

Synthesis of enantioenriched tertiary boronic esters from secondary allylic carbamates.

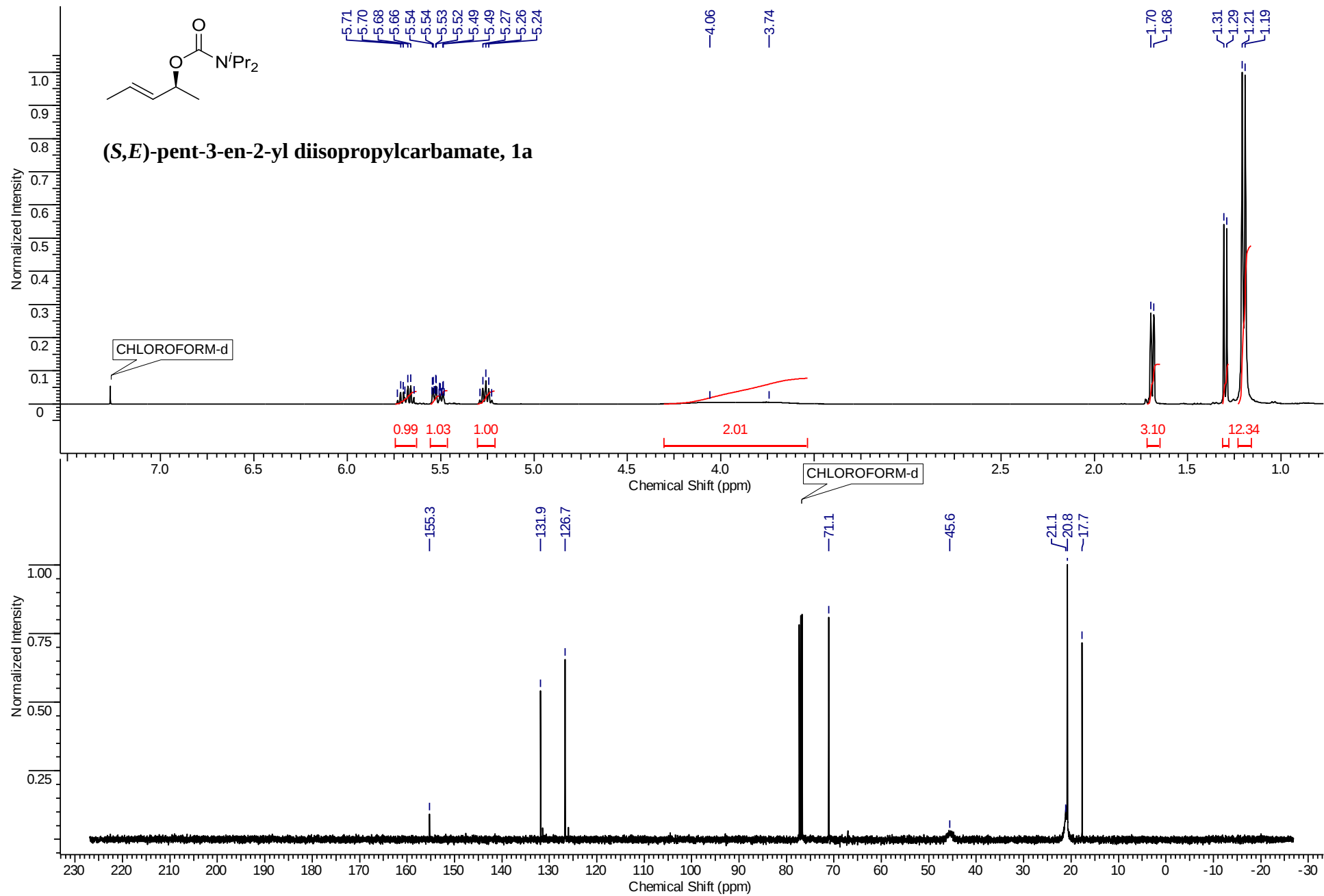
Application to the synthesis of C30 botryococcene.

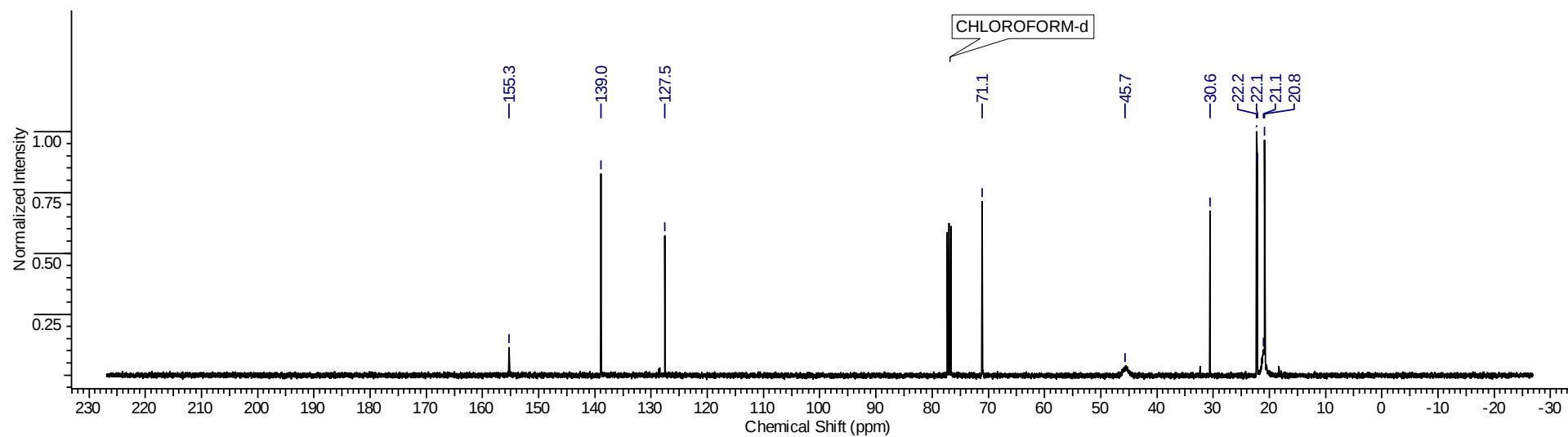
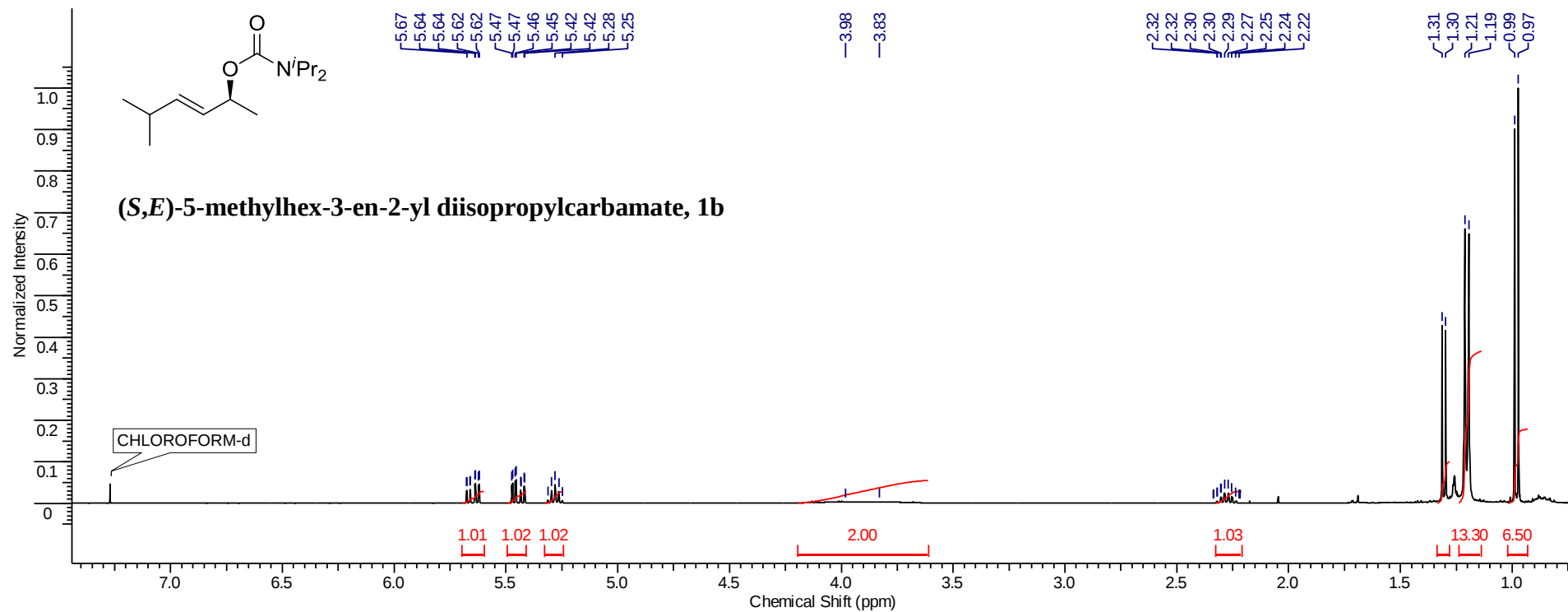
Alexander P. Pulis, Varinder K. Aggarwal

Supporting information: NMR spectra

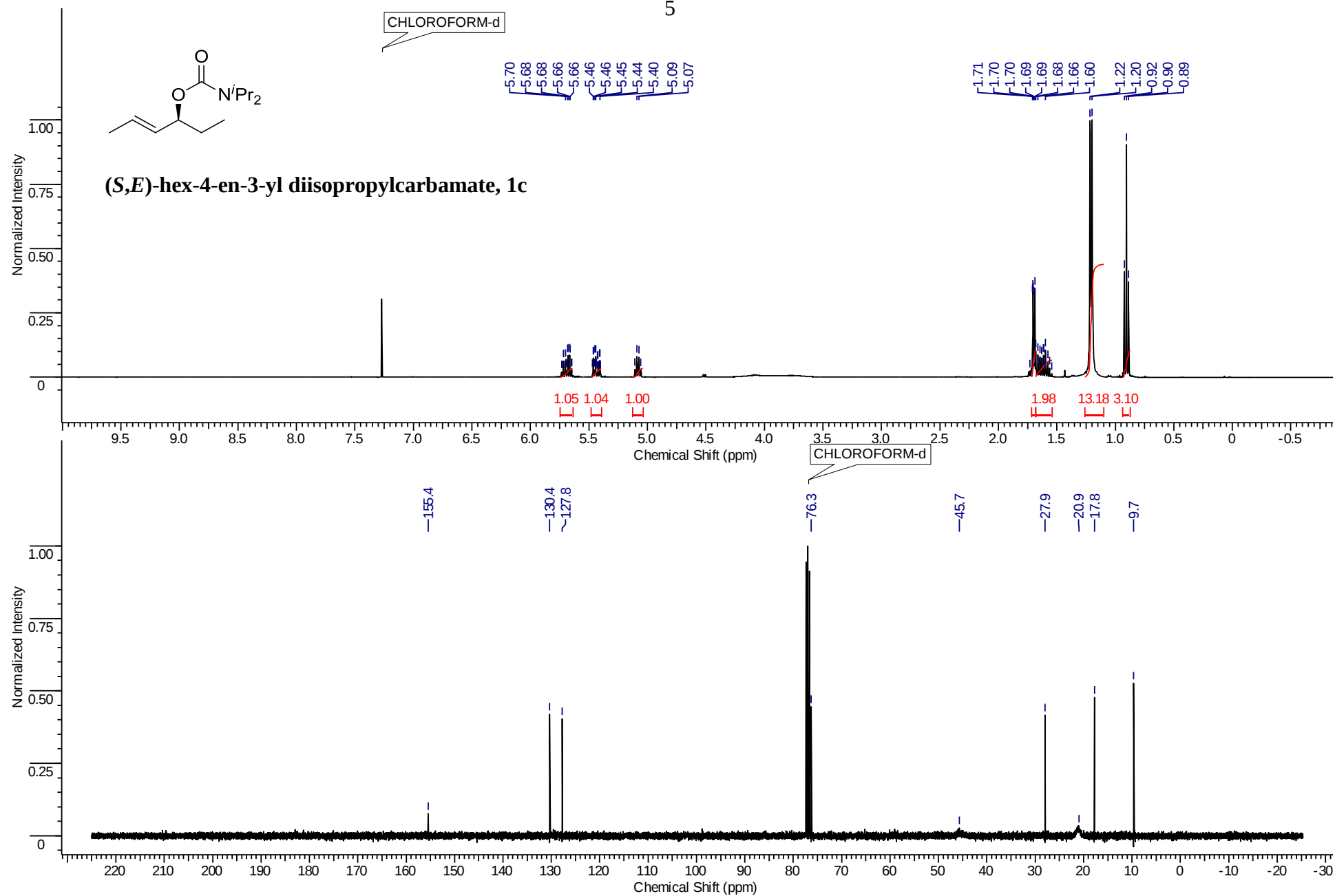
(<i>S,E</i>)-pent-3-en-2-yl diisopropylcarbamate, 1a	3
(<i>S,E</i>)-5-methylhex-3-en-2-yl diisopropylcarbamate, 1b	4
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(<i>S,E</i>)-3-methylpent-3-en-2-yl diisopropylcarbamate, 1e	7
(<i>S</i>)-1-(cyclohex-1-en-1-yl)ethyl diisopropylcarbamate, 1f	8
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(<i>S,E</i>)-4,4,5,5-tetramethyl-2-(4-methyloct-2-en-4-yl)-1,3,2-dioxaborolane, 3aa	11
(<i>S,E</i>)-2-(3,6-dimethylhept-4-en-3-yl)-4,4,5,5-tetramethyl-1,3,2-dioxaborolane, 3bg	12
(<i>R,E</i>)-4-methyloct-2-en-4-ol, 4aa	13
(<i>R,E</i>)-3-methyl-1-phenylhex-4-en-3-ol, 4ab	14
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(<i>R,E</i>)-4-methylhepta-1,5-dien-4-ol, 4ad	16
(<i>Z</i>)-4-hydroxypent-2-en-2-yl diisopropylcarbamate, 6a	17
(<i>S,E</i>)-2-phenylpent-3-en-2-ol, 4ae	18
(<i>R,E</i>)-3,6-dimethylhepta-1,4-dien-3-ol, 4bf	19
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(<i>rac,E</i>)-6-methyl-4-phenethylhept-2-en-4-ol, 4db	22
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(<i>R,E</i>)-2-(6,10-dimethylundeca-5,9-dien-2-yl)-4,4,5,5-tetramethyl-1,3,2-dioxaborolane, 9	29
(<i>R,E</i>)-6,10-dimethylundeca-5,9-dien-2-ol	30
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2-((<i>6E,10S,11E,13R,16E</i>)-2,6,10,13,17,21-hexamethyldocosa-2,6,11,16,20-pentaen-10-yl)-4,4,5,5-tetramethyl-1,3,2-dioxaborolane, 15	37

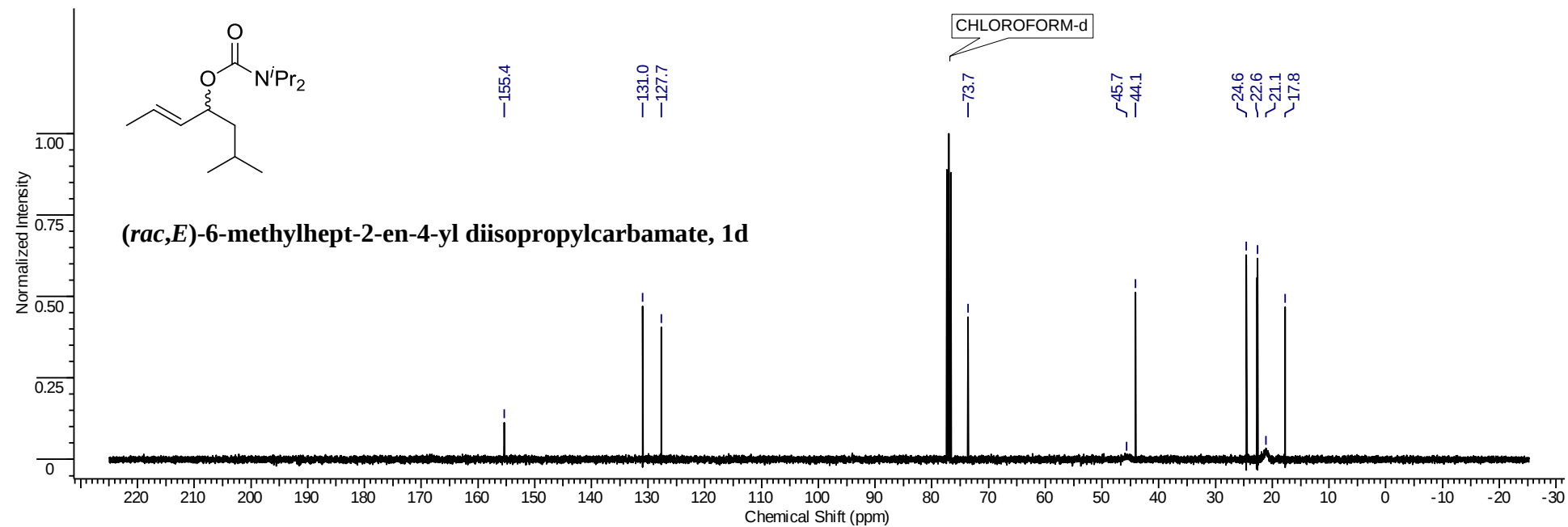
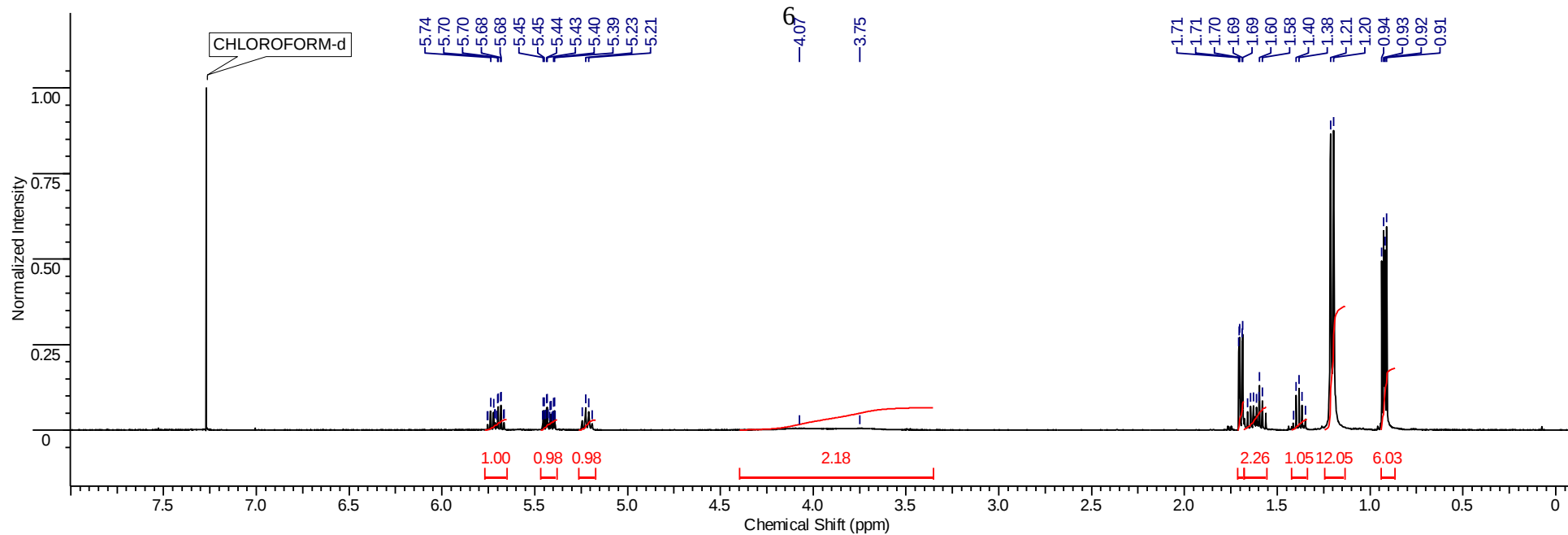
2-((6 <i>E</i> ,10 <i>R</i> ,11 <i>E</i> ,13 <i>R</i> ,16 <i>E</i>)-2,6,10,13,17,21-hexamethyldocosa-2,6,11,16,20-pentaen-10-yl)-4,4,5,5-tetramethyl-1,3,2-dioxaborolane, 20	38
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(6 <i>E</i> ,10 <i>R</i> ,11 <i>E</i> ,13 <i>R</i> ,16 <i>E</i>)-2,6,10,13,17,21-hexamethyl-10-vinyldocosa-2,6,11,16,20-pentaene (C30 Botryococcene), 10-<i>epi</i>-7	41

