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APPENDICES

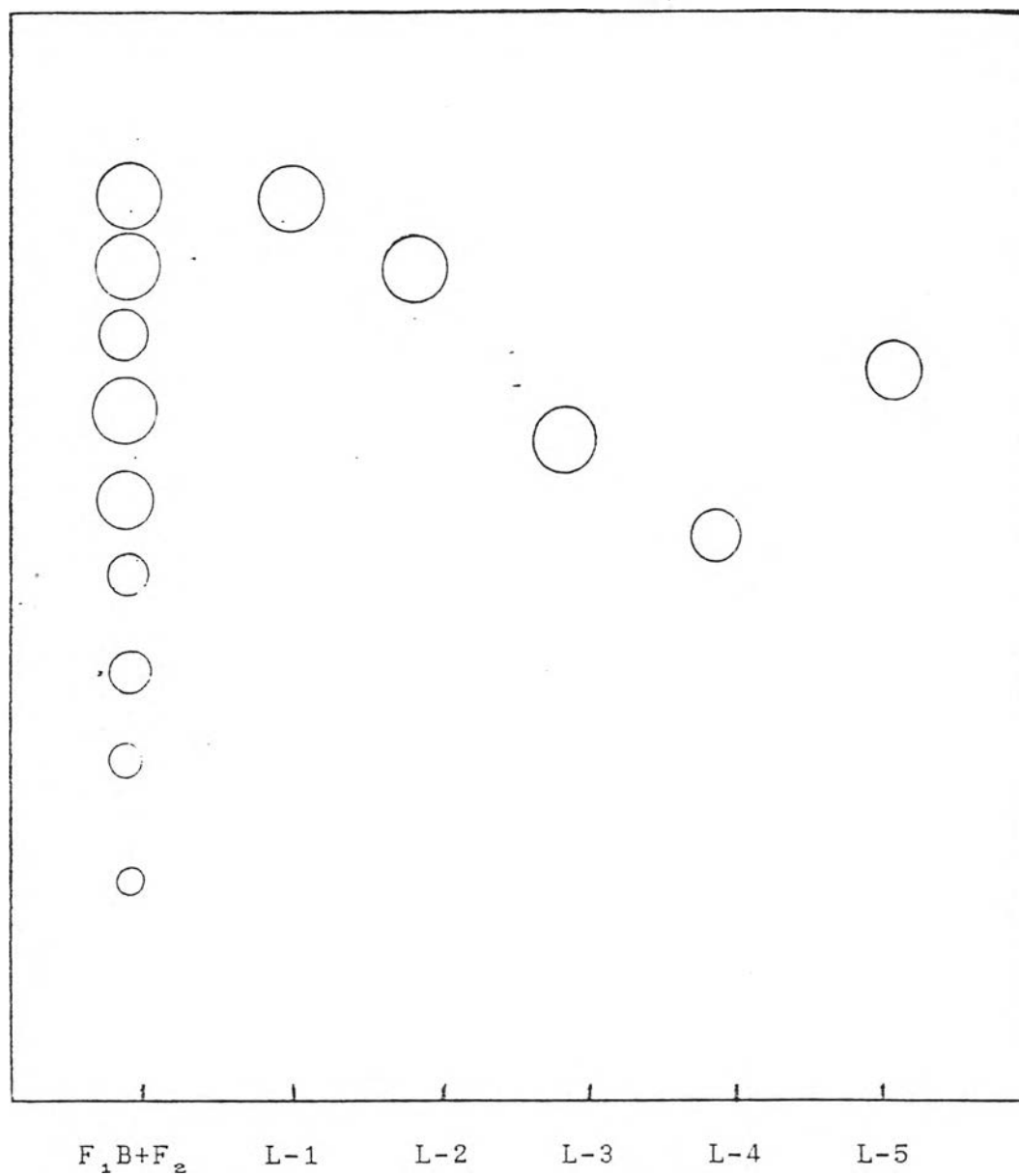


Figure 3. The TLC of Combined F_1B and F_2 , L-1, L-2, L-3, L-4 and L-5 in Solvent System D.

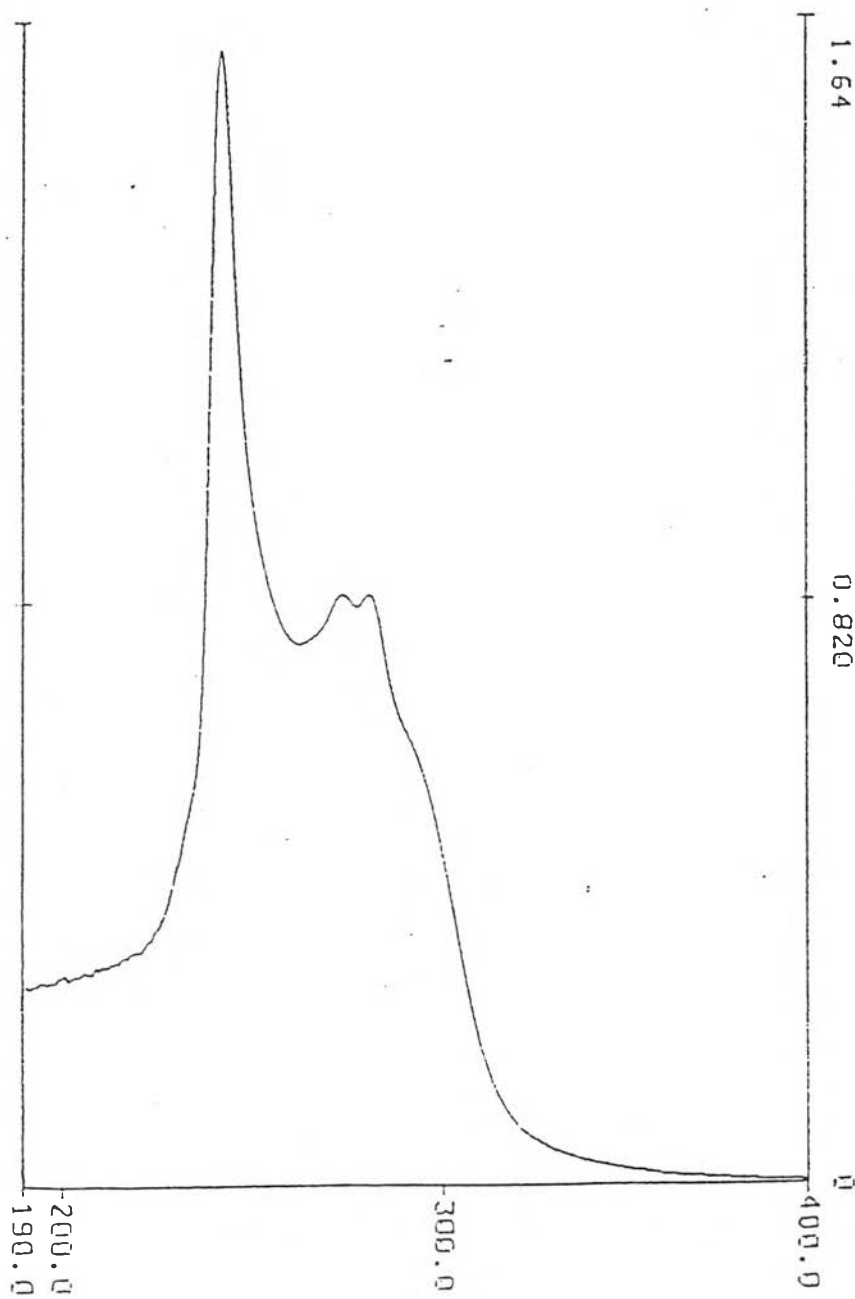


FIGURE 4. THE ULTRAVIOLET SPECTRUM OF L-1

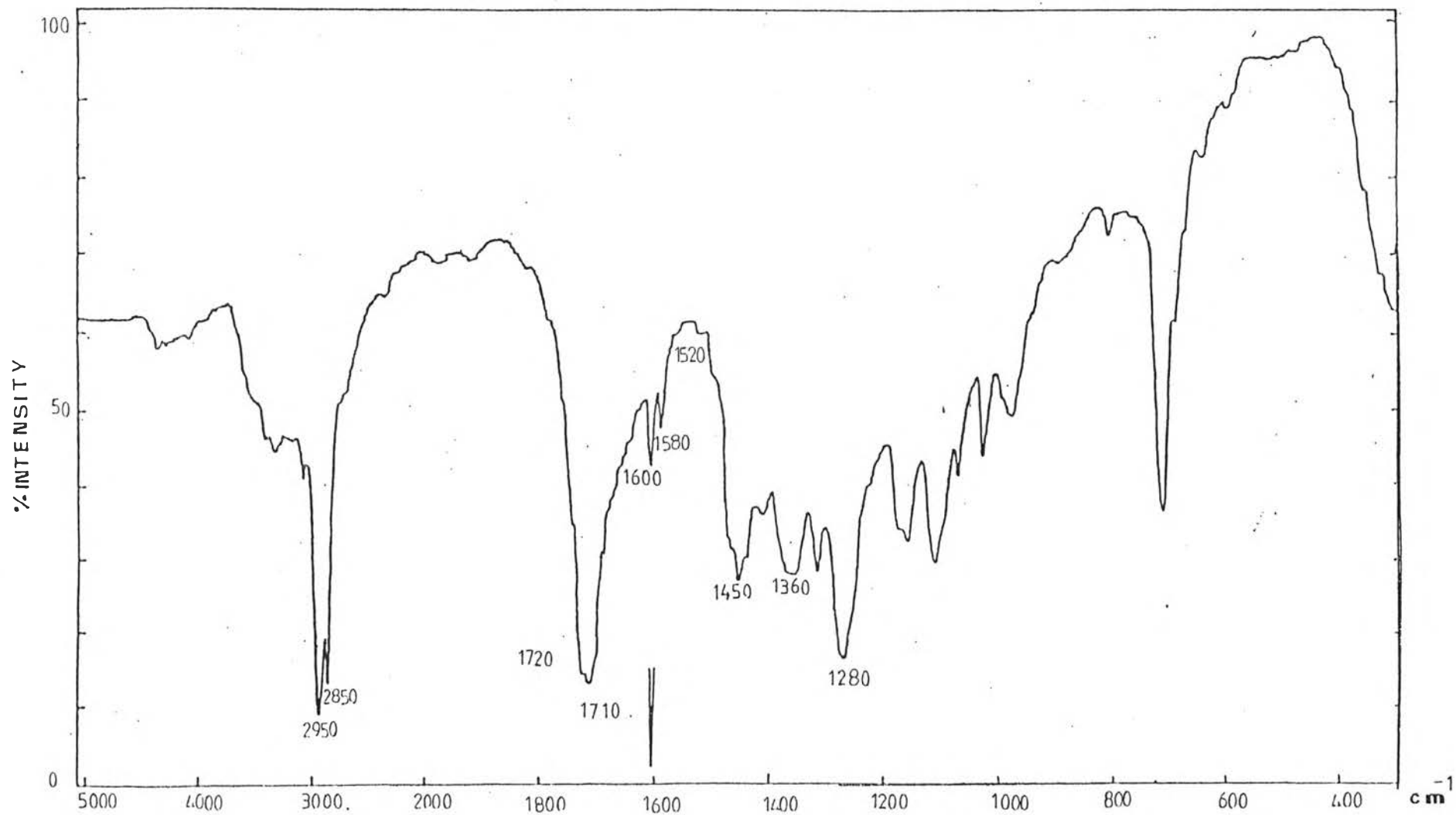


FIGURE 5. THE INFRARED SPECTRUM OF L-1

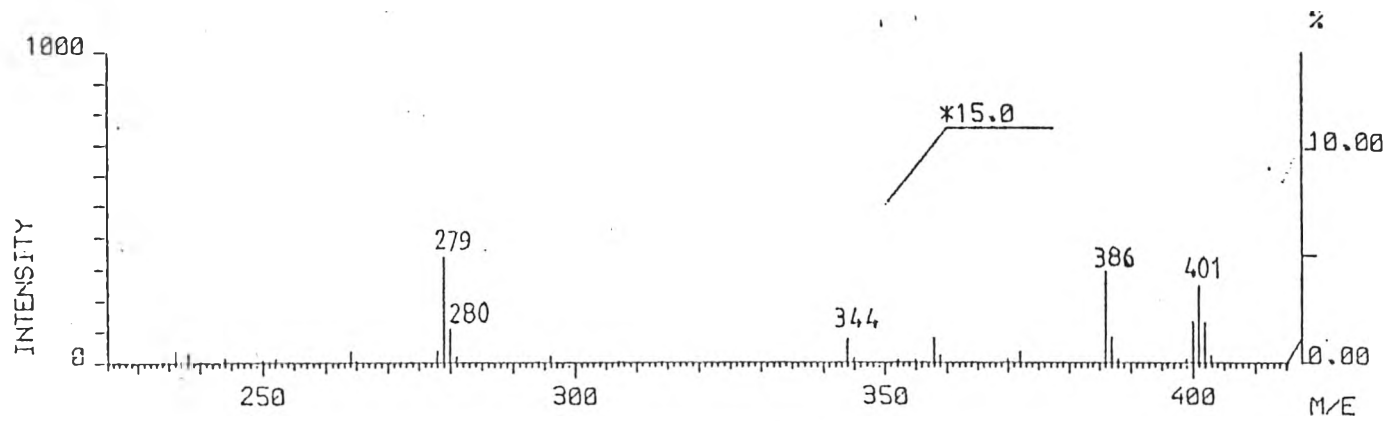
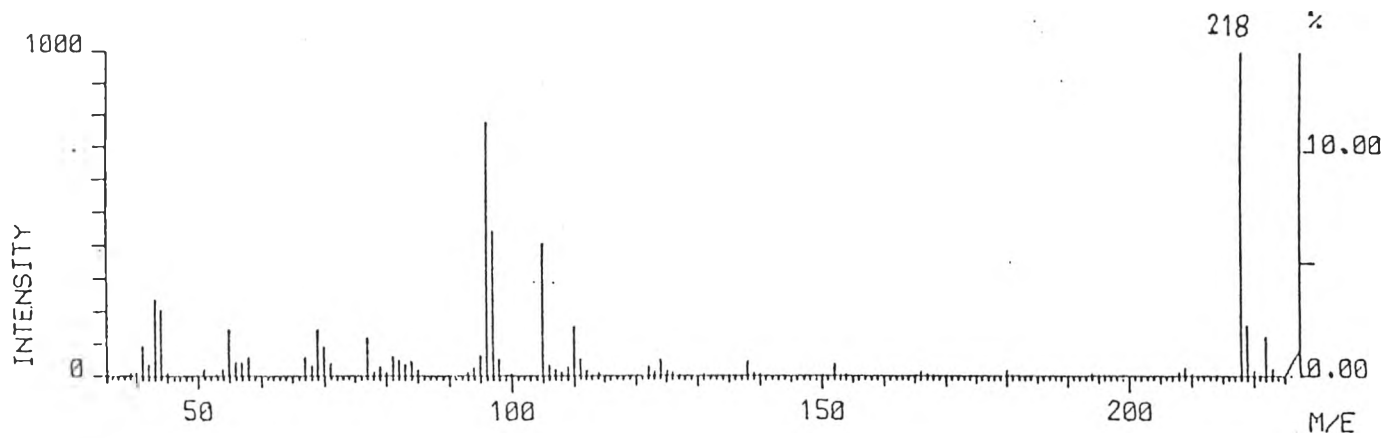


FIGURE 6. THE MASS SPECTRUM (EIMS) OF L-1

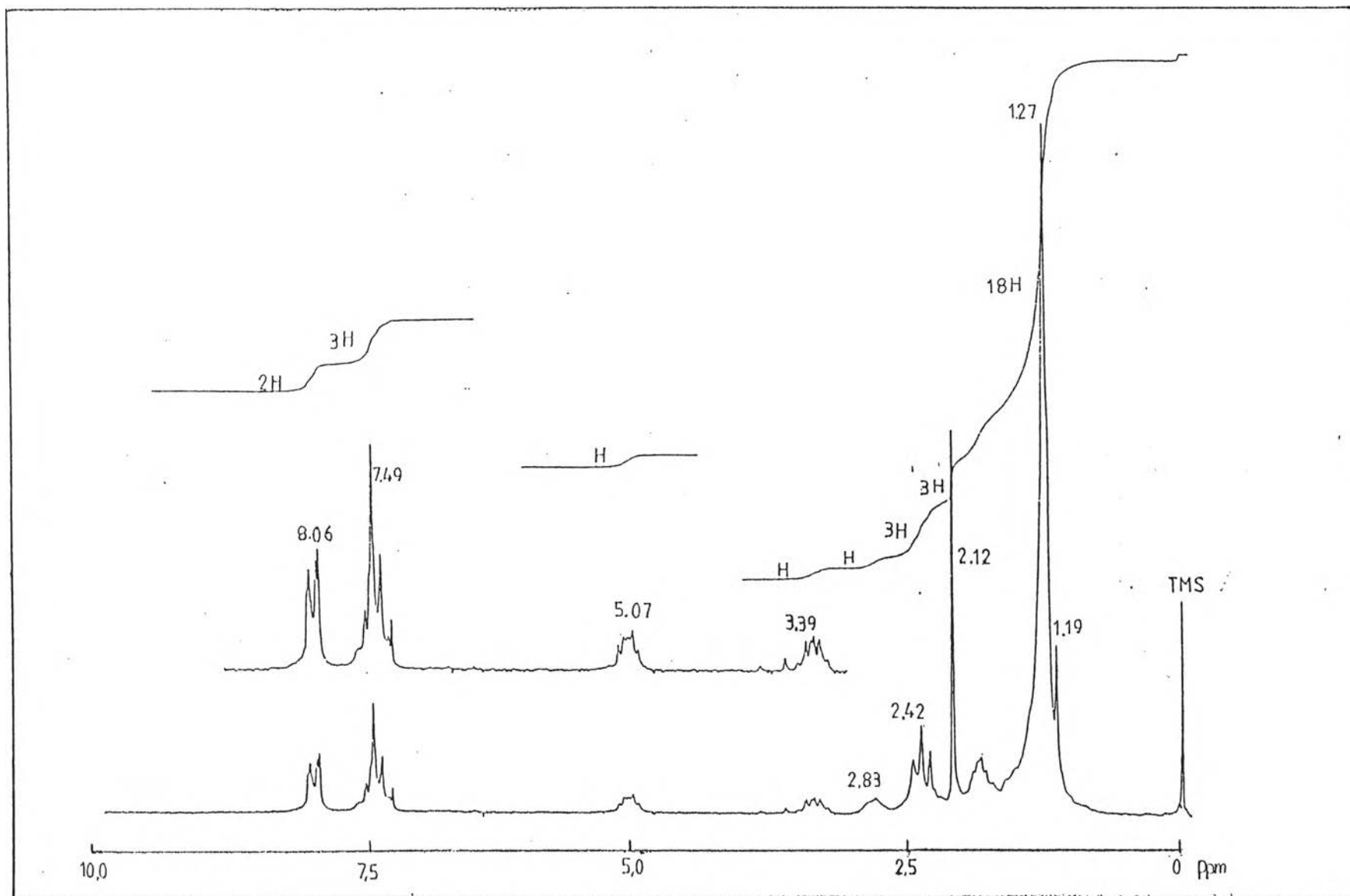


FIGURE 7a. THE PROTON-NMR SPECTRUM OF L-1 (in CDCl₃)

