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PROGRAMA DE PÓS-GRADUAÇÃO EM QUÍMICA

TESE

**SÍNTESE E AVALIAÇÃO DA ATIVIDADE BIOLÓGICA DE
TIOSEMICARBAZIDAS, TIOSEMICARBAZONAS E
CLORIDRATOS MESOIÔNICOS DA CLASSE 1,3,4-TIADIAZÓLIO-2-
AMINIDAS**

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CAMILLA MORETTO DOS REIS

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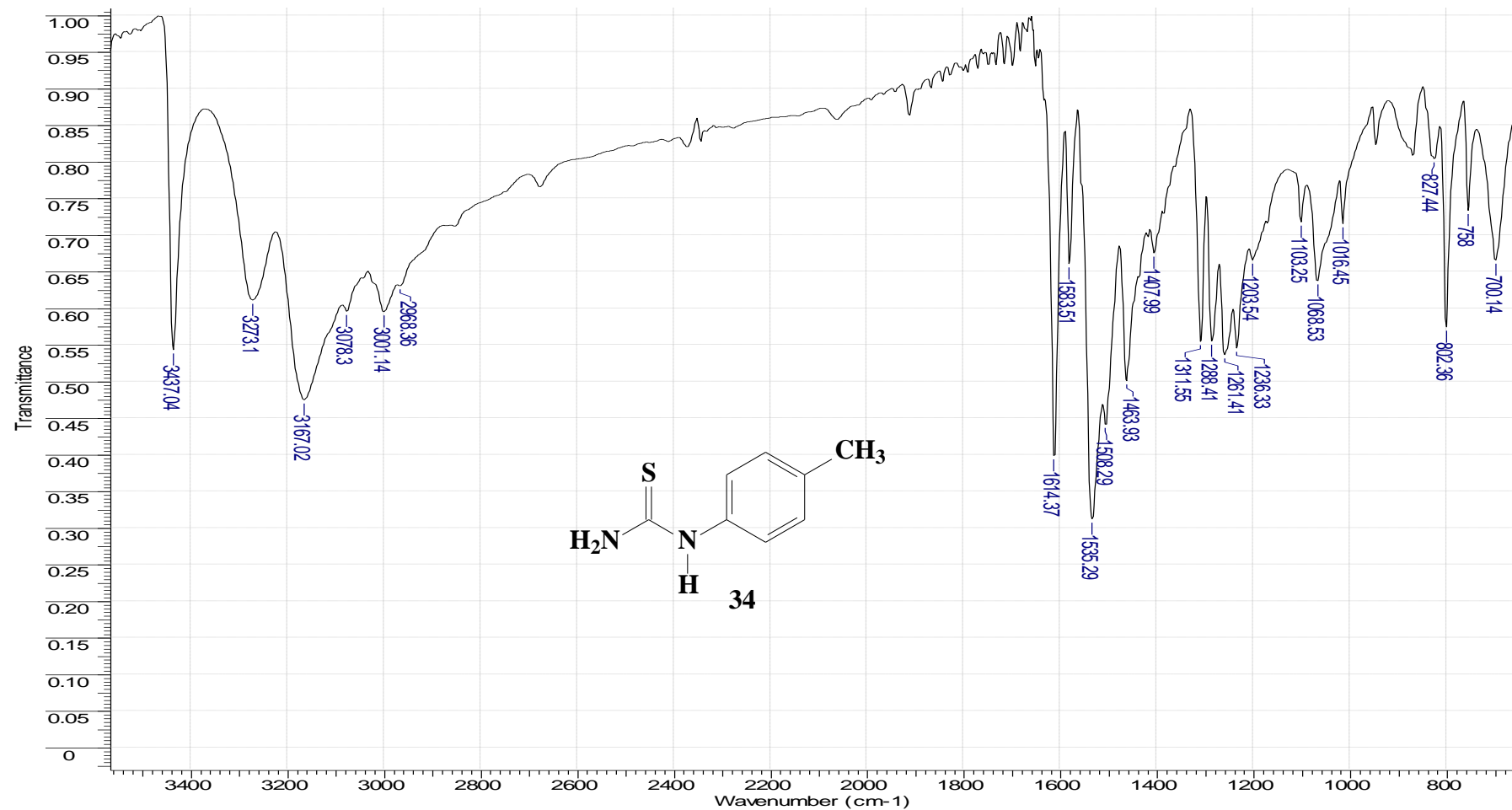
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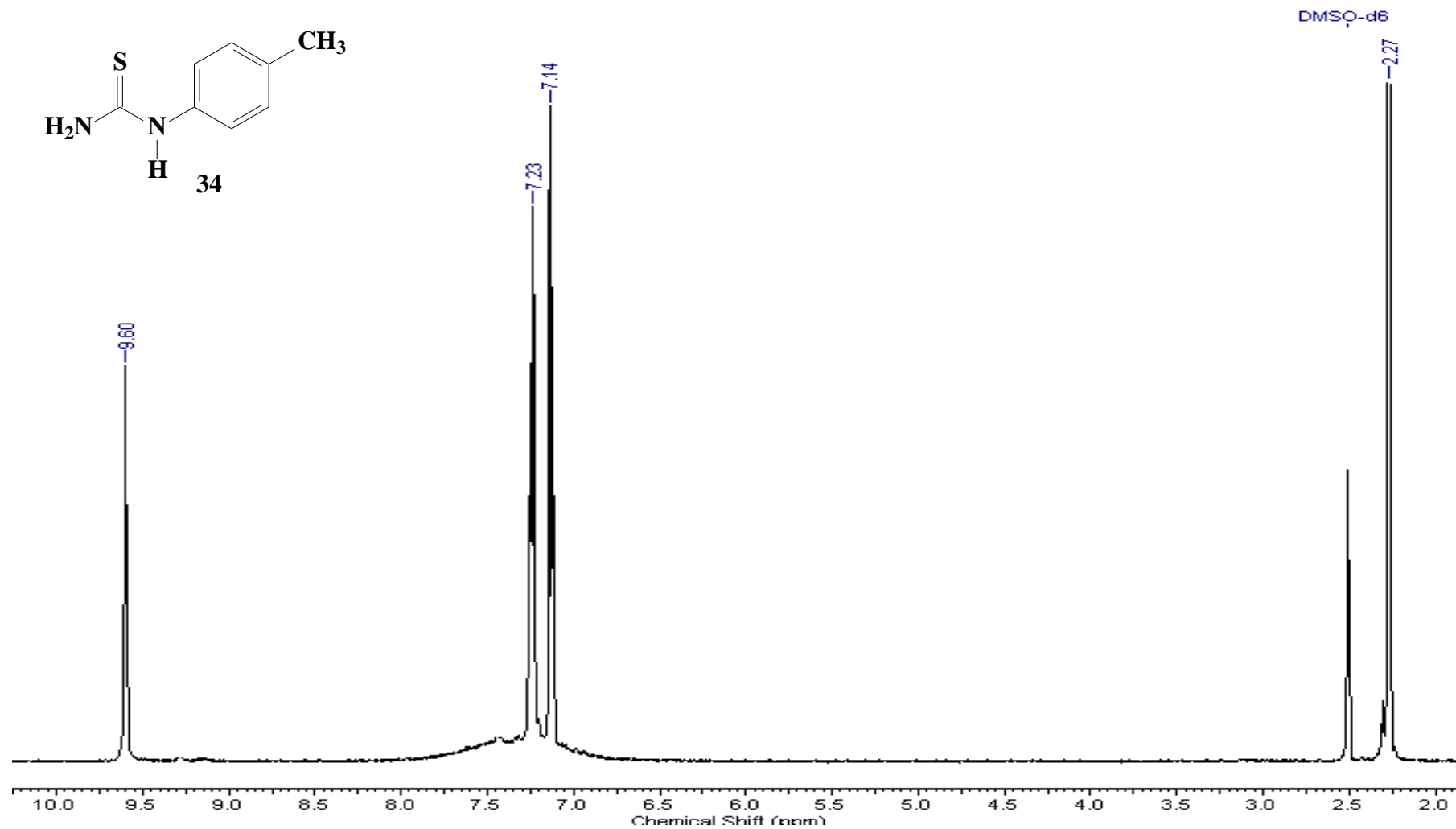
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1 ESPECTROS DAS TIOURÉIAS

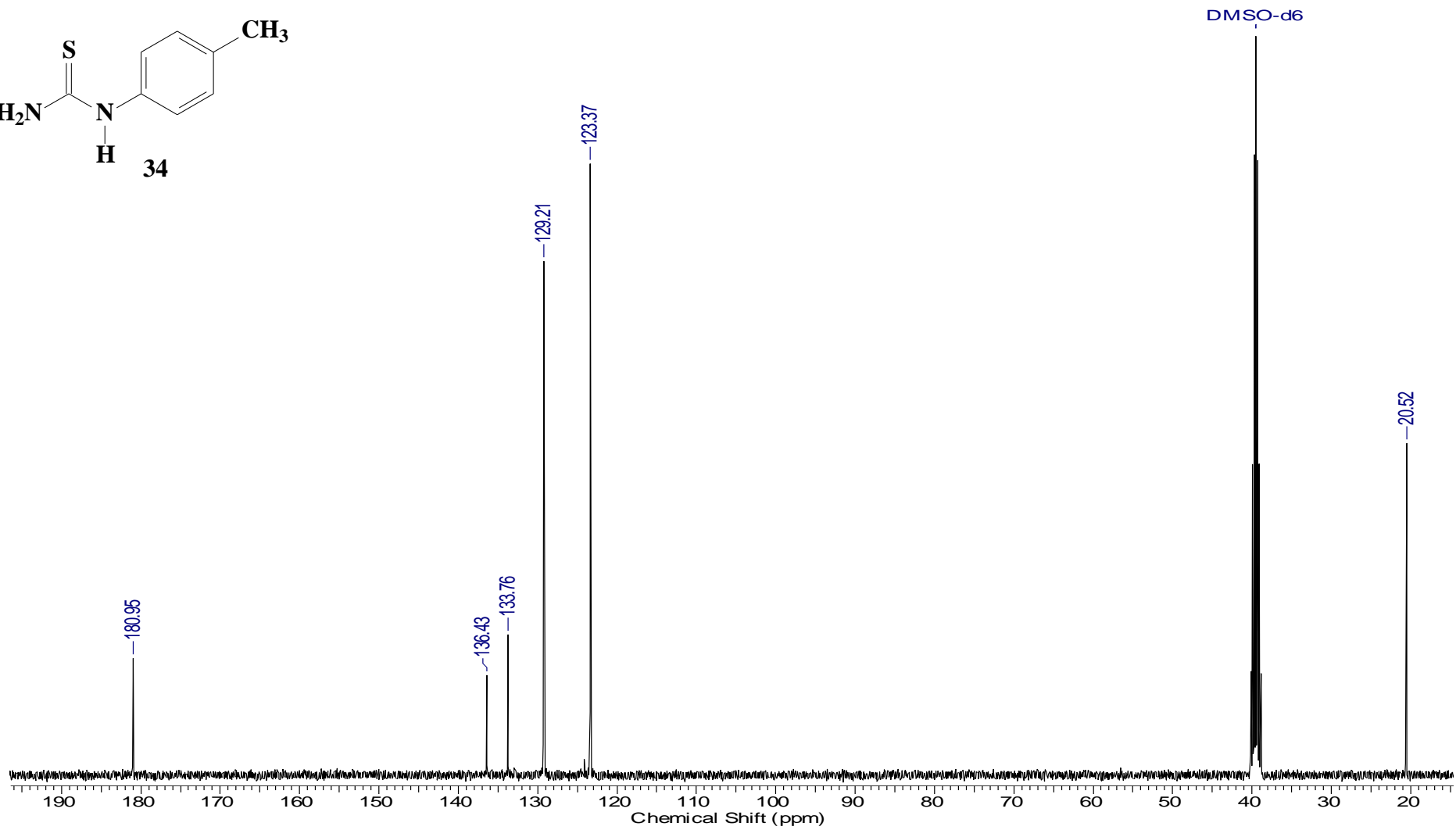
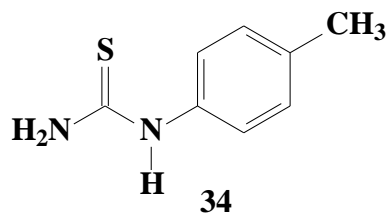
1.1 Espectro de IV da *p*-metil-feniltiouréia (34) obtido em pastilha de KBr



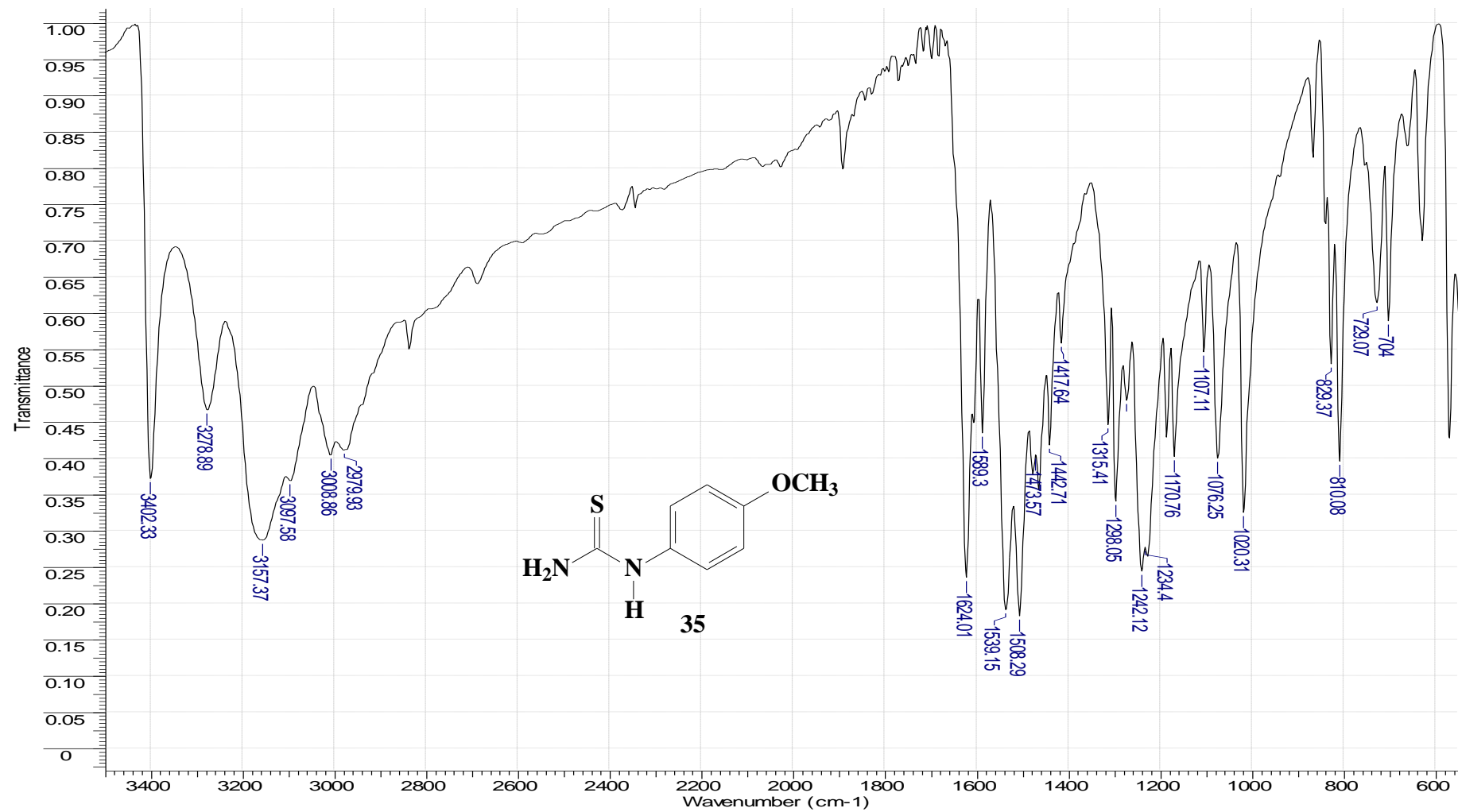
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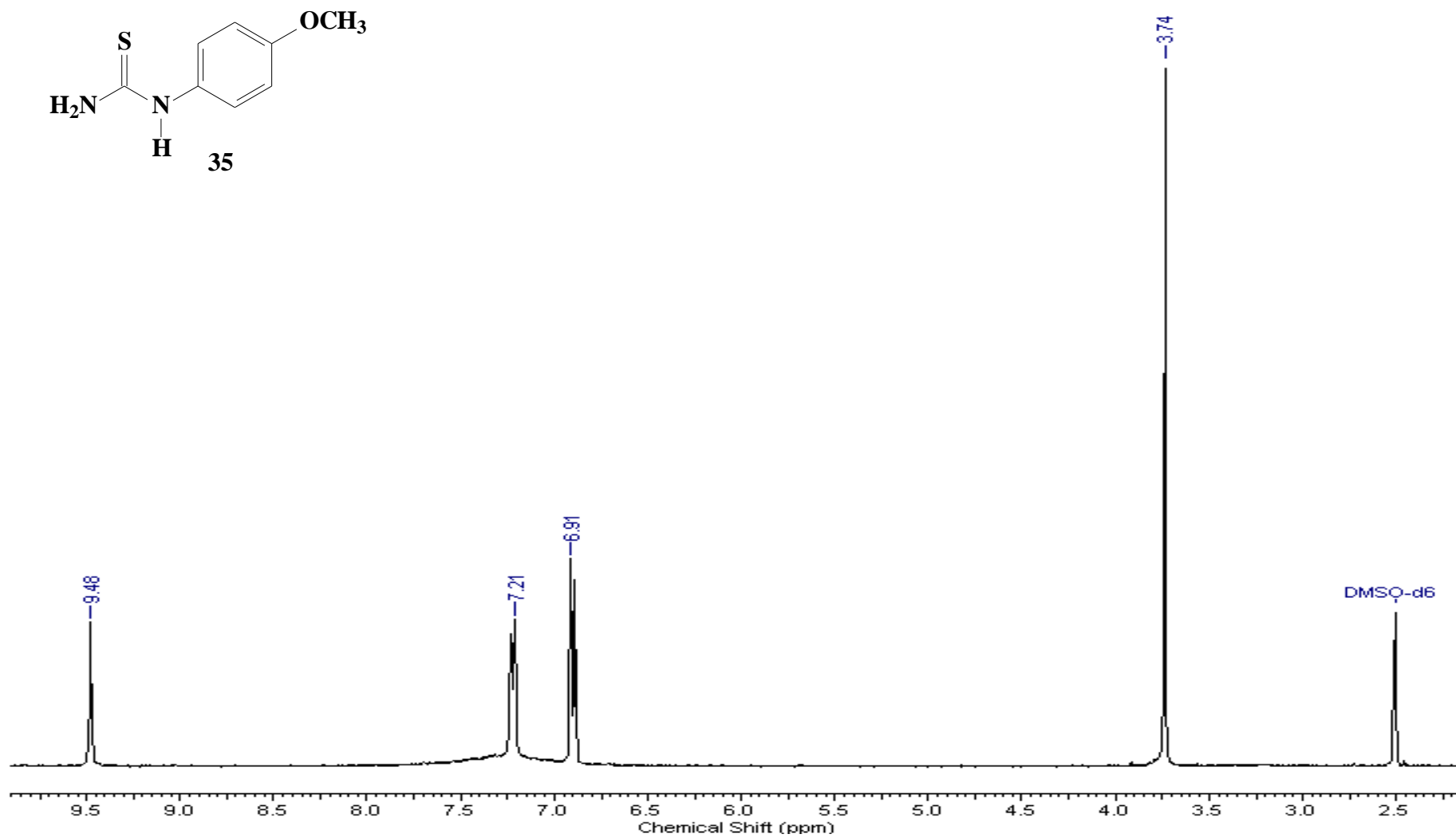
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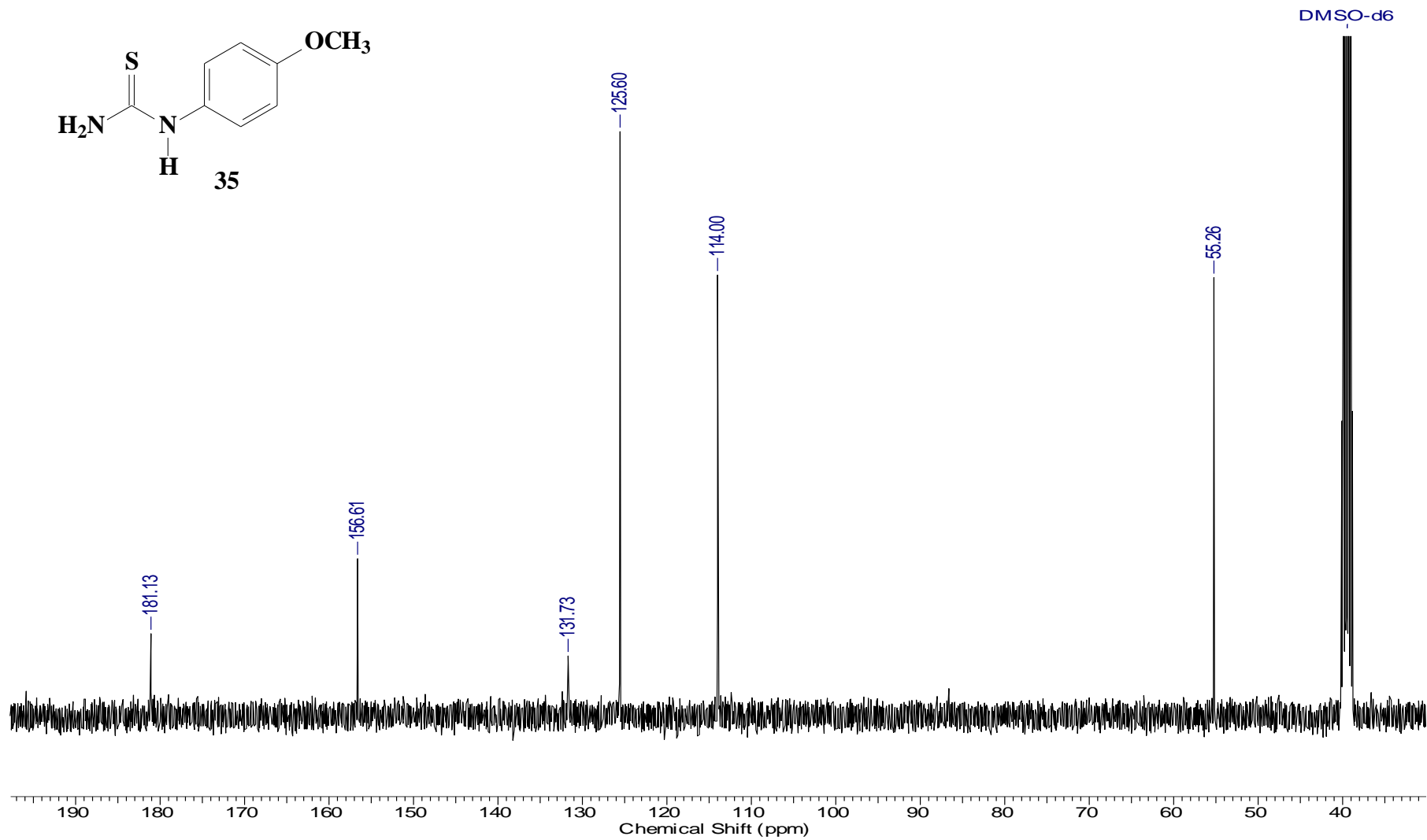
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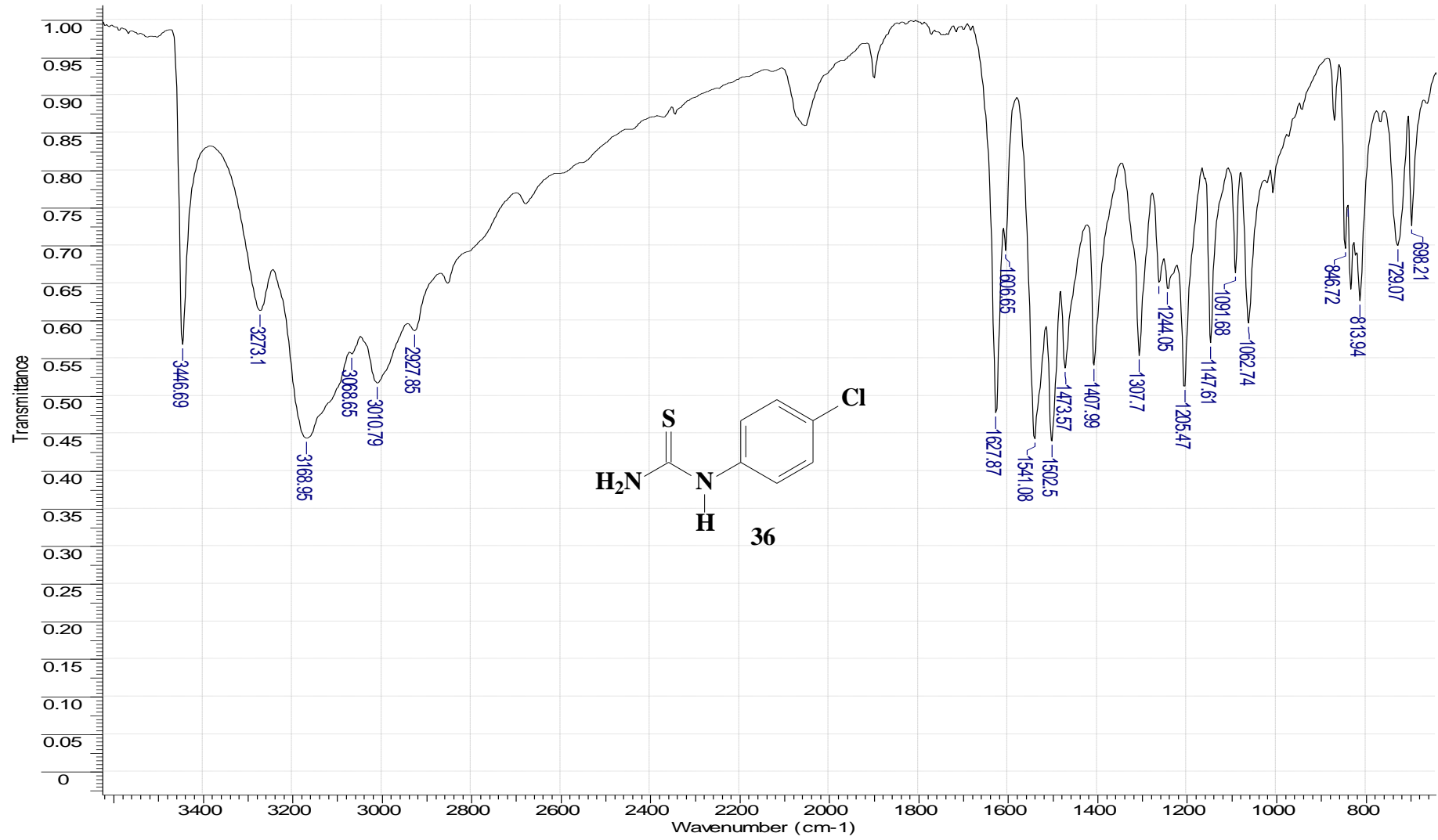
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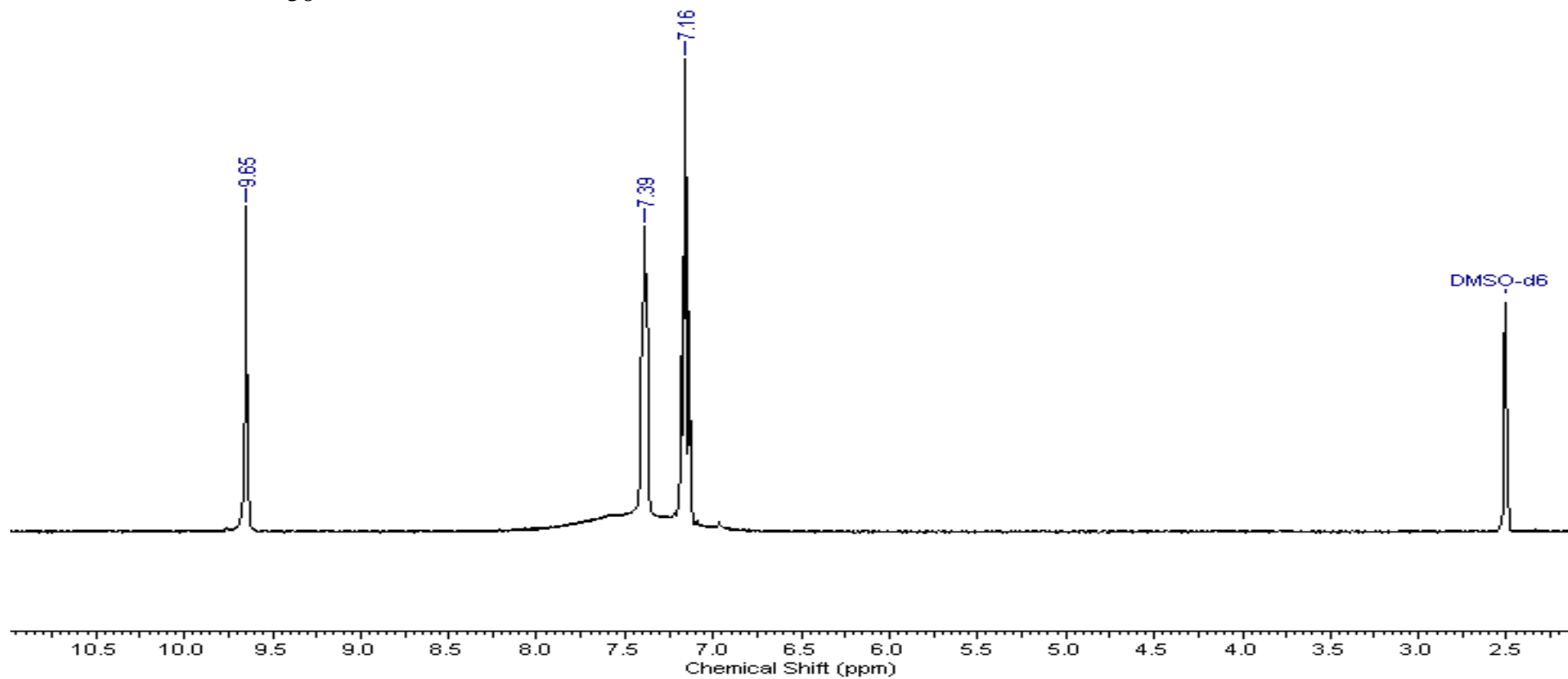
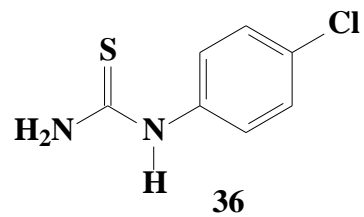
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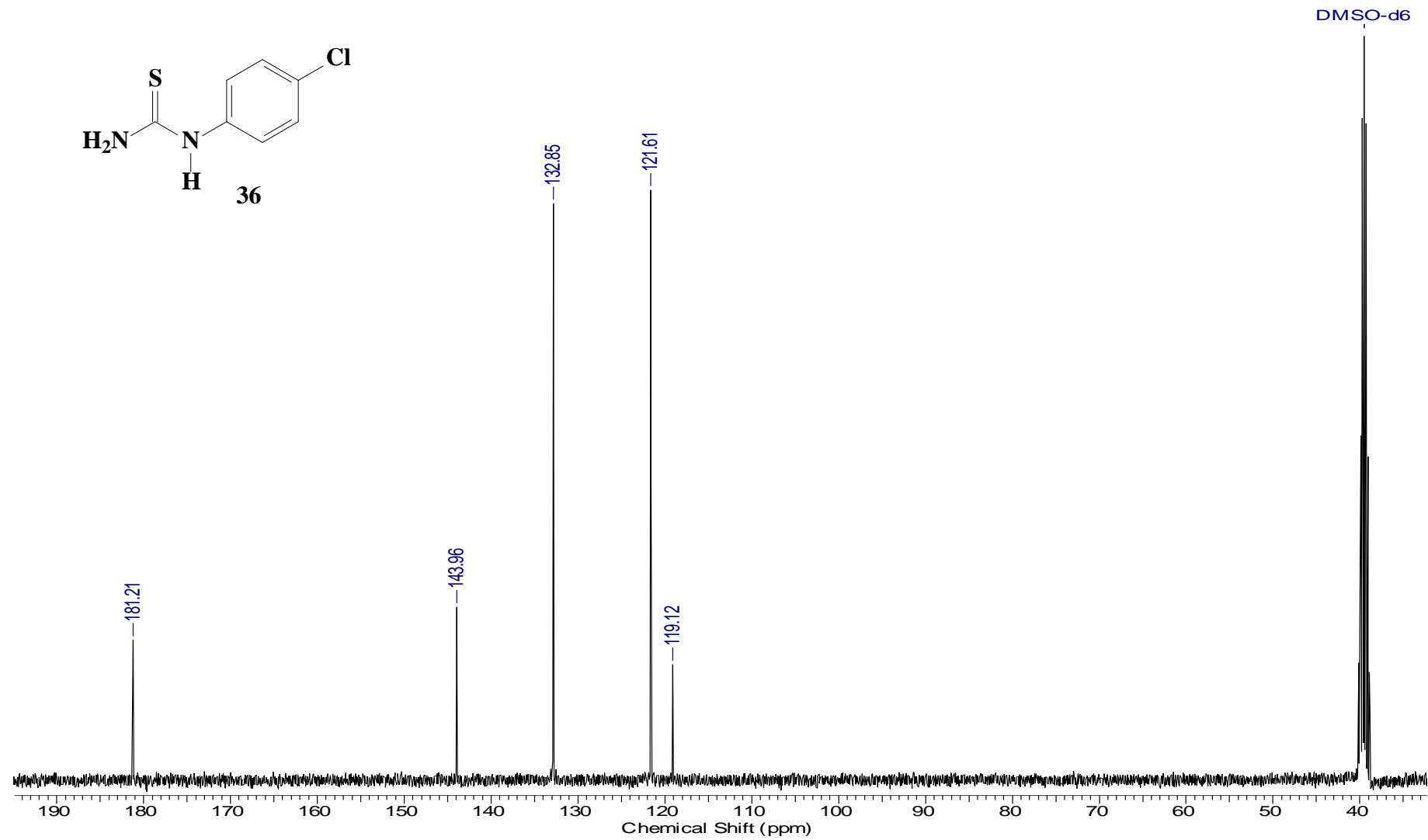
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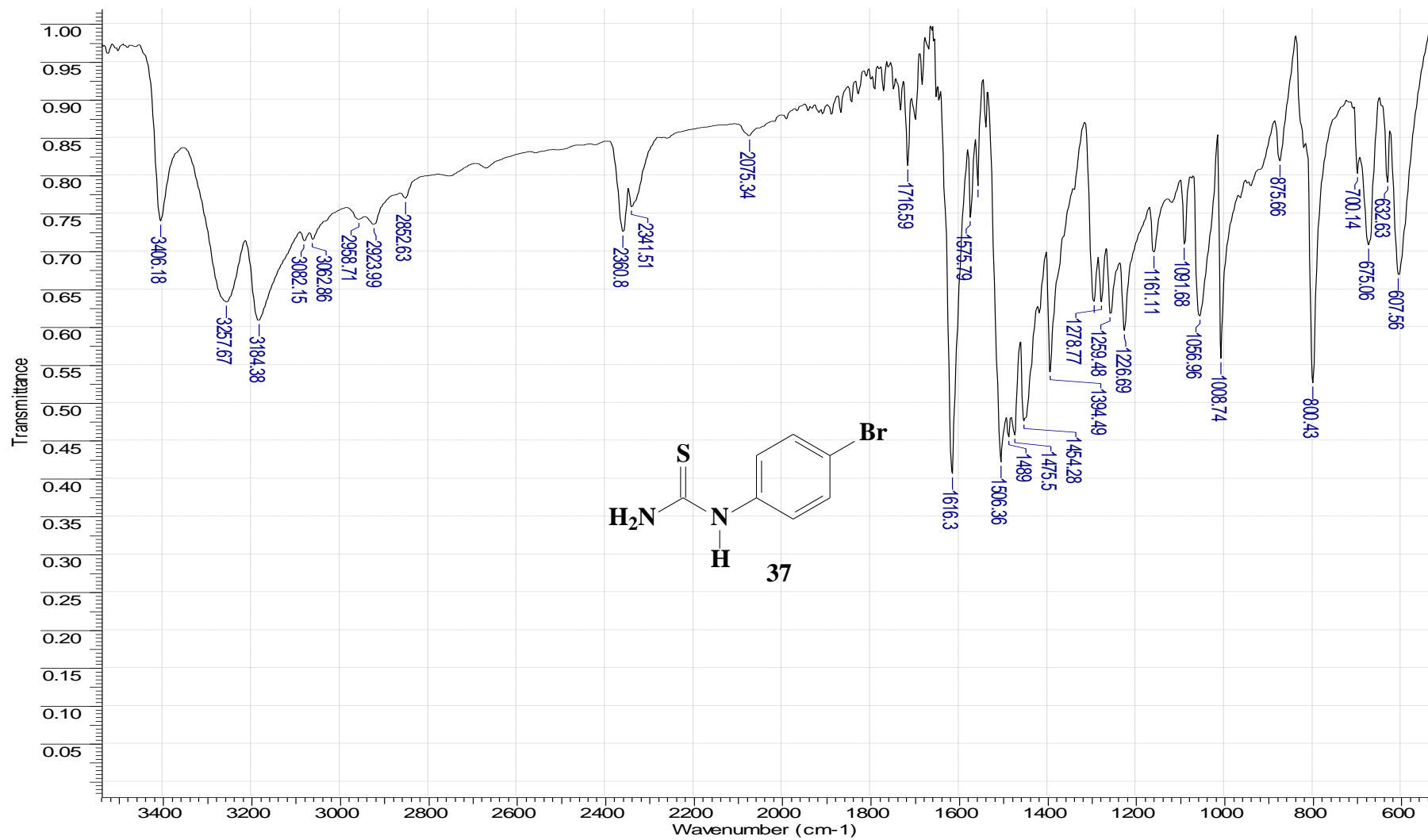
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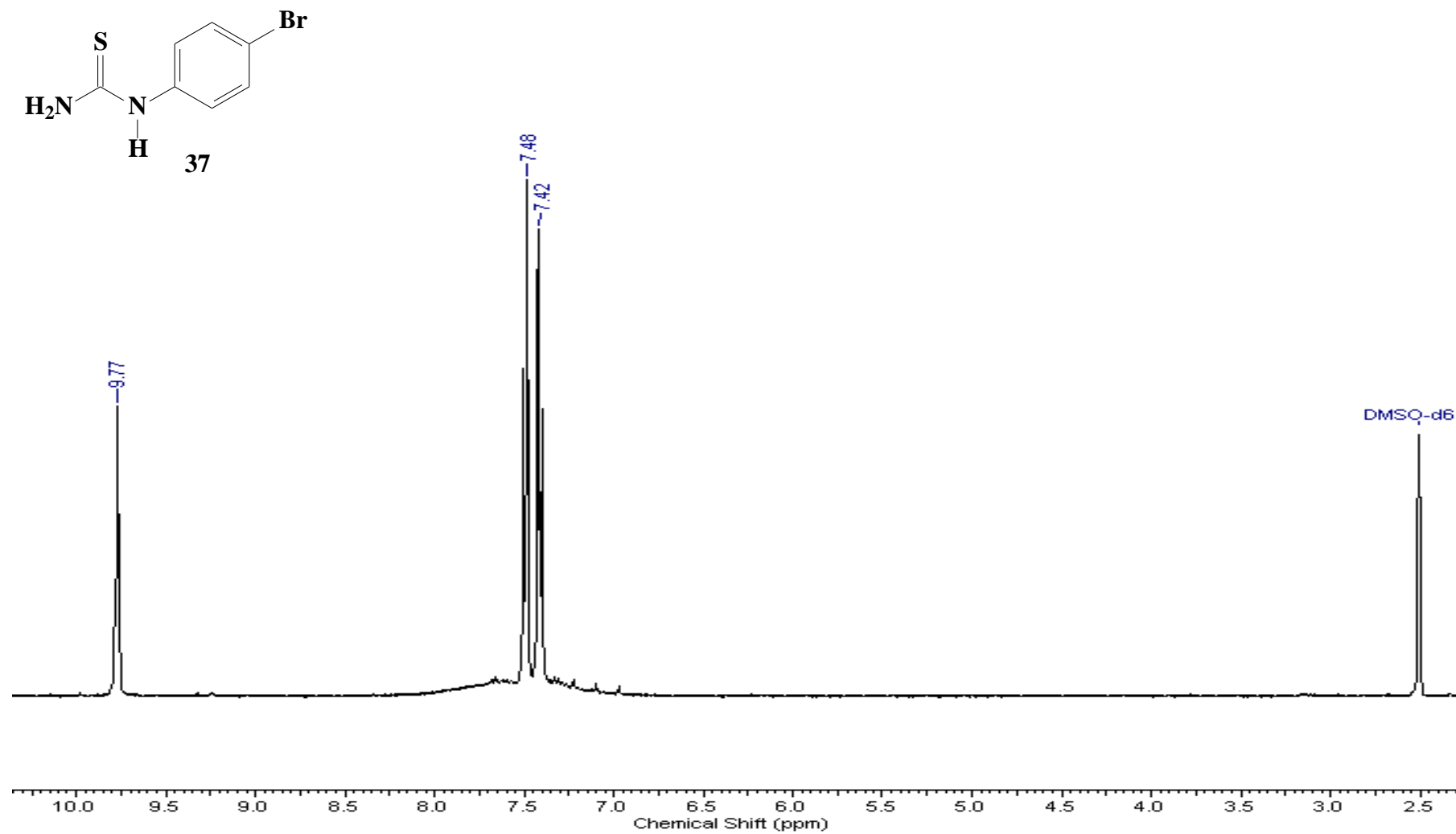
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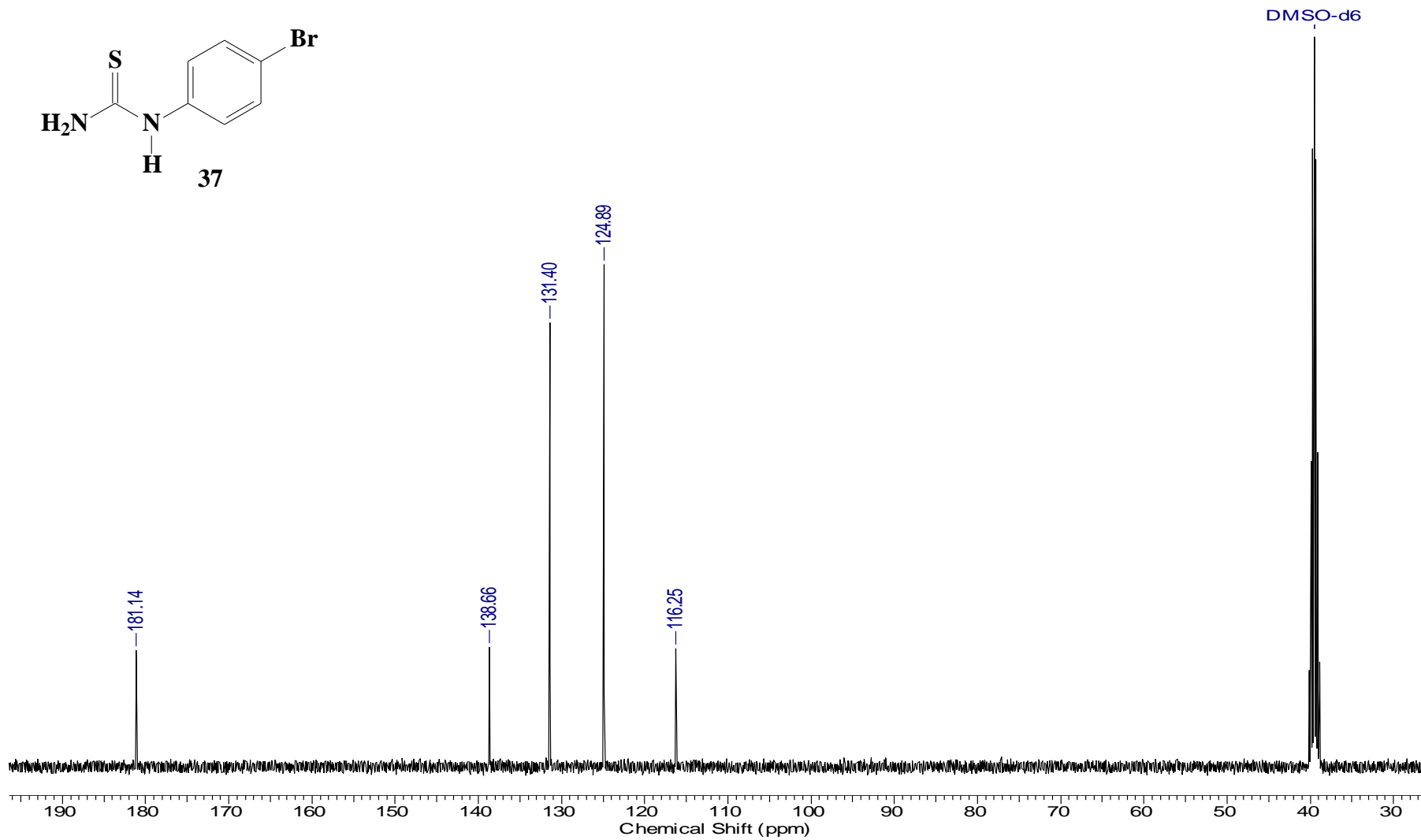
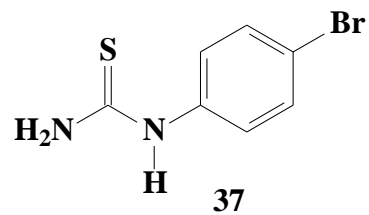
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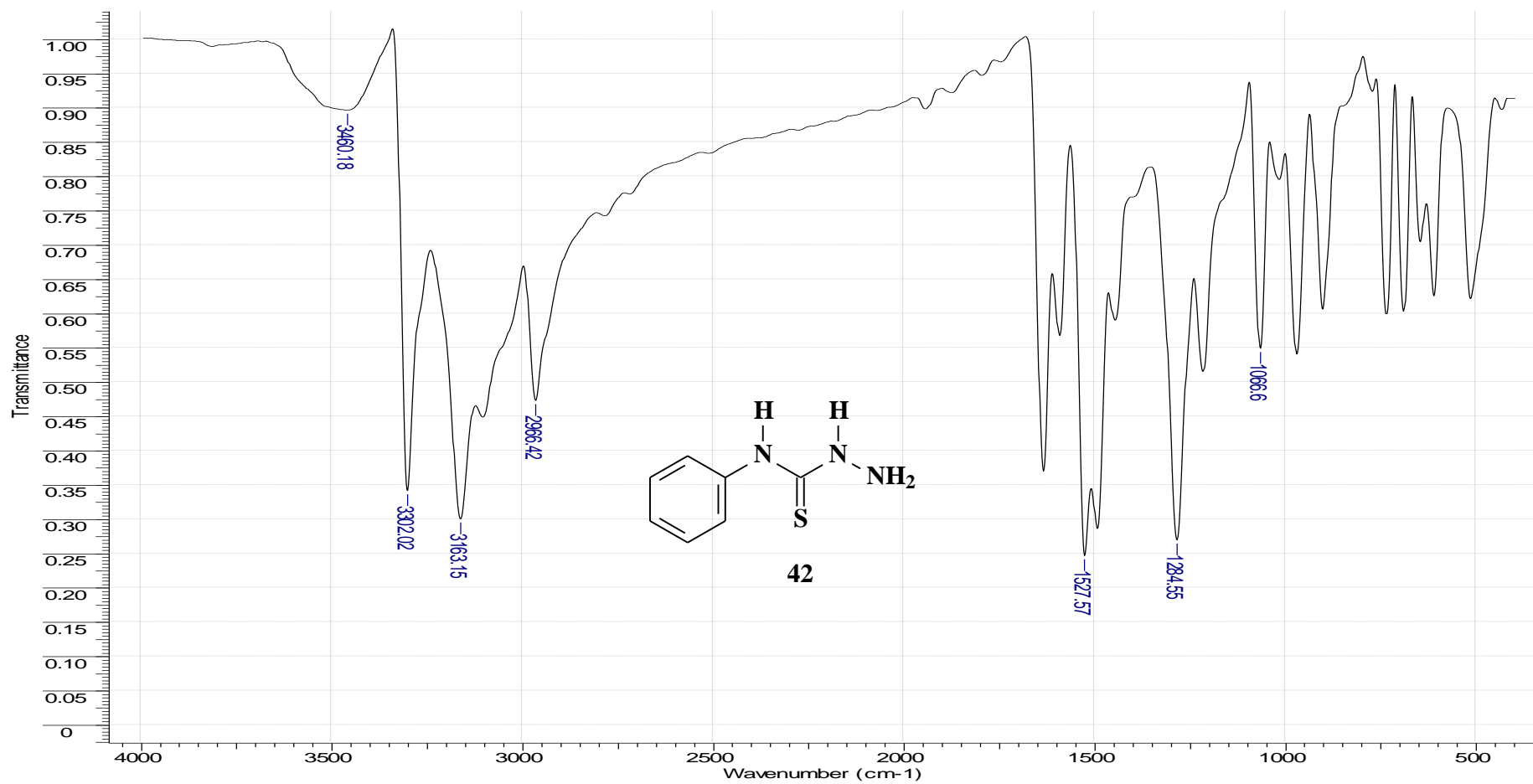


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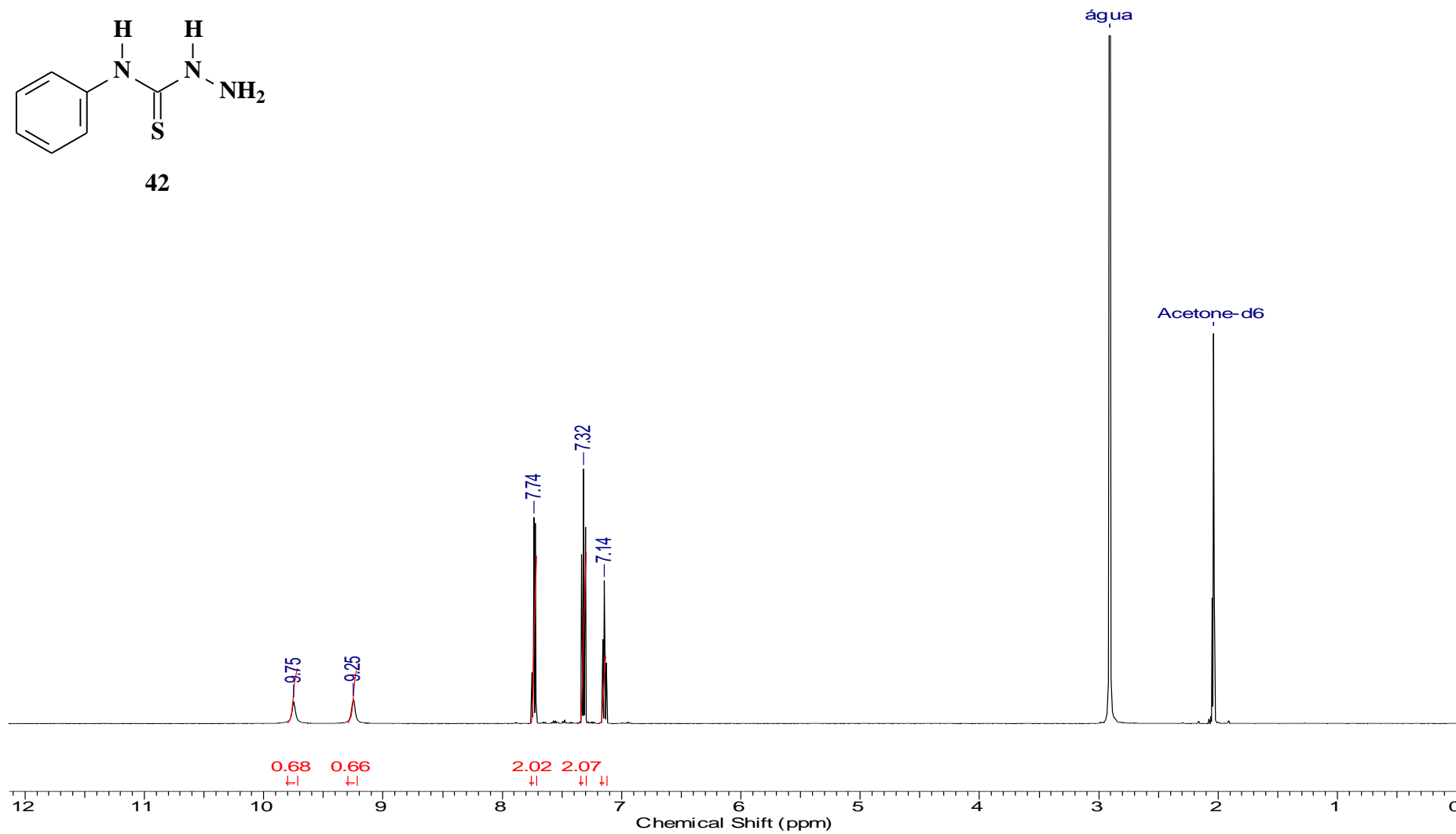
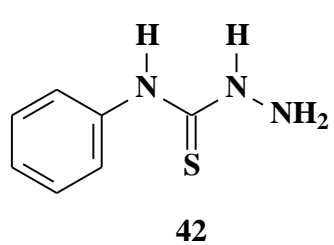


2 ESPECTROS DAS TIOSSEMICARBAZIDAS

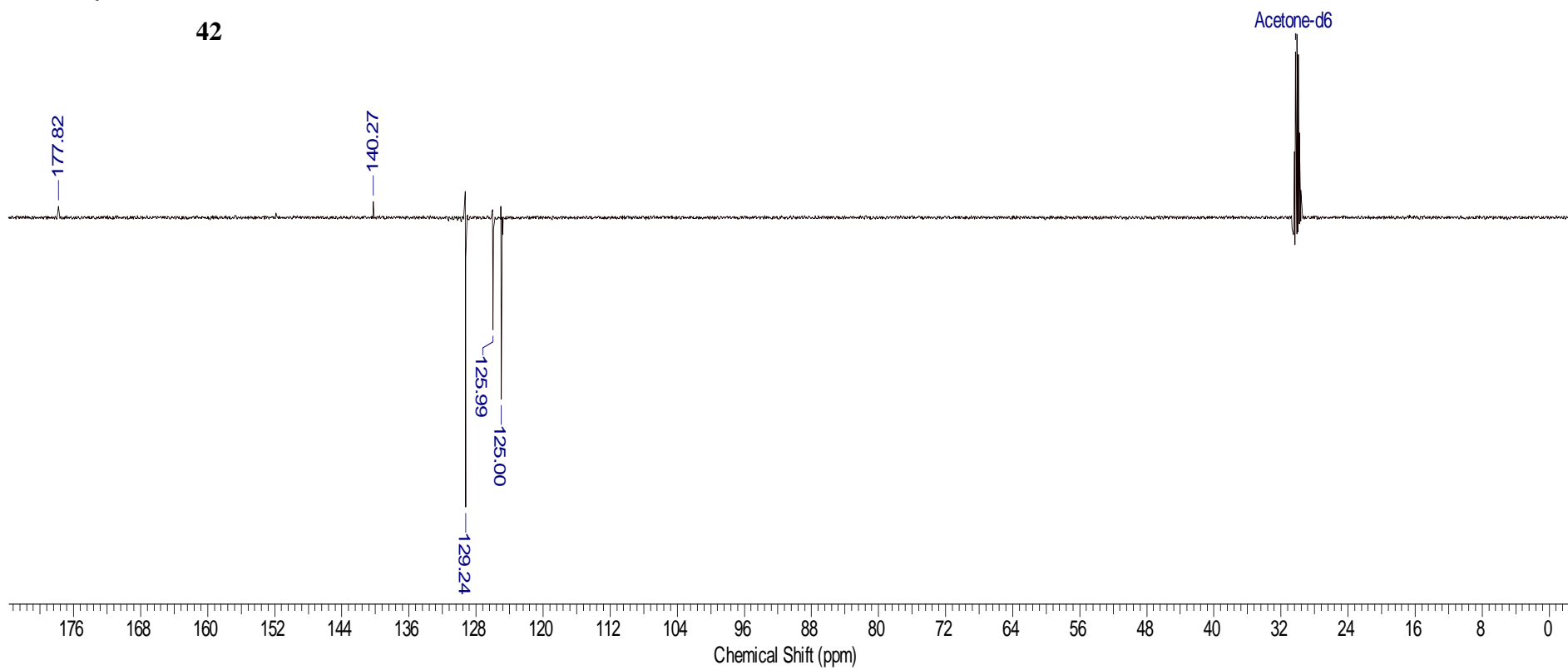
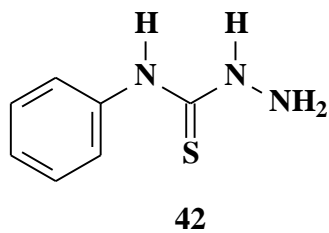
2.1 Espectro de RMN H¹ da 4-fenil-tiossemicarbazida (42) obtido em pastilha de KBr



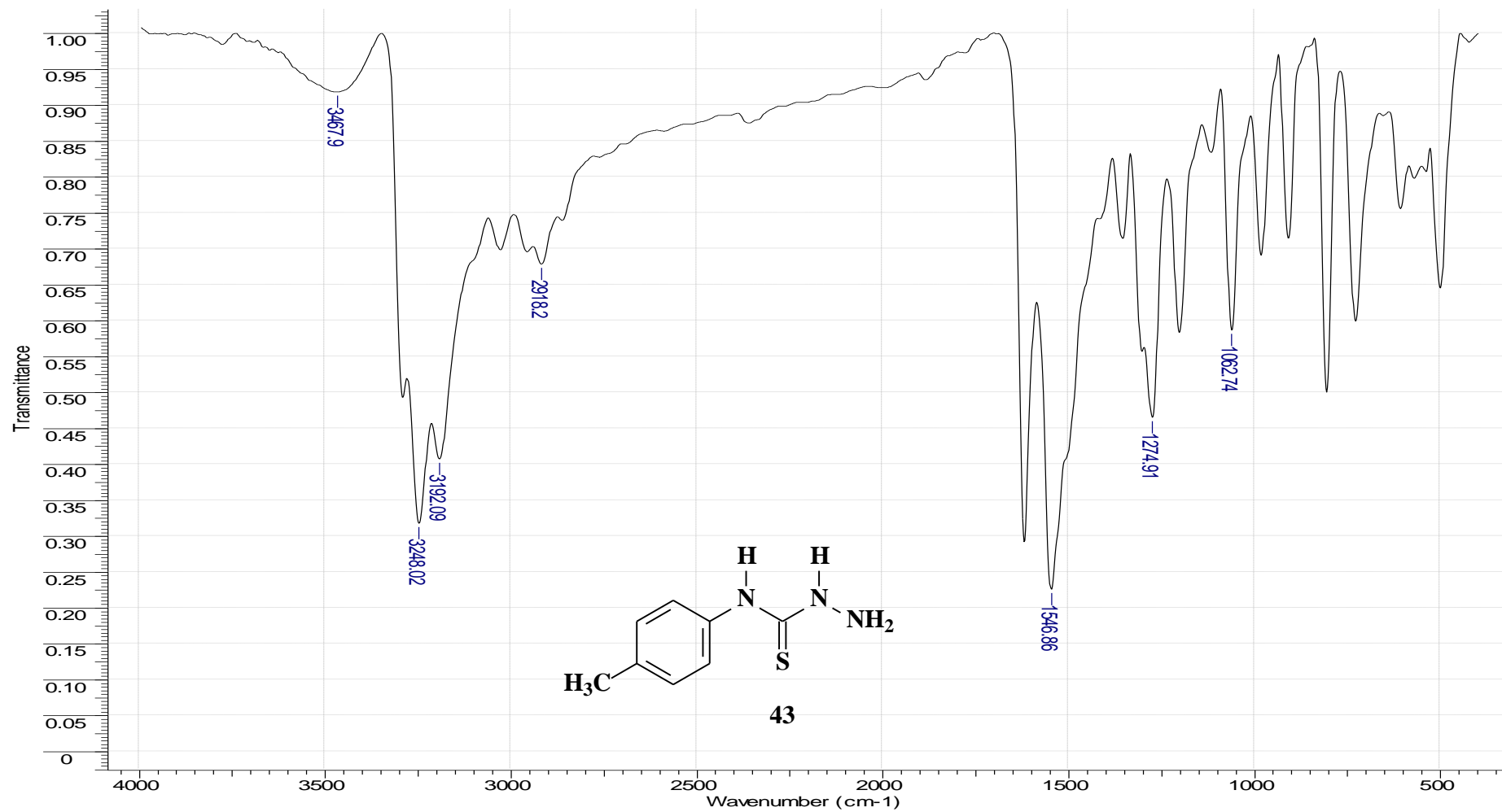
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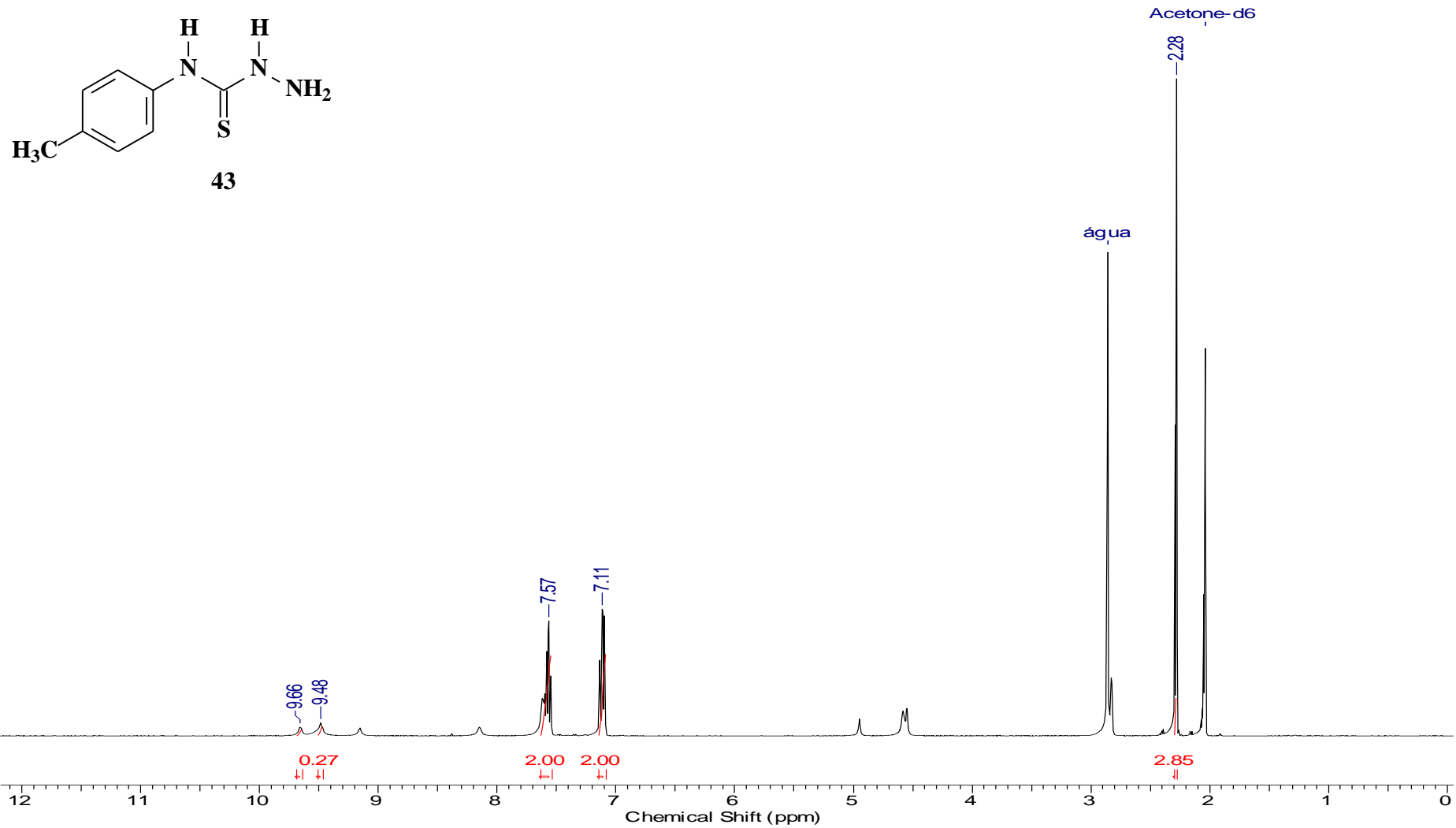
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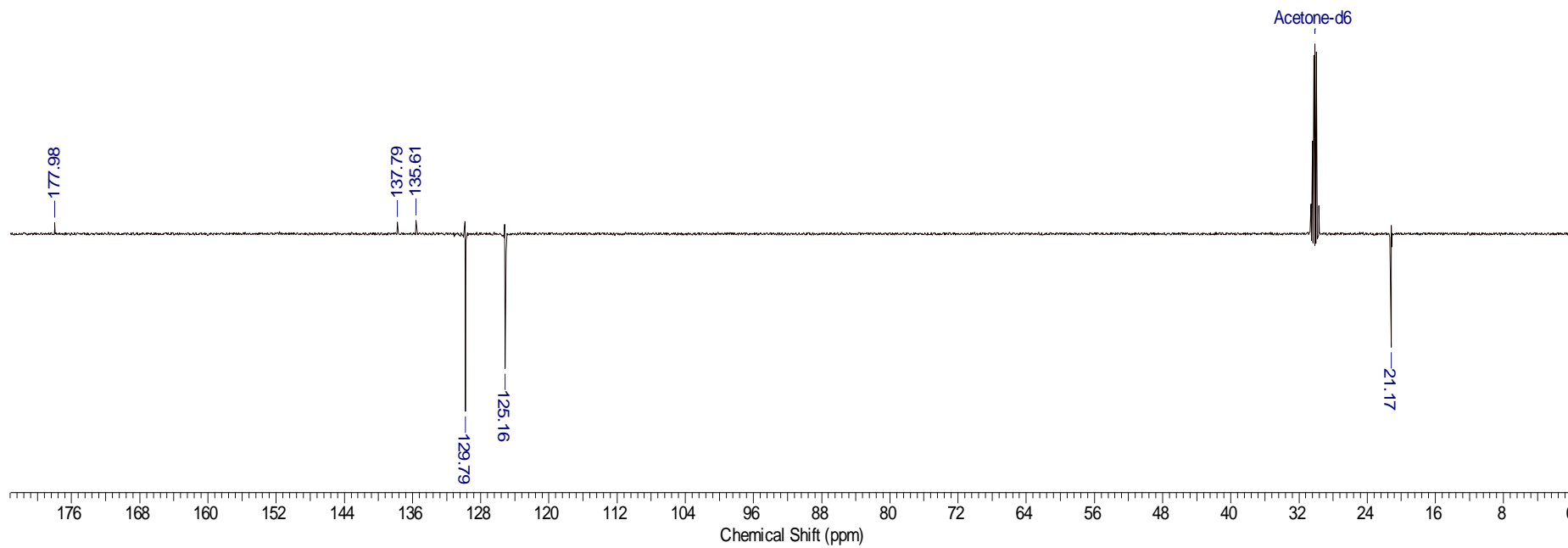
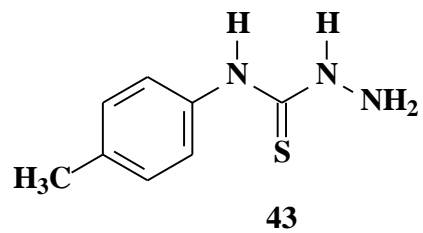
2.4 Espectro de IV da 4-(*p*-metil-fenil)-tiossemicarbazida (43) obtido em pastilha de KBr



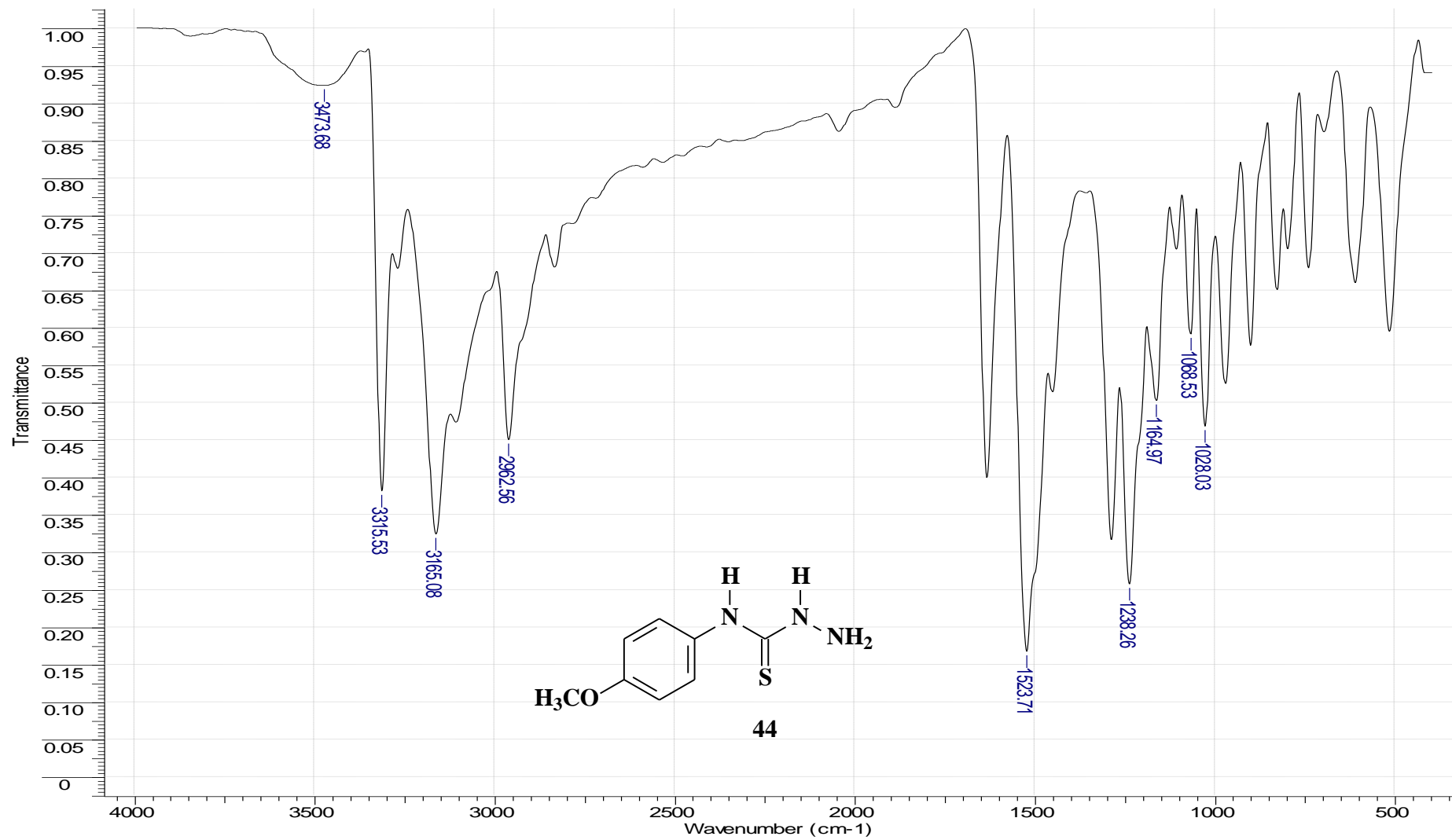
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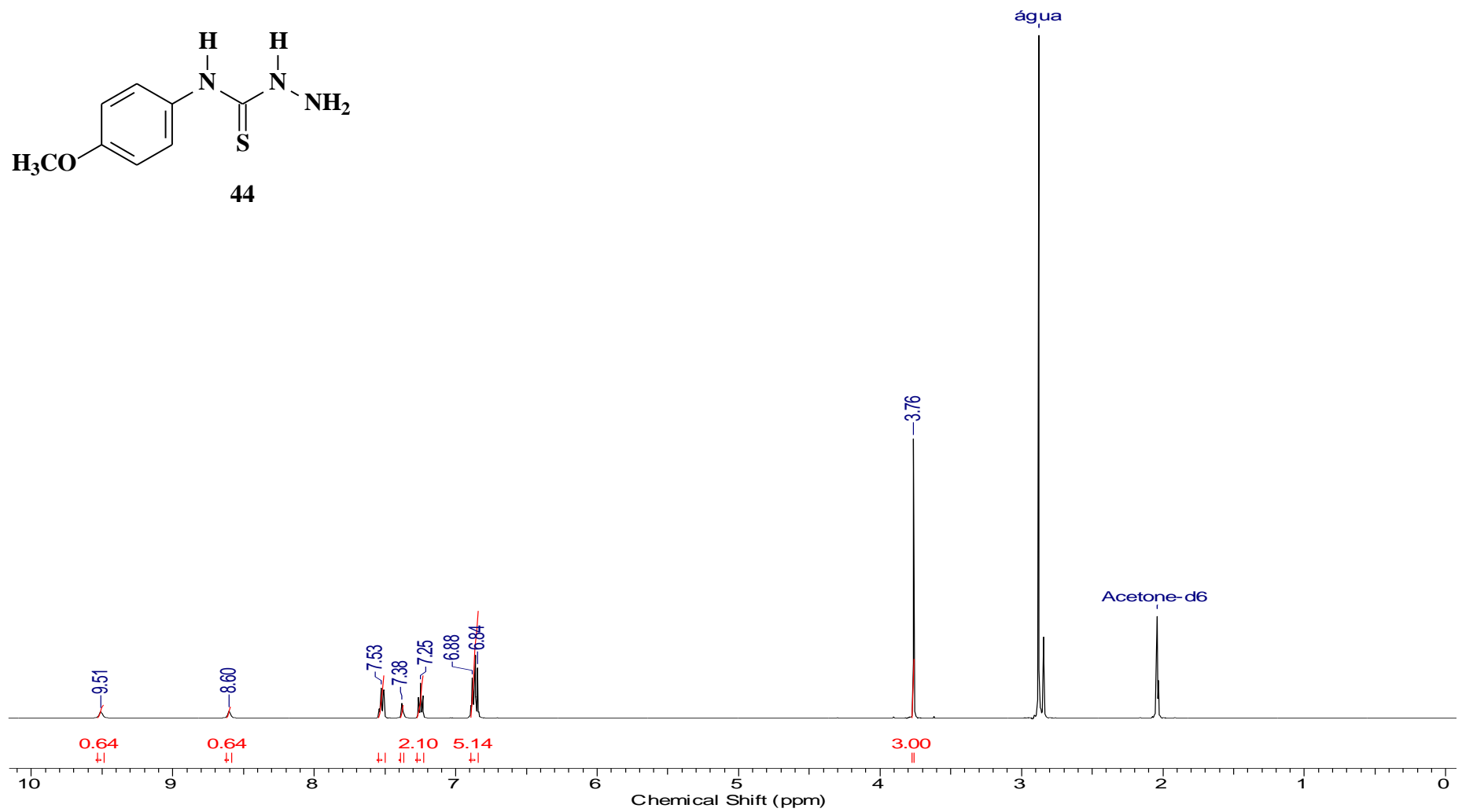
2.6 Espectro de RMN C¹³ (DEPTQ) da 4-(*p*-metil-fenil)-tiossemicarbazida (43) obtido em acetona-*d*₆



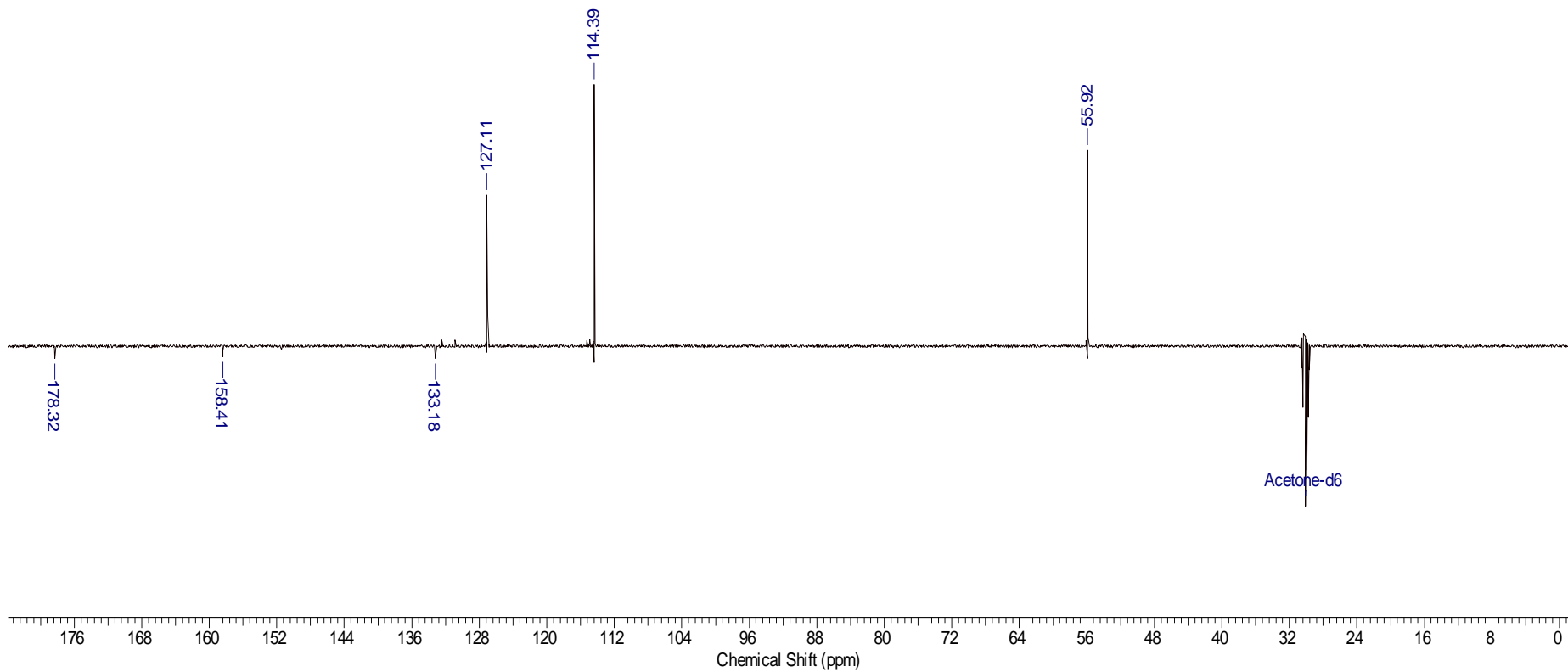
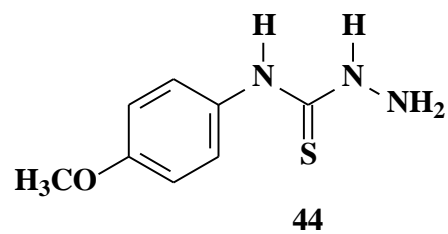
2.7 Espectro de IV da 4-(*p*-metoxi-fenil)-tiossemicarbazida (44) obtido em pastilha de KBr



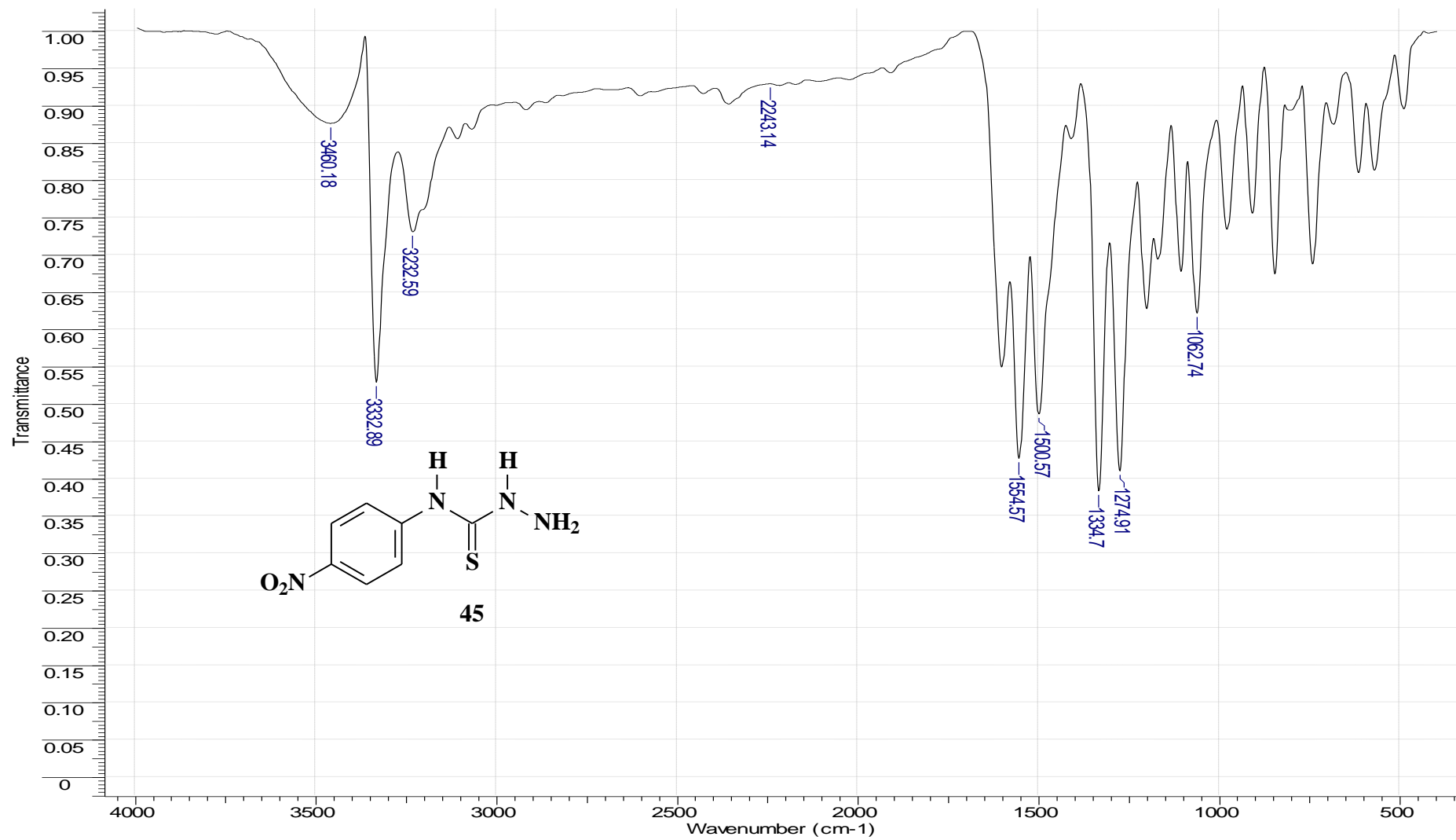
2.8 Espectro de RMN H¹ da 4-(*p*-metoxi-fenil)-tiossemicarbazida (44) obtido em acetona-*d*₆



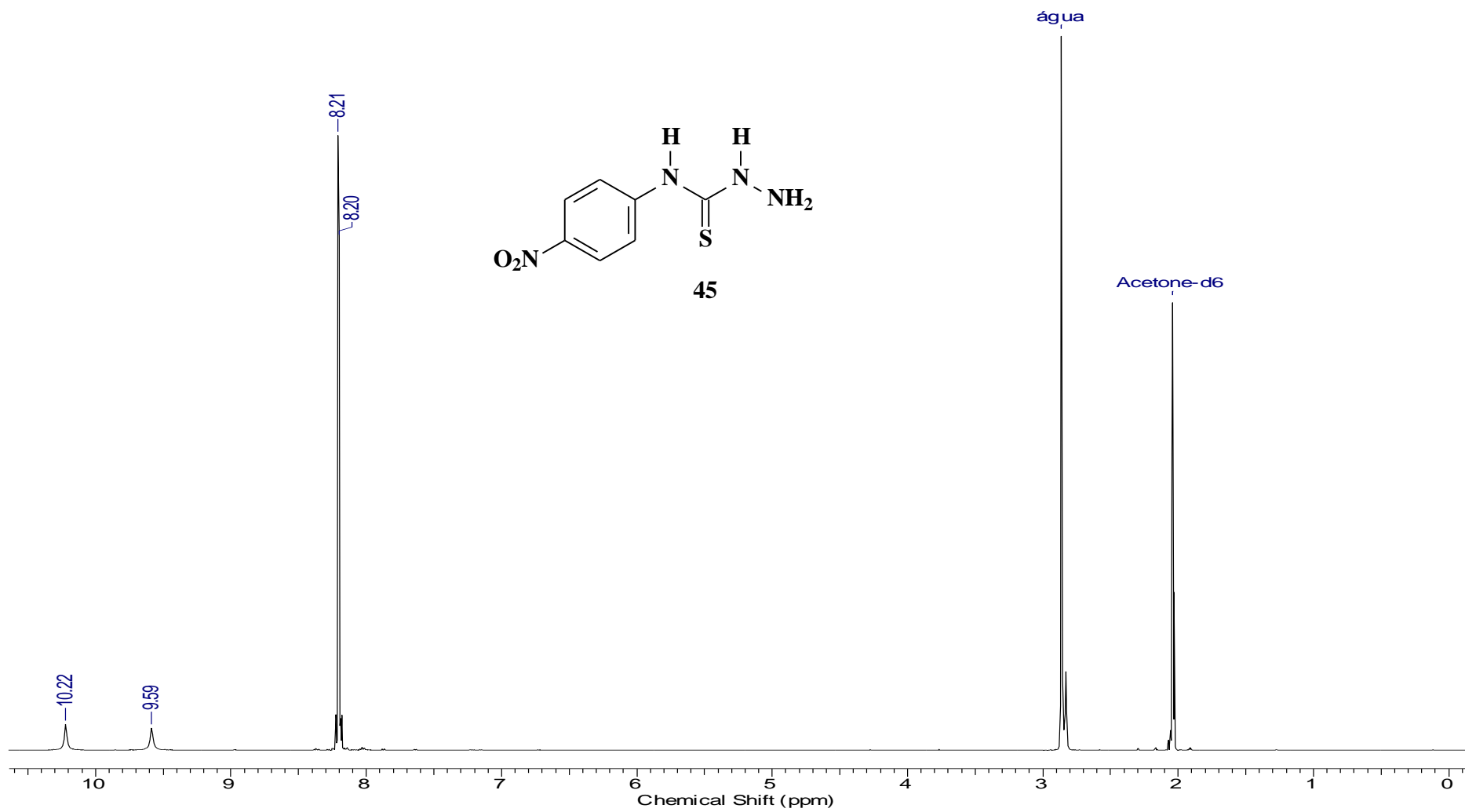
2.9 Espectro de RMN C¹³ (DEPTQ) da 4-(*p*-metoxi-fenil)-tiossemicarbazida (44) obtido em acetona-*d*₆



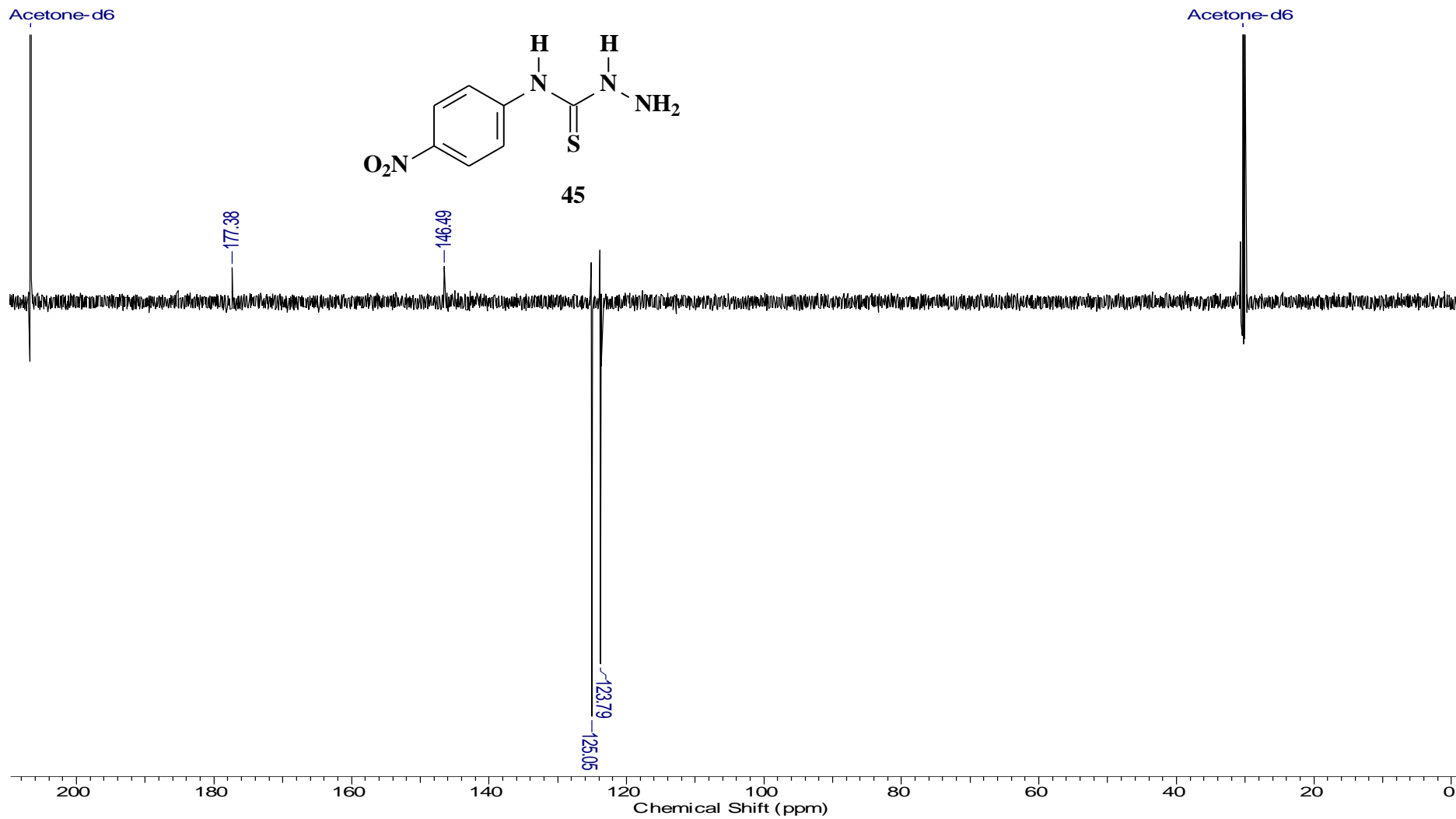
2.10 Espectro de IV da 4-(*p*-nitro-fenil)-tiossemicarbazida (45) obtido em pastilha de KBr



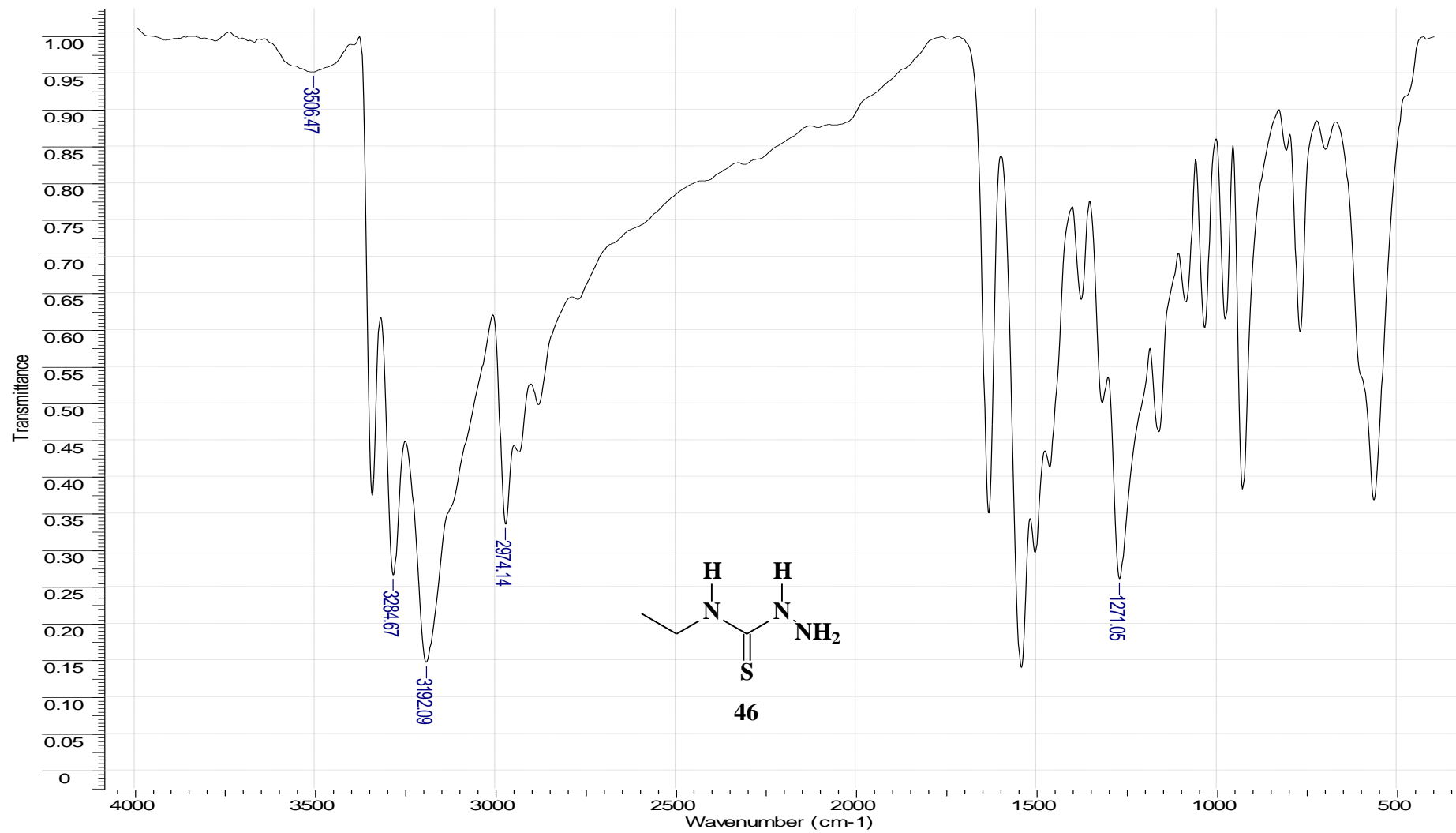
2.11 Espectro de RMN ^1H da 4-(*p*-nitro-fenil)-tiossemicarbazida (45) obtido em acetona- d_6



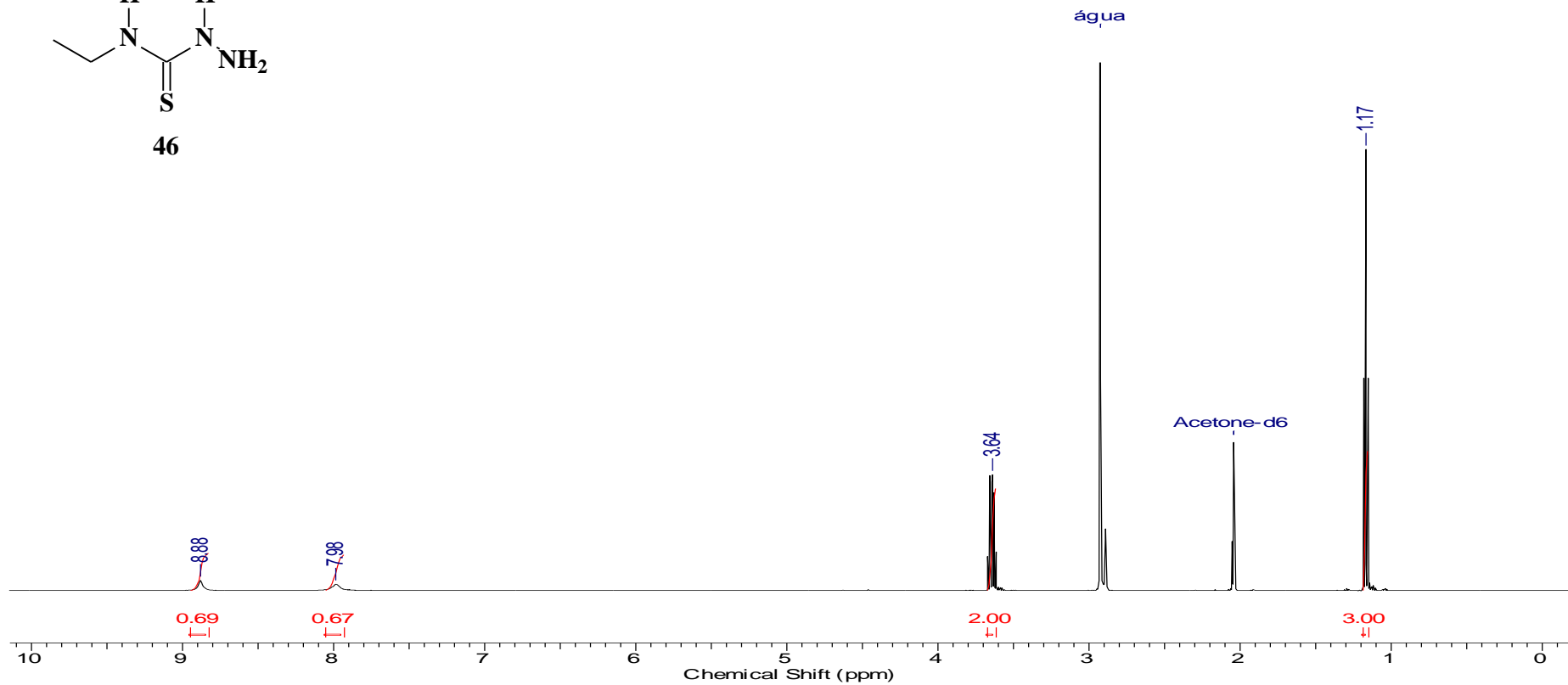
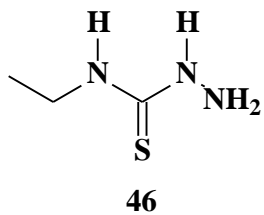
2.12 Espectro de RMN C^{13} (DEPTQ) da 4-(*p*-nitro-fenil)-tiossemicarbazida (45) obtido em acetona- d_6



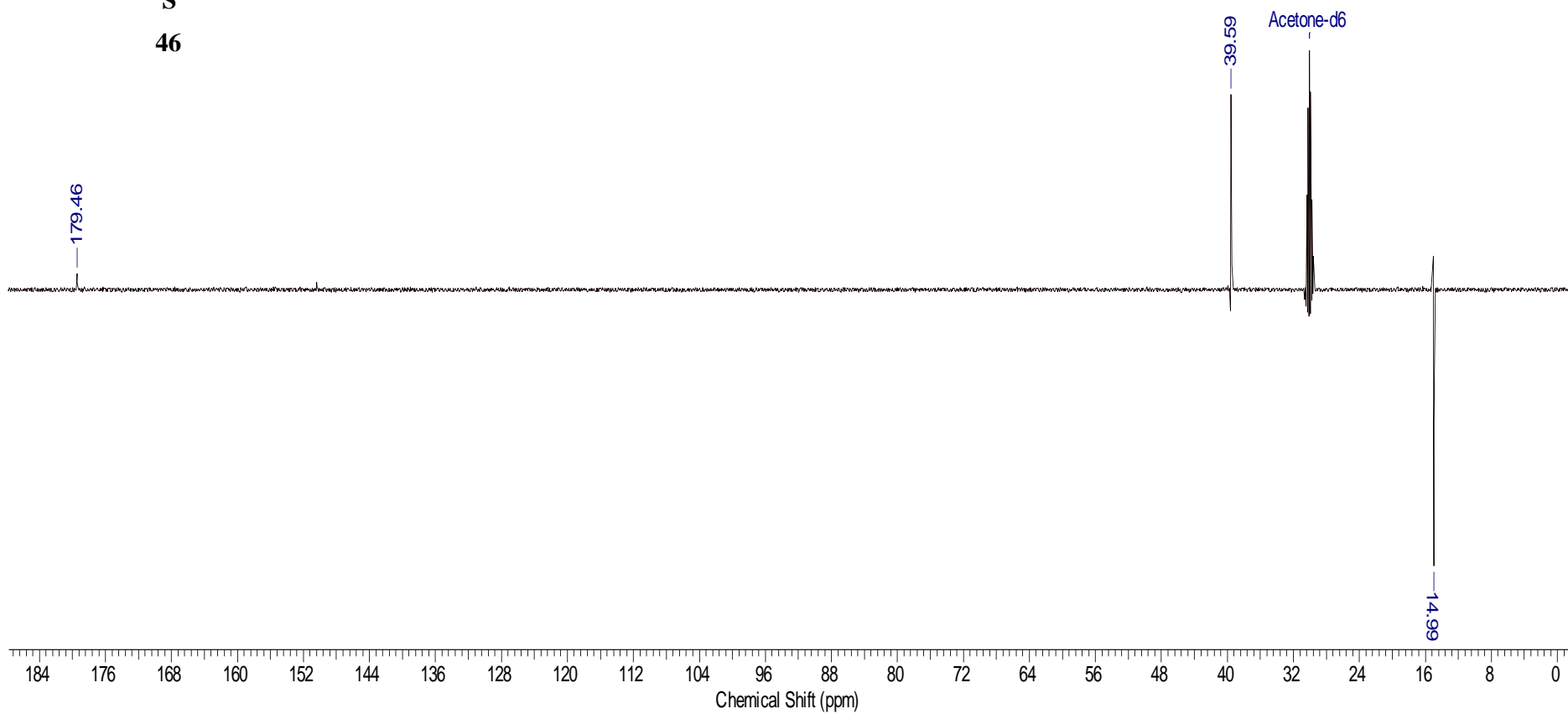
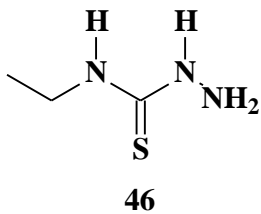
2.13 Espectro de IV da 4-etil-tiossemicarbazida (46) obtido em pastilha de KBr



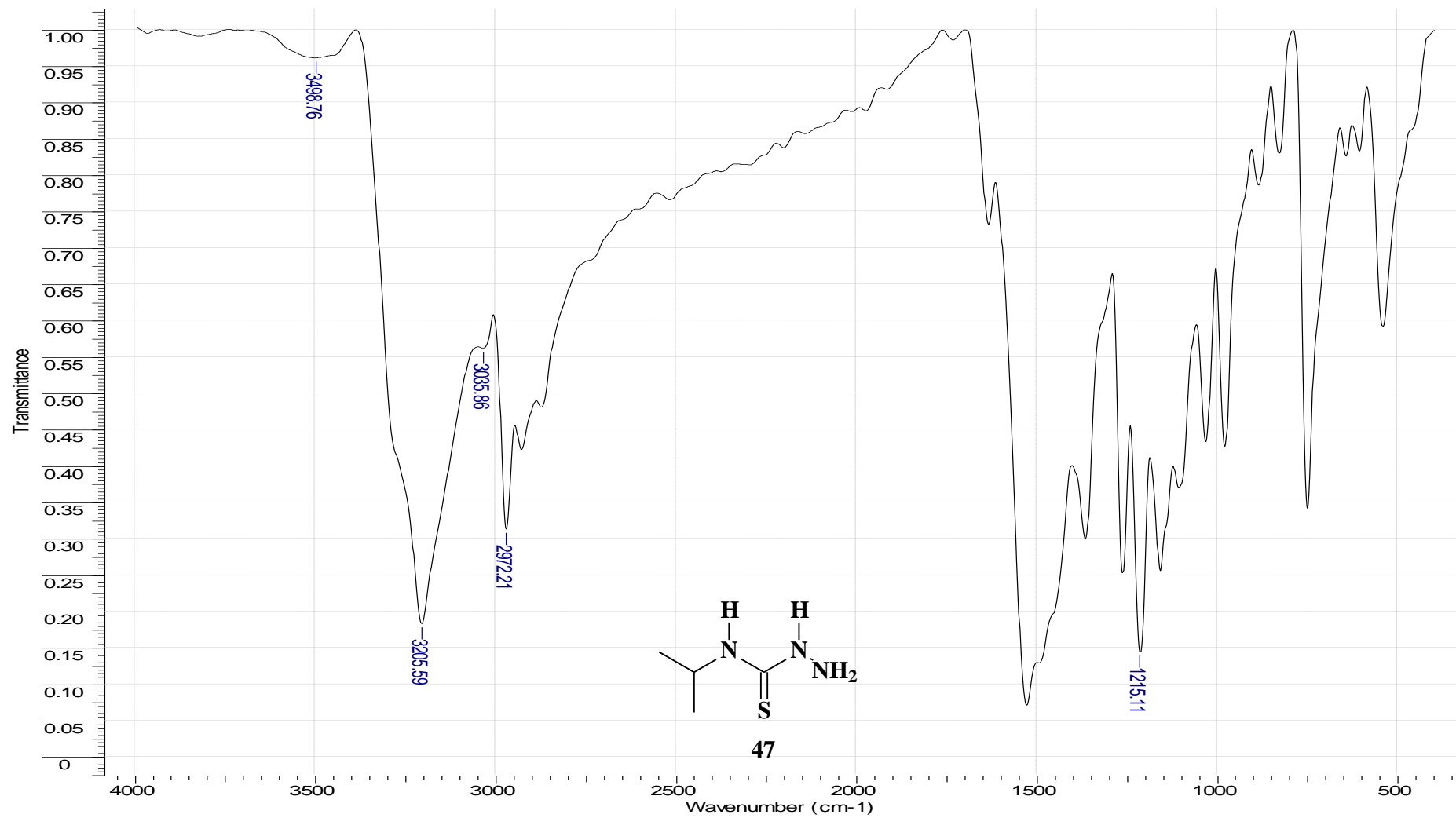
2.14 Espectro de RMN H¹ da 4-etil-tiossemicarbazida (46) obtido em acetona-d₆



