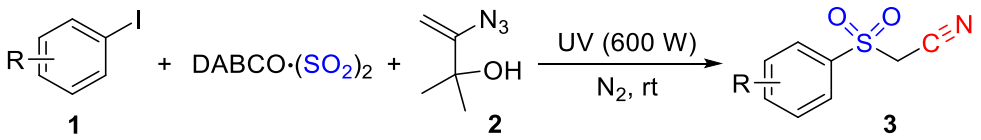
Electronic Supplementary Material (ESI) for ChemComm.

Supporting Information

General experimental methods:

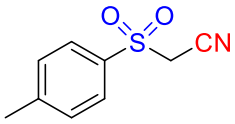
Unless otherwise stated, all commercial reagents were used as received. All solvents were dried and distilled according to standard procedures. Flash column chromatography was performed using silica gel (60-Å pore size, 32–63μm, standard grade). Analytical thin–layer chromatography was performed using glass plates pre-coated with 0.25 mm 230–400 mesh silica gel impregnated with a fluorescent indicator (254 nm). Thin layer chromatography plates were visualized by exposure to ultraviolet light. Organic solutions were concentrated on rotary evaporators at ~20 Torr at 35–45°C. Nuclear magnetic resonance (NMR) spectra are recorded in parts per million from internal tetramethylsilane on the δ scale. ^{1}H and ^{13}C NMR spectra were recorded in $CDCl_3$ on a Bruker DRX-400 spectrometer operating at 400 MHz and 100 MHz, respectively. All chemical shift values are quoted in ppm and coupling constants quoted in Hz. High resolution mass spectrometry (HRMS) spectra were obtained on a micrOTOF II Instrument.

*General experimental procedure for the photo-induced three-component reaction of aryl iodides **1**, sulfur dioxide, and 3-azido-2-methylbut-3-en-2-ol **2***



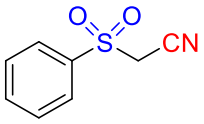
1 2 3

Aryl iodide **1** (0.4mmol) was added to a mixture of 3-azido-2-methylbut-3-en-2-ol **2** (0.2 mmol) and DABCO.$(SO_2)_2$ (0.6 mmol) in MeCN (4.0 mL) under N_2 atmosphere in a quartz tube. The mixture was then placed around the mercury lamp (purchased from Yuming, Shanghai) with a distance of 10 centimeters, was stirred under UV irradiation (0.67 W cm^{-1}) for 24 hours at room temperature. After the conversion was completed as indicated by TLC, the solvent was evaporated under reduced pressure. The residue was purified directly by flash column chromatography (EtOAc/*n*-hexane, 1:4) to give the corresponding product **3**.



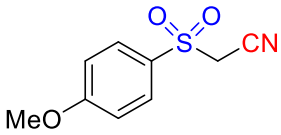
2-Tosylacetonitrile (**3a**)[1]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.89 (d, *J* = 7.7 Hz, 2H), 7.43 (d, *J* = 7.8 Hz, 2H), 4.02 (s, 2H), 2.48 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 147.1, 133.9, 130.7, 129.1, 110.7, 46.1, 22.0.



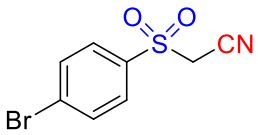
2-(Phenylsulfonyl)acetonitrile (**3b**)[2]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.03 (d, *J* = 7.5 Hz, 2H), 7.77 (t, *J* = 7.5 Hz, 1H), 7.65 (t, *J* = 7.8 Hz, 2H), 4.04 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 141.8, 135.7, 130.1, 129.1, 110.5, 46.0.



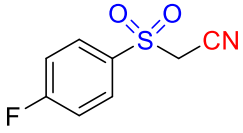
2-((4-Methoxyphenyl)sulfonyl)acetonitrile (**3c**)[2]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.93 (d, *J* = 8.9 Hz, 2H), 7.06 (d, *J* = 8.9 Hz, 2H), 4.02 (s, 2H), 3.89 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 165.3, 131.5, 128.2, 115.2, 110.9, 56.1, 46.2.



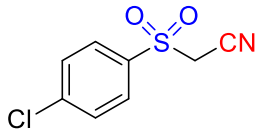
2-((4-Bromophenyl)sulfonyl)acetonitrile (**3d**)

^{1}H NMR (400 MHz, DMSO) δ (ppm) 7.99 (d, *J* = 8.6 Hz, 2H), 7.91 (d, *J* = 8.6 Hz, 2H), 5.30 (s, 2H); ^{13}C NMR (101 MHz, DMSO) δ (ppm) 138.7, 136.4, 132.9, 130.3, 112.1, 44.6. HRMS (EI) calcd for $C_8H_6BrNO_2S$: 258.9303, found: 258.9306.



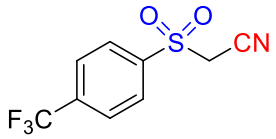
2-((4-Fluorophenyl)sulfonyl)acetonitrile (**3e**)[2]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.09 – 8.02 (m, 2H), 7.33 (t, *J* = 8.0 Hz, 2H), 4.04 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 167.0 (d, *J* = 286 Hz), 132.3 (d, *J* = 10 Hz), 132.0 (d, *J* = 15 Hz), 117.6 (d, *J* = 22 Hz), 110.9, 46.1.



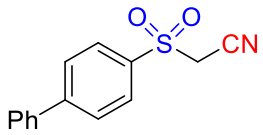
2-((4-Chlorophenyl)sulfonyl)acetonitrile (**3f**)

^{1}H NMR (400 MHz, DMSO) δ (ppm) 7.99 (d, *J* = 8.7 Hz, 2H), 7.84 (d, *J* = 8.7 Hz, 2H), 5.30 (s, 2H); ^{13}C NMR (101 MHz, DMSO) δ (ppm) 140.4, 136.0, 130.3, 129.9, 112.1, 44.7. HRMS (EI) calcd for $C_8H_6ClNO_2S$: 214.9808, found: 214.9824.



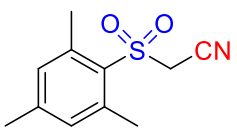
2-((4-(Trifluoromethyl)phenyl)sulfonyl)acetonitrile (**3g**)[2]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.18 (d, *J* = 8.2 Hz, 2H), 7.93 (d, *J* = 8.3 Hz, 2H), 4.10 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 140.2, 137.5, 129.92 127.3 (d, *J* = 3 Hz), 123.6 (q, *J* = 158 Hz), 110.2, 45.9.



2-([1,1'-Biphenyl]-4-ylsulfonyl)acetonitrile (**3h**)

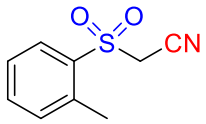
^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.07 (d, *J* = 7.9 Hz, 2H), 7.82 (d, *J* = 8.0 Hz, 2H), 7.61 (d, *J* = 7.2 Hz, 2H), 7.53 – 7.40 (m, 3H), 4.10 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 148.7, 138.8, 135.2, 129.6, 129.4, 129.3, 128.6, 127.7, 110.7, 46.1. HRMS (EI) calcd for $C_{14}H_{11}NO_2S$: 257.0510, found: 257.0516.



2-(Mesitylsulfonyl)acetonitrile (**3i**)

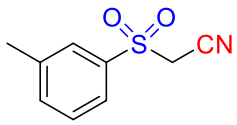
^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.03 (s, 2H), 4.03 (s, 2H), 2.69 (s, 6H), 2.33 (s, 3H);

^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 145.6, 141.2, 133.0, 110.6, 45.5, 23.3, 21.4. HRMS (EI) calcd for $C_{11}H_{13}NO_2S$: 223.0667, found: 223.0681.



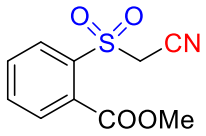
2-(*o*-Tolylsulfonyl)acetonitrile (**3j**)[2]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.07 (d, *J* = 8.0 Hz, 1H), 7.61 (t, *J* = 7.4 Hz, 1H), 7.45 (t, *J* = 7.7 Hz, 1H), 7.40 (d, *J* = 7.6 Hz, 1H), 4.07 (s, 2H), 2.73 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 138.9, 135.4, 135.0, 133.4, 131.4, 127.3, 110.1, 45.2, 20.7.



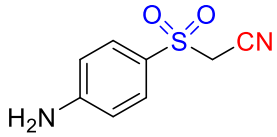
2-(*m*-Tolylsulfonyl)acetonitrile (**3k**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.81 (s, 2H), 7.59 – 7.48 (m, 2H), 4.03 (s, 2H), 2.47 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 140.6, 136.8, 136.5, 129.9, 129.2, 126.2, 110.6, 46.0, 21.6. HRMS (EI) calcd for $C_9H_9NO_2S$: 195.0354, found: 195.0368.



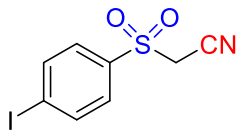
Methyl 2-((cyanomethyl)sulfonyl)benzoate (**3l**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.24 (d, *J* = 7.4 Hz, 1H), 7.85 – 7.69 (m, 3H), 4.69 (s, 2H), 3.97 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 165.2, 135.5, 135.1, 132.9, 132.3, 131.8, 130.6, 110.6, 53.6, 46.1. HRMS (EI) calcd for $C_{10}H_9NO_4S$: 239.0252, found: 239.0256.



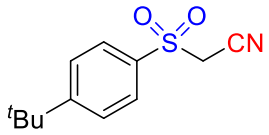
2-((4-Aminophenyl)sulfonyl)acetonitrile (**3m**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.75 (d, *J* = 7.9 Hz, 2H), 6.73 (d, *J* = 7.8 Hz, 2H), 4.37 (s, 2H), 3.97 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 150.3, 136.7, 131.5, 114.4, 109.4, 46.3. HRMS (EI) calcd for $C_8H_8N_2O_2S$: 196.0306, found: 196.0312.



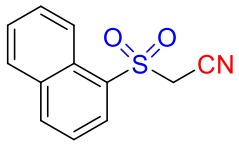
2-((4-Iodophenyl)sulfonyl)acetonitrile (**3n**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.02 (d, *J* = 8.3 Hz, 2H), 7.71 (d, *J* = 8.2 Hz, 2H), 4.03 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 139.5, 130.3, 126.8, 116.4, 110.4, 46.0. HRMS (EI) calcd for $C_8H_6INO_2S$: 306.9164, found: 306.9172.



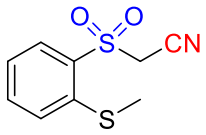
2-((4-(*tert*-Butyl)phenyl)sulfonyl)acetonitrile (**3o**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.93 (d, *J* = 7.7 Hz, 2H), 7.63 (d, *J* = 7.7 Hz, 2H), 4.02 (s, 2H), 1.35 (s, 9H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 160.0, 133.9, 129.0, 127.1, 110.7, 46.0, 35.7, 31.2. HRMS (EI) calcd for $C_{12}H_{15}NO_2S$: 237.0823, found: 237.0832.



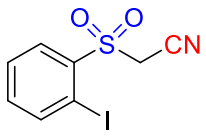
2-(Naphthalen-1-ylsulfonyl)acetonitrile (**3p**)[2]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.68 (d, *J* = 8.6 Hz, 1H), 8.43 (d, *J* = 7.3 Hz, 1H), 8.23 (d, *J* = 8.1 Hz, 1H), 8.02 (d, *J* = 8.2 Hz, 1H), 7.76 (t, *J* = 7.8 Hz, 1H), 7.67 (t, *J* = 7.8 Hz, 2H), 4.25 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 137.3, 134.6, 132.9, 131.7, 130.0, 129.9, 128.8, 127.8, 124.7, 123.4, 110.3, 45.5.



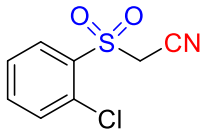
2-((2-(Methylthio)phenyl)sulfonyl)acetonitrile (**3q**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.11 (d, *J* = 7.9 Hz, 1H), 7.65 (t, *J* = 7.7 Hz, 1H), 7.43 (d, *J* = 8.0 Hz, 1H), 7.38 (t, *J* = 7.6 Hz, 1H), 4.47 (s, 2H), 2.58 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 142.6, 140.6, 135.5, 132.5, 127.5, 125.6, 110.5, 42.4, 16.5. HRMS (EI) calcd for $C_9H_9BrNO_2S_2$: 227.0075, found: 227.0084.



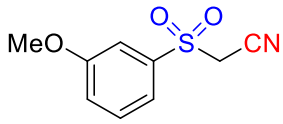
2-((2-Iodophenyl)sulfonyl)acetonitrile (**3r**)[1]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.34 (d, *J* = 7.8 Hz, 1H), 8.21 (d, *J* = 7.7 Hz, 1H), 7.68 (t, *J* = 7.5 Hz, 1H), 7.42 (t, *J* = 7.4 Hz, 1H), 4.50 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 143.4, 139.1, 136.2, 136.0, 133.5, 129.5, 110.0, 42.8.



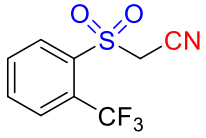
2-((2-Chlorophenyl)sulfonyl)acetonitrile (**3s**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.22 (d, *J* = 7.9 Hz, 1H), 7.69 (t, *J* = 7.6 Hz, 1H), 7.62 (d, *J* = 7.9 Hz, 1H), 7.56 (t, *J* = 7.5 Hz, 1H), 4.42 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 136.6, 134.4, 133.16, 133.0, 132.6, 128.2, 109.9, 44.1. HRMS (EI) calcd for $C_8H_6ClNO_2S$: 214.9808, found: 214.9820.



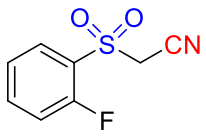
2-((3-Methoxyphenyl)sulfonyl)acetonitrile (**3t**)[2]

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.59 (d, *J* = 7.6 Hz, 1H), 7.53 (t, *J* = 7.9 Hz, 1H), 7.48 (s, 1H), 7.27 (d, *J* = 8.1 Hz, 1H), 4.04 (s, 2H), 3.88 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 160.4, 137.8, 130.9, 122.1, 120.9, 113.0, 110.4, 55.9, 45.8.



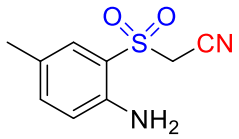
2-((2-(Trifluoromethyl)phenyl)sulfonyl)acetonitrile (**3u**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.41 (d, *J* = 7.1 Hz, 1H), 7.93 – 7.84 (m, 1H), 7.89 (p, *J* = 8.1 Hz, 2H), 4.25 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 152.1 (d, *J* = 105Hz), 139.3, 135.8, 134.9, 133.3, 129.2 (d, *J* = 6Hz), 123.1 (q, *J* = 194Hz), 110.1, 46.3. HRMS (EI) calcd for $C_9H_6F_3NO_2S$: 249.0071, found: 249.0076.



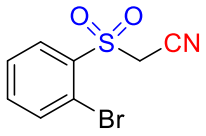
2-((2-Fluorophenyl)sulfonyl)acetonitrile (**3v**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.03 (t, *J* = 7.2 Hz, 1H), 7.81 – 7.73 (m, 1H), 7.43 (t, *J* = 7.6 Hz, 1H), 7.33 (t, *J* = 9.1 Hz, 1H), 4.28 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 138.0 (d, *J* = 9Hz), 131.6, 125.7, 125.4 (d, *J* = 3Hz), 122.9, 117.6 (d, *J* = 21Hz), 110.0, 45.1. HRMS (EI) calcd for $C_8H_6FNO_2S$: 199.0103, found: 199.0109.



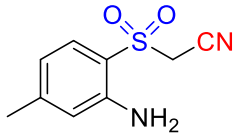
2-((2-Amino-5-methylphenyl)sulfonyl)acetonitrile (**3w**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.56 (s, 1H), 7.26 (s, 1H), 6.71 (d, *J* = 8.0 Hz, 1H), 4.88 (s, 2H), 4.14 (s, 2H), 2.27 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 144.7, 138.2, 130.4, 128.5, 127.5, 118.6, 110.5, 43.3, 20.4. HRMS (EI) calcd for $C_9H_{10}N_2O_2S$: 210.0463, found: 210.0472.



2-((2-Bromophenyl)sulfonyl)acetonitrile (**3x**)

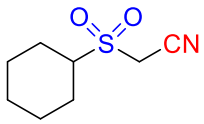
^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.26 (d, *J* = 7.0 Hz, 1H), 7.83 (d, *J* = 6.9 Hz, 1H), 7.64 – 7.56 (m, 2H), 4.46 (s, 2H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 143.9, 136.3, 135.9, 133.3, 128.5, 126.0, 109.7, 43.3. HRMS (EI) calcd for $C_8H_6BrNO_2S$: 258.9303, found: 258.9324.



2-((2-Amino-4-methylphenyl)sulfonyl)acetonitrile (**3y**)

^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 7.64 (d, *J* = 8.1 Hz, 1H), 6.69 (d, *J* = 8.1 Hz, 1H), 6.59 (s, 1H), 4.98 (s, 2H), 4.10 (s, 2H), 2.31 (s, 3H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 147.0, 131.1, 126.4, 121.7, 120.1, 118.5, 110.6, 43.6, 22.0. HRMS (EI) calcd for $C_9H_{10}N_2O_2S$:

210.0463, found: 210.0466.

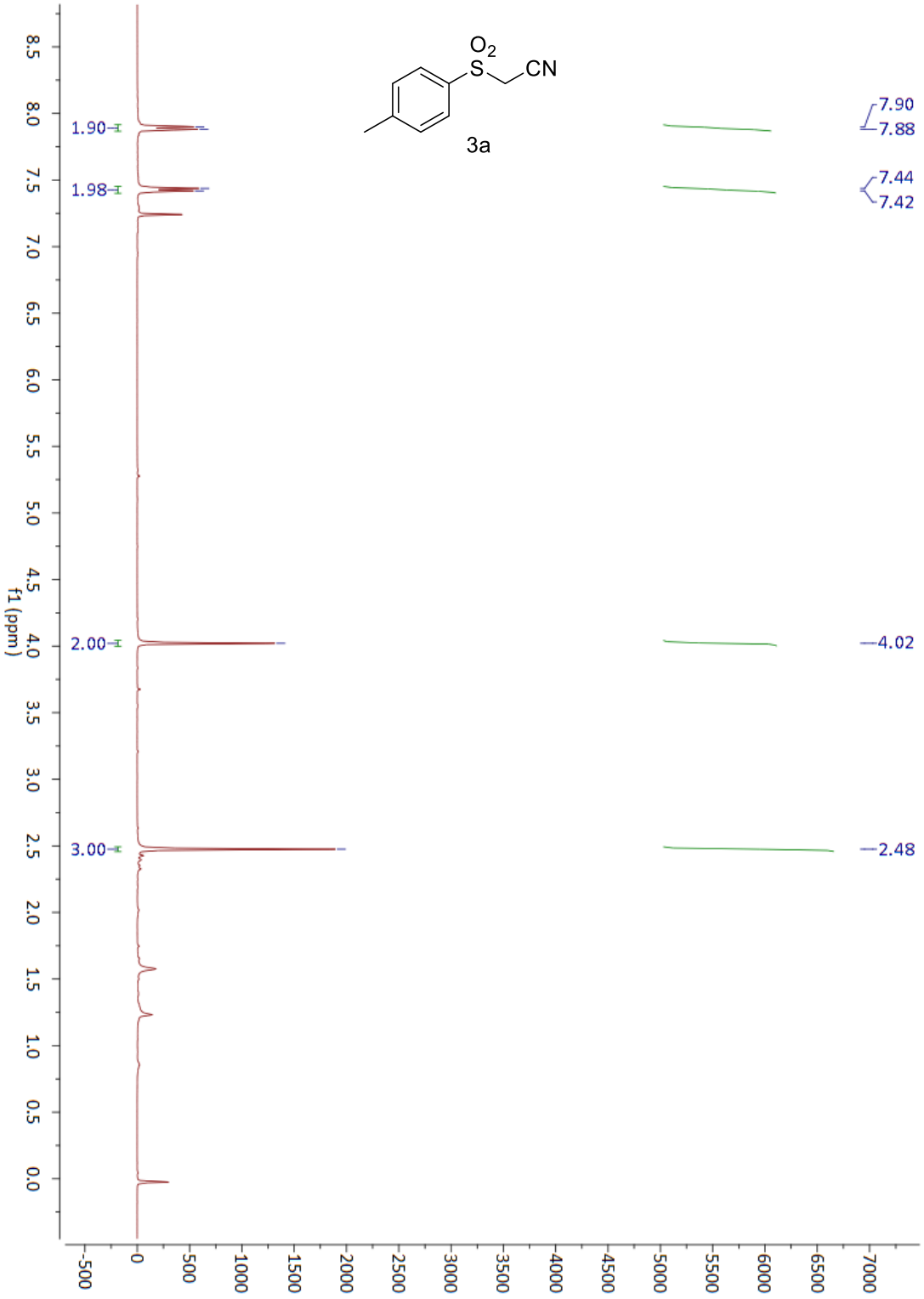


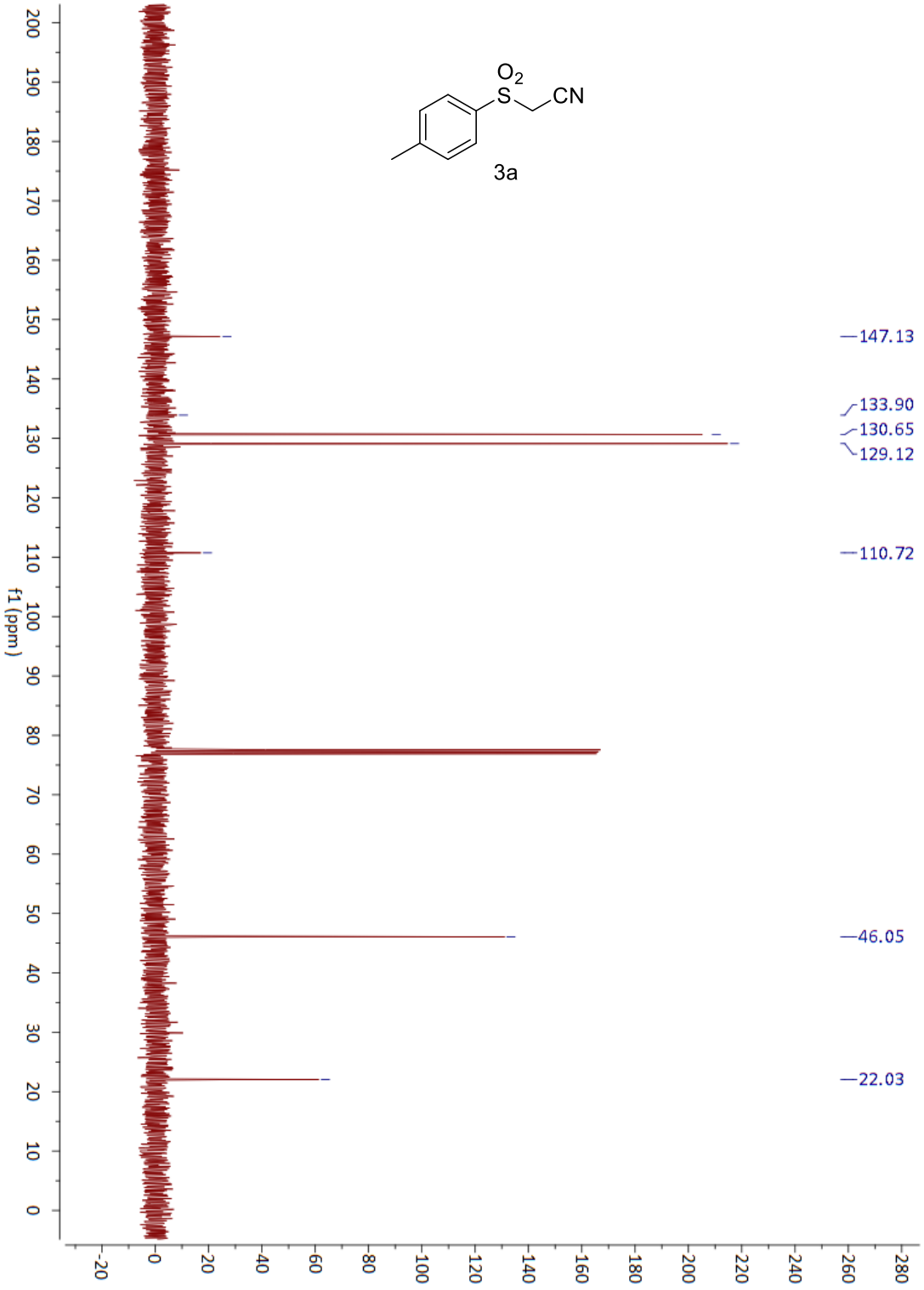
2-(Cyclohexylsulfonyl)acetonitrile (**3z**)[1]

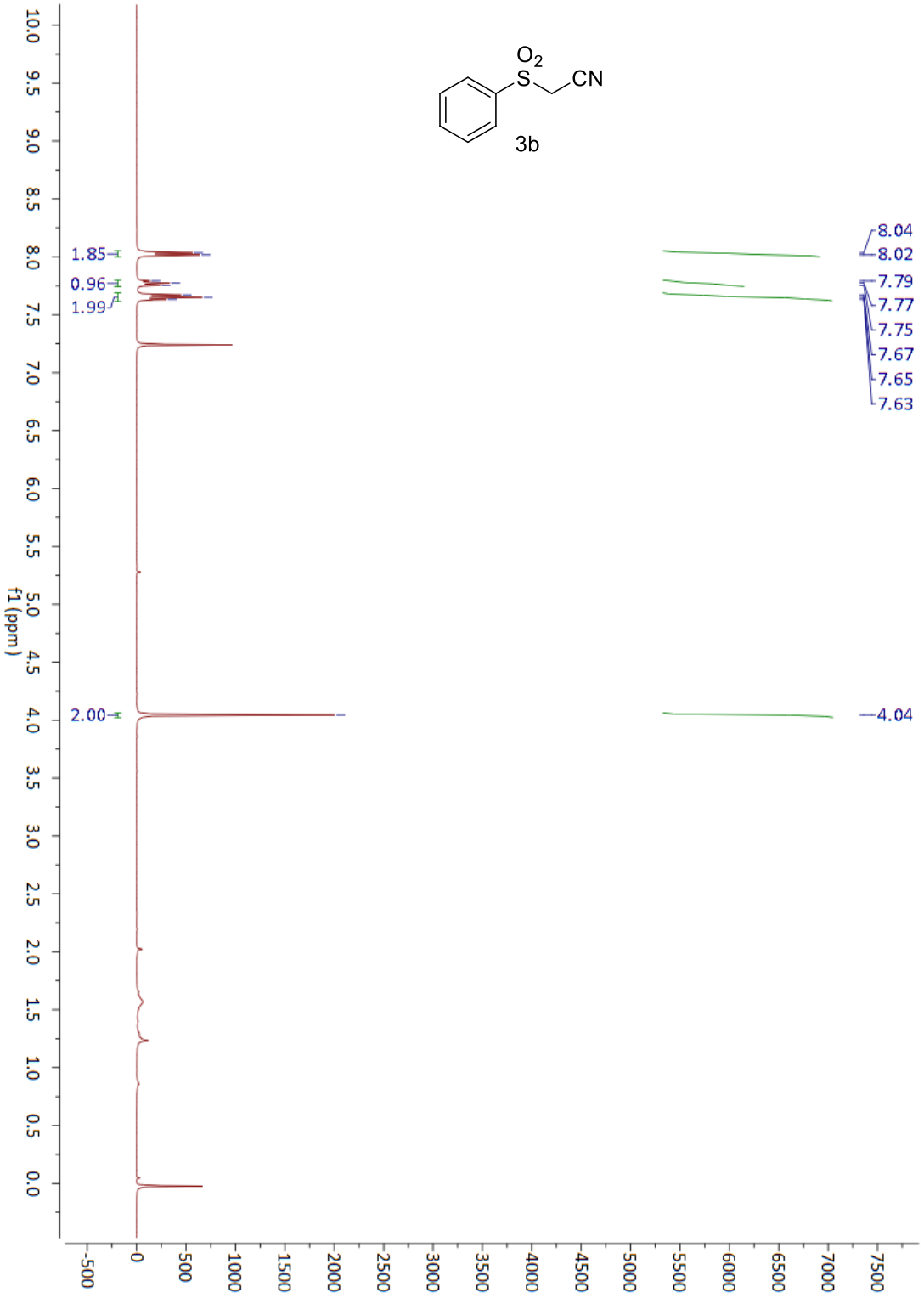
^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 2.20 (d, *J* = 12.3 Hz, 2H), 1.97 (d, *J* = 13.2 Hz, 2H), 1.76 (d, *J* = 12.9 Hz, 1H), 1.69 – 1.56 (m, 2H), 1.42 – 1.29 (m, 2H), 1.27 (d, *J* = 14.1 Hz, 1H); ^{13}C NMR (101 MHz, $CDCl_3$) δ (ppm) 110.6, 62.5, 39.7, 25.4, 25.0, 22.6.

