

Figura 126. Espectro de RMN DEPT 135 do 5-trifluorometil-1-fenil-3-[2-tienil]-1H-pirazol (**15b**) em CDCl_3 .

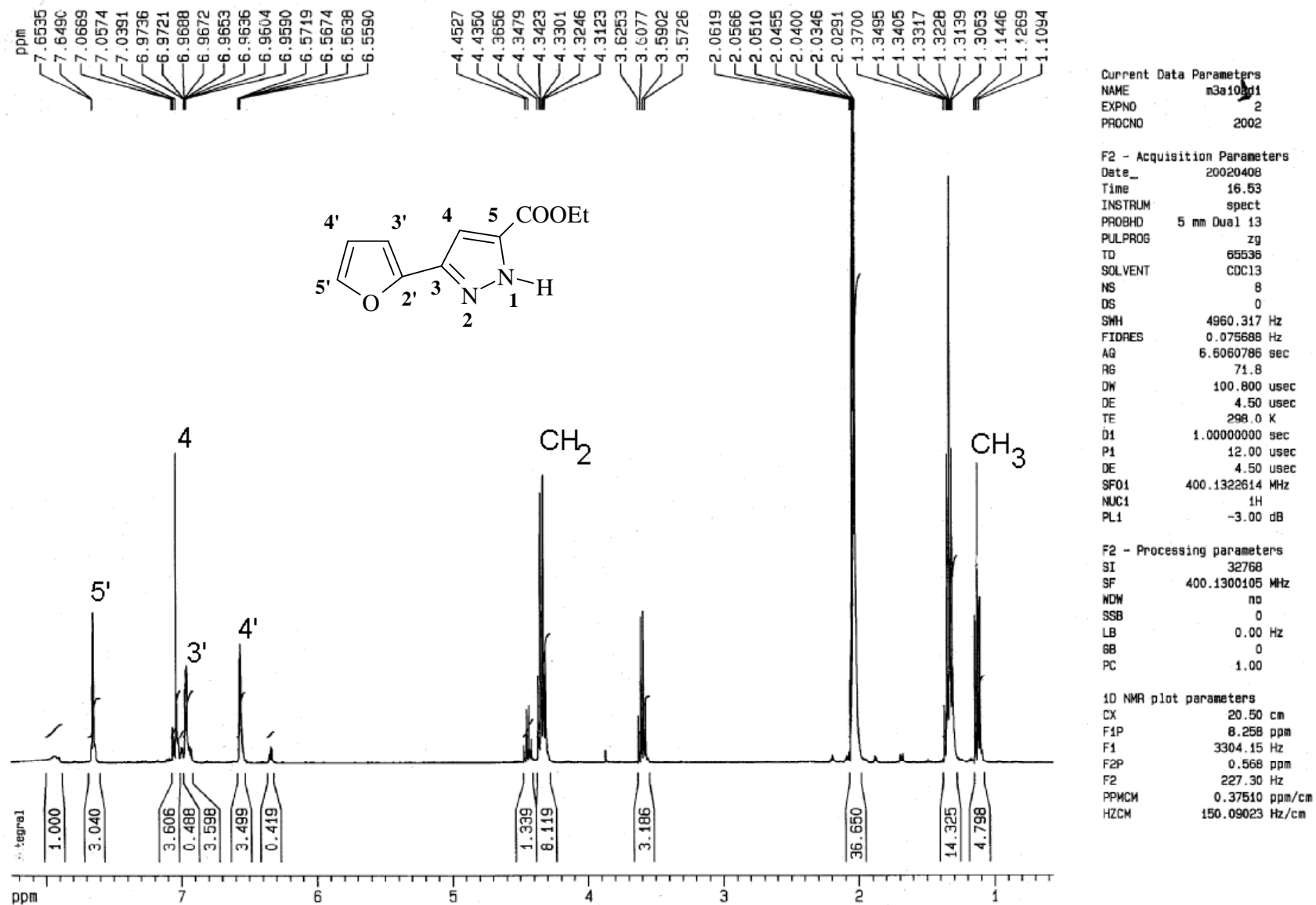


Figura 127. Espectro de RMN ¹H do 5-etoxicarbonil-3-[2-furil]-1H-pirazol (**16a**) em DMSO.

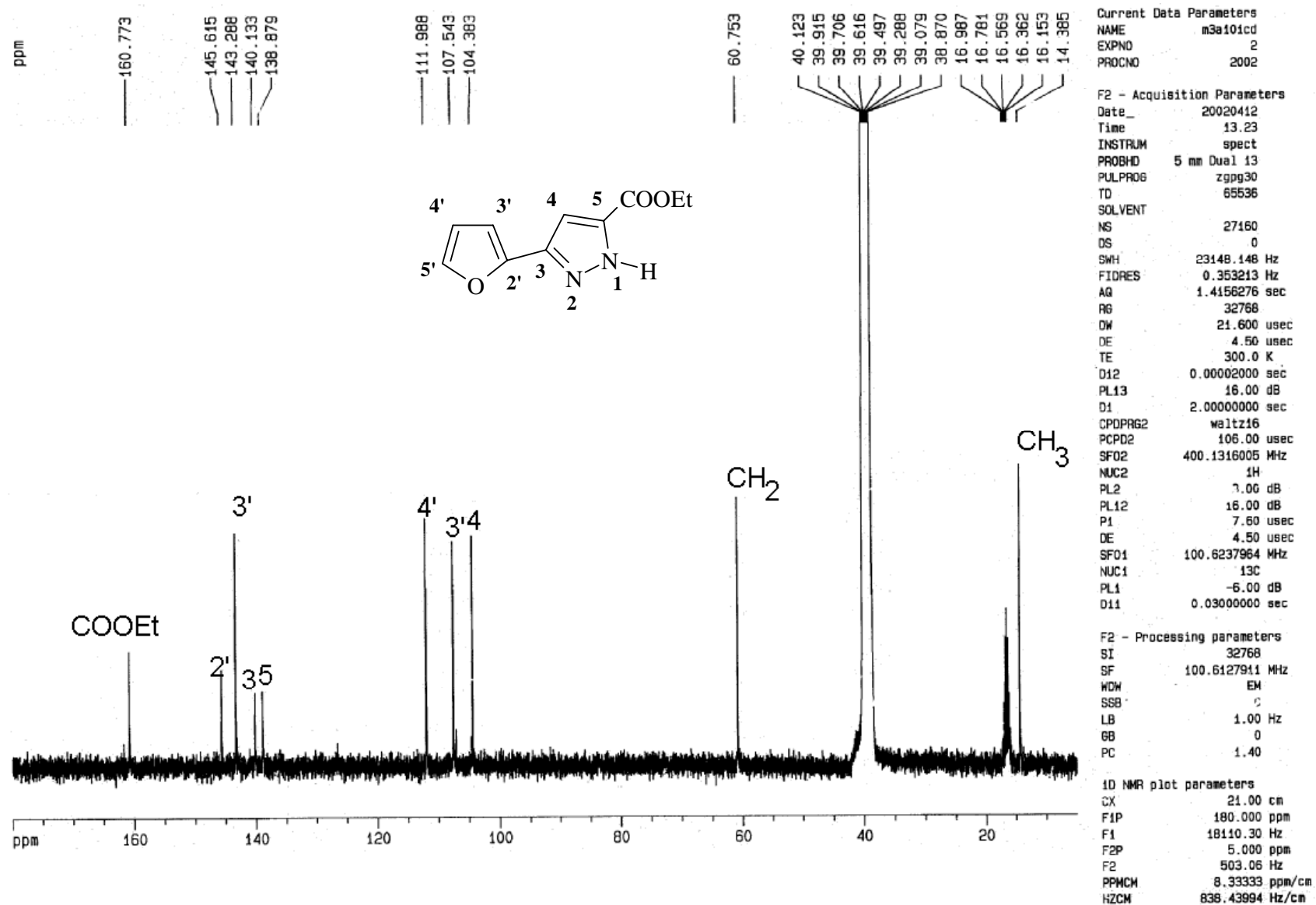


Figura 128. Espectro de RMN ¹³C do 5-etoxicarbonil-3-[2-furil]-1H-pirazol (**16a**) em DMSO.

