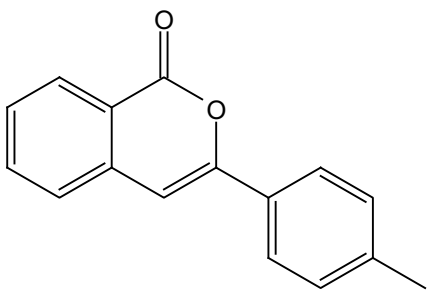


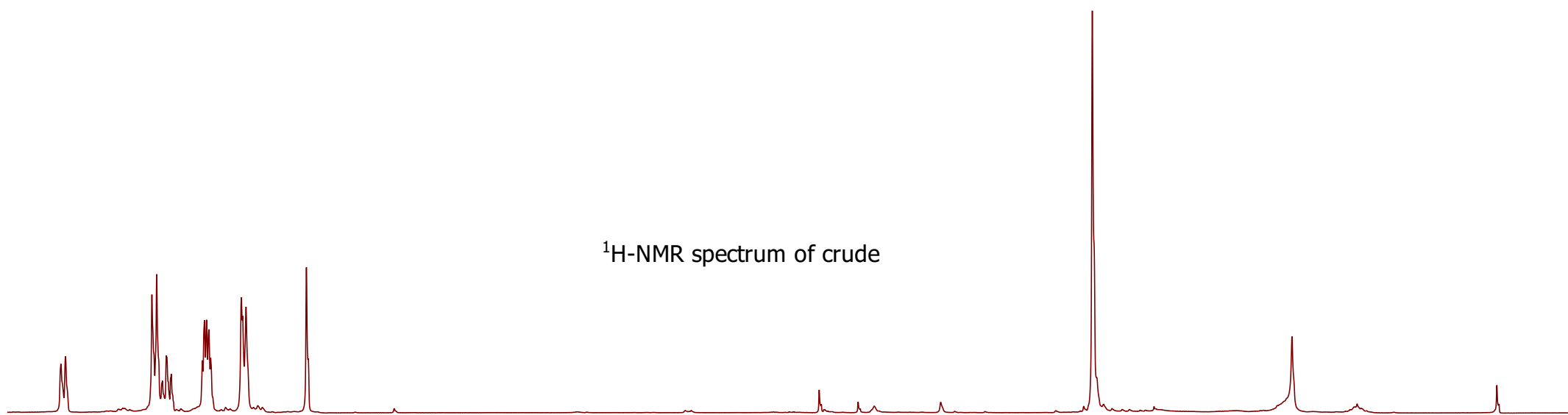
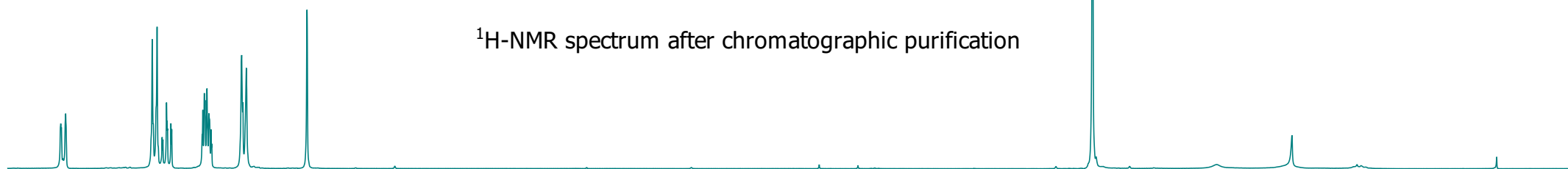
Index

Comparison crude/purified ^1H NMR spectra of 2a	S2
^1H and ^{13}C NMR spectra	S3
HSQC spectra of 2o + 3o	S40
HSQC spectra of 2p + 3p	S43



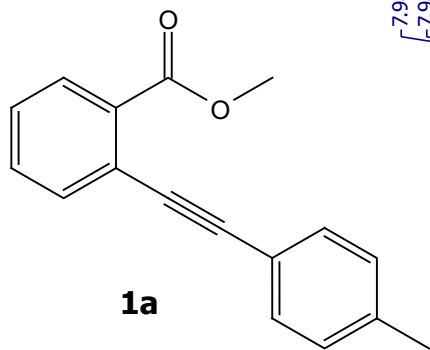
2a

¹H-NMR, 300 MHz, CDCl₃



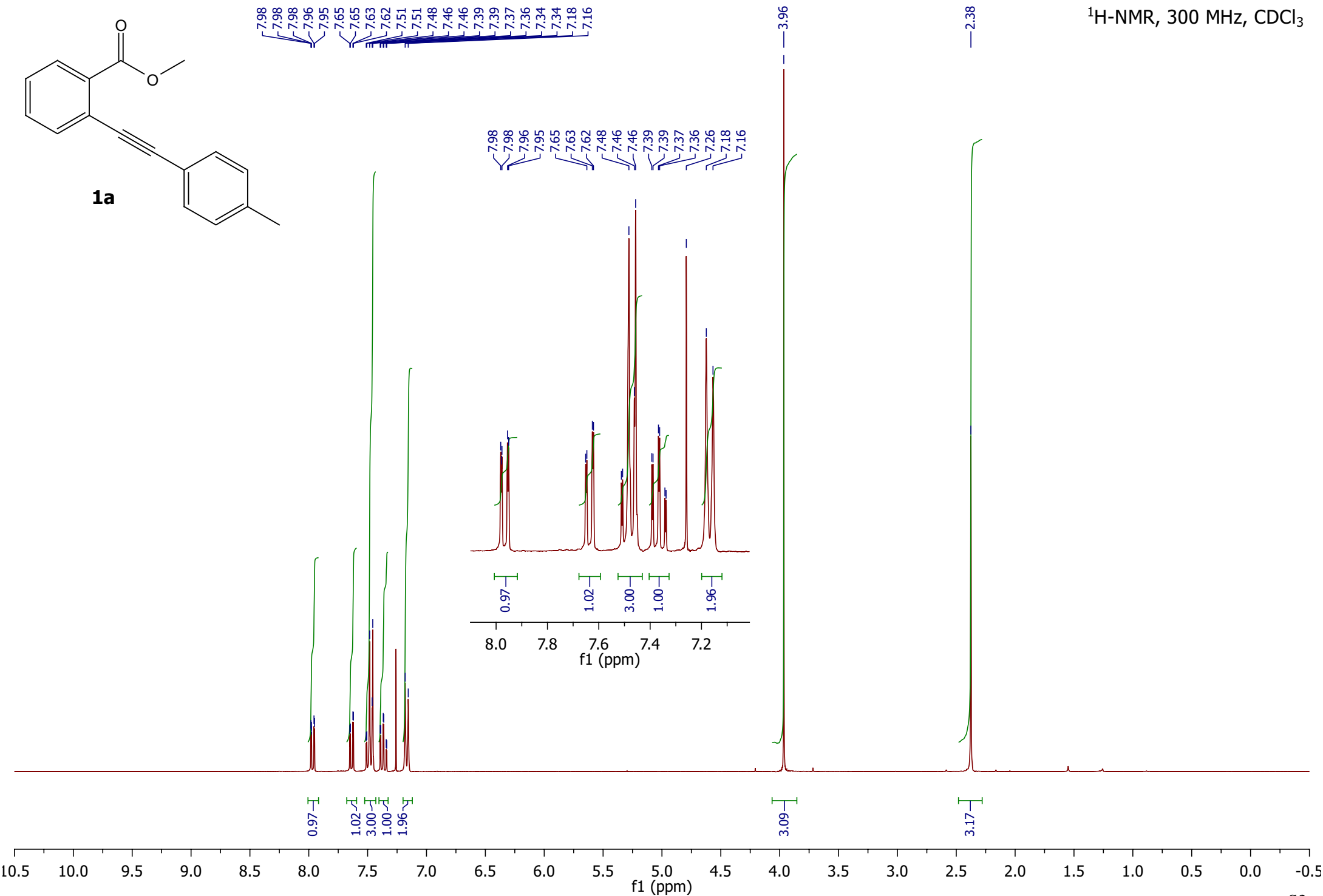
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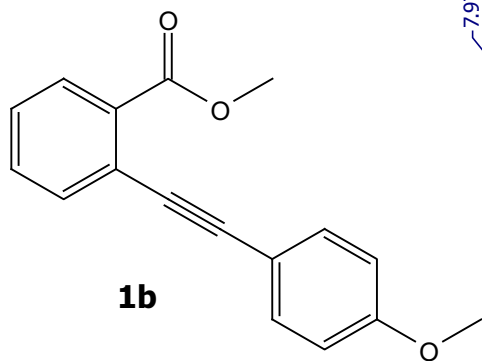
f1 (ppm)



7.98
7.98
7.98
7.96
7.95
7.65
7.65
7.63
7.62
7.51
7.51
7.48
7.46
7.46
7.39
7.39
7.37
7.36
7.34
7.34
7.18
7.16

7.98
7.98
7.96
7.95
7.65
7.63
7.62
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7.46
7.46
7.39
7.39
7.37
7.36
7.26
7.18
7.16





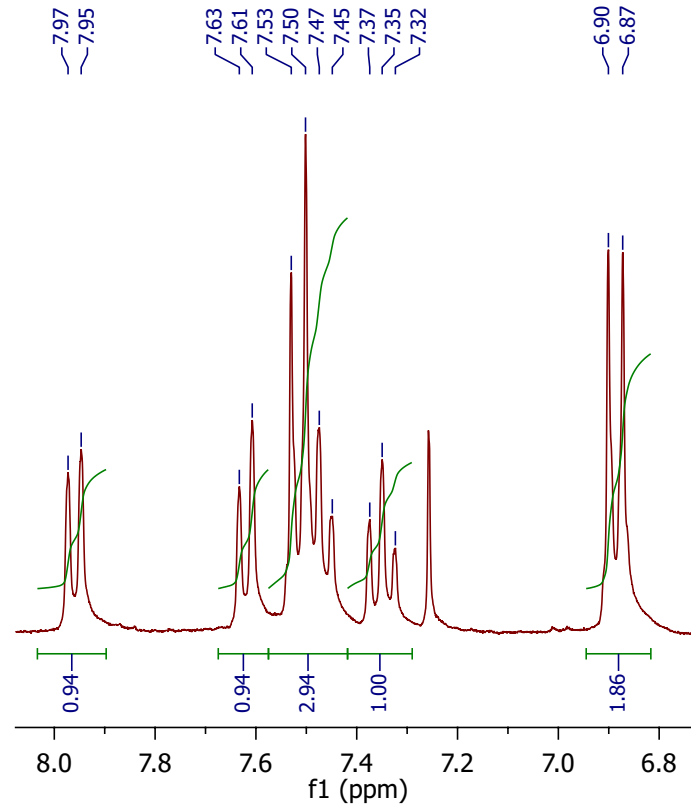
7.97
7.95
7.63
7.61
7.53
7.50
7.47
7.35
6.90
6.87

3.96
3.83

7.97
7.95

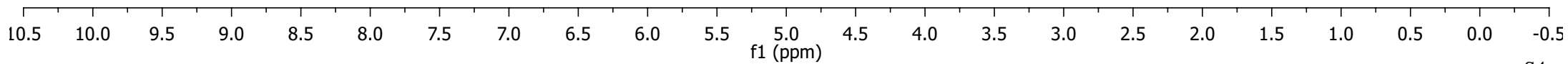
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7.50
7.47
7.45
7.37
7.35
7.32

6.90
6.87



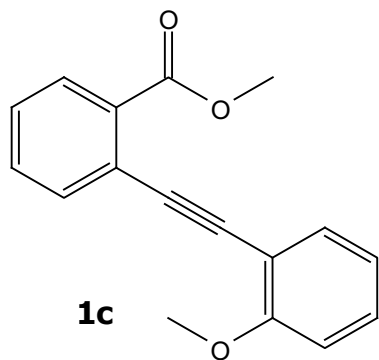
0.94
0.94
2.94
1.00
1.86

2.79
3.04



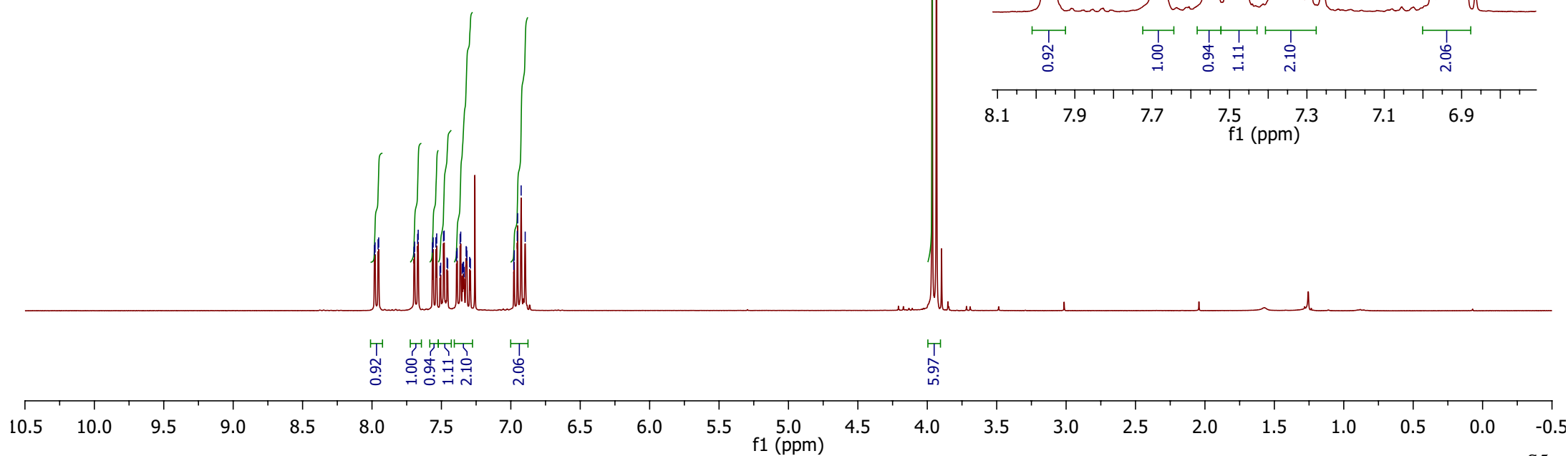
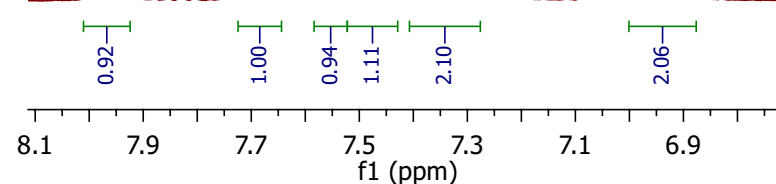
¹H-NMR, 300 MHz, CDCl₃

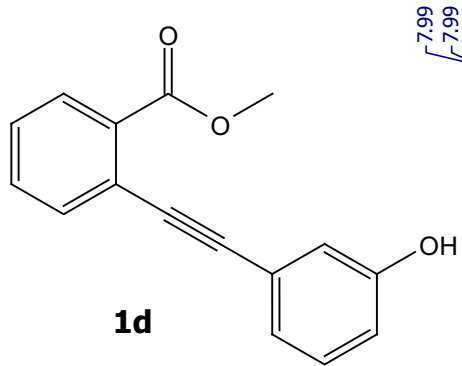
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7.69
7.67
7.67
7.56
7.56
7.54
7.53
7.48
7.48
7.46
7.45
7.39
7.39
7.37
7.36
7.32
7.32
7.32
7.30
7.28
6.98
6.98
6.95
6.95
6.93
6.90



7.98
7.96
7.95
7.70
7.69
7.67
7.67
7.56
7.56
7.54
7.53
7.48
7.48
7.46
7.39
7.39
7.37
7.36
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6.98
6.95
6.95
6.93
6.90

3.97
3.93

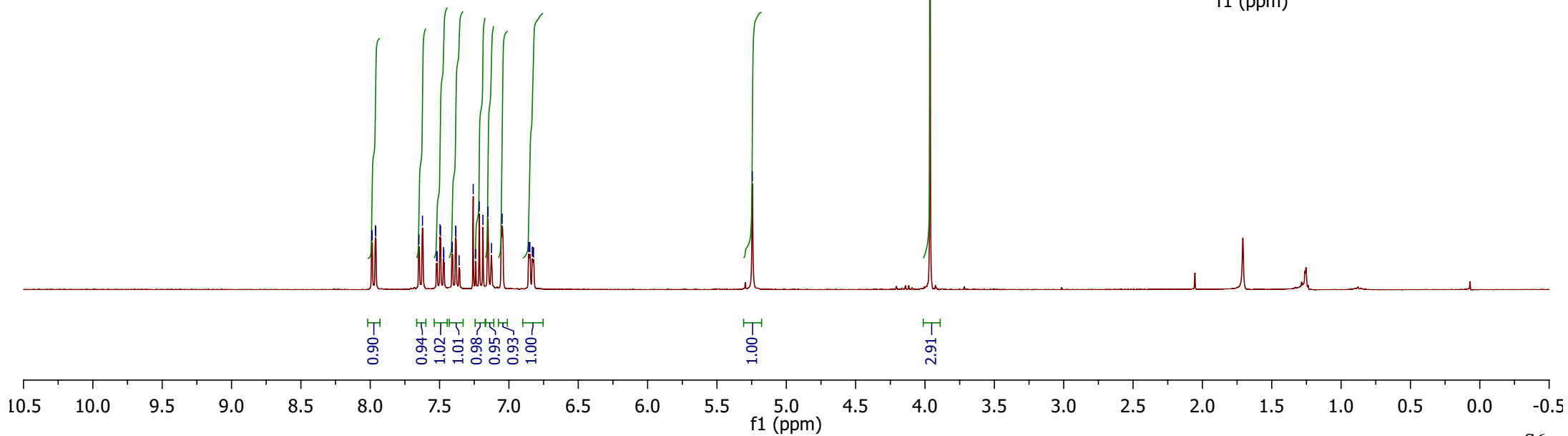
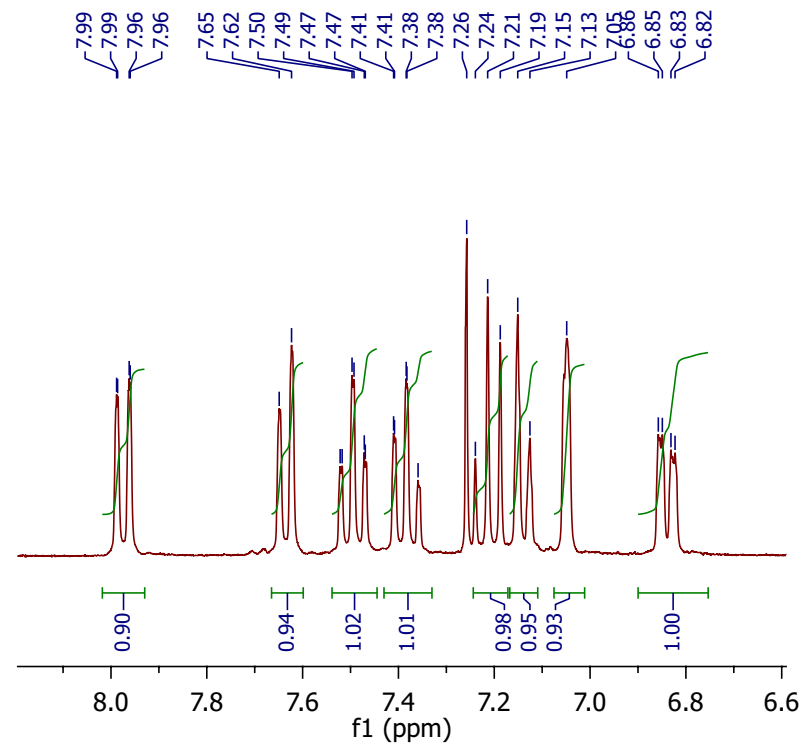


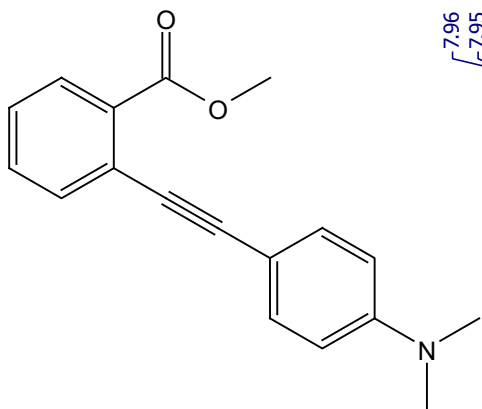


7.99
7.99
7.96
7.96
7.65
7.62
7.50
7.49
7.47
7.41
7.41
7.38
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7.13
7.05
6.86
6.85
6.83
5.93