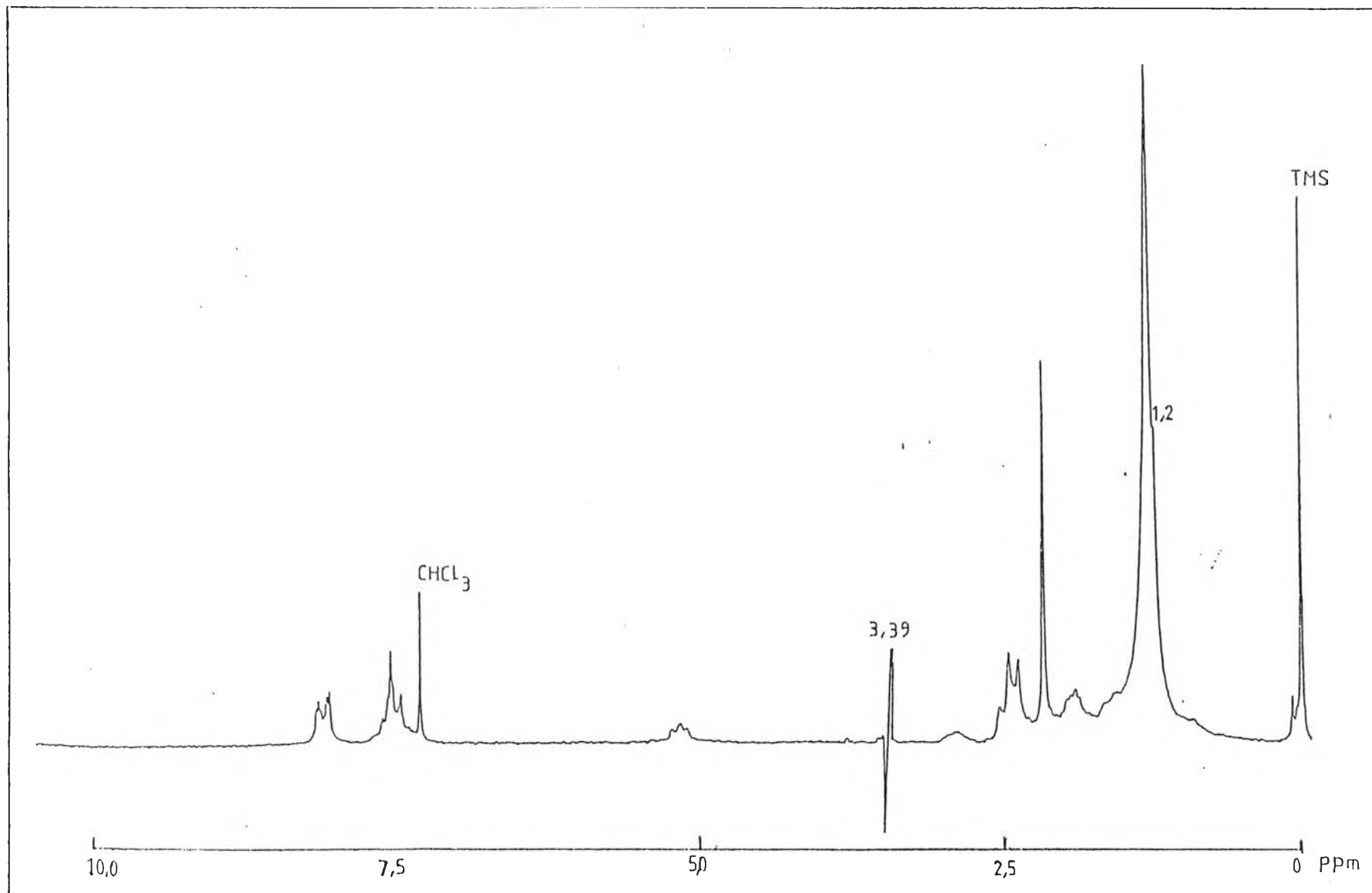


FIGURE 7b. THE PROTON-NMR SPECTRUM OF L-1 (in CDCl₃) irradiate H-2

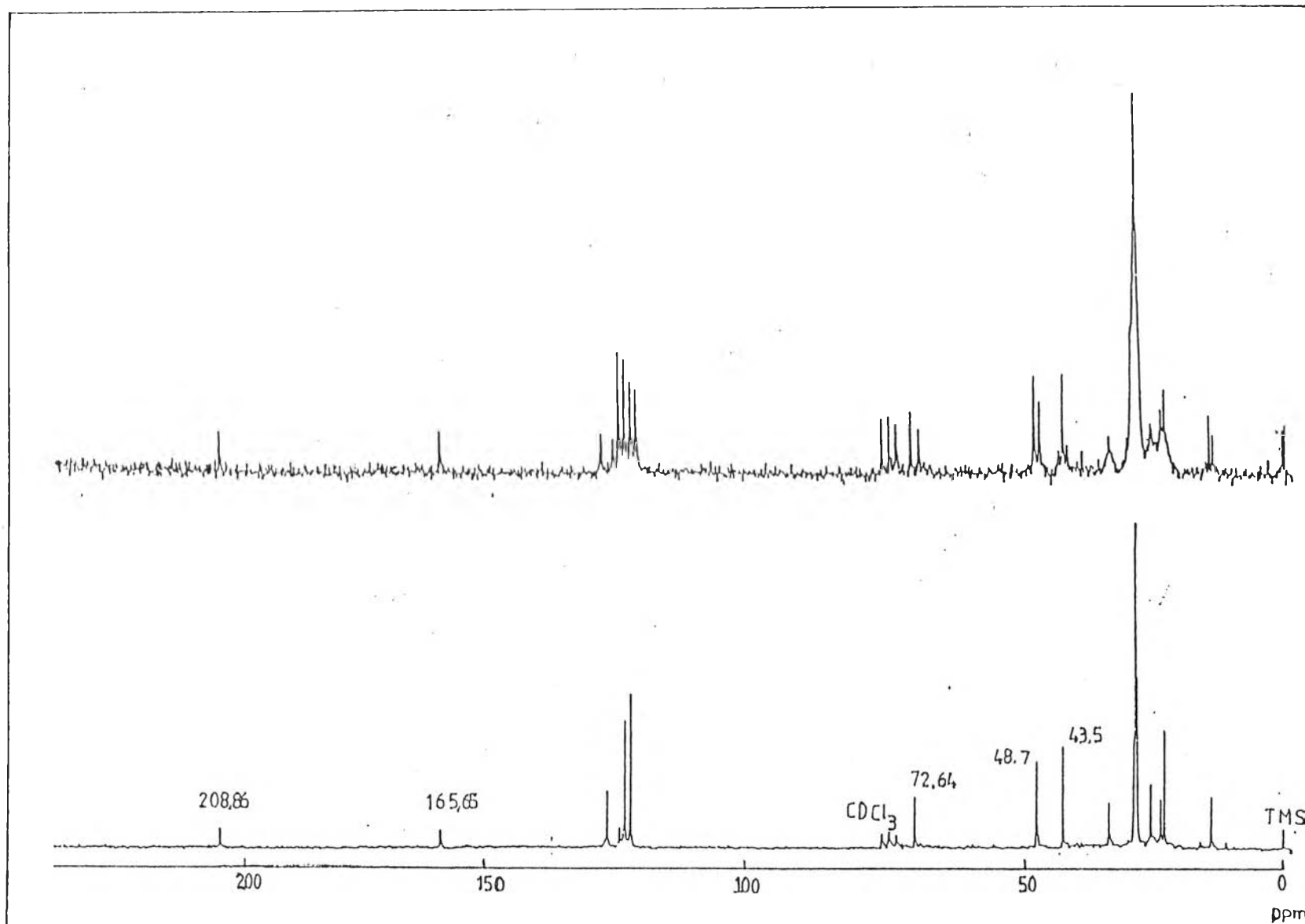


FIGURE 8. THE CARBON-13 NMR SPECTRUM OF L-1 (in CDCl₃, DMSO-D₆)

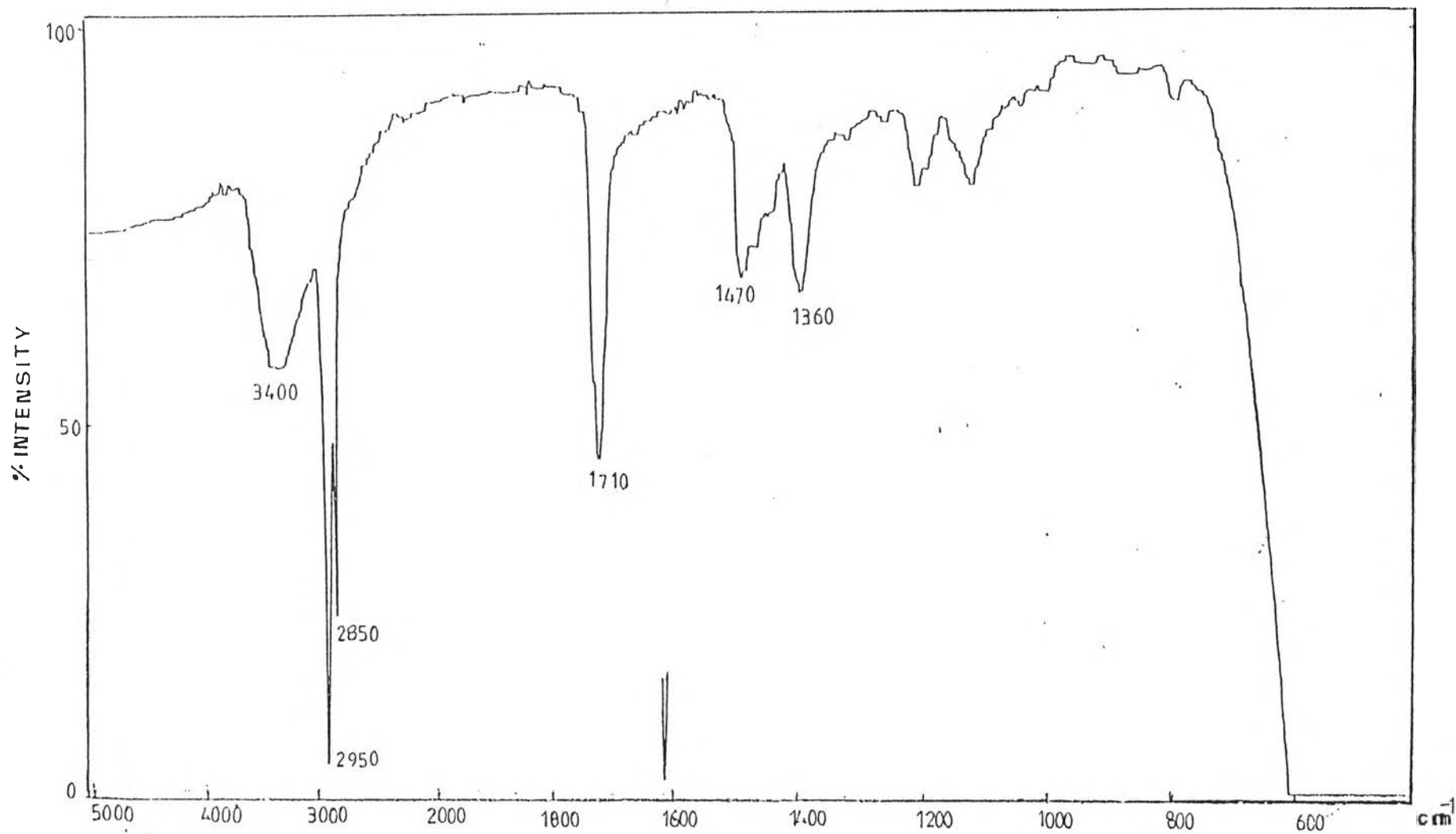


FIGURE 9. THE INFRARED SPECTRUM OF D-1

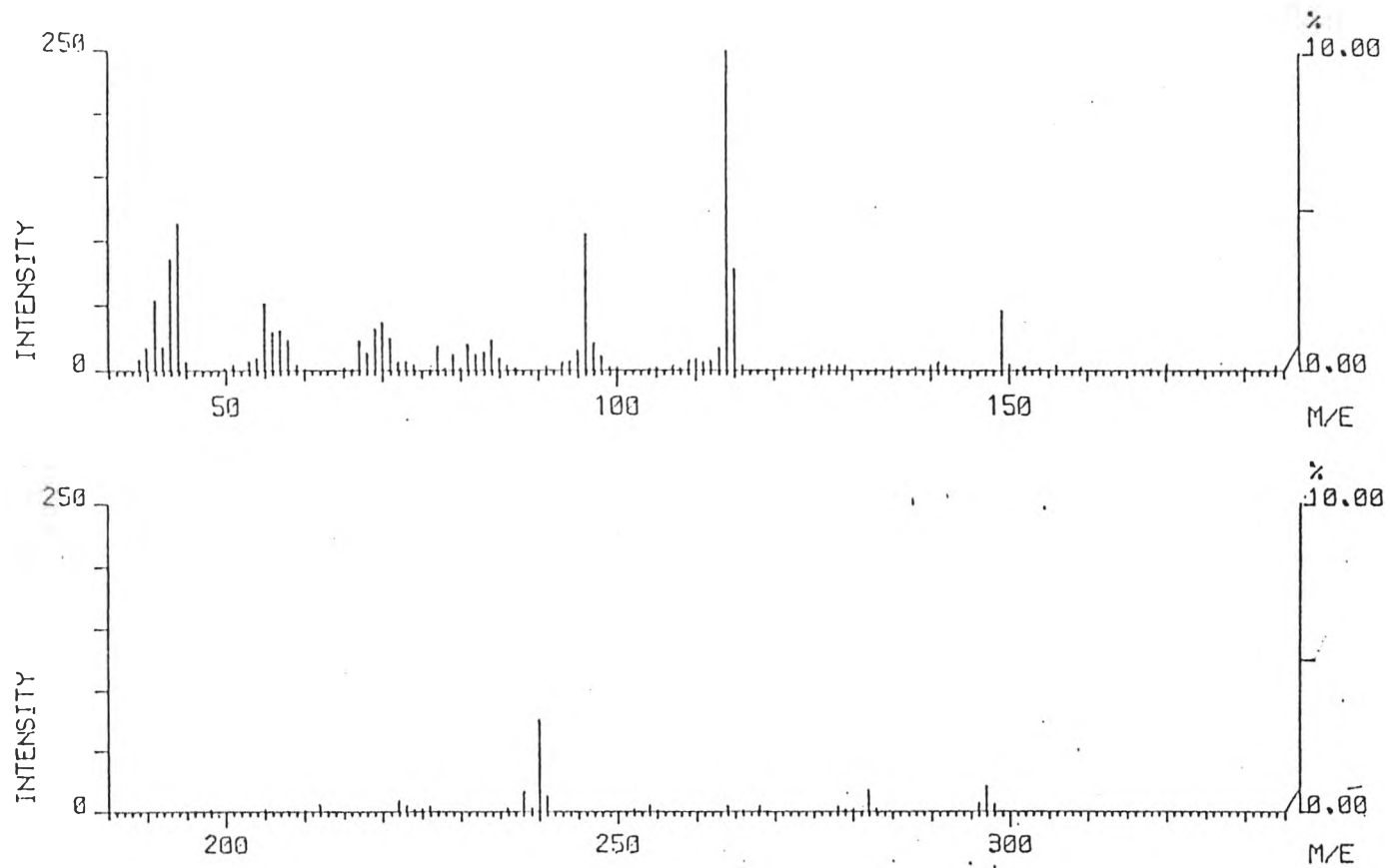


FIGURE 10. THE MASS SPECTRUM (EIMS) OF D-1

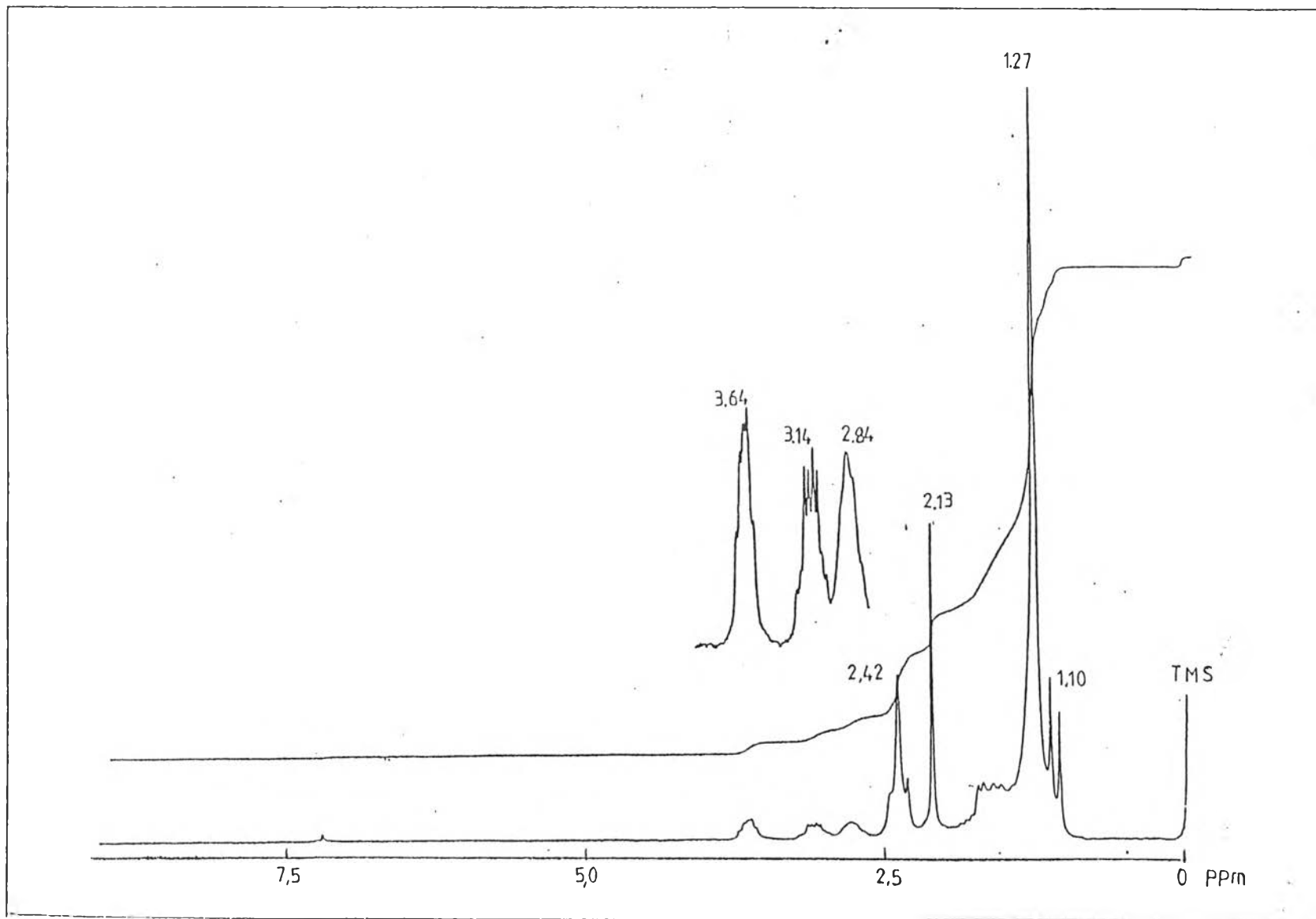


FIGURE 11. THE PROTON-NMR SPECTRUM OF D-1 (in CDCl₃)