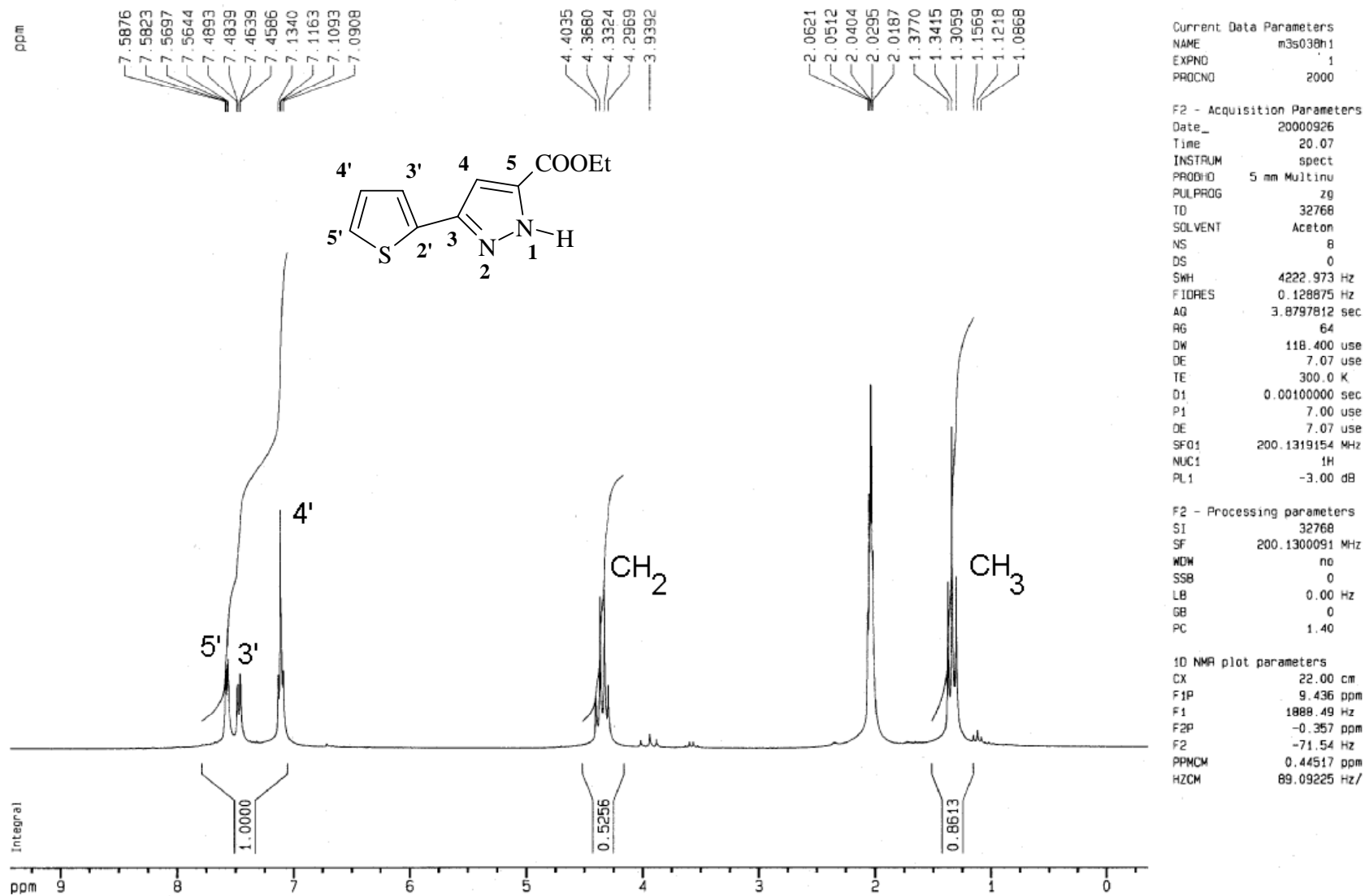


Figura 129. Espectro de RMN ¹H do 5-etoxicarbonil-3-[2-tienil]-1H-pirazol (**16b**) em acetona.

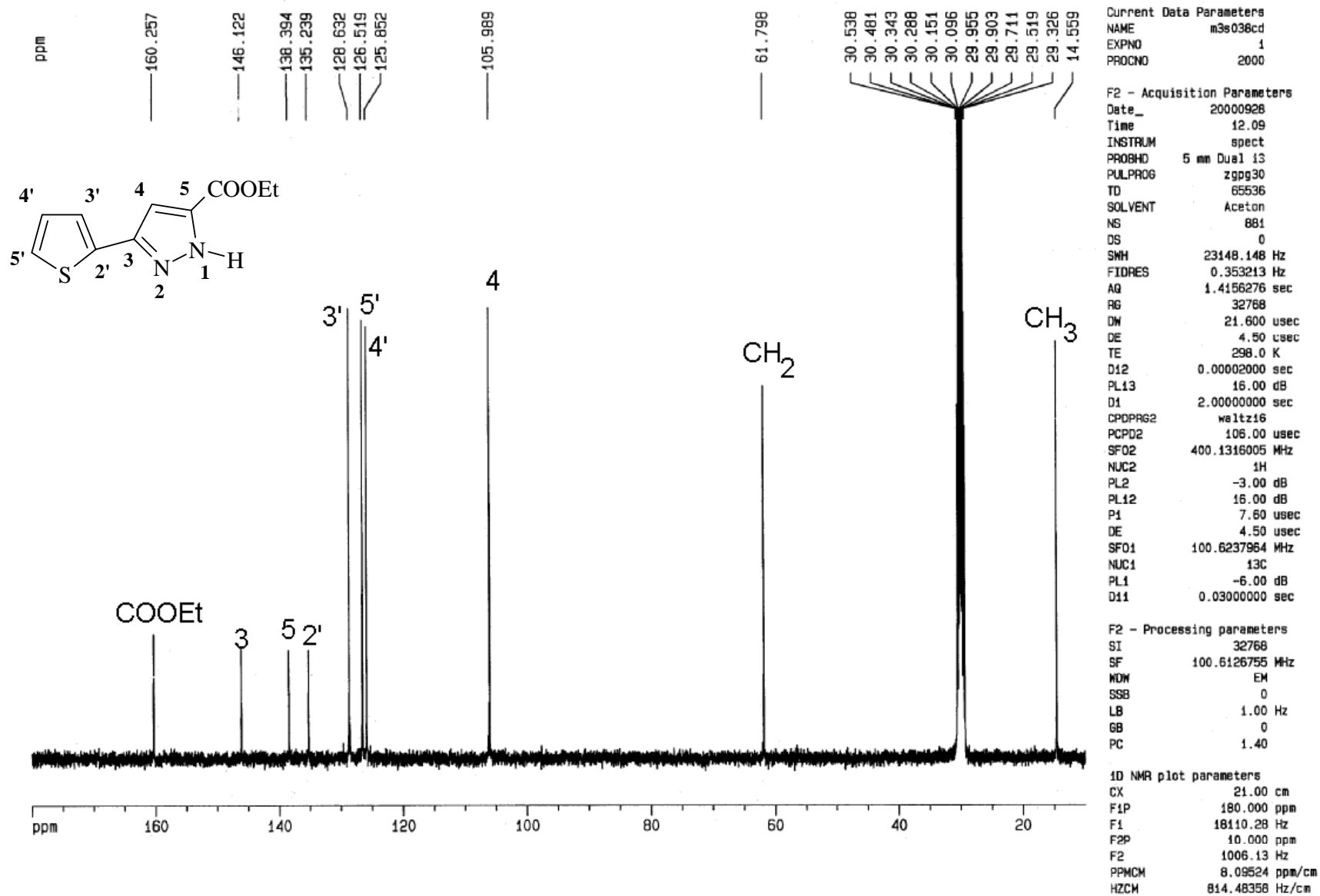
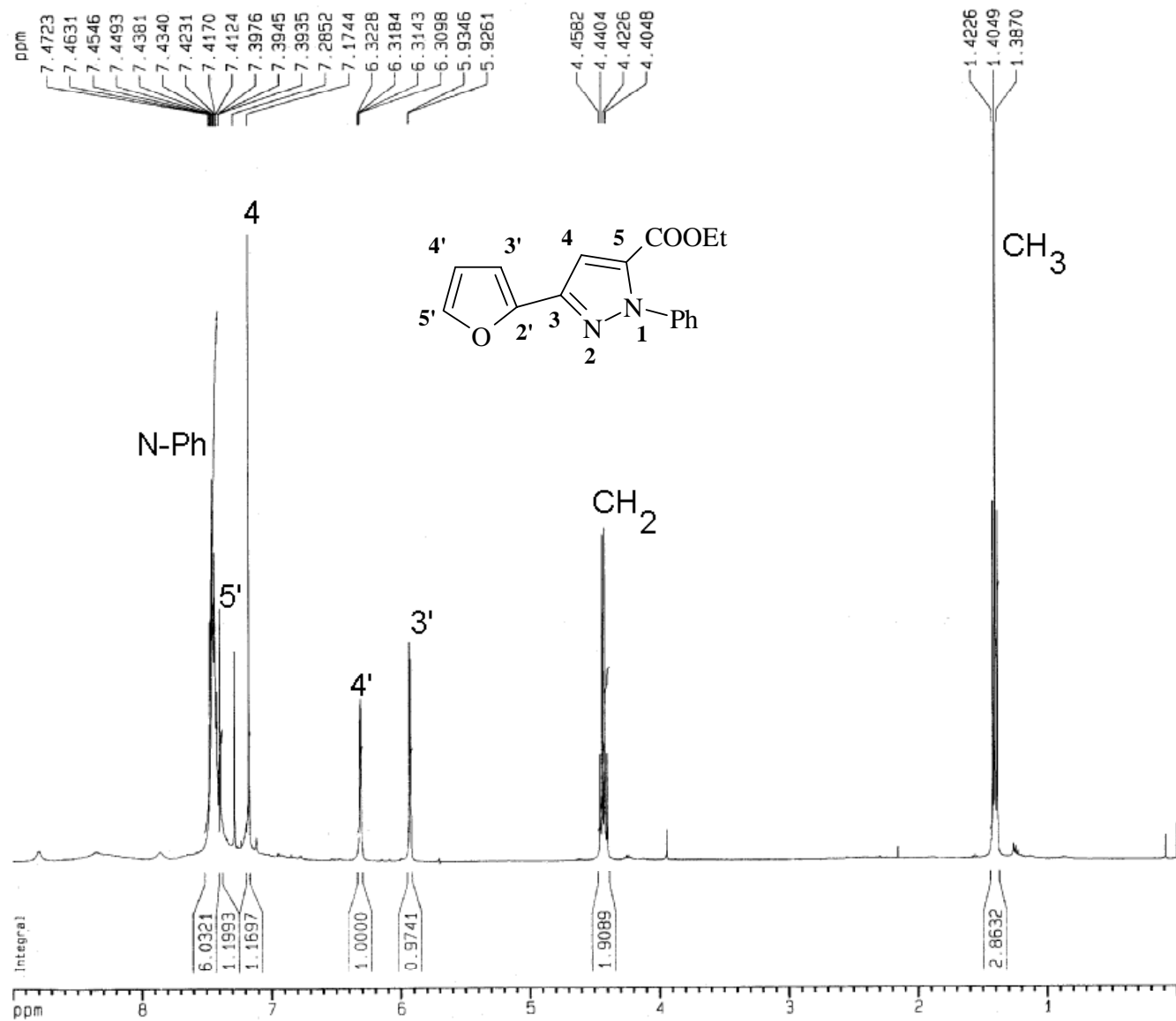


Figura 130. Espectro de RMN ¹³C do 5-etoxicarbonil-3-[2-tienil]-1H-pirazol (**16b**) em acetona.



