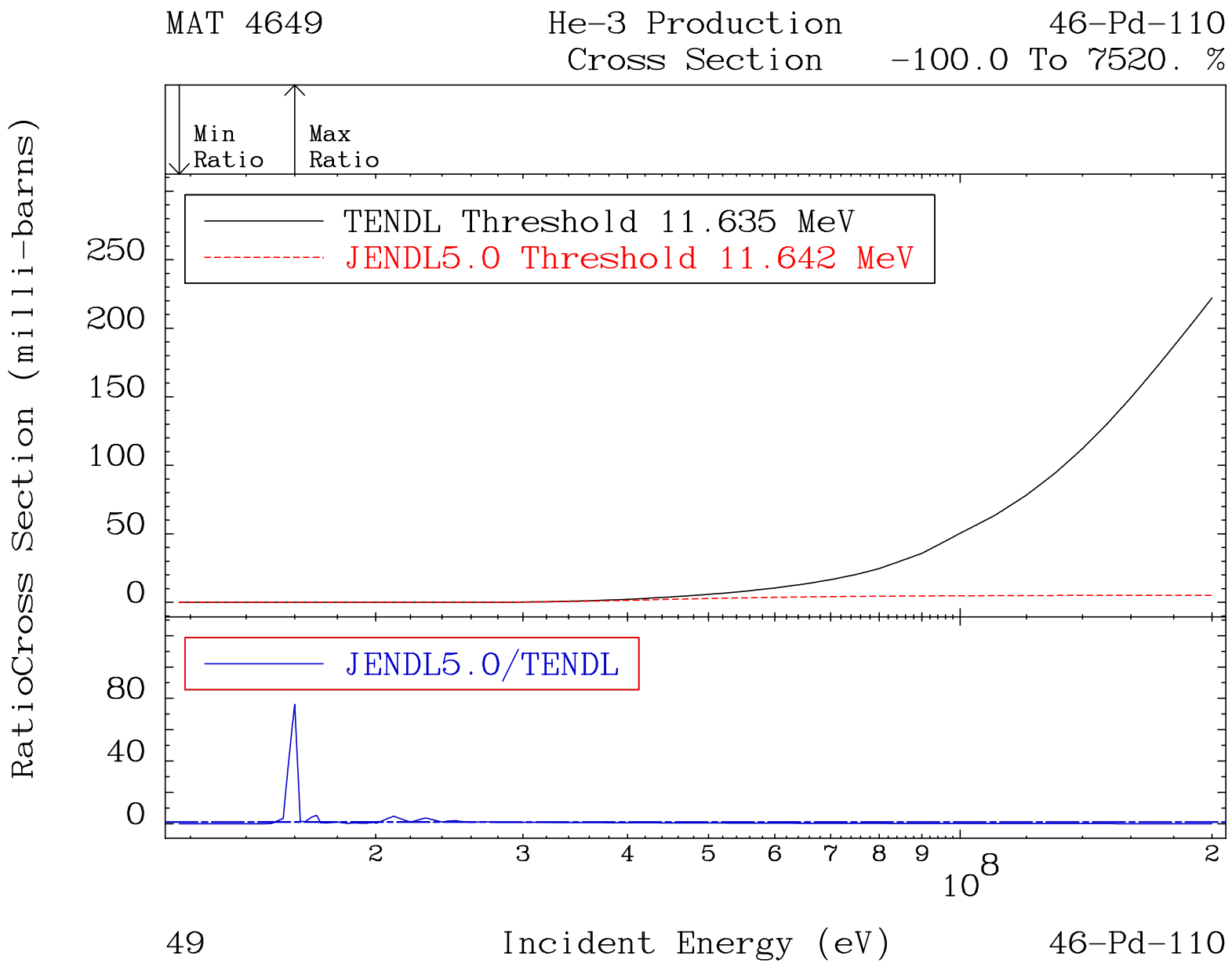

MAT 4649
(n,He-3)
46-Pd-110
Cross Section
-100.0 To 7520. %
Min Ratio
Max Ratio
TENDL Threshold 11.635 MeV
JENDL5.0 Threshold 11.642 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
250
200
150
100
50
0
80
40
0
2
3
4
5
6
7
8
9
2
10^8
44
Incident Energy (eV)
46-Pd-110

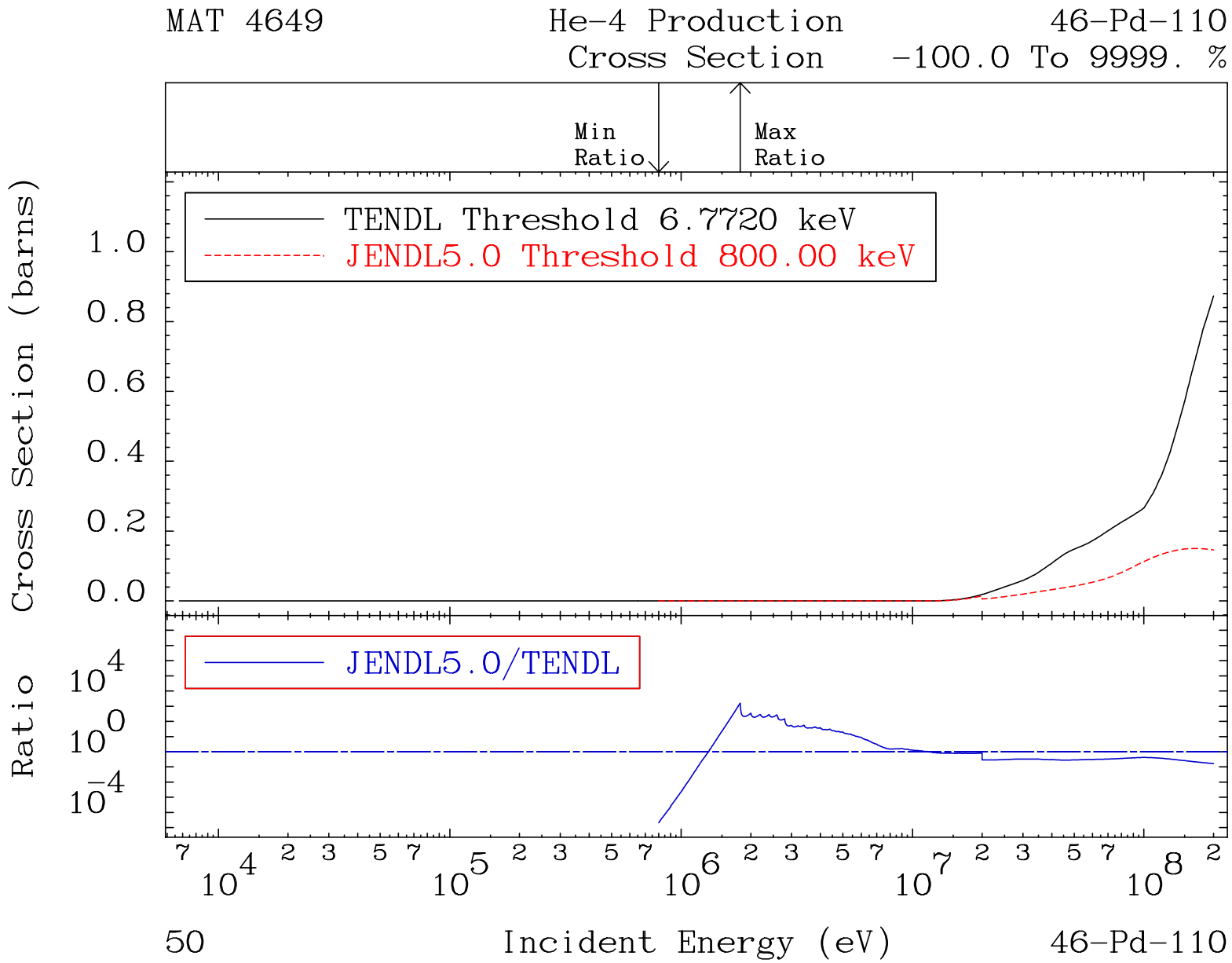

MAT 4649
(n,α)
Cross Section
46-Pd-110
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 6.7720 keV
JENDL5.0 Threshold 800.00 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
45
46-Pd-110

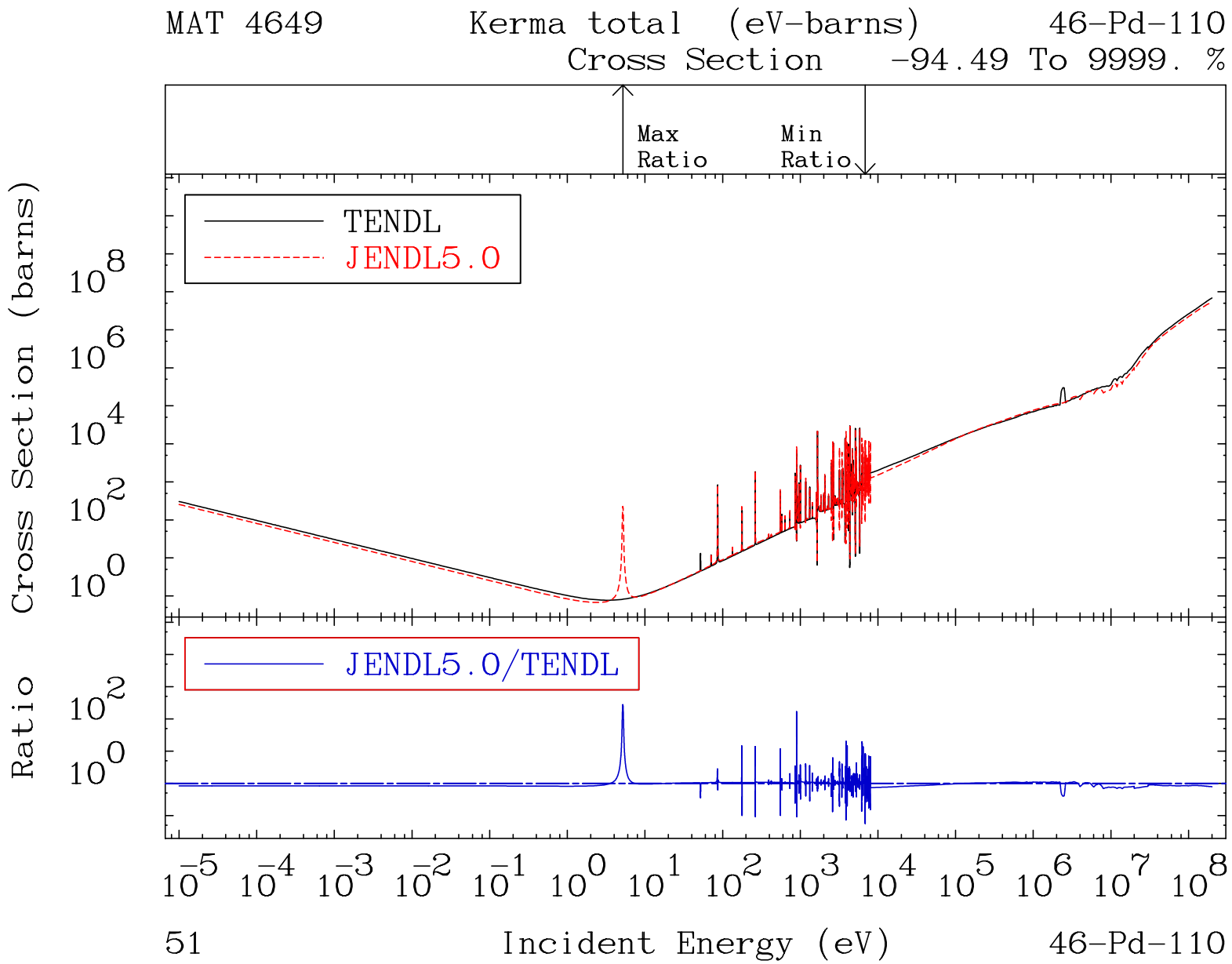

MAT 4649
Hydrogen Production
46-Pd-110
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 4.7632 MeV
JENDL5.0 Threshold 4.8349 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
46
Incident Energy (eV)
46-Pd-110

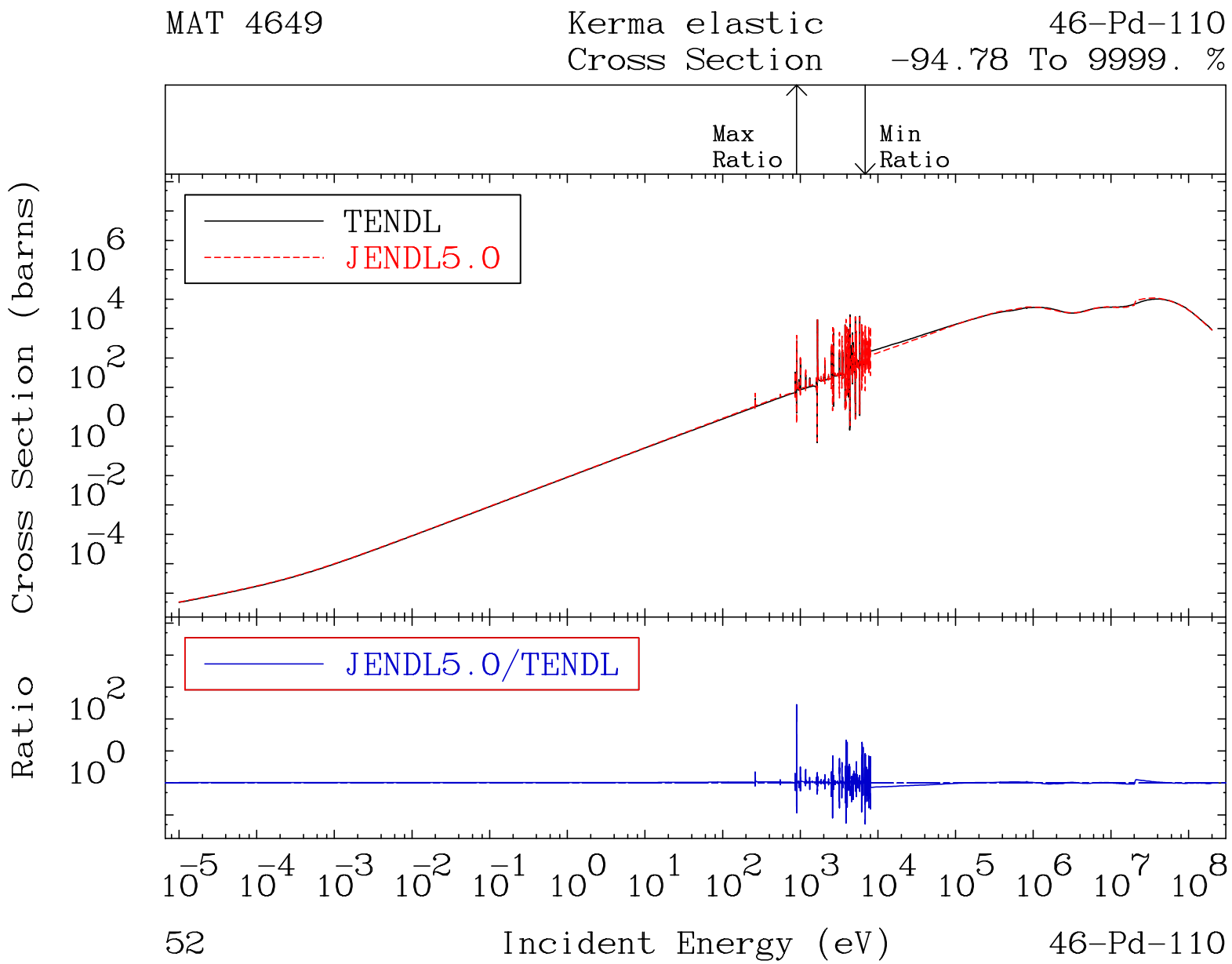

MAT 4649
Deuterium Production
46-Pd-110
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 8.4731 MeV
JENDL5.0 Threshold 8.4800 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
400
300
200
100
0
400
200
0
9
2
3
4
5
6
7
8
9
2
10^7
10^8
47
Incident Energy (eV)
46-Pd-110

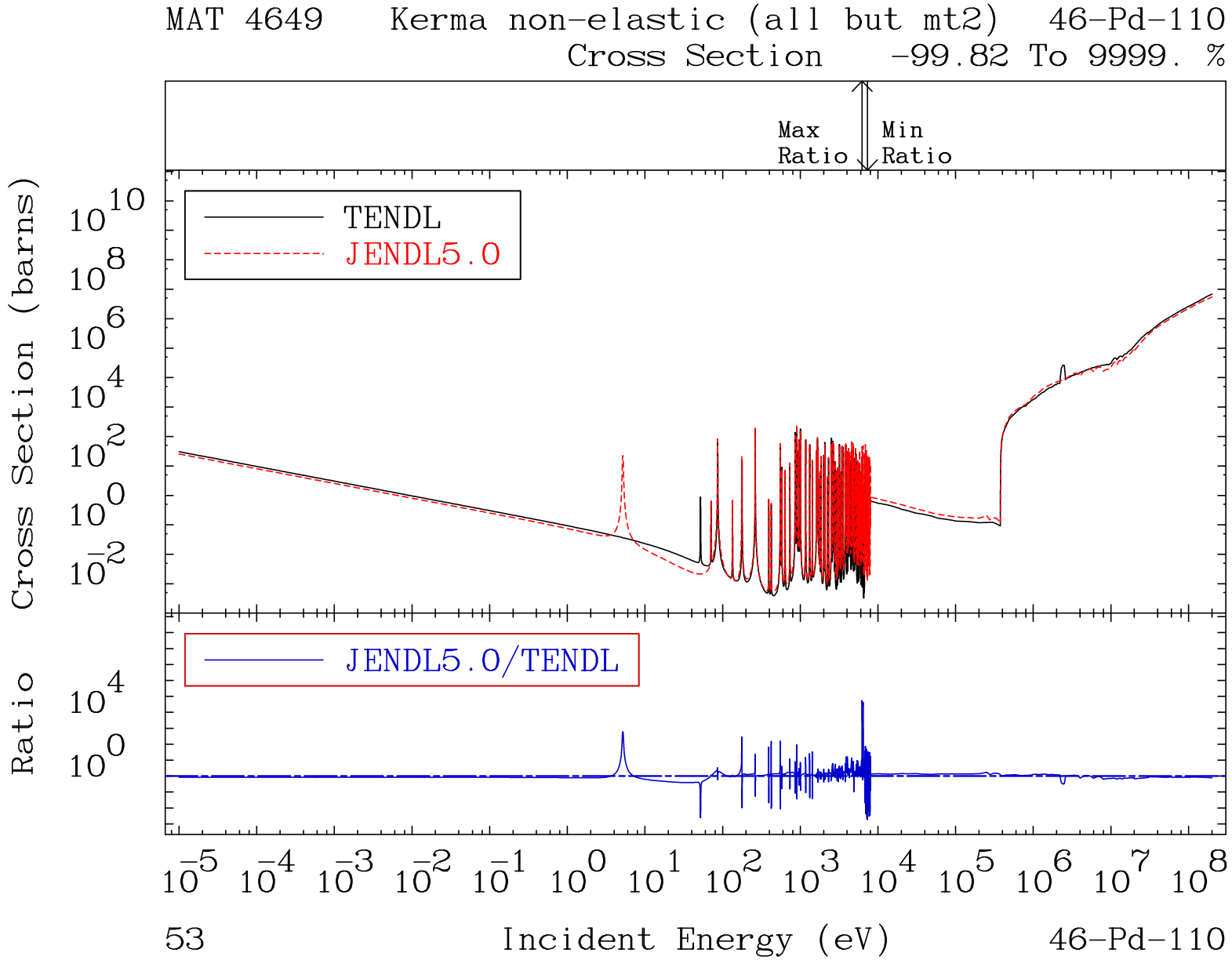

MAT 4649
Tritium Production
Cross Section
46-Pd-110
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 10.272 MeV
JENDL5.0 Threshold 10.302 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
200
150
100
50
0
300
200
100
0
10^7
2
3
4
5
6
7
8
9
10^8
2
48
Incident Energy (eV)
46-Pd-110