3.96

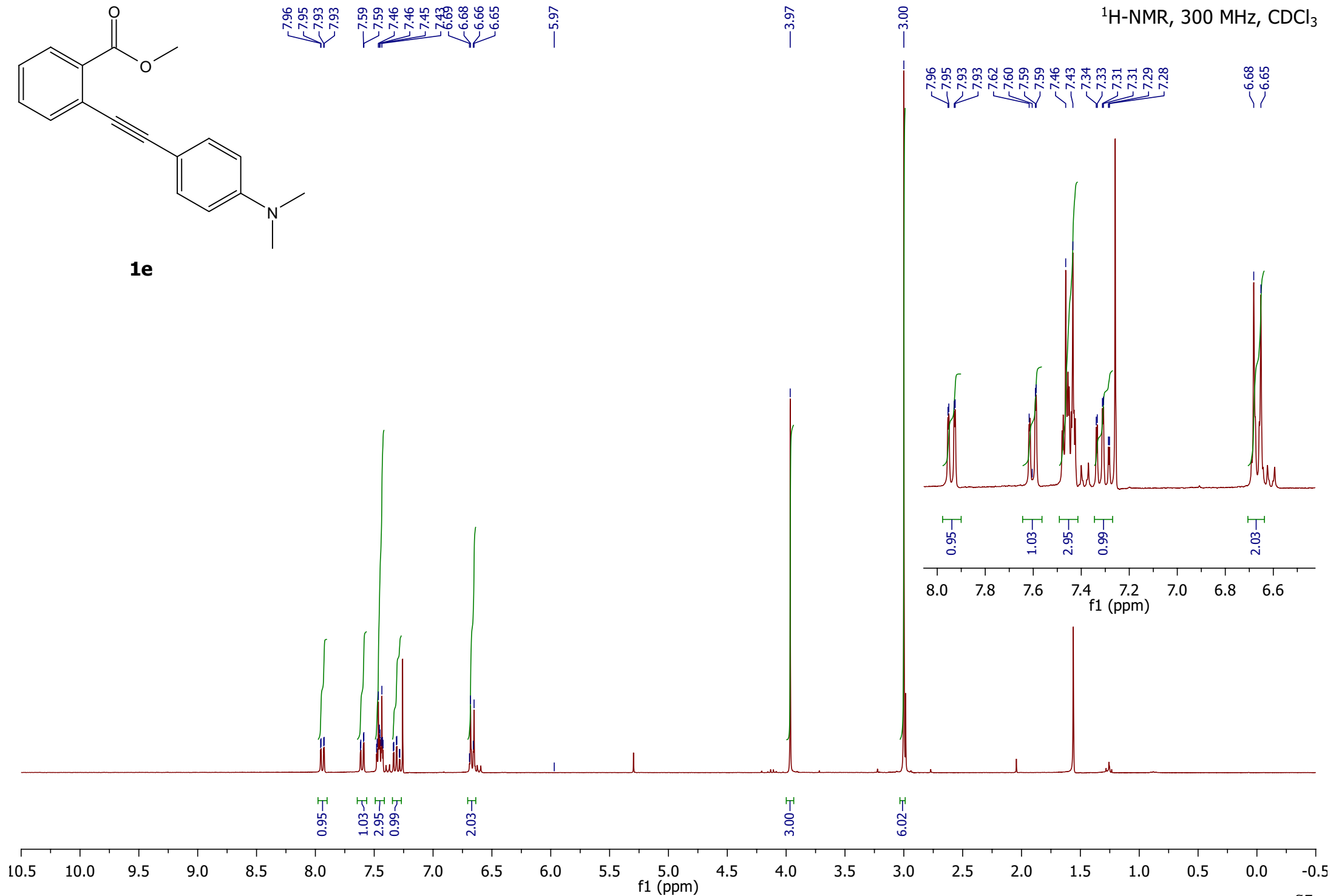
¹H-NMR, 300 MHz, CDCl₃

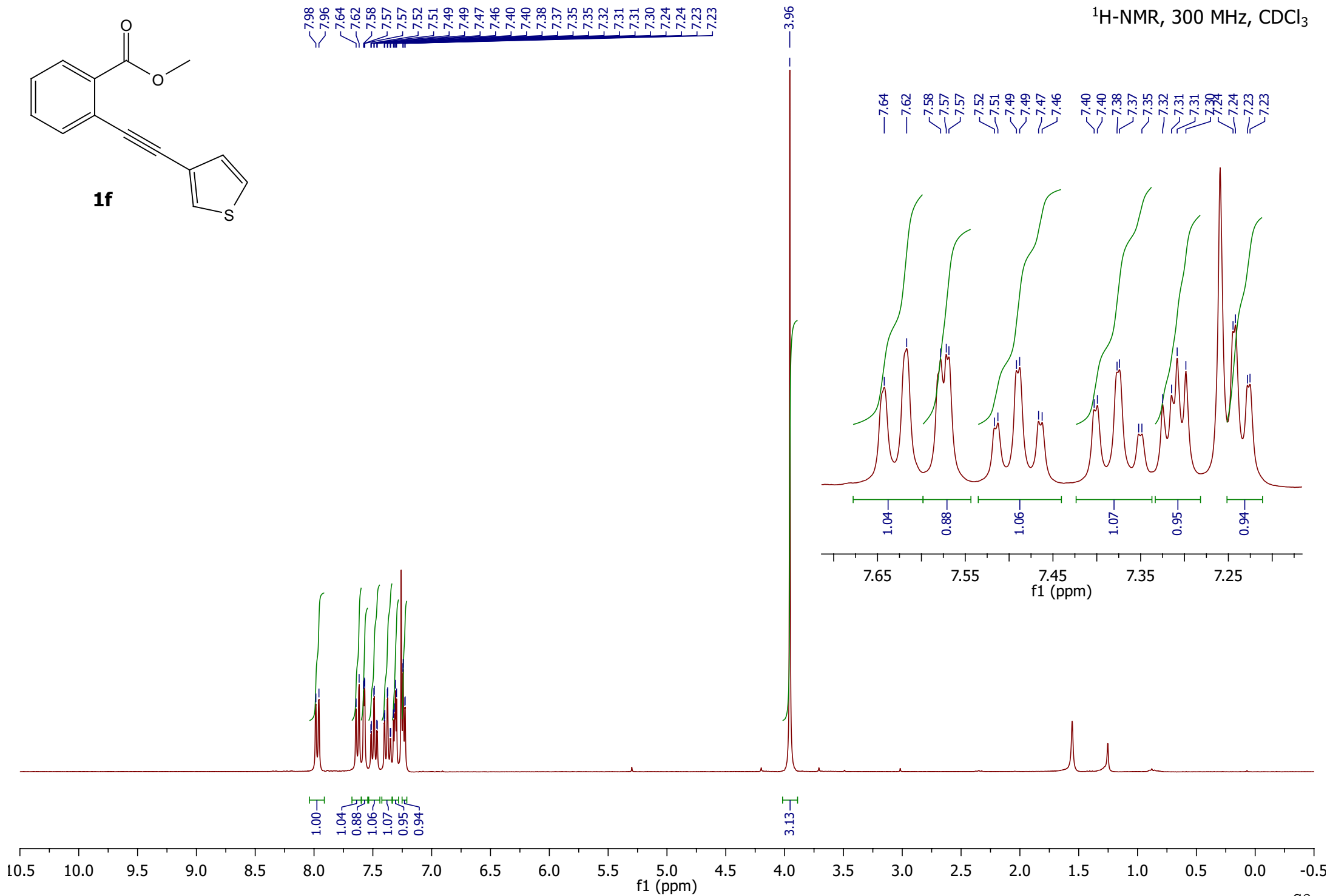
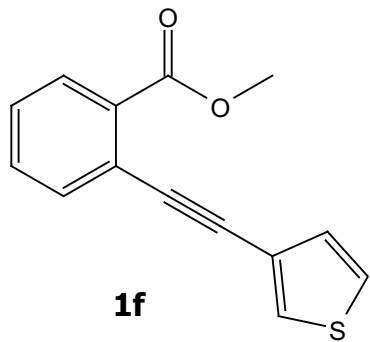


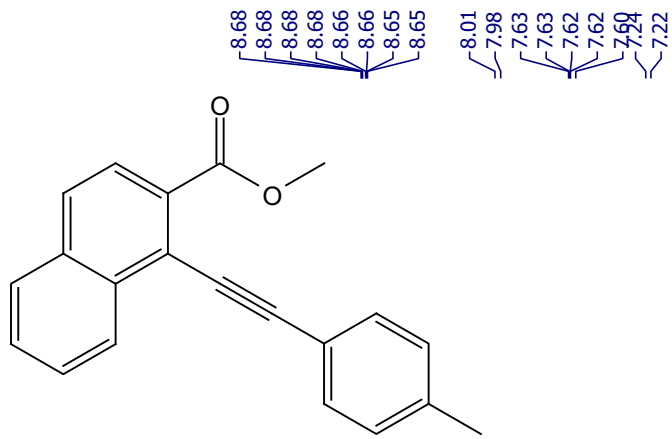


1e

¹H-NMR, 300 MHz, CDCl₃

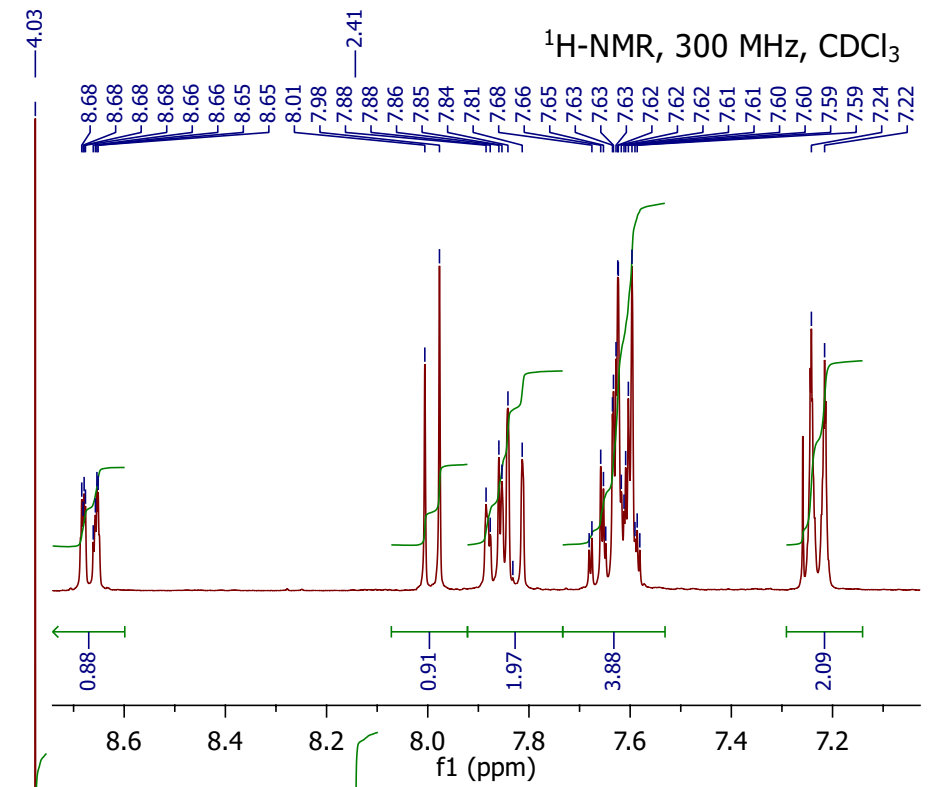
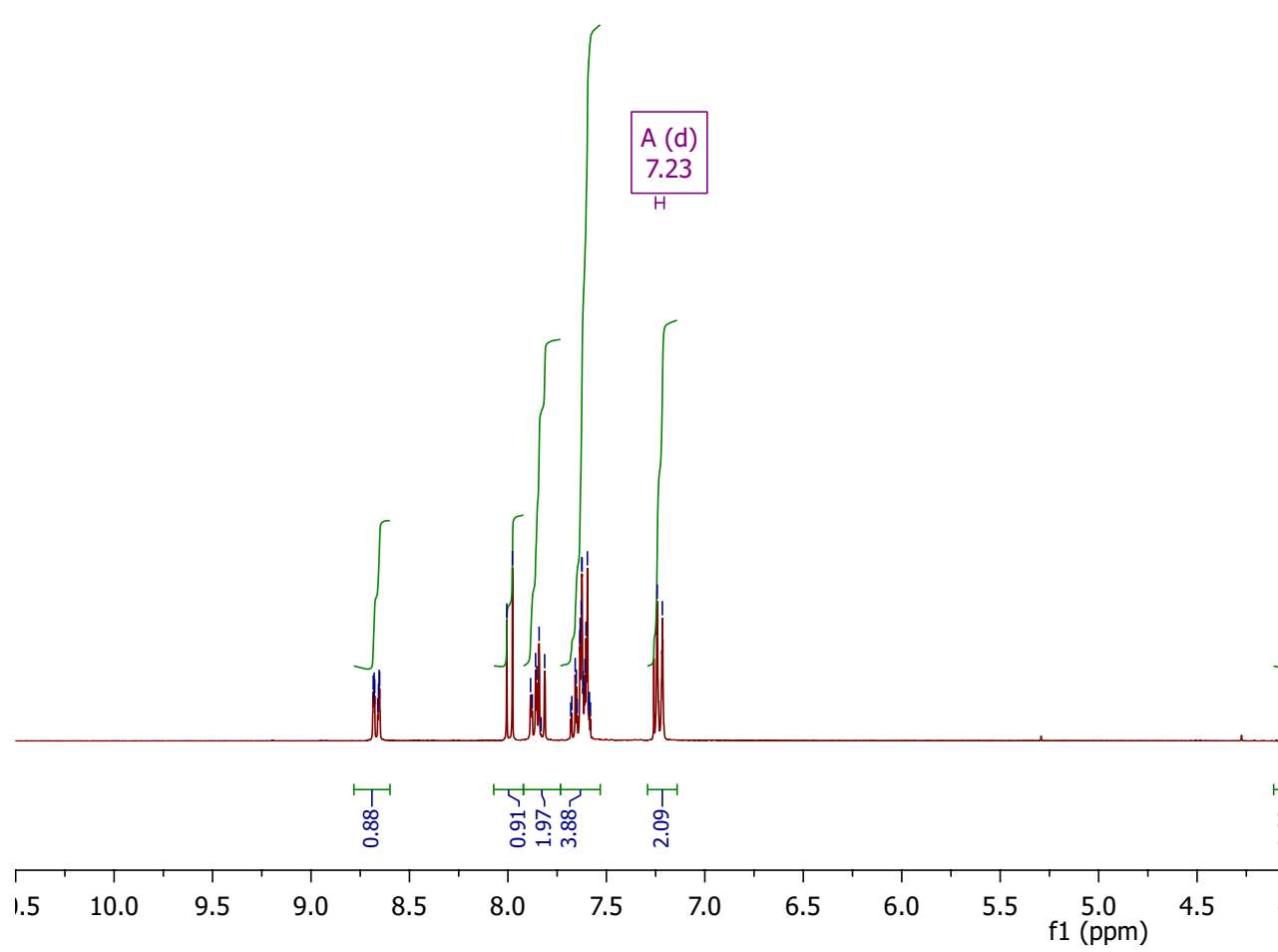


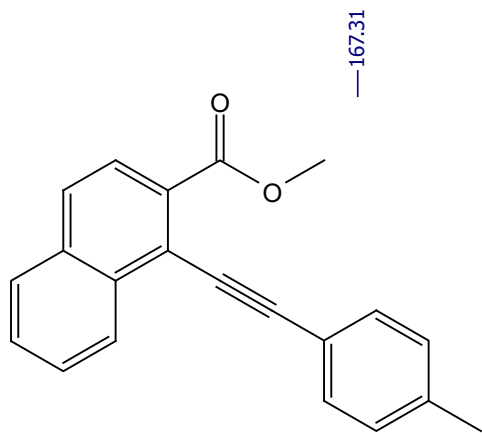




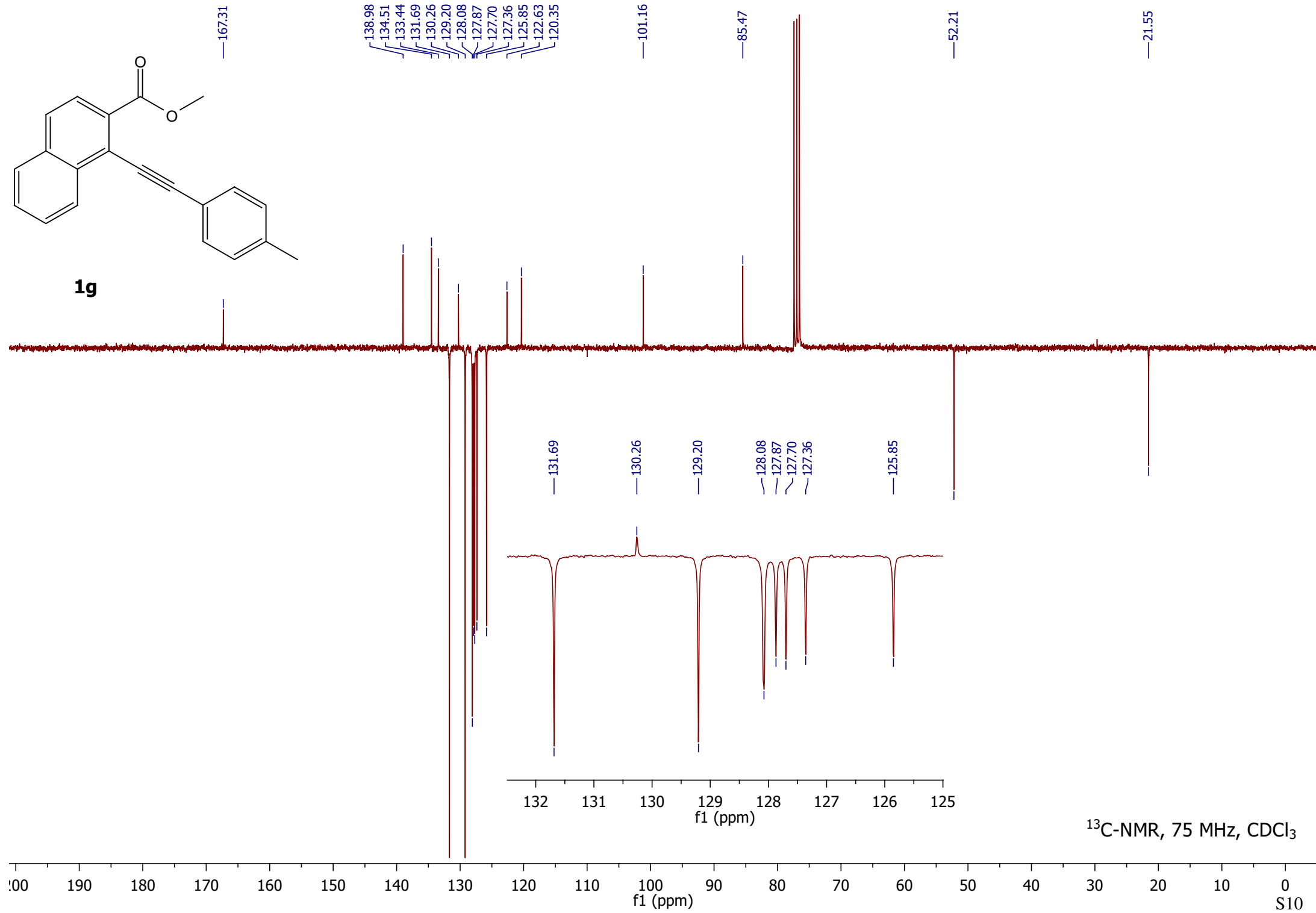
1g

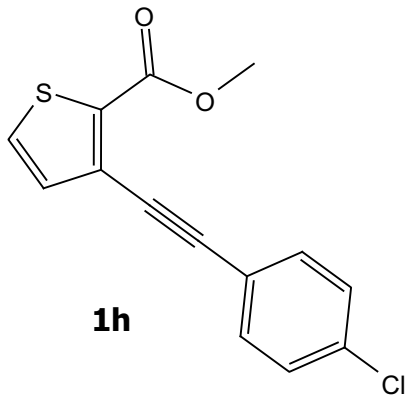
8.68
8.68
8.68
8.66
8.66
8.65
8.65
8.01
7.98
7.63
7.63
7.62
7.62
7.59
7.59
7.22