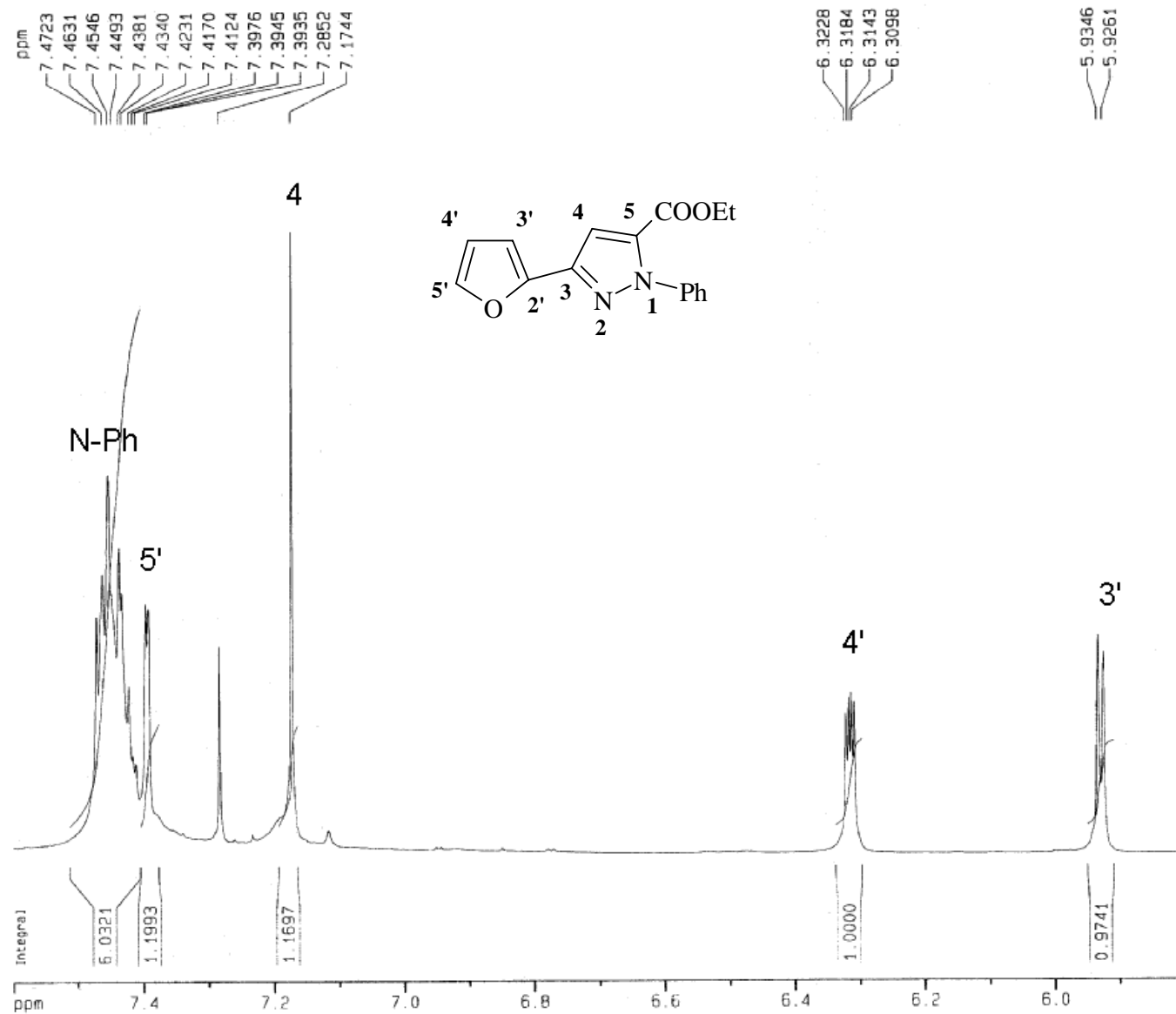
Current Data Parameters
 NAME x1j00Bh1
 EXPNO 2
 PROCNO 2004

F2 - Acquisition Parameters
 Date_ 20040114
 Time 16.04
 INSTRUM spect
 PROBHD 5 mm Dual 13
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 8
 DS 0
 SWH 4789.272 Hz
 FIDRES 0.073078 Hz
 AQ 6.8420086 sec
 RG 32
 DW 104.400 usec
 DE 4.50 usec
 TE 298. C K
 D1 1.00000000 sec
 P1 12.00 usec
 DE 4.50 usec
 SFO1 400.1322807 MHz
 NUC1 1H
 PL1 -3.00 dB

F2 - Processing parameters
 SI 32768
 SF 400.1299989 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.50 cm
 F1P 9.000 ppm
 F1 3601.17 Hz
 F2P -0.100 ppm
 F2 -40.01 Hz
 PPMCM 0.44390 ppm/cm
 HZCM 177.61870 Hz/cm

Figura 131. Espectro de RMN ^1H do 5-etoxicarbonil-1-fenil-3-[2-furil]-1H-pirazol (**17a**) em CDCl_3 .



Current Data Parameters
 NAME x1j008h1
 EXPNO 2
 PROCNO 2004

F2 - Acquisition Parameters
 Date_ 20040114
 Time 16.04
 INSTRUM spect
 PROBHD 5 mm Dual 13
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 8
 DS 0
 SWH 4789.272 Hz
 FIDRES 0.073078 Hz
 AQ 6.8420086 sec
 RG 32
 DW 104.400 usec
 DE 4.50 usec
 TE 298.0 K
 D1 1.00000000 sec
 P1 12.00 usec
 DE 4.50 usec
 SF01 400.1322807 MHz
 NUC1 1H
 PL1 -3.00 dB

F2 - Processing parameters
 SI 32768
 SF 400.1299989 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.50 cm
 F1P 7.600 ppm
 F1 3040.99 Hz
 F2P 5.800 ppm
 F2 2320.75 Hz
 PPNCM 0.08780 ppm/cm
 HZCM 35.13336 Hz/cm

Figura 132. Espectro de RMN ¹H do 5-etoicarbonil-1-fenil-3-[2-furil]-1H-pirazol (**17a**) em CDCl₃.

