

Supporting Information  
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## Supporting Information

### Regioselective Late-stage C-3 Functionalization of Pyrazolo [3,4-*b*]pyridines

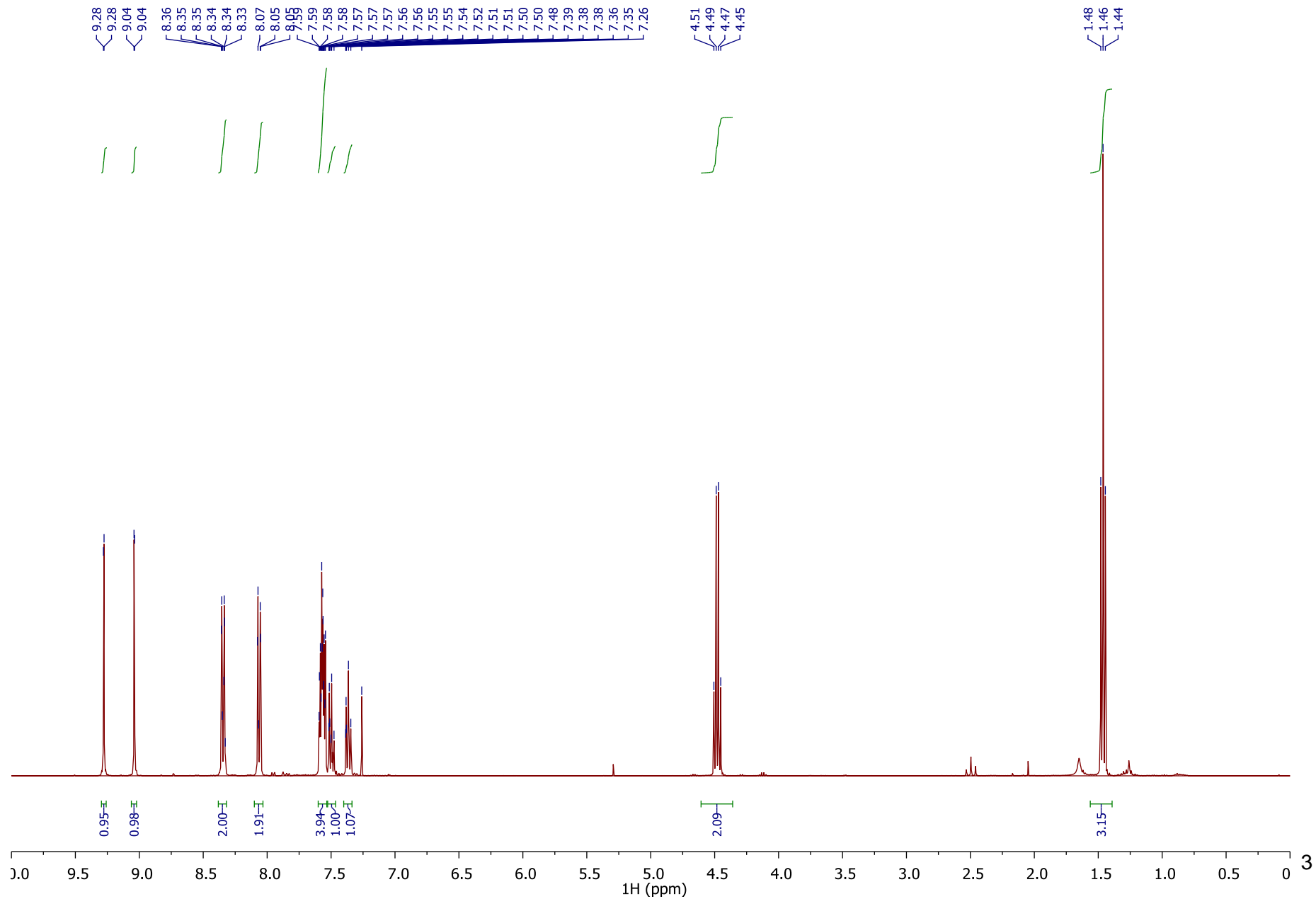
Hubert Lavrard, Florence Popowycz\*

Univ Lyon, INSA, Université Lyon1, CNRS, CPE-Lyon, ICBMS, UMR 5246, 20, Avenue  
Albert Einstein, 69621 Villeurbanne cedex, France

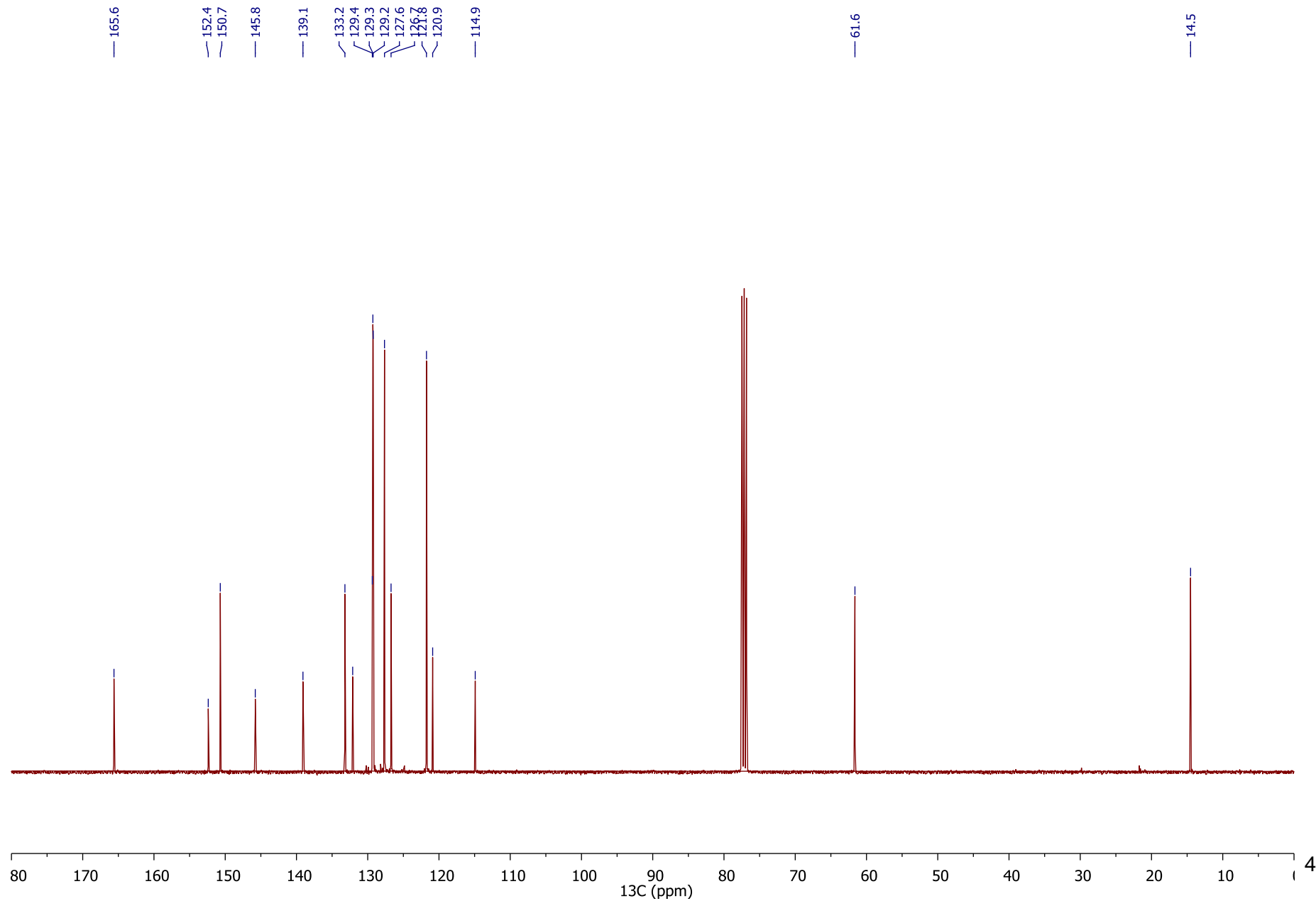
Ethyl 1,4-diphenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5a</b> ) <sup>1</sup> H-NMR (400 MHz, CDCl <sub>3</sub> ) .....	3
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Ethyl 1-phenyl-3-(3-(trifluoromethyl)phenyl)-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5k</b> ) <sup>19</sup> F-NMR (376 MHz, CDCl <sub>3</sub> ) .....	26
Ethyl 3-(3-nitrophenyl)-1-phenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5l</b> ) <sup>1</sup> H-NMR (400 MHz, CDCl <sub>3</sub> ) .....	27
Ethyl 3-(3-nitrophenyl)-1-phenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5l</b> ) <sup>13</sup> C-NMR (100 MHz, CDCl <sub>3</sub> ) .....	28
Ethyl 3-(3-pyridyl)-1-phenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5m</b> ) <sup>1</sup> H-NMR (400 MHz, CDCl <sub>3</sub> ) .....	29

Ethyl 3-(3-pyridyl)-1-phenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5m</b> ) <sup>13</sup> C-NMR (100 MHz, CDCl <sub>3</sub> ) .....	30
Ethyl 3-(2-fluorophenyl)-1-phenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5n</b> ) <sup>1</sup> H-NMR (400 MHz, CDCl <sub>3</sub> ) .....	31
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Ethyl 3-(2-fluorophenyl)-1-phenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>5n</b> ) <sup>19</sup> F-NMR (278 MHz, CDCl <sub>3</sub> ) ...	33
Ethyl 1,4-diphenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>6</b> ) <sup>1</sup> H-NMR (400 MHz, CDCl <sub>3</sub> ) .....	34
Ethyl 1,4-diphenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>6</b> ) <sup>13</sup> C-NMR (100 MHz, CDCl <sub>3</sub> ) .....	35
Ethyl 1,3,4-triphenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>7</b> ) <sup>1</sup> H-NMR (400 MHz, CDCl <sub>3</sub> ) .....	36
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Ethyl 4-ethoxy-1-phenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>8</b> ) <sup>13</sup> C-NMR (100 MHz, CDCl <sub>3</sub> ) .....	39
Ethyl 4-ethoxy-1,3-diphenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>9</b> ) <sup>1</sup> H-NMR (400 MHz, CDCl <sub>3</sub> ) .....	40
Ethyl 4-ethoxy-1,3-diphenyl-1 <i>H</i> -pyrazolo[3,4- <i>b</i> ]pyridine-5-carboxylate ( <b>9</b> ) <sup>13</sup> C-NMR (100 MHz, CDCl <sub>3</sub> ) .....	41