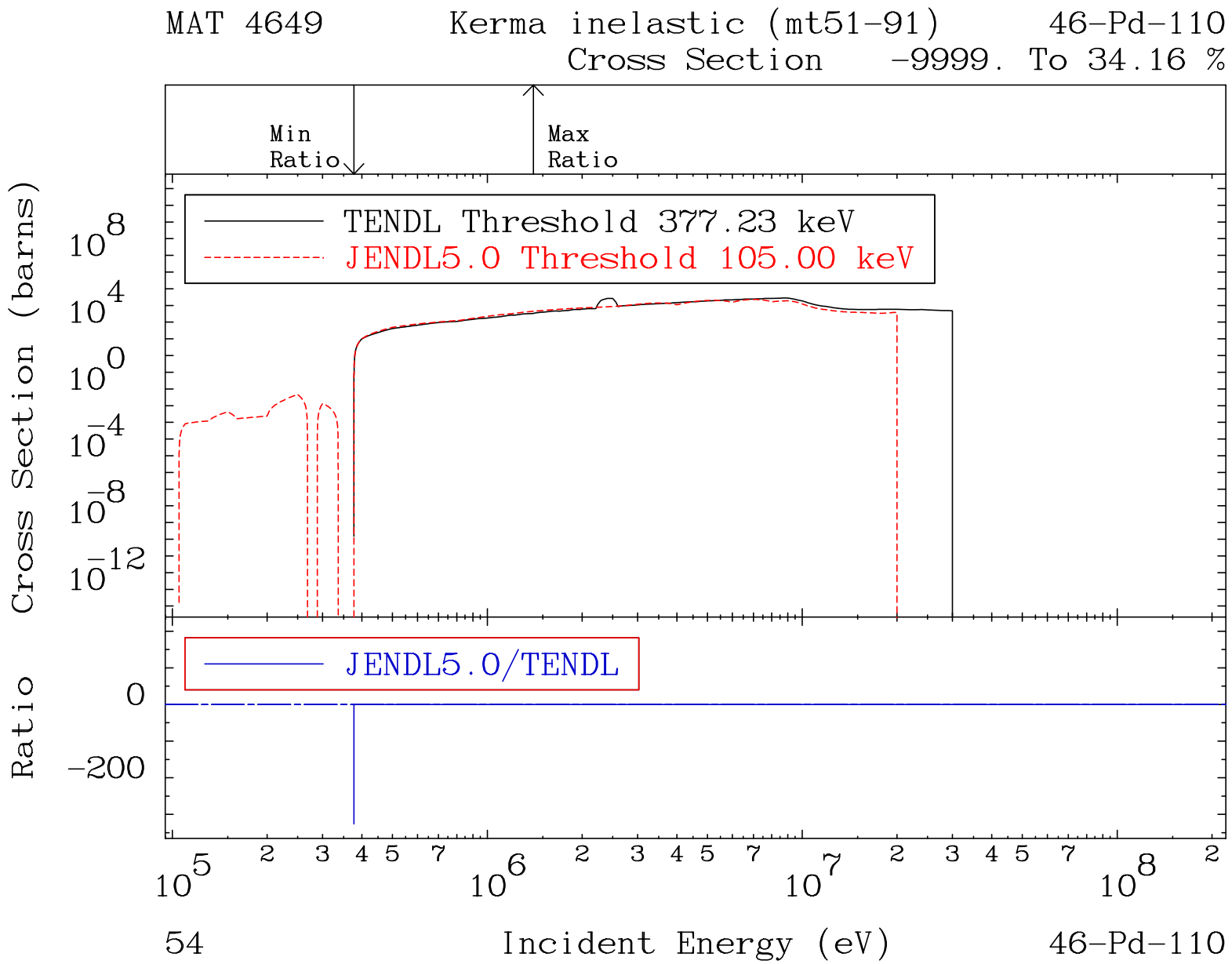

MAT 4649
He-3 Production
Cross Section
46-Pd-110
-100.0 To 7520. %
Min Ratio
Max Ratio
TENDL Threshold 11.635 MeV
JENDL5.0 Threshold 11.642 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
80
40
0
2
3
4
5
6
7
8
9
10^8
2
49
Incident Energy (eV)
46-Pd-110

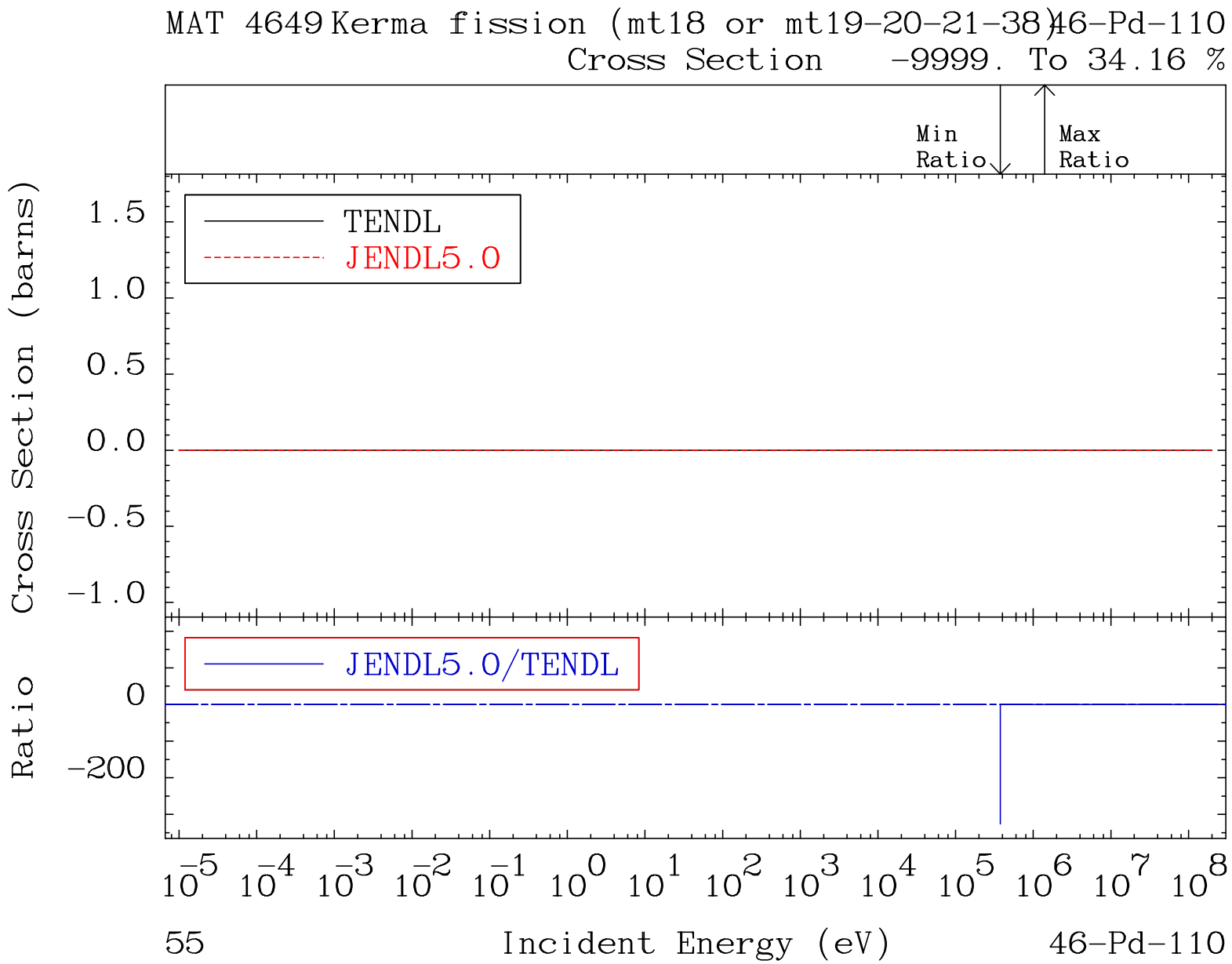

MAT 4649
He-4 Production
Cross Section
46-Pd-110
-100.0 To 9999. %
Min Ratio
Max Ratio
TENDL Threshold 6.7720 keV
JENDL5.0 Threshold 800.00 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JENDL5.0/TENDL
Ratio
10^4
10^0
10^-4
7 2 3 5 7 2 3 5 7 2 3 5 7 2 3 5 7 2
10^4 10^5 10^6 10^7 10^8
50
Incident Energy (eV)
46-Pd-110

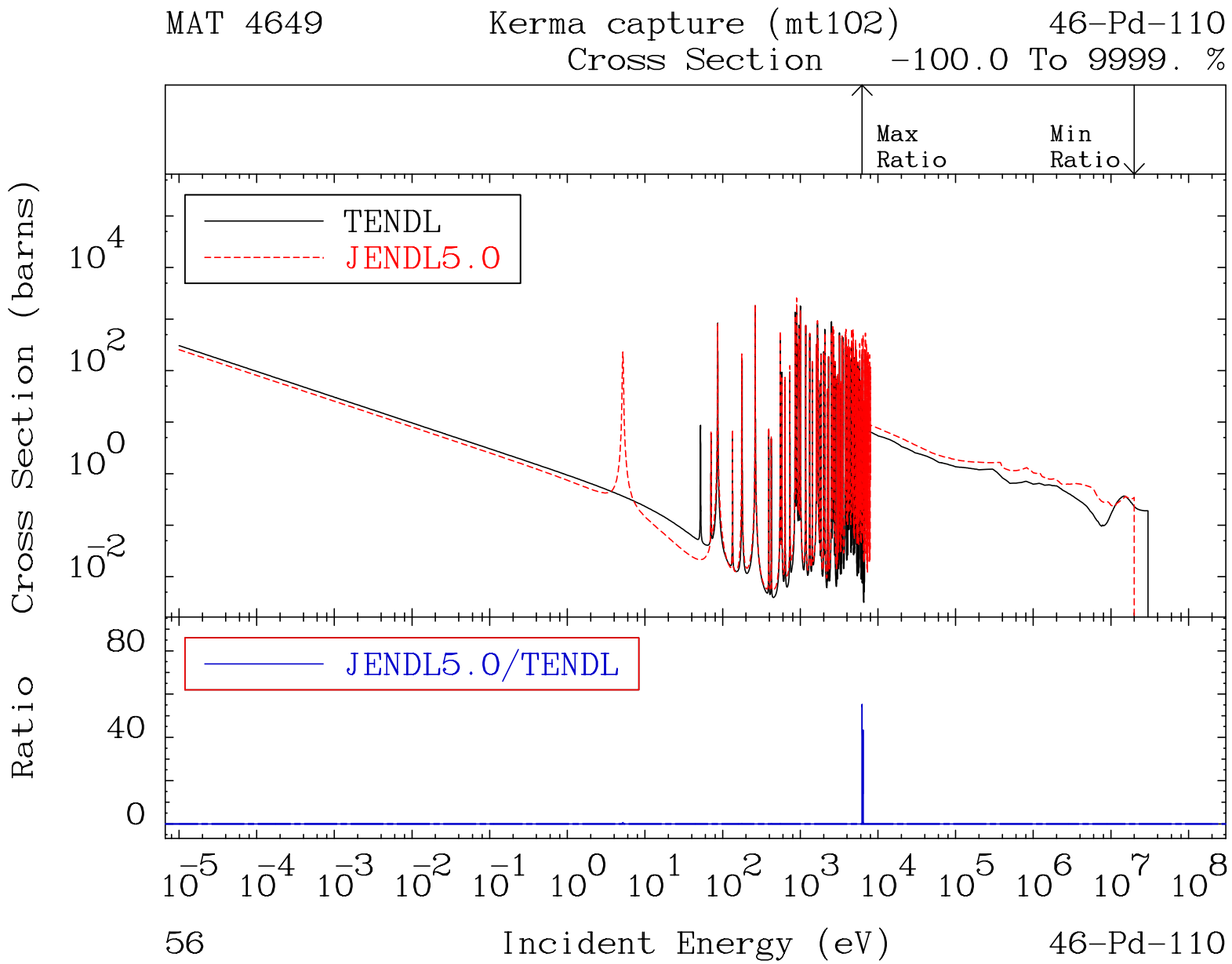

MAT 4649
Kerma total (eV-barns)
46-Pd-110
Cross Section -94.49 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
51
46-Pd-110

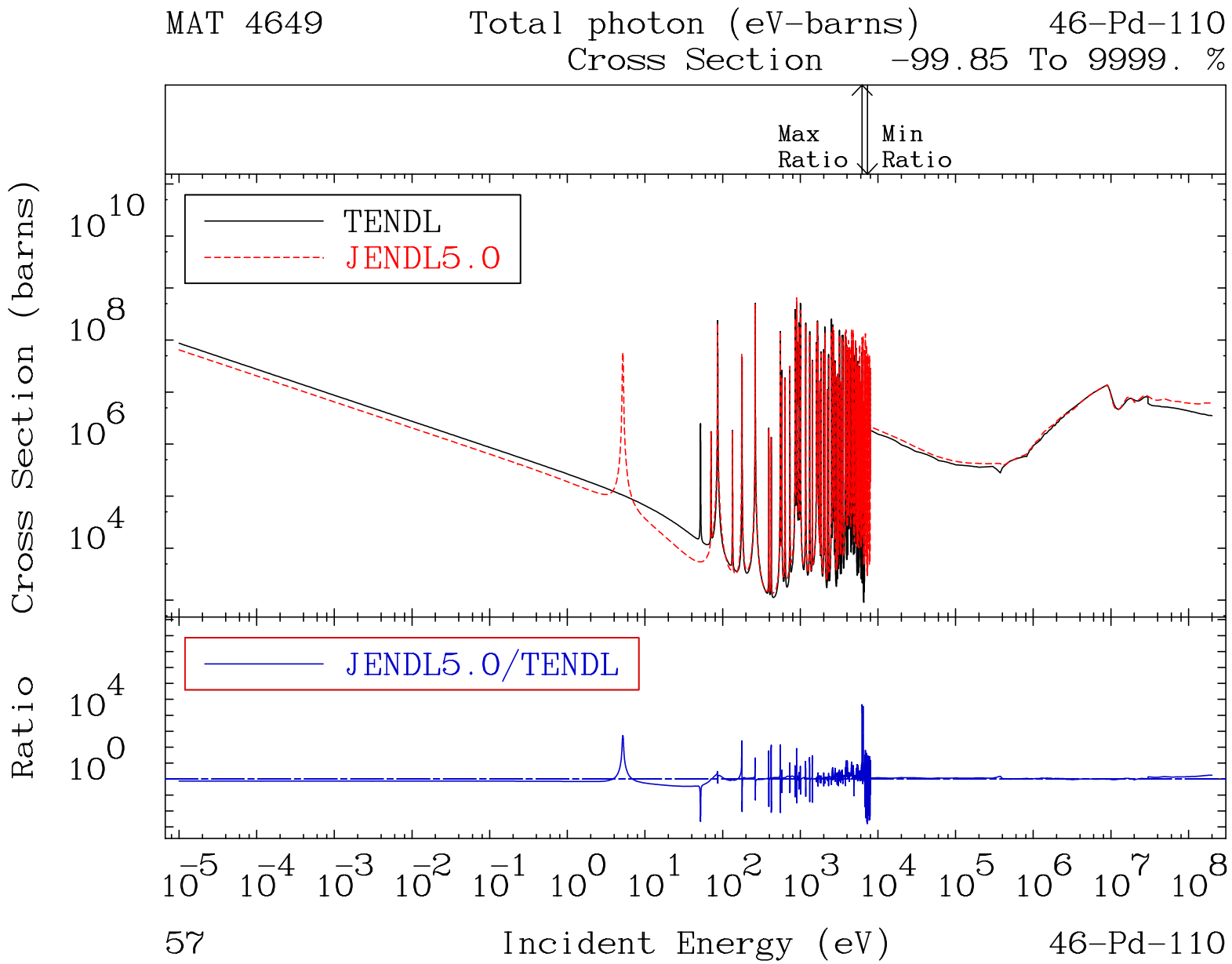

MAT 4649
Kerma elastic
Cross Section
46-Pd-110
-94.78 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
52
46-Pd-110

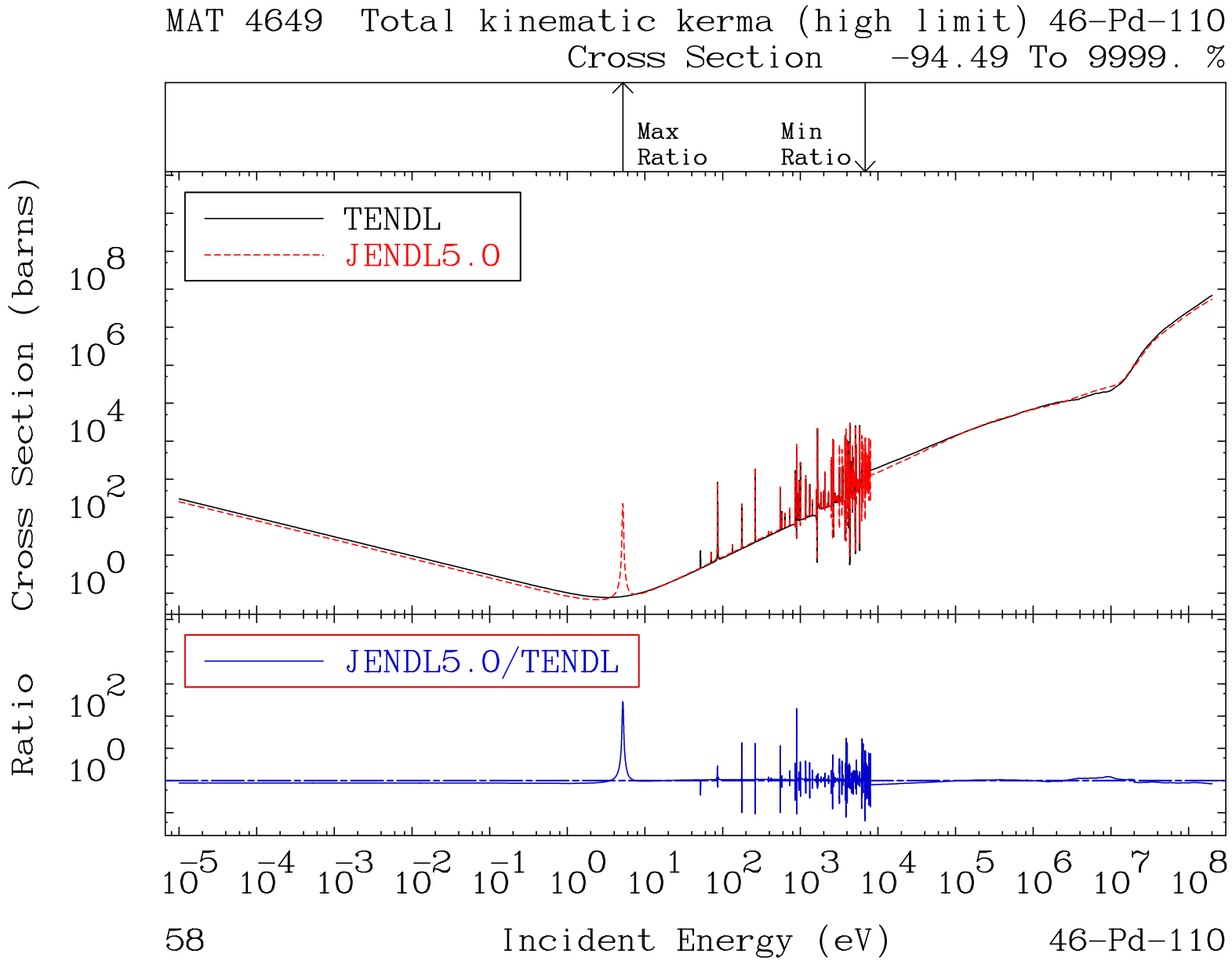

MAT 4649 Kerma non-elastic (all but mt2) 46-Pd-110
Cross Section -99.82 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
53
46-Pd-110

