

# Supporting Information

## One-step Regioselective Synthesis of Benzofurans from Phenols and $\alpha$ -Haloketones

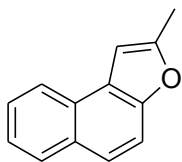
Bingqiao Wang,<sup>1,‡</sup> Qiu Zhang,<sup>1,‡</sup> Juan Luo,<sup>1</sup> Zongjie Gan,<sup>1</sup> Wengao Jiang,<sup>1</sup> and Qiang Tang<sup>1,\*</sup>

<sup>1</sup> College of Pharmacy, Center for Lab Teaching and Management, Chongqing Medical University, No.1 Yixueyuan Road, Chongqing 400016, P. R. China.

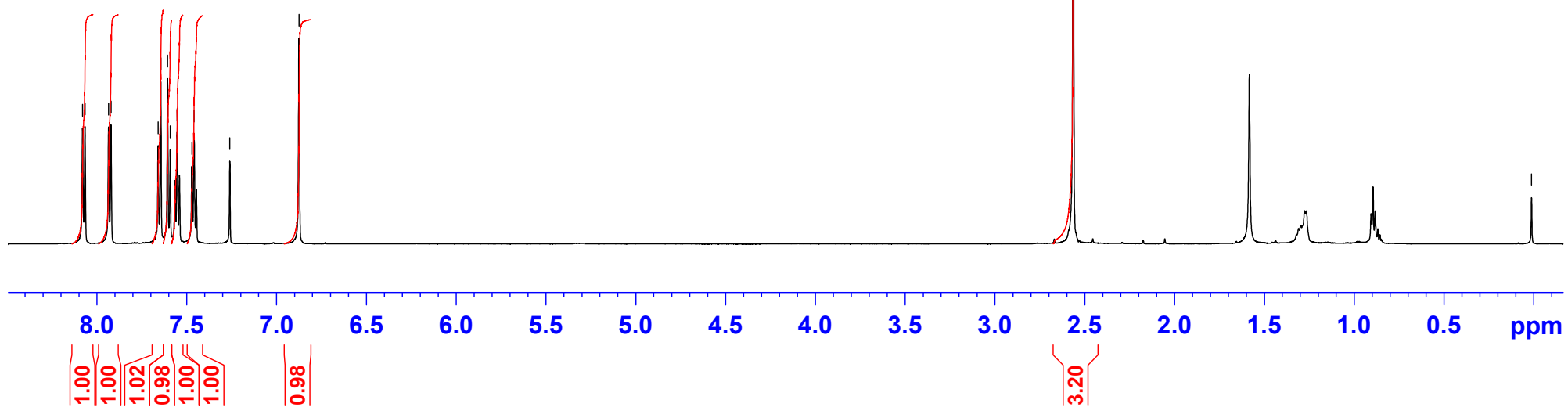
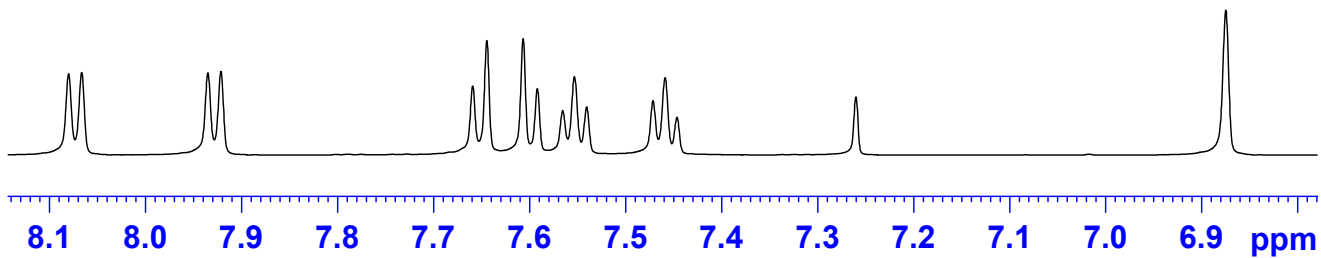
<sup>‡</sup> These authors contributed equally to this work and should be considered co-first authors.

\* Correspondence: E-mail: tangqiang@cqmu.edu.cn.

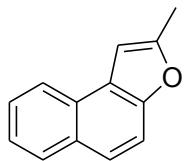
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7.94  
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7.64  
7.61  
7.59  
7.55  
7.47  
7.46  
7.26  
6.88



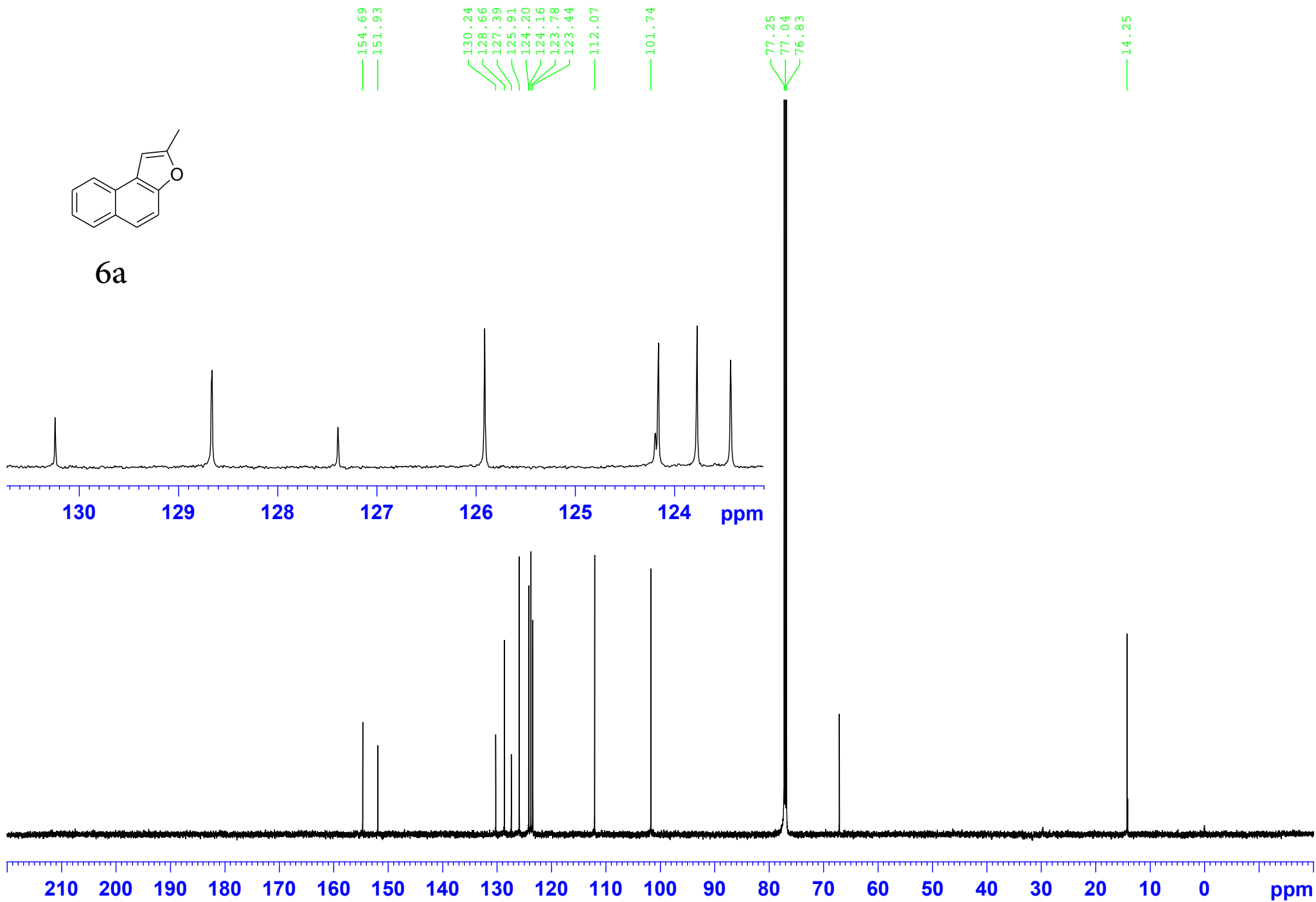
6a



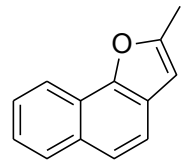
— 0.01



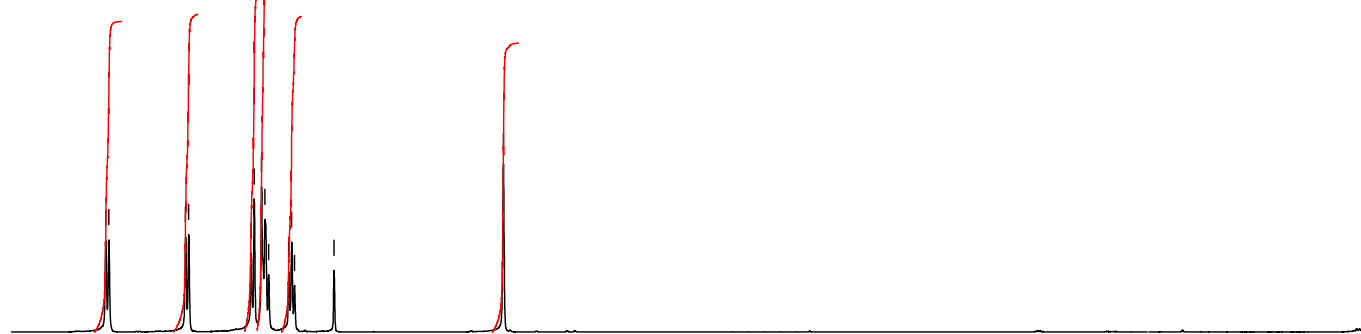
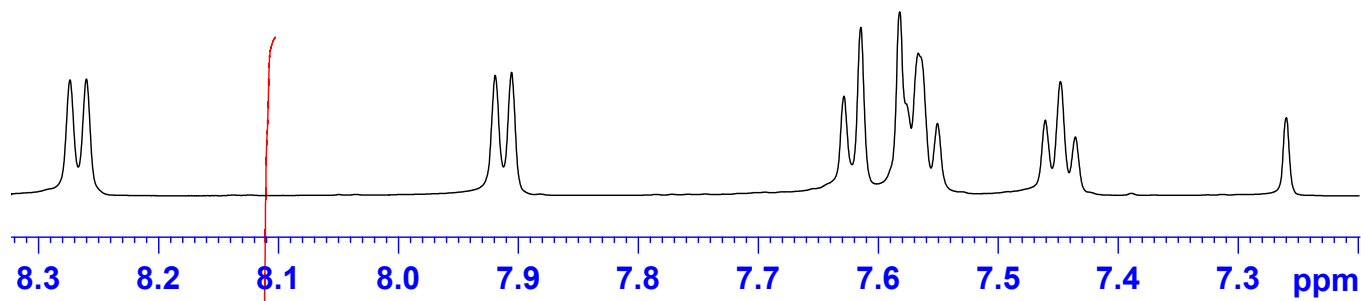
6a



8.274  
8.260  
7.919  
7.906  
7.629  
7.615  
7.582  
7.567  
7.551  
7.461  
7.448  
7.436  
7.260  
— 6.508



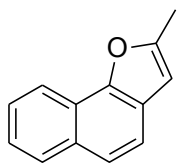
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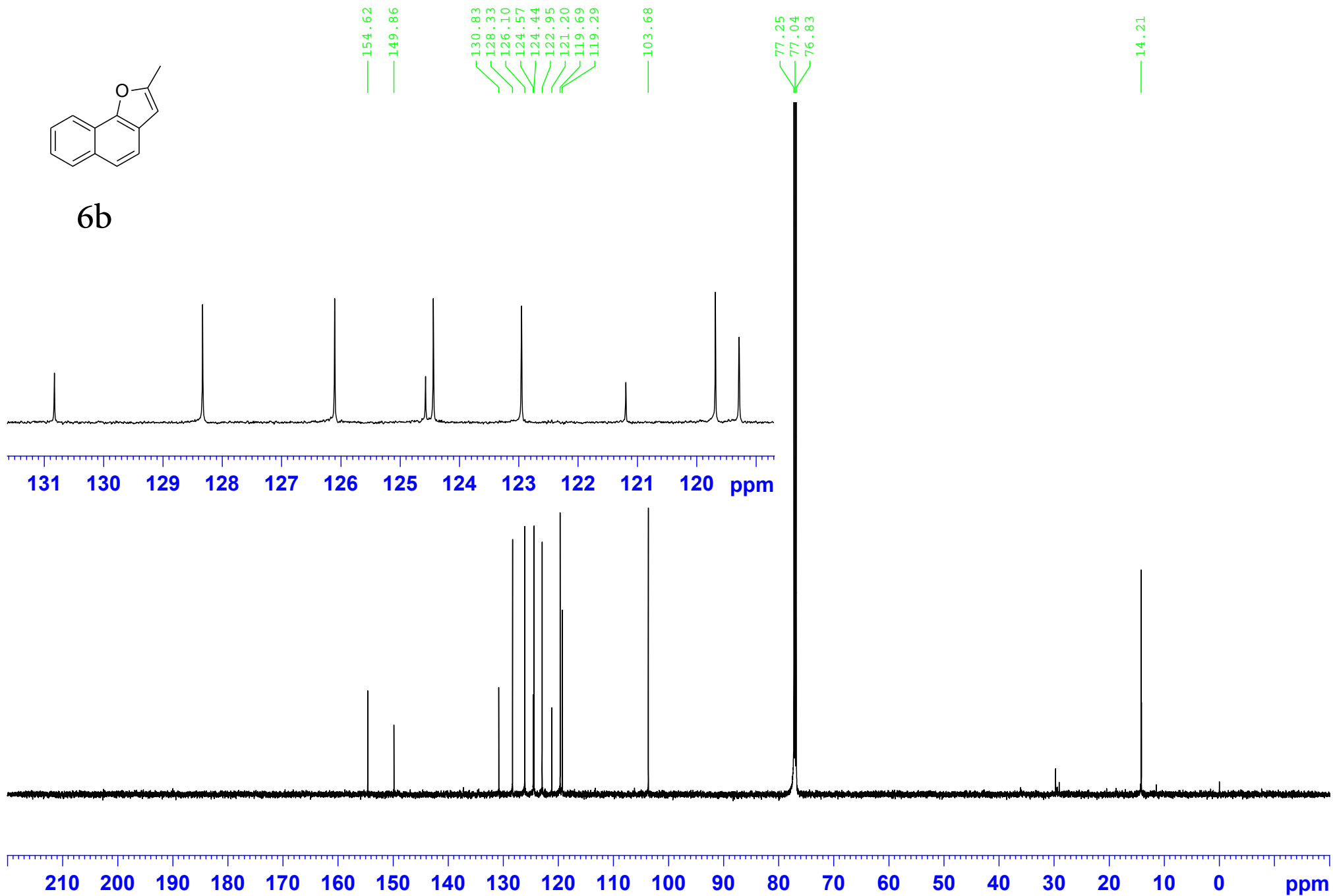
8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 ppm

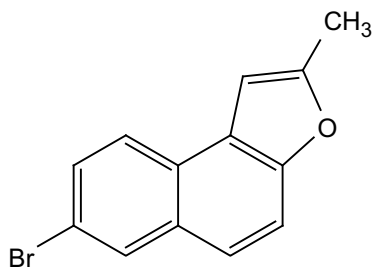
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1.09  
1.99  
1.02  
0.93  
3.10

— 2.576  
— 0.013

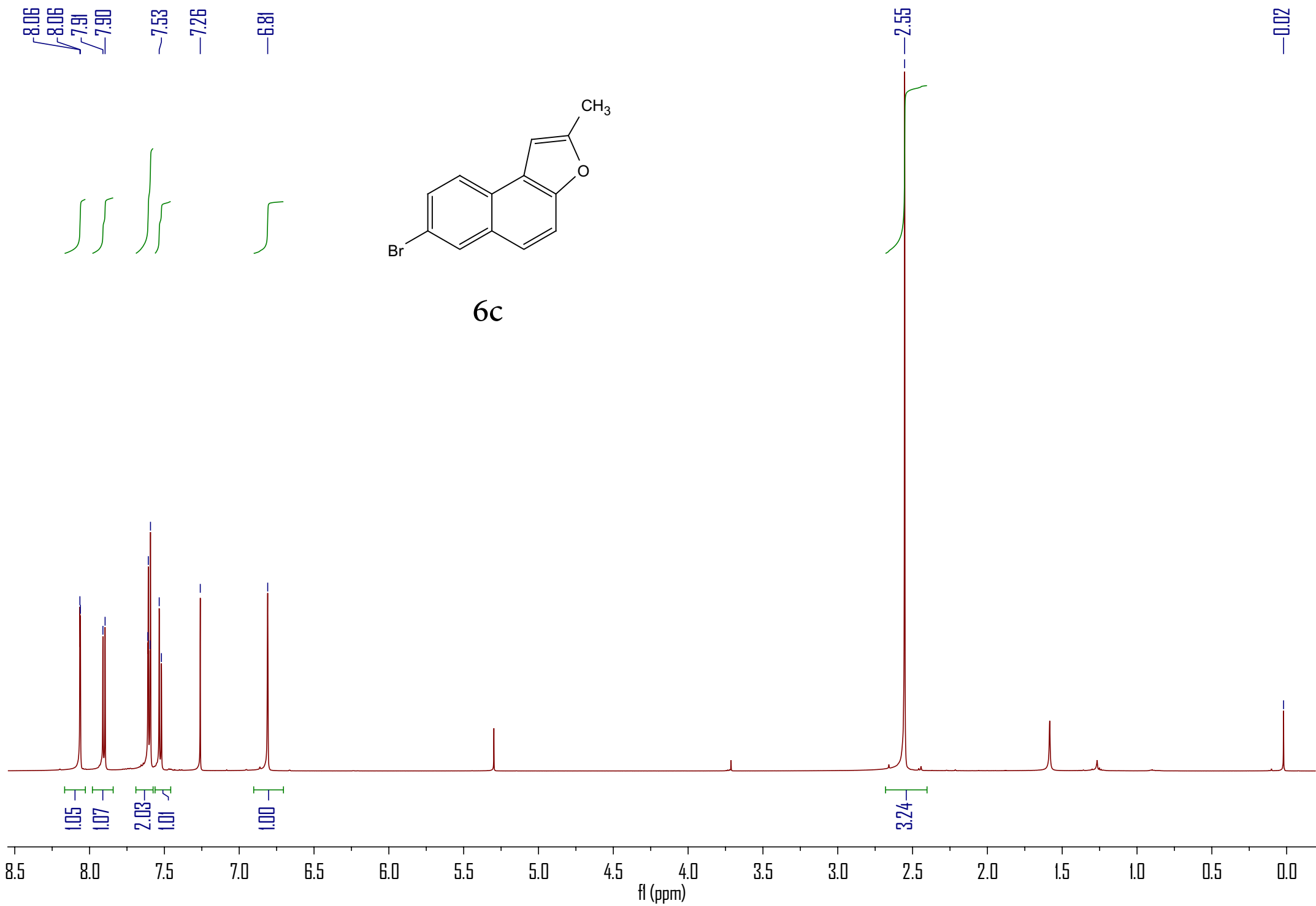


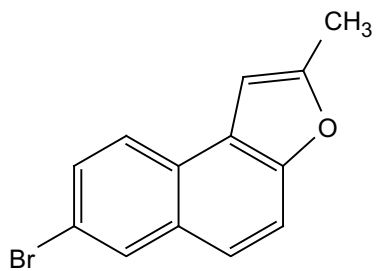
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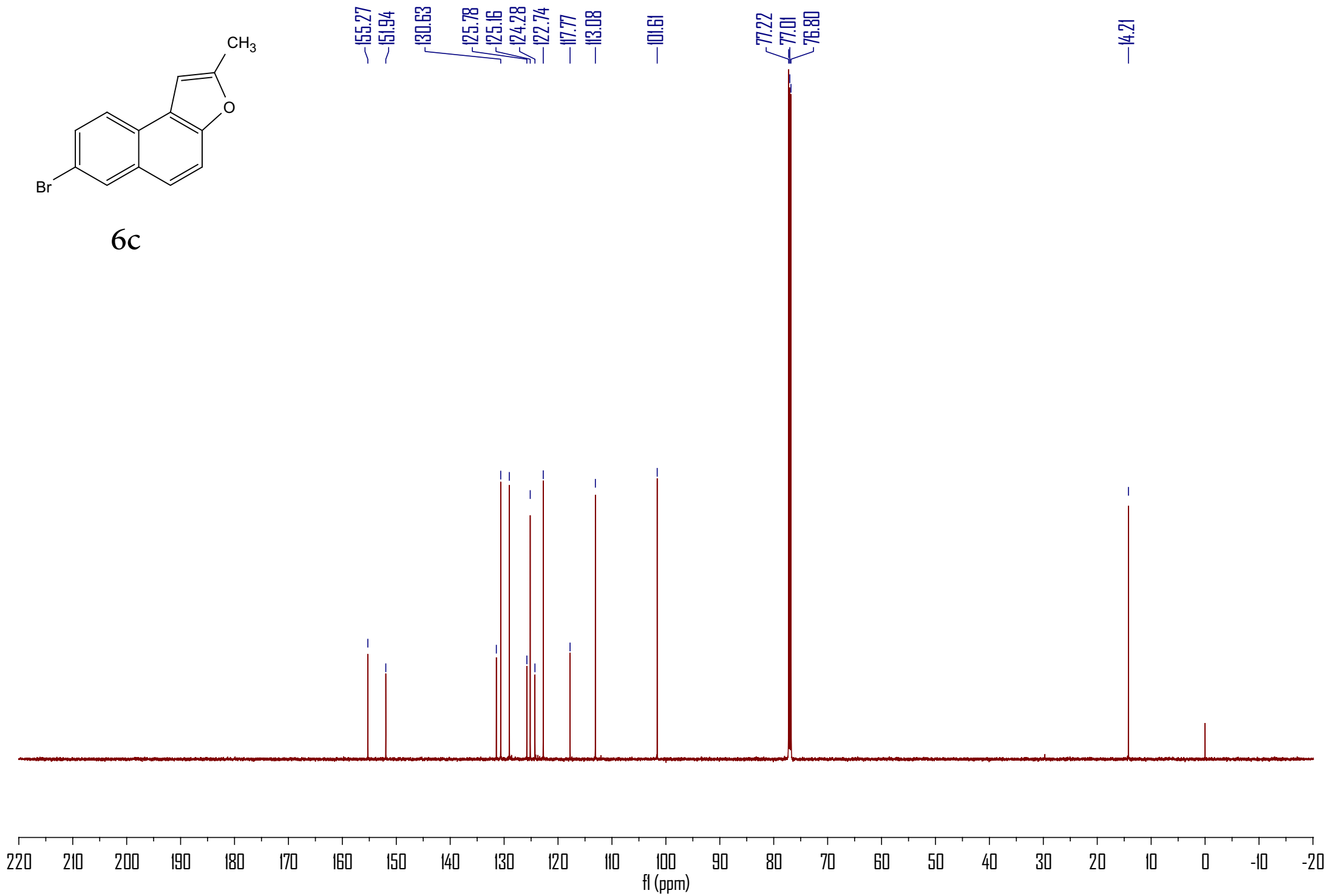


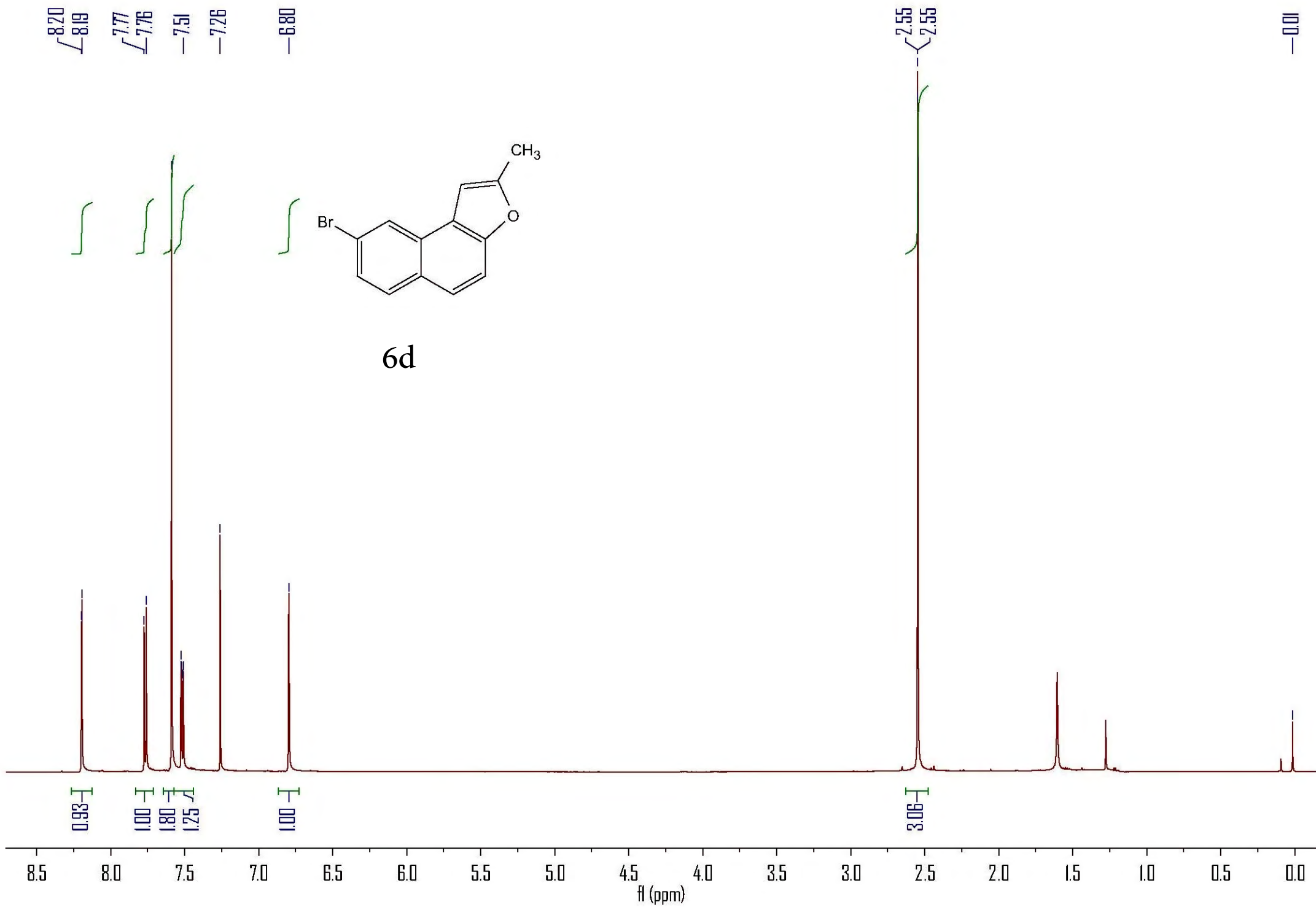
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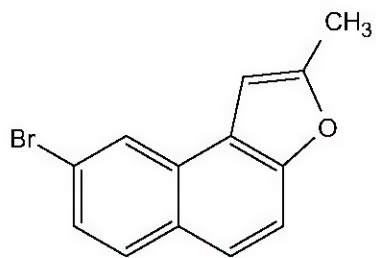


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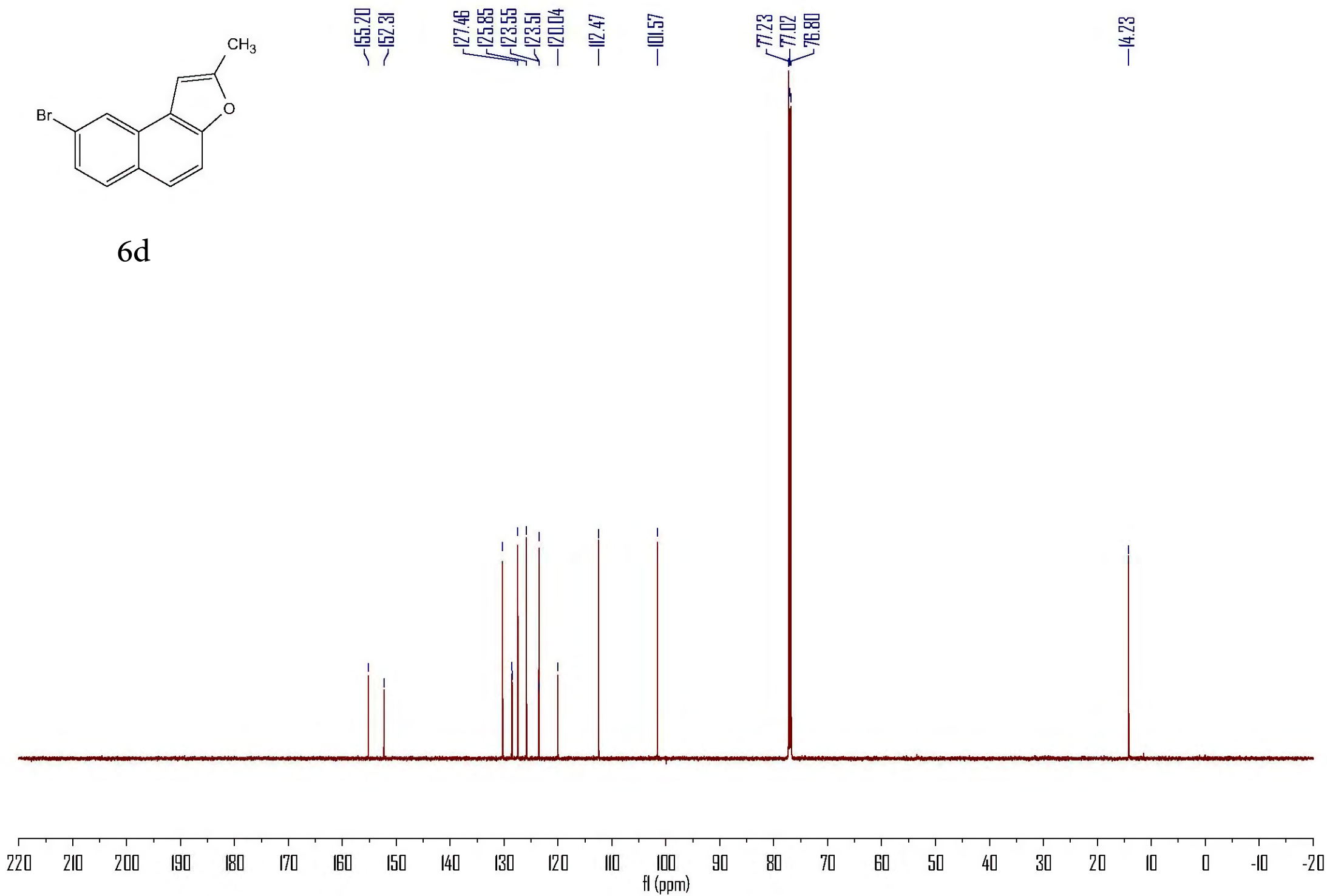




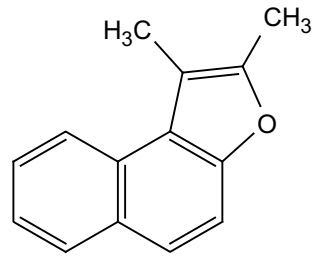
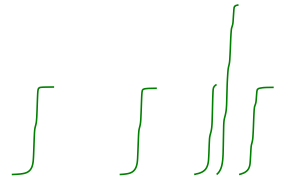




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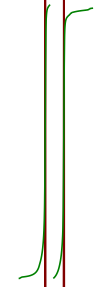