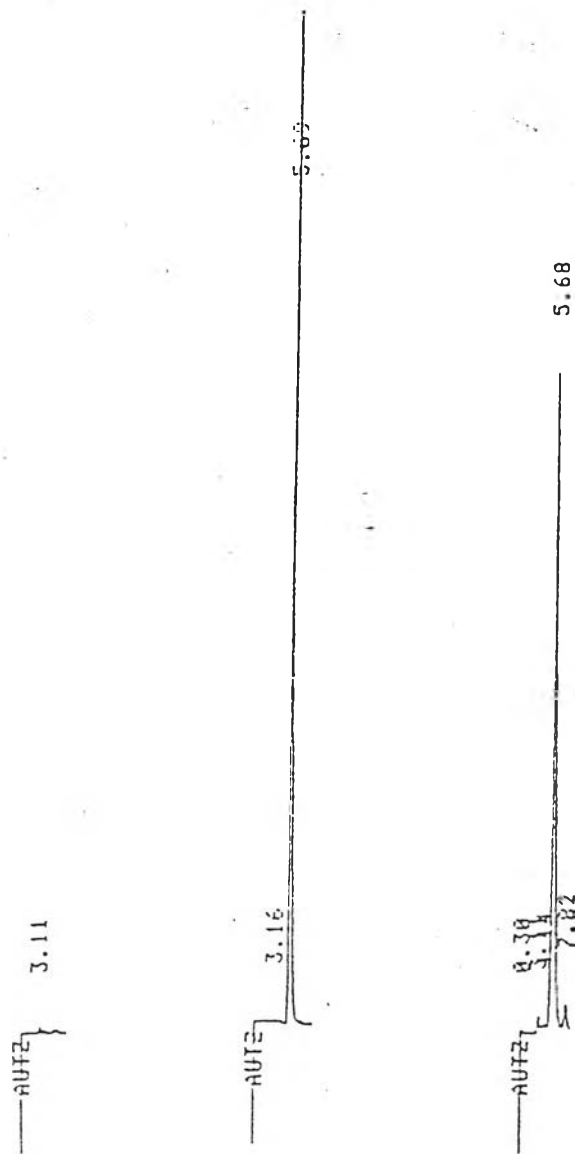


FIGURE 12. THE HPLC-CHROMATOGRAM OF UNKNOWN BENZOIC ACID

1. Methanol (solvent)
2. Standard Benzoic Acid (E.Merck)
3. Unknown Benzoic Acid

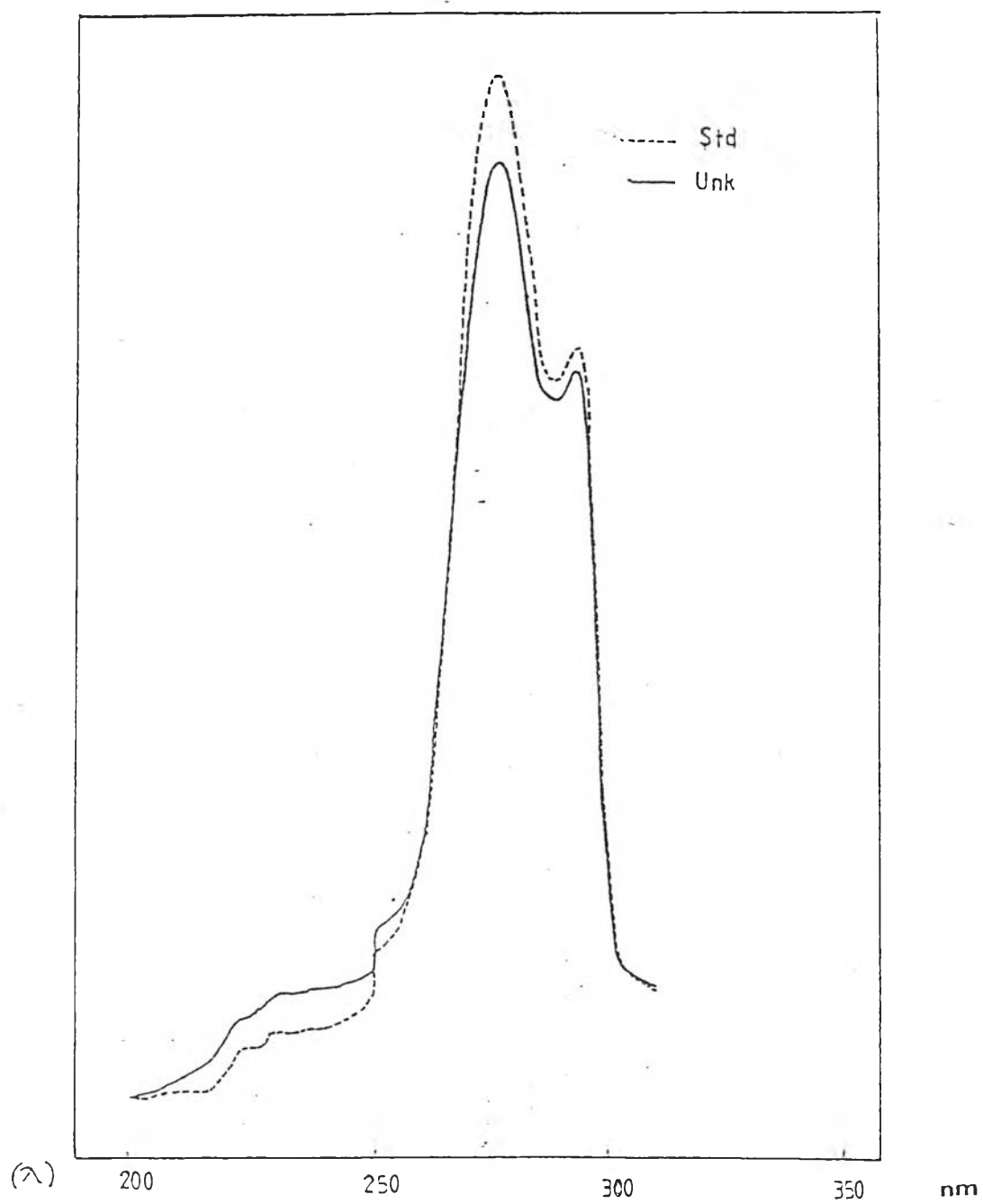


FIGURE 13. THE ULTRAVIOLET SPECTRUM OF UNKNOWN BENZOIC ACID

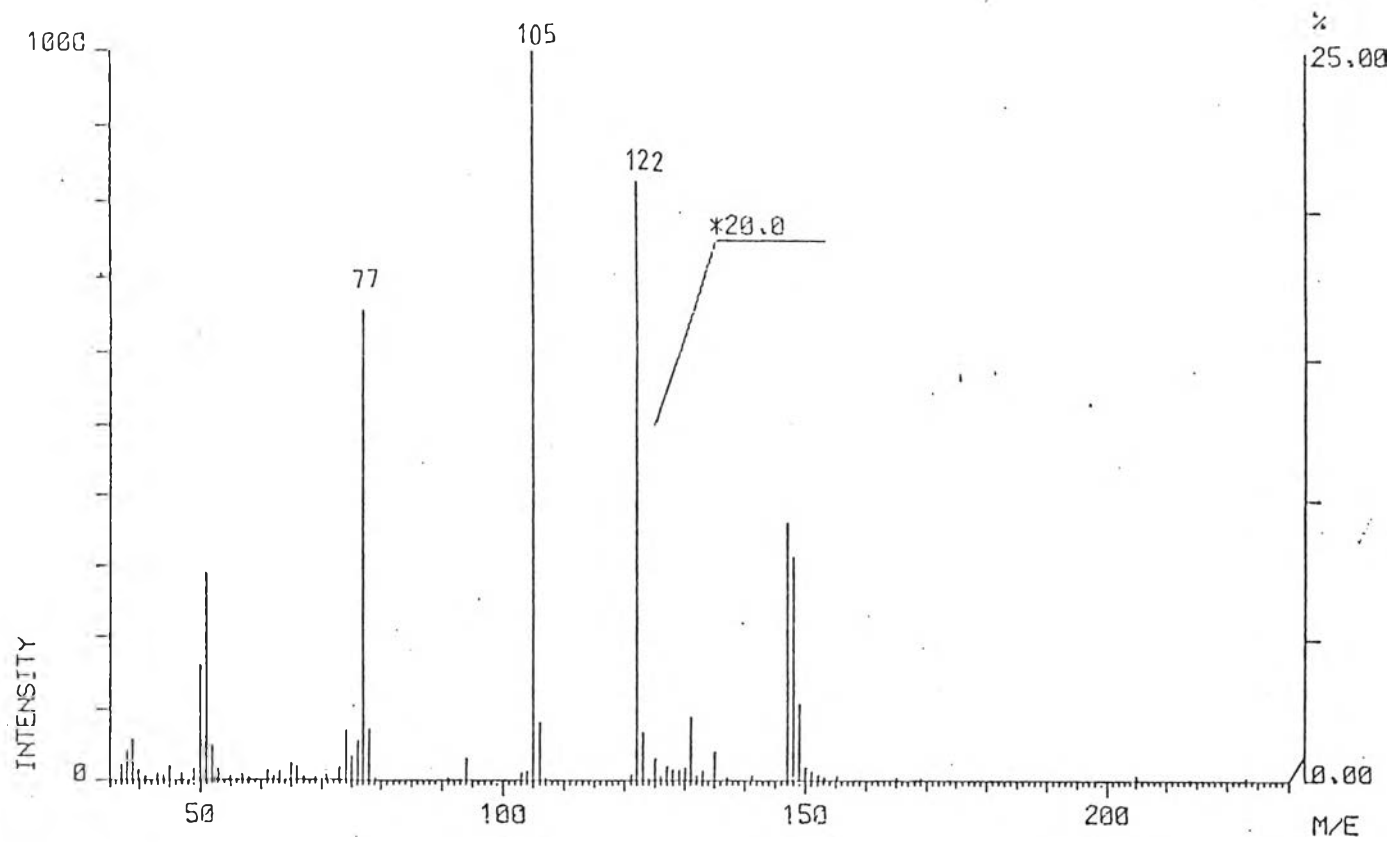


FIGURE 14. THE MASS SPECTRUM (EIMS) OF UNKNOWN BENZOIC ACID

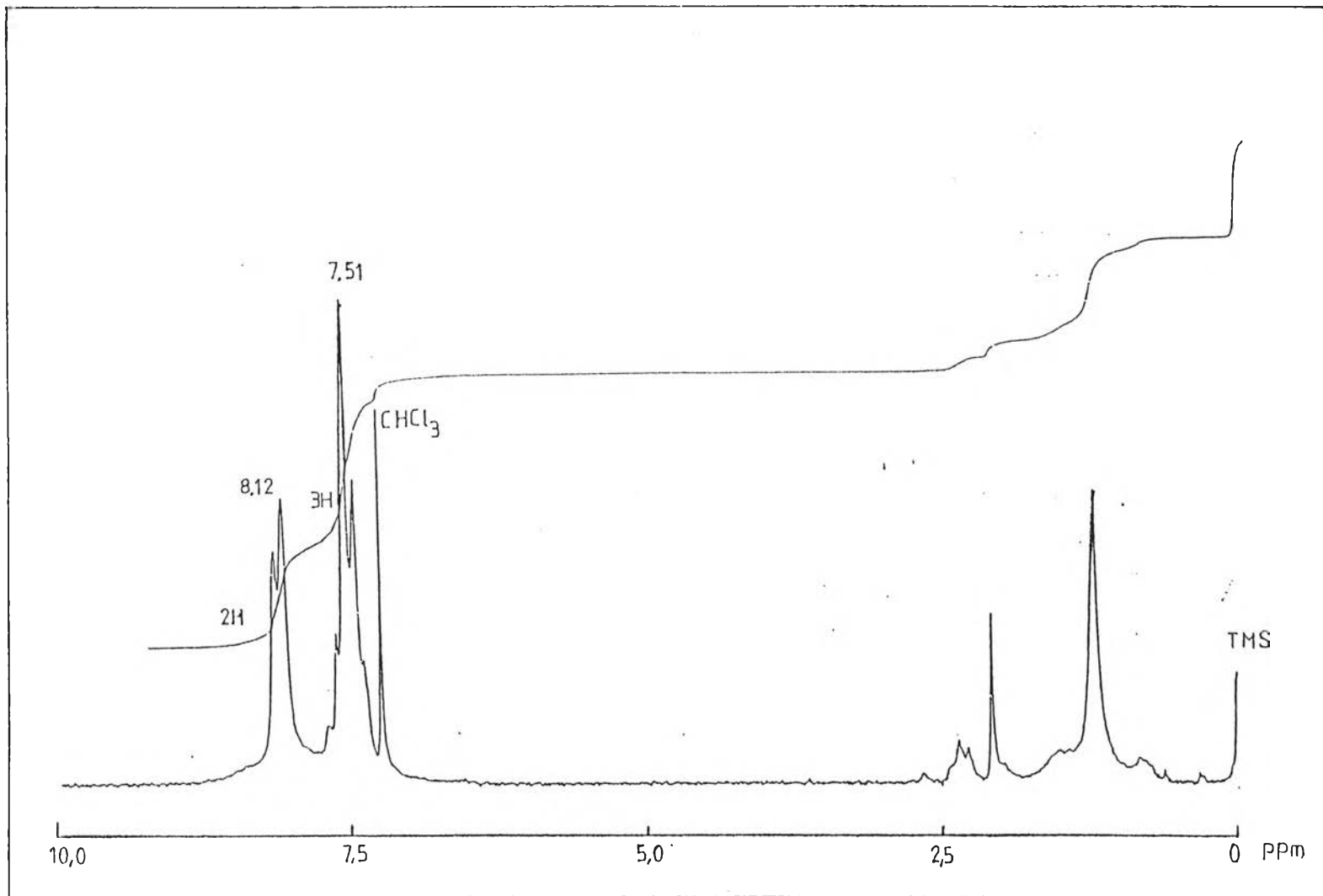


FIGURE 15. THE PROTON-NMR SPECTRUM OF Unknown Benzoic Acid (in CDCl_3)