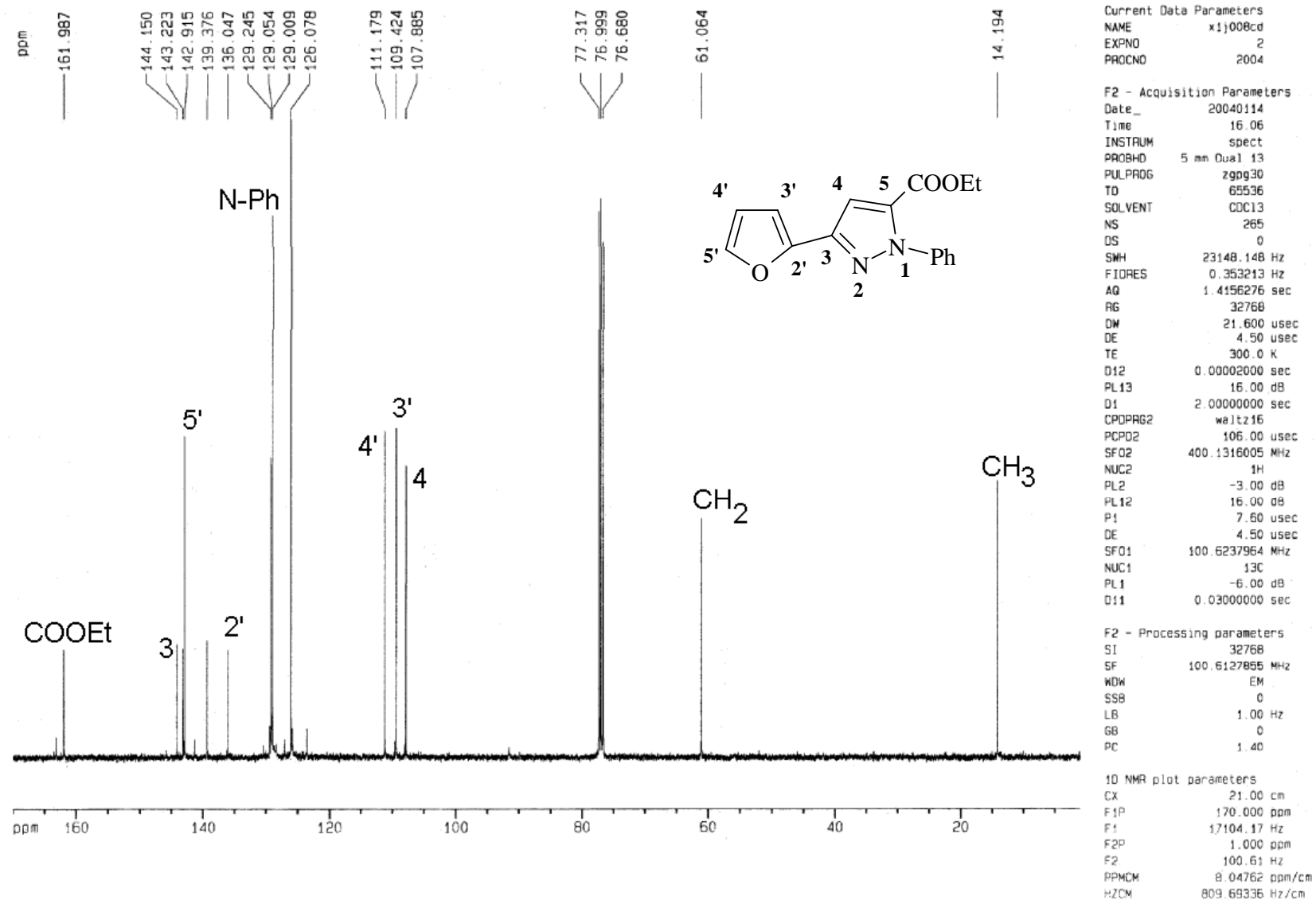


Figura 133. Espectro de RMN ^{13}C do 5-etoxicarbonil-1-fenil-3-[2-furil]-1H-pirazol (**17a**) em CDCl_3 .

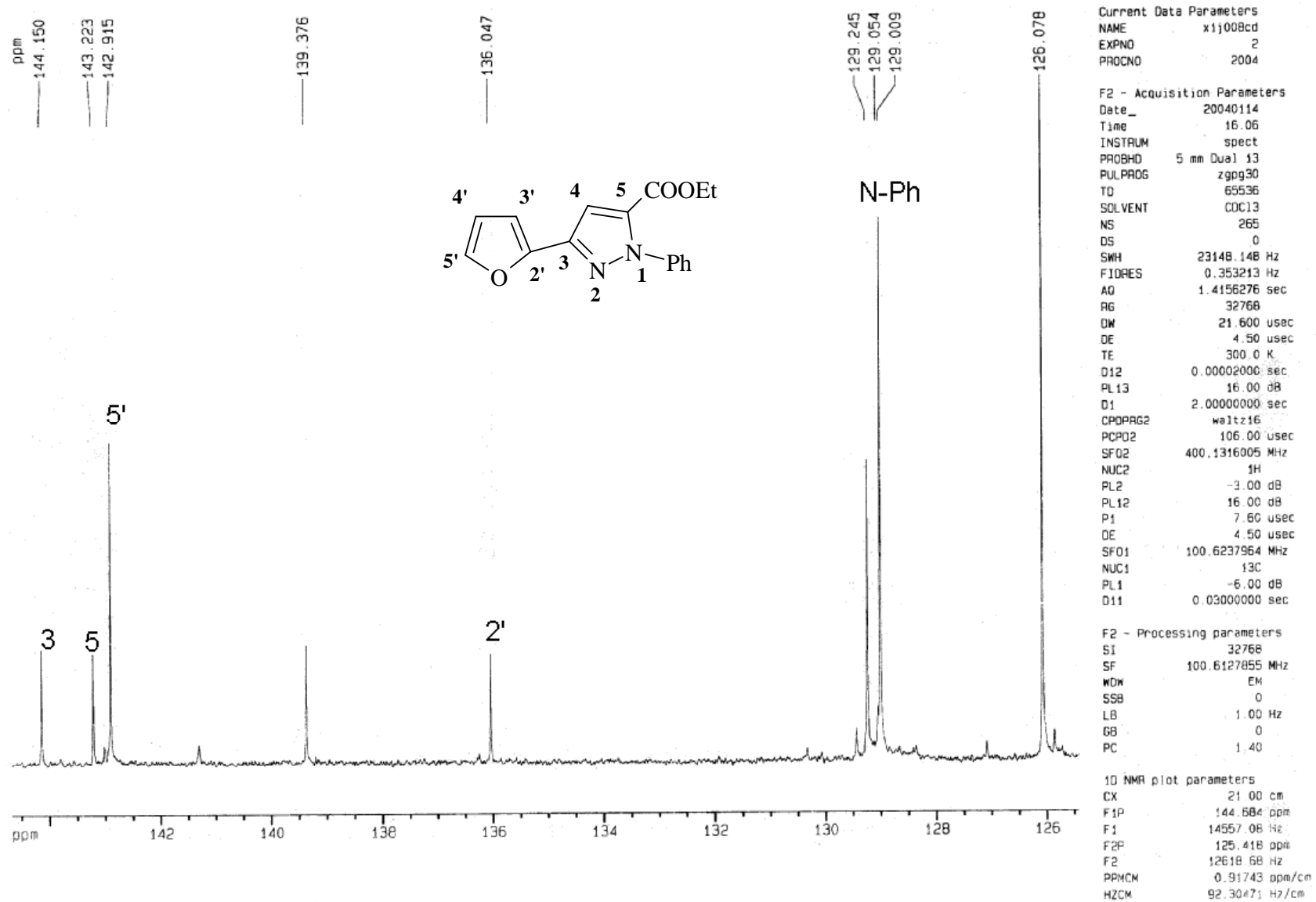


Figura 134. Espectro de RMN ^{13}C do 5-etoxicarbonil-1-fenil-3-[2-furil]-1H-pirazol (**17a**) em CDCl_3 .

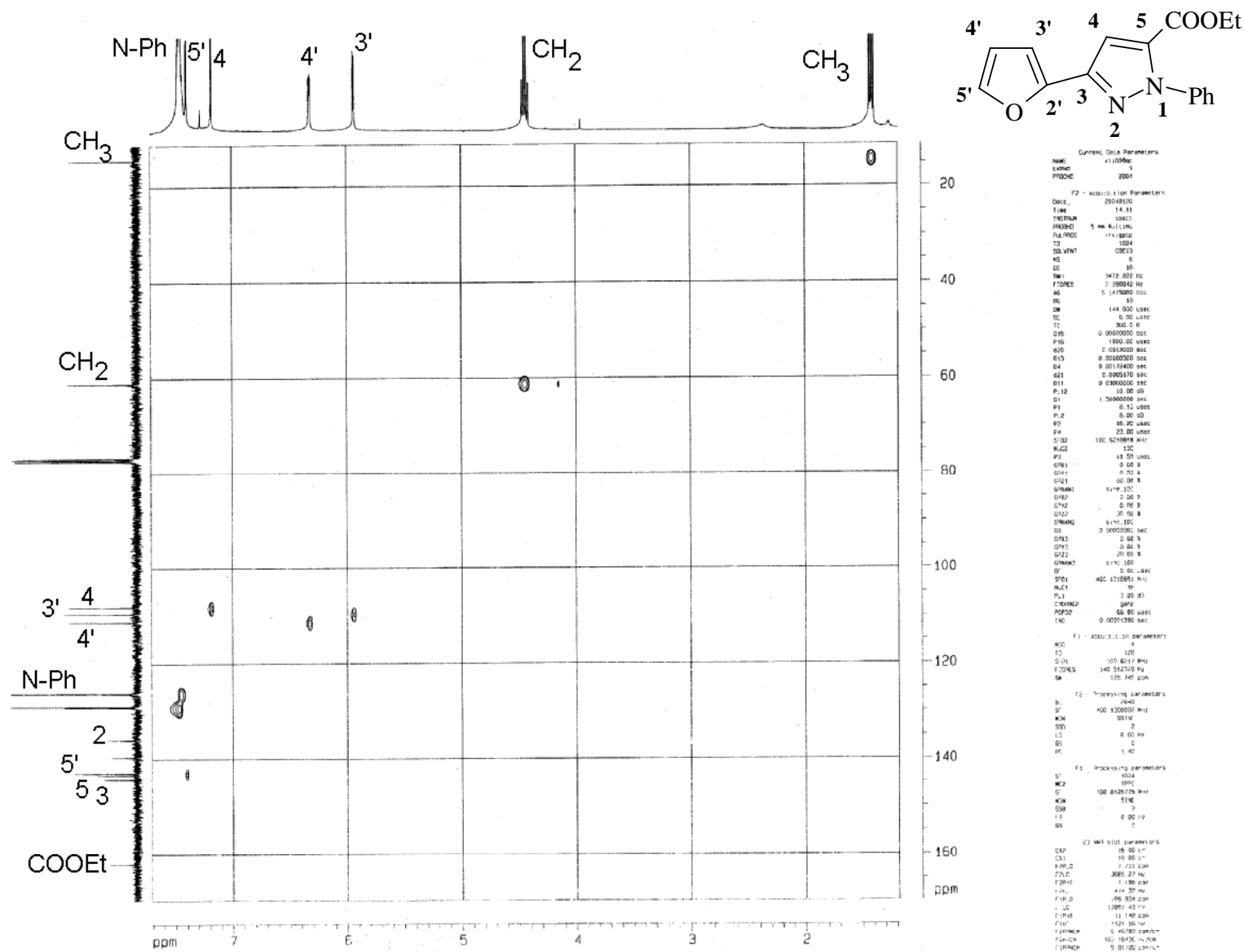


Figura 135. Espectro de RMN HMQC do 5-etoxicarbonil-1-fenil-3-[2-furil]-1H-pirazol (**17a**) em CDCl₃.