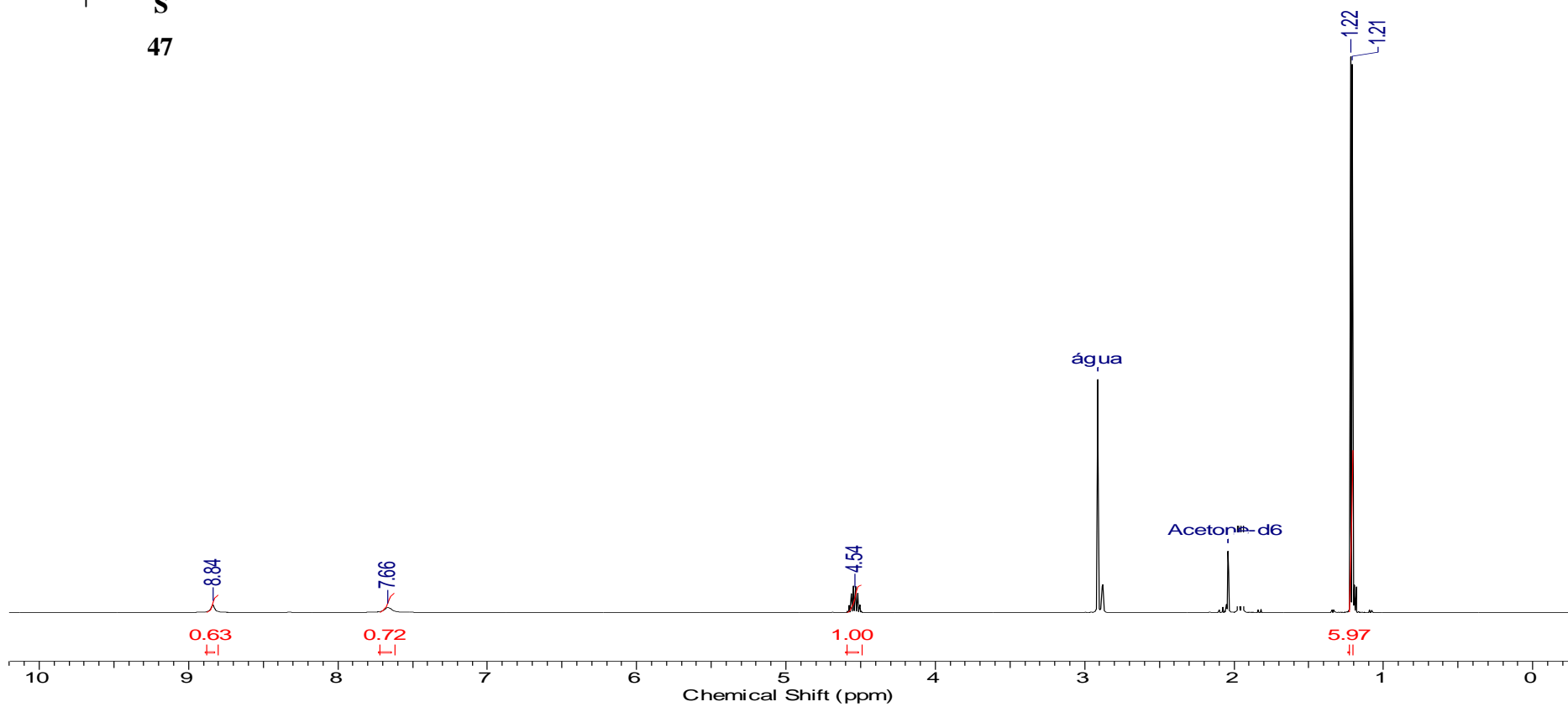
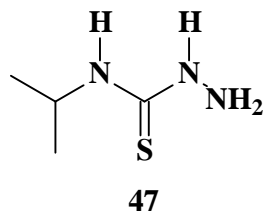
2.15 Espectro de RMN C^{13} (DEPTQ) da 4-etil-tiossemicarbazida (46) obtido em acetona- d_6



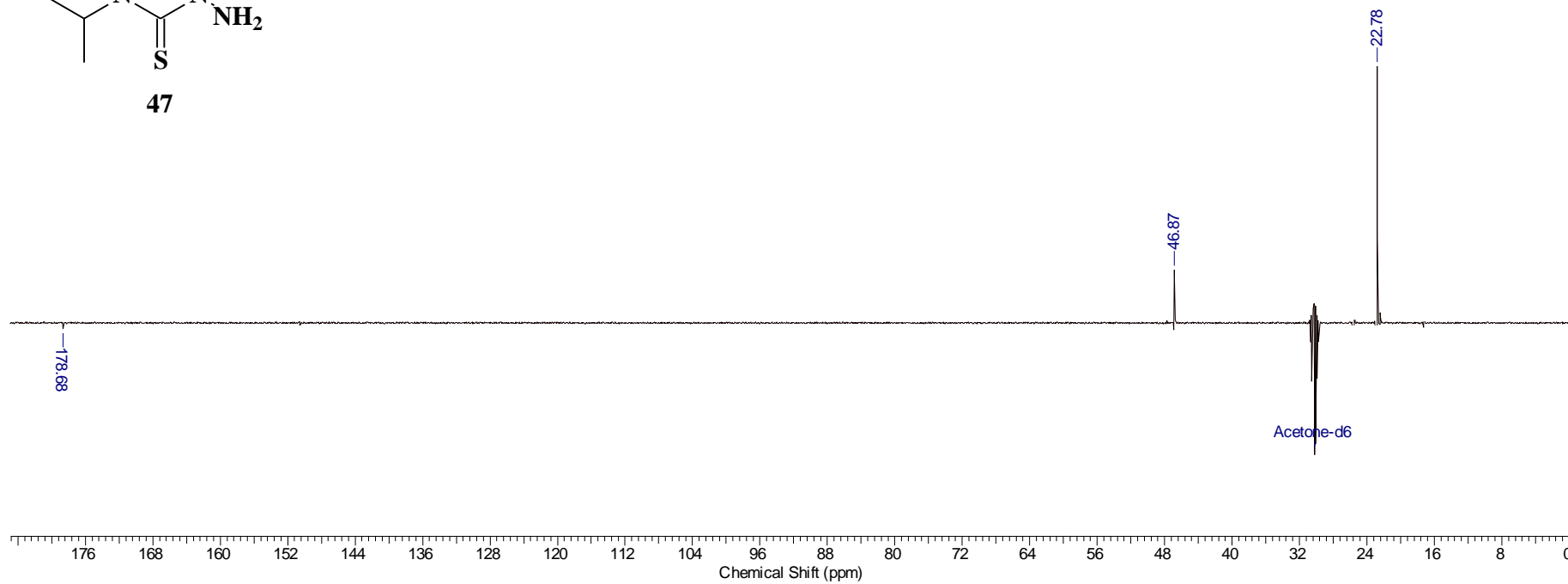
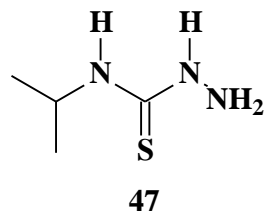
2.16 Espectro de IV da 4-isopropil-tiossemicarbazida (47) obtido em pastilha de KBr



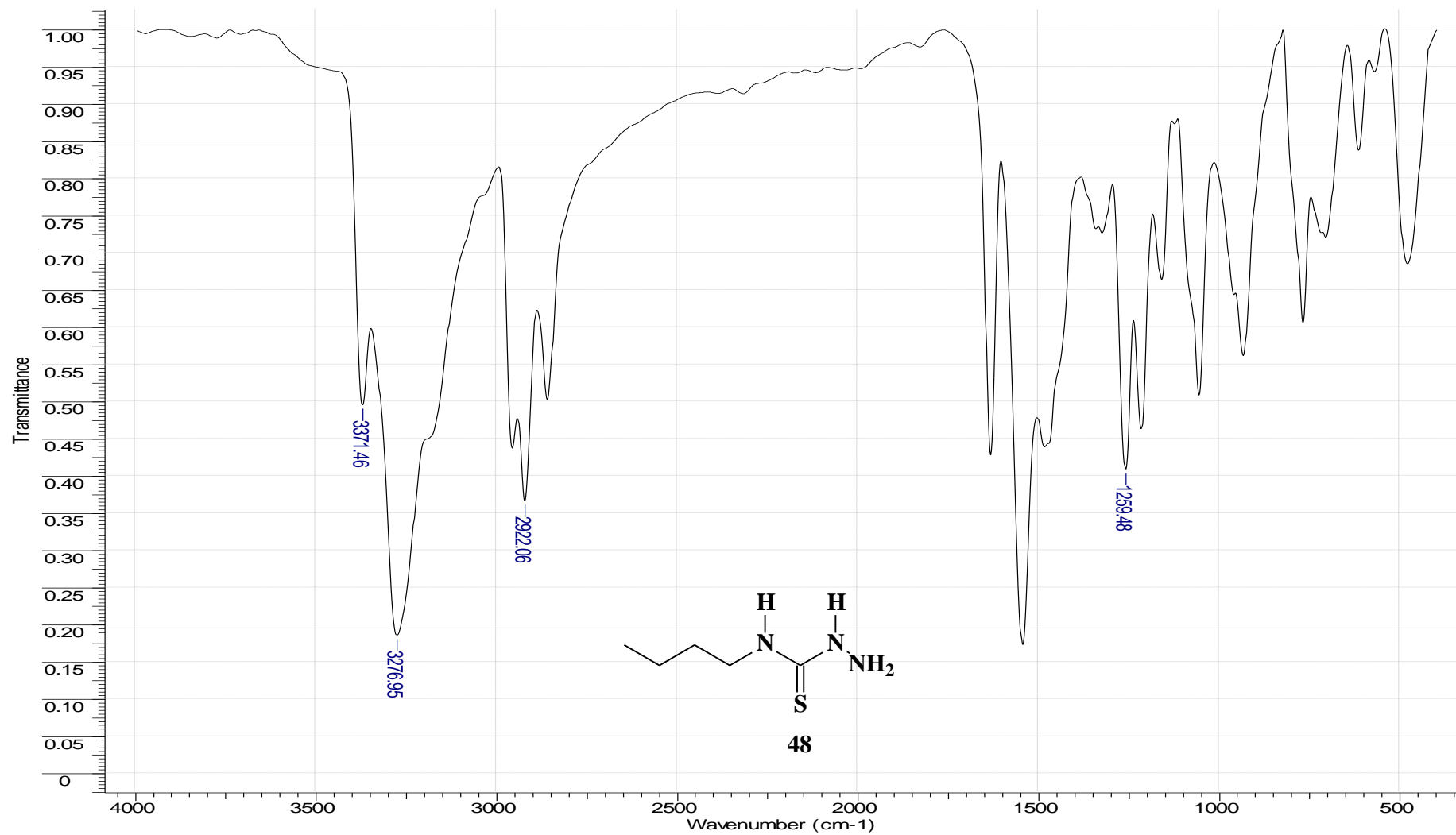
2.17 Espectro de RMN H¹ da 4-isopropil-tiossemicarbazida (47) obtido em acetona-d₆



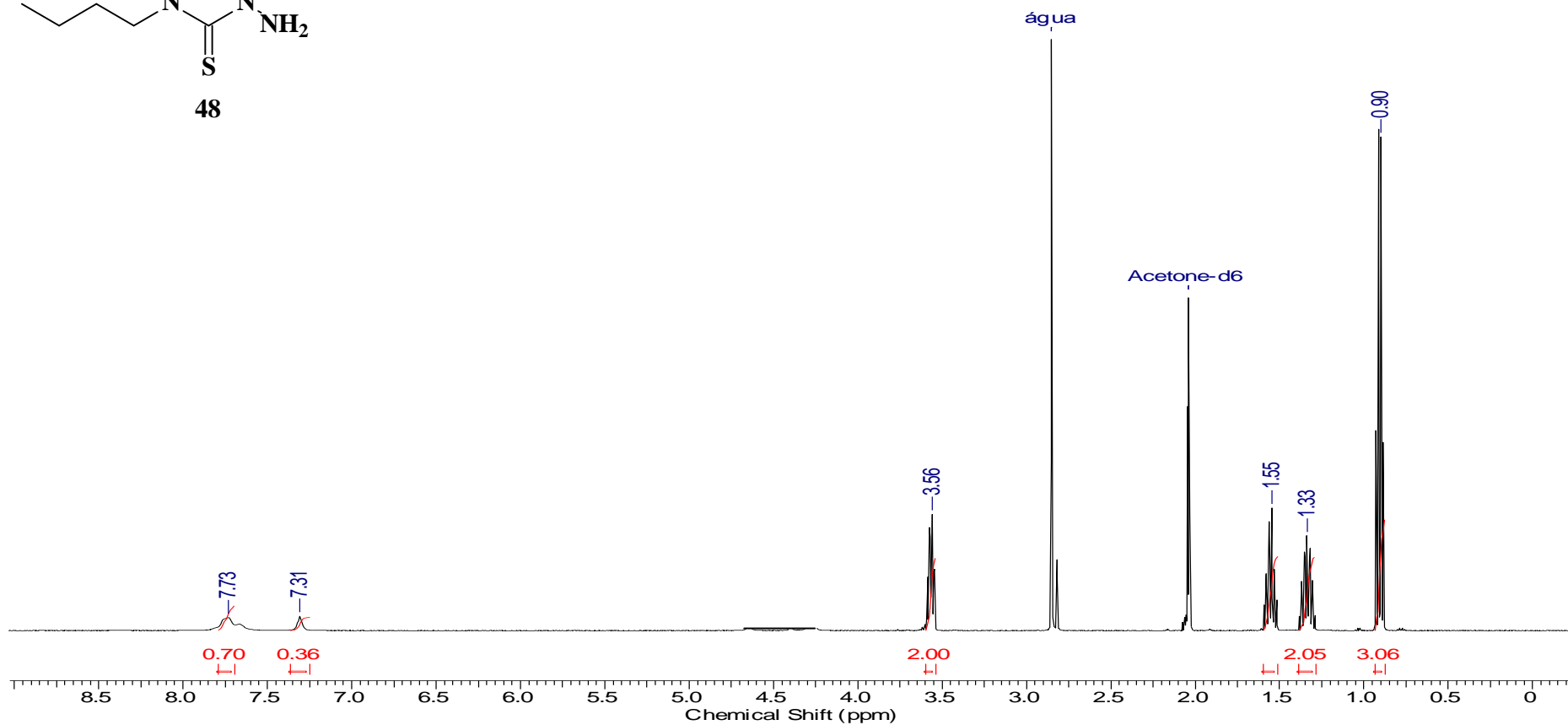
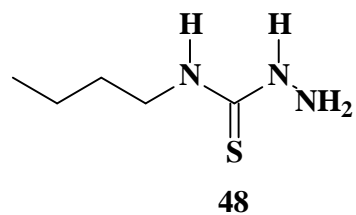
2.18 Espectro de RMN C^{13} (DEPTQ) da 4-isopropil-tiossemicarbazida (47) obtido em acetona- d_6



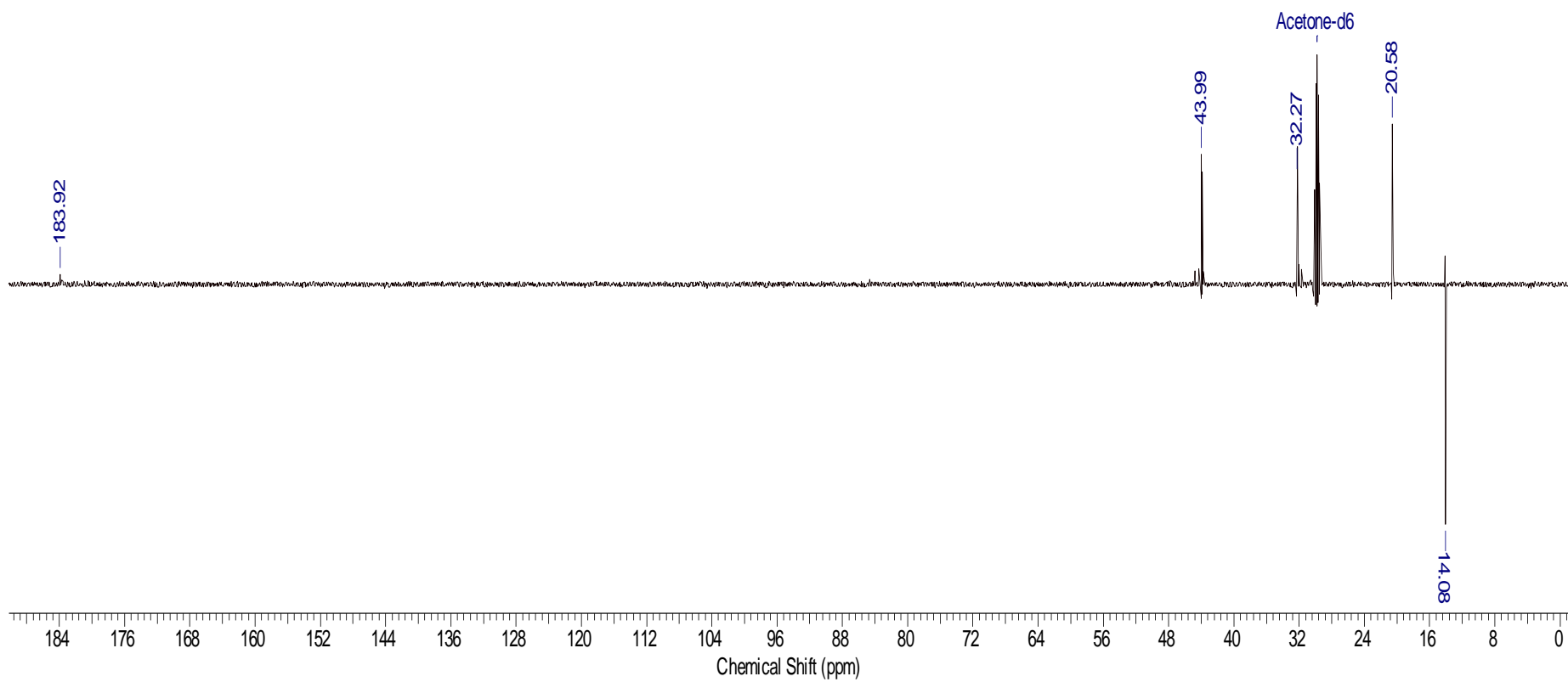
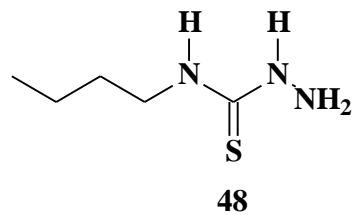
2.19 Espectro de IV da 4-butil-tiossemicarbazida (48) obtido em pastilha de KBr



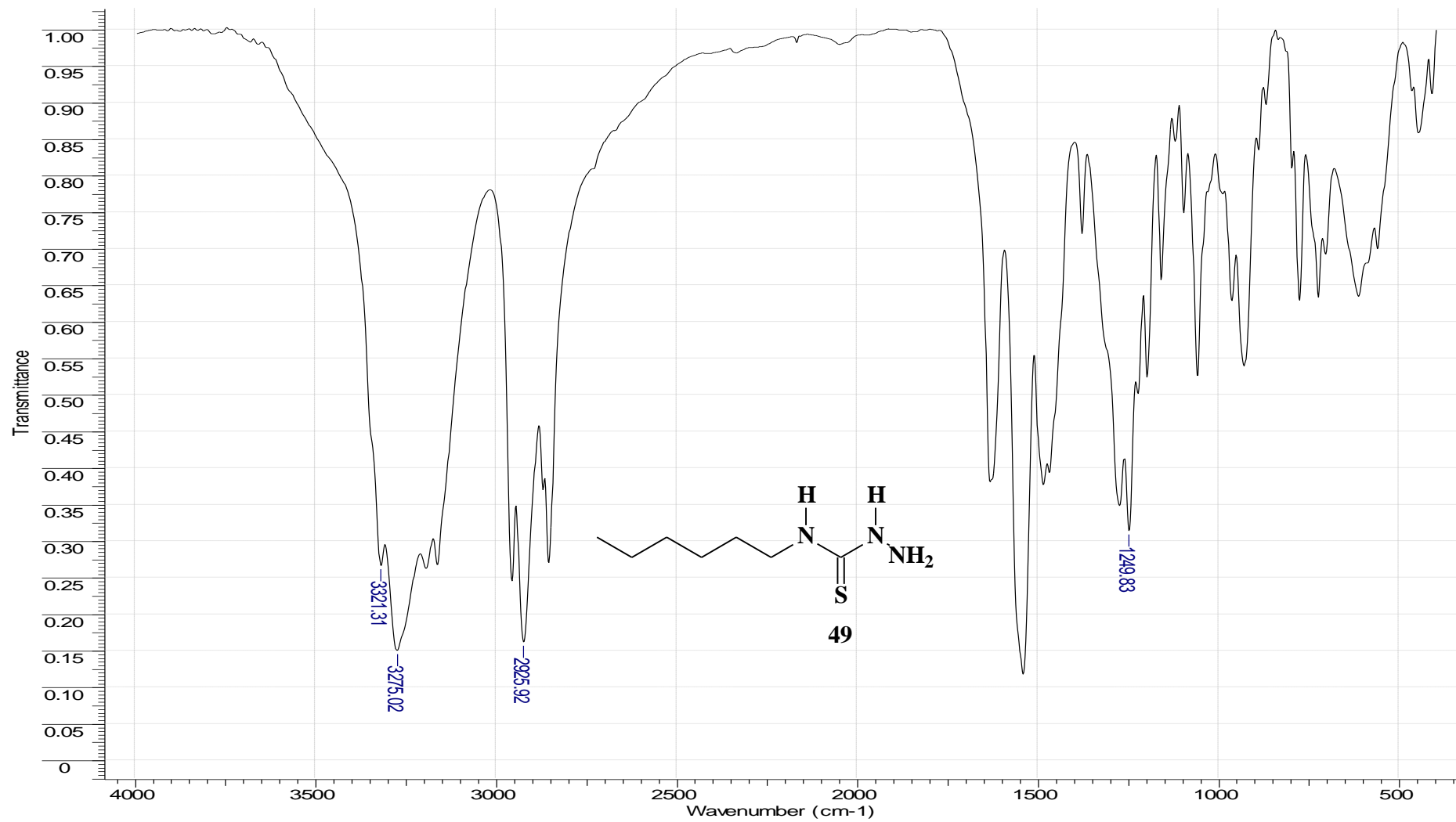
2.20 Espectro de RMN H¹ da 4-butil-tiossemicarbazida (48) obtido em acetona-d₆



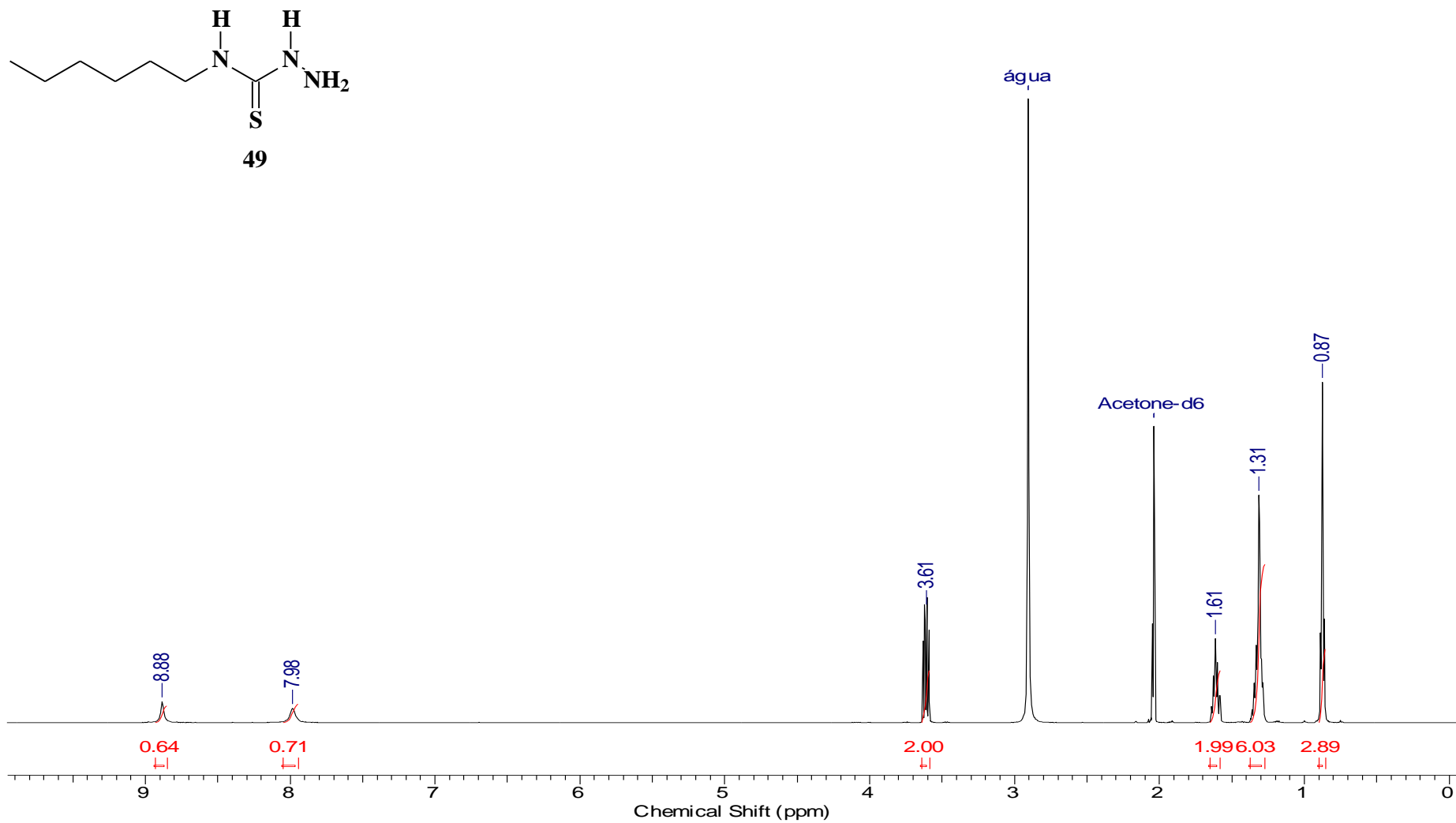
2.21 Espectro de RMN C^{13} (DEPTQ) da 4-butil-tiossemicarbazida (48) obtido em acetona- d_6



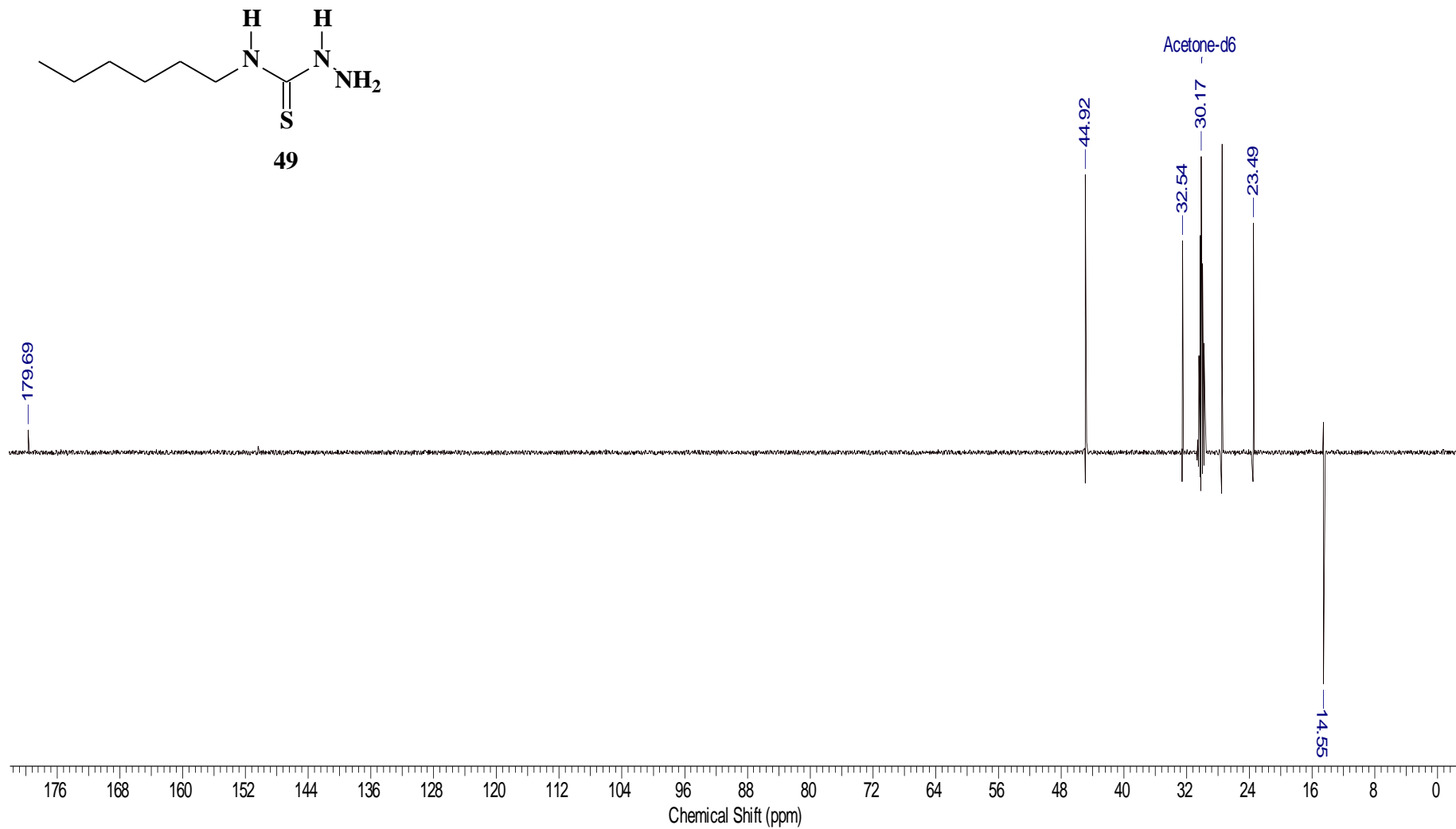
2.22 Espectro de IV da 4-hexil-tiossemicarbazida (49) obtido em pastilha de KBr



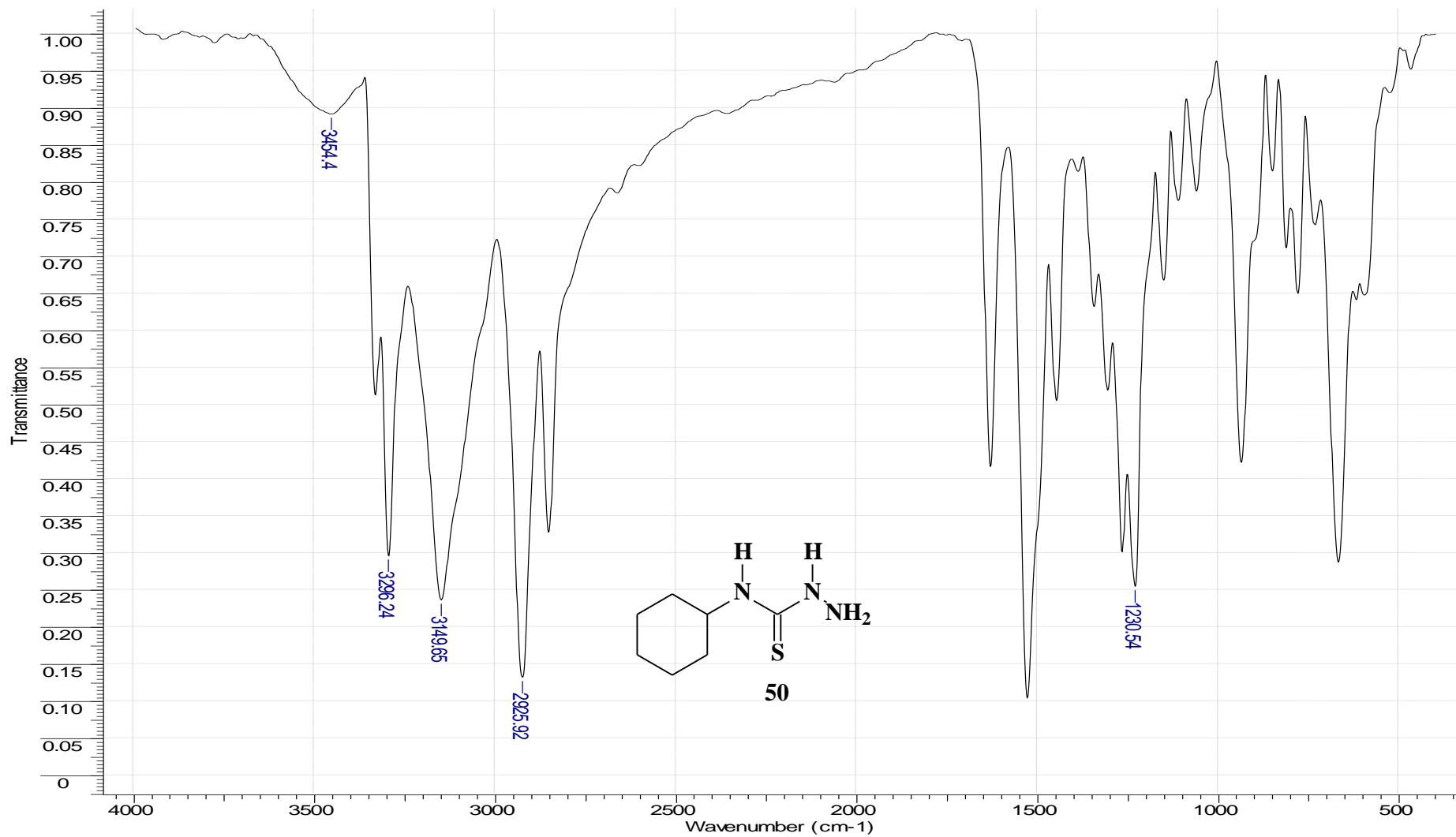
2.23 Espectro de RMN H¹ da 4-hexil-tiossemicarbazida (49) obtido em acetona-d₆



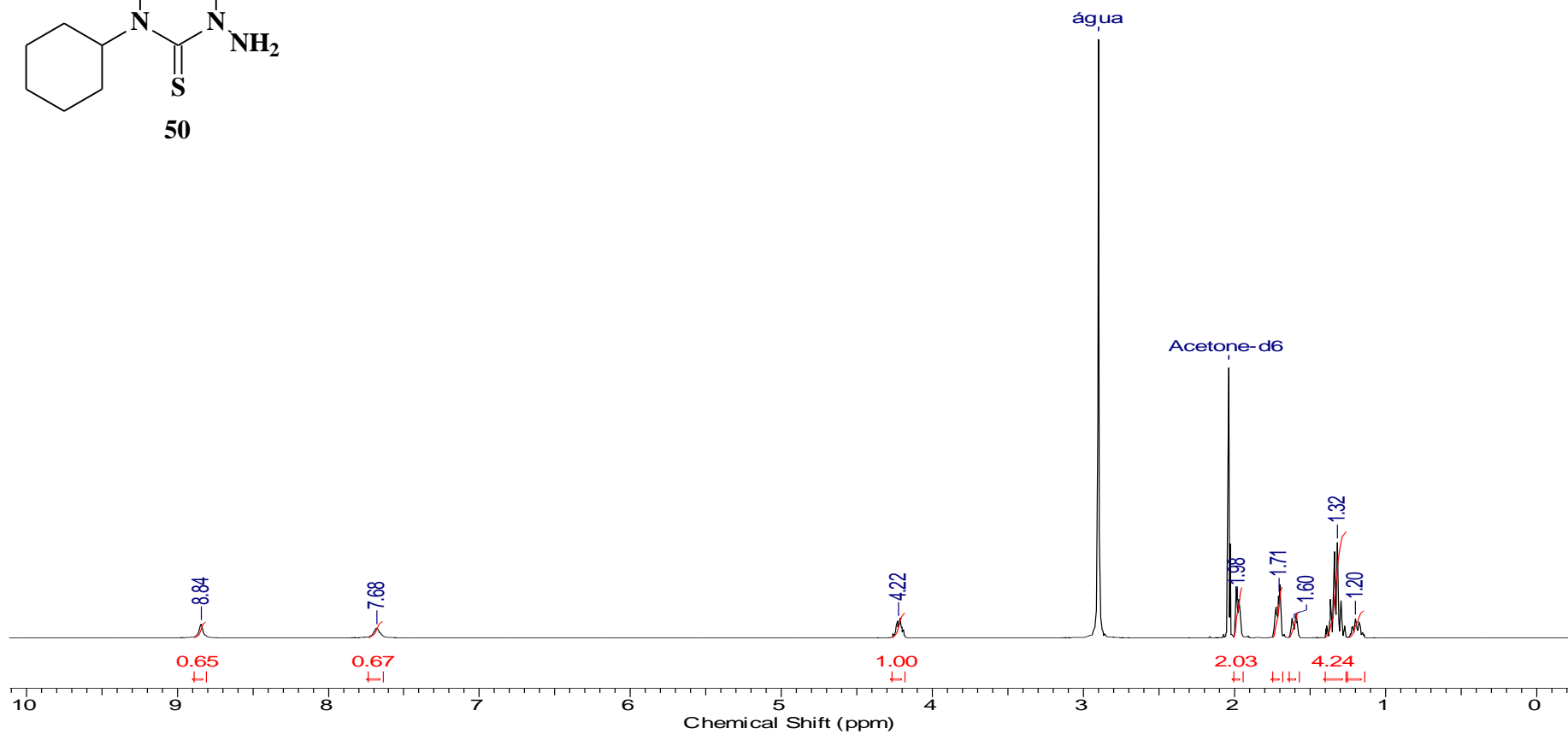
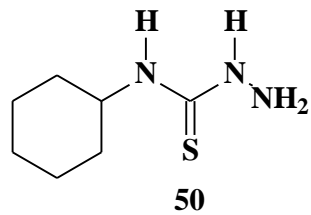
2.24 Espectro de RMN C^{13} (DEPTQ) da 4-hexil-tiossemicarbazida (49) obtido em acetona- d_6



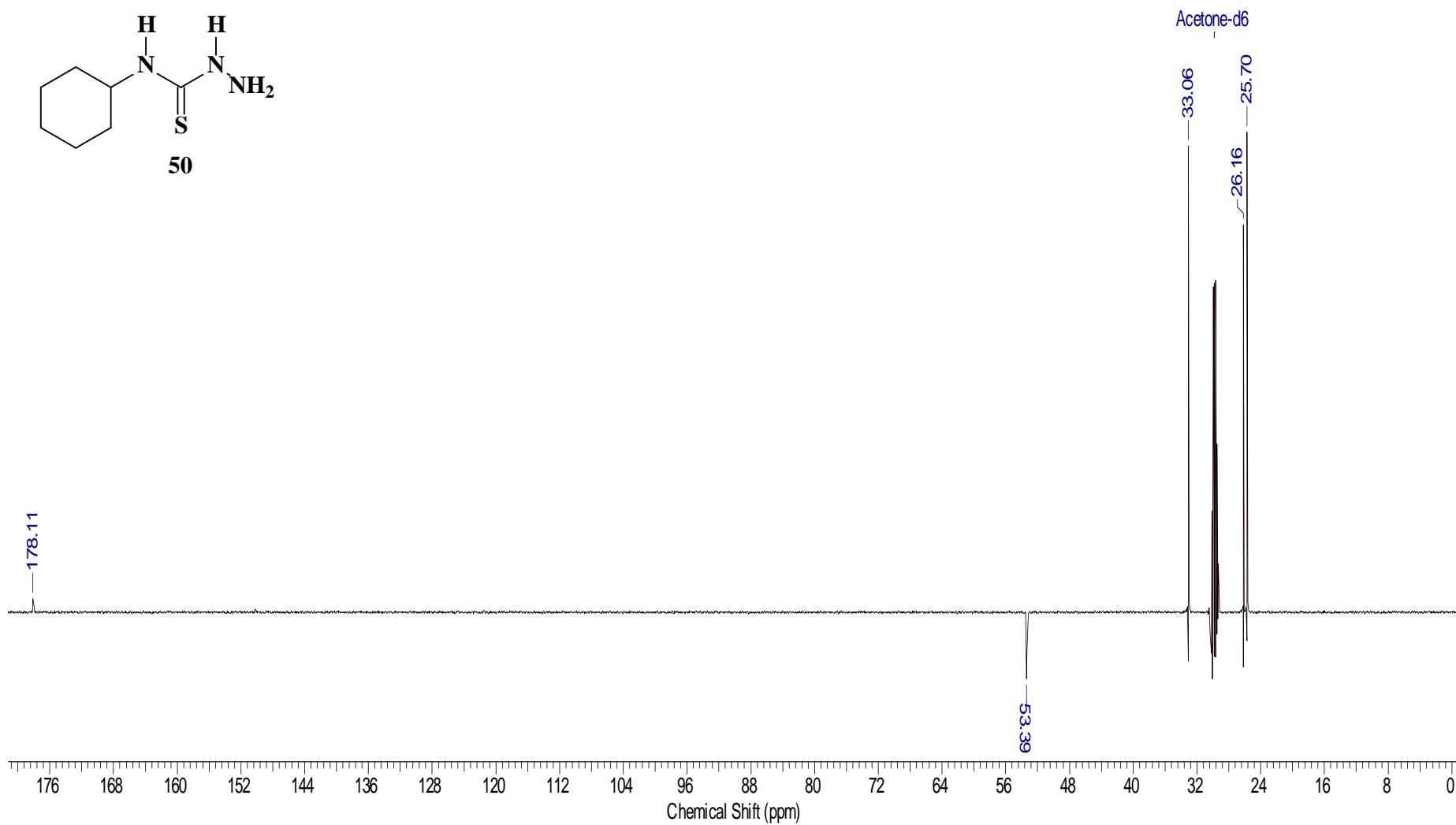
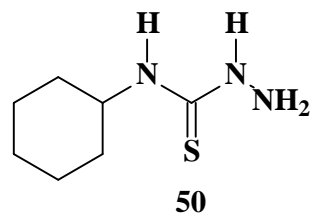
2.25 Espectro de RMN H¹ da 4-cicloexil-tiossemicarbazida (50) obtido em pastilha de KBr



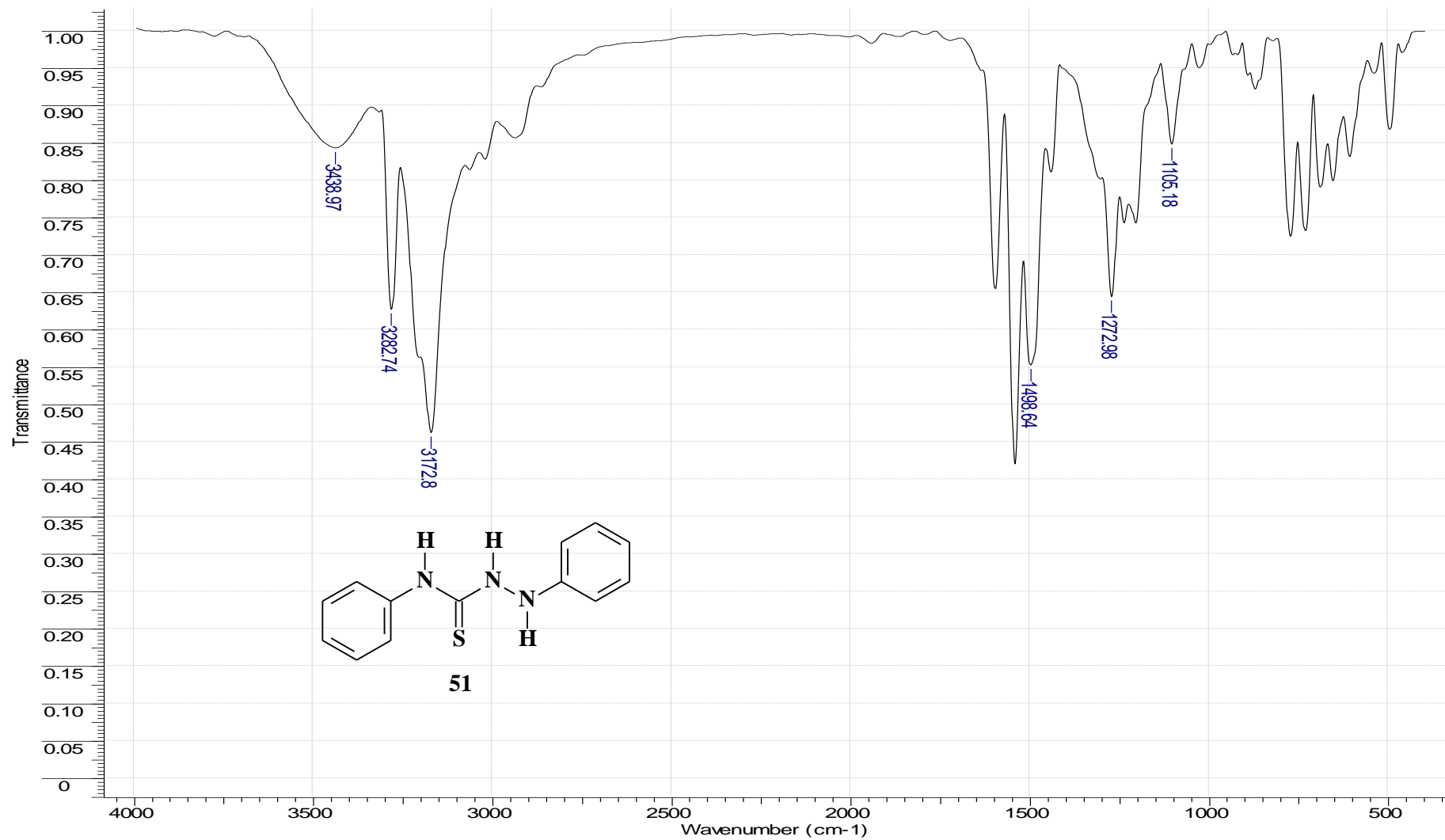
2.26 Espectro de RMN H¹ da 4-cicloexil-tiossemicarbazida (50) obtido em acetona-d₆



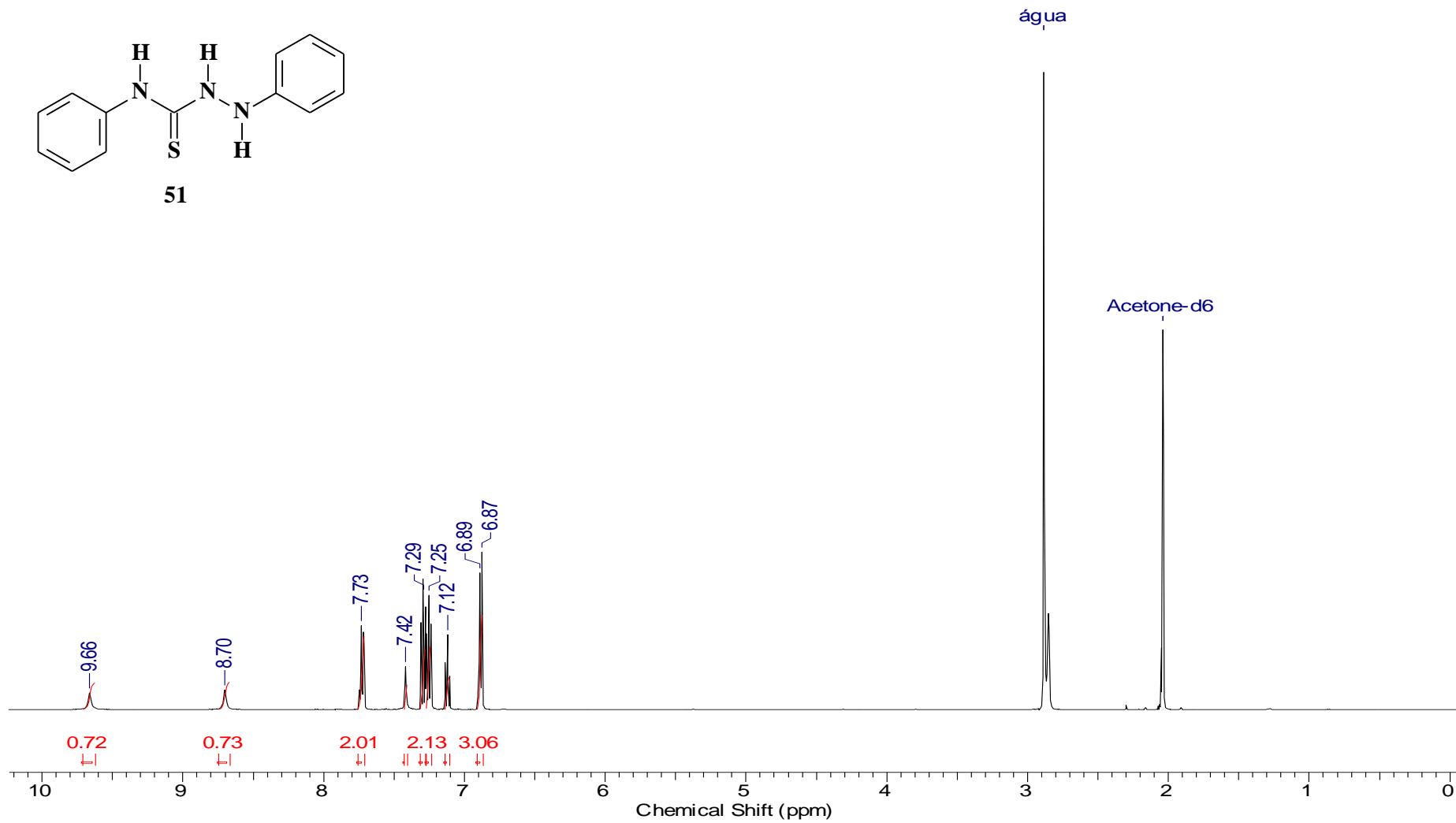
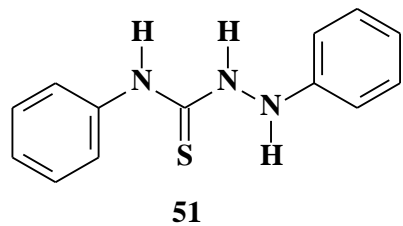
2.27 Espectro de RMN C¹³ (DEPTQ) da 4-cicloexil-tiossemicarbazida (50) obtido em acetona-d₆



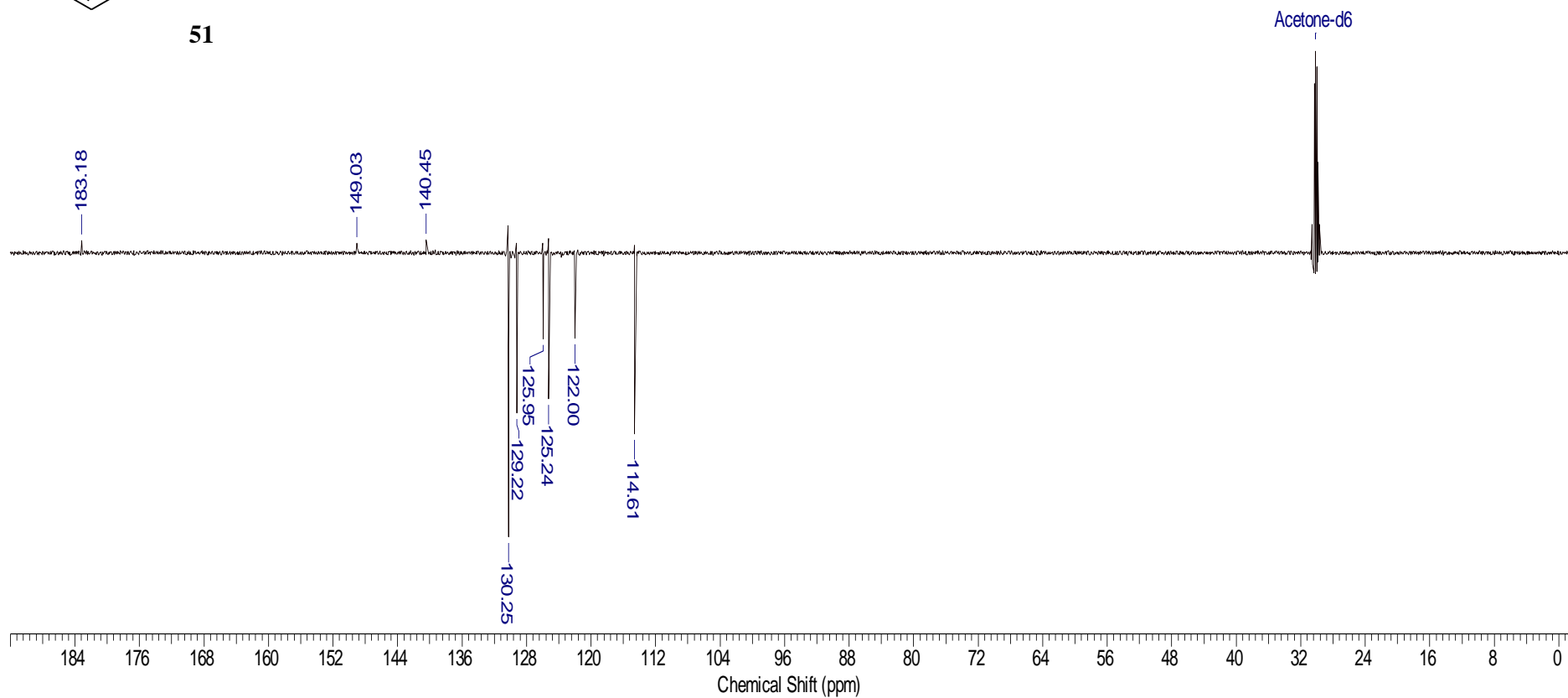
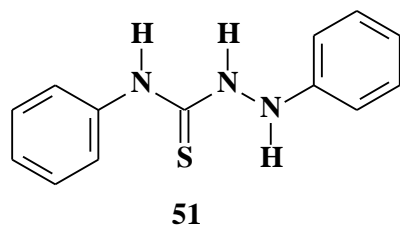
2.28 Espectro de IV da 1,4-difenil-tiossemicarbazida (51) obtido em pastilha de KBr



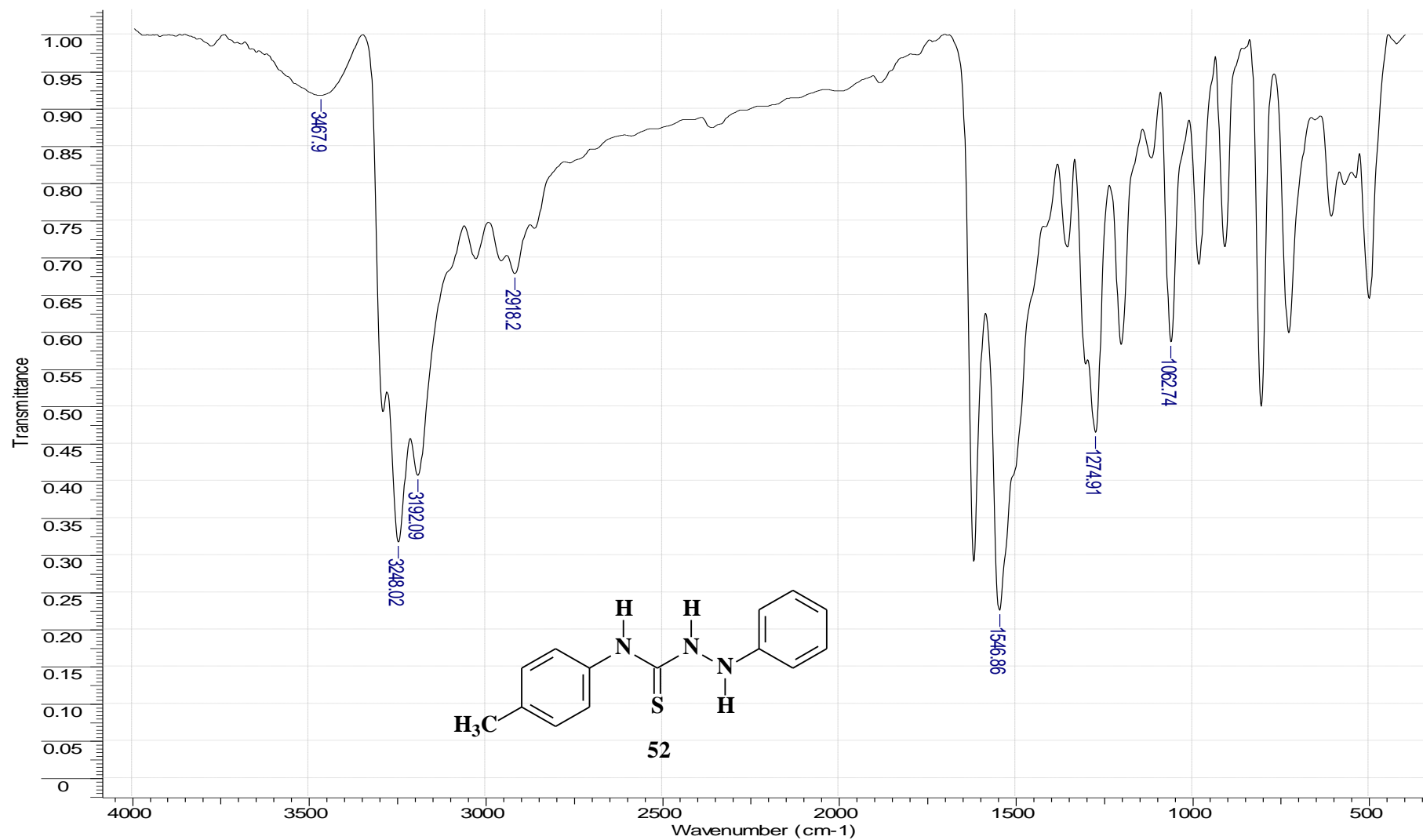
2.29 Espectro de RMN H¹ da 1,4-difenil-tiossemicarbazida (51) obtido em acetona-d₆



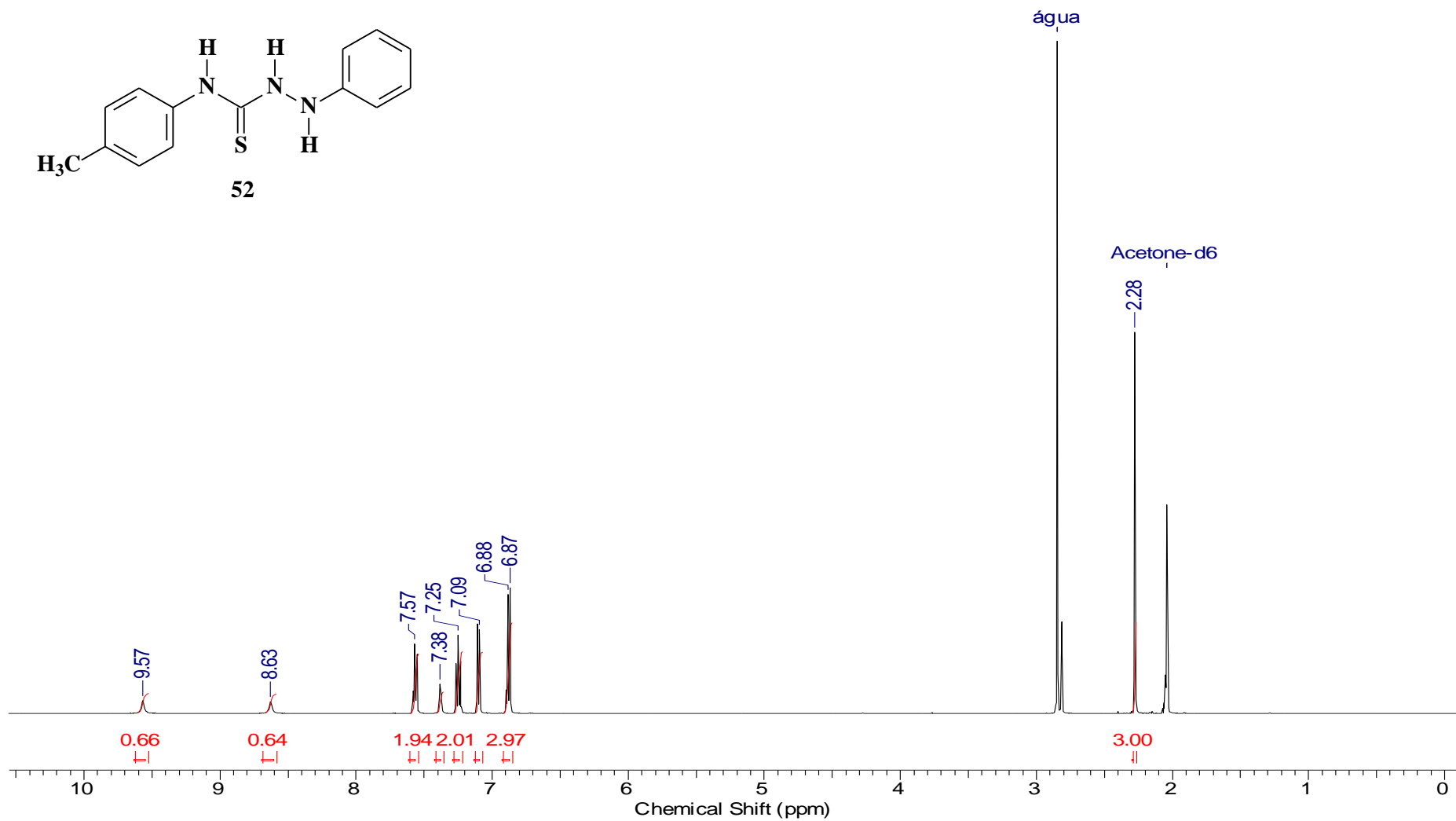
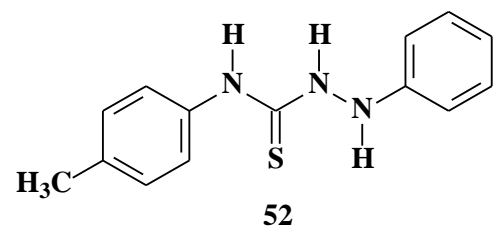
2.30 Espectro de RMN C^{13} (DEPTQ) da 1,4-difenil-tiossemicarbazida (51) obtido em acetona- d_6



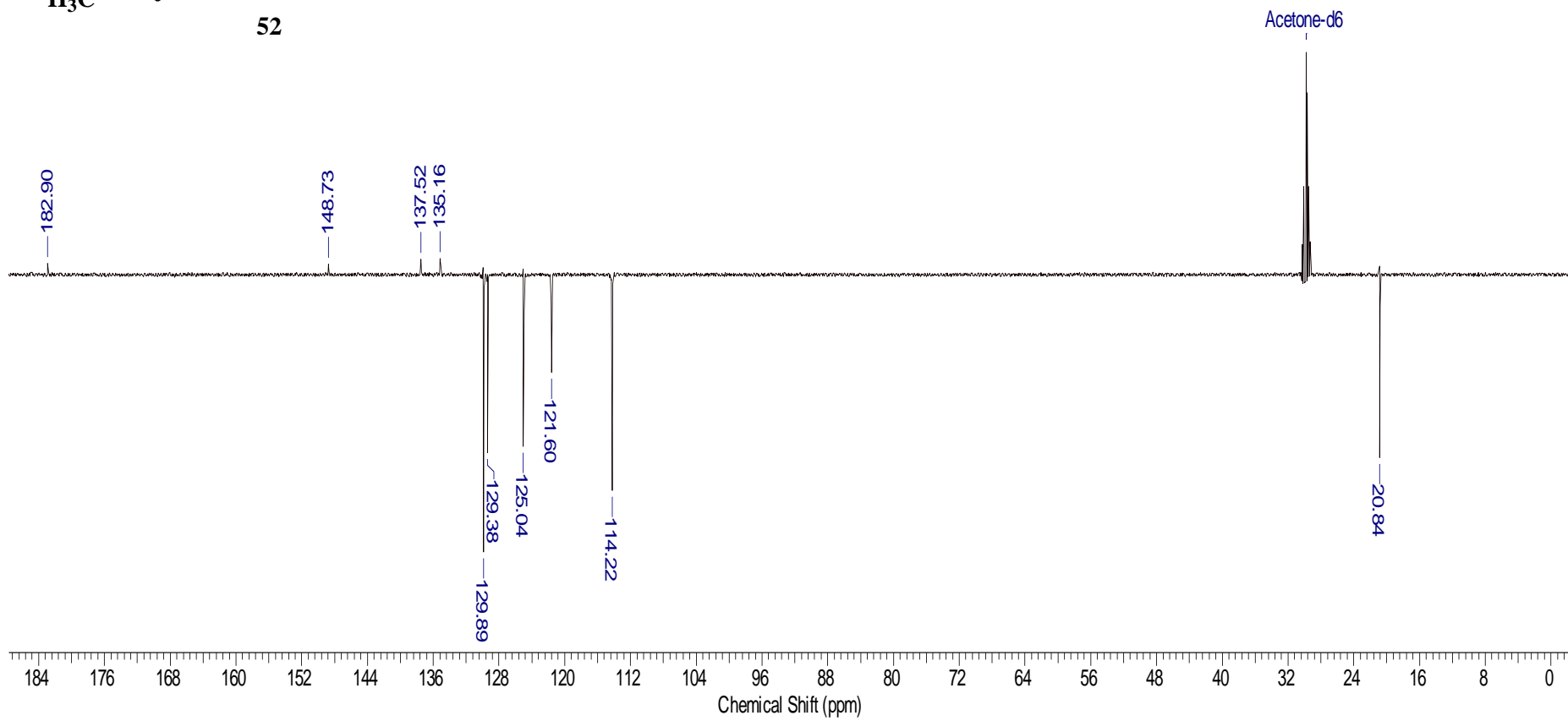
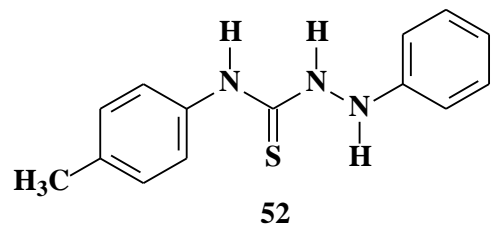
2.31 Espectro de IV da 1-fenil-4-(*p*-metil-fenil)-tiossemicarbazida (52) obtido em pastilha de KBr



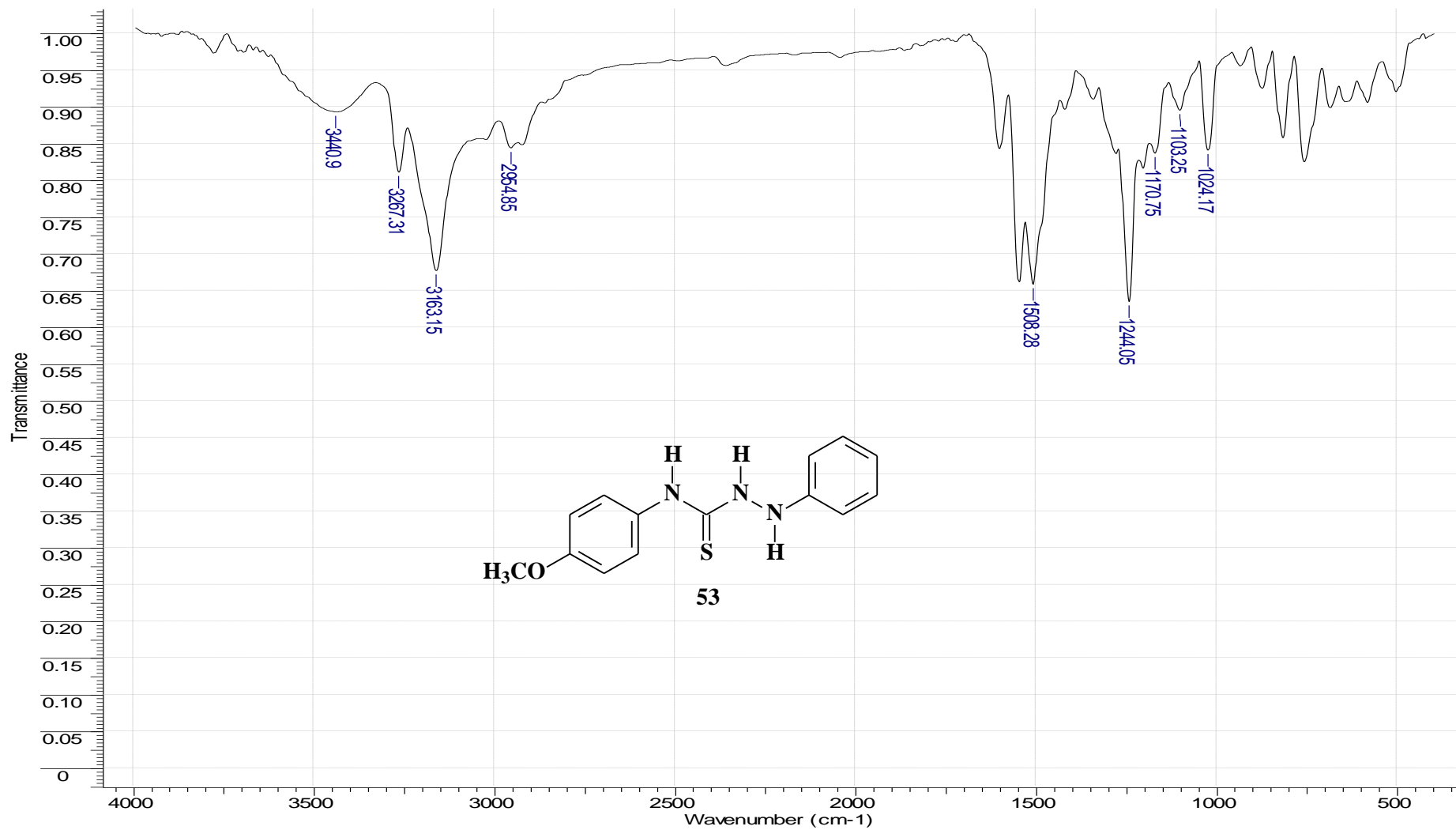
2.32 Espectro de RMN H¹ da 1-fenil-4-(*p*-metil-fenil)-tiossemicarbazida (52) obtido em acetona-*d*₆



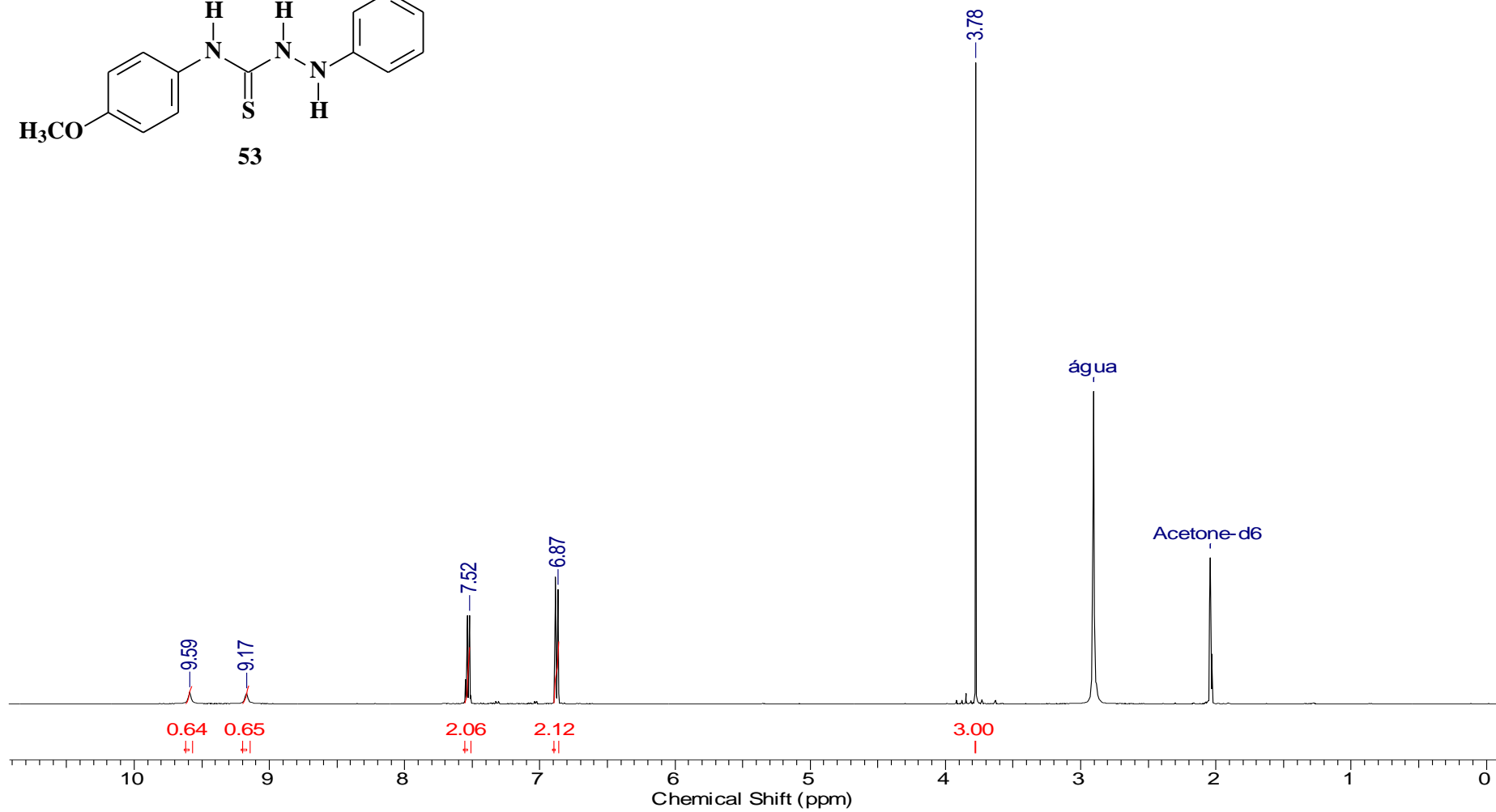
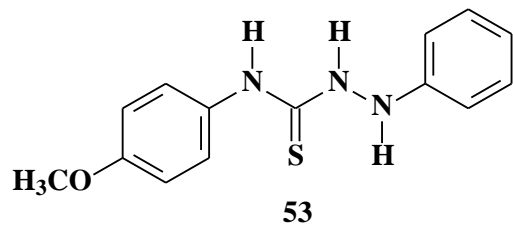
2.33 Espectro de RMN C^{13} (DEPTQ) da 1-fenil-4-(*p*-metil-fenil)-tiossemicarbazida (52) obtido em acetona- d_6



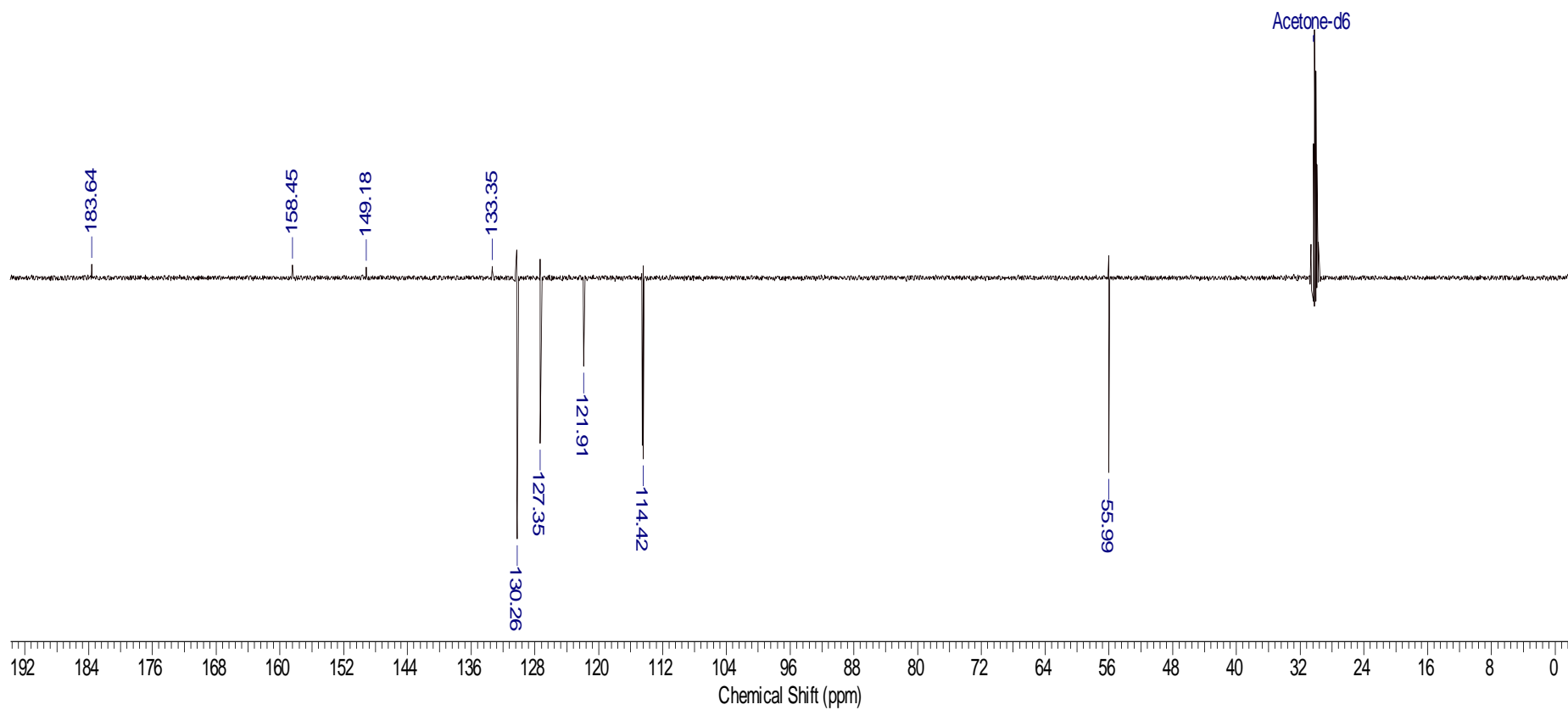
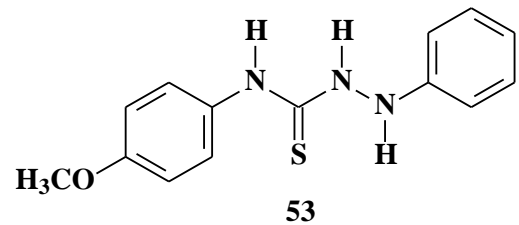
2.34 Espectro de RMN H¹ da 1-fenil-4-(*p*-metoxi-fenil)-tiossemicarbazida (53) obtido em pastilha de KBr



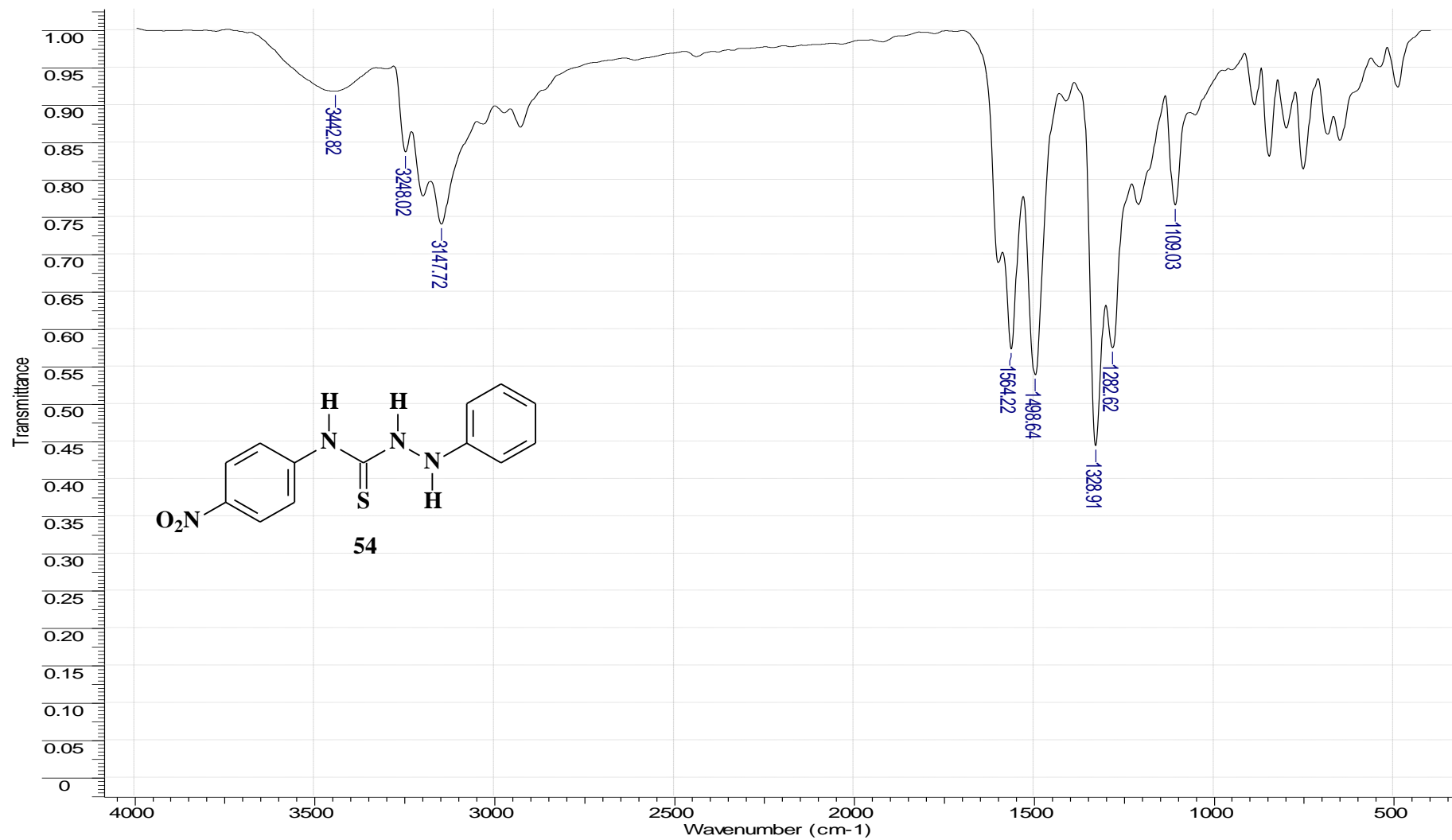
2.35 Espectro de RMN H¹ da 1-fenil-4-(*p*-metoxi-fenil)-tiossemicarbazida (53) obtido em acetona-d₆



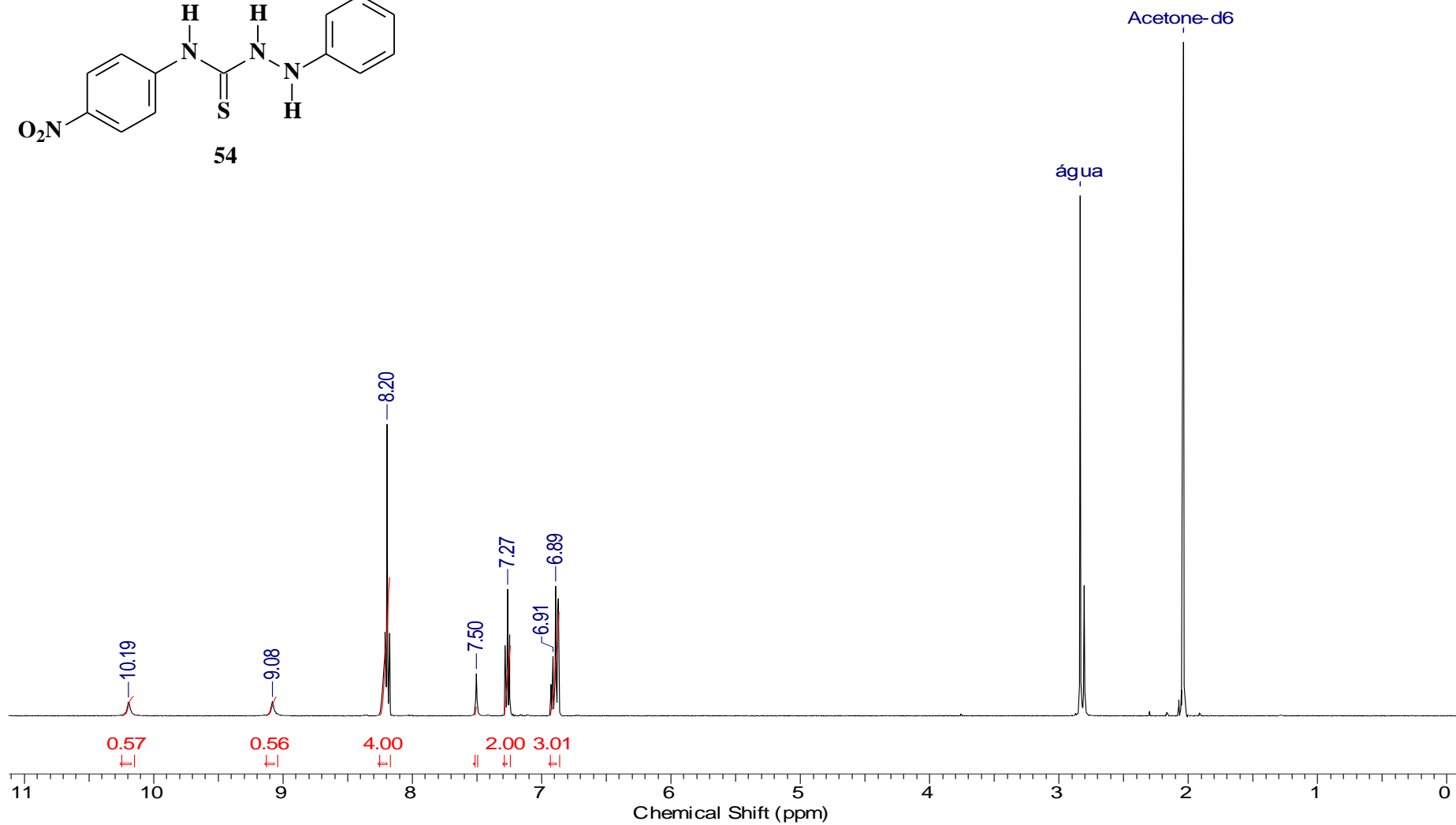
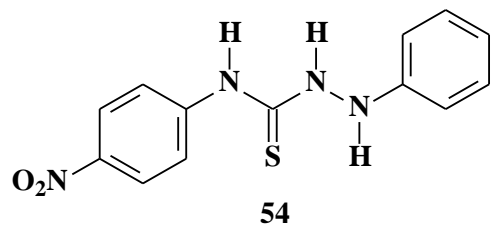
2.36 Espectro de RMN C^{13} (DEPTQ) da 1-fenil-4-(*p*-metoxi-fenil)-tiossemicarbazida (53) obtido em acetona- d_6



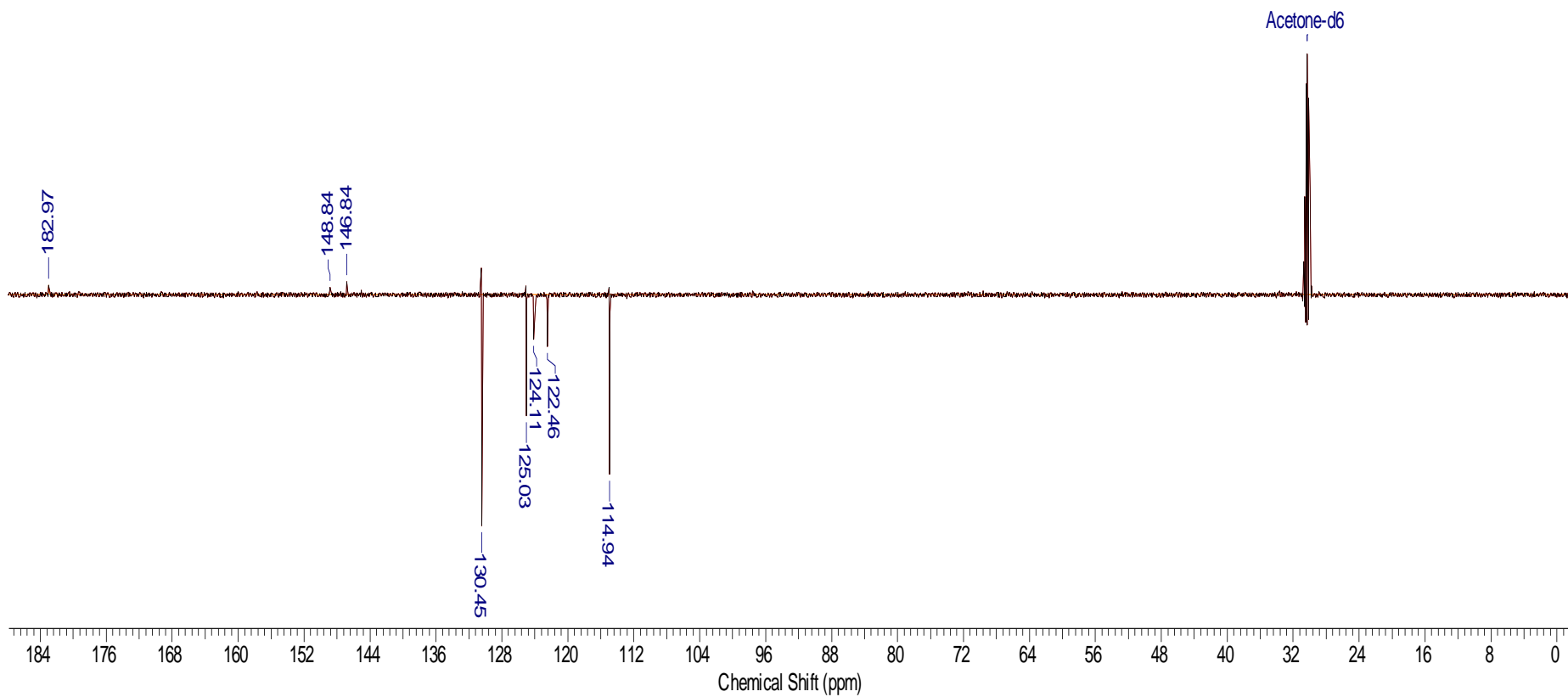
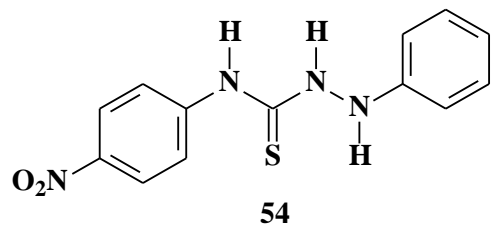
2.37 Espectro de IV da 1-fenil-4-(*p*-nitro-fenil)-tiossemicarbazida (54) obtido em pastilha de KBr



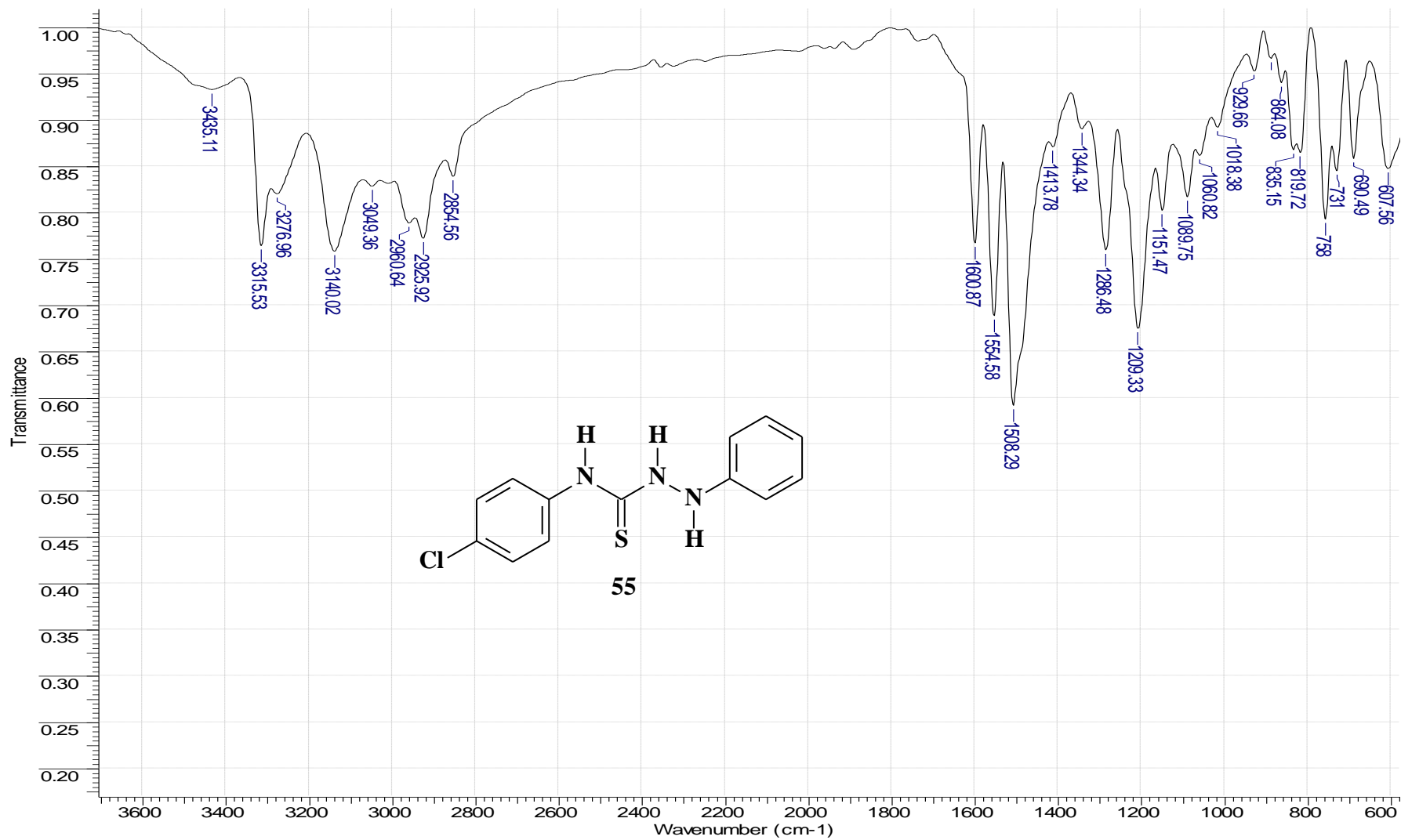
2.38 Espectro de RMN H¹ da 1-fenil-4-(*p*-nitro-fenil)-tiossemicarbazida (54) obtido em acetona-d₆



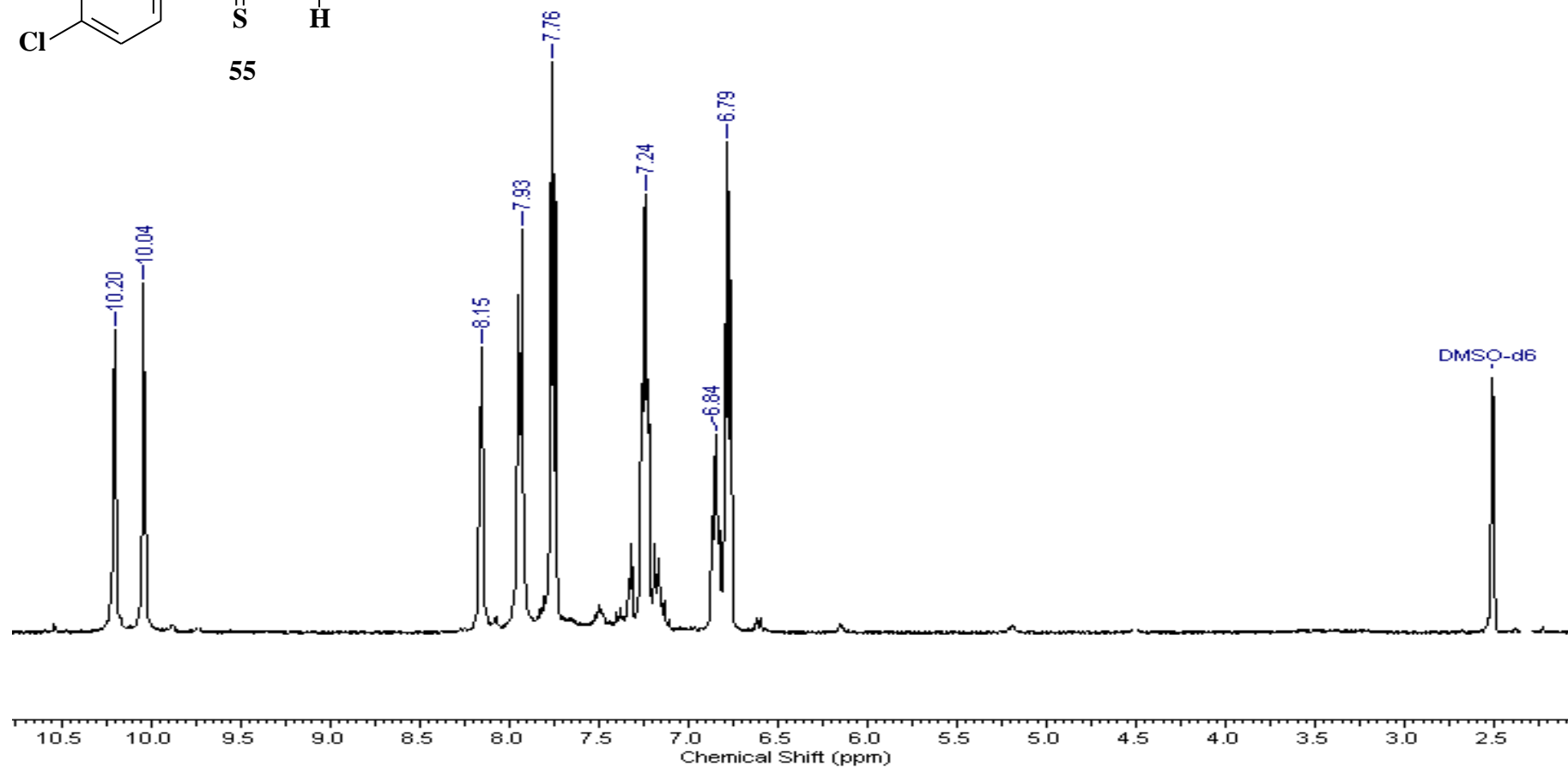
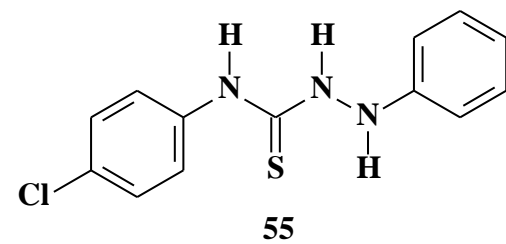
2.39 Espectro de RMN C^{13} (DEPTQ) da 1-fenil-4-(*p*-nitro-fenil)-tiossemicarbazida (54) obtido em acetona- d_6



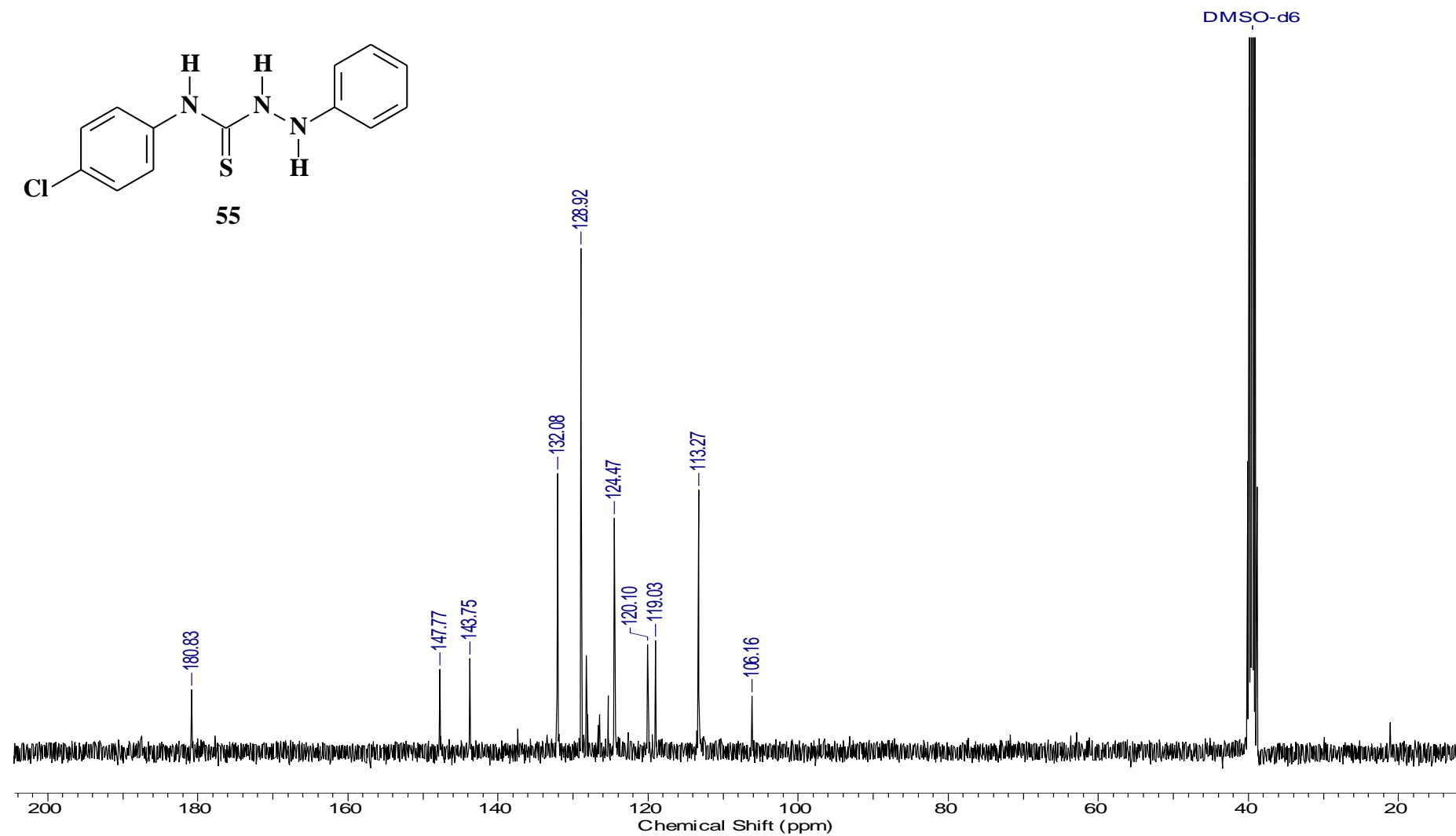
2.40 Espectro de IV da 1-Fenil-4-(*p*-cloro-fenil)-tiossemicarbazida (55) obtido em pastilha de KBr



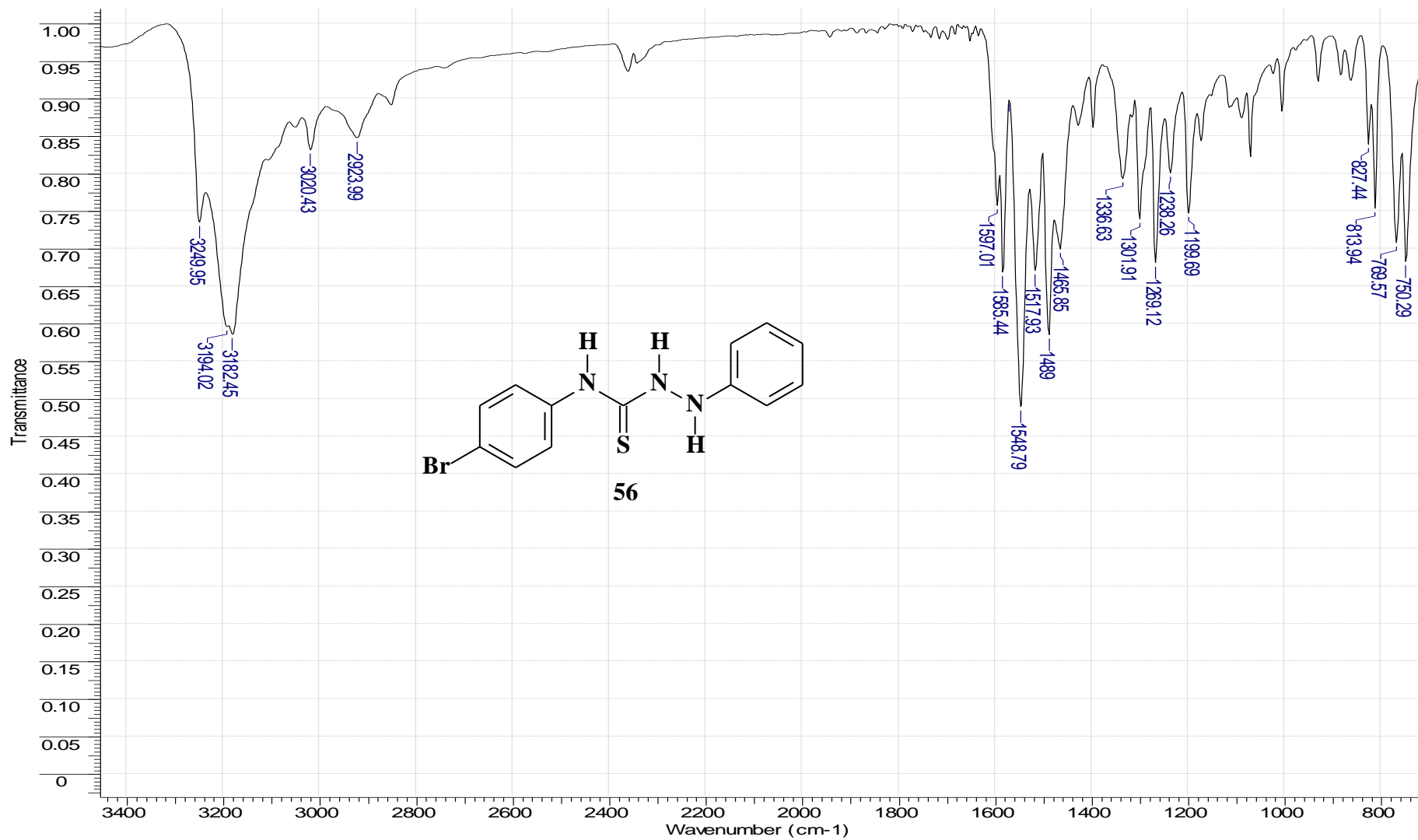
2.41 Espectro de RMN ^1H da 1-Fenil-4-(*p*-cloro-fenil)-tiossemicarbazida (55) obtido em $\text{DMSO-}d_6$



