

Supporting Information to:

***Trans*-Chloro(1-Naphthyl)bis(Triphenylphosphine)Nickel(II)/PCy₃ Catalyzed**

Cross-Coupling of Aryl and Heteroaryl Neopentylglycolboronates with Aryl and

Heteroaryl Mesylates and Sulfamates at Room Temperature

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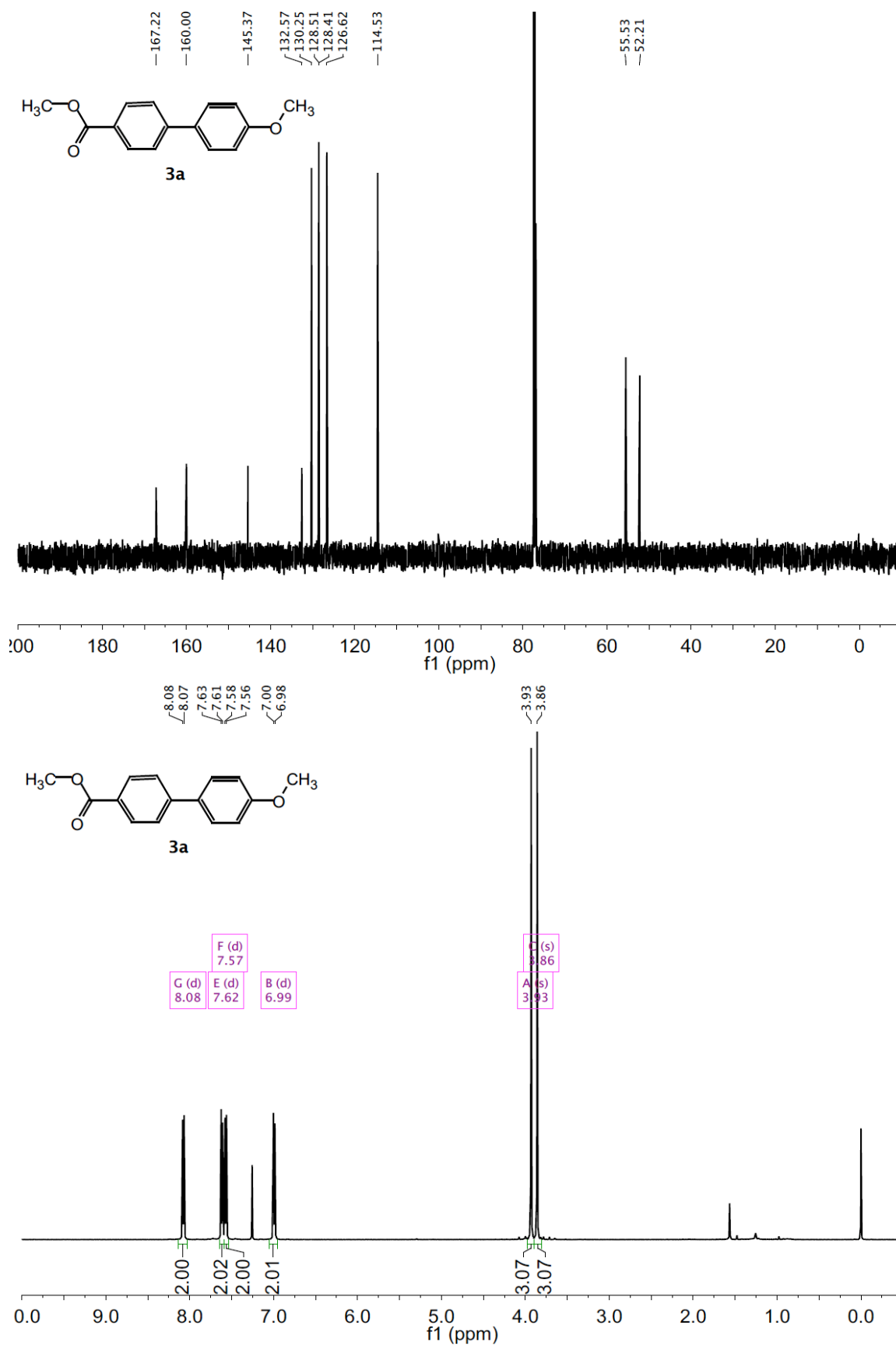


Figure SF1. ^1H NMR (top, 500 MHz) and ^{13}C NMR (bottom, 125 MHz) spectra of methyl 4'-methoxy-[1,1'-biphenyl]-4-carboxylate (**3a**) in CDCl_3



Figure SF2. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of dimethyl [1,1'-biphenyl]-4,4'-dicarboxylate (**3b**) in CDCl₃

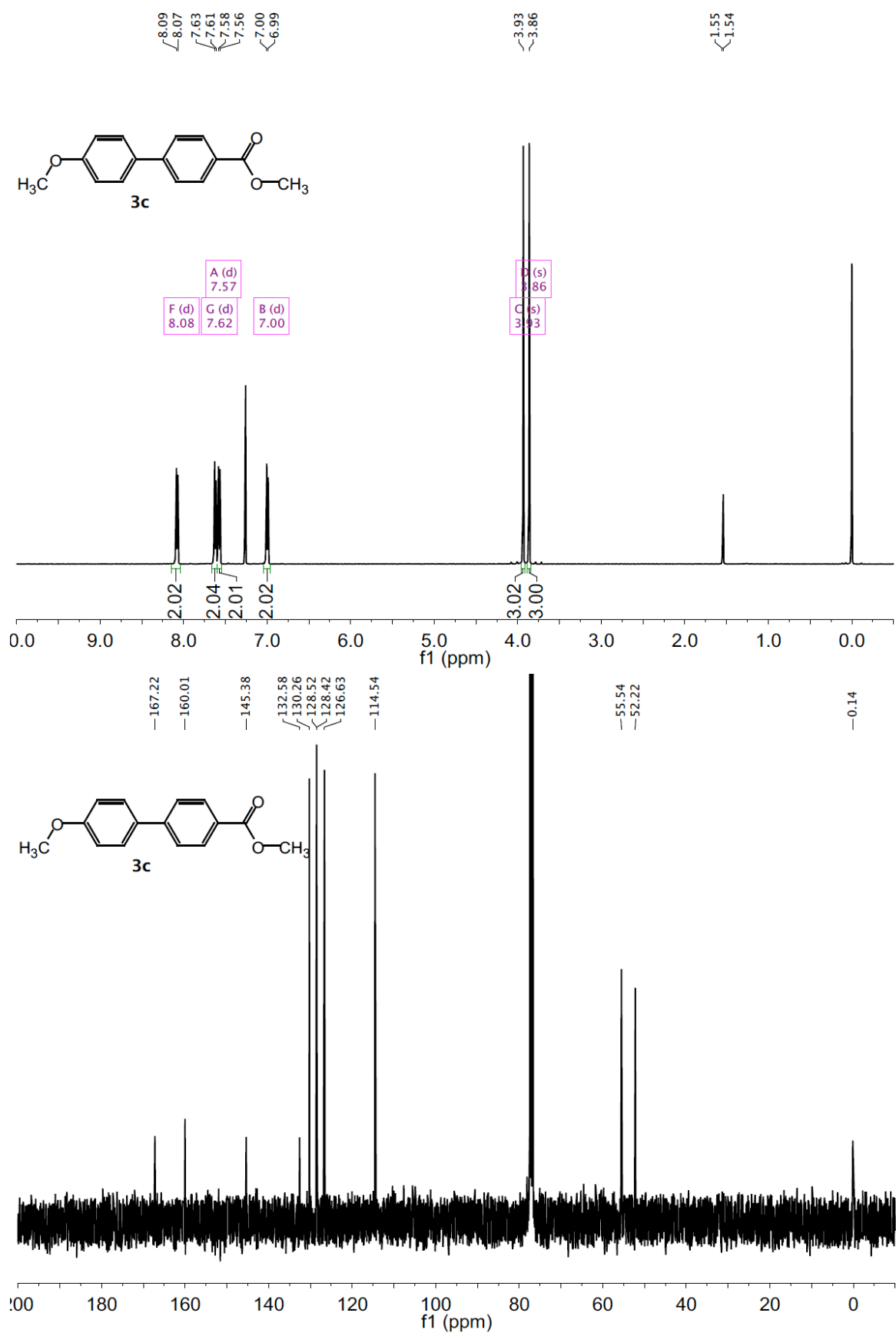


Figure SF3. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 4'-methoxy-[1,1'-biphenyl]-4-carboxylate (**3c**) in CDCl₃

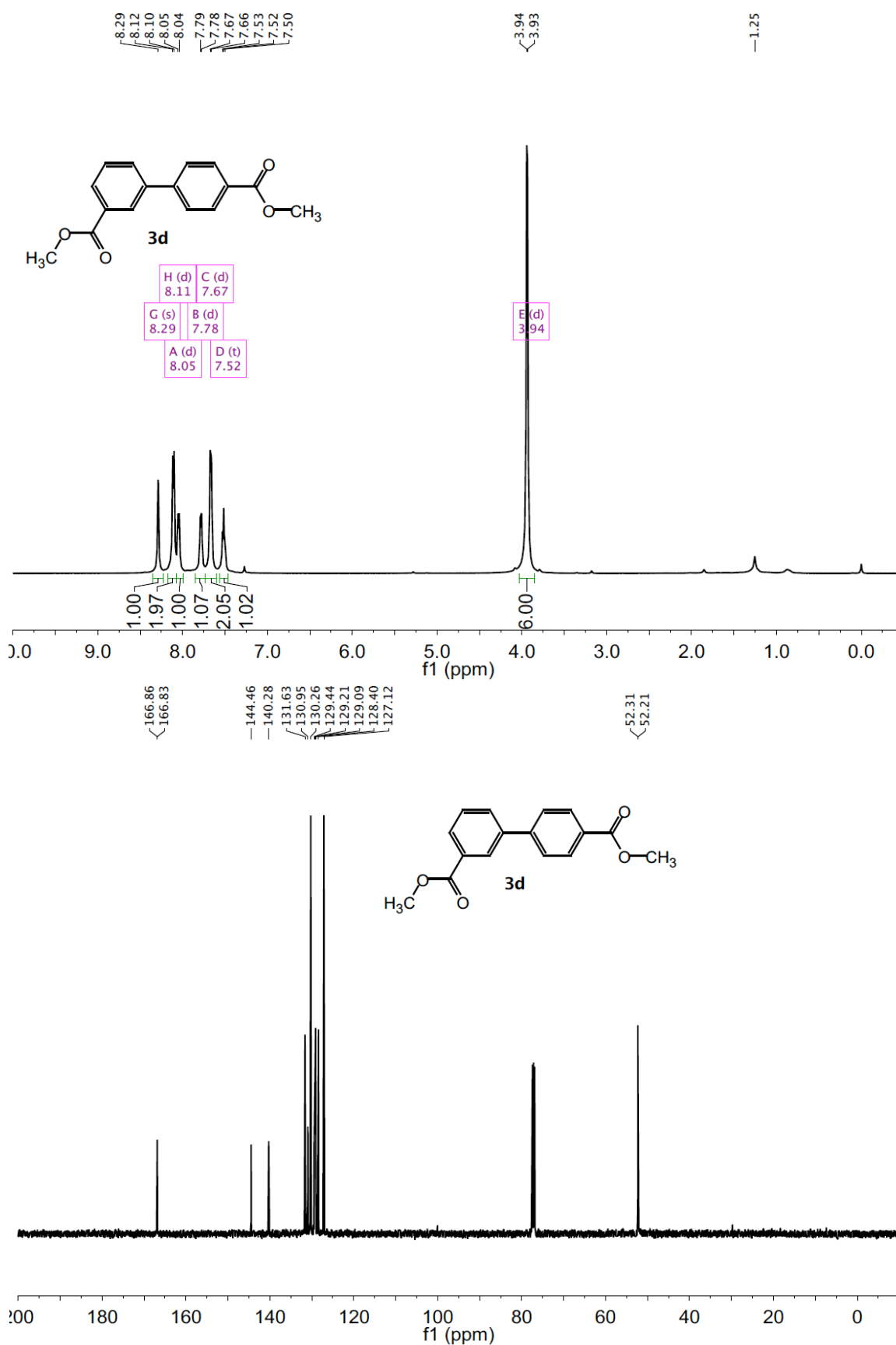


Figure SF4. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of dimethyl [1,1'-biphenyl]-3,4'-dicarboxylate (**3d**) in CDCl₃

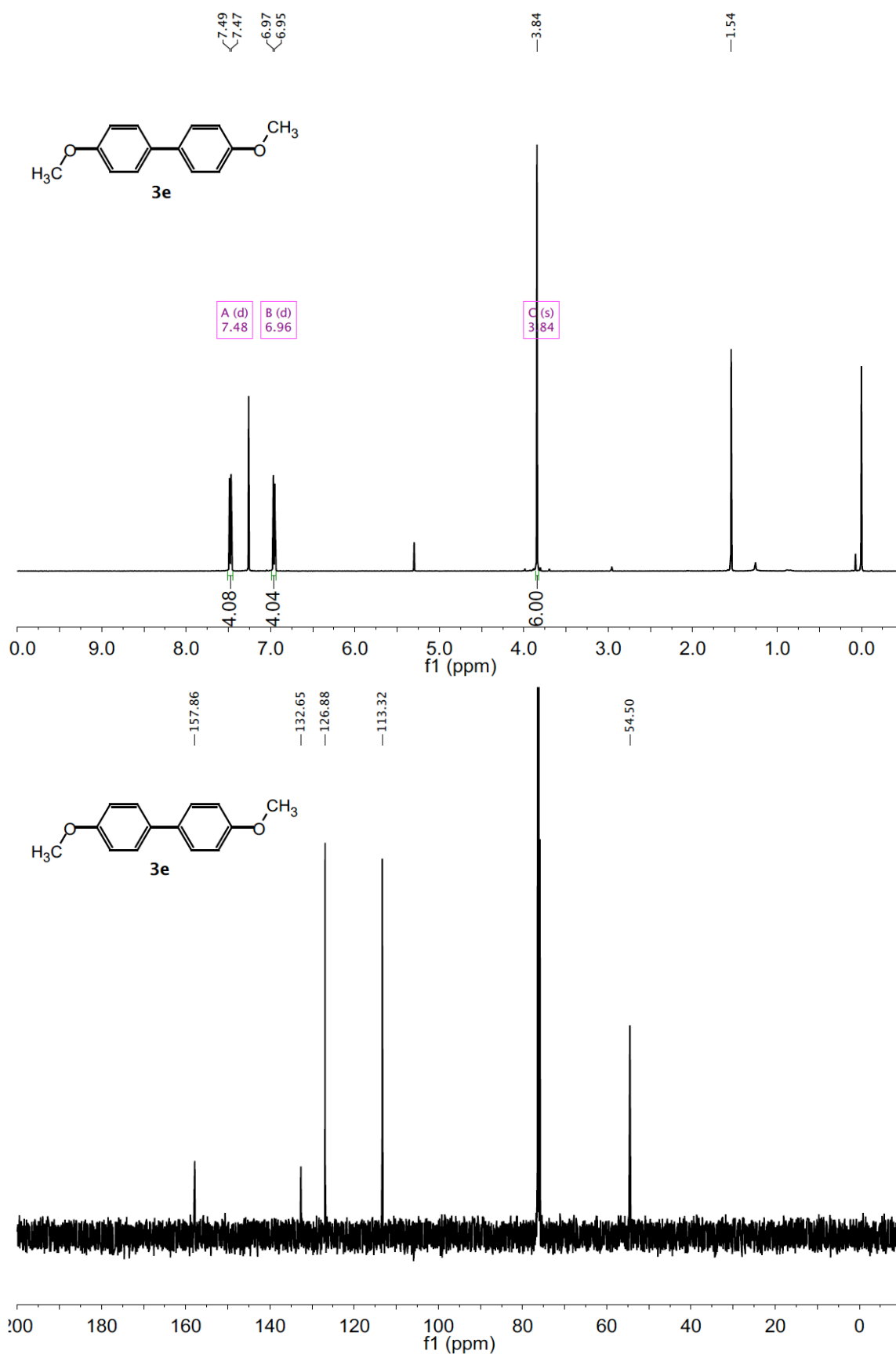


Figure SF5. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 4,4'-dimethoxy-1,1'-biphenyl (**3e**) in CDCl₃