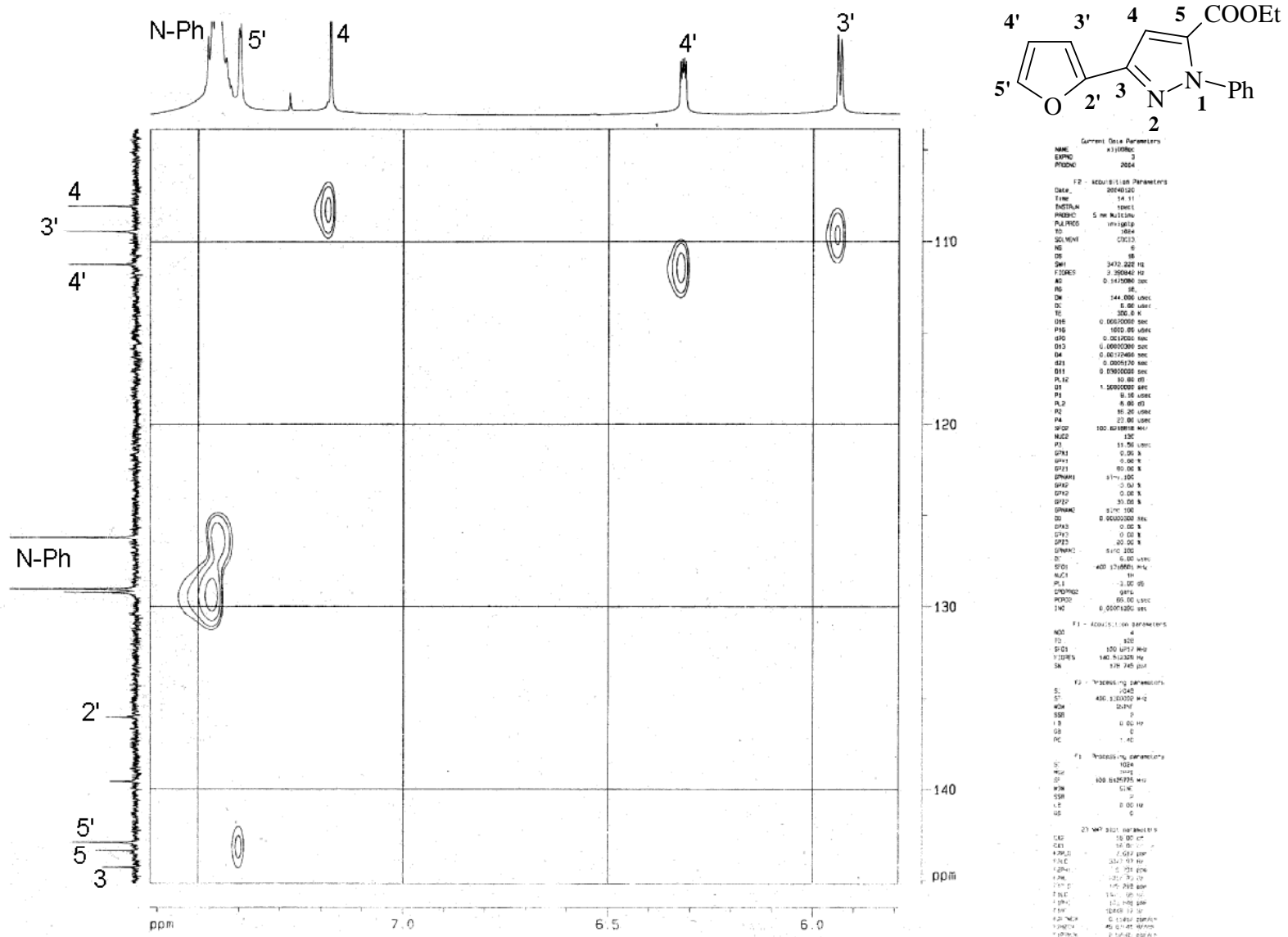
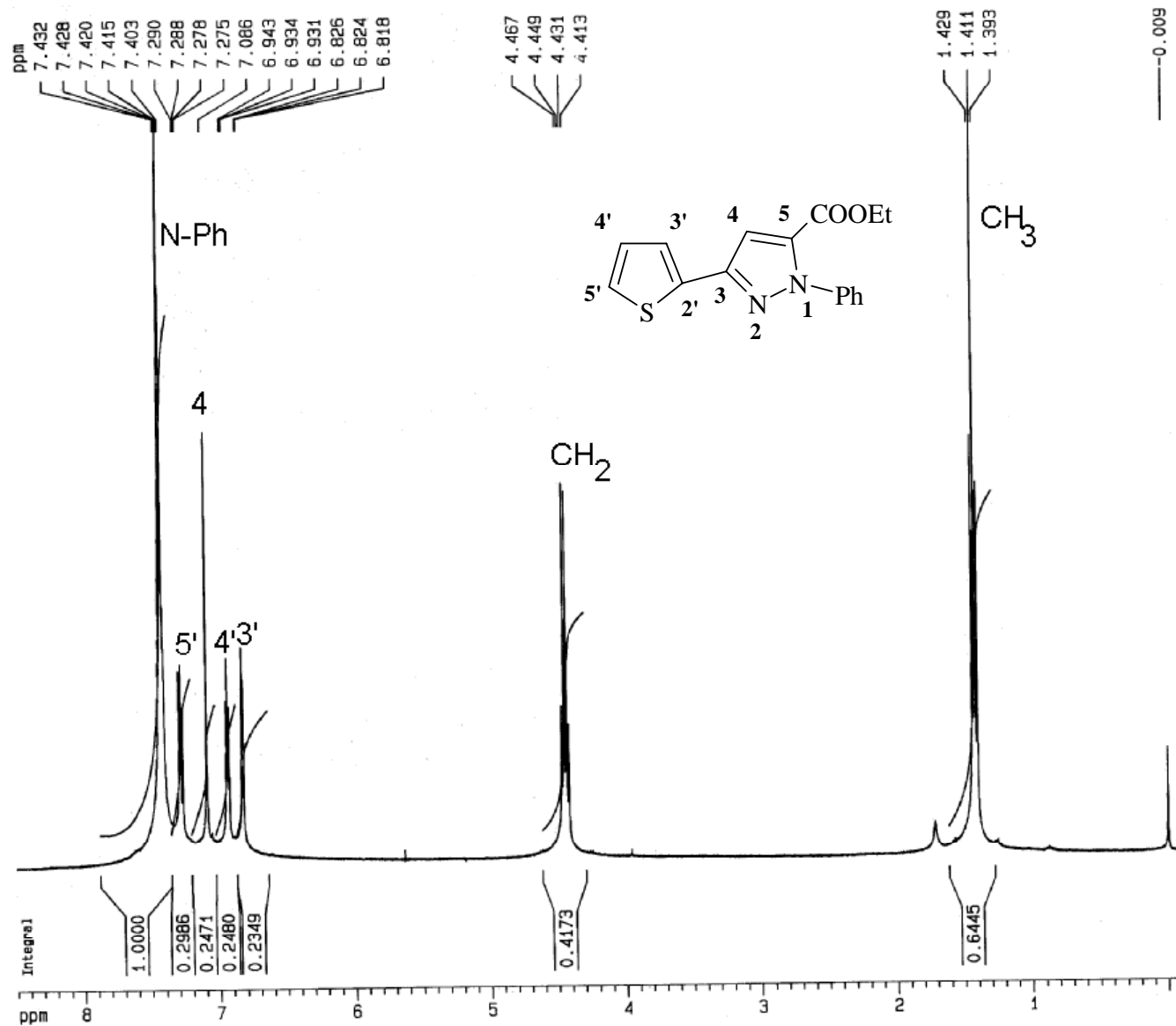


Figura 136. Espectro de RMN HMQC do 5-etoxicarbonil-1-fenil-3-[2-furil]-1H-pirazol (**17a**) em CDCl₃.



Current Data Parameters
 NAME m3s042h1
 EXPNO 1
 PROCNO 2001

F2 - Acquisition Parameters
 Date_ 20010918
 Time 18.56
 INSTRUM spect
 PROBHD 5 mm Dual 13
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 8
 DS 0
 SWH 4960.317 Hz
 FIDRES 0.075688 Hz
 AQ 6.6060786 sec
 RG 71.8
 OW 100.800 usec
 DE 4.50 usec
 TE 298.0 K
 D1 1.00000000 sec
 P1 12.00 usec
 DE 4.50 usec
 SFO1 400.1322614 MHz
 NUC1 1H
 PL1 -3.00 dB

F2 - Processing parameters
 SI 32768
 SF 400.1300077 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

1D NMR plot parameters
 CX 20.50 cm
 F1P 8.500 ppm
 F1 3401.10 Hz
 F2P -0.100 ppm
 F2 -40.01 Hz
 PPMCM 0.41951 ppm/cm
 HZCM 167.85942 Hz/cm

Figura 137. Espectro de RMN ¹H do 5-etoxicarbonil-1-fenil-3-[2-tienil]-1H-pirazol (**17b**) em CDCl₃.