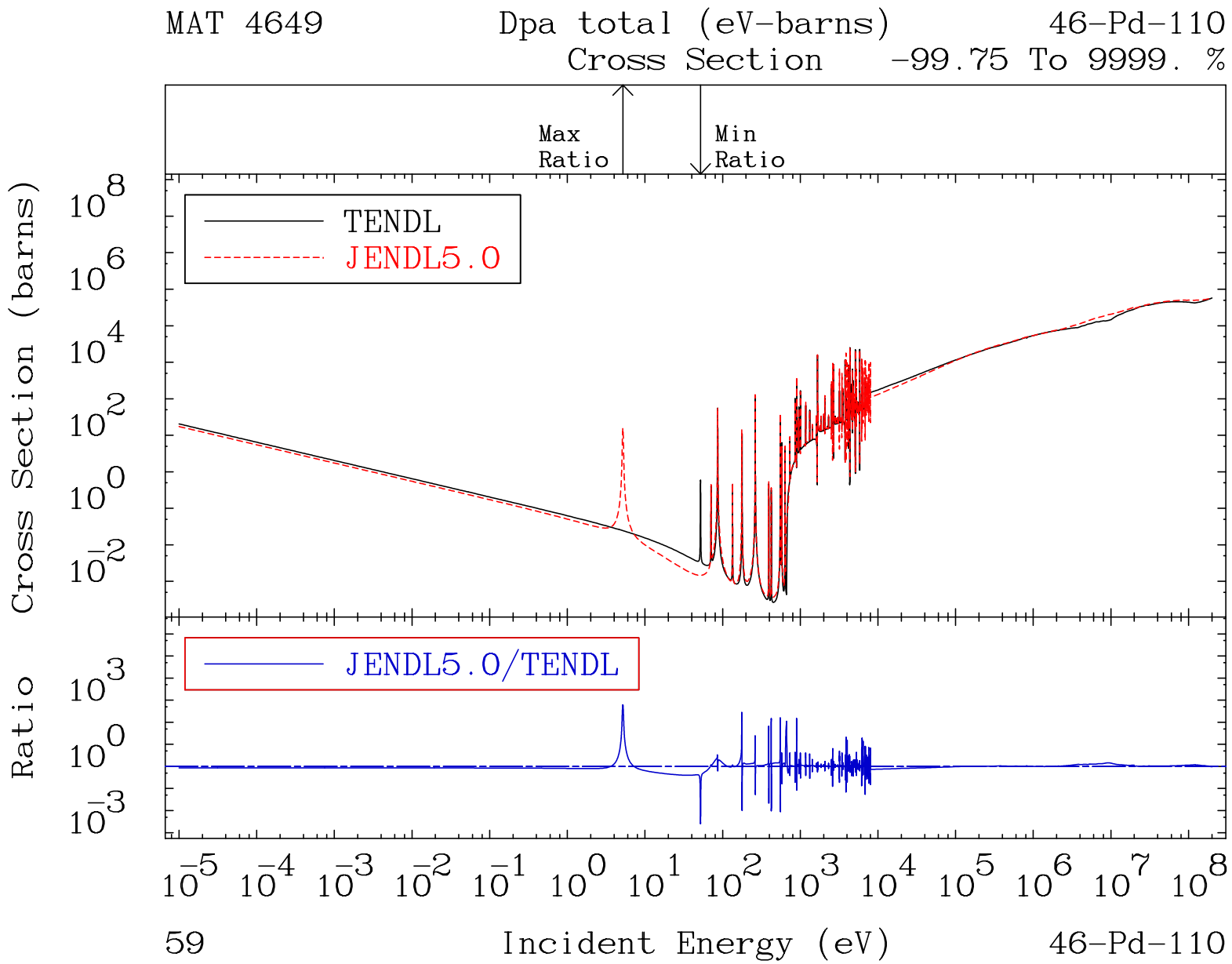

MAT 4649
Kerma inelastic (mt51-91)
46-Pd-110
Cross Section -9999. To 34.16 %
Min Ratio
Max Ratio
TENDL Threshold 377.23 keV
JENDL5.0 Threshold 105.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
46-Pd-110

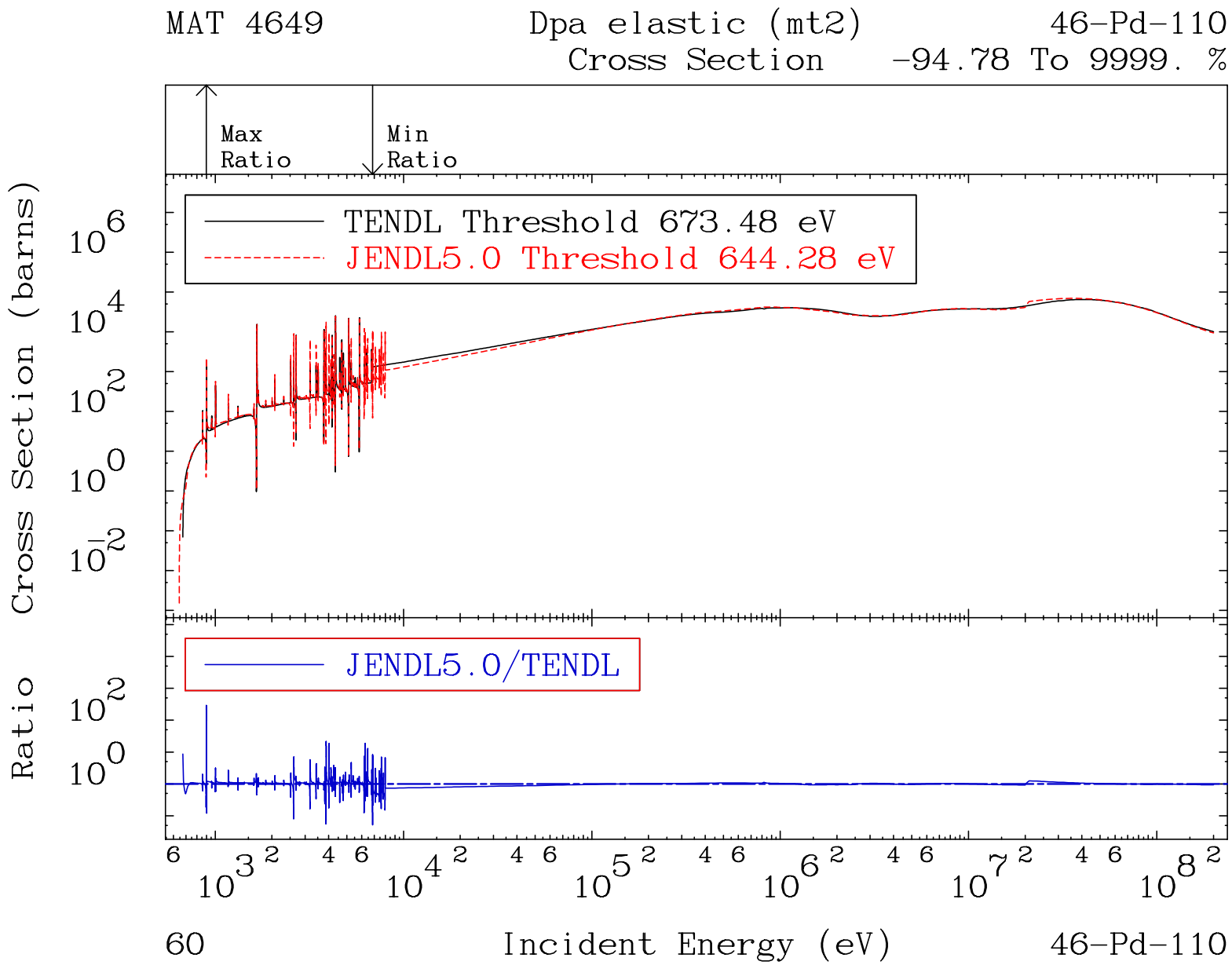

MAT 4649 Kerma fission (mt18 or mt19-20-21-38) 46-Pd-110
Cross Section -9999. To 34.16 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
0
-200
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
55
Incident Energy (eV)
46-Pd-110

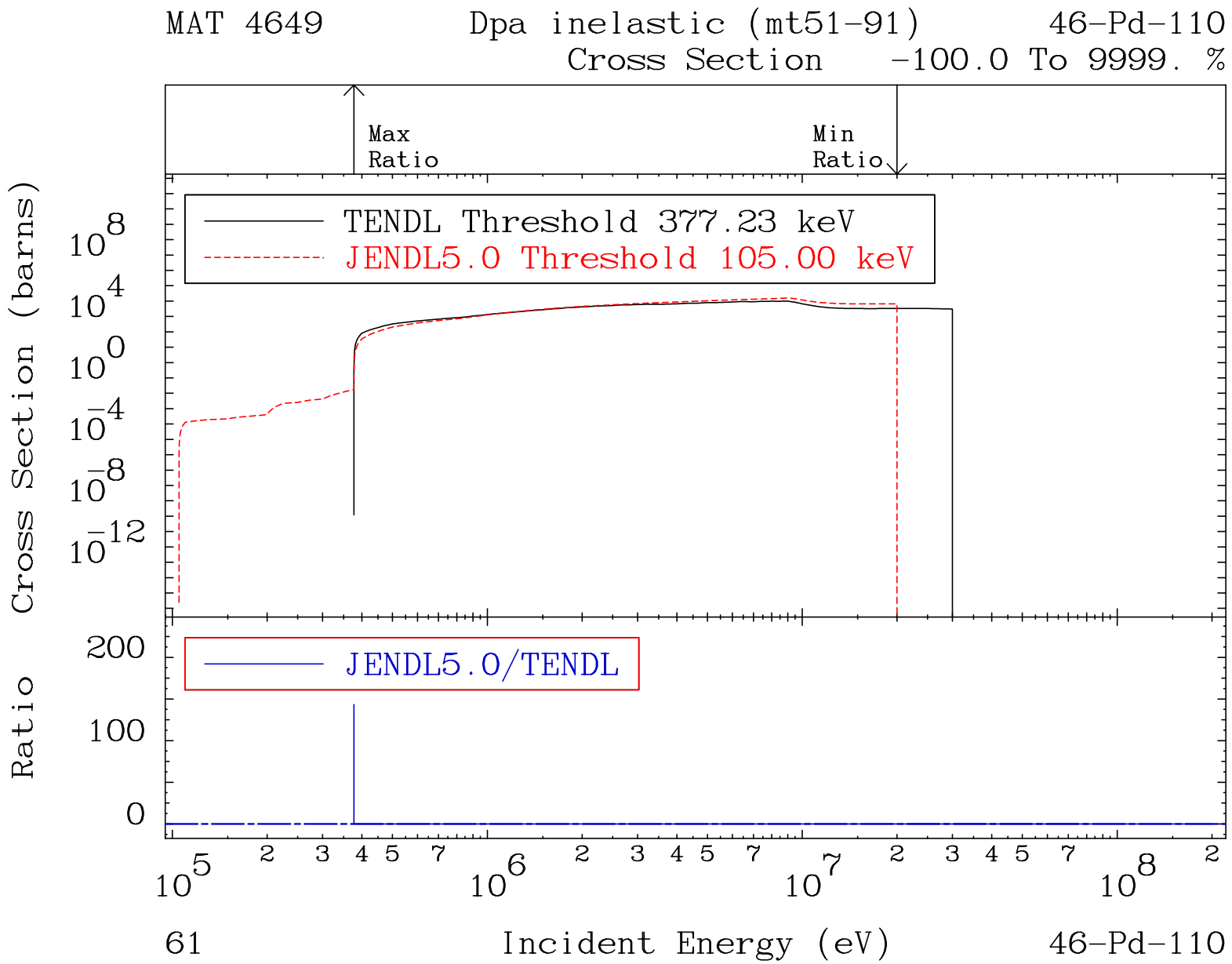

MAT 4649
Kerma capture (mt102)
46-Pd-110
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
56
46-Pd-110

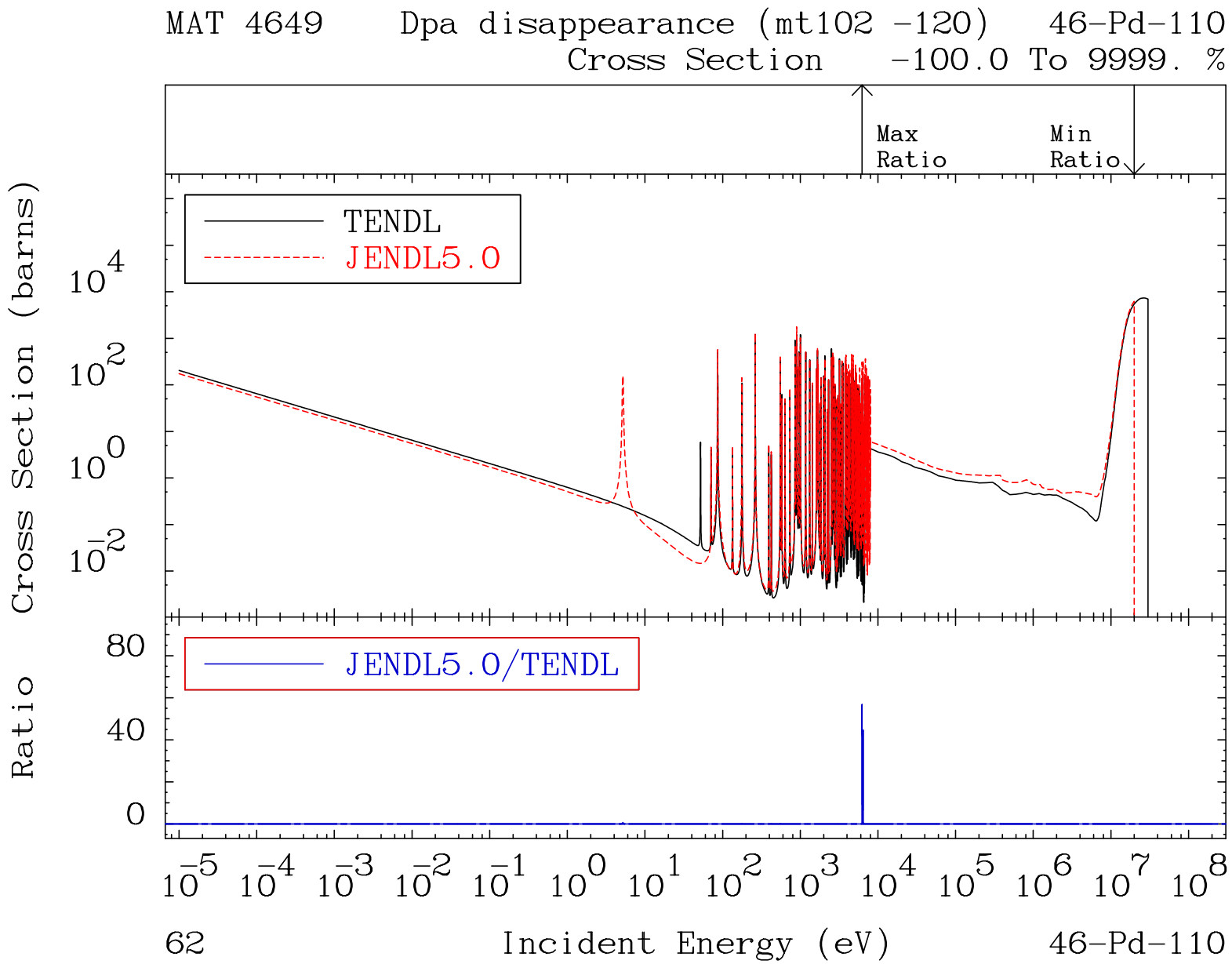

MAT 4649
Total photon (eV-barns)
46-Pd-110
Cross Section -99.85 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
57
46-Pd-110

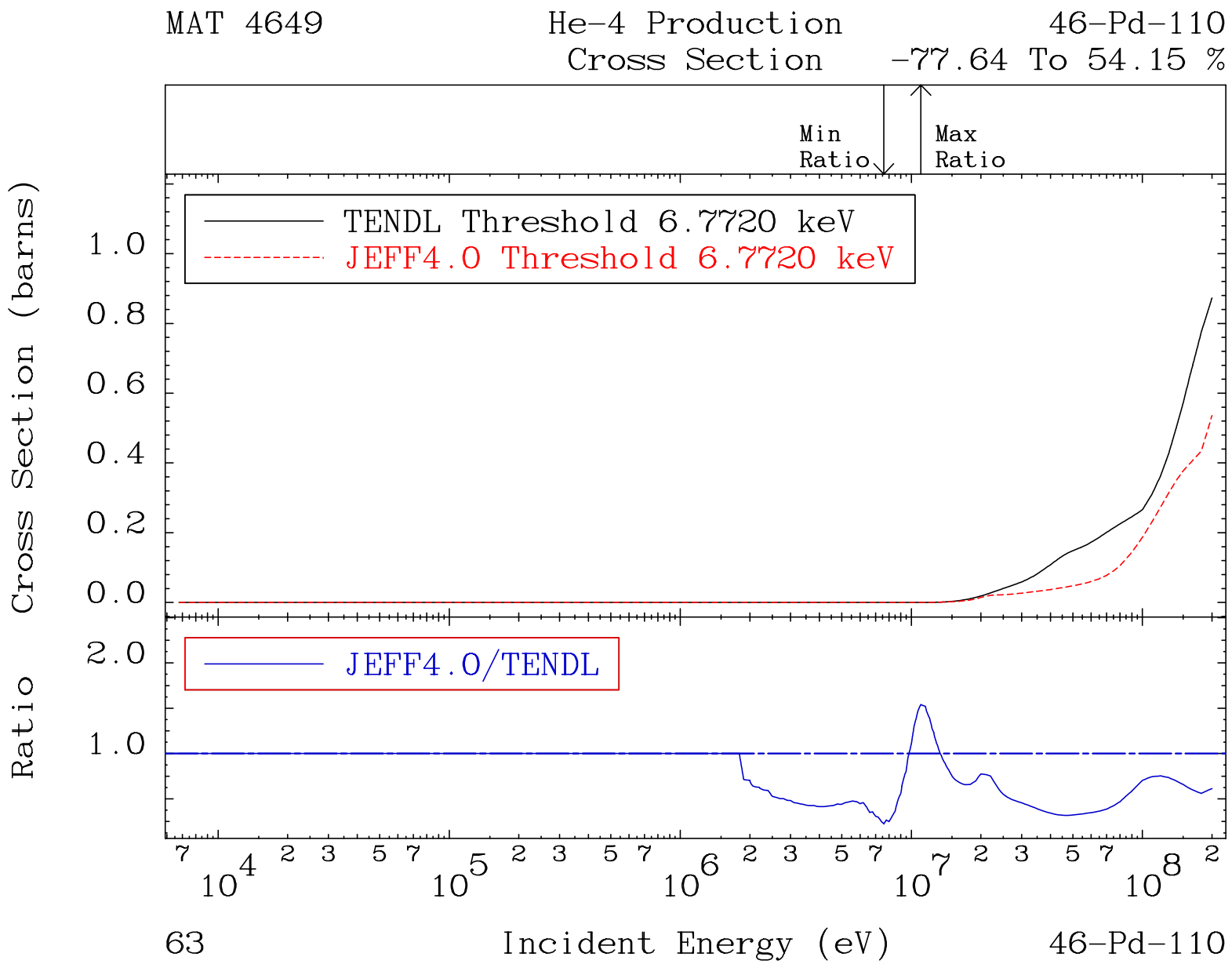

MAT 4649 Total kinematic kerma (high limit) 46-Pd-110
Cross Section -94.49 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
58
46-Pd-110