8.41  
8.39  
7.96  
7.95  
7.57  
7.47  
7.26

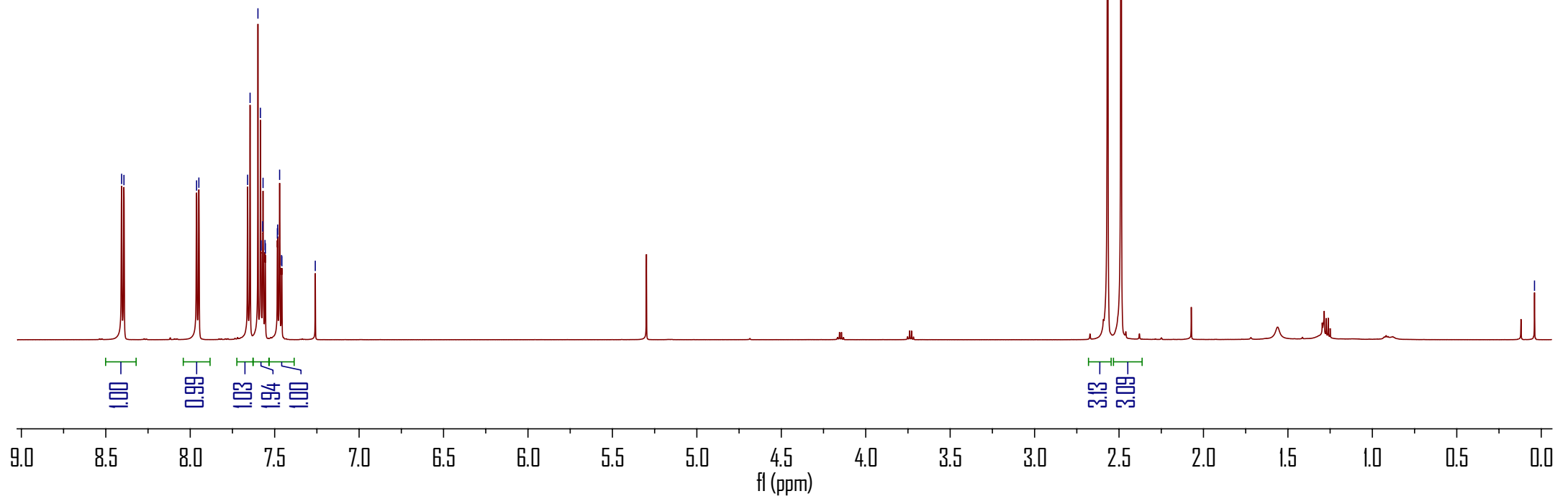


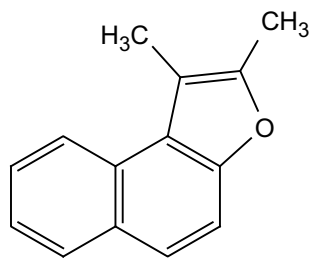
6e

2.57  
2.49

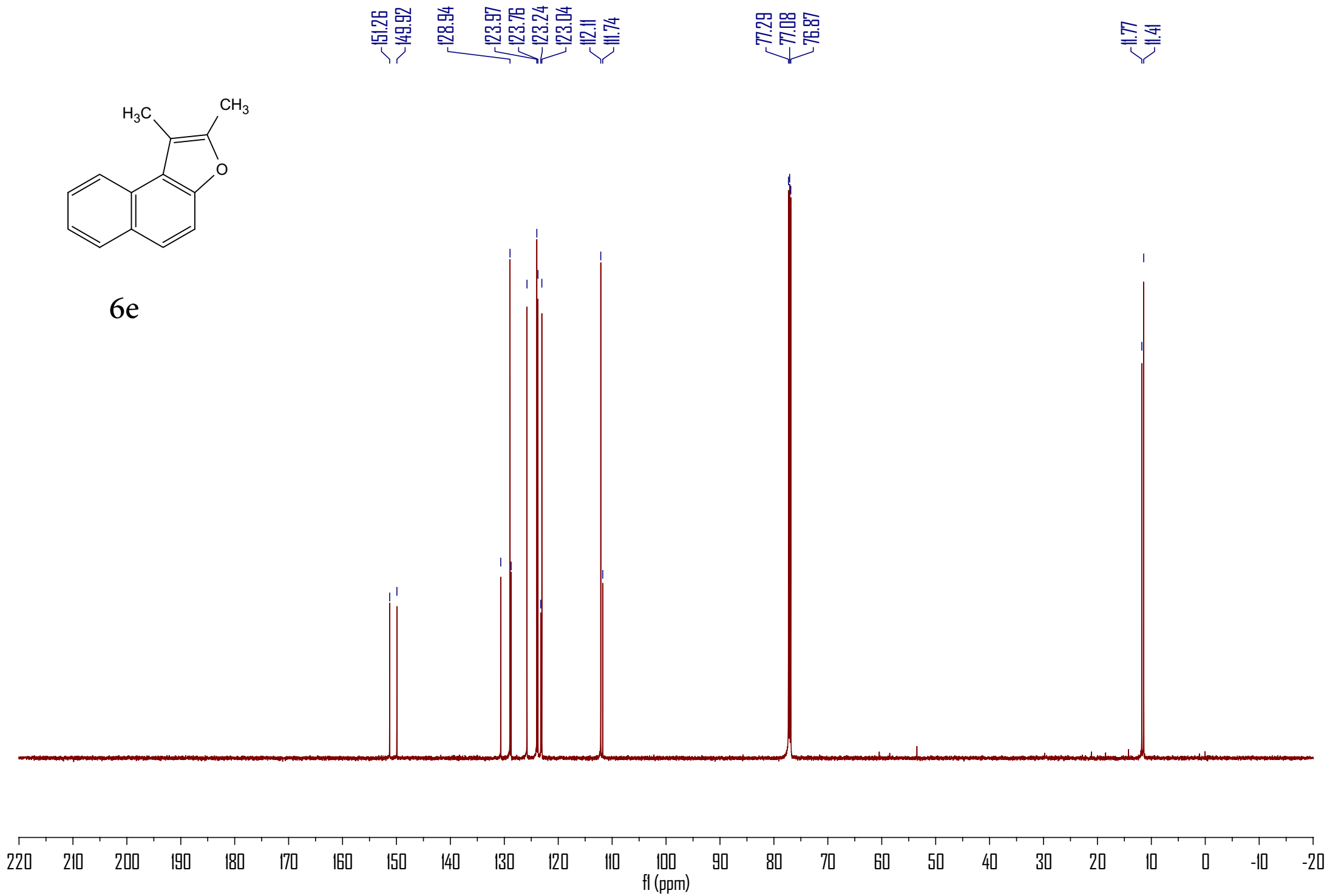


0.04





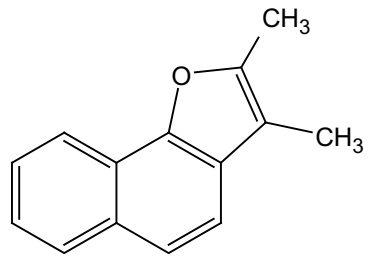
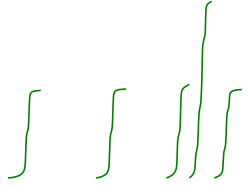
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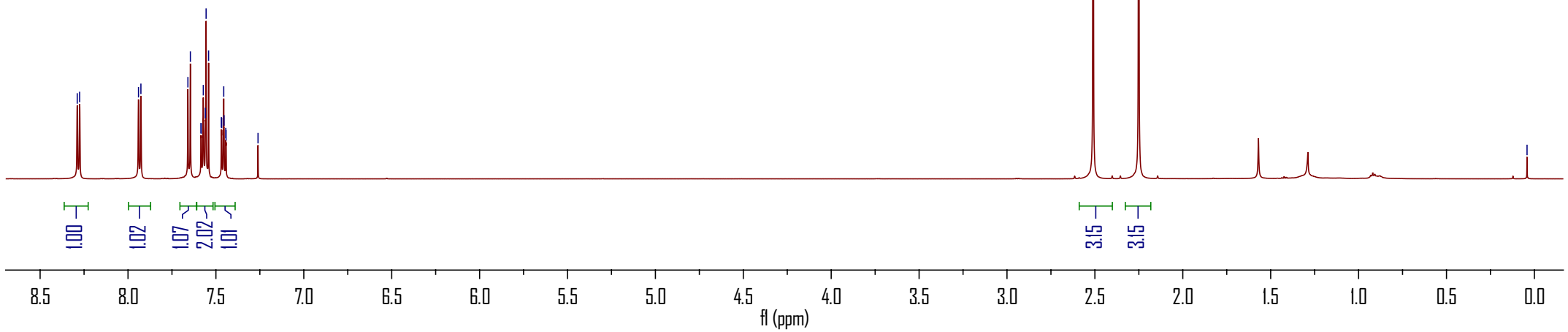
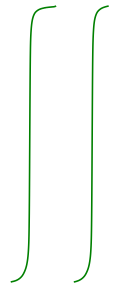
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8.28  
7.94  
7.93  
7.56  
7.45  
7.26

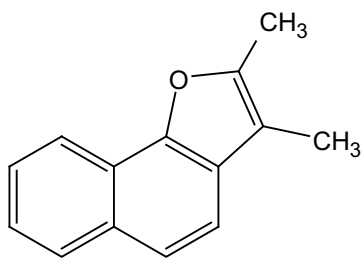
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2.25

0.04

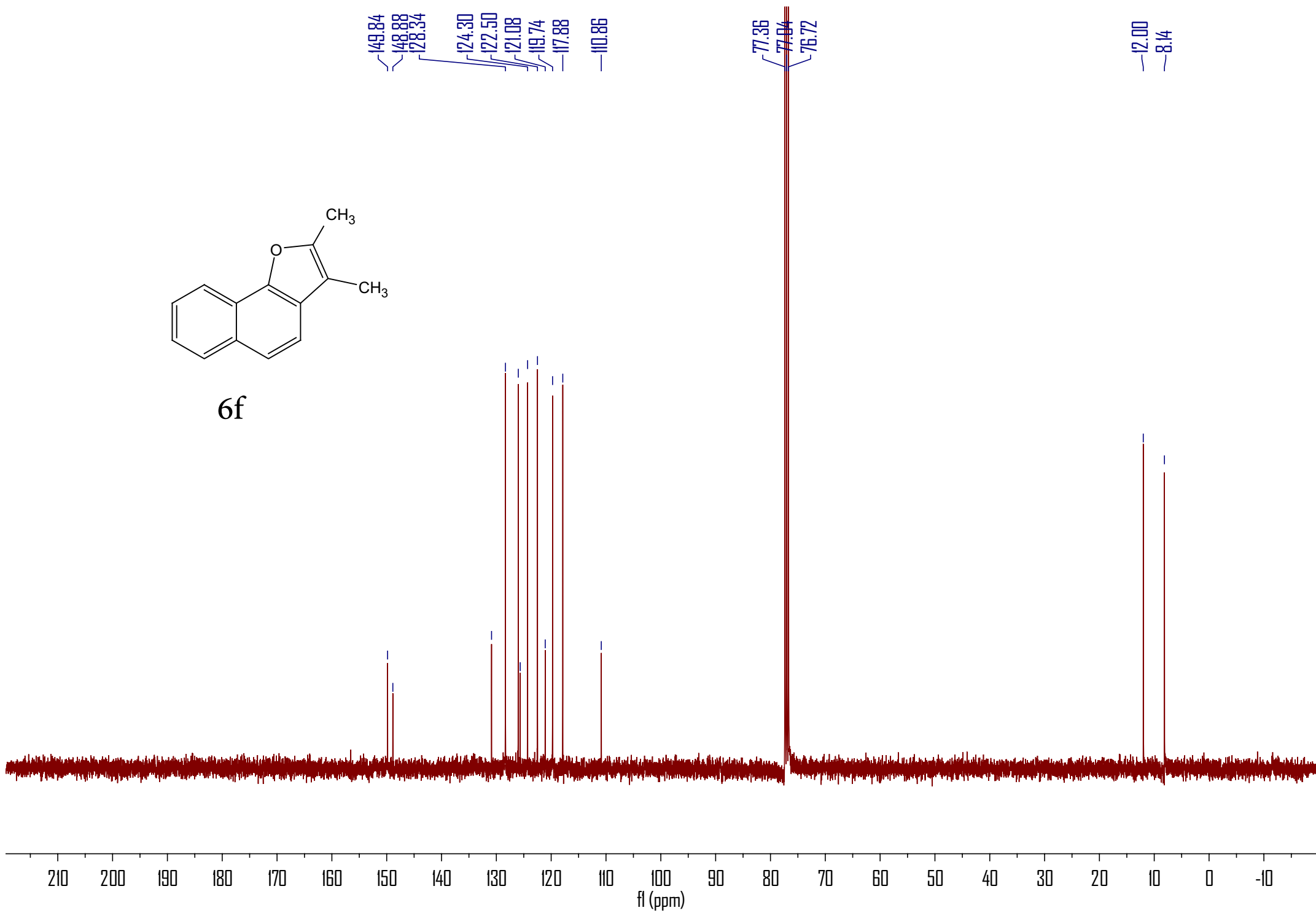


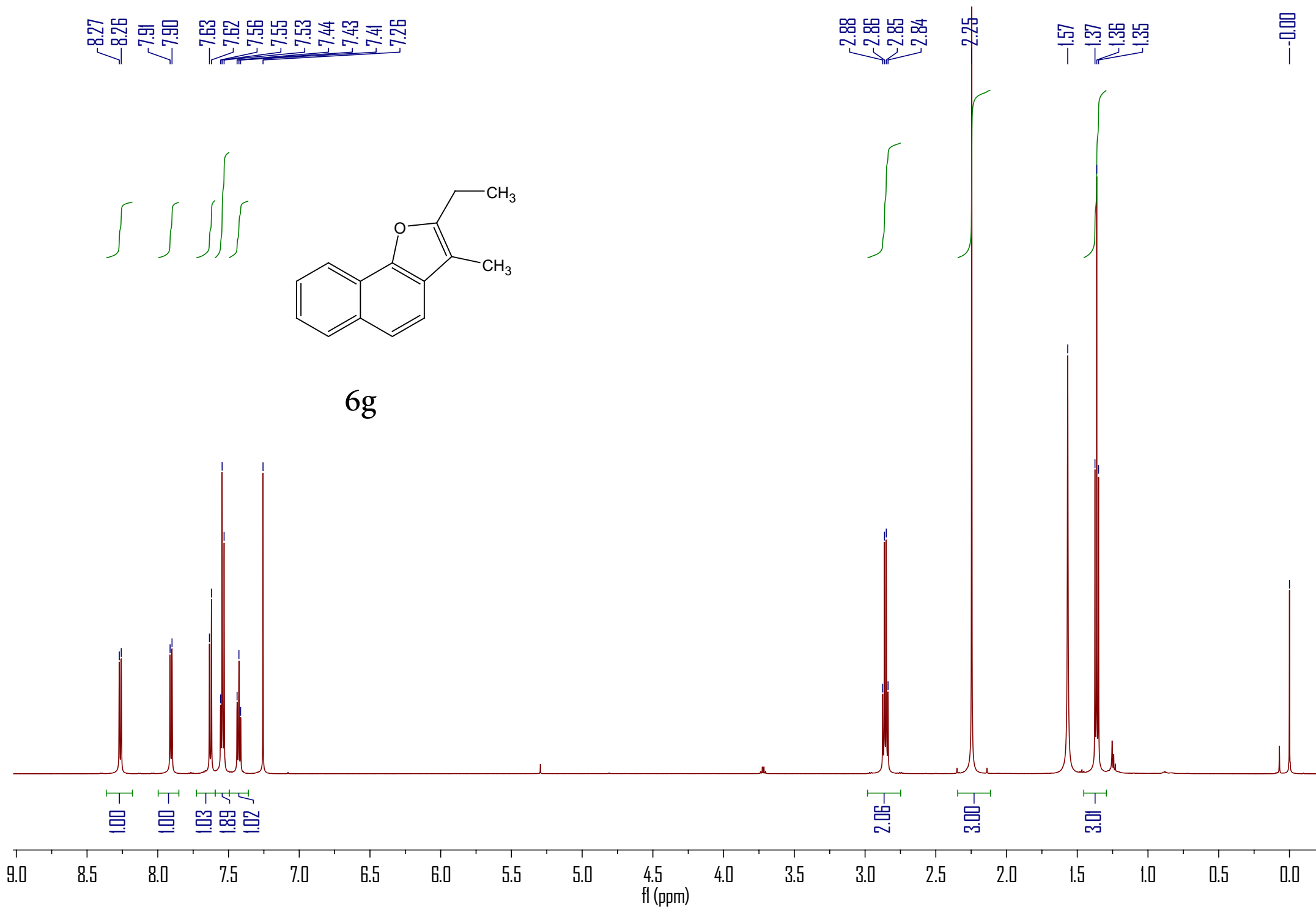
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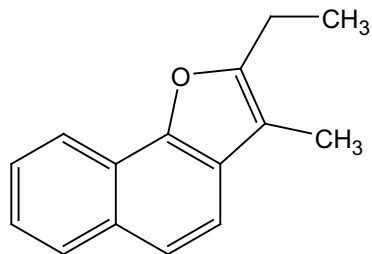




6f





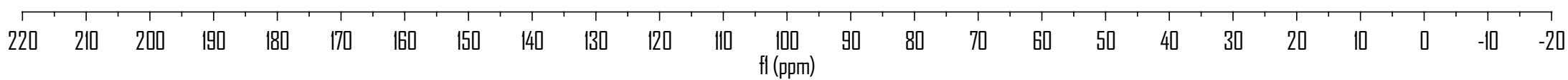


6g

154.94  
148.88  
128.33  
124.29  
122.45  
121.17  
119.83  
117.96  
109.90

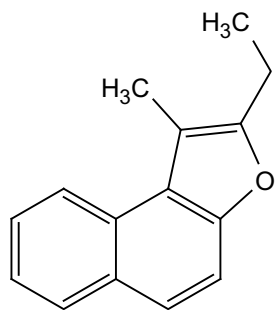
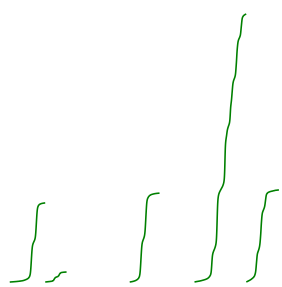
77.24  
77.00  
76.82

19.92  
13.14  
8.00

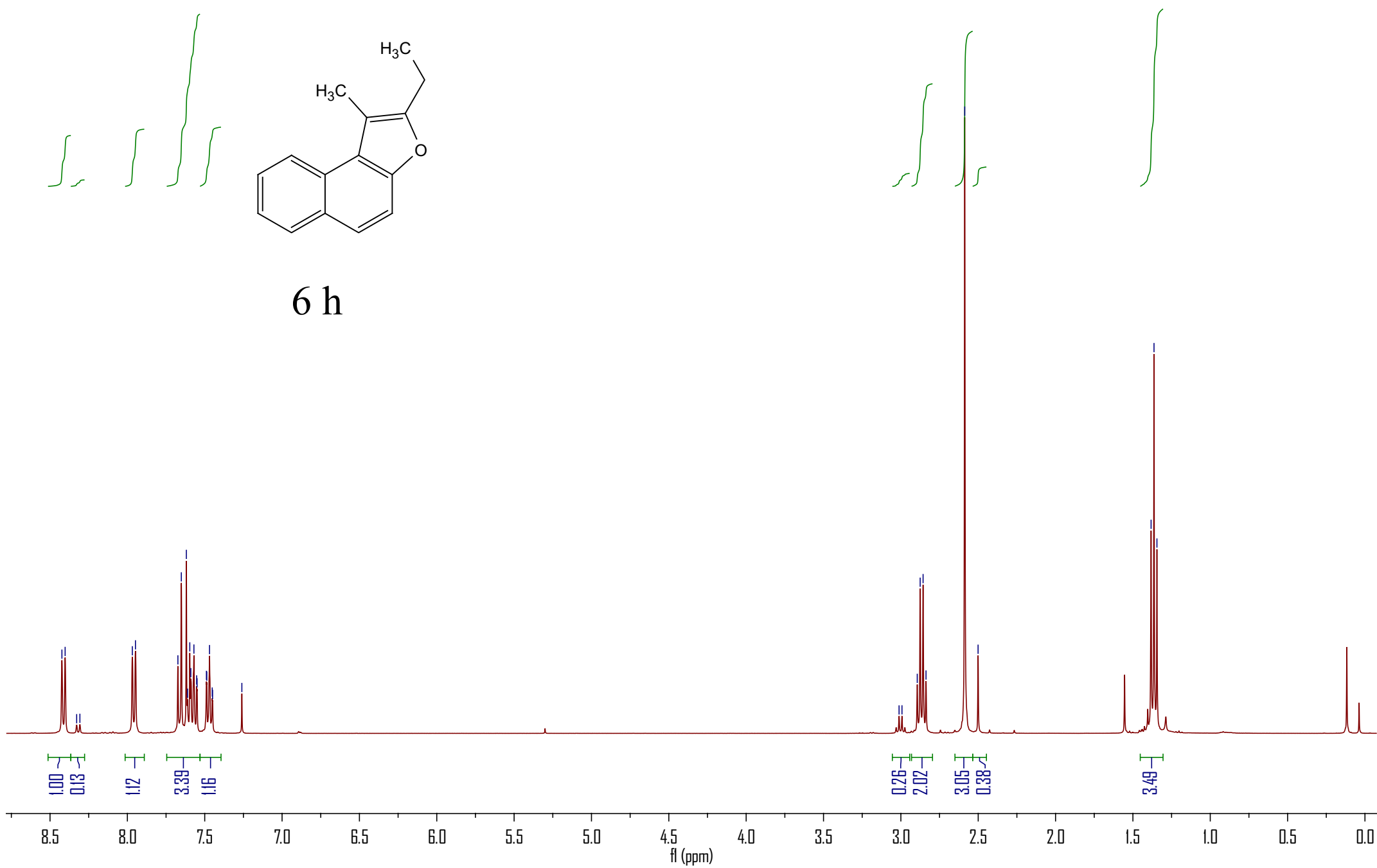


8.42  
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8.33  
8.31  
7.97  
7.95  
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7.45  
7.26

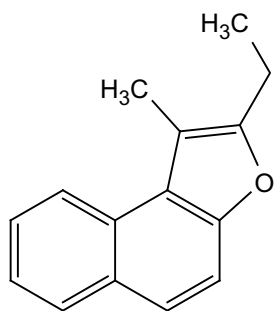
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2.99  
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2.86  
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2.59  
2.50  
1.38  
1.36  
1.34



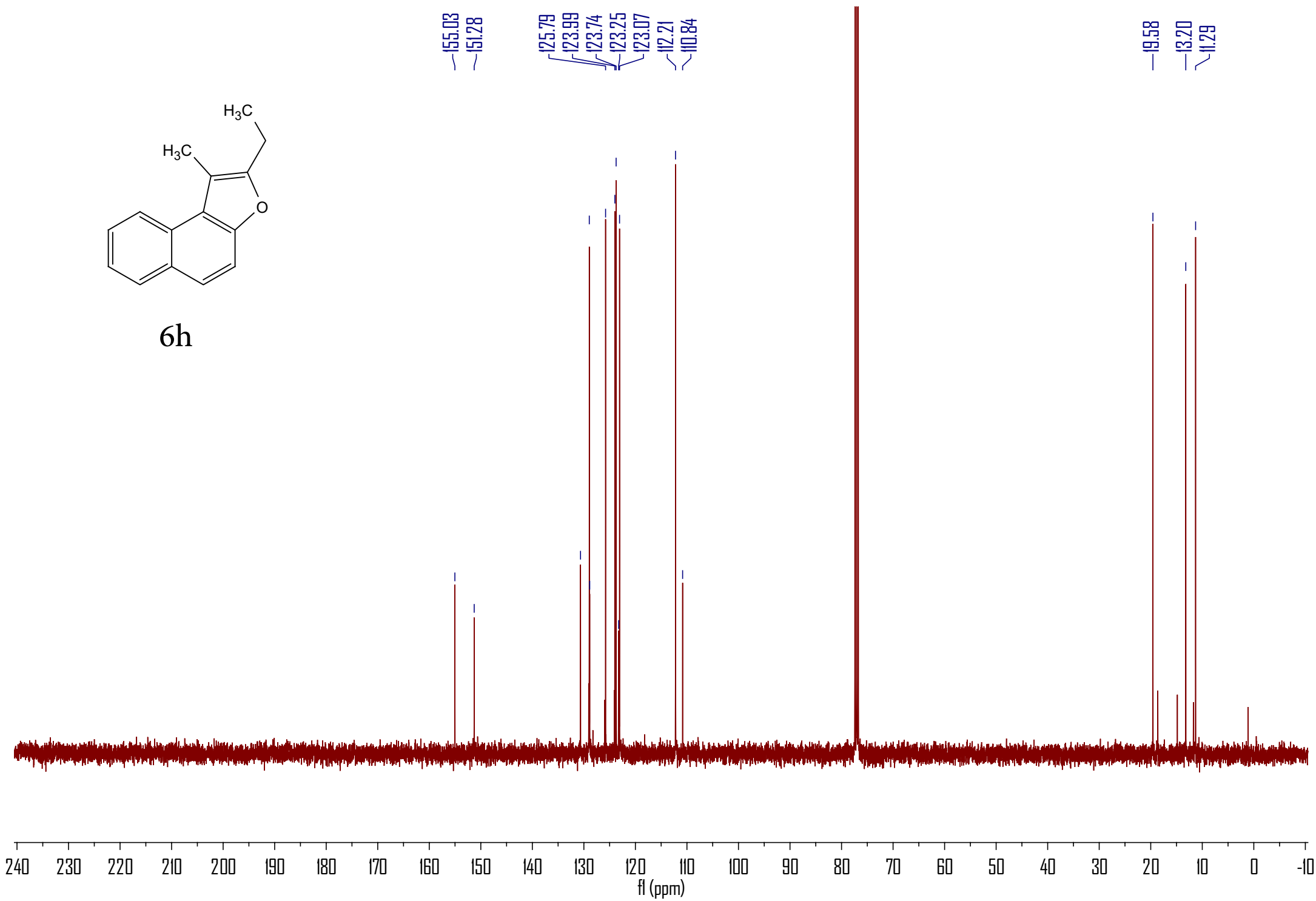
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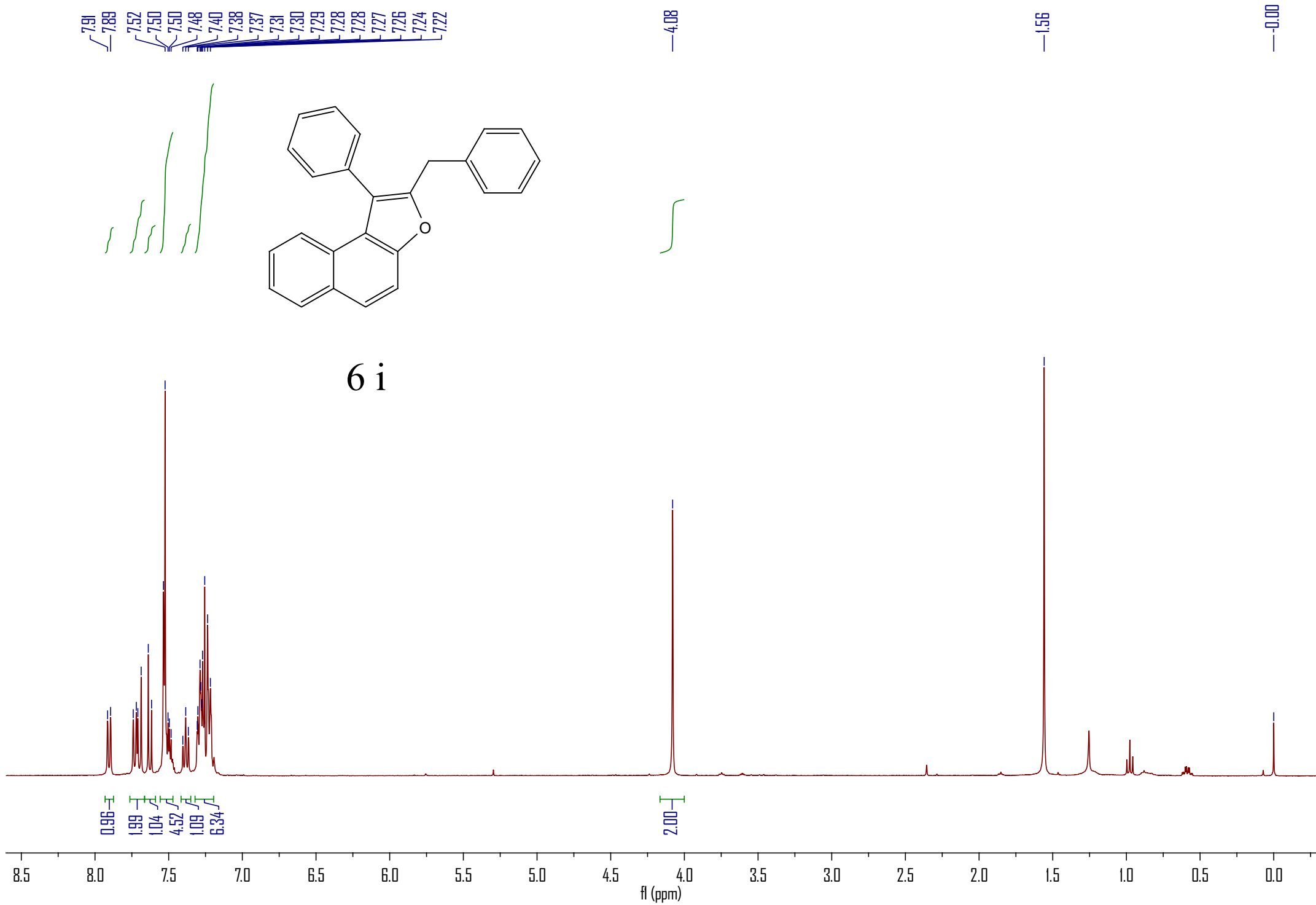




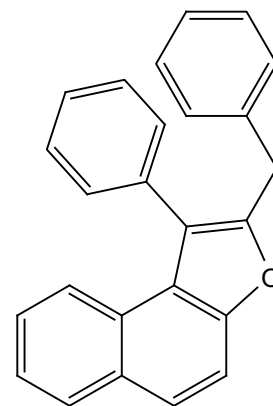
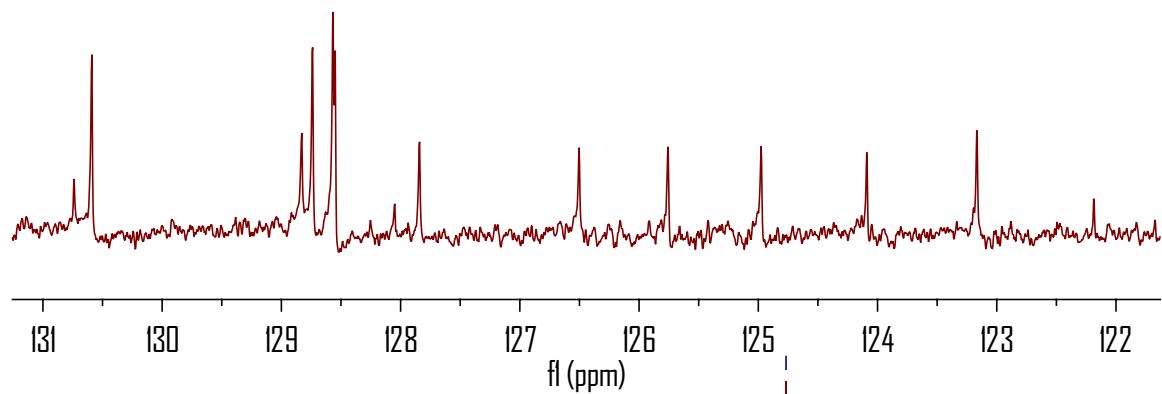


6h



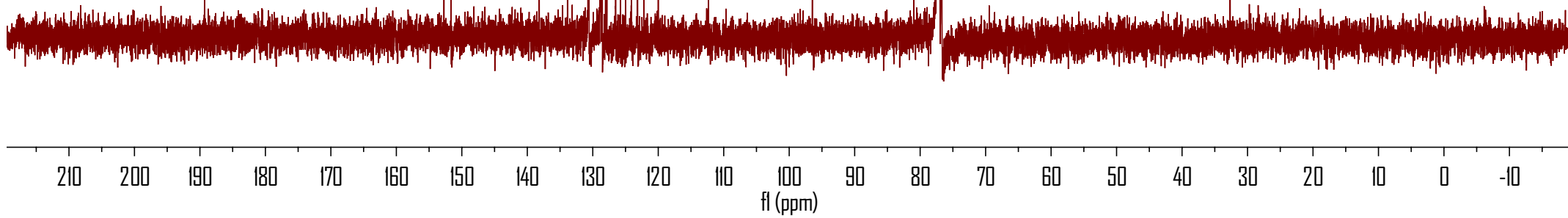


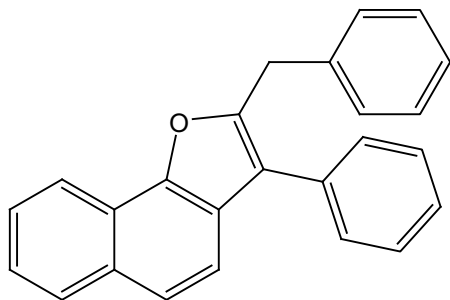
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151.66  
130.74  
128.83  
128.57  
127.84  
125.76  
124.09  
122.19  
12.33