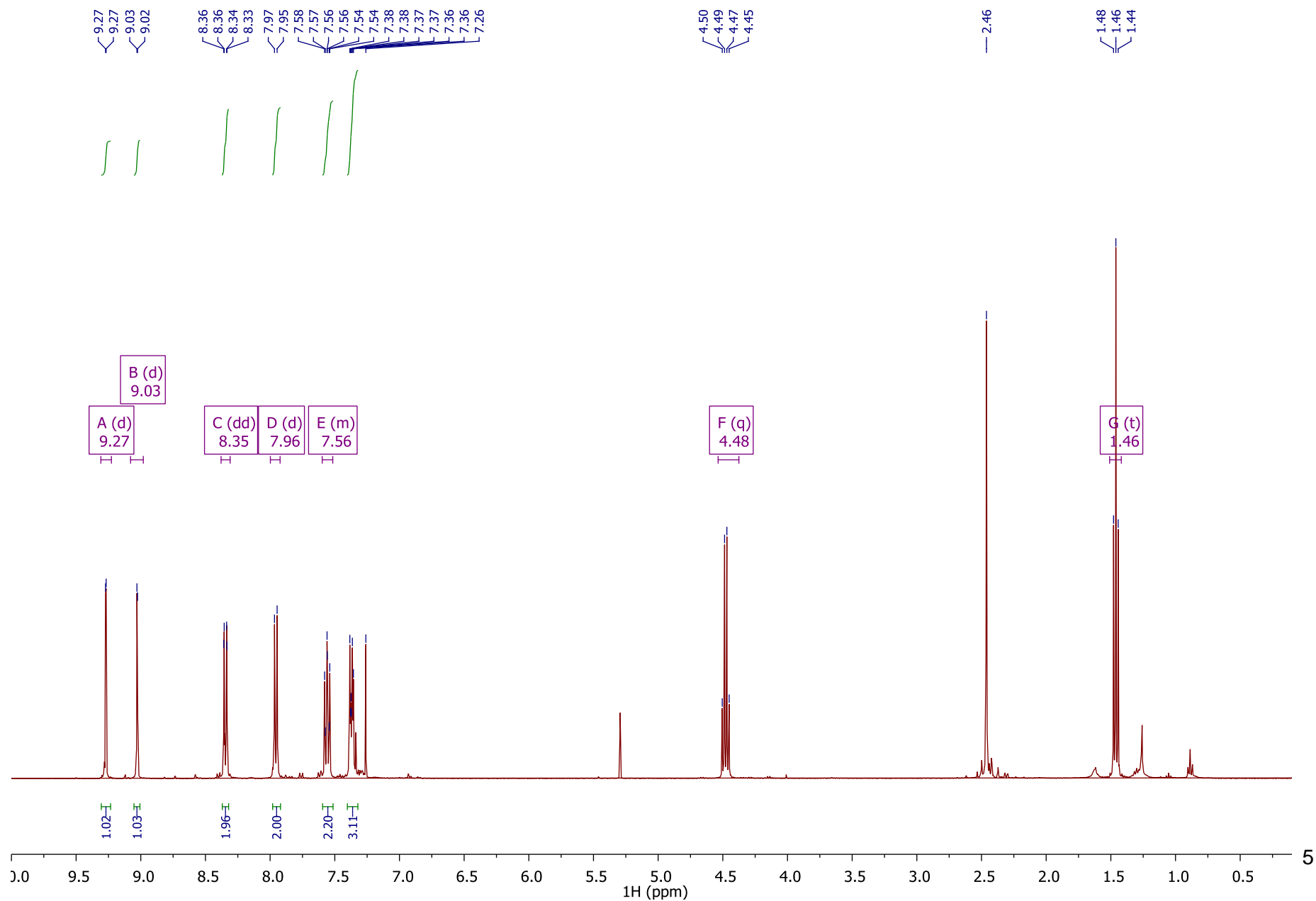
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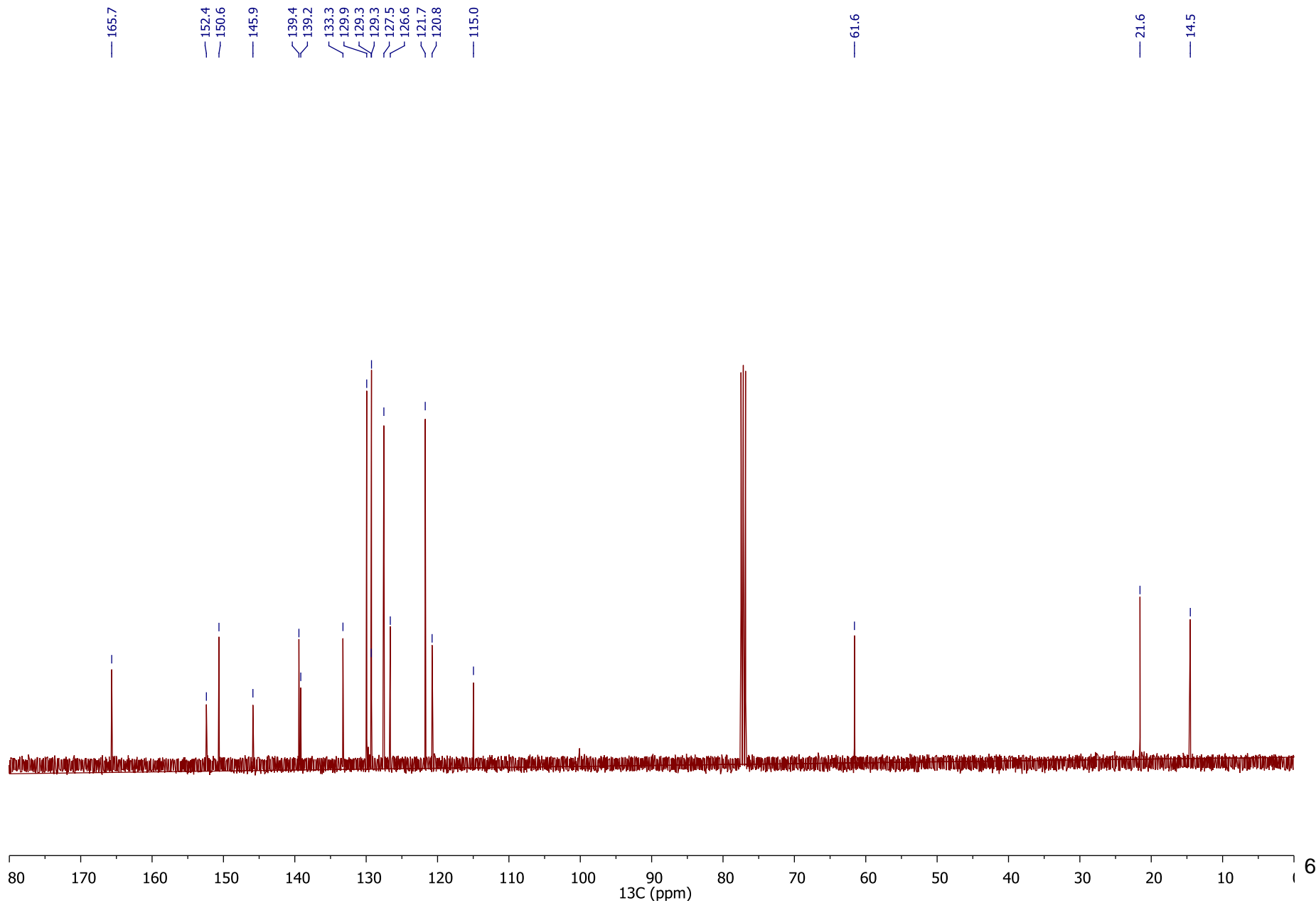
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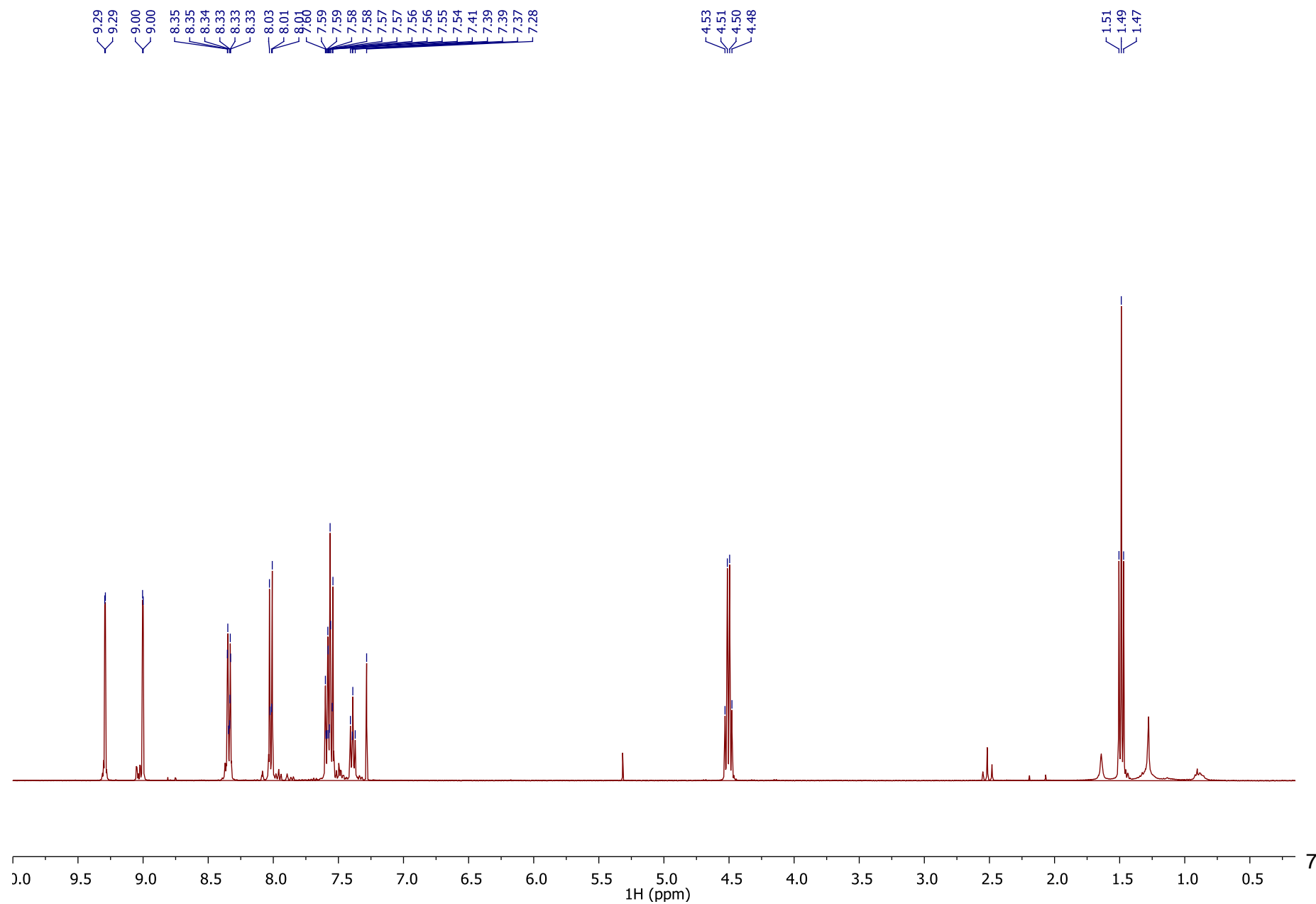
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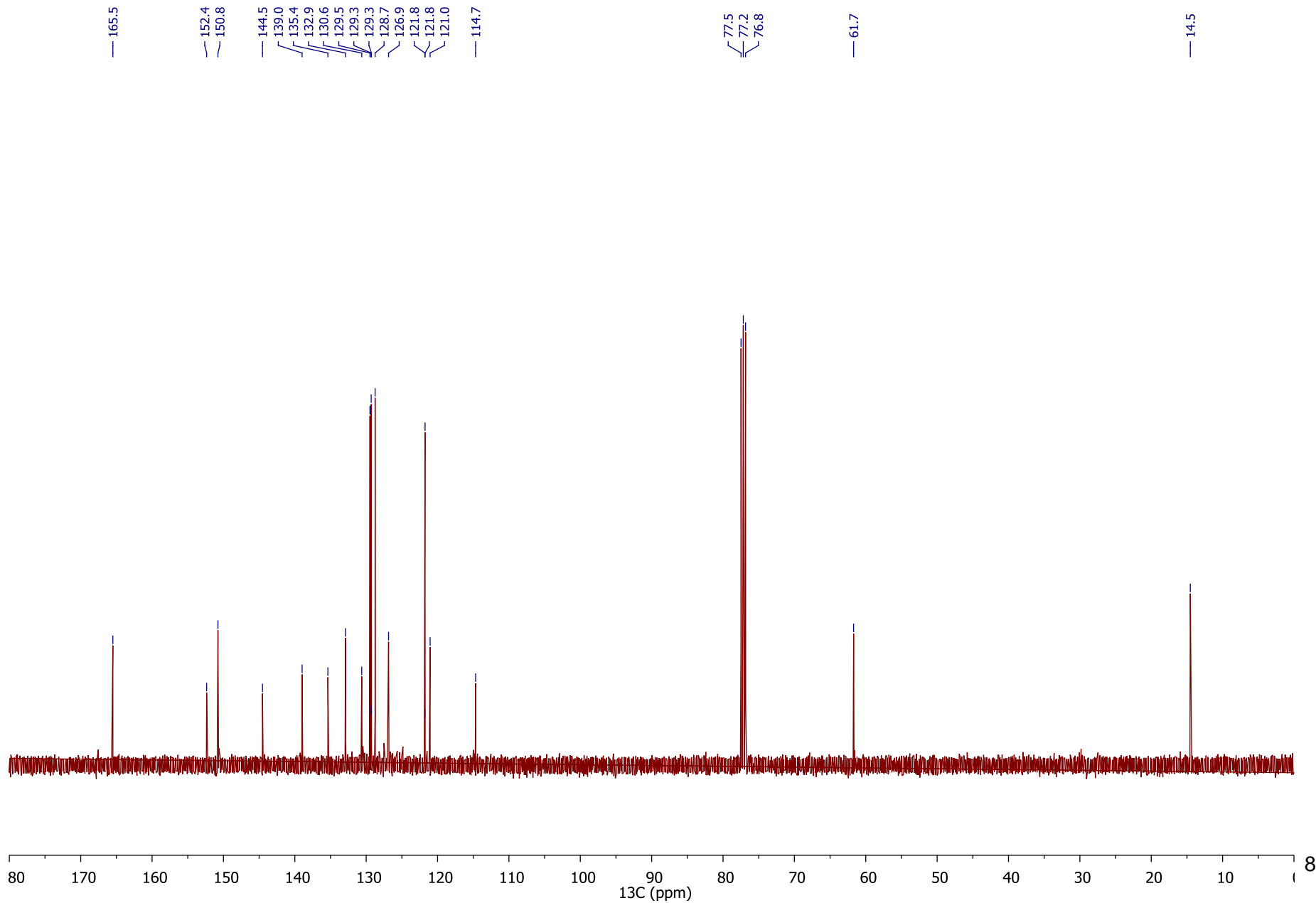
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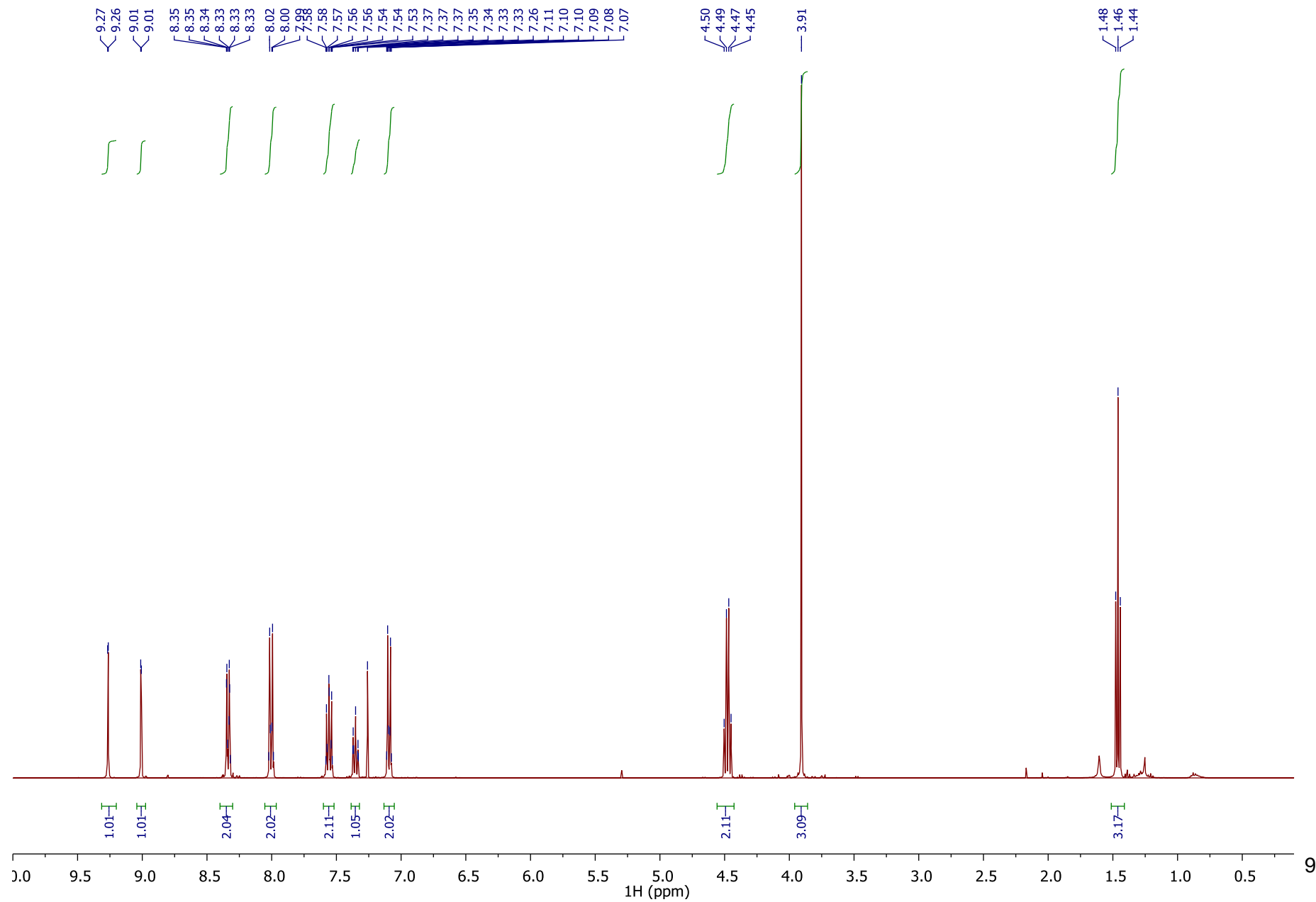
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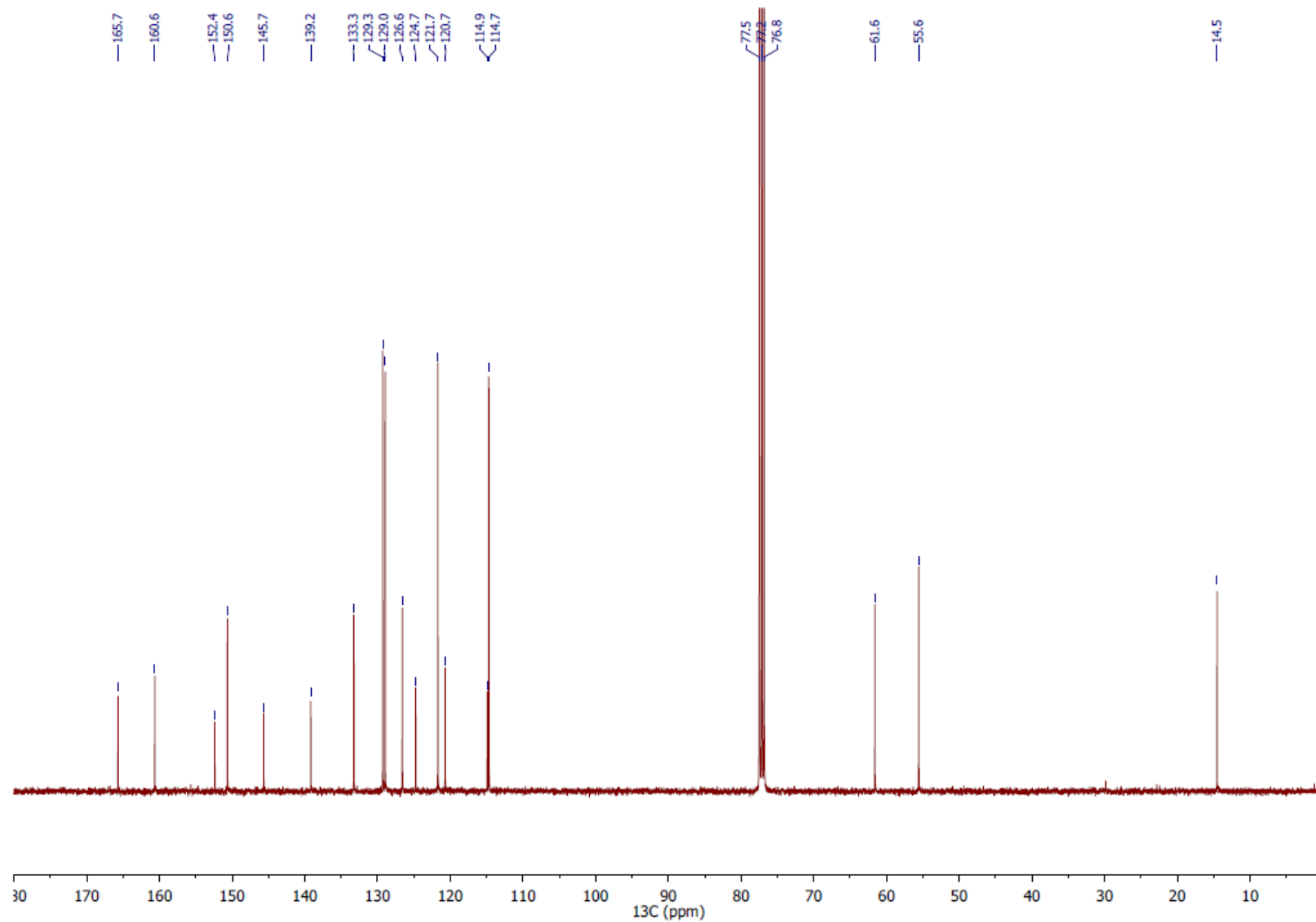
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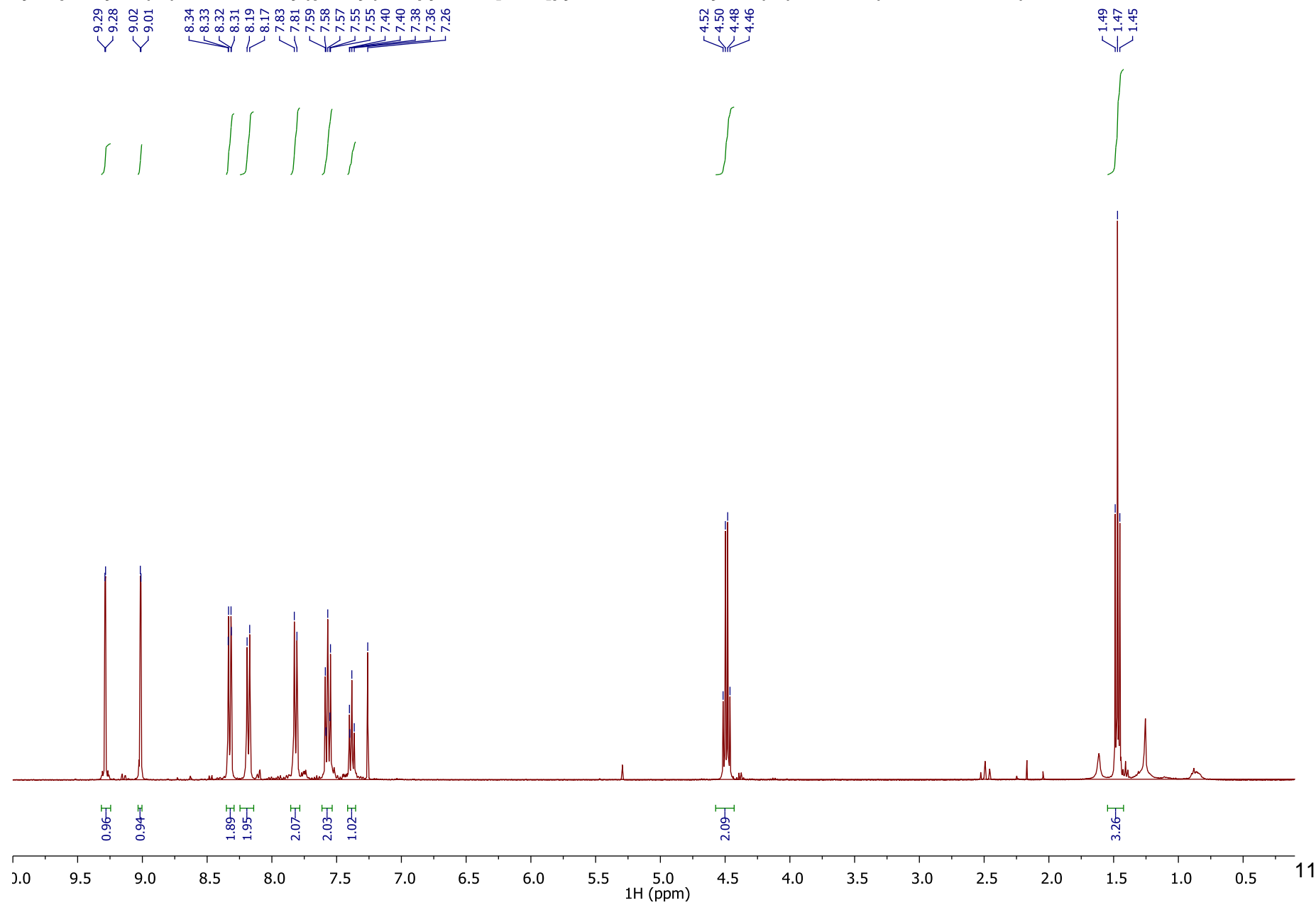
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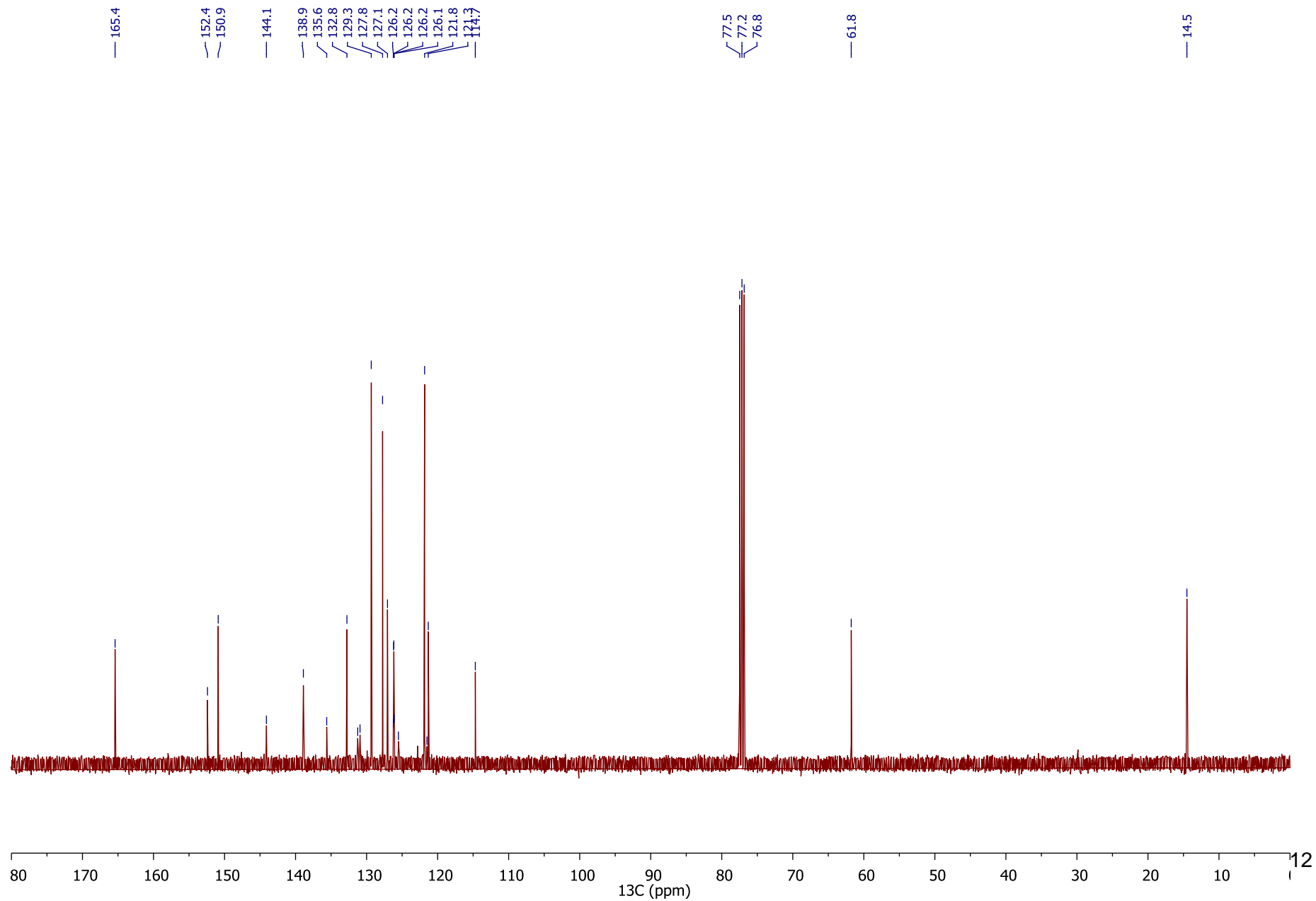
Ethyl 3-(4-methoxyphenyl)-1-phenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (5d) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



