Isoquinolines derivatives via sequential regioselective sp2 and sp3C-H bond functionalizations

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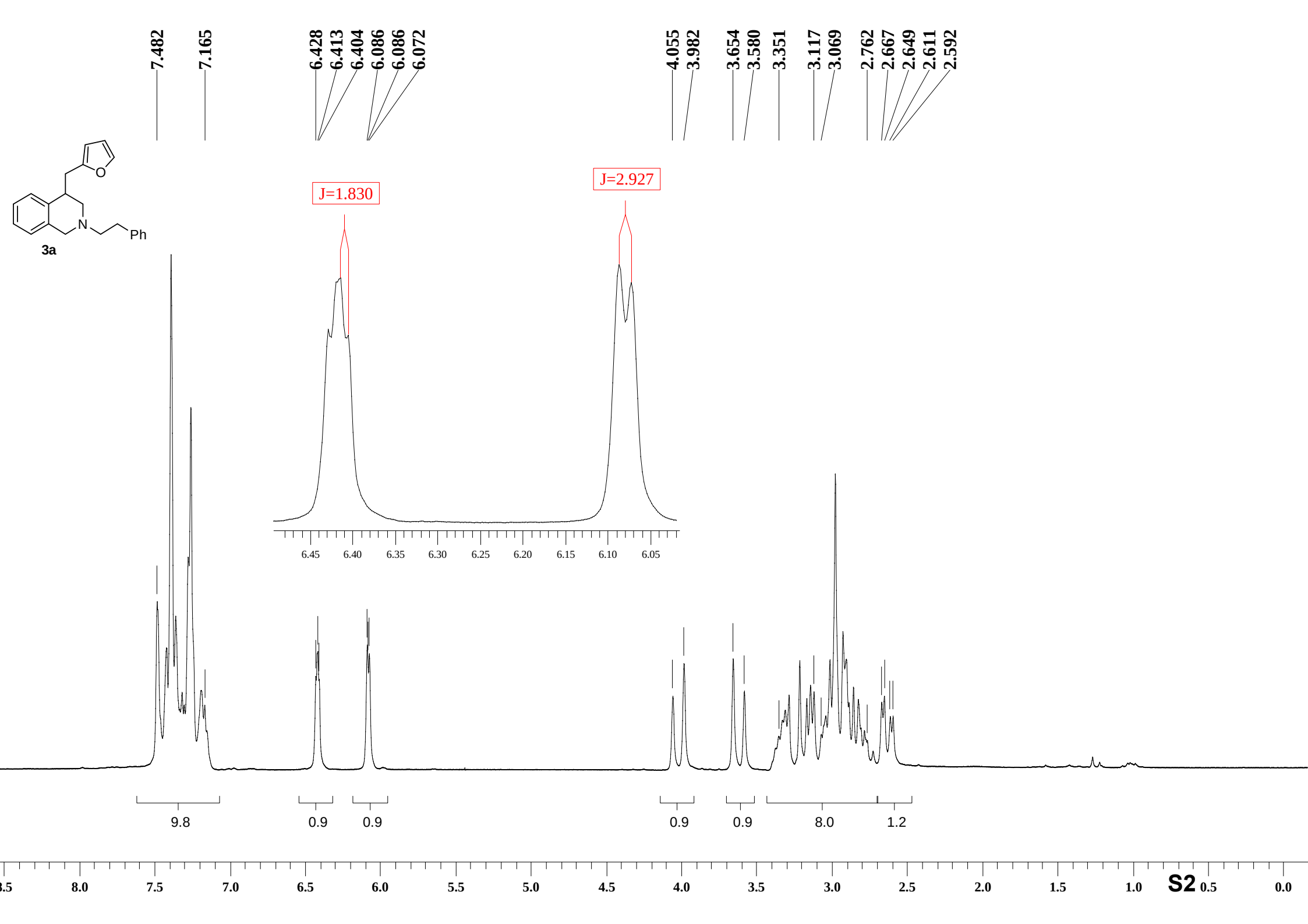
[†]*Université Mentouri-Constantine, Département de chimie, Laboratoire d'Obtention de Substances Thérapeutiques (LOST), 25000 Constantine, Algérie*
[‡]*UMR 6226 CNRS : Université de Rennes 1, Sciences Chimiques-Catalyse et Organométalliques, Campus de Beaulieu-35042 Rennes Cedex, France*
christian.bruneau@univ-rennes1.fr

TABLE OF CONTENTS

Table of contents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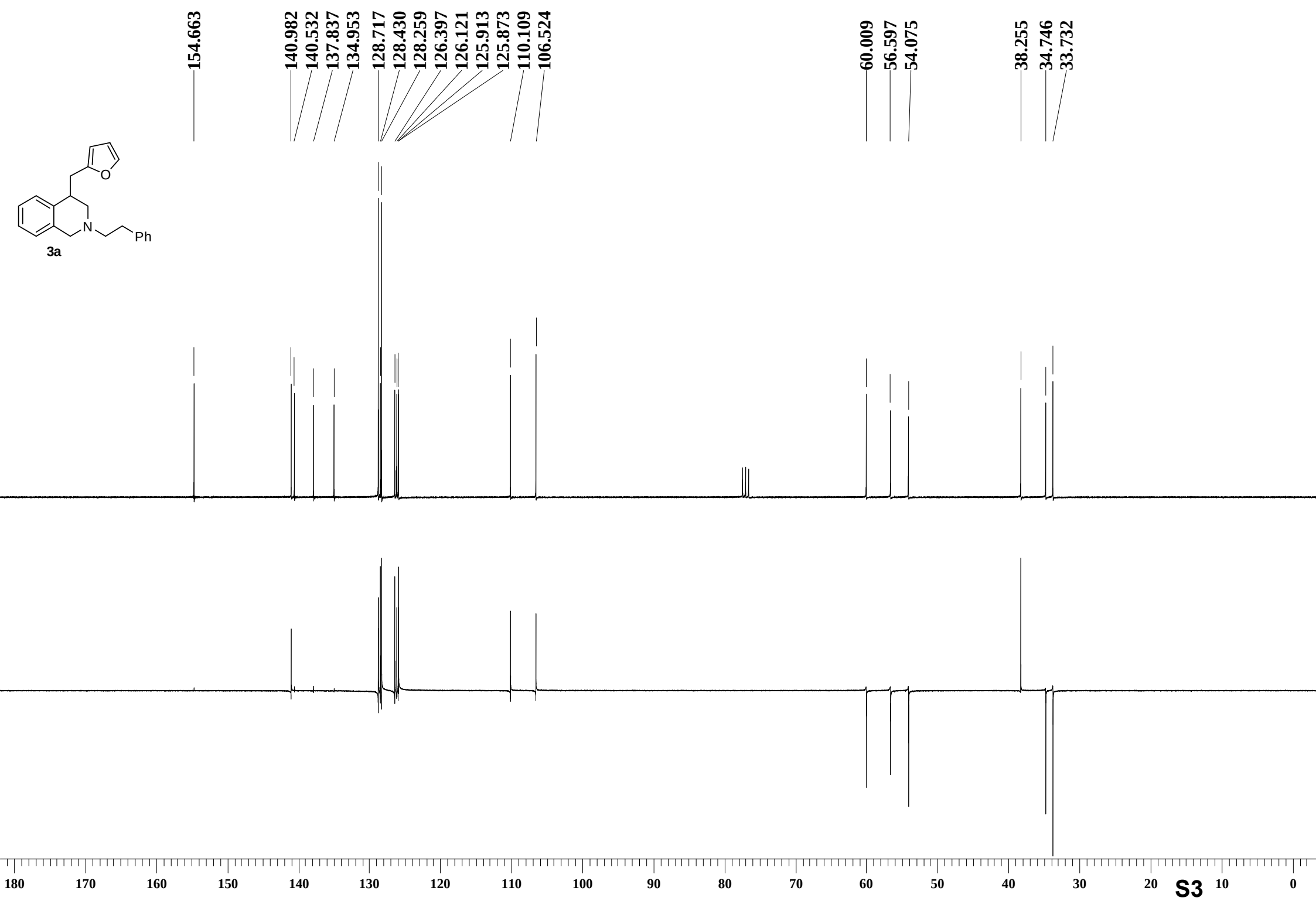
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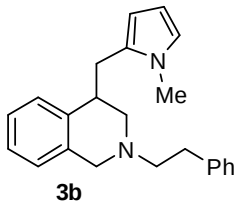

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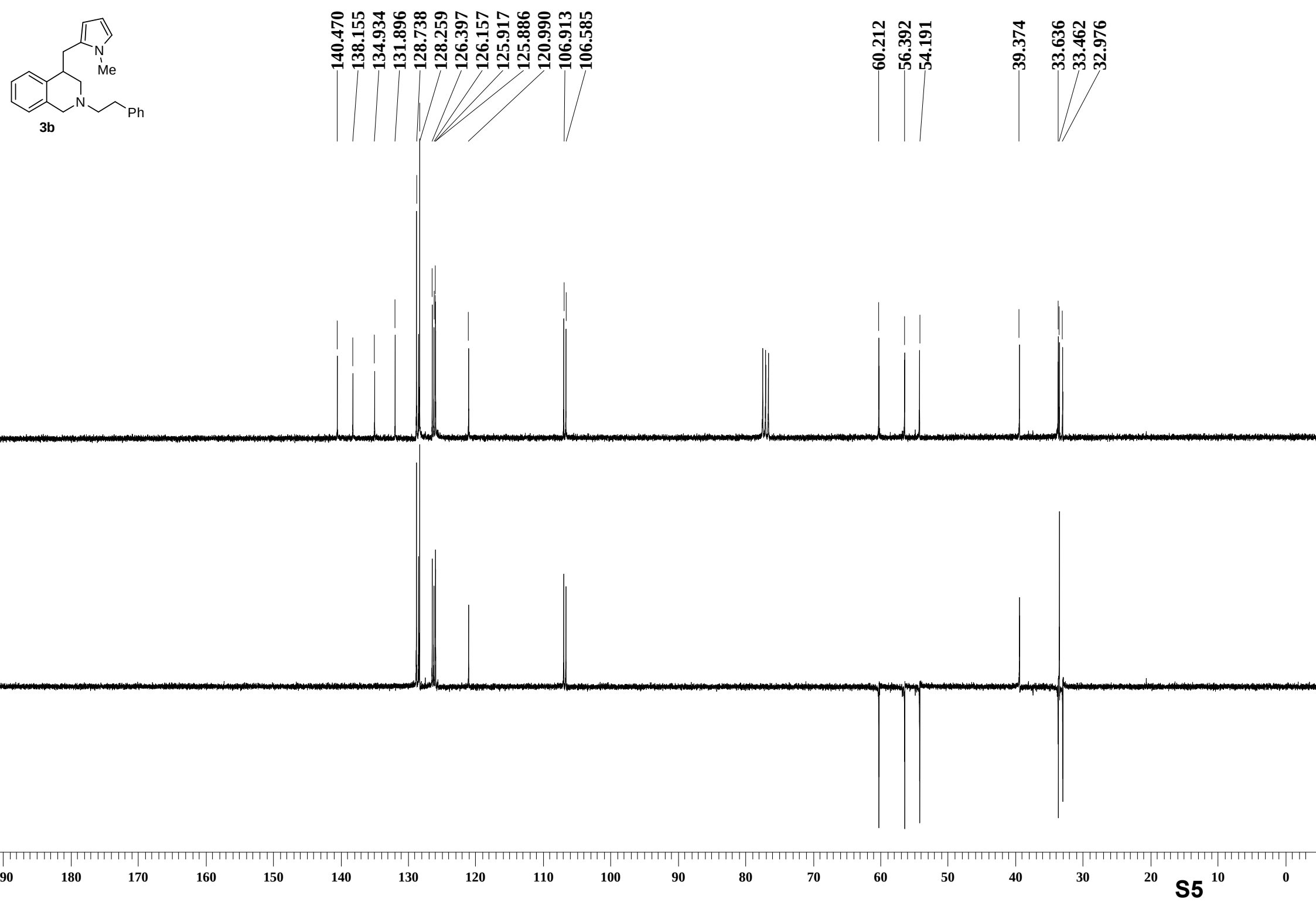
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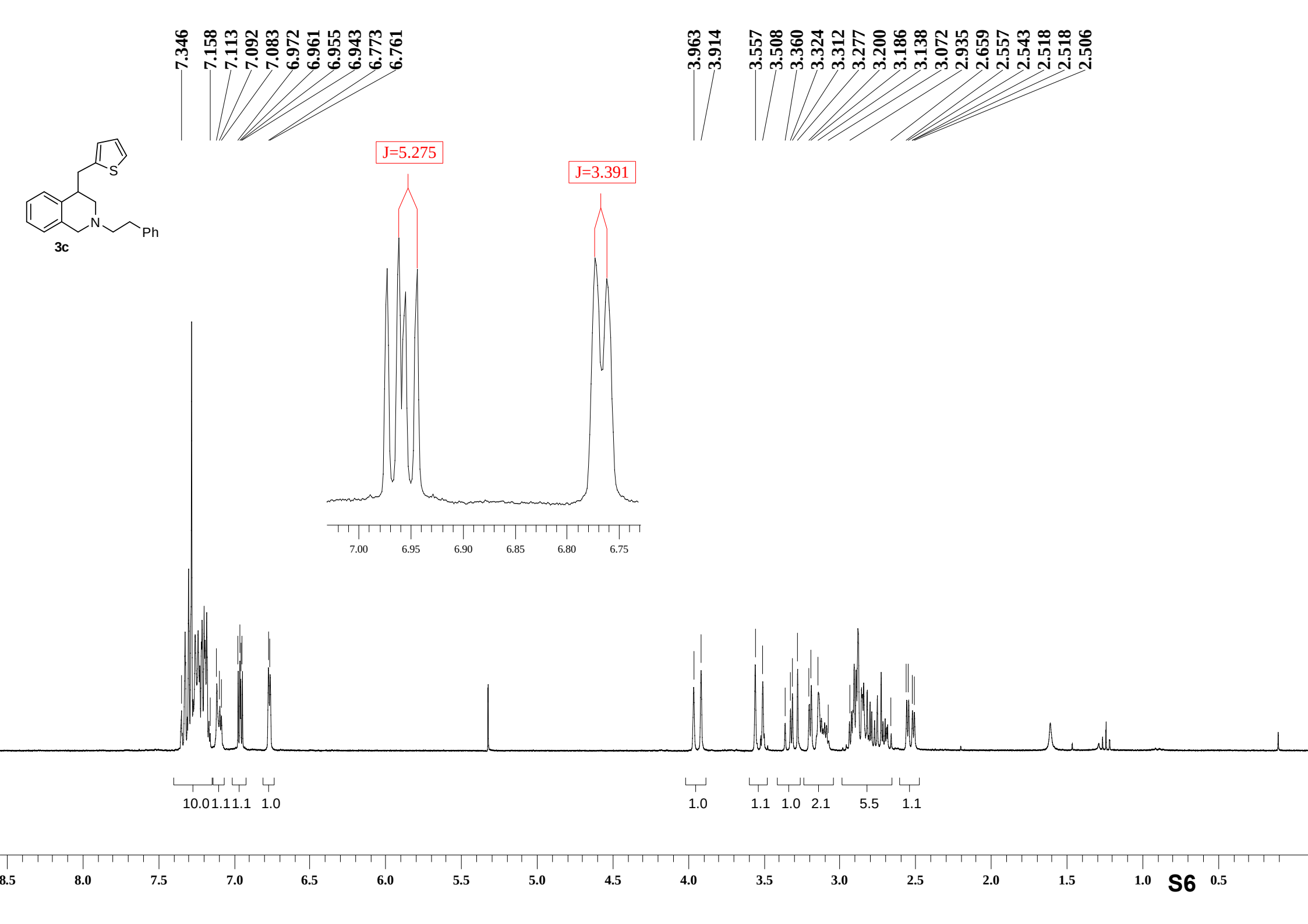