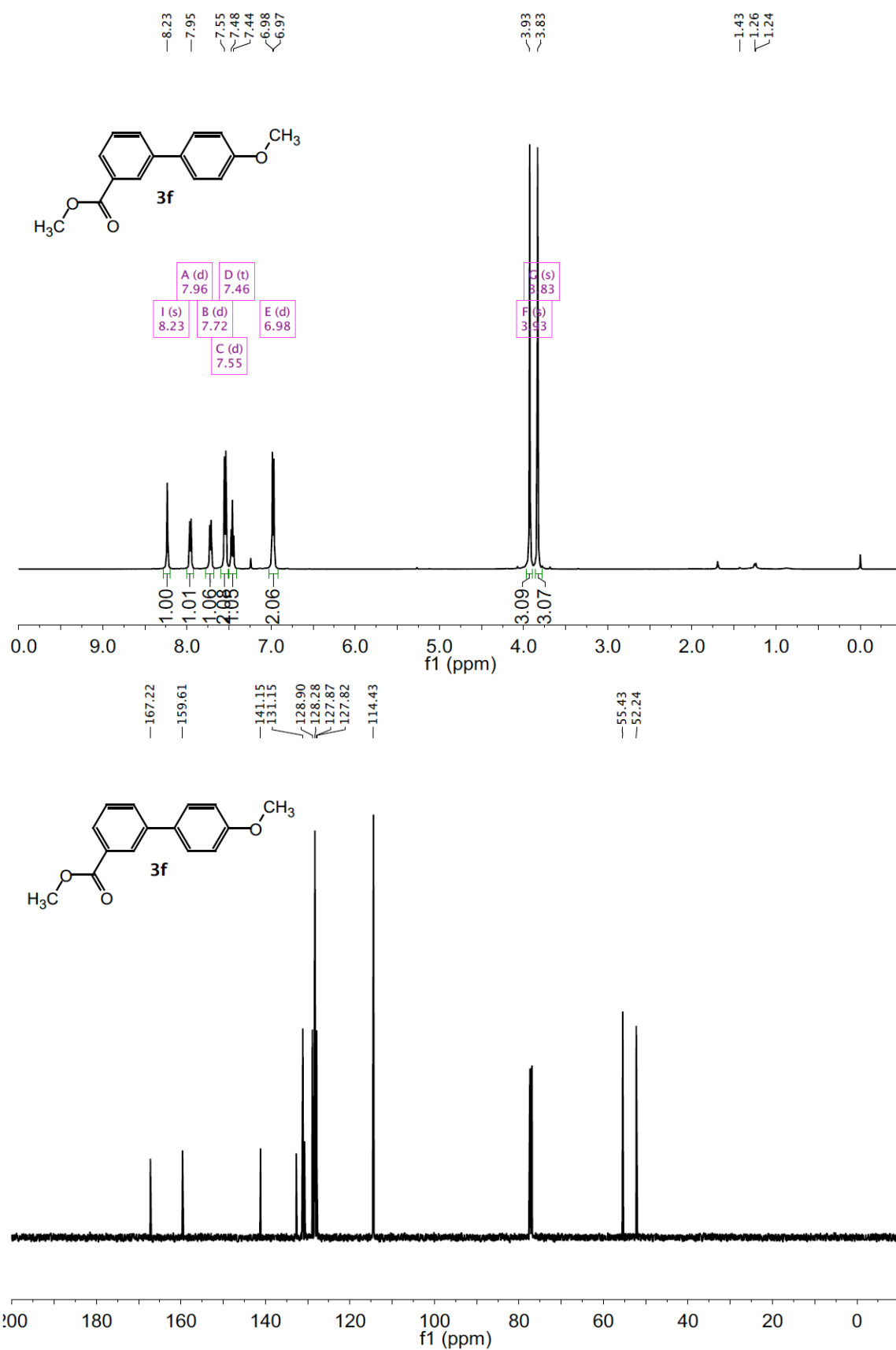


Figure SF6. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 4'-methoxy-[1,1'-biphenyl]-3-carboxylate (**3f**) in CDCl₃

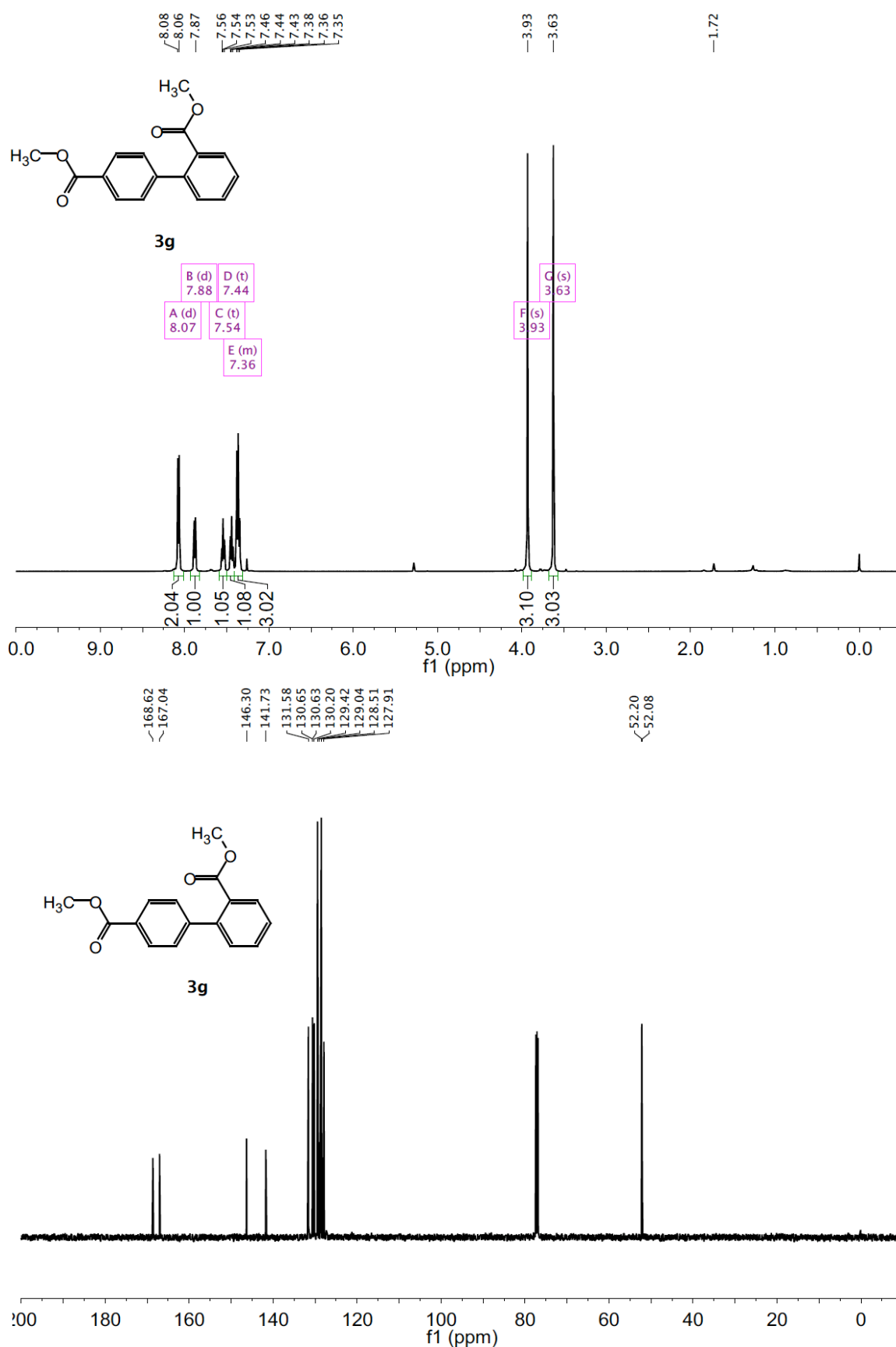


Figure SF7. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of dimethyl [1,1'-biphenyl]-2,4'-dicarboxylate (**3g**) in CDCl₃

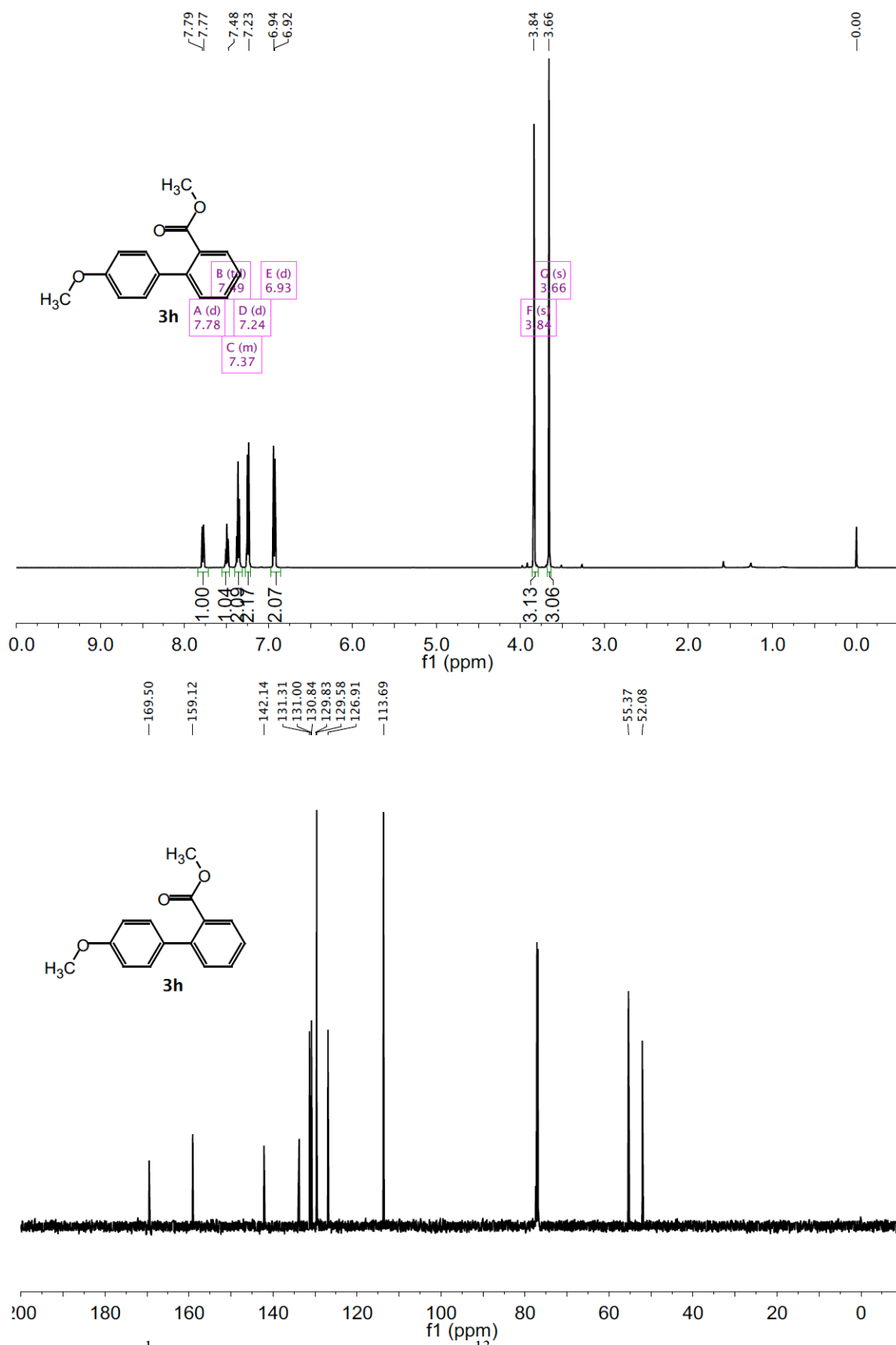


Figure SF8. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 4'-methoxy-[1,1'-biphenyl]-2-carboxylate (**3h**) in CDCl₃

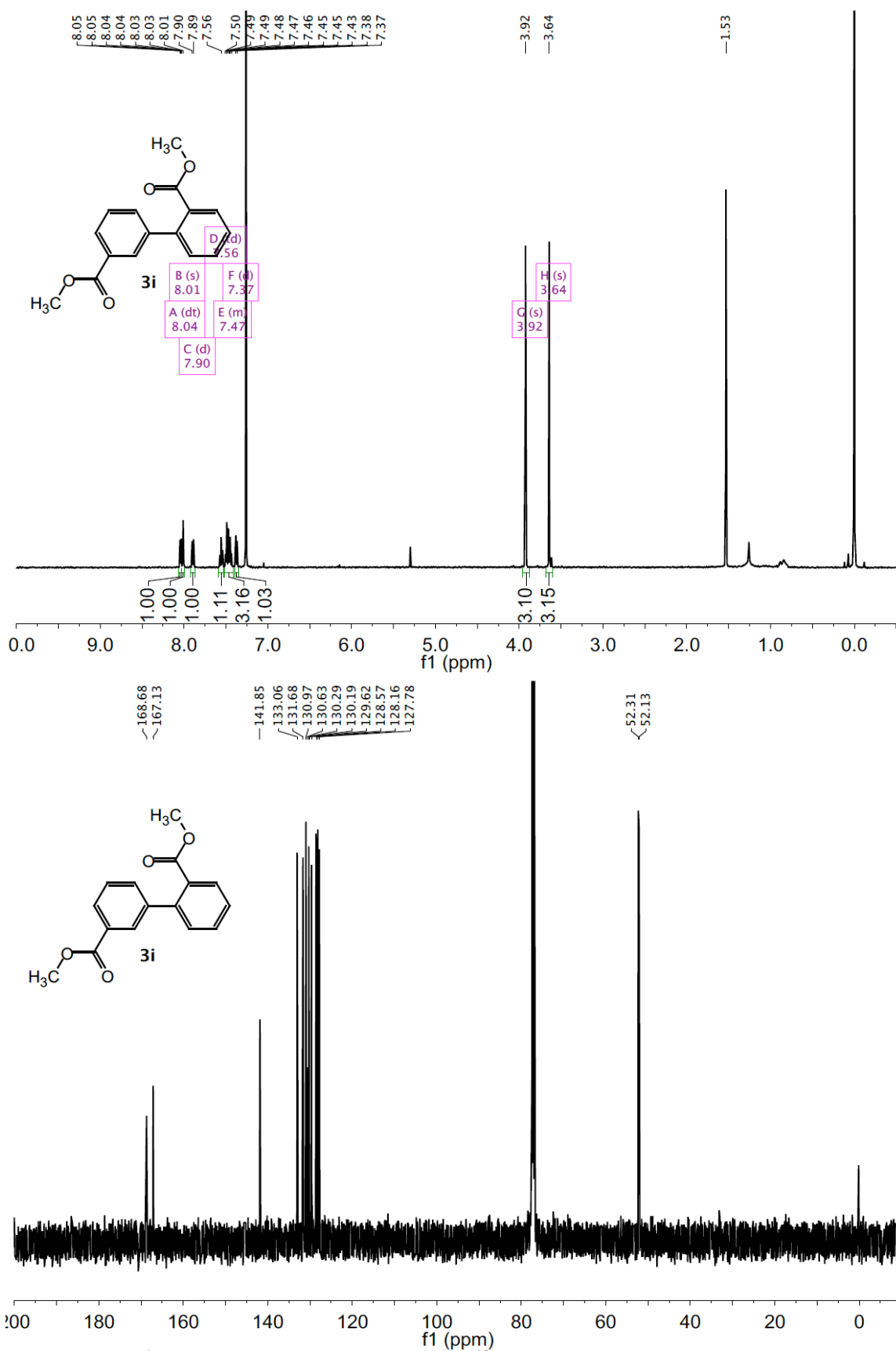


Figure SF9. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of dimethyl [1,1'-biphenyl]-2,3'-dicarboxylate (**3i**) in CDCl₃

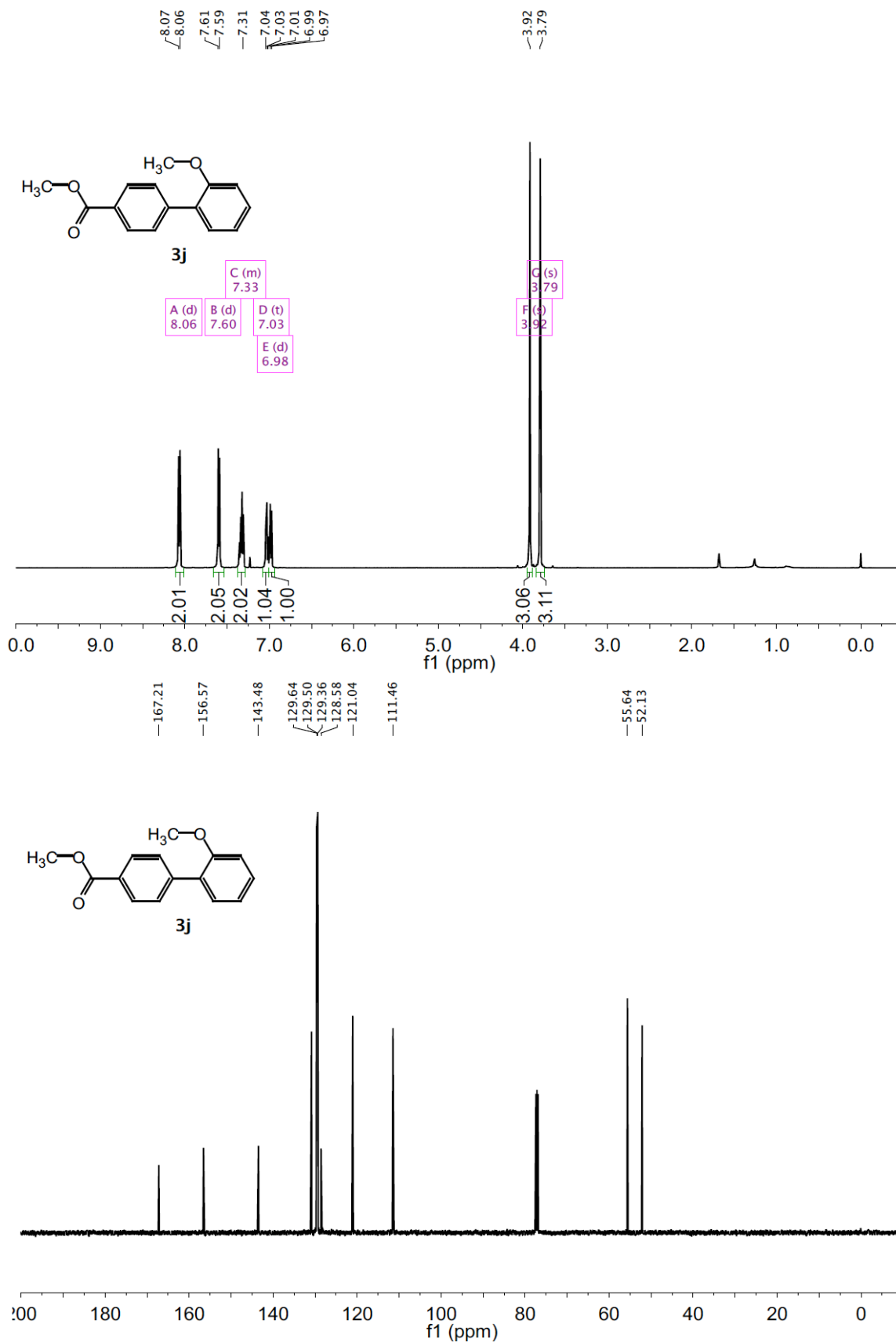


Figure SF10. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 2'-methoxy-[1,1'-biphenyl]-4-carboxylate (**3j**) in CDCl₃