1g





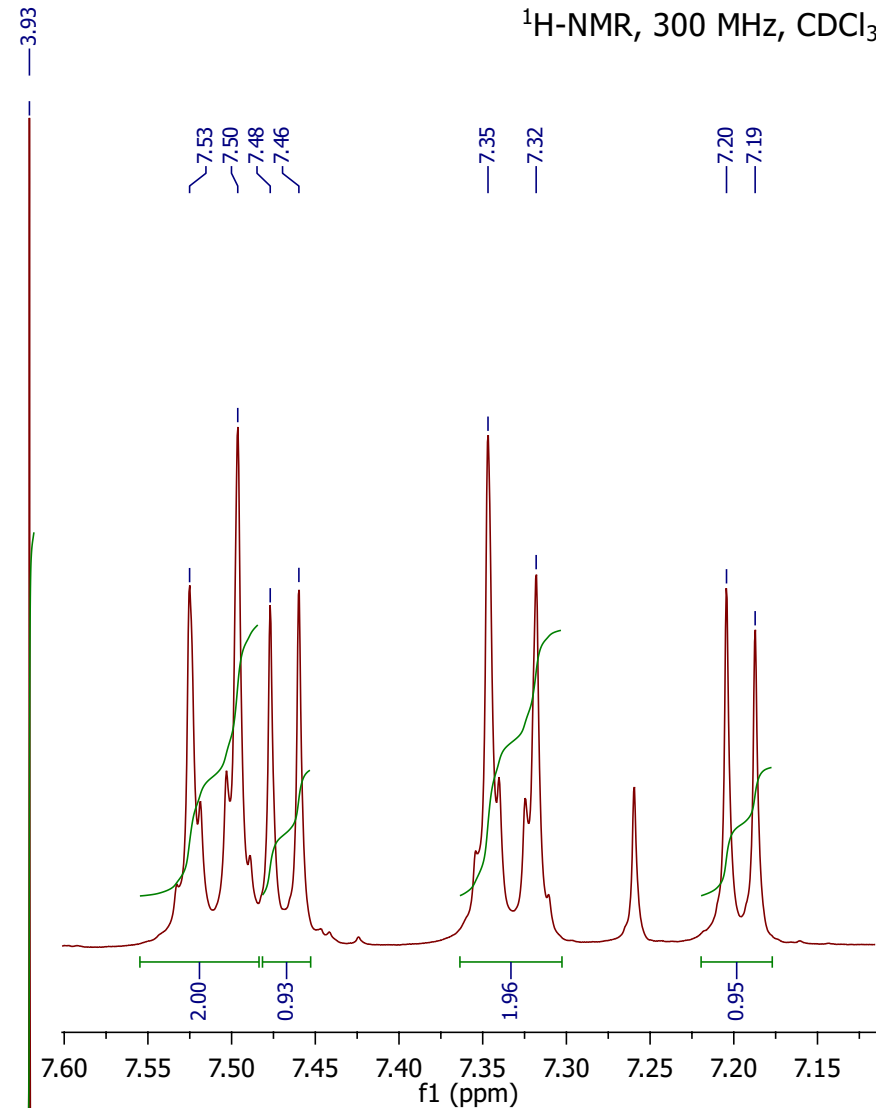
7.53
7.50
7.48
7.46
7.35
7.32
7.20
7.19

¹H-NMR, 300 MHz, CDCl₃

7.53
7.50
7.48
7.46

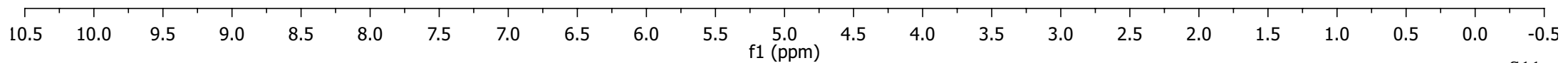
7.35
7.32

7.20
7.19

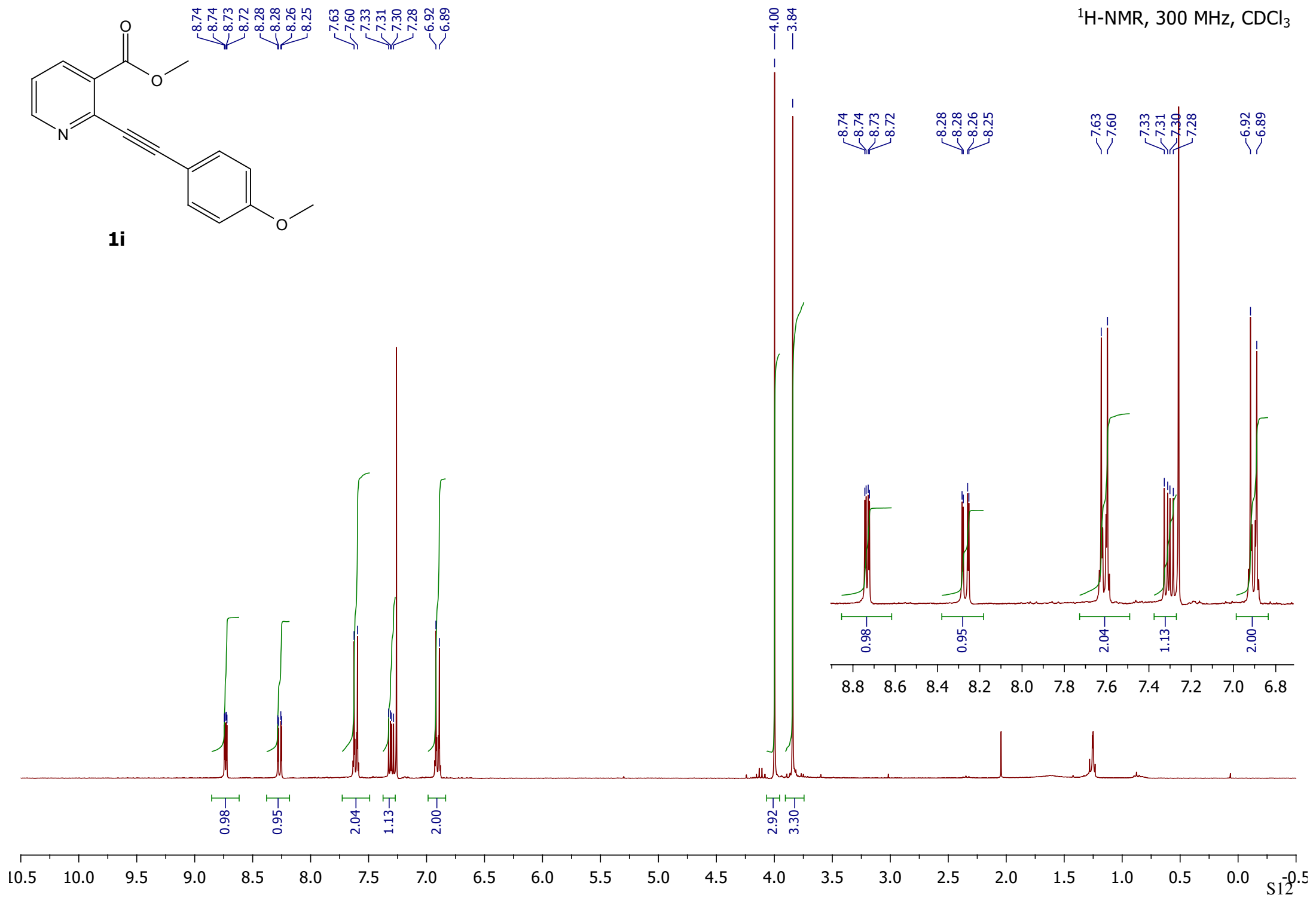
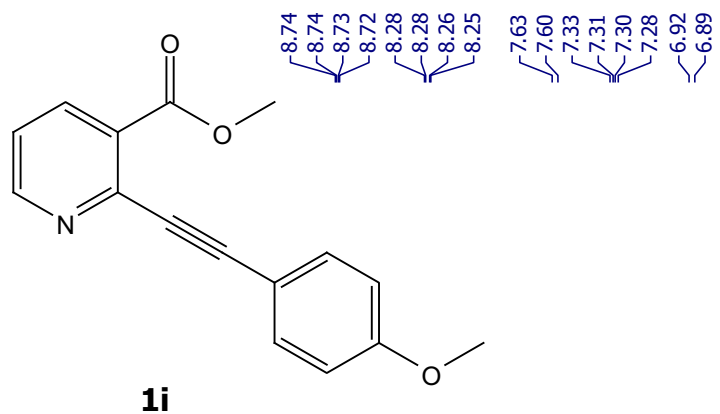


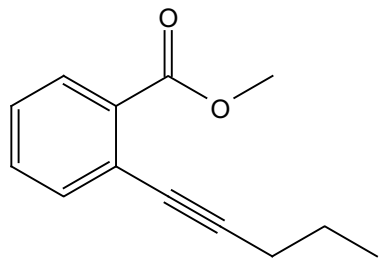
2.00
0.93
1.96
0.95

3.17



¹H-NMR, 300 MHz, CDCl₃



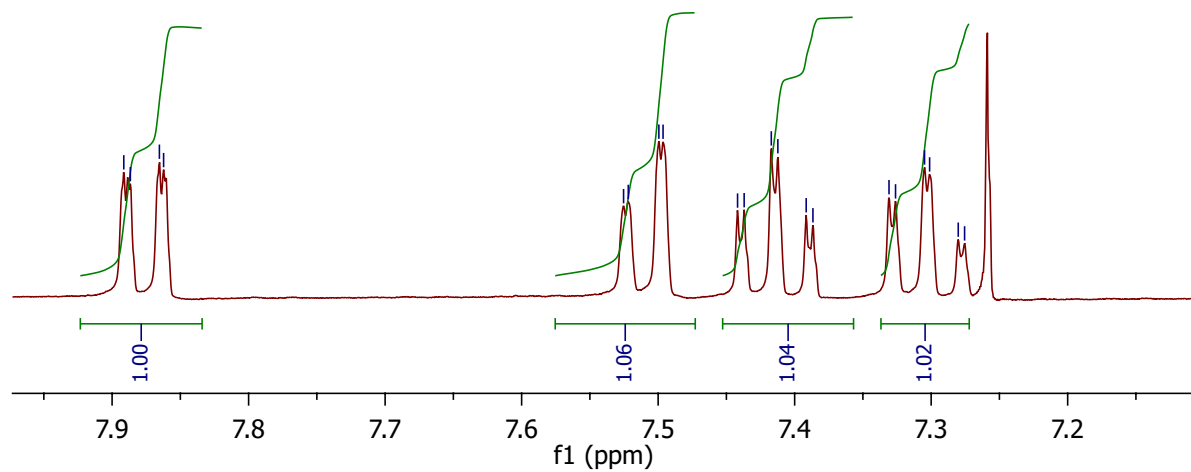


1j

7.89
7.89
7.87
7.86
7.53
7.52
7.50
7.50
7.44
7.44
7.42
7.41
7.39
7.39
7.33
7.33
7.30
7.30
7.28
7.28

7.89
7.89
7.87
7.86

7.53
7.52
7.50
7.50
7.44
7.42
7.41
7.39
7.39
7.33
7.33
7.30
7.30
7.28
7.28



¹H-NMR, 300 MHz, CDCl₃

1.00
1.06
1.04
1.02

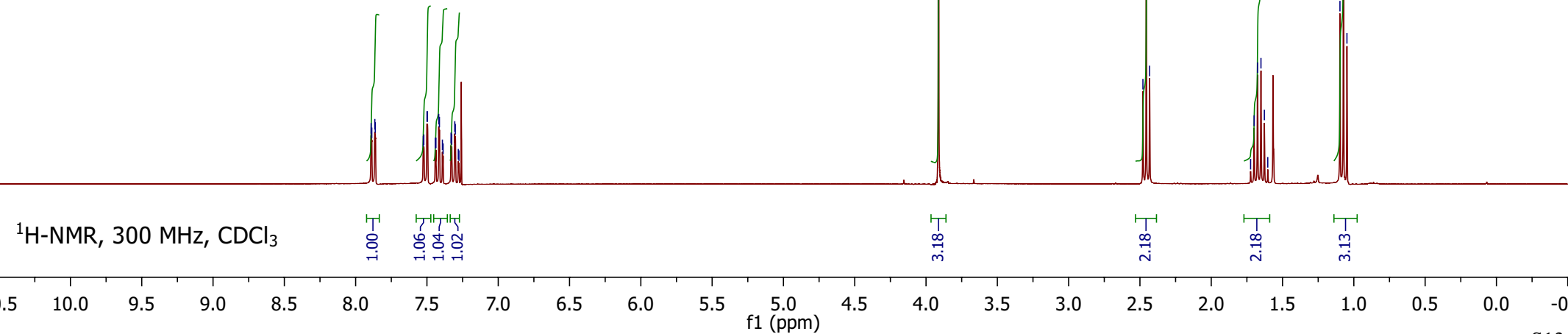
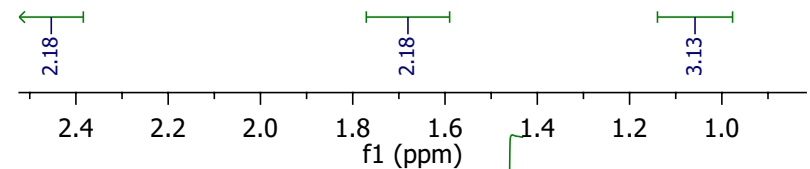
3.91

2.48
2.46
2.43
1.72
1.70
1.68
1.65
1.63
1.60
1.10
1.07
1.05

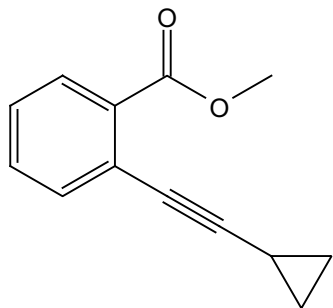
2.48
2.46
2.43

1.72
1.70
1.68
1.65
1.63
1.60

1.10
1.07
1.05



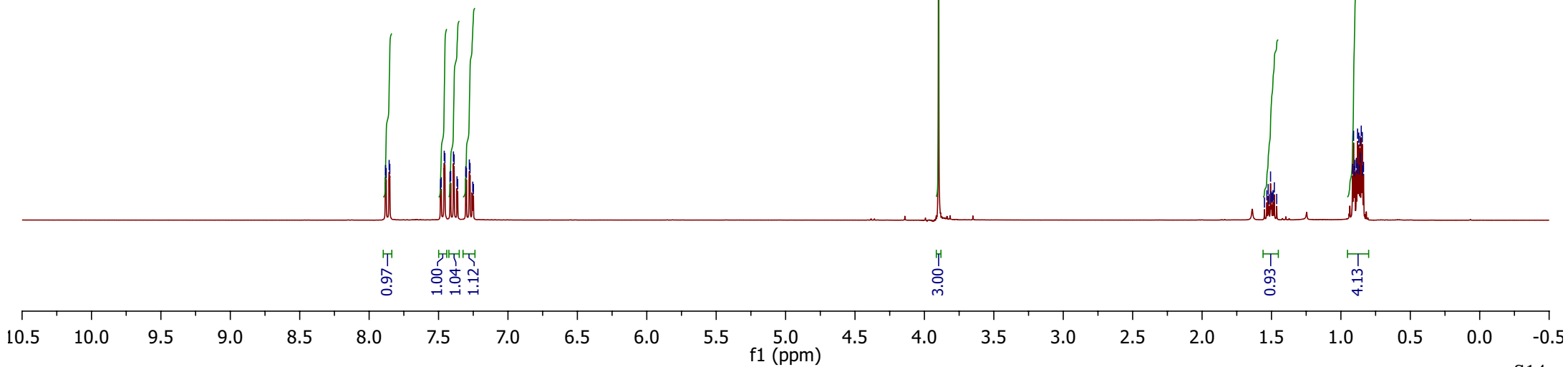
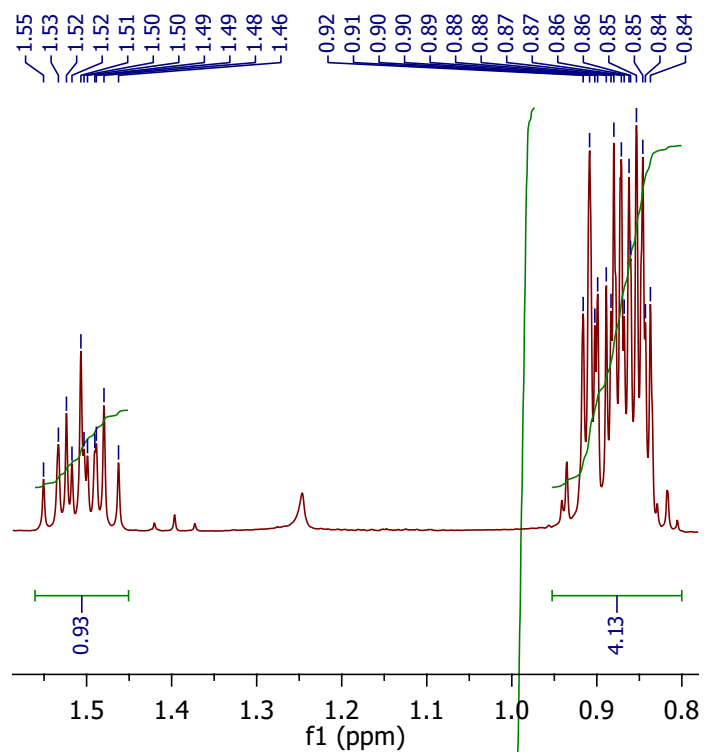
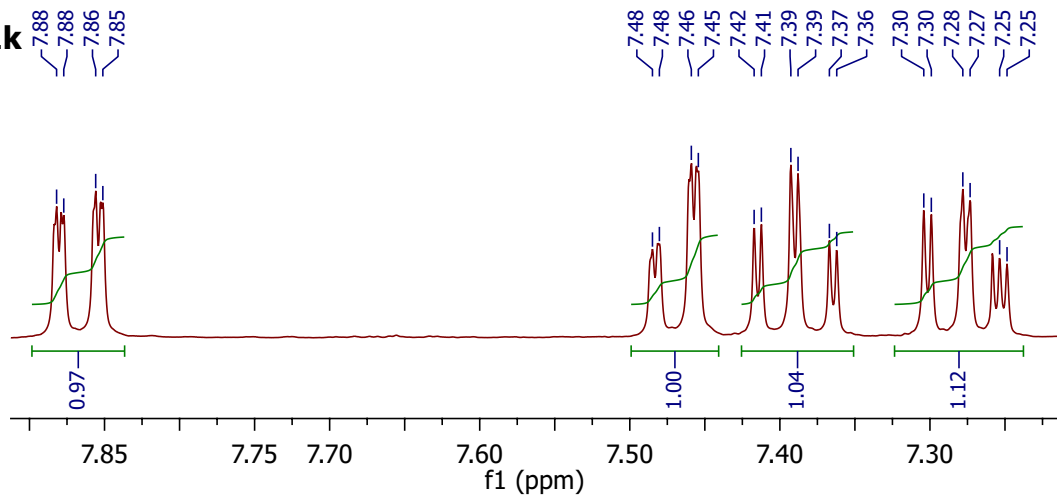
$^1\text{H-NMR}$, 300 MHz, CDCl_3



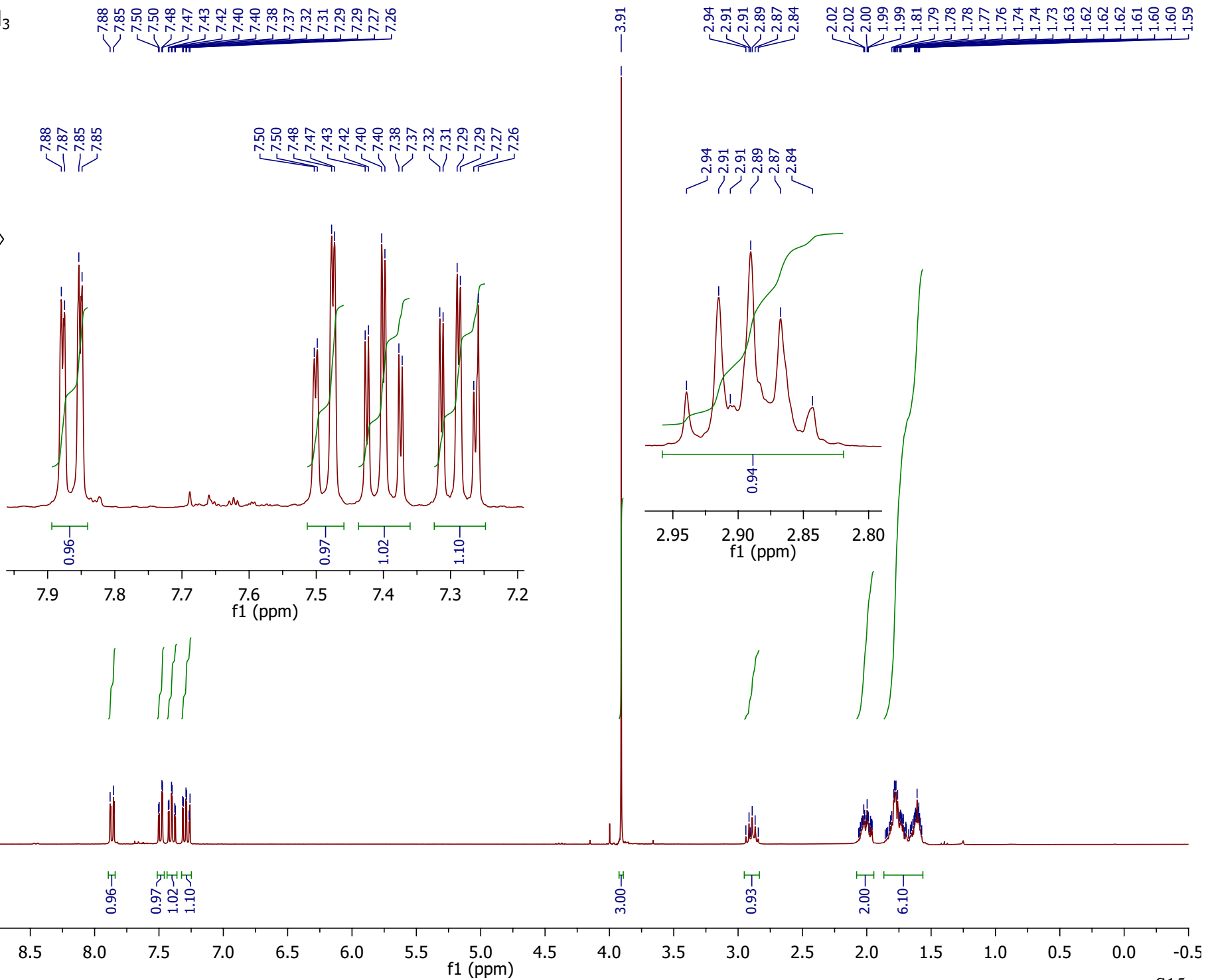
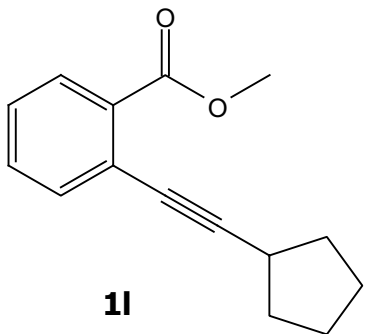
1k

7.88
7.88
7.86
7.85
7.48
7.48
7.46
7.45
7.42
7.41
7.39
7.39
7.37
7.36
7.30
7.30
7.28
7.27
7.25
7.25

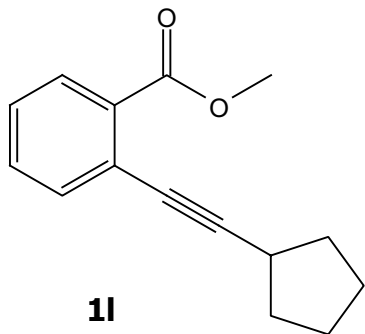
1.55
1.53
1.52
1.52
1.51
1.50
1.50
1.49
1.49
1.48
1.48
1.46
0.92
0.91
0.90
0.89
0.88
0.88
0.87
0.86
0.86
0.85
0.85
0.84
0.84