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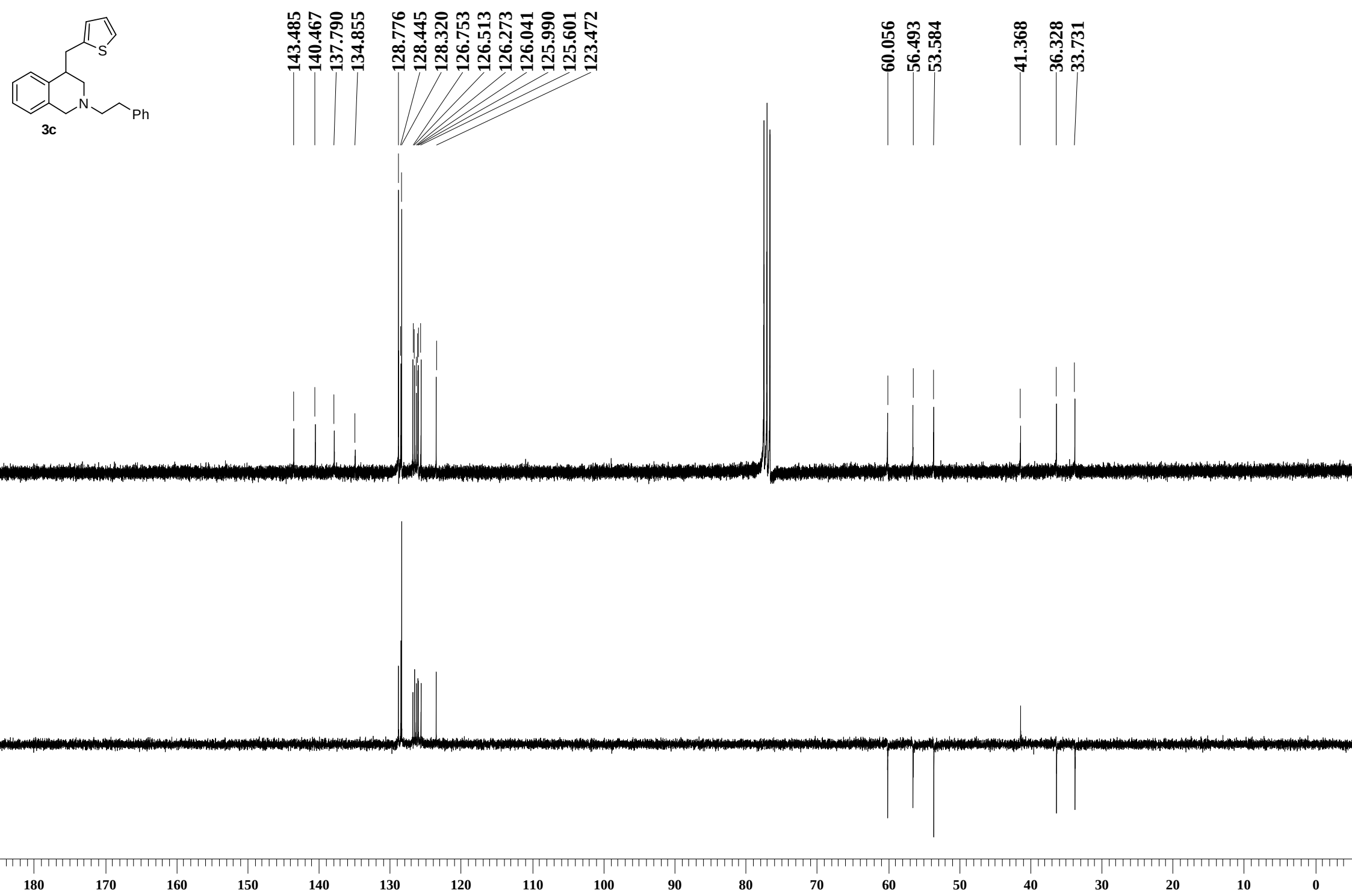
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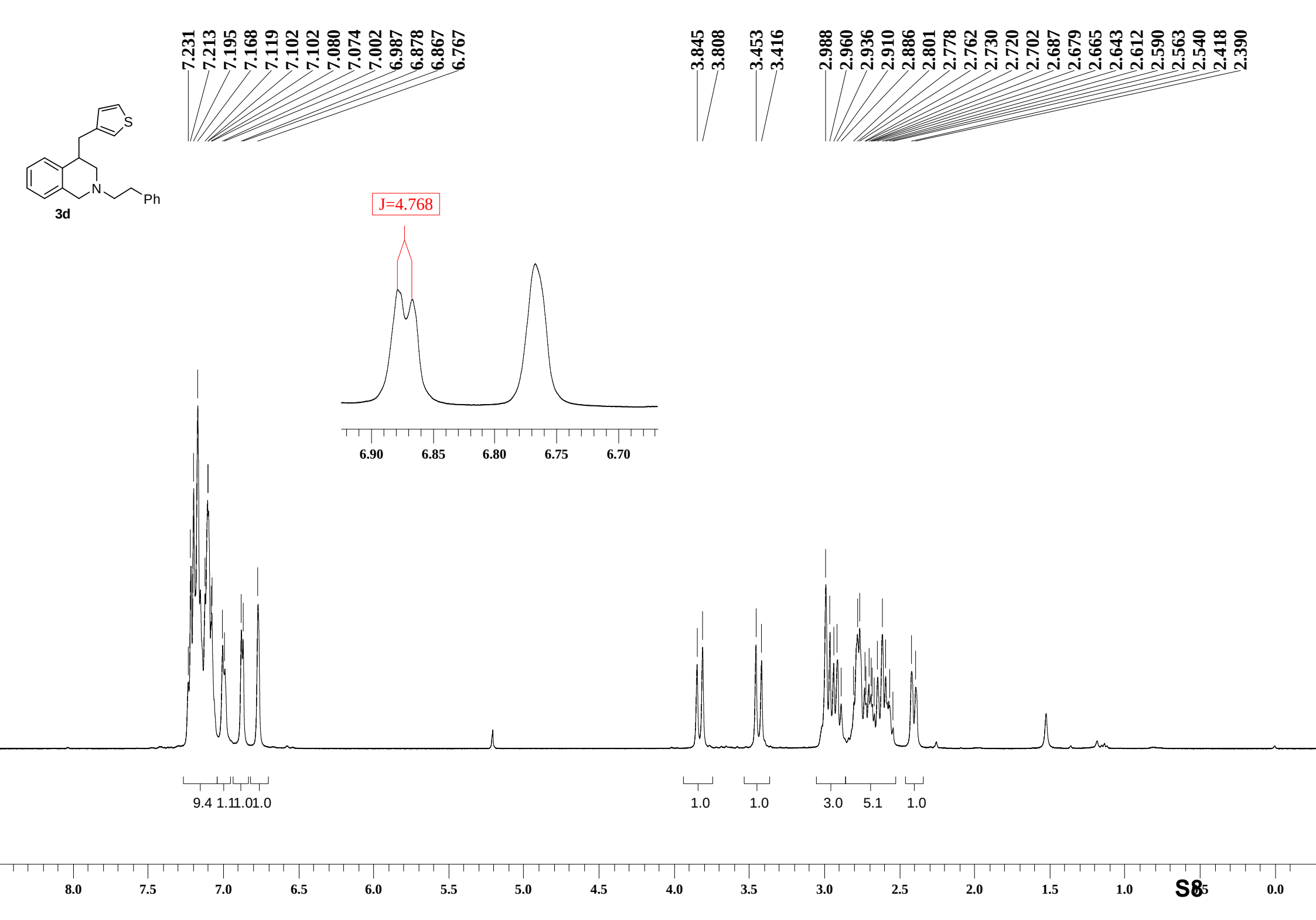
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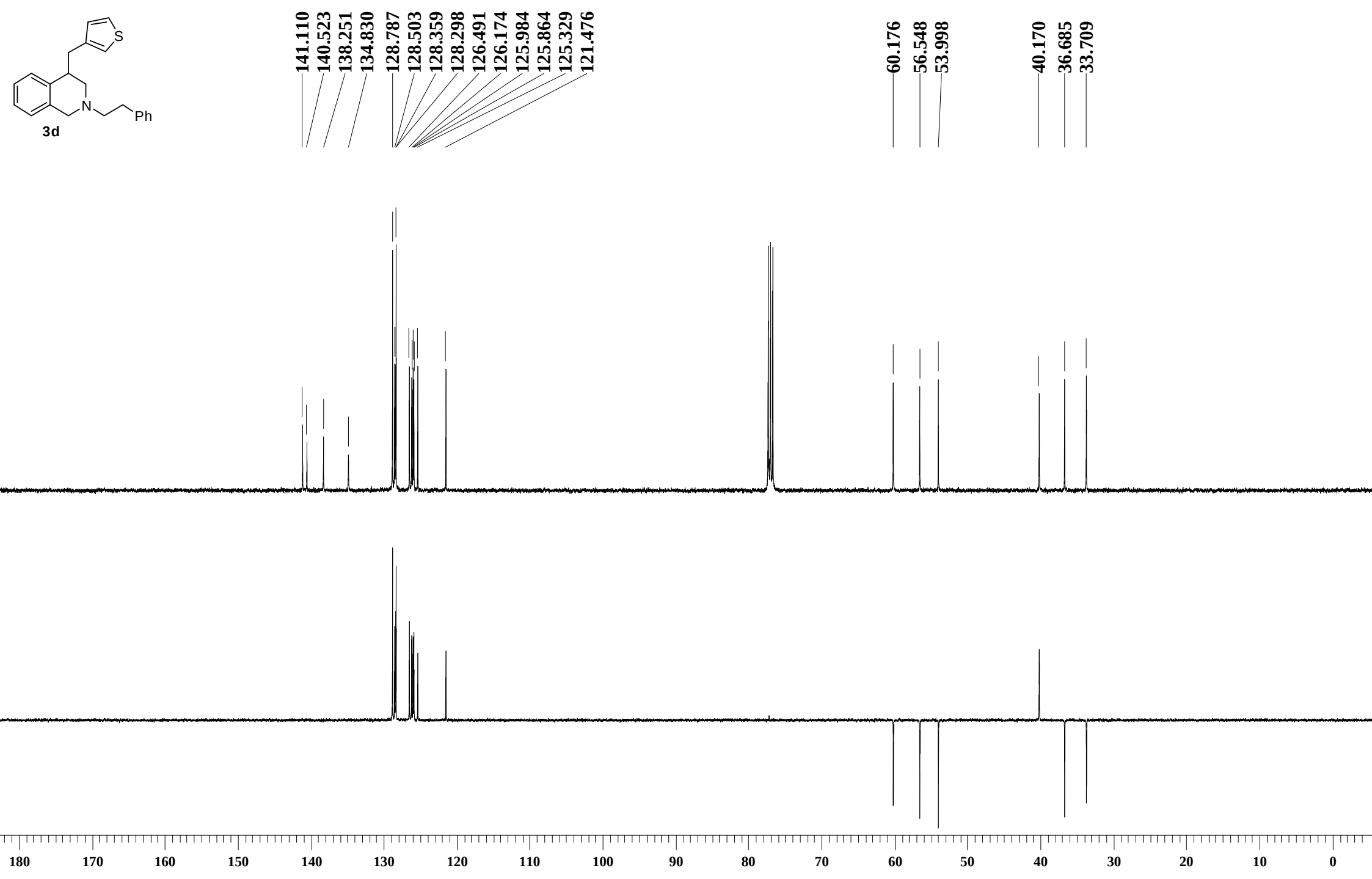
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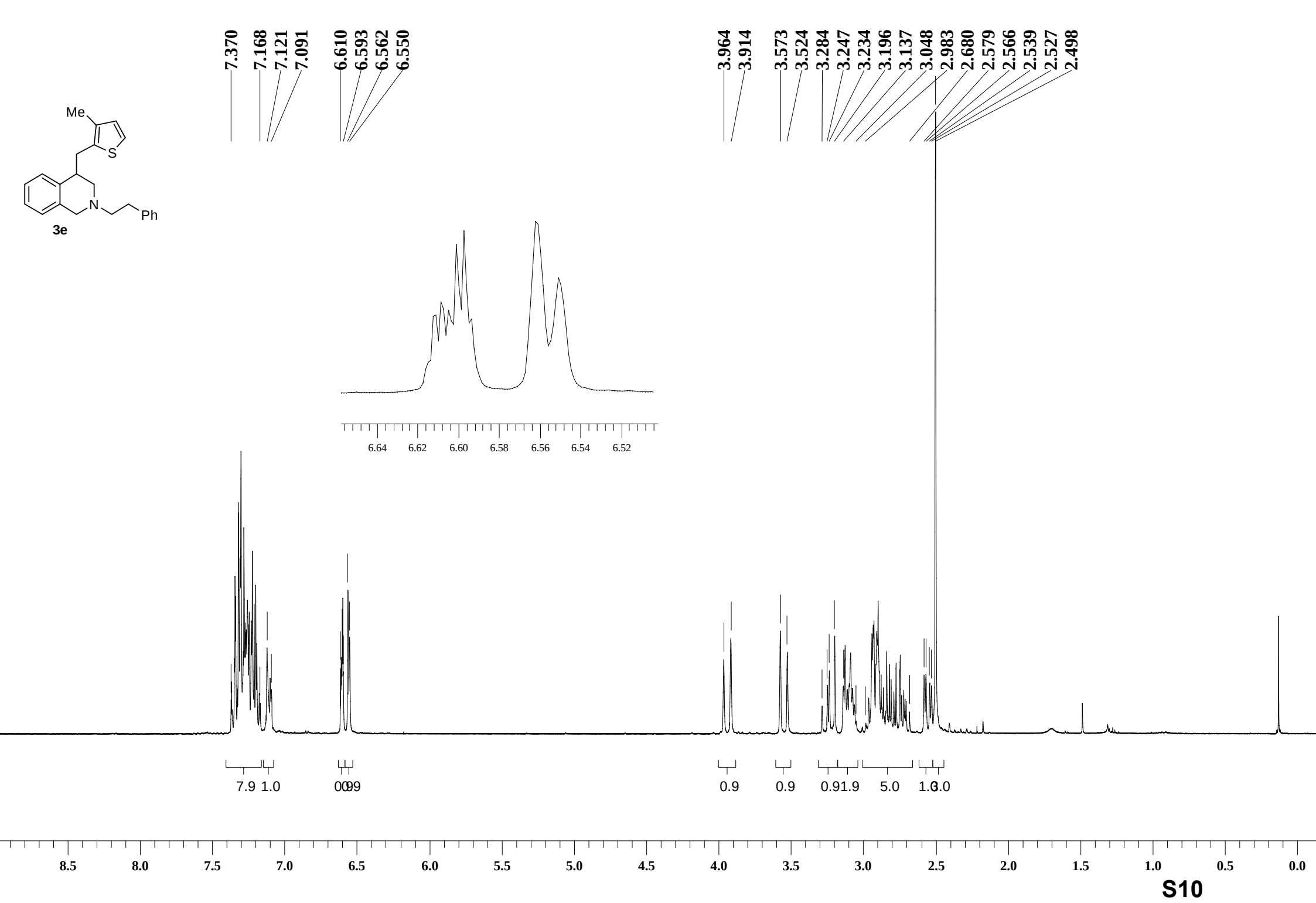
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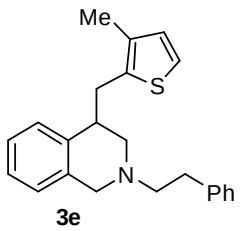

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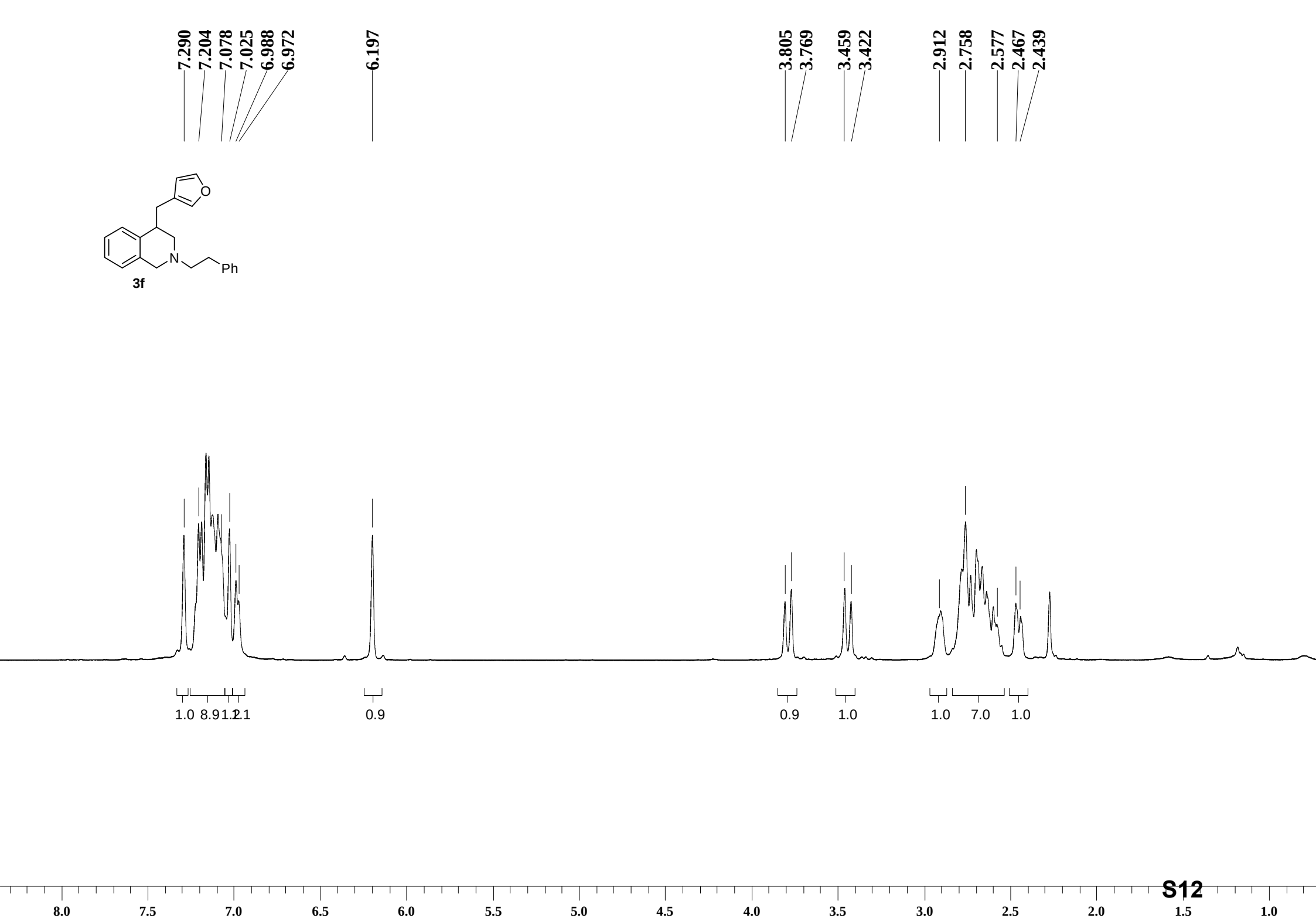
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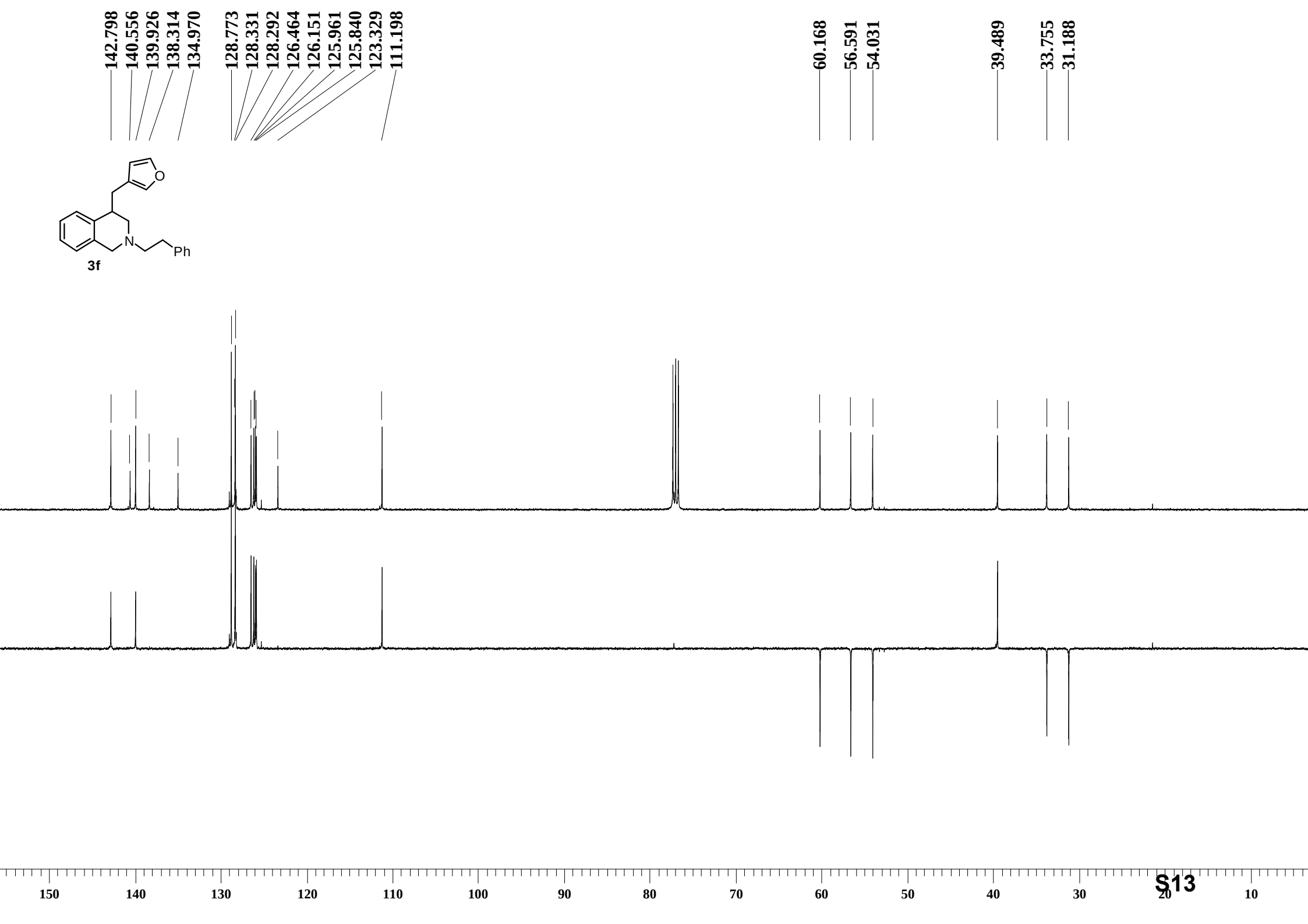
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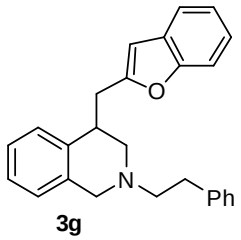

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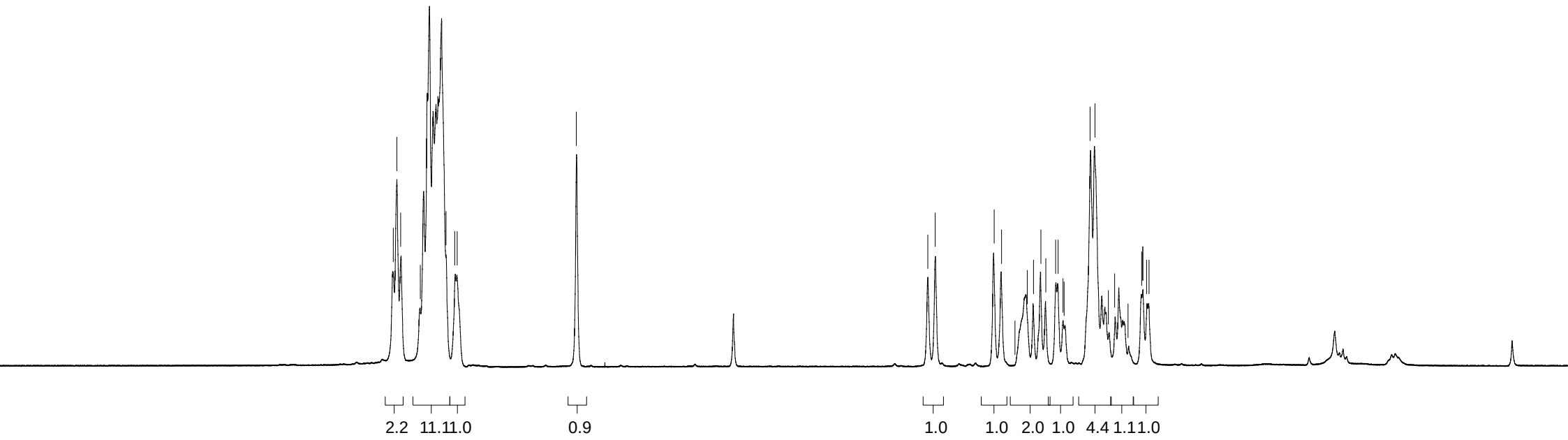

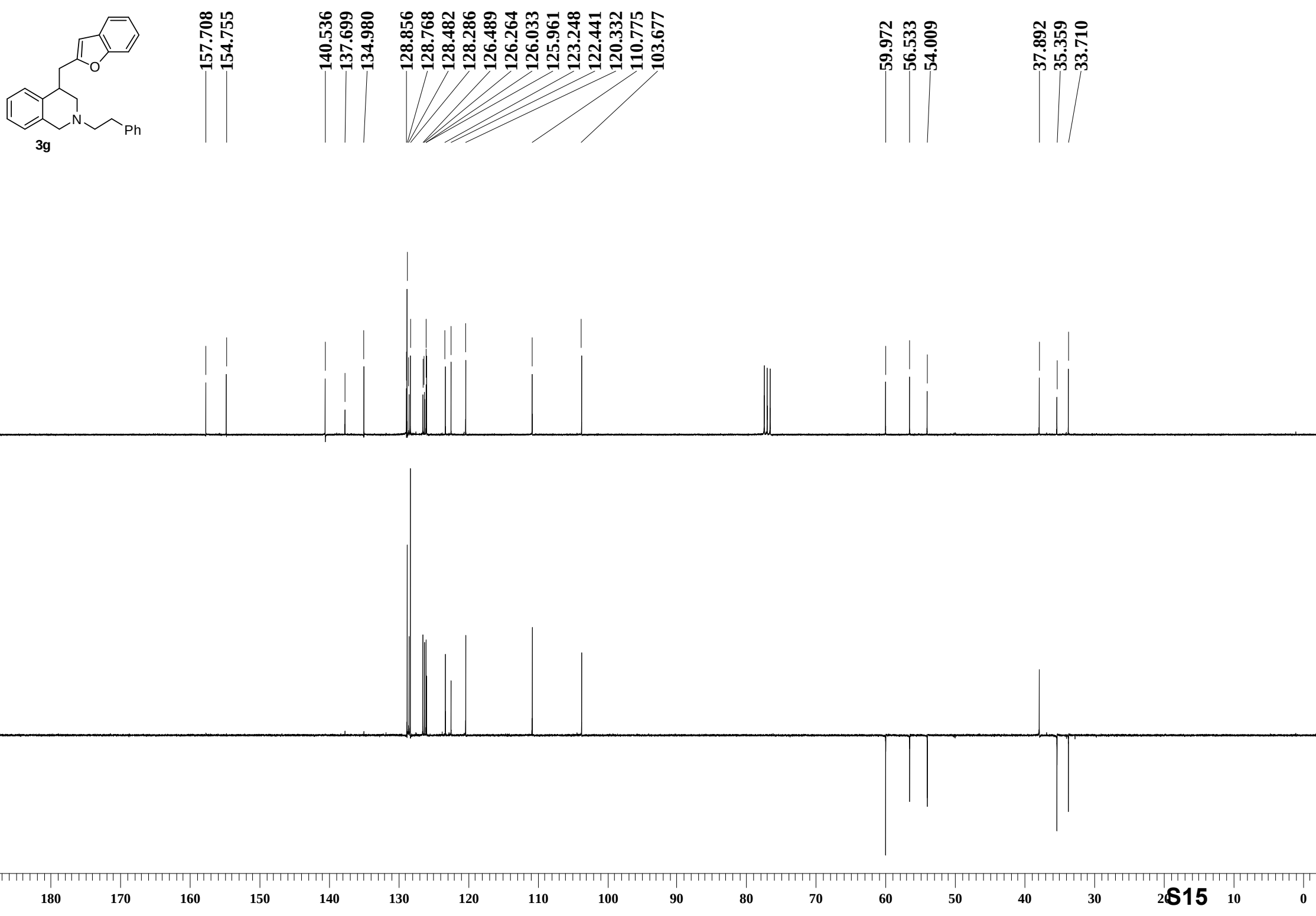
