

Figura 146. Espectro de RMN ^1H do 5-metoxicarbonil-3-[2-tienil]-1*H*-pirazol (**18b**) em CDCl_3 .

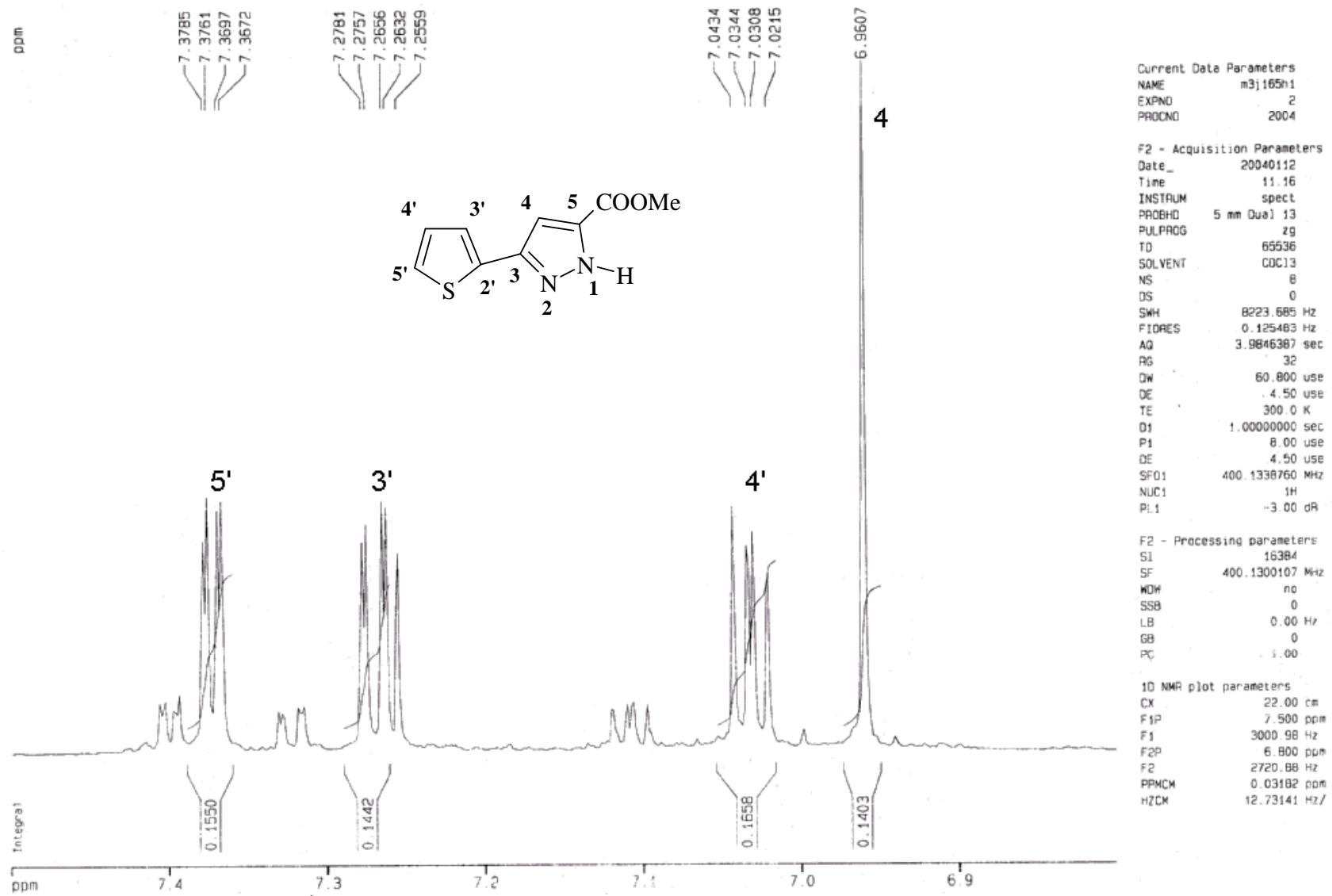


Figura 147. Espectro de RMN ¹H, expansão entre 6,9-7,4 ppm do 5-metoxicarbonil-3-[2-tienil]-1H-pirazol (**18b**) em CDCl₃.

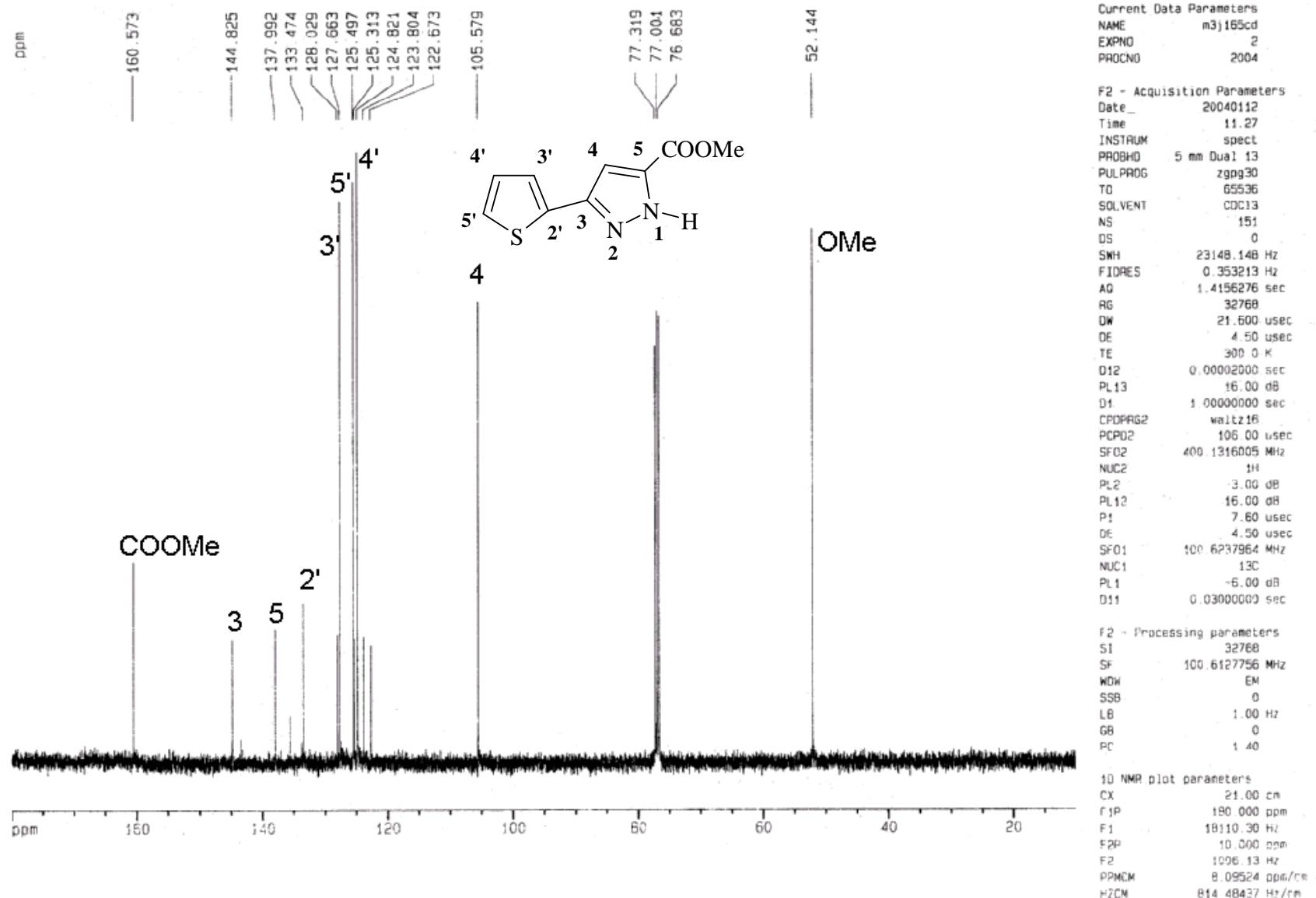
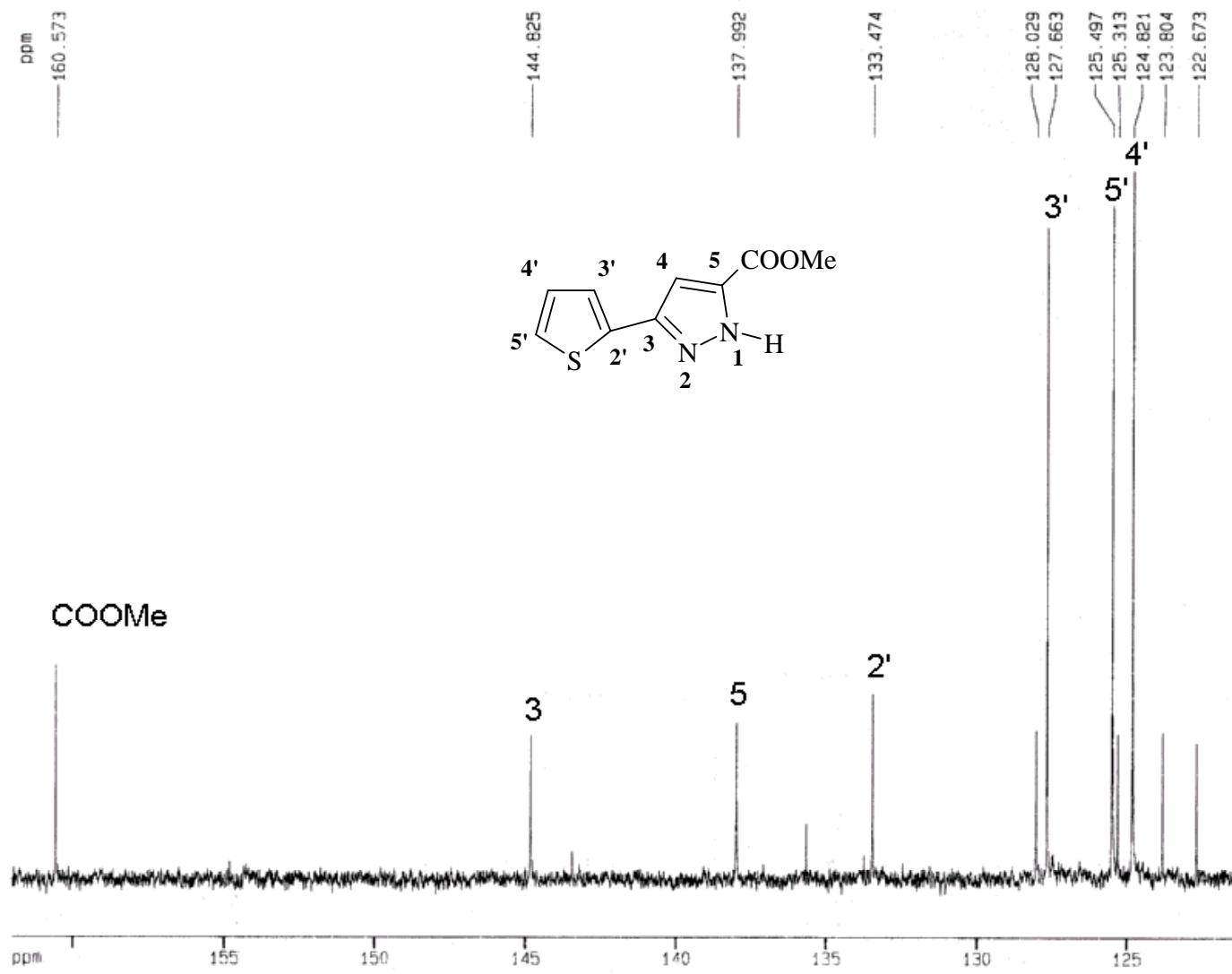