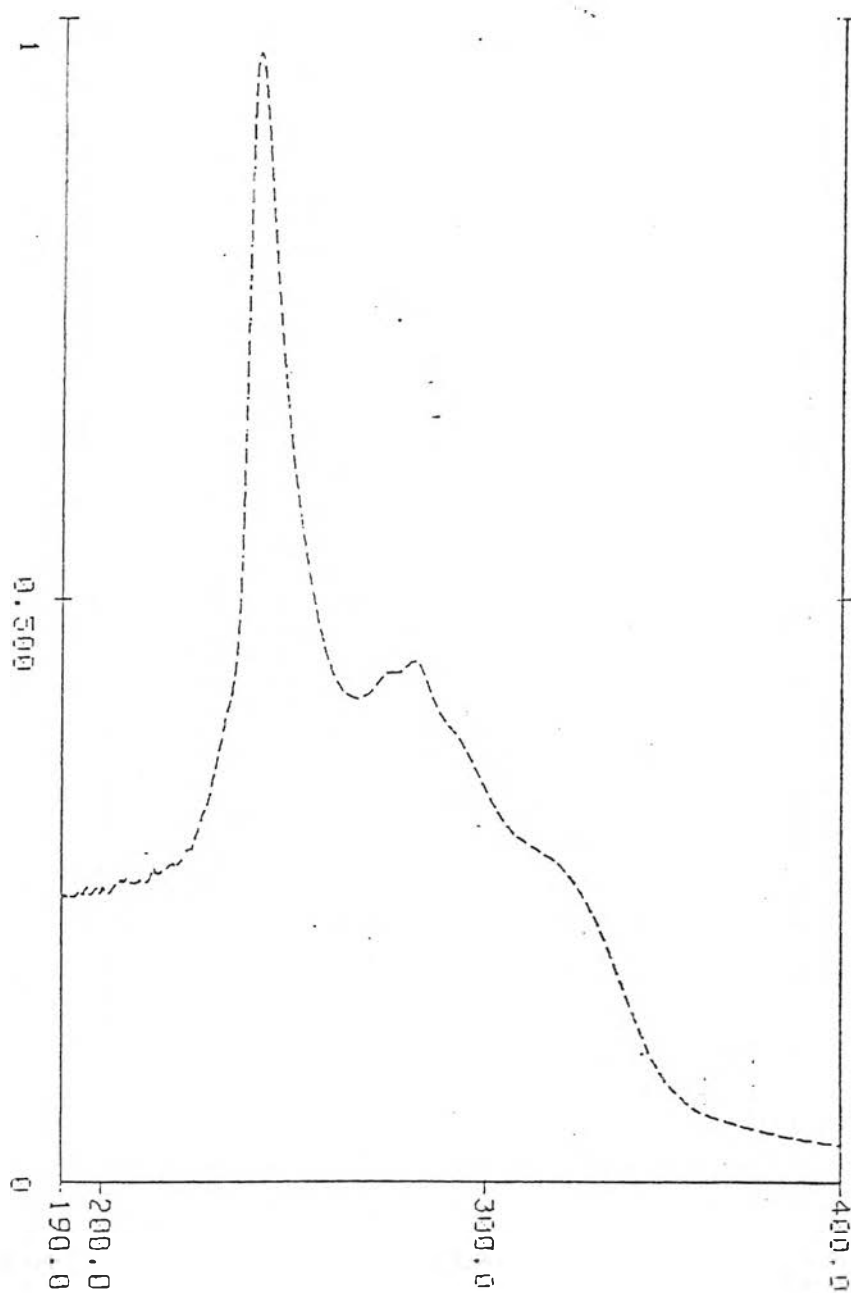


FIGURE 16. THE ULTRAVIOLET SPECTRUM OF L-2

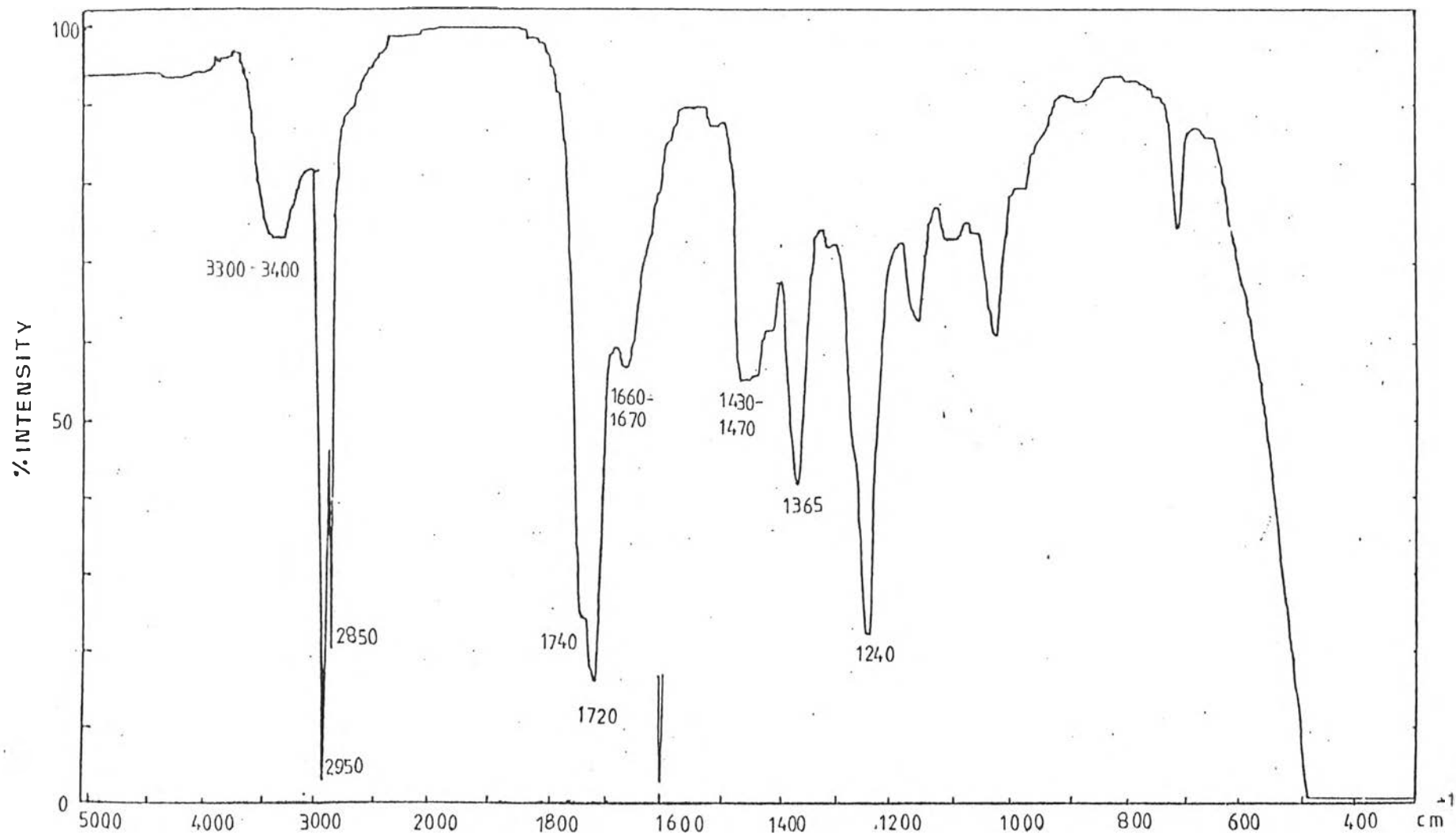


FIGURE 17. THE INFRARED SPECTRUM OF L-2

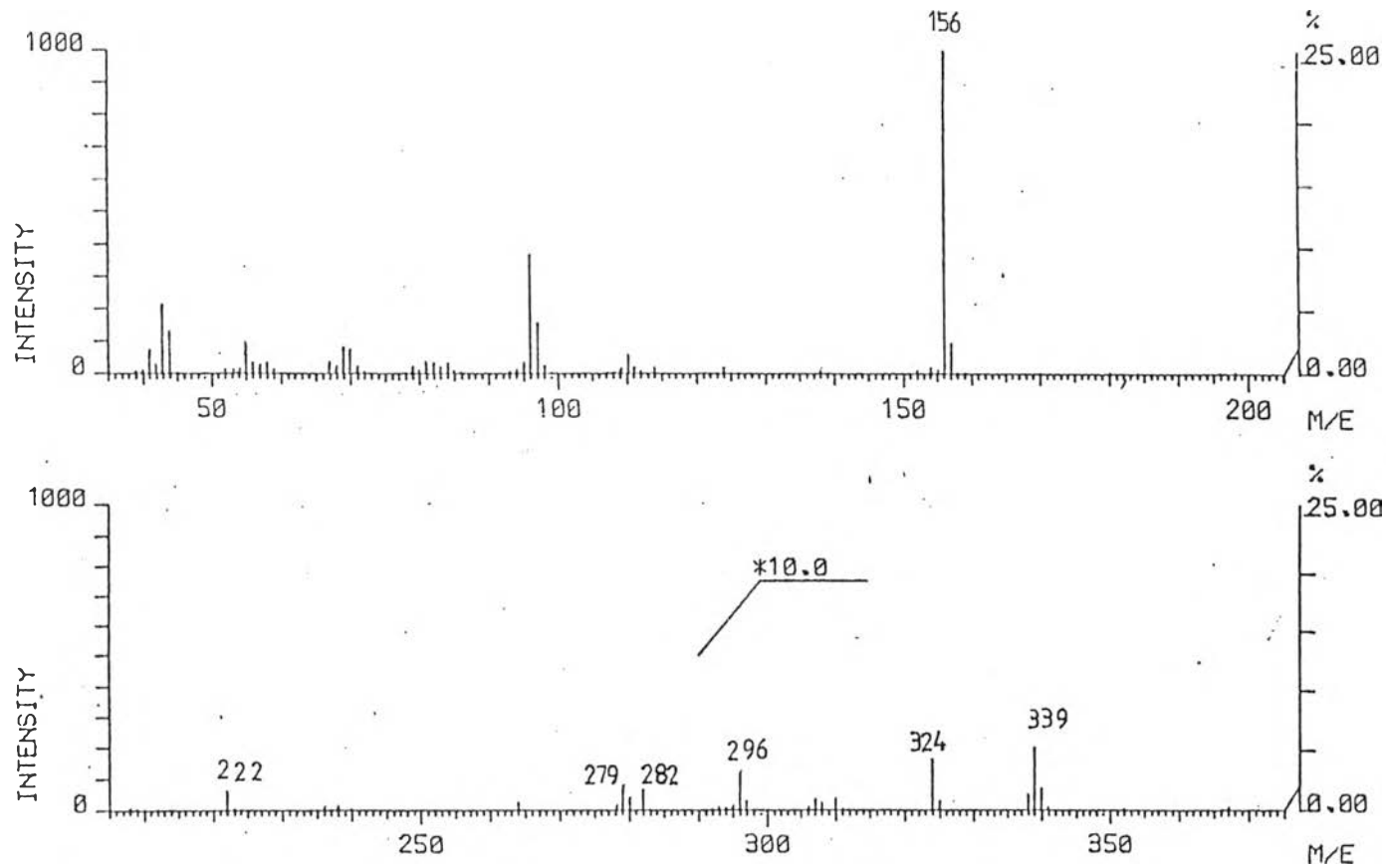


FIGURE 18. THE MASS SPECTRUM (EIMS) OF L-2

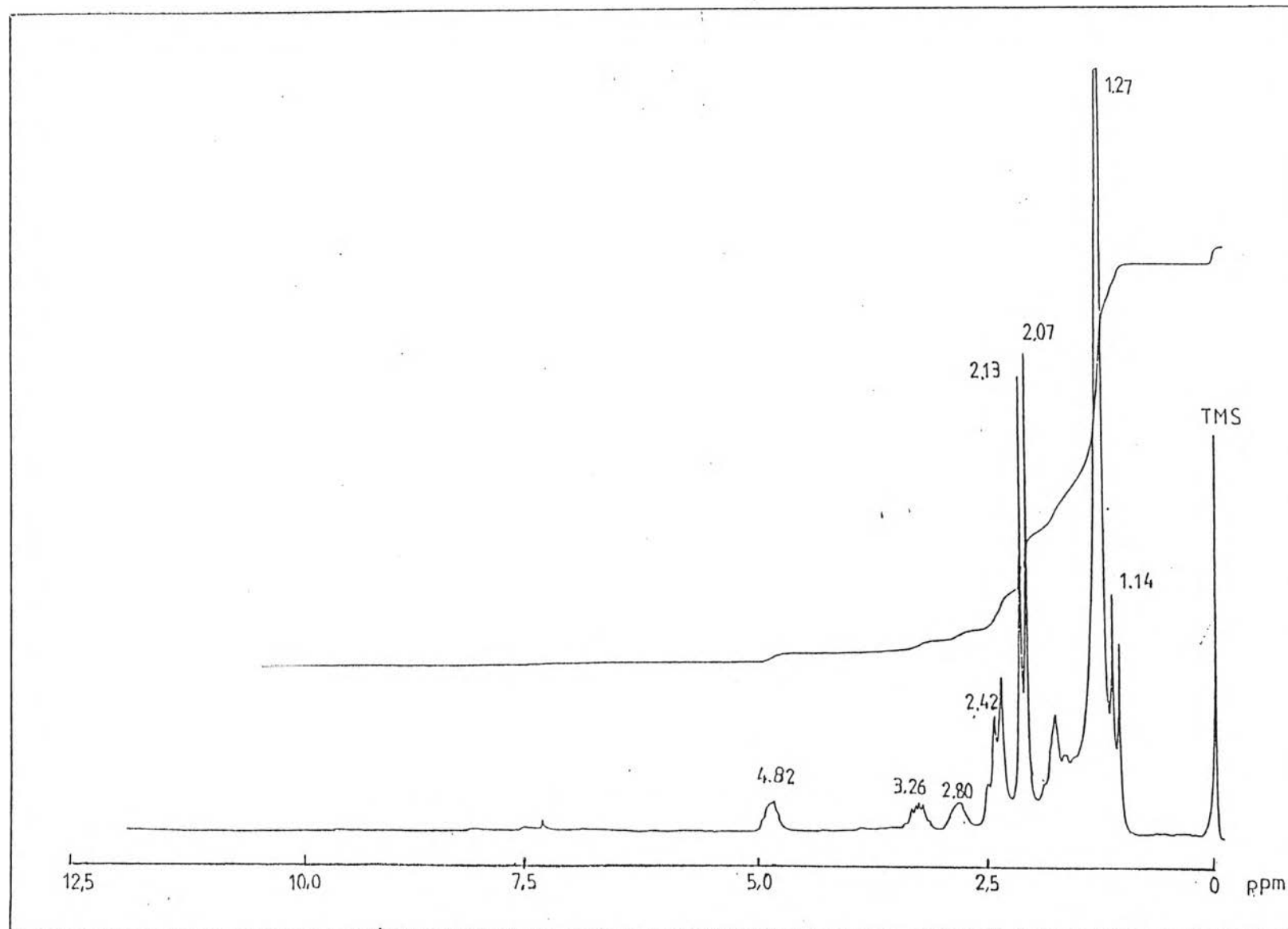
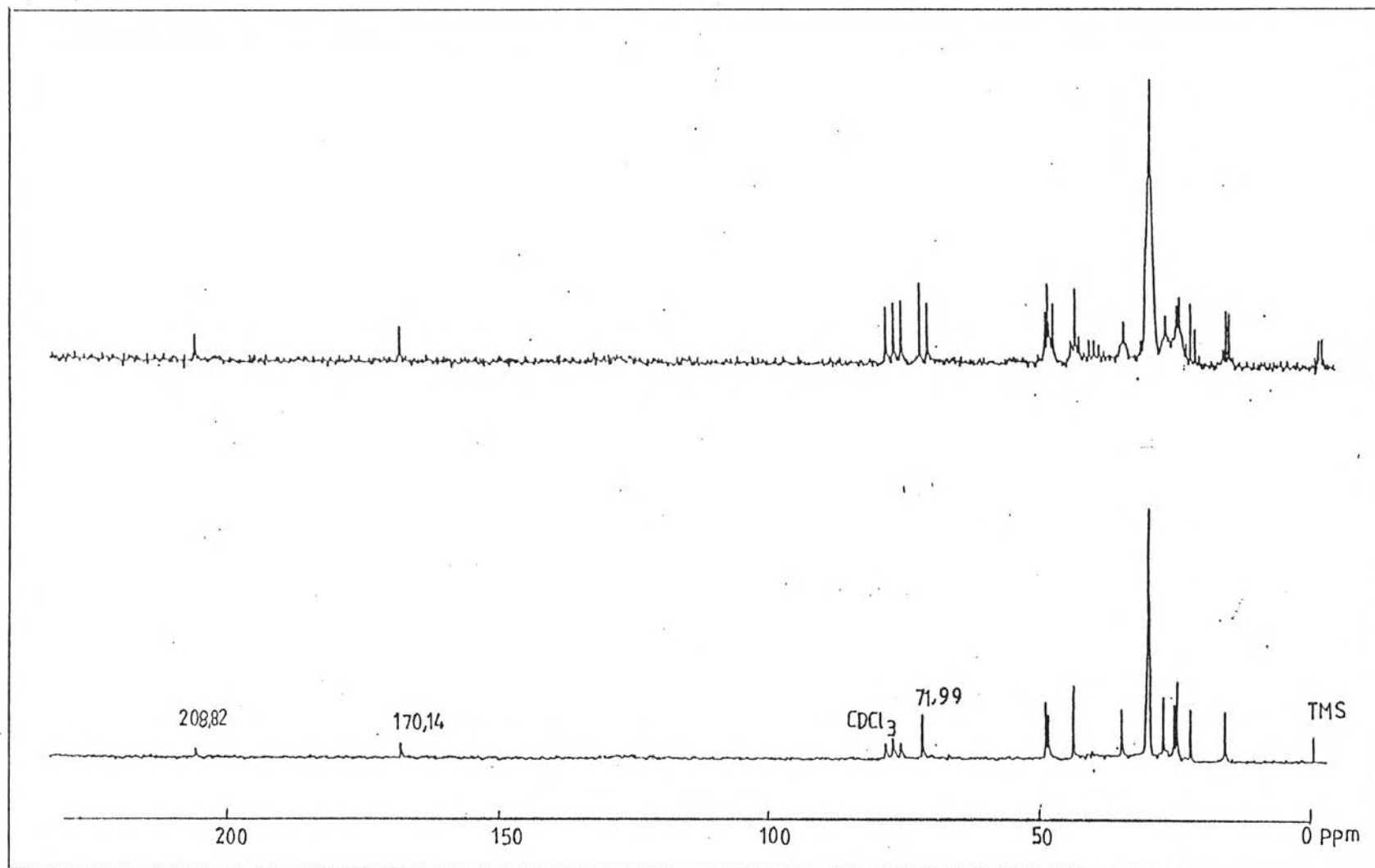


FIGURE 19. THE PROTON-NMR SPECTRUM OF L-2 (in CDCl₃)



FIGURER 20. THE CARBON-13 NMR SPECTRUM OF L-2 (in CDCl₃, DMSO-D₆)

