

Conjugate addition of Grignard reagents to thiochromones catalyzed by copper salts: a unified approach to both 2-alkylthiochroman-4-one and thioflavanone

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Supporting Information

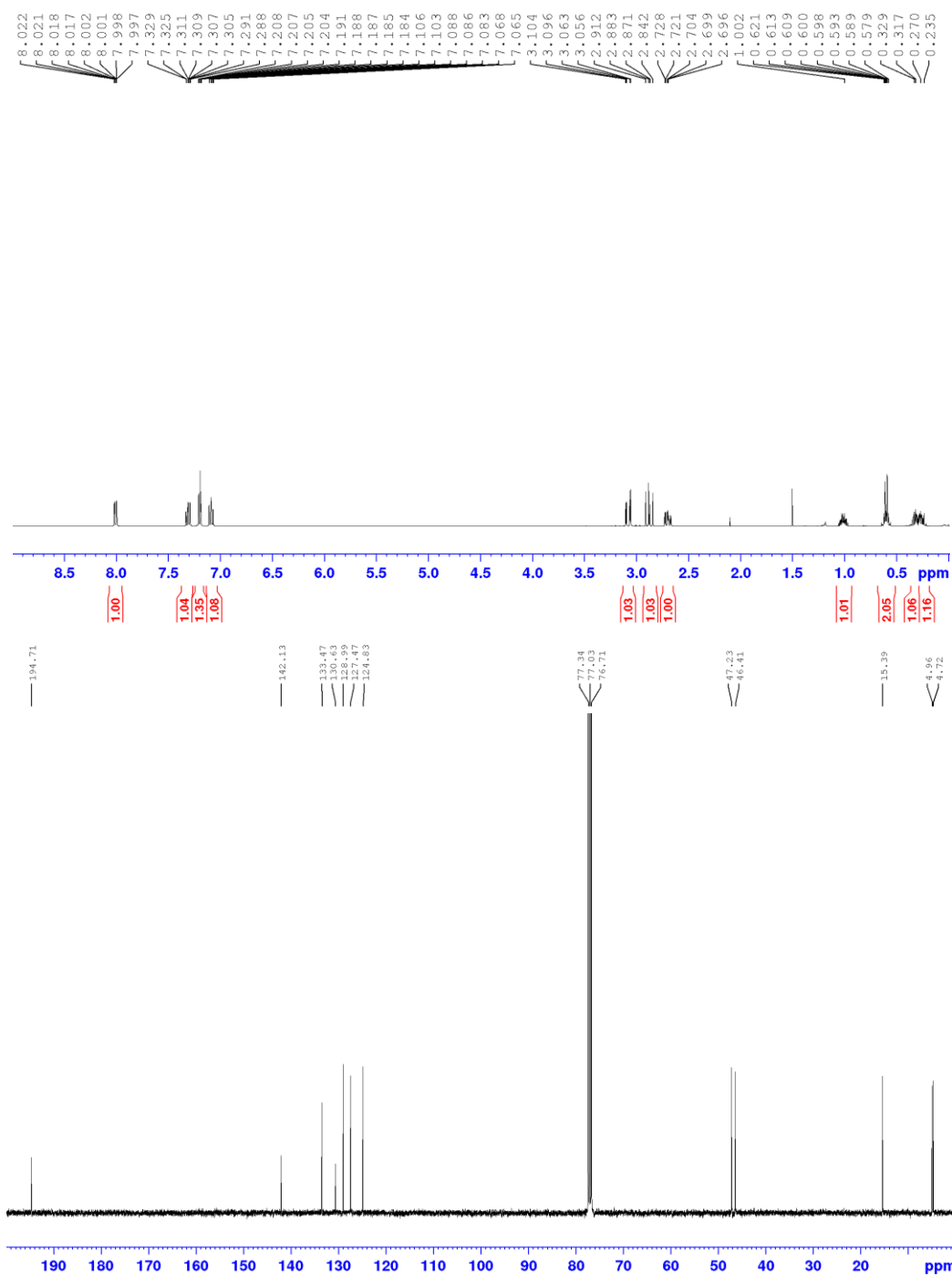
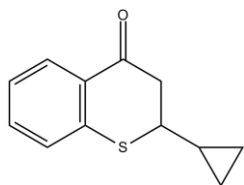
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¹H, ¹³C-NMR, and ¹⁹F spectra:

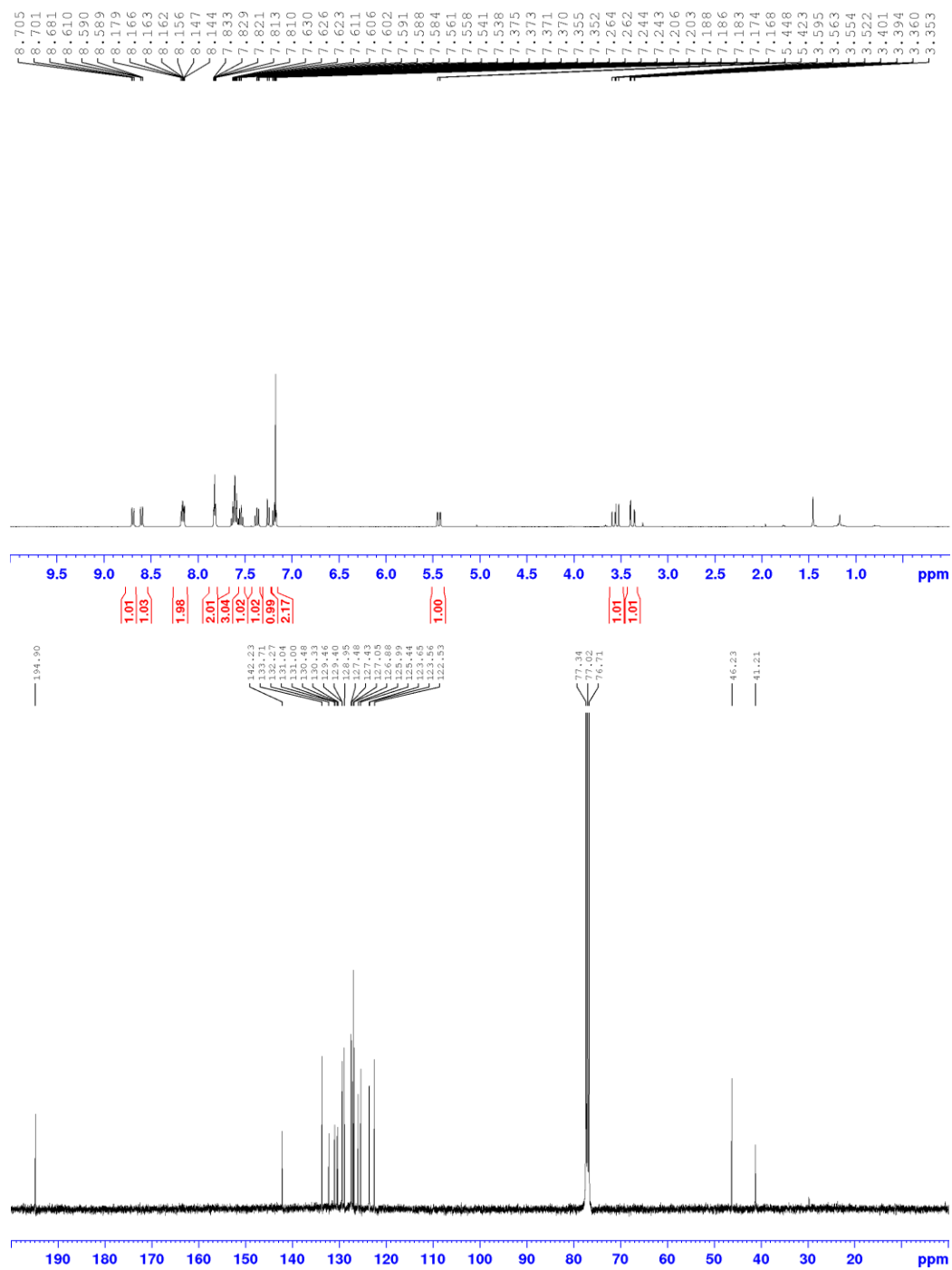
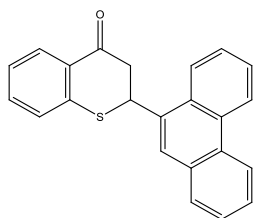
¹H, ¹³C-NMR spectra for compounds: **2Ag, 3Ag, 2Ka, 2La, 2Na, 3Ea, 3Fa, 3Ka-3Ma, 3Pa, 4Af, 5Ac, 5Ae, and 7Ab**.....S2-4, S7-11, S14-19, and S21

¹⁹F spectra for compounds: **2Ka, 3Ka and 5Ae** S5-6, S12-13, and S20

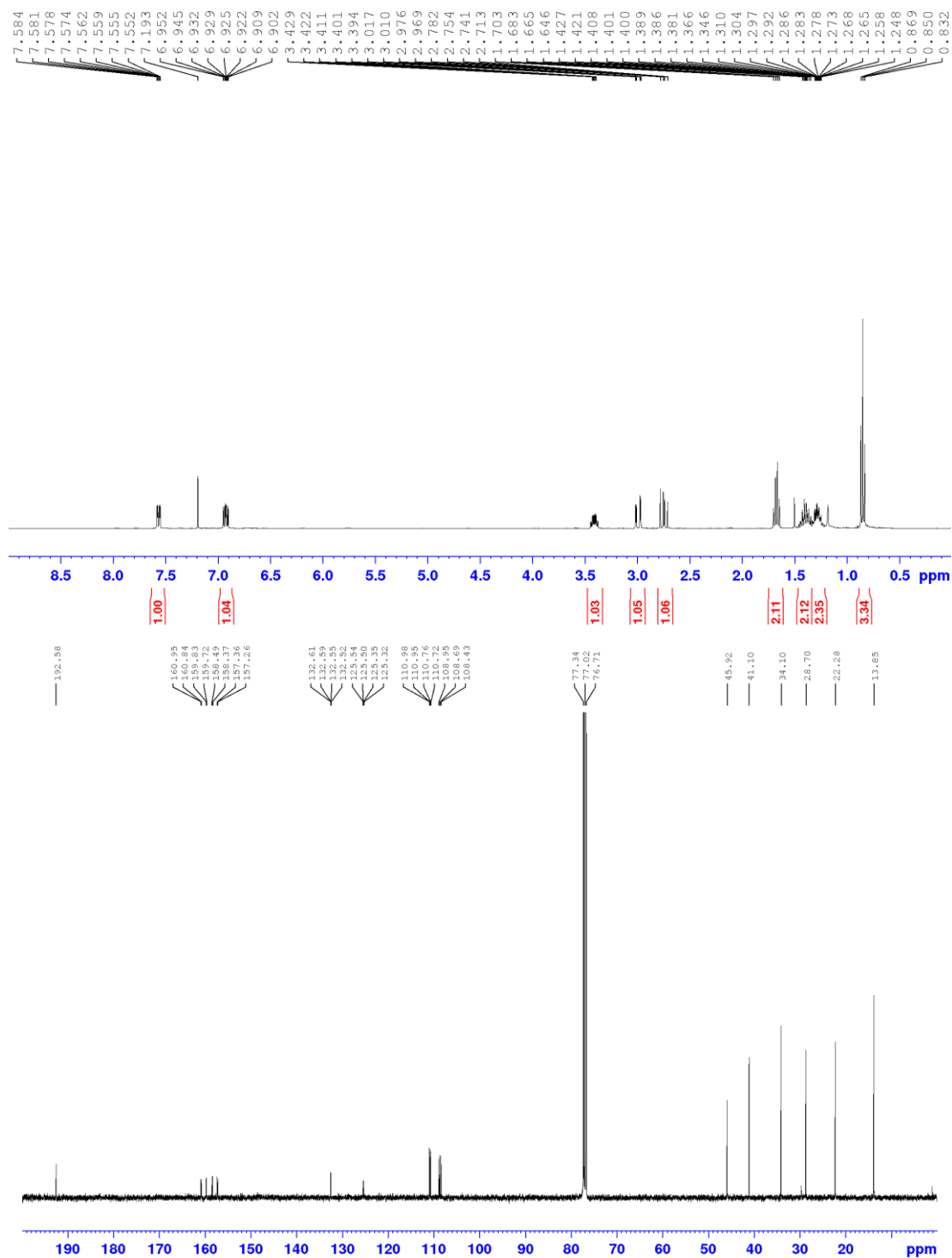
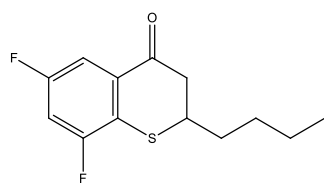