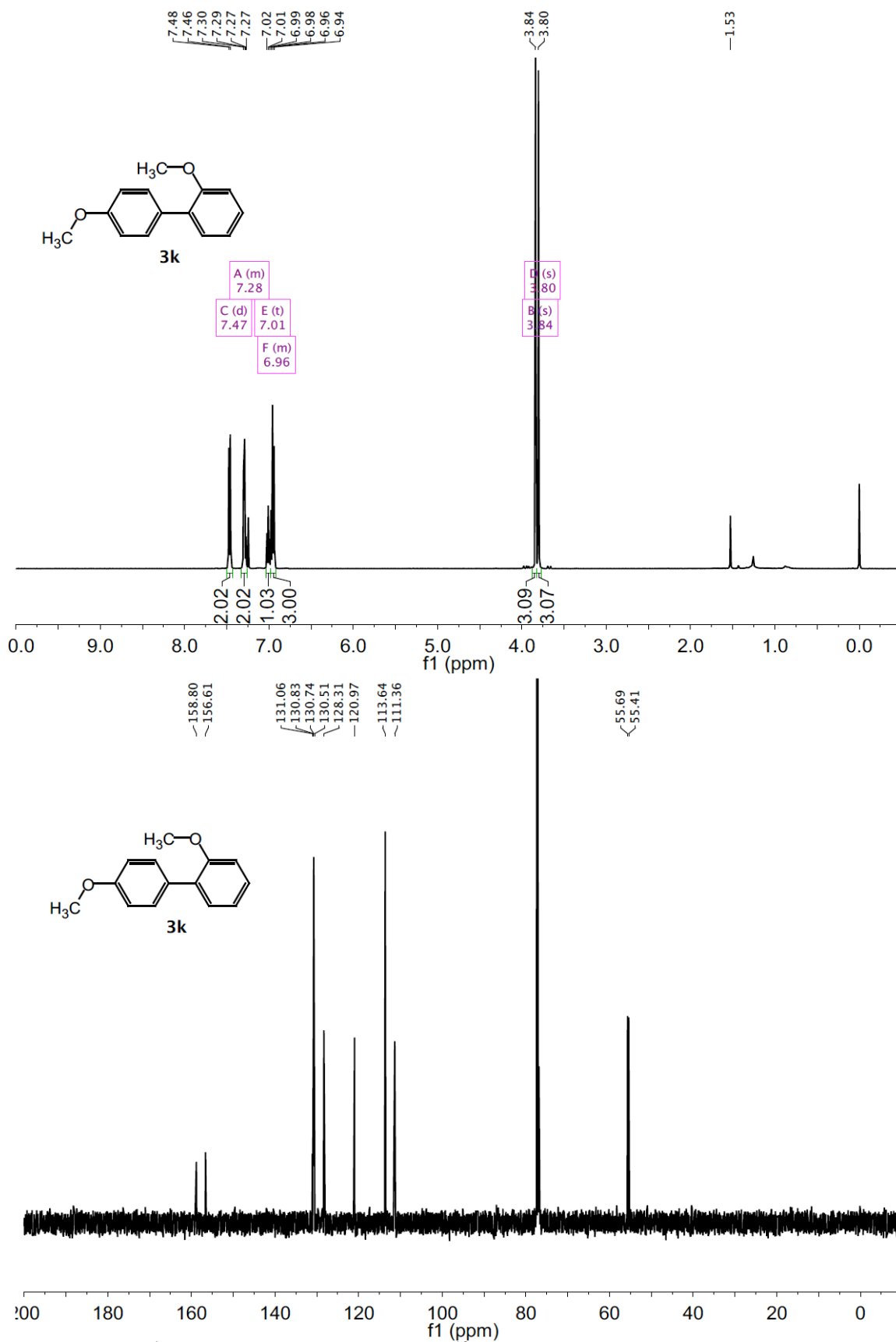


Figure SF11. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 2,4'-dimethoxy-1,1'-biphenyl (**3k**) in CDCl₃

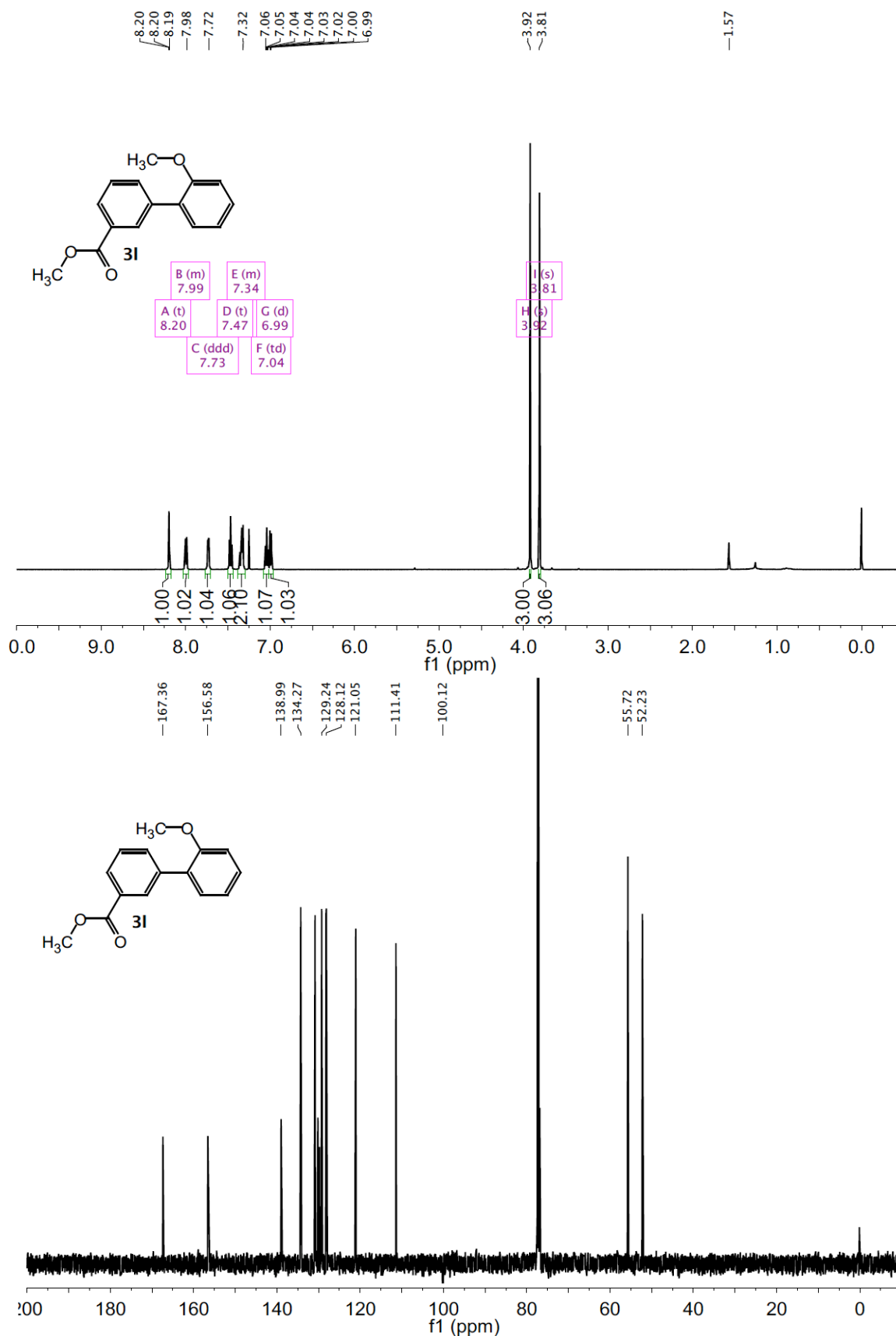


Figure SF12. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 2'-methoxy-[1,1'-biphenyl]-3-carboxylate (**3I**) in CDCl₃

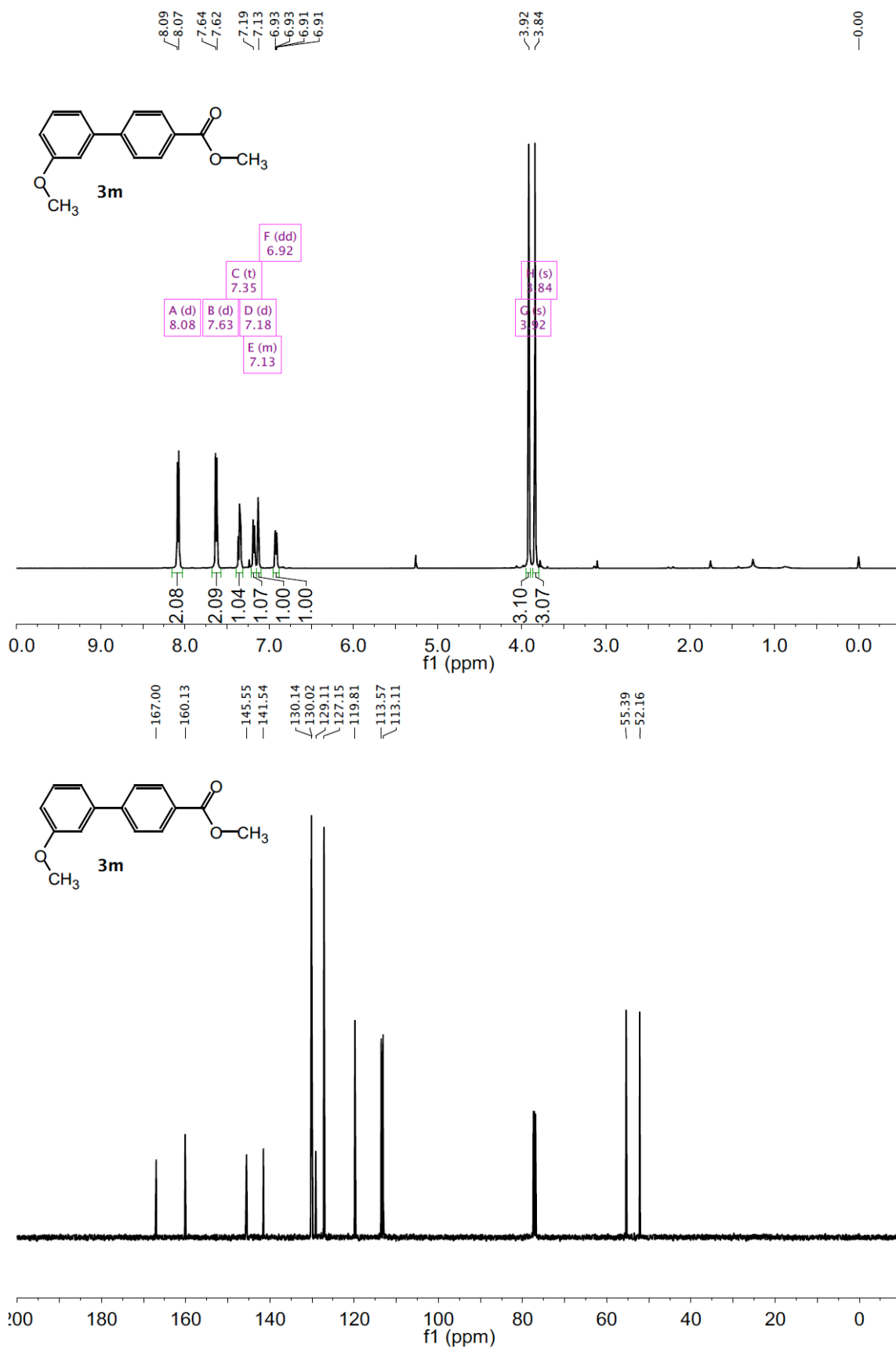


Figure SF13. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 3'-methoxy-[1,1'-biphenyl]-4-carboxylate (**3m**) in CDCl₃

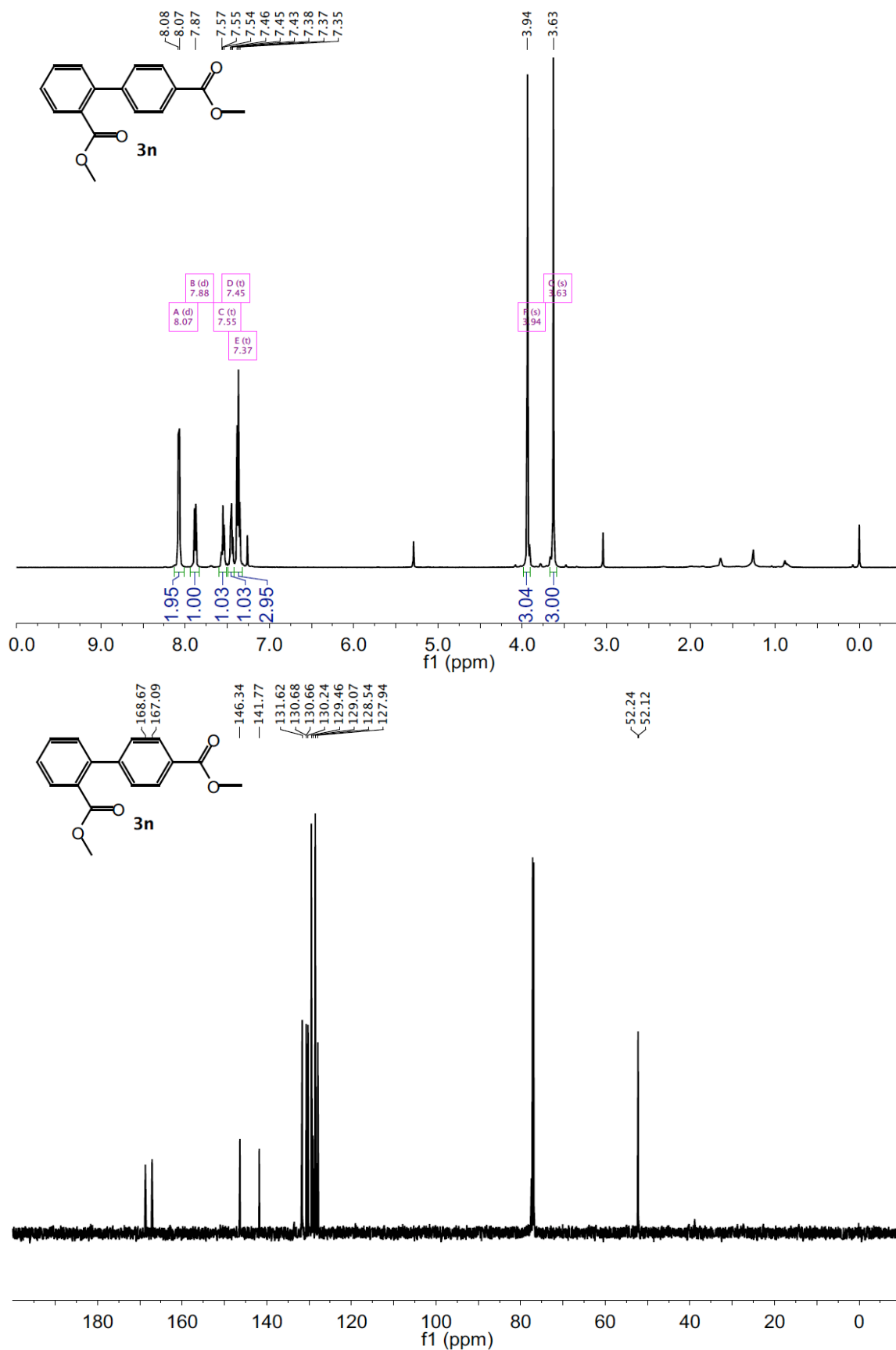


Figure SF14. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of dimethyl [1,1'-biphenyl]-2,4'-dicarboxylate (**3n**) in CDCl₃