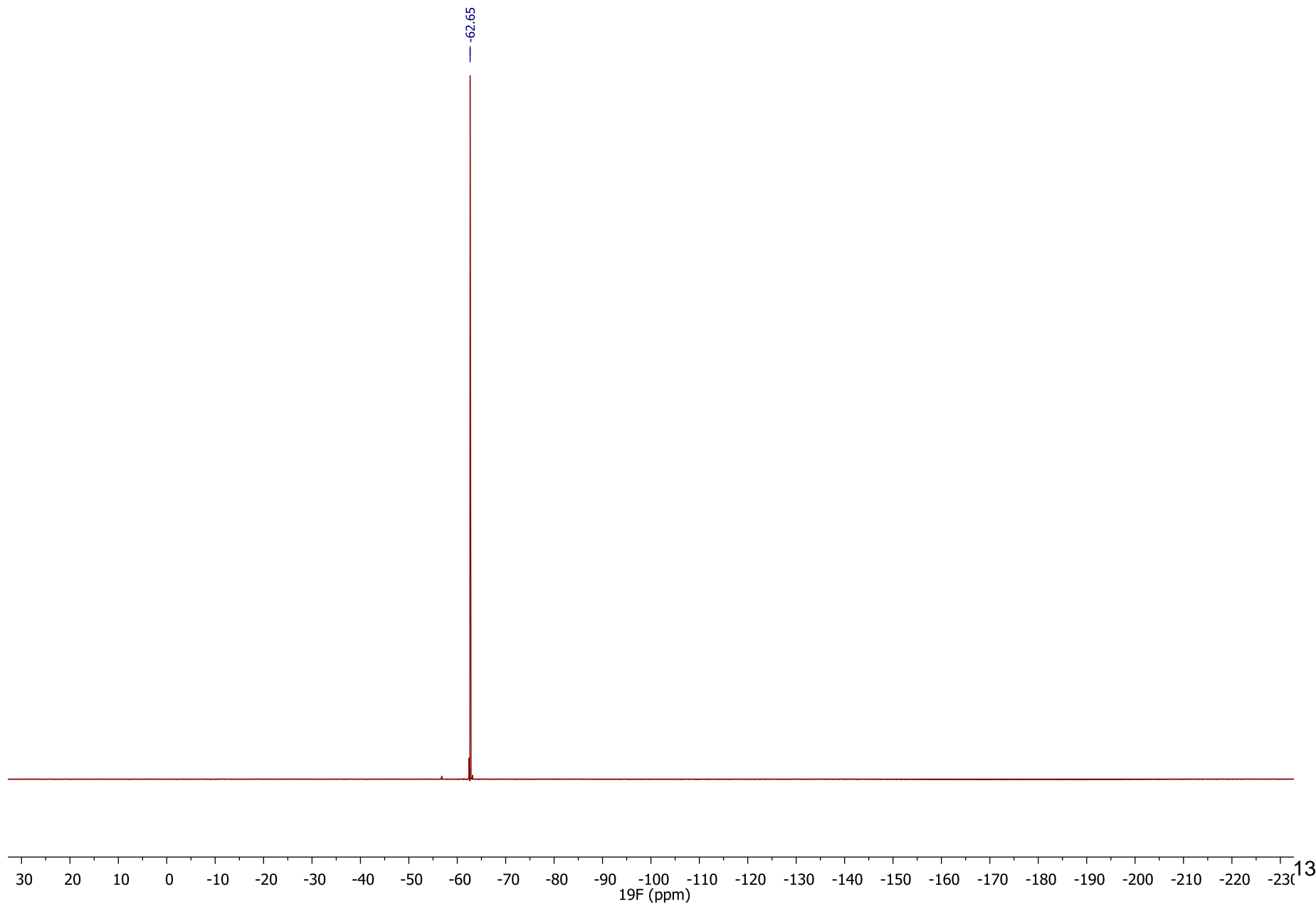
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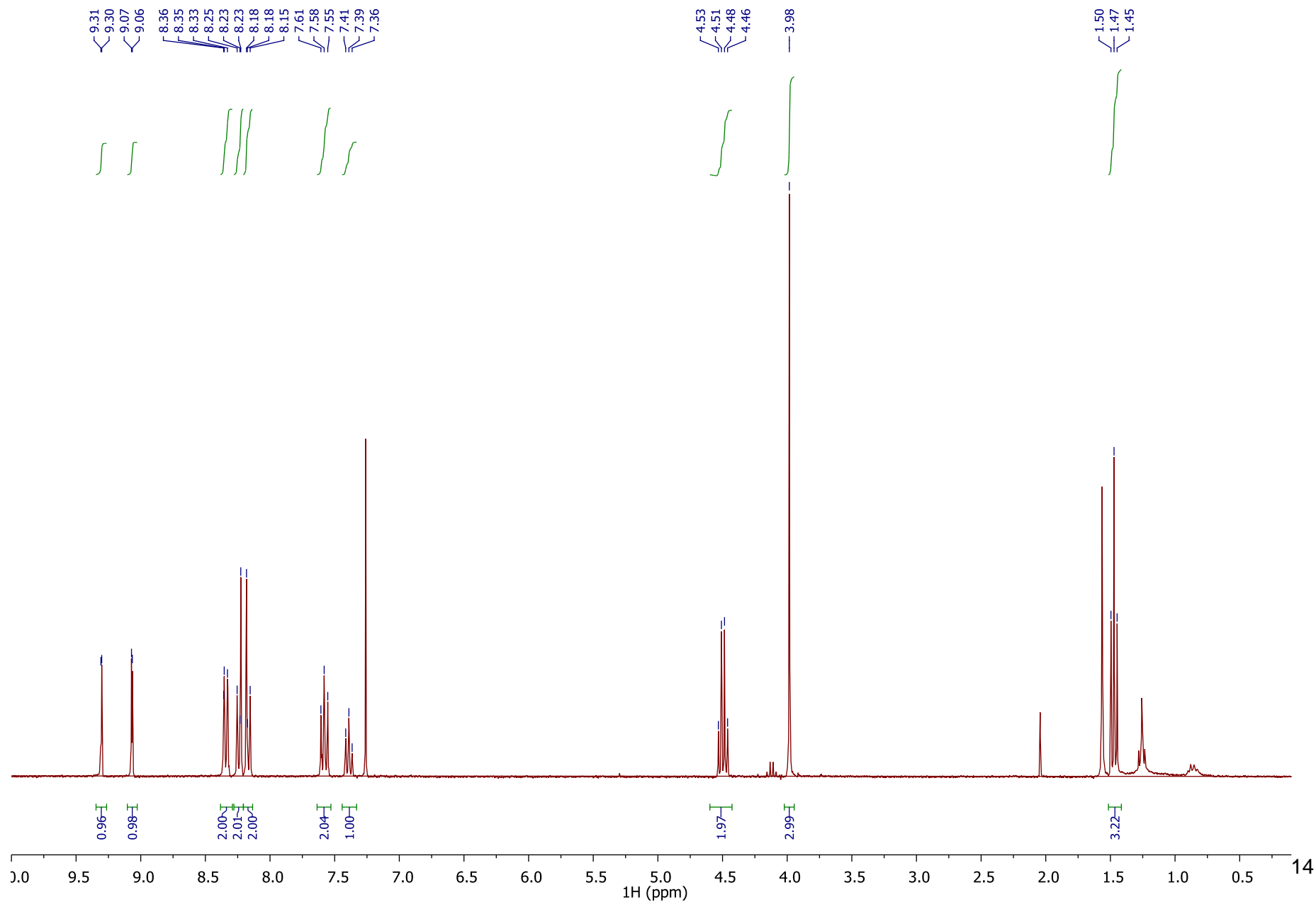
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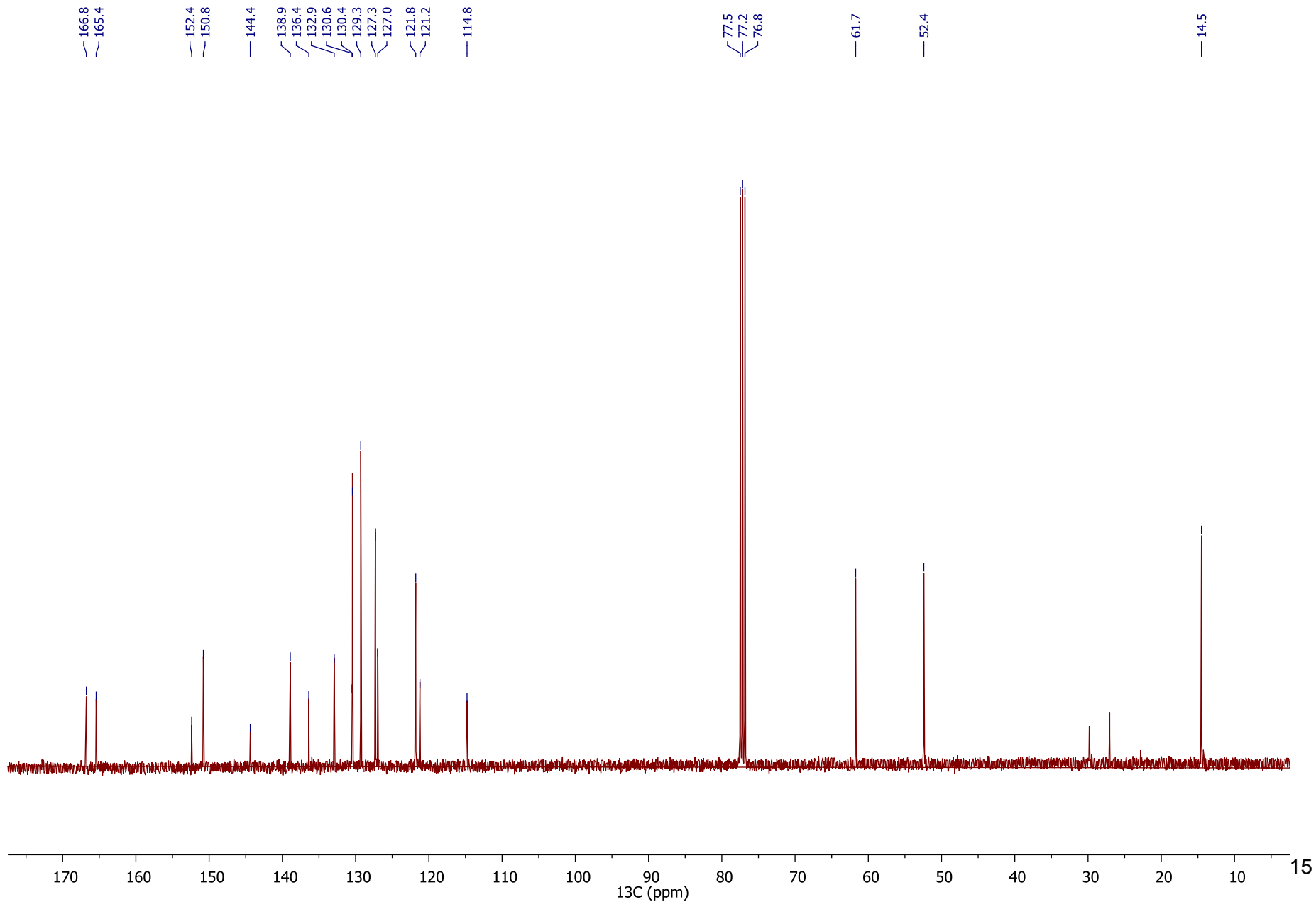
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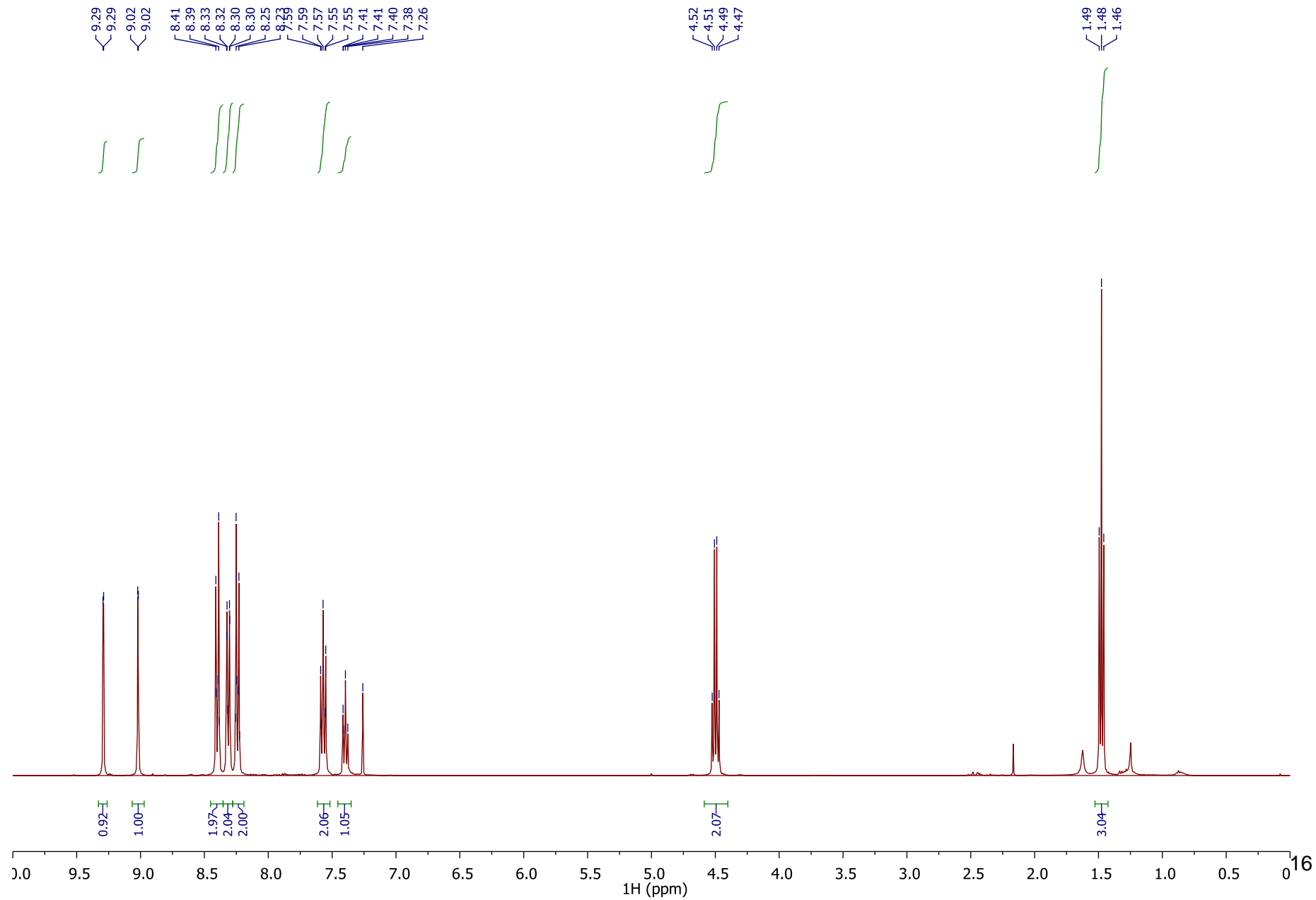
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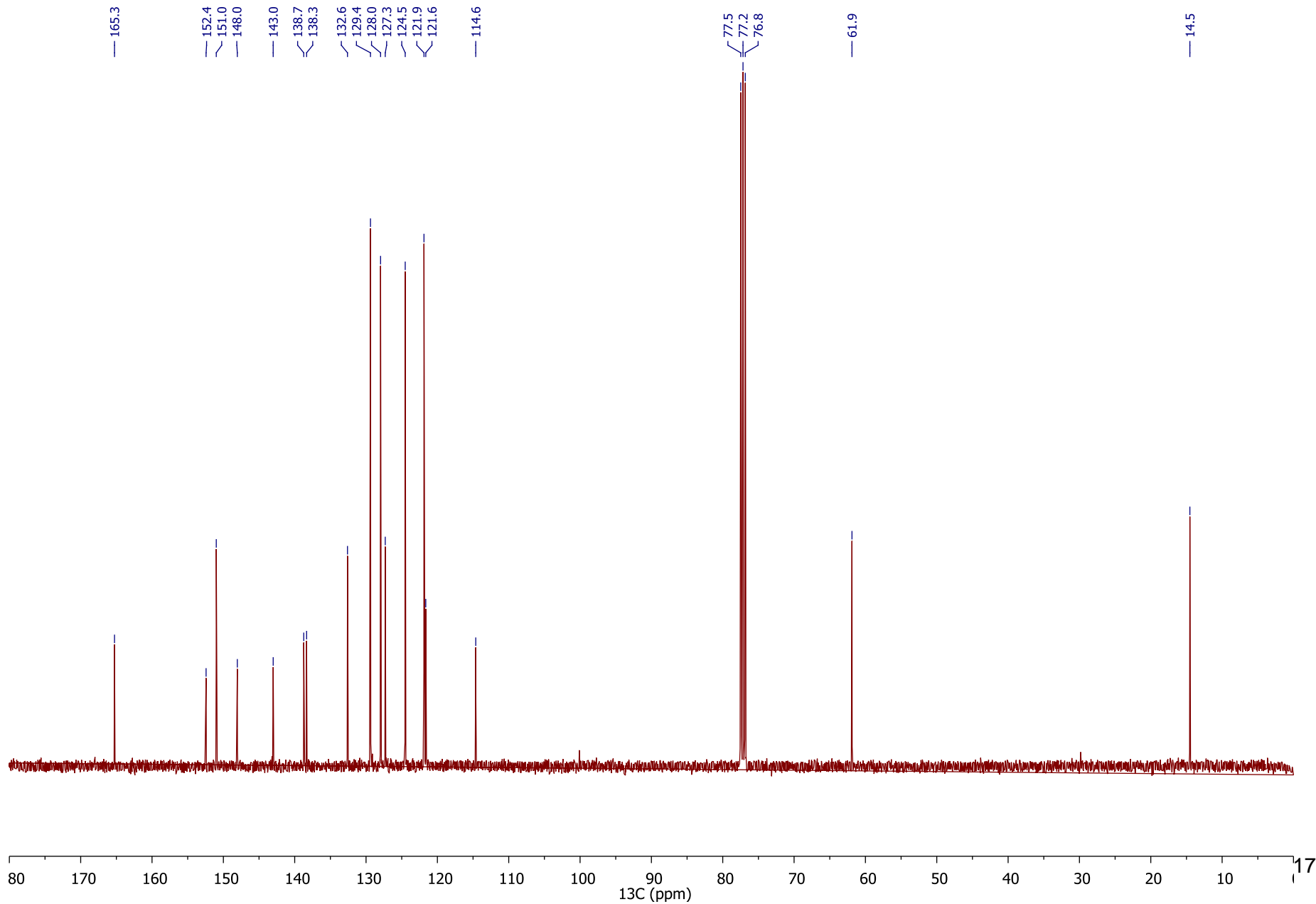
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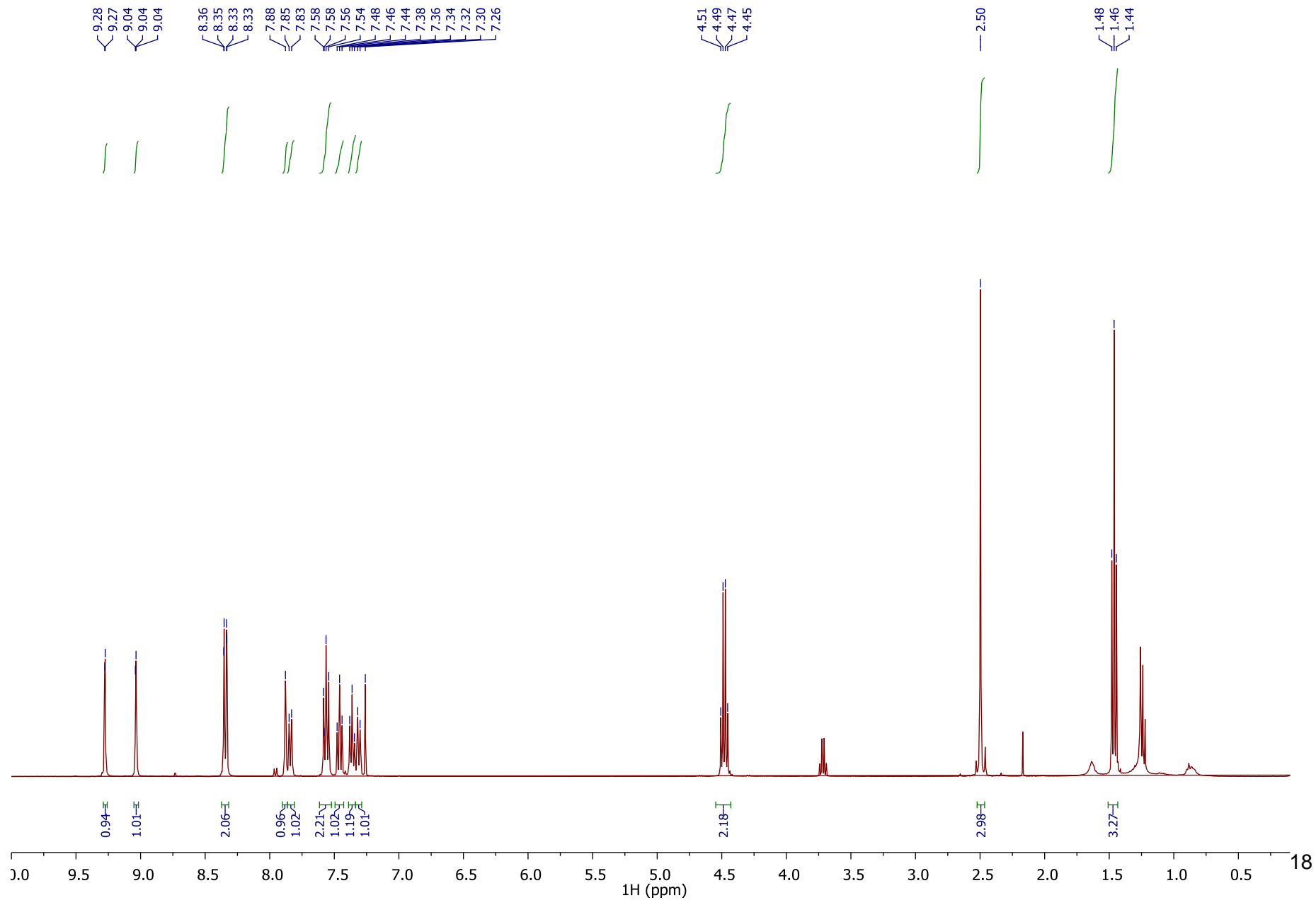
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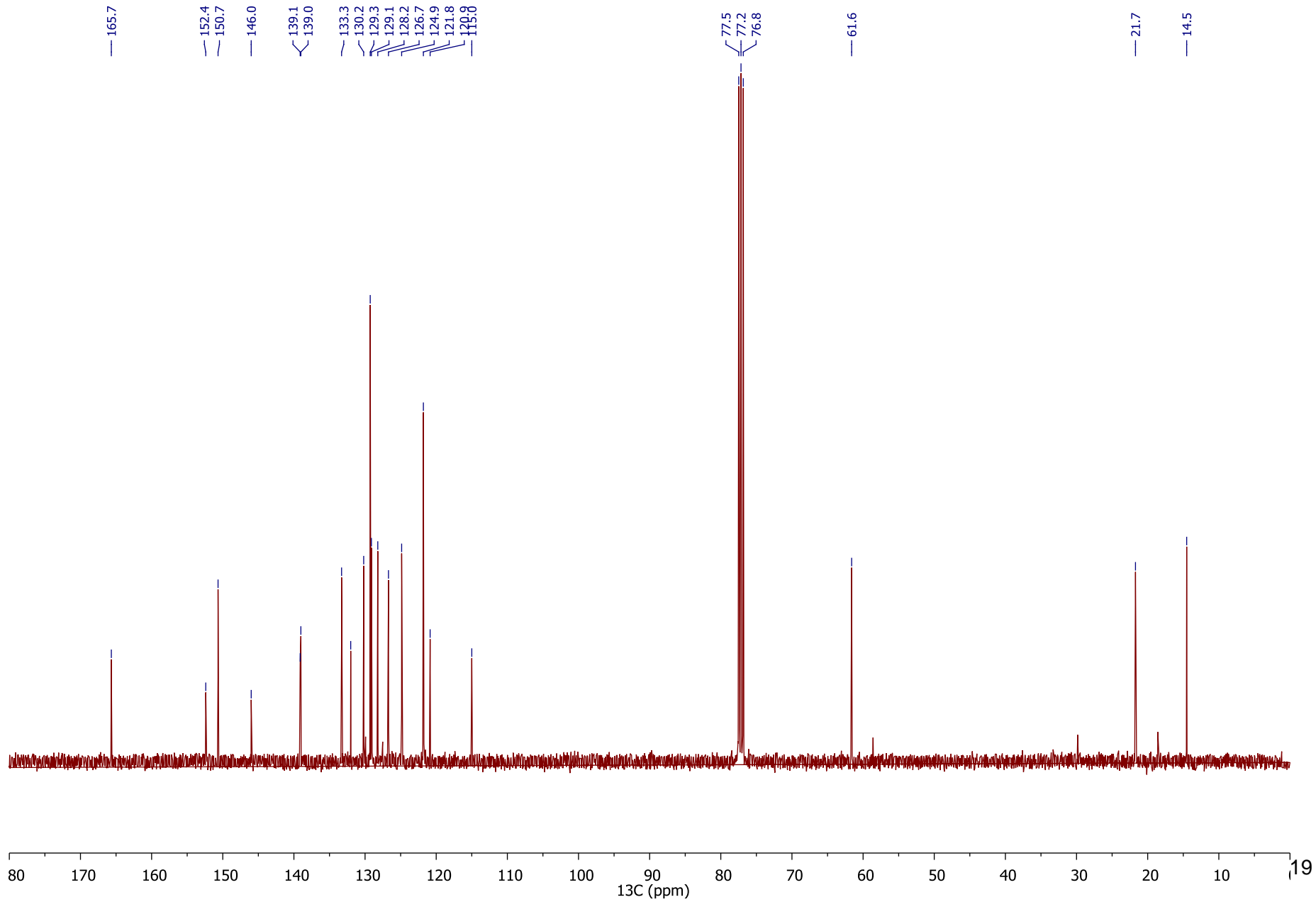
Ethyl 3-(4-nitrophenyl)-1-phenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (5g) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