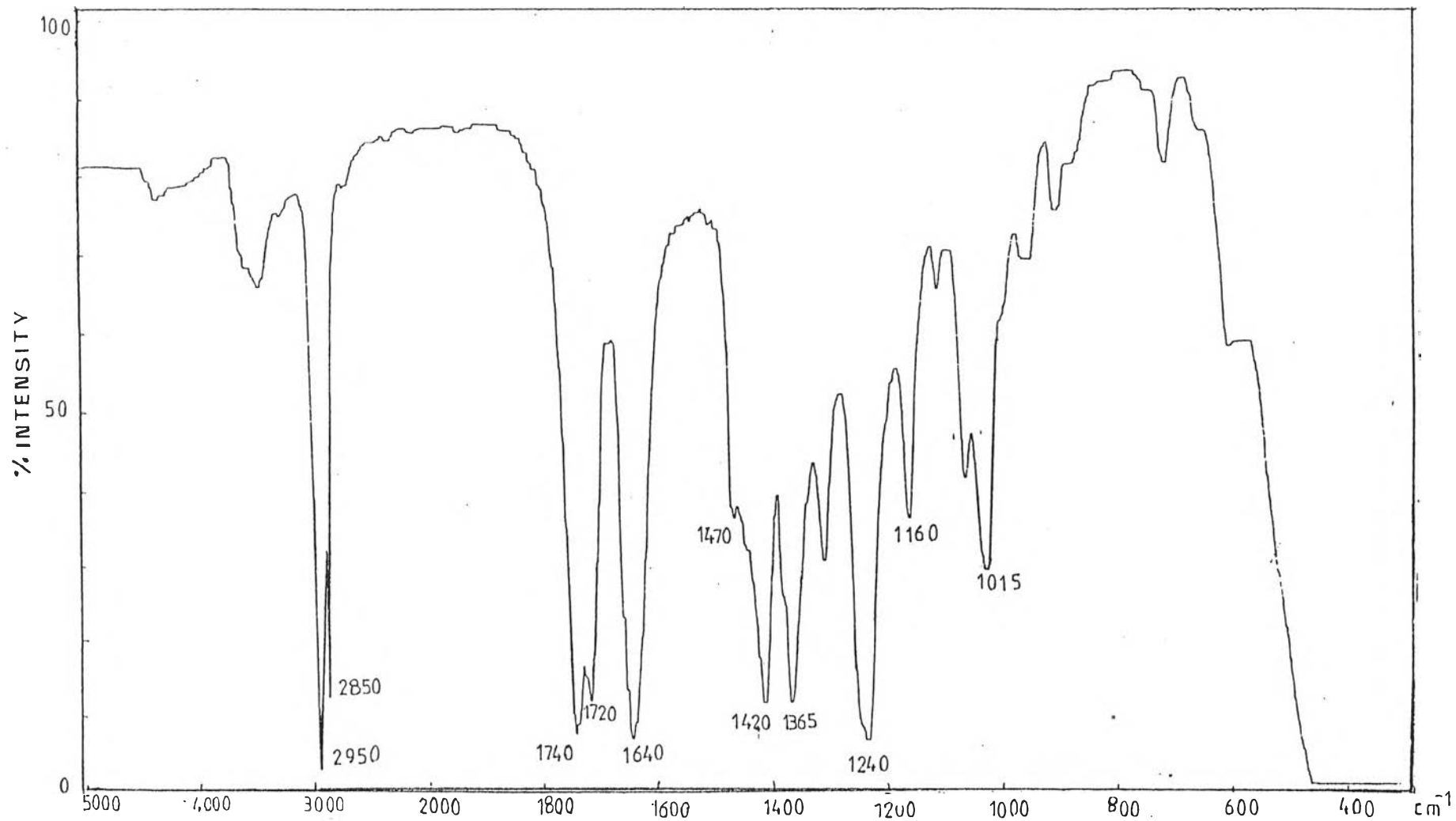


FIGURE 21. THE INFRARED SPECTRUM OF Ac-1

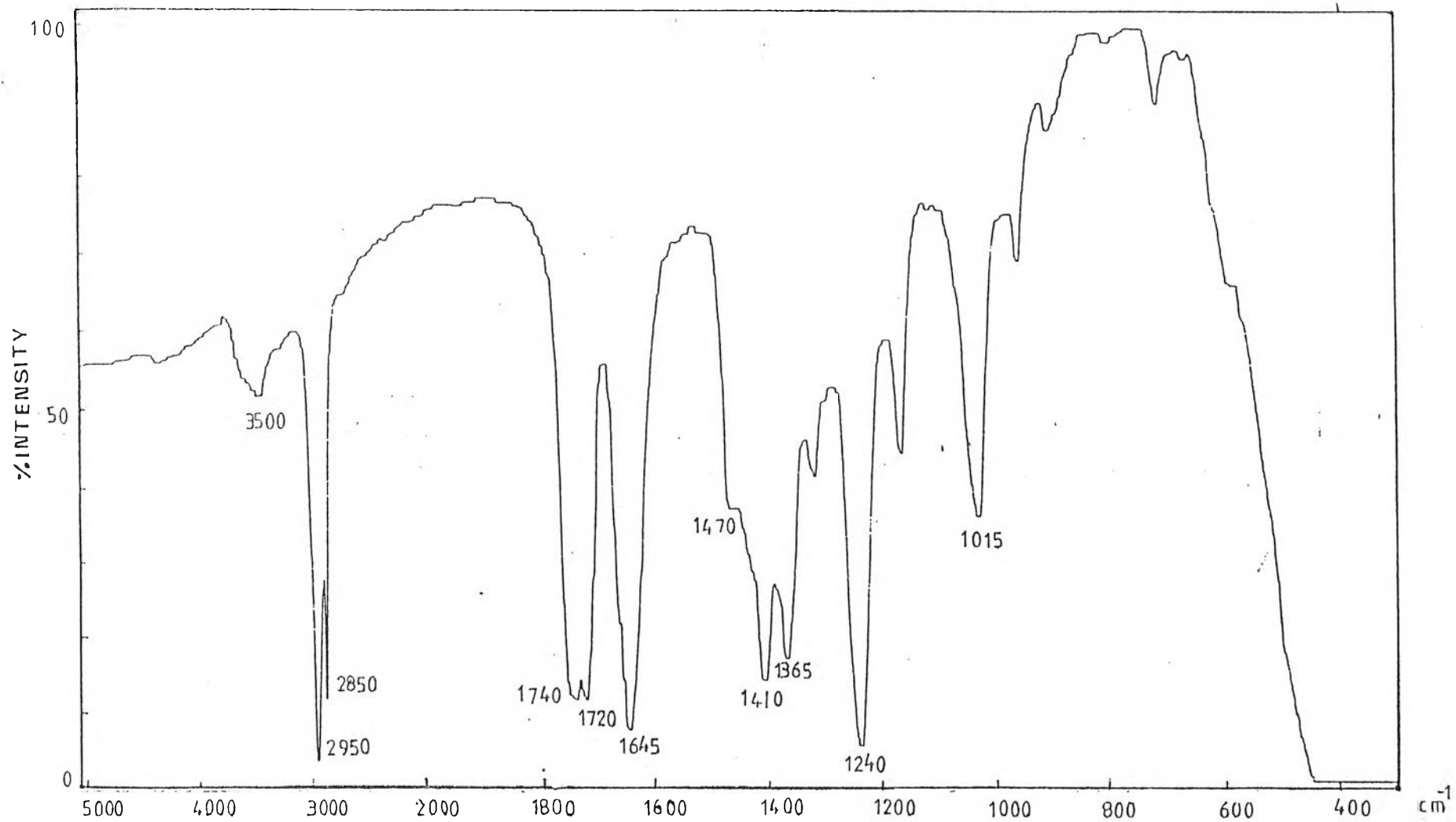


FIGURE 22. THE INFRARED SPECTRUM OF Ac-2

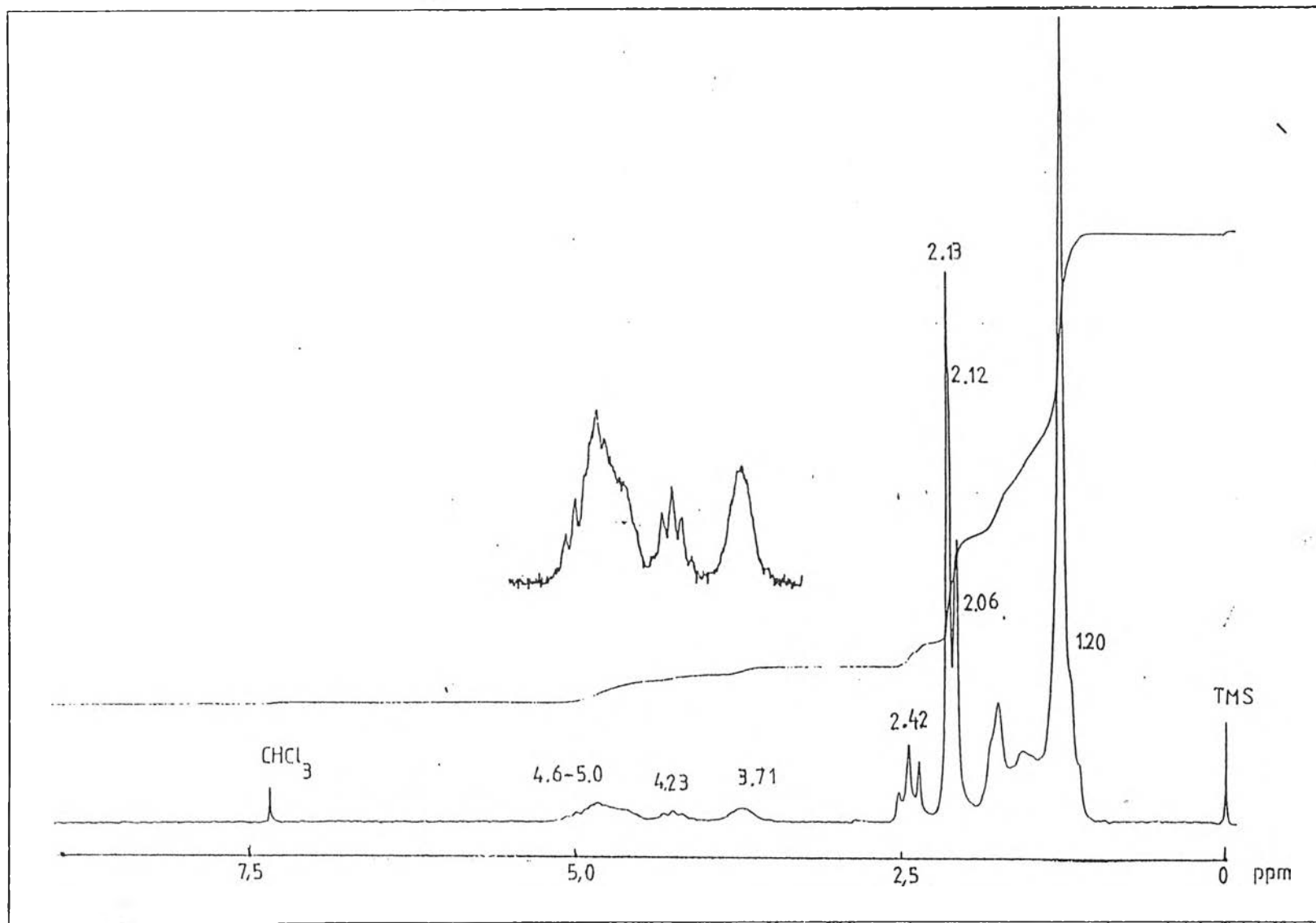


FIGURE 23. THE PROTON-NMR SPECTRUM OF Ac-1 (in CDCl₃)

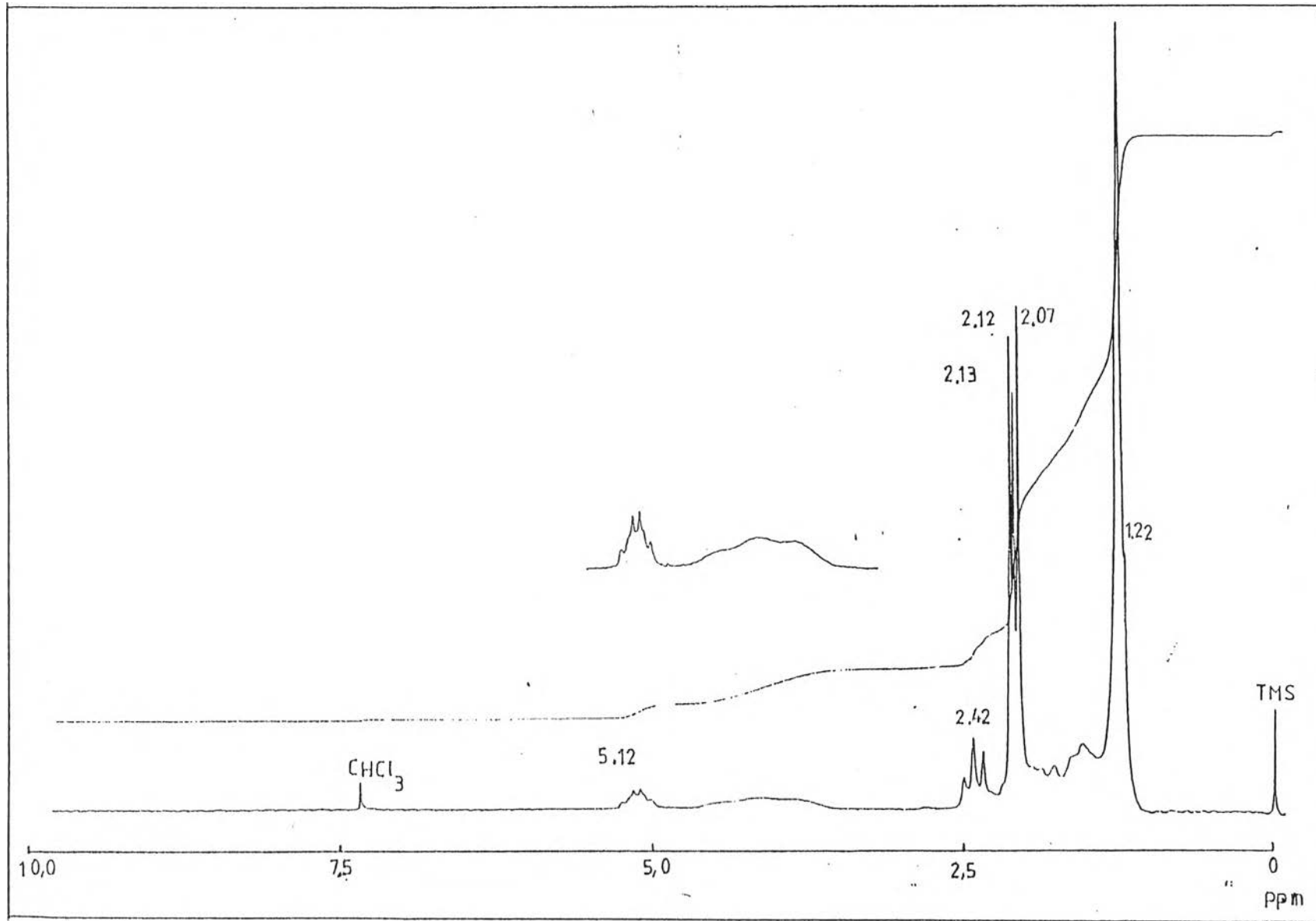


FIGURE 24. THE PROTON-NMR SPECTRUM OF Ac-2 (in CDCl₃)