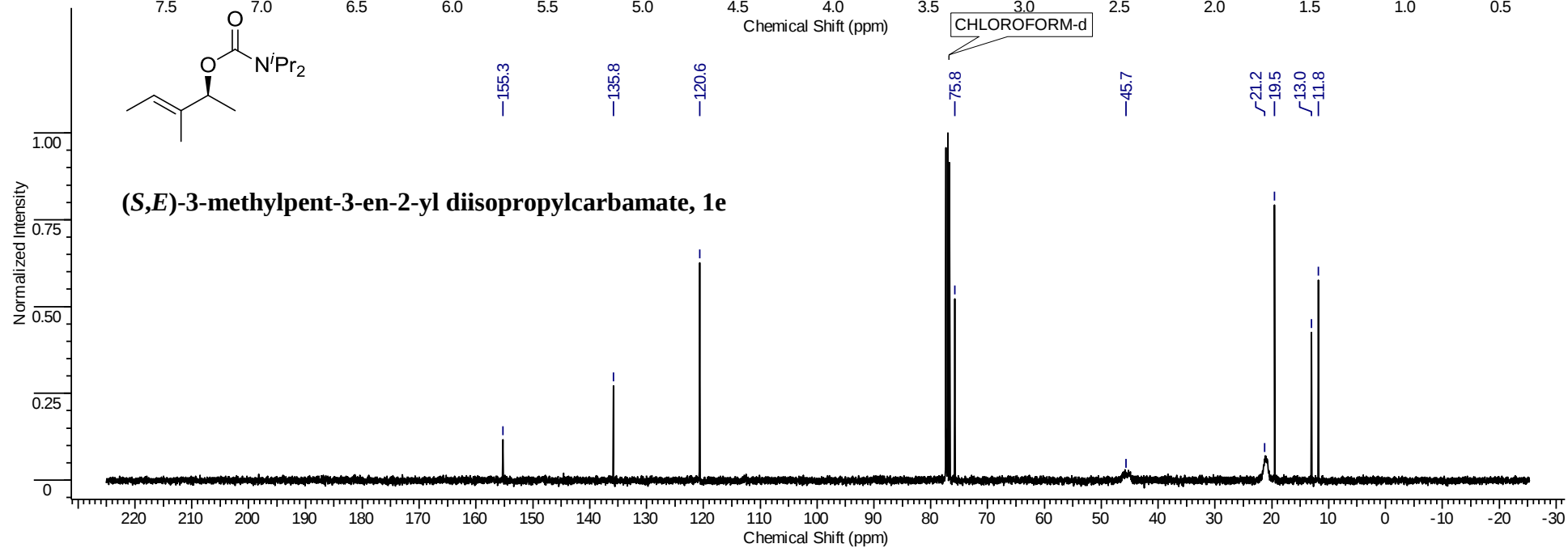
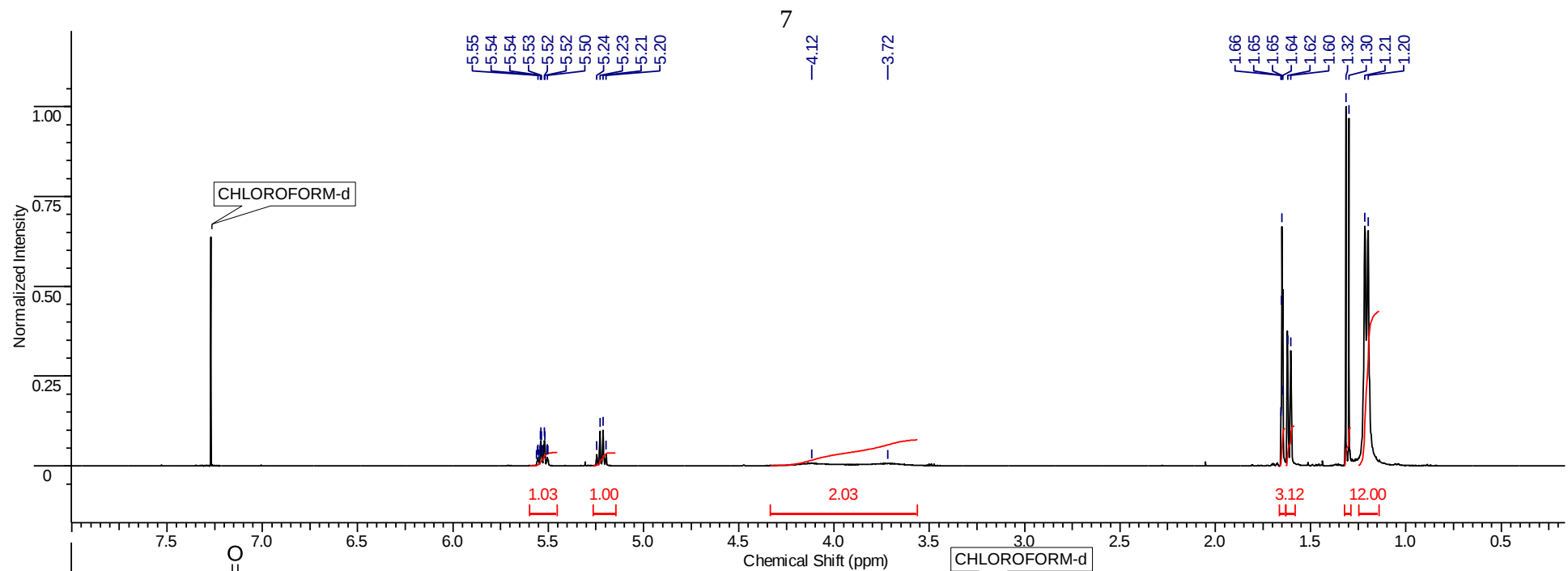




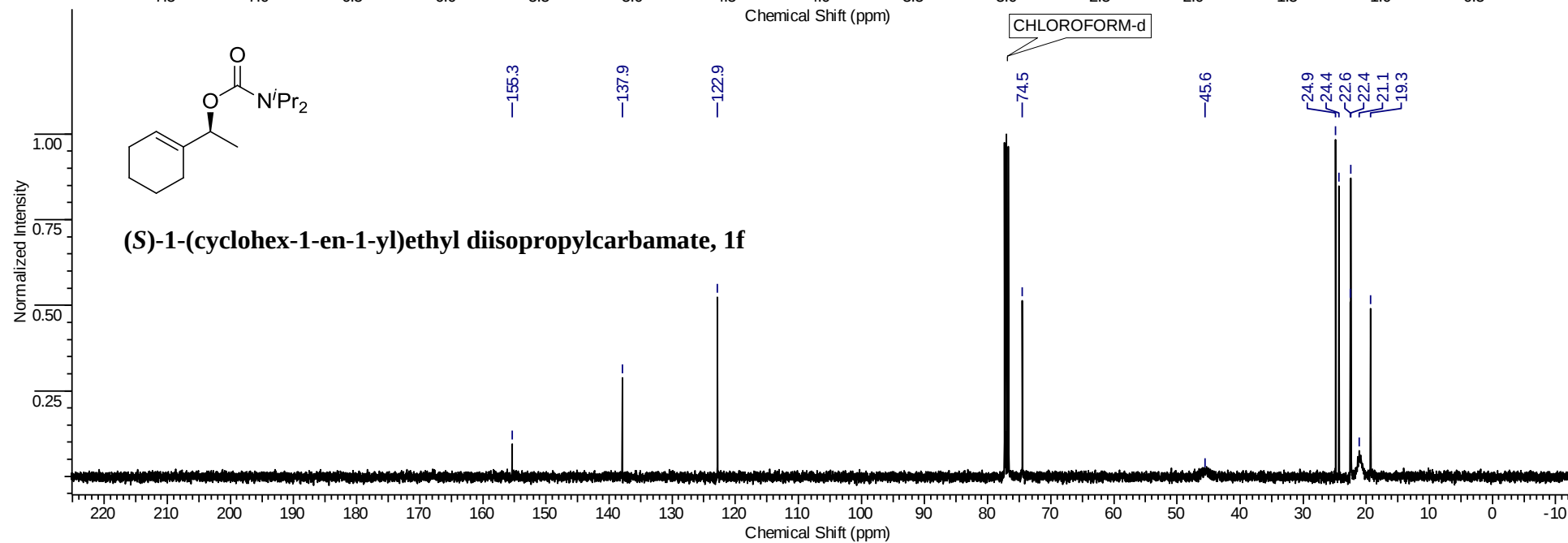
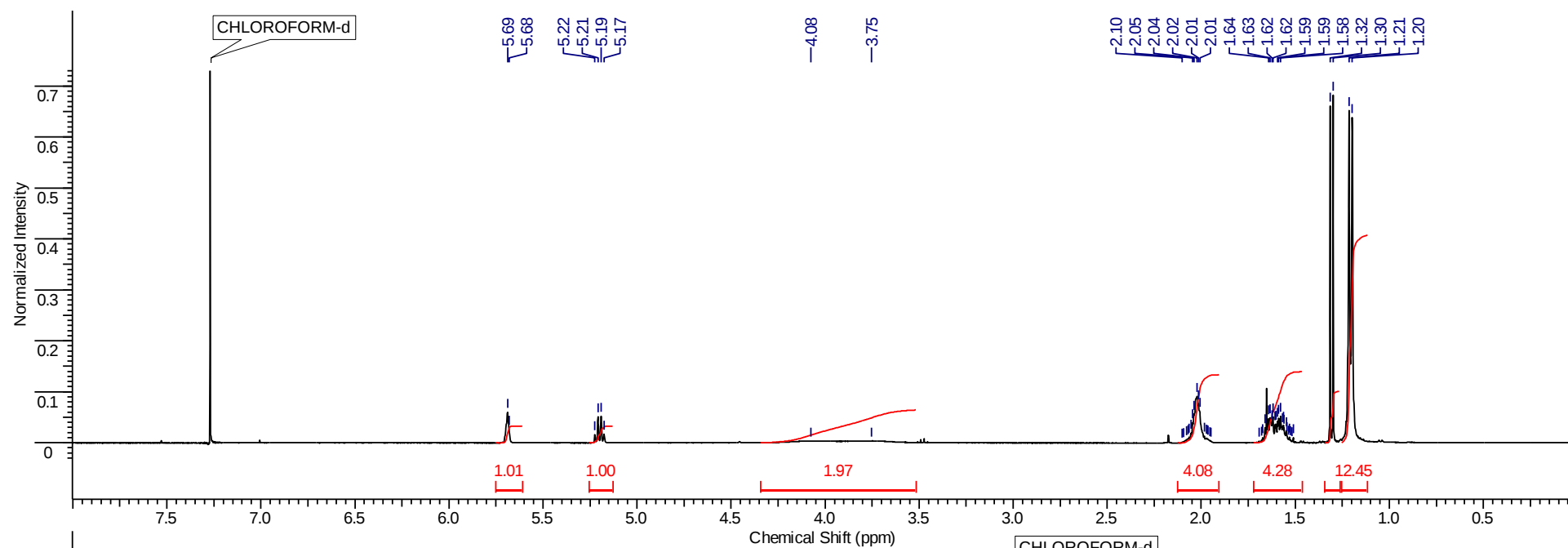
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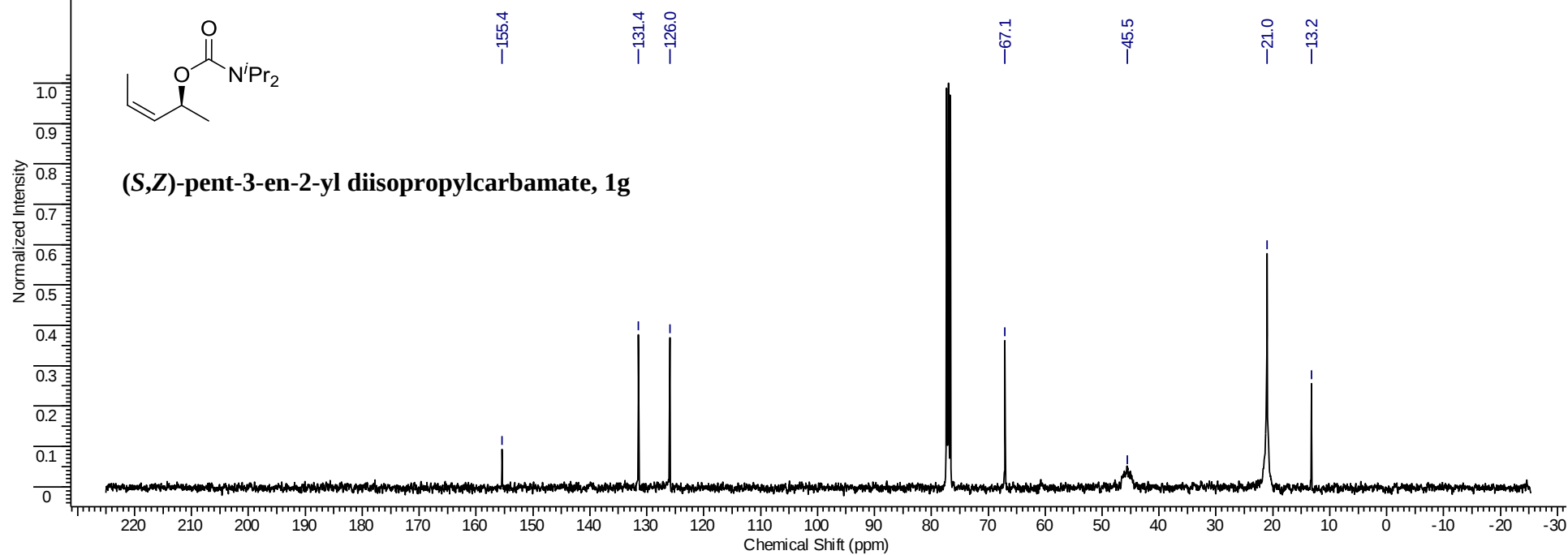
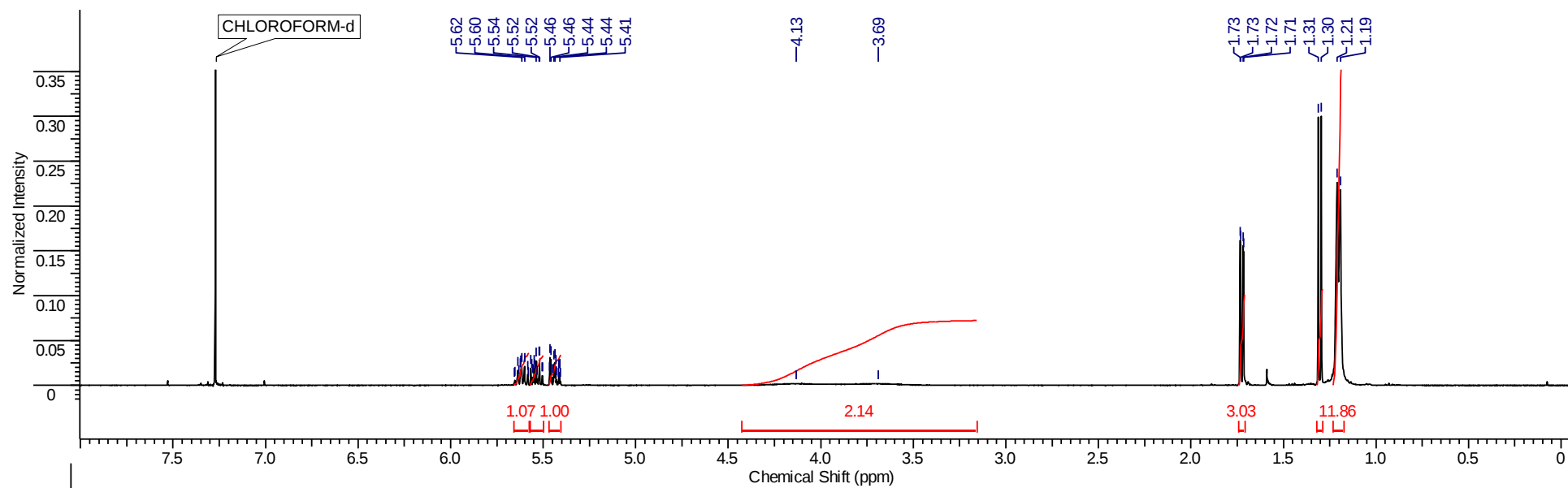


