

## Supporting Information

### Visible-light-induced methylsulfonylation/ bicyclization of C(sp<sup>3</sup>)-tethered 1,7-enynes using DMSO/H<sub>2</sub>O system

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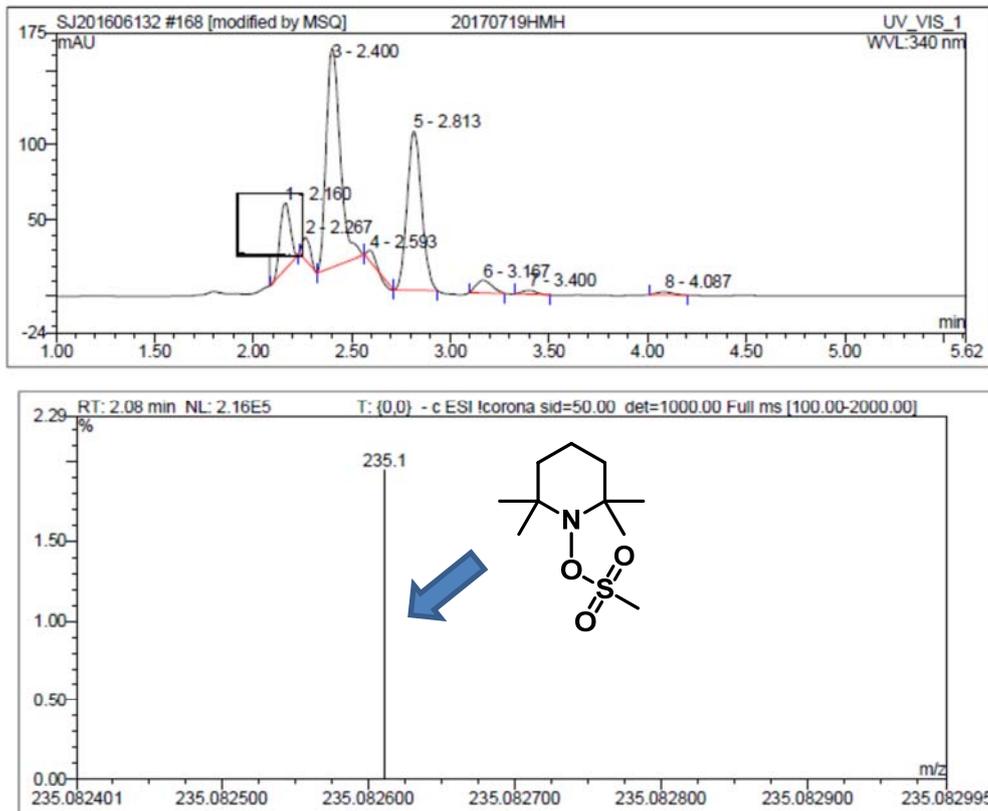
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#### Context

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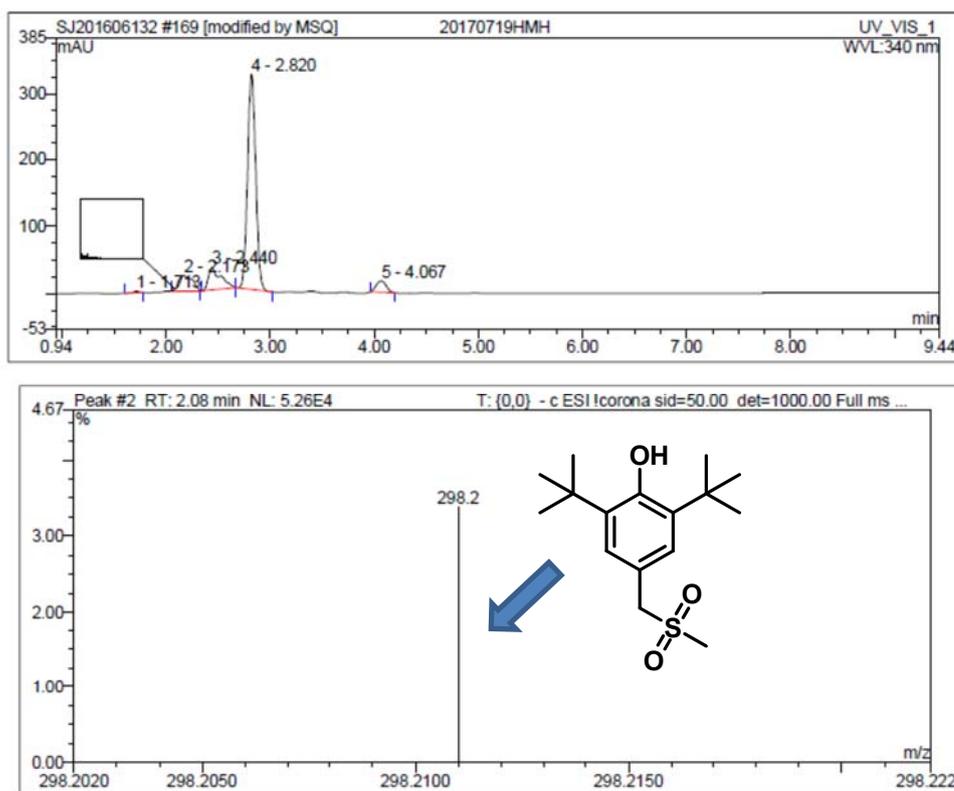
**Overlay of Samples and Spectra from Integration View**

deftLCMS/Overlay UV/MS Spectra Print

Chromeleon (c) Dionex 1996-2006  
Version 6.80 SR15 Build 4656 (243203)

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**Figure S1. Copy of LC-MS Spectrum for TEMPO-S Adduct**

**Overlay of Samples and Spectra from Integration View**

deflLCMS/Overlay UV/MS Spectra Print

Chromeleon (c) Dionex 1996-2006  
Version 6.80 SR15 Build 4656 (243203)

[Create PDF](http://www.novapdf.com) files without this message by purchasing novaPDF printer (<http://www.novapdf.com>)

**Figure S2. Copy of LC-MS Spectrum for BHT-S Adduct**

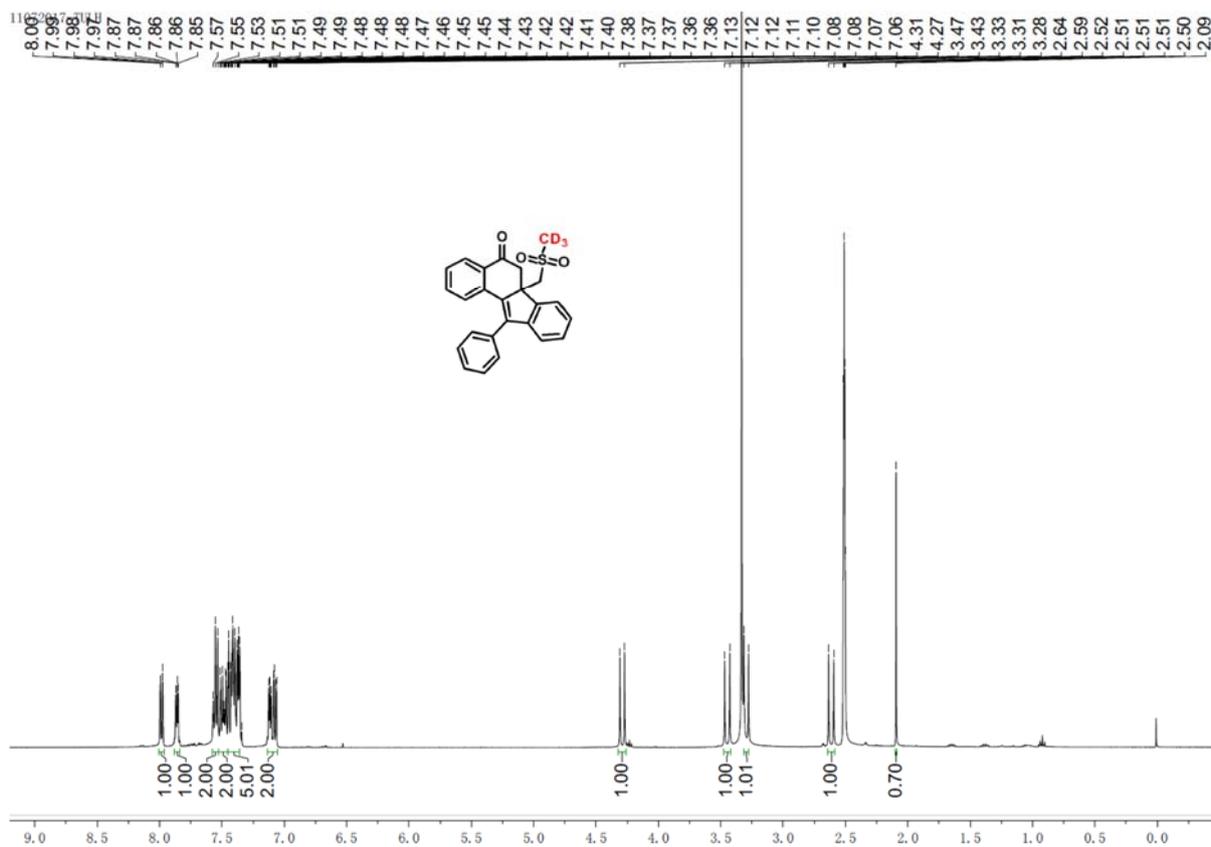


Figure S3. Copy of  $^1\text{H}$  NMR for DMSO- $d_6$  Experiments

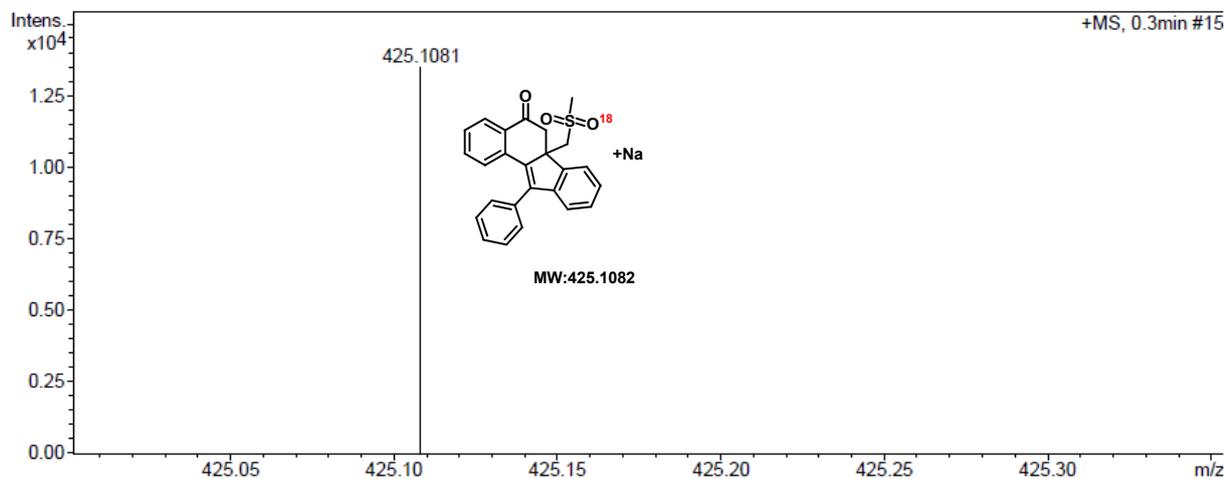
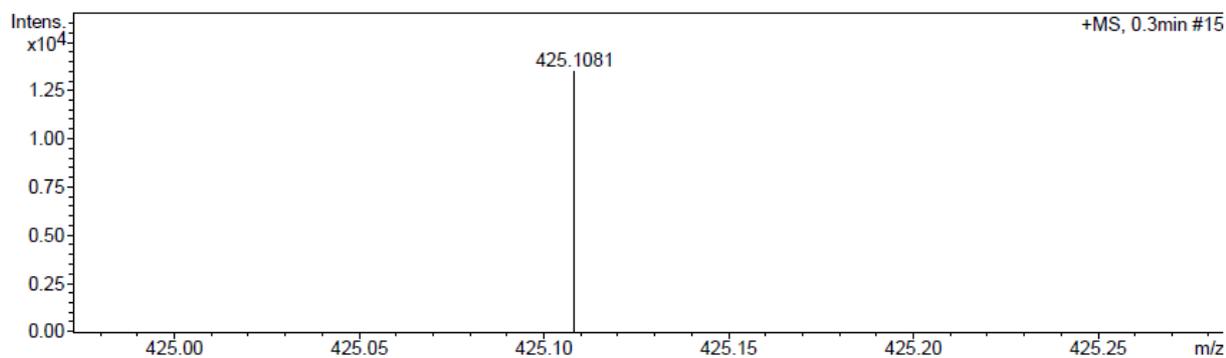


Figure S4. Copy of HRMS for Isotopic labelling experiments with  $\text{H}_2\text{O}^{18}$

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Operator :  
Acquired : 13 Mar 2018 15:39 using AcqMethod DBX-C  
Instrument : Instrumen  
Sample Name:  
Misc Info :  
Vial Number: 1

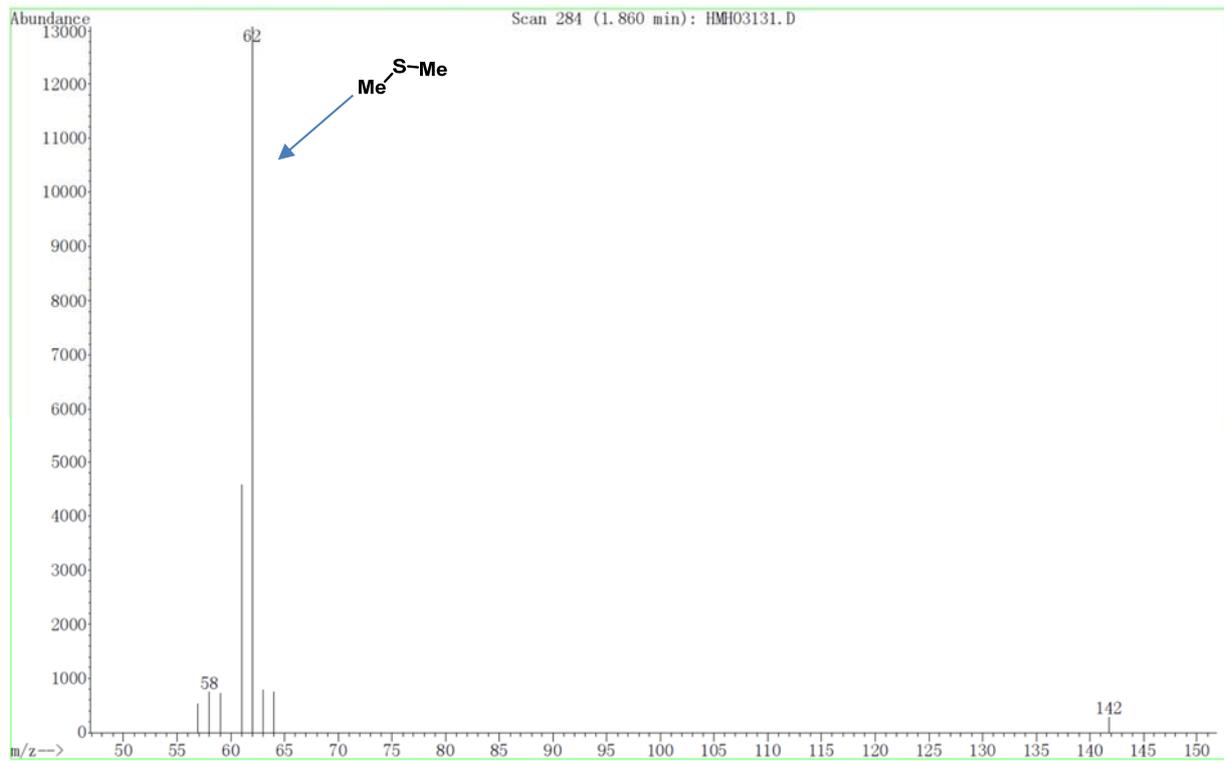
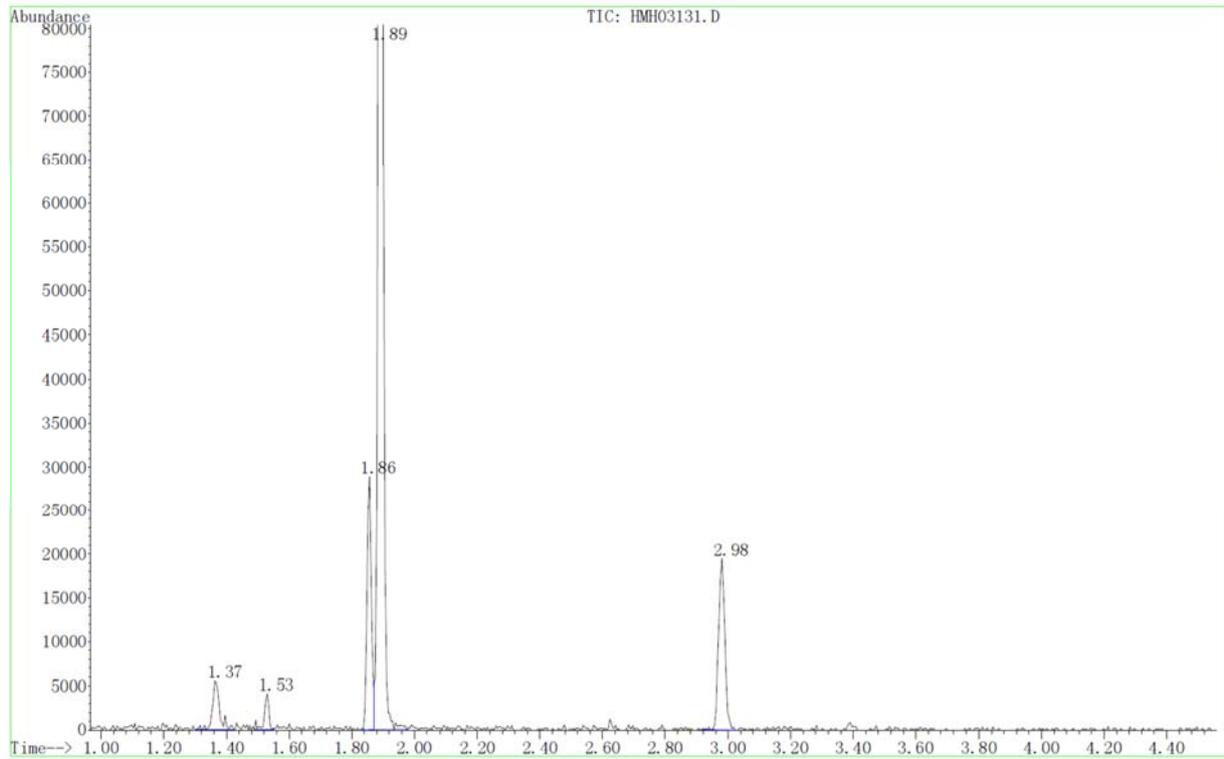
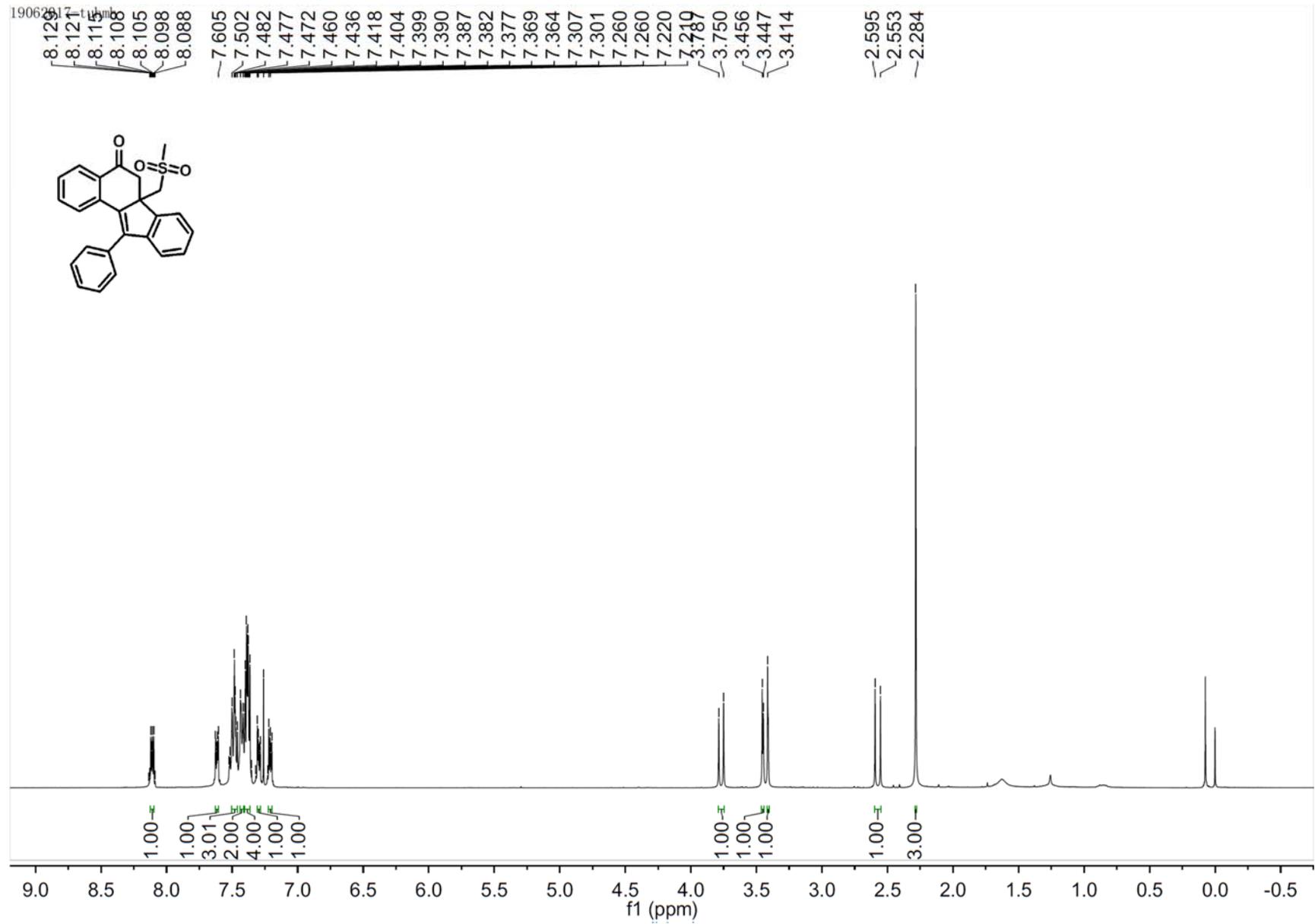
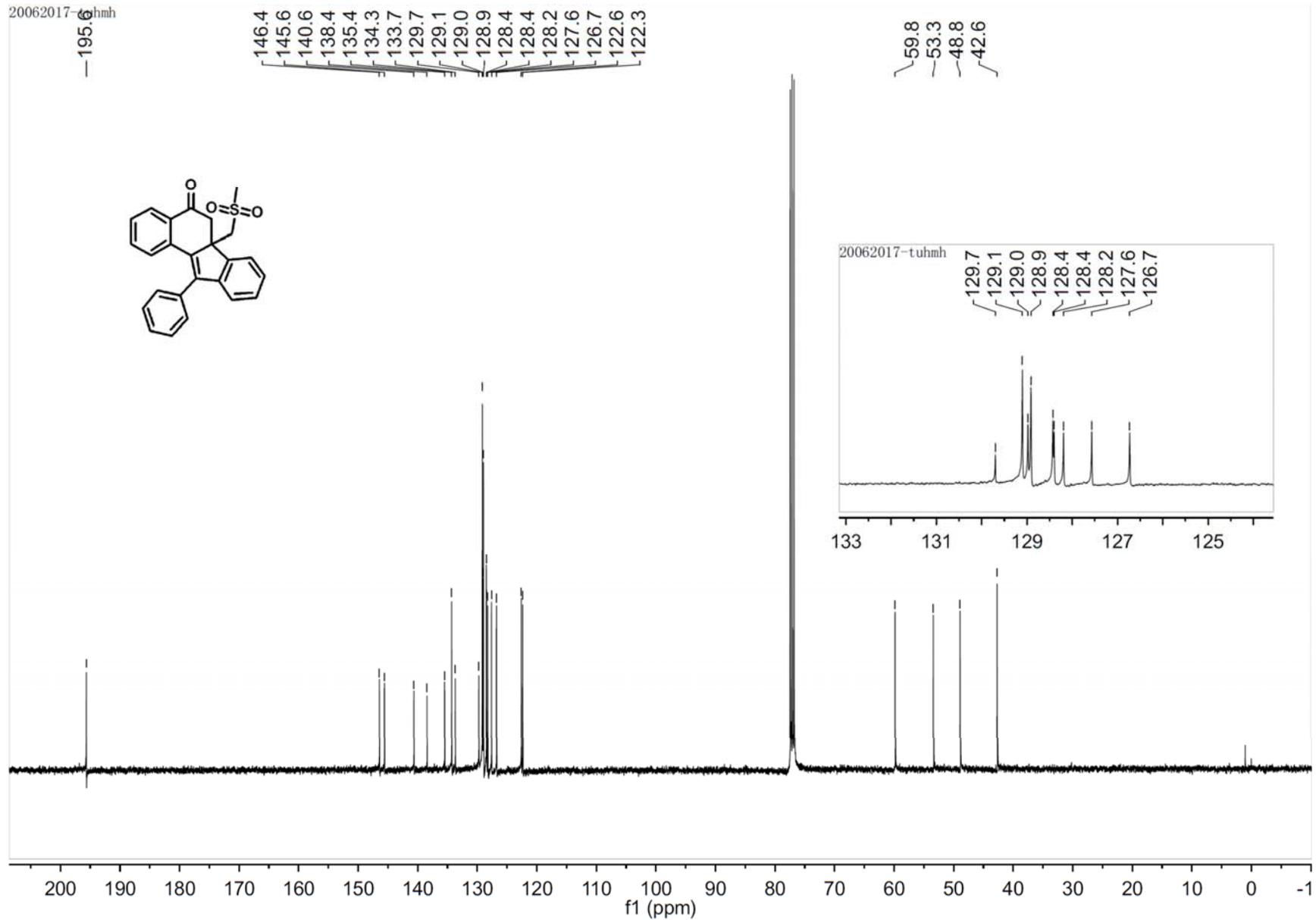
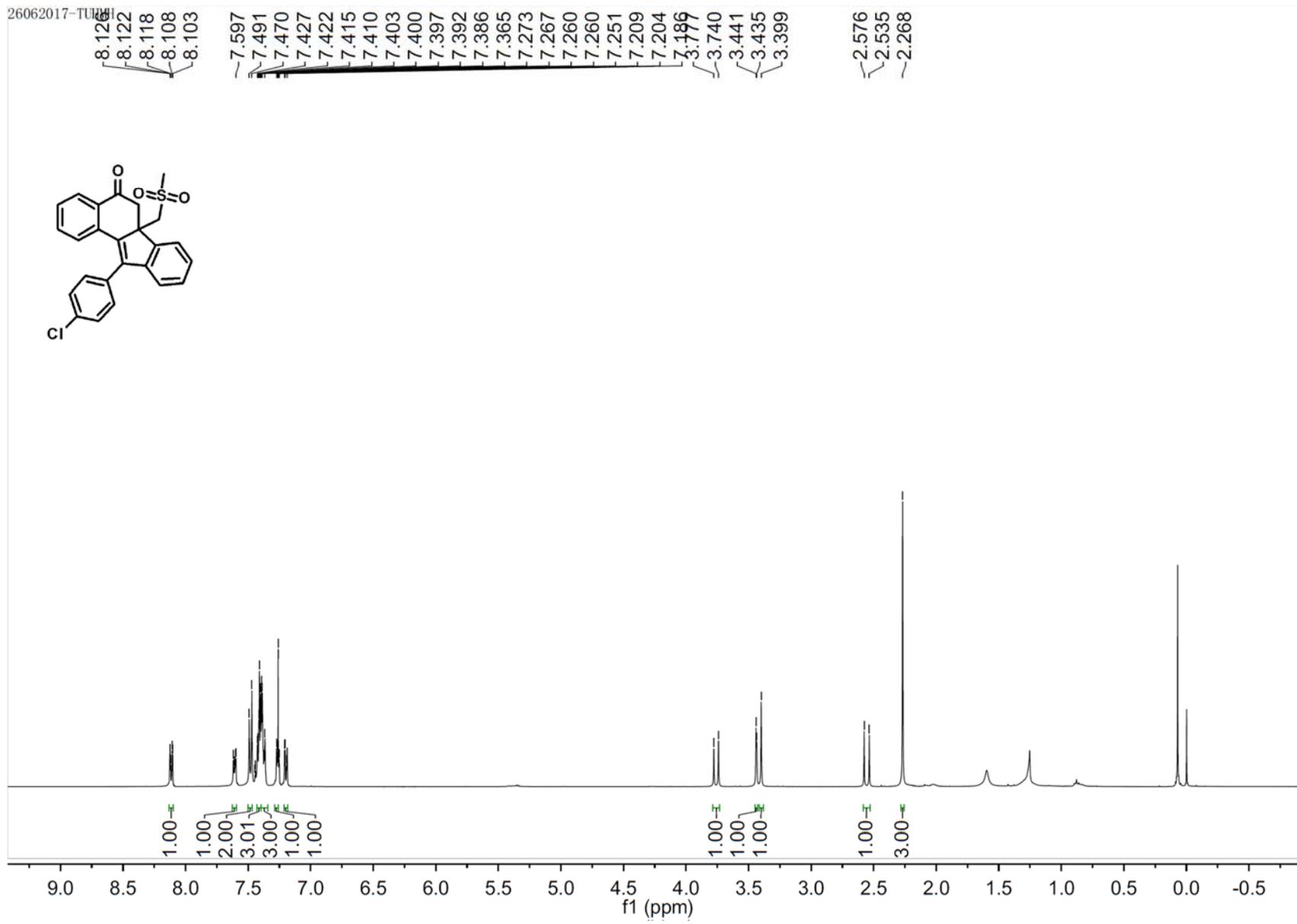