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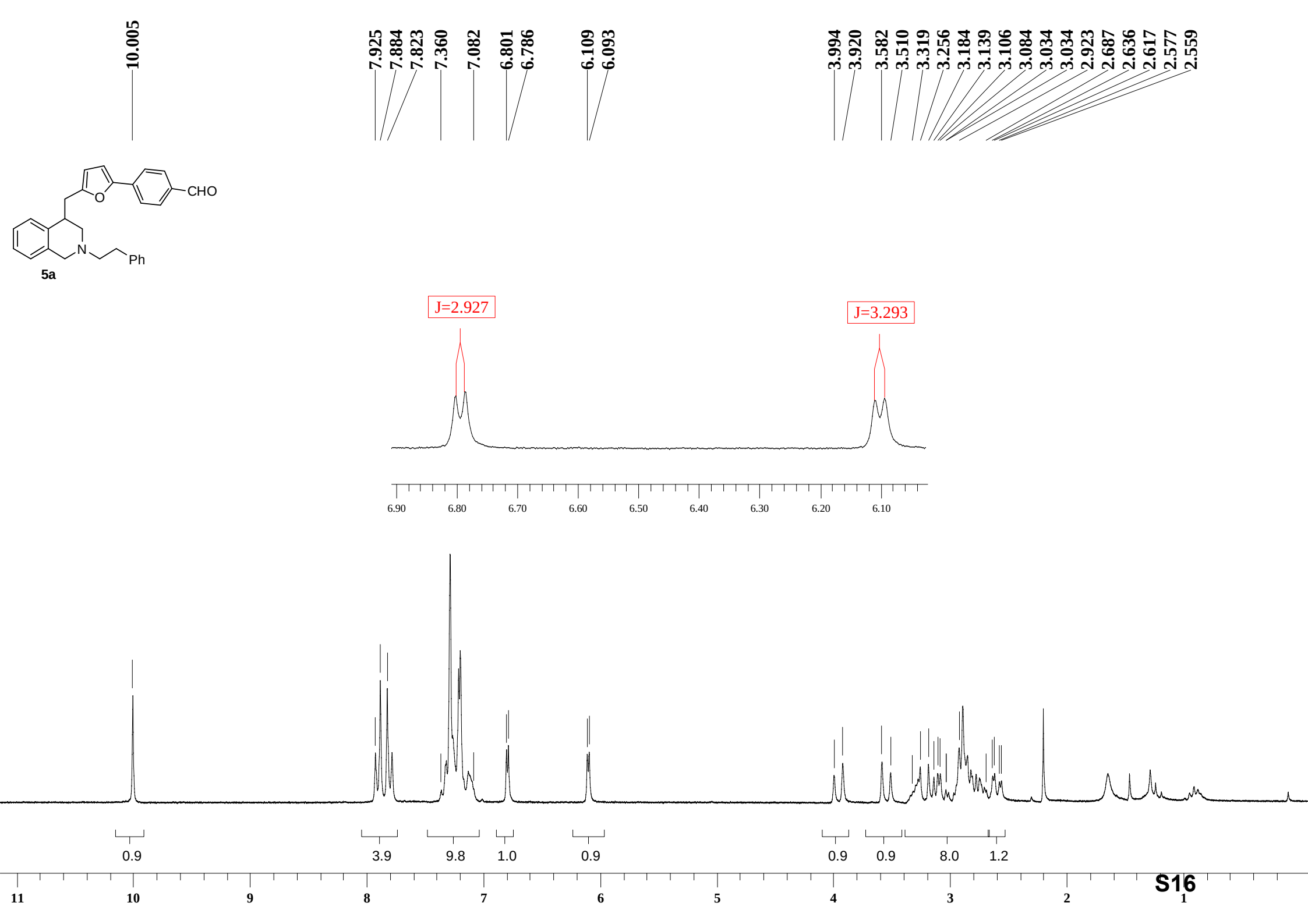
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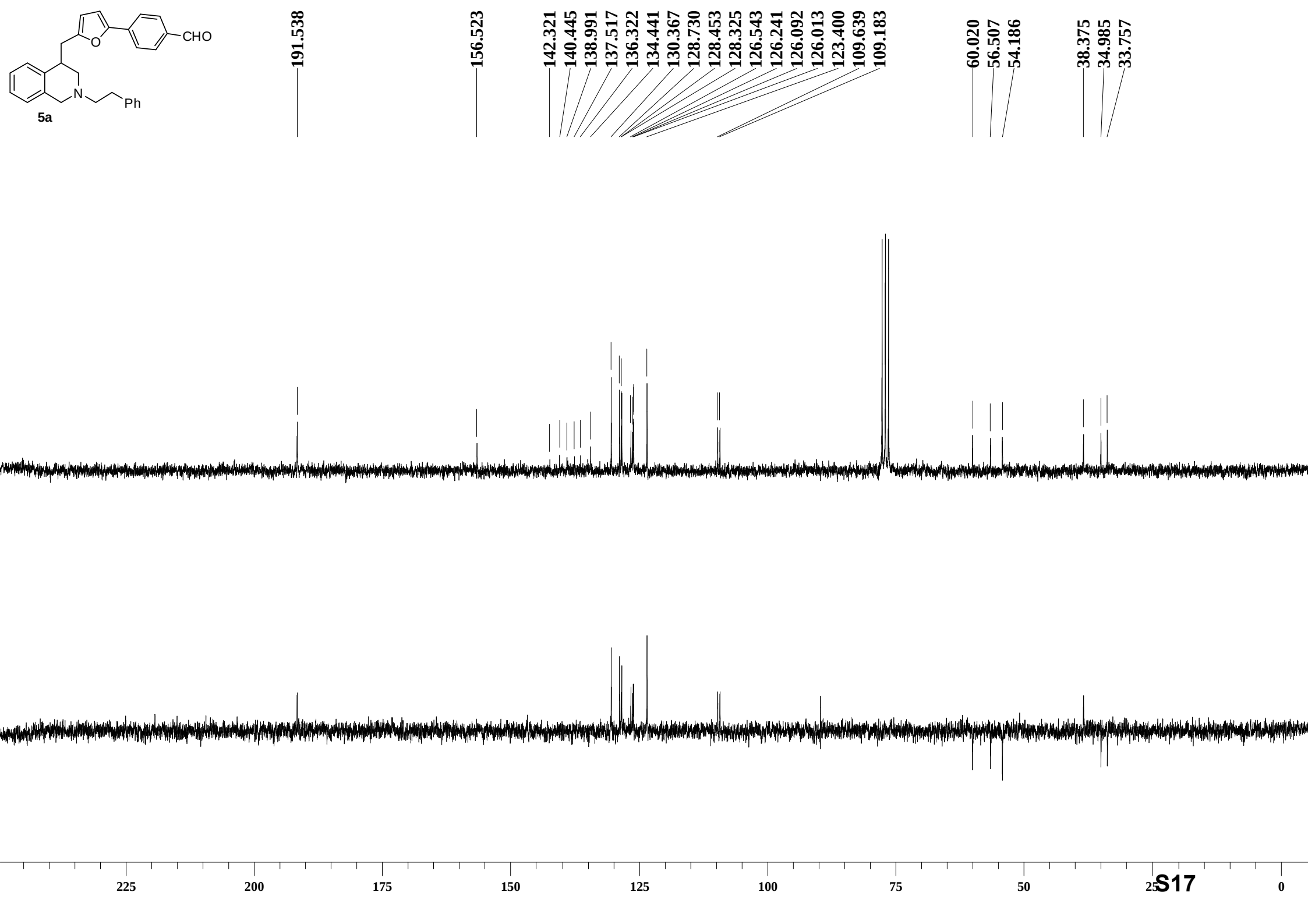
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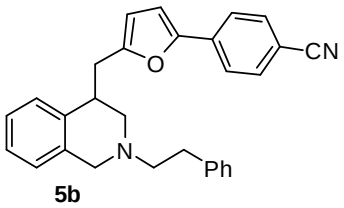

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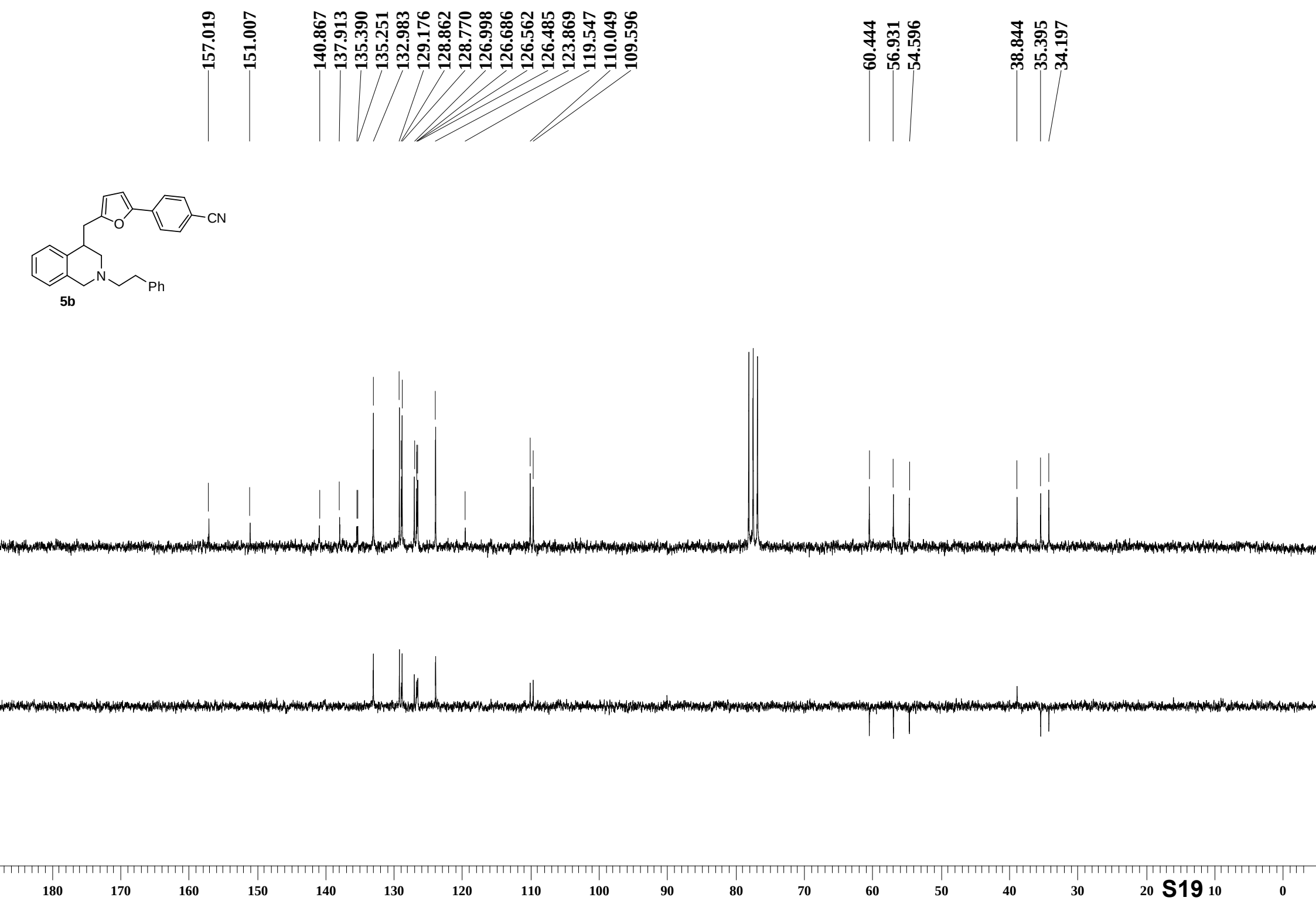
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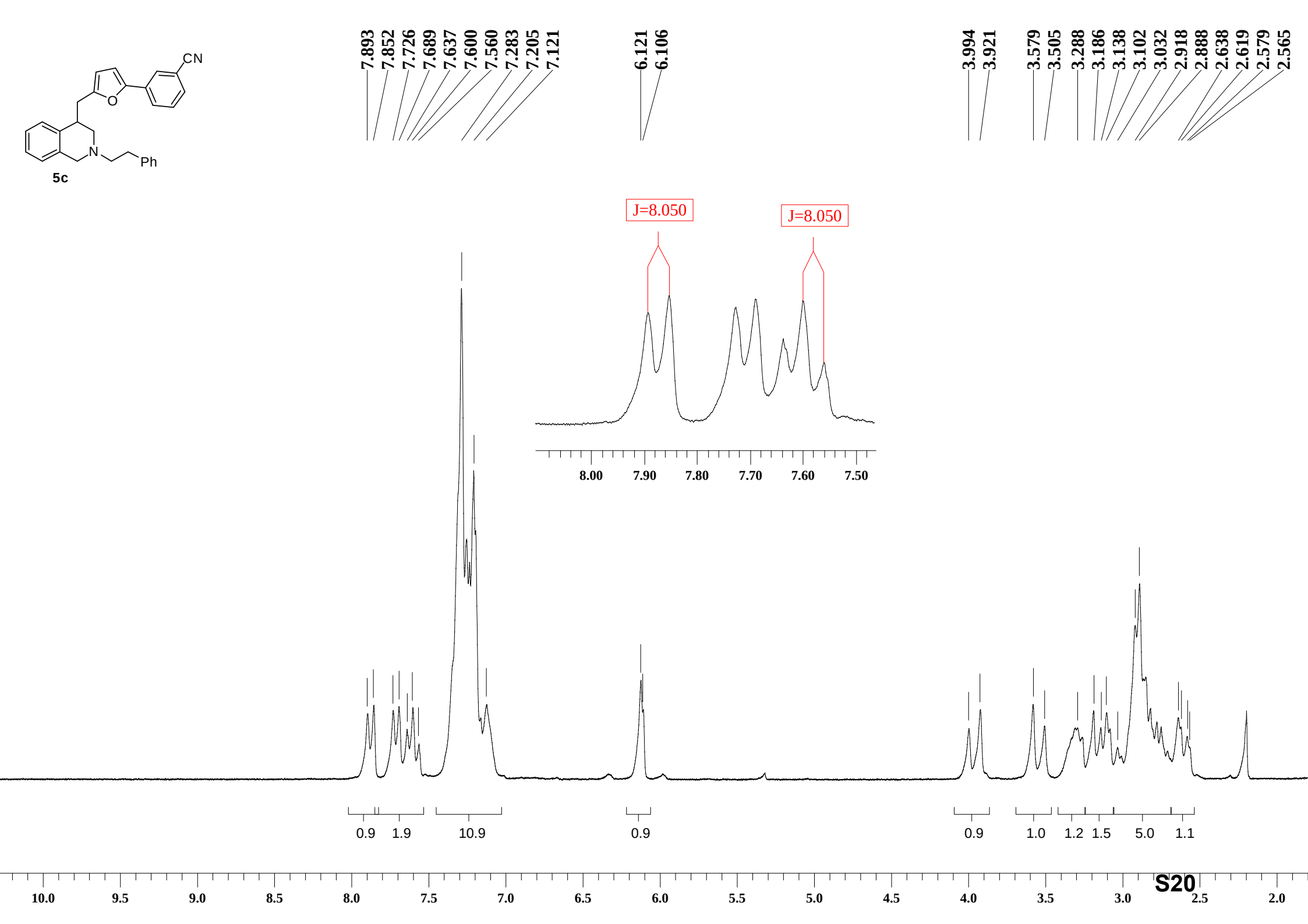
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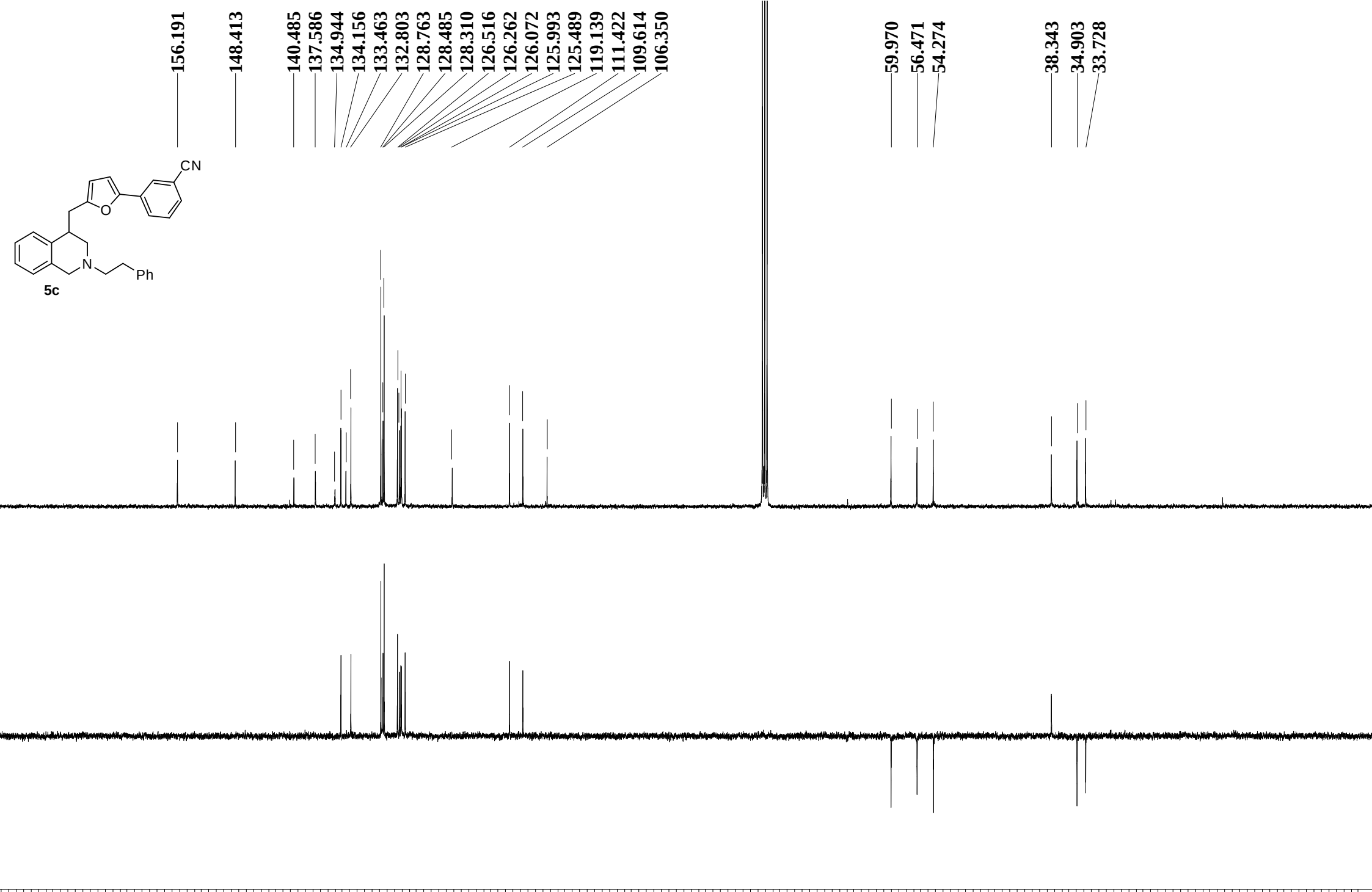
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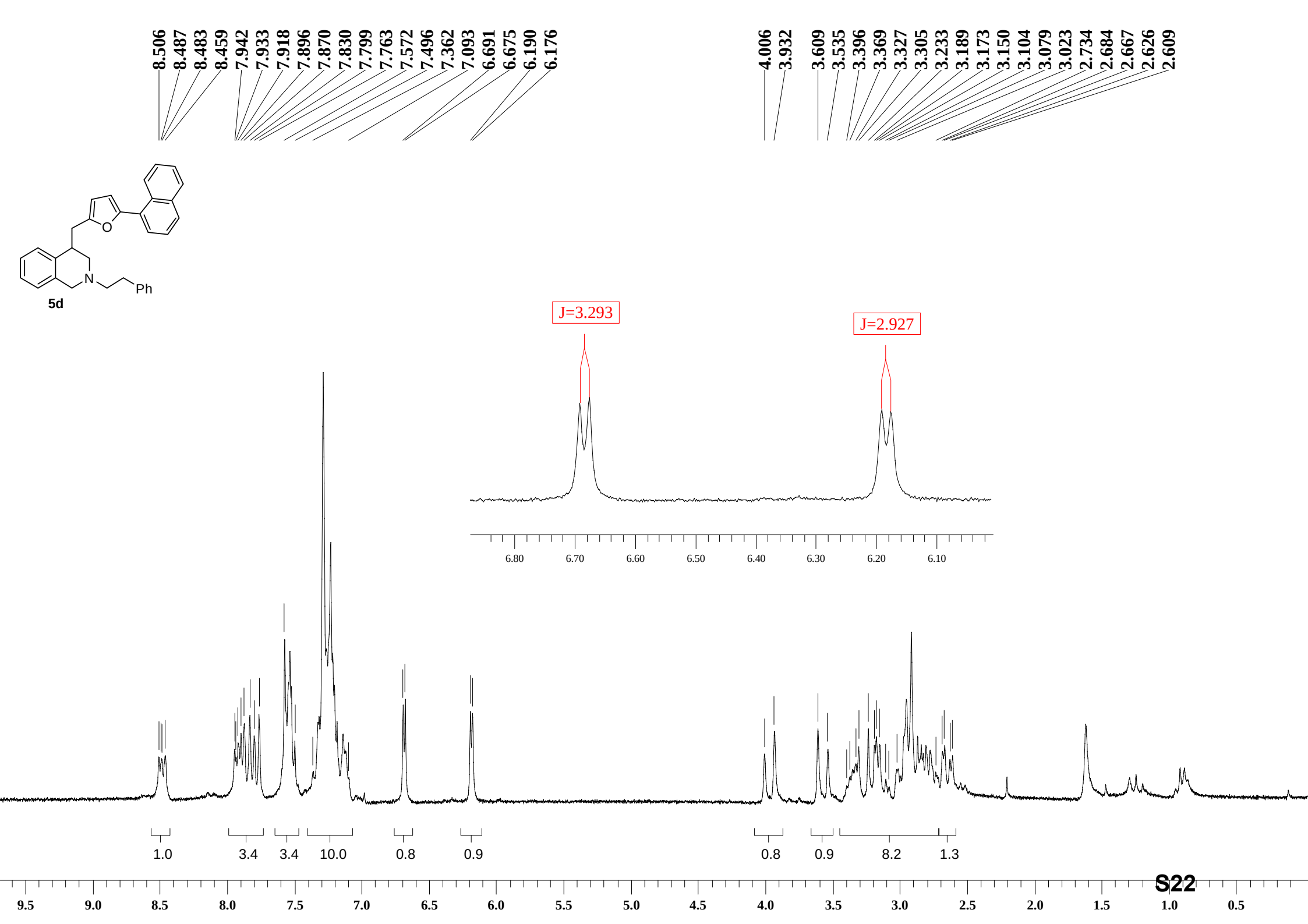
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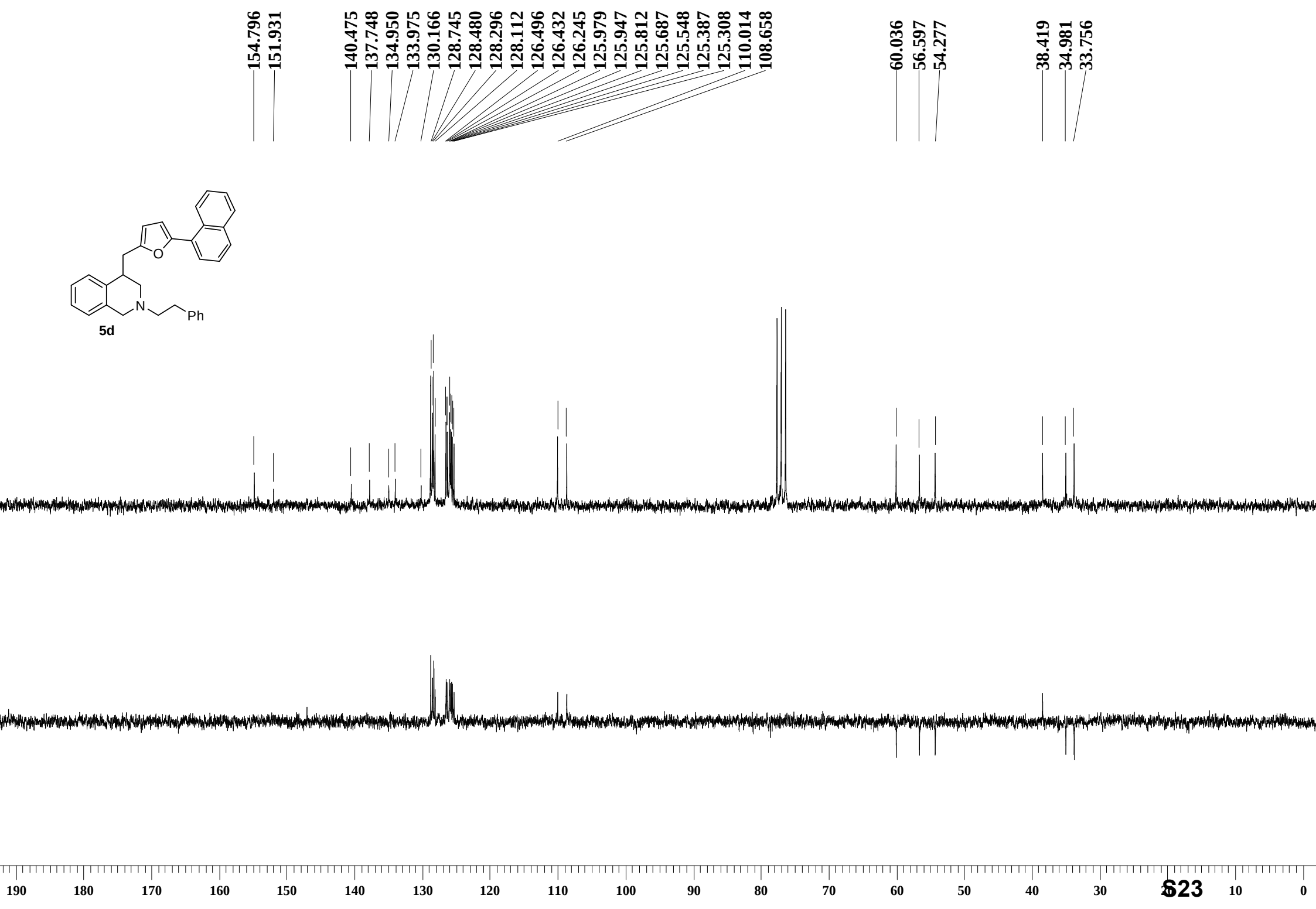
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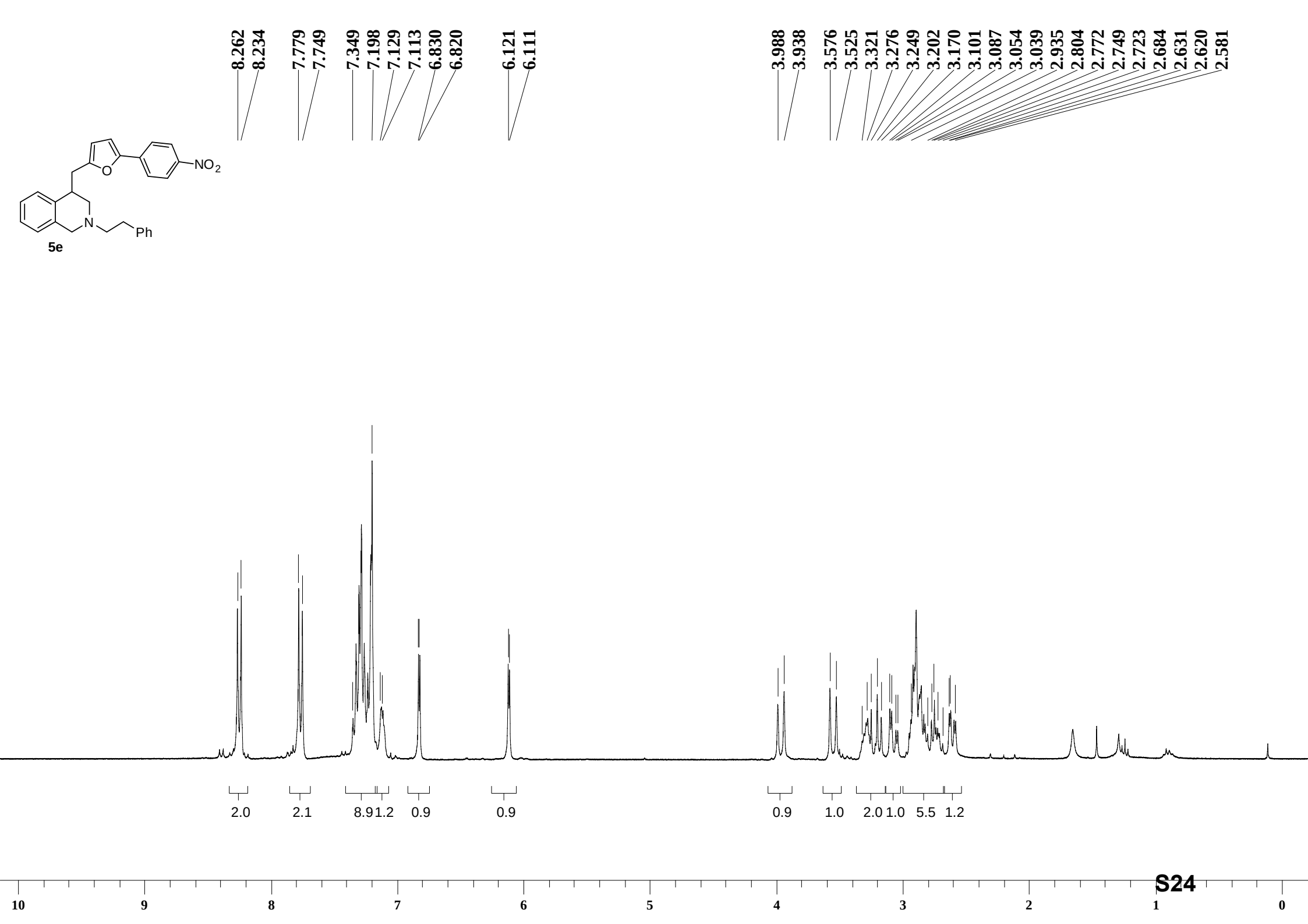
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3.039
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2.620