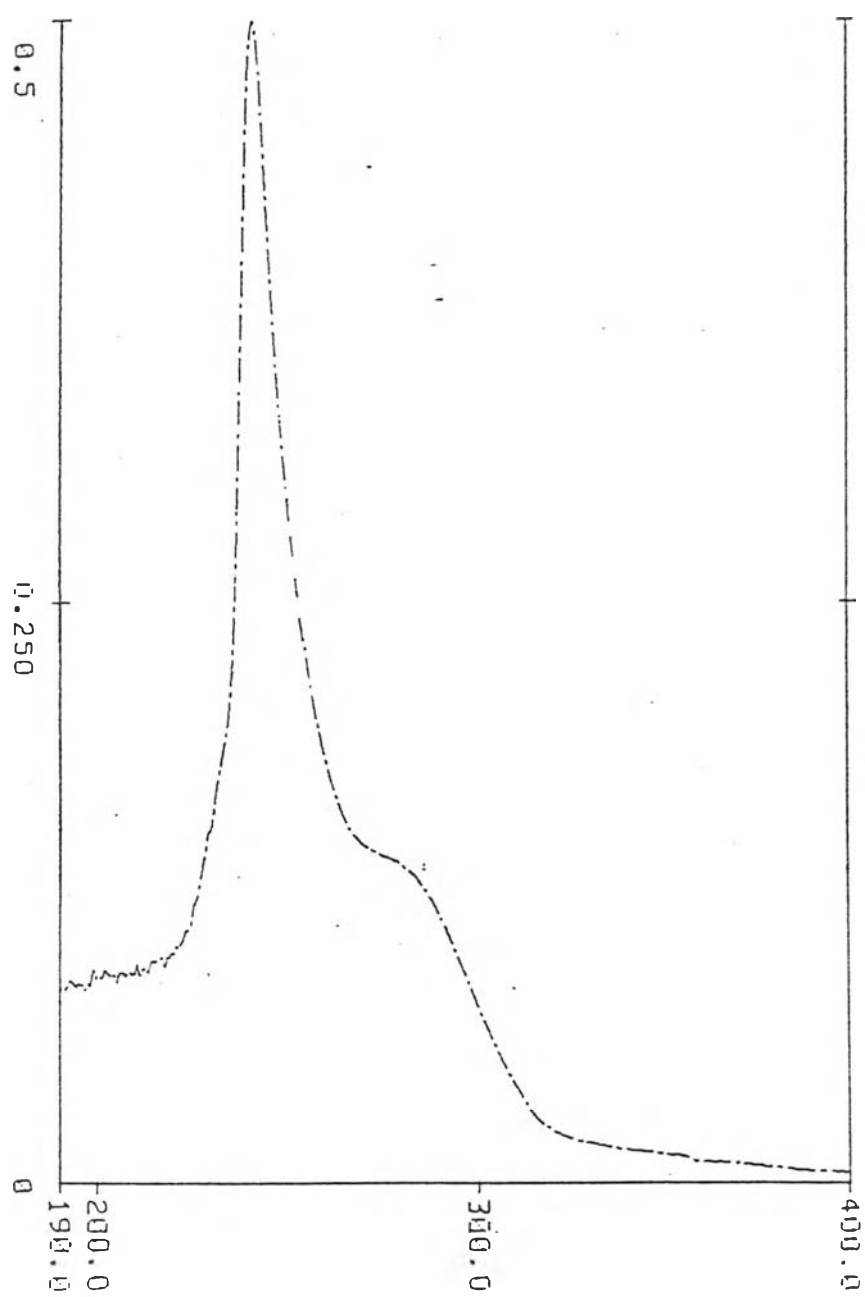


FIGURE 25. THE ULTRAVIOLET SPECTRUM OF L-3

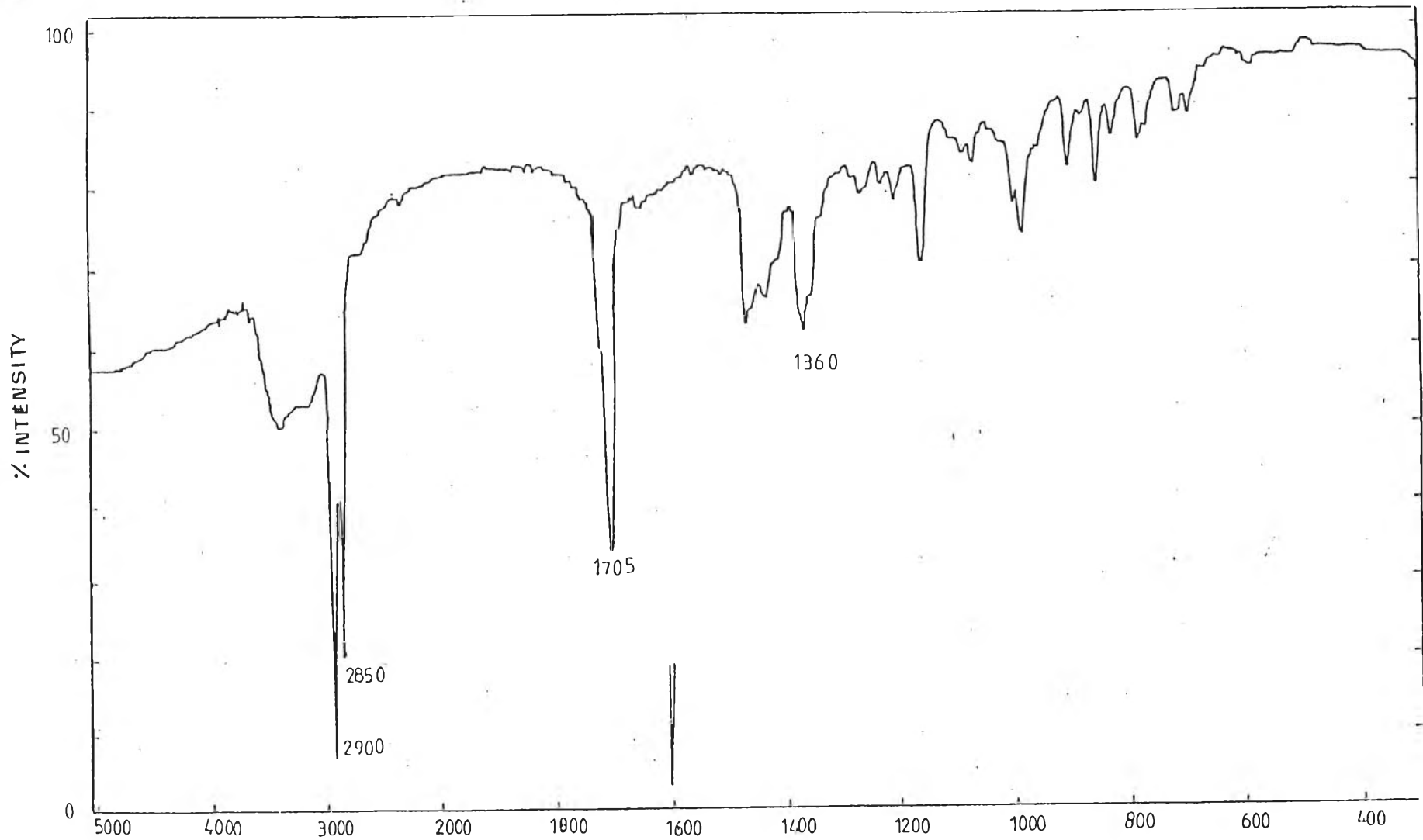


FIGURE 26a. THE INFRARED SPECTRUM OF L-3

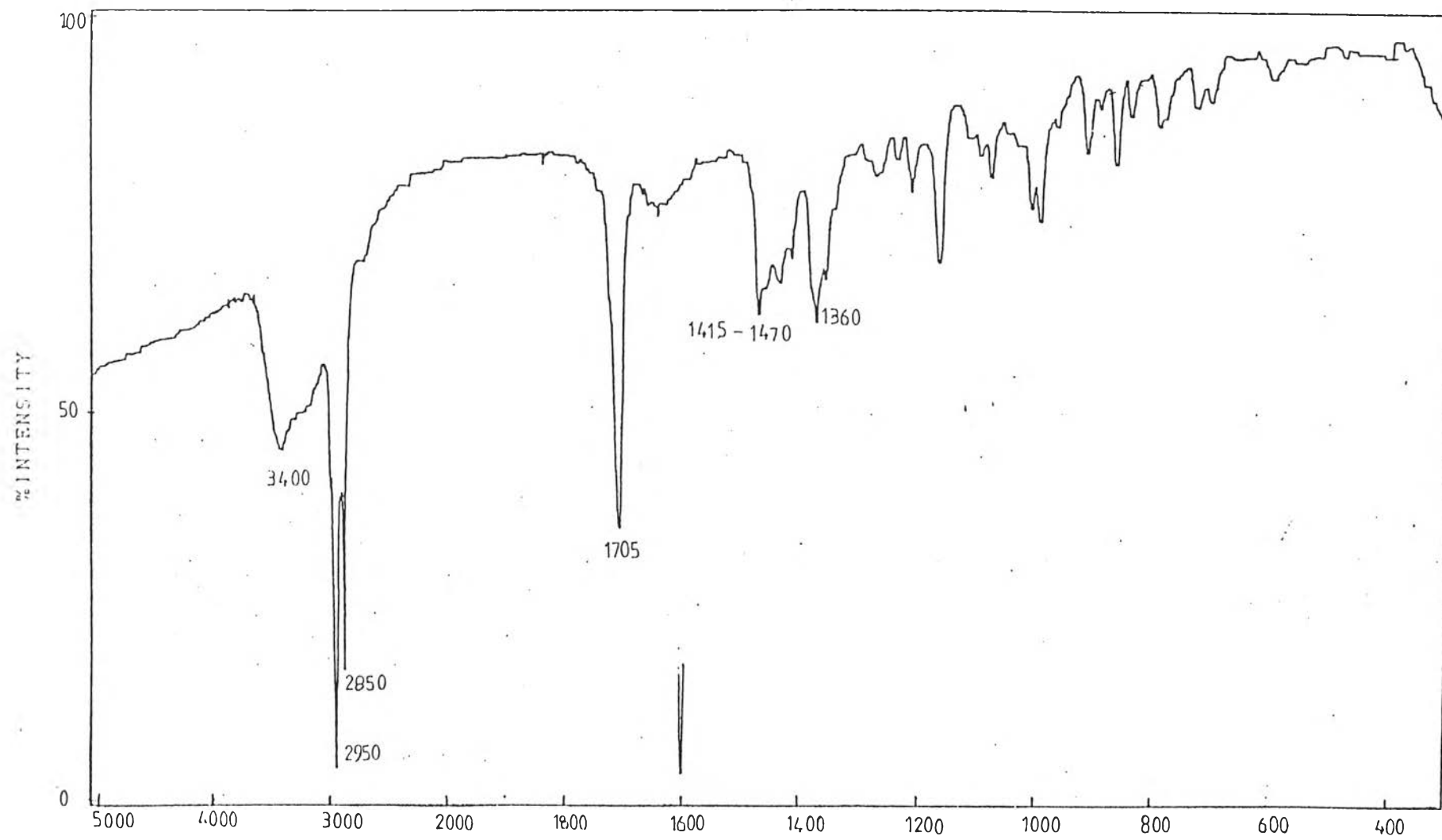


FIGURE 20 b. THE INFRARED SPECTRUM OF CASSINE

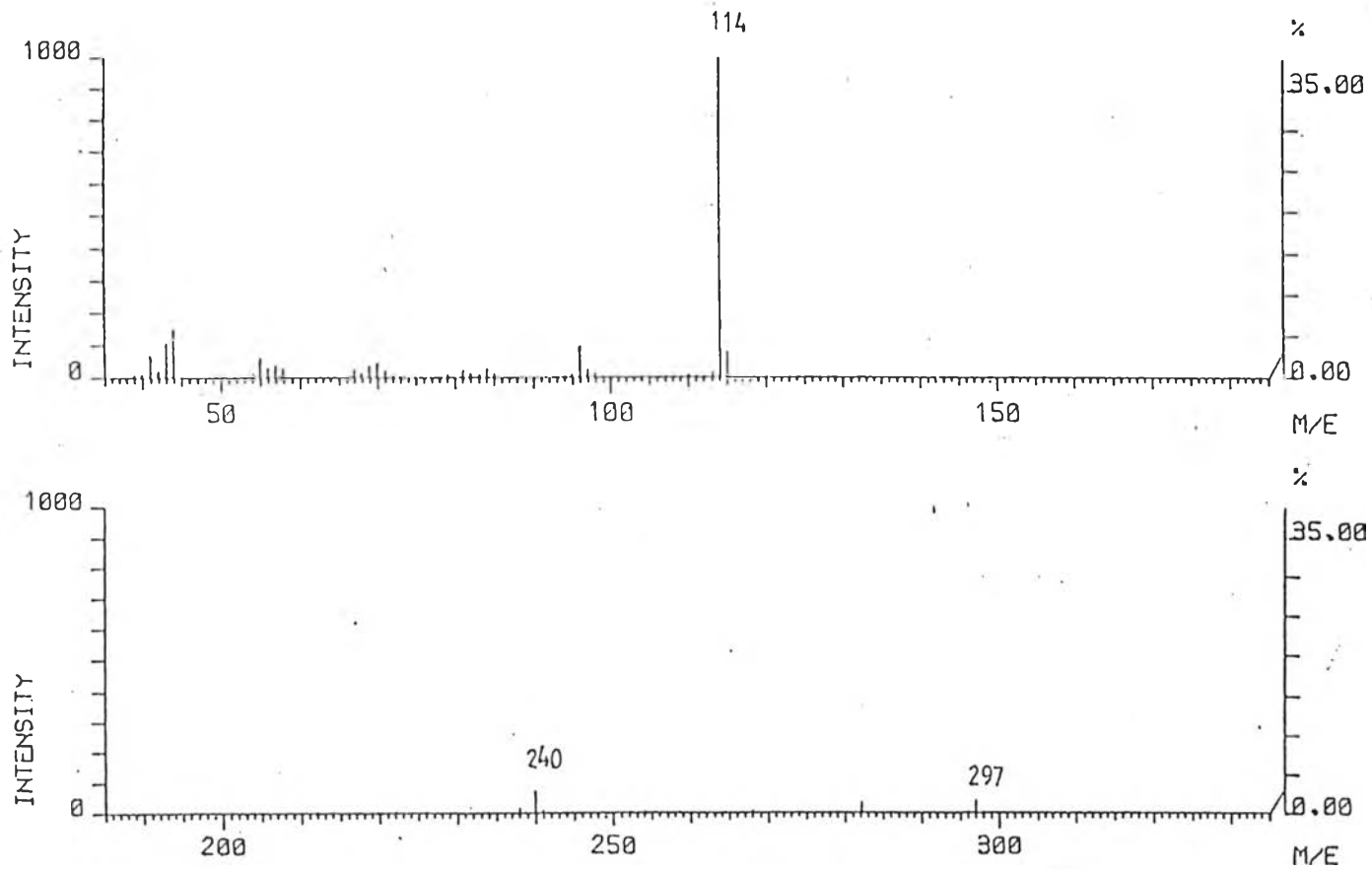


FIGURE 27. THE MASS SPECTRUM (EIMS) OF L-3

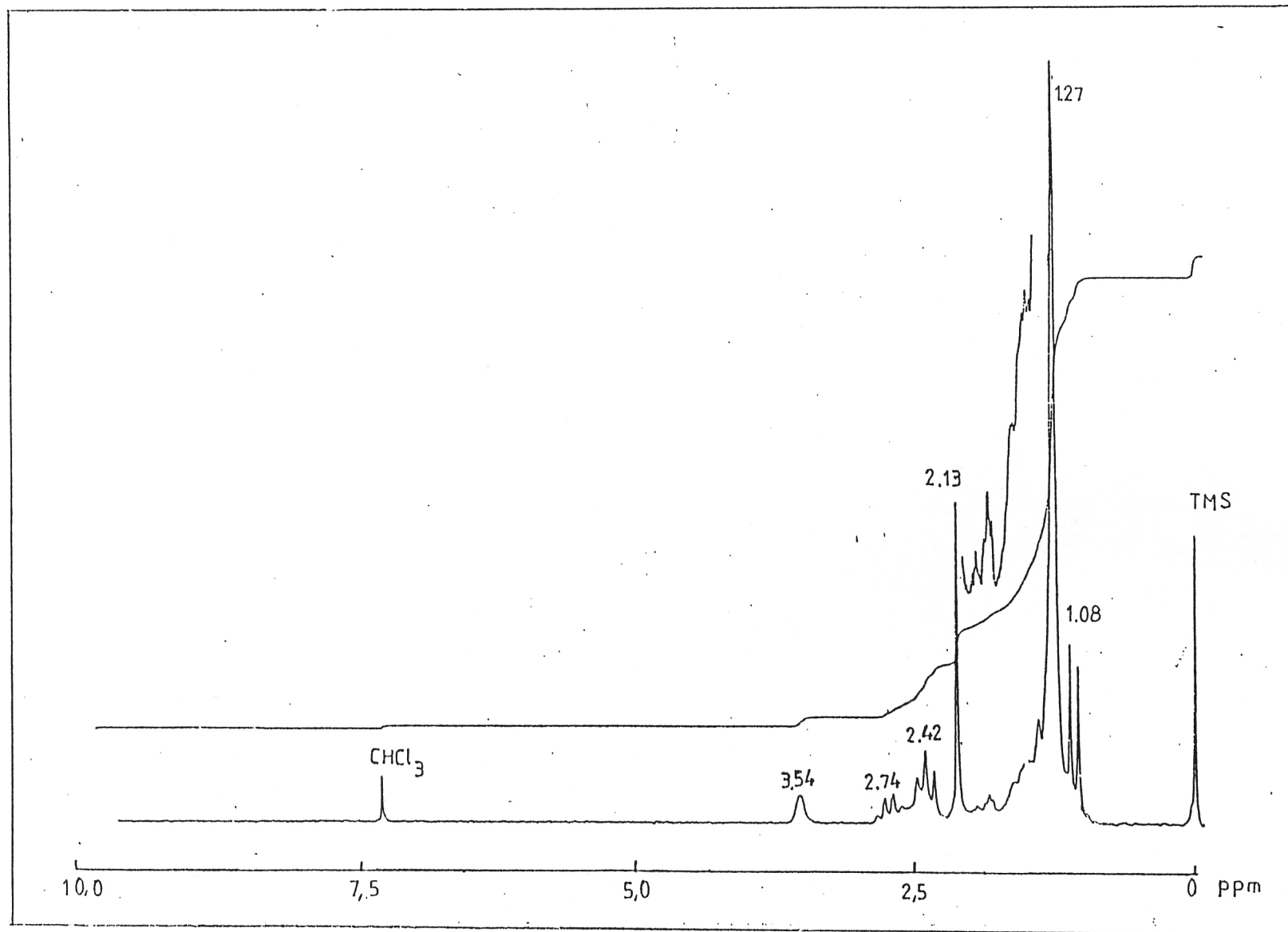


FIGURE 28a. THE PROTON-NMR SPECTRUM OF L-3 (in CDCl₃)

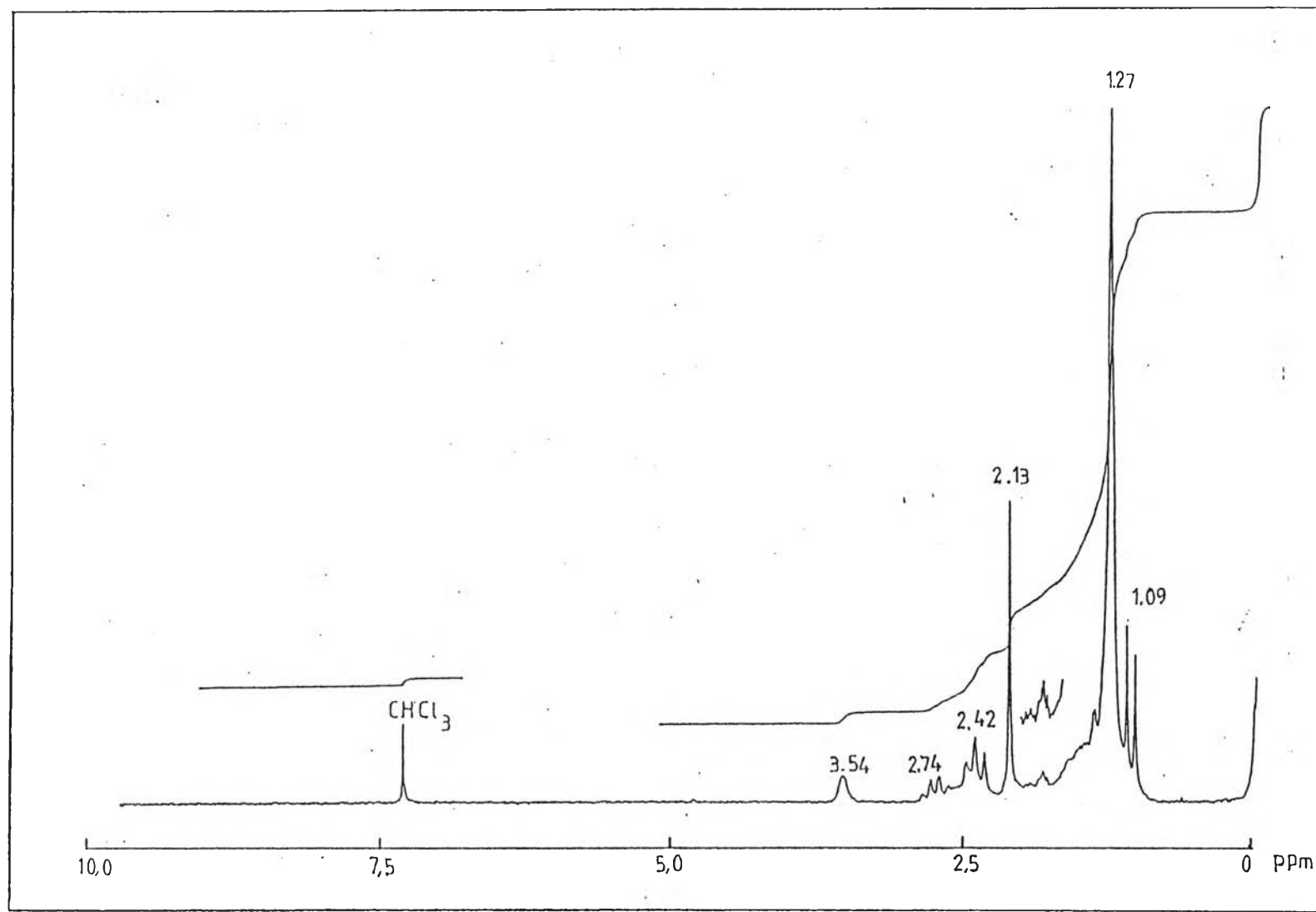


FIGURE 28b. THE PROTON-NMR SPECTRUM OF CASSINE (in CDCl₃)

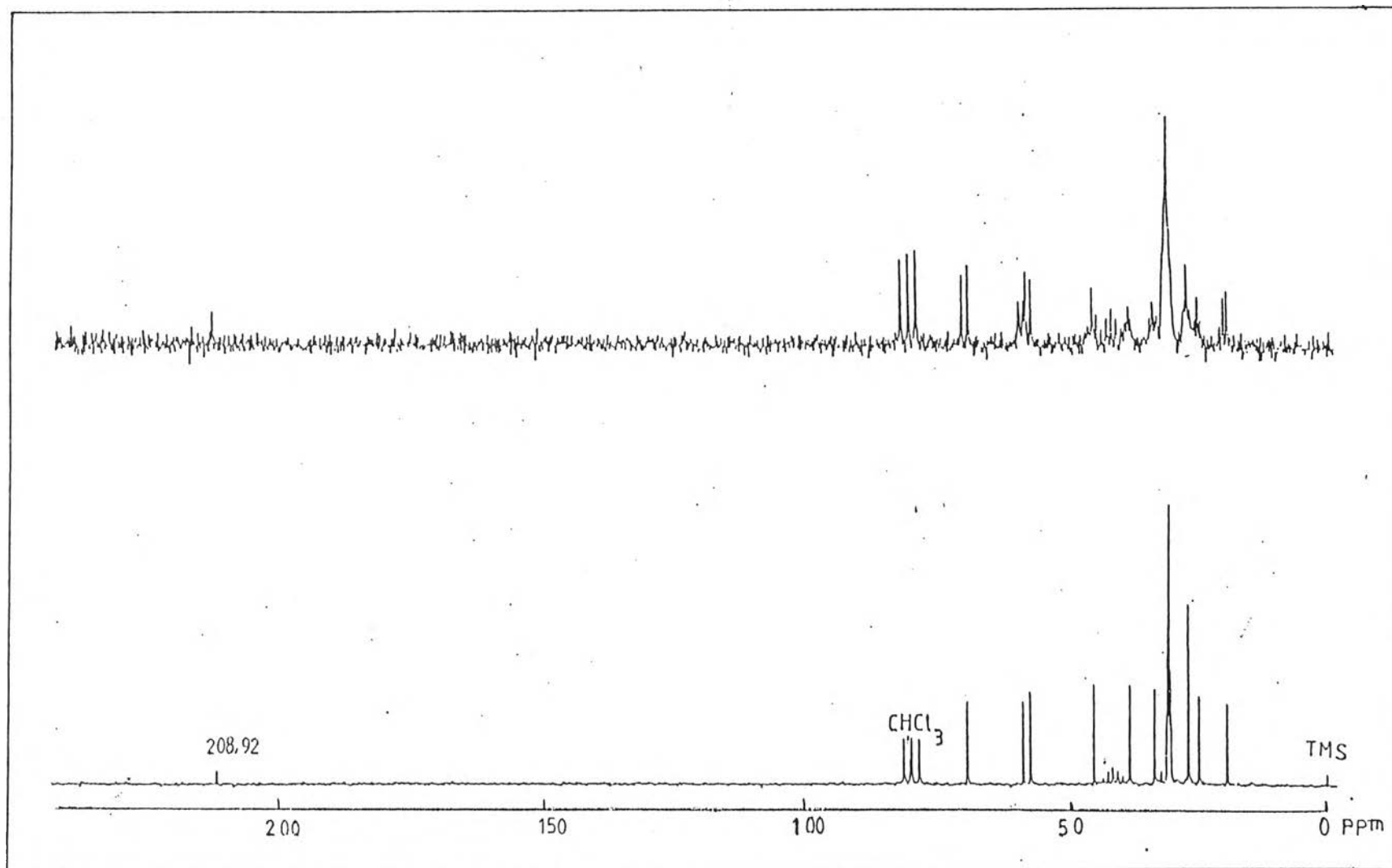


FIGURE 29. THE CARBON-13 NMR SPECTRUM OF L-3 (in CDCl₃, DMSO-D₆)