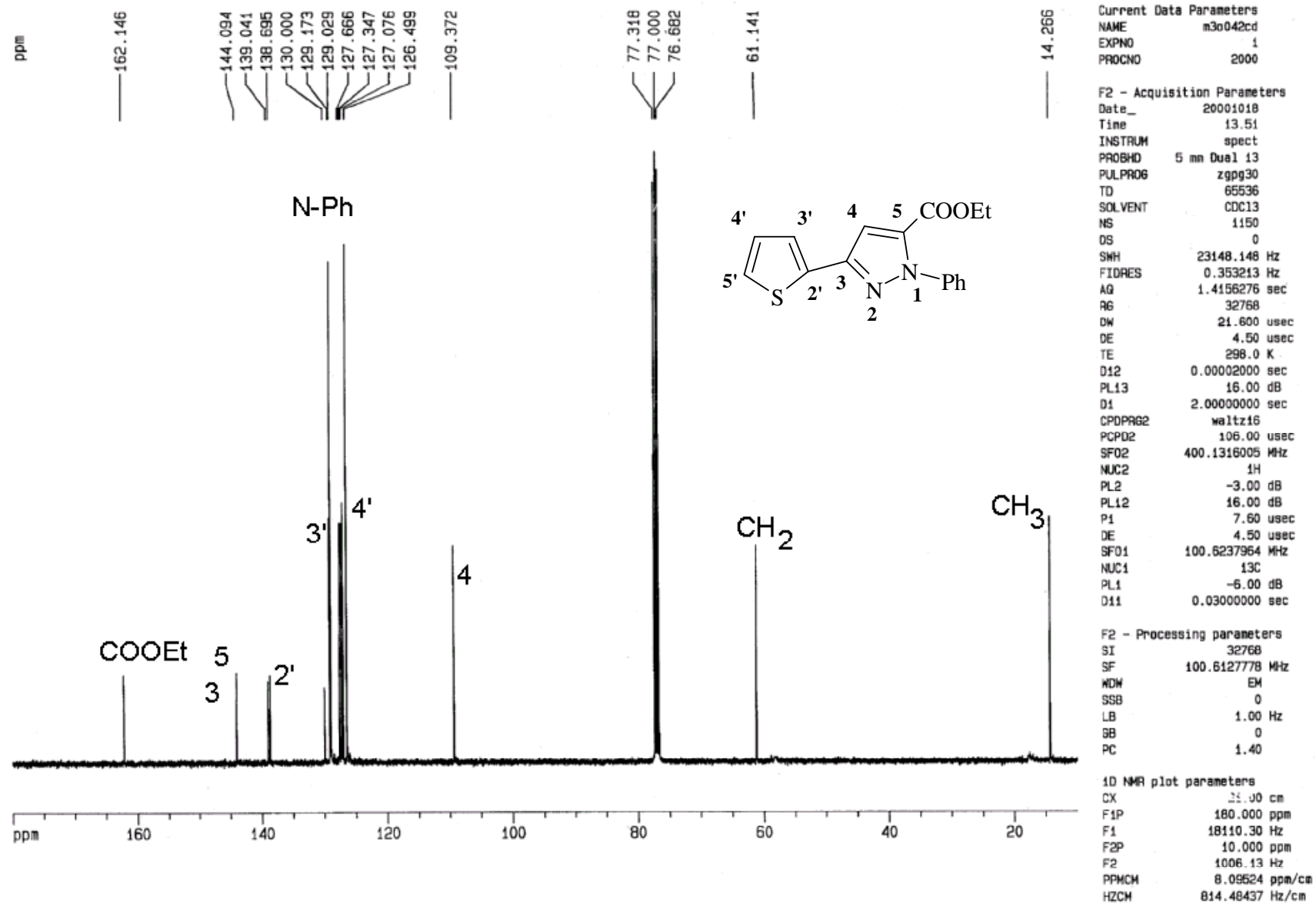


Figura 138. Espectro de RMN ^{13}C do 5-etoxicarbonil-1-fenil-3-[2-tienil]-1*H*-pirazol (**17b**) em CDCl_3 .

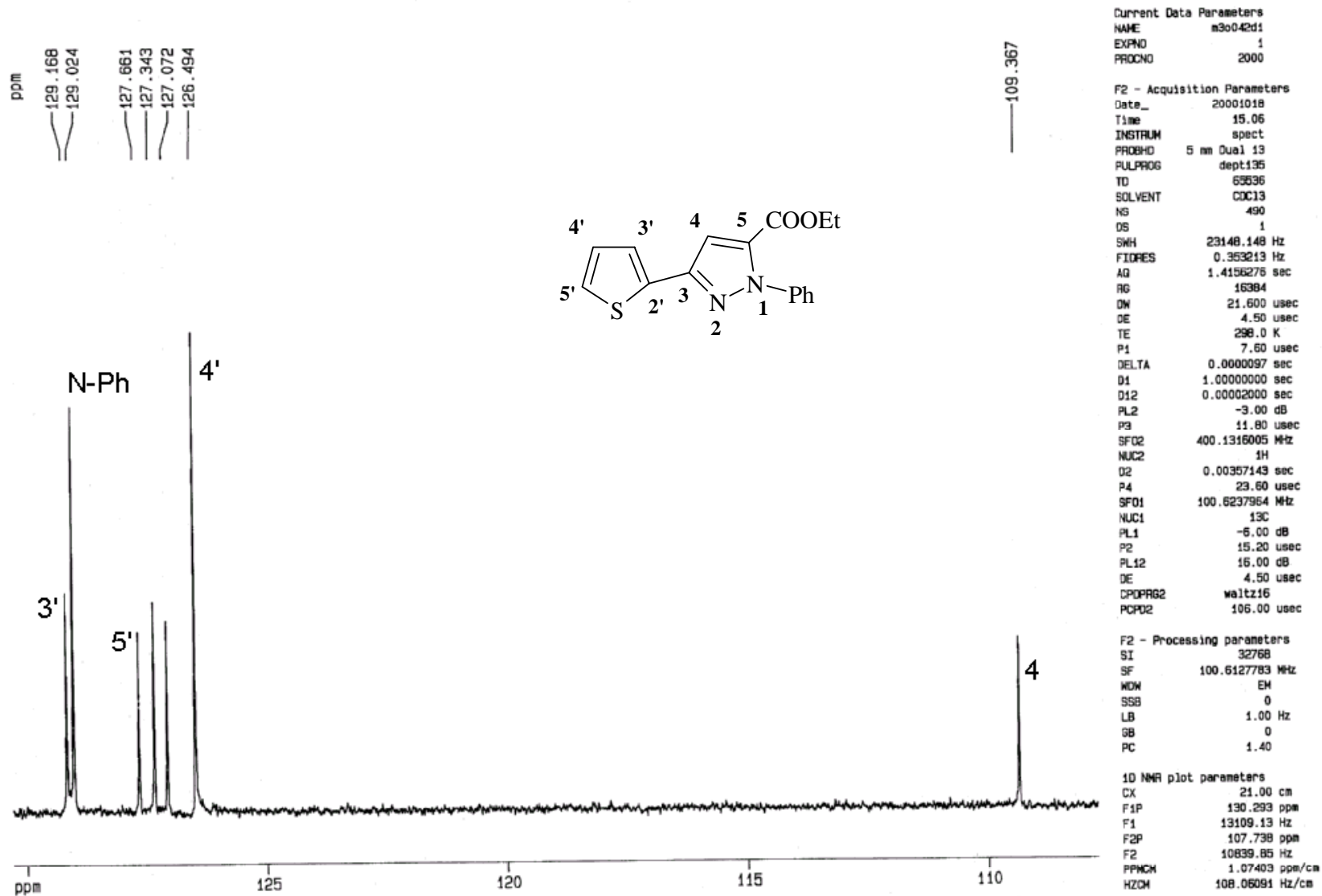


Figura 139. Espectro de RMN Dept 135, do 5-etoxicarbonil-1-fenil-3-[2-tienil]-1H-pirazol (**17b**) em CDCl_3 .