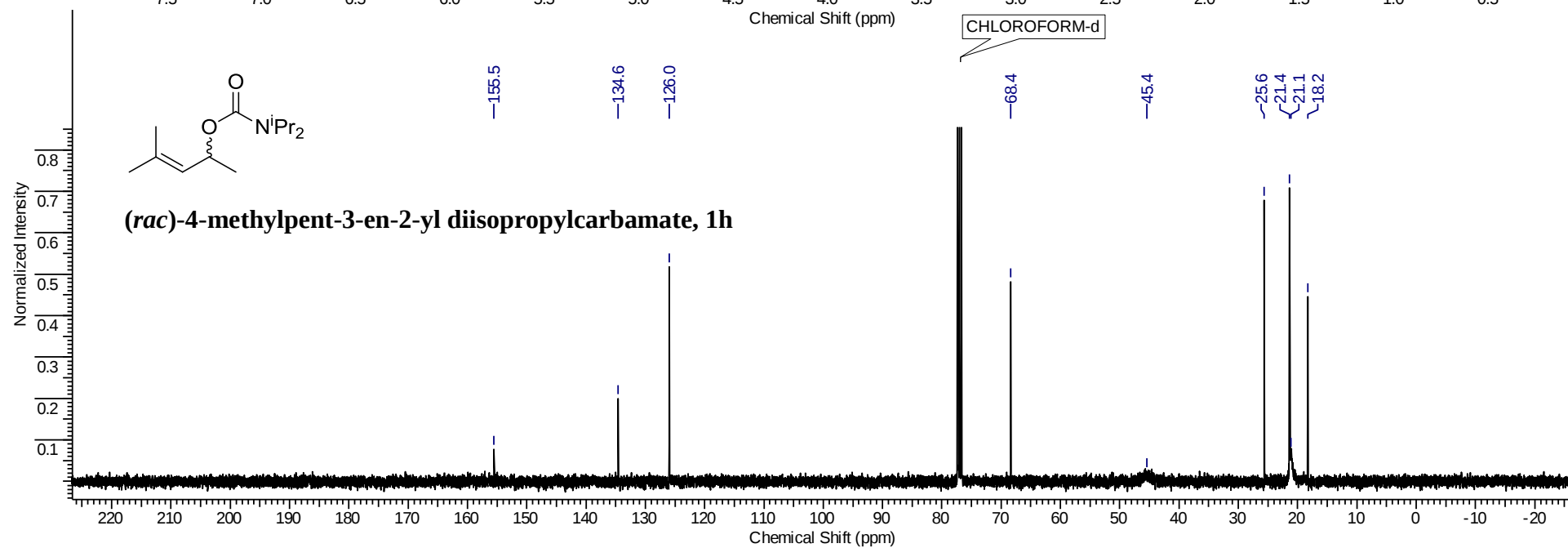
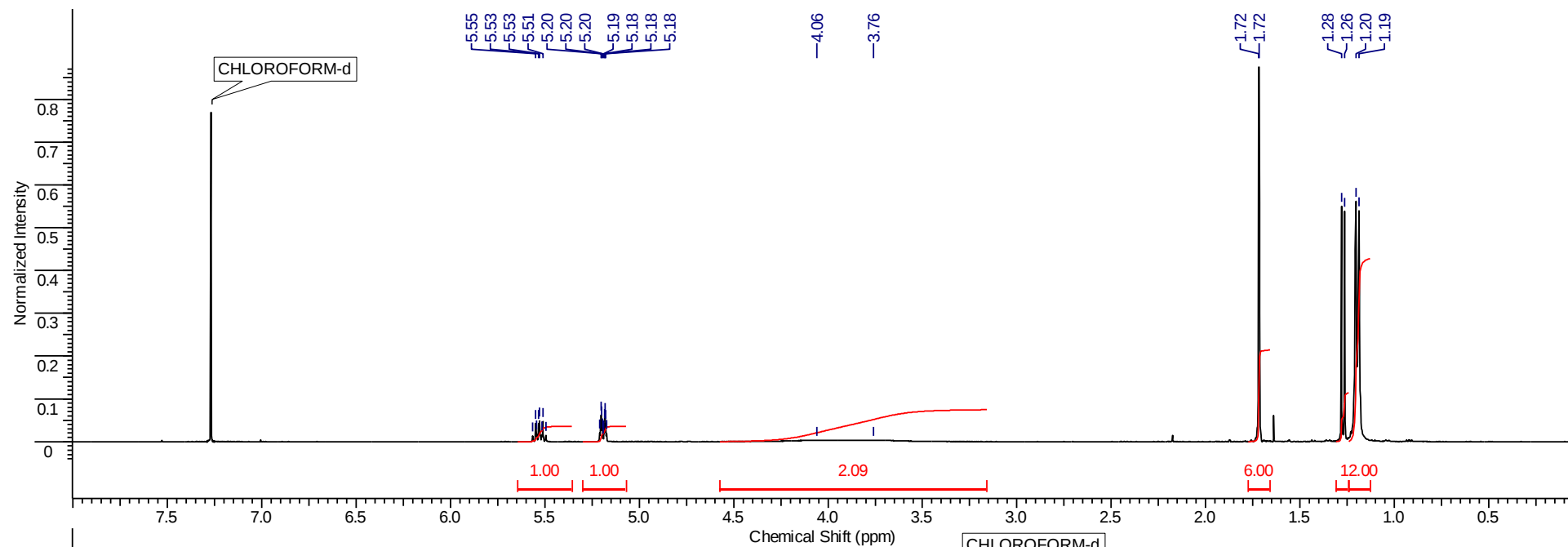


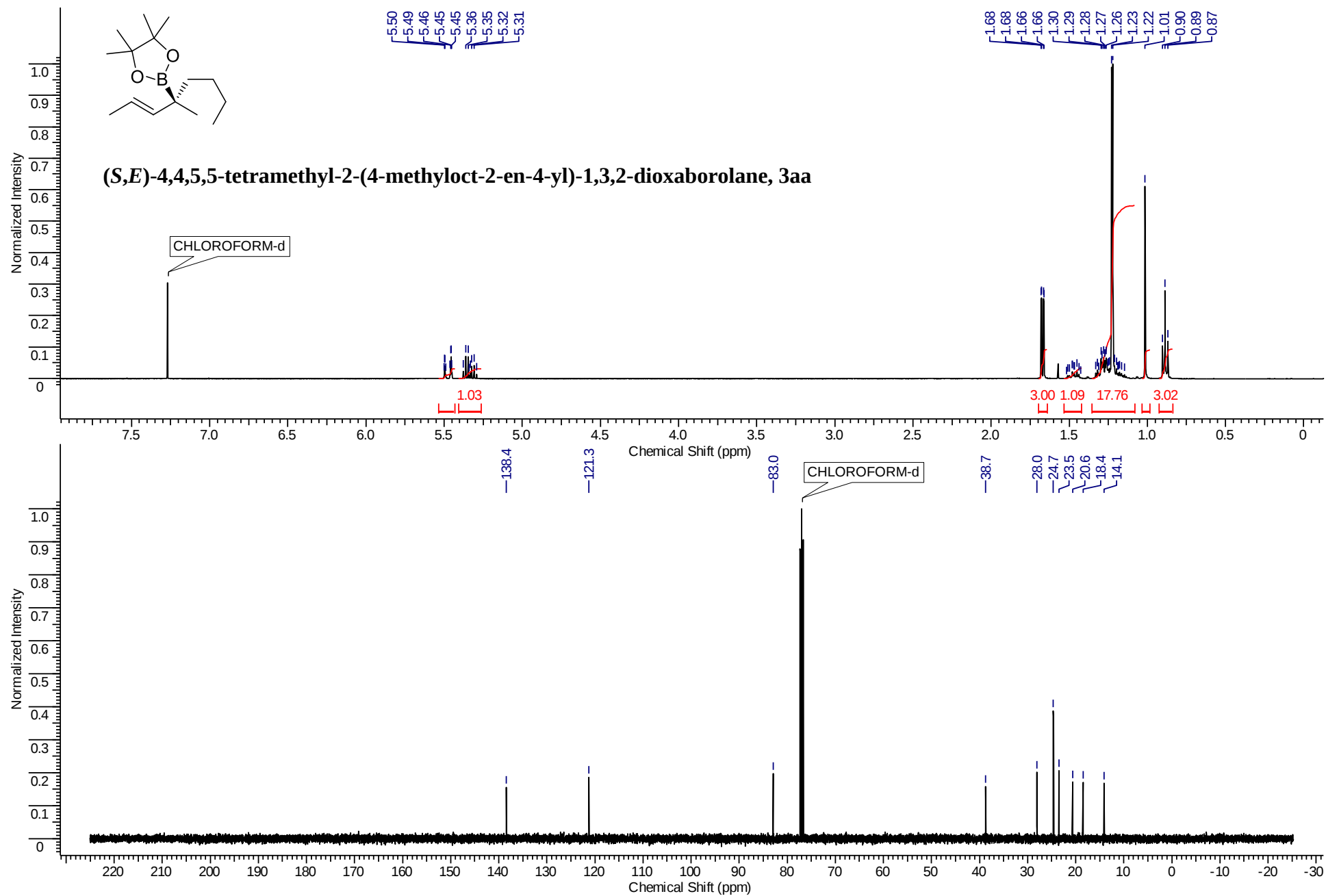
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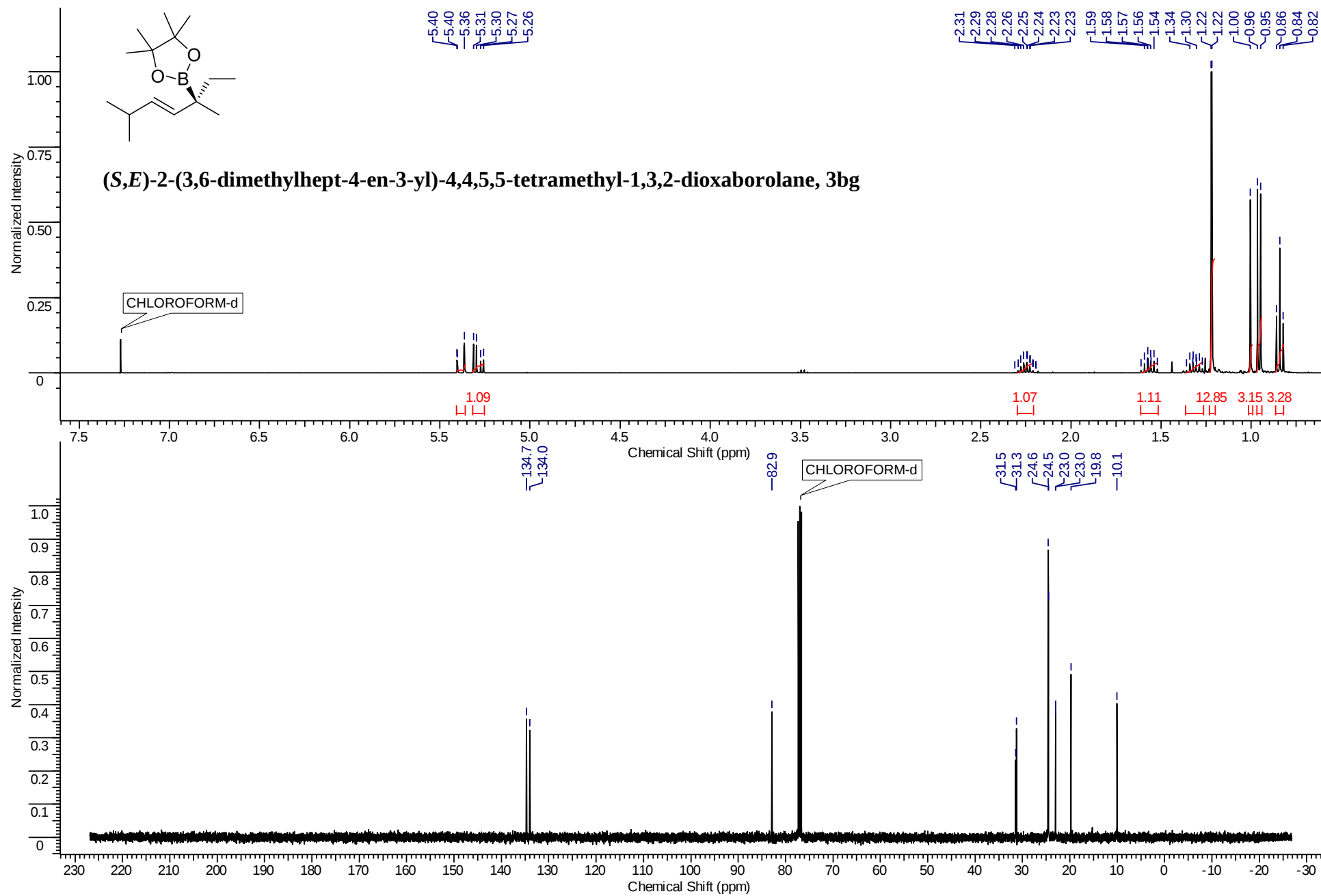


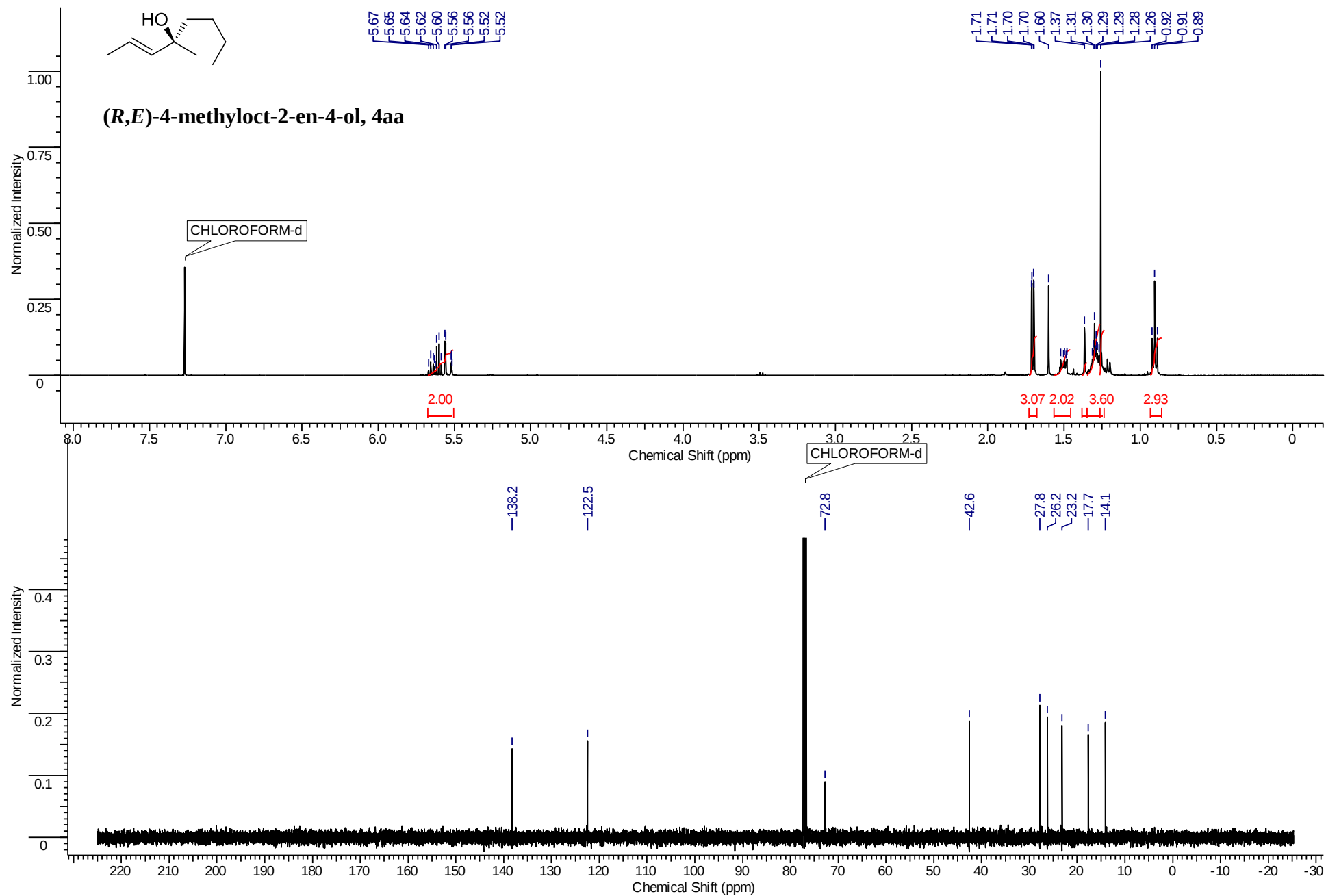
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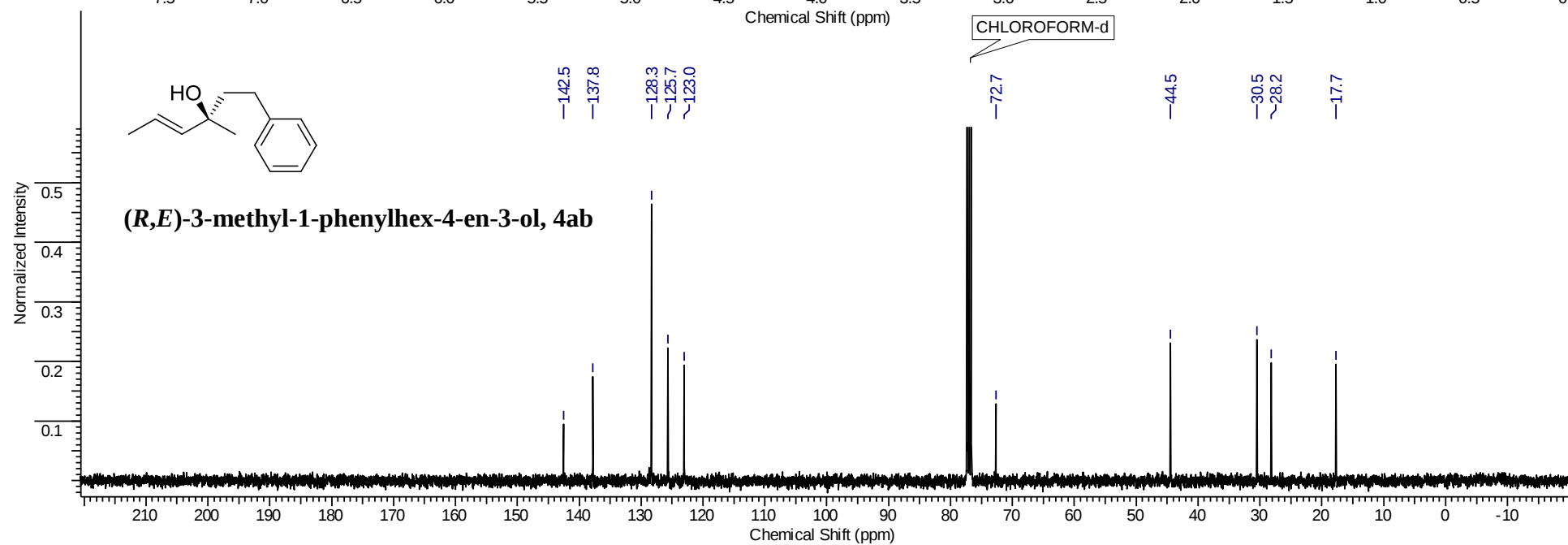
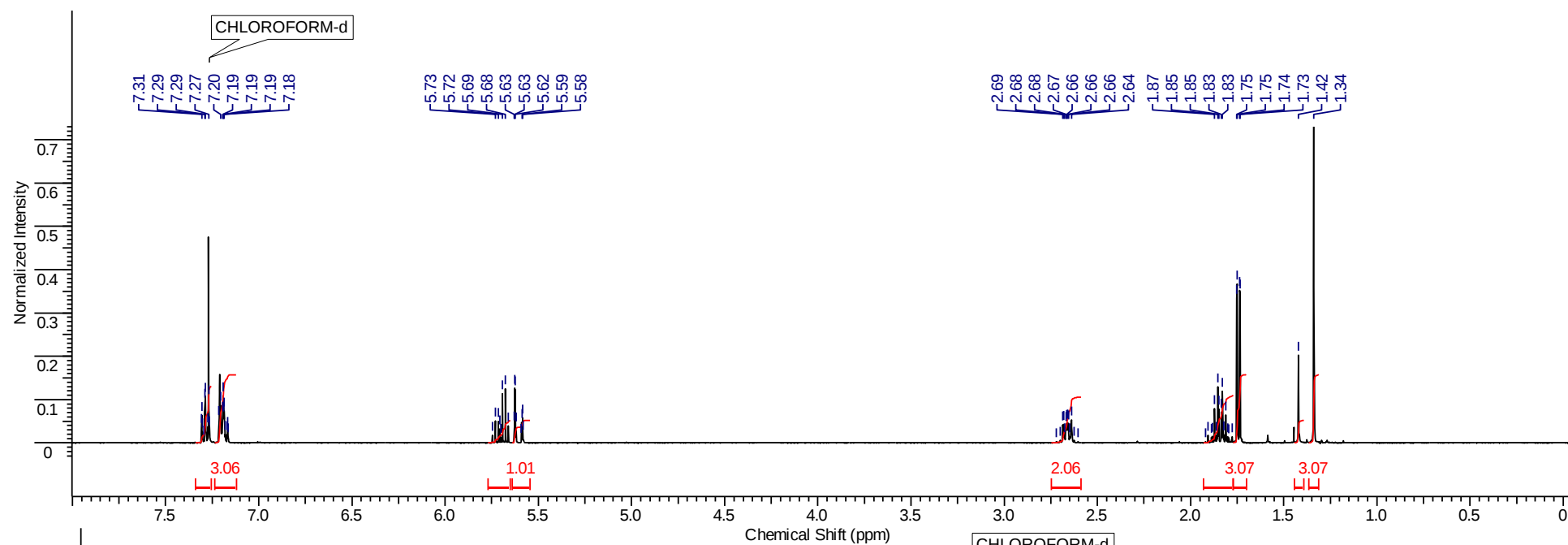