¹H-NMR, 300 MHz, CDCl₃



¹³C-NMR, 75 MHz, CDCl₃



—167.09

—133.97

—132.09

—131.31

—130.06

—126.98

—124.45

—100.02

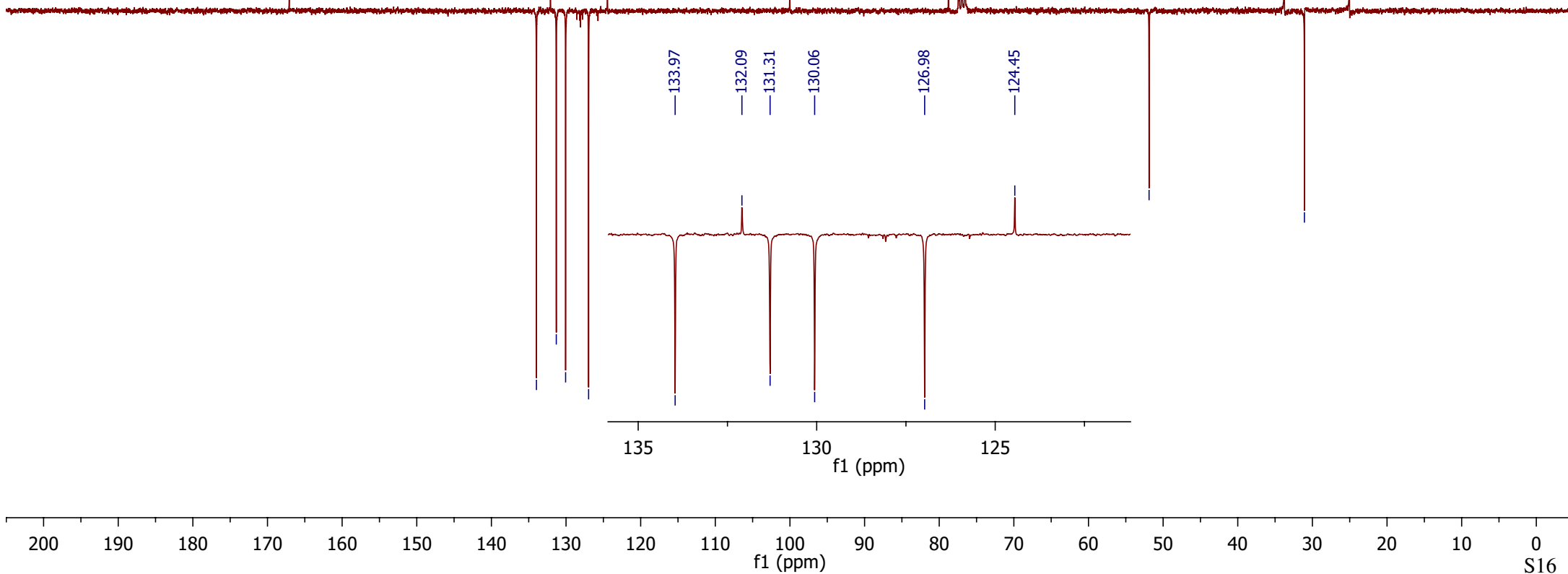
—78.77

—51.88

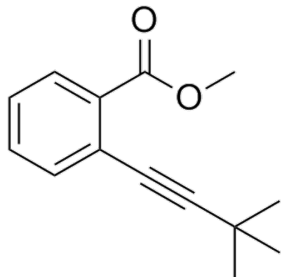
—33.78

—31.07

—25.05



¹H-NMR, 300 MHz, CDCl₃



1m

7.88
7.87
7.85
7.85
7.50
7.49
7.47
7.47
7.43
7.43
7.41
7.40
7.38
7.38
7.33
7.30
7.29
7.27
7.27

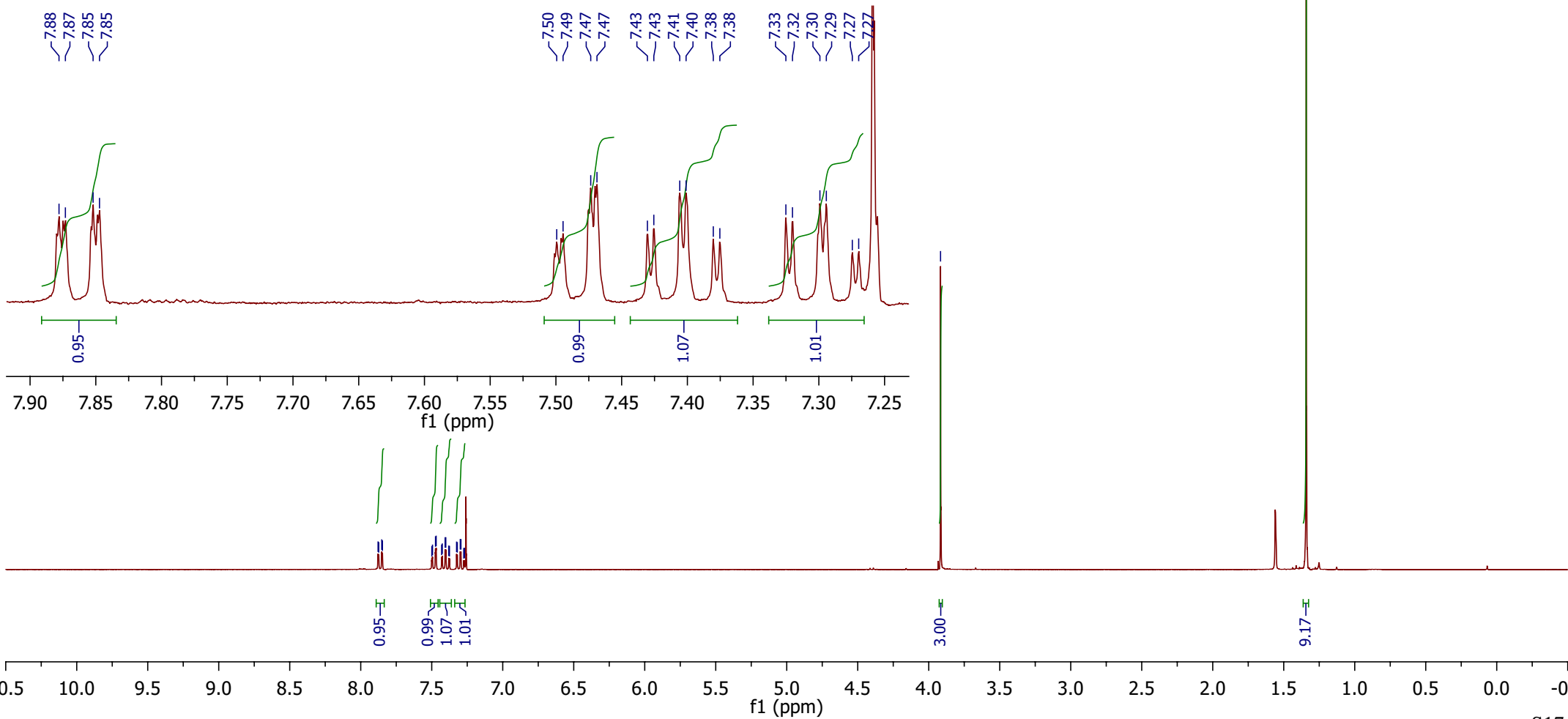
3.92

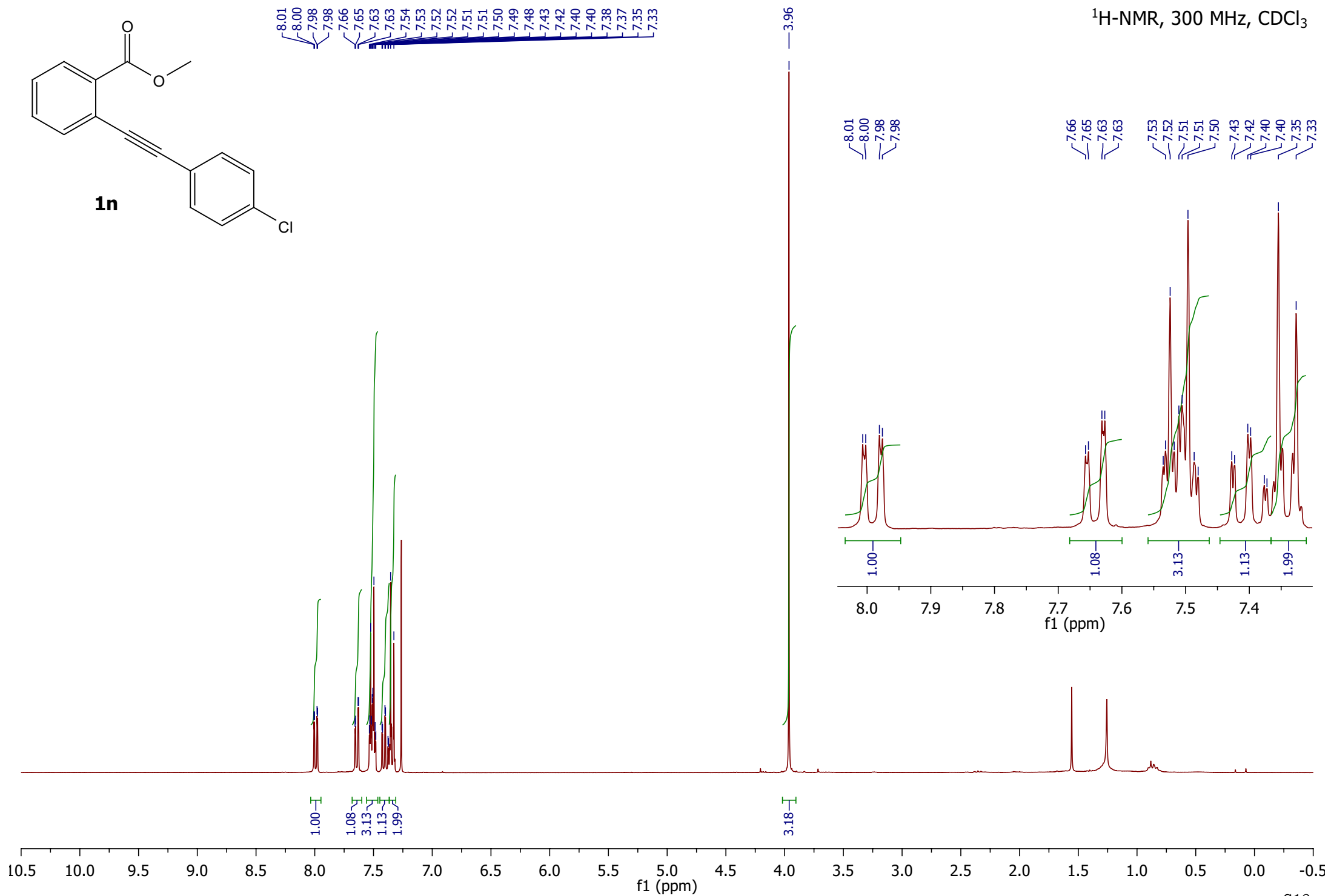
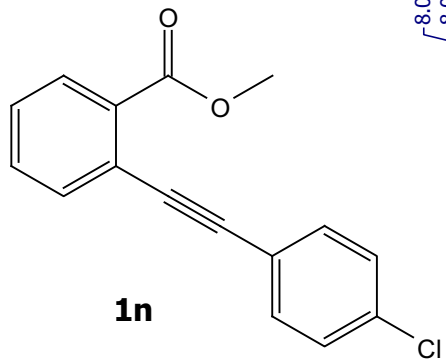
1.34

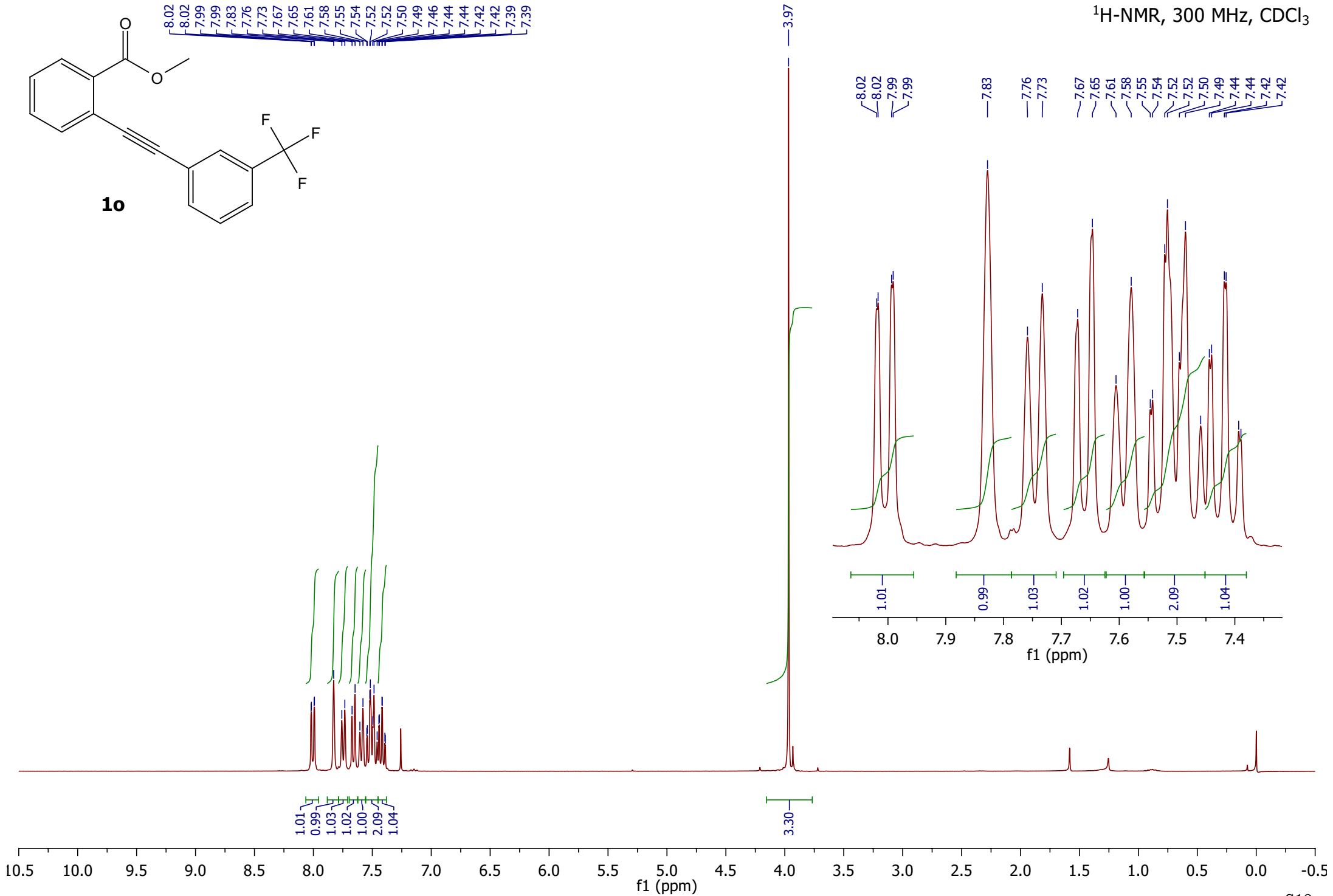
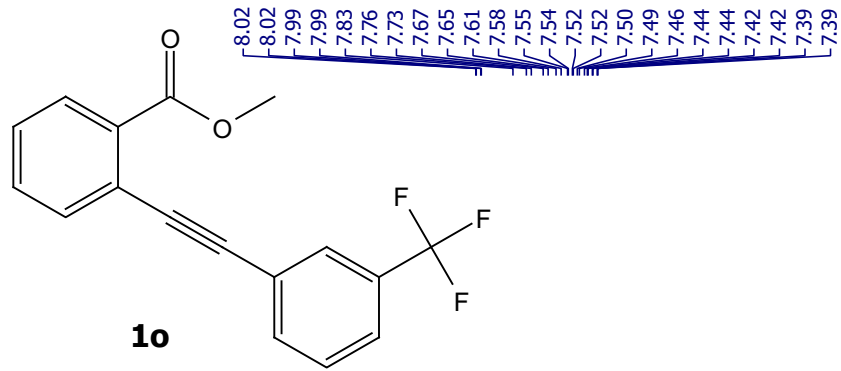
7.88
7.87
7.85
7.85

7.50
7.49
7.47
7.47
7.43
7.43
7.41
7.40
7.38
7.38

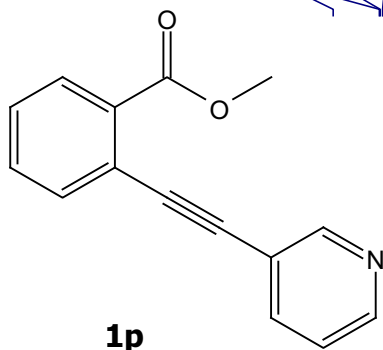
7.33
7.32
7.30
7.29
7.27
7.27



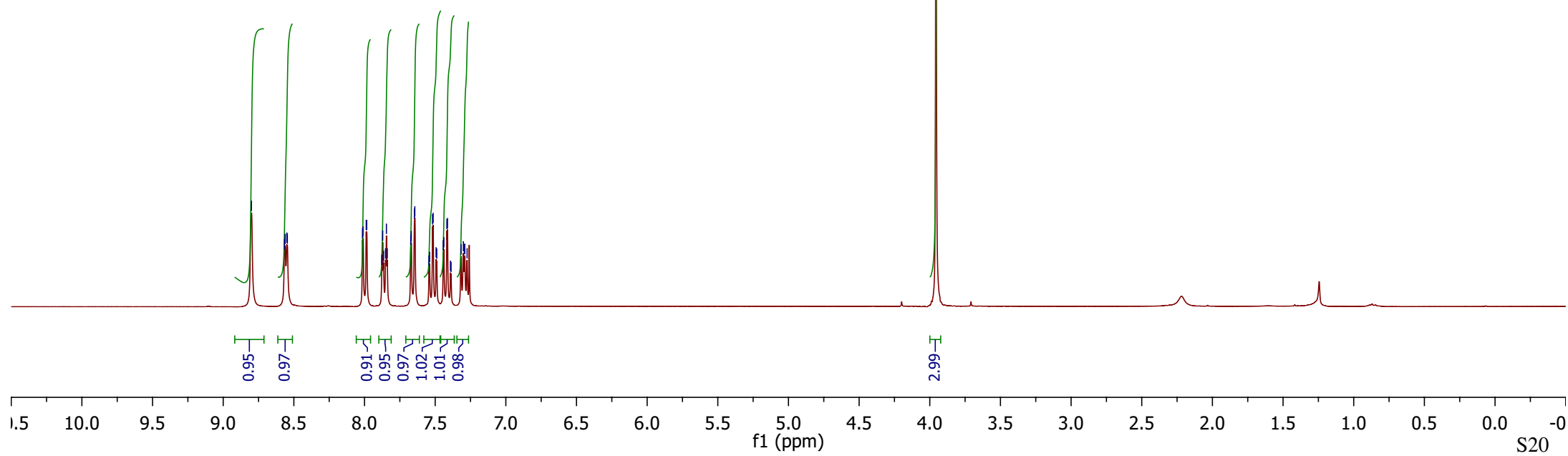
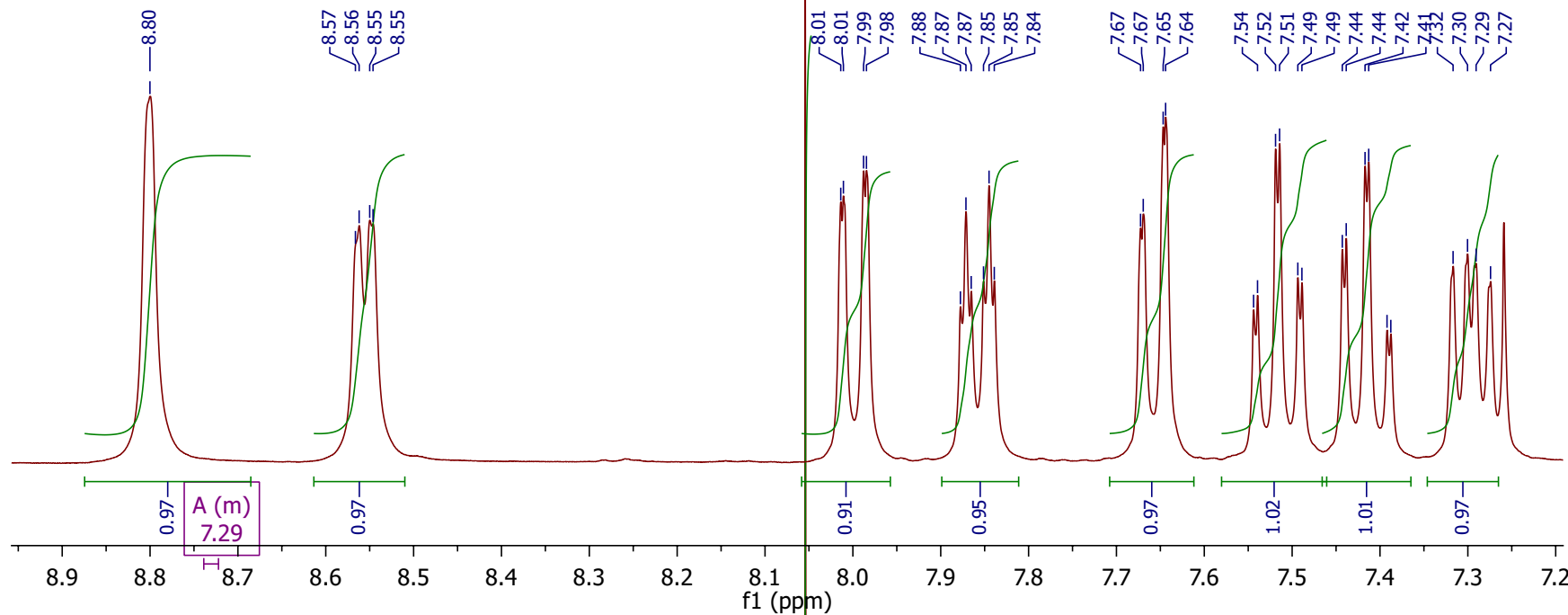