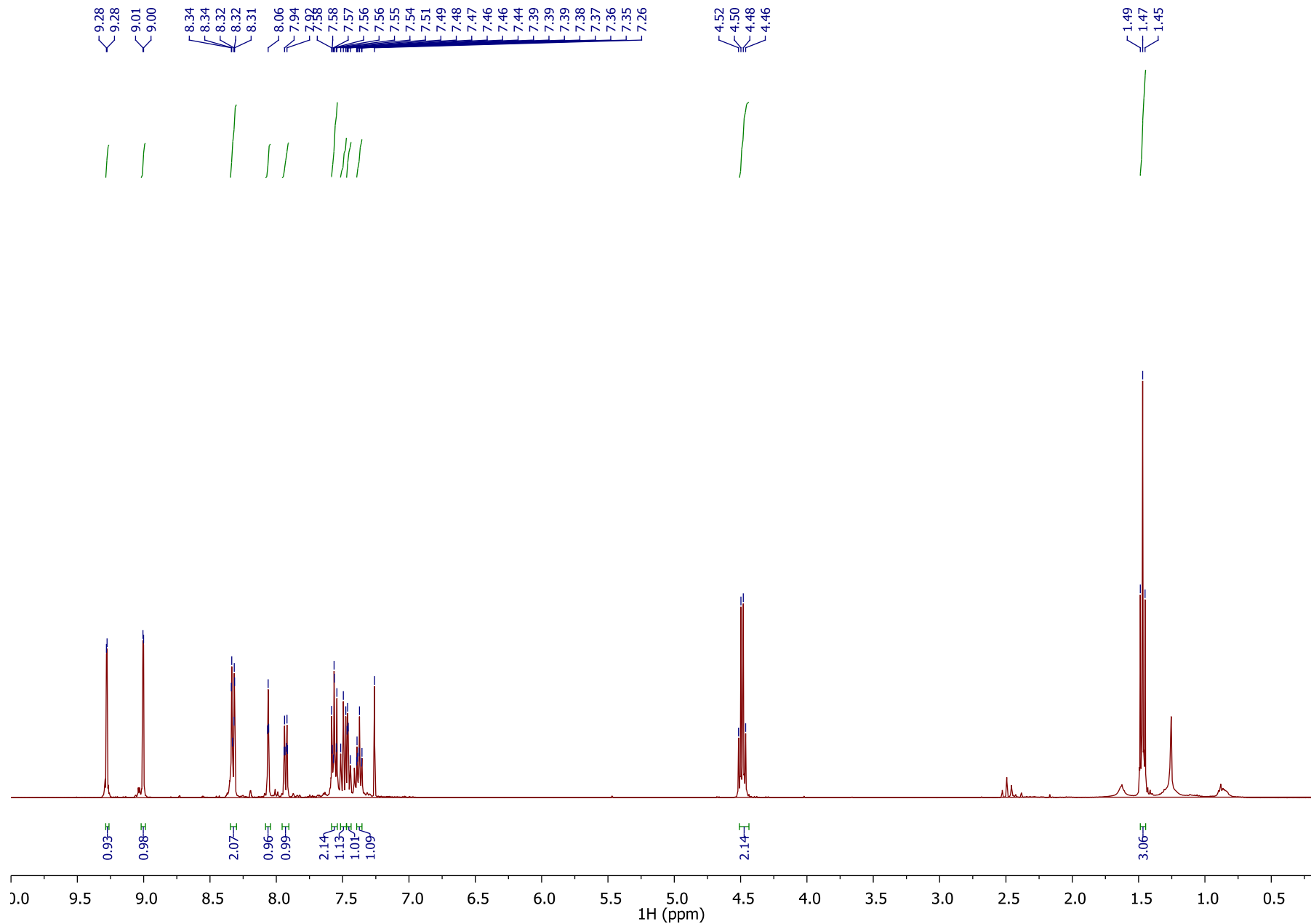
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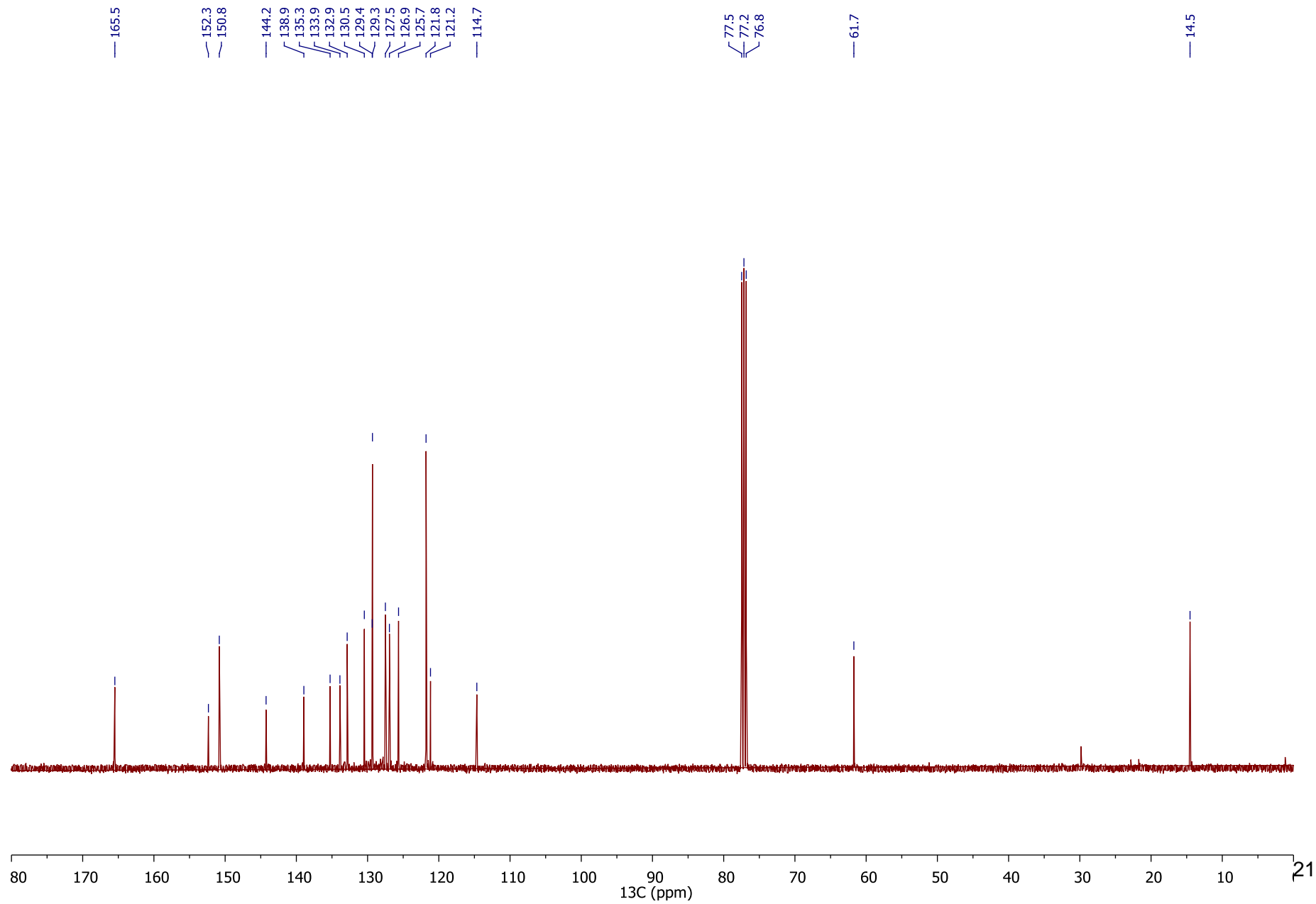
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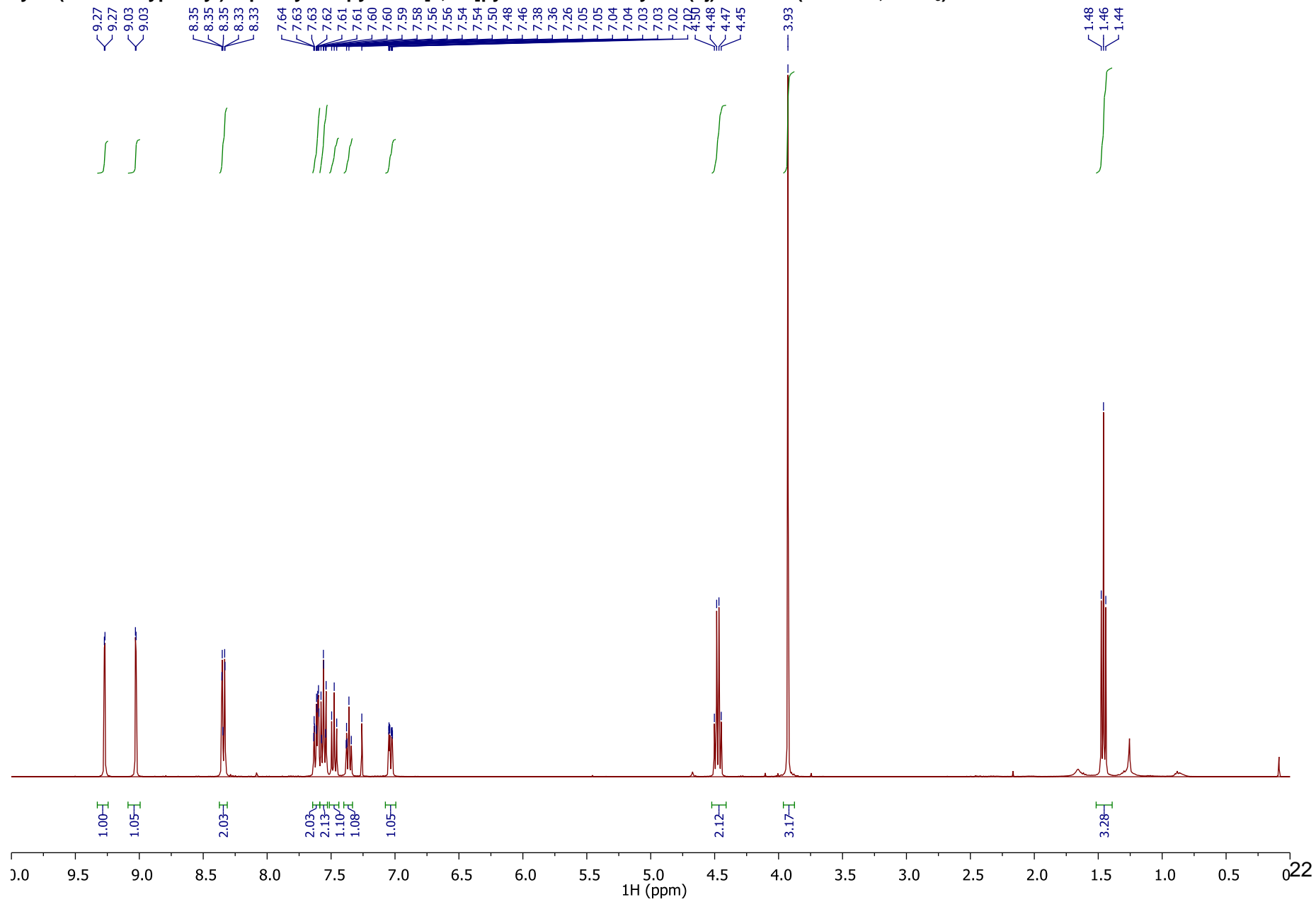
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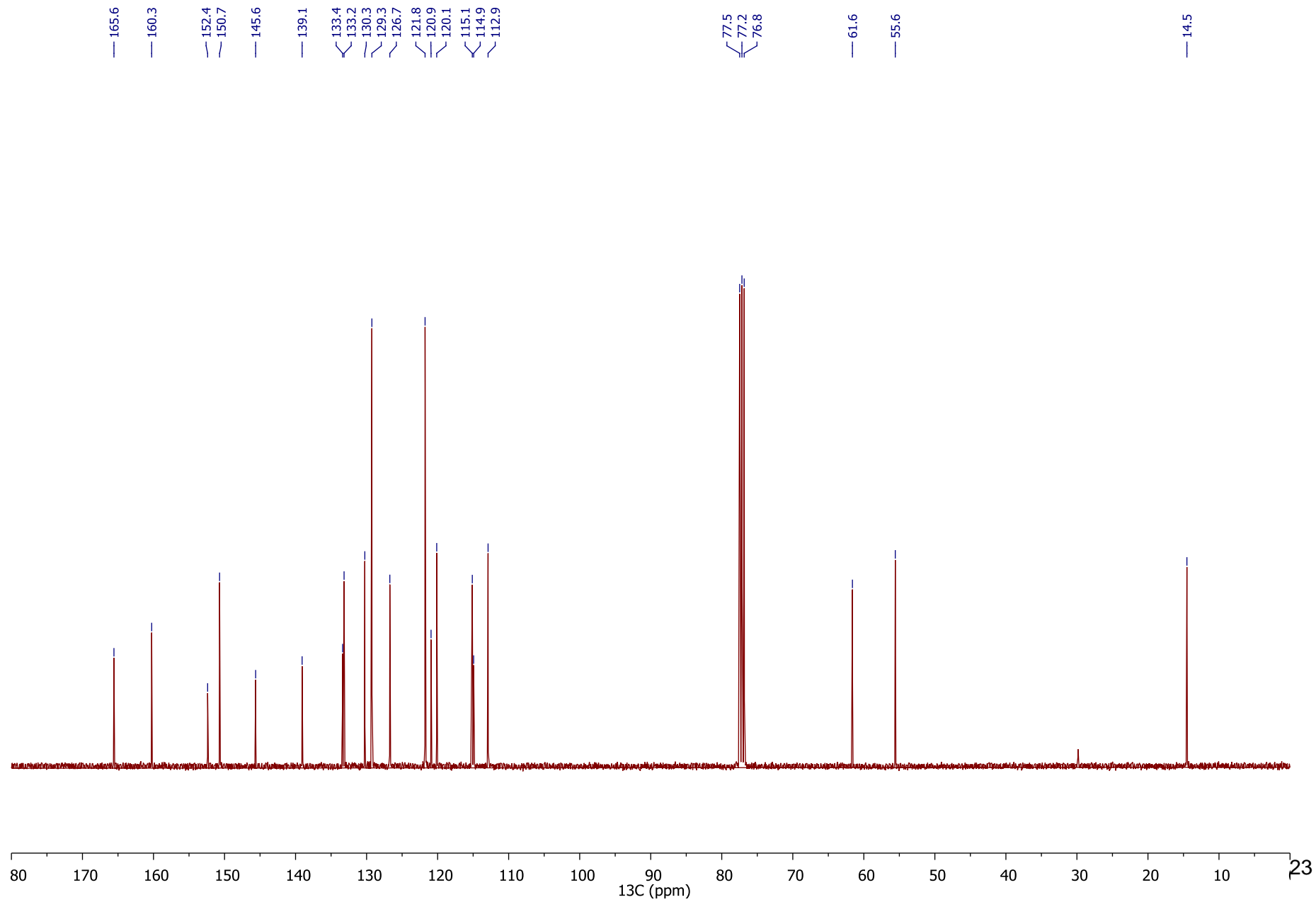
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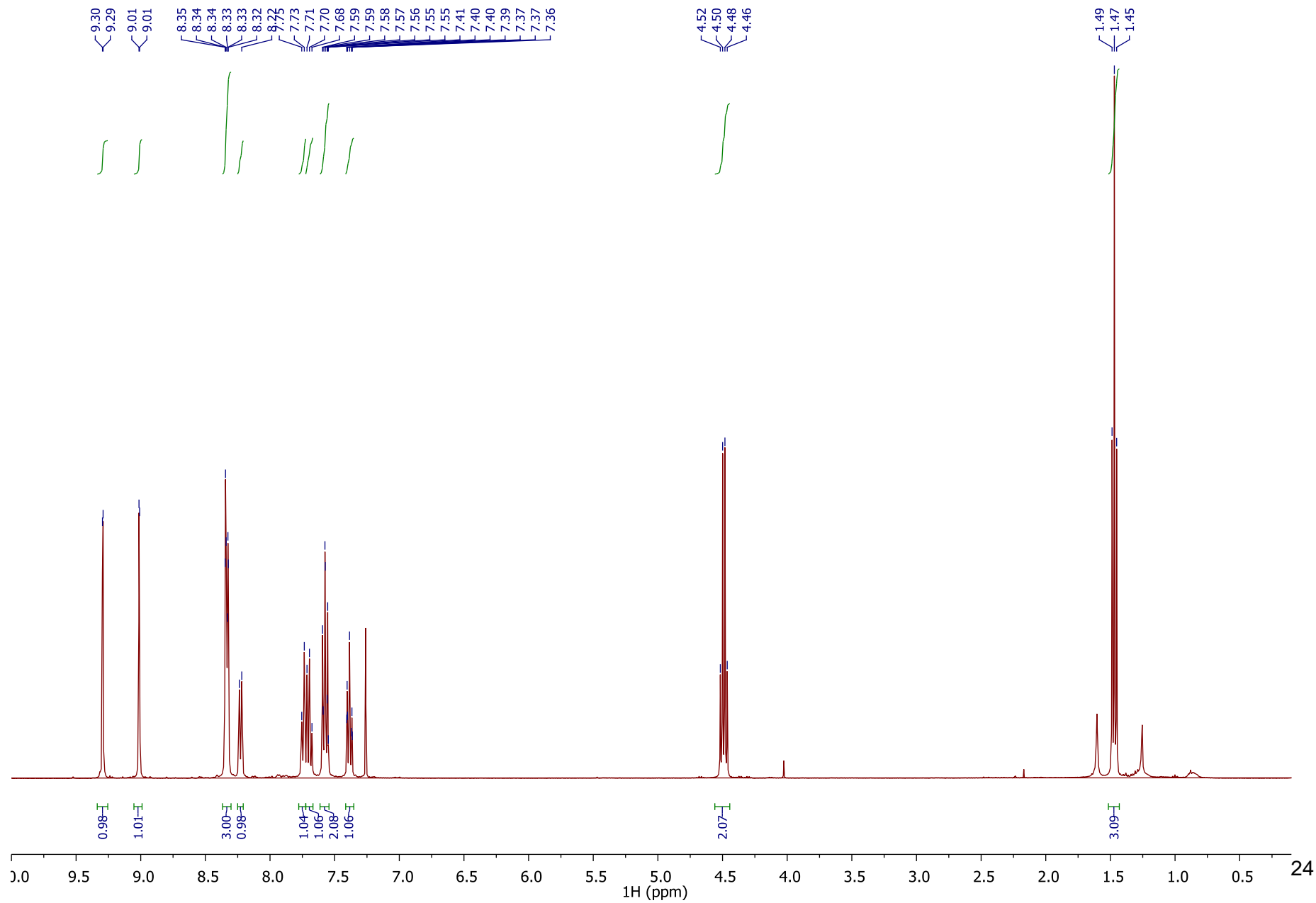
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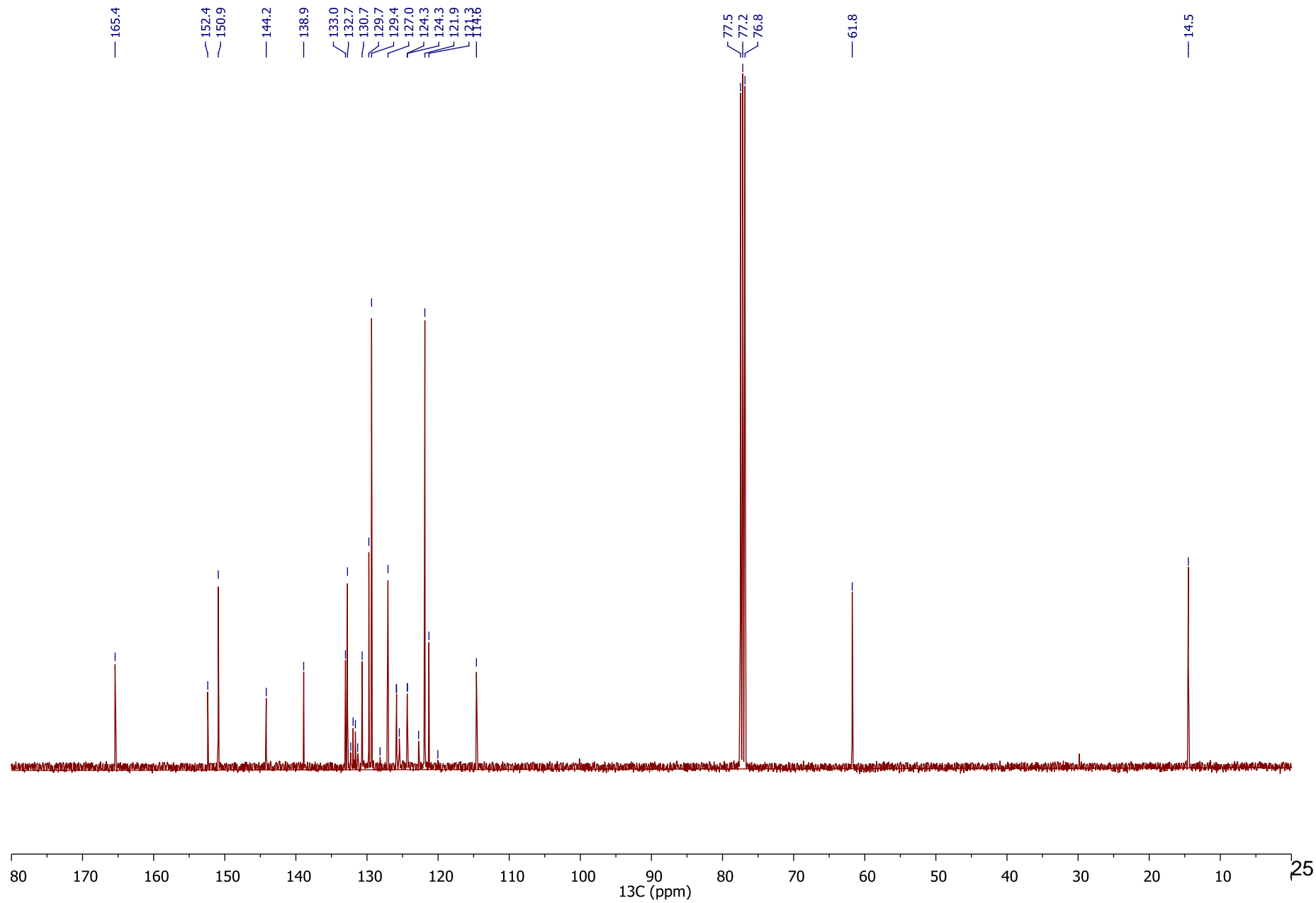
Ethyl 3-(3-methoxyphenyl)-1-phenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (5j) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