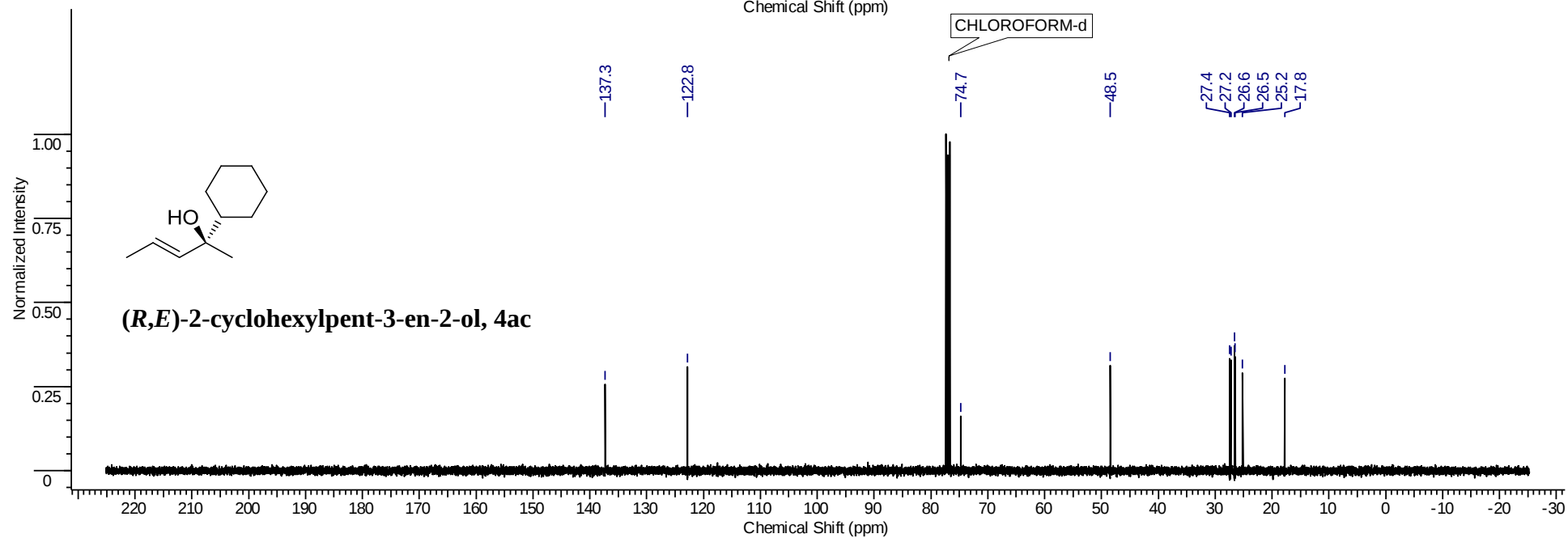
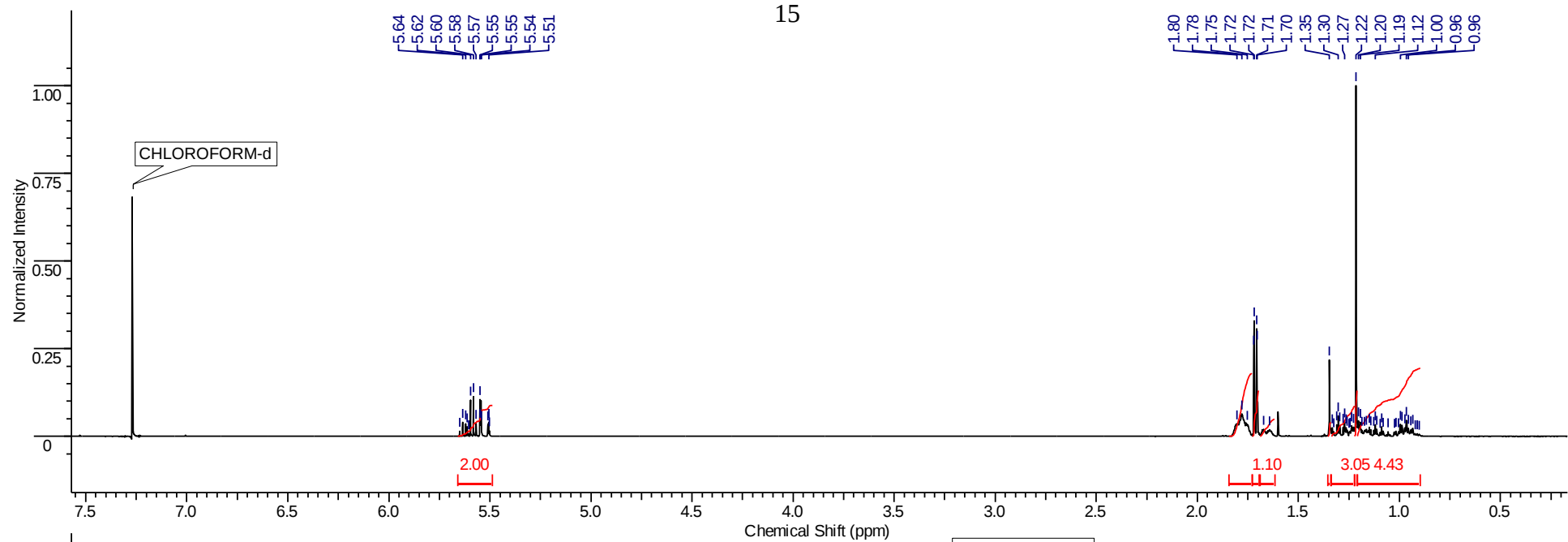




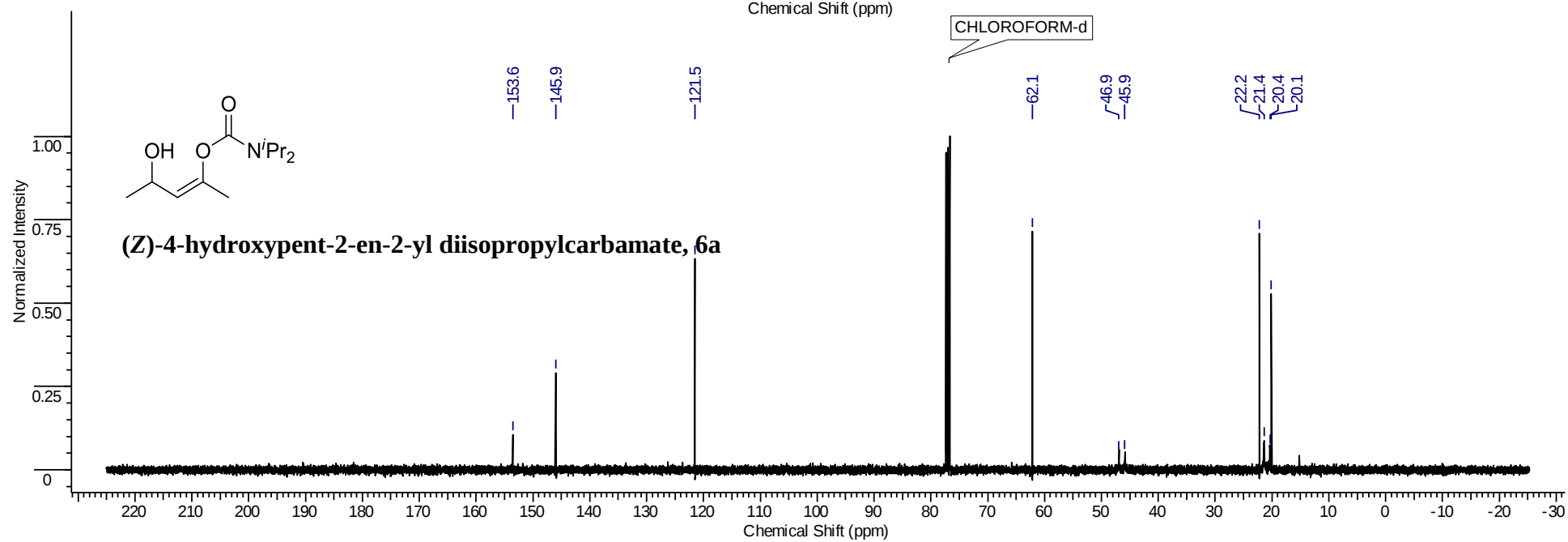
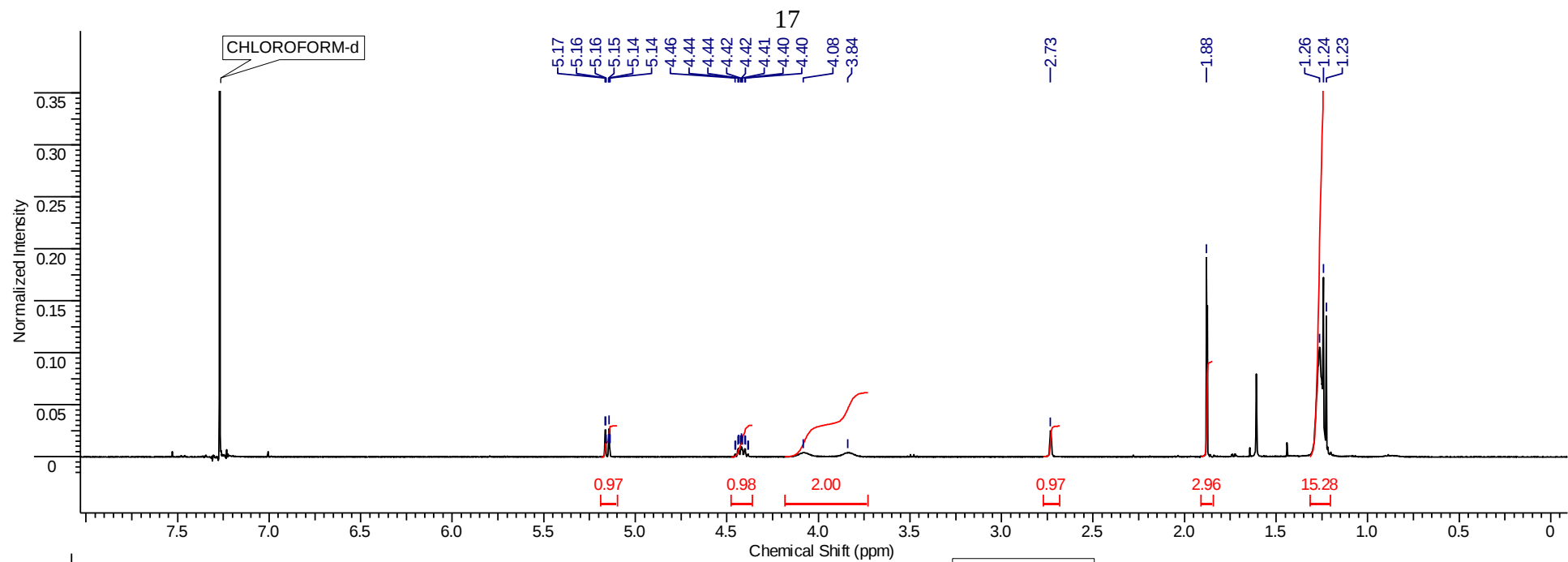