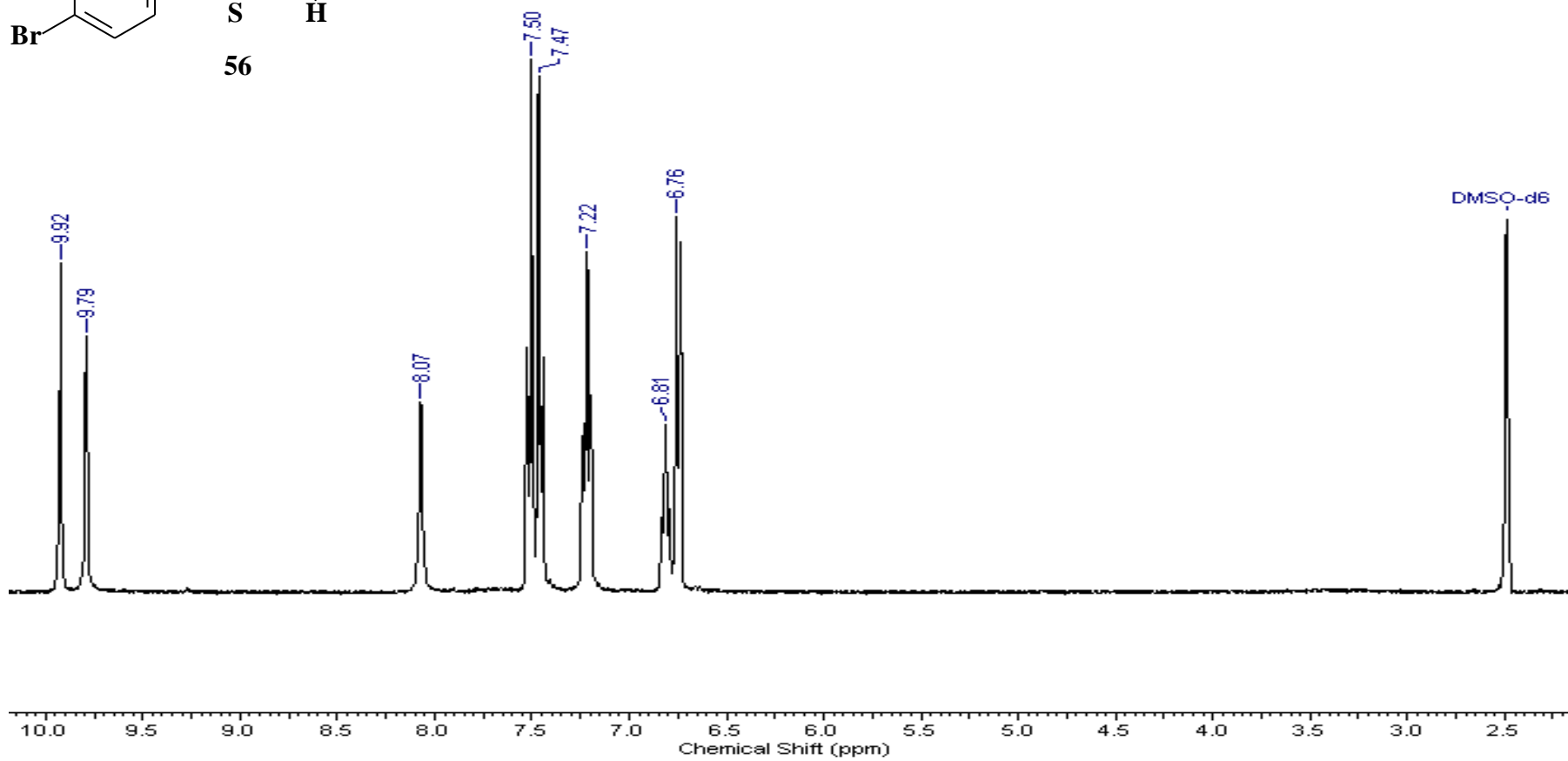
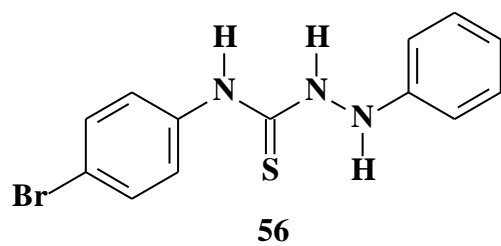
2.42 Espectro de RMN ^{13}C da 1-Fenil-4-(*p*-cloro-fenil)-tiossemicarbazida (55) obtido em $\text{DMSO-}d_6$



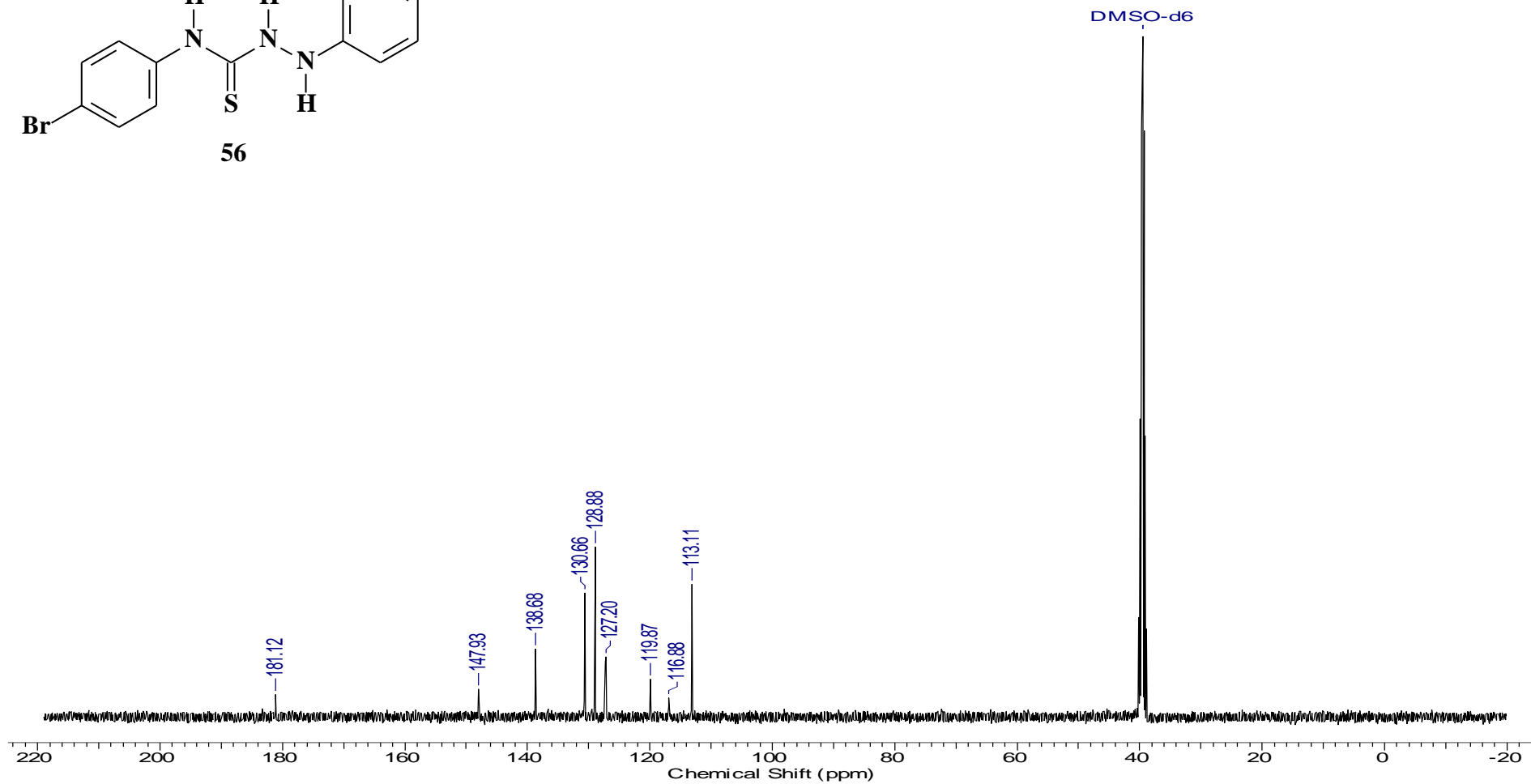
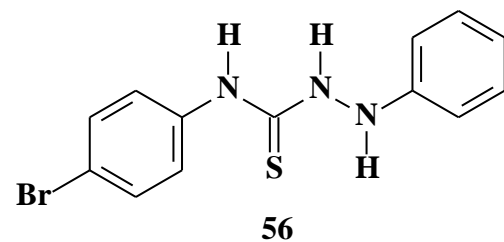
2.43 Espectro de IV da 1-Fenil-4-(*p*-bromo-fenil)-tiossemicarbazida (56) obtido em pastilha de KBr



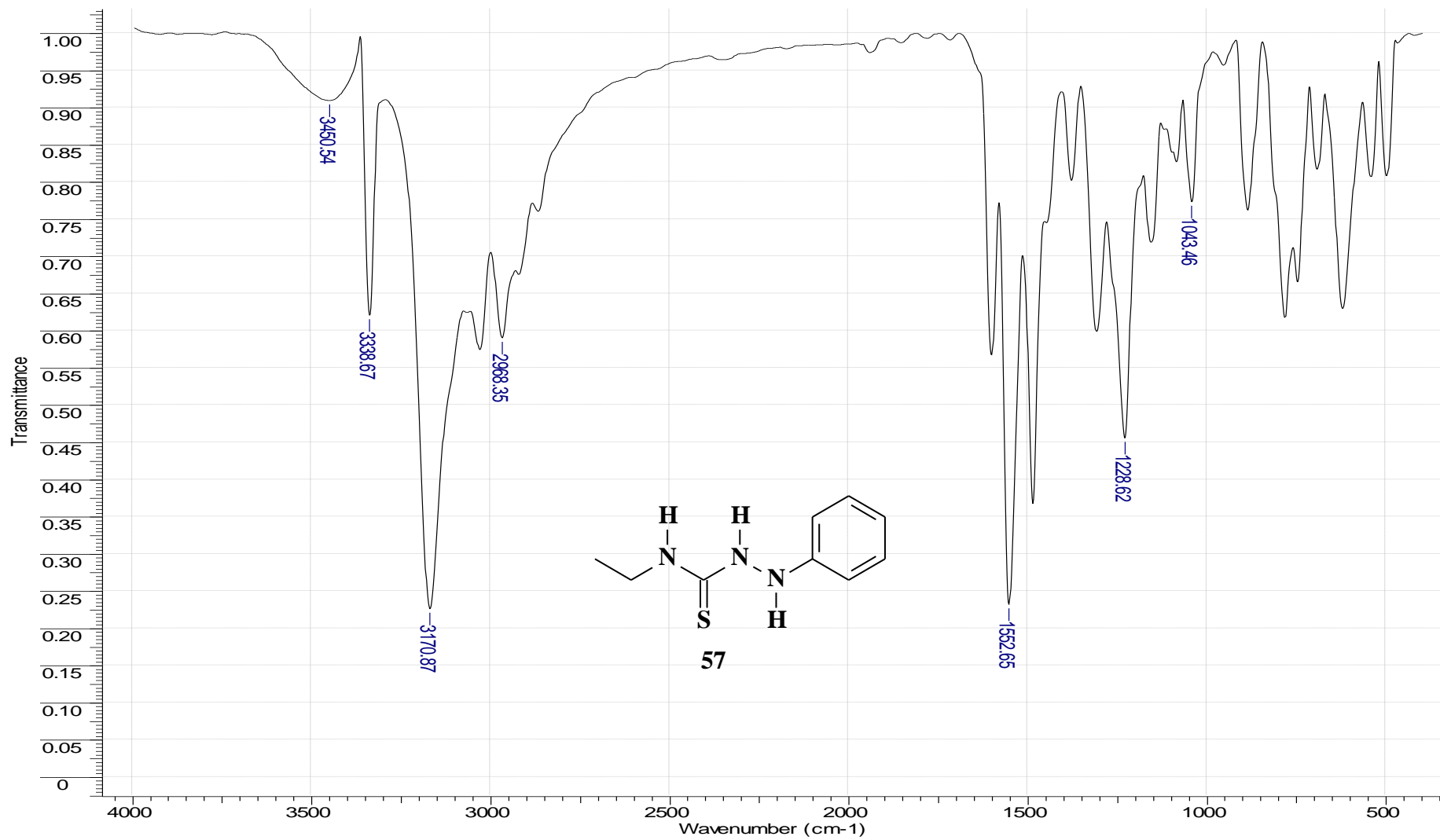
2.44 Espectro de RMN ^1H da 1-Fenil-4-(*p*-bromo-fenil)-tiossemicarbazida (57) obtido em $\text{DMSO-}d_6$



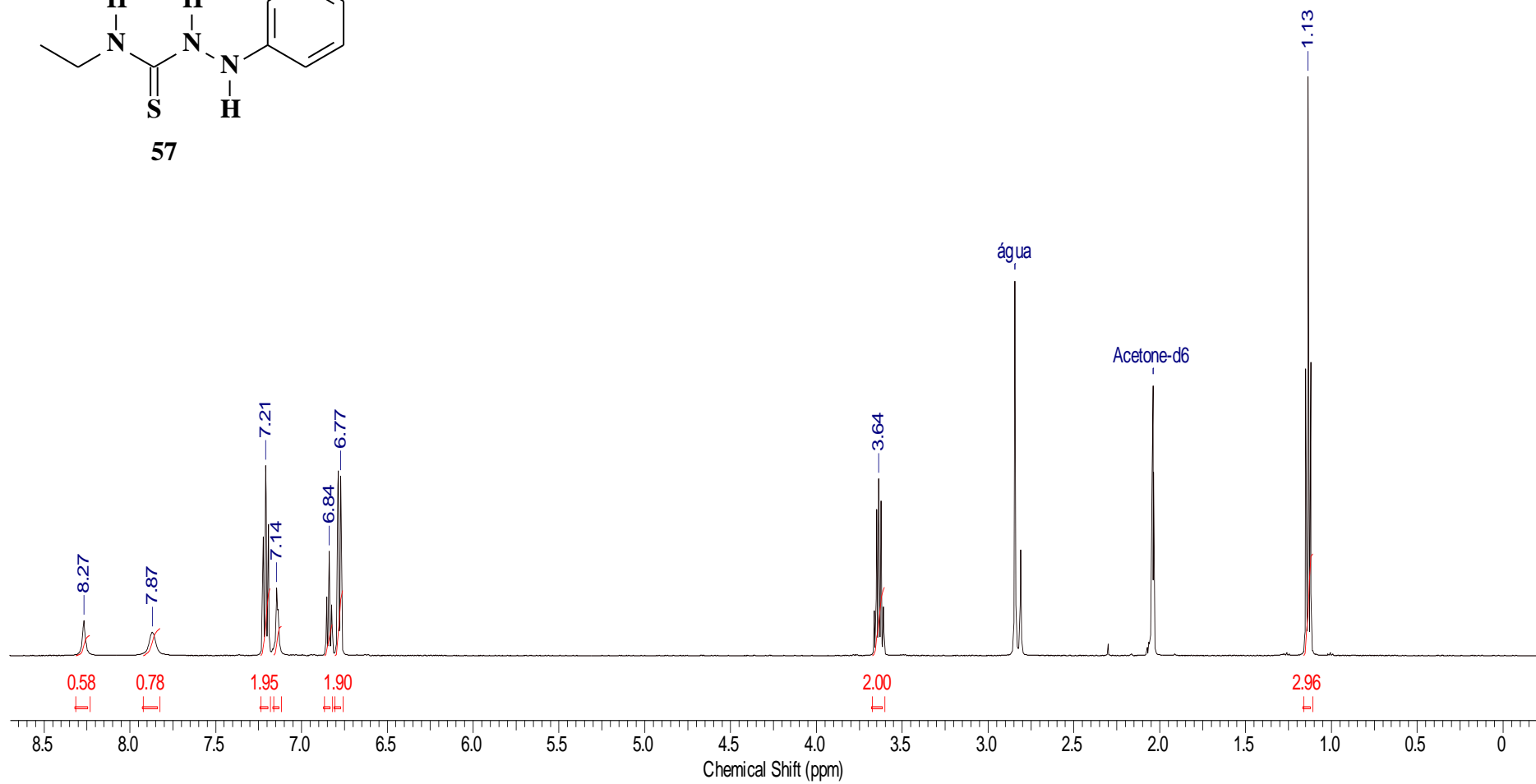
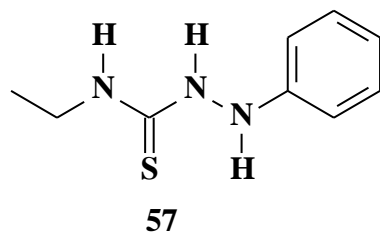
2.45 Espectro de RMN ^{13}C da 1-Fenil-4-(*p*-bromo-fenil)-tiossemicarbazida (56) obtido em $\text{DMSO-}d_6$



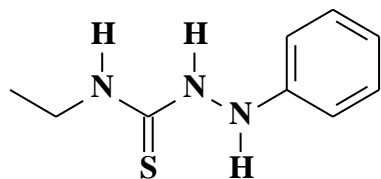
2.46 Espectro de RMN H¹ da 1-fenil-4-etil-tiossemicarbazida (57) obtido em pastilha de KBr



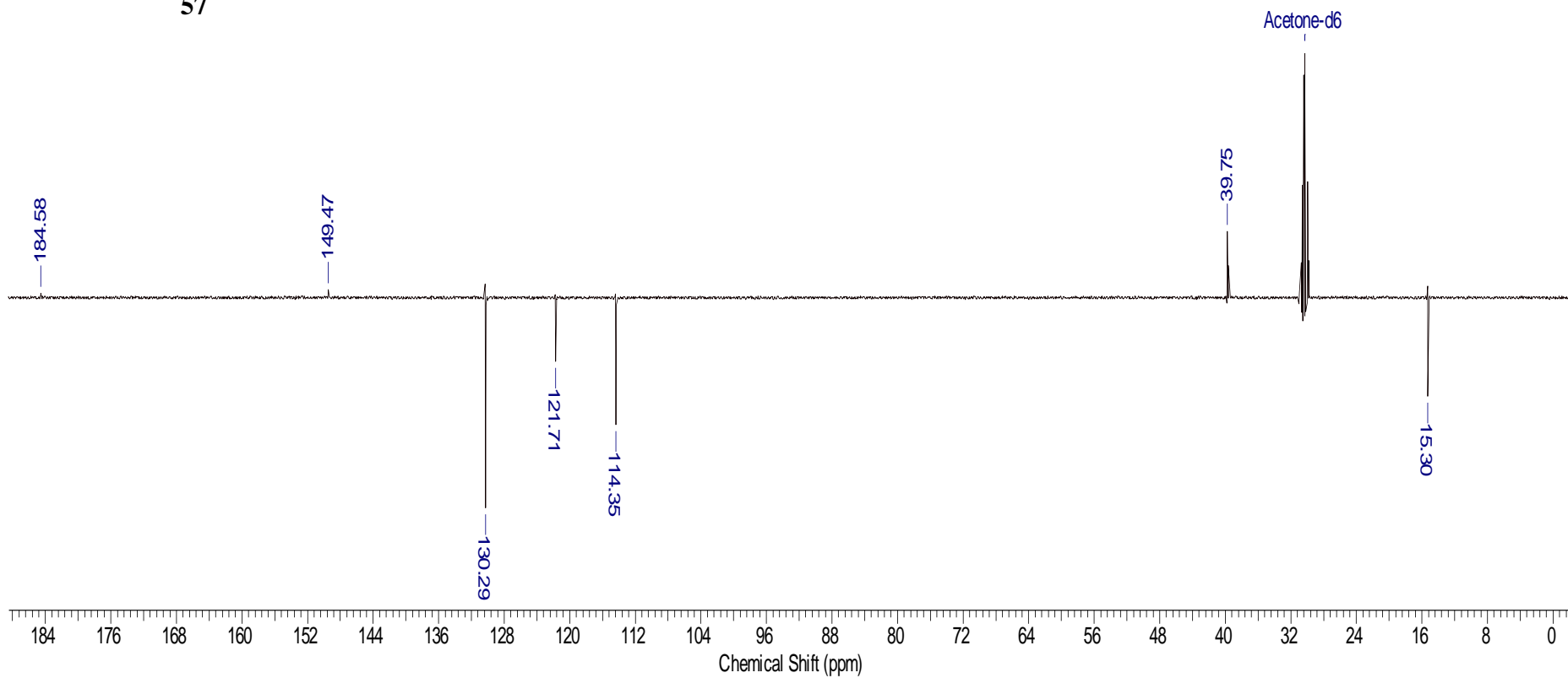
2.47 Espectro de RMN H¹ da 1-fenil-4-etil-tiossemicarbazida (57) obtido em acetona-d₆



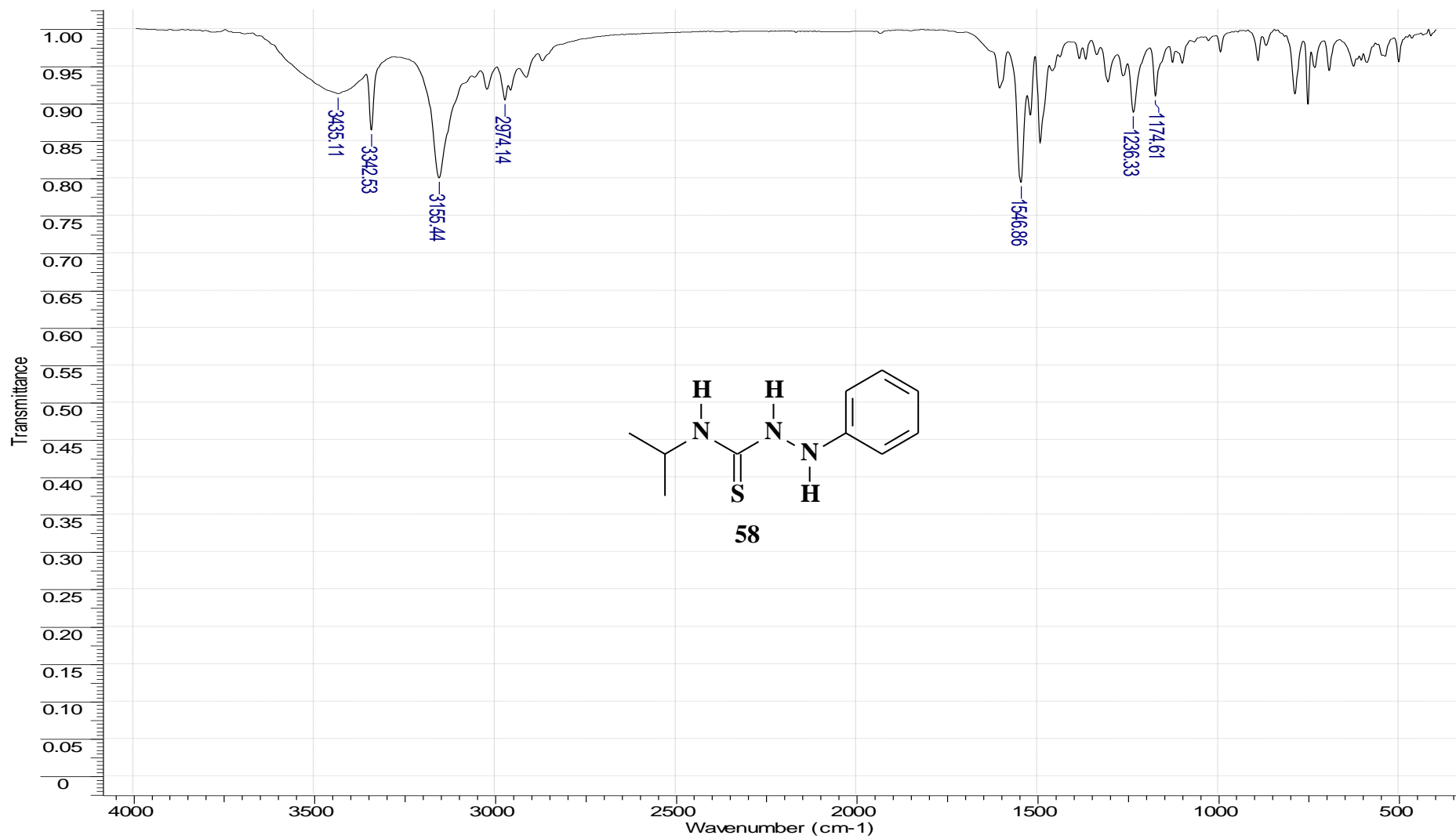
2.48 Espectro de RMN C^{13} (DEPTQ) da 1-fenil-4-etil-tiossemicarbazida (57) obtido em acetona- d_6



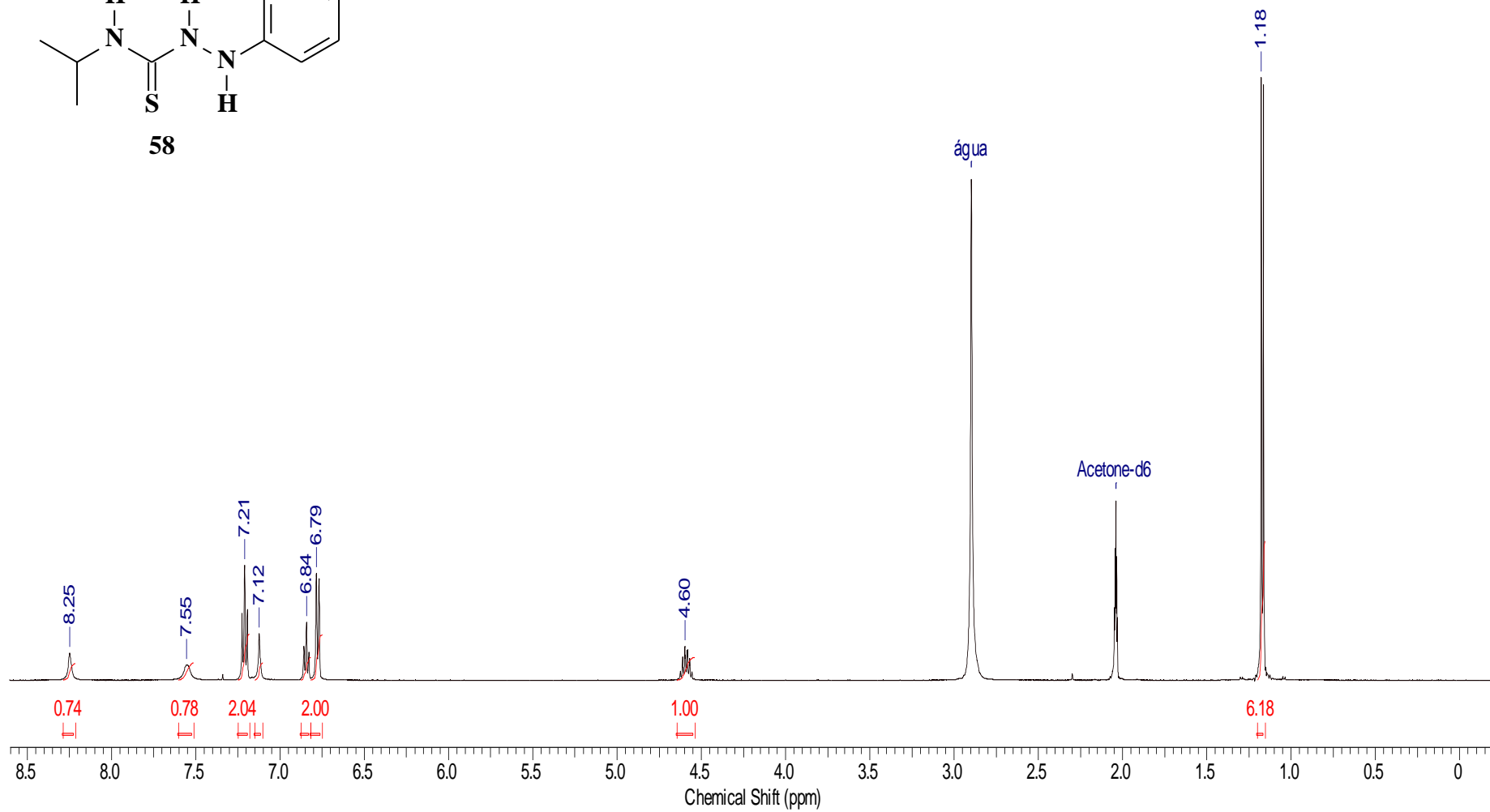
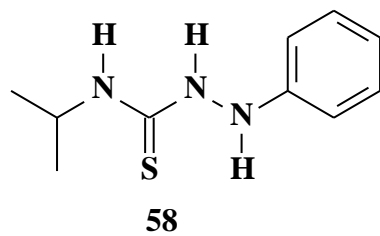
57



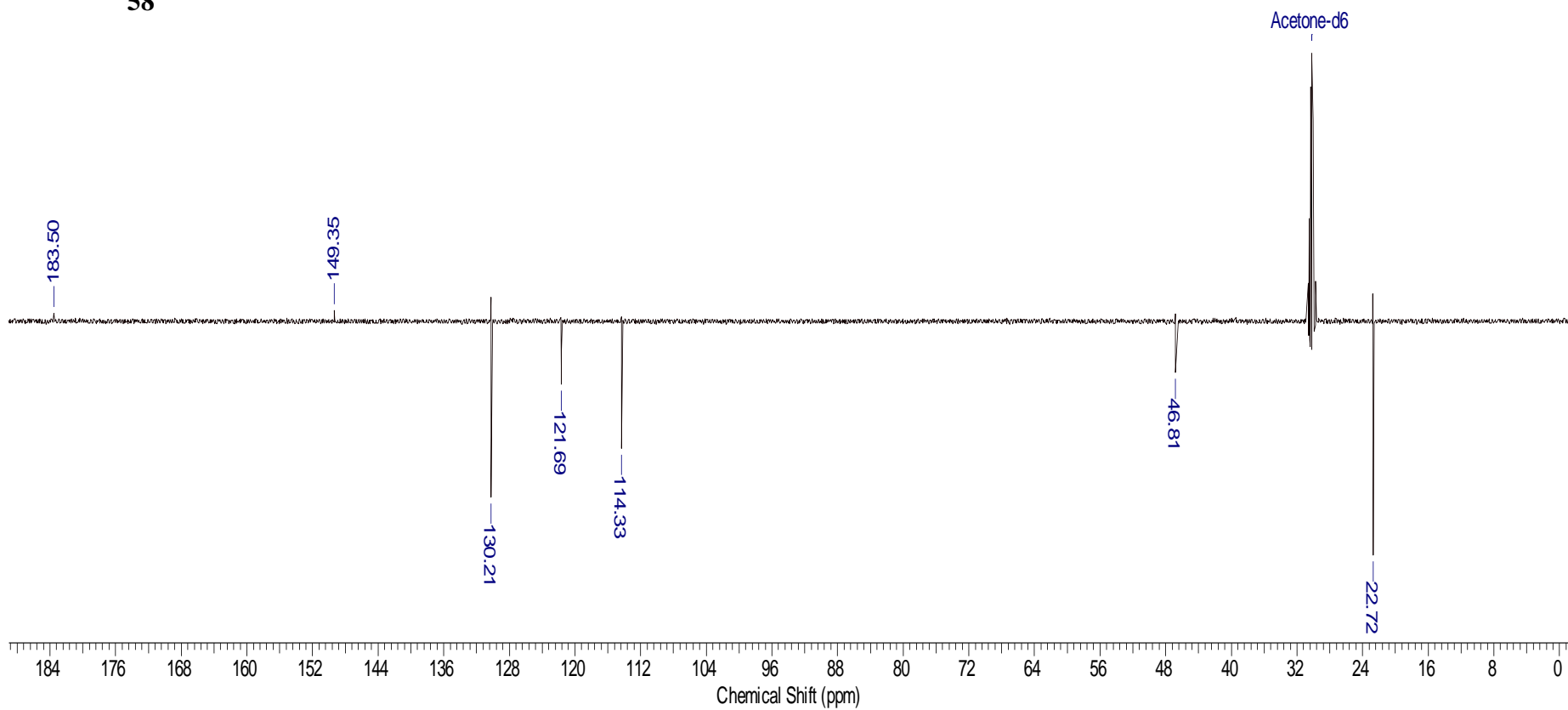
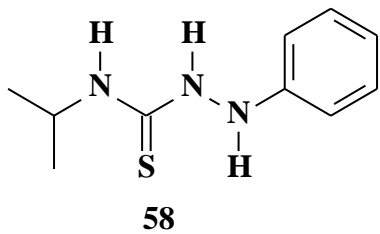
2.49 Espectro de RMN H¹ da 1-fenil-4-isopropil-tiossemicarbazida (58) obtido em pastilha de KBr



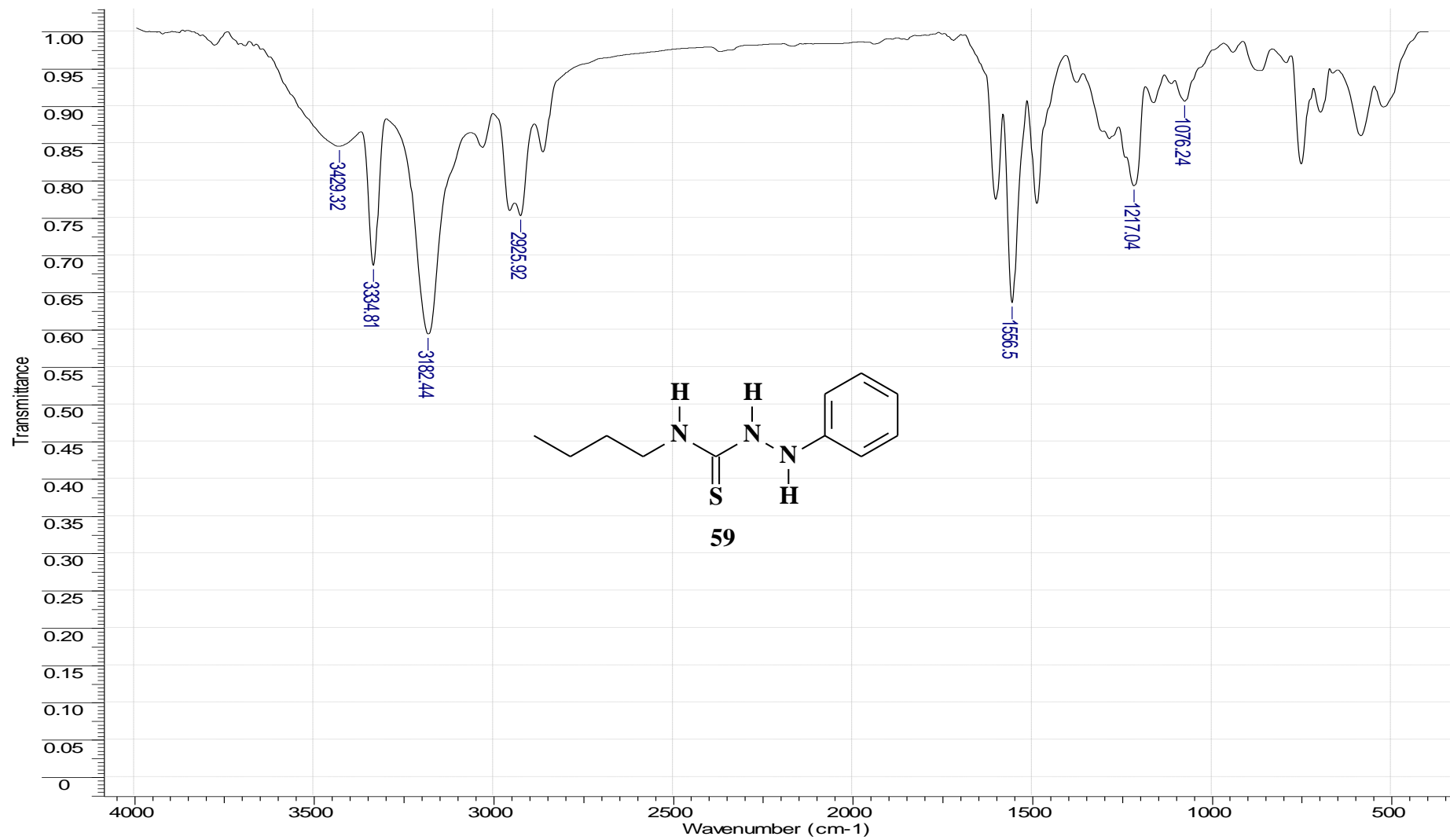
2.50 Espectro de RMN H¹ da 1-fenil-4-isopropil-tiossemicarbazida (58) obtido em acetona-d₆



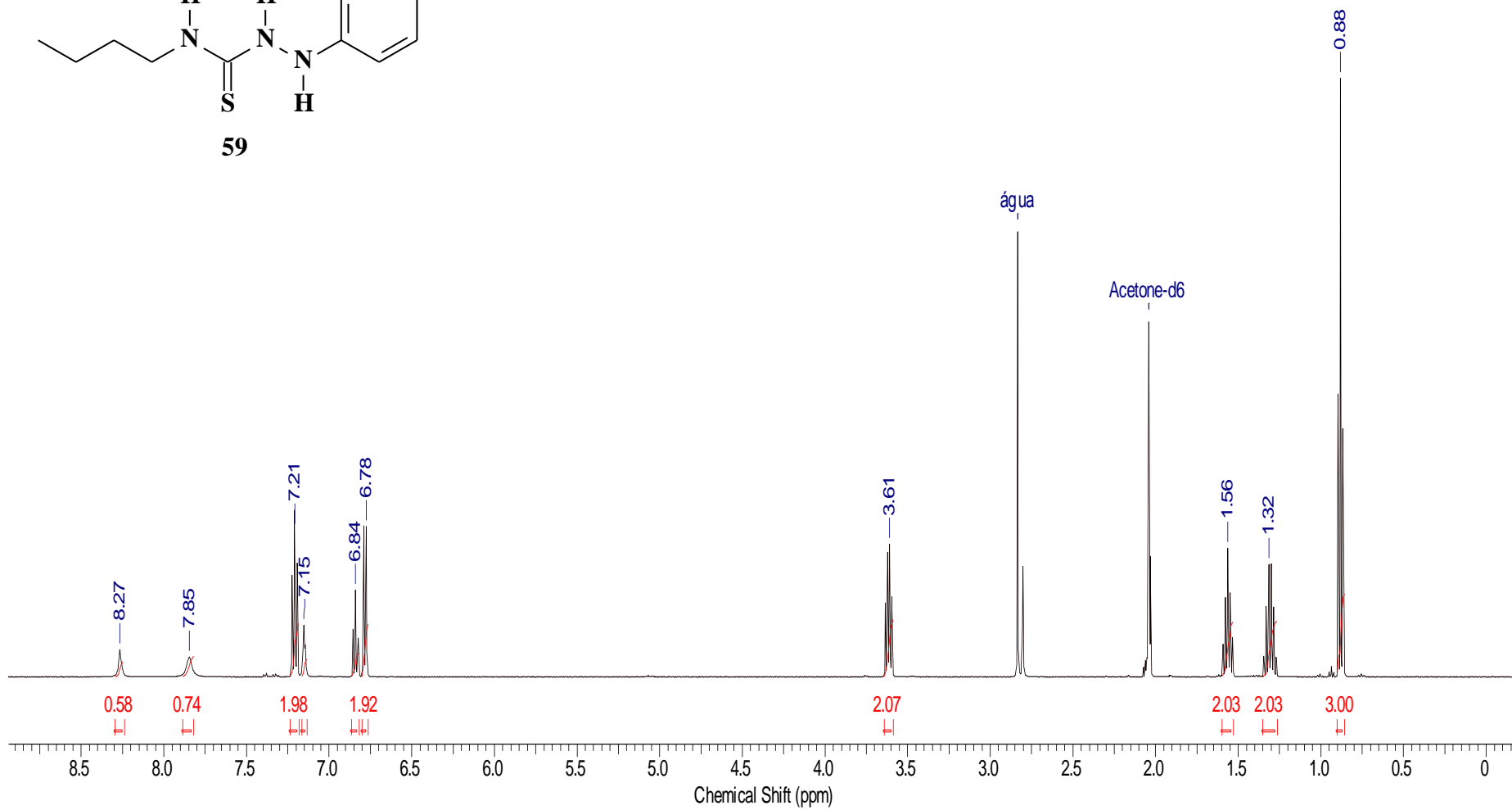
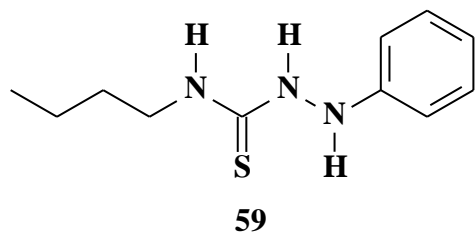
2.51 Espectro de RMN C^{13} (DEPTQ) da 1-fenil-4-isopropil-tiossemicarbazida (58) obtido em acetona- d_6



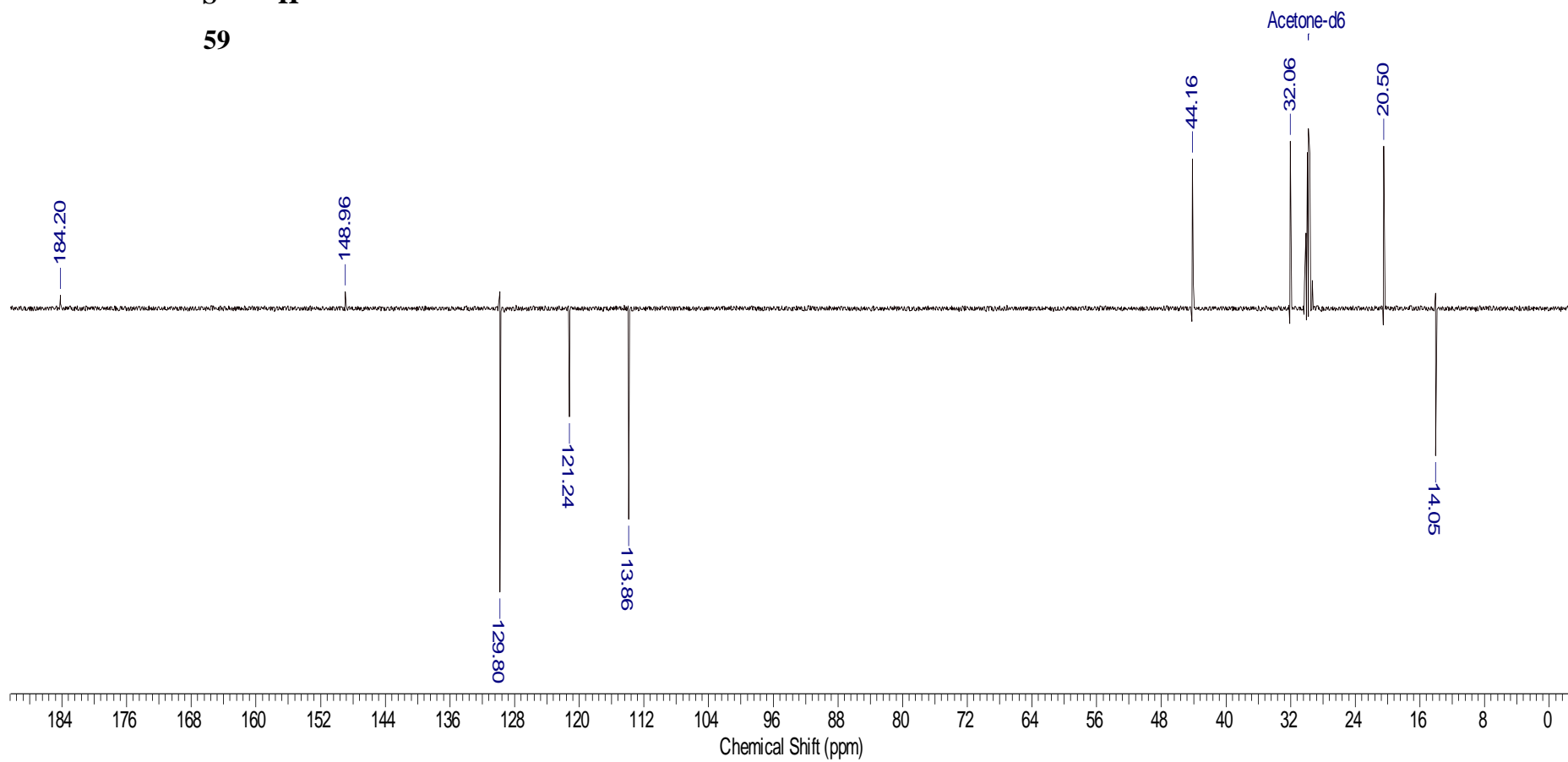
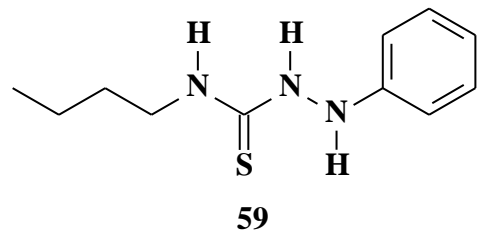
2.52 Espectro de IV da 1-fenil-4-butil-tiossemicarbazida (59) obtido em pastilha de KBr



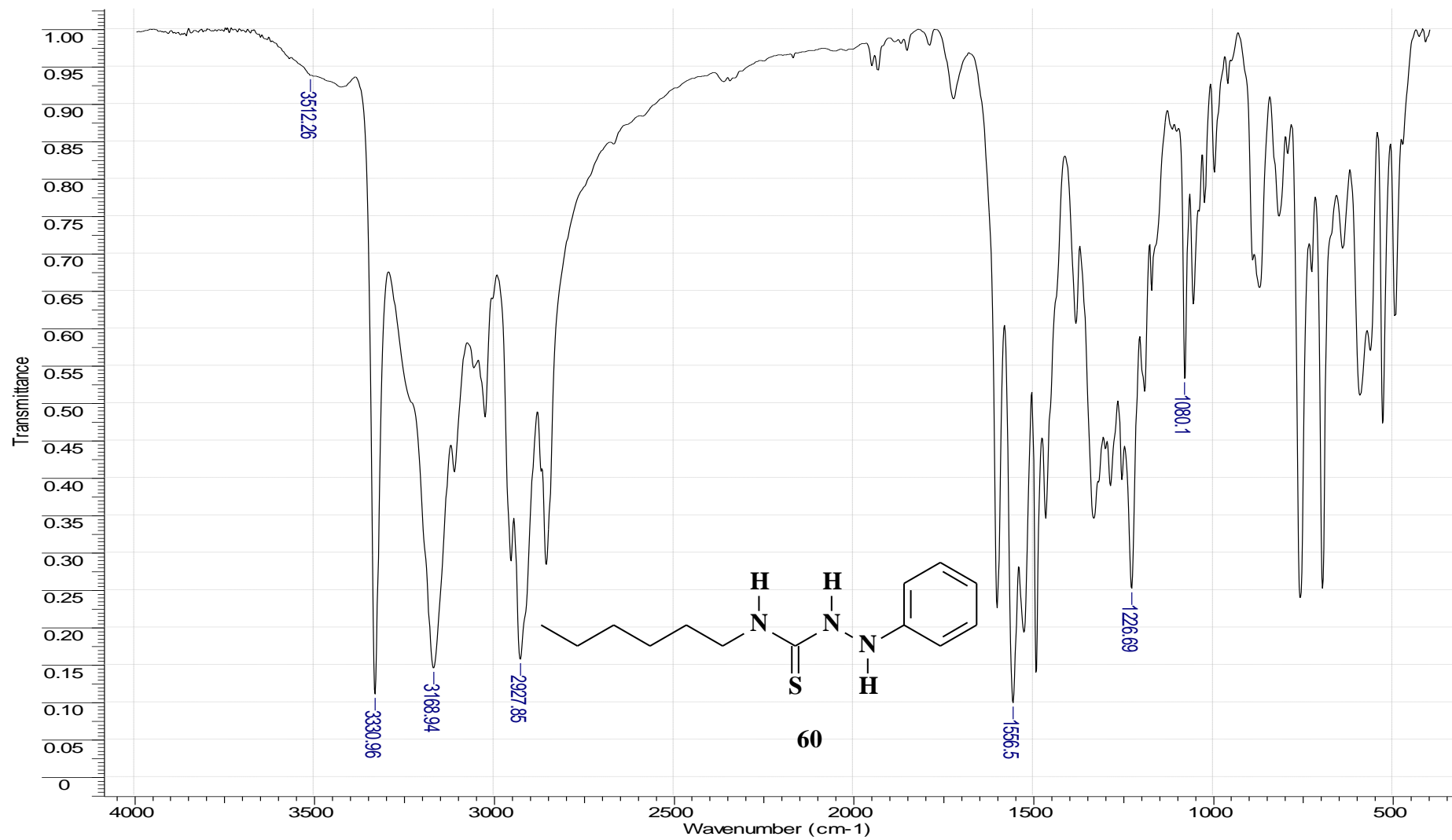
2.53 Espectro de RMN H^1 da 1-fenil-4-butil-tiossemicarbazida (59) obtido em acetona- d_6



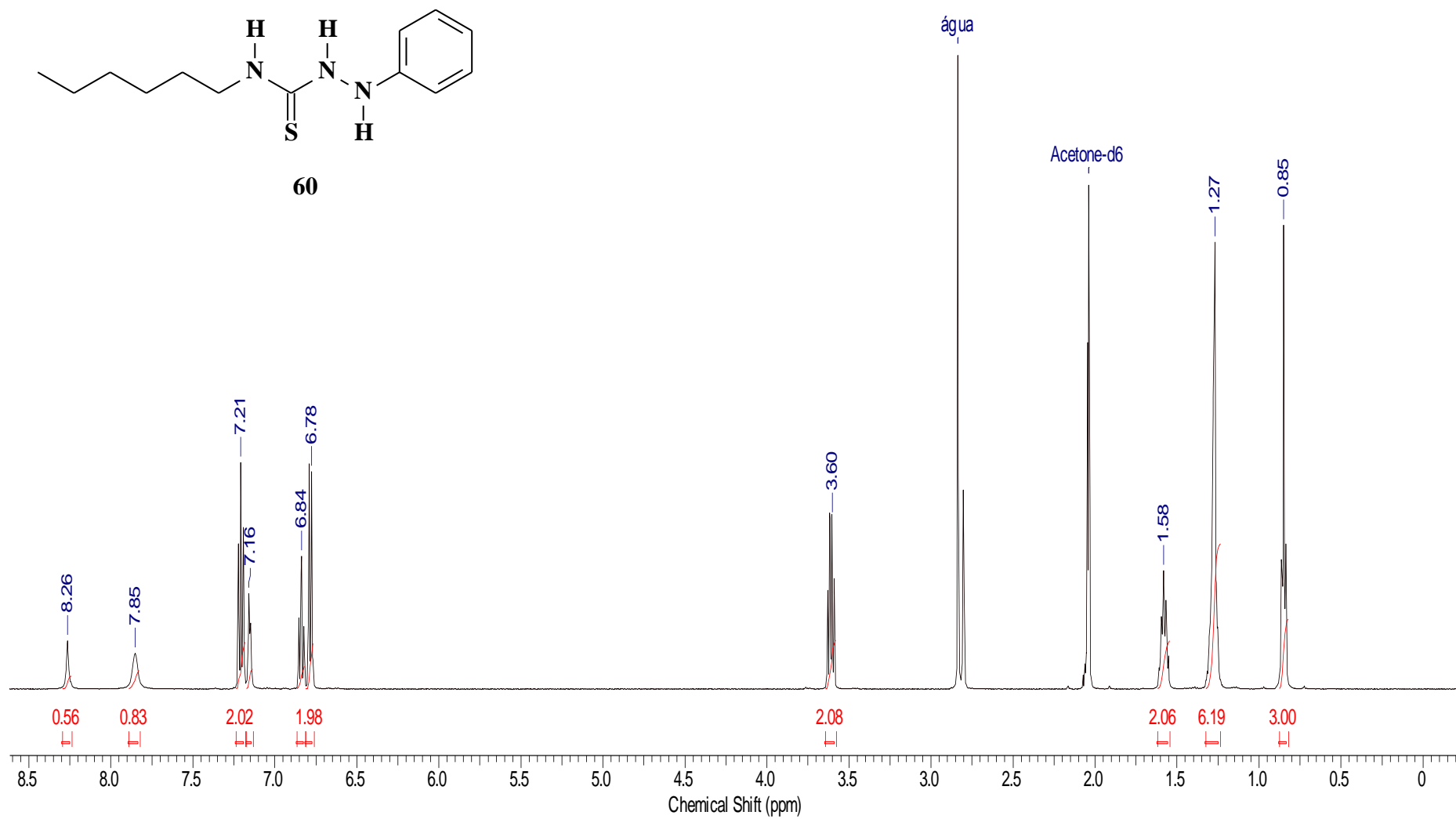
2.54 Espectro de RMN C¹³ (DEPTQ) da 1-fenil-4-butil-tiossemicarbazida (59) obtido em acetona-d₆



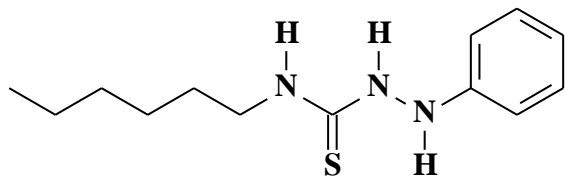
2.55 Espectro de IV da 1-fenil-4-hexil-tiossemicarbazida (60) obtido em pastilha de KBr



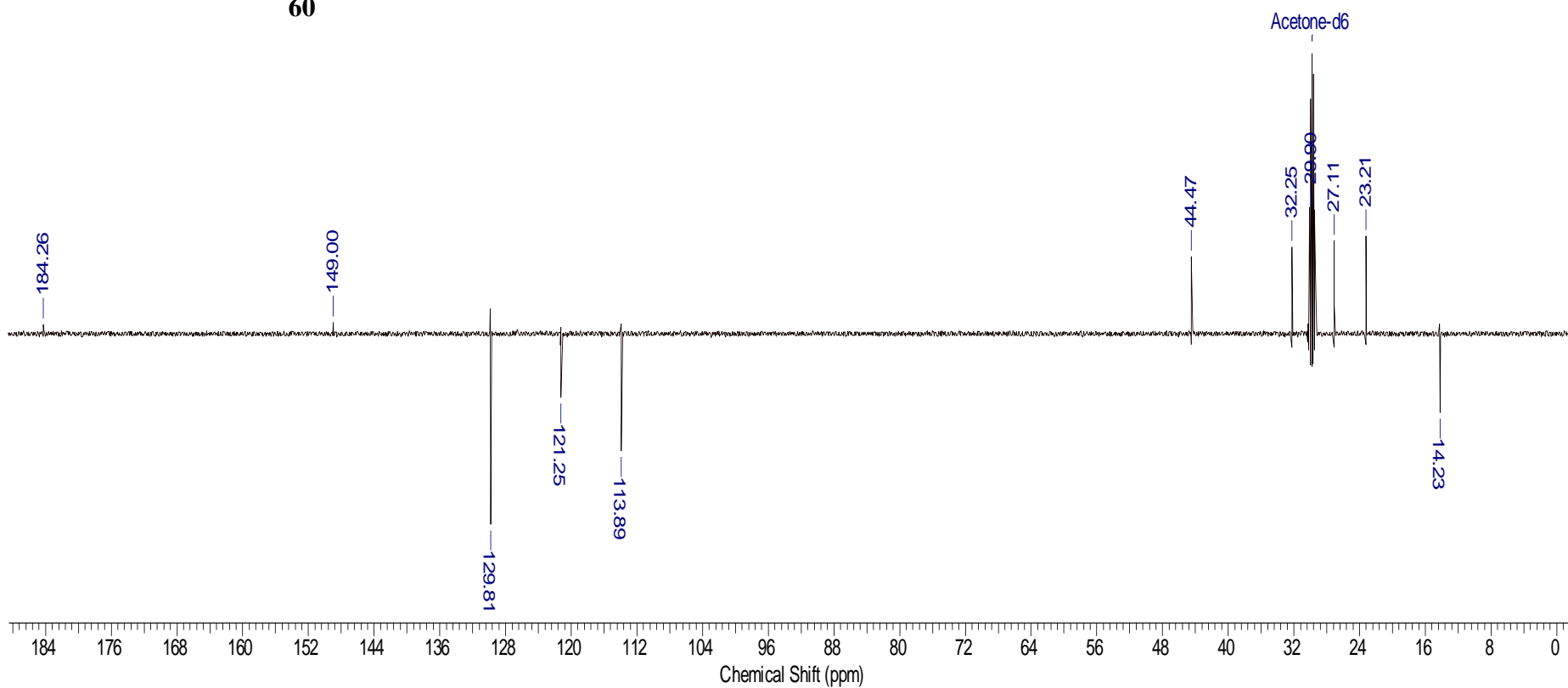
2.56 Espectro de RMN H^1 da 1-fenil-4-hexil-tiossemicarbazida (60) obtido em acetona- d_6



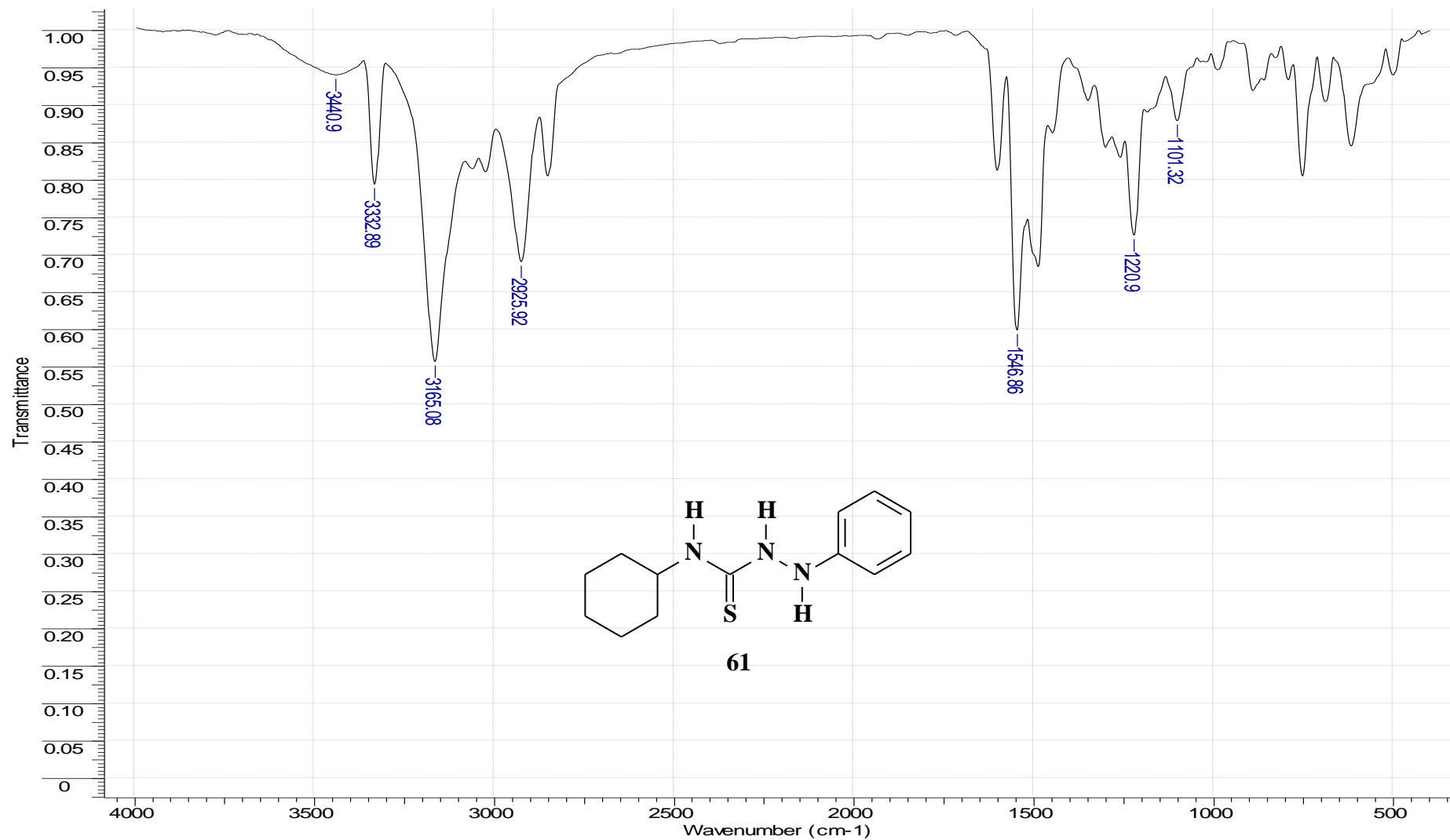
2.57 Espectro de RMN C¹³ (DEPTQ) da 1-fenil-4-hexil-tiossemicarbazida (60) obtido em acetona-d₆



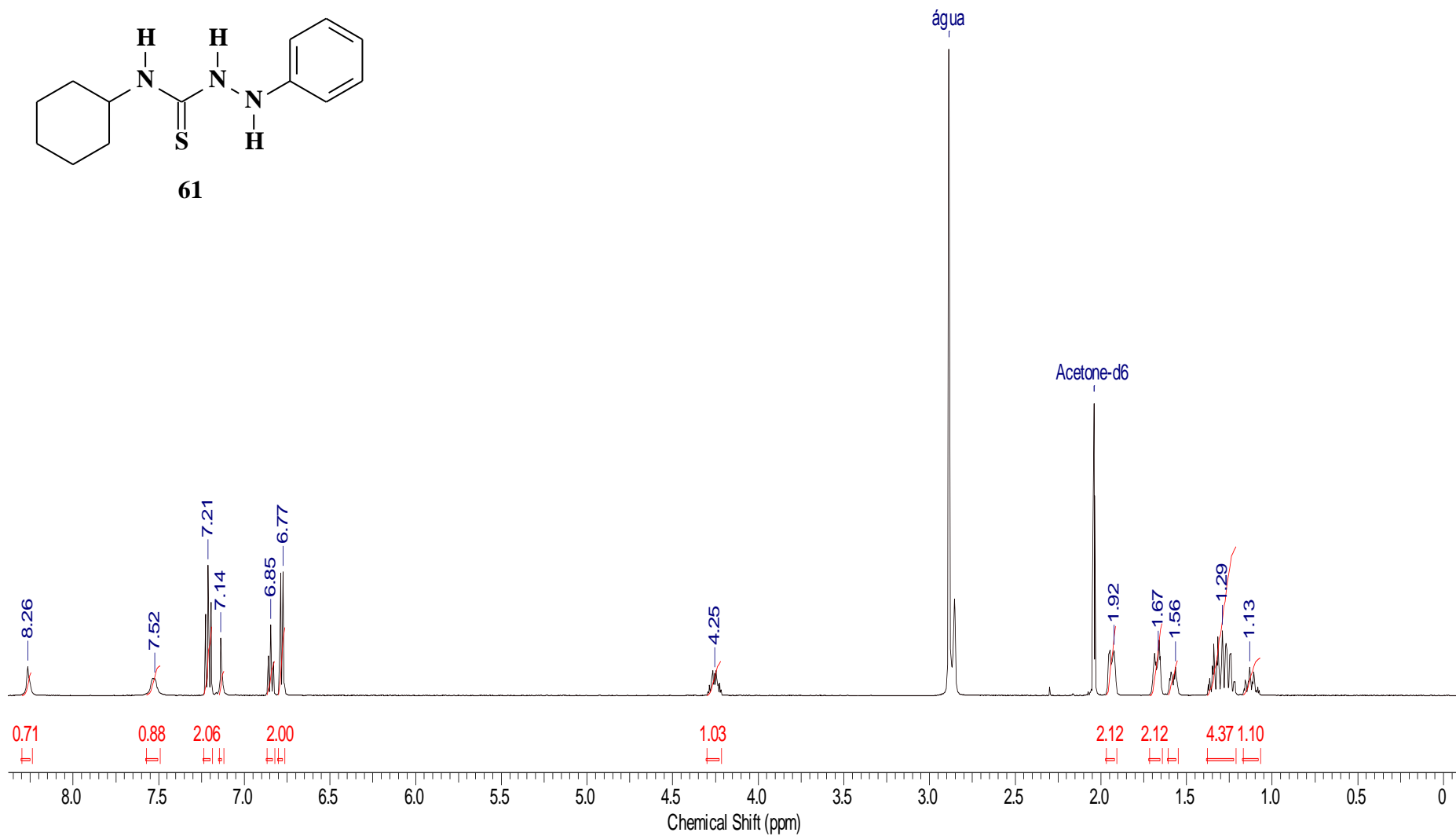
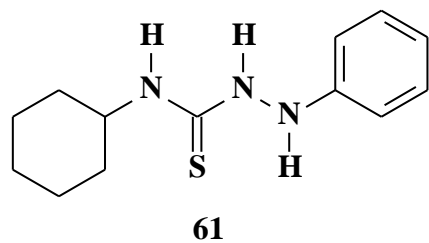
60



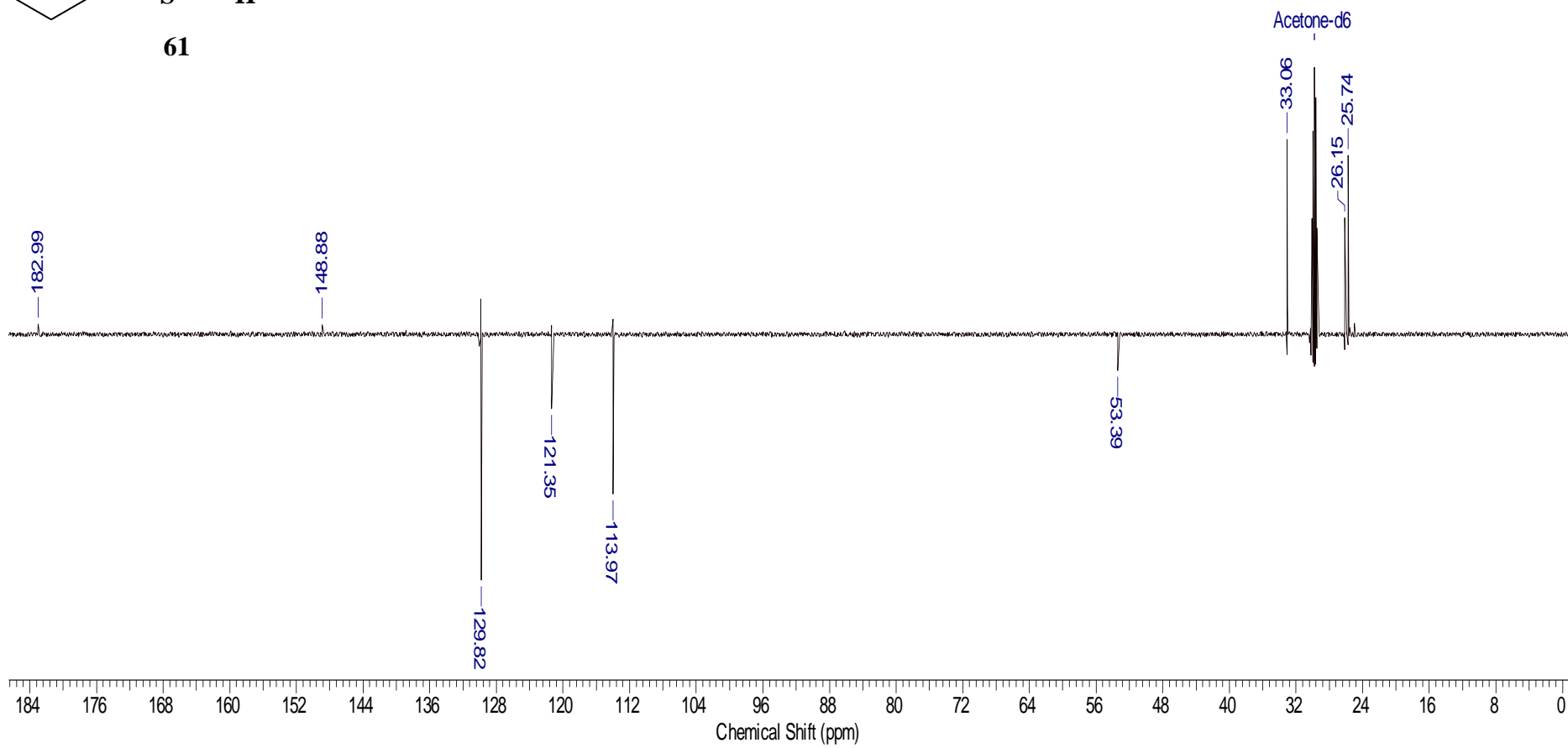
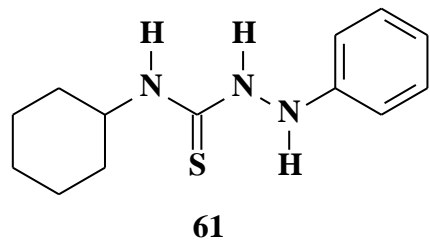
2.58 Espectro de IV da 1-fenil-4-cicloexil-tiossemicarbazida (61) obtido em pastilha de KBr



2.59 Espectro de RMN H^1 da 1-fenil-4-cicloexil-tiossemicarbazida (61) obtido em acetona- d_6

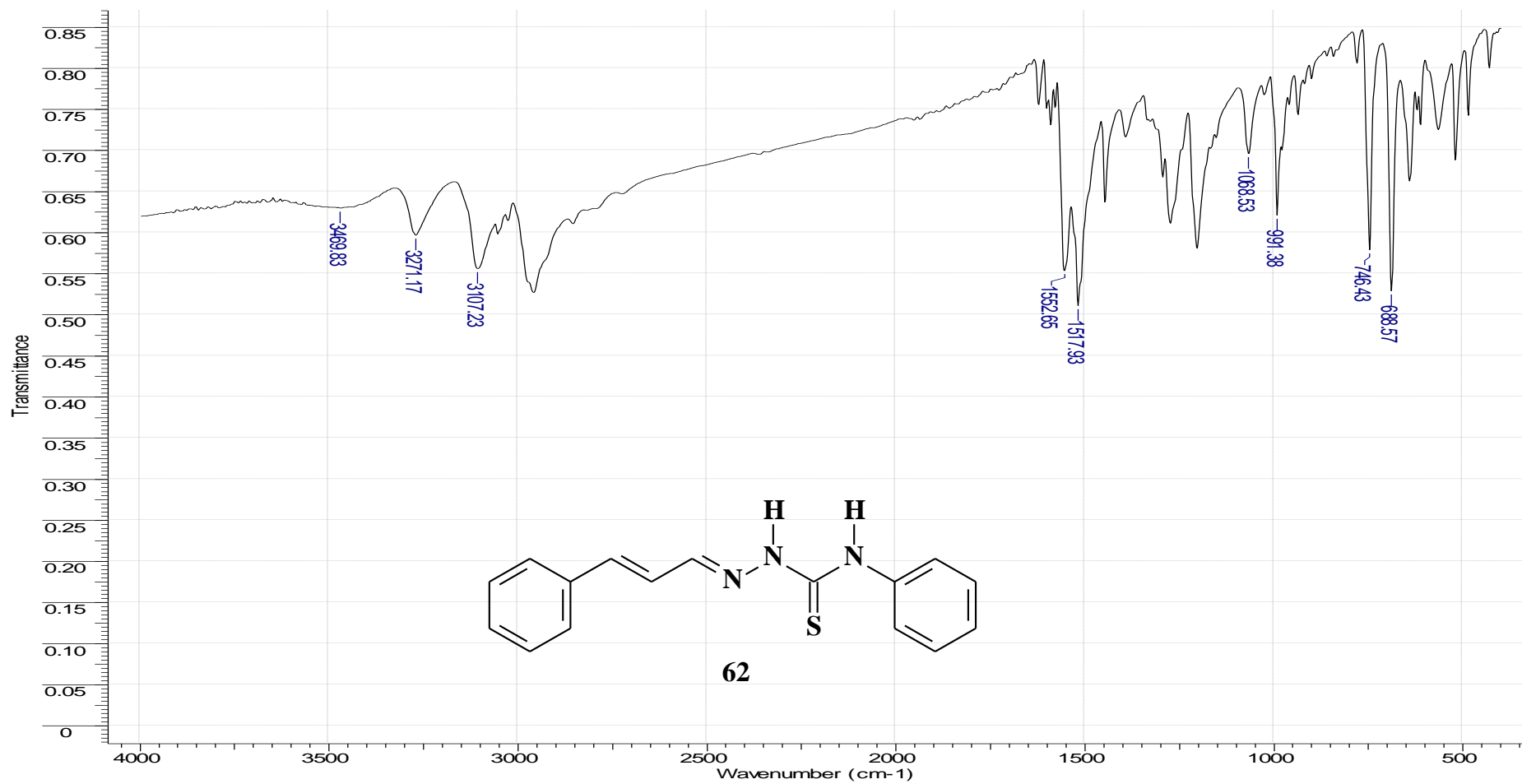


2.60 Espectro de RMN C¹³ (DEPTQ) da 1-fenil-4-cicloexil-tiossemicarbazida (61) obtido em acetona-d₆

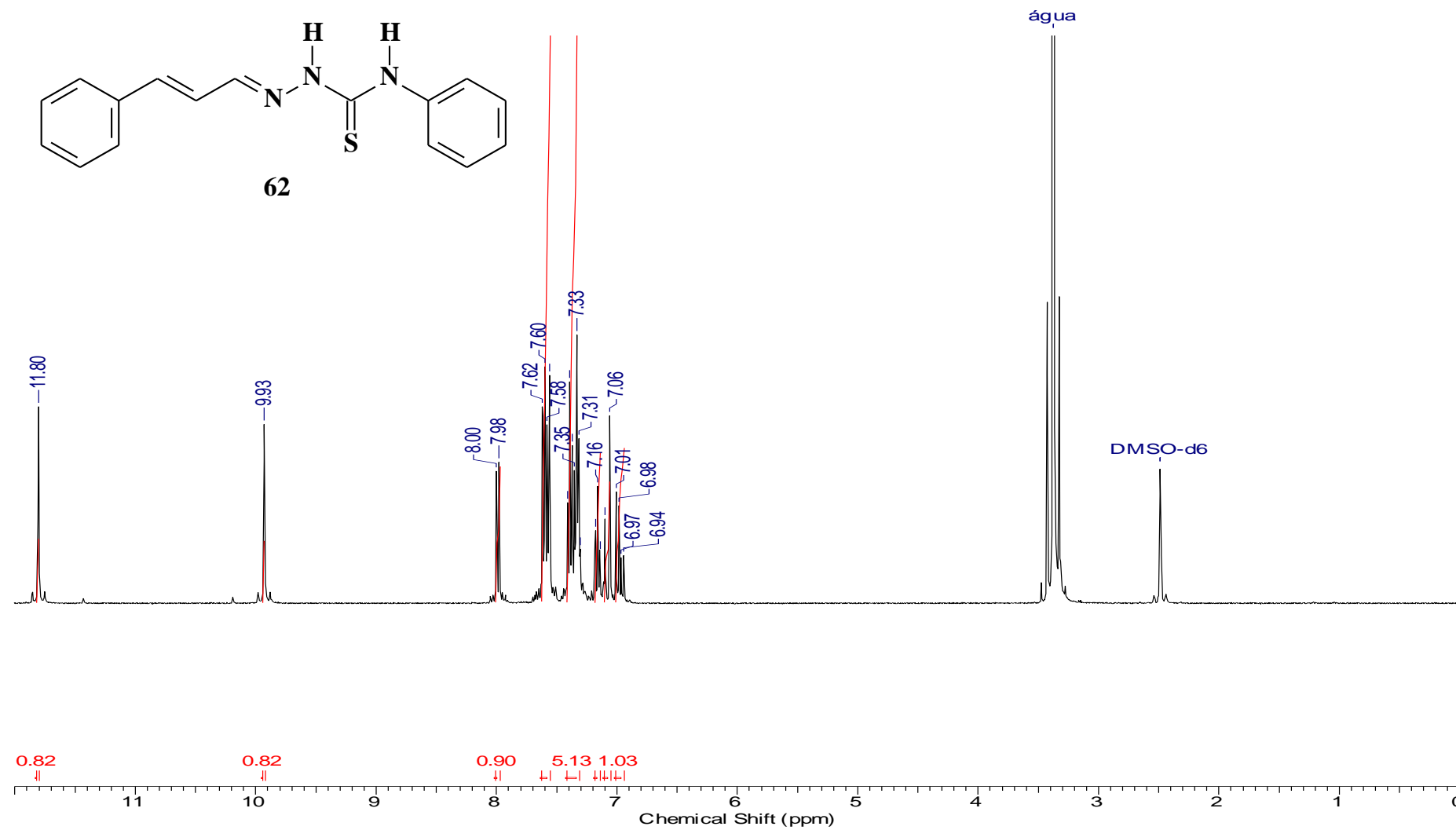


3 ESPECTRO DAS TIOSSEMICARBAZONAS

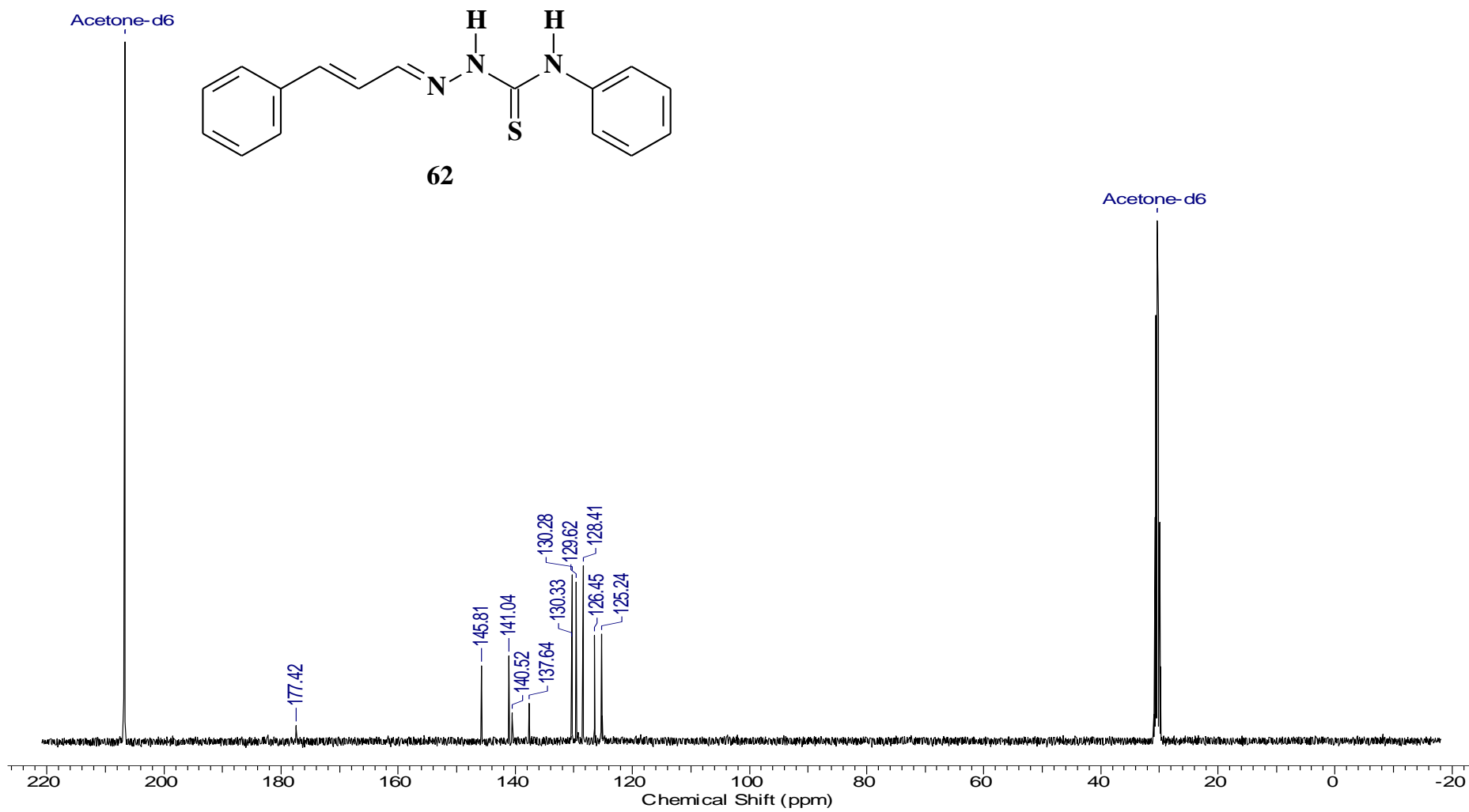
3.1 Espectro de IV do Cinamaldeído-4-fenil-tiossemicarbazona (62) obtido em pastilha de KBr



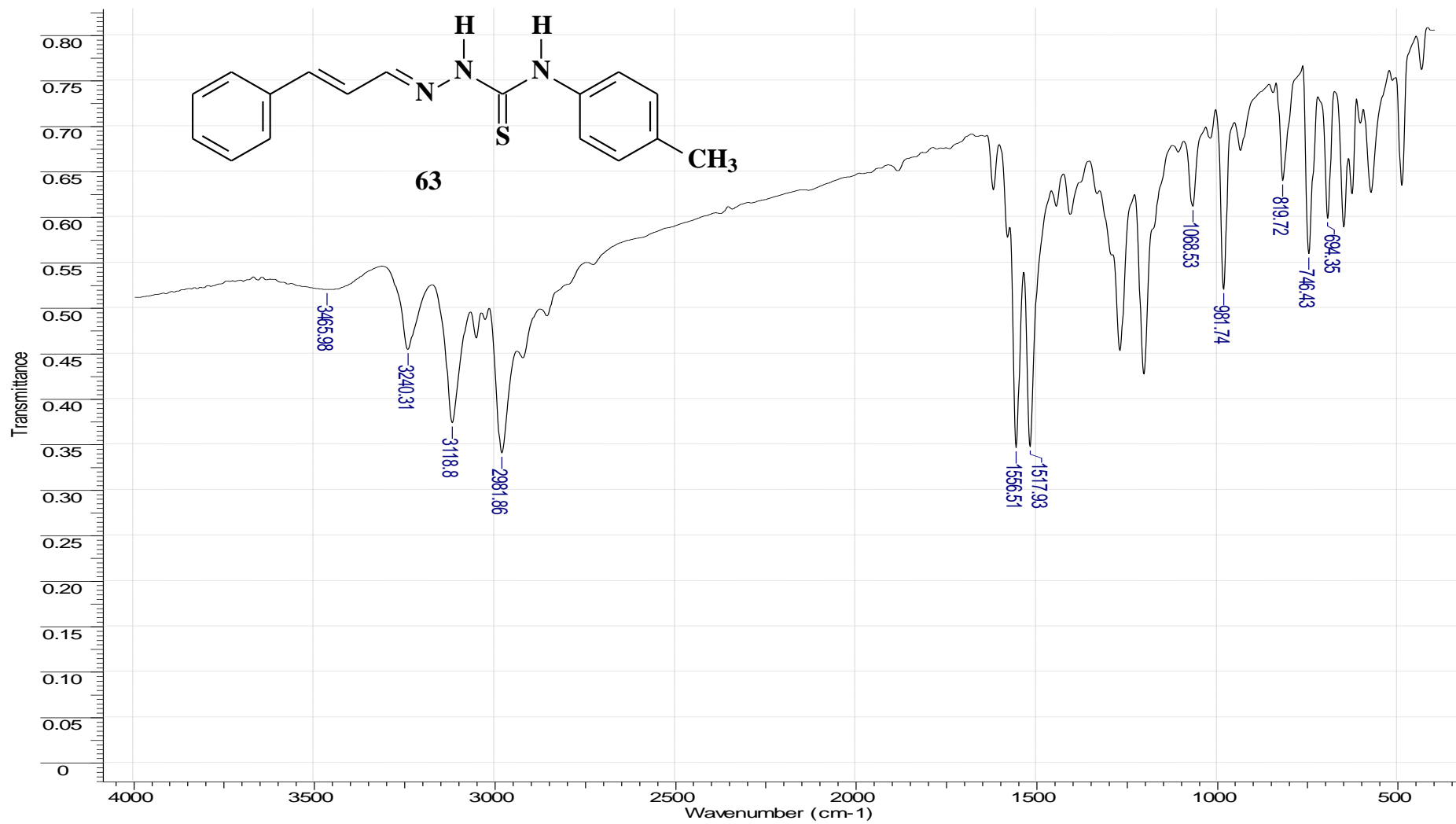
3.2 Espectro de RMN H^1 da Cinamaldeído-4-fenil-tiossemicarbazona (62) obtido em $DMSO-d_6$



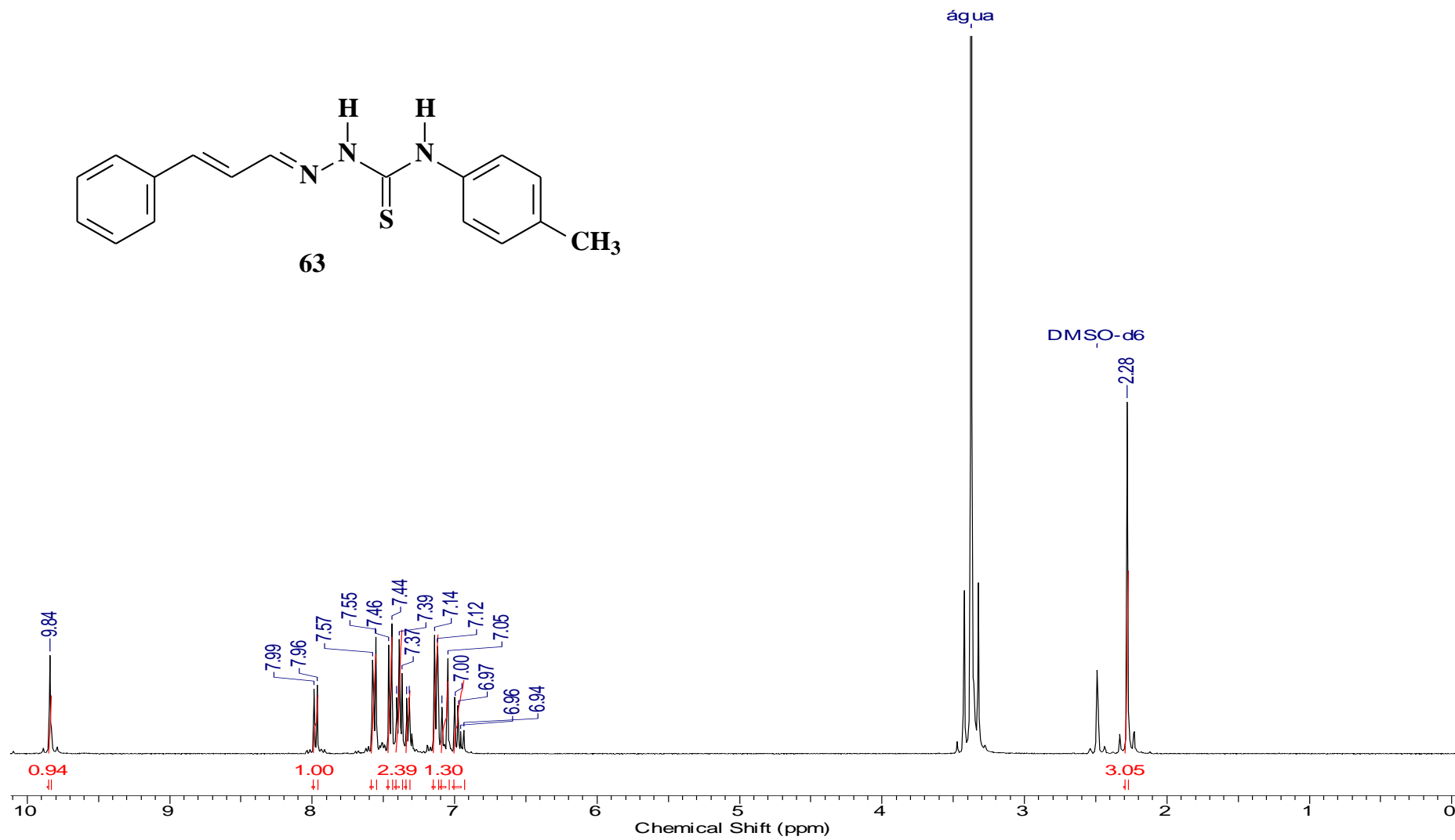
3.3 Espectro de RMN C¹³ do Cinamaldeído-4-fenil-tiossemicarbazona (62) obtido em acetona-d₆



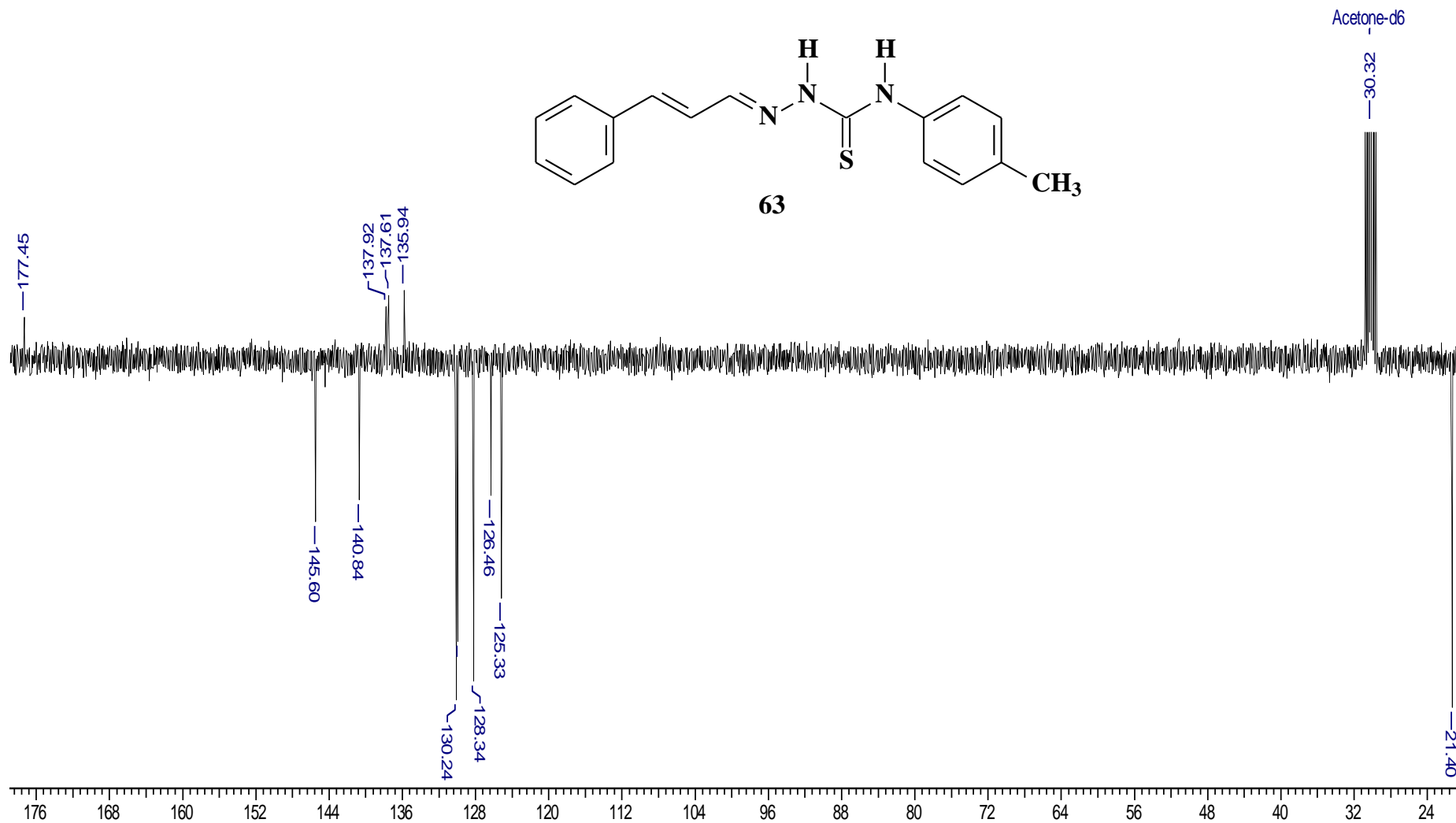
3.4 Espectro de IV do Cinamaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (63) obtido em pastilha de KBr



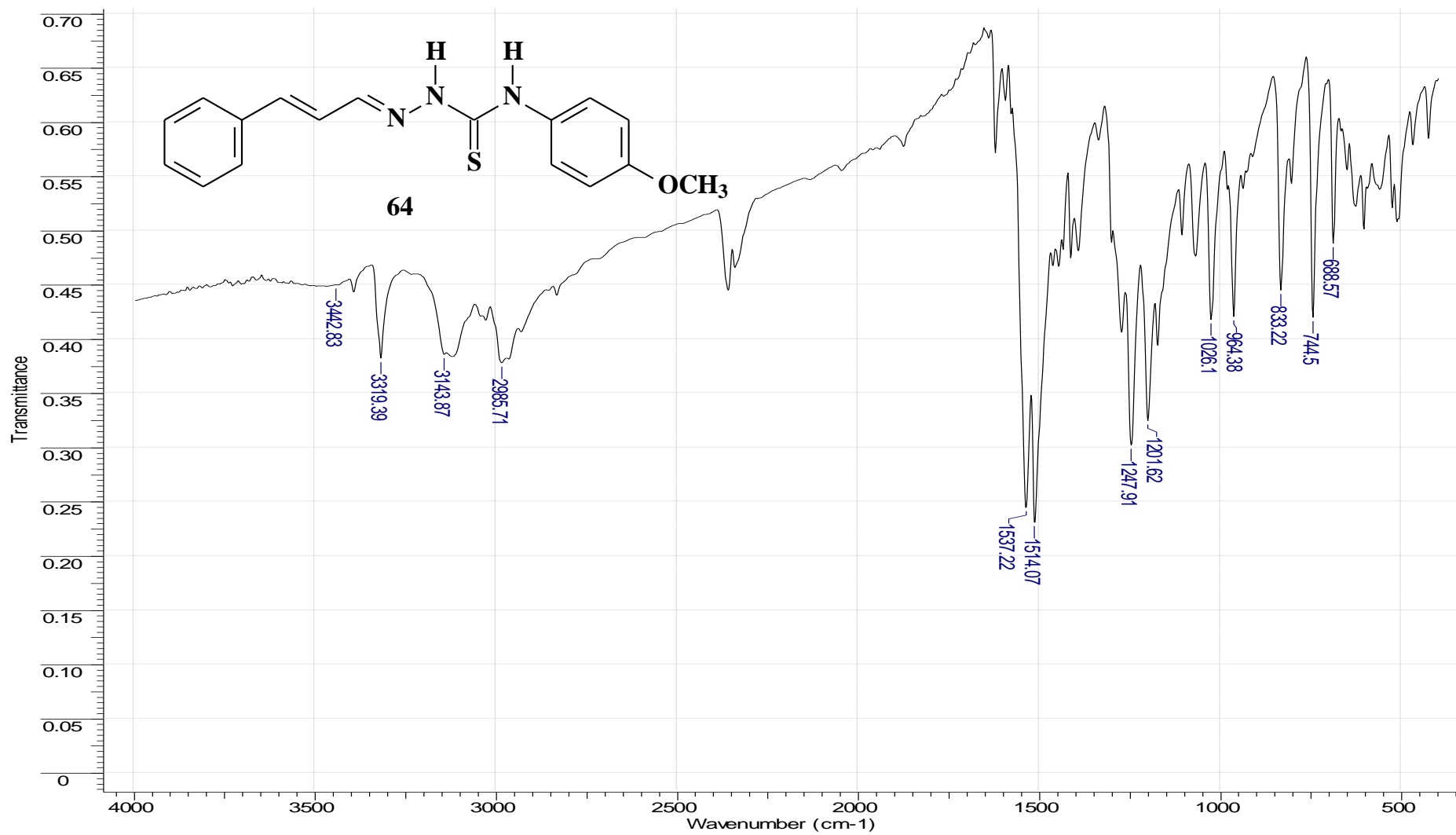
3.5 Espectro de RMN H¹ do Cinamaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (63) obtido em DMSO-*d*₆



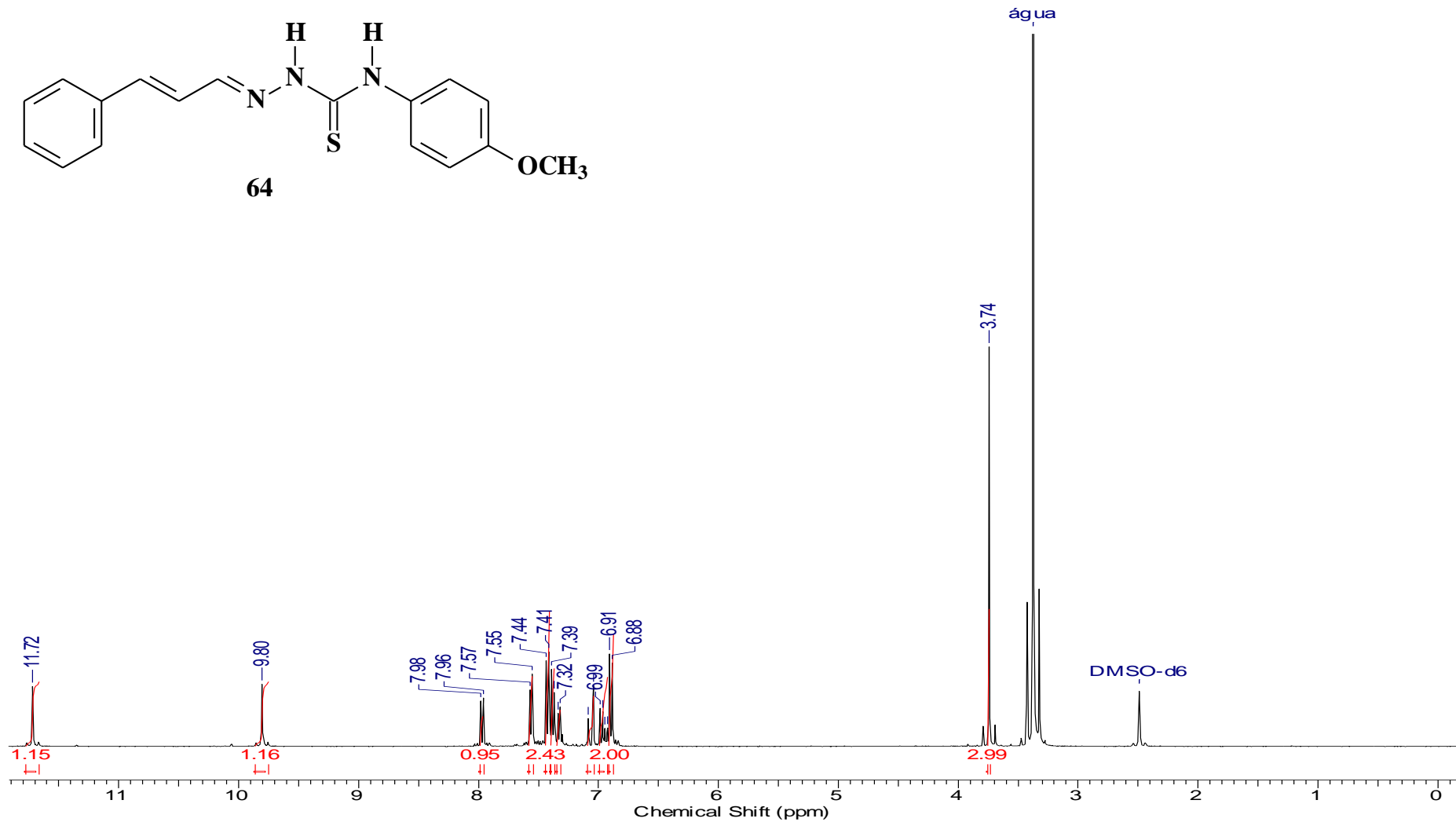
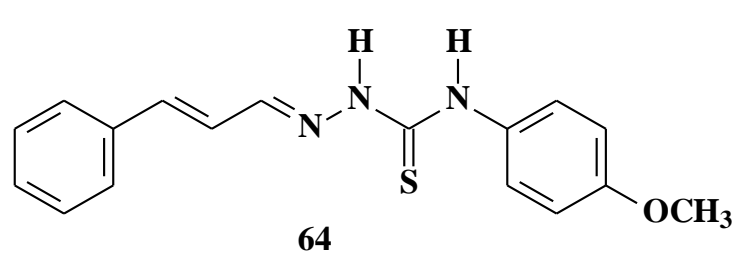
3.6 Espectro de RMN C¹³ (DEPTQ) do Cinamaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (63) obtido em acetona-*d*₆



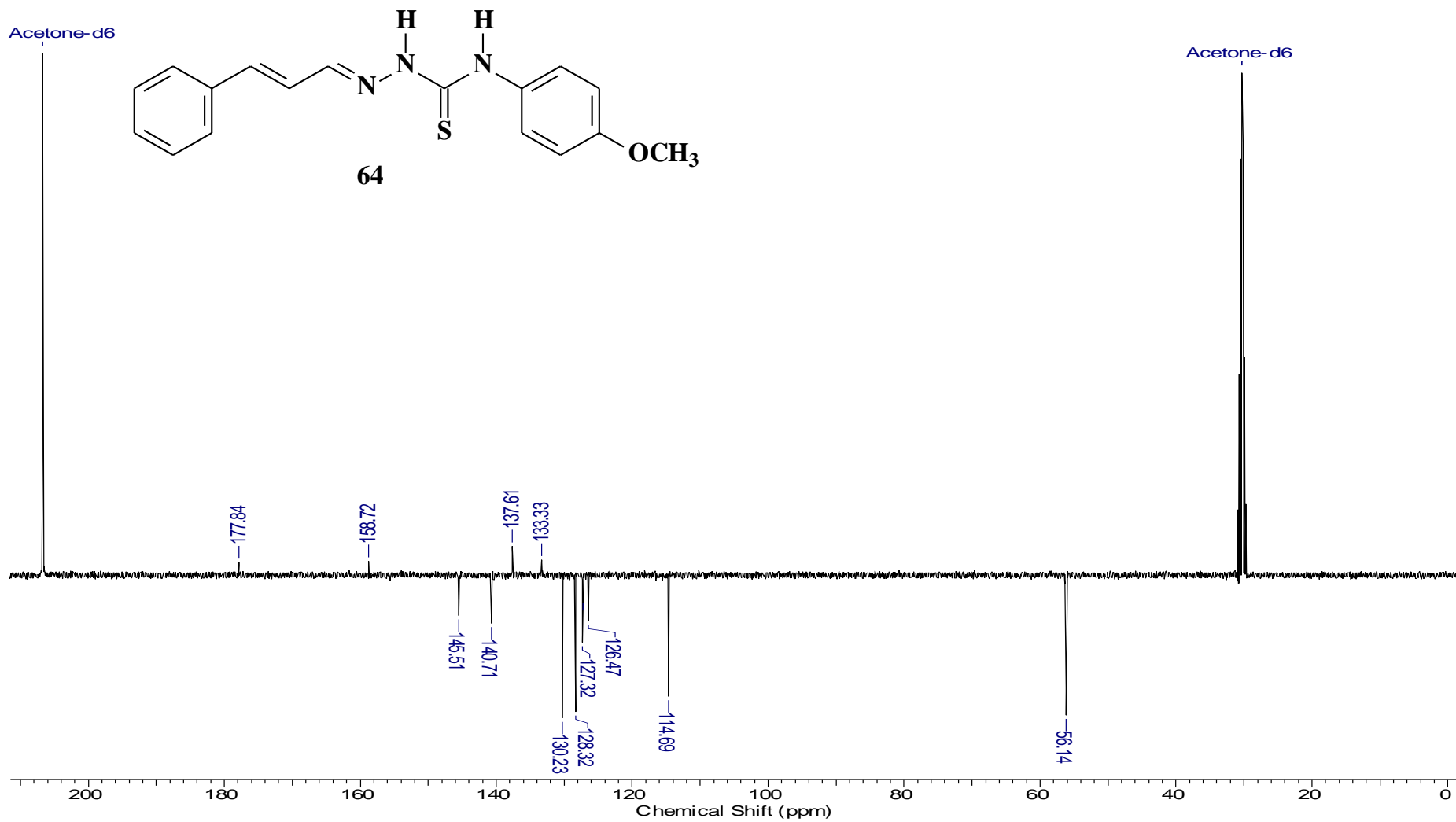
3.7 Espectro de IV do Cinamaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (64) obtido em pastilha de KBr