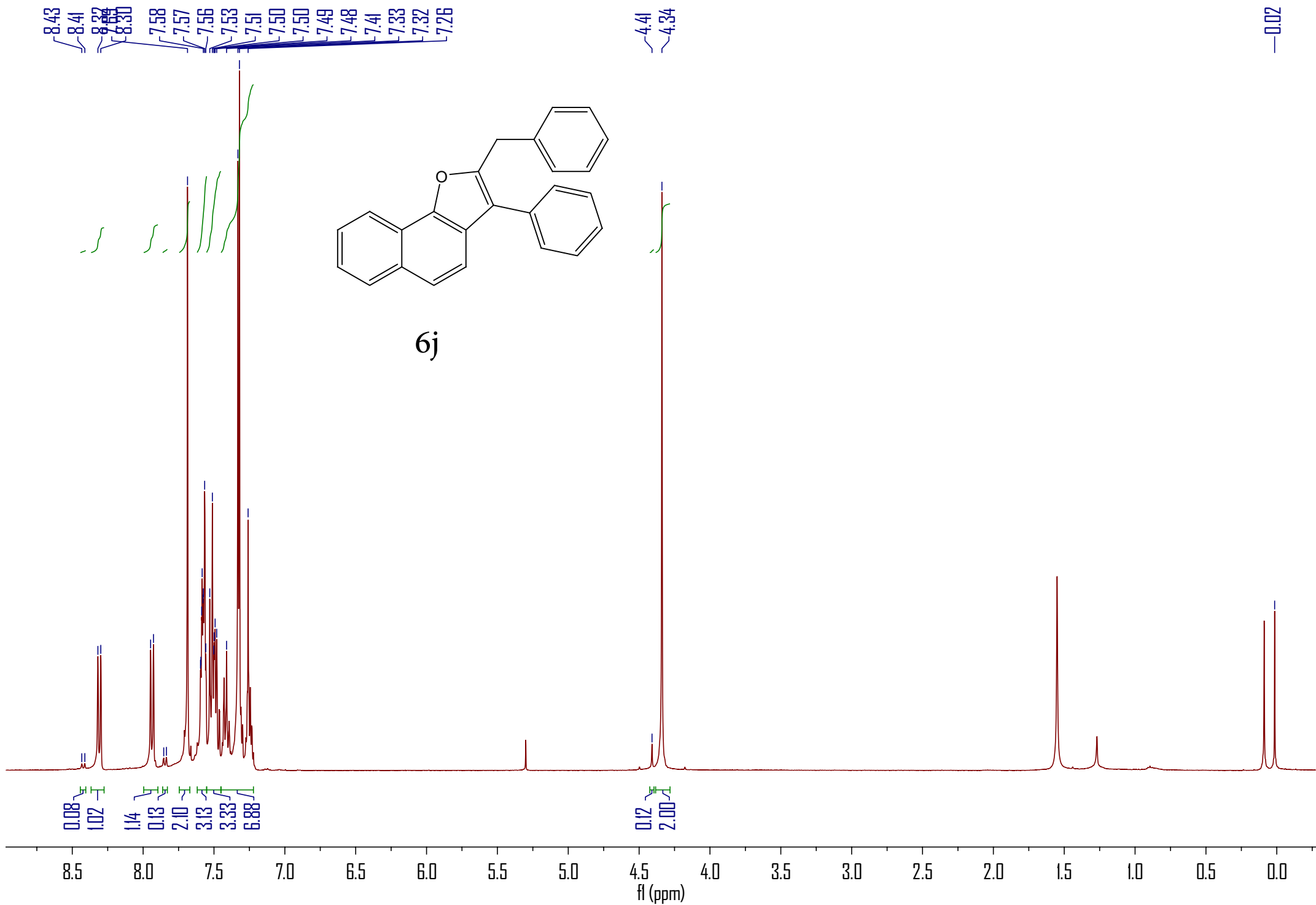
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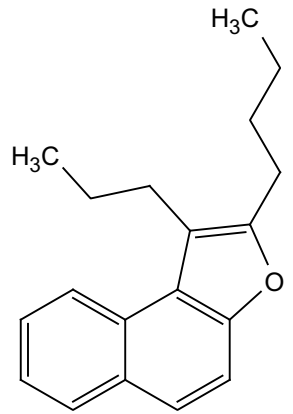
32.67



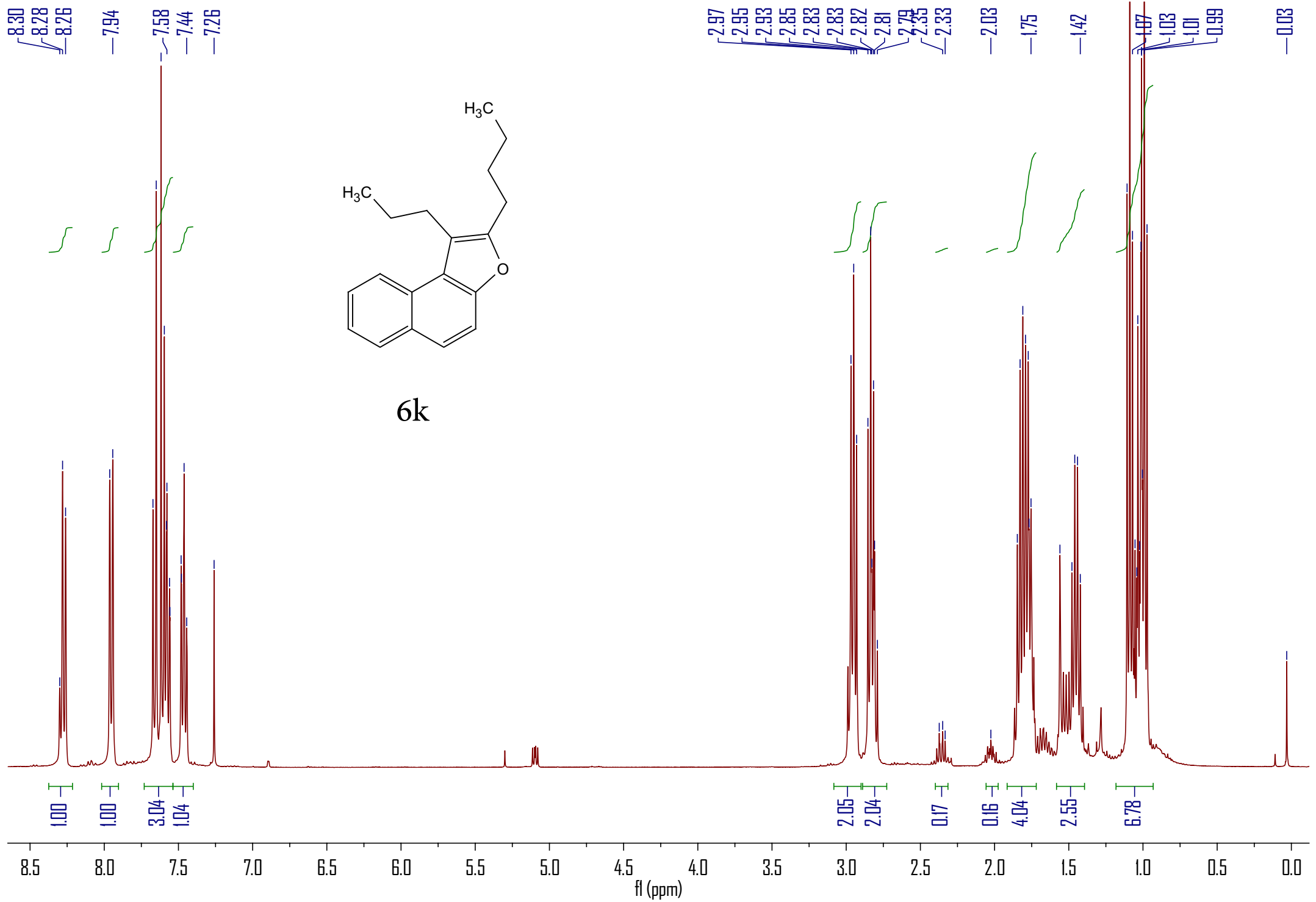


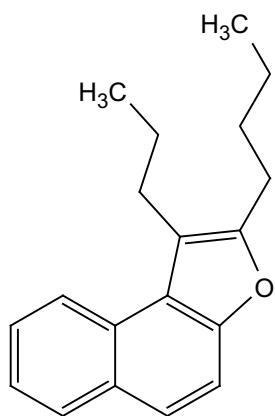
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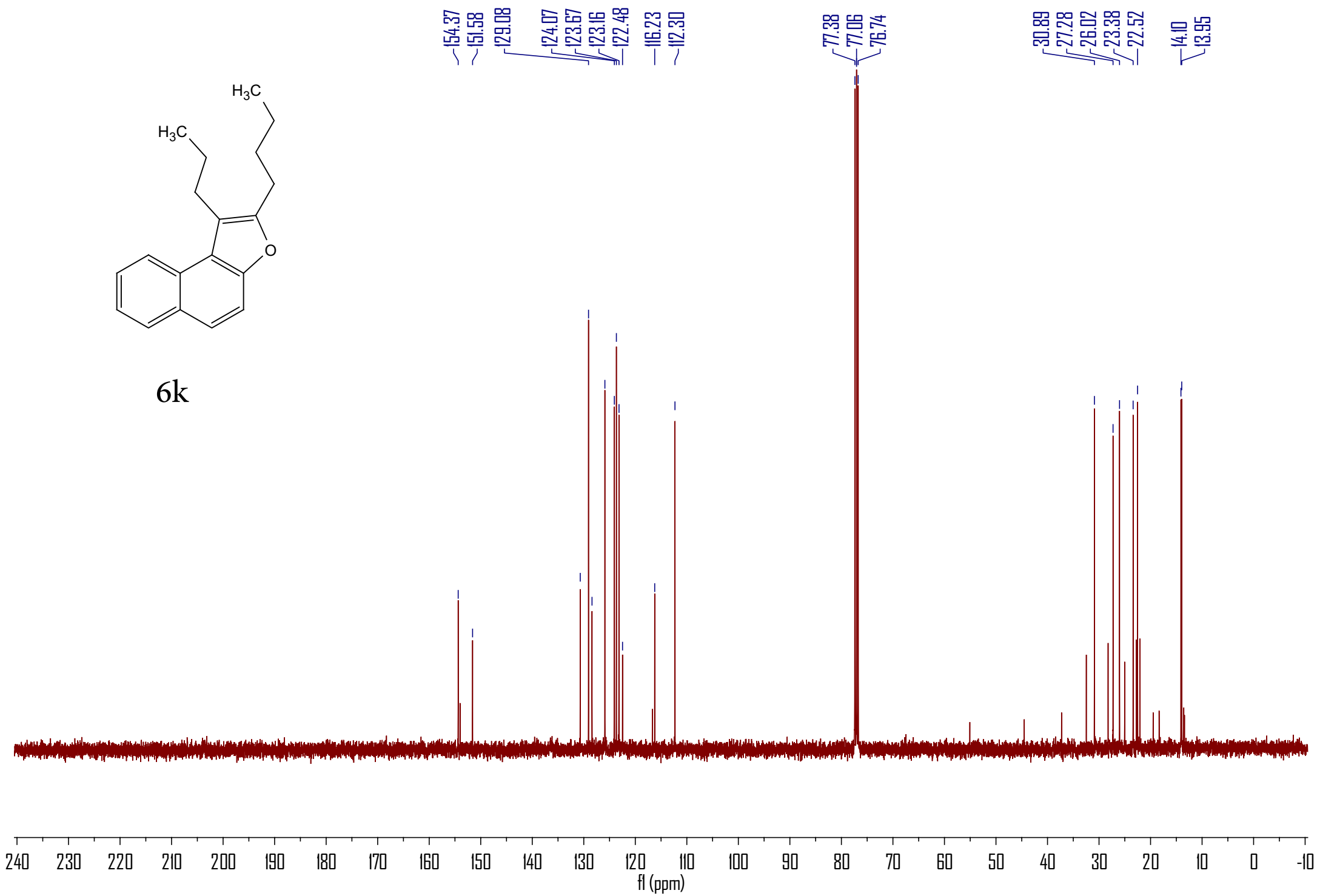


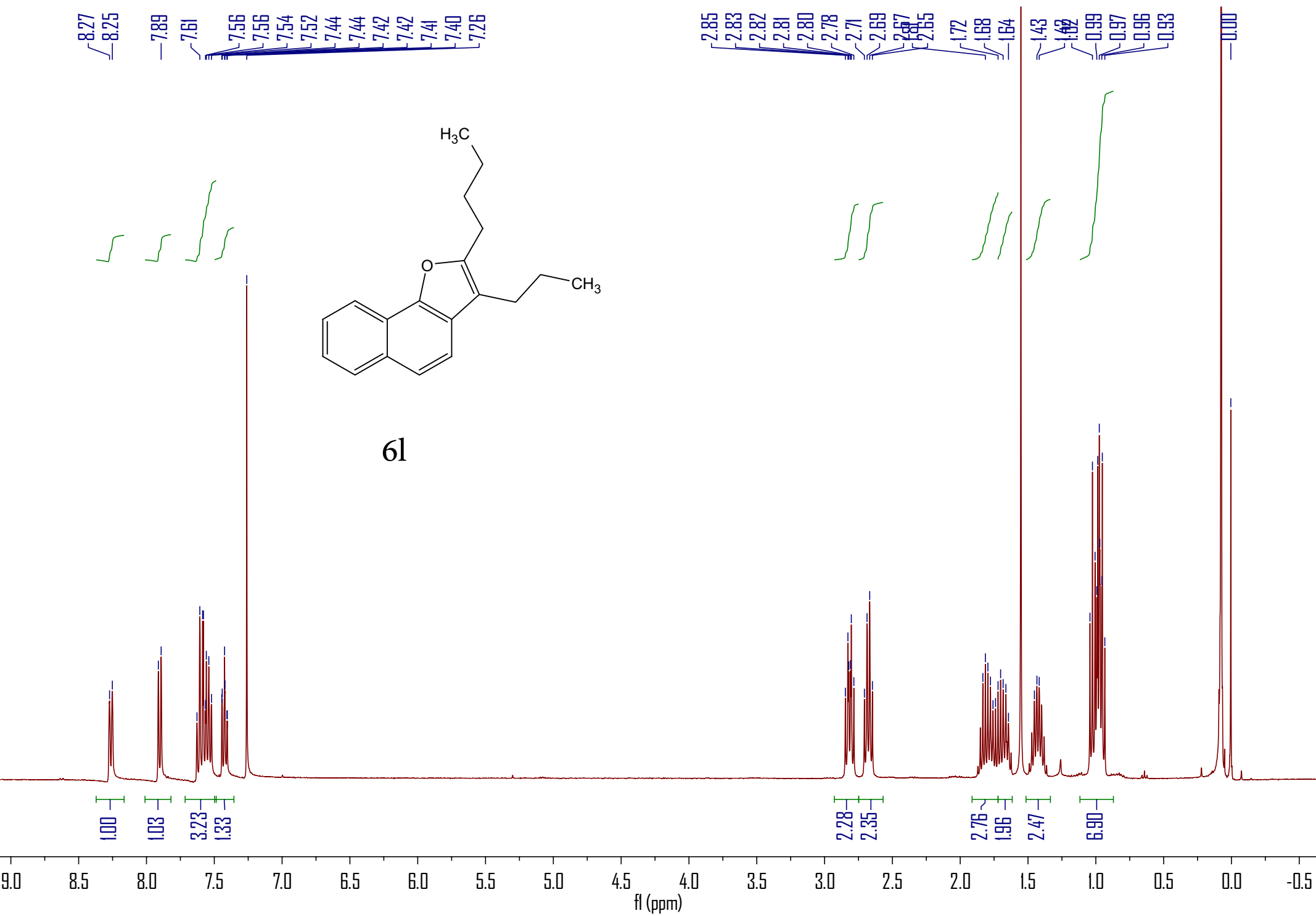
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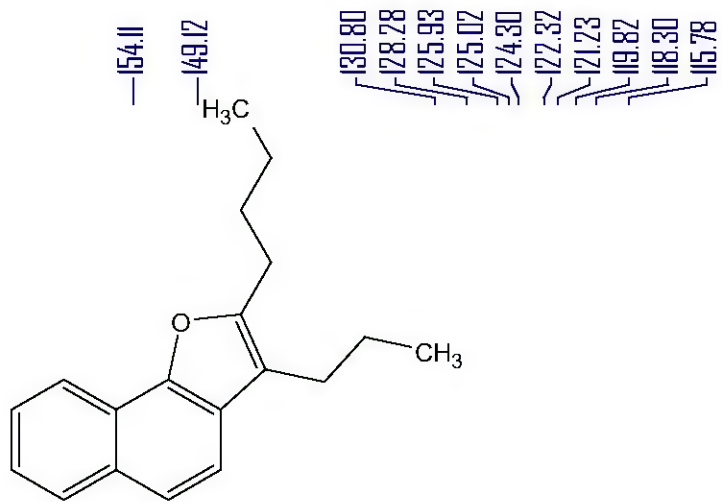




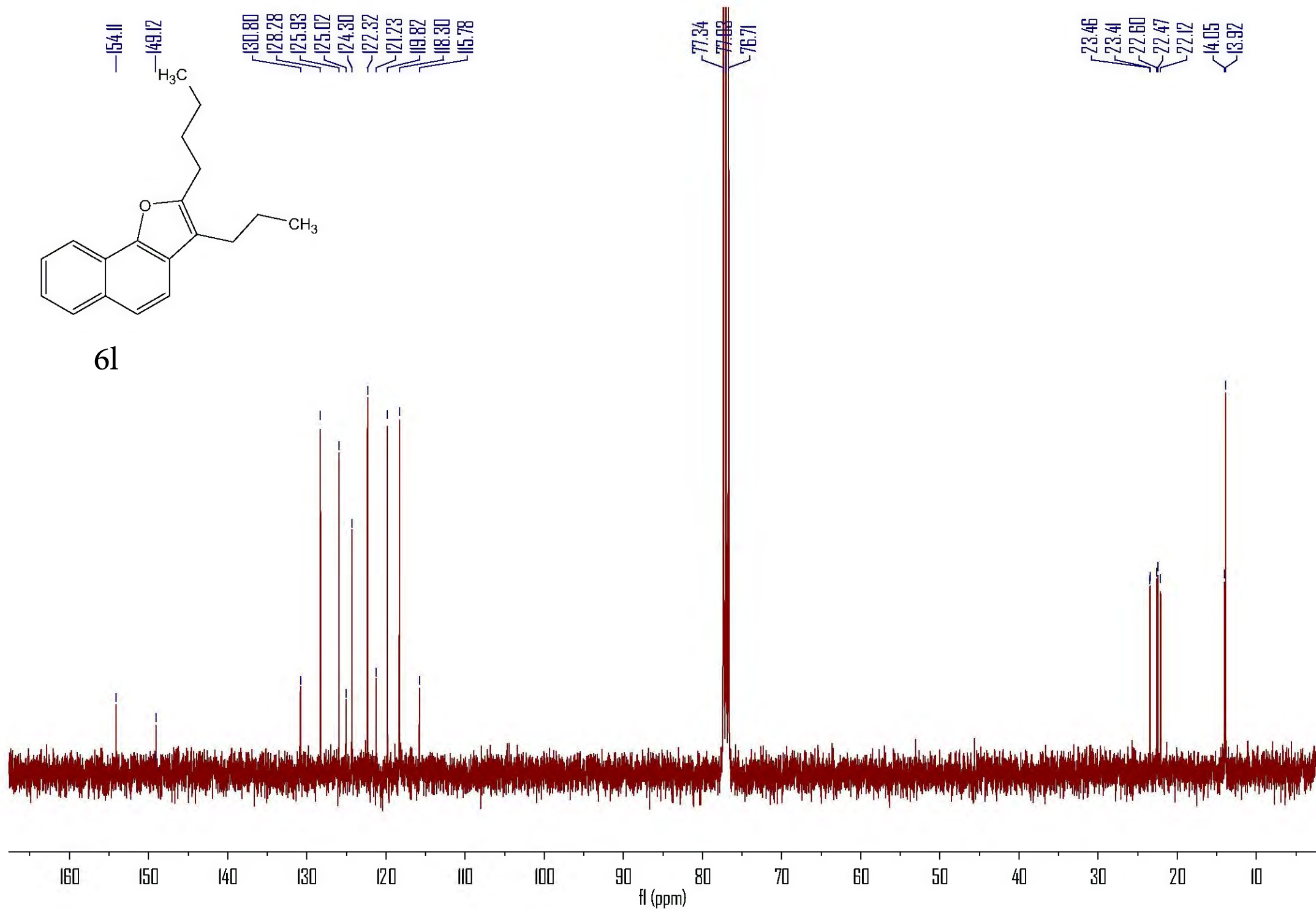
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6l



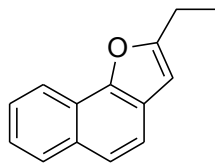


8.261  
7.914  
7.901  
7.624  
7.610  
7.590  
7.576  
7.558  
7.556  
7.545  
7.443  
7.441  
7.260  
6.515  
6.513

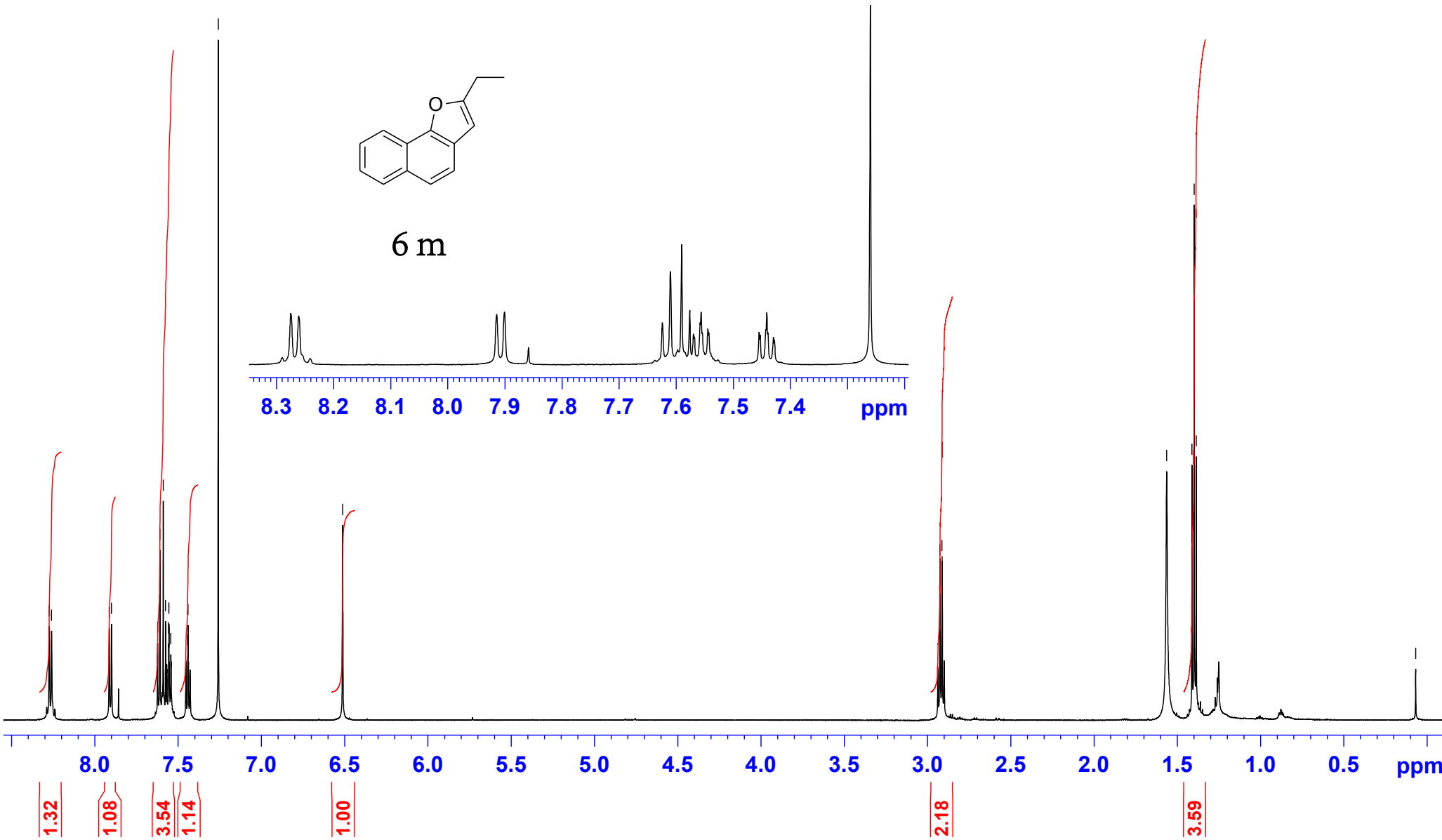
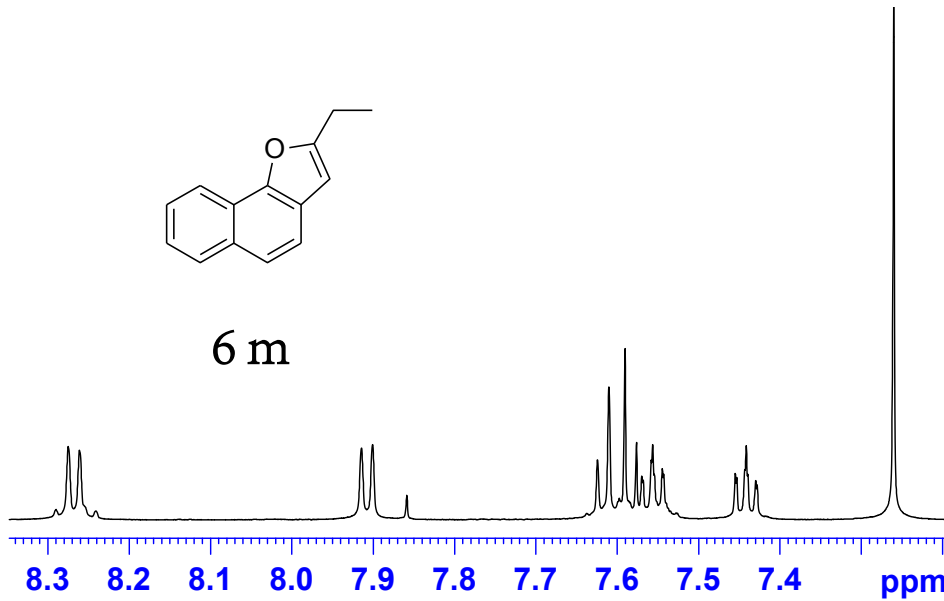
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2.913

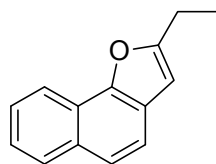
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1.387

0.069

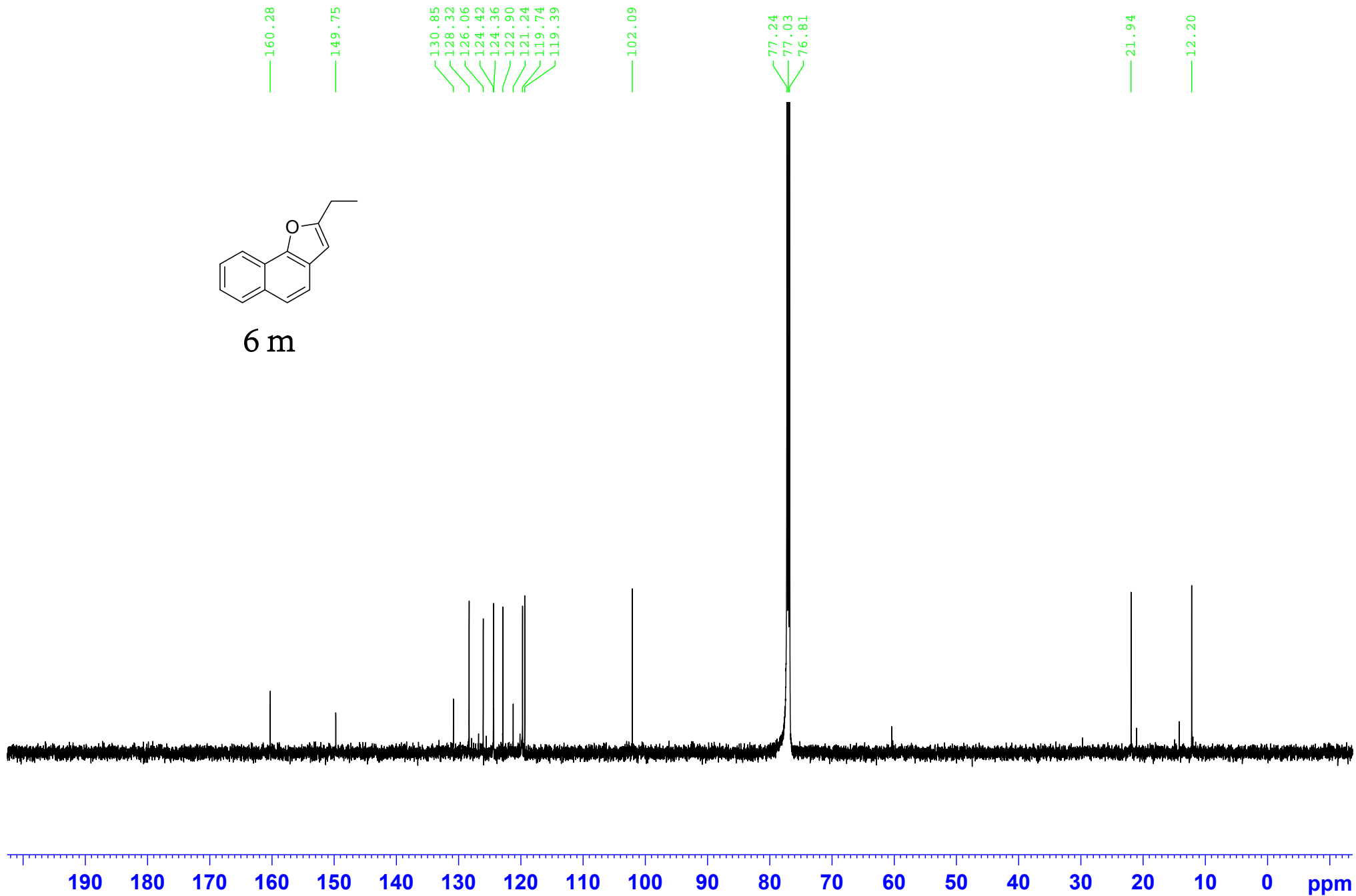


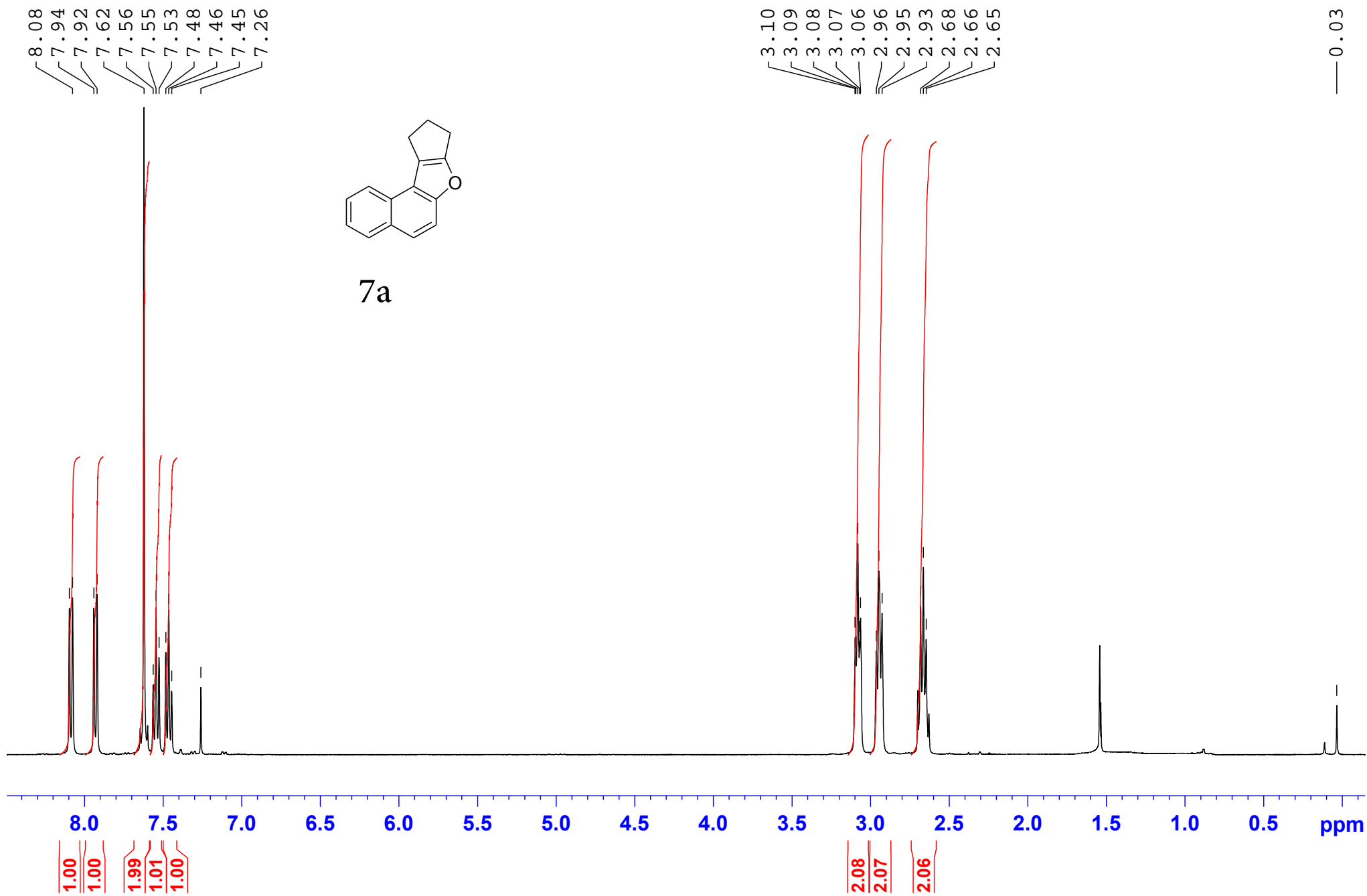
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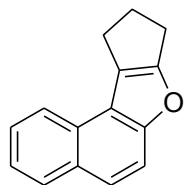




