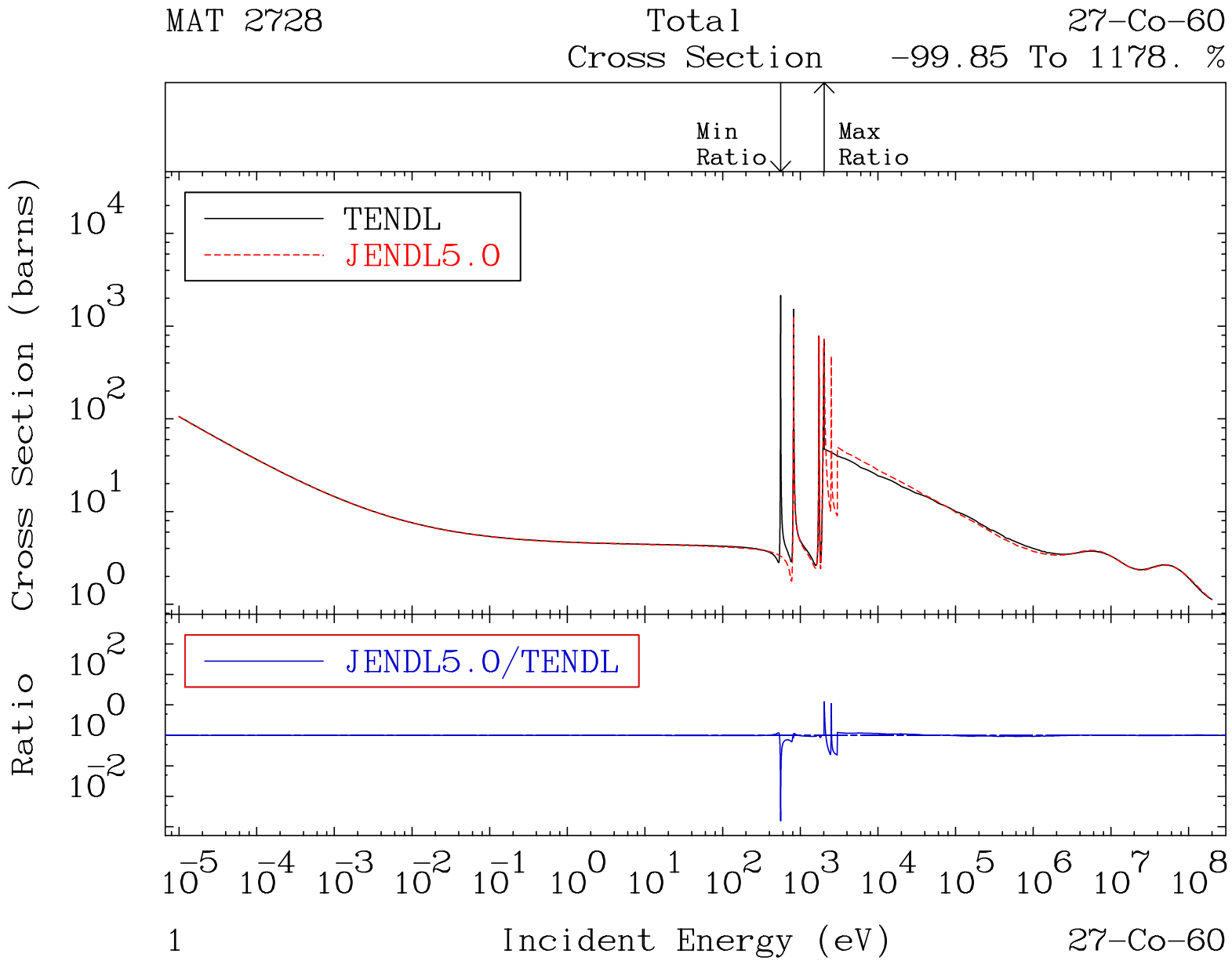
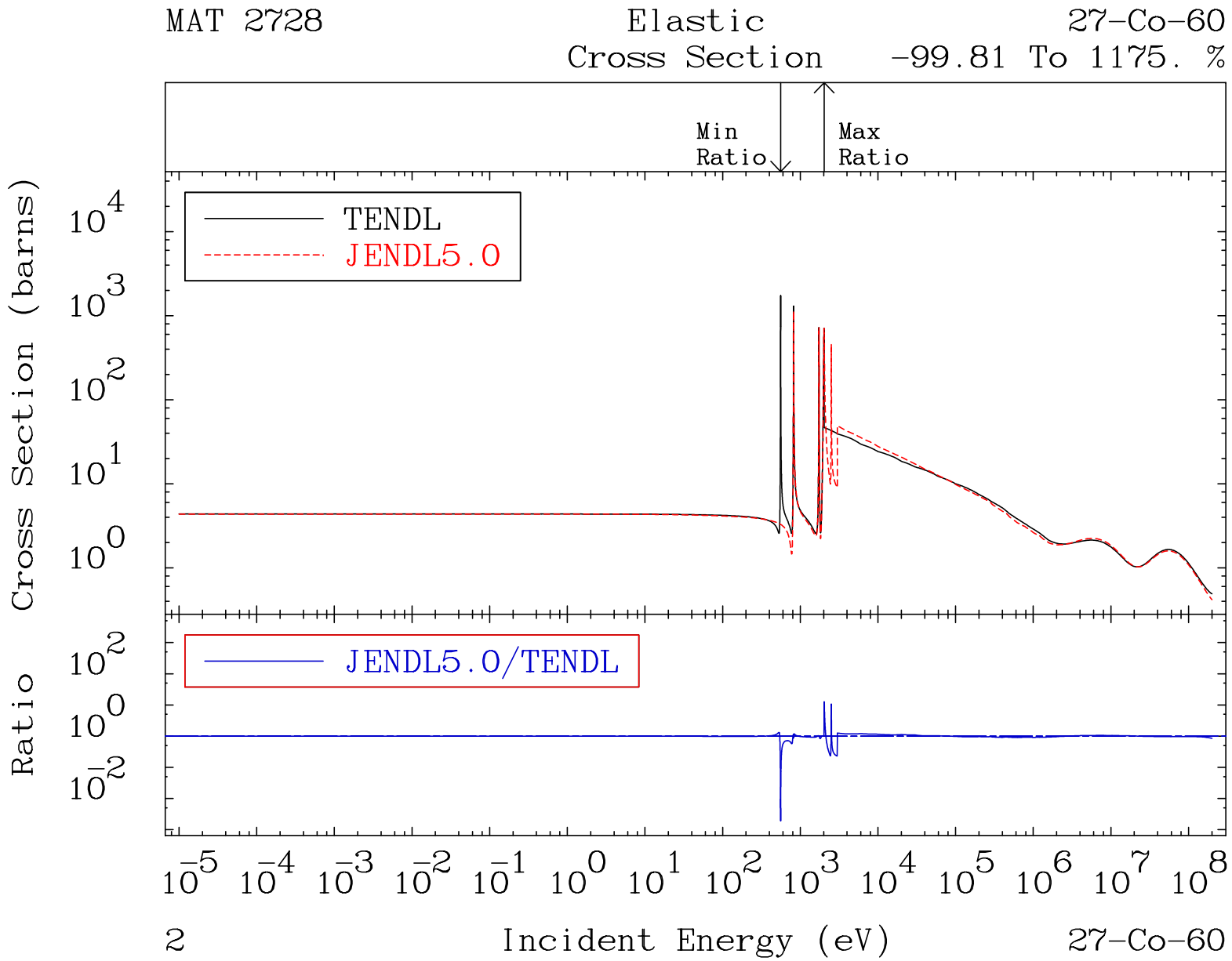
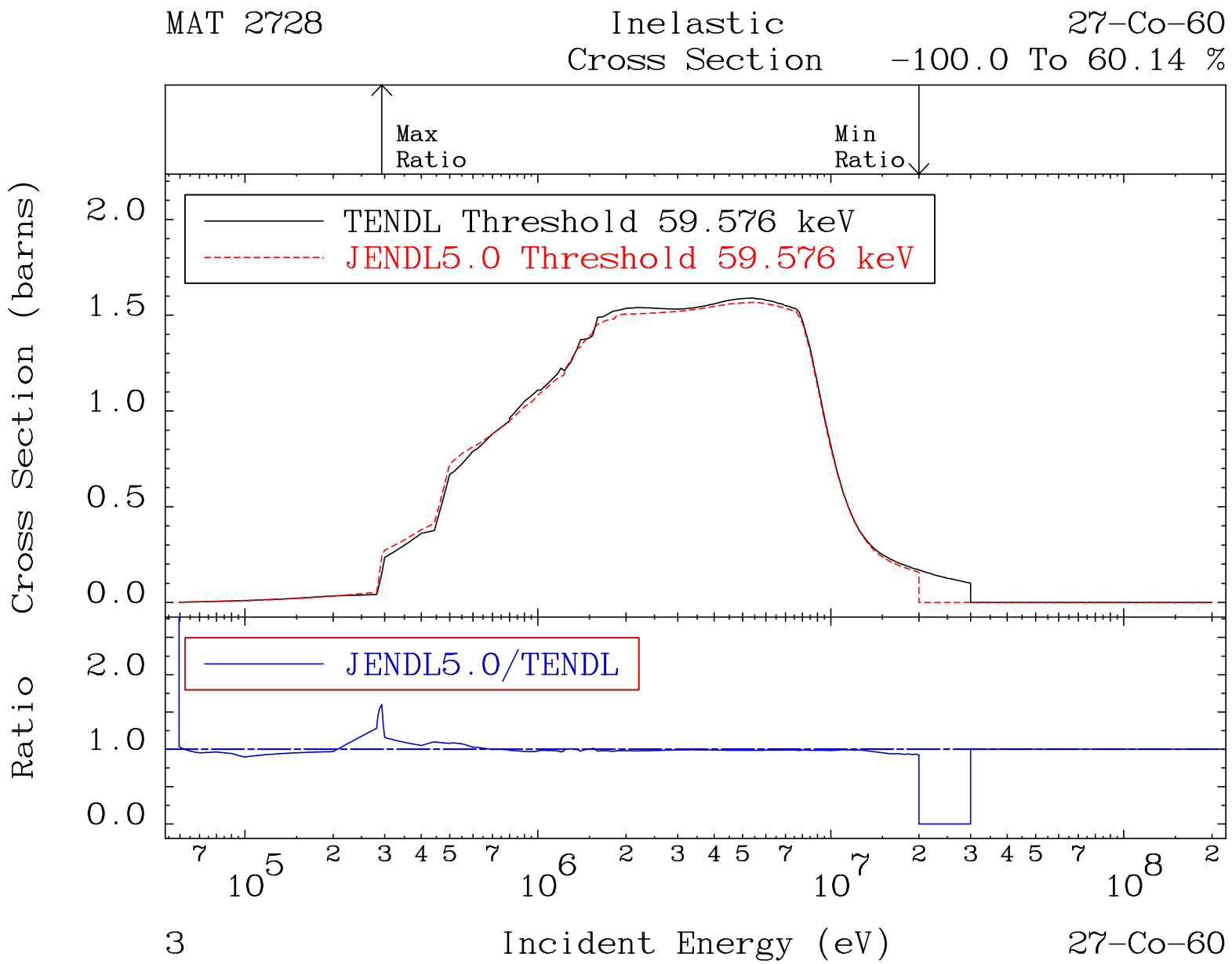
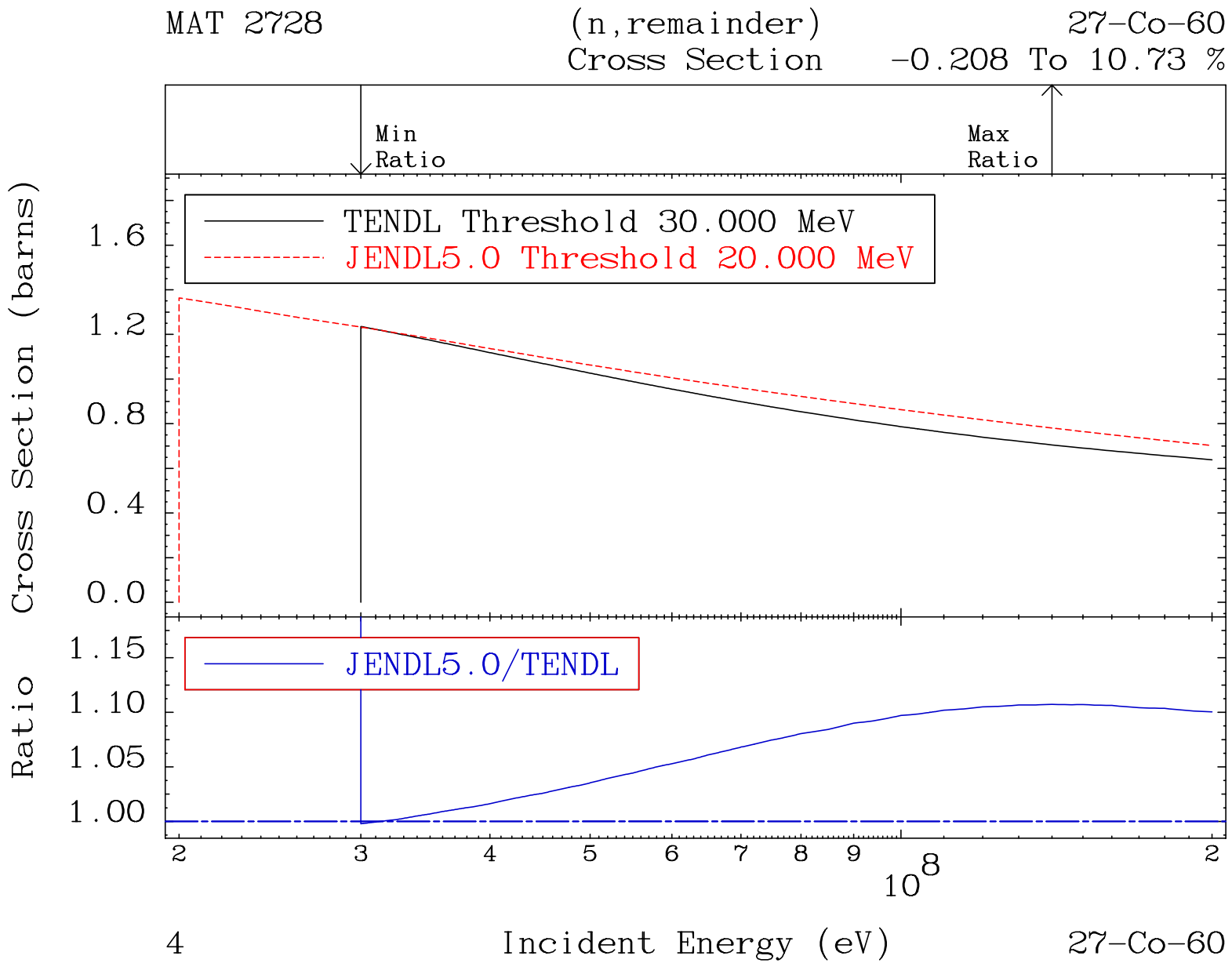
Program Complot
(Version 2021-1)
by
Dermott E. Cullen
(Present Contact Information)
Dermott E. Cullen
1466 Hudson Way
Livermore, CA 94550
U.S.A.
Tele: 925-443-1911
E.Mail:redcullen1@comcast.net
Web:redcullen1.net/HOMEPAGE.NEW

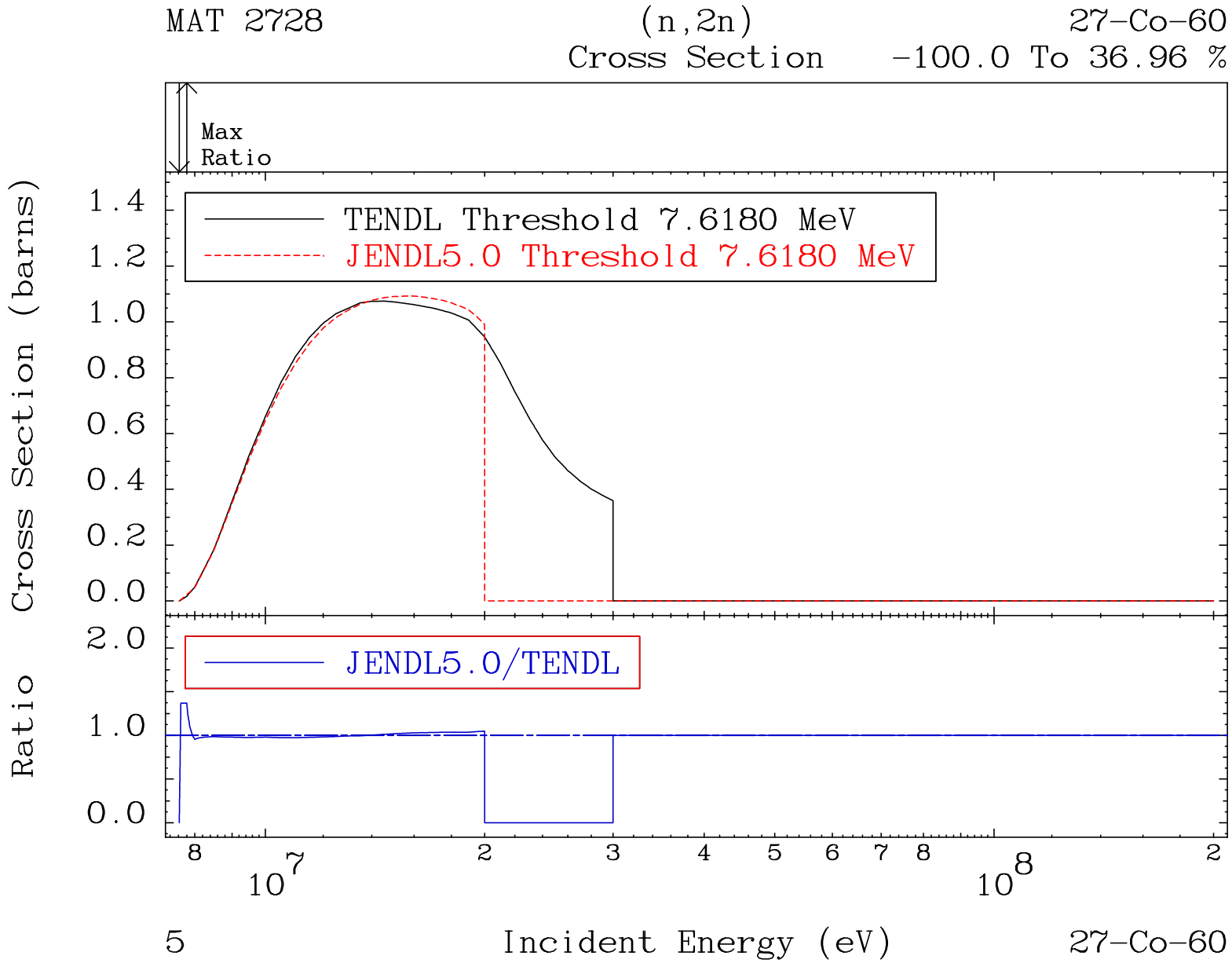
Press Mouse Button to Start

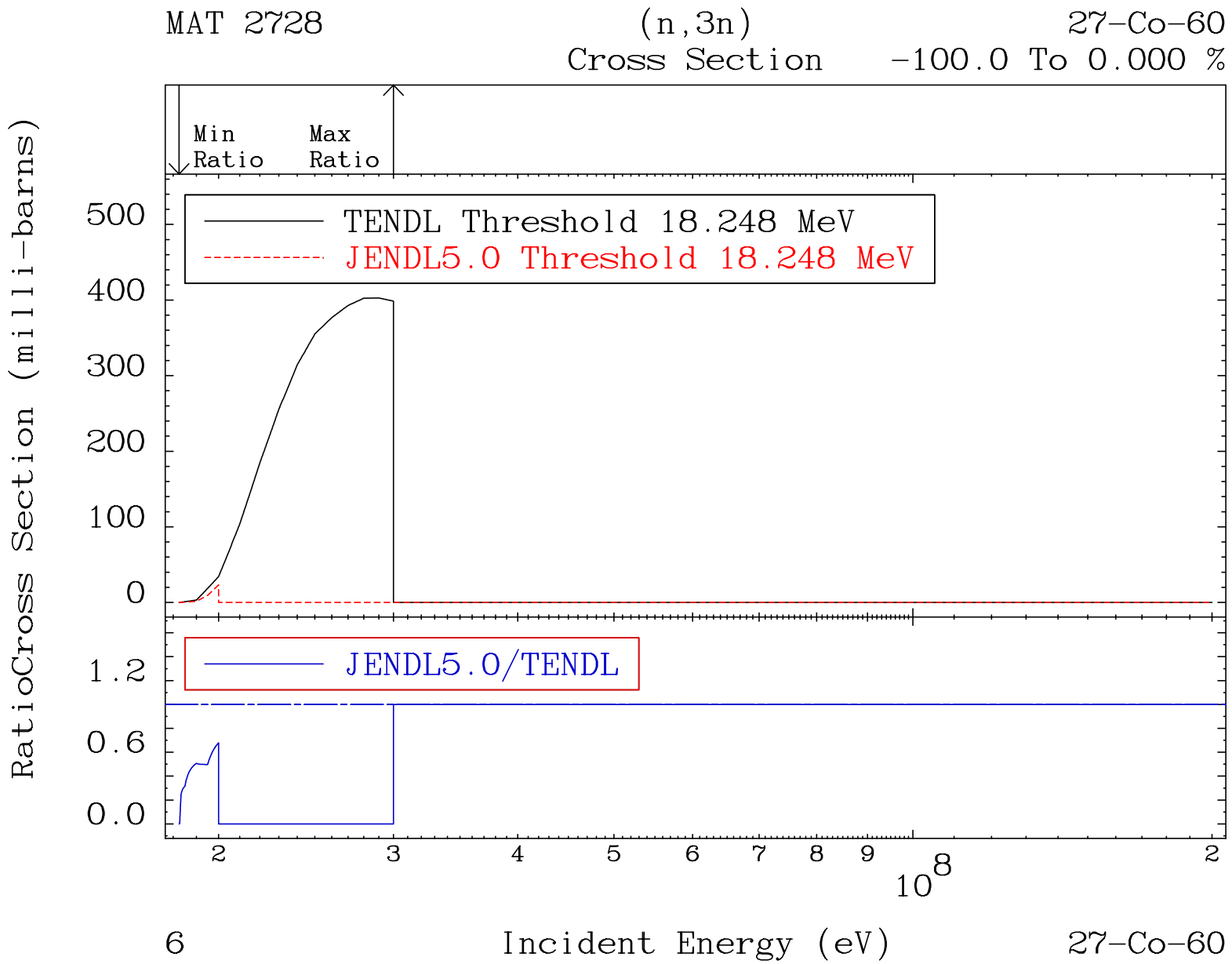

MAT 2728
Total
Cross Section
27-Co-60
-99.85 To 1178. %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
1
27-Co-60

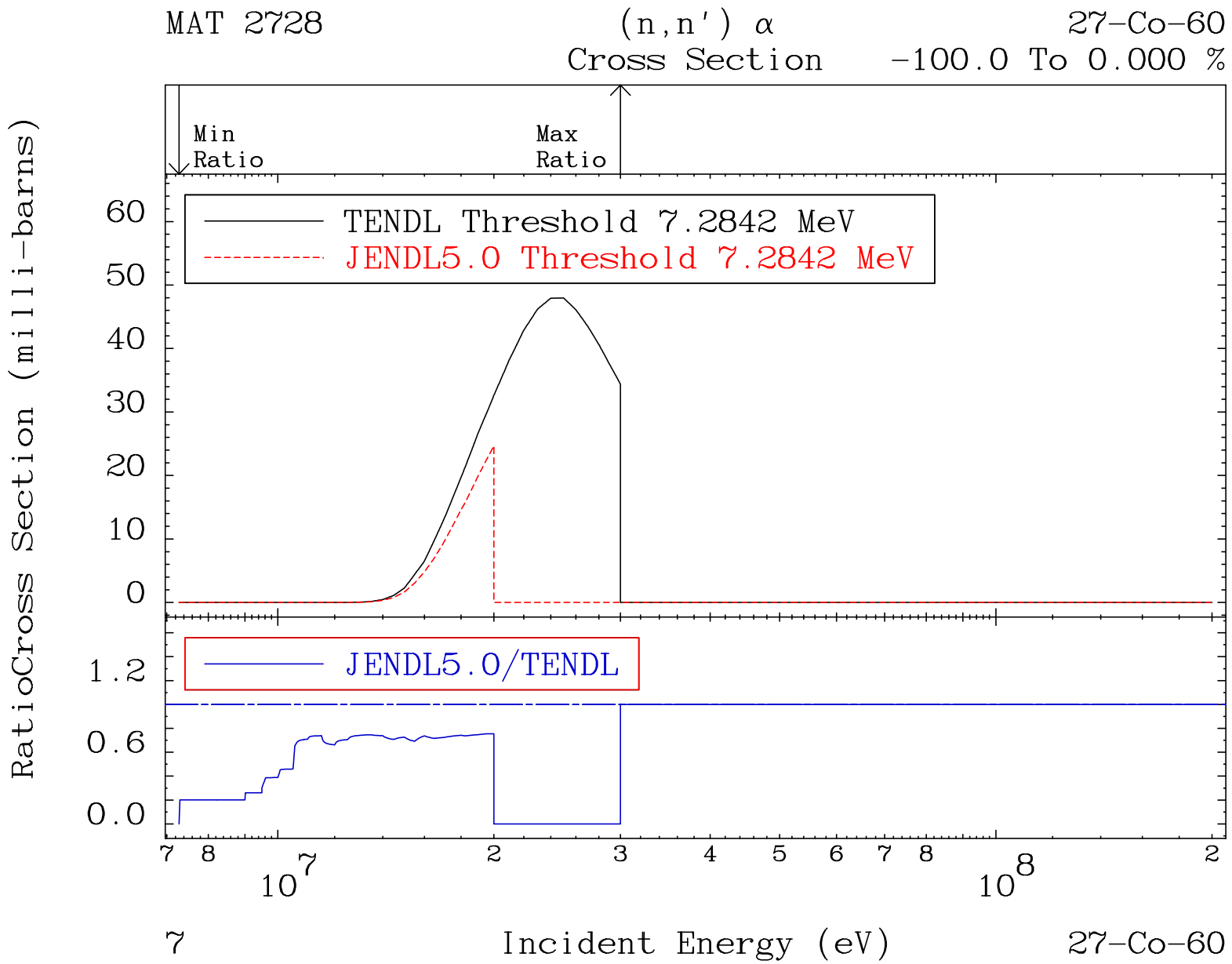

MAT 2728
Elastic
Cross Section
27-Co-60
-99.81 To 1175. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
2
27-Co-60

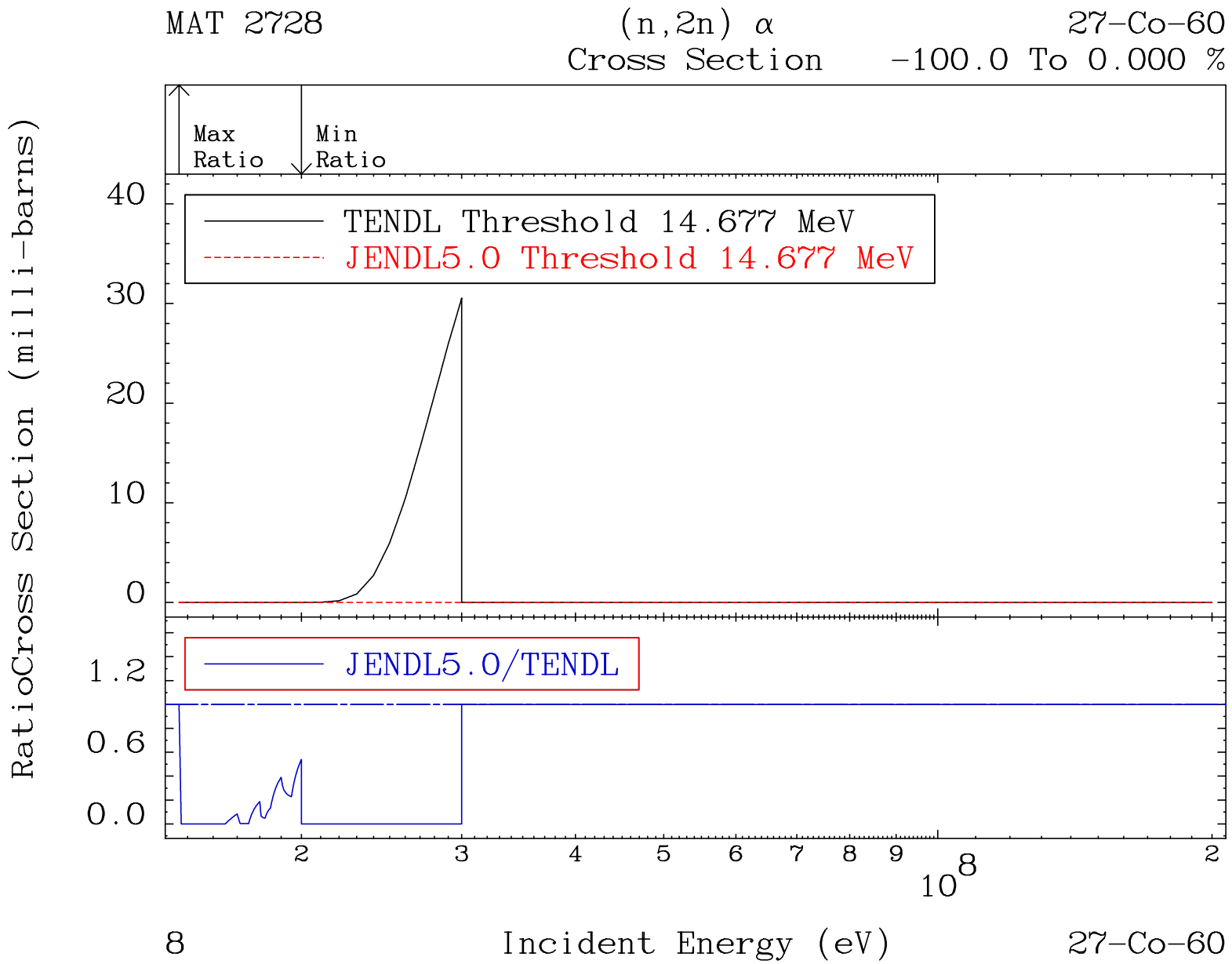

MAT 2728
Inelastic
Cross Section
27-Co-60
-100.0 To 60.14 %
Max
Ratio
Min
Ratio
TENDL Threshold 59.576 keV
JENDL5.0 Threshold 59.576 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
2.0
1.5
1.0
0.5
0.0
7
10^5
2
3
4
5
7
10^6
2
3
4
5
7
10^7
2
3
4
5
7
10^8
2
3
Incident Energy (eV)
27-Co-60

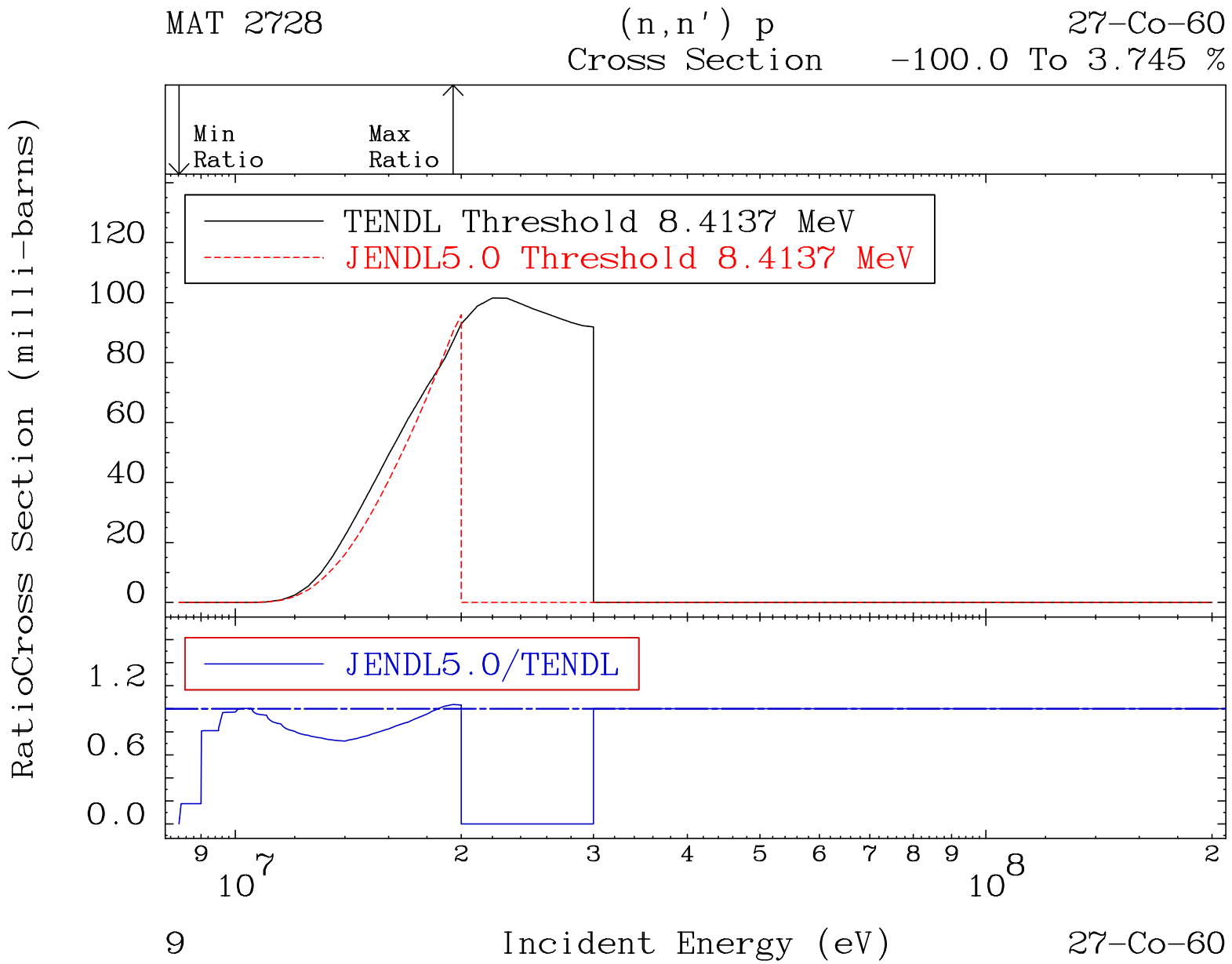

MAT 2728
(n,remainder)
Cross Section
27-Co-60
-0.208 To 10.73 %
Min
Ratio
Max
Ratio
TENDL Threshold 30.000 MeV
JENDL5.0 Threshold 20.000 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.6
1.2
0.8
0.4
0.0
1.15
1.10
1.05
1.00
2
3
4
5
6
7
8
9
2
10^8
4
Incident Energy (eV)
27-Co-60

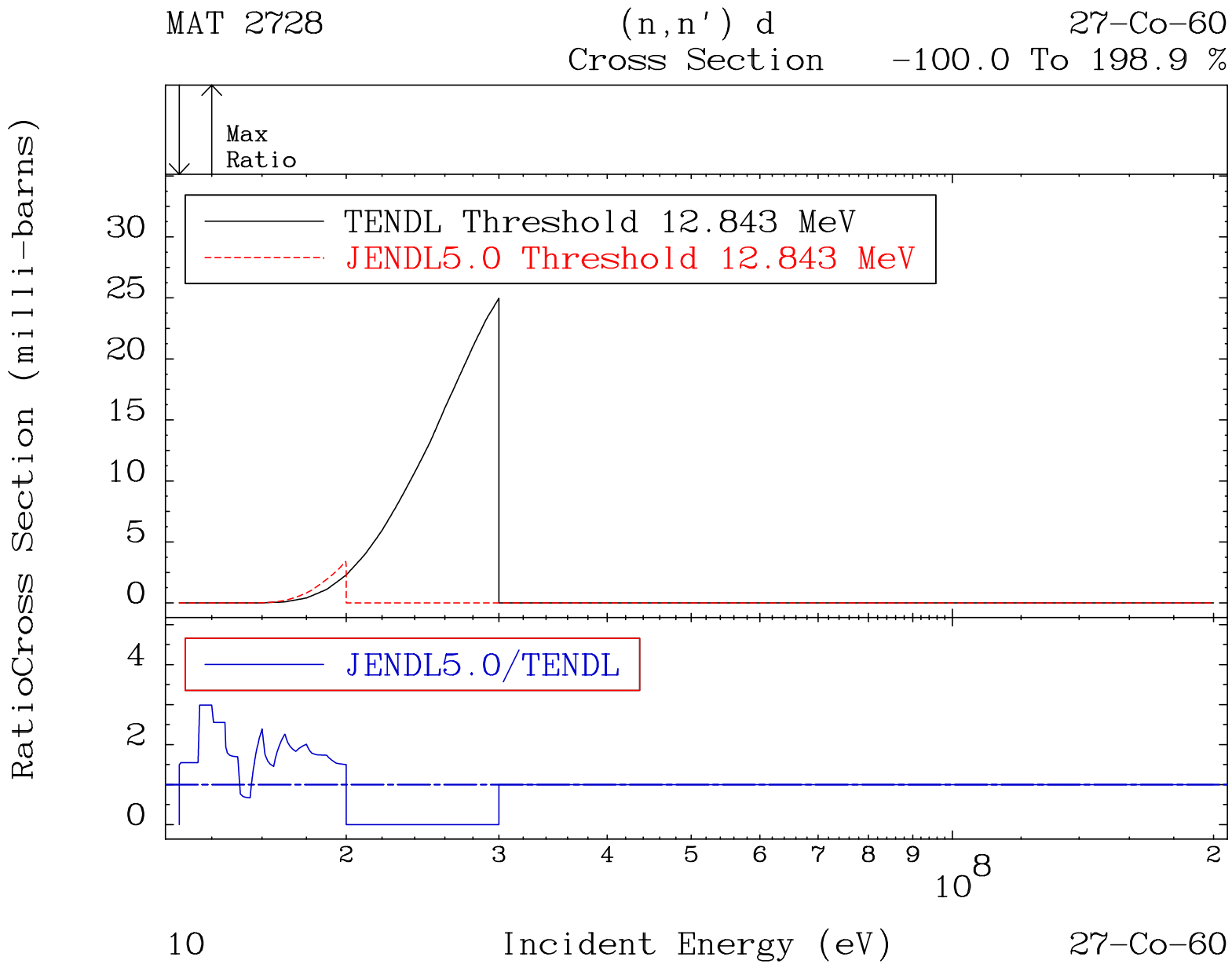

MAT 2728
(n,2n)
Cross Section
27-Co-60
-100.0 To 36.96 %
Max
Ratio
TENDL Threshold 7.6180 MeV
JENDL5.0 Threshold 7.6180 MeV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
2.0
1.0
0.0
8
10^7
2
3
4
5
6
7
8
10^8
2
5
Incident Energy (eV)
27-Co-60

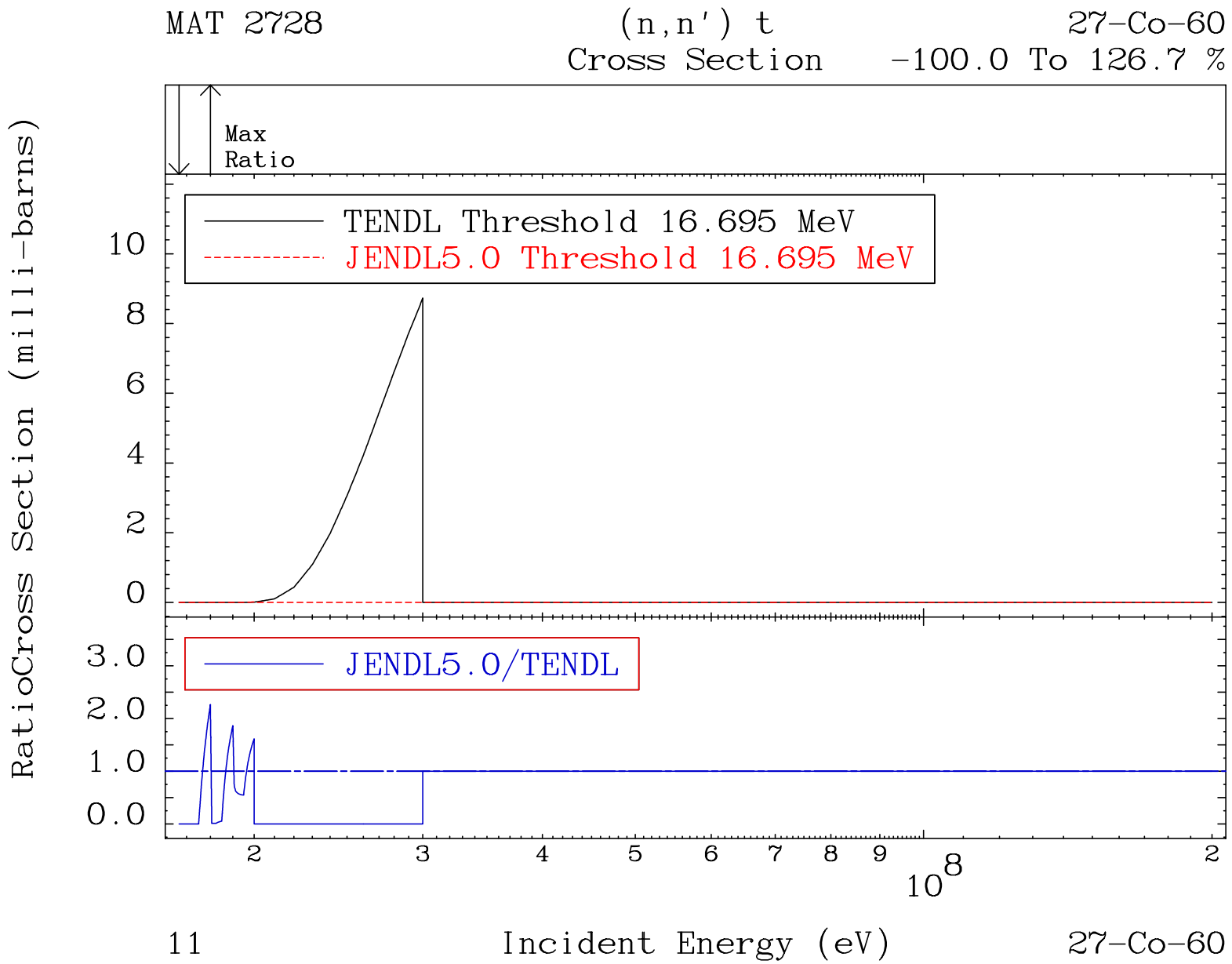

MAT 2728
(n,3n)
27-Co-60
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 18.248 MeV
JENDL5.0 Threshold 18.248 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
6
Incident Energy (eV)
27-Co-60

