

Supporting Information

Photocatalyst-free synthesis of quinazolinones from *o*-aminobenzamides and rongalite under visible light

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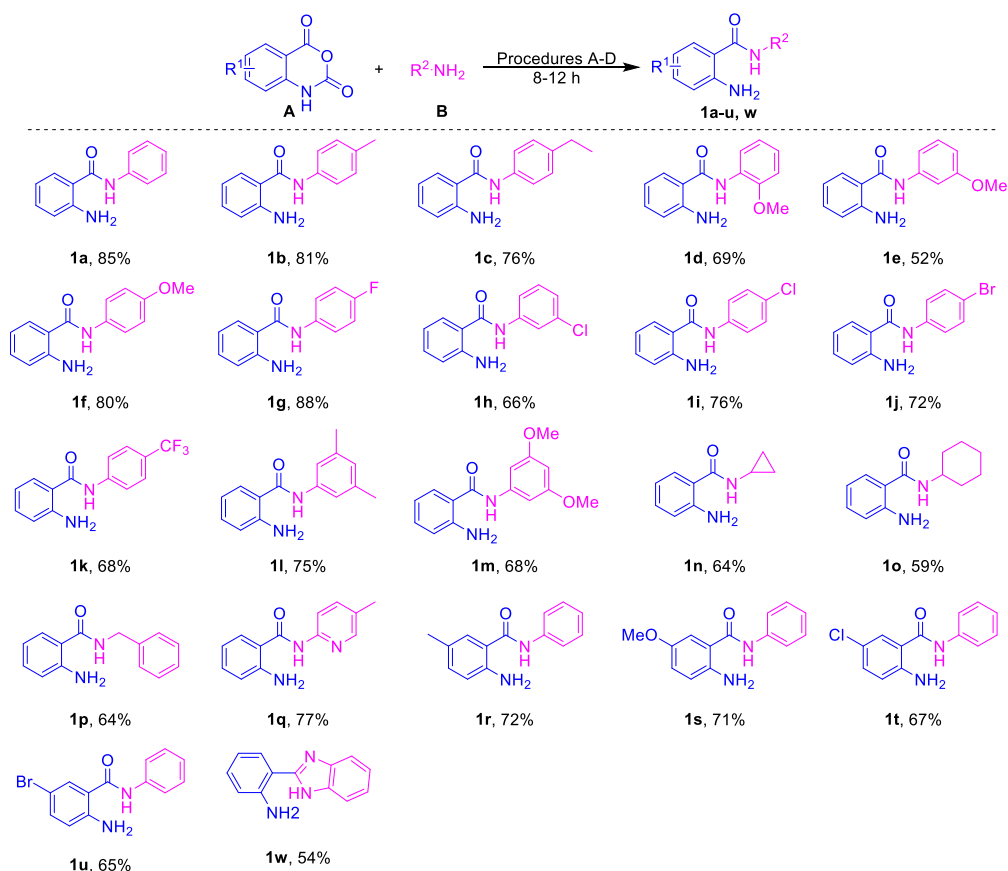
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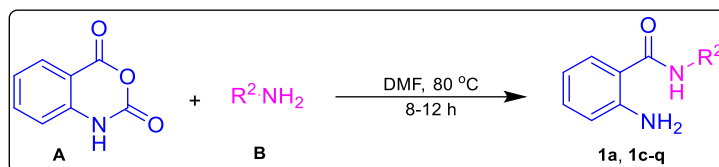
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1. General Information: A Bruker 500 MHz and 400 MHz spectrometer was employed to acquire ^1H NMR spectra, while a Bruker 125MHz and 100MHz spectrometer was utilized for ^{13}C NMR spectra. Parts per million (ppm) denotes chemical shift (δ) values, whereas hertz (Hz) indicates coupling constants (J). The spectra were obtained utilizing CDCl_3 as the solvent. ^1H NMR chemical shifts are calibrated to tetramethylsilane (TMS, 0 ppm), while ^{13}C NMR shifts are referenced to CDCl_3 (77.16 ppm) and $\text{DMSO}-d$ (39.52 ppm). The reaction's development was tracked via TLC utilizing Merck pre-coated TLC sheets. The melting points of compounds were ascertained utilizing a digital melting point instrument (Model 935) from Deep Vision Electronics PVT. LTD. UV-Visible studies were performed using CARY 60 UV-visible spectrometer. High Resolution Mass Spectrometry (HRMS) was analyzed using Agilent G6230B Accurate Mass TOF. EPR studies were performed by using JEOL Model JES FA200 ESR Spectrometer. Kessil 36 W Purple LED (390 nm) light utilized for the irradiation of the reaction mixture. Column chromatography was conducted on 100-200 mesh silica gel utilizing hexane/ethyl acetate as the eluent, with solvents employed without additional distillation. Rongalite CAS No. 149-44-0. All commercial chemicals were acquired from Sigma-Aldrich, Avra, SRL Spectrochem, Loba Chemie and BLDpharm. All starting materials are known and prepared by following reported literature methods.¹⁻⁴ Compound **1v** and **1x** is commercially available.

2. Experimental Procedures

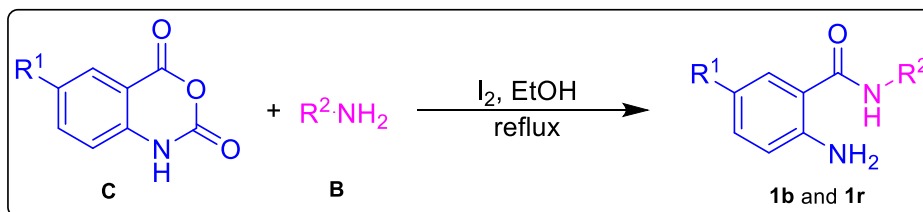


2.1. General Experimental Procedure A for Synthesis of 2-Amino-*N*-phenylbenzamides.¹



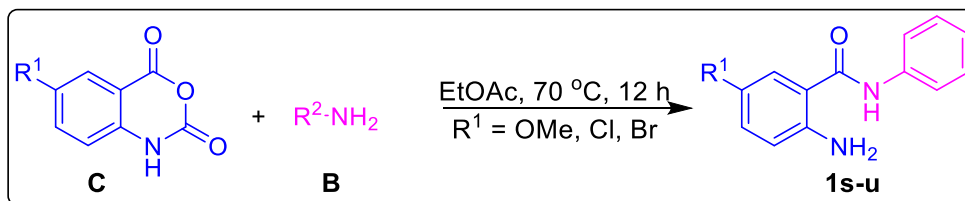
A stirred solution of isatoic anhydride (2.0 mmol) in DMF (10 mL) was combined with aniline derivatives (2.0 mmol) and maintained at 80 °C for 8 to 12 hours. Upon concluding the reaction observed via TLC, the reaction mixture was allowed to cool to room temperature and subsequently diluted with 60 mL of ice water, followed by extraction using ethyl acetate (3 x 20 mL). The organic layer was rinsed with a saturated brine solution (20 mL), dried over Na_2SO_4 , and concentrated under reduced pressure. The crude product was purified using column chromatography using a hexane/ethyl acetate elution, resulting in the required 2-amino-*N*-phenylbenzamides (**1a**, **1c-q**) with yields of 52-88%.

2.2. General Experimental Procedure B for Synthesis of 2-Amino-*N*-phenylbenzamides and 2-Amino-5-substituted-*N*-phenylbenzamide.²



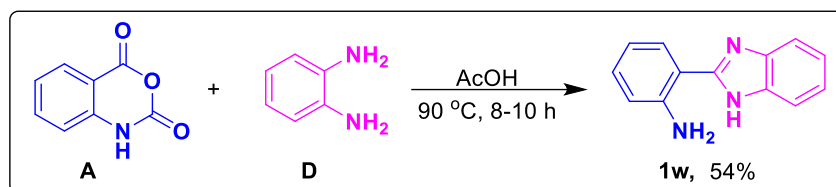
A stirred solution of isatoic anhydride (2.0 mmol) in ethanol (5 mL) was combined with an aniline derivative (2.0 mmol) and iodine (0.4 mmol), combination was refluxed in air. Upon concluding the reaction observed via TLC, ethanol was evaporated, followed by washing with a saturated $Na_2S_2O_3$ solution and extraction with ethyl acetate (3 x 20 mL). The organic layer was rinsed with a saturated brine solution (20 mL), desiccated over Na_2SO_4 , and concentrated under reduced pressure. The crude product was purified using column chromatography using a hexane/ethyl acetate eluent, yielding the off-white required 2-amino-*N*-phenylbenzamides (**1b**) in 81% and (**1r**) in 72% yields.

2.3. General Experimental Procedure C for Synthesis of 2-Amino-5-substituted-*N*-phenylbenzamides.³



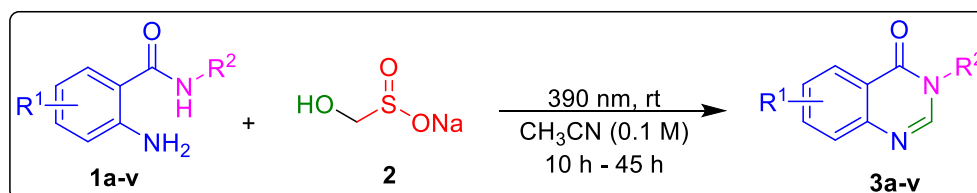
A stirred solution of substituted isatoic anhydride (2.0 mmol) in EtOAc (5 mL) was treated with aniline derivative (2.0 mmol) and maintained at 70 °C for 12 hours. Upon concluding the reaction observed via TLC, the reaction mixture was allowed to cool to room temperature and subsequently diluted with 60 mL of water, followed by extraction using ethyl acetate (3 x 20 mL). The organic layer was rinsed with a saturated brine solution (20 mL), dried over Na₂SO₄, and concentrated under reduced pressure. The crude product was purified using column chromatography using a hexane/ethyl acetate eluent, yielding the target compound 2-amino-5-substituted-*N*-phenylbenzamides (**1s-u**) in 65% to 71% yields.

2.4. General Experimental Procedure D for Synthesis of 2-(benzoimidazole)aniline.⁴



A mixture of isatoic anhydride (2.0 mmol) and *o*-phenylenediamine (2.4 mmol) was combined with glacial acetic acid (4 mL) and stirred at 90 °C for 1-3 hours, monitored by TLC. Upon completion of the reaction, acetic acid was evaporated. The reaction mixture was terminated using a saturated NaHCO₃ solution and subsequently extracted with ethyl acetate (3 x 20 mL). The amalgamated organic layer was rinsed with brine solution, desiccated over anhydrous Na₂SO₄, and concentrated under reduced pressure. The crude product was purified using silica gel column chromatography with hexane and ethyl acetate as eluents, yielding the target compound 2-(1H-benzo[d]imidazol-2-yl)aniline (**1w**) in 54% yield.

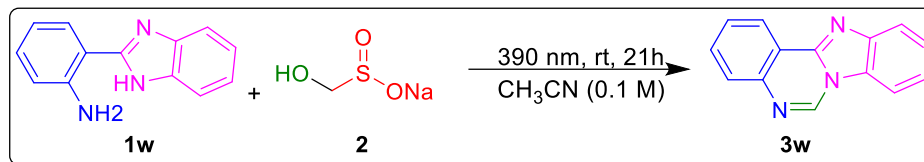
2.5. Procedure E for the Synthesis of Quinazolinones.



A 15 mL reaction tube was filled with 2-amino-*N*-phenylbenzamides (0.25 mmol) and anhydrous rongalite (0.5 mmol) in 2.5 mL of CH₃CN as the solvent. The mixture was stirred under a 36 W Kessil Purple LED (390nm), positioned 7 cm from the light source, at room temperature for a duration of 10 to 36 hours. Upon completion of the reaction, as monitored by TLC, the reaction mixture was concentrated under reduced pressure to eliminate the CH₃CN solvent, subsequently diluted with 20 mL of H₂O, and extracted with EtOAc (3 x 20 mL). The organic layer was rinsed with brine solution (10 mL), desiccated over Na₂SO₄, and concentrated under reduced pressure.

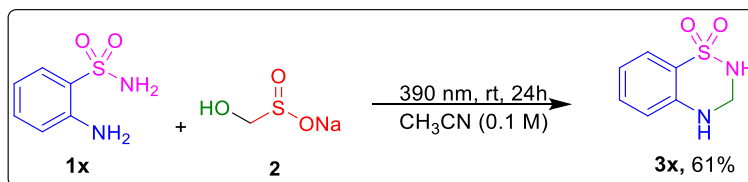
to provide a crude chemical. The crude product was purified using column chromatography using a hexane/ethyl acetate elution, yielding the intended products in 40-96% yield respectively (**3a-v**).

2.6. Procedure F for the Synthesis of Benzoimidazoquinazoline.



A 15 mL reaction tube was filled with 2-(benzoimidazole)aniline (**1w**, 0.25 mmol), and anhydrous rongalite (0.5 mmol) in 2.5 mL of CH_3CN as the solvent. The mixture was stirred under a 36 W Kessil Purple LED (390 nm), positioned 7 cm from the light source, at room temperature for a duration of 21 hours. Upon concluding the reaction observed using TLC, the reaction mixture was concentrated under vacuum to eliminate the CH_3CN solvent, subsequently diluted with 20 mL of H_2O , and extracted with EtOAc (3 x 20 mL). The organic layer was washed with brine (10 mL), dried over Na_2SO_4 , and subjected to decreased pressure to yield a crude chemical. The crude product was purified using column chromatography, employing hexane/ethyl acetate as the eluent, resulting in yields of 47% for the intended product benzo[4,5]imidazo[1,2-c]quinazoline (**3w**).

2.7. Procedure G for the Synthesis of 3,4-Dihydro-benzothiadiazine.



A 15 mL reaction tube was filled with 2-aminobenzenesulfonamide (0.25 mmol), and anhydrous rongalite (0.5 mmol) in 2.5 mL of CH_3CN as the solvent. The mixture was stirred under a 36 W Kessil Purple LED (390 nm), positioned 7 cm from the light source, at room temperature for a duration of 24 hours. Upon concluding the reaction observed using TLC, the reaction mixture was concentrated under vacuum to eliminate the CH_3CN solvent, subsequently diluted with 20 mL of H_2O , and extracted with EtOAc (3 x 20 mL). The amalgamated organic layer was washed with brine (10 mL), dried over Na_2SO_4 , and subjected to decreased pressure to yield a crude chemical. The crude product was purified using column chromatography, employing hexane/ethyl acetate as the eluent, resulting in yields of 61% for the intended product 3,4-dihydro-2H-benzo[e][1,2,4]thiadiazine 1,1-dioxide (**3x**).

3. TLC Analysis

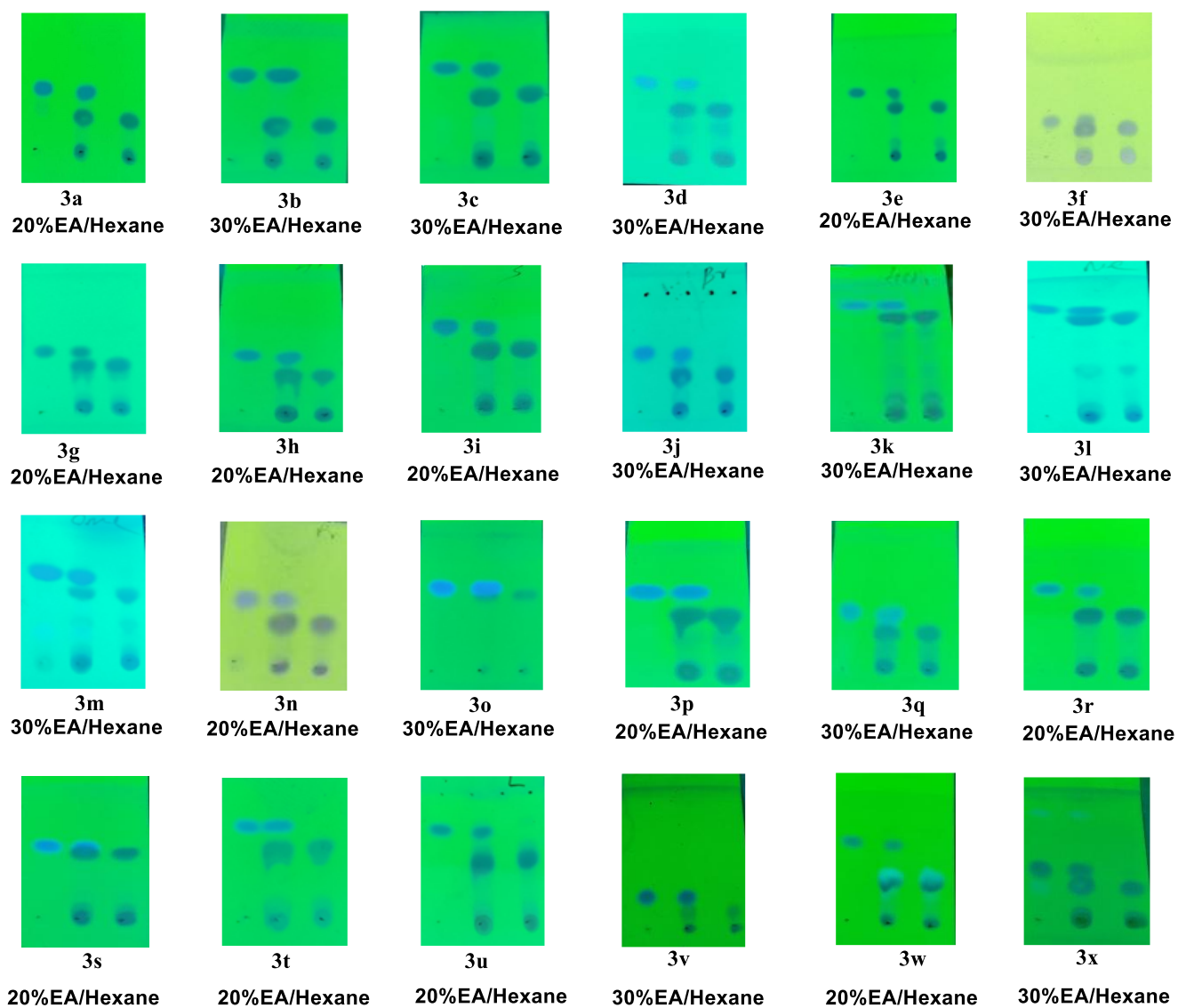


Figure S1. TLCs for substrates scope 3a-3x.

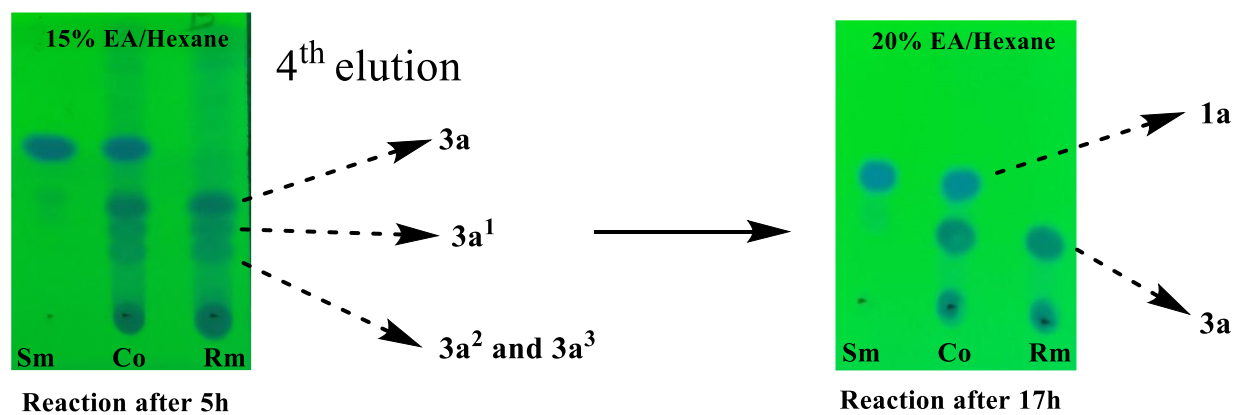


Figure S2. TLC of reaction mixture 3a after 5h and 17h.

4. Kessil LED Photoreaction Lighting PR160L Series (390nm & 456nm) and Experimental Setup Technical Specifications of PR160L Series

- ✓ Operating Temperature, 0 - 40°C / 32 - 104°F, if unit overheat it will automatically shutdown
- ✓ Average Intensity of PR160 series, 352mW/cm² (measured from 1 cm distance)
- ✓ Add more P160L to scaleup our experiment; Power Consumption 390nm (36 W)
- ✓ Input Voltage, 100-240 VAC 50-60 Hz; Beam Angle, 56°; Wavelength, 390nm
- ✓ Dimensions 4.49" x 2.48" / 11.4cm x 6.3cm (H x D)



Figure S3. Front and top view of Kessil LED PR160L – 390 nm and 456 nm.



Figure S4. PR160L – 390 nm setup.



Figure S5. PR160L – 456 nm setup.

PARTS DIAGRAM

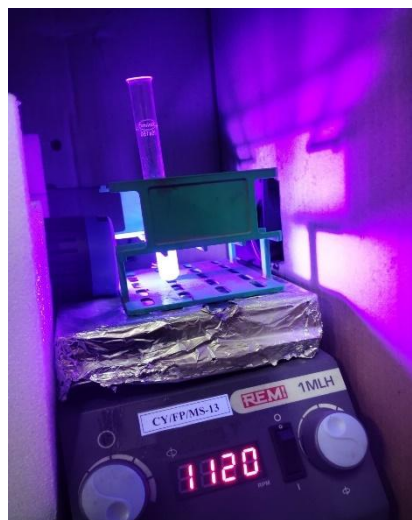
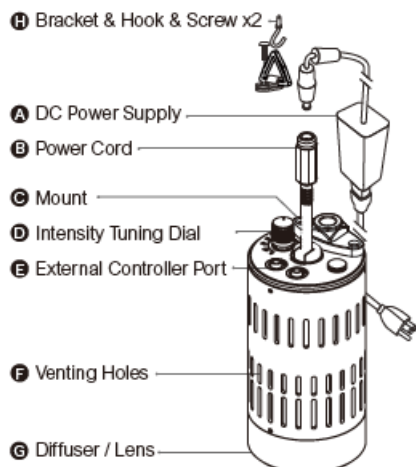


Figure S6. Parts diagram of Kessil LED PR160L.

Figure S7. Reaction experimental setup for 3a.

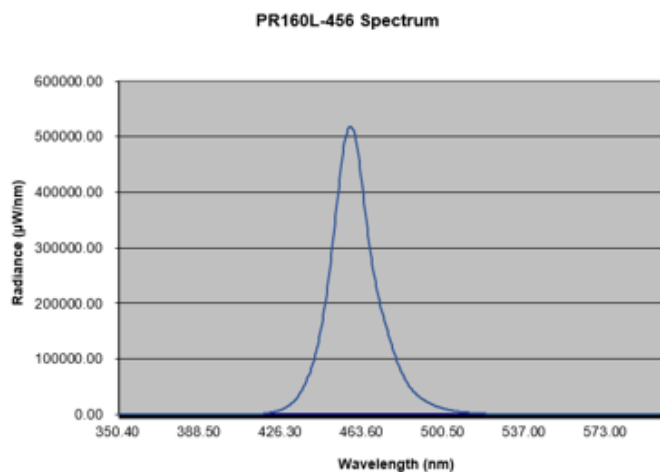
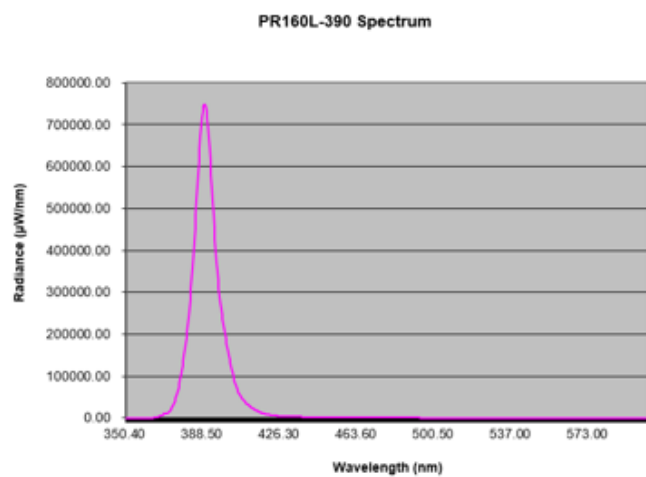


Figure S8. UV absorption spectrum of 390 nm and 456 nm Kessil LEDs. Both 390 nm and 456 nm spectrum details were obtained from Kessil.

5. Analysis of Reaction Intermediates

5.1 ^1H & ^{13}C NMR Analysis for Intermediates Confirmation

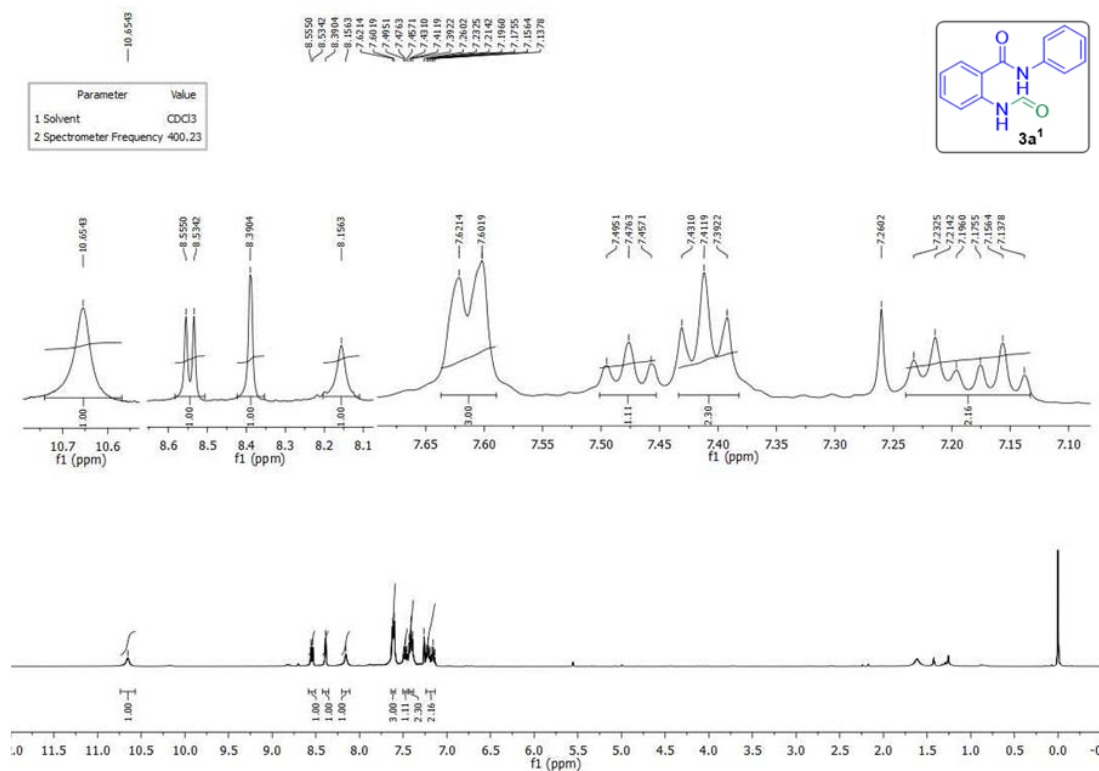


Figure S9. ^1H NMR spectra of 2-Formamido-*N*-phenylbenzamide (**3a¹**).

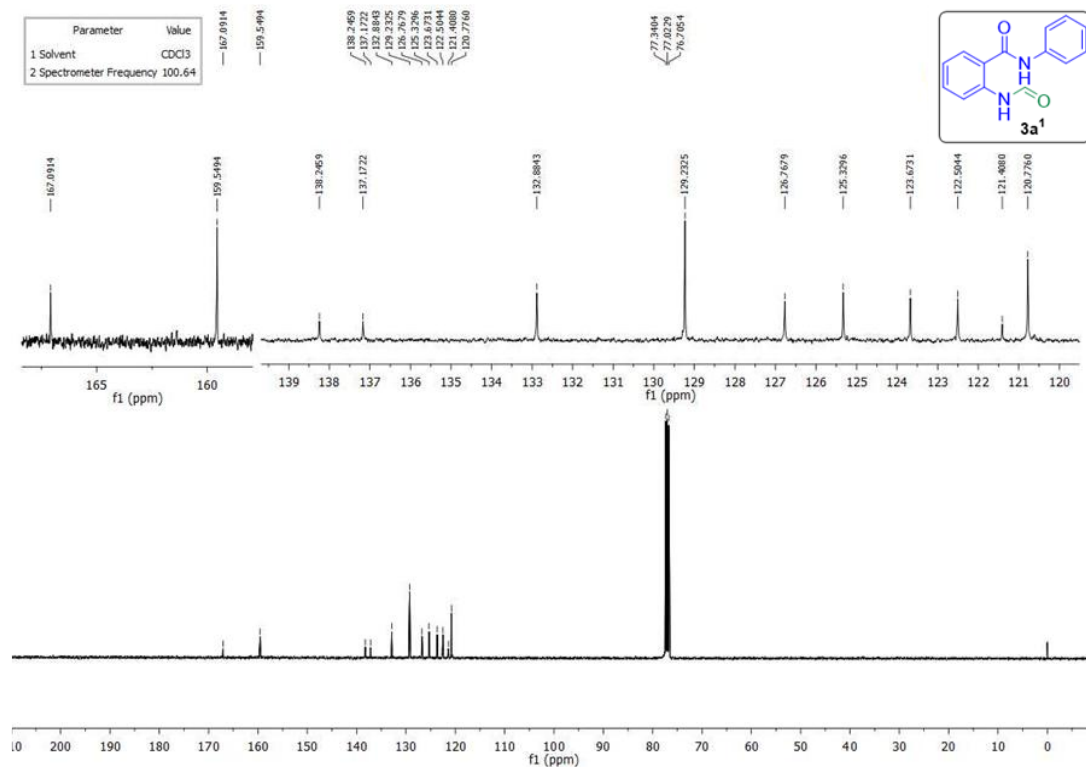


Figure S10. ^{13}C NMR spectra of 2-Formamido-*N*-phenylbenzamide (**3a¹**).

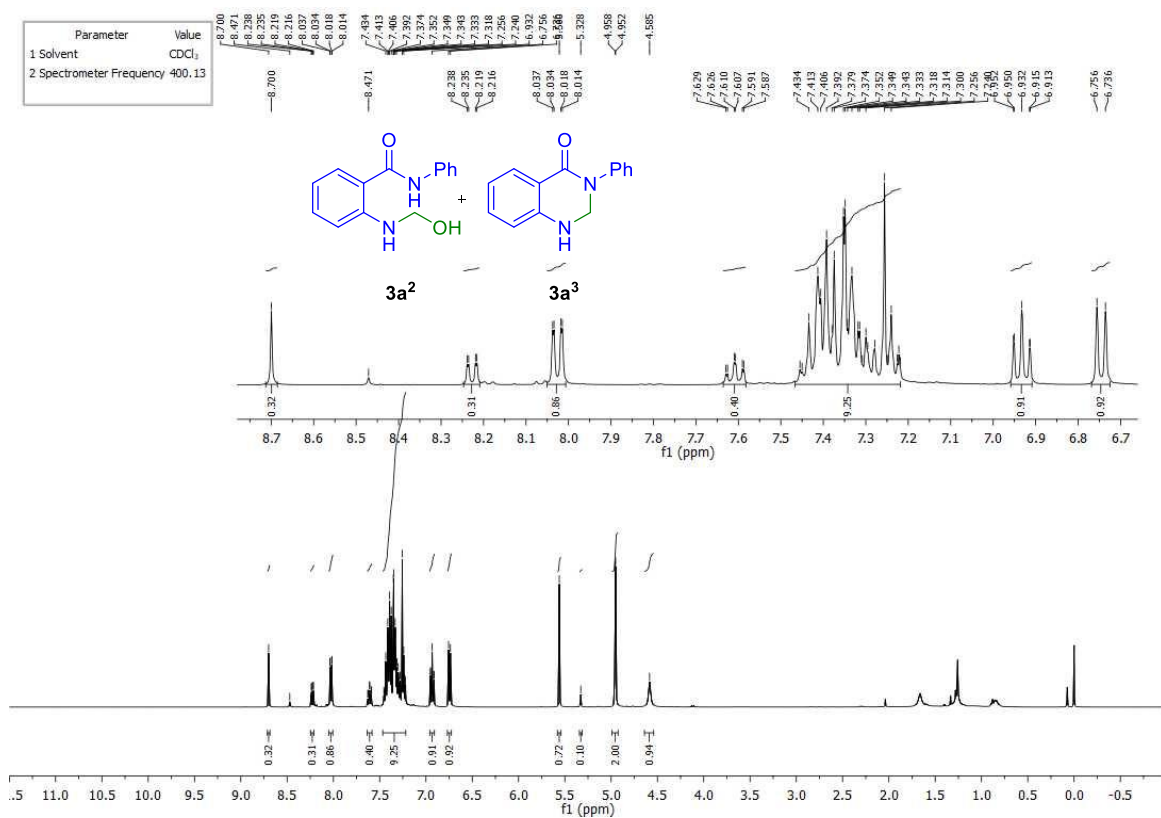


Figure S11. ¹H NMR spectra of mixture (3a² and 3a³).

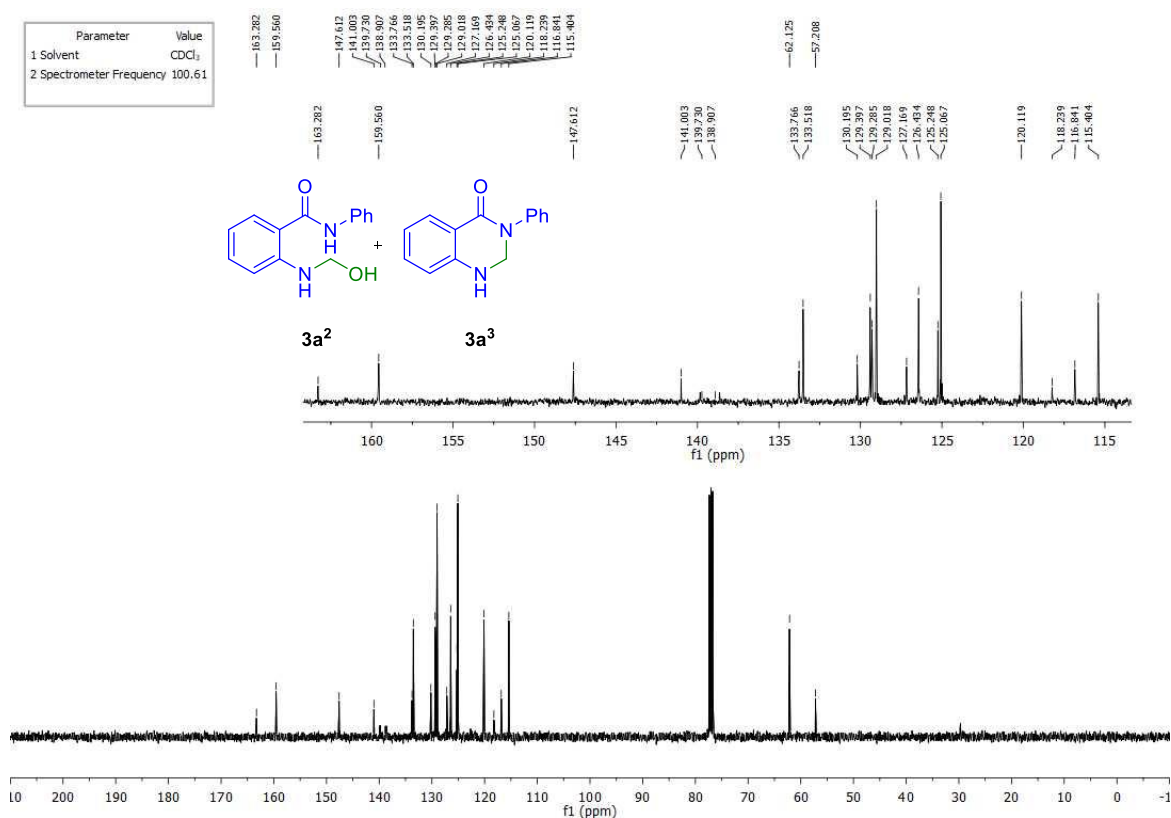


Figure S12. ¹³C NMR spectra of mixture (3a² and 3a³).

5.2 UV-Vis Absorption Data for 3a²+3a³ mixture

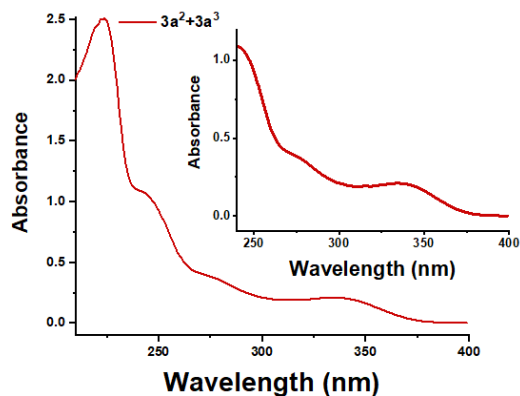


Figure S13. UV-Vis spectra of mixture 3a² and 3a³.

5.3 HRMS Analysis of 3a²+3a³ mixture

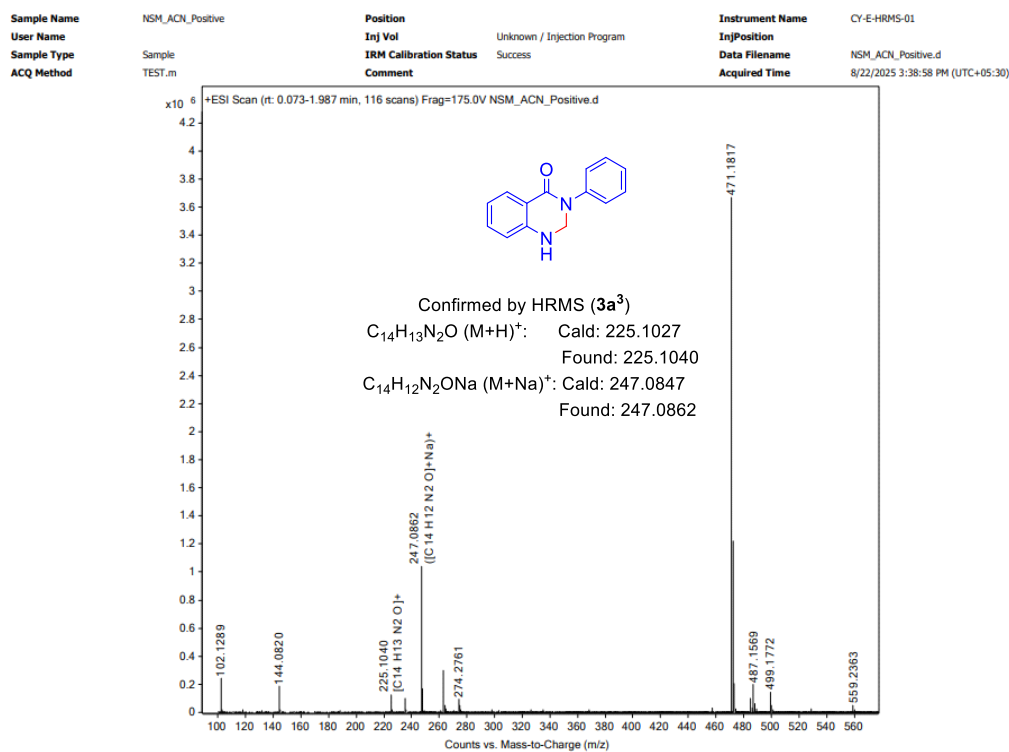
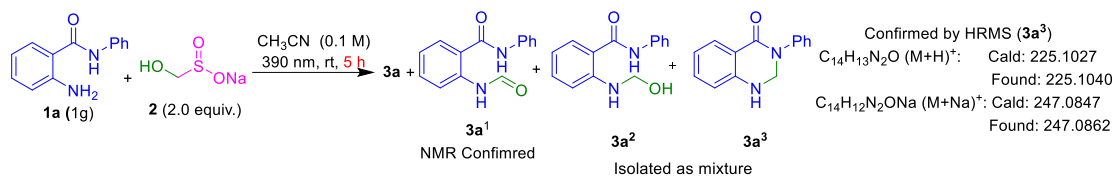


Figure S14. HRMS Data for Intermediate 3a³.

6. Radical Inhibition Data

TEMPO:

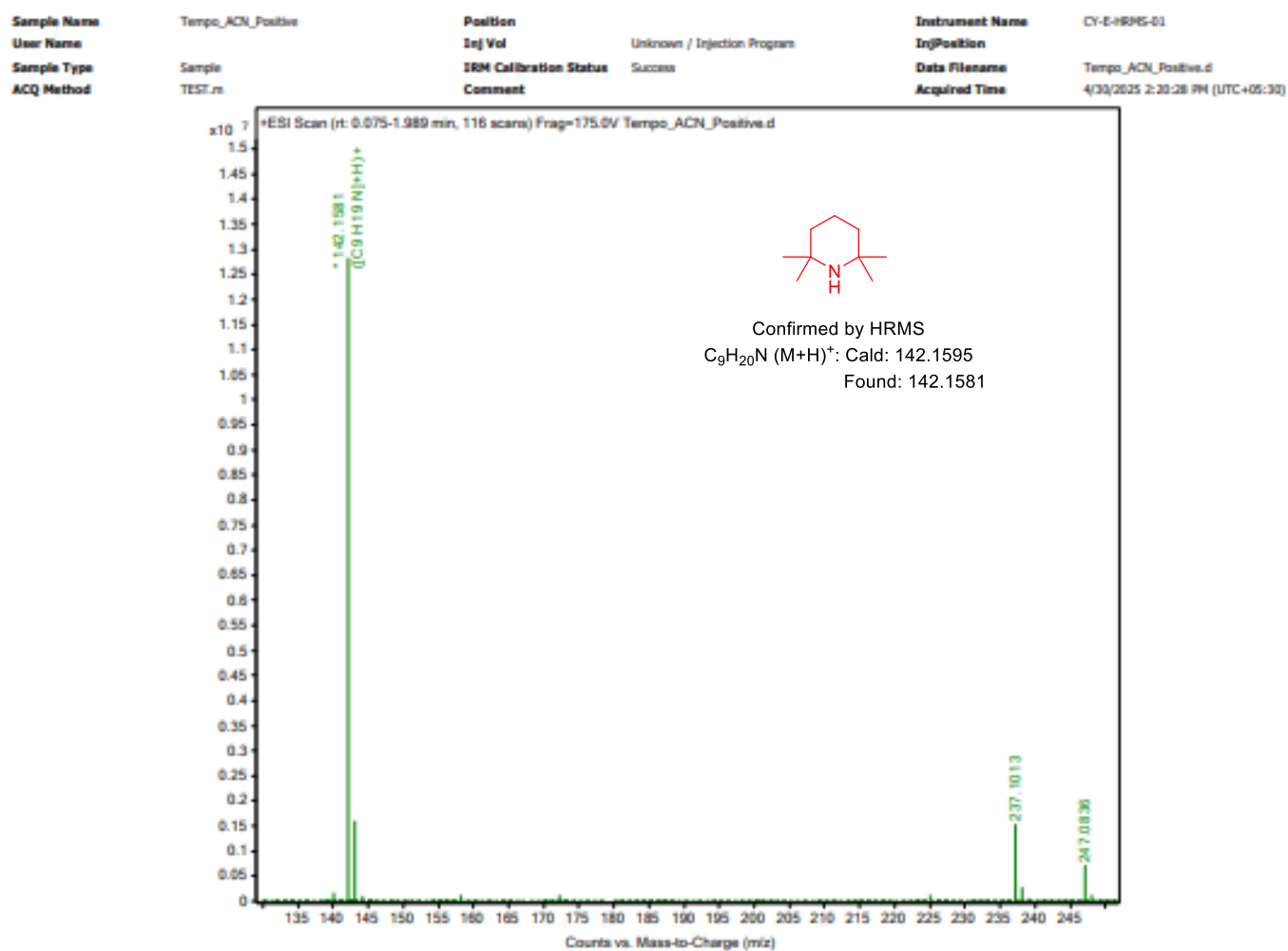
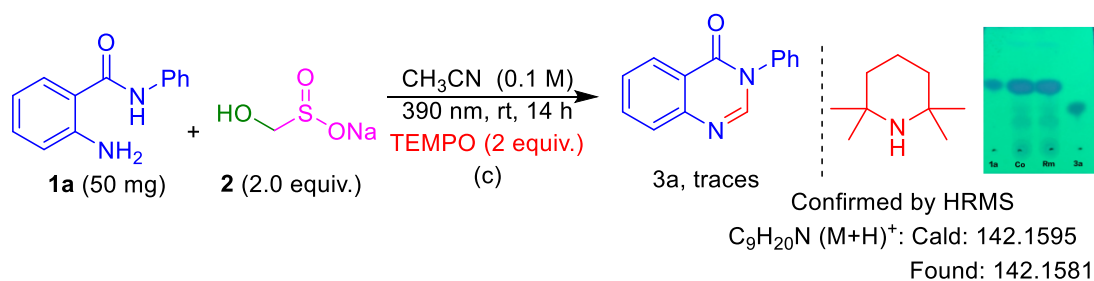
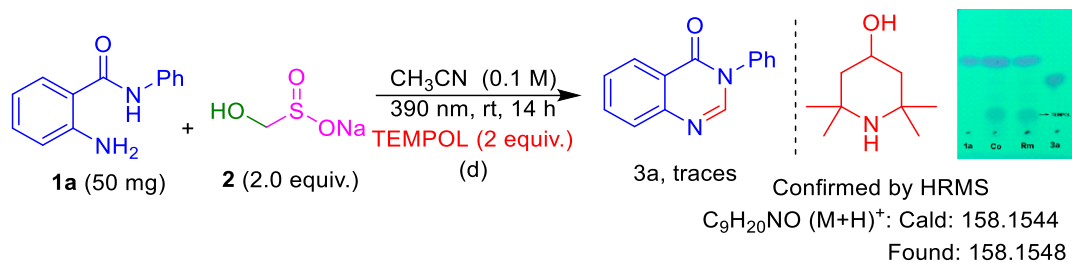


Figure S15. HRMS analysis data for TEMPO studies.

TEMPOL:



| | | | | | |
|-------------|---------------------|------------------------|-----------------------------|-----------------|----------------------------------|
| Sample Name | Tempol_ACN_Positive | Position | | Instrument Name | CY-E-HRMS-01 |
| User Name | | Inj Vol | Unknown / Injection Program | InjPosition | |
| Sample Type | Sample | IRM Calibration Status | Success | Data Filename | Tempol_ACN_Positive.d |
| ACQ Method | TEST.m | Comment | | Acquired Time | 4/30/2025 3:02:38 PM (UTC+05:30) |

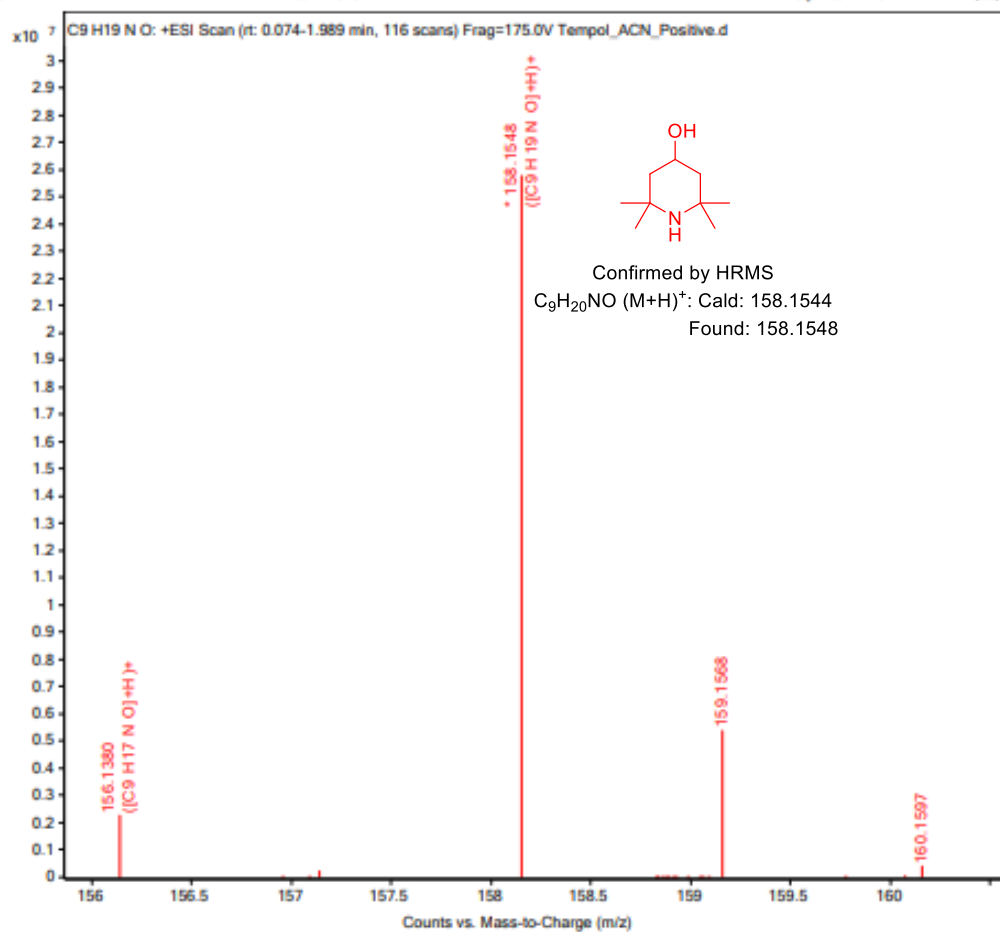


Figure S16. HRMS analysis data for TEMPOL studies

7. UV-Vis Analysis

7.1 Determination of H₂O₂:

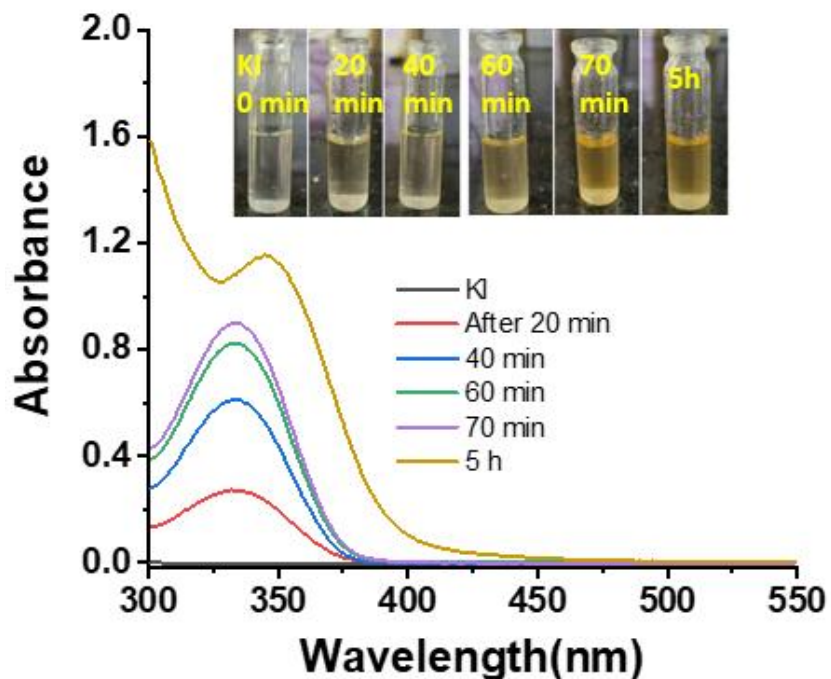


Figure S17. UV-Vis studies of KI with filtrate of crude reaction mixture at varying Time.