Figura 148. Espectro de RMN ^{13}C do 5-metoxicarbonil-3-[2-tienil]-1*H*-pirazol (**18b**) em CDCl_3 .



Current Data Parameters

NAME	m3j165cd
EXPNO	2
PROCNO	2004

F2 - Acquisition Parameters

Date	20040112
Time	11.27
INSTRUM	spect
PROBHD	5 mm Dual 13
PULPROG	zgpg30
TD	65536
SOLVENT	CDCl ₃
NS	151
DS	0
SWH	23148.148 Hz
FIORES	0.353213 Hz
AQ	1.4156276 sec
RG	32768
DW	21.600 usec
DE	4.50 usec
TE	300.0 K
D12	0.00002000 sec
PL13	16.00 dB
D1	1.0000000 sec
CPDPRG2	waltz16
PCPD2	106.00 usec
SFO2	400.1316005 MHz
NUC2	1H
PL2	-3.00 dB
PL12	16.00 dB
P1	7.60 usec
DE	4.50 usec
SFO1	100.6237964 MHz
NUC1	13C
PL1	-6.00 dB
D11	0.03000000 sec

F2 - Processing parameters

SI	32768
SF	100.6127756 MHz
WDW	EM
SSB	0
L8	1.00 Hz
GB	0
PC	1.40

1D NMR plot parameters

CX	21.00 cm
F1P	162.000 ppm
F1	16299.27 Hz
F2P	121.000 ppm
F2	12174.15 Hz
PPMCM	1.95238 ppm/cm
HZCM	196.43446 Hz/cm

Figura 149. Espectro de RMN ¹³C, expansão entre 125-155 ppm do 5-metoxicarbonil-3-[2-tienil]-1H-pirazol (**18b**) em CDCl₃.

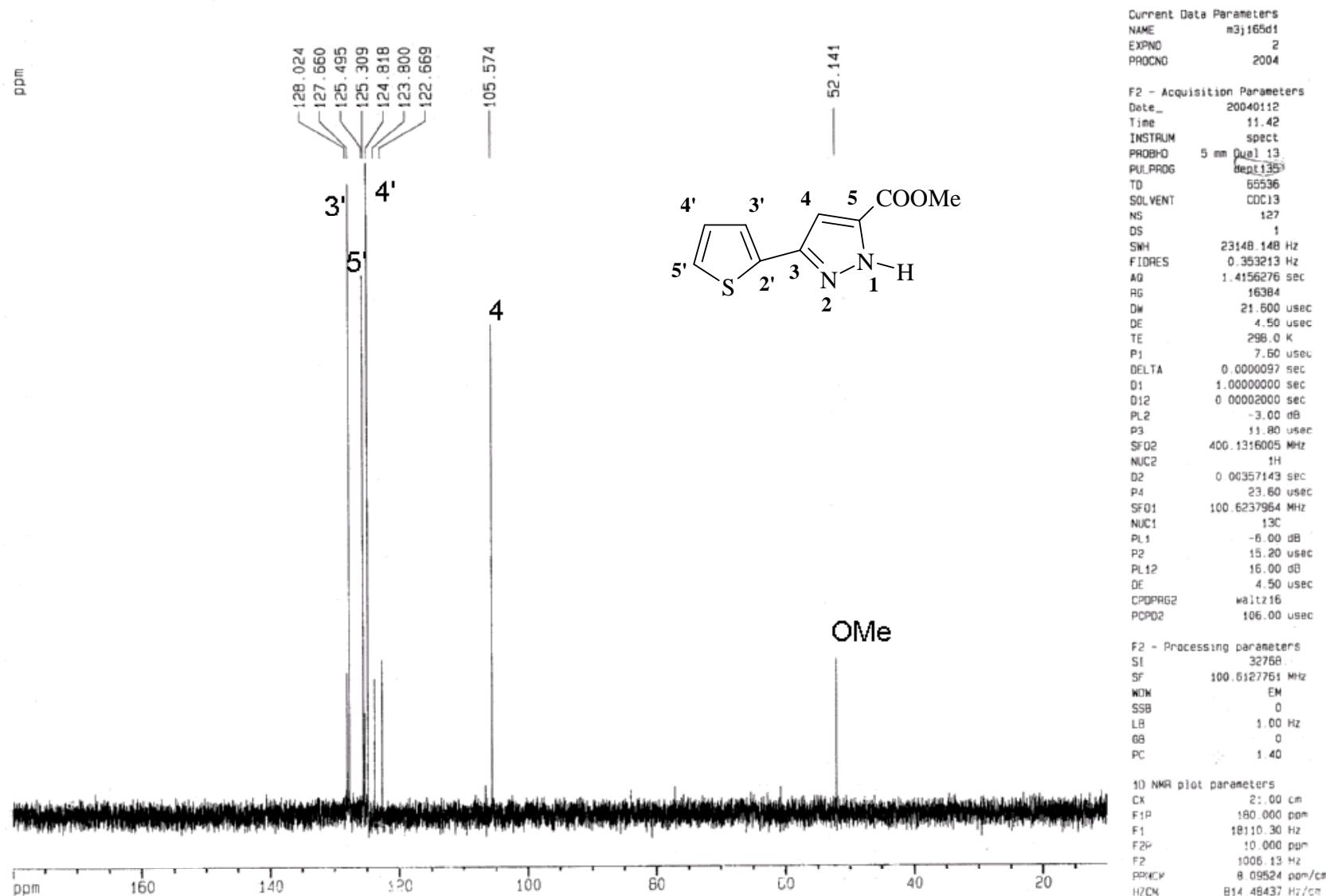


Figura 150. Espectro de RMN (DEPT 135) do 5-metoxicarbonil-3-[2-tienil]-1H-pirazol (**18b**) em CDCl₃.

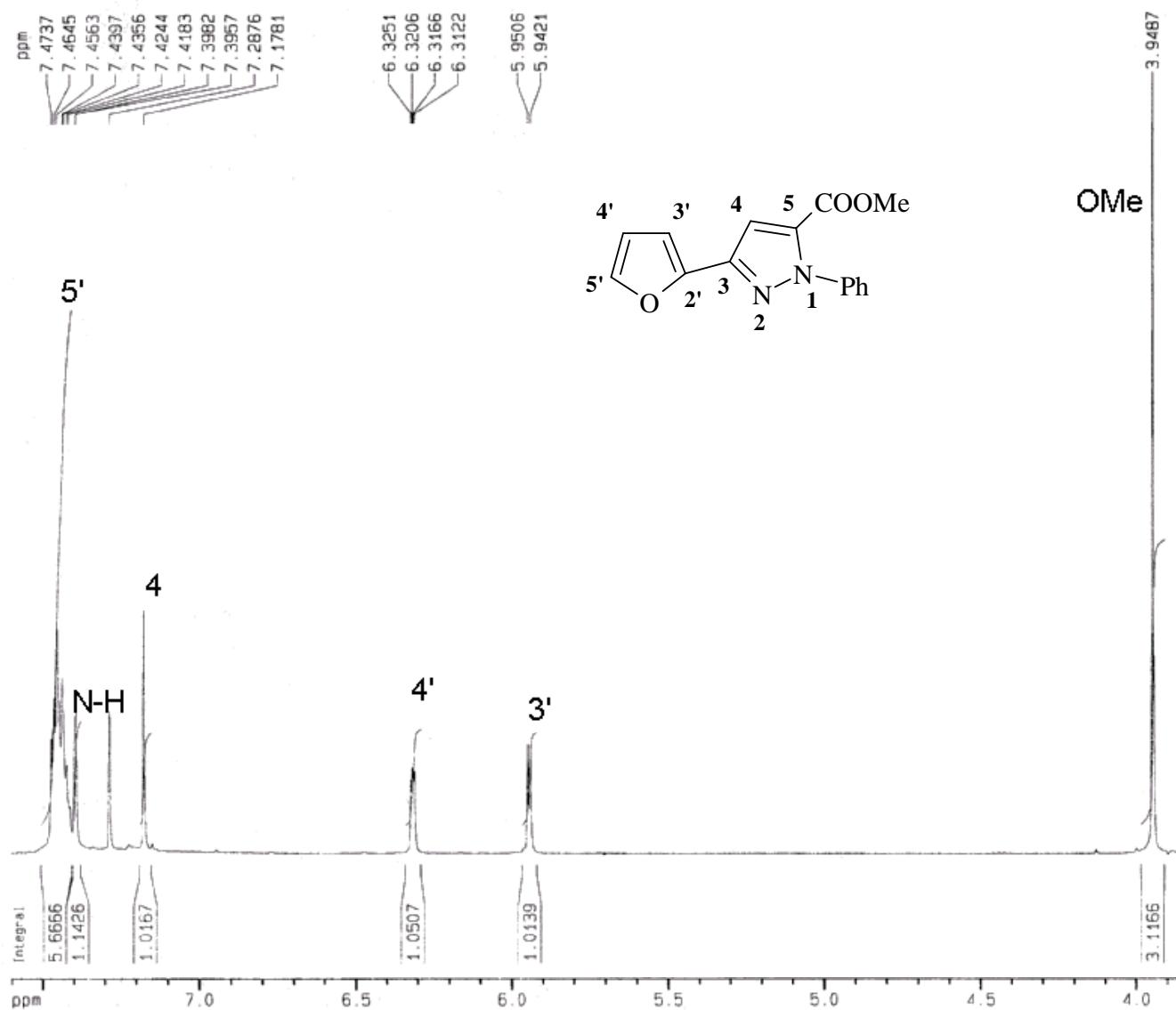


Figura 151. Espectro de RMN ^1H do 5-metoxicarbonil-1-fenil-3-[2-furil]-1*H*-pirazol (**19a**) em CDCl_3 .