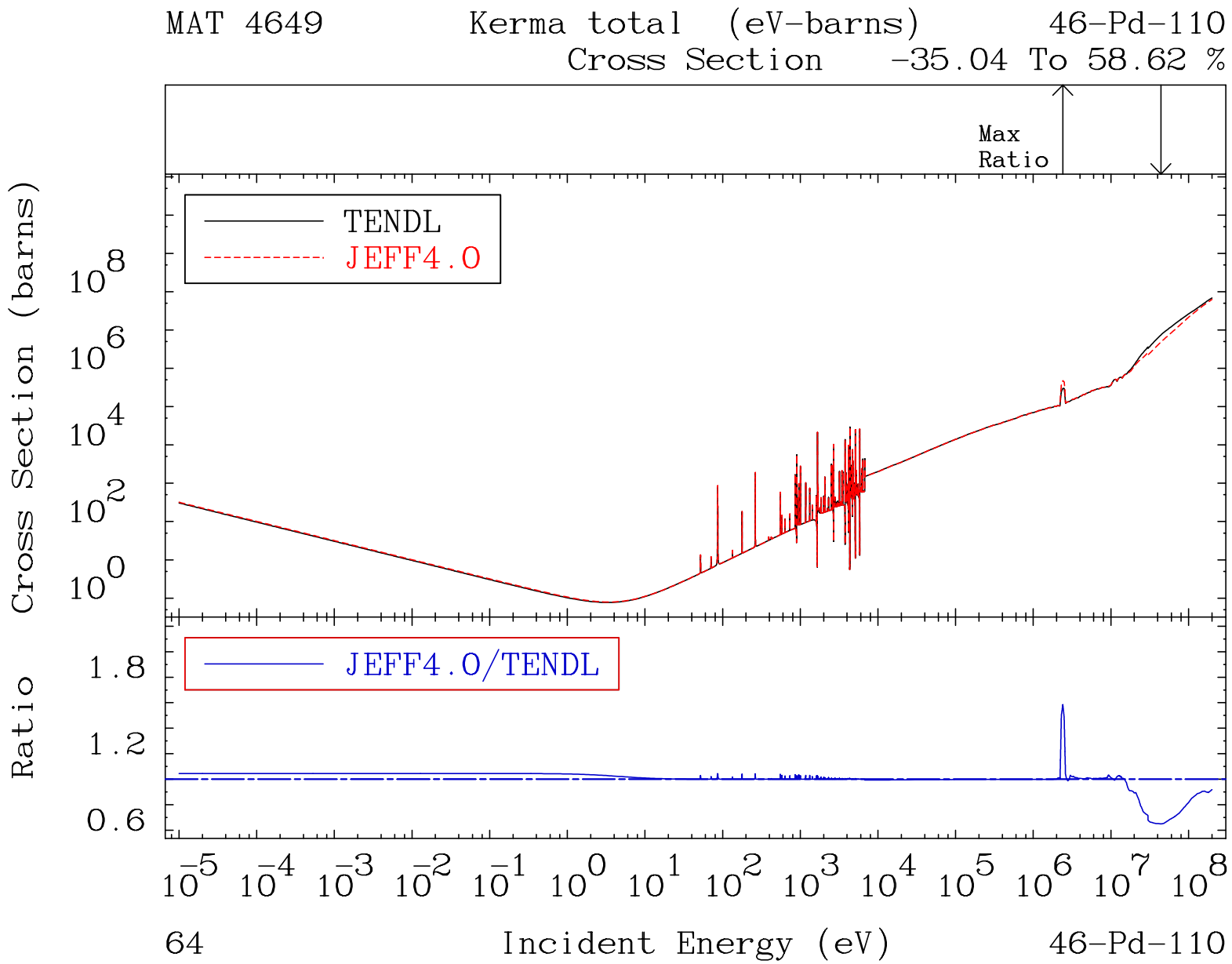

MAT 4649
Dpa total (eV-barns)
46-Pd-110
Cross Section -99.75 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
59
Incident Energy (eV)
46-Pd-110

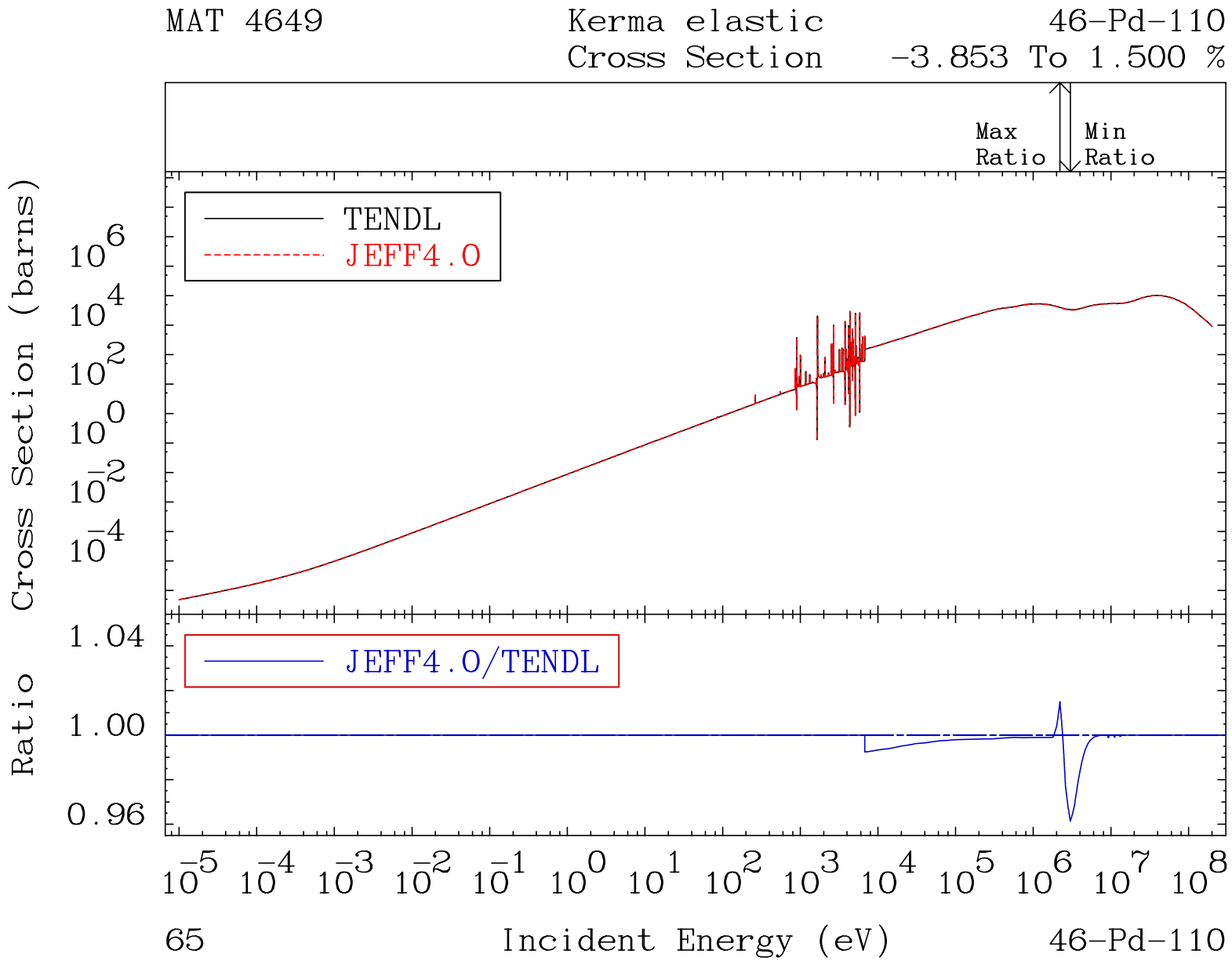

MAT 4649
Dpa elastic (mt2)
Cross Section
46-Pd-110
-94.78 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 673.48 eV
JENDL5.0 Threshold 644.28 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
46-Pd-110

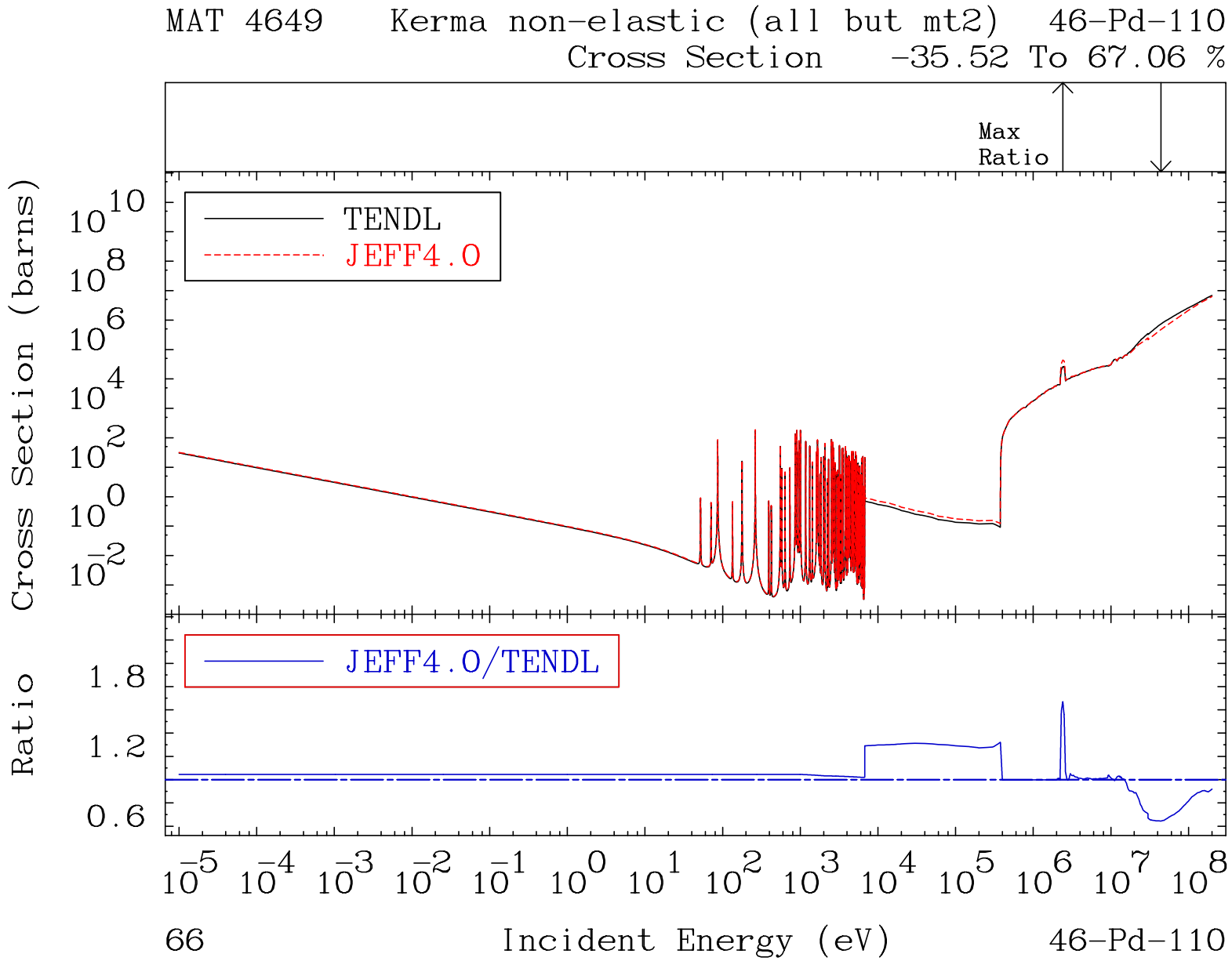

MAT 4649
Dpa inelastic (mt51-91)
46-Pd-110
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 377.23 keV
JENDL5.0 Threshold 105.00 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
46-Pd-110

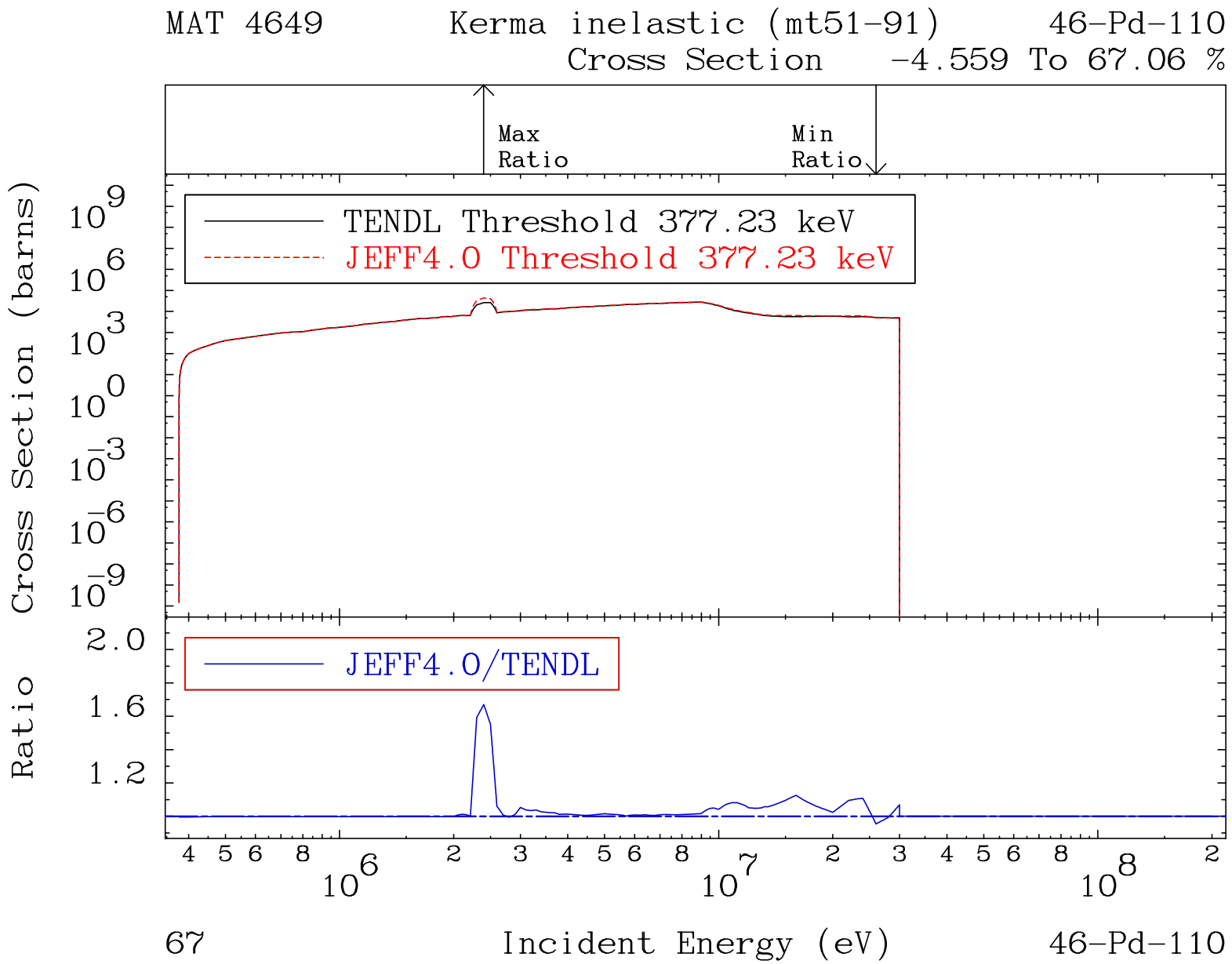

MAT 4649 Dpa disappearance (mt102 -120) 46-Pd-110
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
46-Pd-110

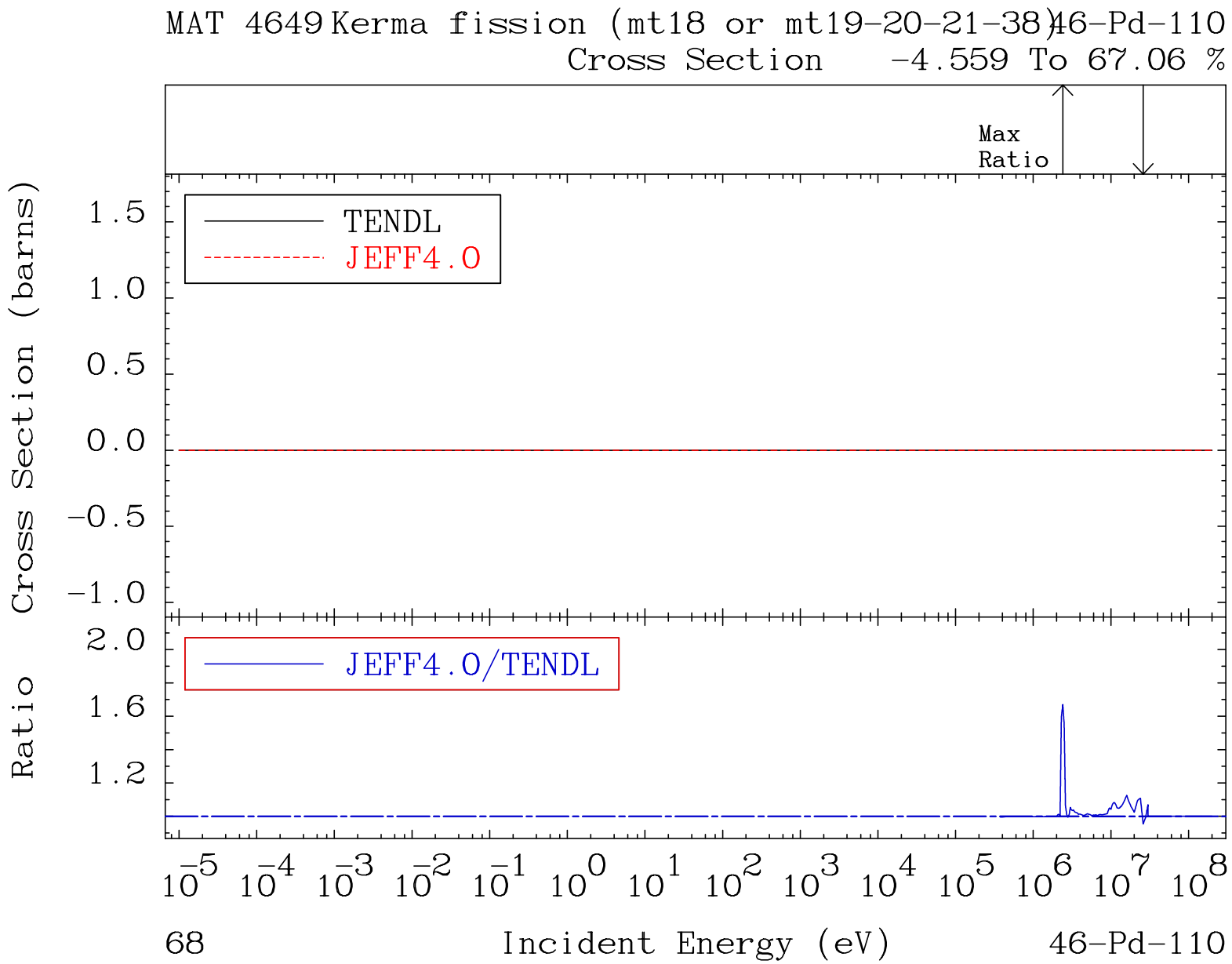

MAT 4649
He-4 Production
Cross Section
46-Pd-110
-77.64 To 54.15 %
Min Ratio
Max Ratio
TENDL Threshold 6.7720 keV
JEFF4.0 Threshold 6.7720 keV
Cross Section (barns)
1.0
0.8
0.6
0.4
0.2
0.0
JEFF4.0/TENDL
Ratio
2.0
1.0
7 2 3 5 7 2 3 5 7 2 3 5 7 2 3 5 7 2
10^4 10^5 10^6 10^7 10^8
63
Incident Energy (eV)
46-Pd-110