7.2 UV-visible Absorption Spectrum of 1a and 2:

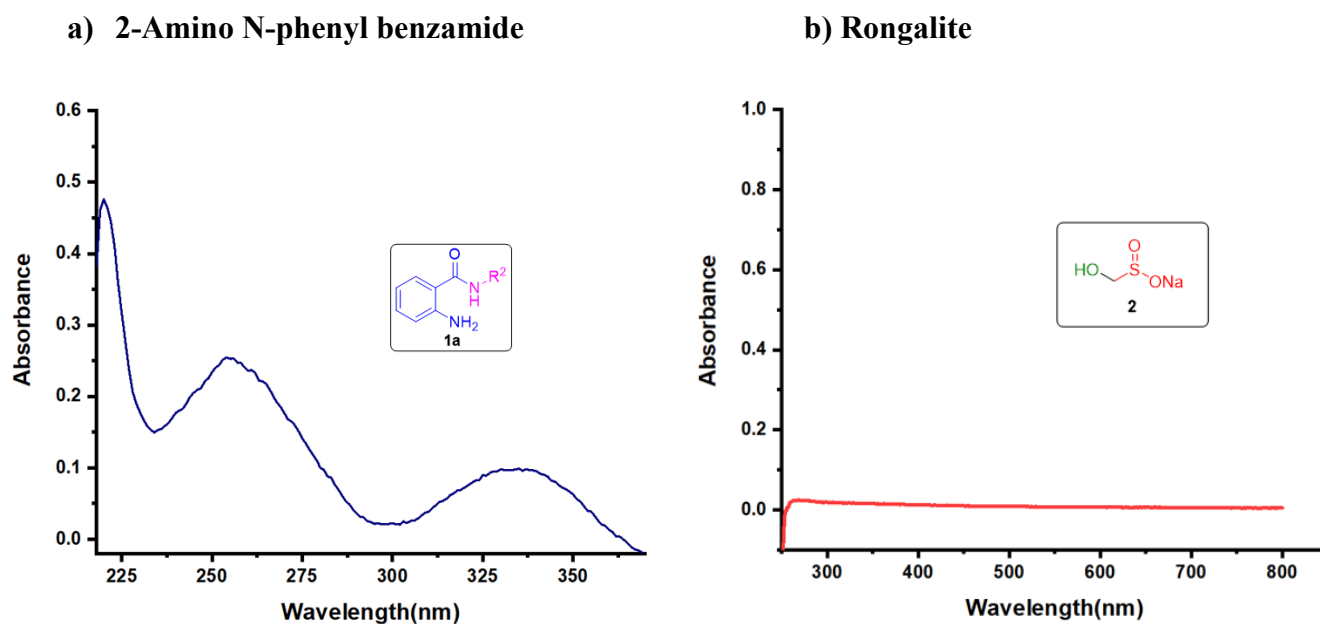


Figure S18. UV-Vis absorption spectrum of **1a** (2-Amino-N-phenyl benzamide) and **2** (Rongalite)

8. EPR-Studies

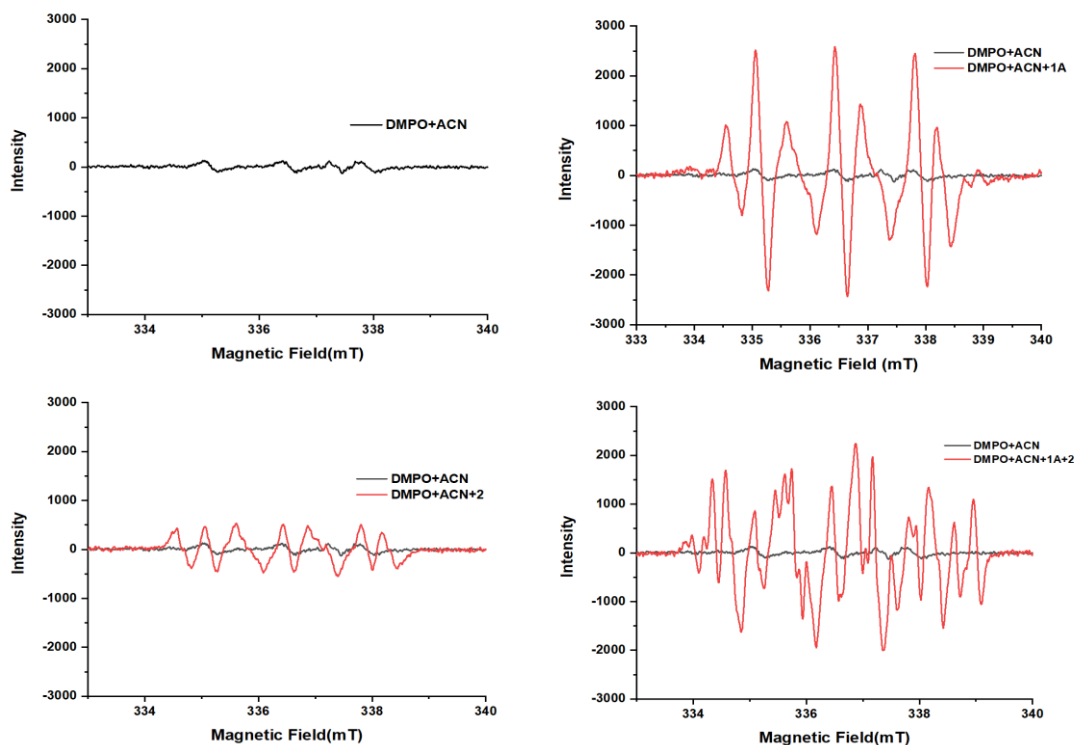


Figure S19. EPR studies for trapping superoxide radical with DMPO.

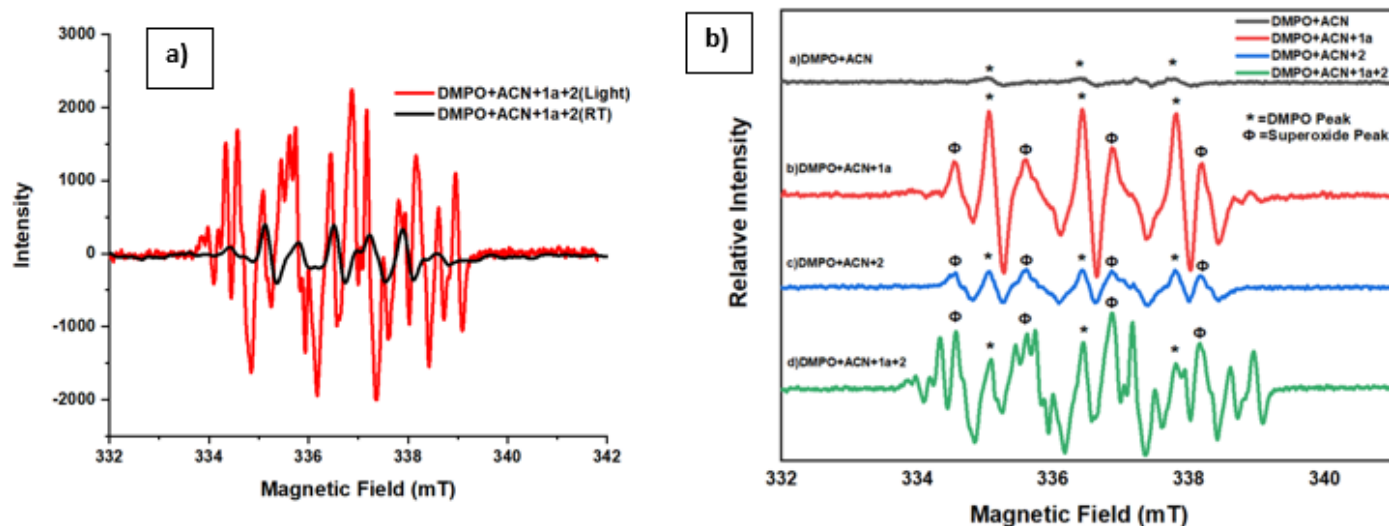
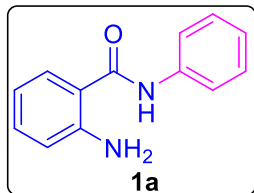


Figure S20. a) EPR spectrum of RT and light conditions; b) Stacked ESR spectra by irradiating 390 nm light for (a) DMPO (0.1 mol/L) in acetonitrile, (b) DMPO with **1a** (0.25 mmol) in acetonitrile, (c) DMPO (0.1 mol/L) with **2** (0.25 mmol) in acetonitrile, (d) DMPO (0.1 mol/L) with **1a** (0.25 mmol) and **2** (2.0 equiv.) in acetonitrile.

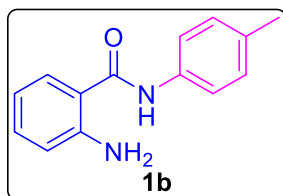
9. Spectral Characterization

2-Amino-N-phenylbenzamide (1a).¹ The title compound was prepared according to the general procedure (A)



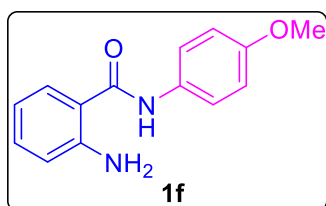
on a 2.0 mmol scale to obtain as a pale-yellow solid (362 mg, yield = 85%); Mp. 138-139 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.79 (s, 1H), 7.59 (d, *J* = 10 Hz, 2H), 7.49 (dd, *J* = 8, 1 Hz, 1H), 7.39 (t, *J* = 7.8 Hz, 2H), 7.28 (dd, *J* = 15.2, 1.2 Hz, 1H), 7.17 (t, *J* = 7.5 Hz, 1H), 6.75-6.72 (m, 2H), 5.52 (s, 2H). ¹³C{¹H} NMR (126 MHz, CDCl₃) δ 167.59, 148.99, 137.84, 132.81, 129.11, 127.17, 124.54, 120.55, 117.57, 116.87, 116.22.

2-Amino-N-(p-tolyl)benzamide (1b).⁵ The title compound was prepared according to the general procedure (B)



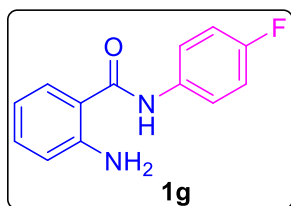
on a 2.0 mmol scale to obtain as a white solid (369 mg, yield = 81%); Mp. 175-176 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.72 (s, 1H), 7.46-7.42 (m, 3H), 7.25-7.22 (m, 1H), 7.16 (d, *J* = 8, 2H), 6.71-6.68 (m, 2H), 5.48 (s, 1H), 2.33 (s, 1H). ¹³C{¹H} NMR (126 MHz, CDCl₃) δ 167.52, 148.90, 135.21, 134.20, 132.64, 129.56, 127.14, 120.68, 117.50, 116.80, 116.38, 20.91.

2-Amino-N-(4-methoxyphenyl)benzamide (1f).⁵ The title compound was prepared according to the general



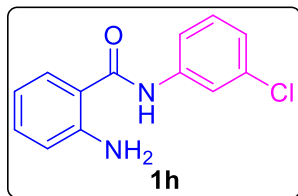
procedure (A) on a 2.0 mmol scale to obtain as a white solid (390 mg, yield = 80%); Mp. 129-130 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.71 (s, 1H), 7.47 (d, *J* = 9 Hz, 3H), 7.27-7.25 (m, 1H), 6.94-6.91 (m, 2H), 6.74-6.71 (m, 2H), 5.52 (s, 2H), 3.83 (s, 3H). ¹³C{¹H} NMR (126 MHz, CDCl₃) δ 167.58, 156.67, 148.92, 132.65, 130.79, 127.15, 122.63, 117.52, 116.82, 116.28, 114.25, 55.55.

2-Amino-N-(4-fluorophenyl)benzamide (1g).⁶ The title compound was prepared according to the general



procedure (A) on a 2.0 mmol scale to obtain as a pale-brown solid (410 mg, yield = 88%); Mp. 143-144 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.88 (s, 1H), 7.52 (d, *J* = 5 Hz, 1H), 7.50 (d, *J* = 5 Hz, 1H), 7.47 (d, *J* = 8 Hz, 1H), 7.27 (d, *J* = 15 Hz, 1H), 7.05 (t, *J* = 8.5 Hz, 2H), 6.73-6.69 (m, 2H), 5.49 (s, 2H). ¹³C{¹H} NMR (126 MHz, CDCl₃) δ 167.69, 159.56 (d, *J*_{CF} = 242 Hz), 148.96, 133.78 (d, *J*_{CF} = 2.64 Hz), 132.87, 127.45, 122.61 (d, *J*_{CF} = 8.06 Hz), 117.59, 116.88, 115.95, 115.79, 115.62.

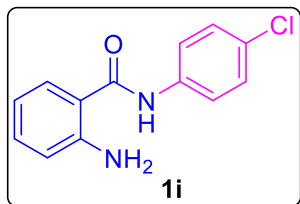
2-Amino-N-(3-chlorophenyl)benzamide (1h).⁷ The title compound was prepared according to the general



procedure (A) on a 2.0 mmol scale to obtain as a pale-yellow solid (328 mg, yield = 66%); Mp. 149-150 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.78 (s, 1H), 7.72 (t, *J* = 2 Hz, 1H), 7.45-7.44 (m, 1H), 7.39 (ddd, *J* = 8, 2, 1 Hz, 1H), 7.29-7.28 (m, 1H), 7.27-7.25 (m, 1H), 7.12 (ddd, *J* = 8, 2, 1 Hz, 1H), 6.73-6.70 (m, 2H), 5.51 (s, 2H). ¹³C{¹H} NMR

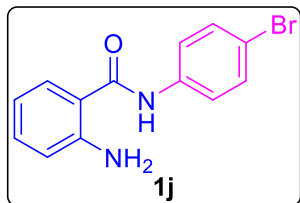
(126 MHz, CDCl₃) δ 167.46, 149.09, 139.05, 134.72, 133.05, 130.01, 127.07, 124.45, 120.46, 118.30, 117.117.67, 116.89, 115.64.

2-Amino-N-(4-chlorophenyl)benzamide (1i).⁵ The title compound was prepared according to the general



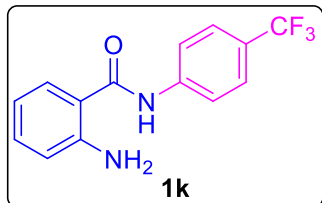
procedure (A) on a 2.0 mmol scale to obtain as a pale-brown solid (375 mg, yield = 76%); Mp. 147-148 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.83 (s, 1H), 7.51-7.48 (m, 2H), 7.43 (dd, *J* = 8, 1.5 Hz, 1H), 7.31-7.28 (m, 2H), 7.26-7.23 (m, 1H), 6.70-6.67 (m, 2H), 5.46 (s, 2H). ¹³C{¹H} NMR (126 MHz, CDCl₃) δ 167.54, 148.96, 136.42, 132.93, 129.41, 129.02, 127.16, 121.76, 117.61, 116.88, 115.81.

2-Amino-N-(4-bromophenyl)benzamide (1j).⁸ The title compound was prepared according to the general



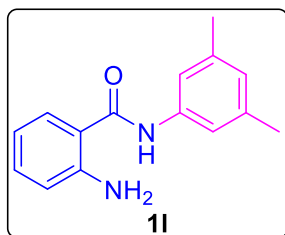
procedure (A) on a 2.0 mmol scale to obtain as a pale-yellow solid (420 mg, yield = 72%); Mp. 169-170 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.83 (s, 1H), 7.48-7.46 (m, 5H), 7.28 (dd, *J* = 15.5, 1 Hz, 1H), 6.74-6.71 (m, 2H), 5.50 (s, 2H). ¹³C{¹H} NMR (126 MHz, CDCl₃) δ 167.52, 149.03, 136.98, 133.01, 132.02, 127.16, 122.06, 117.67, 117.08, 116.92, 115.80.

2-Amino-N-(4-(trifluoromethyl)phenyl)benzamide (1k).⁹ The title compound was prepared according to the



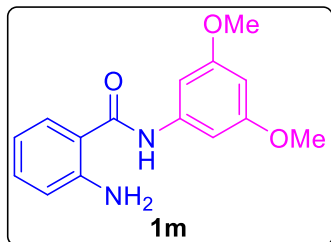
general procedure (A) on a 2.0 mmol scale to obtain as a white solid (382 mg, yield = 68%); Mp. 205-206 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.90 (s, 1H), 7.71 (d, *J* = 8.5 Hz, 2H), 7.62 (d, *J* = 8.5 Hz, 2H), 7.48 (dd, *J* = 8.5, 1.5 Hz, 1H), 7.29 (td, *J* = 7.7, 1.3 Hz, 1H), 6.75-6.72 (m, 2H), 5.53 (s, 2H).

2-Amino-N-(3,5-dimethylphenyl)benzamide (1l).⁵ The title compound was prepared according to the general



procedure (A) on a 2.0 mmol scale to obtain as a pale-brown solid (362 mg, yield = 75%); Mp. 174-175 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.71 (s, 1H), 7.43 (d, *J* = 7.5, 1H), 7.24-7.21 (m, 1H), 7.18 (s, 2H), 6.78 (s, 1H), 6.69-6.66 (m, 2H), 5.47 (s, 2H), 2.30 (s, 6H). ¹³C{¹H} NMR (126 MHz, CDCl₃) δ 167.57, 148.90, 138.74, 137.65, 132.63, 127.17, 126.26, 118.30, 117.49, 116.78, 116.43, 21.39.

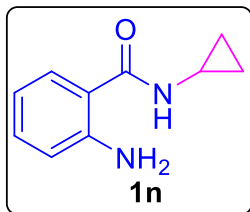
2-Amino-N-(3,5-dimethoxyphenyl)benzamide (1m).¹⁰ The title compound was prepared according to the



general procedure (A) on a 2.0 mmol scale to obtain as a brown solid (369 mg, yield = 68%); Mp. 148-149 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.81 (s, 1H), 7.46 (d, *J* = 7.5 Hz, 1H), 7.26 (td, *J* = 7.7, 1.5 Hz, 1H), 6.83 (d, *J* = 2.5 Hz, 2H), 6.73-6.69 (m, 2H), 6.29 (t, *J* = 2 Hz, 1H), 5.49 (s, 2H), 3.81 (s, 6H). ¹³C{¹H} NMR (126 MHz,

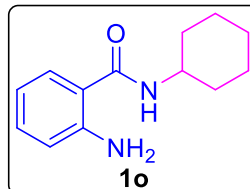
CDCl_3) δ 167.61, 161.08, 148.90, 139.69, 132.79, 127.22, 117.56, 116.89, 116.34, 98.71, 96.89, 55.44.

2-Amino-N-cyclopropylbenzamide (1n).¹¹ The title compound was prepared according to the general procedure



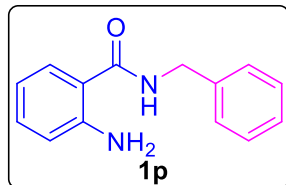
(A) on a 2.0 mmol scale to obtain as a white solid (227 mg, yield = 64%); Mp. 169-170 °C; ^1H NMR (500 MHz, CDCl_3) δ 7.25 (dd, J = 8, 1 Hz, 1H), 7.22-7.18 (m, 1H), 6.68 (dd, J = 8.2, 0.7 Hz, 1H), 6.64-6.60 (m, 1H), 6.25 (s, 1H), 5.56 (s, 2H), 2.87-2.82 (m, 1H), 0.88-0.84 (m, 2H), 0.62-0.59 (m, 2H). $^{13}\text{C}\{^1\text{H}\}$ NMR (126 MHz, CDCl_3) δ 170.90, 148.78, 132.37, 127.07, 117.35, 116.47, 115.60, 22.83, 6.77.

2-Amino-N-cyclohexylbenzamide (1o).⁵ The title compound was prepared according to the general procedure



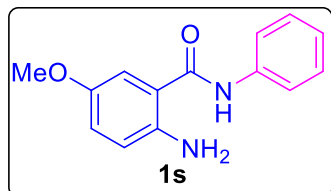
(A) on a 2.0 mmol scale to obtain as a white solid (258 mg, yield = 59%); Mp. 171-172 °C; ^1H NMR (500 MHz, CDCl_3) δ 7.28 (dd, J = 8, 1 Hz, 1H), 7.21-7.17 (m, 1H), 6.68-6.62 (m, 2H), 5.91 (d, J = 5.5 Hz, 1H), 5.47 (s, 2H), 3.95-3.89 (m, 1H), 2.01 (dd, J = 12.2, 3.2 Hz, 2H), 1.77-1.73 (m, 2H), 1.67-1.63 (m, 1H), 1.46-1.37 (m, 2H), 1.26-1.18 (m, 3H). $^{13}\text{C}\{^1\text{H}\}$ NMR (126 MHz, CDCl_3) δ 168.47, 148.56, 132.07, 127.00, 117.25, 116.65, 116.57, 48.28, 33.23, 25.58, 24.92.

2-Amino-N-benzylbenzamide (1p).¹ The title compound was prepared according to the general procedure (A)



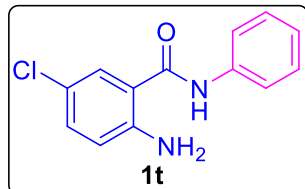
on a 2.0 mmol scale to obtain as a pale-brown solid (291 mg, yield = 64%); Mp. 151-152 °C; ^1H NMR (500 MHz, CDCl_3) δ 7.39-7.30 (m, 6H), 7.22 (td, J = 7.5, 1 Hz, 1H), 6.70 (d, J = 8 Hz, 1H), 6.64 (t, J = 7.5 Hz, 1H), 6.44 (s, 1H), 5.57 (s, 2H), 4.61 (d, J = 5.5 Hz, 2H). $^{13}\text{C}\{^1\text{H}\}$ NMR (126 MHz, CDCl_3) δ 169.22, 148.87, 138.31, 132.44, 128.80, 127.82, 127.58, 127.17, 117.38, 116.62, 115.81, 43.72.

2-Amino-5-methoxy-N-phenylbenzamide (1s).³ The title compound was prepared according to the general



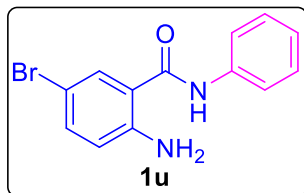
procedure (C) on a 2.0 mmol scale to obtain as a brown solid (346 mg, yield = 71%); Mp. 140-141 °C; ^1H NMR (500 MHz, CDCl_3) δ 8.07 (s, 1H), 7.60 (dd, J = 8.5, 1 Hz, 2H), 7.39 (t, J = 8 Hz, 2H), 7.18-7.15 (m, 1H), 7.08 (d, J = 2.5 Hz, 1H), 6.94 (dd, J = 9, 3 Hz, 1H), 6.74 (d, J = 9 Hz, 1H), 3.81 (s, 3H). $^{13}\text{C}\{^1\text{H}\}$ NMR (126 MHz, CDCl_3) δ 167.04, 151.70, 141.94, 137.83, 129.10, 124.56, 120.47, 119.69, 119.43, 118.22, 112.20, 56.09.

2-Amino-5-chloro-N-phenylbenzamide (1t).³ The title compound was prepared according to the general



procedure (C) on a 2.0 mmol scale to obtain as a pale brown solid (332 mg, yield = 67%); Mp. 177-178 °C; ^1H NMR (500 MHz, CDCl_3) δ 7.76 (s, 1H), 7.57 (d, J = 8 Hz, 2H), 7.45 (d, J = 2 Hz, 1H), 7.39 (t, J = 8 Hz, 2H), 7.23-7.17 (m, 2H), 6.68 (d, J = 9 Hz, 1H), 5.49 (s, 2H). $^{13}\text{C}\{^1\text{H}\}$ NMR (126 MHz, CDCl_3) δ 166.46, 147.46, 137.50, 132.61, 129.13, 126.78, 124.84, 121.20, 120.68, 118.80, 117.20.

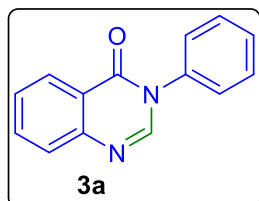
2-Amino-5-bromo-*N*-phenylbenzamide (1u).³ The title compound was prepared according to the general



procedure (C) on a 2.0 mmol scale to obtain as a pale-brown solid (380 mg, yield = 65%); Mp. 177-178 °C; ¹H NMR (500 MHz, CDCl₃) δ 7.75 (s, 1H), 7.55 (t, *J* = 2.7 Hz, 2H), 7.53 (s, 1H), 7.36 (t, *J* = 8 Hz, 2H), 7.30 (dd, *J* = 17.5, 2.2 Hz, 1H), 7.15 (t, *J* = 7.5 Hz, 1H), 6.59 (d, *J* = 8.5 Hz, 1H), 5.48 (s, 2H). ¹³C{¹H} NMR (126 MHz, CDCl₃)

δ 166.35, 147.82, 137.46, 135.30, 129.66, 129.08, 124.81, 120.69, 119.08, 117.75, 107.84.

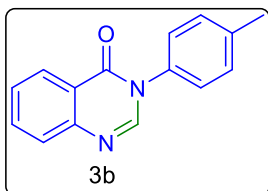
3-Phenylquinazolin-4(3*H*)-one (3a).⁴ The title compound was prepared according to the general procedure (E)



on a 0.25 mmol scale to obtain as a white solid (53 mg, yield = 96%); Mp. 135-138 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.37 (d, *J* = 8.0 Hz, 1H), 8.13 (s, 1H), 7.83 – 7.75 (m, 2H), 7.57-7.54 (m, 3H), 7.49 (d, *J* = 7.3 Hz, 1H), 7.43 (d, *J* = 7.3 Hz, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.90, 148.06, 146.22, 137.61, 134.72, 129.78, 129.25, 127.79, 127.71,

127.31, 127.13, 122.50.

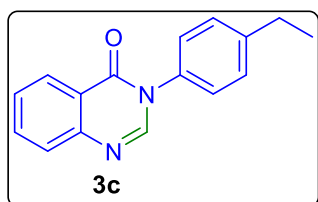
3-(4-Tolyl)quinazolin-4(3*H*)-one (3b).⁴ The title compound was prepared according to the general procedure



(E) a 0.25 mmol scale to obtain as a white solid (42 mg, yield = 71%); Mp. 149-151 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.36 (d, *J* = 8.0 Hz, 1H), 8.11 (s, 1H), 7.80-7.74 (m, 2H), 7.53 (t, *J* = 7.3 Hz, 1H), 7.36-7.29 (m, 4H), 2.43 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.95, 147.99, 146.38, 139.29, 135.01, 134.45, 130.31, 127.64, 127.25, 126.82,

122.49, 21.28.

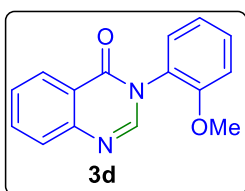
3-(4-Ethylphenyl)quinazolin-4(3*H*)-one (3c).¹² The title compound was prepared according to the general



procedure (E) on a 0.25 mmol scale to obtain as a white solid (34 mg, yield = 54%); Mp. 146-148 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.37 (d, *J* = 7.9 Hz, 1H), 8.12 (s, 1H), 7.82-7.74 (m, 2H), 7.54 (t, *J* = 7.3 Hz, 1H), 7.37-7.31 (m, 4H), 2.73 (q, *J* = 7.6 Hz, 2H), 1.29 (t, *J* = 7.6 Hz, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.89, 147.92,

146.32, 145.42, 135.07, 134.50, 129.08, 127.57, 127.55, 127.19, 126.81, 122.42, 28.56, 15.41.

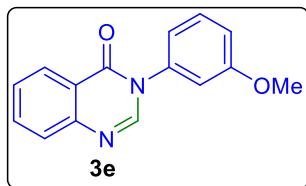
3-(2-Methoxyphenyl)quinazolin-4(3*H*)-one (3d).² The title compound was prepared according to the general



procedure (E) on a 0.25 mmol scale to obtain as a white solid (36 mg, yield = 57%); Mp. 168-171 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.34 (d, *J* = 8.0 Hz, 1H), 7.96 (s, 1H), 7.78-7.73 (m, 2H), 7.51-7.42 (m, 2H), 7.32 (d, *J* = 7.5 Hz, 1H), 7.07 (t, *J* = 9.1 Hz, 2H), 3.78 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.62, 154.66, 148.05, 147.18, 134.35, 130.90,

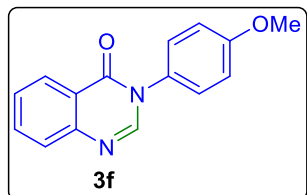
129.12, 127.48, 127.26, 127.11, 125.97, 122.67, 120.96, 112.26, 55.82.

3-(3-Methoxyphenyl)quinazolin-4(3H)-one (3e).⁴ The title compound was prepared according to the general



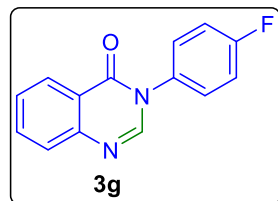
procedure (E) on a 0.25 mmol scale to obtain as a white solid (46 mg, yield = 73%); Mp. 161-163 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.35 (d, *J* = 7.9 Hz, 1H), 8.11 (s, 1H), 7.81-7.73 (m, 2H), 7.53 (t, *J* = 7.3 Hz, 1H), 7.43 (t, *J* = 8.1 Hz, 1H), 7.03-6.95 (m, 3H), 3.83 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.68, 160.42, 147.84, 146.07, 138.53, 134.56, 130.38, 127.62, 127.57, 127.16, 122.37, 119.10, 115.04, 112.85, 55.54.

3-(4-Methoxyphenyl)quinazolin-4(3H)-one (3f).⁴ The title compound was prepared according to the general



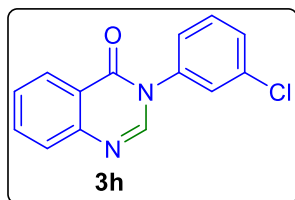
procedure (E) on a 0.25 mmol scale to obtain as a white solid (32 mg, yield = 51%); Mp. 187-190 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.35 (d, *J* = 8.0 Hz, 1H), 8.10 (s, 1H), 7.78-7.73 (m, 2H), 7.53 (t, *J* = 7.3 Hz, 1H), 7.33 (d, *J* = 8.8 Hz, 2H), 7.03 (d, *J* = 8.8 Hz, 2H), 3.86 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 161.03, 159.91, 147.92, 146.44, 134.48, 130.19, 128.14, 127.55, 127.15, 122.38, 114.83, 55.60.

3-(4-Fluorophenyl)quinazolin-4(3H)-one (3g).⁴ The title compound was prepared according to the general



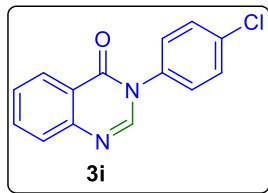
procedure (E) on a 0.25 mmol scale to obtain as a white solid (24 mg, yield = 40%); Mp. 199-201 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.34 (d, *J* = 7.9 Hz, 1H), 8.09 (s, 1H), 7.82-7.74 (m, 2H), 7.54 (t, *J* = 7.4 Hz, 1H), 7.42-7.39 (m, 2H), 7.23 (t, *J* = 8.4 Hz, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 162.62 (*J*_{CF} = 247.99 Hz), 160.79, 147.84, 145.85, 134.70, 133.41, 133.38, 128.97, 128.88, 127.72 (*J*_{CF} = 12.55 Hz), 127.16, 122.26, 116.68 (*J*_{CF} = 22.92 Hz), ¹⁹F NMR (377 MHz, CDCl₃) δ -111.58.

3-(3-Chlorophenyl)quinazolin-4(3H)-one (3h).¹³ The title compound was prepared according to the general



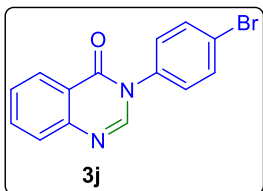
procedure (E) on a 0.25 mmol scale to obtain as a white solid (44 mg, yield = 68%); Mp. 156-159 °C; ¹H NMR (500 MHz, CDCl₃) δ 8.34 (dd, *J* = 8.0, 1.4 Hz, 1H), 8.08 (s, 1H), 7.82-7.78 (m, 1H), 7.75 (d, *J* = 8.1 Hz, 1H), 7.54 (t, *J* = 7.5 Hz, 1H), 7.48 – 7.45 (m, 3H), 7.34-7.31 (m, 1H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.57, 147.86, 145.52, 138.59, 135.34, 134.85, 130.69, 129.49, 127.93, 127.80, 127.60, 127.28, 125.40, 122.34.

3-(4-Chlorophenyl)quinazolin-4(3H)-one (3i).² The title compound was prepared according to the general



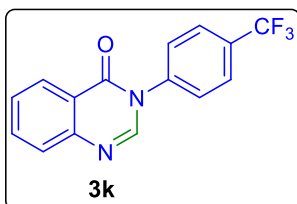
procedure (E) on a 0.25 mmol scale to obtain as a white solid (45 mg, yield = 71%); Mp. 182-185 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.33 (d, *J* = 7.9 Hz, 1H), 8.08 (s, 1H), 7.83-7.74 (m, 2H), 7.56-7.50 (m, 3H), 7.38 (d, *J* = 8.6 Hz, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.66, 147.83, 145.66, 135.97, 135.21, 134.81, 129.92, 128.42, 127.89, 127.73, 127.23, 122.28.

3-(4-Bromophenyl)quinazolin-4(3H)-one (3j).⁴ The title compound was prepared according to the general



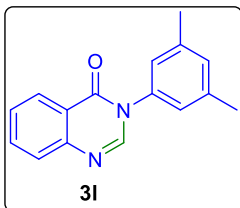
procedure (E) on a 0.25 mmol scale to obtain as a white solid (47 mg, yield = 63%); Mp. 196-199 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.36 (d, *J* = 8.0 Hz, 1H), 8.09 (s, 1H), 7.84-7.75 (m, 2H), 7.69 (d, *J* = 8.6 Hz, 2H), 7.56 (t, *J* = 7.4 Hz, 1H), 7.32 (d, *J* = 8.6 Hz, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.69, 147.90, 145.61, 136.55, 134.91, 133.00, 128.76, 127.98, 127.82, 127.32, 123.32, 122.34.

3-(4-(Trifluoromethyl)phenyl)quinazolin-4(3H)-one (3k).² The title compound was prepared according to the



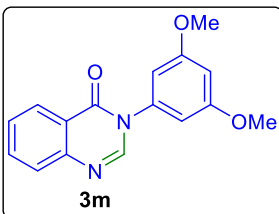
general procedure (E) on a 0.25 mmol scale to obtain as a white solid (48 mg, yield = 66%); Mp. 201-203 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.34 (d, *J* = 7.9 Hz, 1H), 8.10 (s, 1H), 7.81 (t, *J* = 7.0 Hz, 3H), 7.76 (d, *J* = 8.0 Hz, 1H), 7.60-7.53 (m, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.46, 147.72, 145.15, 140.48, 134.93, 131.28 (*J*_{CF} = 32.88 Hz), 127.99, 127.76, 127.56, 127.23, 126.85 (*J*_{CF} = 11.04 Hz), 123.59 (*J*_{CF} = 270.76 Hz), 122.16, ¹⁹F NMR (377 MHz, CDCl₃) δ -62.72.

3-(3,5-Dimethylphenyl)quinazolin-4(3H)-one (3l).¹³ The title compound was prepared according to the general



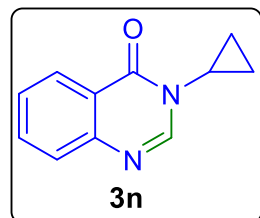
procedure (E) on a 0.25 mmol scale to obtain as a white solid (40 mg, yield = 67%); Mp. 165-168 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.36 (d, *J* = 7.9 Hz, 1H), 8.09 (s, 1H), 7.80-7.77 (m, 2H), 7.53 (t, *J* = 7.3 Hz, 1H), 7.11 (s, 1H), 7.02 (s, 2H), 2.38 (s, 6H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.88, 147.91, 146.28, 139.55, 137.33, 134.47, 130.83, 127.53, 127.15, 124.66, 122.42, 21.20.

3-(3,5-Dimethoxyphenyl)quinazolin-4(3H)-one (3m).¹⁴ The title compound was prepared according to the



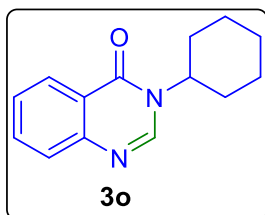
general procedure (E) on a 0.25 mmol scale to obtain as a white solid (37 mg, yield = 52%); Mp. 227-228 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.37 (d, *J* = 7.9 Hz, 1H), 8.11 (s, 1H), 7.82-7.75 (m, 2H), 7.55 (t, *J* = 7.4 Hz, 1H), 6.56 (s, 3H), 3.82 (s, 6H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 161.39, 160.67, 147.83, 146.03, 139.08, 134.60, 127.65, 127.59, 127.19, 122.38, 105.52, 101.34, 55.64.

3-Cyclopropylquinazolin-4(3H)-one (3n).¹³ The title compound was prepared according to the general



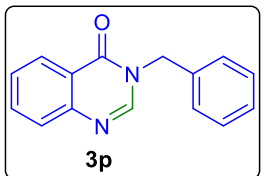
procedure (E) on a 0.25 mmol scale to obtain as a white solid (23 mg, yield = 49%); Mp. 121-124 °C; ¹H NMR (500 MHz, CDCl₃) δ 8.28 (d, *J* = 8.0 Hz, 1H), 8.08 (s, 1H), 7.72 (t, *J* = 7.6 Hz, 1H), 7.66 (d, *J* = 7.8 Hz, 1H), 7.47 (t, *J* = 7.5 Hz, 1H), 3.23 (tt, *J* = 7.8, 4.1 Hz, 1H), 1.19 (q, *J* = 6.7 Hz, 2H), 0.92 (q, *J* = 6.6 Hz, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 162.37, 147.71, 146.84, 134.28, 127.46, 127.36, 126.69, 121.97, 29.77, 29.40, 6.57.

3-Cyclohexylquinazolin-4(3H)-one (3o).⁴ The title compound was prepared according to the general procedure



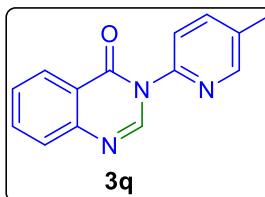
(E) on a 0.25 mmol scale to obtain as a white solid (41 mg, yield = 72%); Mp. 120-123 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.30 (d, *J* = 8.0 Hz, 1H), 8.10 (s, 1H), 7.72 (t, *J* = 7.5 Hz, 1H), 7.67 (d, *J* = 7.9 Hz, 1H), 7.47 (t, *J* = 7.4 Hz, 1H), 4.80 (ddd, *J* = 12.1, 7.8, 3.6 Hz, 1H), 1.96 (dd, *J* = 26.4, 12.0 Hz, 4H), 1.77 (d, *J* = 13.2 Hz, 1H), 1.66-1.47 (m, 4H), 1.24 (tdd, *J* = 13.0, 9.4, 3.7 Hz, 1H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.79, 147.61, 144.00, 134.18, 127.34, 127.17, 127.05, 122.04, 53.46, 32.69, 25.99, 25.37.

3-Benzylquinazolin-4(3H)-one (3p).⁴ The title compound was prepared according to the general procedure (E)



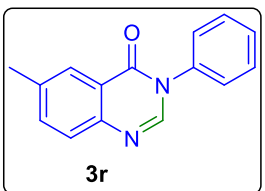
on a 0.25 mmol scale to obtain as a white solid (45 mg, yield = 76%); Mp. 121-124 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.33 (d, *J* = 8.0 Hz, 1H), 8.11 (s, 1H), 7.77-7.68 (m, 2H), 7.50 (t, *J* = 7.4 Hz, 1H), 7.35-7.29 (m, 4H), 7.32 – 7.27 (m, 1H), 5.19 (s, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 161.13, 148.11, 146.42, 135.82, 134.37, 129.09, 128.37, 128.07, 127.59, 127.44, 126.95, 122.28, 49.66.

3-(5-Methylpyridin-2-yl)quinazolin-4(3H)-one (3q).⁴ The title compound was prepared according to the



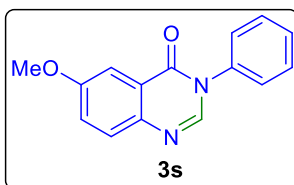
general procedure (E) on a 0.25 mmol scale to obtain as a white solid (43 mg, yield = 73%); Mp. 162-165 °C; ¹H NMR (500 MHz, CDCl₃) δ 8.57 (s, 1H), 8.42 (s, 1H), 8.36 (d, *J* = 8.0 Hz, 1H), 7.81-7.74 (m, 3H), 7.69 (d, *J* = 8.2 Hz, 1H), 7.53 (t, *J* = 7.3 Hz, 1H), 2.41 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.64, 149.45, 147.84, 147.60, 145.19, 138.70, 134.78, 133.65, 127.78, 127.64, 127.30, 122.39, 120.90, 18.13.

6-Methyl-3-phenylquinazolin-4(3H)-one (3r).² The title compound was prepared according to the general



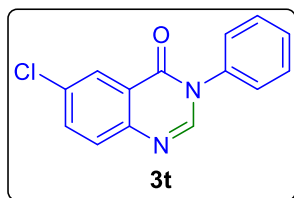
procedure (E) on a 0.25 mmol scale to obtain as a white solid (43 mg, yield = 72%); Mp. 102-105 °C; ¹H NMR (500 MHz, CDCl₃) δ 8.14 (s, 1H), 8.06 (d, *J* = 1.6 Hz, 1H), 7.65 (d, *J* = 8.3 Hz, 1H), 7.59 (d, *J* = 8.2 Hz, 1H), 7.53 (t, *J* = 7.8 Hz, 2H), 7.47 (t, *J* = 7.4 Hz, 1H), 7.41 (d, *J* = 8.1 Hz, 2H), 2.50 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.83, 145.93, 145.43, 138.01, 137.74, 136.04, 129.68, 129.09, 127.45, 127.12, 126.66, 122.18, 21.44.

6-Methoxy-3-phenylquinazolin-4(3H)-one (3s).² The title compound was prepared according to the general



procedure (E) on a 0.25 mmol scale to obtain as a white solid (48 mg, yield = 76%); Mp. 159-162 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.04 (s, 1H), 7.75-7.68 (m, 2H), 7.56 (t, *J* = 7.3 Hz, 2H), 7.50 (d, *J* = 7.0 Hz, 1H), 7.44-7.38 (m, 3H), 3.94 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 160.79, 159.20, 144.15, 142.55, 137.81, 129.77, 129.29, 129.20, 127.17, 124.80, 123.42, 106.80, 56.03.

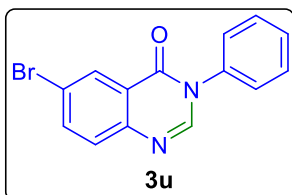
6-Chloro-3-phenylquinazolin-4(3*H*)-one (3t).² The title compound was prepared according to the general



procedure (E) on a 0.25 mmol scale to obtain as a white solid (44 mg, yield = 69%); Mp. 192-195 °C; ¹H NMR (500 MHz, CDCl₃) δ 8.29 (s, 1H), 8.10 (s, 1H), 7.70-7.68 (m, 2H), 7.56-7.48 (m, 3H), 7.40 (d, *J* = 7.5 Hz, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 159.78, 146.48, 146.36, 137.32, 135.02, 133.61, 129.79, 129.35, 127.00, 126.59,

123.56.

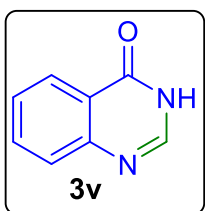
6-Bromo-3-phenylquinazolin-4(3*H*)-one (3u).² The title compound was prepared according to the general



procedure (E) on a 0.25 mmol scale to obtain as a white solid (63 mg, yield = 84%); Mp. 178-180 °C; ¹H NMR (400 MHz, CDCl₃) δ 8.45 (d, *J* = 2.0 Hz, 1H), 8.11 (s, 1H), 7.85 (dd, *J* = 8.6, 2.1 Hz, 1H), 7.62 (d, *J* = 8.7 Hz, 1H), 7.56-7.48 (m, 3H), 7.40 (d, *J* = 7.2 Hz, 2H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 159.62, 146.76, 146.48, 137.80,

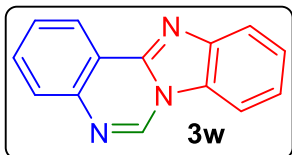
137.24, 129.78, 129.72, 129.45, 129.36, 126.96, 123.81, 121.35.

Quinazolin-4(3*H*)-one (3v).⁴ The title compound was prepared according to the general procedure (E) on a 0.25



mmol scale to obtain as a white solid (20 mg, yield = 54%); Mp. 190-193 °C; ¹H NMR (500 MHz, CDCl₃) δ 11.84 (s, 1H), 8.31 (d, *J* = 7.8 Hz, 1H), 8.15 (s, 1H), 7.81-7.77 (m, 2H), 7.55 (t, *J* = 7.2 Hz, 1H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 163.12, 149.13, 143.61, 135.05, 127.97, 127.58, 126.54, 122.72.

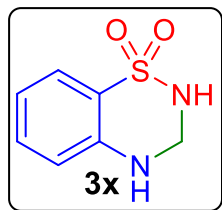
Benzo[4,5]imidazo[1,2-*c*]quinazoline (3w).⁴ The title compound was prepared according to the general



procedure (F) on a 0.25 mmol scale to obtain as a white solid (26 mg, yield = 47%); Mp. 223-226; ¹H NMR (500 MHz, CDCl₃) δ 9.15 (s, 1H), 8.69 (d, *J* = 7.7 Hz, 1H), 8.03-7.97 (m, 3H), 7.80 (t, *J* = 7.1 Hz, 1H), 7.71 (t, *J* = 7.1 Hz, 1H), 7.59 (t, *J* = 7.2 Hz, 1H),

7.49 (t, *J* = 7.2 Hz, 1H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ ¹³C{¹H} (101 MHz, None) δ 146.54, 144.23, 142.76, 136.27, 131.92, 128.81, 128.68, 128.34, 126.31, 124.39, 123.44, 120.50, 119.52, 110.20.

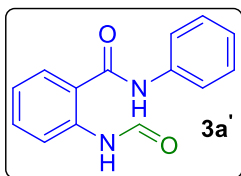
3,4-Dihydro-2*H*-benzo[*e*][1,2,4]thiadiazine 1,1-dioxide (3x).¹⁵ The title compound was prepared according to



the general procedure (G) on a 0.25 mmol scale to obtain as a white solid (28 mg, yield = 61%); Mp. 168-171 °C; ¹H NMR (400 MHz, DMSO-*d*₆) δ 7.63 (t, *J* = 7.8 Hz, 1H), (7.50, *J* = 7.8 Hz, 1H), 7.32 (t, *J* = 7.6 Hz, 1H), 7.15 (s, 1H), 6.81 (d, *J* = 8.3 Hz, 1H), 5.83 (d, *J* = 7.5 Hz, 1H) 4.65 (dd, *J* = 7.9, 2.7 Hz, 2H); ¹³C{¹H} NMR (101 MHz, DMSO-*d*₆) δ 143.71,

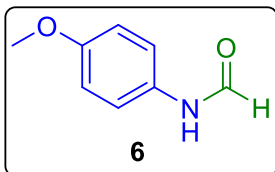
132.80, 123.80, 121.71, 116.08, 115.94, 54.35.

2-Formamido-*N*-phenylbenzamide (3a¹).¹⁶ The title compound was prepared according to the general



procedure (E) for 5 hours on a 0.25 mmol scale to obtain as a white solid; Mp. 155-157 °C; ¹H NMR (400 MHz, CDCl₃) δ 10.65 (s, 1H), 8.54 (d, *J* = 8.3 Hz, 1H), 8.39 (s, 1H), 8.15 (s, 1H), 7.61 (d, *J* = 7.8 Hz, 3H), 7.47 (t, *J* = 7.6 Hz, 1H), 7.41 (t, *J* = 7.8 Hz, 2H), 7.18 (dt, *J* = 23.1, 7.4 Hz, 2H) ; ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 167.09, 159.54, 138.24, 137.17, 132.88, 129.23, 126.76, 125.32, 123.67, 122.50, 121.40, 120.77.

***N*-(4-Methoxyphenyl)formamide (6).**¹⁷ The title compound was prepared according to the general procedure



(E) on a 0.25 mmol scale to obtain as a yellow oily (22 mg, yield = 57%); ¹H NMR (500 MHz, CDCl₃); Mixture of rotamers is observed. Ratio: 31.3/68.7): δ 8.52 (d, *J* = 11.5 Hz, 1H) (minor), 8.34 (s, 1H) (major), 7.91 (s, 1H) (minor), 7.46 (d, *J* = 8.9 Hz, 1H) (major), 7.31 (s, 1H) (major), 7.28 (s, 1H), 7.05 (d, *J* = 8.8 Hz, 2H) (minor), 6.92-6.87

(m, 4H), 3.82 (s, 3H), 3.81 (s, 3H); ¹³C{¹H} NMR (101 MHz, CDCl₃) δ 163.01, 158.87, 157.80, 156.87, 130.01, 129.57, 121.86, 115.02, 114.35, 55.64, 55.58.

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11. Copies of ^1H , ^{13}C and ^{19}F

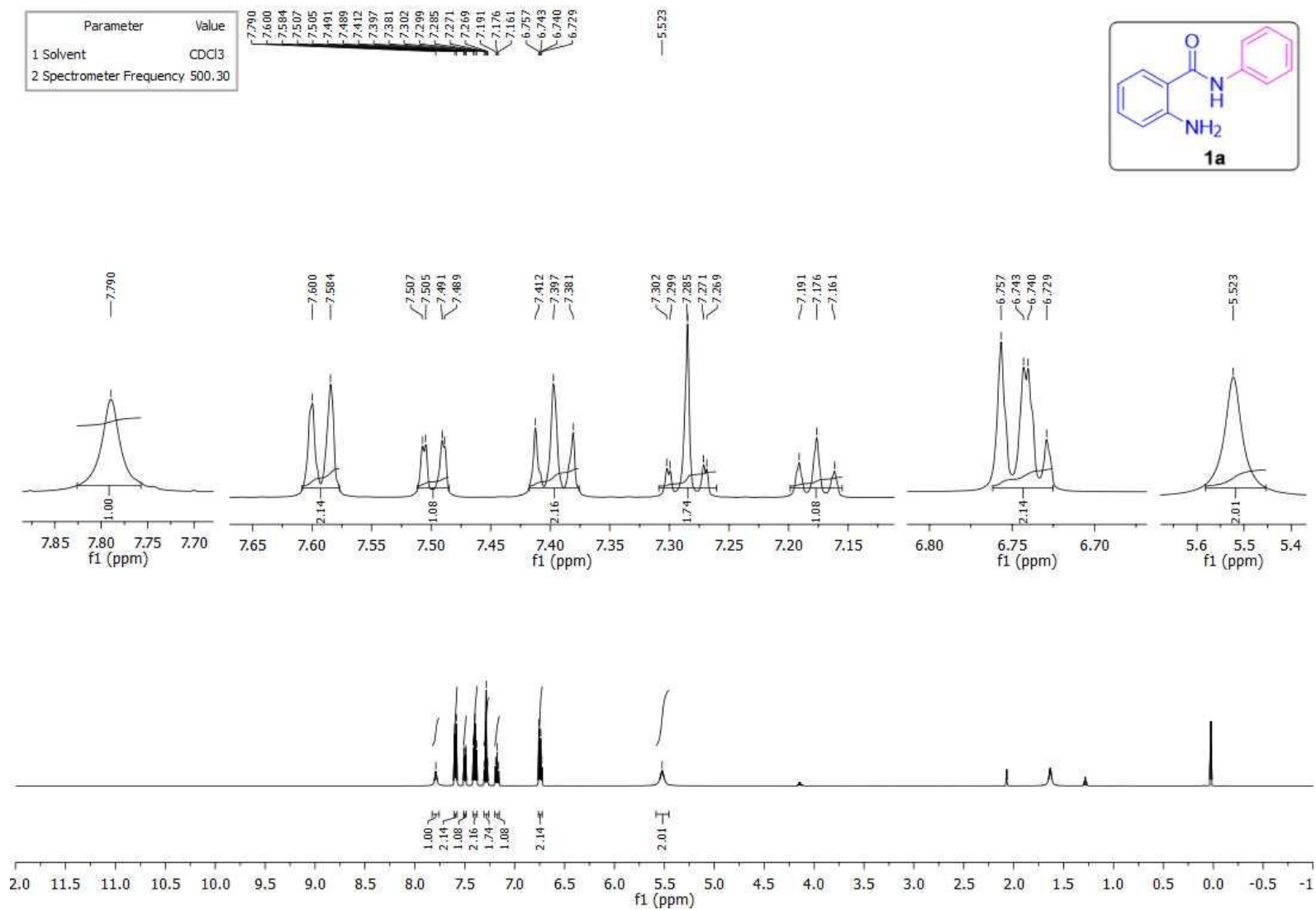


Figure S21. ^1H NMR spectra of 2-Amino-*N*-phenylbenzamide (**1a**).