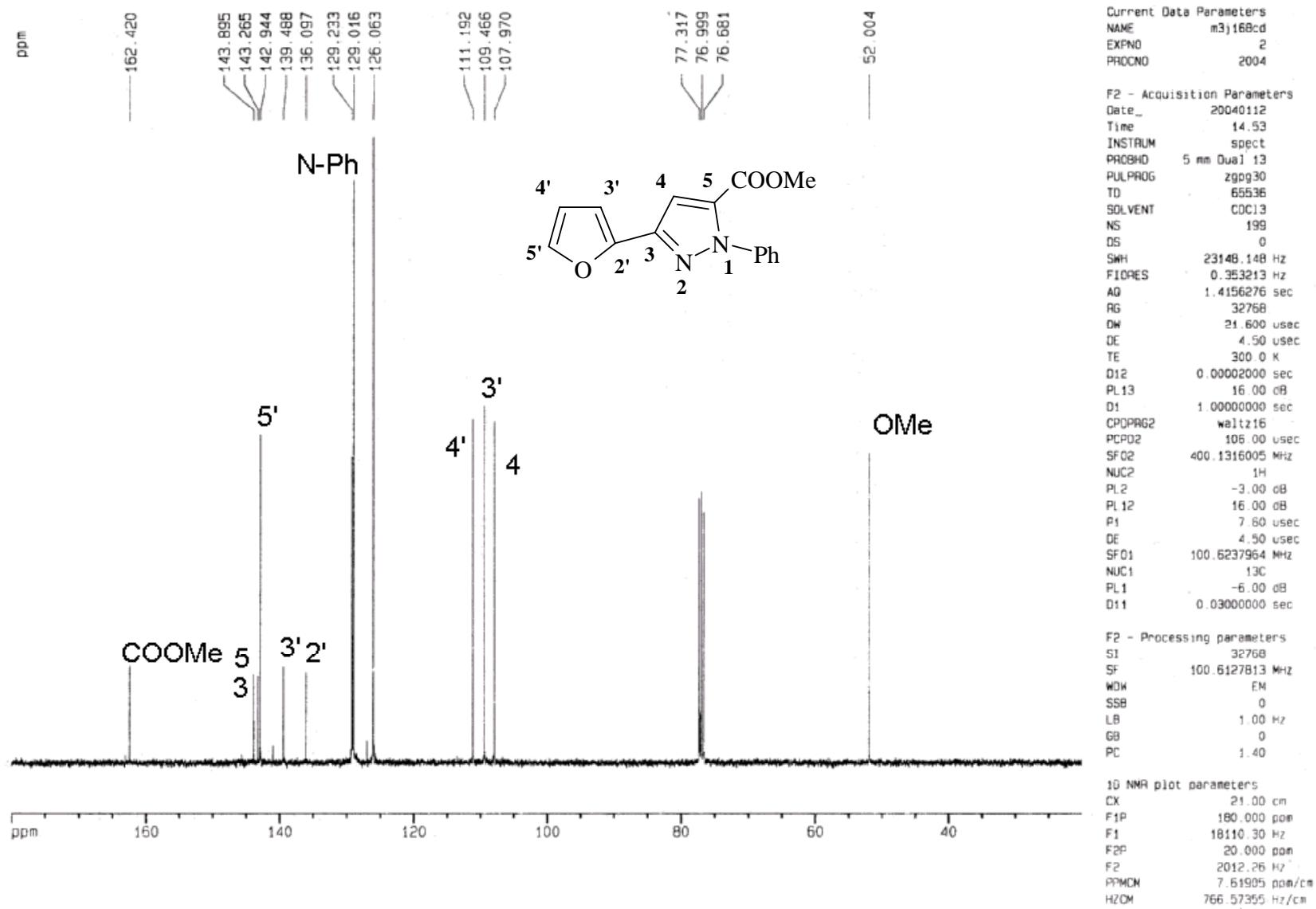


Figura 152. Espectro de RMN ^{13}C do 5-metoxicarbonil-1-fenil-3-[2-furil]-1*H*-pirazol (**19a**) em CDCl_3 .

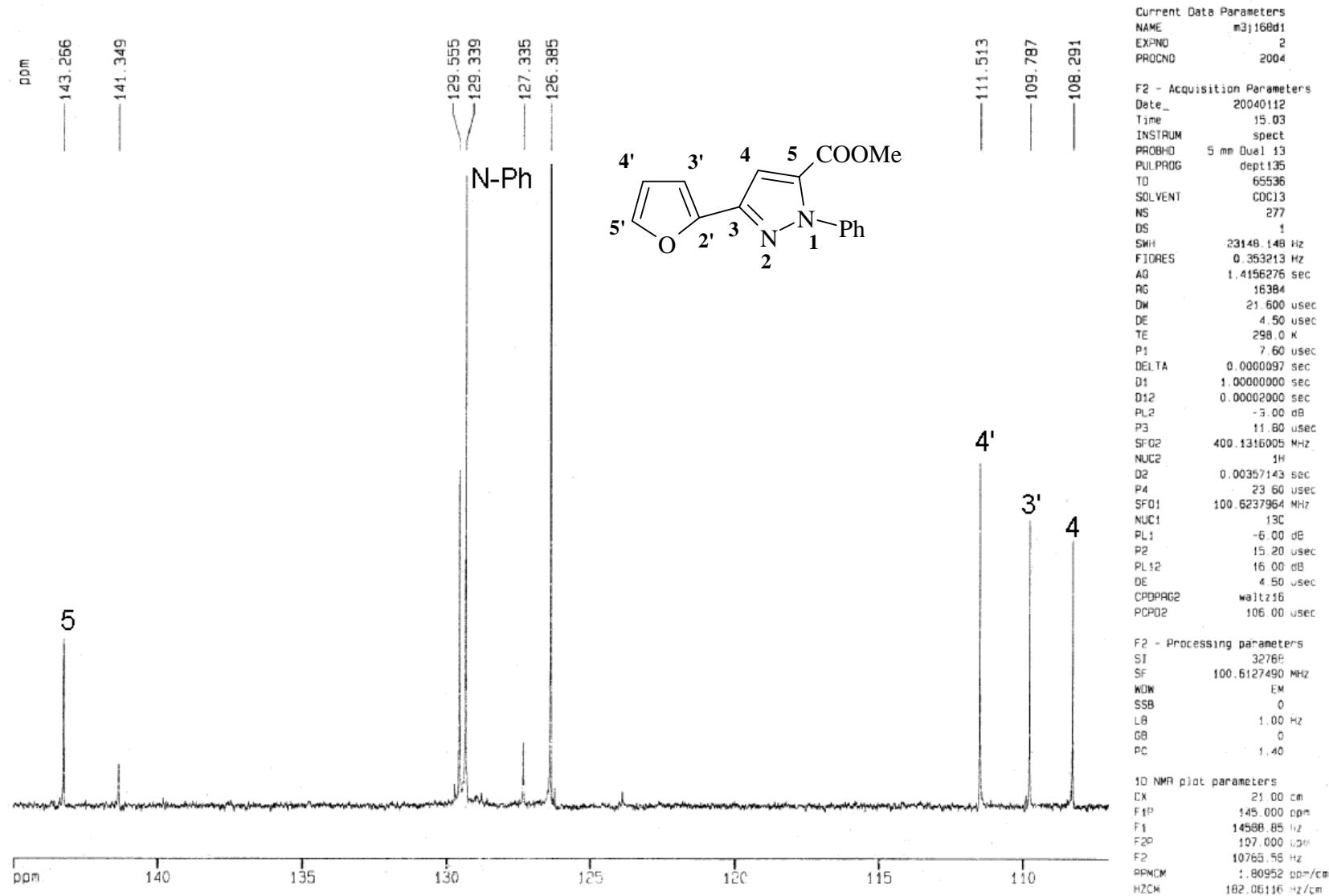


Figura 153. Espectro de RMN ^{13}C , expansão entre 110-140 do 5-metoxicarbonil-1-fenil-3-[2-furil]-1*H*-pirazol (**19a**) em CDCl_3 .