Figure S5. Copy of GC-MS of DMS

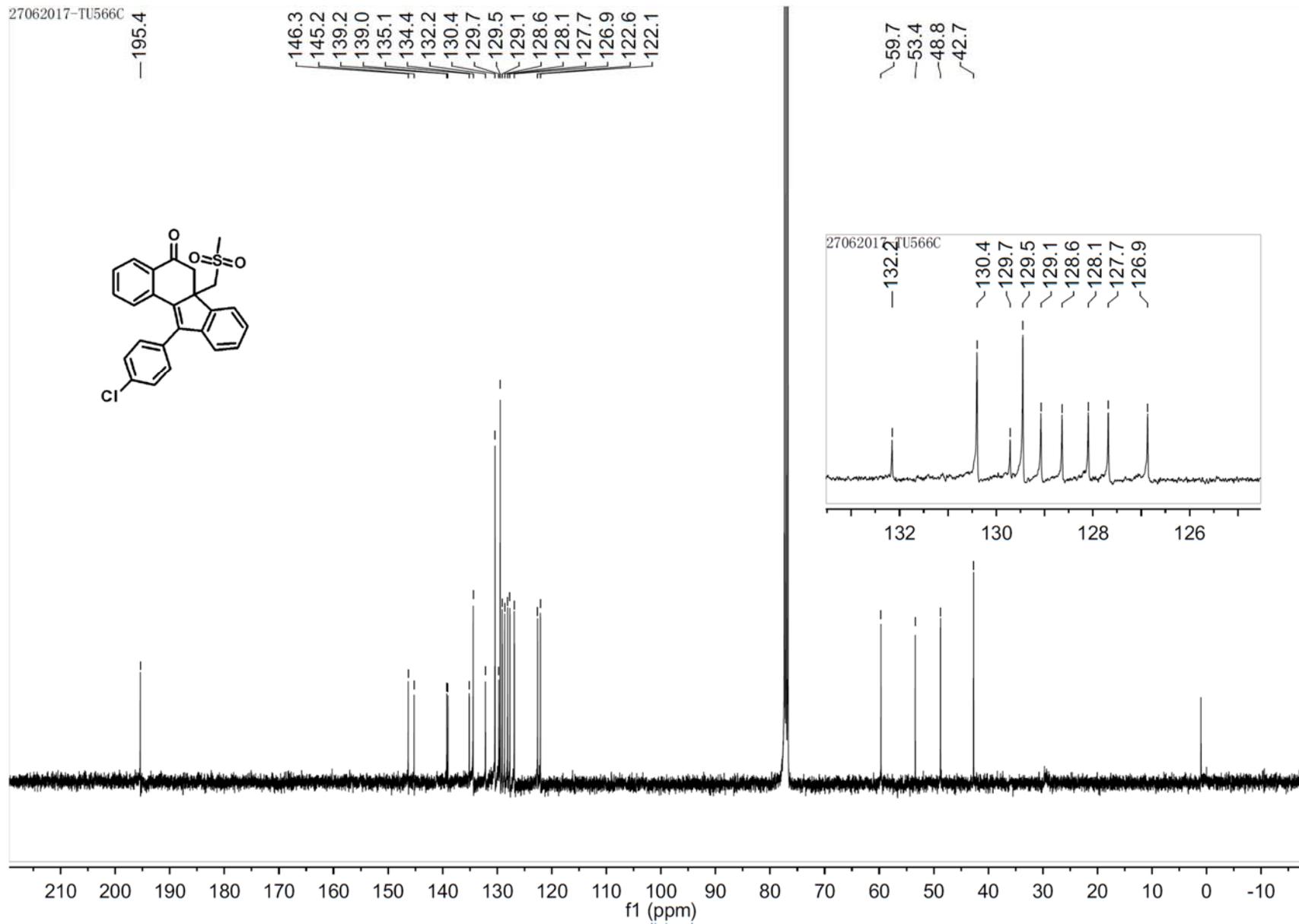




**<sup>13</sup>C NMR Spectrum of Compound 3a**

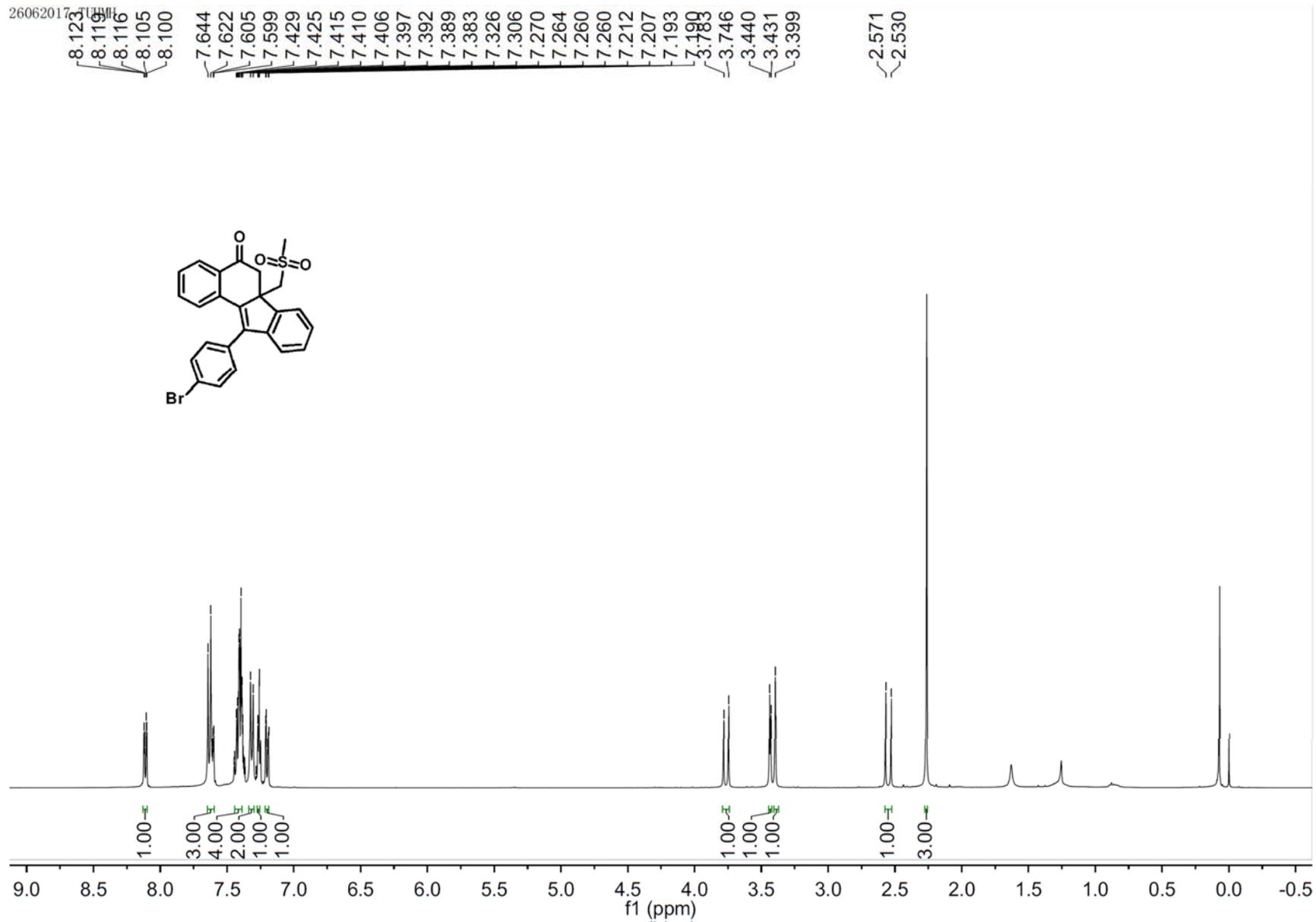


<sup>1</sup>H NMR Spectrum of Compound 3b

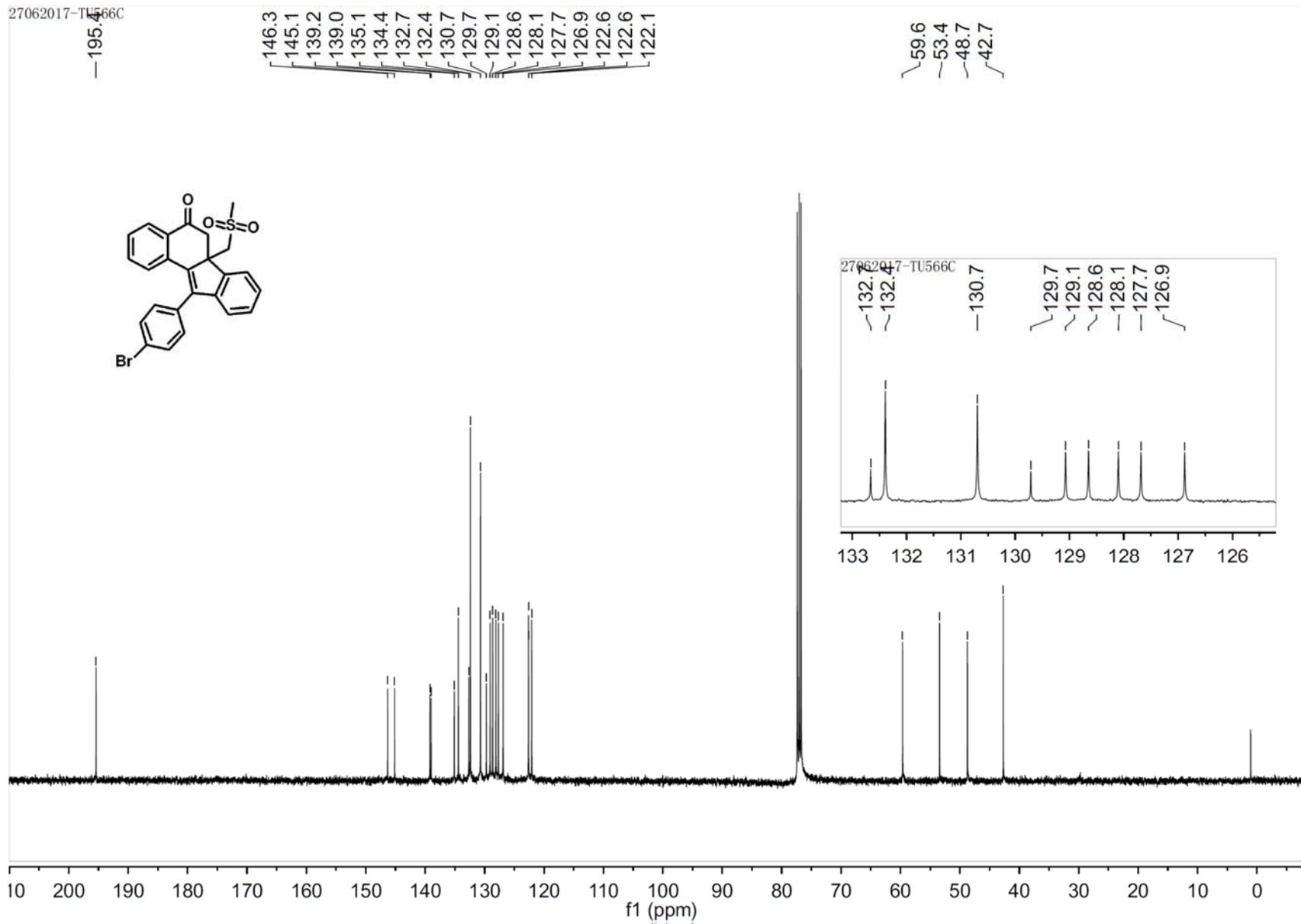


<sup>13</sup>C NMR Spectrum of Compound 3b

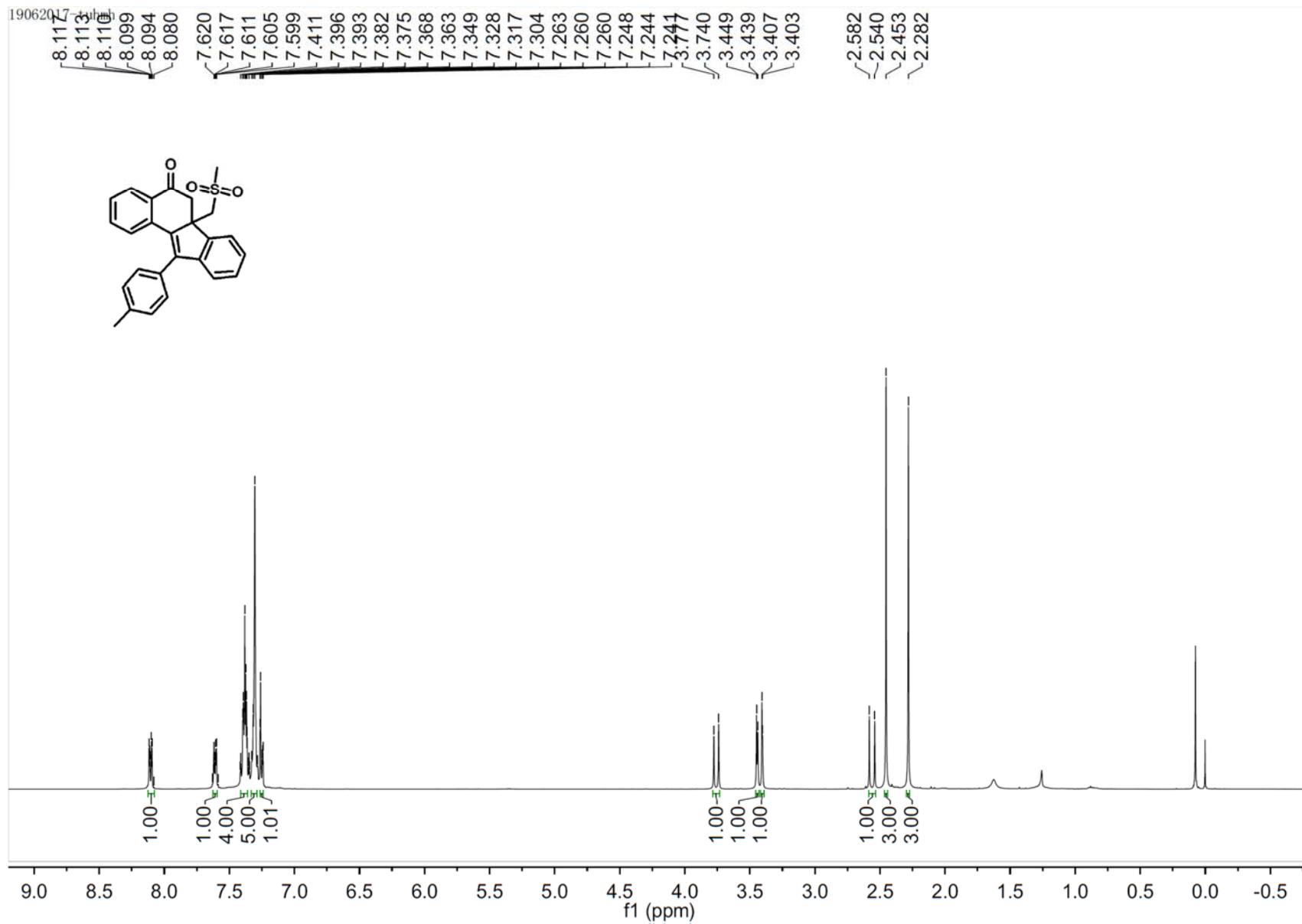
26062017



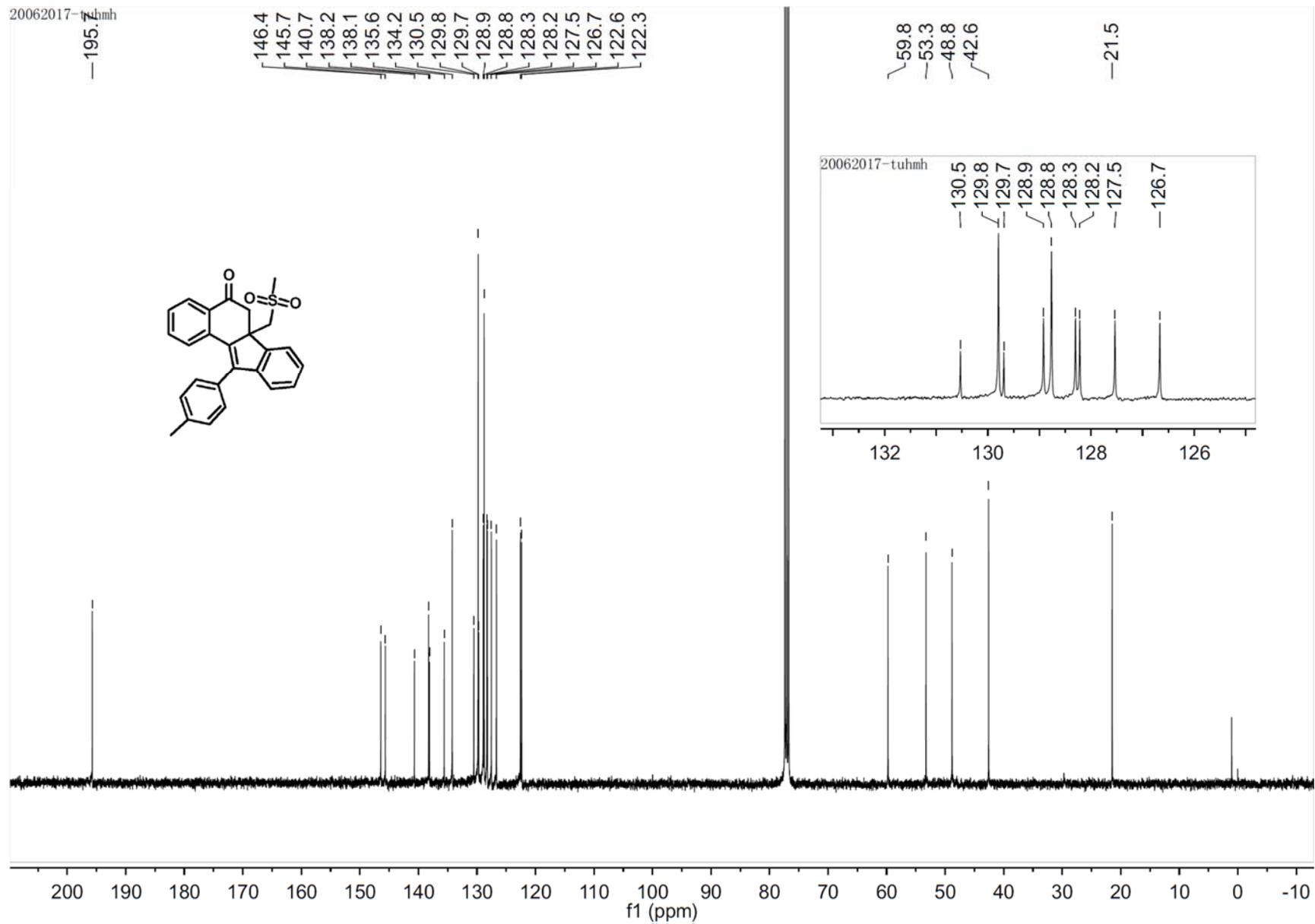
<sup>1</sup>H NMR Spectrum of Compound 3d



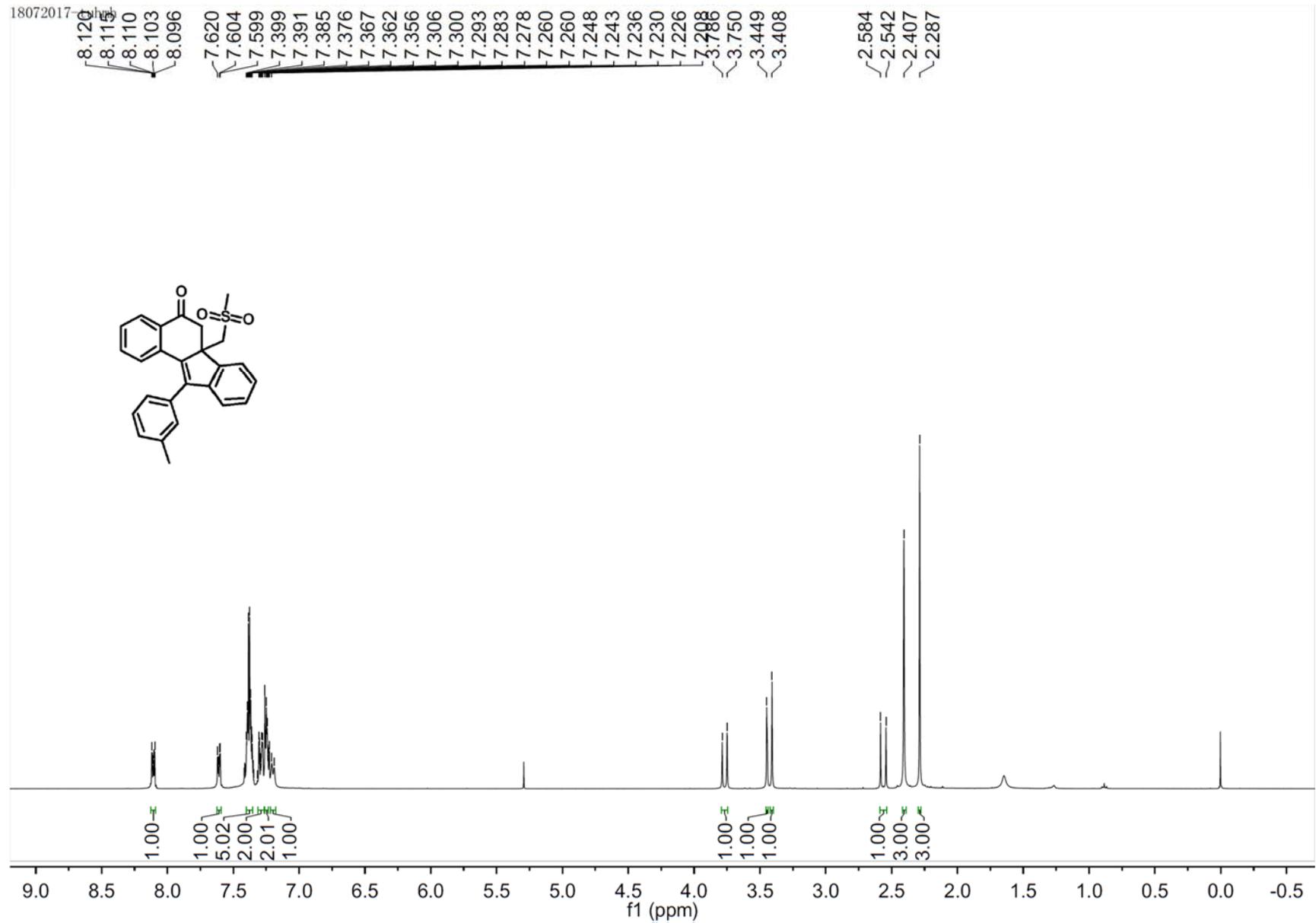
<sup>13</sup>C NMR Spectrum of Compound 3d