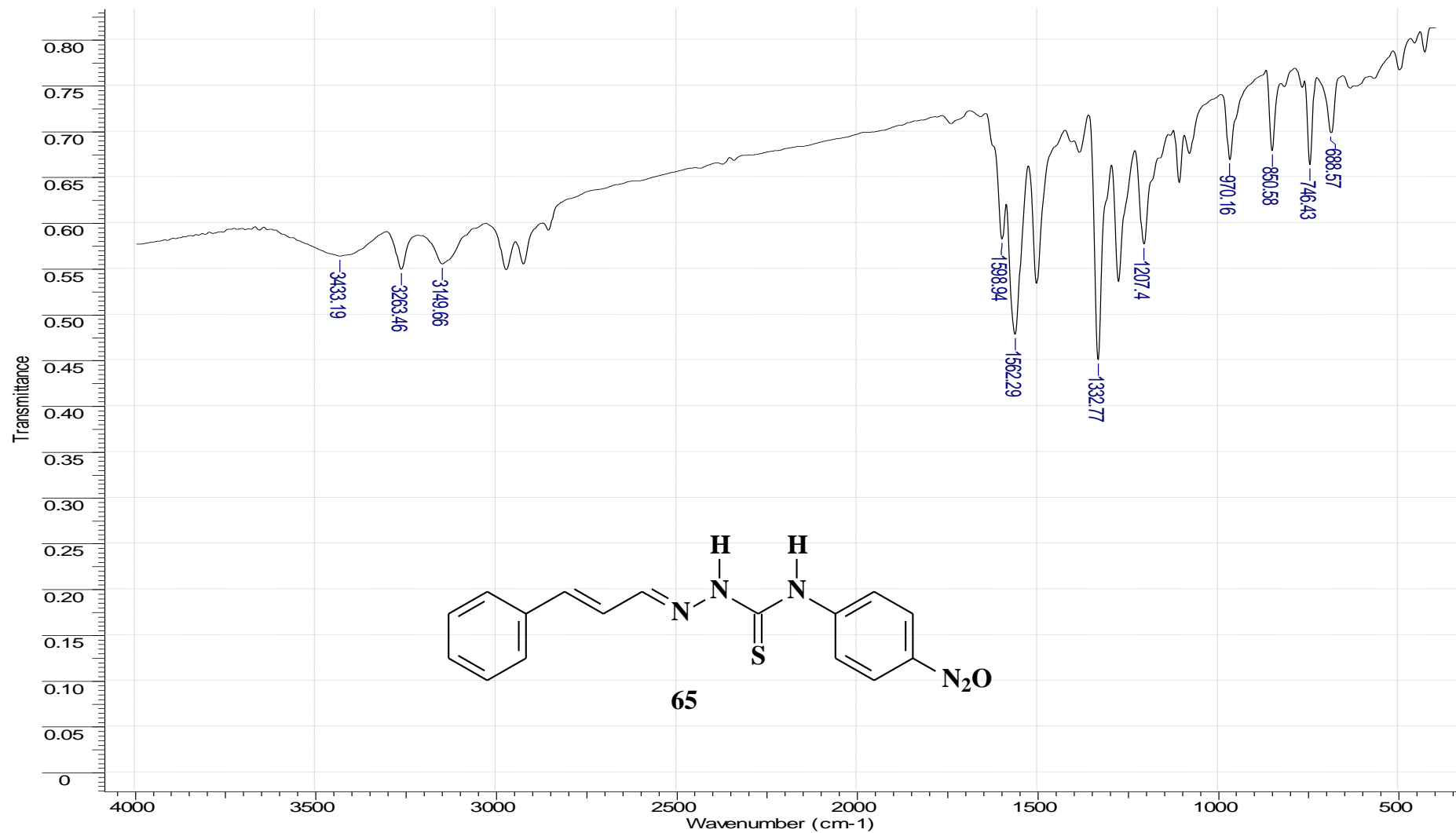
3.8 Espectro de RMN H¹ do Cinamaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (64) obtido em DMSO-*d*₆



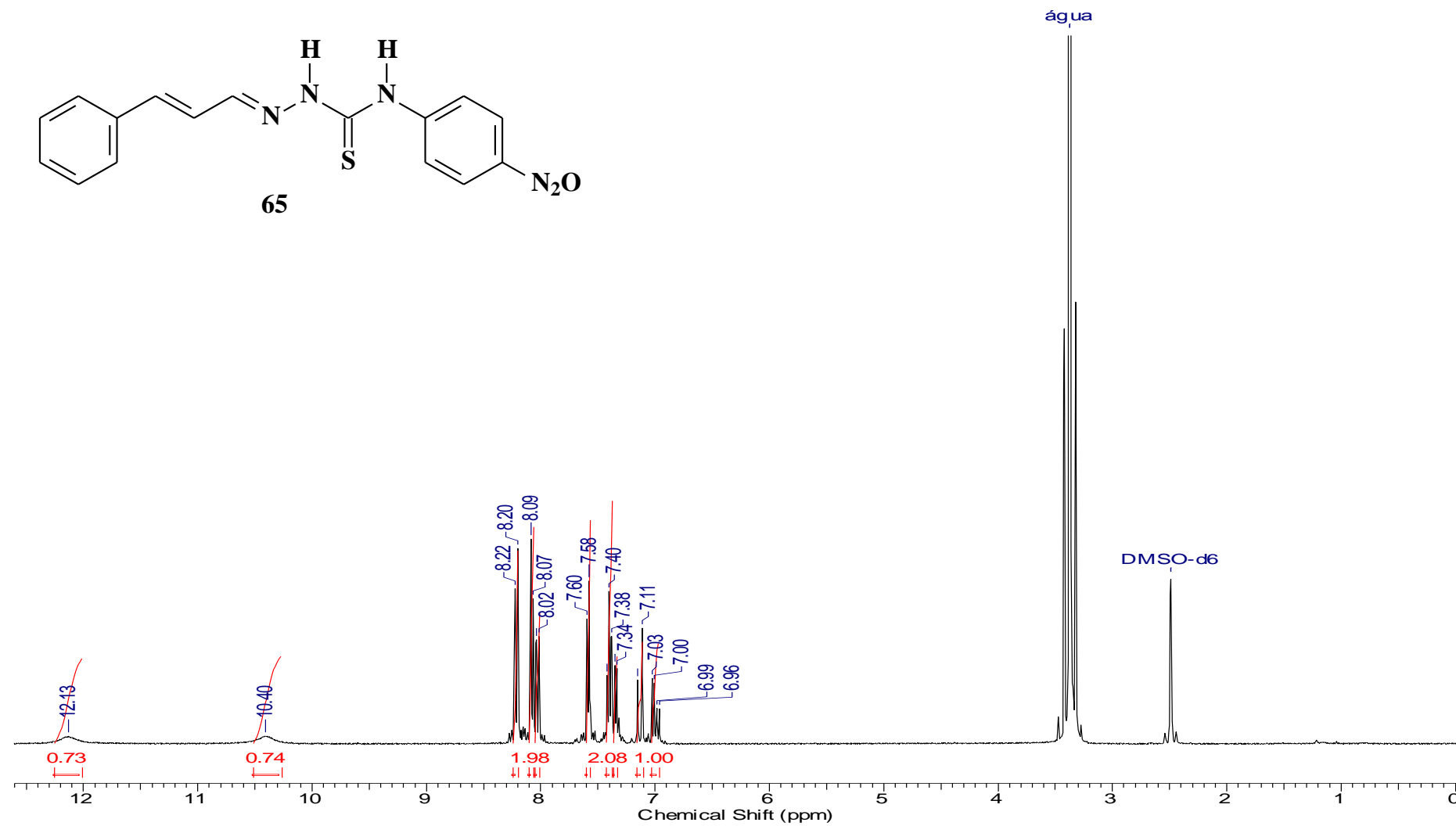
3.9 Espectro de RMN C¹³ (DEPTQ) do Cinamaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (64) obtido em acetona-*d*₆



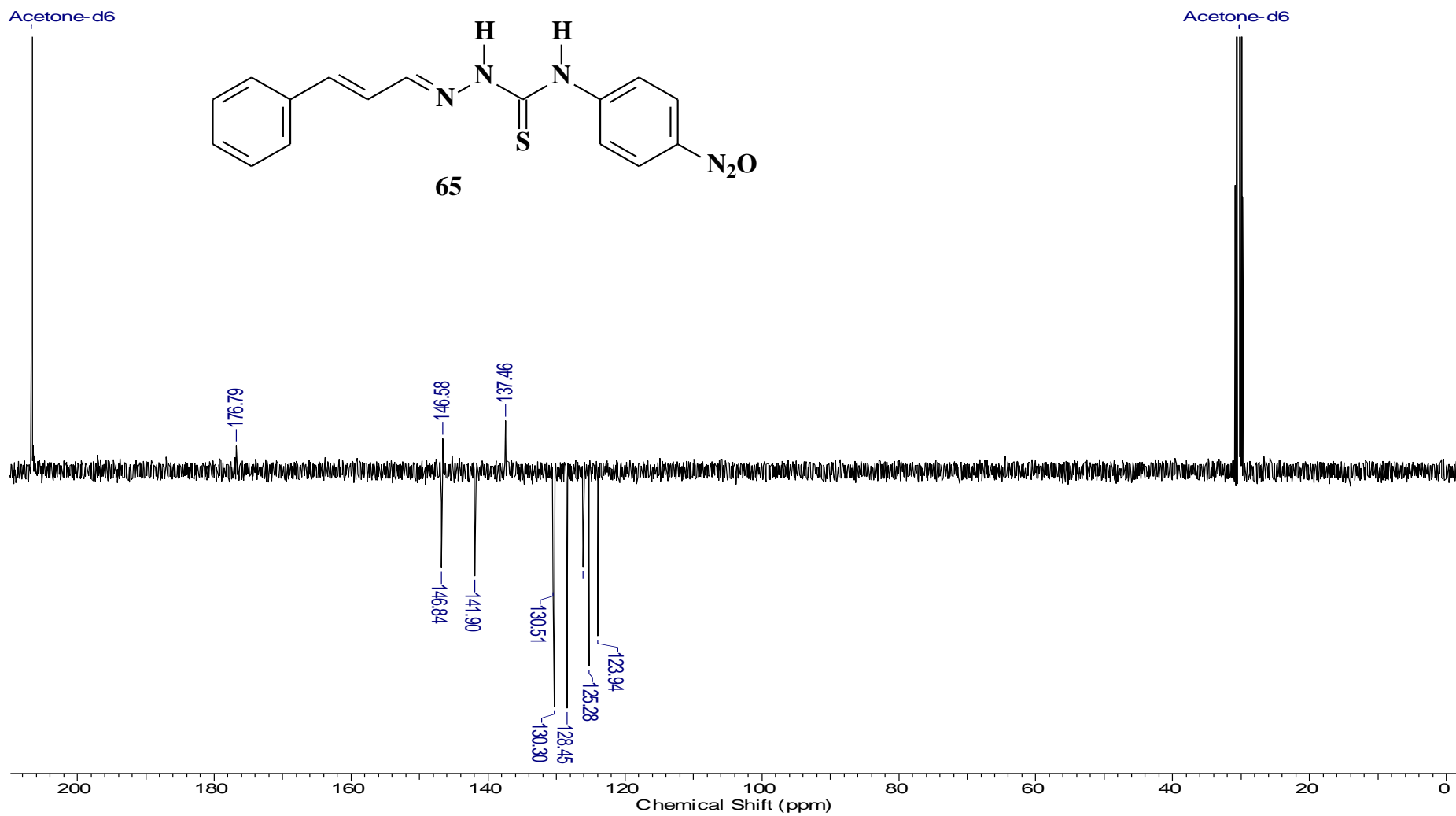
3.10 Espectro de IV do Cinamaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (65) obtido em pastilha de KBr



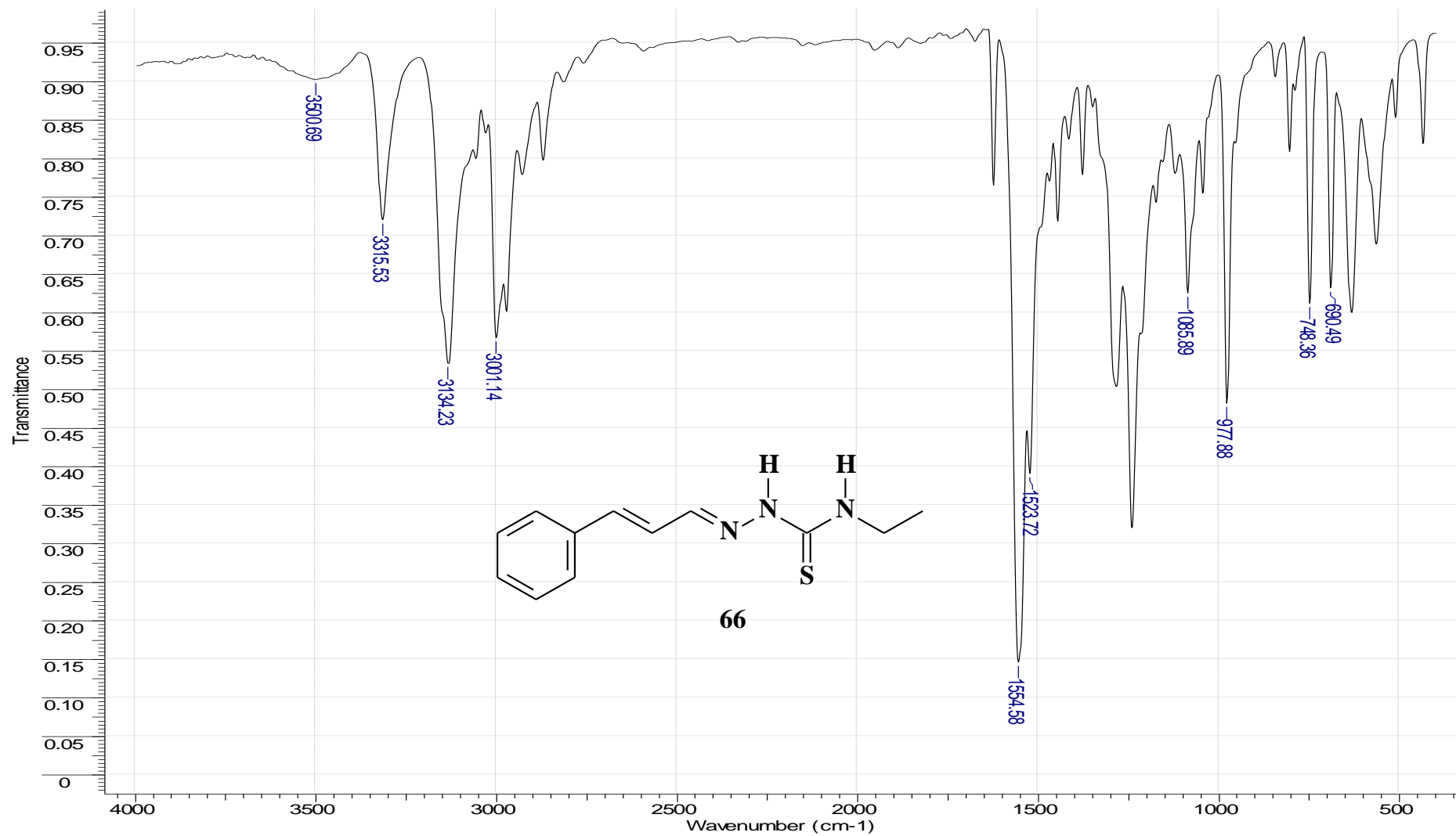
3.11 Espectro de RMN H¹ do Cinamaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (65) obtido em DMSO-*d*₆



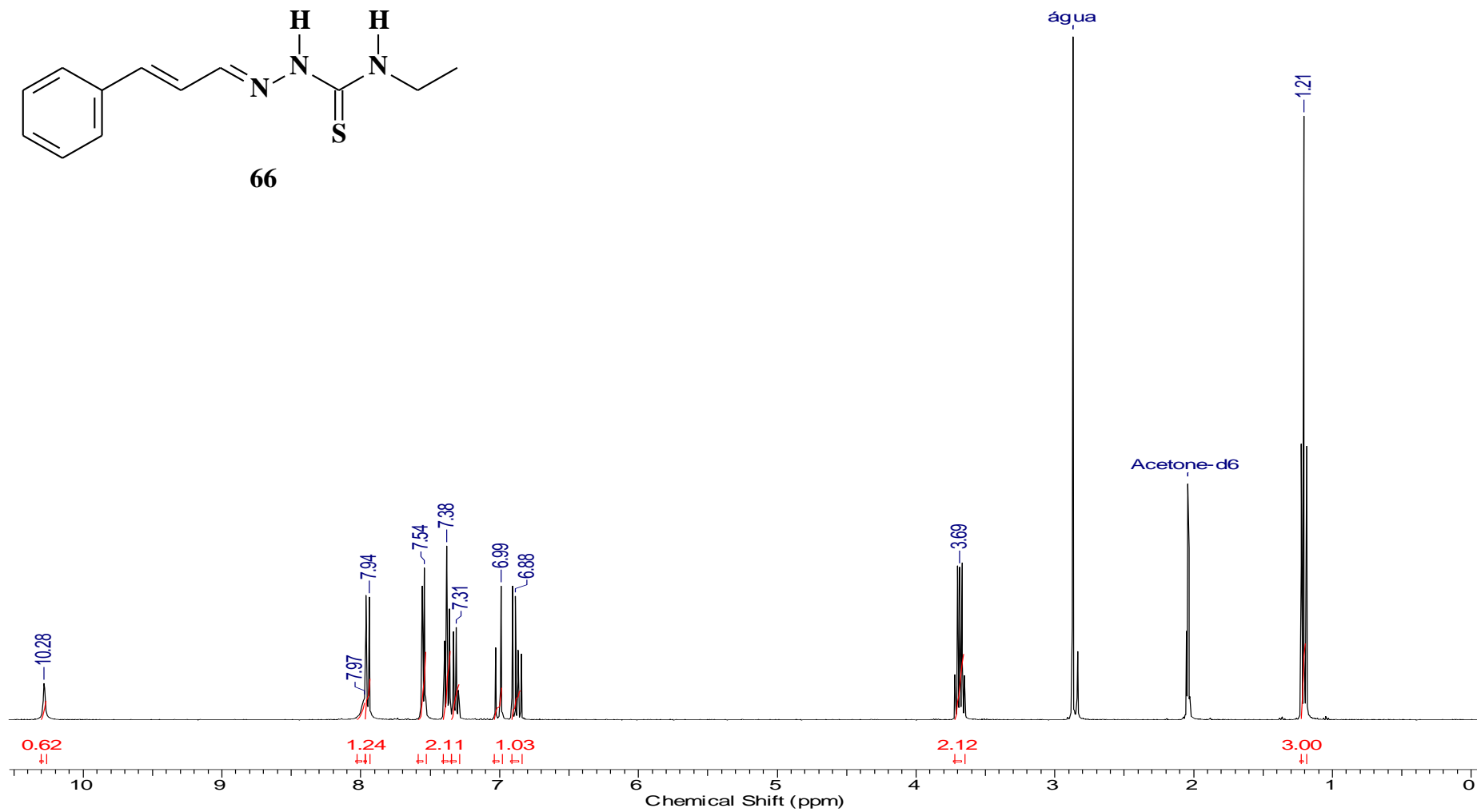
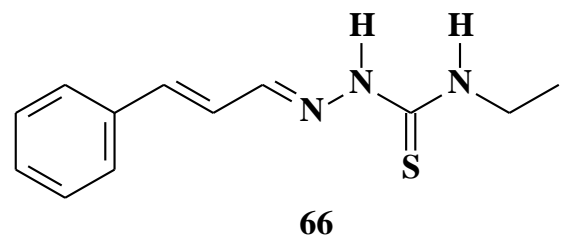
3.12 Espectro de RMN C^{13} (DEPTQ) do Cinamaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (65) obtido em acetona- d_6



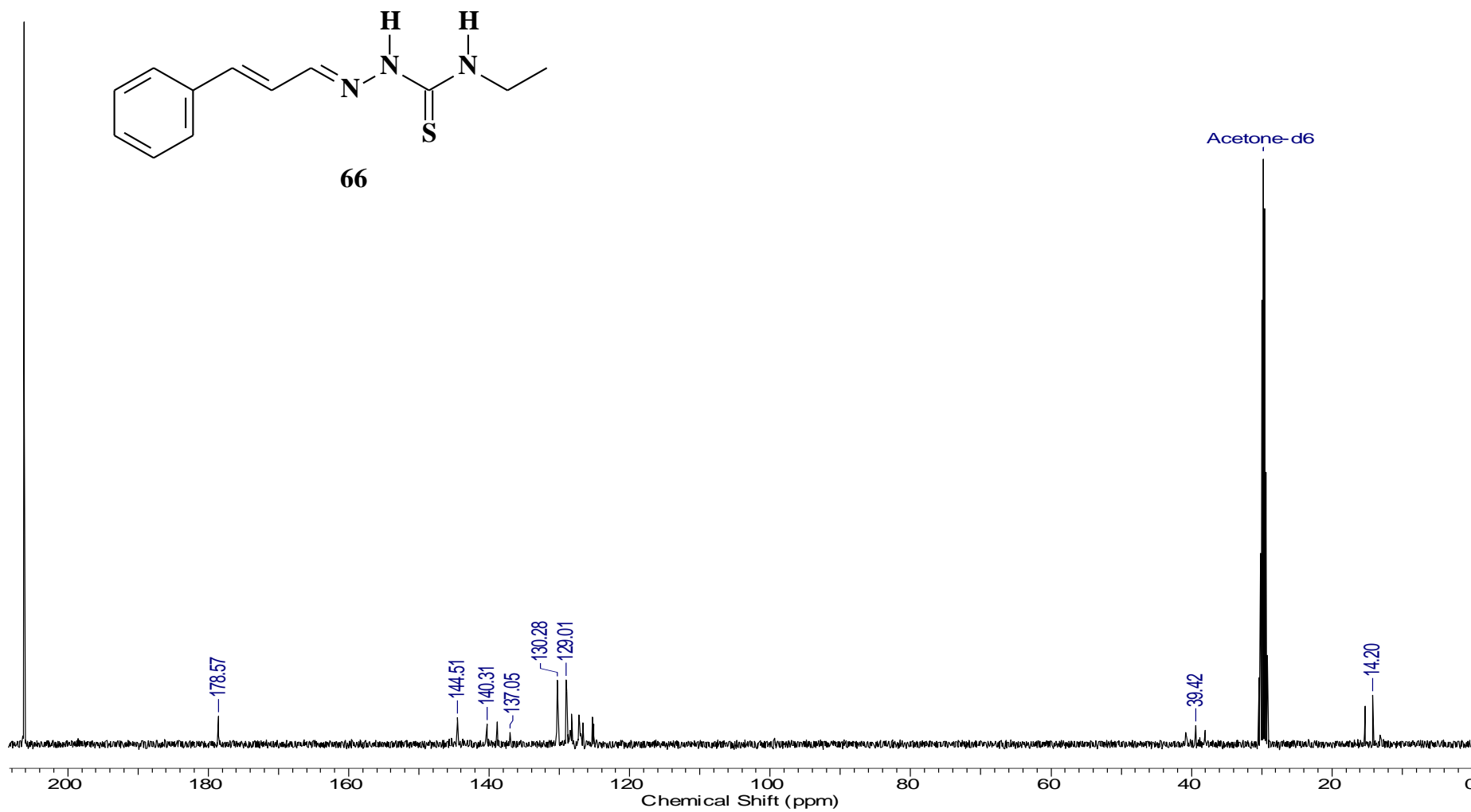
3.13 Espectro de IV do Cinamaldeído-4-etil-tiossemicarbazona (66) obtido em pastilha de KBr



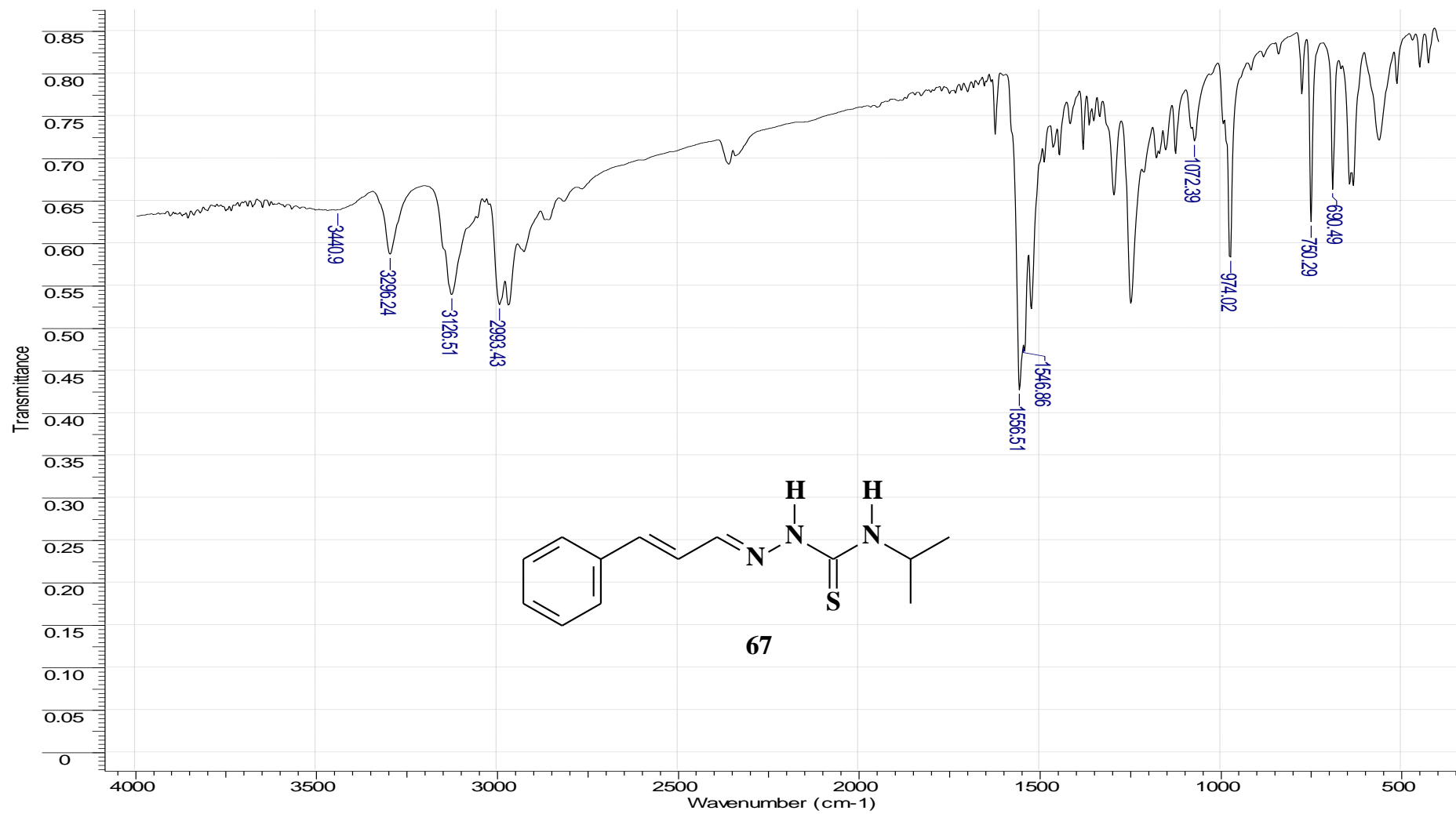
3.14 Espectro de RMN H¹ do Cinamaldeído-4-etil-tiossemicarbazona (66) obtido em acetona-d₆



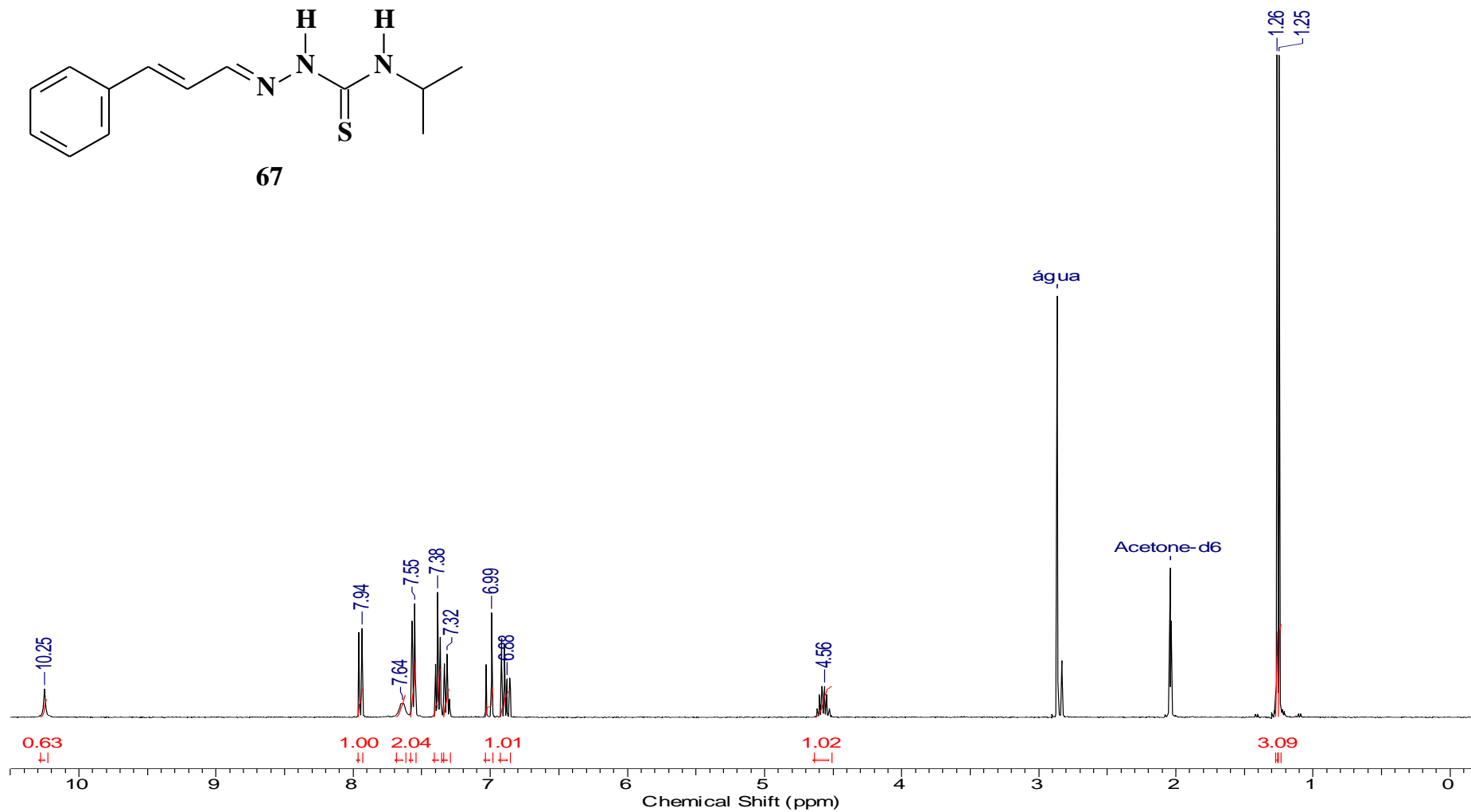
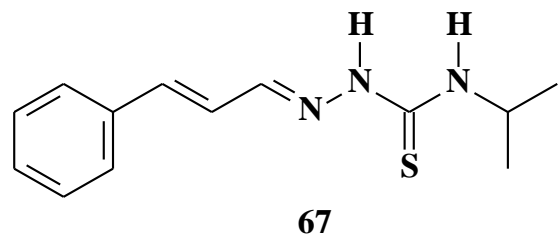
3.15 Espectro de RMN C¹³ do Cinamaldeído-4-etil-tiossemicarbazona (66) obtido em acetona-d₆



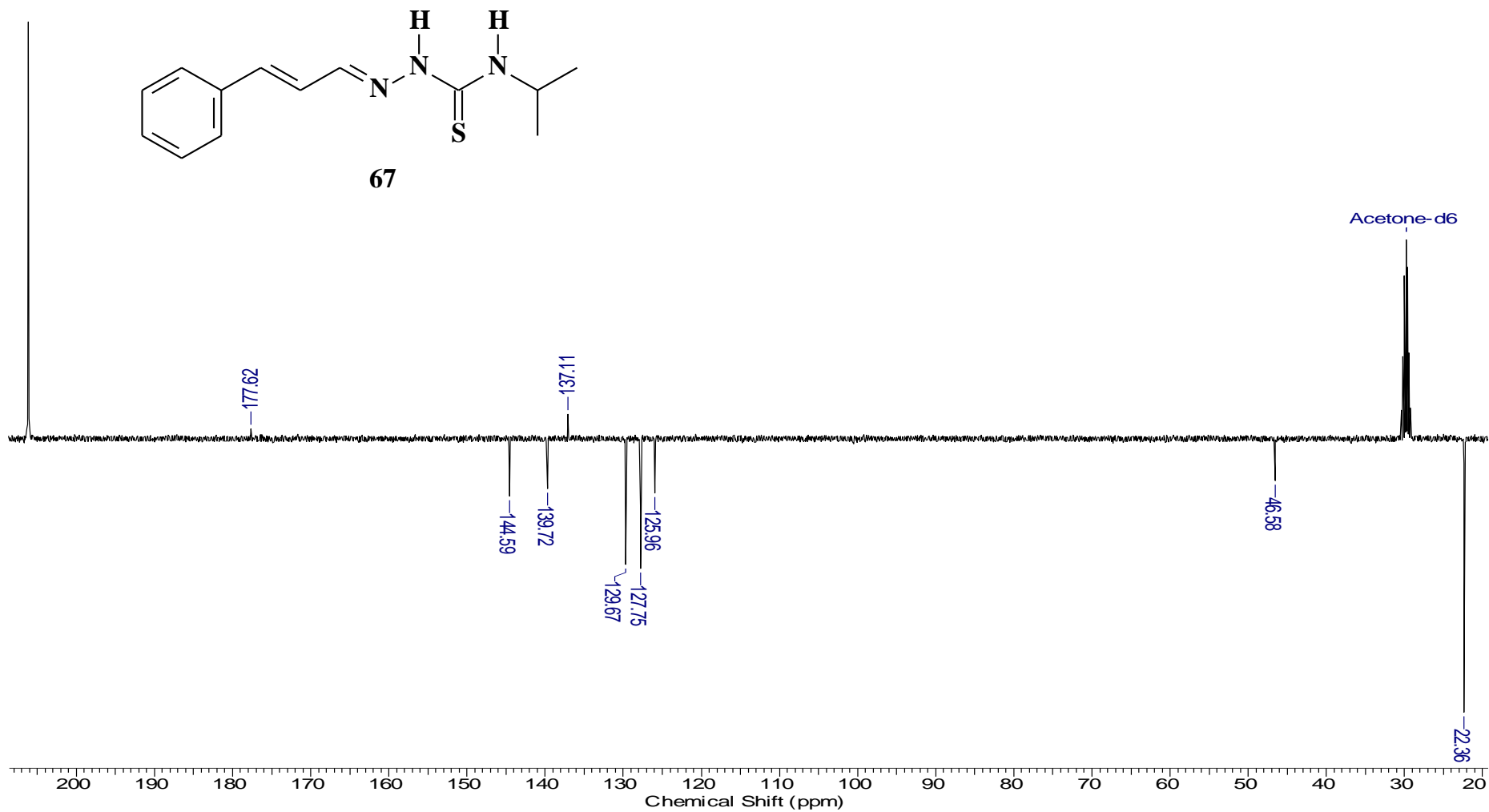
3.16 Espectro de IV do Cinamaldeído-4-isopropil-tiossemicarbazona (67) obtido em pastilha de KBr



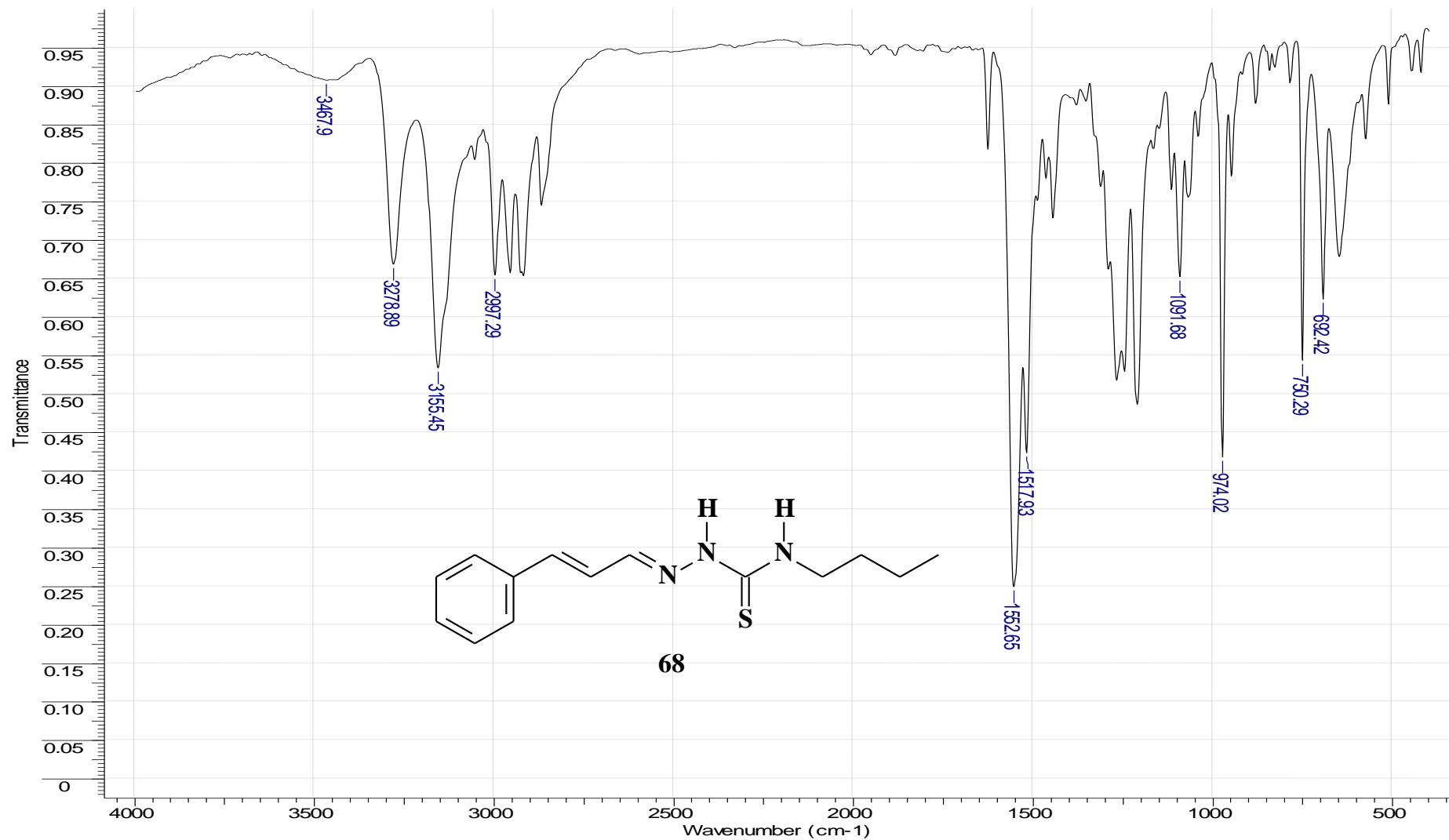
3.17 Espectro de RMN H¹ do Cinamaldeído-4-isopropil-tiossemicarbazona (67) obtido em acetona-d₆



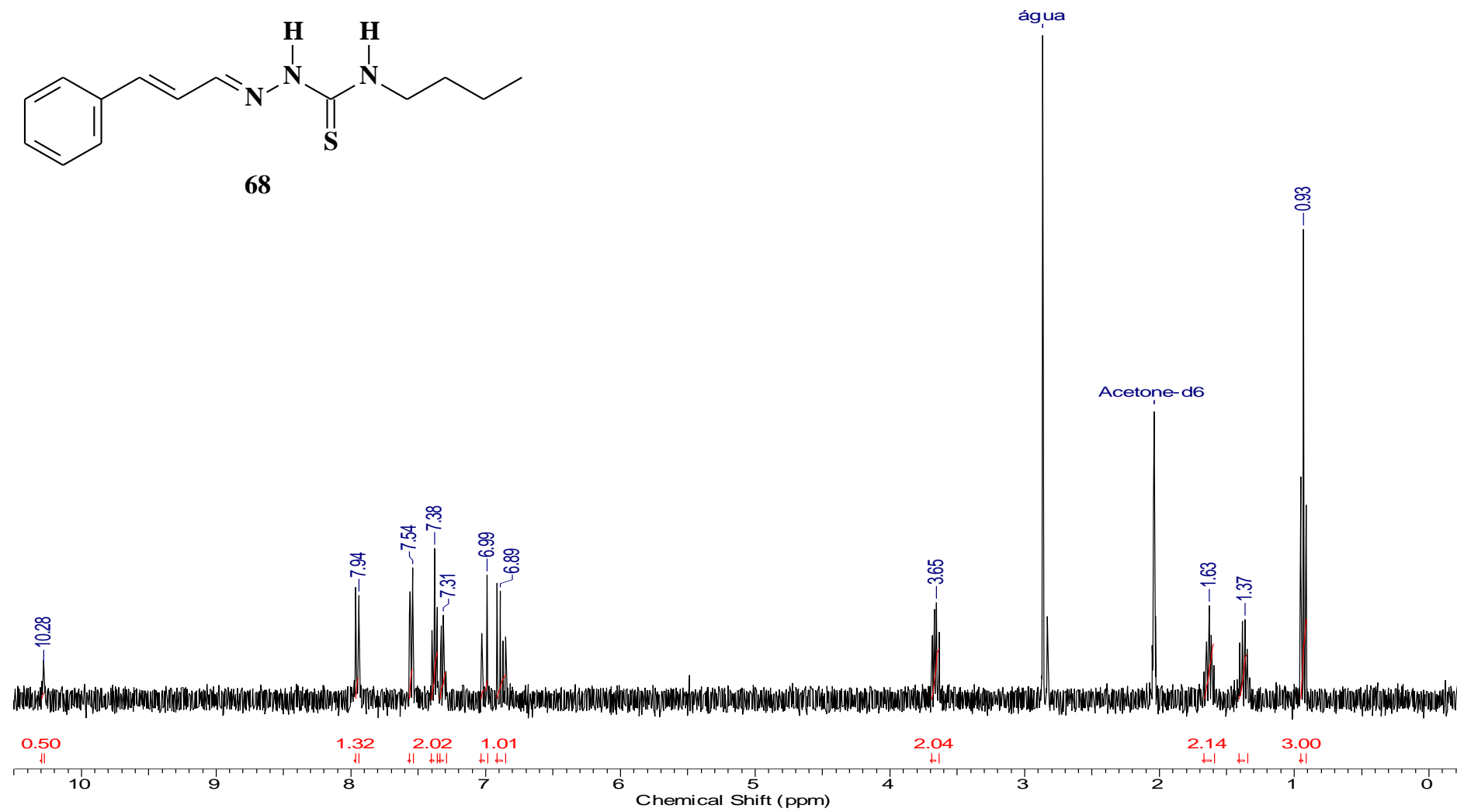
3.18 Espectro de RMN C¹³ (DEPTQ) do Cinamaldeído-4-isopropil-tiossemicarbazona (67) obtido em acetona-d₆



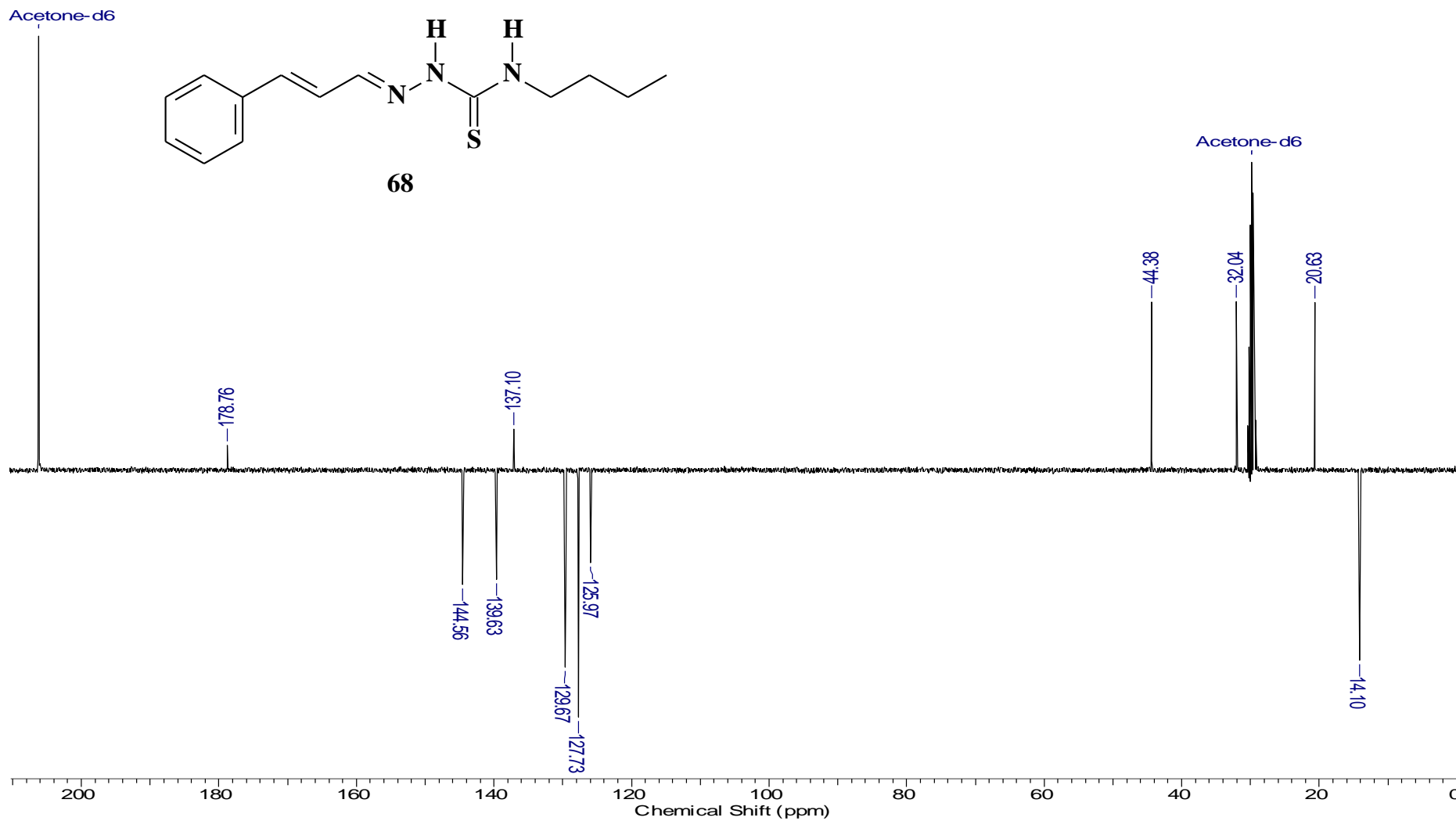
3.19 Espectro de IV do Cinamaldeído-4-butil-tiossemicarbazona (68) obtido em pastilha de KBr



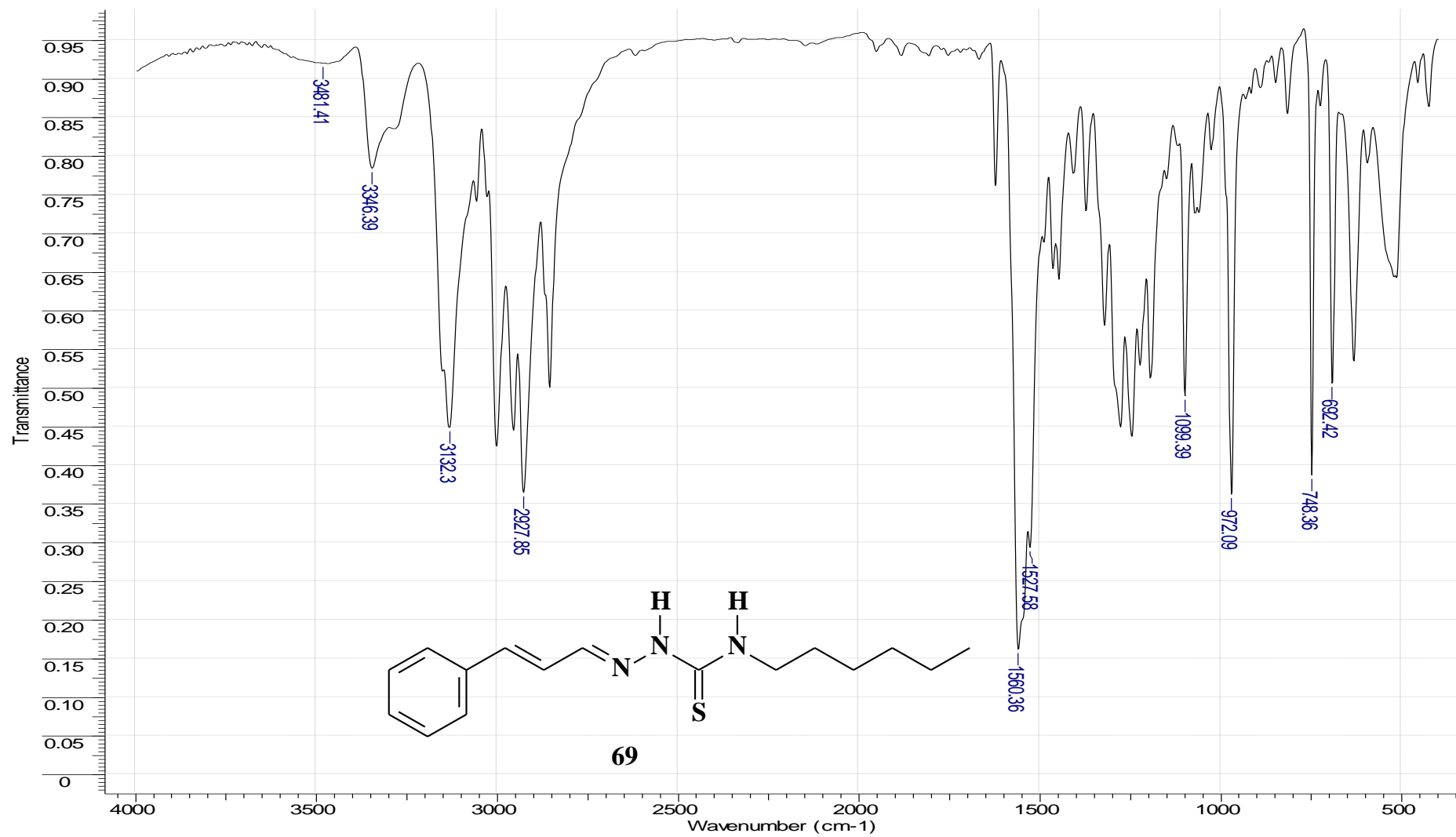
3.20 Espectro de RMN H¹ do Cinamaldeído-4-butil-tiossemicarbazona (68) obtido em acetona-d₆



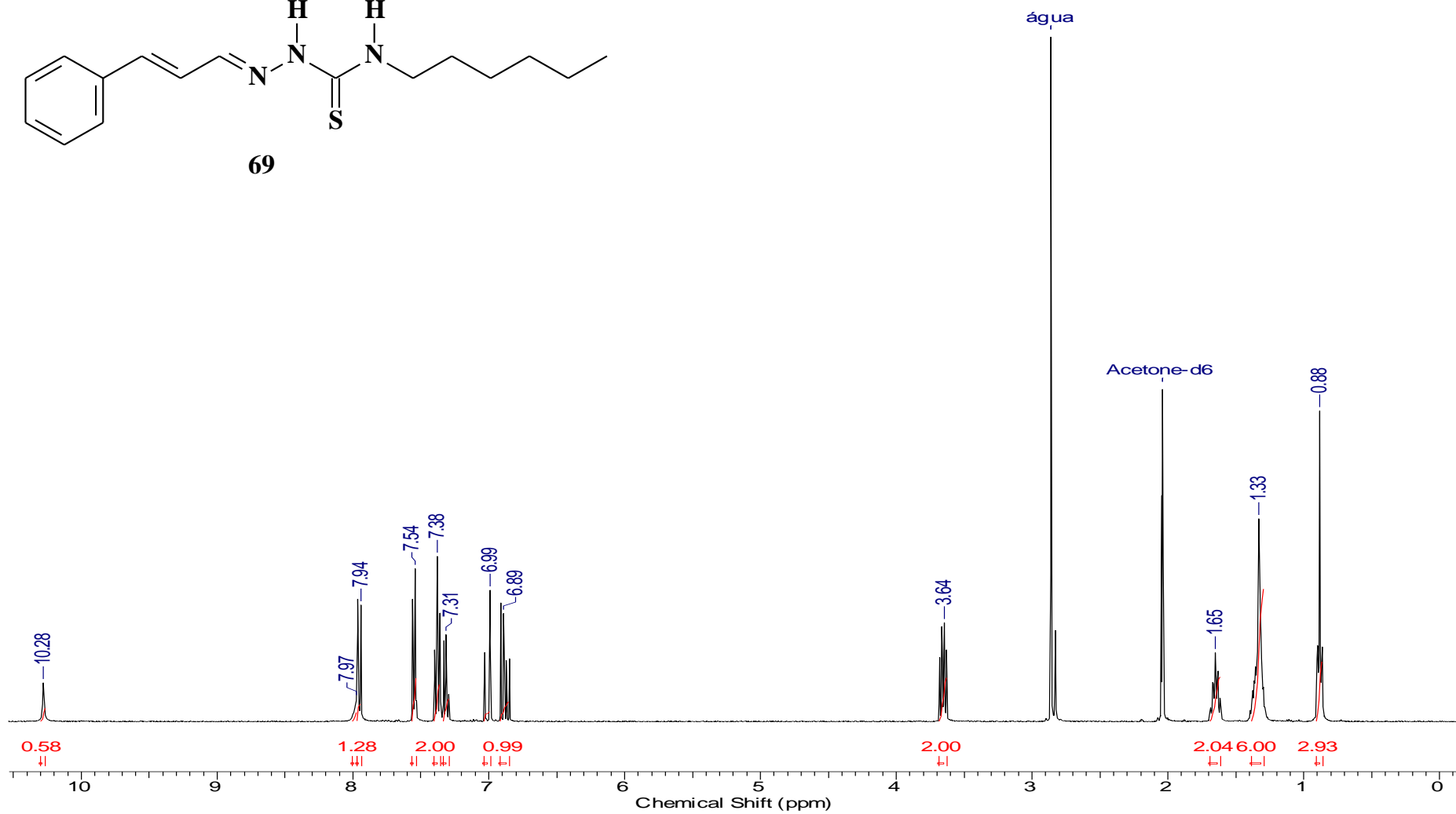
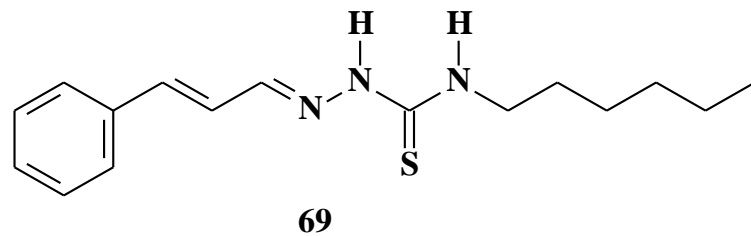
3.21 Espectro de RMN C^{13} (DEPTQ) do Cinamaldeído-4-butil-tiossemicarbazona (68) obtido em acetona- d_6



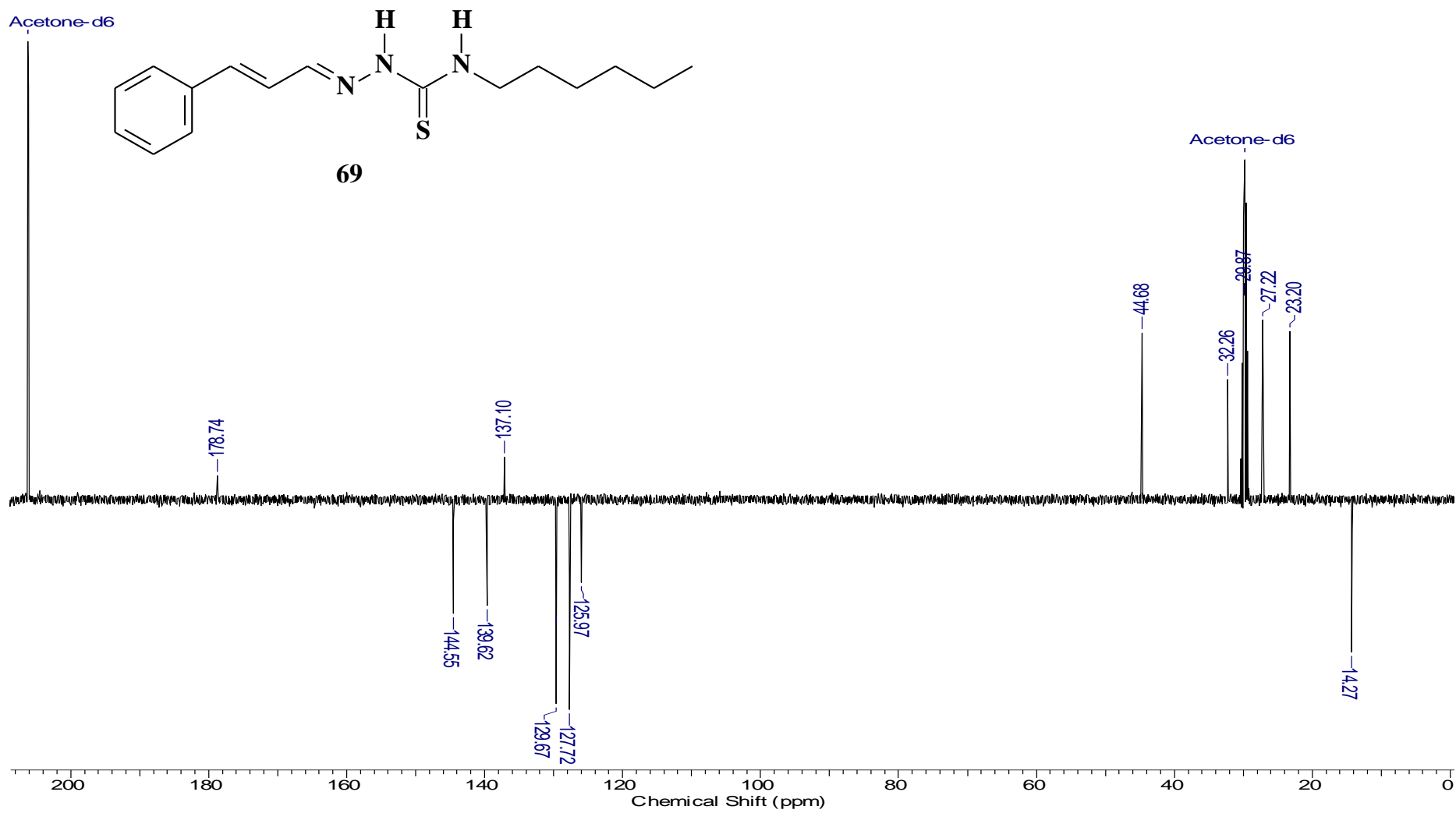
3.22 Espectro de IV do Cinamaldeído-4-hexil-tiossemicarbazona (69) obtido em pastilha de KBr



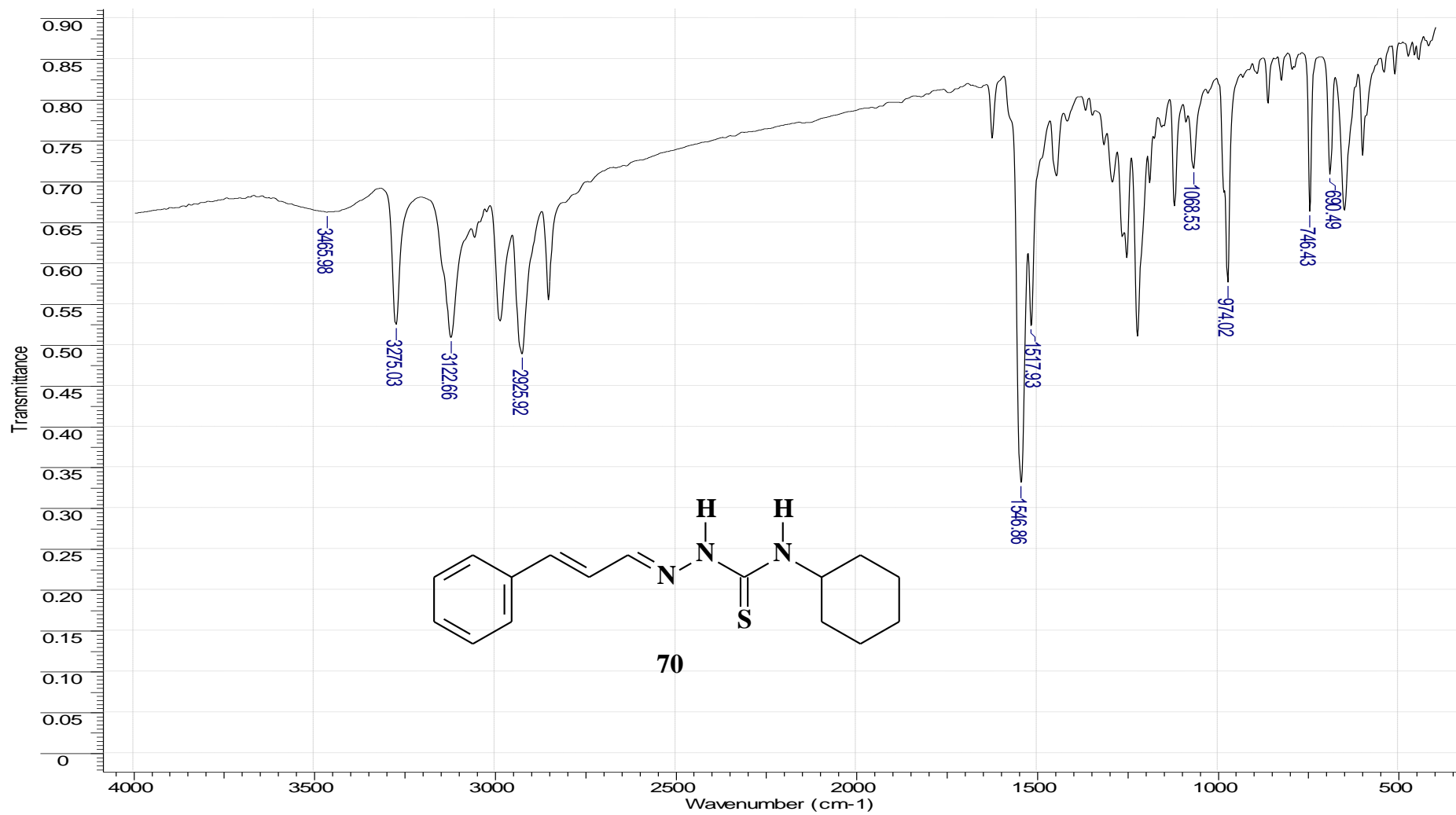
3.23 Espectro de RMN H¹ do Cinamaldeído-4-hexil-tiossemicarbazona (69) obtido em acetona-d₆



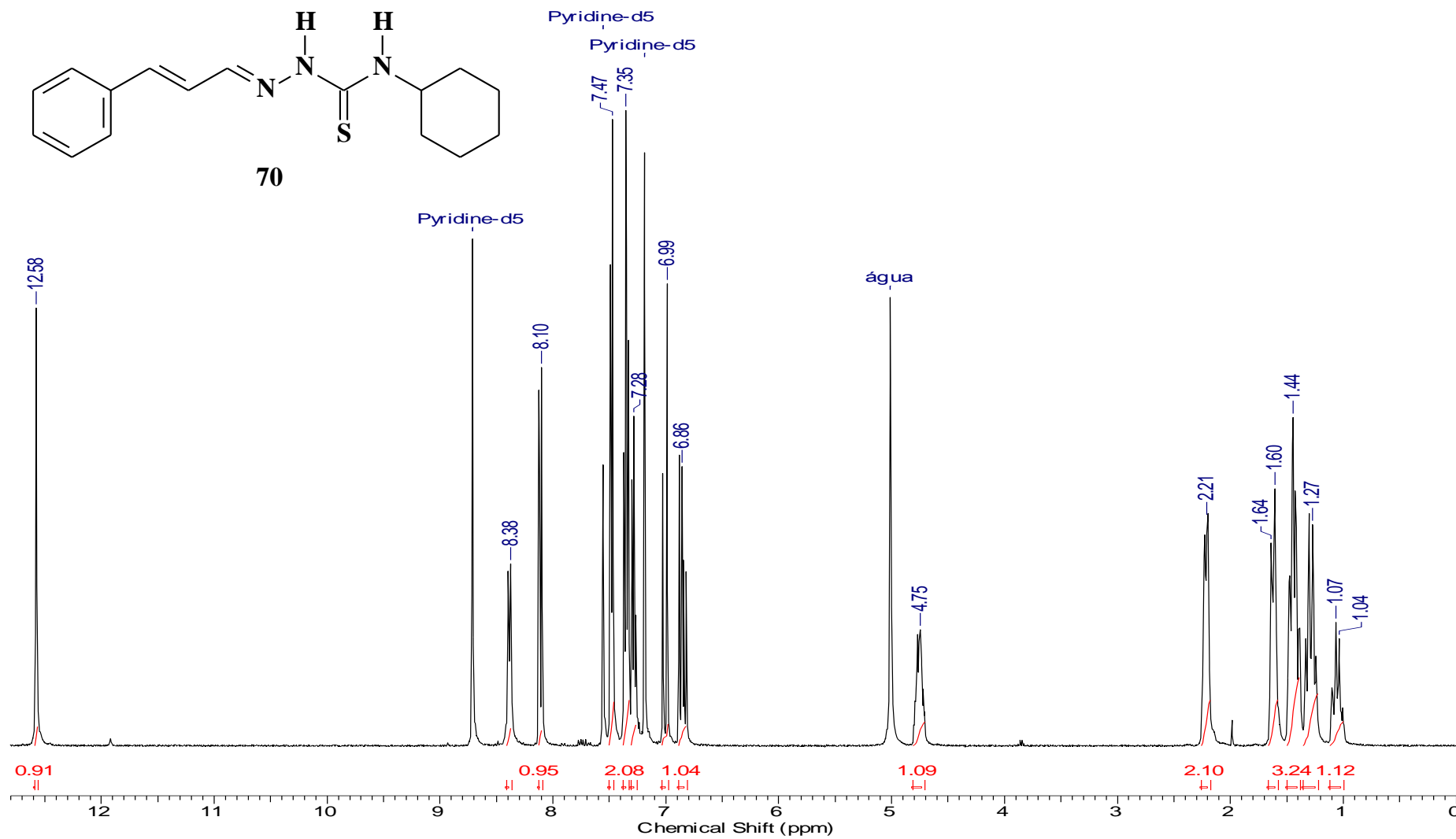
3.24 Espectro de RMN C¹³ (DEPTQ) do Cinamaldeído-4-hexil-tiossemicarbazona (69) obtido em acetona-d₆



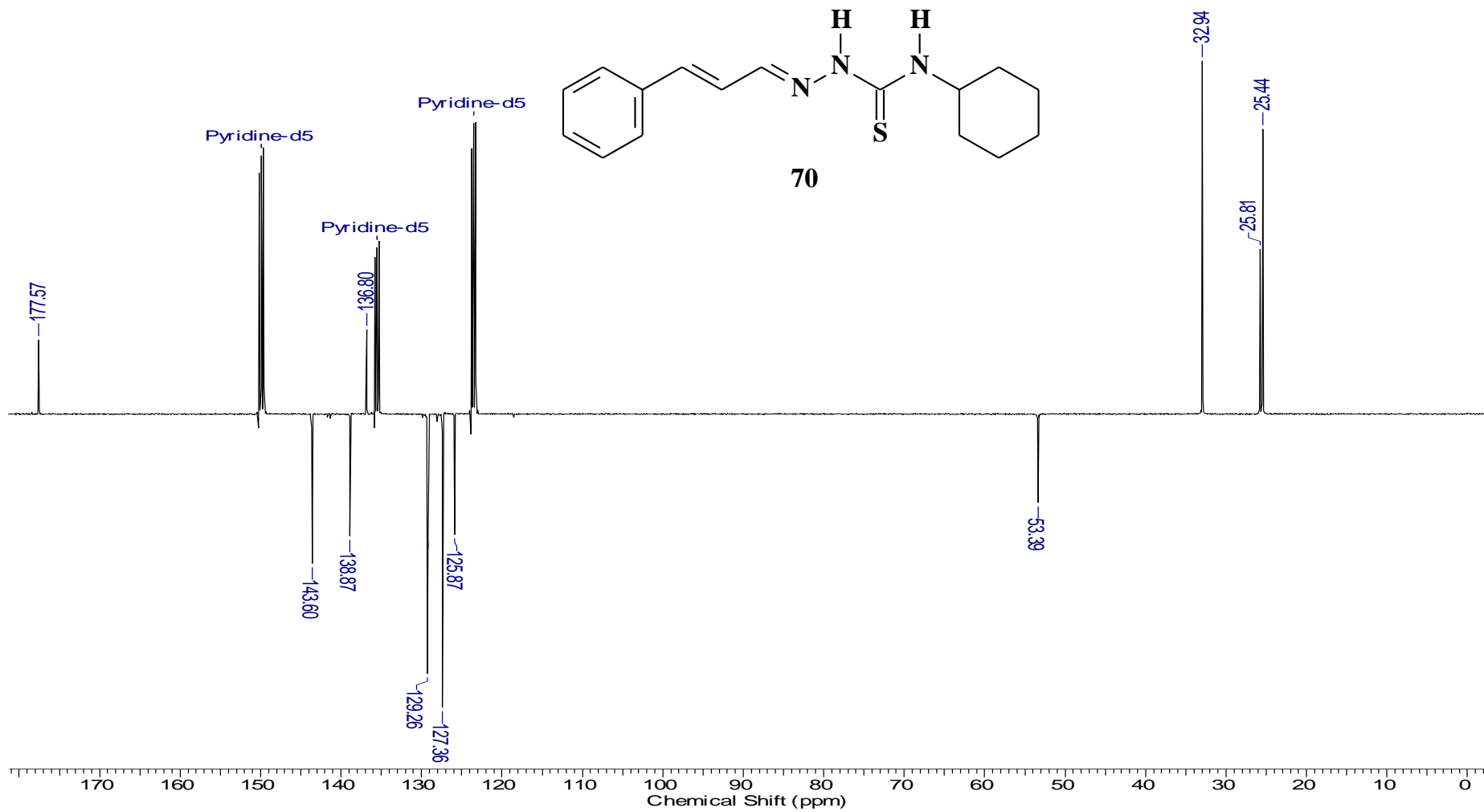
3.25 Espectro de IV do Cinamaldeído-4-cicloexil-tiossemicarbazona (70) obtido em pastilha de KBr



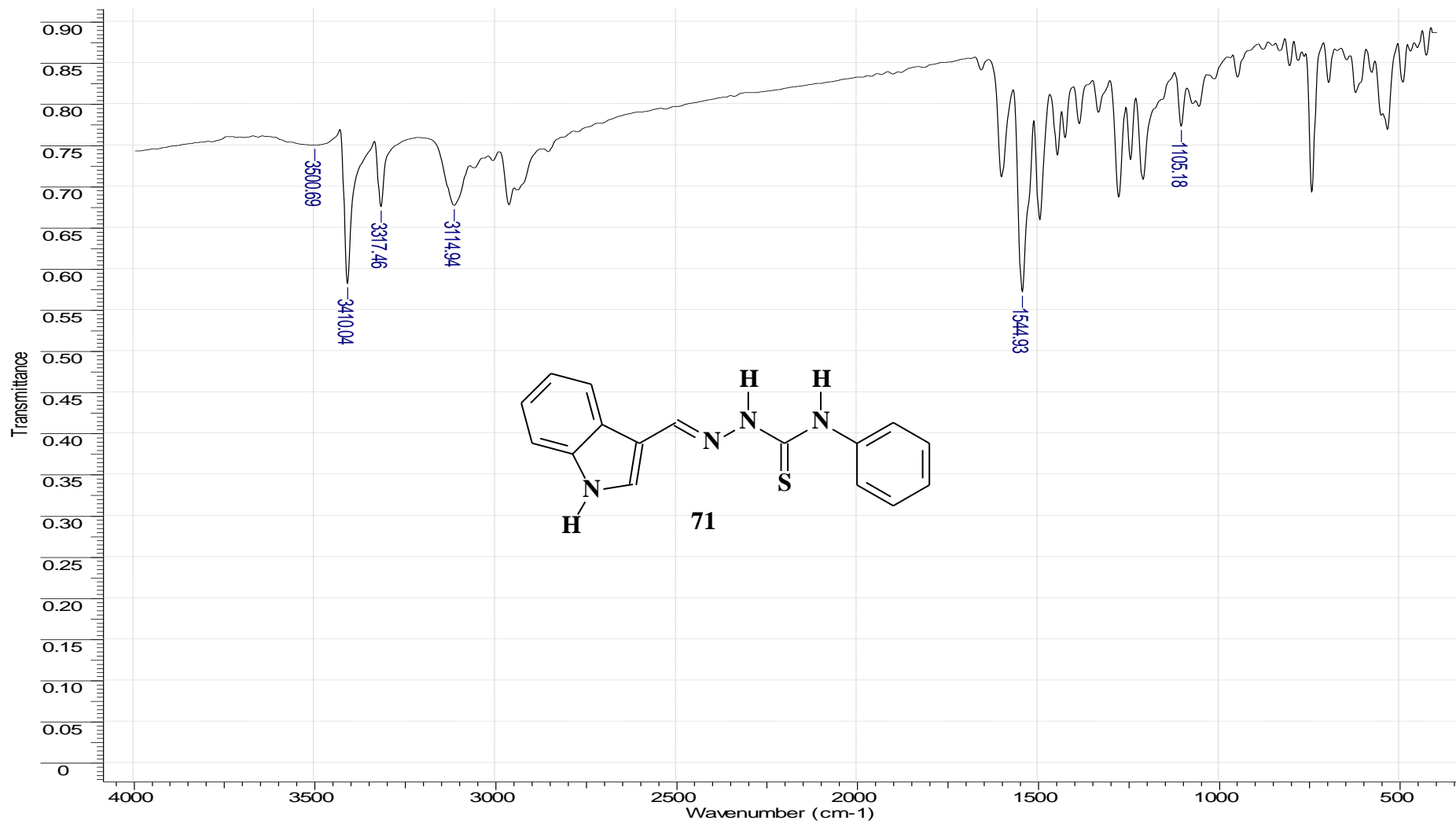
3.26 Espectro de RMN H¹ do Cinamaldeído-4-cicloexil-tiossemicarbazona (70) obtido em piridina-d₅



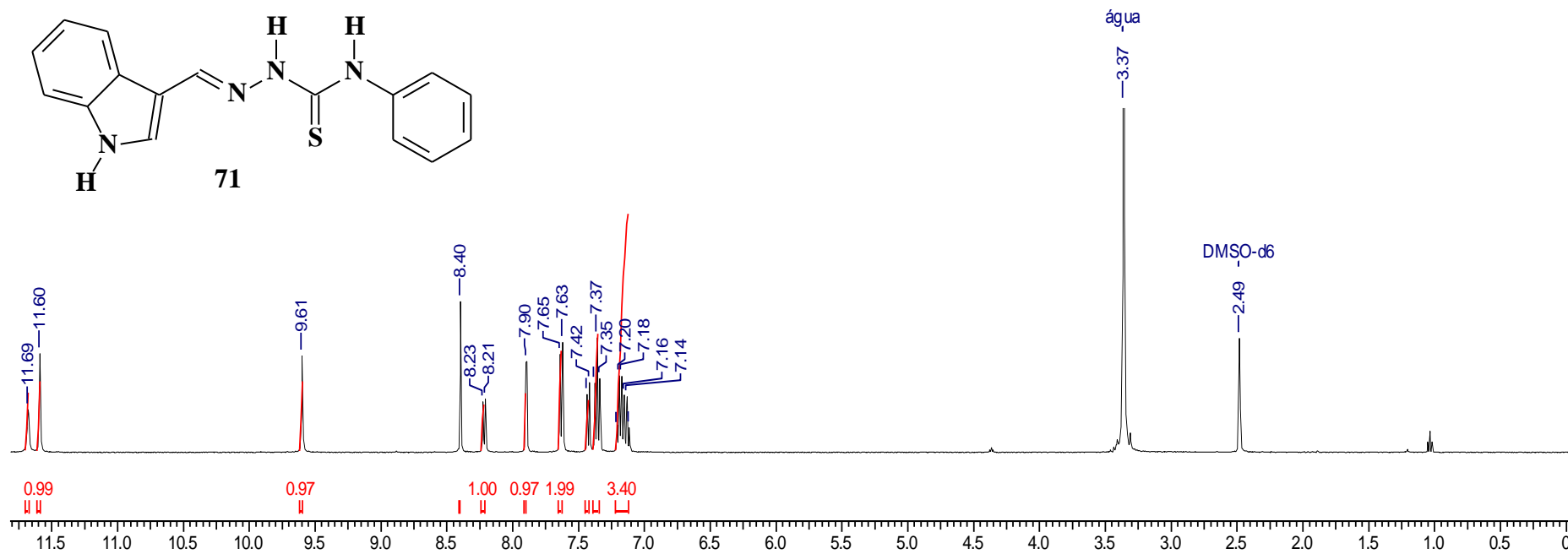
3.27 Espectro de RMN C¹³ (DEPTQ) do Cinamaldeído-4-cicloexil-tiossemicarbazona (70) obtido em piridina-d₅



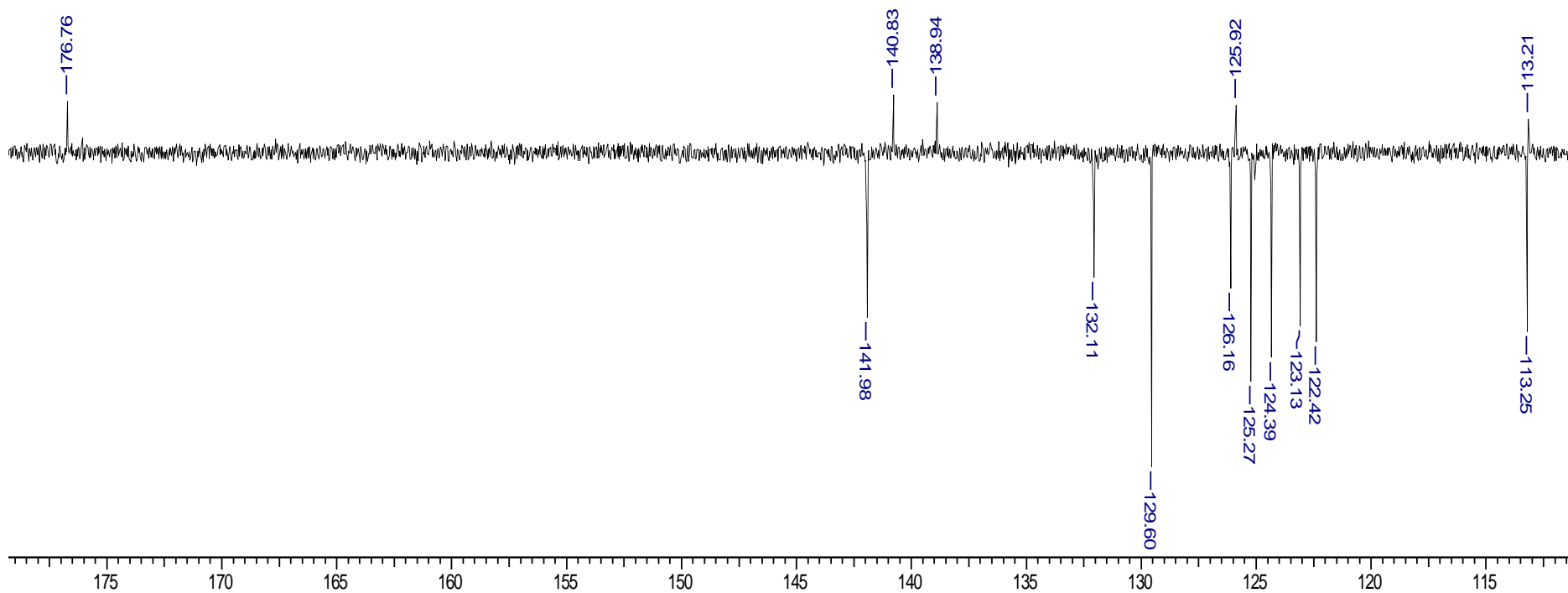
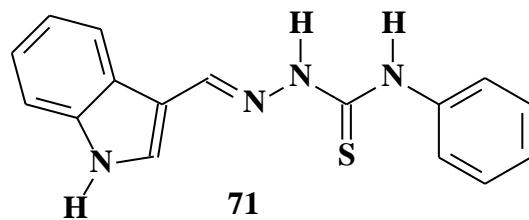
3.28 Espectro de IV do Indol-3-carboxaldeído-4-fenil-tiossemicarbazona (71) obtido em pastilha de KBr



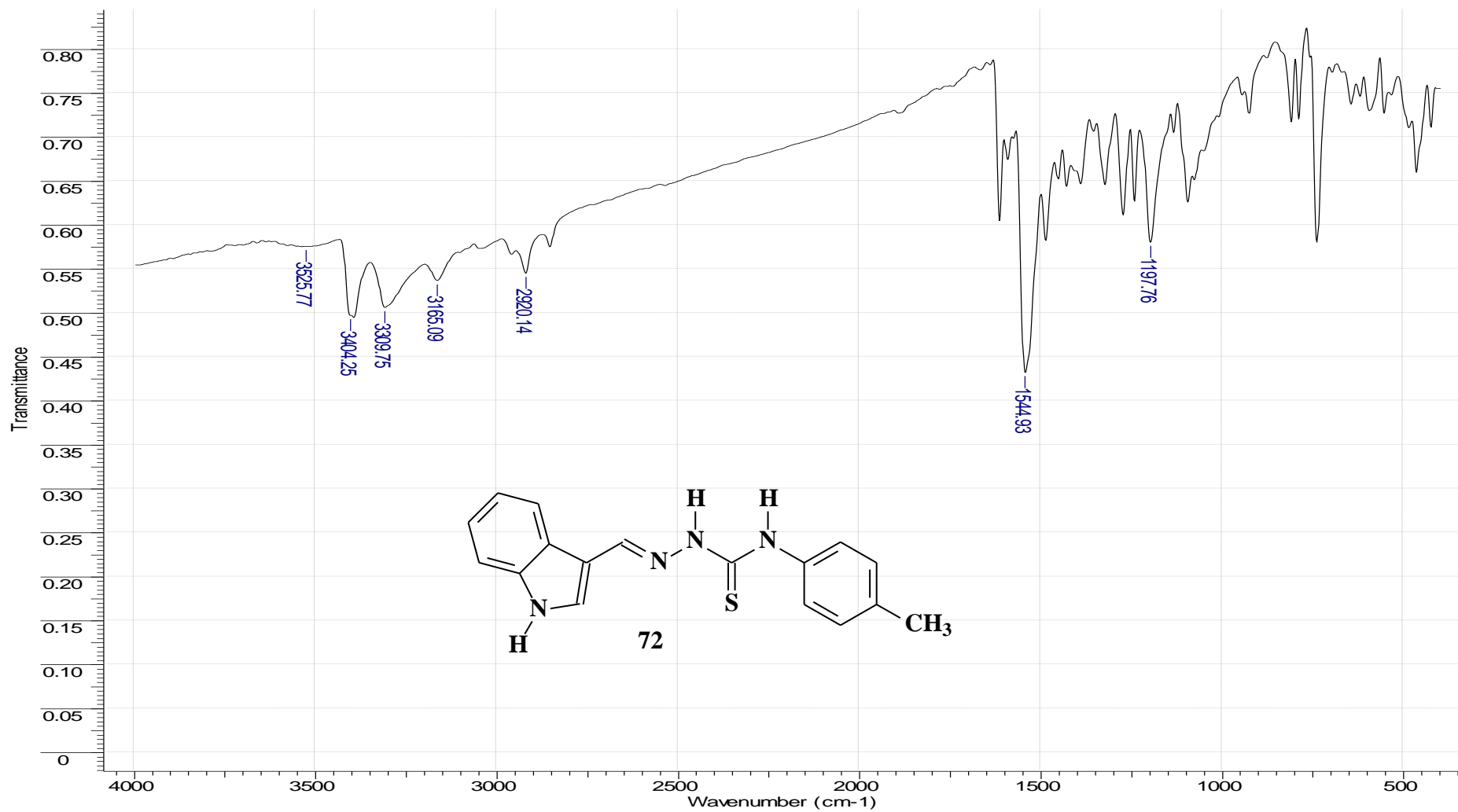
3.29 Espectro de RMN H^1 do Indol-3-carboxaldeído-4-fenil-tiossemicarbazona (71) obtido em $DMSO-d_6$



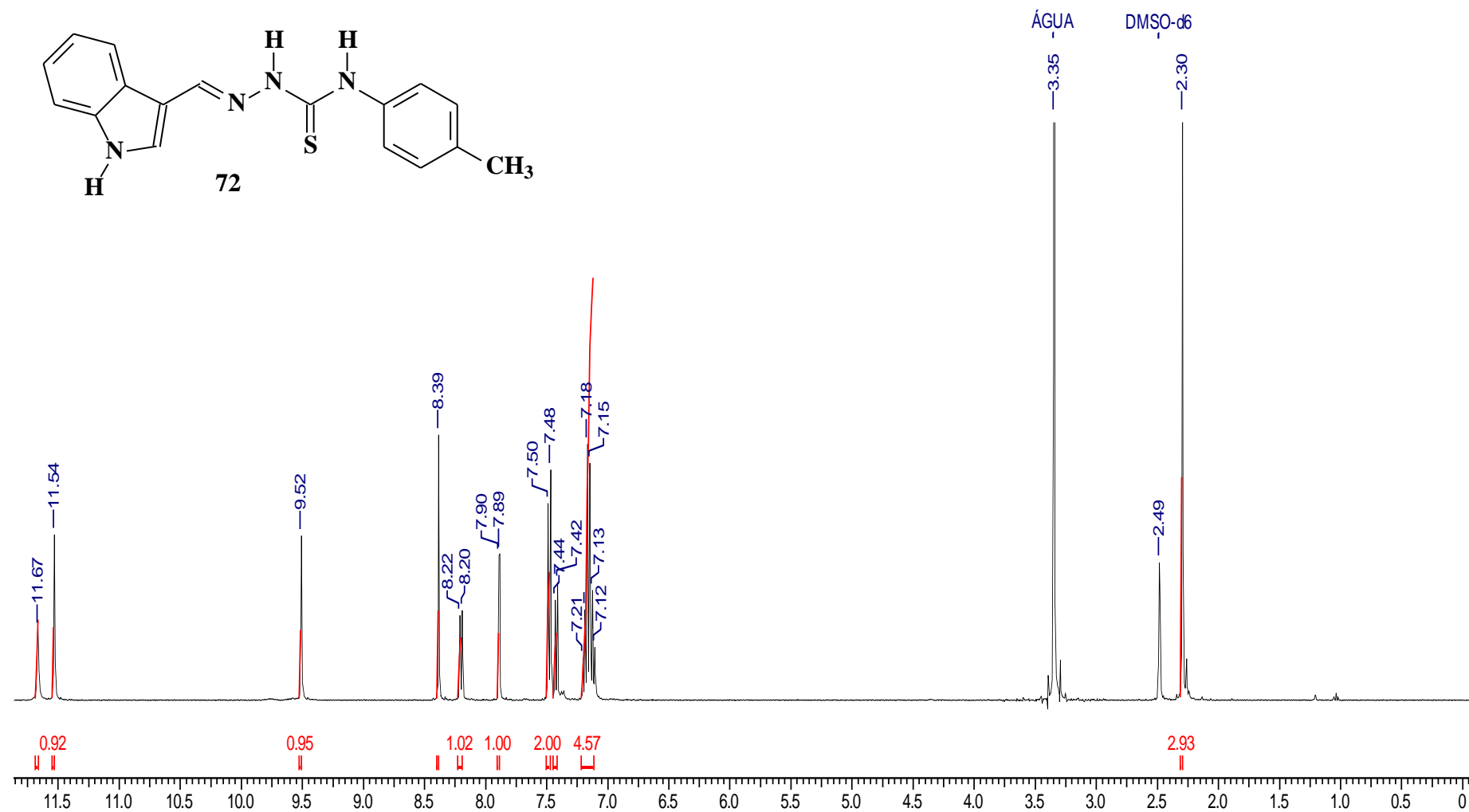
3.30 Espectro de RMN C^{13} (DEPTQ) do Indol-3-carboxaldeído-4-fenil-tiossemicarbazona (71) obtido em acetona- d_6



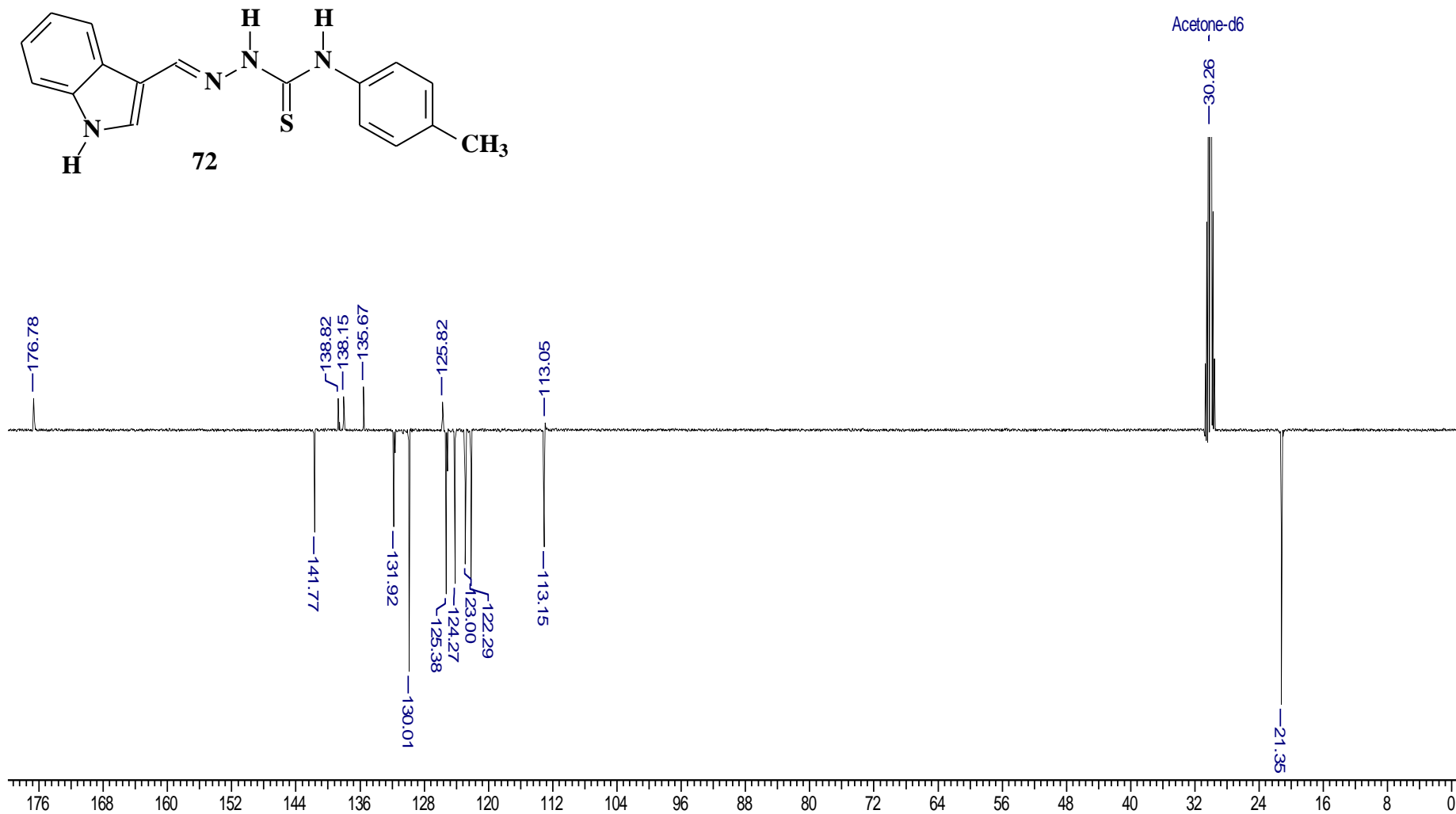
3.31 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (72) obtido em pastilha de KBr



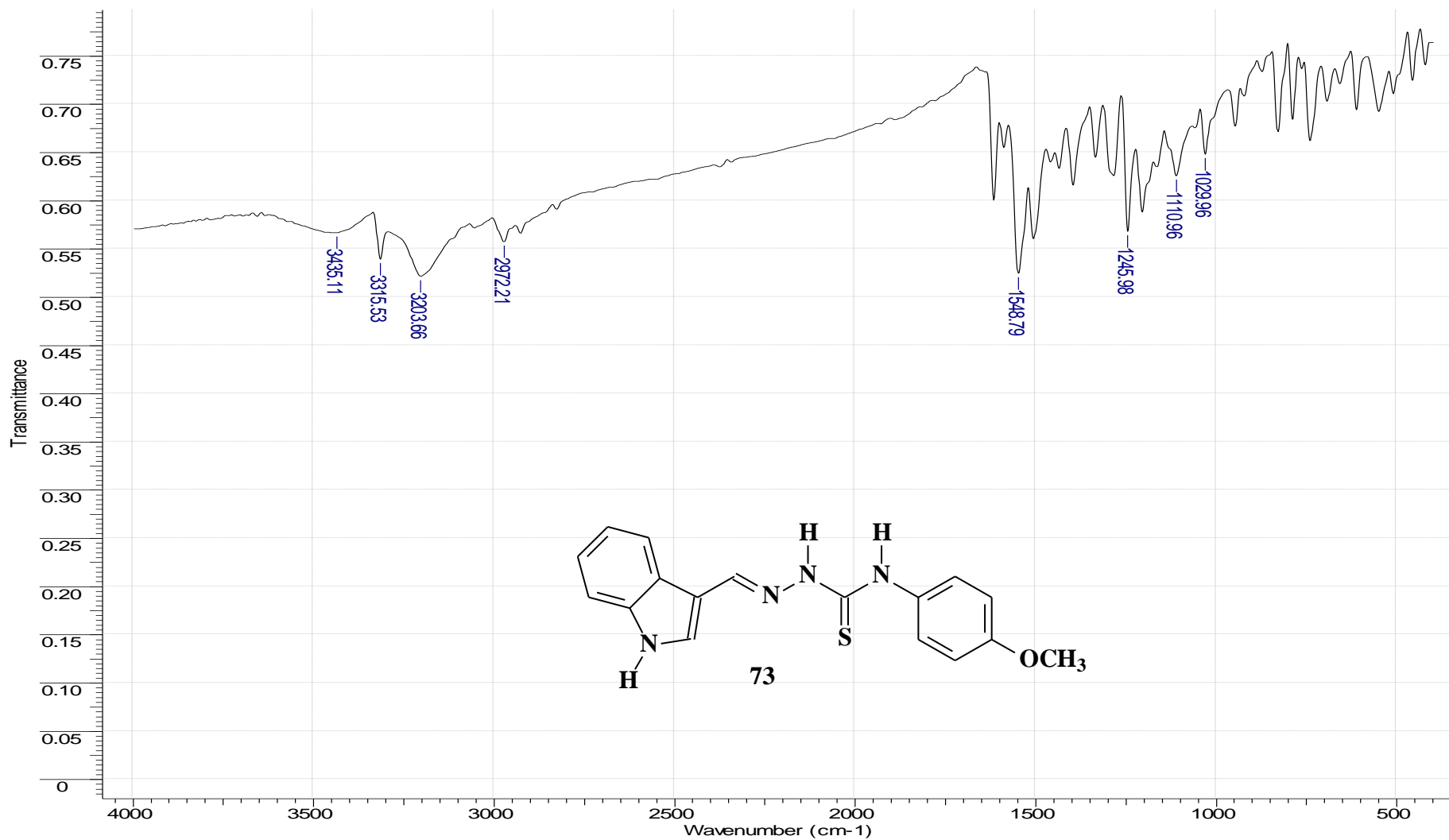
3.32 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (72) obtido em DMSO-*d*₆



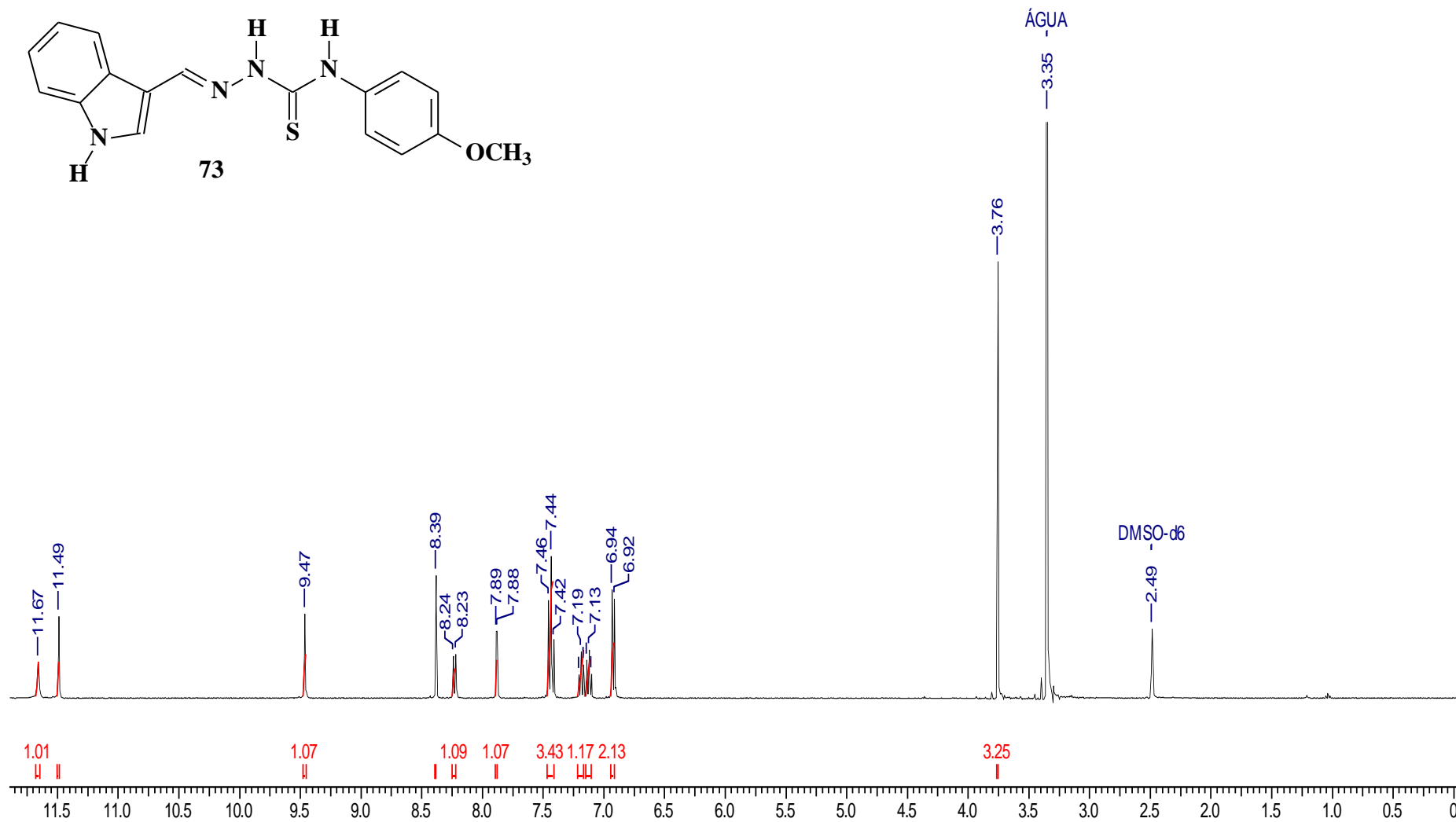
3.33 Espectro de RMN C^{13} (DEPTQ) do Indol-3-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (72) obtido em acetona- d_6



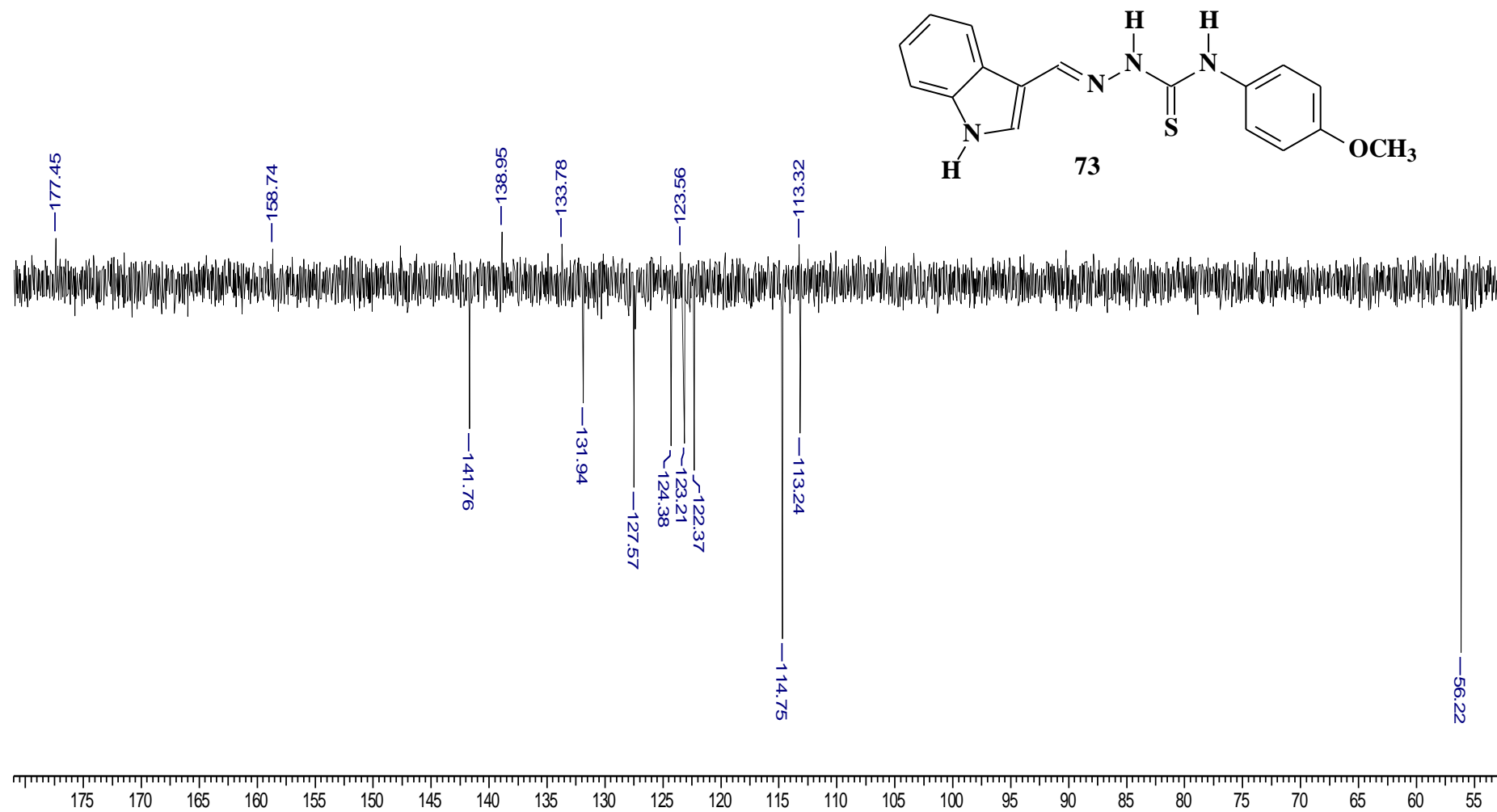
3.34 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (73) obtido em pastilha de KBr



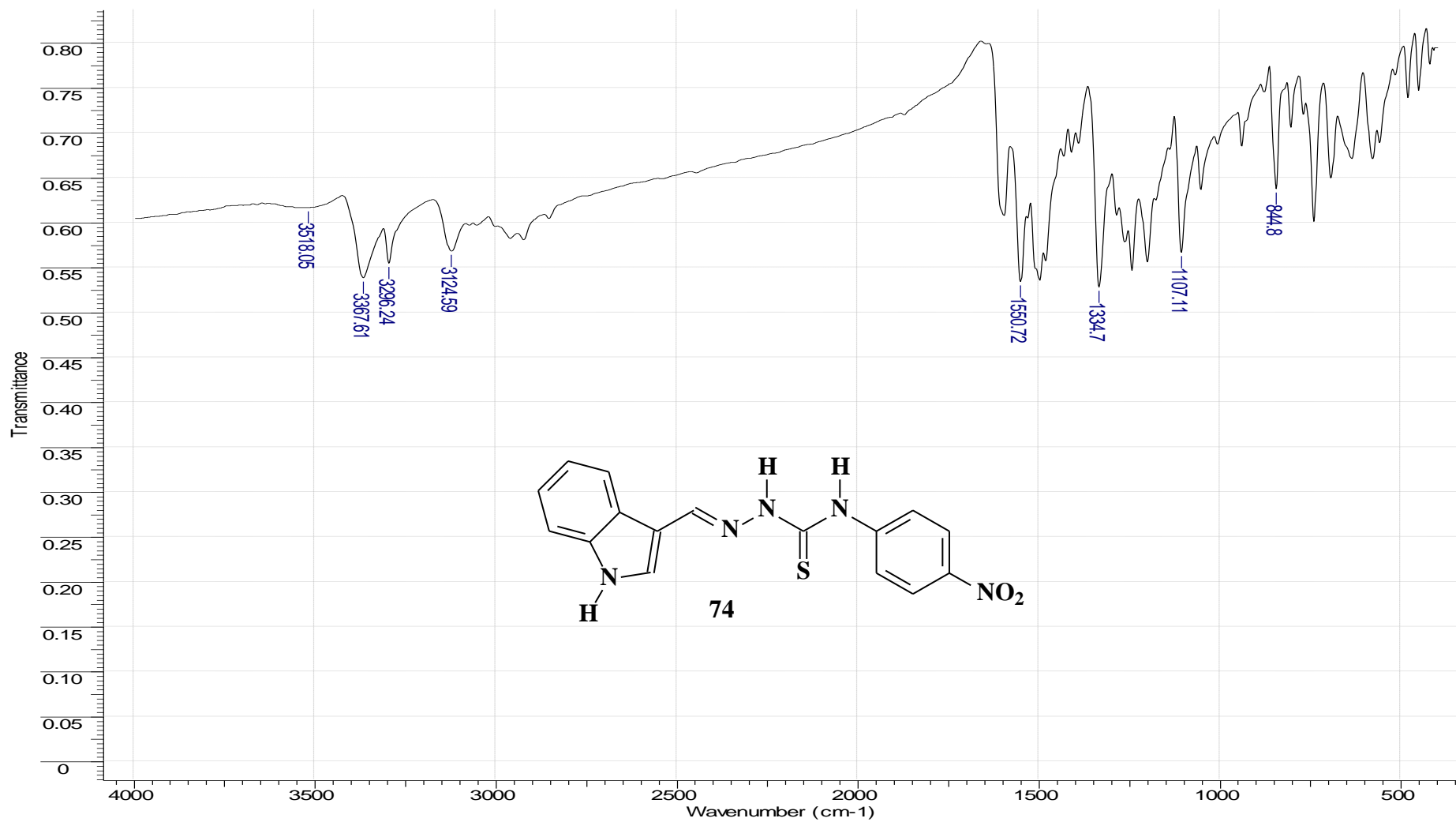
3.35 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (73) obtido em DMSO-*d*₆