Reference：

1. J. R. Donald and S. L. Berrell, *Chem. Sci.*, 2019, **10**, 5832.
2. G. C. Tsui, Q. Glenadel, C. Lau and M. Lautens, *Org. Lett.*, 2011, 13, 208.


O2
S
CN
3a
1.90
1.98
2.00
3.00
7.90
7.88
7.44
7.42
4.02
2.48
f1 (ppm)


O2
S
CN
3a
147.13
133.90
130.65
129.12
110.72
46.05
22.03
f1 (ppm)


O2
S
CN
3b
1.85
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2.00
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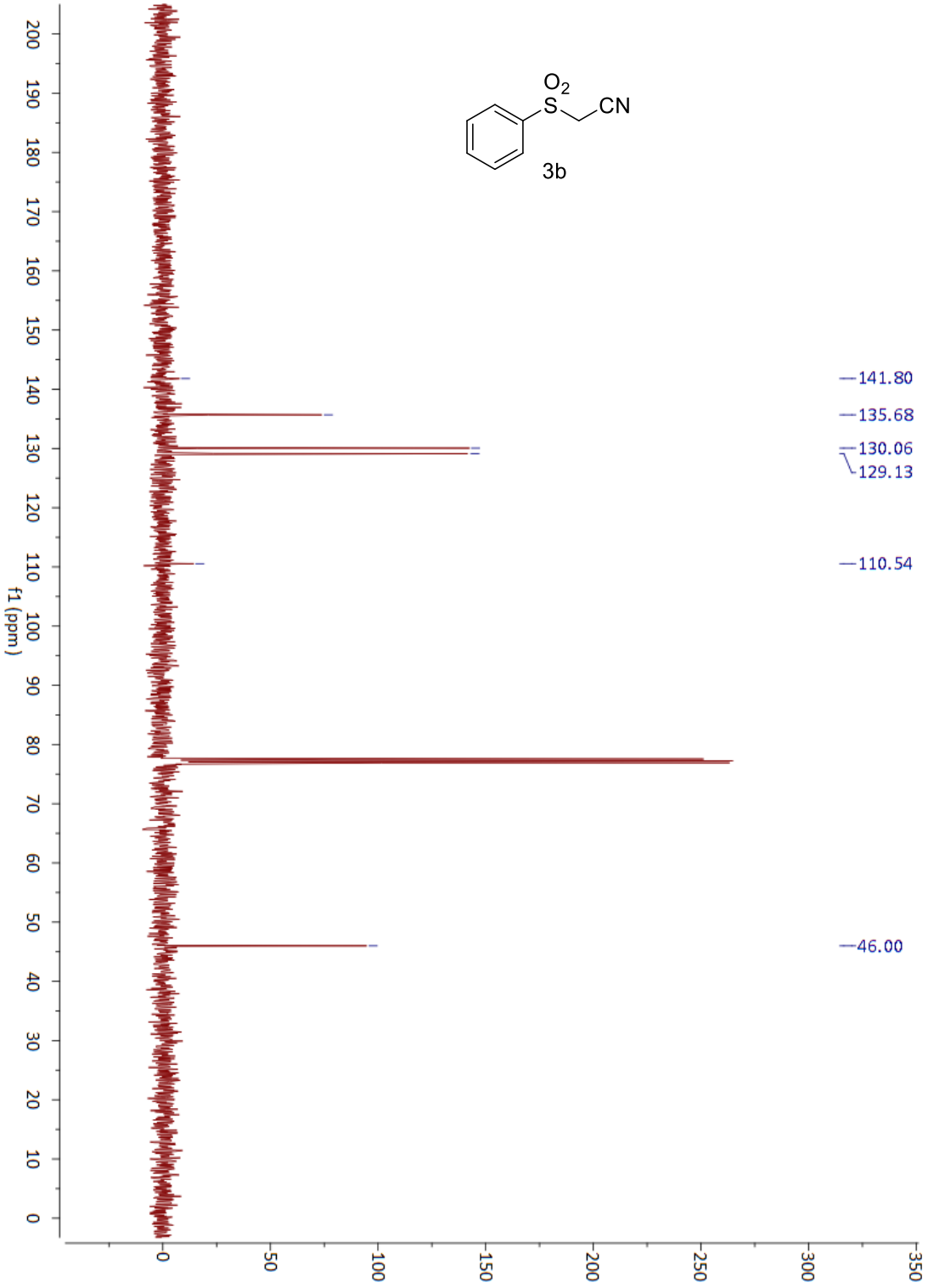
8.02
7.79
7.77
7.75
7.67
7.65
7.63
4.04
f1 (ppm)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CN
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130.06
129.13
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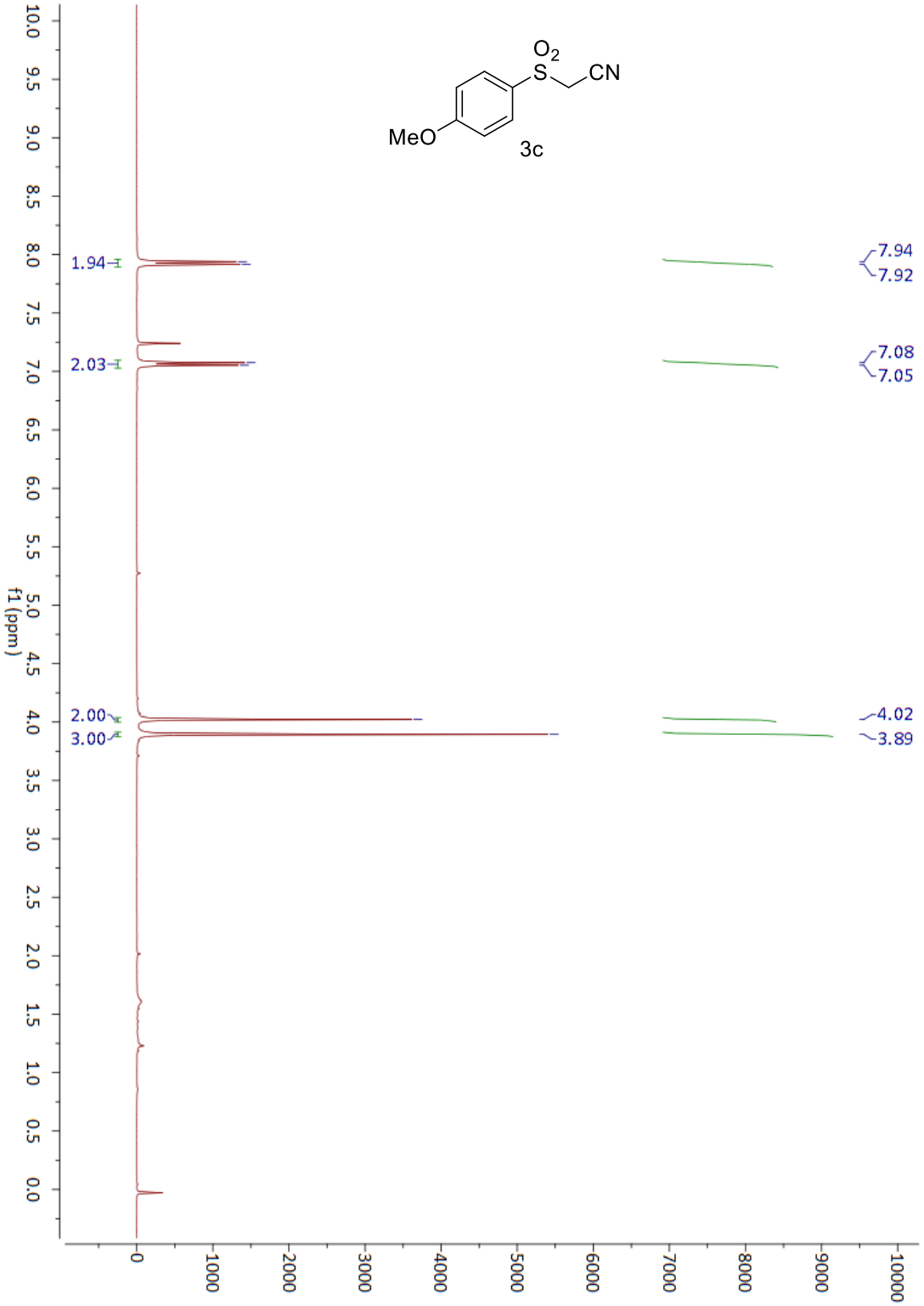
46.00
f1 (ppm)


O2
S
CN
MeO
3c
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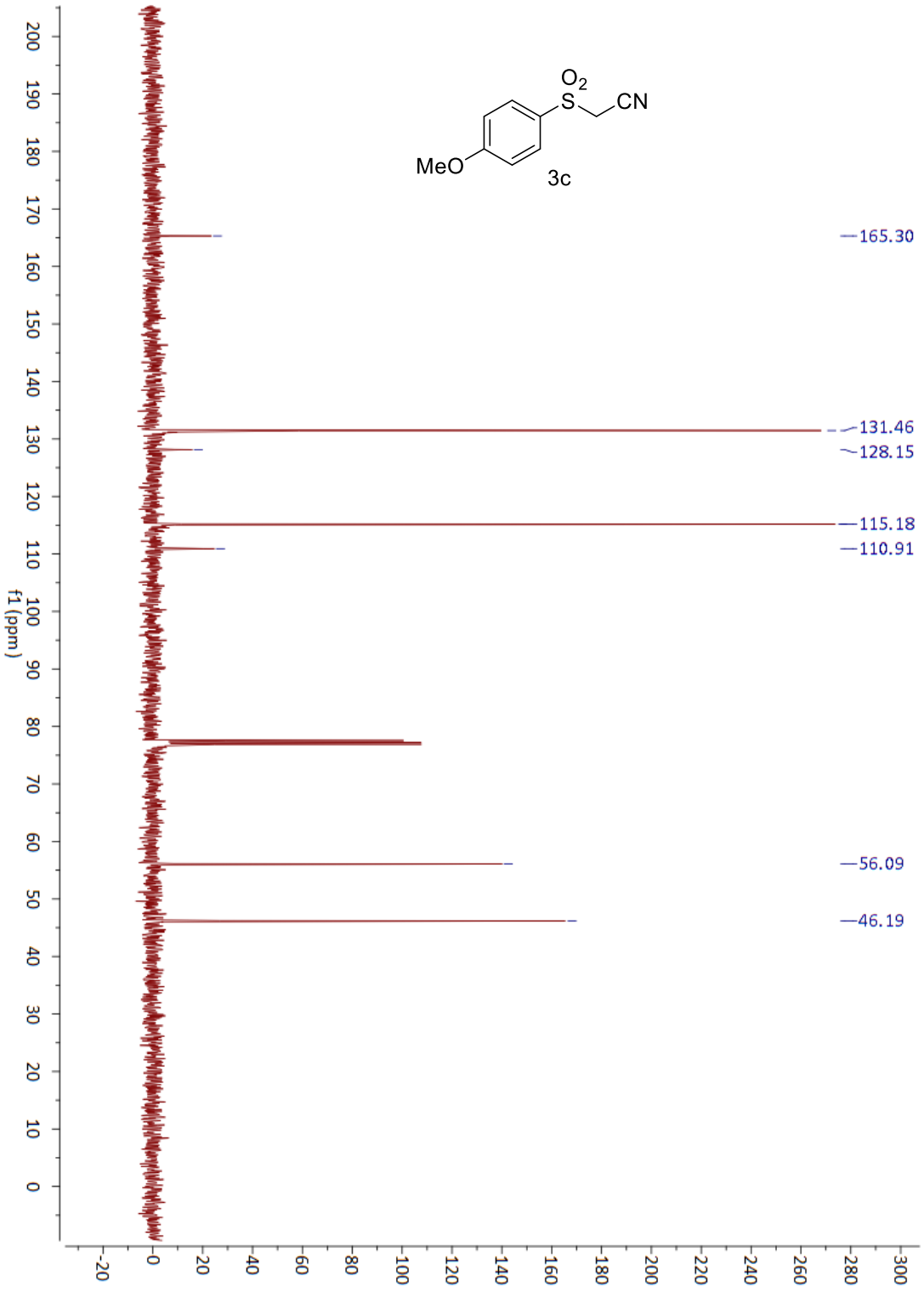
7.94
7.92
7.08
7.05
4.02
3.89
f1 (ppm)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CN
MeO
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115.18
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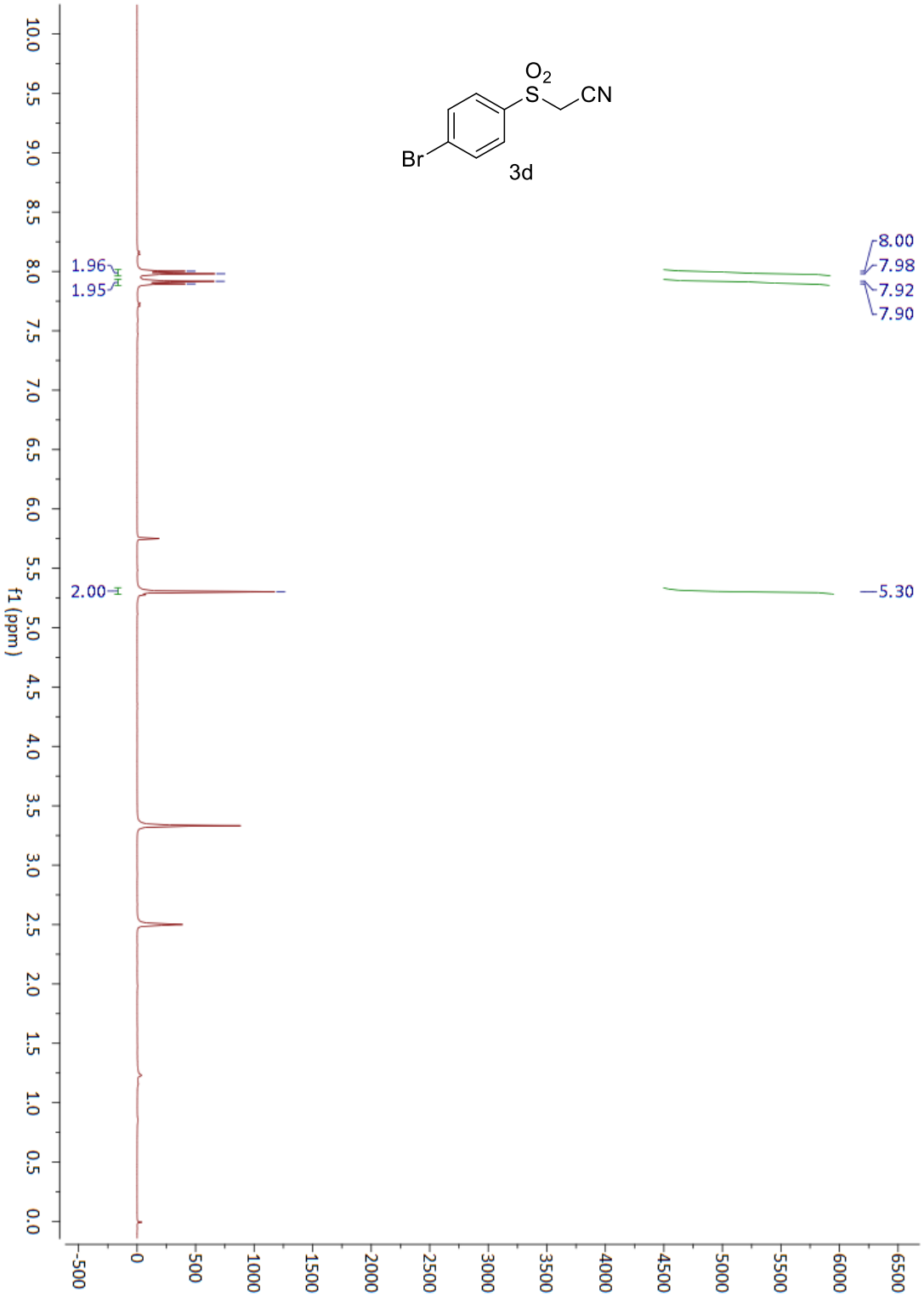
56.09
46.19
f1 (ppm)


O2
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CN
Br
3d
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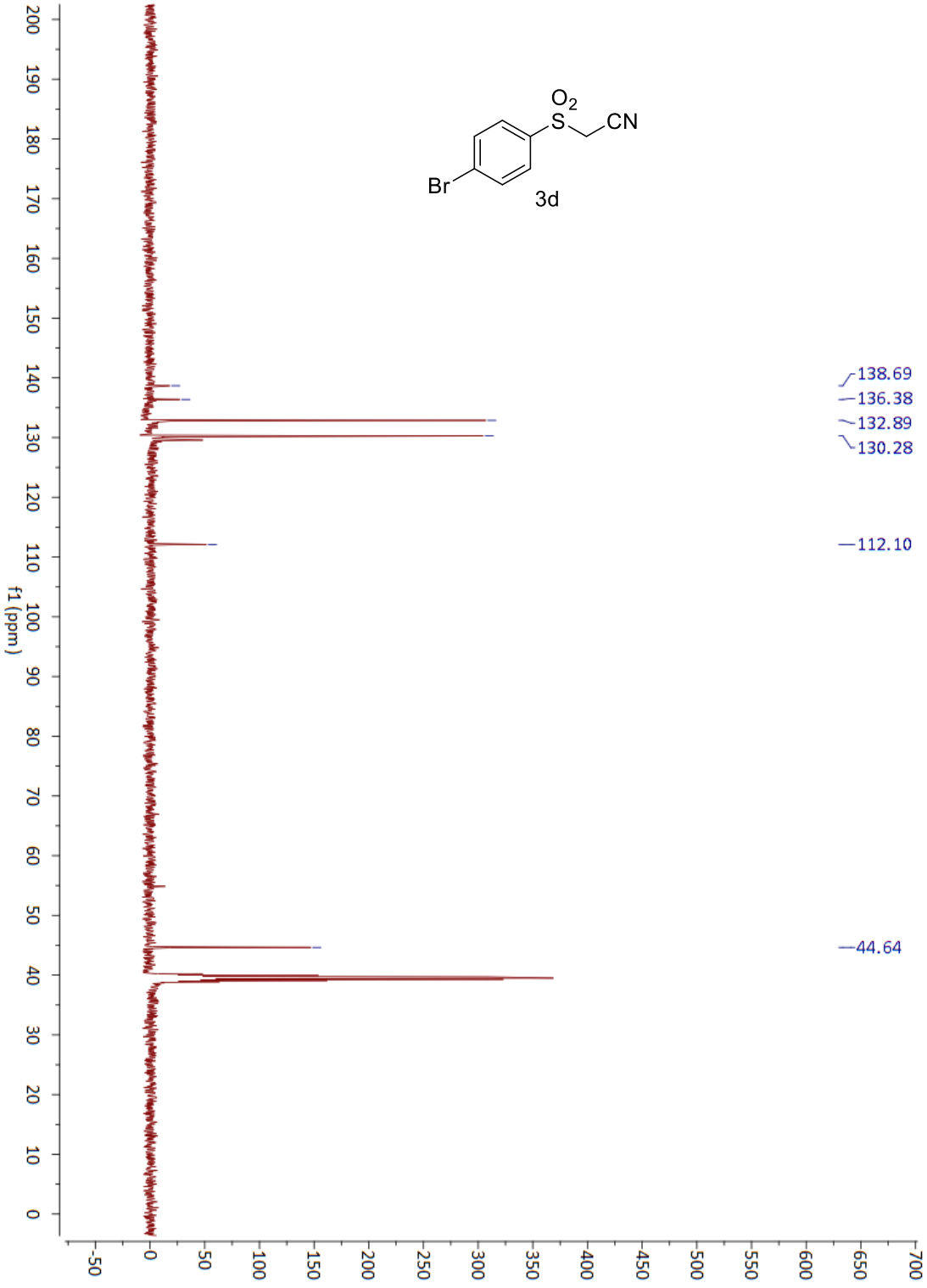
2.00
8.00
7.98
7.92
7.90
5.30
f1 (ppm)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Br
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112.10
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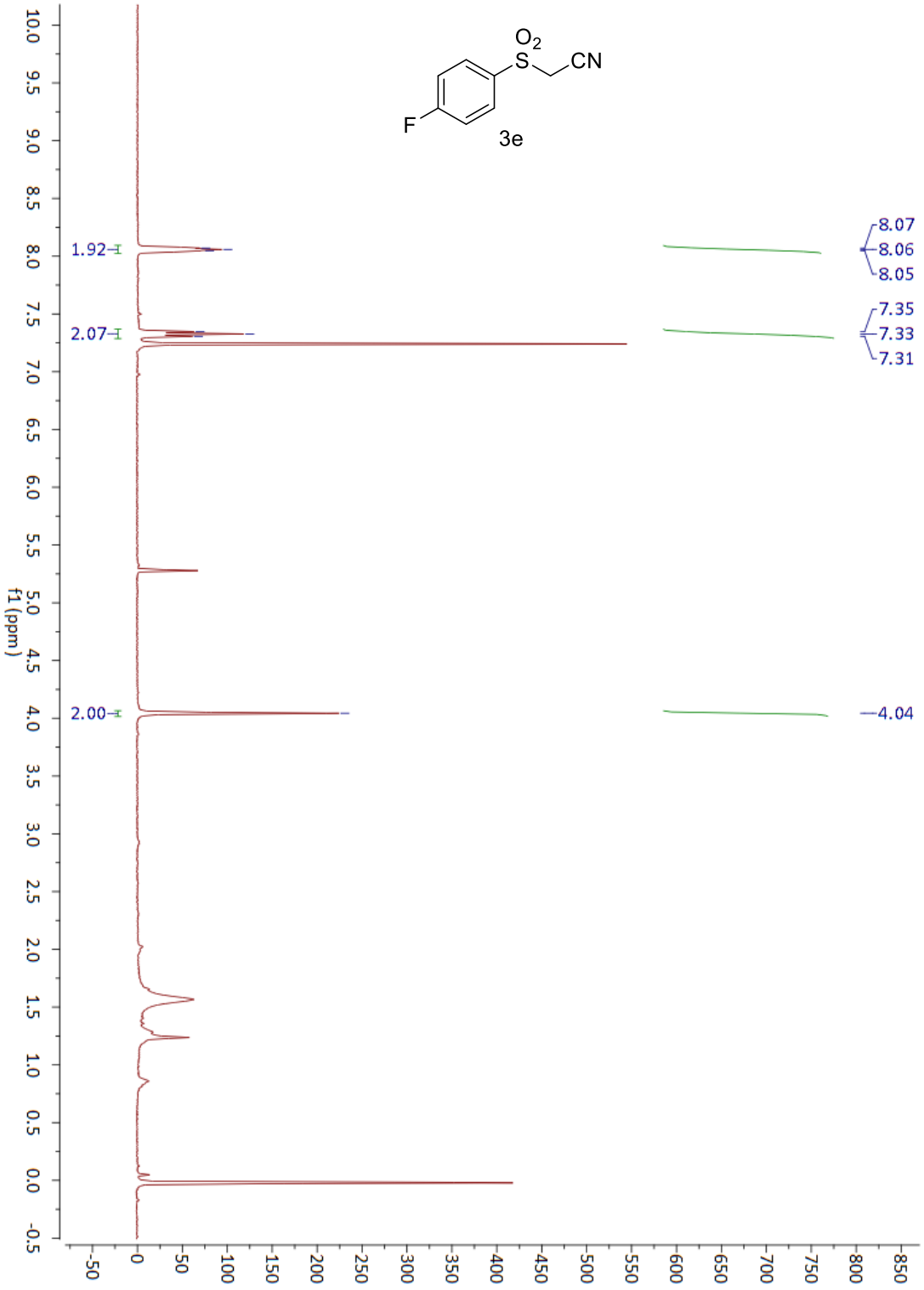
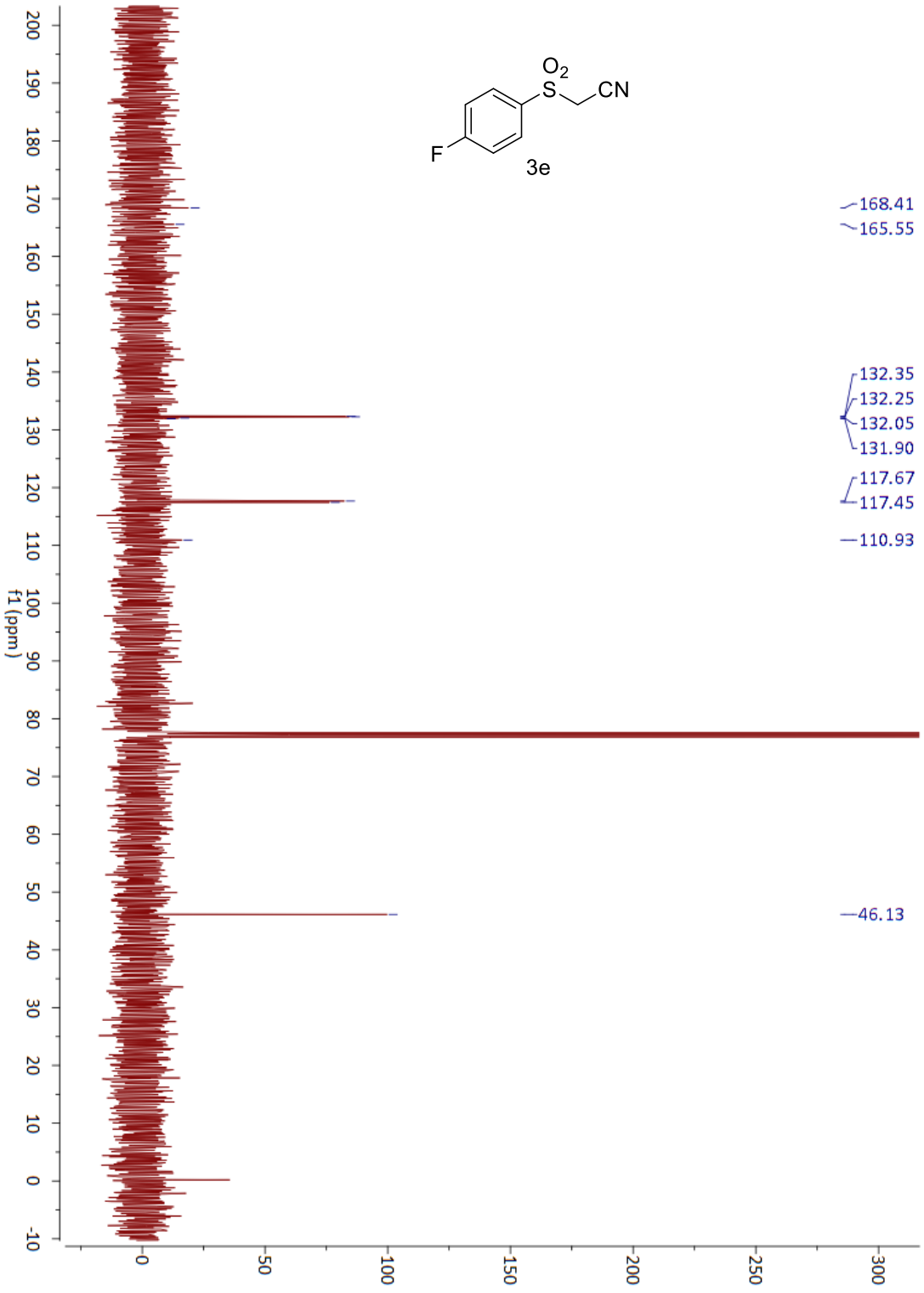
f1 (ppm)