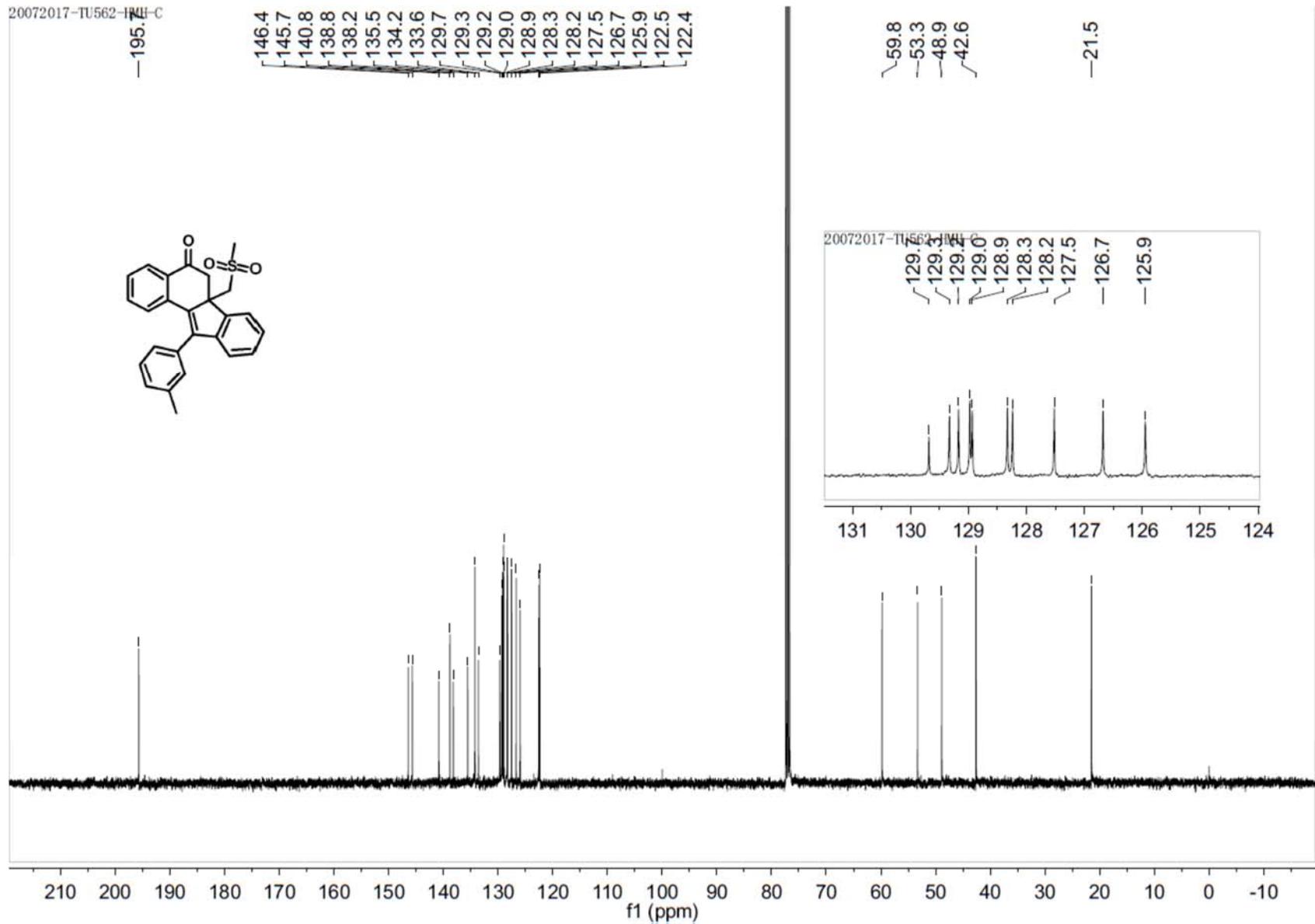
<sup>1</sup>H NMR Spectrum of Compound 3e



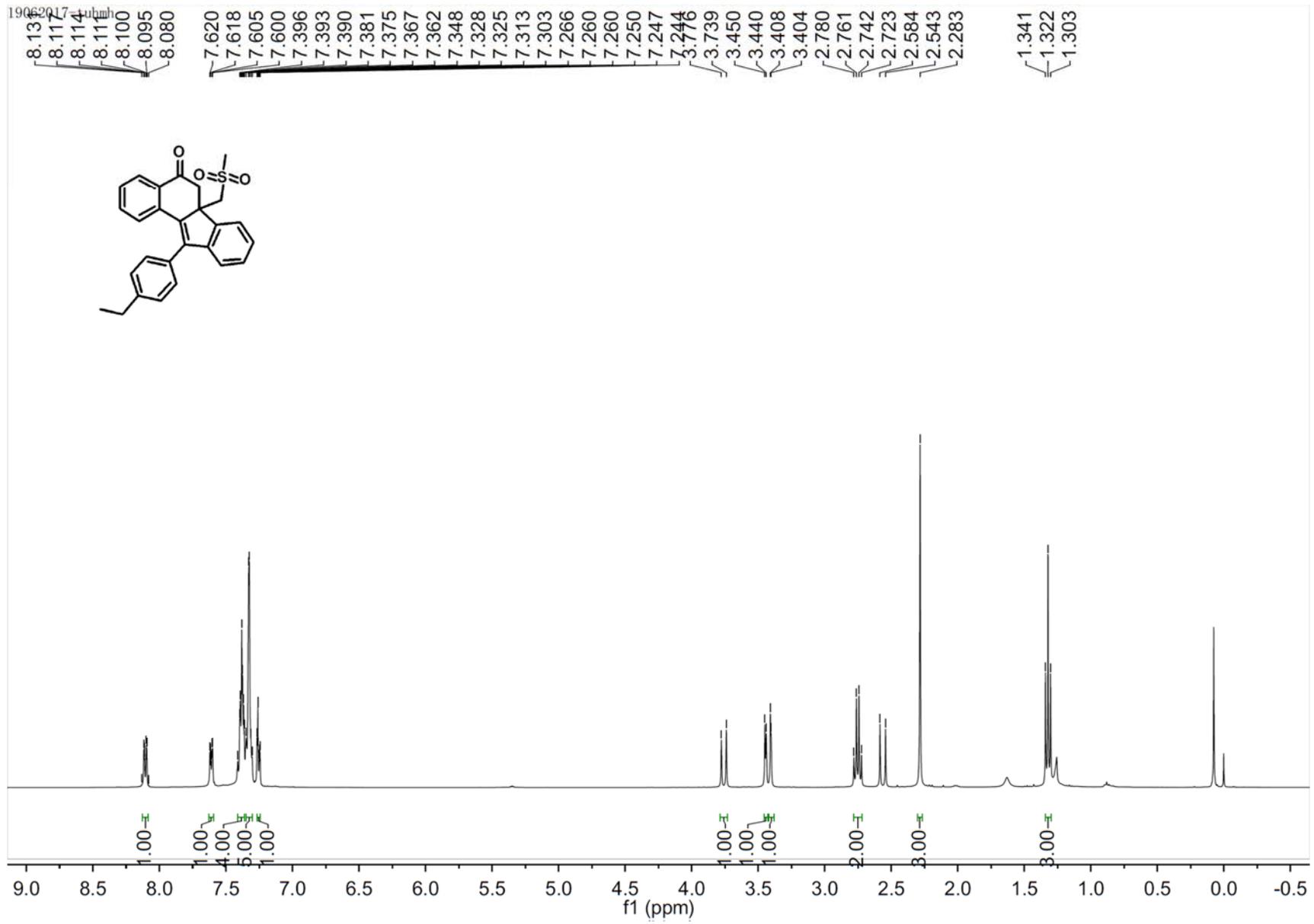
<sup>13</sup>C NMR Spectrum of Compound 3e



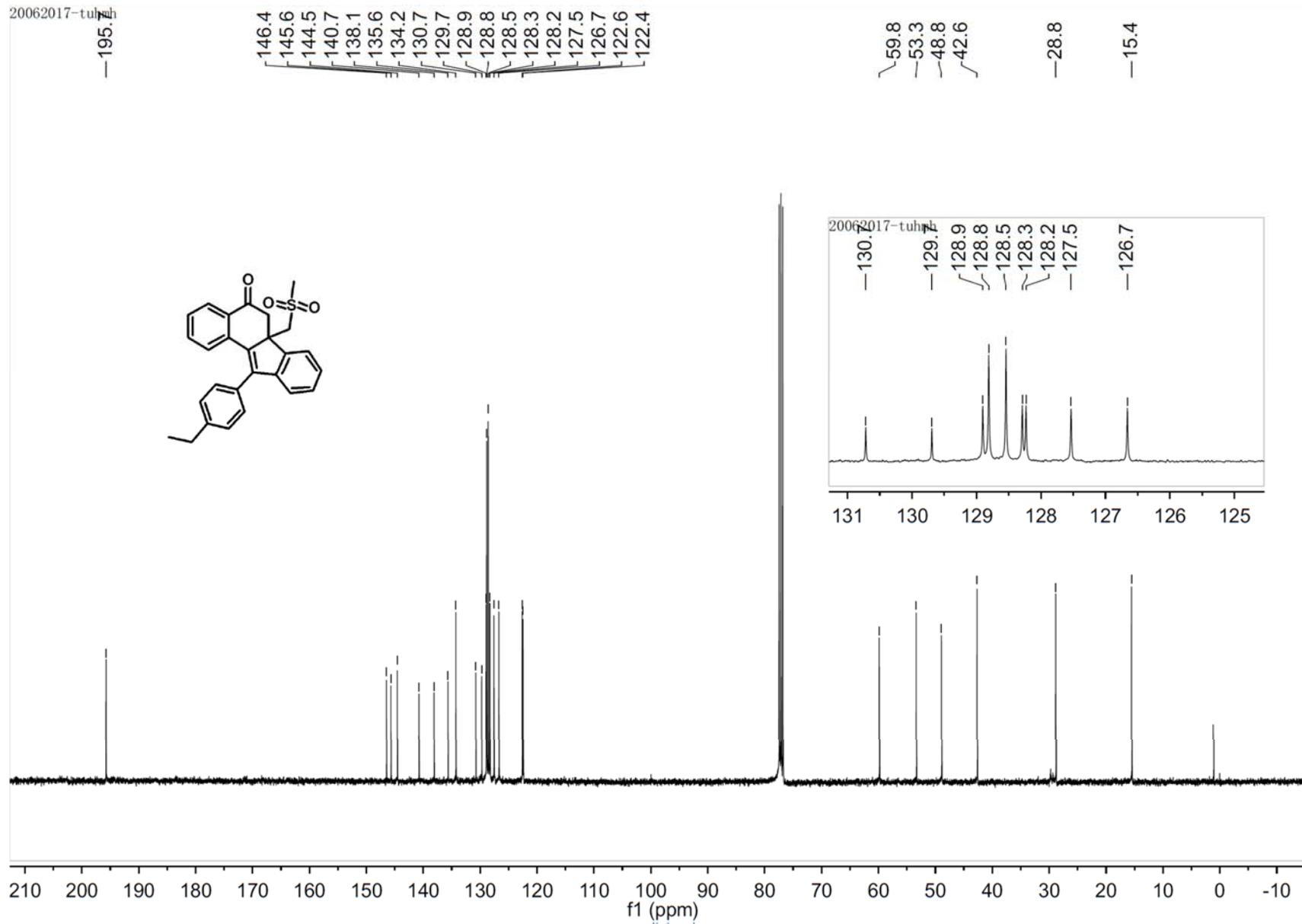
<sup>1</sup>H NMR Spectrum of Compound 3f



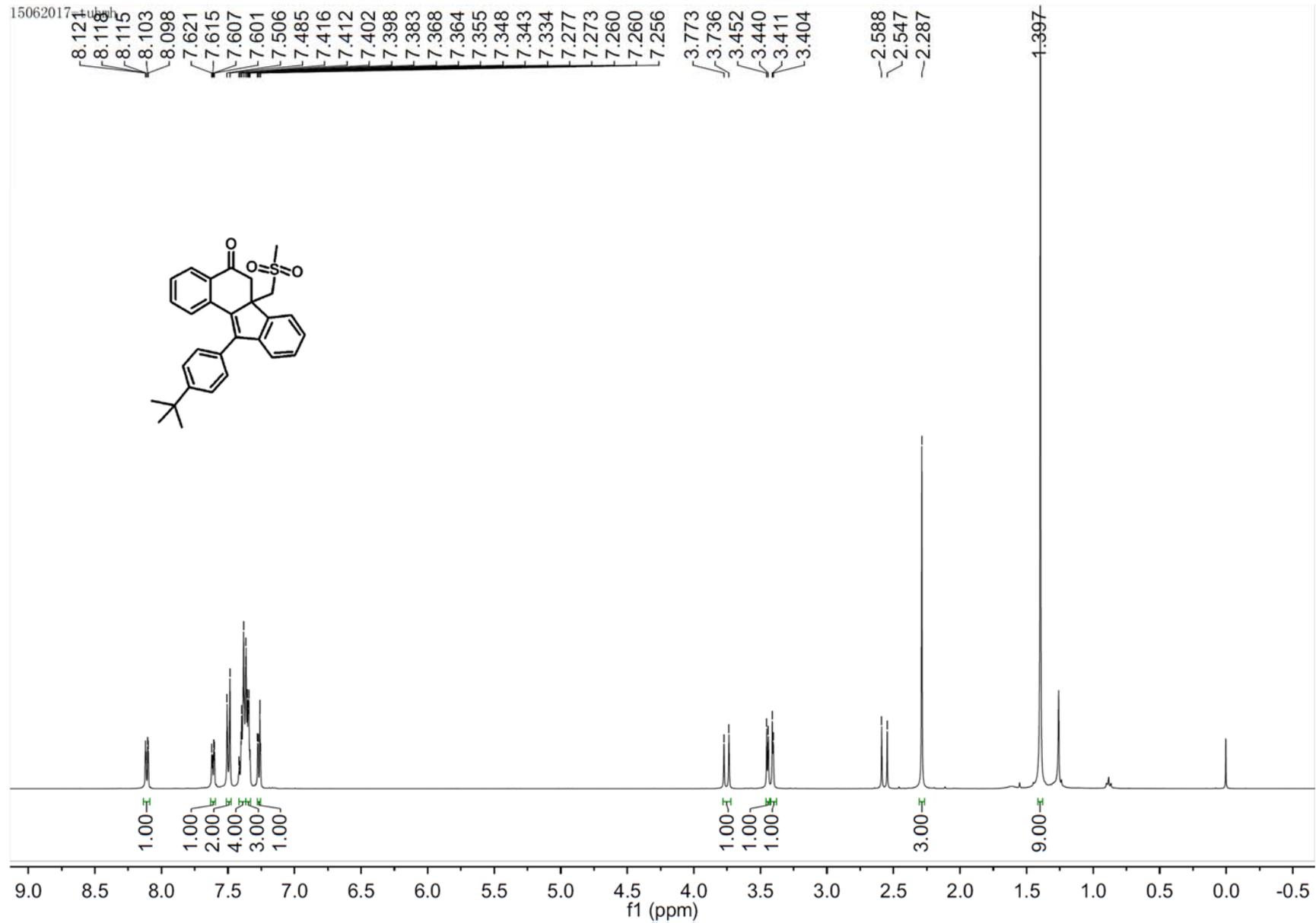
<sup>13</sup>C NMR Spectrum of Compound 3f



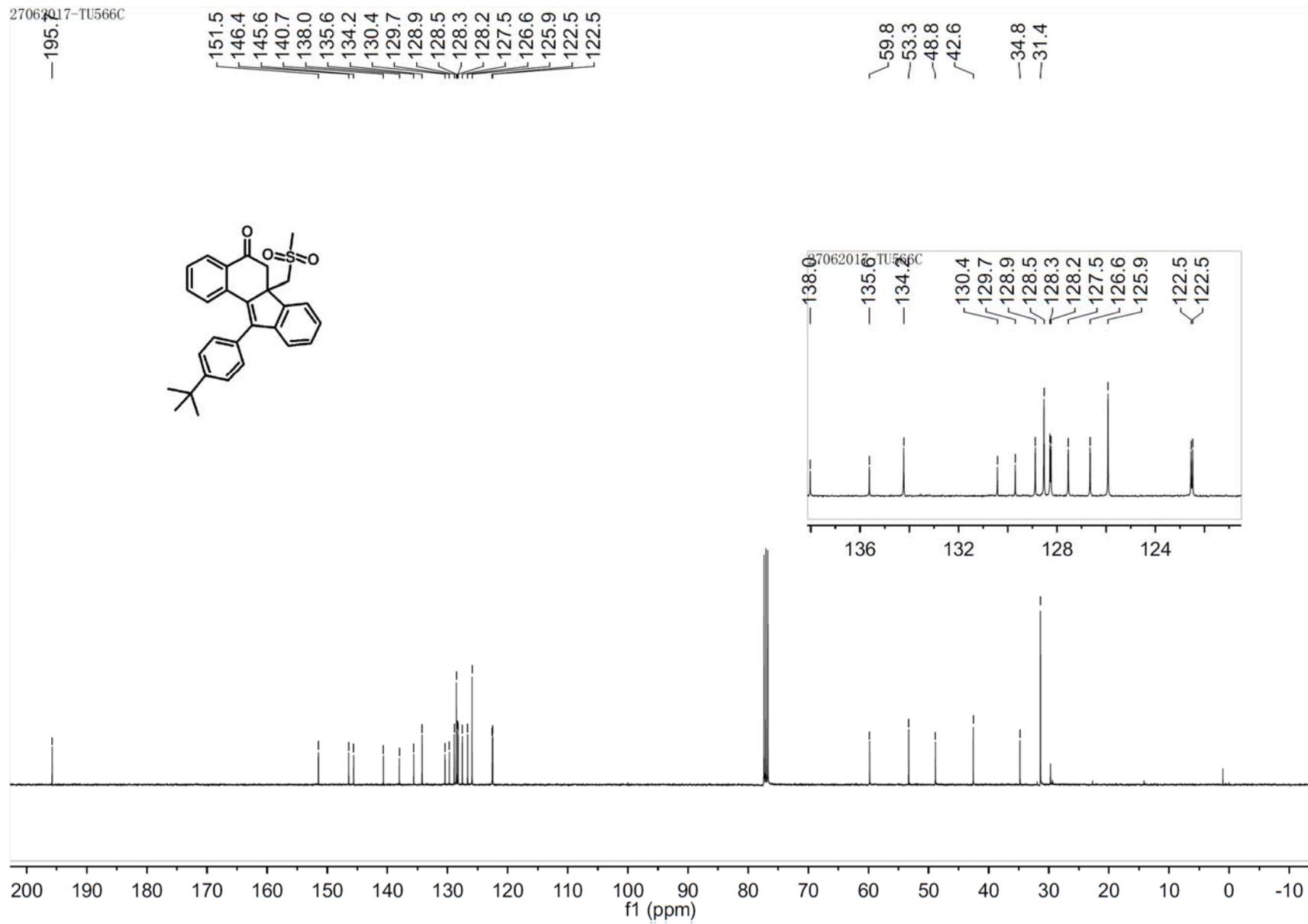
<sup>1</sup>H NMR Spectrum of Compound 3g



<sup>13</sup>C NMR Spectrum of Compound 3g

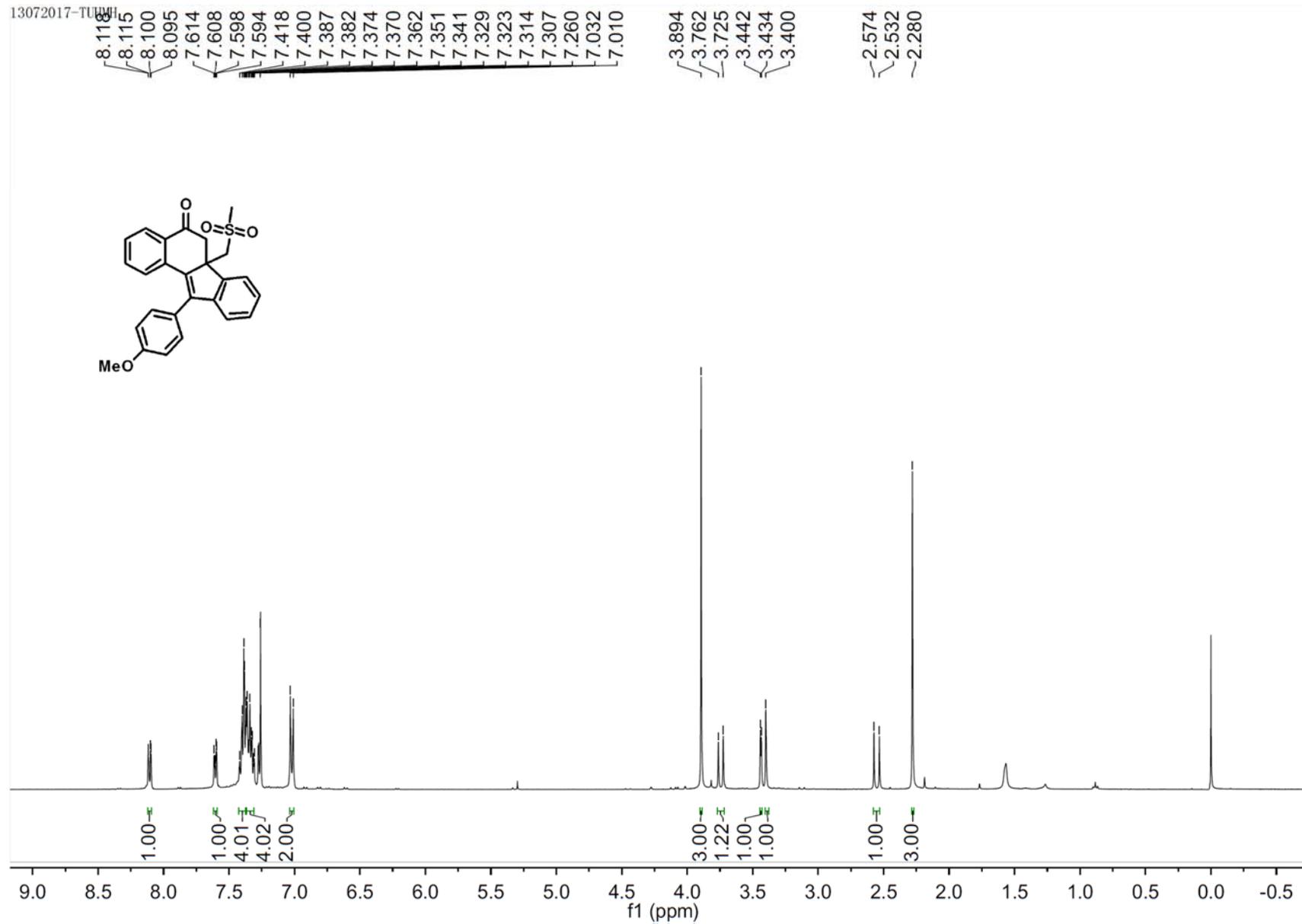


**<sup>1</sup>H NMR Spectrum of Compound 3h**



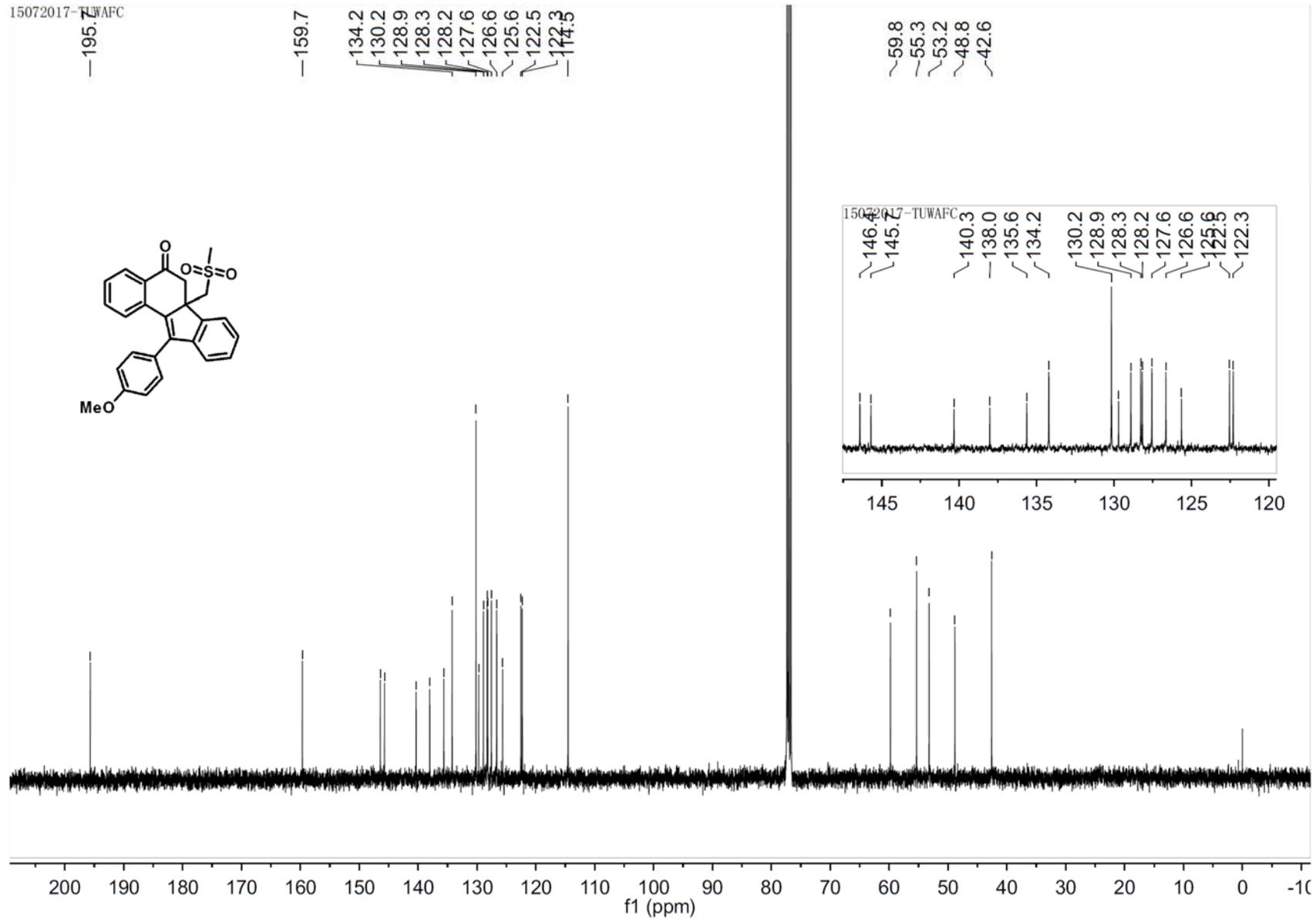
<sup>13</sup>C NMR Spectrum of Compound 3h