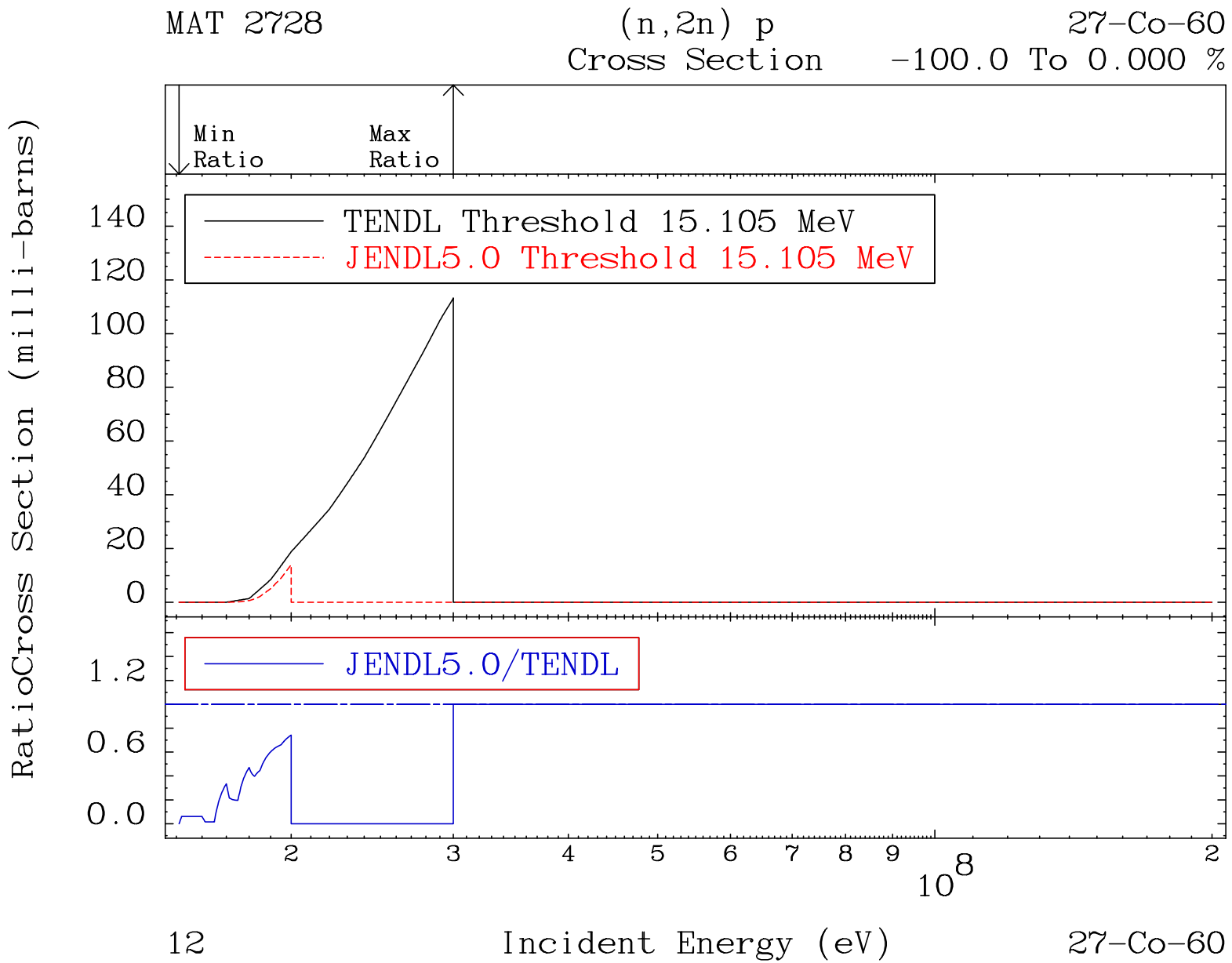

MAT 2728
(n,n') α
Cross Section
27-Co-60
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 7.2842 MeV
JENDL5.0 Threshold 7.2842 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
27-Co-60

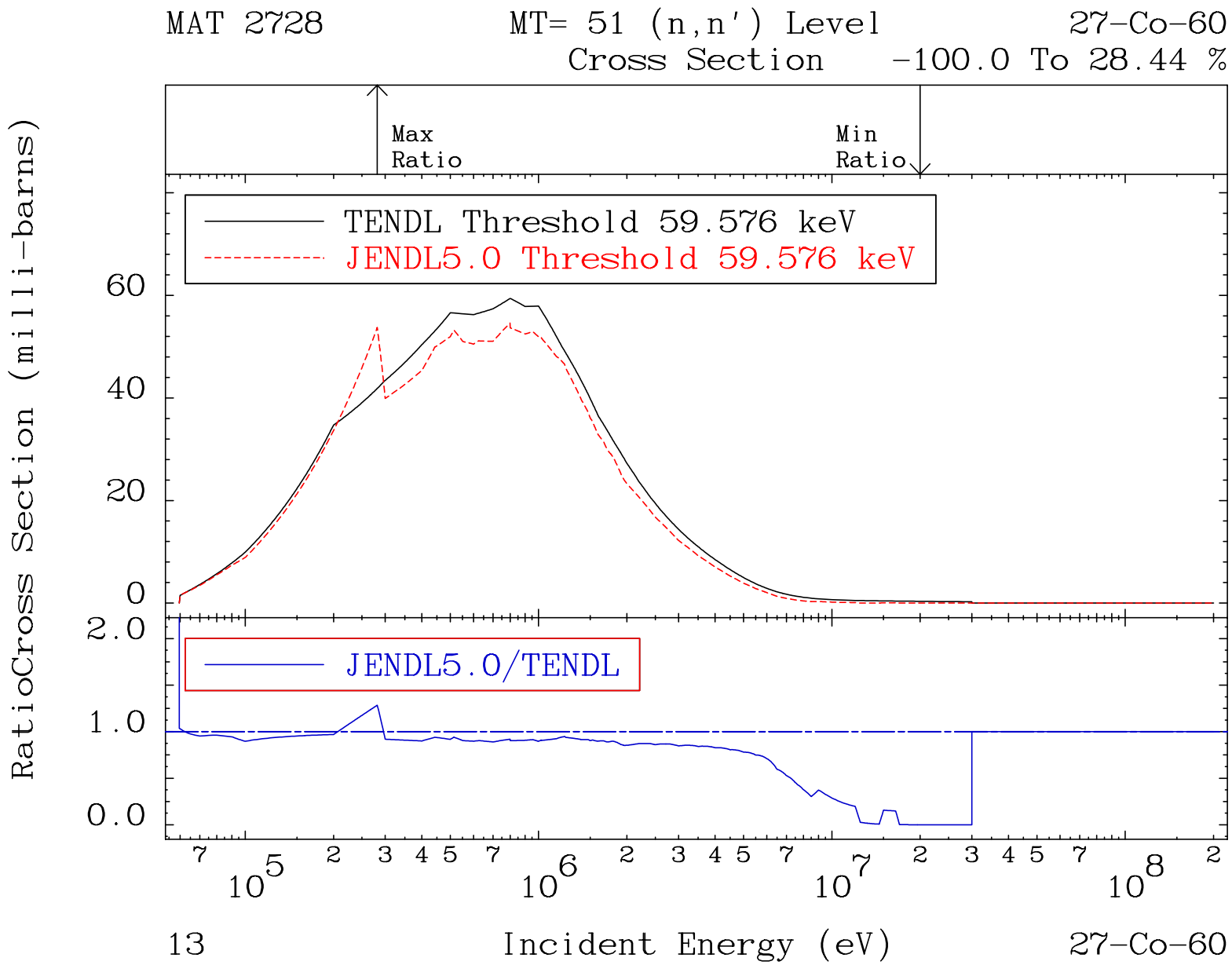

MAT 2728
(n,2n) α
27-Co-60
Cross Section
-100.0 To 0.000 %
Max Ratio
Min Ratio
TENDL Threshold 14.677 MeV
JENDL5.0 Threshold 14.677 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
8
Incident Energy (eV)
27-Co-60

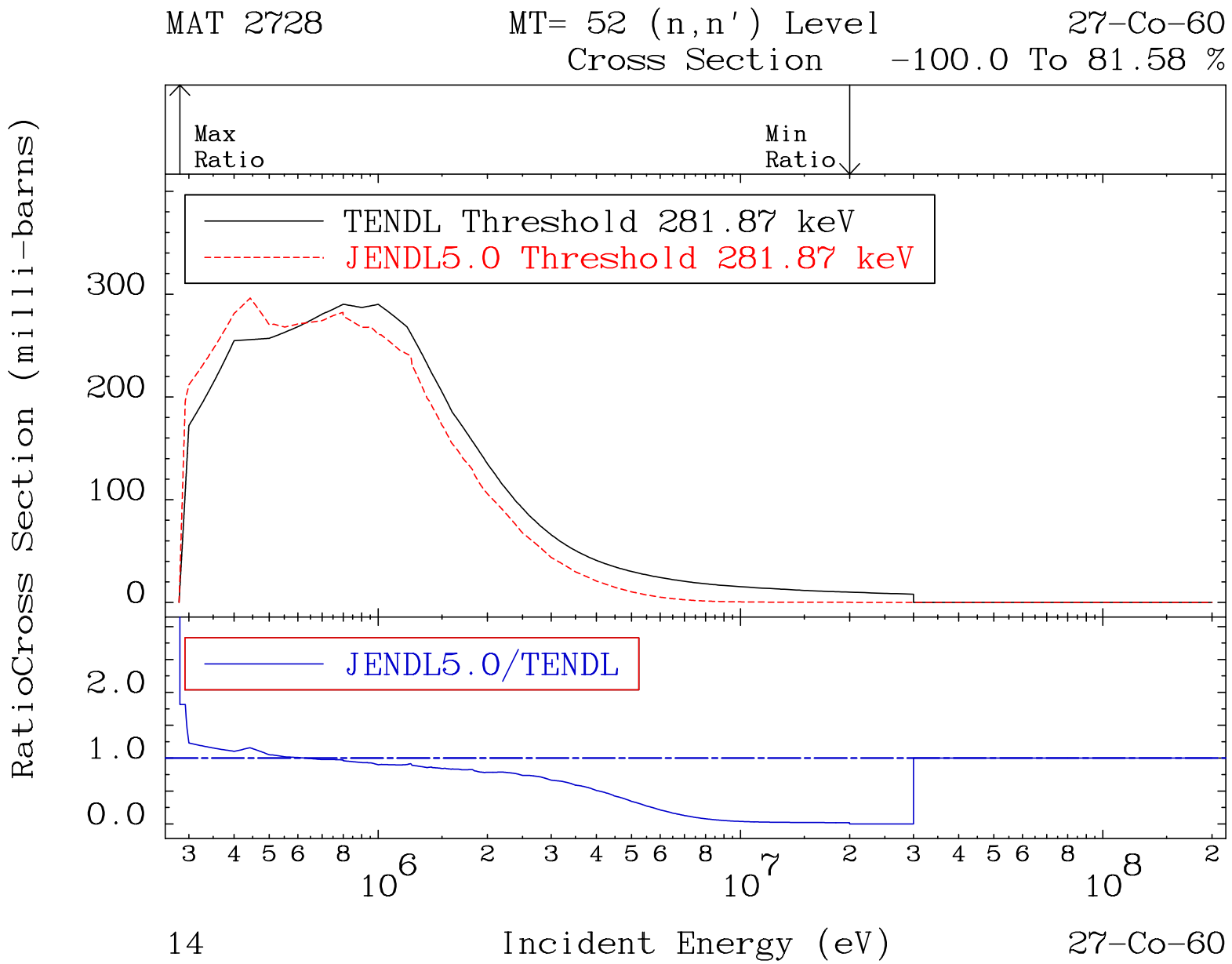

MAT 2728
(n,n') p
Cross Section
27-Co-60
-100.0 To 3.745 %
Min Ratio
Max Ratio
TENDL Threshold 8.4137 MeV
JENDL5.0 Threshold 8.4137 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.2
0.6
0.0
9
10^7
2
3
4
5
6
7
8
9
10^8
2
9
Incident Energy (eV)
27-Co-60

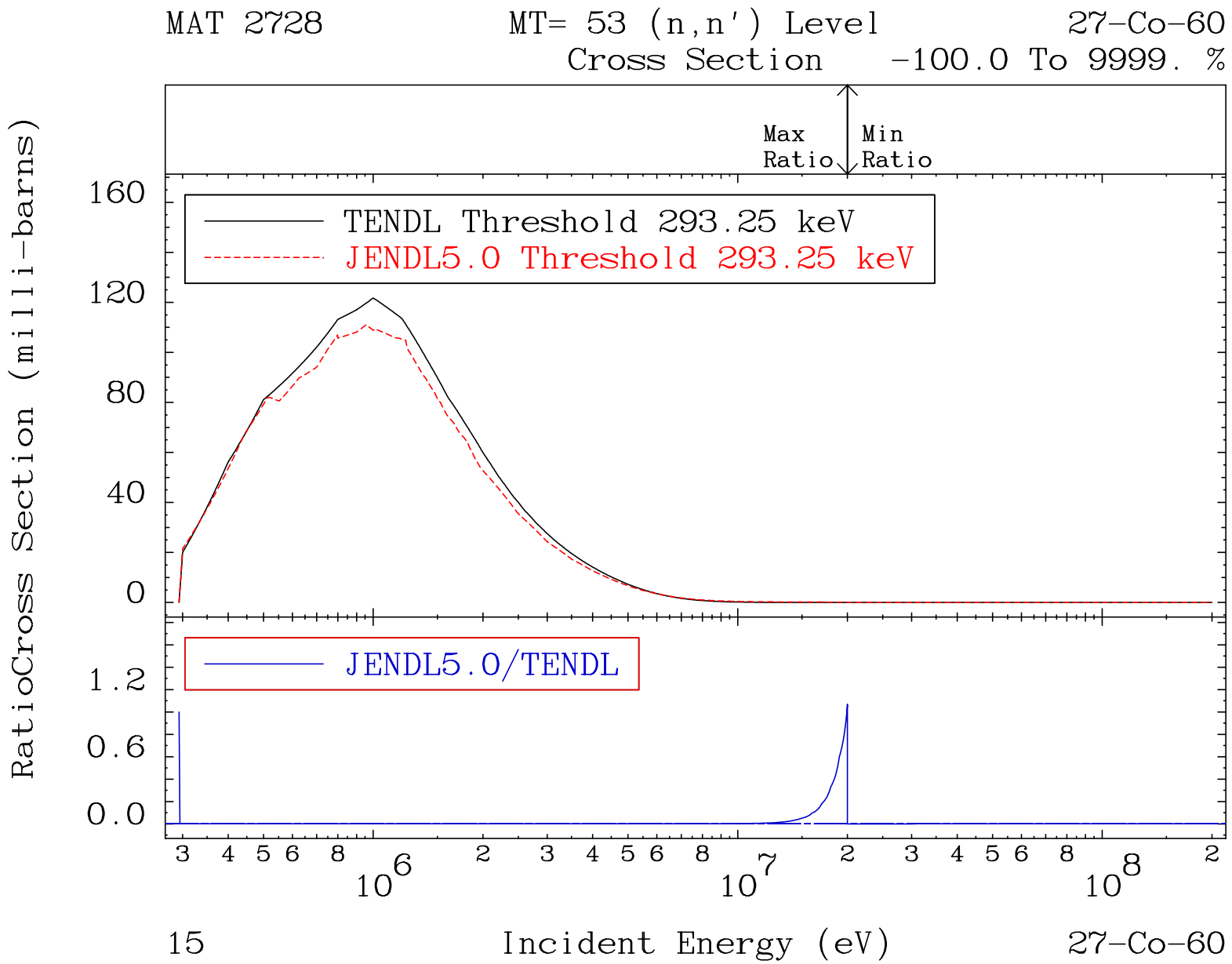

MAT 2728
(n,n') d
Cross Section
27-Co-60
-100.0 To 198.9 %
Max
Ratio
TENDL Threshold 12.843 MeV
JENDL5.0 Threshold 12.843 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
10
Incident Energy (eV)
27-Co-60

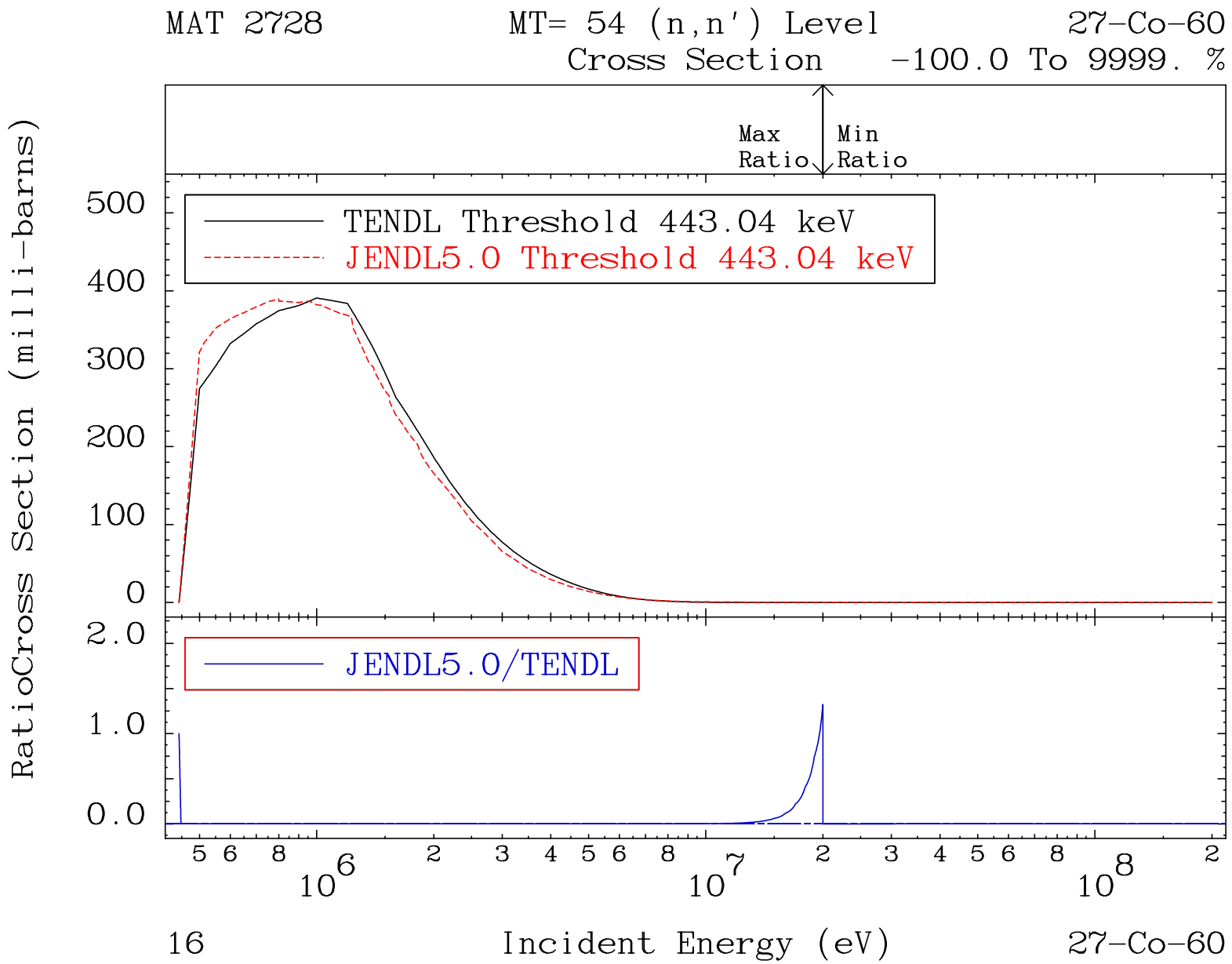

MAT 2728
(n,n') t
Cross Section
27-Co-60
-100.0 To 126.7 %
Max
Ratio
TENDL Threshold 16.695 MeV
JENDL5.0 Threshold 16.695 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
10
8
6
4
2
0
3.0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
11
Incident Energy (eV)
27-Co-60

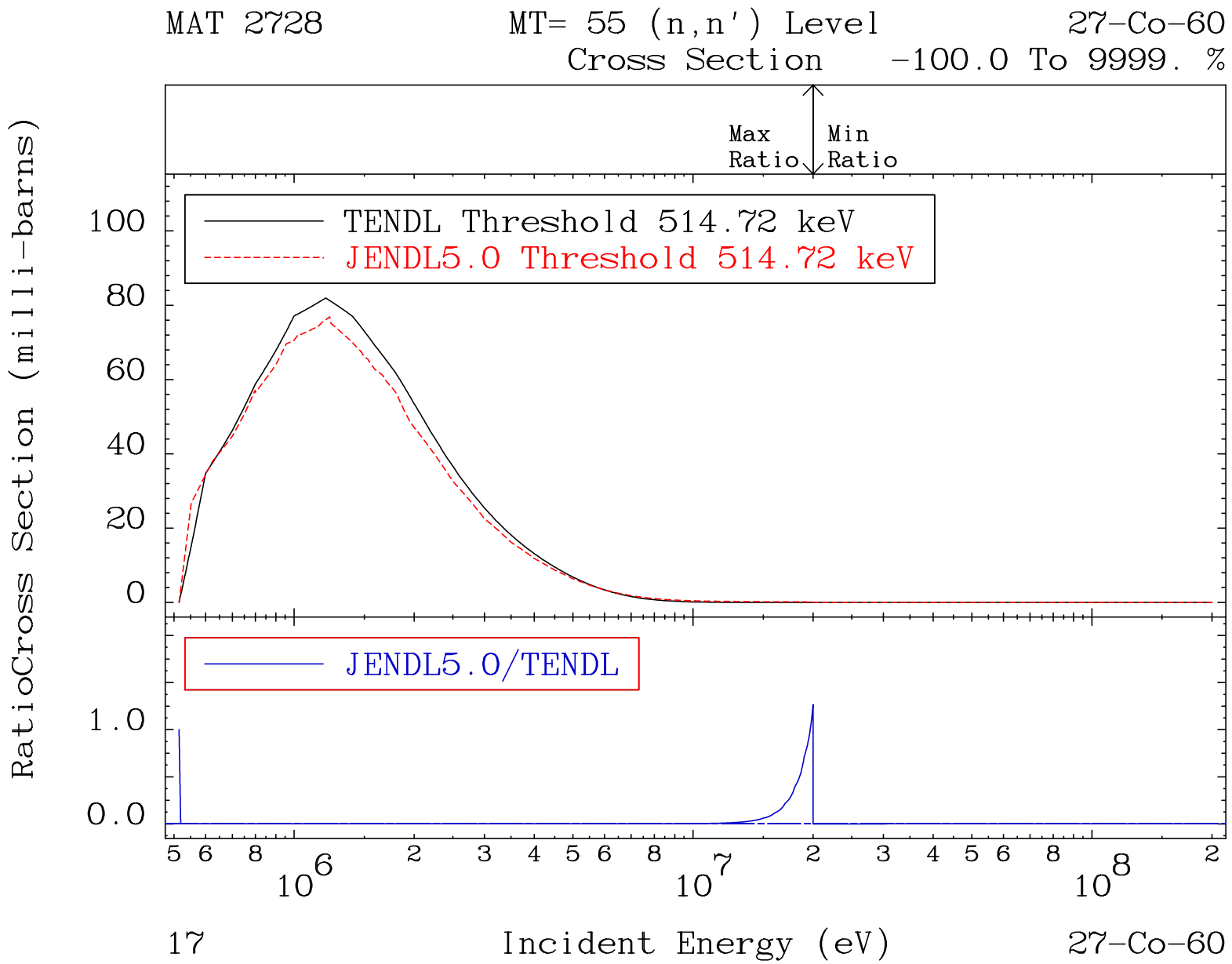

MAT 2728
(n,2n) p
27-Co-60
Cross Section
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 15.105 MeV
JENDL5.0 Threshold 15.105 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
140
120
100
80
60
40
20
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
12
Incident Energy (eV)
27-Co-60

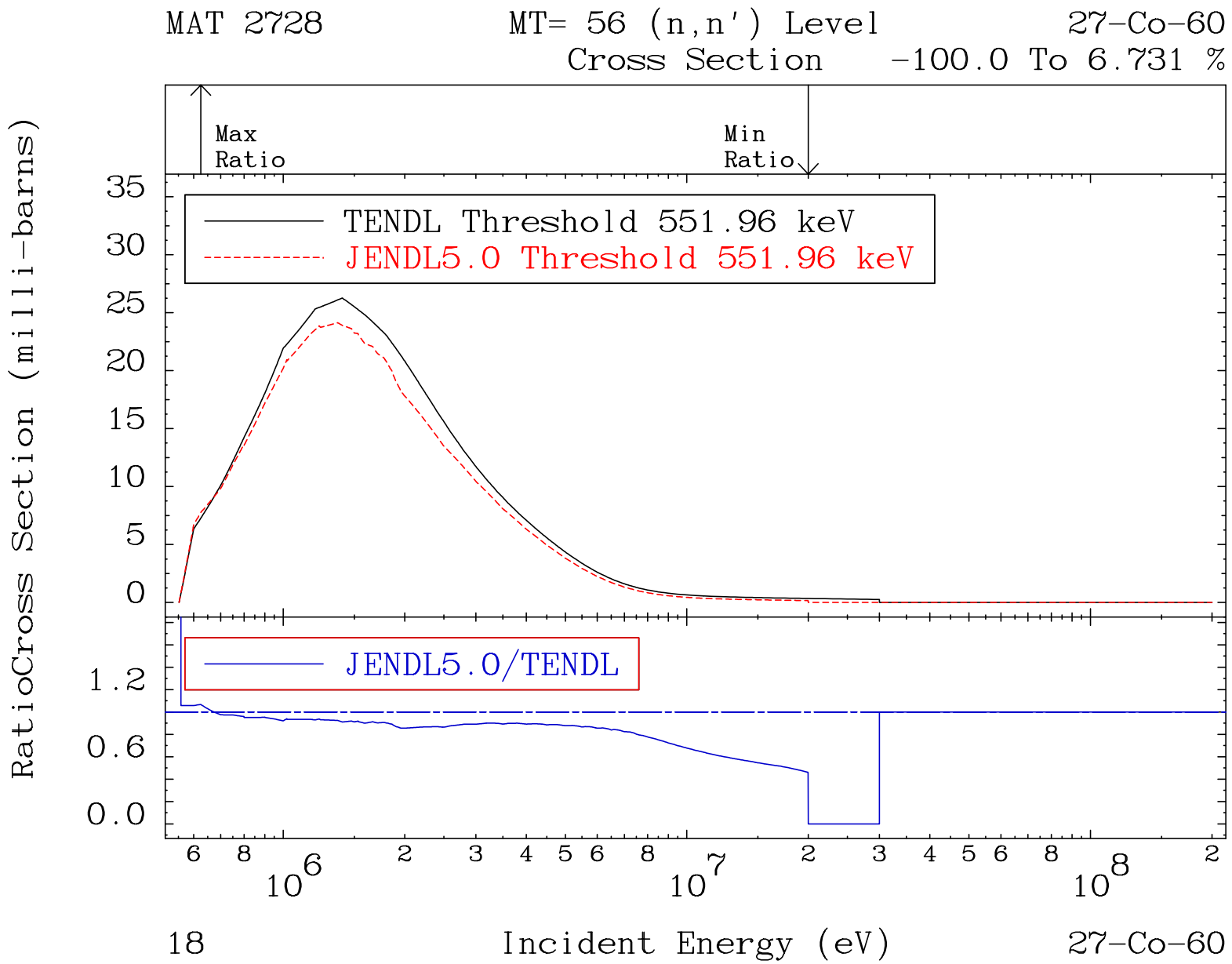

MAT 2728
MT= 51 (n,n') Level
27-Co-60
Cross Section
-100.0 To 28.44 %
Max Ratio
Min Ratio
TENDL Threshold 59.576 keV
JENDL5.0 Threshold 59.576 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
60
40
20
0
2.0
1.0
0.0
7 2 3 4 5 7 2 3 4 5 7 2 3 4 5 7 2
10^5 10^6 10^7 10^8
13
Incident Energy (eV)
27-Co-60

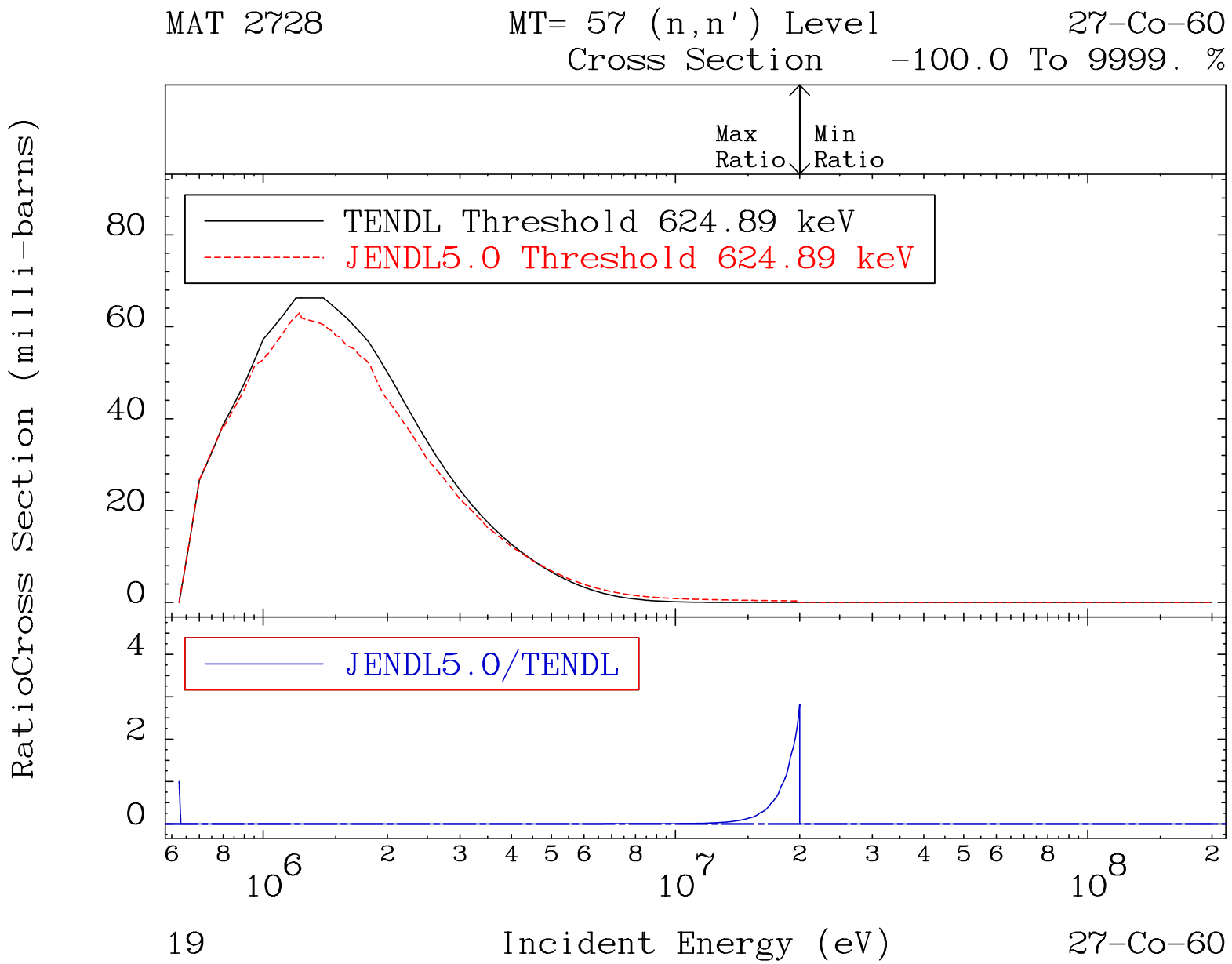

MAT 2728
MT= 52 (n,n') Level
27-Co-60
Cross Section
-100.0 To 81.58 %
Max Ratio
Min Ratio
TENDL Threshold 281.87 keV
JENDL5.0 Threshold 281.87 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
200
100
0
2.0
1.0
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
14
Incident Energy (eV)
27-Co-60

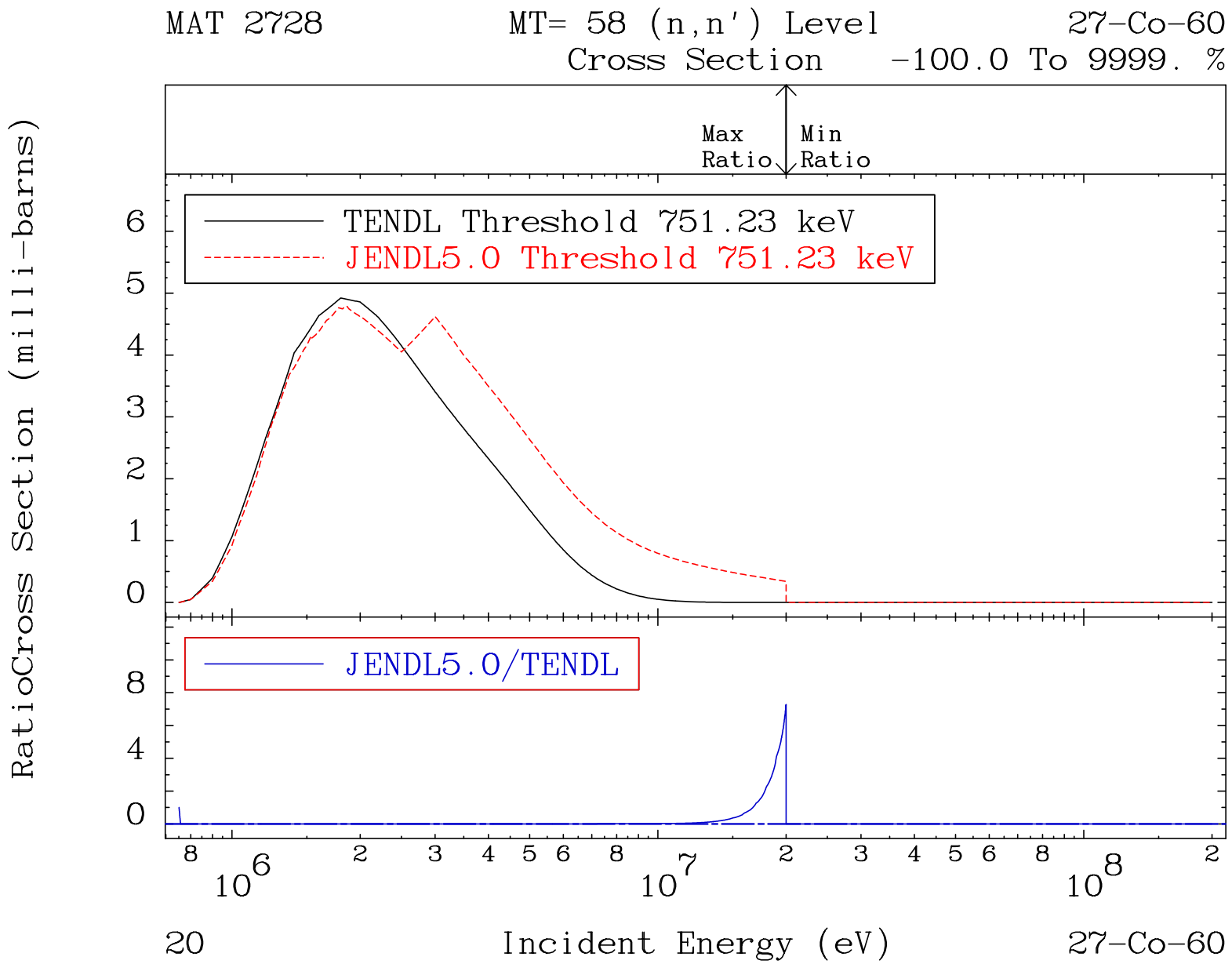

MAT 2728
MT= 53 (n,n') Level
27-Co-60
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 293.25 keV
JENDL5.0 Threshold 293.25 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
160
120
80
40
0
1.2
0.6
0.0
3 4 5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
15
Incident Energy (eV)
27-Co-60

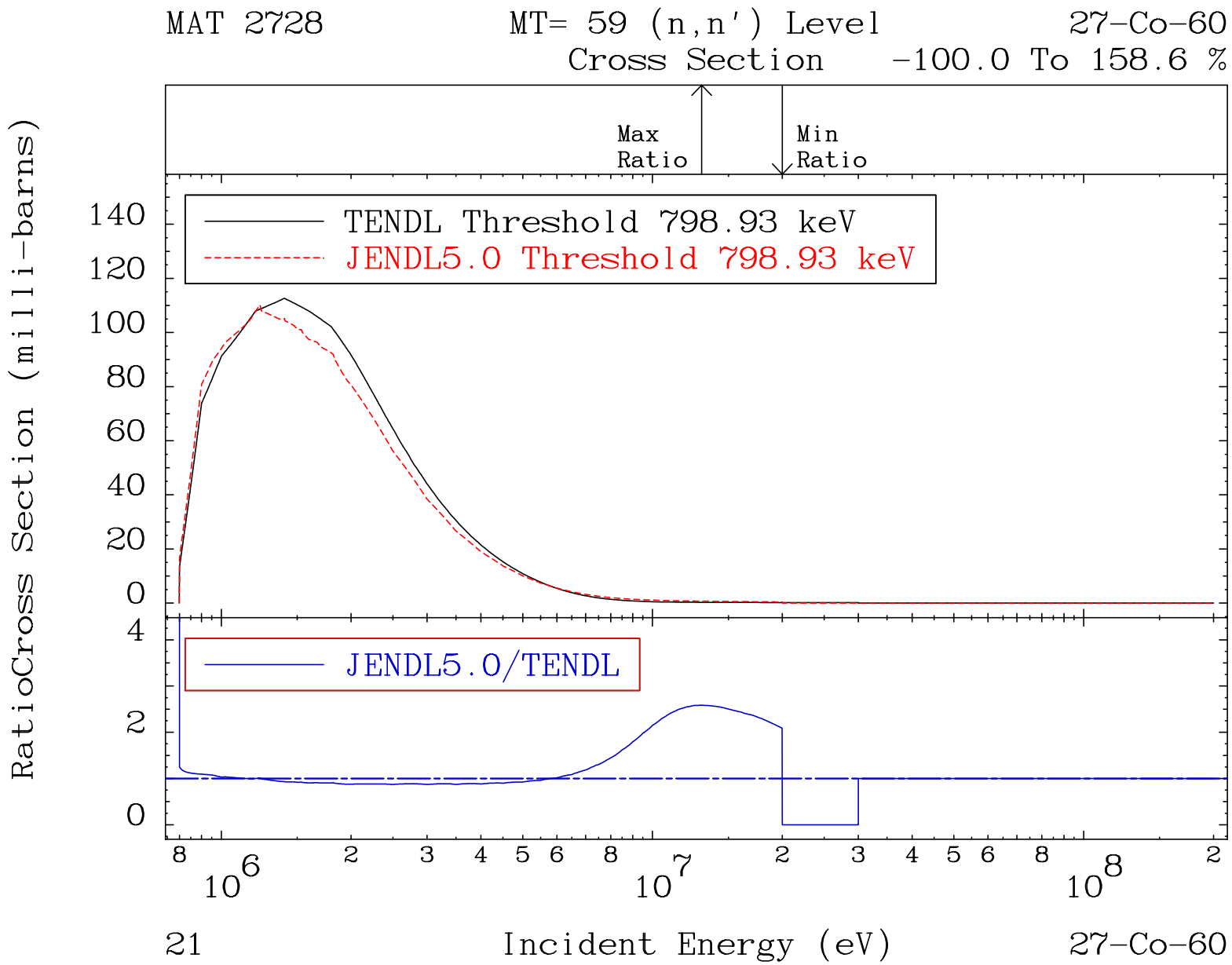

MAT 2728
MT= 54 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 443.04 keV
JENDL5.0 Threshold 443.04 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
500
400
300
200
100
0
2.0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
16
Incident Energy (eV)
27-Co-60

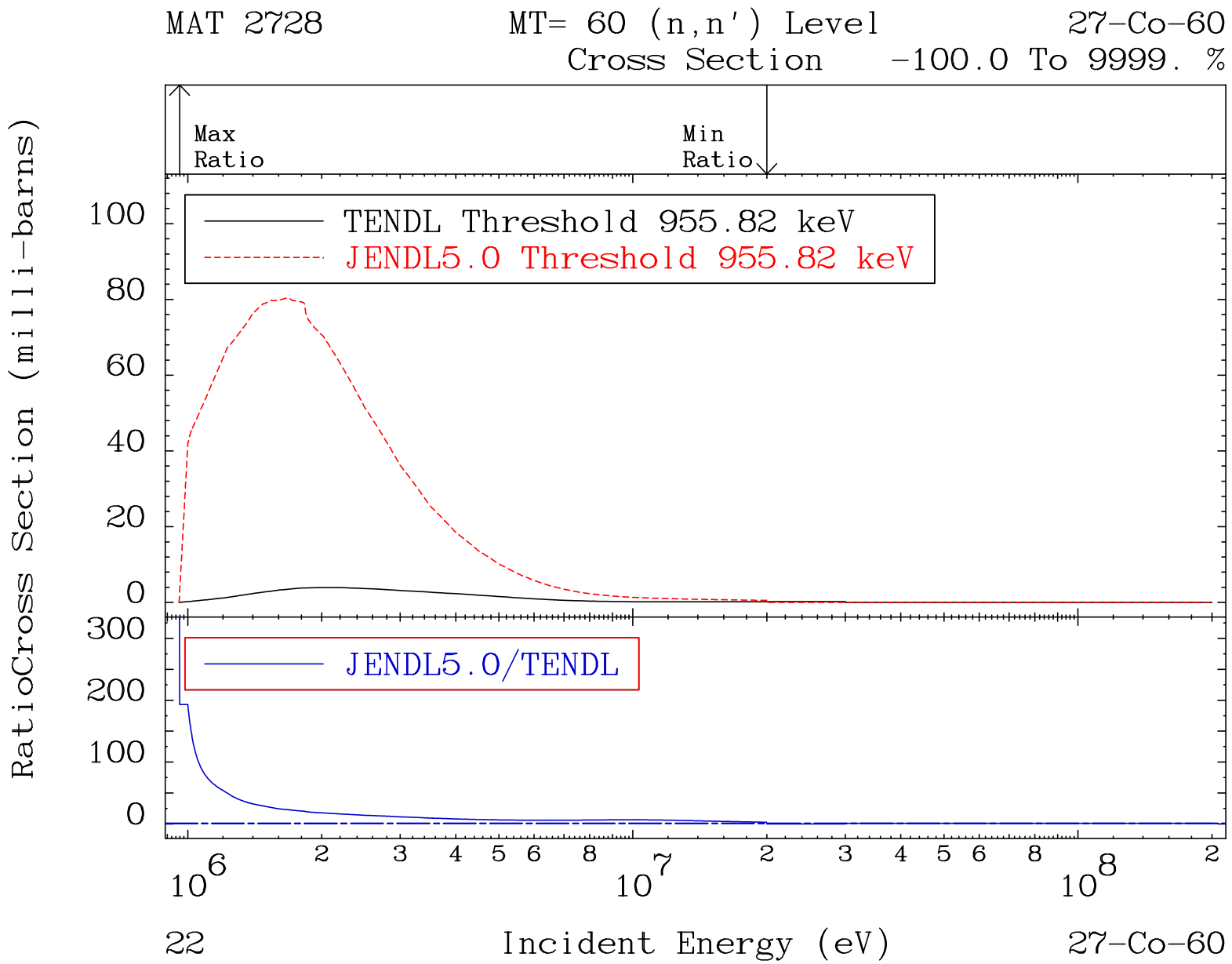

MAT 2728
MT= 55 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 514.72 keV
JENDL5.0 Threshold 514.72 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
1.0
0.0
5 6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
17
Incident Energy (eV)
27-Co-60