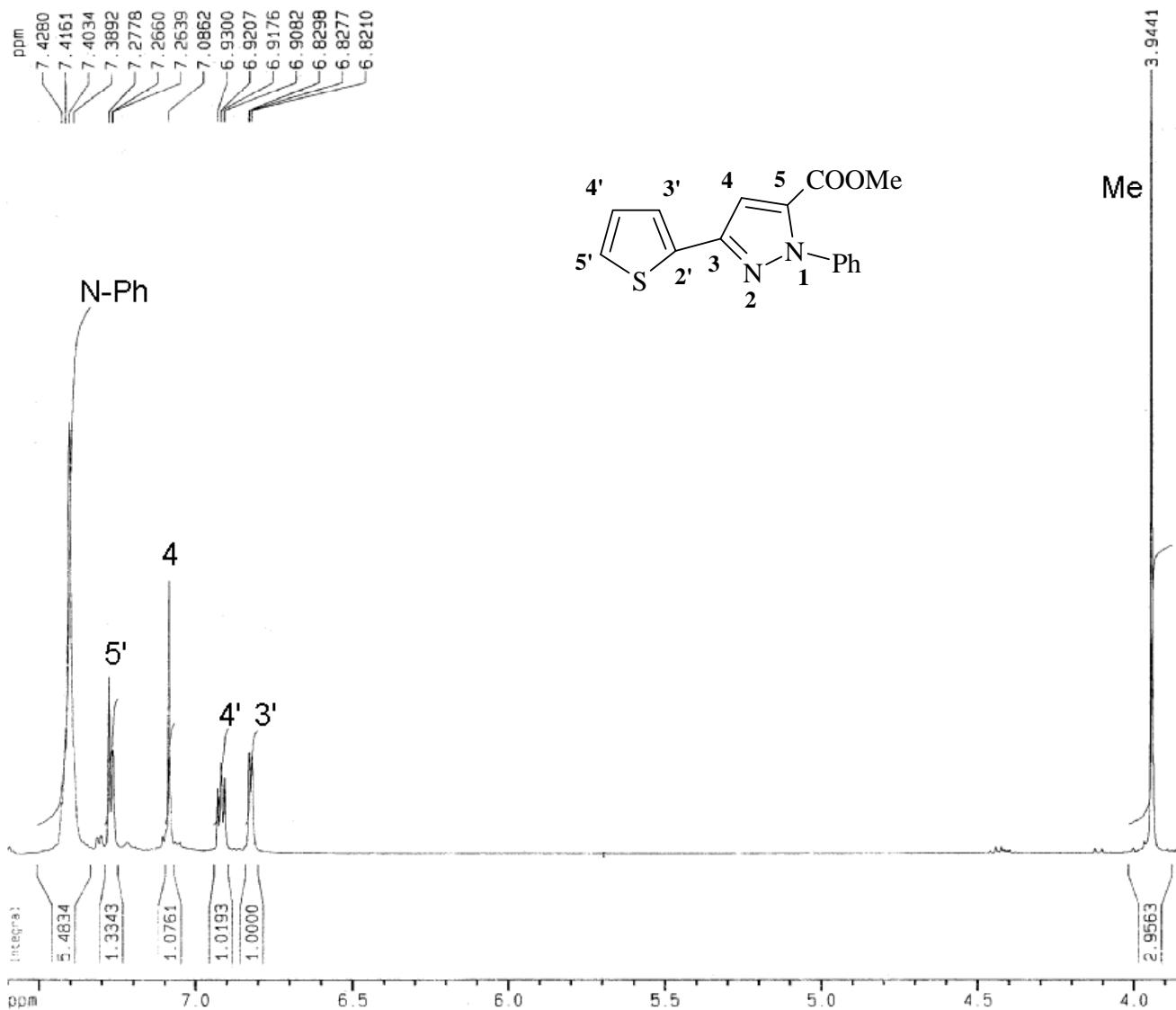


Figura 154. Espectro de RMN ^1H do 5-metoxicarbonil-1-fenil-3-[2-tienil]-1*H*-pirazol (**19b**) em CDCl_3 .

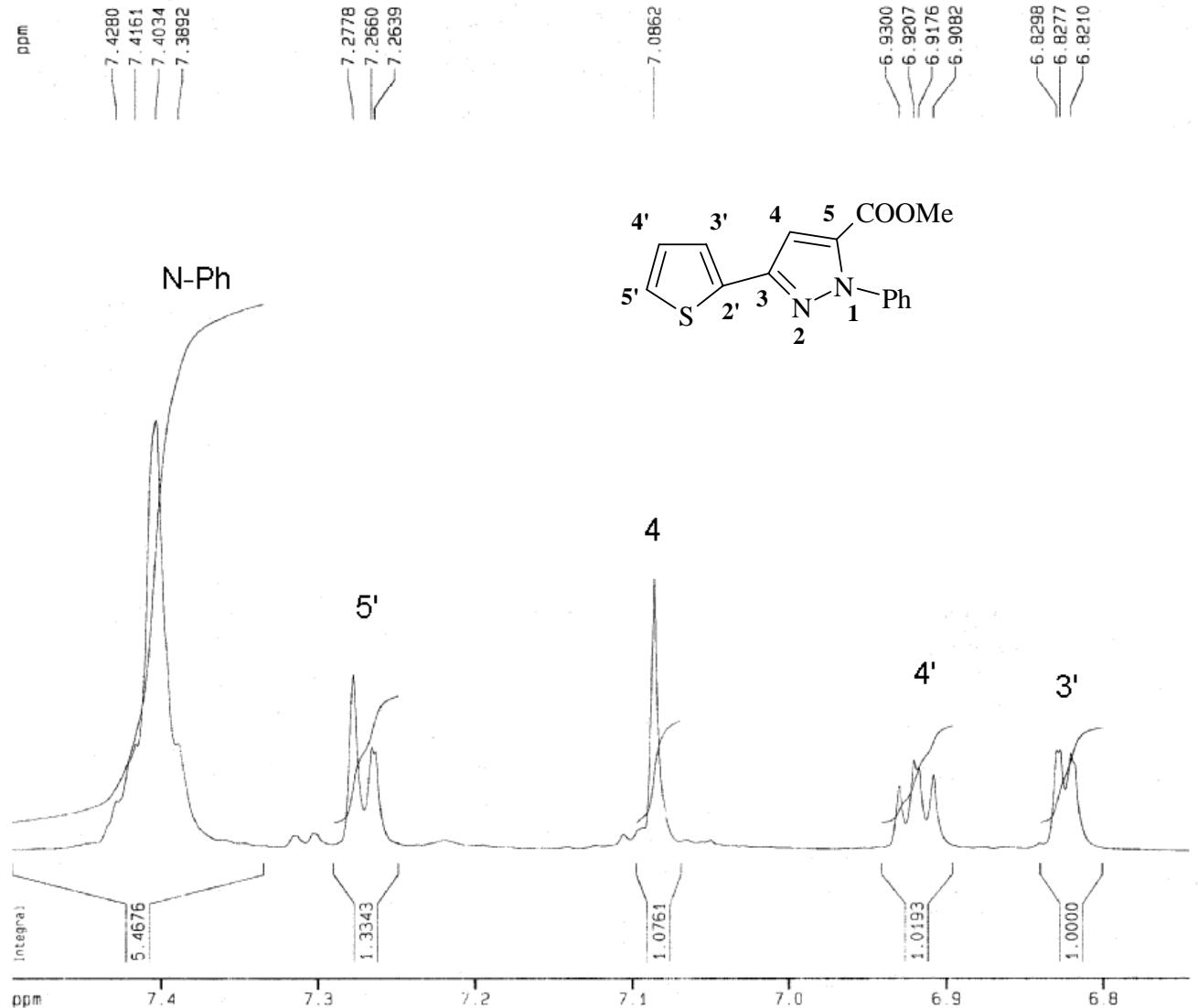


Figura 155. Espectro de RMN ^1H , expansão entre 6,8-7,4 ppm do 5-metoxicarbonil-1-fenil-3-[2-tienil]-1*H*-pirazol (**19b**) em CDCl_3 .

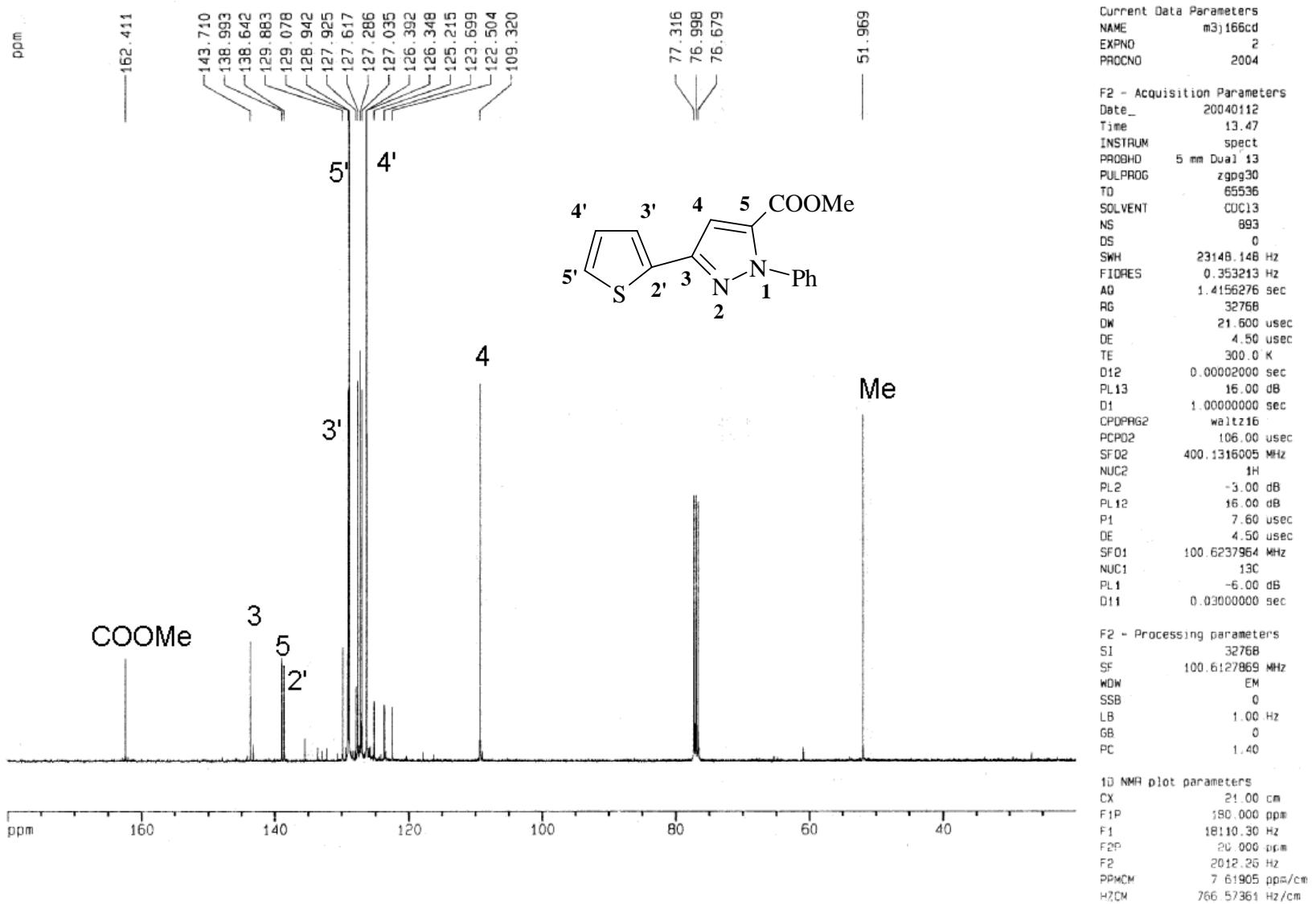


Figura 156. Espectro de RMN ^{13}C do 5-metoxicarbonil-1-fenil-3-[2-tienil]-1*H*-pirazol (**19b**) em CDCl_3 .