13072017-TUMM



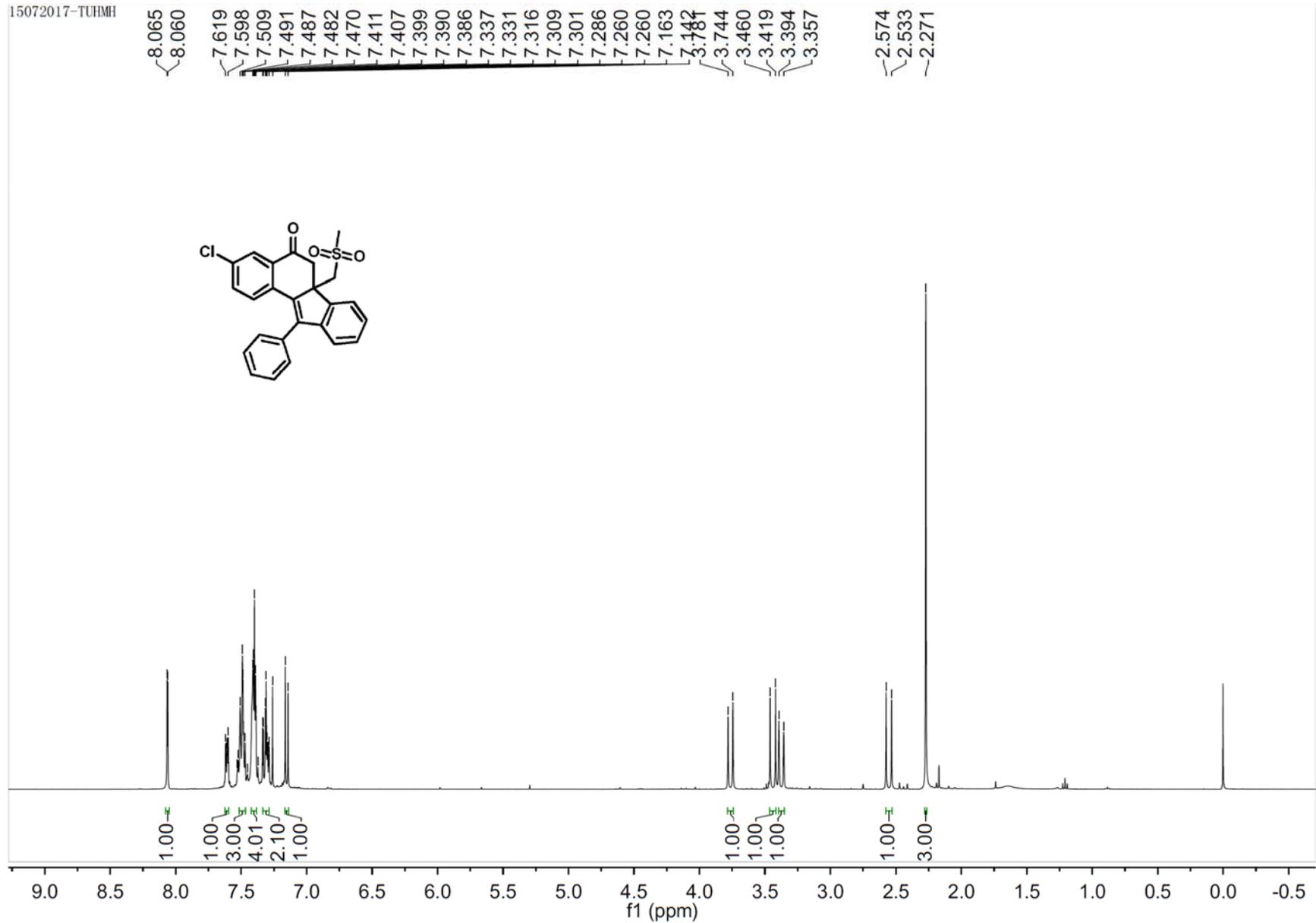
<sup>1</sup>H NMR Spectrum of Compound 3i

15072017-TUWAF



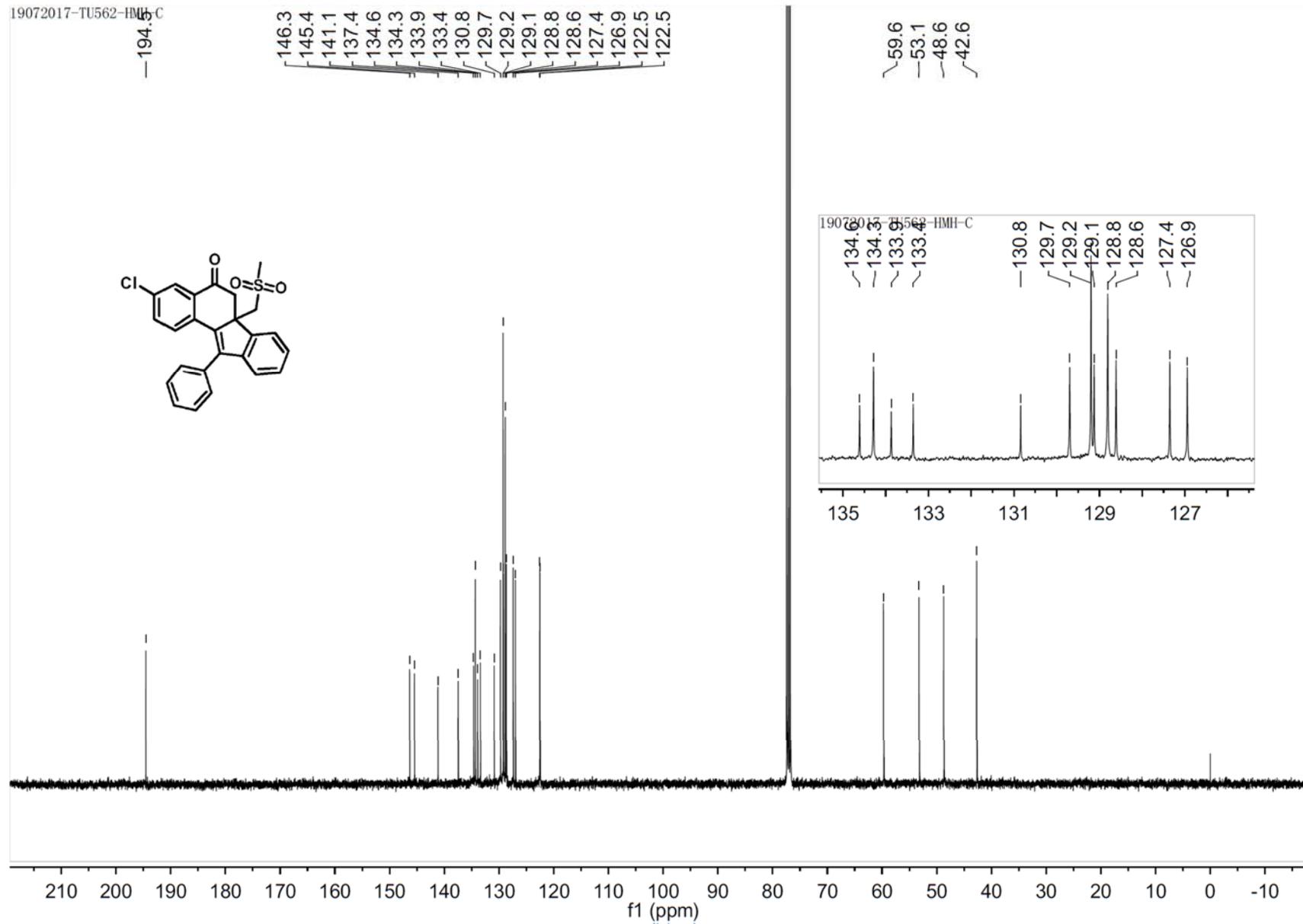
<sup>13</sup>C NMR Spectrum of Compound 3i

15072017-TUHMH

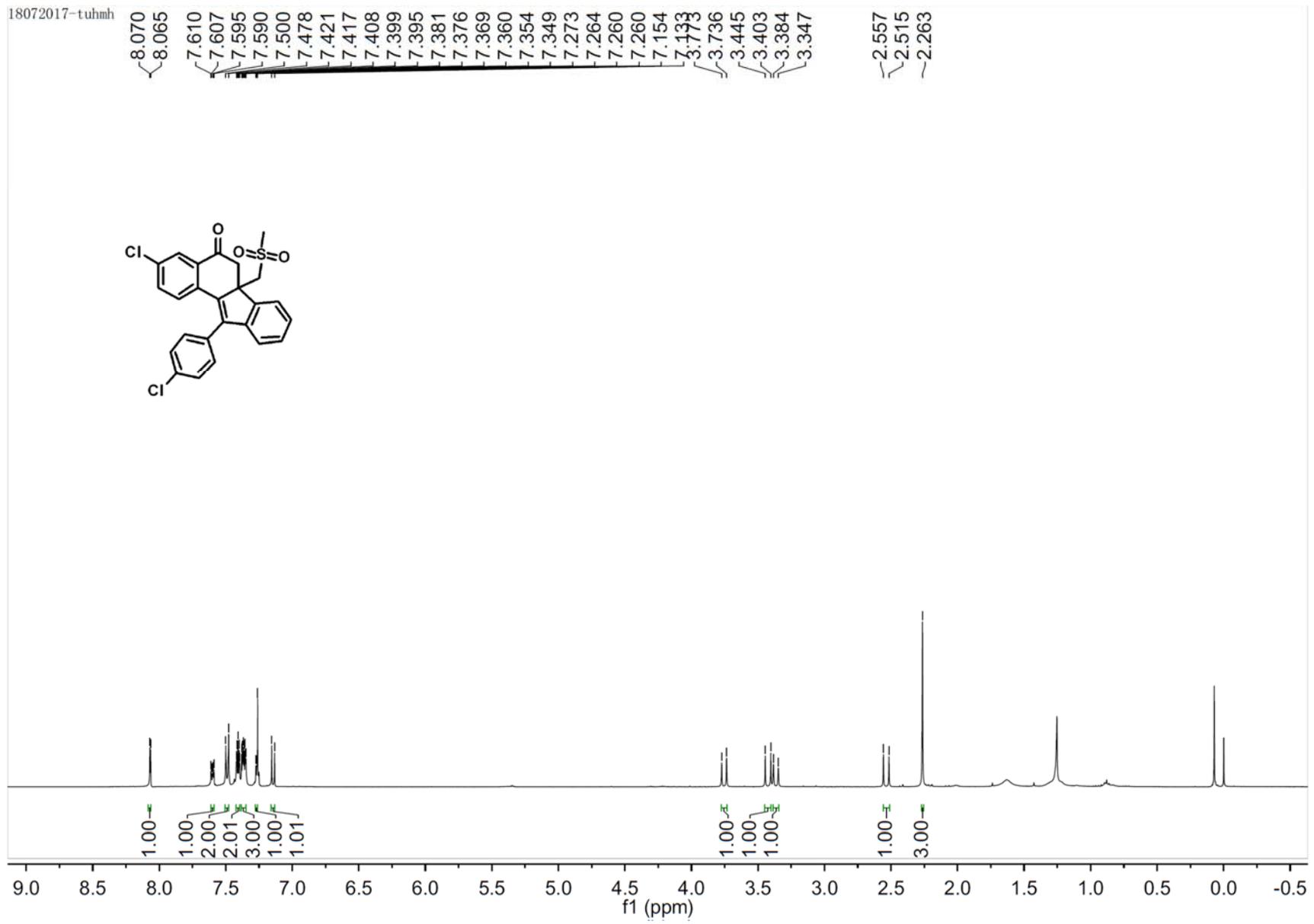


<sup>1</sup>H NMR Spectrum of Compound 3k

19072017-TU562-HMH-C

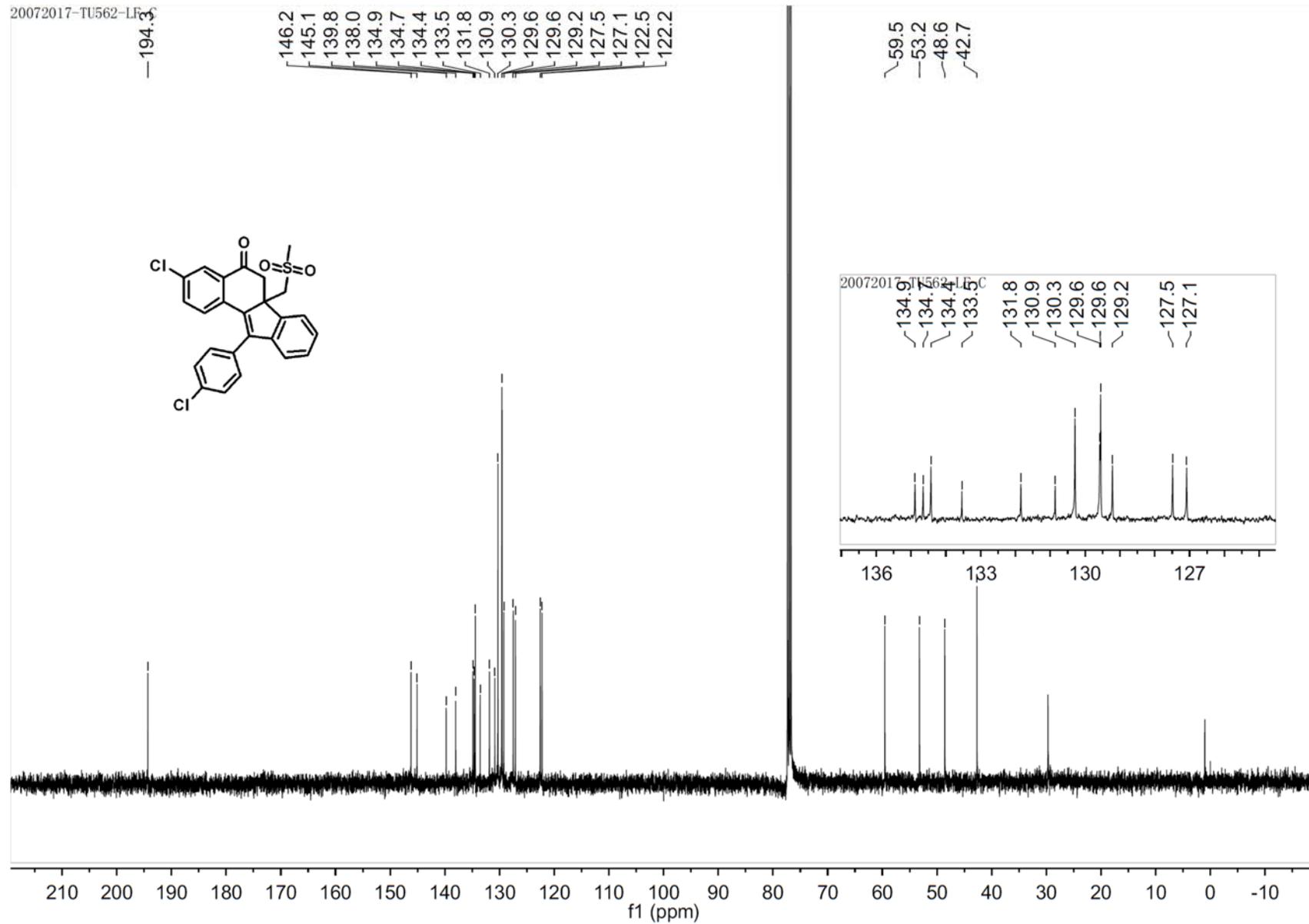


<sup>13</sup>C NMR Spectrum of Compound 3k



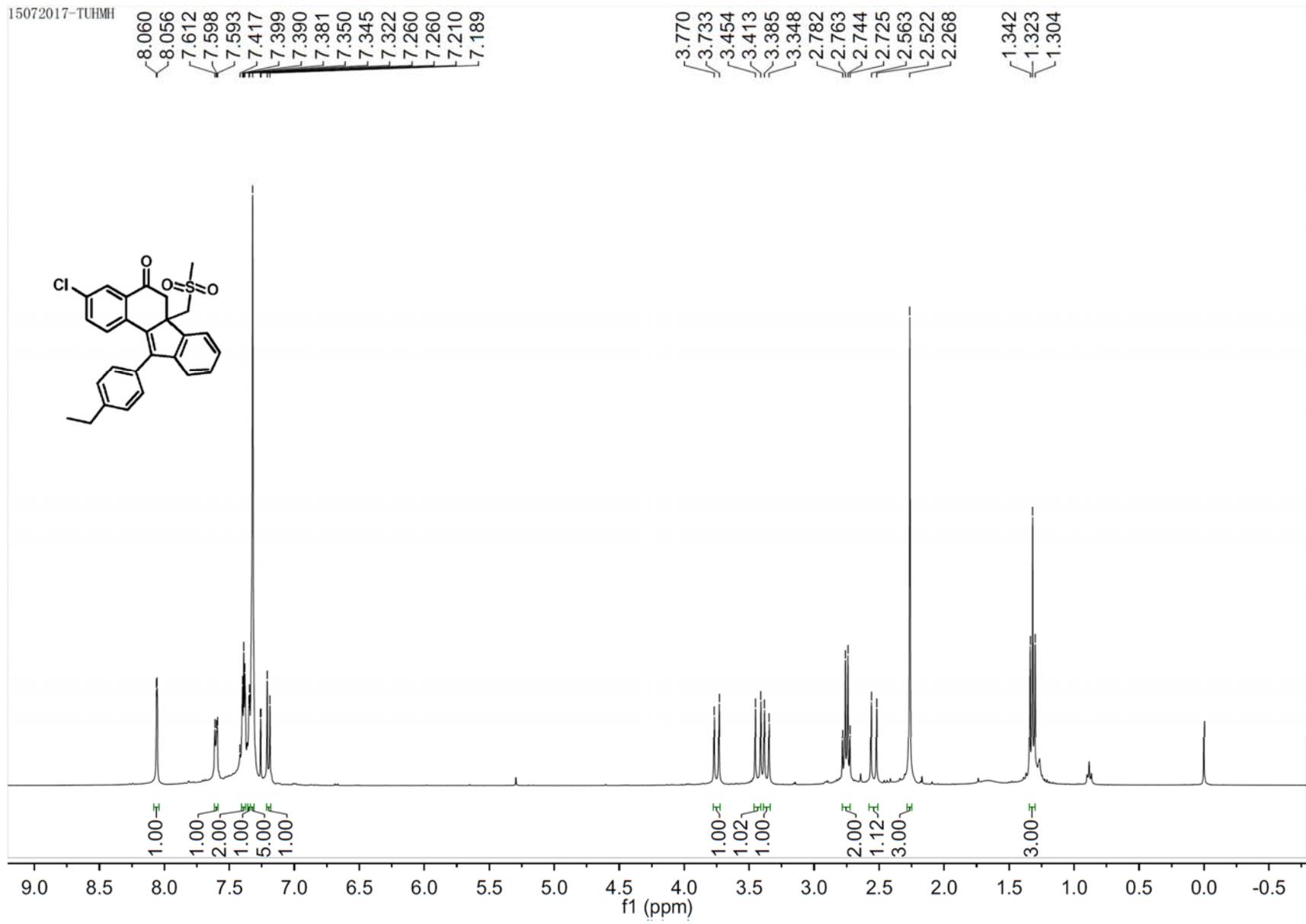
<sup>1</sup>H NMR Spectrum of Compound 31

20072017-TU562-LF-5



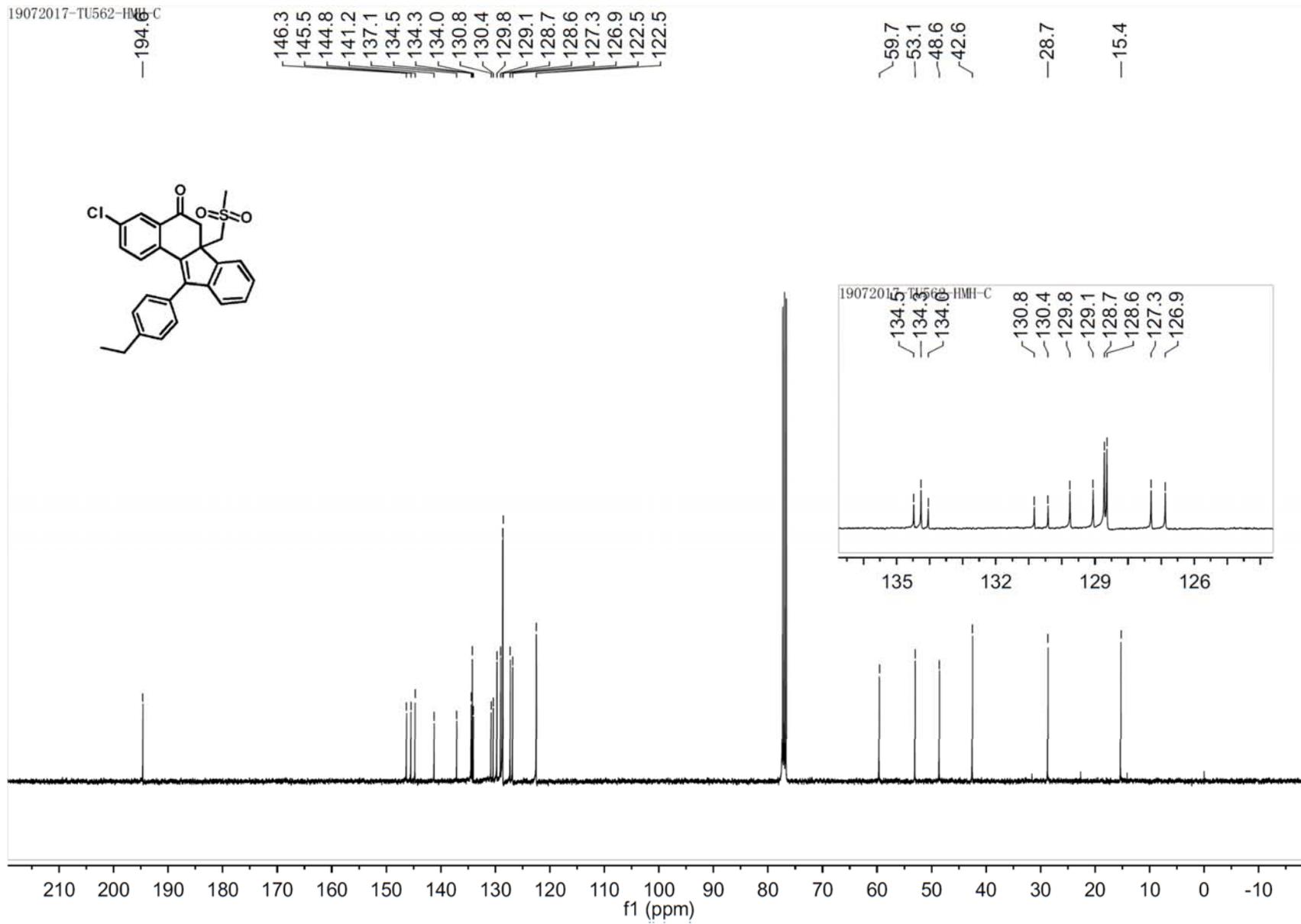
<sup>13</sup>C NMR Spectrum of Compound 3l