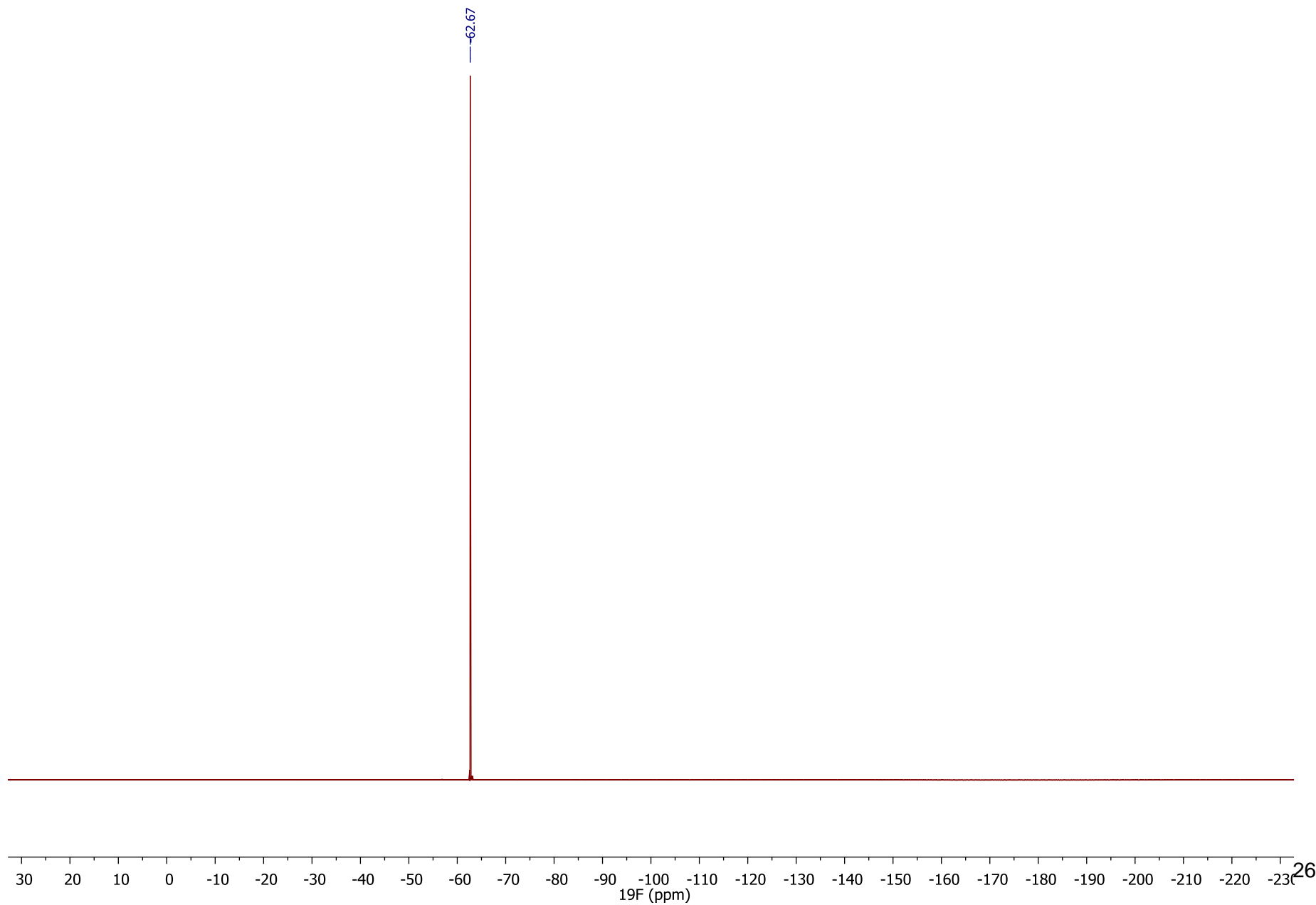
Ethyl 1-phenyl-3-(3-(trifluoromethyl)phenyl)-1H-pyrazolo[3,4-b]pyridine-5-carboxylate (5k) <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>)