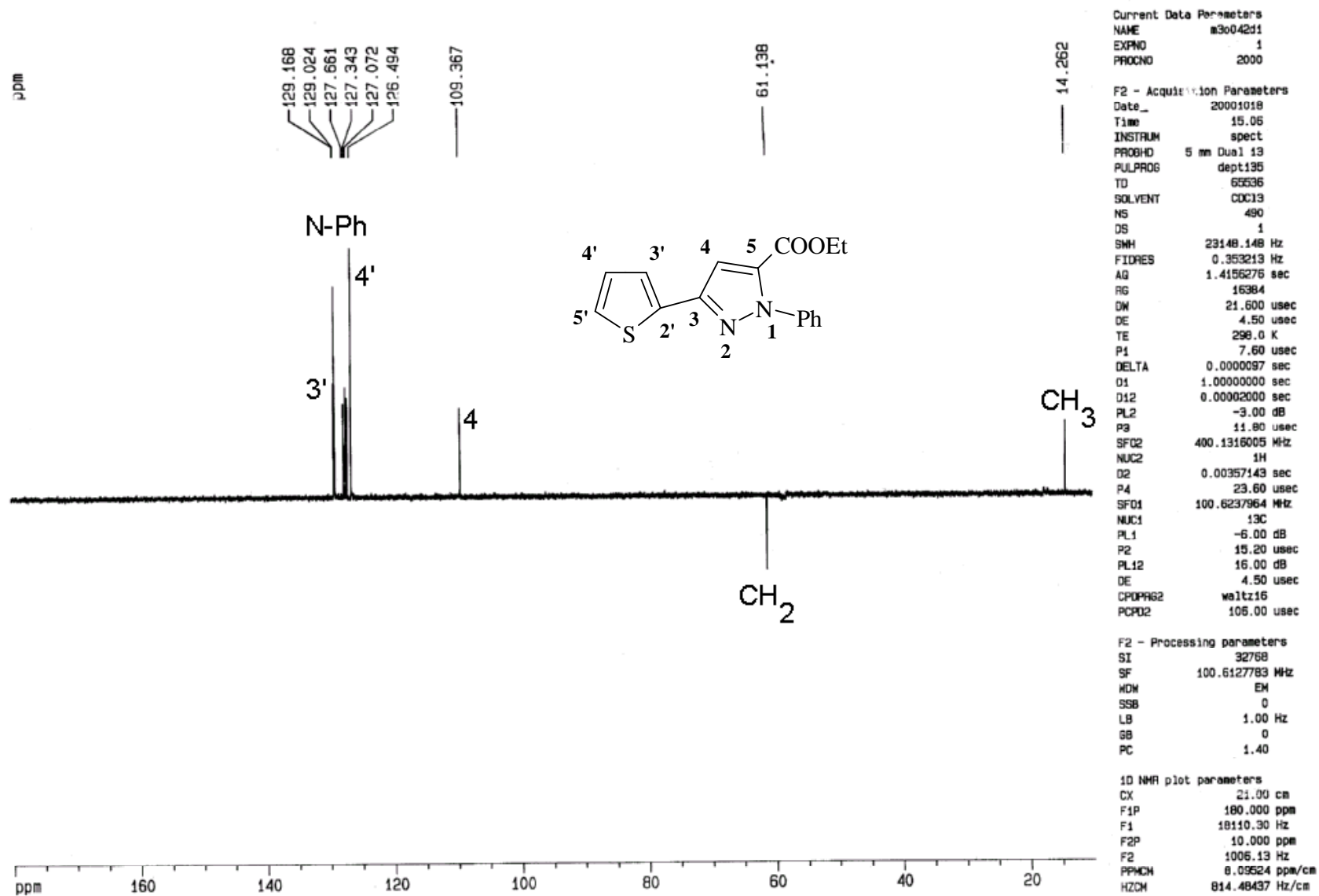


Figura 140. Espectro de RMN (DEPT 135), do 5-etoxicarbonil-1-fenil-3-[2-tienil]-1H-pirazol (17b) em CDCl₃.

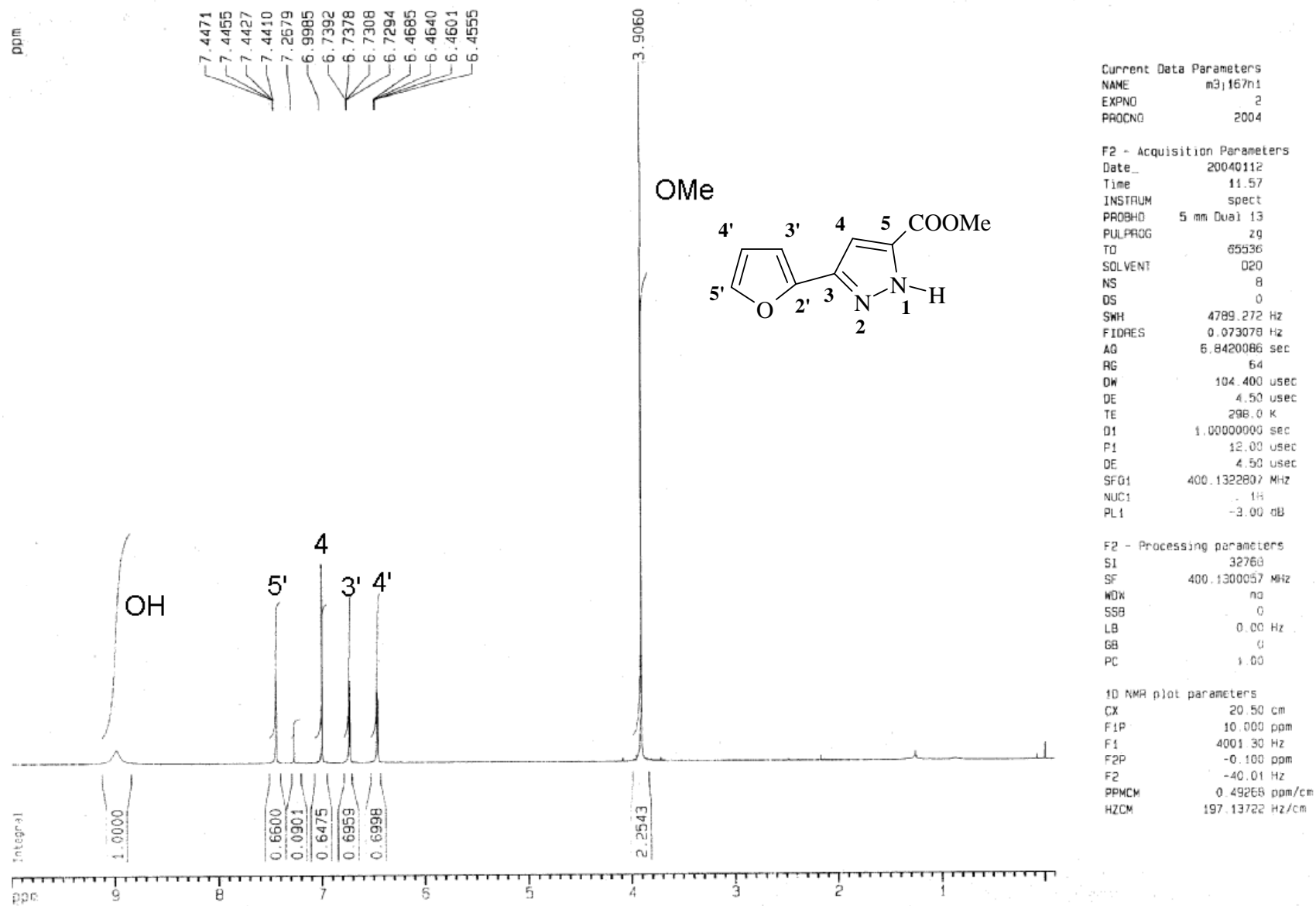


Figura 141. Espectro de RMN ¹H do 5-metoxicarbonil-3-[2-furil]-1H-pirazol (**18a**) em CDCl₃.