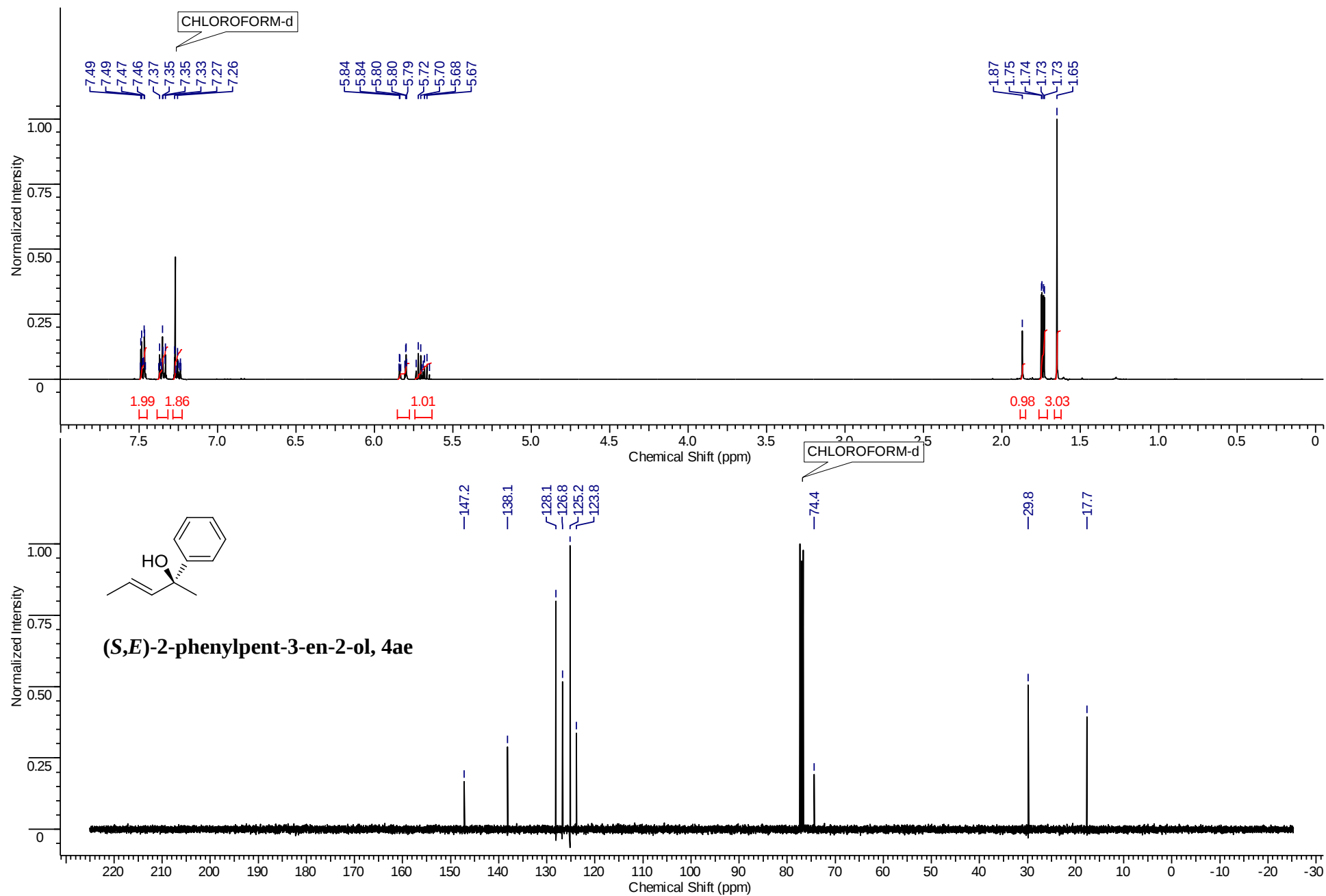


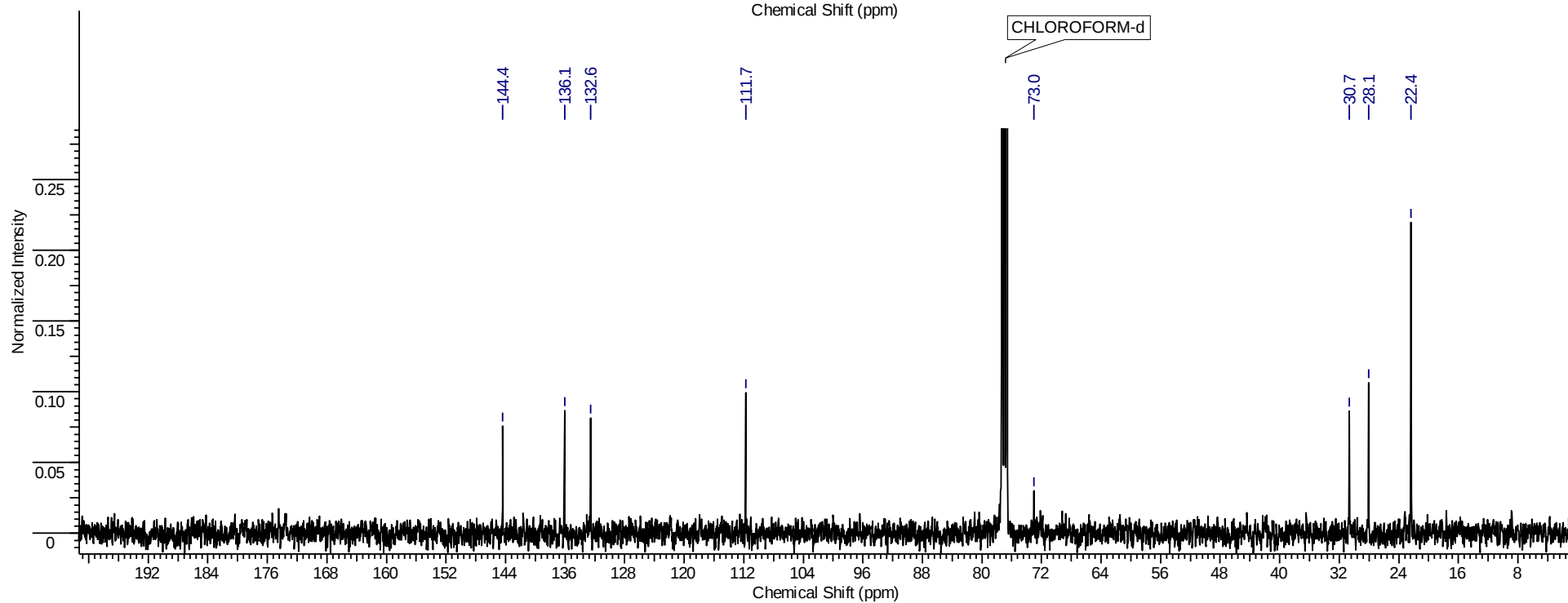
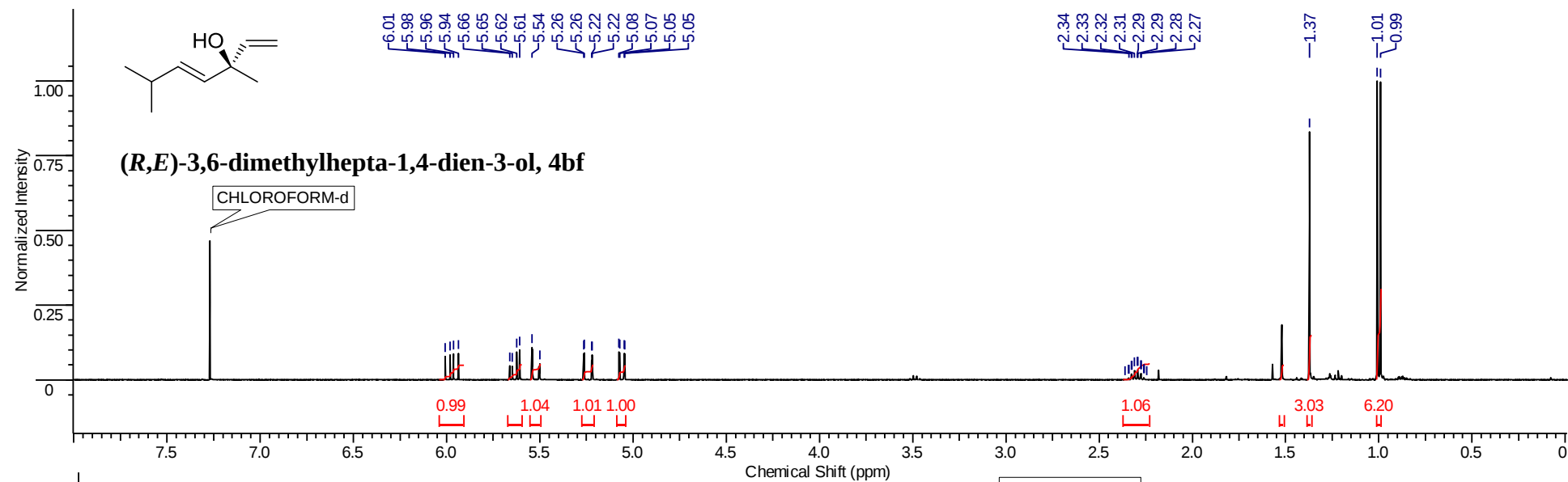


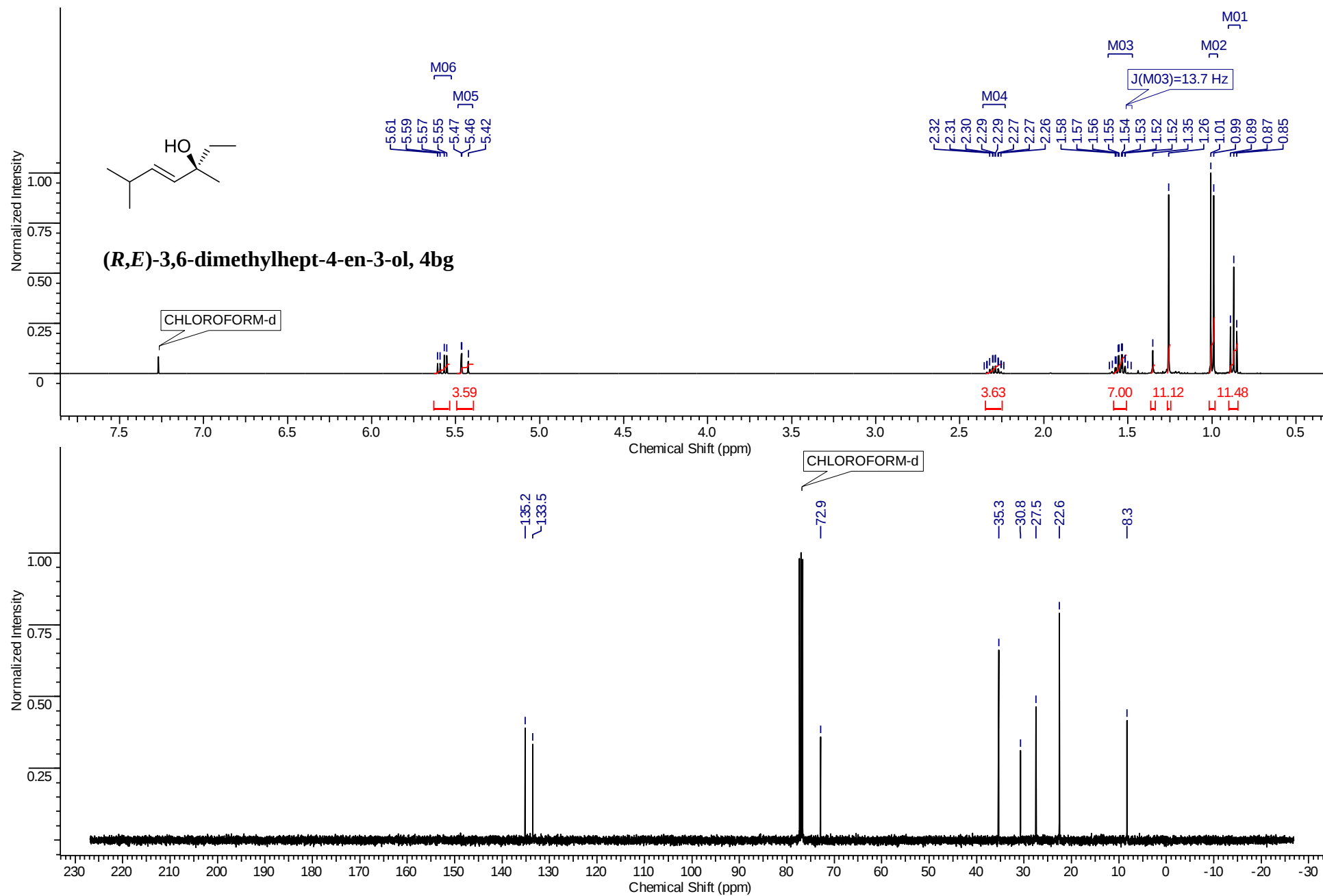


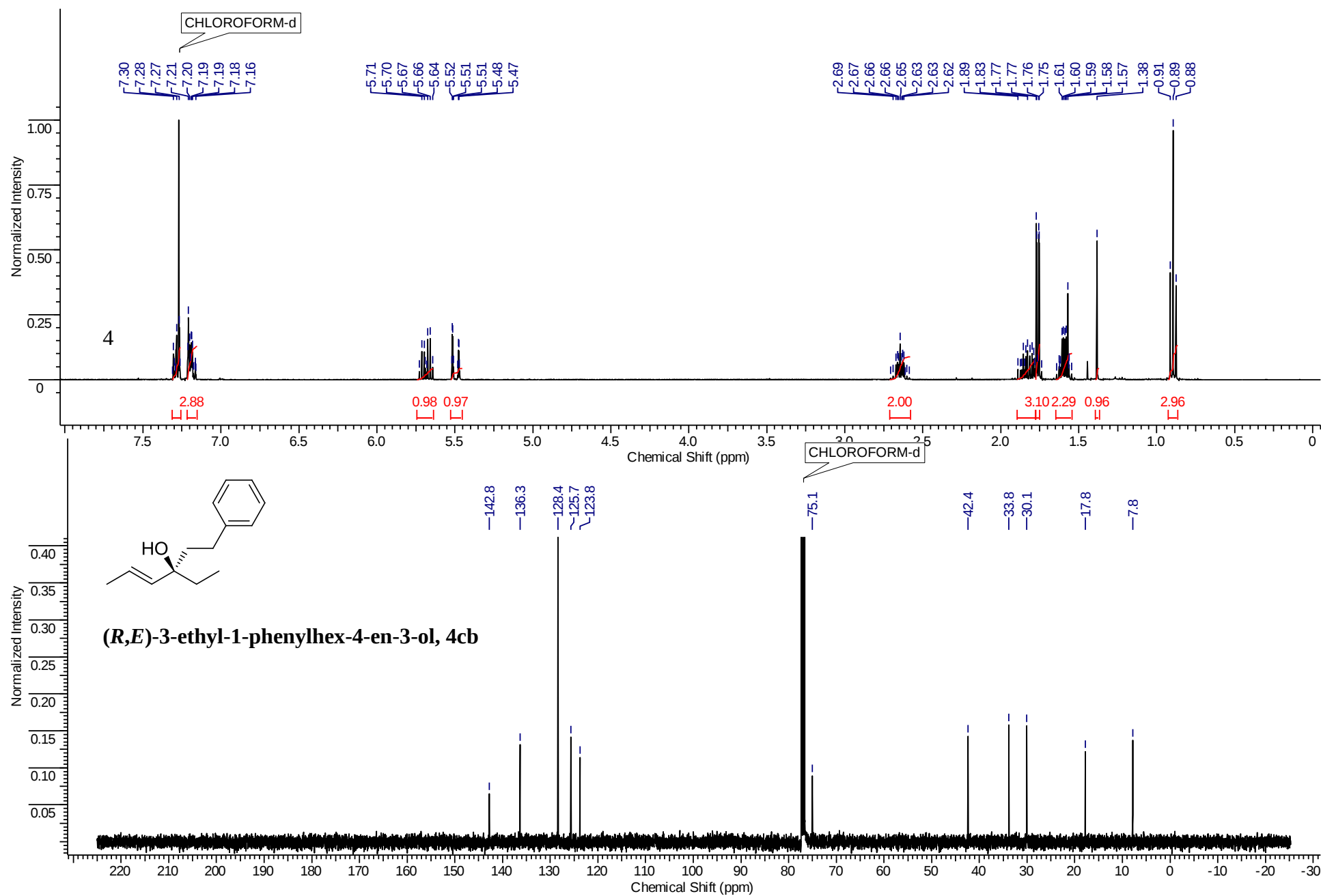


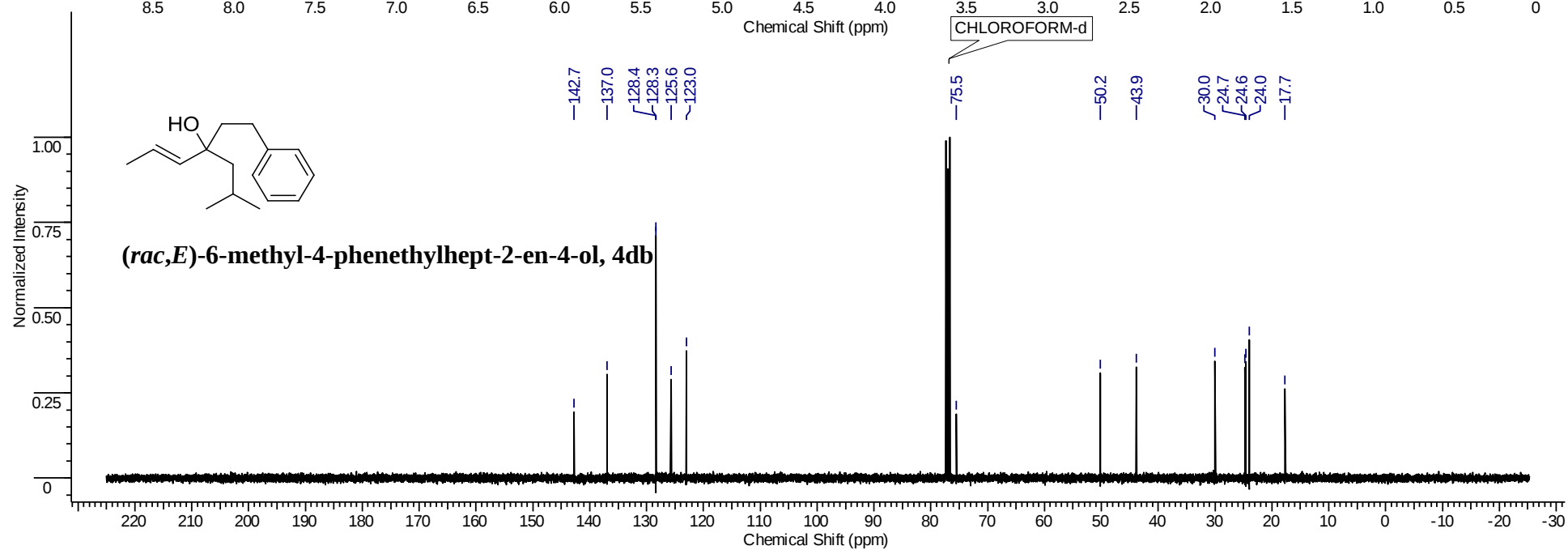
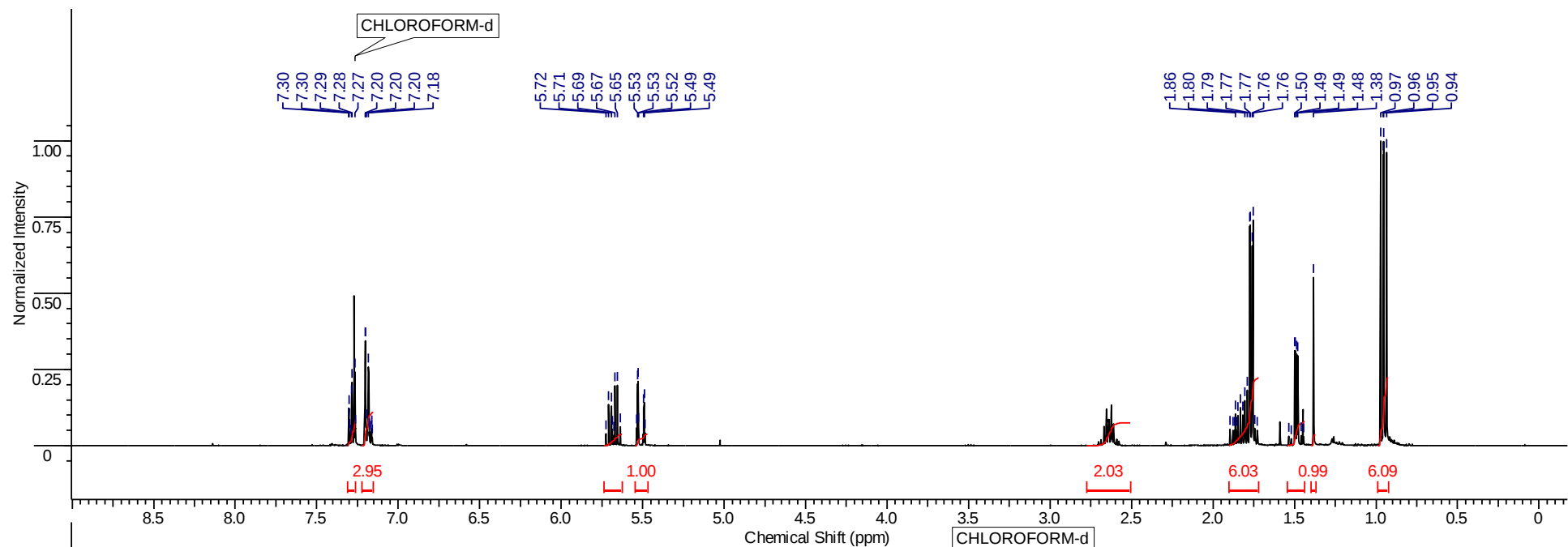