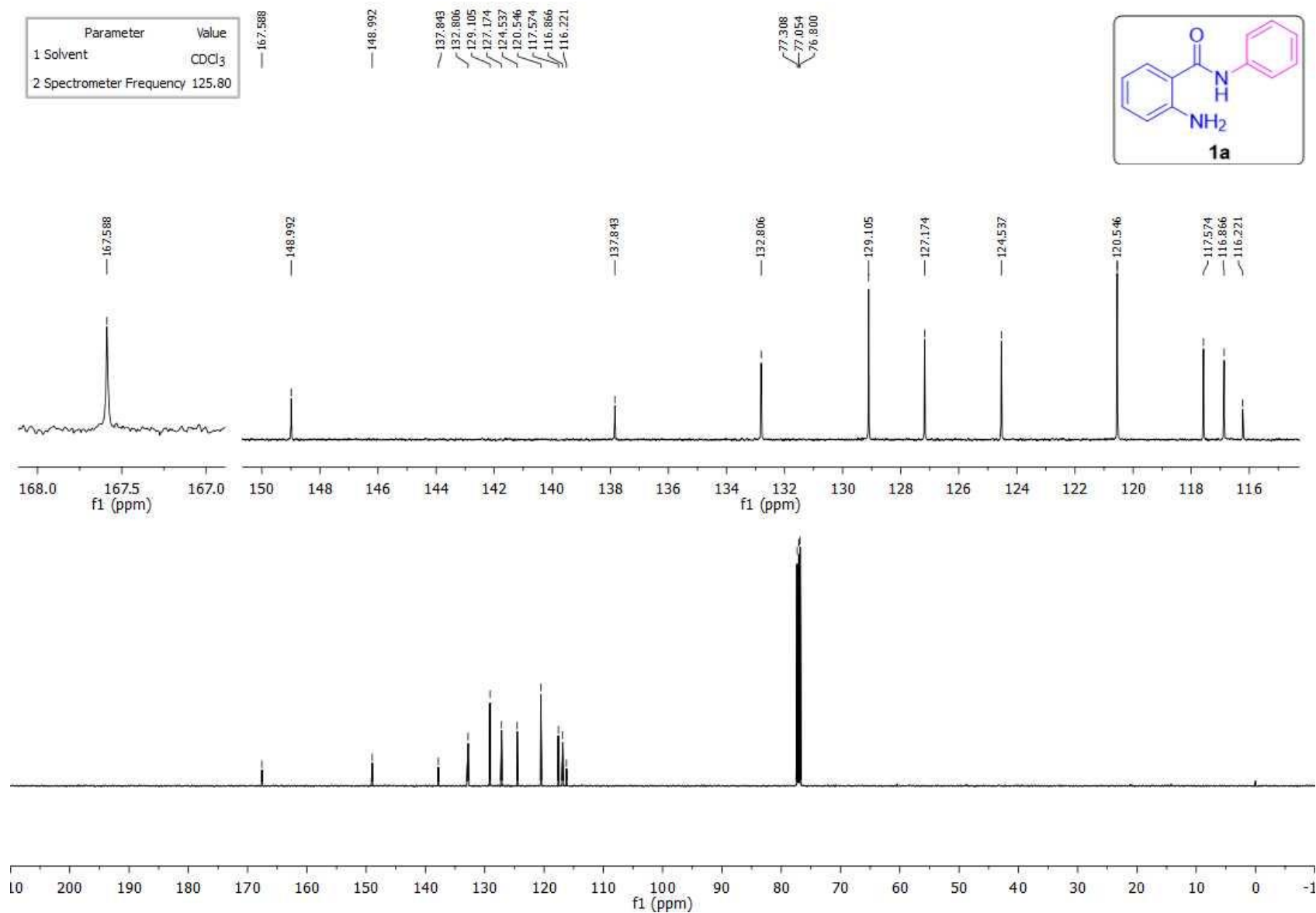


Figure S22. ¹³C NMR spectra of 2-Amino-*N*-phenylbenzamide (**1a**).

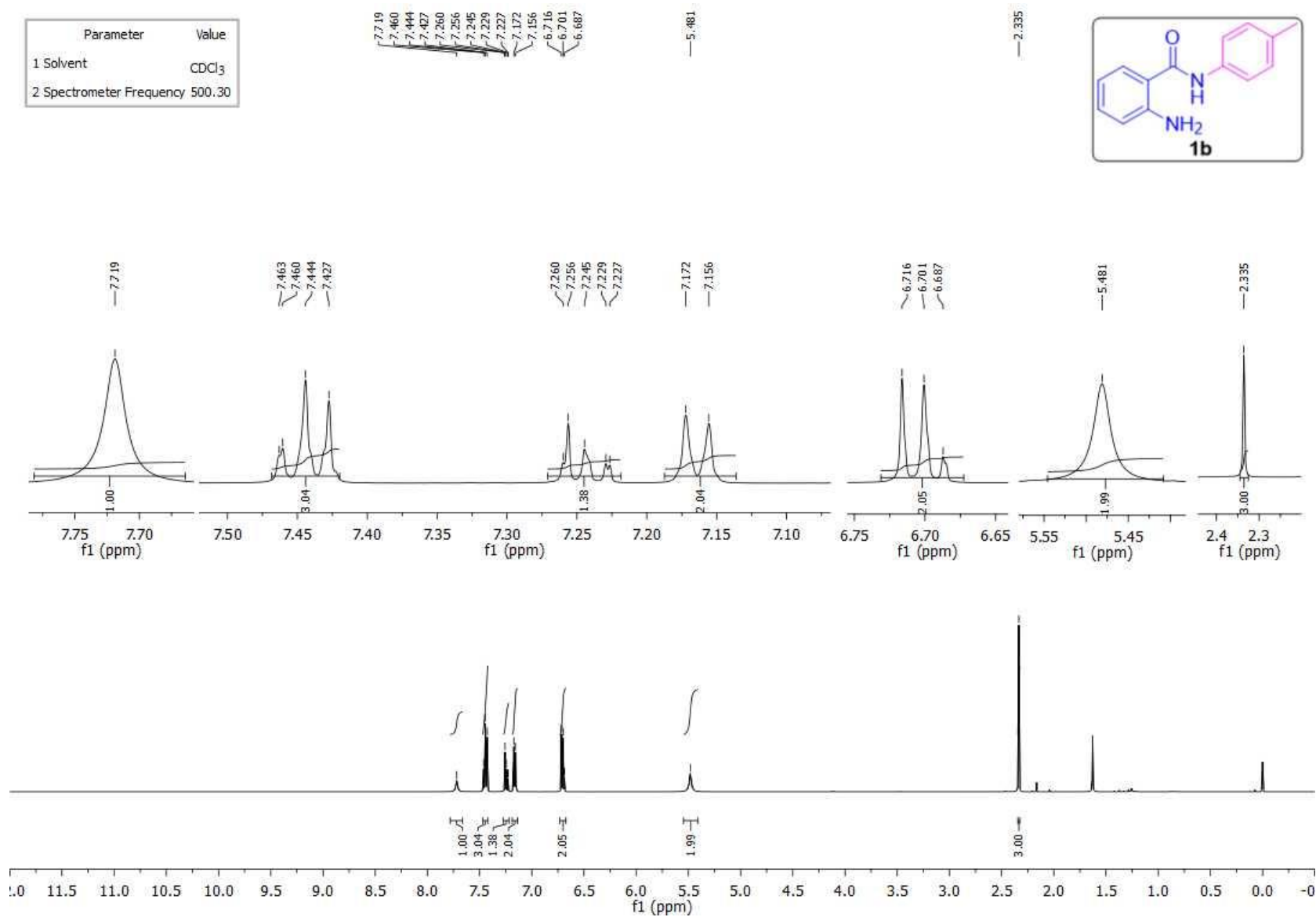


Figure S23. ¹H NMR spectra of 2-Amino-*N*-(4-methylphenyl)benzamide (**1b**).

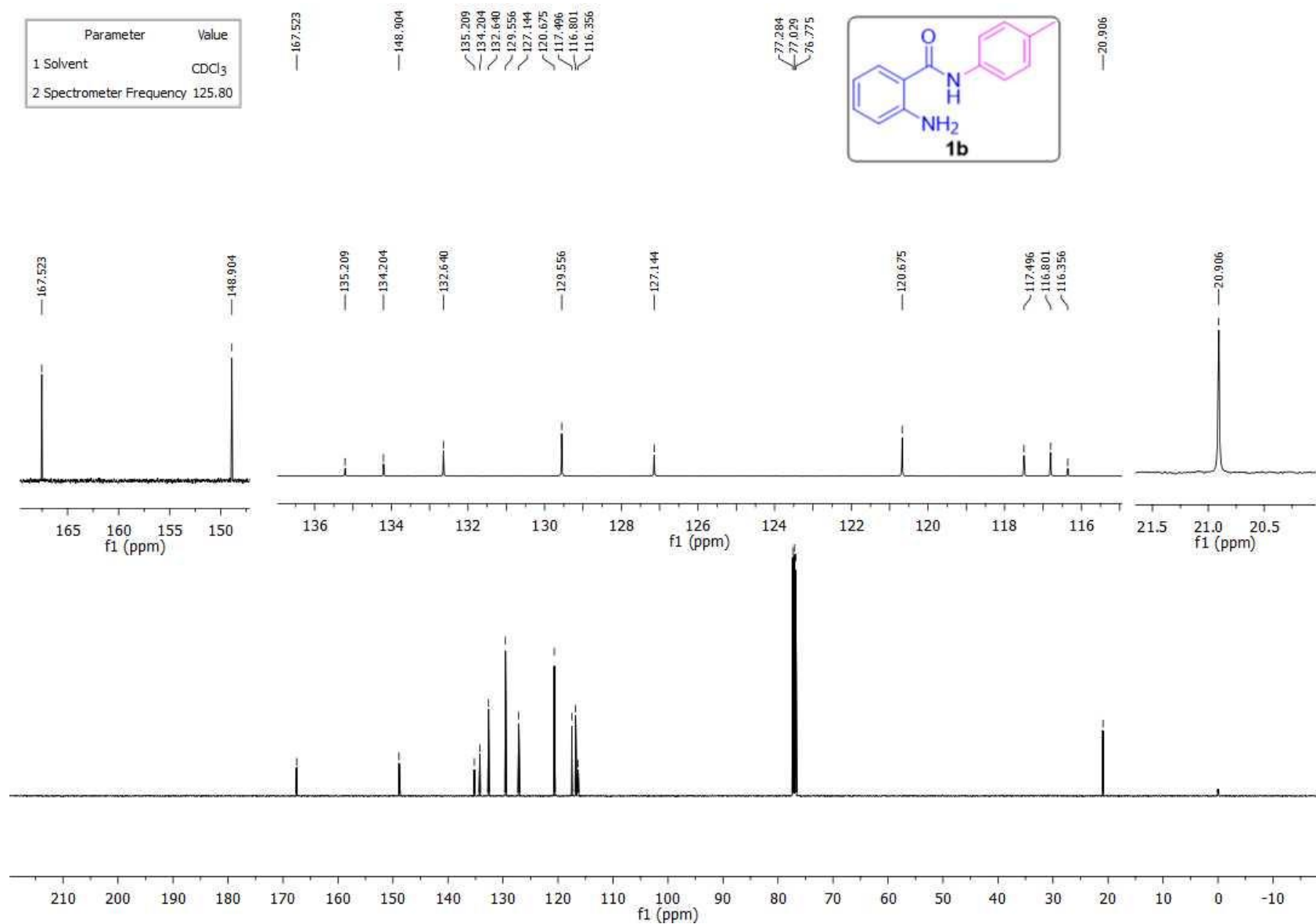


Figure S24. ¹³C NMR spectra of 2-Amino-*N*-(4-methylphenyl)benzamide (**1b**).

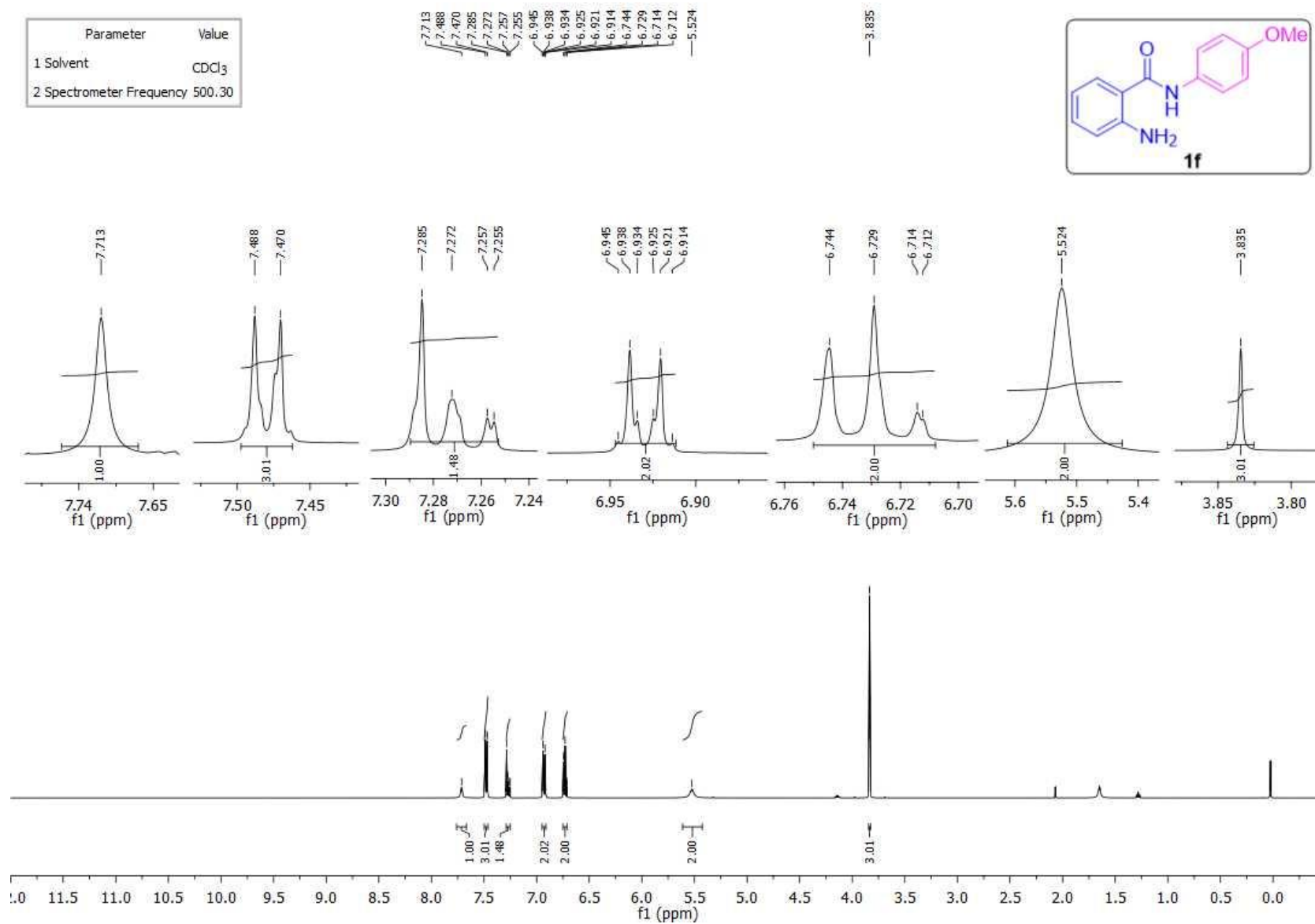


Figure S25. ¹H NMR spectra of 2-Amino-N-(4-methoxyphenyl)benzamide (**1f**).

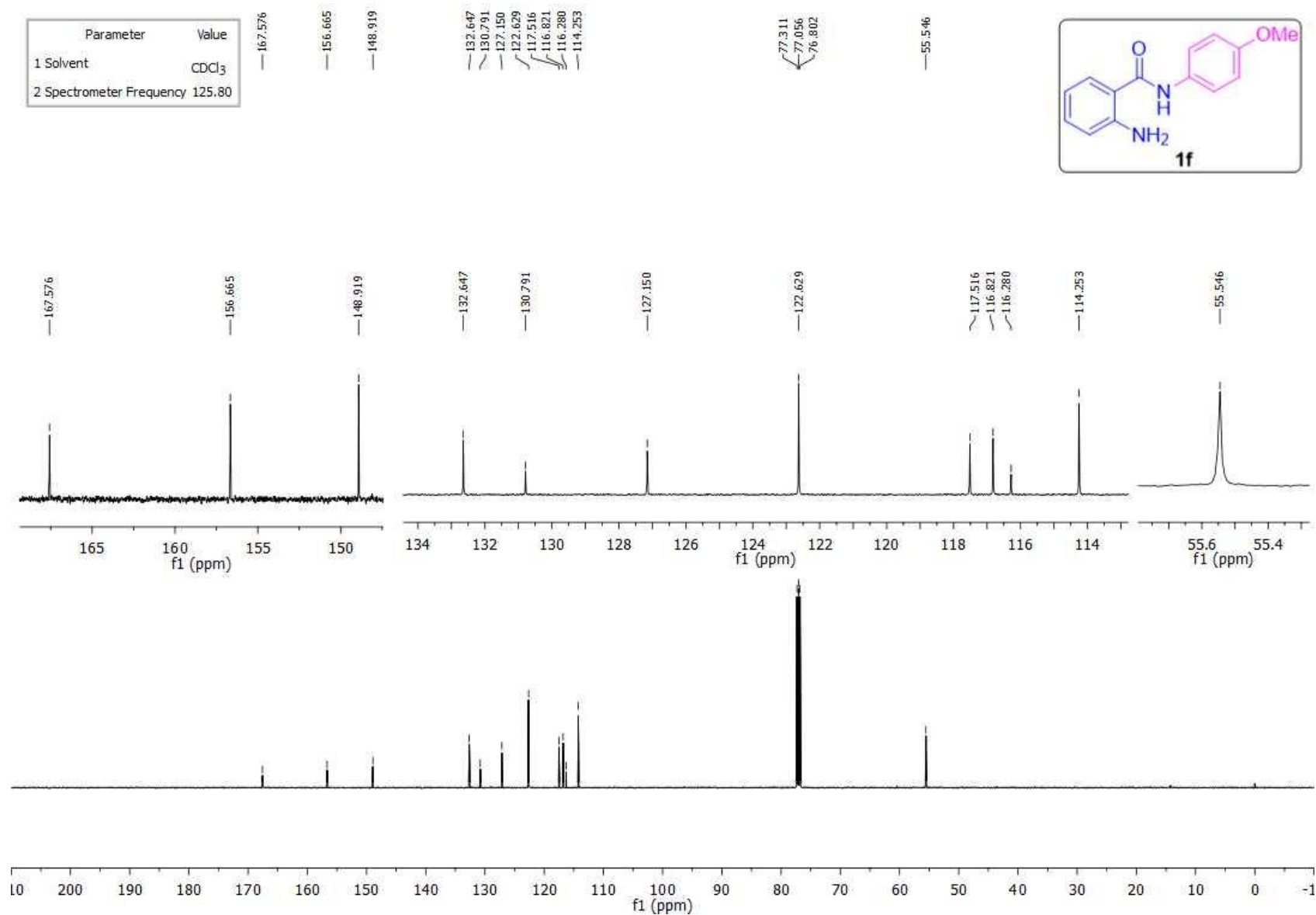


Figure S26. ¹³C NMR spectra of 2-Amino-N-(4-methoxyphenyl)benzamide (**1f**).

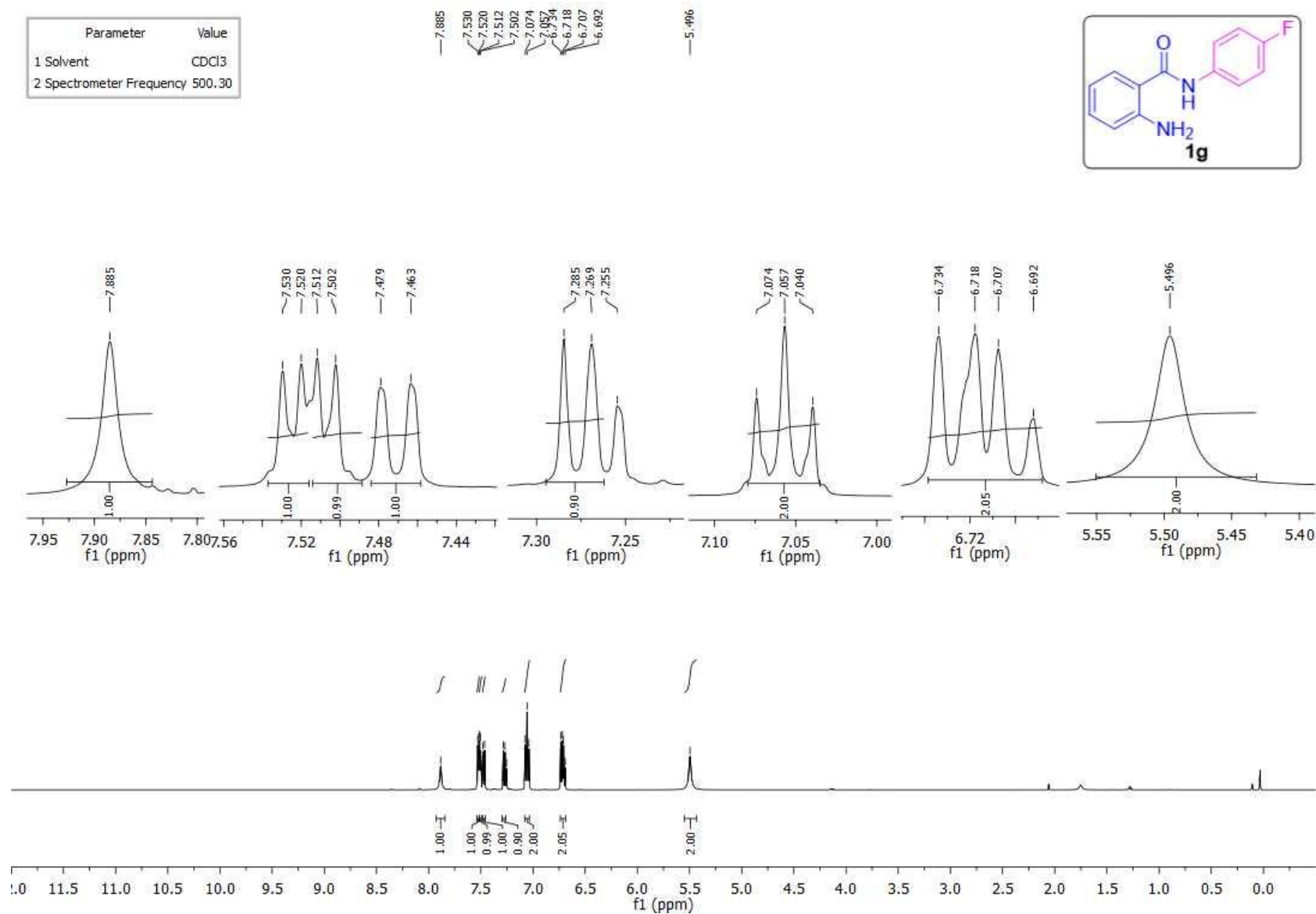


Figure S27. ¹H NMR spectra of 2-Amino-N-(4-fluorophenyl)benzamide (**1g**).

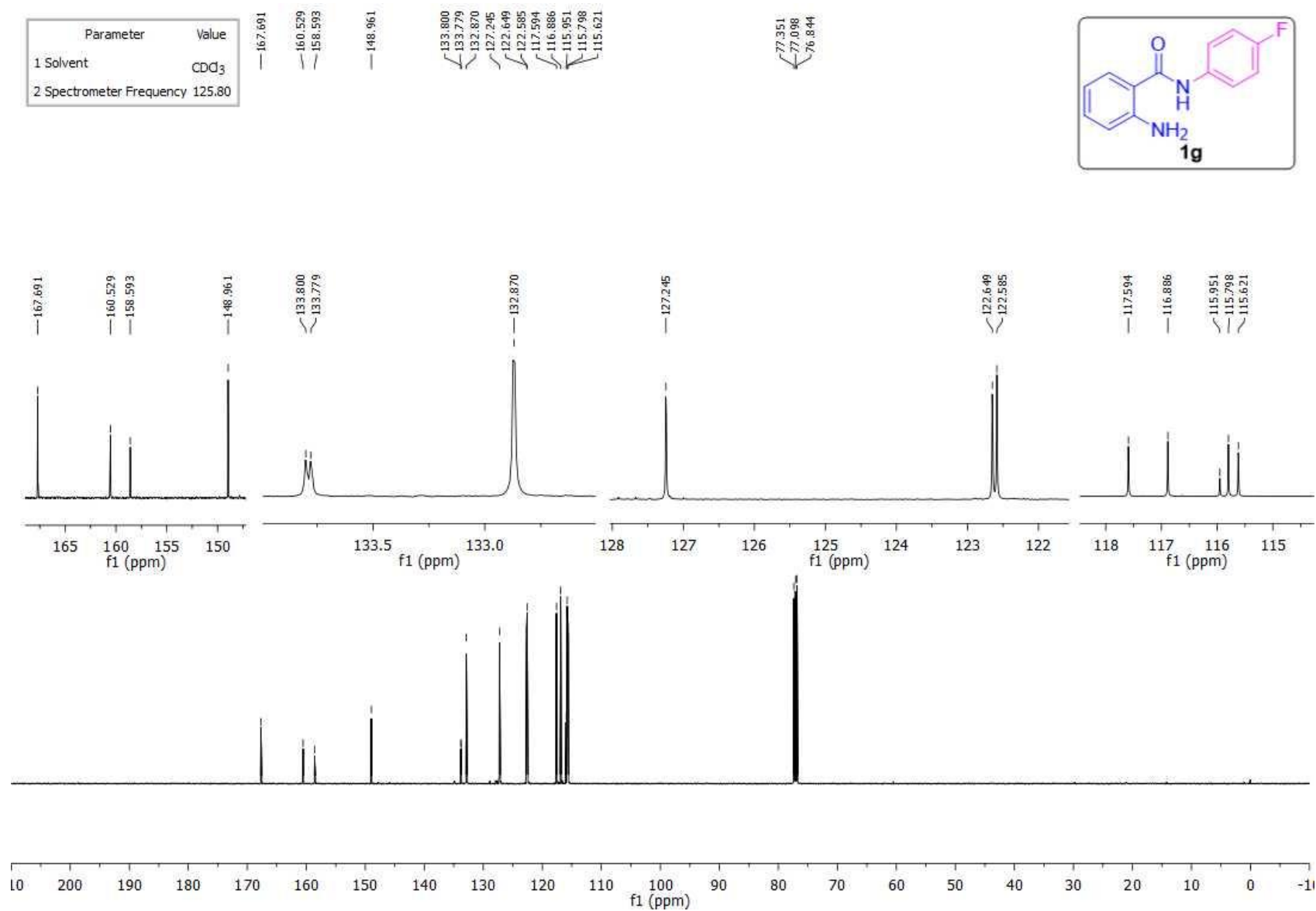


Figure S28. ¹³C NMR spectra of 2-Amino-N-(4-fluorophenyl)benzamide (**1g**).

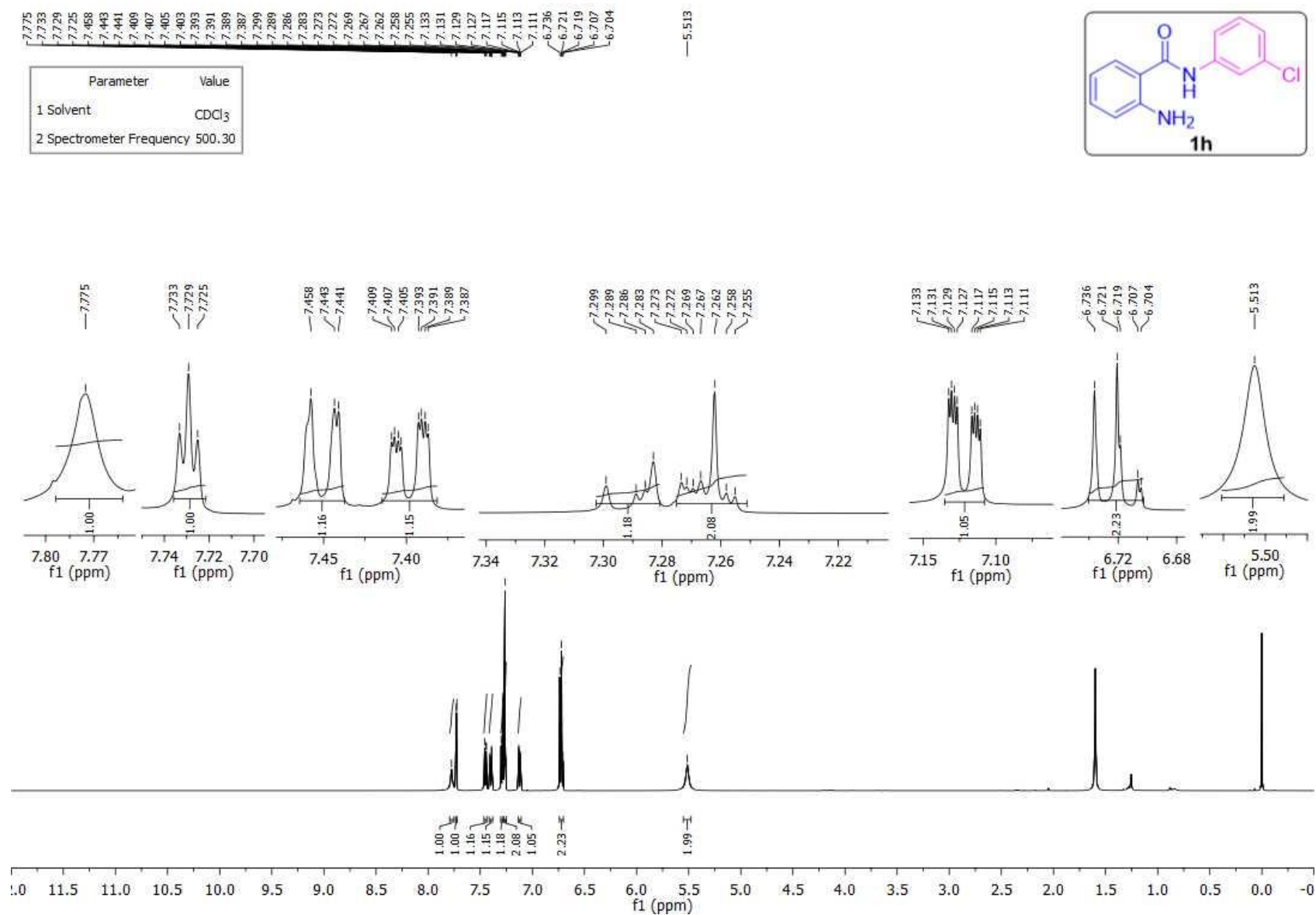


Figure S29. ¹H NMR of 2-Amino-*N*-(3-chlorophenyl)benzamide (**1h**).

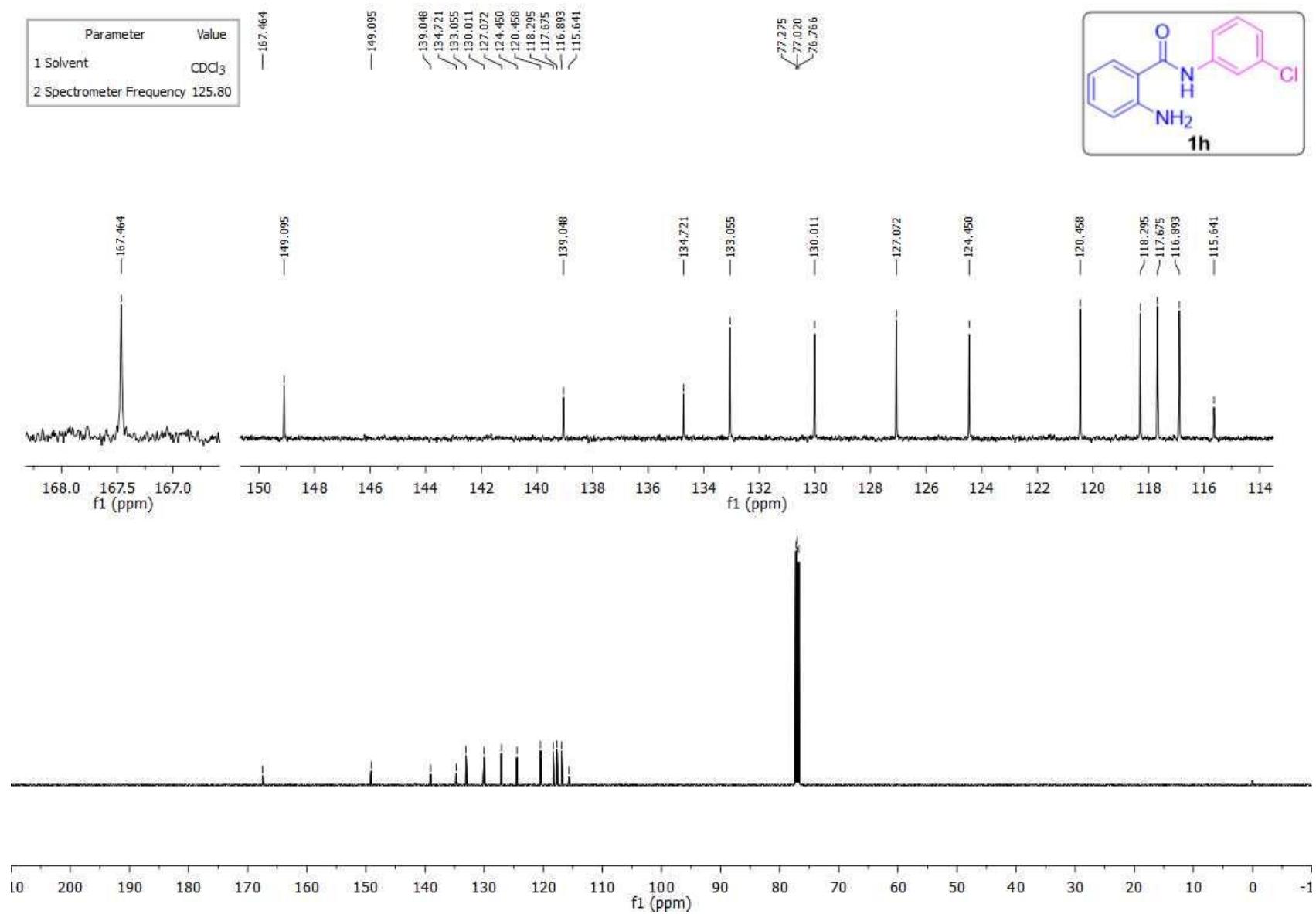


Figure S30. ¹³C NMR of 2-Amino-*N*-(3-chlorophenyl)benzamide (**1h**).

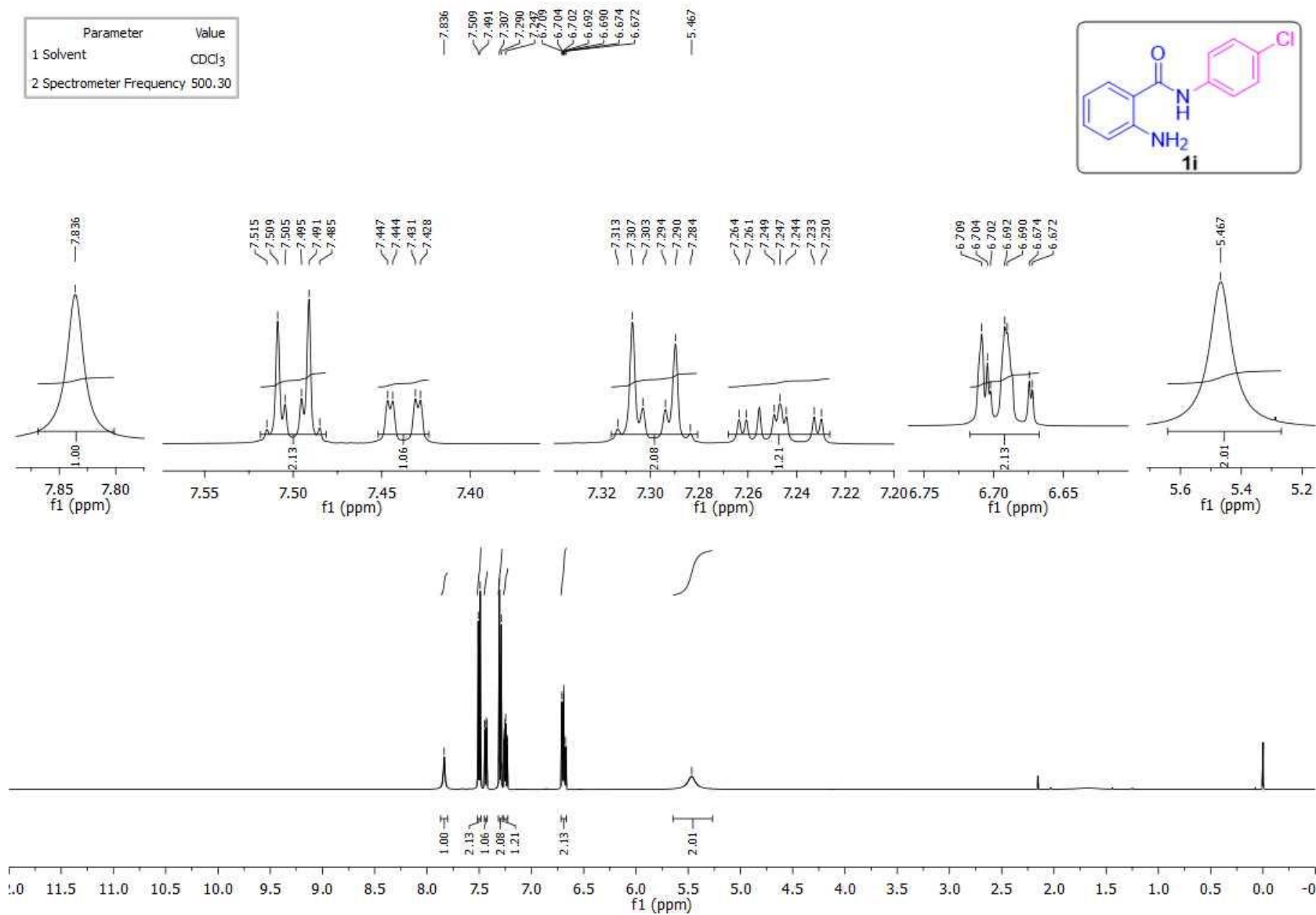


Figure S31. ¹H NMR of 2-Amino-N-(4-chlorophenyl)benzamide (**1i**).

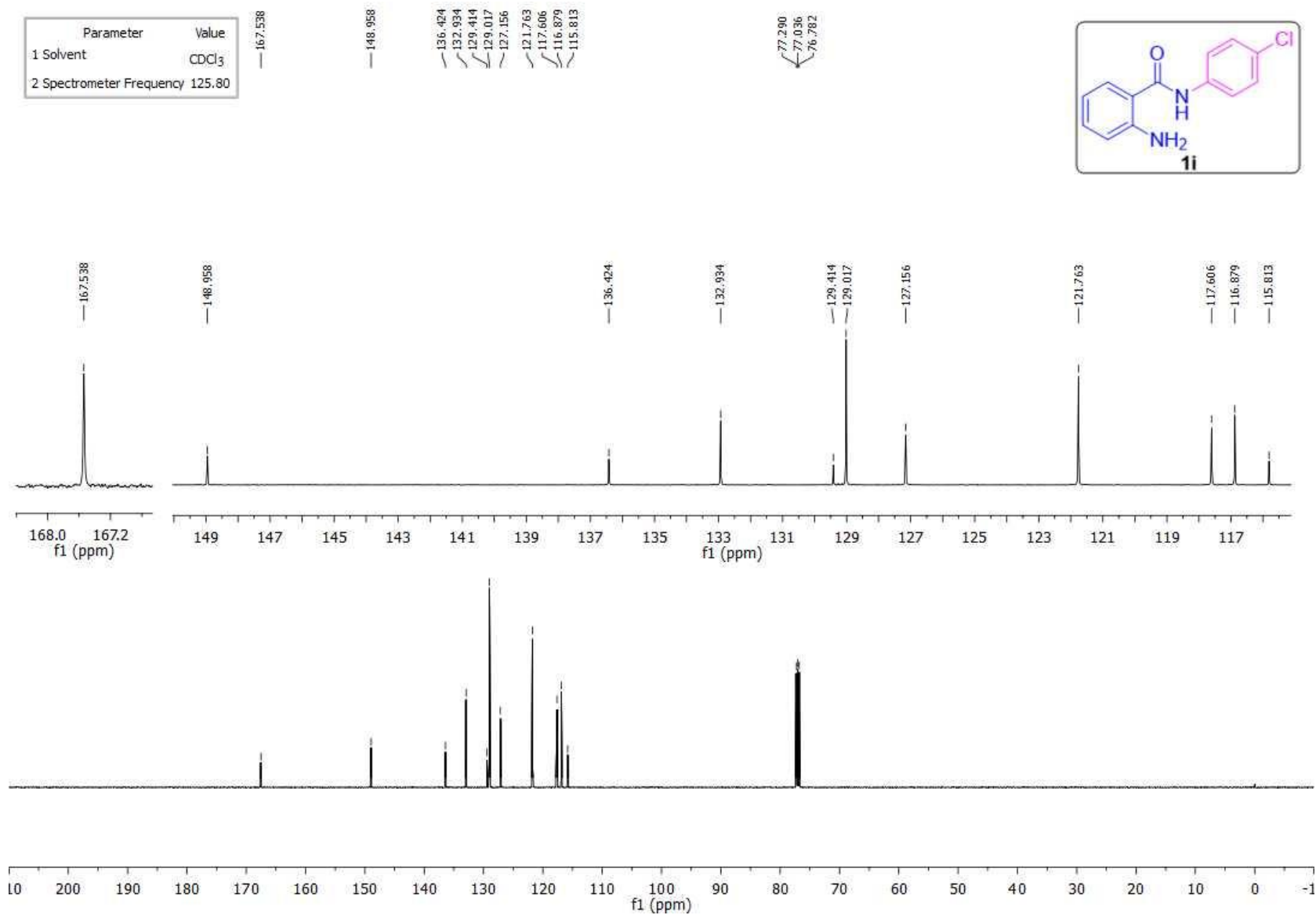


Figure S32. ¹³C NMR of 2-Amino-*N*-(4-chlorophenyl)benzamide (**1i**).

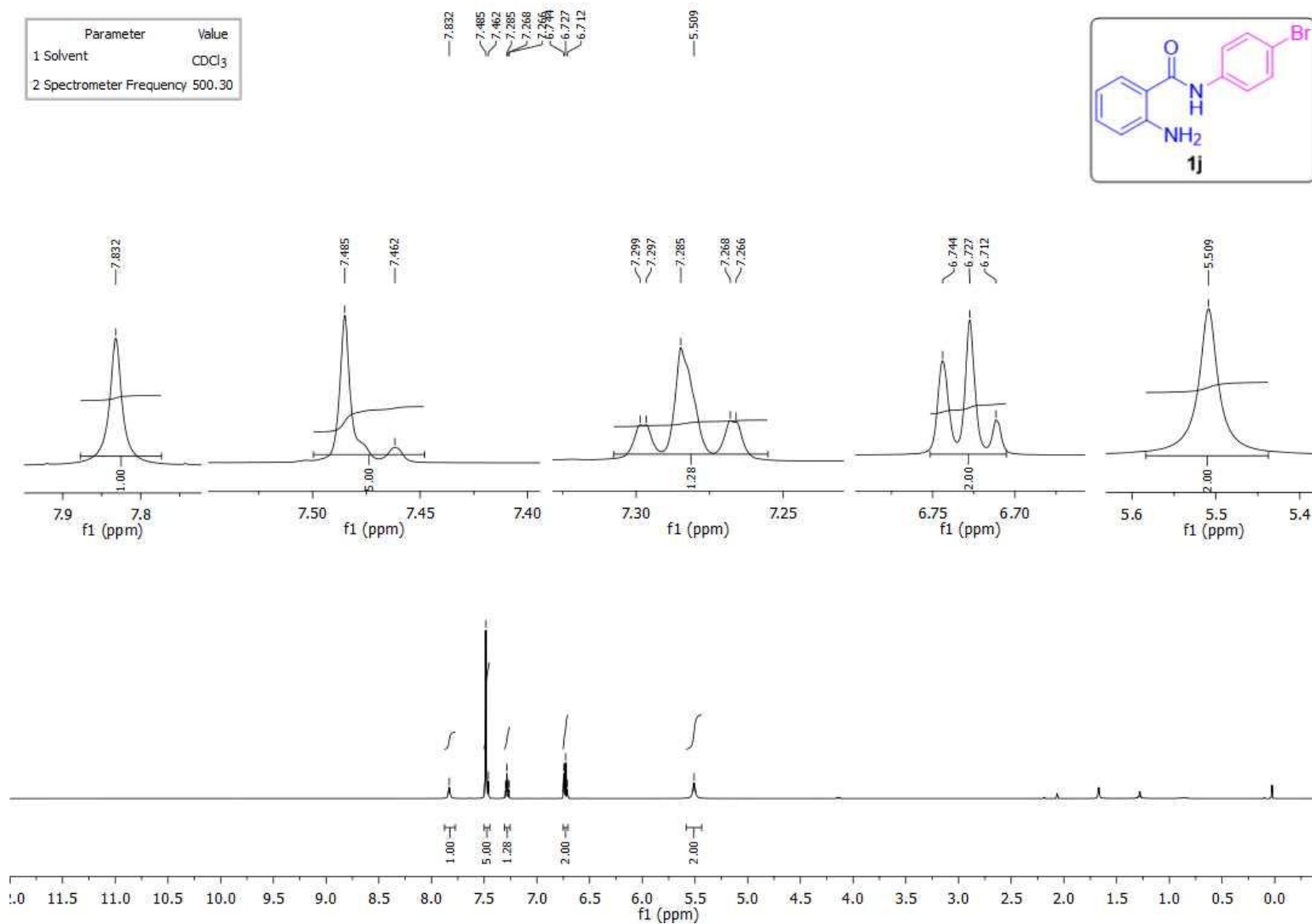


Figure S33. ¹H NMR of 2-Amino-N-(4-bromophenyl)benzamide (**1j**).

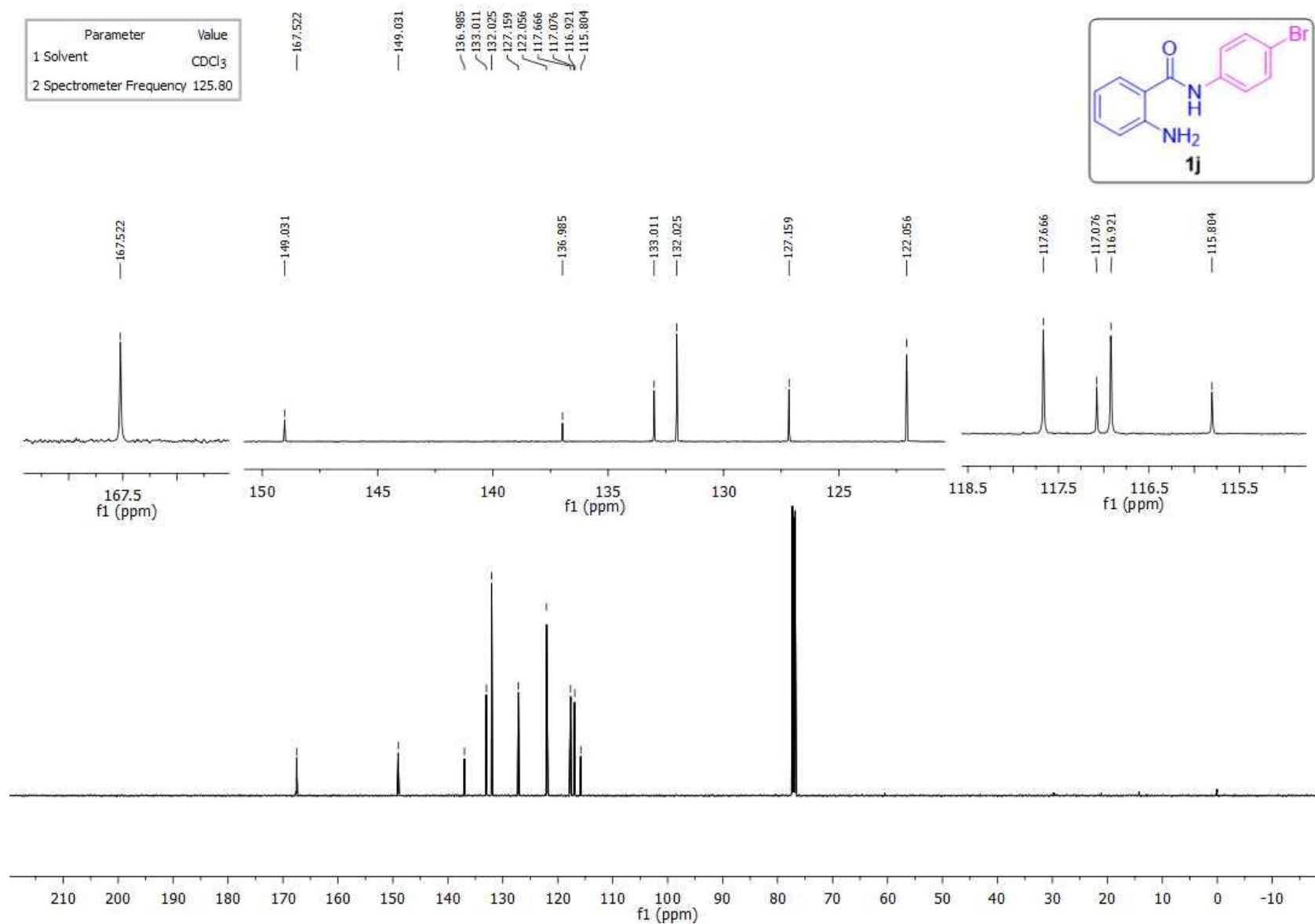


Figure S34. ¹³C NMR of 2-Amino-*N*-(4-bromophenyl)benzamide (**1j**).