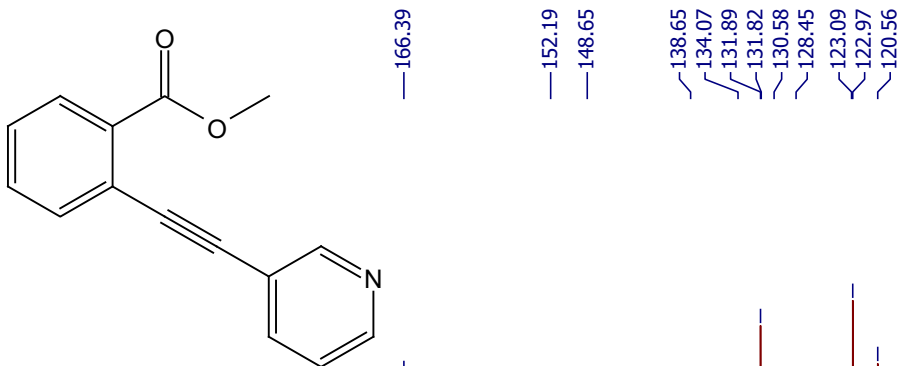
¹H-NMR, 300 MHz, CDCl₃



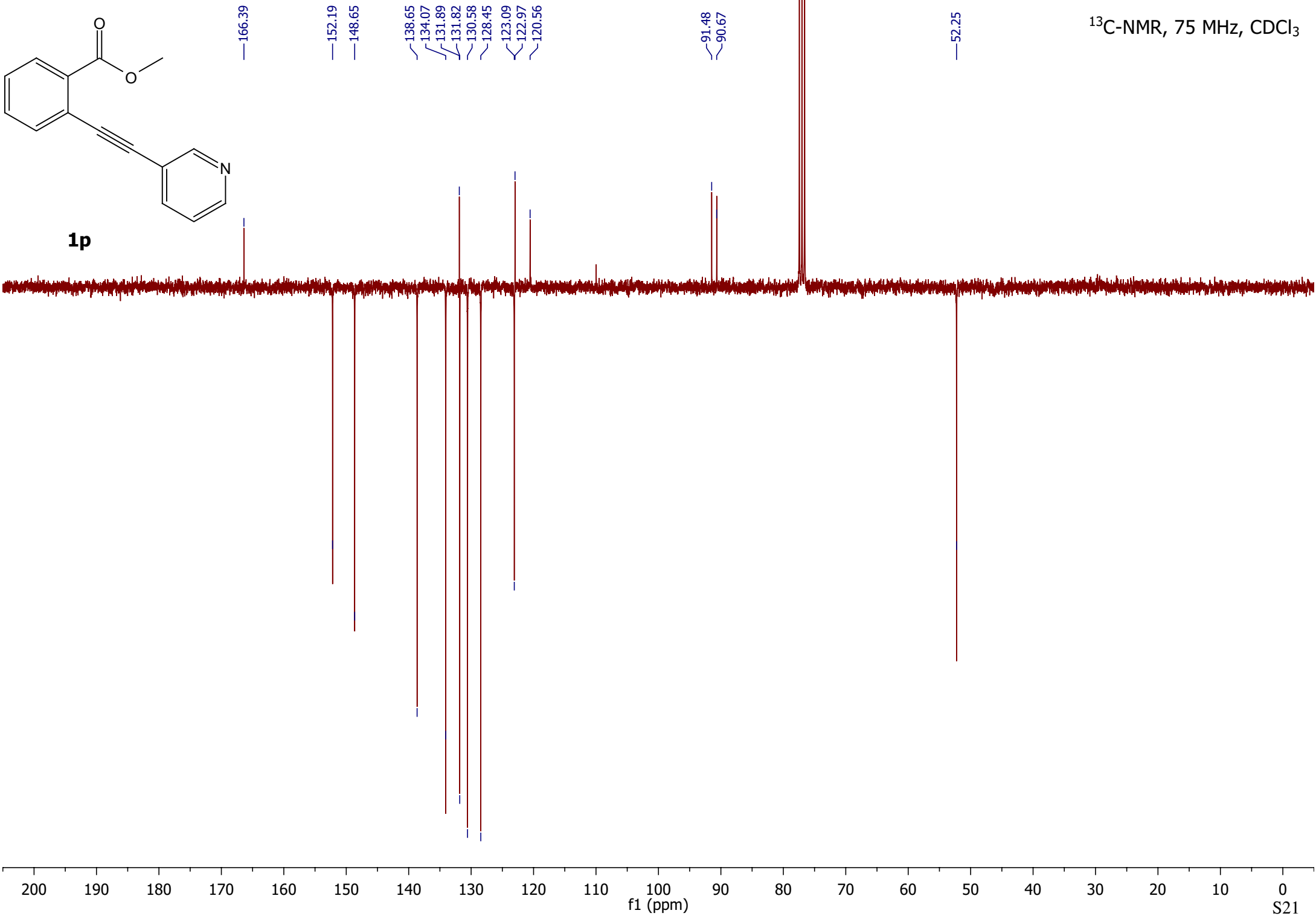
8.80
8.57
8.56
8.55
8.55
8.01
8.01
7.99
7.98
7.88
7.87
7.87
7.85
7.85
7.84
7.67
7.67
7.65
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7.39
7.32
7.30
7.29
7.29
7.27

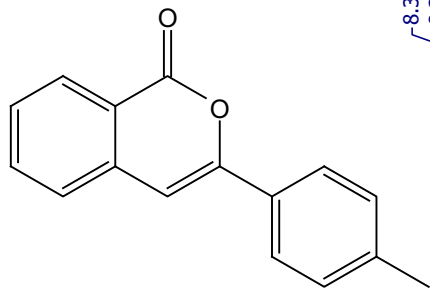


¹³C-NMR, 75 MHz, CDCl₃



1p

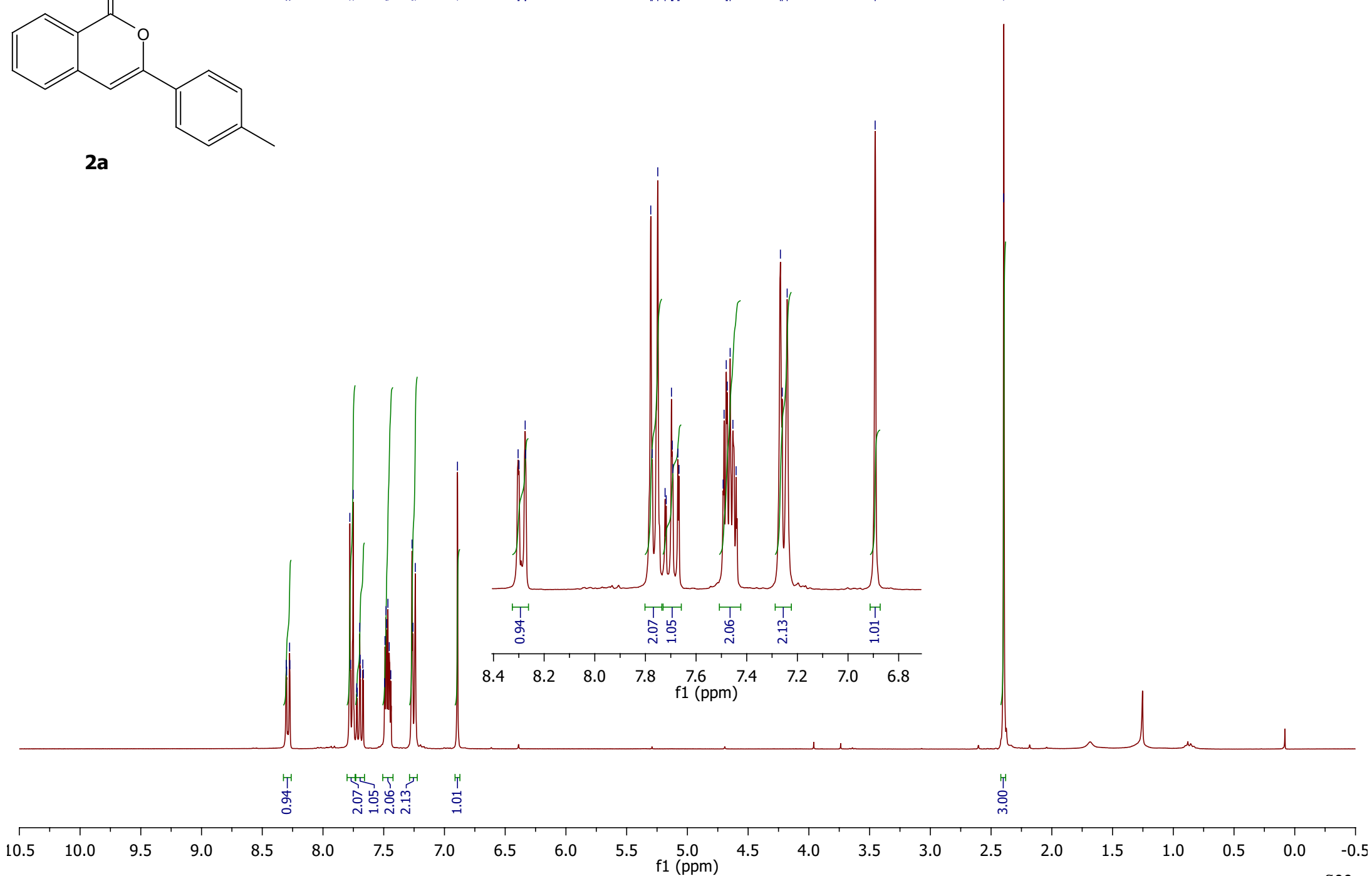


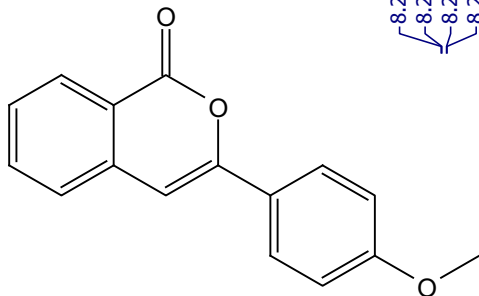


2a

¹H-NMR, 300 MHz, CDCl₃

8.30, 8.30, 8.27, 8.27, 7.78, 7.75, 7.48, 7.48, 7.47, 7.27, 7.26, 7.69, 7.67, 7.67, 7.48, 7.48, 7.47, 7.26, 7.24, 6.89, 2.40

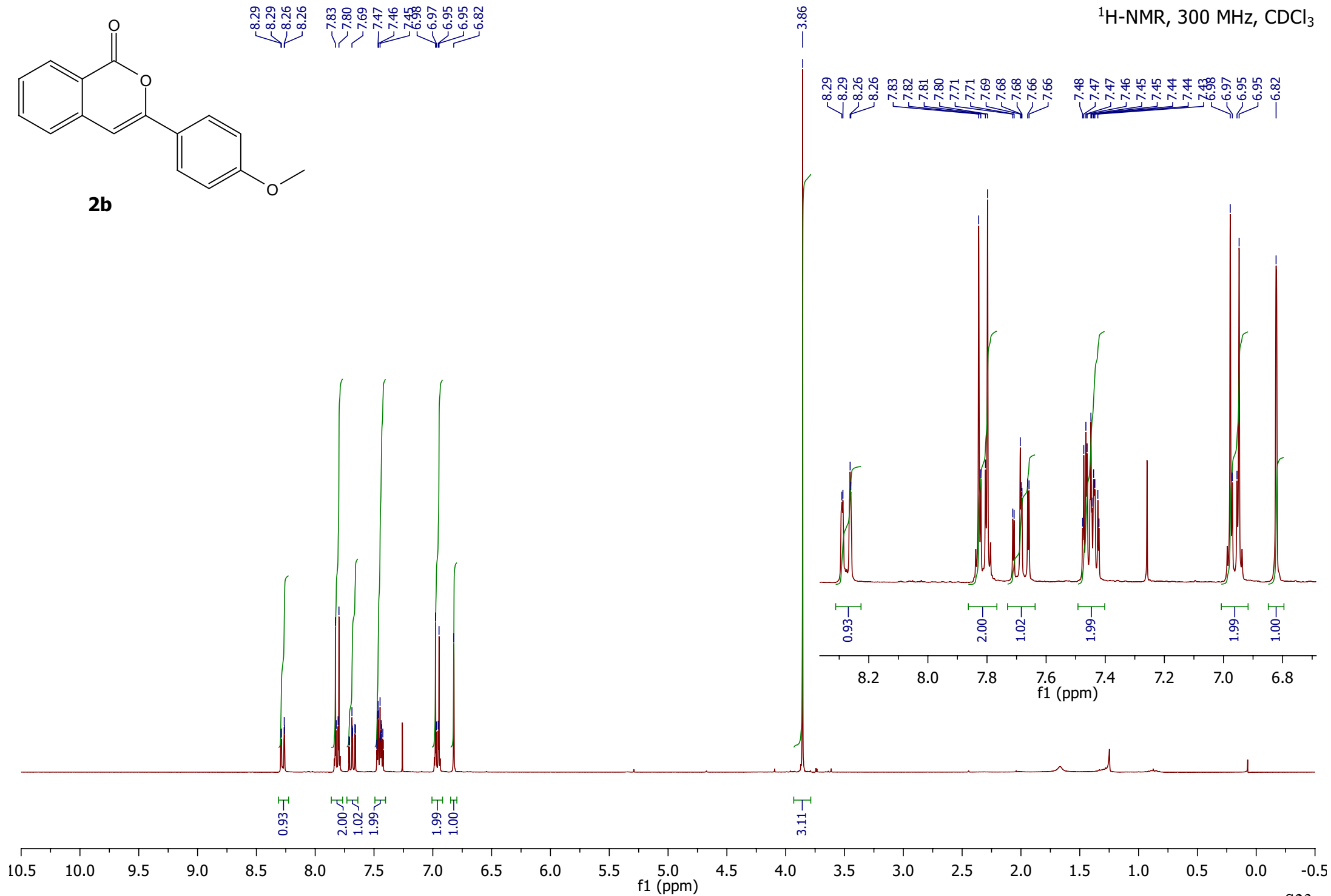


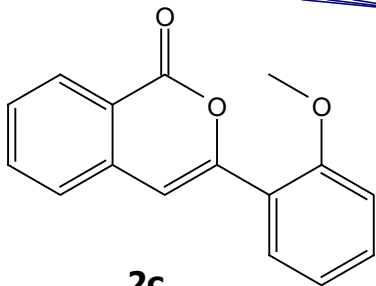


2b

8.29
8.29
8.26
8.26
7.83
7.80
7.69
7.47
7.46
7.45
6.97
6.95
6.95
6.82

¹H-NMR, 300 MHz, CDCl₃





2c

8.32
8.32
8.32
8.30
8.29
8.29
7.99
7.98
7.96
7.96
7.73
7.71
7.70
7.70
7.68
7.68
7.51
7.51
7.48
7.46
7.46
7.39
7.39
7.38
7.38
7.36
7.36
7.10
7.10
7.10
7.08
7.07
7.05
7.05
7.03
7.03
7.00
7.00
3.99

¹H-NMR, 300 MHz, CDCl₃

8.32
8.32
8.30
8.29
8.29
7.99
7.98
7.96
7.96
7.70
7.70
7.68
7.68
7.51
7.51
7.48
7.39
7.39
7.38
7.38
7.36
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7.08
7.07
7.05
7.03
7.03
7.00
7.00

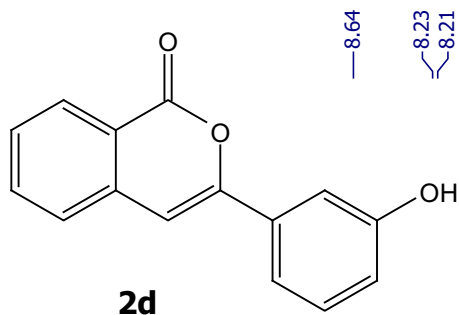
10.5
10.0
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
-0.5

f1 (ppm)

f1 (ppm)

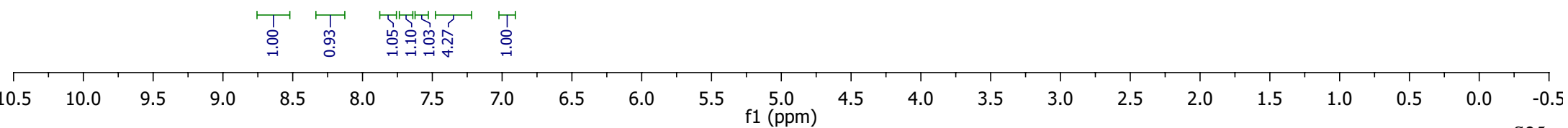
1.00
1.04
1.12
4.21
2.08
3.30

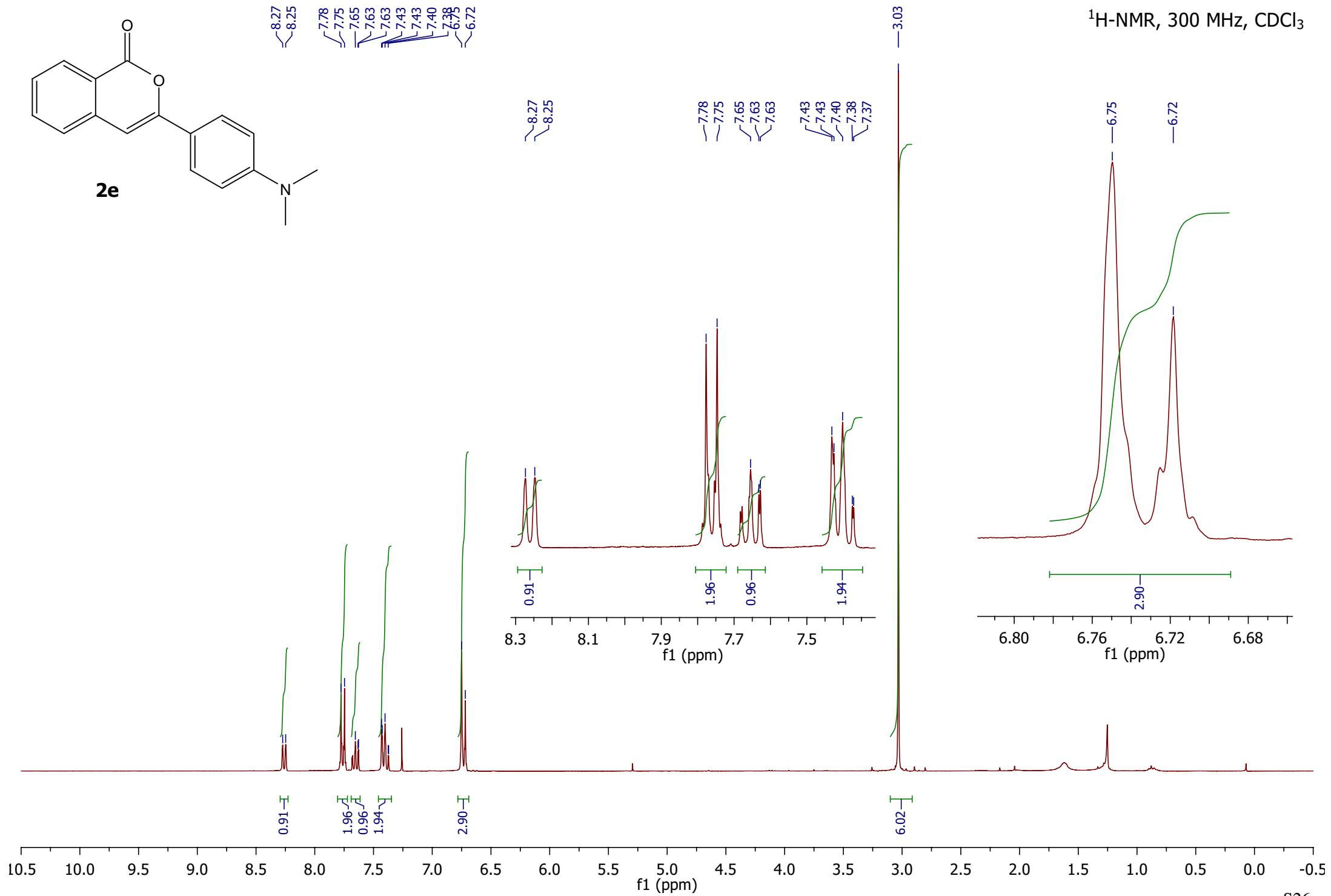
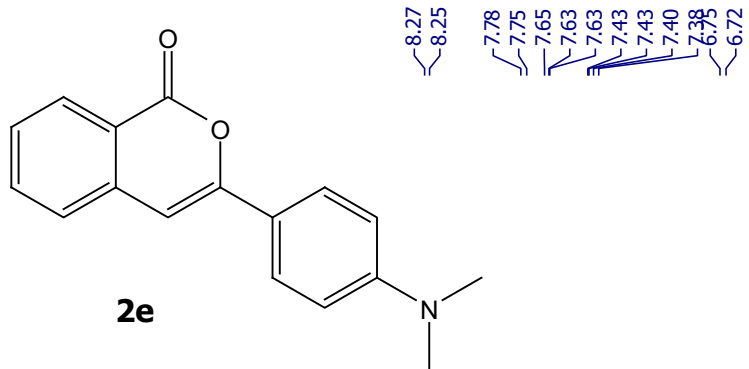
1.00
1.04
1.12
4.21
2.08

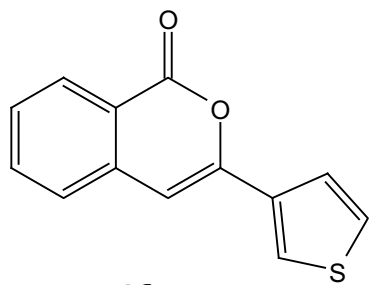


8.64
8.23
8.21
7.83
7.69
7.58
7.42
7.41
7.34
7.28
6.98
6.97
6.97
6.95
6.94

8.64
8.23
8.21
7.83
7.80
7.80
7.69
7.67
7.61
7.61
7.58
7.44
7.44
7.42
7.41
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7.34
7.32
7.28
6.98
6.97
6.97
6.97
6.95
6.95







2f

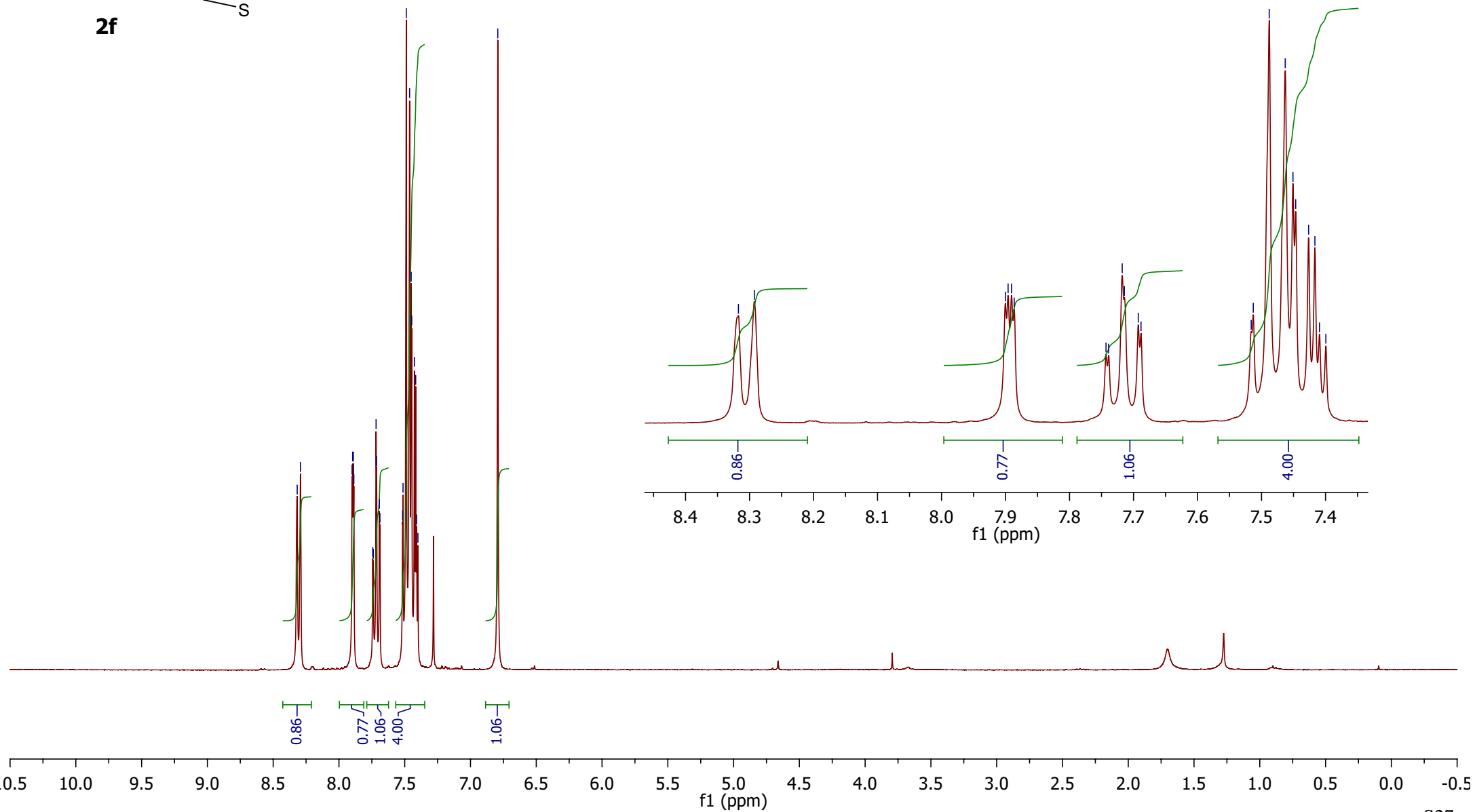
8.32
8.29
7.90
7.89
7.72
7.49
7.46
7.45
7.45
7.43
7.42