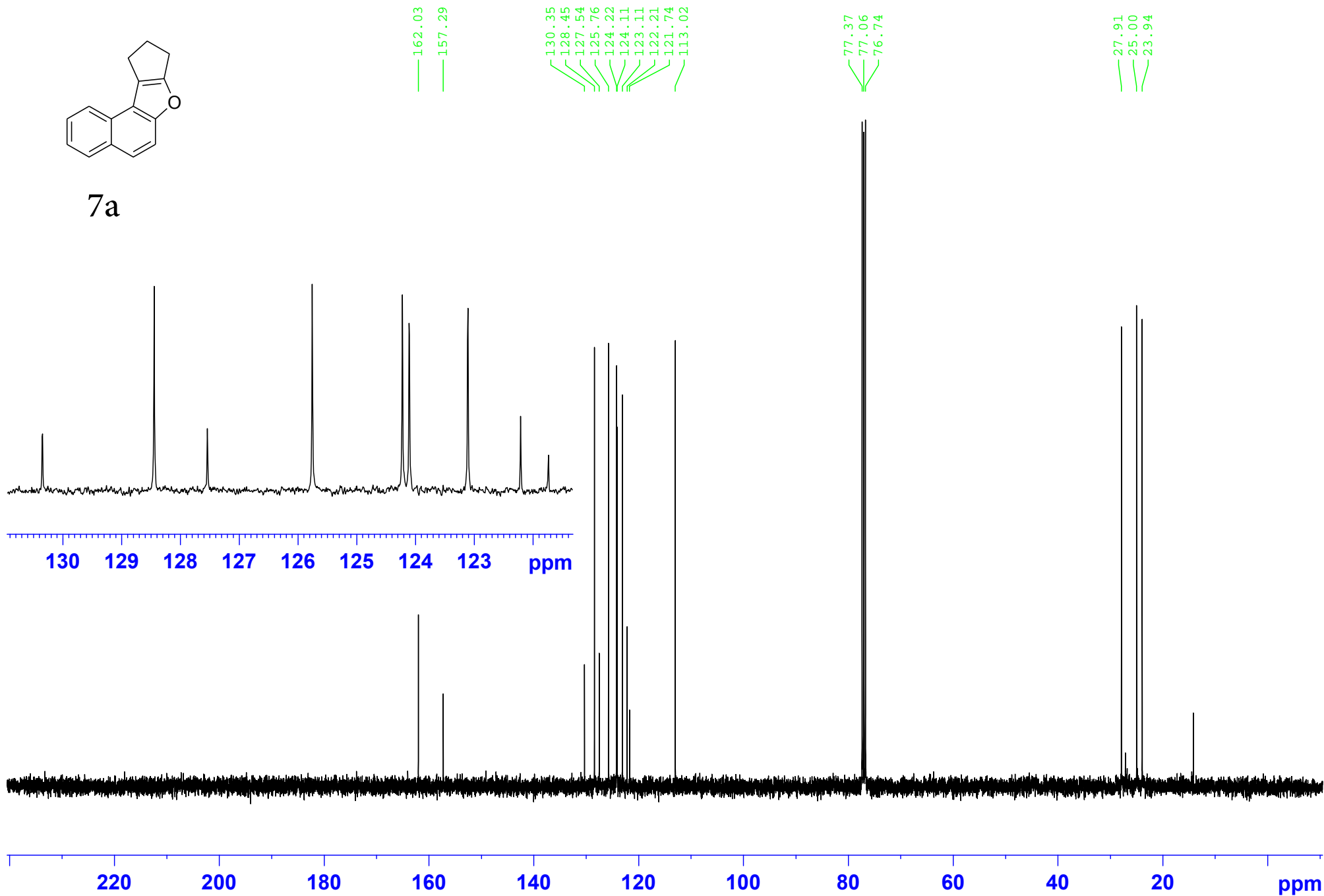
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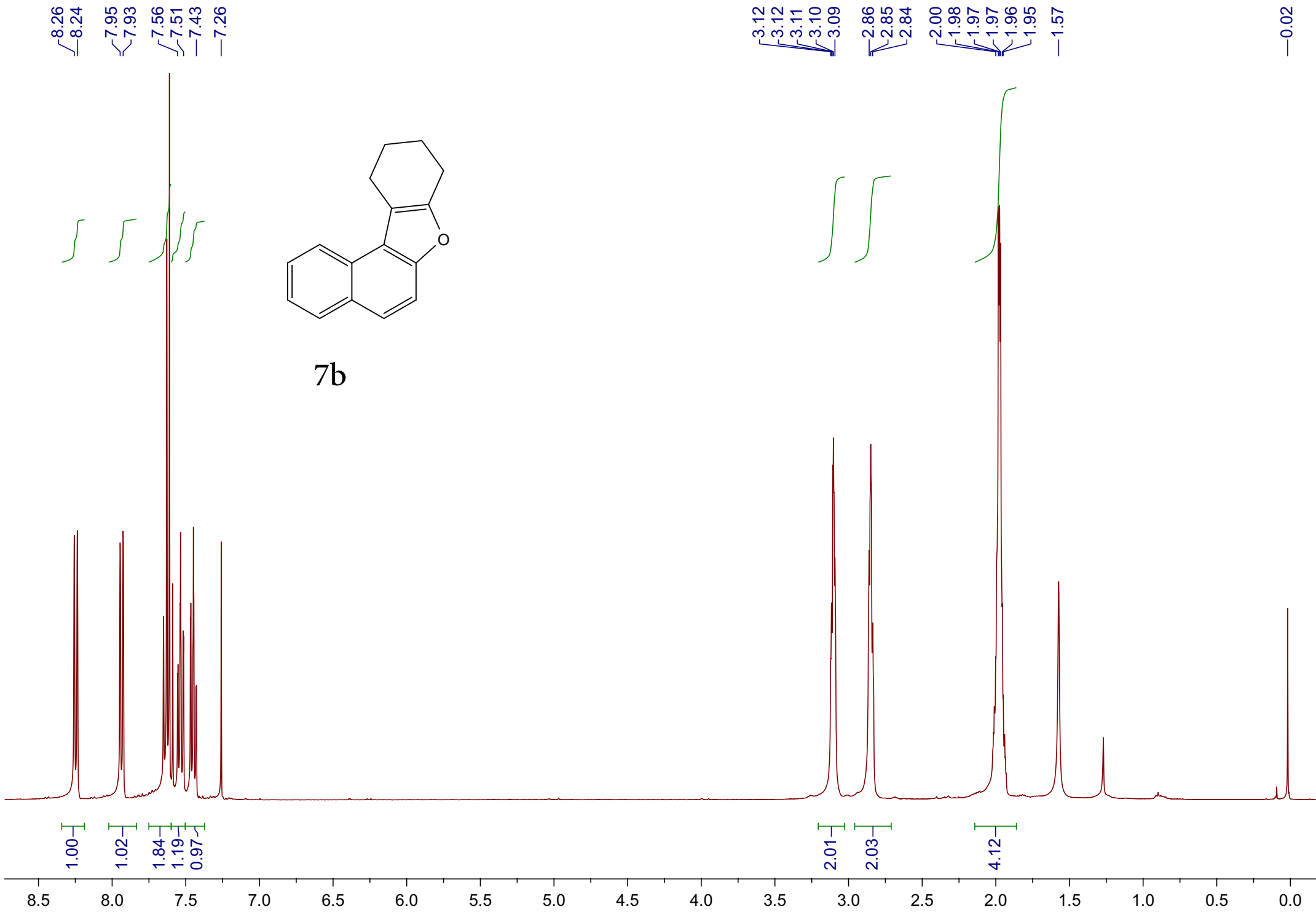


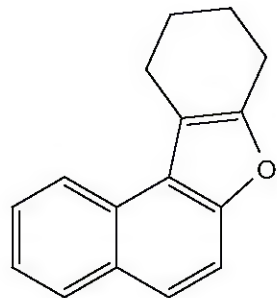




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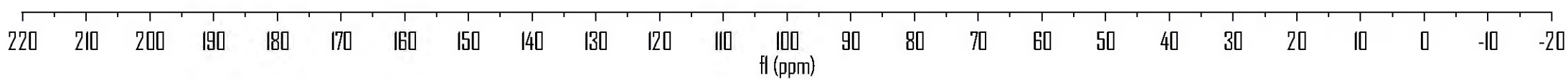


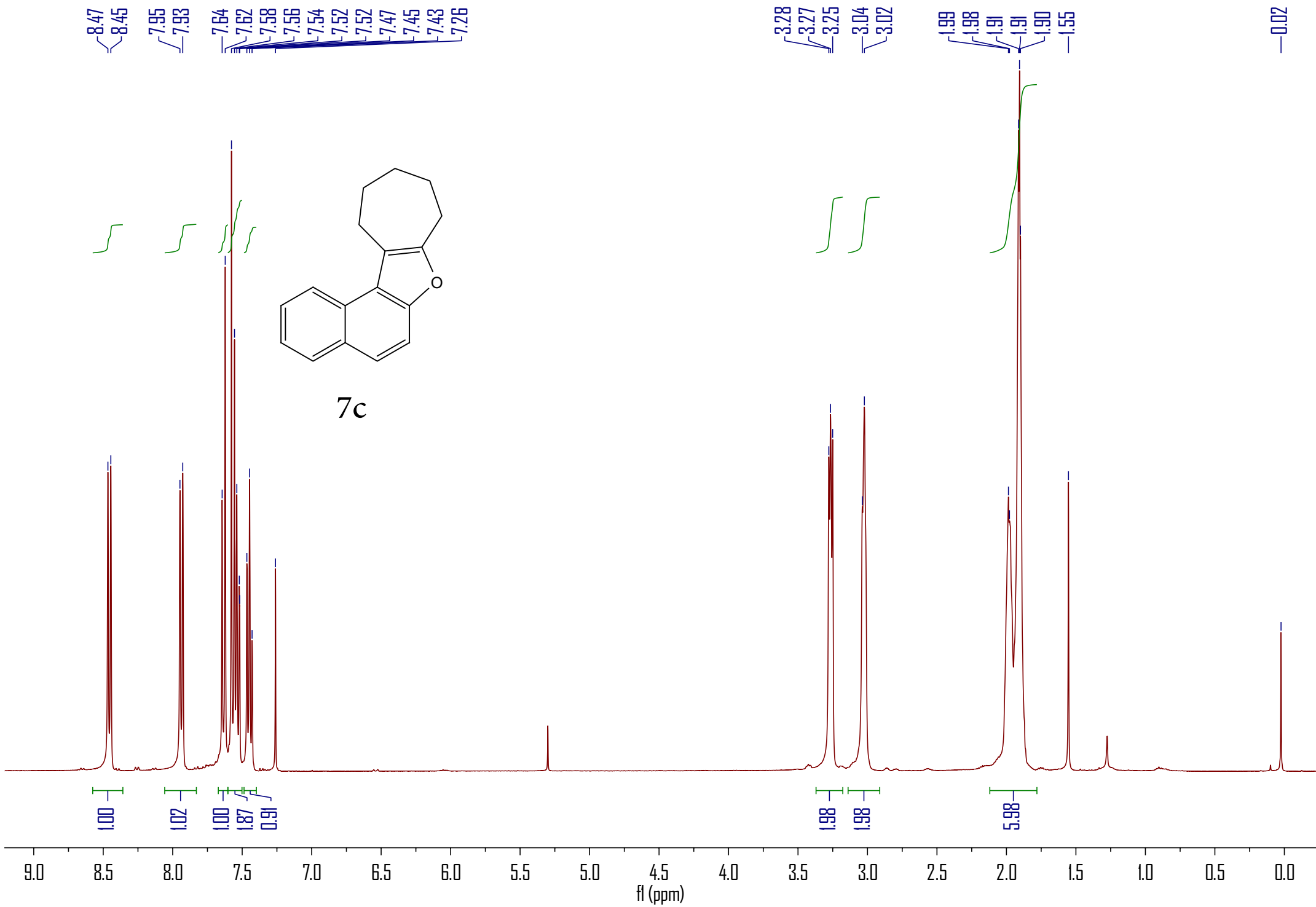


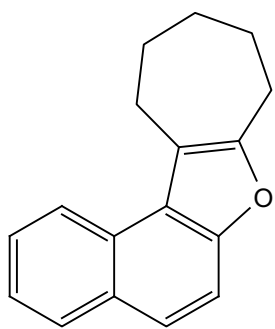


7b

153.30  
151.48  
129.48  
123.82  
123.65  
123.52  
122.51  
114.34  
112.79  
77.23  
77.02  
76.81  
23.75  
23.16  
23.12  
22.62





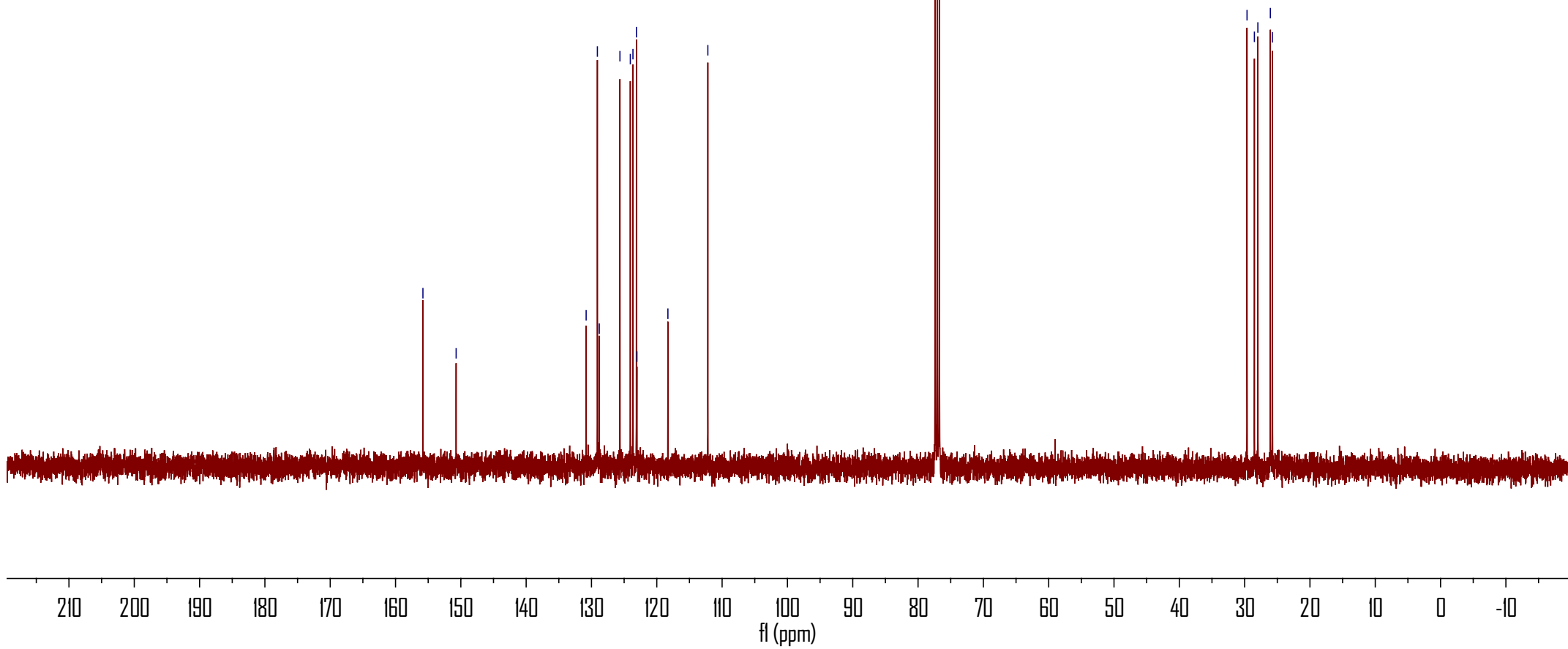


7c

155.81  
150.72  
129.10  
124.05  
123.65  
123.12  
123.04  
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77.38  
77.06  
76.74

29.63  
28.51  
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26.06  
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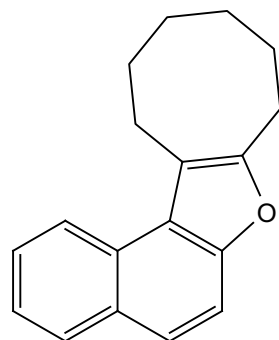


8.37  
8.36  
7.95  
7.93  
7.56  
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7.44  
7.26

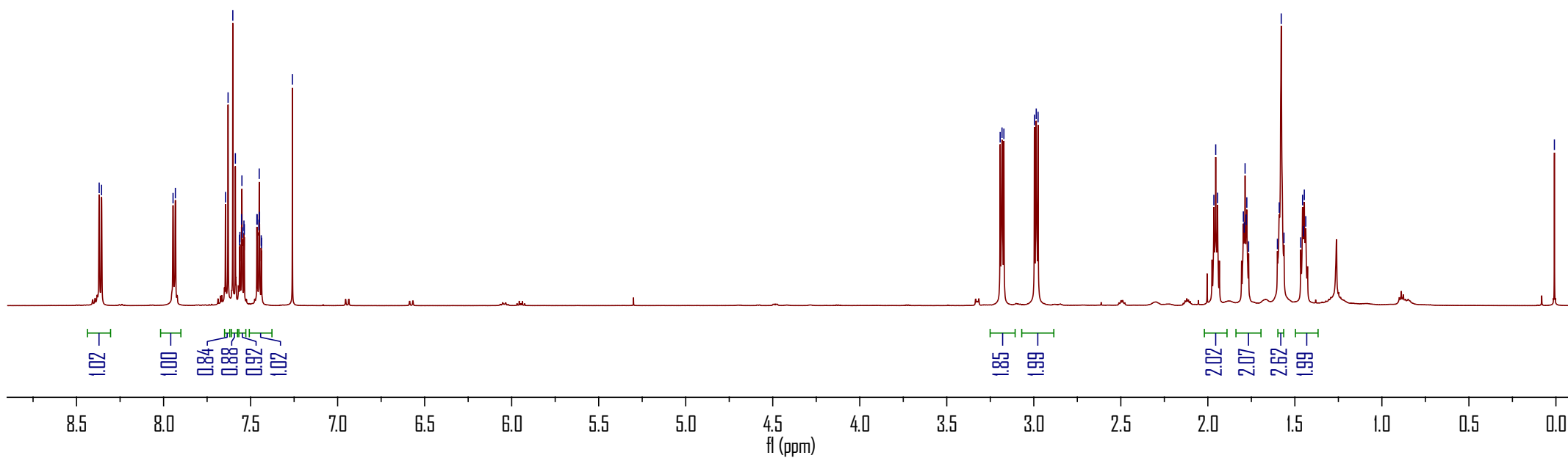
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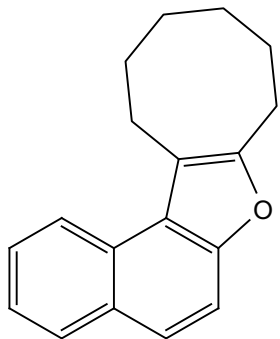
1.97  
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1.94  
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1.58  
1.56  
1.47  
1.46  
1.45  
1.45  
1.44

0.01



7 d



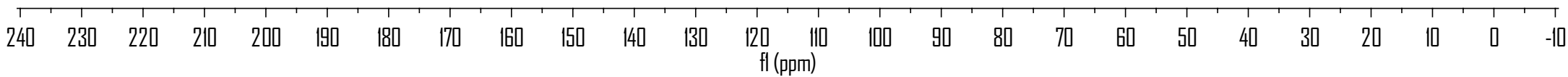
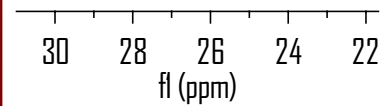
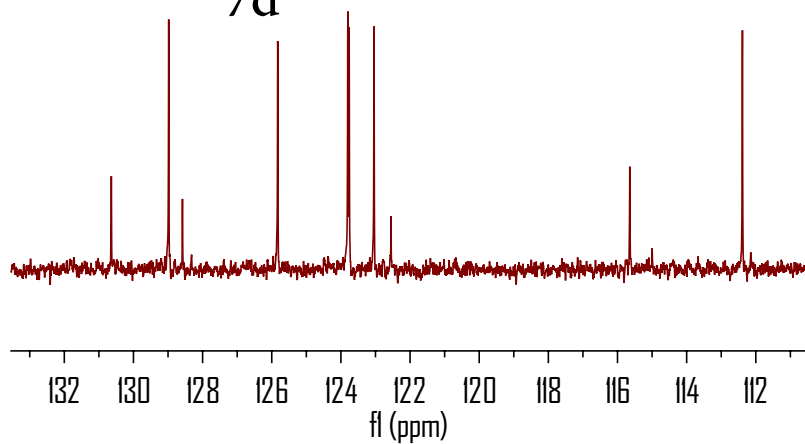


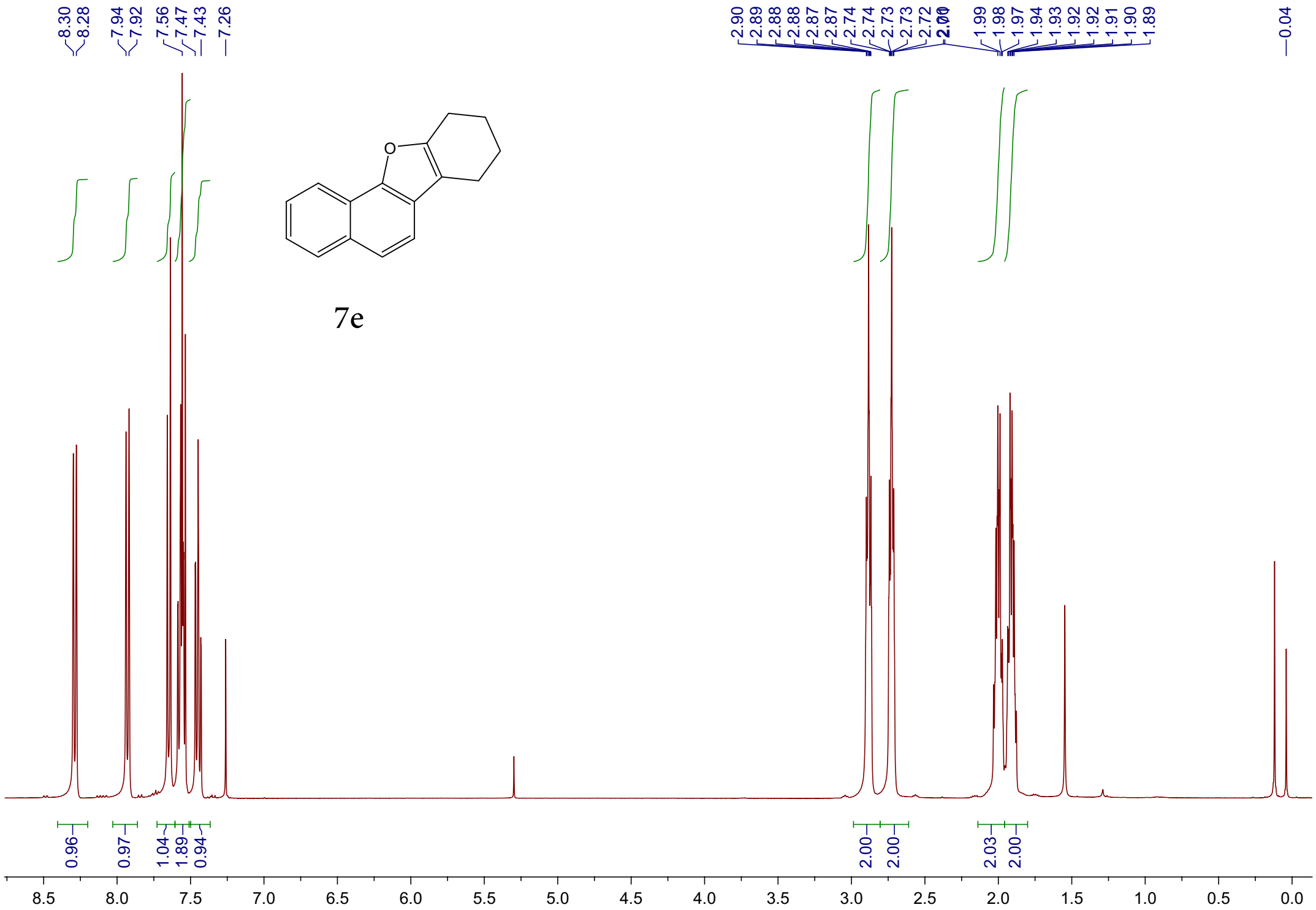
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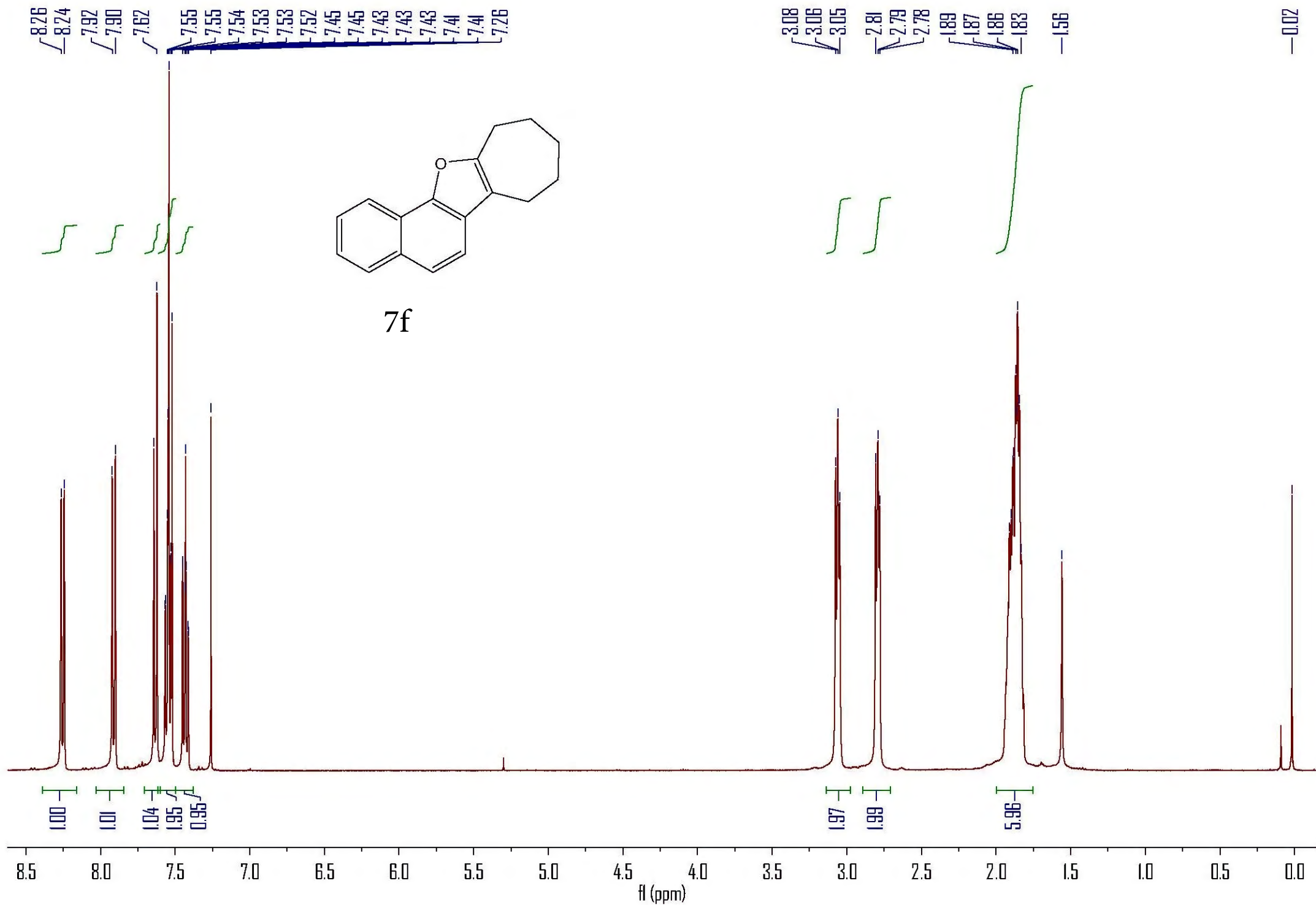
154.96  
151.33  
128.98  
123.80  
123.76  
123.04  
122.55  
115.64  
112.39