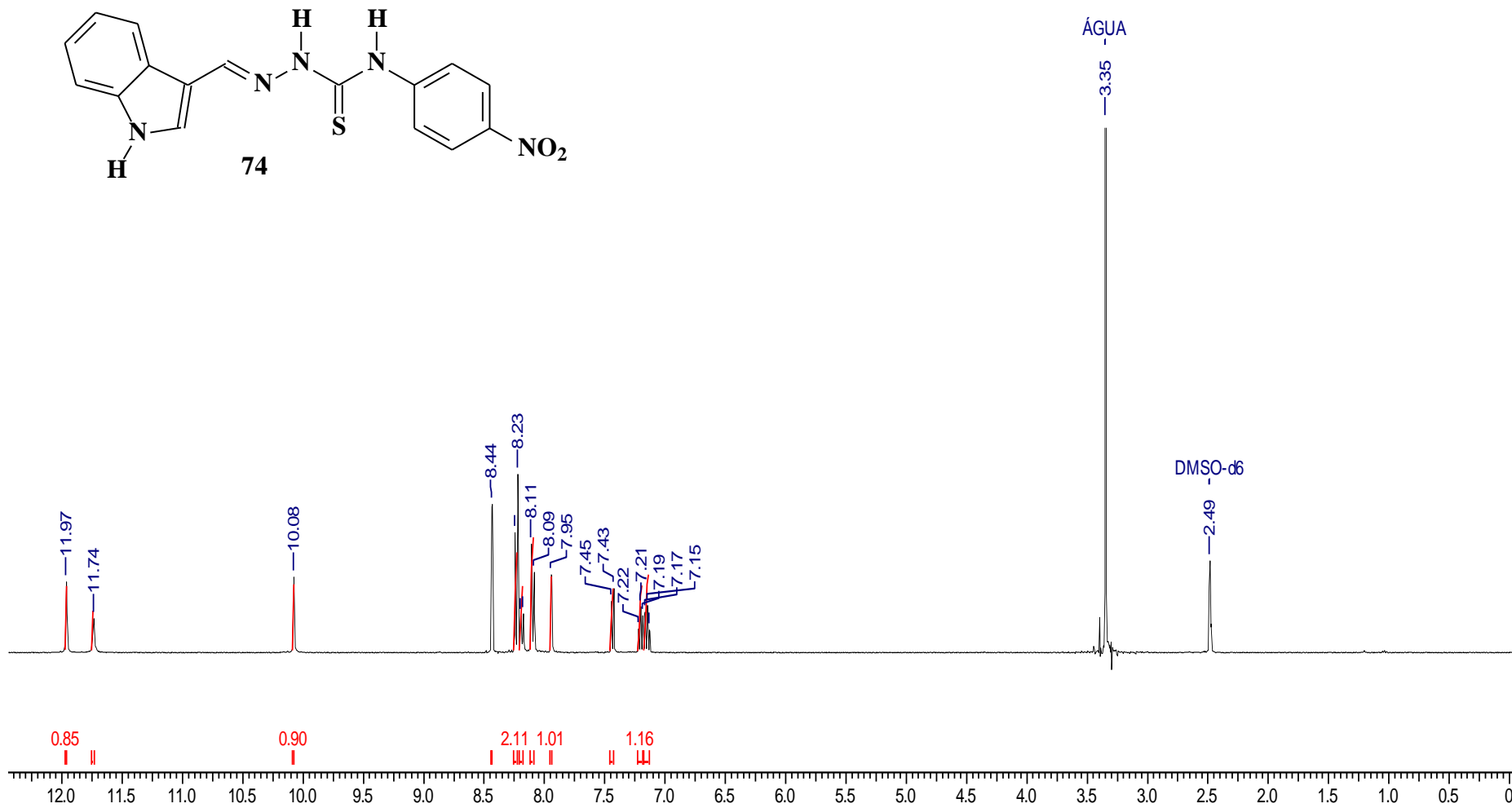
3.36 Espectro de RMN C^{13} (DEPTQ) do Indol-3-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (73) obtido em acetona- d_6



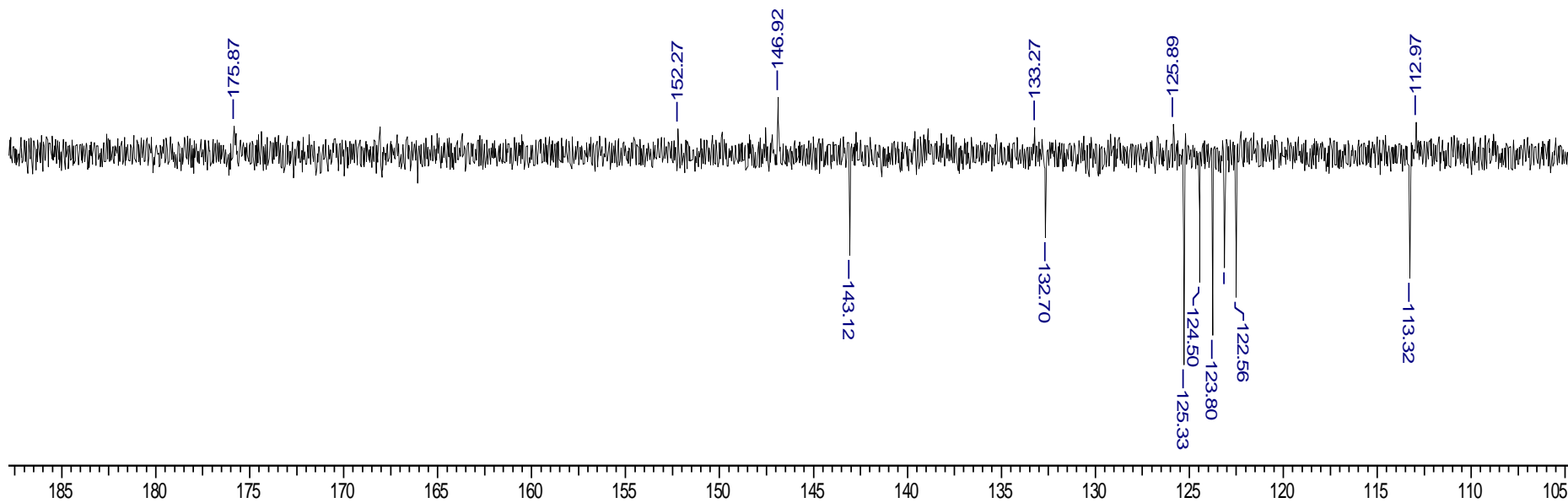
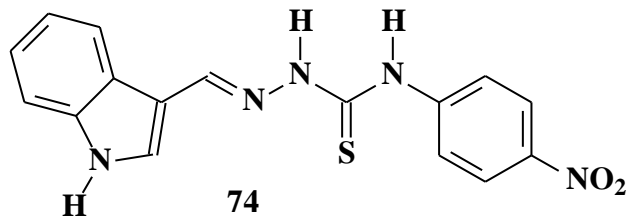
3.37 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (74) obtido em pastilha de KBr



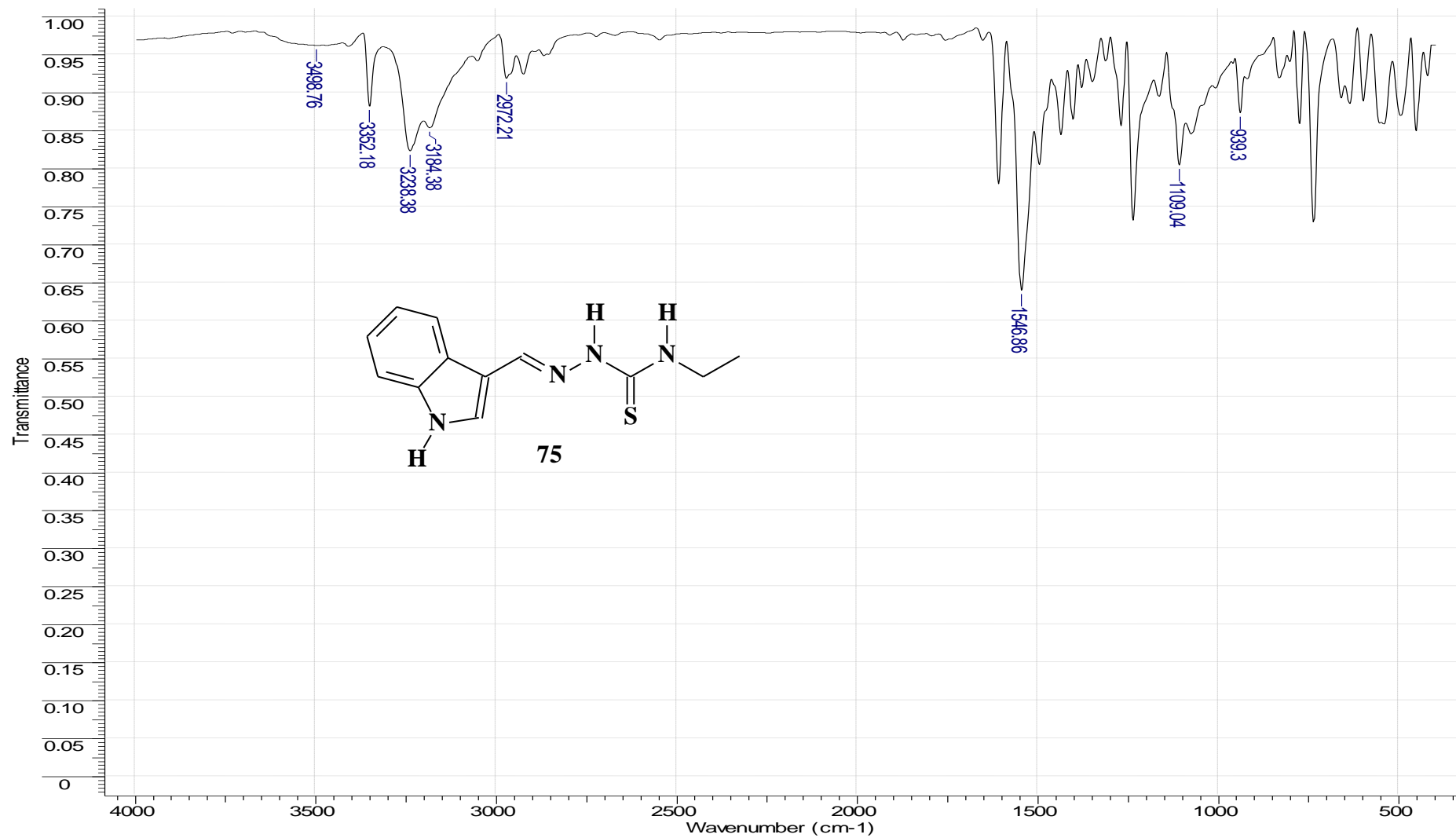
3.38 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (74) obtido em DMSO-*d*₆



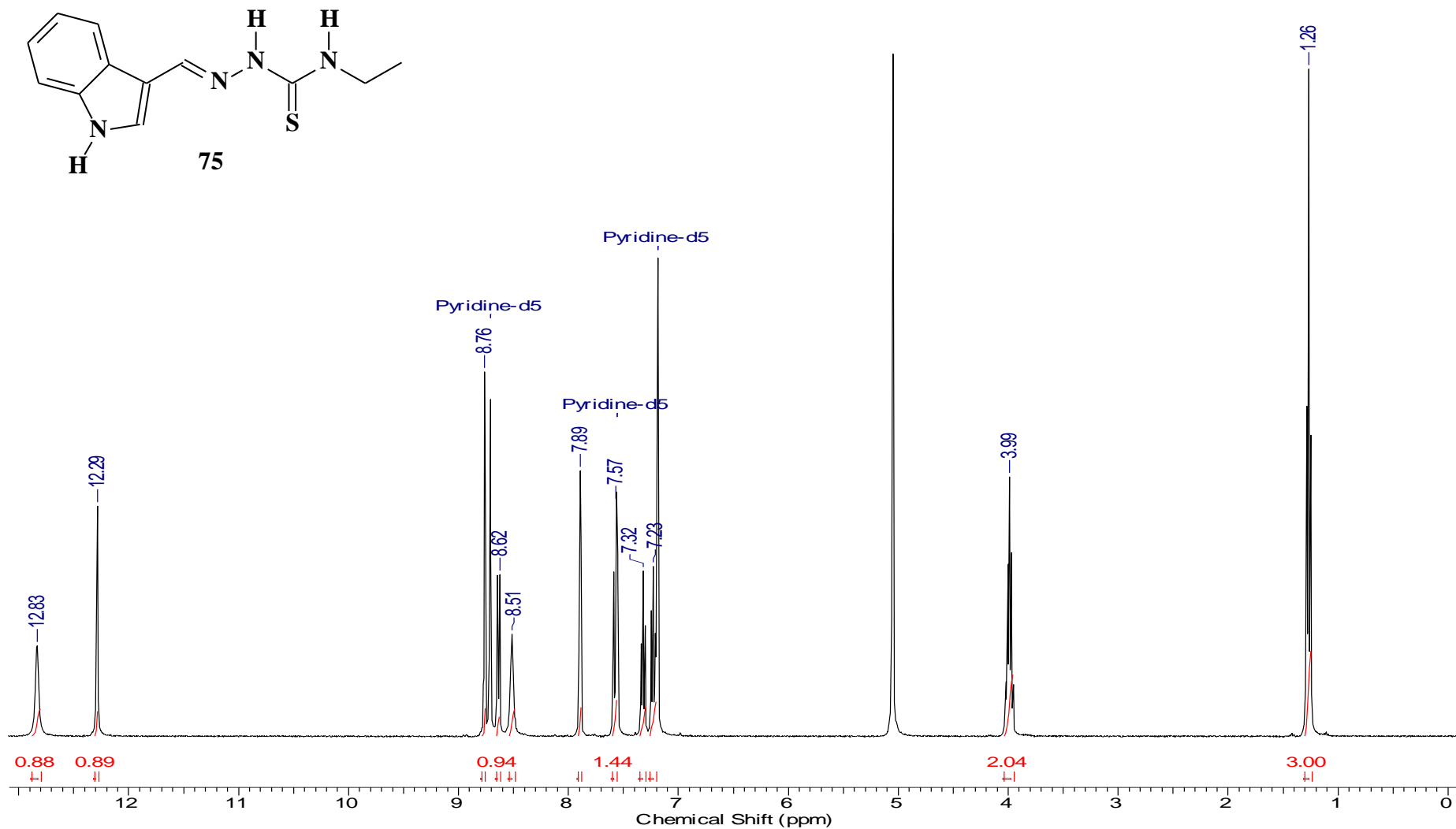
3.39 Espectro de RMN C¹³ (DEPTQ) do Indol-3-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (74) obtido em acetona-*d*₆



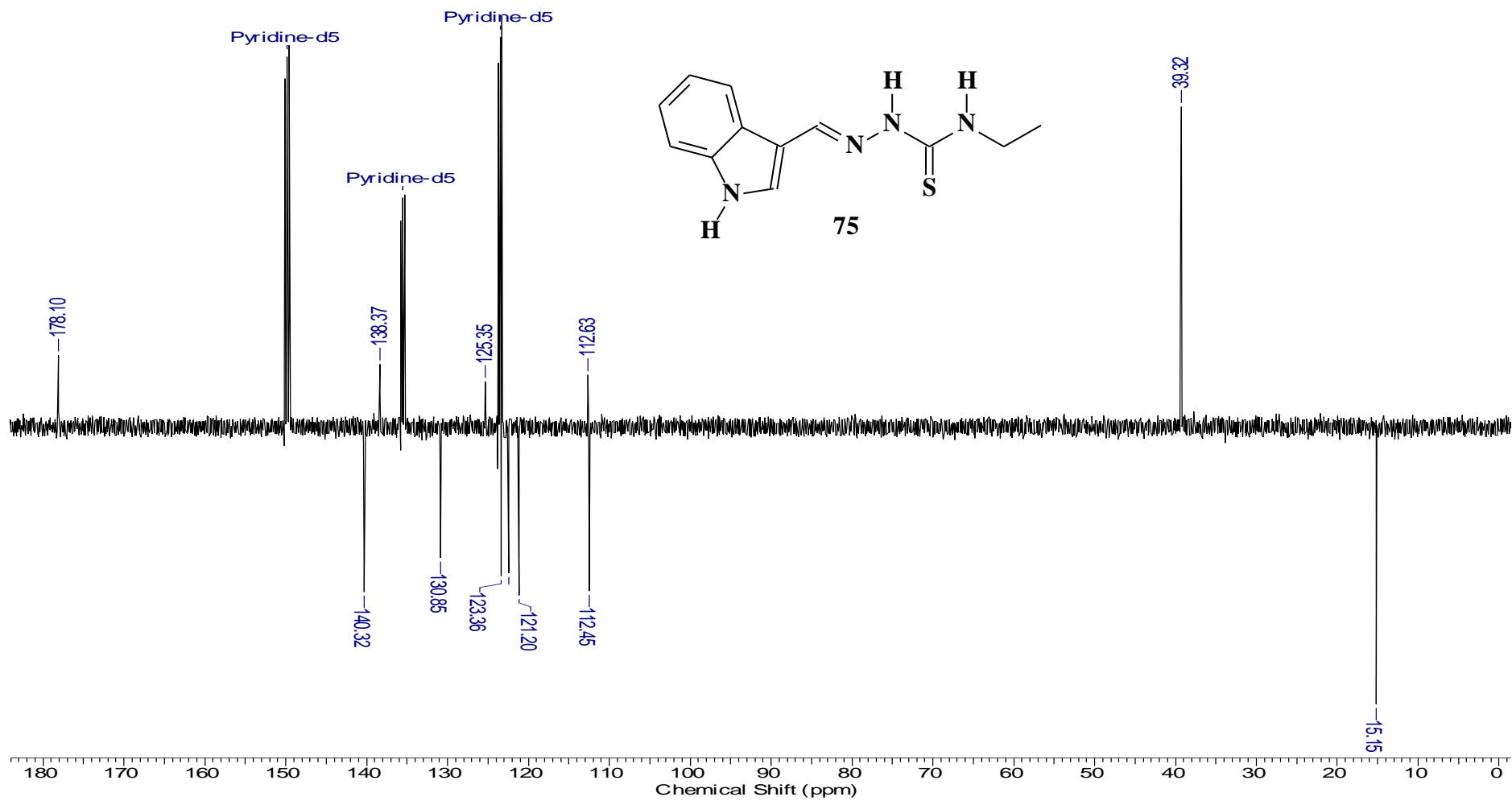
3.40 Espectro de IV do Indol-3-carboxaldeído-4-etil-tiossemicarbazona (75) obtido em pastilha de KBr



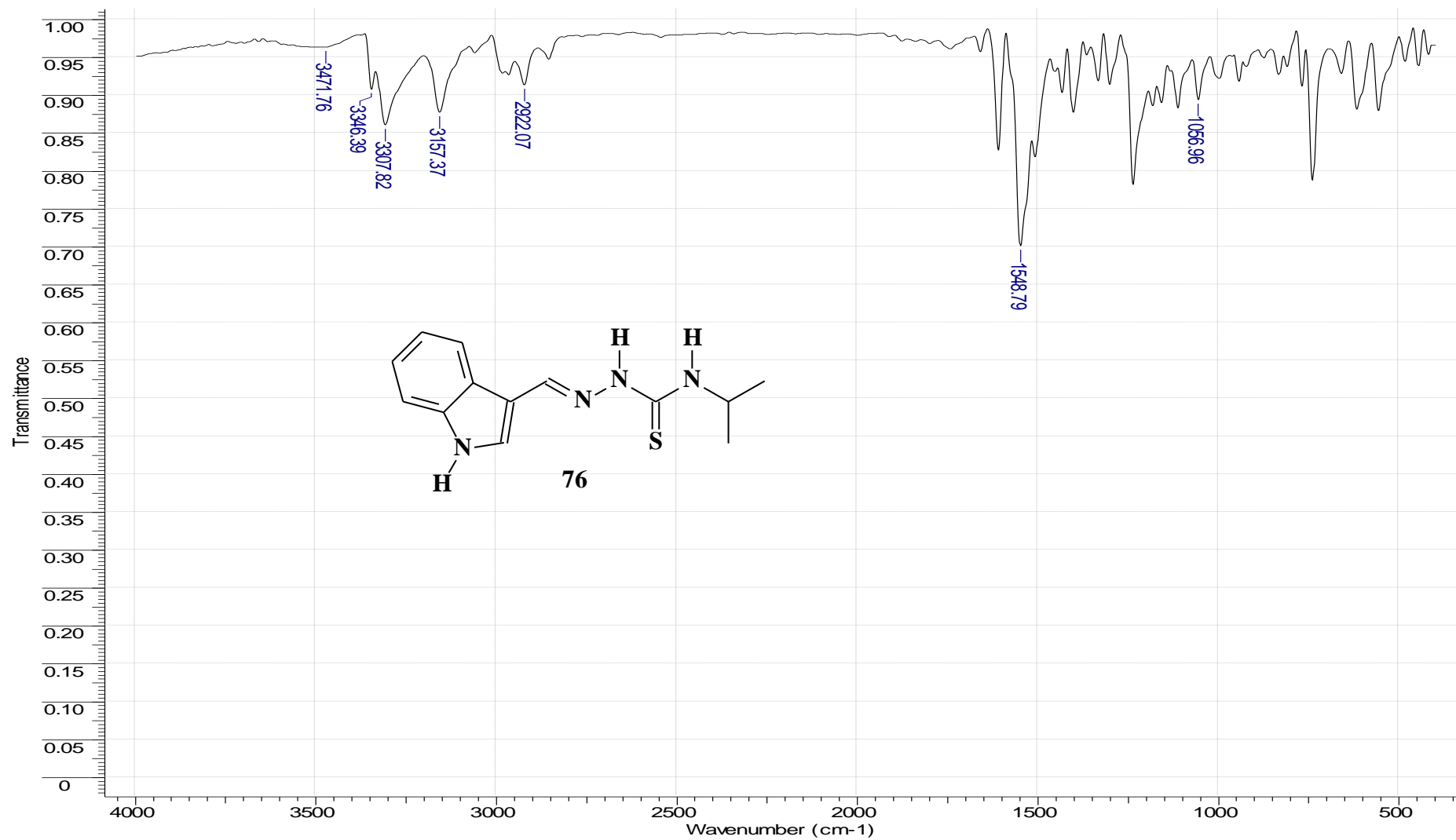
3.41 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-etil-tiossemicarbazona (75) obtido em piridina-d₅



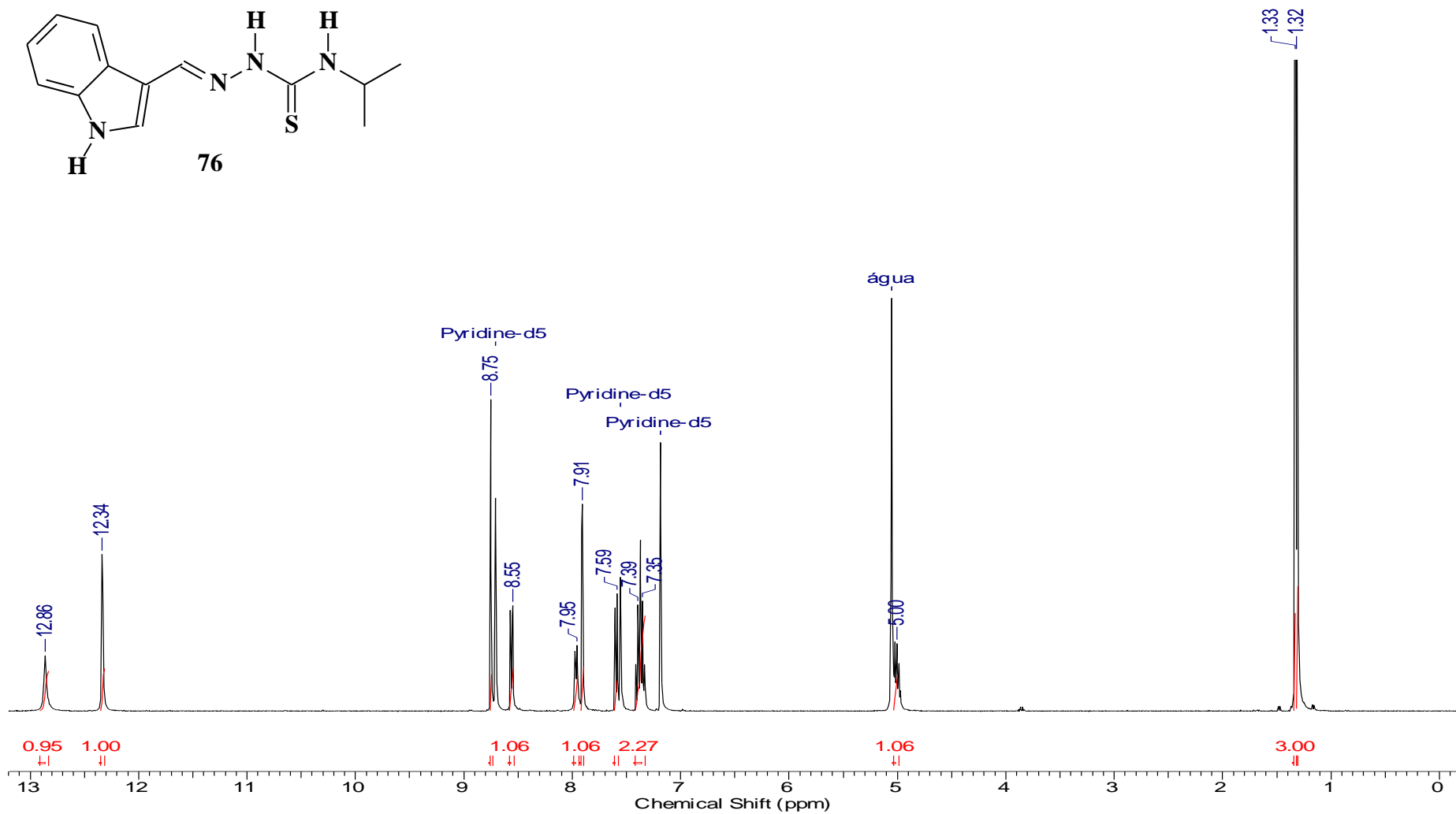
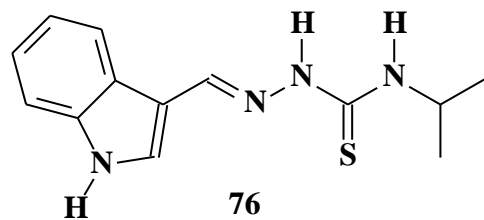
3.42 Espectro de RMN C^{13} (DEPTQ) do Indol-3-carboxaldeído-4-etil-tiossemicarbazona (75) obtido em piridina- d_5



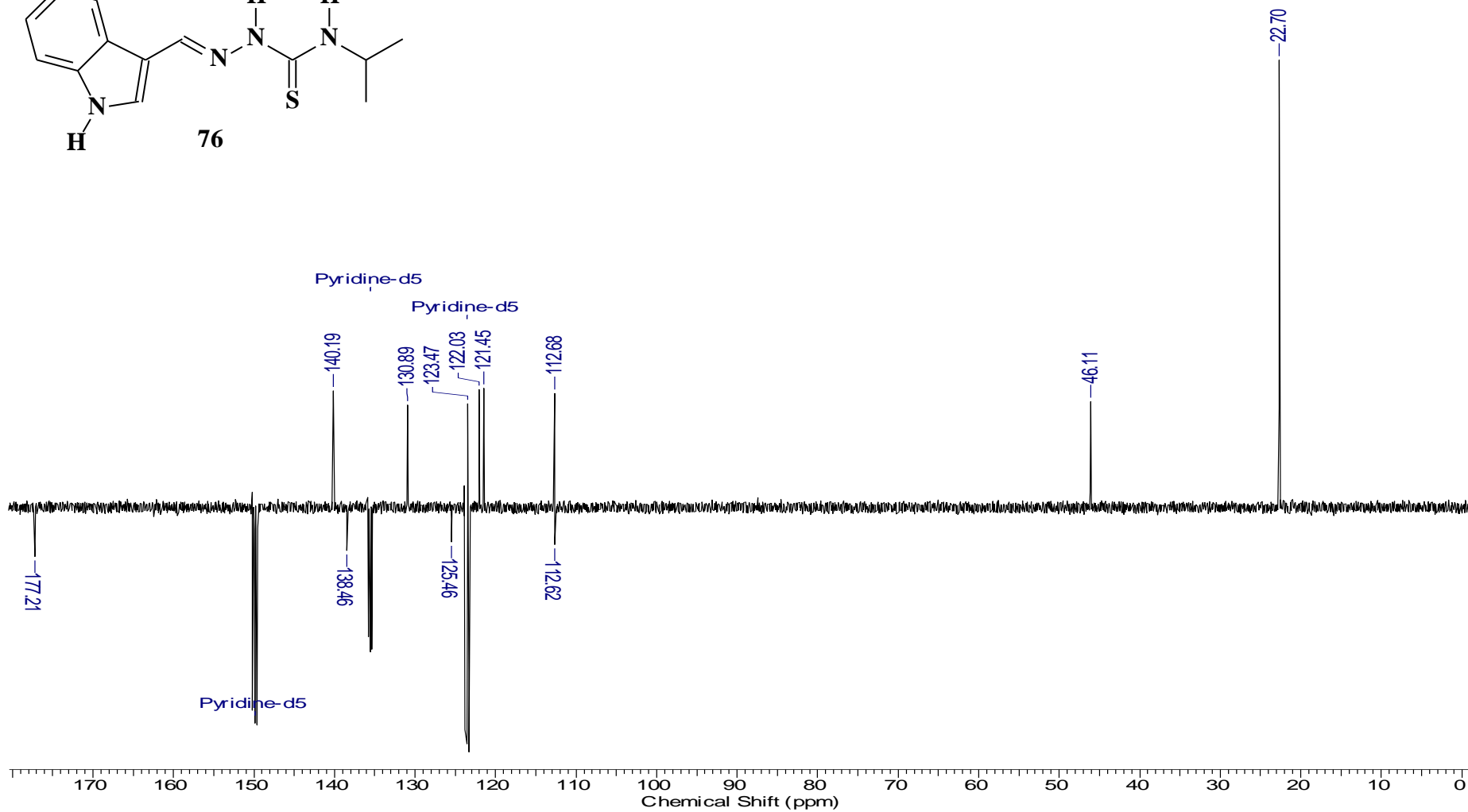
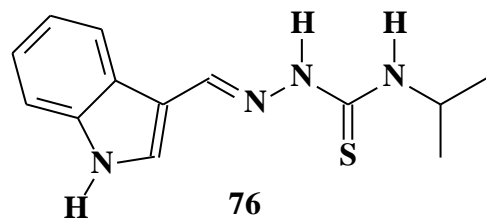
3.43 Espectro de IV do Indol-3-carboxaldeído-4-isopropil-tiossemicarbazona (76) obtido em pastilha de KBr



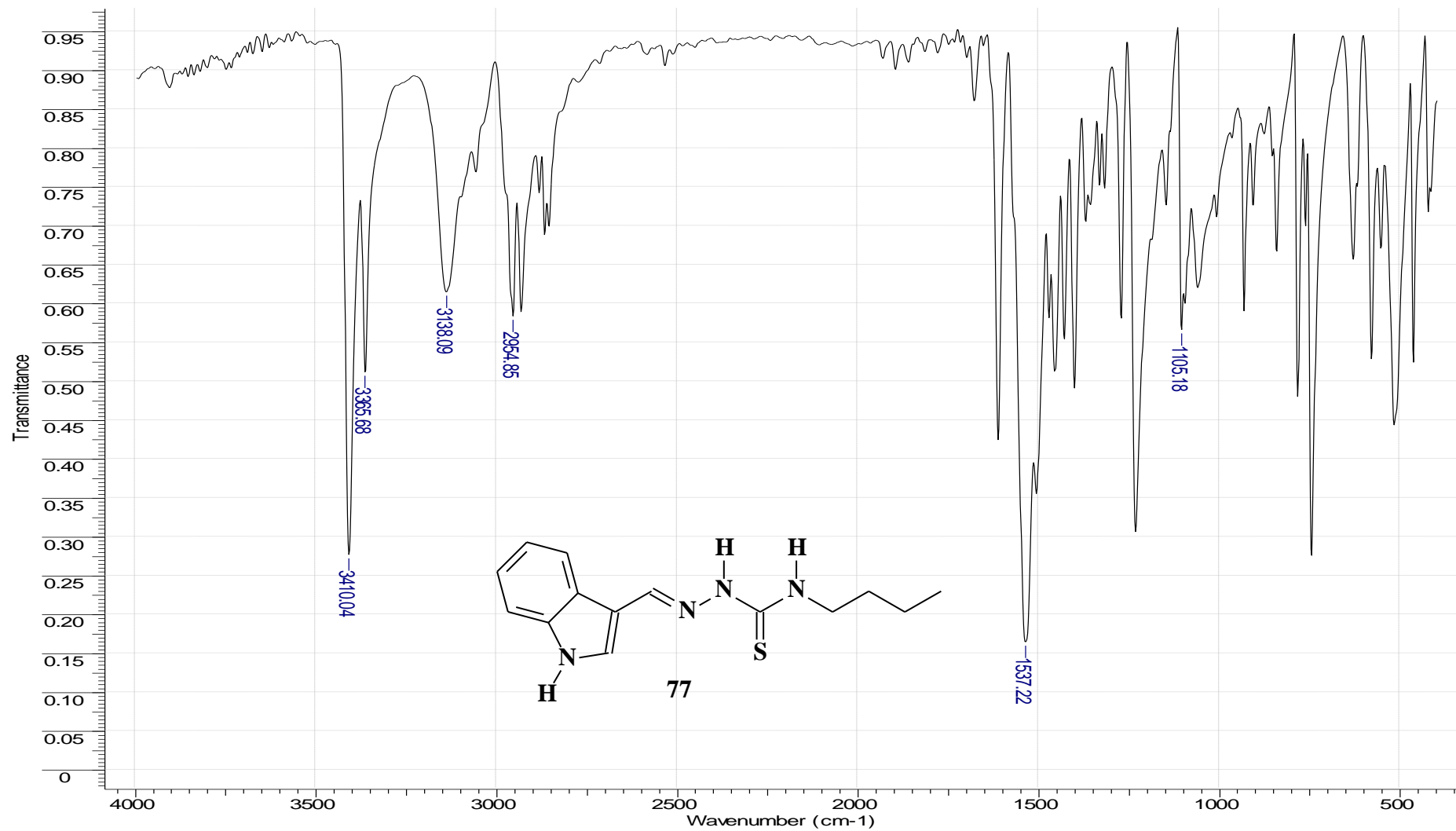
3.44 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-isopropil-tiossemicarbazona (76) obtido em piridina-d₅



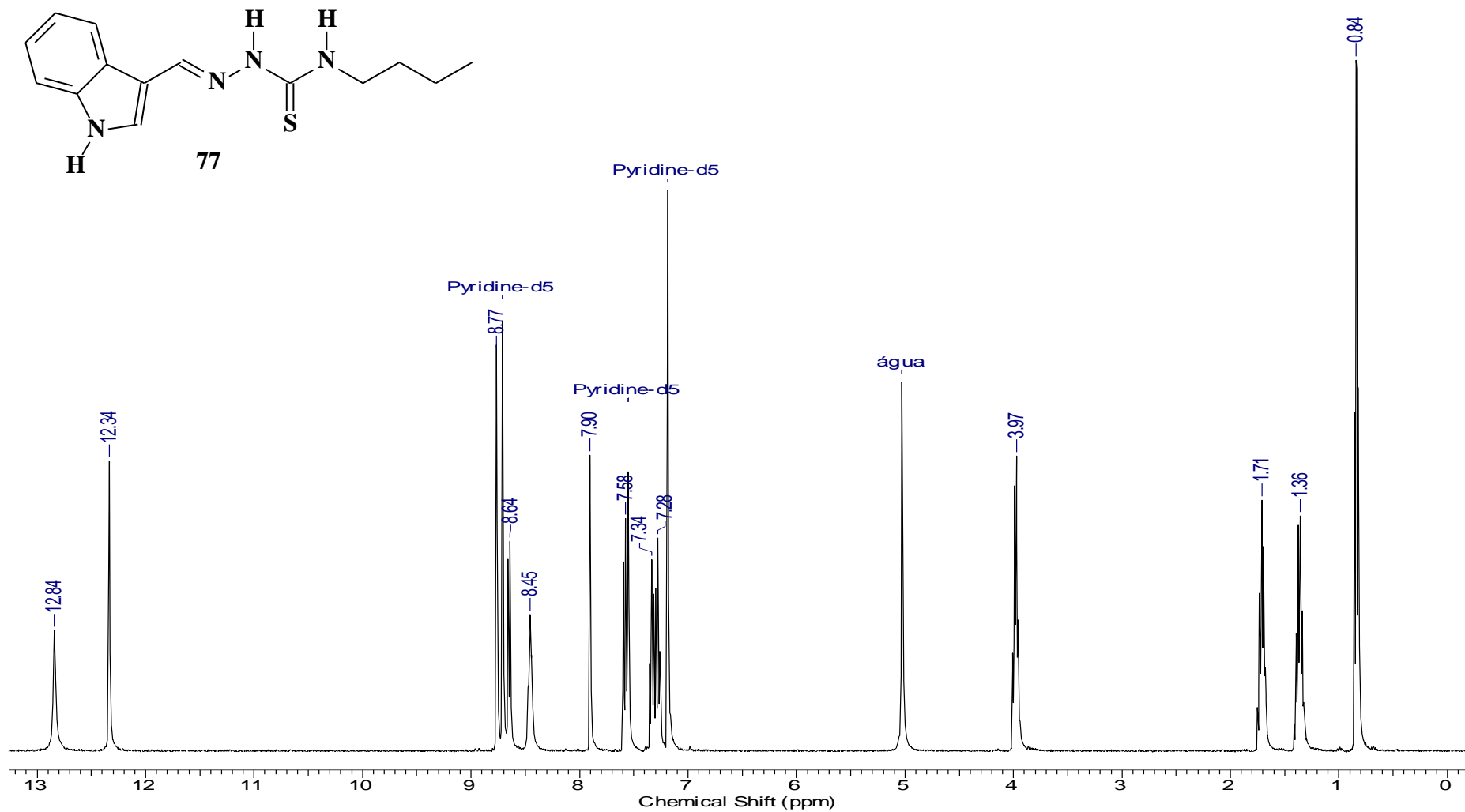
3.45 Espectro de RMN C^{13} (DEPTQ) do Indol-3-carboxaldeído-4-isopropil-tiossemicarbazona (76) obtido em piridina- d_5



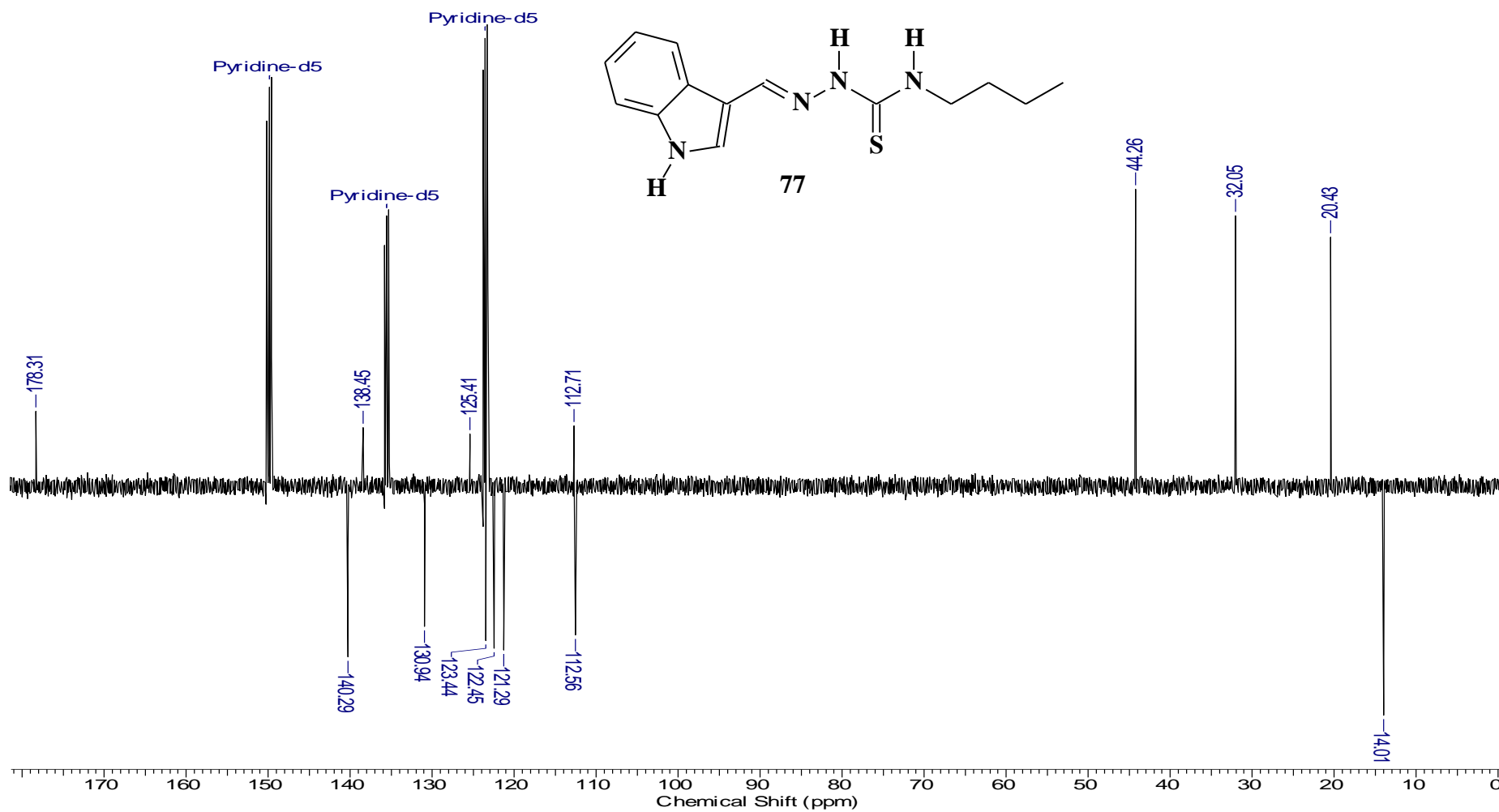
3.46 Espectro de IV do Indol-3-carboxaldeído-4-butil-tiossemicarbazona (77) obtido em pastilha de KBr



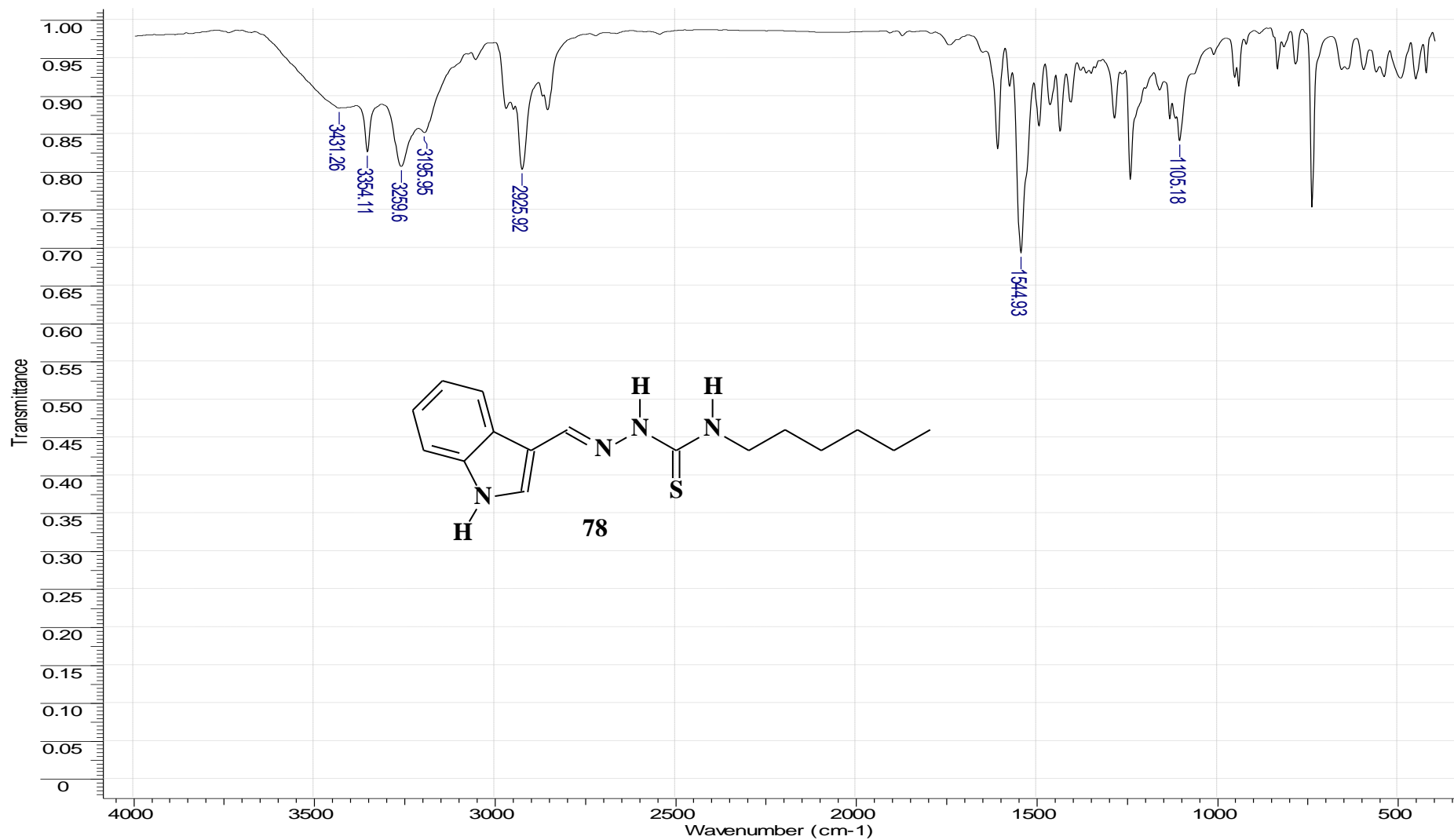
3.47 Espectro de RMN H^1 do Indol-3-carboxaldeído-4-butil-tiossemicarbazona (77) obtido em piridina- d_5



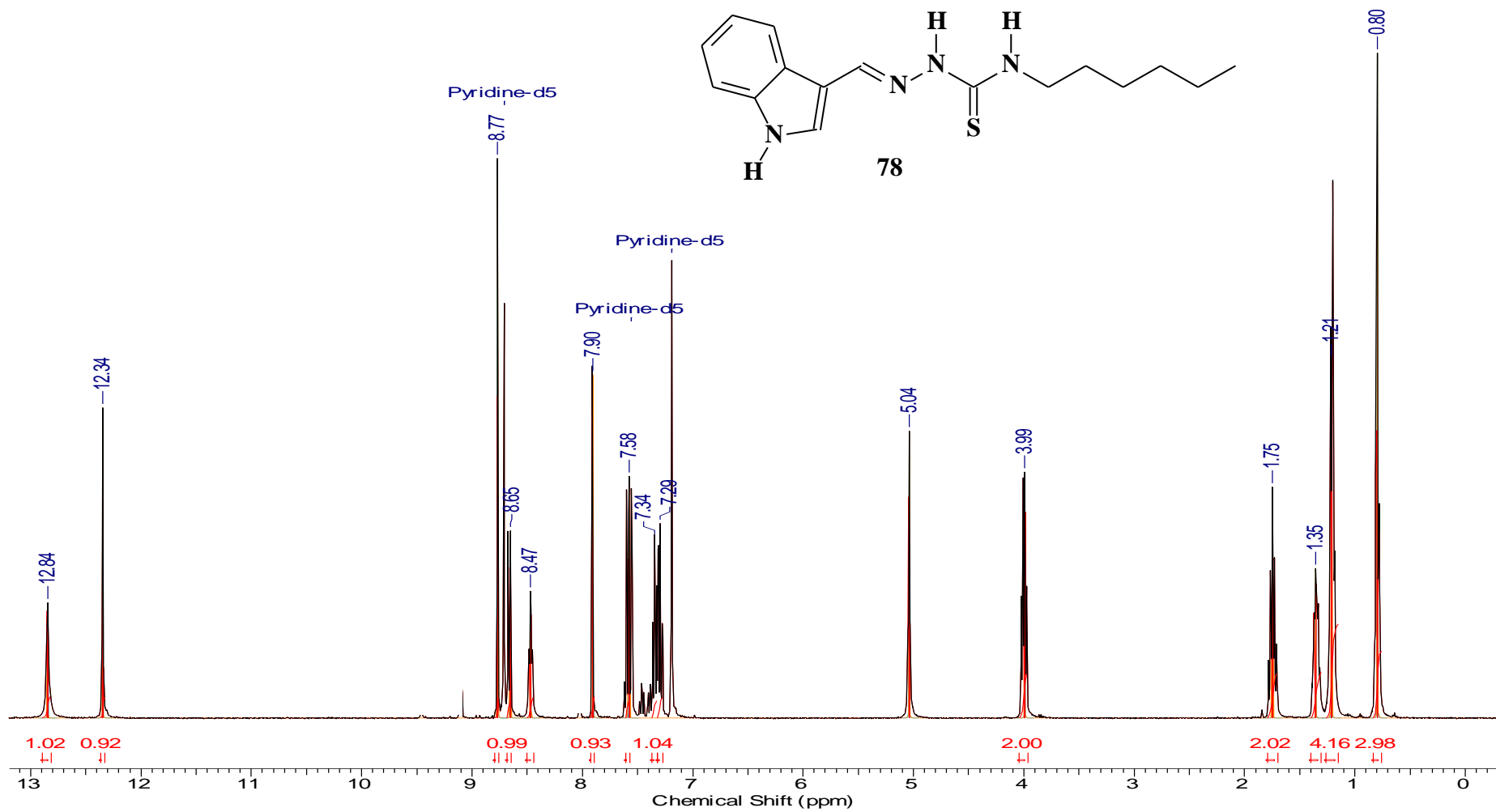
3.48 Espectro de RMN C^{13} (DEPTQ) do Indol-3-carboxaldeído-4-butil-tiossemicarbazona (77) obtido em piridina- d_5



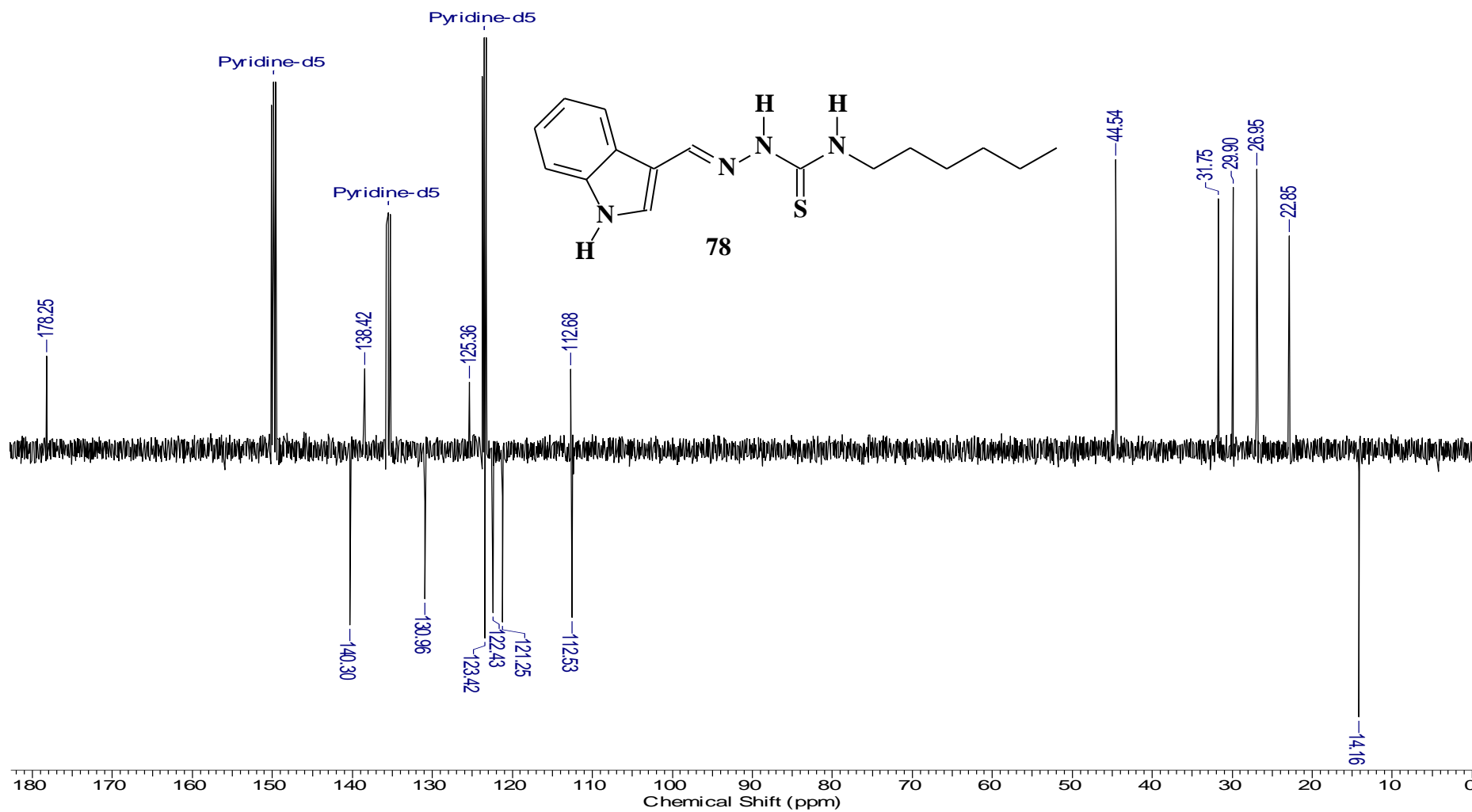
3.49 Espectro de IV do Indol-3-carboxaldeído-4-hexil-tiossemicarbazona (78) obtido em pastilha de KBr



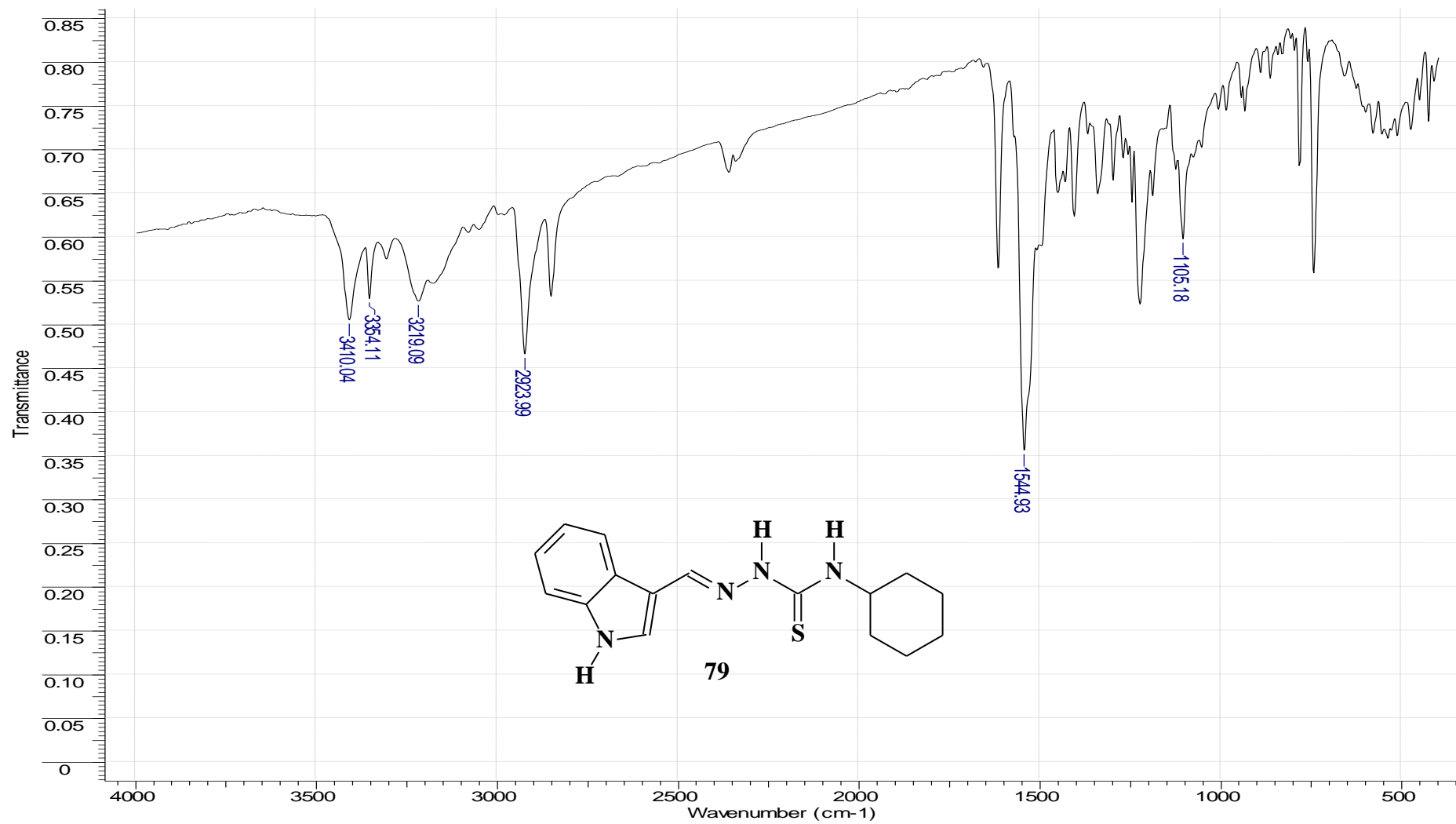
3.50 Espectro de RMN H¹ do Indol-3-carboxaldeído-4-hexil-tiossemicarbazona (78) obtido em piridina-d₅



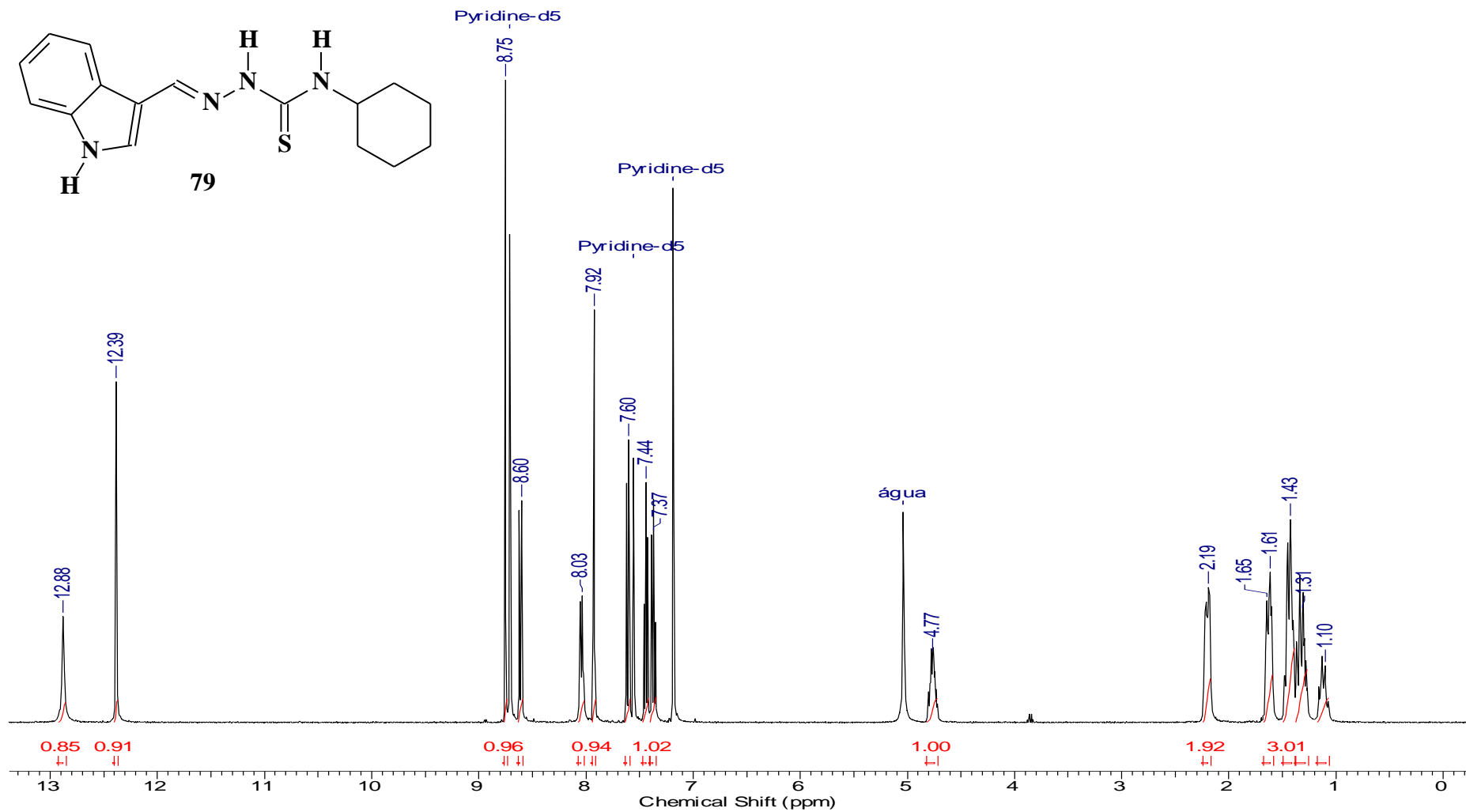
3.51 Espectro de RMN C¹³ (DEPTQ) do Indol-3-carboxaldeído-4-hexil-tiossemicarbazona (78) obtido em piridina-d₅



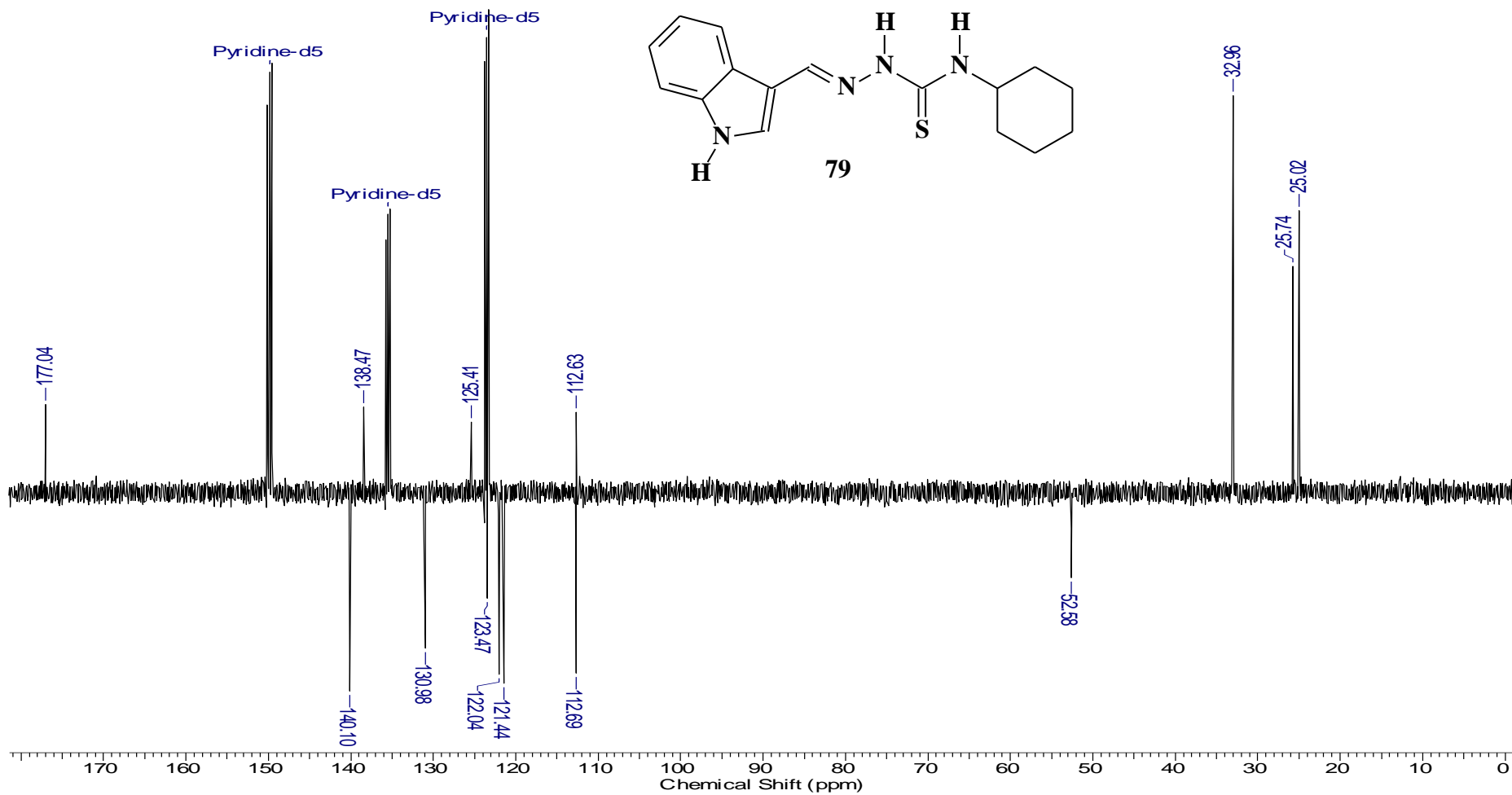
3.52 Espectro de IV do Indol-3-carboxaldeído-4-cicloexil-tiossemicarbazona (79) obtido em pastilha de KBr



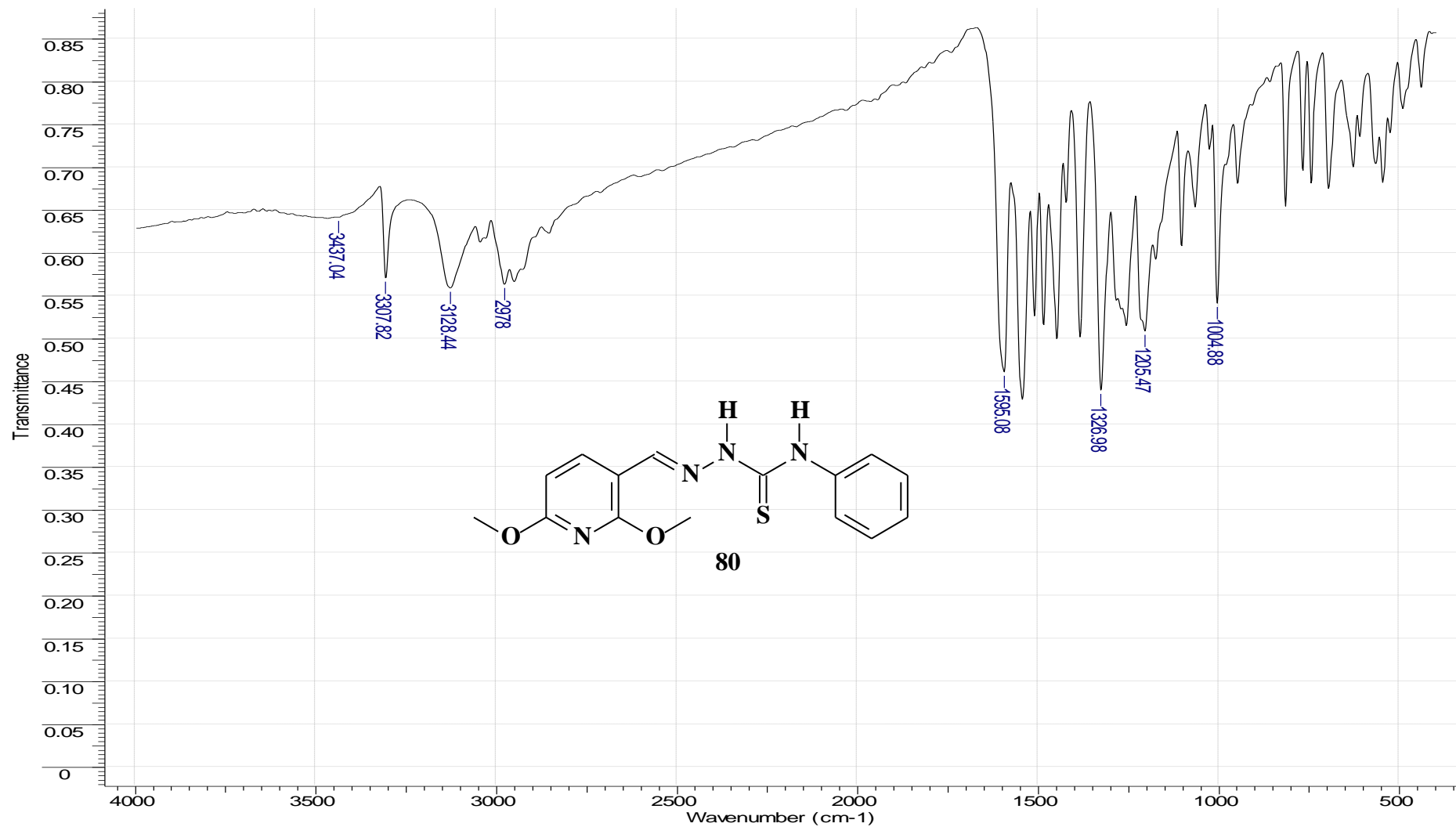
3.53 Espectro de RMN H^1 do Indol-3-carboxaldeído-4-cicloexil-tiossemicarbazona (79) obtido em piridina- d_5



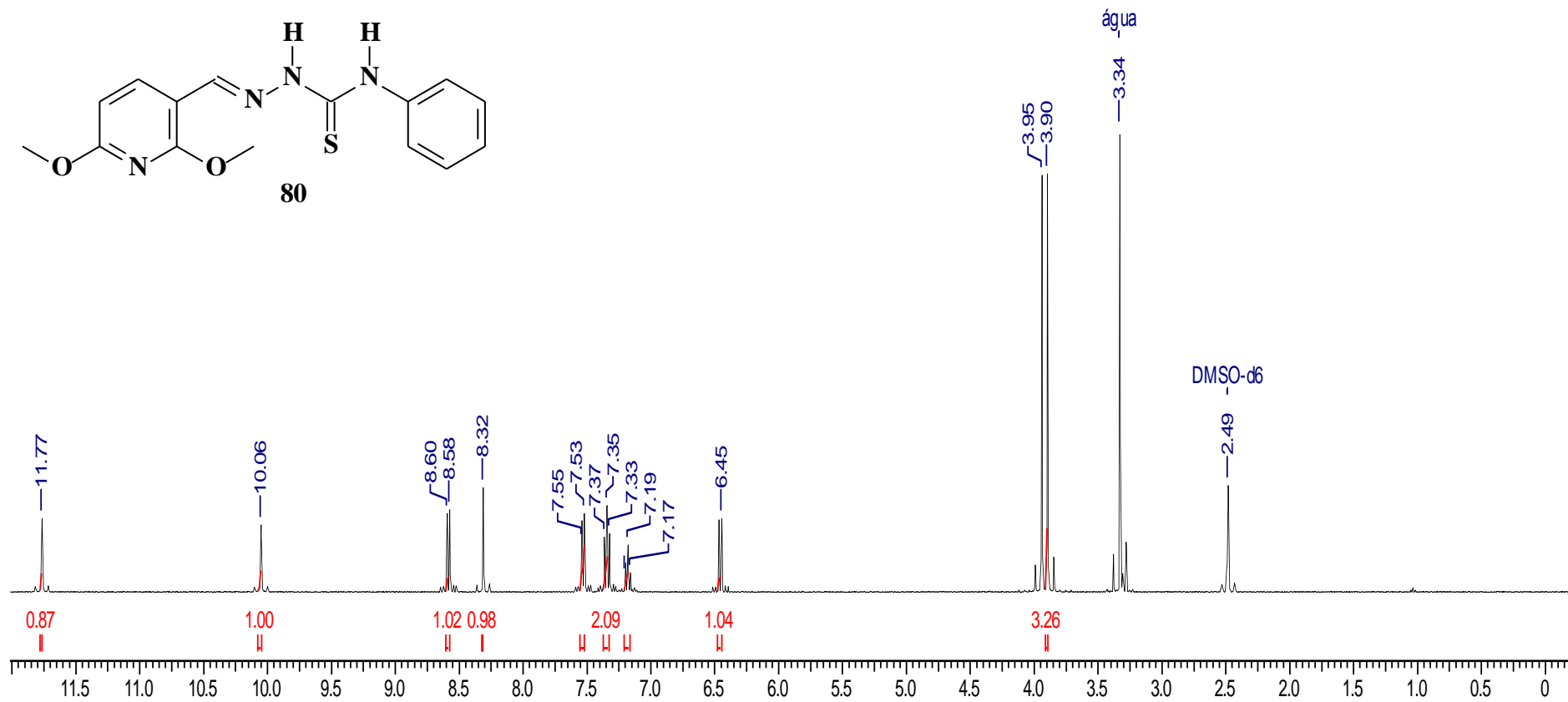
3.54 Espectro de RMN C^{13} (DEPTQ) do Indol-3-carboxaldeído-4-cicloexil-tiossemicarbazona (79) obtido em piridina- d_5



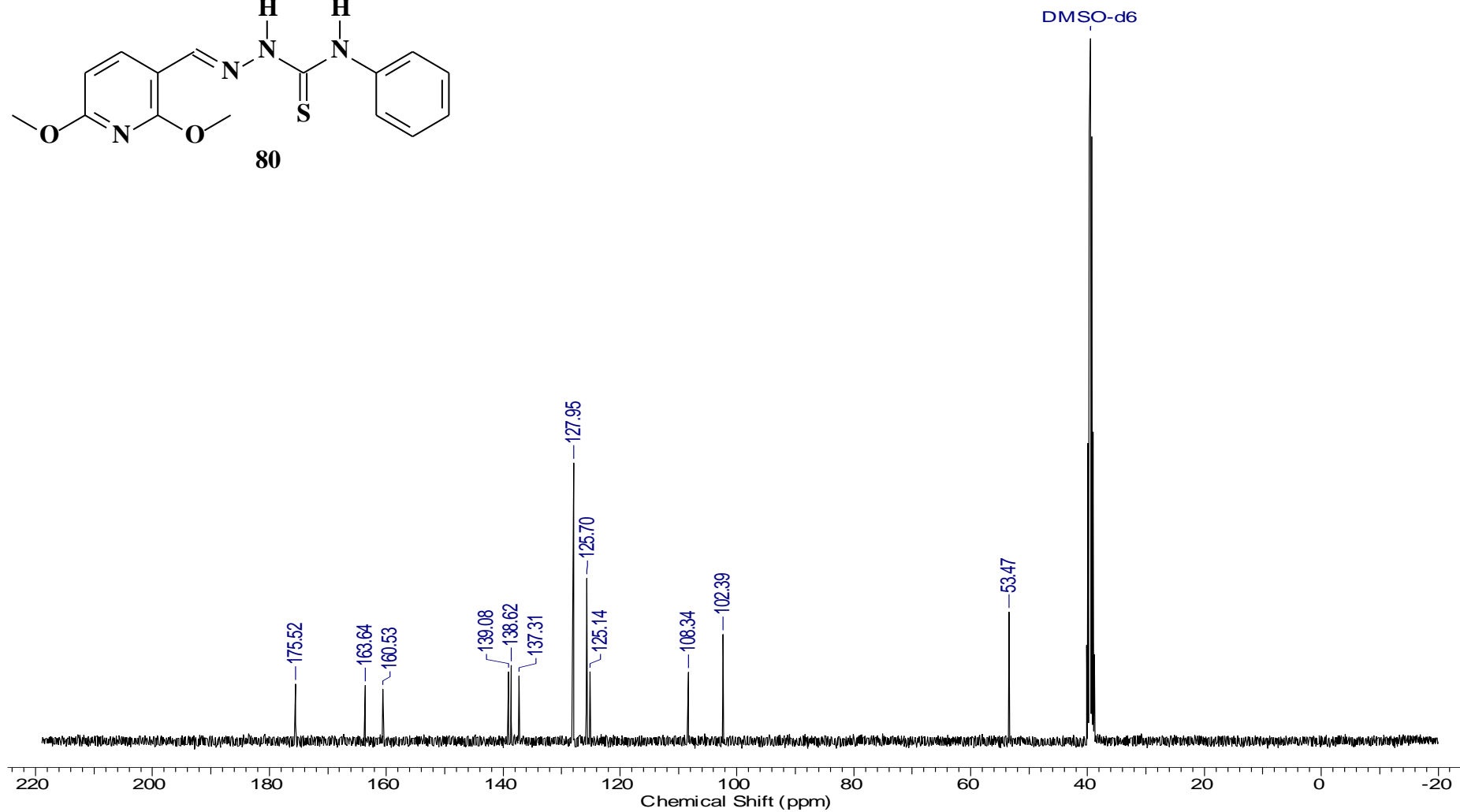
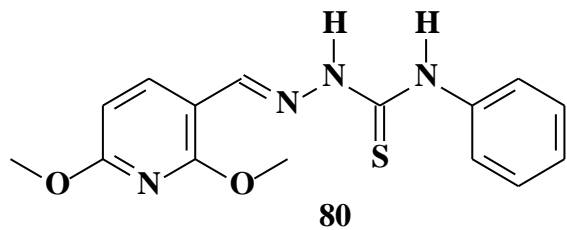
3.55 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-fenil-tiossemicarbazona (80) obtido em pastilha de KBr



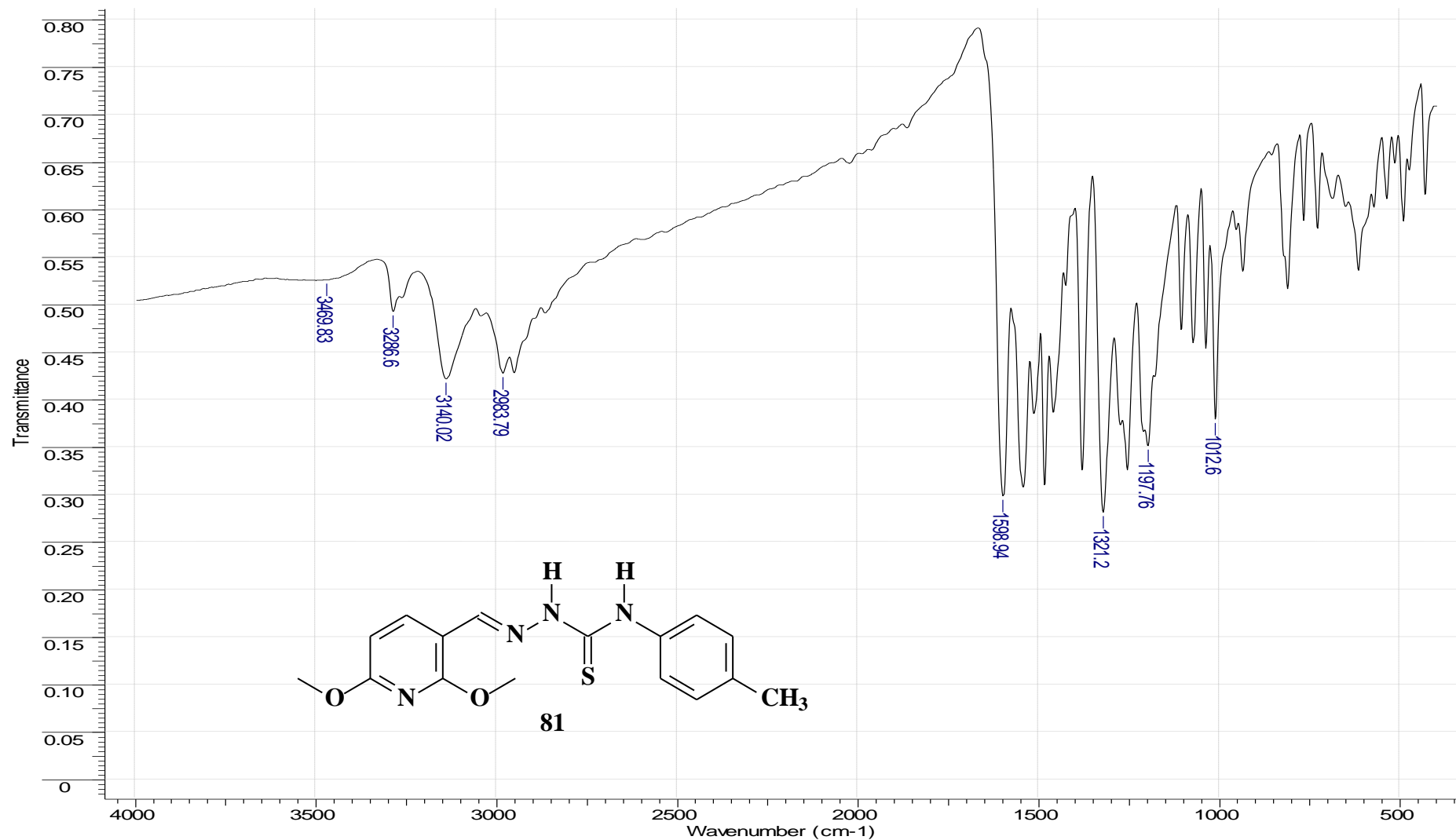
3.56 Espectro de RMN H¹ do 2,6-Dimetoxipiridina-3-carboxaldeído-4-fenil-tiossemicarbazona (80) obtido em DMSO-d₆



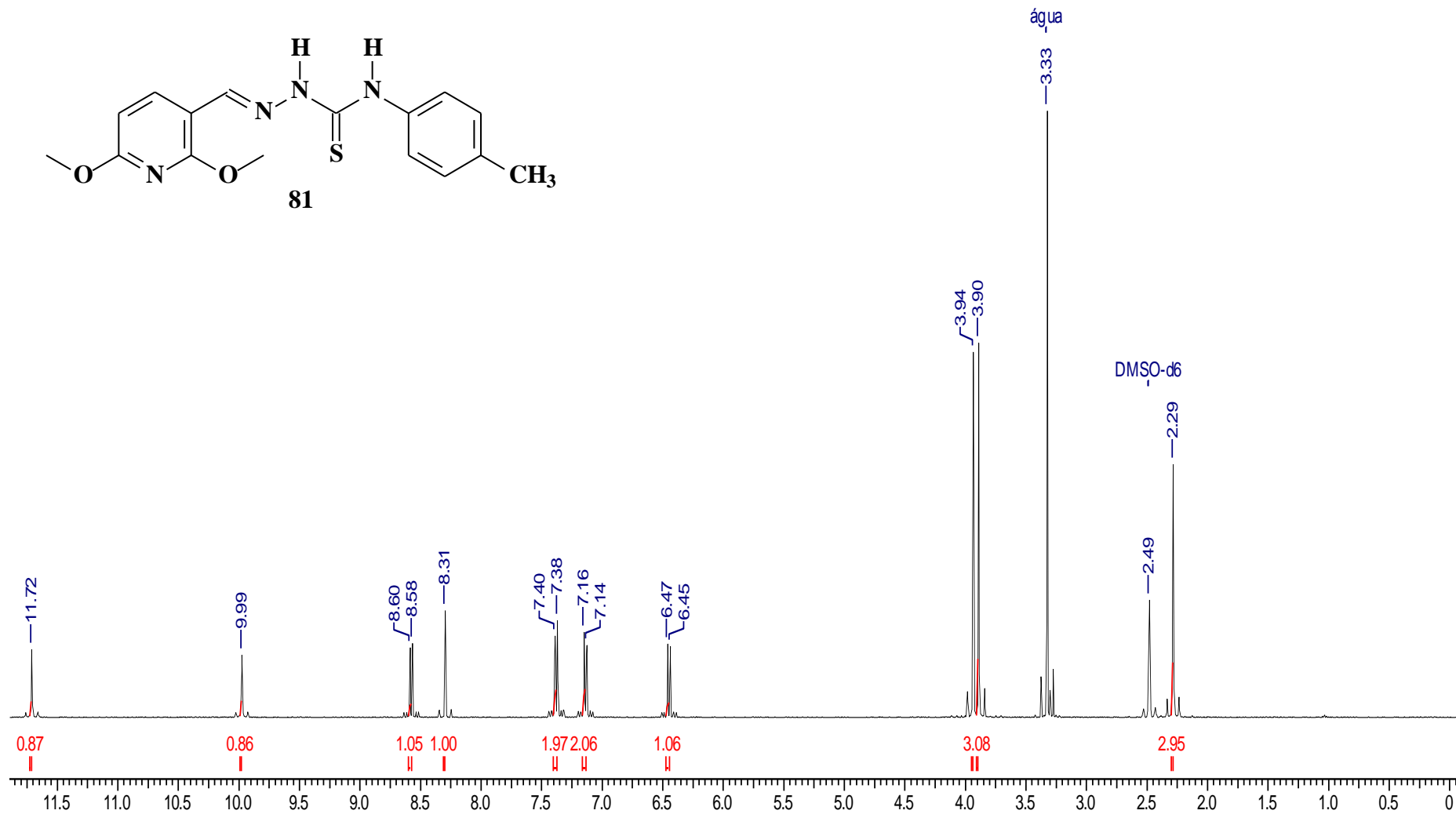
3.57 Espectro de RMN C^{13} (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-fenil-tiossemicarbazona (80) obtido em $DMSO-d_6$



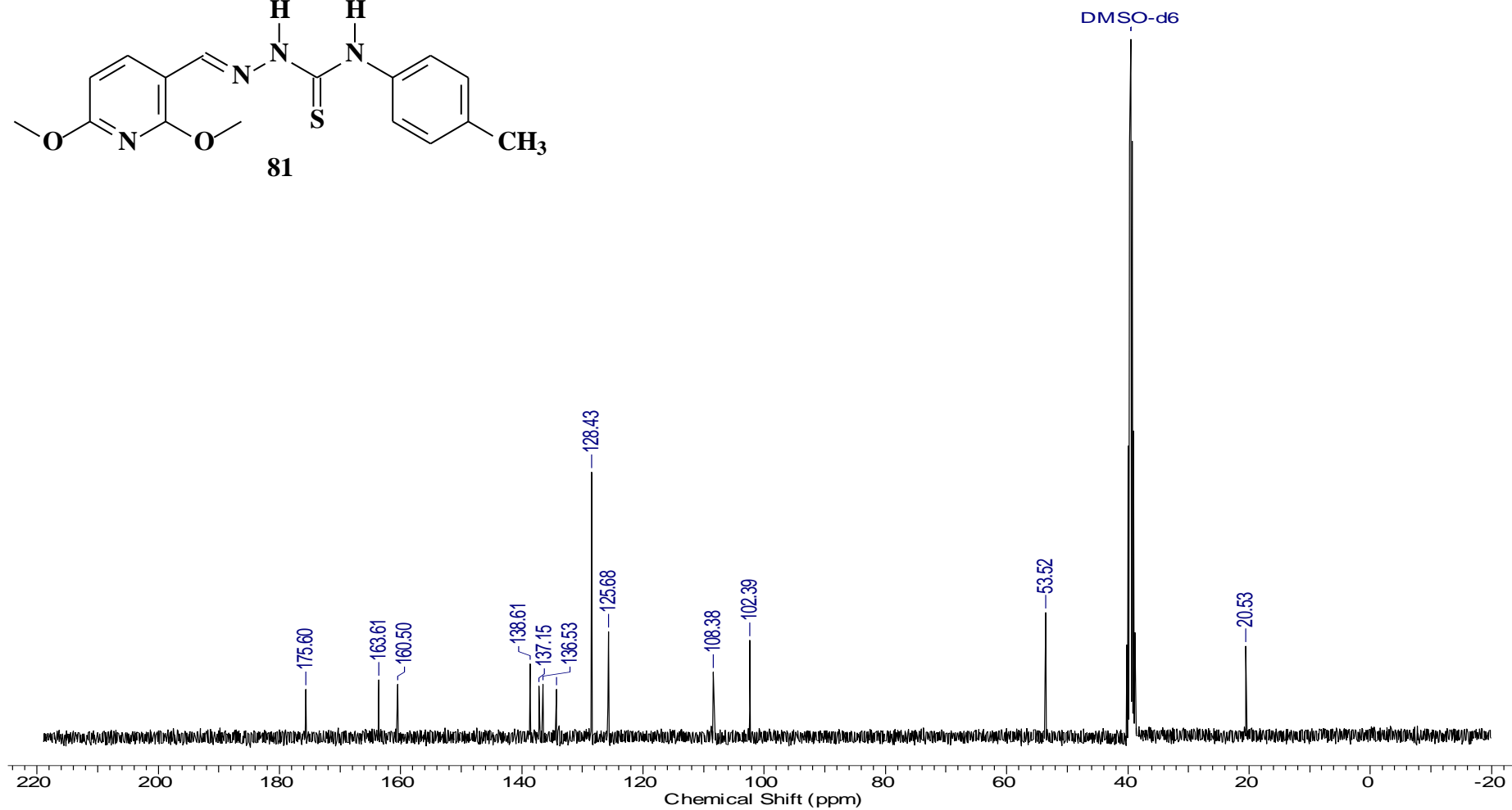
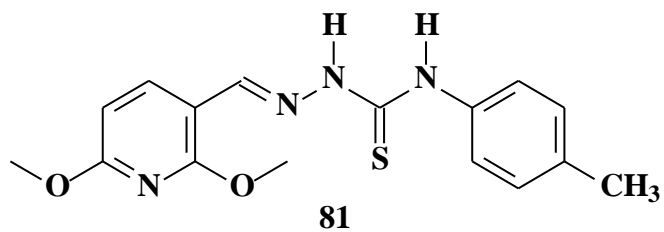
3.58 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (81) obtido em pastilha de KBr



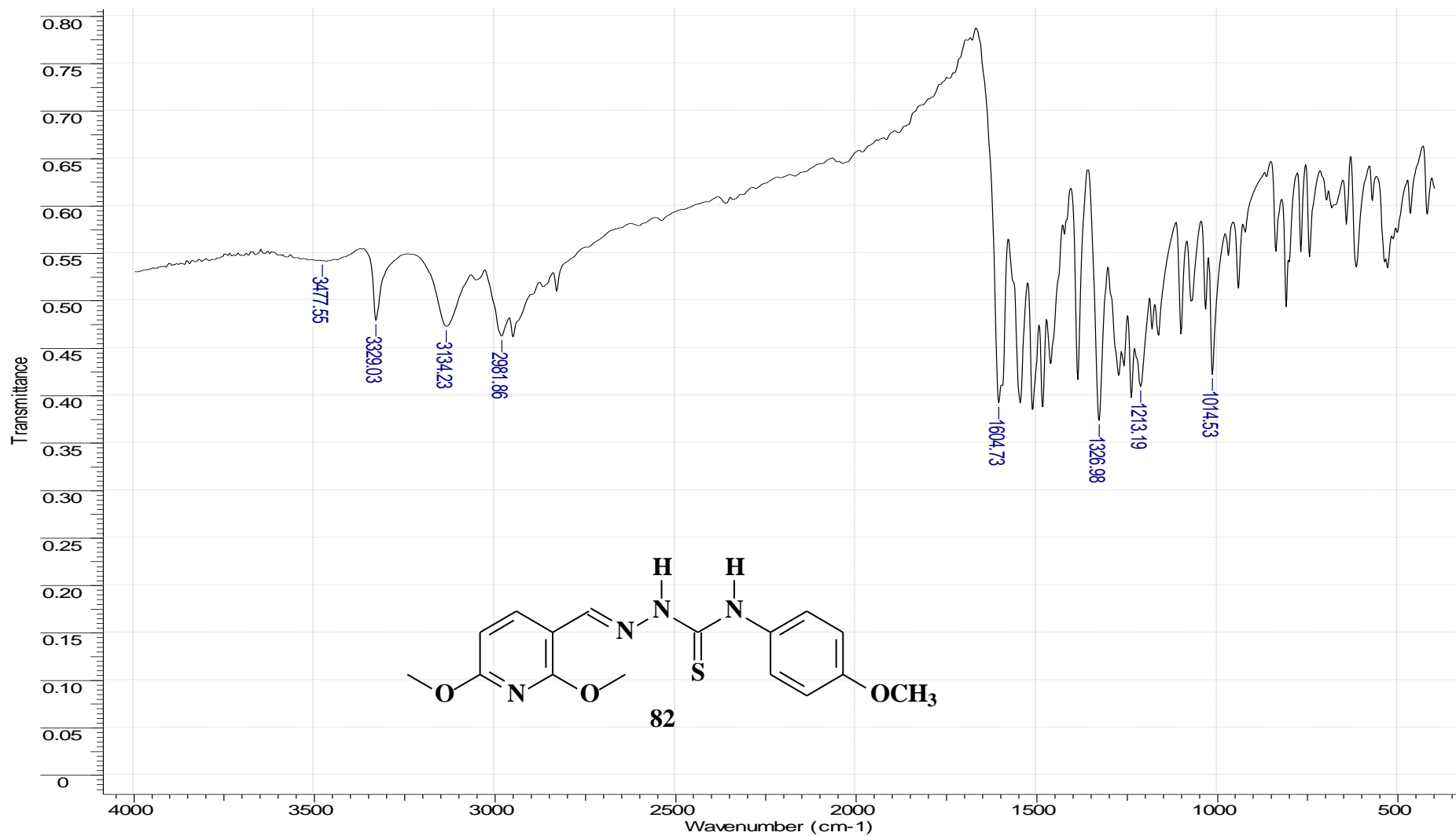
3.59 Espectro de RMN H¹ do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (81) obtido em DMSO-*d*₆



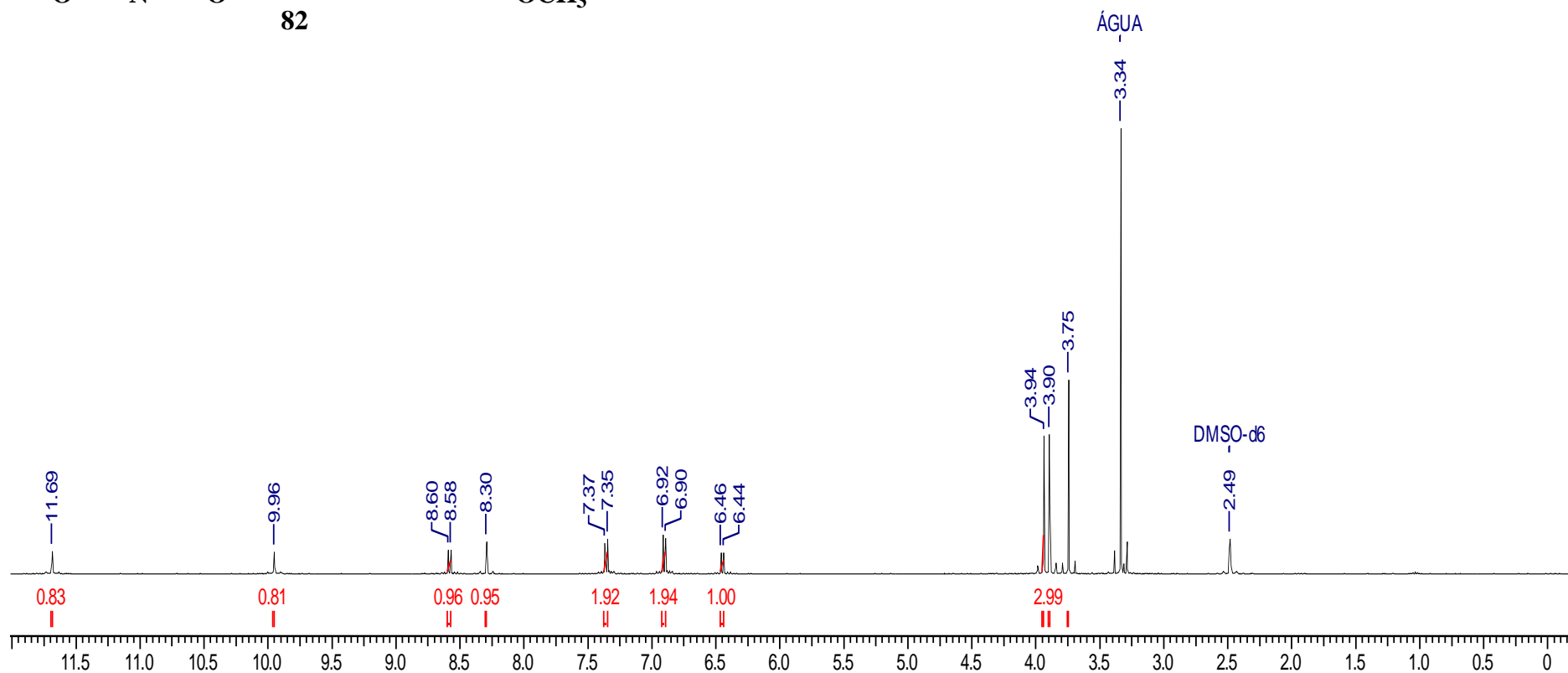
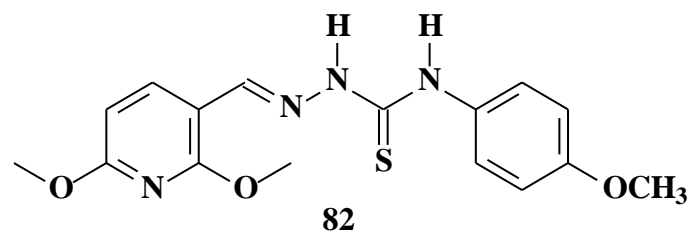
3.60 Espectro de RMN C^{13} (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (81) obtido em $DMSO-d_6$



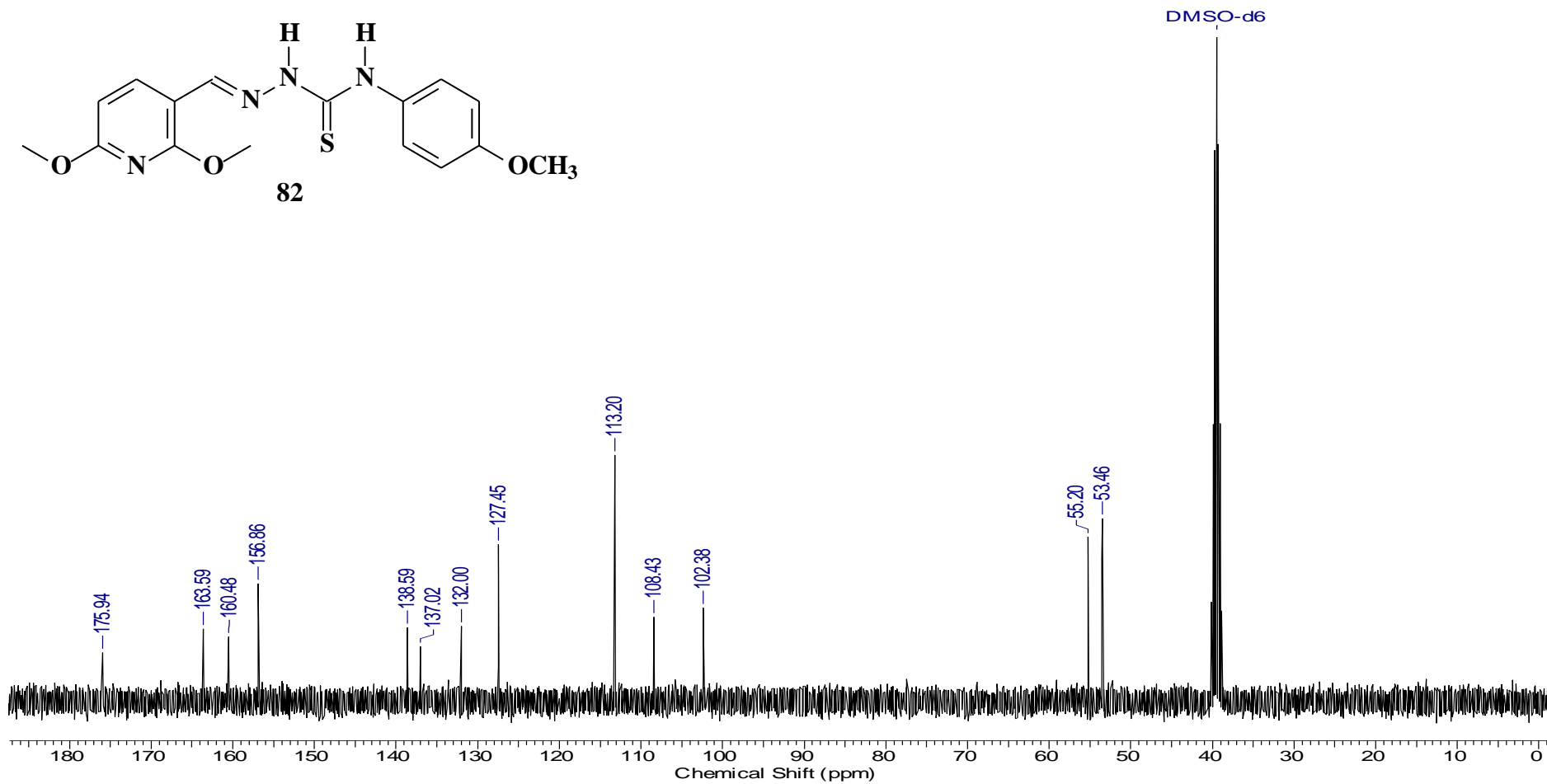
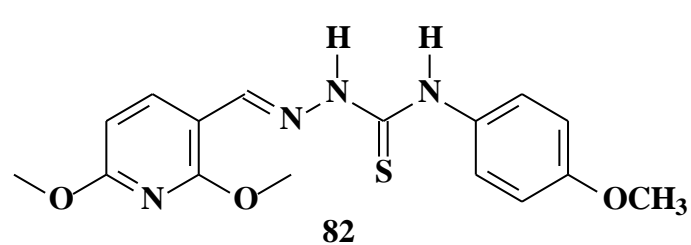
3.61 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (82) obtido em pastilha de KBr



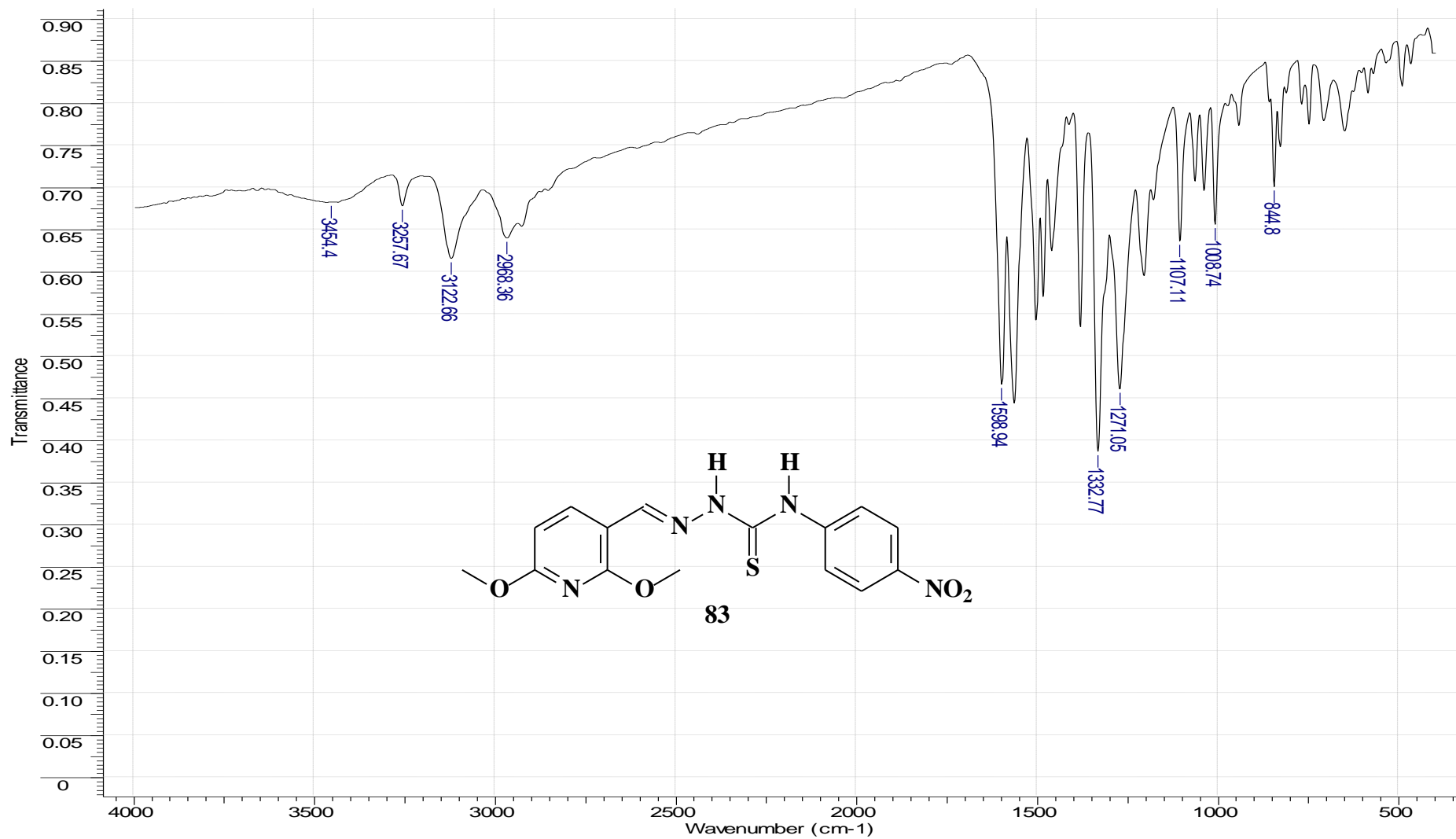
3.62 Espectro de RMN H^1 do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (82) obtido em $DMSO-d_6$