15072017-TUHMH

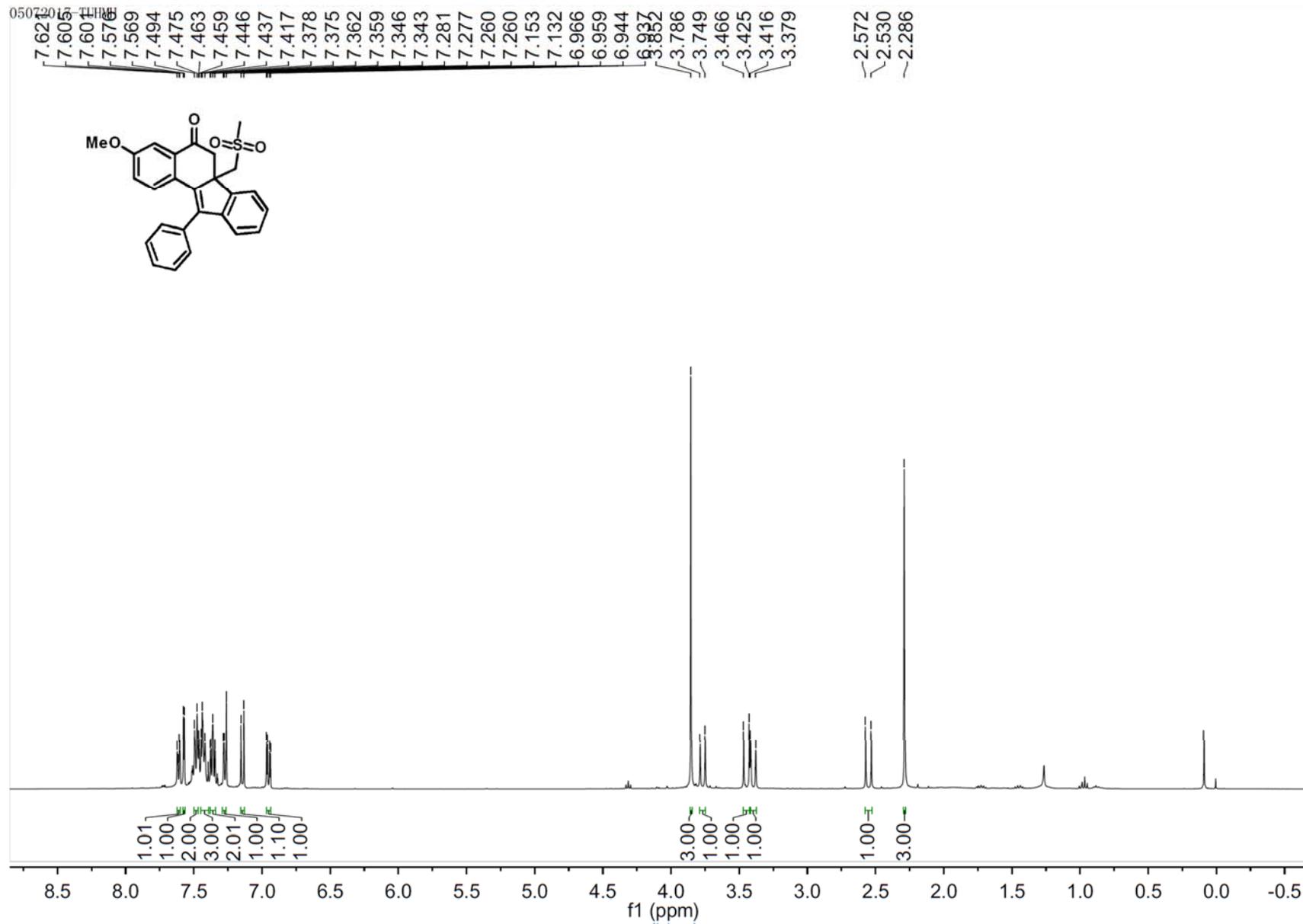


<sup>1</sup>H NMR Spectrum of Compound 3m

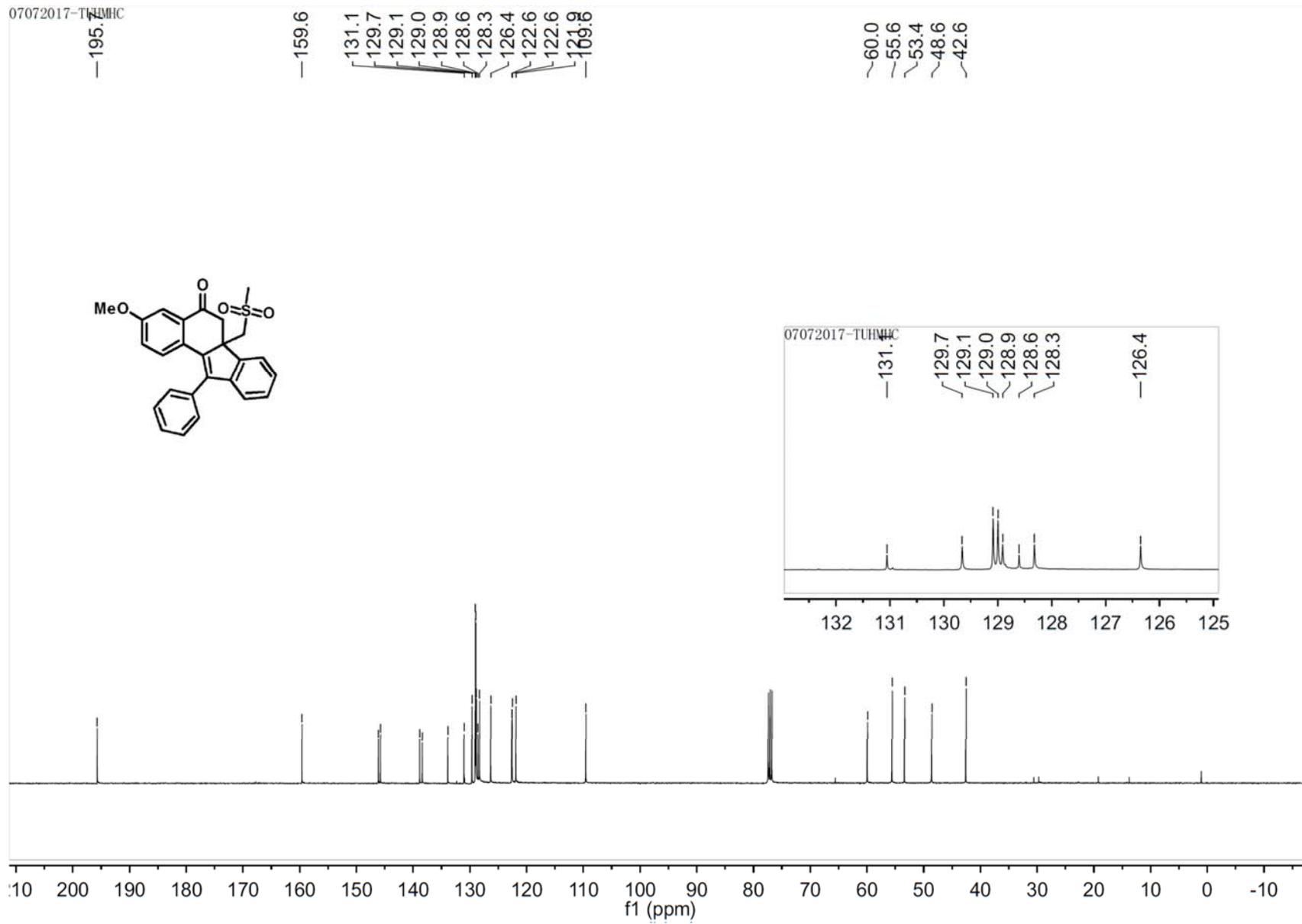
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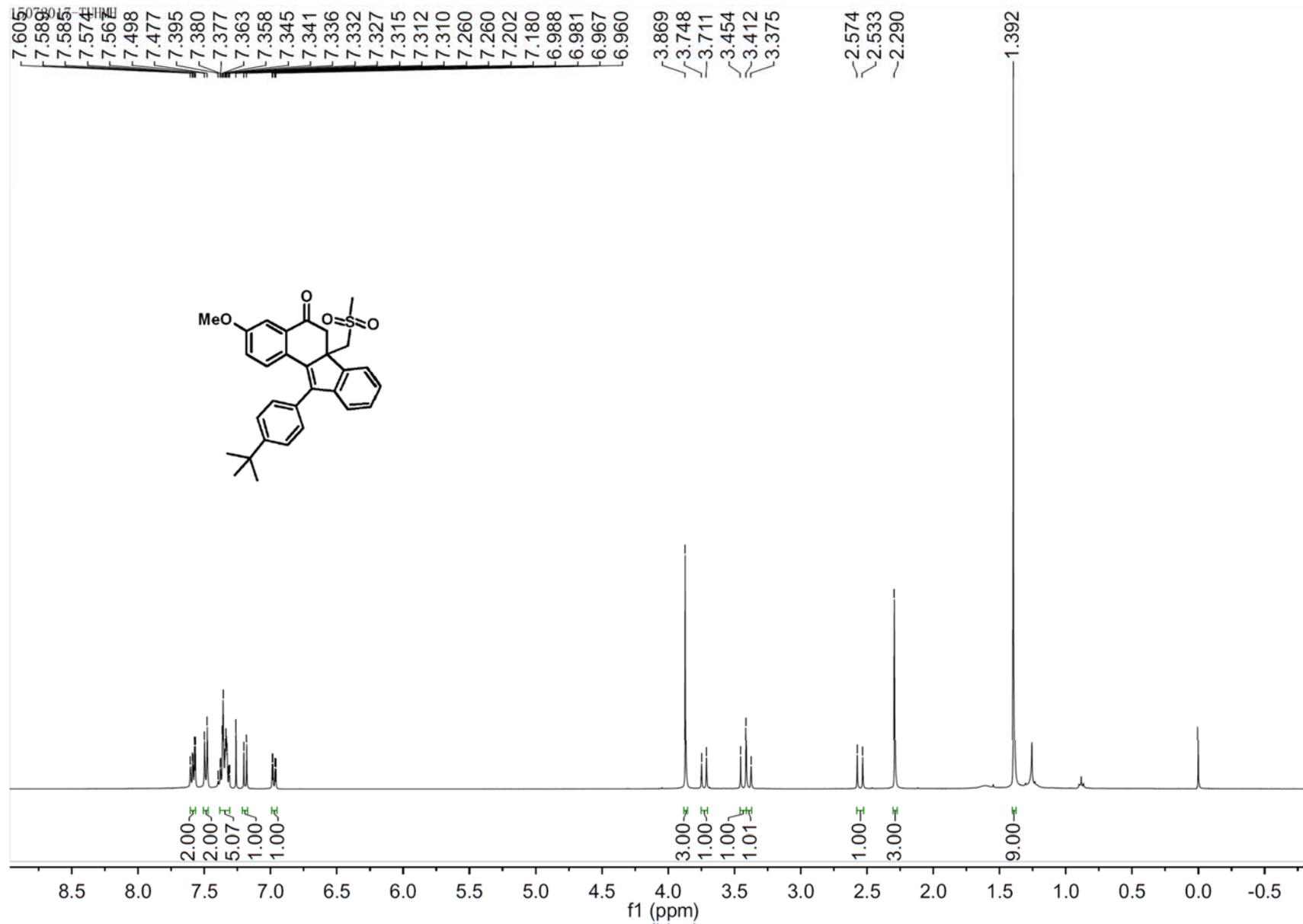