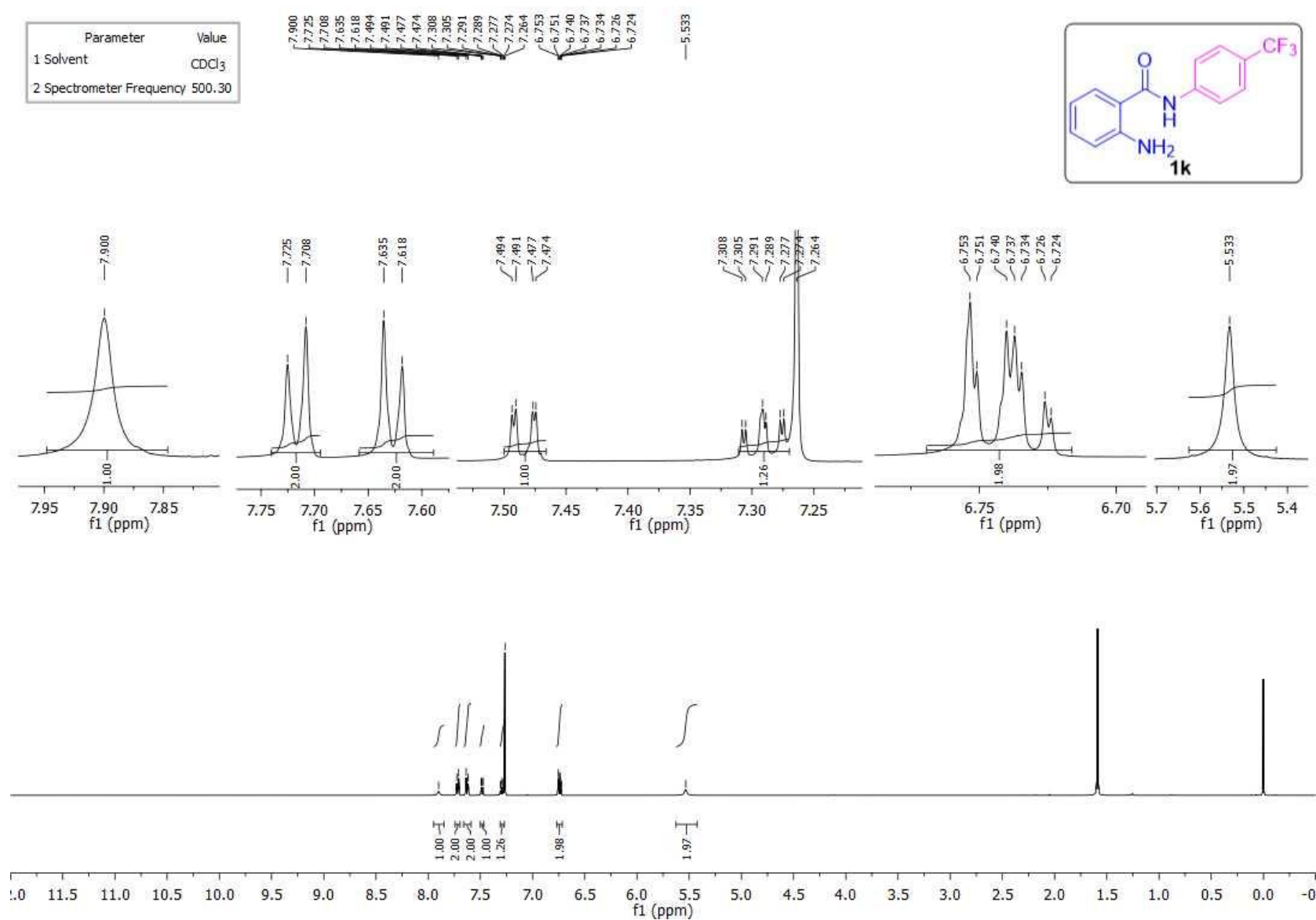


Figure S35. ¹H NMR of 2-Amino-N-(4-(trifluoromethyl)phenyl)benzamide (**1k**).

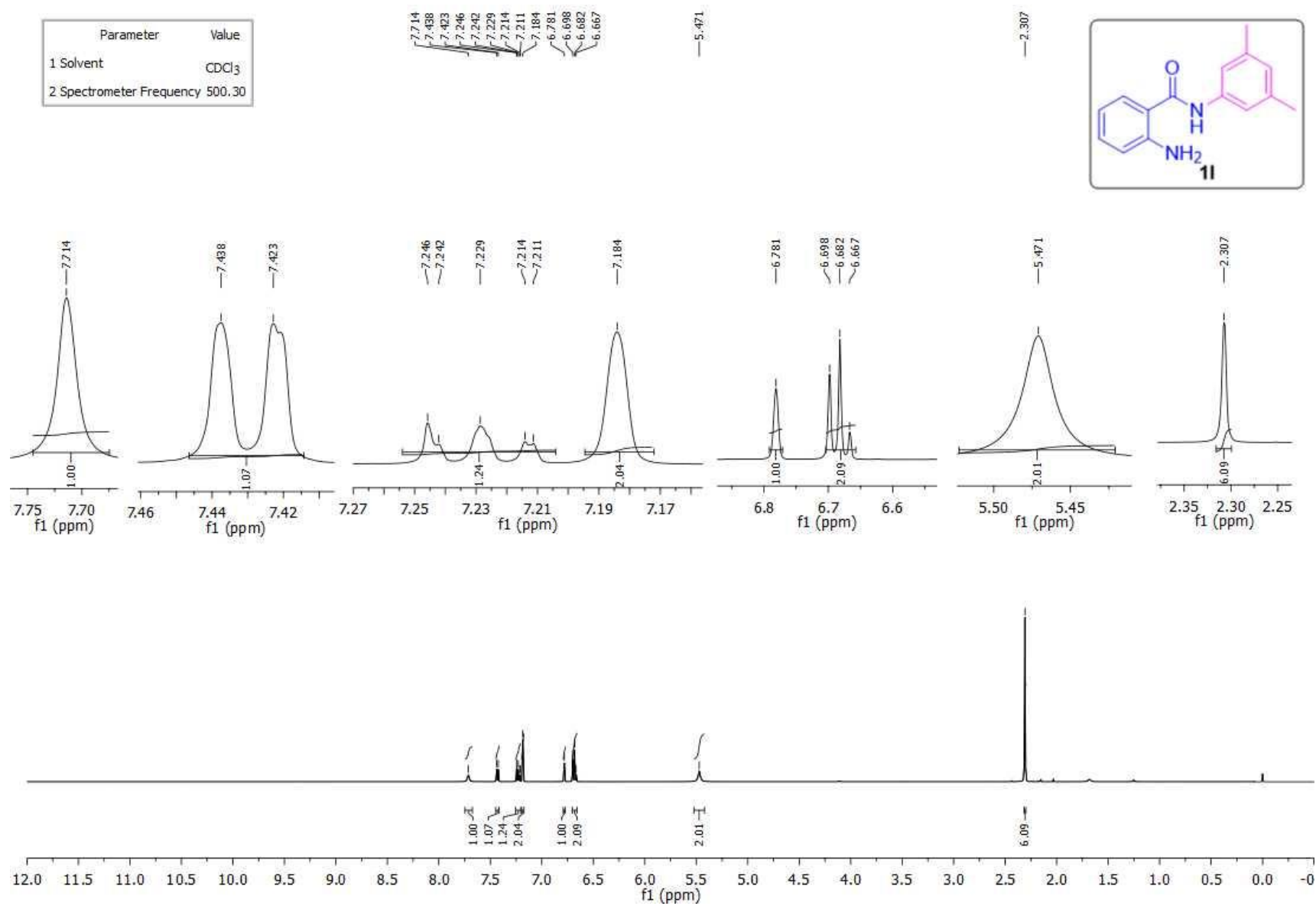


Figure S36. ¹H NMR of 2-Amino-*N*-(3, 5-dimethylphenyl)benzamide (**11**).

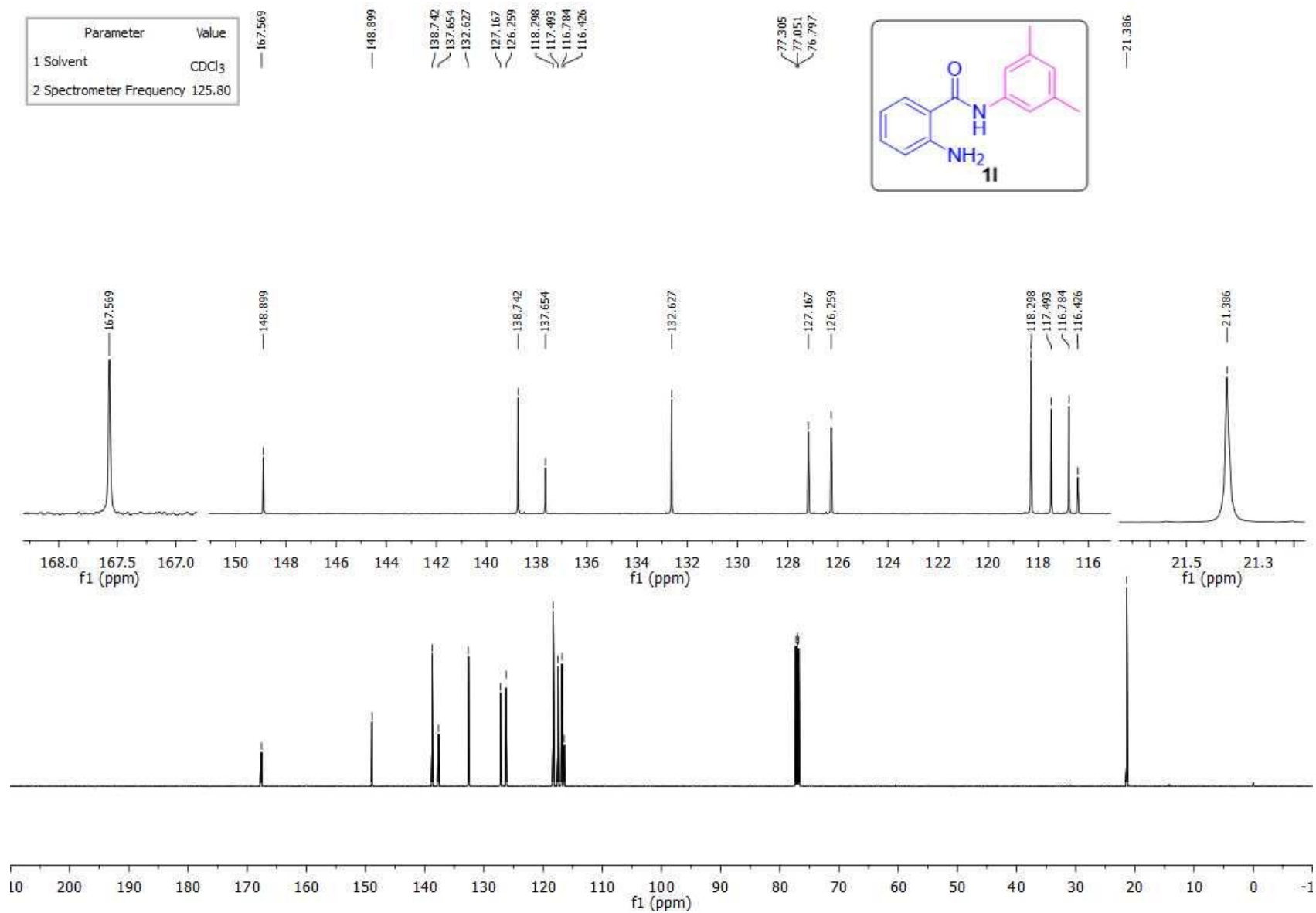


Figure S37. ¹³C NMR of 2-Amino-*N*-(3, 5-dimethylphenyl)benzamide (**11**).

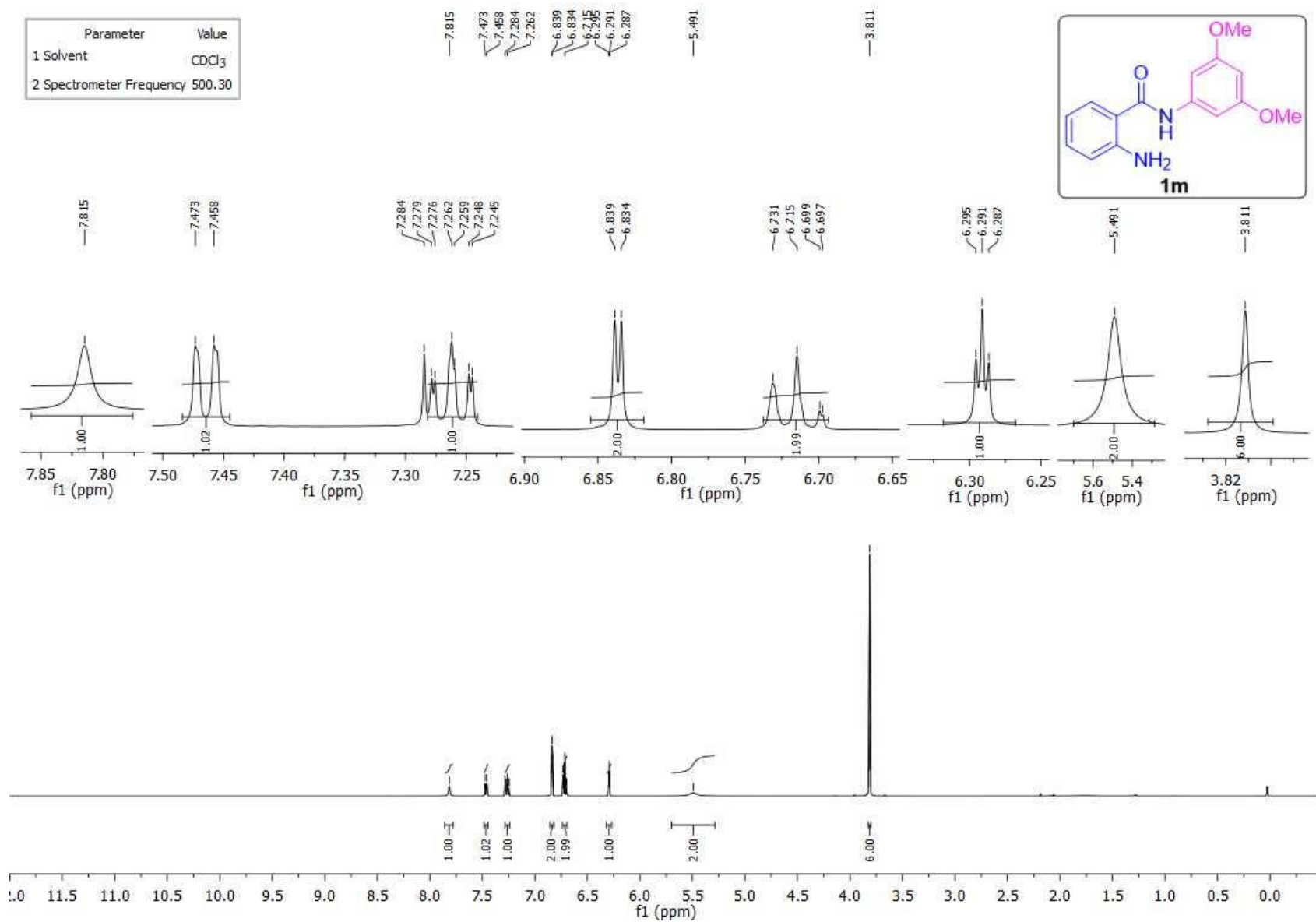


Figure S38. ¹H NMR of 2-Amino-*N*-(3, 5-dimethoxyphenyl)benzamide (**1m**).

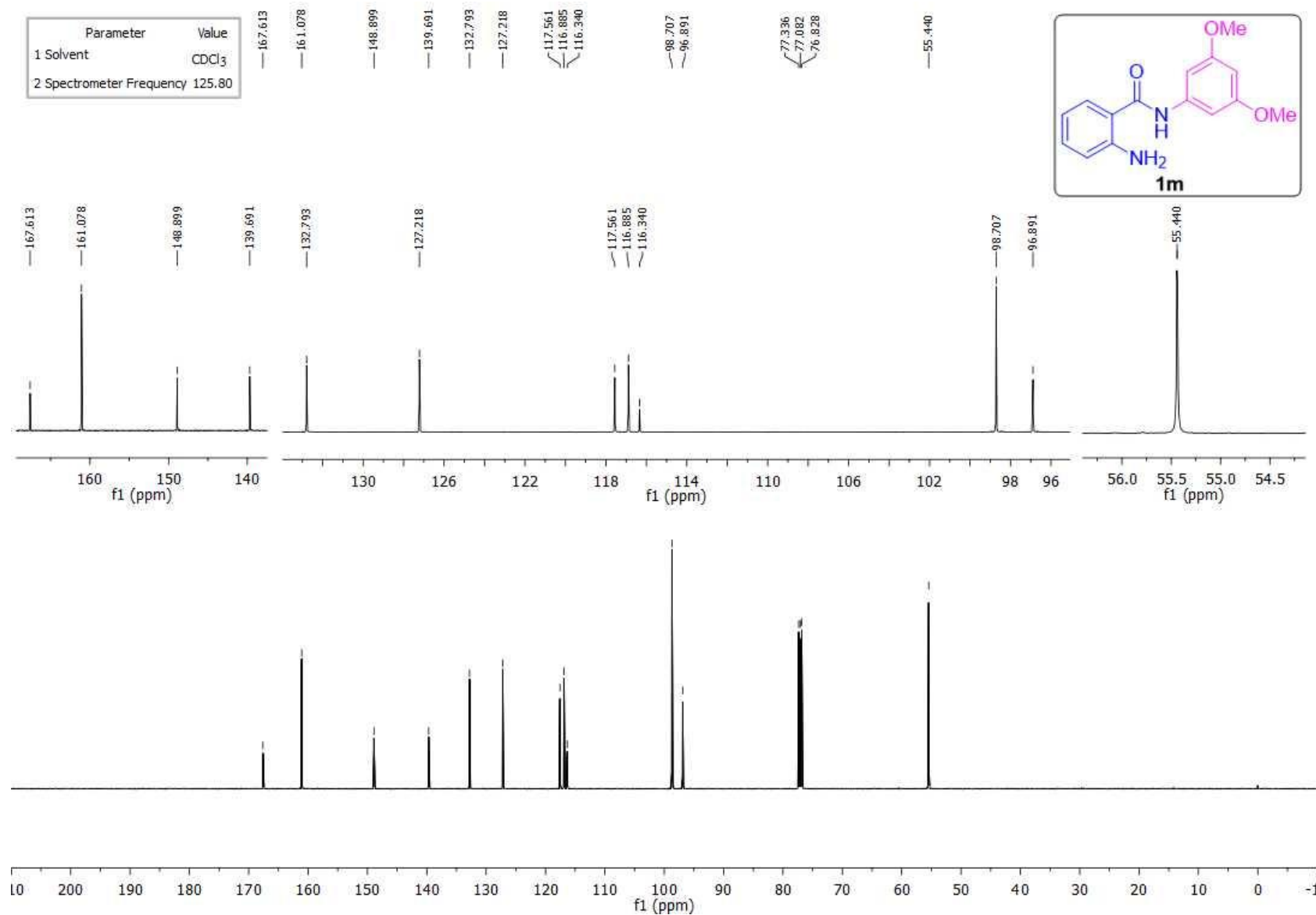


Figure S39. ¹³C NMR of 2-Amino-*N*-(3, 5-dimethoxyphenyl)benzamide (**1m**).

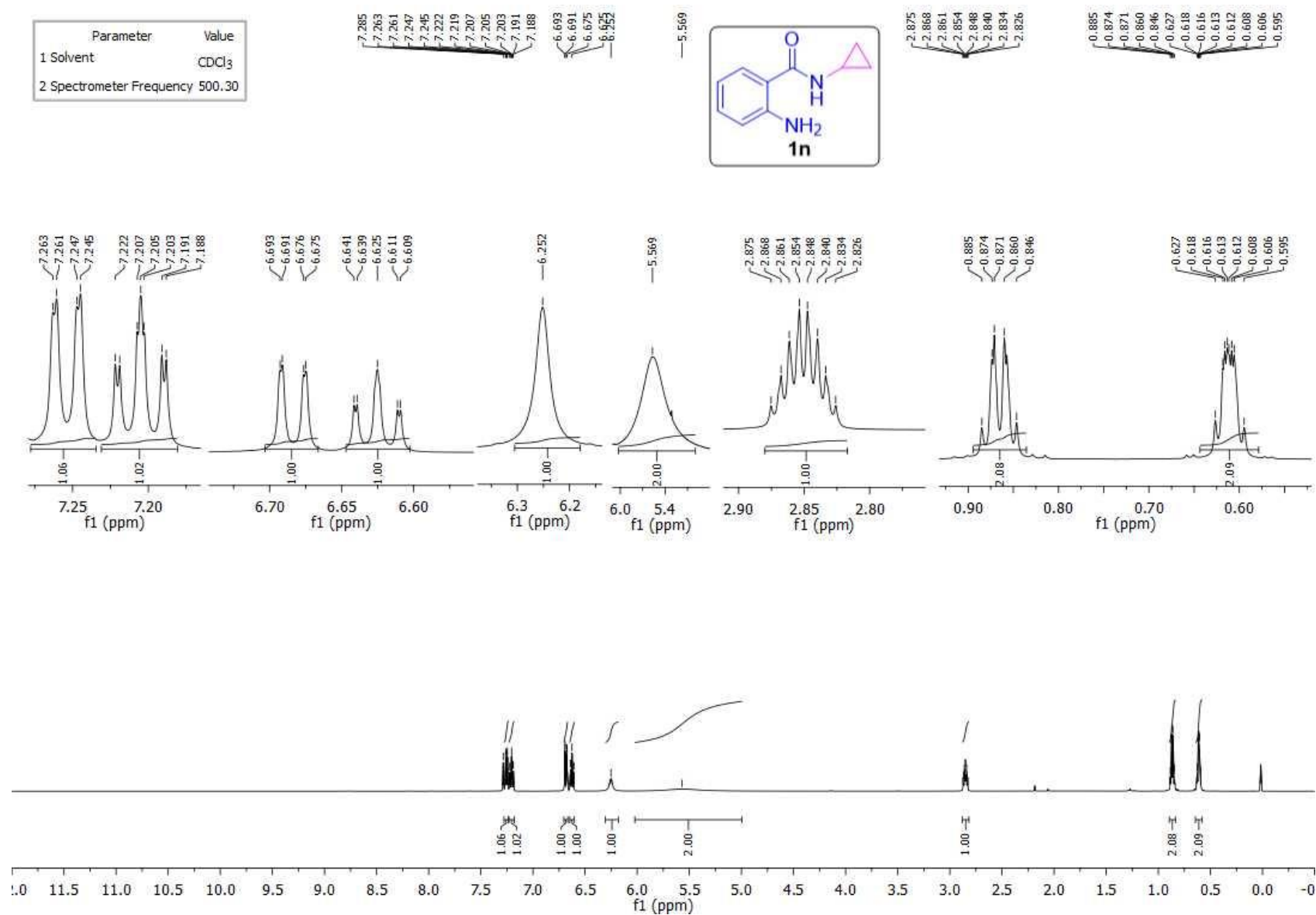


Figure S40. ¹H NMR of 2-Amino-N-cyclopropylbenzamide (**1n**).

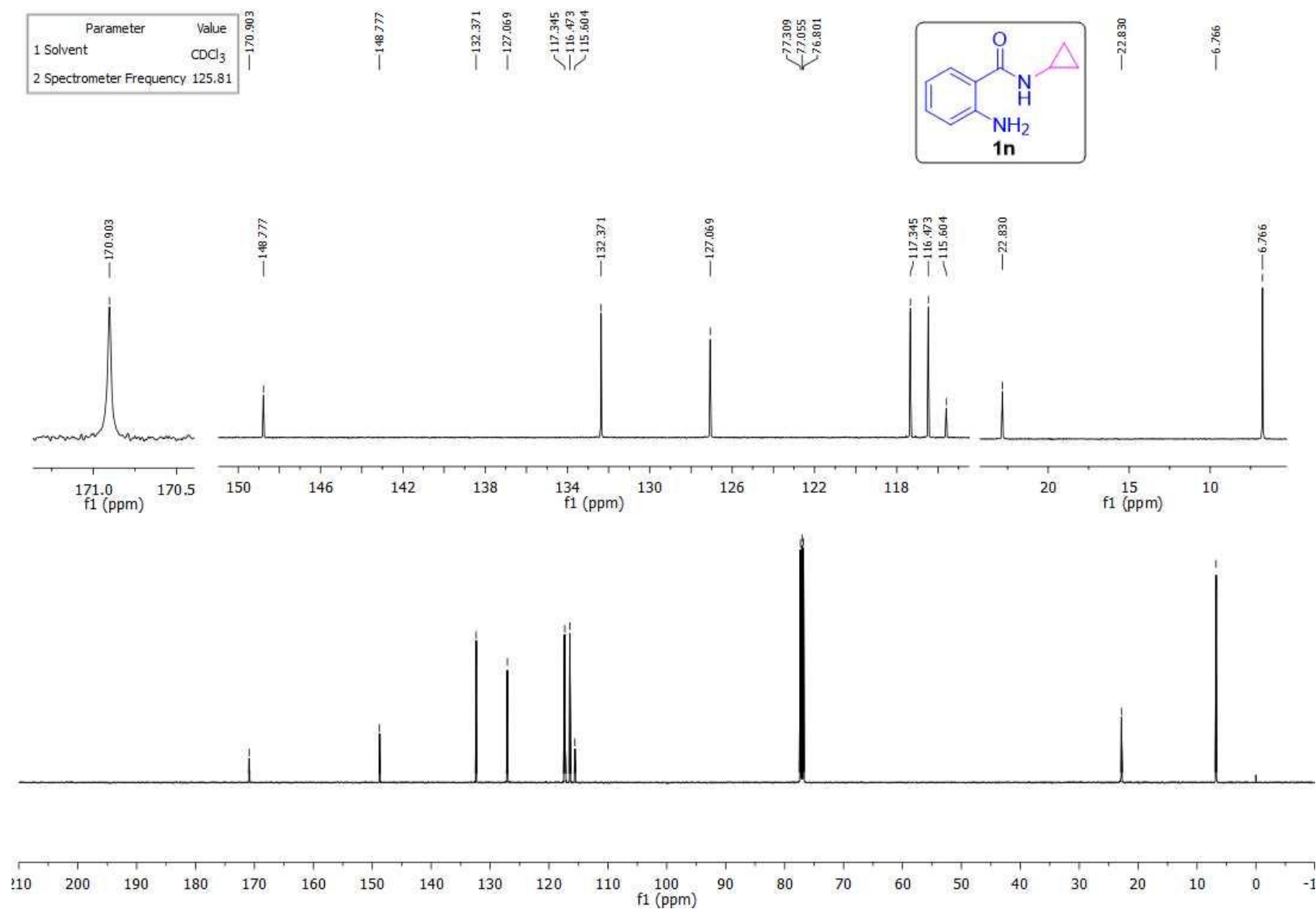


Figure S41. ¹³C NMR of 2-Amino-*N*-cyclopropylbenzamide (**1n**).

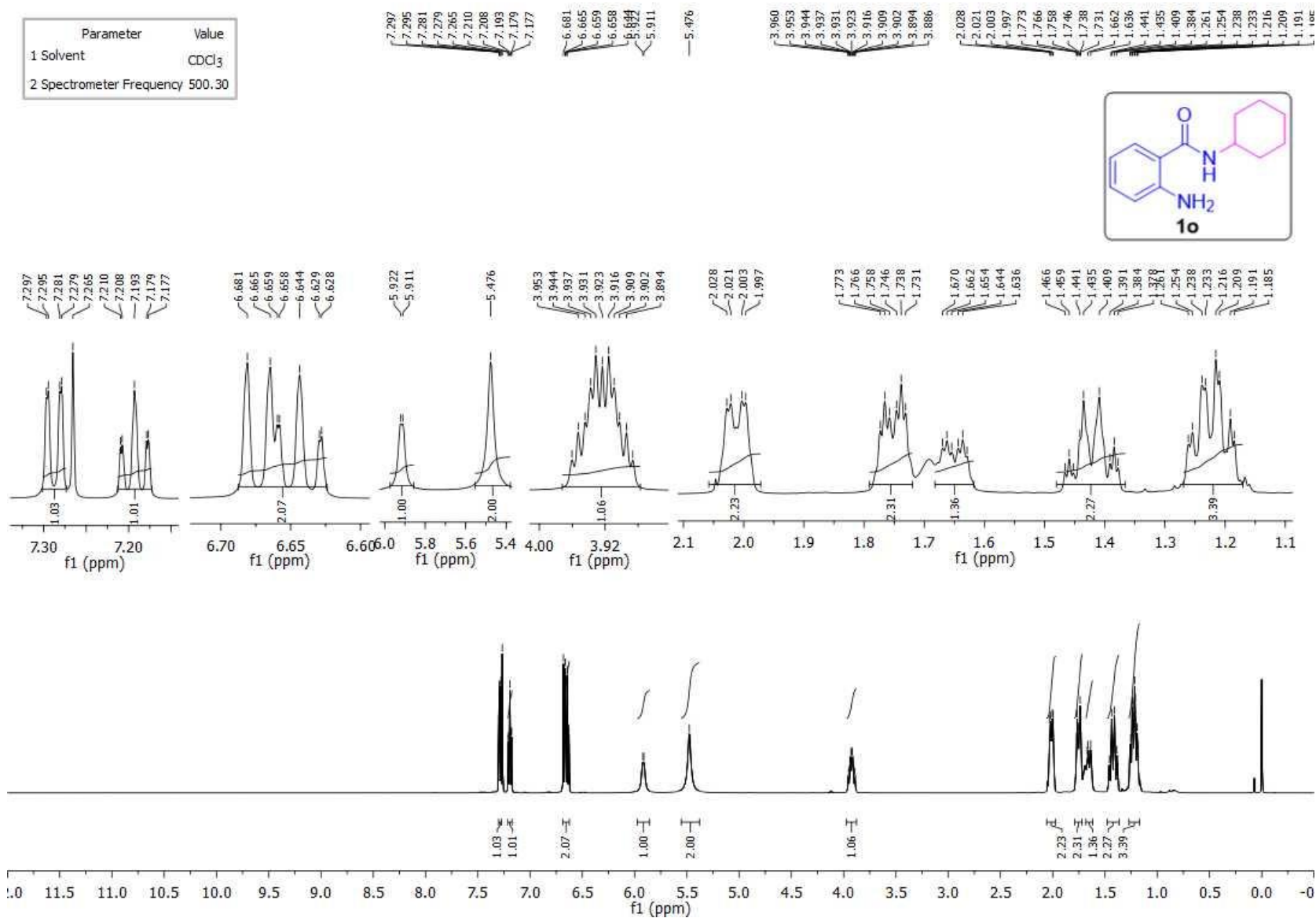


Figure S42. ¹H NMR of 2-Amino-N-cyclohexylbenzamide (**10**).

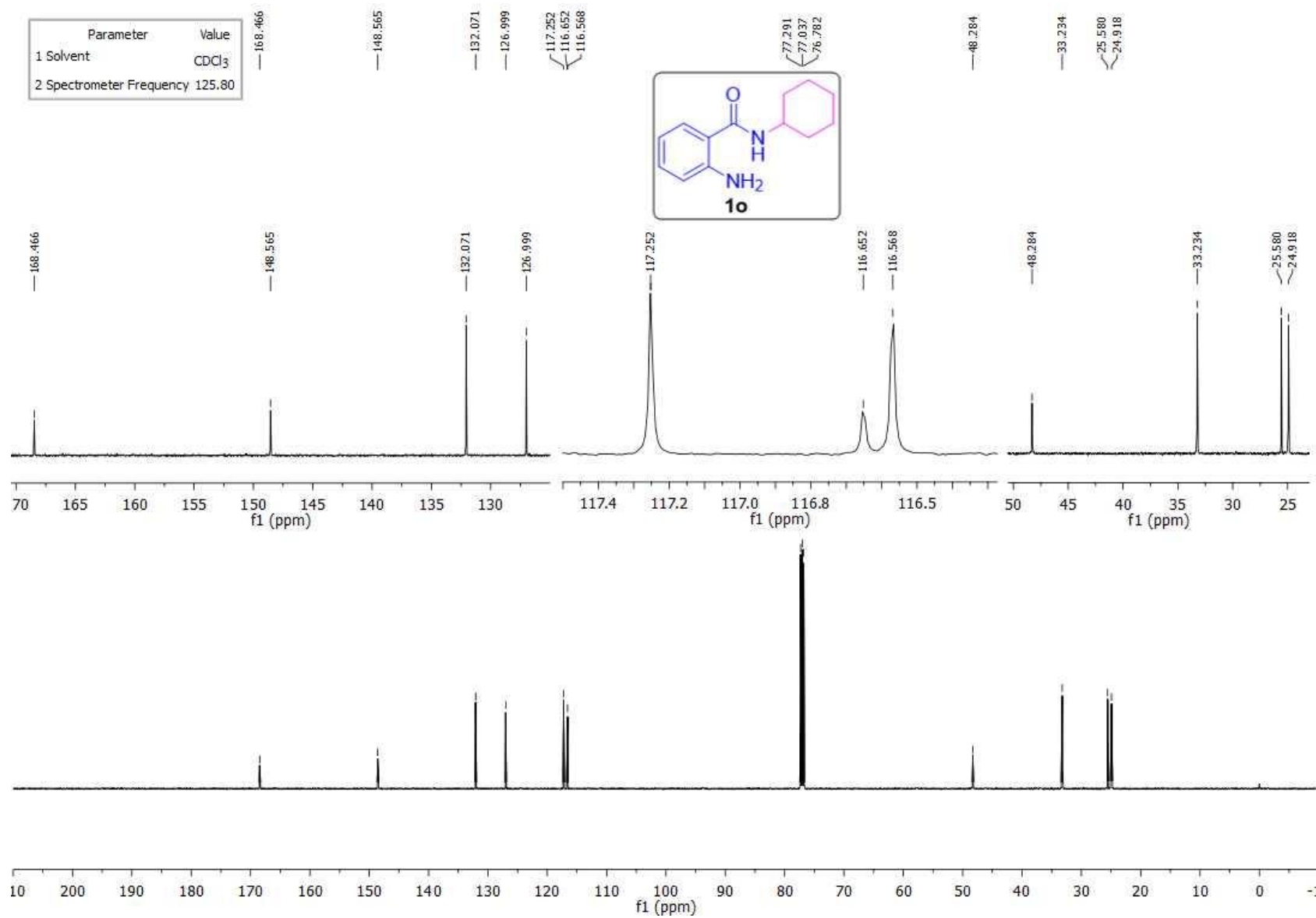


Figure S43. ¹³C NMR of 2-Amino-*N*-cyclohexylbenzamide (**1o**).

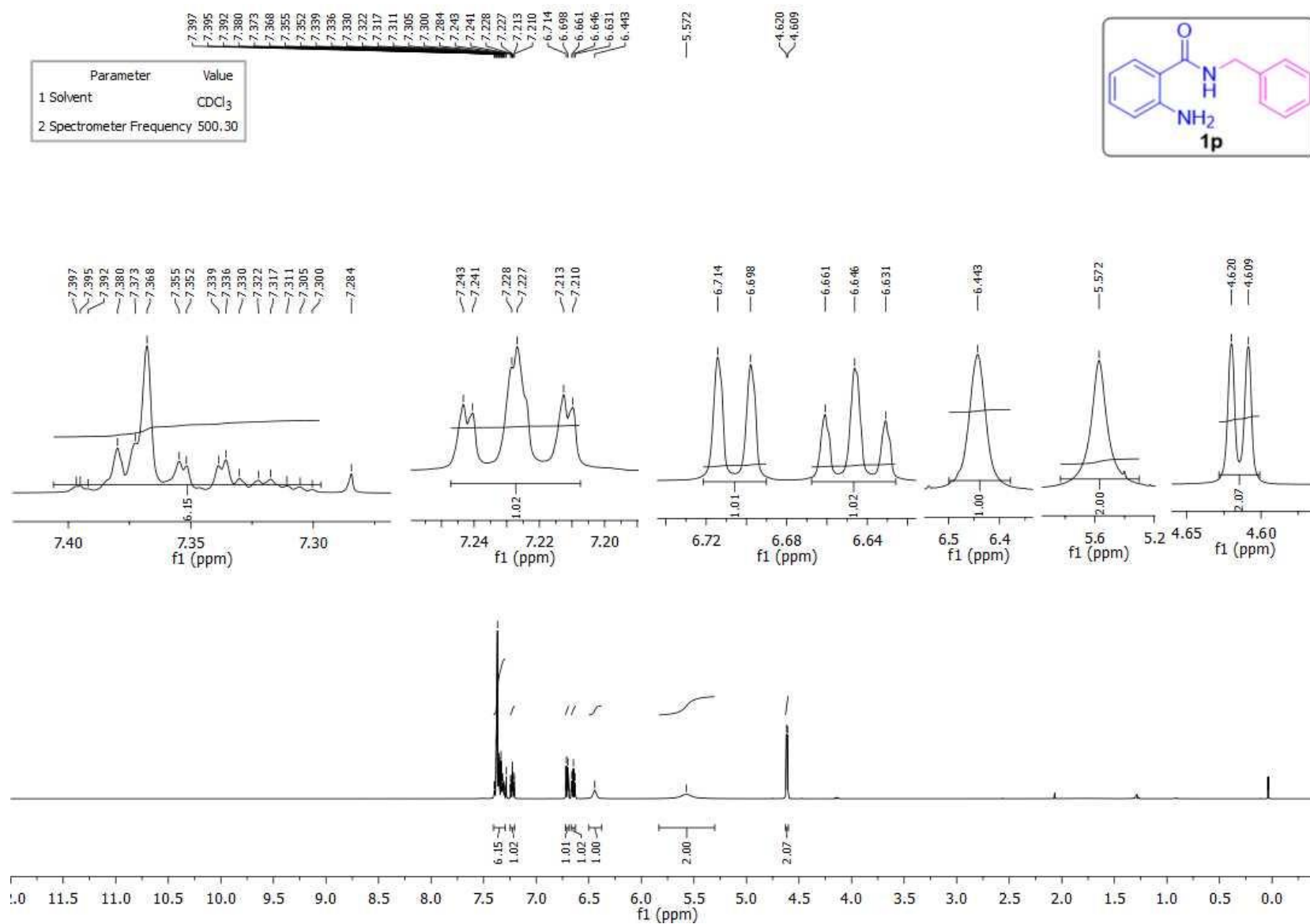


Figure S44. ¹H NMR of 2-Amino-*N*-benzylbenzamide (**1p**).

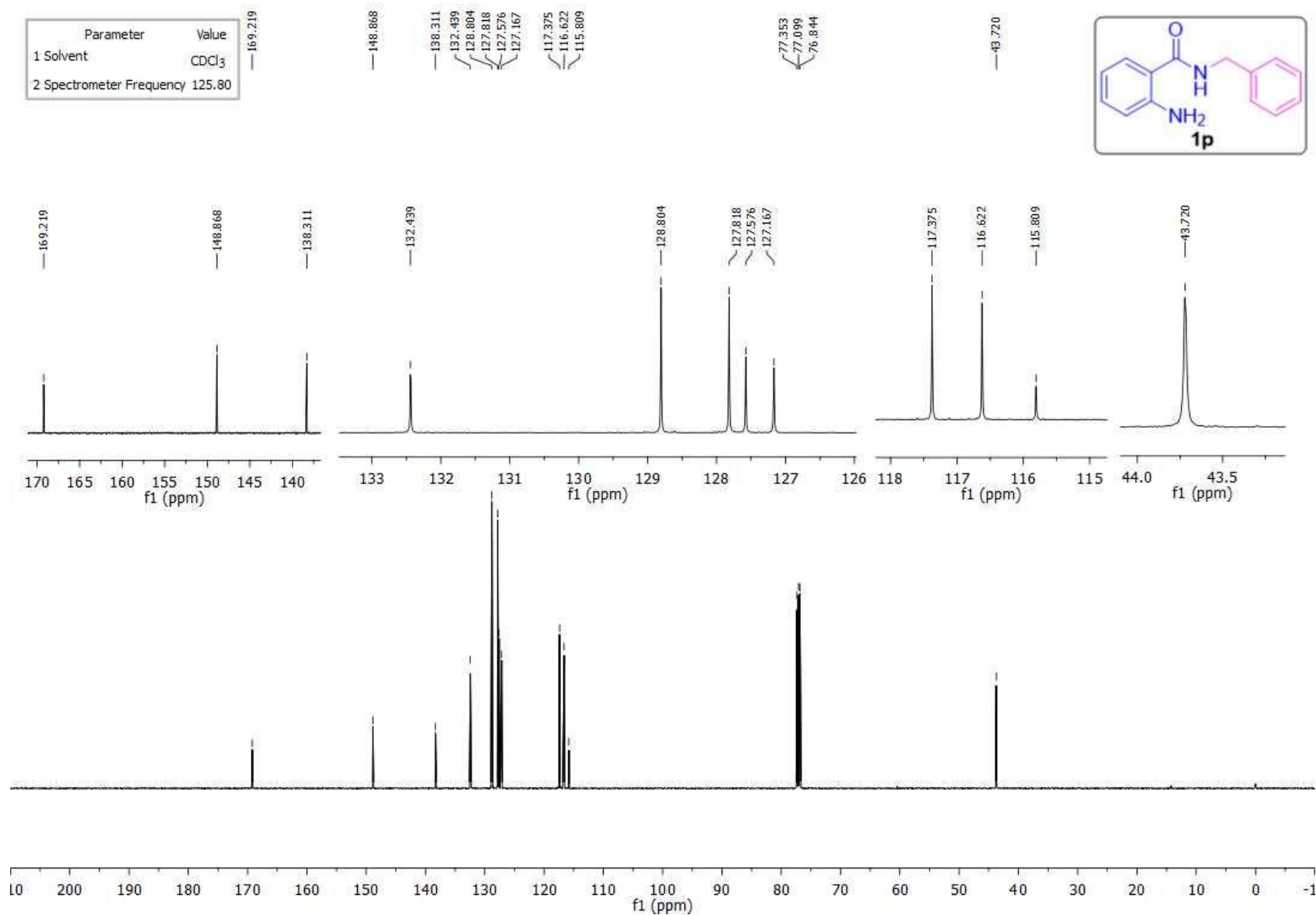


Figure S45. ¹³C NMR of 2-Amino-*N*-benzylbenzamide (**1p**).

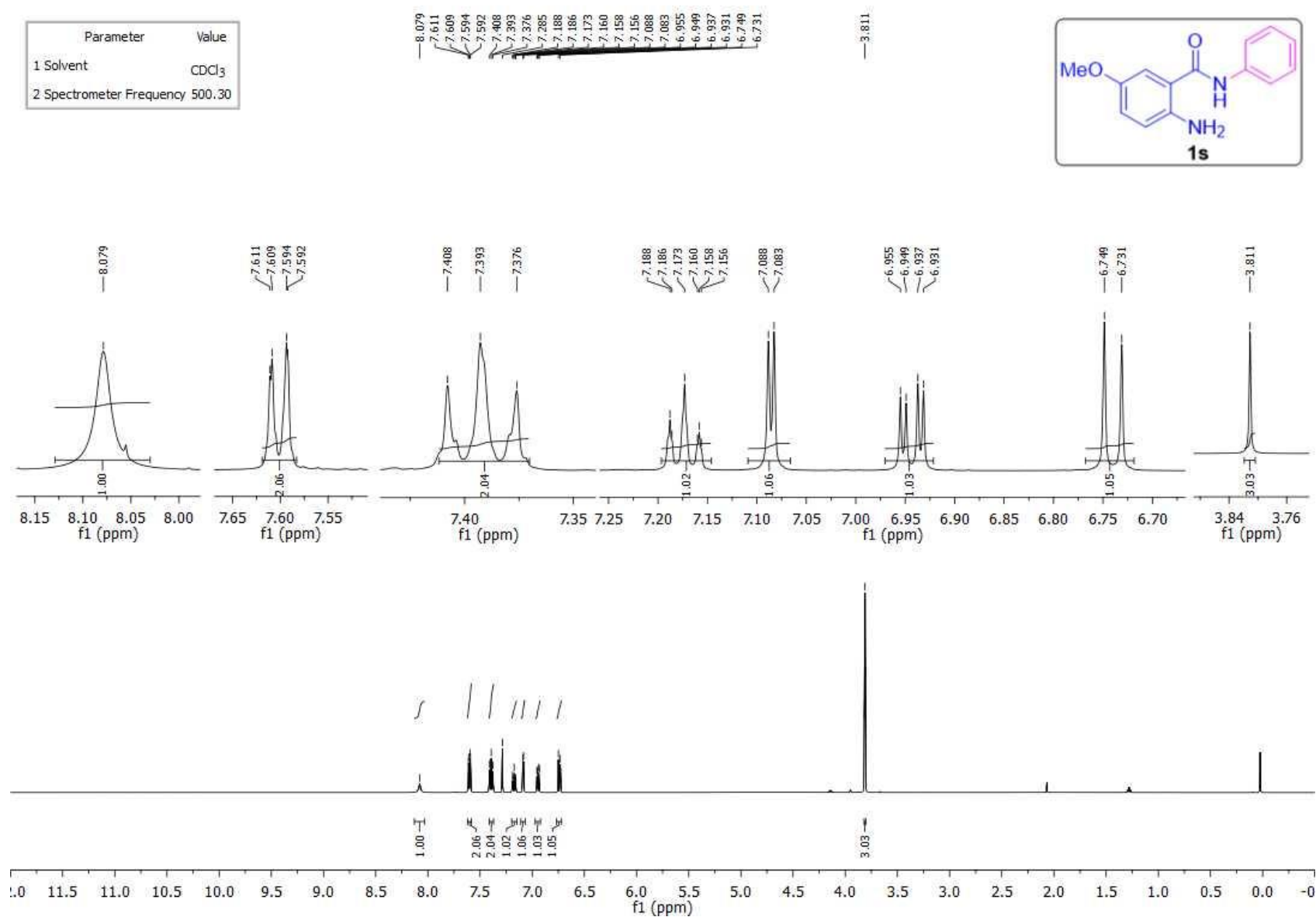


Figure S46. ¹H NMR of 2-Amino-5-methoxy-*N*-phenylbenzamide (**1s**).

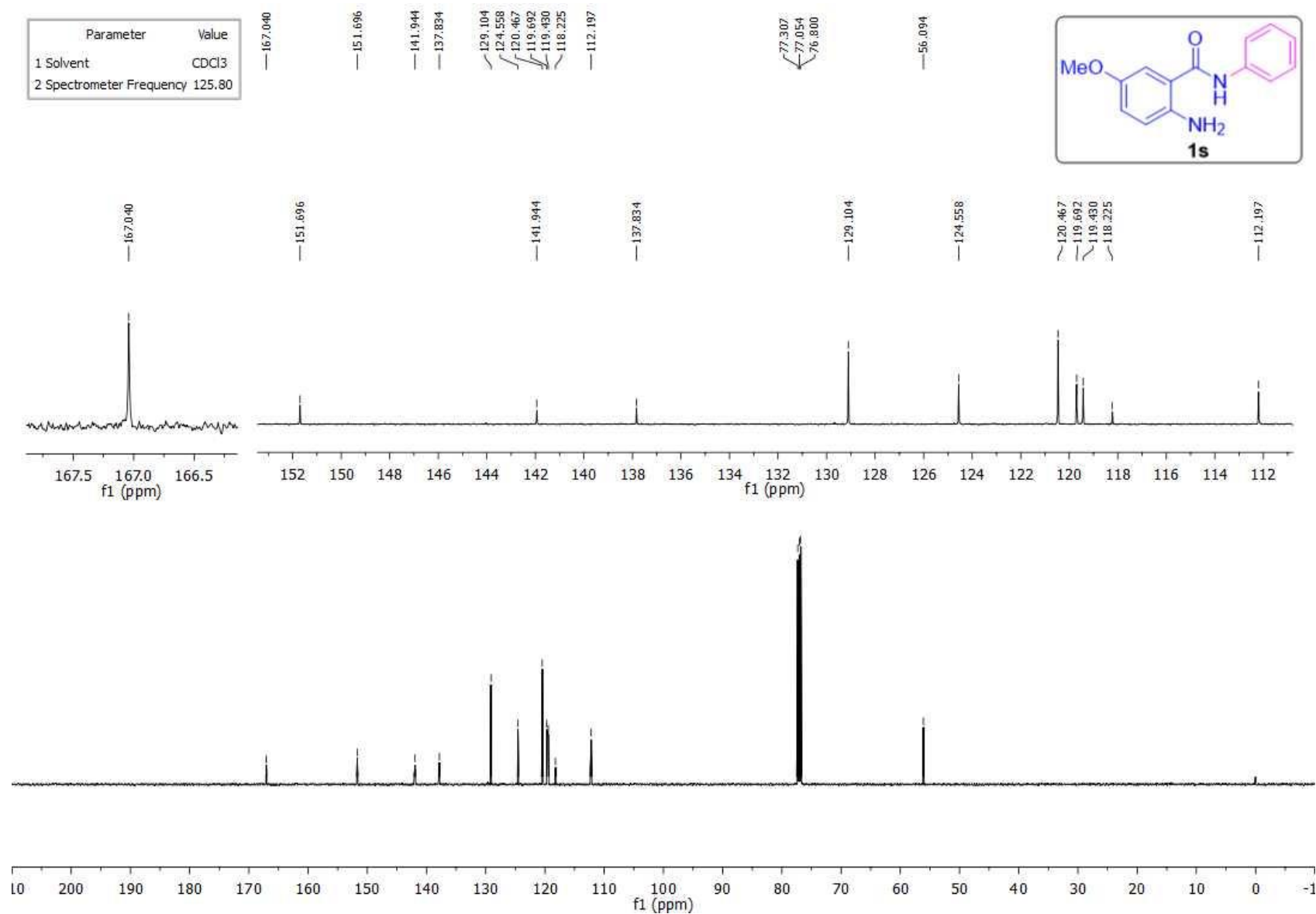


Figure S47. ¹³C NMR of 2-Amino-5-methoxy-*N*-phenylbenzamide (**1s**).

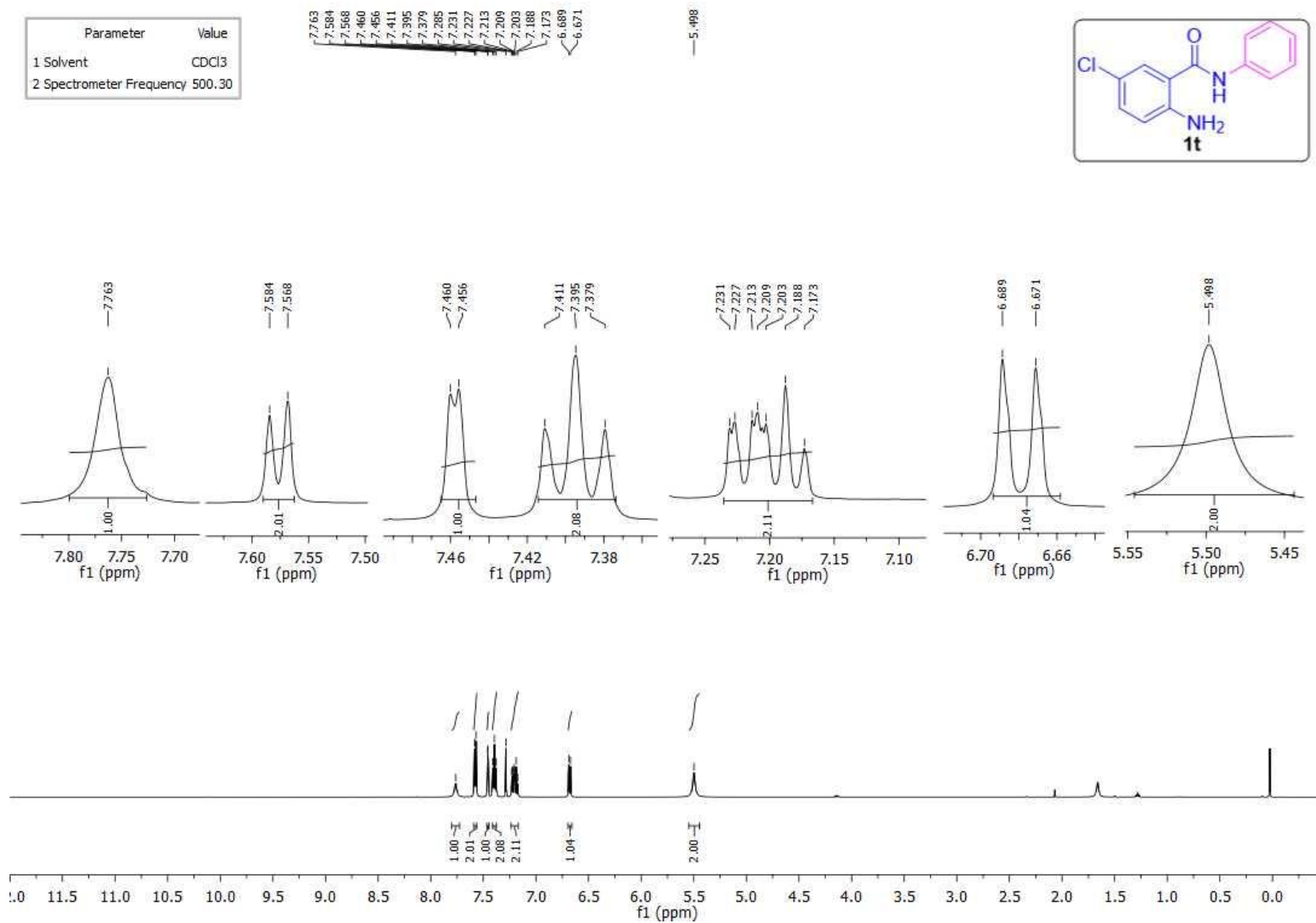


Figure S48. ¹H NMR of 2-Amino-5-chloro-*N*-phenylbenzamide (**1t**).