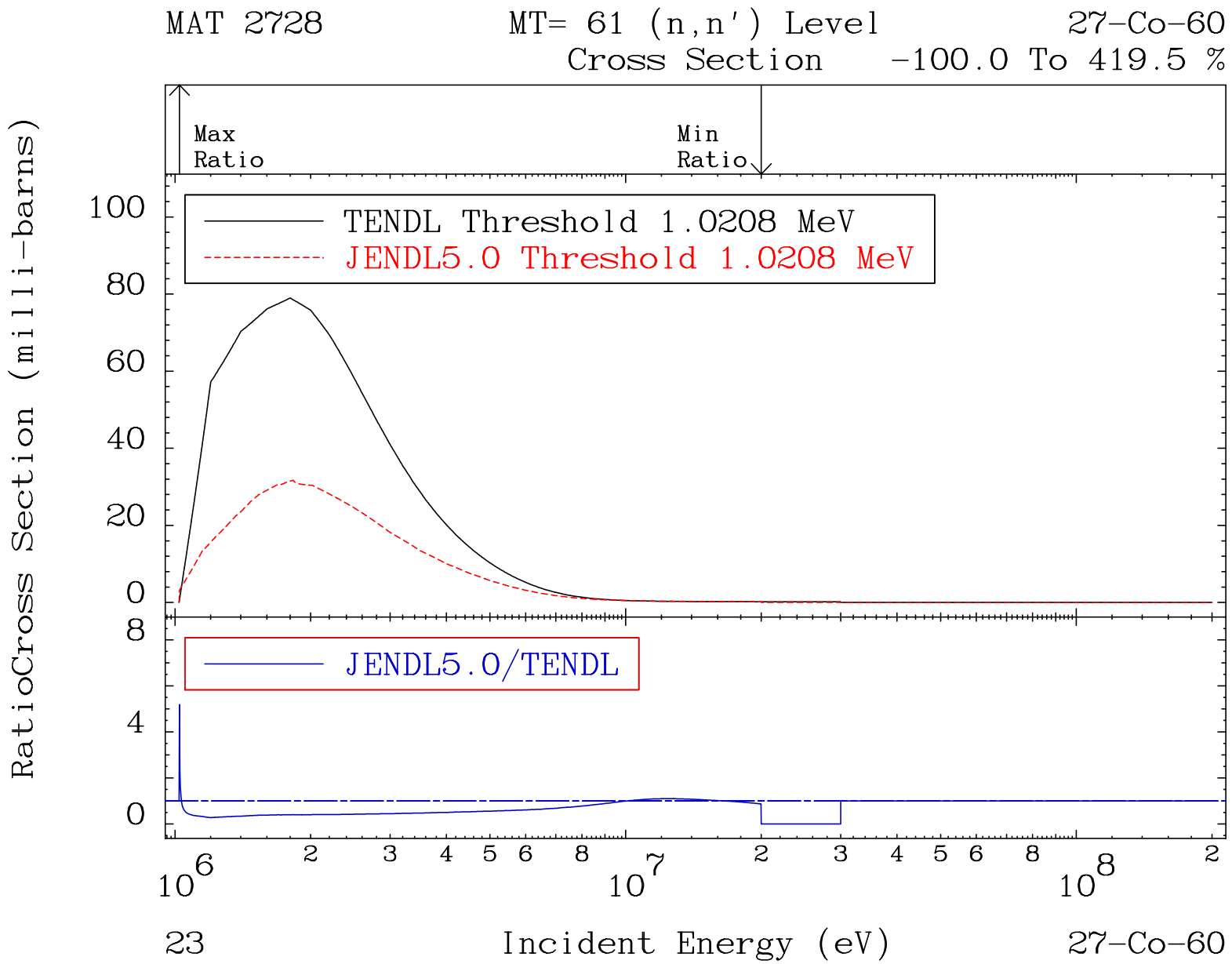

MAT 2728
MT= 56 (n,n') Level
27-Co-60
Cross Section
-100.0 To 6.731 %
Max Ratio
Min Ratio
TENDL Threshold 551.96 keV
JENDL5.0 Threshold 551.96 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
35
30
25
20
15
10
5
0
1.2
0.6
0.0
6 8 10^6 2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
18
Incident Energy (eV)
27-Co-60

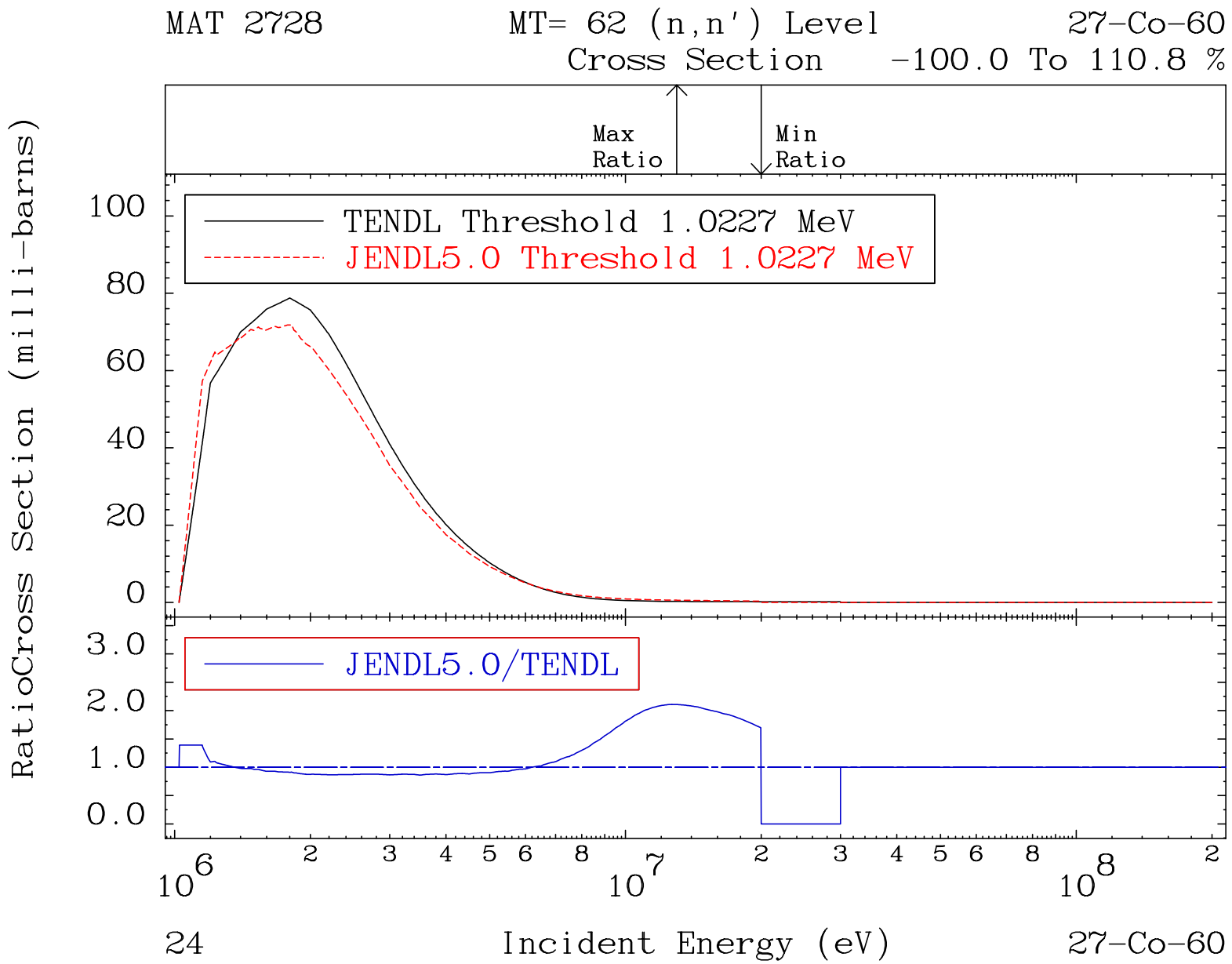

MAT 2728
MT= 57 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 624.89 keV
JENDL5.0 Threshold 624.89 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
19
27-Co-60

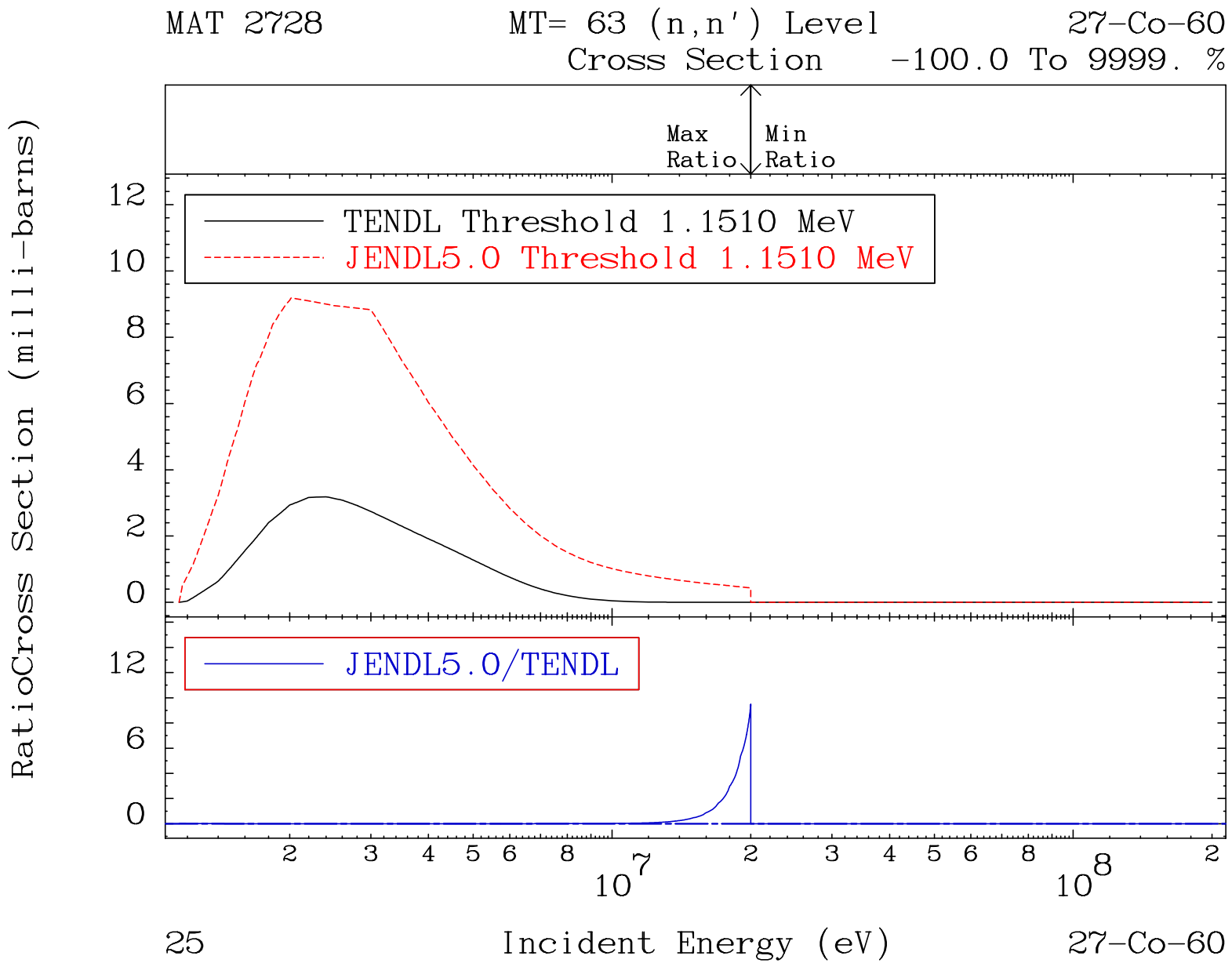

MAT 2728
MT= 58 (n,n') Level
27-Co-60
Cross Section
-100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 751.23 keV
JENDL5.0 Threshold 751.23 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
20
27-Co-60

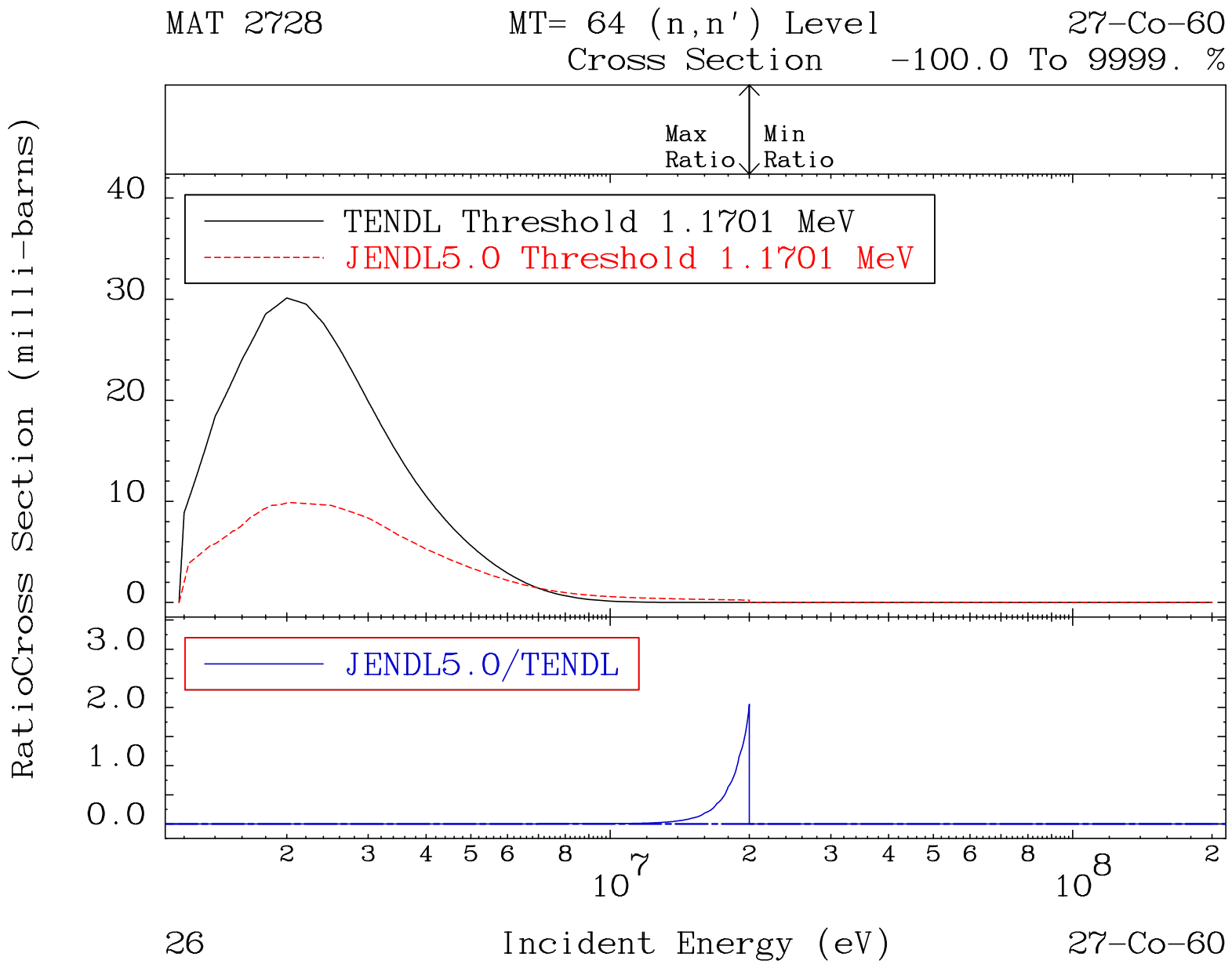

MAT 2728
MT= 59 (n,n') Level
27-Co-60
Cross Section
-100.0 To 158.6 %
Max Ratio
Min Ratio
TENDL Threshold 798.93 keV
JENDL5.0 Threshold 798.93 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
21
27-Co-60

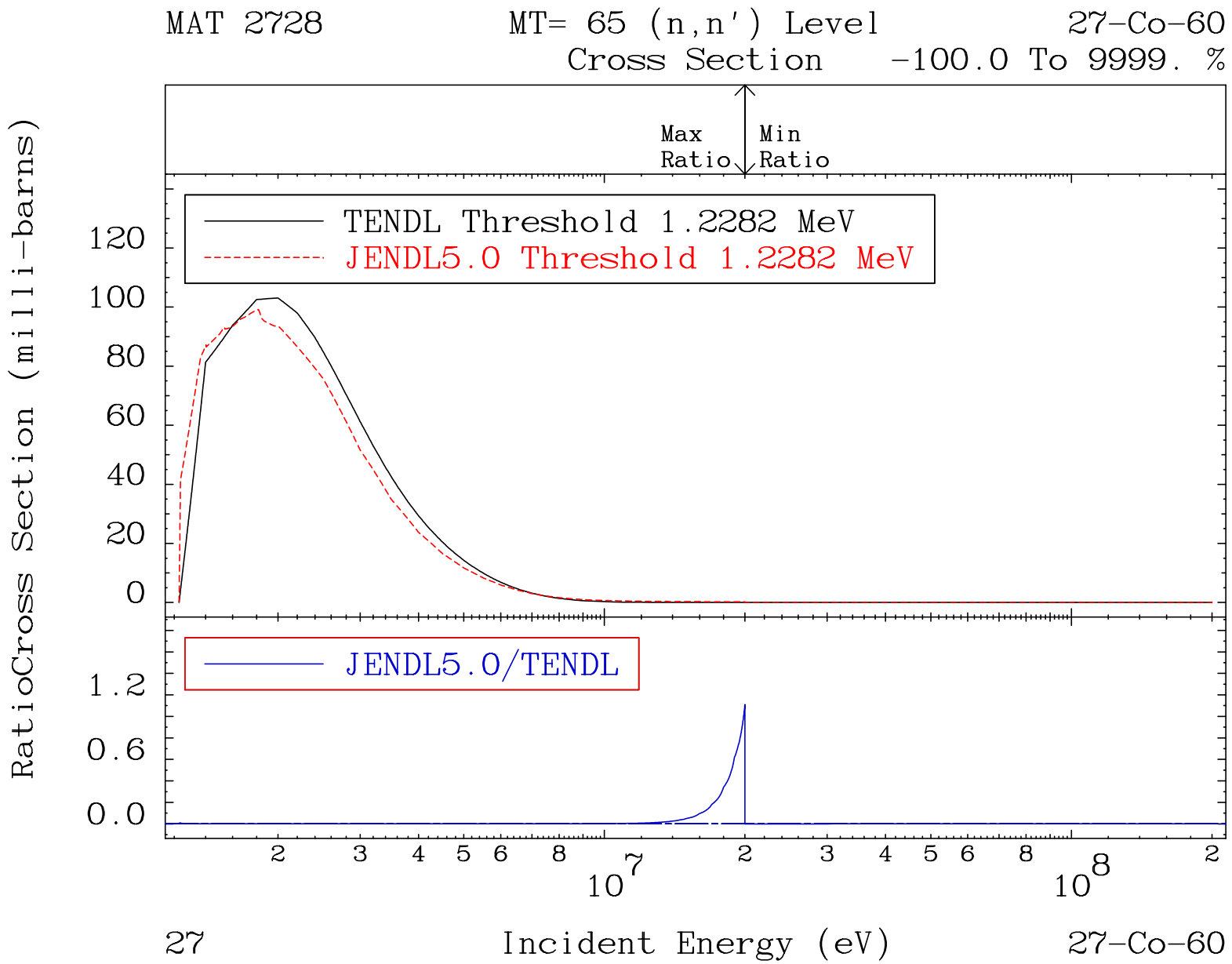

MAT 2728
MT= 60 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 955.82 keV
JENDL5.0 Threshold 955.82 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
100
80
60
40
20
0
300
200
100
0
10^6
10^7
10^8
Incident Energy (eV)
22
27-Co-60

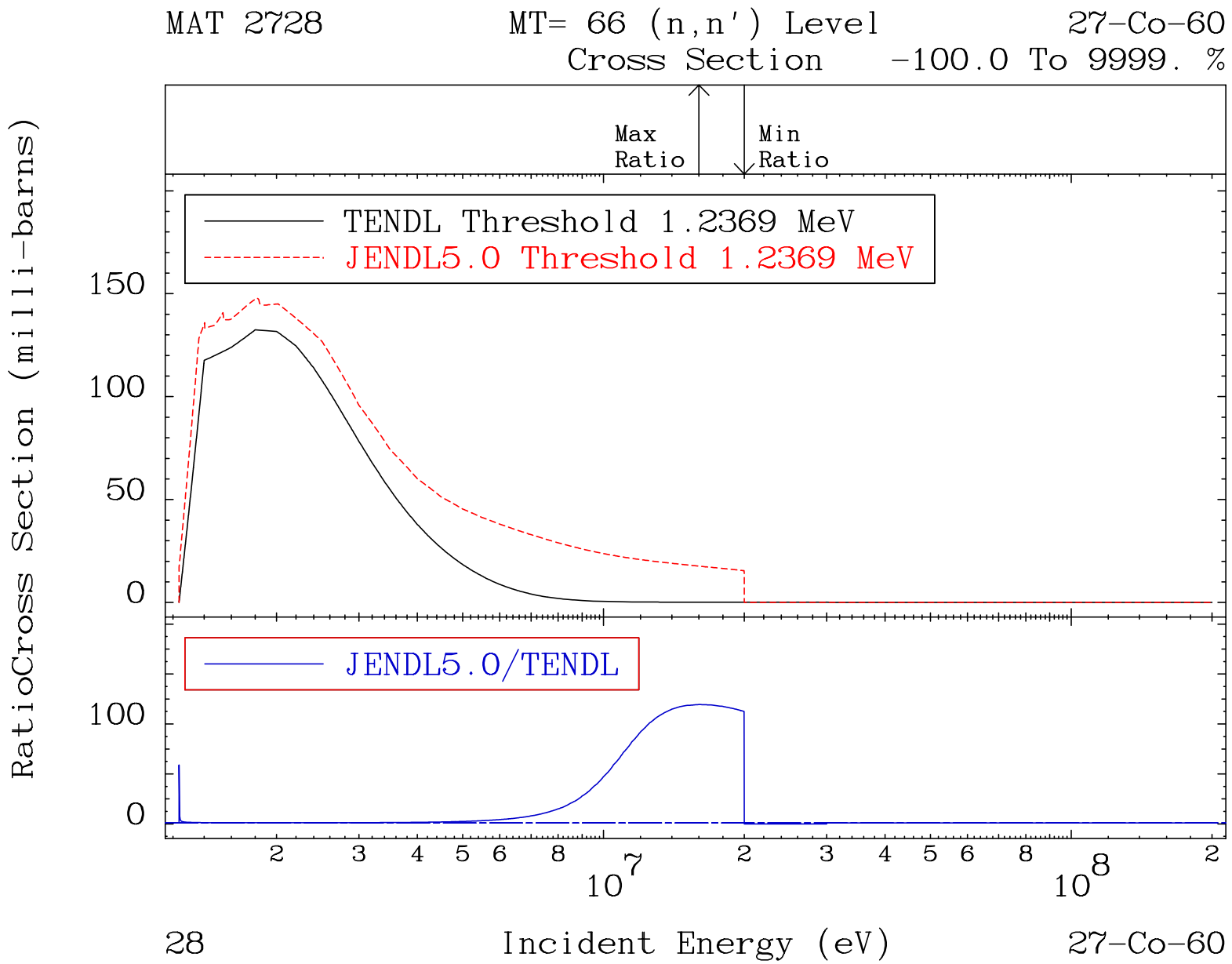

MAT 2728
MT= 61 (n,n') Level
27-Co-60
Cross Section -100.0 To 419.5 %
Max Ratio
Min Ratio
TENDL Threshold 1.0208 MeV
JENDL5.0 Threshold 1.0208 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
23
27-Co-60

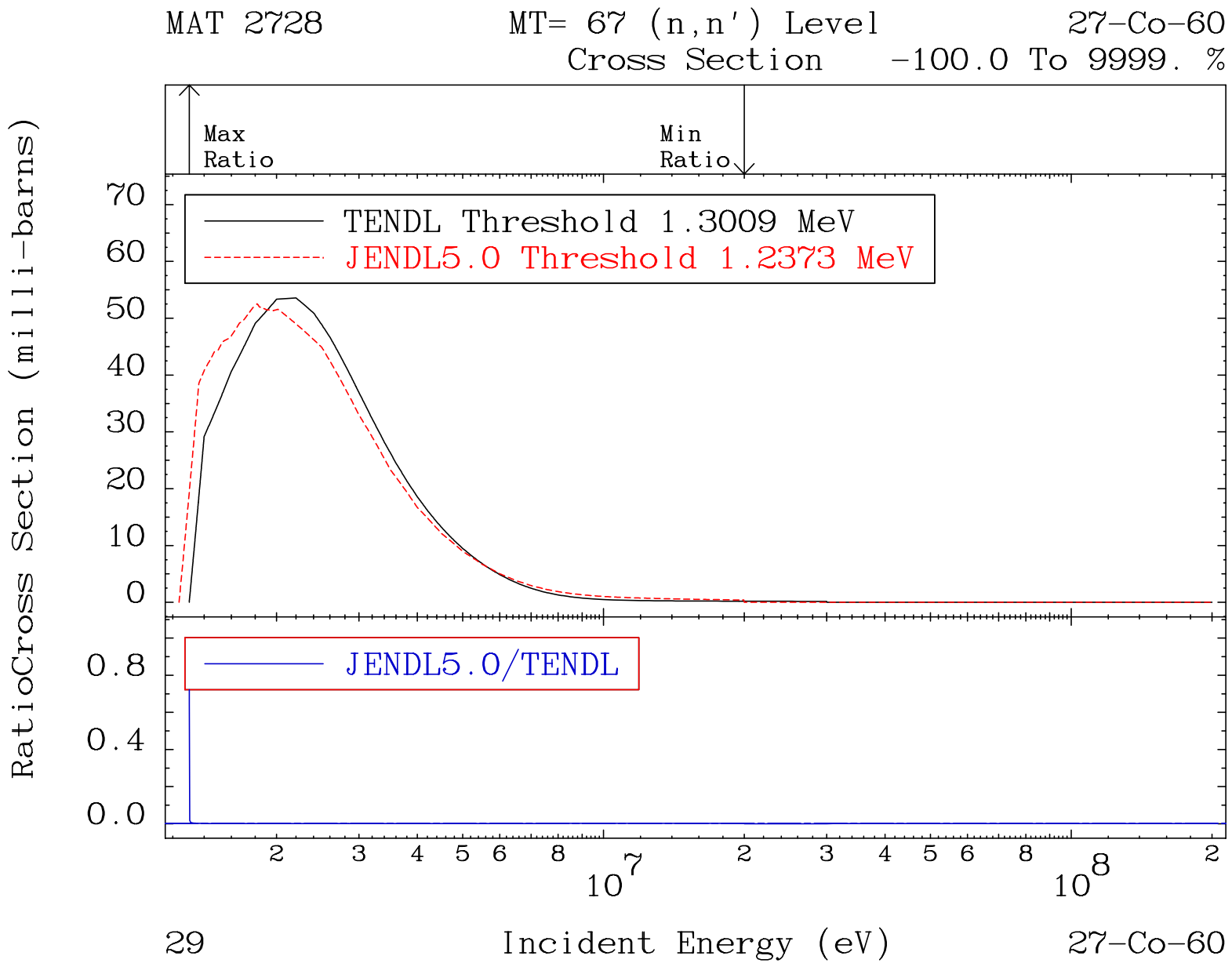

MAT 2728
MT= 62 (n,n') Level
27-Co-60
Cross Section
-100.0 To 110.8 %
Max Ratio
Min Ratio
TENDL Threshold 1.0227 MeV
JENDL5.0 Threshold 1.0227 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
24
27-Co-60

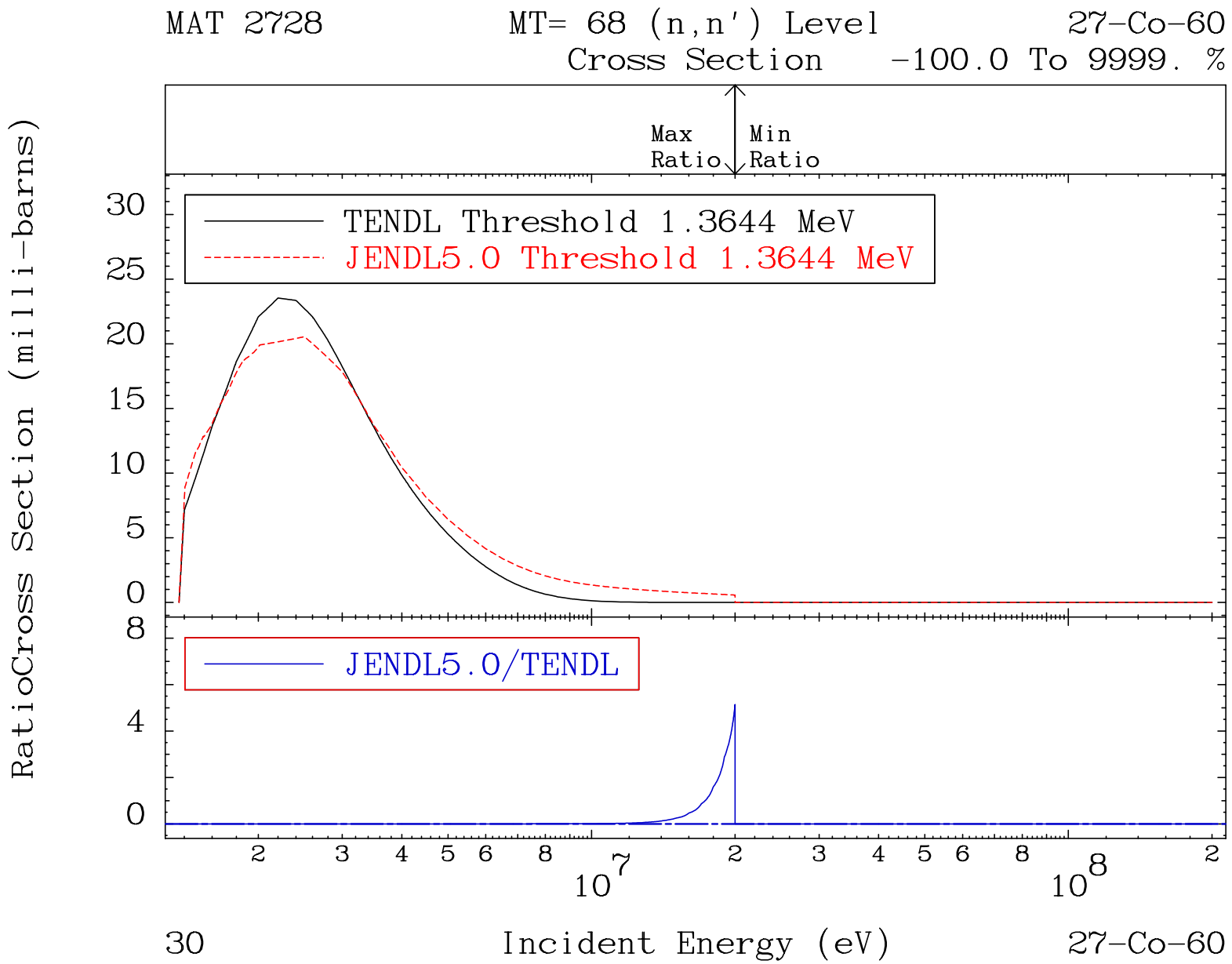

MAT 2728
MT= 63 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1510 MeV
JENDL5.0 Threshold 1.1510 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
25
27-Co-60

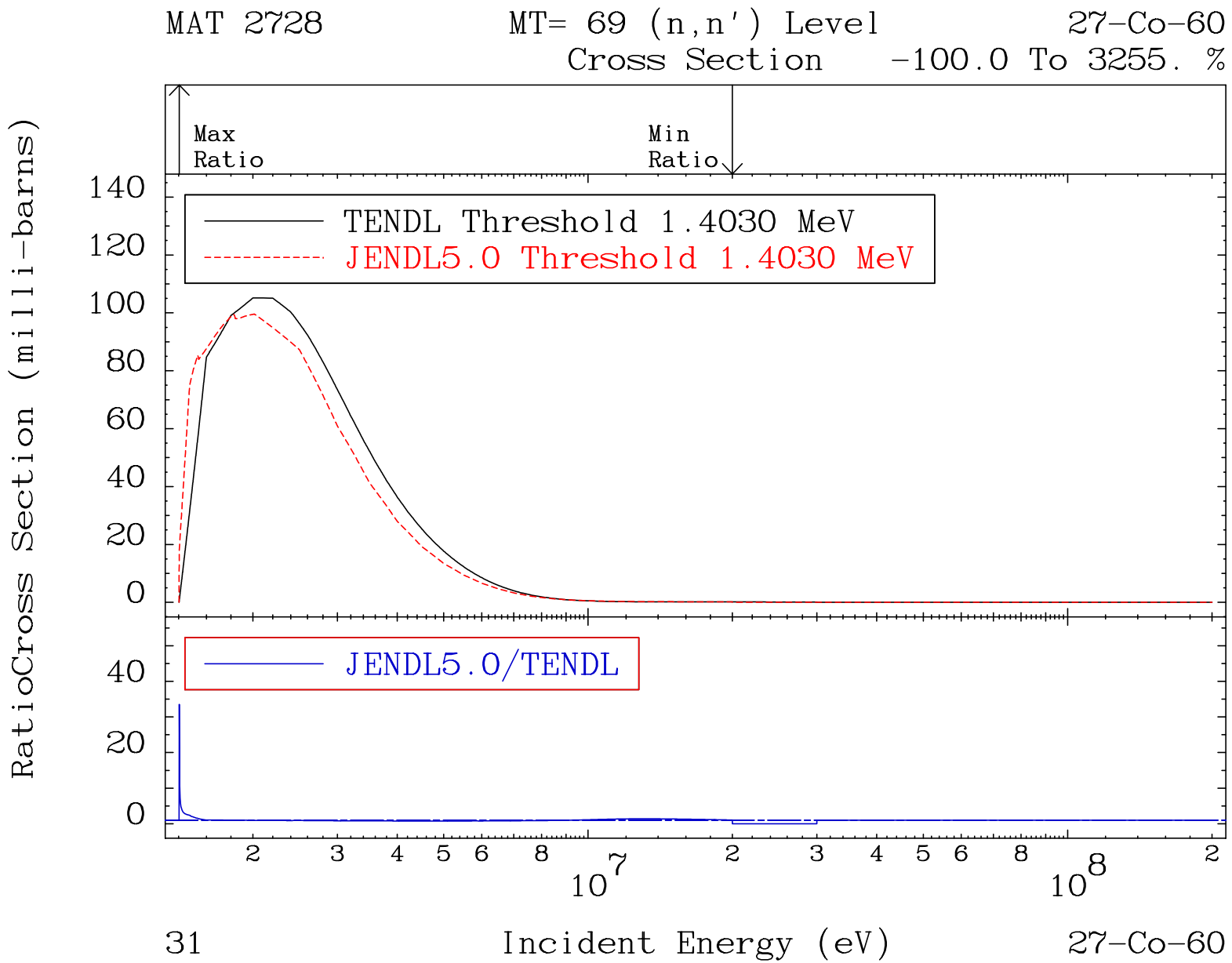

MAT 2728
MT= 64 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.1701 MeV
JENDL5.0 Threshold 1.1701 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
3.0
2.0
1.0
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
26
Incident Energy (eV)
27-Co-60

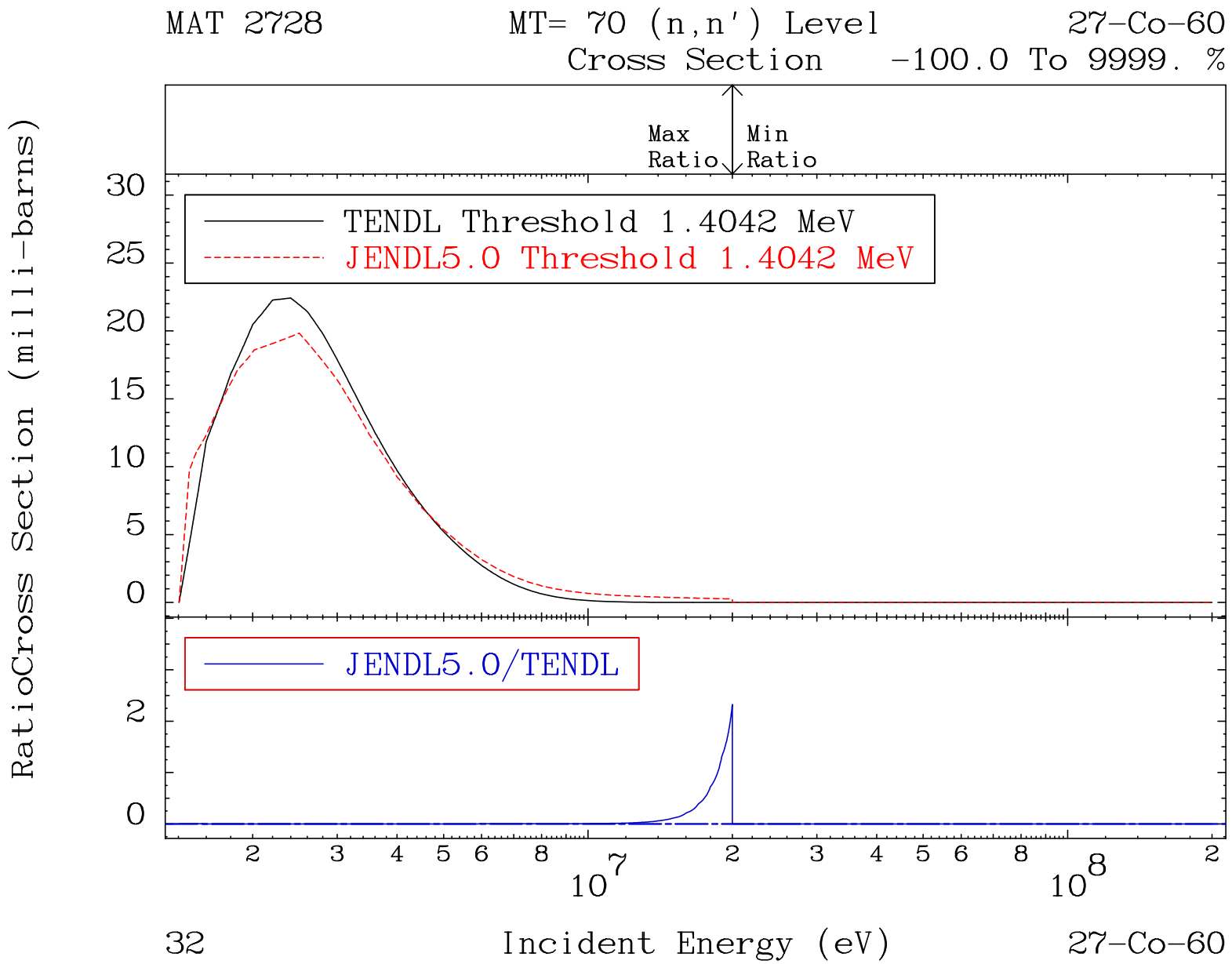

MAT 2728
MT= 65 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.2282 MeV
JENDL5.0 Threshold 1.2282 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
1.2
0.6
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
27
Incident Energy (eV)
27-Co-60