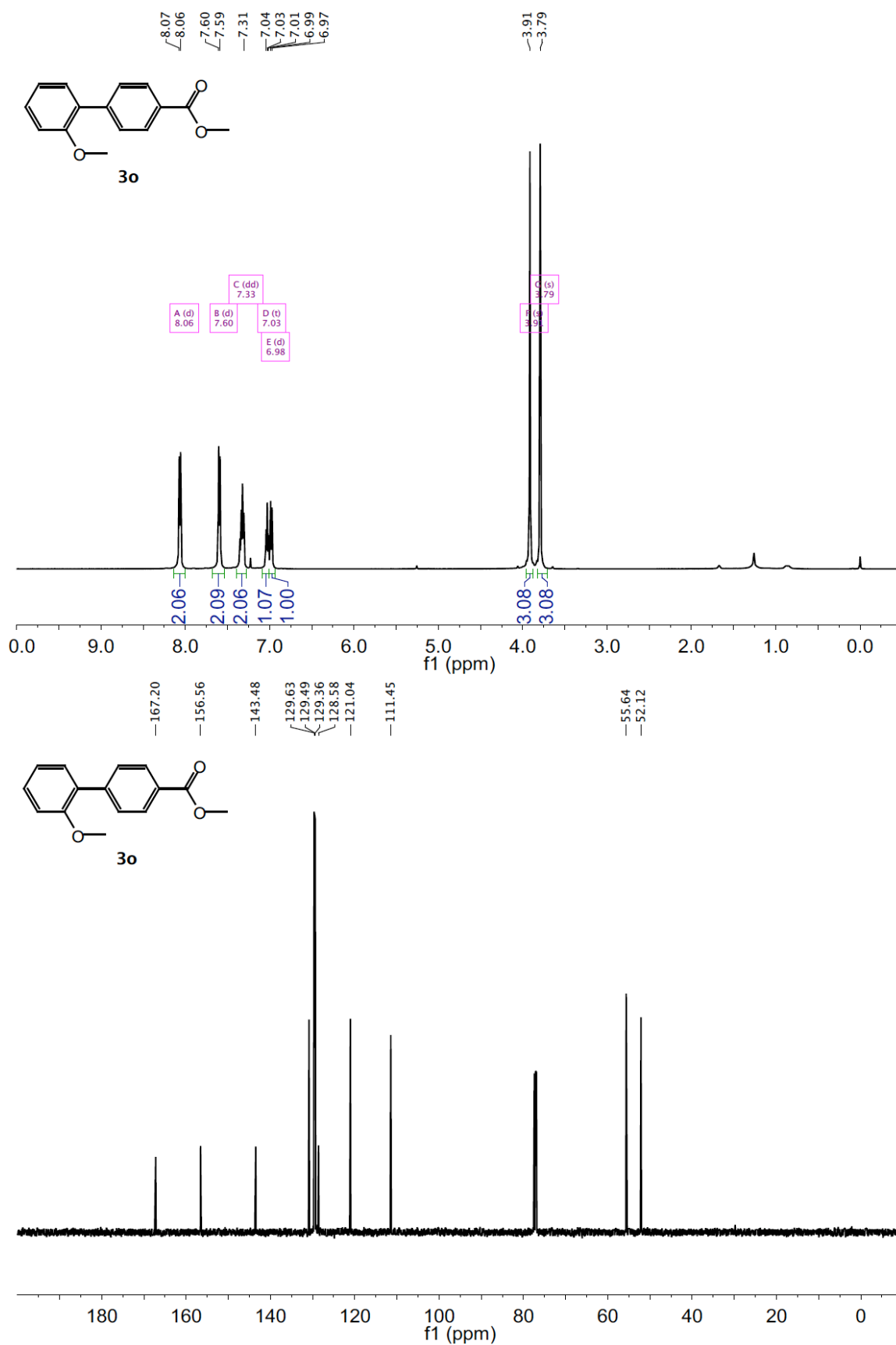


Figure SF15. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 2'-methoxy-[1,1'-biphenyl]-4-carboxylate (**3o**) in CDCl₃

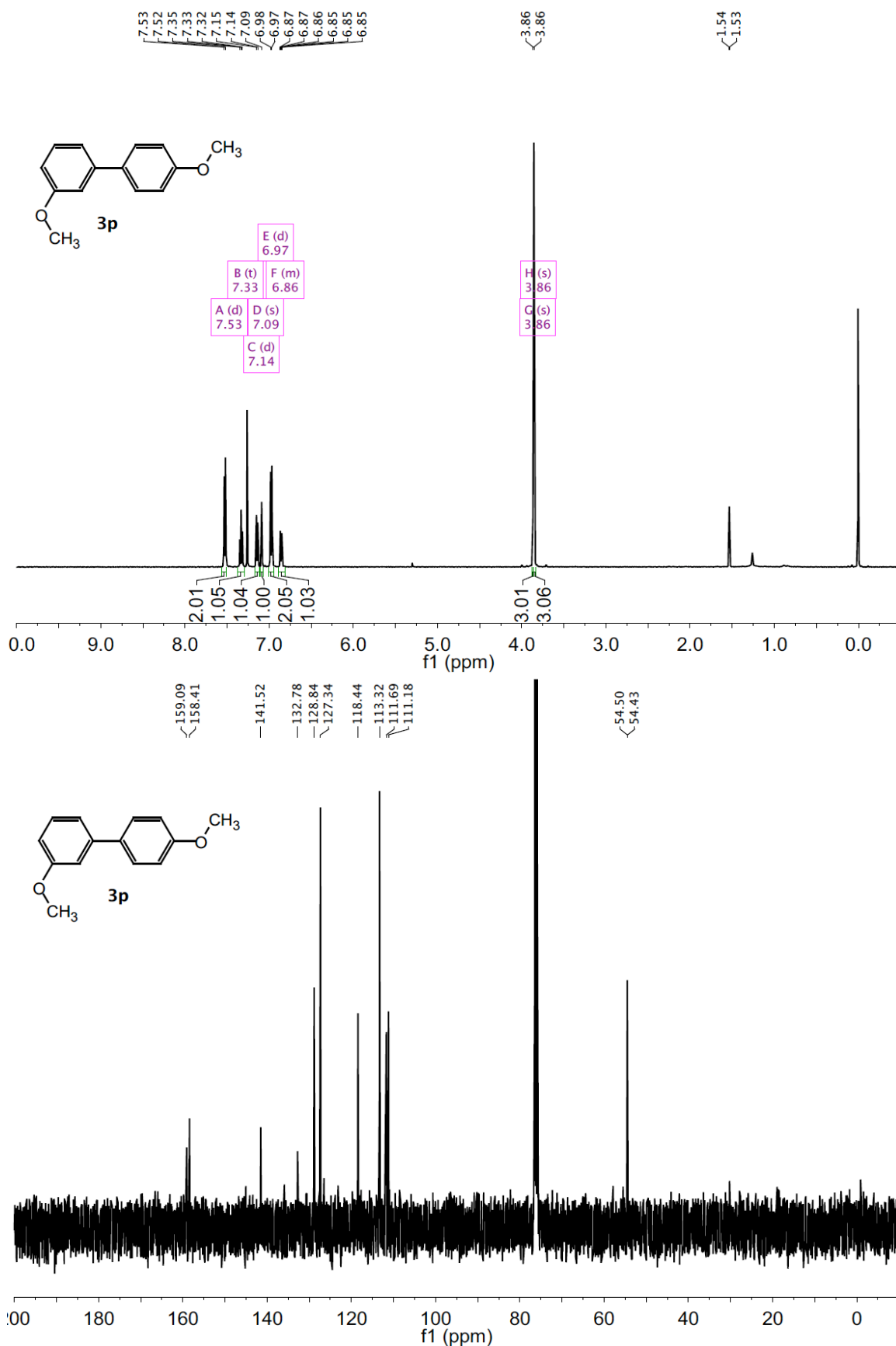


Figure SF16. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 3,4'-dimethoxy-1,1'-biphenyl (**3p**) in CDCl₃

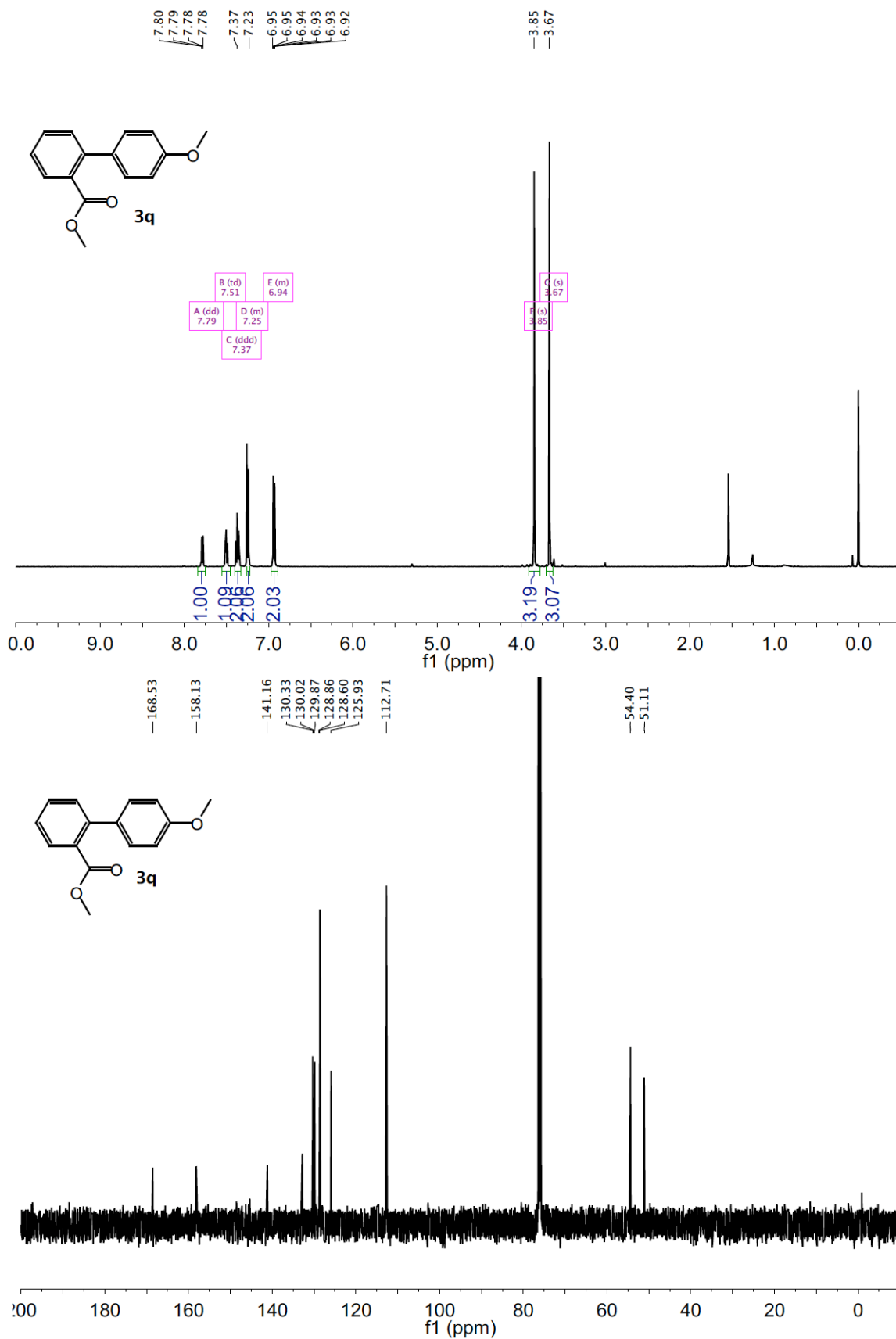


Figure SF17. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 4'-methoxy-[1,1'-biphenyl]-2-carboxylate (**3q**) in CDCl₃

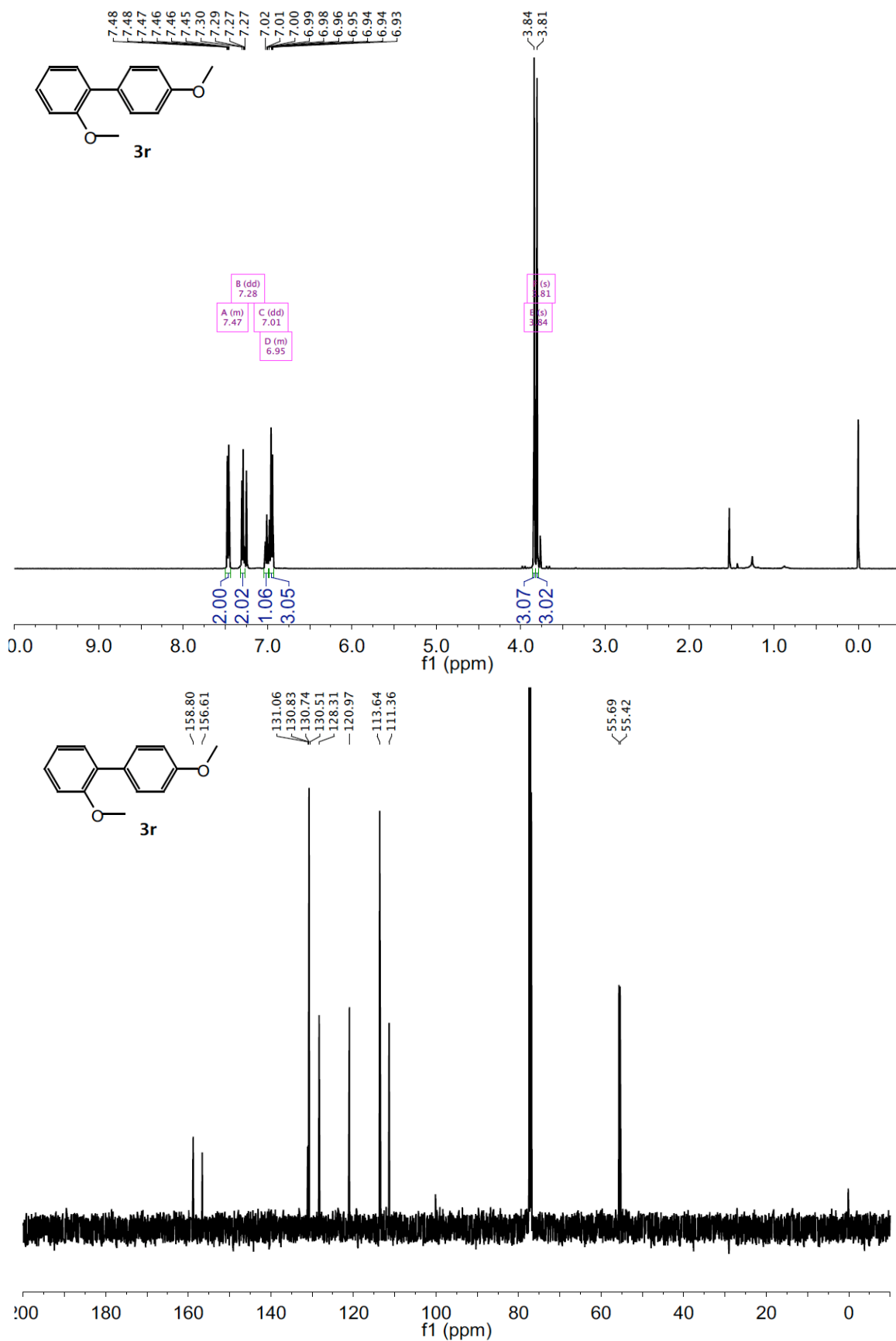


Figure SF18. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 2,4'-dimethoxy-1,1'-biphenyl (**3r**) in CDCl₃