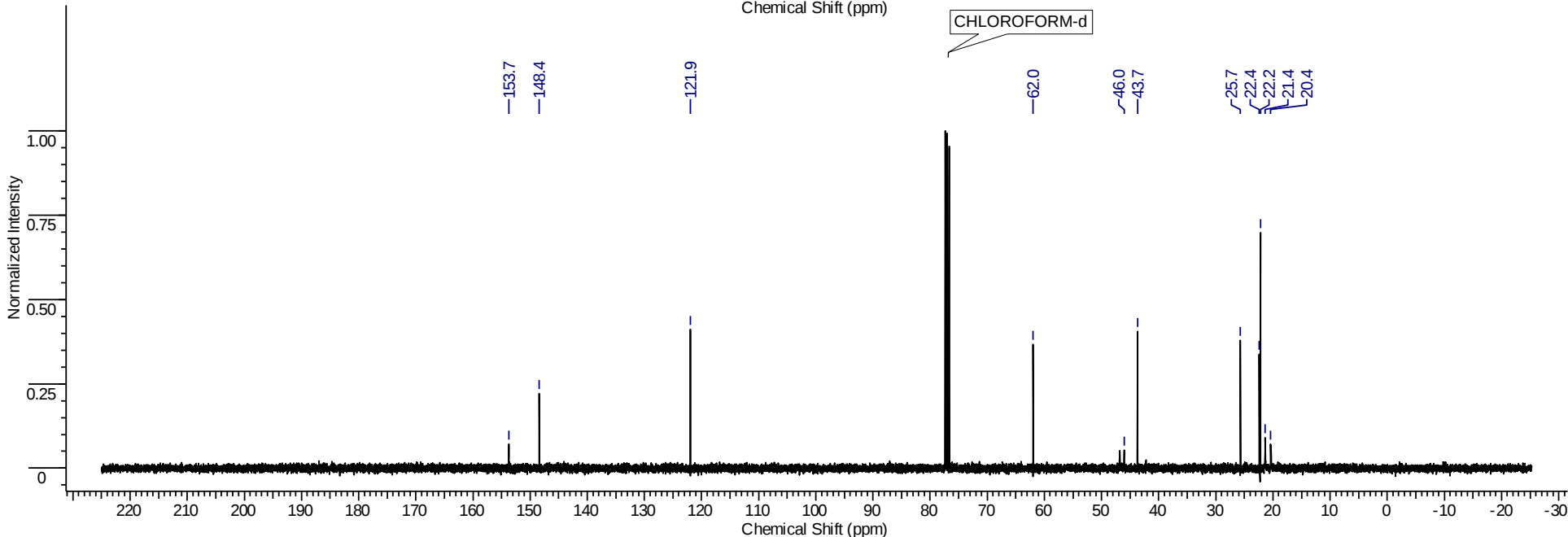
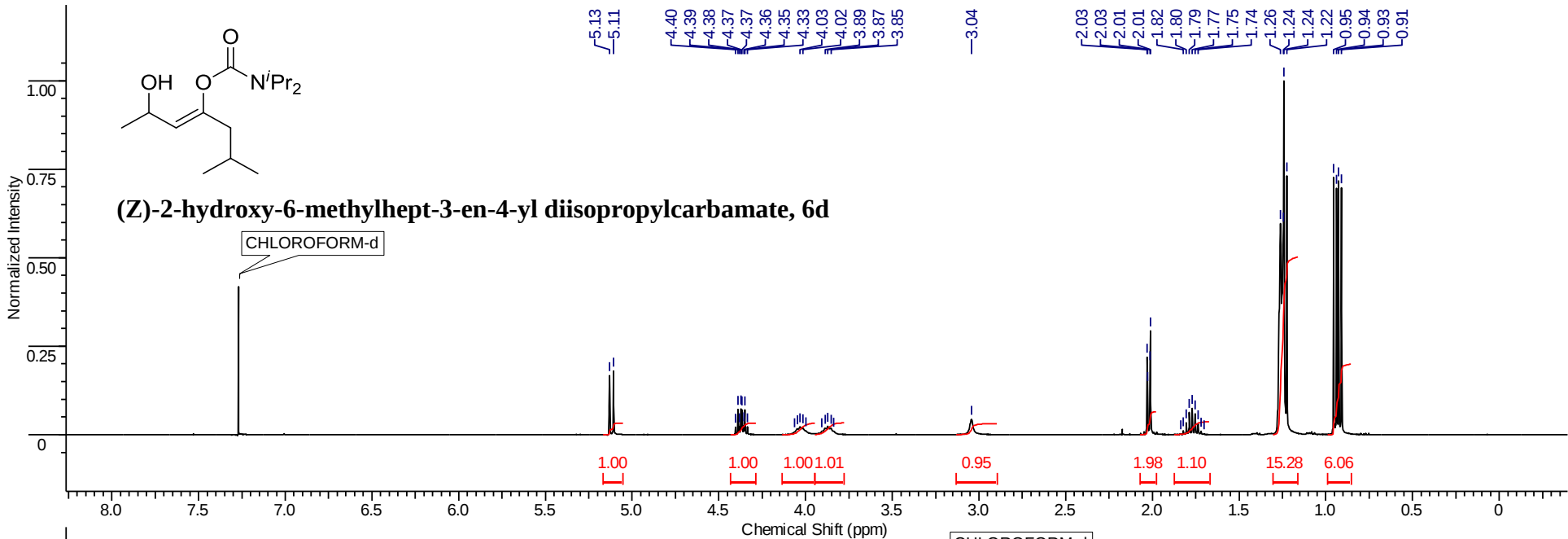


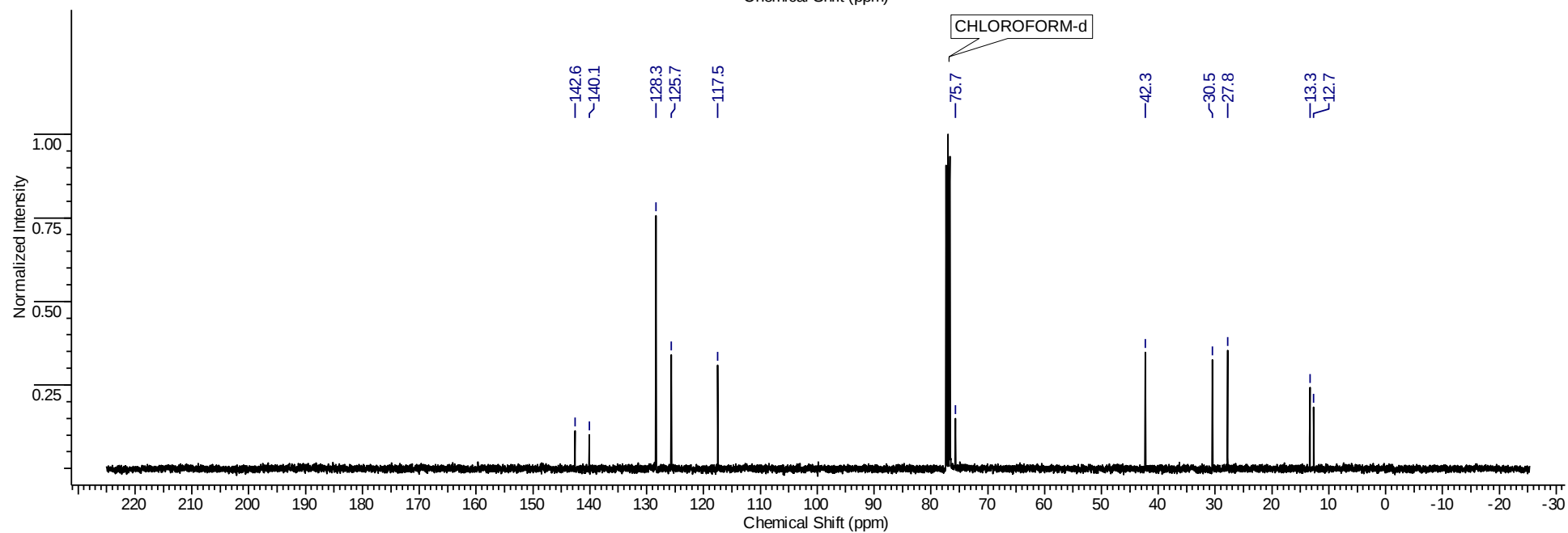
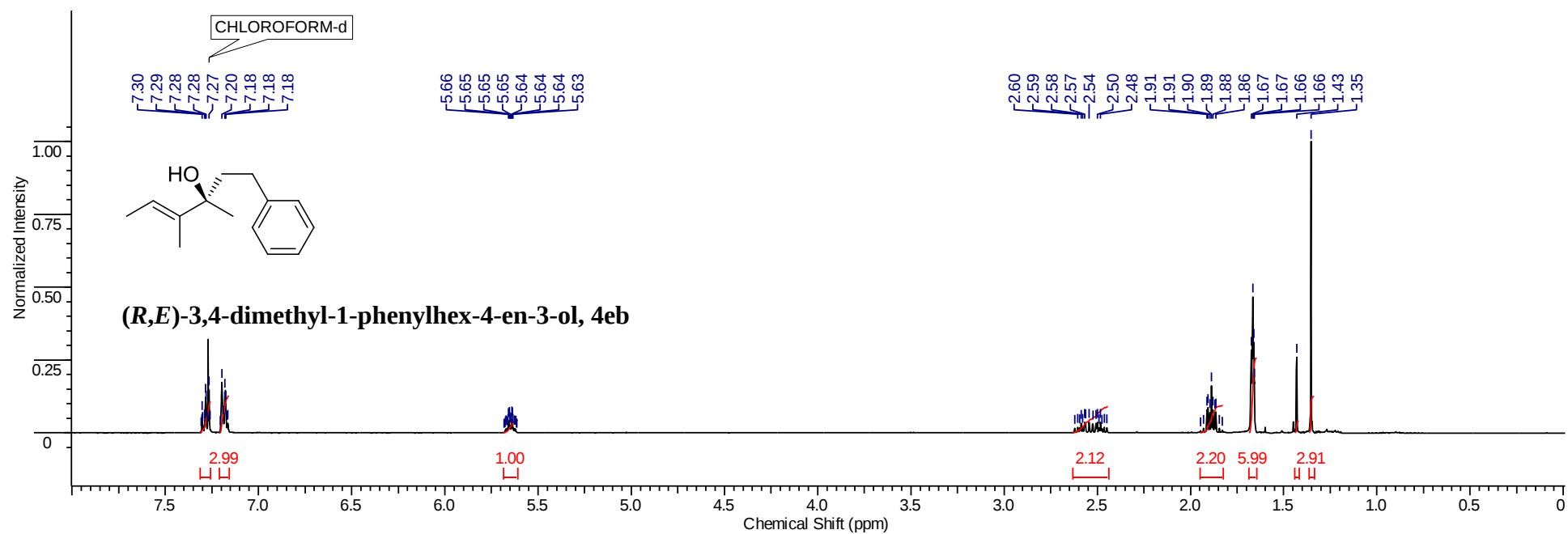


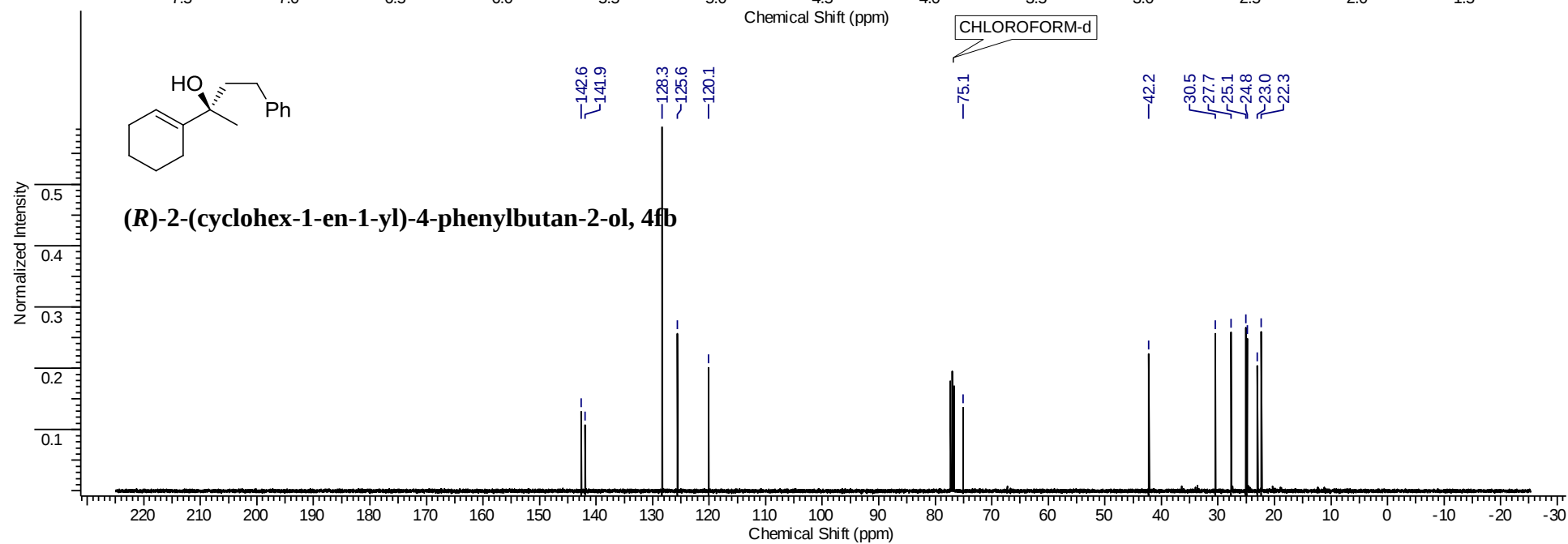
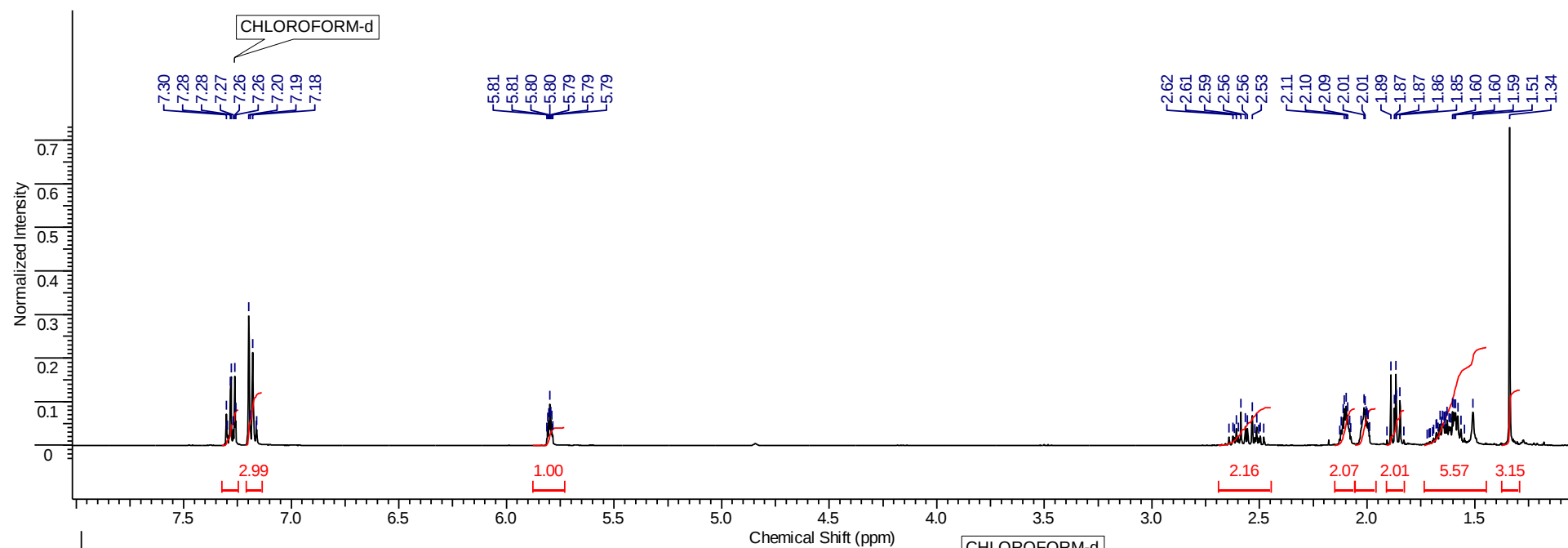