2.581
NO2
O
N
Ph
5e
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2.1
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0.9
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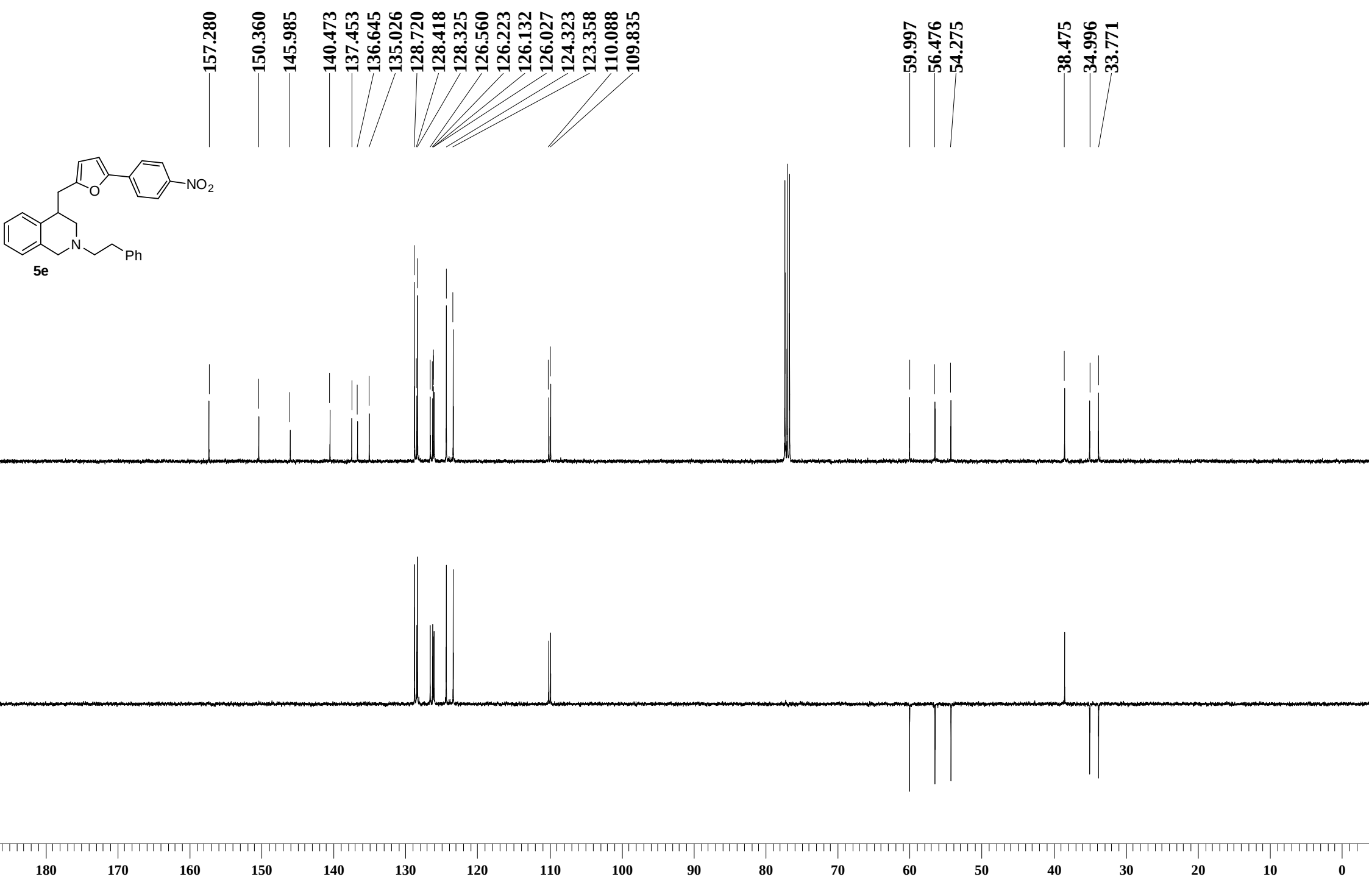
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126.132
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109.835
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56.476
54.275
38.475
34.996
33.771
O
NO2
N
Ph
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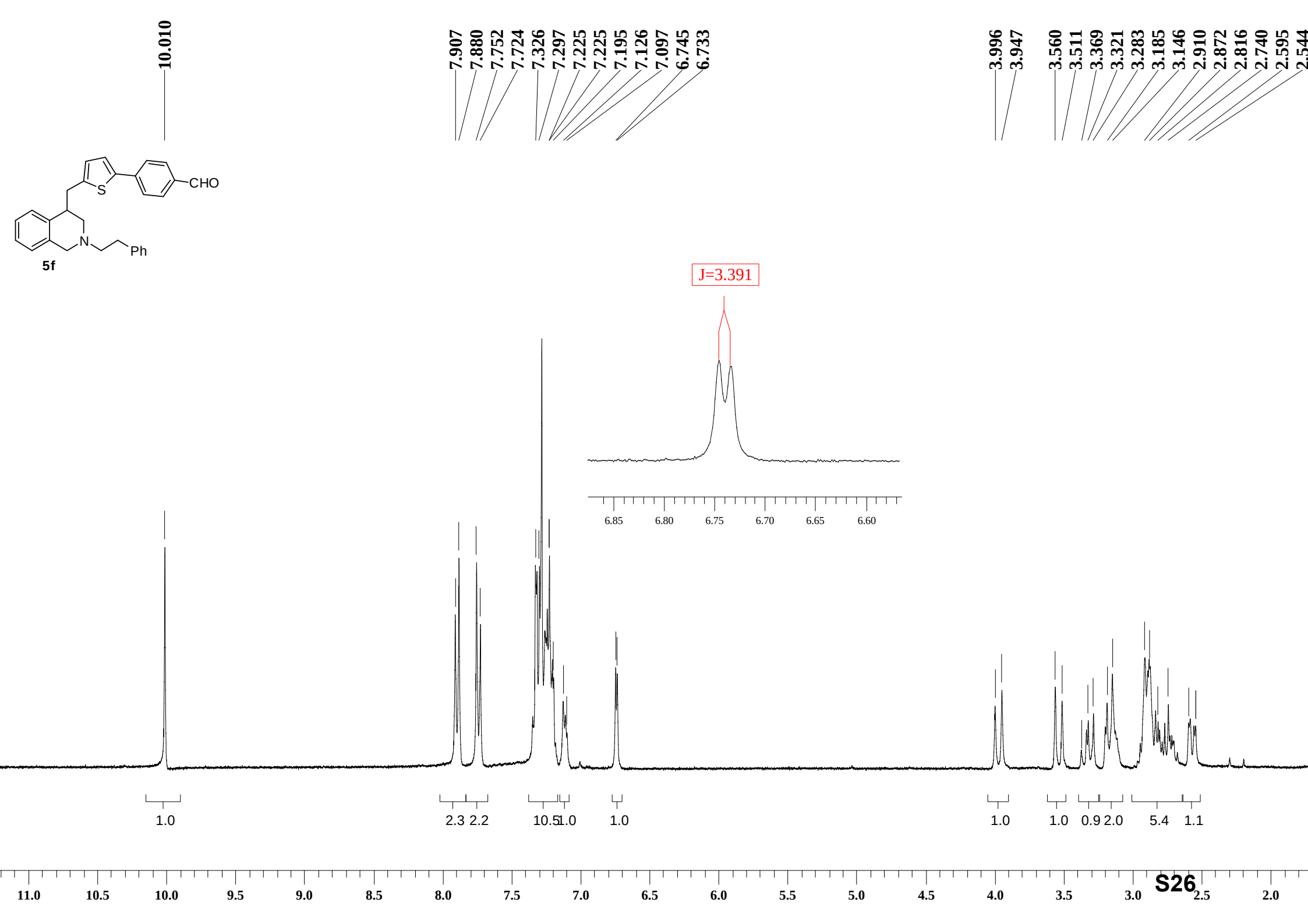
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3.185
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2.816
2.740
2.595
2.544
S
CHO
N
Ph
5f
J=3.391
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6.70
6.65
6.60
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2.2
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1.0