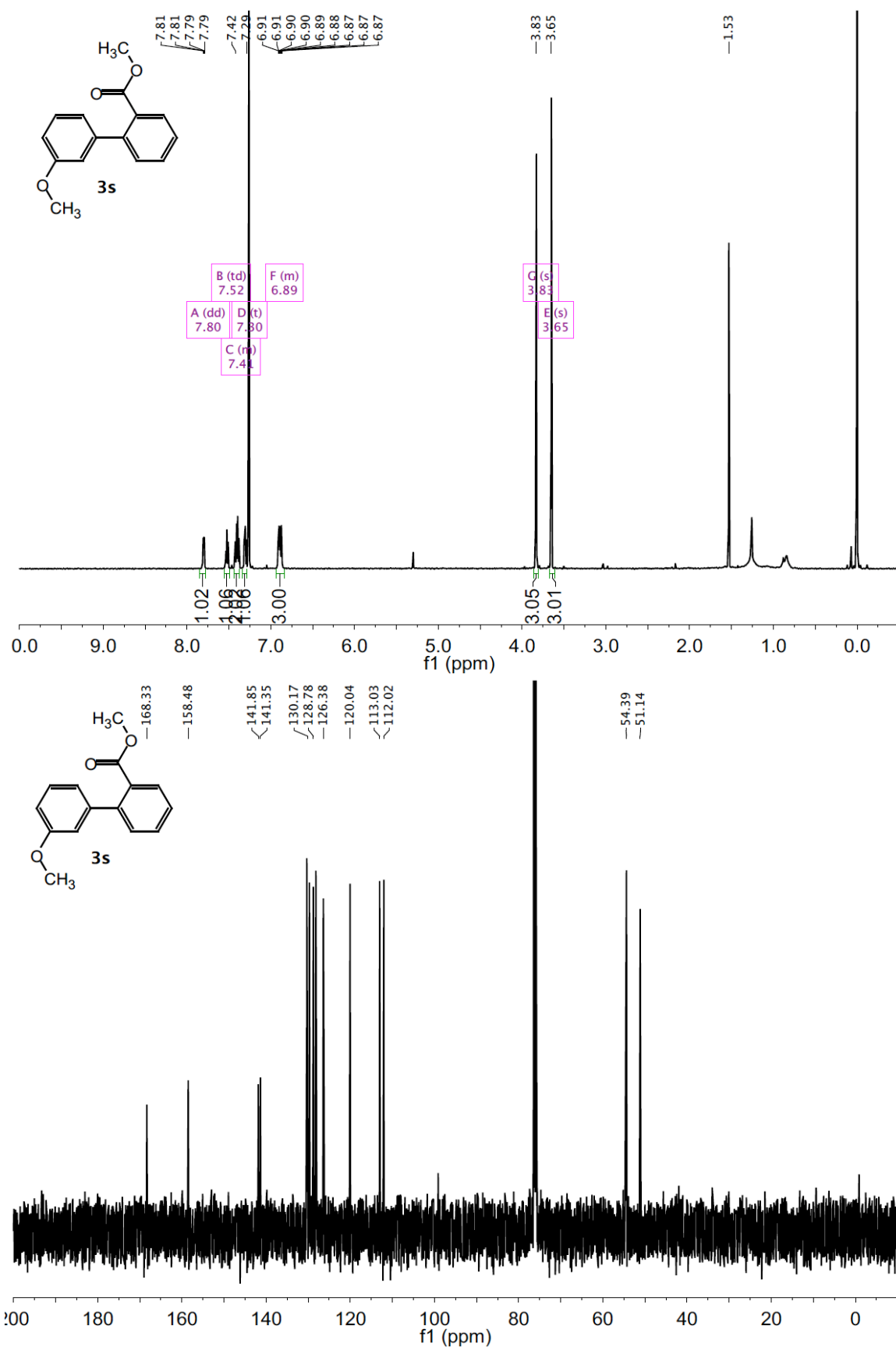


Figure SF19. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 3'-methoxy-[1,1'-biphenyl]-2-carboxylate (**3s**) in CDCl₃

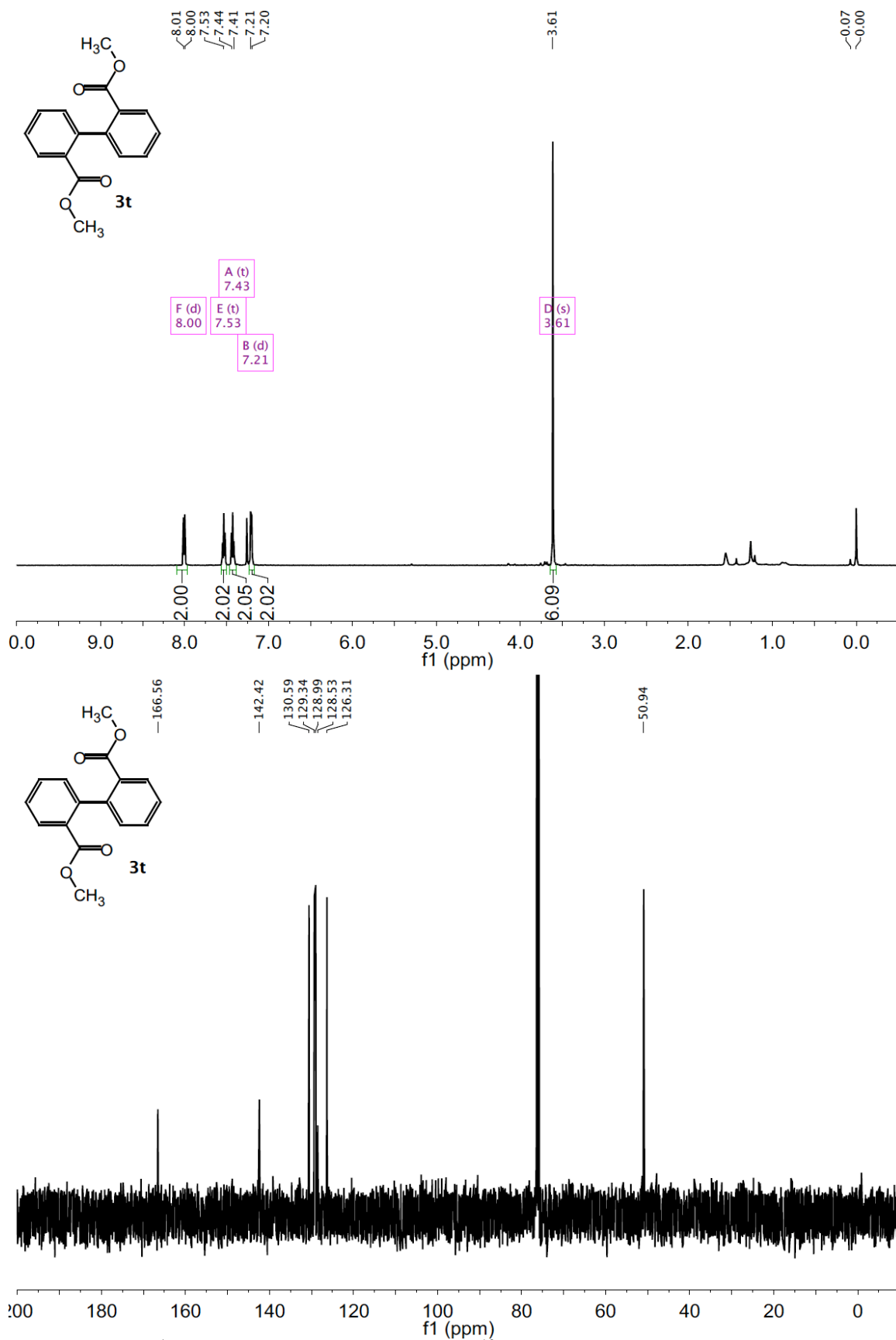


Figure SF20. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of dimethyl [1,1'-biphenyl]-2,2'-dicarboxylate (**3t**) in CDCl₃

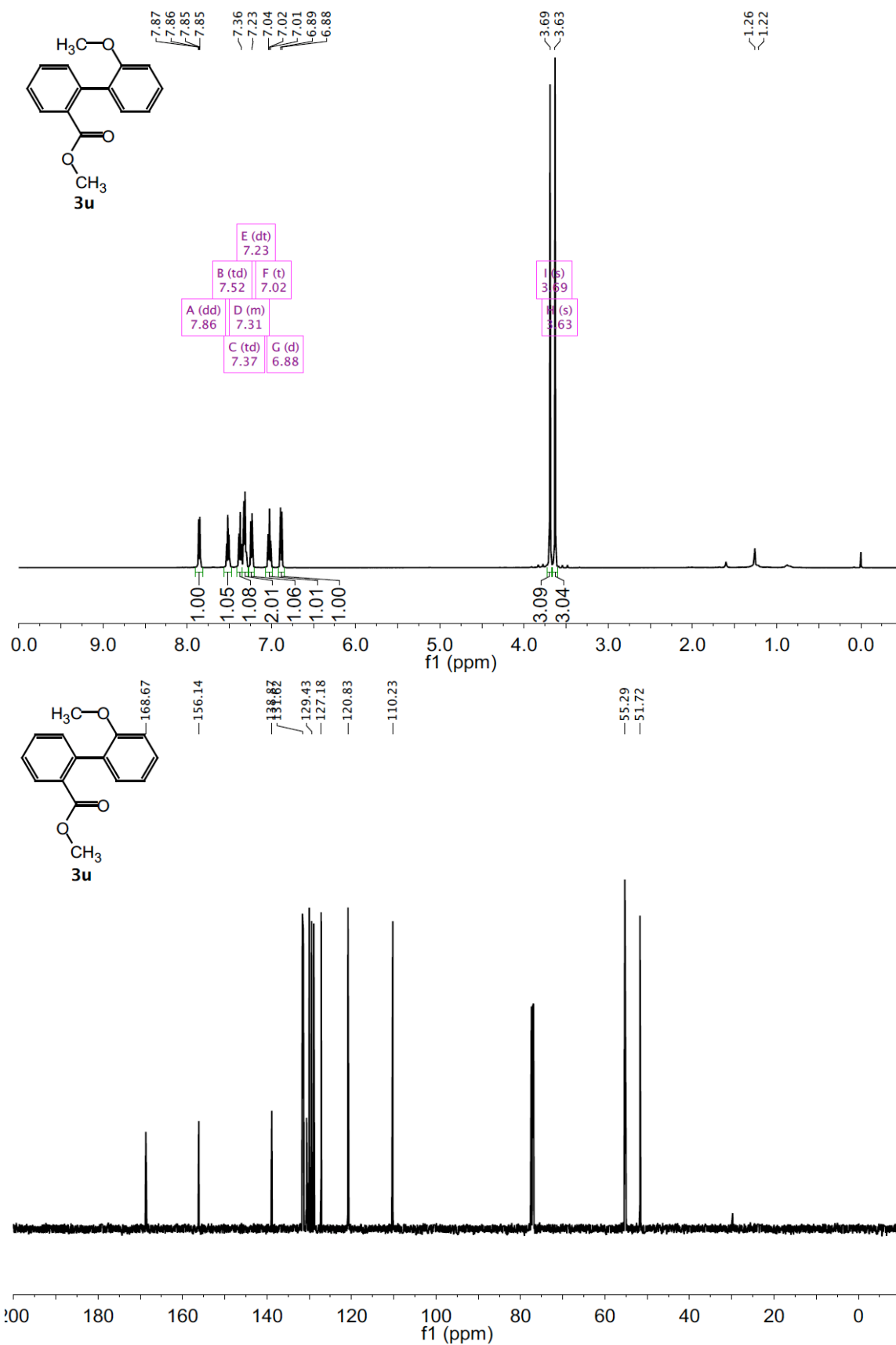


Figure SF21. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 2'-methoxy-[1,1'-biphenyl]-2-carboxylate (**3u**) in CDCl₃

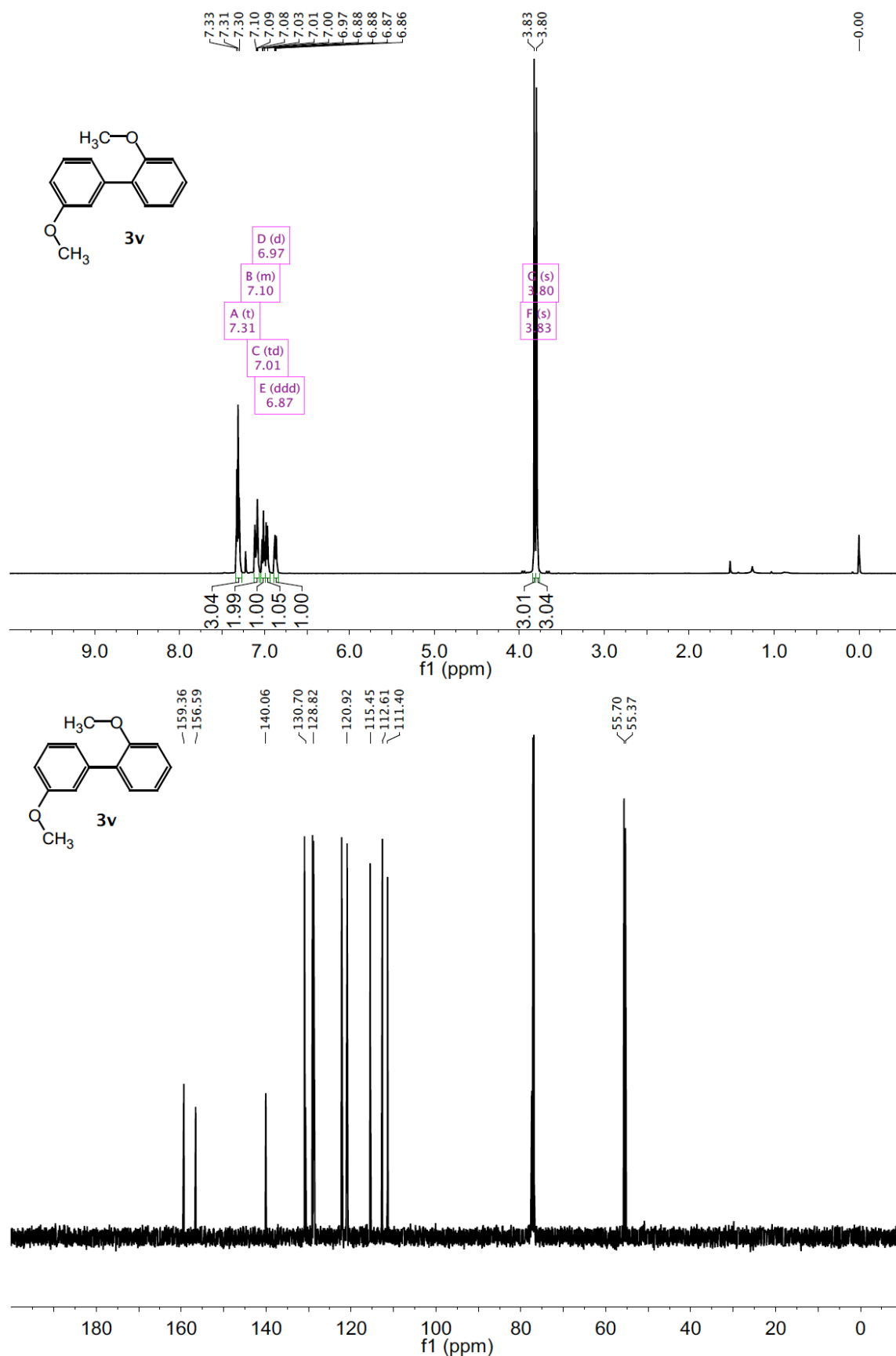


Figure SF22. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 2,3'-dimethoxy-1,1'-biphenyl (**3v**) in CDCl₃

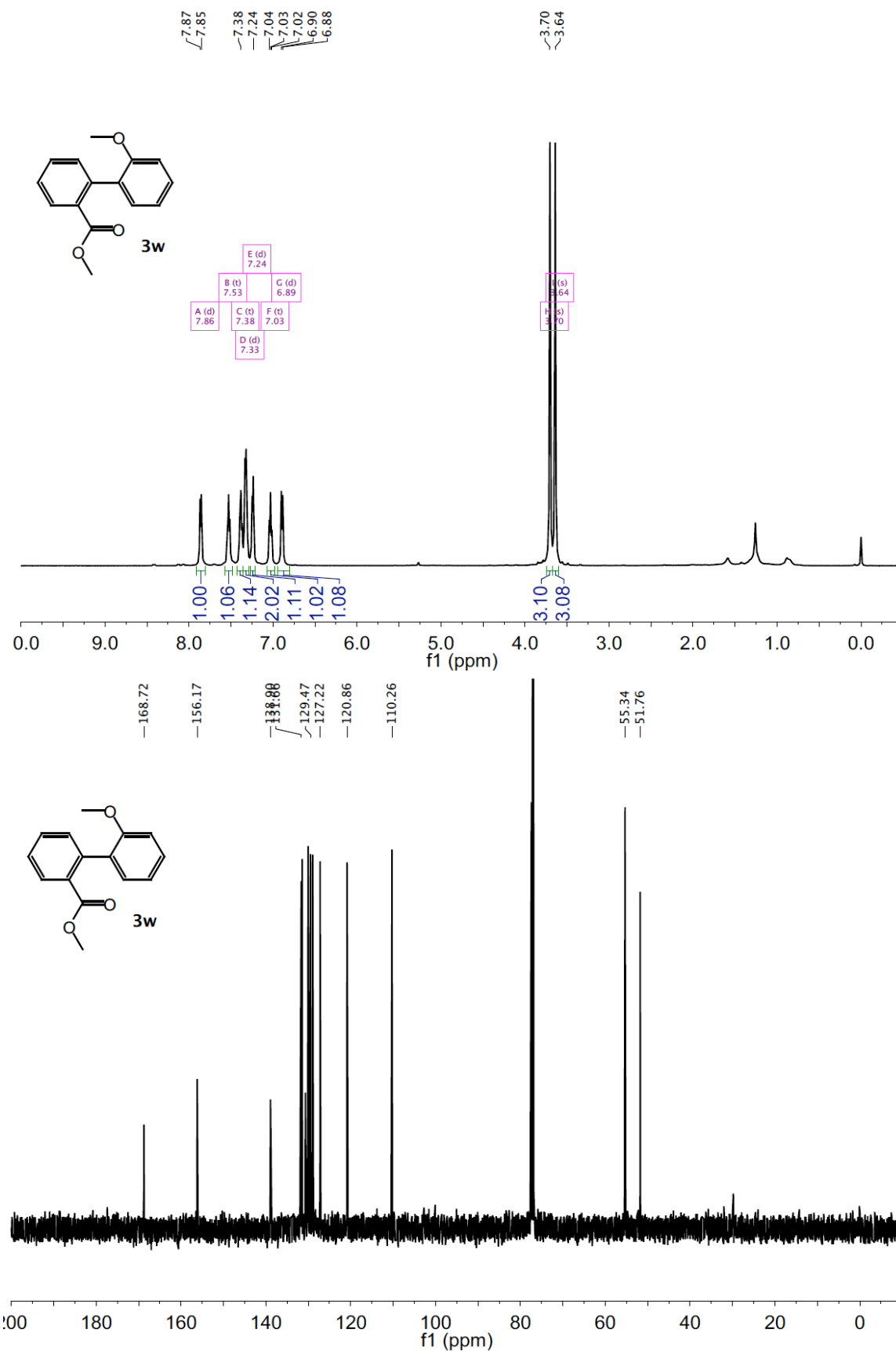


Figure SF23. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 2'-methoxy-[1,1'-biphenyl]-2-carboxylate (**3w**) in CDCl₃