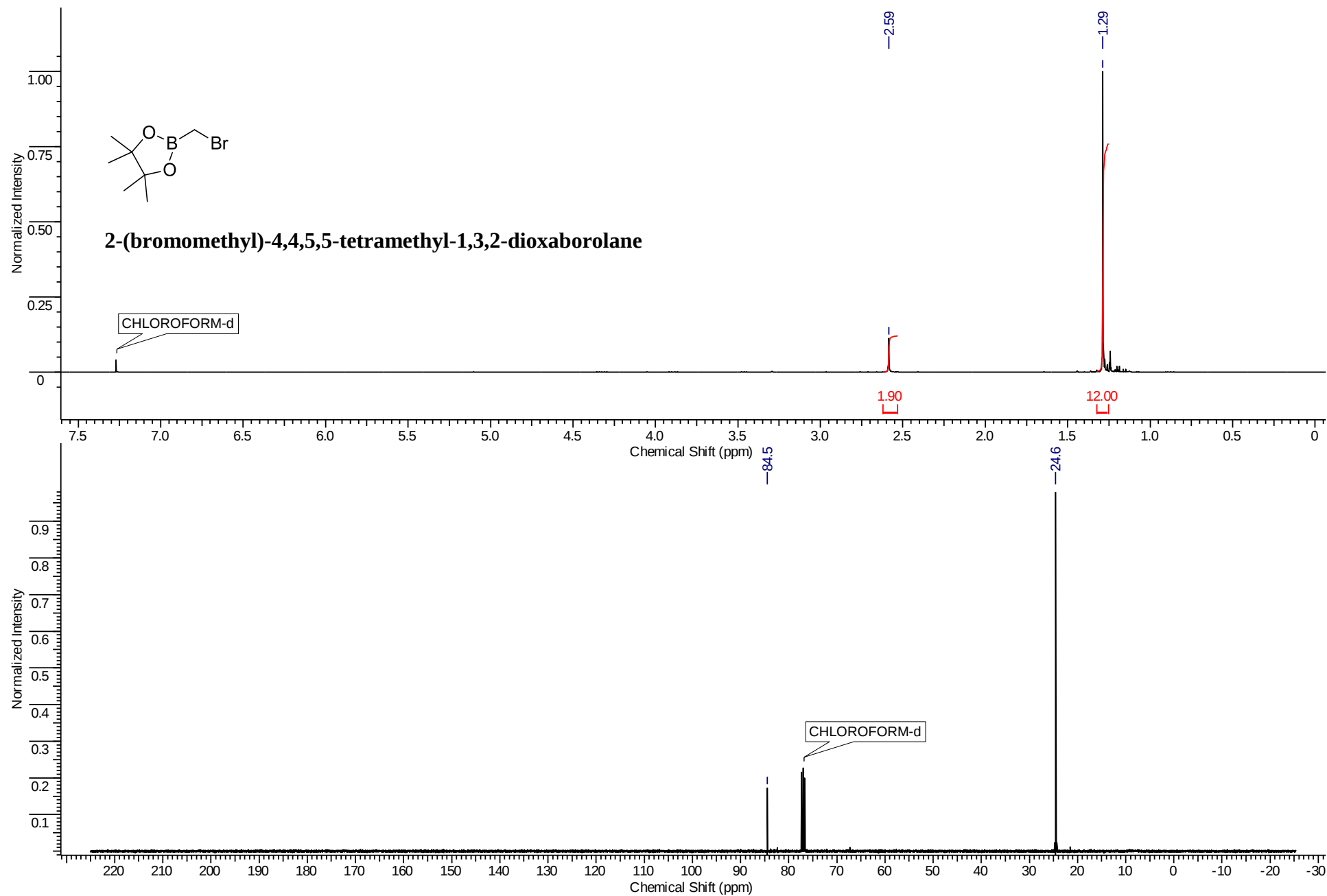


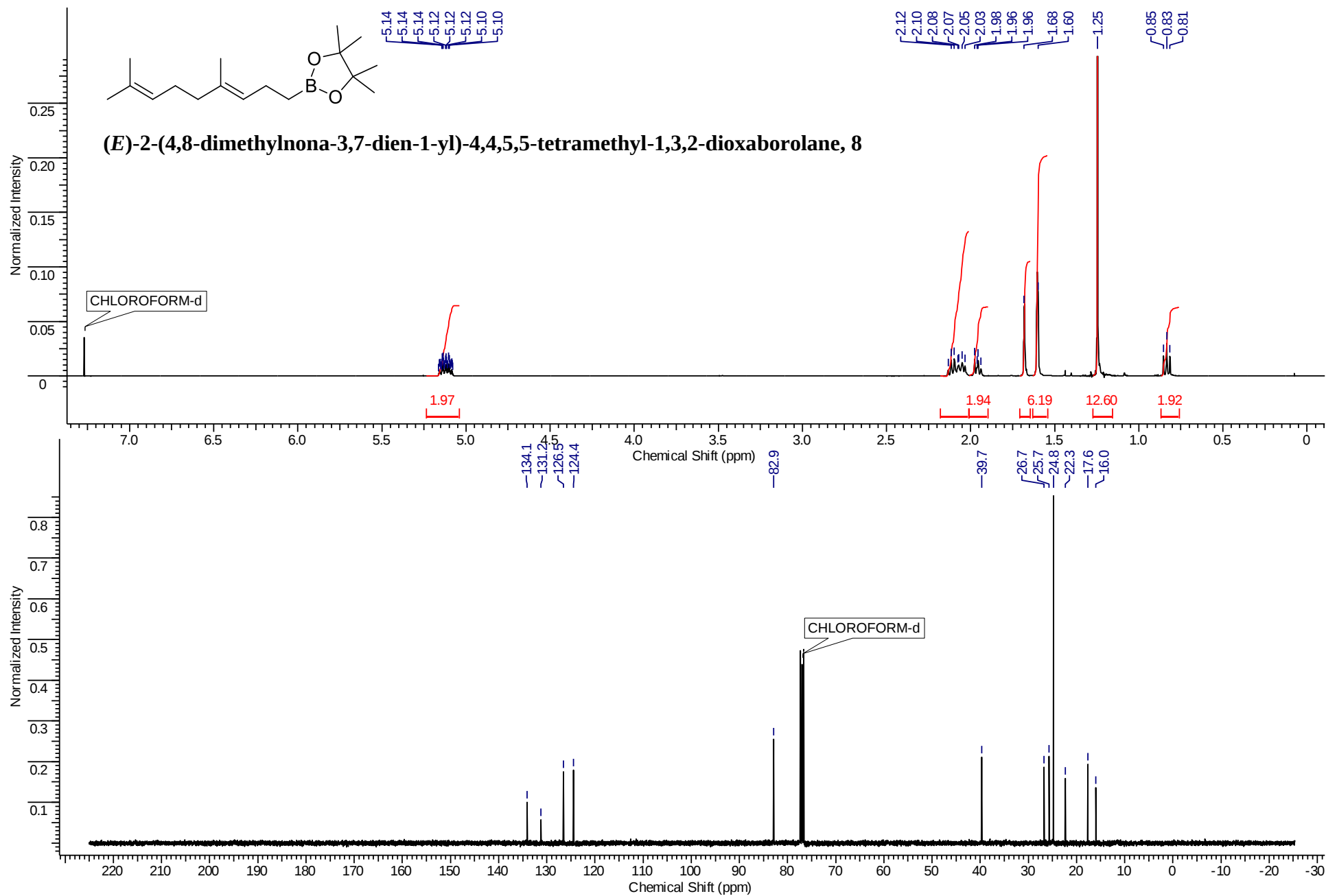
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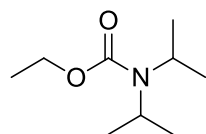
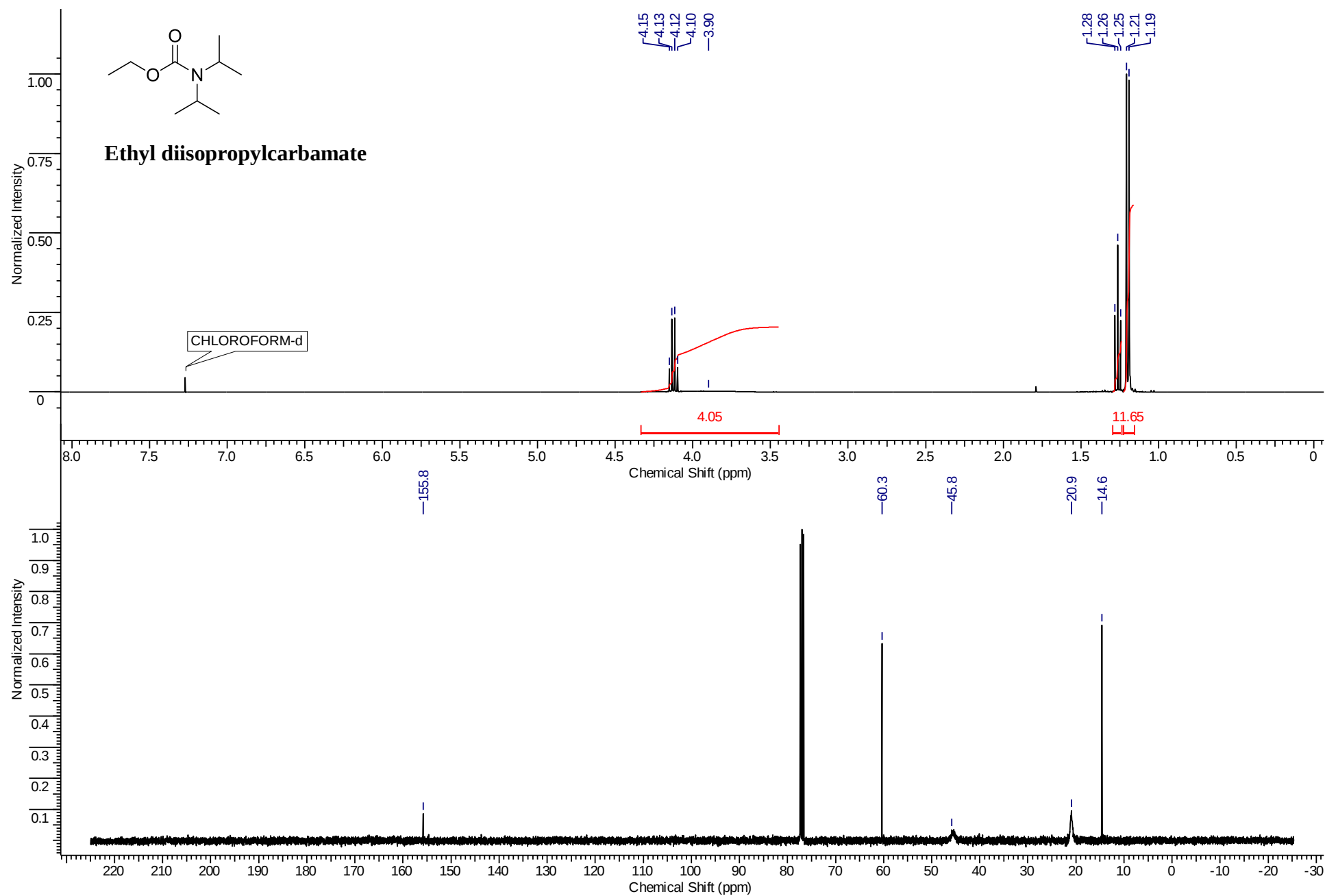


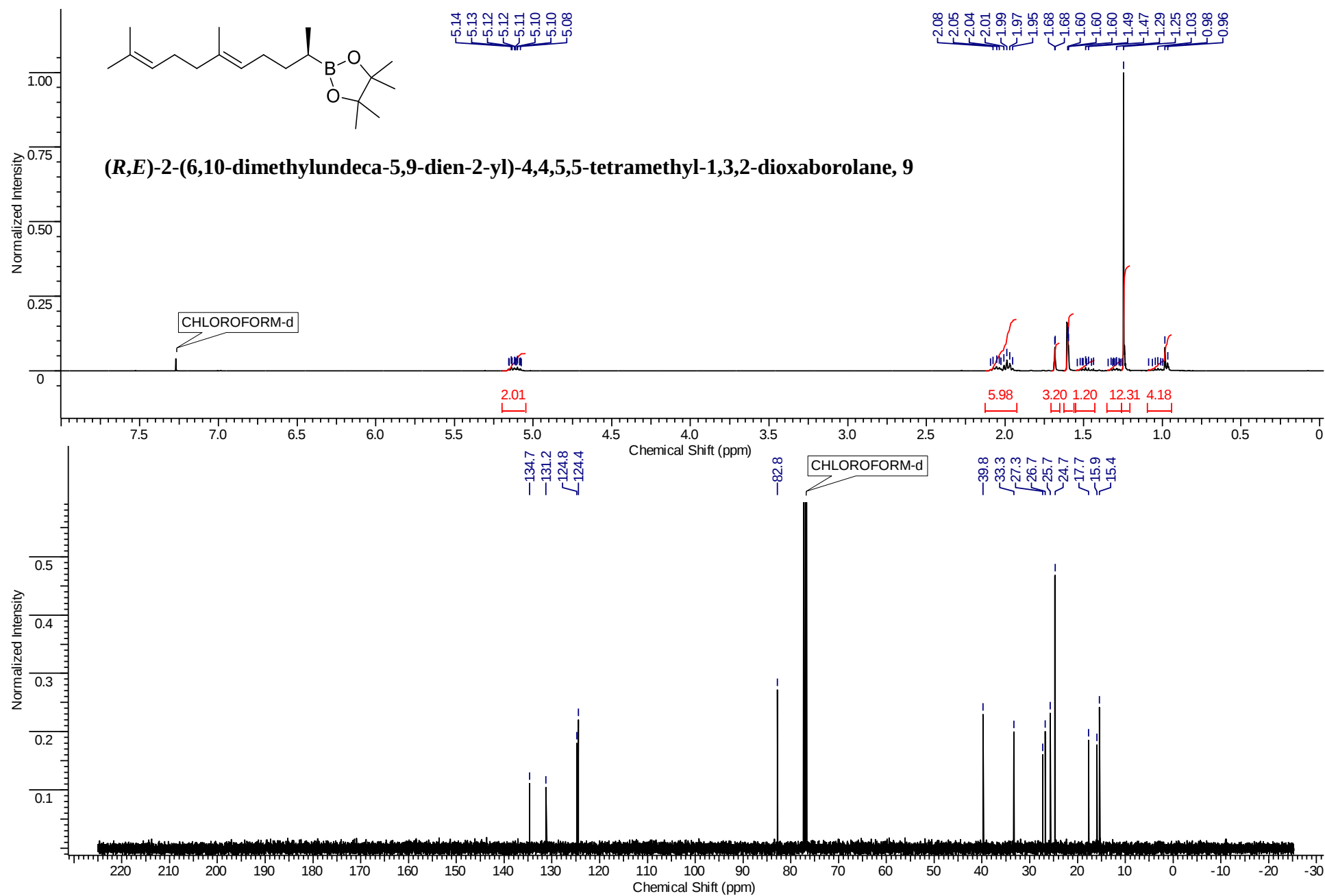




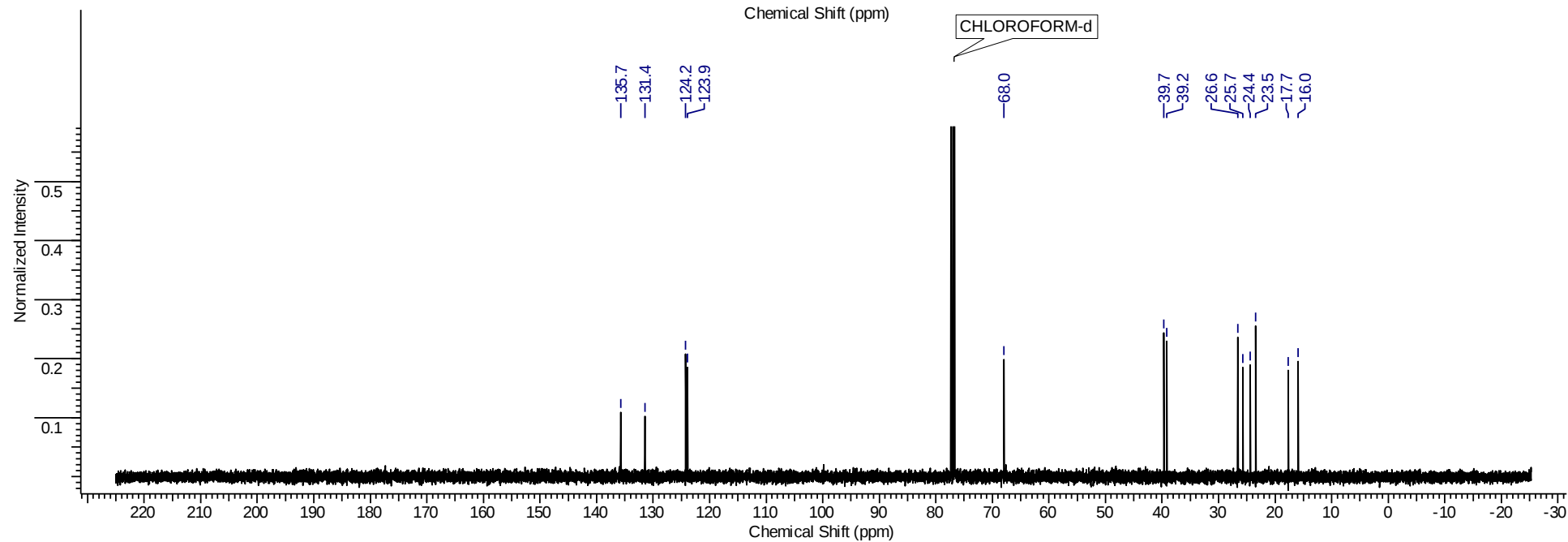
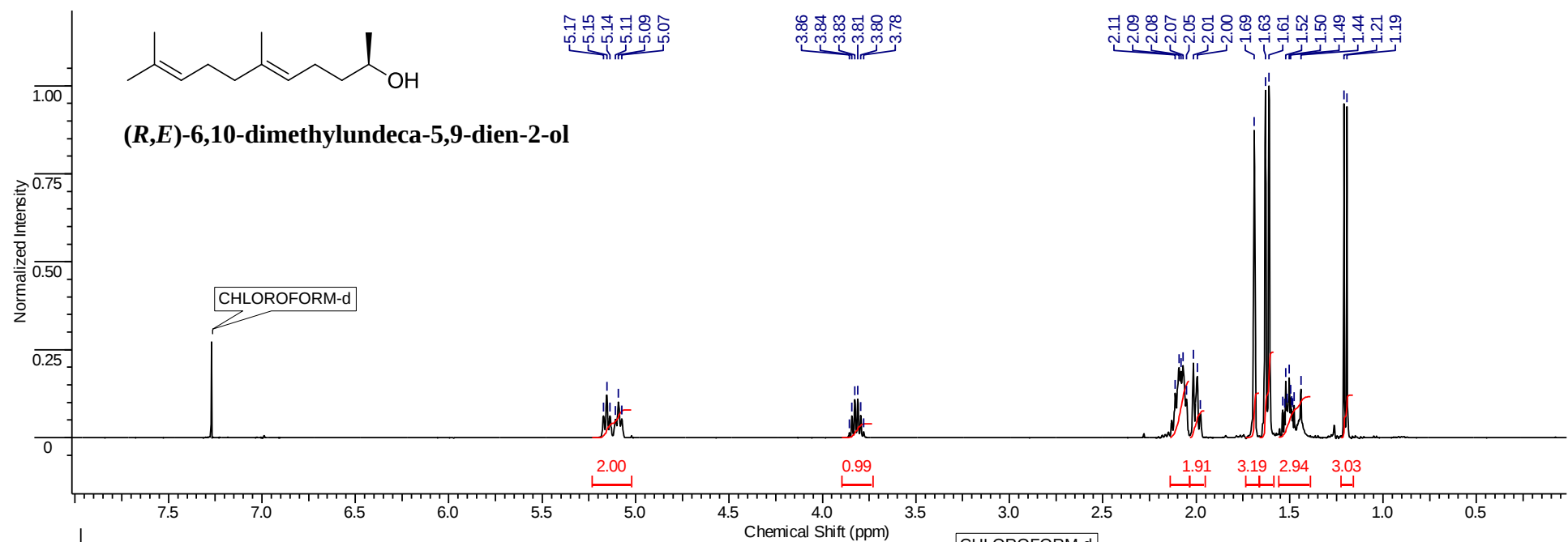


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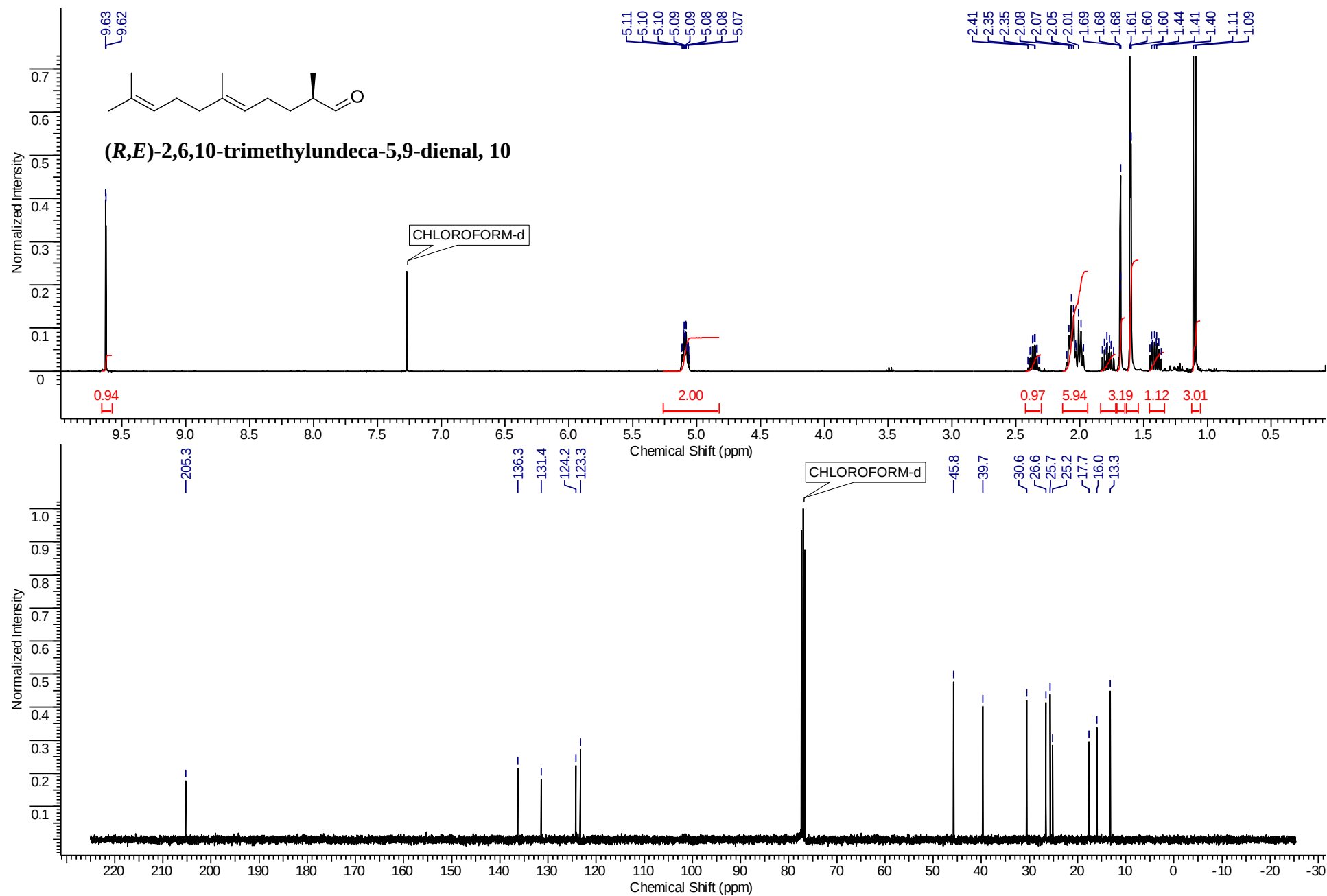
**Ethyl diisopropylcarbamate**