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2.0
5.4
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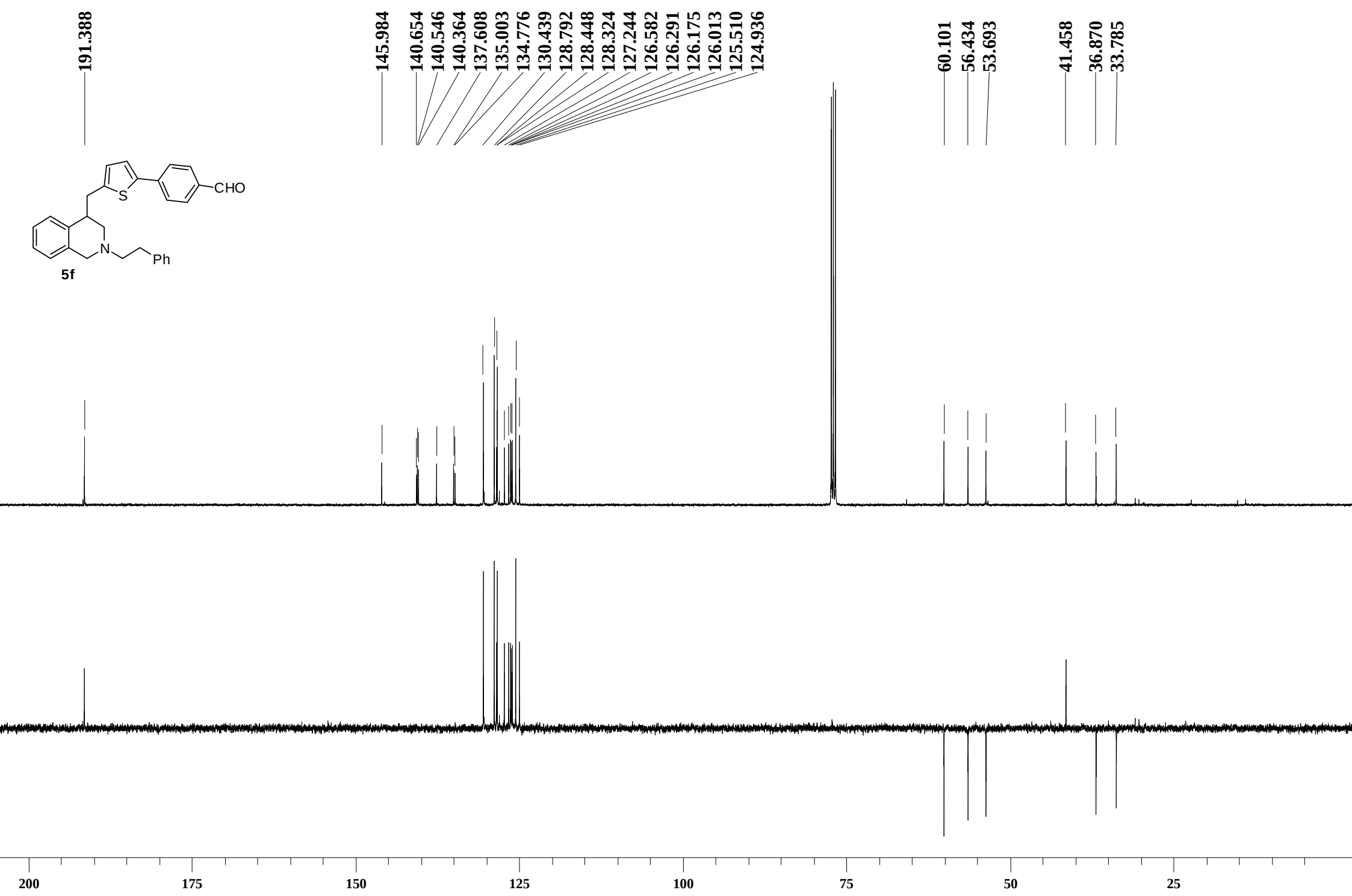
2.0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CHO
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Ph
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75
50
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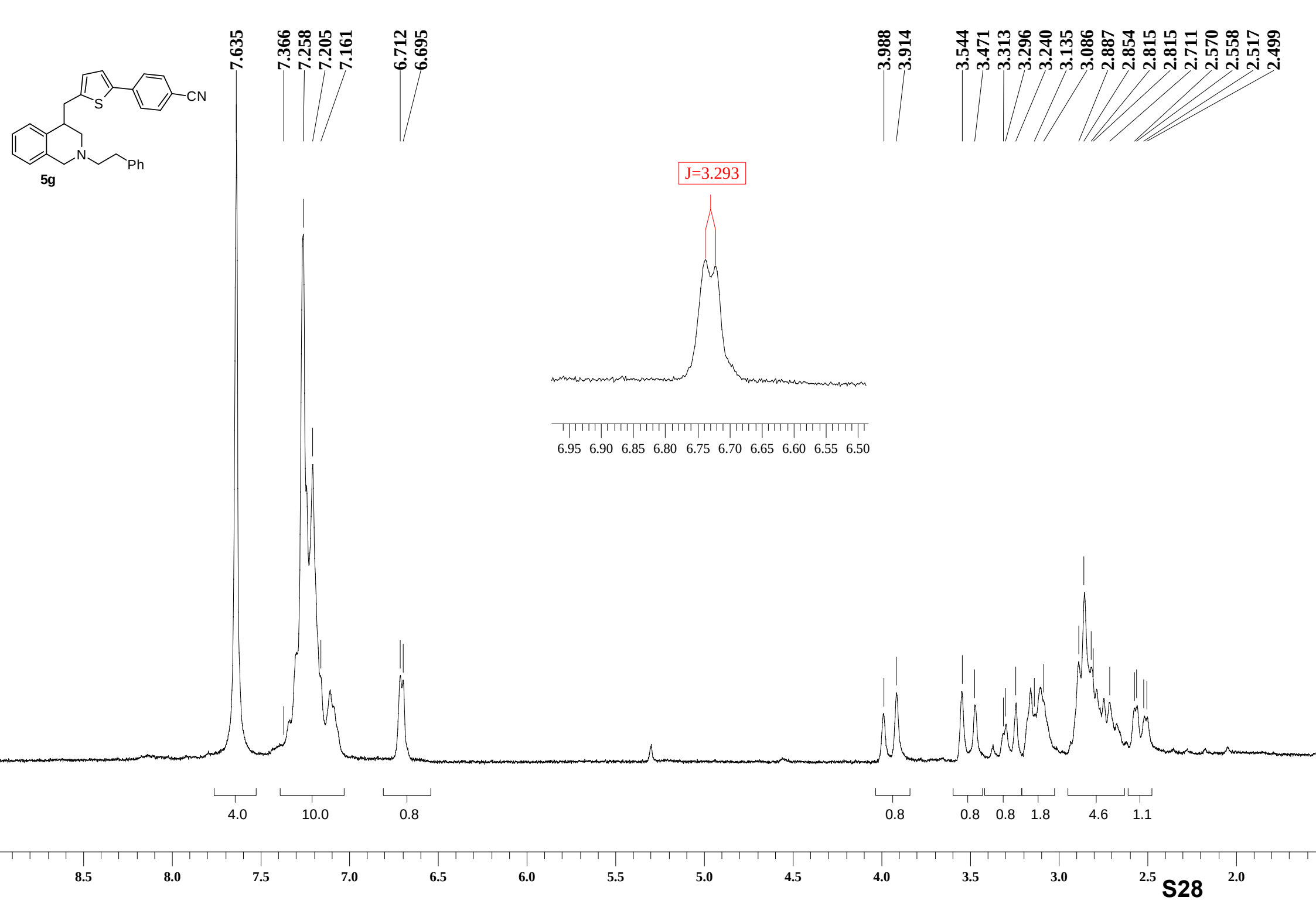
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3.296
3.240
3.135
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2.887
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2.815
2.815
2.711
2.570
2.558
2.517
2.499
S
CN
N
Ph
5g
J=3.293
6.95 6.90 6.85 6.80 6.75 6.70 6.65 6.60 6.55 6.50
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10.0
0.8
0.8
0.8
0.8
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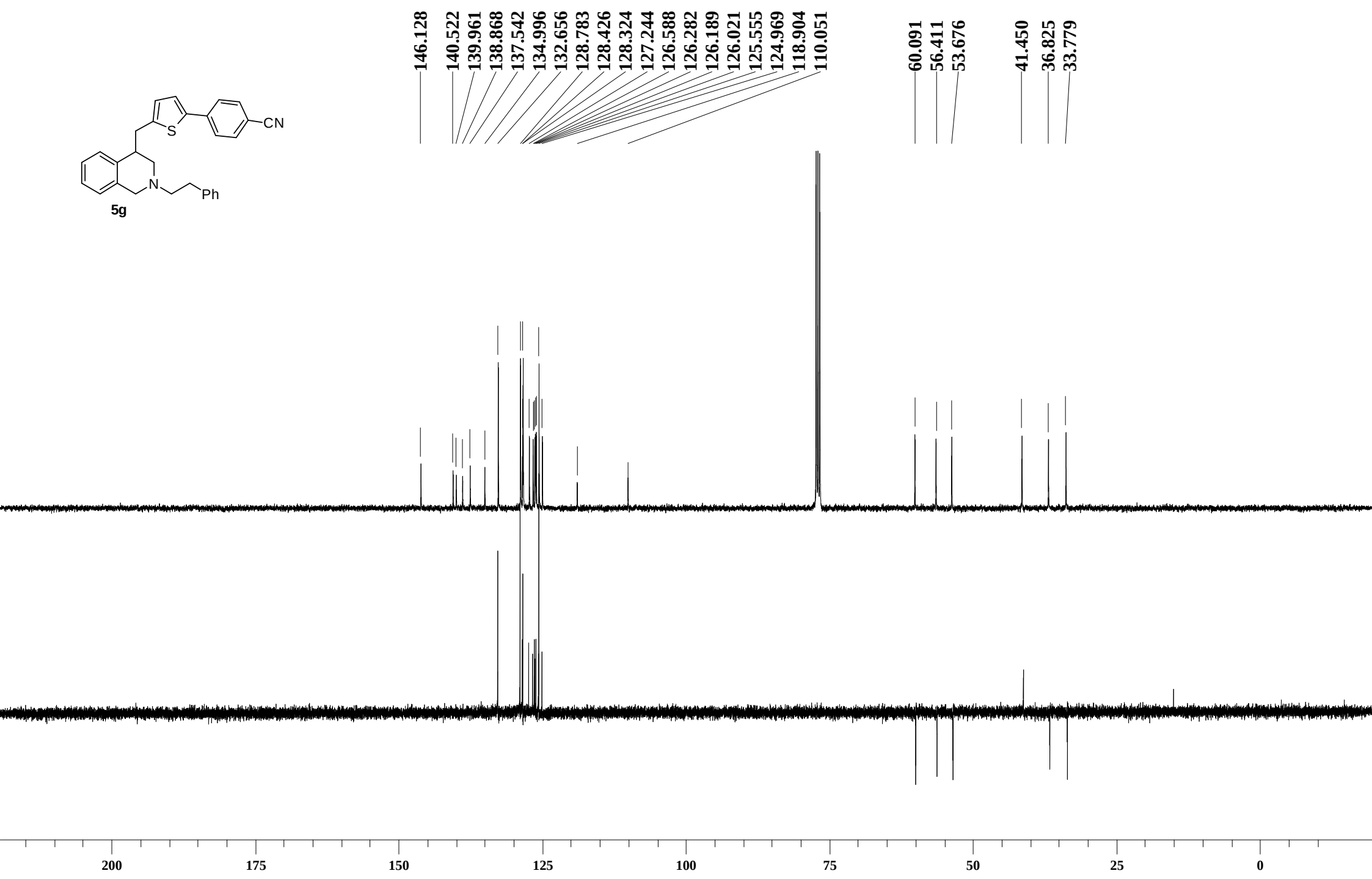
4.6
1.1