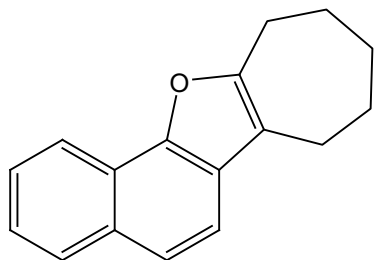
77.37  
77.05  
76.74

29.58  
28.14  
26.67  
25.96  
25.75  
23.25

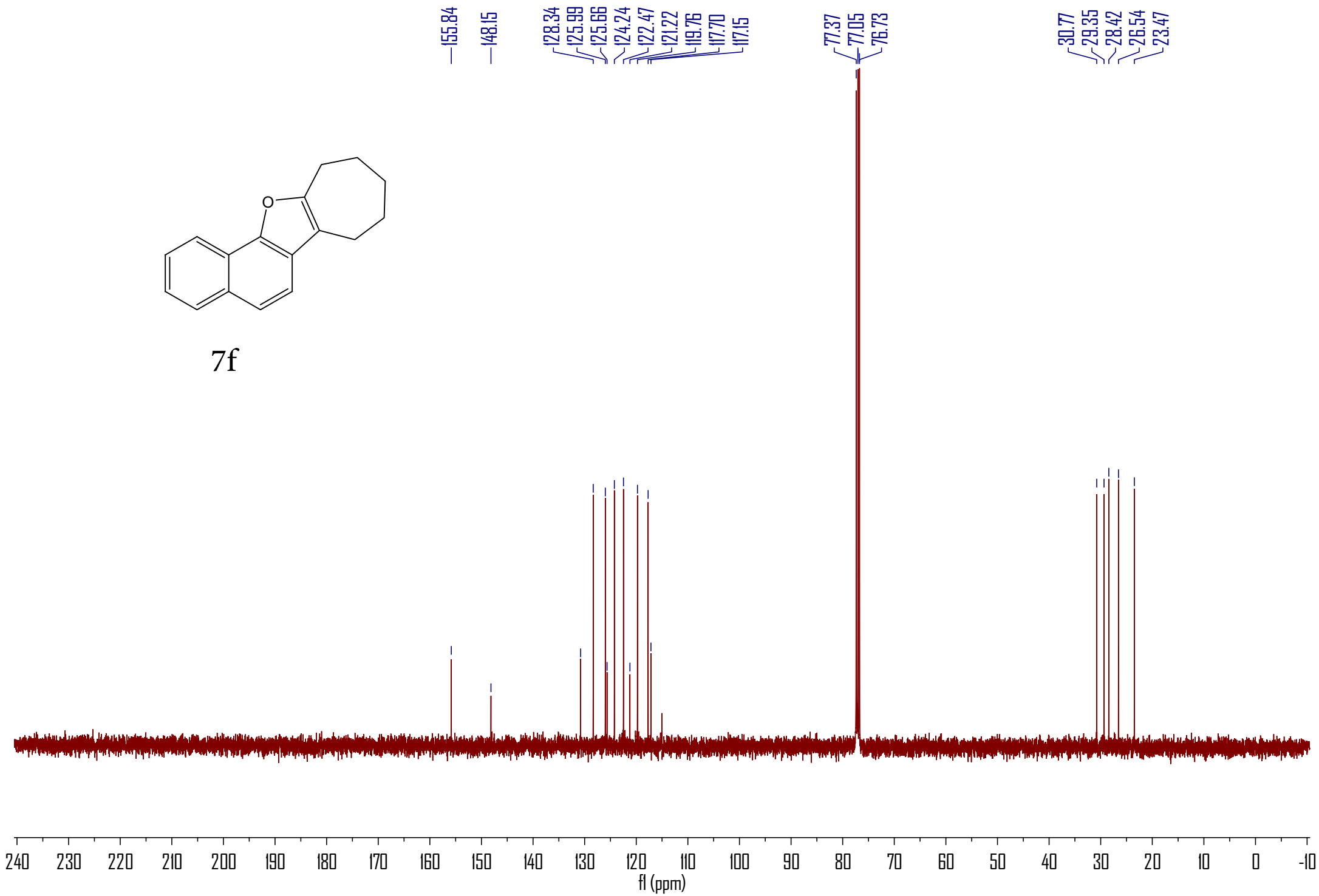


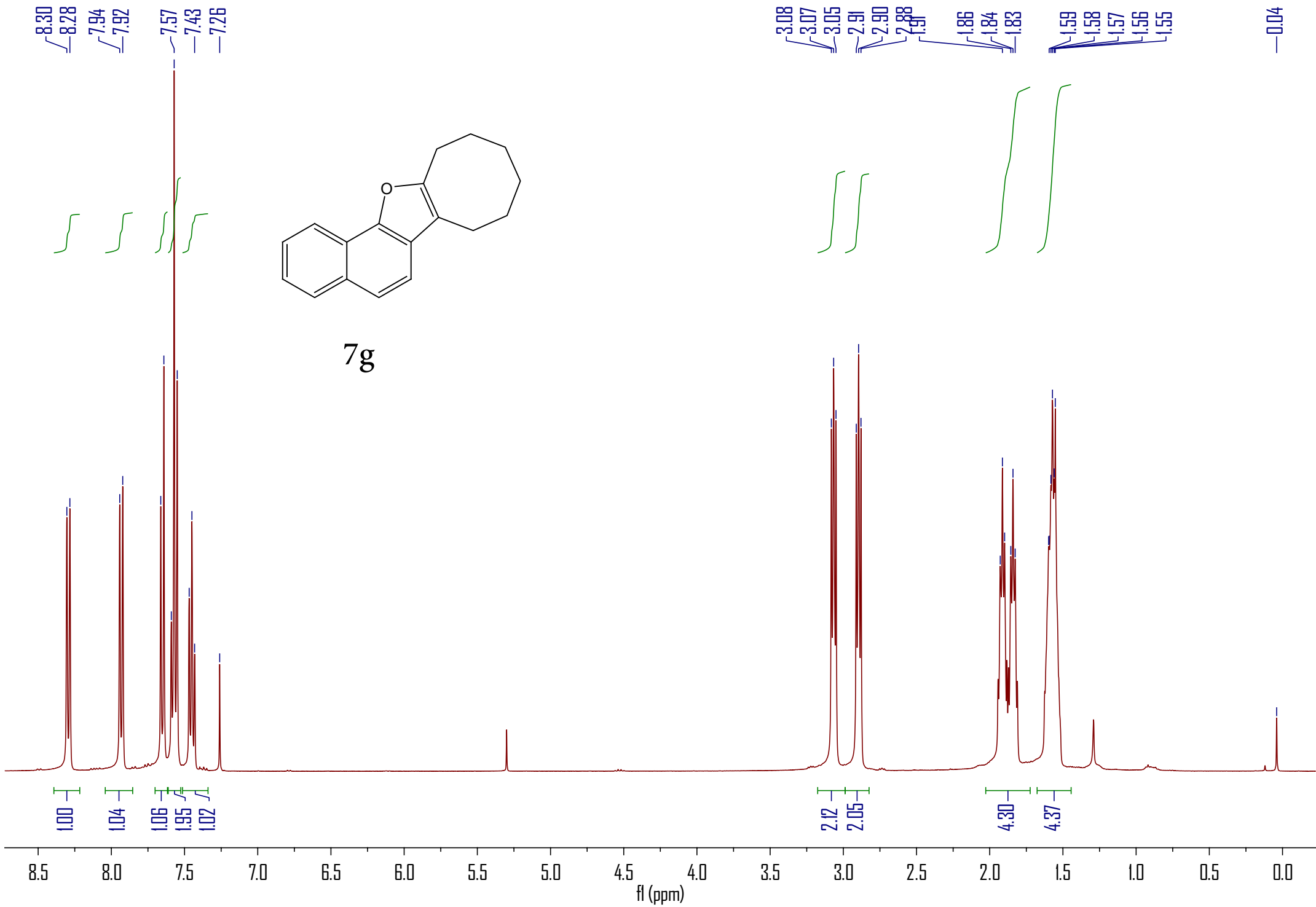


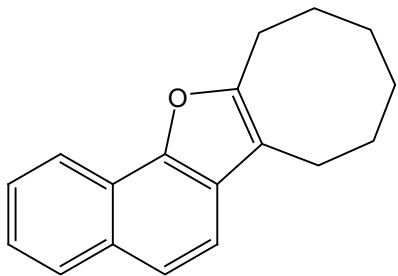




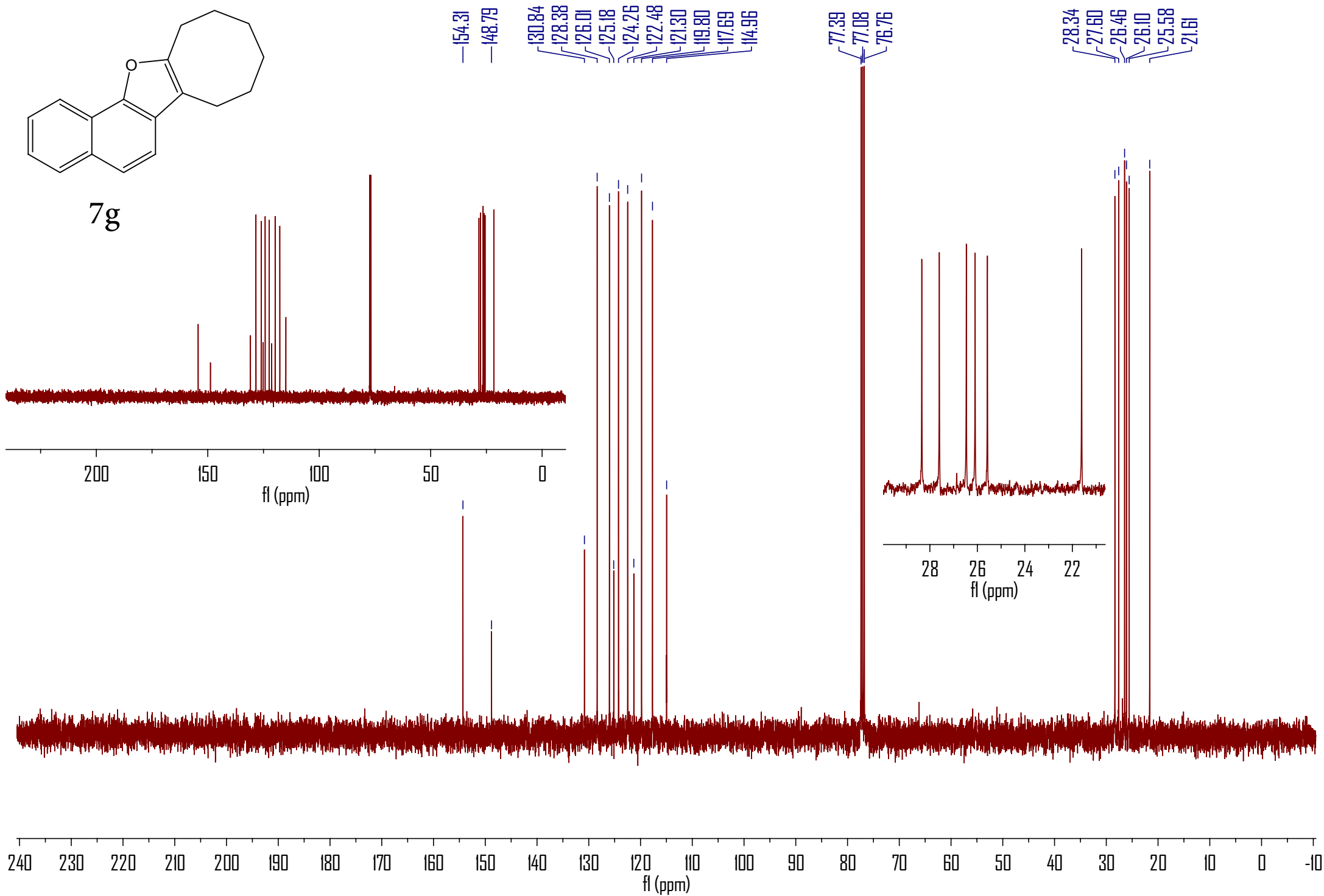
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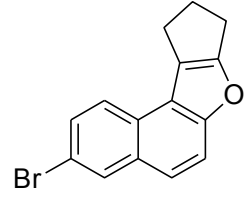


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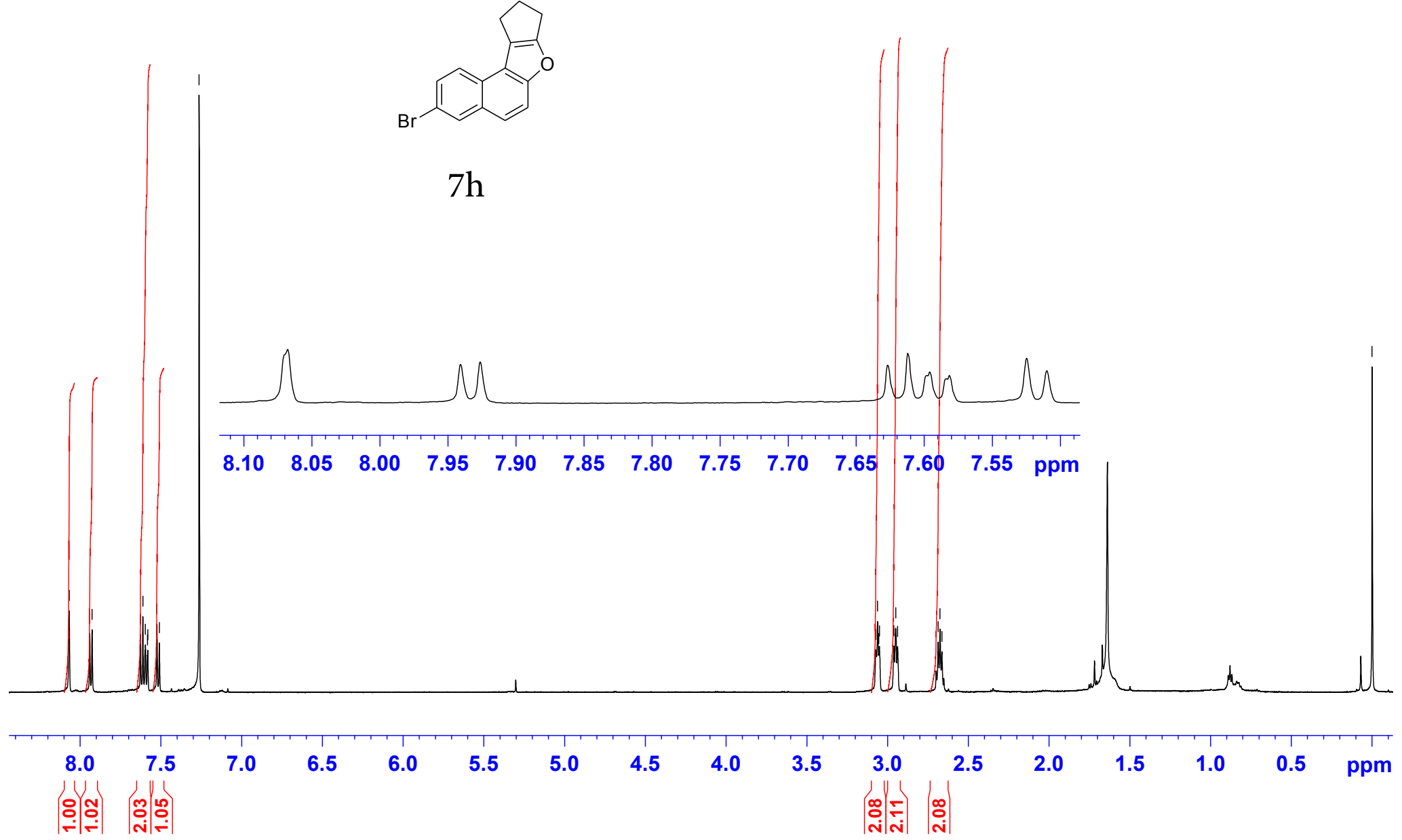


8.07  
7.94  
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7.63  
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7.60  
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7.52  
7.51  
7.26

3.07  
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3.05  
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2.66

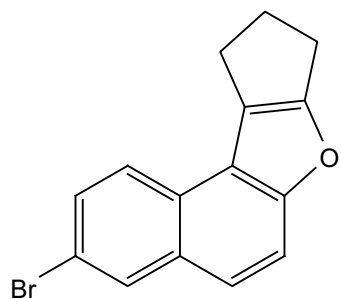


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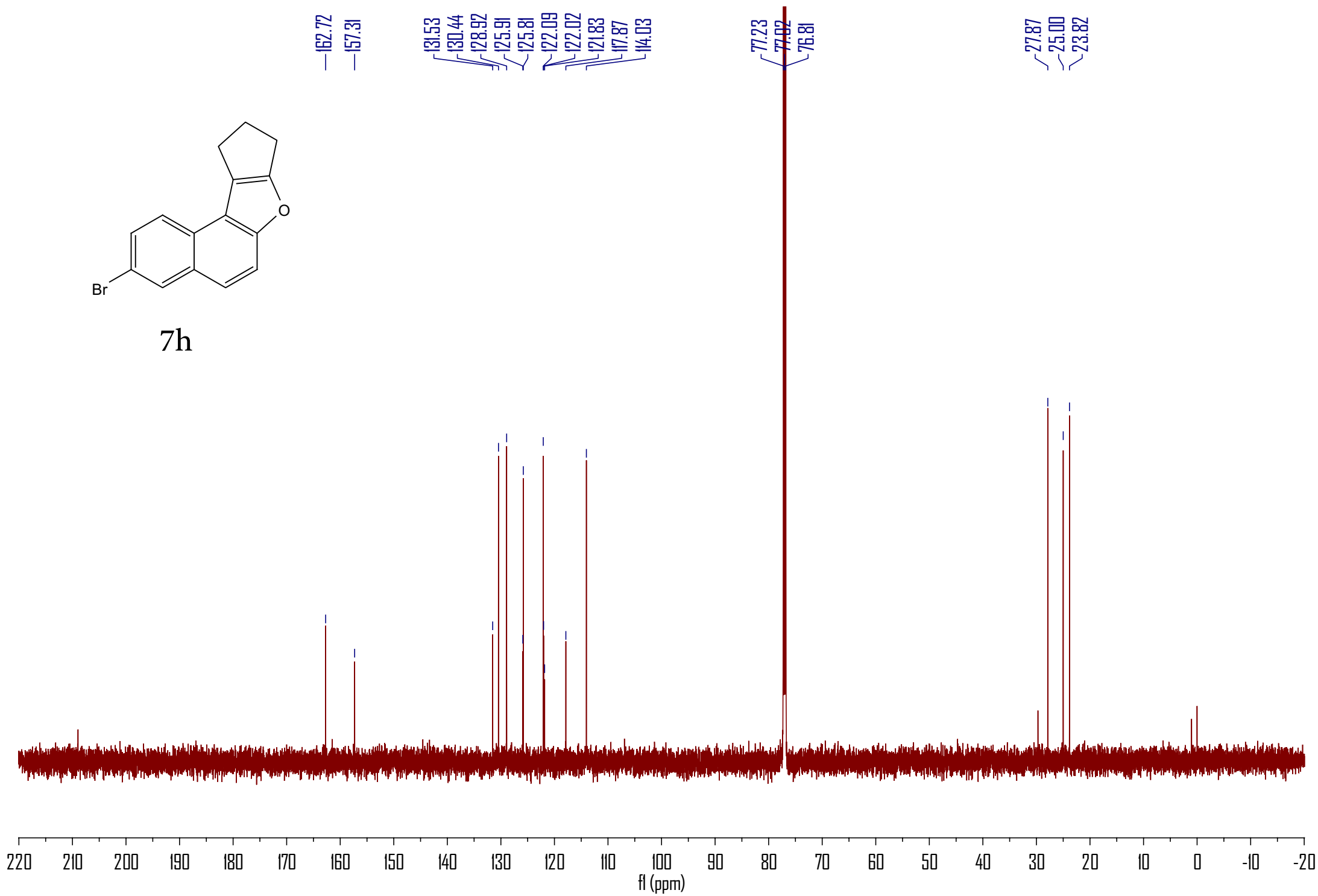


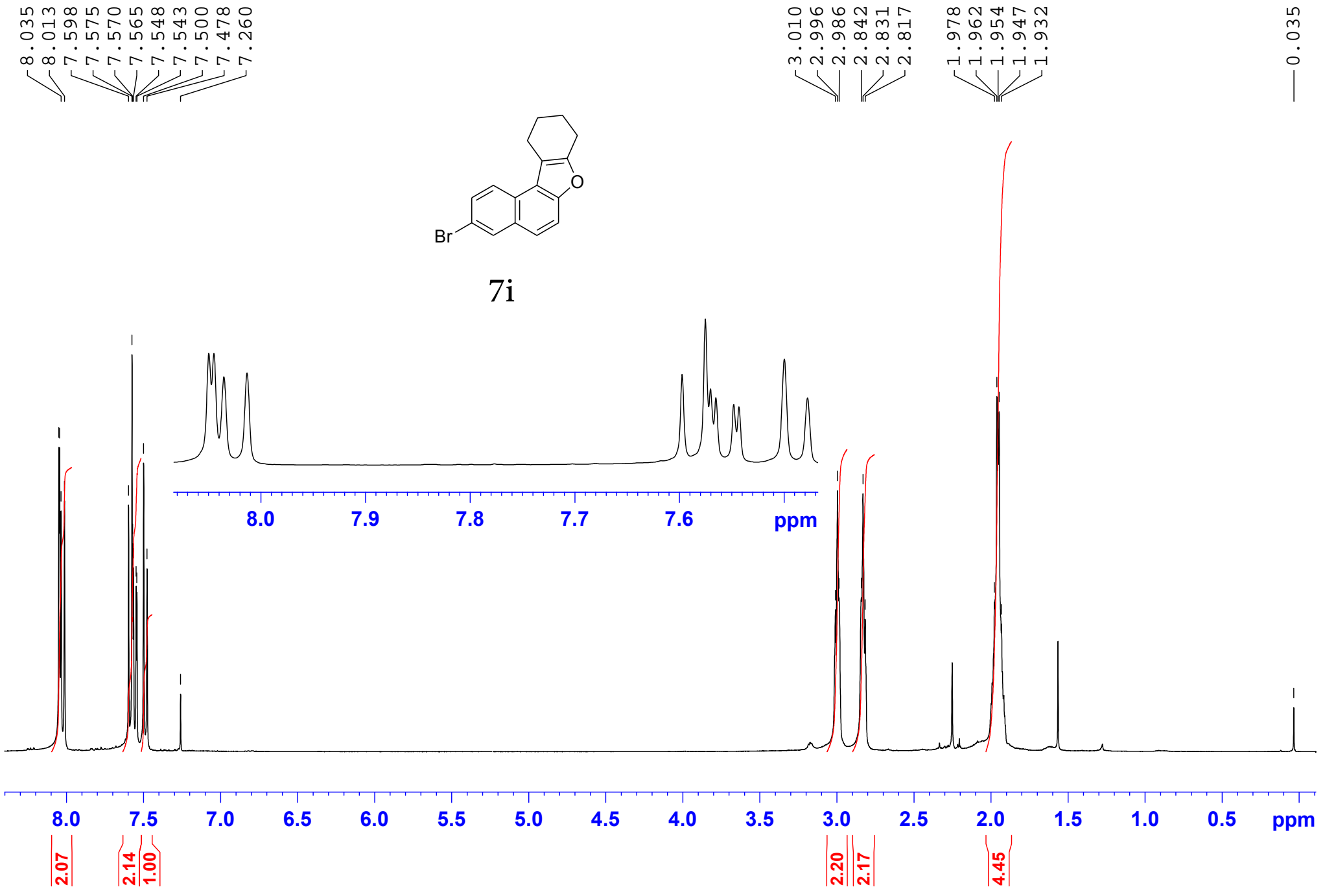
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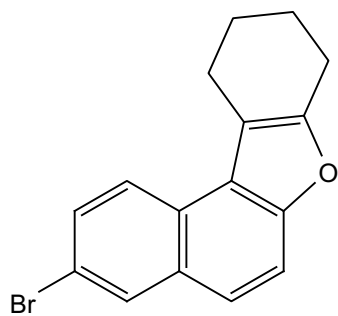




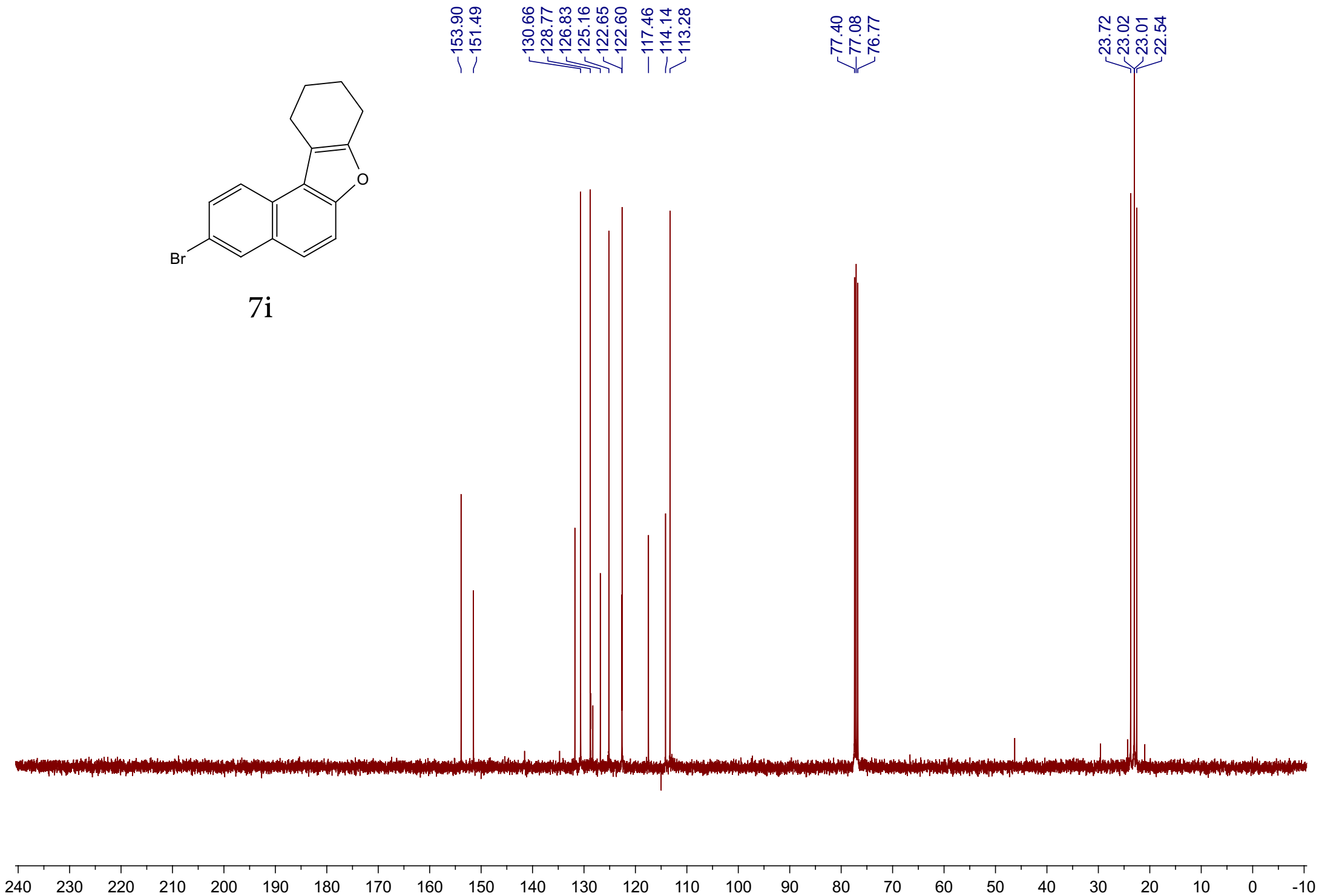
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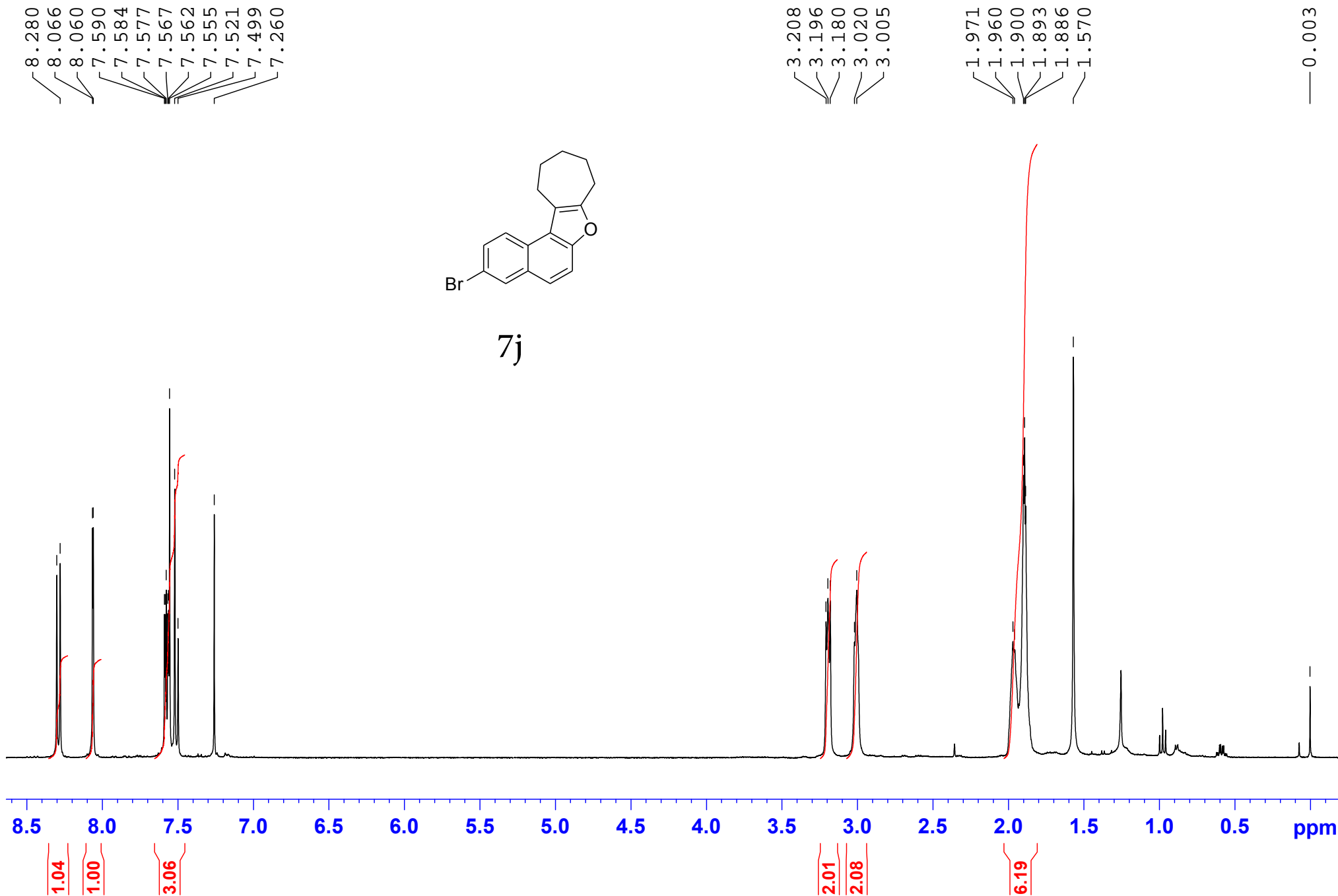


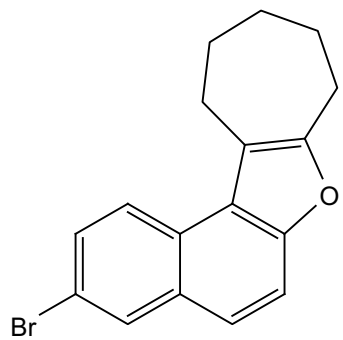




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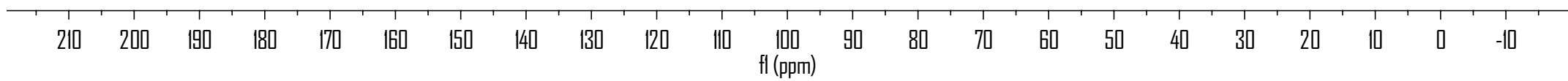


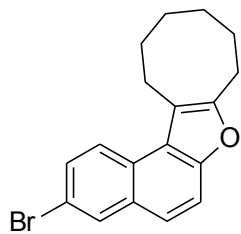




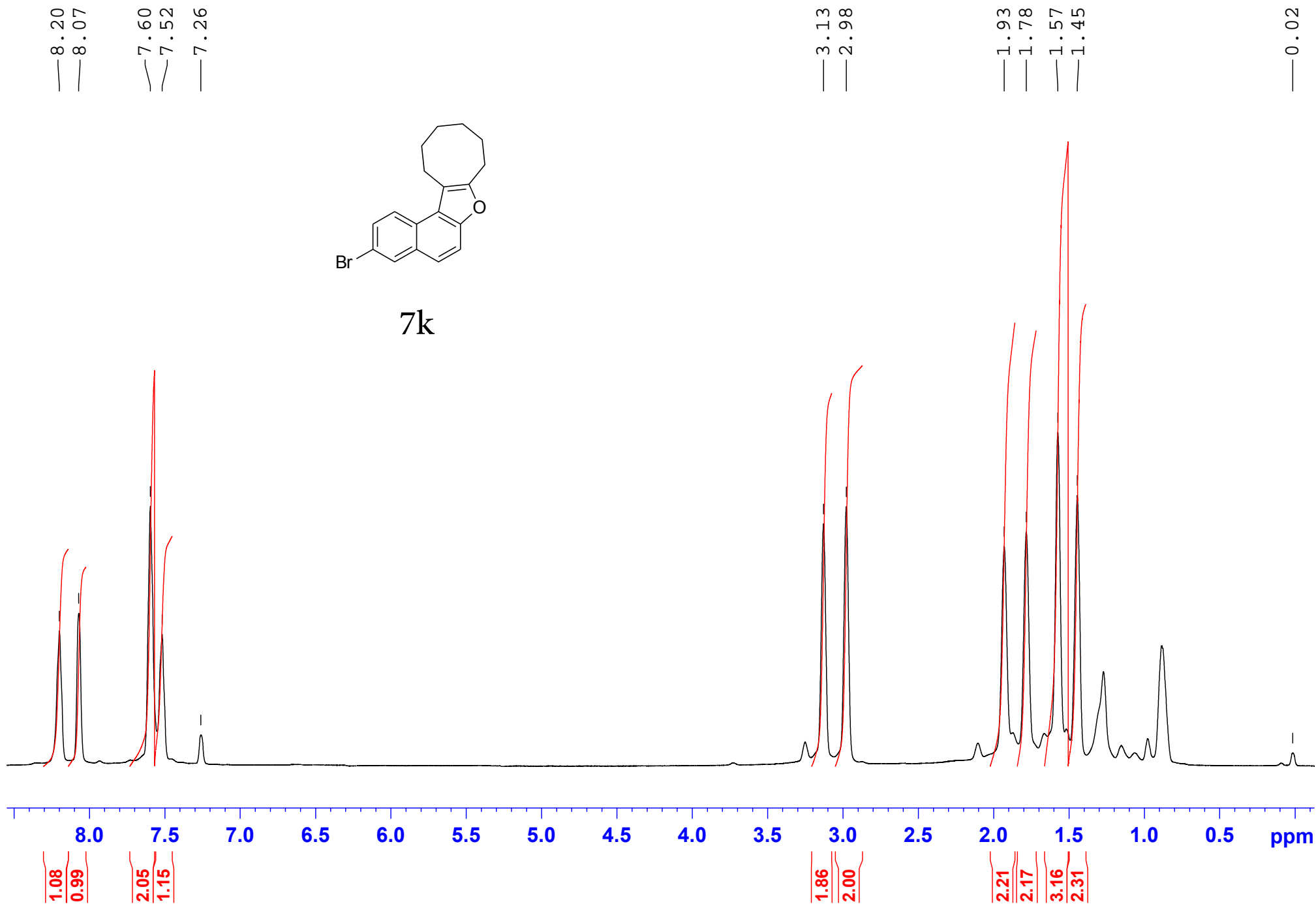
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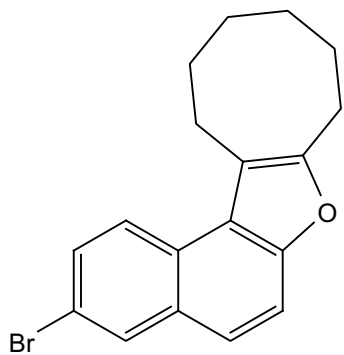
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117.23  
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77.02  
76.71  
29.51  
28.46  
27.87  
25.97  
25.70