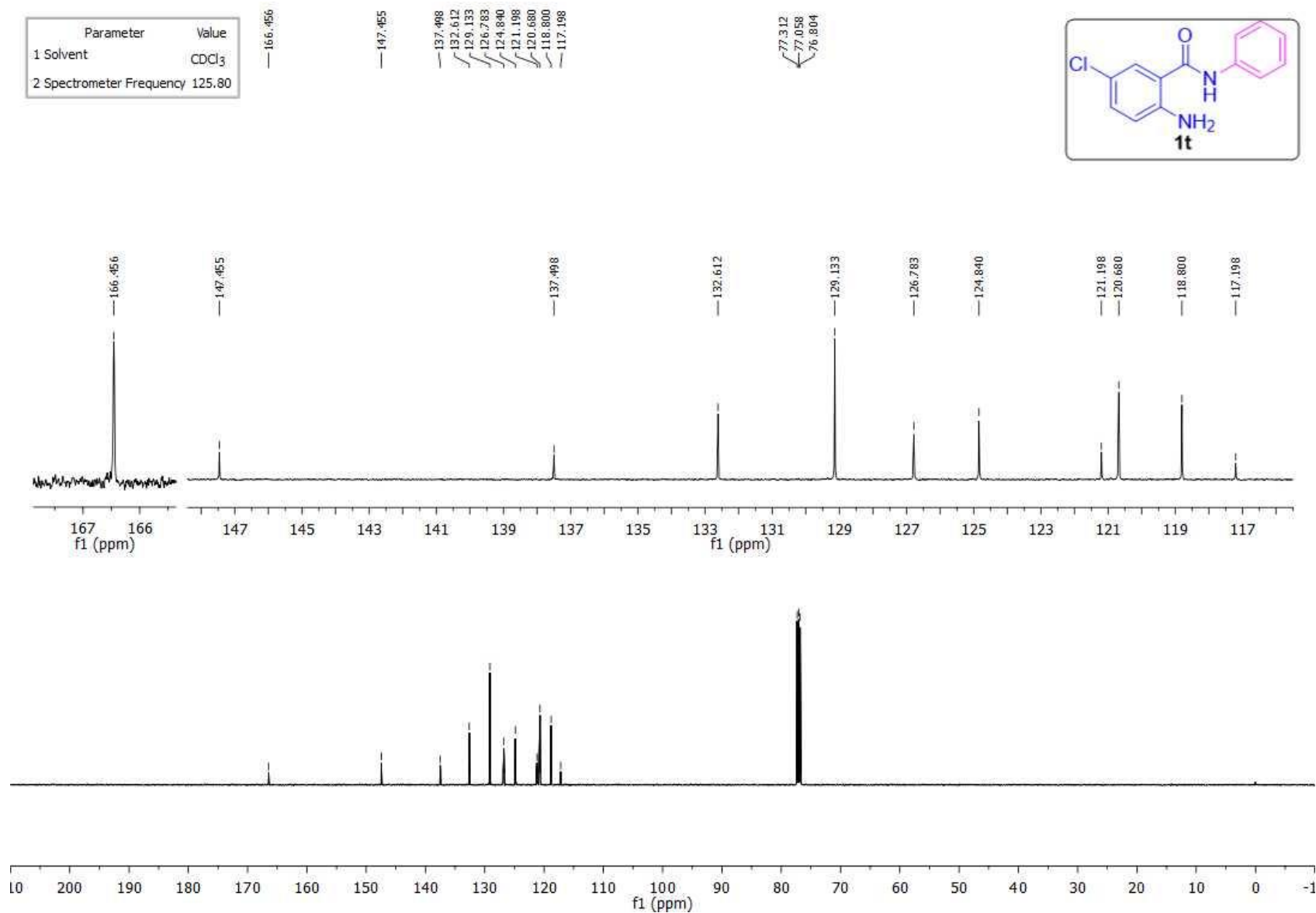


Figure S49. ¹³C NMR of 2-Amino-5-chloro-*N*-phenylbenzamide (**1t**).

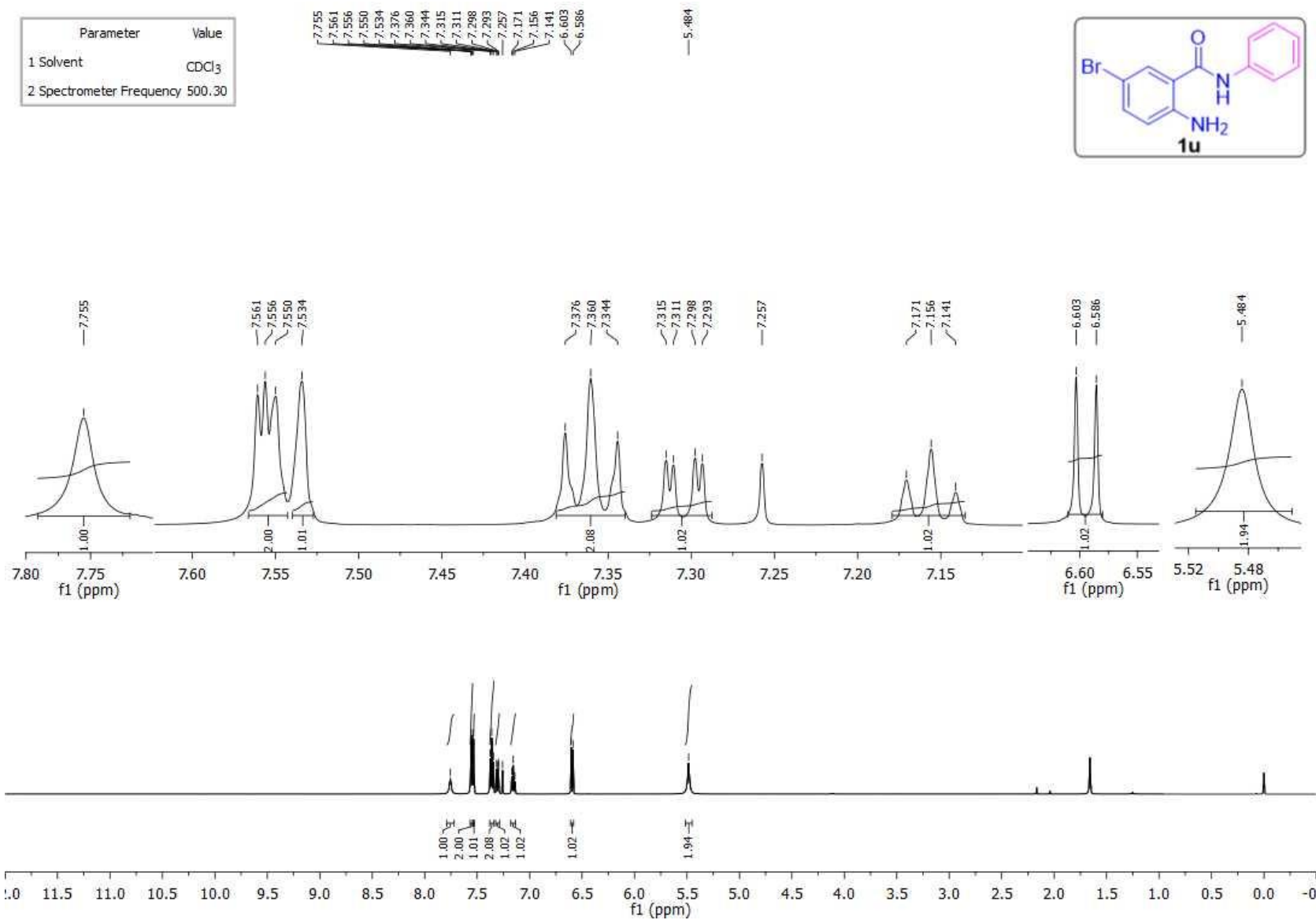


Figure S50. ¹H NMR of 2-Amino-5-bromo-*N*-phenylbenzamide (**1u**).

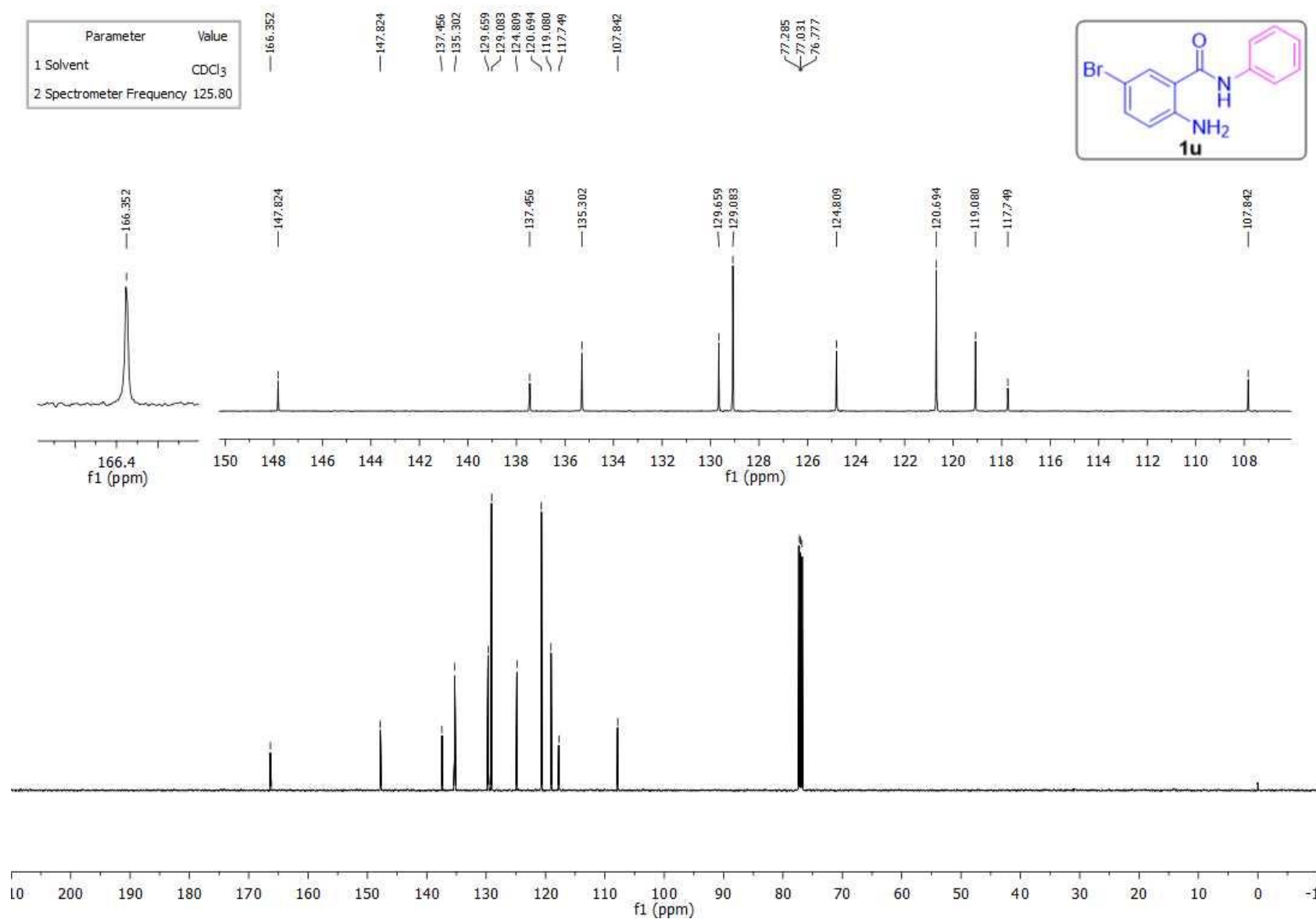


Figure S51. ¹³C NMR of 2-Amino-5-bromo-*N*-phenylbenzamide (**1u**).

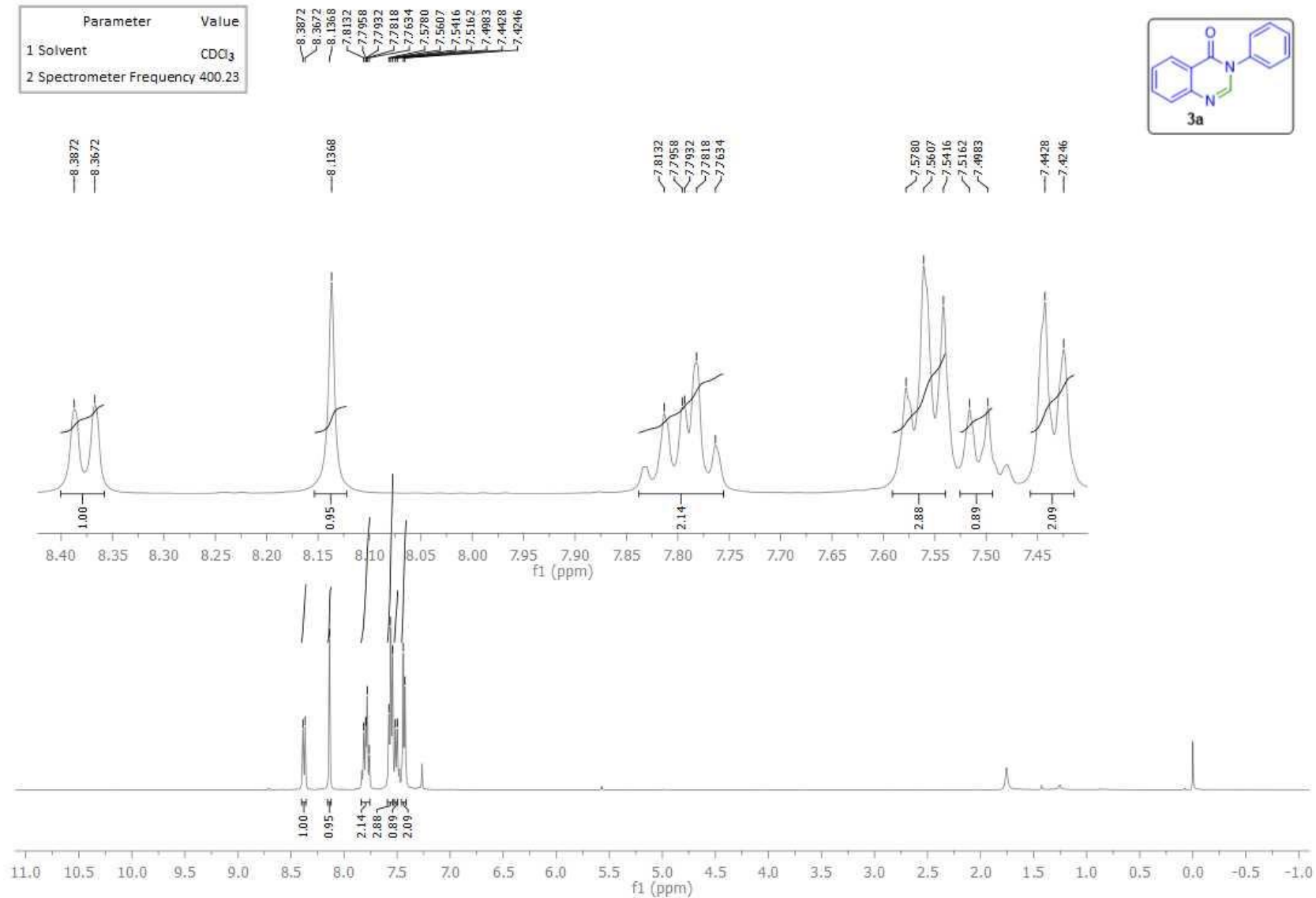


Figure S52. ¹H NMR spectra of 3-Phenylquinazolin-4(3H)-one (**3a**).

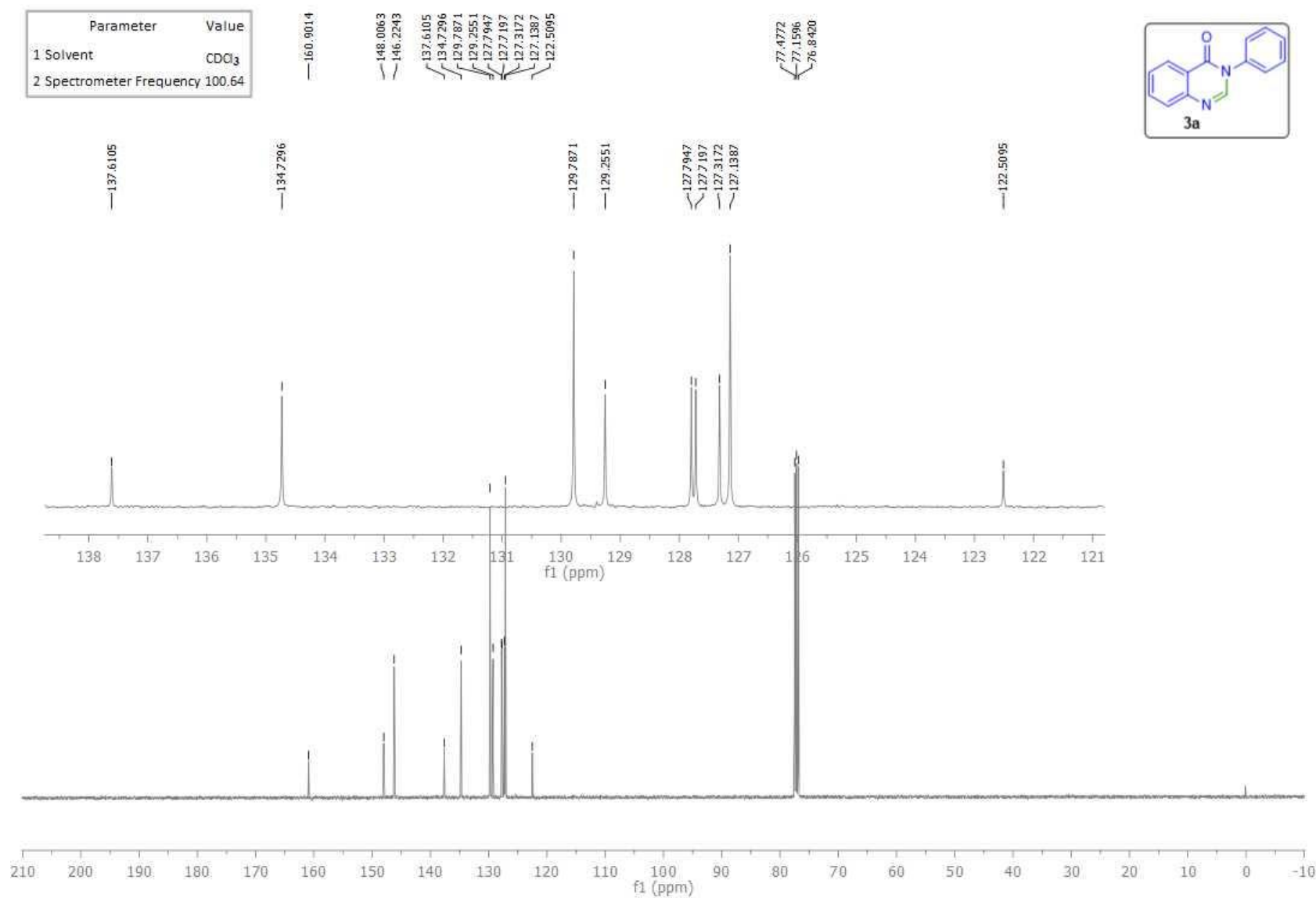


Figure S53. ¹³C NMR spectra of 3-Phenylquinazolin-4(3*H*)-one (**3a**).

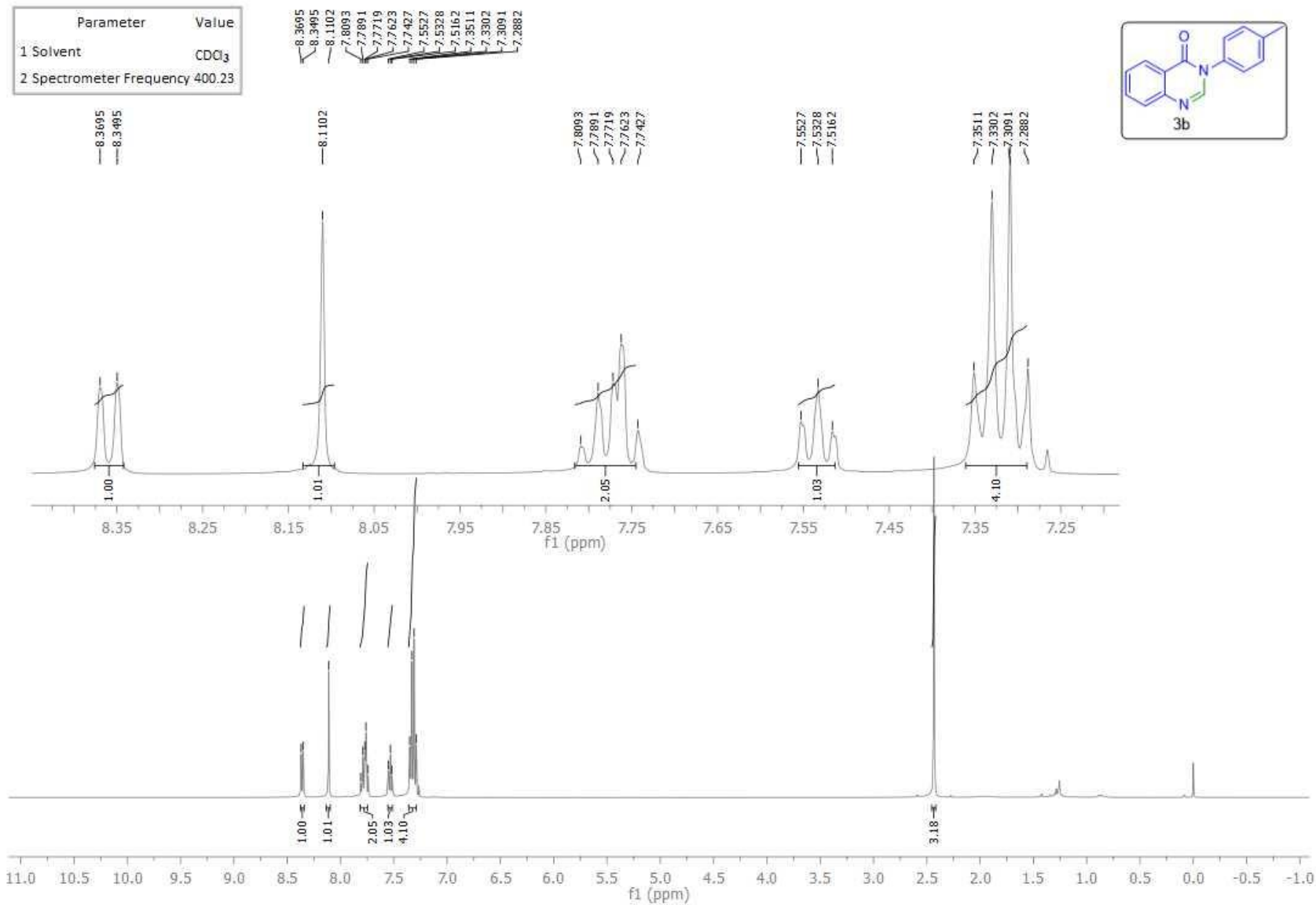


Figure S54. ¹H NMR spectra of 3-(4-Tolyl)quinazolin-4(3H)-one (**3b**).

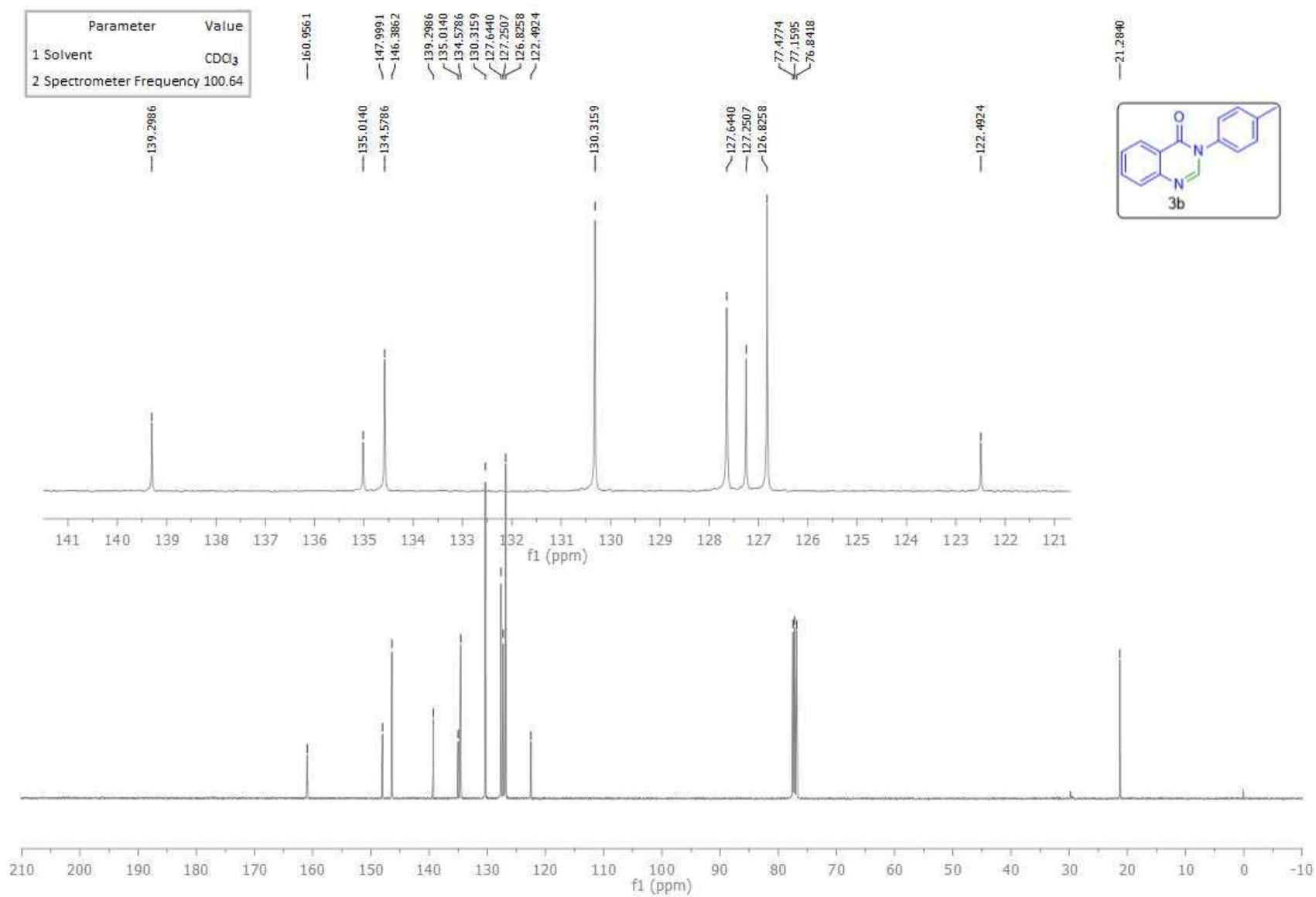


Figure S55. ¹³C NMR spectra of 3-(4-Tolyl)quinazolin-4(3H)-one (**3b**).

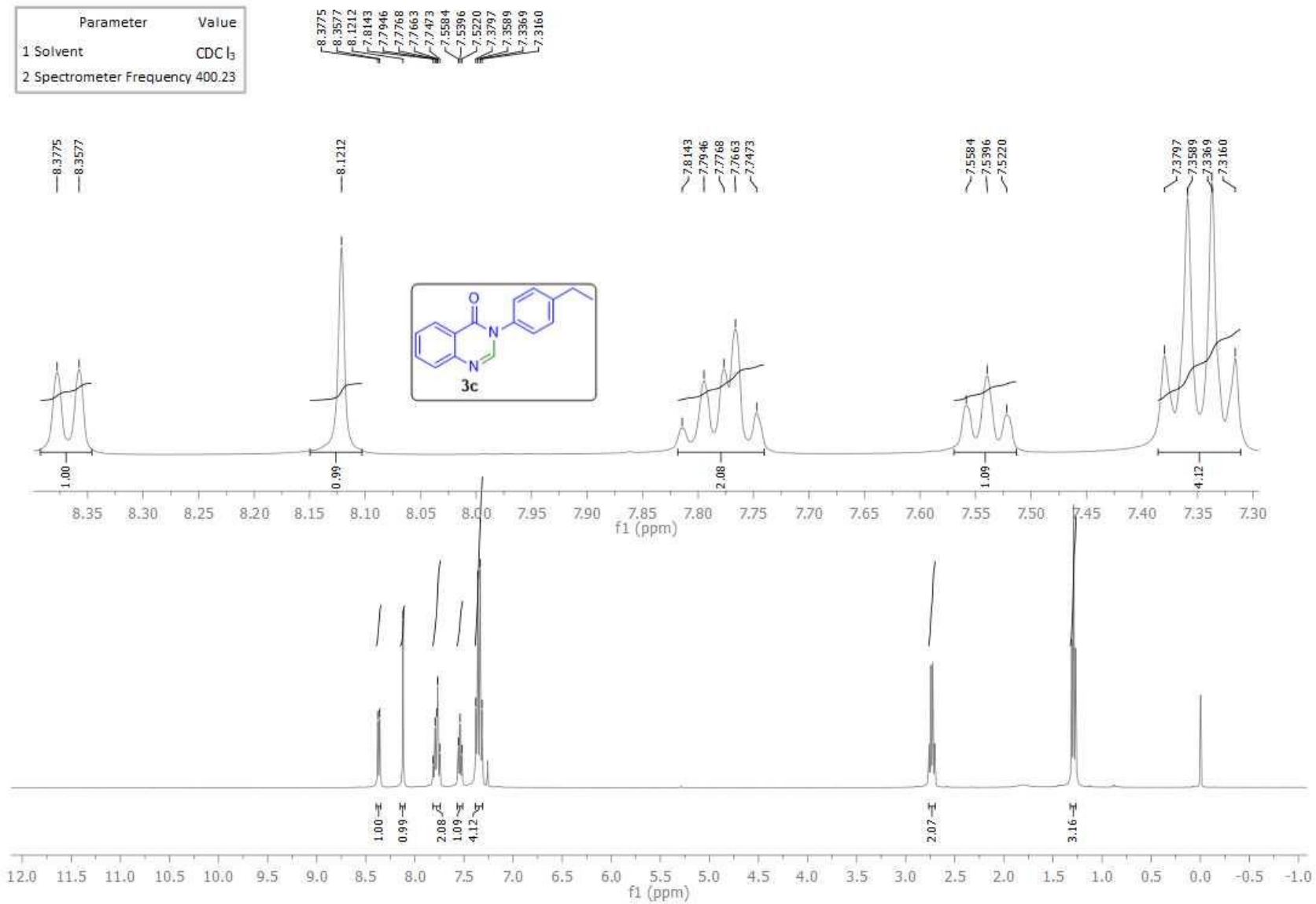


Figure S56. ¹H NMR spectra of 3-(4-Ethylphenyl)quinazolin-4(3*H*)-one (**3c**).

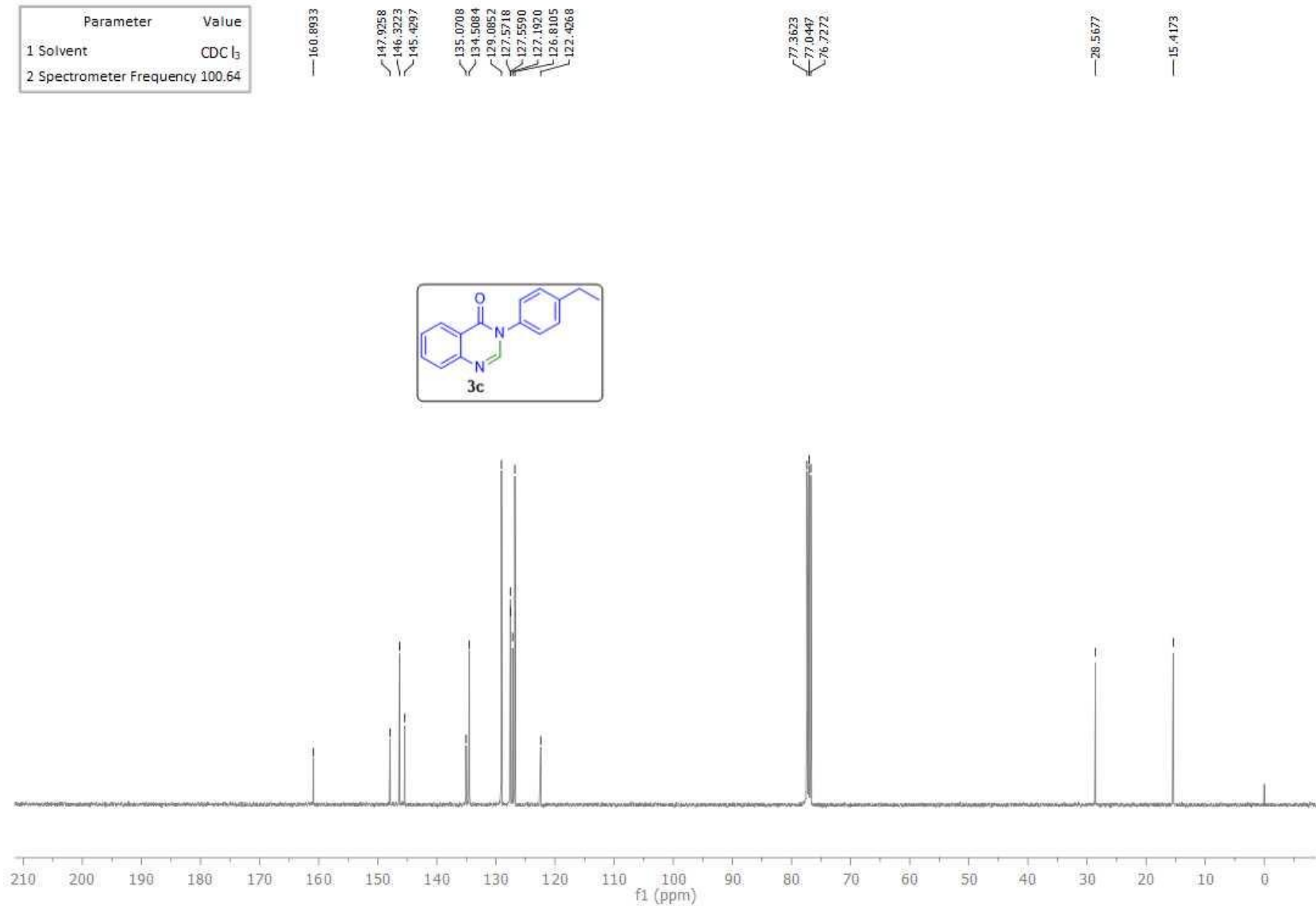


Figure S57. ¹³C NMR spectra of 3-(4-Ethylphenyl)quinazolin-4(3*H*)-one (**3c**).

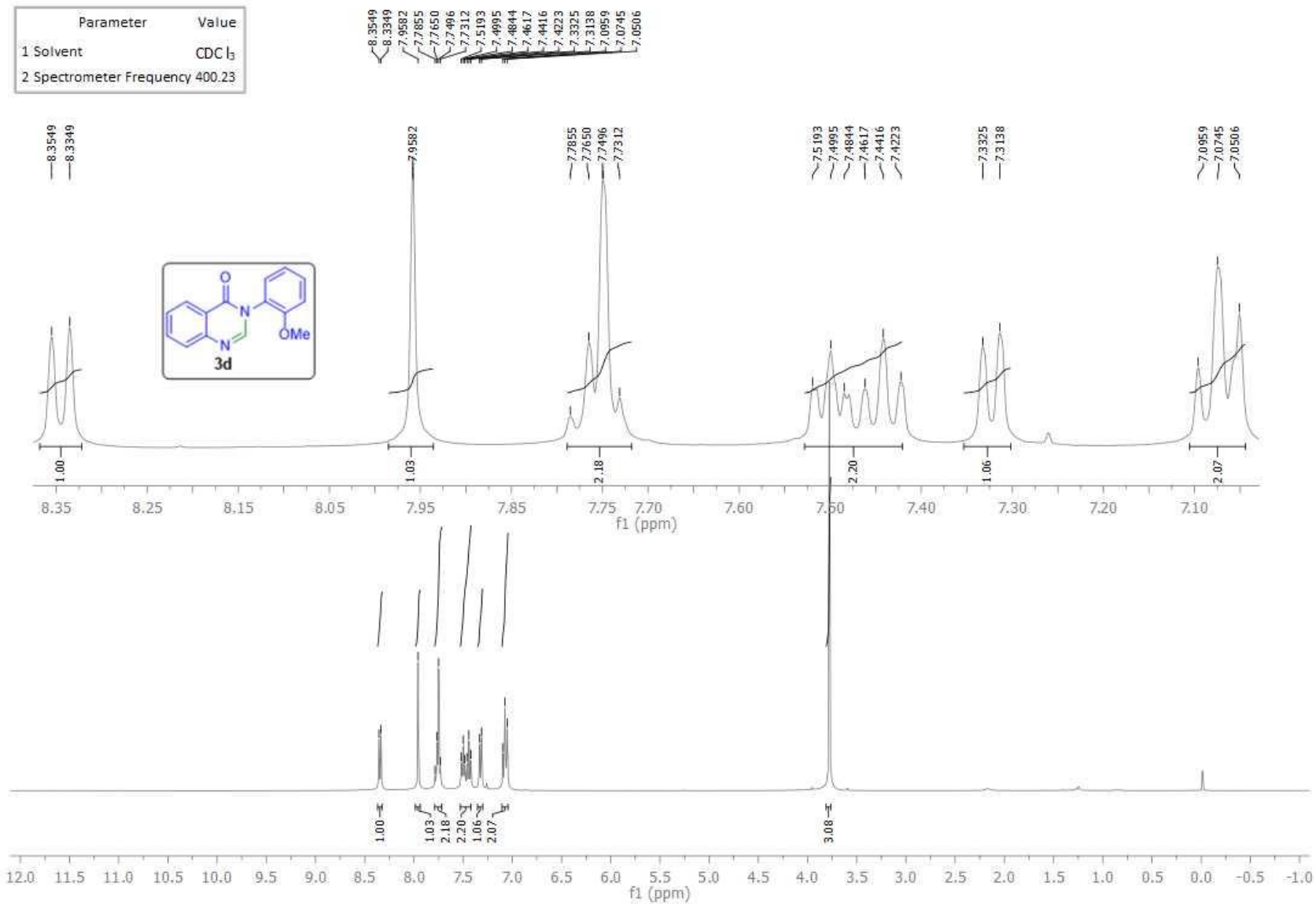


Figure S58. ¹H NMR spectra of 3-(2-Methoxyphenyl)quinazolin-4(3H)-one (**3d**).

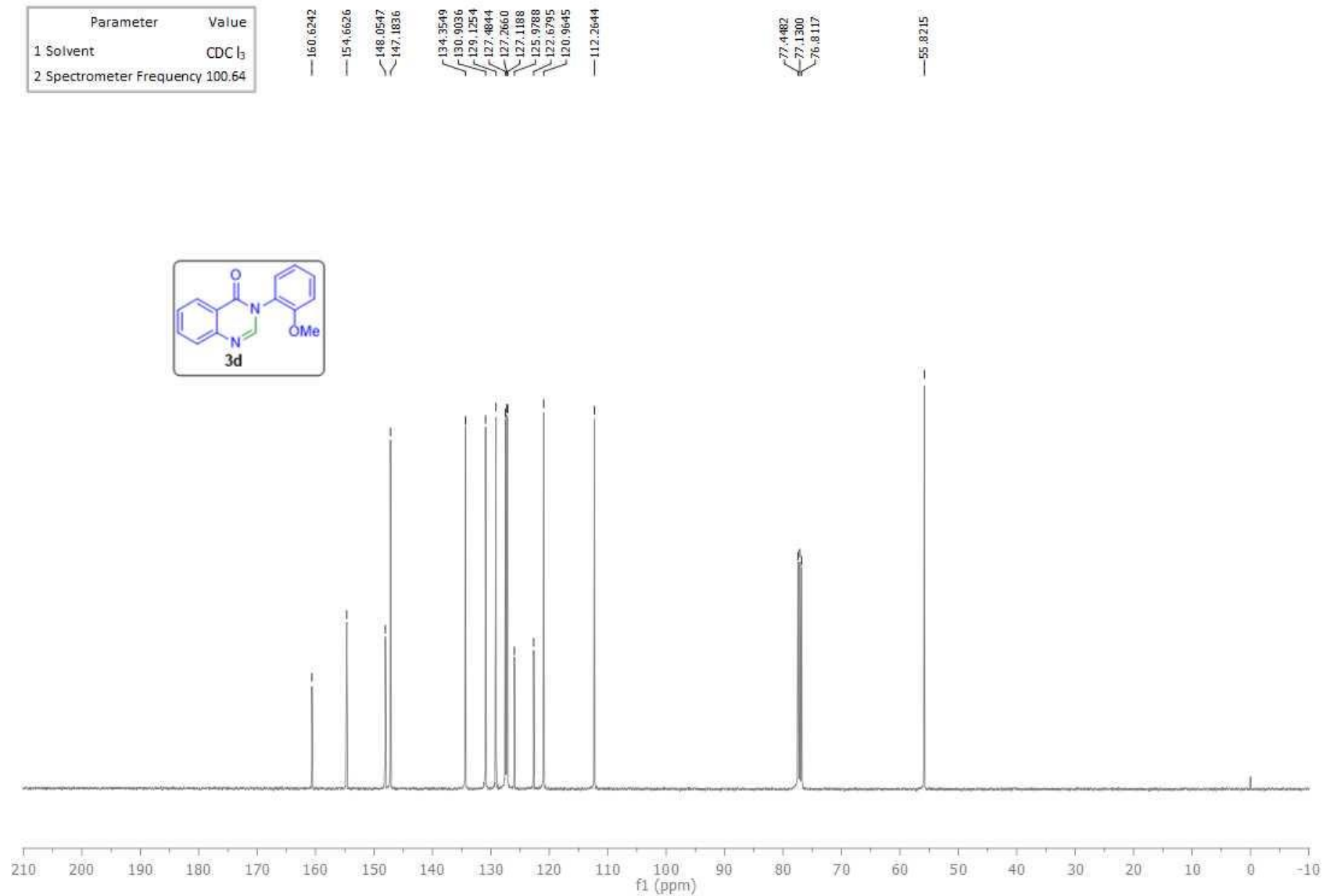


Figure S59. ¹³C NMR spectra of 3-(2-Methoxyphenyl)quinazolin-4(3H)-one (**3d**).

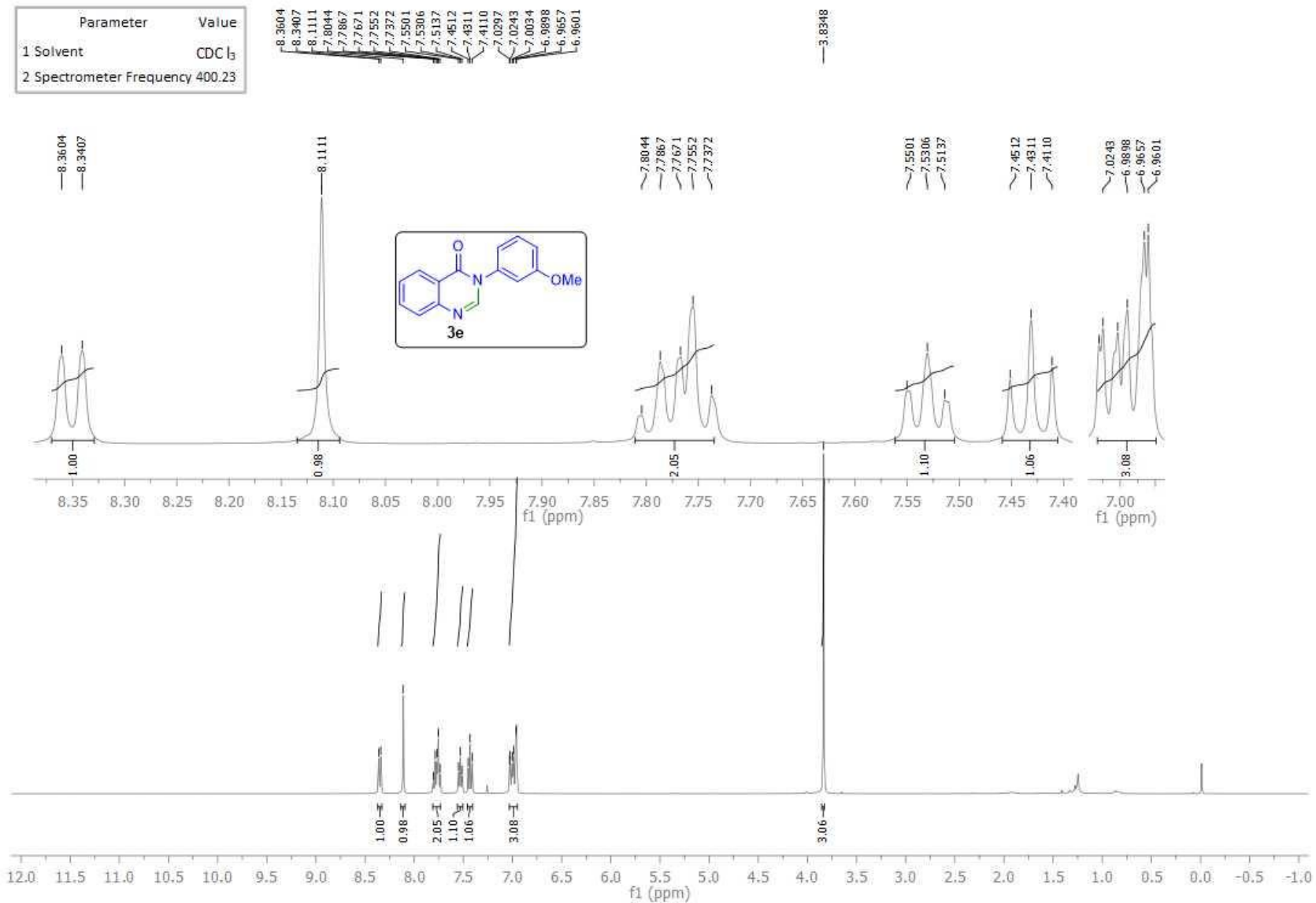


Figure S60. ¹H NMR spectra of 3-(3-Methoxyphenyl)quinazolin-4(3H)-one (**3e**).

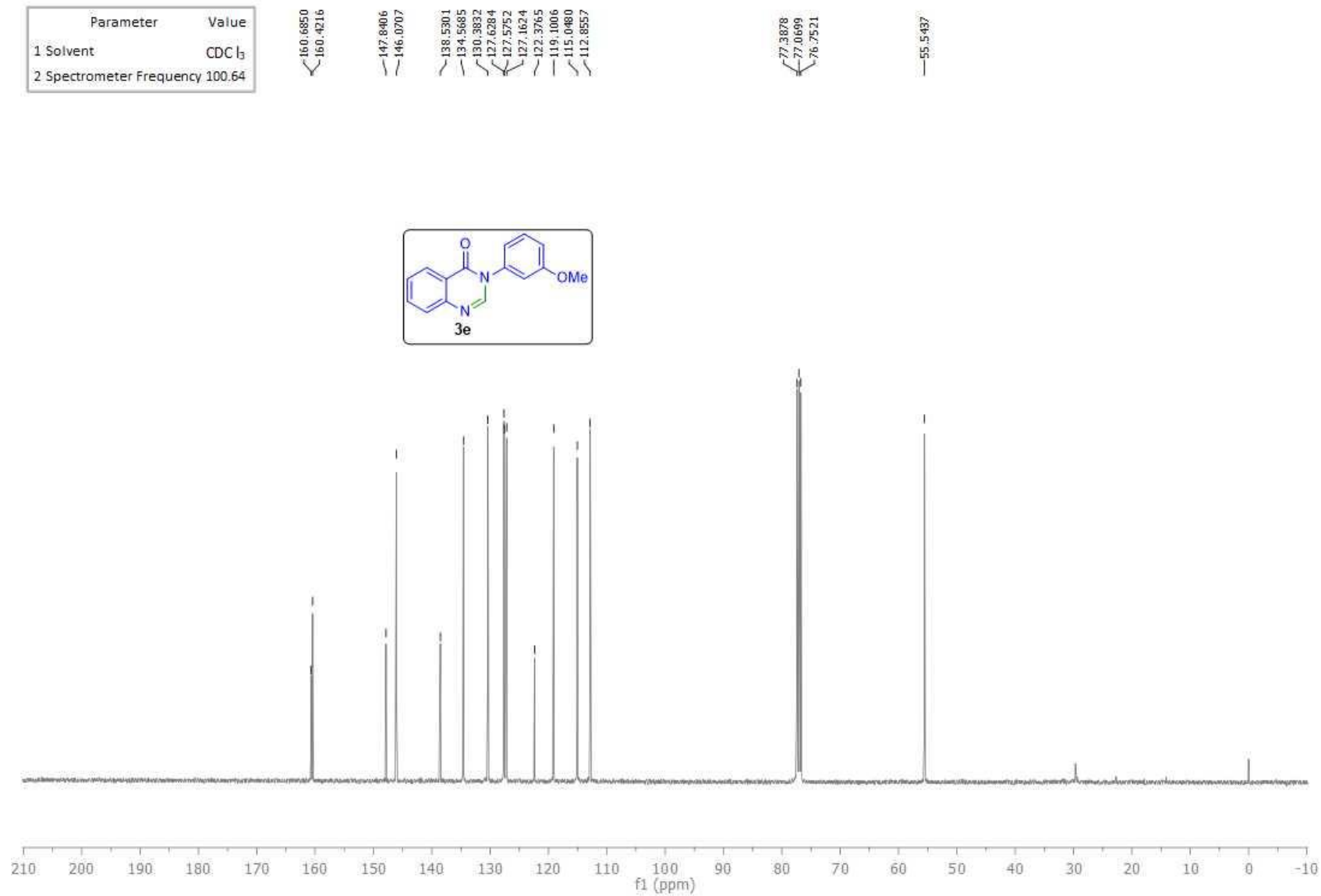


Figure S61. ¹³C NMR spectra of 3-(3-Methoxyphenyl)quinazolin-4(3*H*)-one (**3e**).