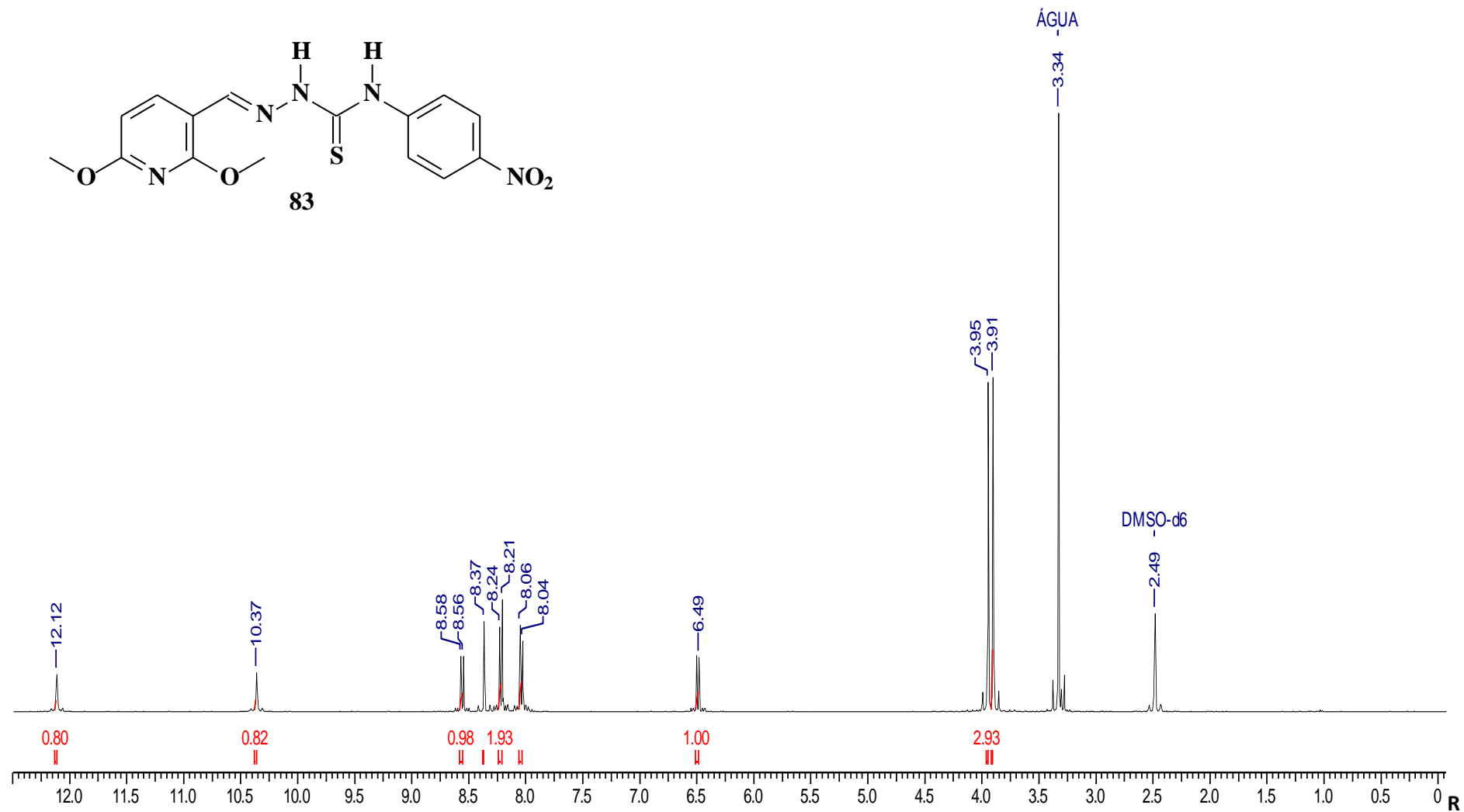
3.63 Espectro de RMN C^{13} (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (82) obtido em $DMSO-d_6$



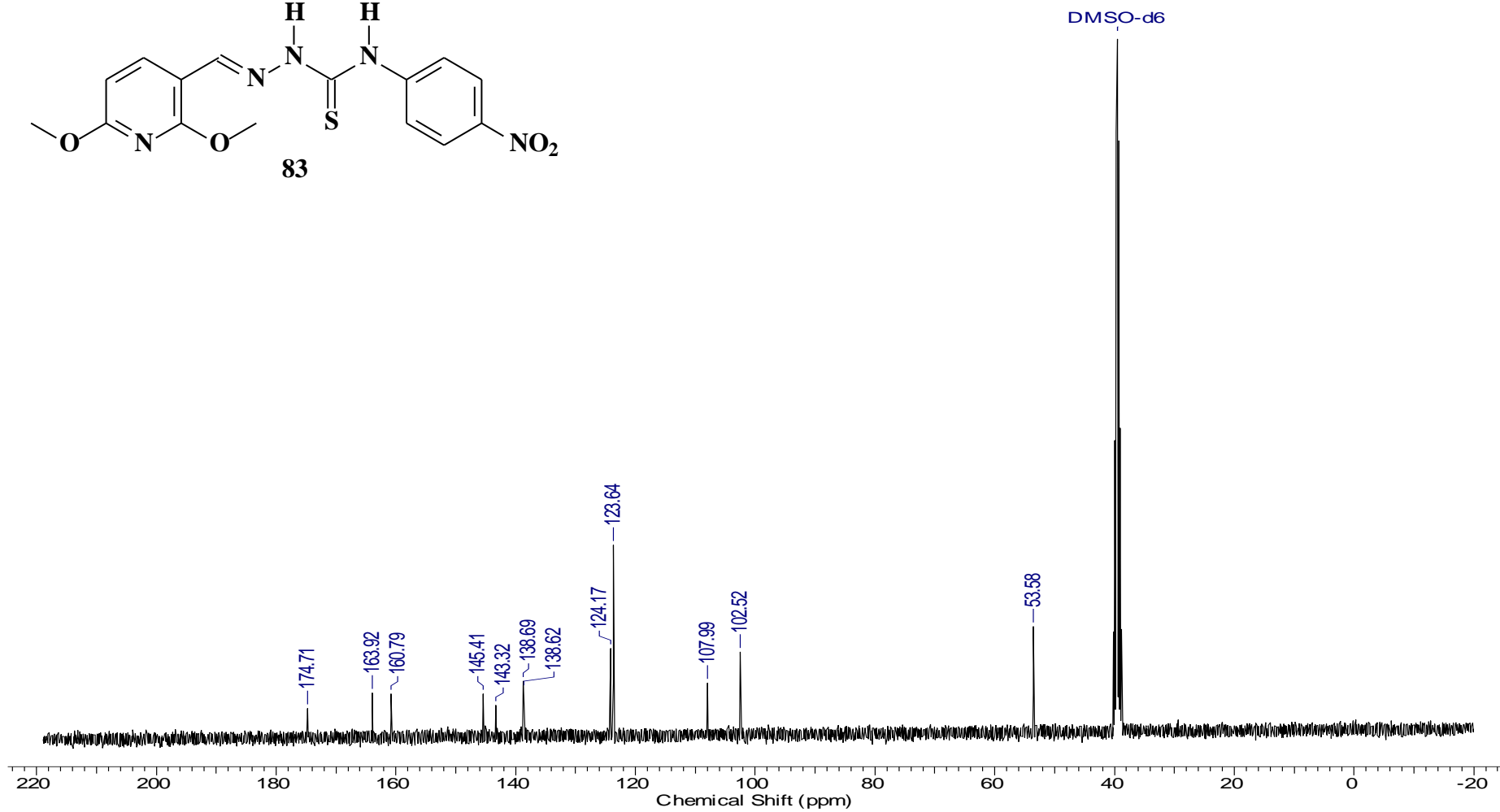
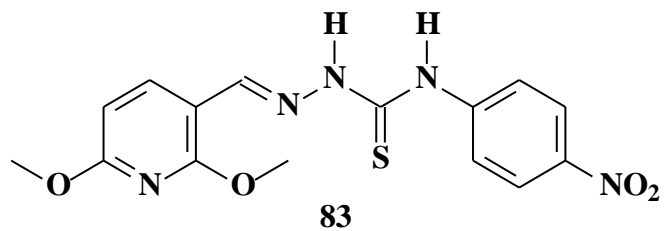
3.64 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (83) obtido em pastilha de KBr



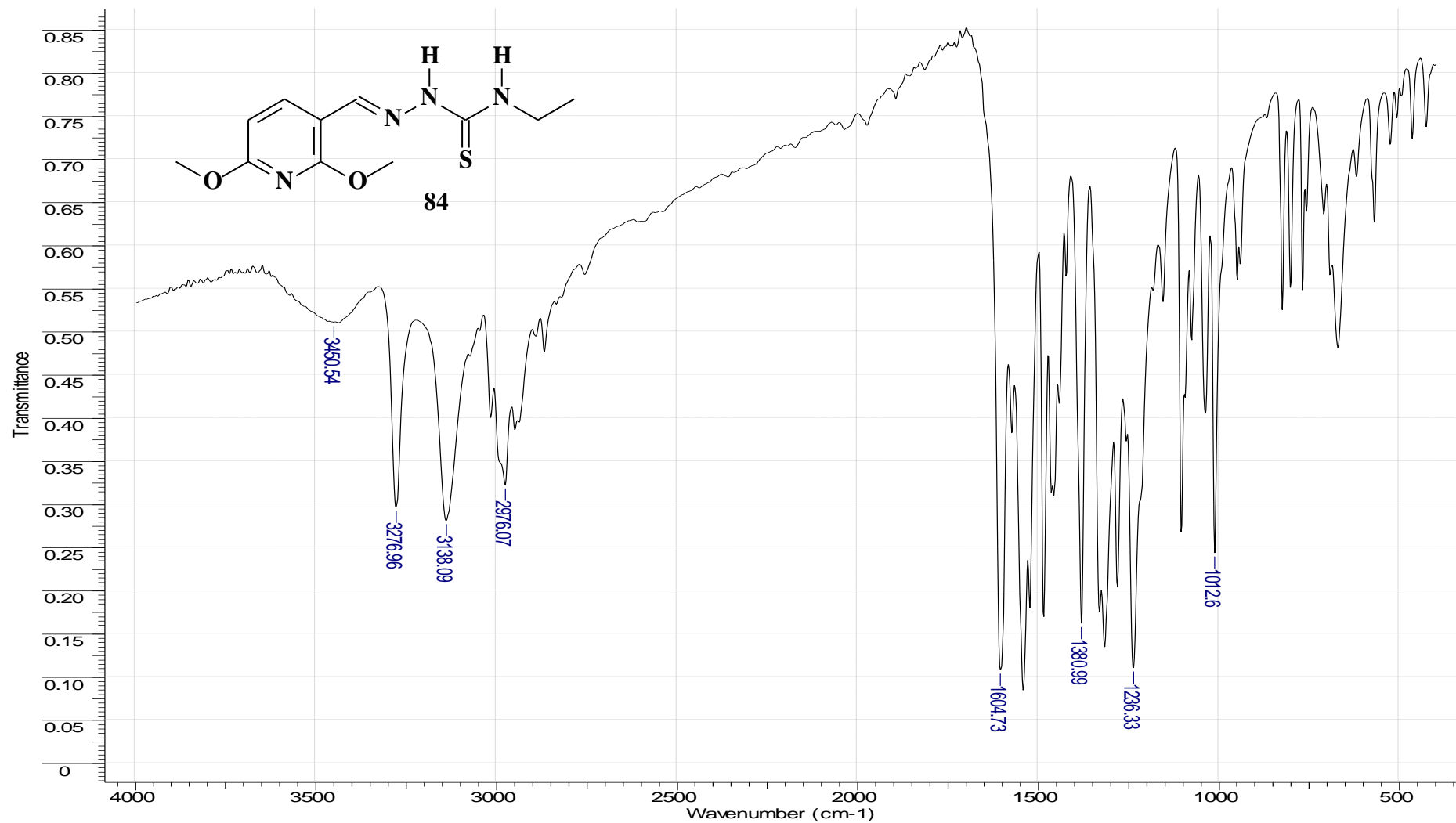
3.65 Espectro de RMN H¹ do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (83) obtido em DMSO-*d*₆



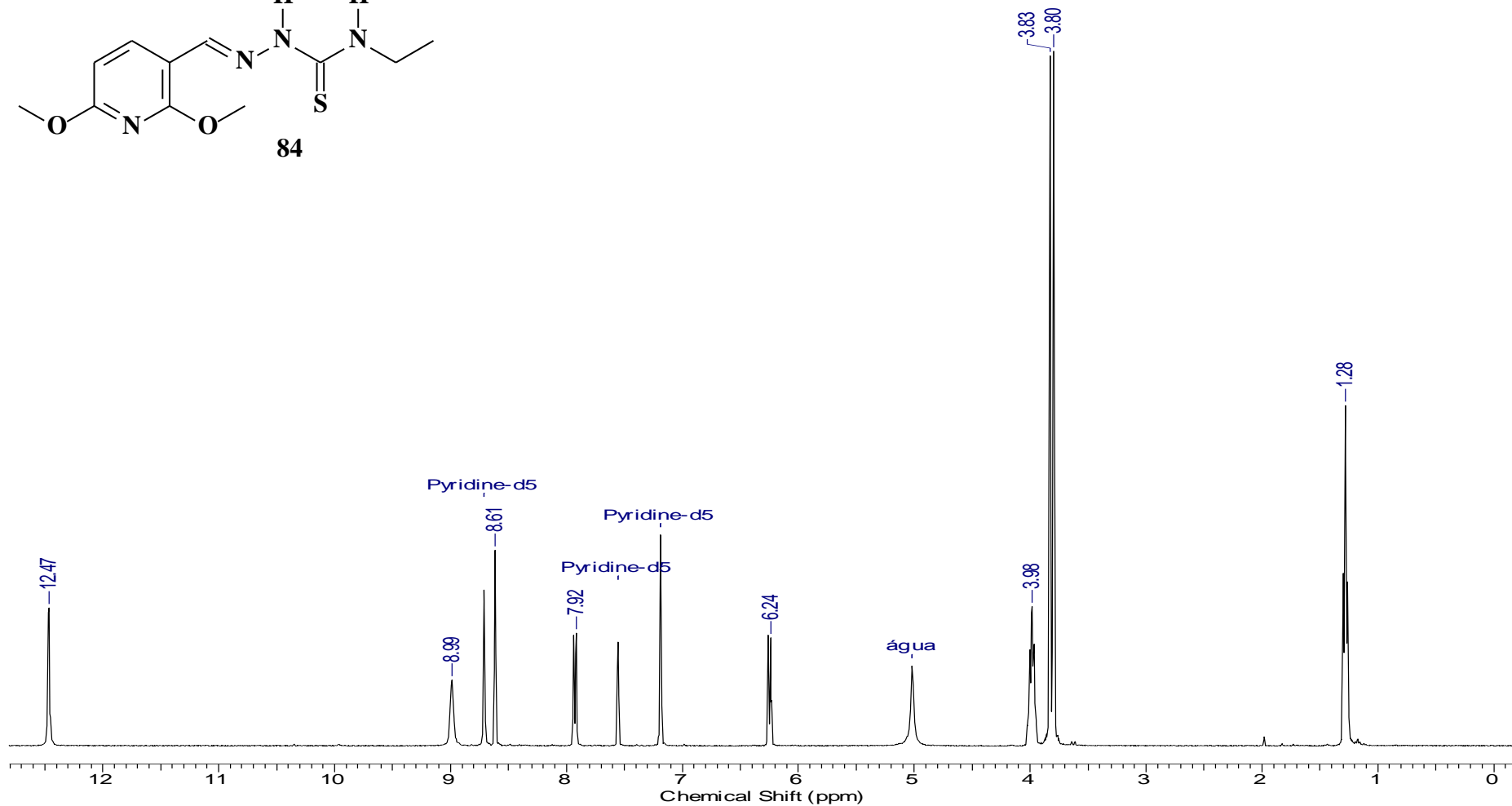
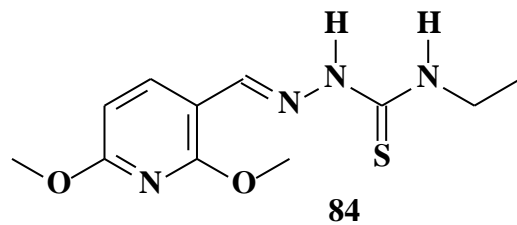
3.66 Espectro de RMN C^{13} (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (83) obtido em $DMSO-d_6$



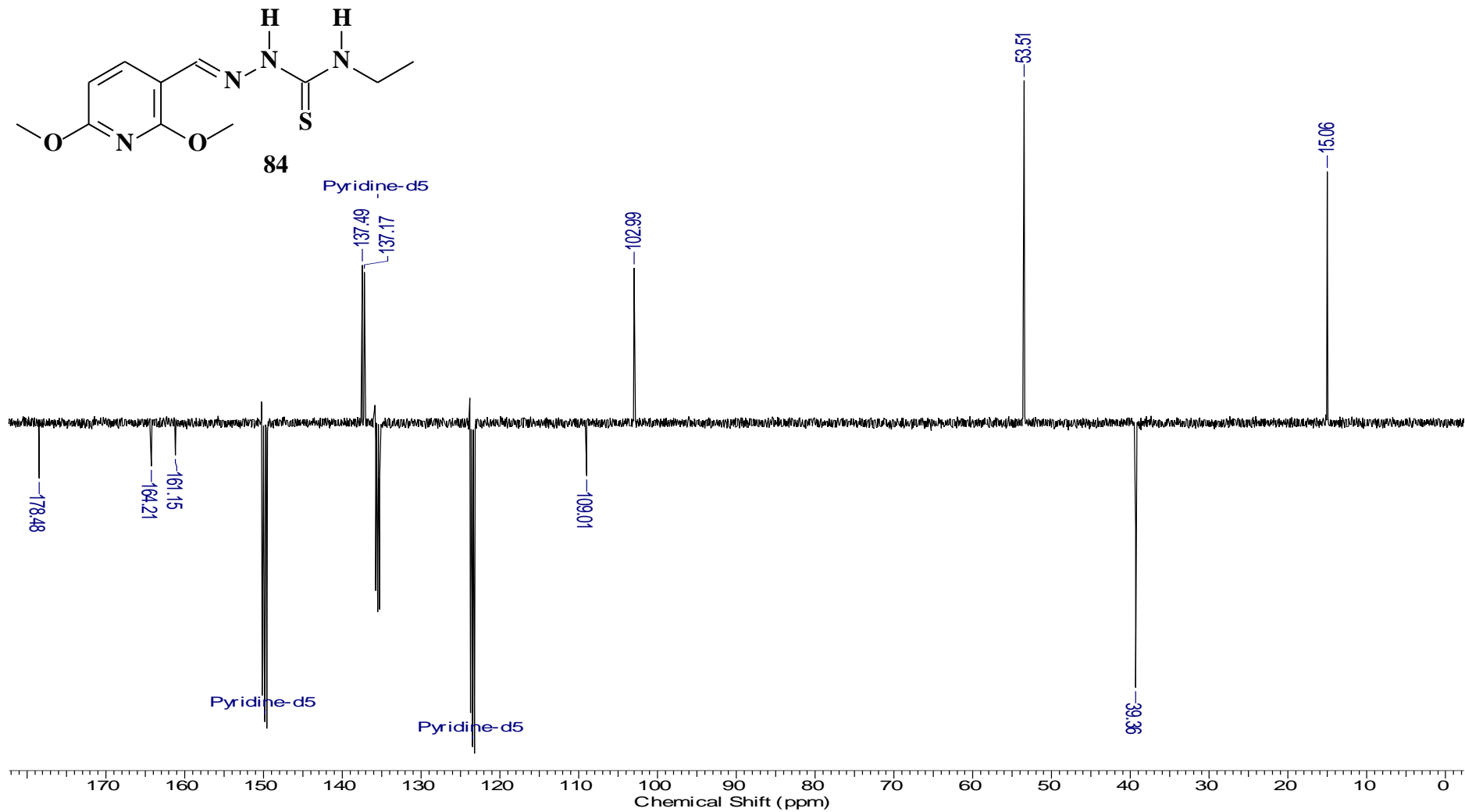
3.67 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-etil-tiossemicarbazona (84) obtido em pastilha de KBr



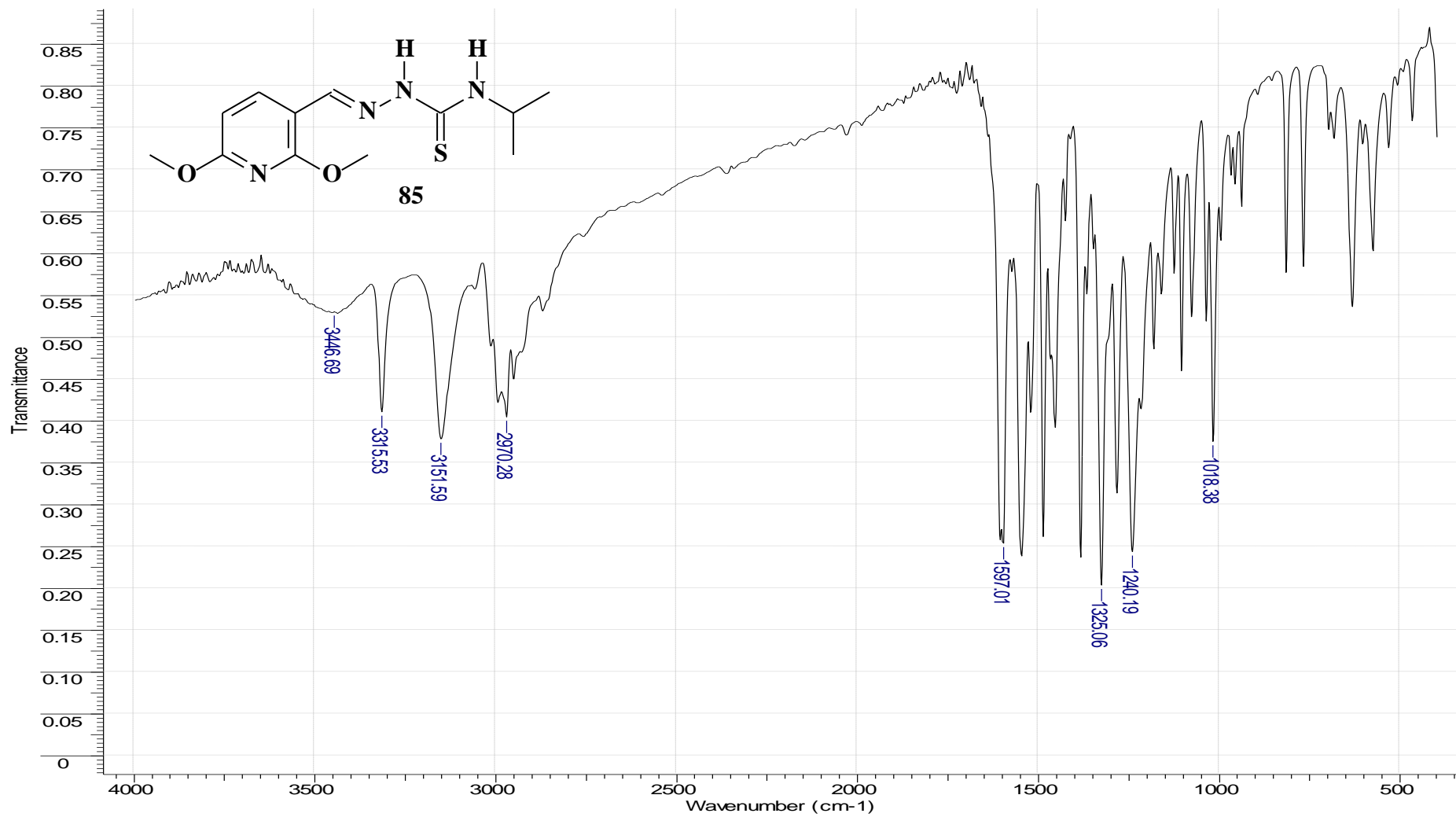
3.68 Espectro de RMN H^1 do 2,6-Dimetoxipiridina-3-carboxaldeído-4-etil-tiossemicarbazona (84) obtido em piridina- d_5



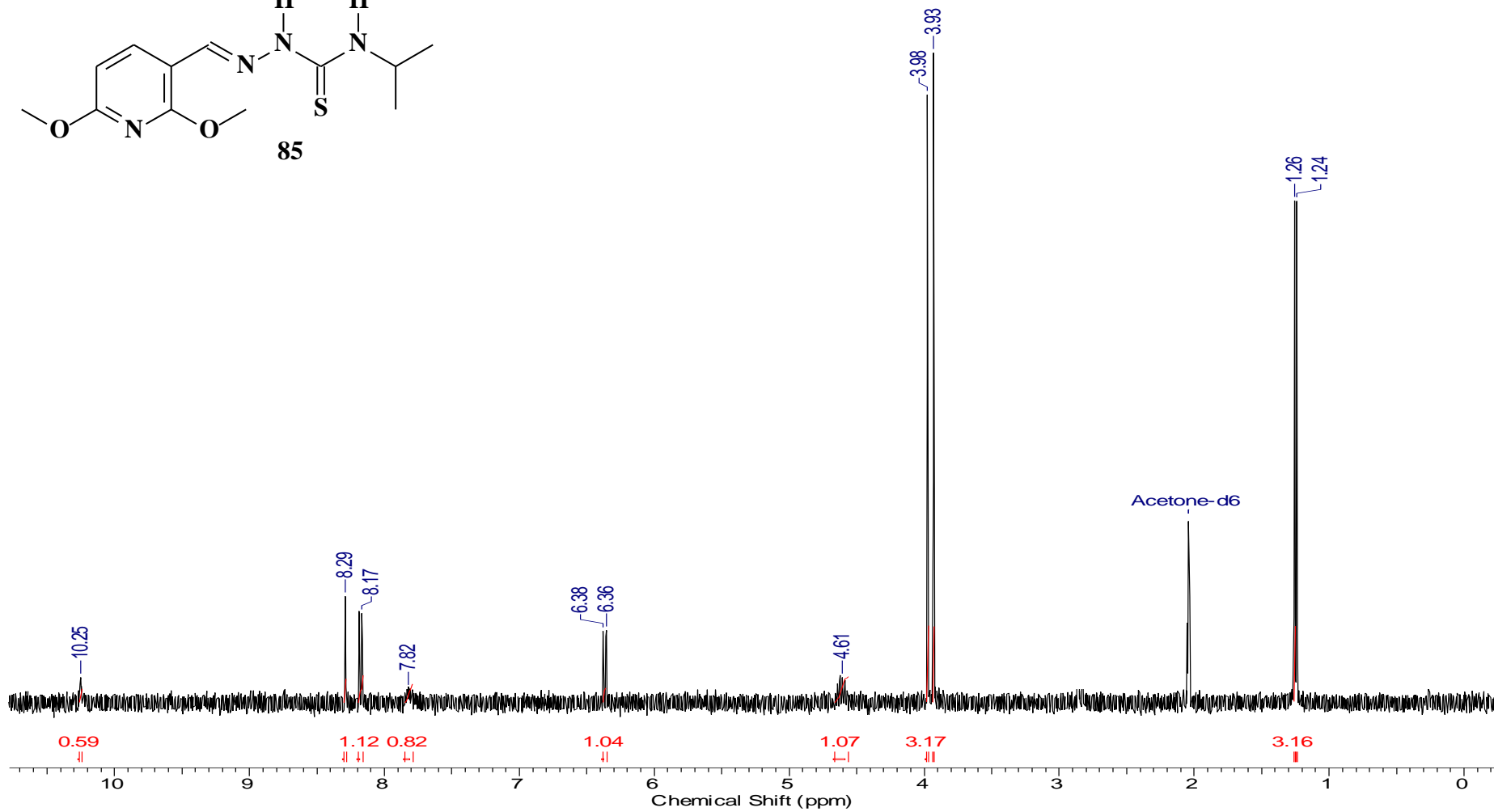
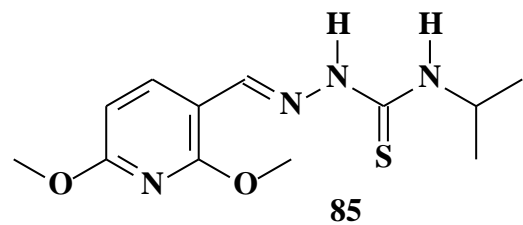
3.69 Espectro de RMN C^{13} (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-etil-tiossemicarbazona (84) obtido em piridina- d_5



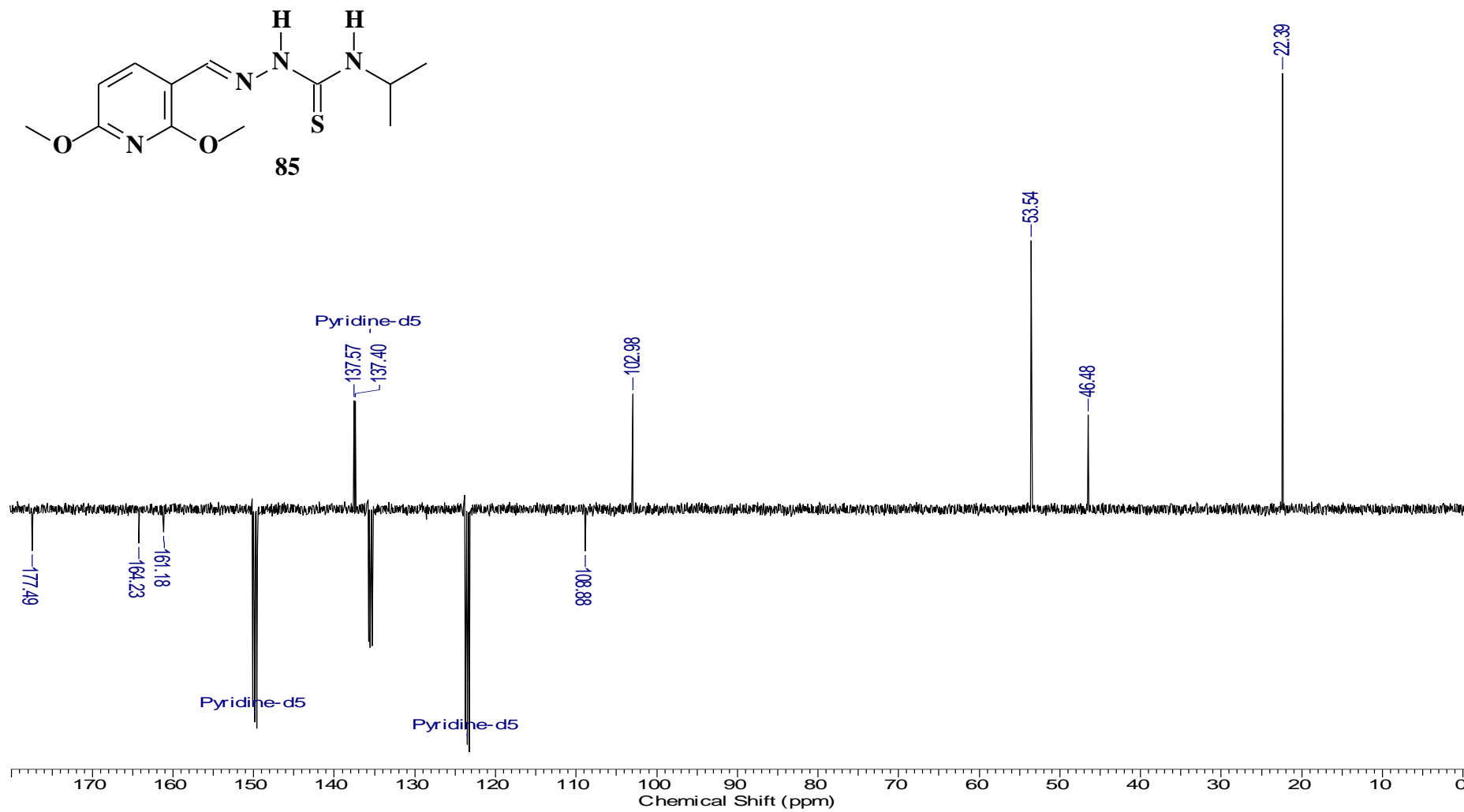
3.70 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-isopropil-tiossemicarbazona (85) obtido em pastilha de KBr



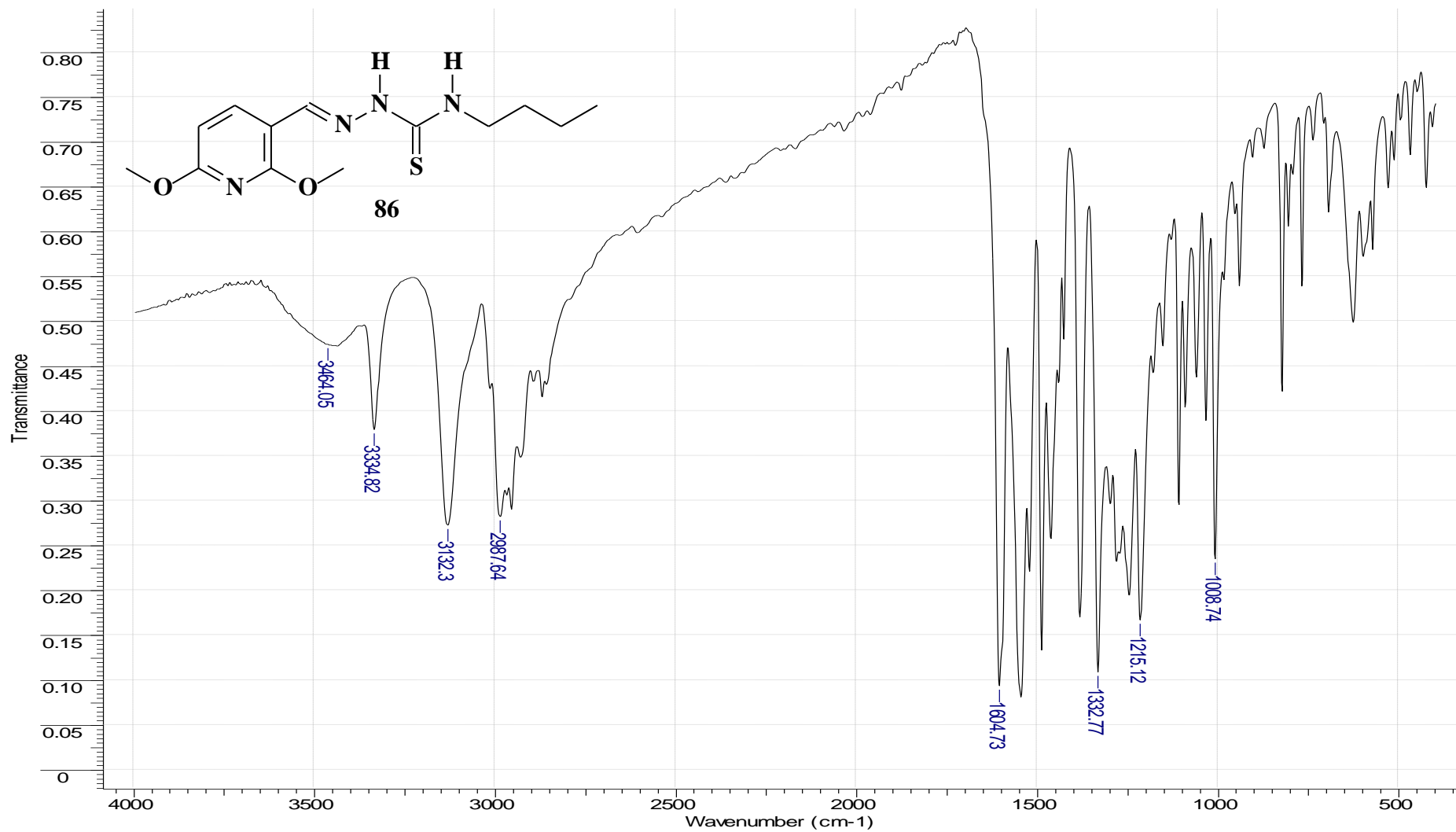
3.71 Espectro de RMN H^1 do 2,6-Dimetoxipiridina-3-carboxaldeído-4-isopropil-tiossemicarbazona (85) obtido em acetona- d_6



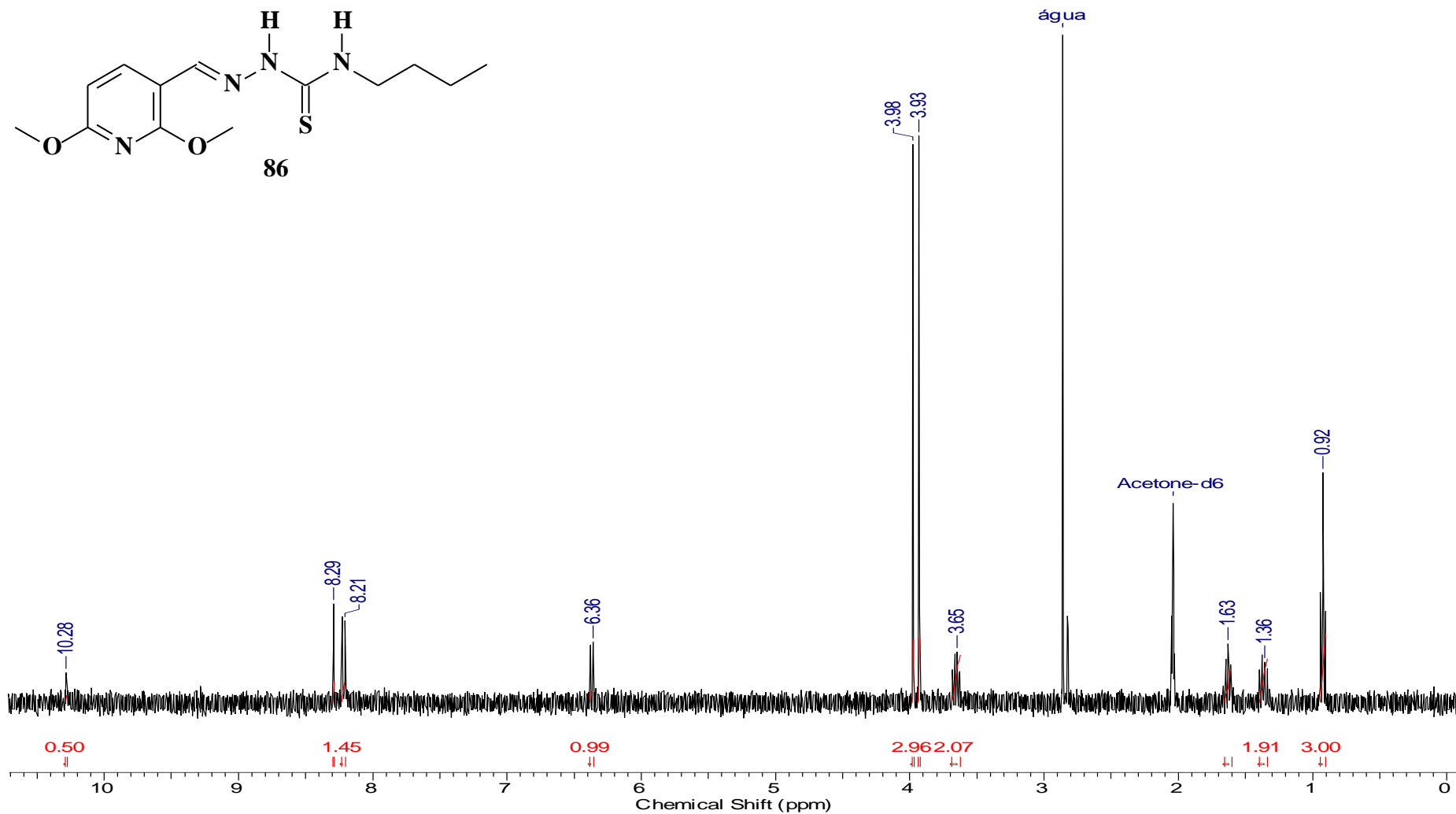
3.72 Espectro de RMN C^{13} (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-isopropil-tiossemicarbazona (85) obtido em acetona- d_6



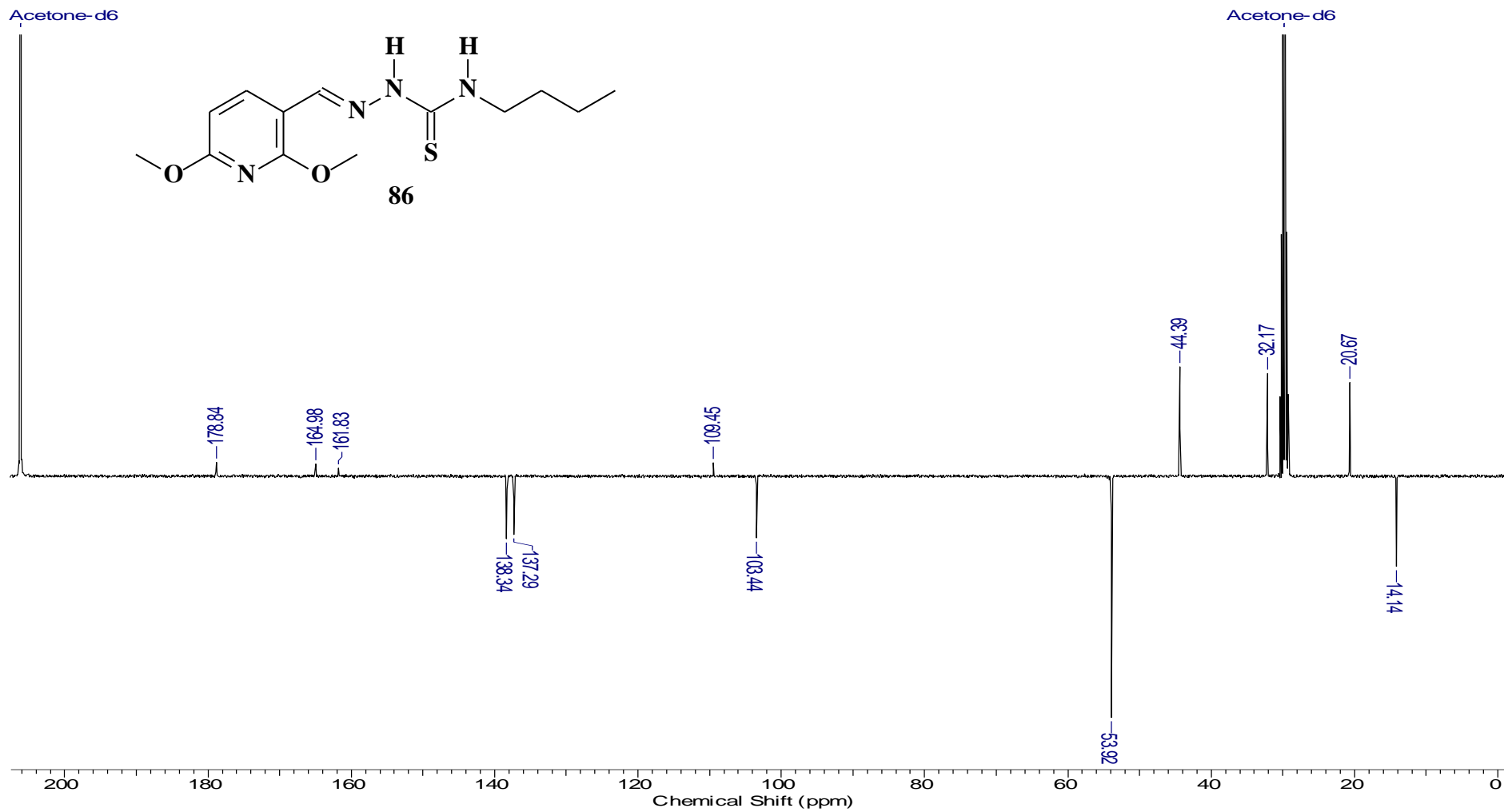
3.73 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-butil-tiossemicarbazona (86) obtido em pastilha de KBr



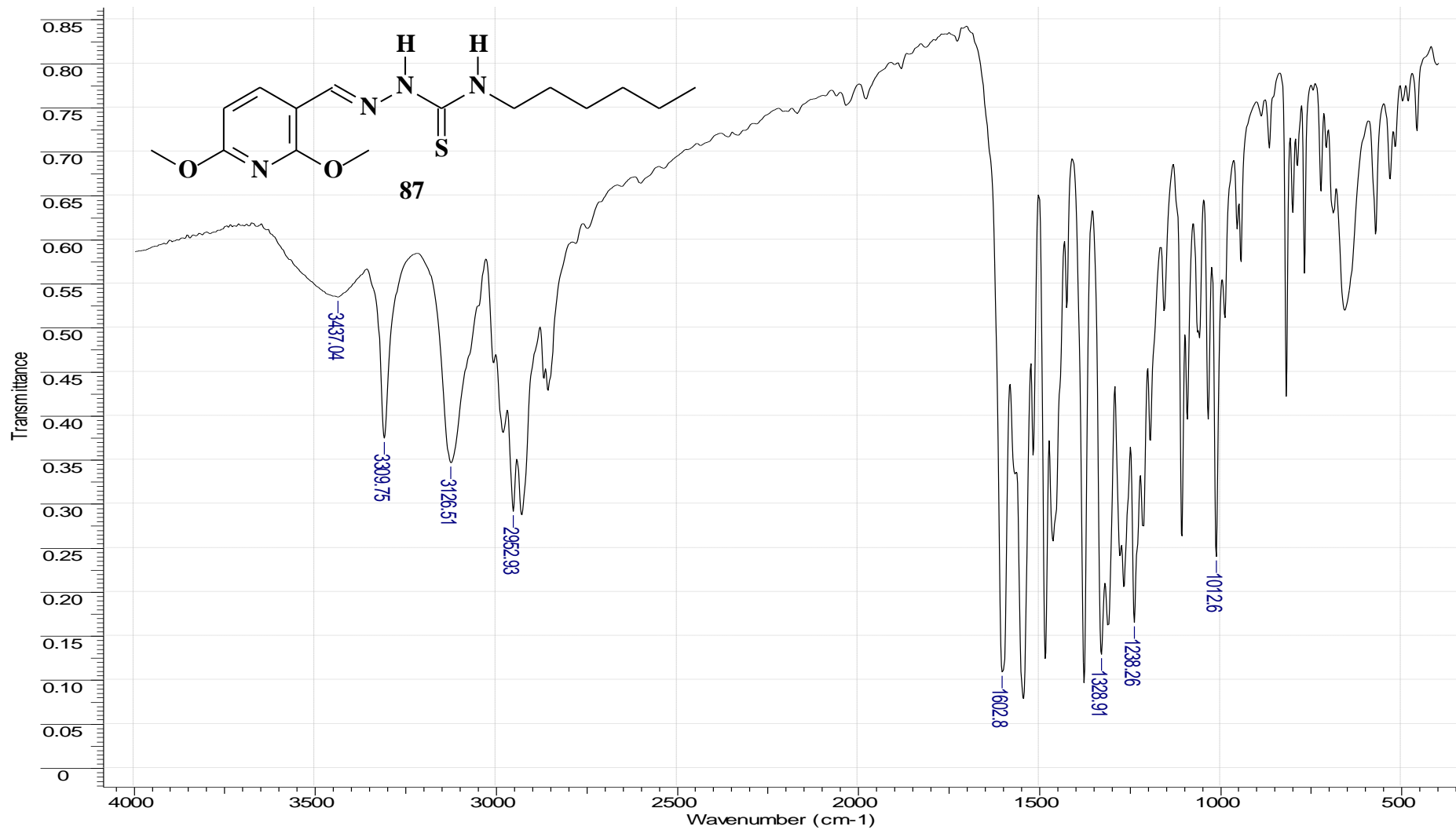
3.74 Espectro de RMN H¹ do 2,6-Dimetoxipiridina-3-carboxaldeído-4-butil-tiossemicarbazona (86) obtido em acetona-d₆



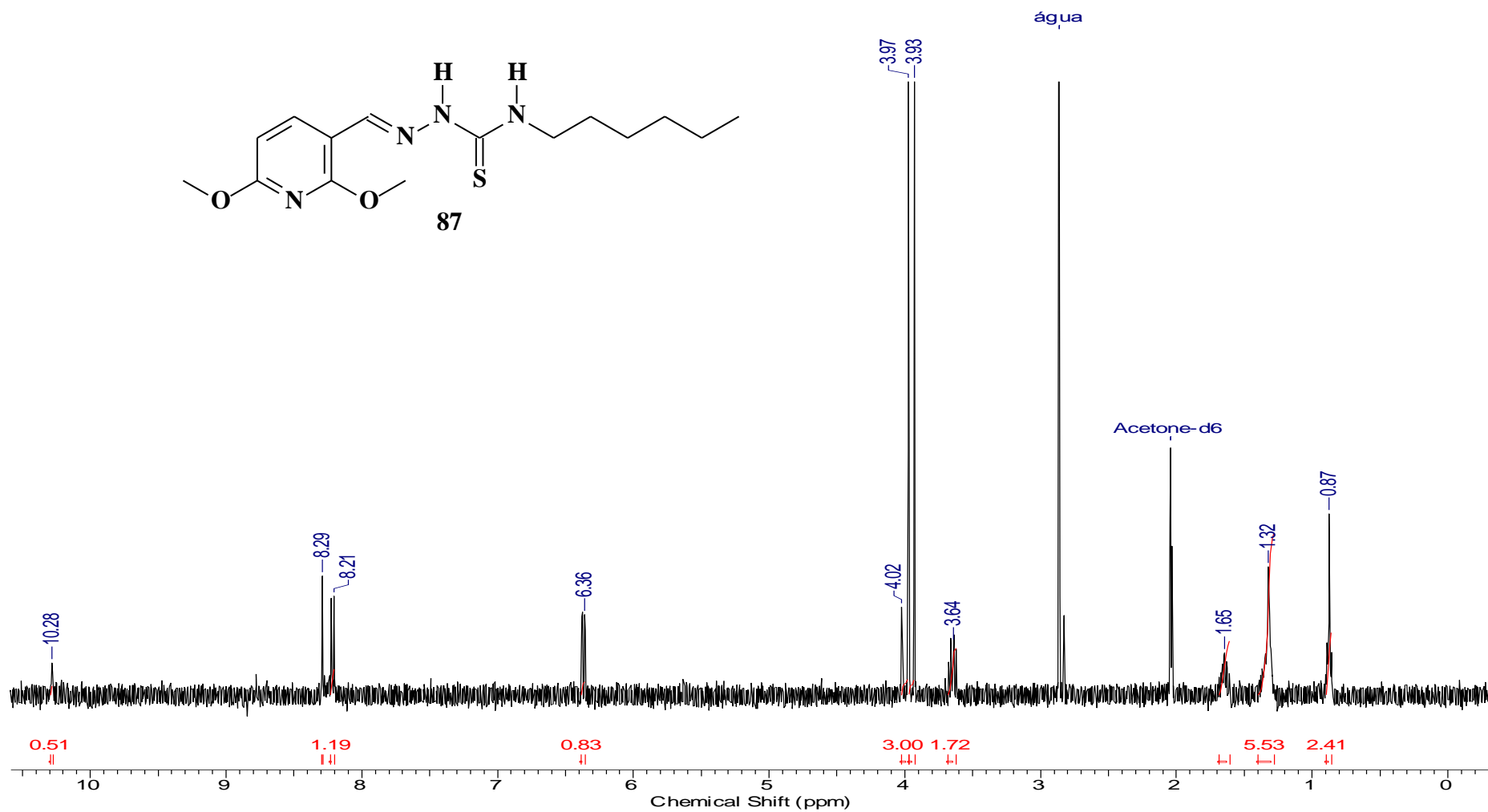
3.75 Espectro de RMN C^{13} (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-butil-tiossemicarbazona (86) obtido em acetona- d_6



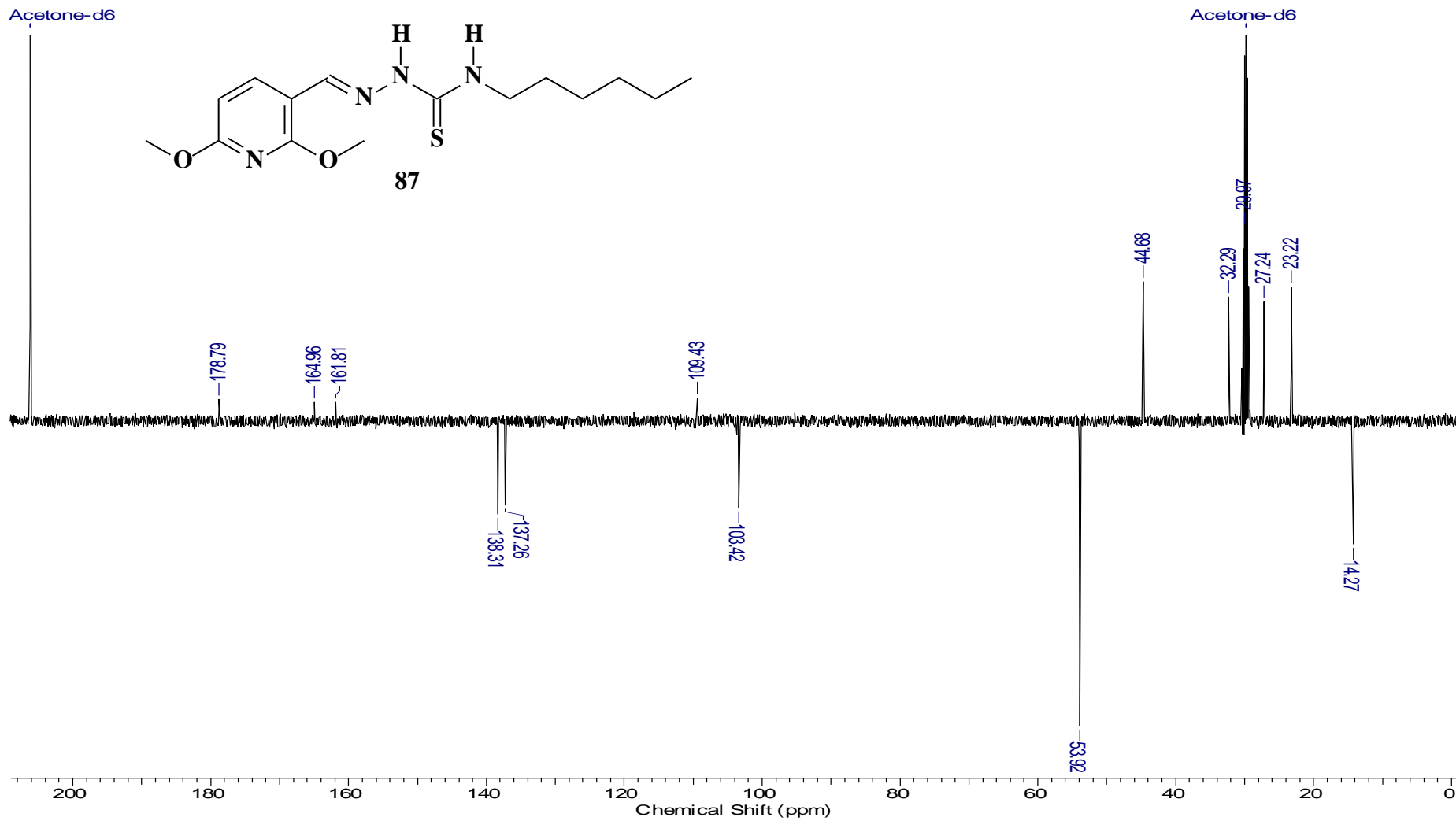
3.76 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-hexil-tiossemicarbazona (87) obtido em pastilha de KBr



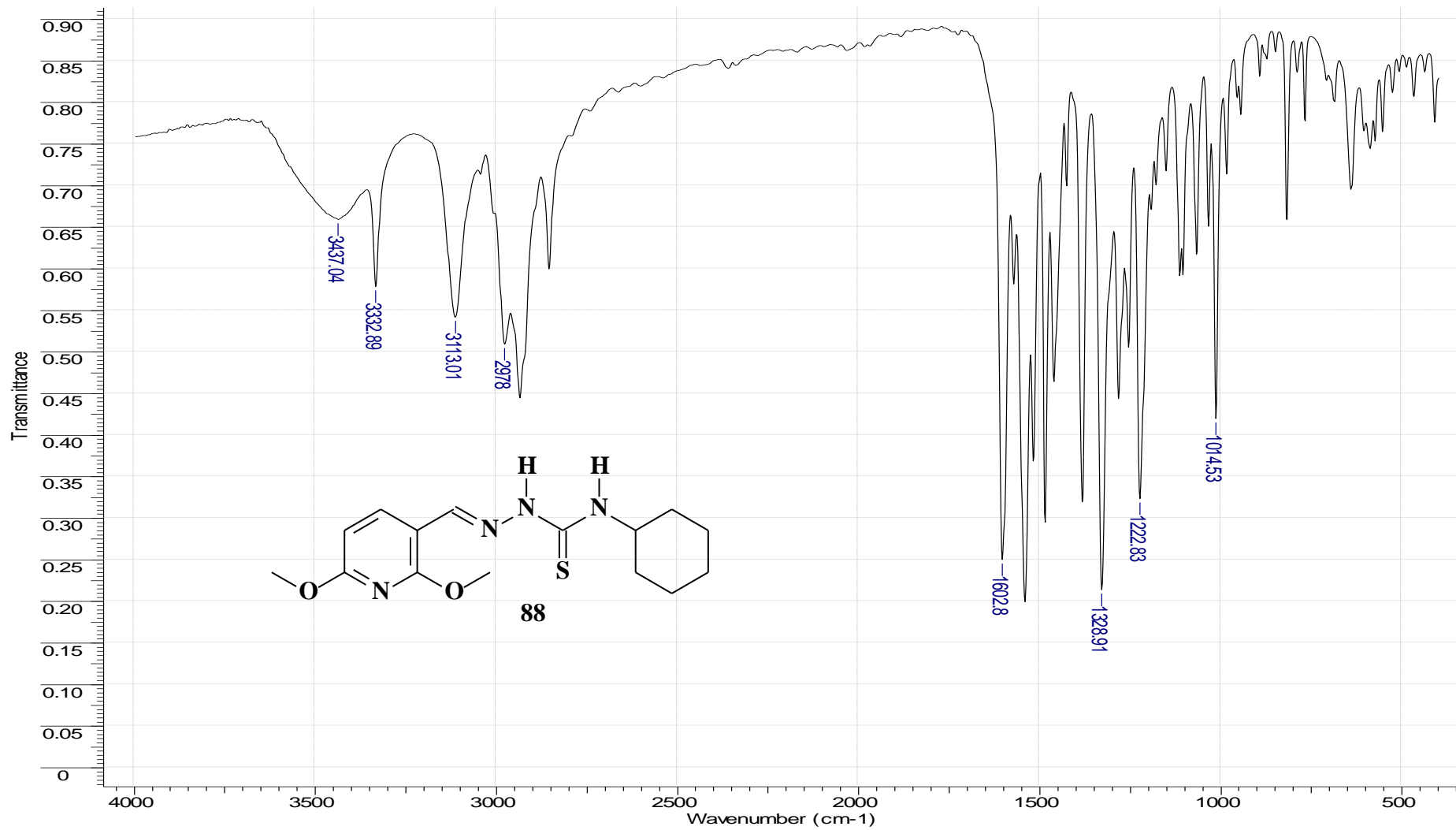
3.77 Espectro de RMN H¹ do 2,6-Dimetoxipiridina-3-carboxaldeído-4-hexil-tiossemicarbazona (87) obtido em acetona-d₆



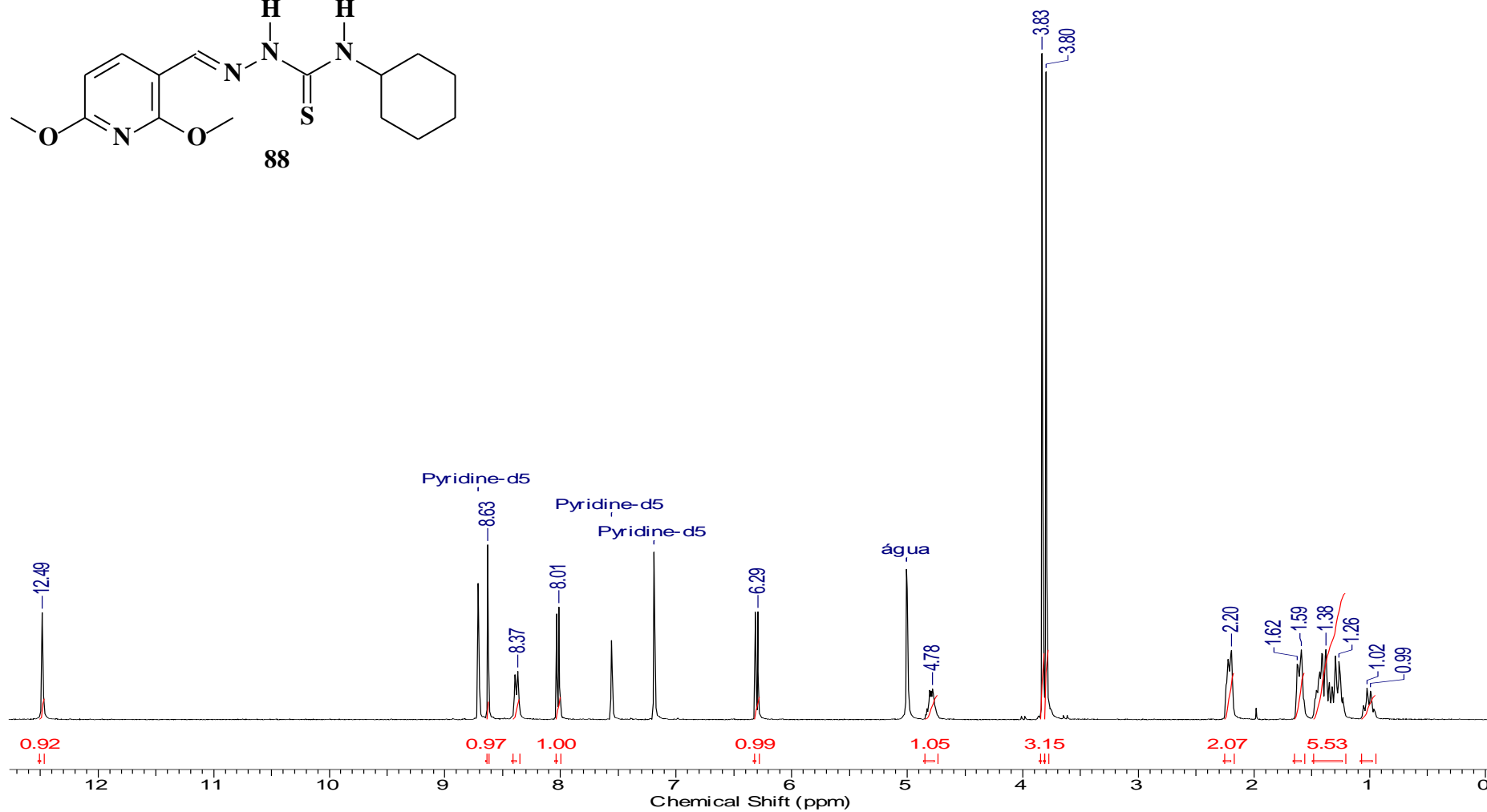
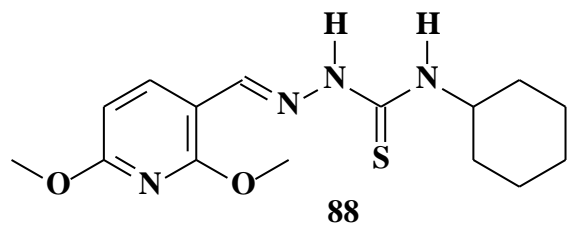
3.78 Espectro de RMN C¹³ (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-hexil-tiossemicarbazona (87) obtido em acetona-d₆



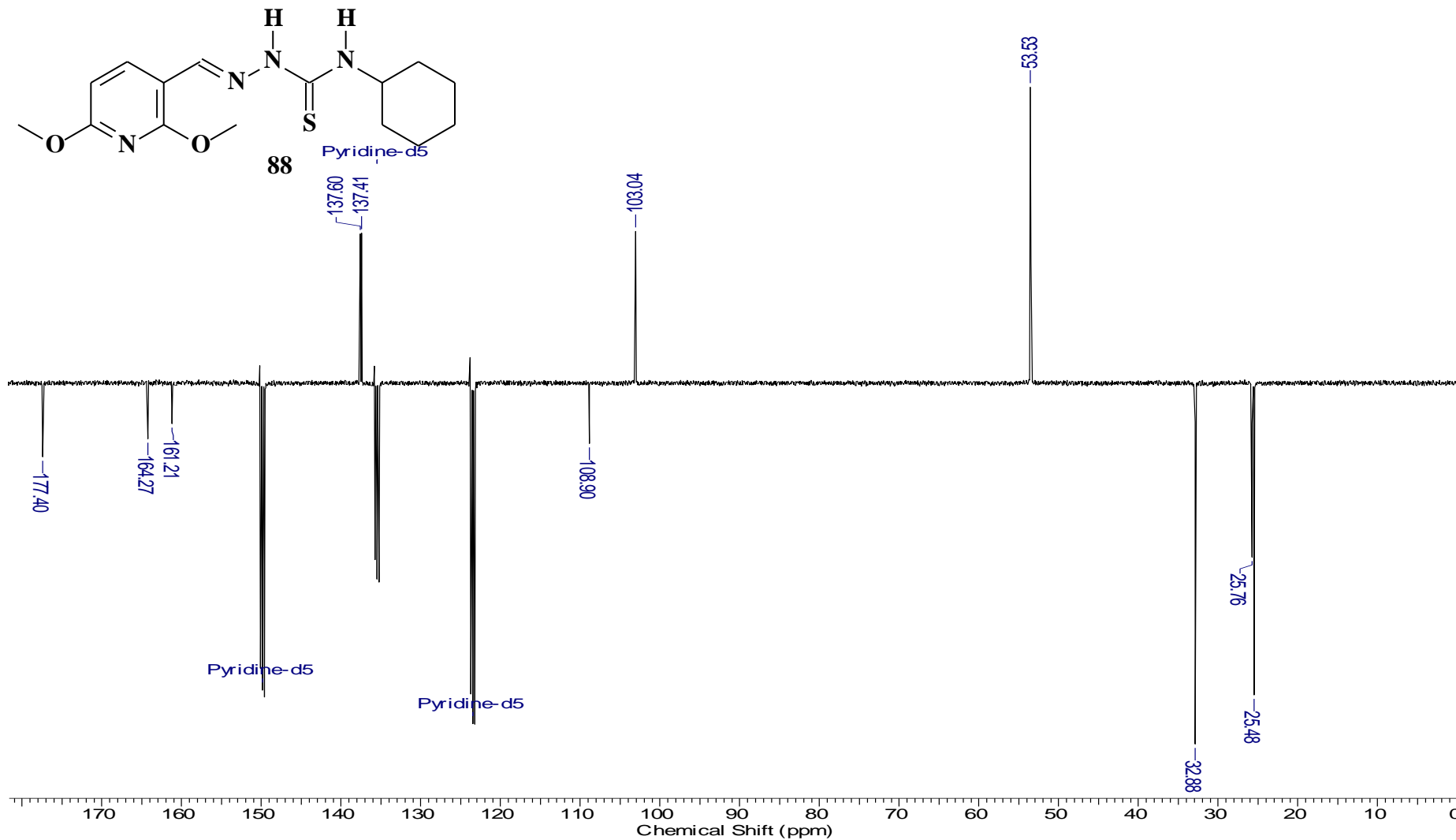
3.79 Espectro de IV do 2,6-Dimetoxipiridina-3-carboxaldeído-4-cicloexil-tiossemicarbazona (88) obtido em pastilha de KBr



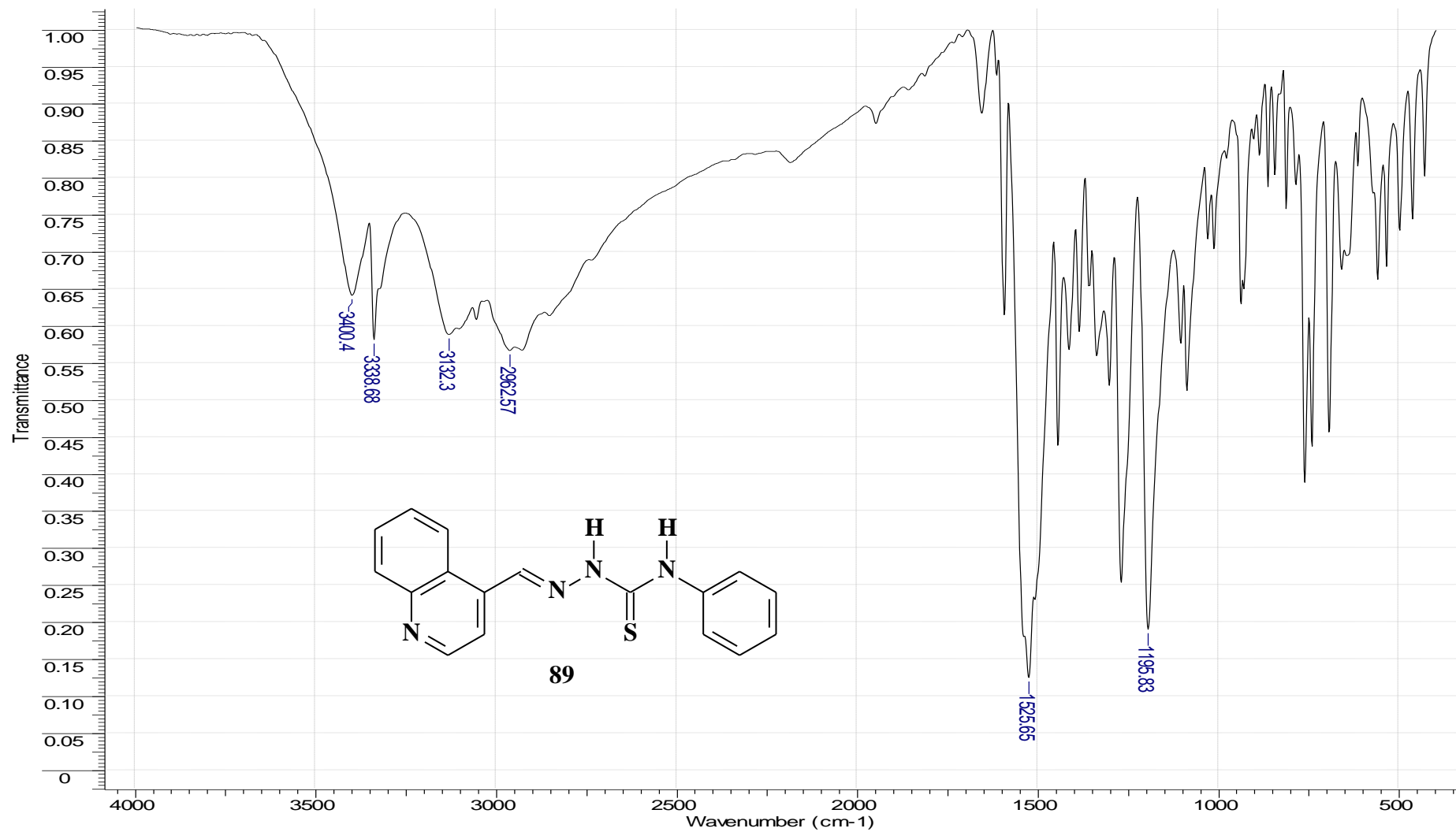
3.80 Espectro de RMN H^1 do 2,6-Dimetoxipiridina-3-carboxaldeído-4-cicloexil-tiossemicarbazona (88) obtido em piridina- d_5



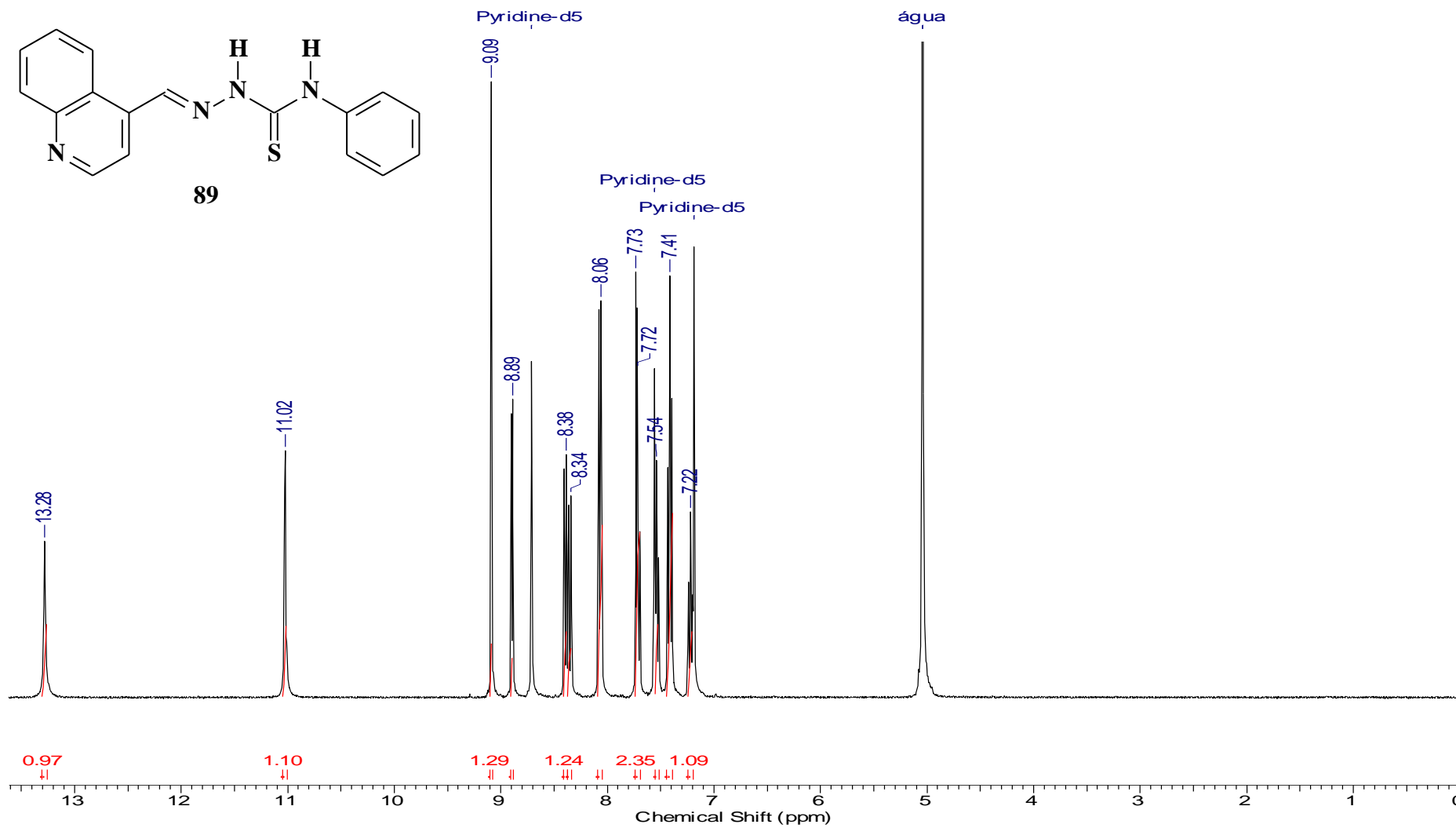
3.81 Espectro de RMN C¹³ (DEPTQ) do 2,6-Dimetoxipiridina-3-carboxaldeído-4-cicloexil-tiossemicarbazona (88) obtido em piridina-d₅



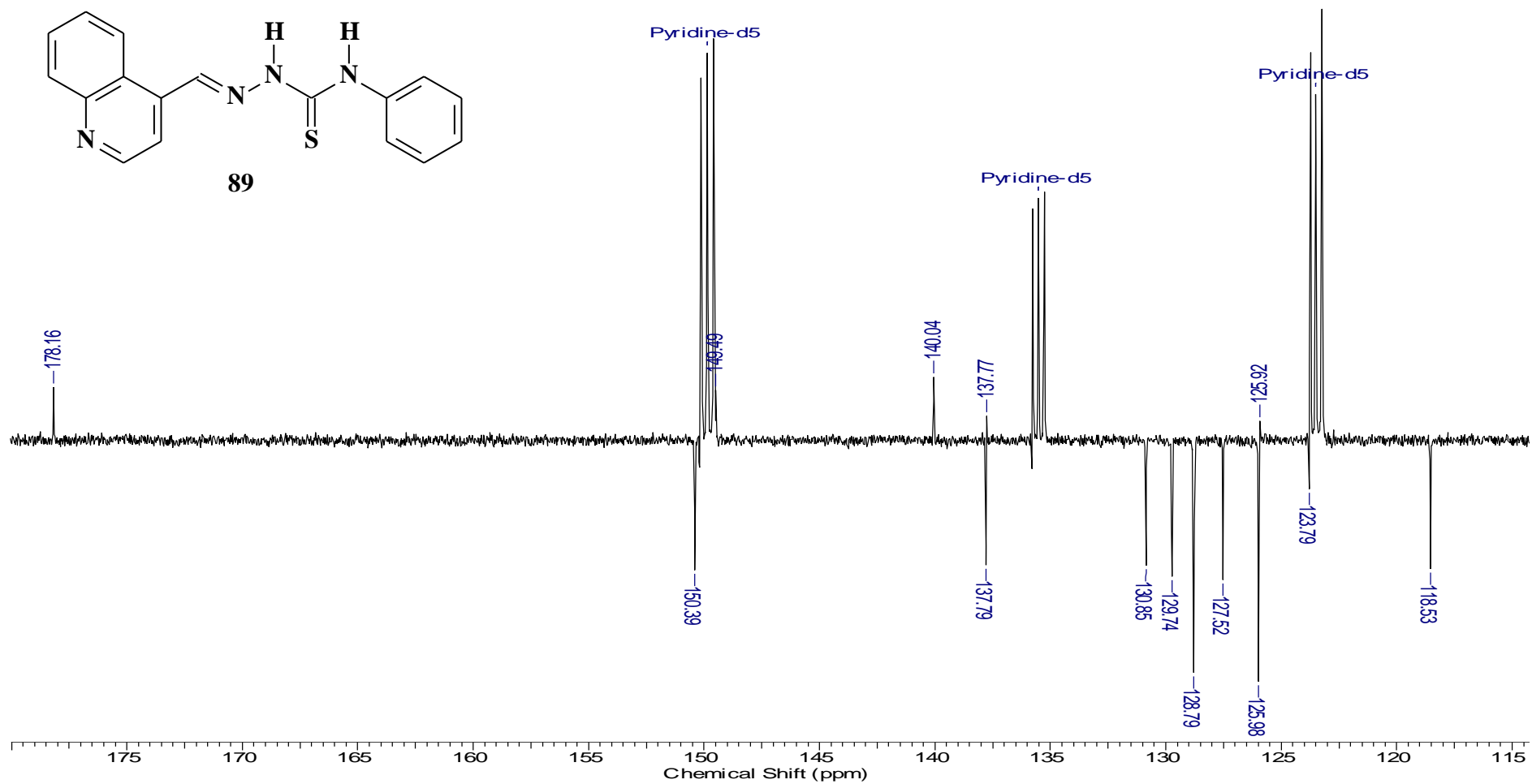
3.82 Espectro de IV do Quinolina-4-carboxaldeído-4-fenil-tiossemicarbazona (89) obtido em pastilha de KBr



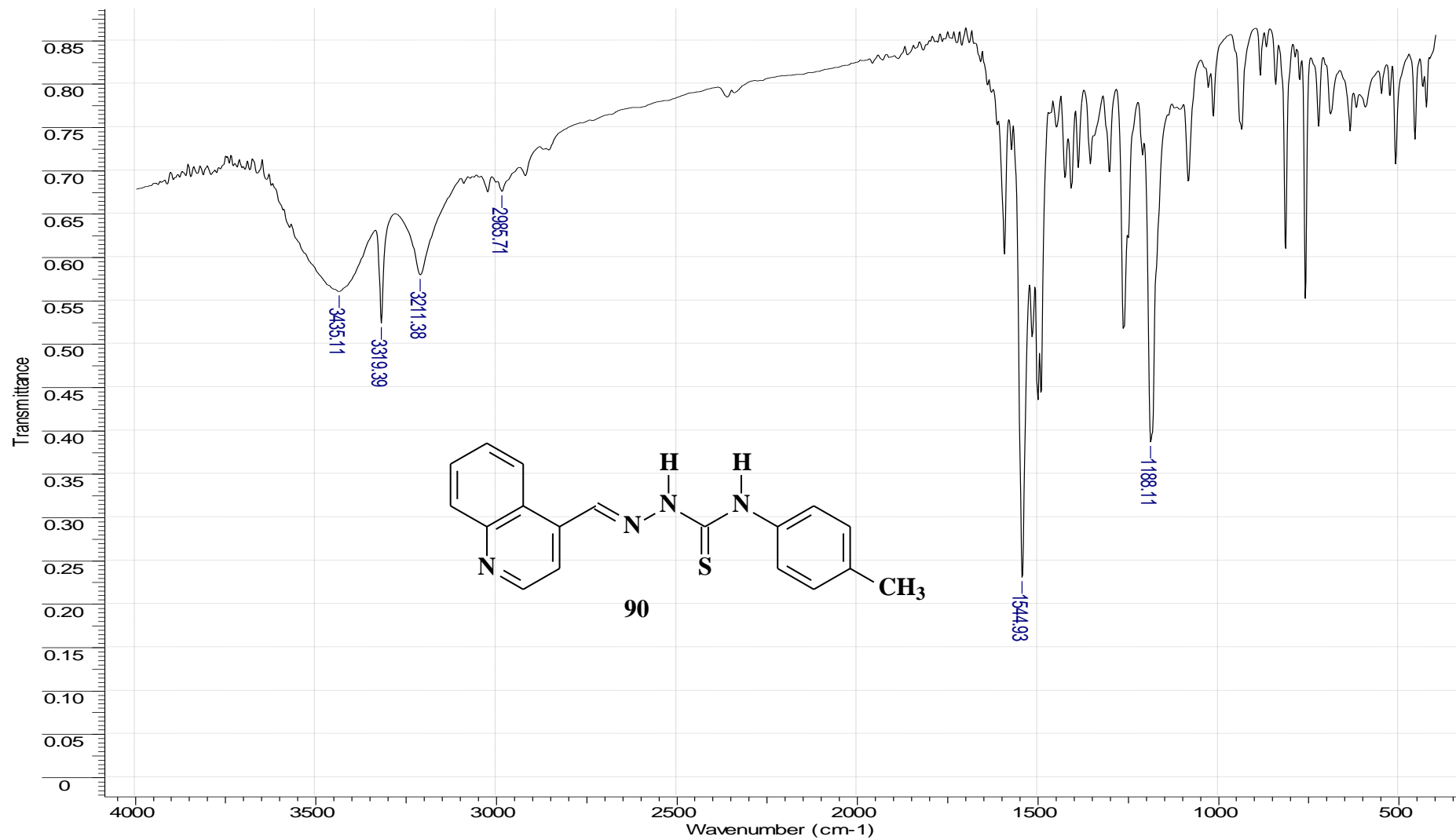
3.83 Espectro de RMN H^1 do Quinolina-4-carboxaldeído-4-fenil-tiossemicarbazona (89) obtido em piridina- d_5



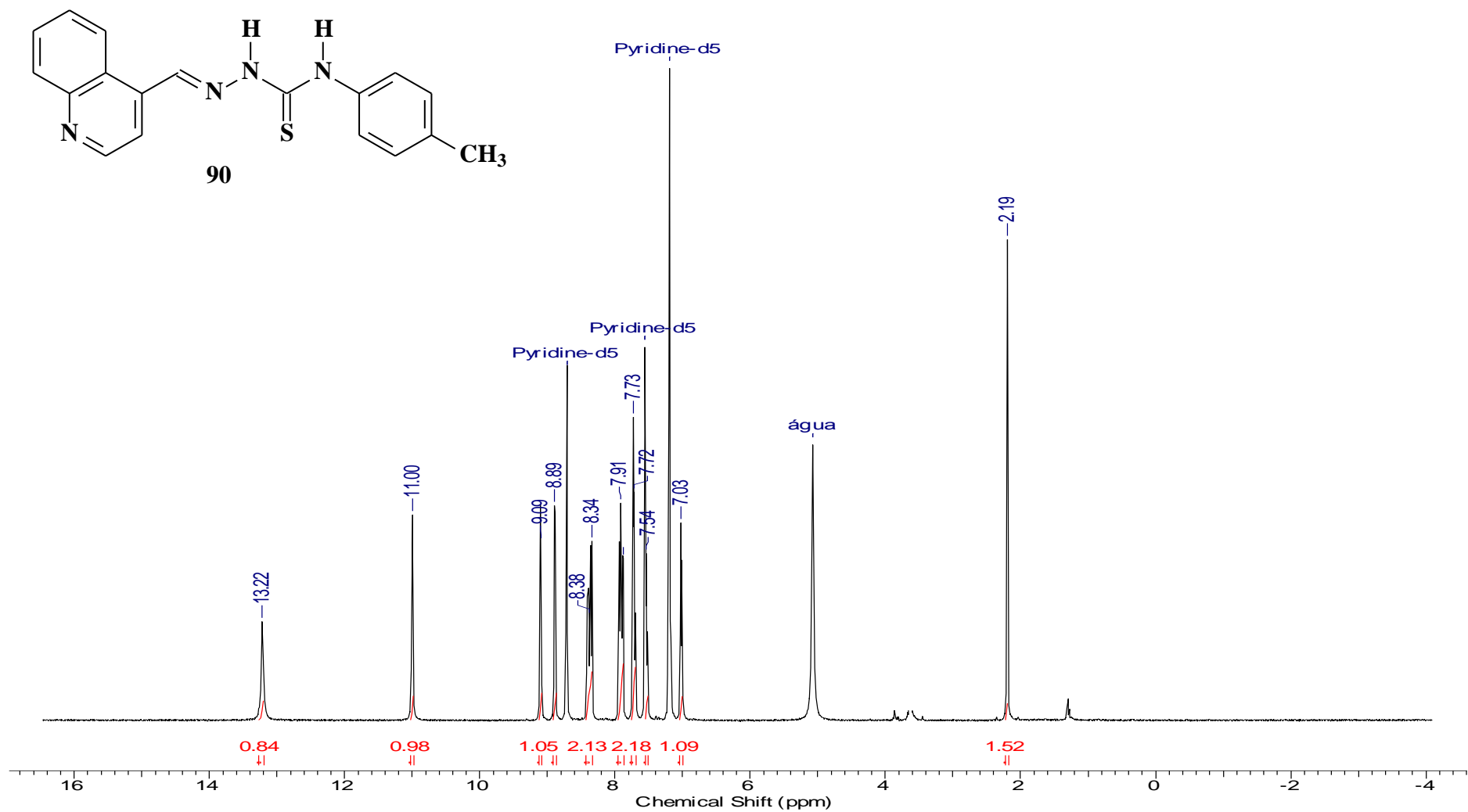
3.84 Espectro de RMN C^{13} (DEPTQ) do Quinolina-4-carboxaldeído-4-fenil-tiossemicarbazona (89) obtido em piridina- d_5



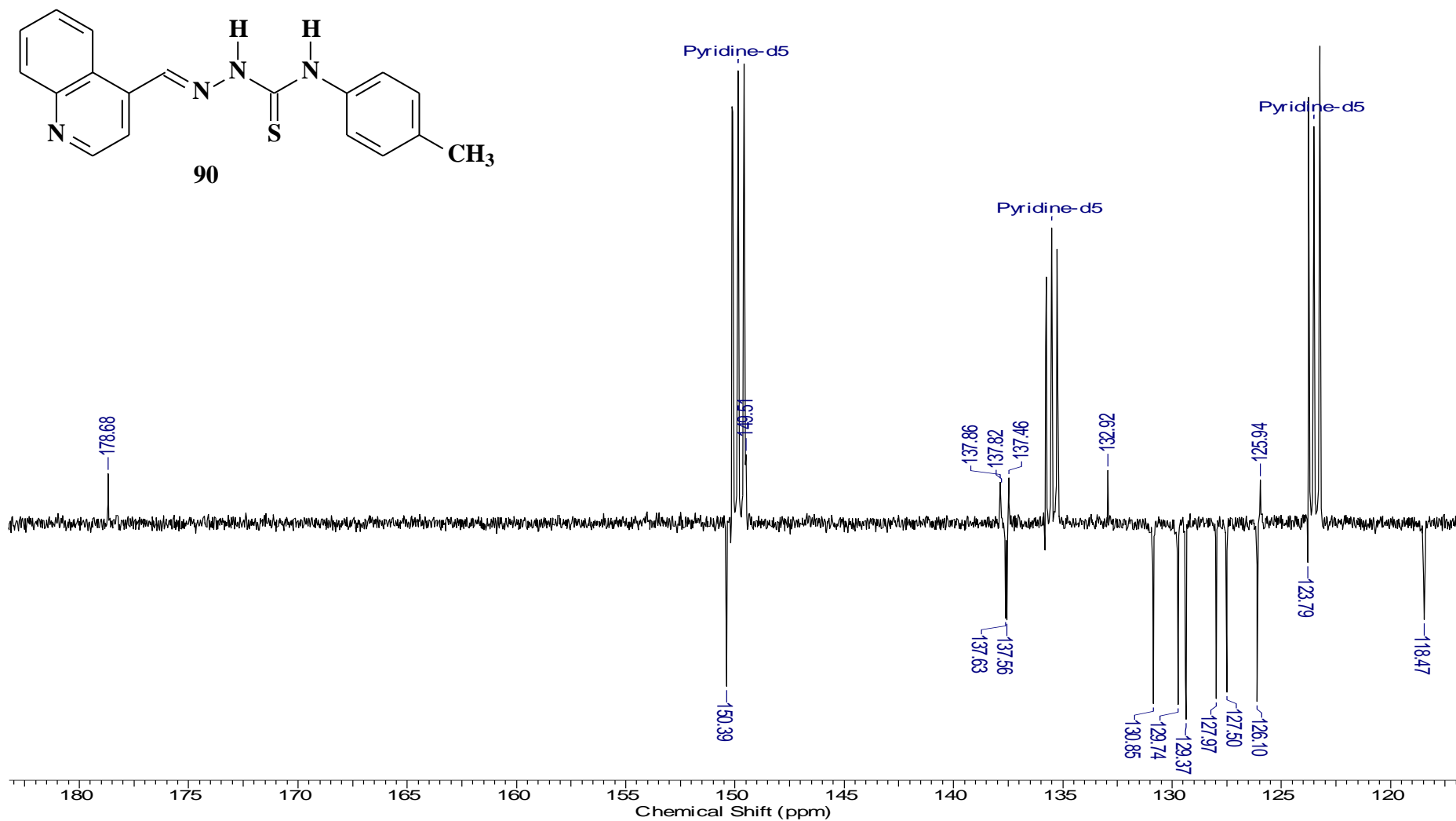
3.85 Espectro de IV do Quinolina-4-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (90) obtido em pastilha de KBr



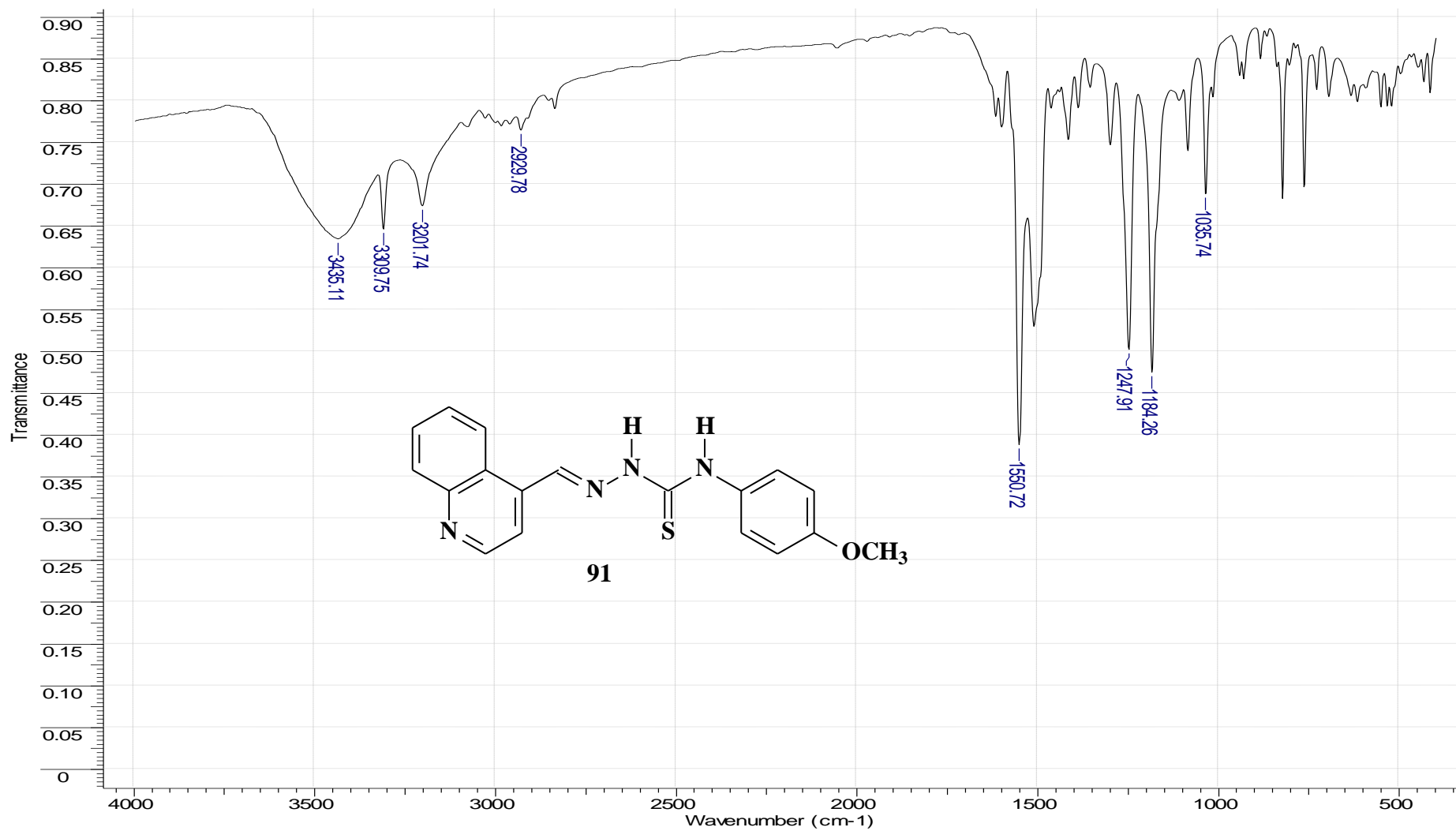
3.86 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (90) obtido em piridina-*d*₅



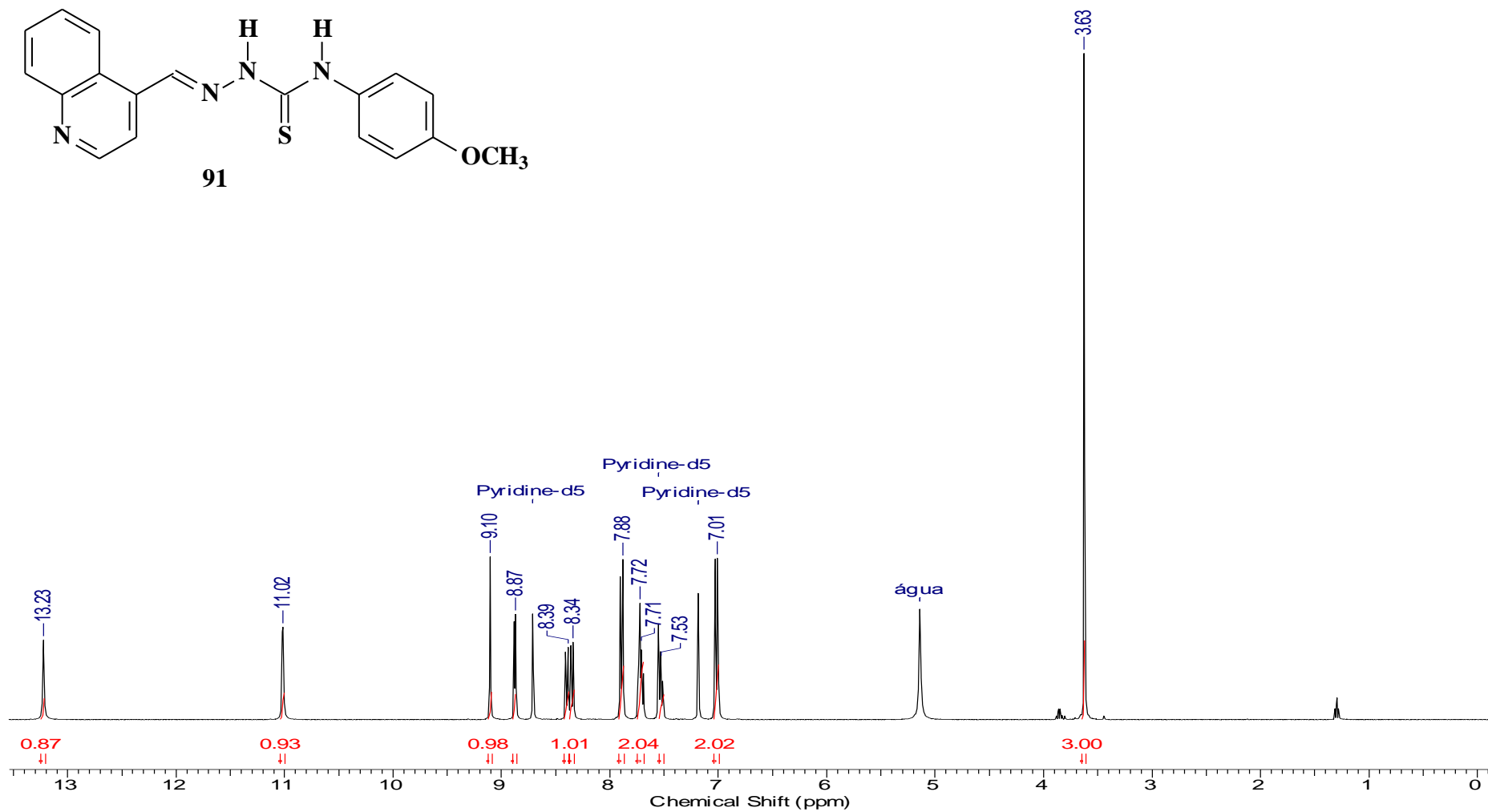
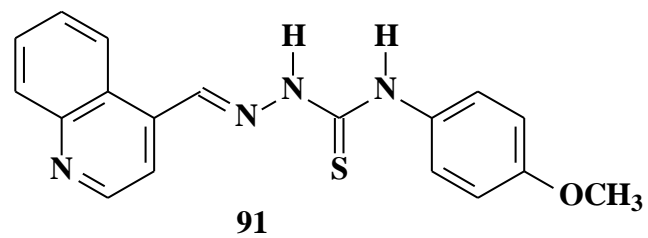
3.87 Espectro de RMN C¹³ (DEPTQ) do Quinolina-4-carboxaldeído-4-(*p*-metil-fenil)-tiossemicarbazona (90) obtido em piridina-*d*₅



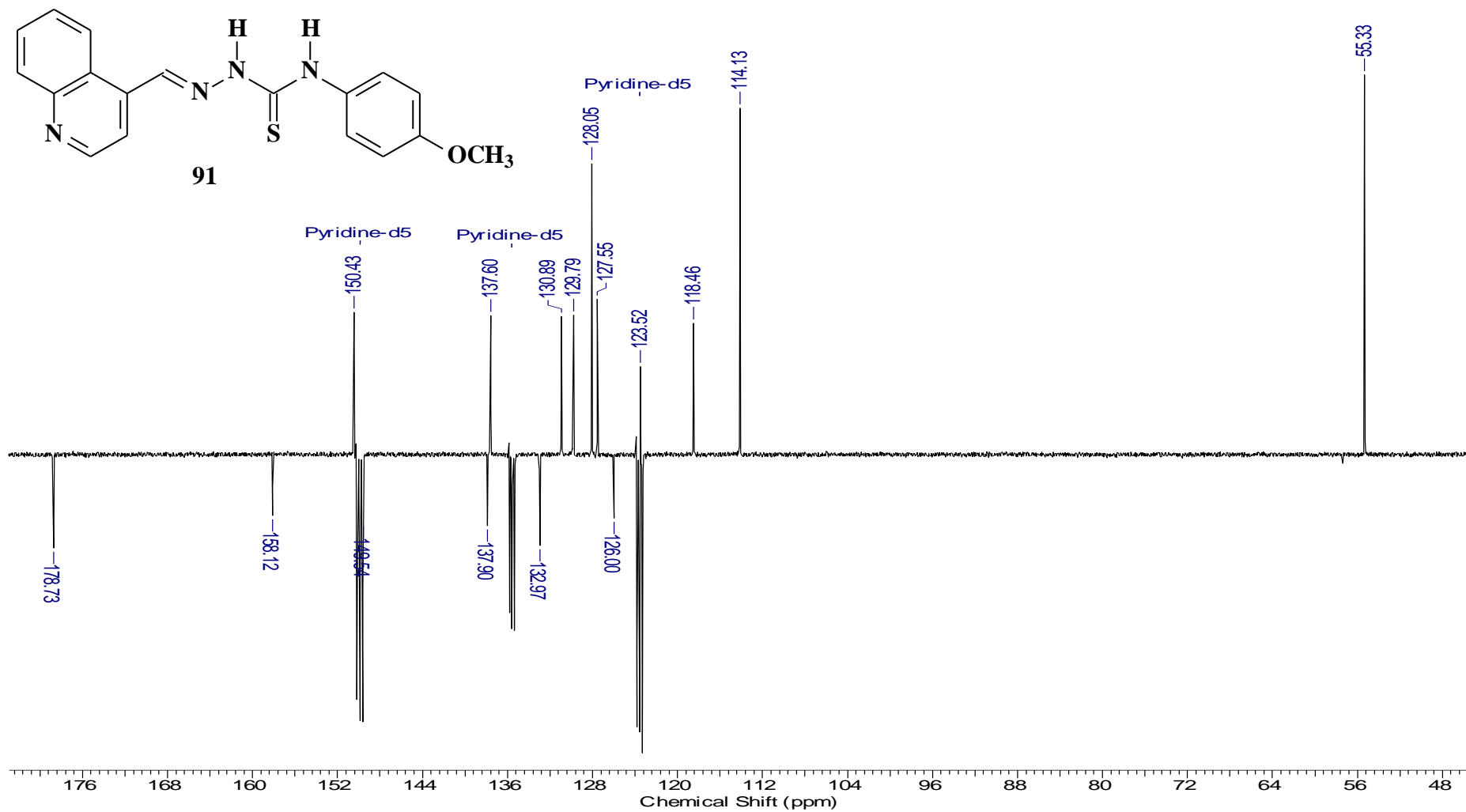
3.88 Espectro de IV do Quinolina-4-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (91) obtido em pastilha de KBr