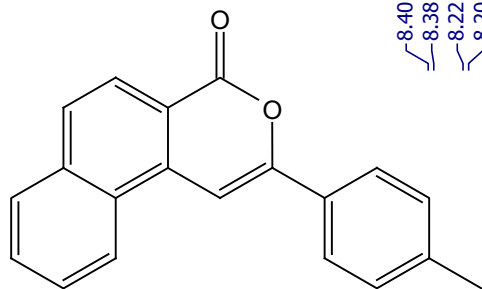
8.32
8.29

7.90
7.89
7.89

7.74
7.74
7.72
7.71
7.69
7.69

7.52
7.51
7.49
7.46
7.45
7.45
7.43
7.42
7.41
7.40





2g

¹H-NMR, 300 MHz, CDCl₃

8.40
8.38
8.22
8.20

7.88
7.85
7.70
7.62
7.31
7.28

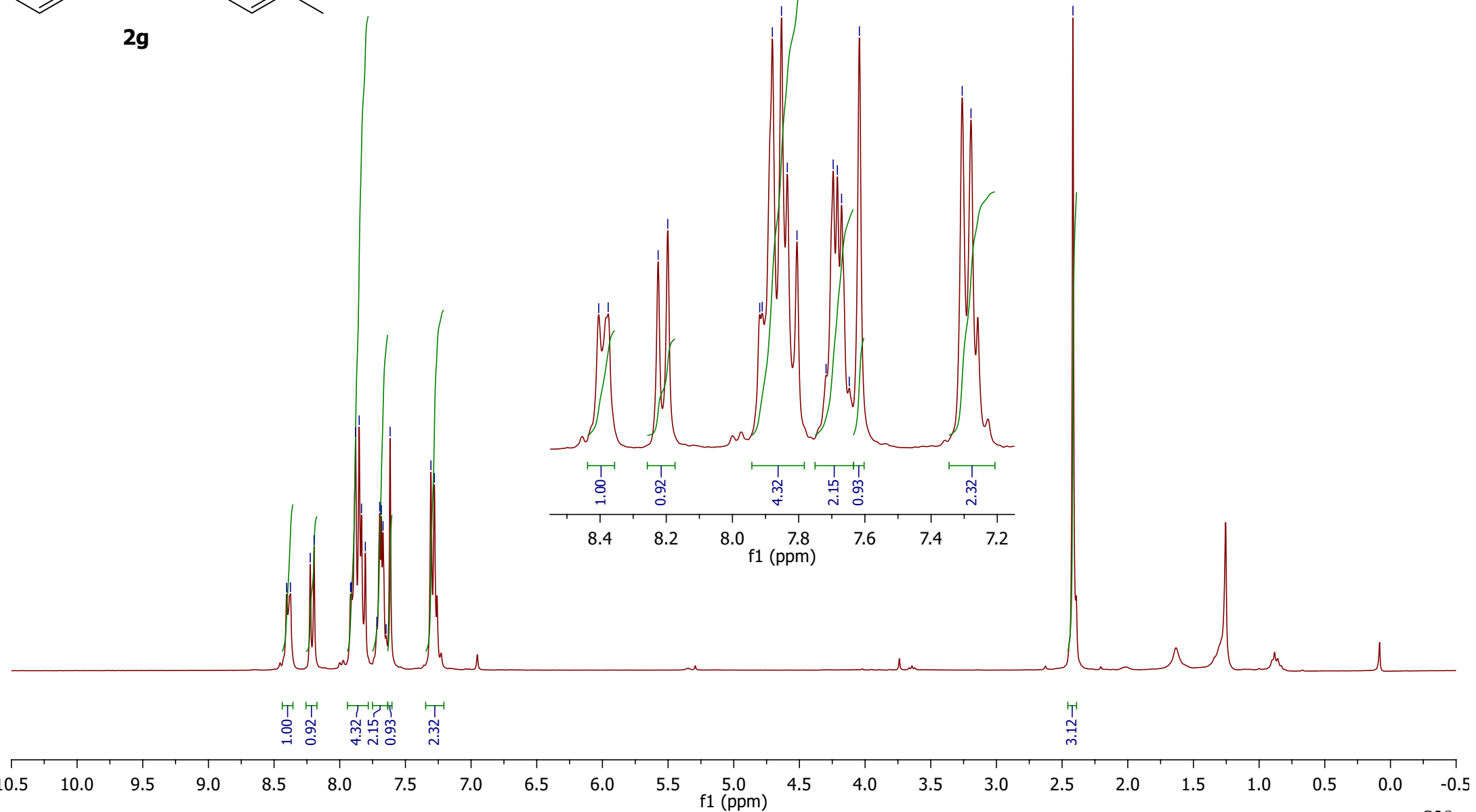
8.40
8.38

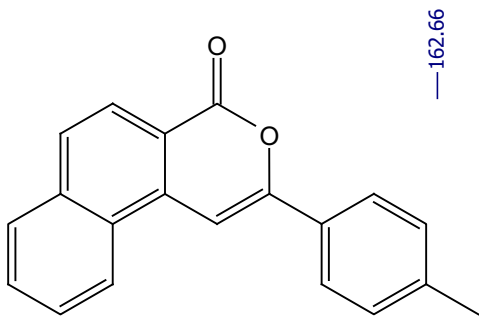
8.22
8.20

7.92
7.91
7.88
7.85
7.83
7.81
7.72
7.70
7.68
7.67
7.65
7.62

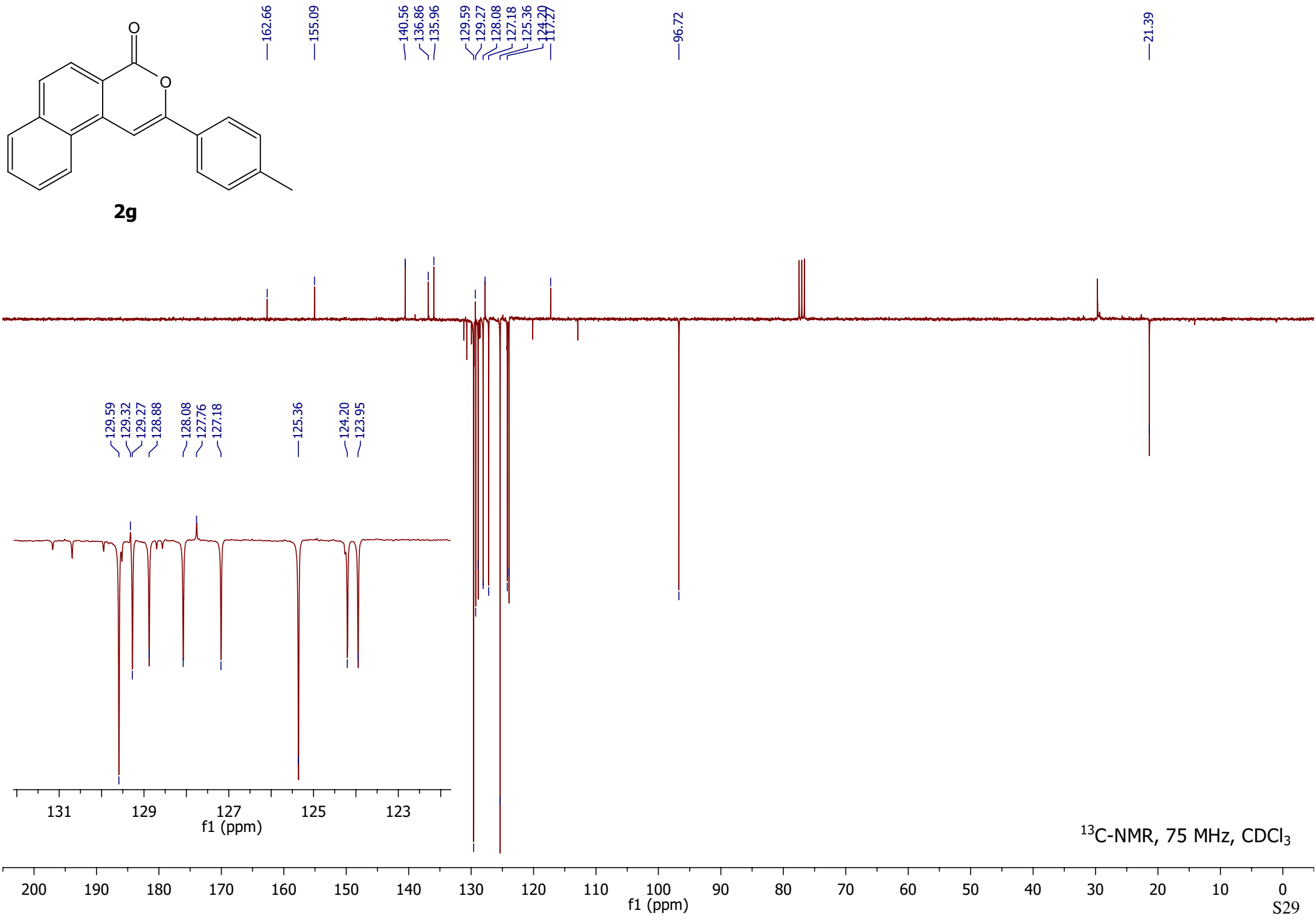
7.31
7.28

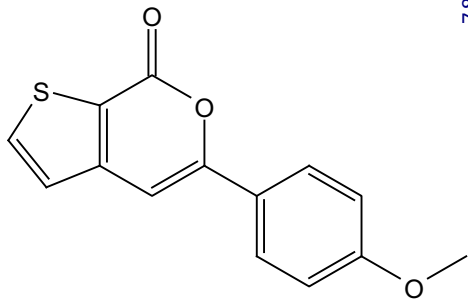
2.42





2g

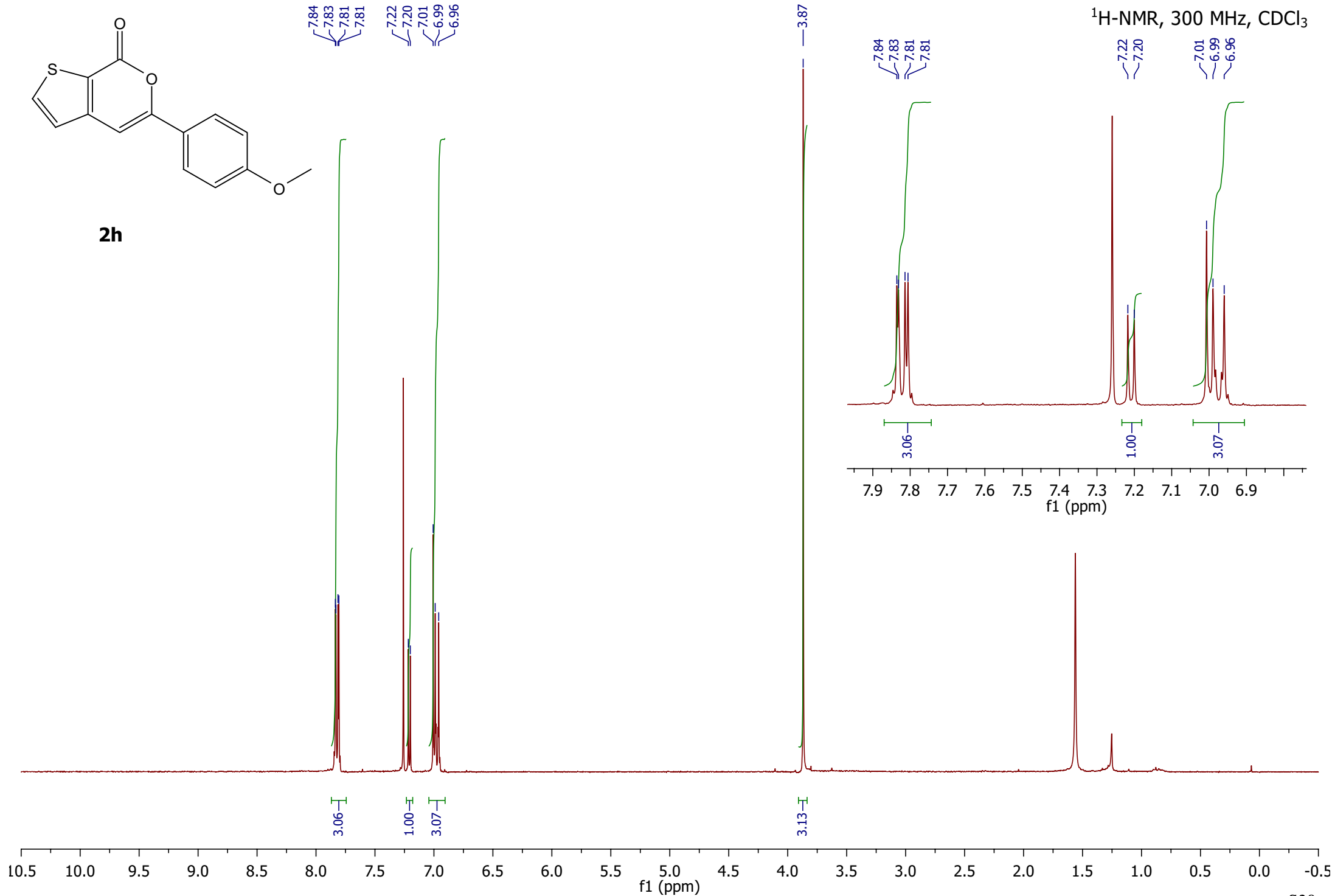
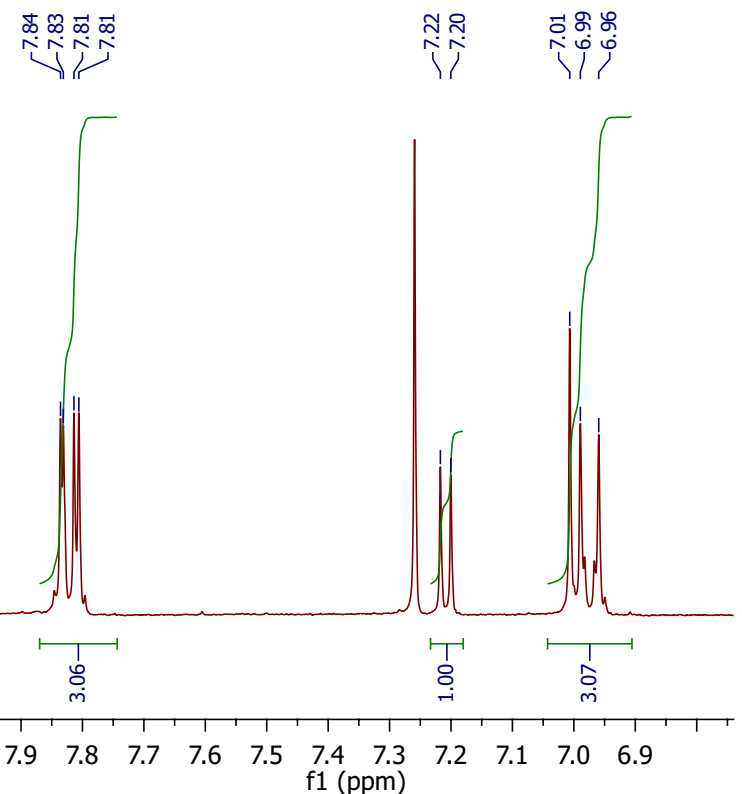


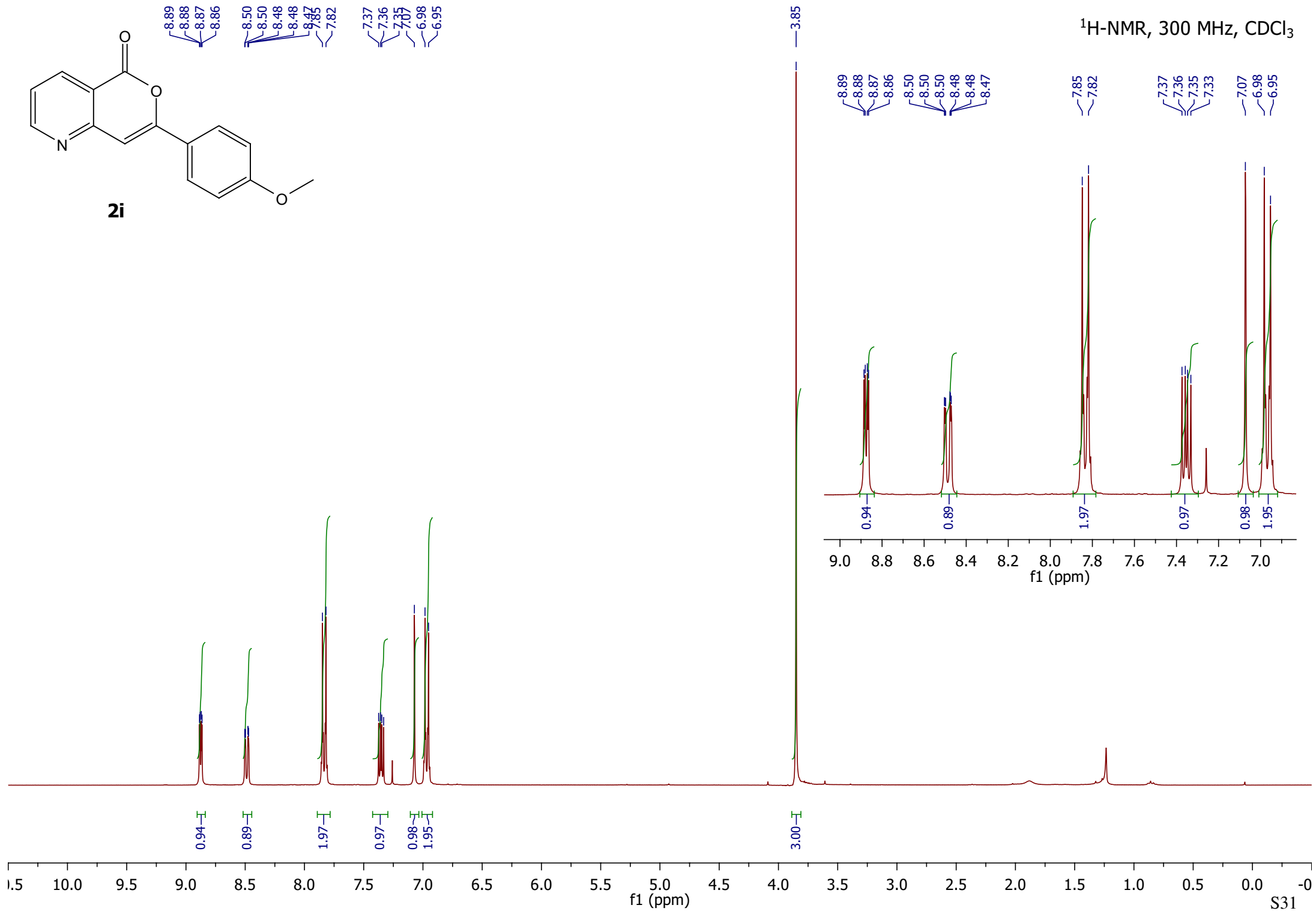
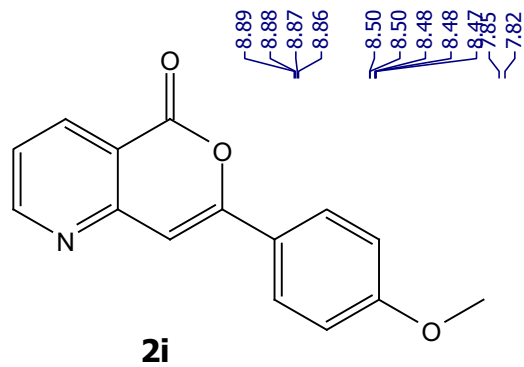