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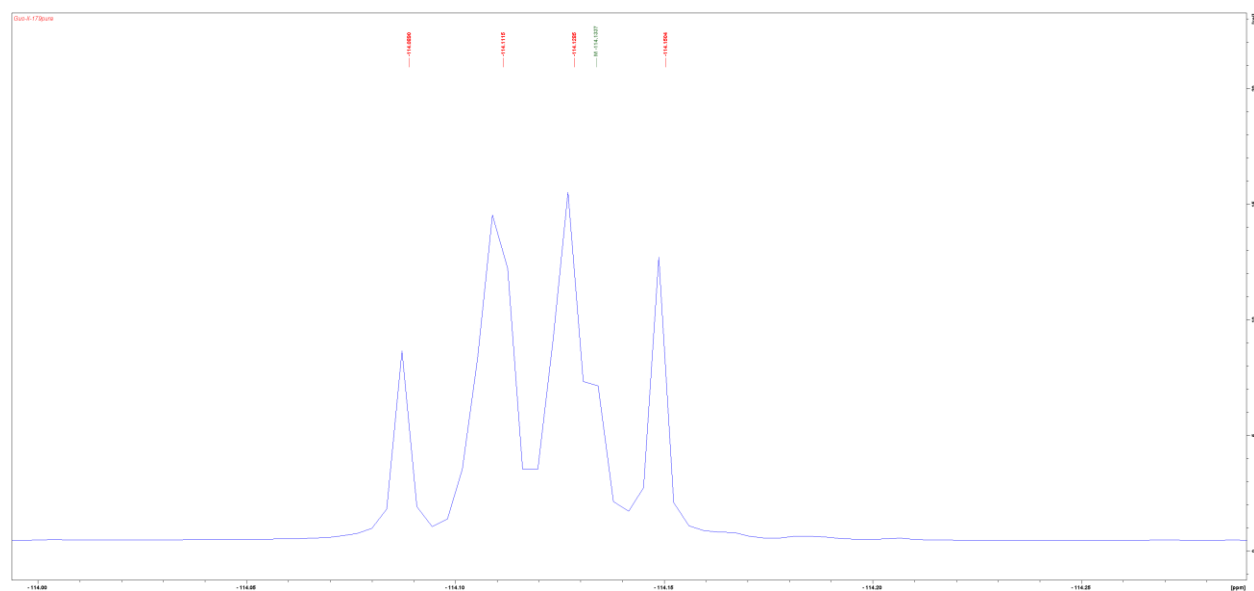
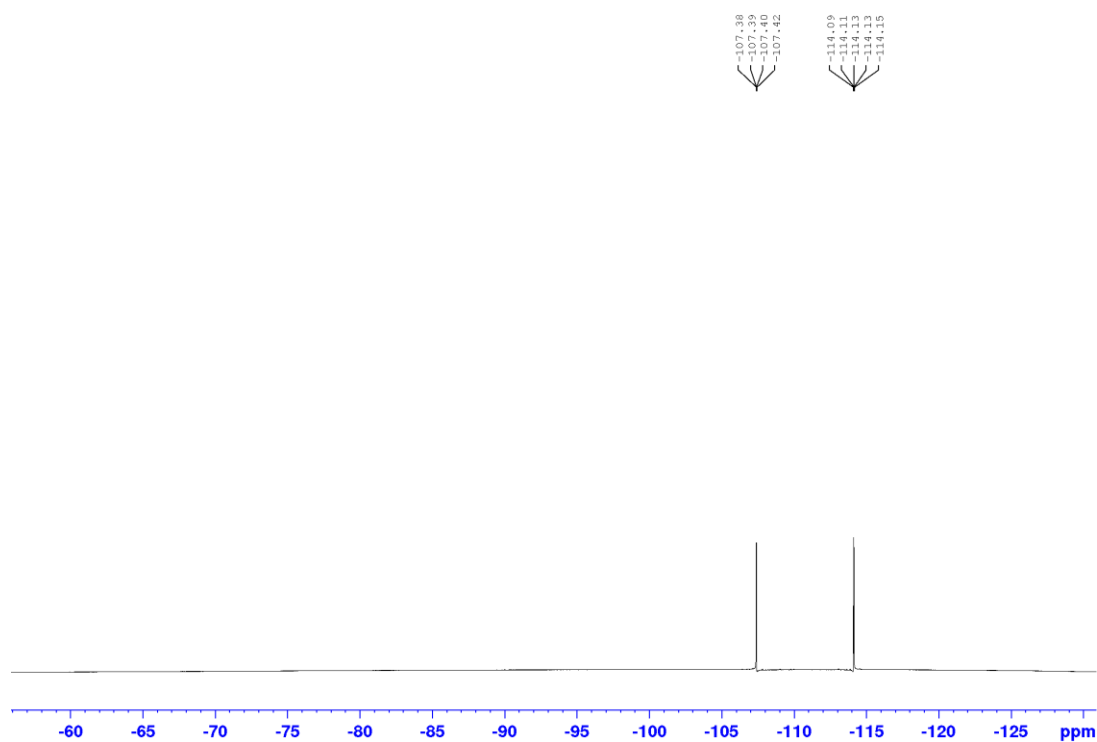
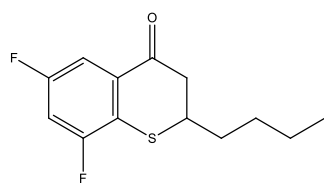
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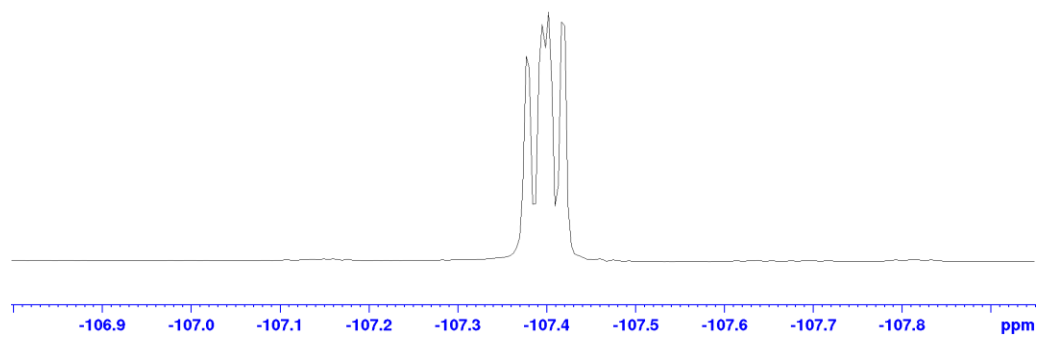
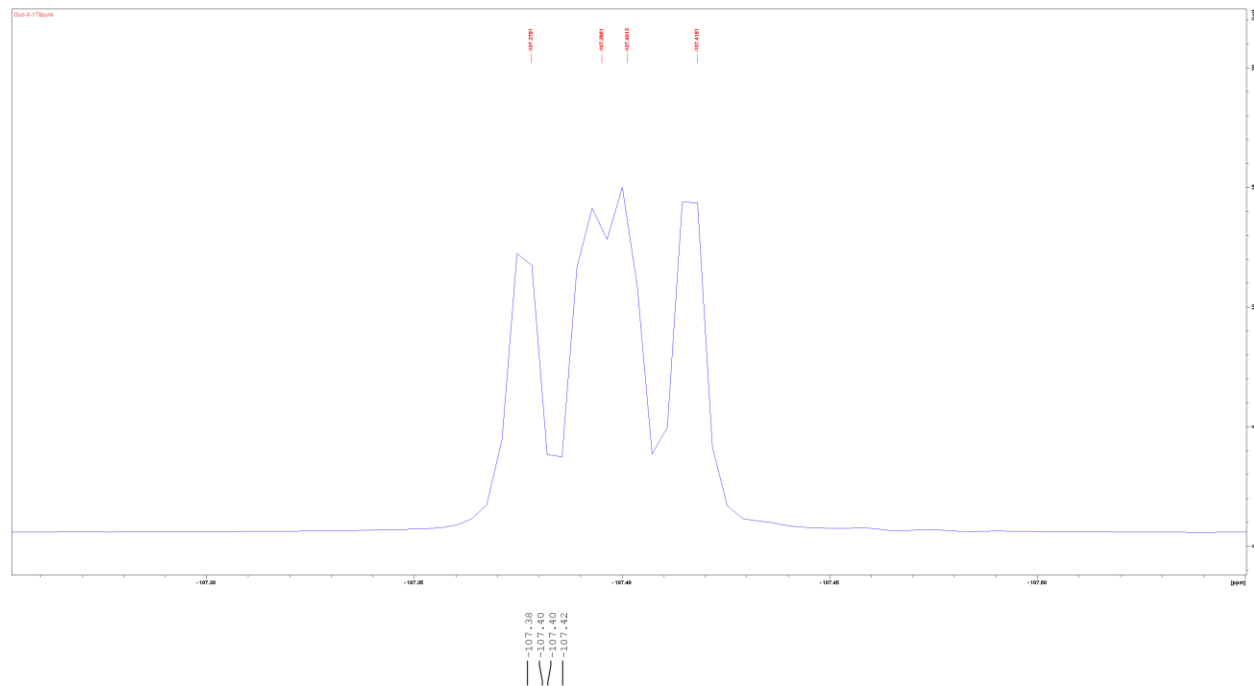
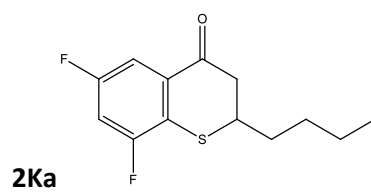


2Ka