8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0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125.555
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118.904
110.051
60.091
56.411
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33.779
S
CN
N
Ph
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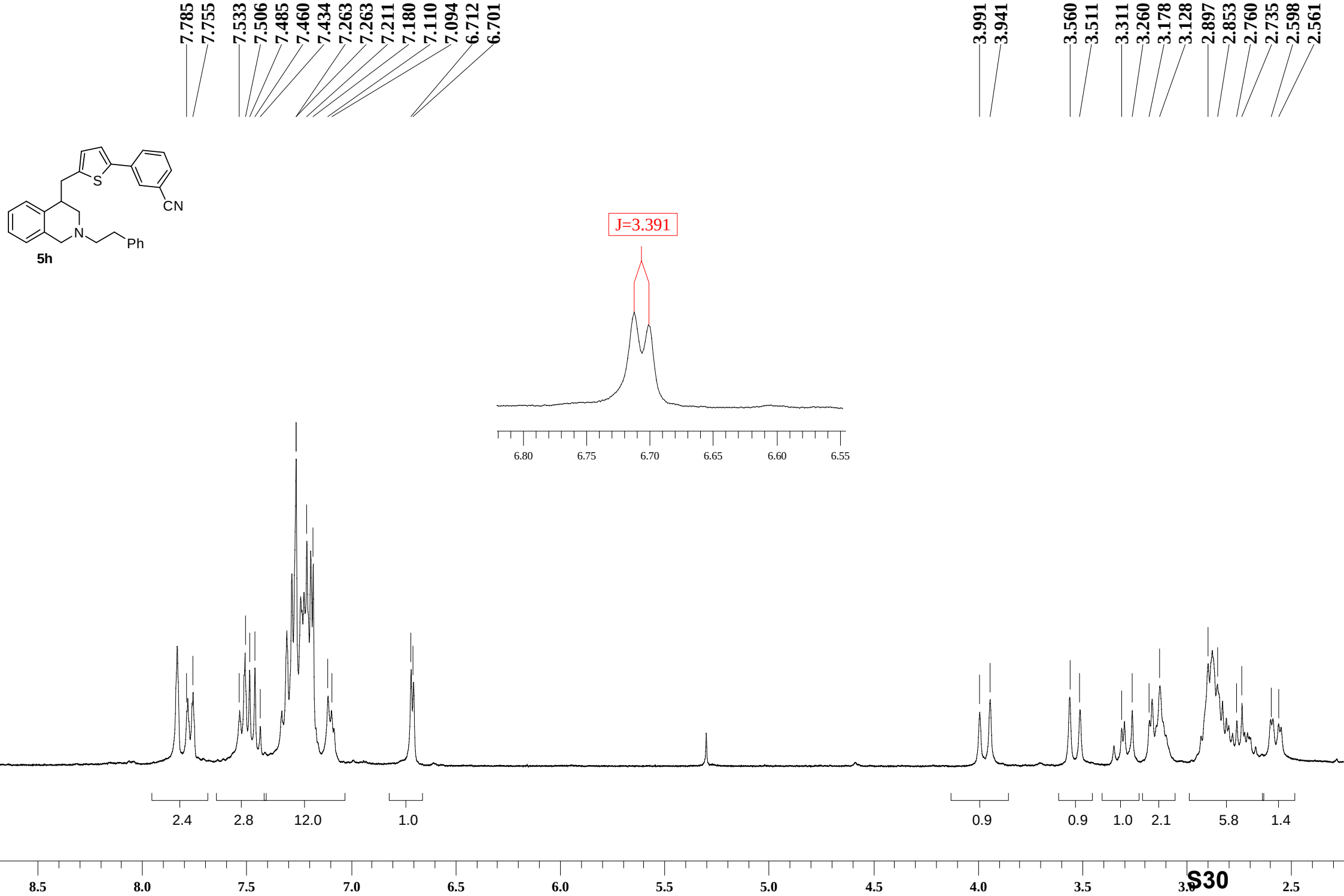
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7.110
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6.712
6.701
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3.941
3.560
3.511
3.311
3.260
3.178
3.128
2.897
2.853
2.760
2.735
2.598
2.561
S
CN
N
Ph
5h
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6.70
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6.60
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0.9
1.0
2.1
5.8
1.4
8.5
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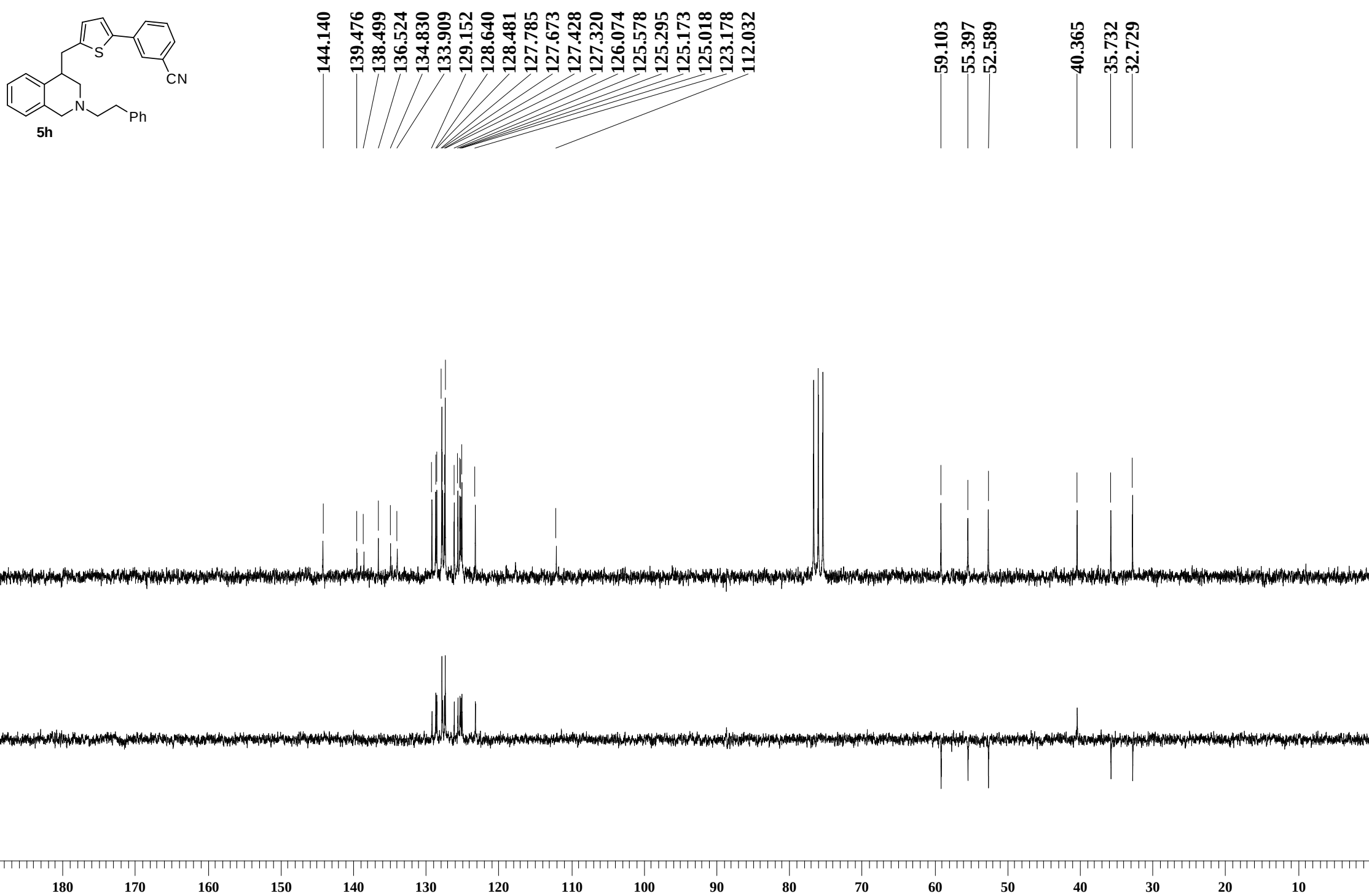
2.5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CN