O2
S
CN
F
3e
8.07
8.06
8.05
7.35
7.33
7.31
4.04
1.92
2.07
2.00
f1 (ppm)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CN
F
3e
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132.05
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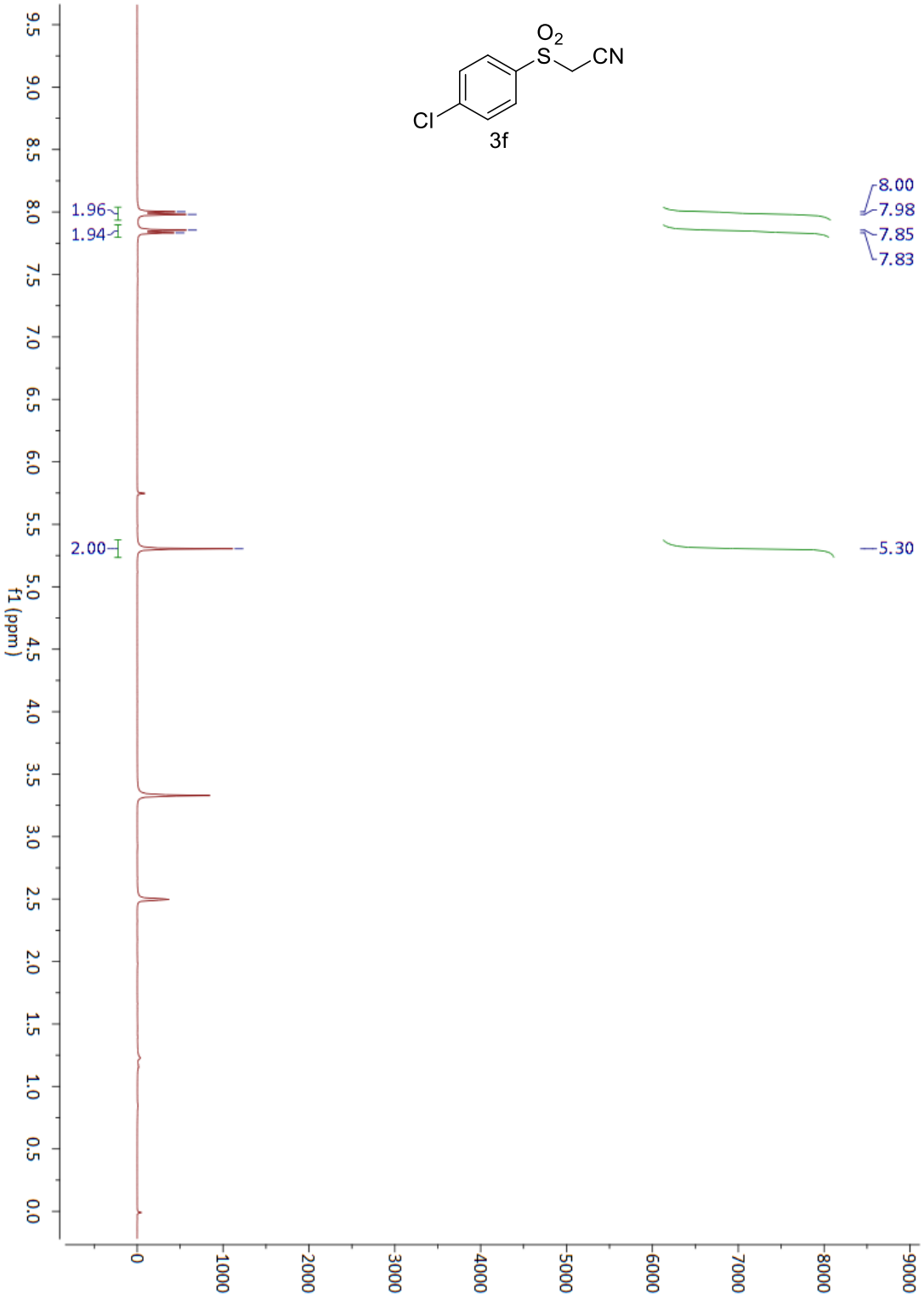
117.67
117.45
110.93
46.13
f1 (ppm)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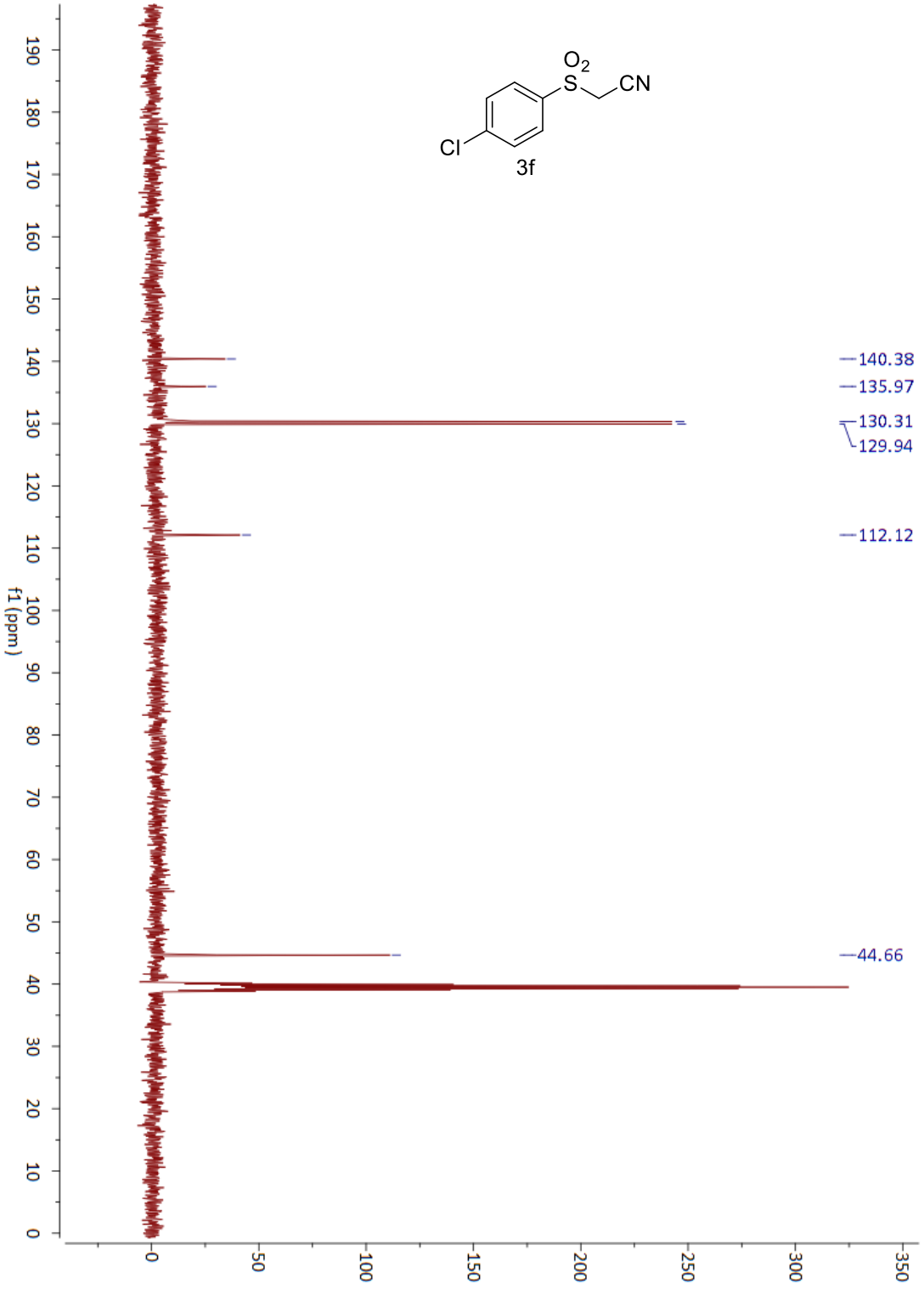
f1 (ppm)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CN
Cl
3f
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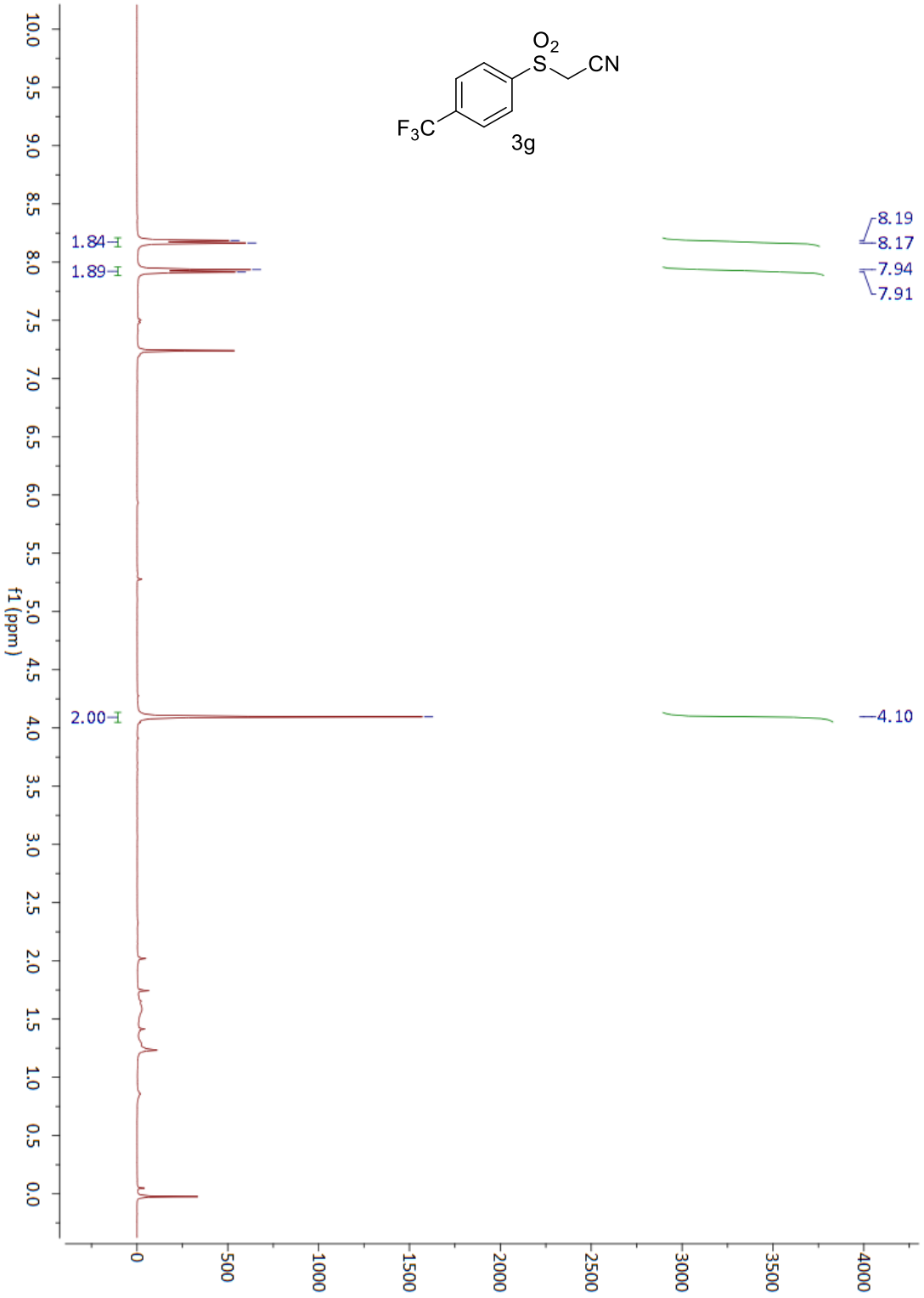
129.94
112.12
44.66
f1 (ppm)


O2
S
CN
F3C
3g
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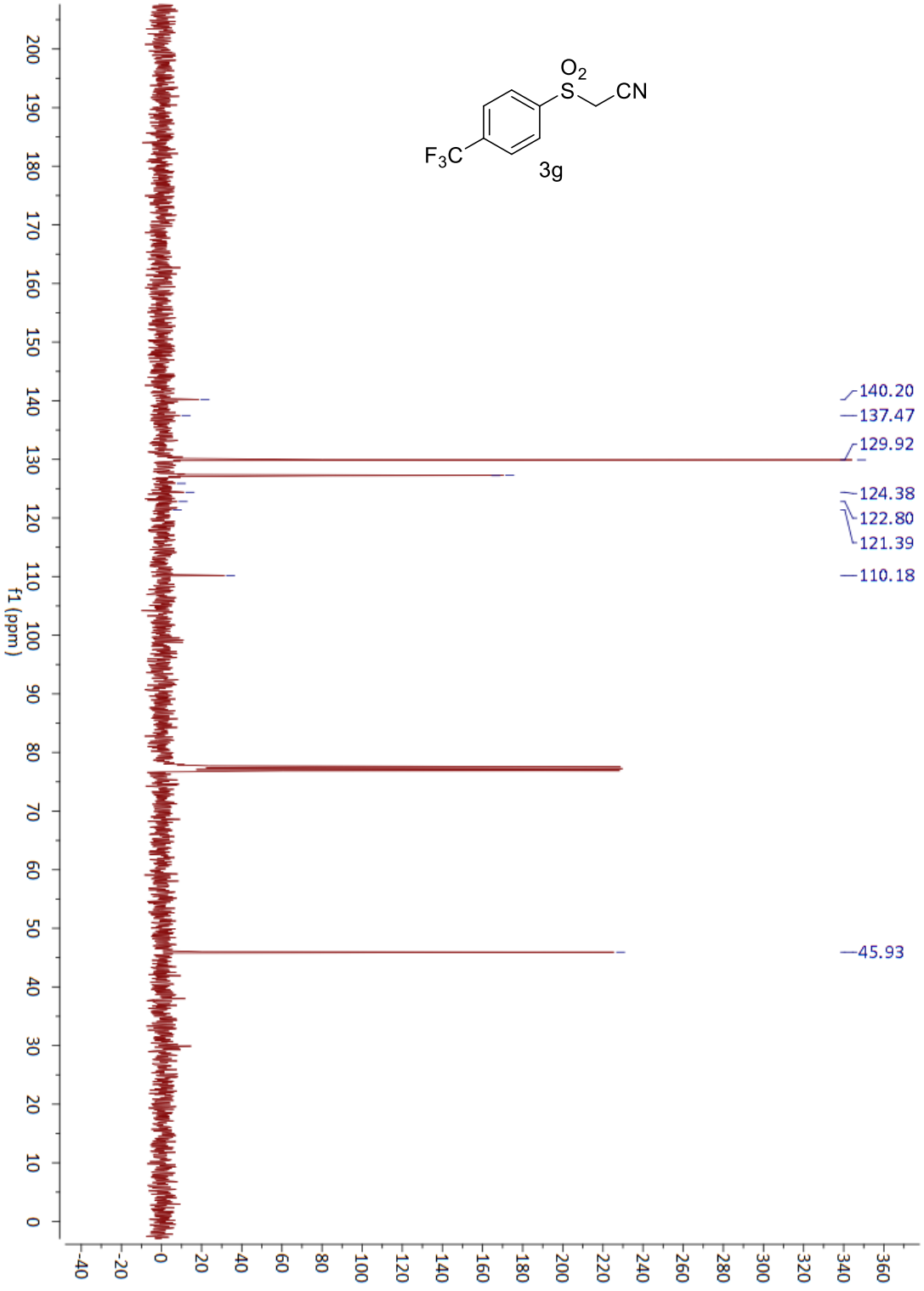
8.17
7.94
7.91
1.84
1.89
2.00
4.10
f1 (ppm)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CN
F3C
3g
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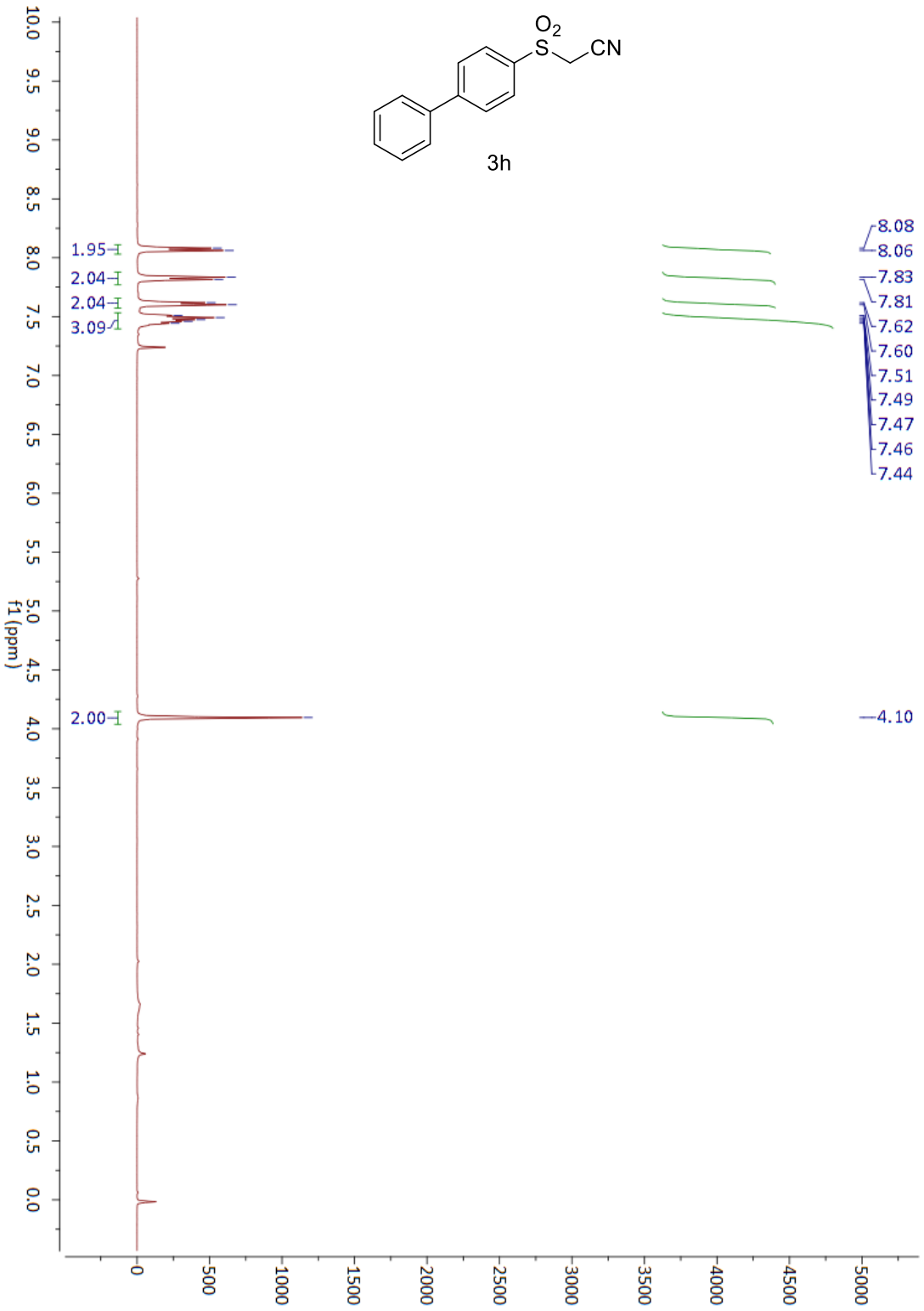
124.38
122.80
121.39
110.18
45.93
f1 (ppm)