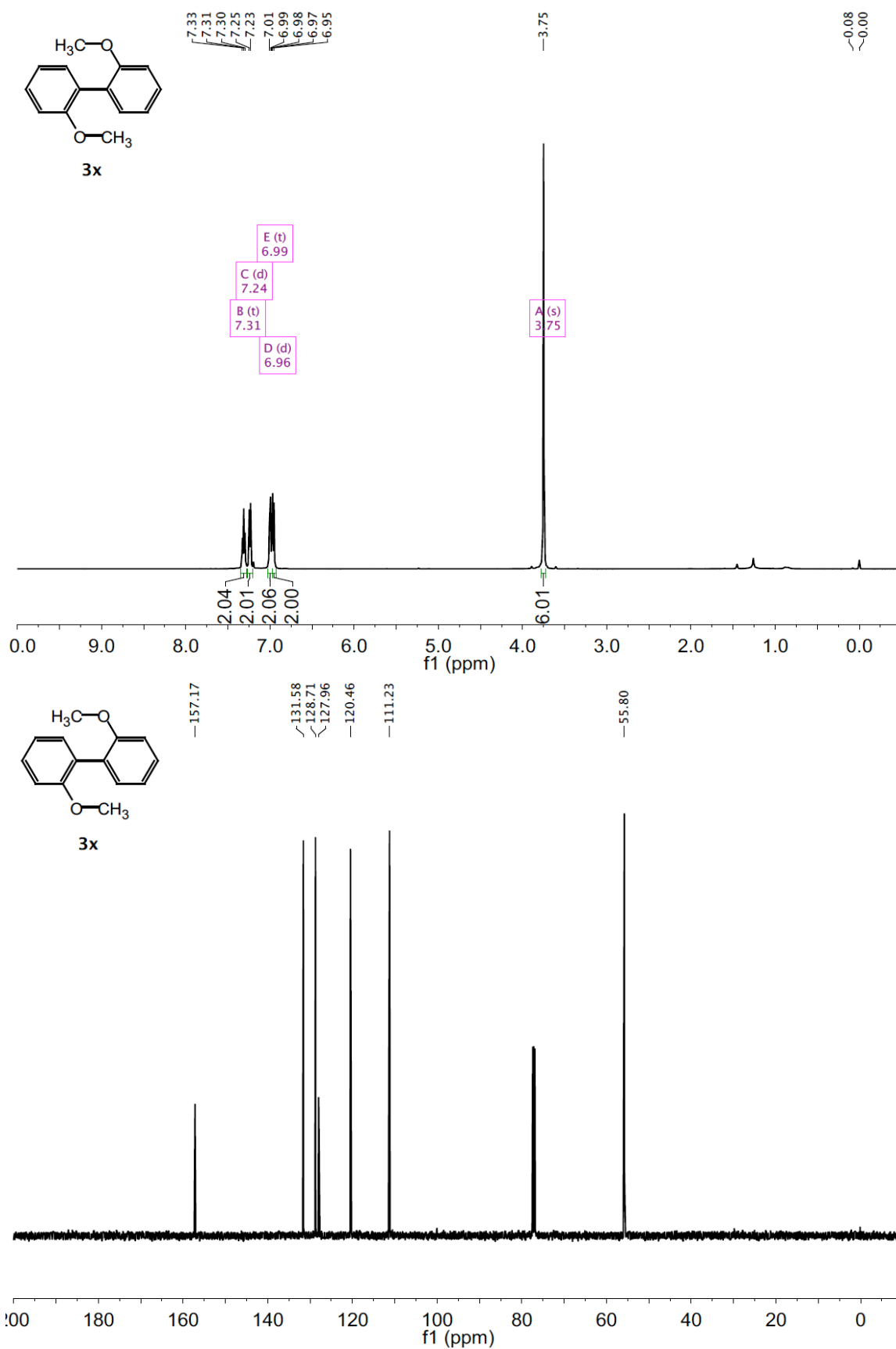


Figure SF24. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 2,2'-dimethoxy-1,1'-biphenyl (**3x**) in CDCl₃

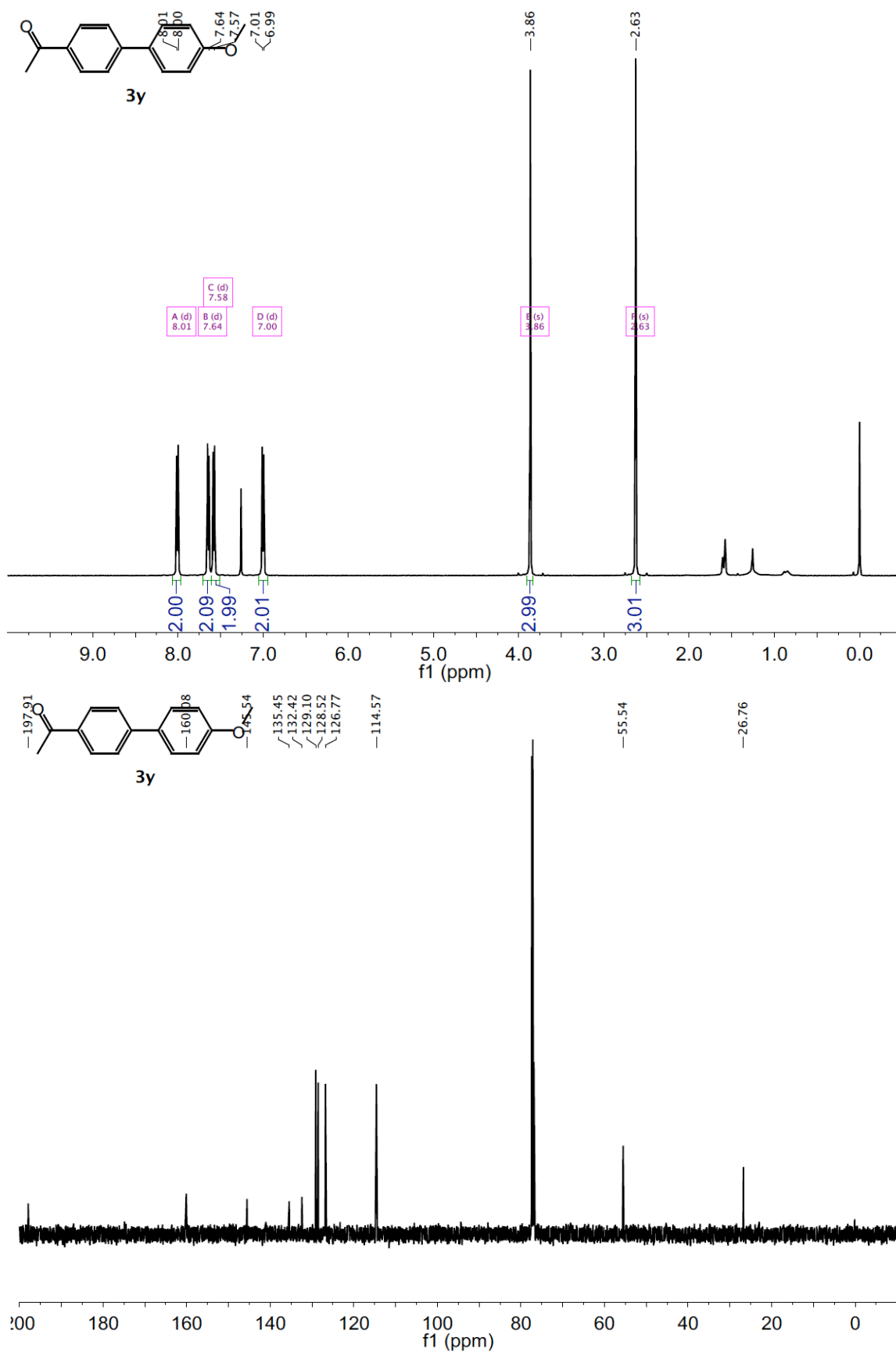


Figure SF25. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 1-(4'-methoxy-[1,1'-biphenyl]-4-yl)ethanone (**3y**) in CDCl₃

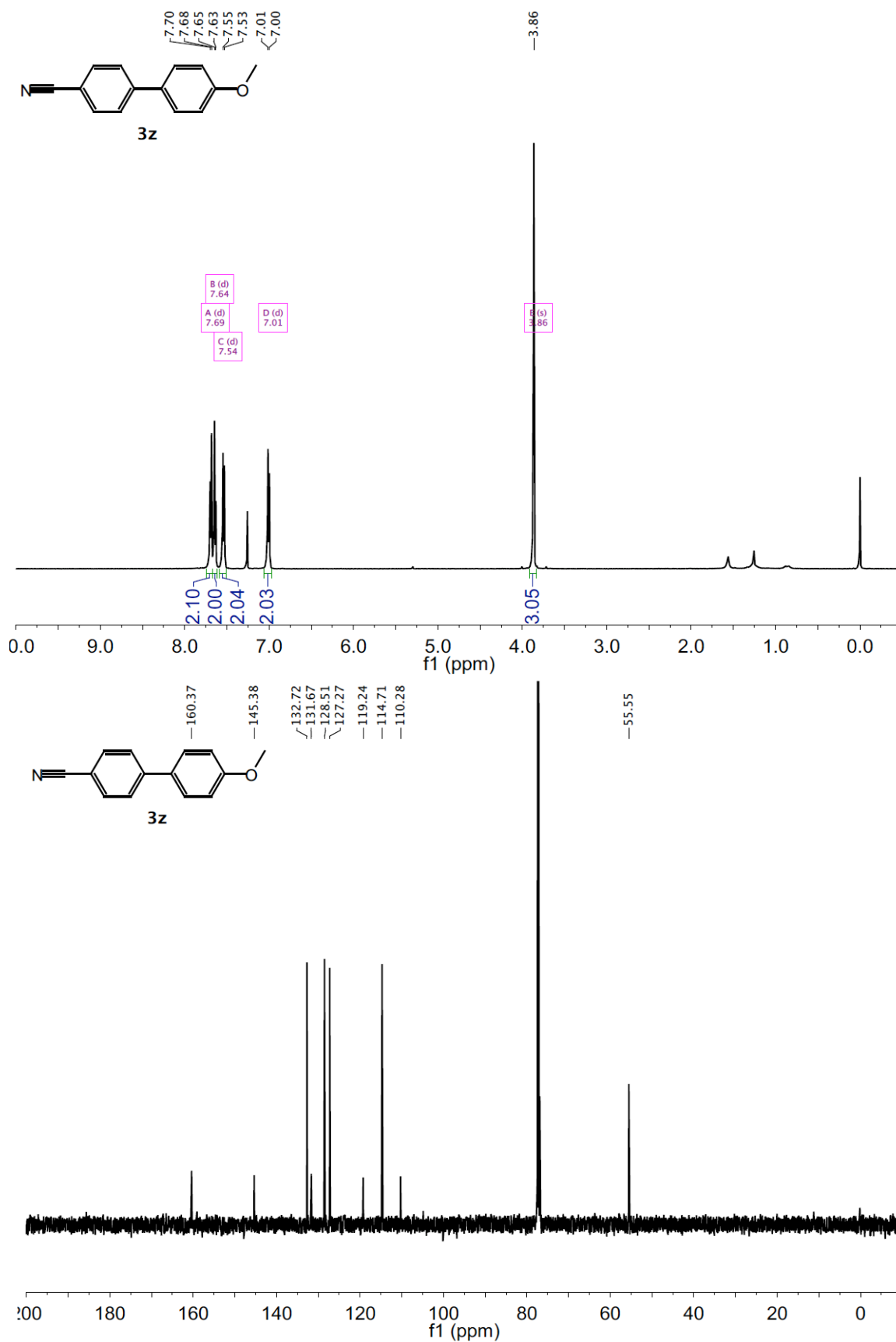


Figure SF26. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 4'-methoxy-[1,1'-biphenyl]-4-carbonitrile (**3z**) in CDCl₃

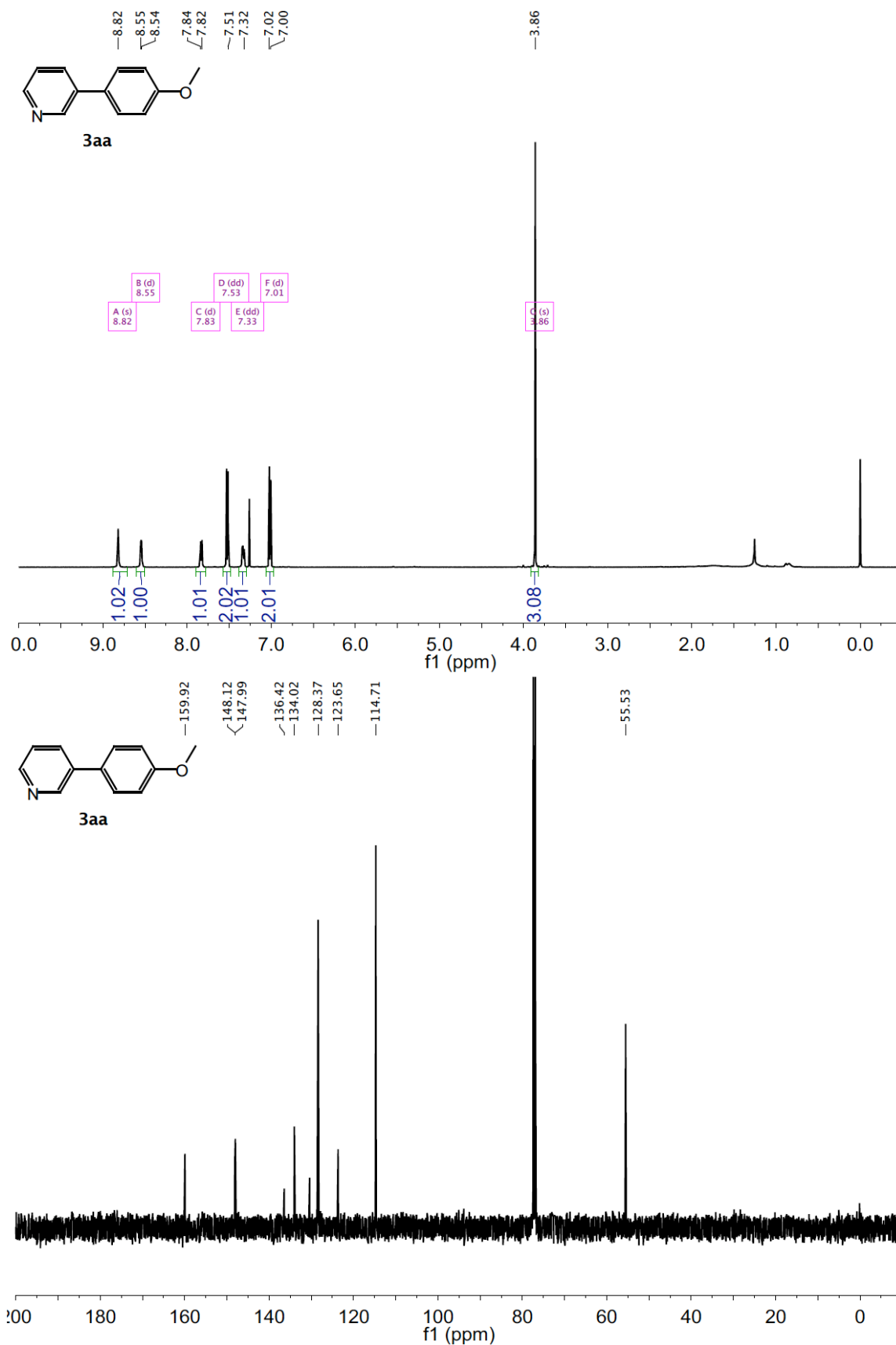


Figure SF27. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 3-(4-methoxyphenyl)pyridine (**3aa**) in CDCl₃