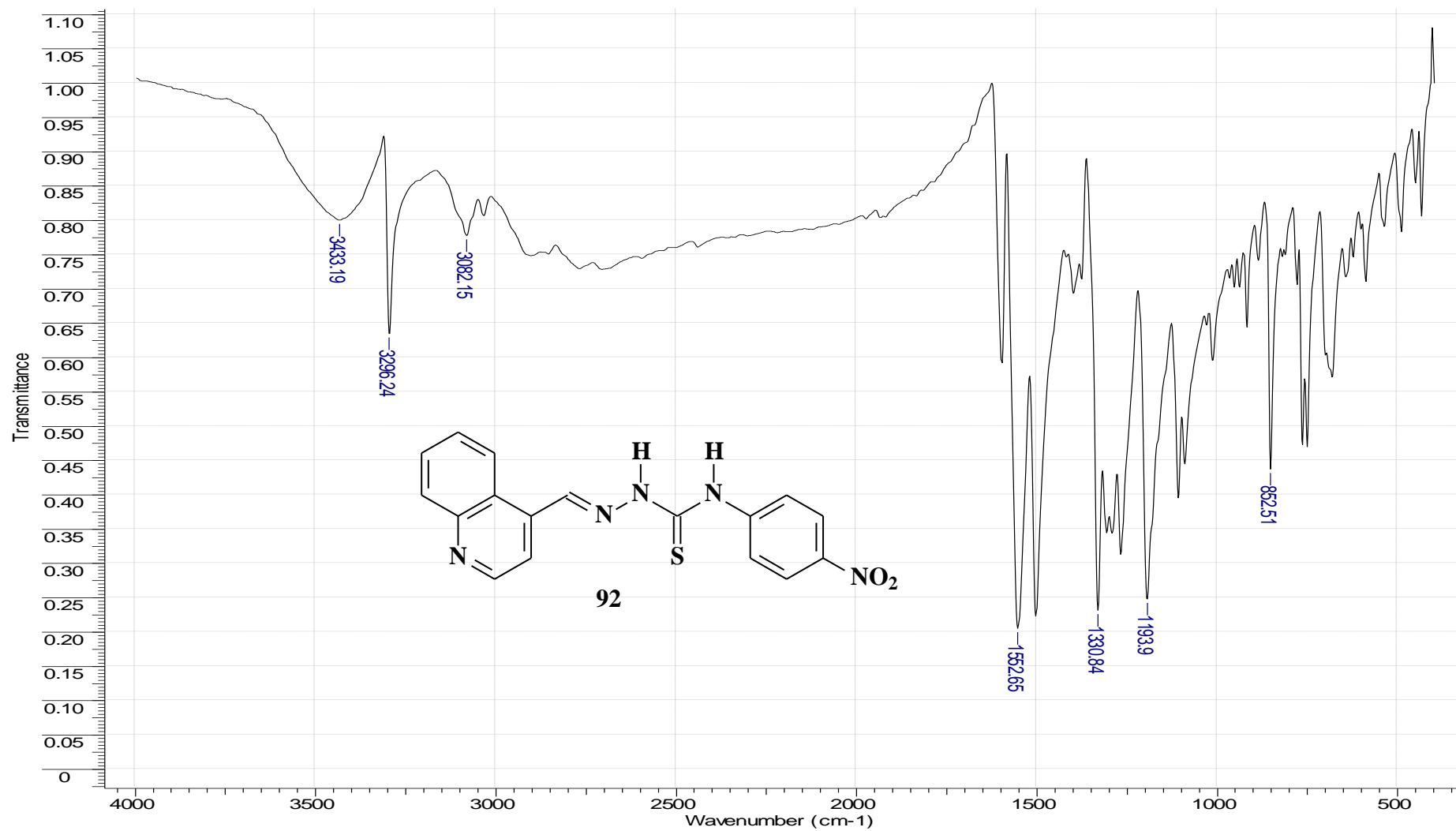
3.89 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (91) obtido em piridina-*d*₅



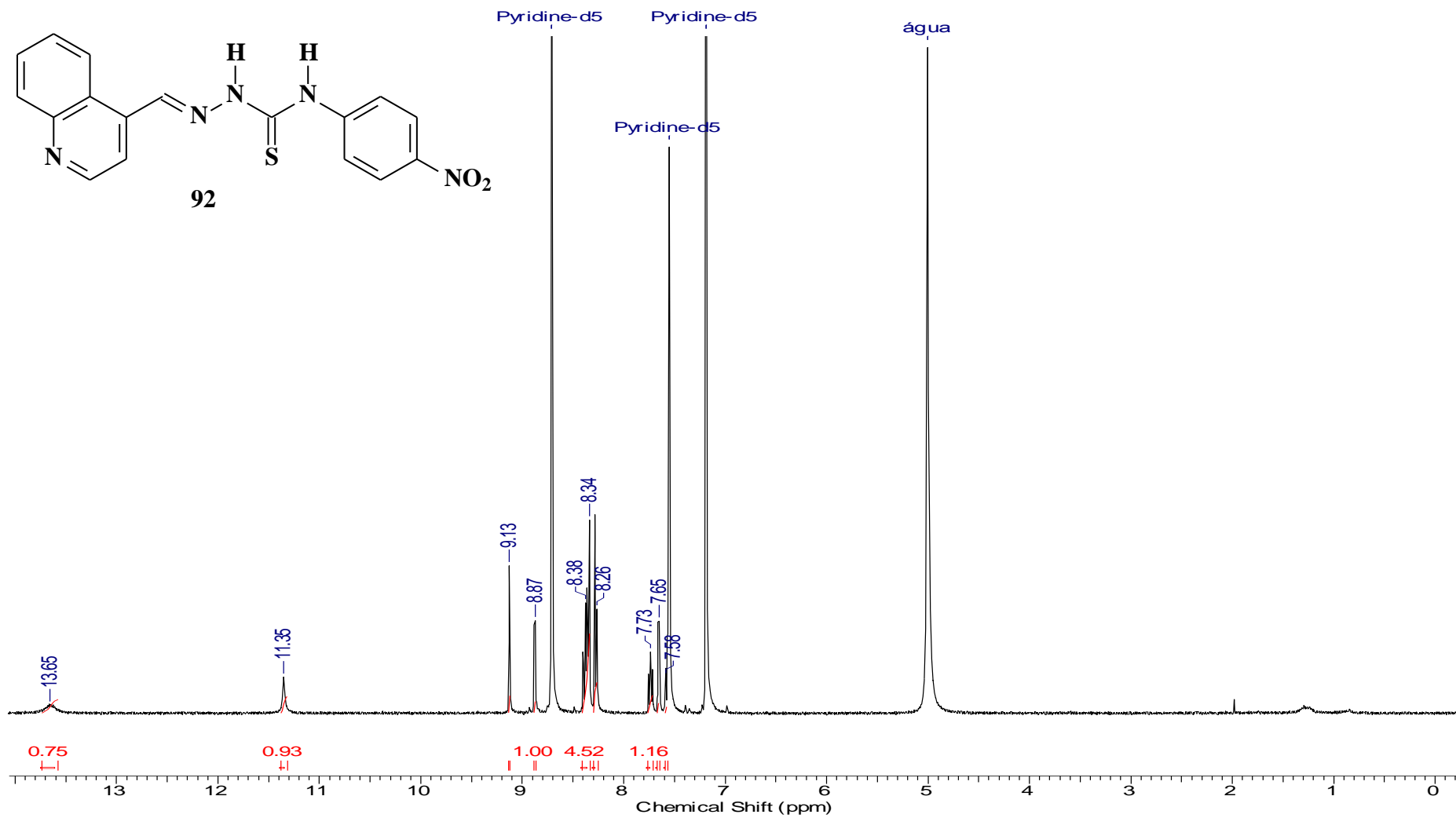
3.90 Espectro de RMN C¹³ (DEPTQ) do Quinolina-4-carboxaldeído-4-(*p*-metoxi-fenil)-tiossemicarbazona (91) obtido em piridina-*d*₅



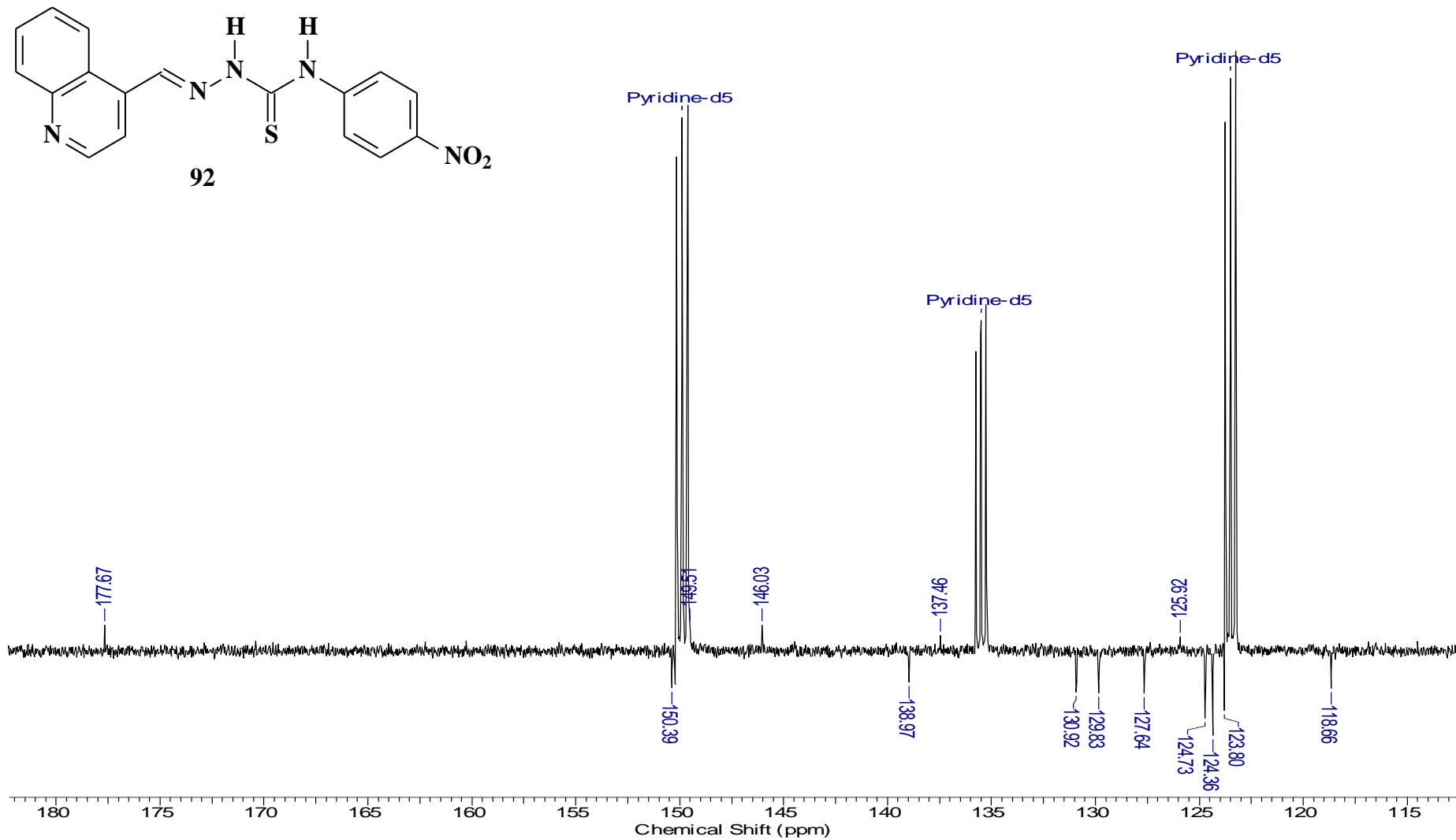
3.91 Espectro de IV do Quinolina-4-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (92) obtido em pastilha de KBr



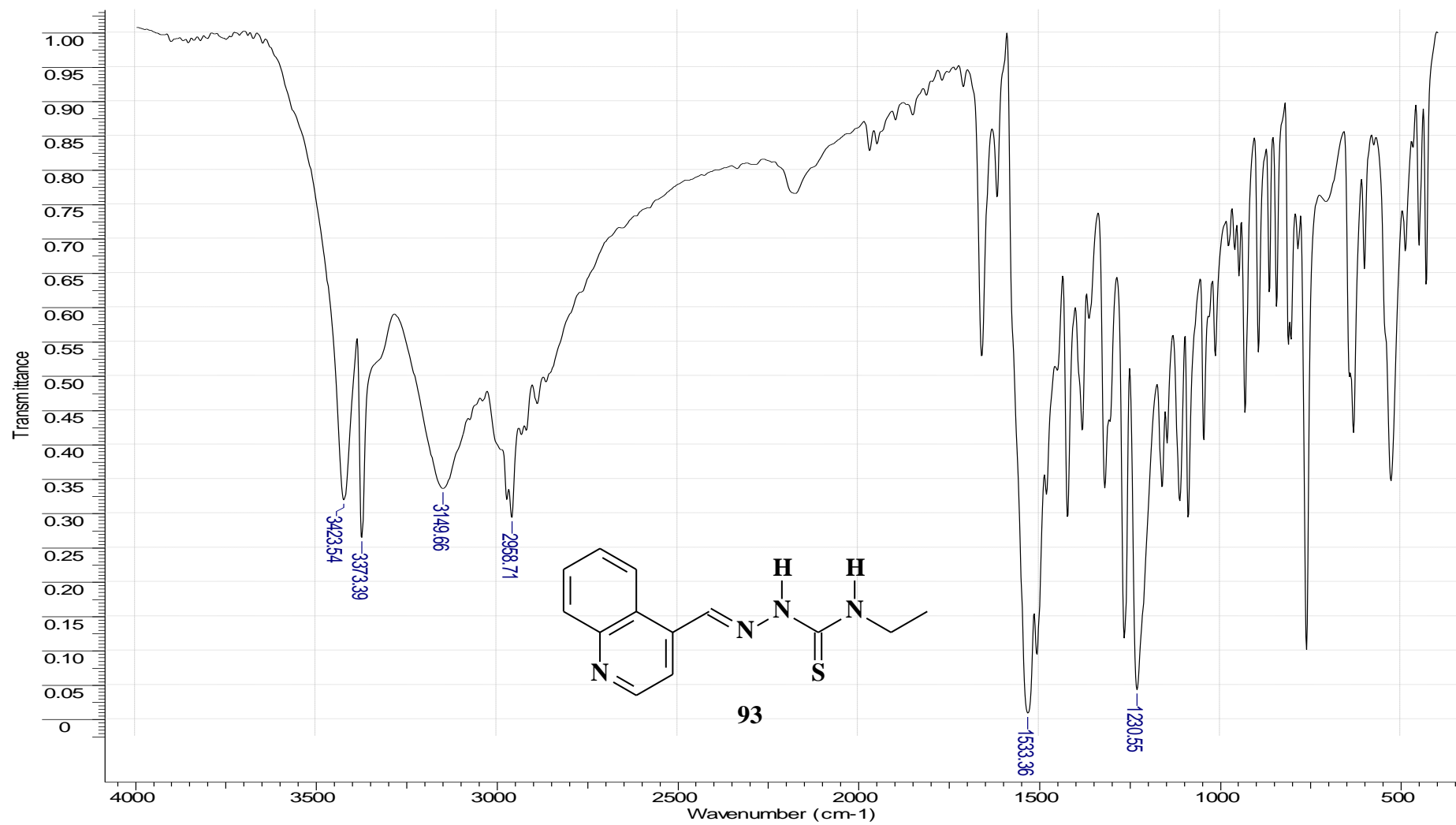
3.92 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (92) obtido em piridina-*d*₅



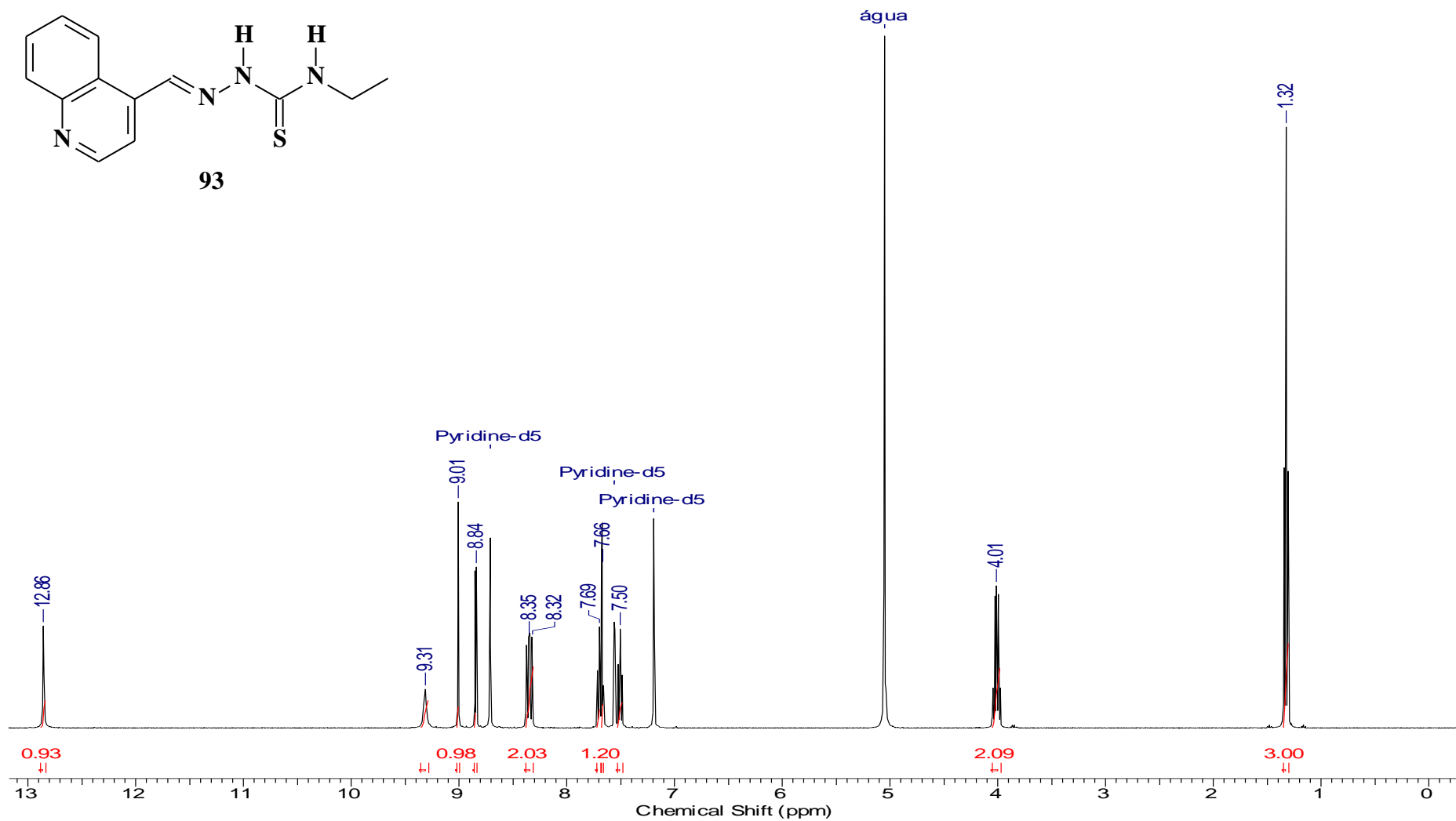
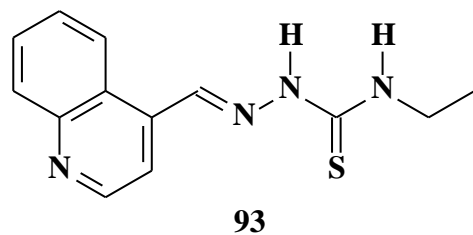
3.93 Espectro de RMN C¹³ (DEPTQ) do Quinolina-4-carboxaldeído-4-(*p*-nitro-fenil)-tiossemicarbazona (92) obtido em piridina-*d*₅



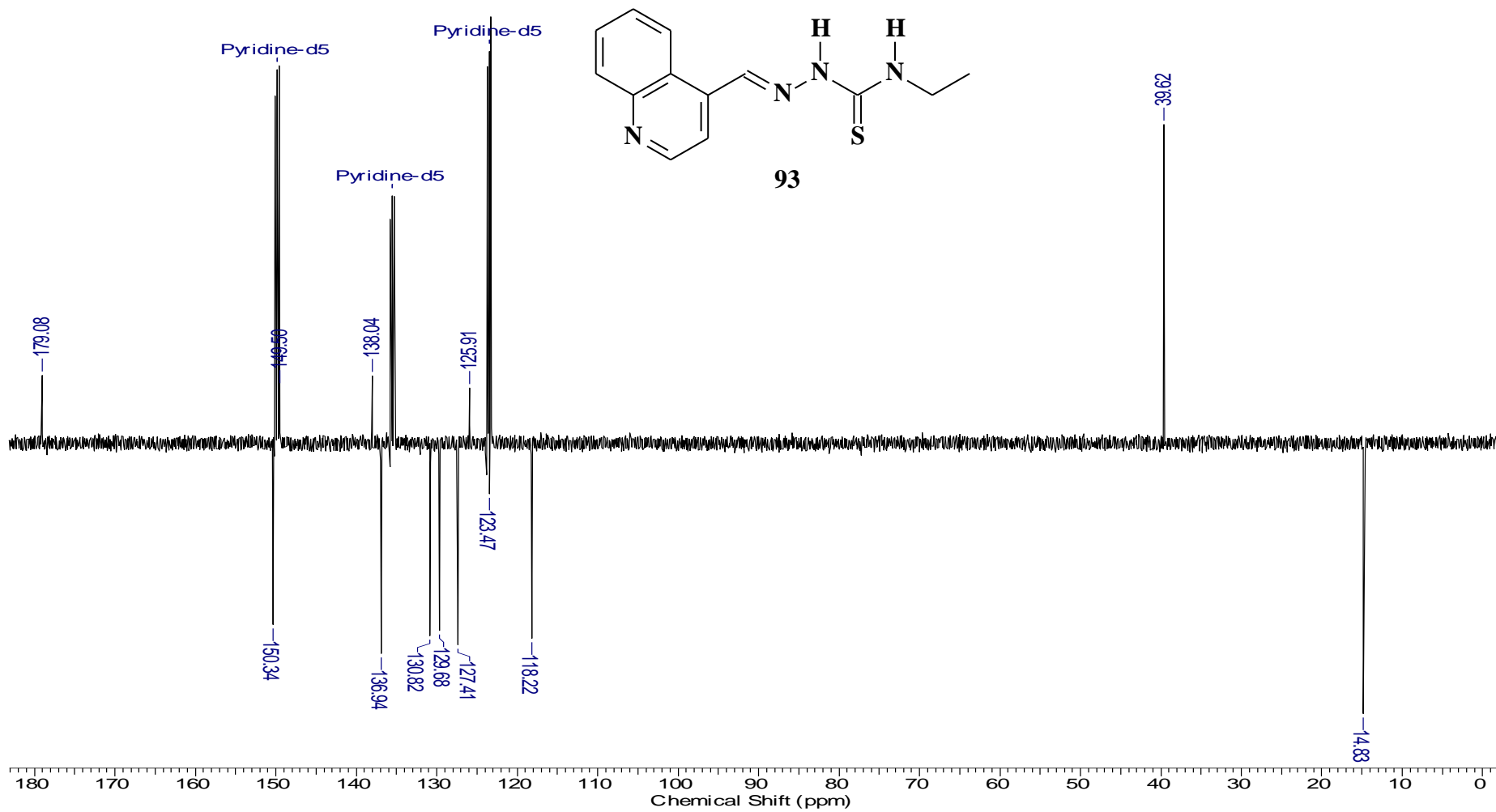
3.94 Espectro de IV do Quinolina-4-carboxaldeído-4-etil-tiossemicarbazona (93) obtido em pastilha de KBr



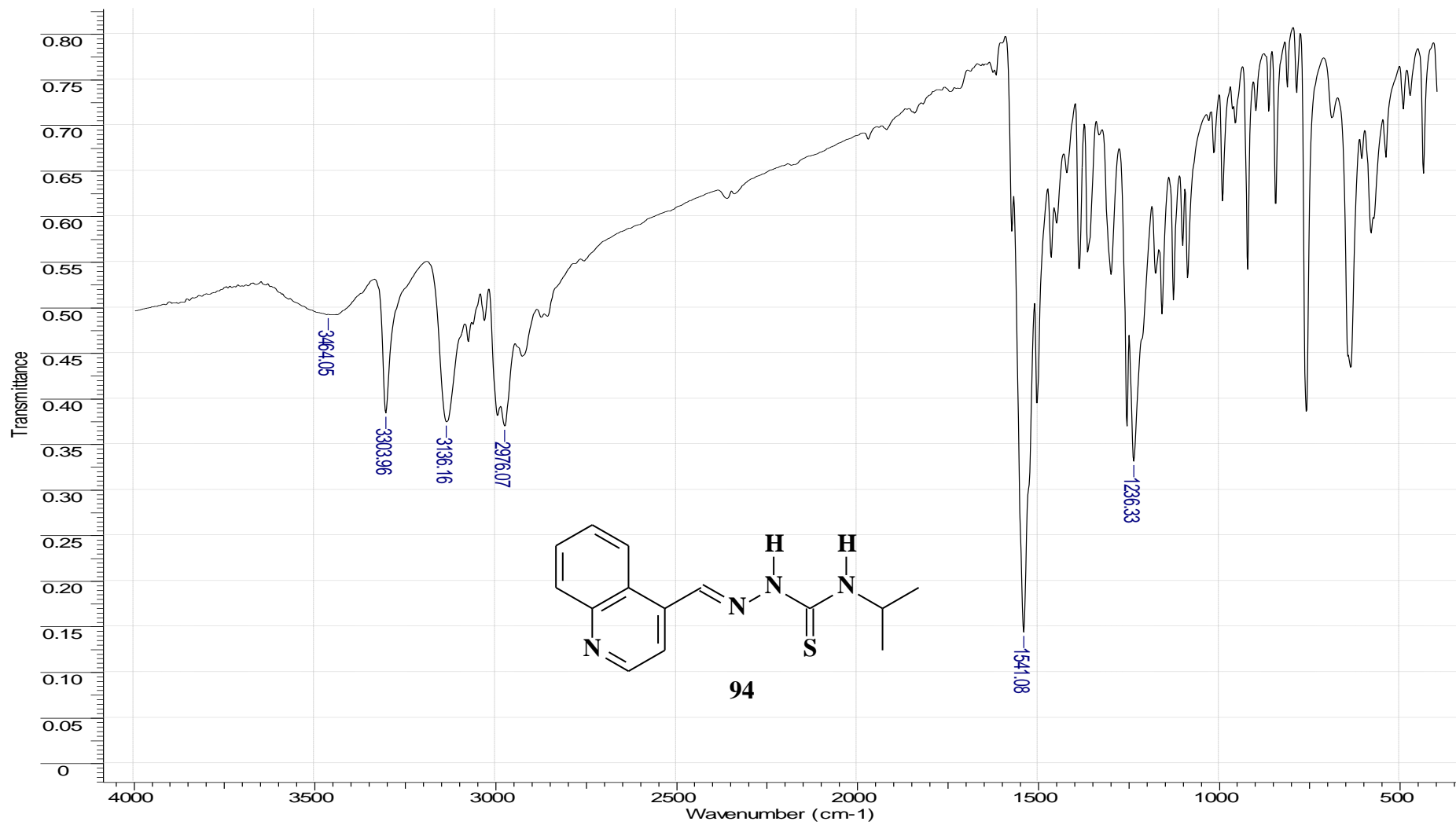
3.95 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-etil-tiossemicarbazona (93) obtido em piridina-d₅



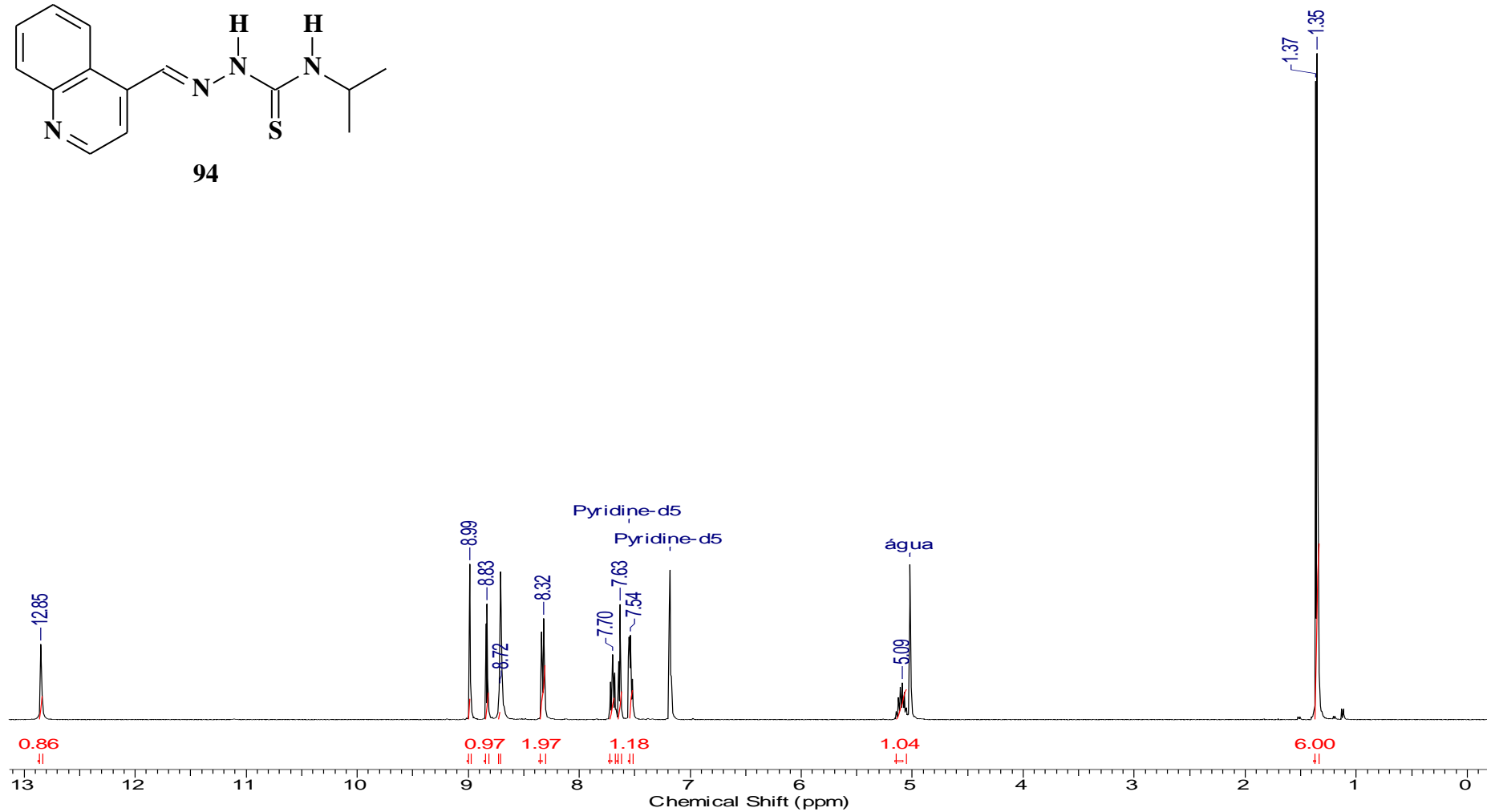
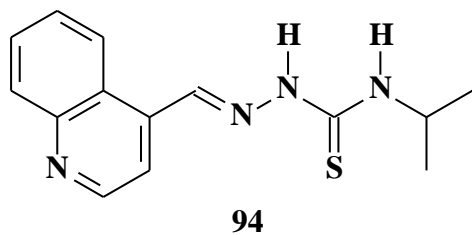
3.96 Espectro de RMN C^{13} (DEPTQ) do Quinolina-4-carboxaldeído-4-etil-tiossemicarbazona (93) obtido em piridina- d_5



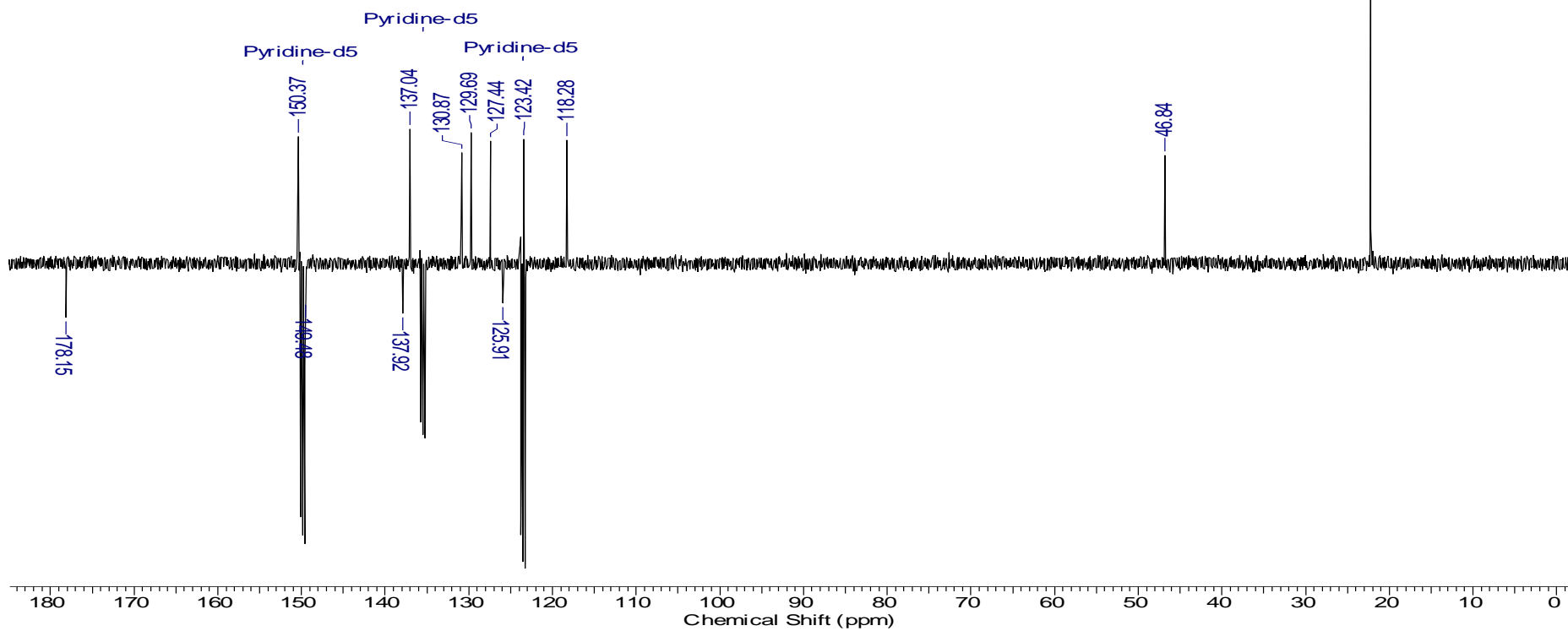
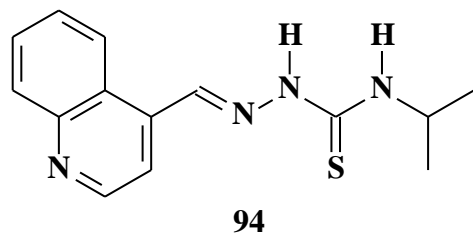
3.97 Espectro de IV do Quinolina-4-carboxaldeído-4-isopropil-tiossemicarbazona (94) obtido em pastilha de KBr



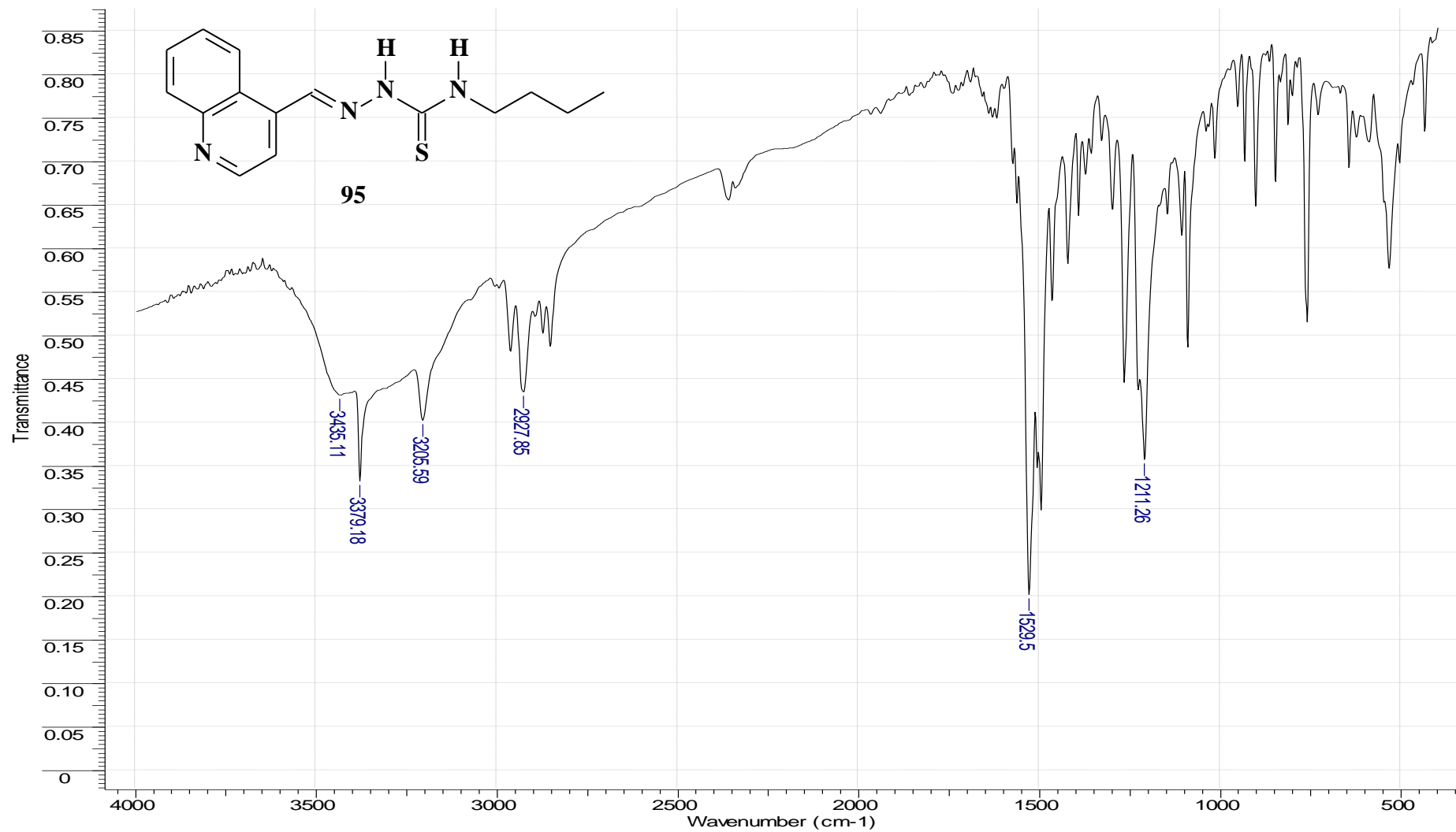
3.98 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-isopropil-tiossemicarbazona (94) obtido em piridina-d₅



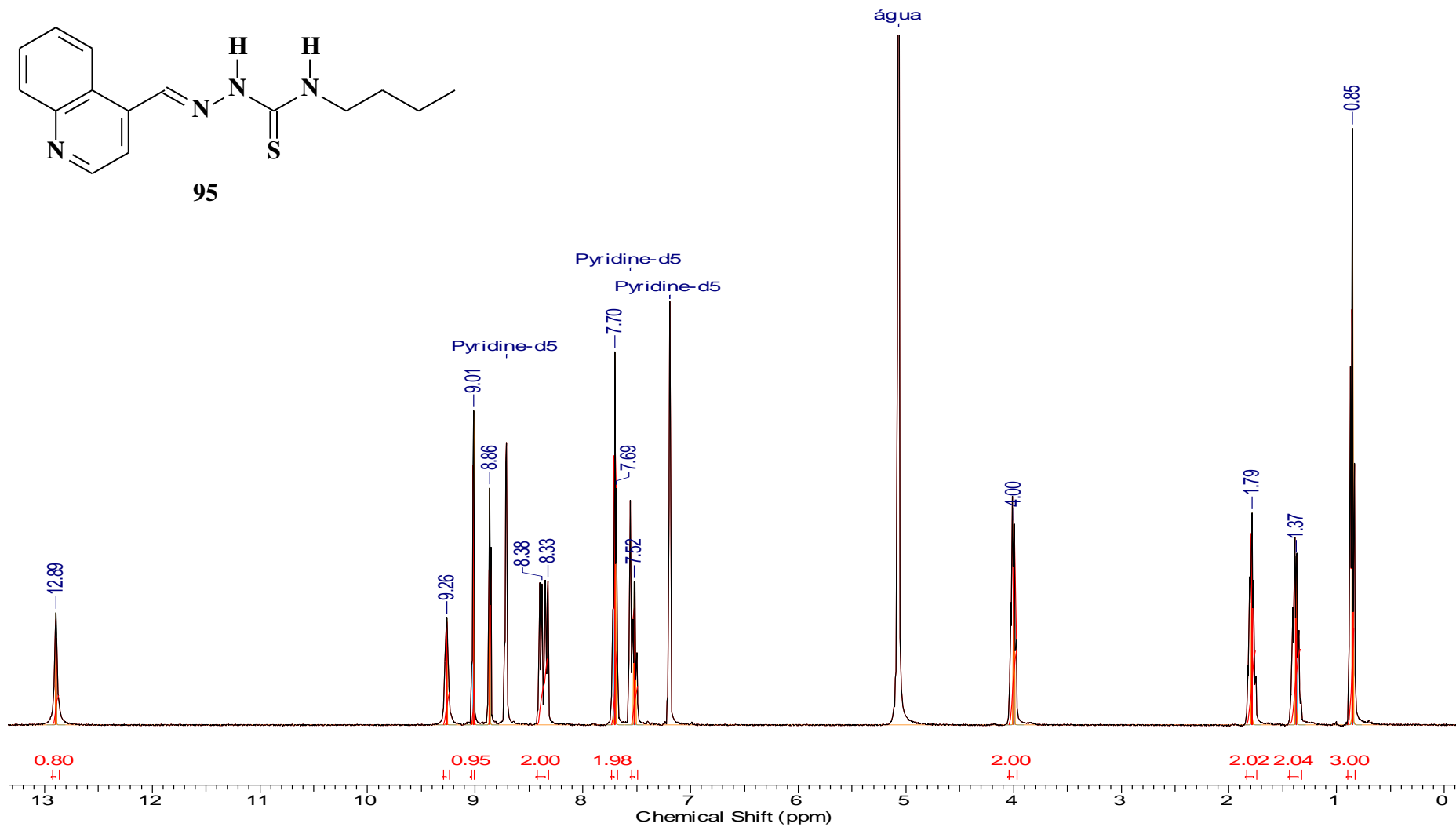
3.99 Espectro de RMN C^{13} (DEPTQ) do Quinolina-4-carboxaldeído-4-isopropil-tiossemicarbazona (94) obtido em piridina- d_5



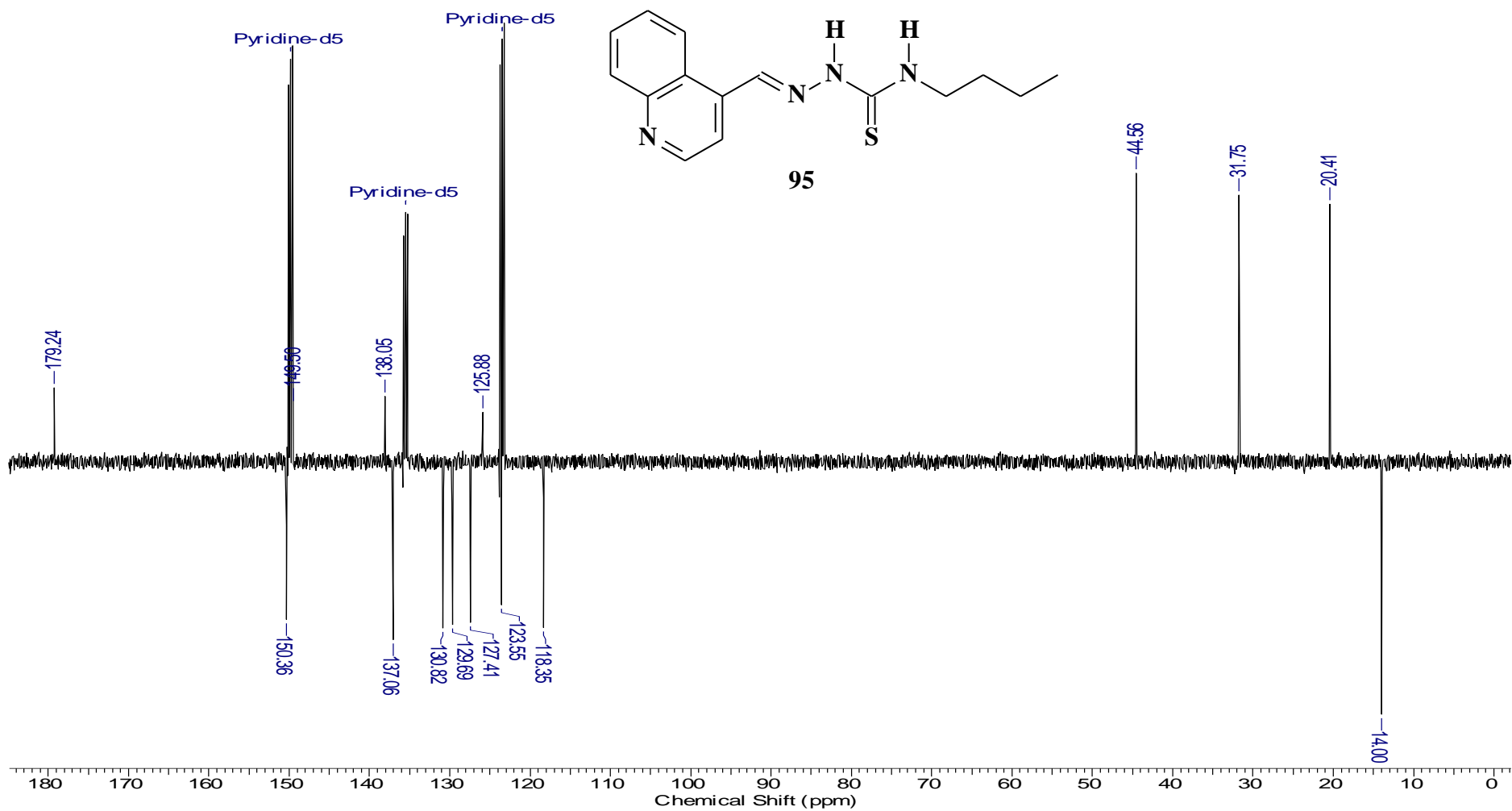
3.100 Espectro de IV do Quinolina-4-carboxaldeído-4-butil-tiossemicarbazona (95) obtido em pastilha de KBr



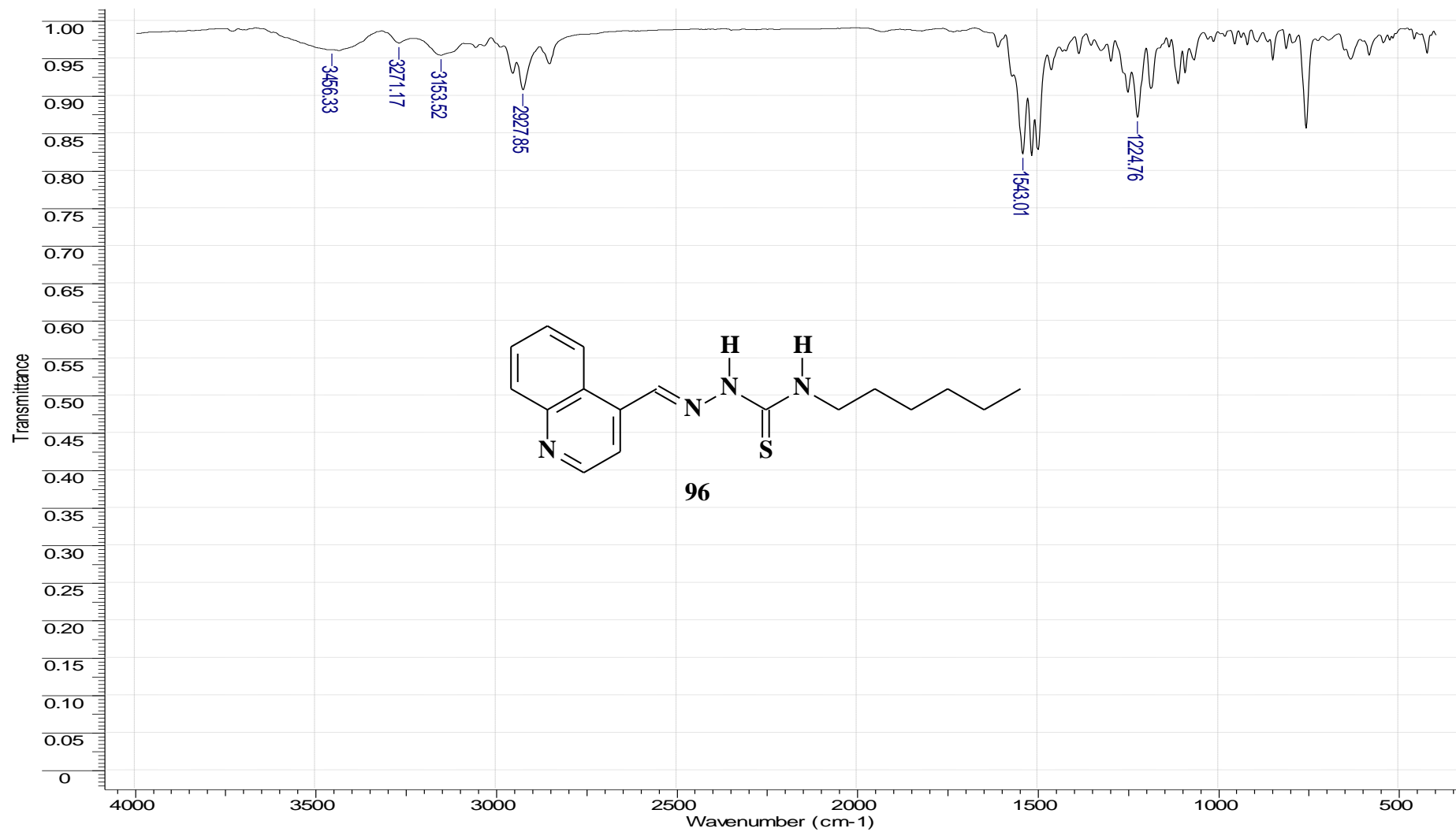
3.101 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-butil-tiossemicarbazona (95) obtido em piridina-d₅



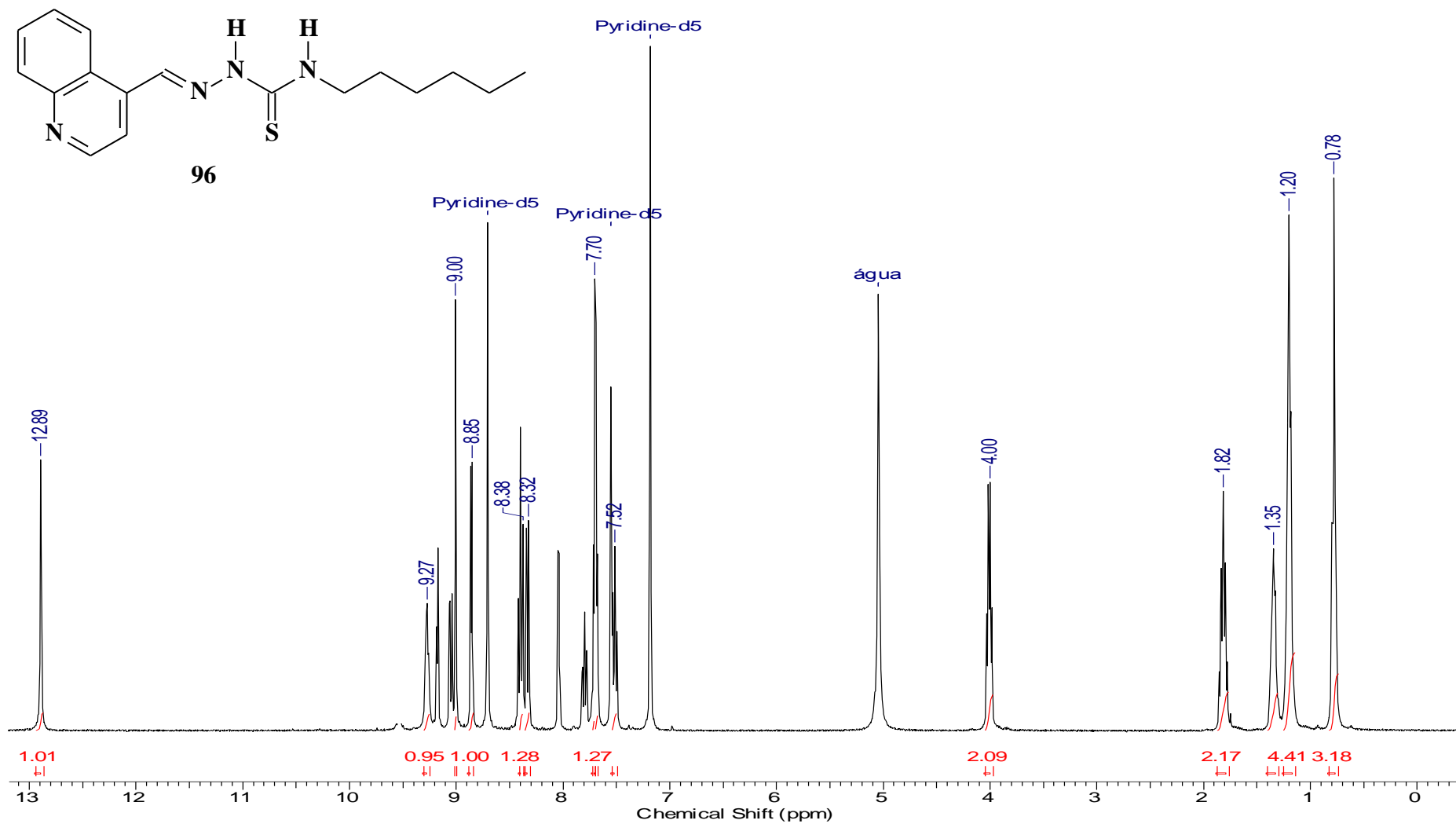
3.102 Espectro de RMN C¹³ (DEPTQ) do Quinolina-4-carboxaldeído-4-butil-tiossemicarbazona (95) obtido em piridina-d₅



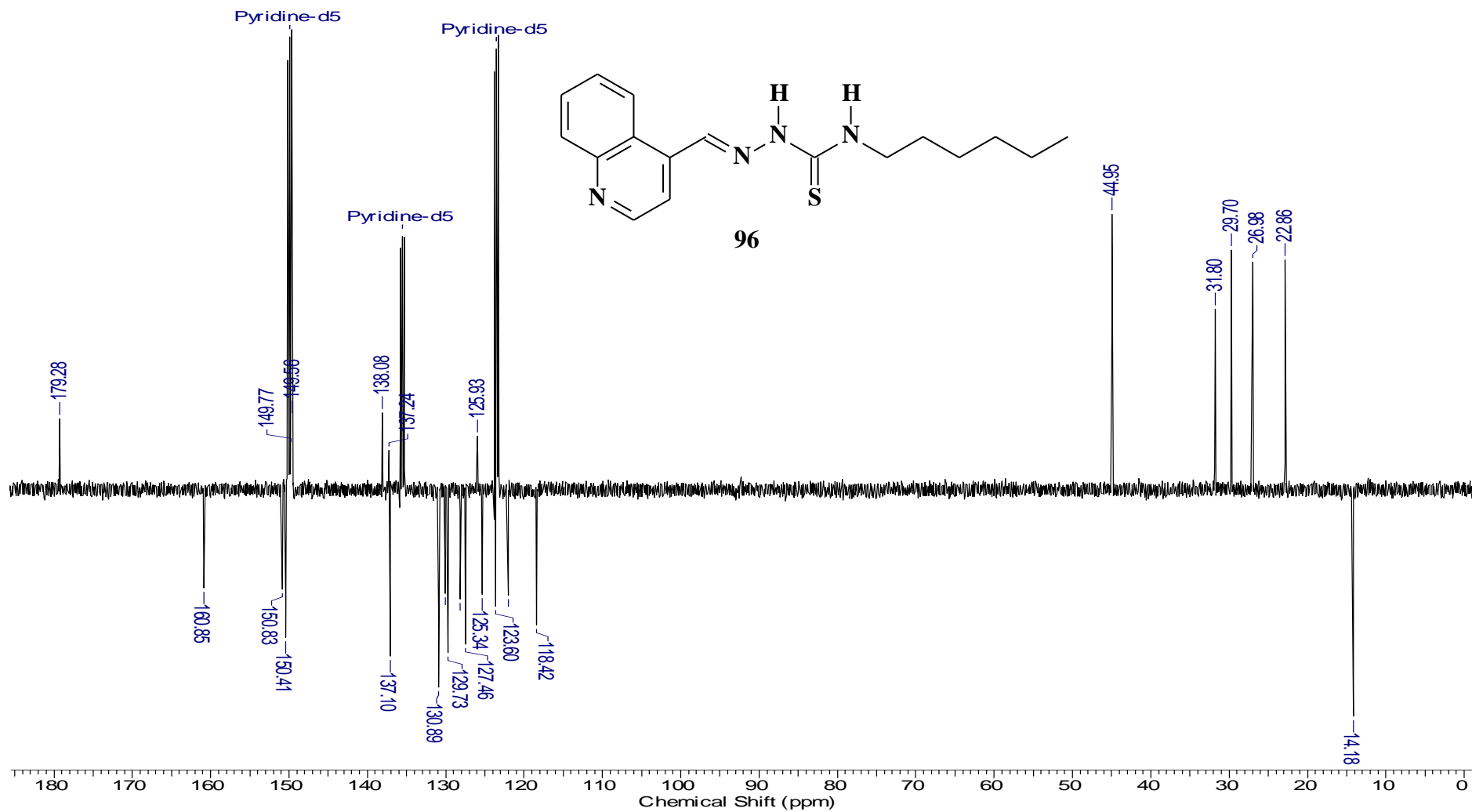
3.103 Espectro de IV do Quinolina-4-carboxaldeído-4-hexil-tiossemicarbazona (96) obtido em pastilha de KBr



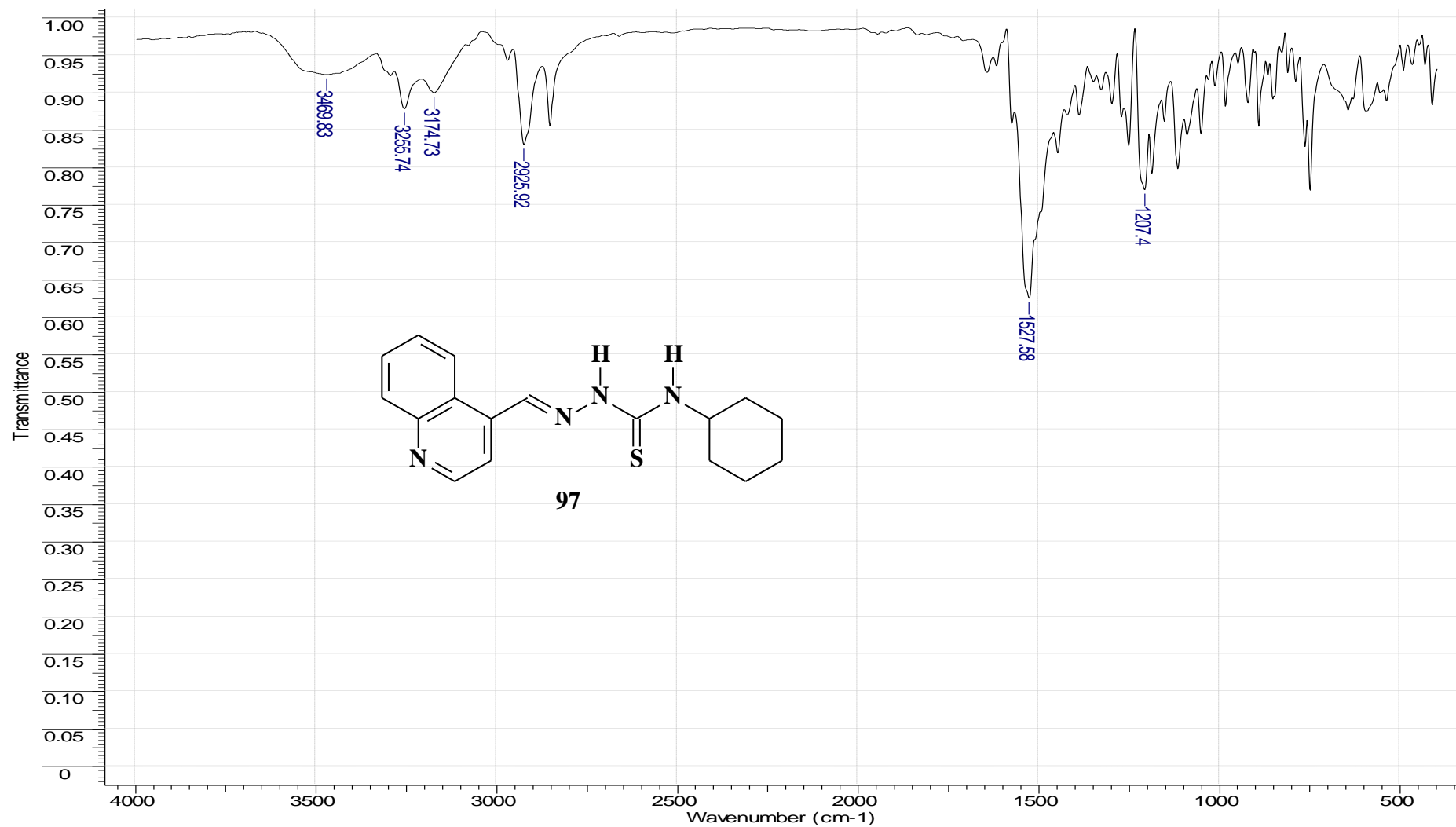
3.104 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-hexil-tiossemicarbazona (96) obtido em piridina-d₅



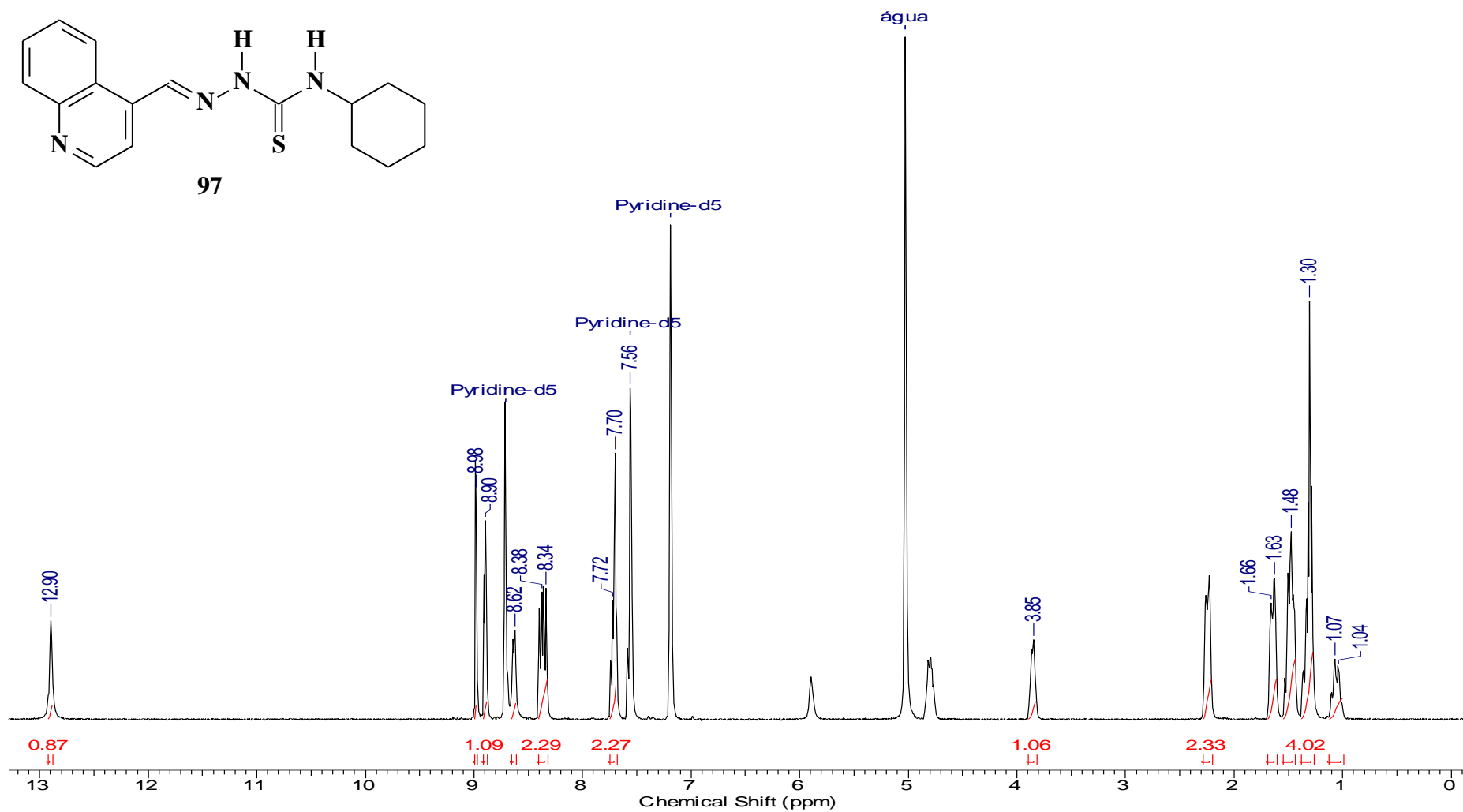
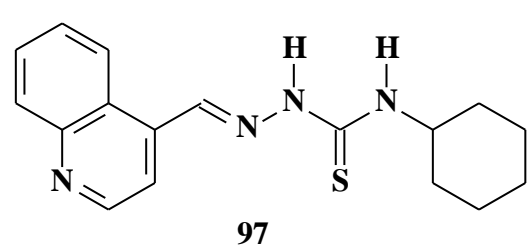
3.105 Espectro de RMN C¹³ (DEPTQ) do Quinolina-4-carboxaldeído-4-hexil-tiossemicarbazona (96) obtido em piridina-d₅



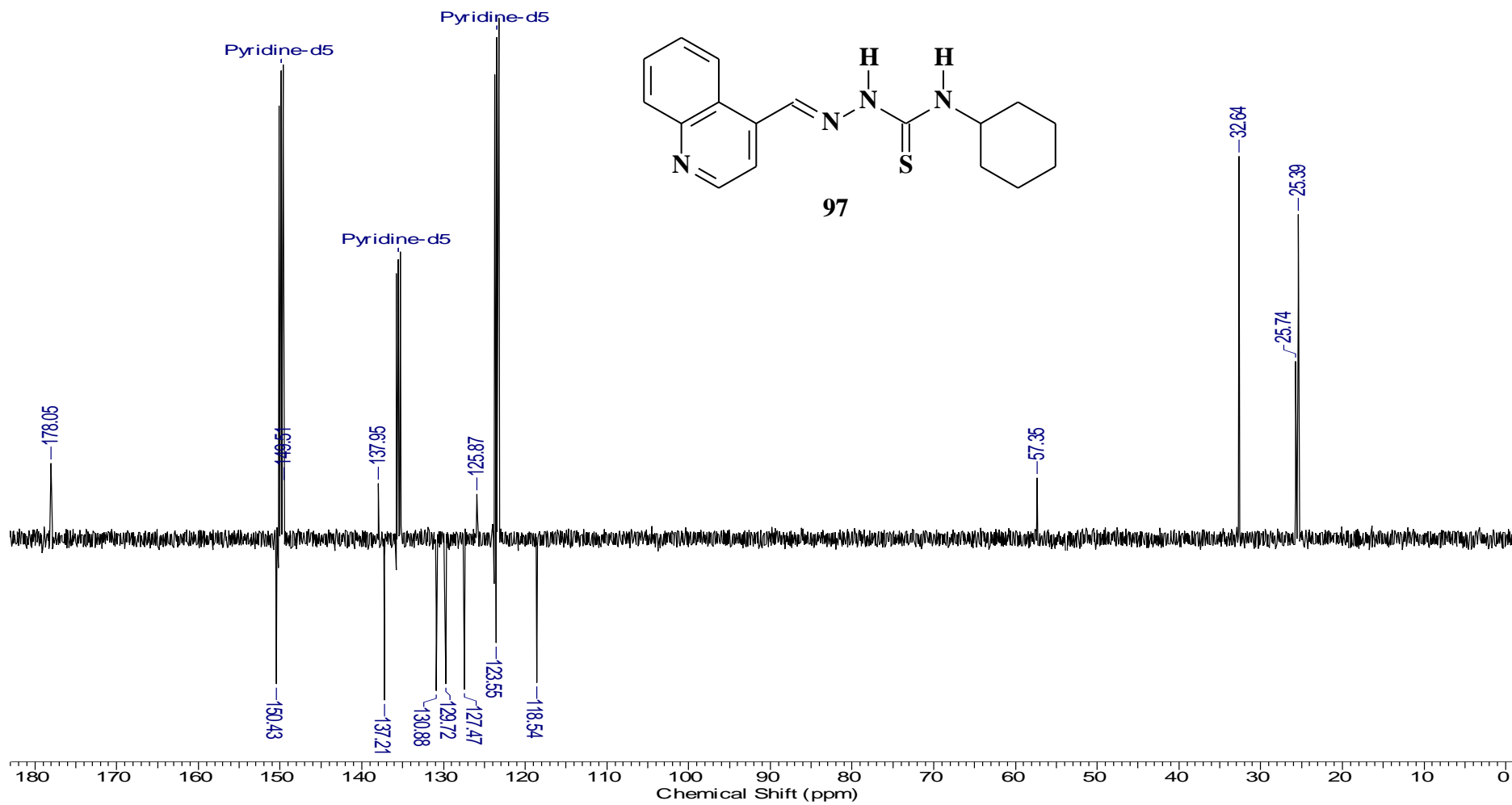
3.106 Espectro de IV do Quinolina-4-carboxaldeído-4-cicloexil-tiossemicarbazona (97) obtido em pastilha de KBr



3.107 Espectro de RMN H¹ do Quinolina-4-carboxaldeído-4-cicloexil-tiossemicarbazona (97) obtido em piridina-d₅



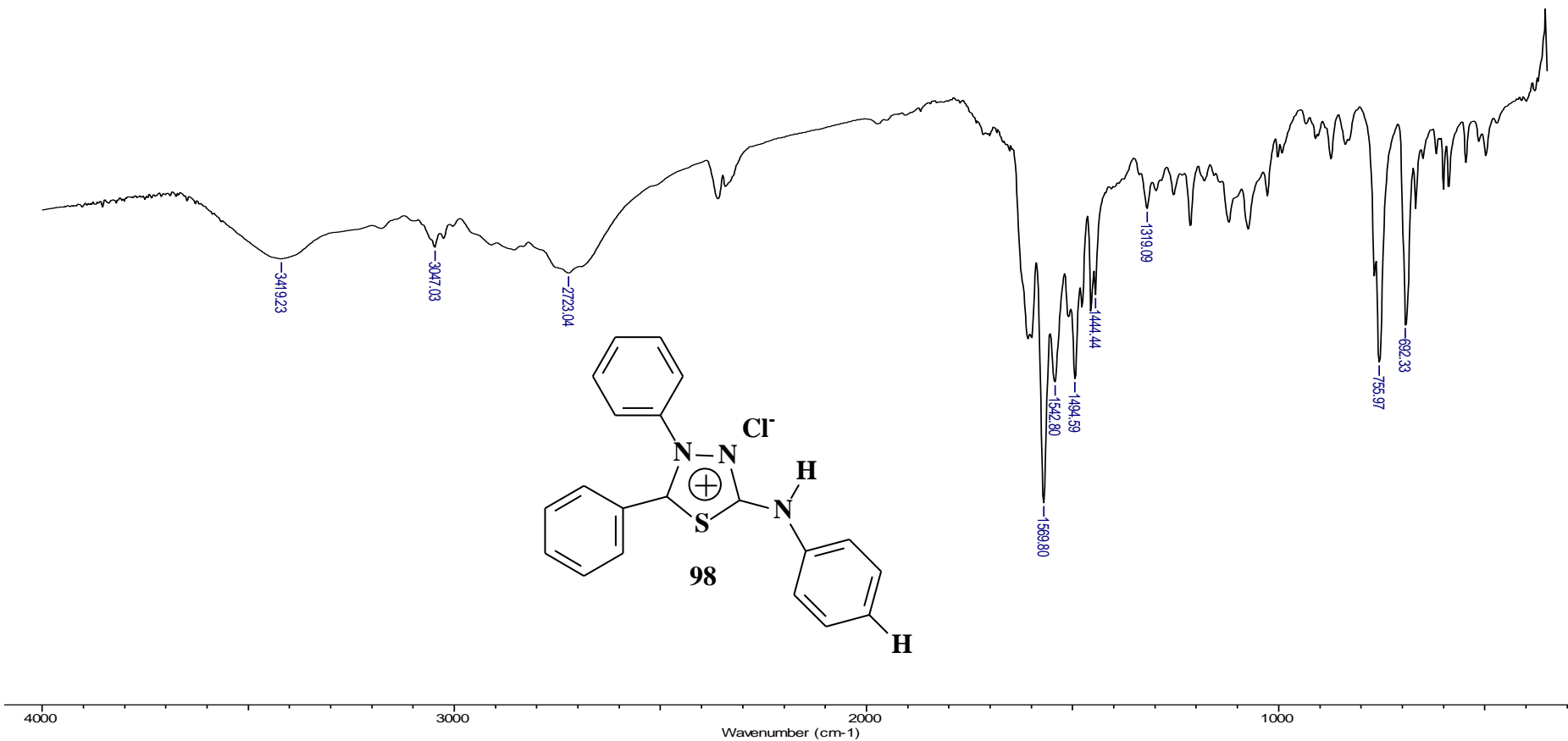
3.108 Espectro de RMN C¹³ (DEPTQ) do Quinolina-4-carboxaldeído-4-cicloexil-tiossemicarbazona (97) obtido em piridina-d₅



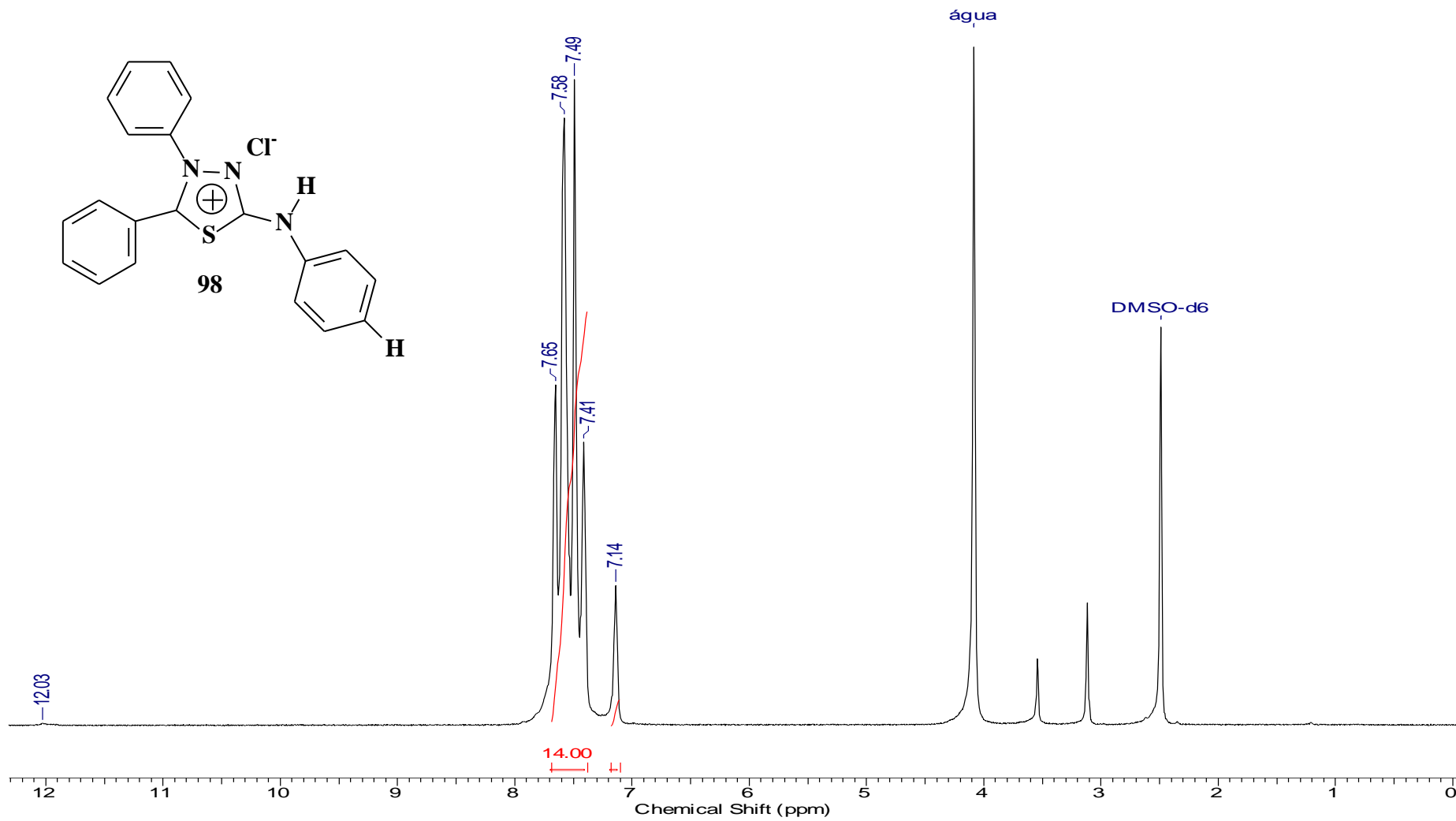
4 ESPECTROS DOS CLORIDRATOS MESOIÔNICOS

4.1 Espectro IV do Cloreto de 4,5-difenil-1,3,4-tiadiazólio-2-fenilamina (98) obtido em pastilha de KBr

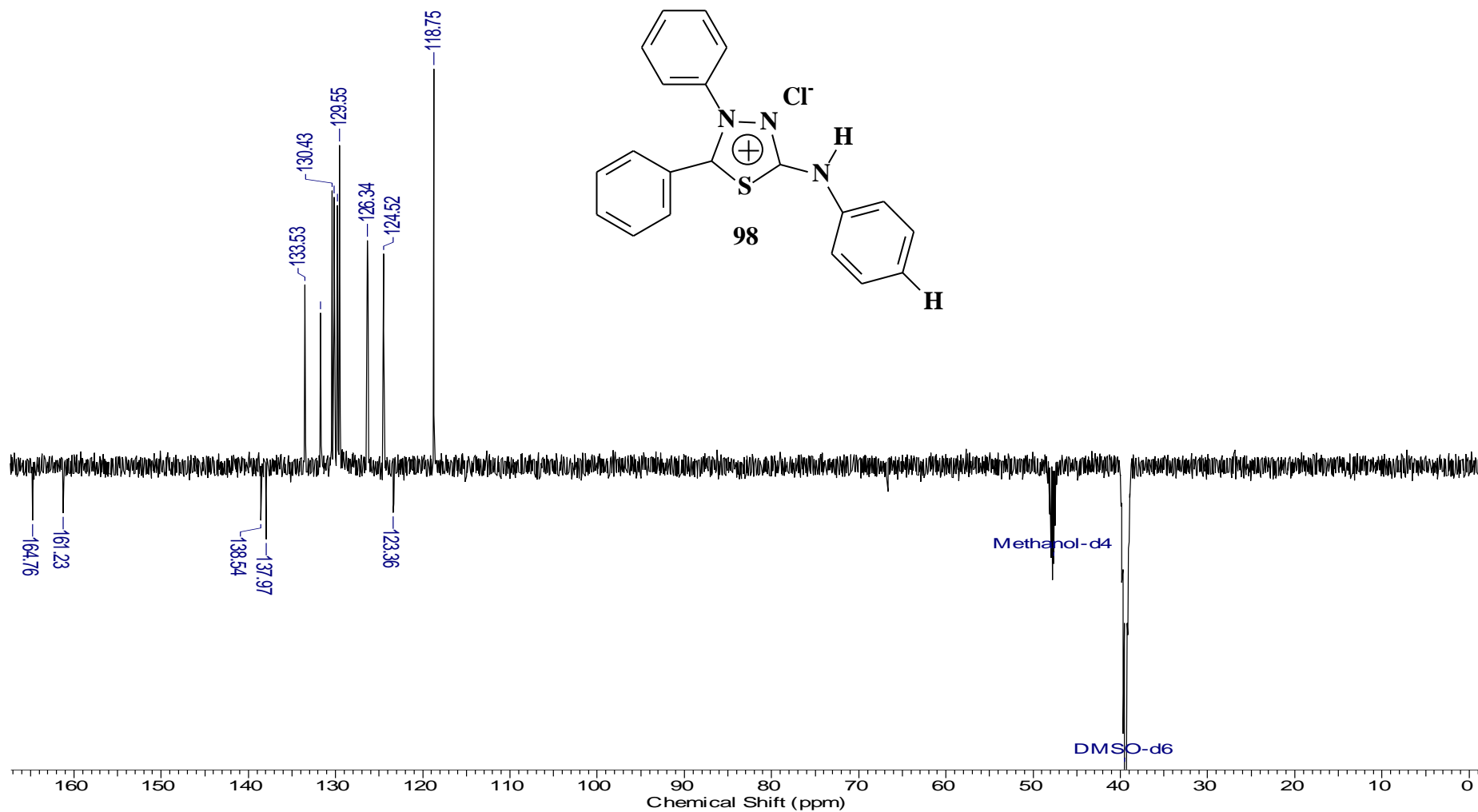
Title	MISHTU	Date	07/08/07 10:34:17	Technique	Infrared	Spectral Region	IR	Spectrum Range	349.0582 - 3999.7045 cm ⁻¹
Points Count	1894	Data Spacing	1.9285 cm ⁻¹						



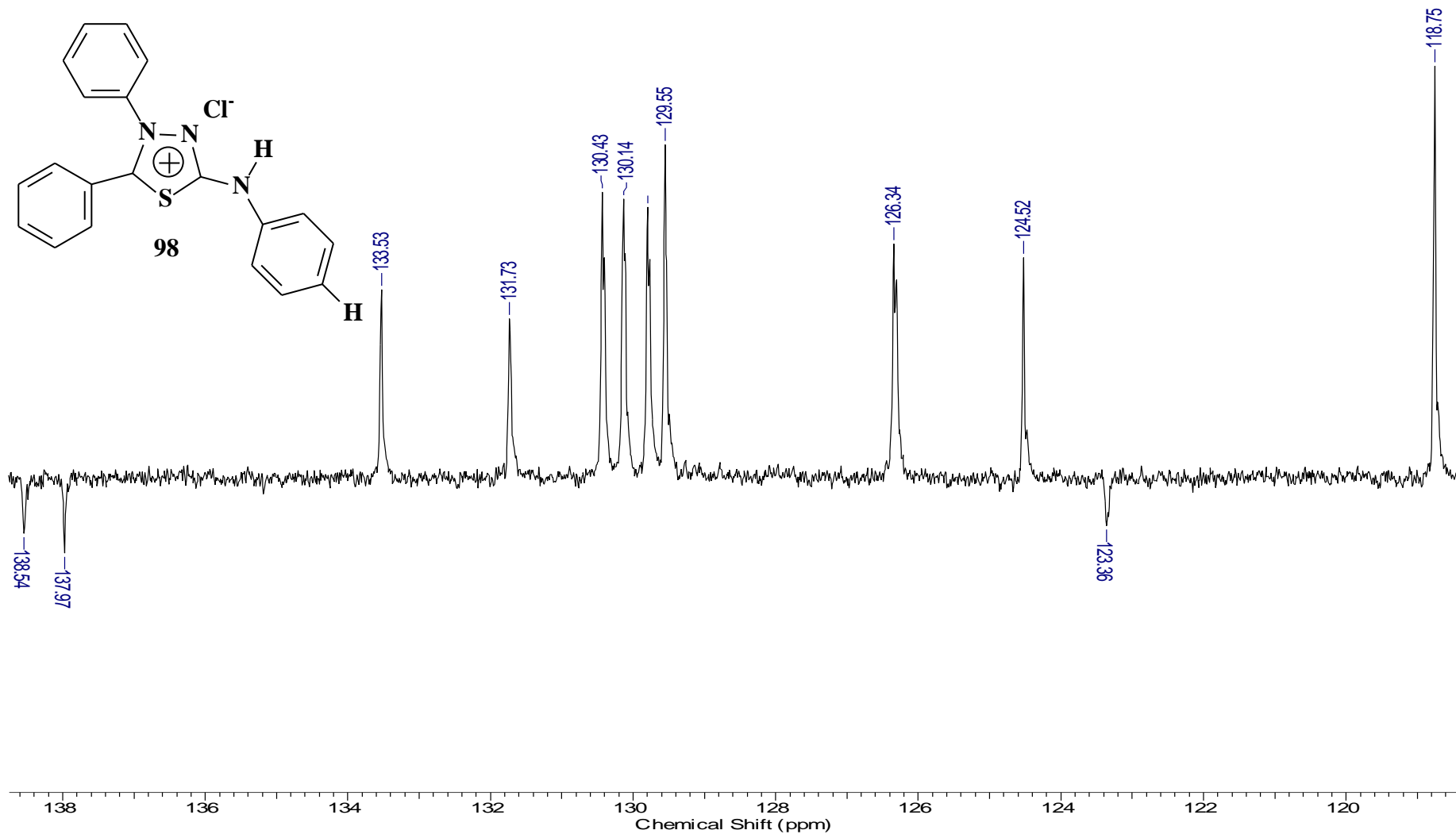
4.2 Espectro RMN ^1H do Cloreto de 4,5-difenil-1,3,4-tiadiazólio-2-fenilamina (98) obtido em $\text{DMSO-}d_6$



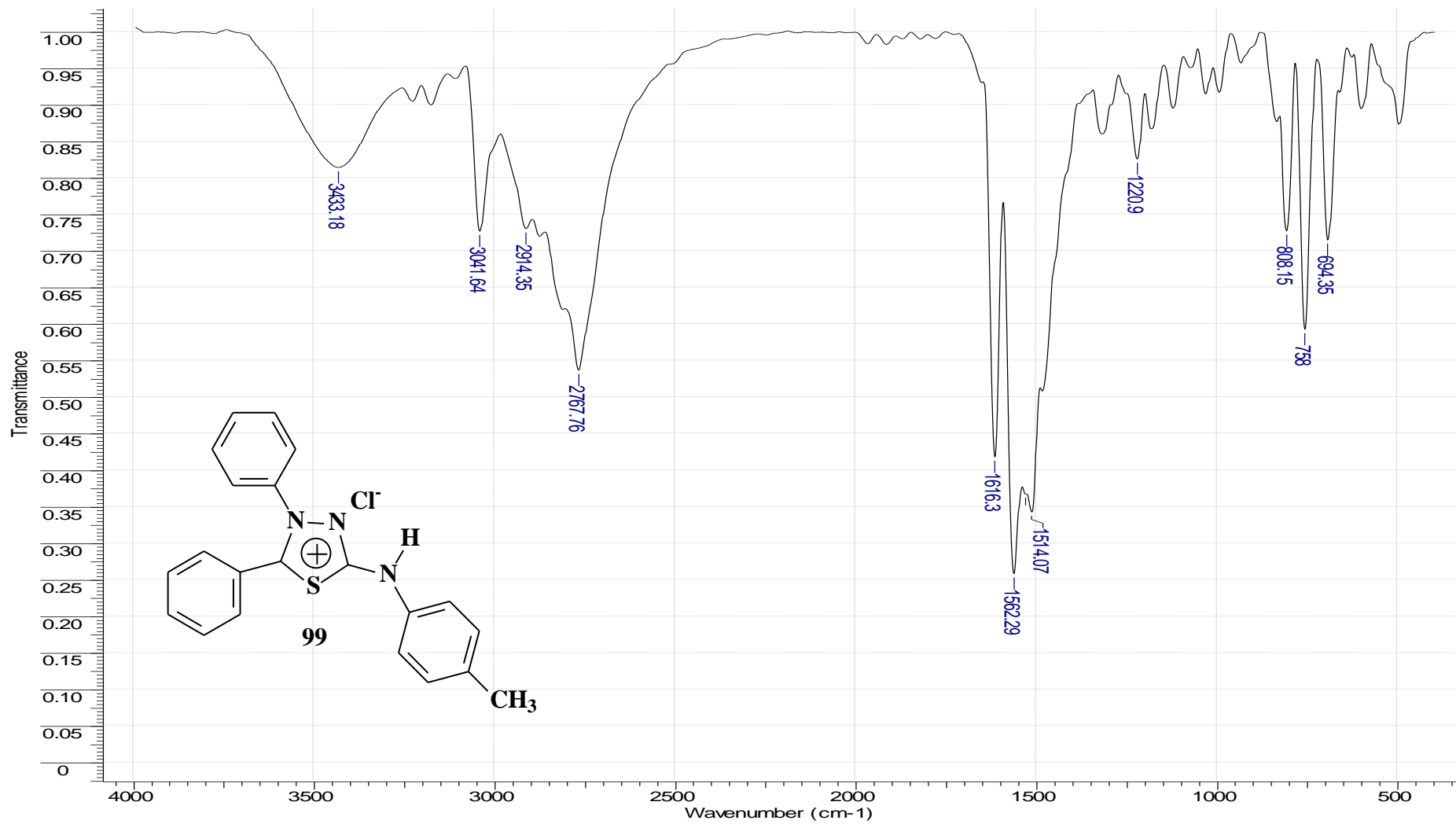
4.3 Espectro RMN C^{13} (DEPTQ) do Cloreto de 4,5-difenil-1,3,4-tiadiazólio-2-fenilamina (98) obtido em $DMSO-d_6$



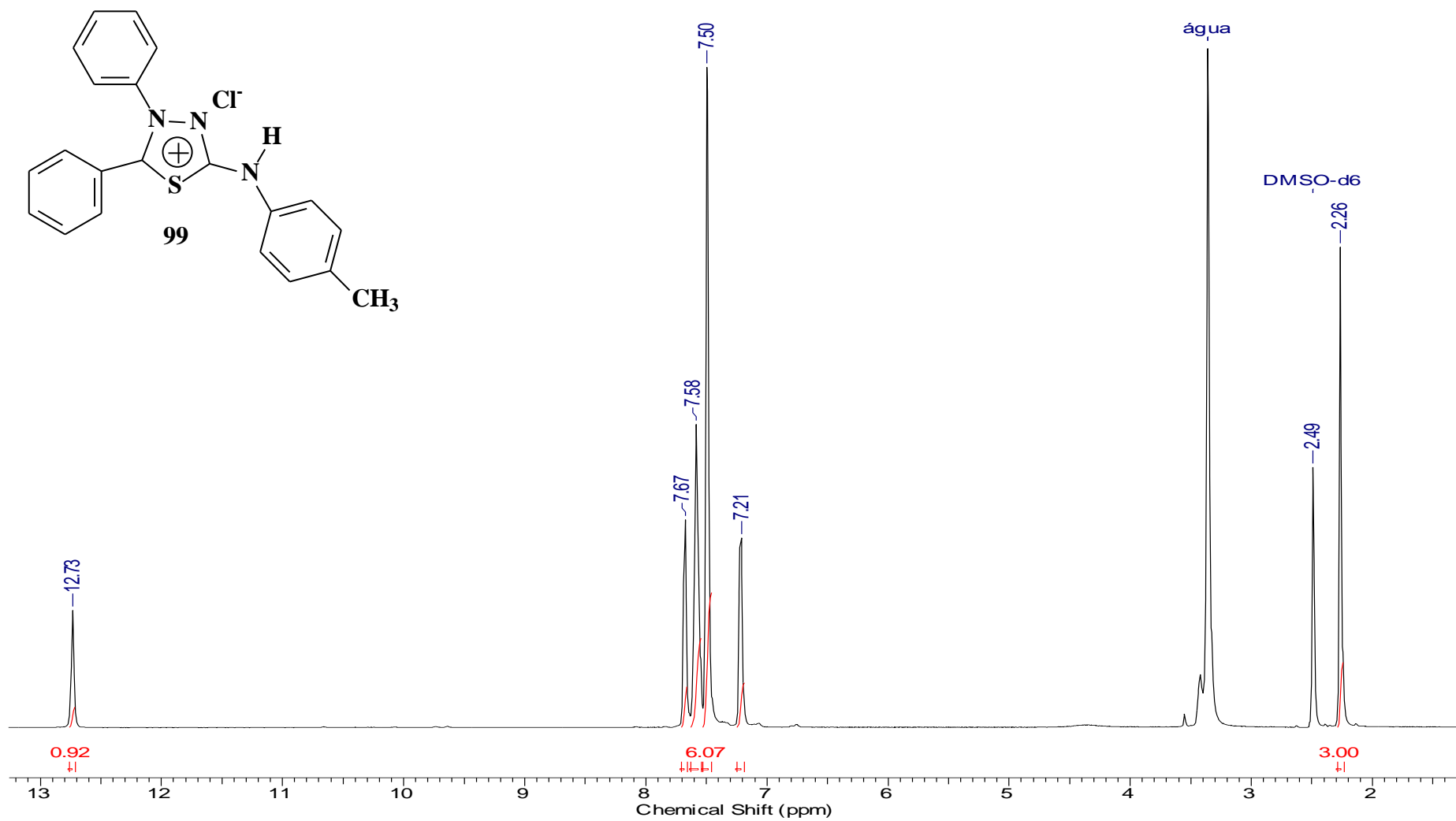
4.4 Expansão do espectro RMN C¹³ (DEPTQ) do Cloreto de 4,5-difenil-1,3,4-tiadiazólio-2-fenilamina (98) obtido em DMSO-d₆



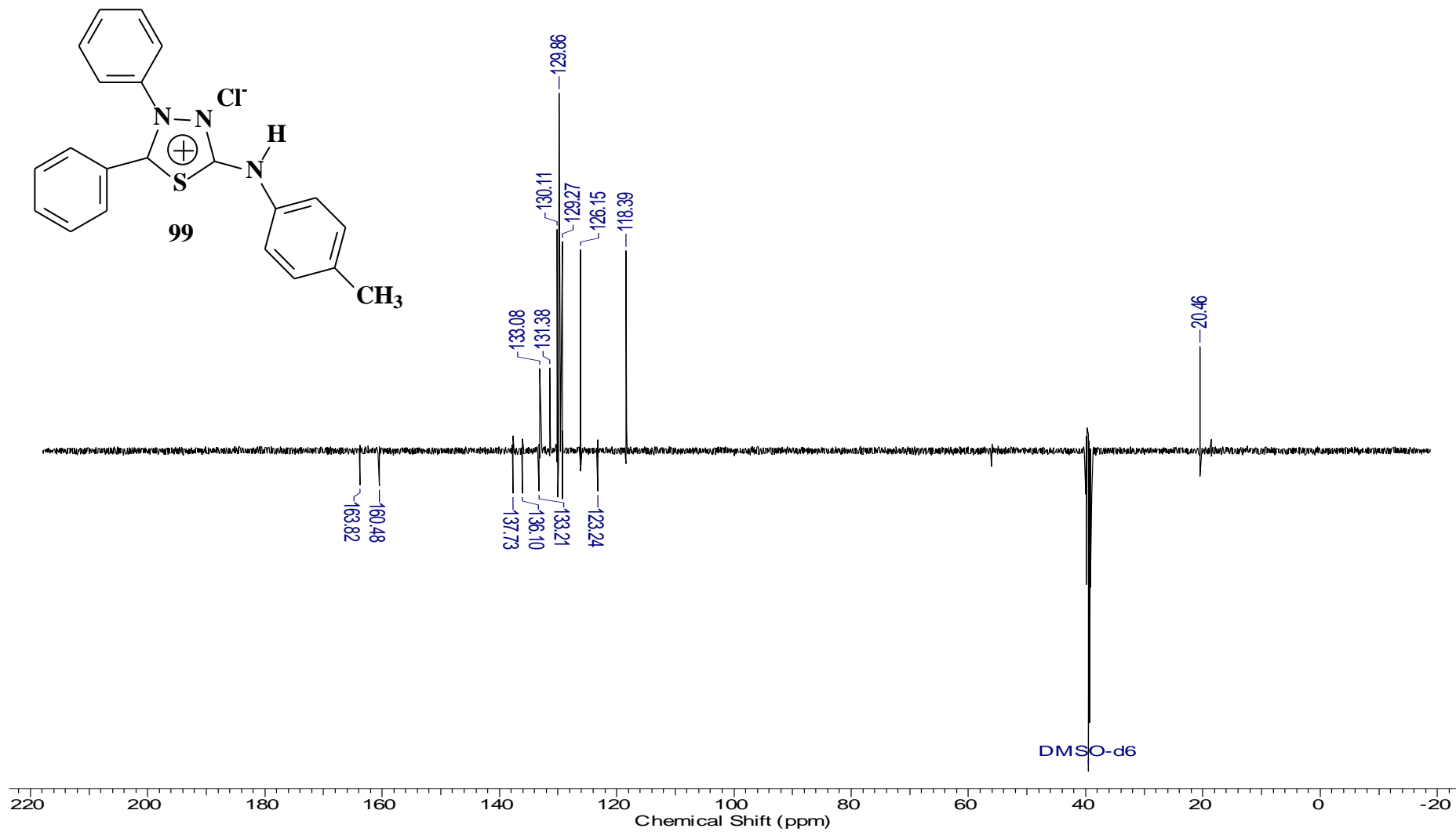
4.5 Espectro IV do Cloreto de 4-fenil-5-(4''-metil-fenil)-1,3,4-tiadiazólio-2-fenilamina (99) obtido em pastilha de KBr



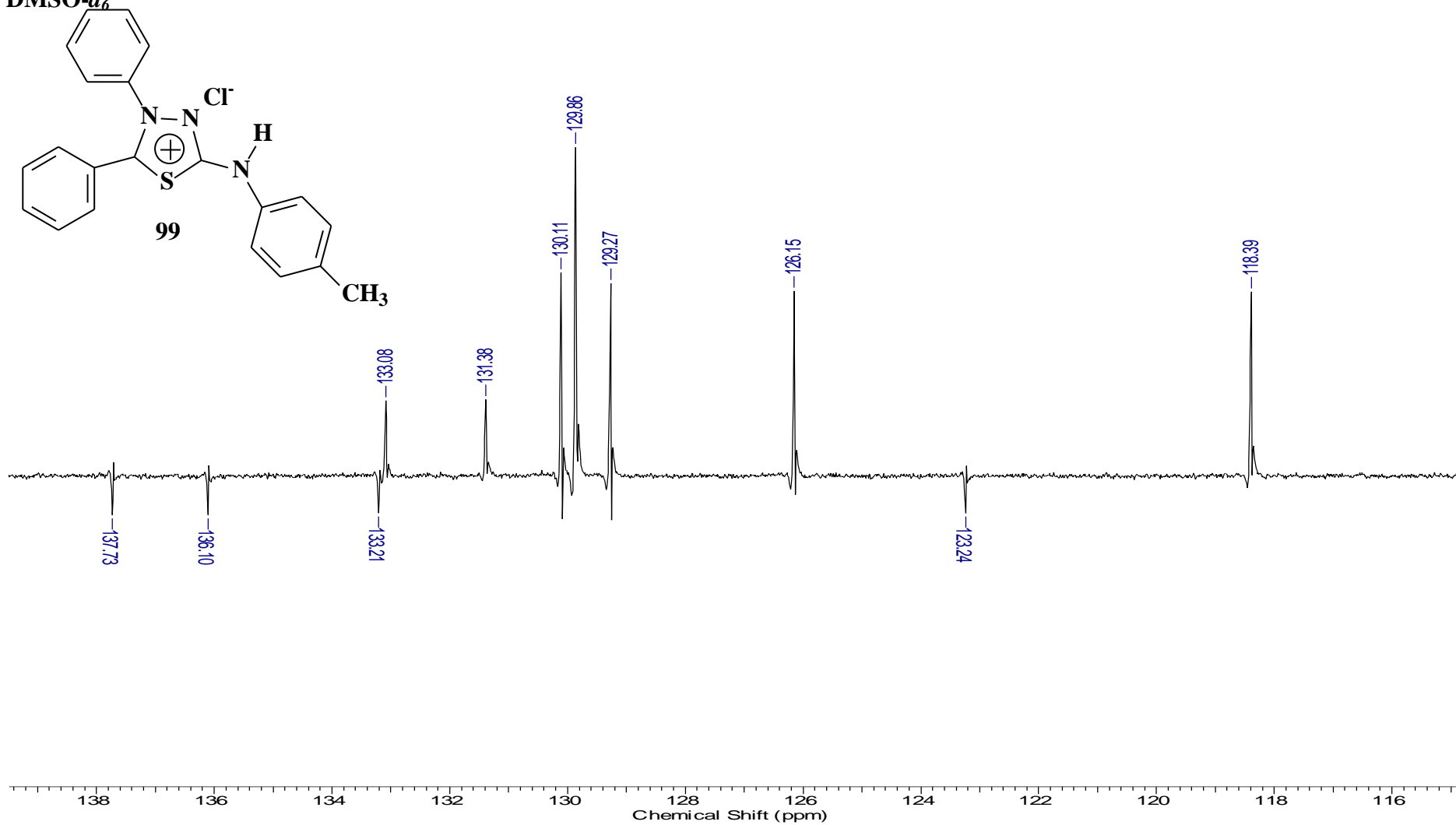
4.6 Espectro de RMN H¹ do Cloreto de 4-fenil-5-(4'''-metil-fenil)-1,3,4-tiadiazólio-2-fenilamina (99) obtido em DMSO-d₆



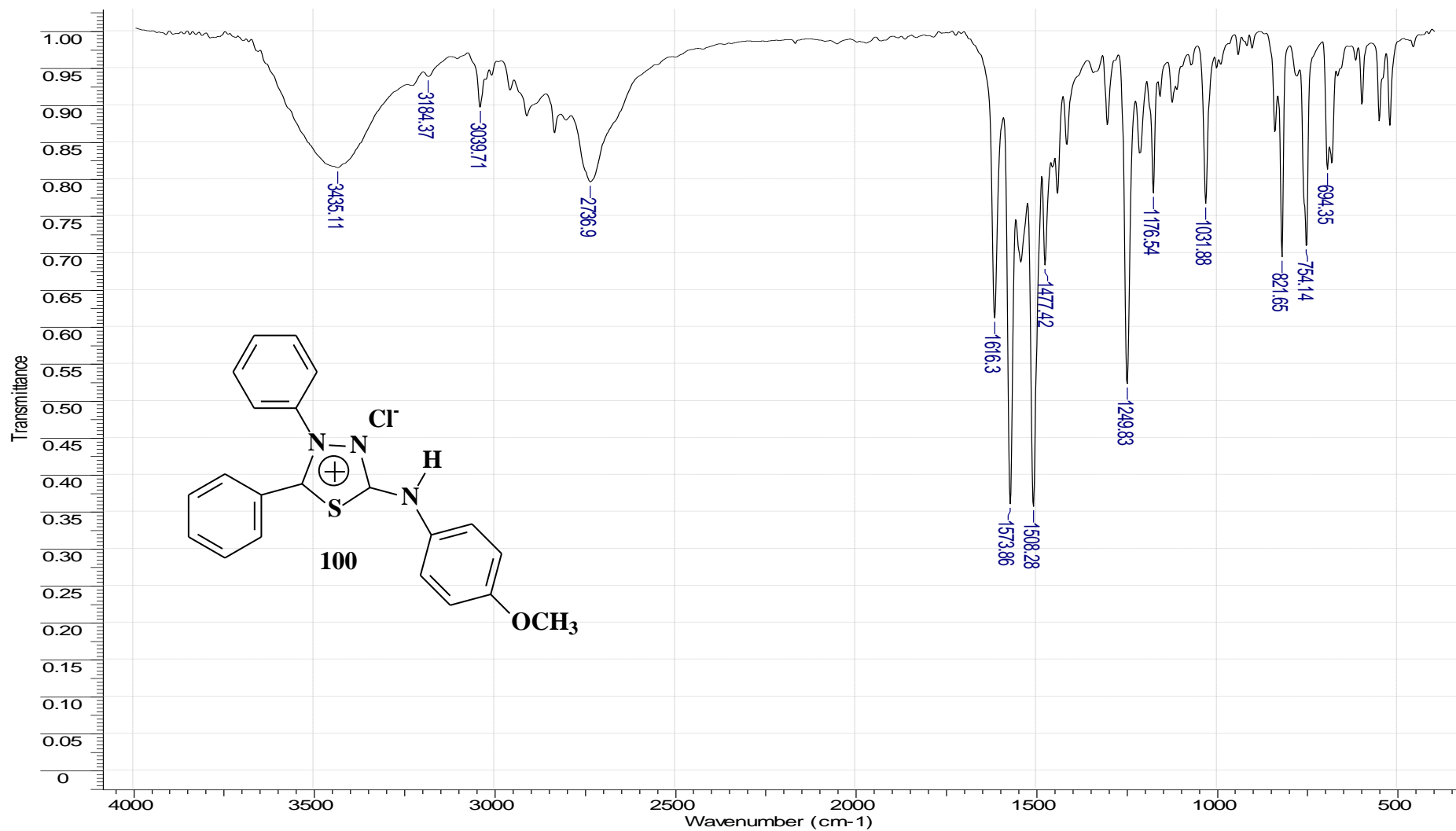
4.7 Espectro de RMN C¹³ (DEPTQ) do Cloreto de 4-fenil-5-(4'''-metil-fenil)-1,3,4-tiadiazólio-2-fenilamina (99) obtido em DMSO-d₆