O2
S
CN
3h
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7.83
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7.60
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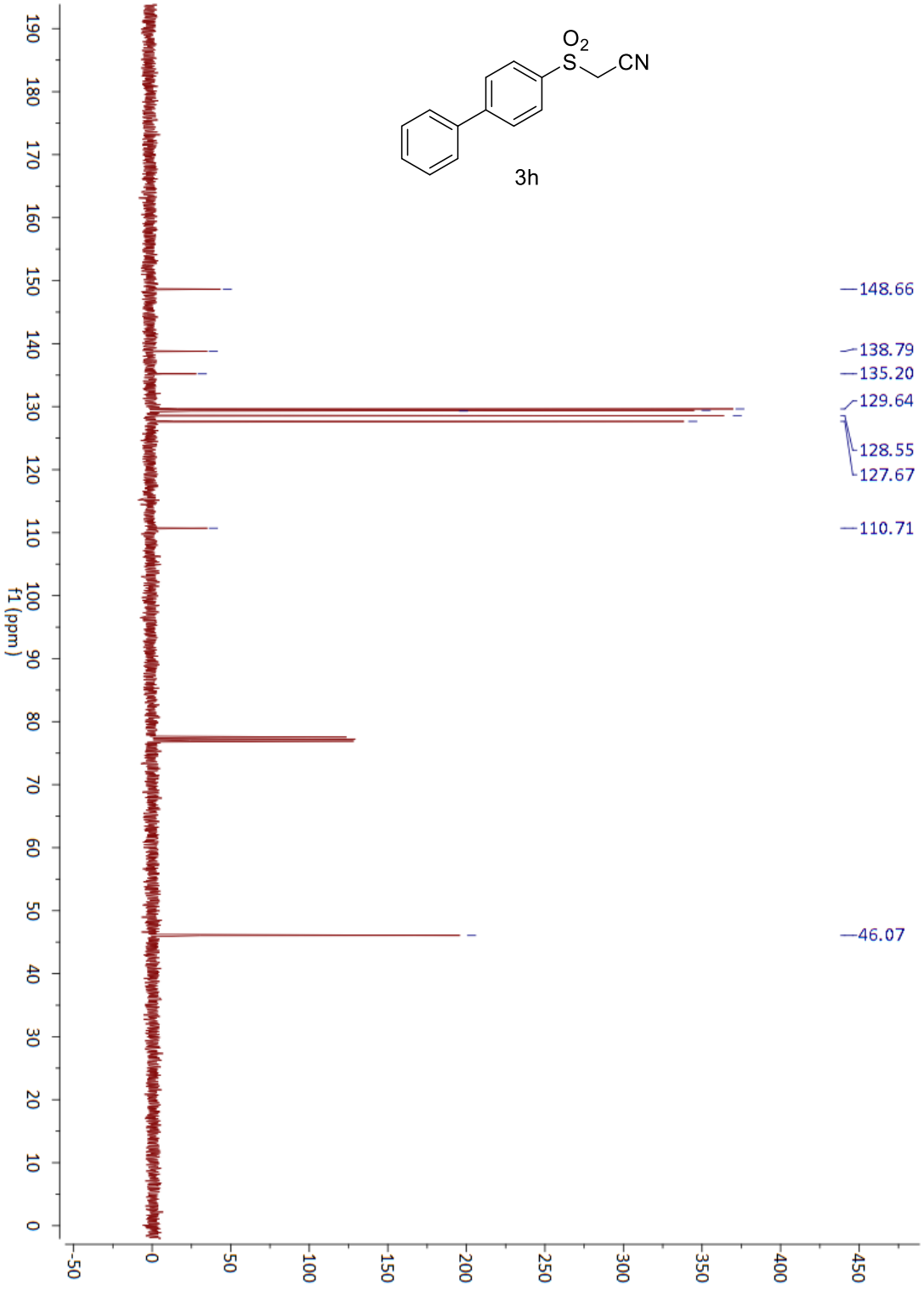
7.46
7.44
4.10
1.95
2.04
2.04
3.09
2.00
f1 (ppm)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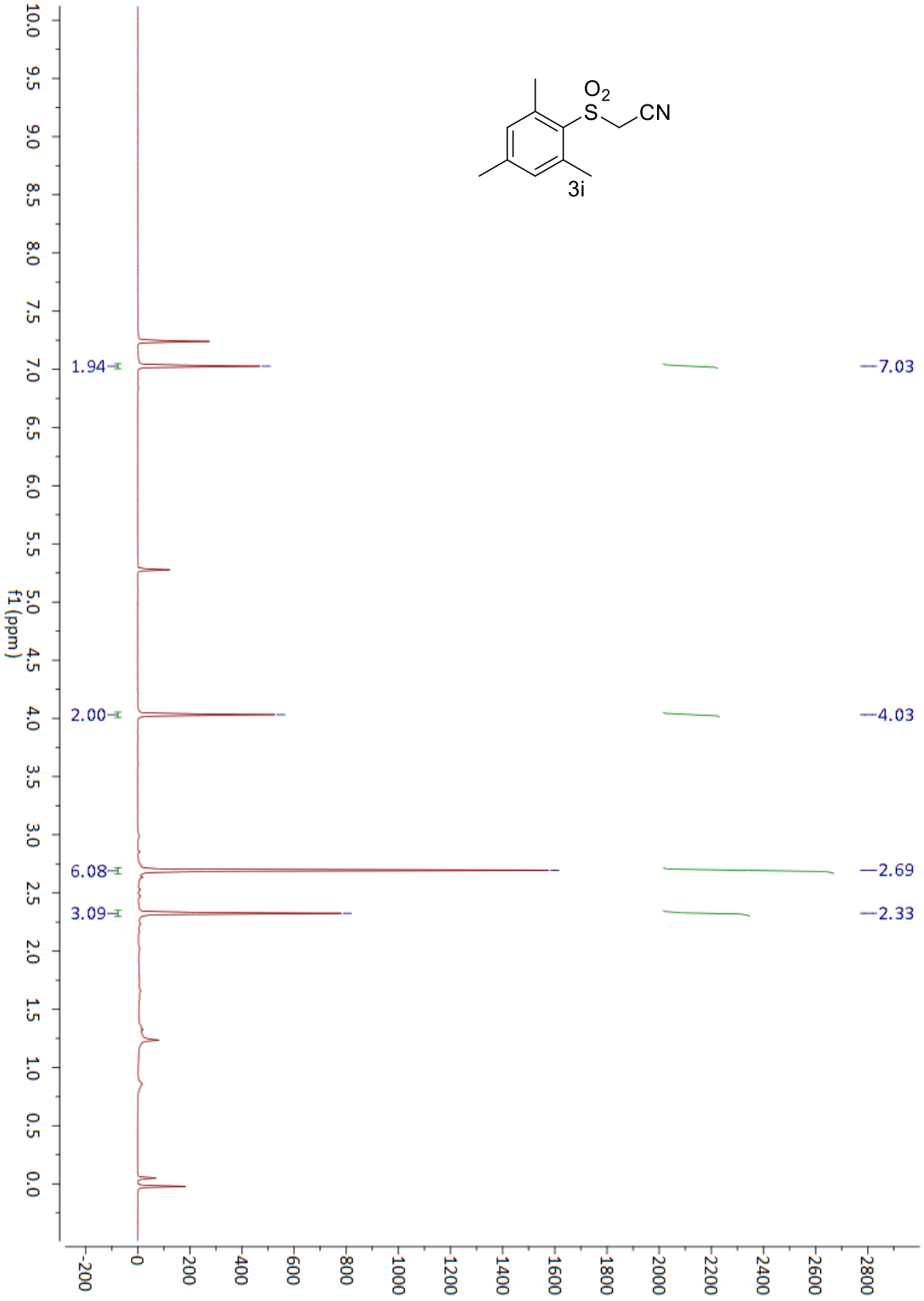
127.67
110.71
46.07
f1 (ppm)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CN
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6.08
3.09
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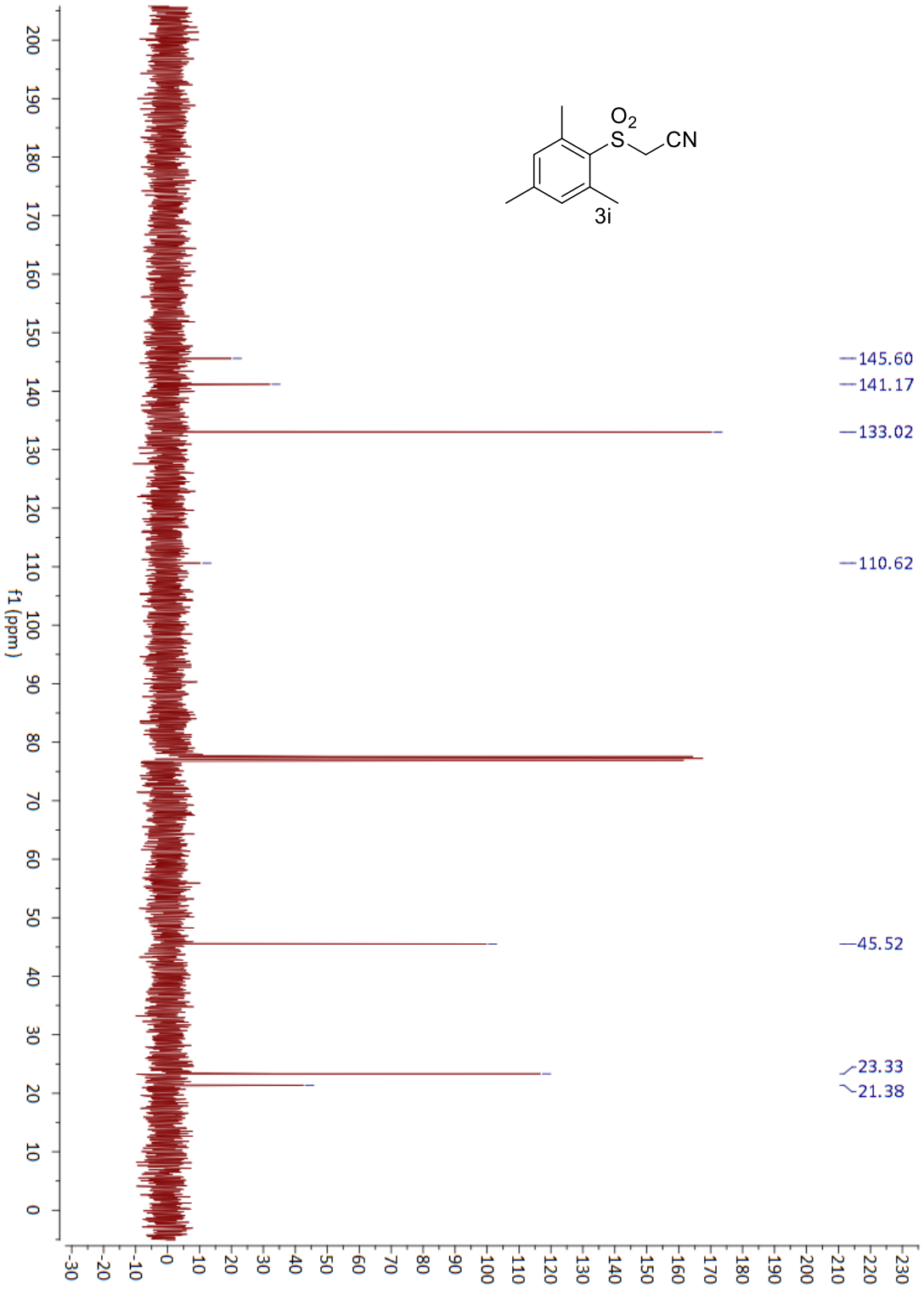
4.03
2.69
2.33
f1 (ppm)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S
CN
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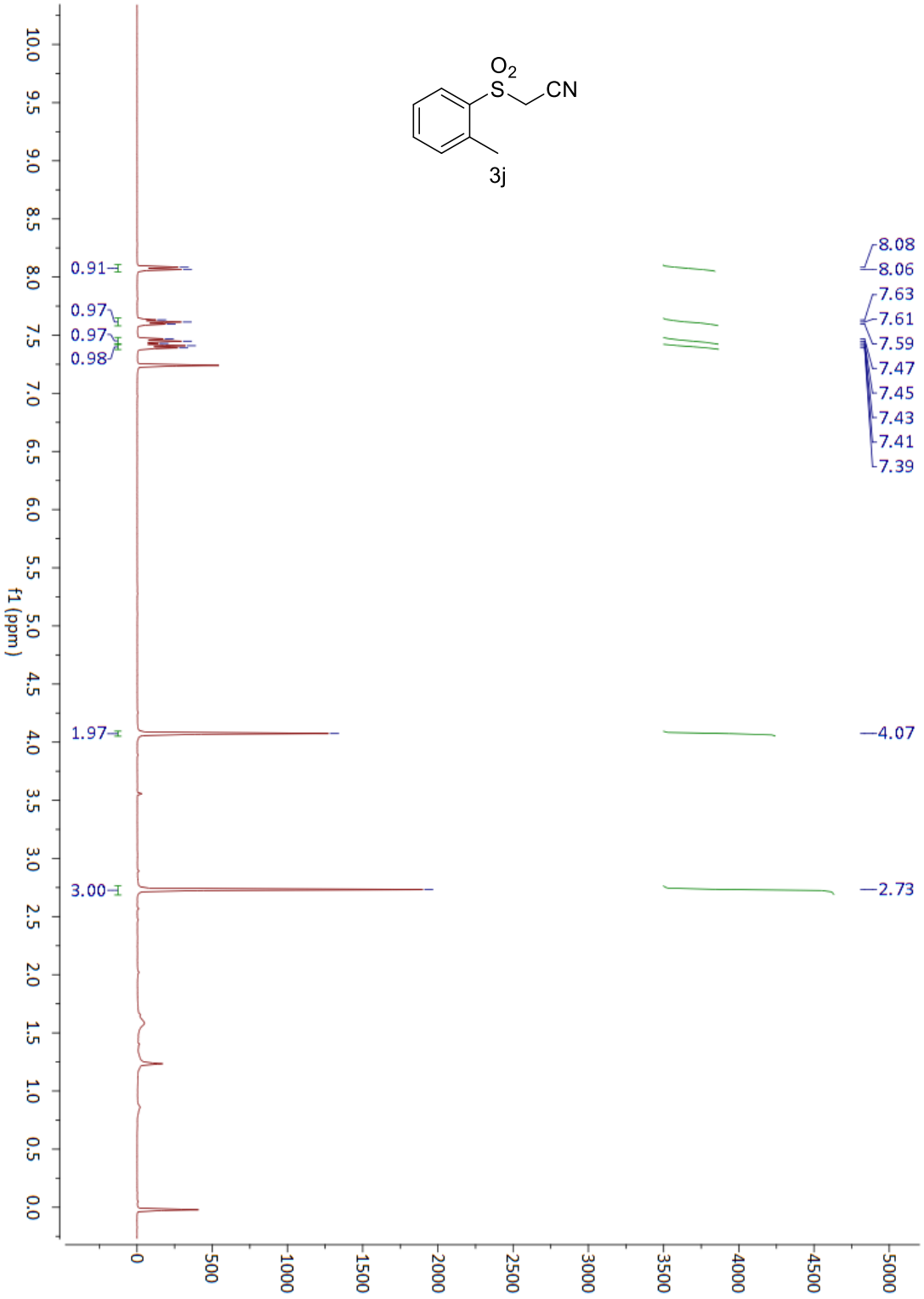
133.02
110.62
45.52
23.33
21.38
f1 (ppm)