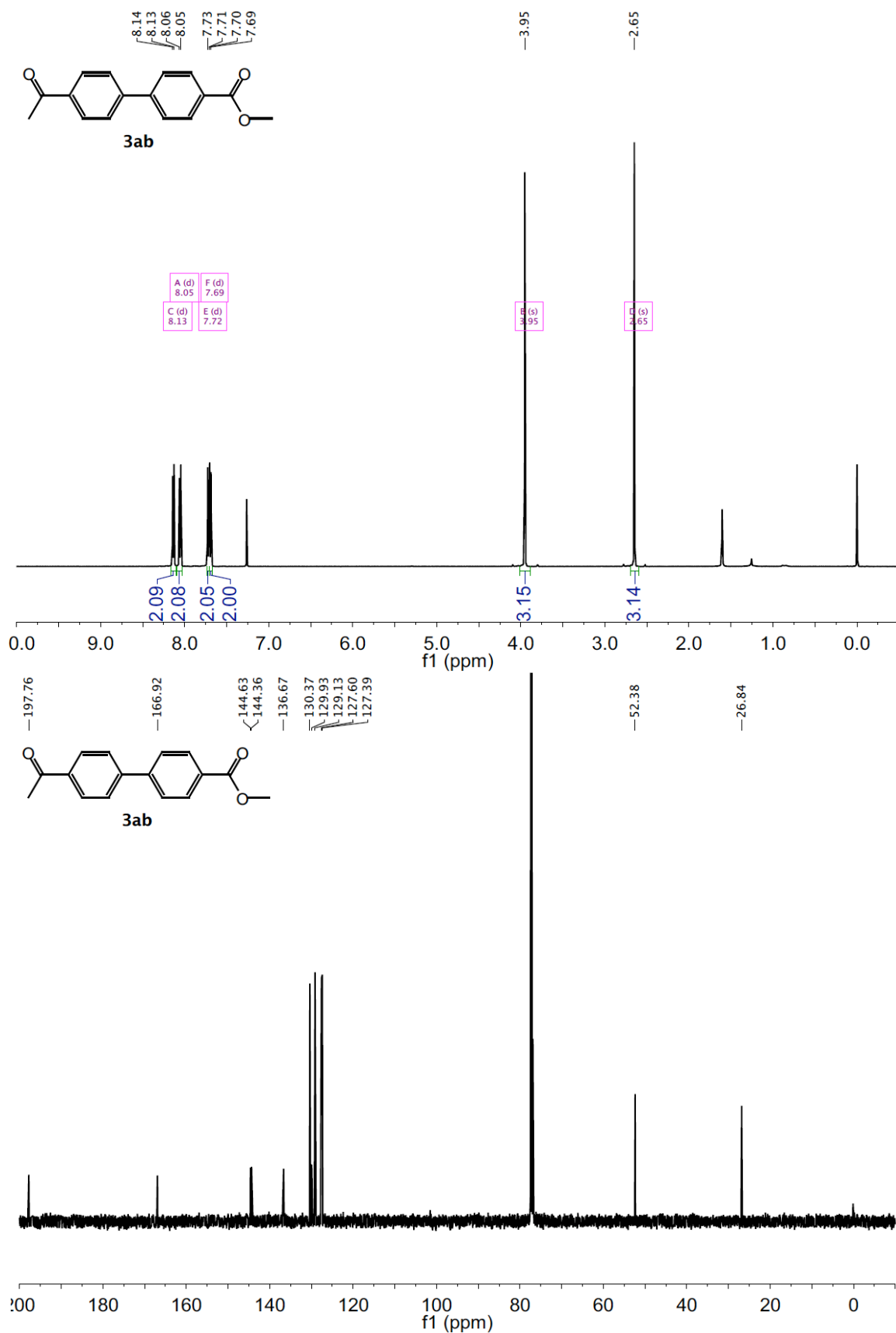


Figure SF28. ^1H NMR (top, 500 MHz) and ^{13}C NMR (bottom, 125 MHz) spectra of methyl 4'-acetyl-[1,1'-biphenyl]-4-carboxylate (**3ab**) in CDCl_3

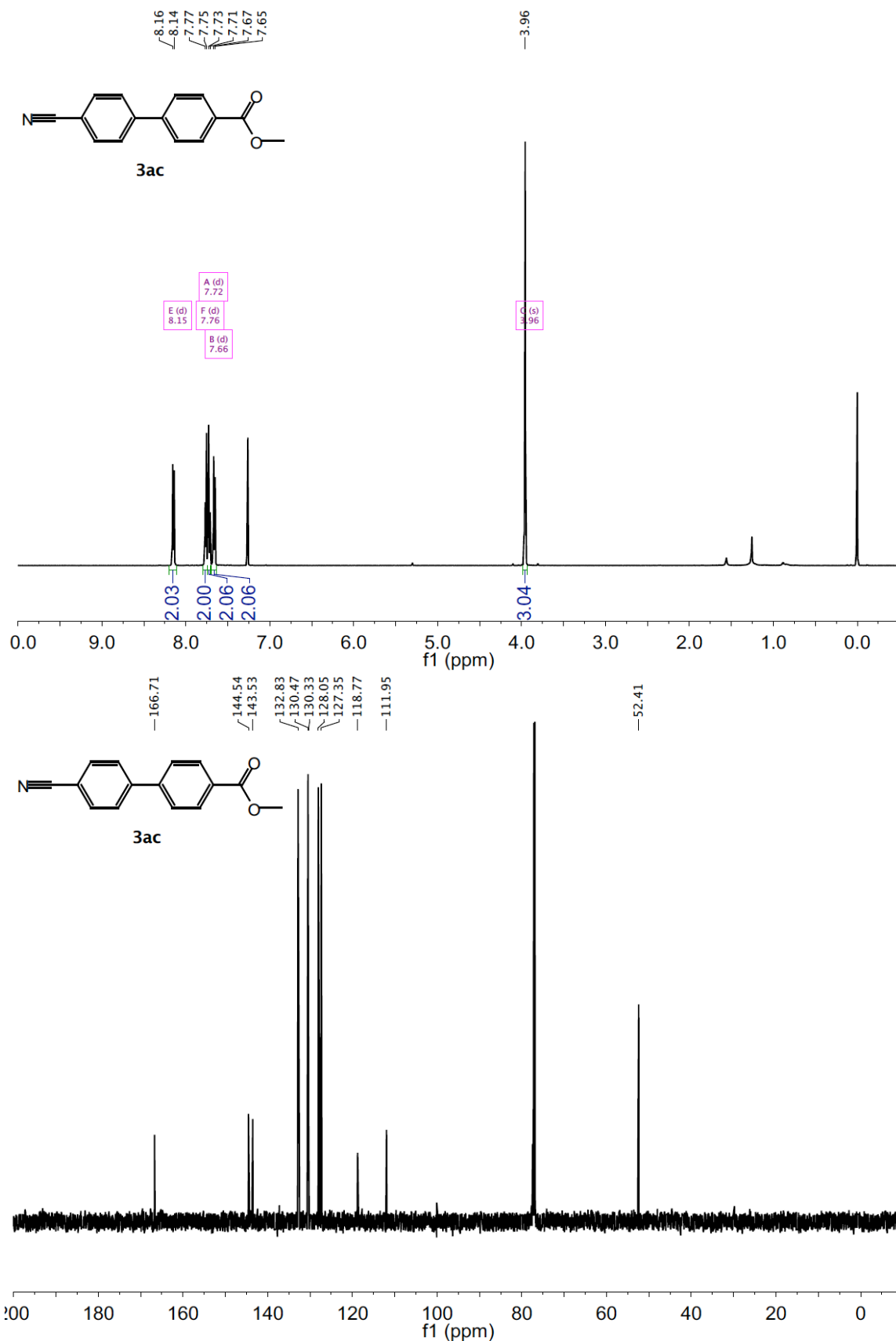


Figure SF29. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 4'-cyano-[1,1'-biphenyl]-4-carboxylate (**3ac**) in CDCl₃

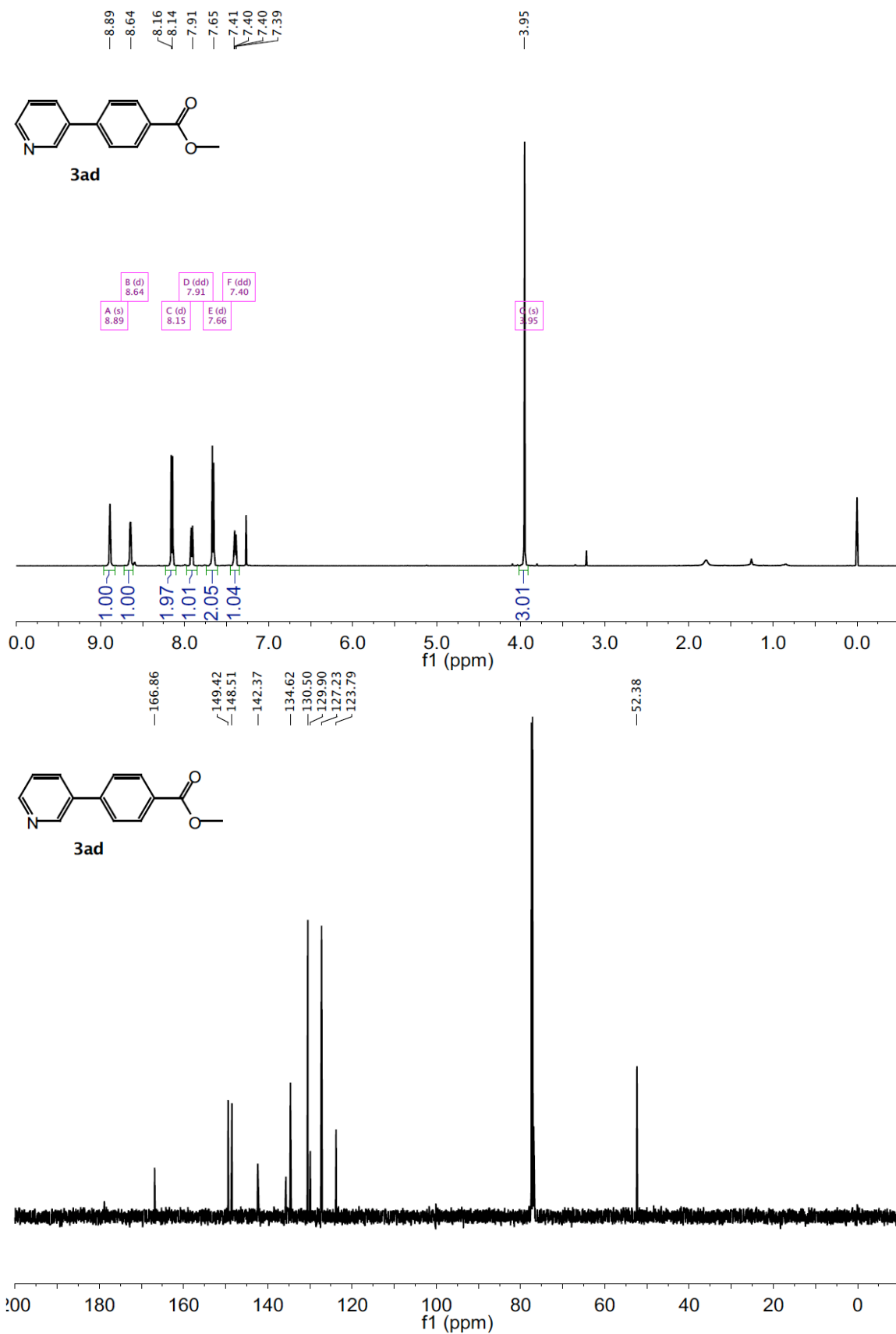


Figure SF30. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 4-(pyridin-3-yl)benzoate (**3ad**) in CDCl₃

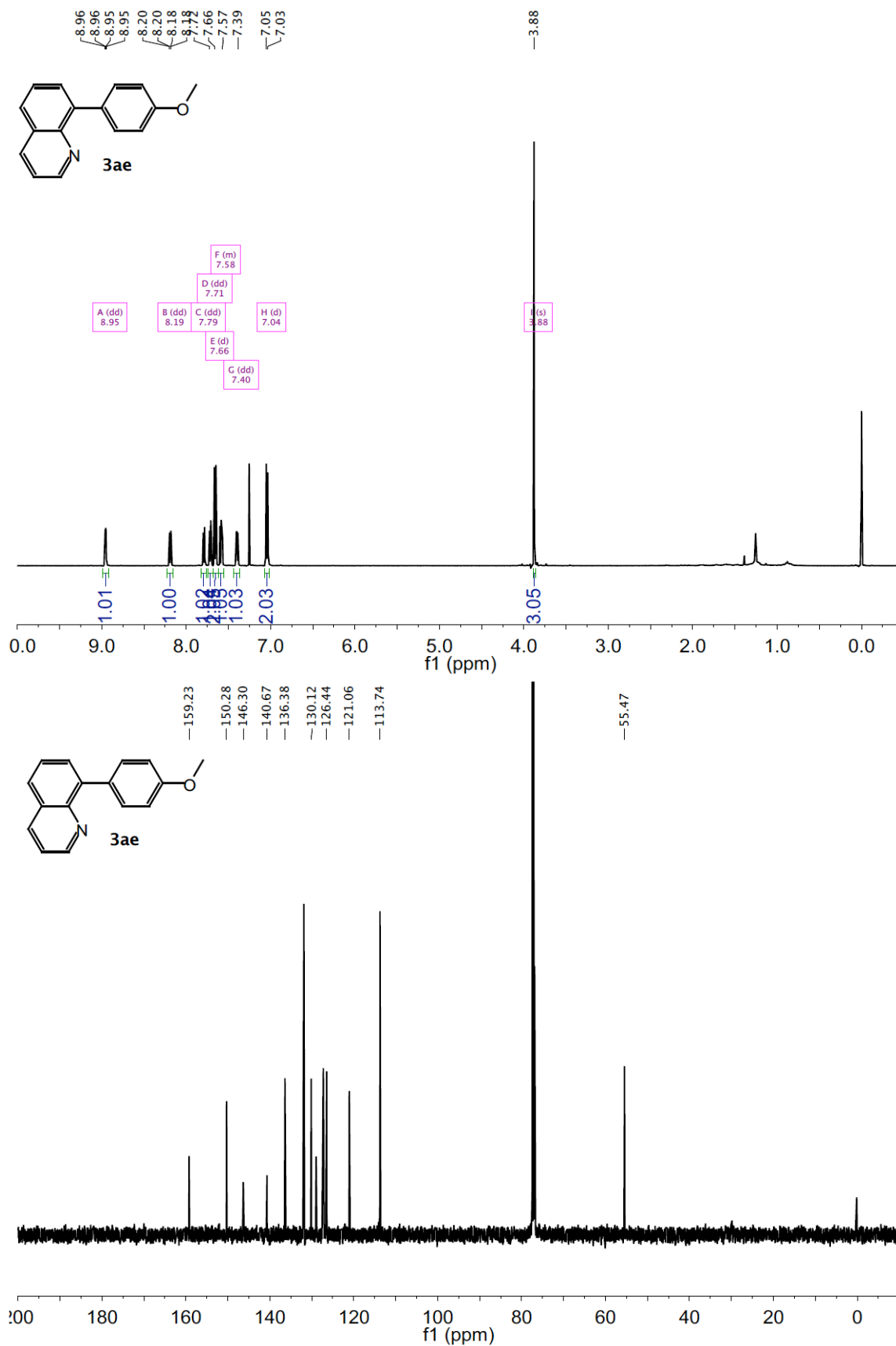


Figure SF31. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 8-(4-methoxyphenyl)quinoline (**3ae**) in CDCl₃

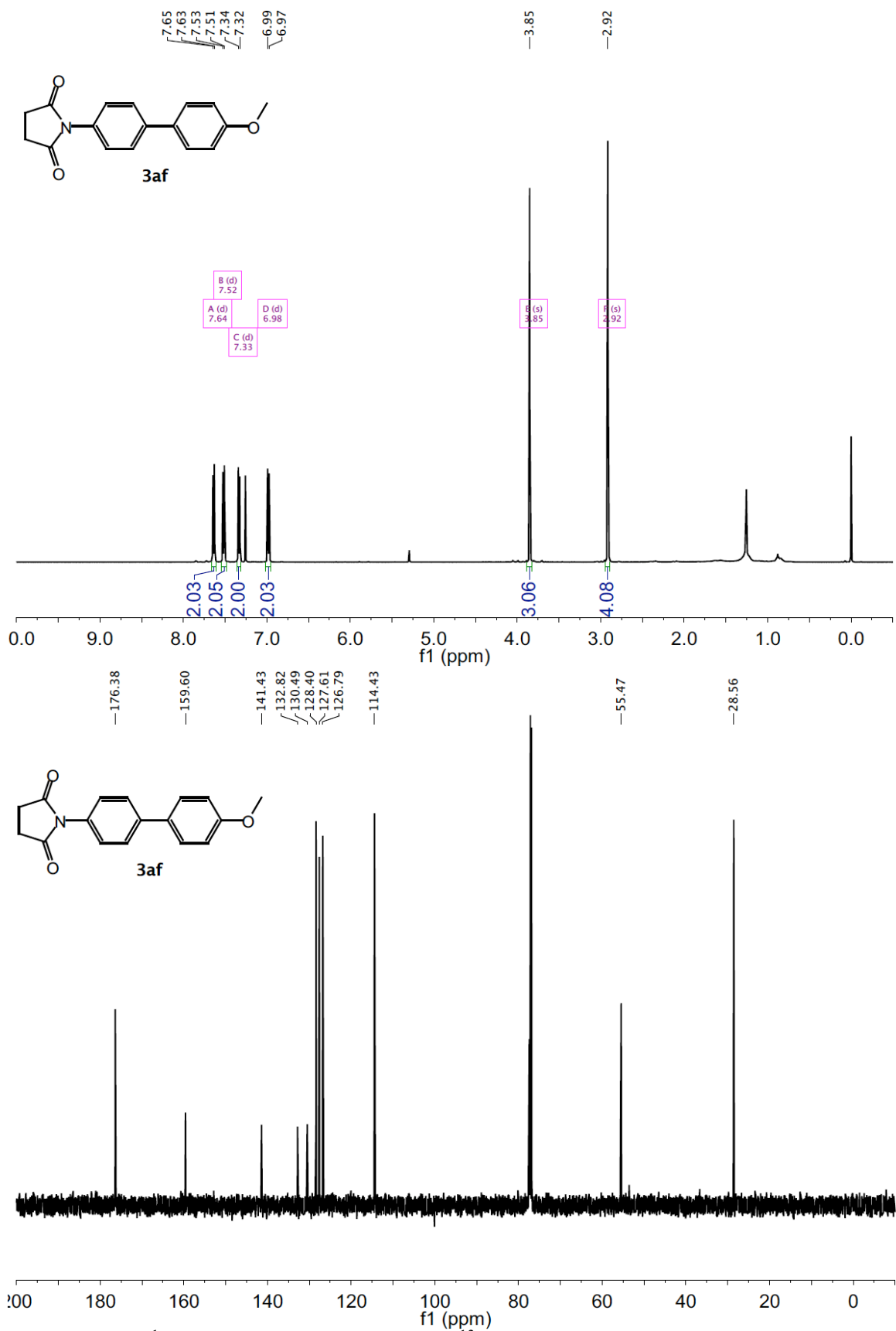


Figure SF32. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 1-(4'-methoxy-[1,1'-biphenyl]-4-yl)pyrrolidine-2,5-dione (**3af**) in CDCl₃