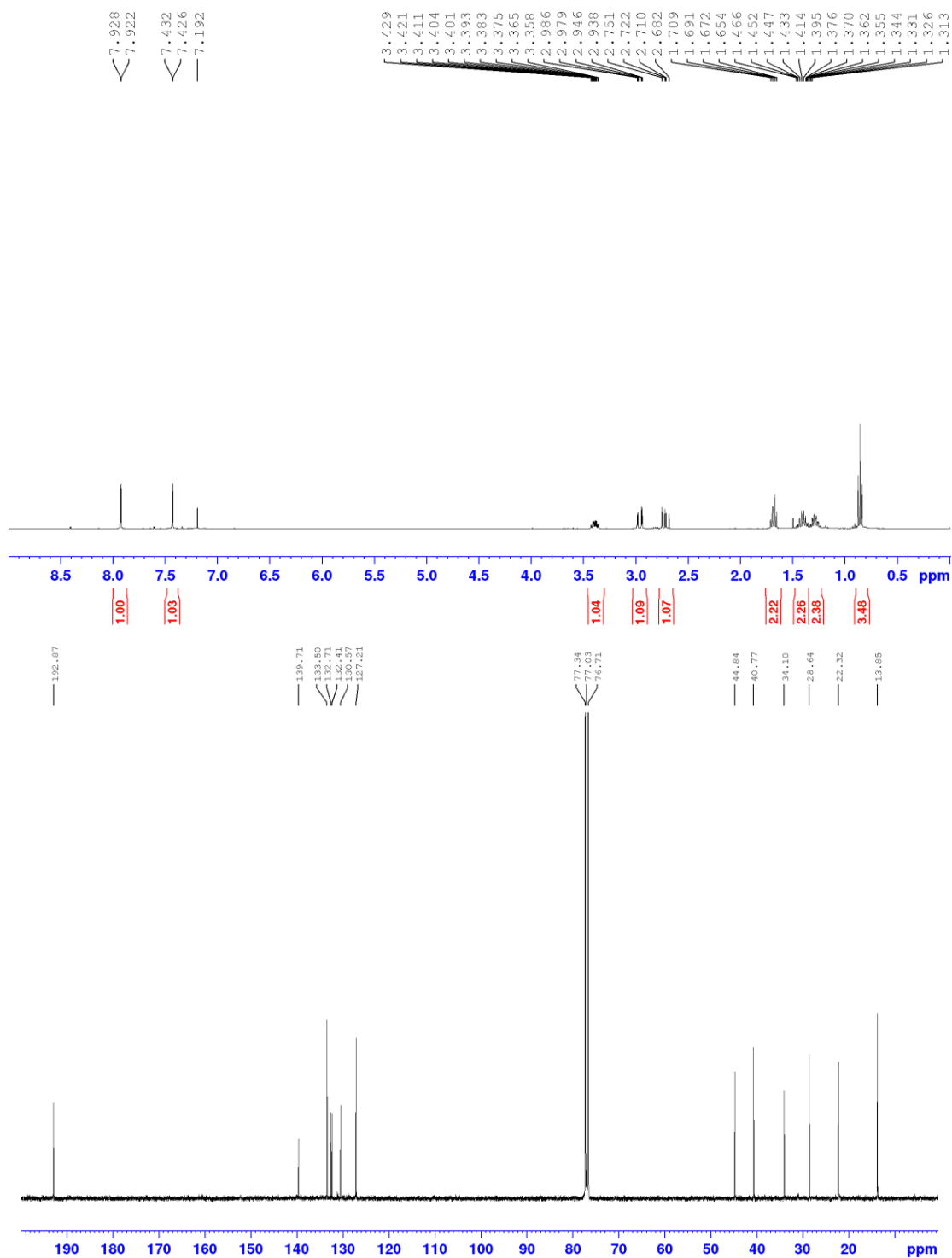
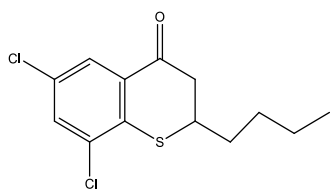


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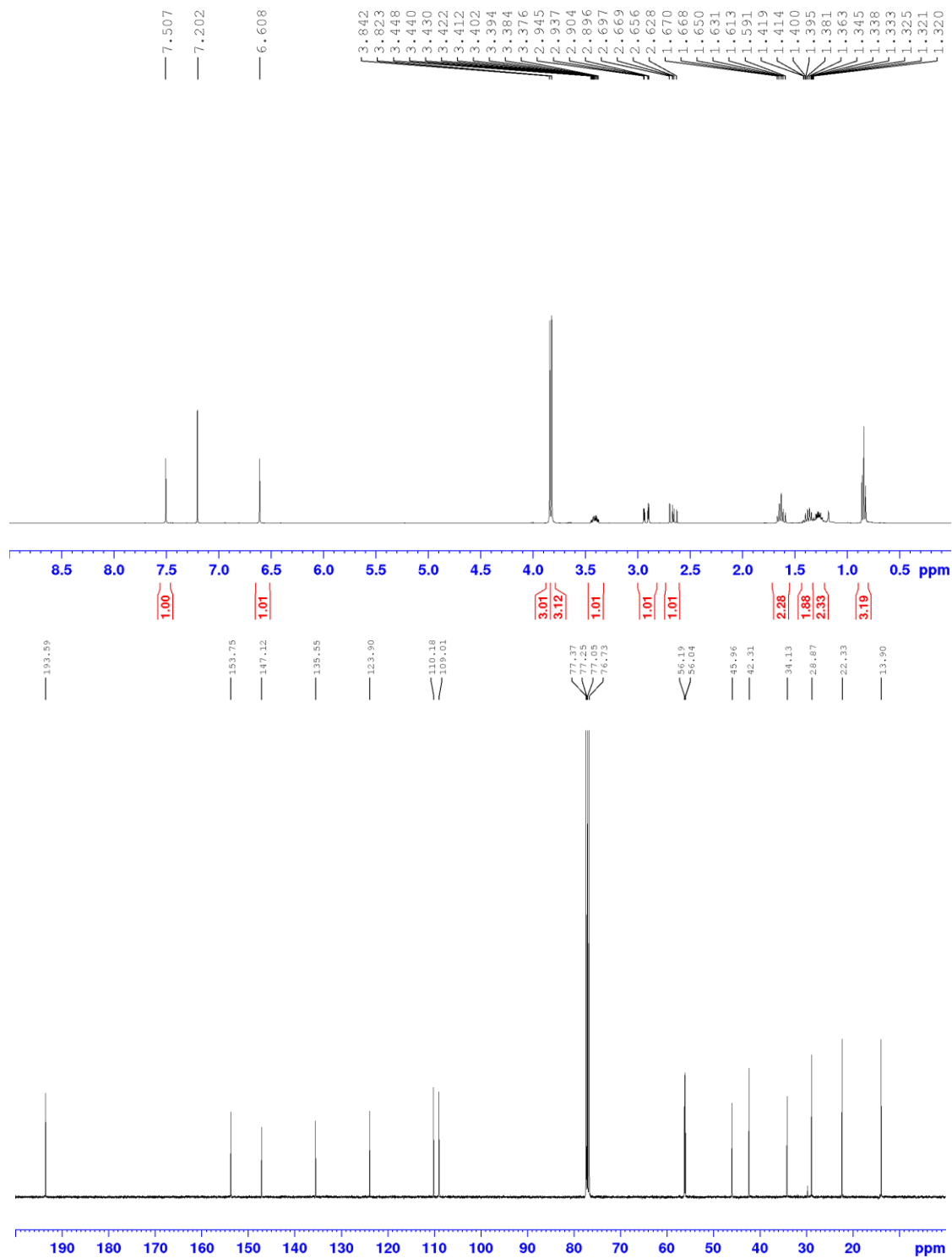
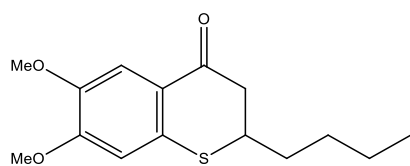




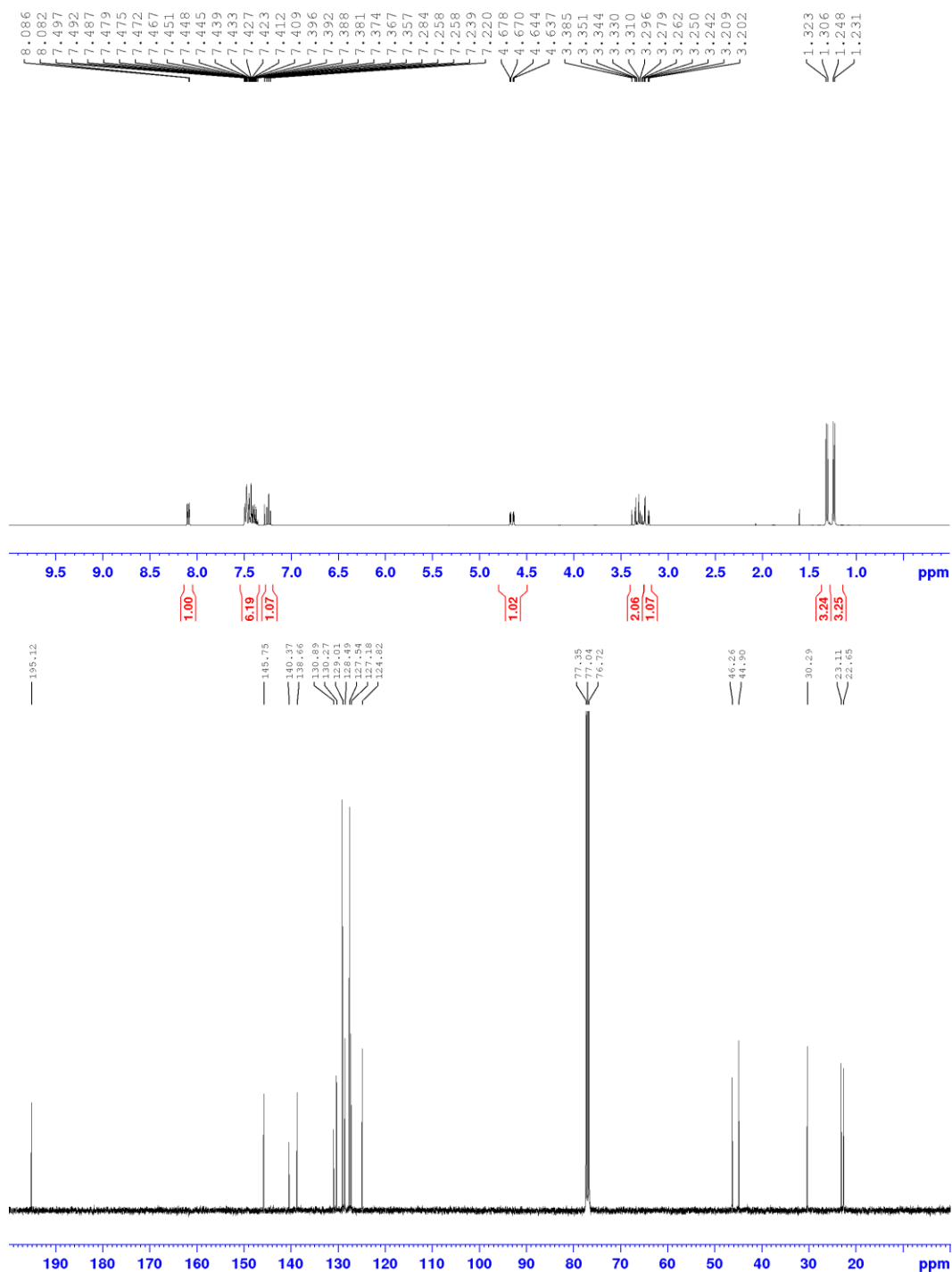
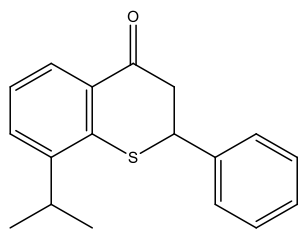
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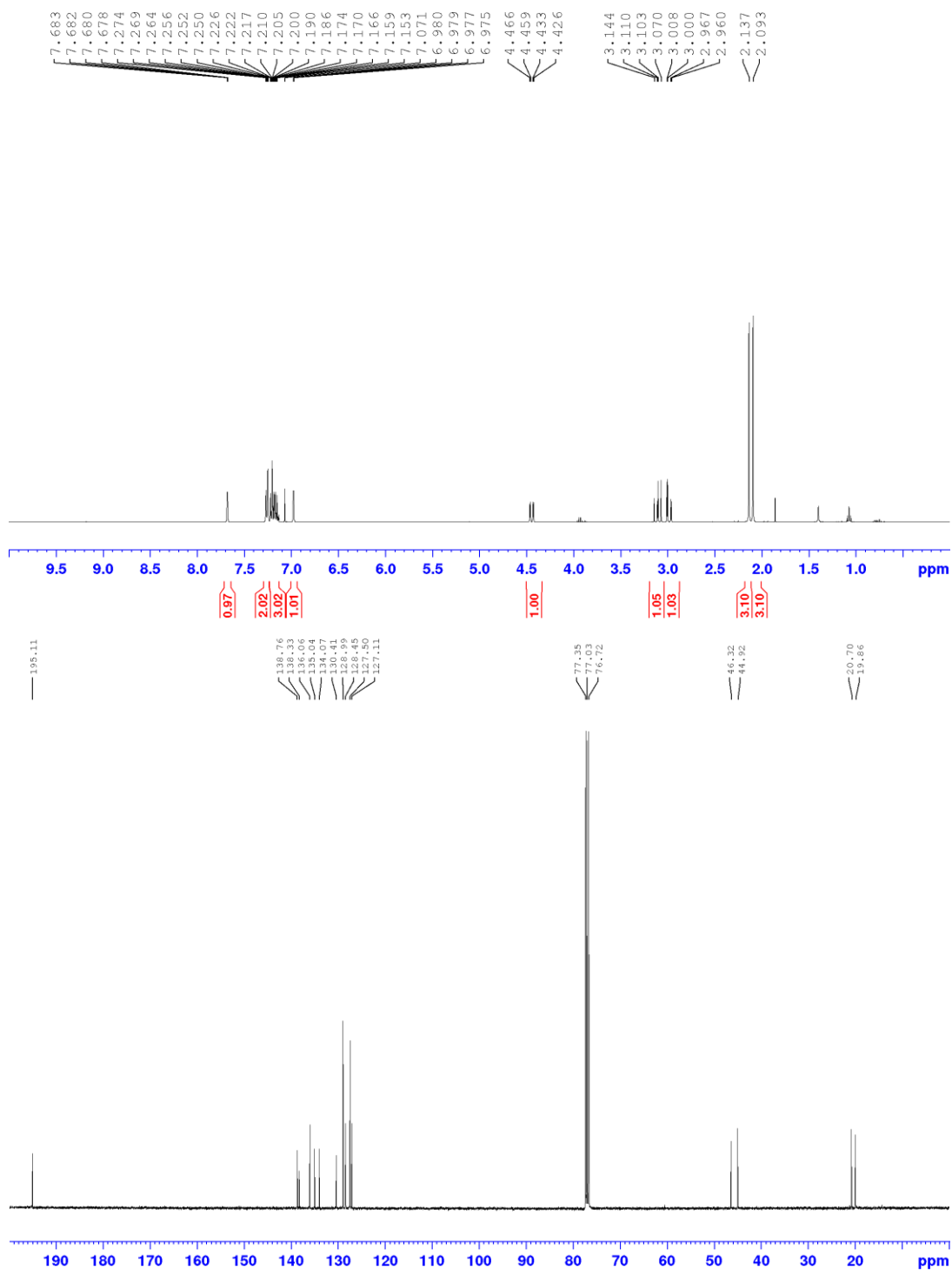