O2
S
CN
3j
0.91
0.97
0.97
0.98
1.97
3.00
8.08
8.06
7.63
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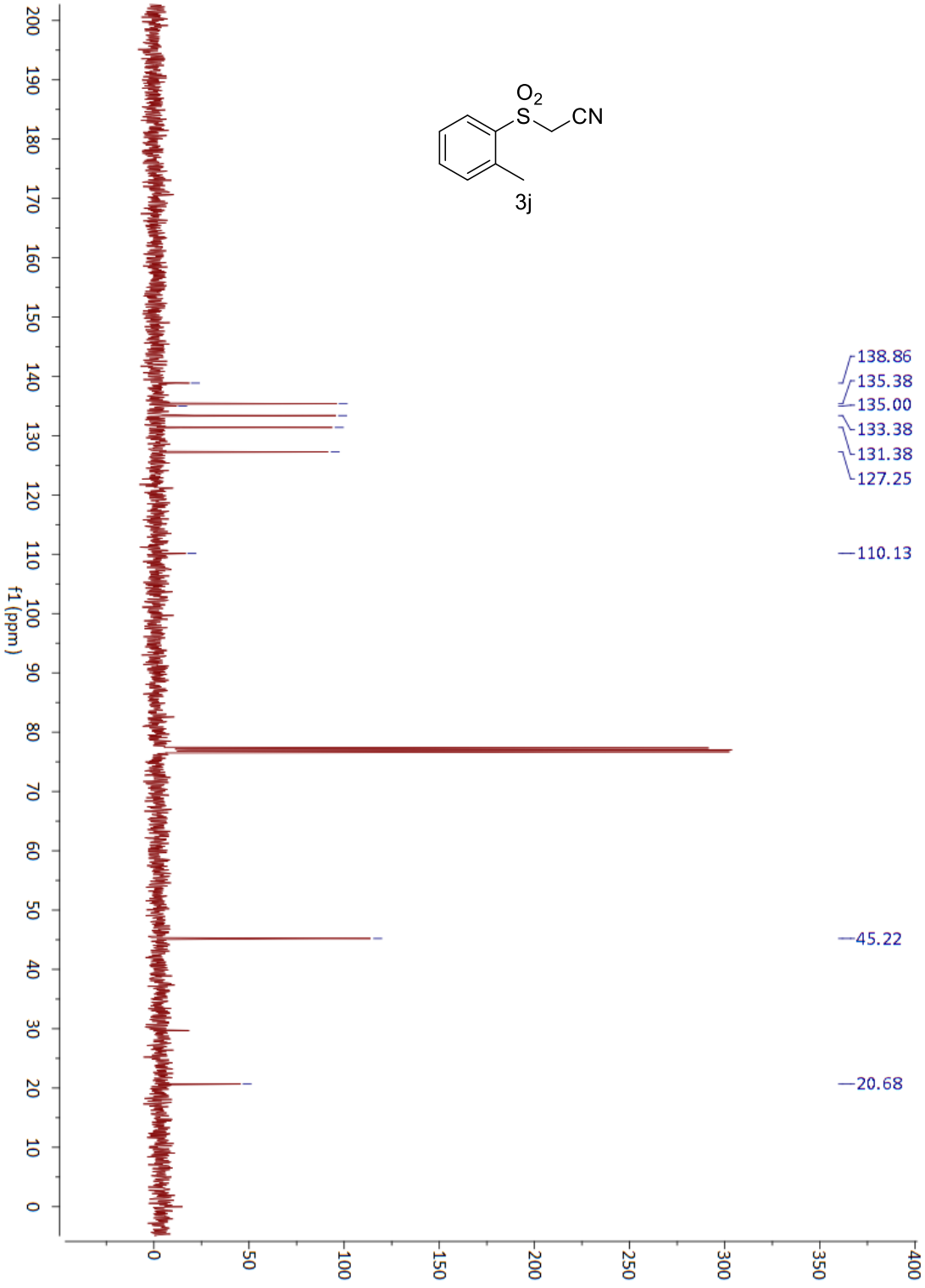
7.59
7.47
7.45
7.43
7.41
7.39
4.07
2.73
f1 (ppm)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CN
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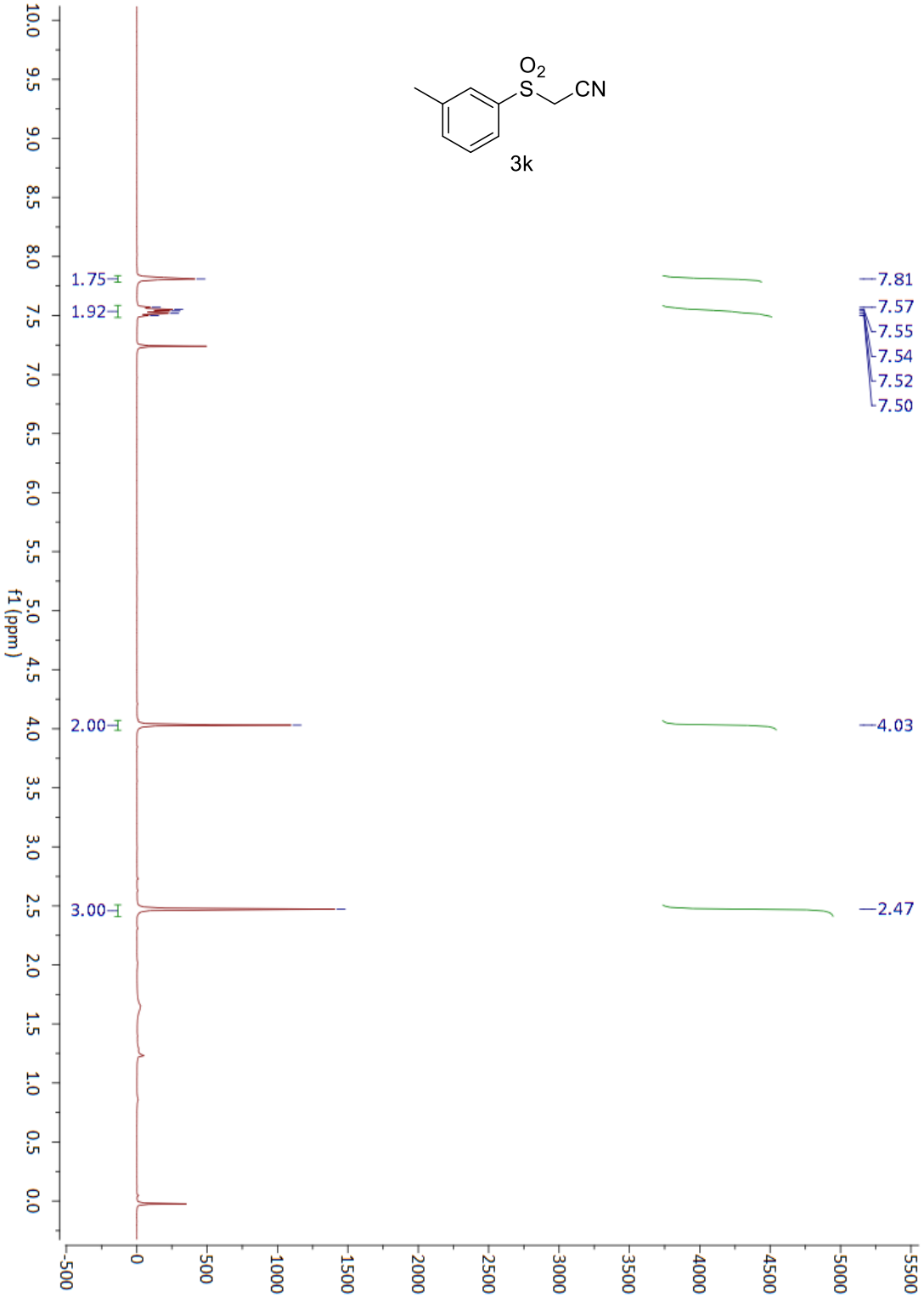
f1 (ppm)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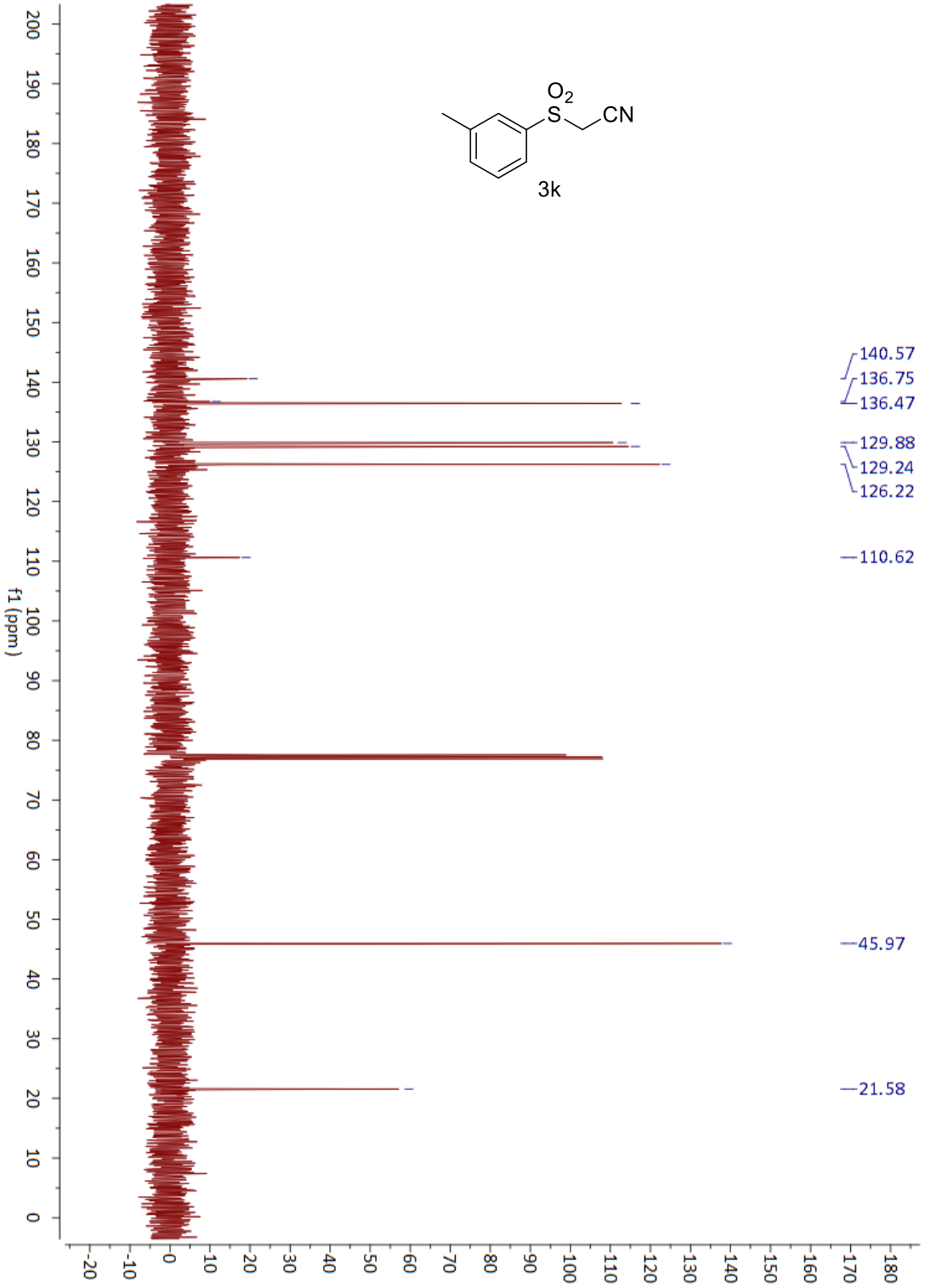
4.03
2.47
f1 (ppm)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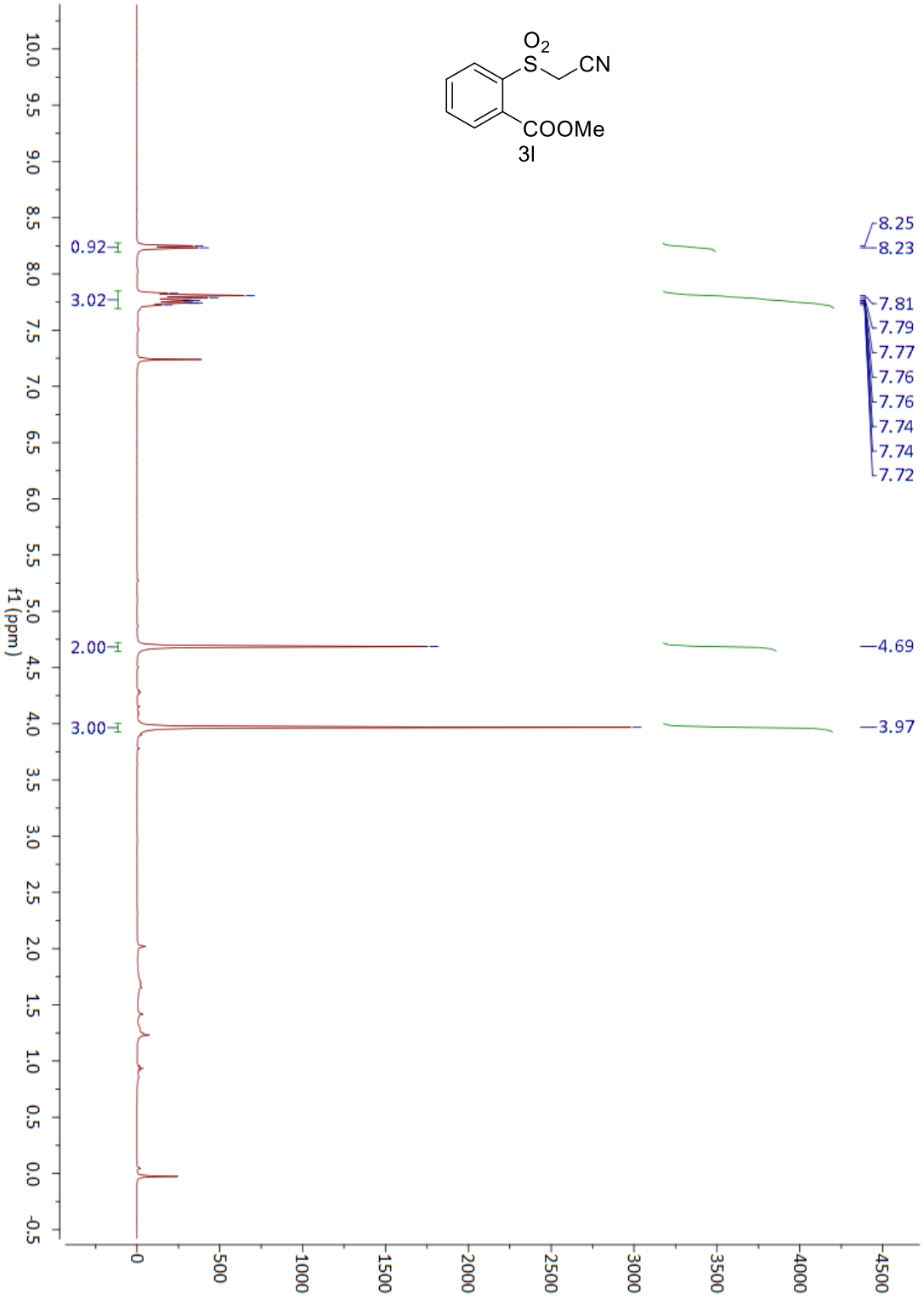
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CN
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7.77
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7.74
7.72
4.69
3.97
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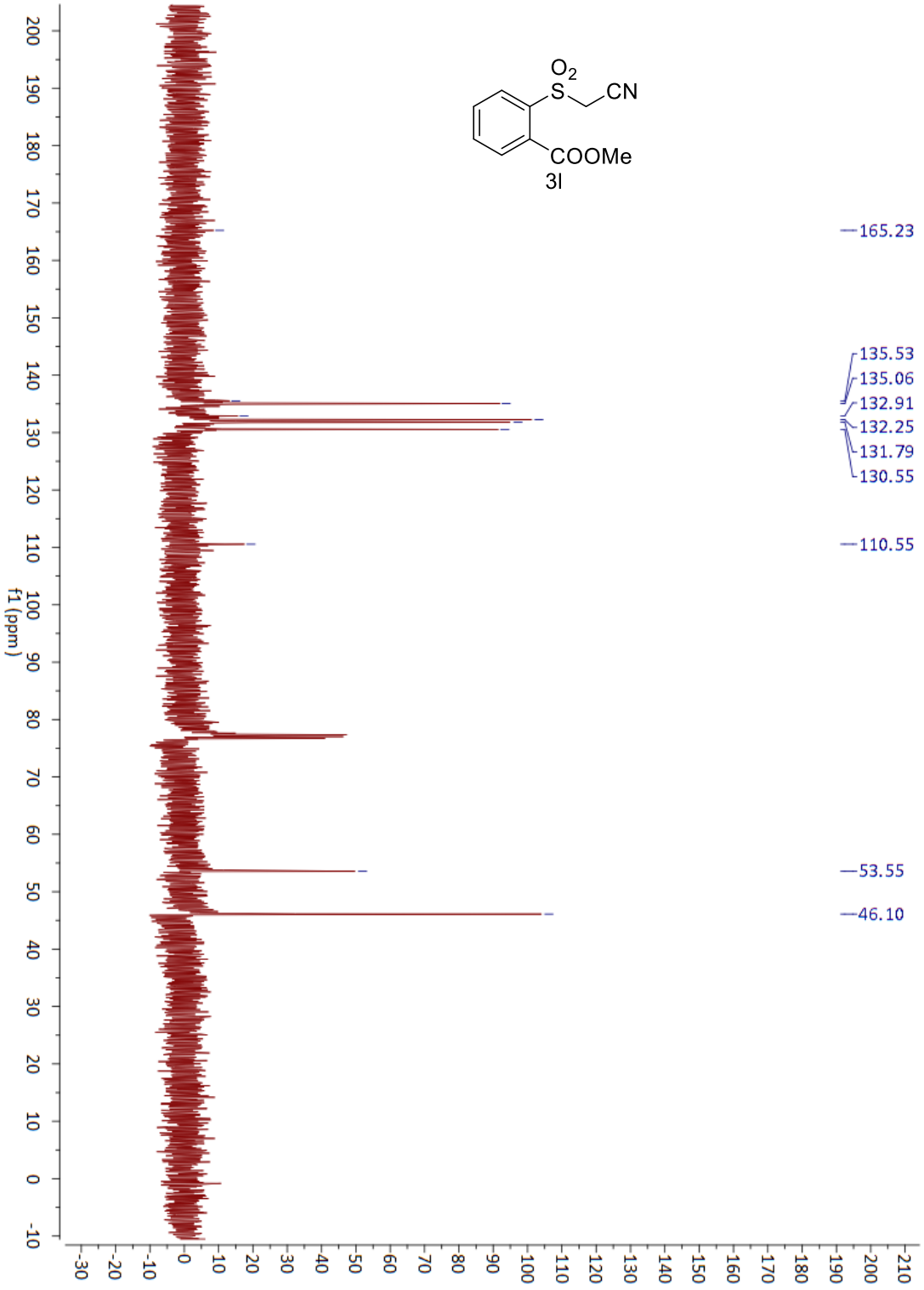
3.02
2.00
3.00
f1 (ppm)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S
CN
COOMe
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131.79
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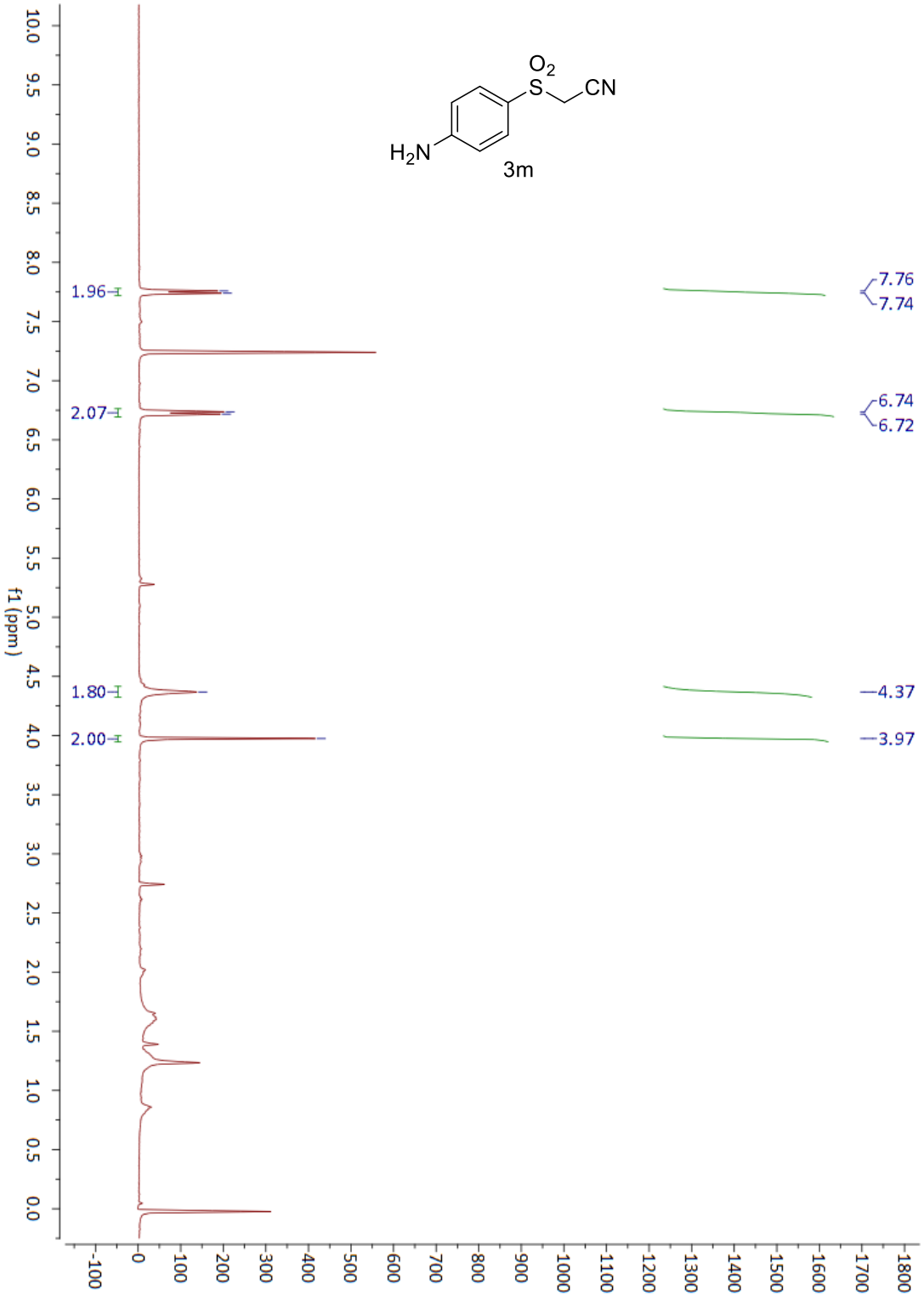
f1 (ppm)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CN
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4.37
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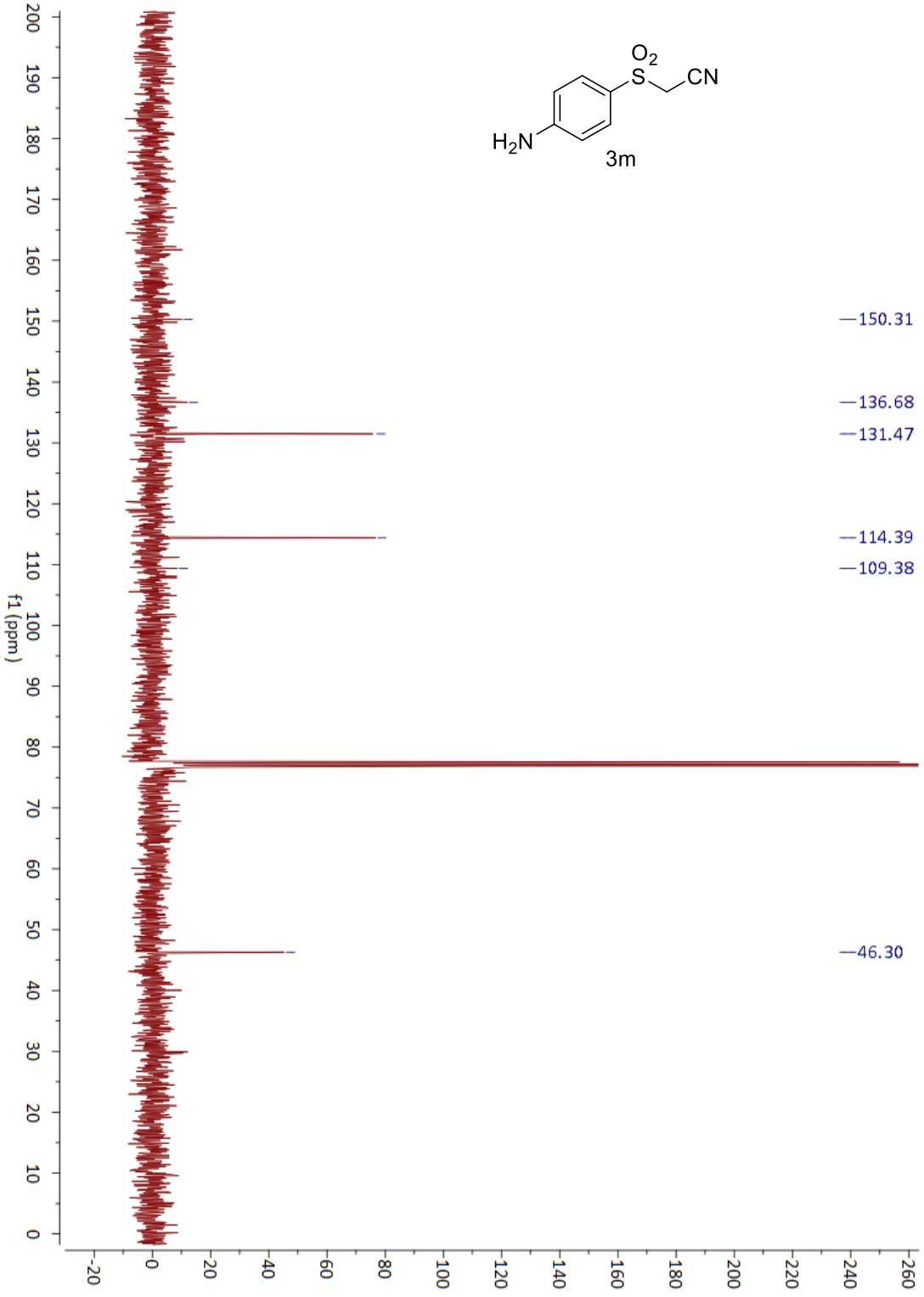
f1 (ppm)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CN
H2N
3m
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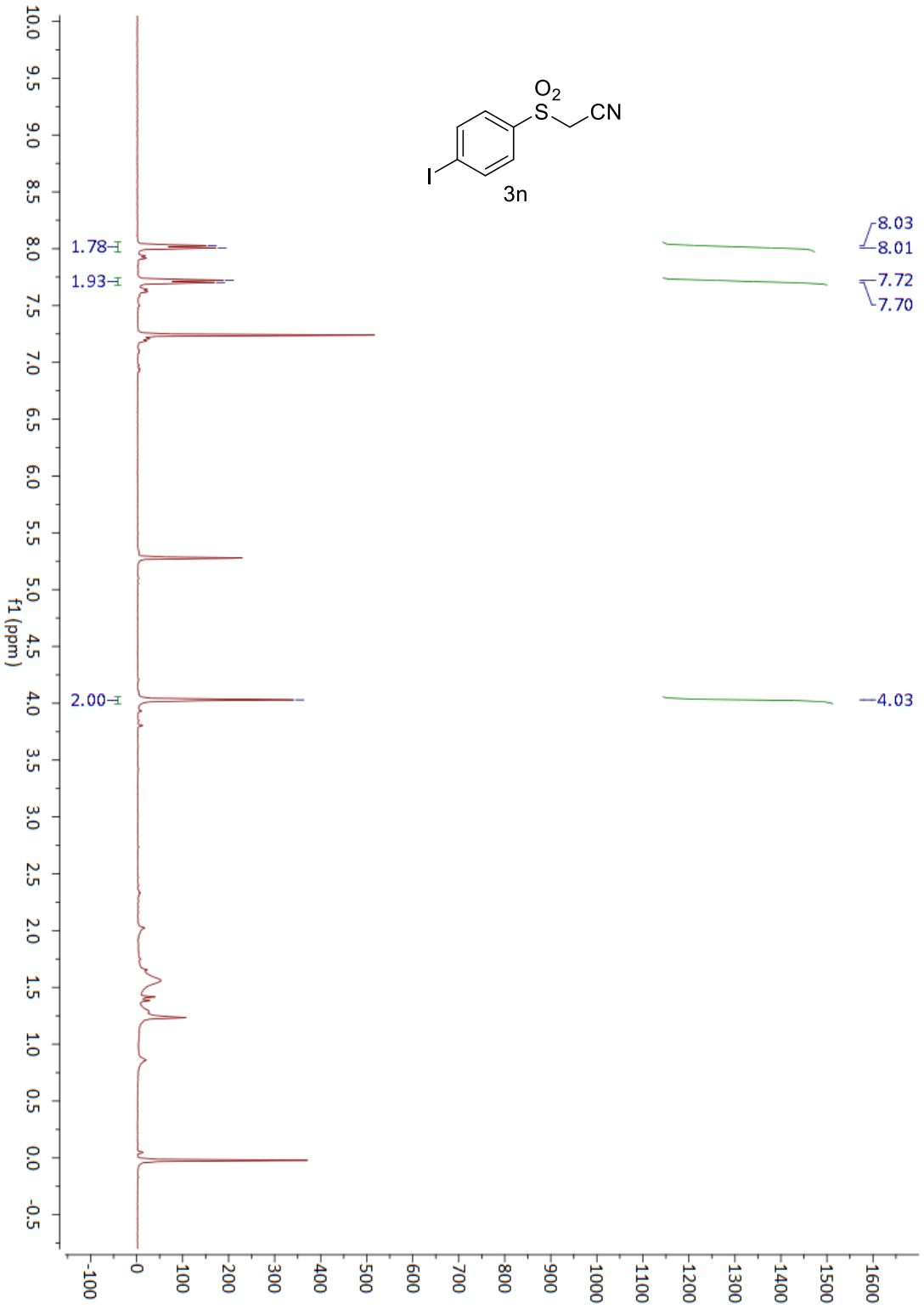
131.47
114.39
109.38
46.30
f1 (ppm)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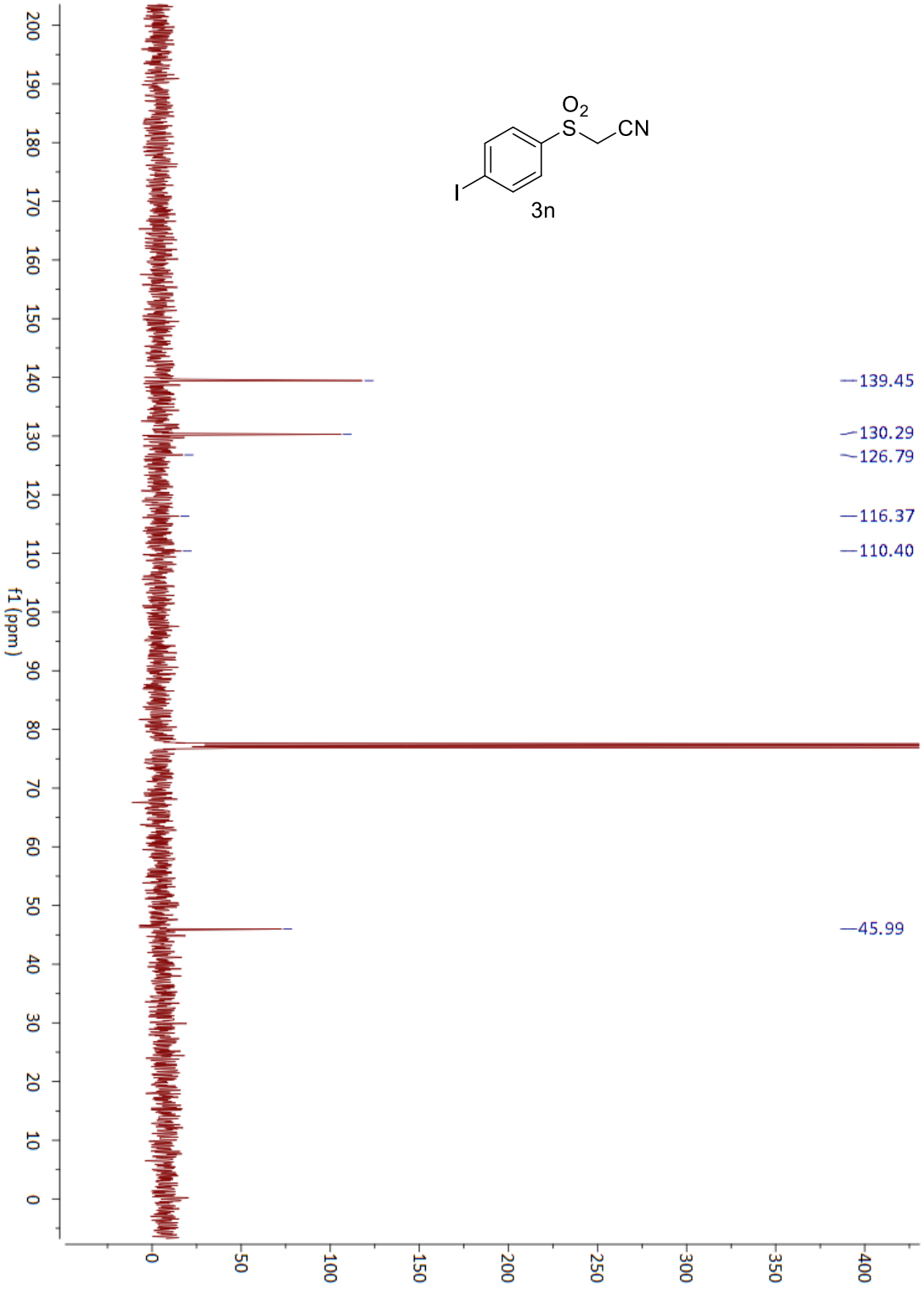
4.03
f1 (ppm)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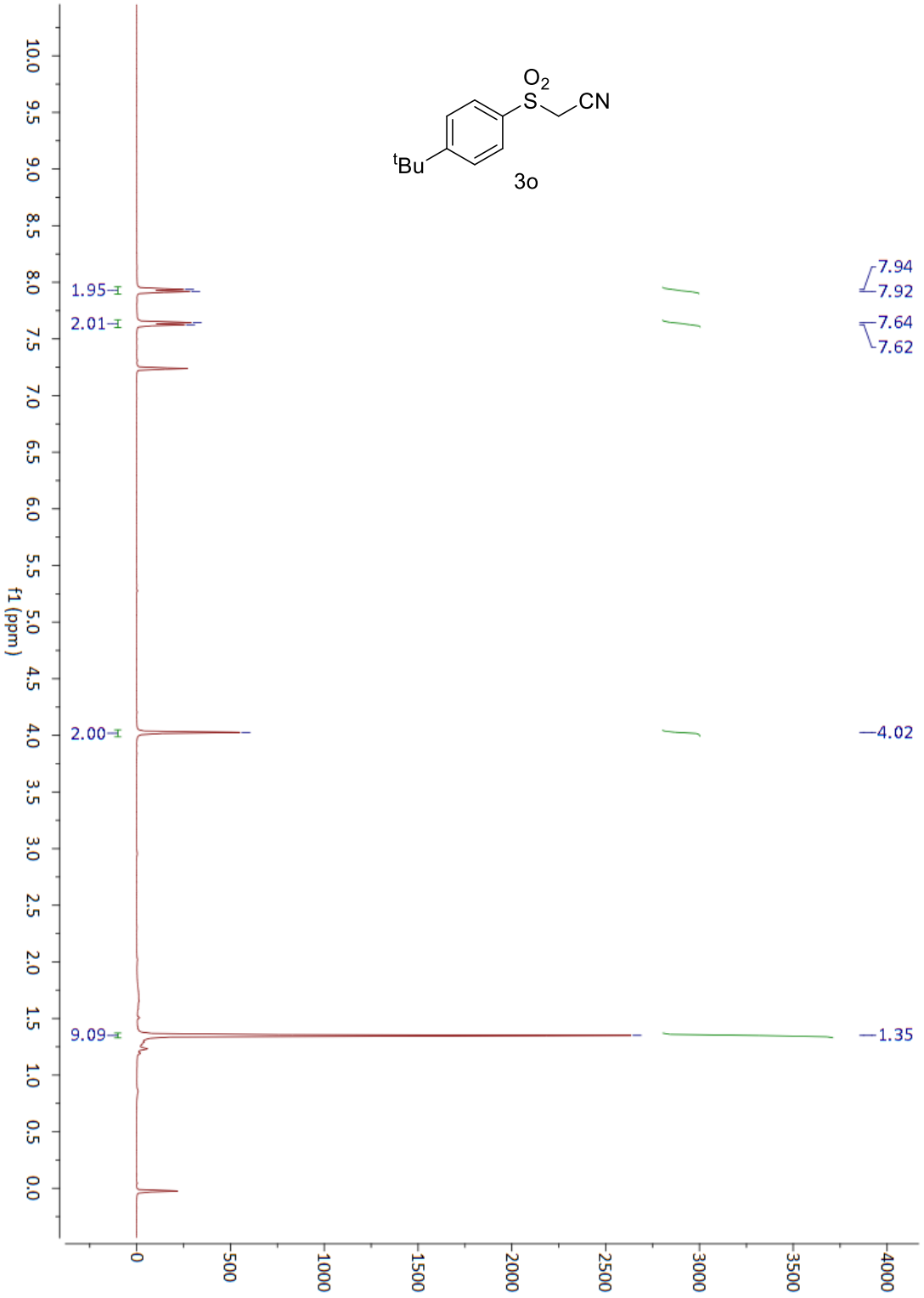
f1 (ppm)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S
CN
tBu
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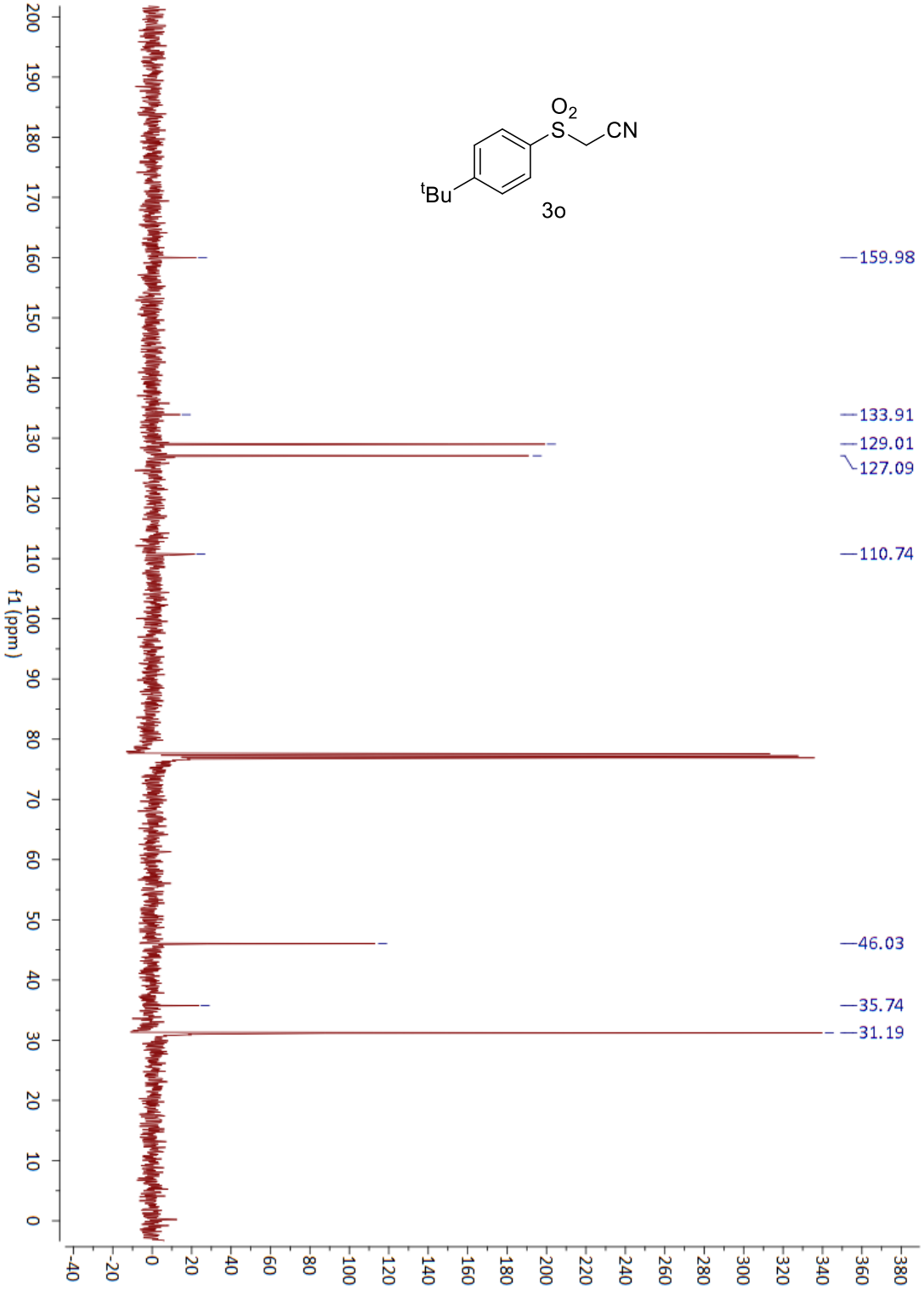
2.00
9.09
7.94
7.92
7.64
7.62
4.02
1.35
f1 (ppm)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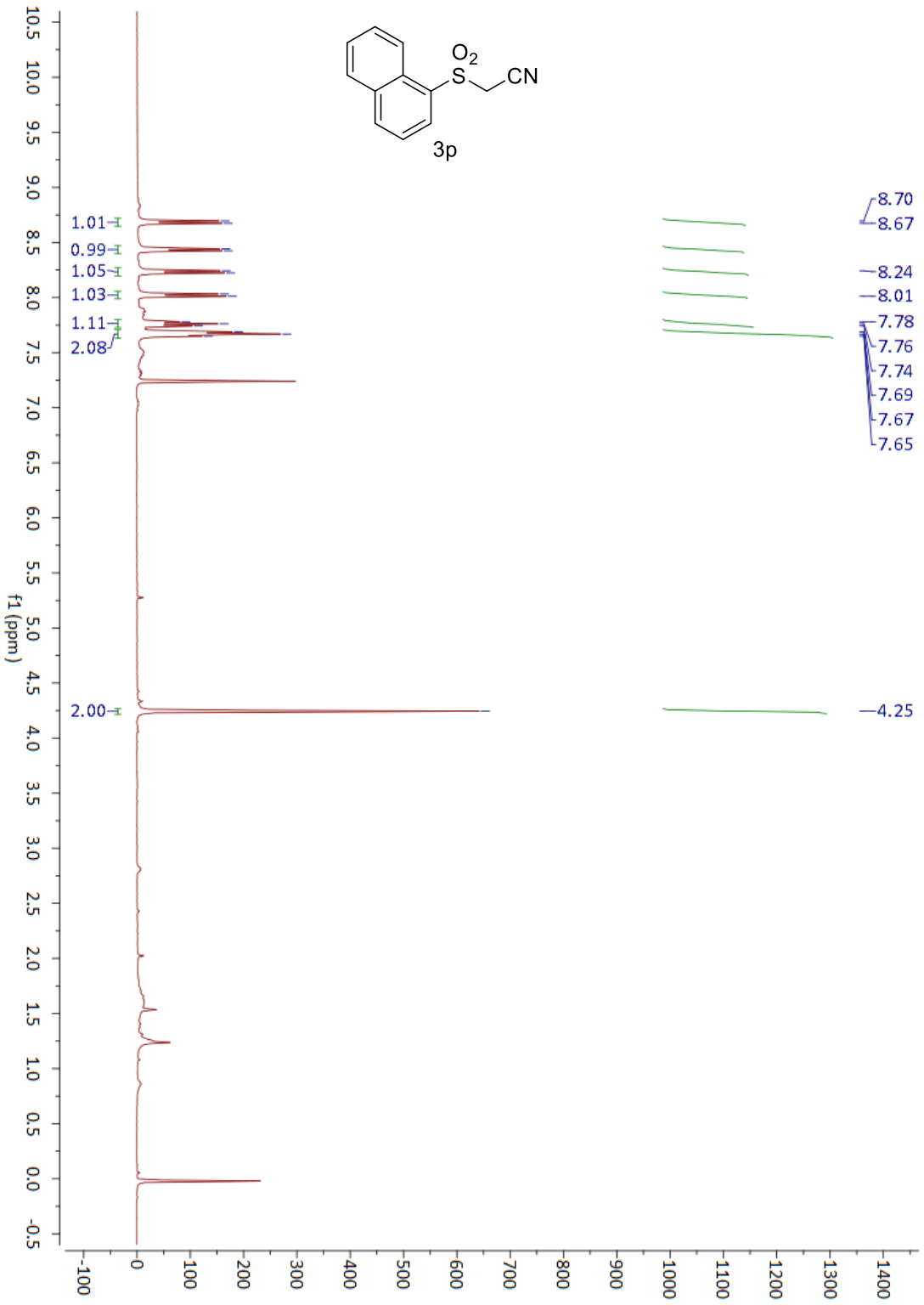
46.03
35.74
31.19
f1 (ppm)