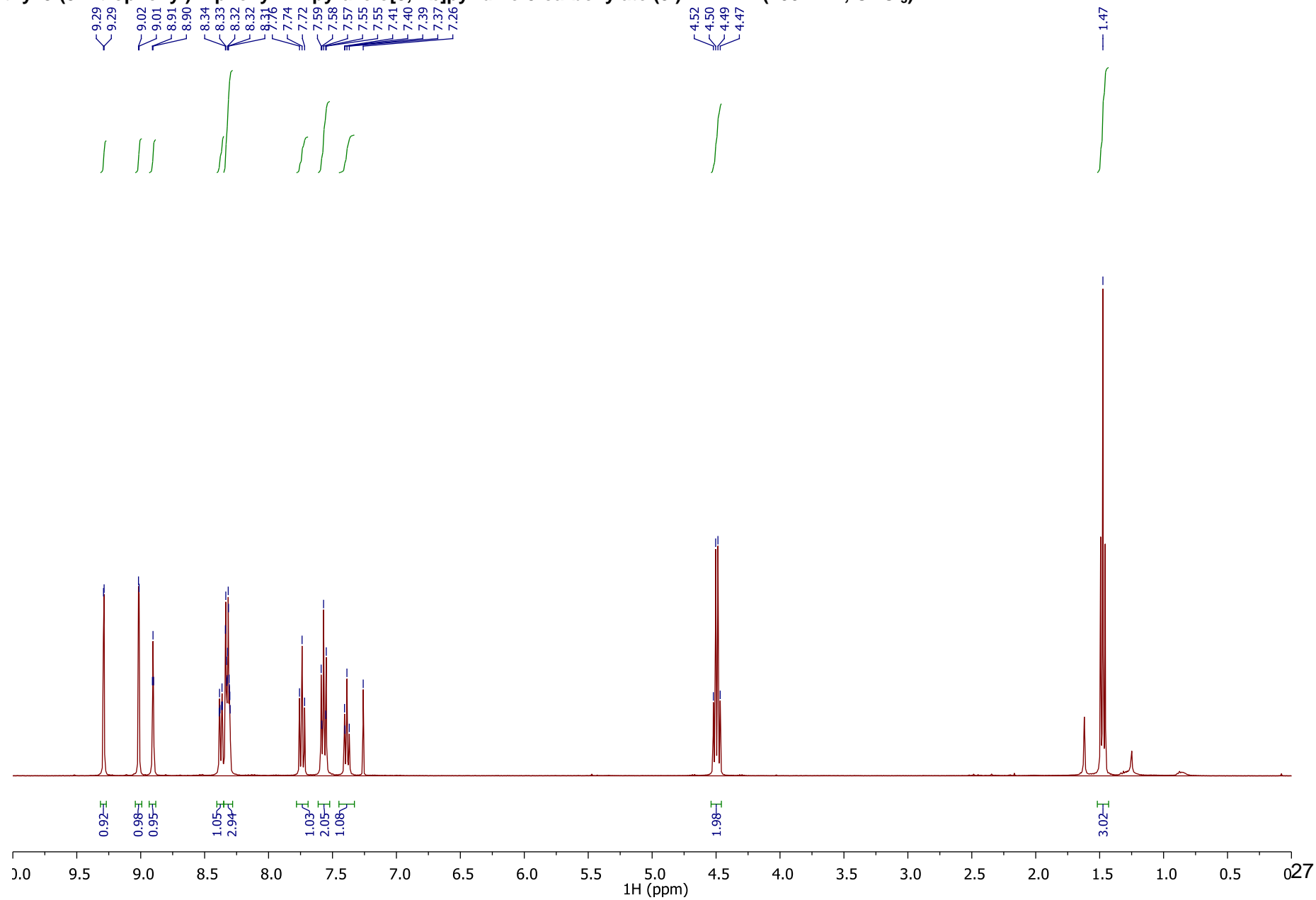
Ethyl 1-phenyl-3-(3-(trifluoromethyl)phenyl)-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (5k) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



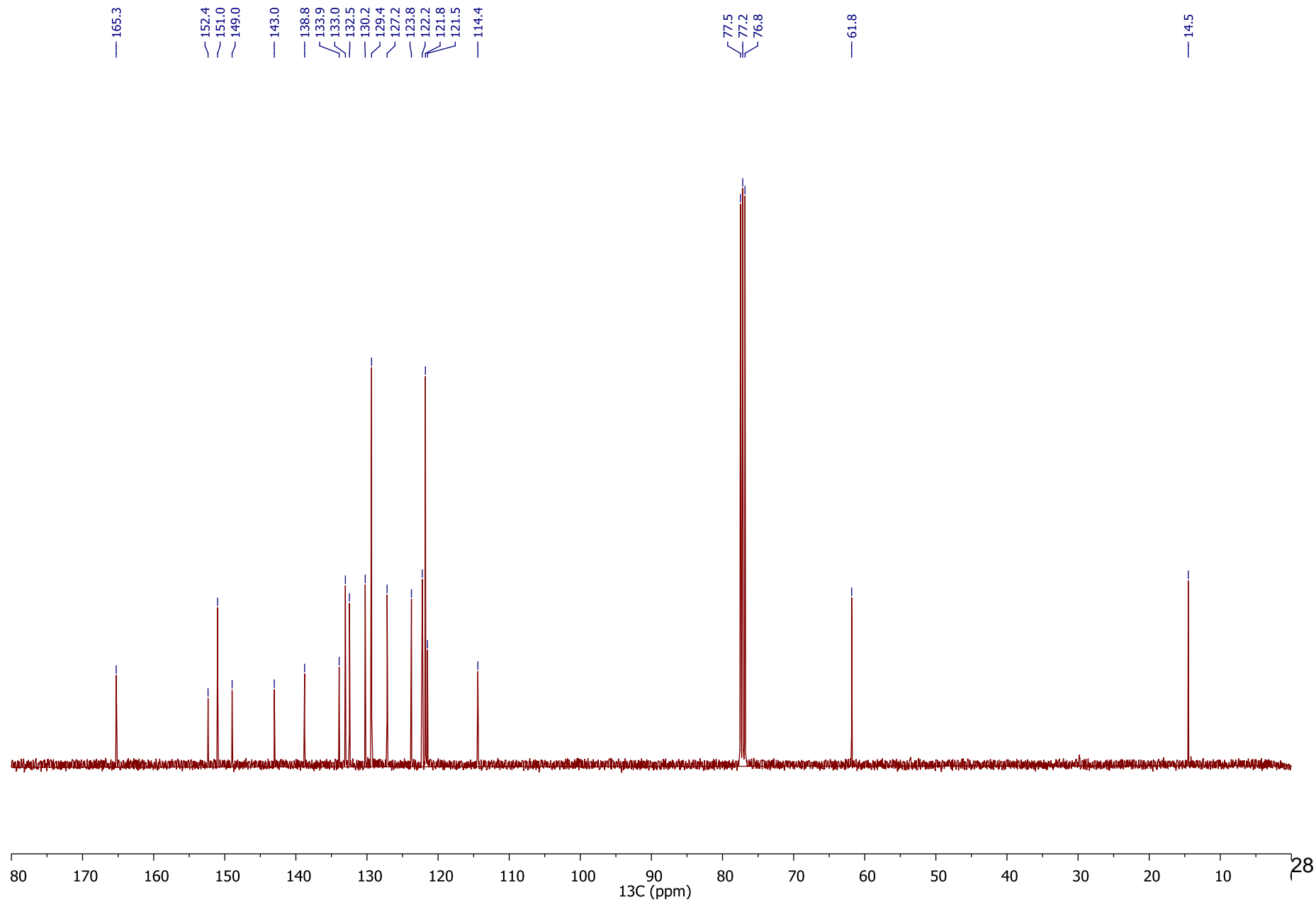
Ethyl 1-phenyl-3-(3-(trifluoromethyl)phenyl)-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (5k) <sup>19</sup>F-NMR (376 MHz, CDCl<sub>3</sub>)



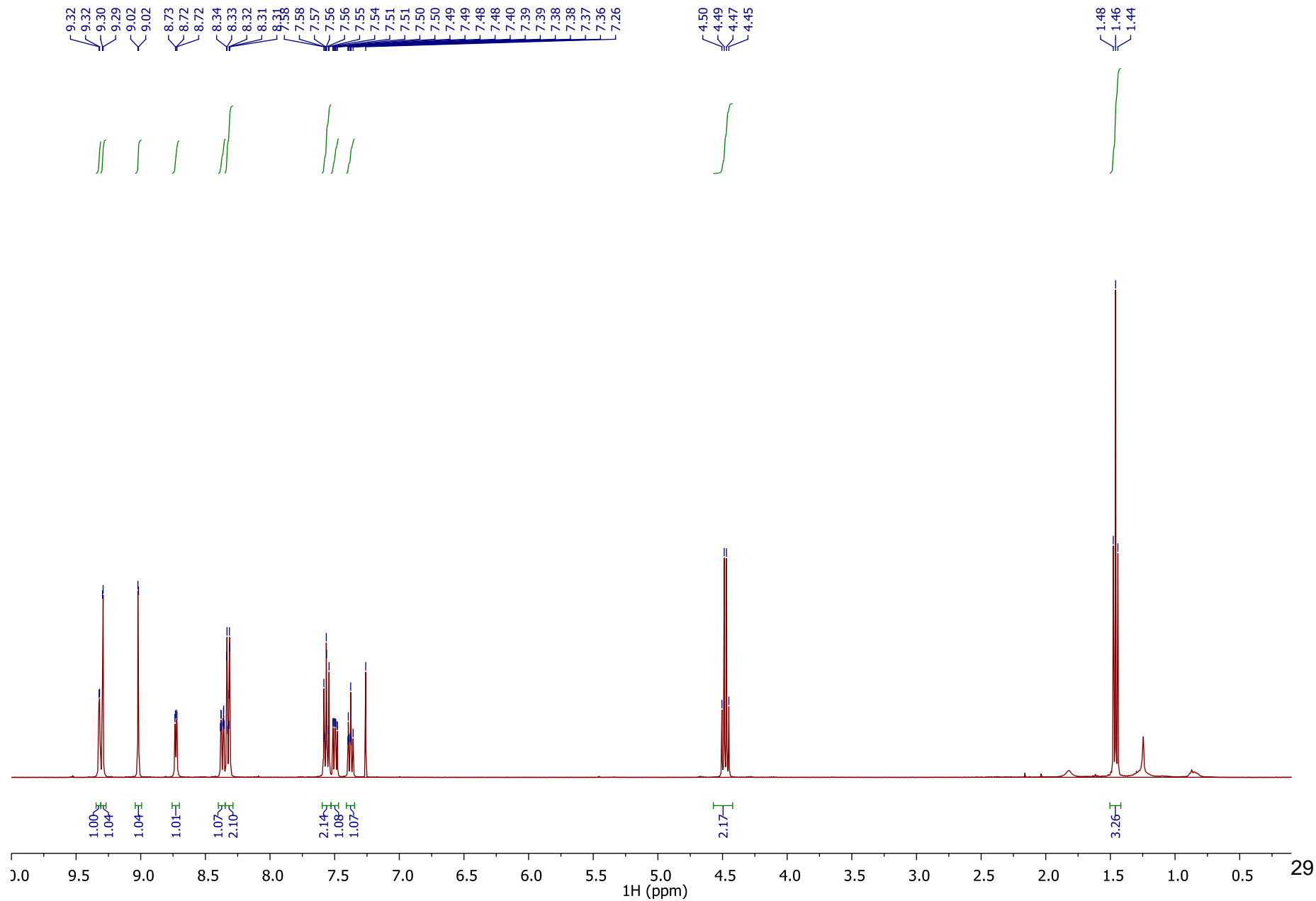
Ethyl 3-(3-nitrophenyl)-1-phenyl-1H-pyrazolo[3,4-b]pyridine-5-carboxylate (5l) <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>)



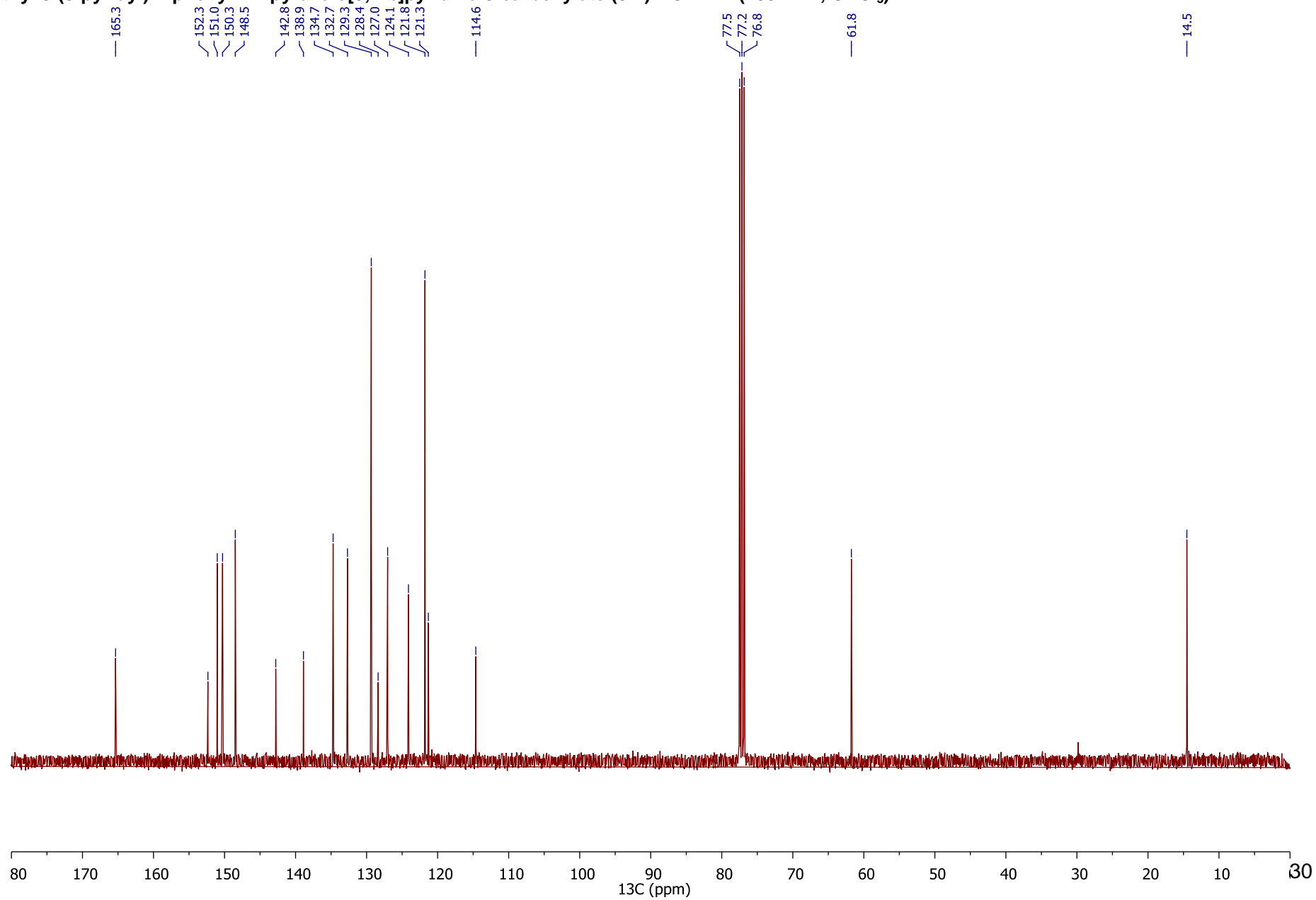
Ethyl 3-(3-nitrophenyl)-1-phenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (5I) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