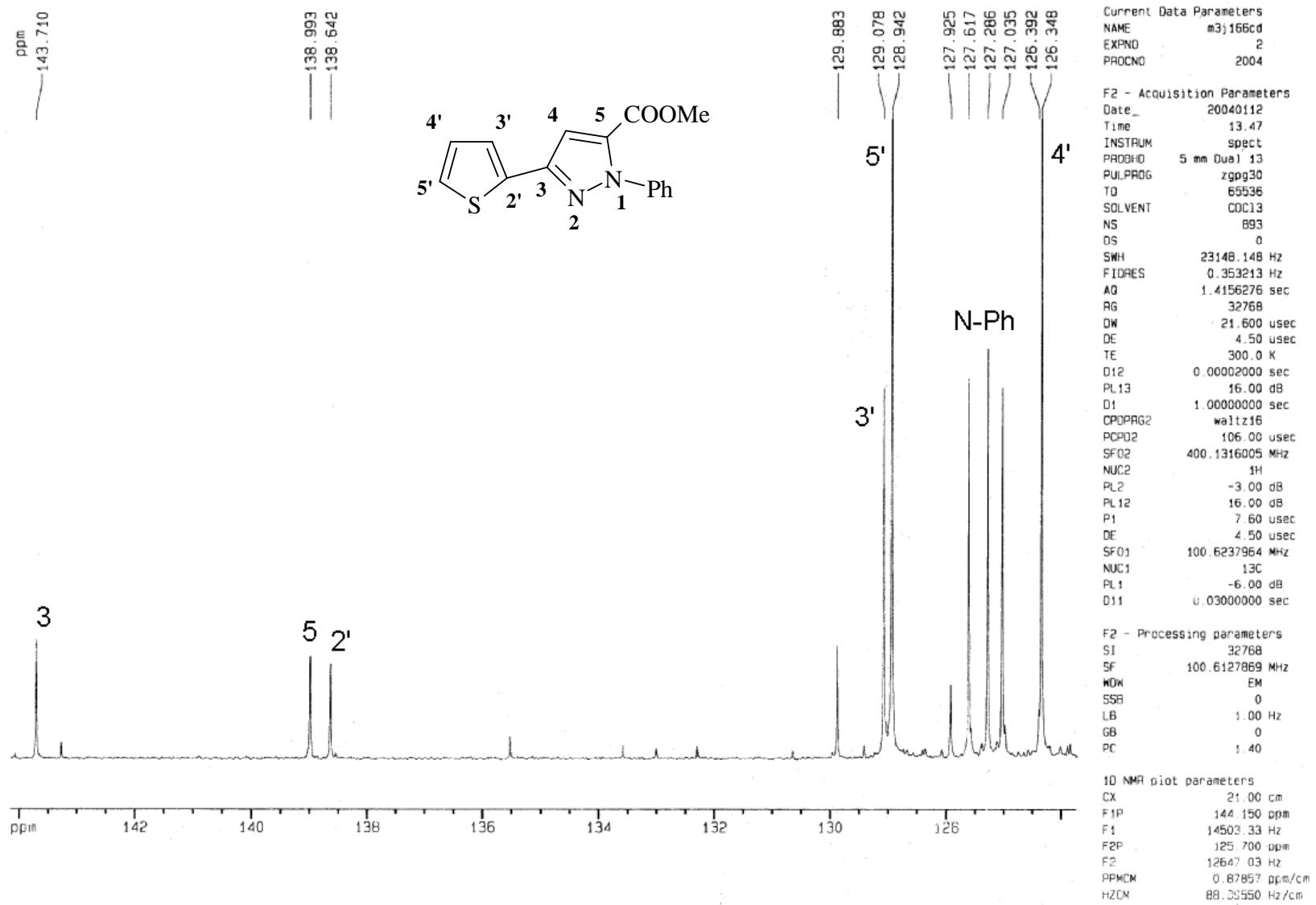


Figura 157. Espectro de RMN ^{13}C , expansão entre 128-142 ppm do 5-metoxicarbonil-1-fenil-3-[2-tienil]-1H-pirazol (19b) em CDCl_3 .

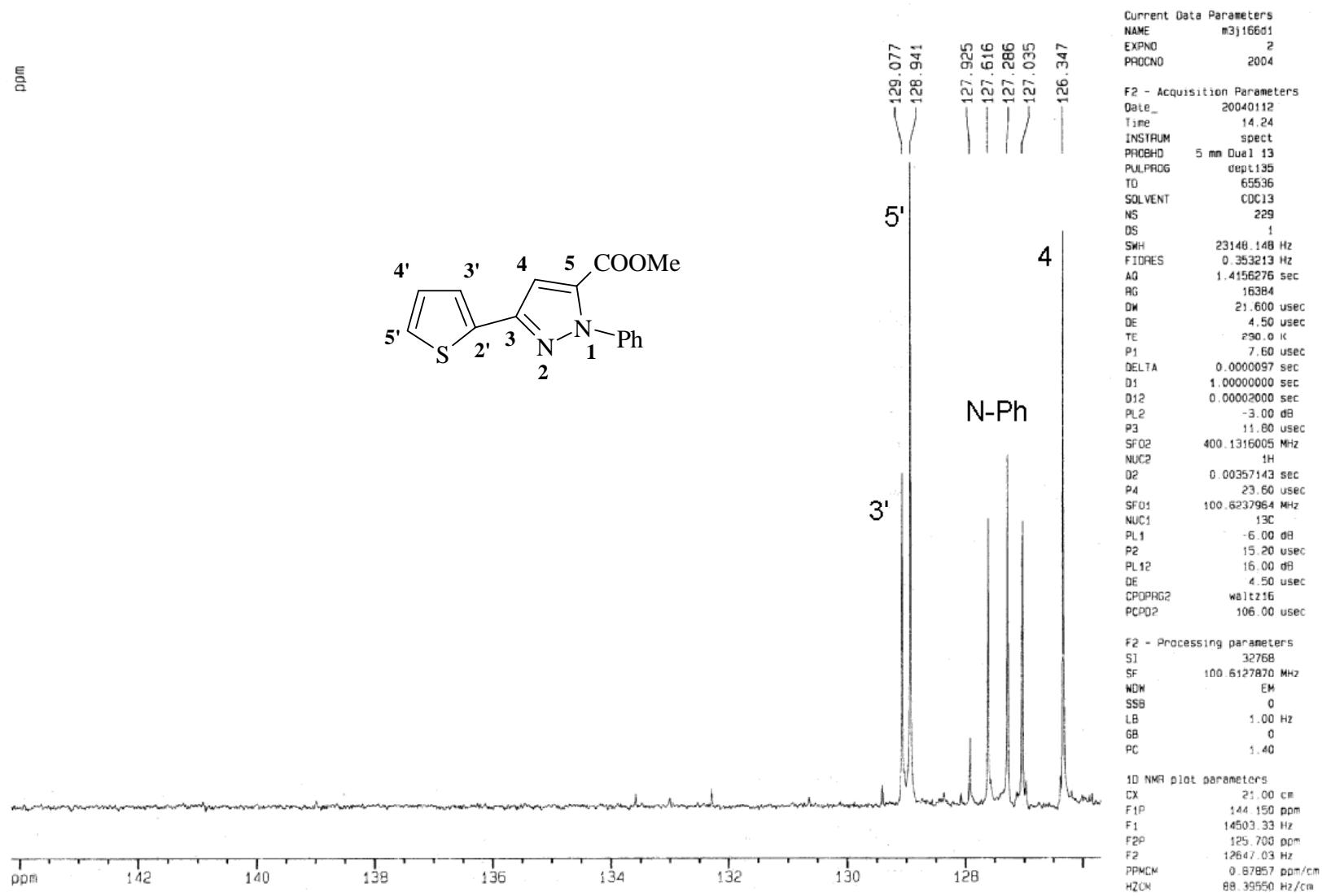


Figura 158. Espectro de RMN (DEPT 135) do 5-metoxicarbonil-1-fenil-3-[2-tienil]-1H-pirazol (**19b**) em CDCl_3 .