N
Ph
5h
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125.578
125.295
125.173
125.018
123.178
112.032
59.103
55.397
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40.365
35.732
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150
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130
120
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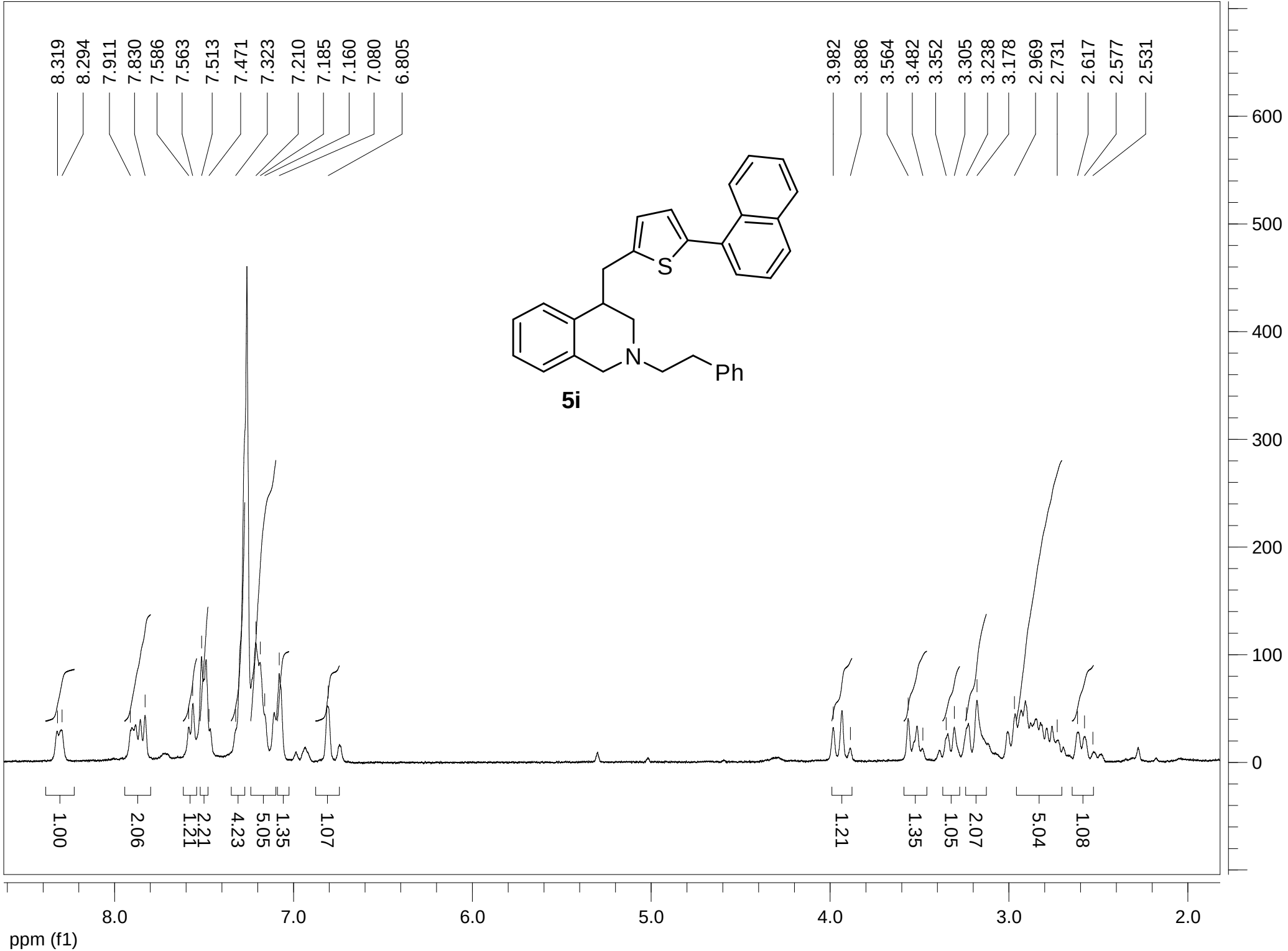
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7.185
7.160
7.080
6.805
3.982
3.886
3.564
3.482
3.352
3.305
3.238
3.178
2.969
2.731
2.617
2.577
2.531
S
N
Ph
5i
1.00
2.06
1.21
2.21
4.23
5.05
1.35
1.07
1.21
1.35
1.05
2.07
5.04
1.08
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400
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100
0
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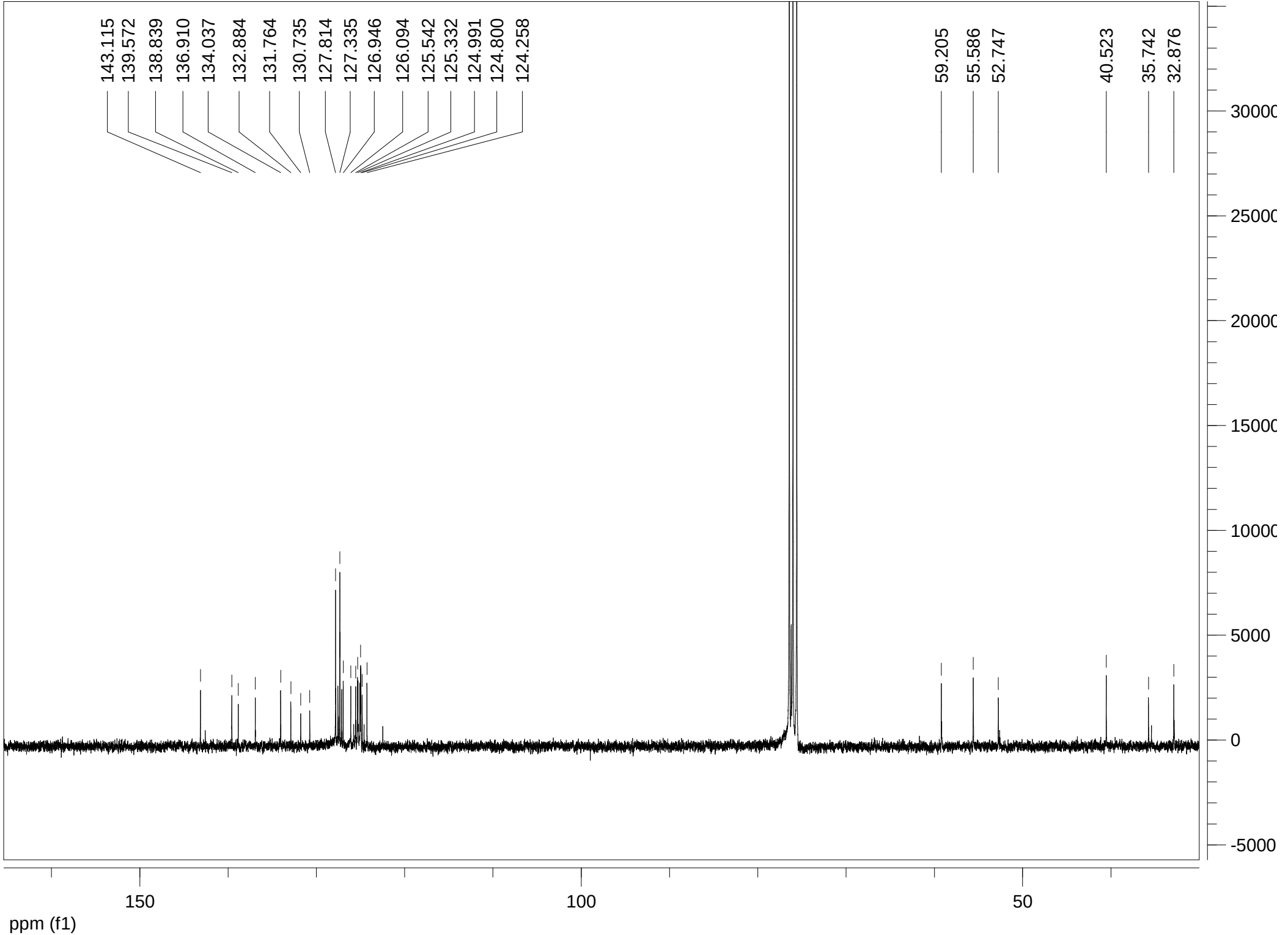
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125.542