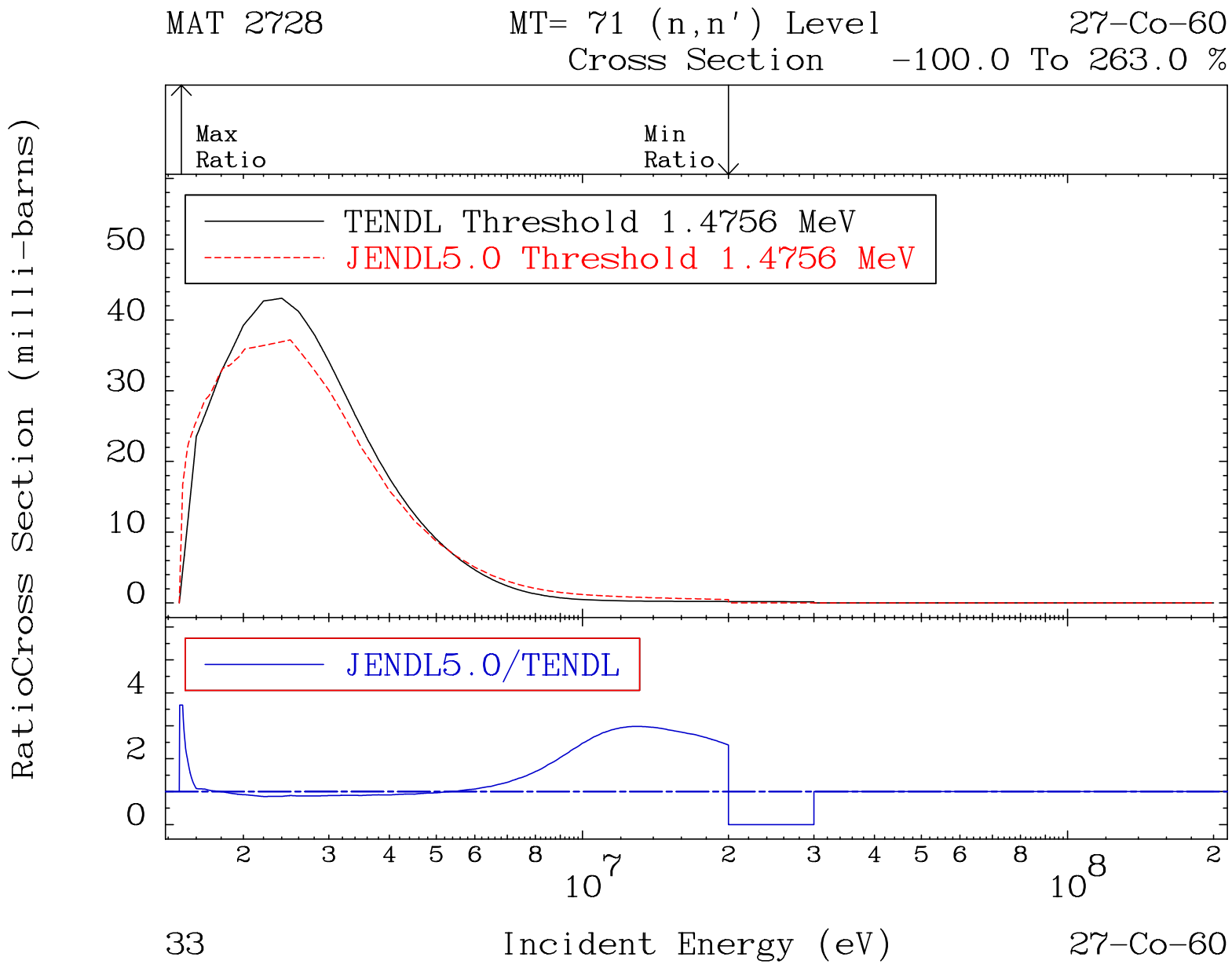

MAT 2728
MT= 66 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.2369 MeV
JENDL5.0 Threshold 1.2369 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
150
100
50
0
100
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
28
Incident Energy (eV)
27-Co-60

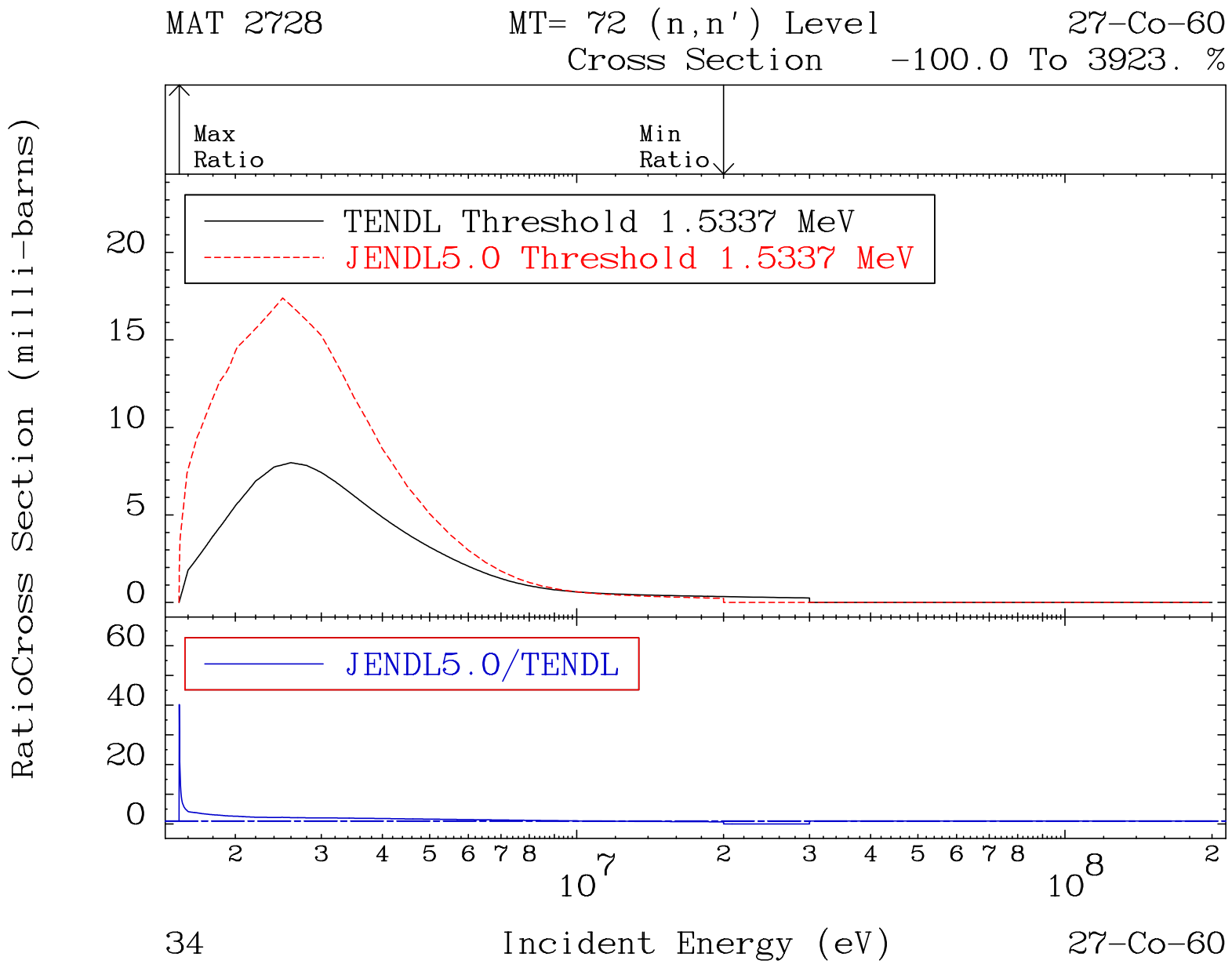

MAT 2728
MT= 67 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.3009 MeV
JENDL5.0 Threshold 1.2373 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
70
60
50
40
30
20
10
0
0.8
0.4
0.0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
29
Incident Energy (eV)
27-Co-60

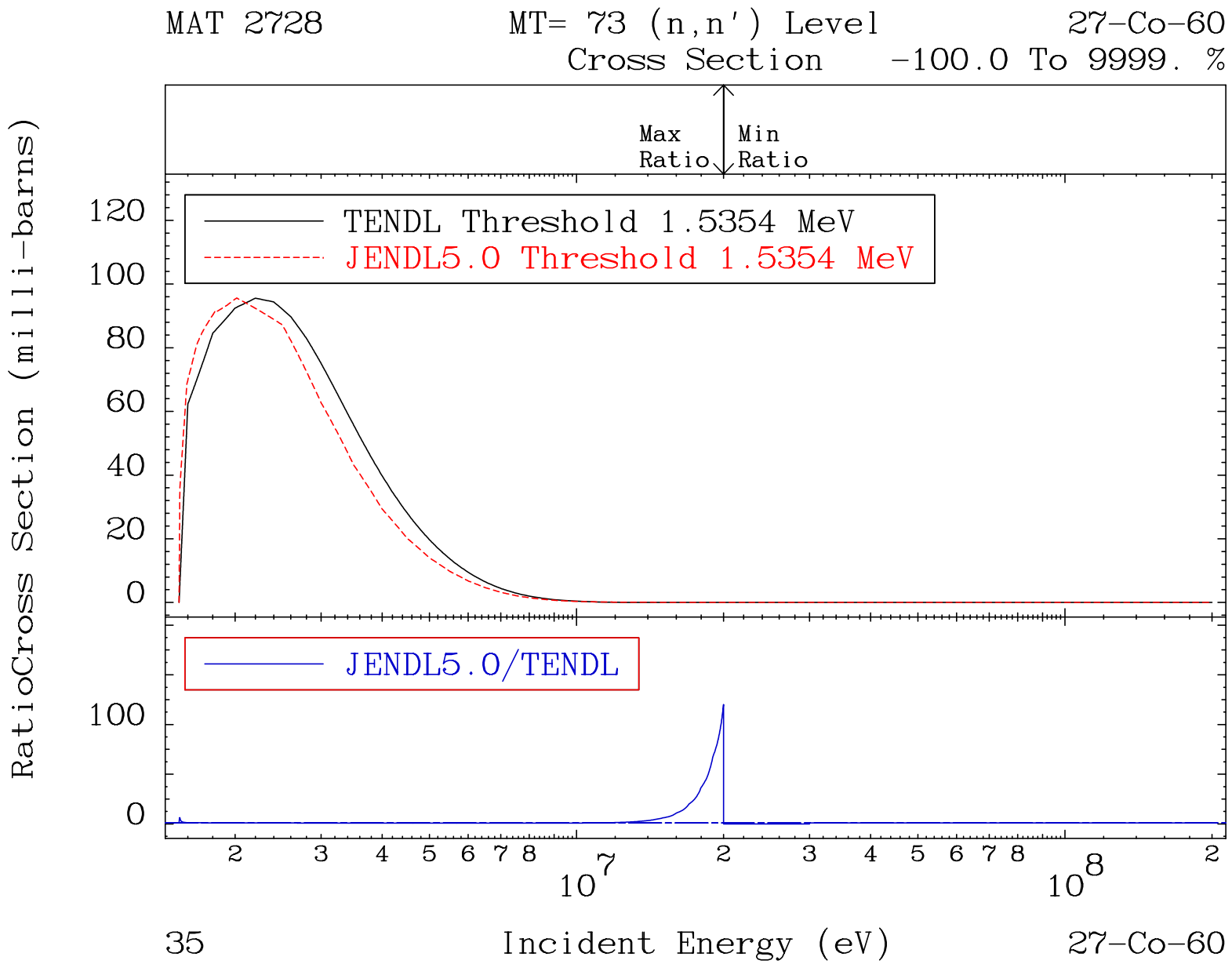

MAT 2728
MT= 68 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.3644 MeV
JENDL5.0 Threshold 1.3644 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
30
27-Co-60

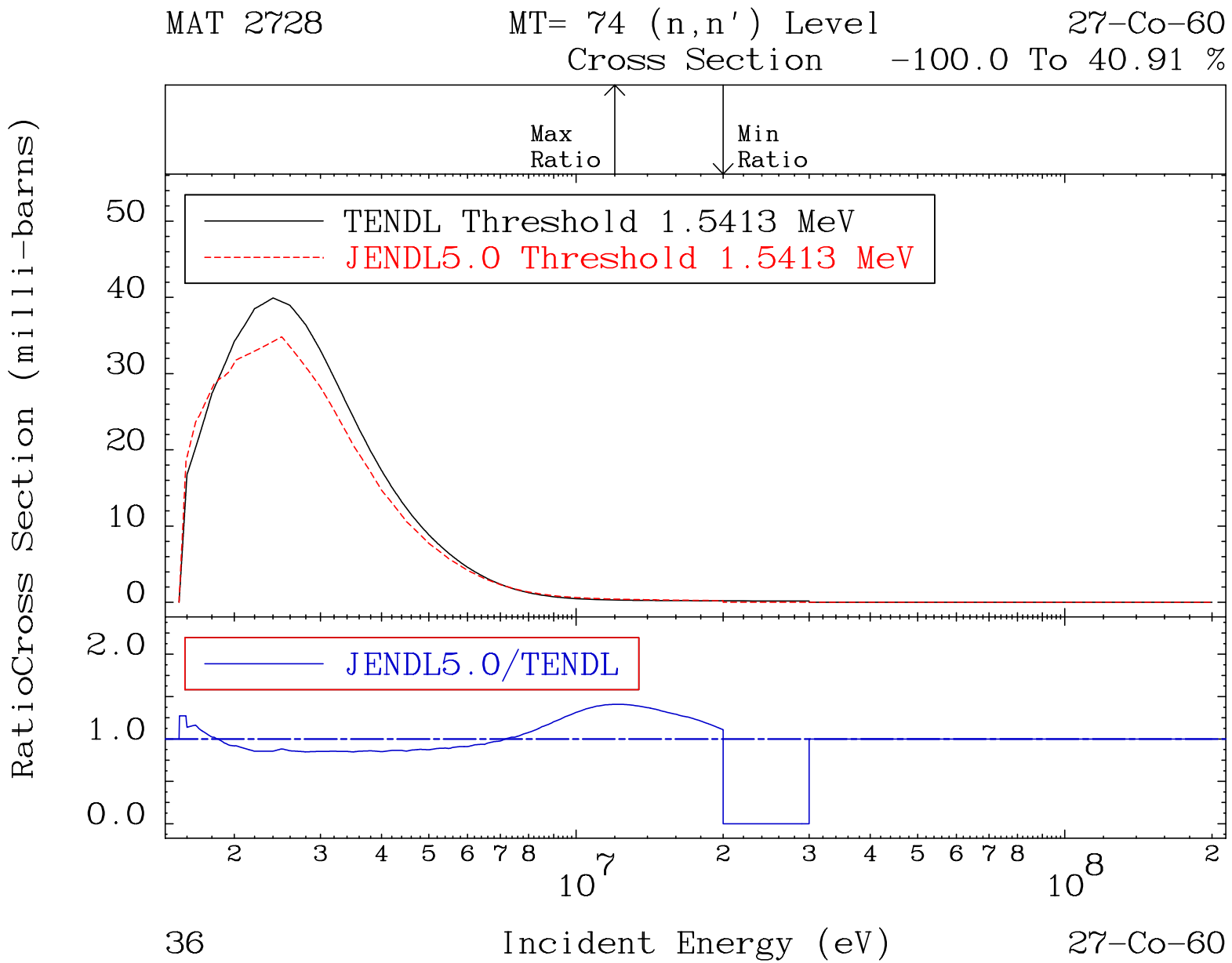

MAT 2728
MT= 69 (n,n') Level
27-Co-60
Cross Section -100.0 To 3255. %
Max Ratio
Min Ratio
TENDL Threshold 1.4030 MeV
JENDL5.0 Threshold 1.4030 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
31
27-Co-60

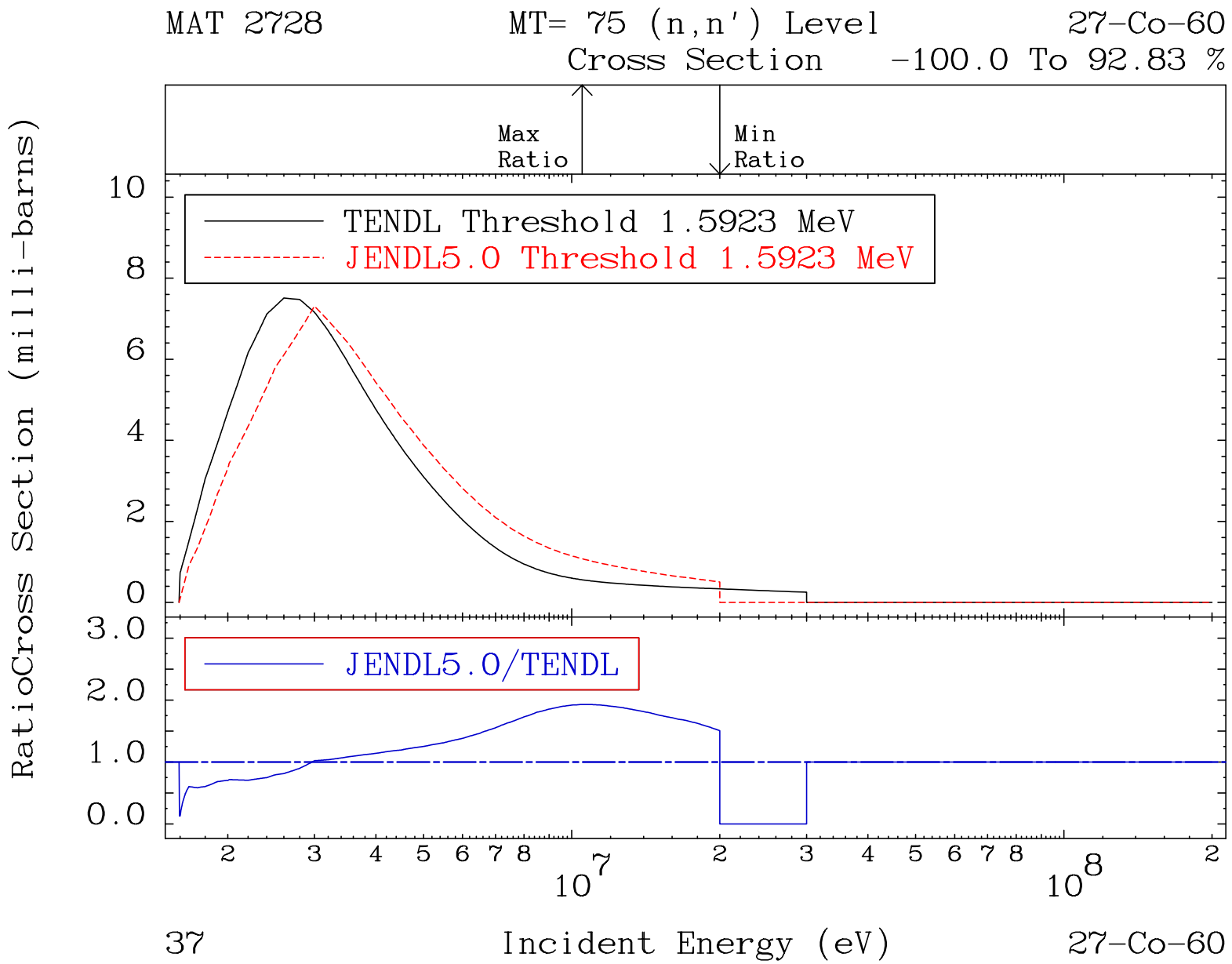

MAT 2728
MT= 70 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.4042 MeV
JENDL5.0 Threshold 1.4042 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
32
27-Co-60

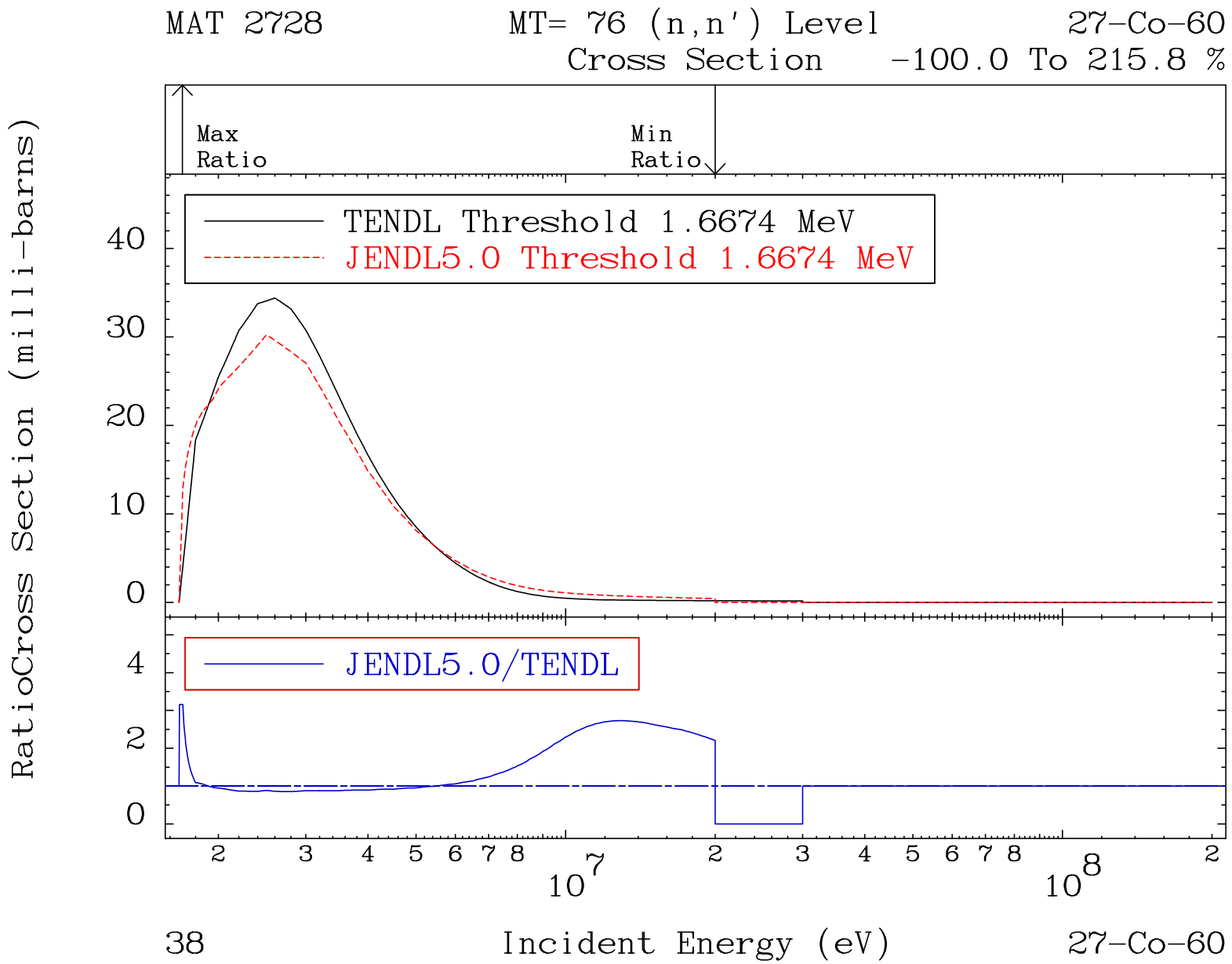

MAT 2728
MT= 71 (n,n') Level
27-Co-60
Cross Section -100.0 To 263.0 %
Max Ratio
Min Ratio
TENDL Threshold 1.4756 MeV
JENDL5.0 Threshold 1.4756 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
4
2
0
2 3 4 5 6 8 10^7 2 3 4 5 6 8 10^8 2
33
Incident Energy (eV)
27-Co-60

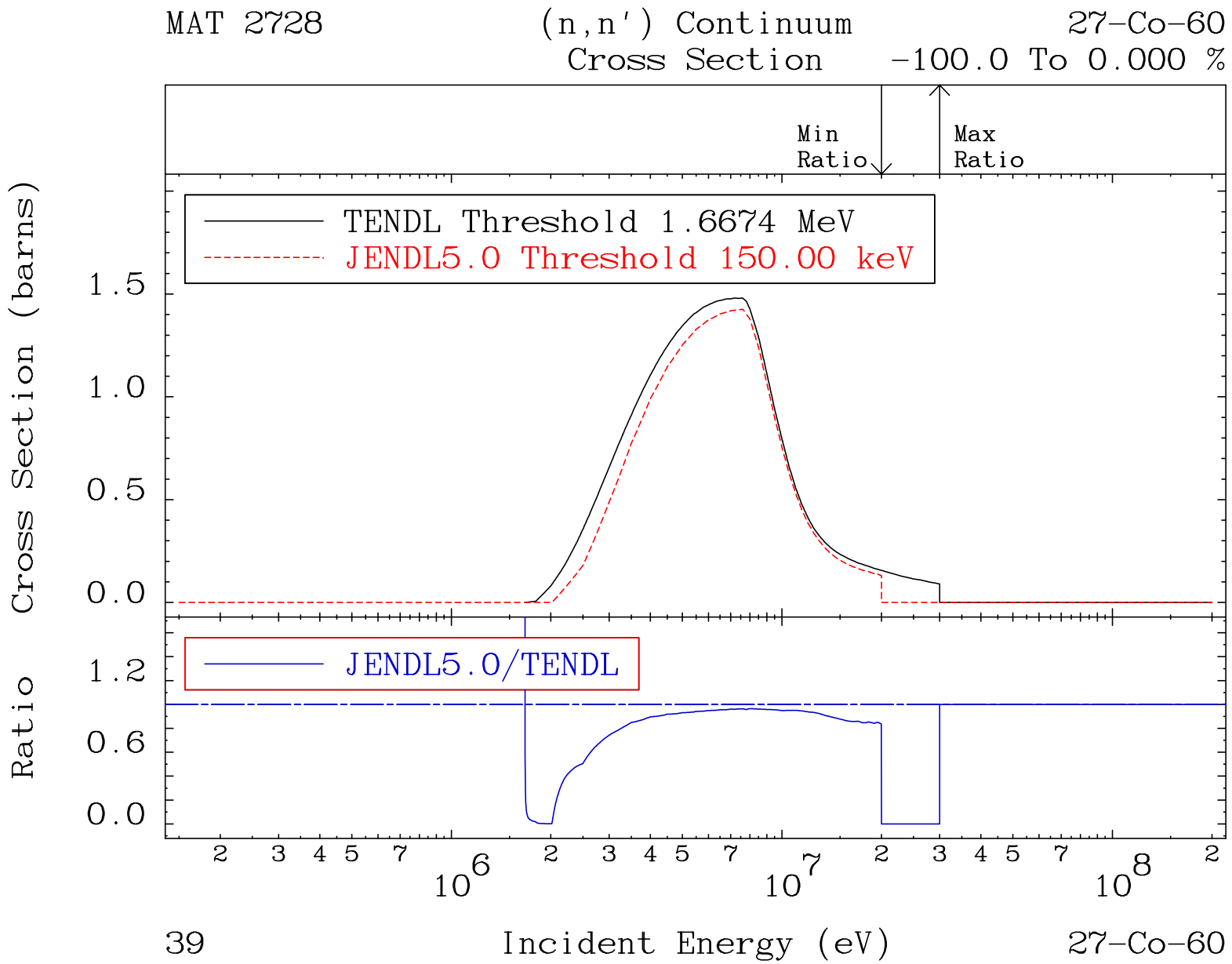

MAT 2728
MT= 72 (n,n') Level
27-Co-60
Cross Section -100.0 To 3923. %
Max Ratio
Min Ratio
TENDL Threshold 1.5337 MeV
JENDL5.0 Threshold 1.5337 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
34
27-Co-60

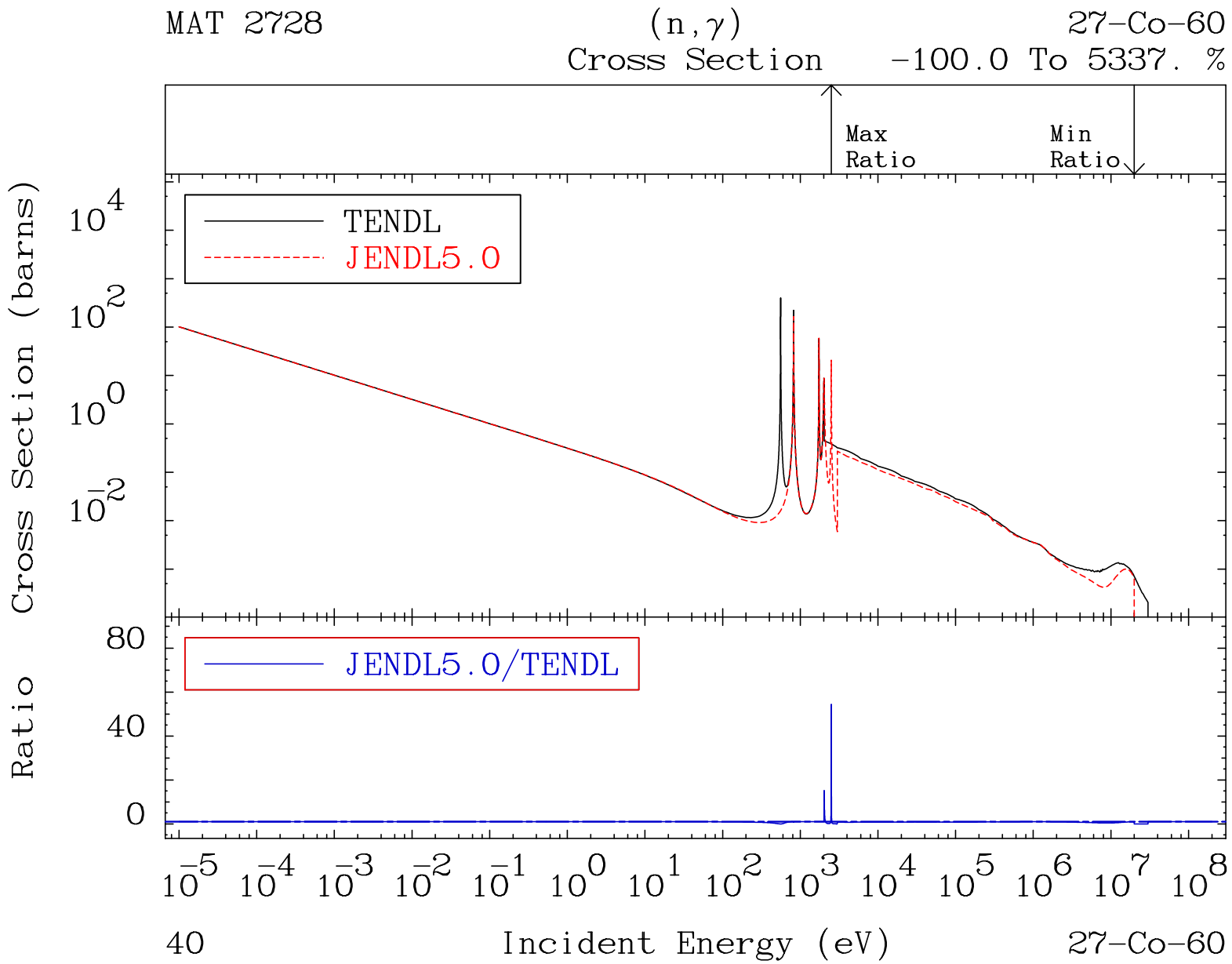

MAT 2728
MT= 73 (n,n') Level
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 1.5354 MeV
JENDL5.0 Threshold 1.5354 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
120
100
80
60
40
20
0
100
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
35
Incident Energy (eV)
27-Co-60

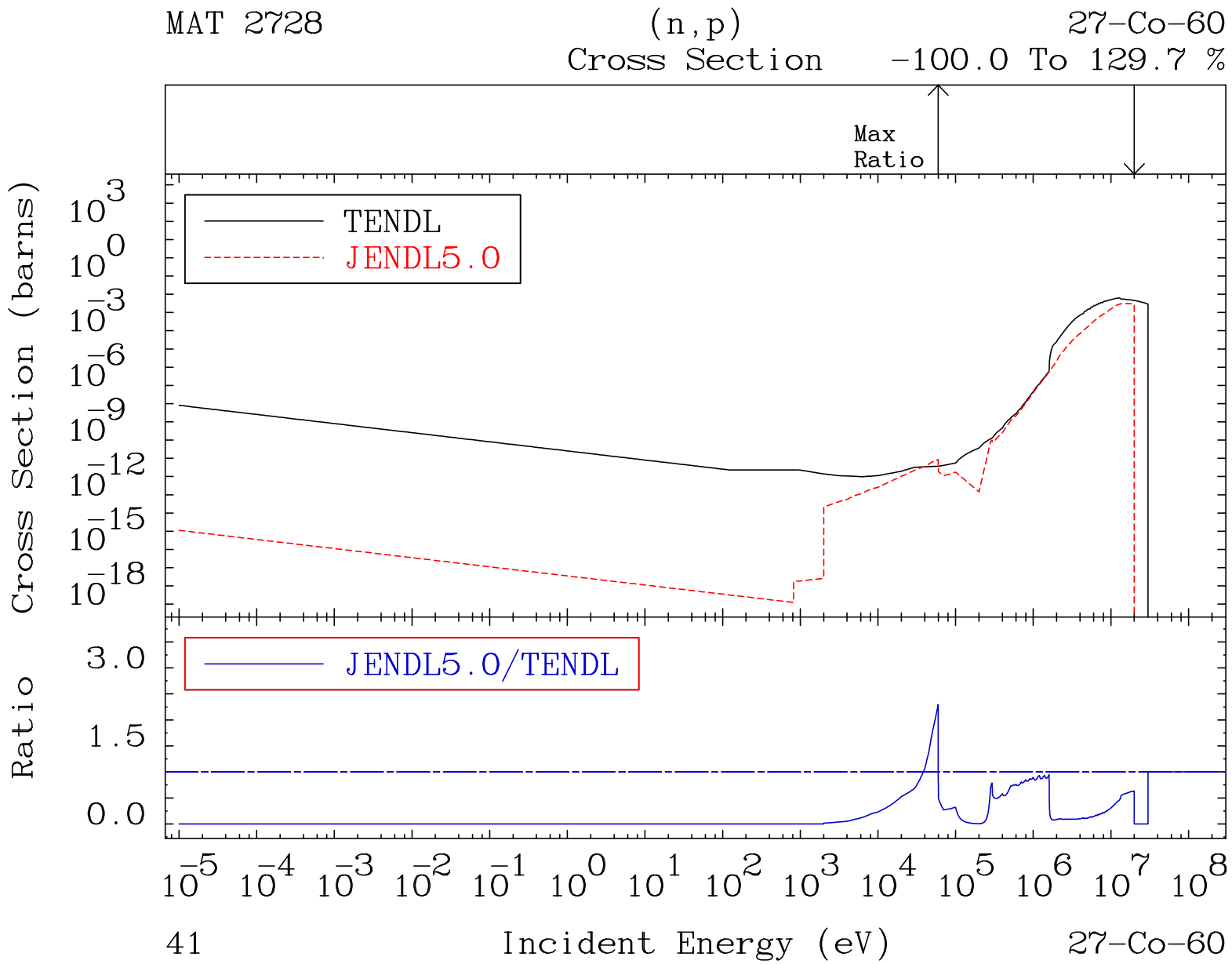

MAT 2728
MT= 74 (n,n') Level
27-Co-60
Cross Section -100.0 To 40.91 %
Max Ratio
Min Ratio
TENDL Threshold 1.5413 MeV
JENDL5.0 Threshold 1.5413 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
50
40
30
20
10
0
2.0
1.0
0.0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
36
Incident Energy (eV)
27-Co-60

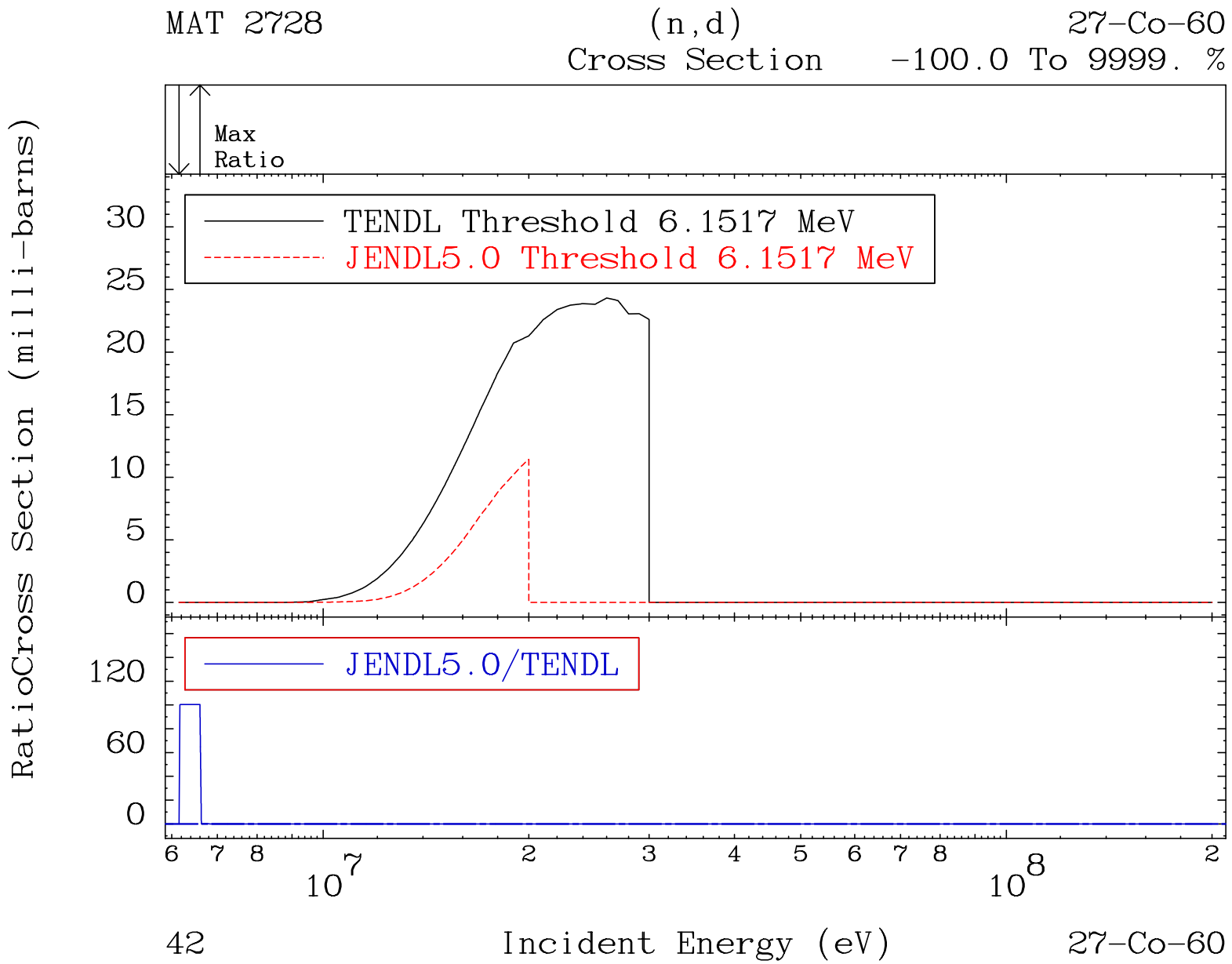

MAT 2728
MT= 75 (n,n') Level
27-Co-60
Cross Section -100.0 To 92.83 %
Max Ratio
Min Ratio
TENDL Threshold 1.5923 MeV
JENDL5.0 Threshold 1.5923 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
37
27-Co-60

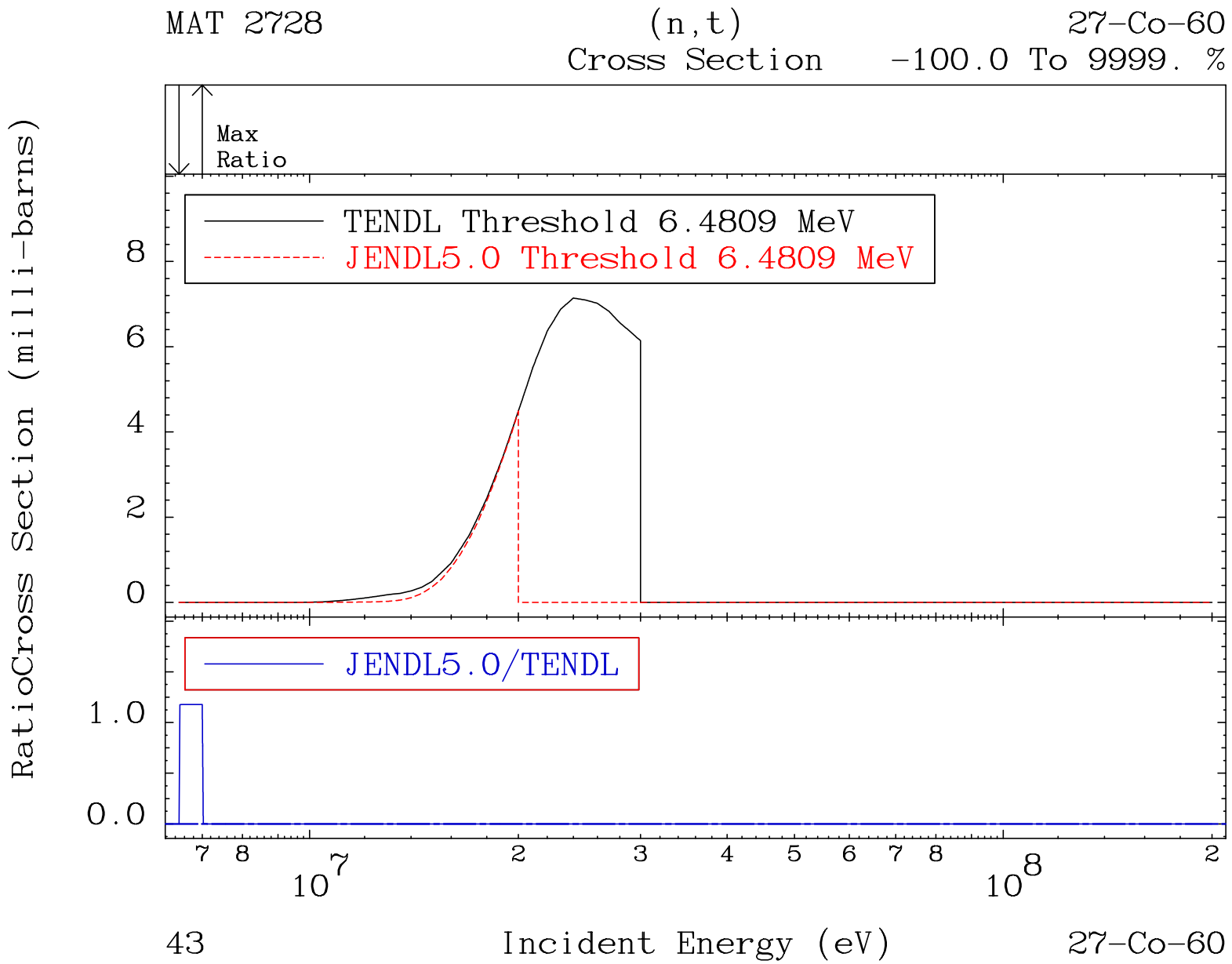

MAT 2728
MT= 76 (n,n') Level
27-Co-60
Cross Section
-100.0 To 215.8 %
Max Ratio
Min Ratio
TENDL Threshold 1.6674 MeV
JENDL5.0 Threshold 1.6674 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
40
30
20
10
0
4
2
0
2 3 4 5 6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
38
Incident Energy (eV)
27-Co-60