ANEXO II

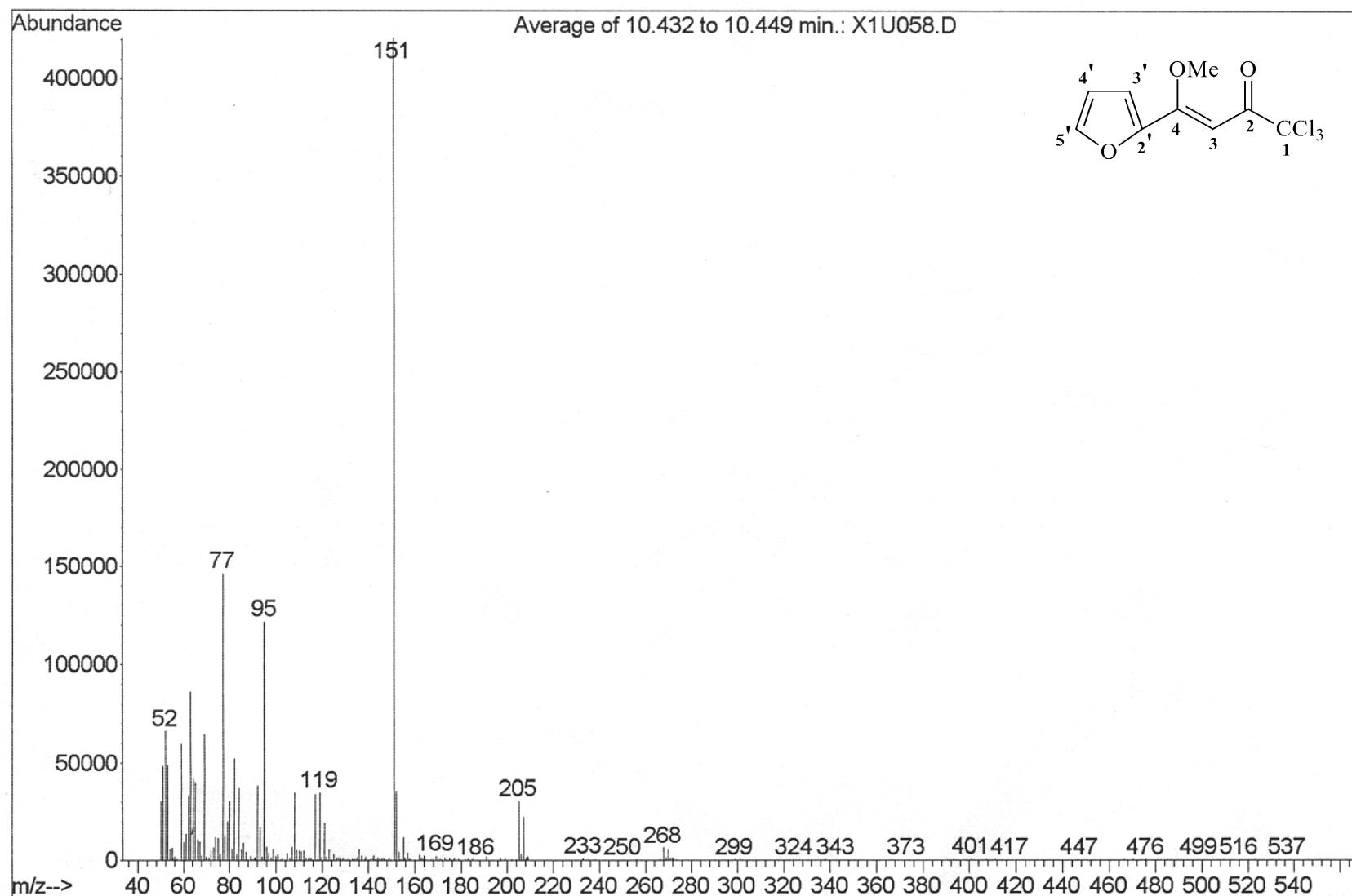


Figura 159. Espectro de Massa do 1,1,1-Tricloro-4-[2-furil]-4-metoxi-3-buten-2-on (2a)

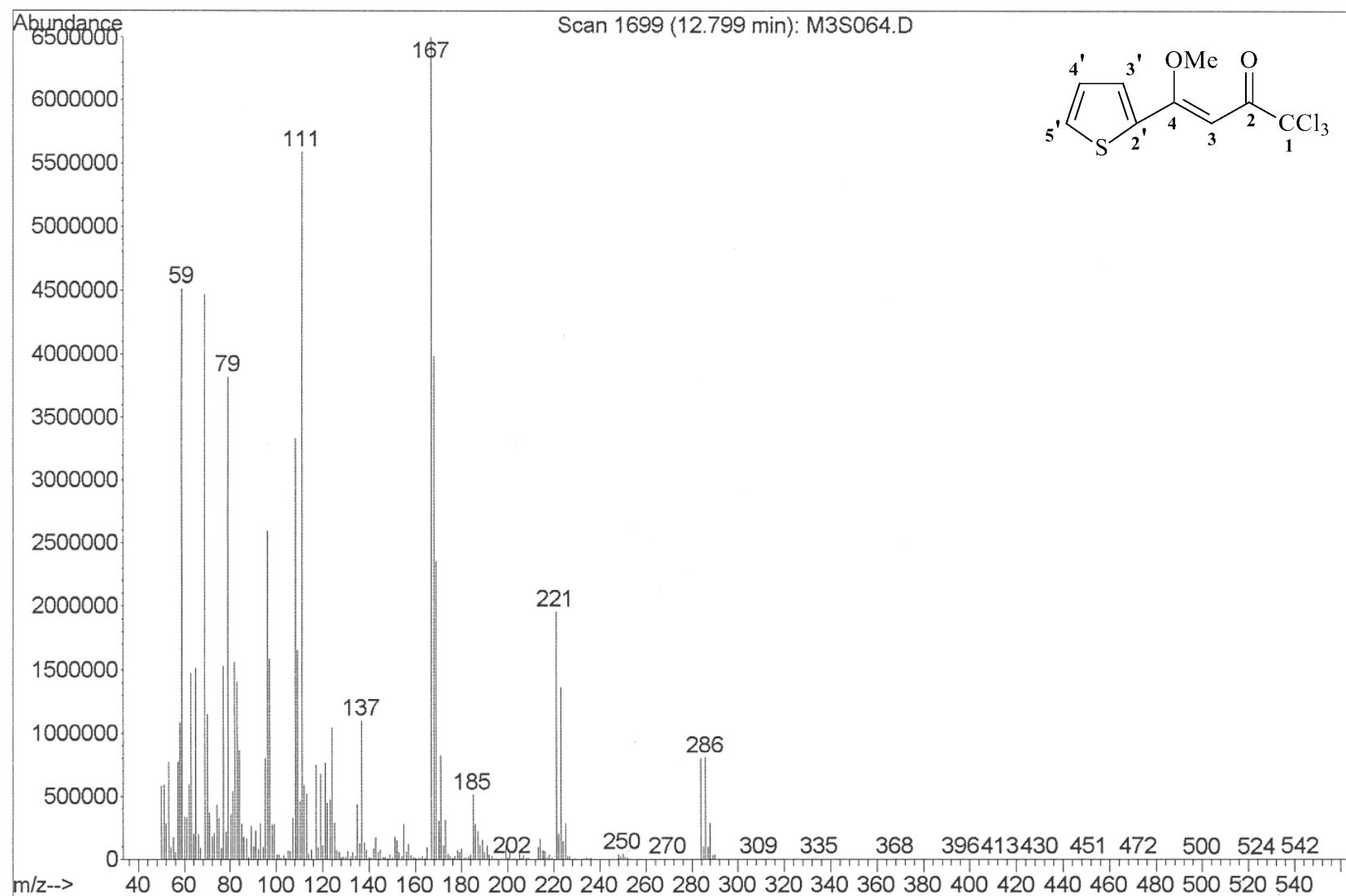


Figura 160. Espectro de Massa do 1,1,1-tricloro-4-metoxi-4-[2-tienil]-3-butene-2-oná (2b)

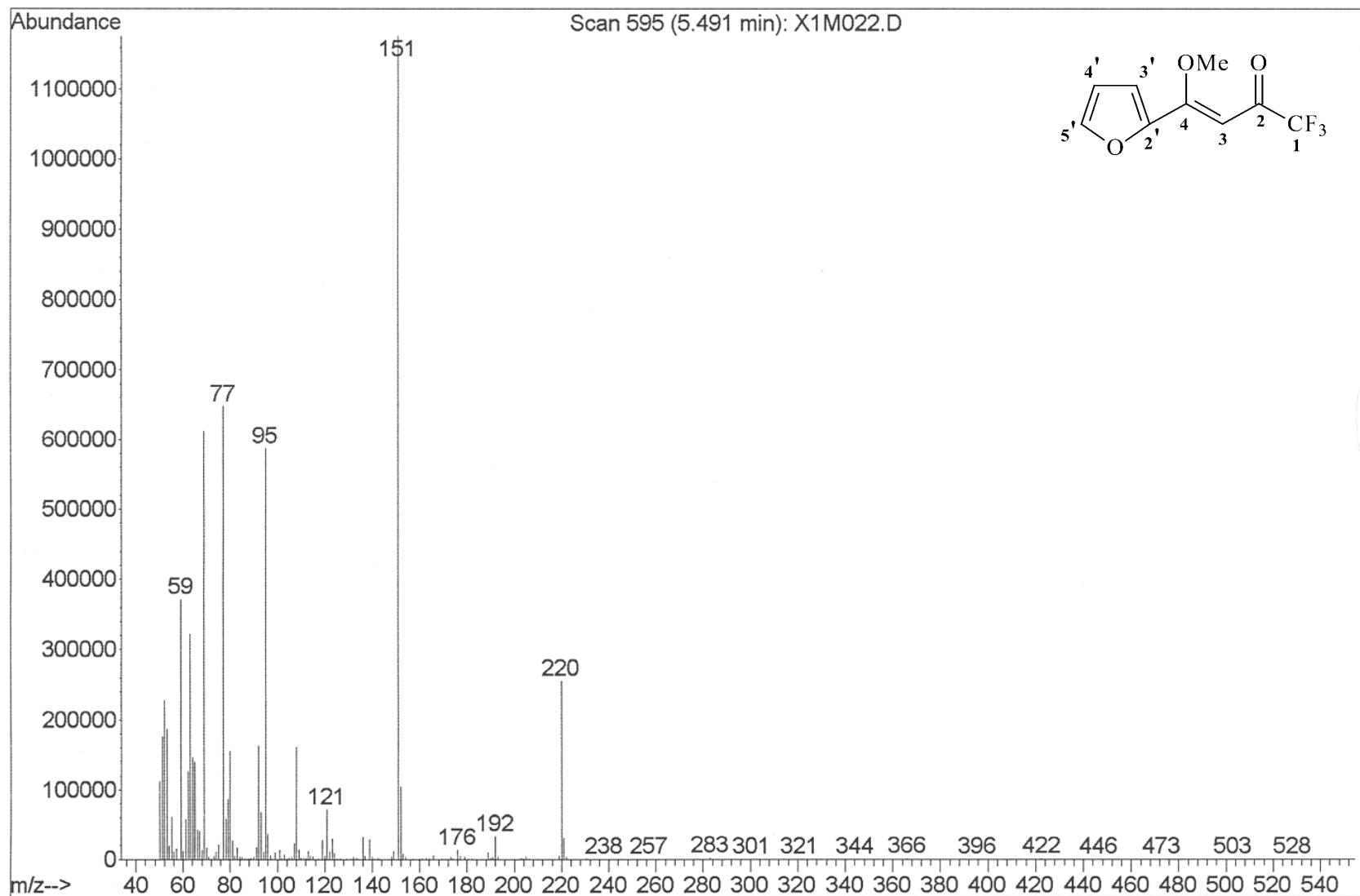


Figura 161. Espectro de Massa do 1,1,1-trifluor-4-[2-furil]-4-metoxi-3-buten-2-on (3a)