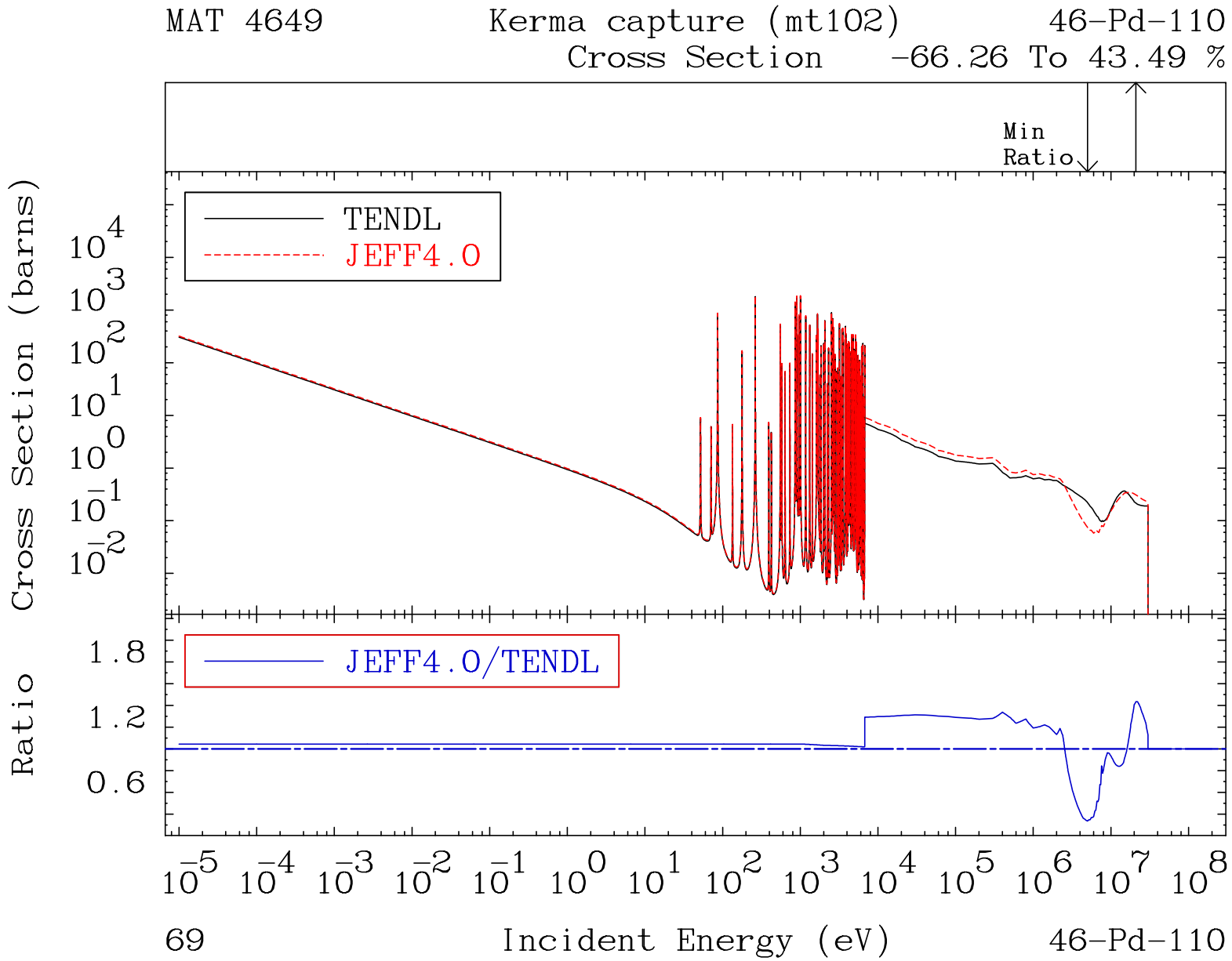

MAT 4649
Kerma total (eV-barns)
46-Pd-110
Cross Section -35.04 To 58.62 %
Max
Ratio
TENDL
JEFF4.0
Cross Section (barns)
10^8
10^6
10^4
10^2
10^0
JEFF4.0/TENDL
Ratio
1.8
1.2
0.6
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
64
Incident Energy (eV)
46-Pd-110

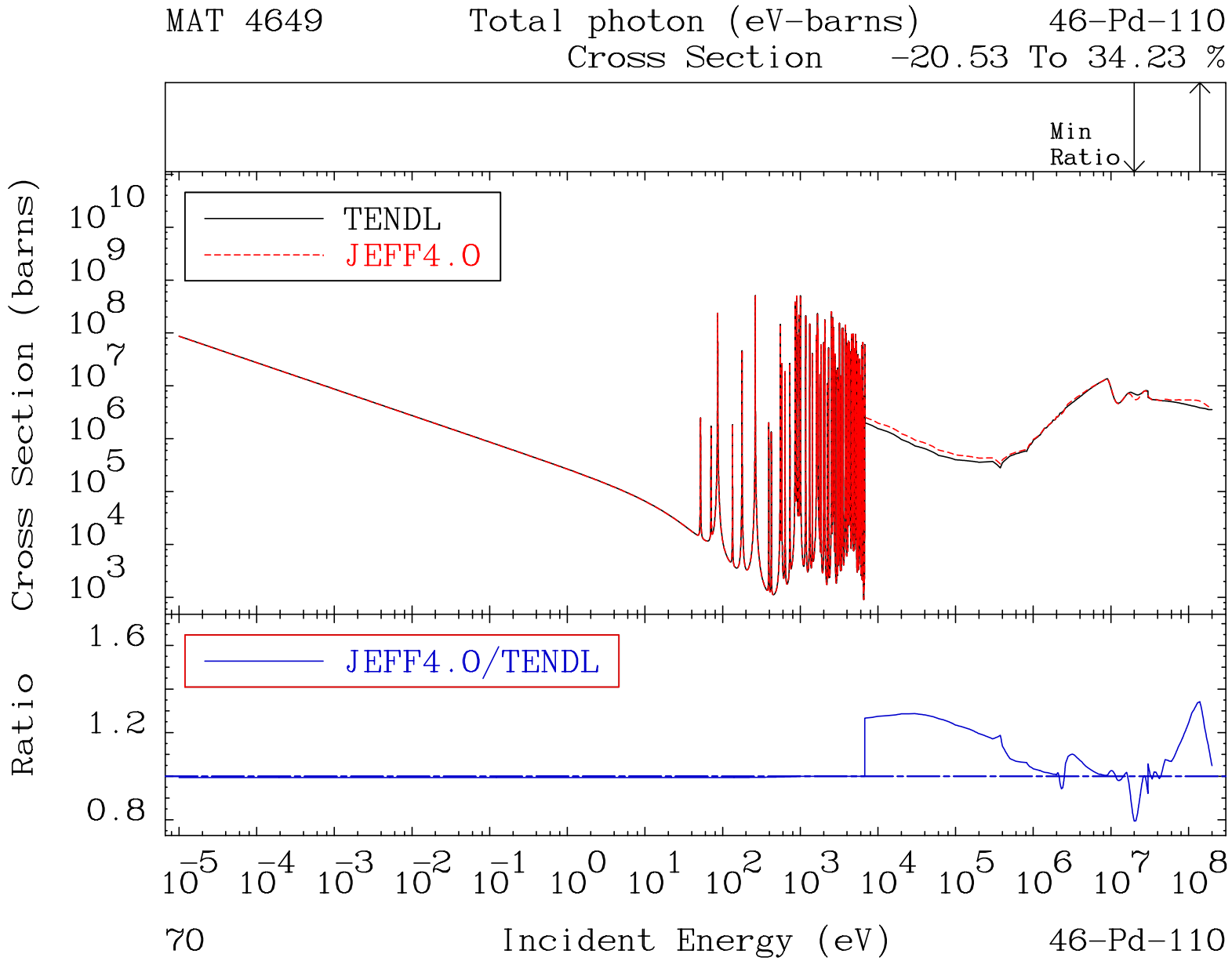

MAT 4649
Kerma elastic
Cross Section
46-Pd-110
-3.853 To 1.500 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
65
46-Pd-110

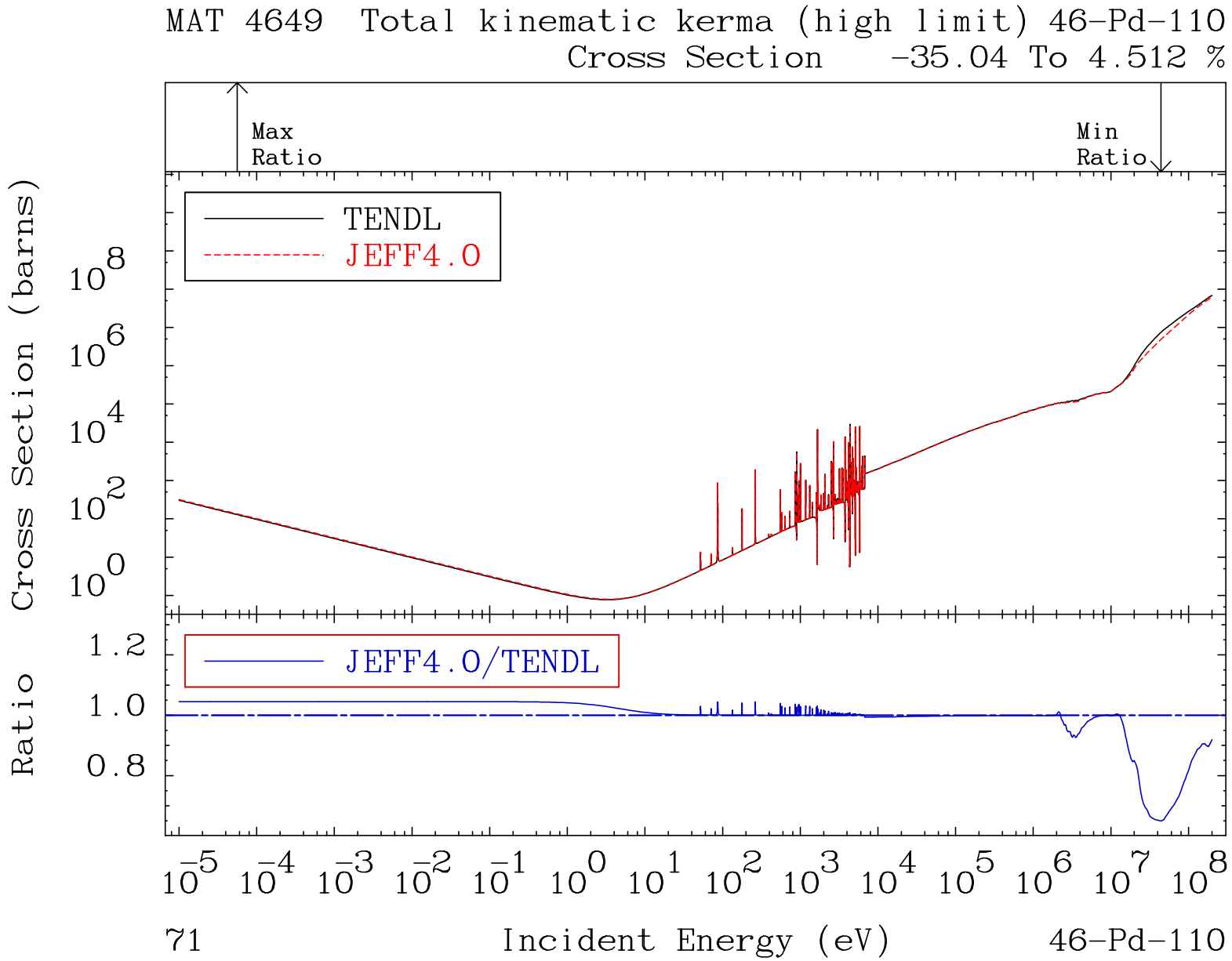

MAT 4649 Kerma non-elastic (all but mt2) 46-Pd-110
Cross Section -35.52 To 67.06 %
Max
Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
66
46-Pd-110

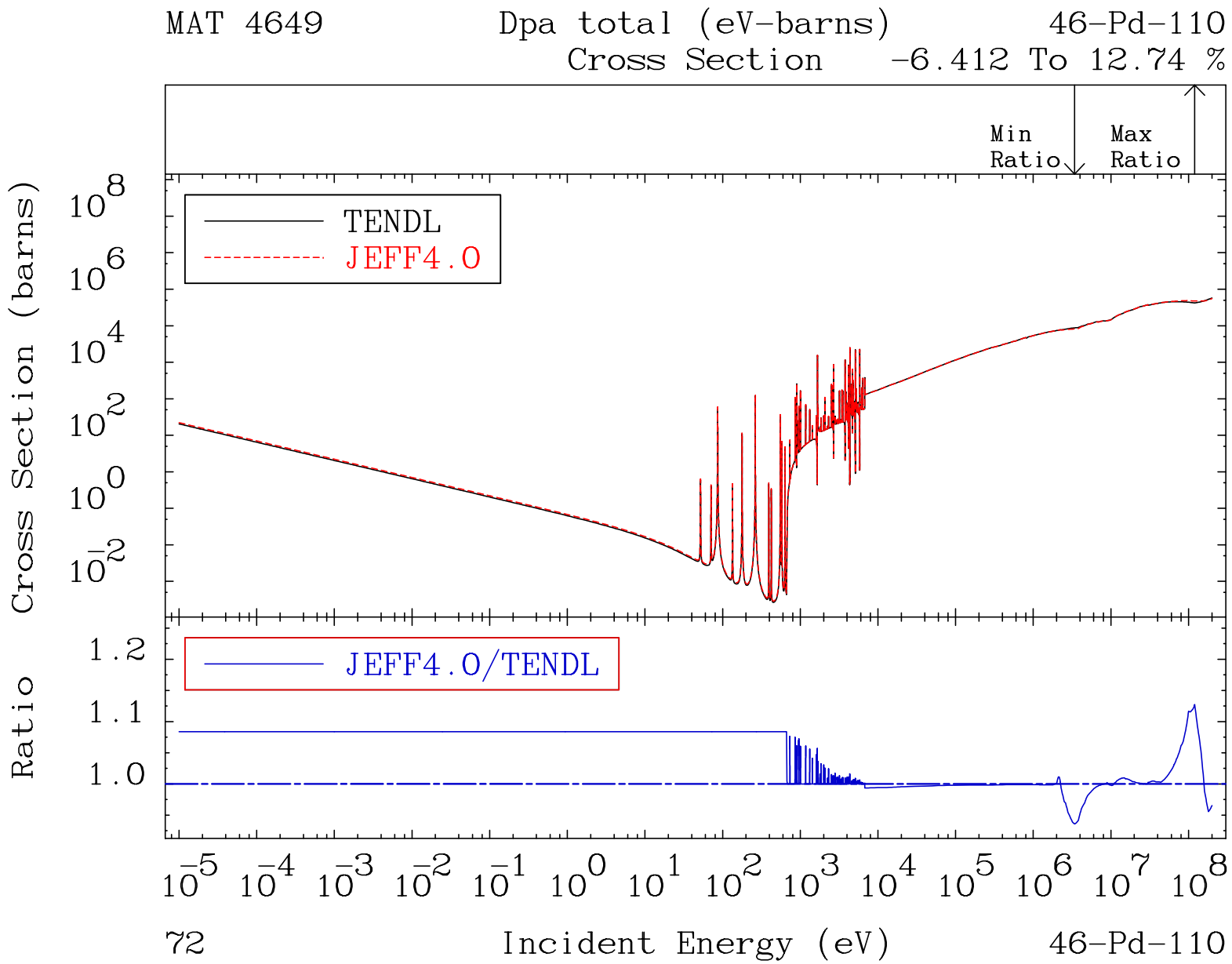

MAT 4649
Kerma inelastic (mt51-91)
46-Pd-110
Cross Section -4.559 To 67.06 %
Max Ratio
Min Ratio
TENDL Threshold 377.23 keV
JEFF4.0 Threshold 377.23 keV
Cross Section (barns)
JEFF4.0/TENDL
Ratio
67
Incident Energy (eV)
46-Pd-110

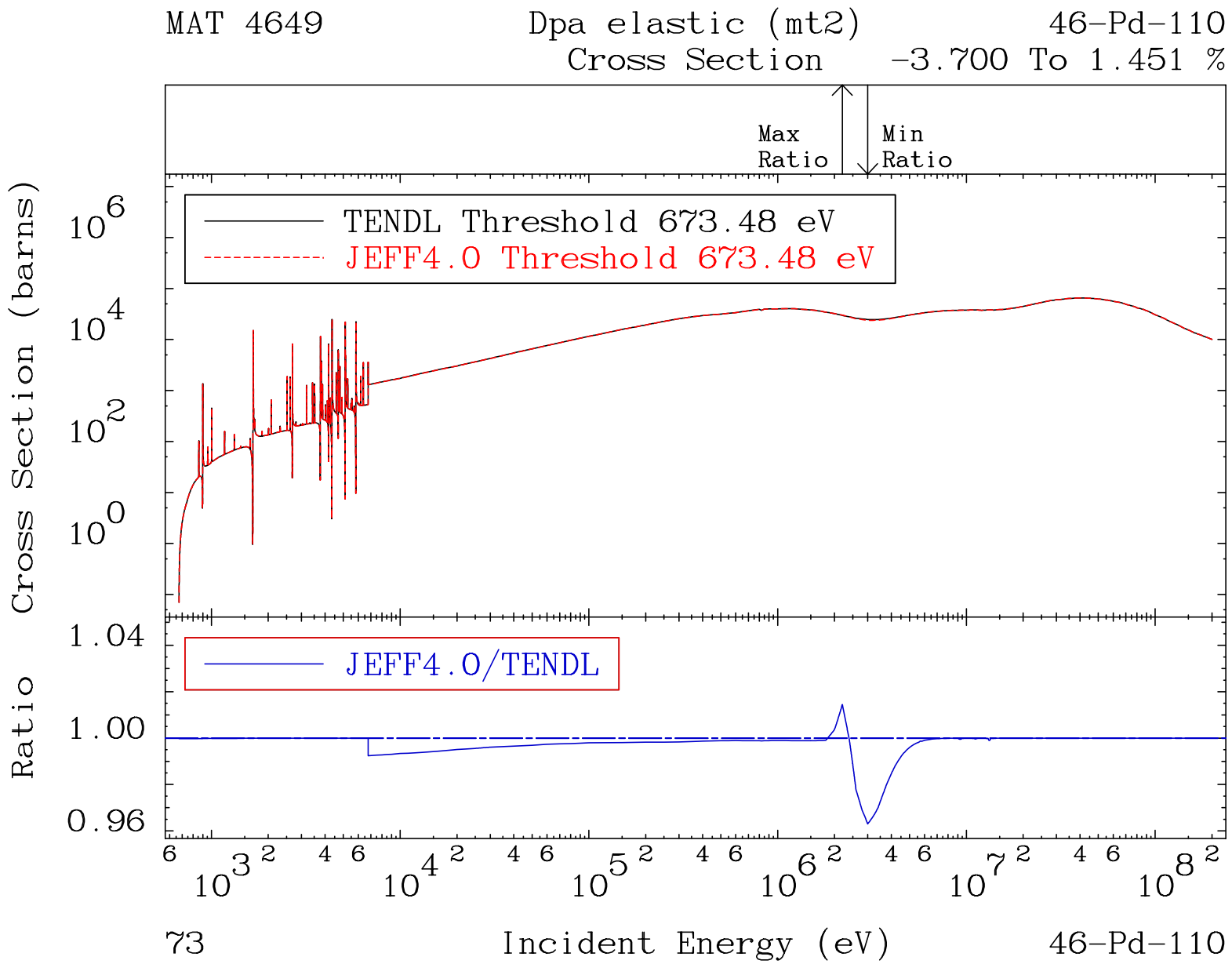

MAT 4649 Kerma fission (mt18 or mt19-20-21-38) 46-Pd-110
Cross Section -4.559 To 67.06 %
Max
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
2.0
1.6
1.2
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
68
Incident Energy (eV)
46-Pd-110