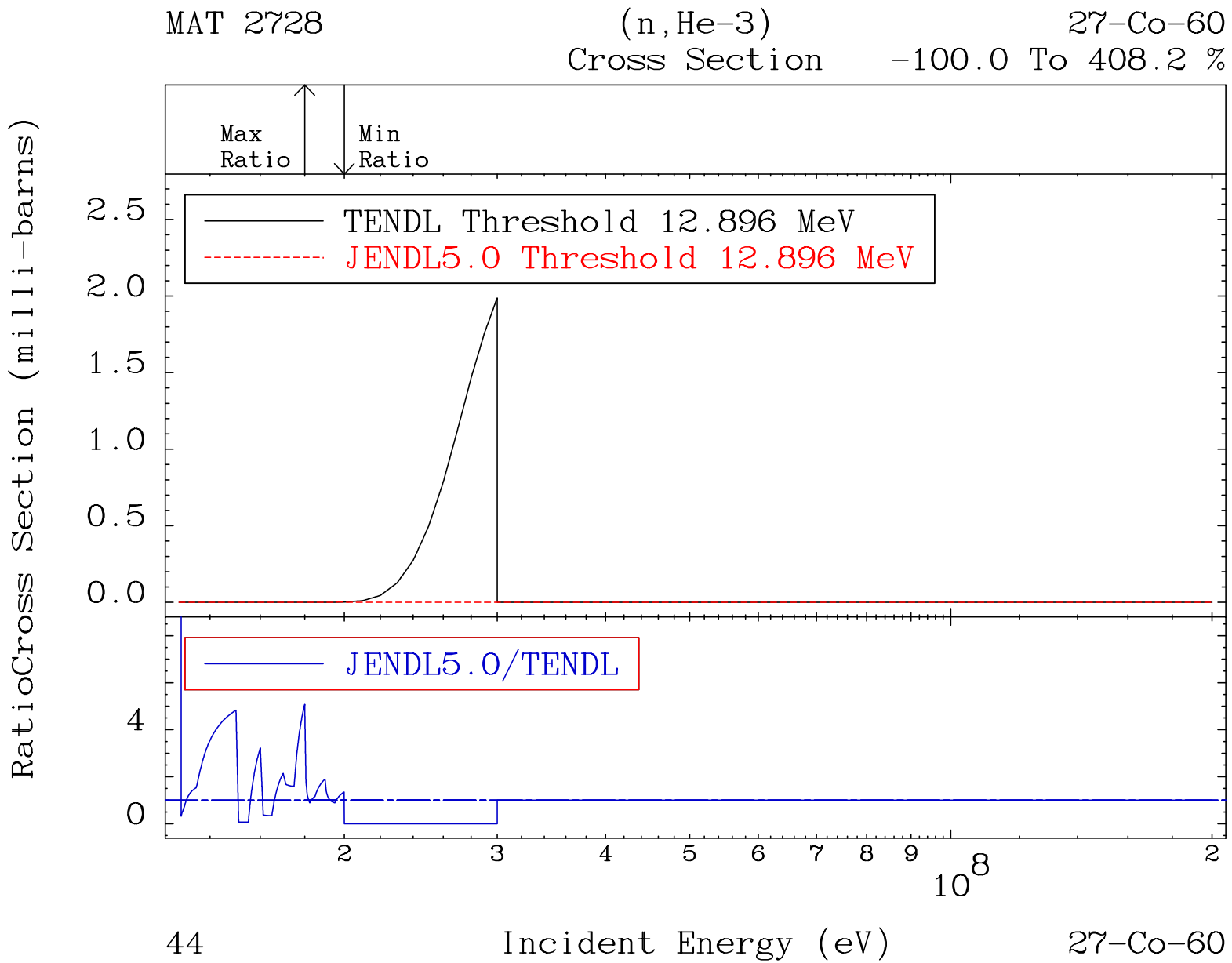

MAT 2728
(n,n') Continuum
Cross Section
27-Co-60
-100.0 To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 1.6674 MeV
JENDL5.0 Threshold 150.00 keV
Cross Section (barns)
1.5
1.0
0.5
0.0
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
39
Incident Energy (eV)
27-Co-60

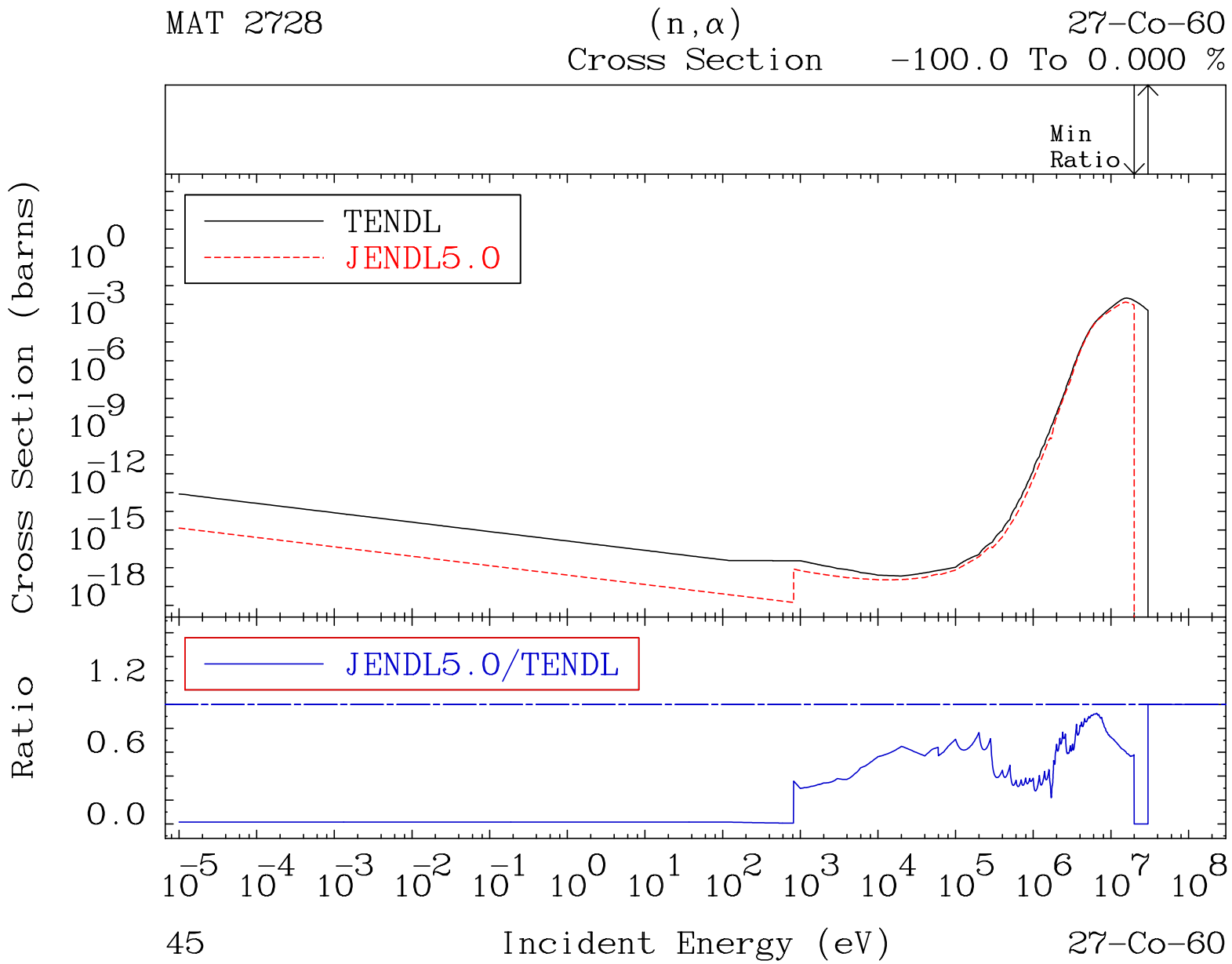

MAT 2728
(n,γ)
27-Co-60
Cross Section
-100.0 To 5337. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
27-Co-60
40

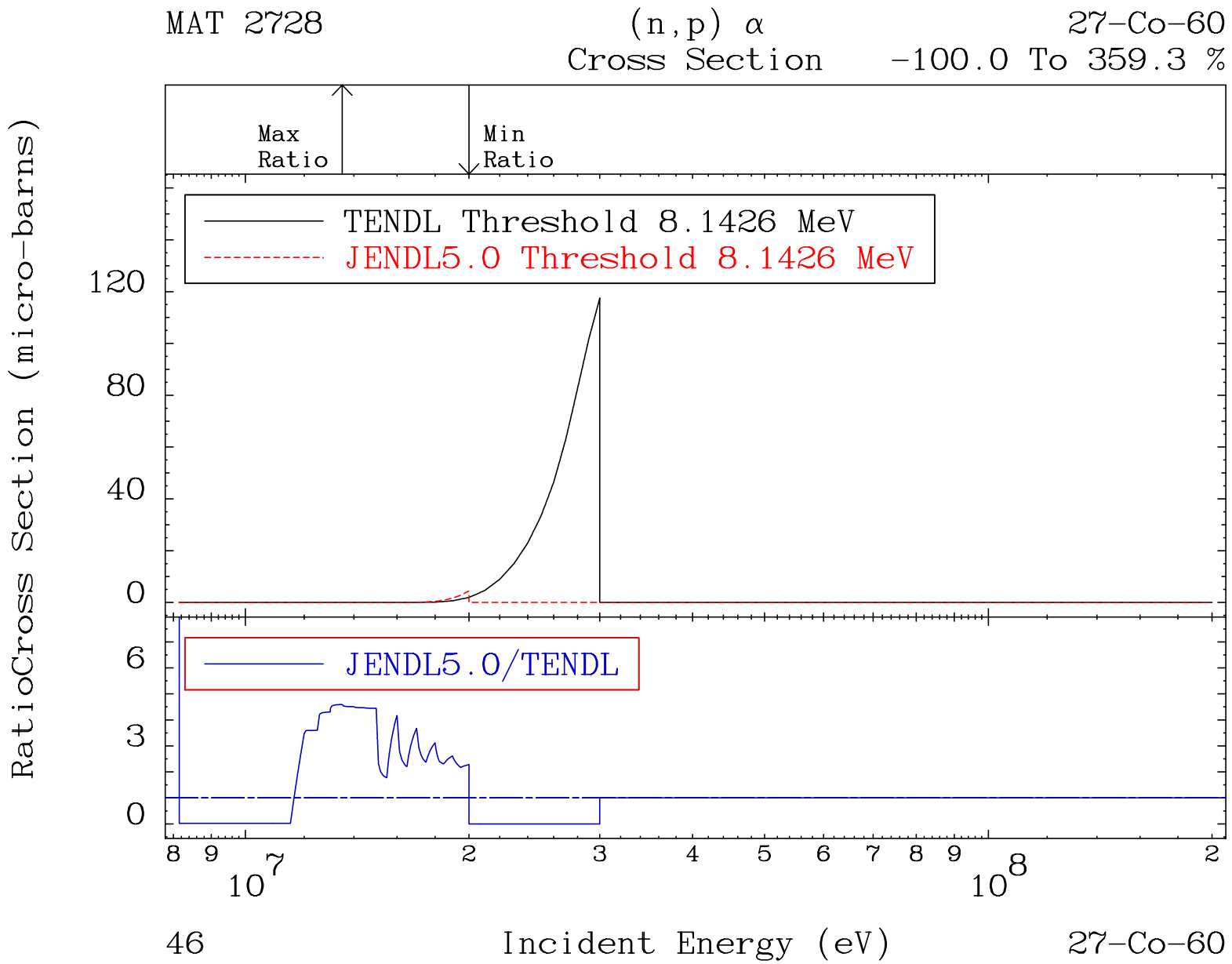

MAT 2728
(n,p)
Cross Section
27-Co-60
-100.0 To 129.7 %
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
41
27-Co-60

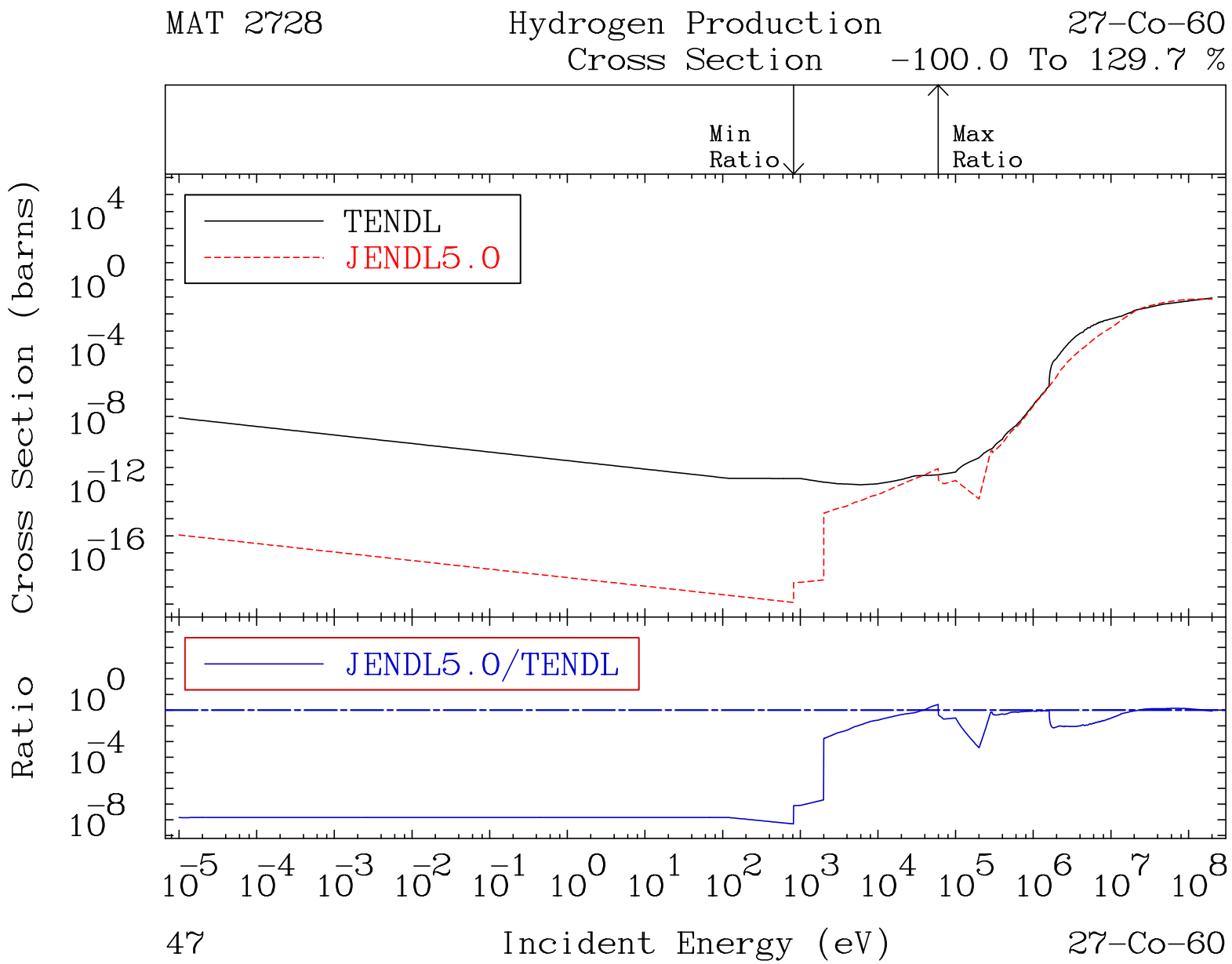

MAT 2728
(n,d)
27-Co-60
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.1517 MeV
JENDL5.0 Threshold 6.1517 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
30
25
20
15
10
5
0
120
60
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
42
Incident Energy (eV)
27-Co-60

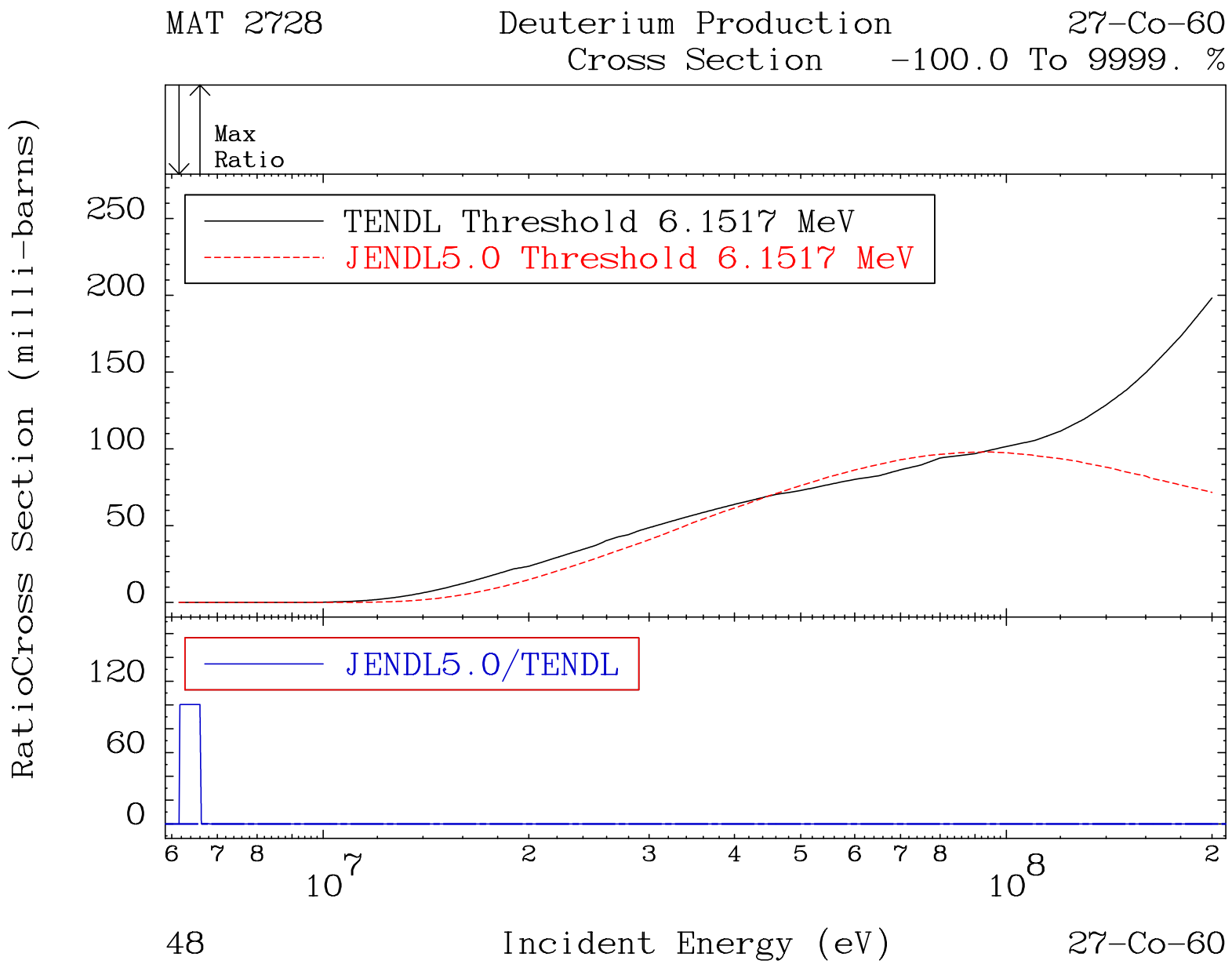

MAT 2728
(n,t)
27-Co-60
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.4809 MeV
JENDL5.0 Threshold 6.4809 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
8
6
4
2
0
1.0
0.0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
43
Incident Energy (eV)
27-Co-60

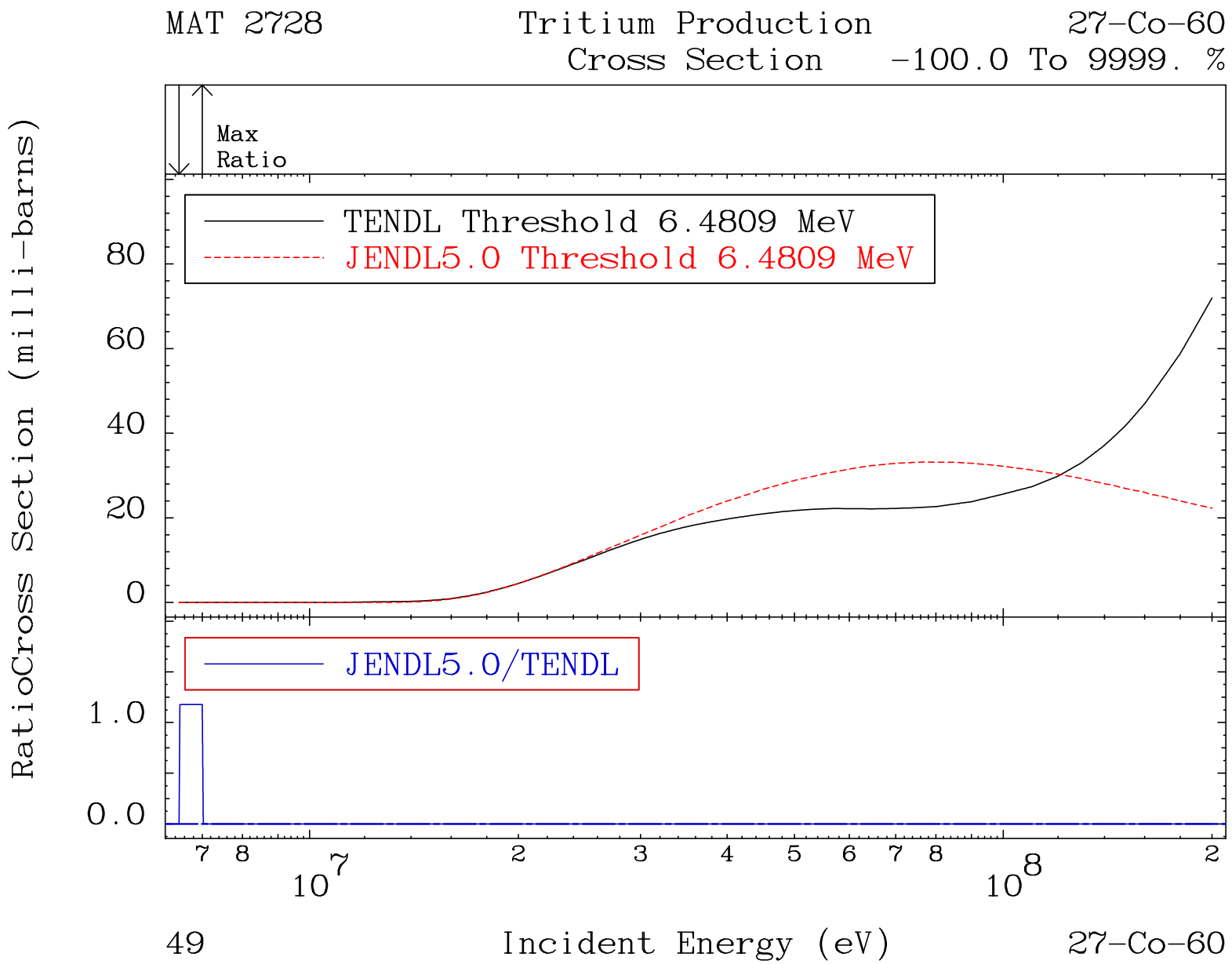

MAT 2728
(n,He-3)
Cross Section
27-Co-60
-100.0 To 408.2 %
Max Ratio
Min Ratio
TENDL Threshold 12.896 MeV
JENDL5.0 Threshold 12.896 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
2.5
2.0
1.5
1.0
0.5
0.0
4
0
2
3
4
5
6
7
8
9
2
10^8
44
Incident Energy (eV)
27-Co-60

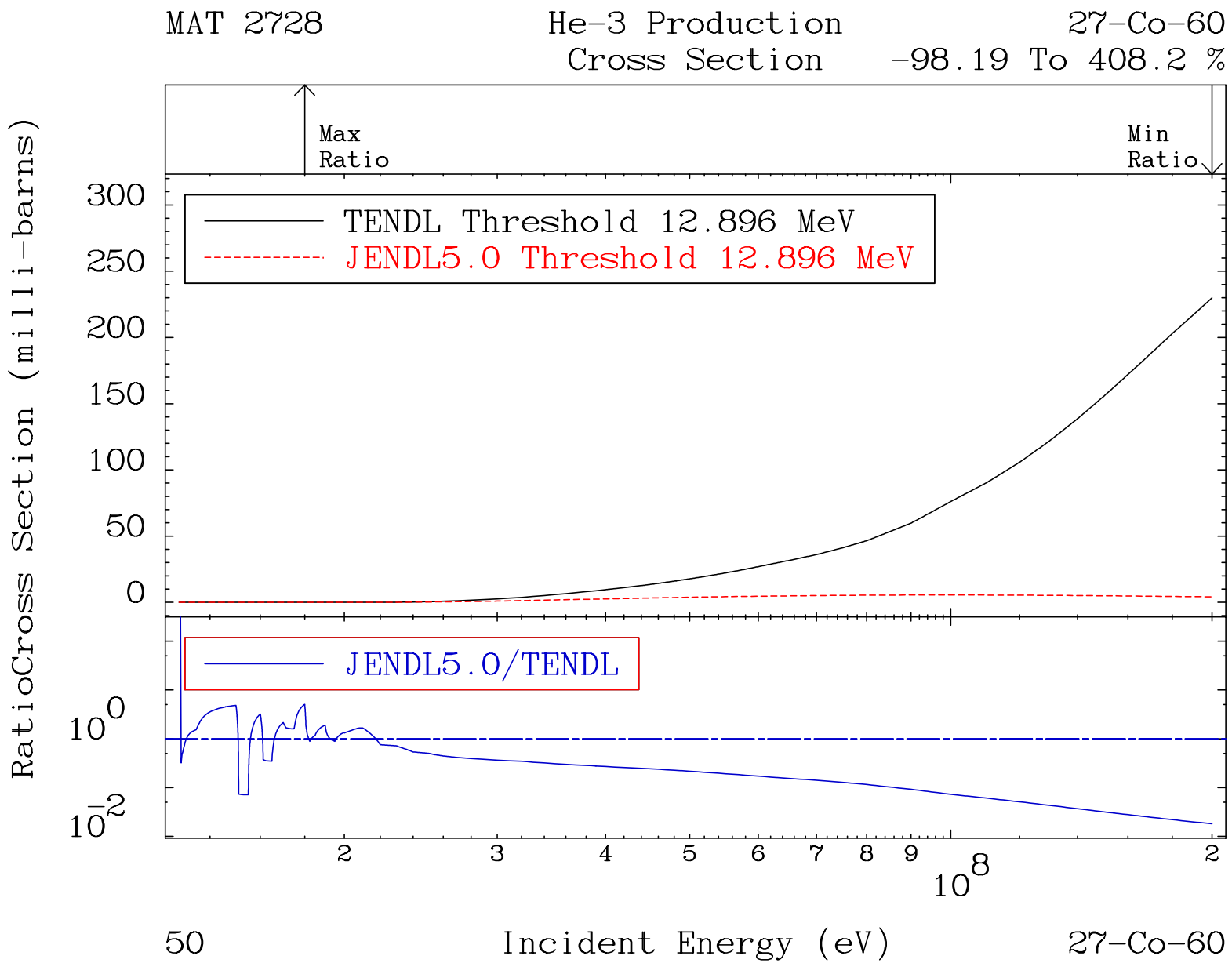

MAT 2728
(n,α)
Cross Section
27-Co-60
-100.0 To 0.000 %
Min
Ratio
TENDL
JENDL5.0
Cross Section (barns)
10^0
10^-3
10^-6
10^-9
10^-12
10^-15
10^-18
JENDL5.0/TENDL
Ratio
1.2
0.6
0.0
10^-5 10^-4 10^-3 10^-2 10^-1 10^0 10^1 10^2 10^3 10^4 10^5 10^6 10^7 10^8
45
Incident Energy (eV)
27-Co-60

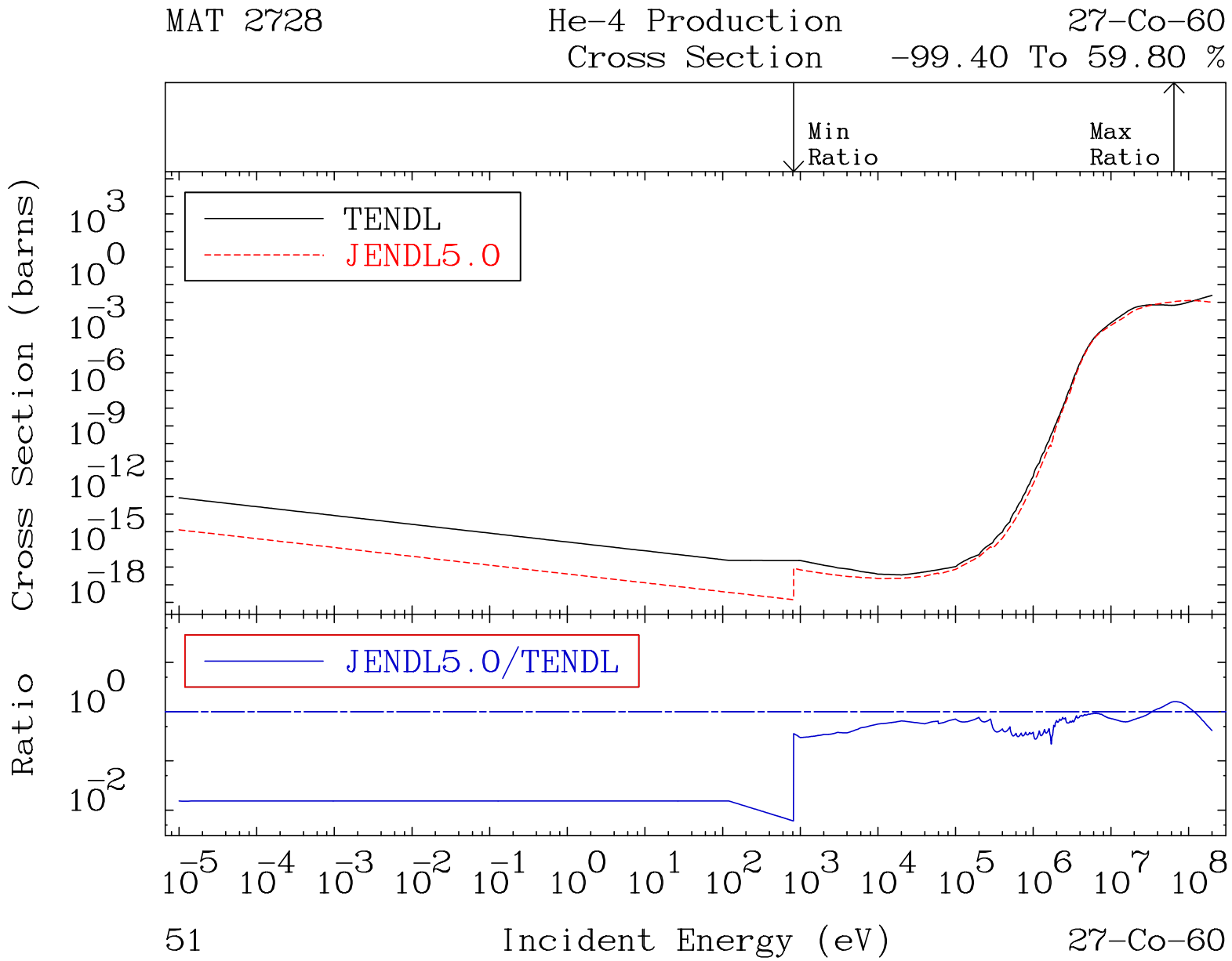

MAT 2728
(n,p) α
27-Co-60
Cross Section
-100.0 To 359.3 %
Max Ratio
Min Ratio
TENDL Threshold 8.1426 MeV
JENDL5.0 Threshold 8.1426 MeV
JENDL5.0/TENDL
RatioCross Section (micro-barns)
120
80
40
0
6
3
0
8 9 10^7 2 3 4 5 6 7 8 9 10^8 2
46
Incident Energy (eV)
27-Co-60

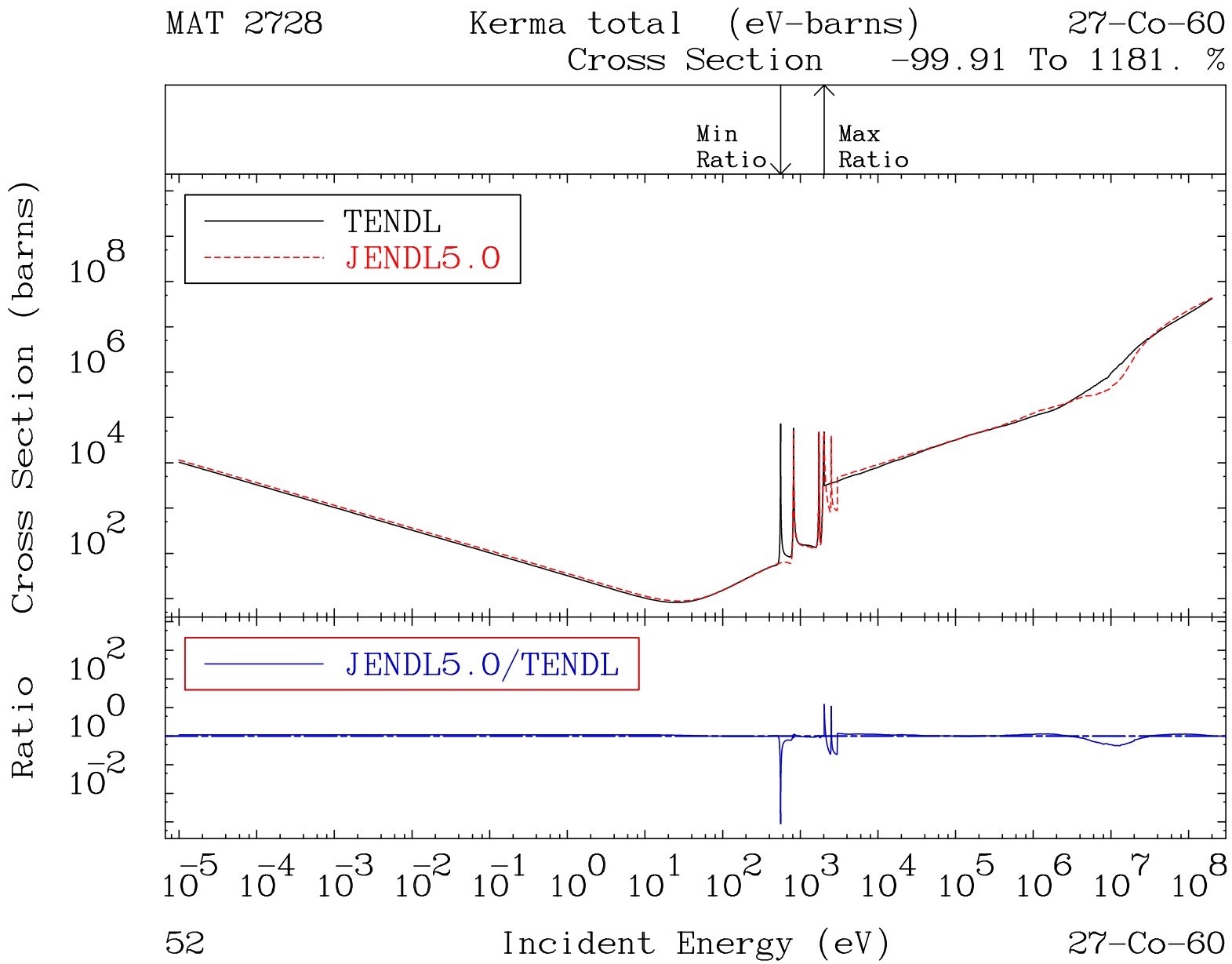

MAT 2728
Hydrogen Production
27-Co-60
Cross Section
-100.0 To 129.7 %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
47
27-Co-60

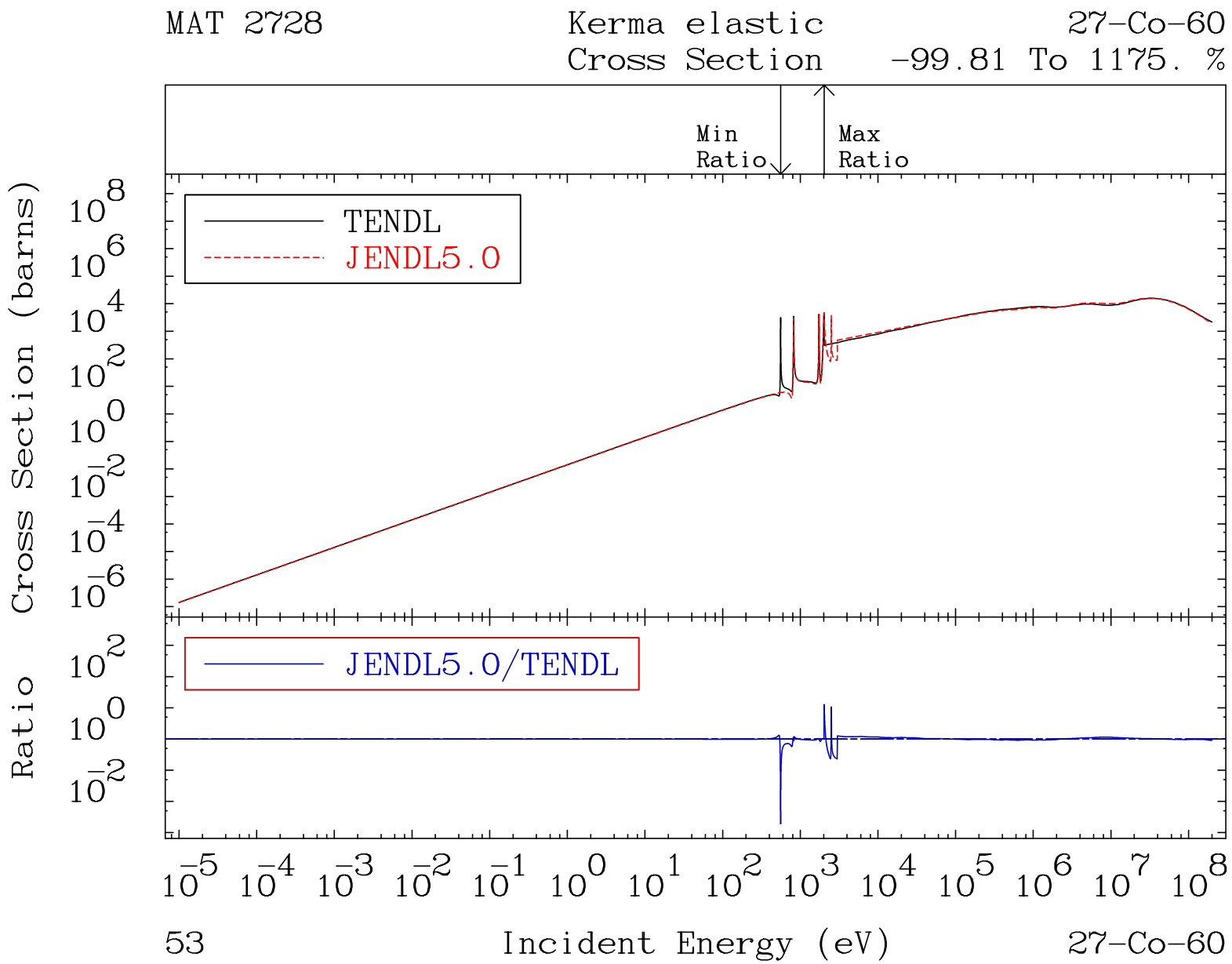

MAT 2728
Deuterium Production
27-Co-60
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.1517 MeV
JENDL5.0 Threshold 6.1517 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
120
60
0
6 7 8
10^7
2 3 4 5 6 7 8
10^8
2
48
Incident Energy (eV)
27-Co-60

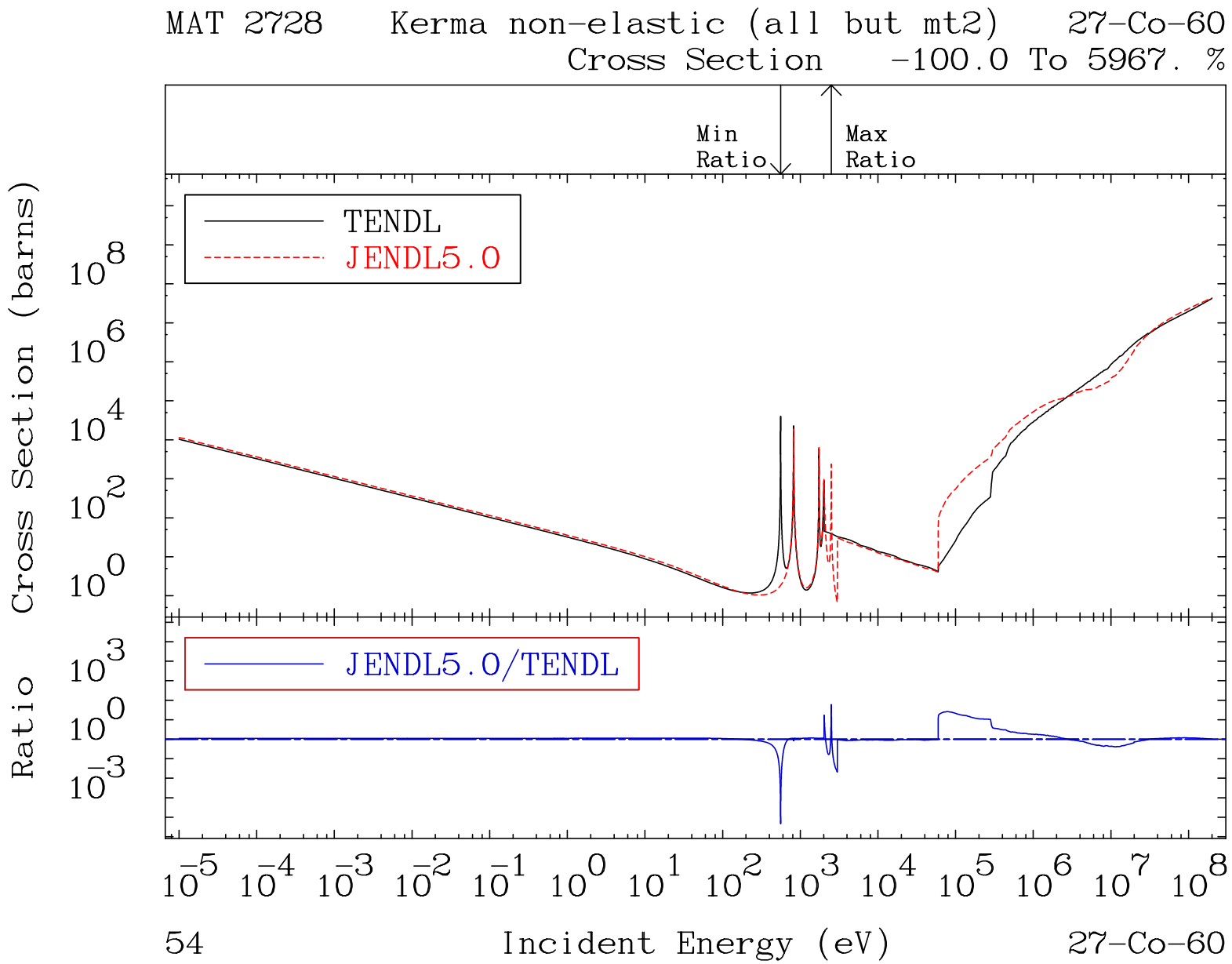

MAT 2728
Tritium Production
27-Co-60
Cross Section
-100.0 To 9999. %
Max
Ratio
TENDL Threshold 6.4809 MeV
JENDL5.0 Threshold 6.4809 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
80
60
40
20
0
1.0
0.0
7 8
10^7
2 3 4 5 6 7 8
10^8
2
49
Incident Energy (eV)
27-Co-60