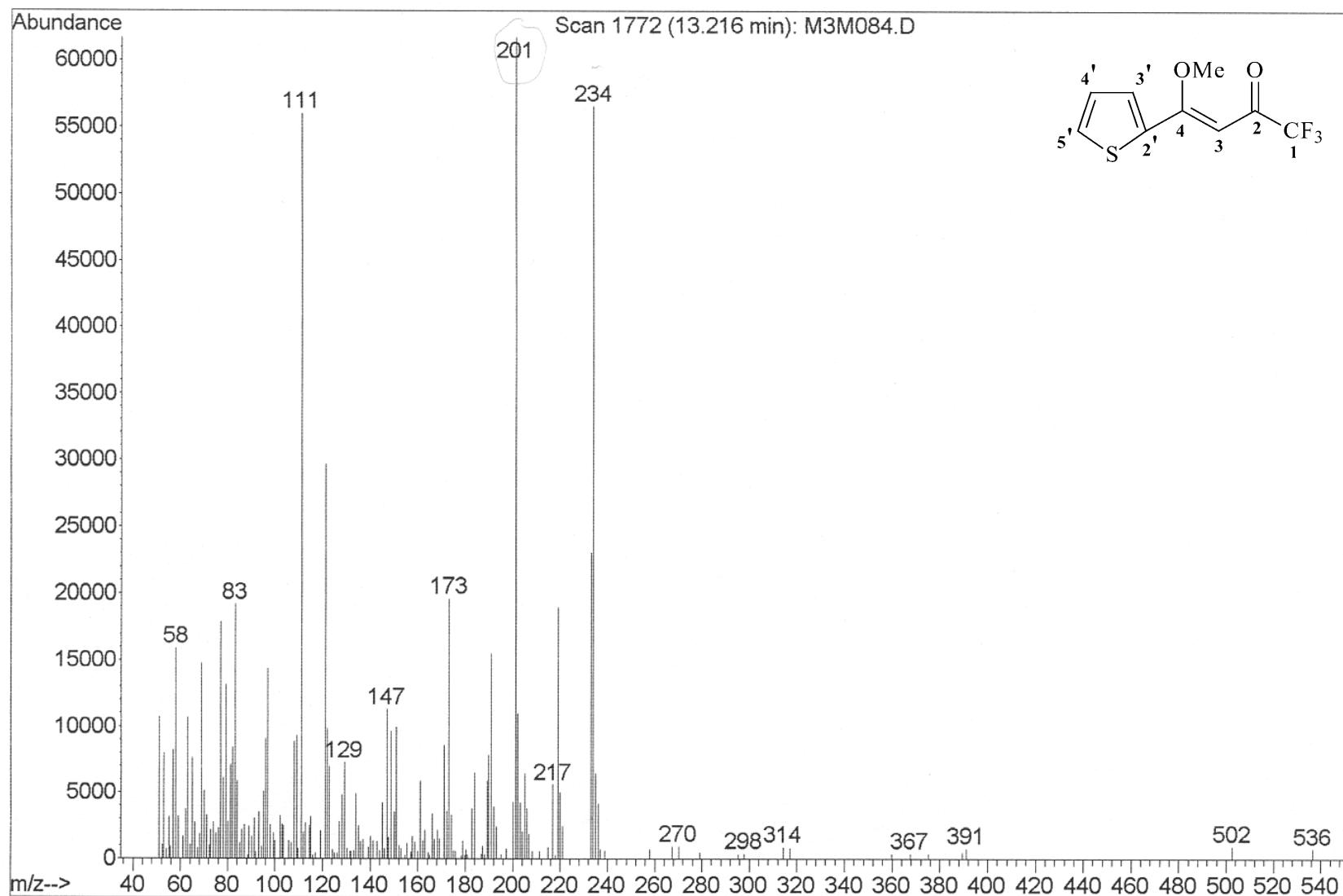


Figura 162. Espectro de Massa do 1,1,1-trifluor-4-metoxi-4-[2-tienil]-3-butene-2-oná (**3b**)

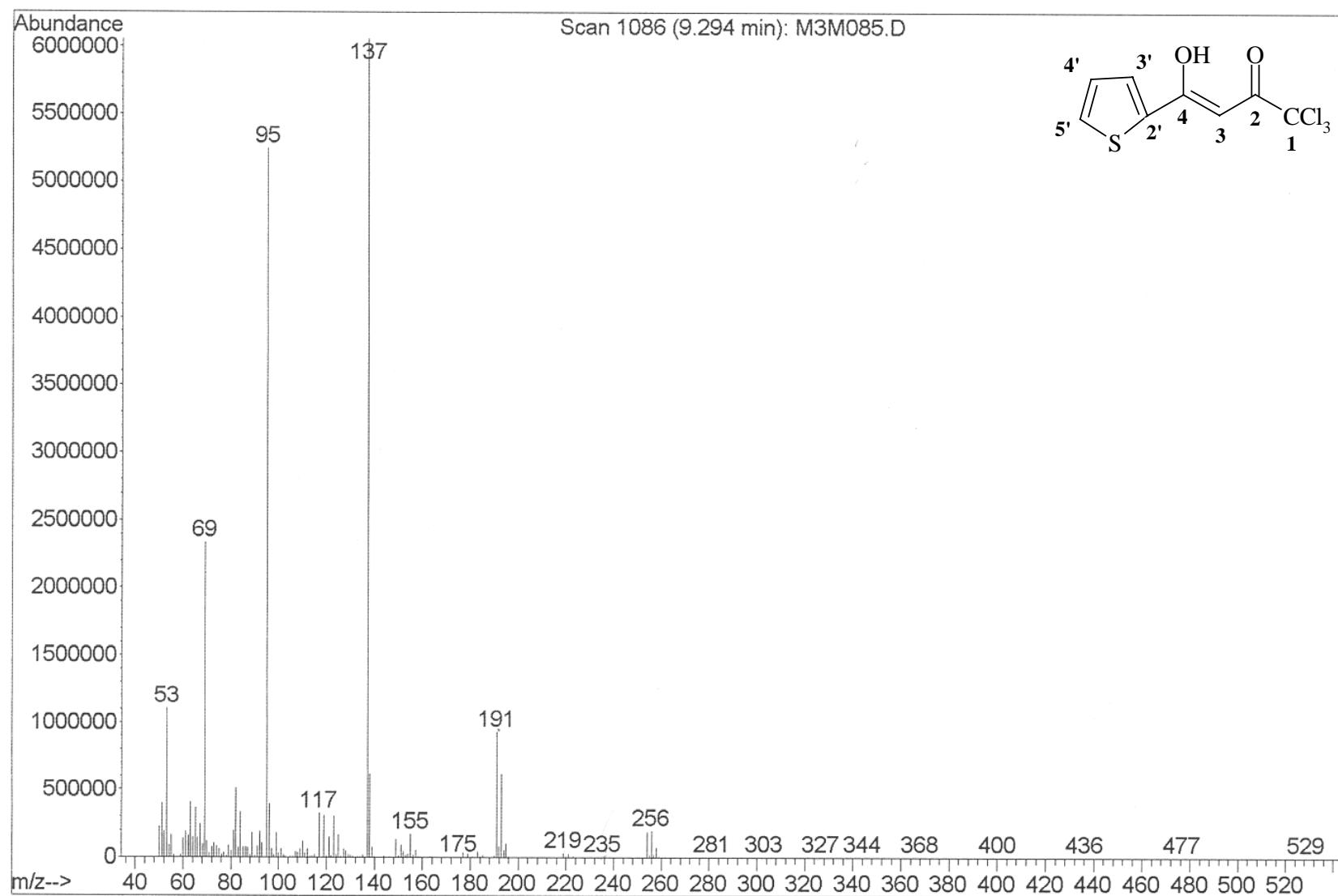


Figura 163. Espectro de Massa do 1,1,1-tricloro-4-[2-tienil]-buten-1,3-diona (**4a**)