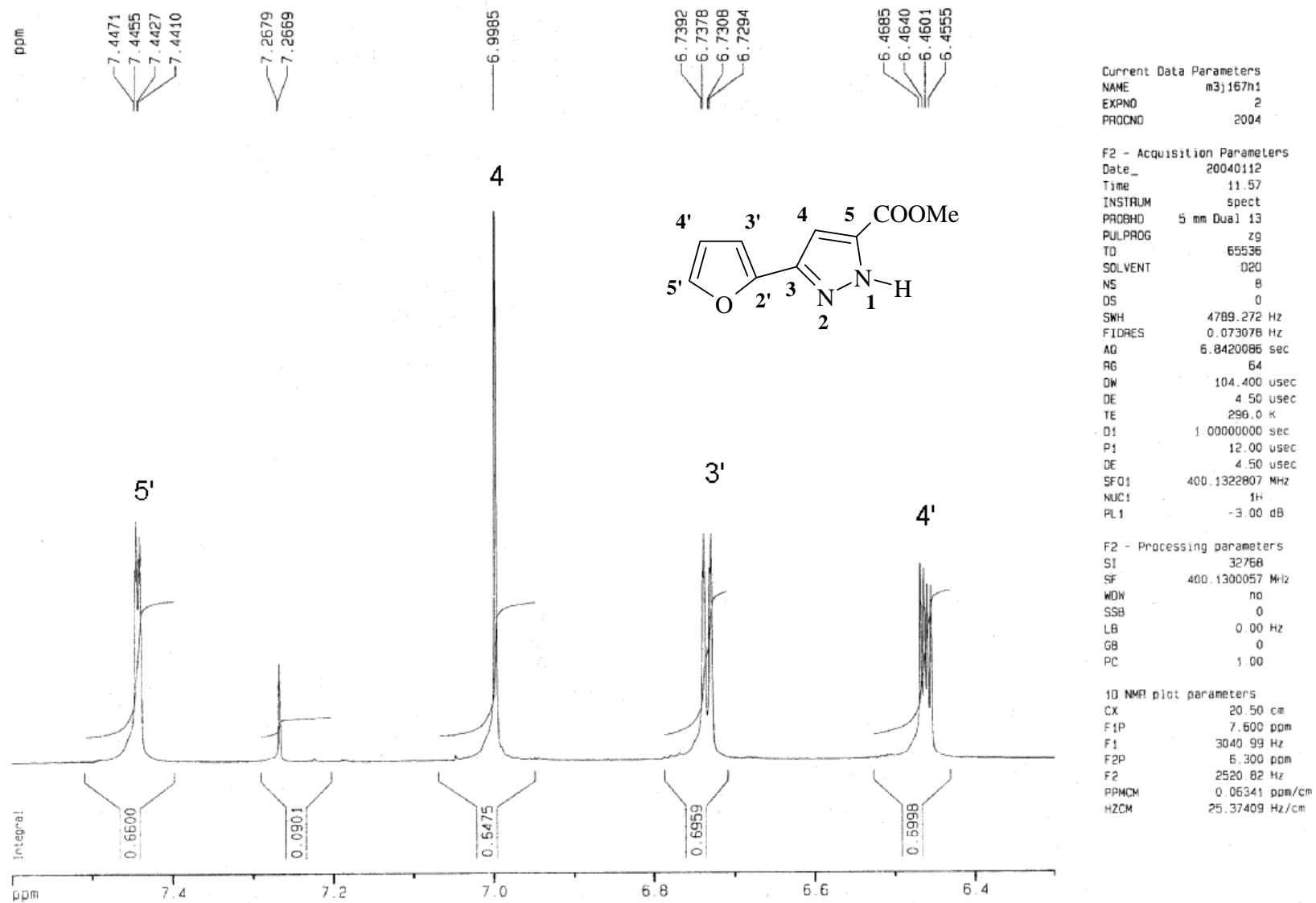


Figura 142. Espectro de RMN ¹H do 5-metoxicarbonil-3-[2-furil]-1H-pirazol (**18a**) em CDCl₃.

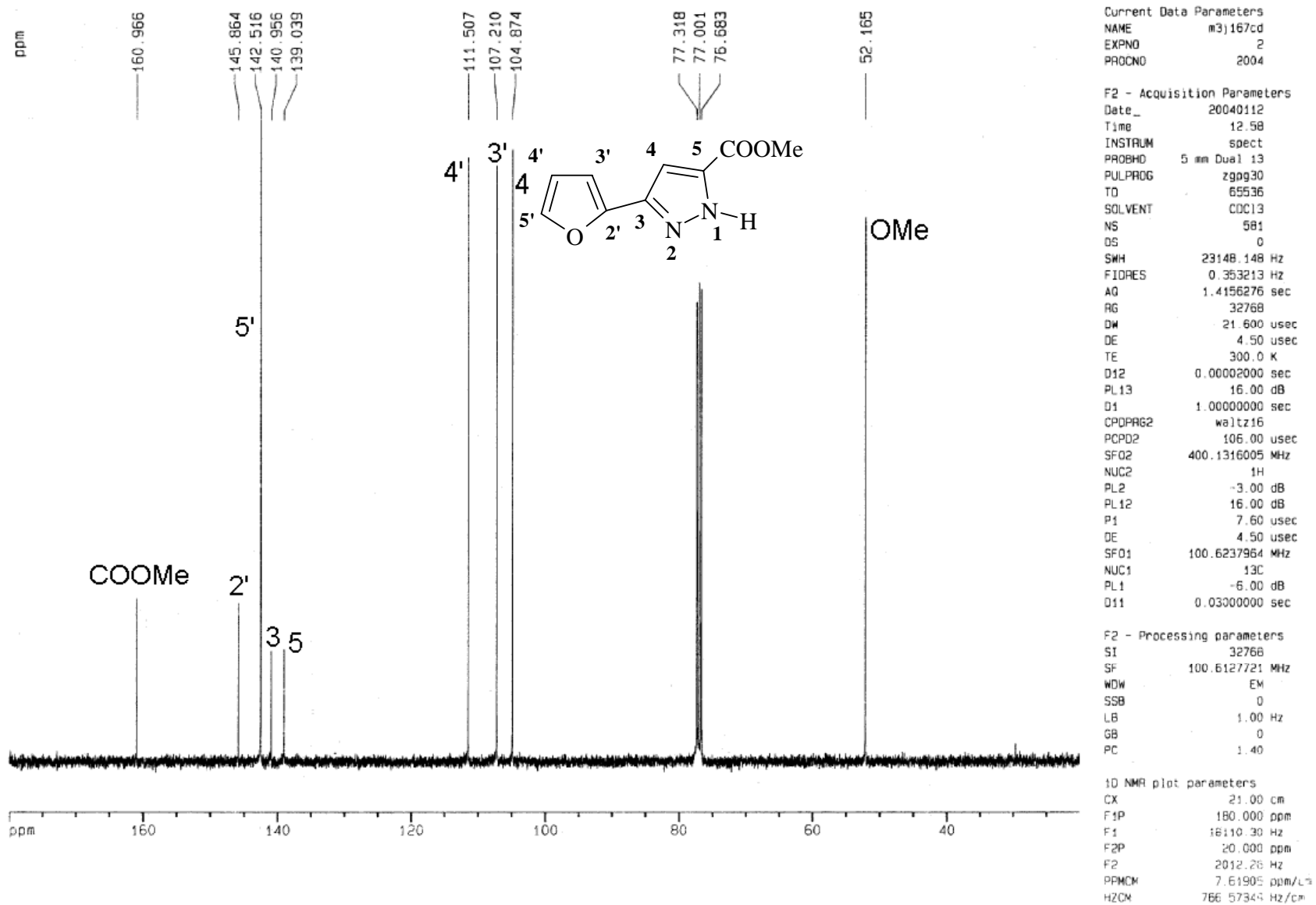


Figura 143. Espectro de RMN ¹³C do 5-metoxicarbonil-3-[2-furil]-1H-pirazol (**18a**) em CDCl₃.

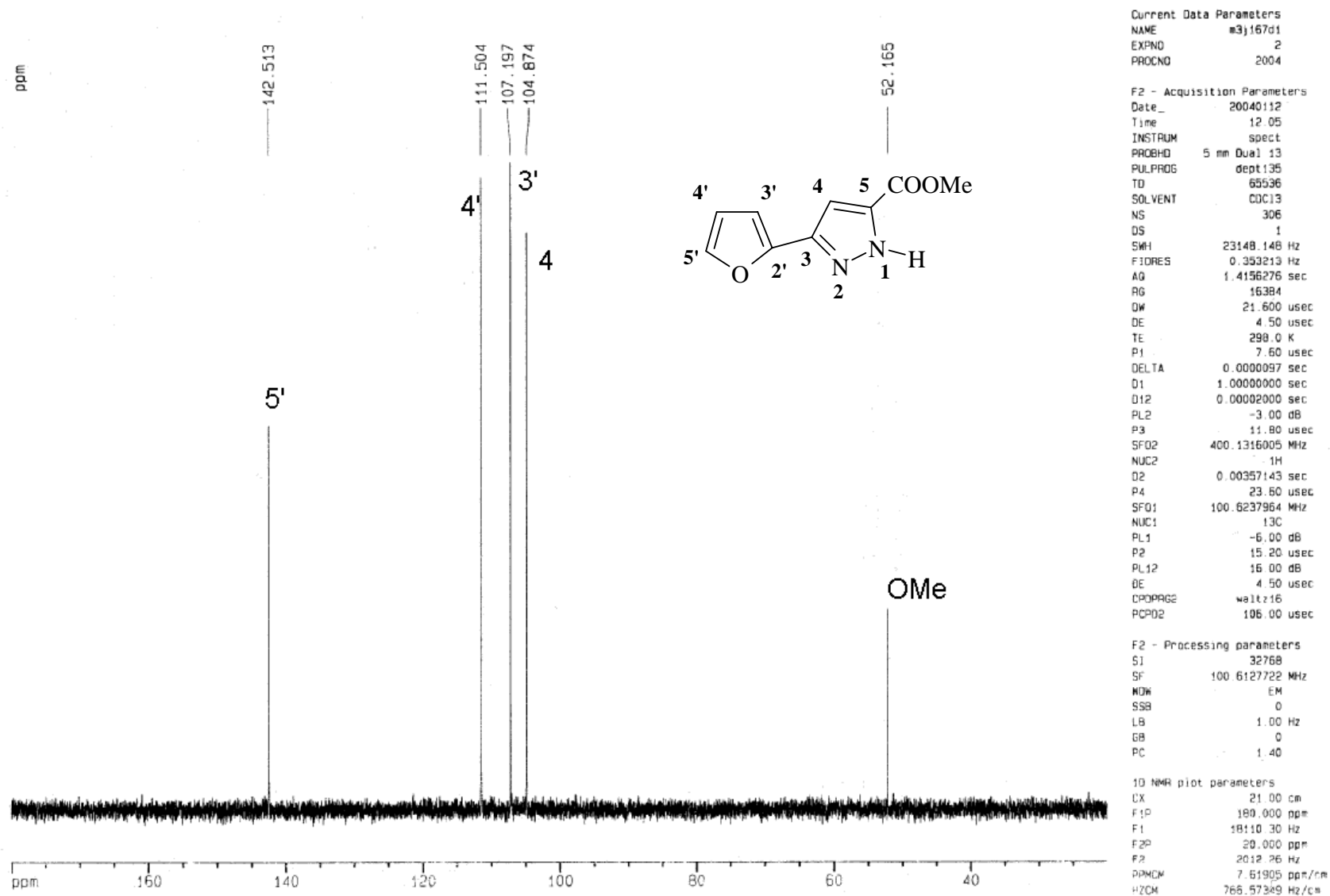


Figura 144. Espectro de RMN (DEPT 135) do 5-metoxicarbonil-3-[2-furil]-1H-pirazol (**18a**) em CDCl_3 .