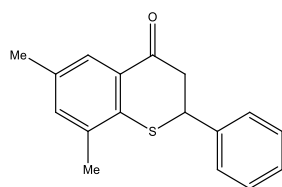
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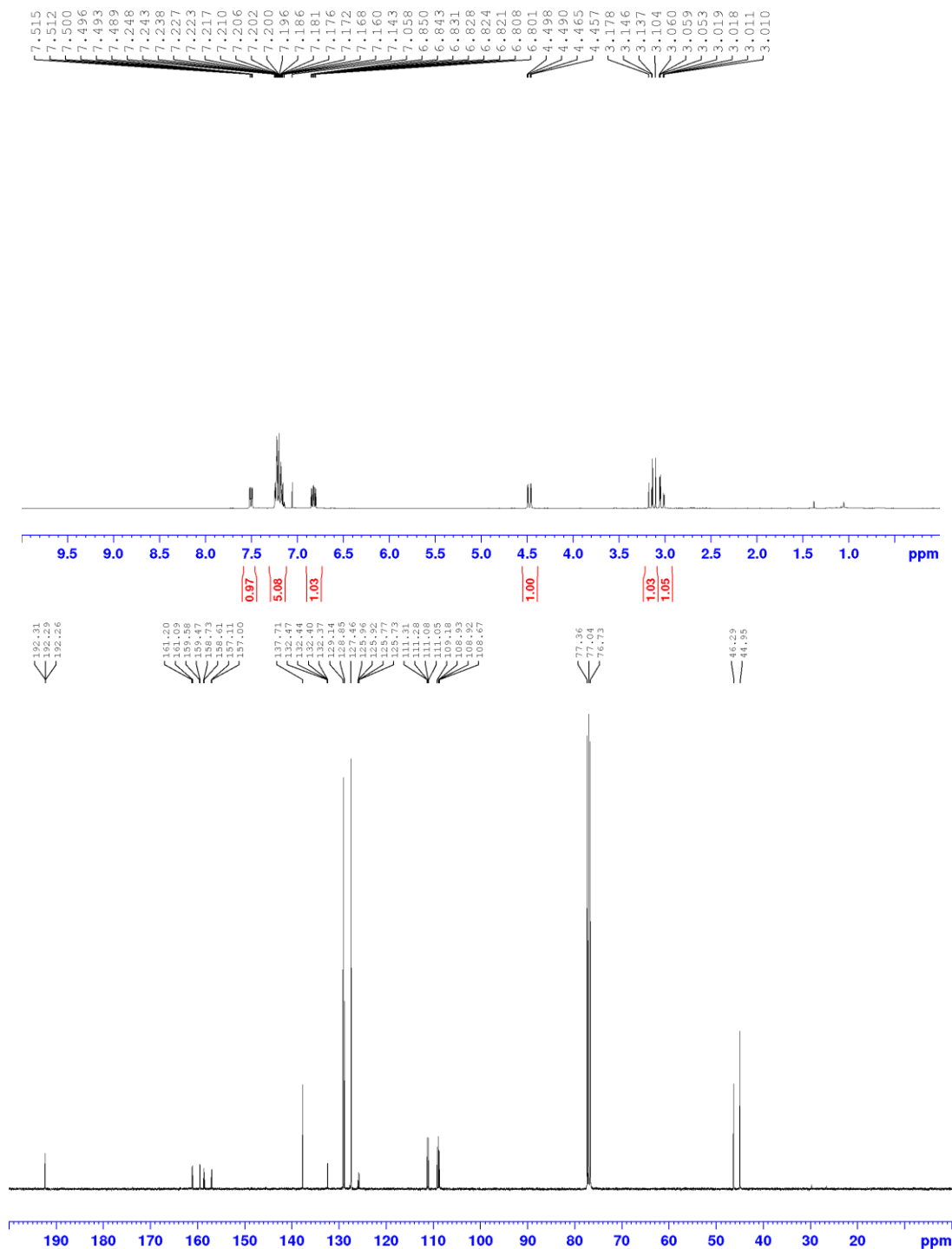
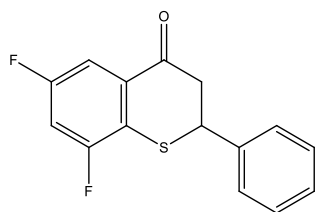
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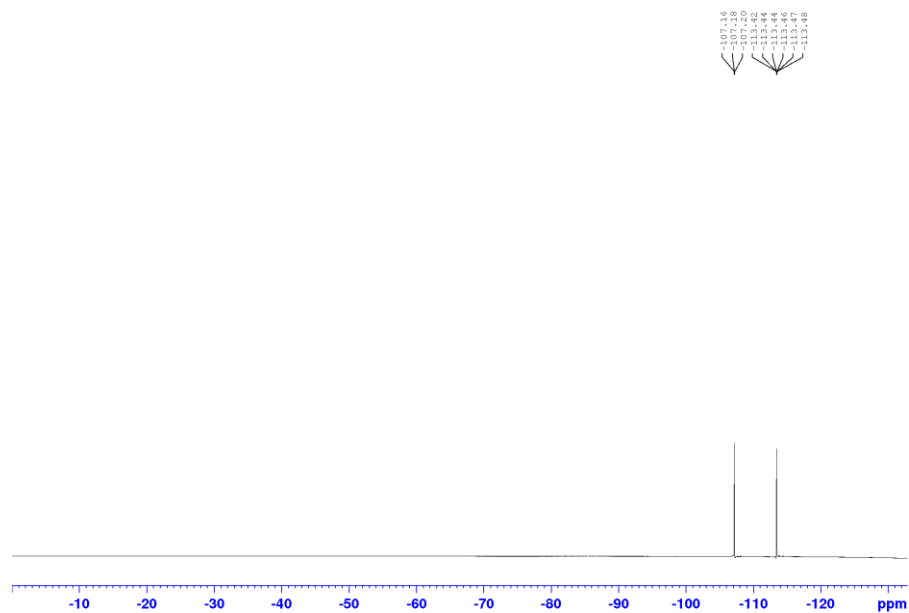
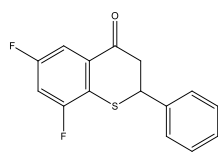
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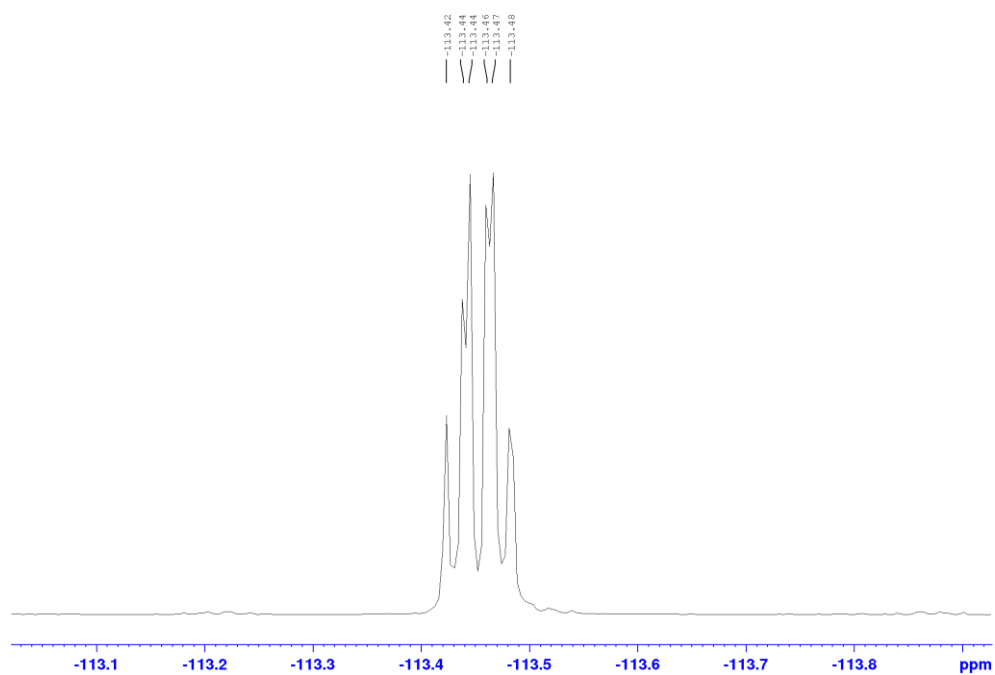