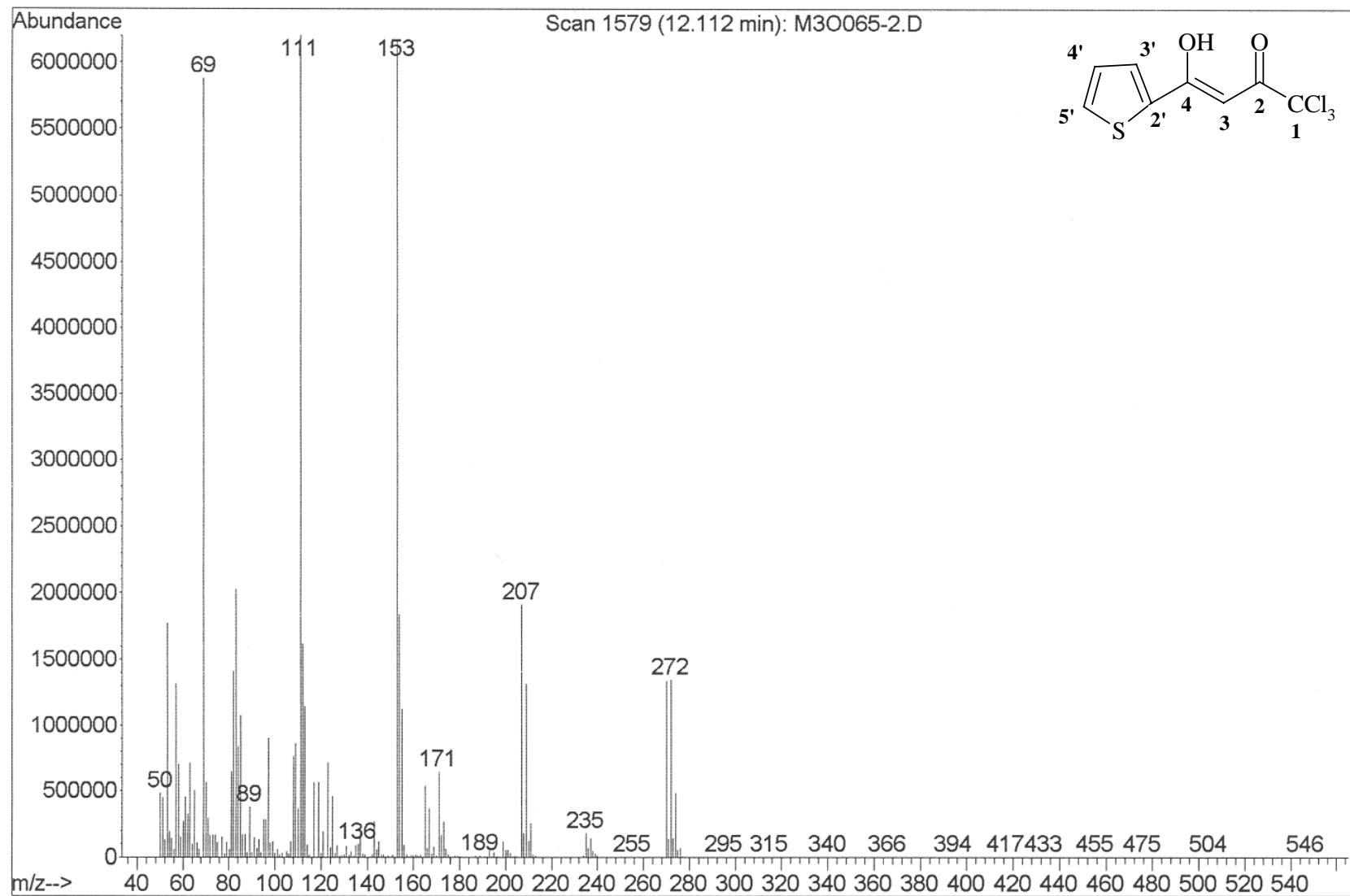


Figura 164. Espectro de Massa do 1,1,1-tricloro-4-[2-tienil]-buten-1,3-diona (**4b**)

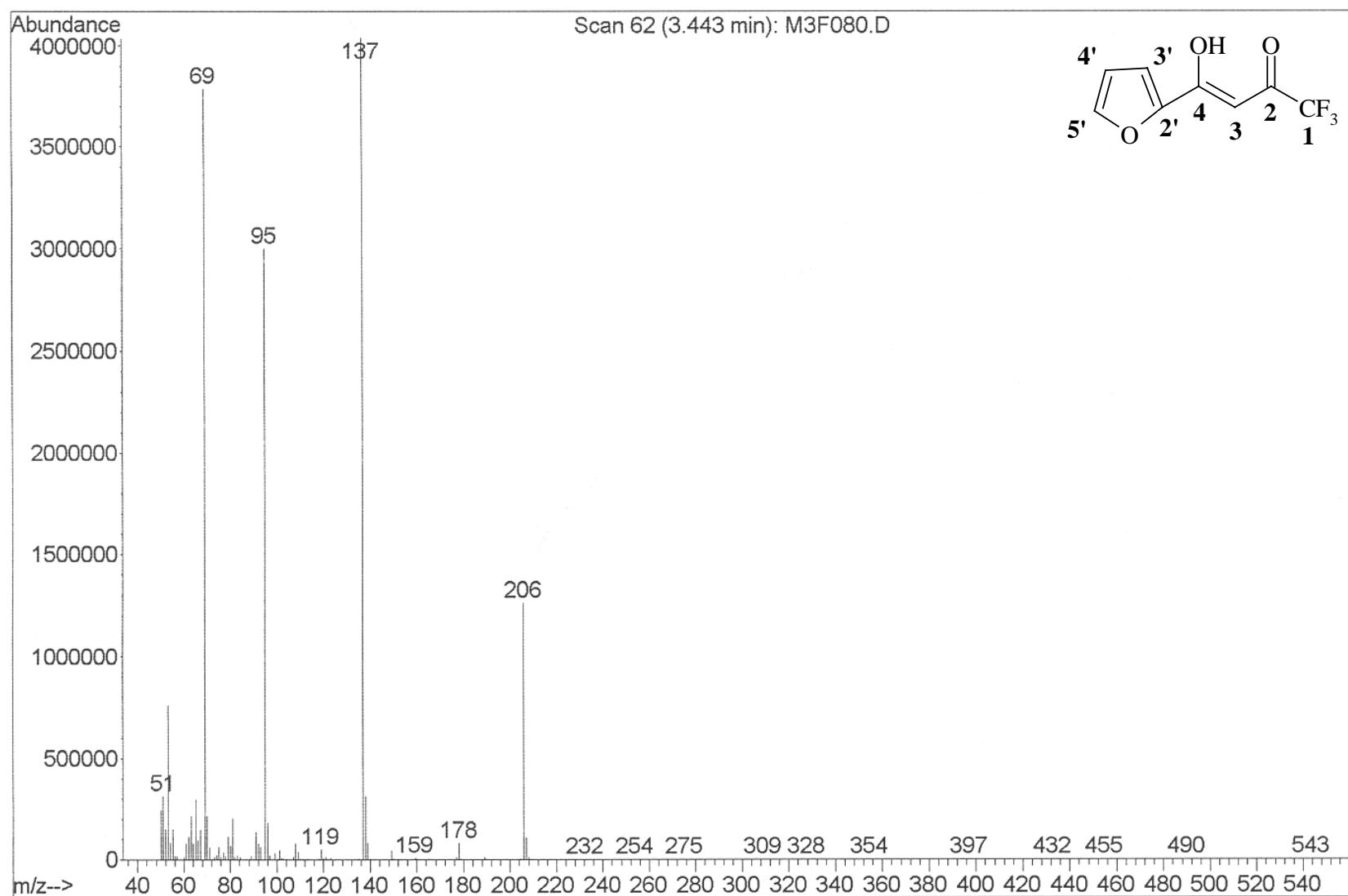


Figura 165. Espectro de Massa do 1,1,1-trifluor-4-[2-furil]-buten-1,3-diona (**5a**)

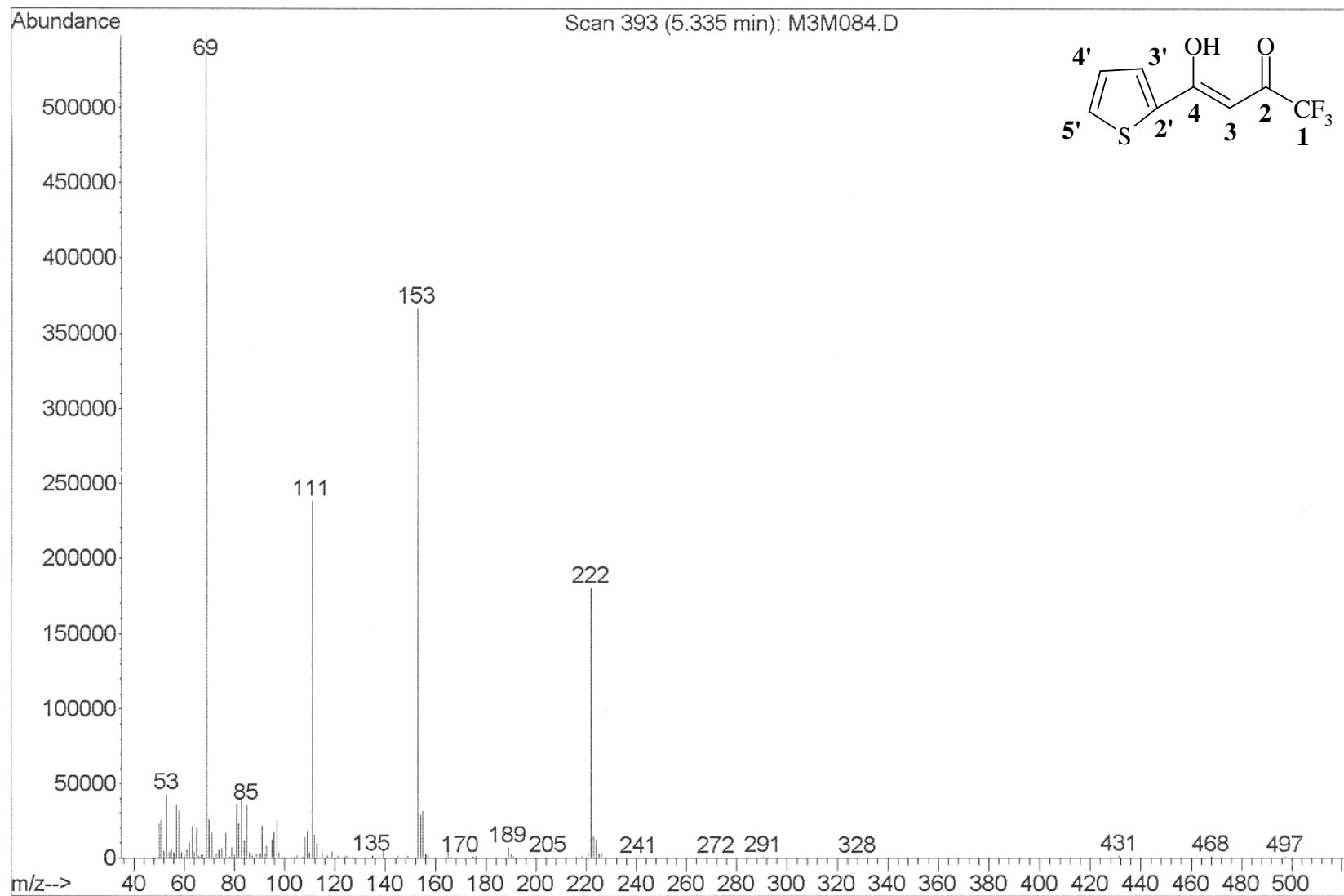


Figura 166. Espectro de Massa do 1,1,1-trifluor-4-[2-tienil]-buten-1,3-diona (**5b**)