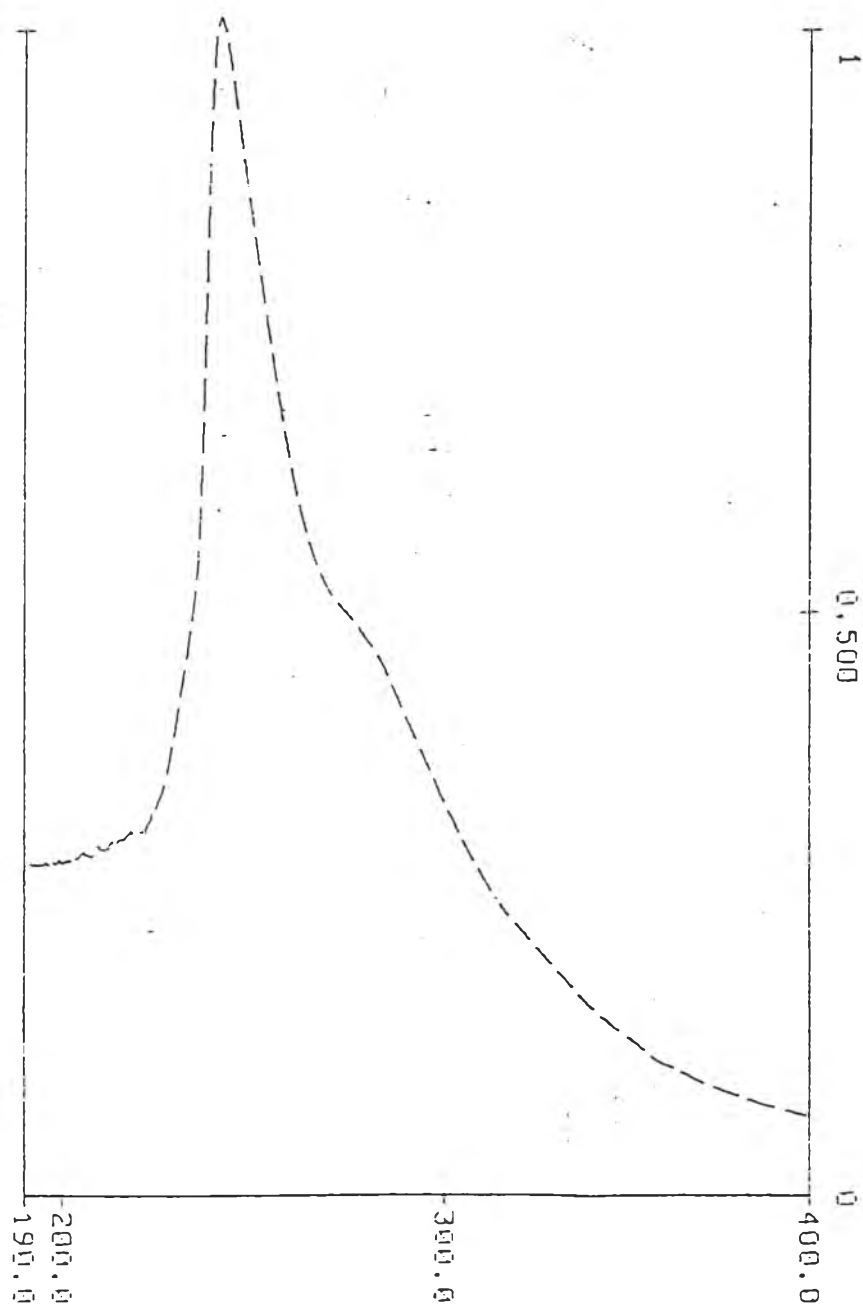


FIGURE 30. THE ULTRAVIOLET SPECTRUM OF L-4

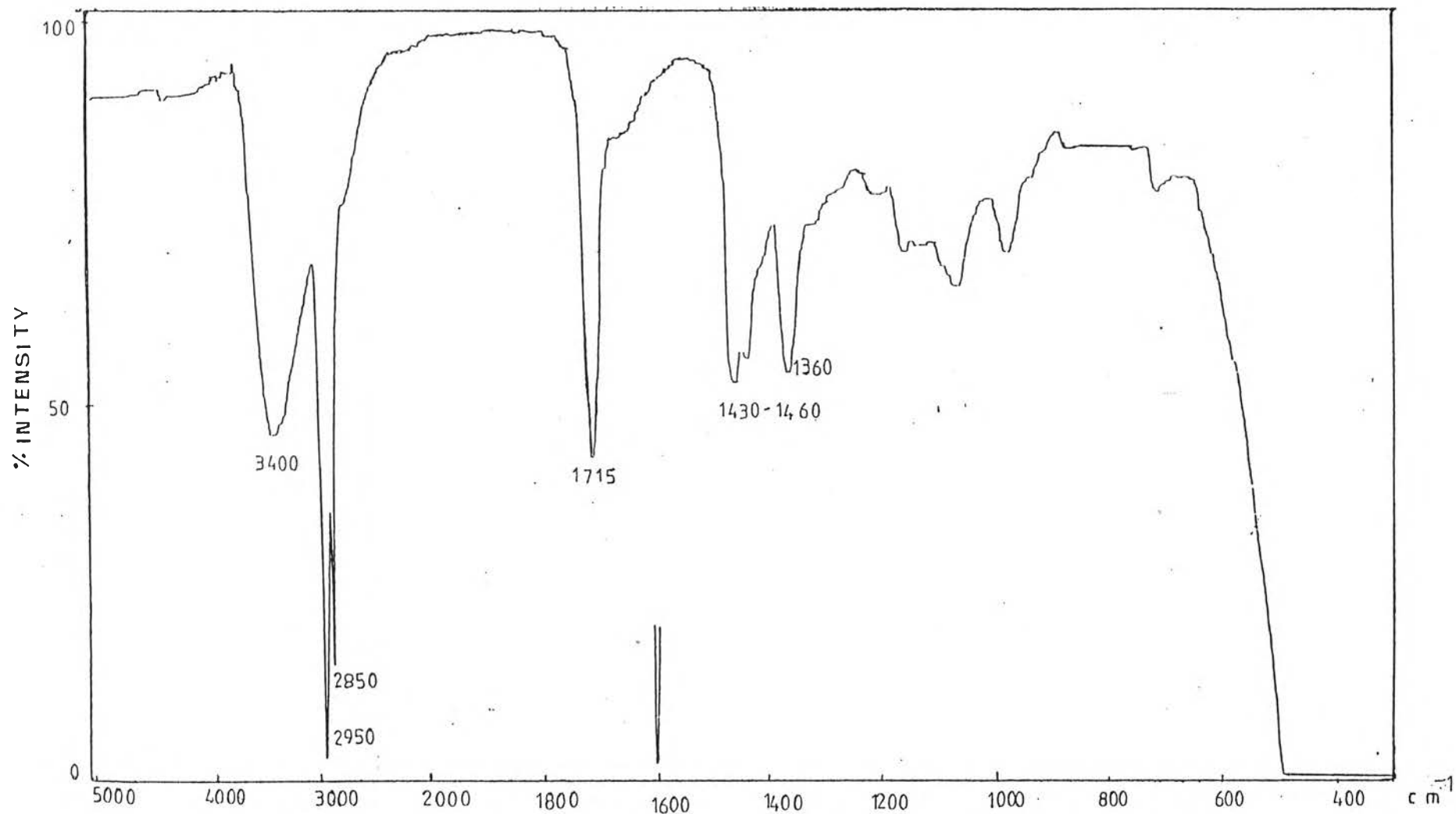


FIGURE 31a. THE INFRARED SPECTRUM OF L-4

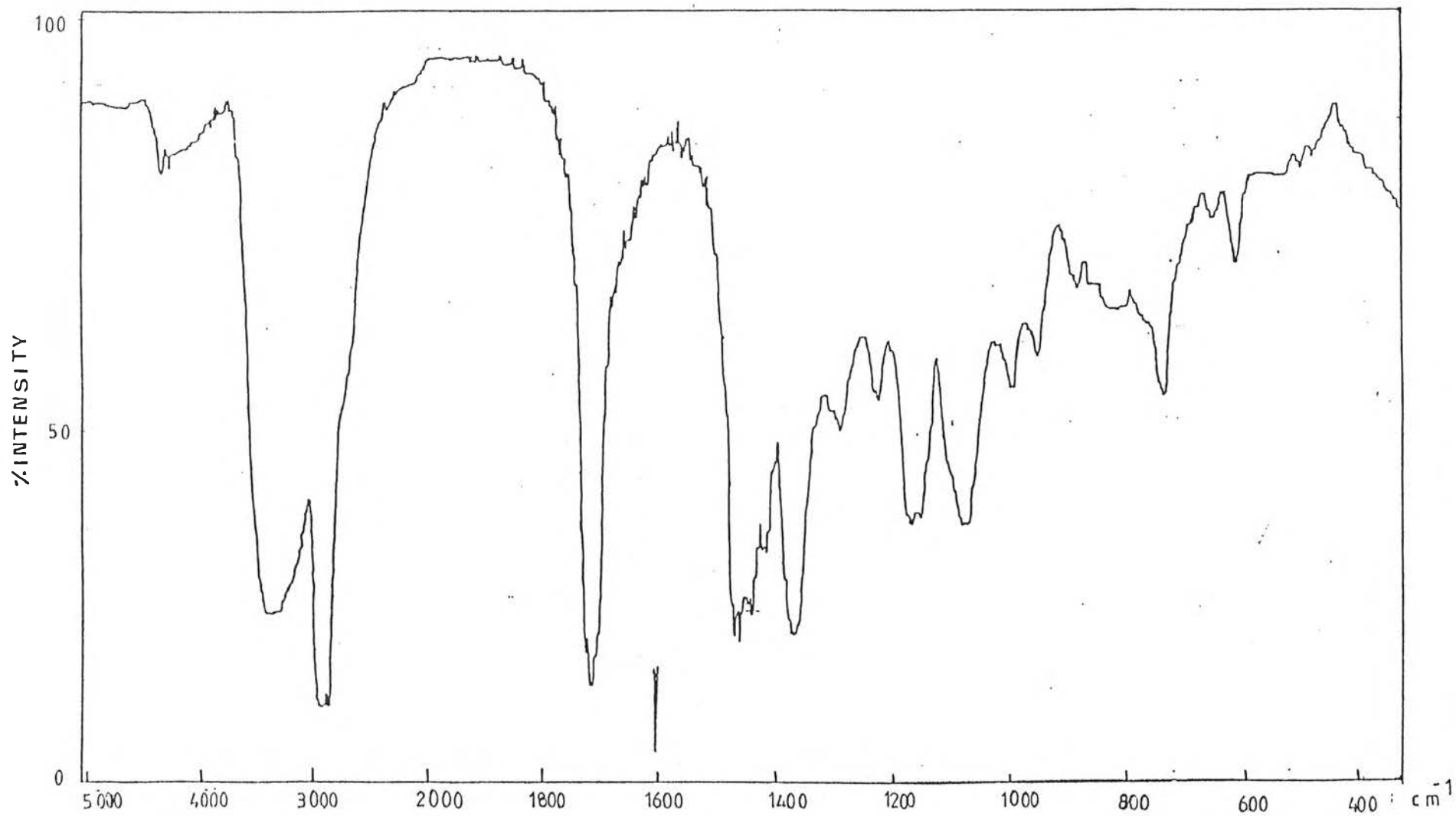


FIGURE 31b. THE INFRARED SPECTRUM OF 150-6-CASSINE

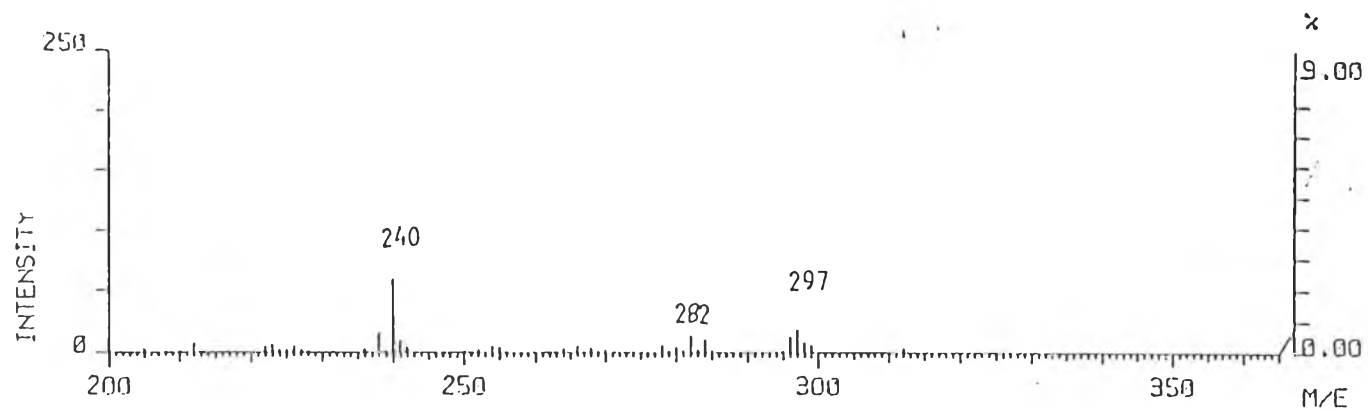
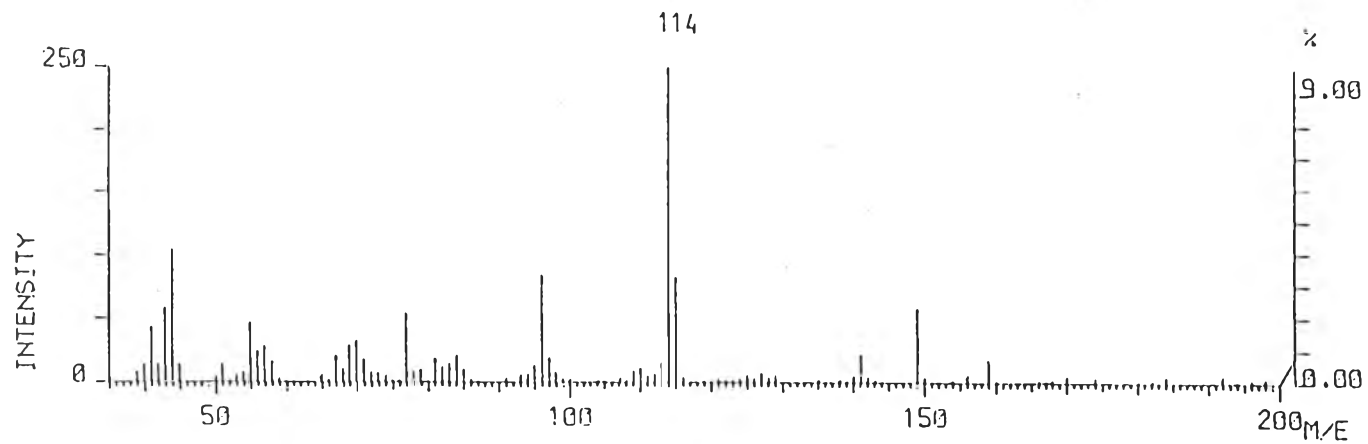


FIGURE 32. THE MASS SPECTRUM (EIMS) OF L-4

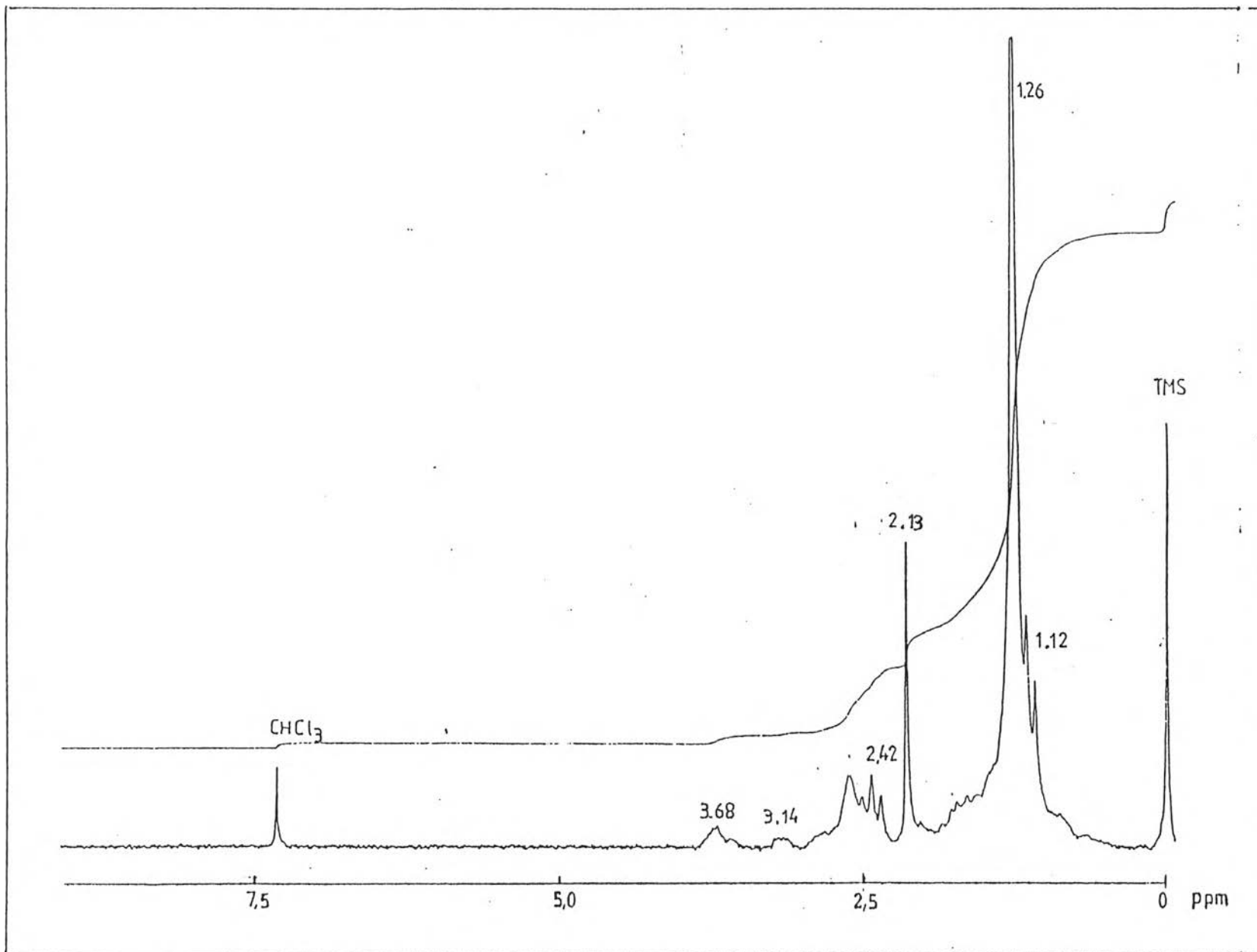


FIGURE 33a. THE PROTON-NMR SPECTRUM OF L-4 (in CDCl₃)

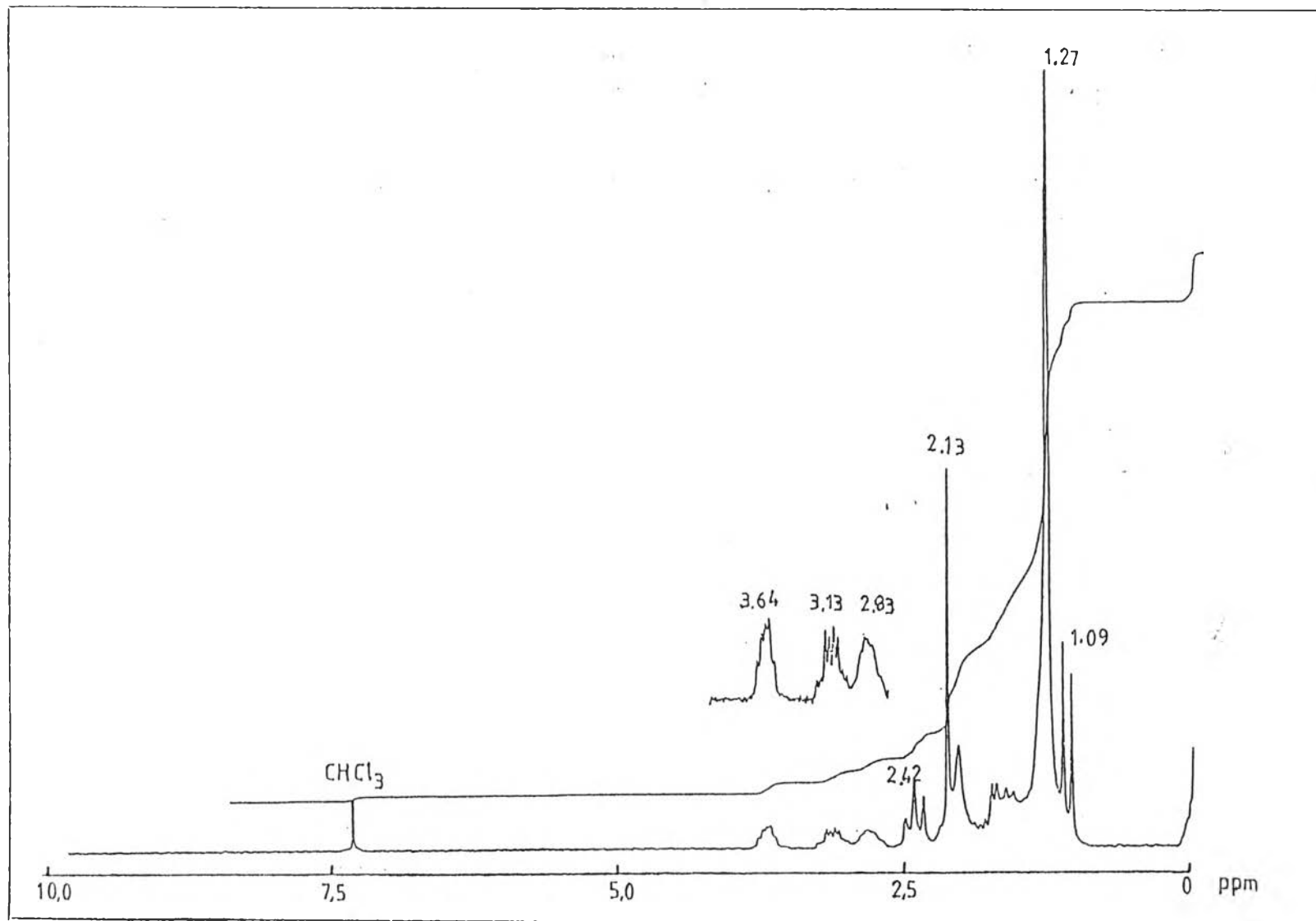


FIGURE 33b. THE PROTON-NMR SPECTRUM OF ISO-6-CASSINE (in CDCl₃)