<sup>13</sup>C NMR Spectrum of Compound 3m

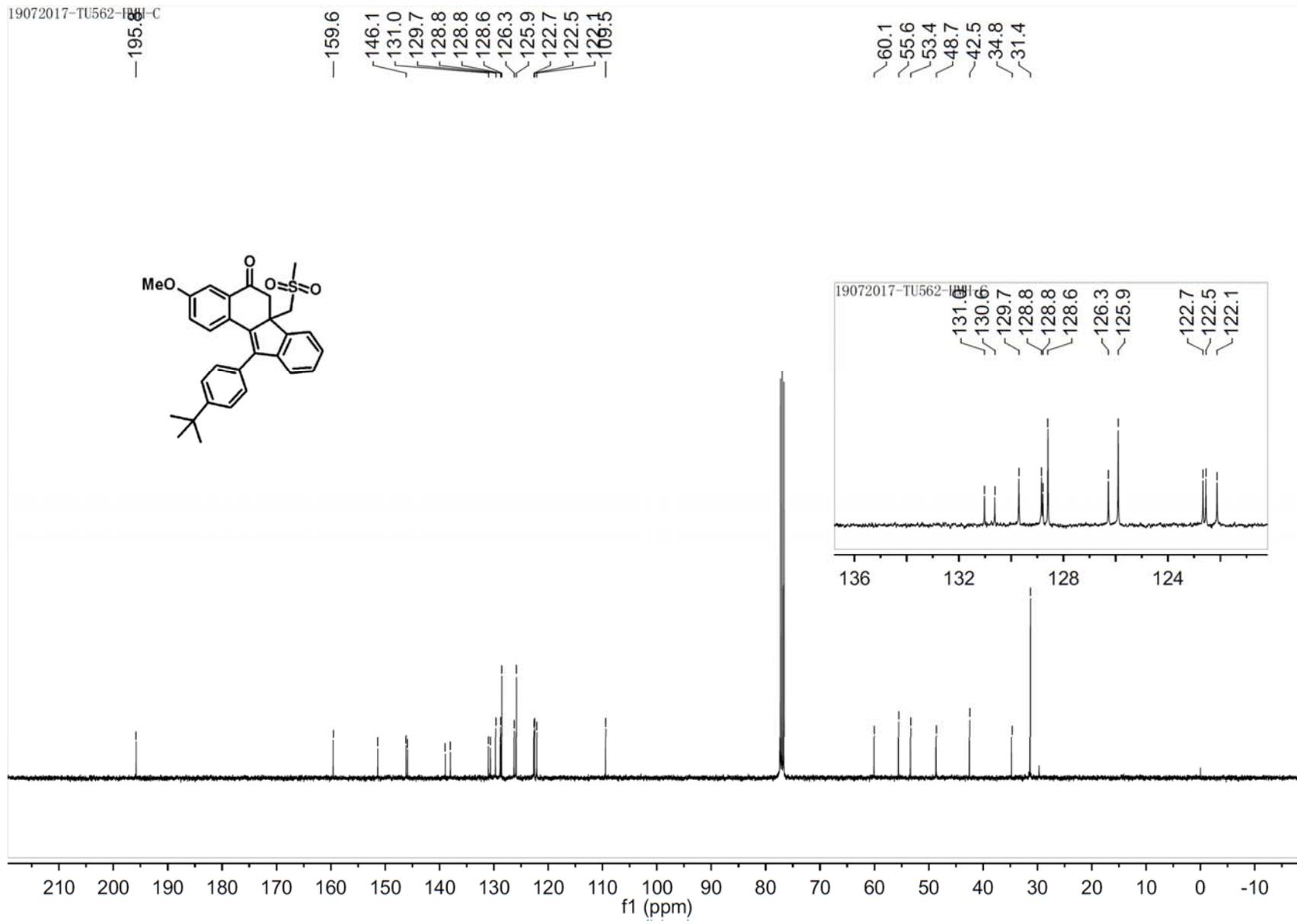


<sup>1</sup>H NMR Spectrum of Compound 3n



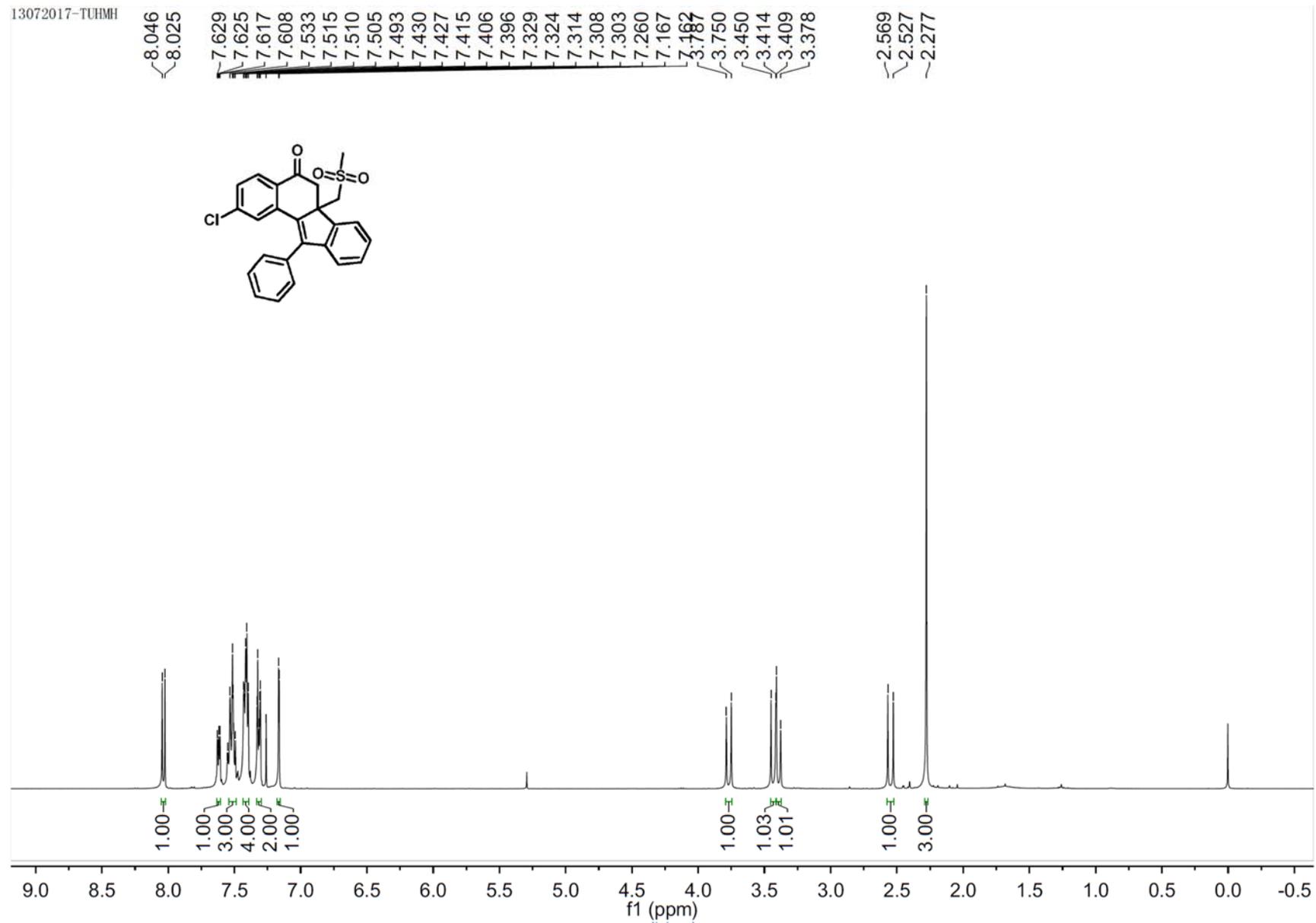


**<sup>1</sup>H NMR Spectrum of Compound 3o**

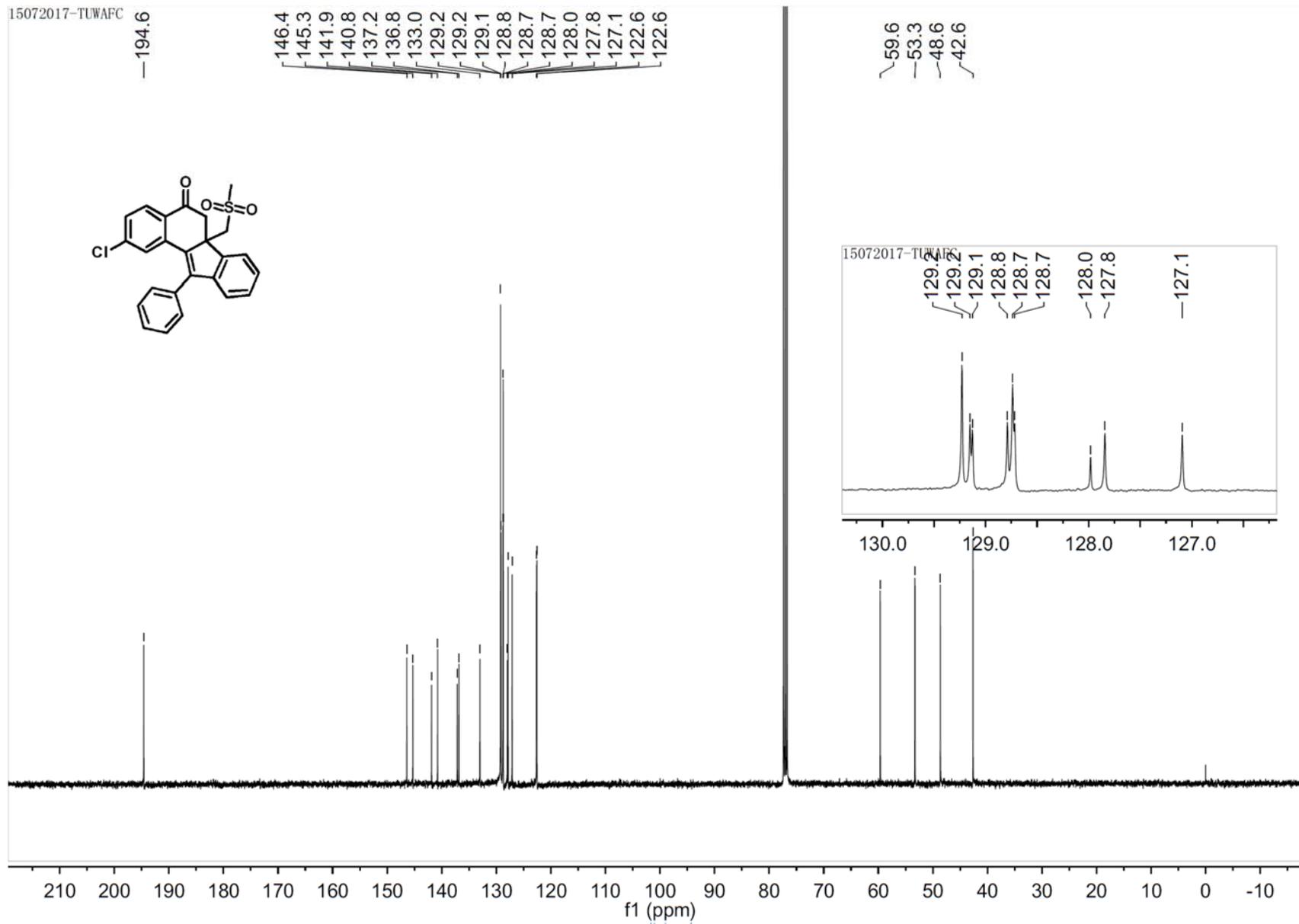


<sup>13</sup>C NMR Spectrum of Compound 3o

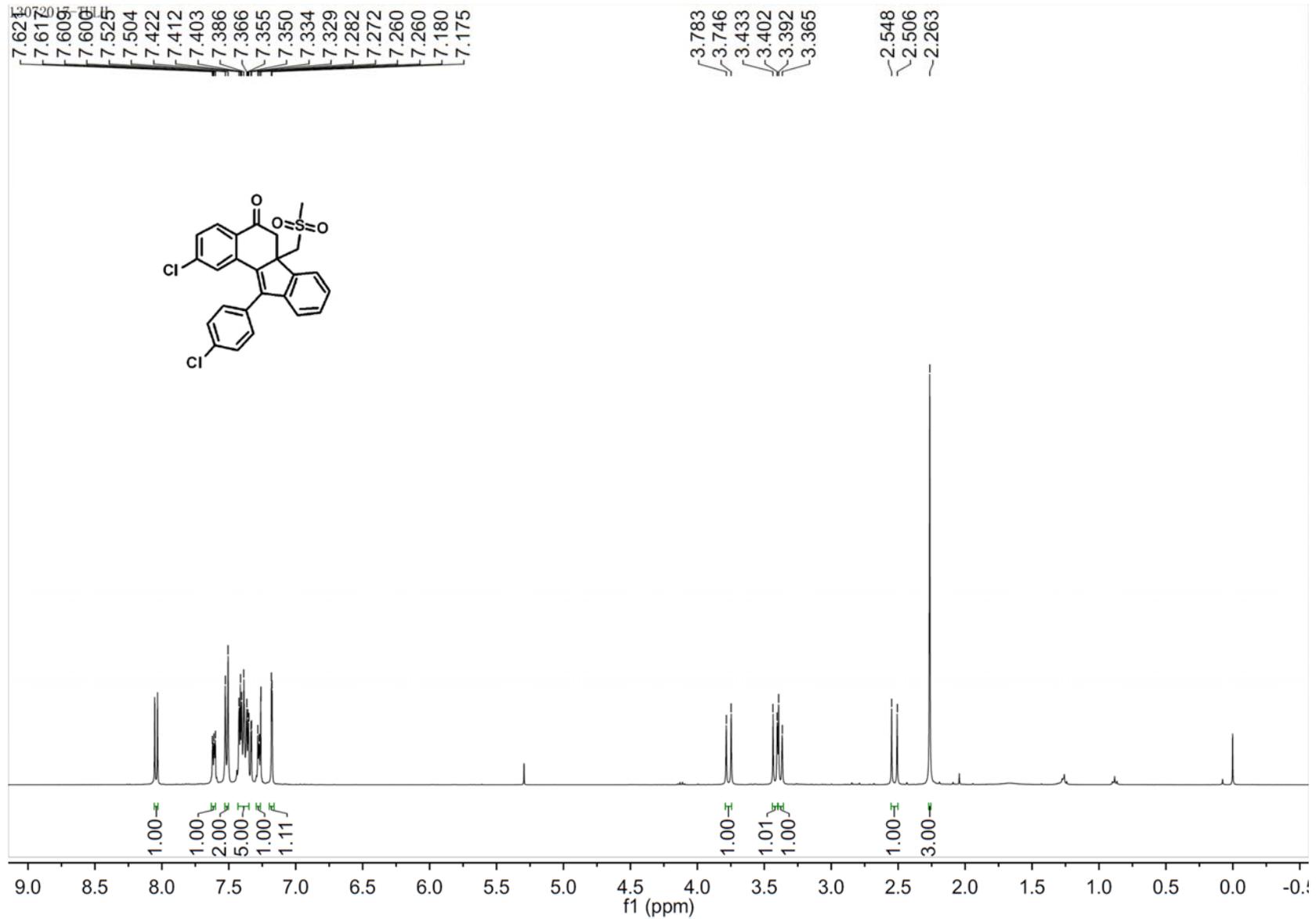
13072017-TUHMH



<sup>1</sup>H NMR Spectrum of Compound 3p

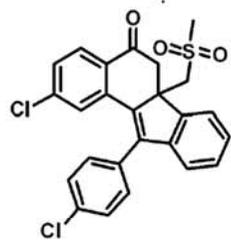


**<sup>13</sup>C NMR Spectrum of Compound 3p**



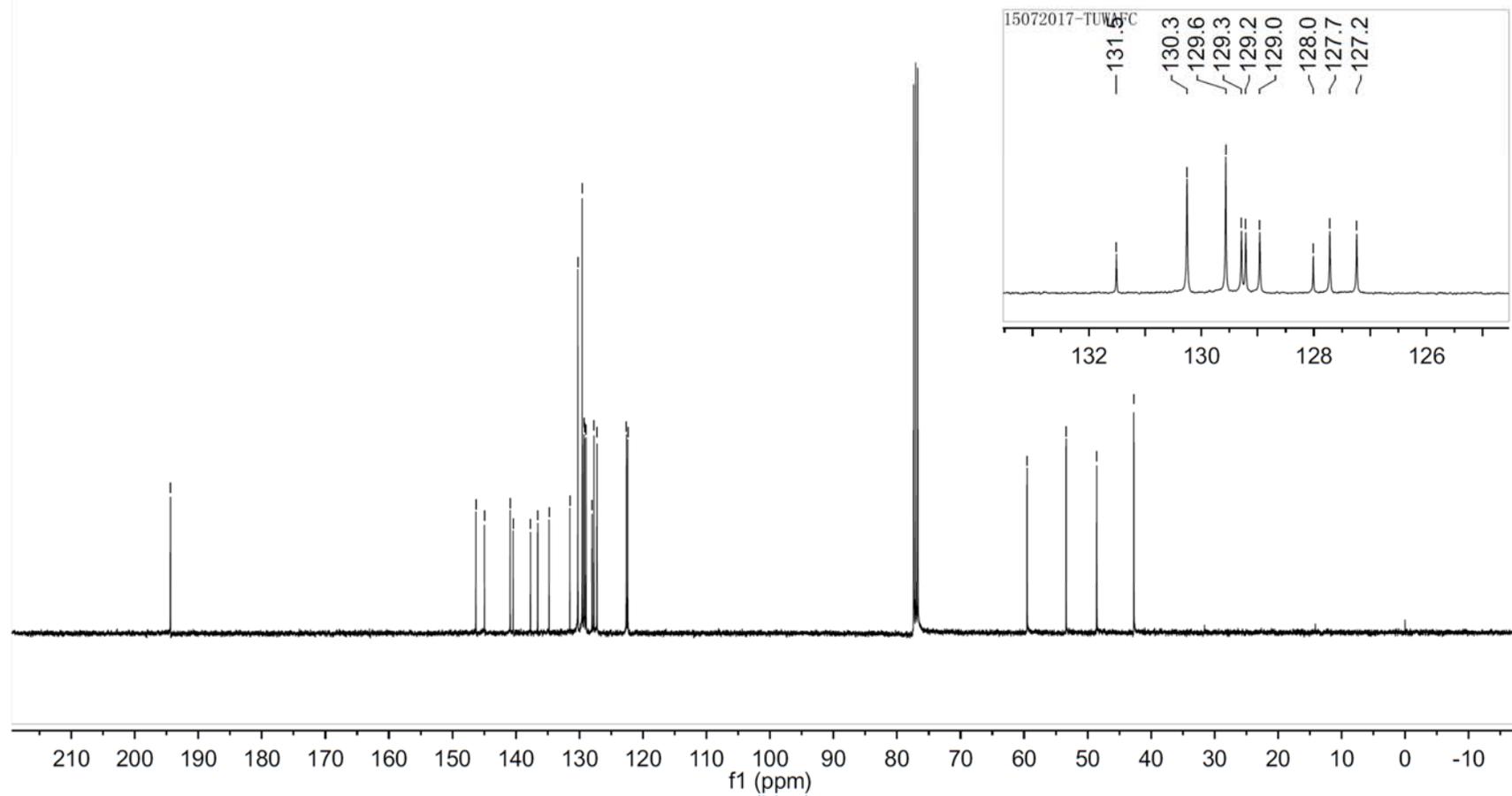
<sup>1</sup>H NMR Spectrum of Compound 3q

15072017-TUWAF

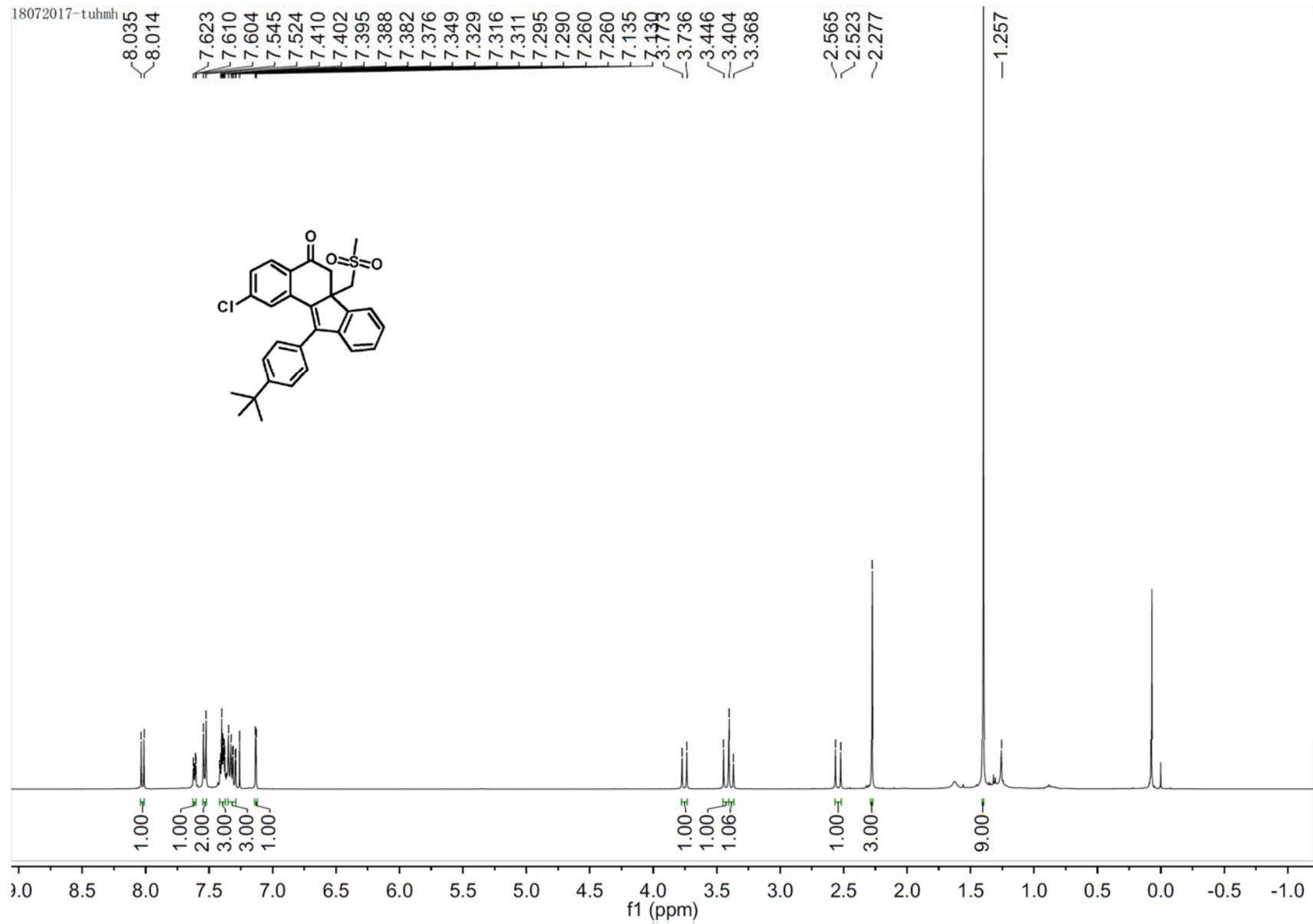


146.3  
145.0  
140.9  
140.4  
137.7  
136.6  
134.8  
131.5  
130.3  
129.6  
129.3  
129.2  
129.0  
128.0  
127.7  
127.2  
122.6  
122.4

59.5  
53.4  
48.6  
42.7

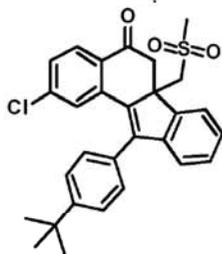


<sup>13</sup>C NMR Spectrum of Compound 3q



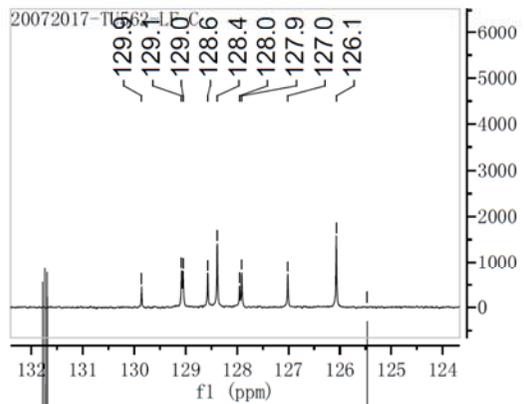
<sup>1</sup>H NMR Spectrum of Compound 3r

20072017-TU562-LF-C



152.0  
146.5  
145.3  
142.0  
140.7  
137.0  
129.9  
129.1  
129.0  
128.6  
128.4  
128.0  
127.9  
127.0  
126.1  
122.8  
122.6

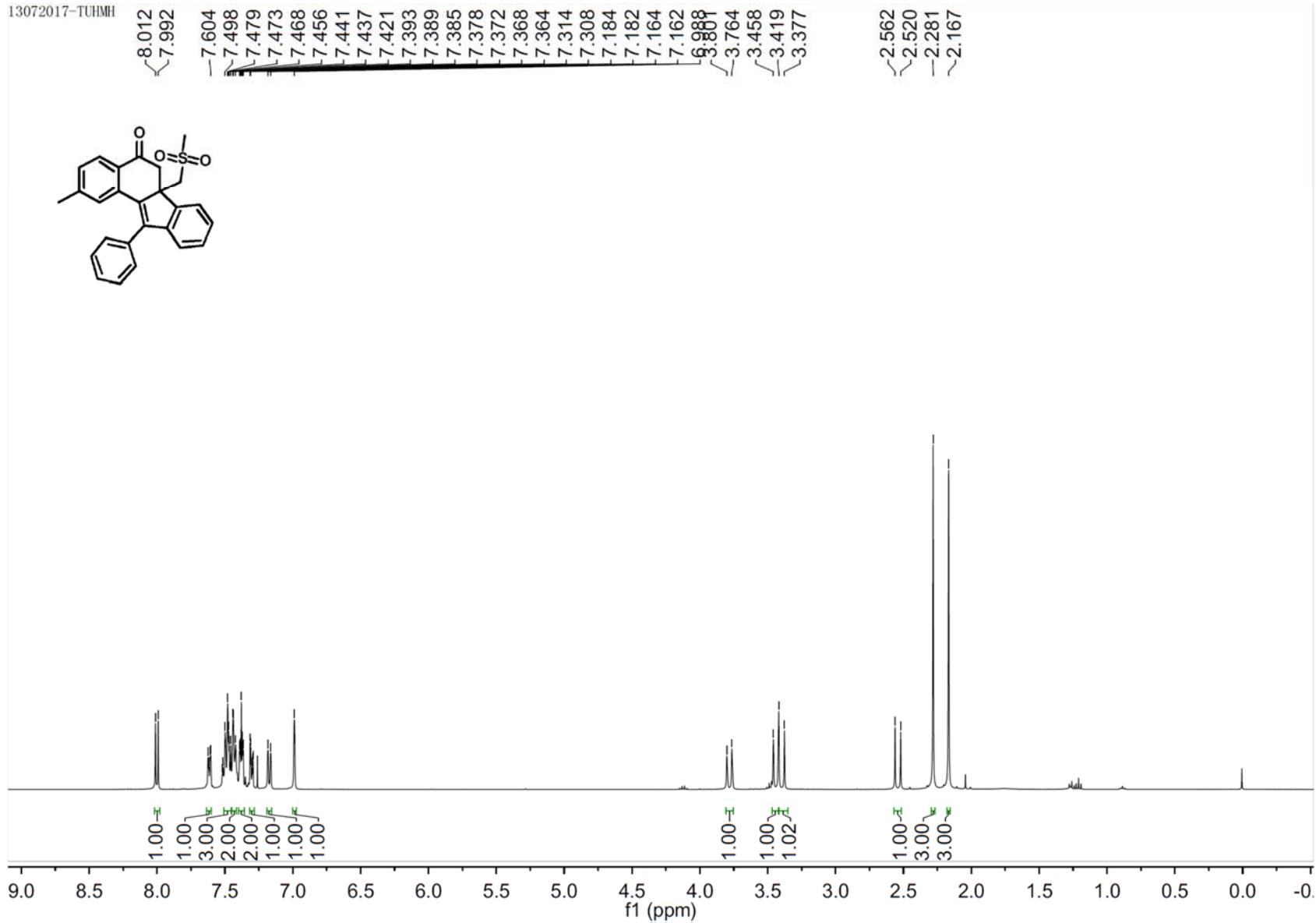
59.7  
53.2  
48.6  
42.6  
34.8  
31.3



210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 -10  
f1 (ppm)

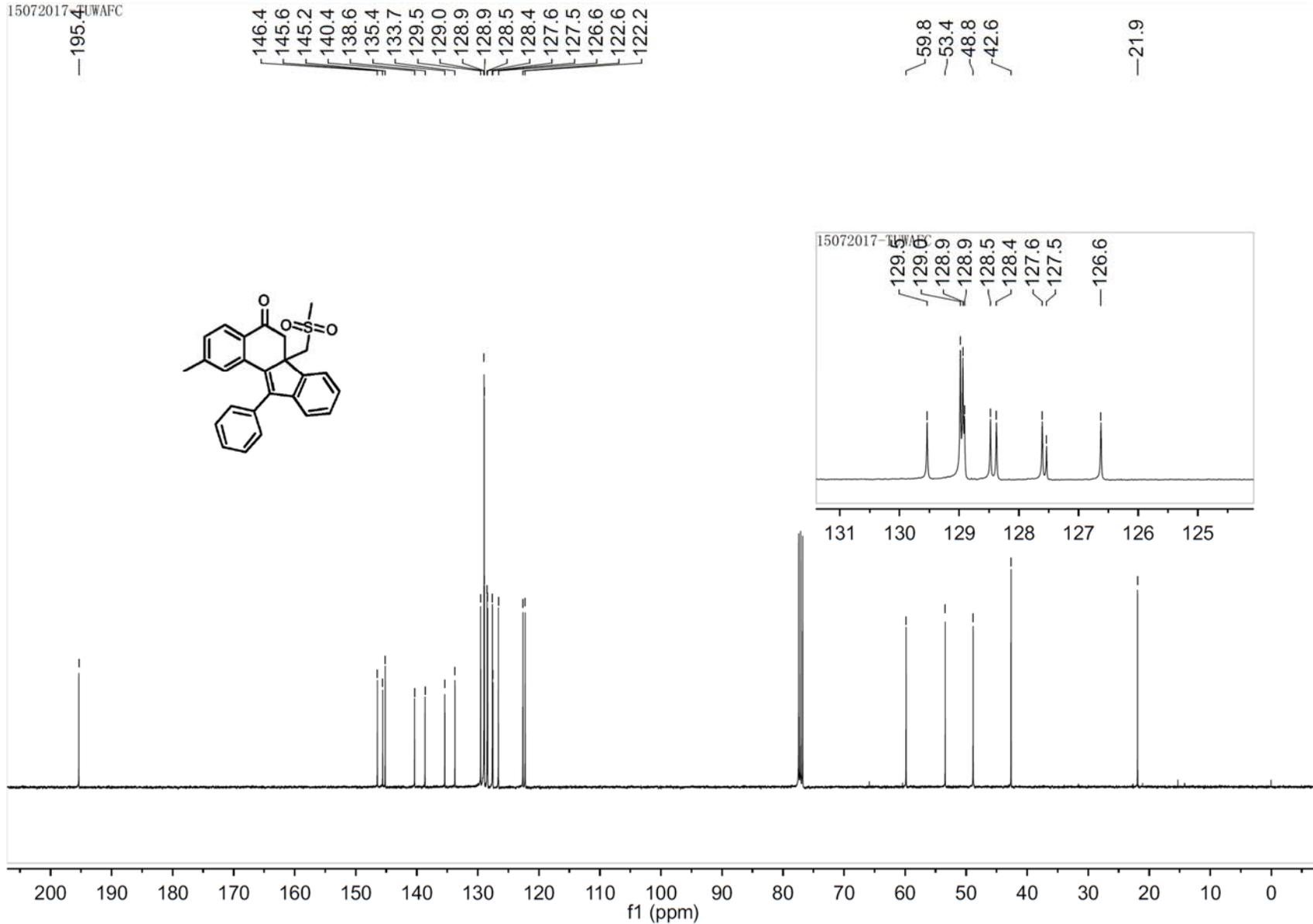
<sup>13</sup>C NMR Spectrum of Compound 3r