125.332
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124.800
124.258
59.205
55.586
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20000
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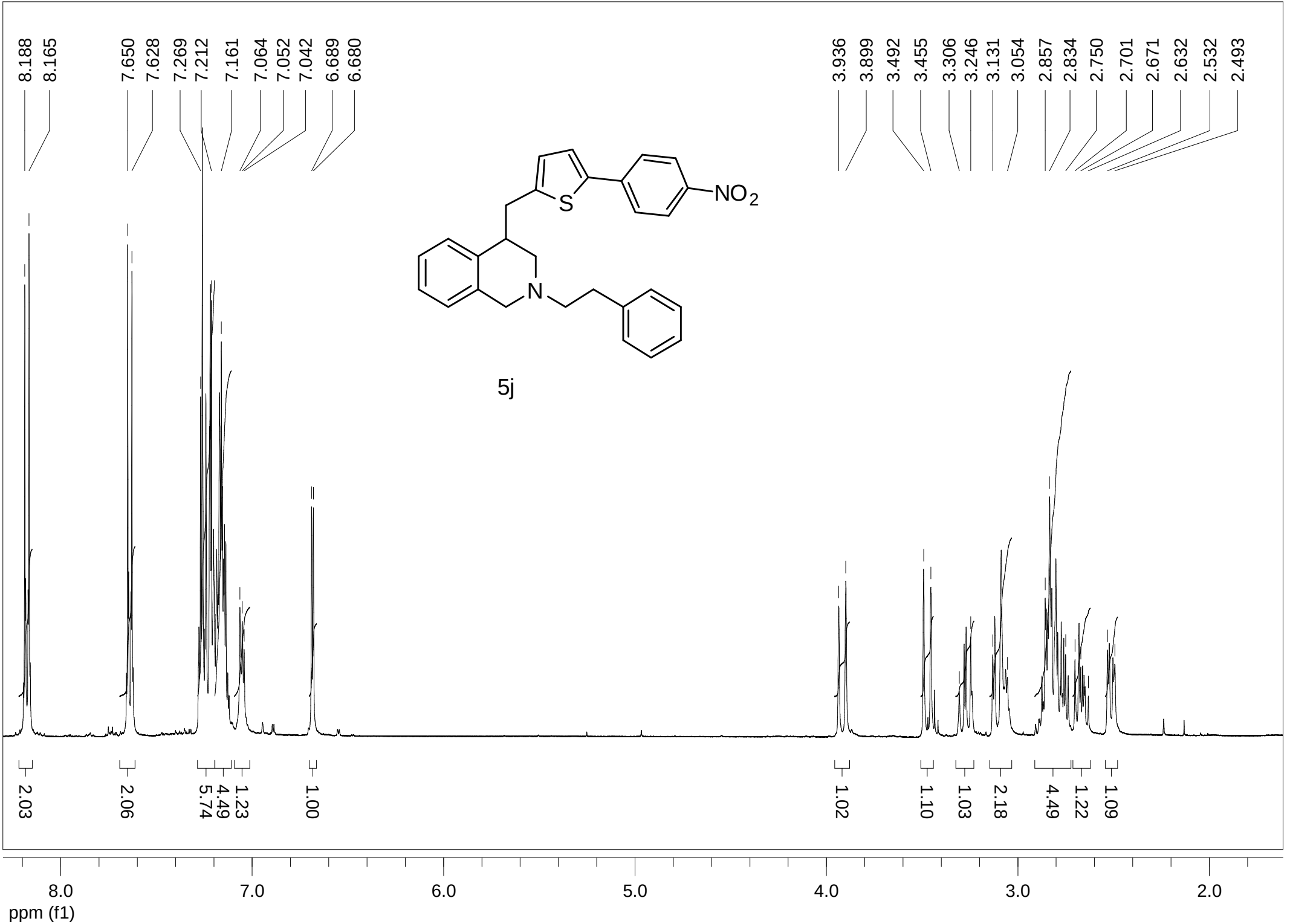
5000
0
-5000
150
100
50
ppm (f1)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7.042
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3.899
3.492
3.455
3.306
3.246
3.131
3.054
2.857
2.834
2.750
2.701
2.671
2.632
2.532
2.493
S
NO2
N
5j
2.03
2.06
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1.10
1.03
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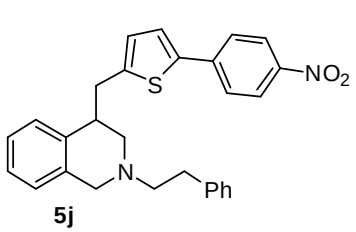
4.0
3.0
2.0
ppm (f1)



5j

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127.430
127.326
126.446
125.596
125.291
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125.029
124.630
124.419
123.376

59.106
55.398
52.633

40.467
35.863
32.772