7k



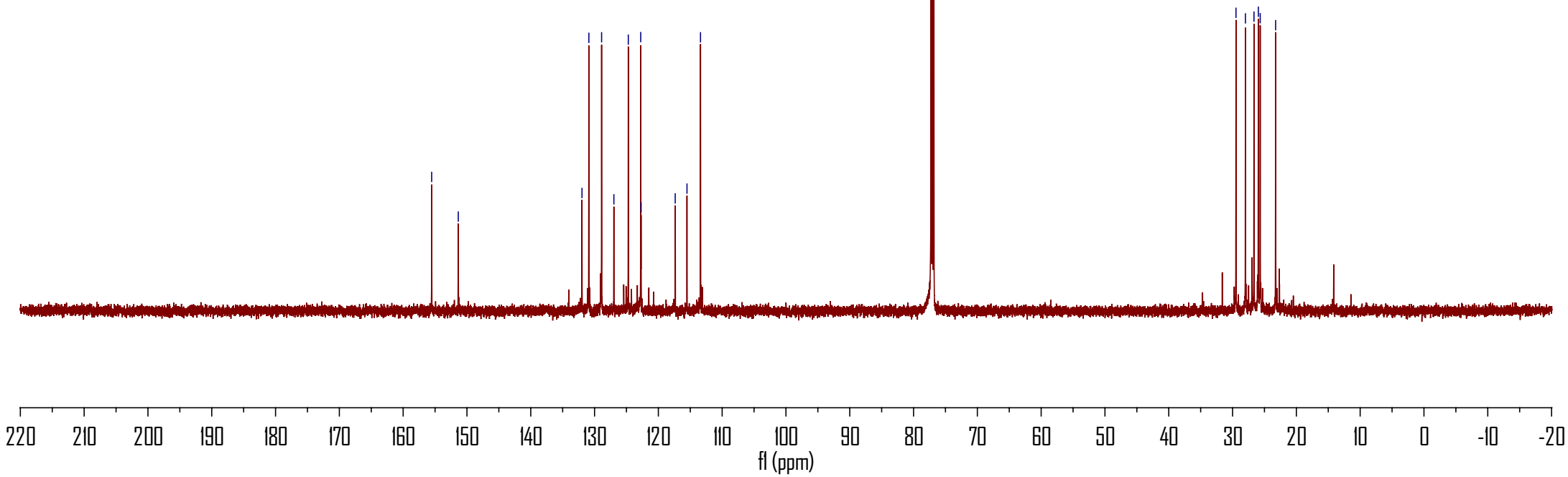
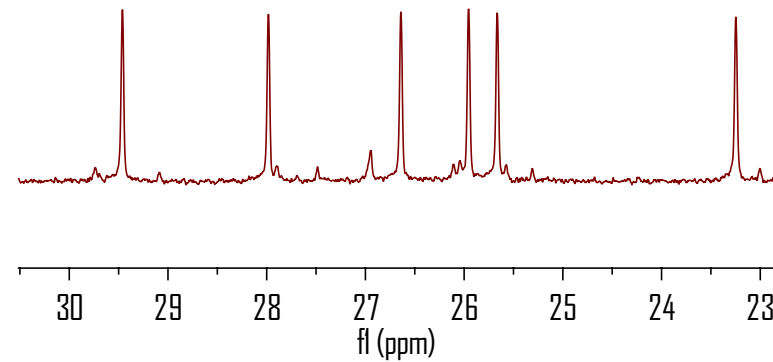
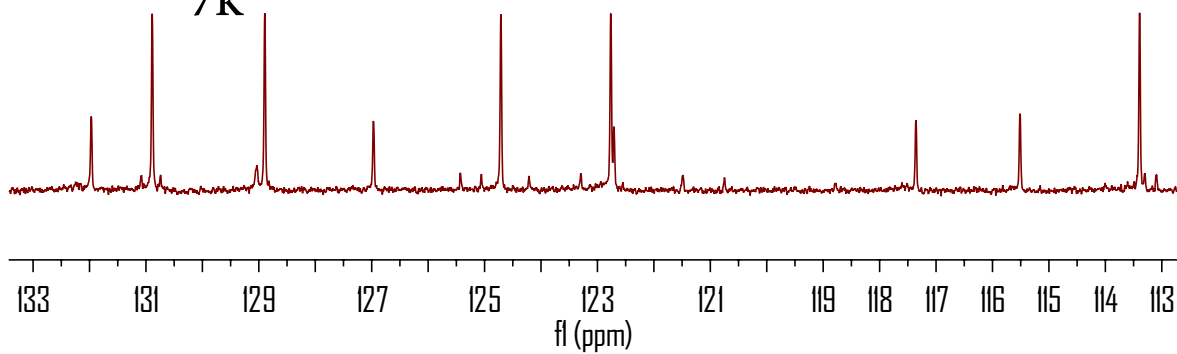


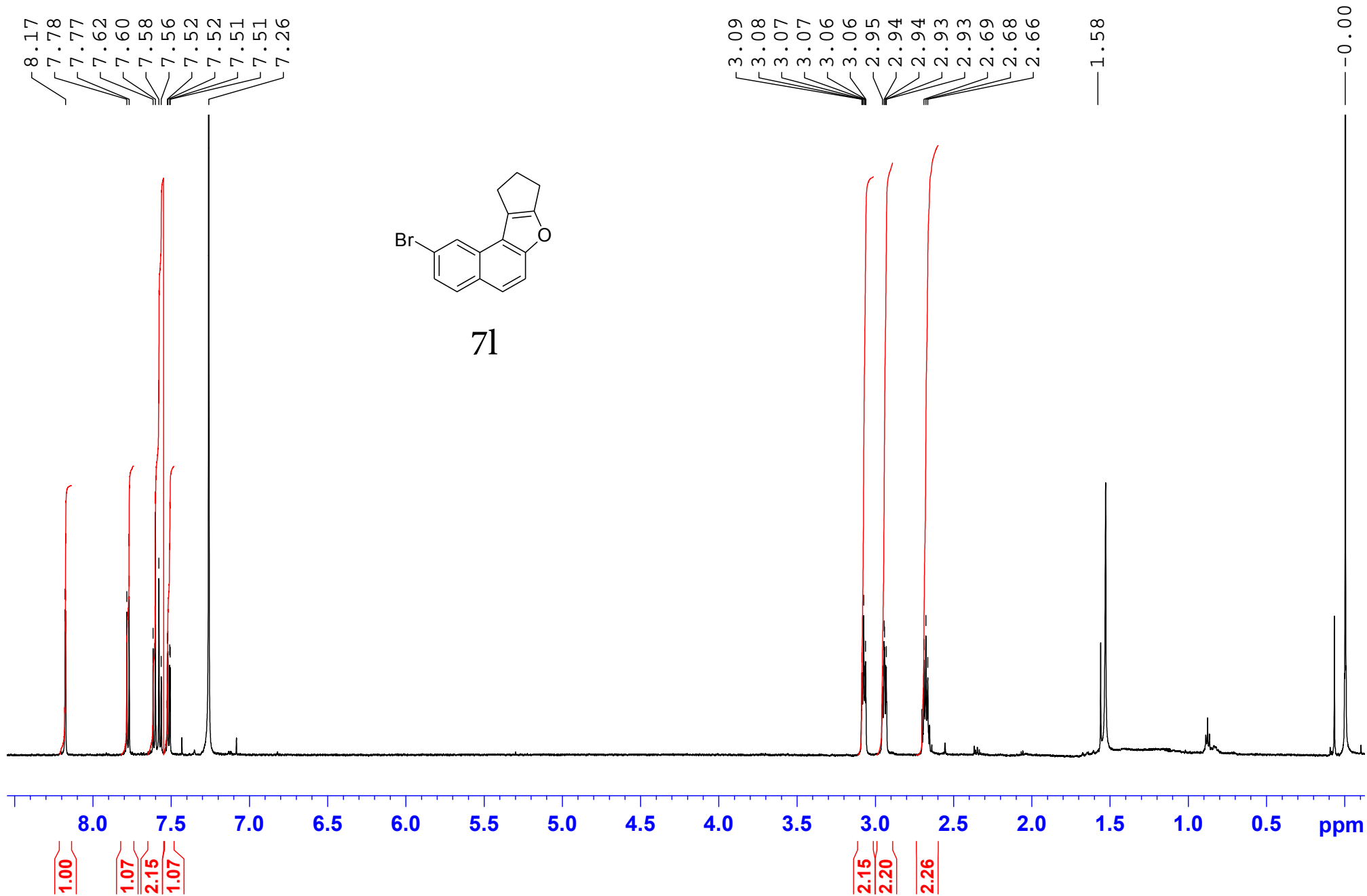
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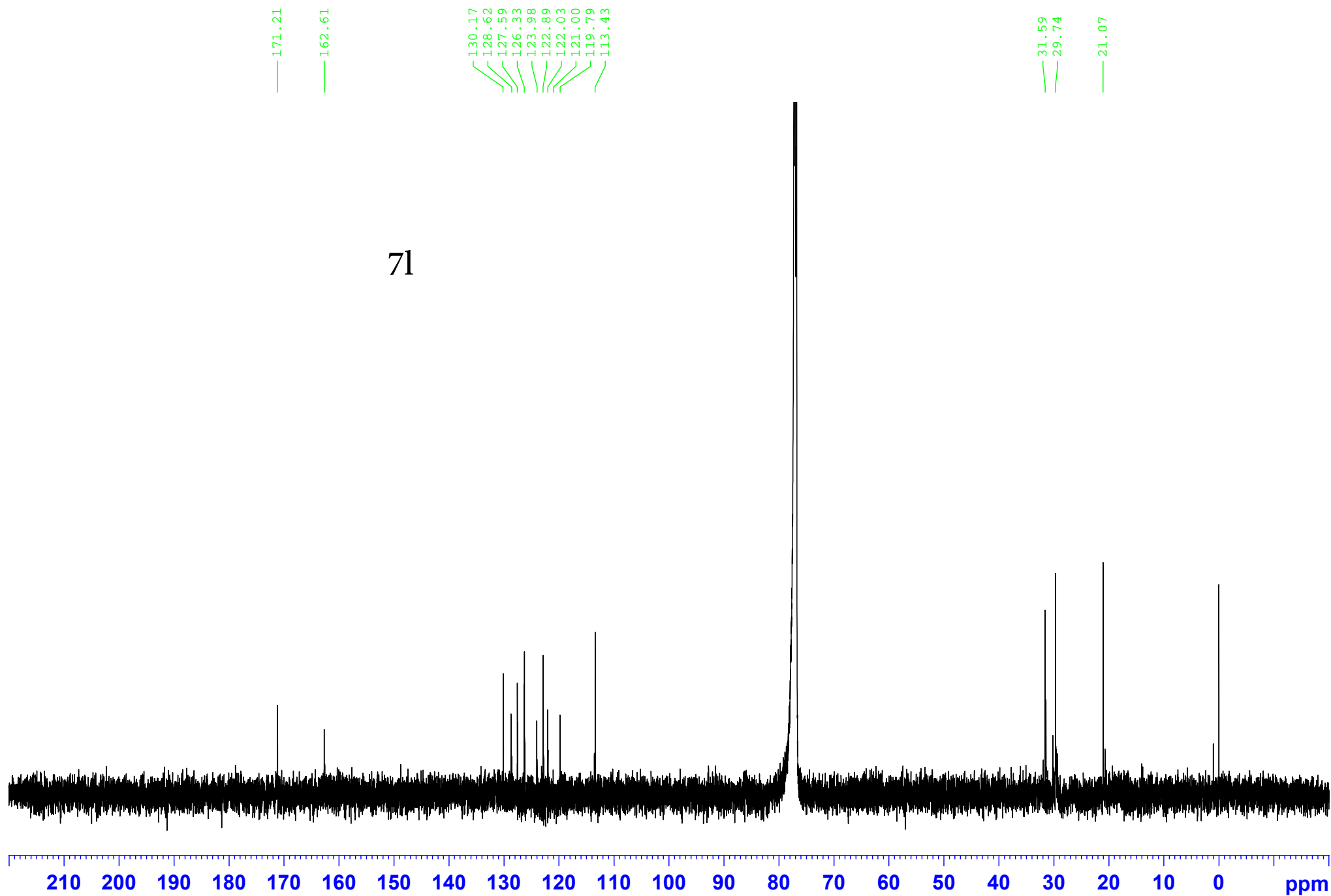
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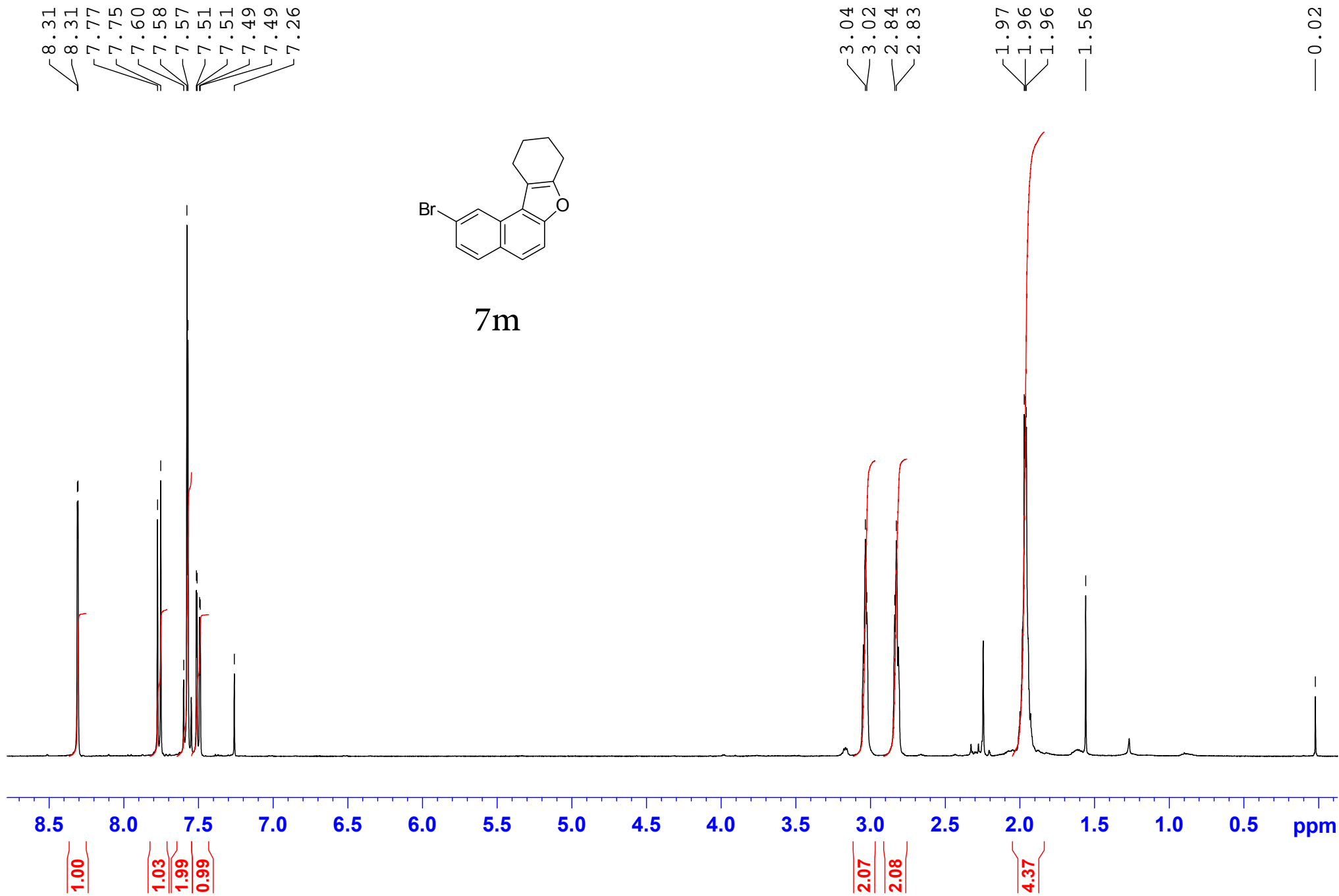
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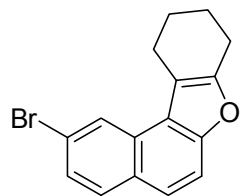




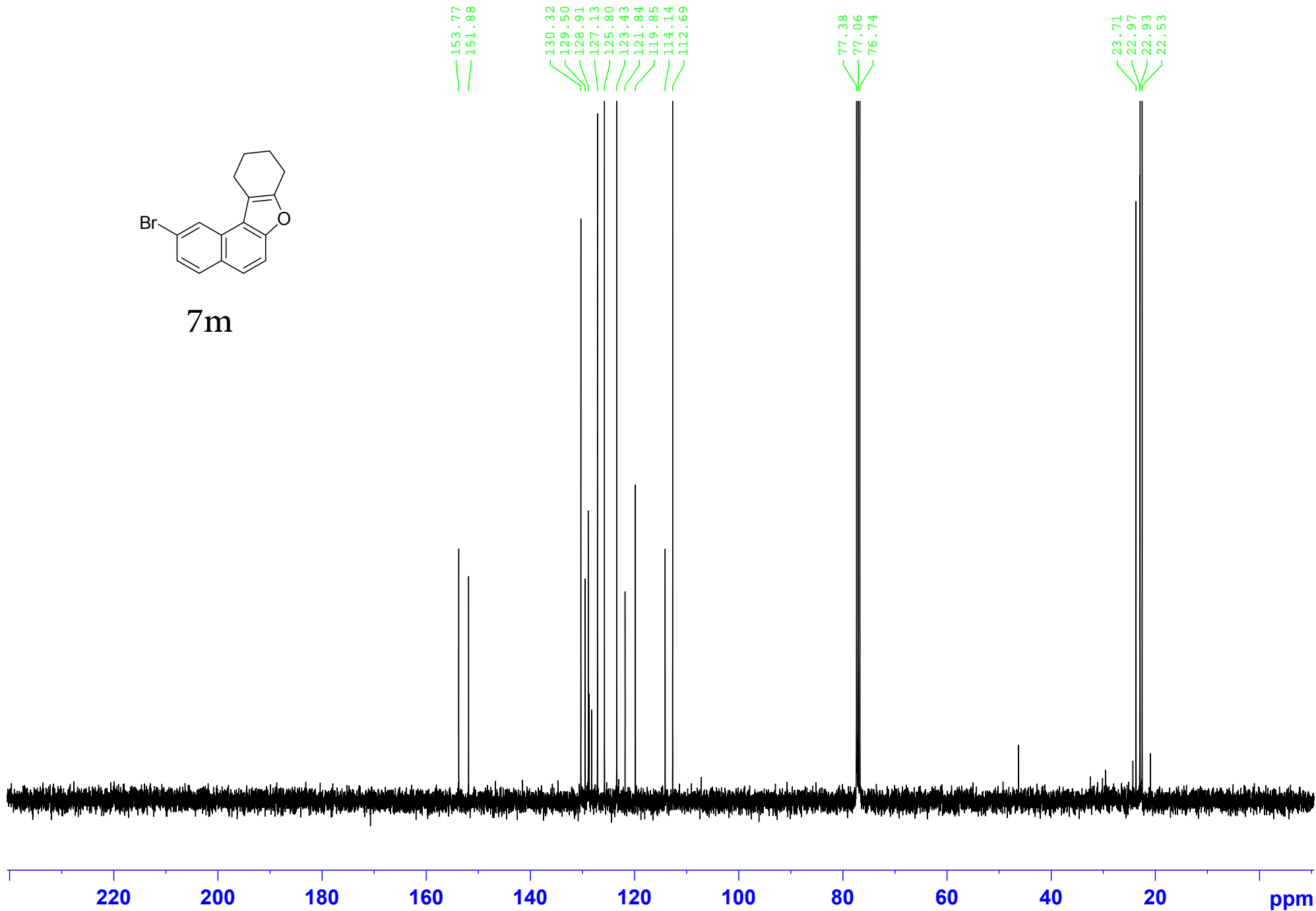


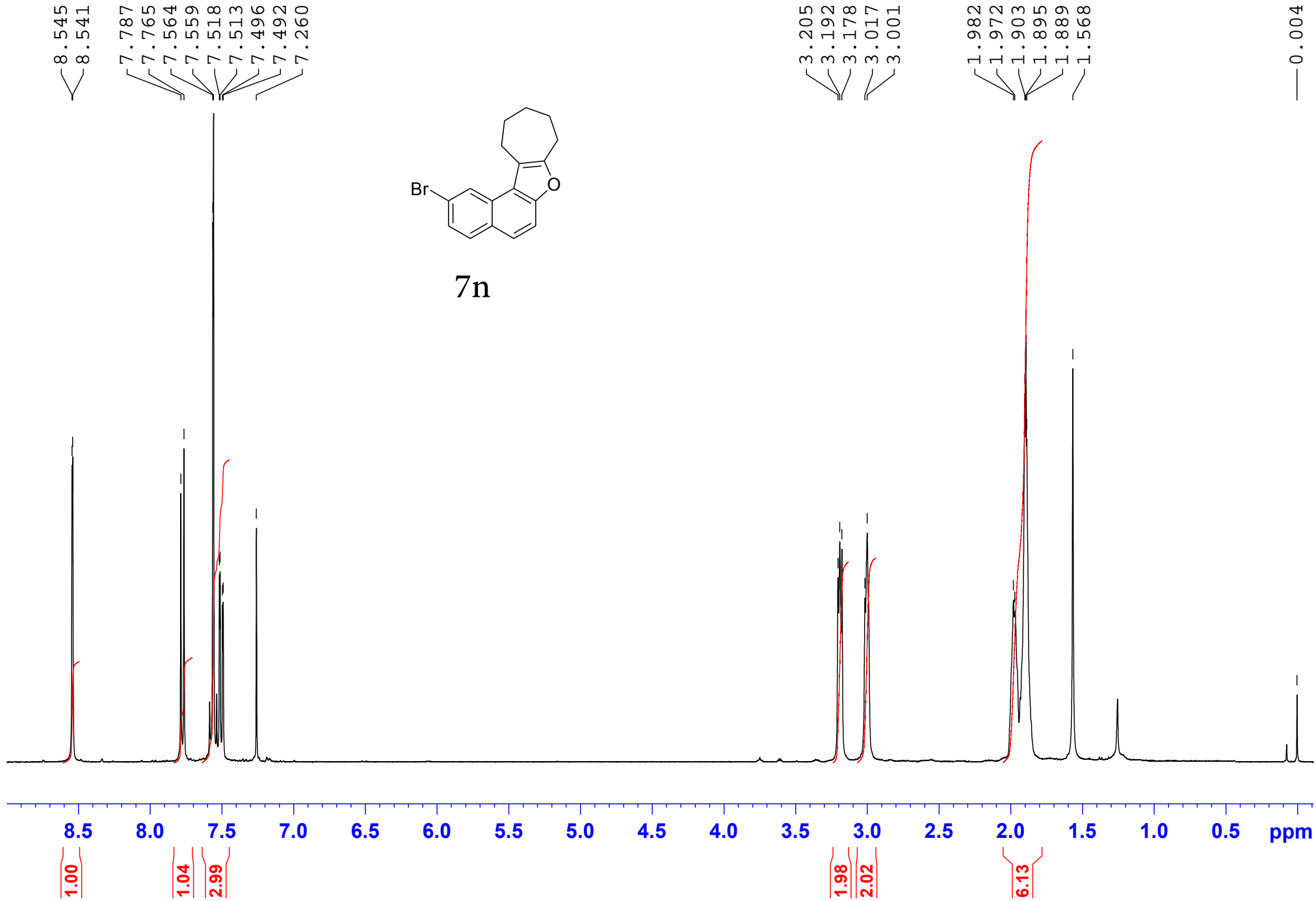




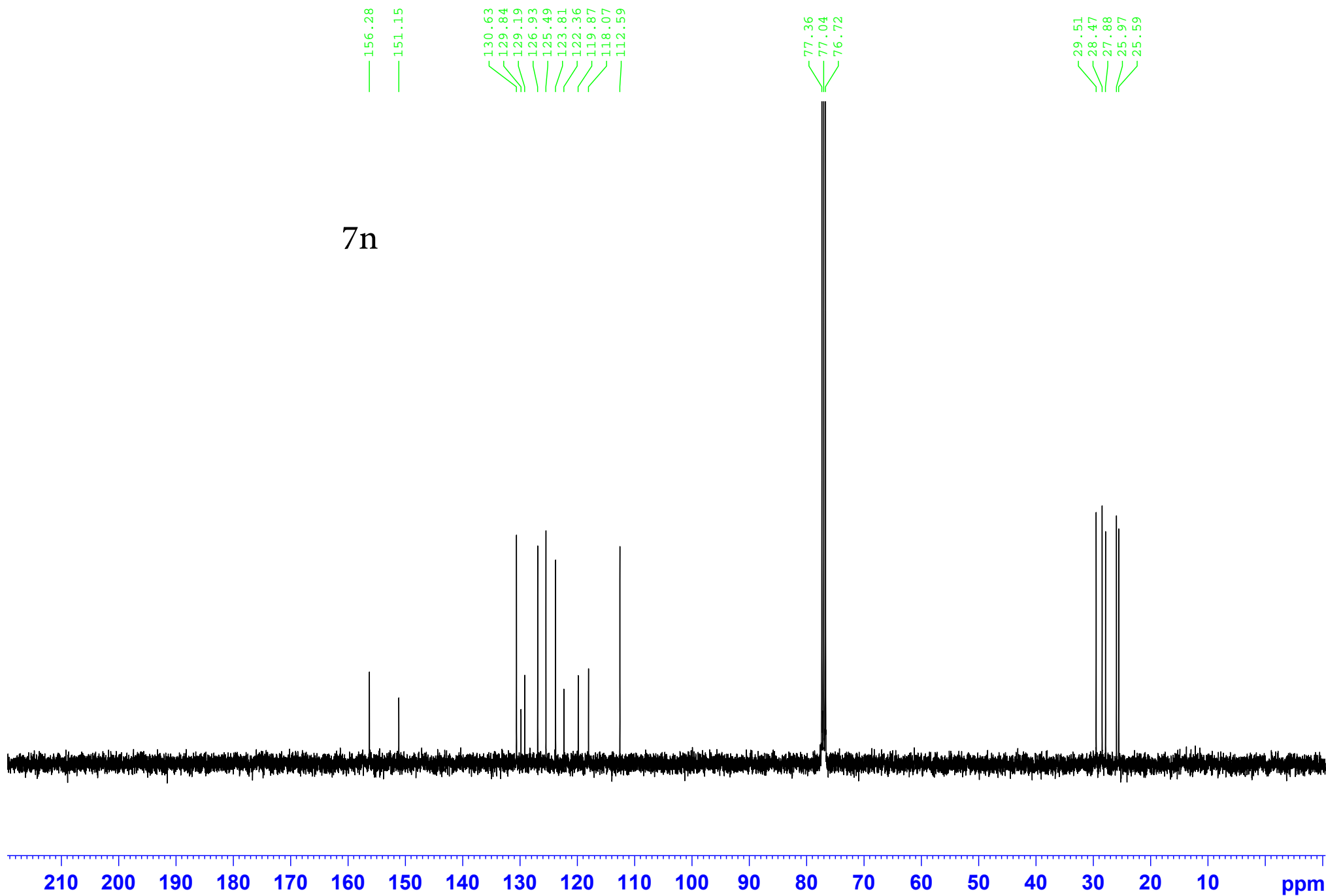


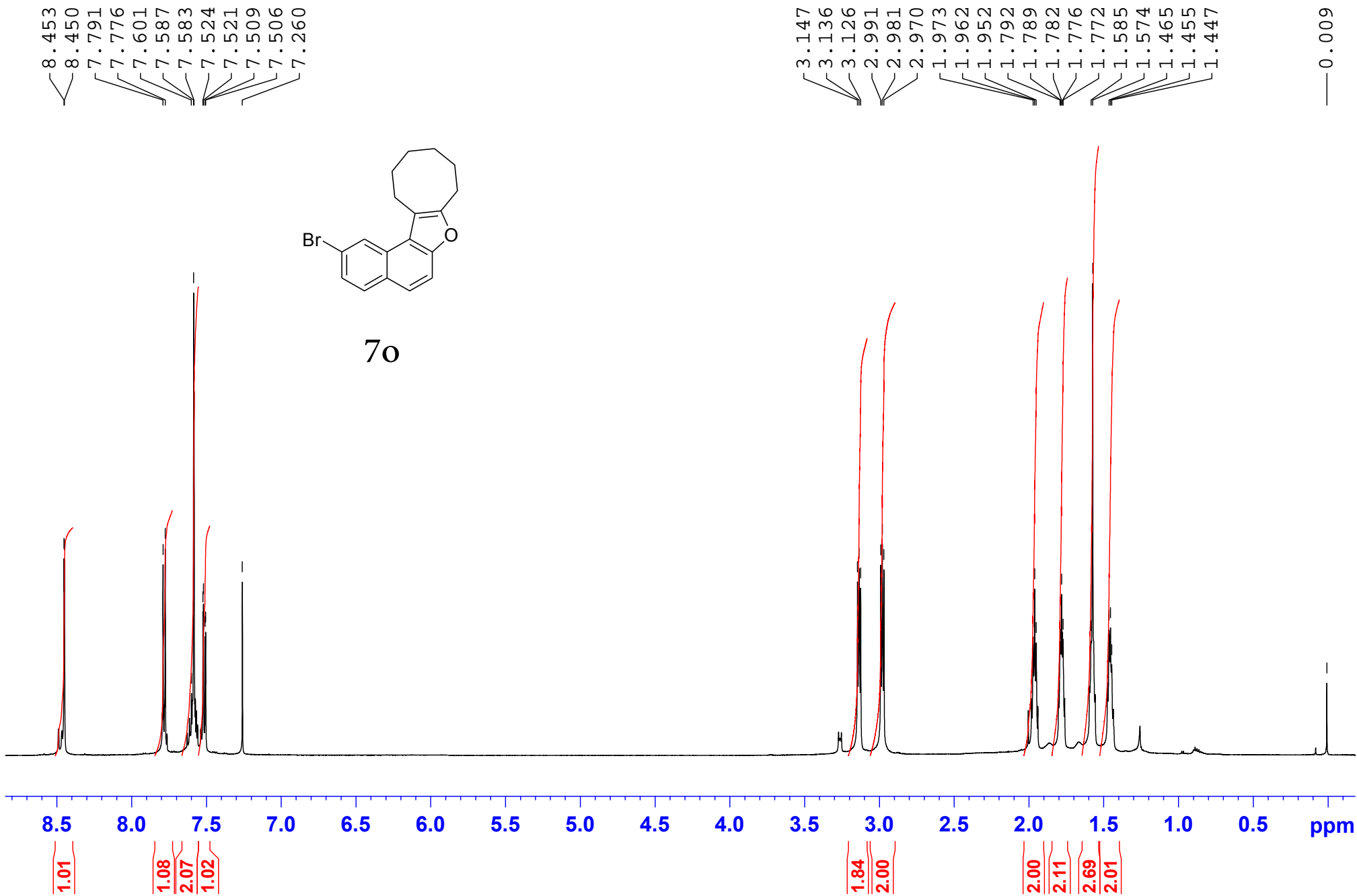
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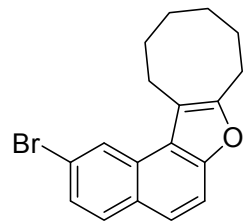