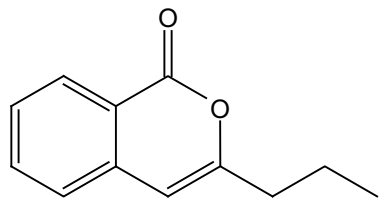
2h

7.84
7.83
7.81
7.81
7.22
7.20
7.01
6.99
6.96

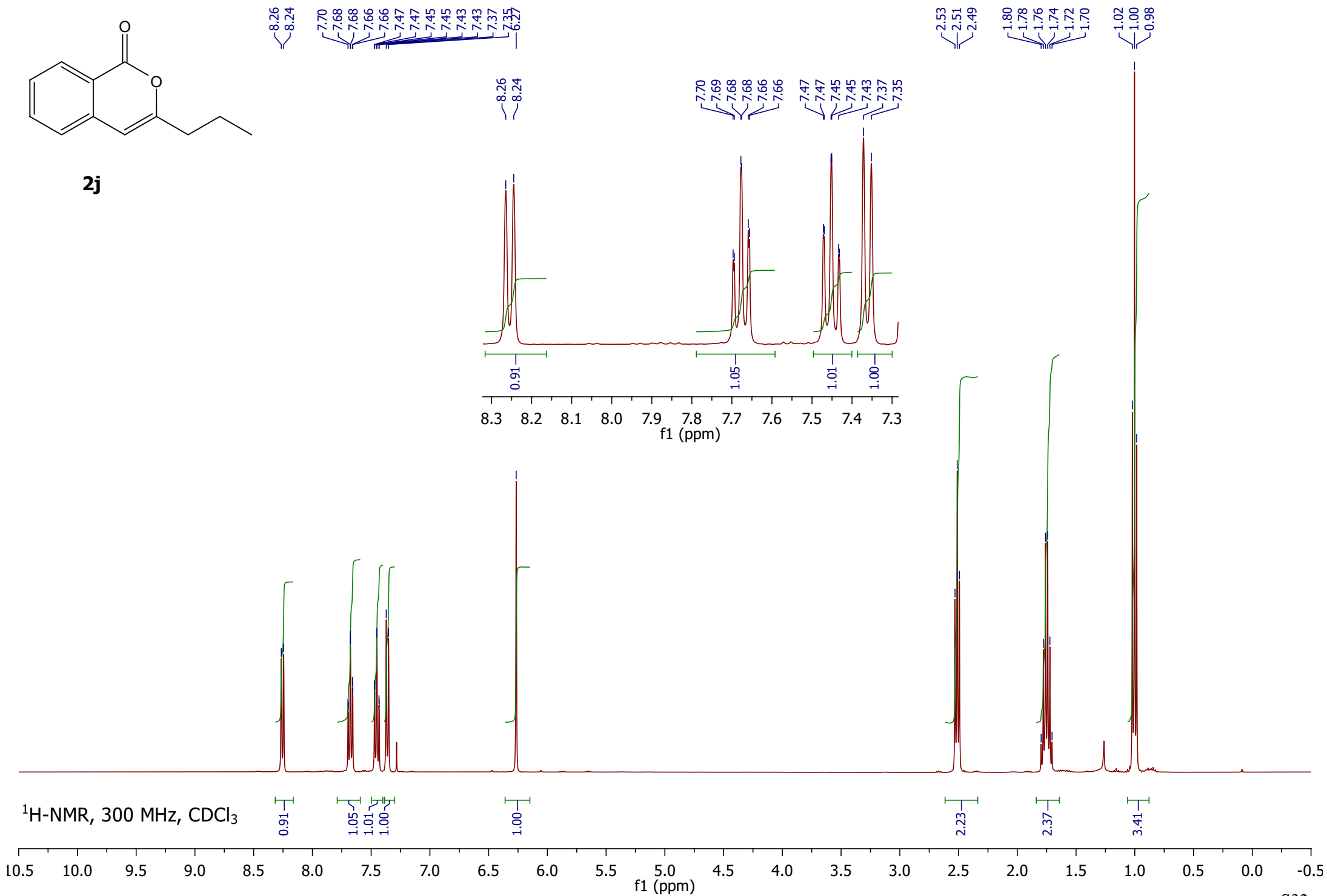
¹H-NMR, 300 MHz, CDCl₃

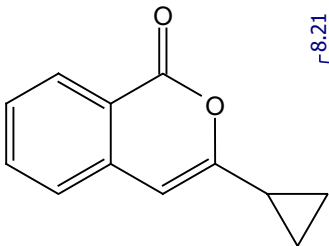




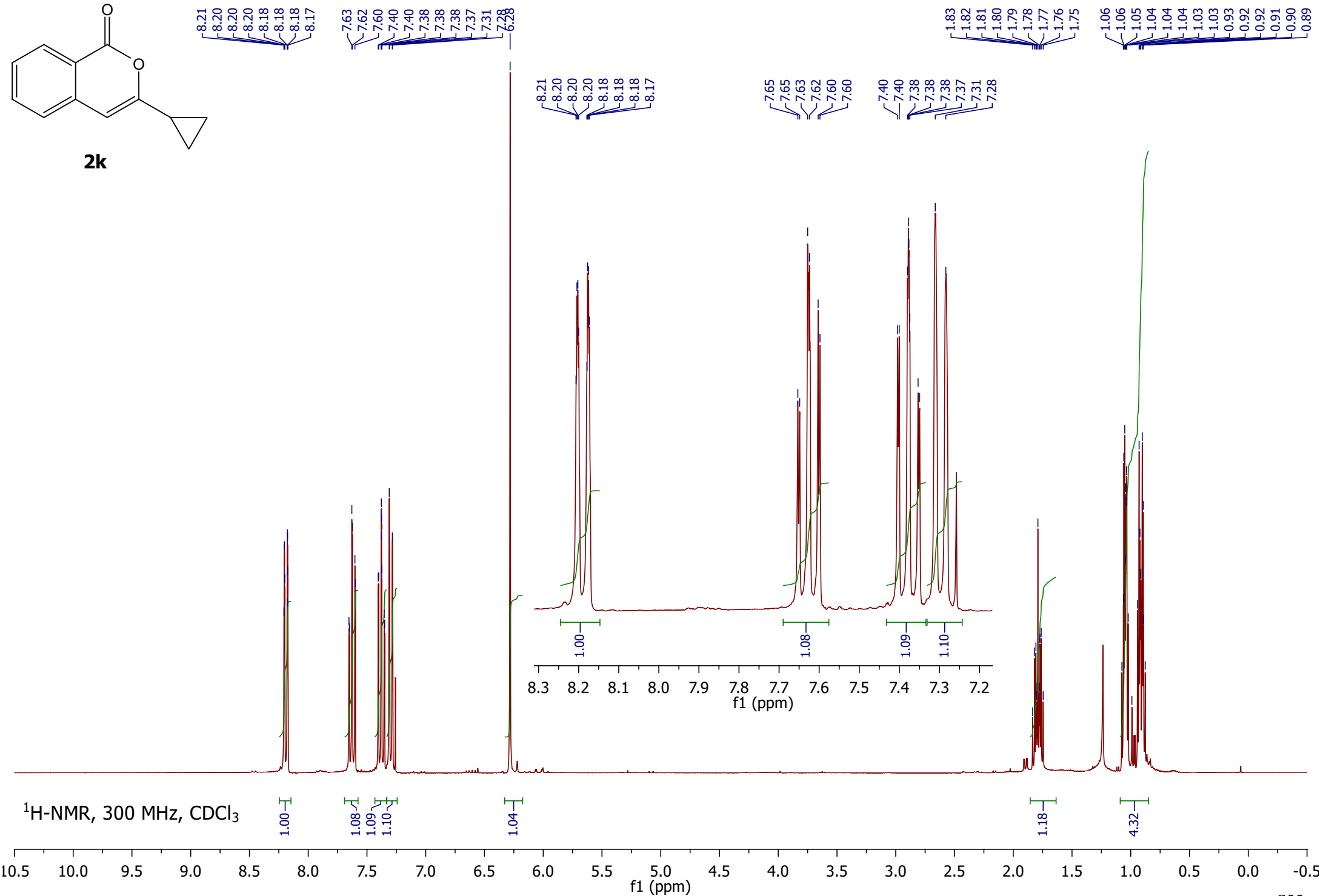


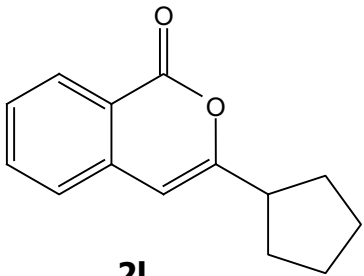
2j





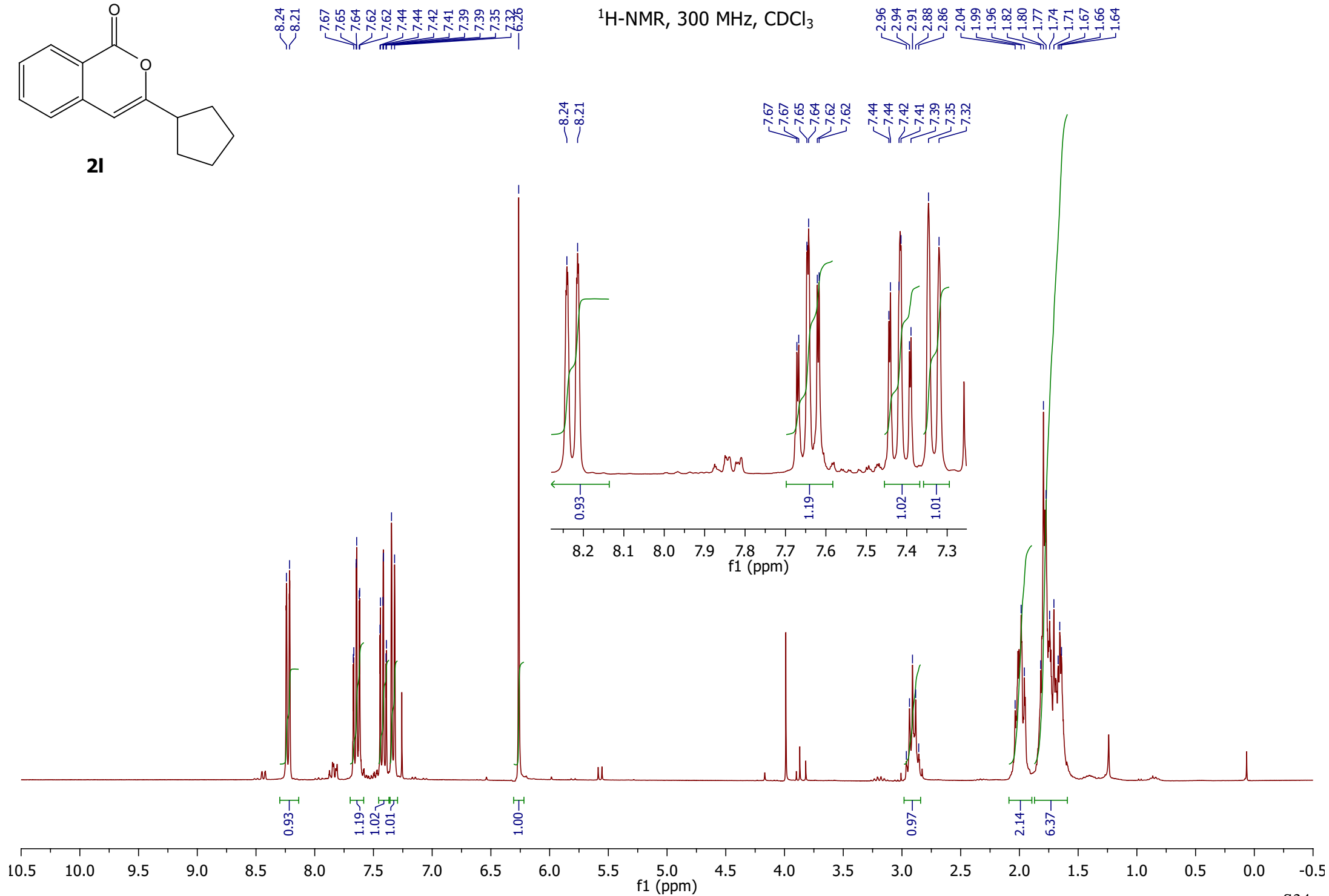
2k

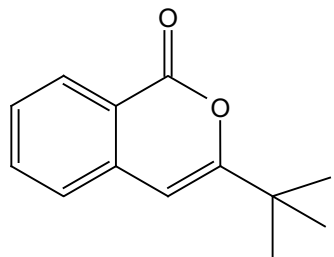




21

¹H-NMR, 300 MHz, CDCl₃





2m

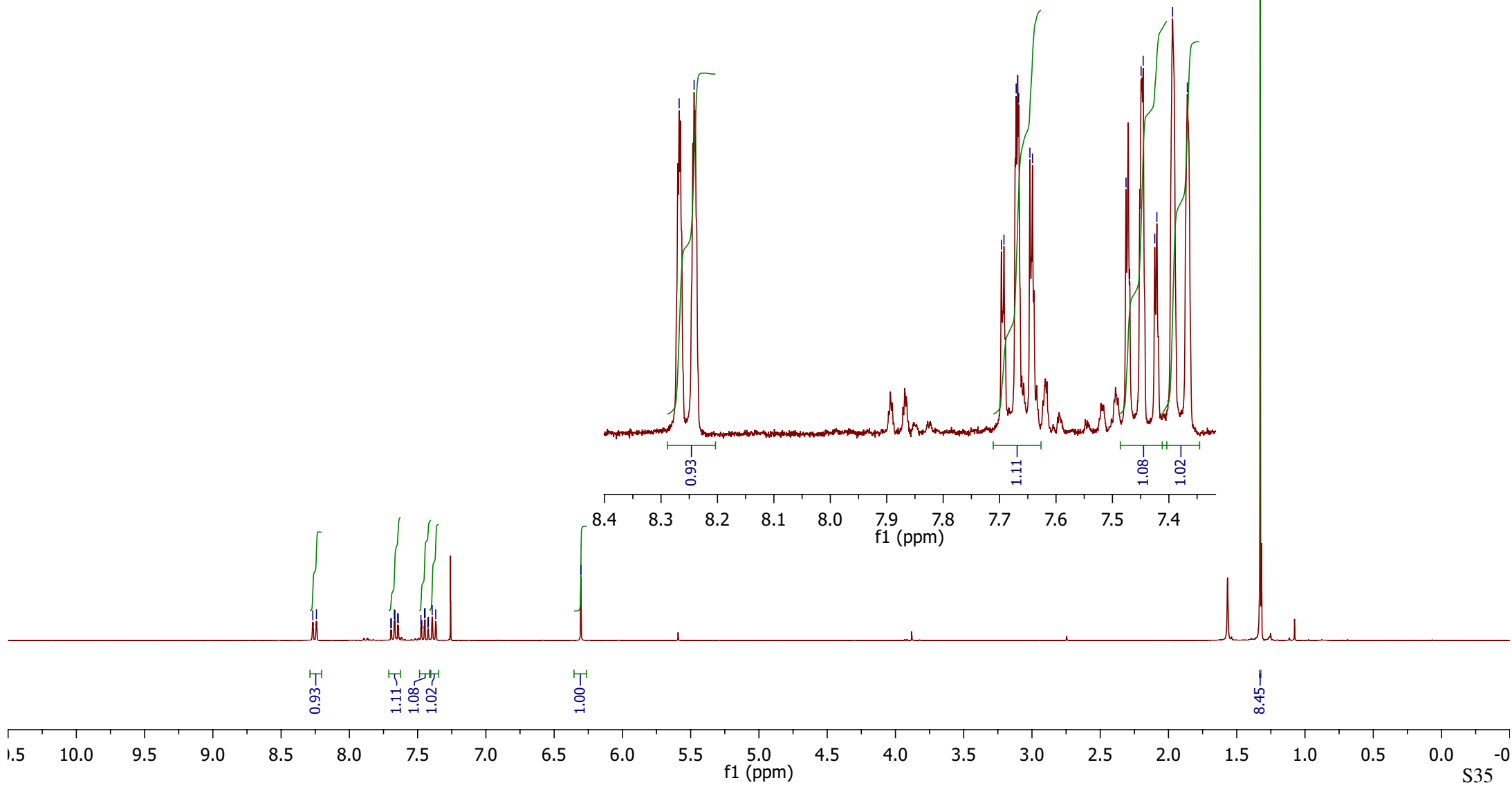
¹H-NMR, 300 MHz, CDCl₃

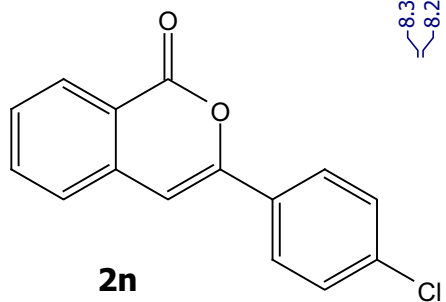
8.27
8.24
7.70
7.69
7.67
7.67
7.65
7.64
7.48
7.45
7.45
7.43
7.42
7.39
6.36

8.27
8.24

7.70
7.69
7.67
7.67
7.65
7.64
7.48
7.47
7.45
7.45
7.43
7.42
7.39
7.37

1.33





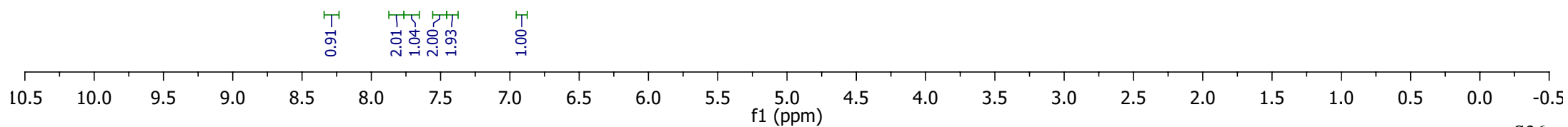
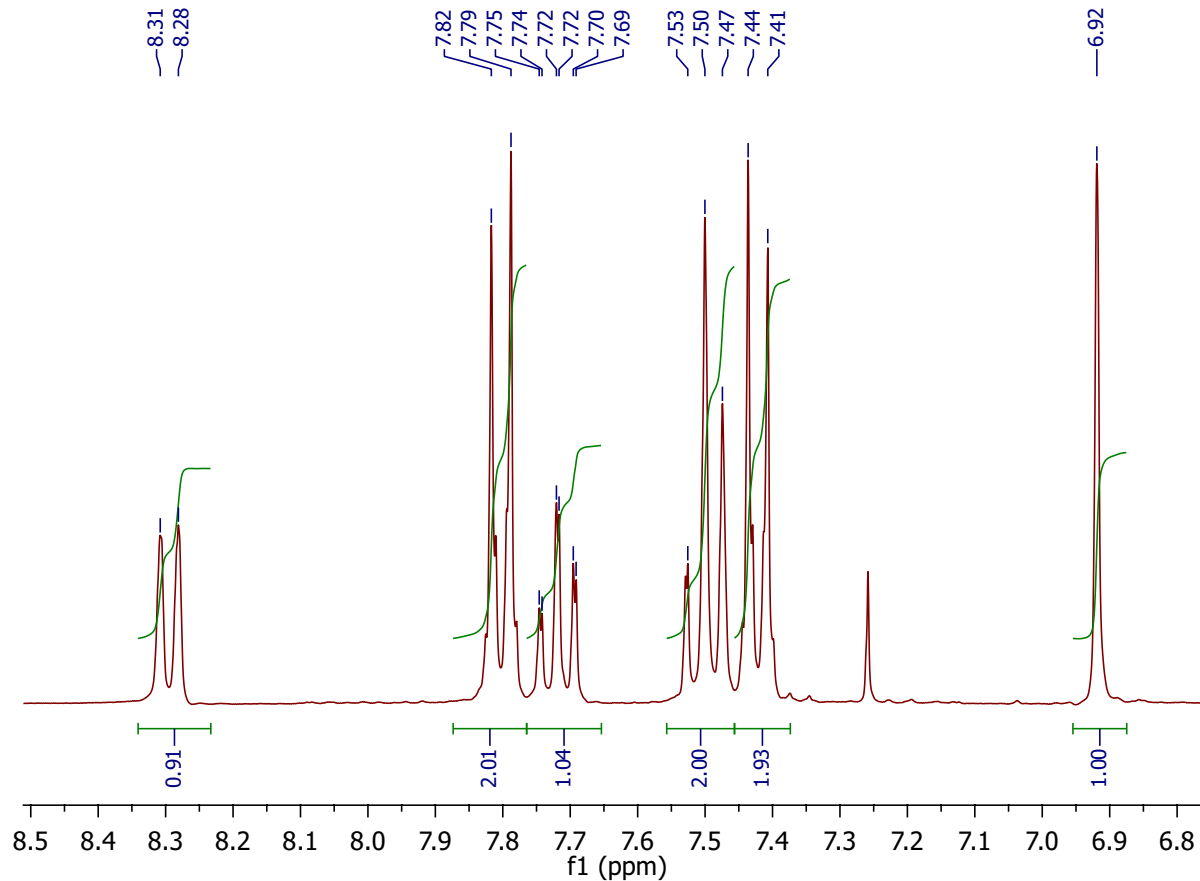
8.31
8.28
7.82
7.79
7.79
7.72
7.50
7.47
7.44
6.92