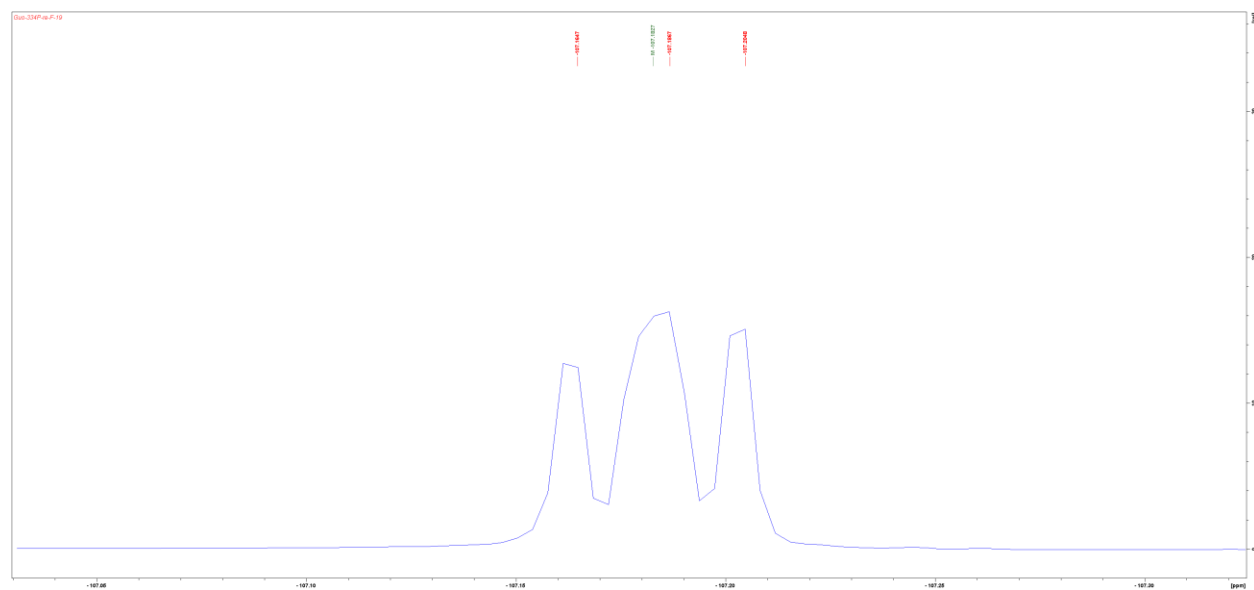
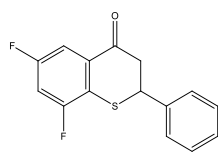
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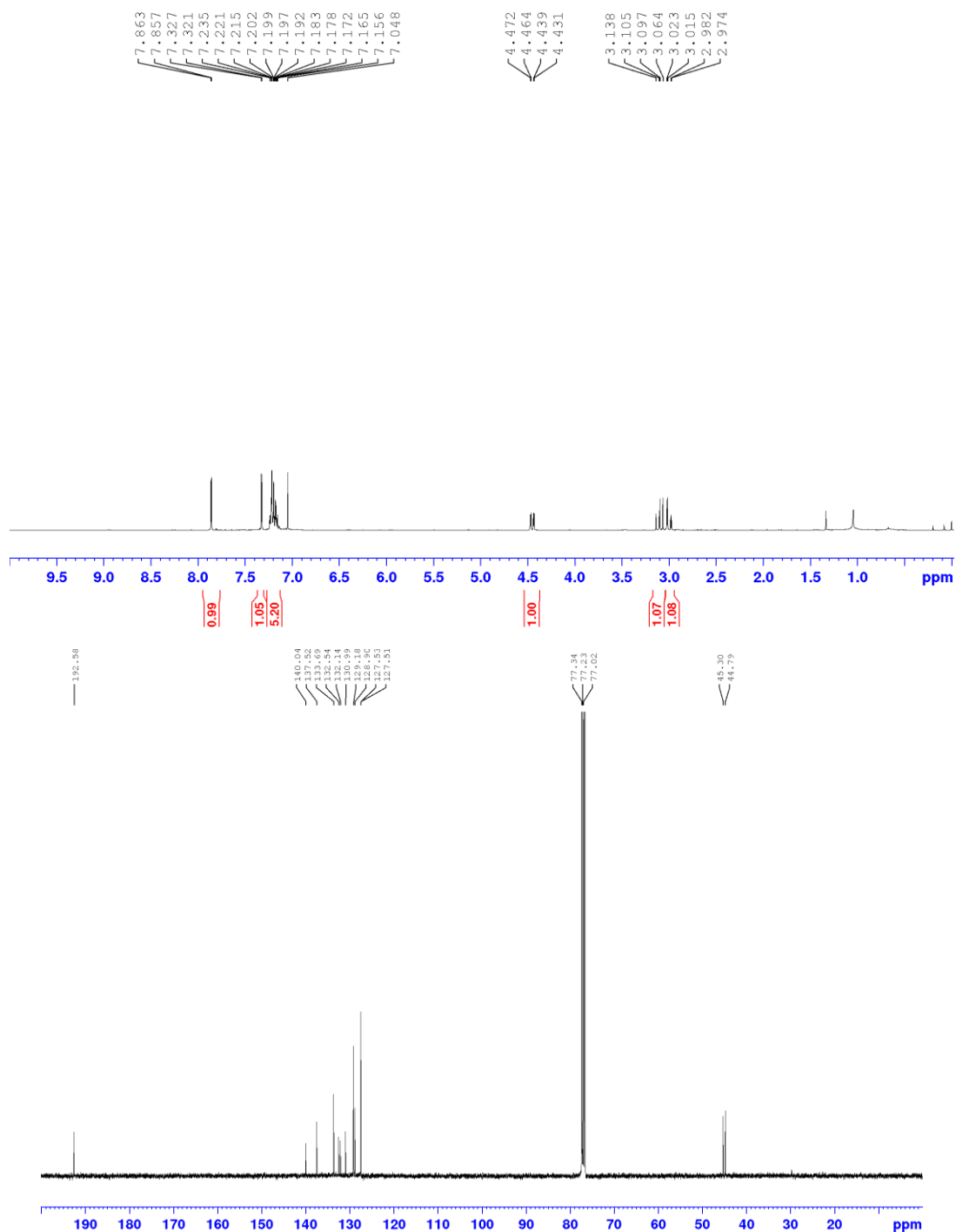
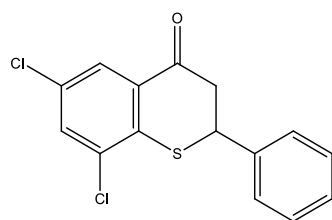
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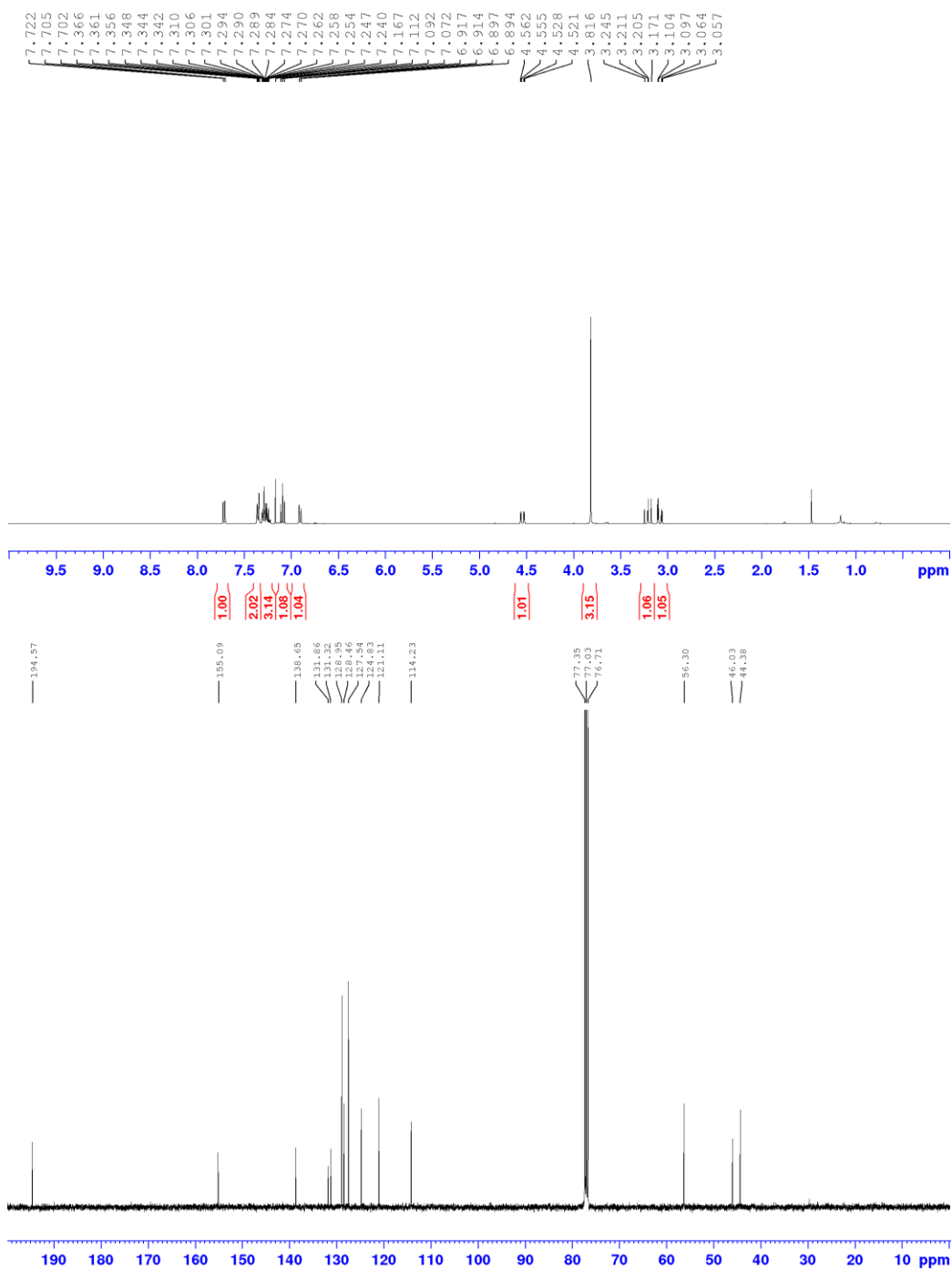
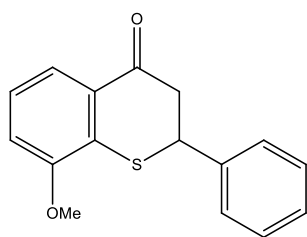