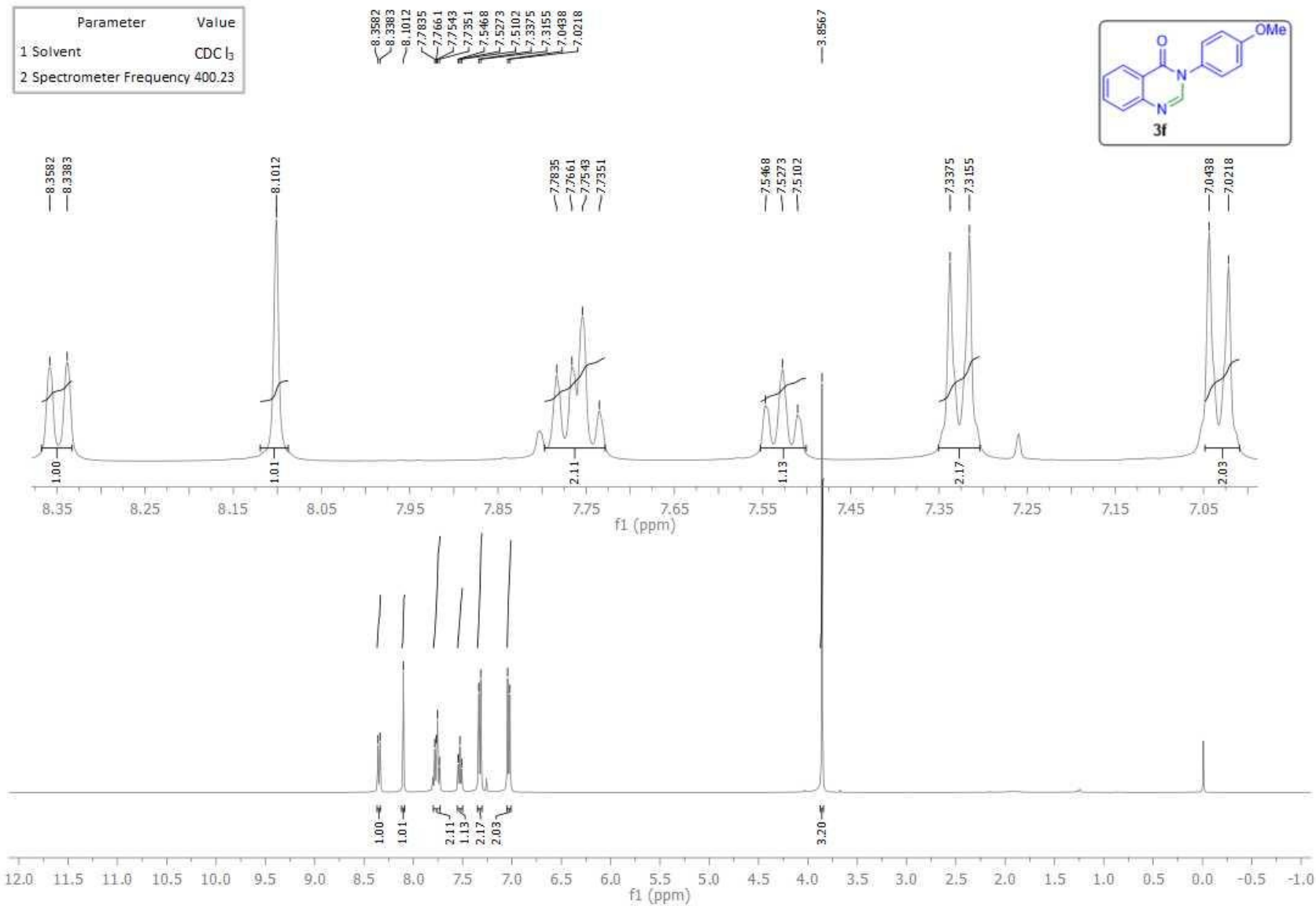


Figure S62. ¹H NMR spectra of 3-(4-Methoxyphenyl)quinazolin-4(3H)-one (**3f**).

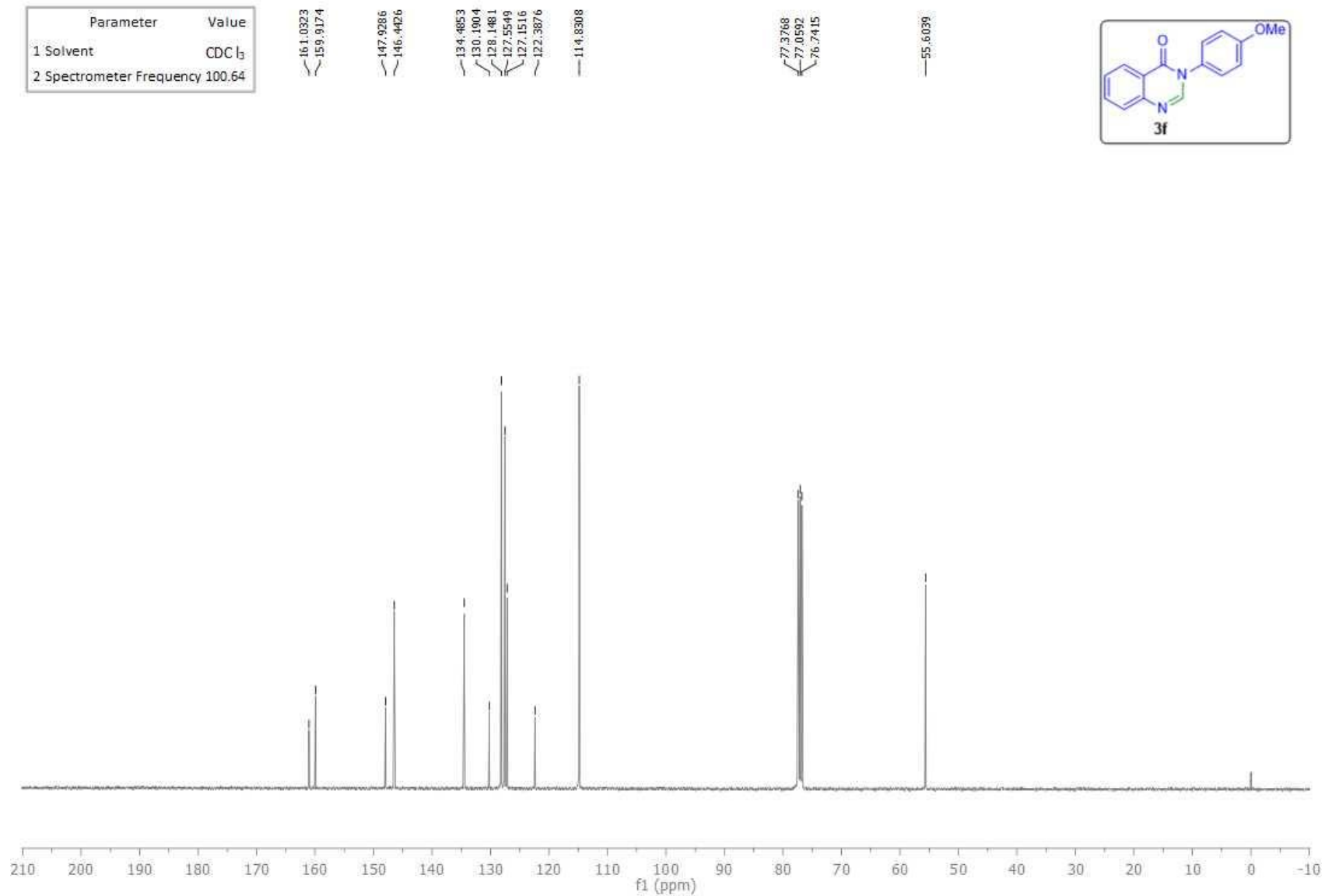


Figure S63. ^{13}C NMR spectra of 3-(4-Methoxyphenyl)quinazolin-4(3H)-one (**3f**).

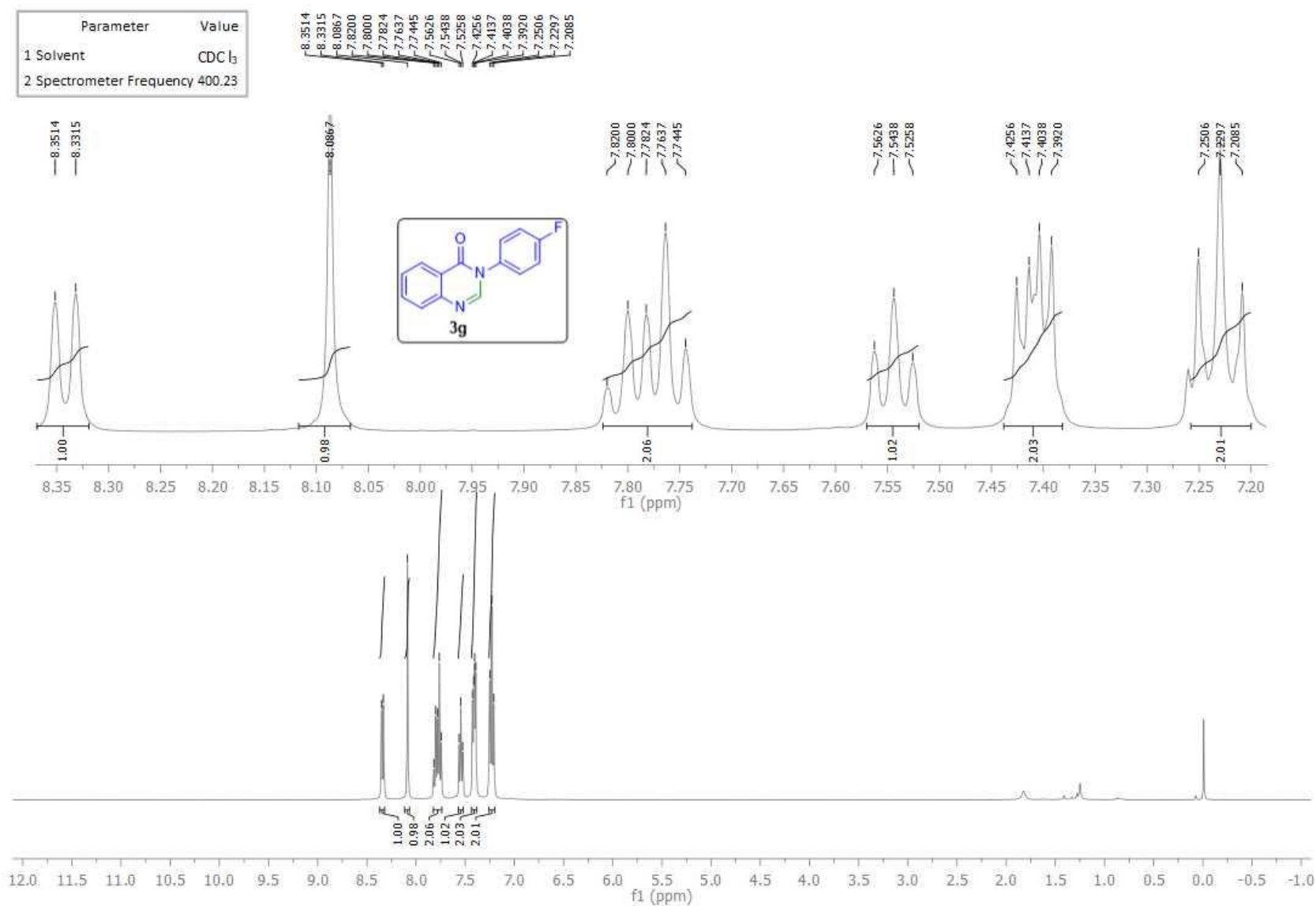


Figure S64. ¹H NMR spectra of 3-(4-Fluorophenyl)quinazolin-4(3H)-one (**3g**).

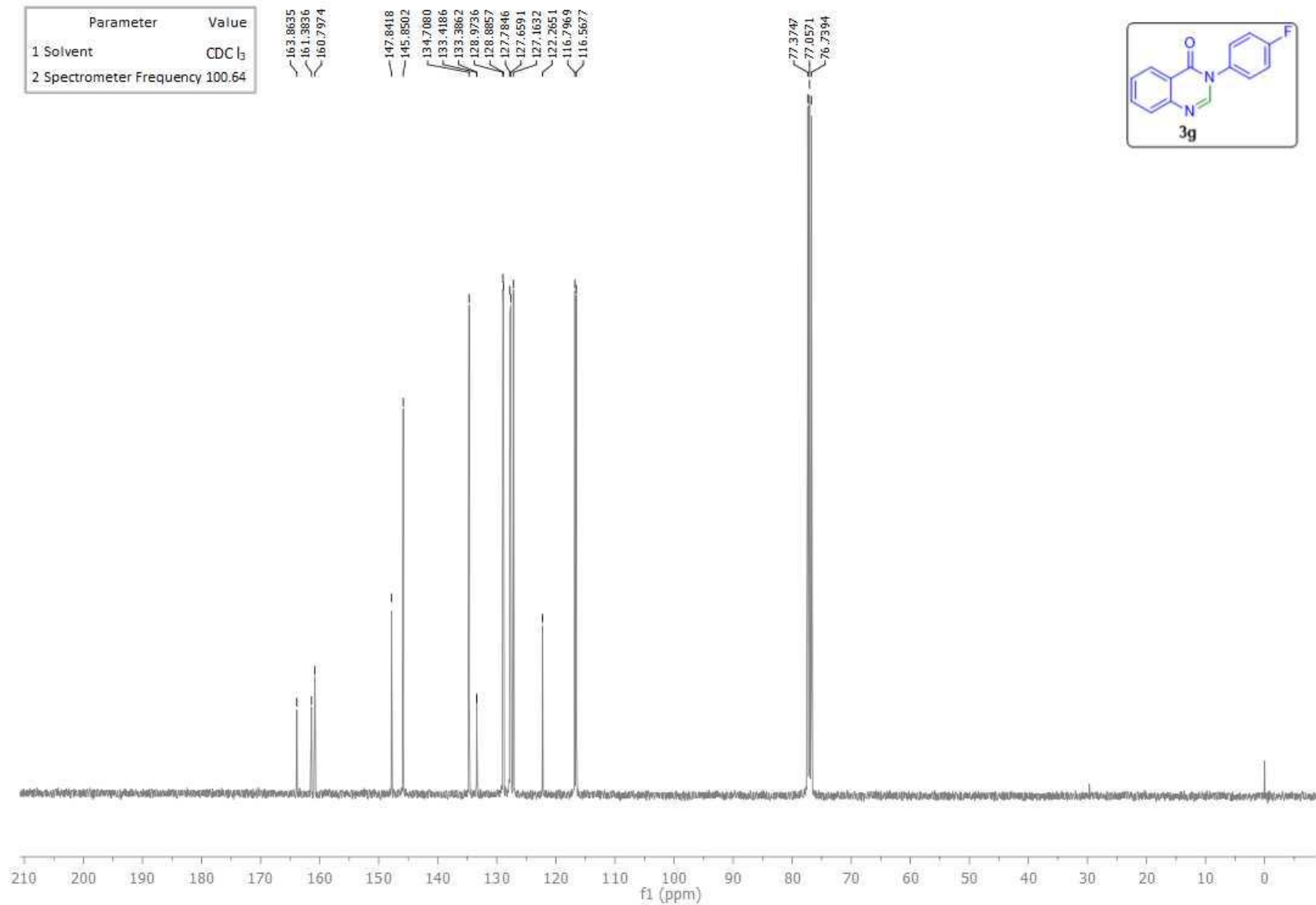


Figure S65. ¹³C NMR spectra of 3-(4-Fluorophenyl)quinazolin-4(3H)-one (**3g**).

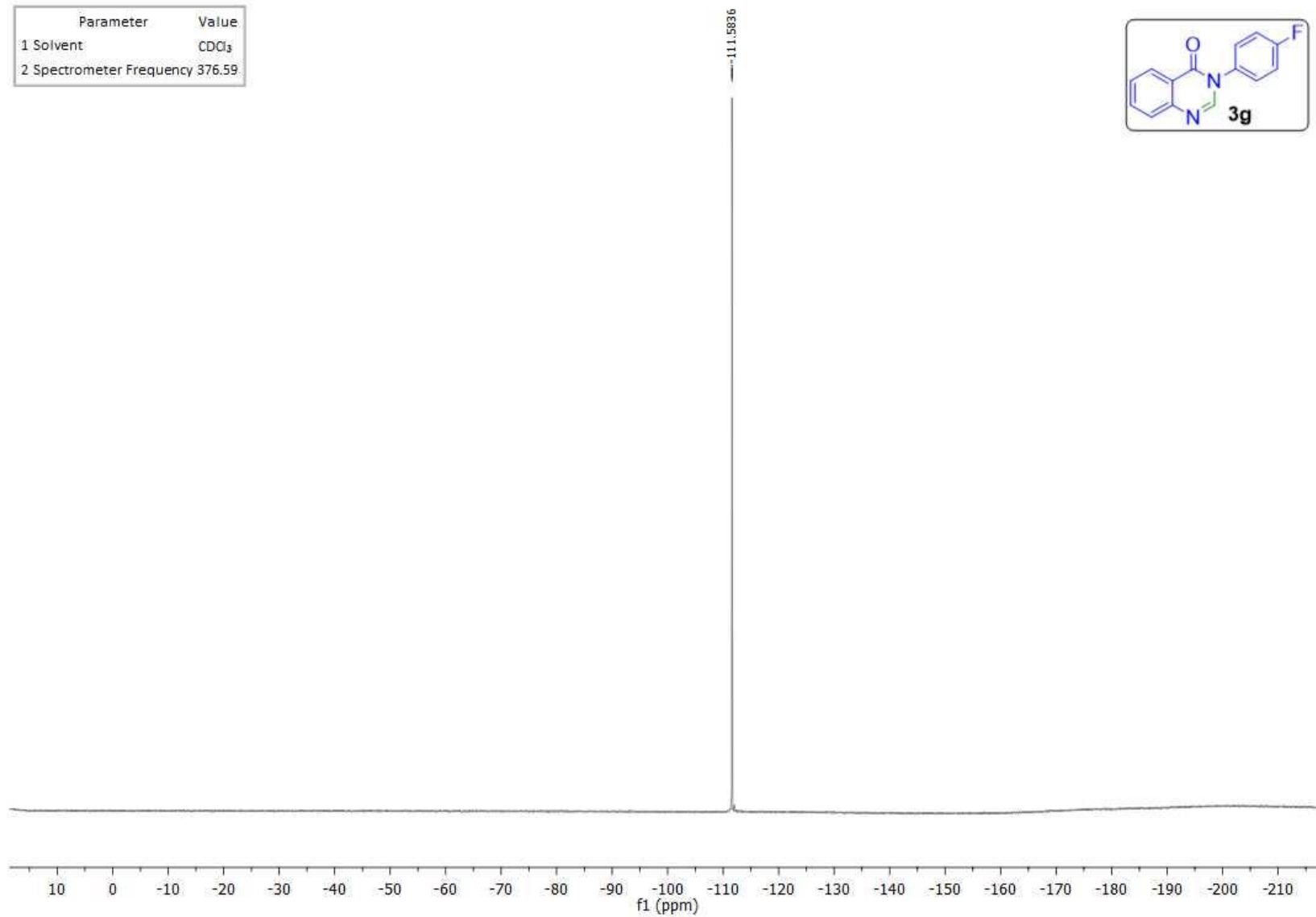


Figure S66. ¹⁹F NMR spectra of 3-(4-Fluorophenyl)quinazolin-4(3H)-one (**3g**).

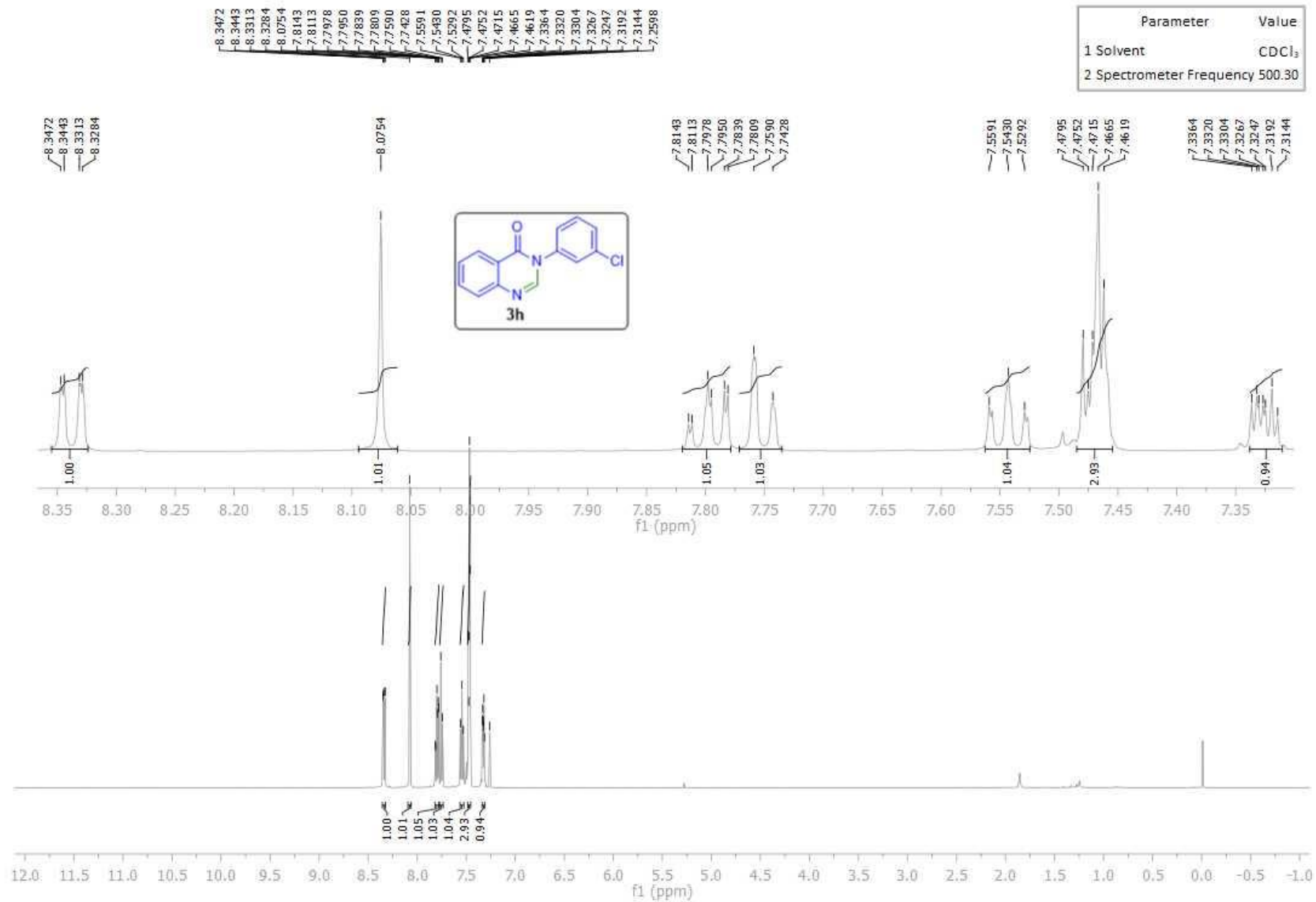


Figure S67. ¹H NMR spectra of 3-(3-Chlorophenyl)quinazolin-4(3H)-one (**3h**).

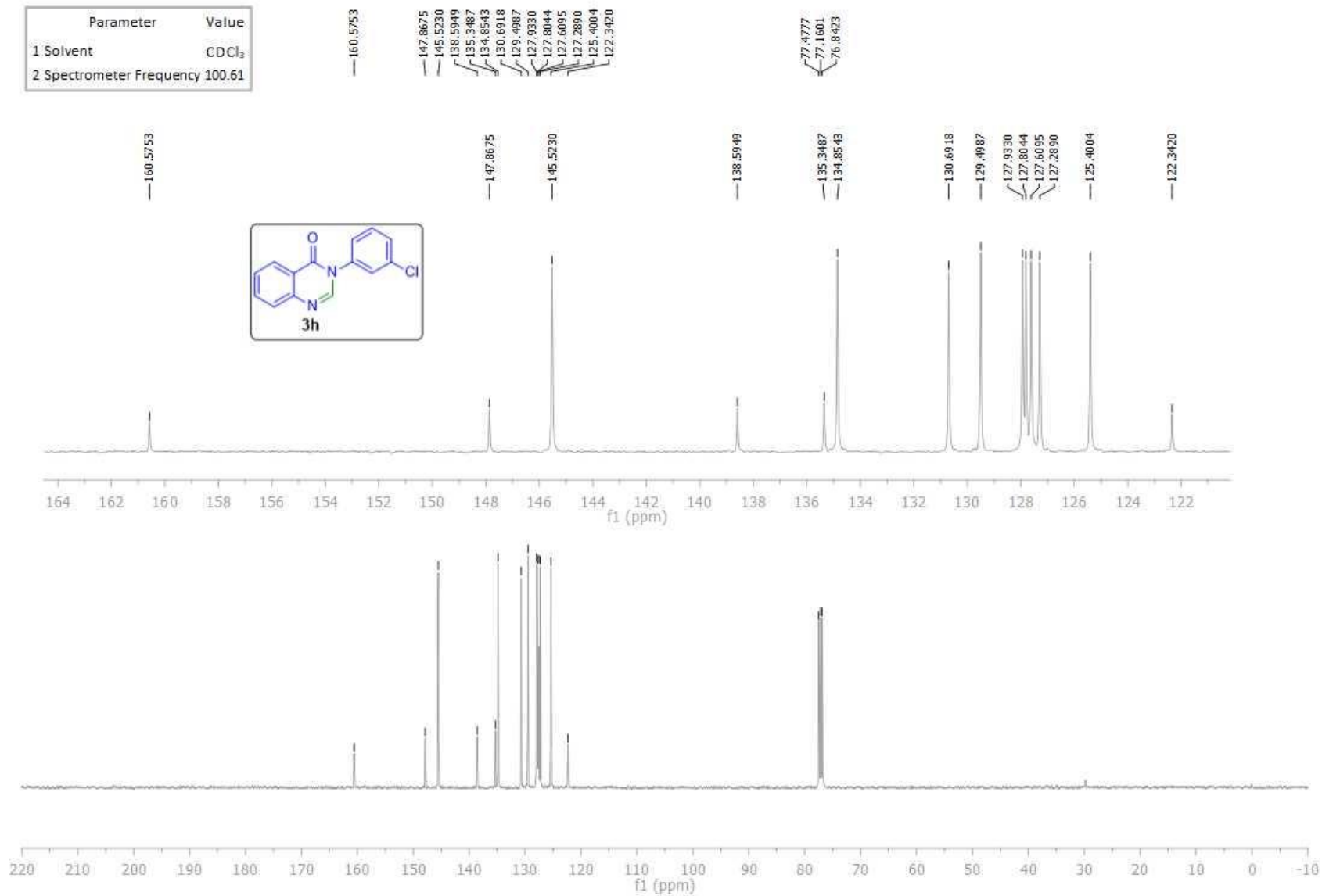


Figure S68. ¹³C NMR spectra of 3-(3-Chlorophenyl)quinazolin-4(3*H*)-one (**3h**).

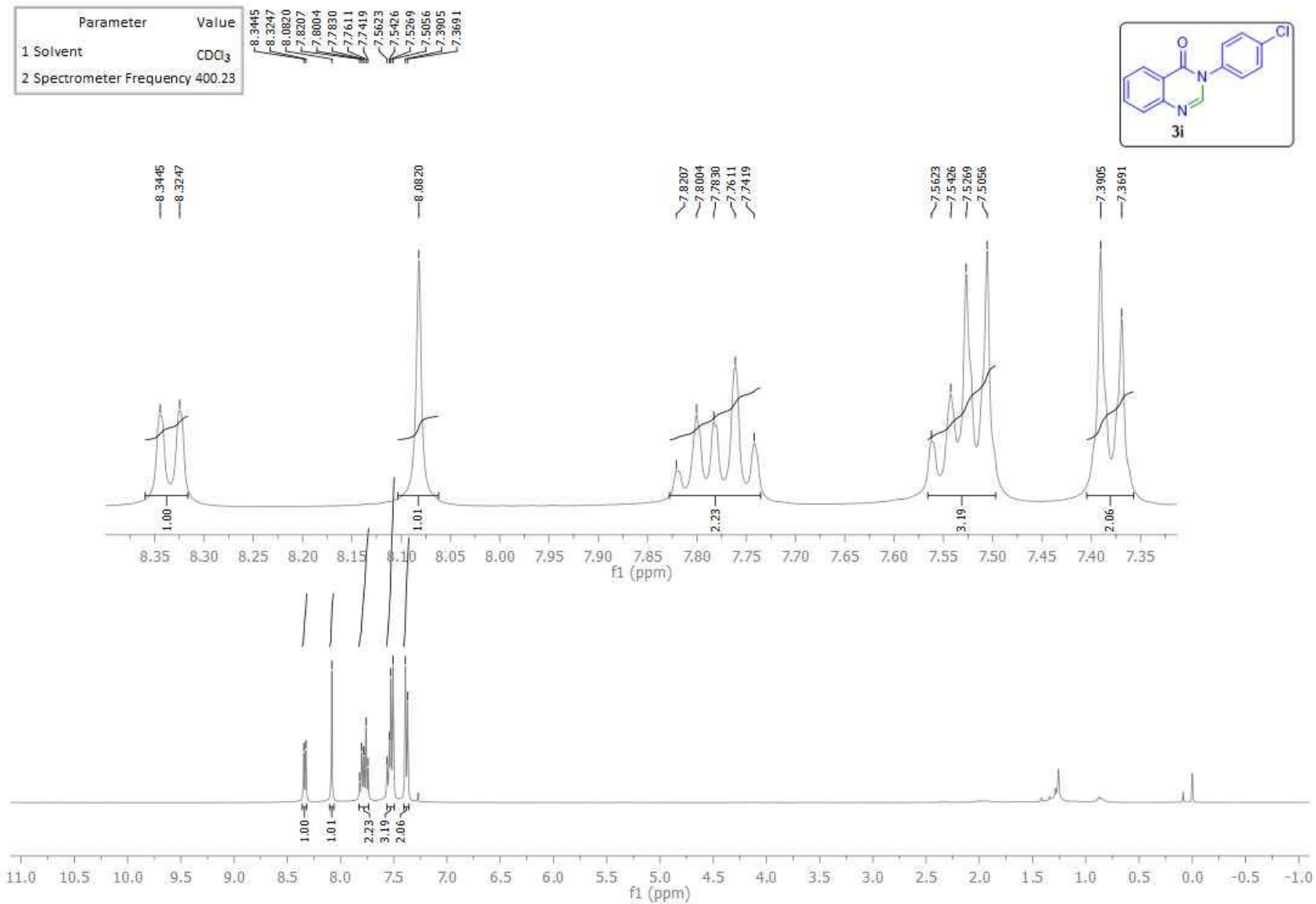


Figure S69. ¹H NMR spectra of 3-(4-Chlorophenyl)quinazolin-4(3*H*)-one (**3i**).

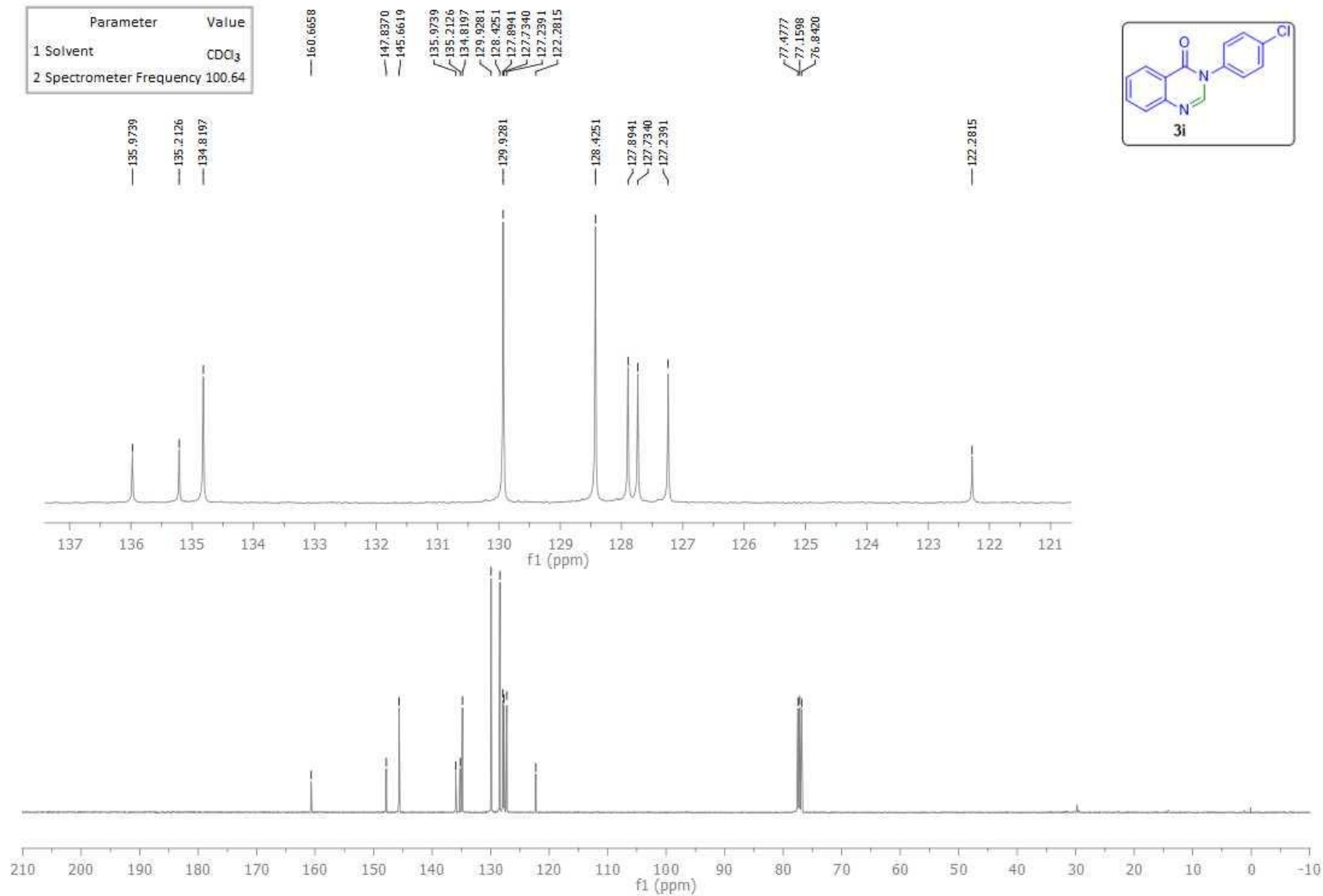


Figure S70. ¹³C NMR spectra of 3-(4-Chlorophenyl)quinazolin-4(3*H*)-one (**3i**).

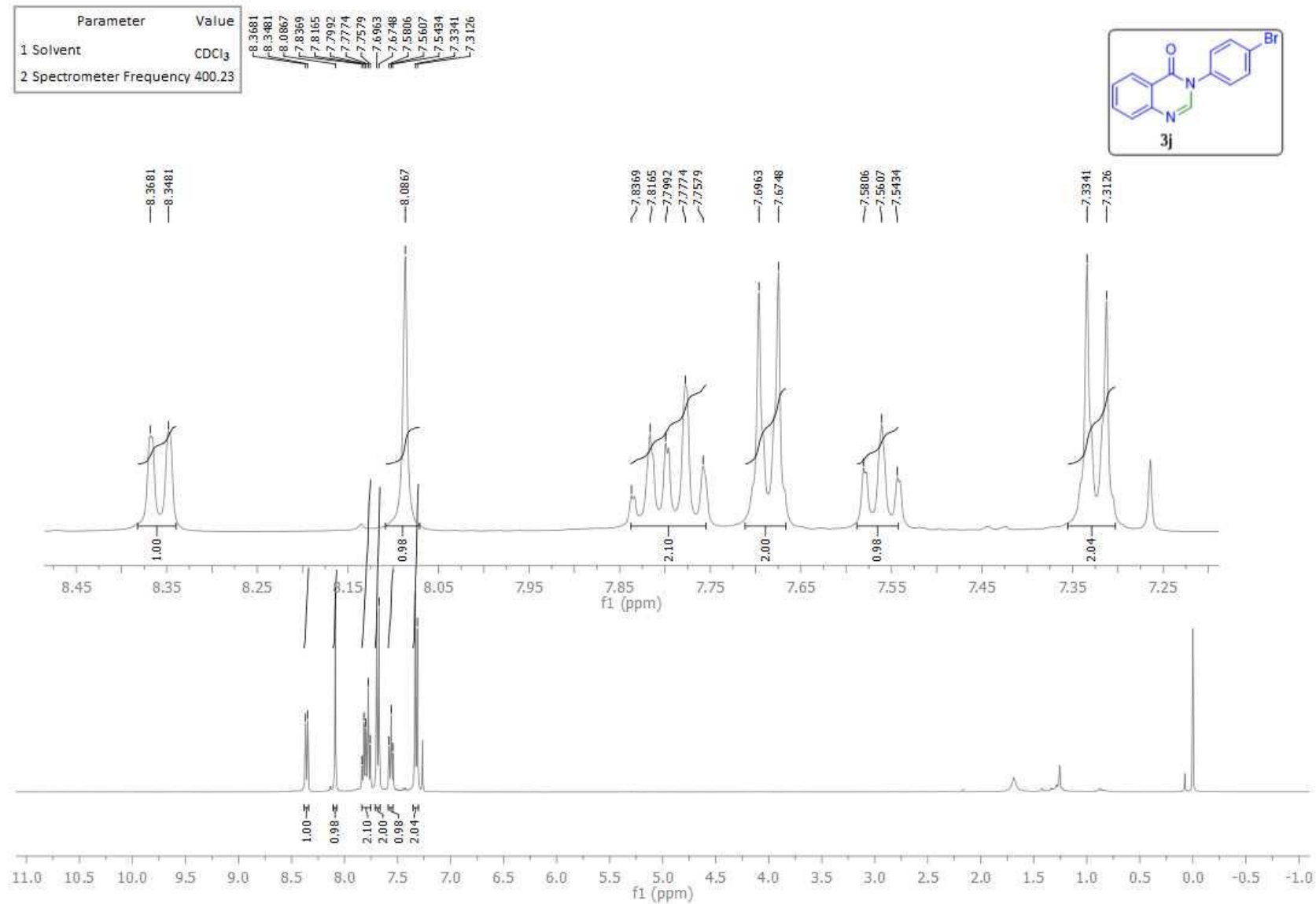


Figure S71. ¹H NMR spectra of 3-(4-Bromophenyl)quinazolin-4(3H)-one (**3j**).

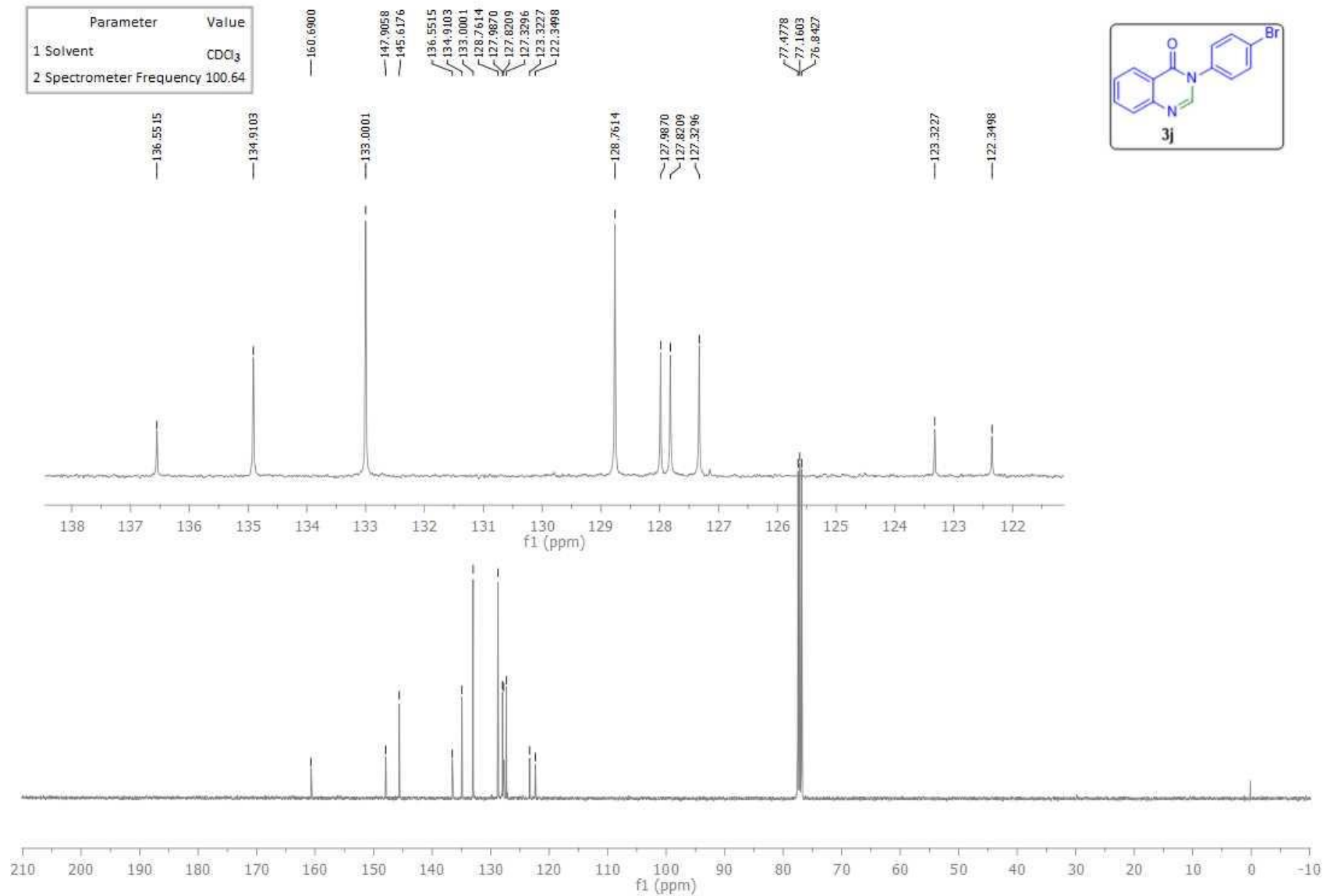


Figure S72. ¹³C NMR spectra of 3-(4-Bromophenyl)quinazolin-4(3H)-one (**3j**).

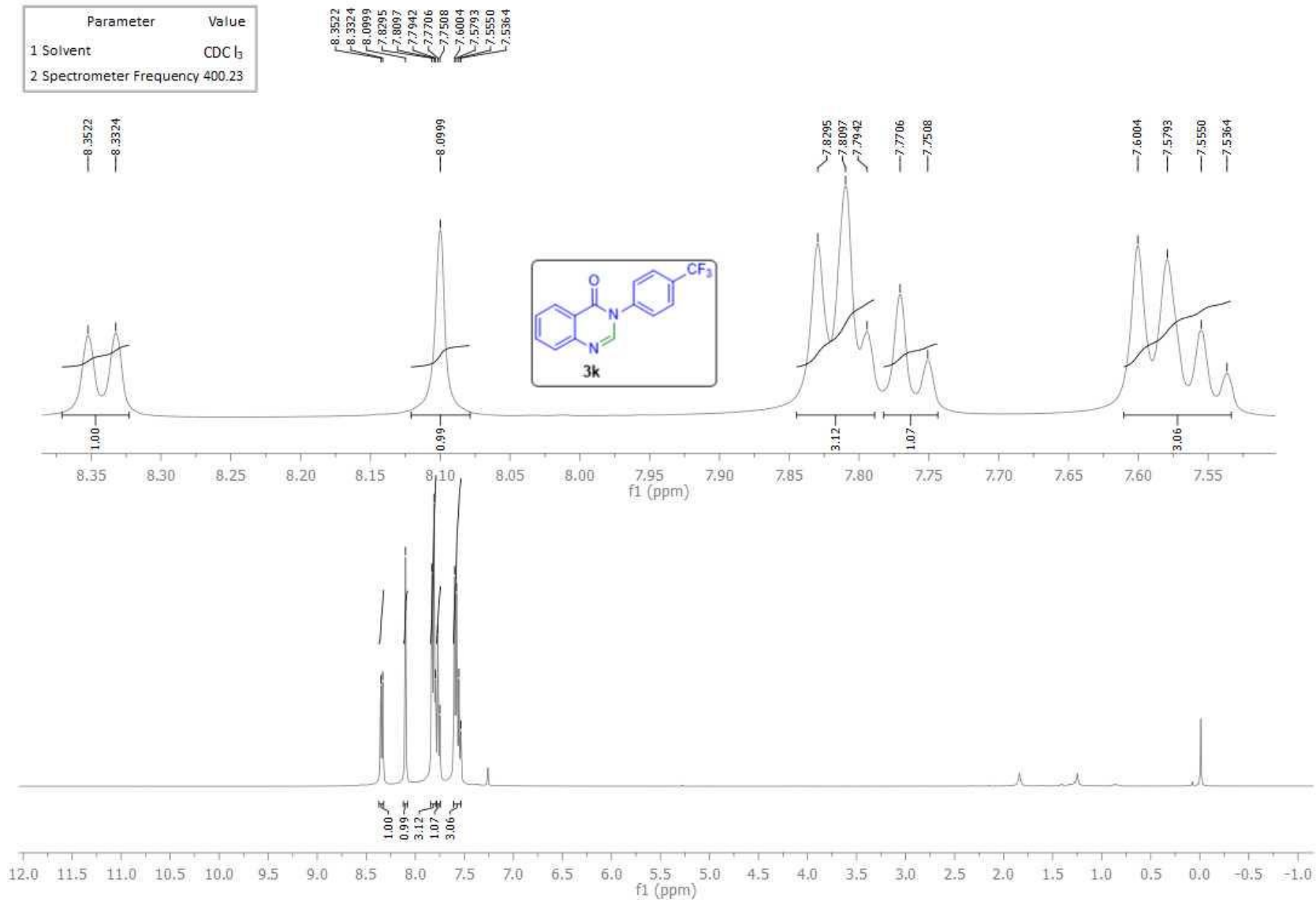


Figure S73. ¹H NMR spectra of 3-(4-(Trifluoromethyl)phenyl)quinazolin-4(3*H*)-one (**3k**).

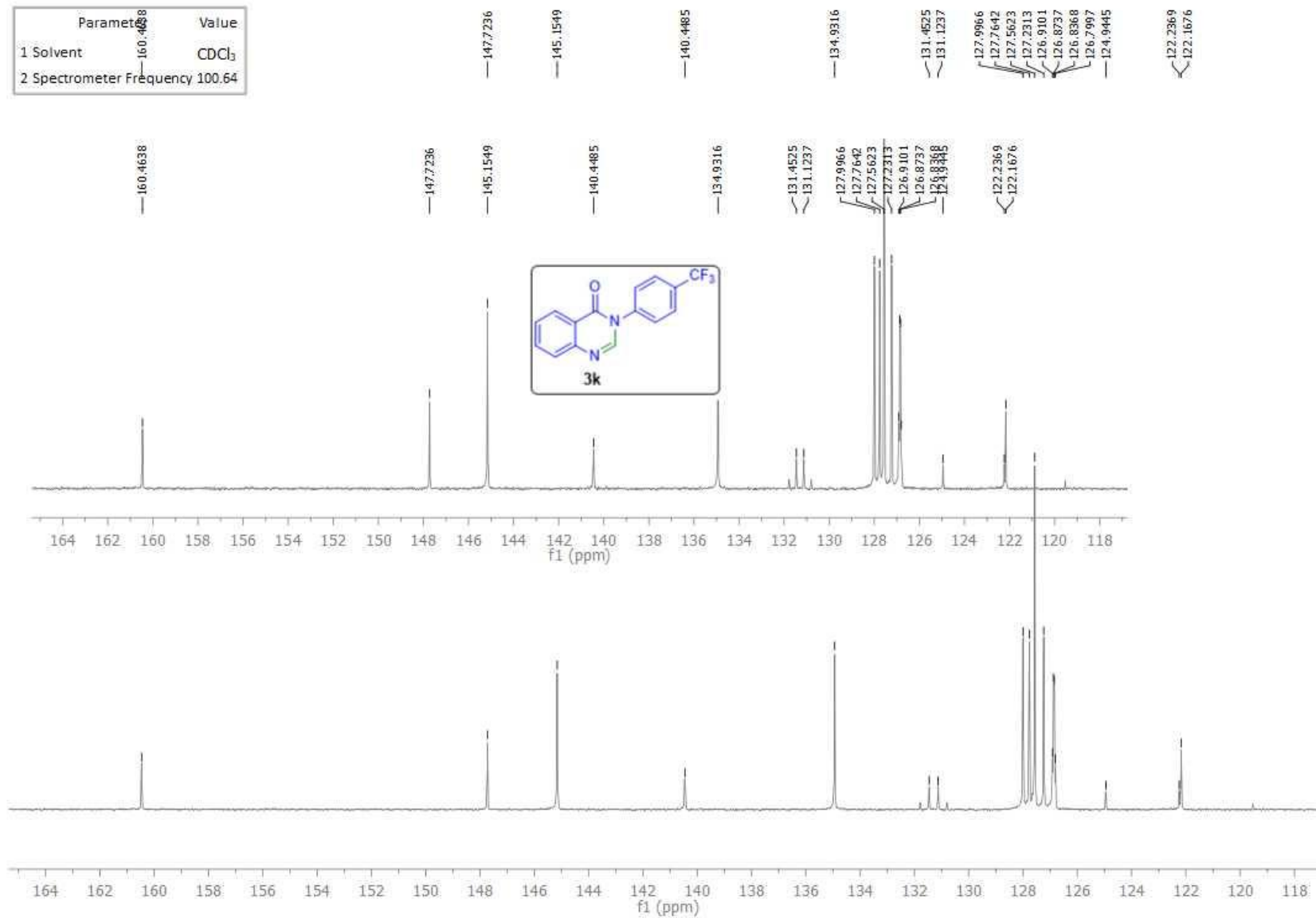


Figure S74. ¹³C NMR spectra of 3-(4-(Trifluoromethyl)phenyl)quinazolin-4(3H)-one (**3k**).

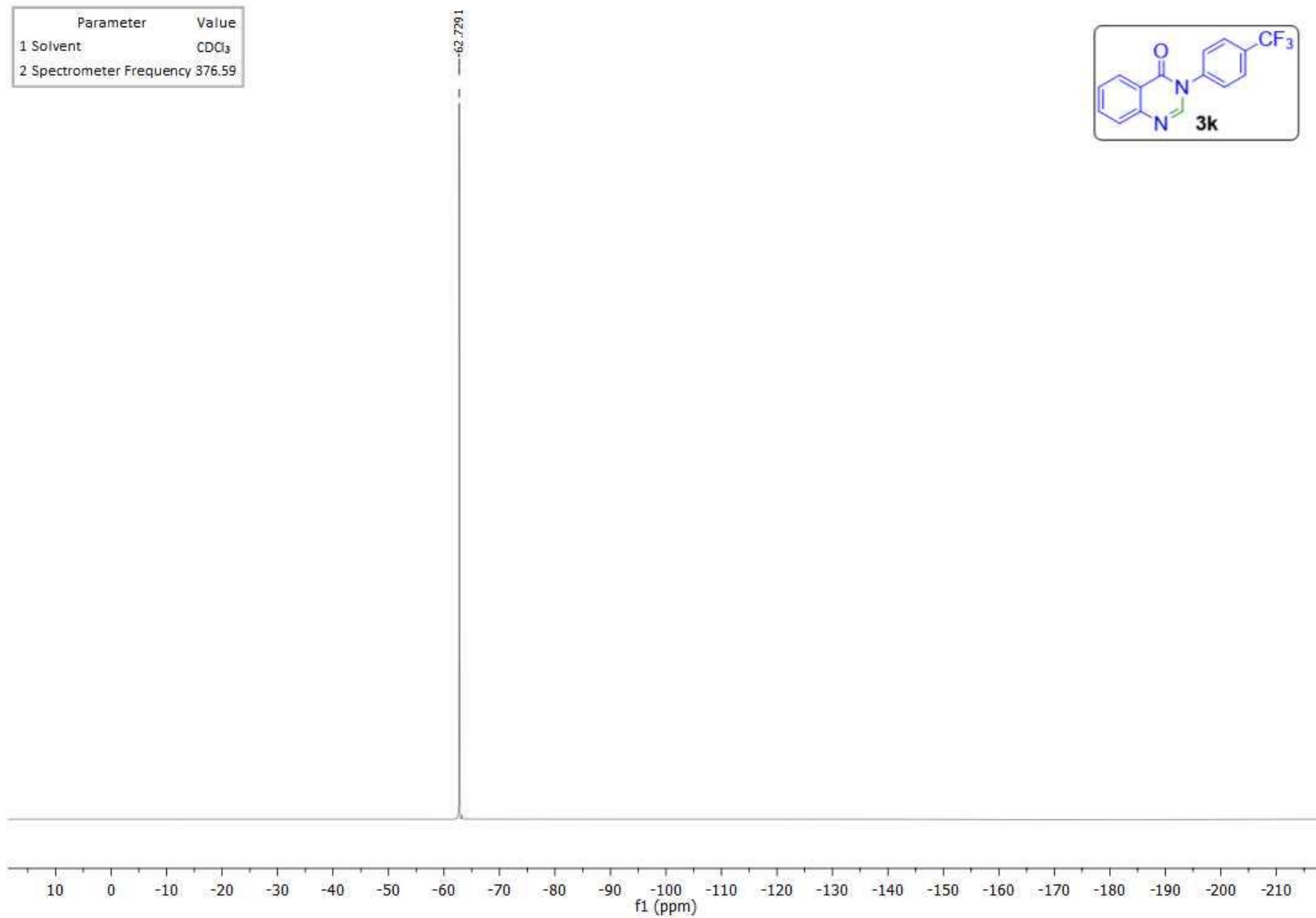


Figure S75. ¹⁹F NMR spectra of 3-(4-(Trifluoromethyl)phenyl)quinazolin-4(3*H*)-one (**3k**).