O2
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CN
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1.05
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2.00
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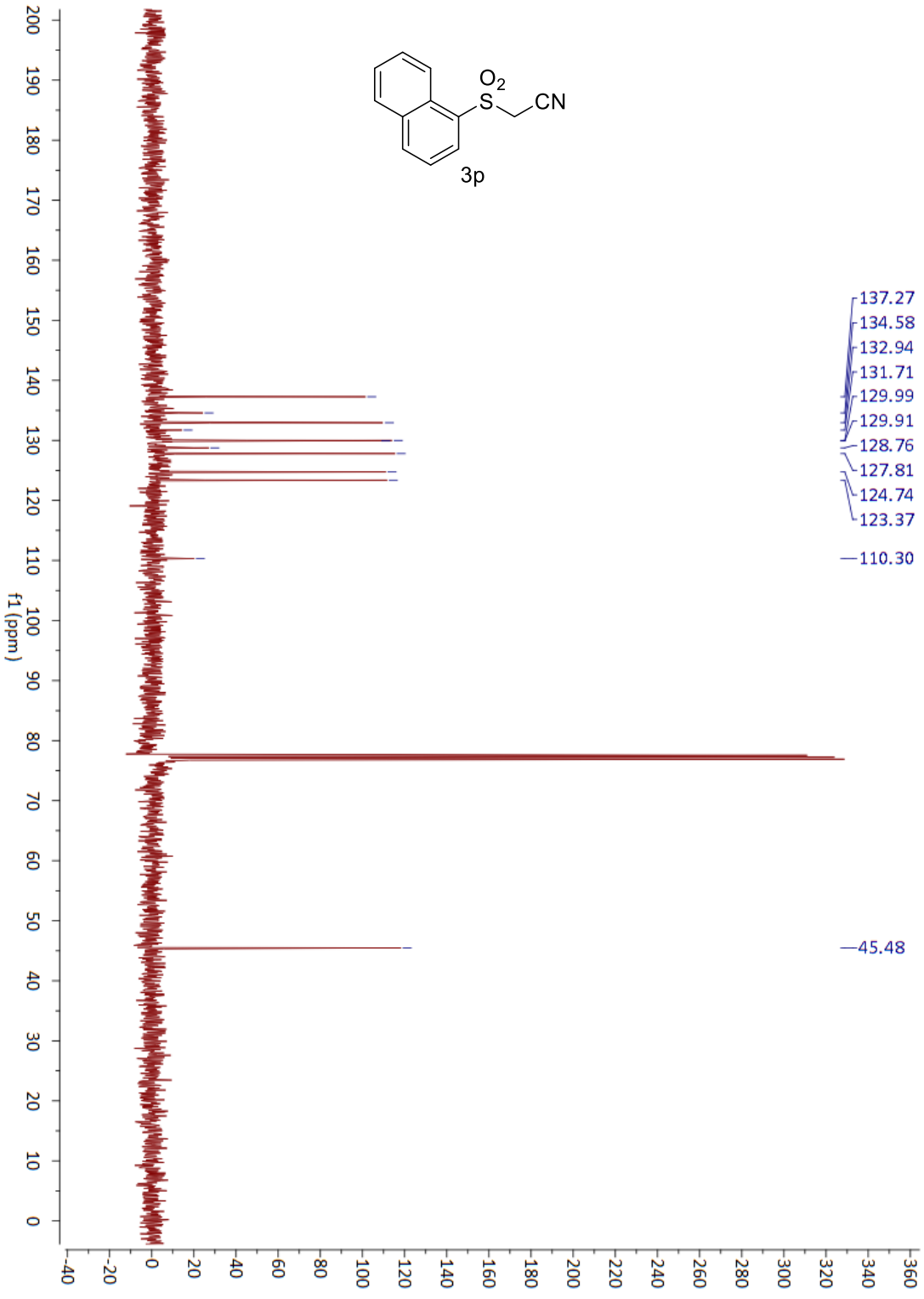
8.01
7.78
7.76
7.74
7.69
7.67
7.65
4.25
f1 (ppm)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CN
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123.37
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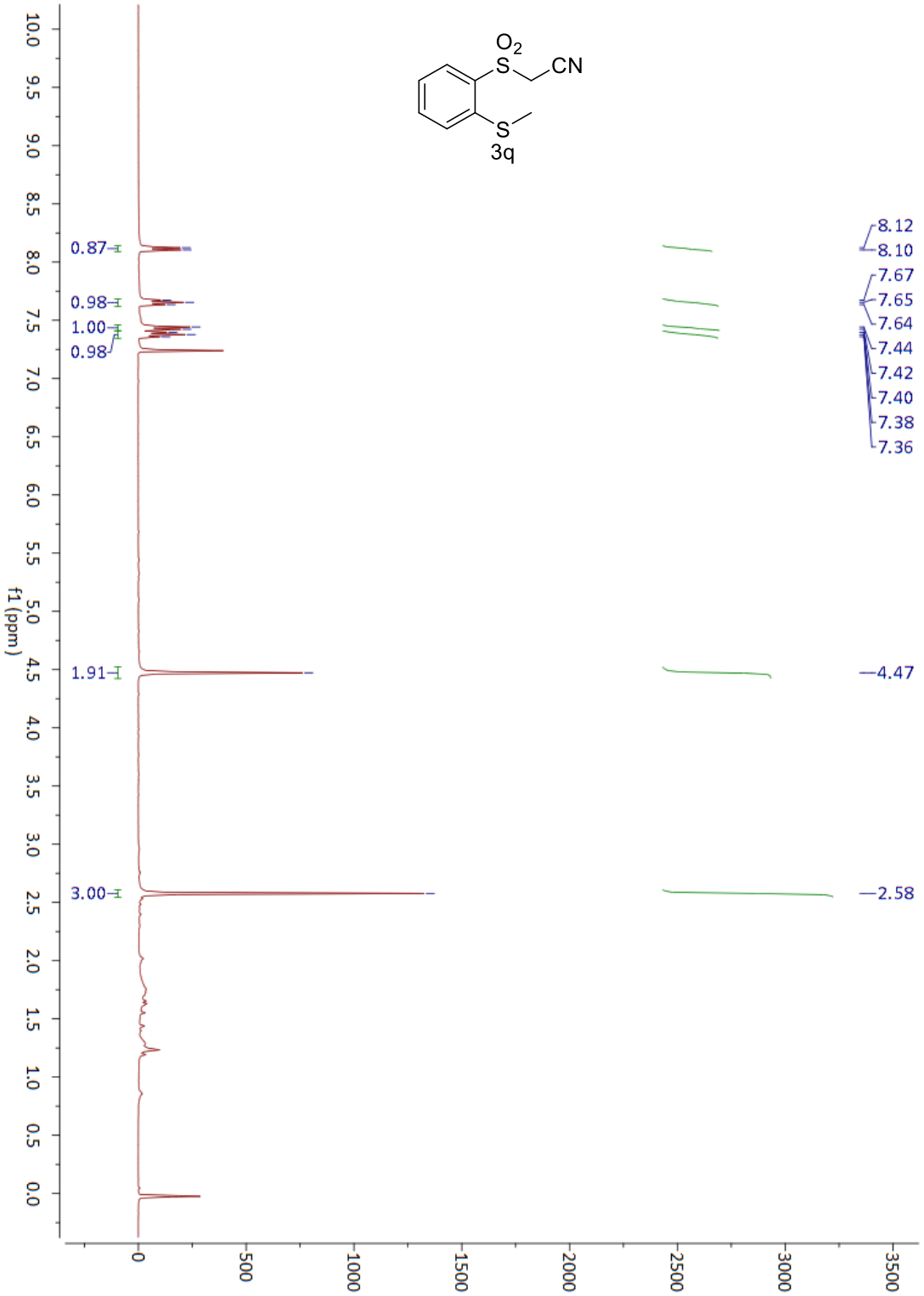
45.48
f1 (ppm)


O2
S
CN
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3q
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7.64
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7.38
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1.00
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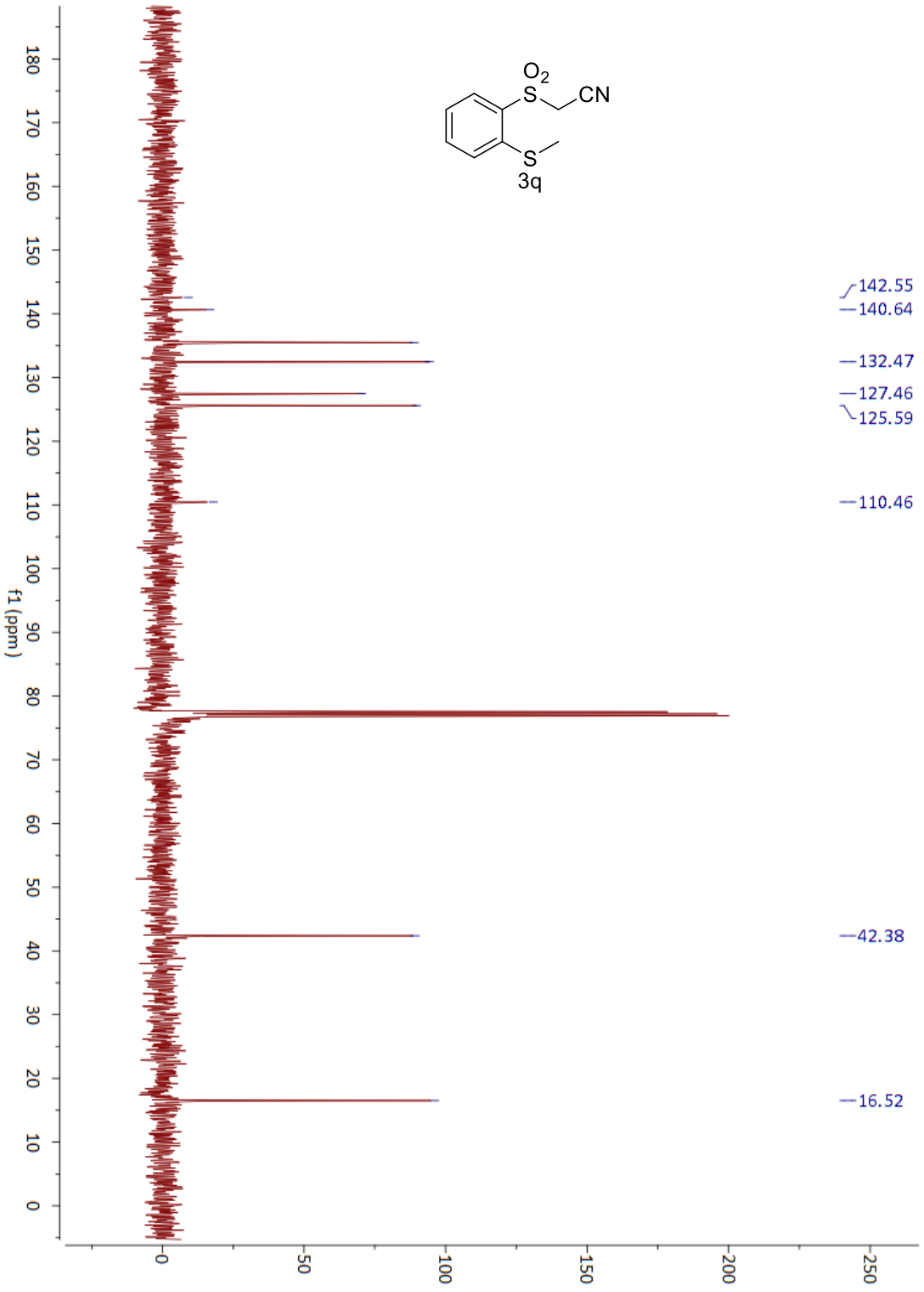
1.91
3.00
4.47
2.58
f1 (ppm)


O2
S
CN
S
3q
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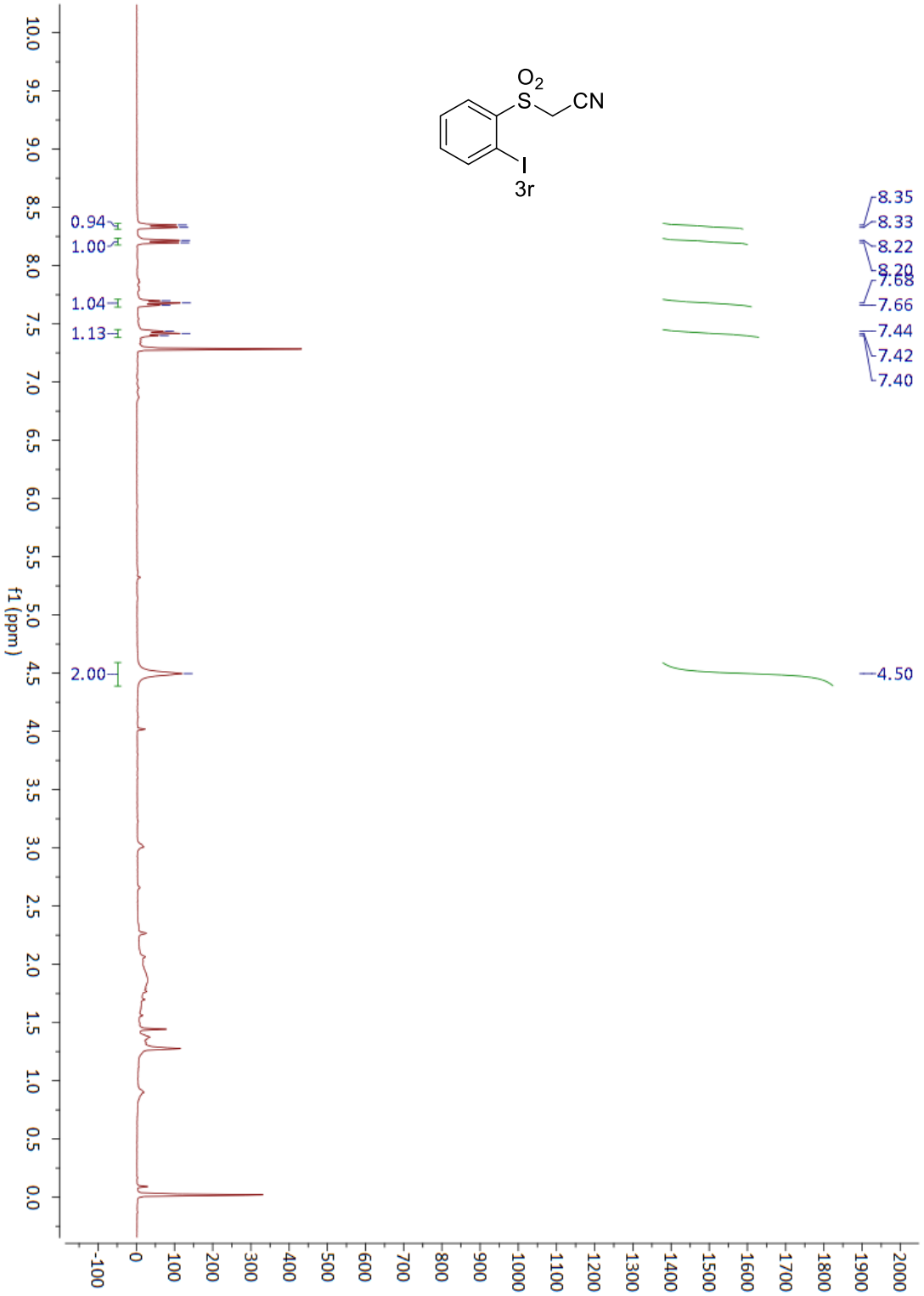
132.47
127.46
125.59
110.46
42.38
16.52
f1 (ppm)


O2
S
CN
I
3r
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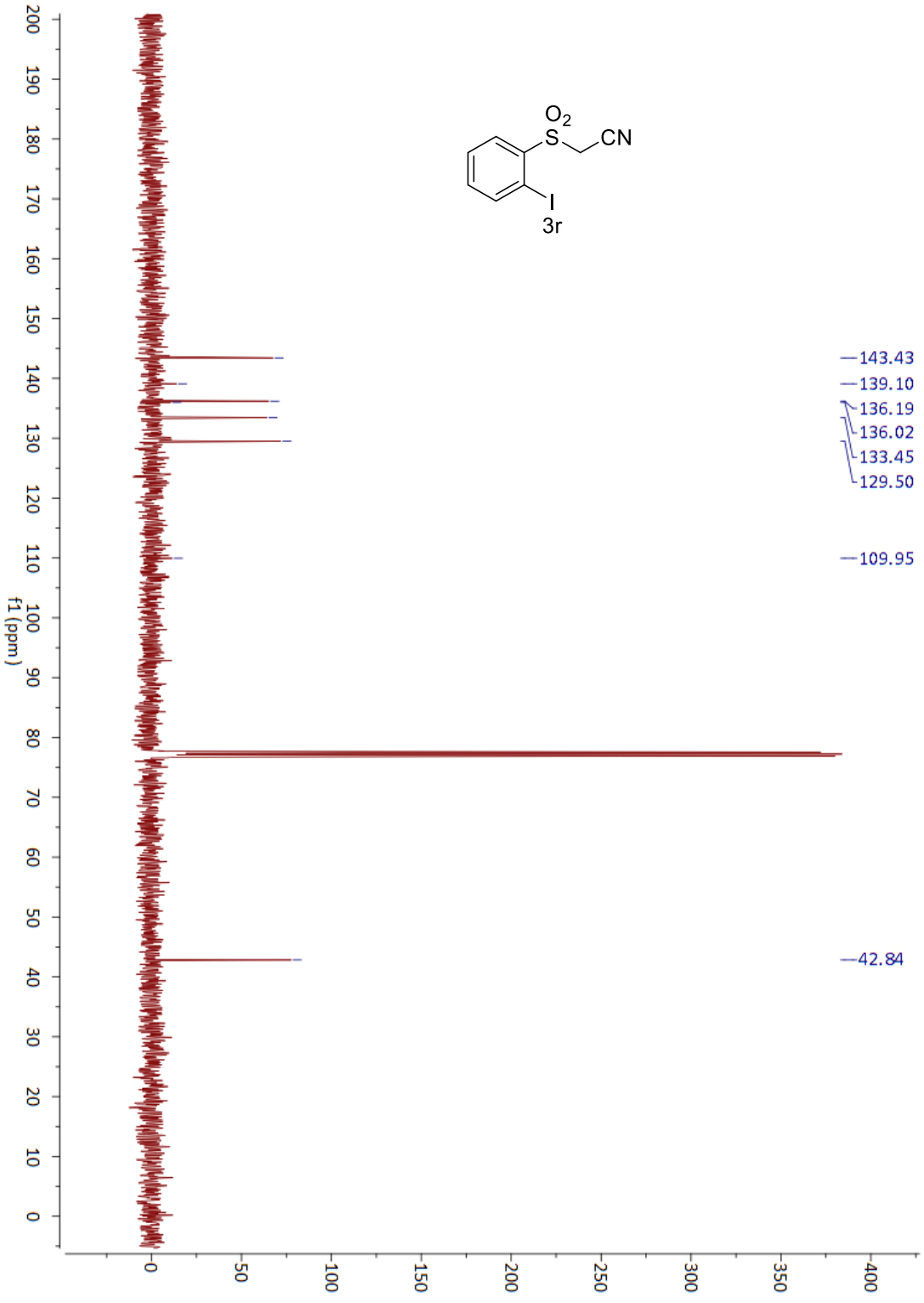
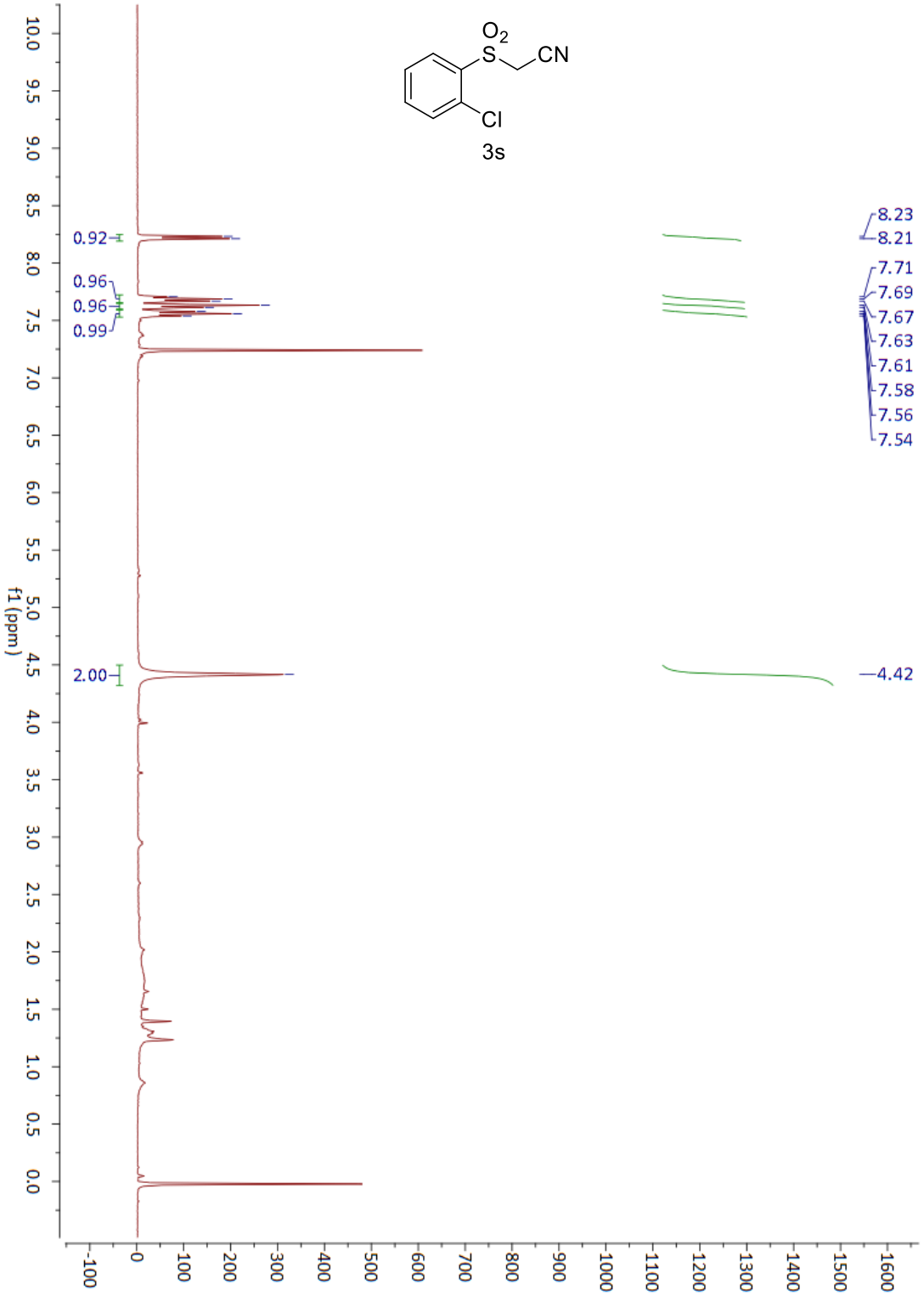
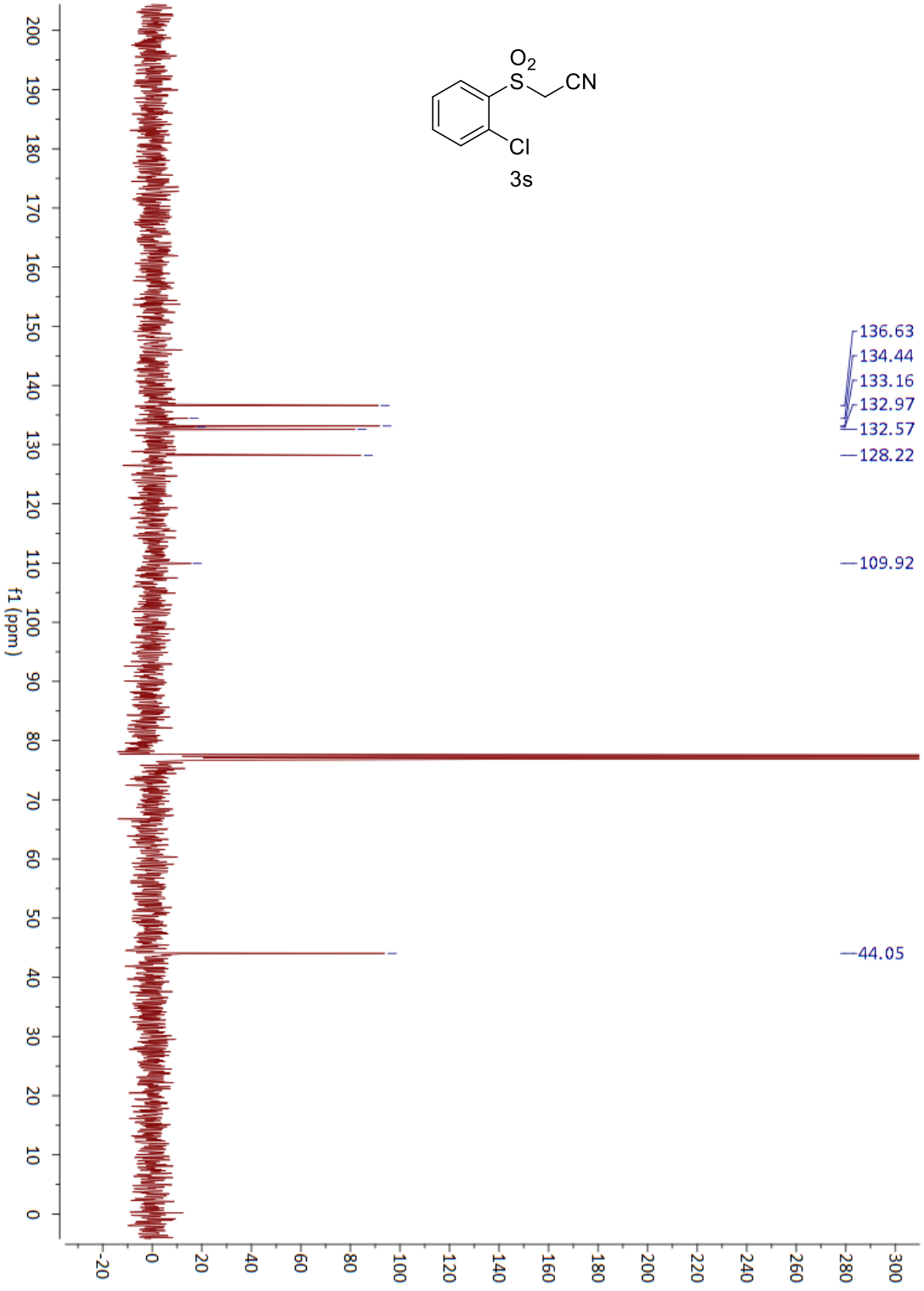
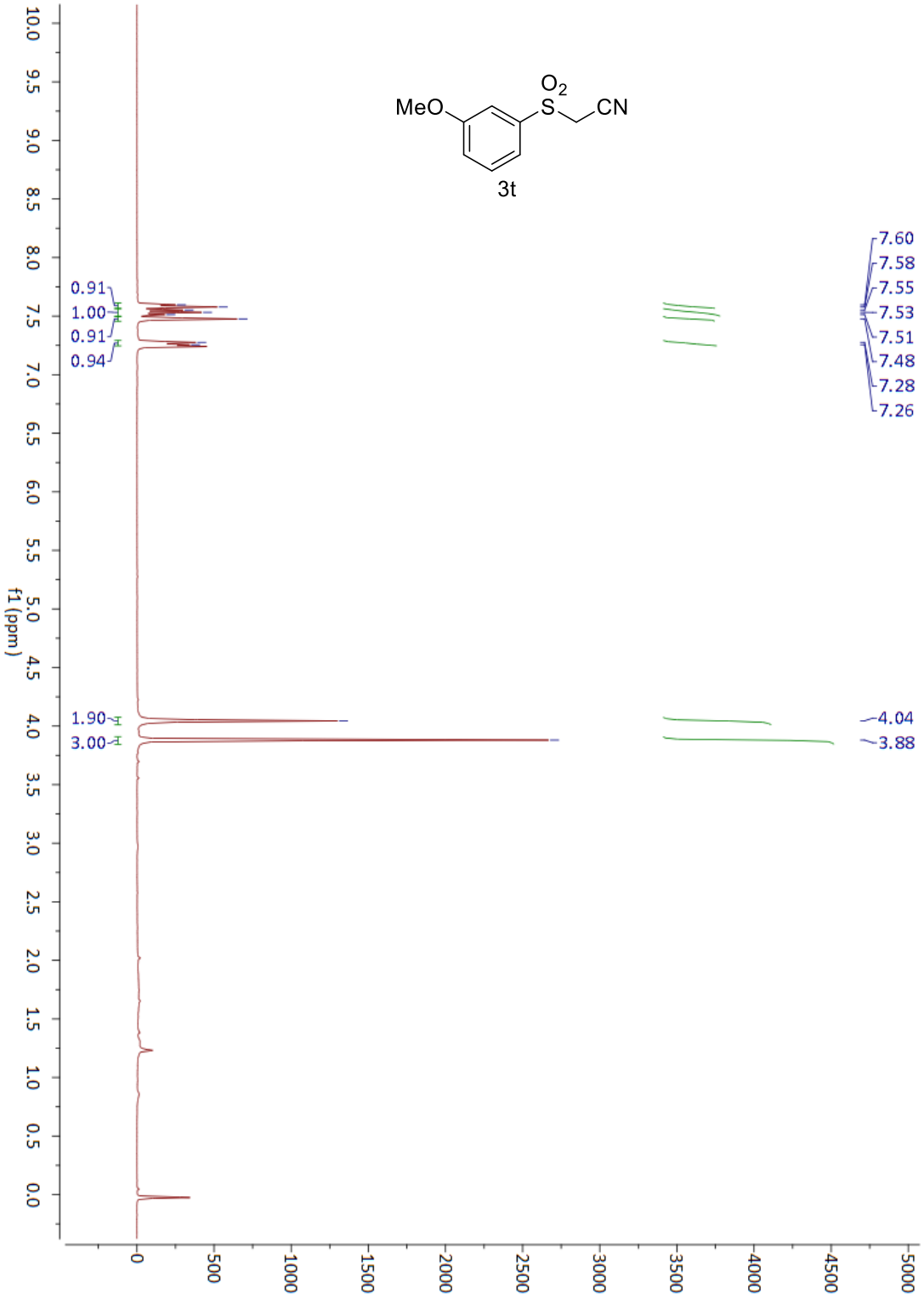
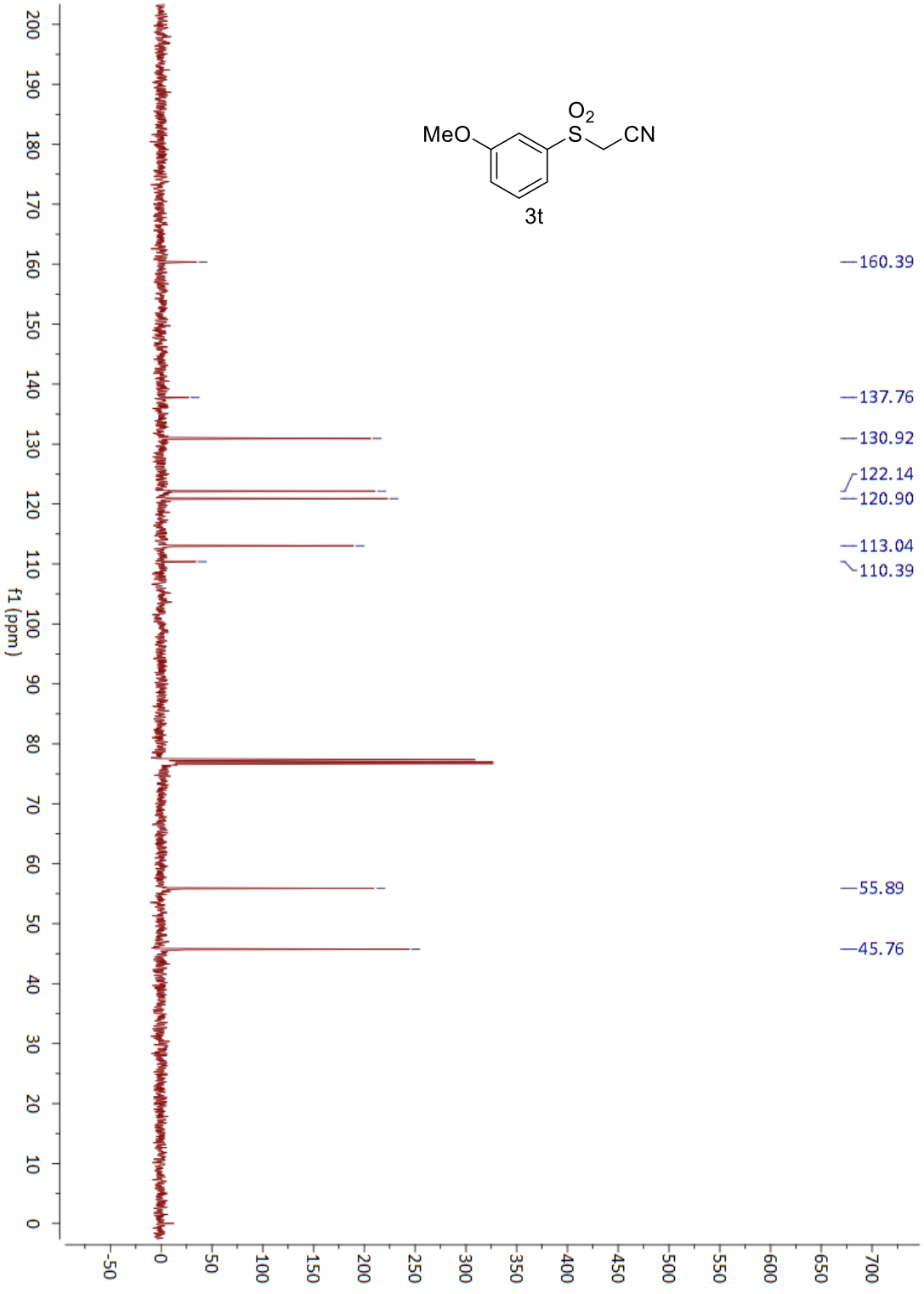
1.00
1.04
1.13
2.00
8.35
8.33
8.22
8.20
7.68
7.66
7.44
7.42
7.40
4.50
f1 (ppm)