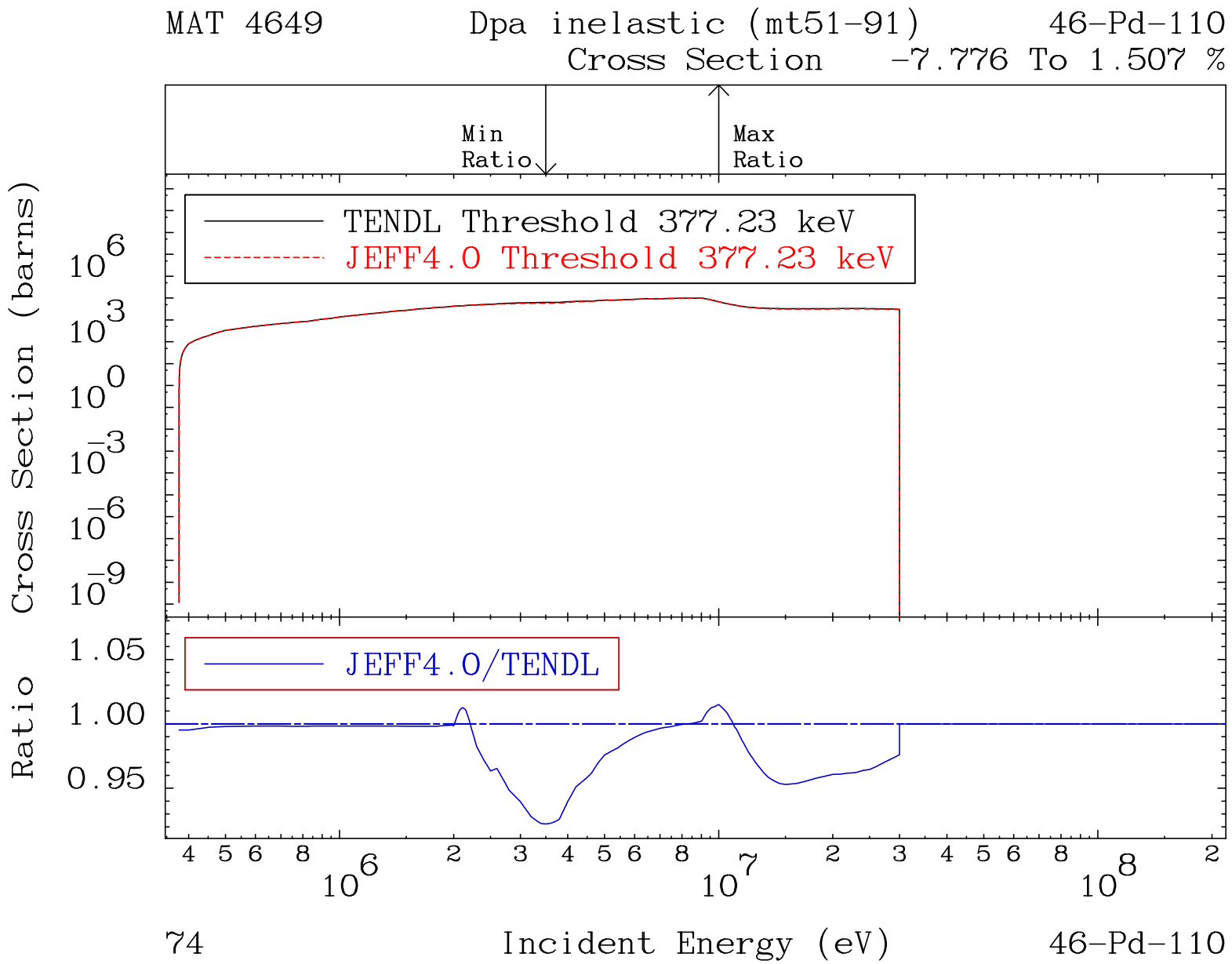

MAT 4649
Kerma capture (mt102)
46-Pd-110
Cross Section
-66.26 To 43.49 %
Min
Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
69
46-Pd-110

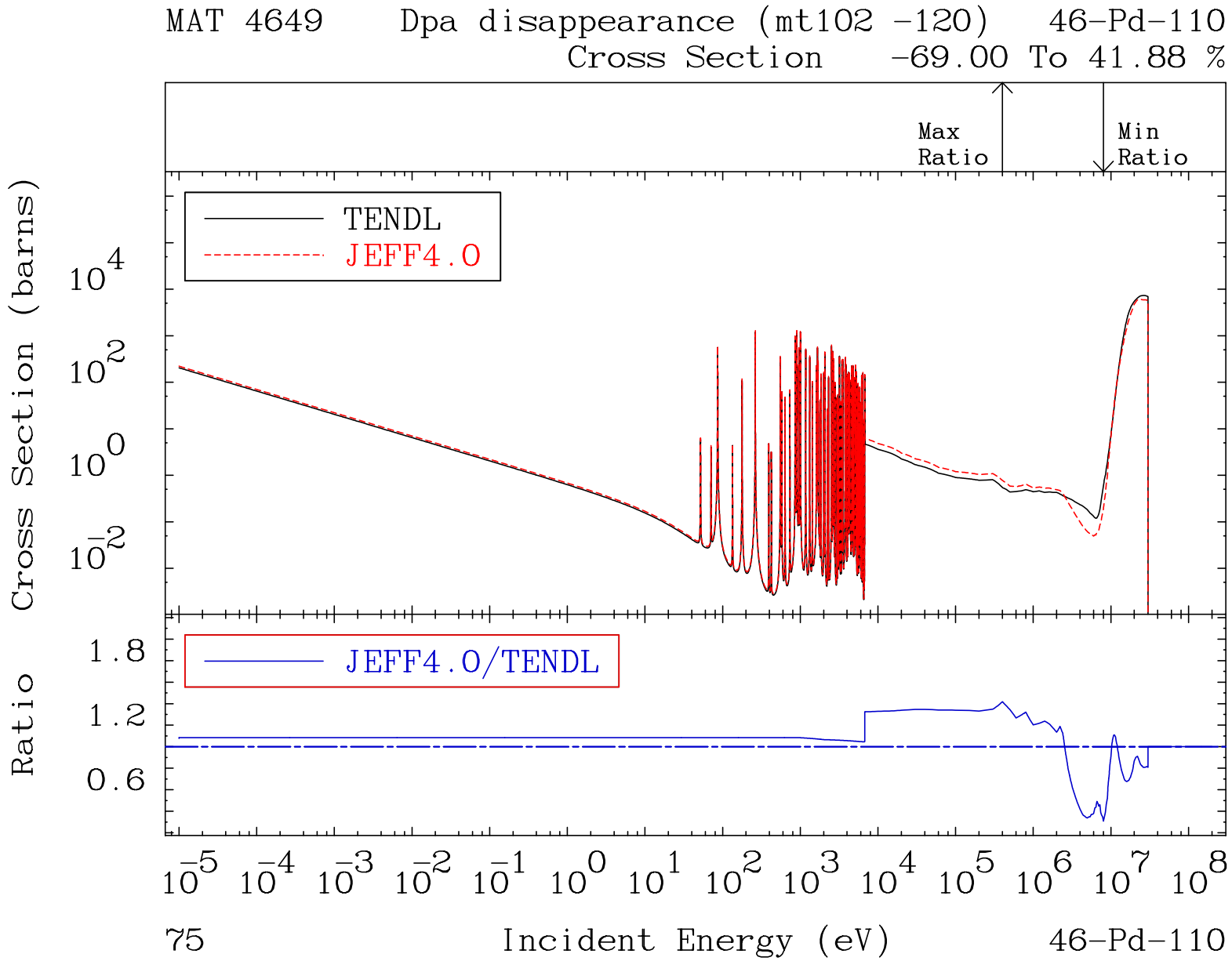

MAT 4649
Total photon (eV-barns)
46-Pd-110
Cross Section -20.53 To 34.23 %
Min
Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
46-Pd-110

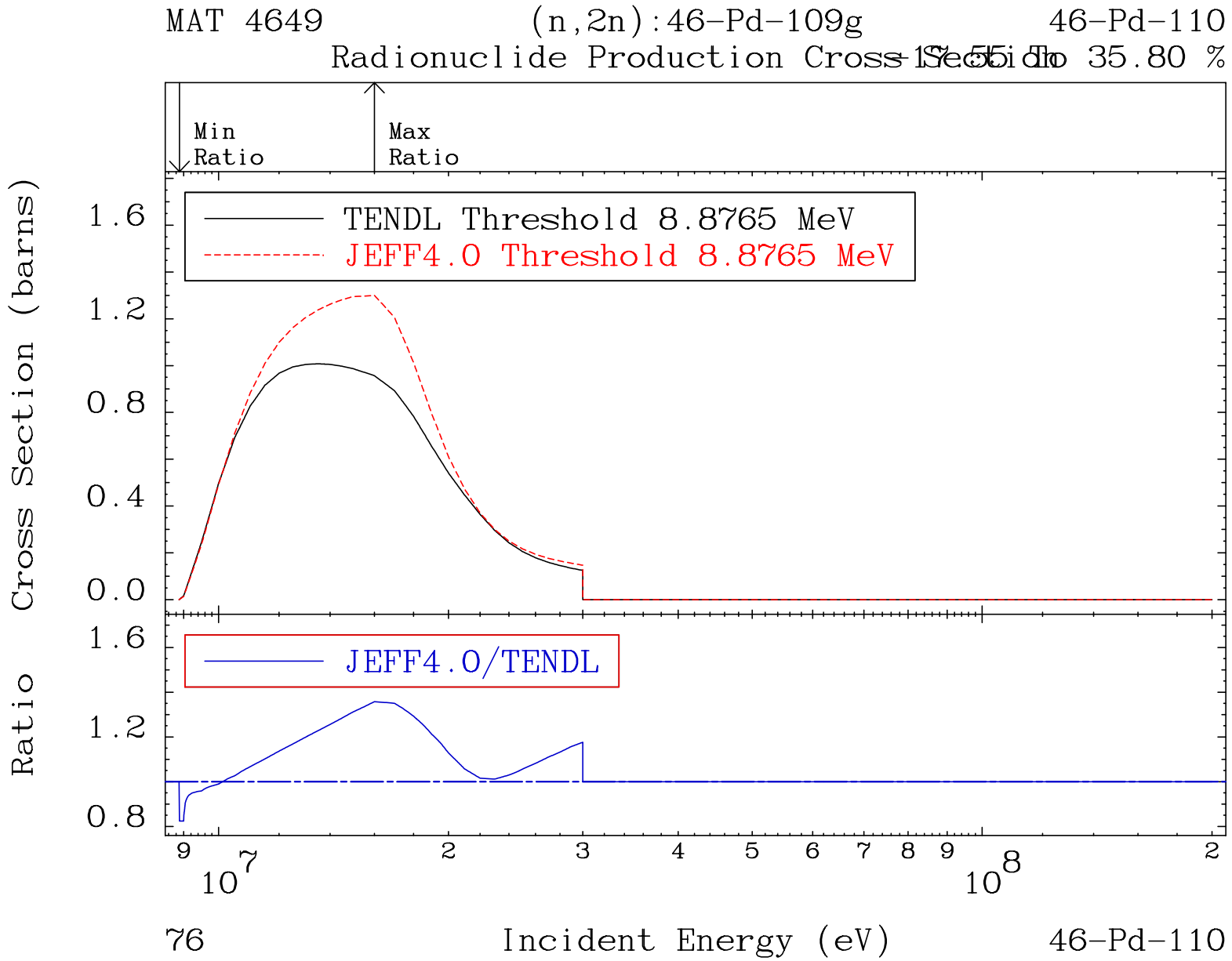

MAT 4649 Total kinematic kerma (high limit) 46-Pd-110
Cross Section -35.04 To 4.512 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
71
46-Pd-110

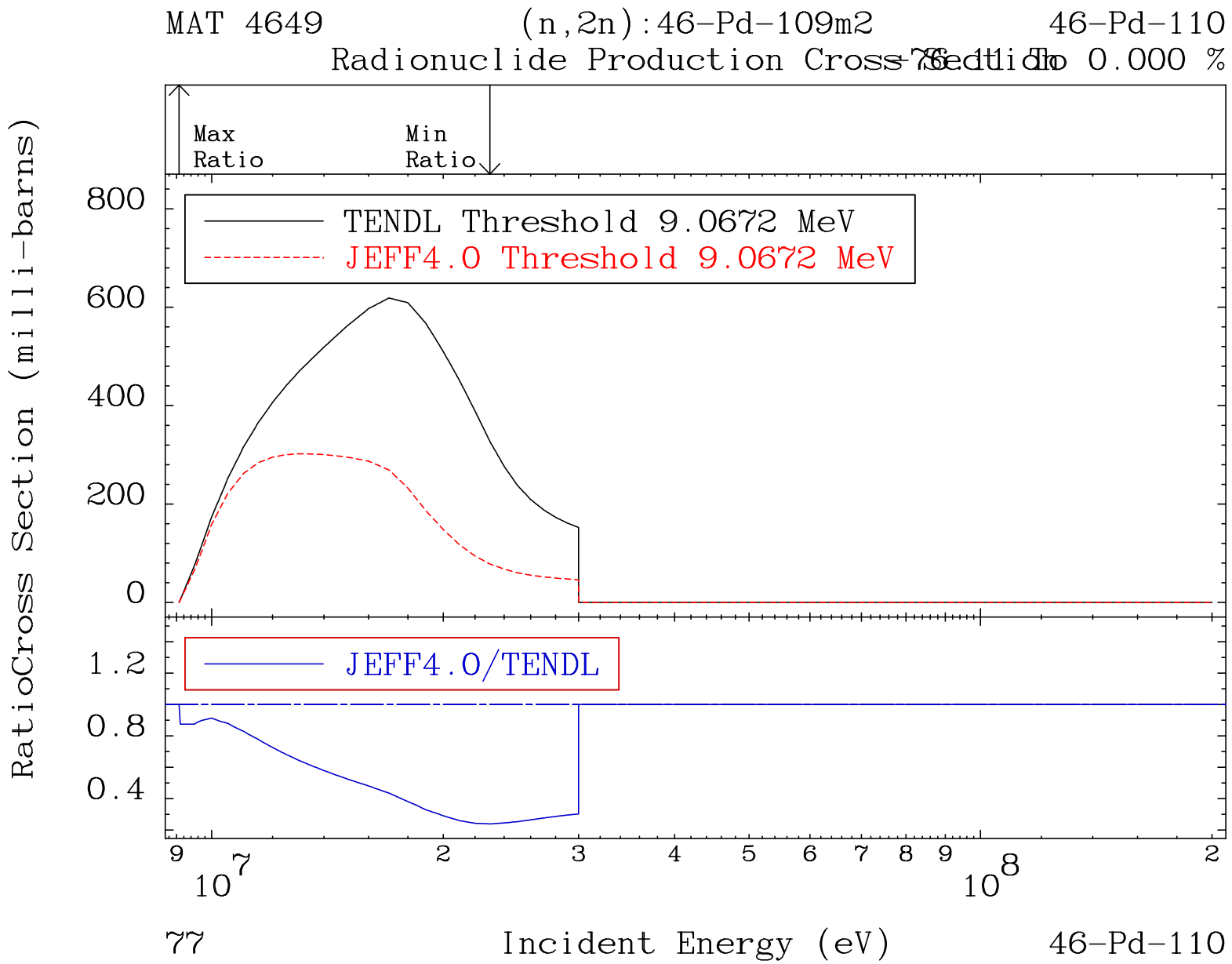

MAT 4649
Dpa total (eV-barns)
46-Pd-110
Cross Section
-6.412 To 12.74 %
Min Ratio
Max Ratio
TENDL
JEFF4.0
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
46-Pd-110

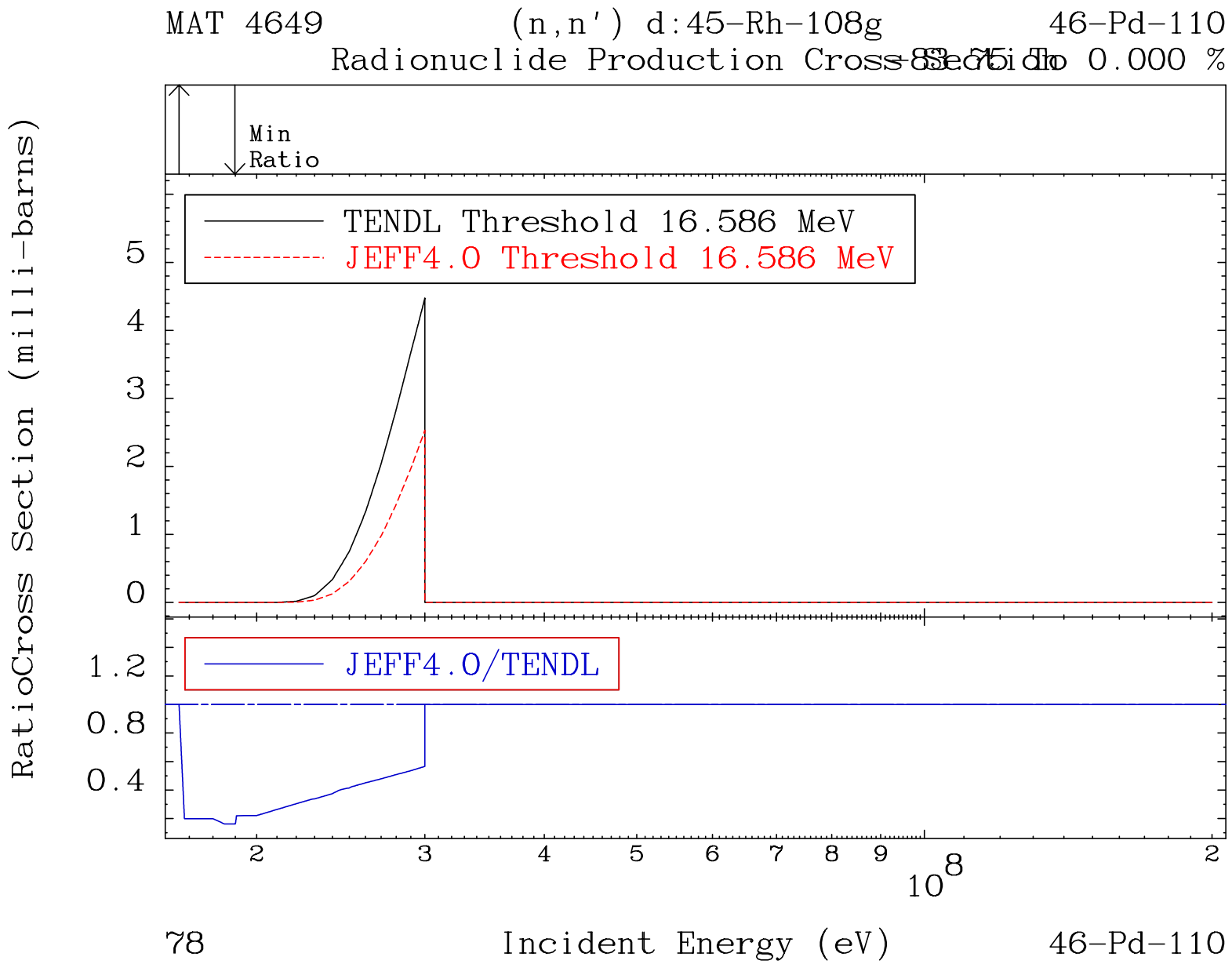

MAT 4649
Dpa elastic (mt2)
Cross Section
46-Pd-110
-3.700 To 1.451 %
Max Ratio
Min Ratio
TENDL Threshold 673.48 eV
JEFF4.0 Threshold 673.48 eV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
46-Pd-110