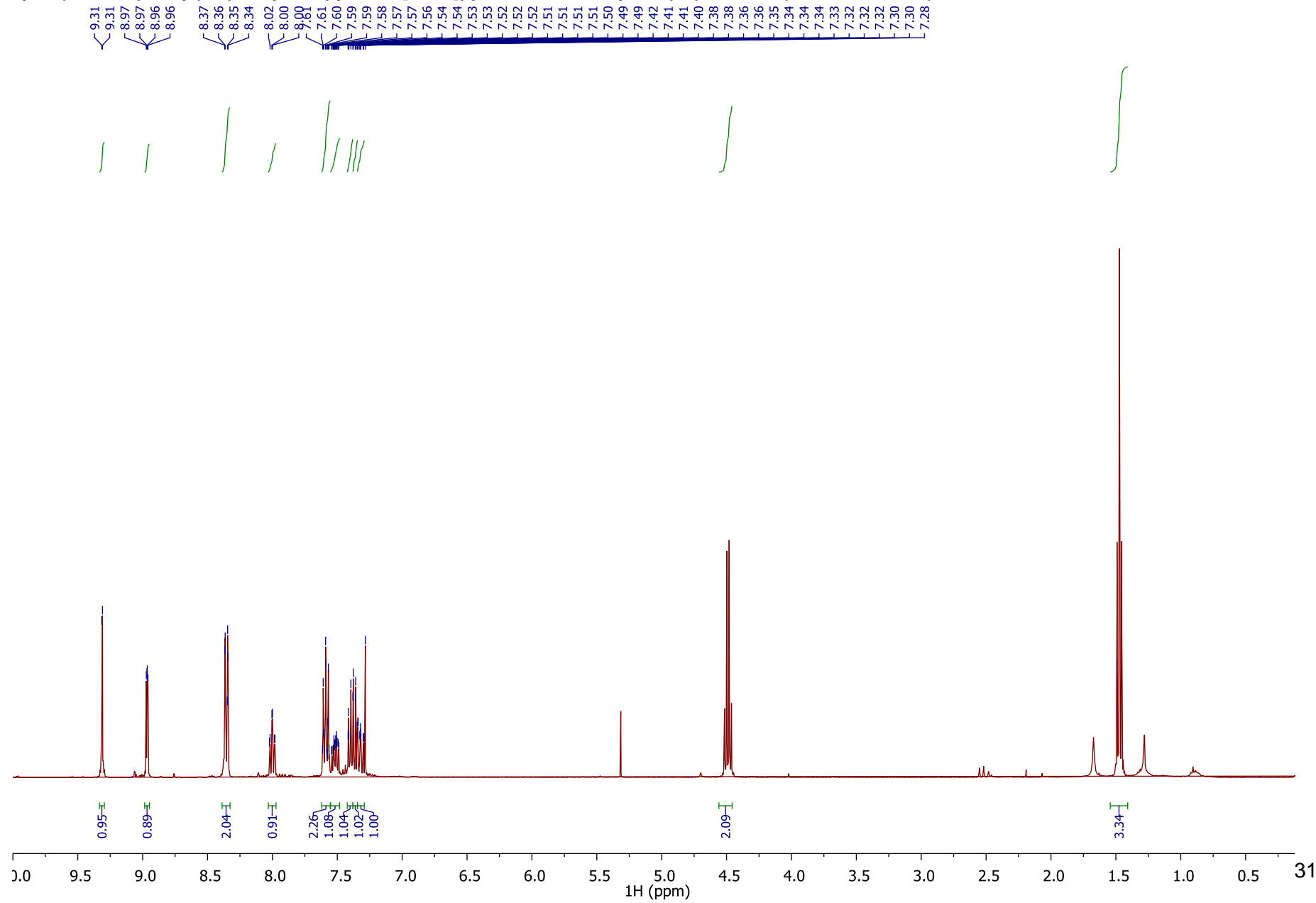
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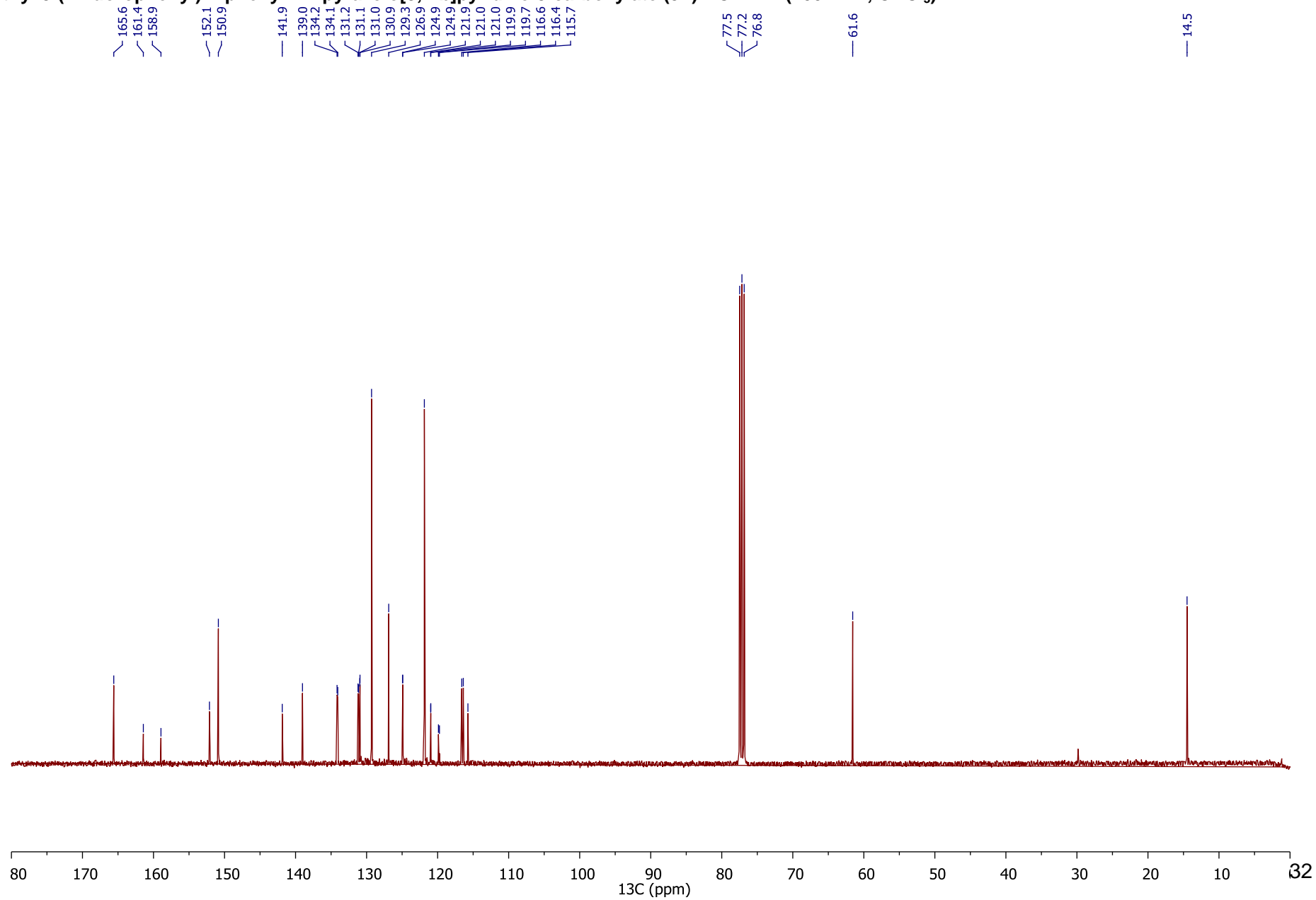
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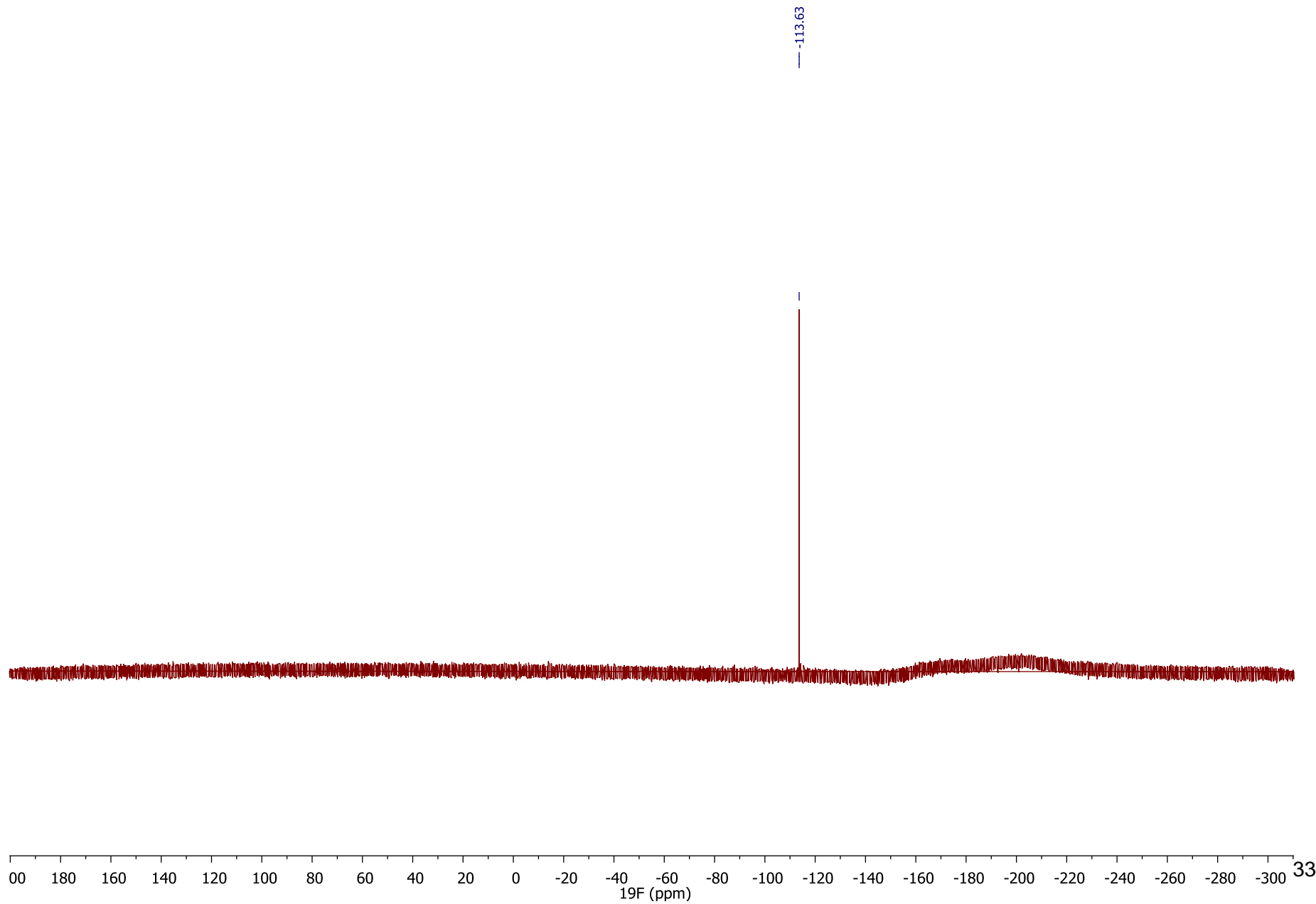
Ethyl 3-(2-fluorophenyl)-1-phenyl-1H-pyrazolo[3,4-b]pyridine-5-carboxylate (5n) <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>)



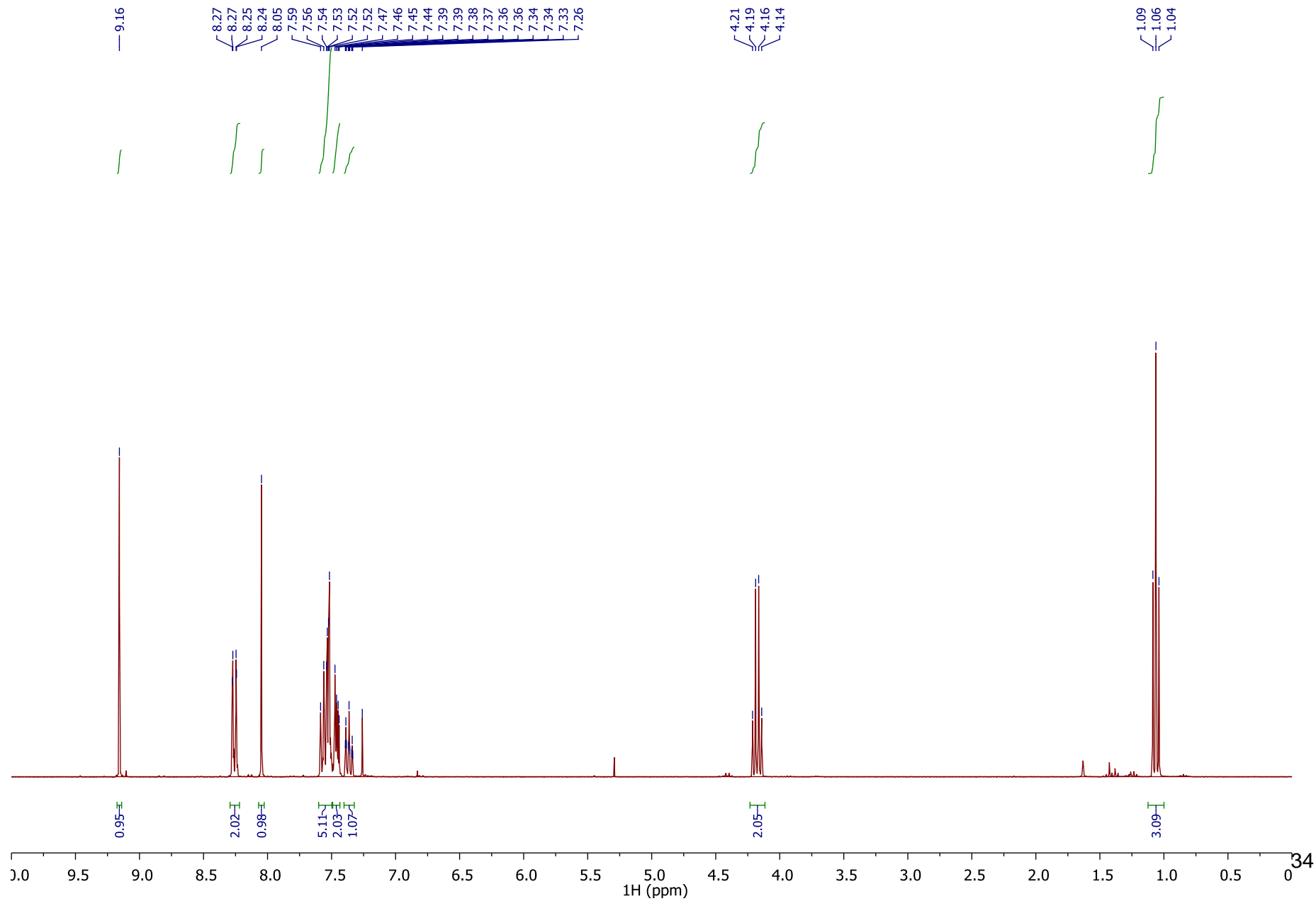
Ethyl 3-(2-fluorophenyl)-1-phenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (5n) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



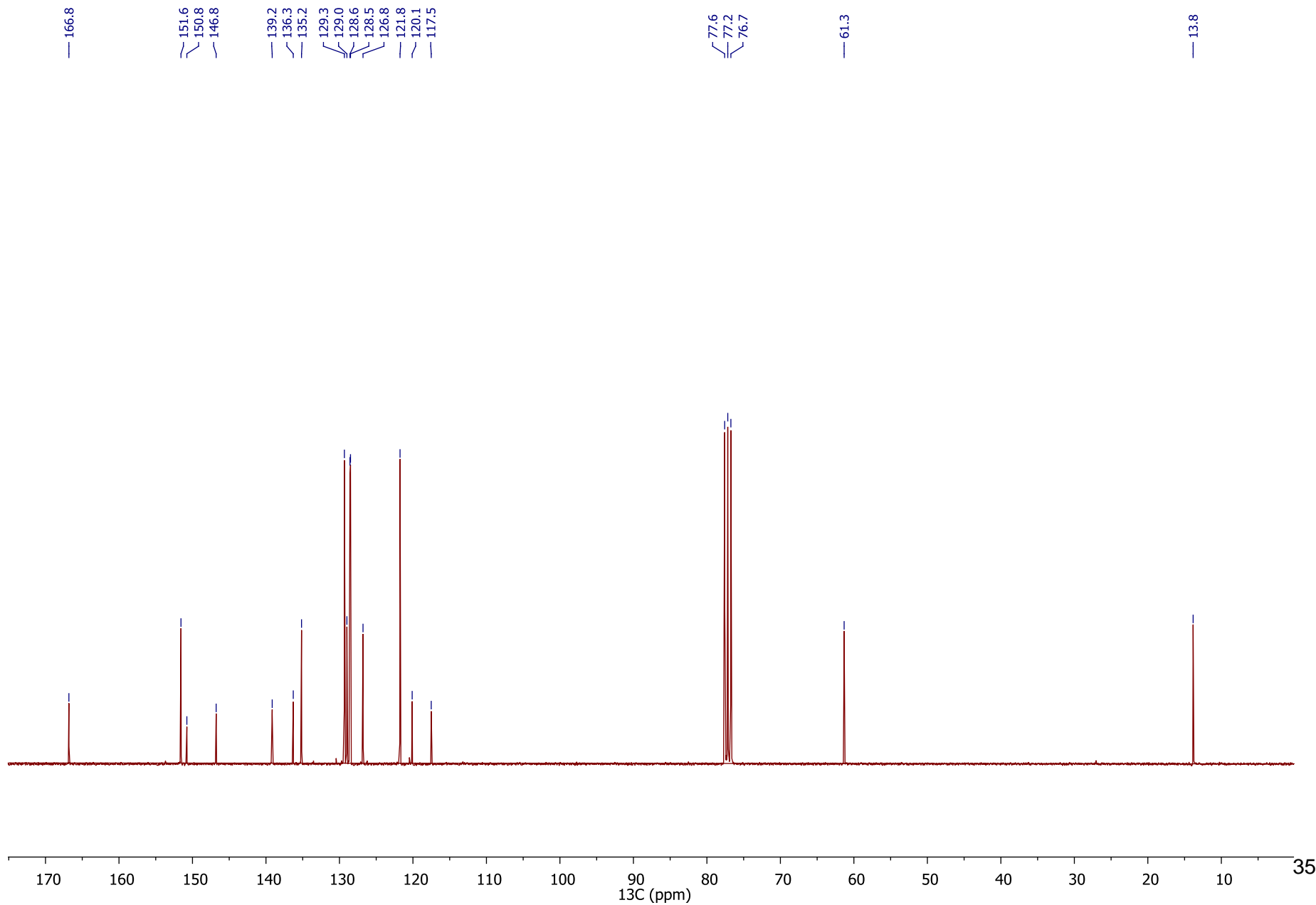
Ethyl 3-(2-fluorophenyl)-1-phenyl-1H-pyrazolo[3,4-b]pyridine-5-carboxylate (5n) <sup>19</sup>F-NMR (278 MHz, CDCl<sub>3</sub>)