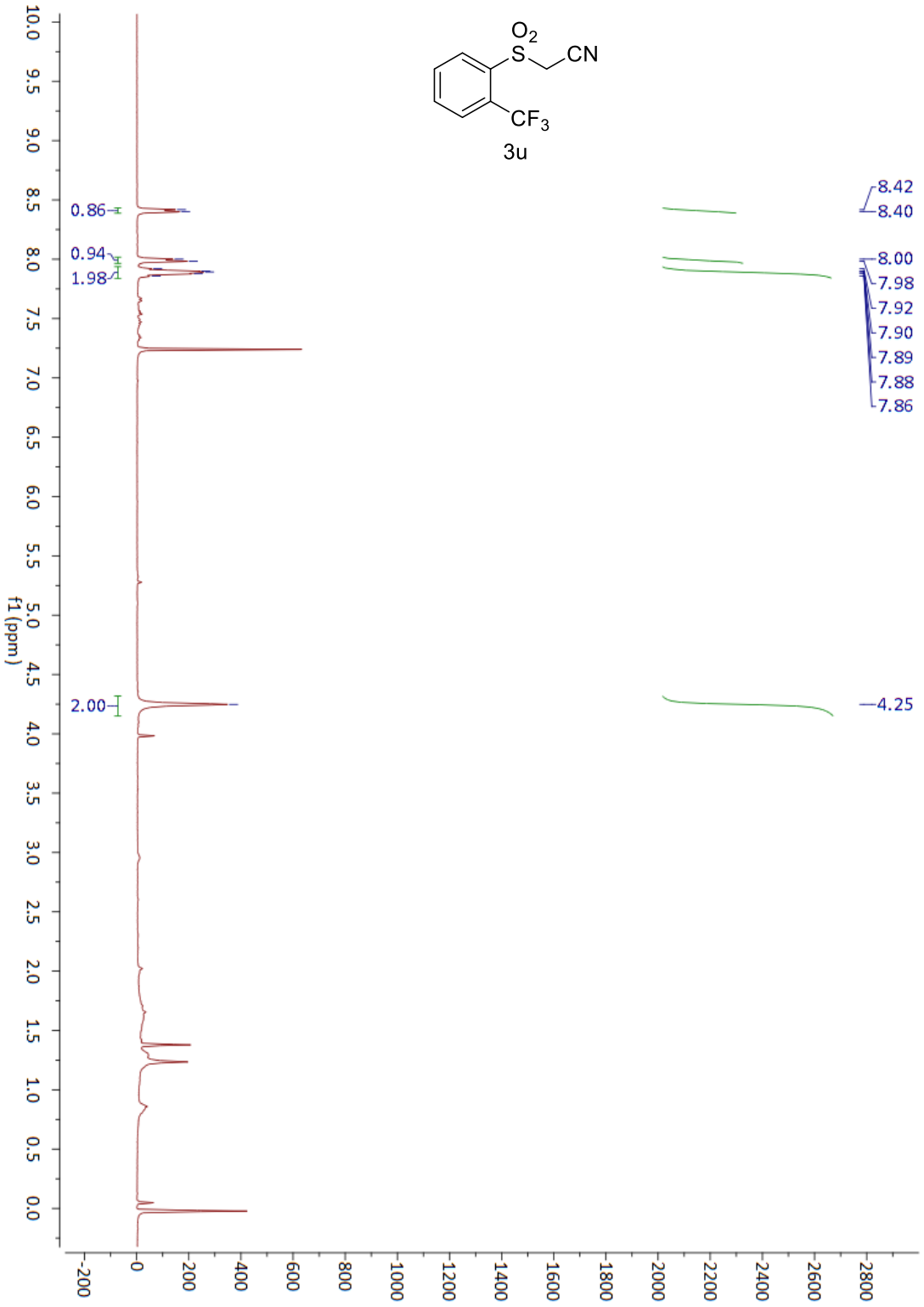

O2
S
CN
I
3r
143.43
139.10
136.19
136.02
133.45
129.50
109.95
42.84
f1 (ppm)

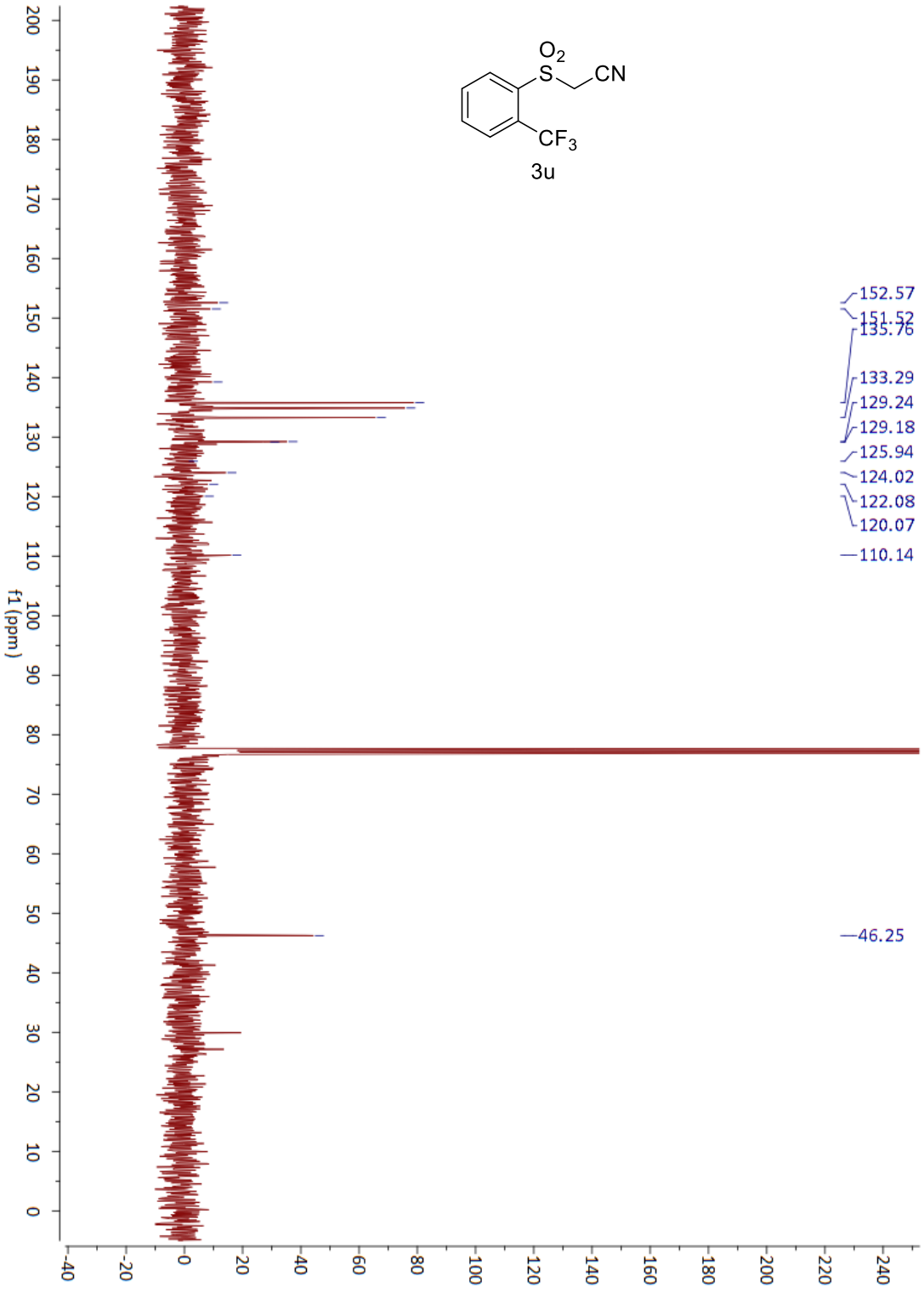

O2
S
CN
Cl
3s
8.23
8.21
7.71
7.69
7.67
7.63
7.61
7.58
7.56
7.54
0.92
0.96
0.96
0.99
2.00
4.42
f1 (ppm)

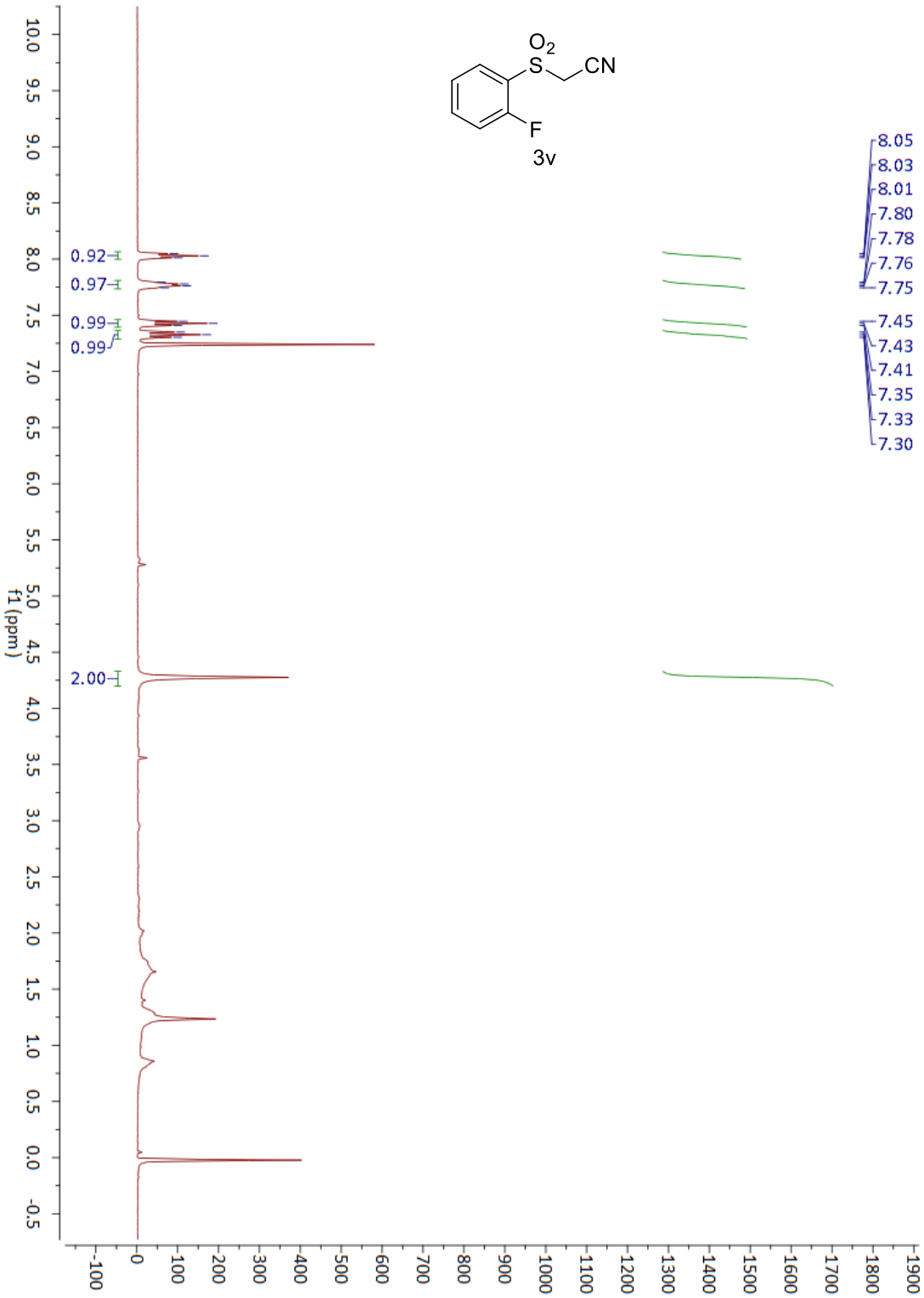

O2
S
CN
Cl
3s
136.63
134.44
133.16
132.97
132.57
128.22
109.92
44.05
f1 (ppm)

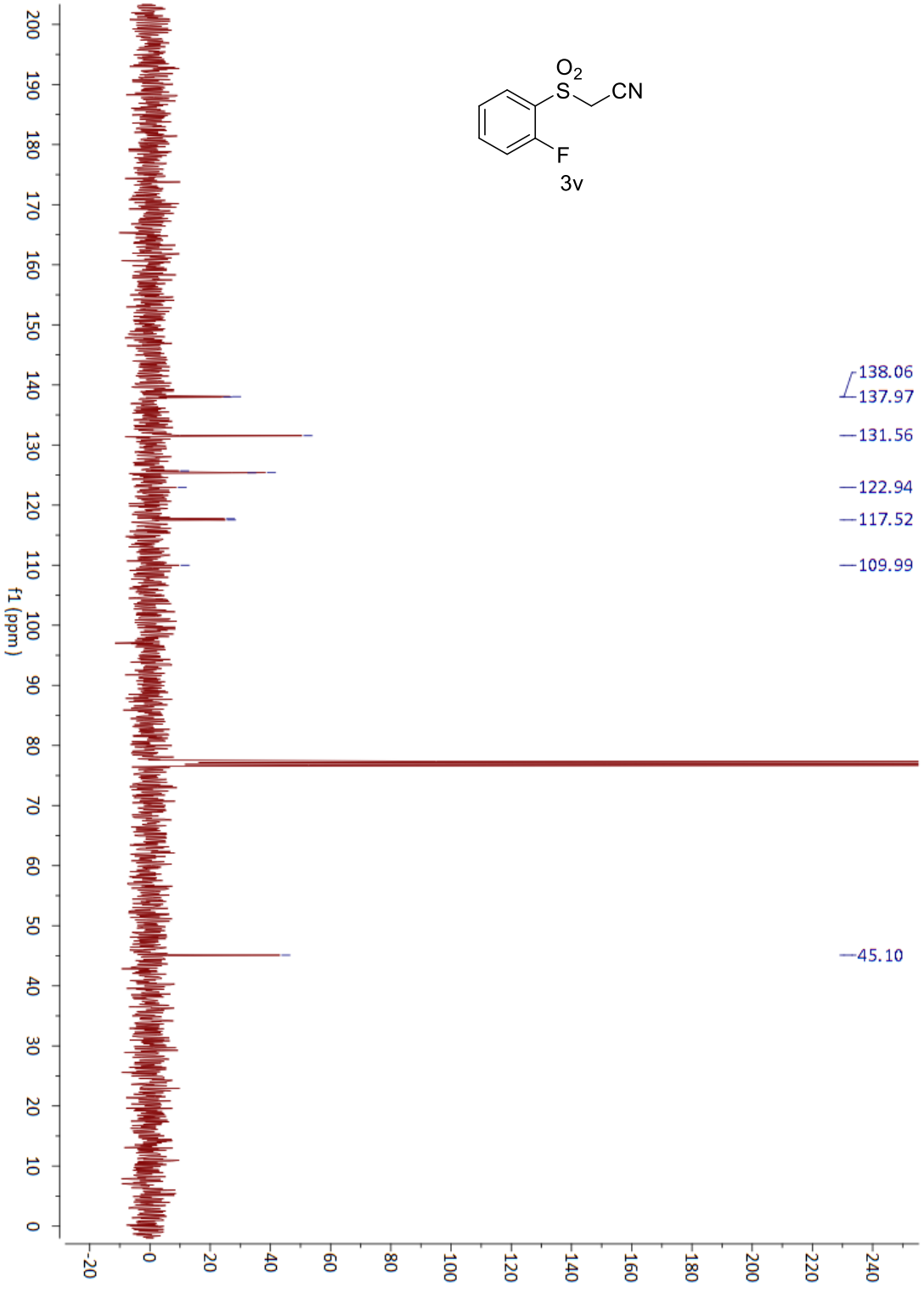

MeO
O2
S
CN
3t
0.91
1.00
0.91
0.94
1.90
3.00
7.60
7.58
7.55
7.53
7.51
7.48
7.28
7.26
4.04
3.88
f1 (ppm)

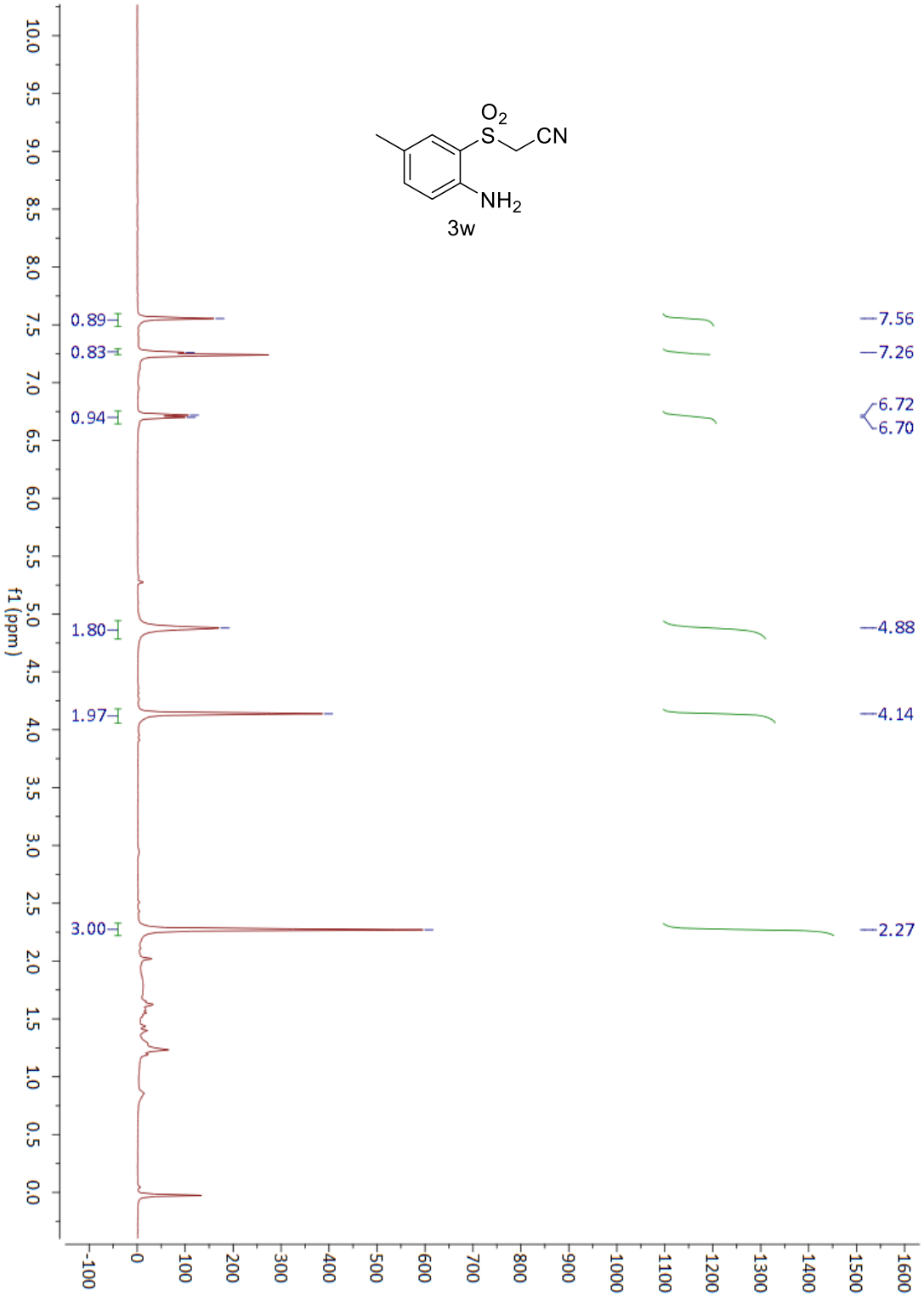

MeO
O2
S
CN
3t
160.39
137.76
130.92
122.14
120.90
113.04
110.39
55.89
45.76
f1 (ppm)