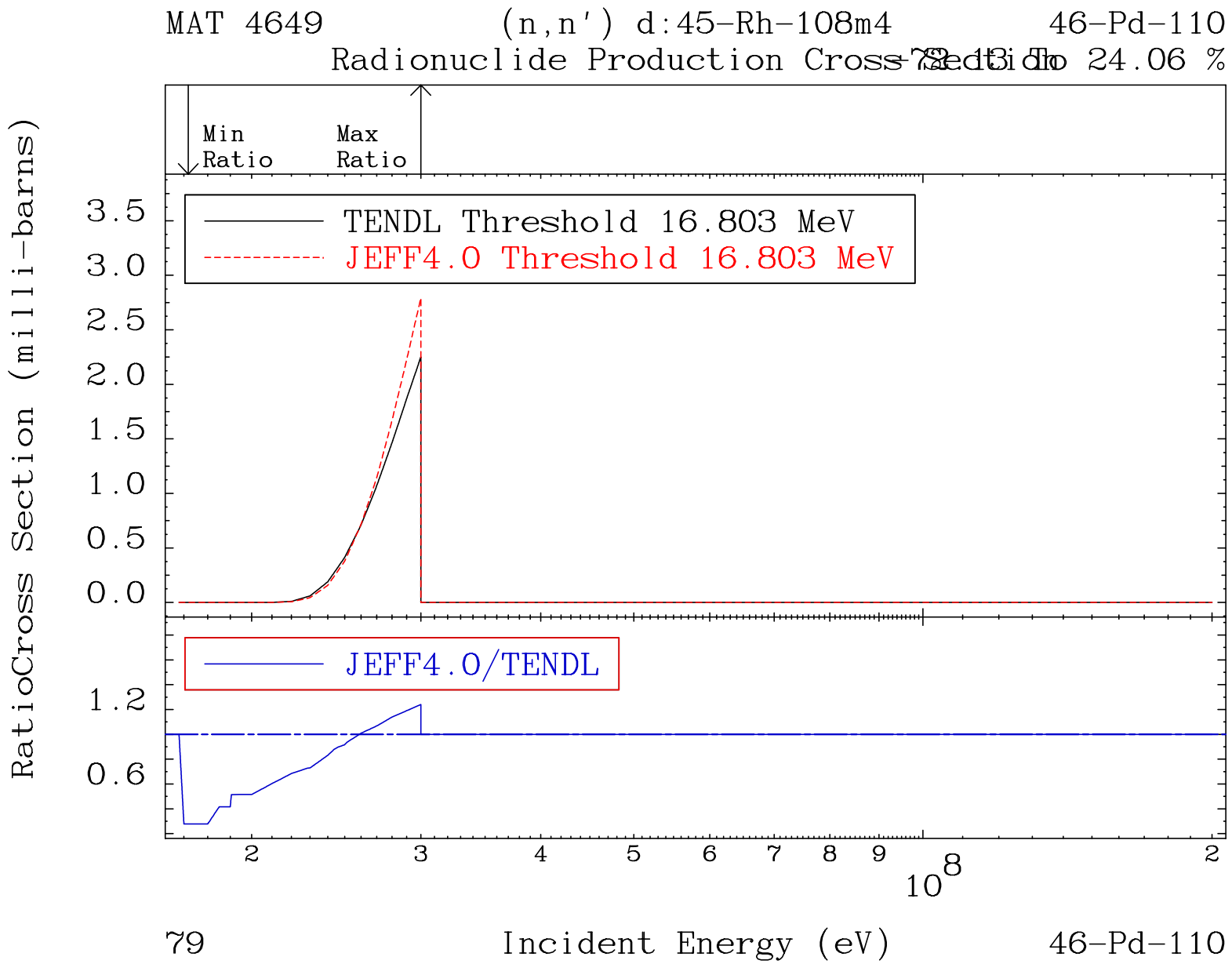

MAT 4649
Dpa inelastic (mt51-91)
46-Pd-110
Cross Section -7.776 To 1.507 %
Min Ratio
Max Ratio
TENDL Threshold 377.23 keV
JEFF4.0 Threshold 377.23 keV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
46-Pd-110

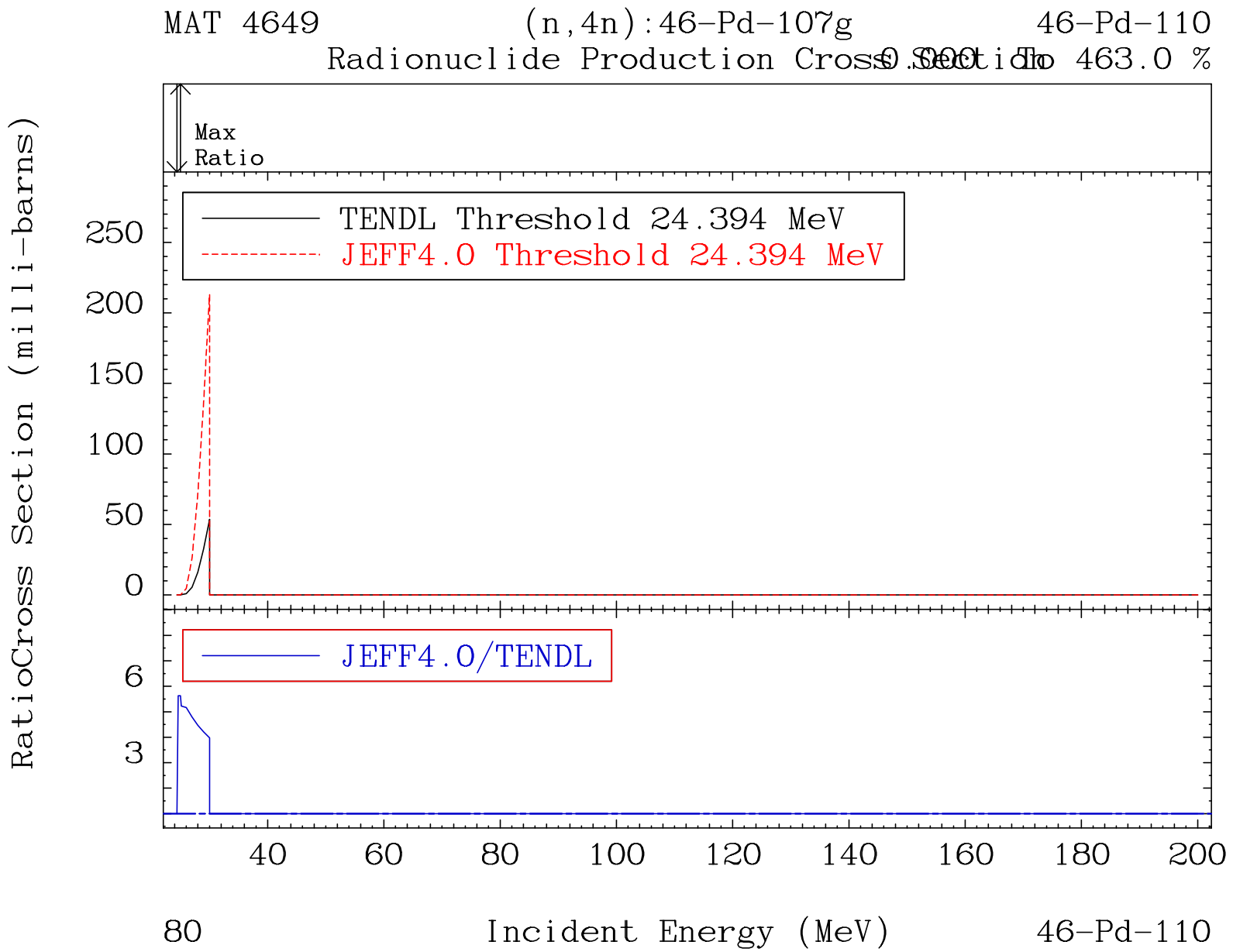

MAT 4649 Dpa disappearance (mt102 -120) 46-Pd-110
Cross Section -69.00 To 41.88 %
Max Ratio
Min Ratio
TENDL
JEFF4.0
Cross Section (barns)
JEFF4.0/TENDL
Ratio
Incident Energy (eV)
75
46-Pd-110

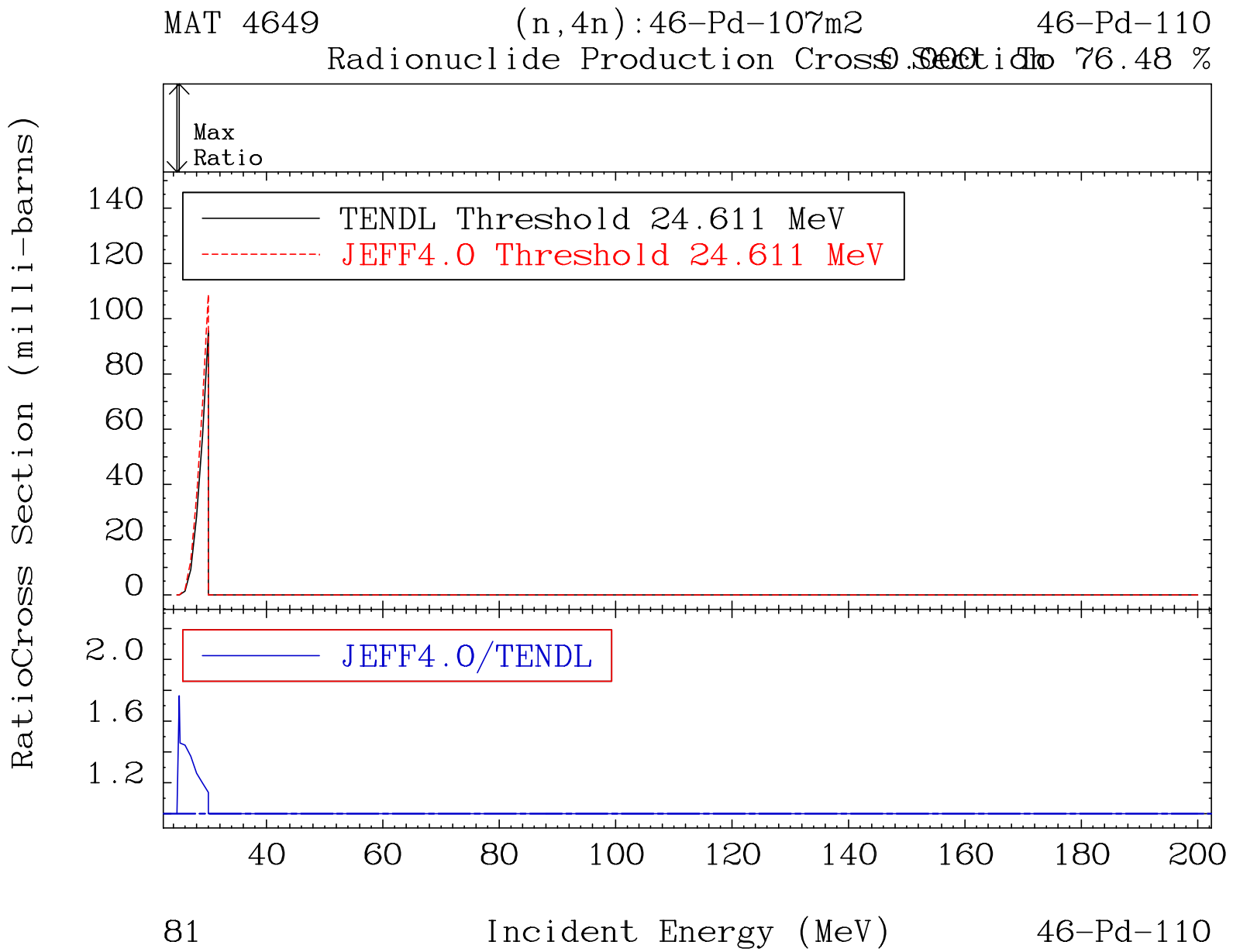

MAT 4649
(n,2n):46-Pd-109g
46-Pd-110
Radionuclide Production Cross Section
-1.55 to 35.80 %
Min Ratio
Max Ratio
TENDL Threshold 8.8765 MeV
JEFF4.0 Threshold 8.8765 MeV
JEFF4.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
76
Incident Energy (eV)
46-Pd-110

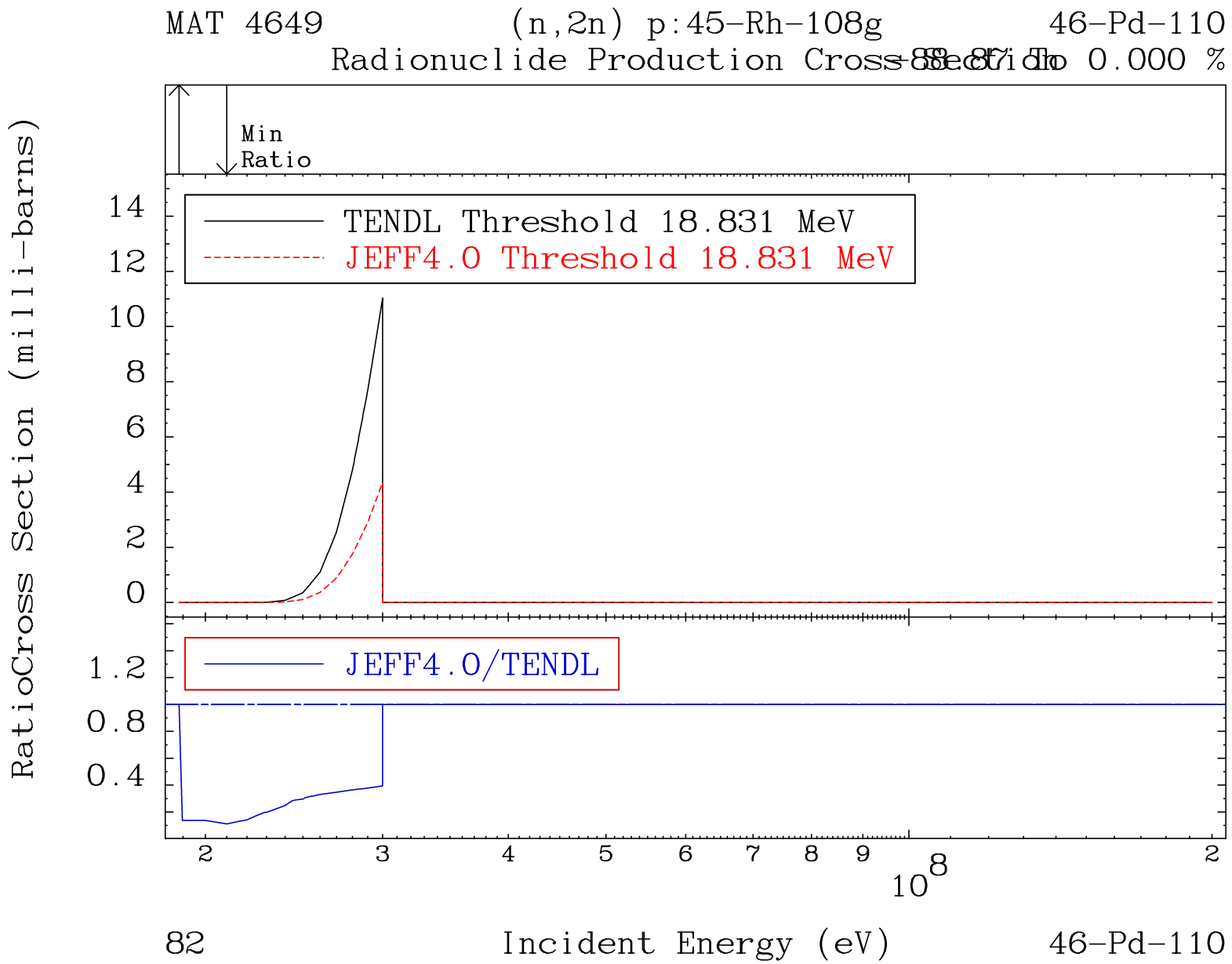

MAT 4649
(n,2n):46-Pd-109m2
46-Pd-110
Radionuclide Production Cross Section
To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 9.0672 MeV
JEFF4.0 Threshold 9.0672 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
800
600
400
200
0
1.2
0.8
0.4
9
10^7
2
3
4
5
6
7
8
9
10^8
2
77
Incident Energy (eV)
46-Pd-110

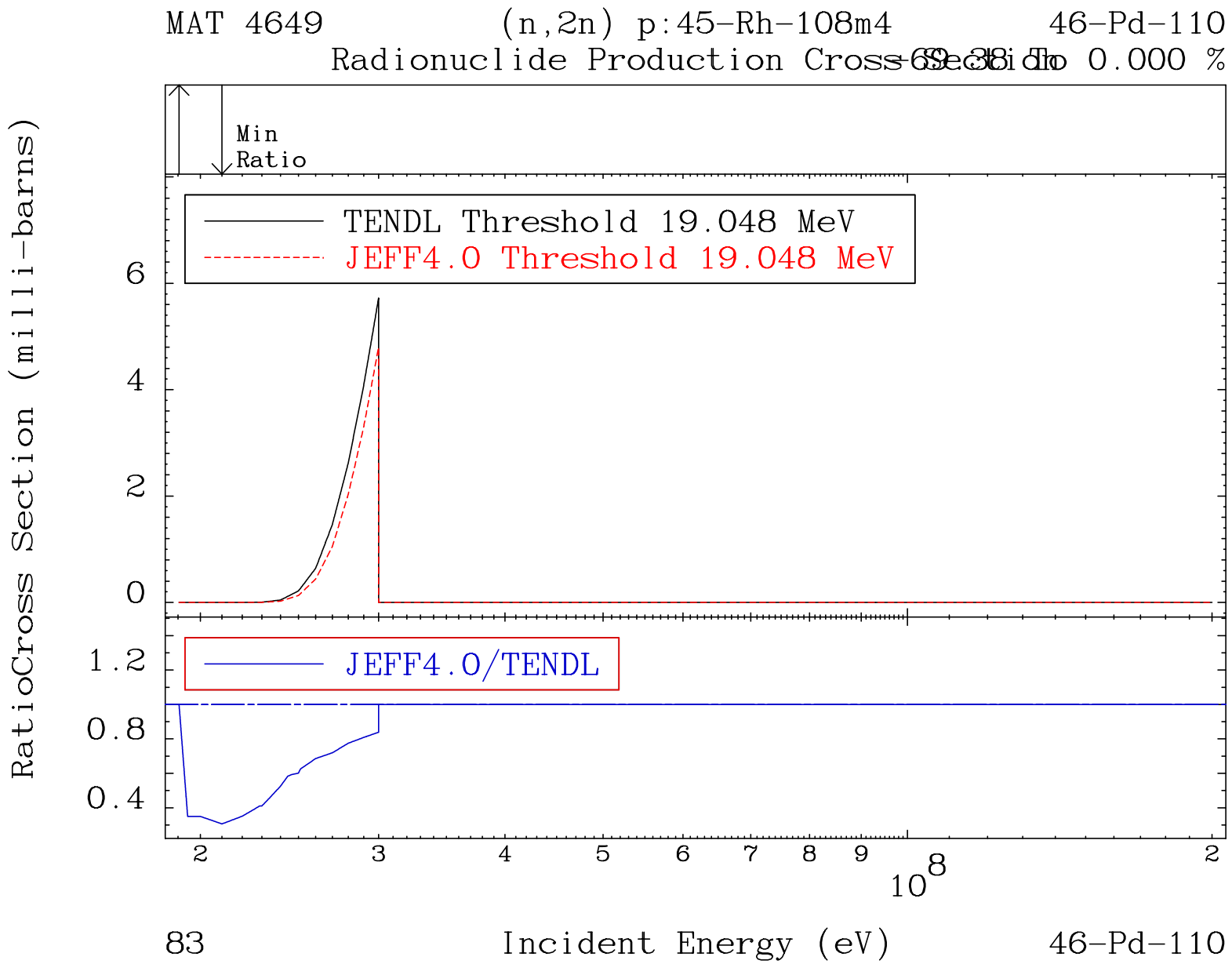

MAT 4649
(n,n') d:45-Rh-108g
46-Pd-110
Radionuclide Production Cross Section To 0.000 %
Min
Ratio
TENDL Threshold 16.586 MeV
JEFF4.0 Threshold 16.586 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
78
46-Pd-110