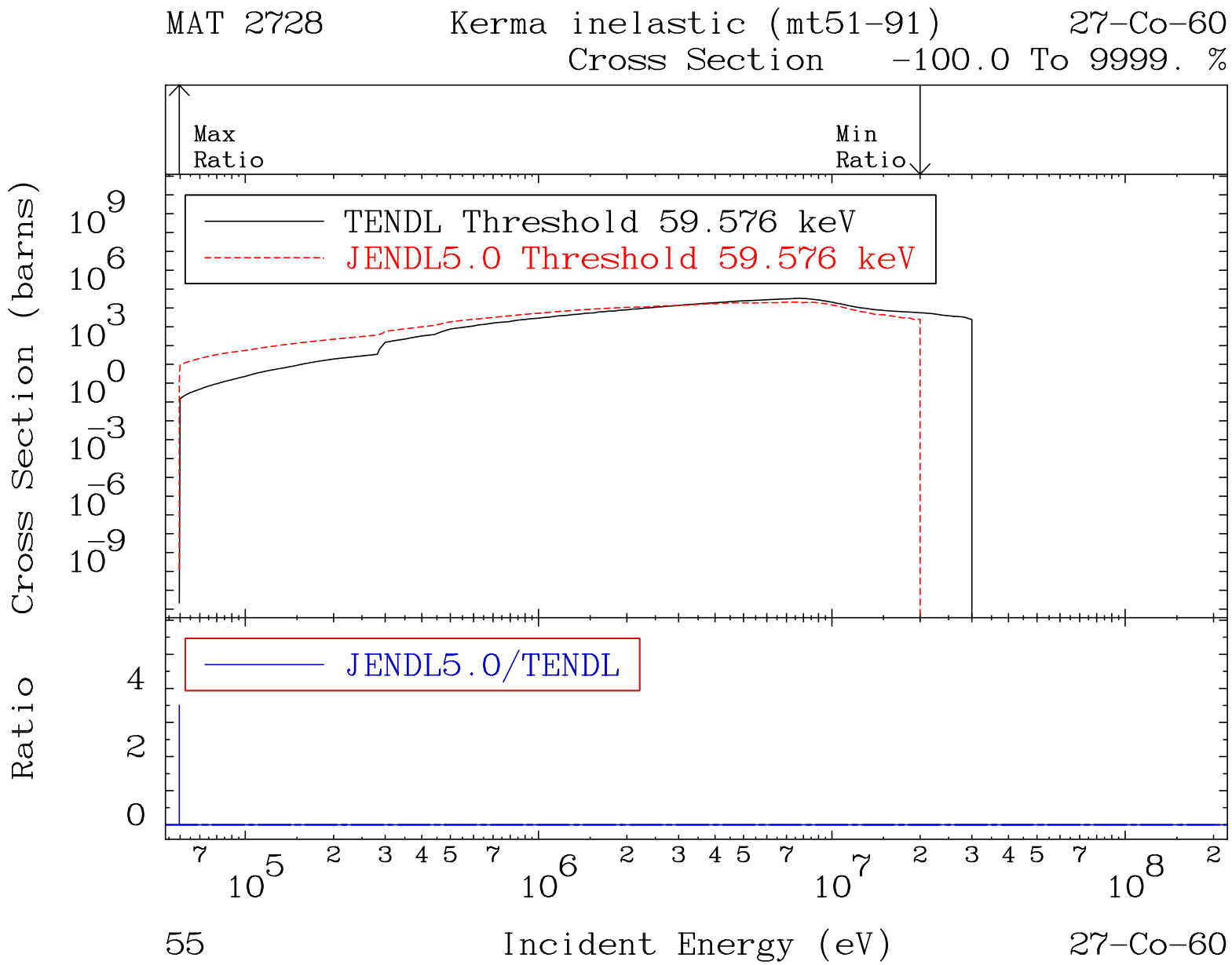

MAT 2728
He-3 Production
Cross Section
27-Co-60
-98.19 To 408.2 %
Max
Ratio
Min
Ratio
TENDL Threshold 12.896 MeV
JENDL5.0 Threshold 12.896 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
300
250
200
150
100
50
0
10^0
10^-2
2
3
4
5
6
7
8
9
10^8
2
50
Incident Energy (eV)
27-Co-60

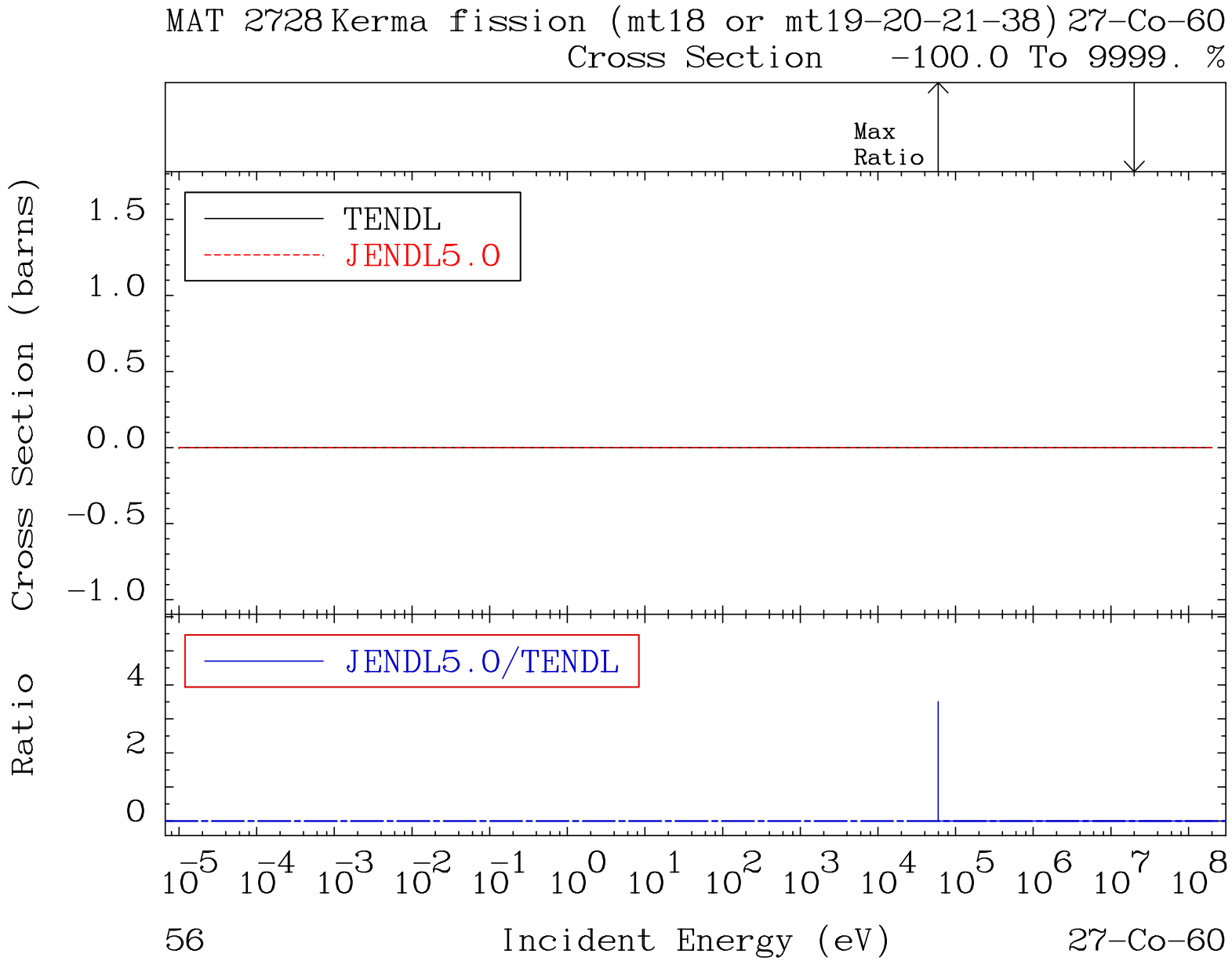

MAT 2728
He-4 Production
Cross Section
27-Co-60
-99.40 To 59.80 %
Min
Ratio
Max
Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
51
27-Co-60

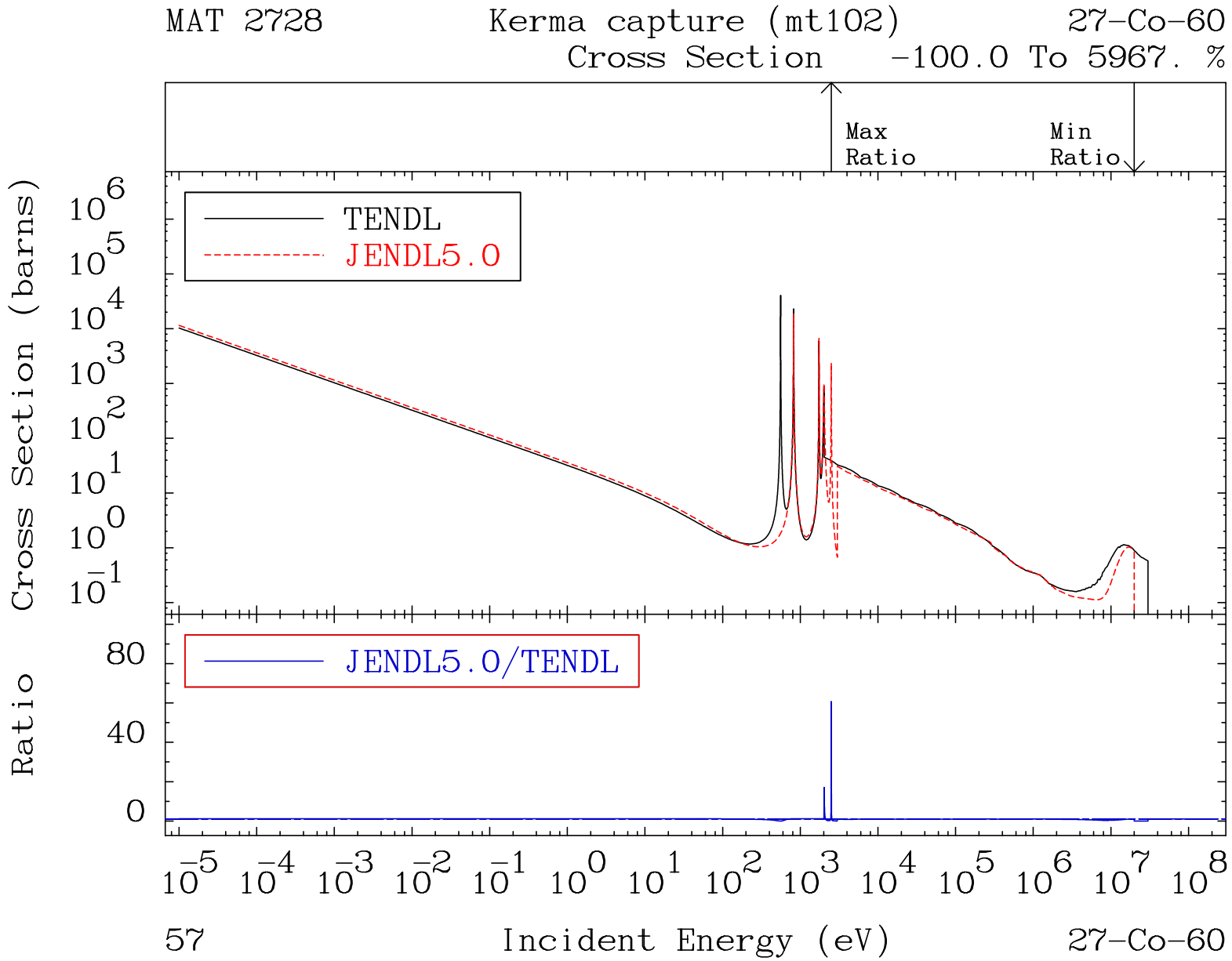

MAT 2728
Kerma total (eV-barns)
27-Co-60
Cross Section -99.91 To 1181. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
52
27-Co-60

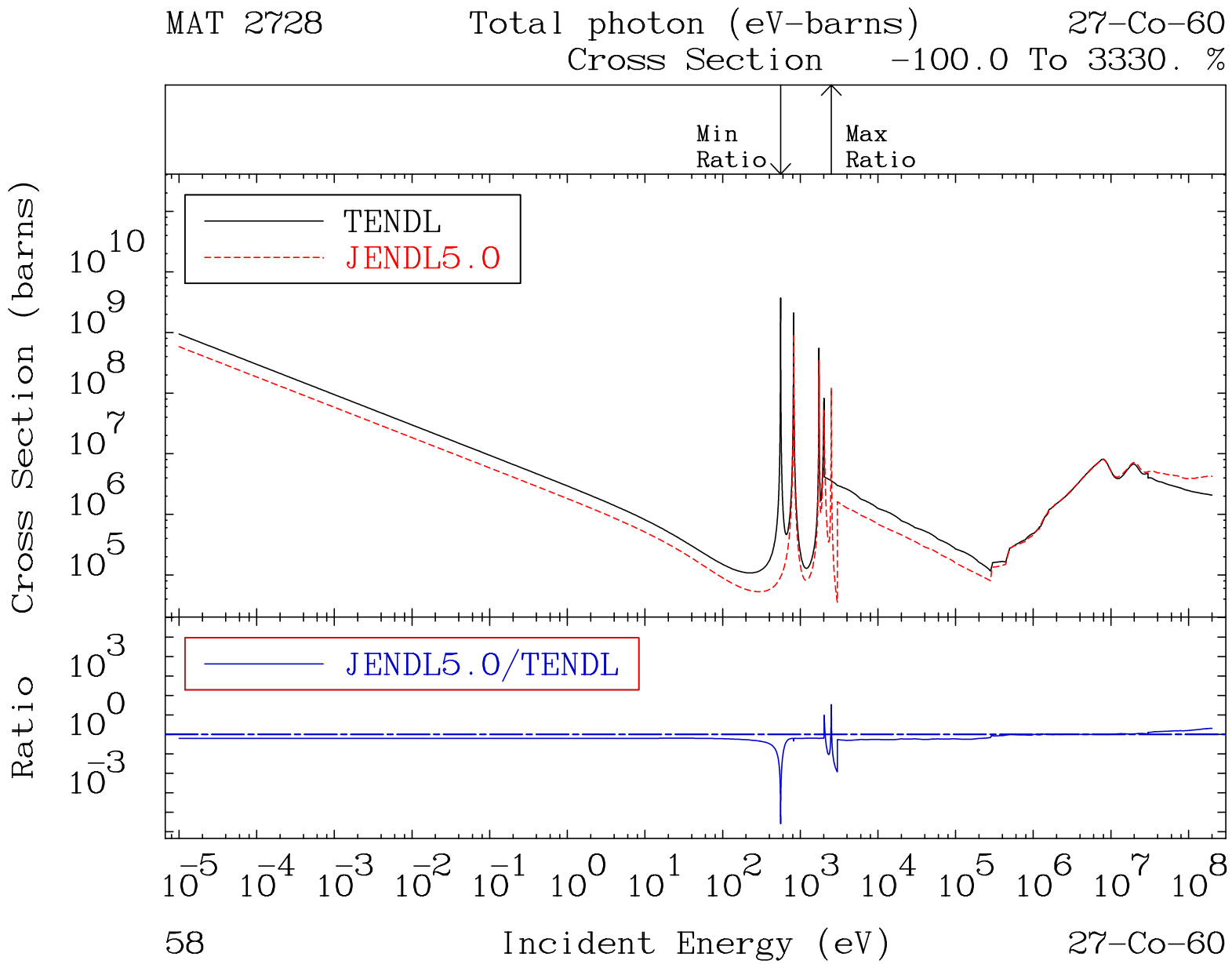

MAT 2728
Kerma elastic
Cross Section
27-Co-60
-99.81 To 1175. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
53
27-Co-60

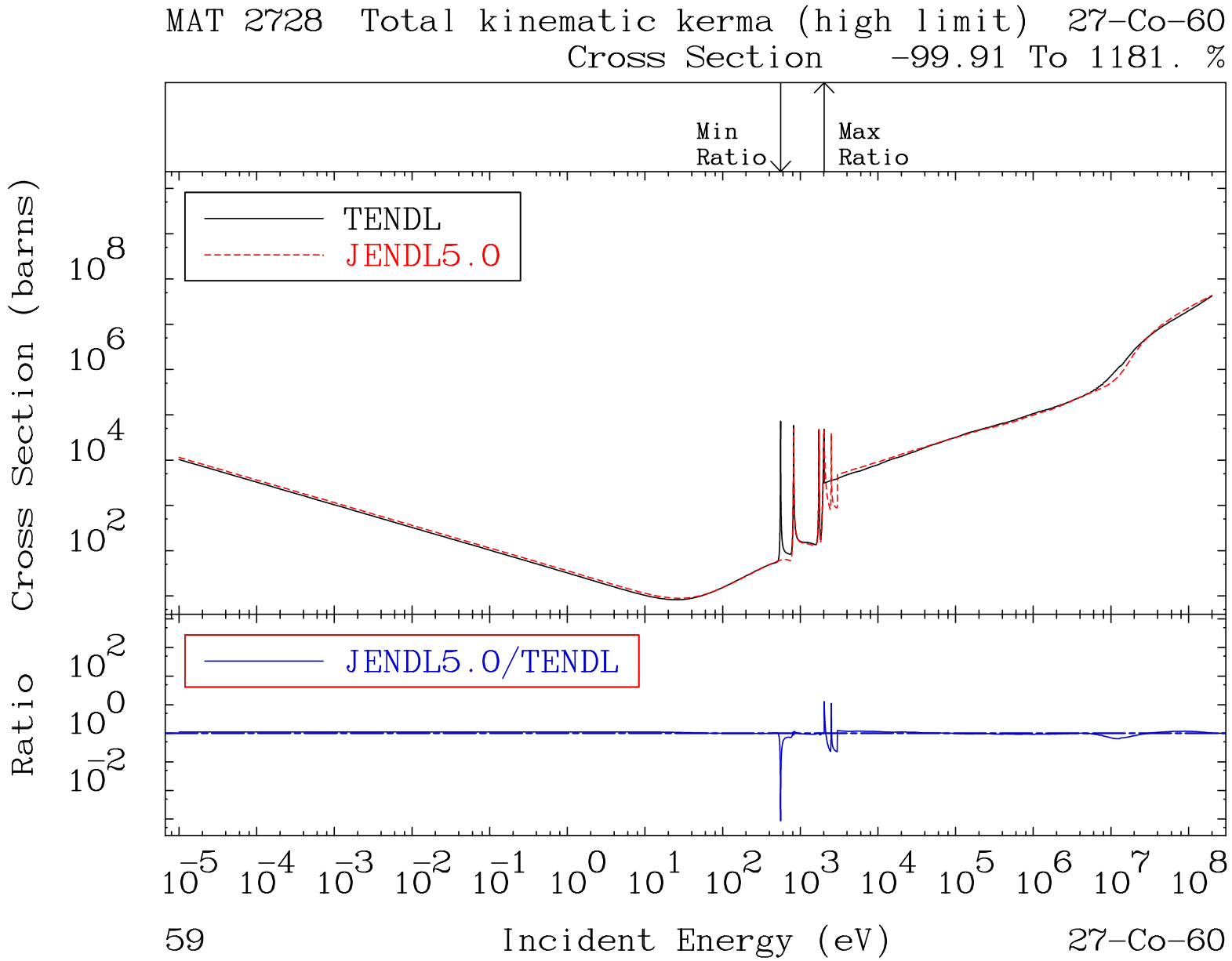

MAT 2728 Kerma non-elastic (all but mt2) 27-Co-60
Cross Section -100.0 To 5967. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
54
27-Co-60

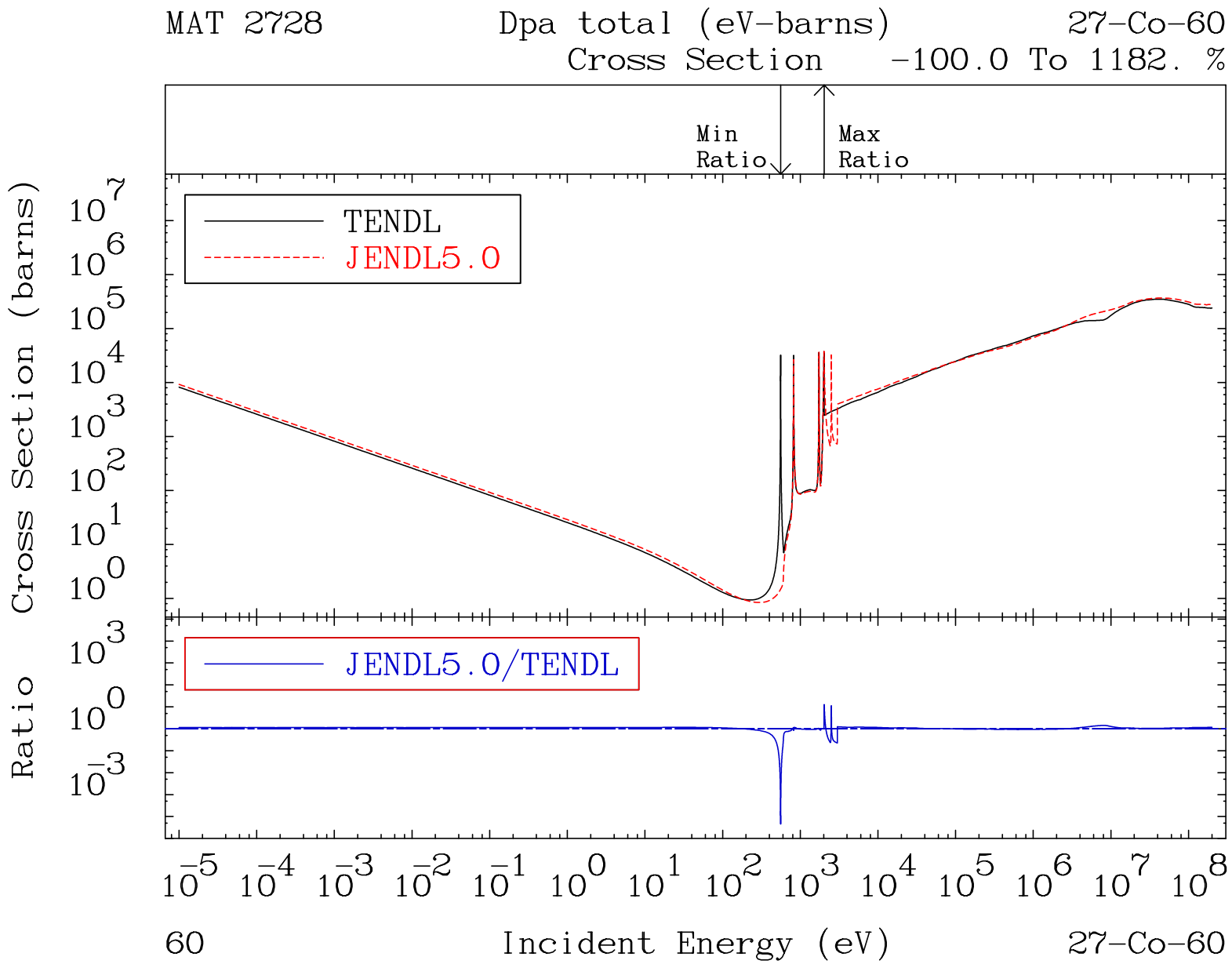

MAT 2728
Kerma inelastic (mt51-91)
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 59.576 keV
JENDL5.0 Threshold 59.576 keV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
55
27-Co-60

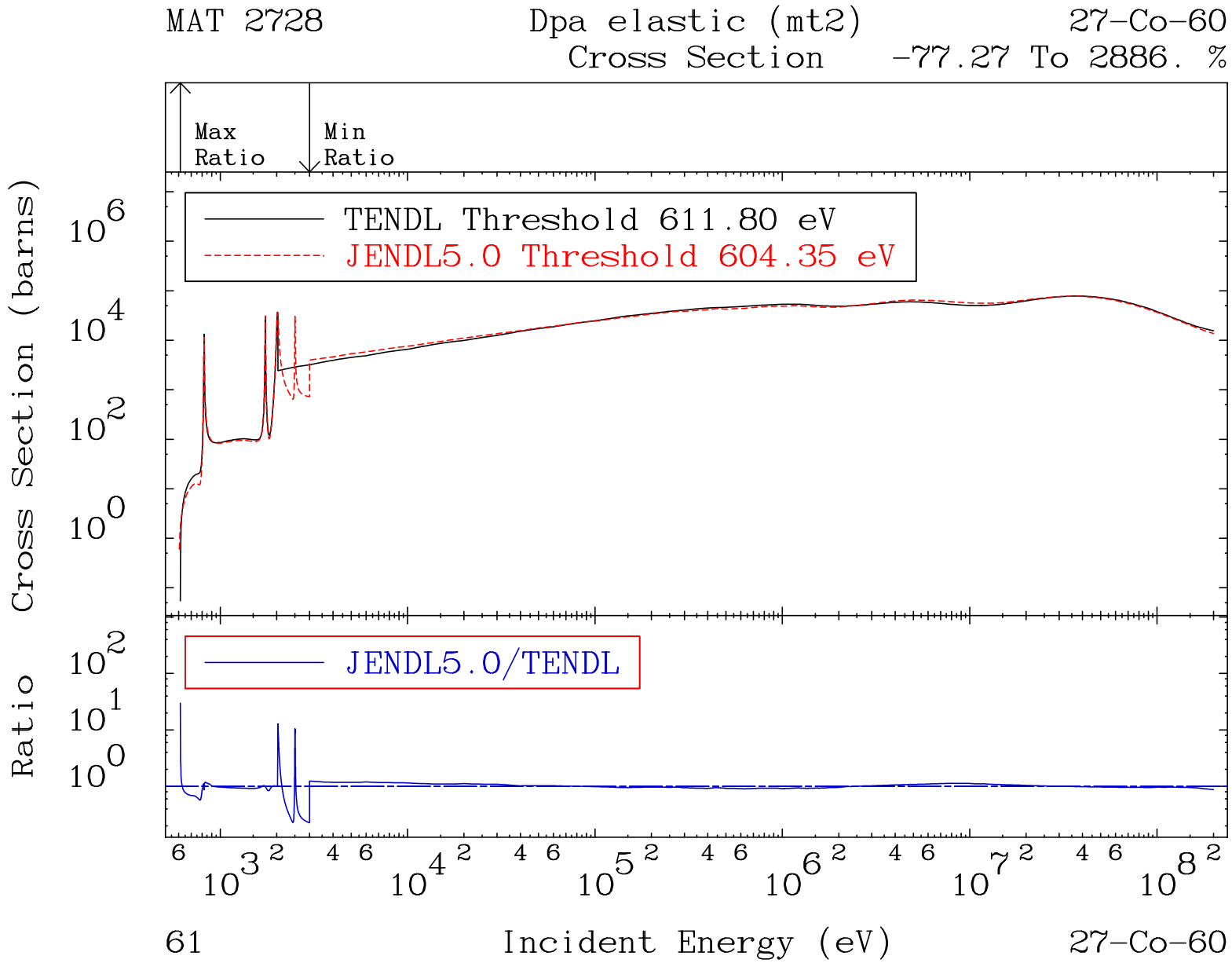

MAT 2728 Kerma fission (mt18 or mt19-20-21-38) 27-Co-60
Cross Section -100.0 To 9999. %
Max
Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
1.5
1.0
0.5
0.0
-0.5
-1.0
4
2
0
10^{-5} 10^{-4} 10^{-3} 10^{-2} 10^{-1} 10^{0} 10^{1} 10^{2} 10^{3} 10^{4} 10^{5} 10^{6} 10^{7} 10^{8}
56
Incident Energy (eV)
27-Co-60

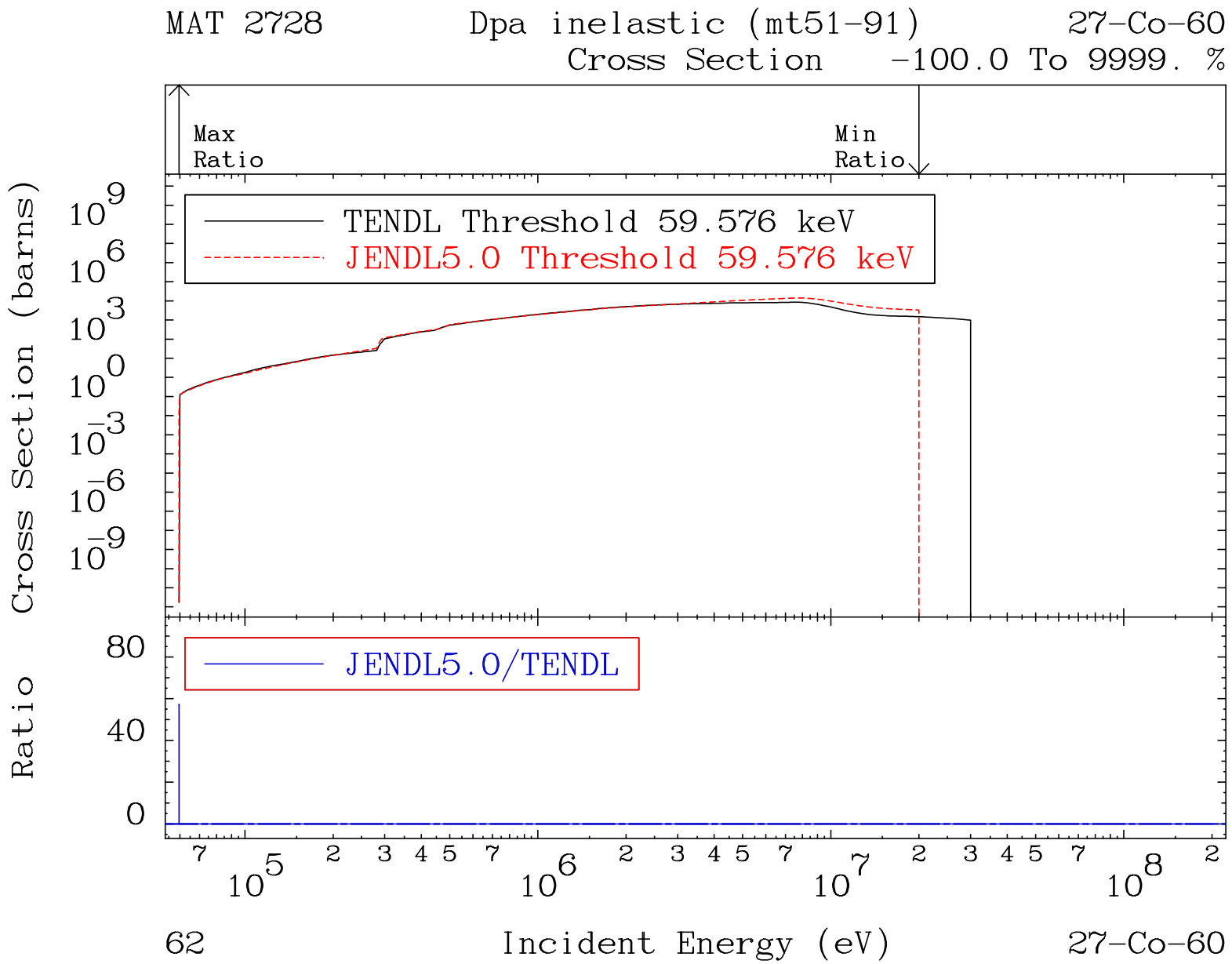

MAT 2728
Kerma capture (mt102)
27-Co-60
Cross Section -100.0 To 5967. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
57
27-Co-60

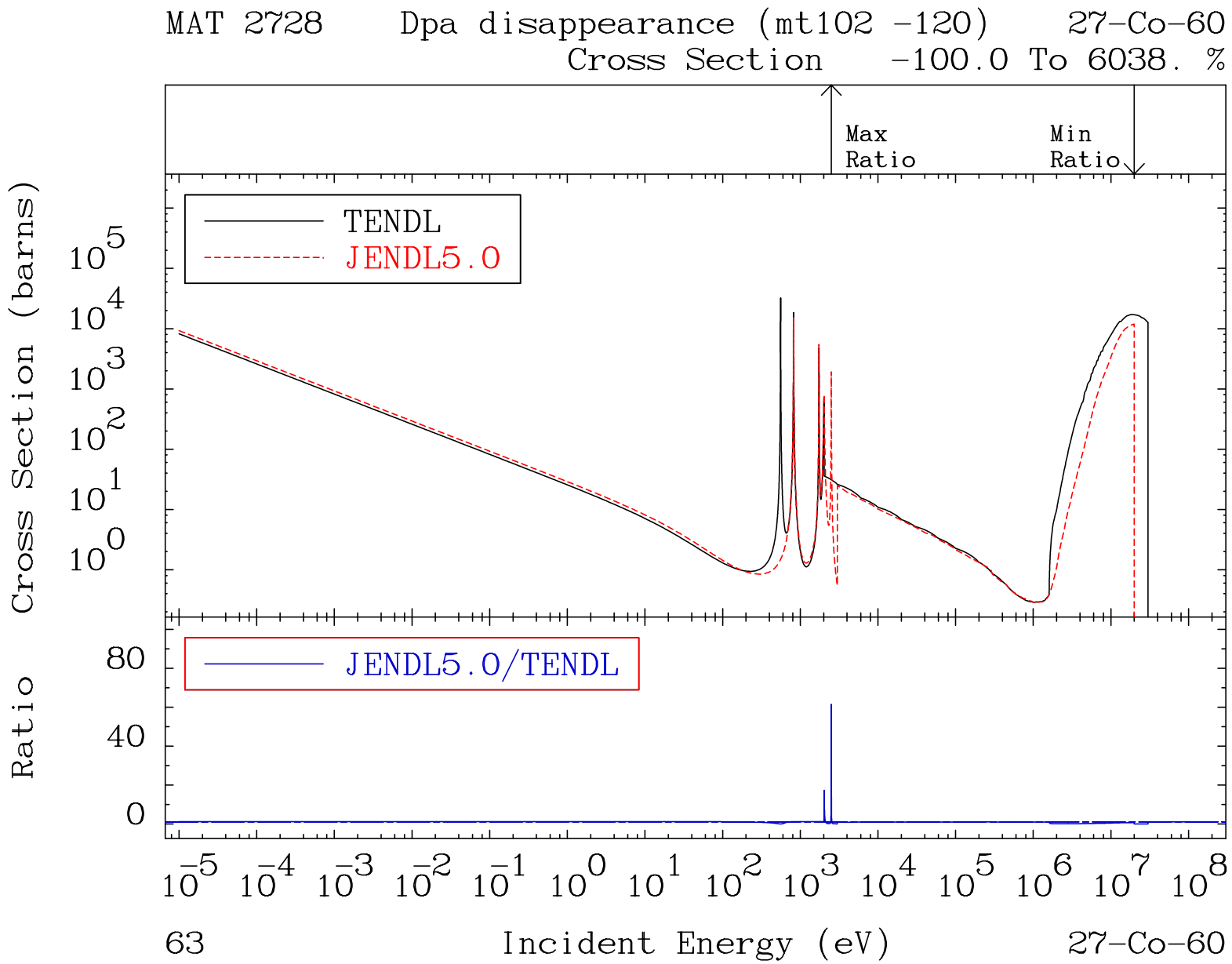

MAT 2728
Total photon (eV-barns)
27-Co-60
Cross Section -100.0 To 3330. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
58
27-Co-60

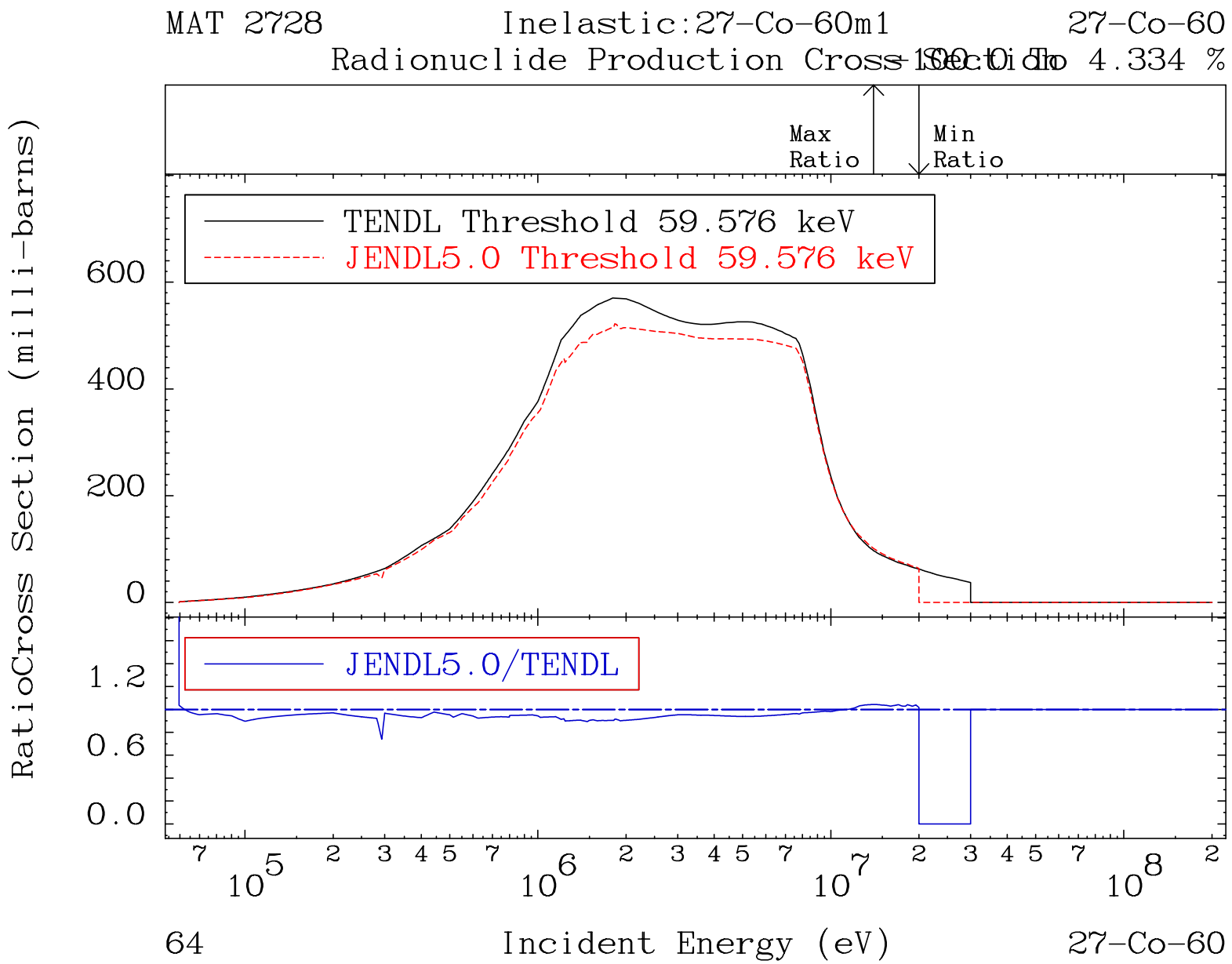

MAT 2728 Total kinematic kerma (high limit) 27-Co-60
Cross Section -99.91 To 1181. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
Cross Section (barns)
Ratio
JENDL5.0/TENDL
Incident Energy (eV)
59
27-Co-60