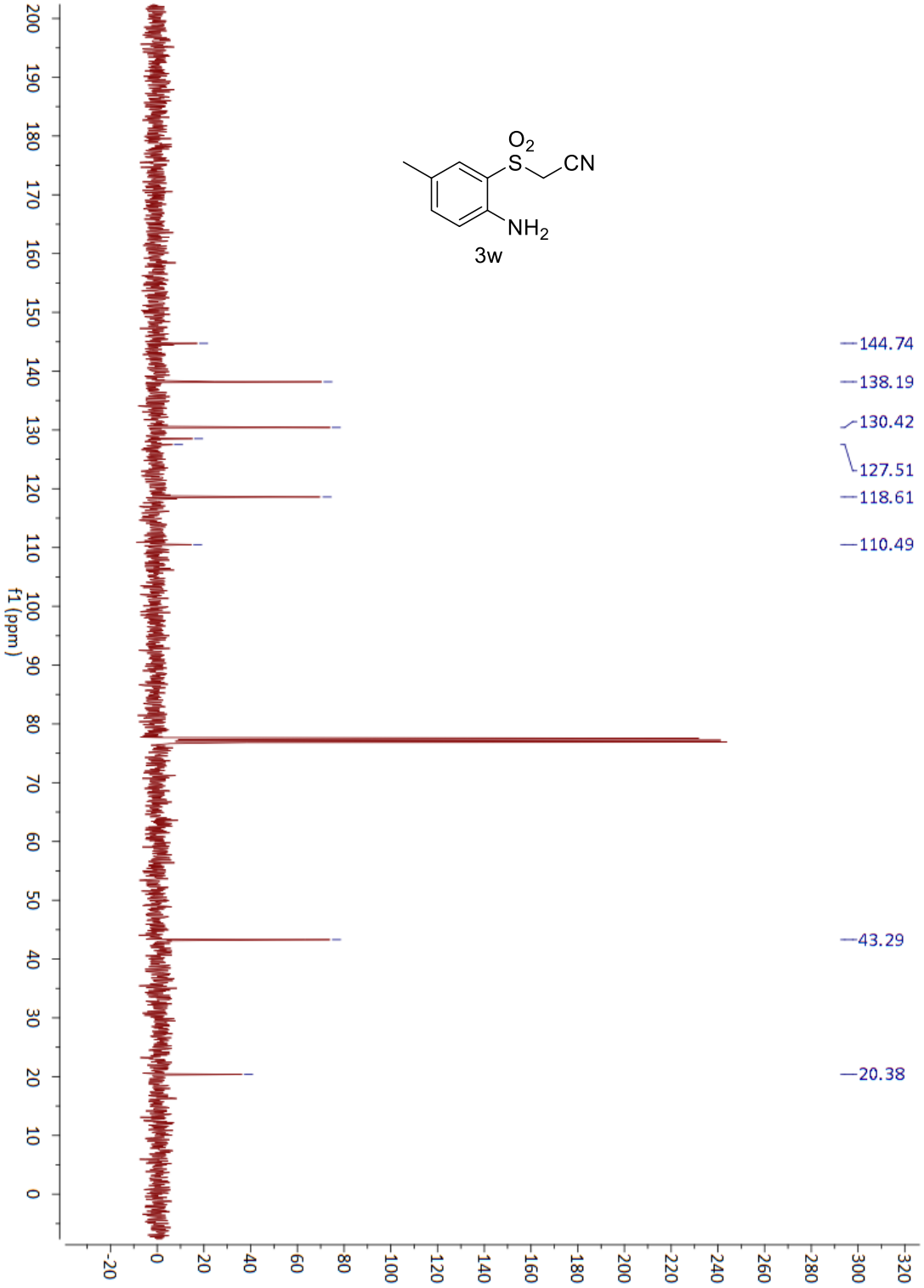

O2
S
CN
CF3
3u
0.86
0.94
1.98
2.00
8.42
8.40
8.00
7.98
7.92
7.90
7.89
7.88
7.86
4.25
f1 (ppm)

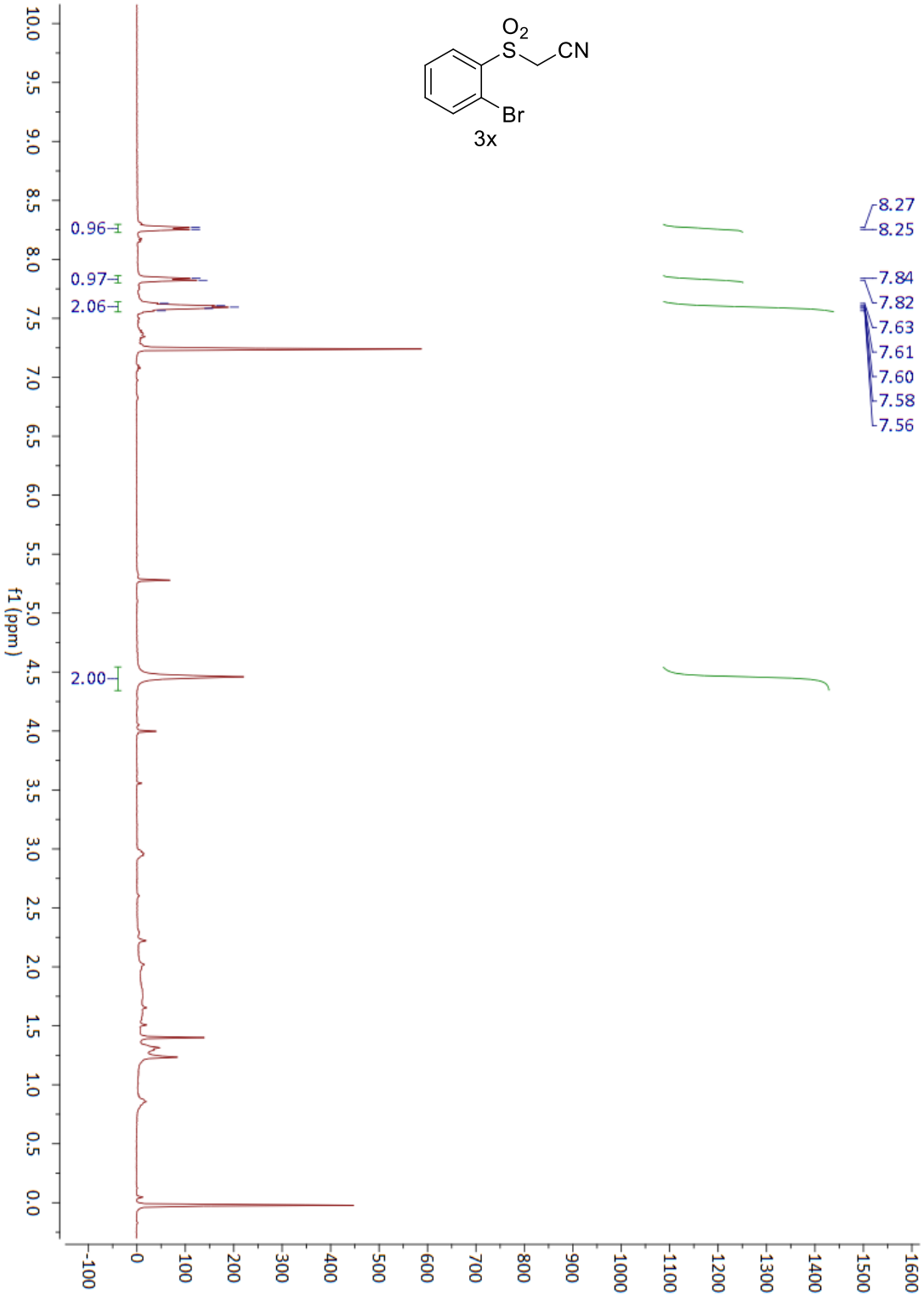

O2
S
CN
CF3
3u
152.57
151.52
135.76
133.29
129.24
129.18
125.94
124.02
122.08
120.07
110.14
46.25
f1 (ppm)

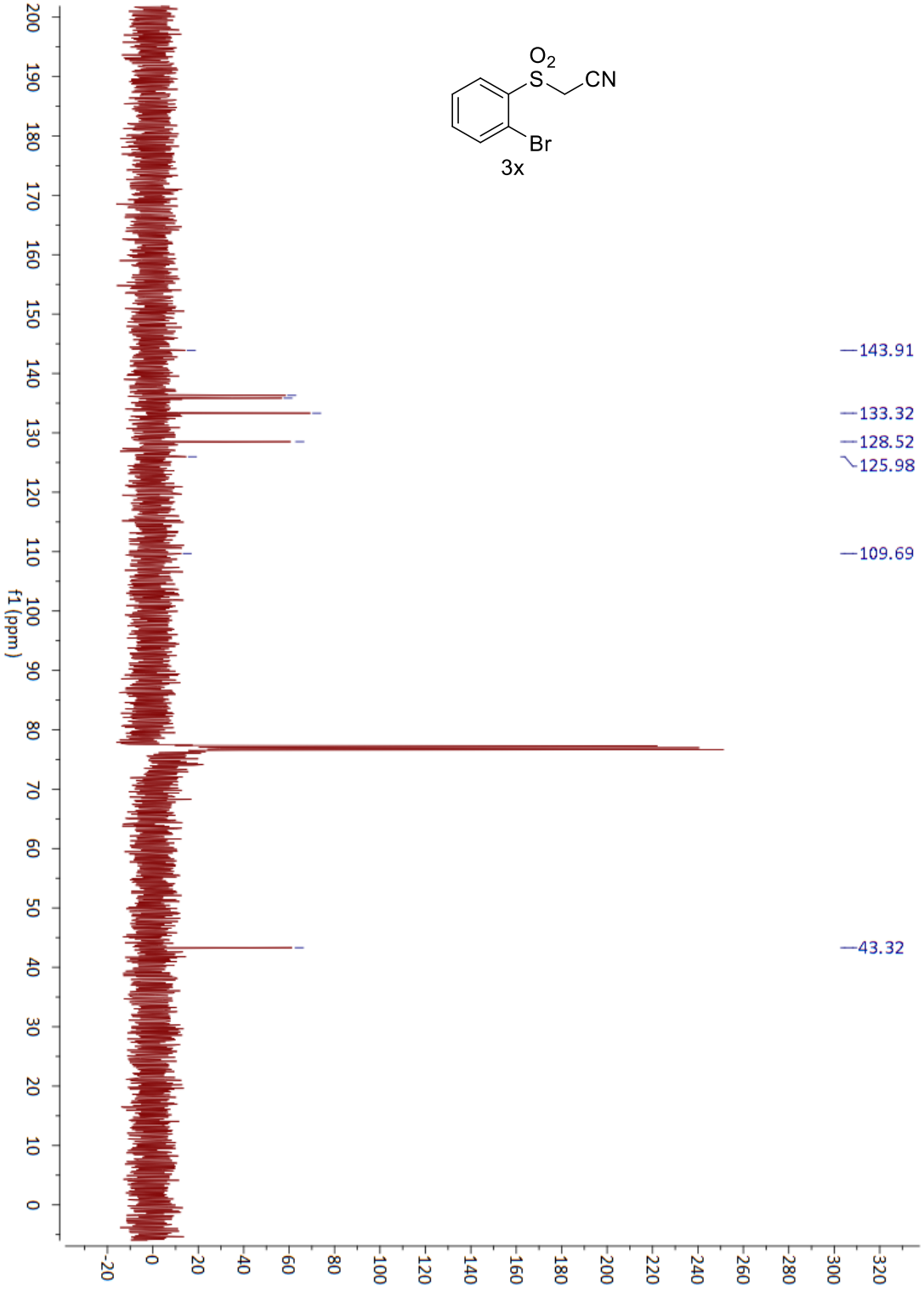

O2
S
CN
F
3v
8.05
8.03
8.01
7.80
7.78
7.76
7.75
7.45
7.43
7.41
7.35
7.33
7.30
0.92
0.97
0.99
0.99
2.00
f1 (ppm)

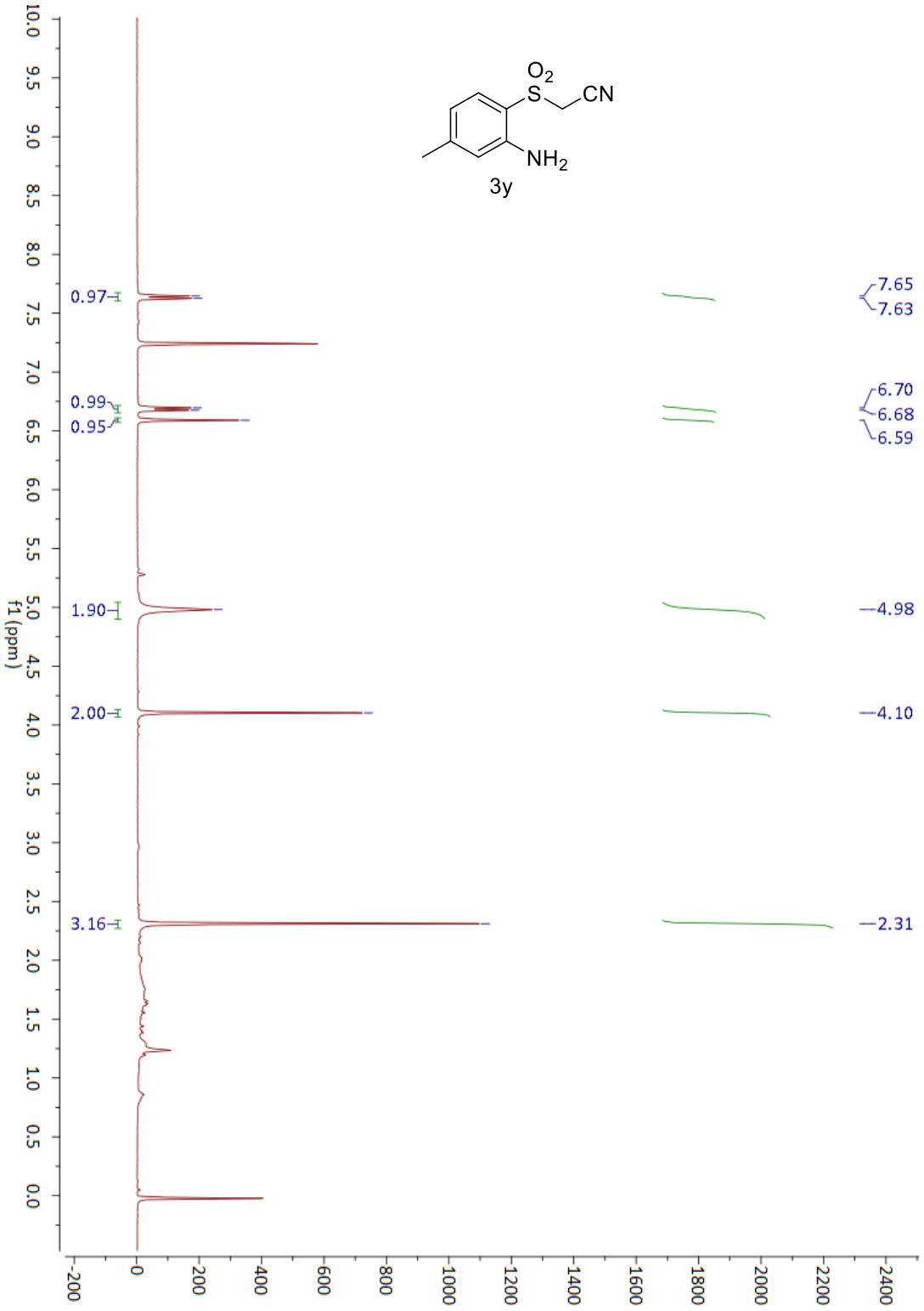

O2
S
CN
F
3v
138.06
137.97
131.56
122.94
117.52
109.99
45.10
f1 (ppm)

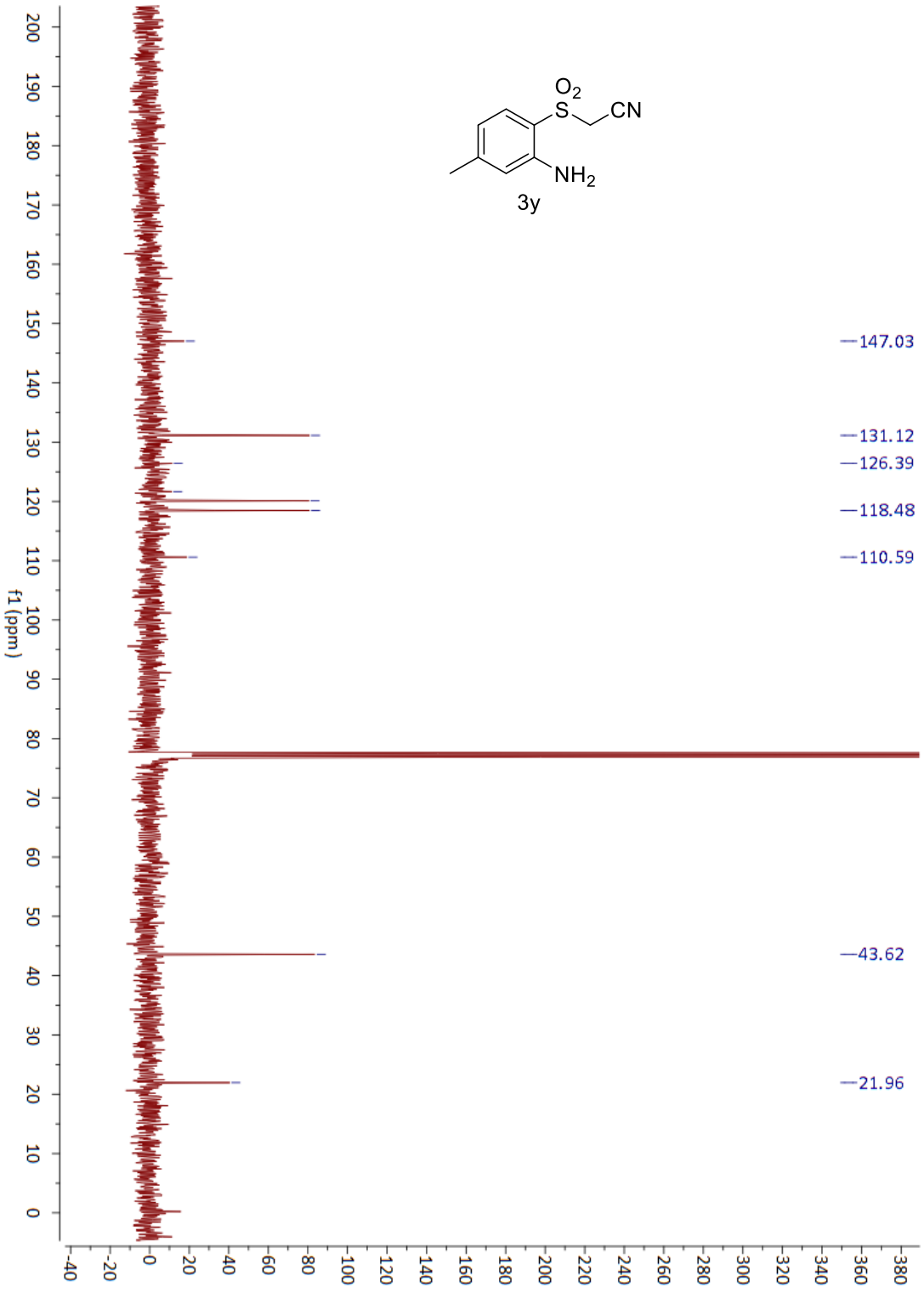

O2
S
CN
NH2
3w
0.89
0.83
0.94
1.80
1.97
3.00
7.56
7.26
6.72
6.70
4.88
4.14
2.27
f1 (ppm)

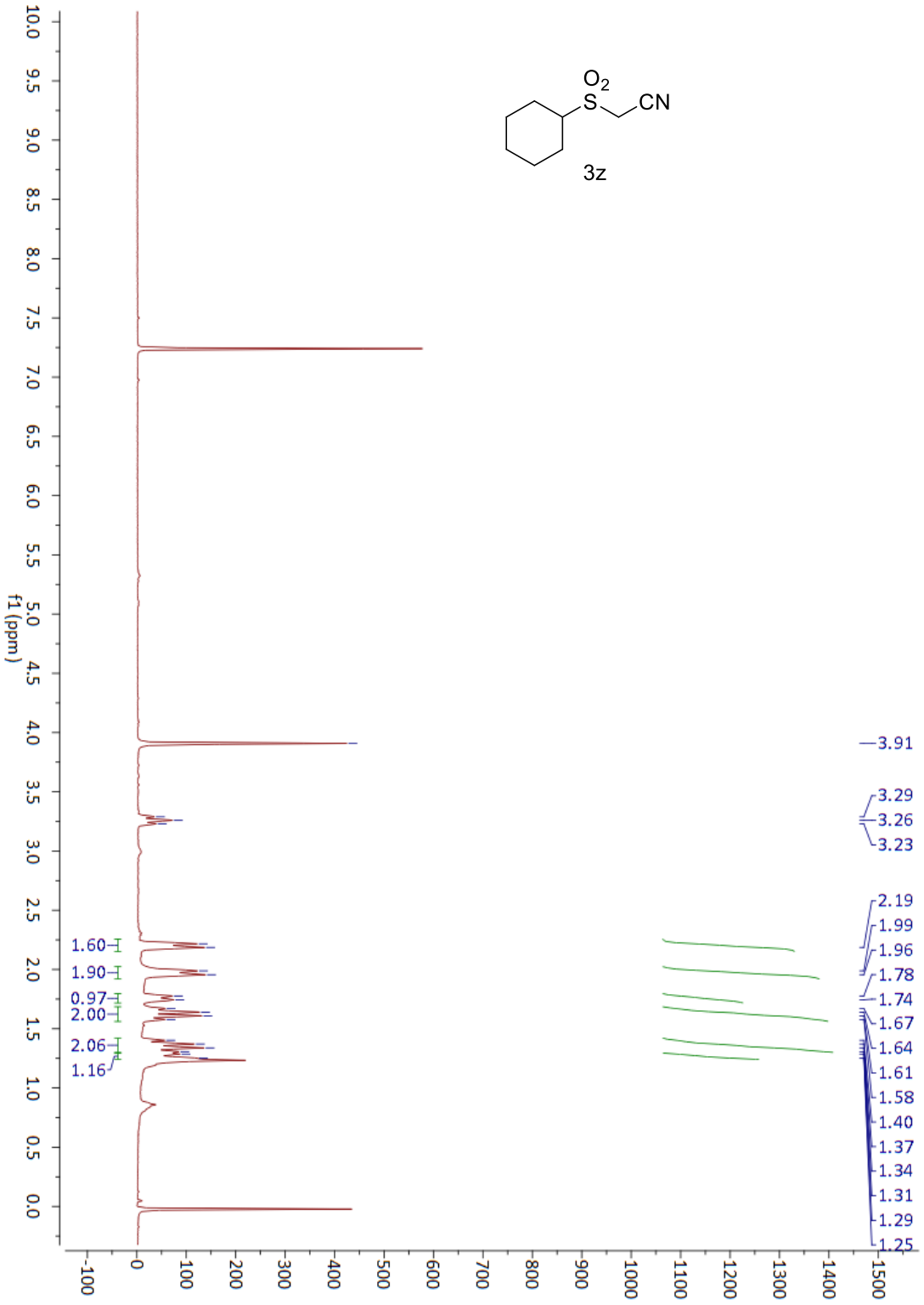

O2
S
CN
NH2
3w
144.74
138.19
130.42
127.51
118.61
110.49
43.29
20.38
f1 (ppm)

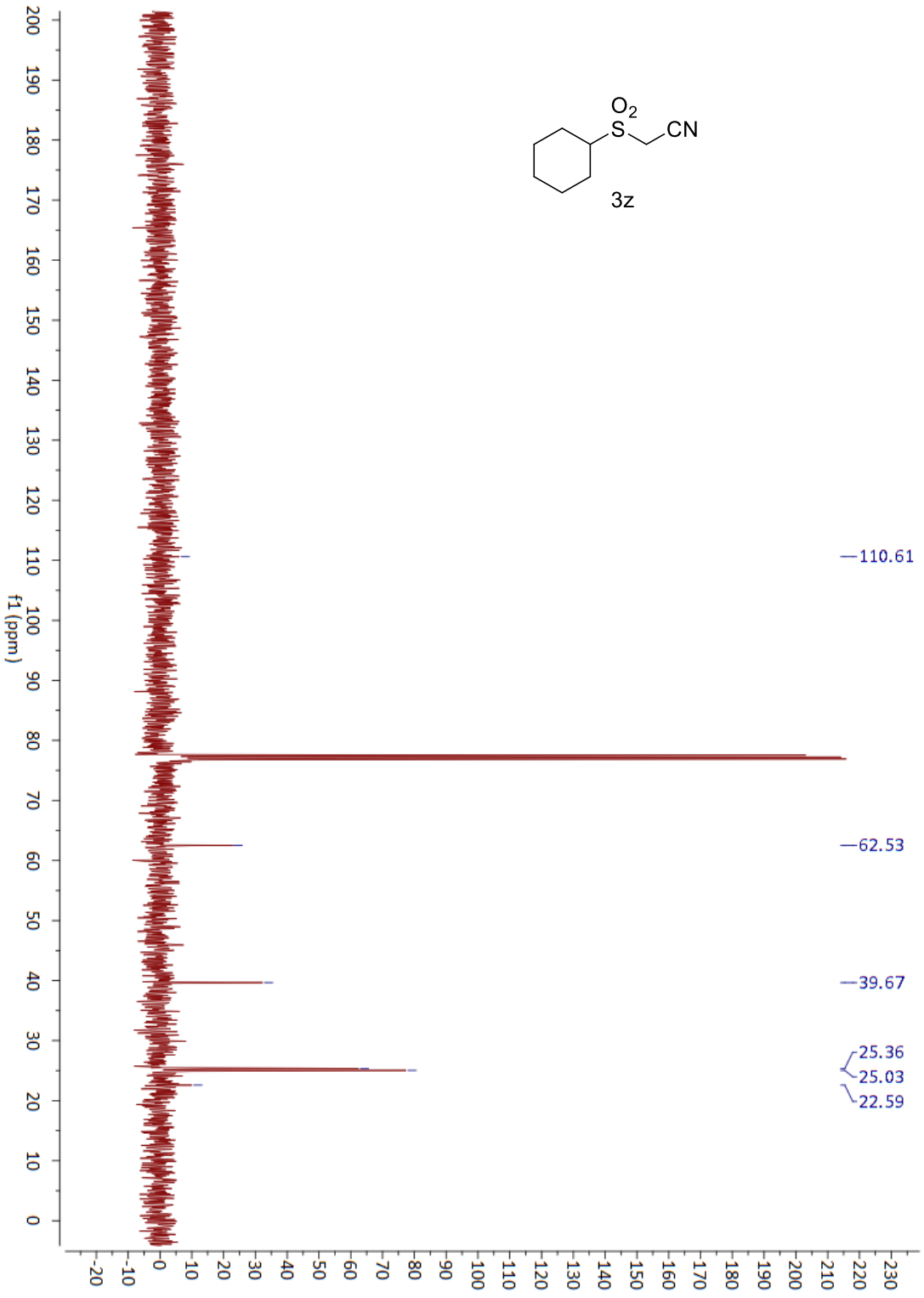

O2
S
CN
Br
3x
0.96
0.97
2.06
2.00
8.27
8.25
7.84
7.82
7.63
7.61
7.60
7.58
7.56
f1 (ppm)


O2
S
CN
Br
3x
143.91
133.32
128.52
125.98
109.69
43.32
f1 (ppm)


O2
S
CN
NH2
3y
0.97
0.99
0.95
1.90
2.00
3.16
7.65
7.63
6.70
6.68
6.59
4.98
4.10
2.31
f1 (ppm)


O2
S
CN
NH2
3y
147.03
131.12
126.39
118.48
110.59
43.62
21.96
f1 (ppm)


O2
S
CN
3z
f1 (ppm)
3.91
3.29
3.26
3.23
2.19
1.99
1.96
1.78
1.74
1.67
1.64
1.61
1.58
1.40
1.37
1.34
1.31
1.29
1.25
1.60
1.90
0.97
2.00
2.06
1.16


O2
S
CN
3z
110.61
62.53
39.67
25.36
25.03
22.59
f1 (ppm)