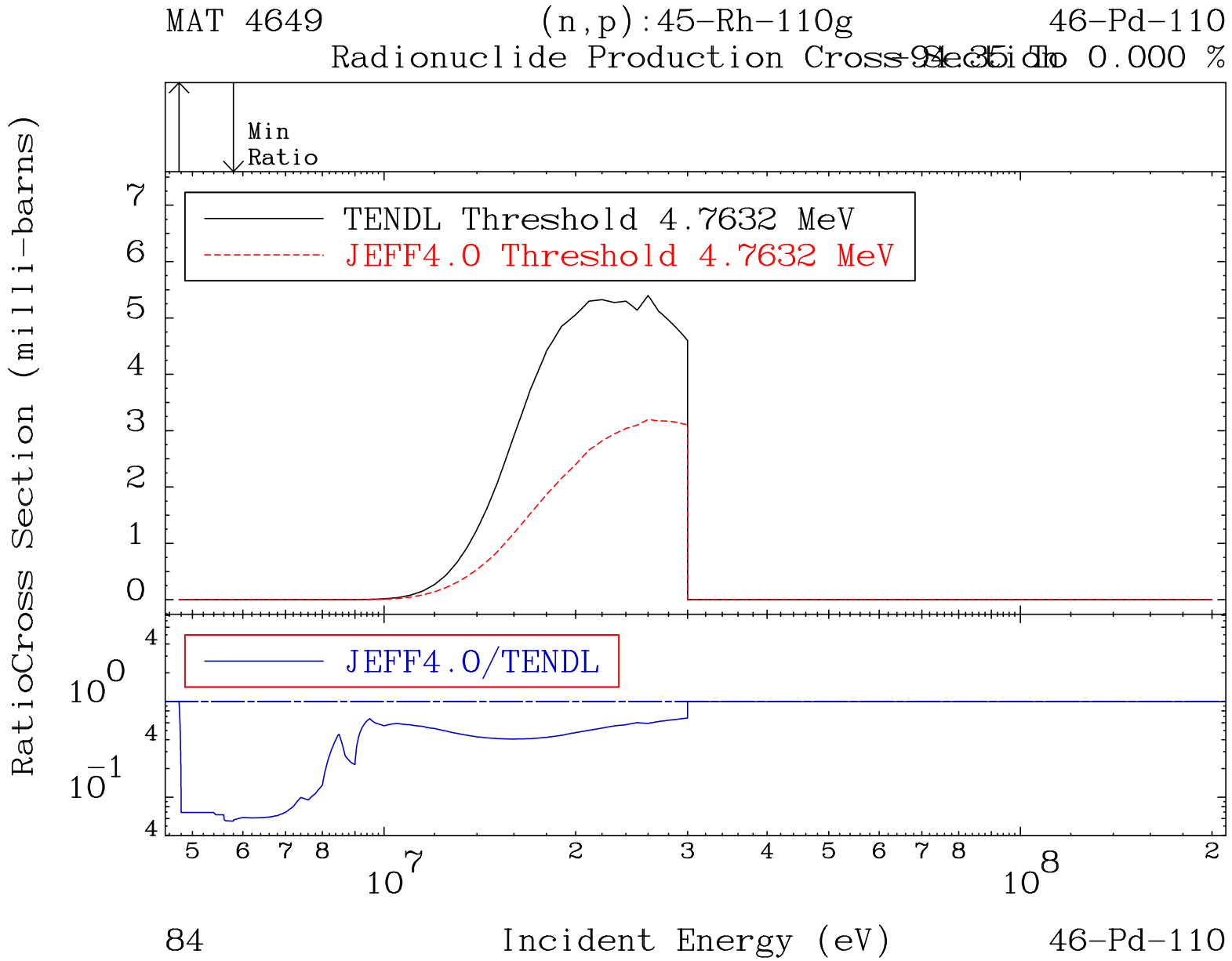

MAT 4649 (n,n') d:45-Rh-108m4 46-Pd-110
Radionuclide Production Cross Section To 24.06 %
Min Ratio
Max Ratio
TENDL Threshold 16.803 MeV
JEFF4.0 Threshold 16.803 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1.2
0.6
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
46-Pd-110

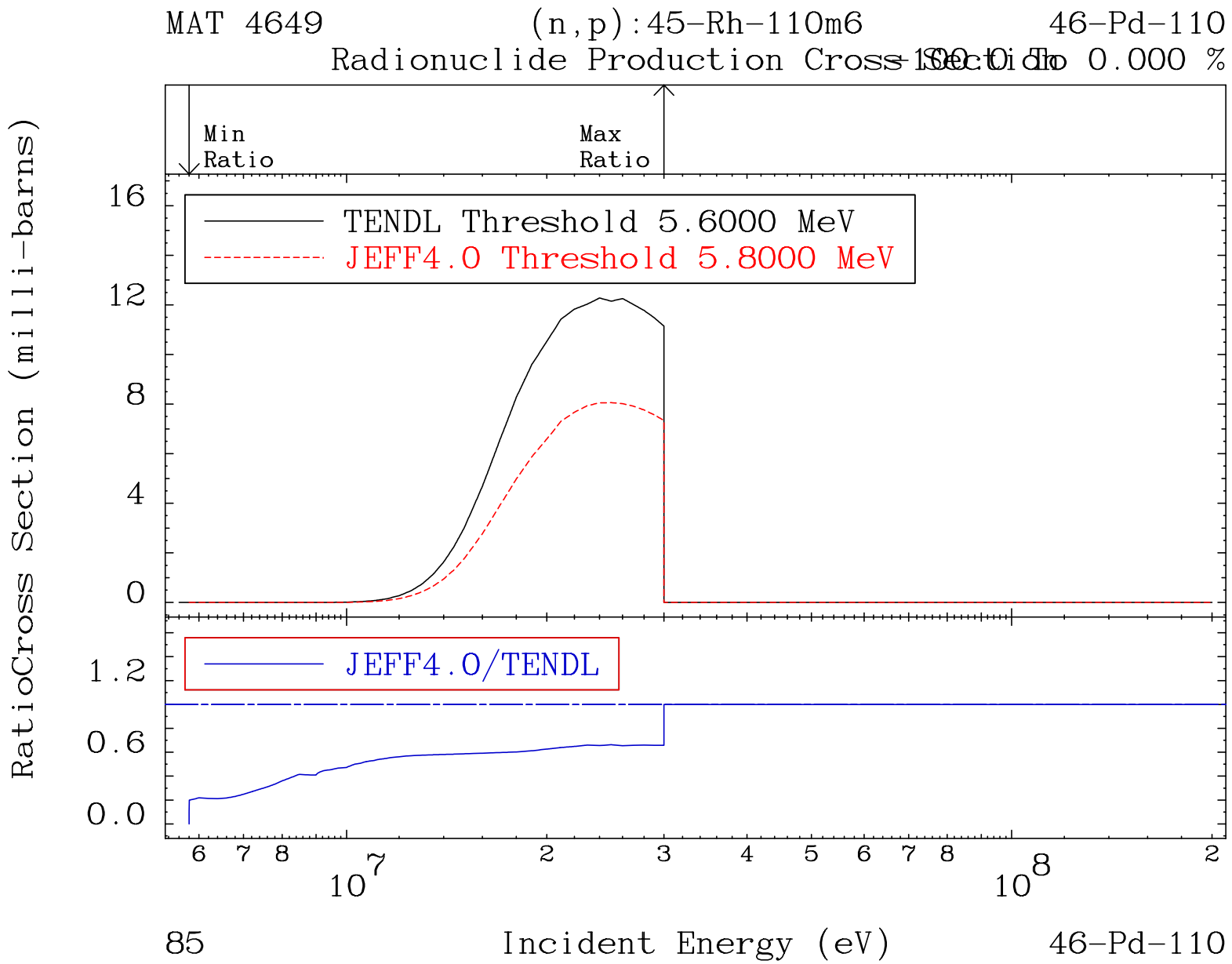

MAT 4649
(n,4n):46-Pd-107g
46-Pd-110
Radionuclide Production Cross Section
0.000 To 463.0 %
Max
Ratio
TENDL Threshold 24.394 MeV
JEFF4.0 Threshold 24.394 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
6
3
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
46-Pd-110

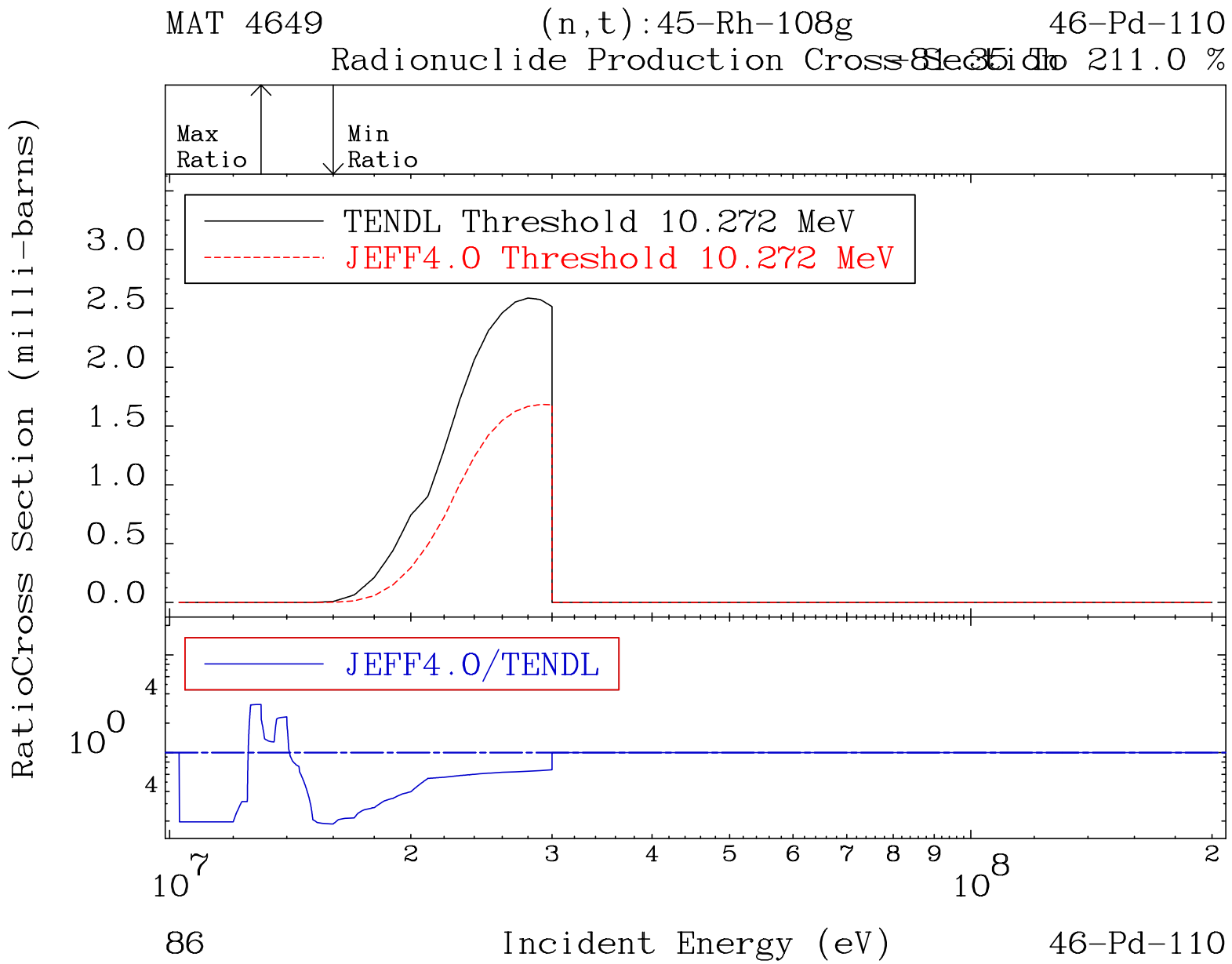

MAT 4649
(n,4n):46-Pd-107m2
46-Pd-110
Radionuclide Production Cross Section
0.000 To 76.48 %
Max
Ratio
TENDL Threshold 24.611 MeV
JEFF4.0 Threshold 24.611 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
2.0
1.6
1.2
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
46-Pd-110

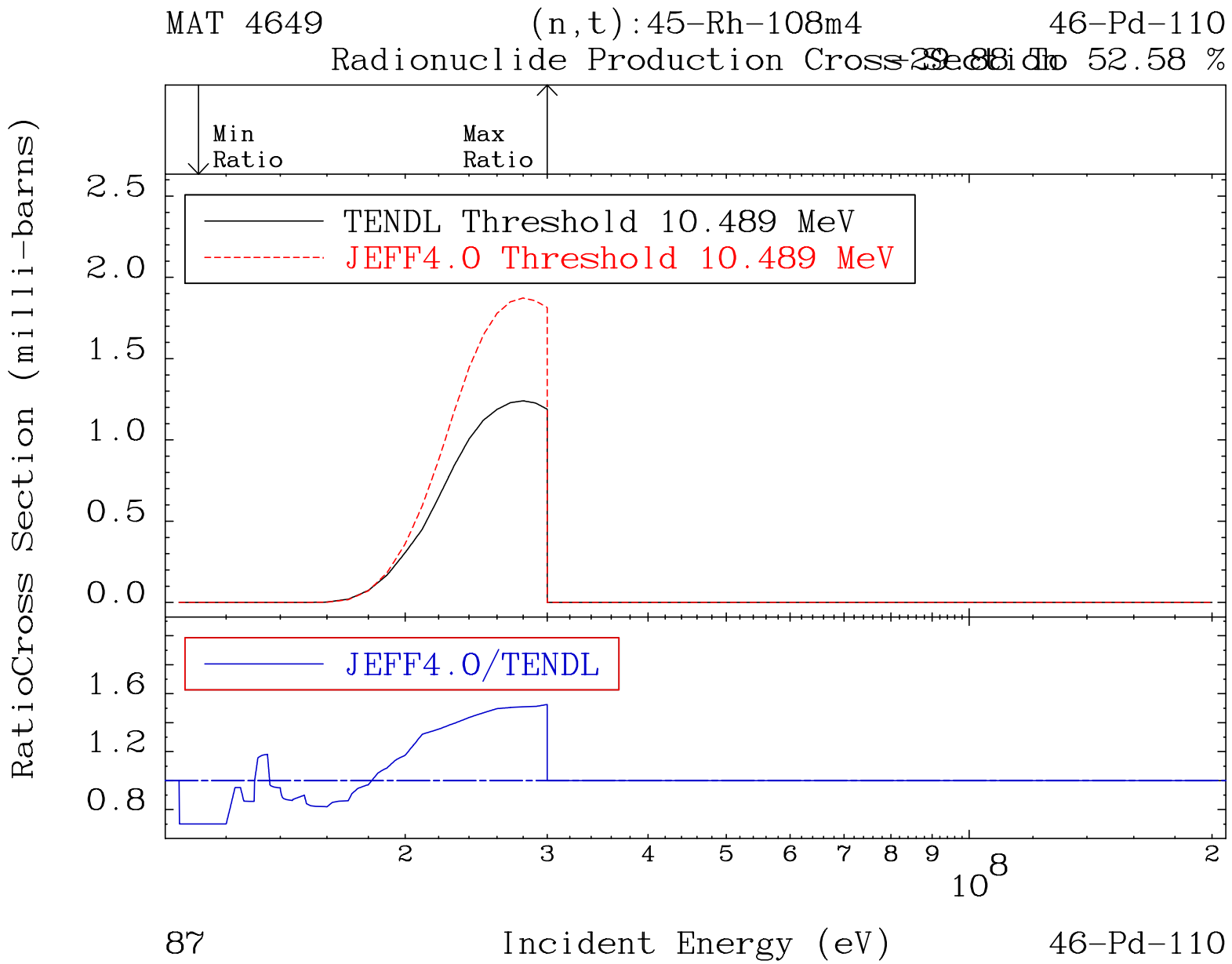

MAT 4649
(n,2n) p:45-Rh-108g
46-Pd-110
Radionuclide Production Cross Section
Min
Ratio
TENDL Threshold 18.831 MeV
JEFF4.0 Threshold 18.831 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
14
12
10
8
6
4
2
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
46-Pd-110


MAT 4649
(n,2n) p:45-Rh-108m4
46-Pd-110
Radionuclide Production Cross Section To 0.000 %
Min
Ratio
TENDL Threshold 19.048 MeV
JEFF4.0 Threshold 19.048 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
6
4
2
0
1.2
0.8
0.4
2
3
4
5
6
7
8
9
10^8
2
83
Incident Energy (eV)
46-Pd-110


MAT 4649
(n,p):45-Rh-110g
46-Pd-110
Radionuclide Production Cross Section
Min
Ratio
TENDL Threshold 4.7632 MeV
JEFF4.0 Threshold 4.7632 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
84
46-Pd-110


MAT 4649
(n,p):45-Rh-110m6
46-Pd-110
Radionuclide Production Cross Section
Isotopic 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 5.6000 MeV
JEFF4.0 Threshold 5.8000 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
16
12
8
4
0
1.2
0.6
0.0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
85
Incident Energy (eV)
46-Pd-110


MAT 4649
(n,t):45-Rh-108g
46-Pd-110
Radionuclide Production Cross-Section
Max Ratio
Min Ratio
TENDL Threshold 10.272 MeV
JEFF4.0 Threshold 10.272 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
86
46-Pd-110


MAT 4649
(n,t):45-Rh-108m4
46-Pd-110
Radionuclide Production Cross Section To 52.58 %
Min Ratio
Max Ratio
TENDL Threshold 10.489 MeV
JEFF4.0 Threshold 10.489 MeV
JEFF4.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
1.6
1.2
0.8
2
3
4
5
6
7
8
9
10^8
2
87
Incident Energy (eV)
46-Pd-110