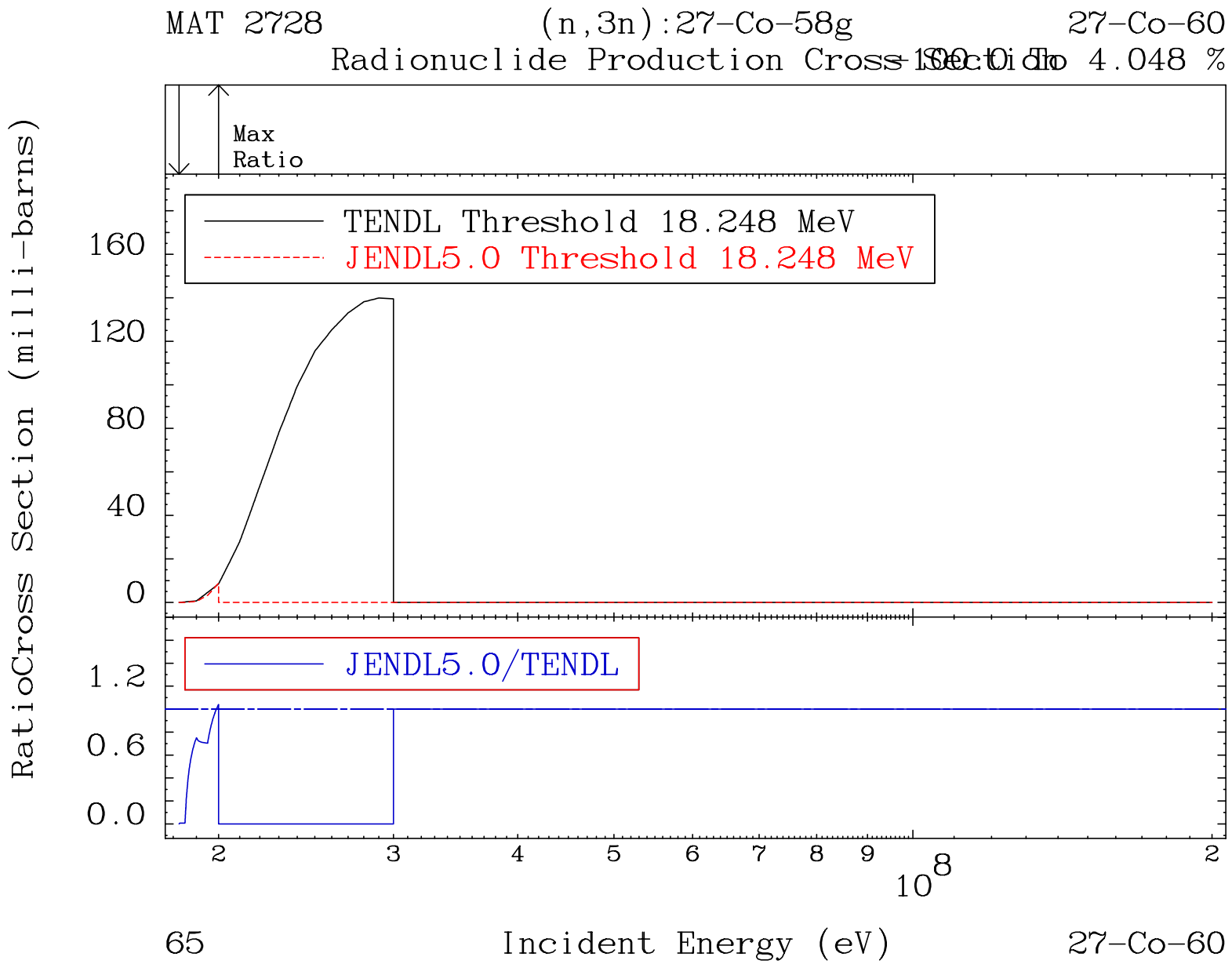

MAT 2728
Dpa total (eV-barns)
27-Co-60
Cross Section -100.0 To 1182. %
Min Ratio
Max Ratio
TENDL
JENDL5.0
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
60
27-Co-60

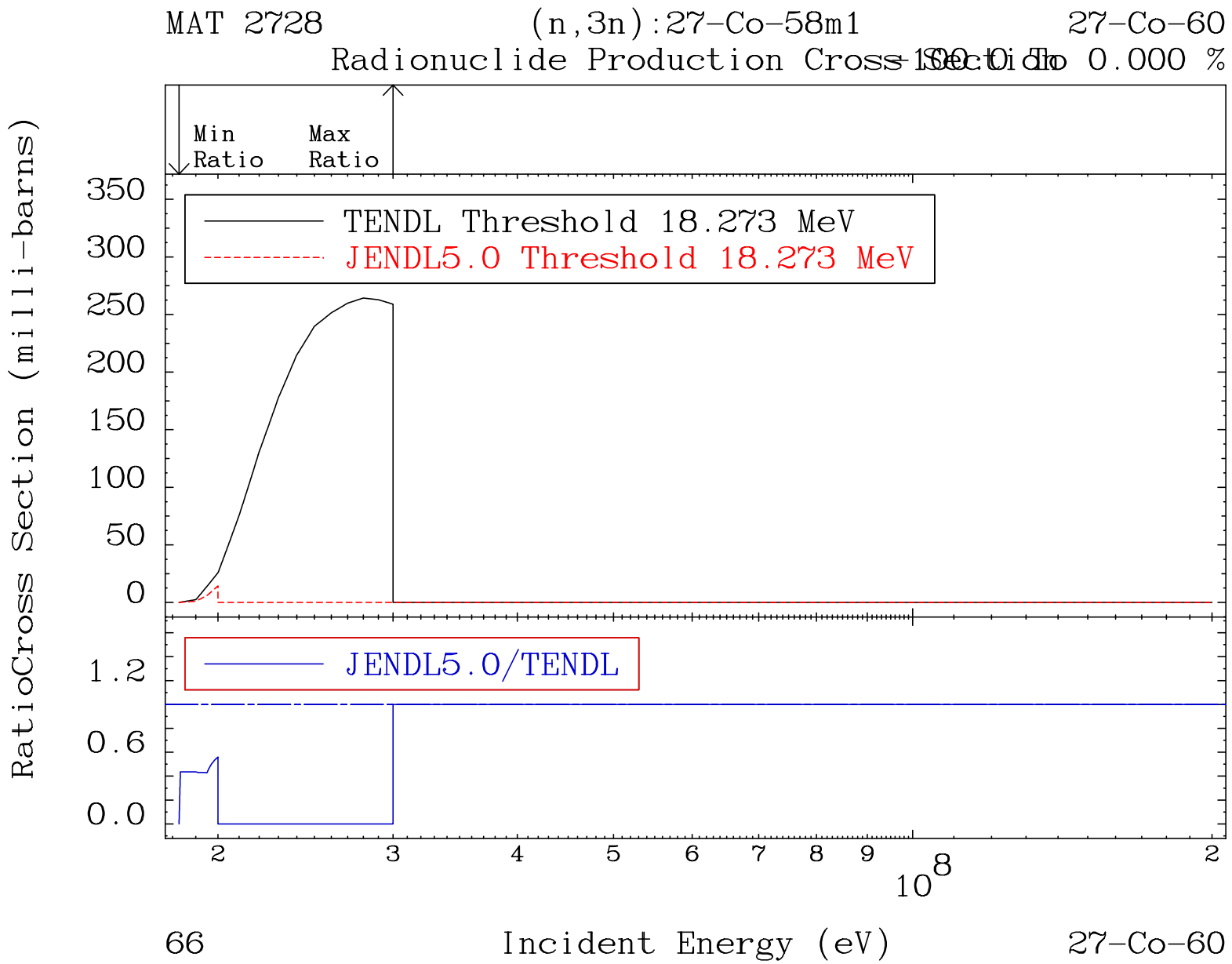

MAT 2728
Dpa elastic (mt2)
Cross Section
27-Co-60
-77.27 To 2886. %
Max Ratio
Min Ratio
TENDL Threshold 611.80 eV
JENDL5.0 Threshold 604.35 eV
JENDL5.0/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
61
27-Co-60

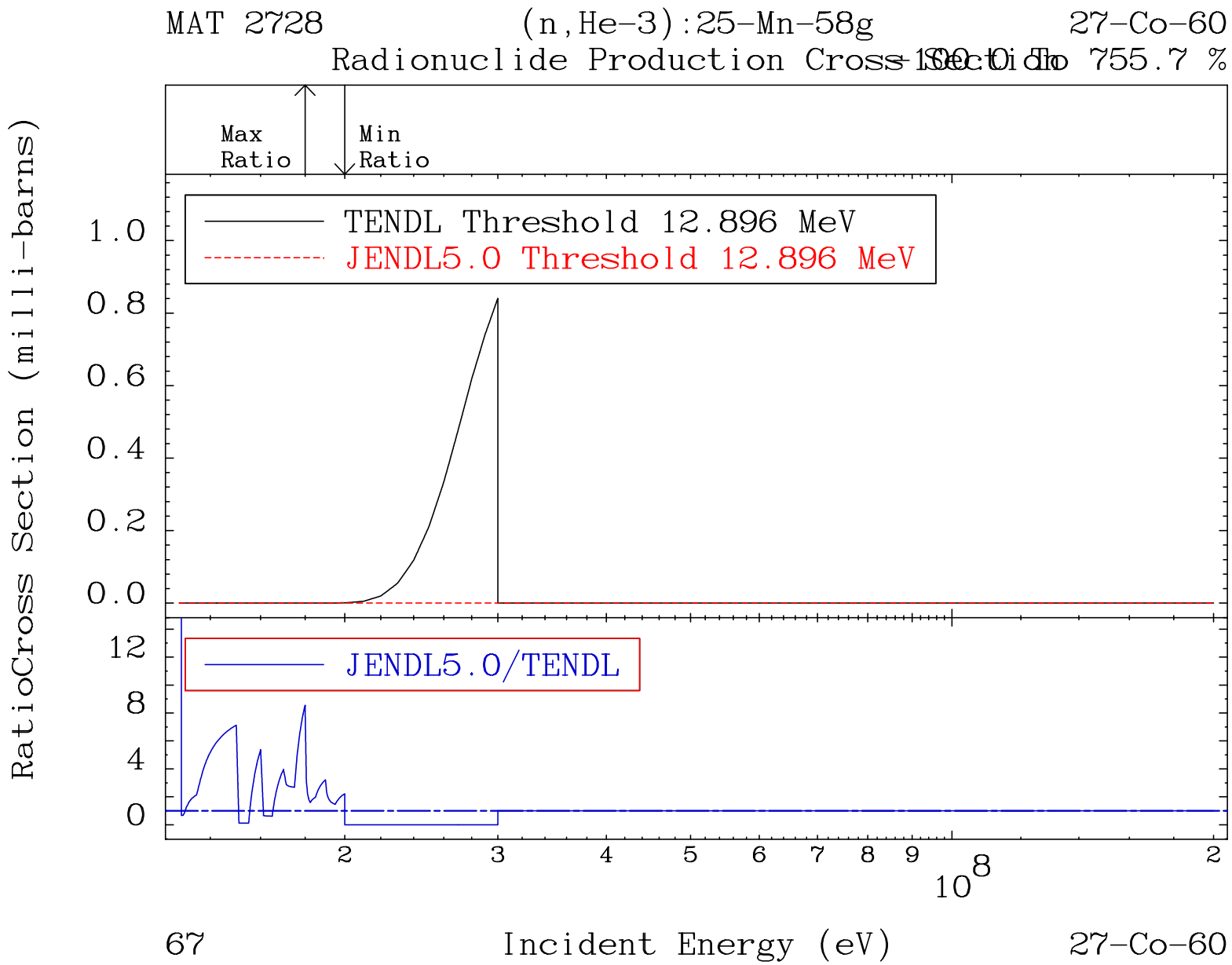

MAT 2728
Dpa inelastic (mt51-91)
27-Co-60
Cross Section -100.0 To 9999. %
Max Ratio
Min Ratio
TENDL Threshold 59.576 keV
JENDL5.0 Threshold 59.576 keV
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
62
27-Co-60

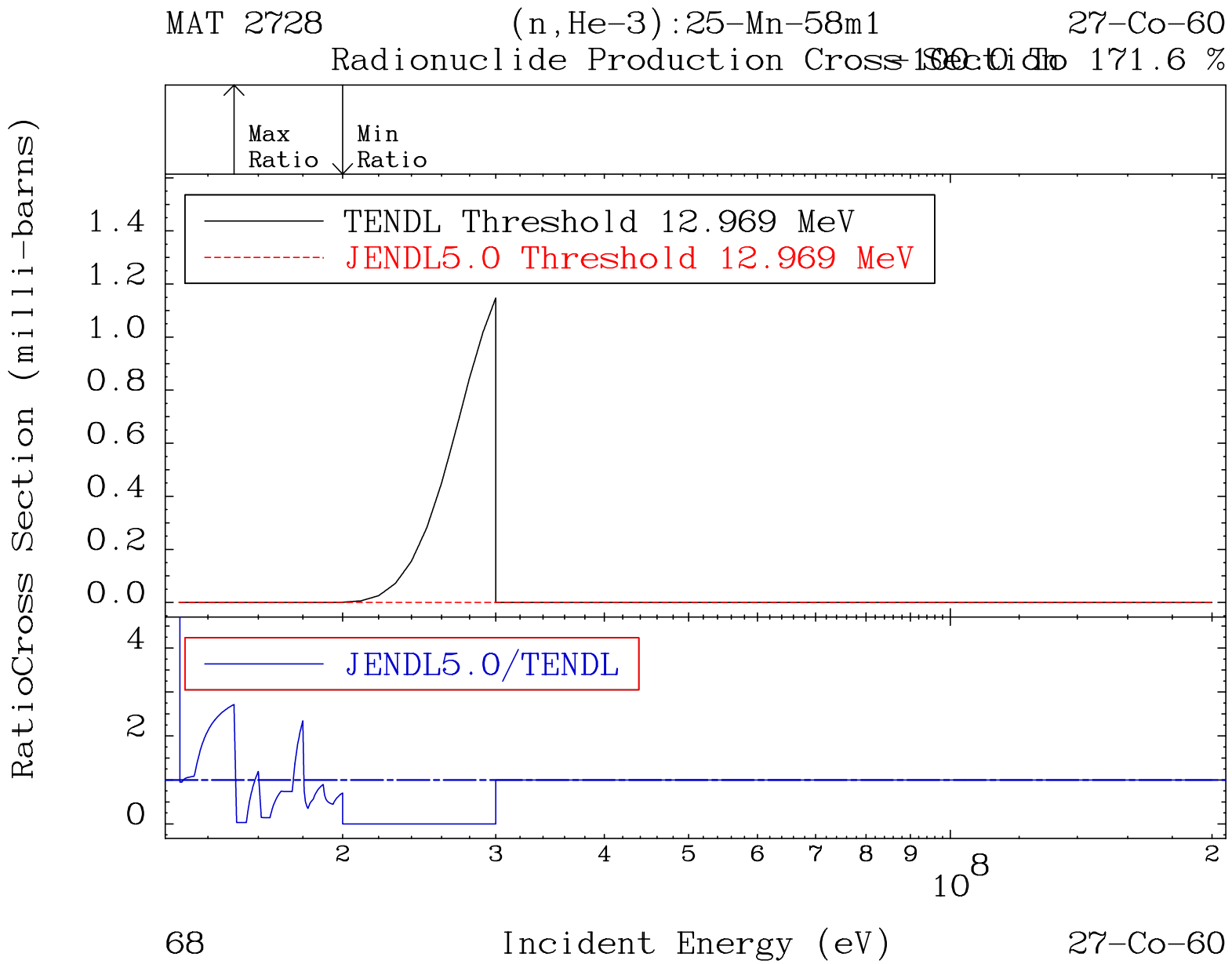

MAT 2728 Dpa disappearance (mt102 -120) 27-Co-60
Cross Section -100.0 To 6038. %
Max Ratio
Min Ratio
TENDL
JENDL5.0
Cross Section (barns)
JENDL5.0/TENDL
Ratio
Incident Energy (eV)
63
27-Co-60

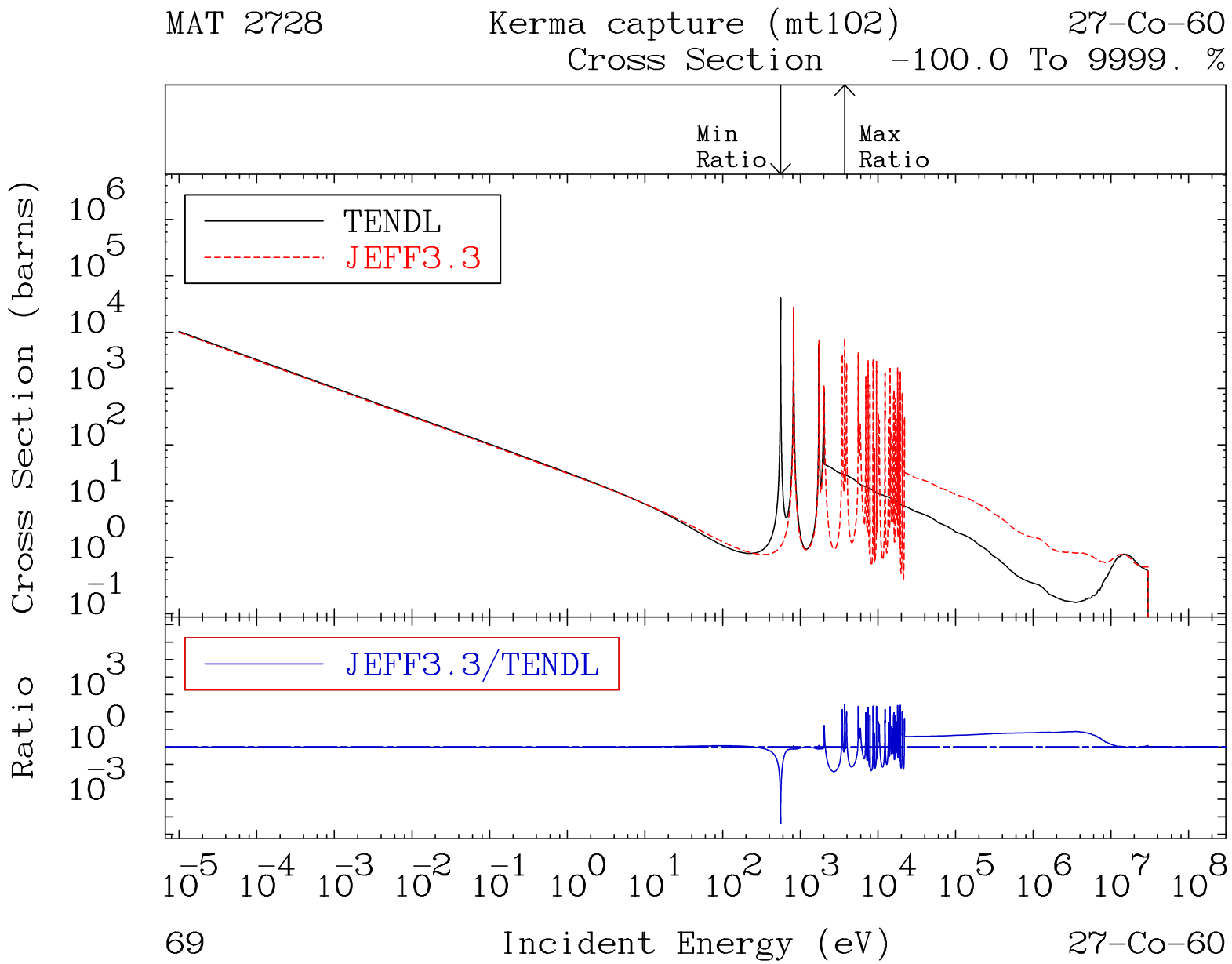

MAT 2728
Inelastic:27-Co-60m1
27-Co-60
Radionuclide Production Cross Section To 4.334 %
Max Ratio
Min Ratio
TENDL Threshold 59.576 keV
JENDL5.0 Threshold 59.576 keV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
600
400
200
0
1.2
0.6
0.0
7 2 3 4 5 7 2 3 4 5 7 2 3 4 5 7 2
10^5 10^6 10^7 10^8
64
Incident Energy (eV)
27-Co-60

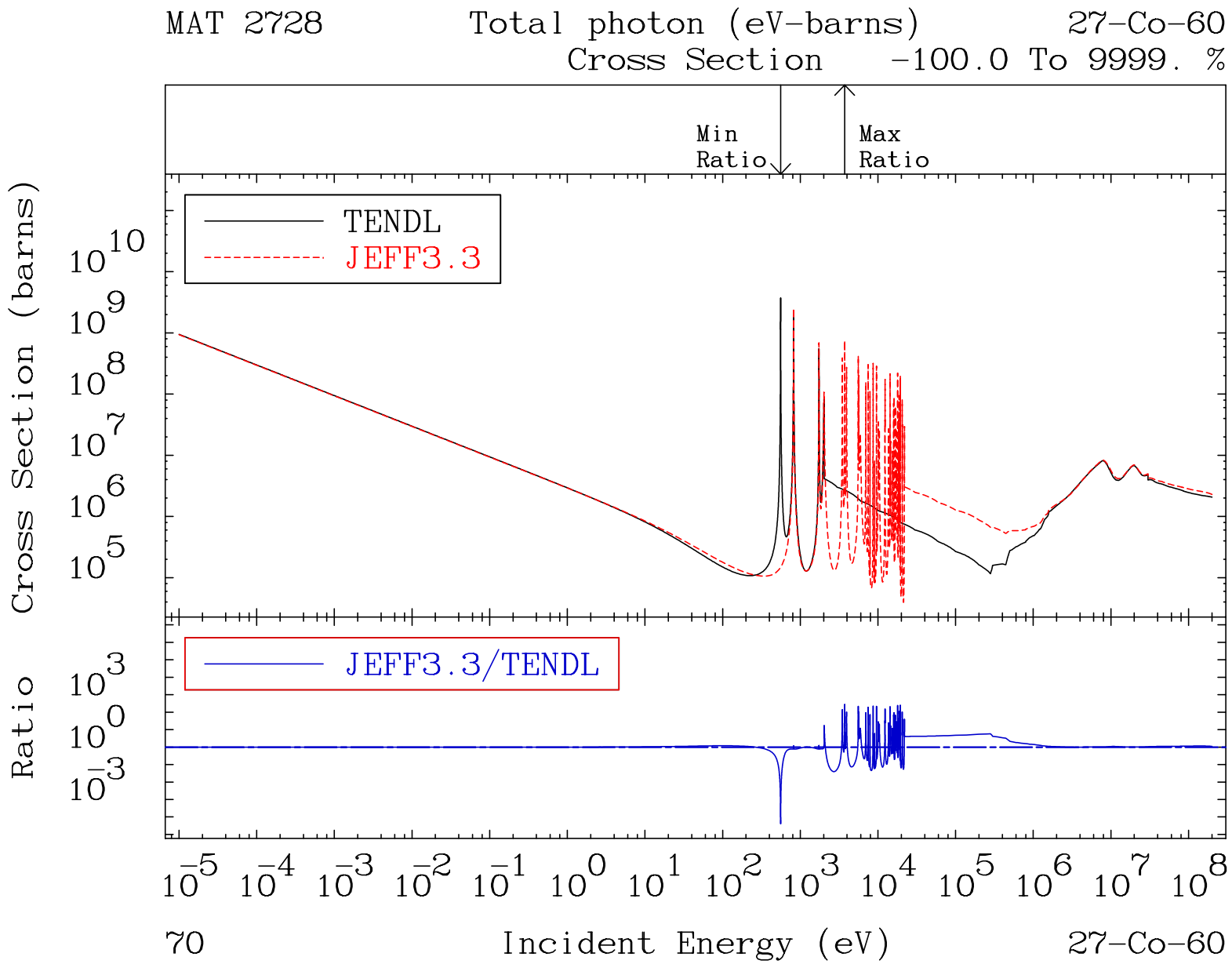

MAT 2728
(n,3n):27-Co-58g
27-Co-60
Radionuclide Production Cross Section To 4.048 %
Max
Ratio
TENDL Threshold 18.248 MeV
JENDL5.0 Threshold 18.248 MeV
160
120
80
40
0
JENDL5.0/TENDL
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
RatioCross Section (milli-barns)
65
Incident Energy (eV)
27-Co-60

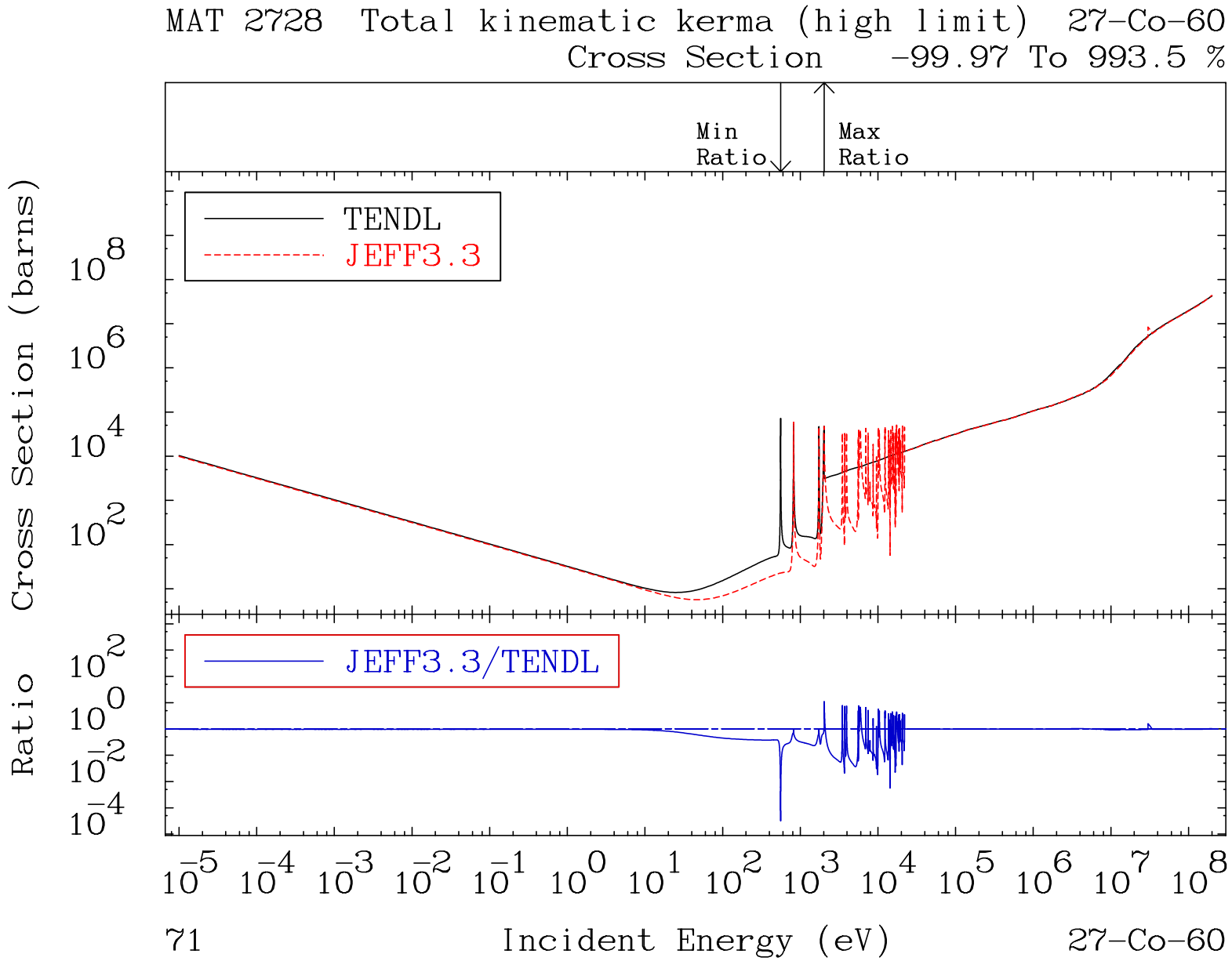

MAT 2728
(n,3n):27-Co-58m1
27-Co-60
Radionuclide Production Cross Section
Uncertainty 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 18.273 MeV
JENDL5.0 Threshold 18.273 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
1.2
0.6
0.0
2
3
4
5
6
7
8
9
10^8
2
66
Incident Energy (eV)
27-Co-60

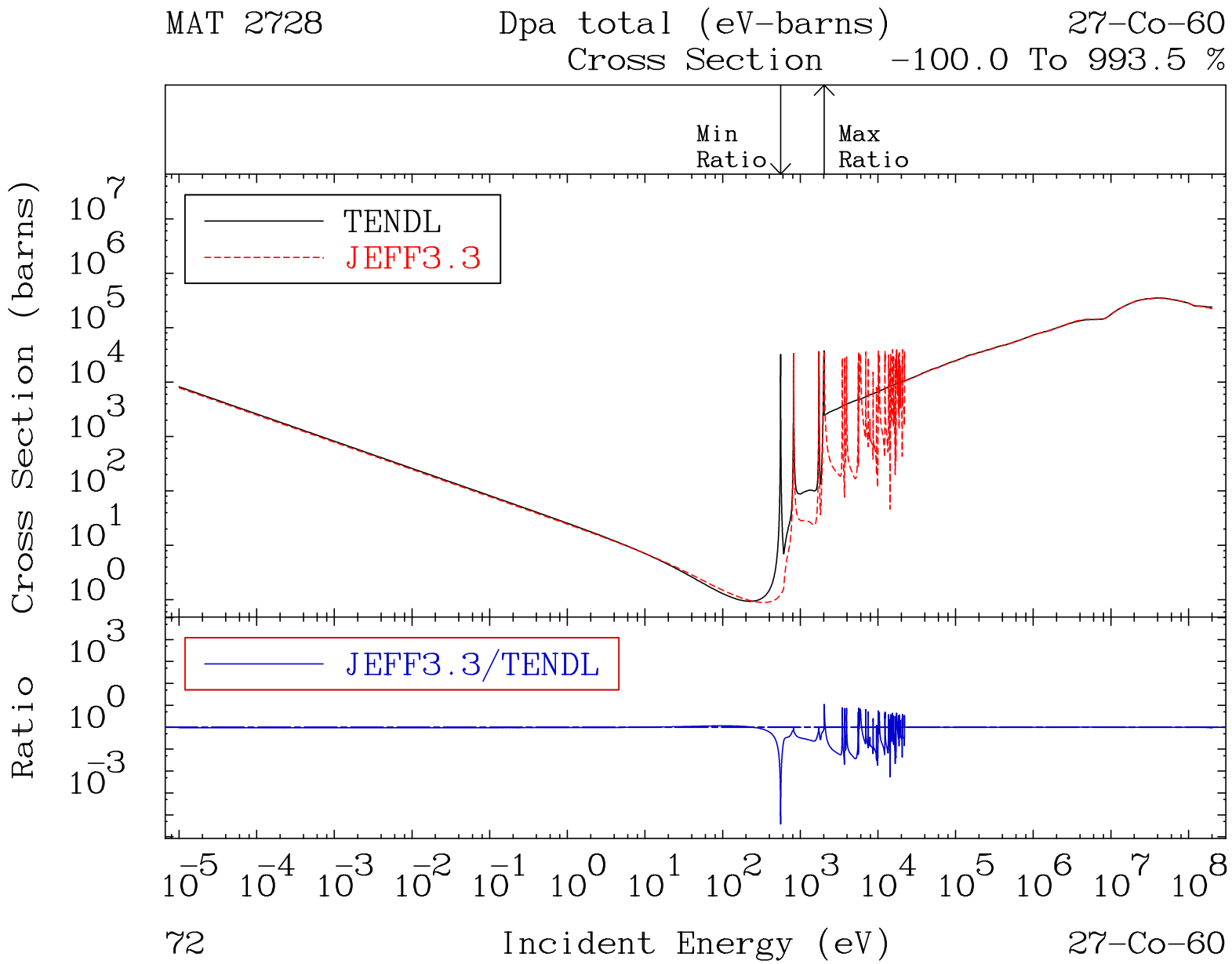

MAT 2728
(n,He-3):25-Mn-58g
27-Co-60
Radionuclide Production Cross Section To
Max Ratio
Min Ratio
TENDL Threshold 12.896 MeV
JENDL5.0 Threshold 12.896 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
Incident Energy (eV)
67
27-Co-60

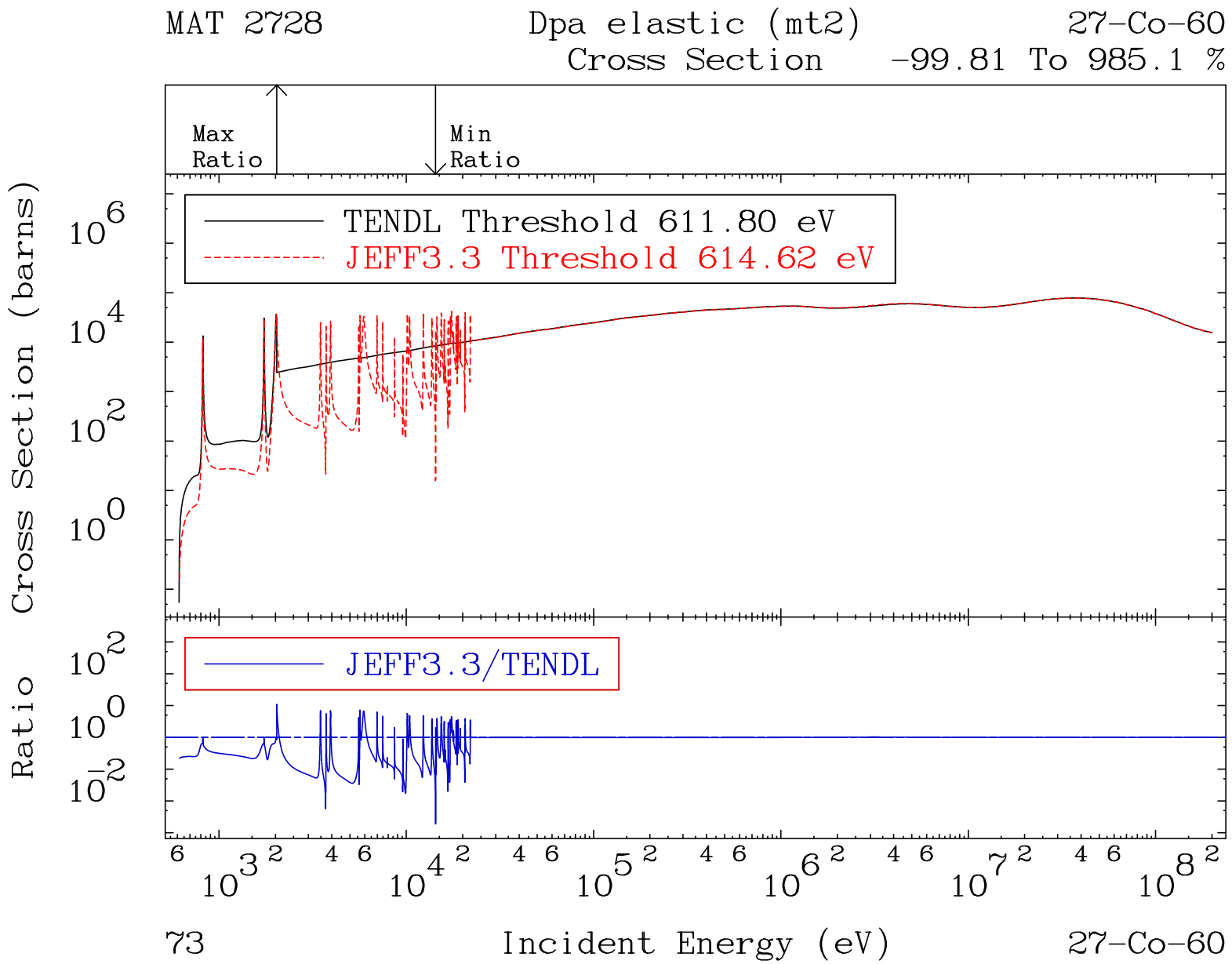

MAT 2728
(n,He-3):25-Mn-58m1
27-Co-60
Radionuclide Production Cross Section To 171.6 %
Max Ratio
Min Ratio
TENDL Threshold 12.969 MeV
JENDL5.0 Threshold 12.969 MeV
JENDL5.0/TENDL
RatioCross Section (milli-barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
68
Incident Energy (eV)
27-Co-60

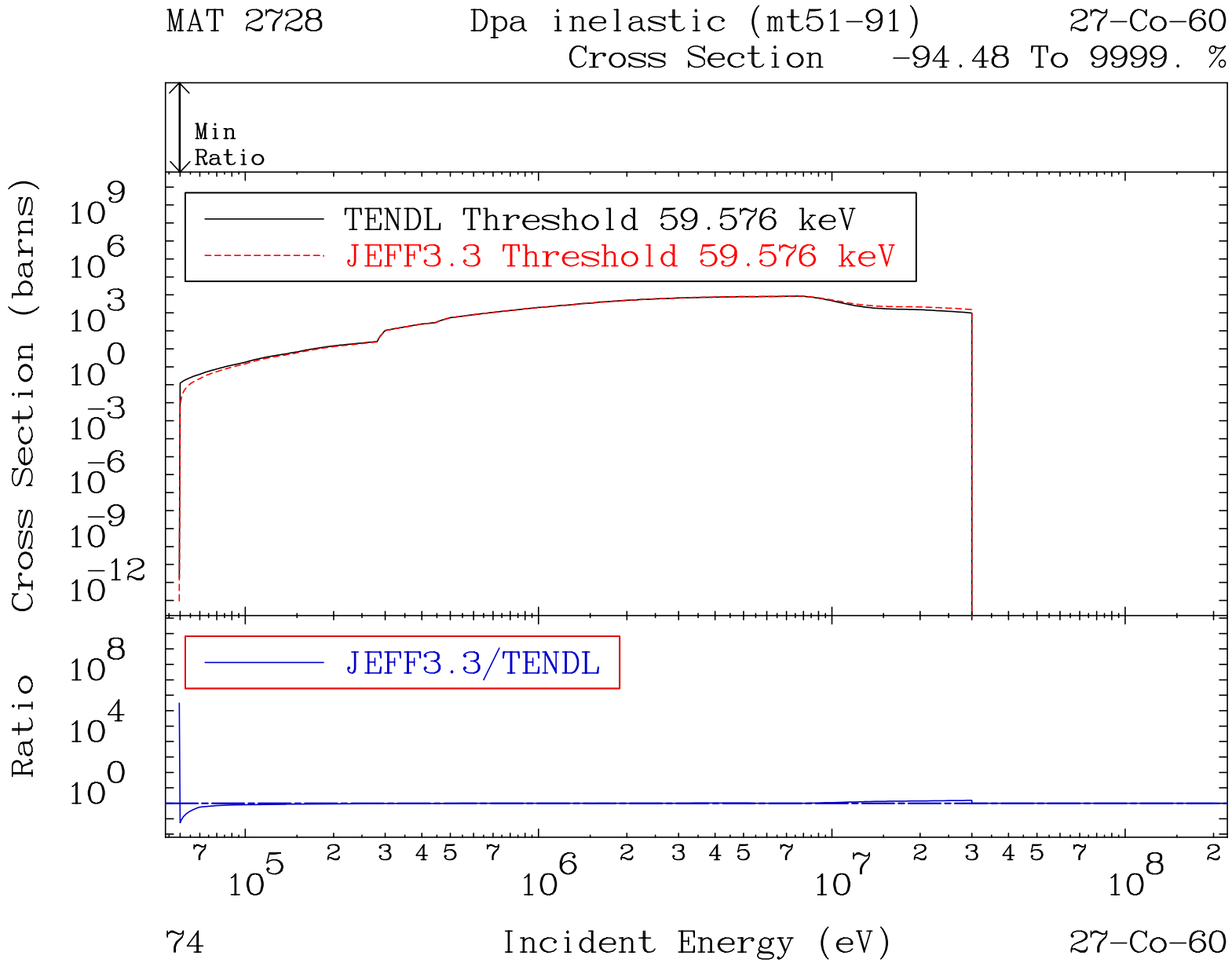

MAT 2728
Kerma capture (mt102)
27-Co-60
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
69
27-Co-60

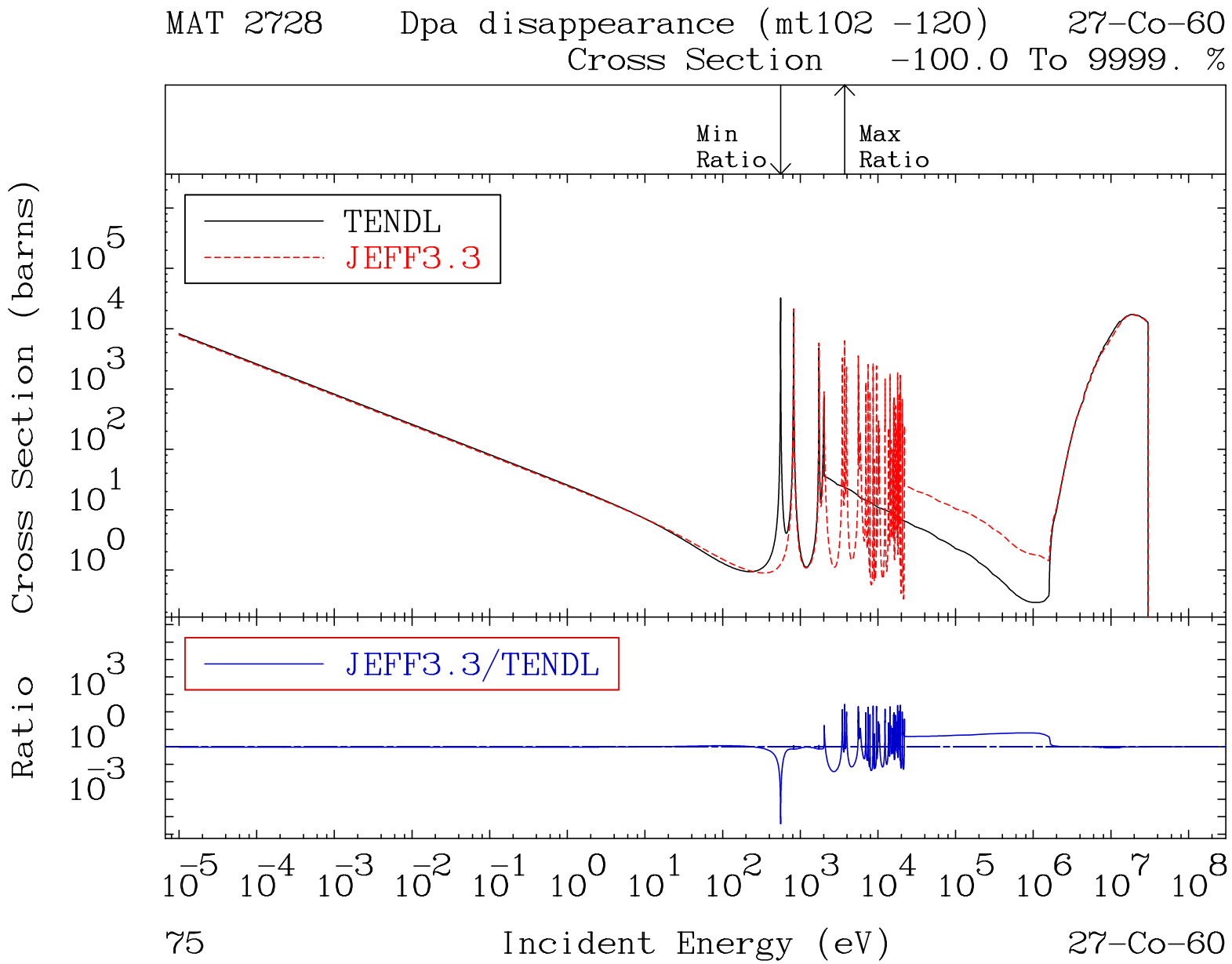

MAT 2728
Total photon (eV-barns)
27-Co-60
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
70
27-Co-60