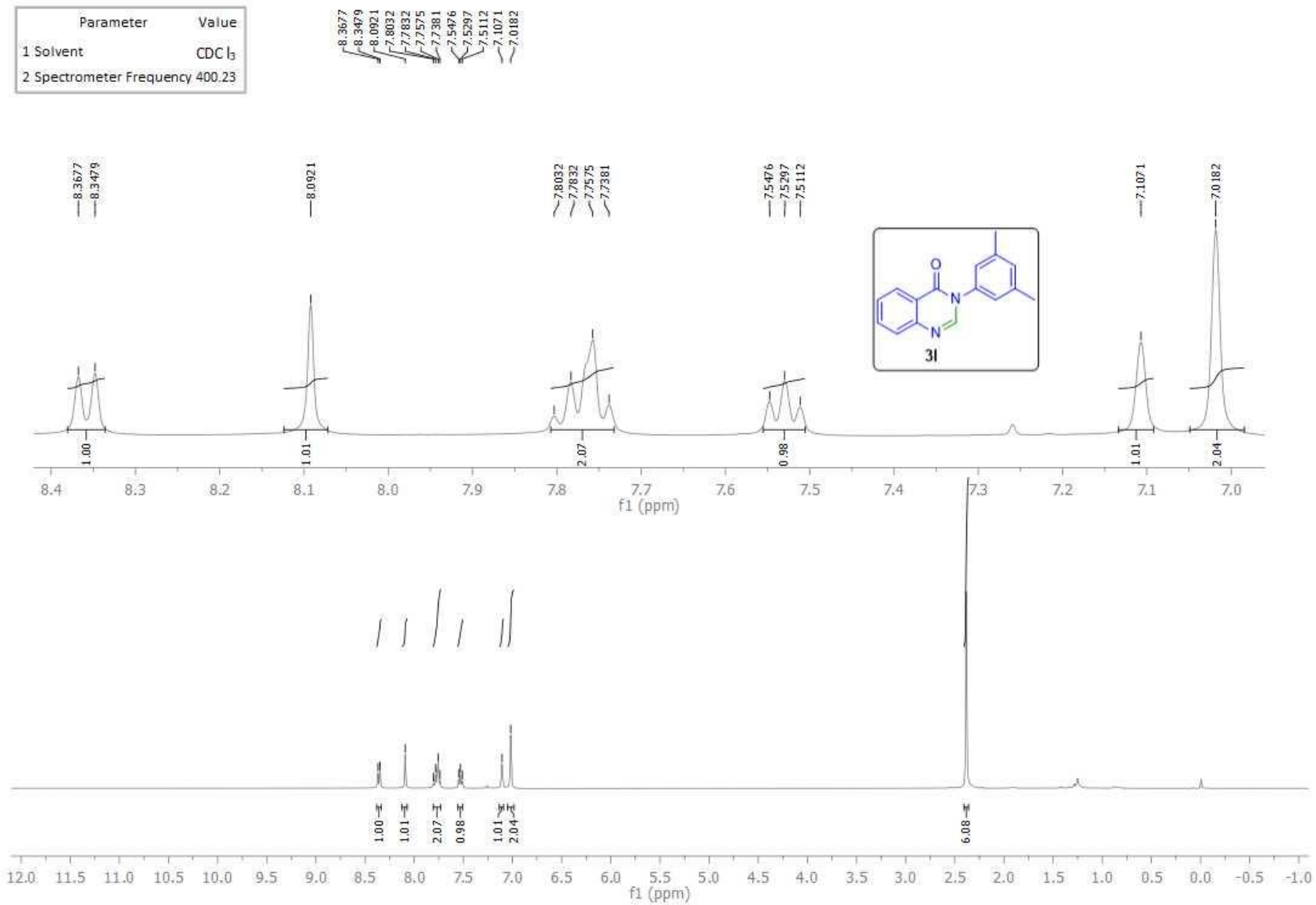


Figure S76. ¹H NMR spectra of 3-(3,5-Dimethylphenyl)quinazolin-4(3H)-one (**3I**).

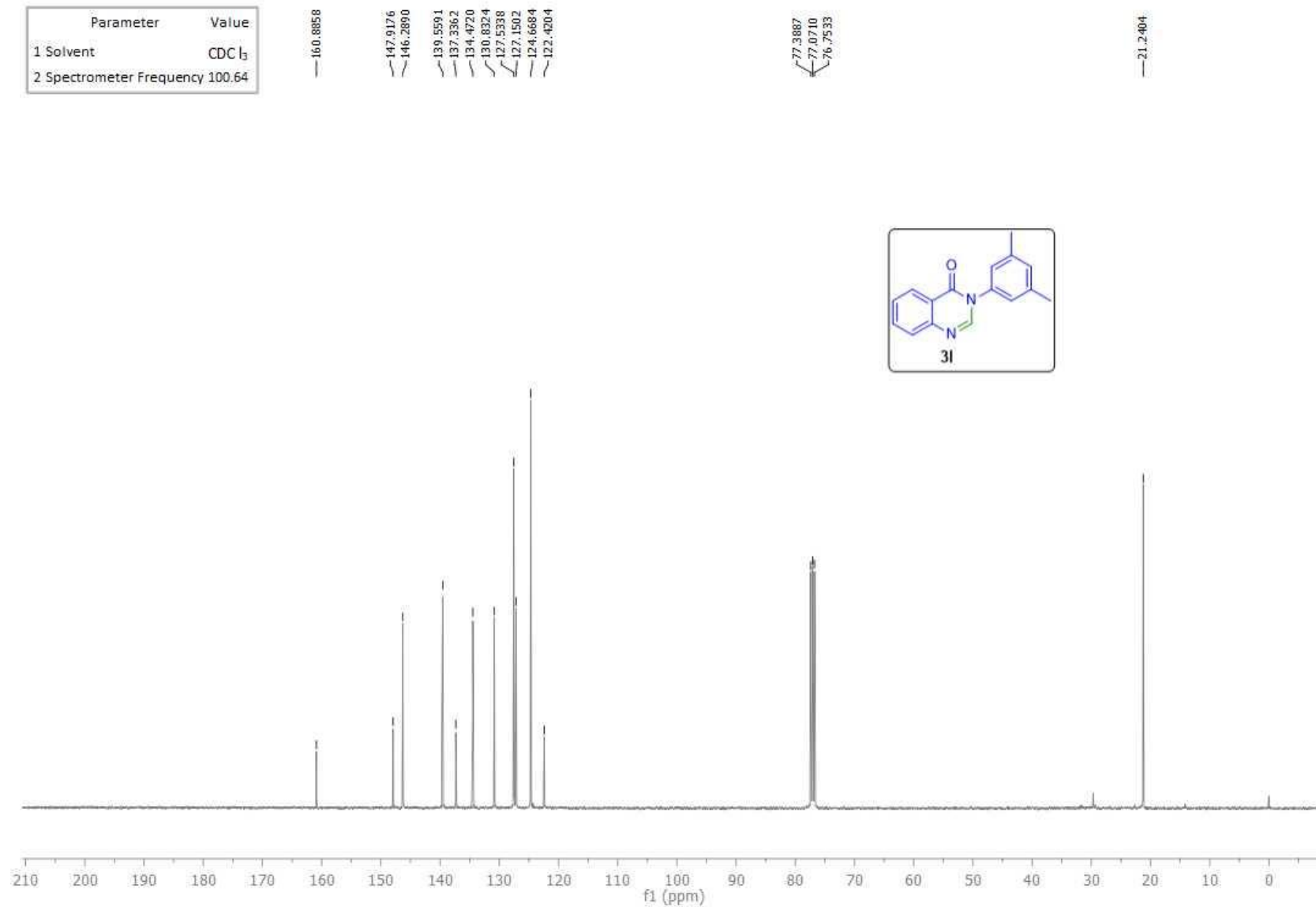


Figure S77. ^{13}C NMR spectra of 3-(3,5-Dimethylphenyl)quinazolin-4(3*H*)-one (**3l**).

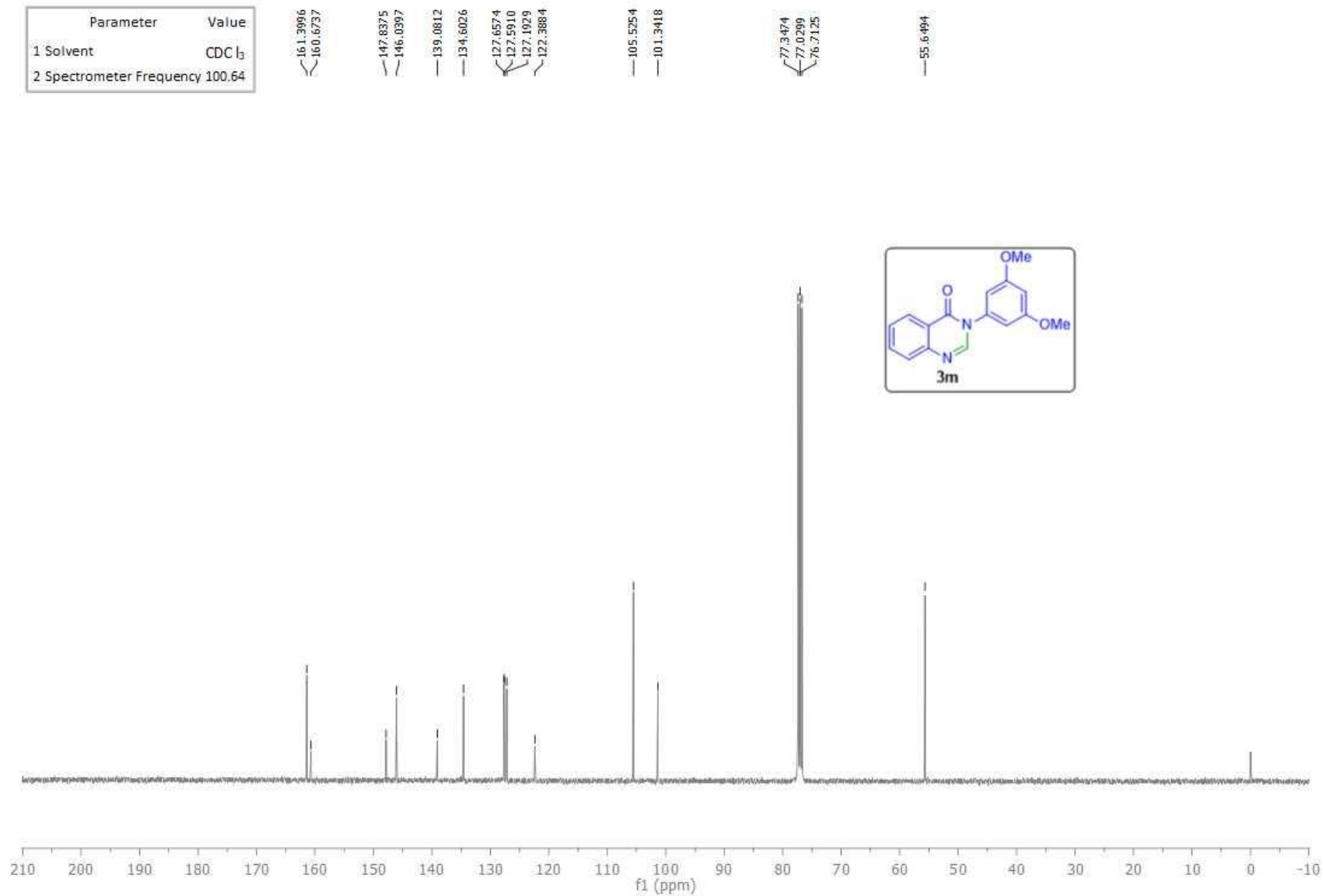


Figure S79. ¹³C NMR spectra of 3-(3,5-Dimethoxyphenyl)quinazolin-4(3*H*)-one (**3m**).

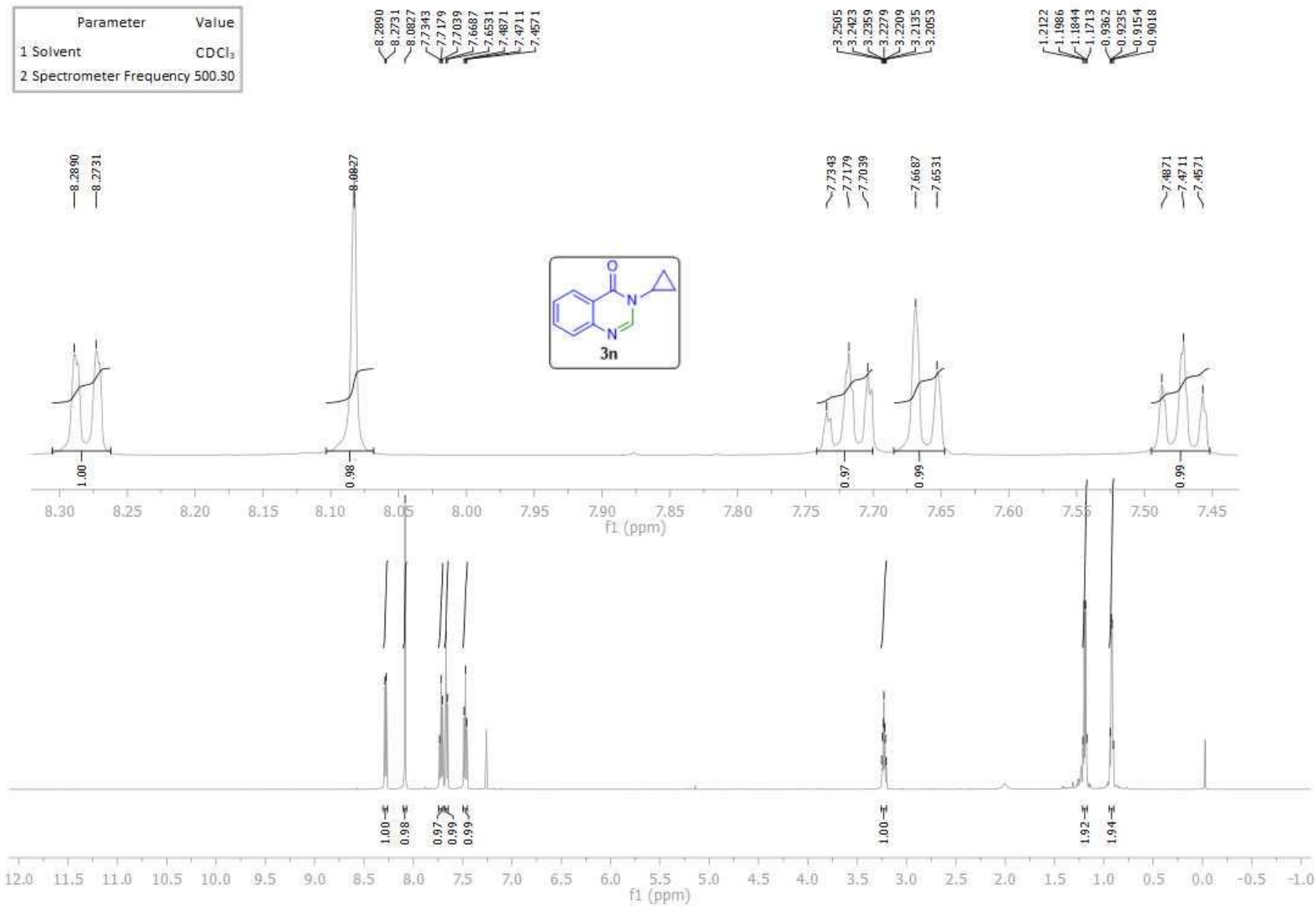


Figure S80. ¹H NMR spectra of 3-Cyclopropylquinazolin-4(3H)-one (**3n**).

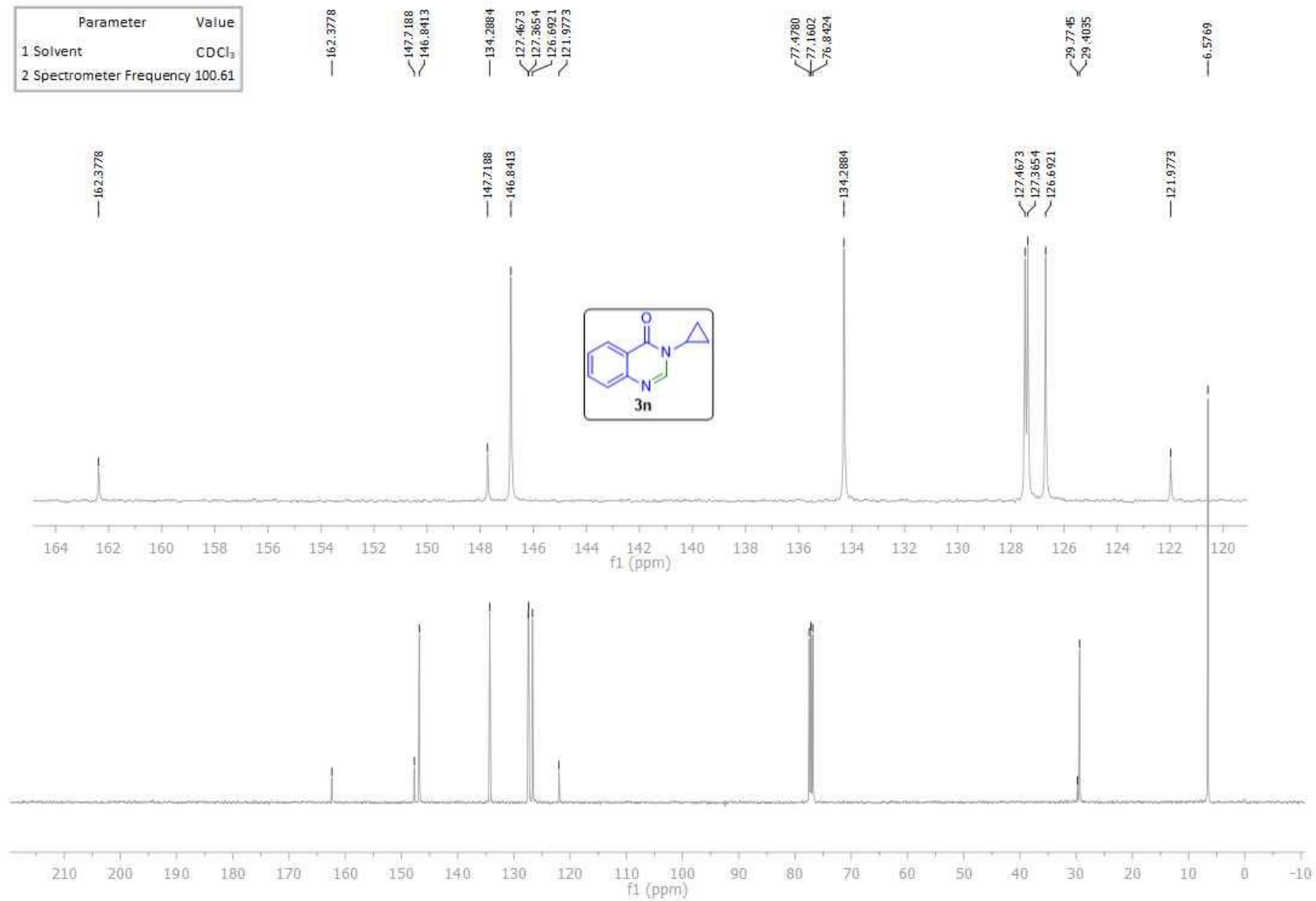


Figure S81. ¹³C NMR spectra of 3-Cyclopropylquinazolin-4(3H)-one (**3n**).

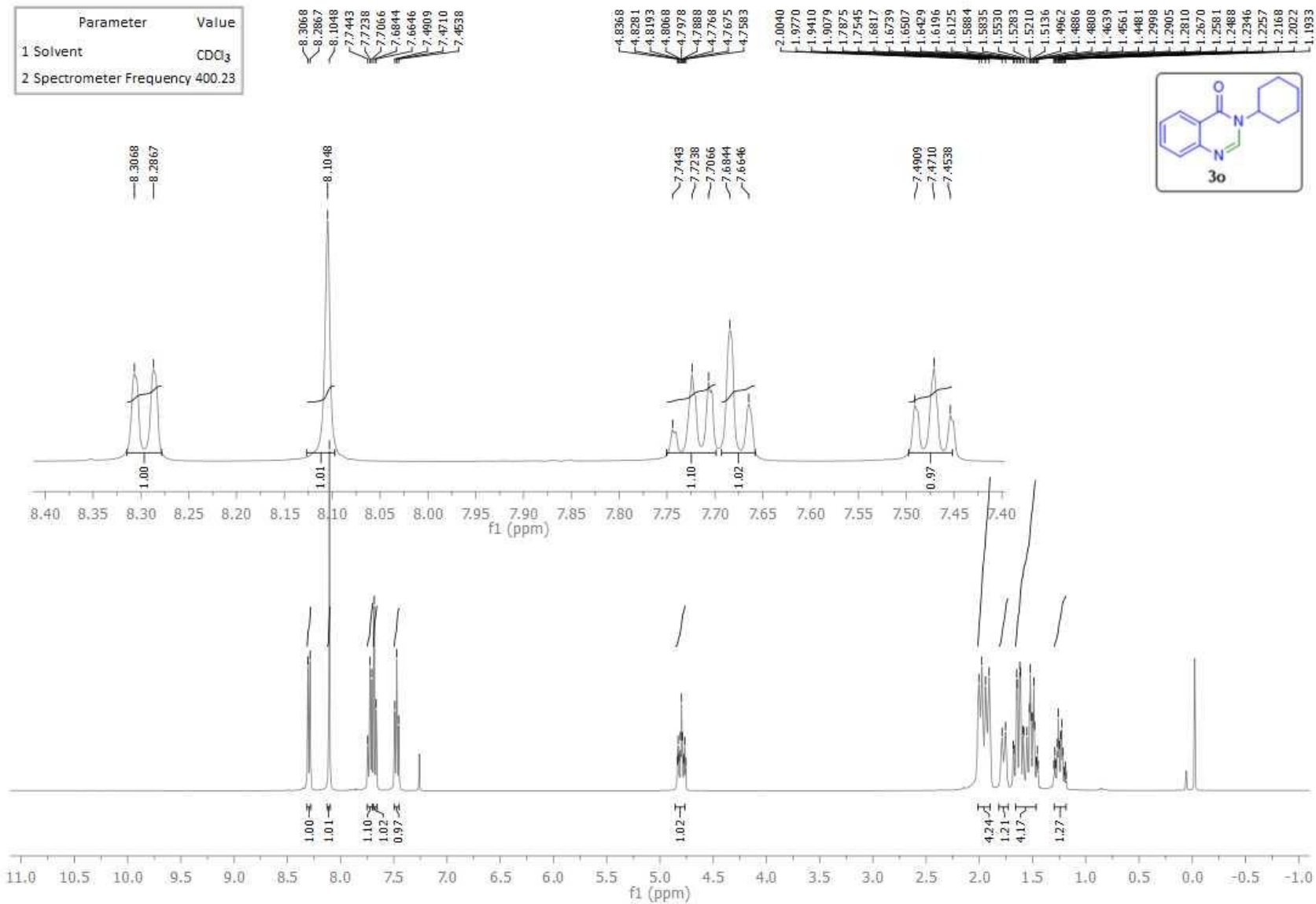


Figure S82. ¹H NMR spectra of 3-cyclohexylquinazolin-4(3H)-one (**3o**).

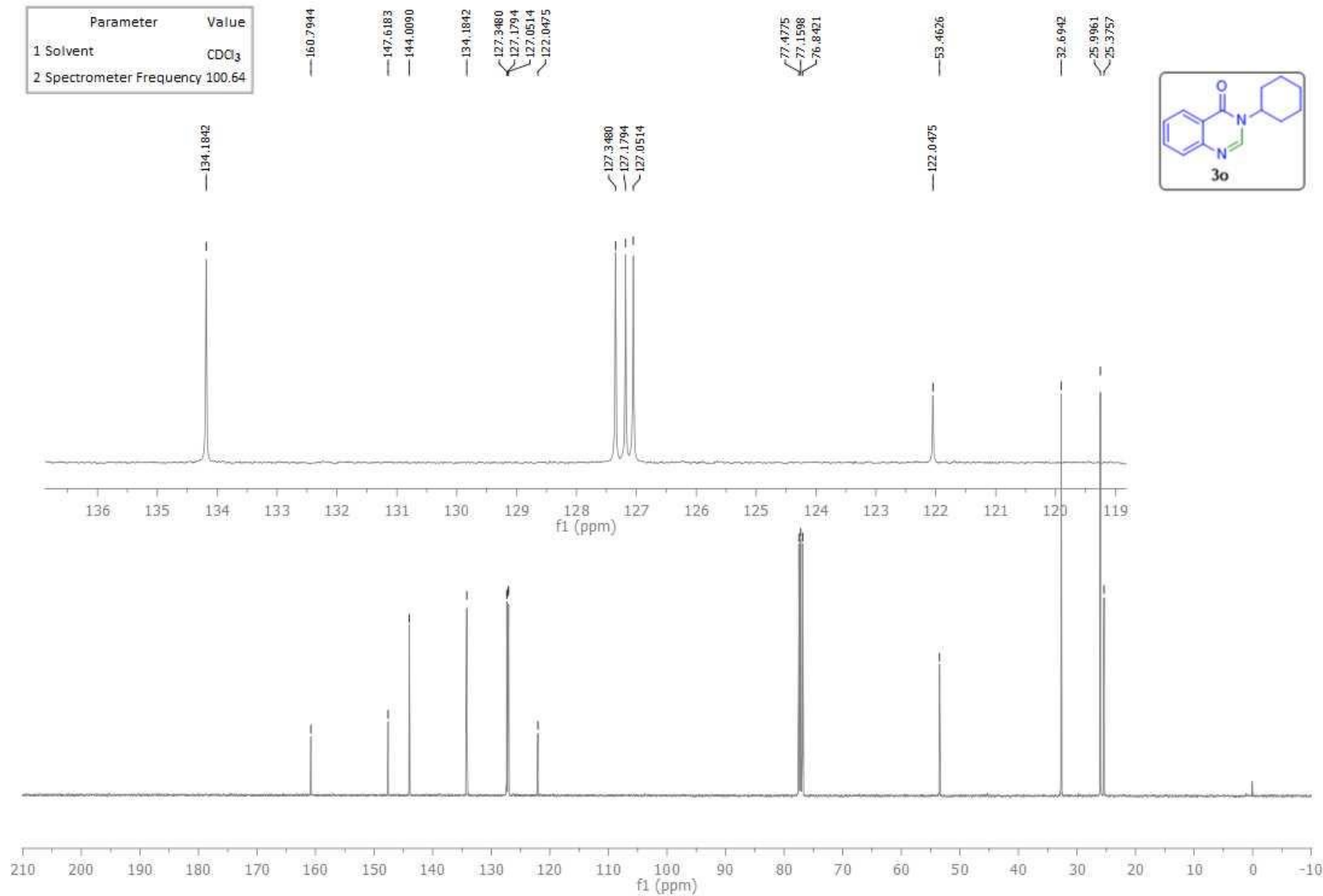


Figure S83. ¹³C NMR spectra of 3-Cyclohexylquinazolin-4(3H)-one (**3o**).

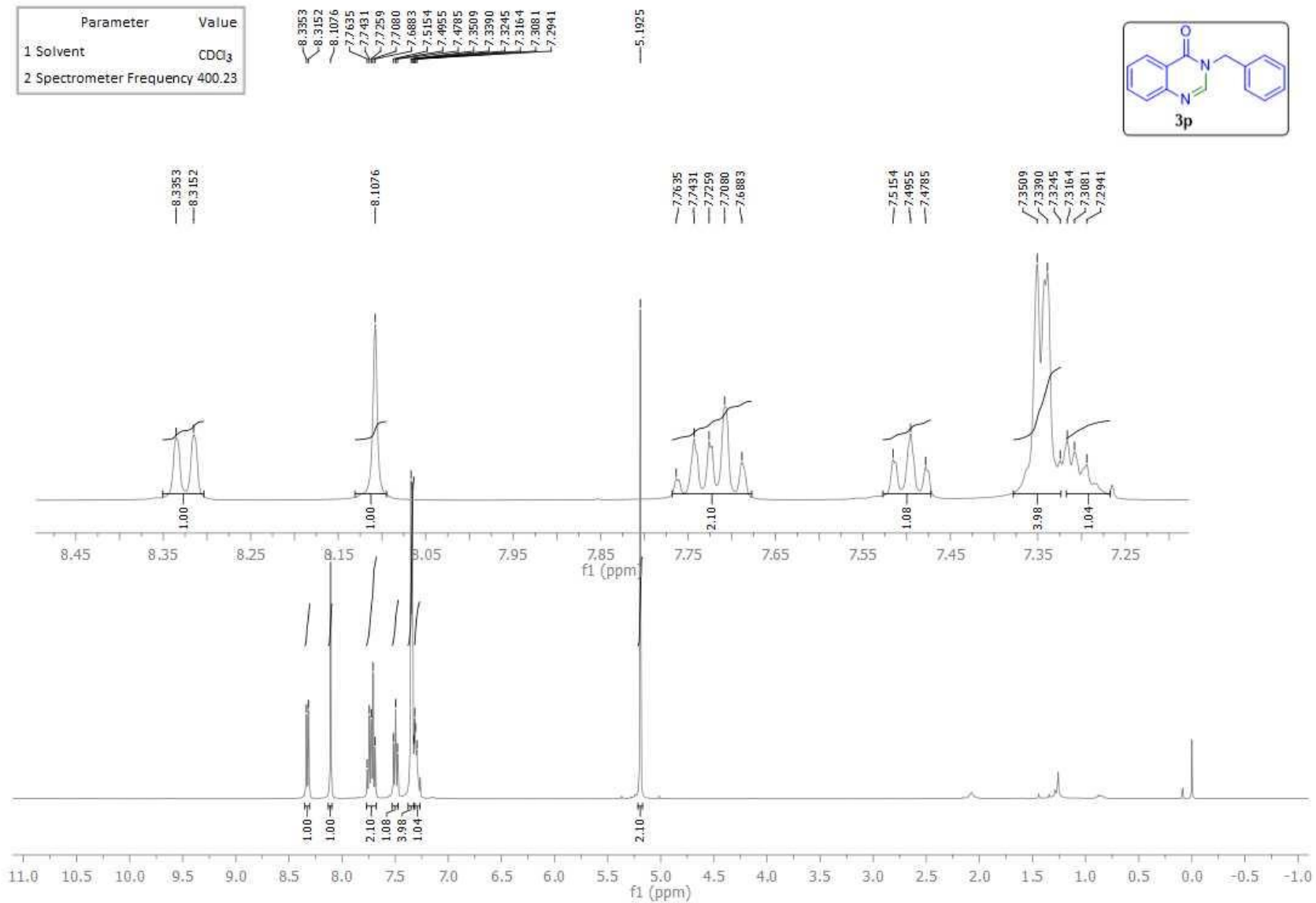


Figure S84. ¹H NMR spectra of 3-Benzylquinazolin-4(3H)-one (**3p**).

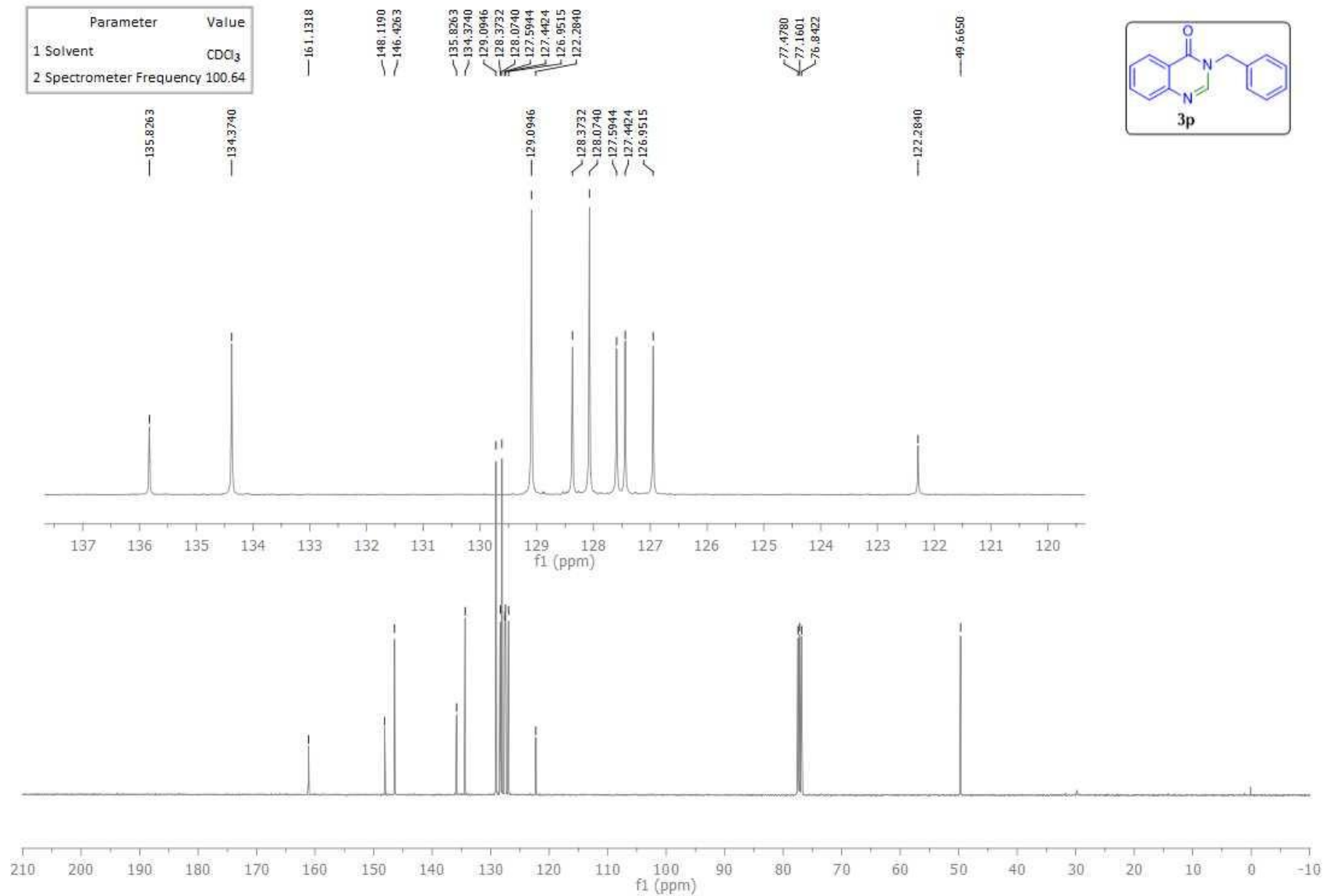


Figure S85. ¹³C NMR spectra of 3-Benzylquinazolin-4(3H)-one (**3p**).

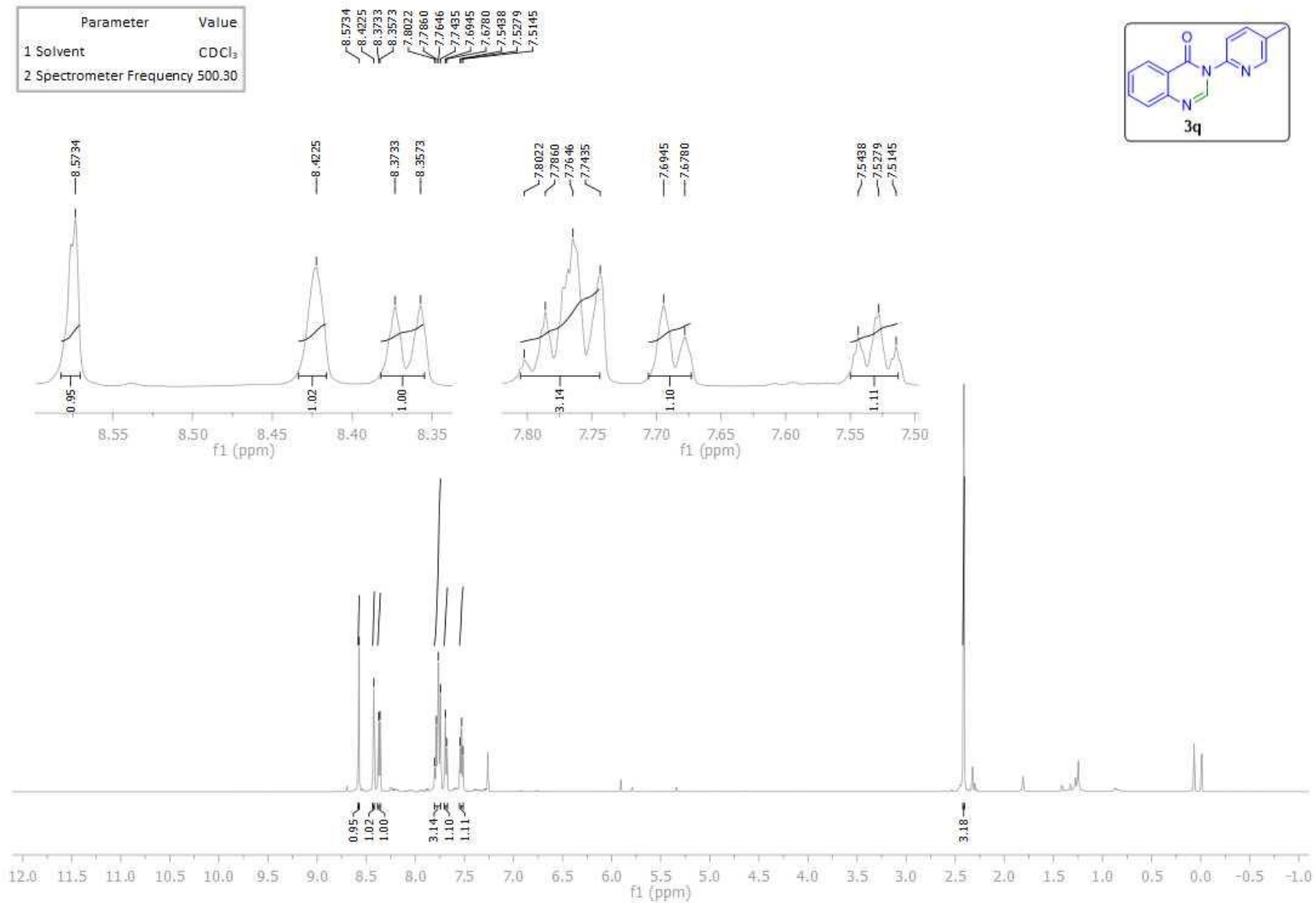


Figure S86. ¹H NMR spectra of 3-(5-Methylpyridin-2-yl)quinazolin-4(3H)-one (**3q**).

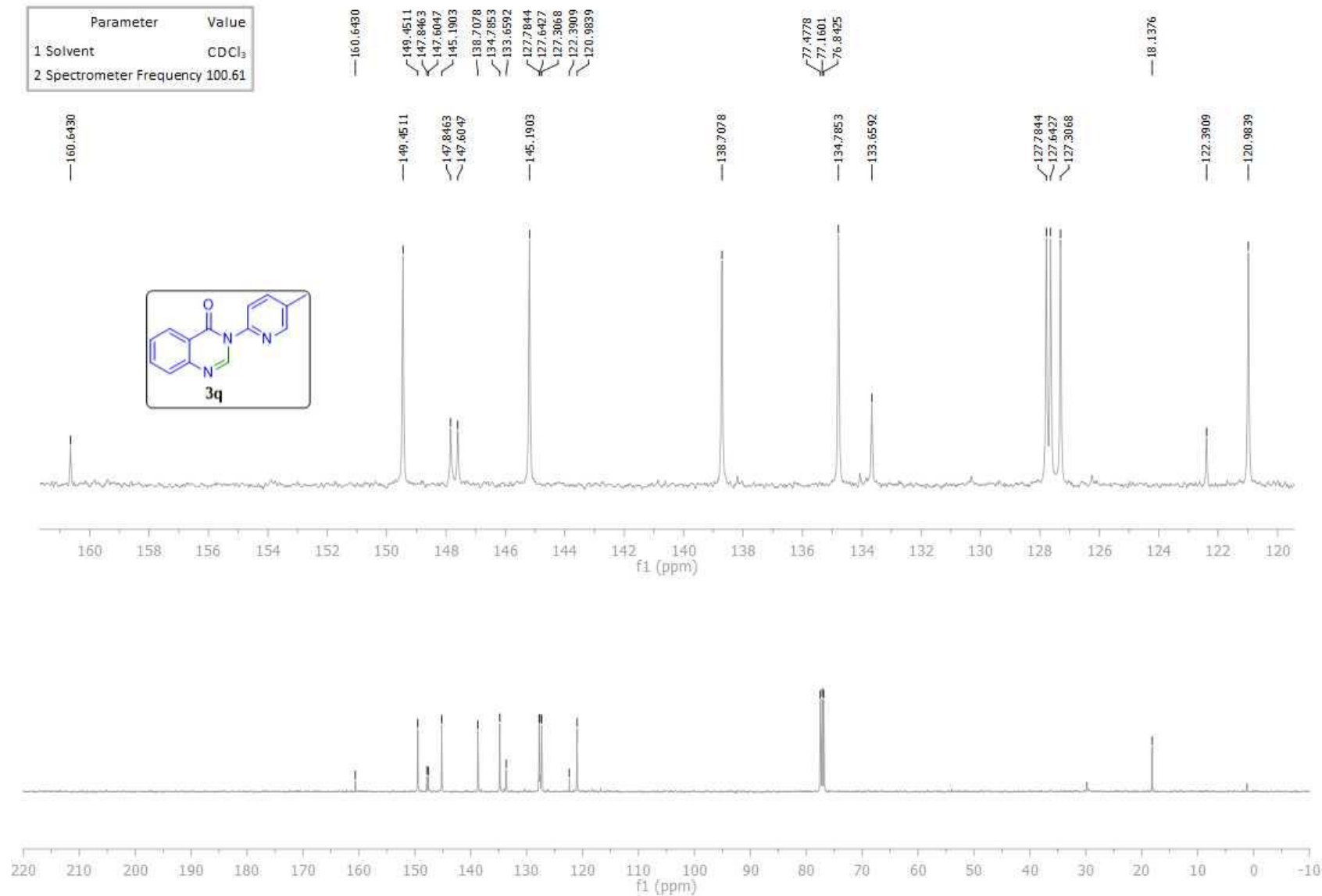


Figure S87. ¹³C NMR spectra of 3-(5-Methylpyridin-2-yl)quinazolin-4(3H)-one (**3q**).

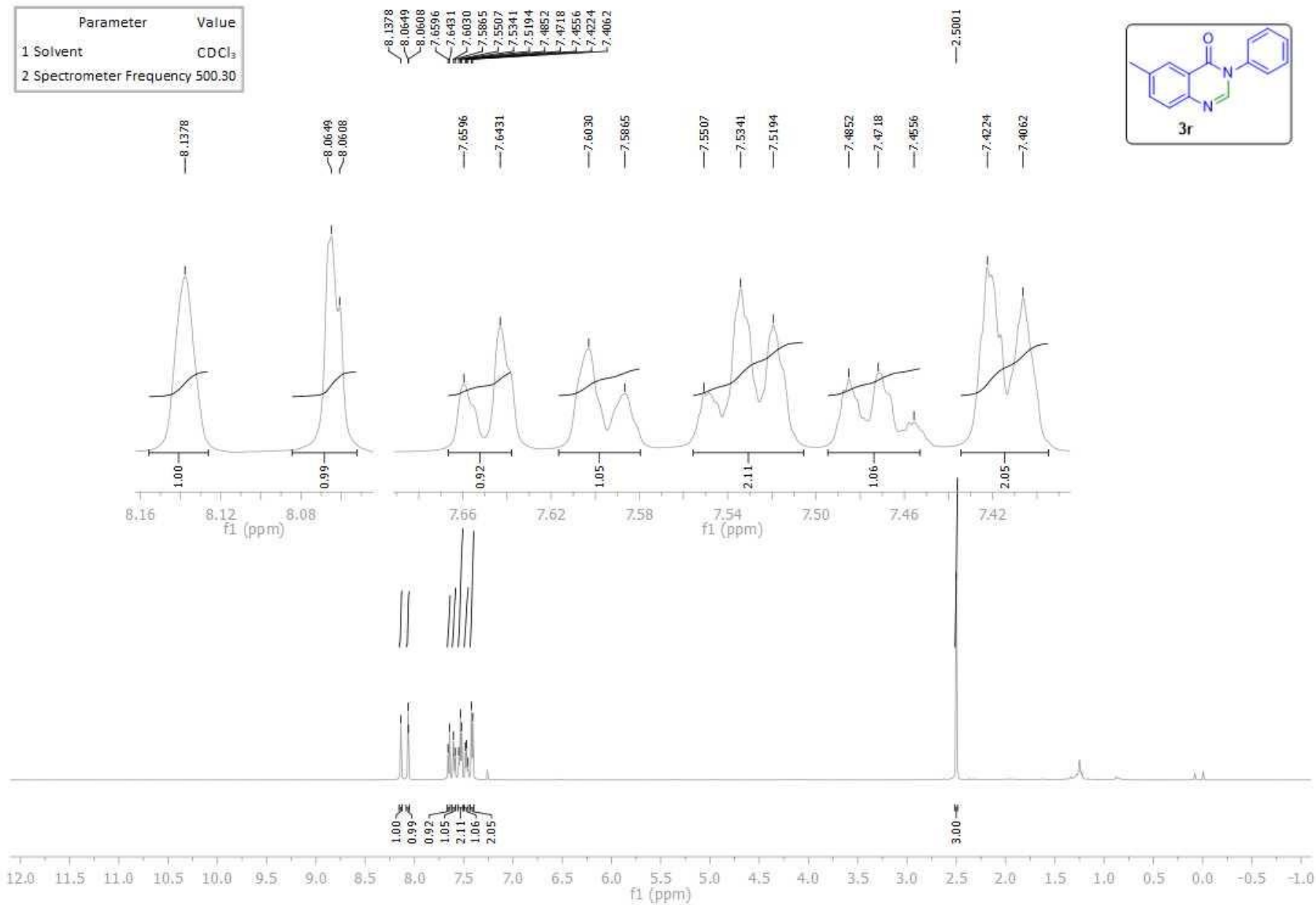


Figure S88. ¹H NMR spectra of 6-Methyl-3-phenylquinazolin-4(3H)-one (**3r**).

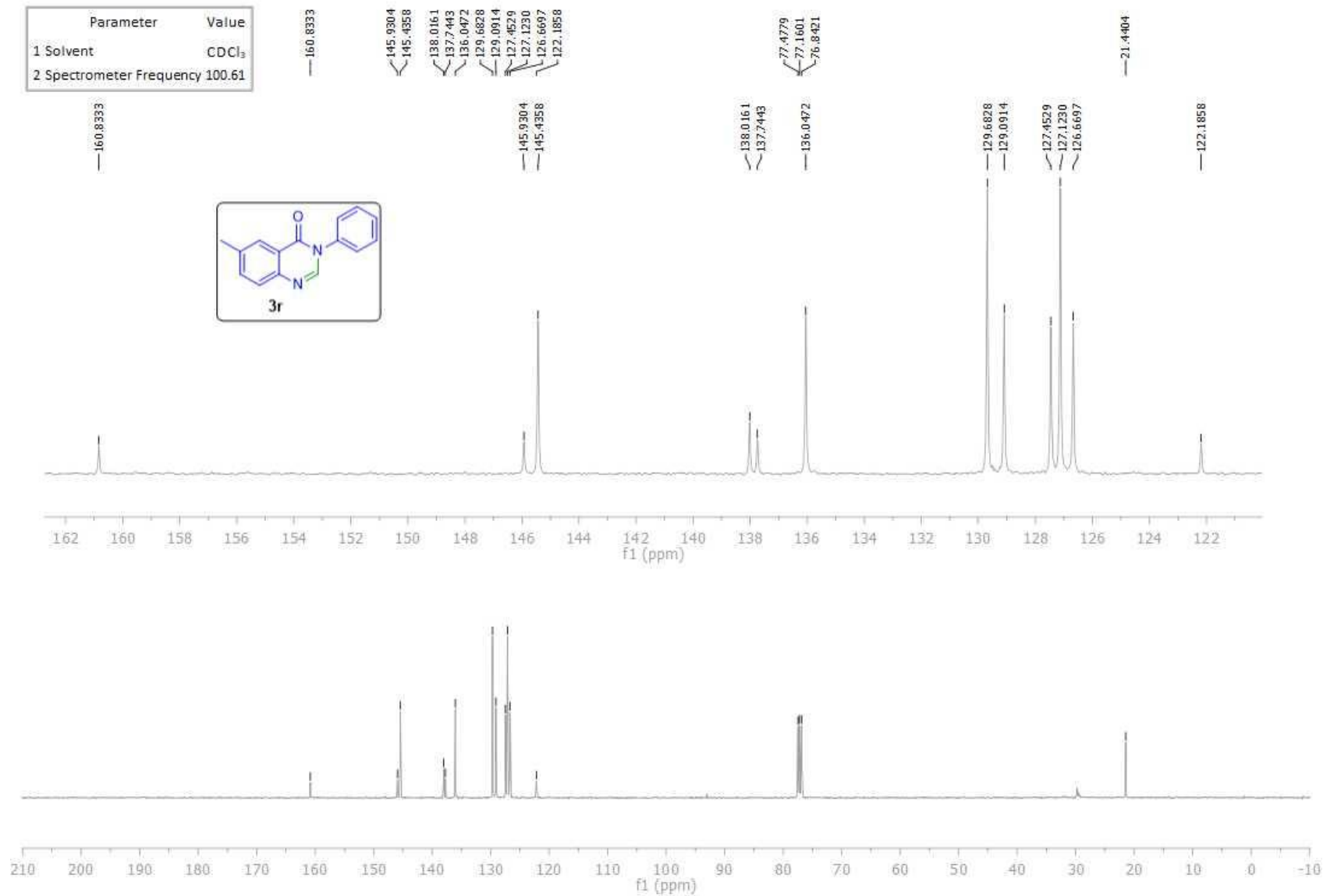


Figure S89. ¹³C NMR spectra of 6-Methyl-3-phenylquinazolin-4(3H)-one (**3r**).