13072017-TUHH

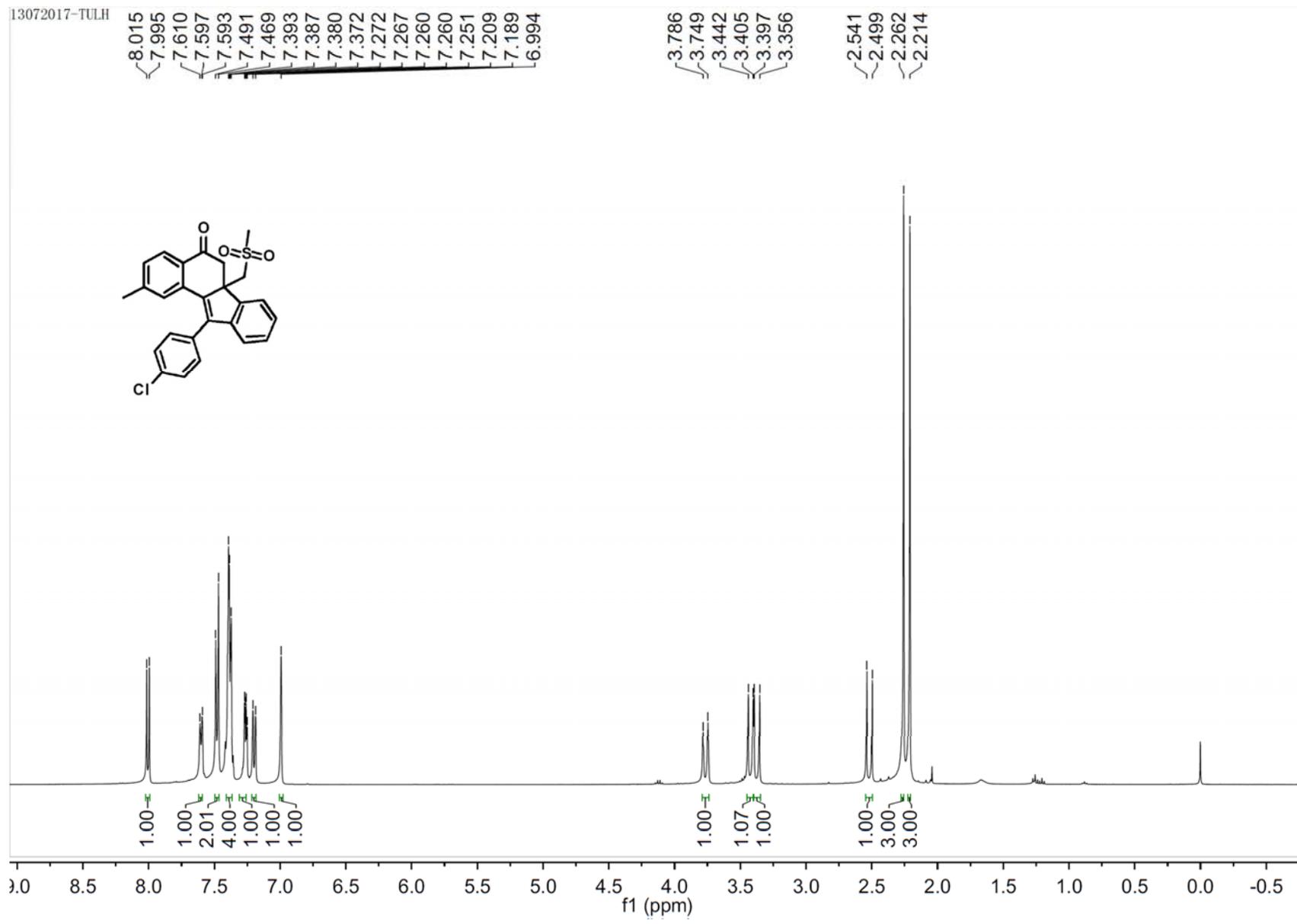


<sup>1</sup>H NMR Spectrum of Compound 3s

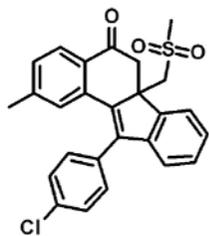
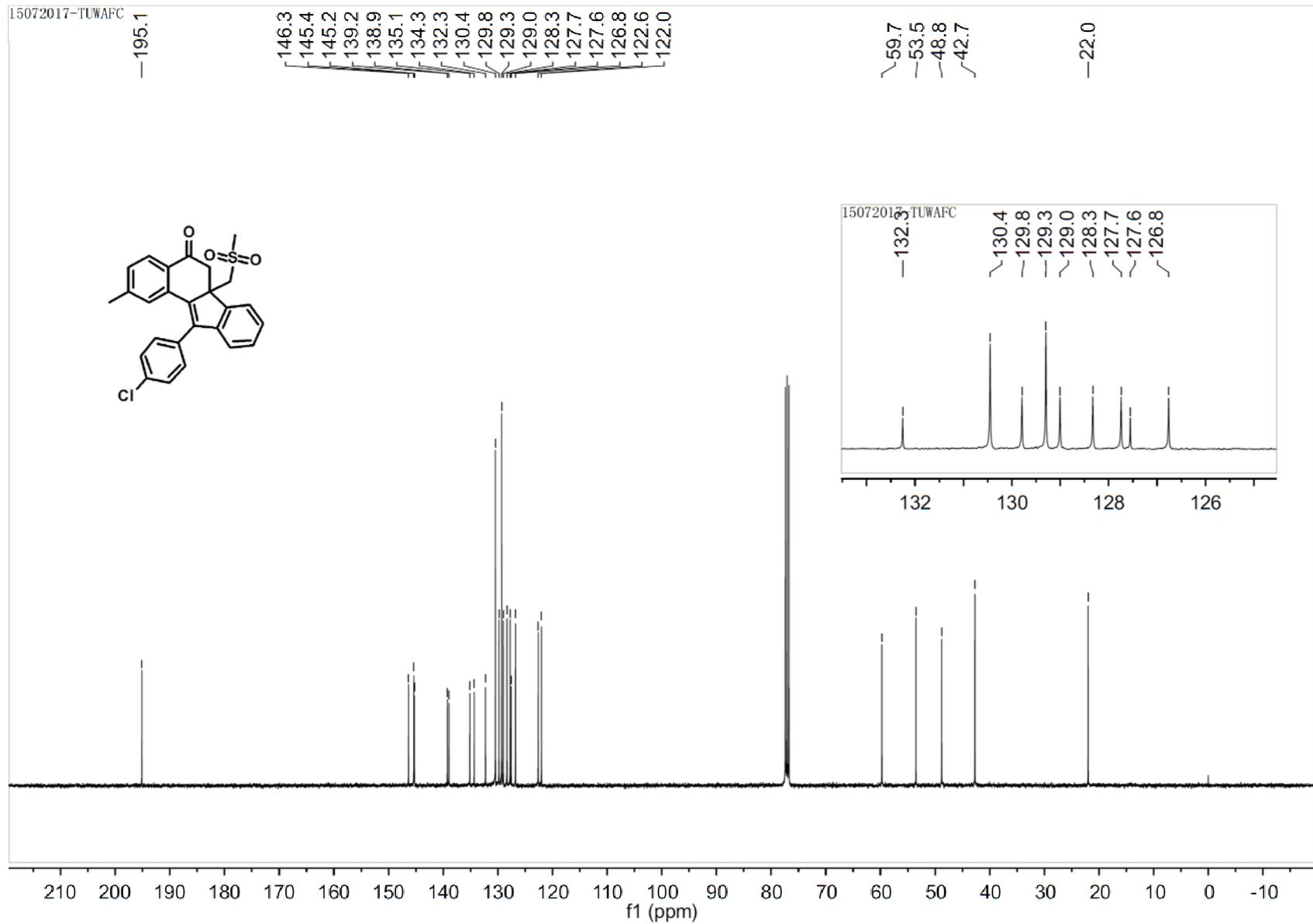
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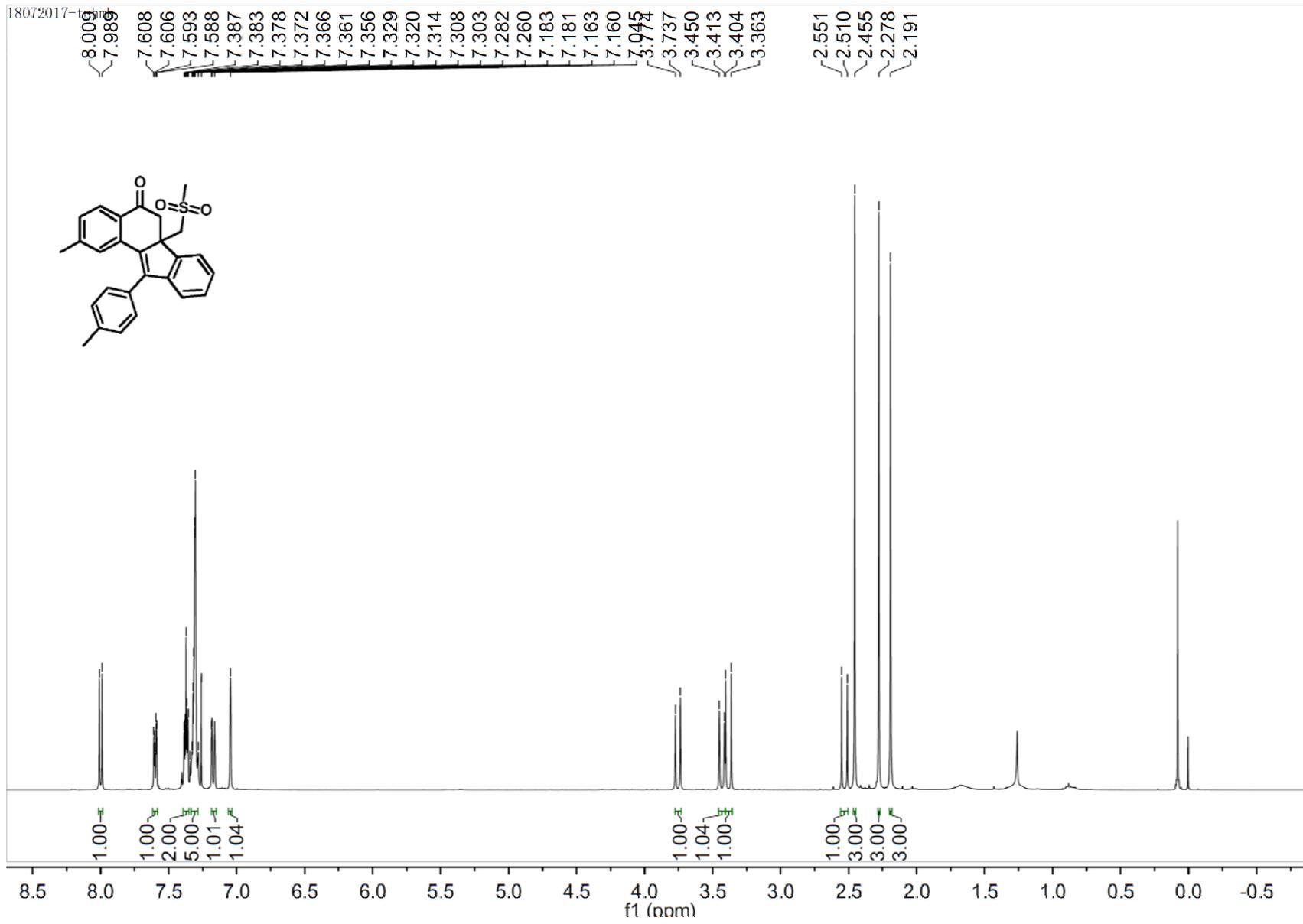
<sup>13</sup>C NMR Spectrum of Compound 3s



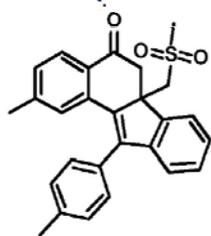
<sup>1</sup>H NMR Spectrum of Compound 3t



<sup>13</sup>C NMR Spectrum of Compound 3t



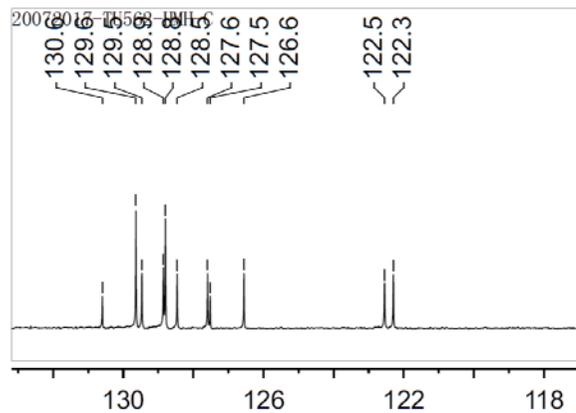
20072017-TU562-HMH-C



146.4  
145.7  
145.1  
140.4  
138.3  
138.2  
135.6  
130.6  
129.6  
129.5  
128.9  
128.8  
128.5  
127.6  
127.5  
126.6  
122.5  
122.3

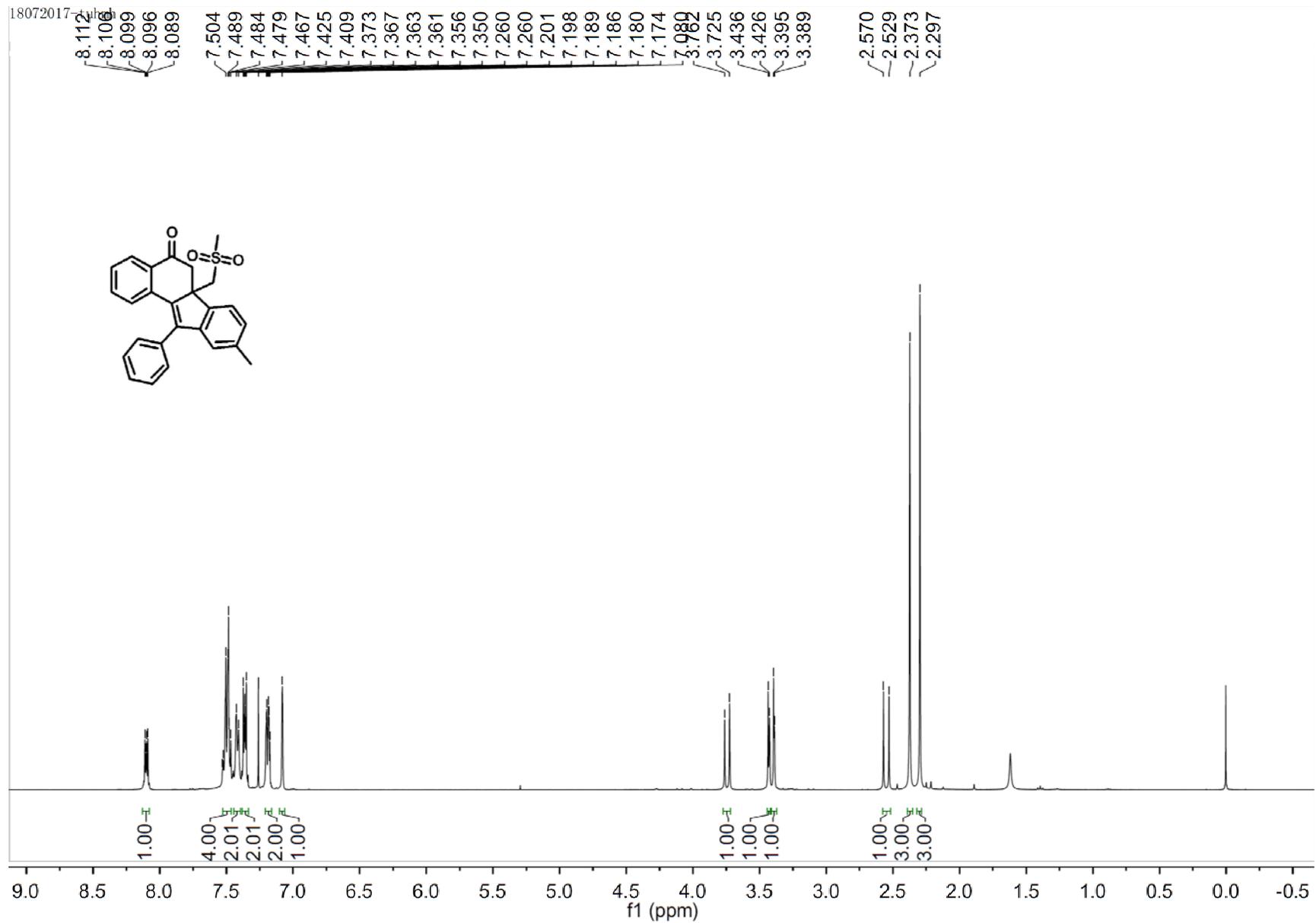
59.9  
53.4  
48.9  
42.6

22.0  
21.5



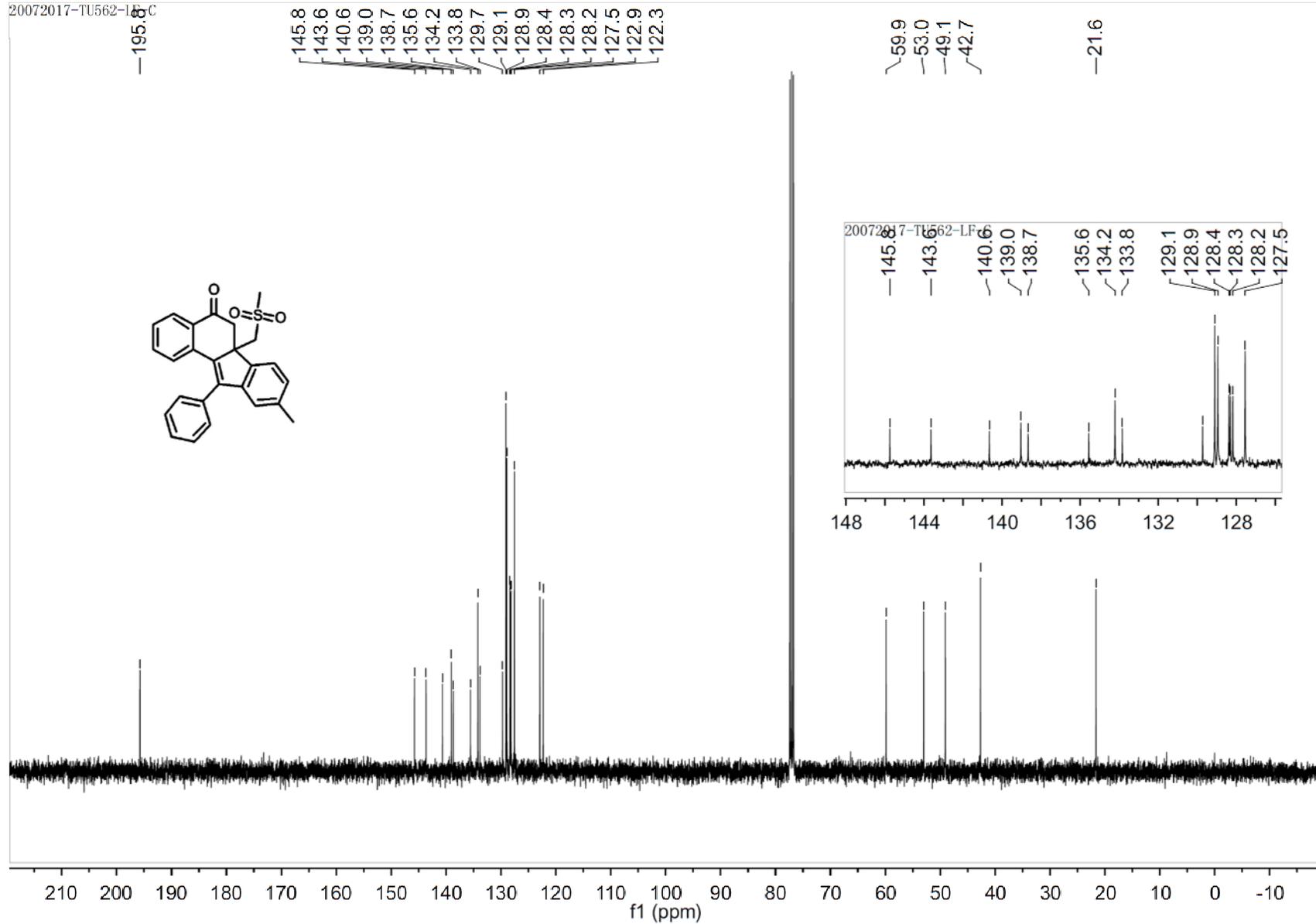
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f1 (ppm)

<sup>13</sup>C NMR Spectrum of Compound 3u

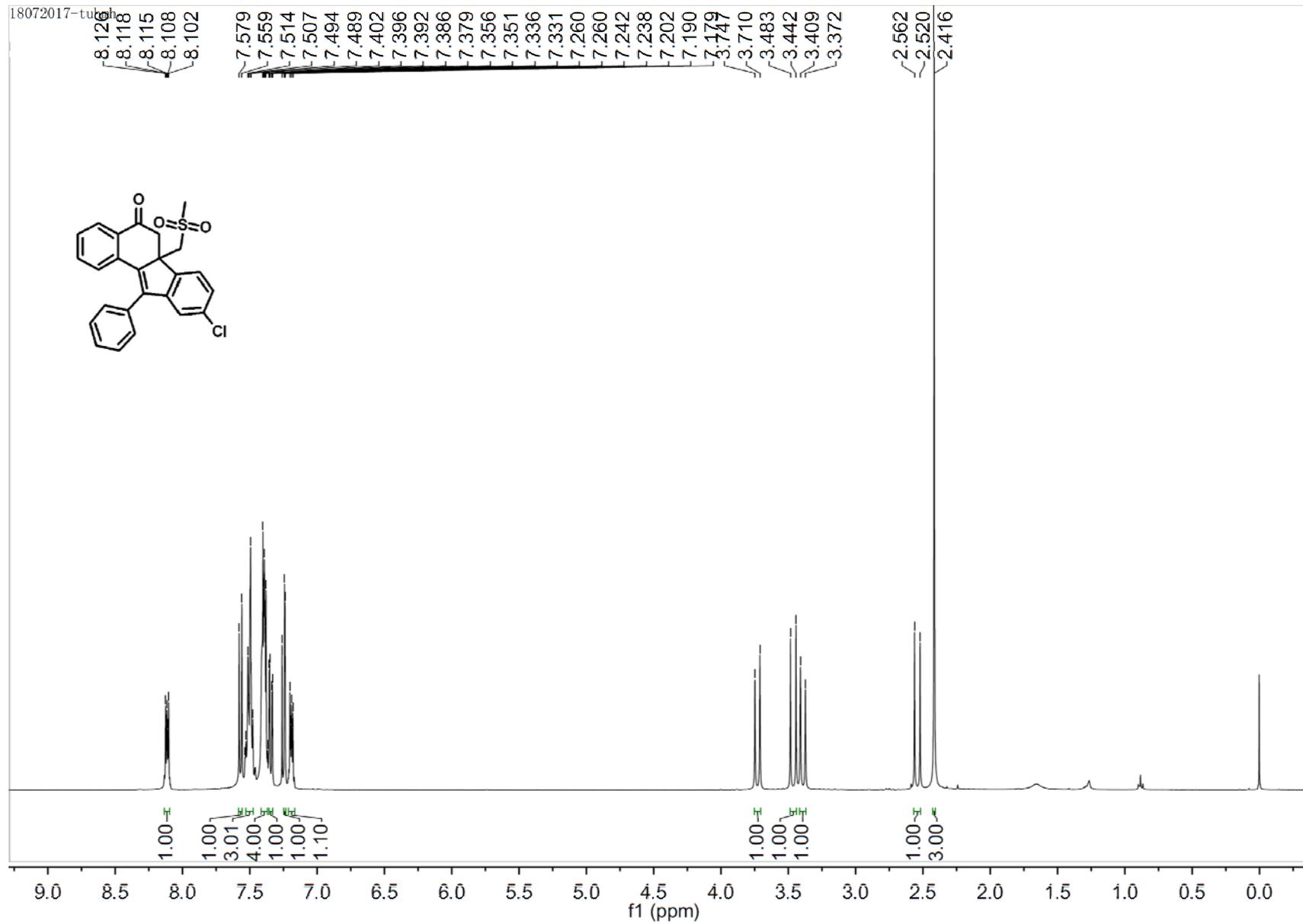


<sup>1</sup>H NMR Spectrum of Compound 3v

20072017-TU562-LF

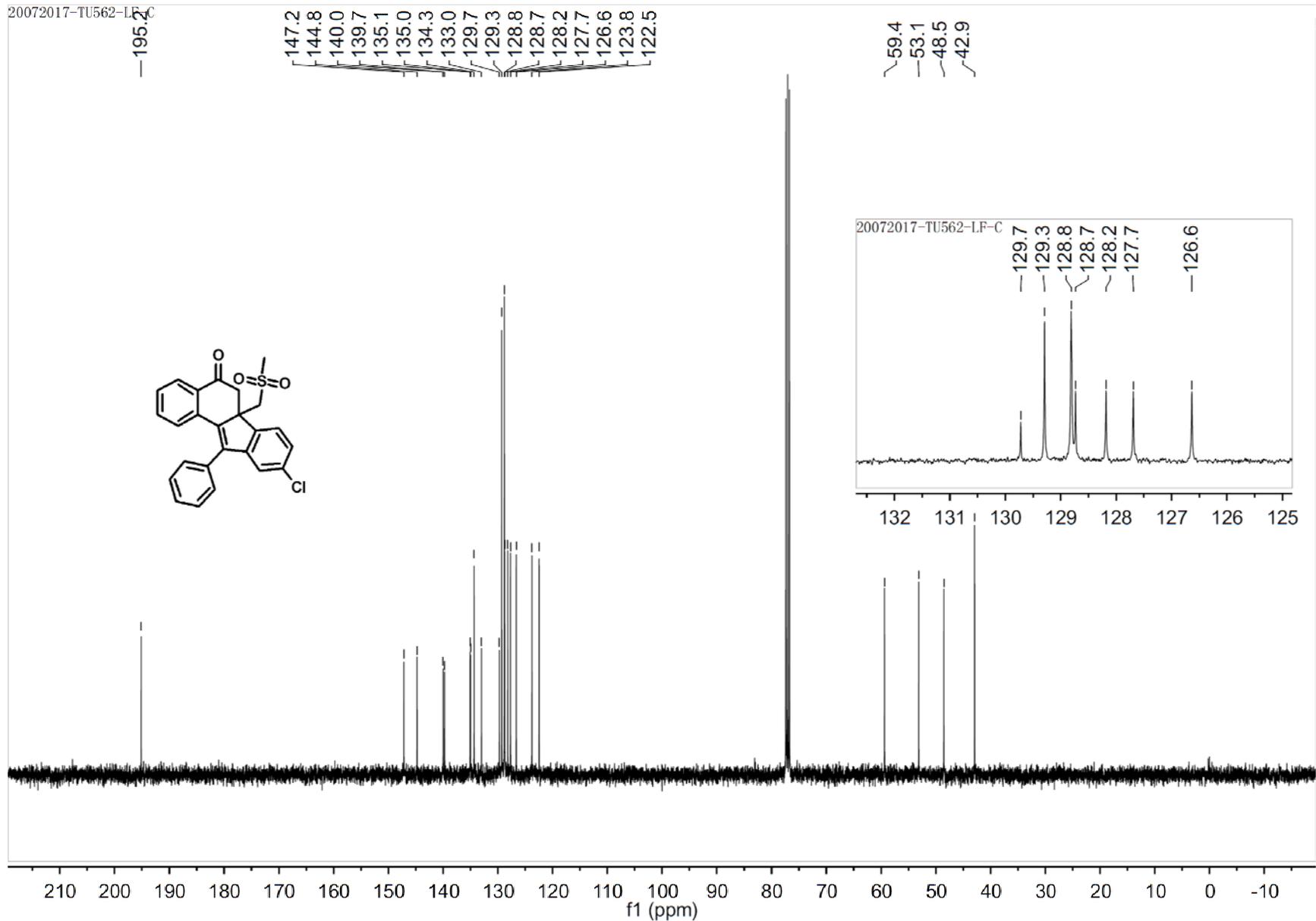


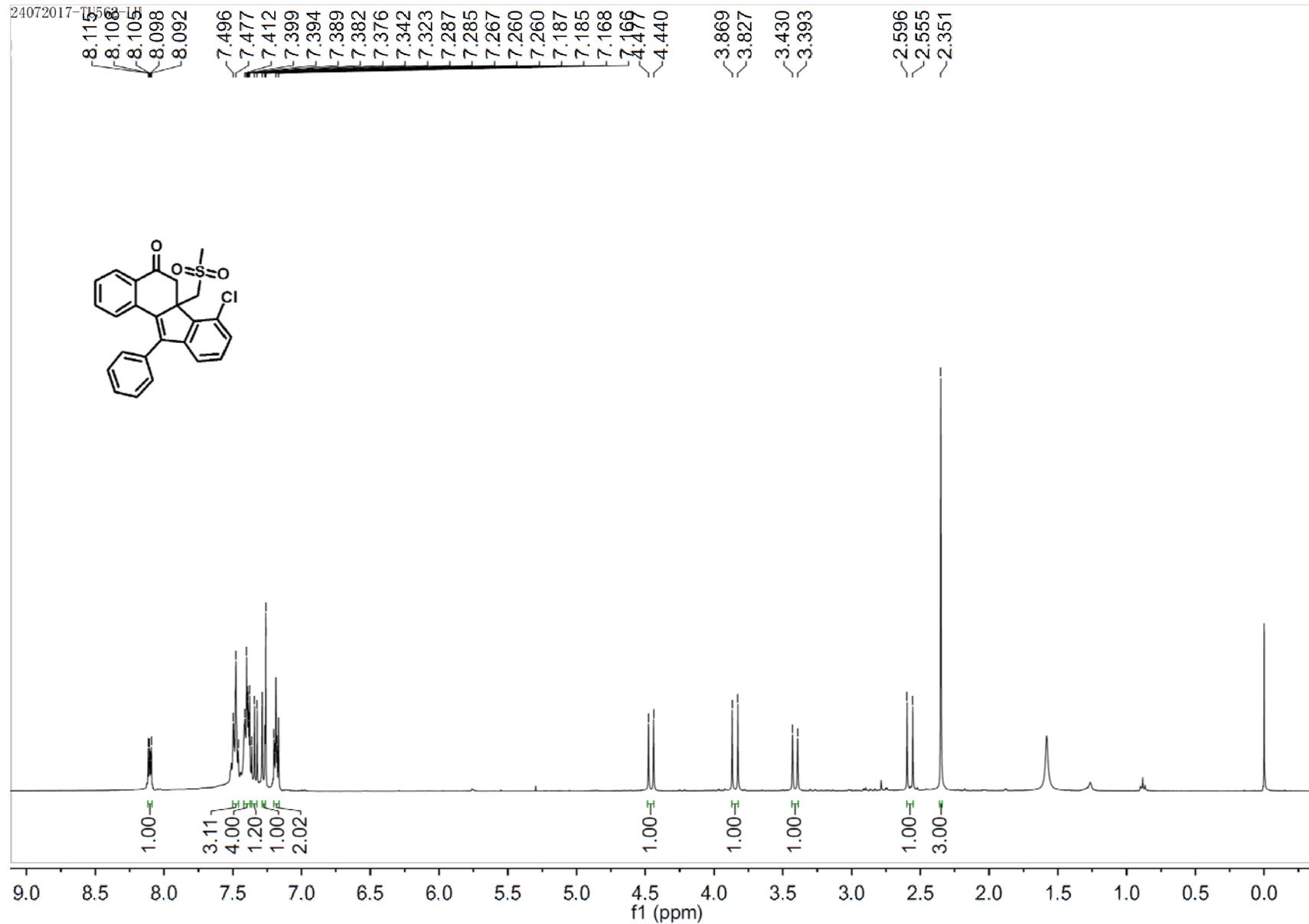
<sup>13</sup>C NMR Spectrum of Compound 3v