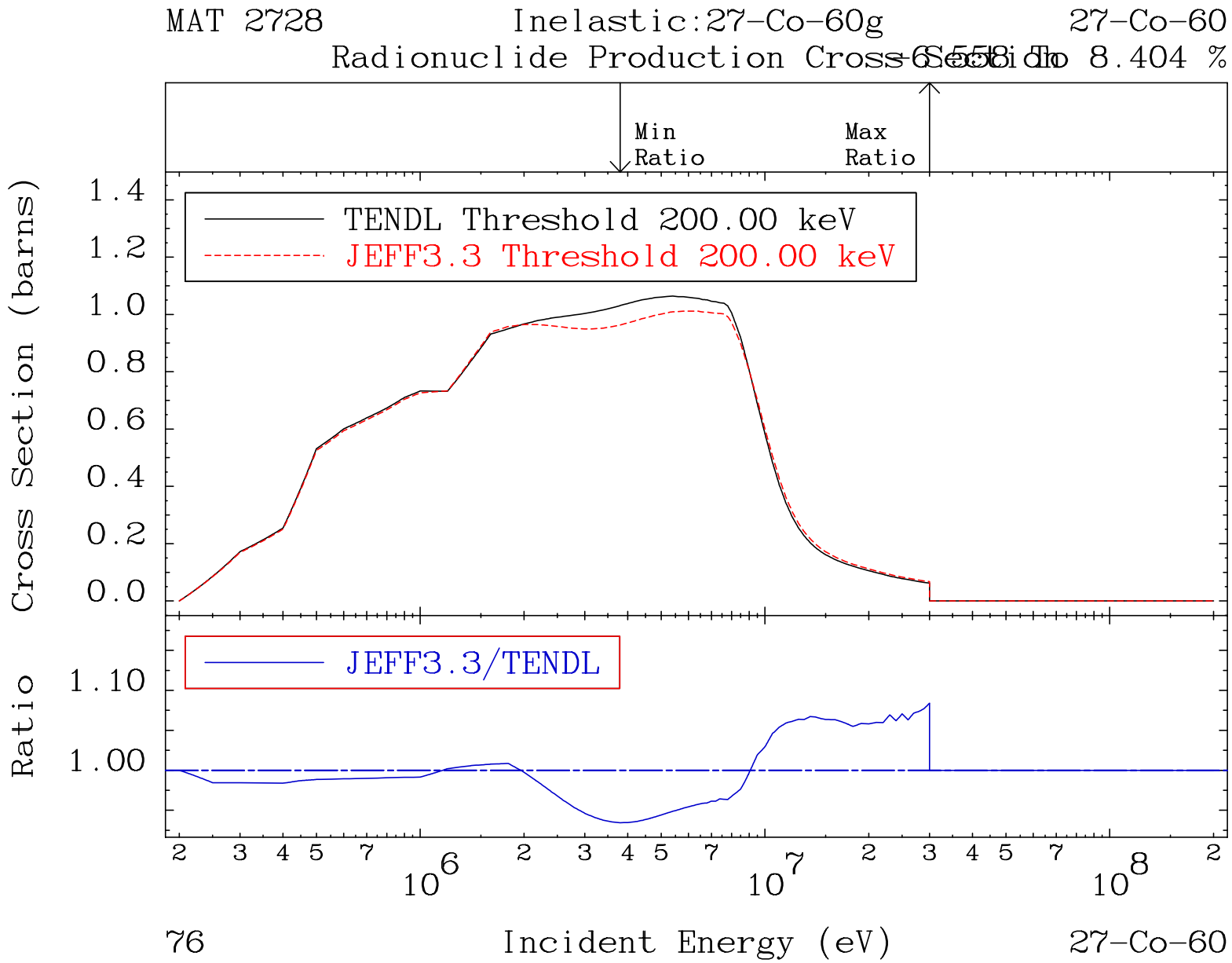

MAT 2728 Total kinematic kerma (high limit) 27-Co-60
Cross Section -99.97 To 993.5 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
71
27-Co-60

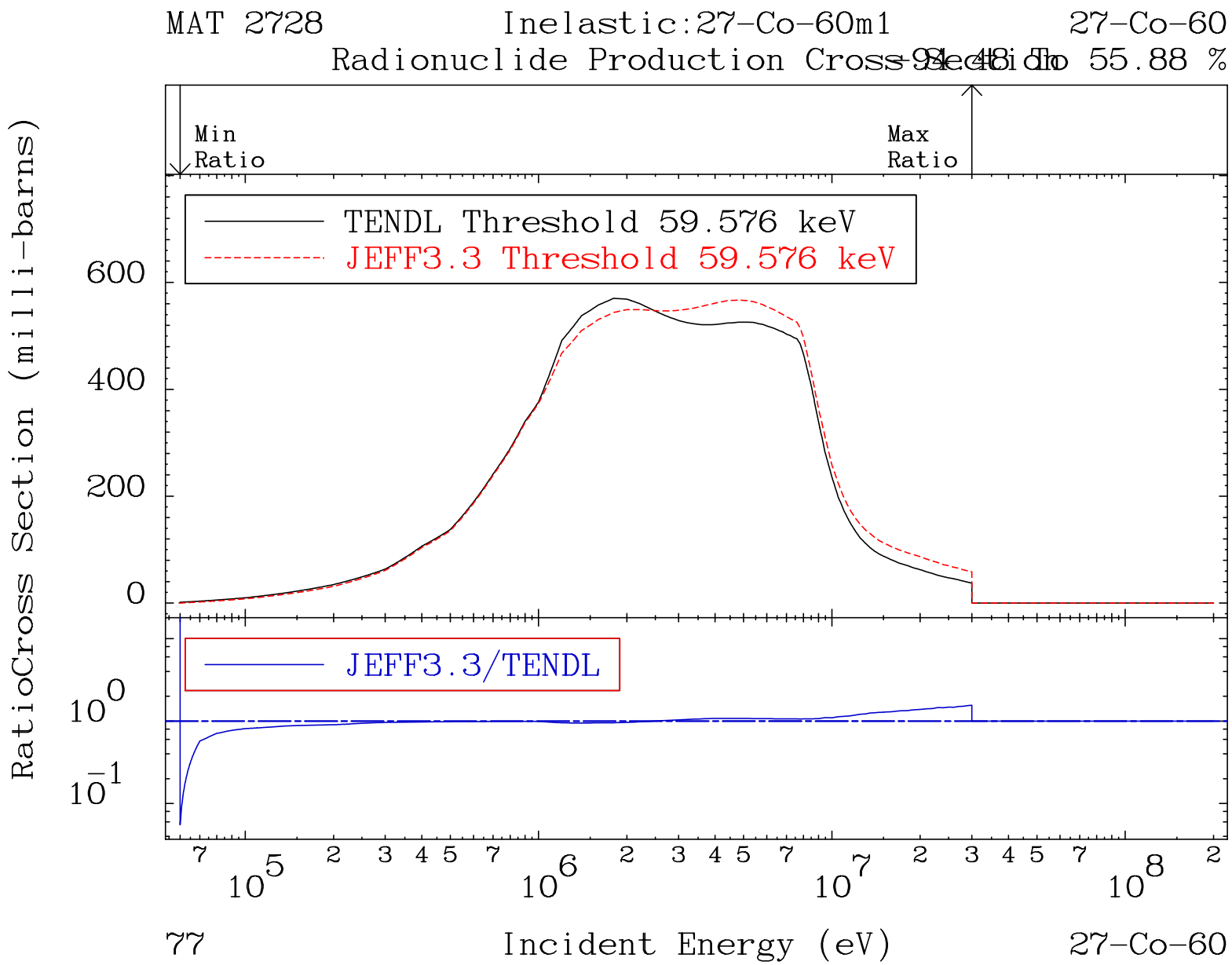

MAT 2728
Dpa total (eV-barns)
27-Co-60
Cross Section
-100.0 To 993.5 %
Min Ratio
Max Ratio
TENDL
JEFF3.3
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
72
27-Co-60

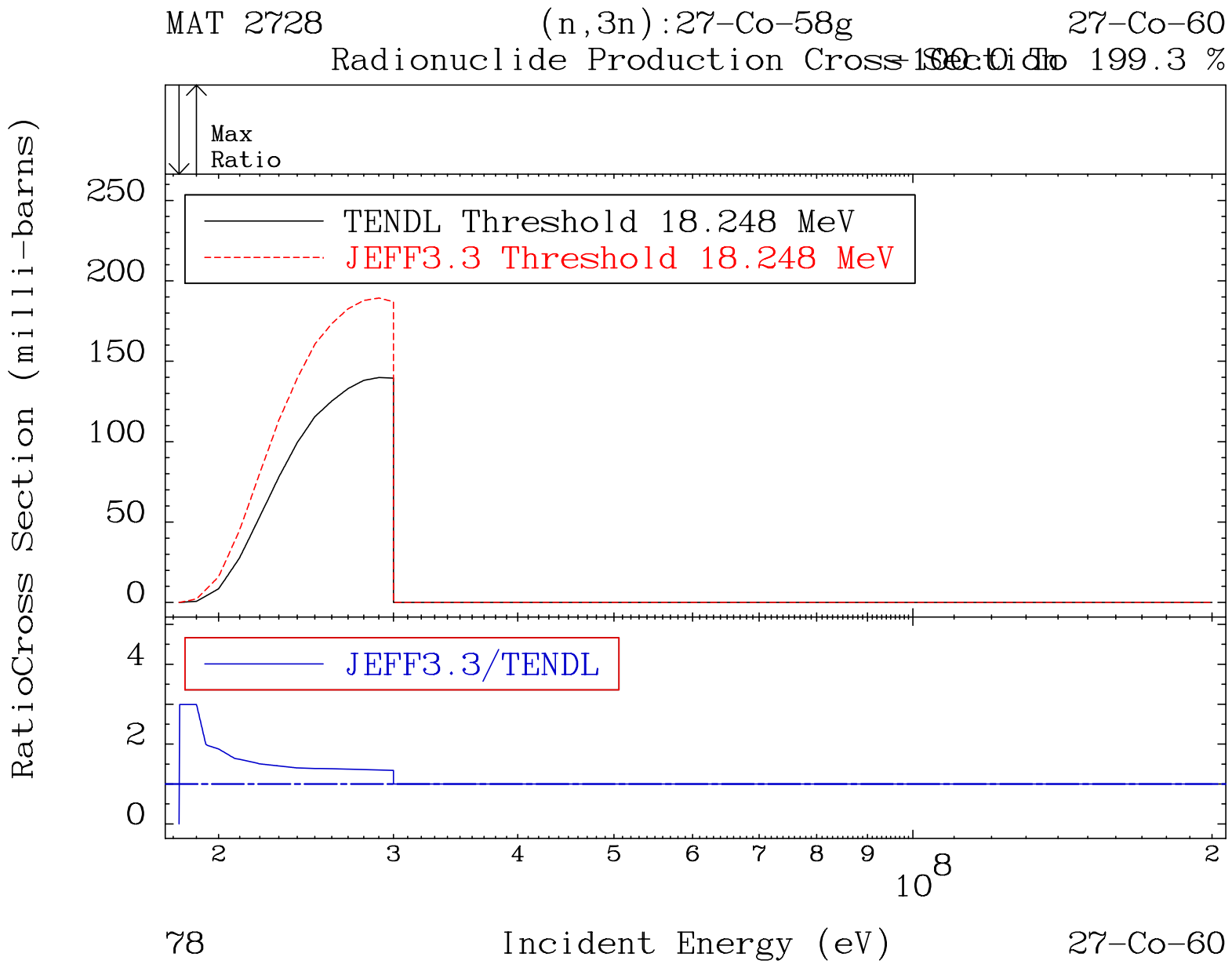

MAT 2728
Dpa elastic (mt2)
Cross Section
27-Co-60
-99.81 To 985.1 %
Max Ratio
Min Ratio
TENDL Threshold 611.80 eV
JEFF3.3 Threshold 614.62 eV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
73
27-Co-60

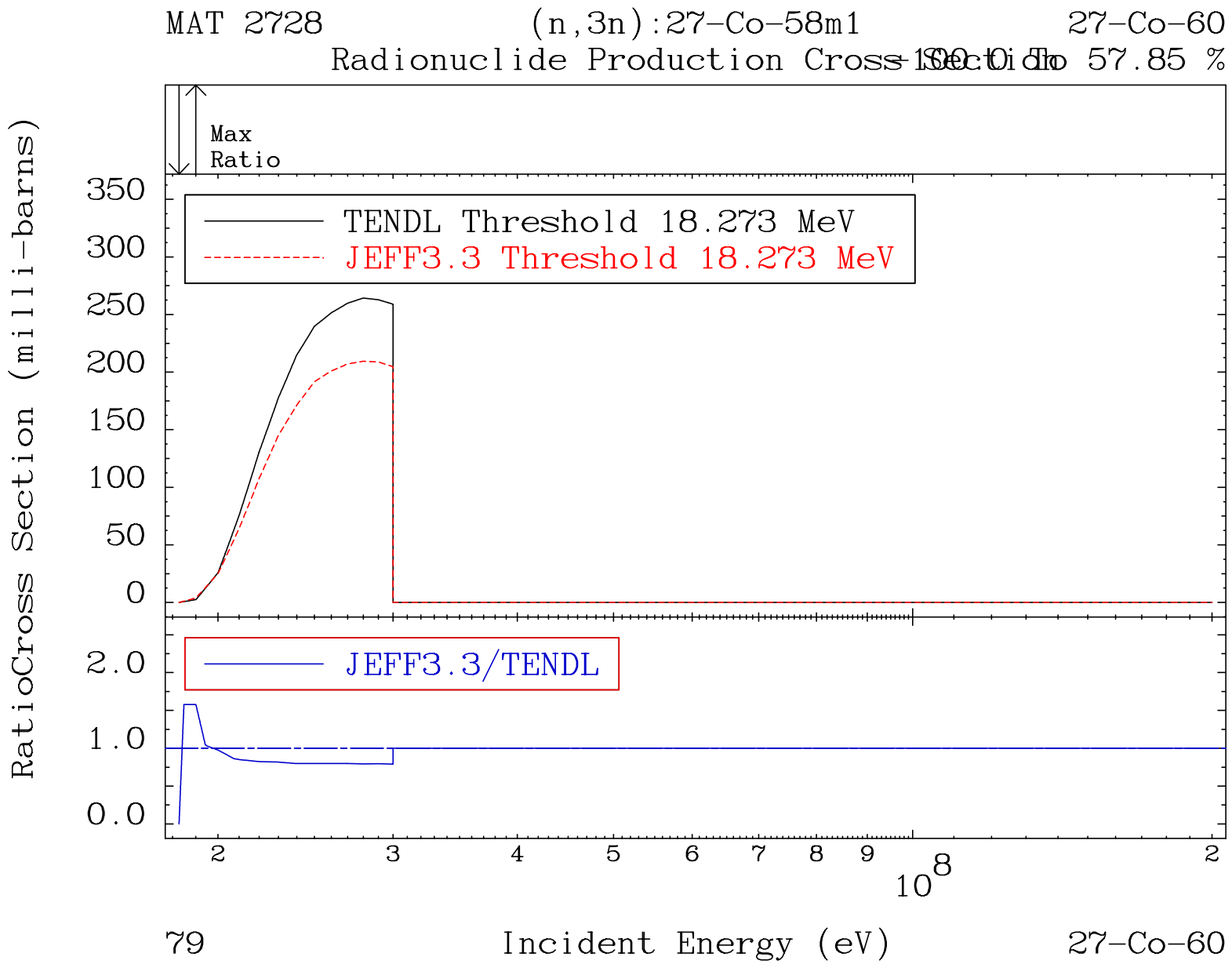

MAT 2728
Dpa inelastic (mt51-91)
27-Co-60
Cross Section -94.48 To 9999. %
Min
Ratio
TENDL Threshold 59.576 keV
JEFF3.3 Threshold 59.576 keV
JEFF3.3/TENDL
Cross Section (barns)
Ratio
Incident Energy (eV)
74
27-Co-60

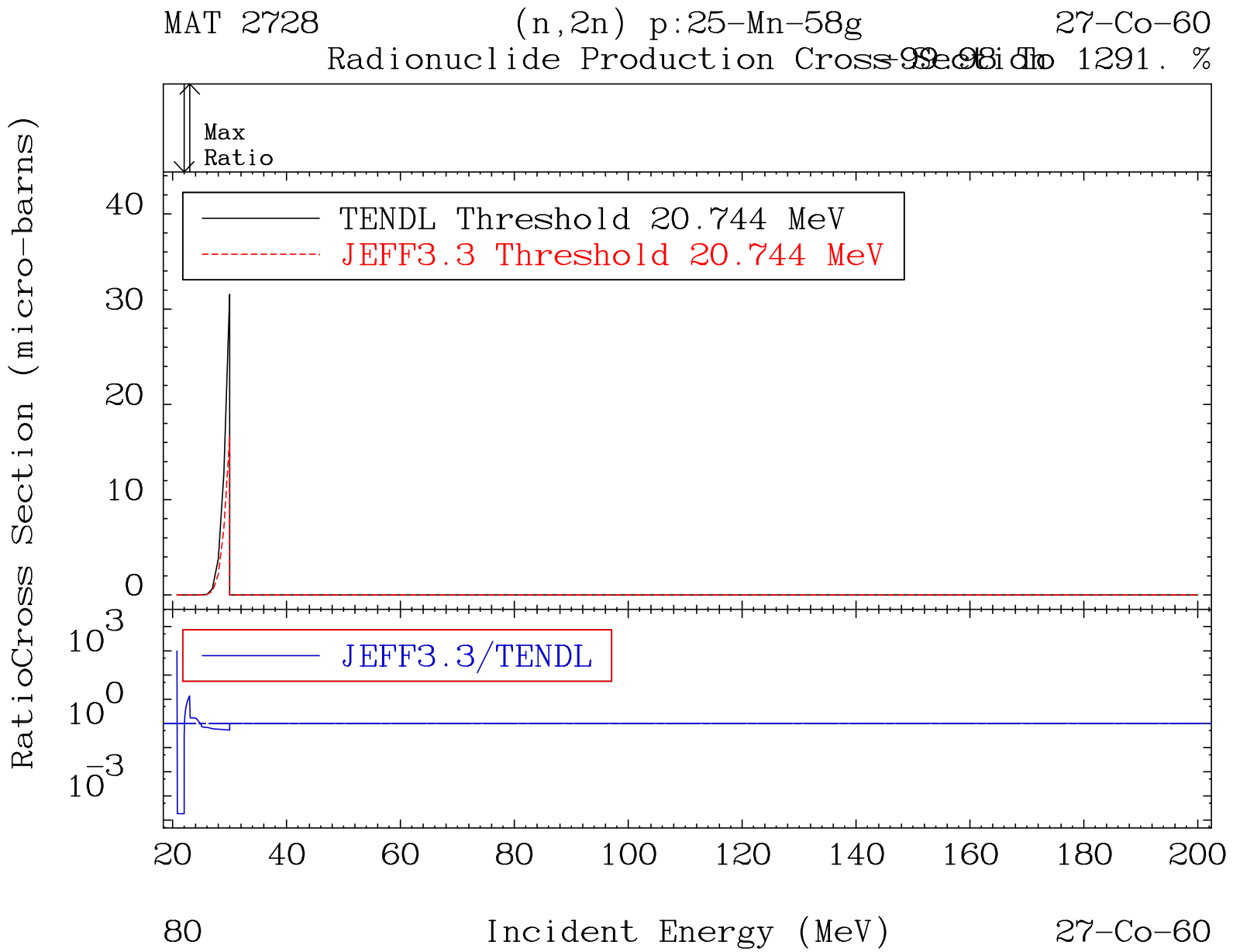

MAT 2728 Dpa disappearance (mt102 -120) 27-Co-60
Cross Section -100.0 To 9999. %
Min Ratio
Max Ratio
TENDL
JEFF3.3
Cross Section (barns)
JEFF3.3/TENDL
Ratio
Incident Energy (eV)
75
27-Co-60

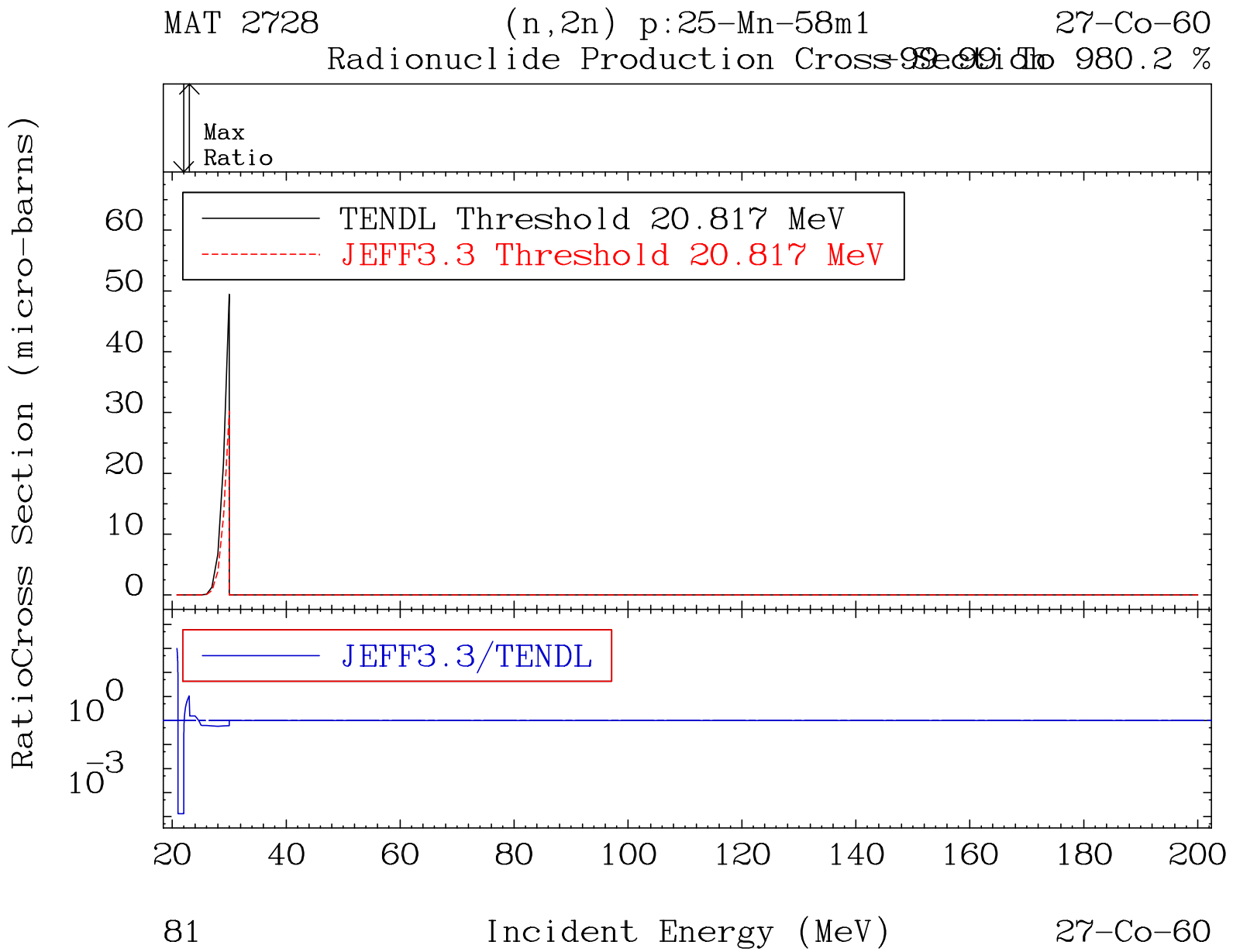

MAT 2728
Inelastic:27-Co-60g
27-Co-60
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 200.00 keV
JEFF3.3 Threshold 200.00 keV
Cross Section (barns)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
JEFF3.3/TENDL
Ratio
1.10
1.00
2 3 4 5 7 10^6 2 3 4 5 7 10^7 2 3 4 5 7 10^8 2
76
Incident Energy (eV)
27-Co-60

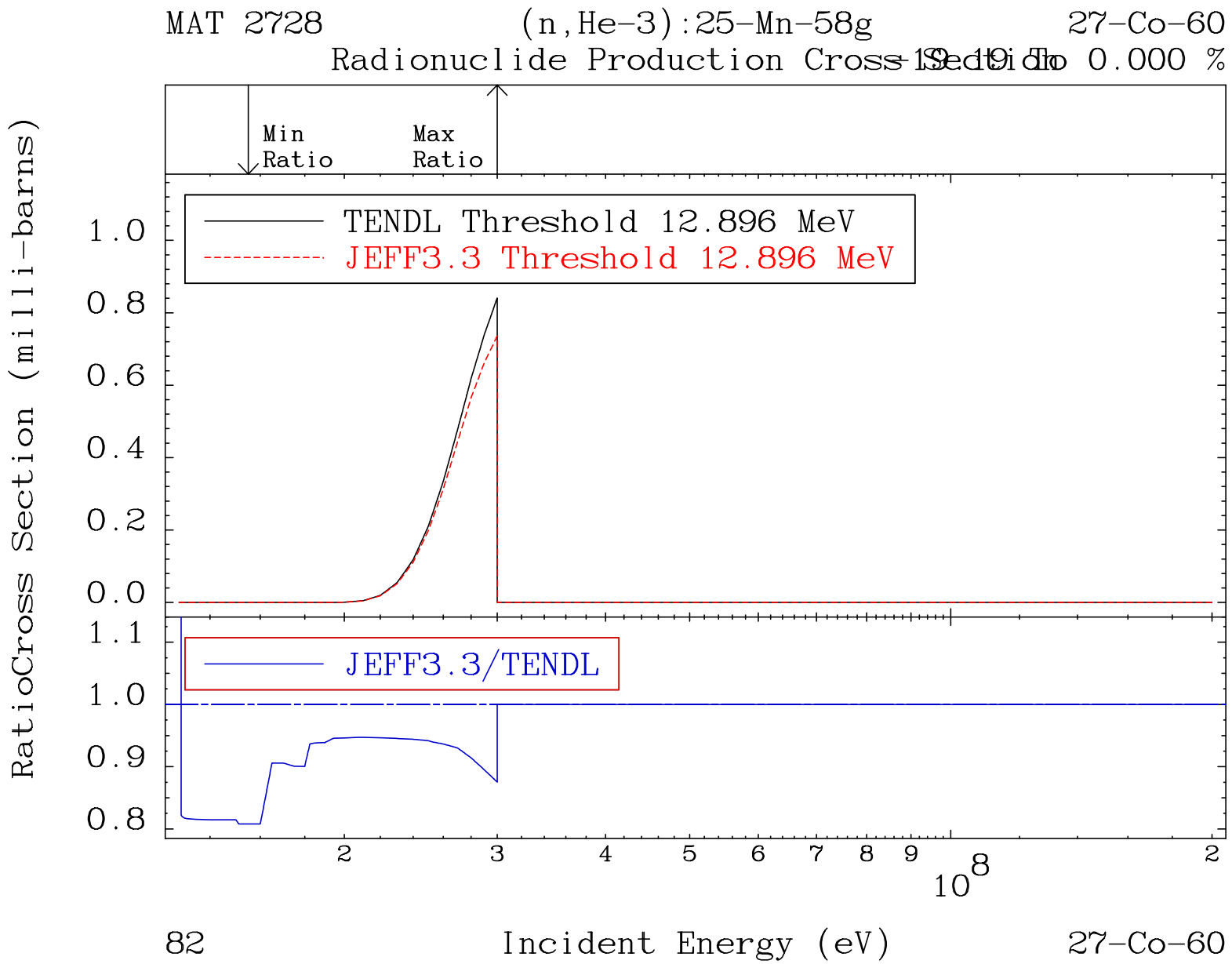

MAT 2728
Inelastic:27-Co-60m1
27-Co-60
Radionuclide Production Cross Section To 55.88 %
Min Ratio
Max Ratio
TENDL Threshold 59.576 keV
JEFF3.3 Threshold 59.576 keV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
600
400
200
0
10^{0}
10^{-1}
7 2 3 4 5 7 2 3 4 5 7 2 3 4 5 7 2
10^{5} 10^{6} 10^{7} 10^{8}
77
Incident Energy (eV)
27-Co-60

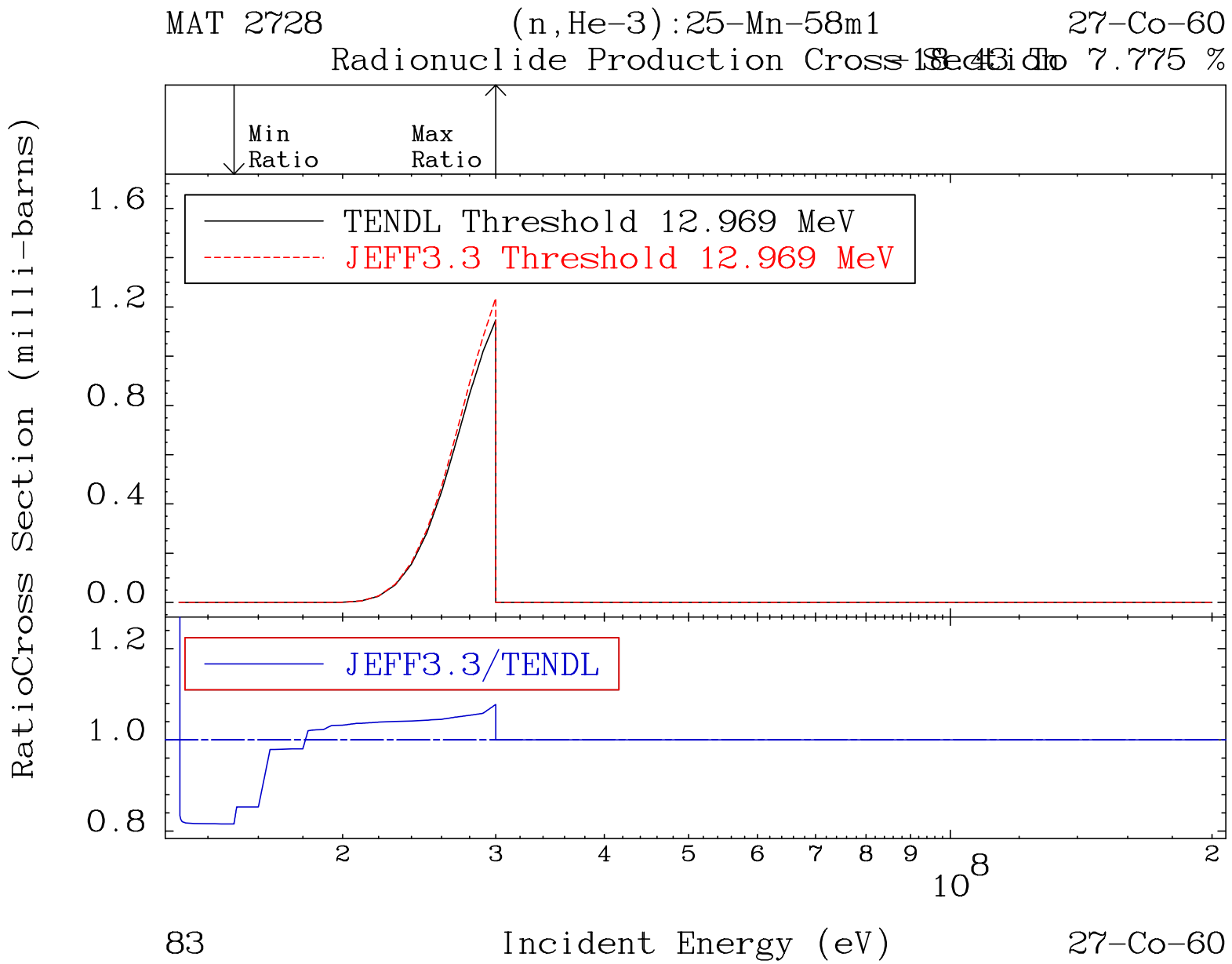

MAT 2728
(n,3n):27-Co-58g
27-Co-60
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 18.248 MeV
JEFF3.3 Threshold 18.248 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
250
200
150
100
50
0
4
2
0
2
3
4
5
6
7
8
9
10^8
2
78
Incident Energy (eV)
27-Co-60

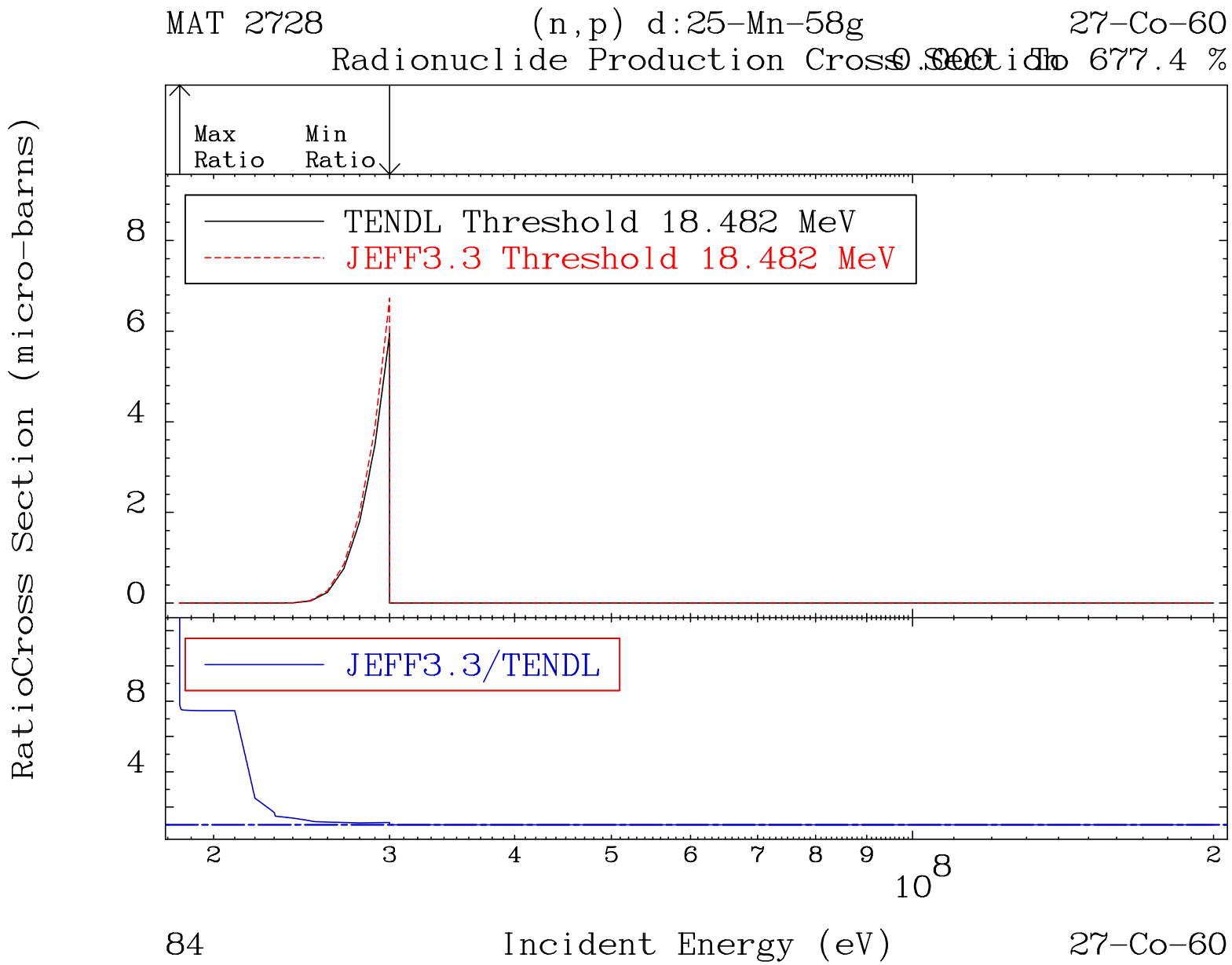

MAT 2728
(n,3n):27-Co-58m1
27-Co-60
Radionuclide Production Cross Section
Max
Ratio
TENDL Threshold 18.273 MeV
JEFF3.3 Threshold 18.273 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
350
300
250
200
150
100
50
0
2.0
1.0
0.0
2
3
4
5
6
7
8
9
10^8
2
79
Incident Energy (eV)
27-Co-60

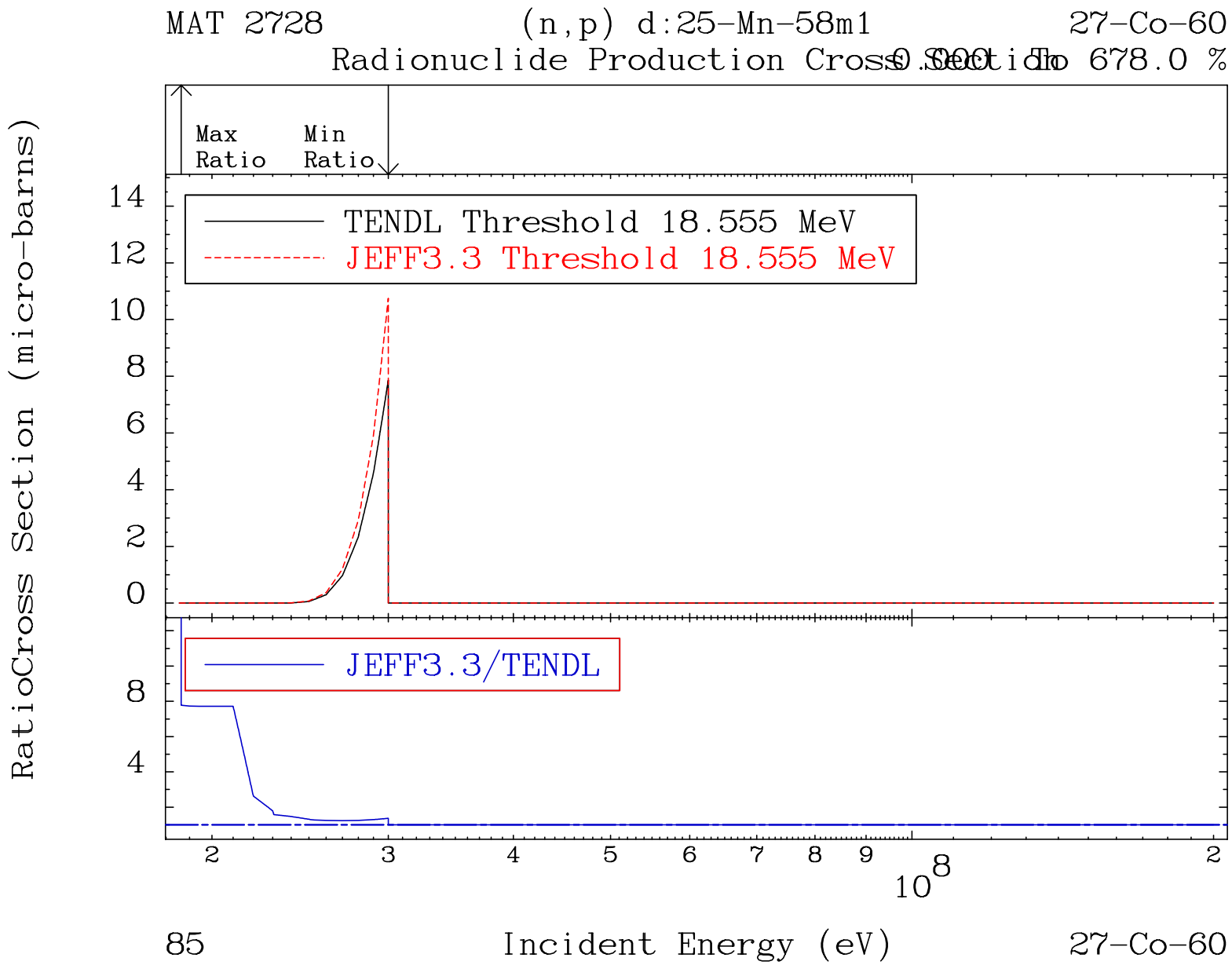

MAT 2728
(n,2n) p:25-Mn-58g
27-Co-60
Radionuclide Production Cross Section To 1291. %
Max
Ratio
TENDL Threshold 20.744 MeV
JEFF3.3 Threshold 20.744 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
40
30
20
10
0
10^3
10^0
10^-3
20
40
60
80
100
120
140
160
180
200
80
Incident Energy (MeV)
27-Co-60


MAT 2728
(n,2n) p:25-Mn-58m1
27-Co-60
Radionuclide Production Cross Section To 980.2 %
Max
Ratio
TENDL Threshold 20.817 MeV
JEFF3.3 Threshold 20.817 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
60
50
40
30
20
10
0
10^0
10^-3
20
40
60
80
100
120
140
160
180
200
81
Incident Energy (MeV)
27-Co-60


MAT 2728
(n,He-3):25-Mn-58g
27-Co-60
Radionuclide Production Cross Section To 0.000 %
Min Ratio
Max Ratio
TENDL Threshold 12.896 MeV
JEFF3.3 Threshold 12.896 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.0
0.8
0.6
0.4
0.2
0.0
1.1
1.0
0.9
0.8
2
3
4
5
6
7
8
9
10^8
2
82
Incident Energy (eV)
27-Co-60


MAT 2728
(n,He-3):25-Mn-58m1
27-Co-60
Radionuclide Production Cross Section
Min Ratio
Max Ratio
TENDL Threshold 12.969 MeV
JEFF3.3 Threshold 12.969 MeV
JEFF3.3/TENDL
RatioCross Section (milli-barns)
1.6
1.2
0.8
0.4
0.0
1.2
1.0
0.8
2
3
4
5
6
7
8
9
2
10^8
83
Incident Energy (eV)
27-Co-60


MAT 2728
(n,p) d:25-Mn-58g
27-Co-60
Radionuclide Production Cross Section
0.000 To 677.4 %
Max Ratio
Min Ratio
TENDL Threshold 18.482 MeV
JEFF3.3 Threshold 18.482 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
84
27-Co-60


MAT 2728
(n,p) d:25-Mn-58m1
27-Co-60
Radionuclide Production Cross Section
0.000 To 678.0 %
Max Ratio
Min Ratio
TENDL Threshold 18.555 MeV
JEFF3.3 Threshold 18.555 MeV
JEFF3.3/TENDL
RatioCross Section (micro-barns)
Incident Energy (eV)
85
27-Co-60