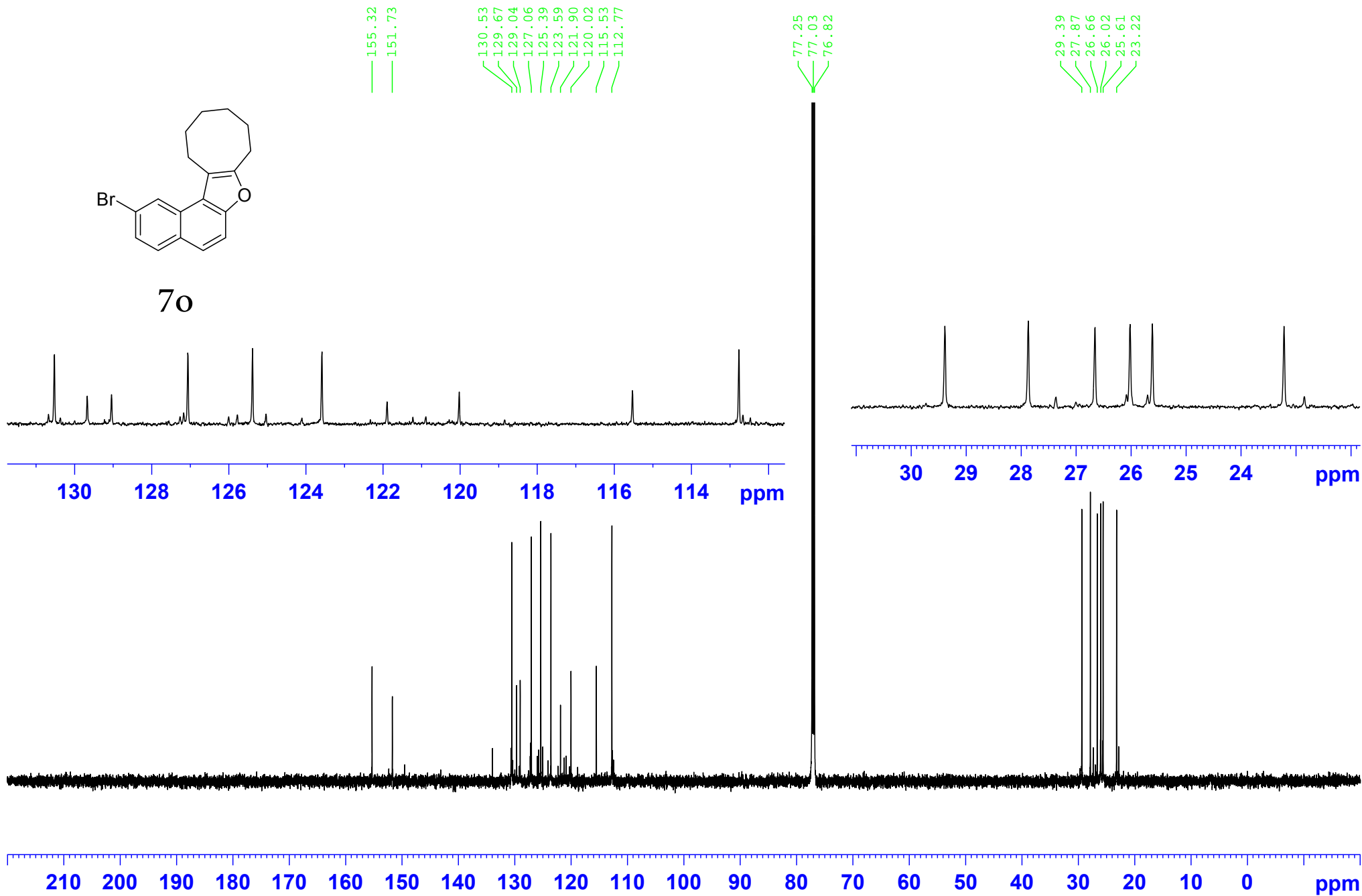
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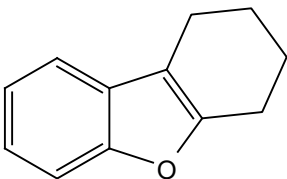
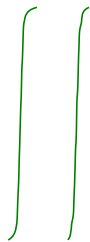
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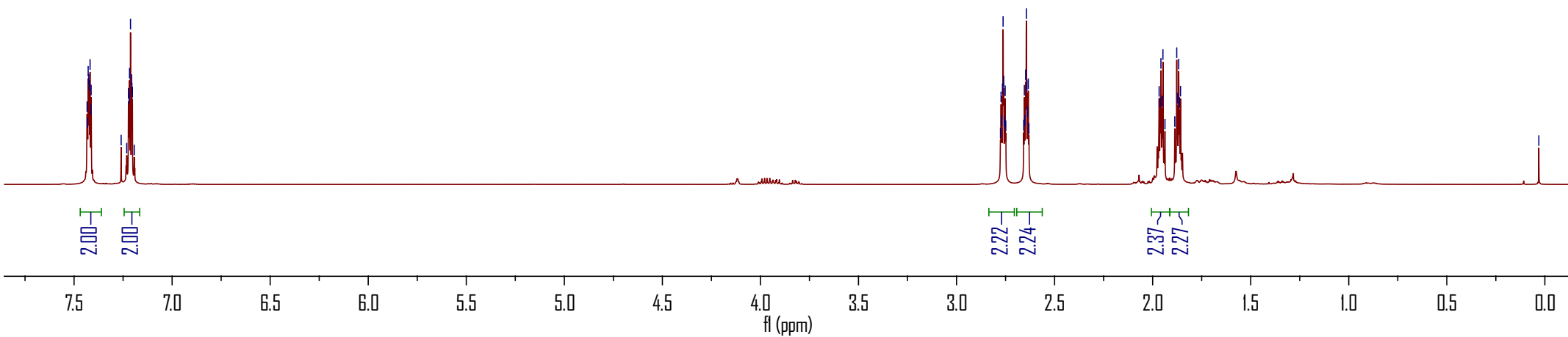
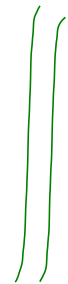
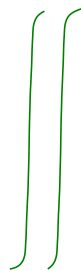
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7.21  
7.20  
7.19

2.78  
2.77  
2.77  
2.77  
2.76  
2.76  
2.76  
2.75  
2.75  
2.66  
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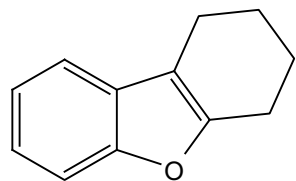
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9 a







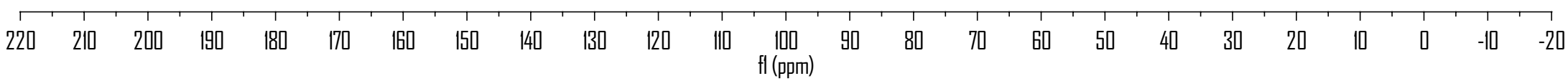
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154.04

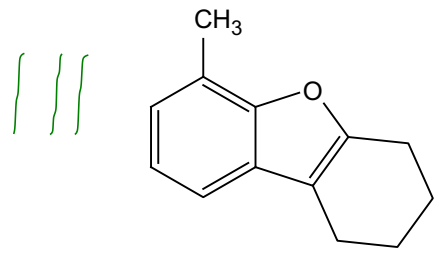
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77.28  
77.07  
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23.46  
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22.71  
20.48



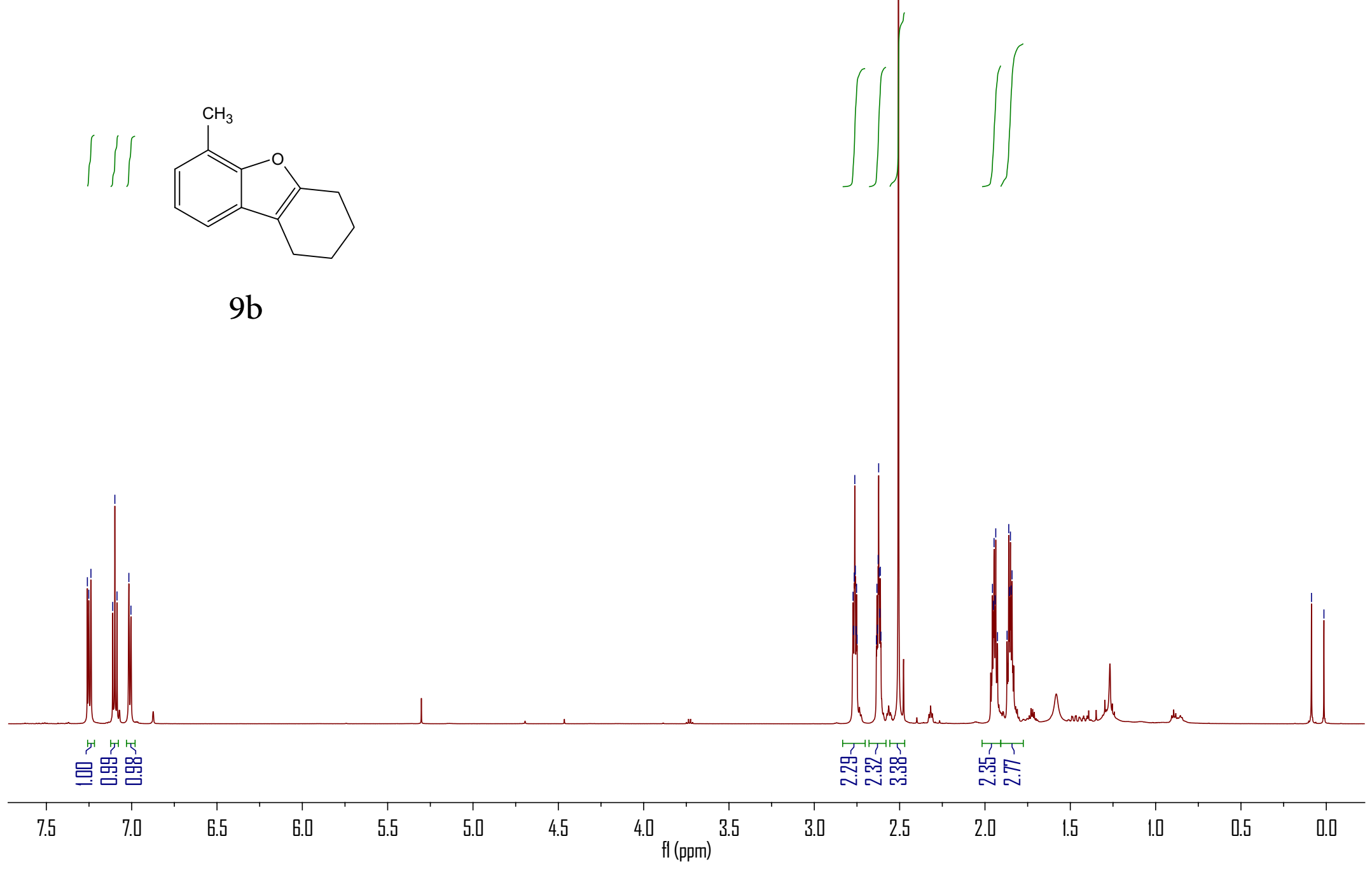
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7.00

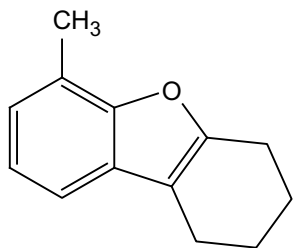


9b

2.77  
2.77  
2.77  
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2.76  
2.76  
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2.75  
2.64  
2.63  
2.63  
2.63  
2.62  
2.62  
2.61  
2.61  
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0.09  
0.01





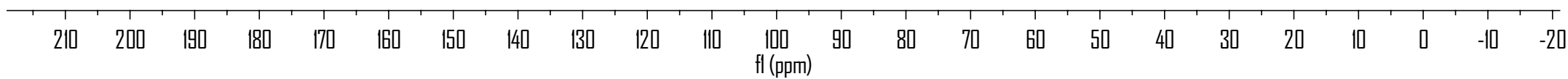
9b

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75.78

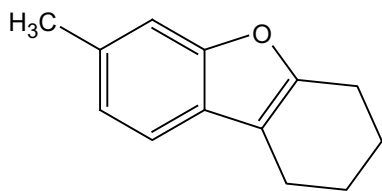
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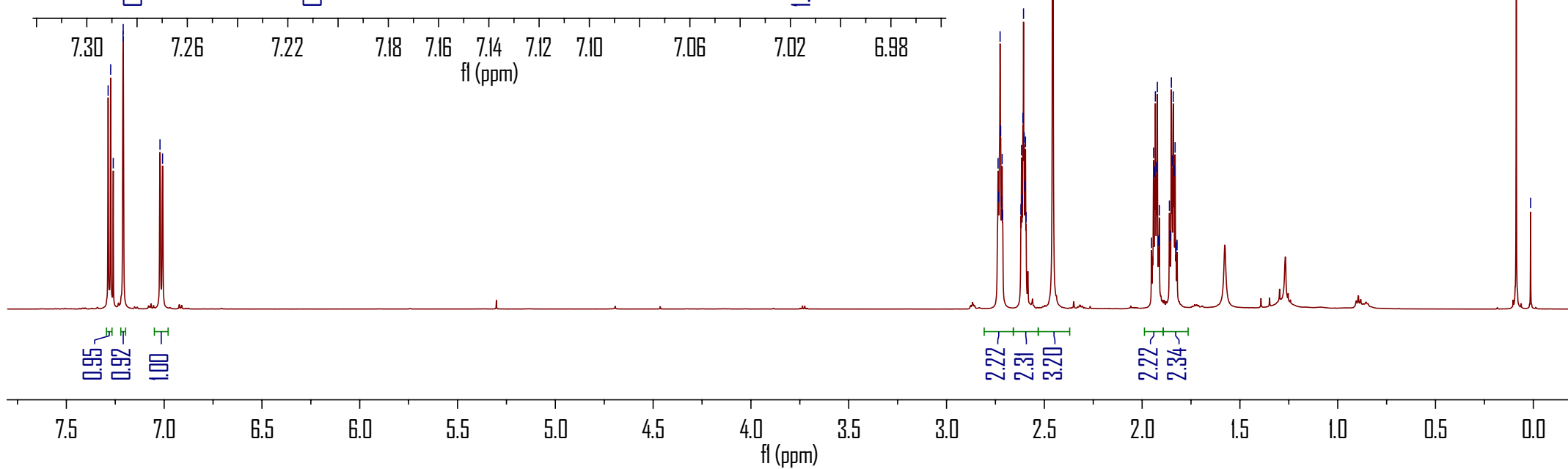
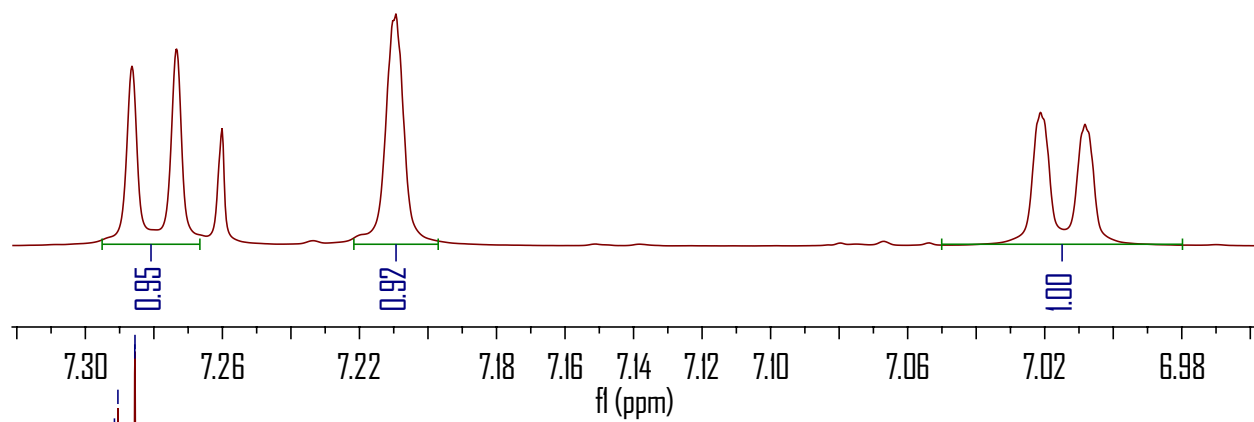
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7.01

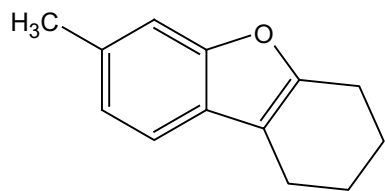
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2.60  
2.60  
2.59  
2.46  
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1.85  
1.85  
1.84  
1.84  
1.83  
1.83  
1.82

0.01



9c





9c

153.66  
152.26

131.93

122.29

116.76

111.57

110.07

76.20

75.99

75.78

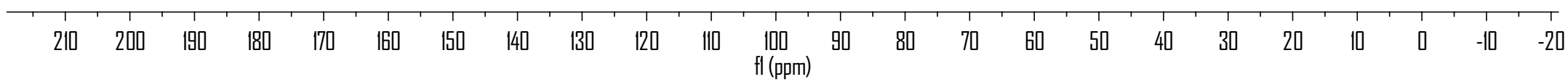
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21.94

21.67

20.60

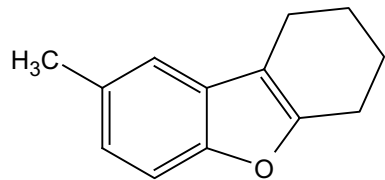
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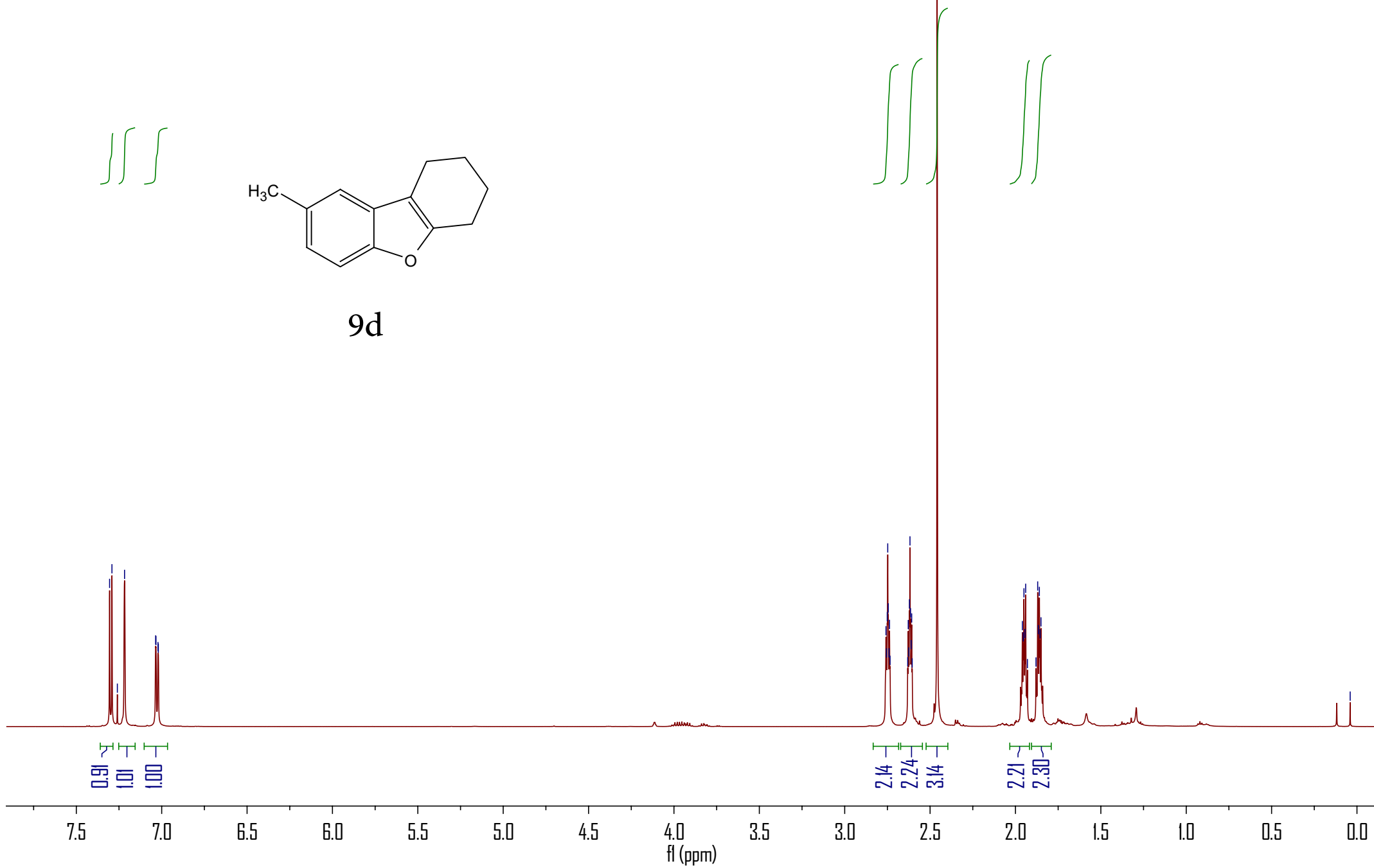
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7.02  
7.02

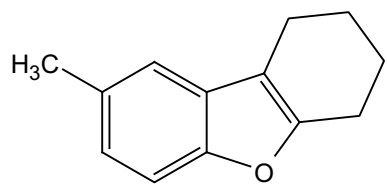
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2.74  
2.74  
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2.63  
2.63  
2.62  
2.62  
2.62  
2.61  
2.61  
2.61  
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1.87  
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1.86  
1.86  
1.85

0.04

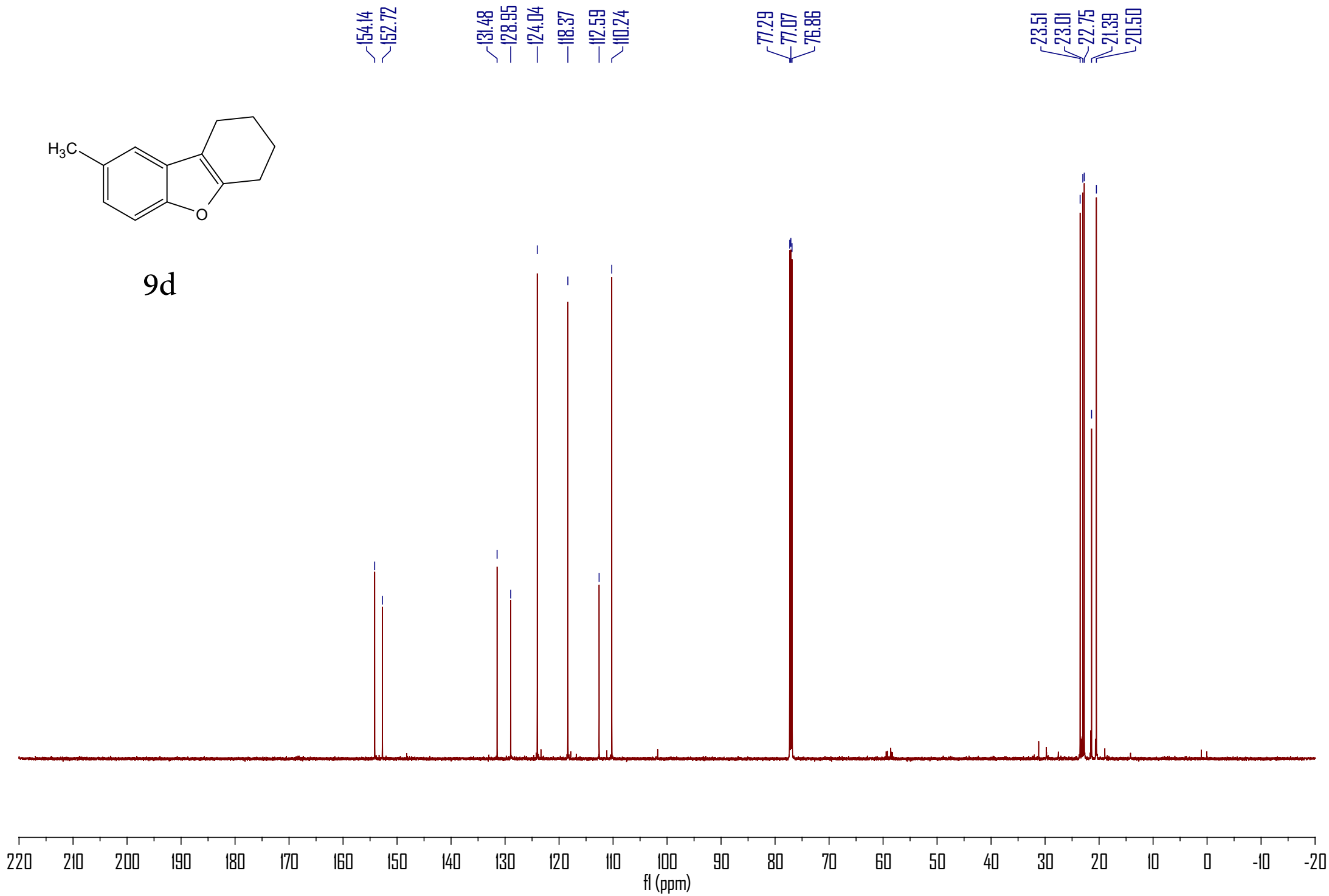


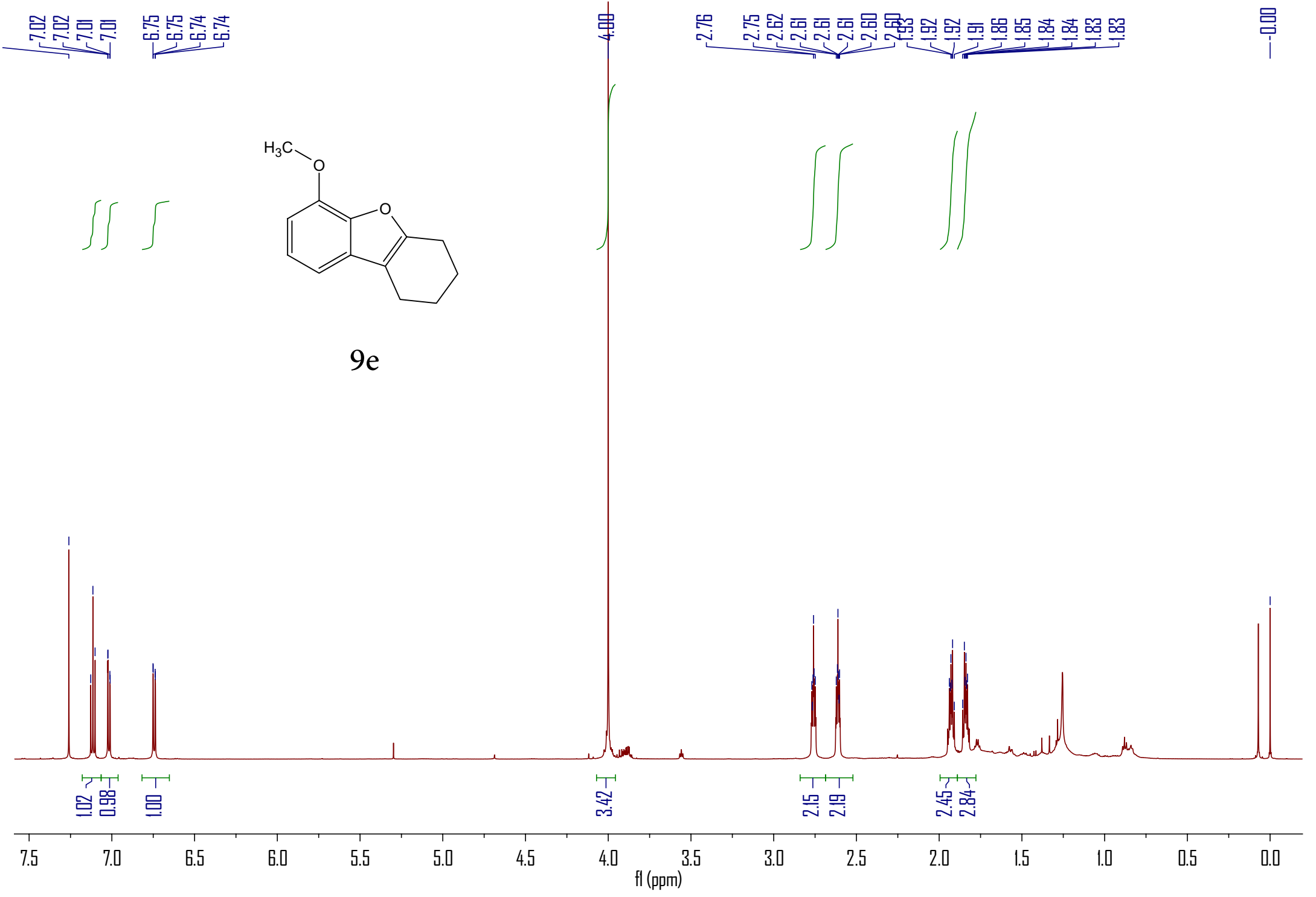
9d





9d







23.43  
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20.61

55.99

105.51

111.03

113.18

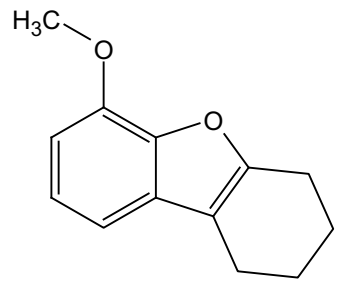
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130.51

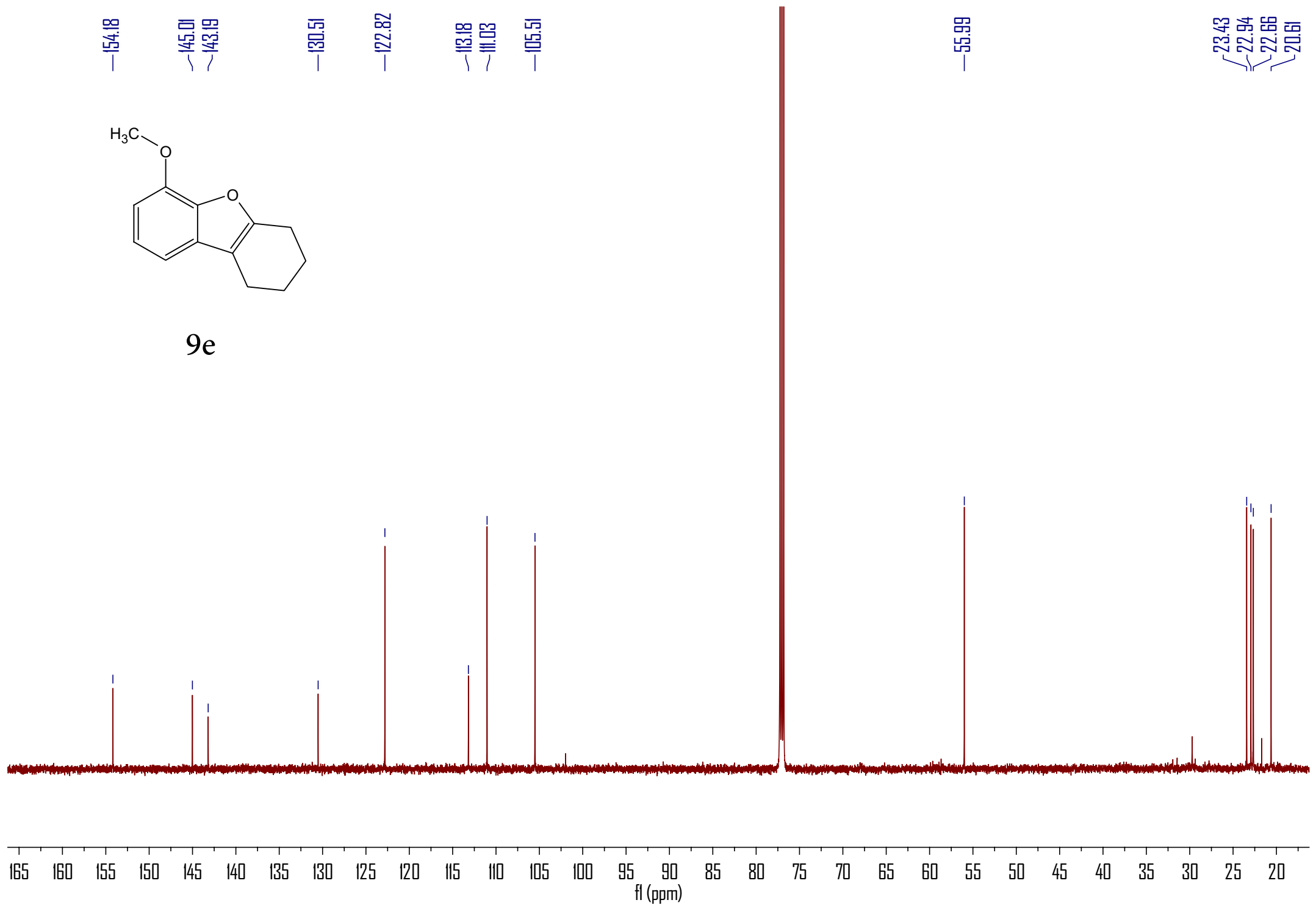
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145.01

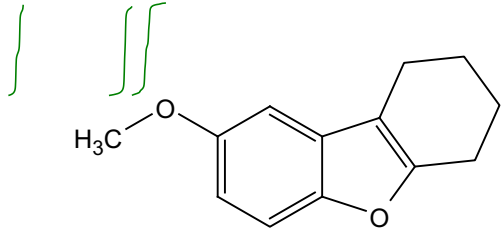
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9e