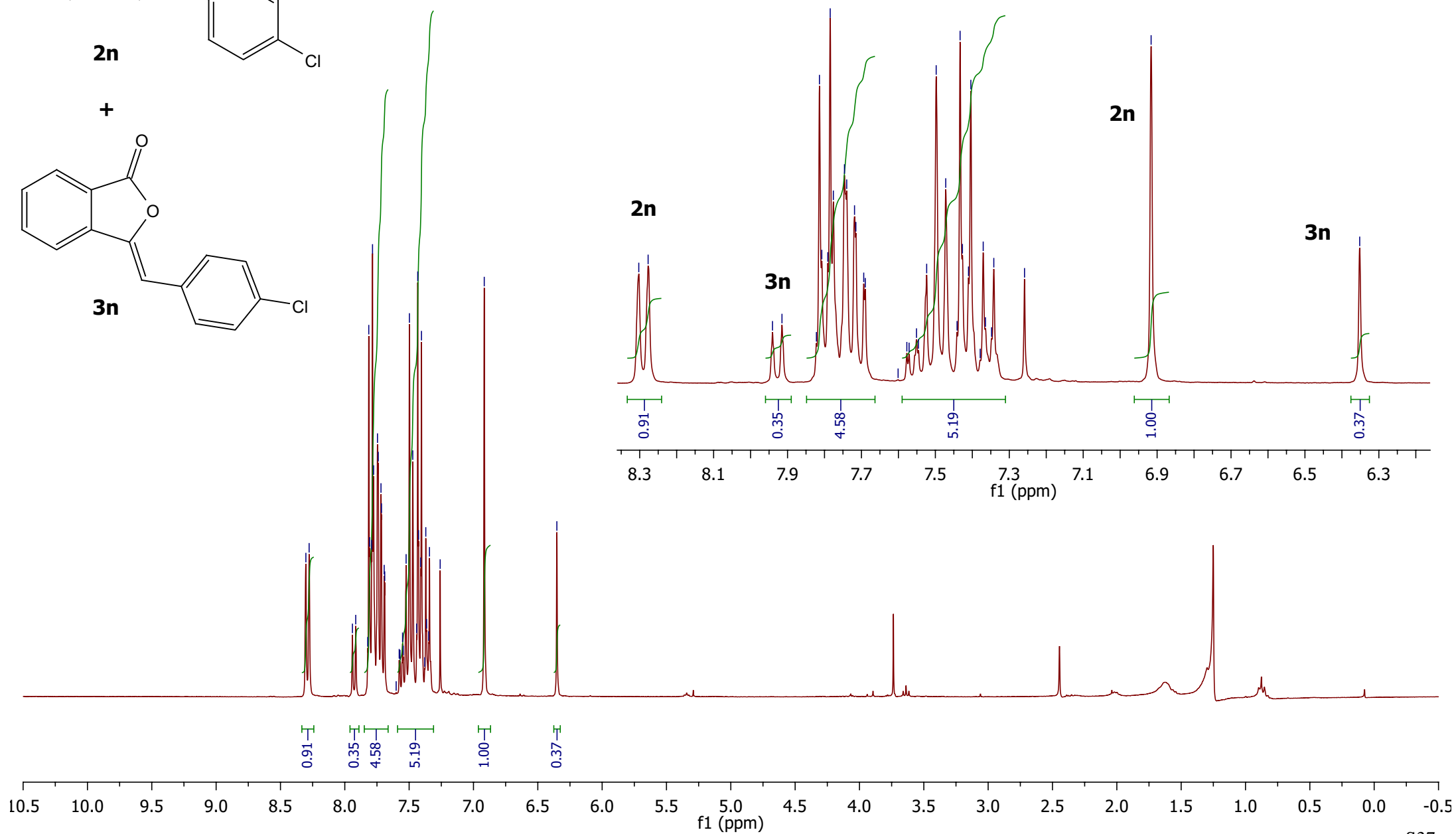
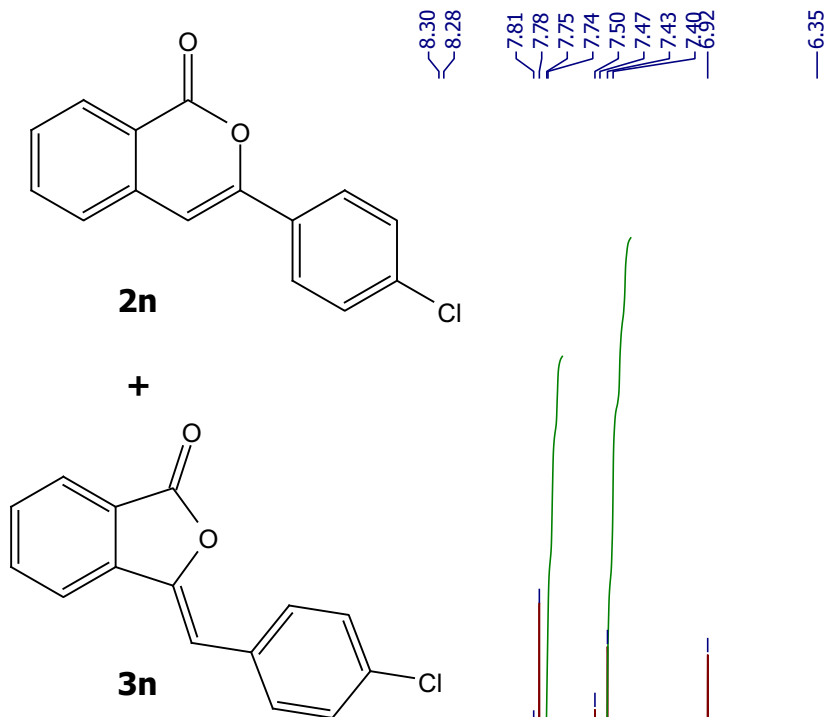
8.31
8.28

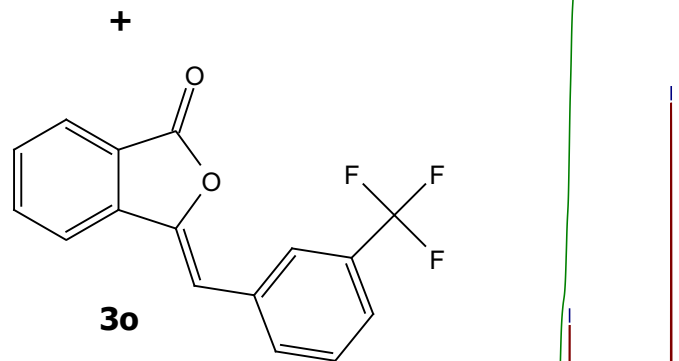
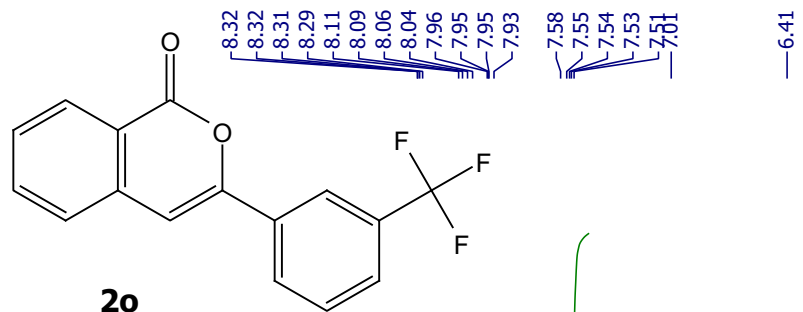
7.82
7.79
7.75
7.74
7.72
7.72
7.70
7.69

7.53
7.50
7.47
7.44
7.41

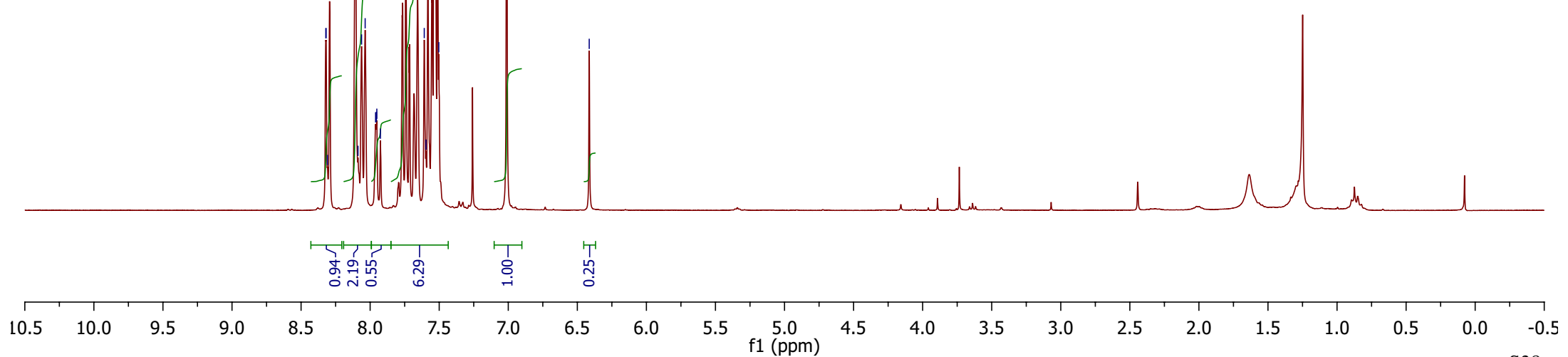
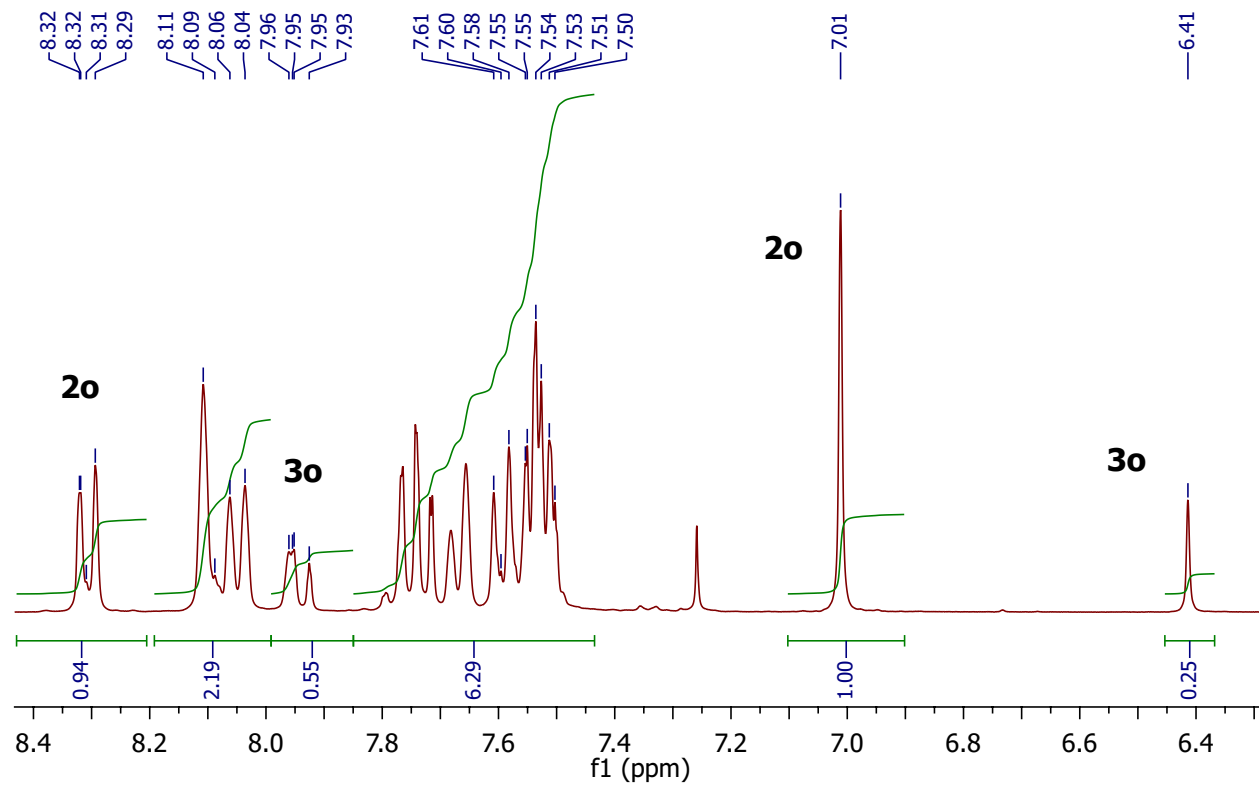
6.92

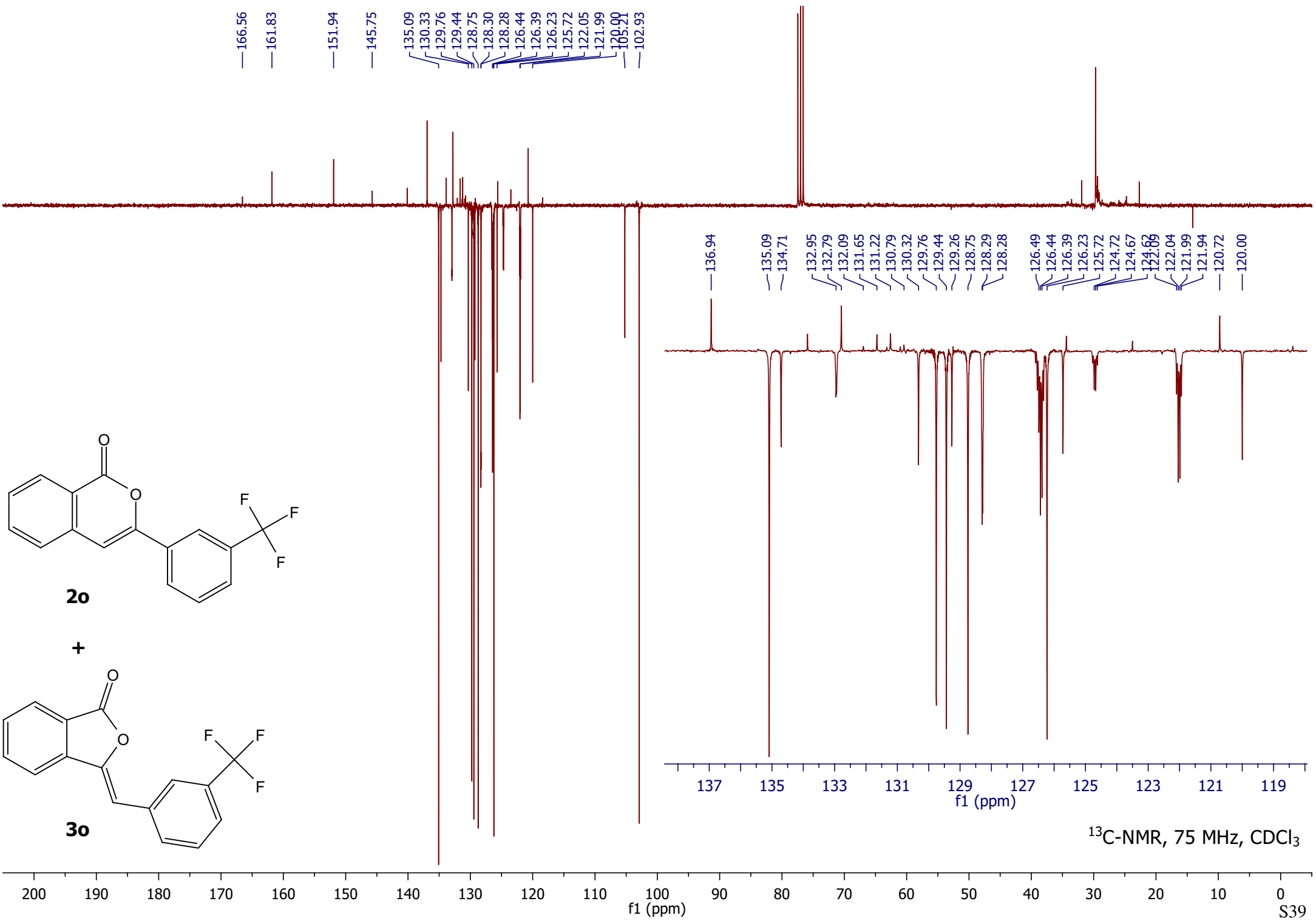


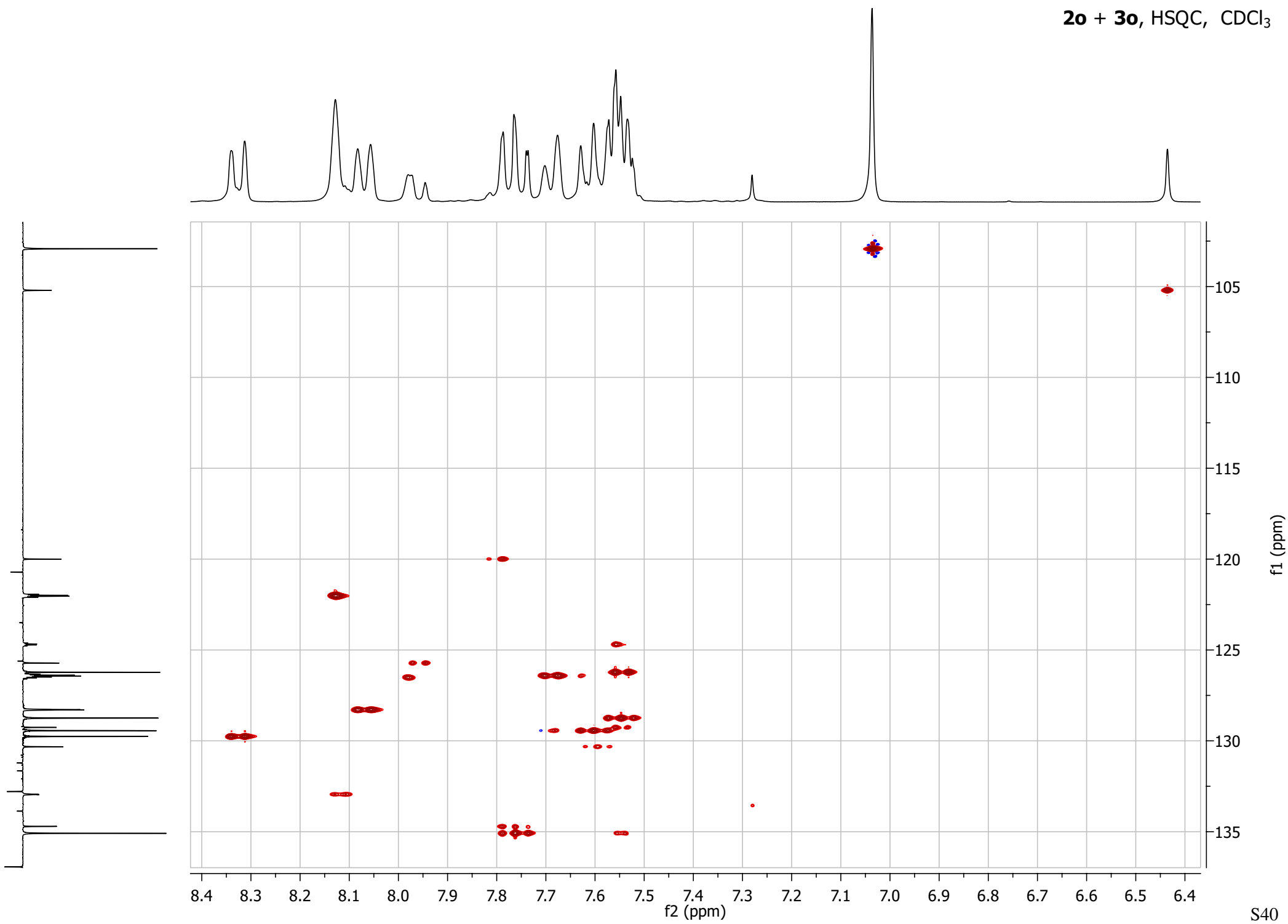


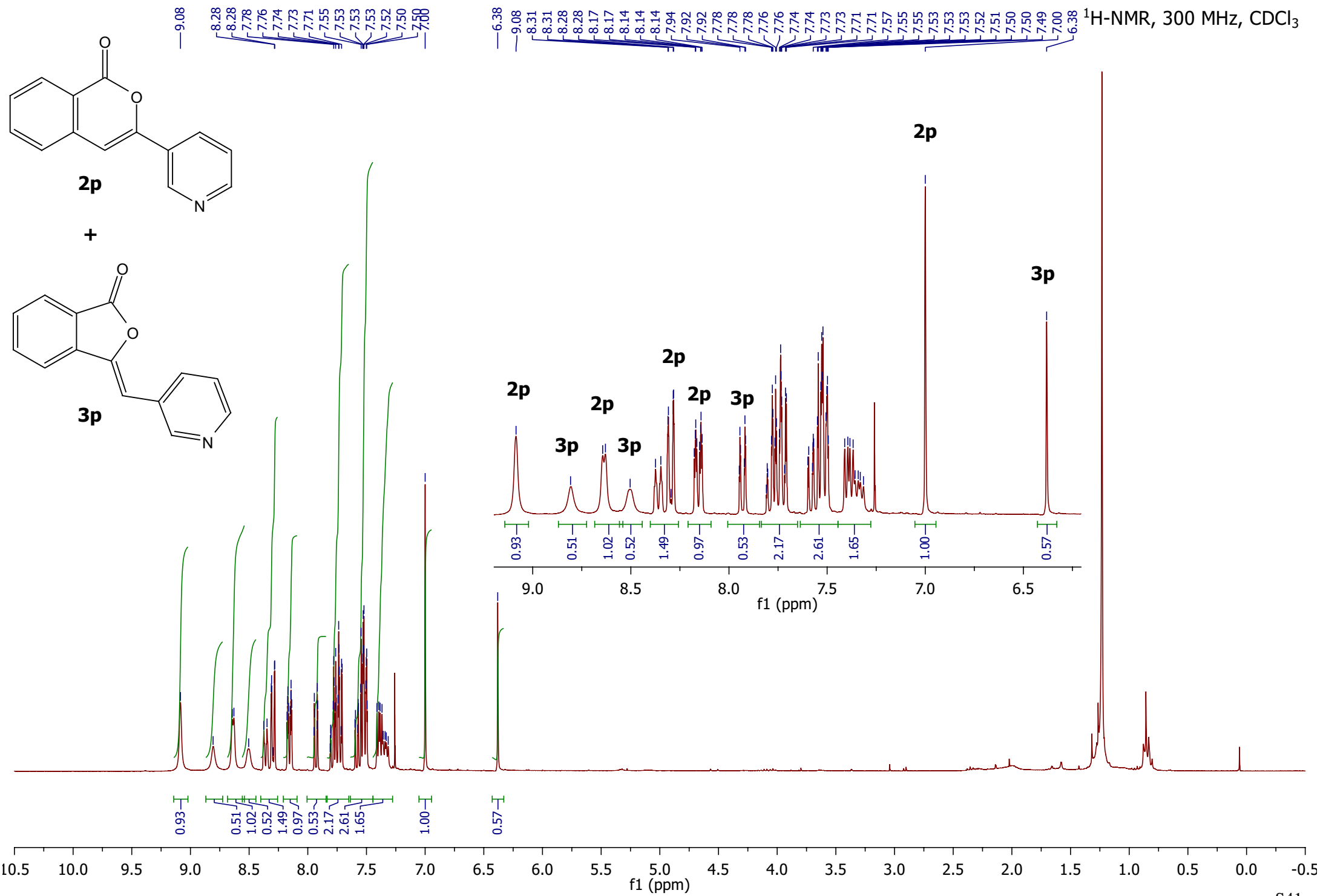


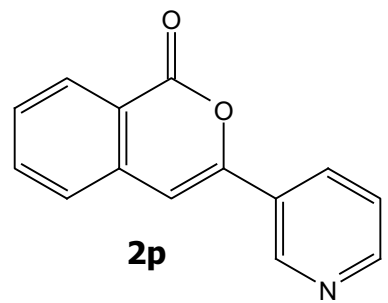
8.32
8.32
8.31
8.29
8.11
8.09
8.06
8.04
7.96
7.95
7.93
7.58
7.55
7.54
7.53
7.51
6.41











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