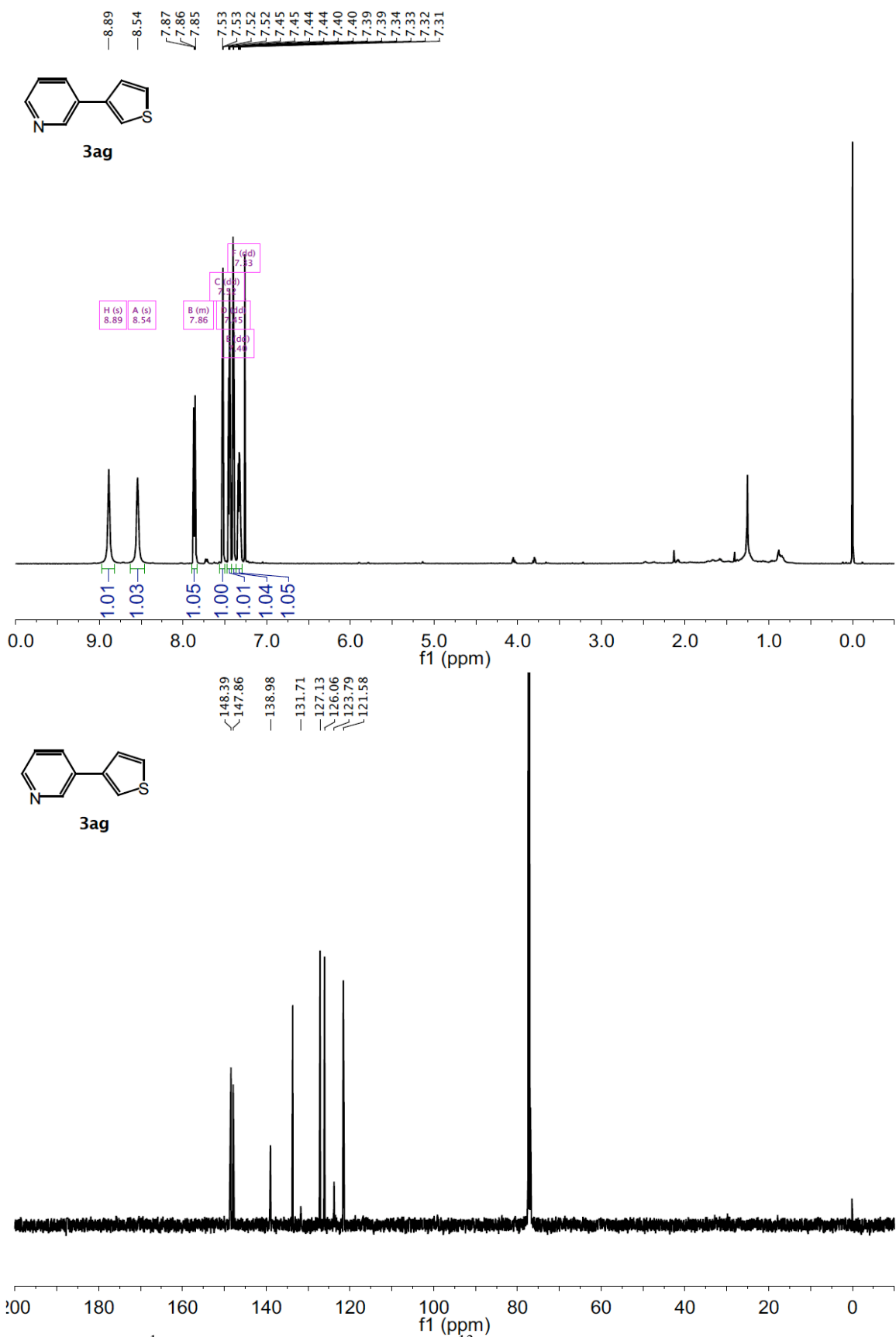


Figure SF33. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 3-(thiophen-3-yl)pyridine (**3ag**) in CDCl₃

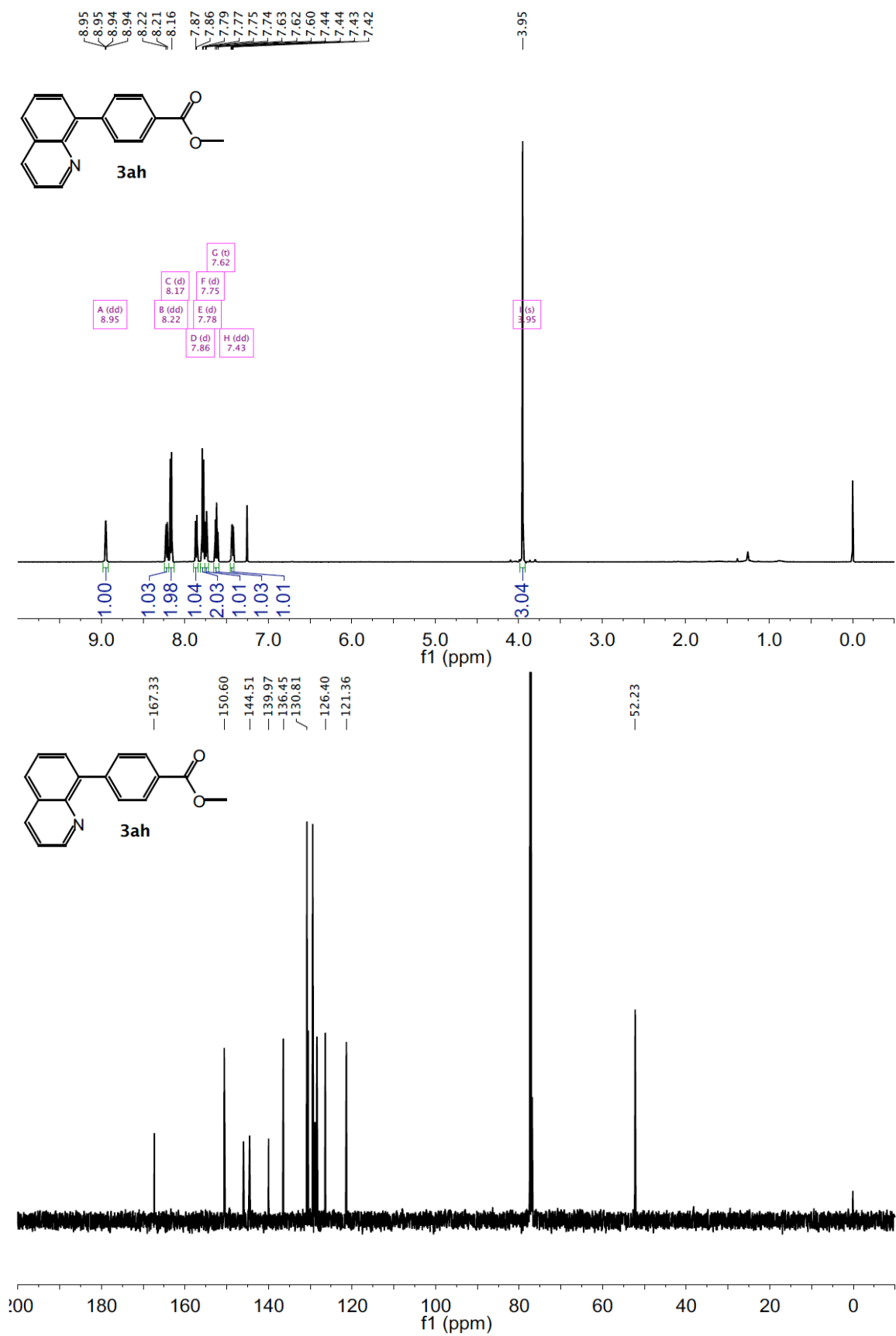


Figure SF34. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of methyl 4-(quinolin-8-yl)benzoate (**3ah**) in CDCl₃

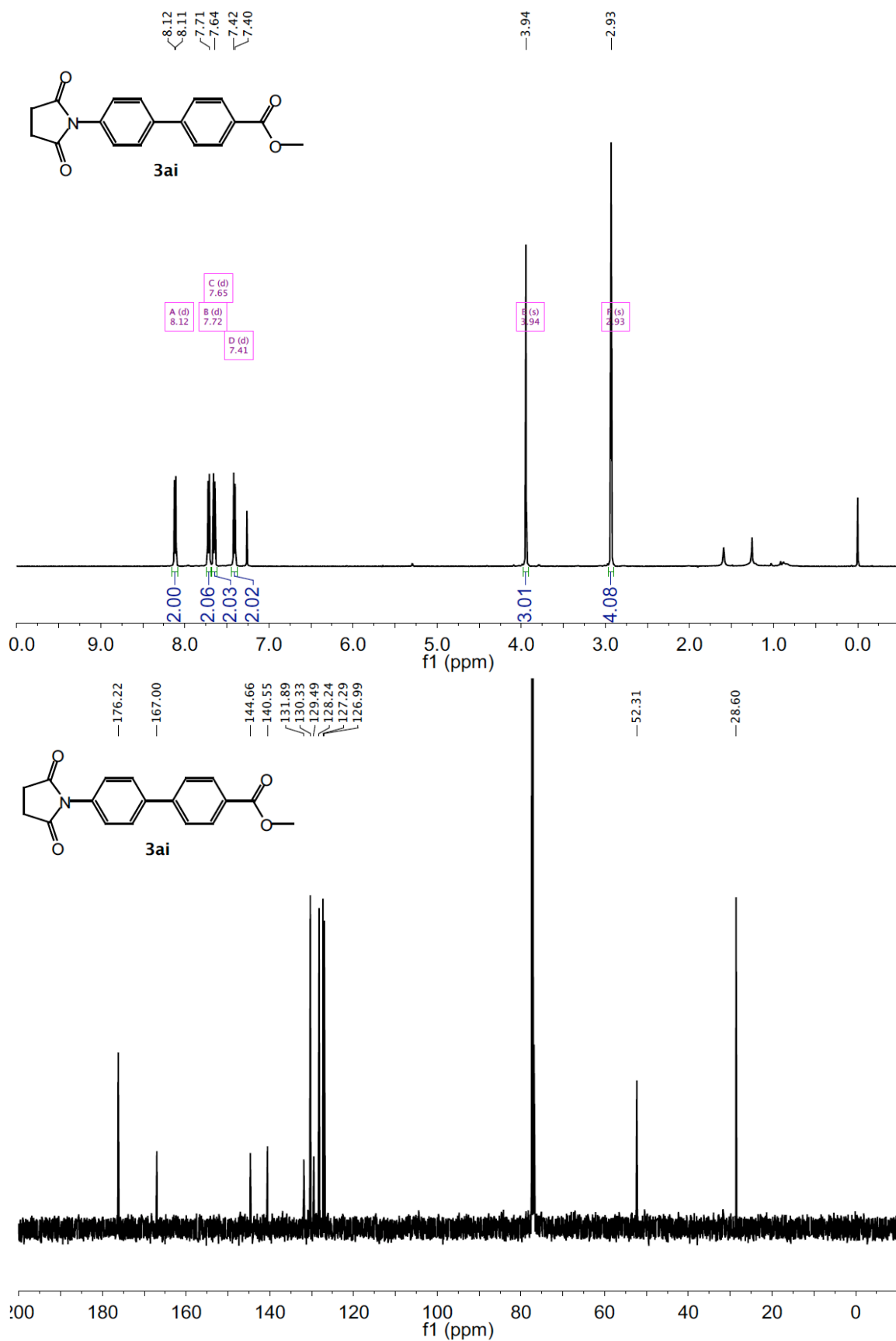


Figure SF35. ^1H NMR (top, 500 MHz) and ^{13}C NMR (bottom, 125 MHz) spectra of methyl 4'-(2,5-dioxopyrrolidin-1-yl)-[1,1'-biphenyl]-4-carboxylate (**3ai**) in CDCl_3

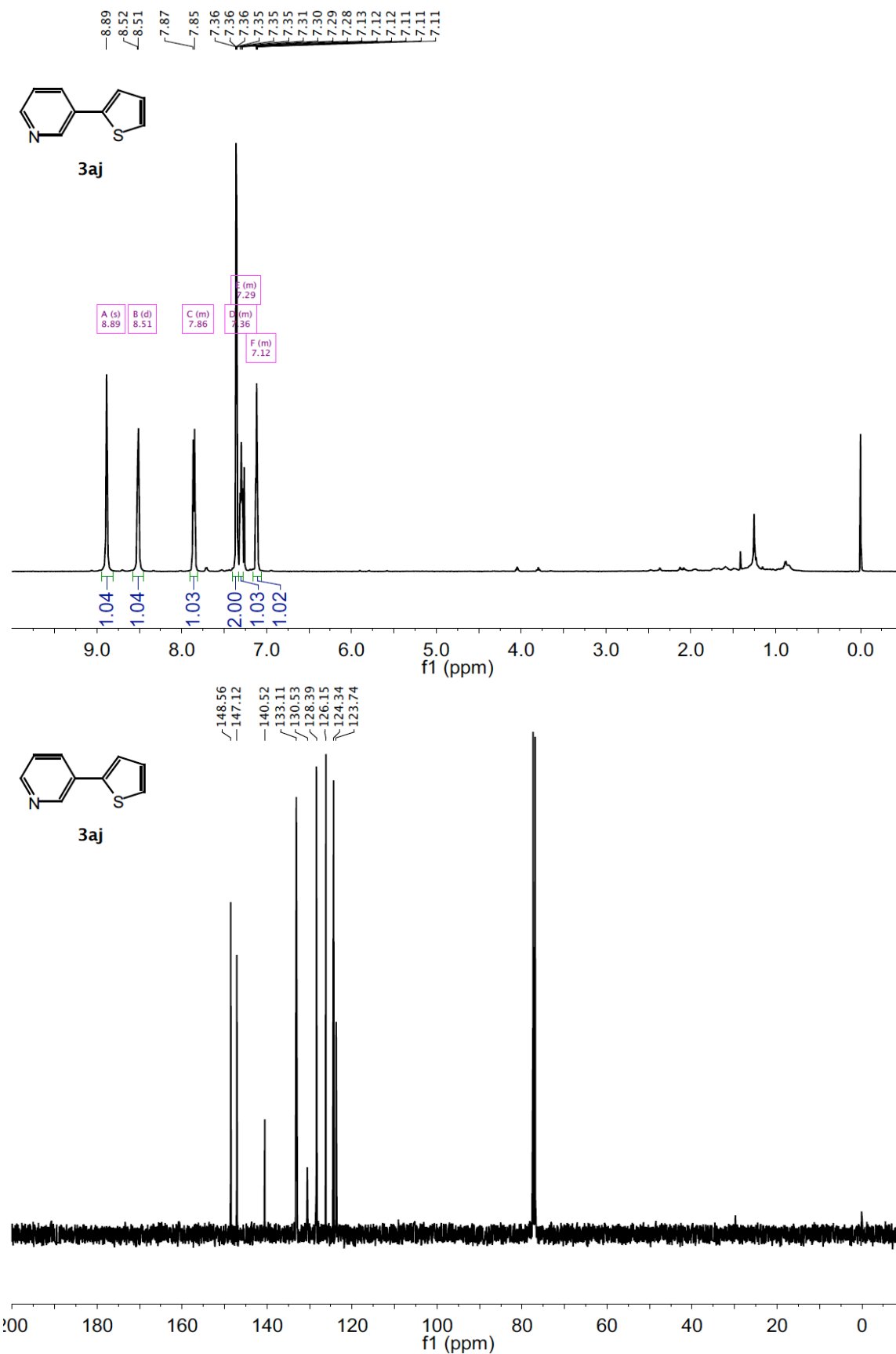


Figure SF36. ¹H NMR (top, 500 MHz) and ¹³C NMR (bottom, 125 MHz) spectra of 3-(thiophen-2-yl)pyridine (**3aj**) in CDCl₃