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6.78

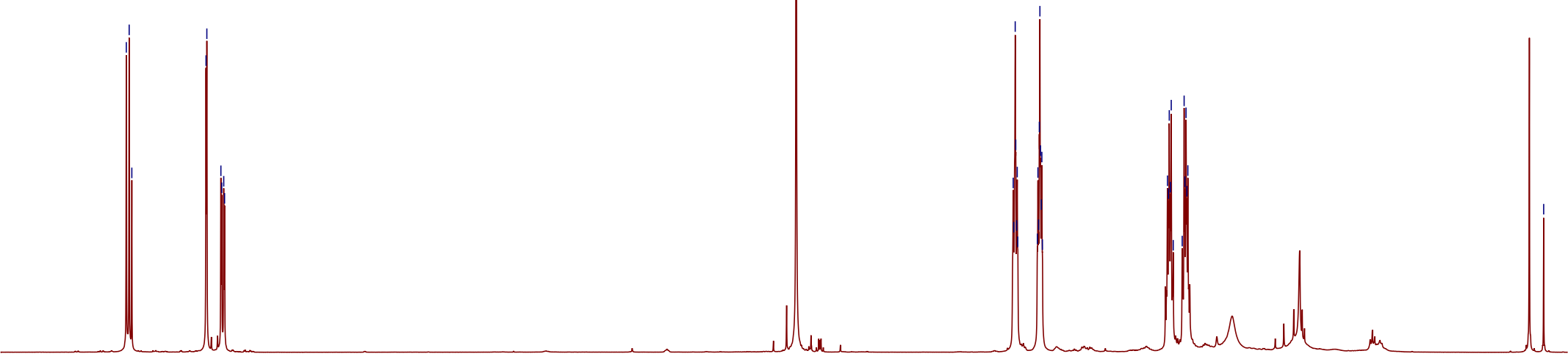


9f

3.84

2.71  
2.70  
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2.59  
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2.58  
1.92  
1.91  
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1.83

0.00



1.02

1.00  
1.04

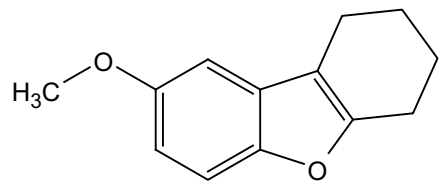
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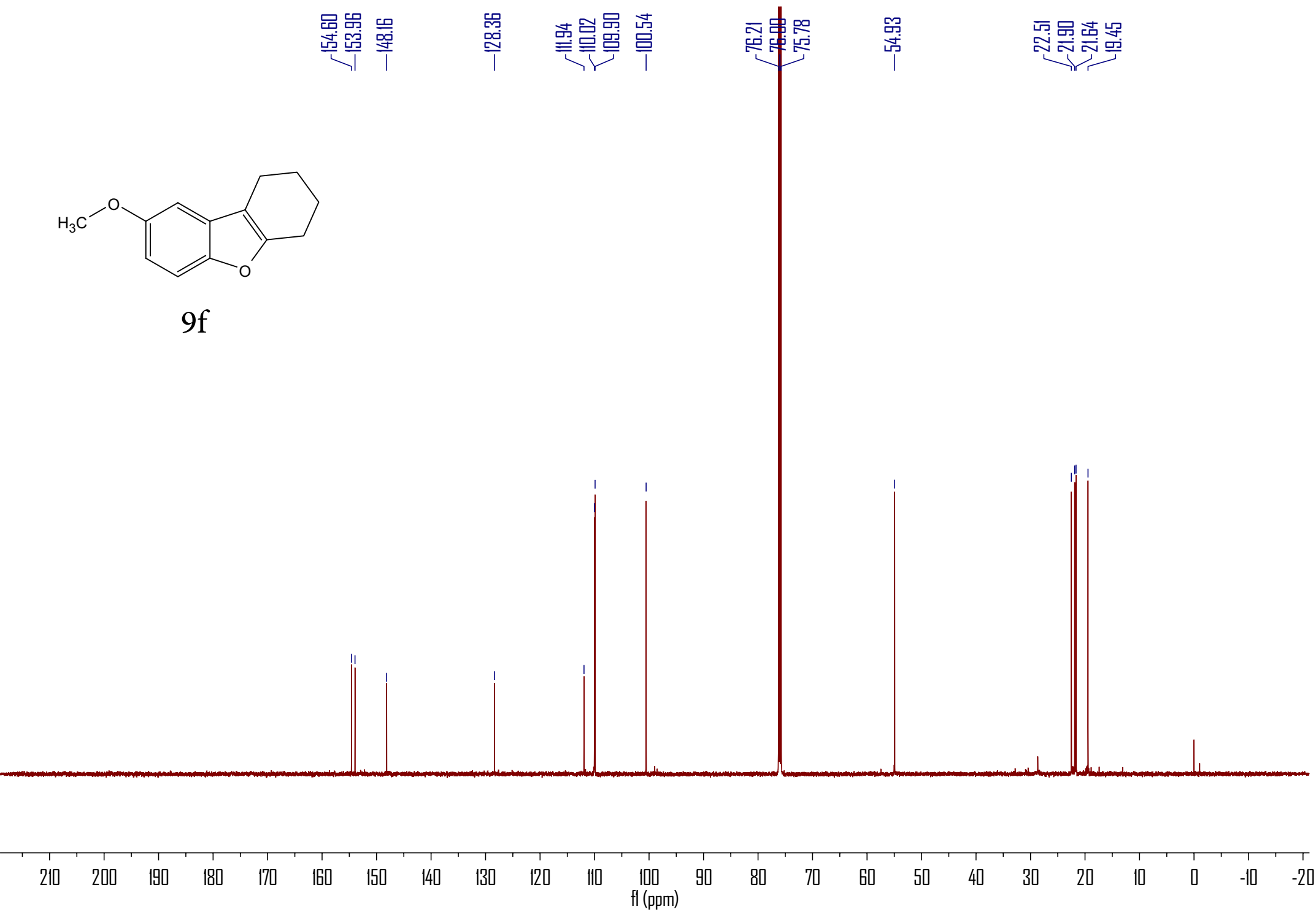
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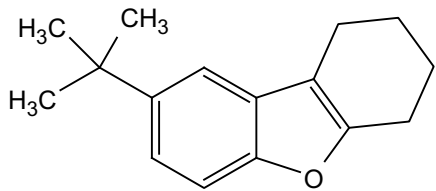
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f1 (ppm)

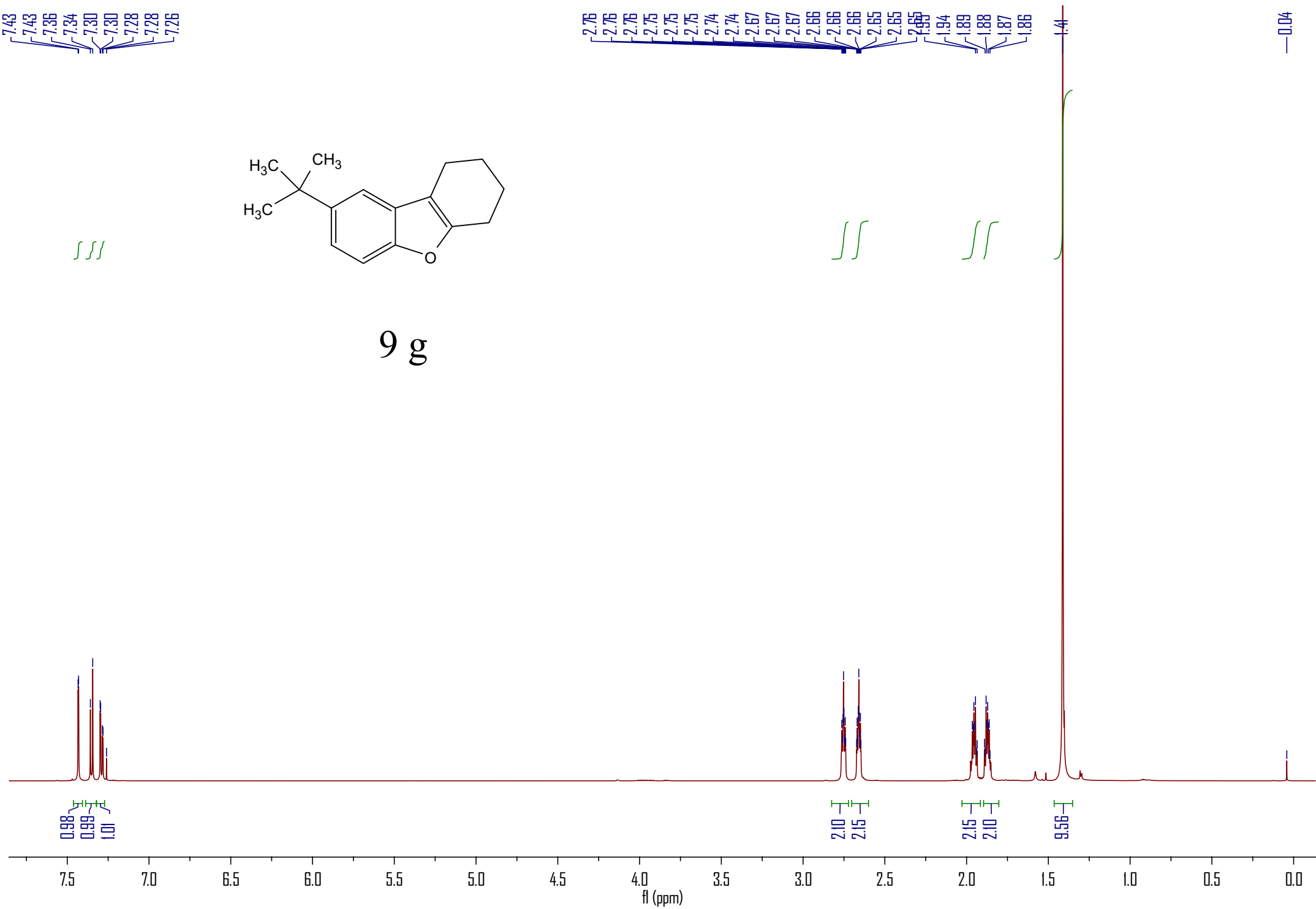


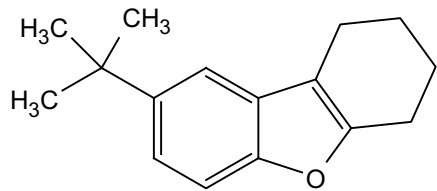
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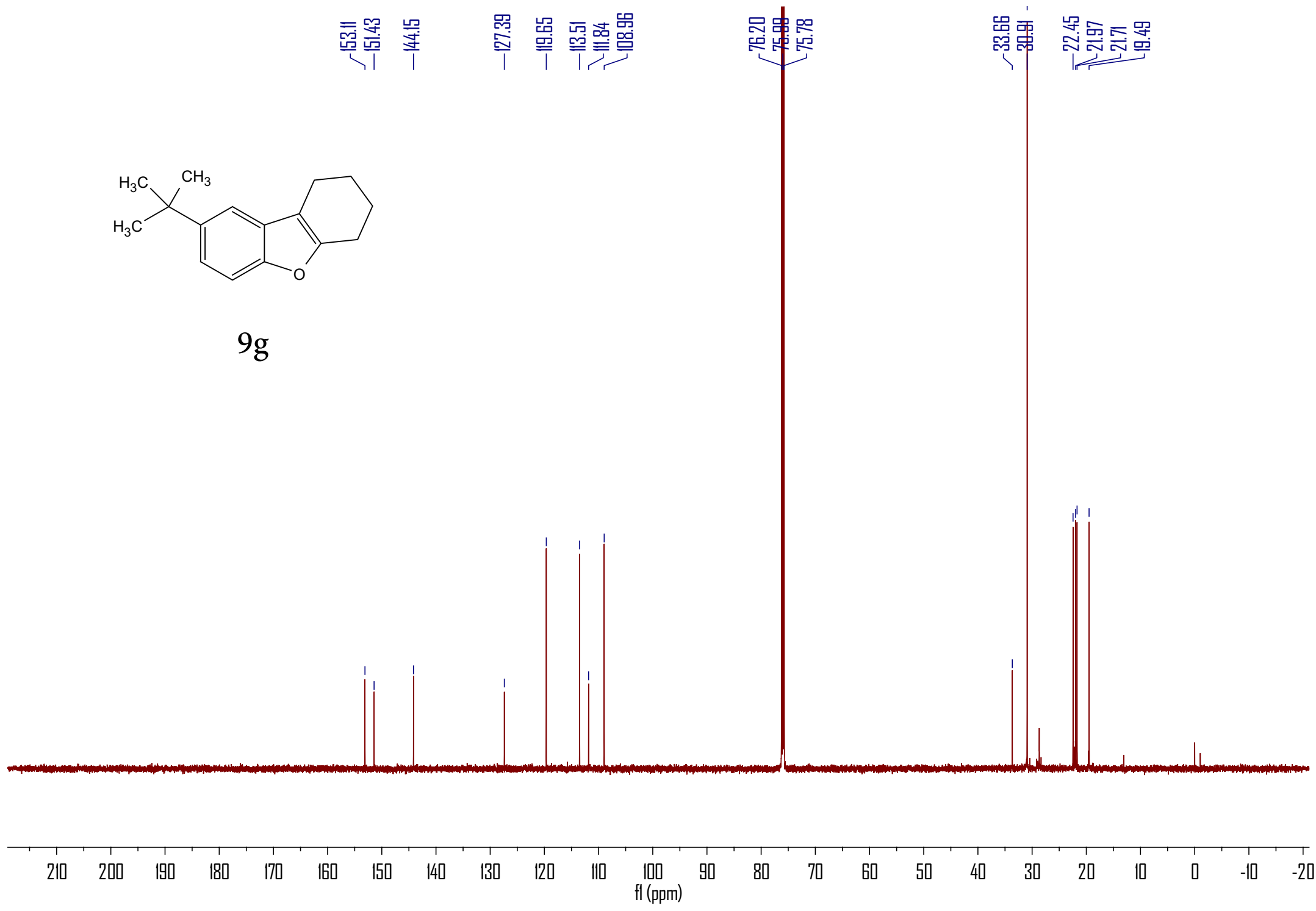
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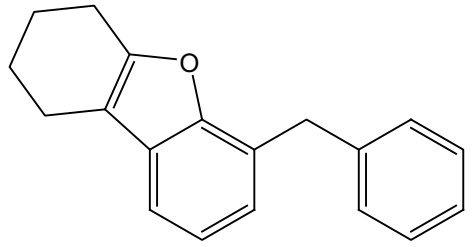




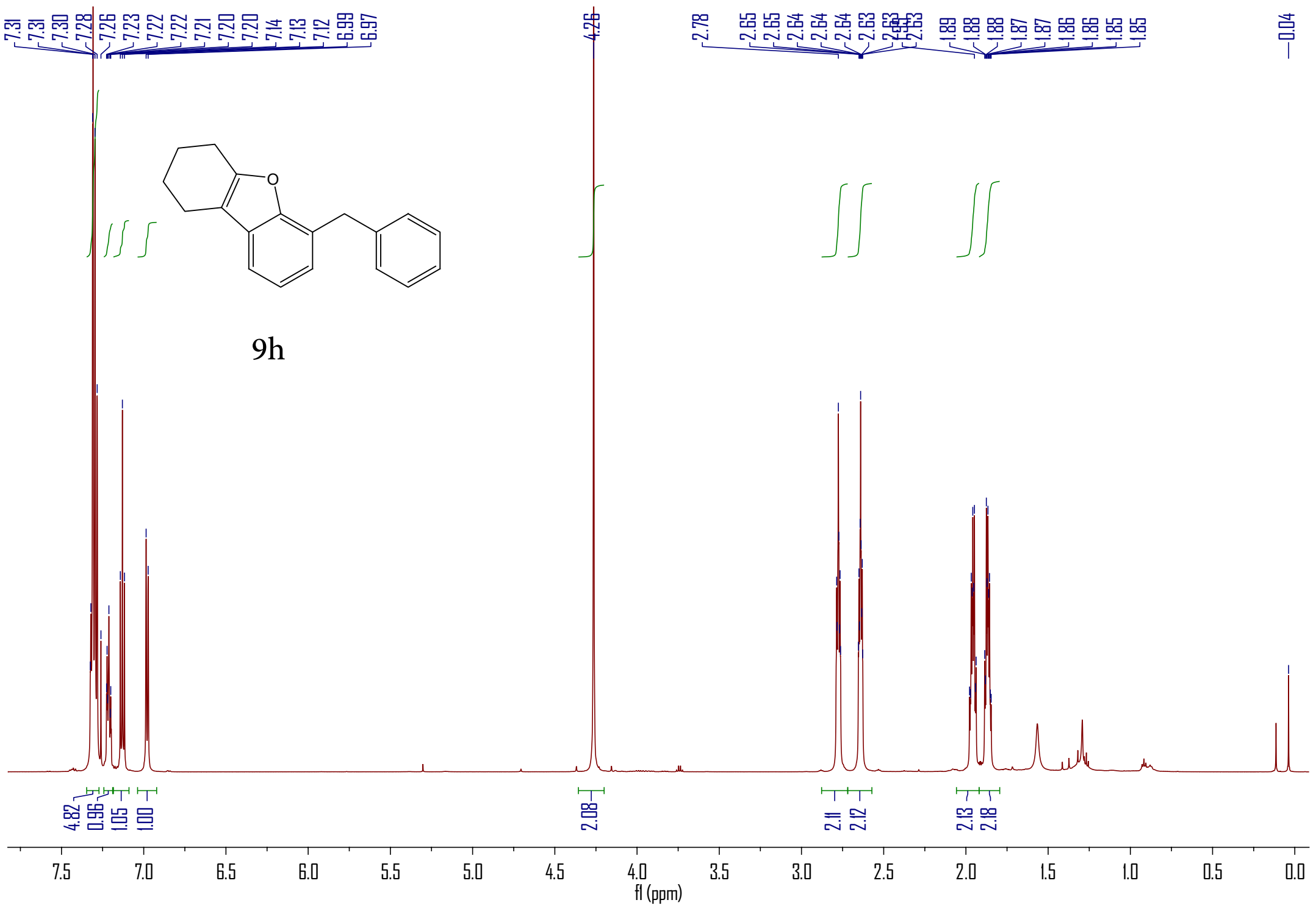
9g

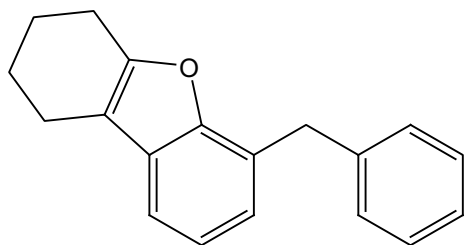
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111.84  
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33.66  
30.91  
22.45  
21.97  
21.71  
19.49





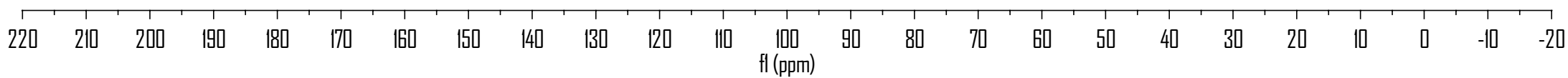
9h





9h

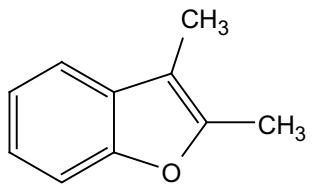
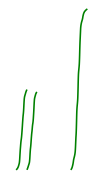
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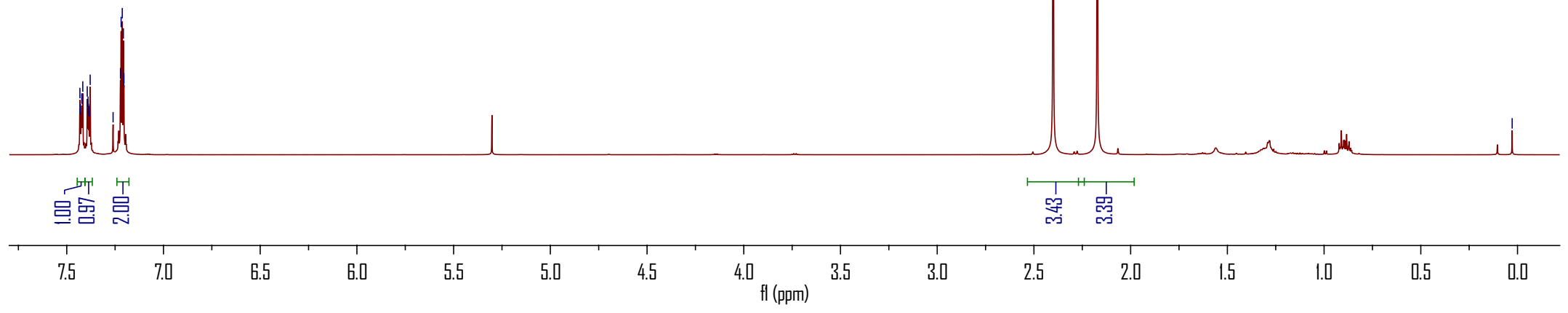
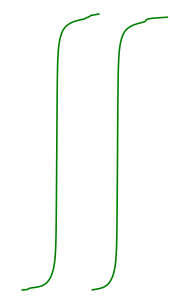
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7.20

2.40  
2.17

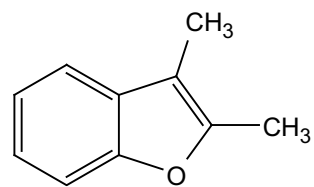
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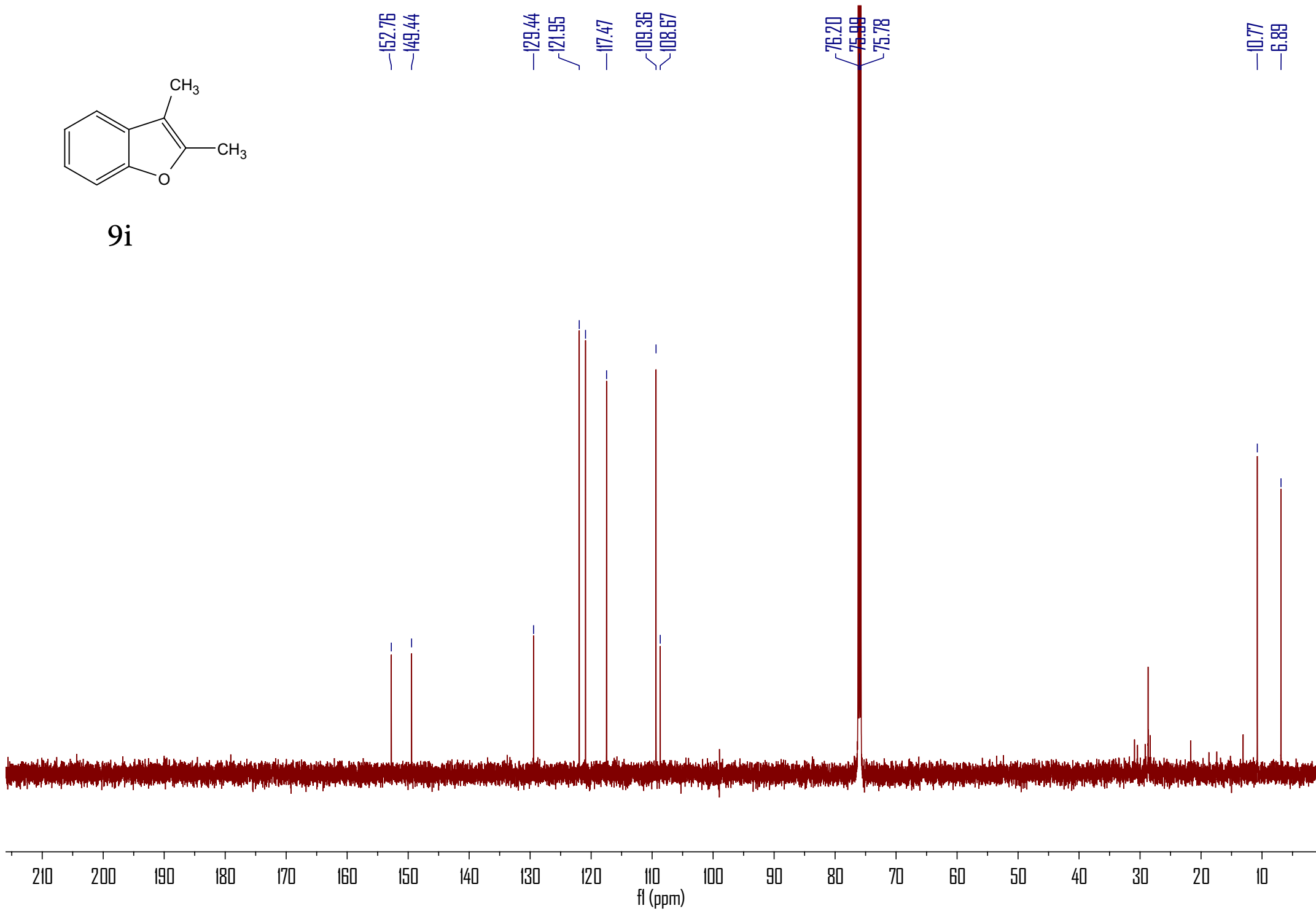
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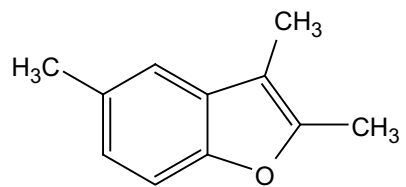




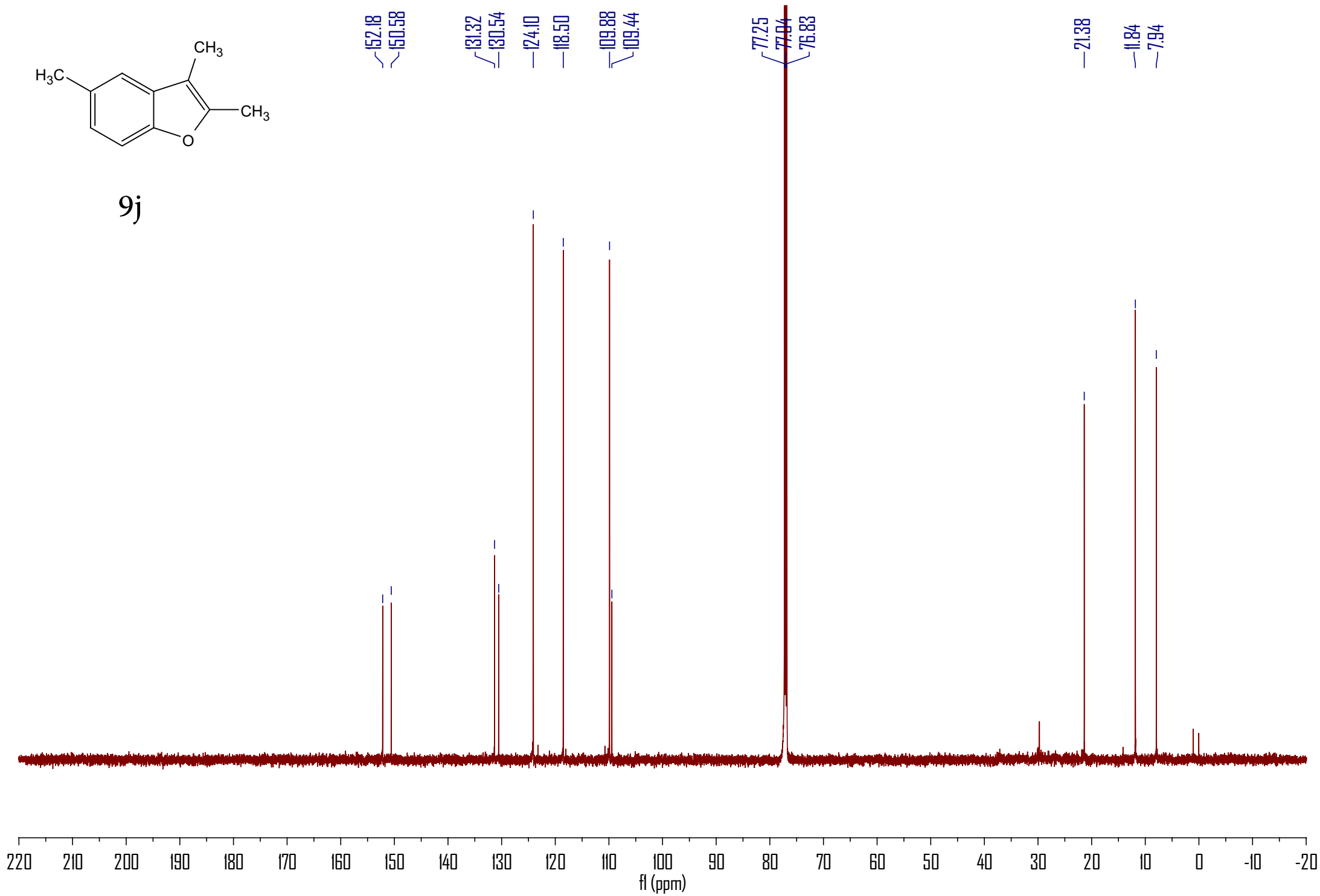


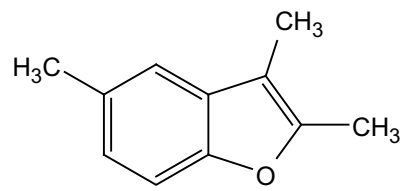
9i



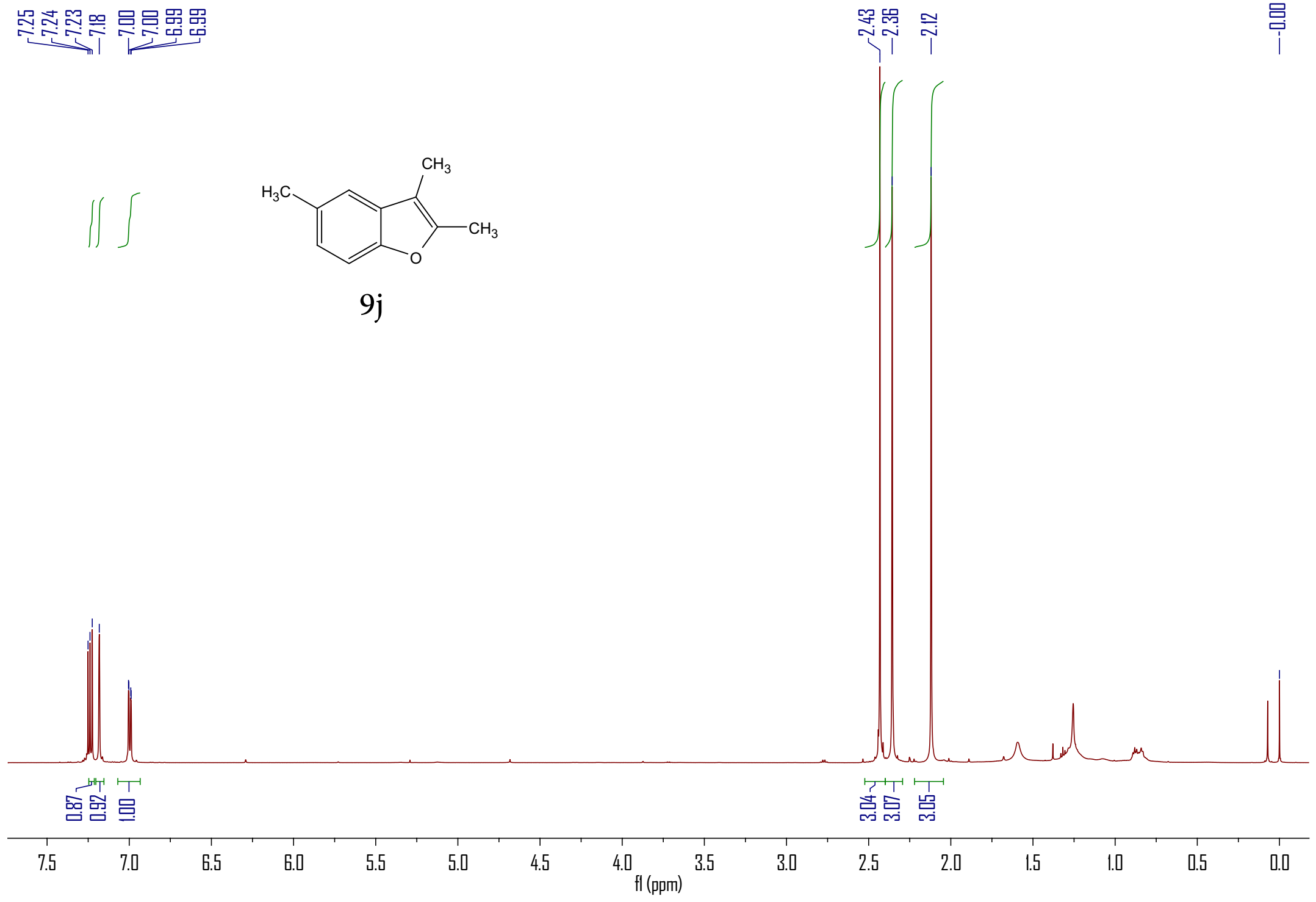


9j

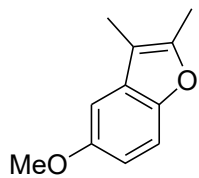




9j



7.260  
7.253  
7.238  
6.866  
6.862  
6.800  
6.796  
6.785  
6.781



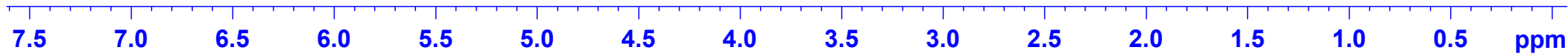
9 k

3.851

2.359

2.124

0.001



0.92

1.00  
1.00

3.20

3.15

3.13

9 k