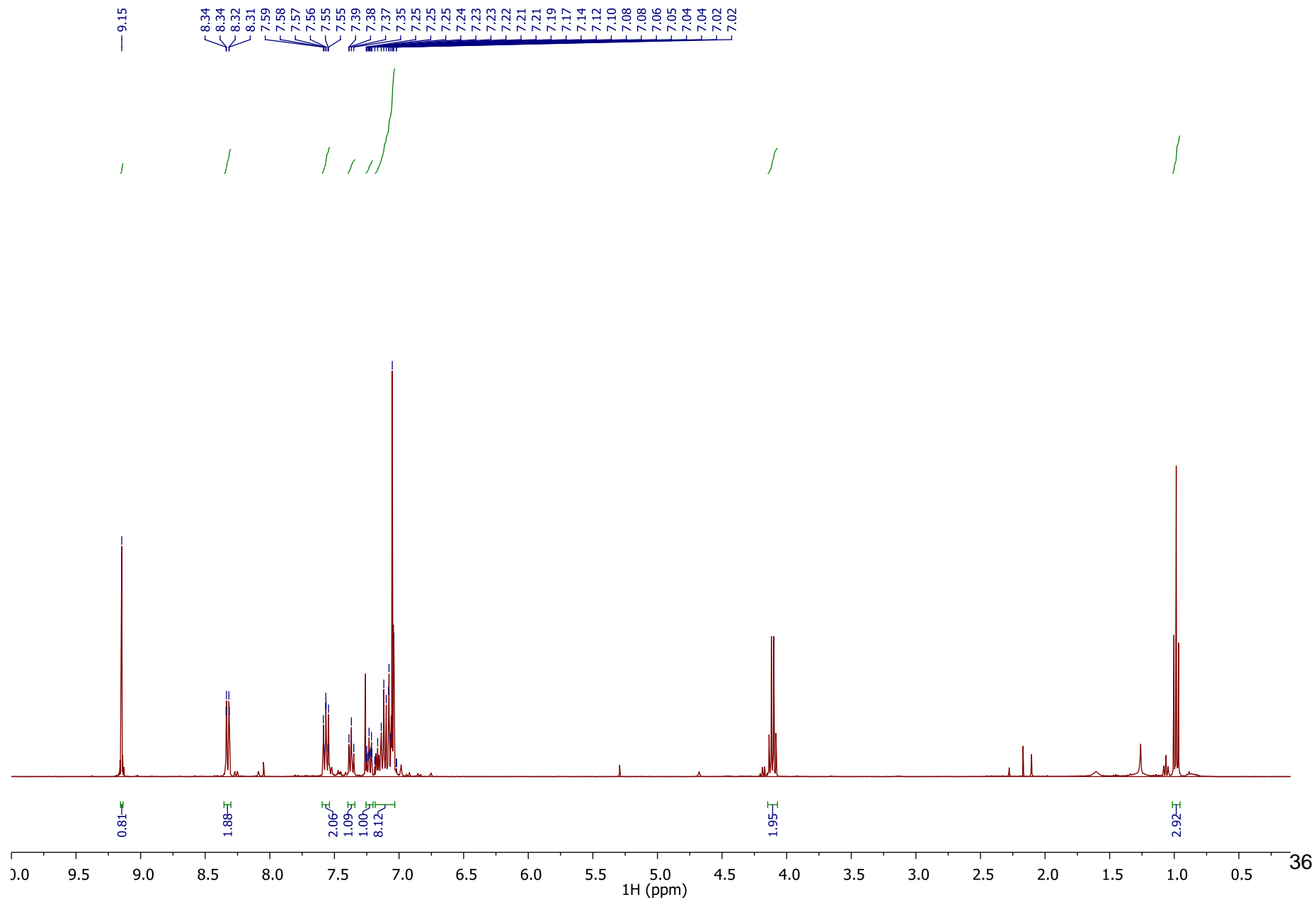
Ethyl 1,4-diphenyl-1H-pyrazolo[3,4-b]pyridine-5-carboxylate (6) <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>)



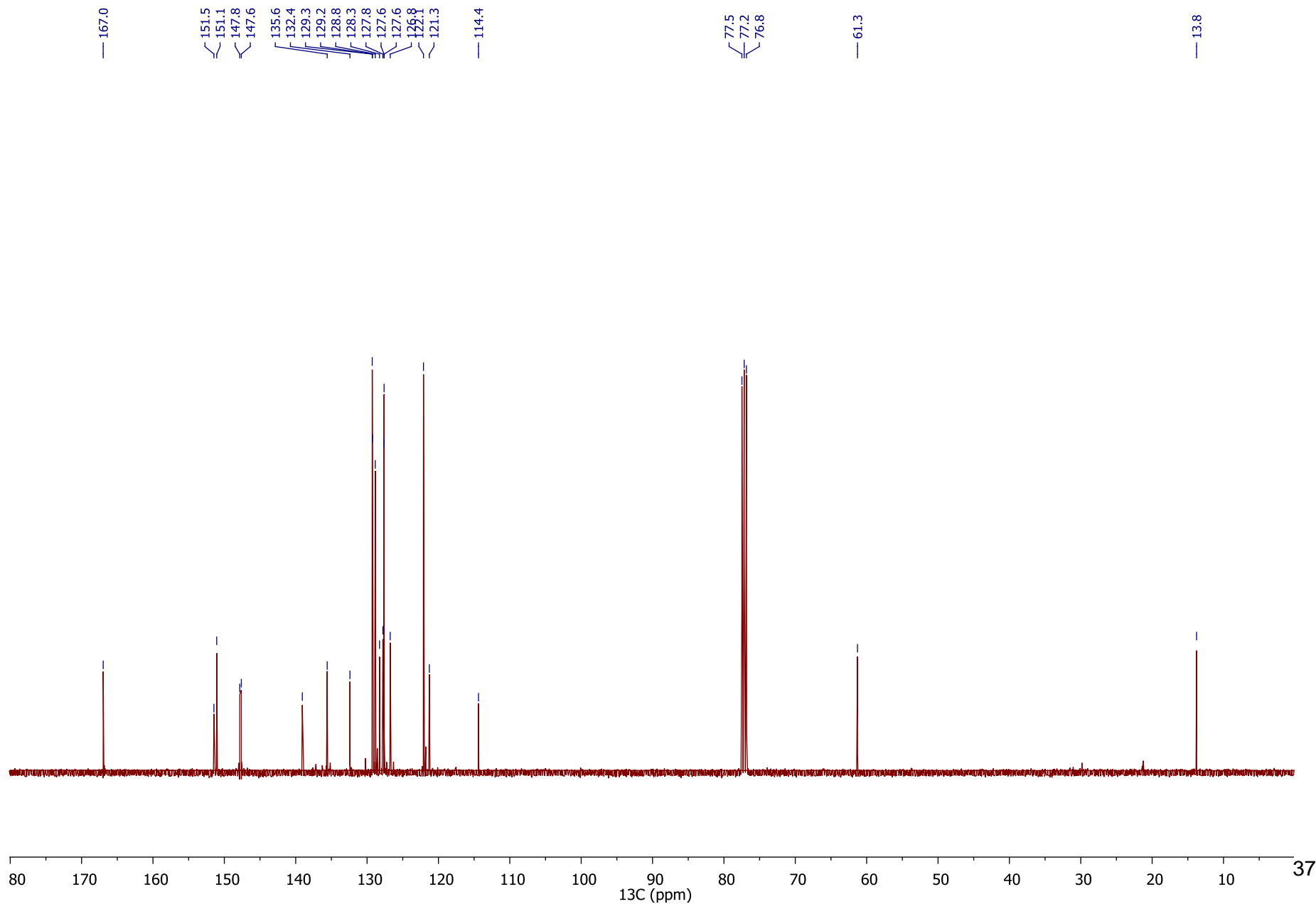
Ethyl 1,4-diphenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (6) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



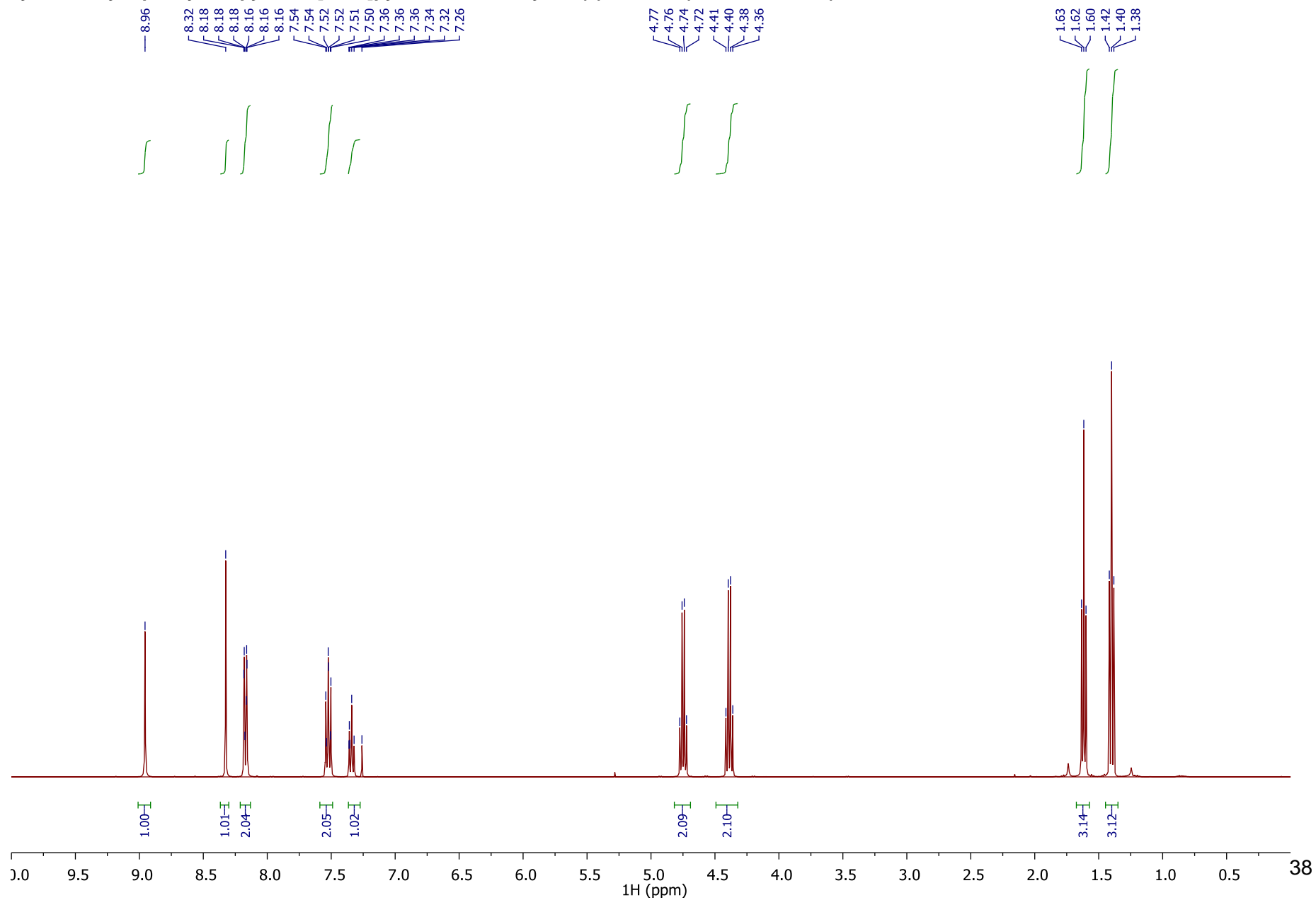
Ethyl 1,3,4-triphenyl-1H-pyrazolo[3,4-b]pyridine-5-carboxylate (7) <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>)



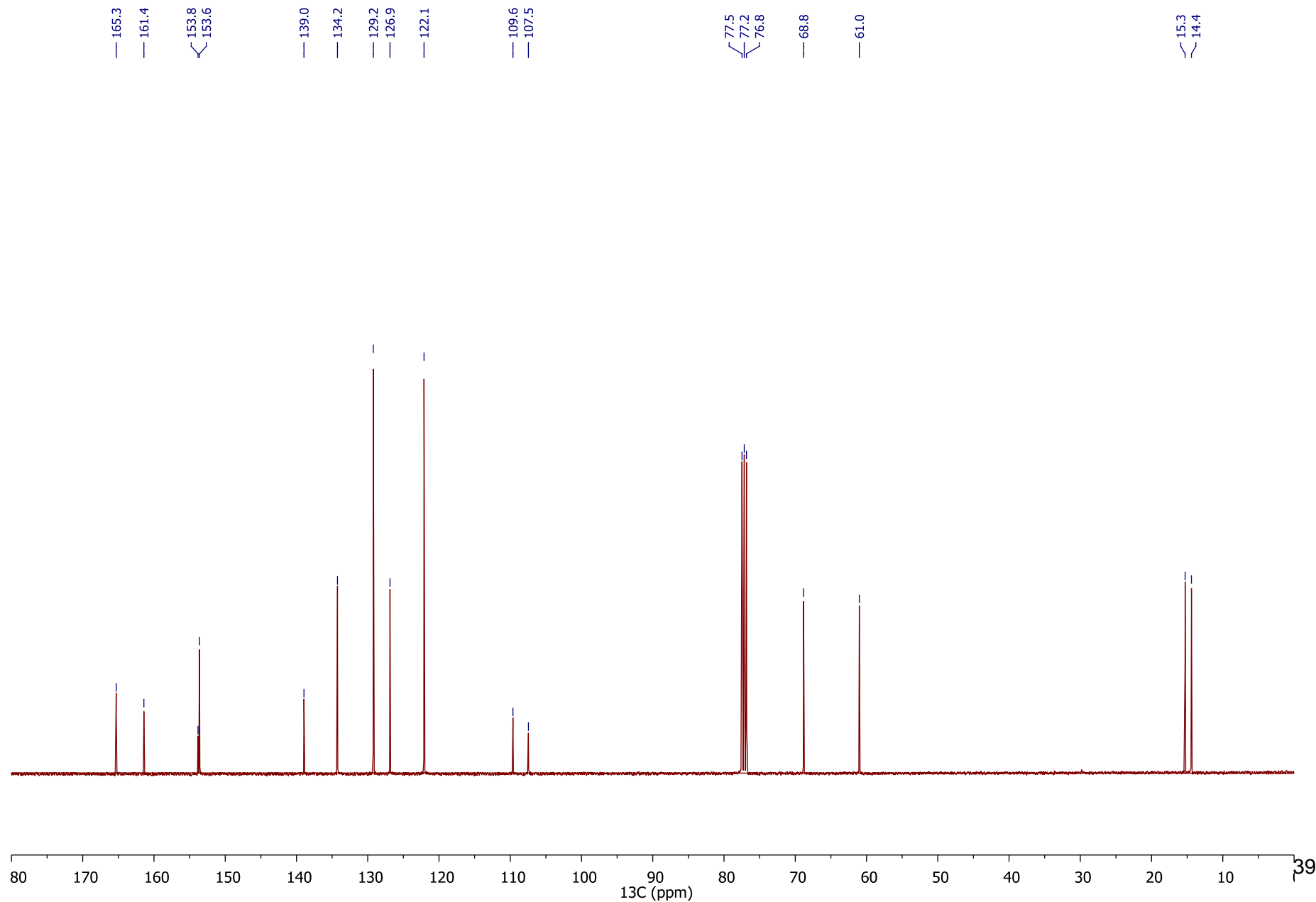
Ethyl 1,3,4-triphenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (7) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



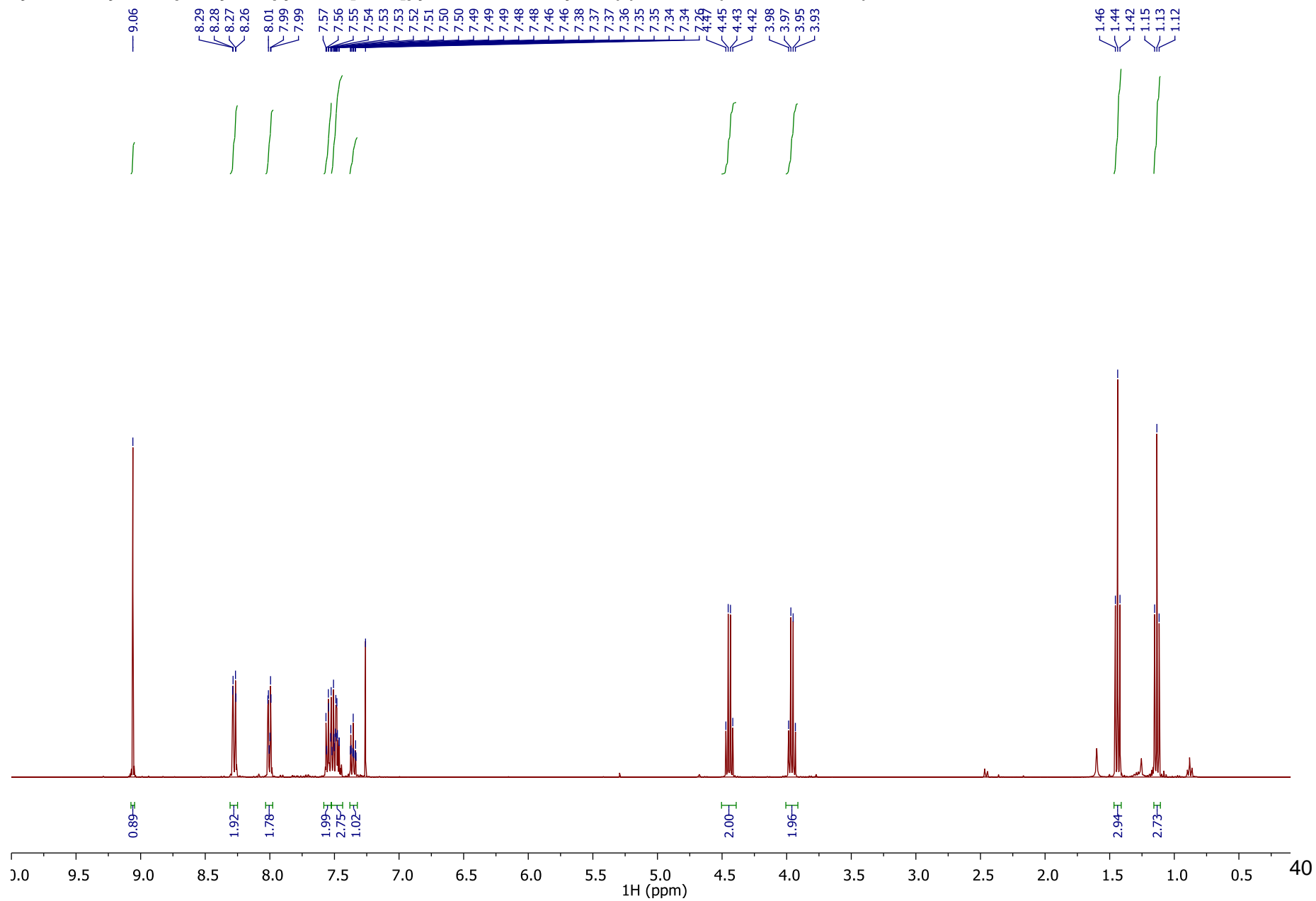
Ethyl 4-ethoxy-1-phenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (8) <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>)



Ethyl 4-ethoxy-1-phenyl-1H-pyrazolo[3,4-b]pyridine-5-carboxylate (8) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)



Ethyl 4-ethoxy-1,3-diphenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (9) <sup>1</sup>H-NMR (400 MHz, CDCl<sub>3</sub>)



Ethyl 4-ethoxy-1,3-diphenyl-1*H*-pyrazolo[3,4-*b*]pyridine-5-carboxylate (9) <sup>13</sup>C-NMR (100 MHz, CDCl<sub>3</sub>)