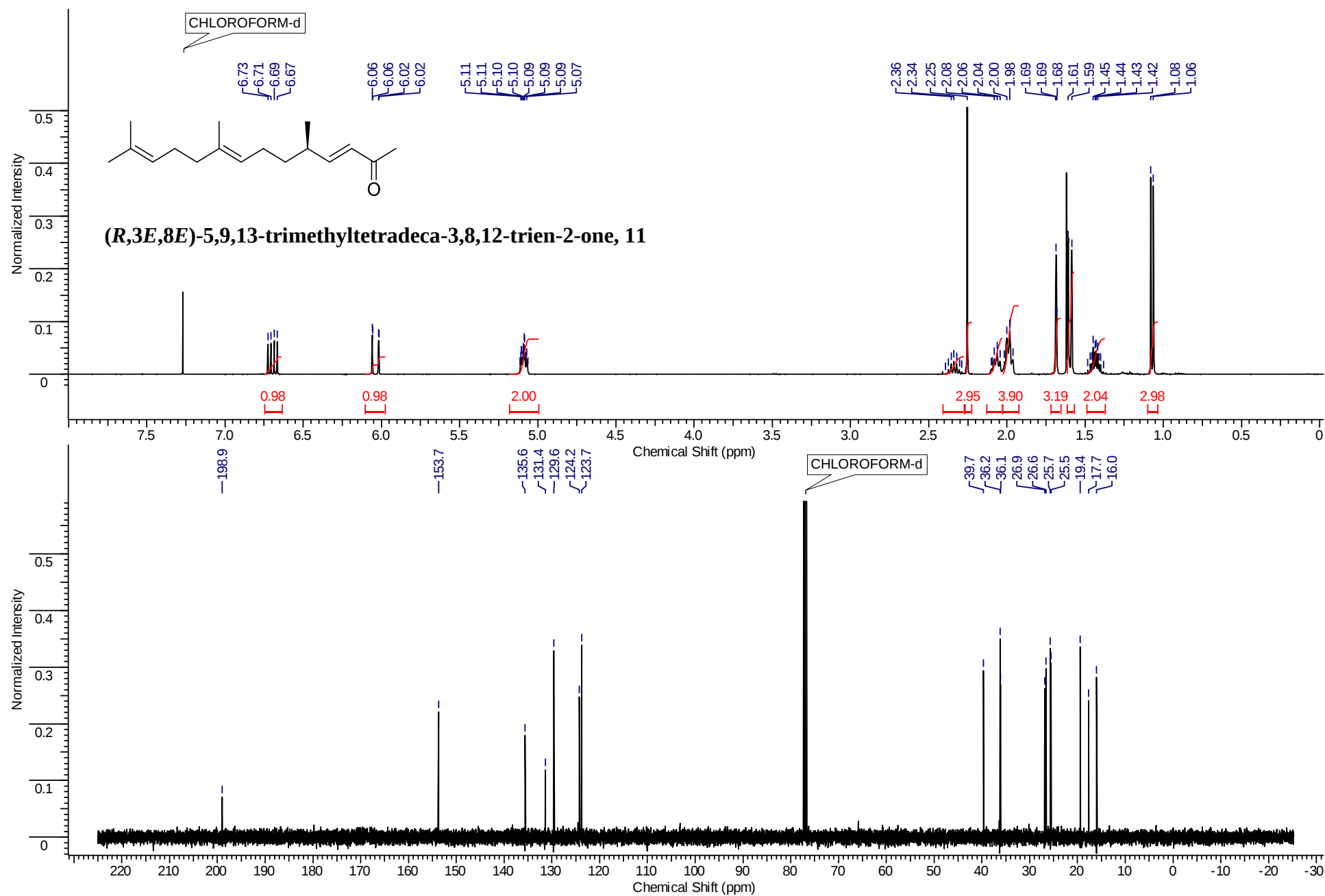


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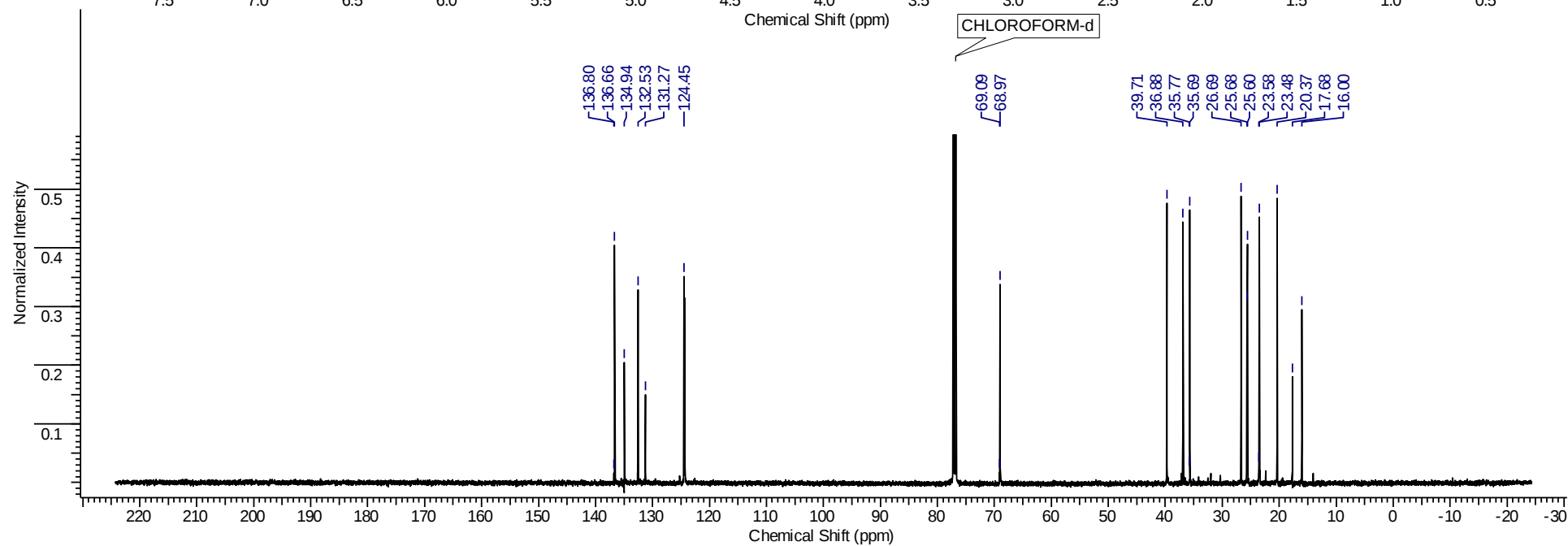
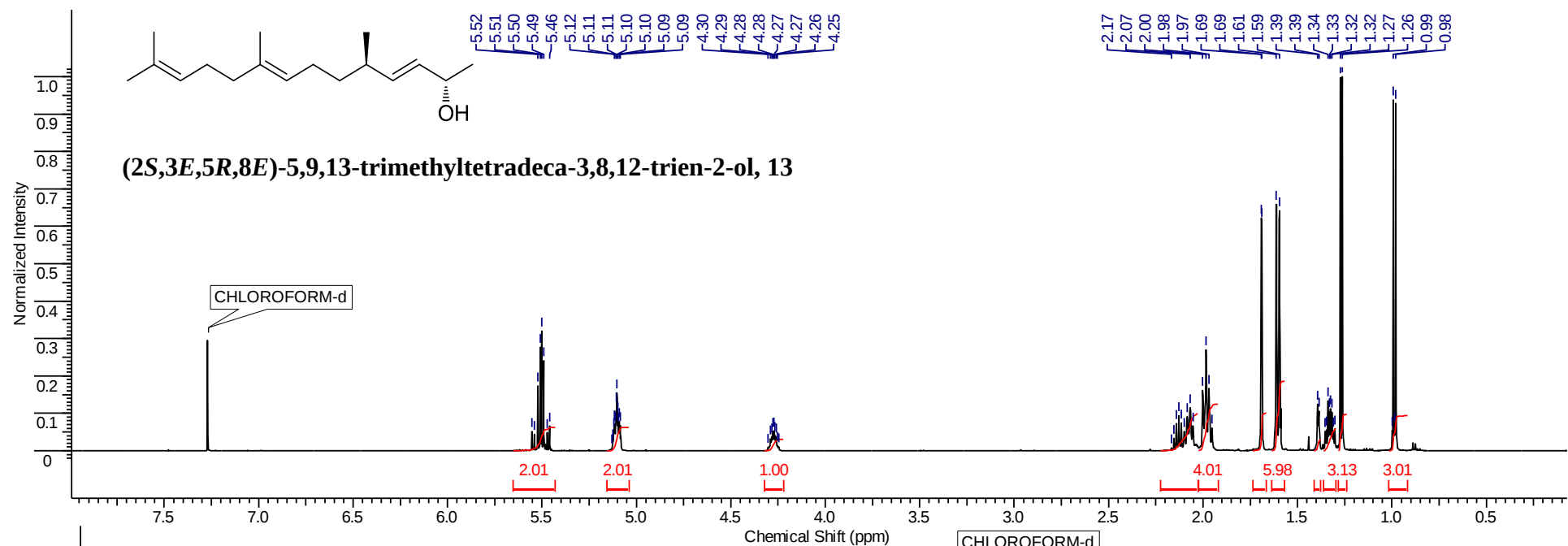


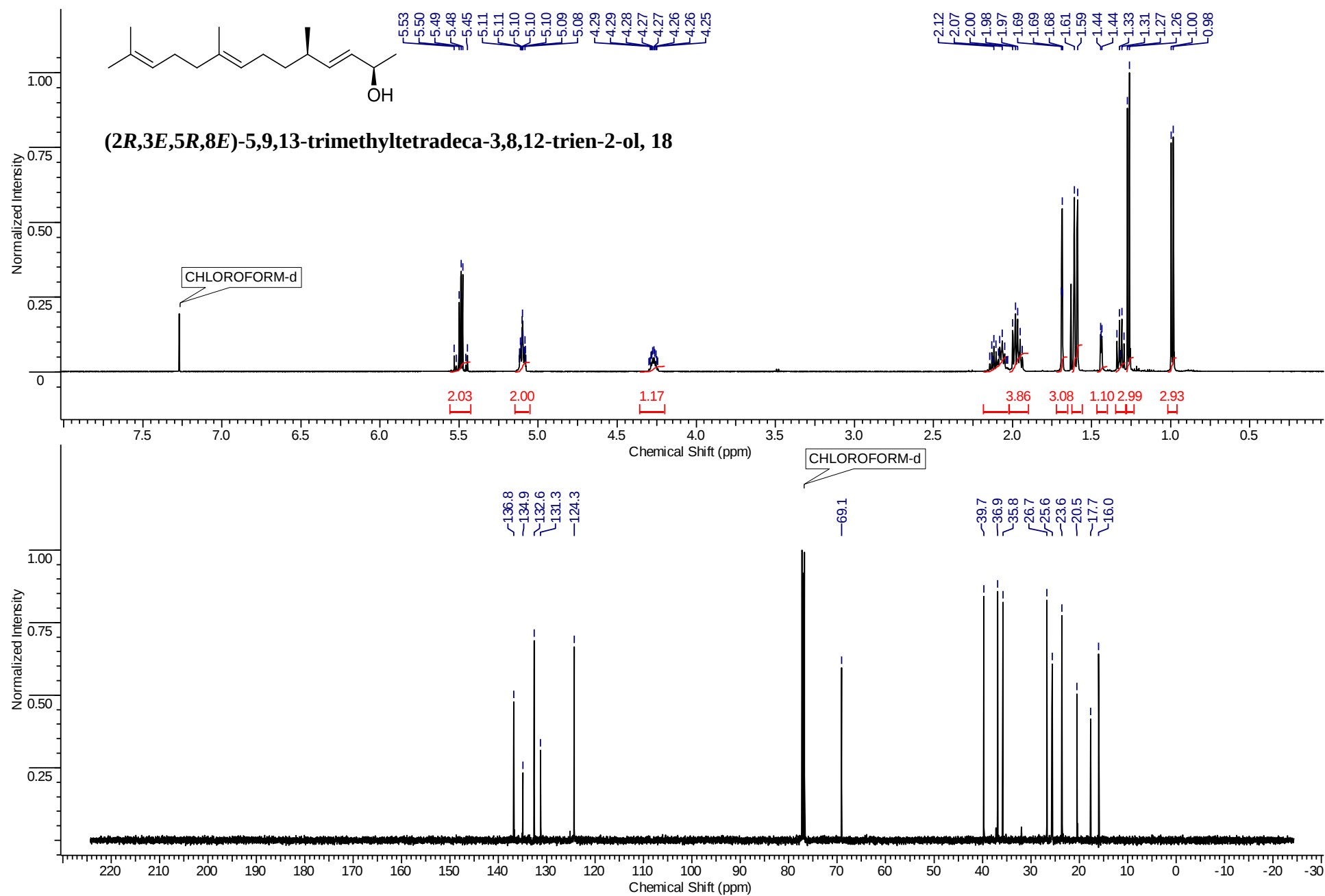
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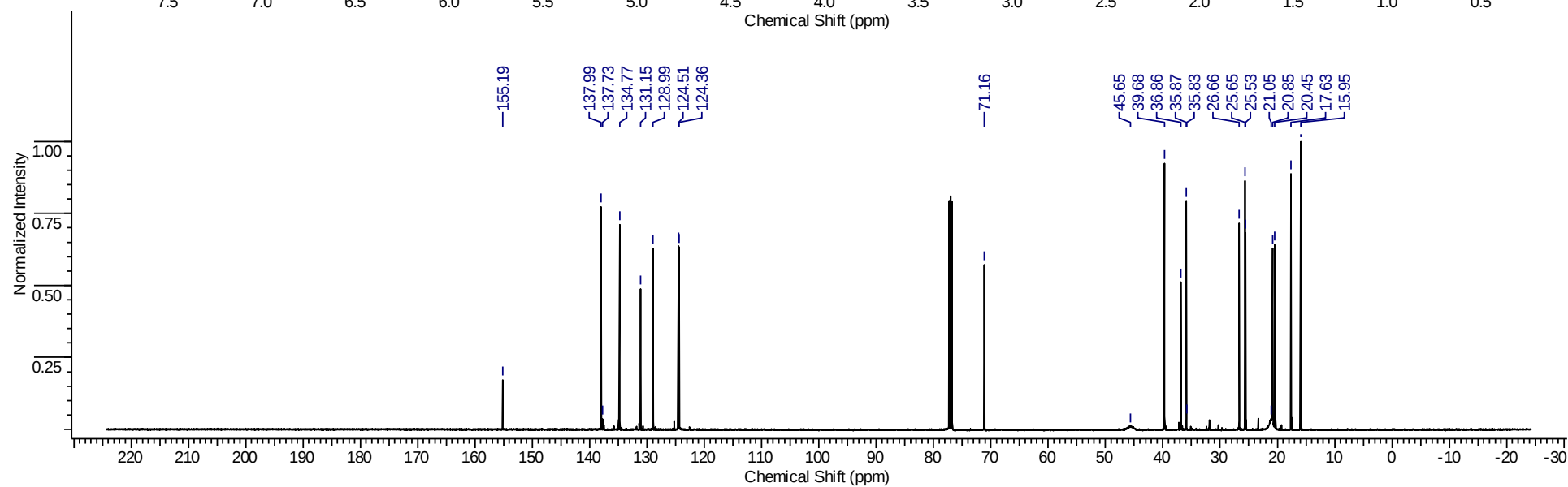
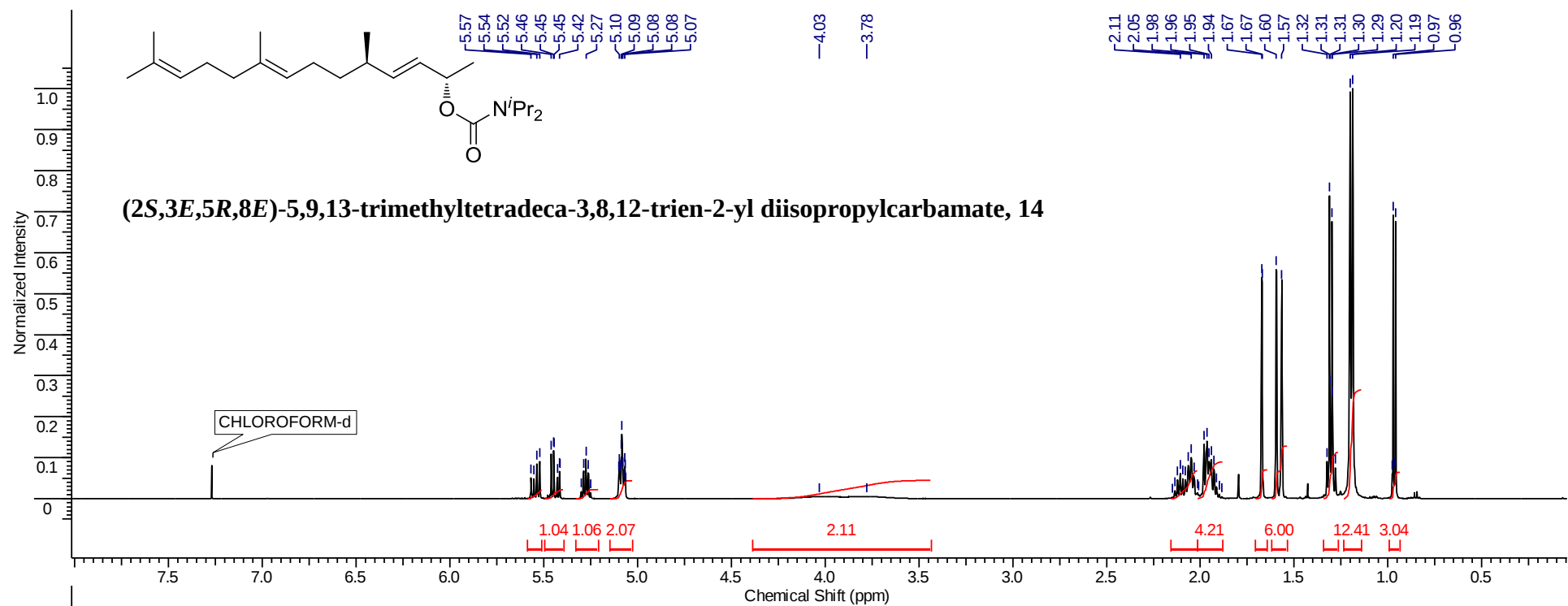


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