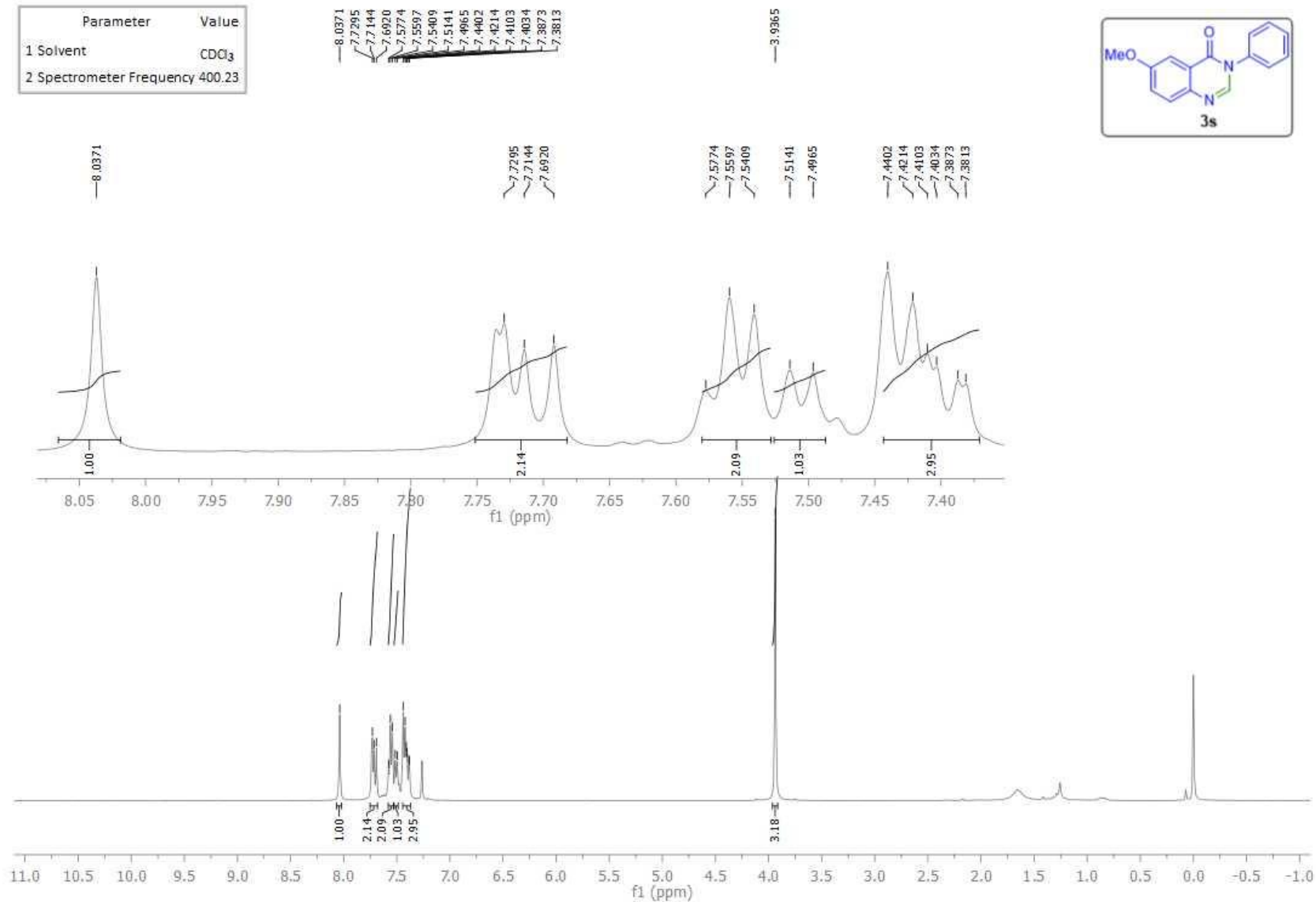


Figure S90. ¹H NMR spectra of 6-Methoxy-3-phenylquinazolin-4(3*H*)-one (**3s**).

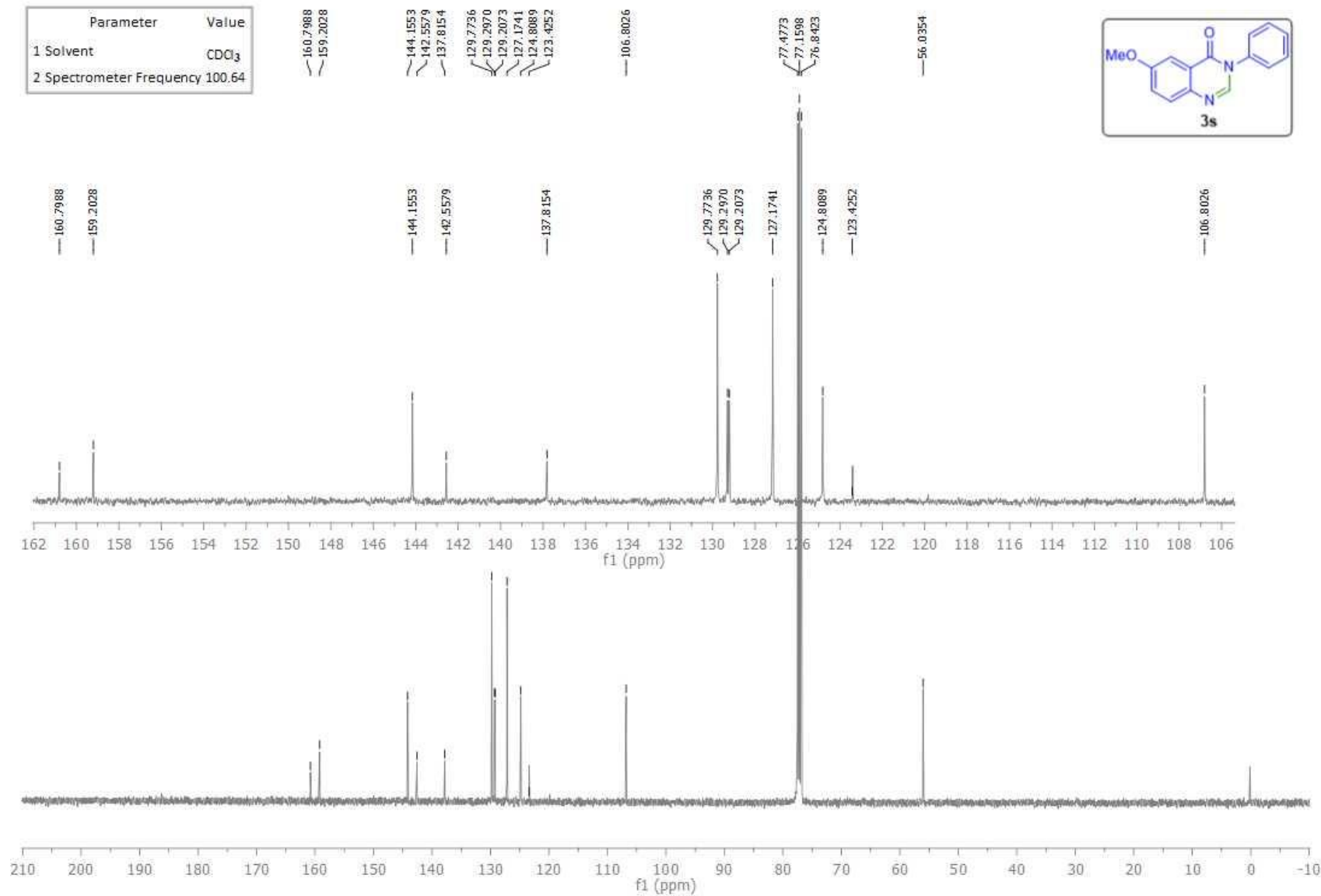


Figure S91. ¹³C NMR spectra of 6-Methoxy-3-phenylquinazolin-4(3*H*)-one (**3s**).

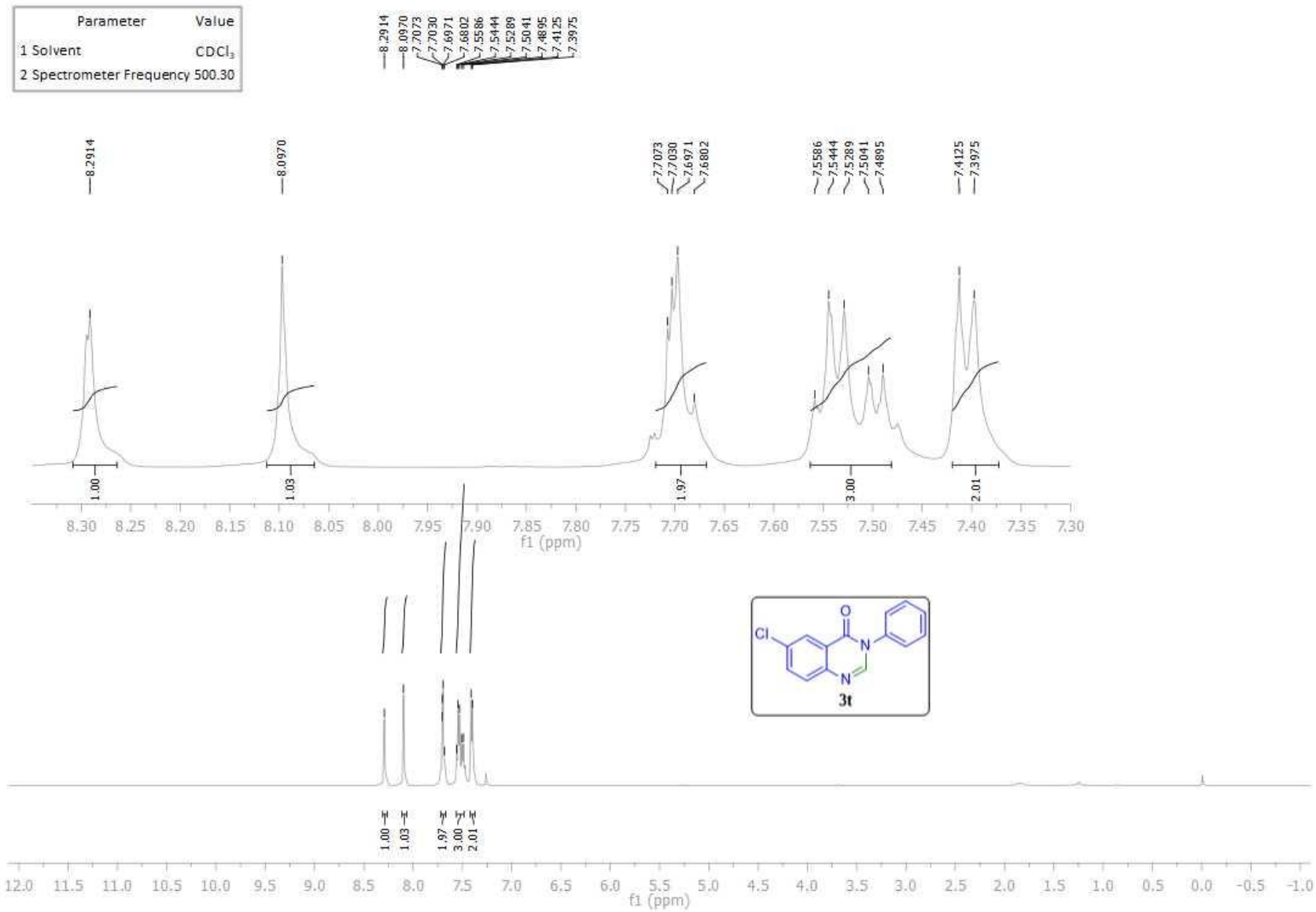


Figure S92. ¹H NMR spectra of 6-Chloro-3-phenylquinazolin-4(3*H*)-one (**3t**).

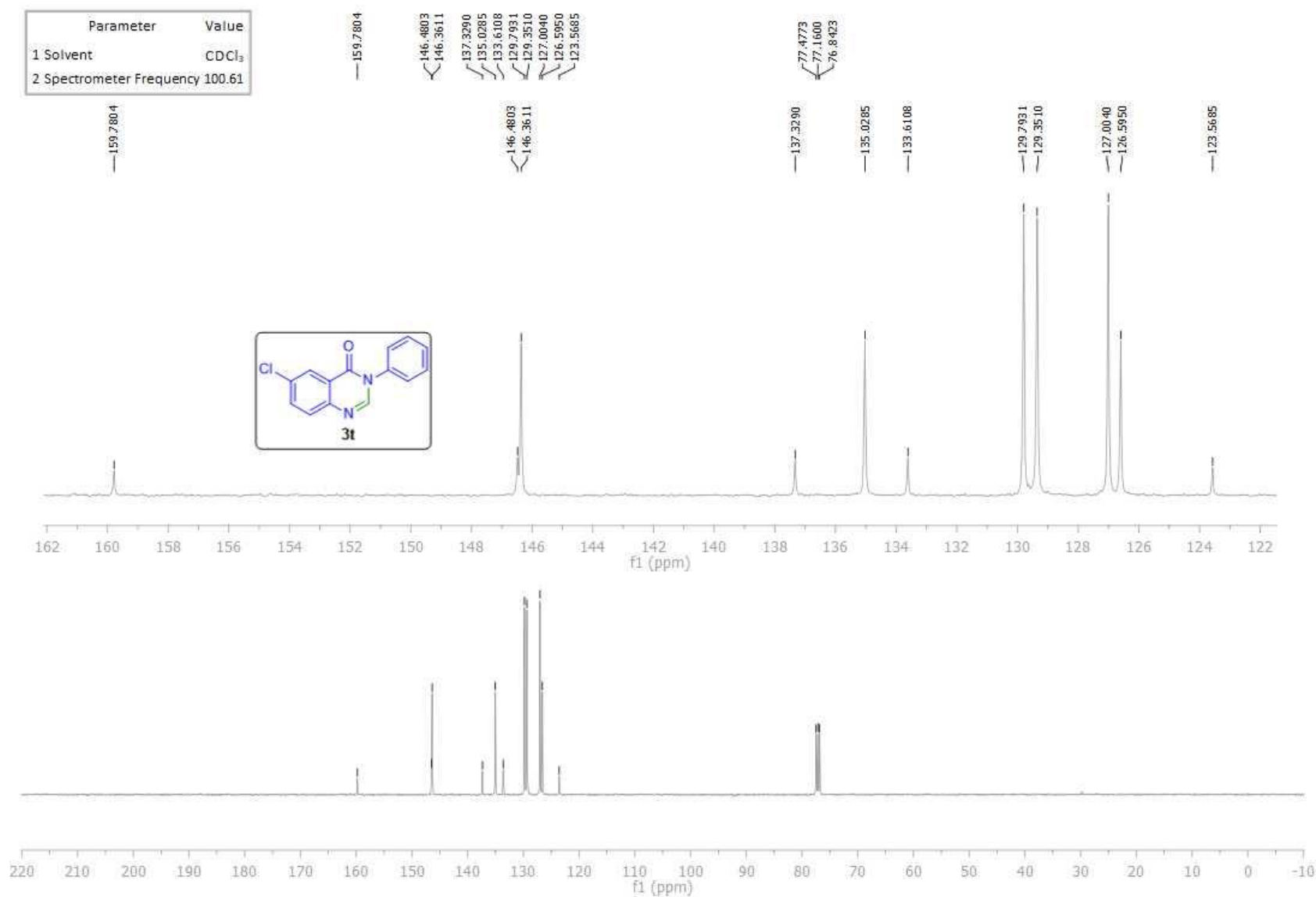


Figure S93. ¹³C NMR spectra of 6-Chloro-3-phenylquinazolin-4(3H)-one (**3t**).

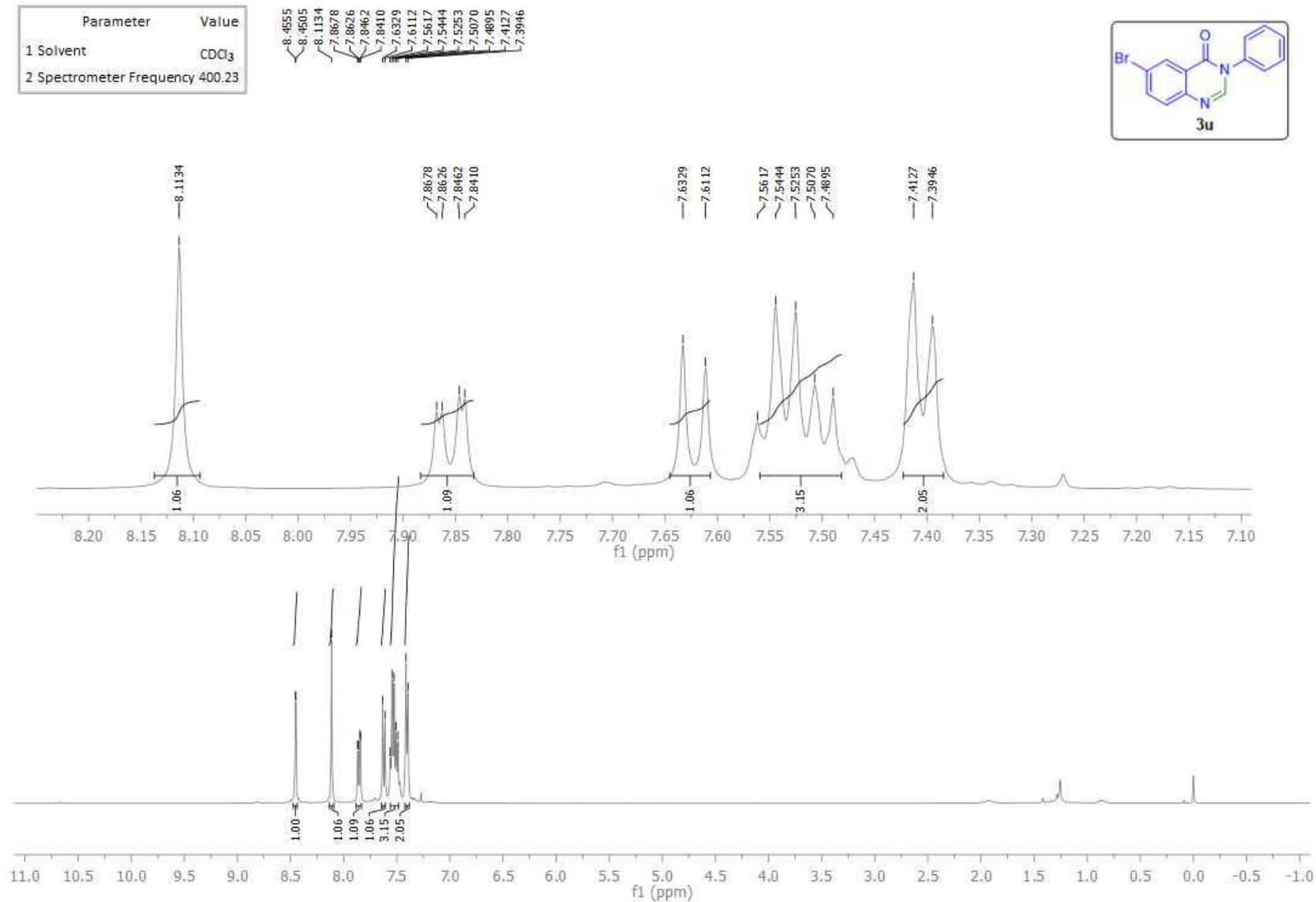


Figure S94. ¹H NMR spectra of 6-Bromo-3-phenylquinazolin-4(3H)-one (**3u**).

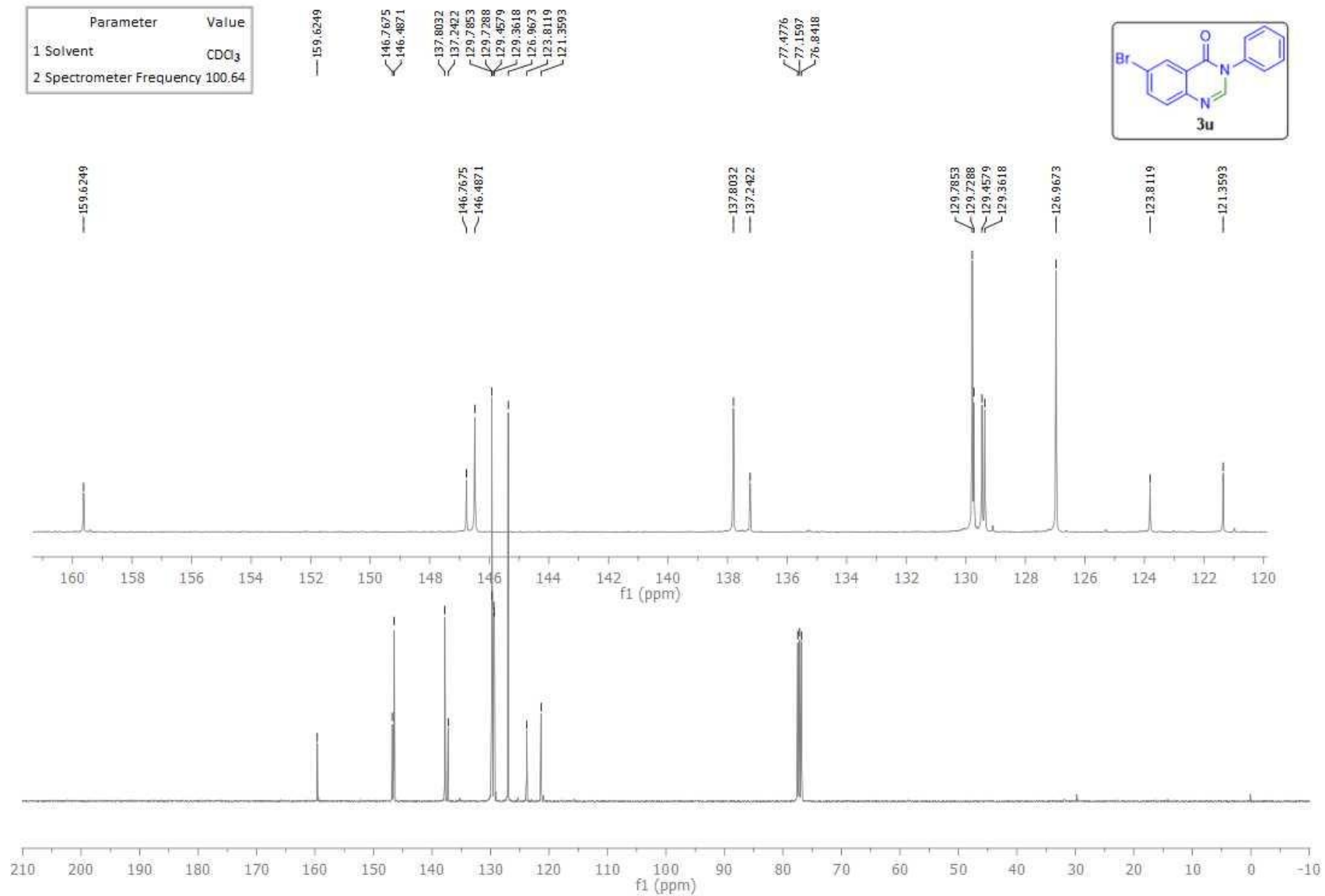


Figure S95. ¹³C NMR spectra of 6-Bromo-3-phenylquinazolin-4(3*H*)-one (**3u**).

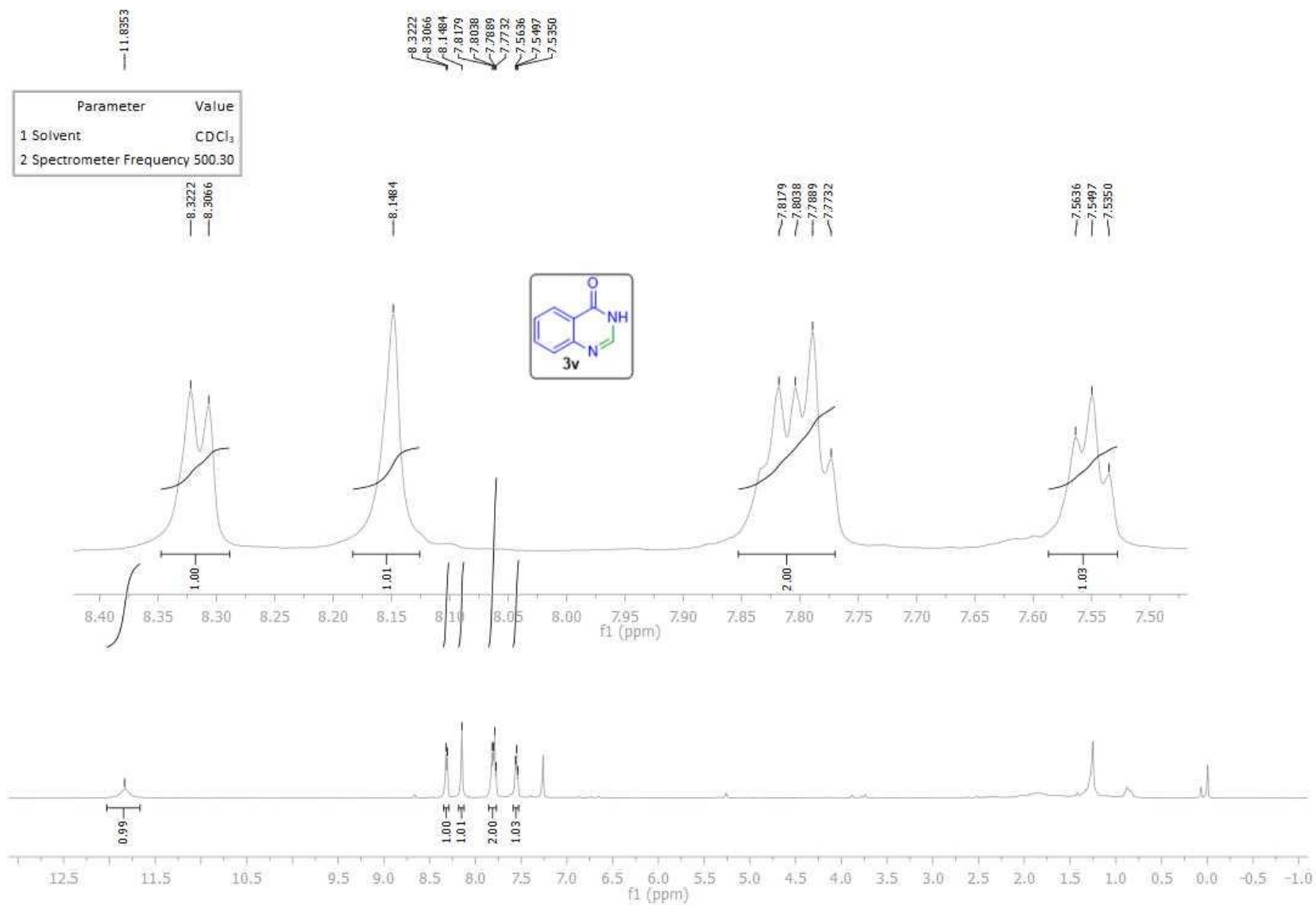


Figure S96. ¹H NMR spectra of Quinazolin-4(3H)-one (**3v**).

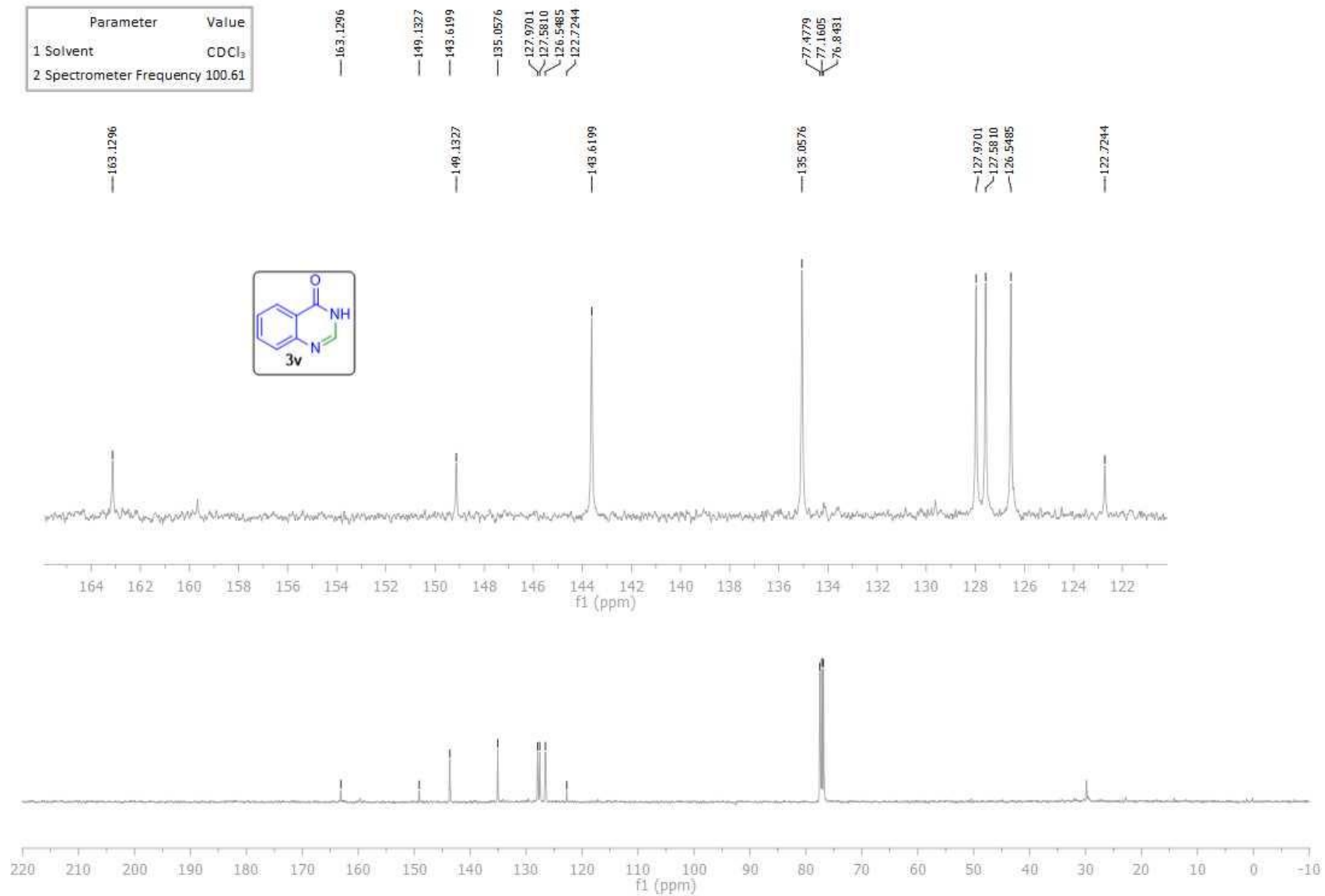


Figure S97. ¹³C NMR spectra of Quinazolin-4(3H)-one (3v).

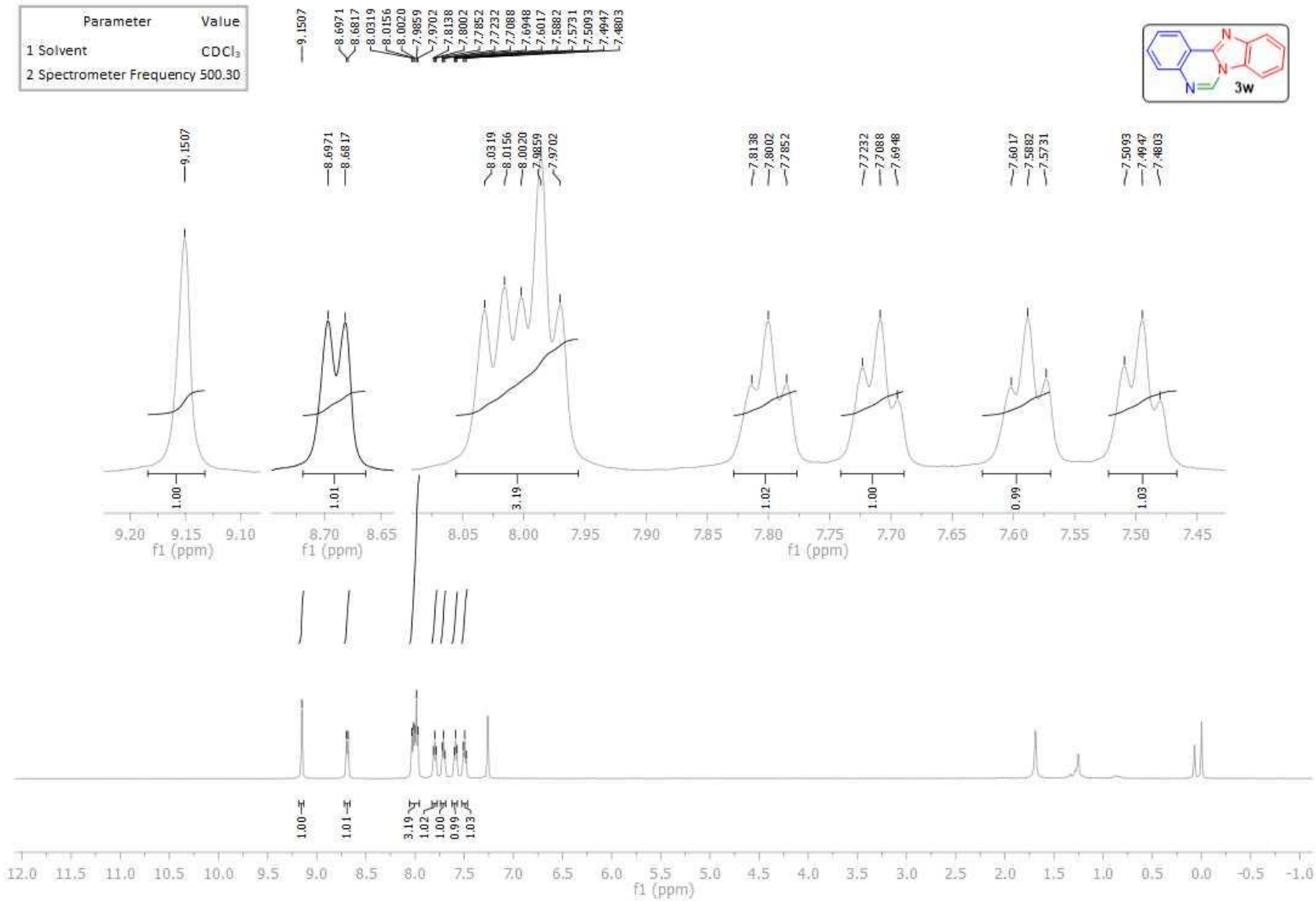


Figure S98. ¹H NMR spectra of Benzo[4,5]imidazo[1,2-*c*]quinazoline (**3w**).

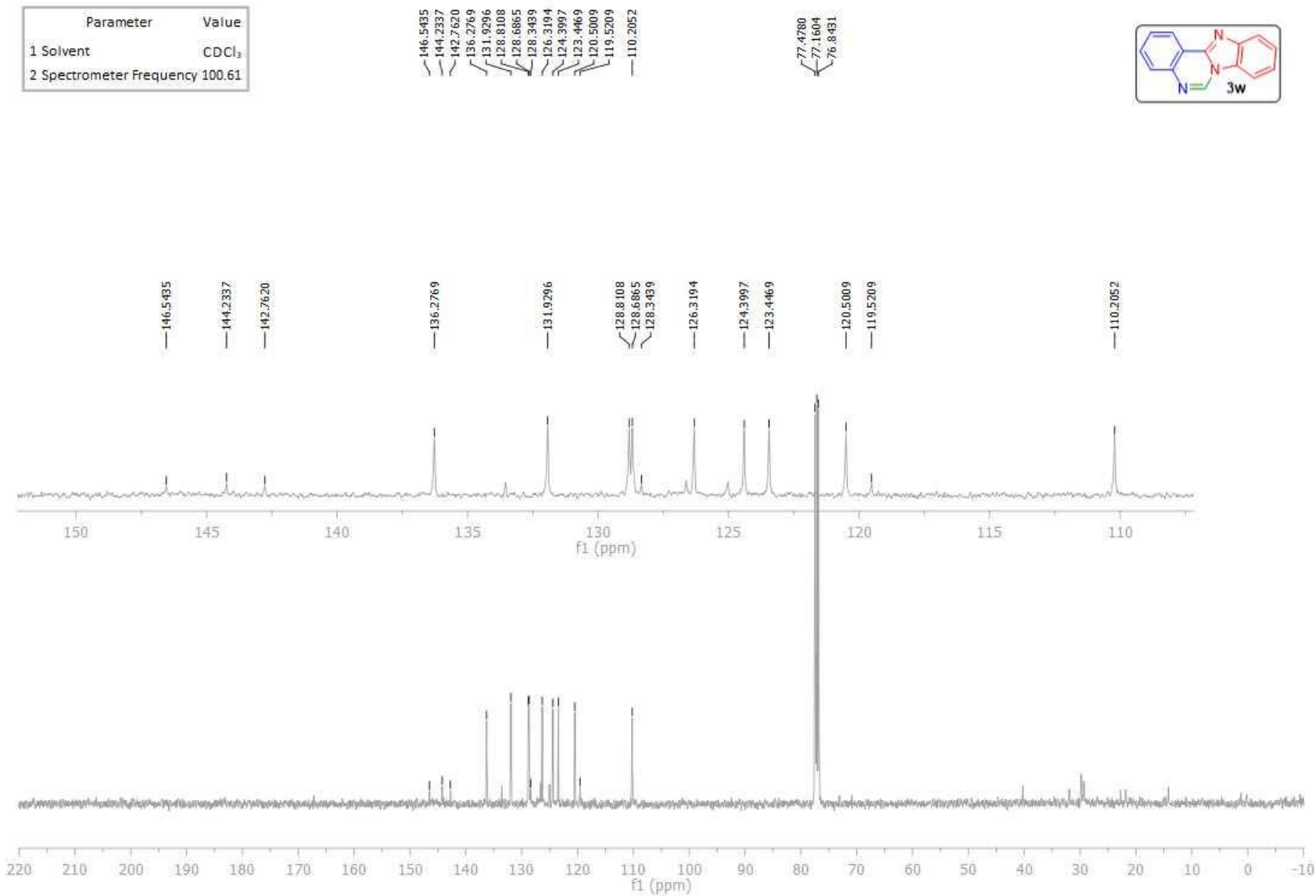


Figure S99. ¹³C NMR spectra of Benzo[4,5]imidazo[1,2-*c*]quinazoline (**3w**).

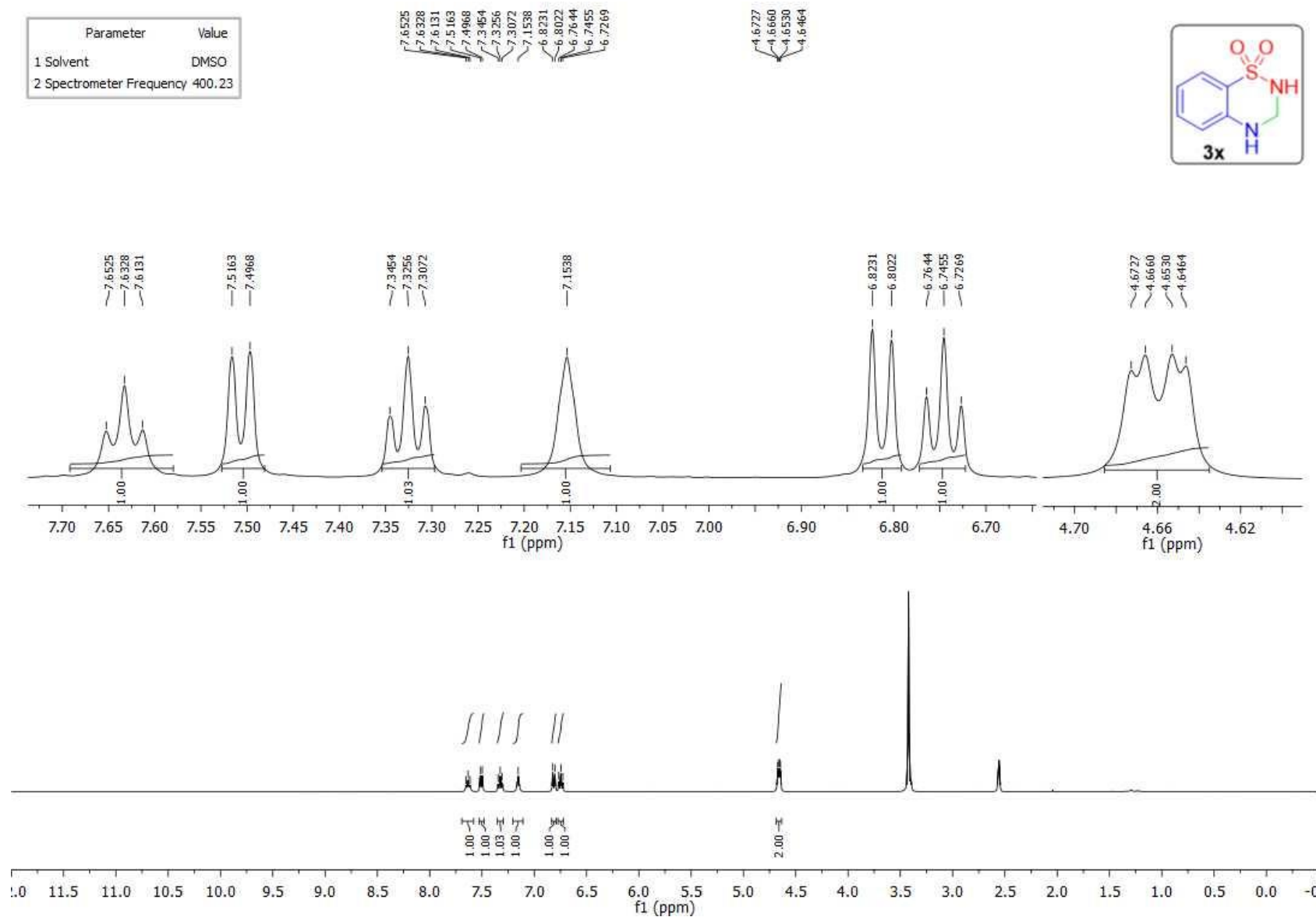


Figure S100. ¹H NMR spectra of 3,4-Dihydro-2H-benzo[e][1,2,4]thiadiazine 1,1-dioxide (**3x**).

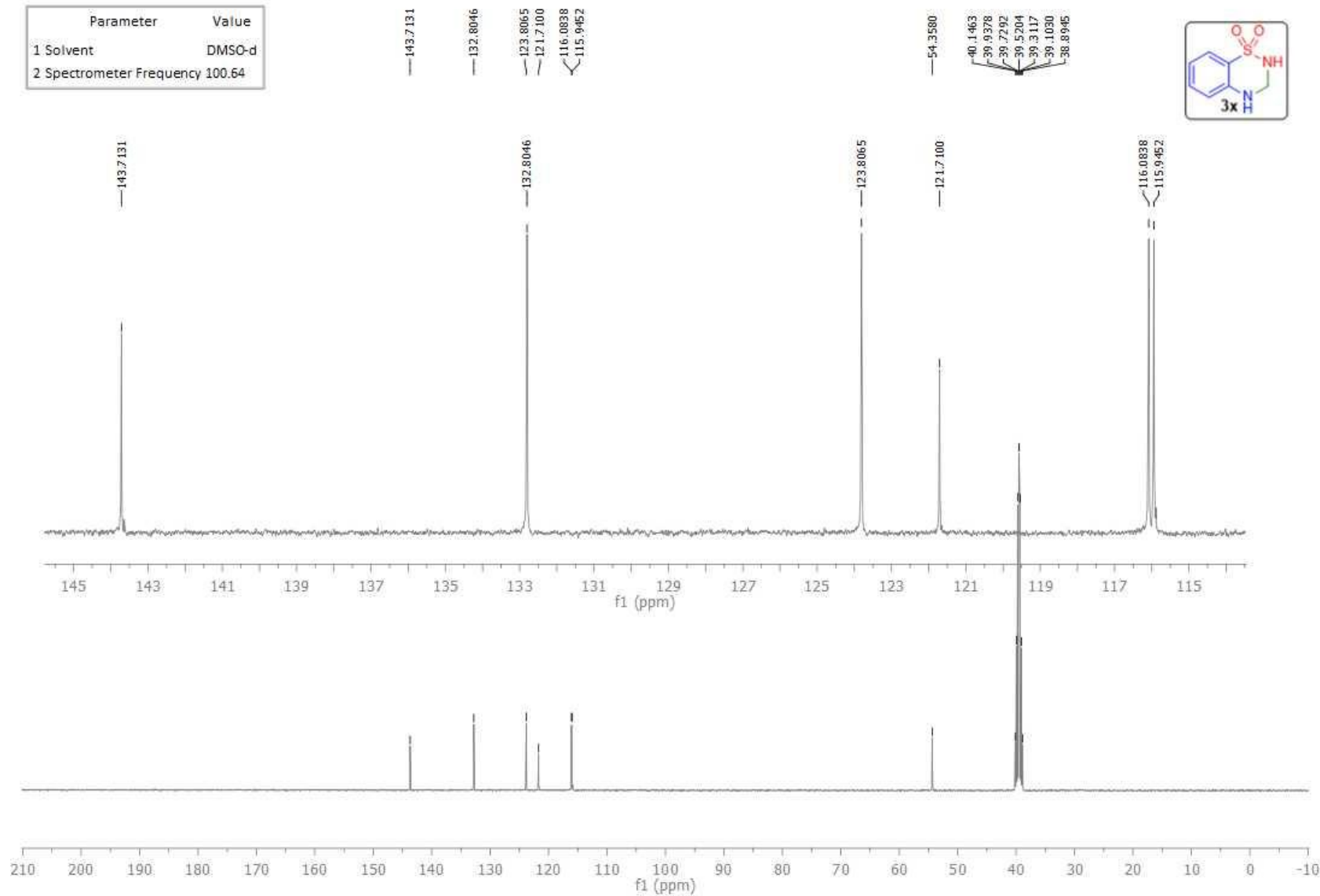


Figure S101. ^{13}C NMR spectra of 3,4-Dihydro-2*H*-benzo[*e*][1,2,4]thiadiazine 1,1-dioxide (**3x**).

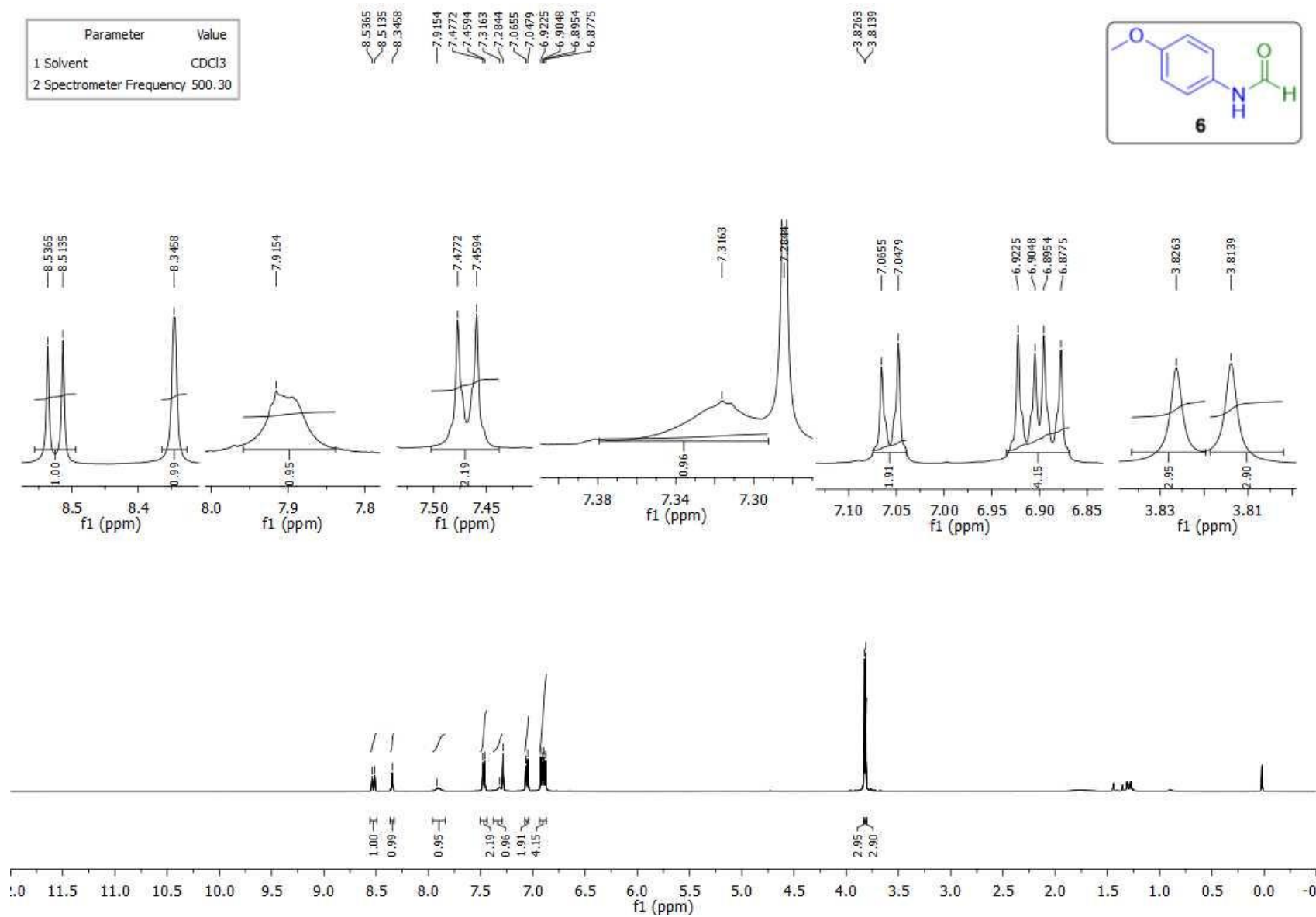


Figure S102. ¹H NMR spectra of *N*-(4-Methoxyphenyl)formamide (**6**).

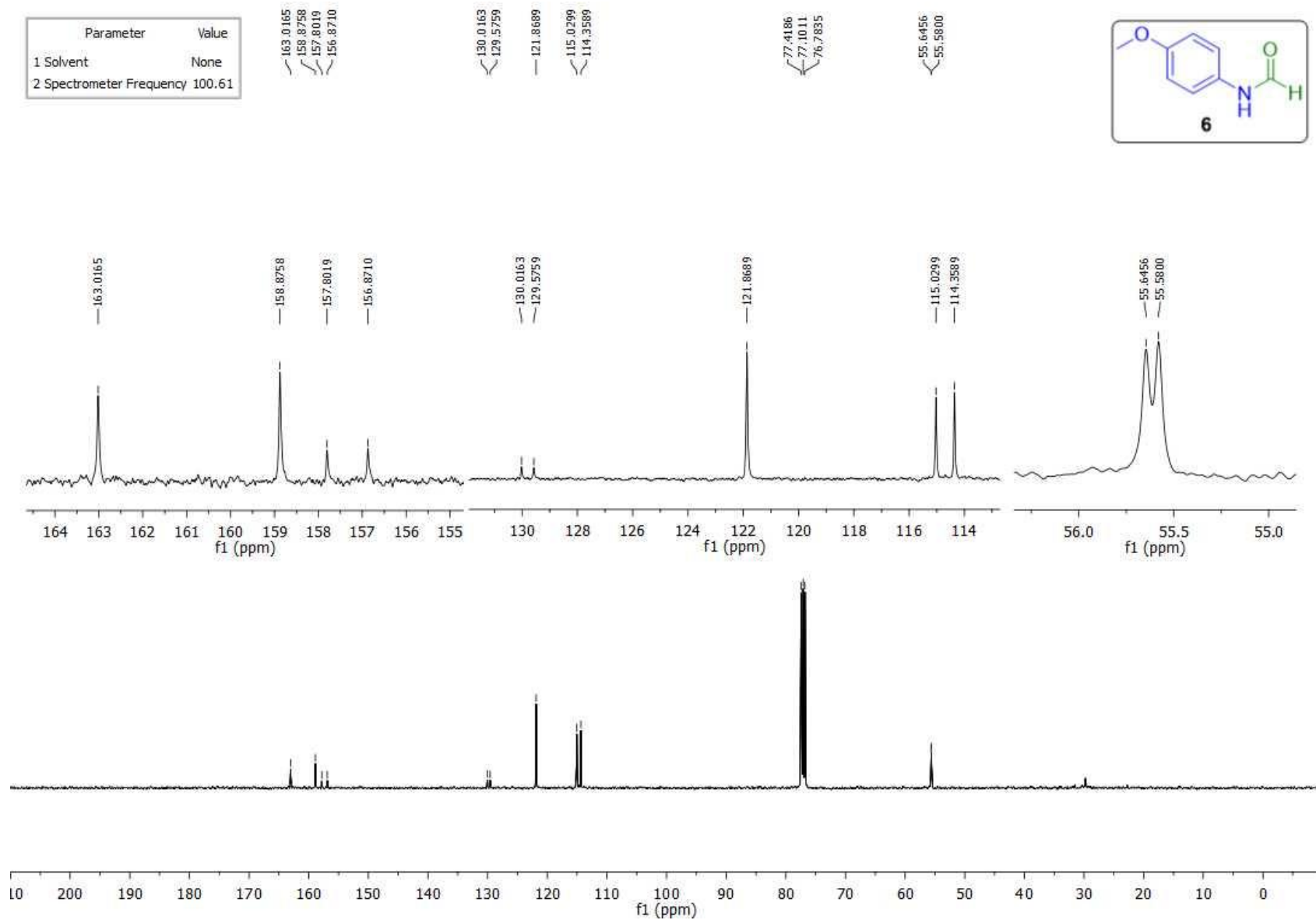


Figure S103. ^{13}C NMR spectra of *N*-(4-Methoxyphenyl)formamide (**6**).