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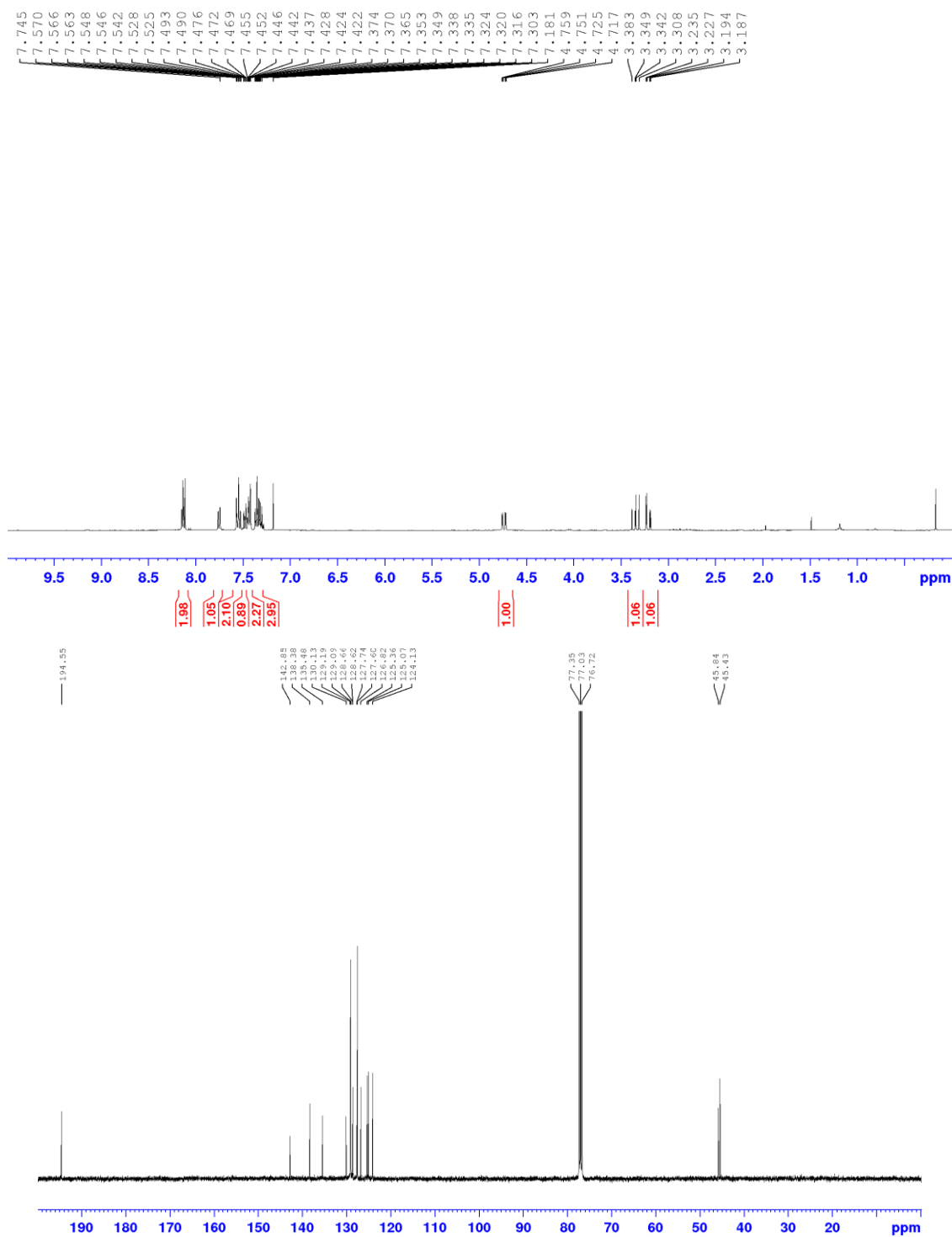
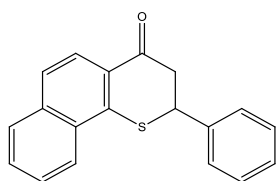
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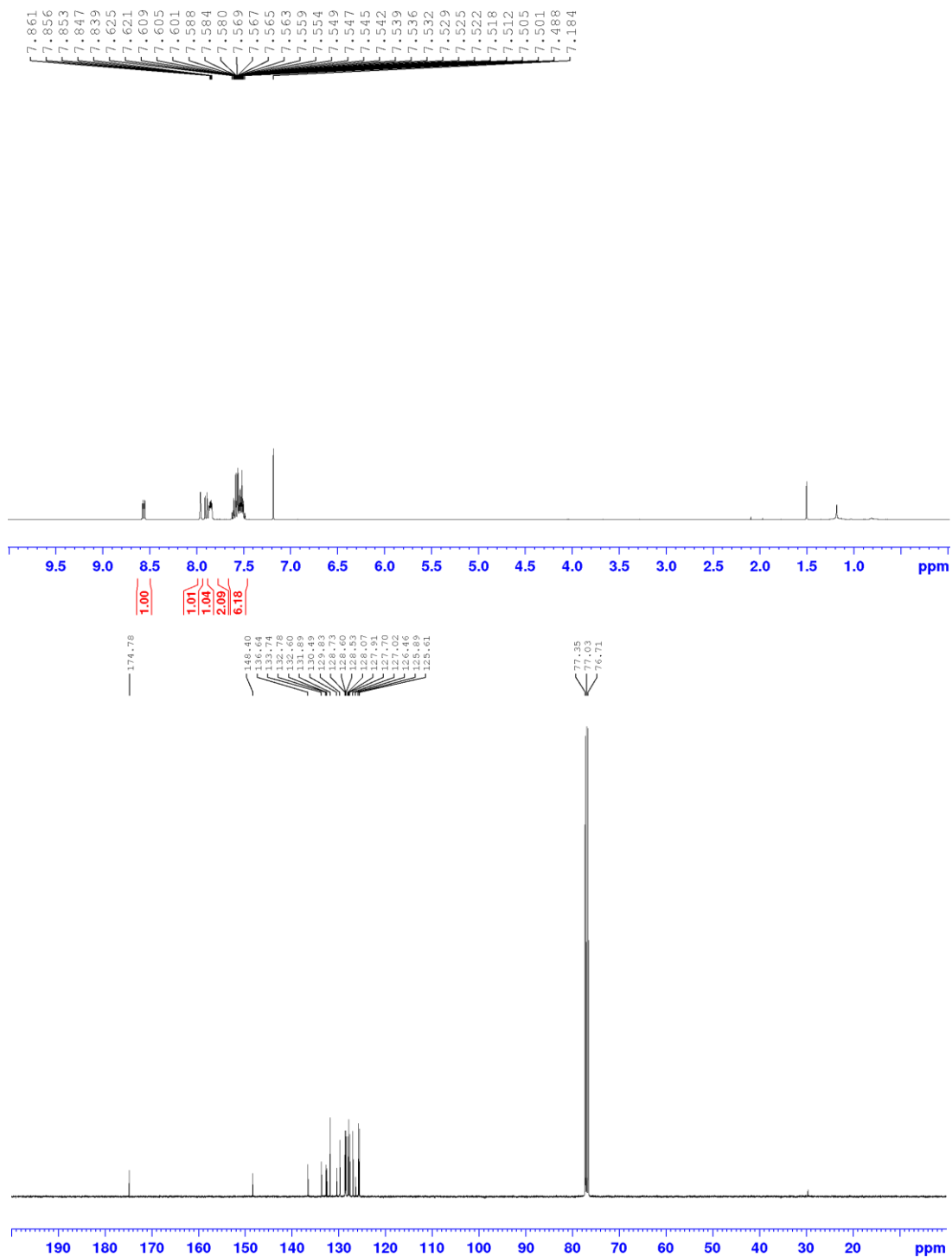
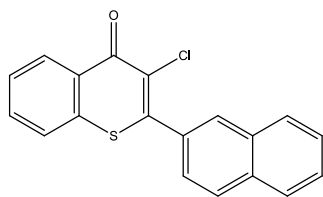
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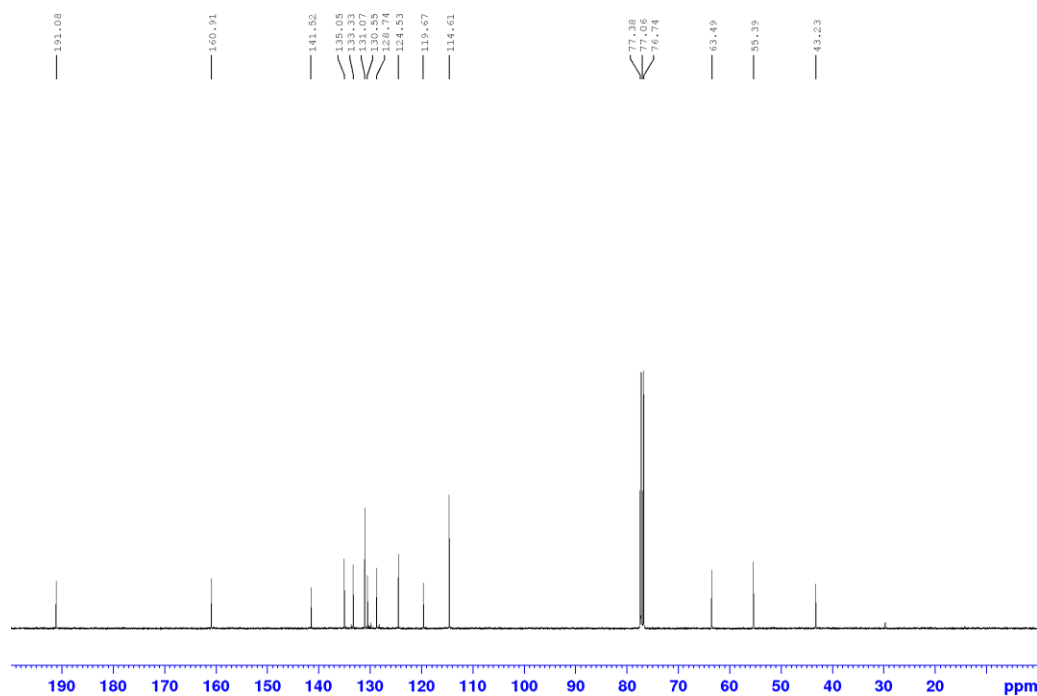
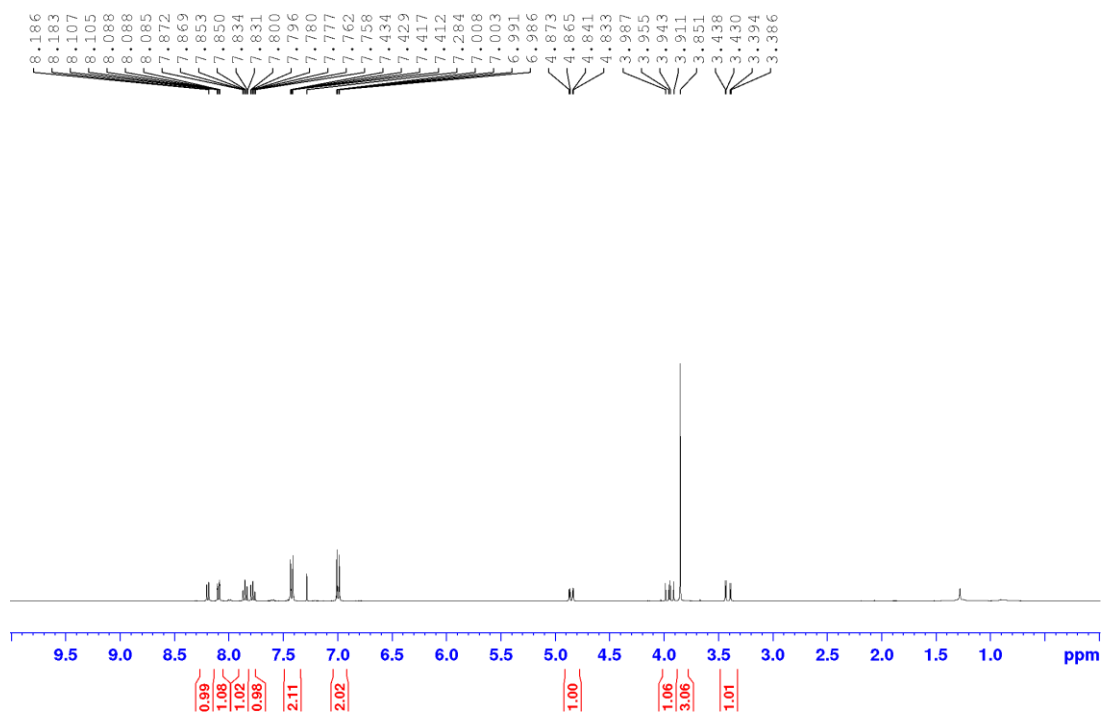