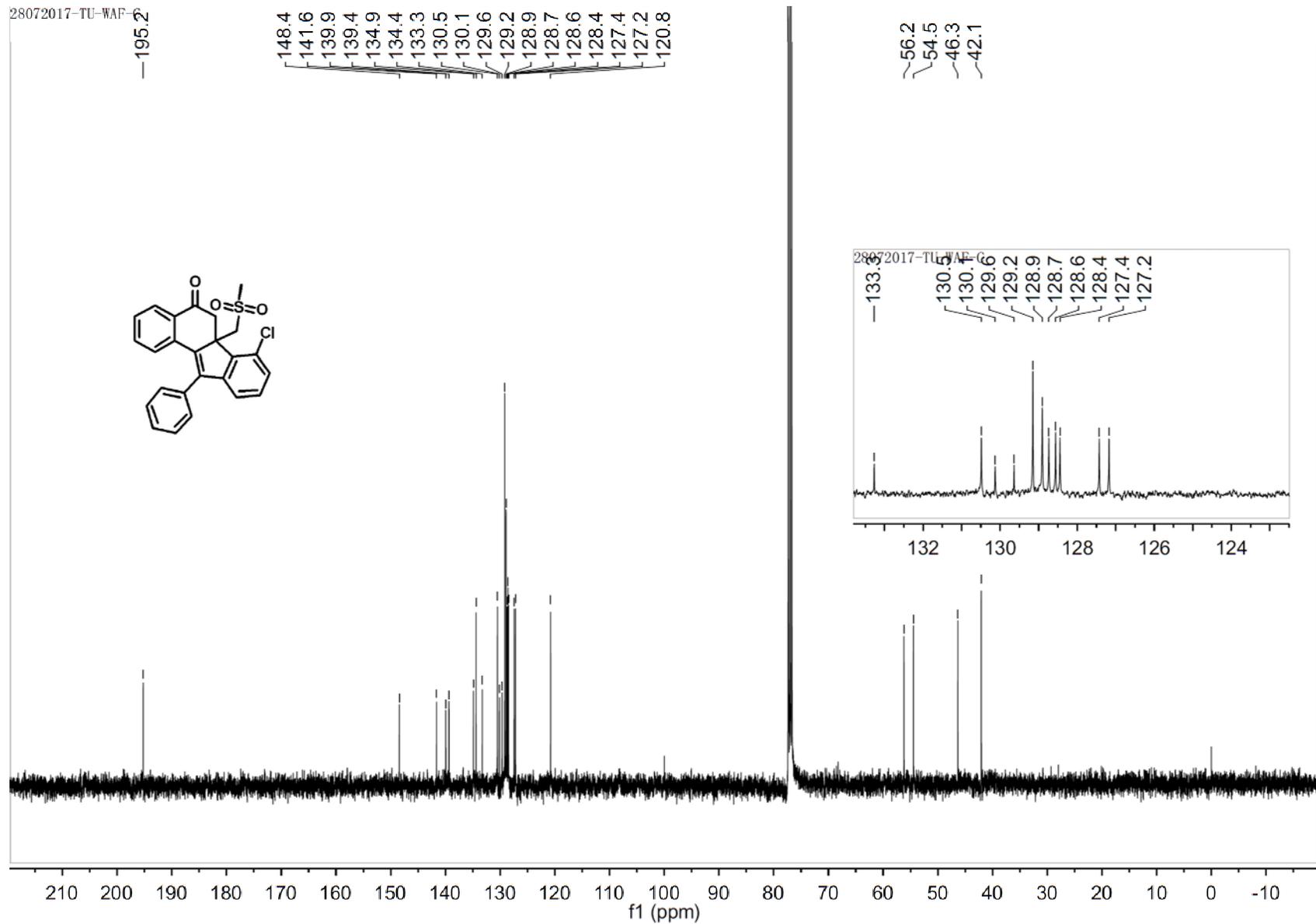
<sup>1</sup>H NMR Spectrum of Compound 3w

20072017-TU562-LF-C



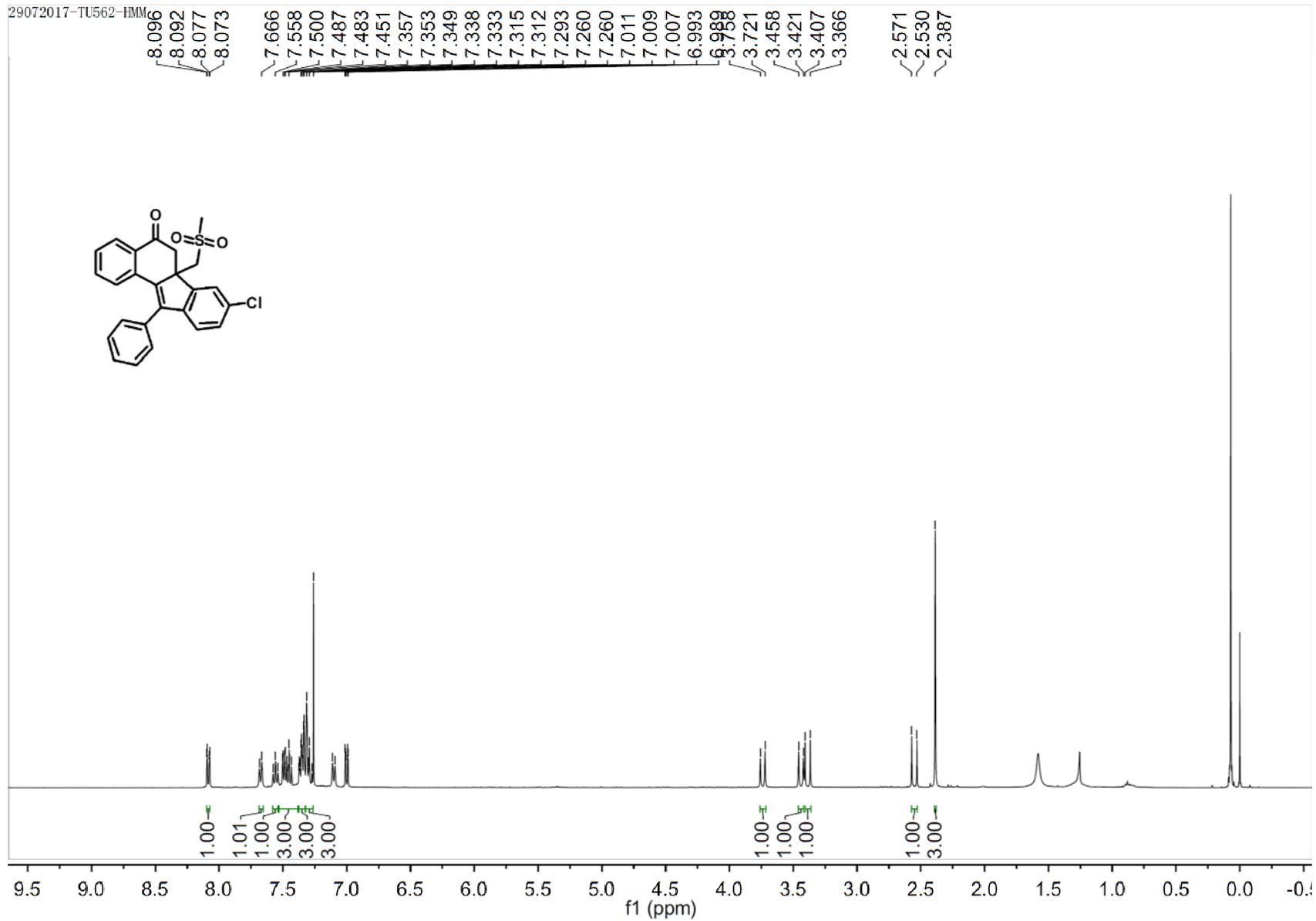


<sup>1</sup>H NMR Spectrum of Compound 3x

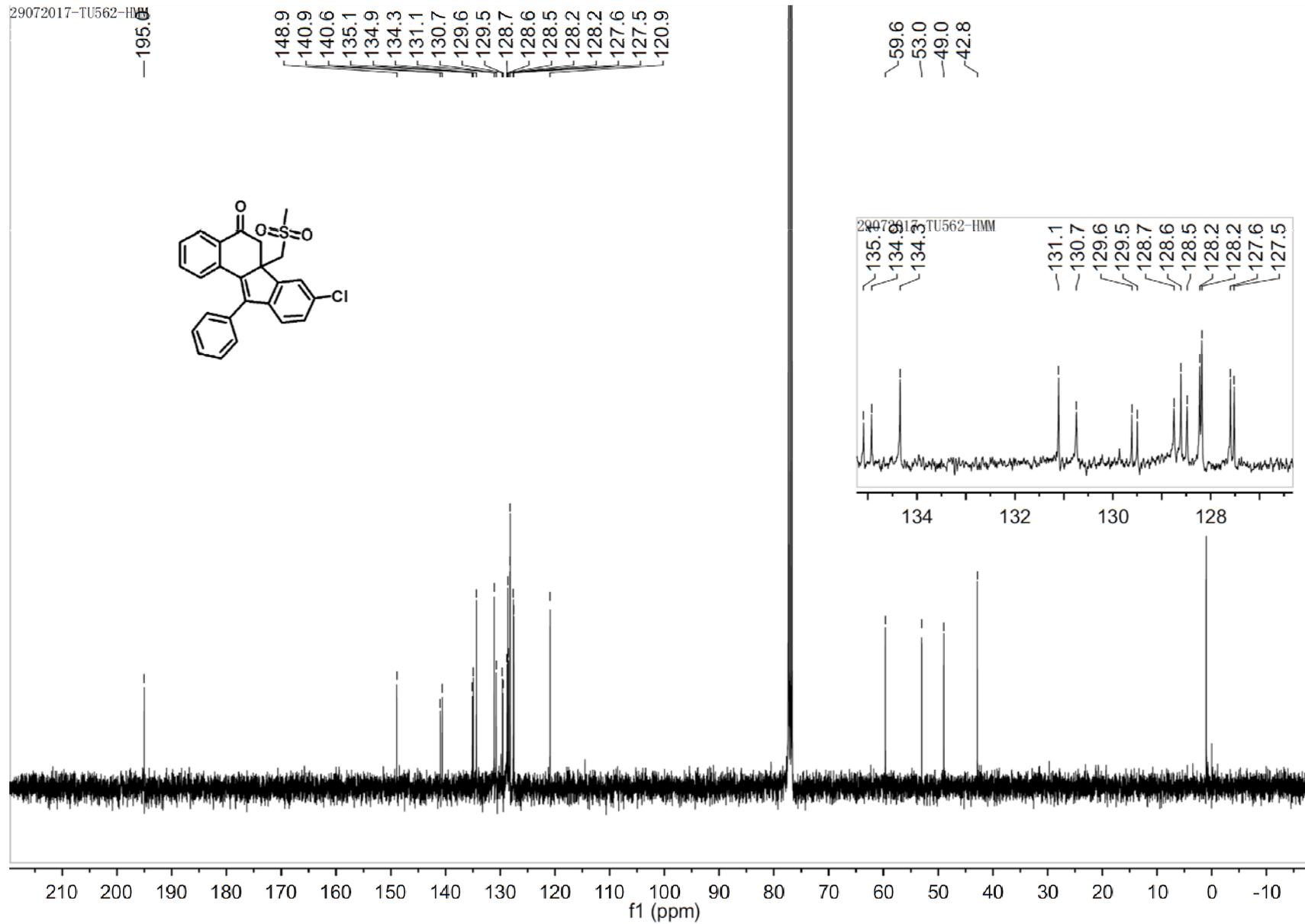


<sup>13</sup>C NMR Spectrum of Compound 3x

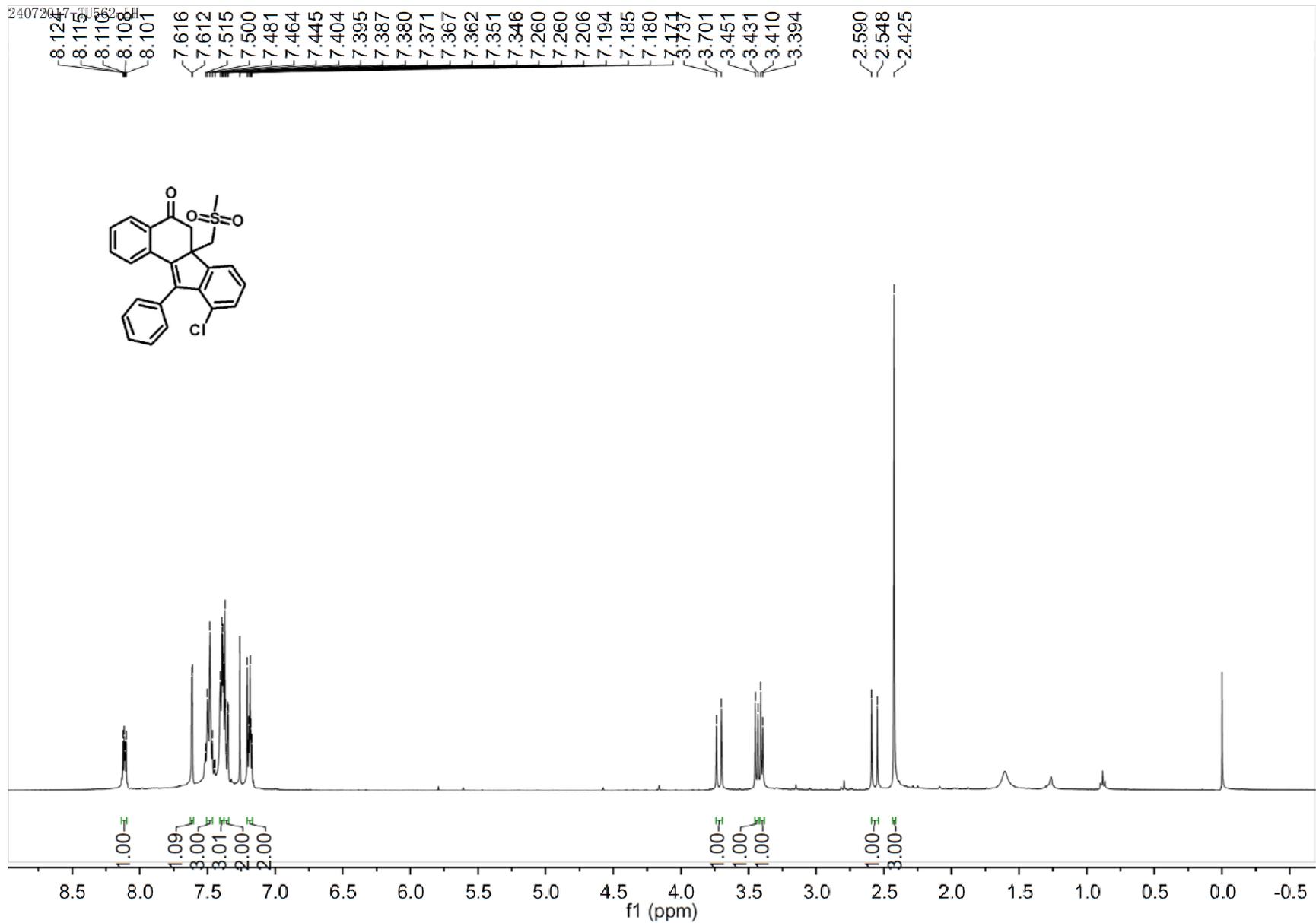
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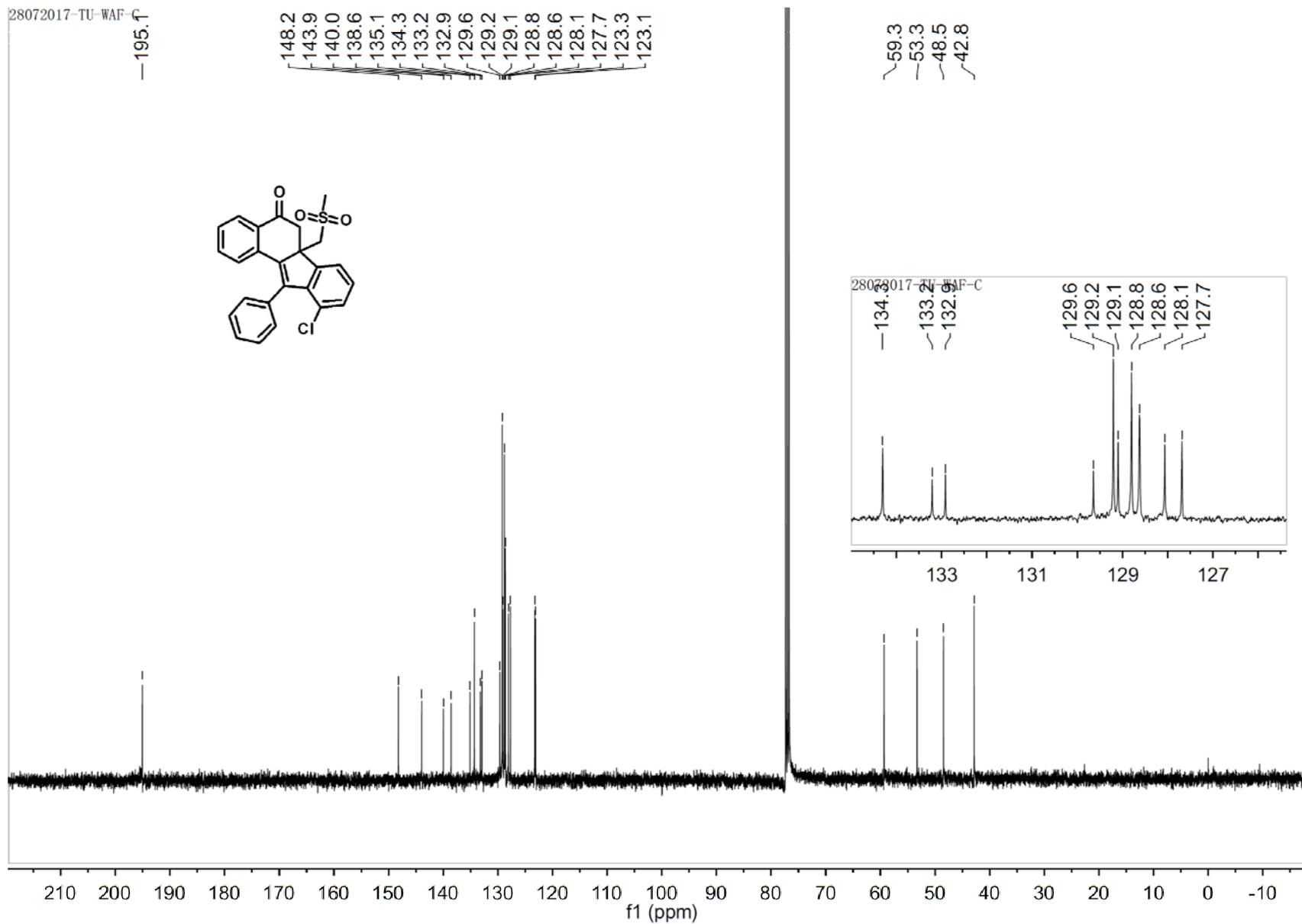
<sup>1</sup>H NMR Spectrum of Compound 3y



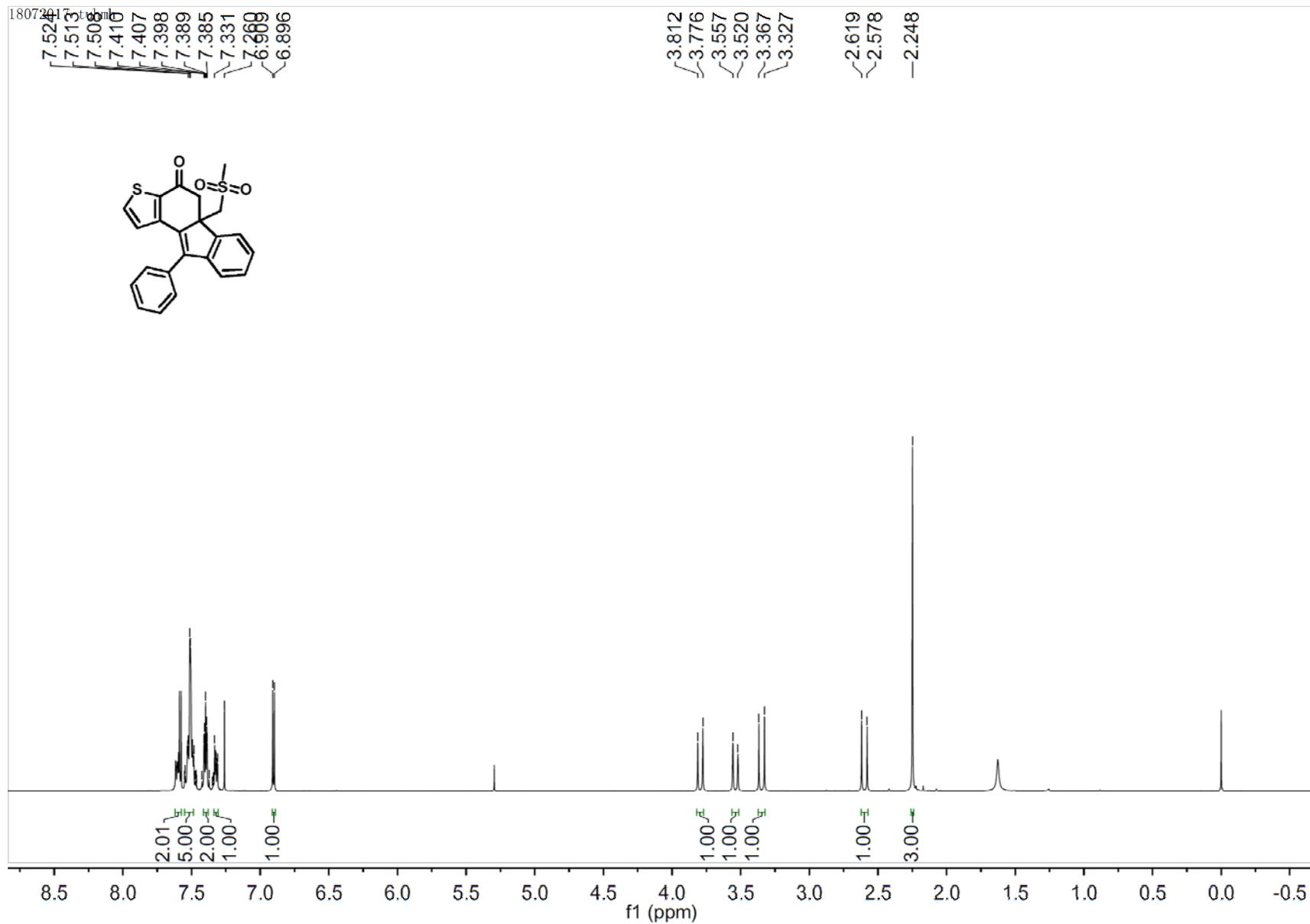
<sup>13</sup>C NMR Spectrum of Compound 3y



<sup>1</sup>H NMR Spectrum of Compound 3y'

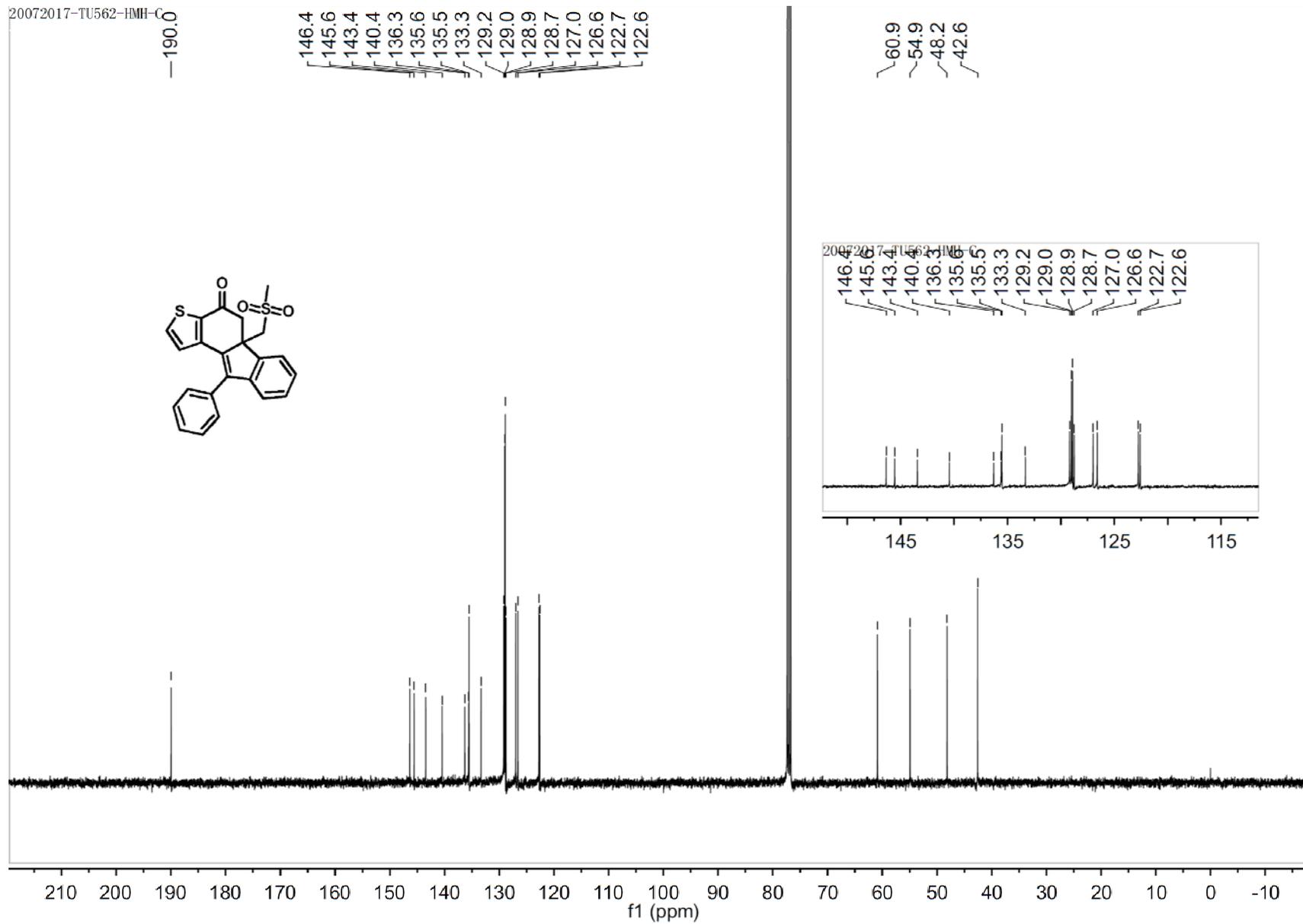


<sup>13</sup>C NMR Spectrum of Compound 3y'



<sup>1</sup>H NMR Spectrum of Compound 3aa

20072017-TU562-HMH-C



<sup>13</sup>C NMR Spectrum of Compound 3aa