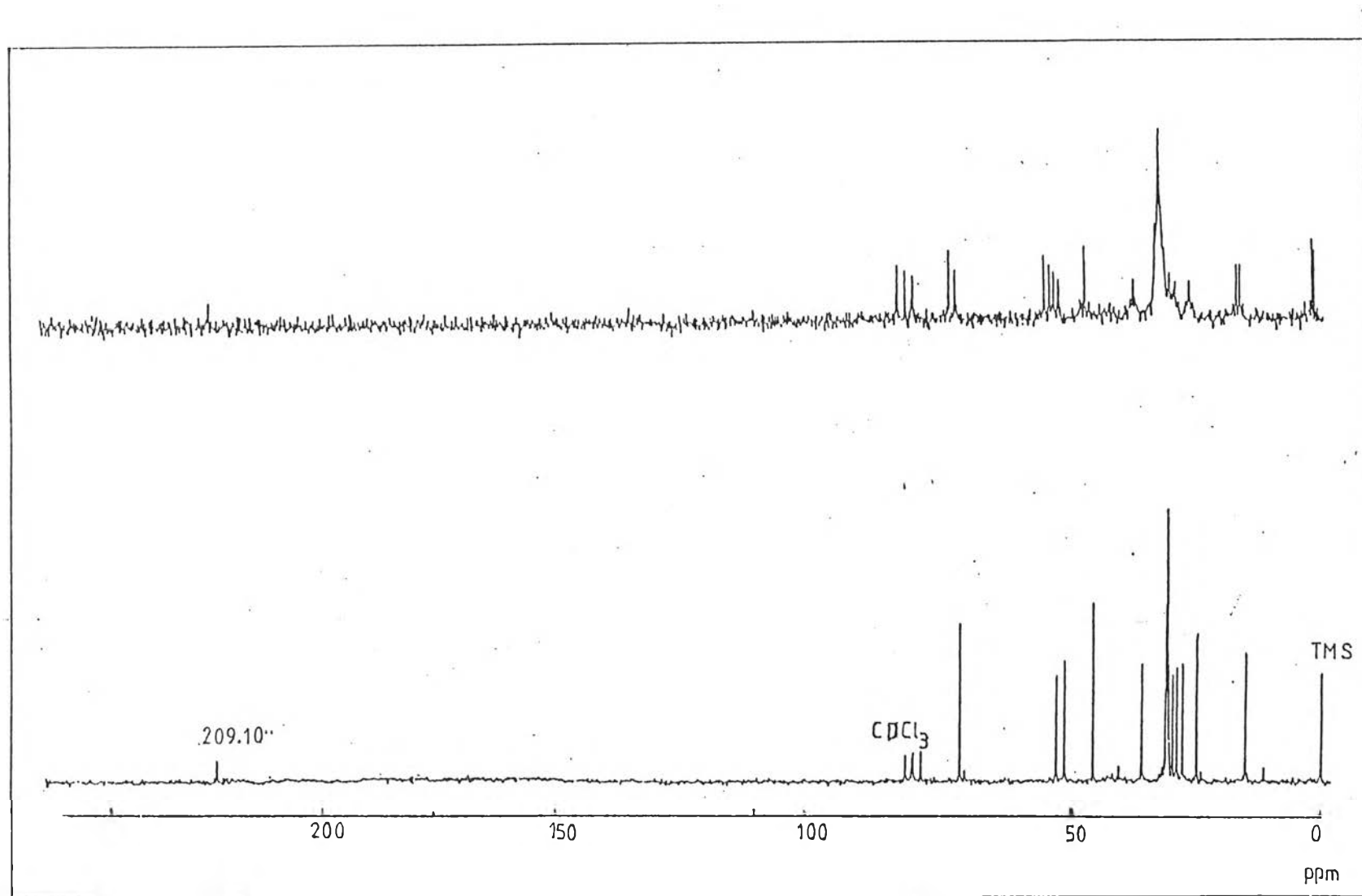


FIGURE 34. THE CARBON-13 NMR SPECTRUM OF 1-4 (in CDCl₃, DMSO-D₆)

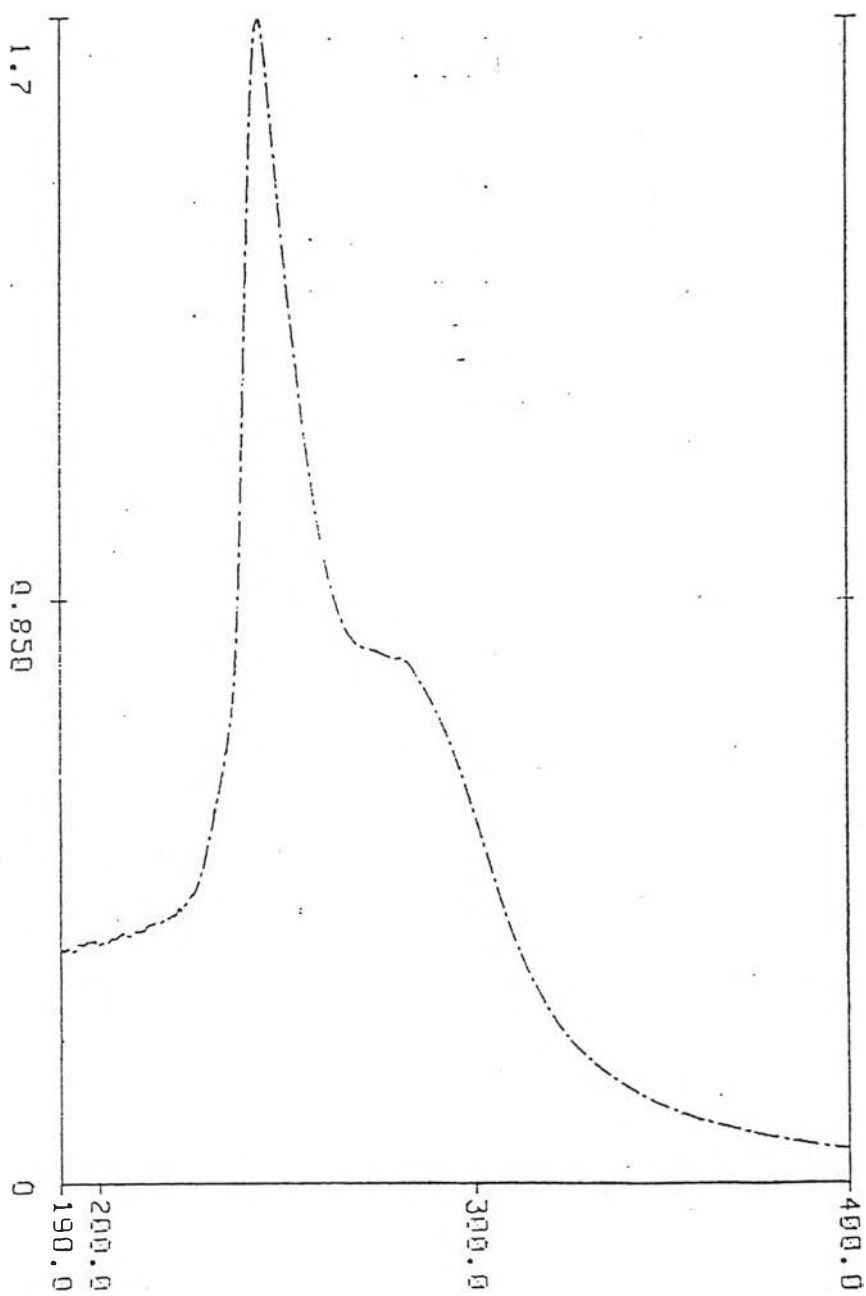


FIGURE 35. THE ULTRAVIOLET SPECTRUM OF L-5

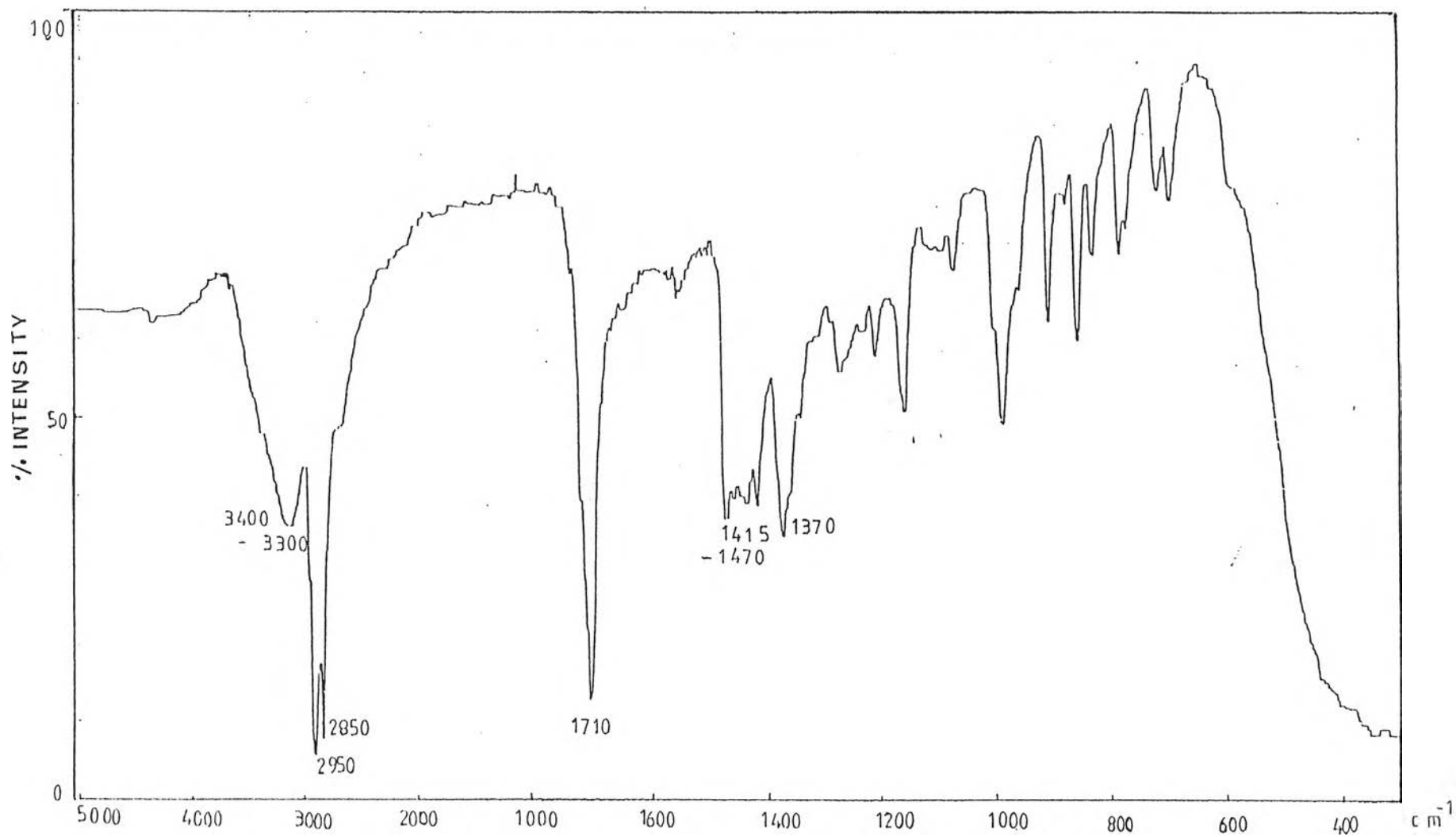


FIGURE 36. THE INFRARED SPECTRUM OF L-5

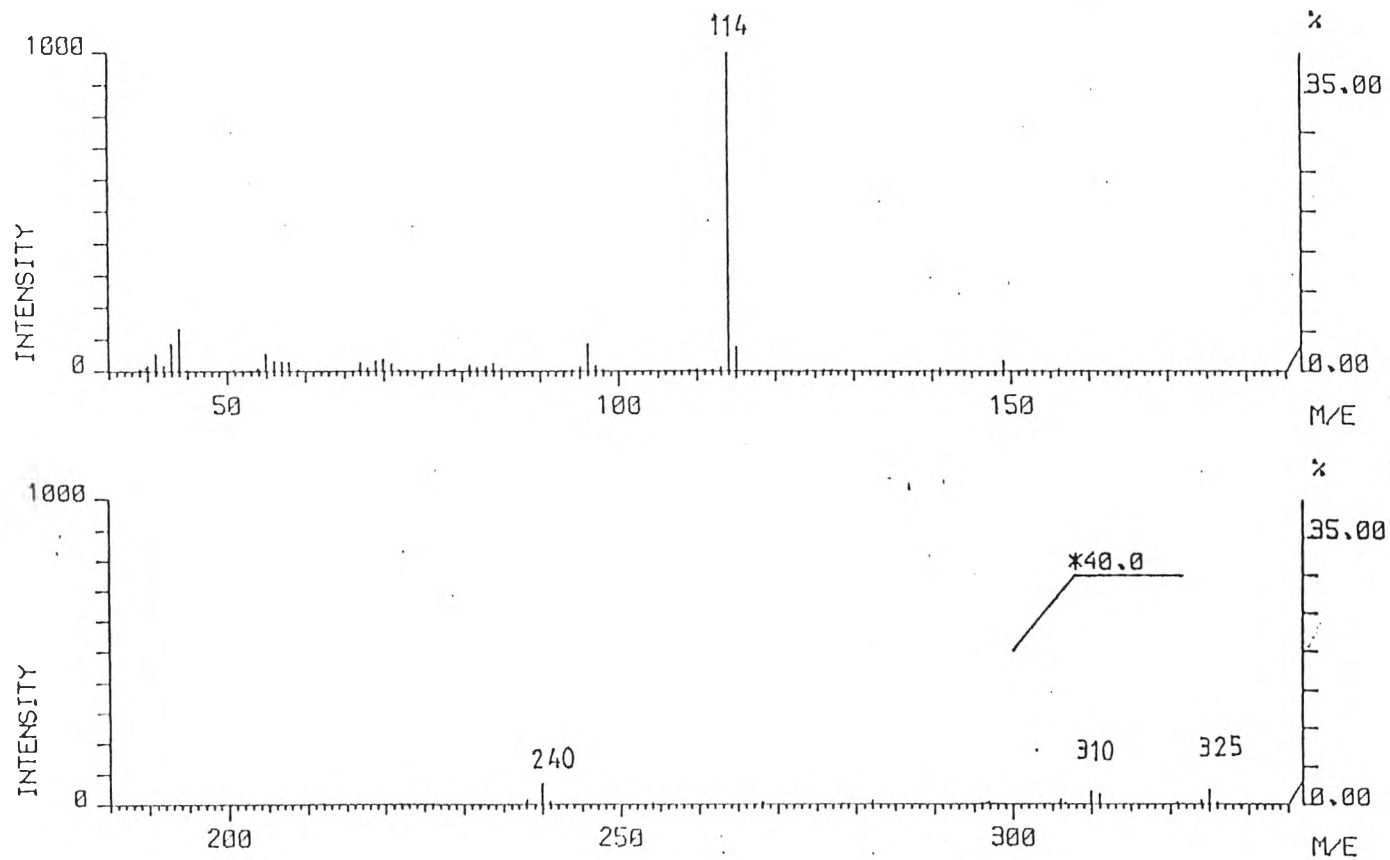


FIGURE 37. THE MASS SPECTRUM (EIMS) OF L-5

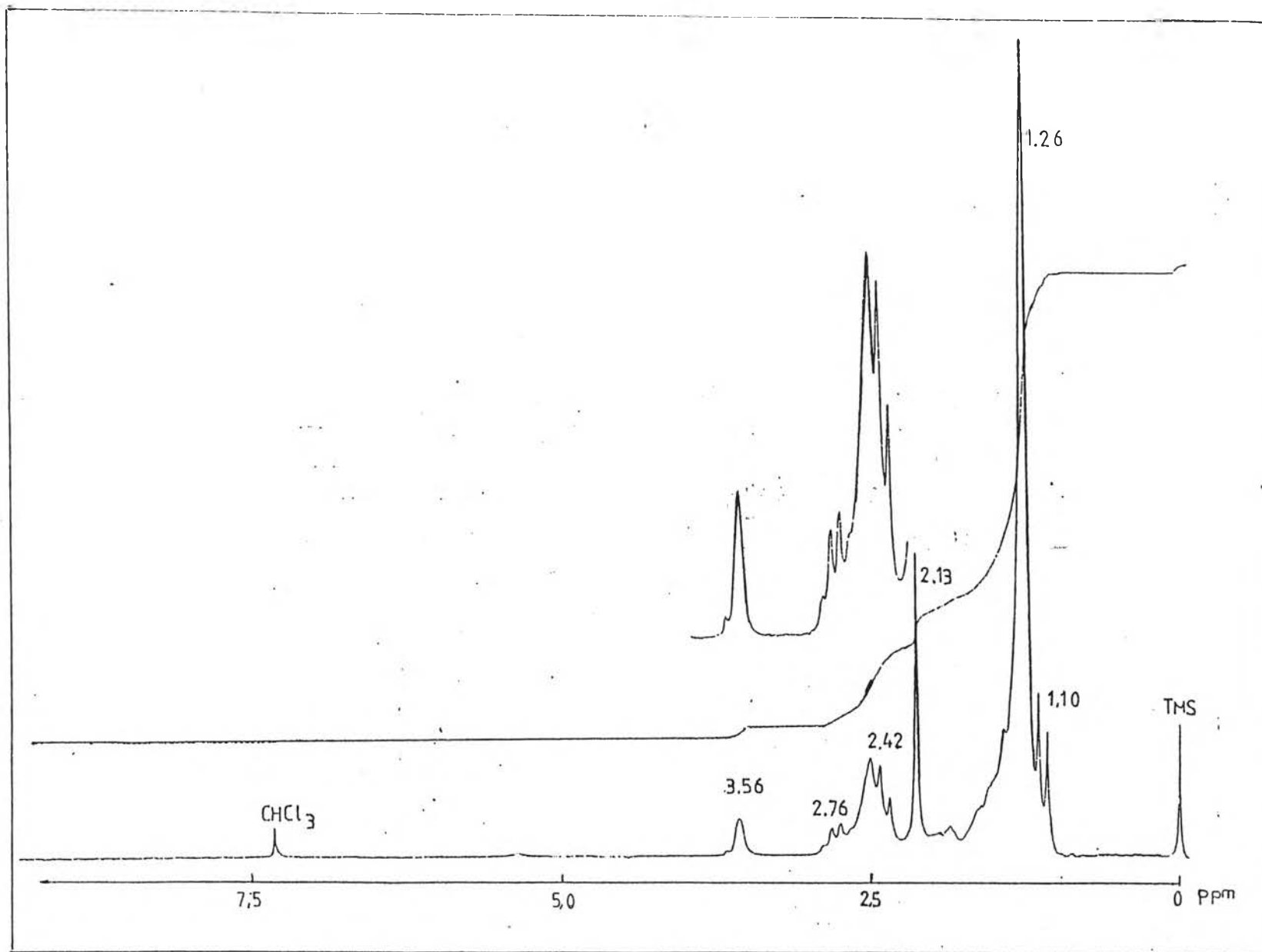


FIGURE 38. THE PROTON-NMR SPECTRUM OF 5 (in CDCl₃)



VITA

Miss Lawan SripHong was born on July 29, 1963 in Buriram province. She graduated with a B.Sc. in Pharm. (Second Class Honors) in 1986 from Chulalongkorn University.