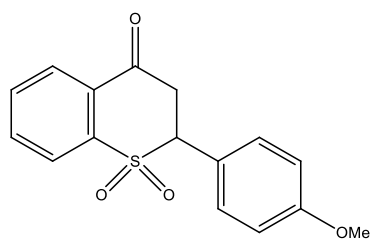
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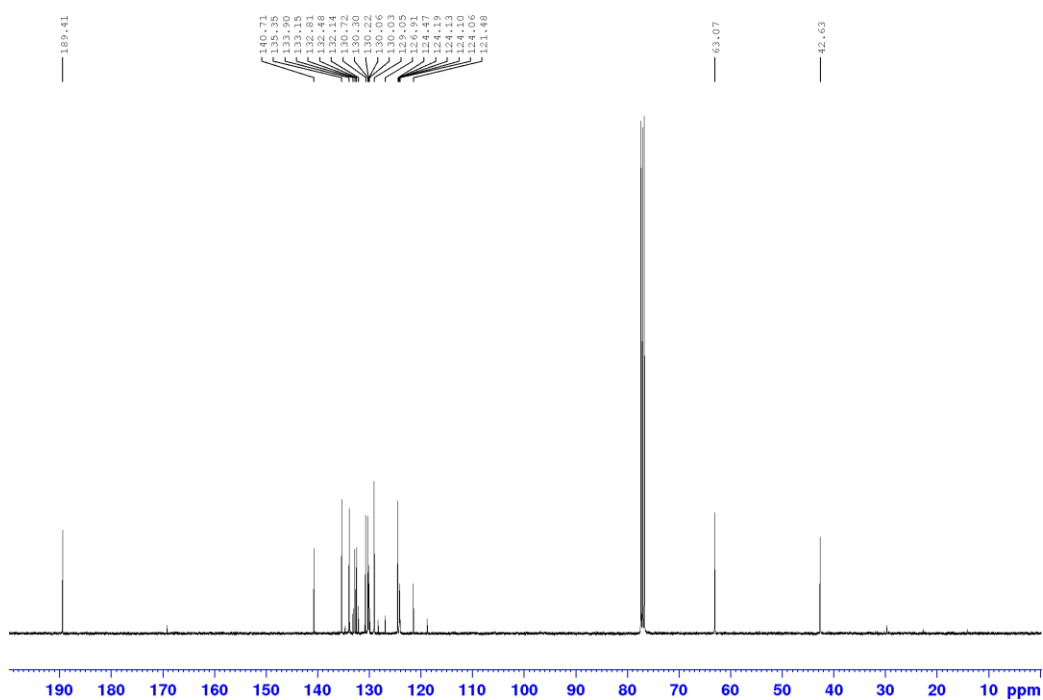
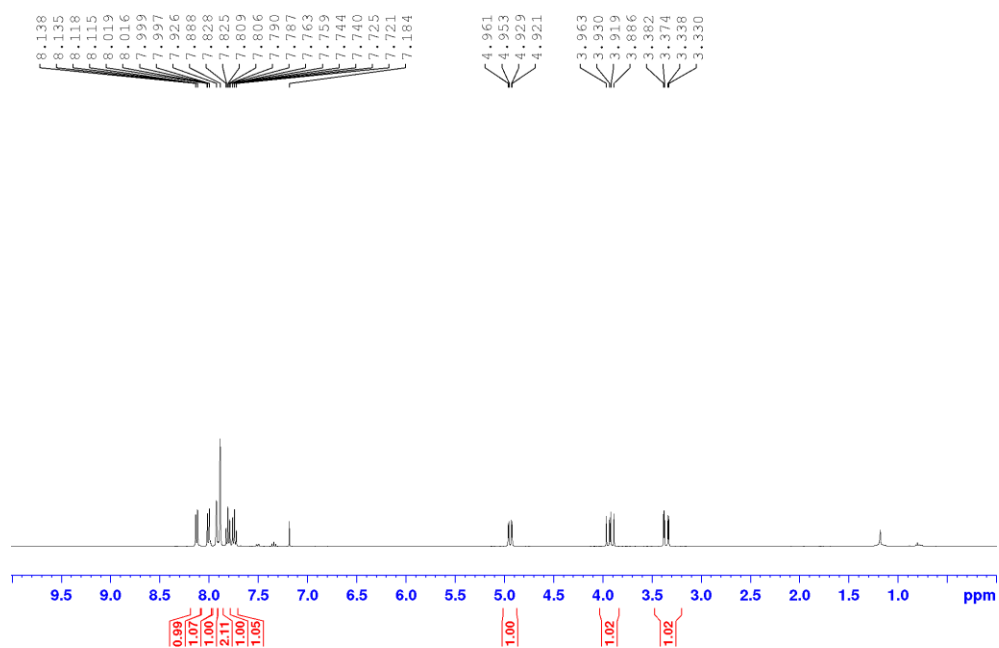
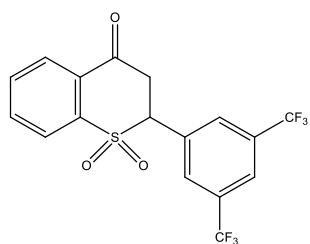
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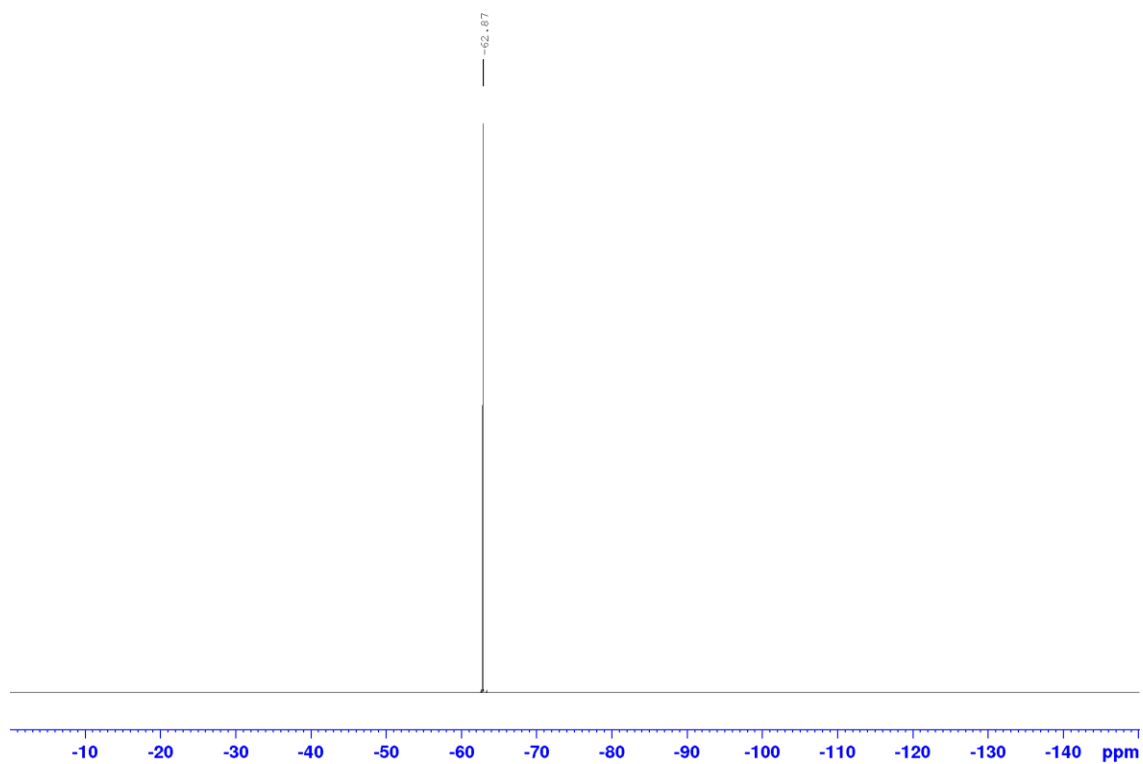
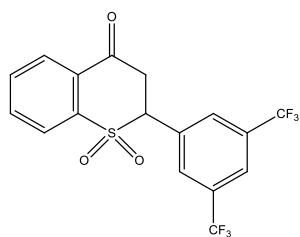
5Ac



5Ae



5Ae



7Ab