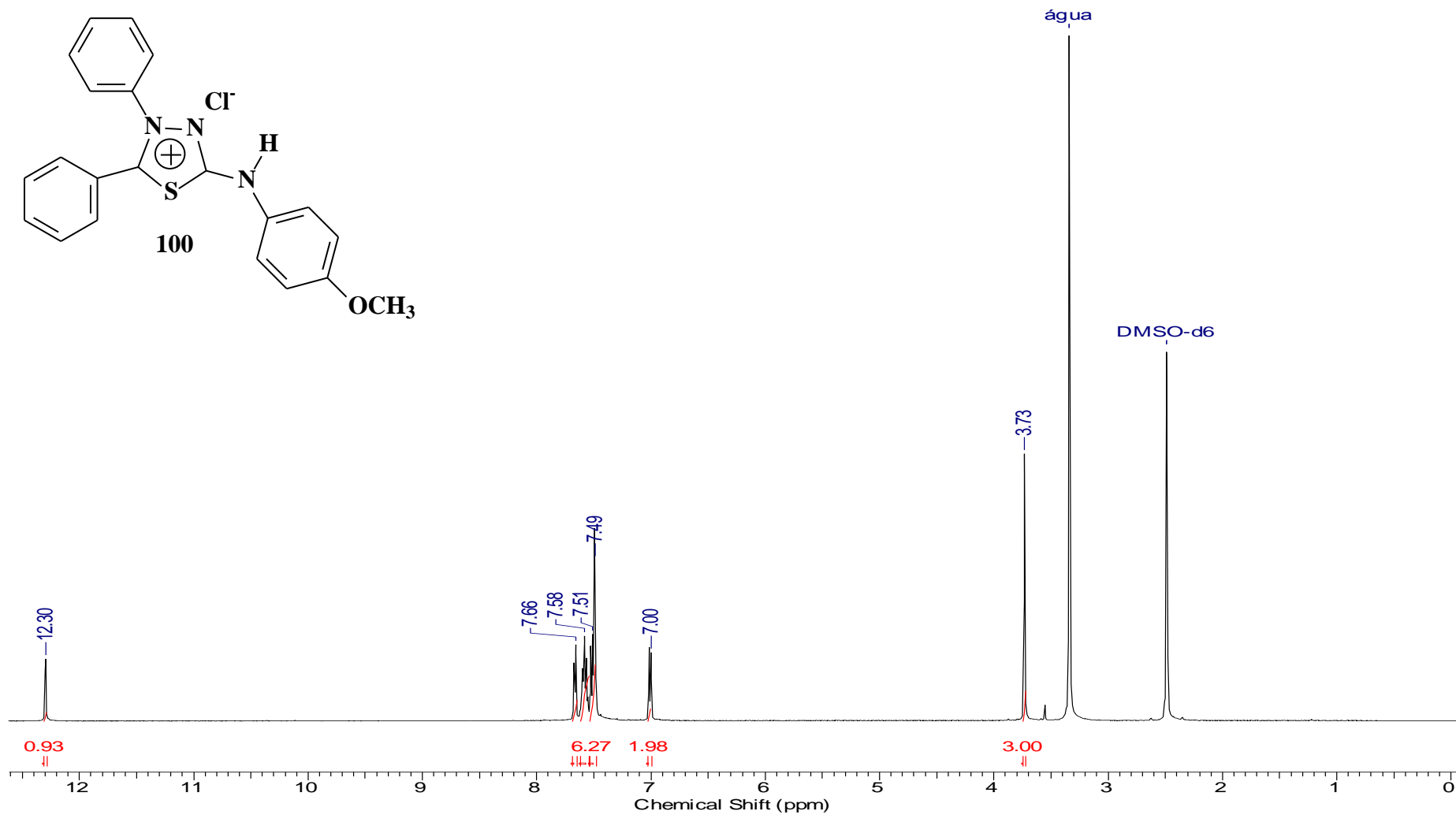
4.8 Expansão do espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4'''-metil-fenil)-1,3,4-tiadiazólio-2-fenilamina (99) obtido em $DMSO-d_6$



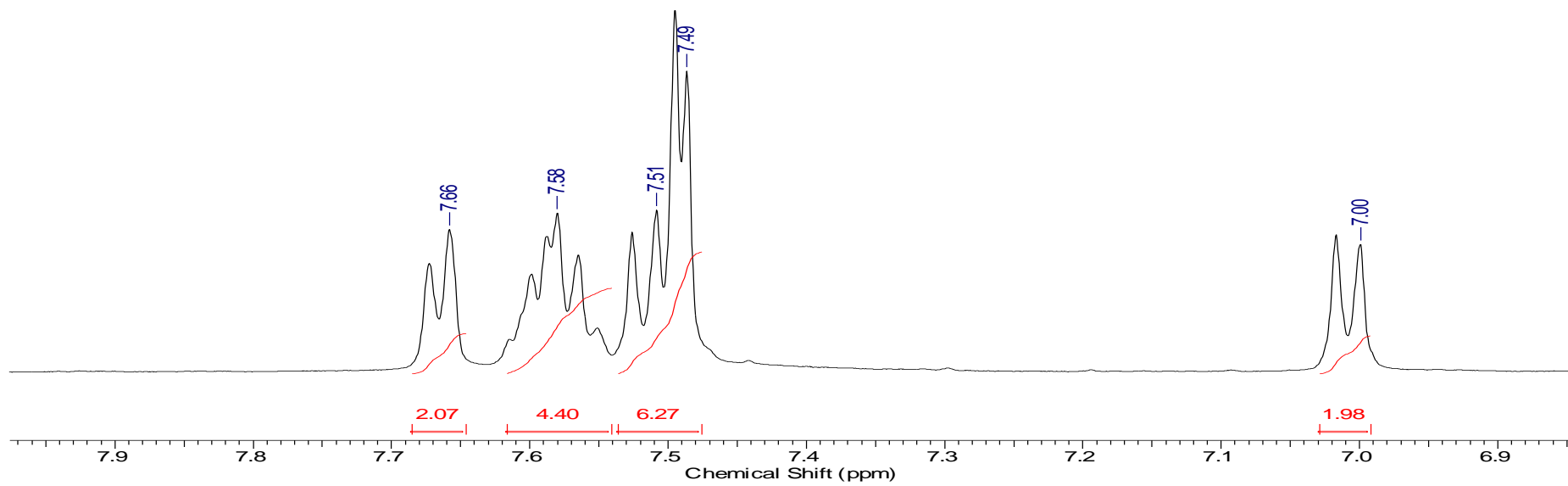
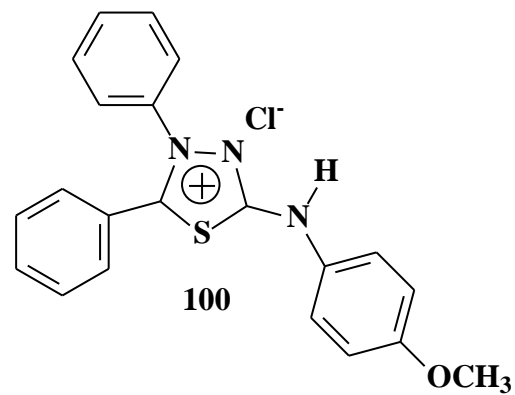
4.9 Espectro de RMN C¹³ do Cloreto de 4-fenil-5-(4'''-metoxi-fenil)-1,3,4-tiadiazólio-2-fenilamina (100) obtido em pastilha de KBr



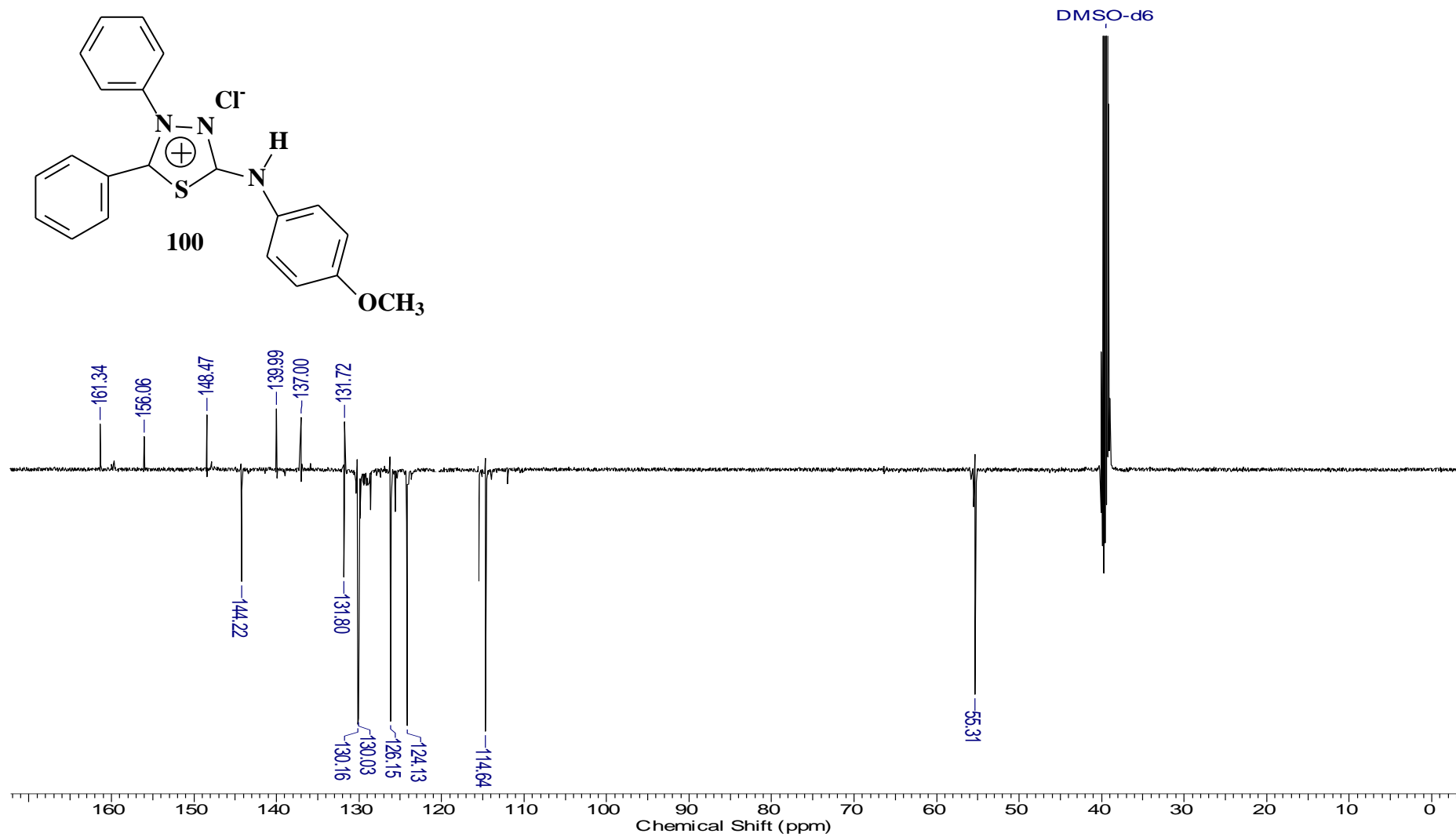
4.10 Espectro de RMN H^1 do Cloreto de 4-fenil-5-(4'''-metoxi-fenil)-1,3,4-tiadiazólio-2-fenilamina (100) obtido em $DMSO-d_6$



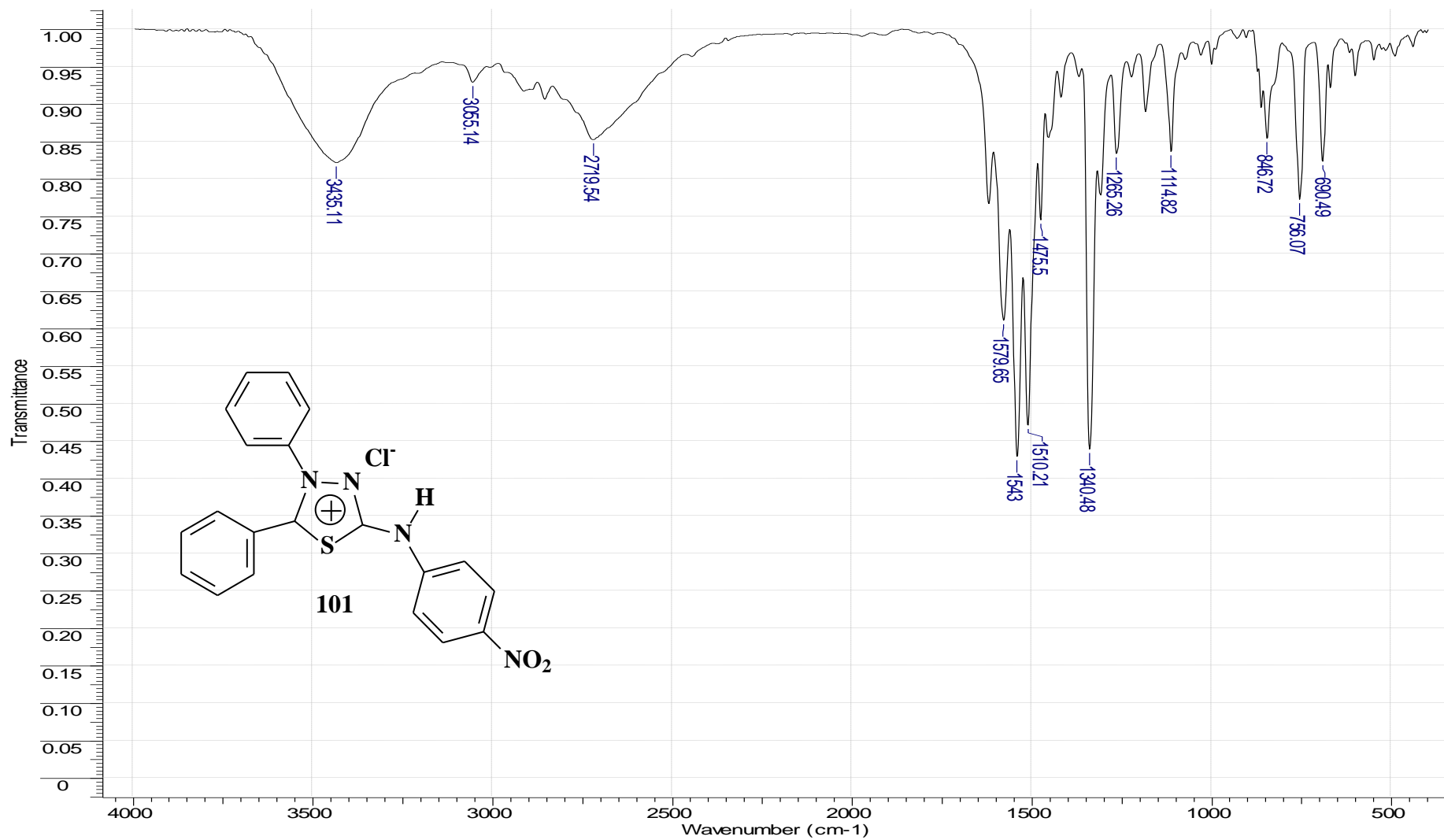
4.11 Expansão do Espectro de RMN H^1 do Cloreto de 4-fenil-5-(4'''-metoxi-fenil)-1,3,4-tiadiazólio-2-fenilamina (100) obtido em DMSO- d_6



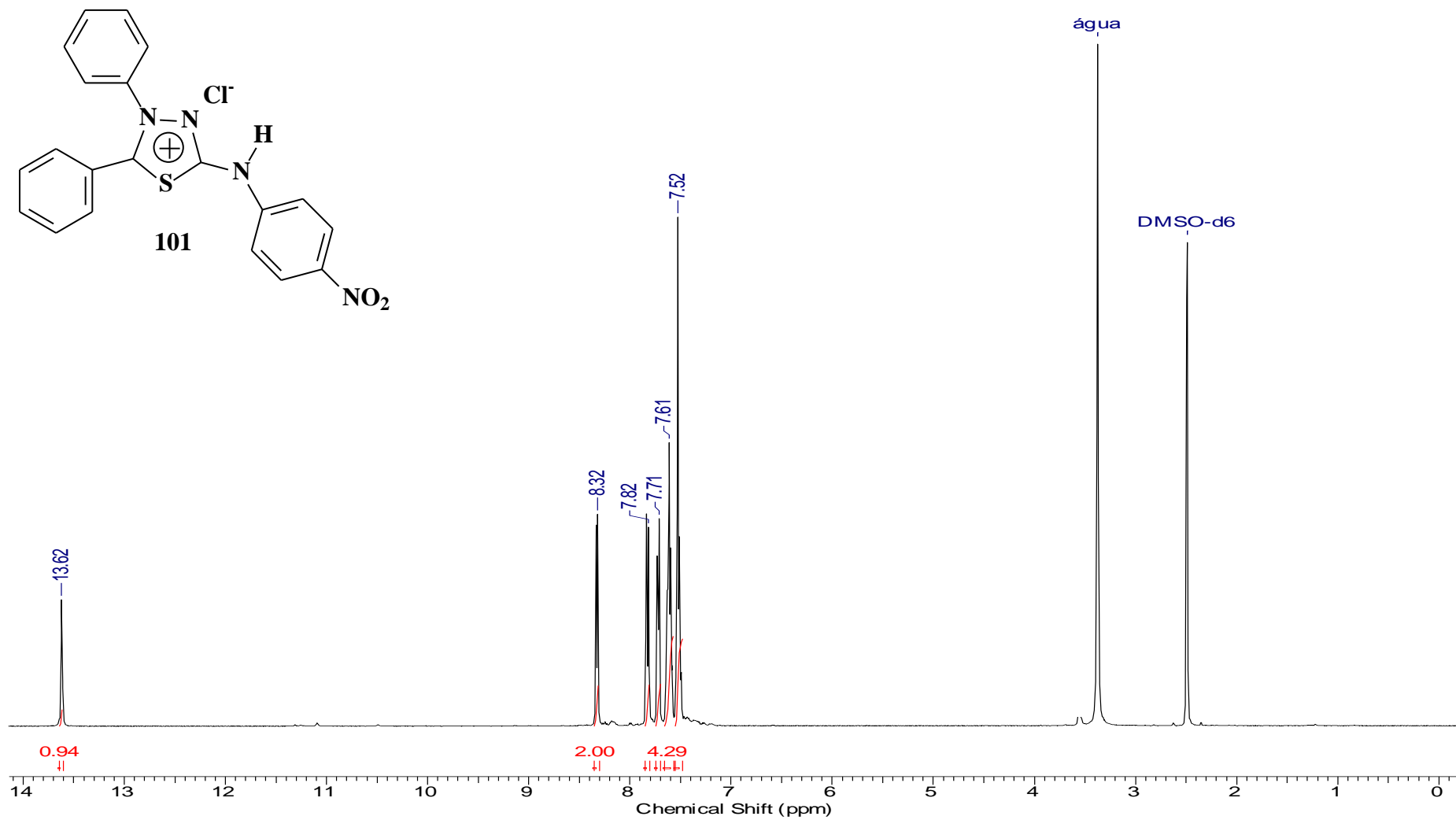
4.12 Espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4'''-metoxi-fenil)-1,3,4-tiadiazólio-2-fenilamina (100) obtido em $DMSO-d_6$



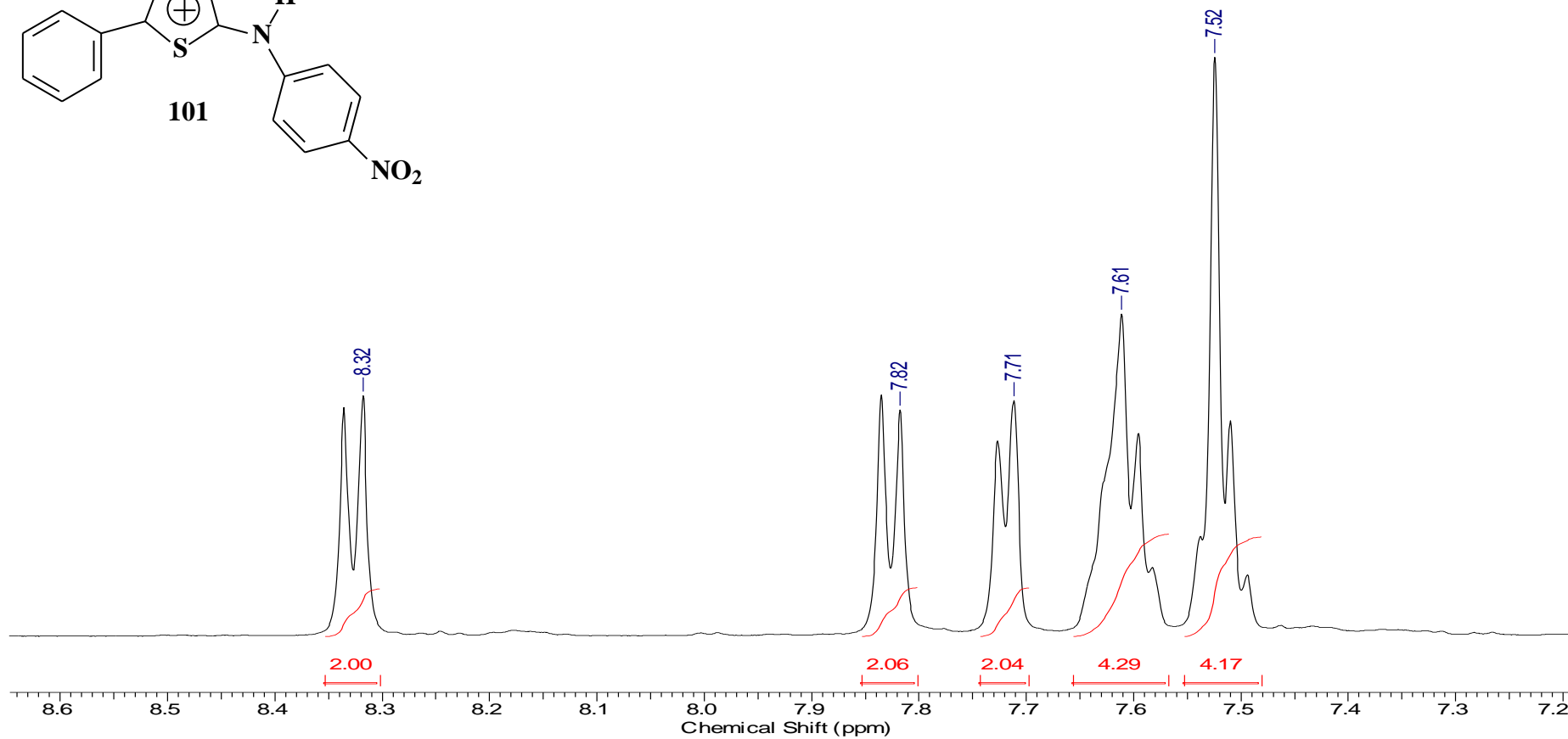
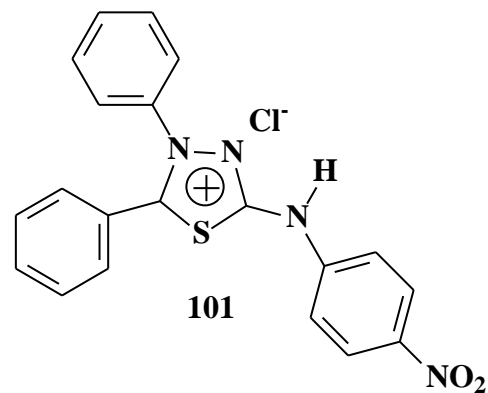
4.13 Espectro de RMN C^{13} do Cloreto de 4-fenil-5-(4'''-nitro-fenil)-1,3,4-tiadiazólio-2-fenilamina (101) obtido em pastilha de KBr



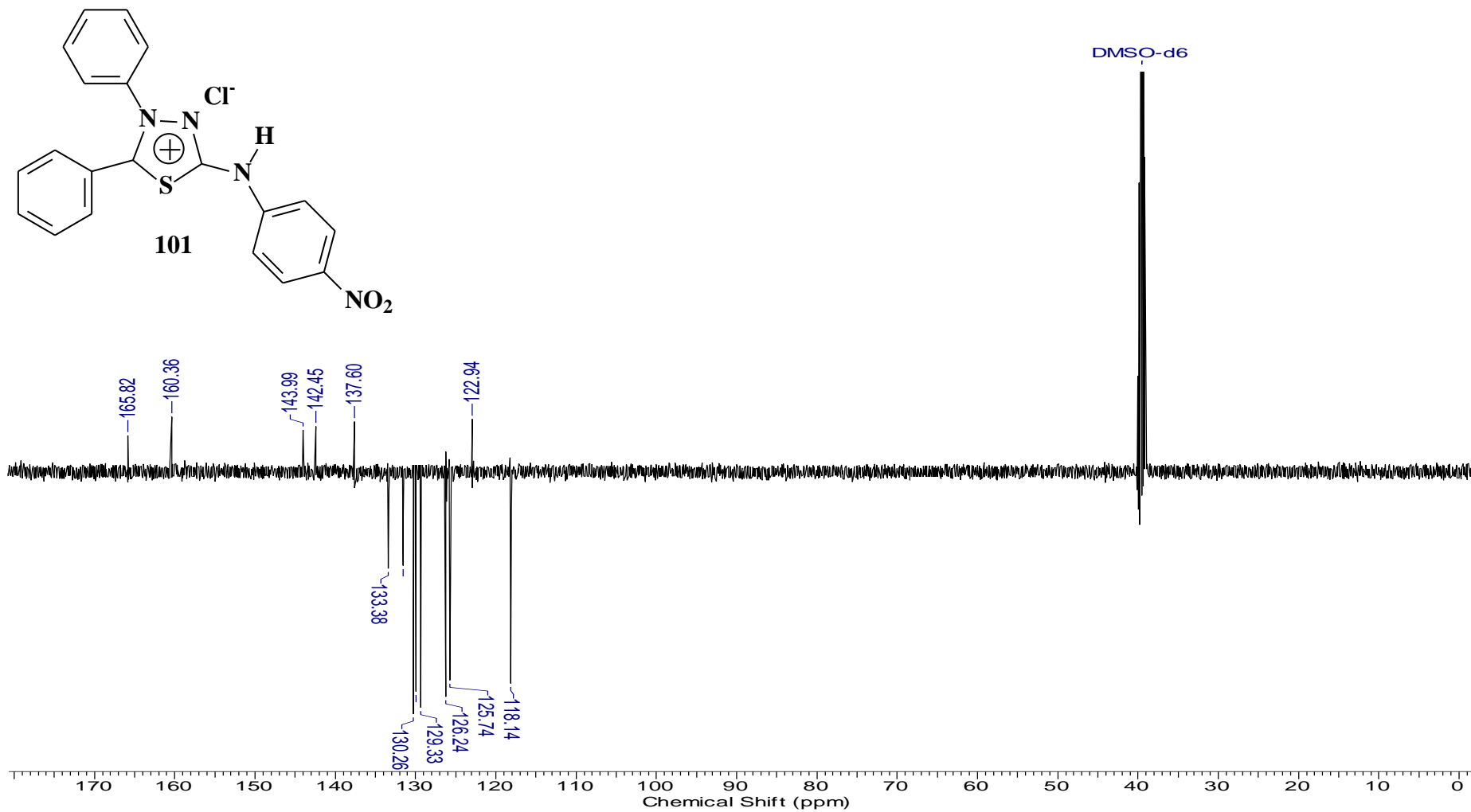
4.14 Espectro de RMN H^1 do Cloreto de 4-fenil-5-(4''''-nitro-fenil)-1,3,4-tiadiazólio-2-fenilamina (101) obtido em $DMSO-d_6$



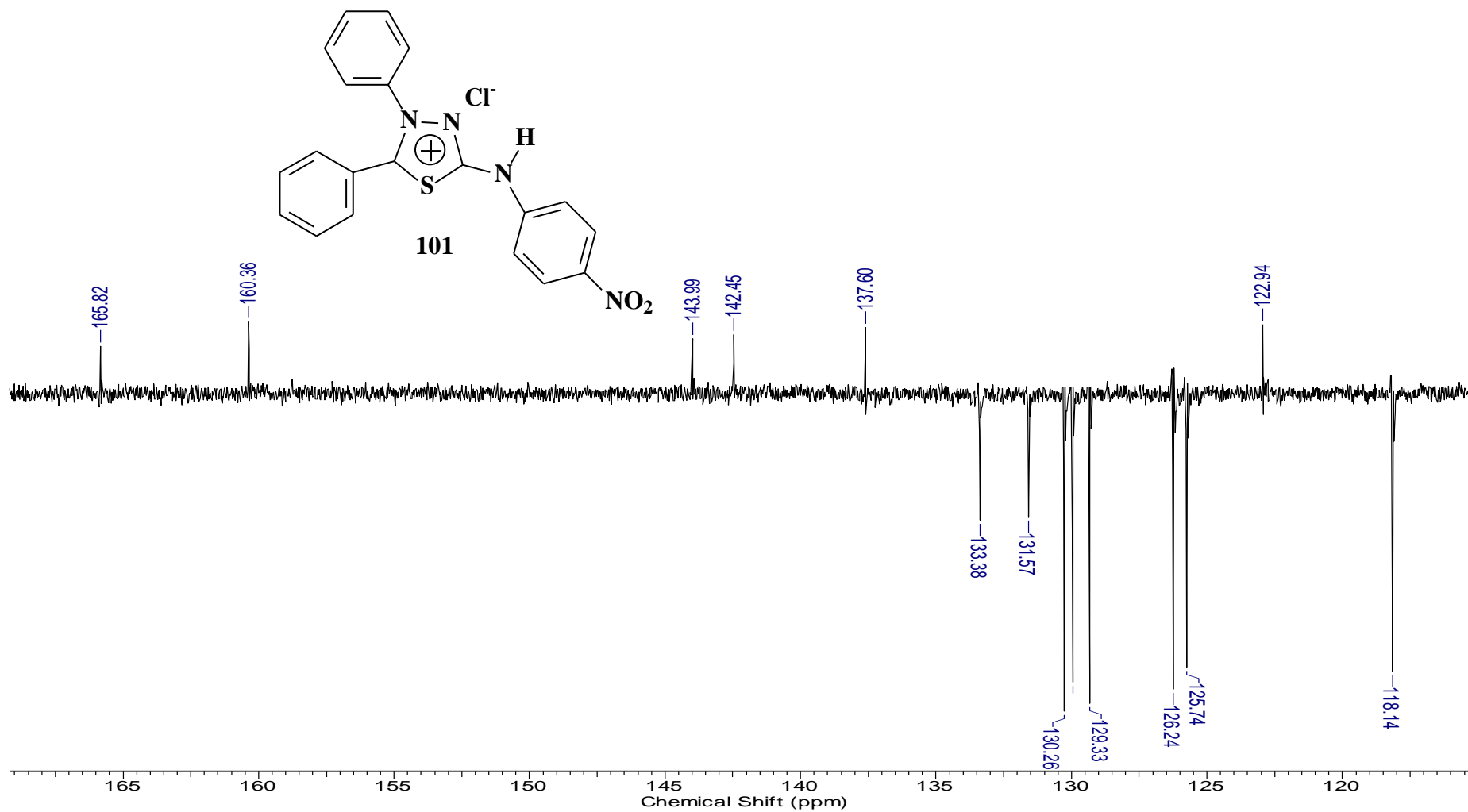
4.15 Expansão do espectro de RMN H¹ do Cloreto de 4-fenil-5-(4''''-nitro-fenil)-1,3,4-tiadiazólio-2-fenilamina (101) obtido em DMSO-d₆



4.16 Espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4'''-nitro-fenil)-1,3,4-tiadiazólio-2-fenilamina (101) obtido em $DMSO-d_6$



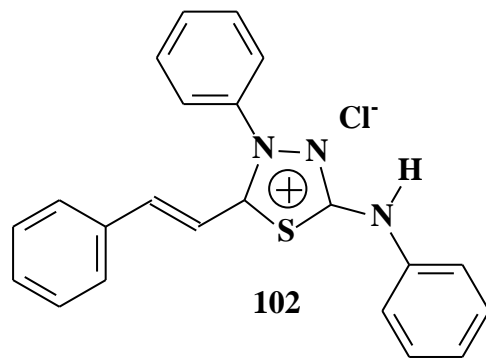
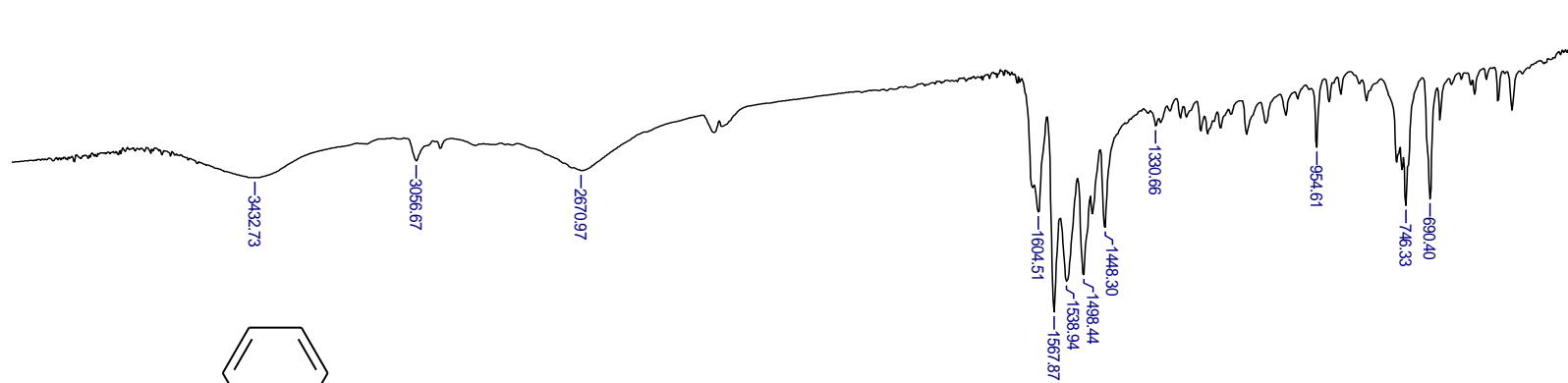
4.17 Expansão do espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4'''-nitro-fenil)-1,3,4-tiadiazólio-2-fenilamina (101) obtido em $DMSO-d_6$



4.18 Espectro de IV do Cloreto de 4-fenil-5-estiril-1,3,4-tiadiazólio-2-fenilamina (102) obtido em pastilha de KBr

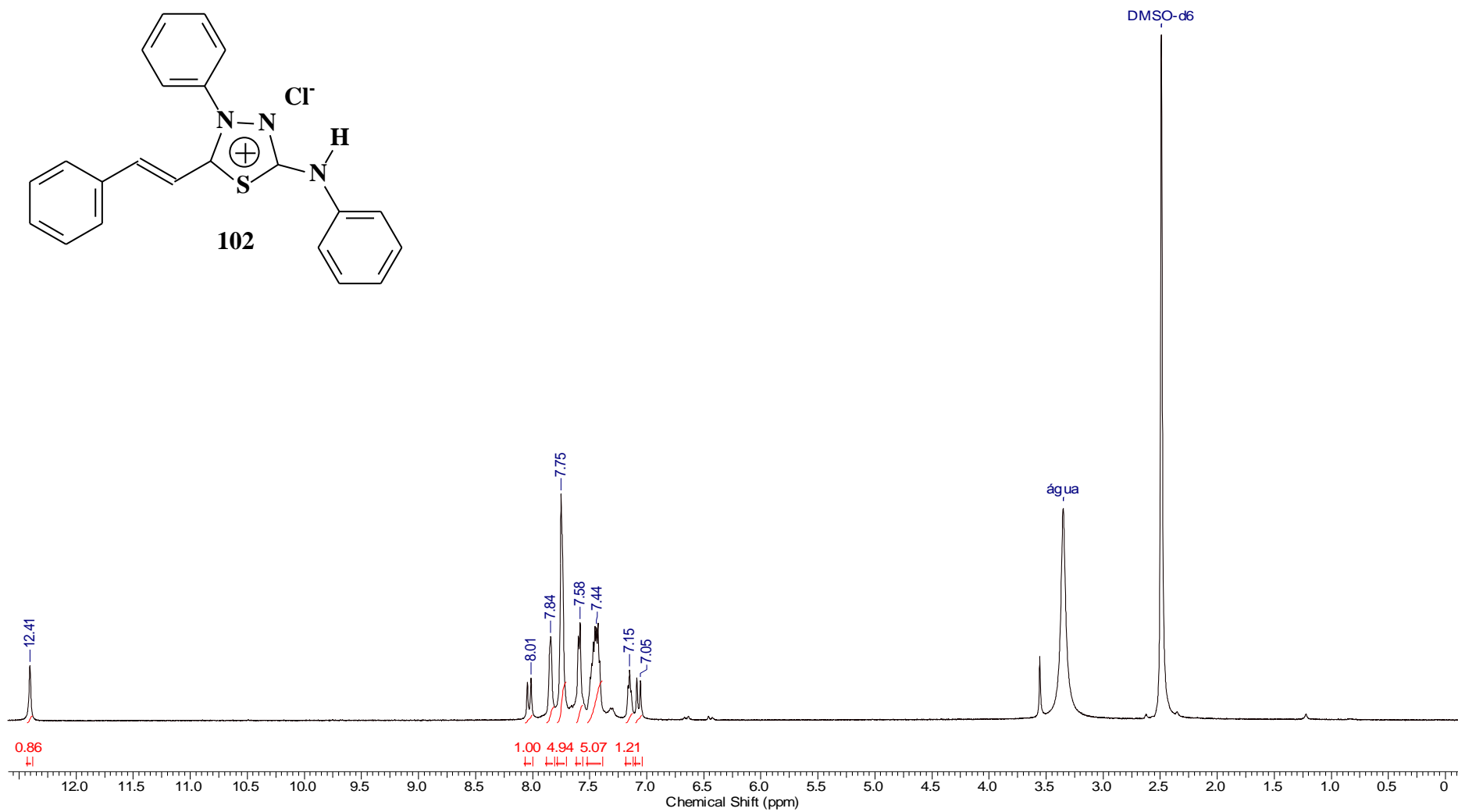
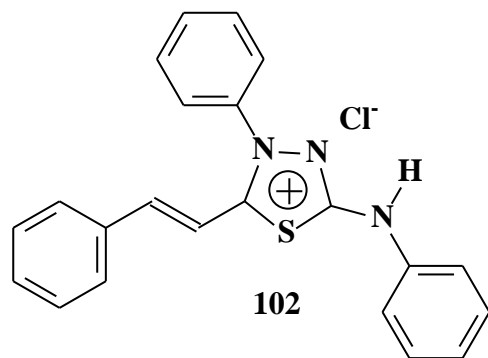
11 Jan 2008

Title	MIDSAL H	Date	25/07/07 08:01:43	Technique	Infrared	Spectral Region	IR	Spectrum Range	349.0582 - 3999.7045 cm ⁻¹
Points Count	1894	Data Spacing	1.9285 cm ⁻¹						

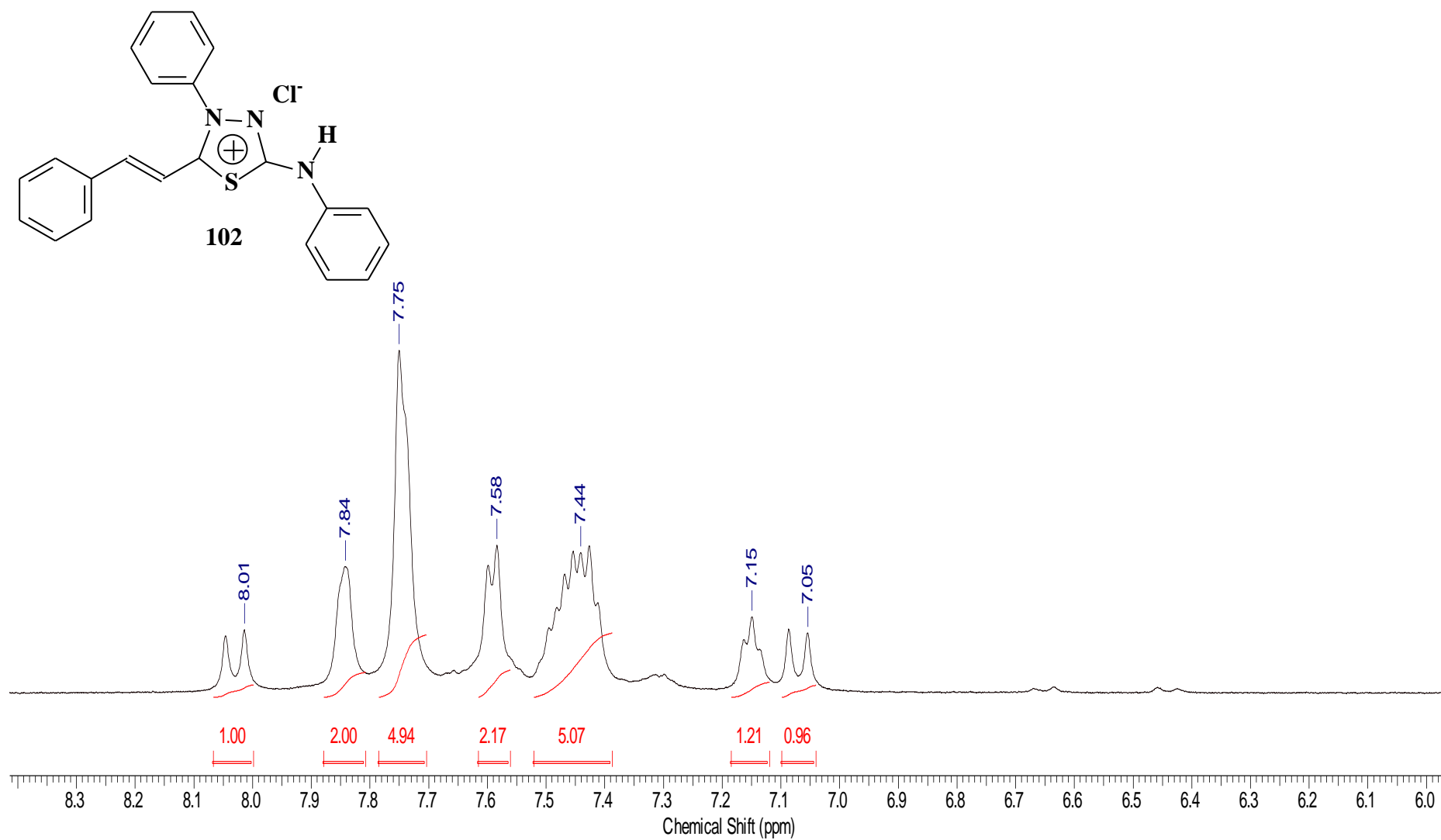


4000 3000 2000 1000
Wavenumber (cm⁻¹)

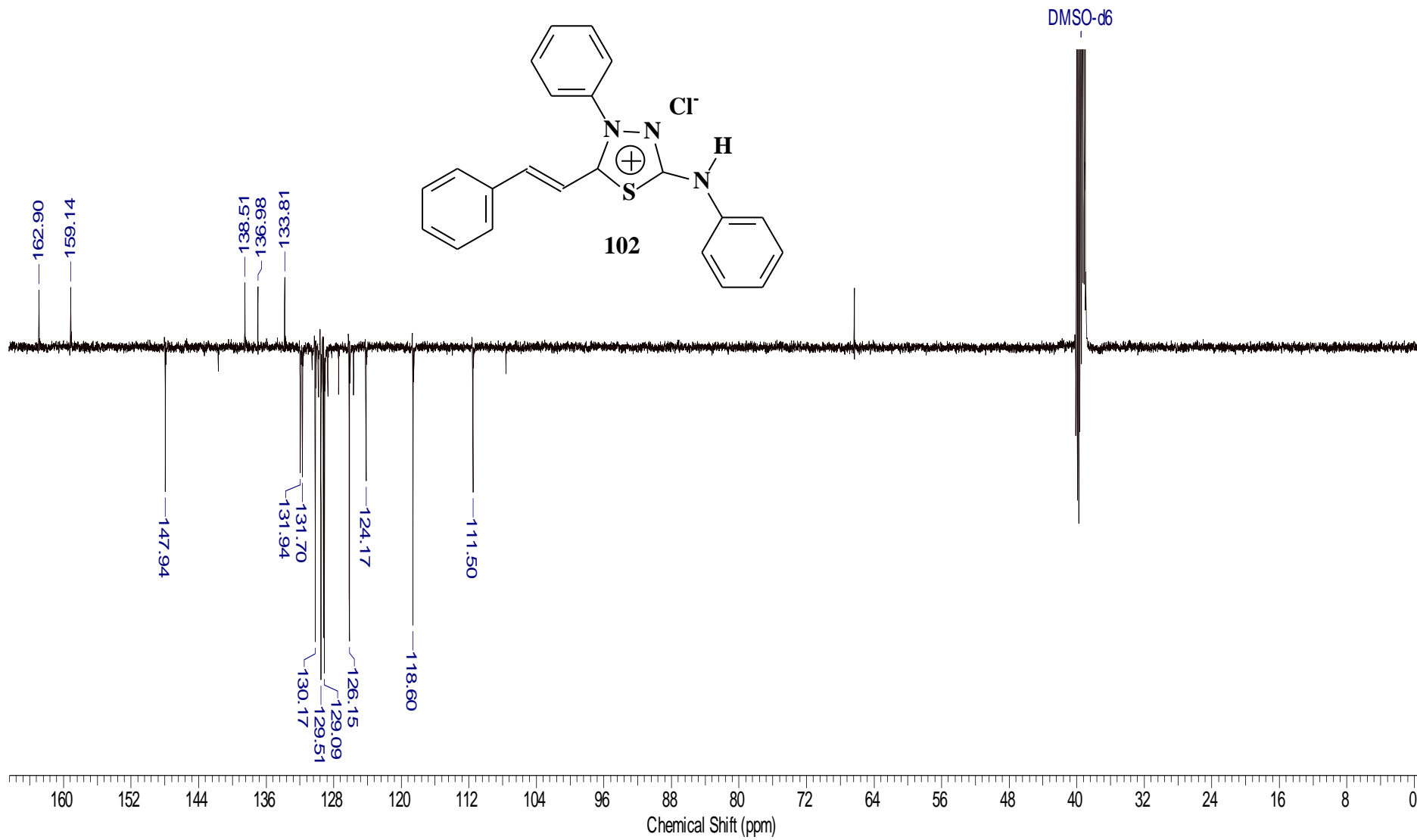
4.19 Espectro de RMN ^1H do Cloreto de 4-fenil-5-estiril-1,3,4-tiadiazólio-2-fenilamina (102) obtido em $\text{DMSO-}d_6$



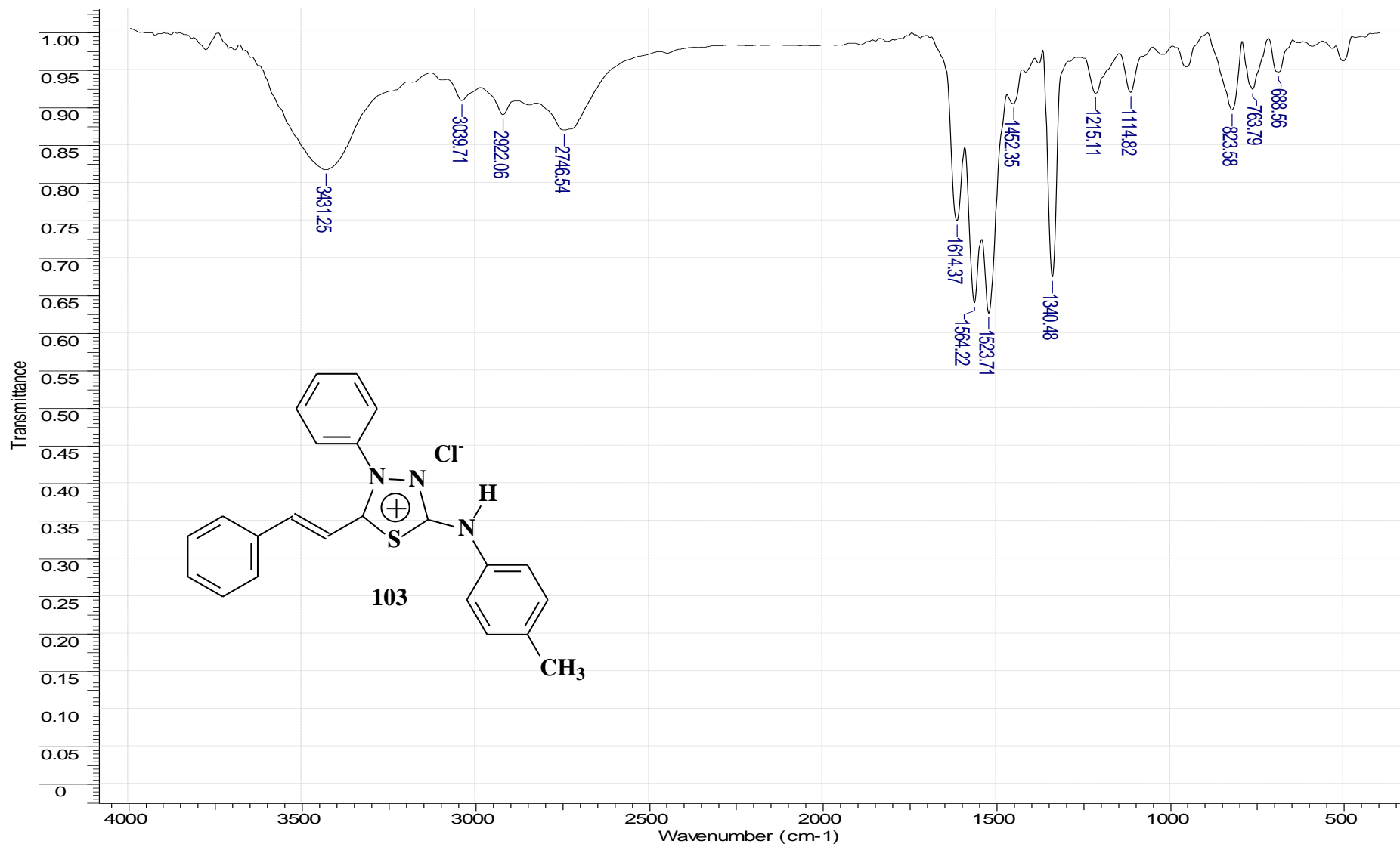
4.20 Expansão do espectro de RMN ^1H do Cloreto de 4-fenil-5-estiril-1,3,4-tiadiazólio-2-fenilamina (102) obtido em $\text{DMSO-}d_6$



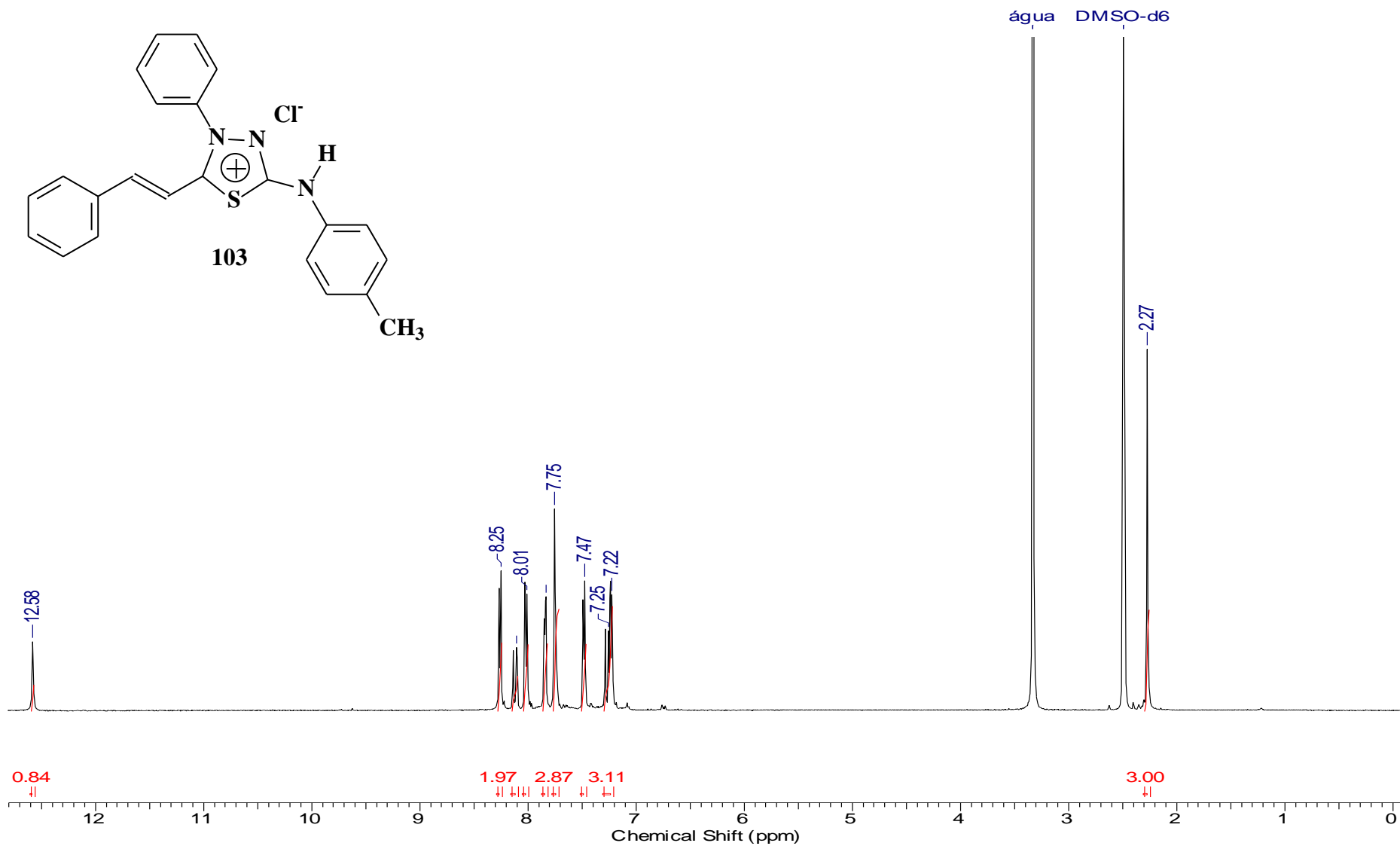
4.21 Espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-estiril-1,3,4-tiadiazólio-2-fenilamina (102) obtido em $DMSO-d_6$



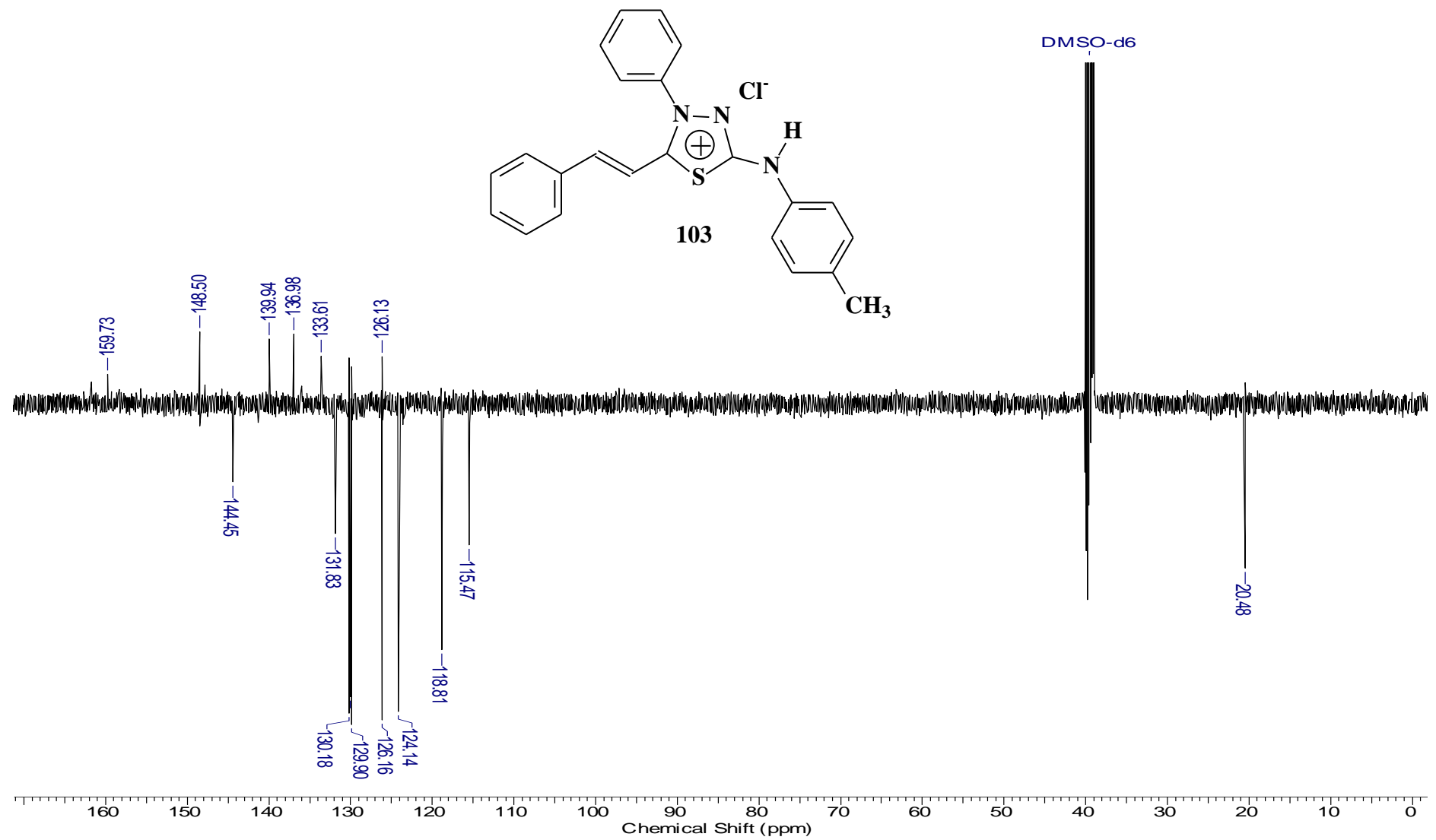
4.22 Espectro de IV do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4'''-metil-fenil)amina (103) obtido em pastilha de KBr



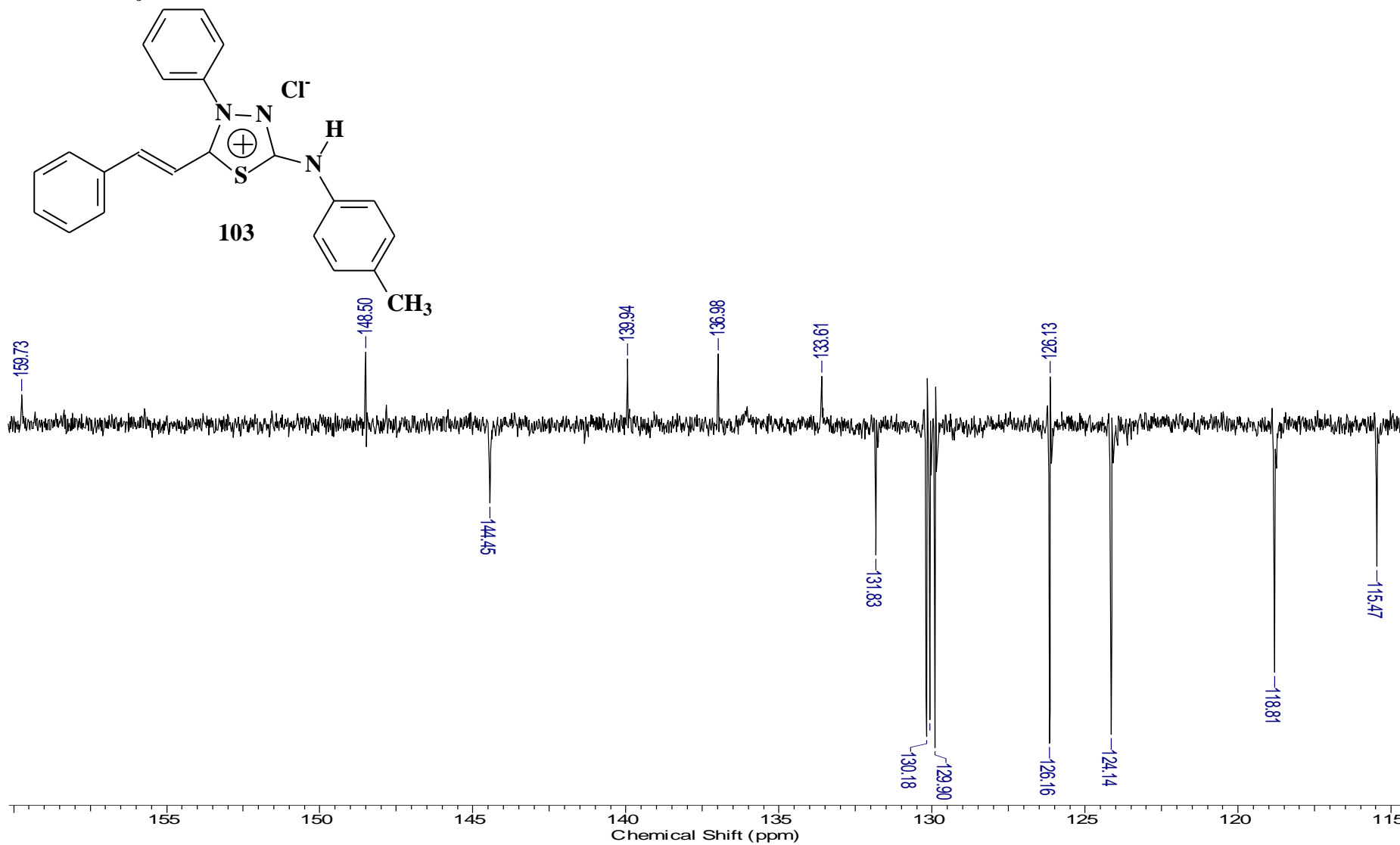
4.23 Espectro de RMN ¹H do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4''-metil-fenil)amina (103) obtido em DMSO-d₆



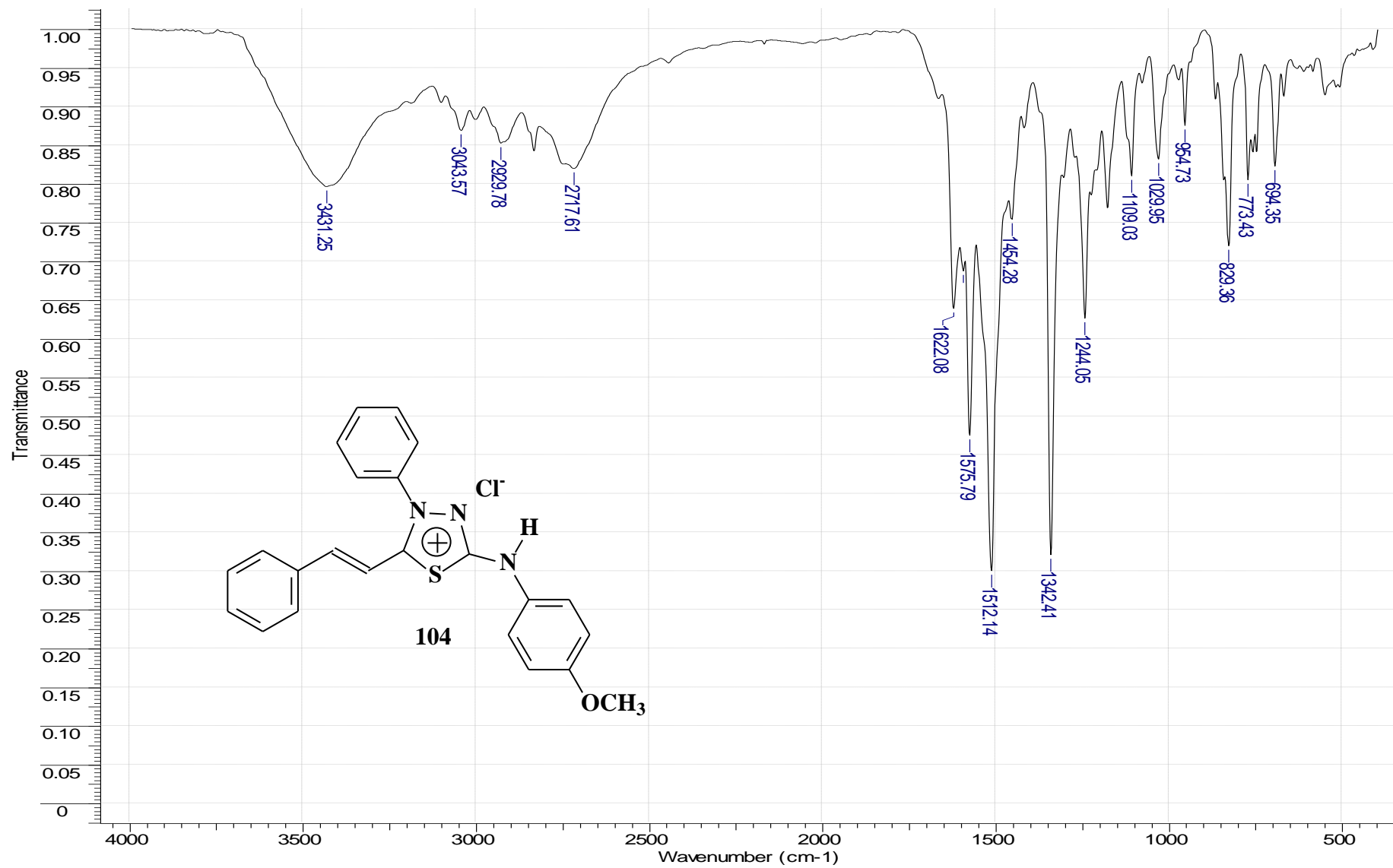
4.24 Espectro de RMN C¹³ (DEPTQ) do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4'''-metil-fenil)amina (103) obtido em DMSO-d₆



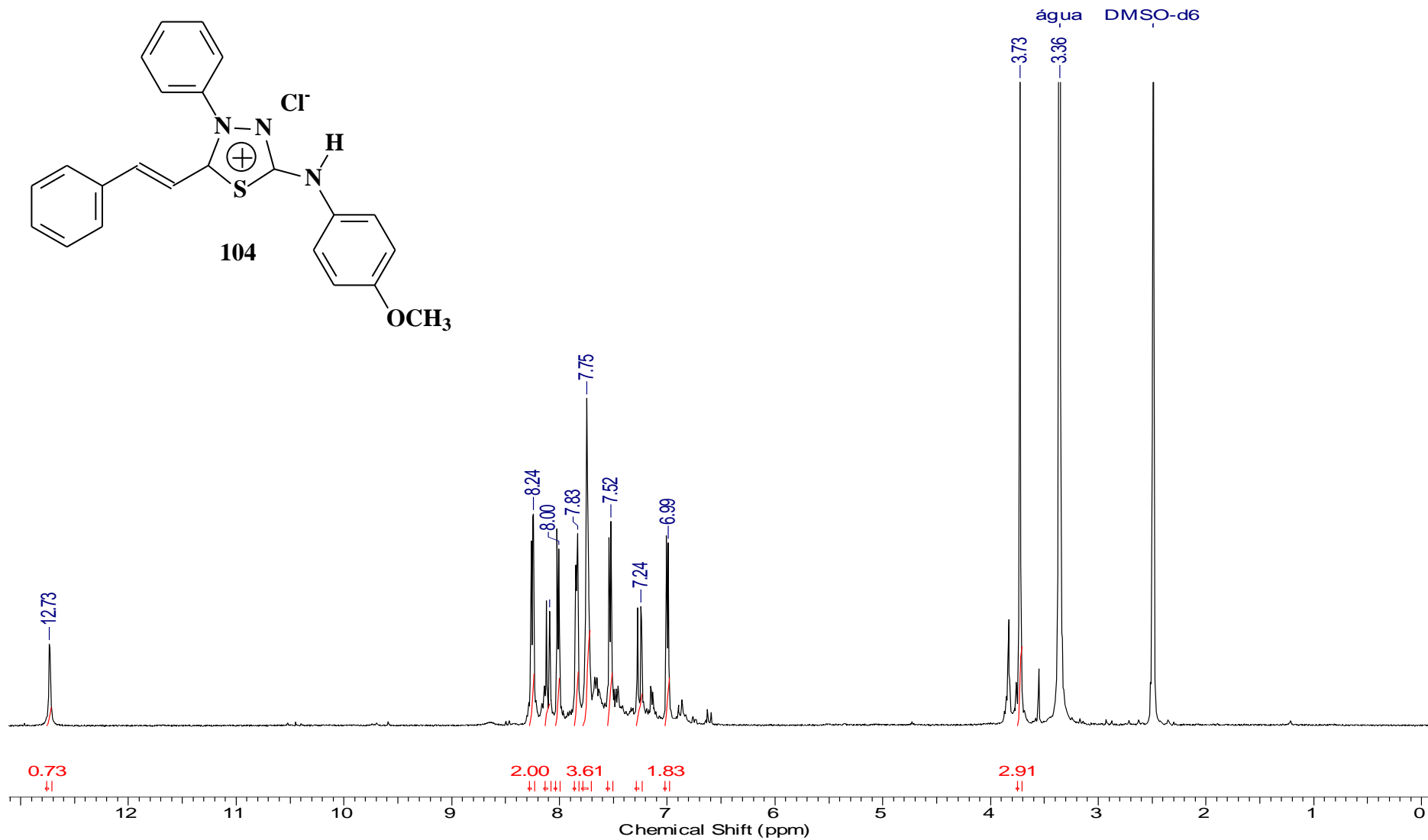
4.25 Expansão do espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4''-metil-fenil)amina (103) obtido em $DMSO-d_6$



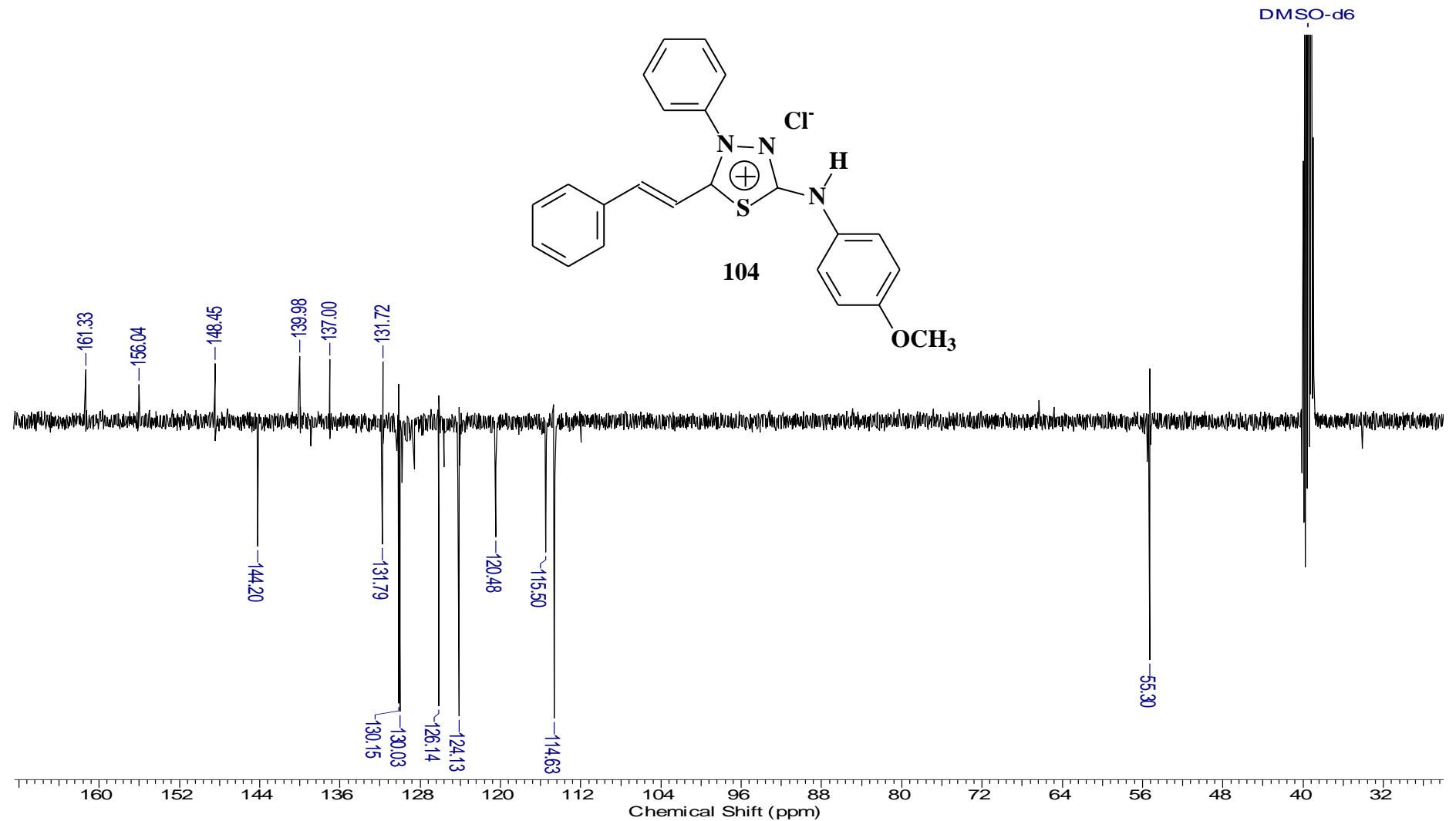
4.26 Espectro de IV do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4'''-metoxi-fenil)amina (104) obtido em pastilha de KBr



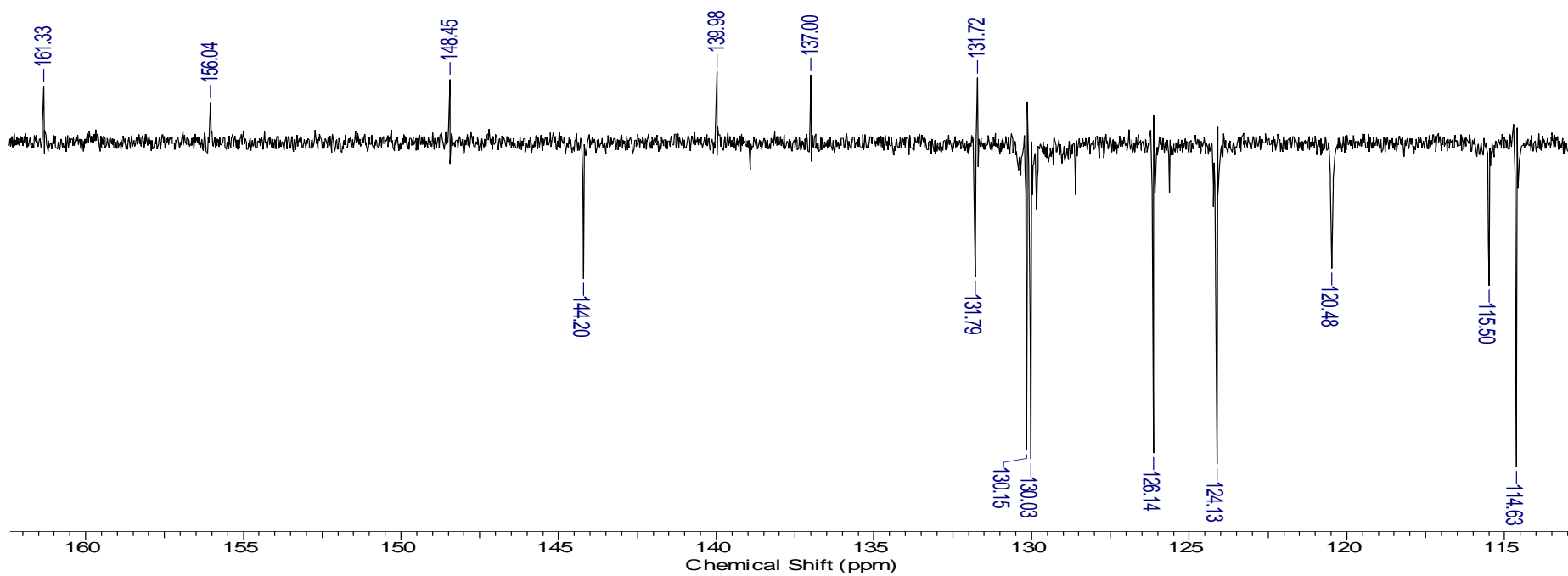
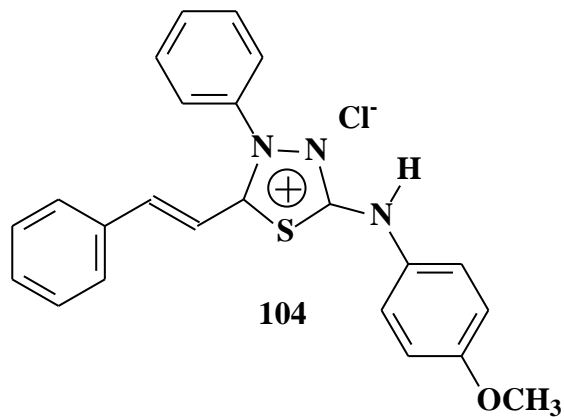
4.27 Espectro de RMN ¹H do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4'''-metoxi-fenil)amina (104) obtido em DMSO-d₆



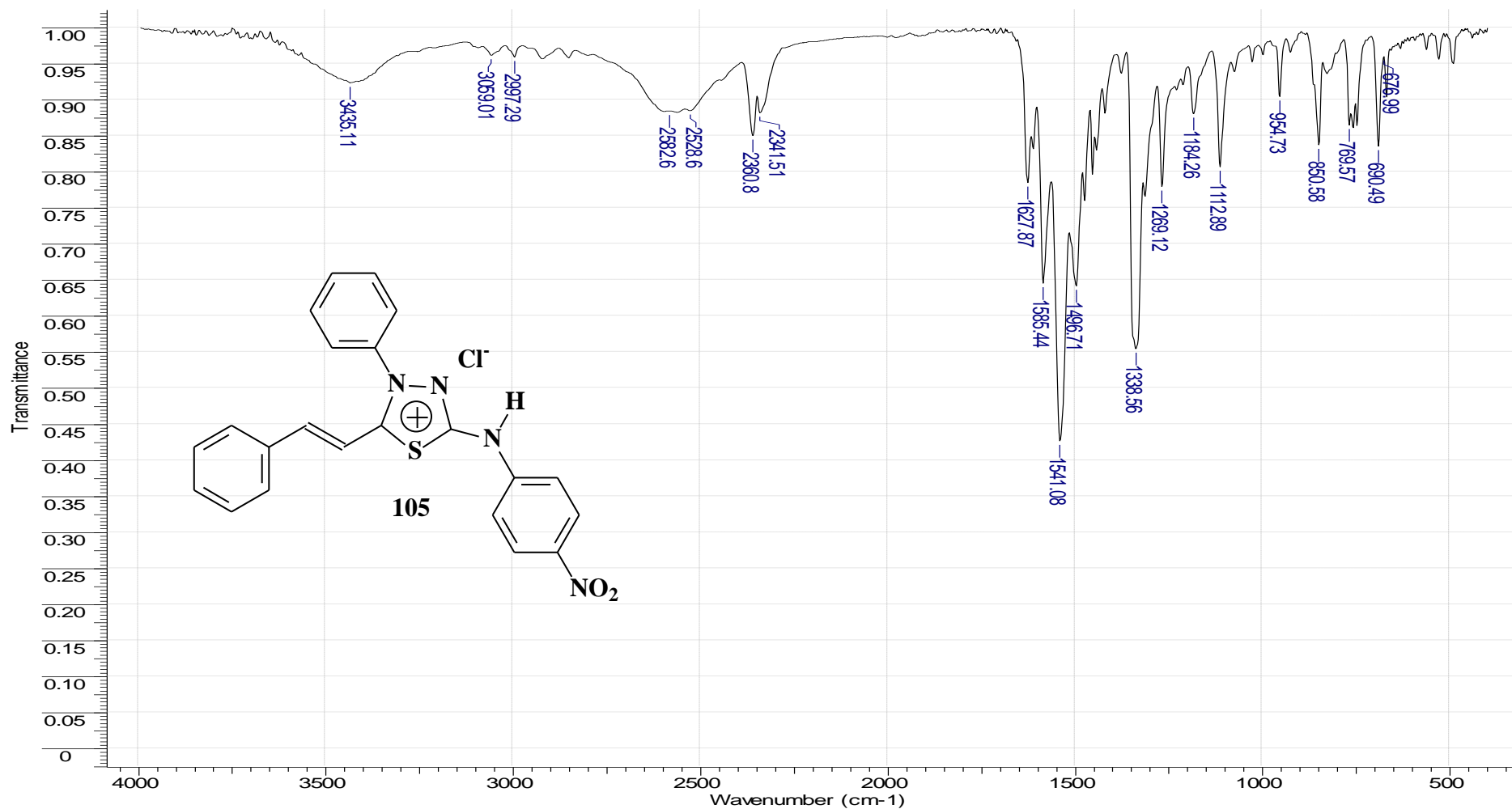
4.28 Espectro de RMN C¹³ (DEPTQ) do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4'''-metoxi-fenil)amina (104) obtido em DMSO-d₆



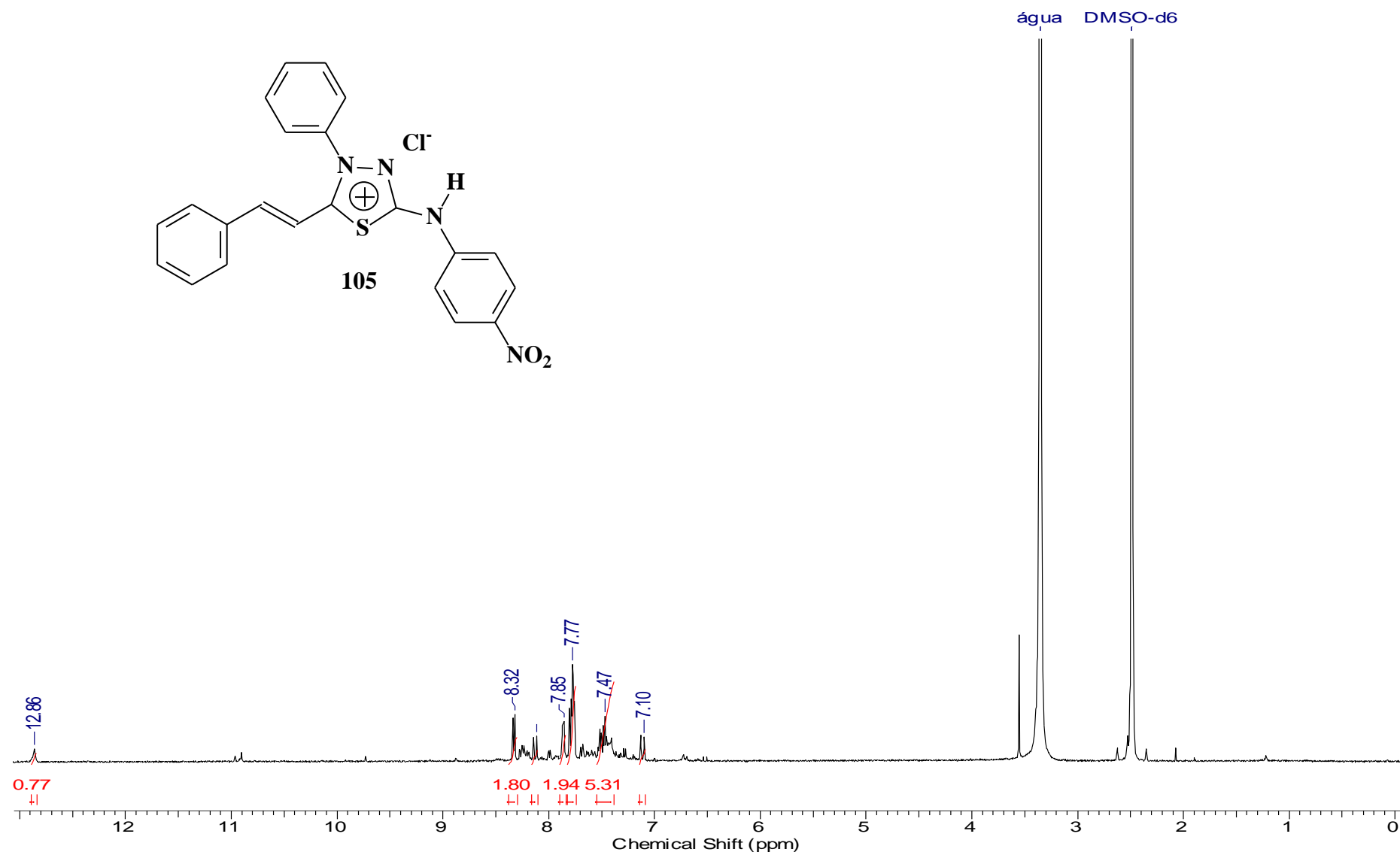
4.29 Expansão do espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-esteril-1,3,4-tiadiazólio-2-(4''''-metoxi-fenil)amina (104) obtido em $DMSO-d_6$



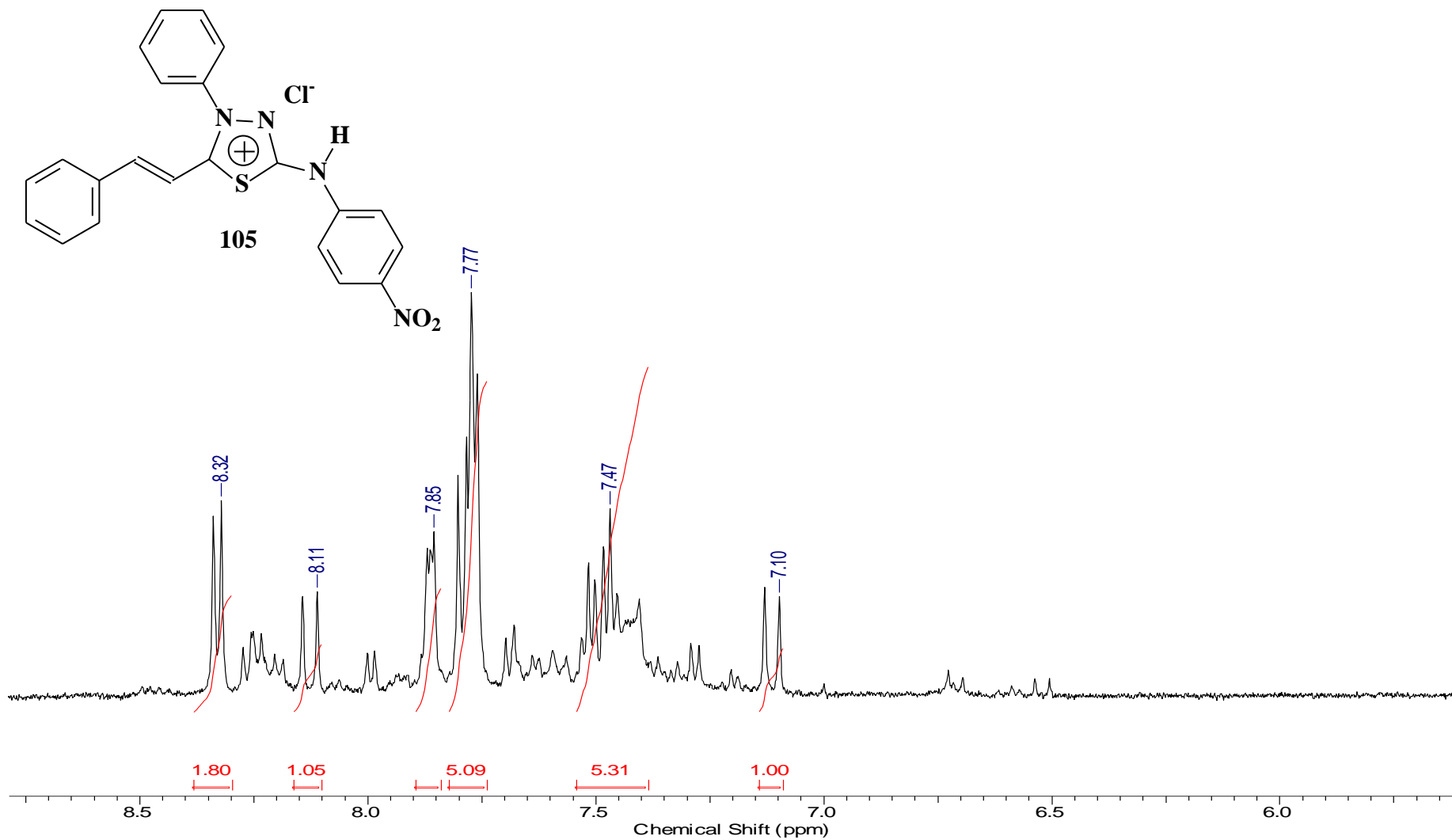
4.30 Espectro de IV do Cloreto de 4-fenil-5-(4''-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (105) obtido em pastilha de KBr



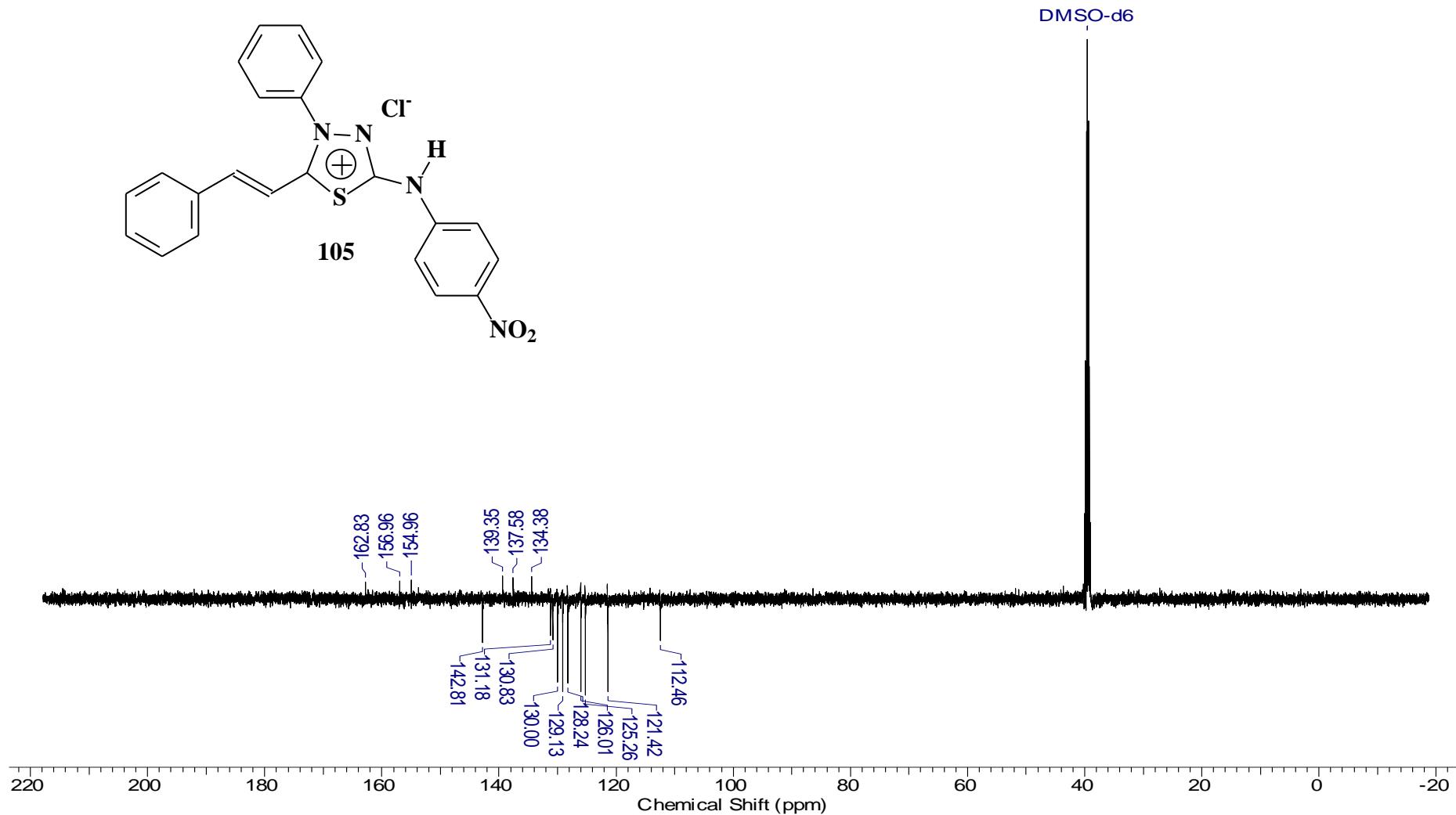
4.31 Espectro de RMN ^1H do Cloreto de 4-fenil-5-(4'''-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (105) obtido em $\text{DMSO-}d_6$



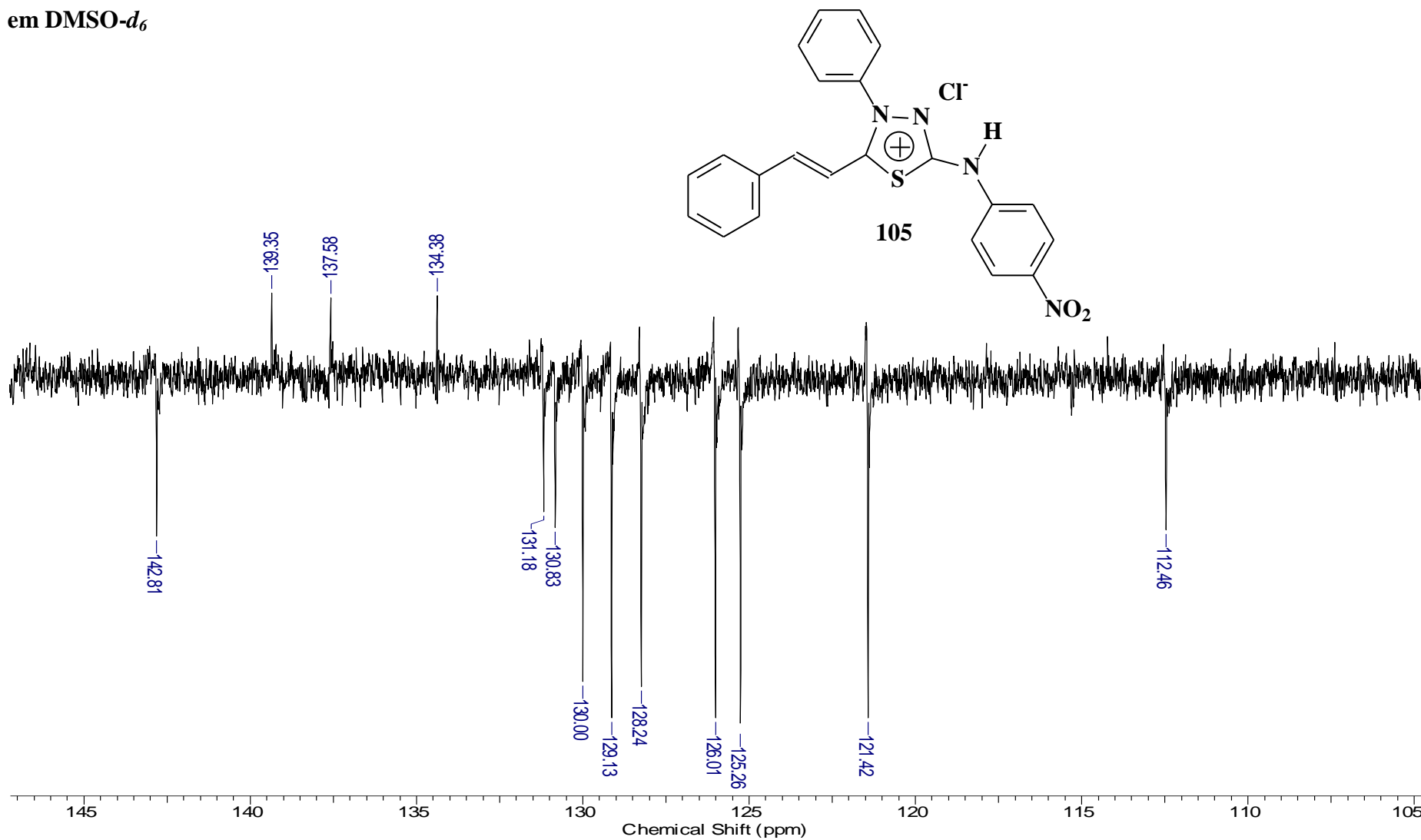
4.32 Expansão do espectro de RMN ^1H do Cloreto de 4-fenil-5-(4'''-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (105) obtido em $\text{DMSO-}d_6$



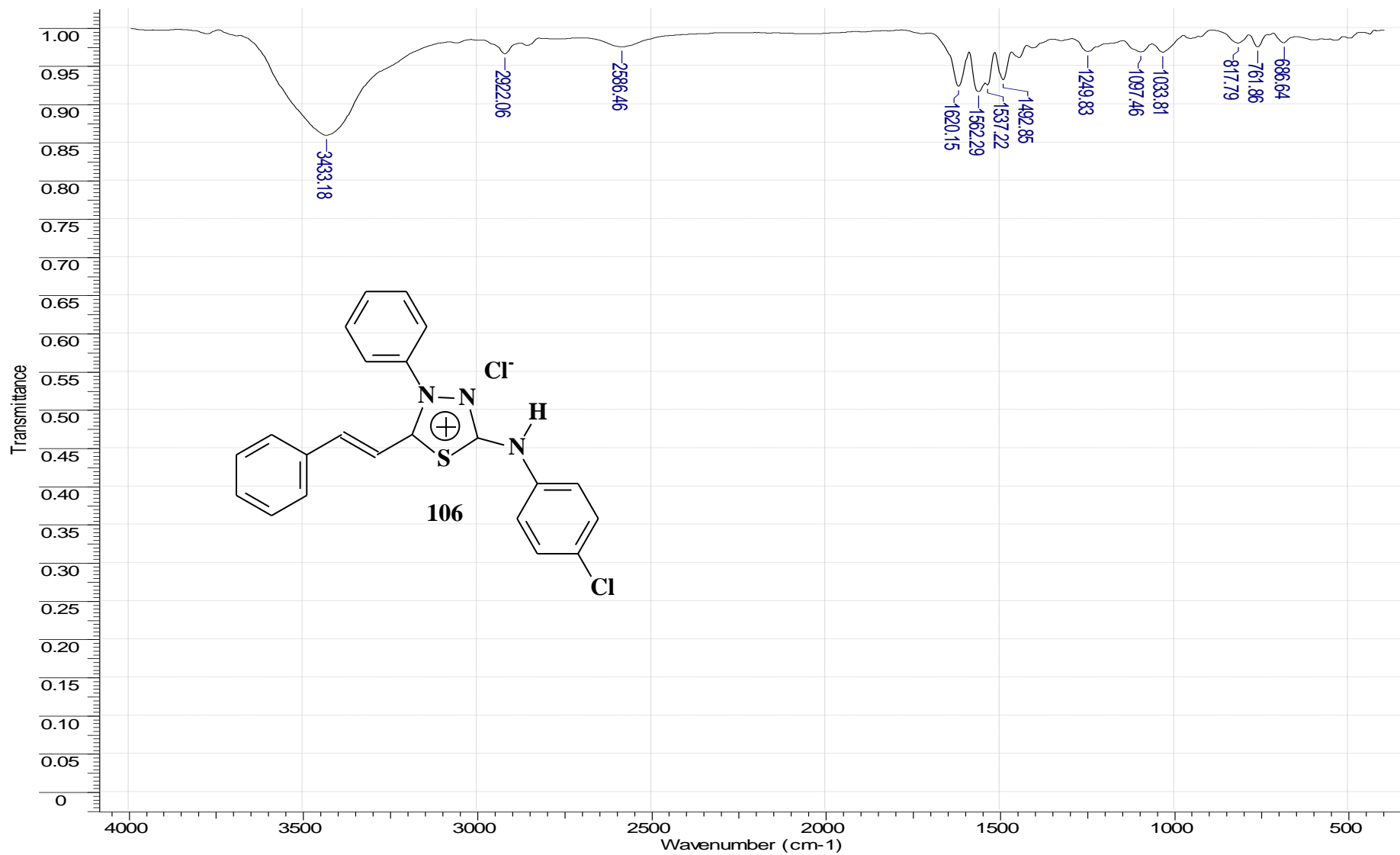
4.33 Espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4'''-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (105) obtido em DMSO- d_6



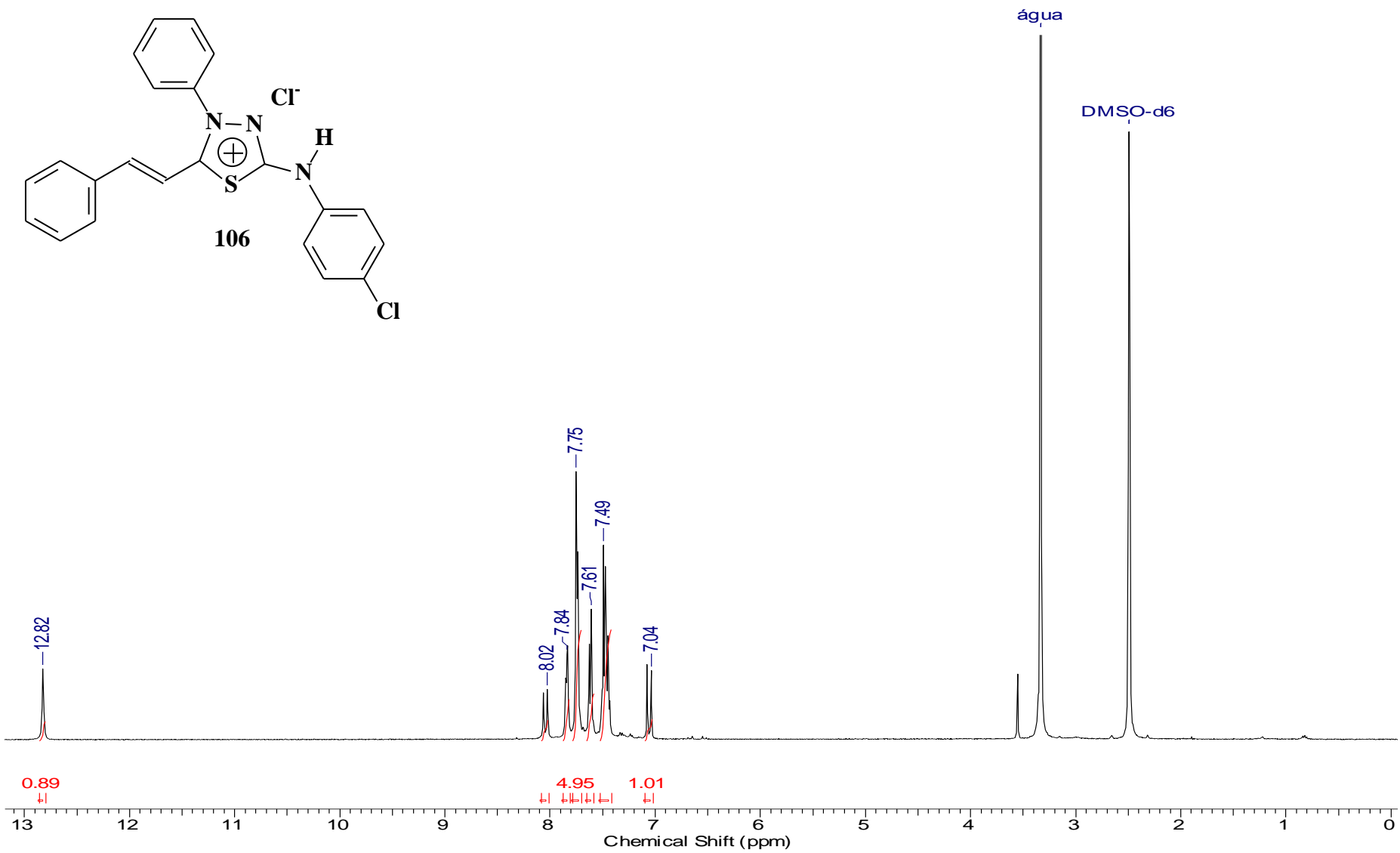
4.34 Expansão do espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4''''-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (105) obtido em $DMSO-d_6$



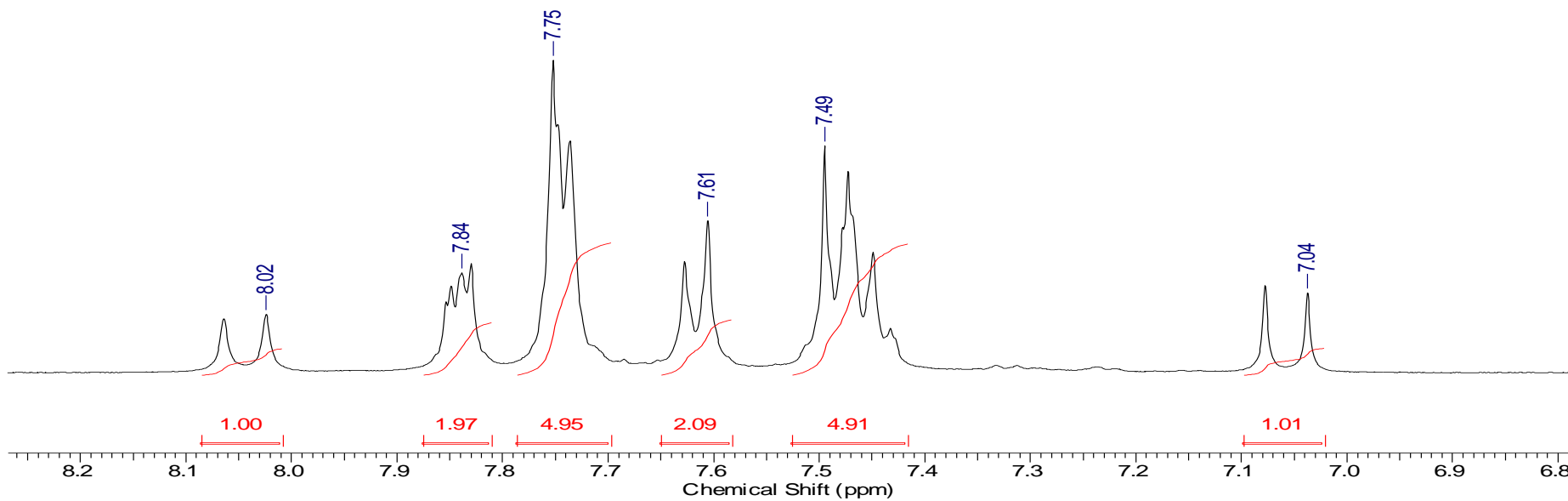
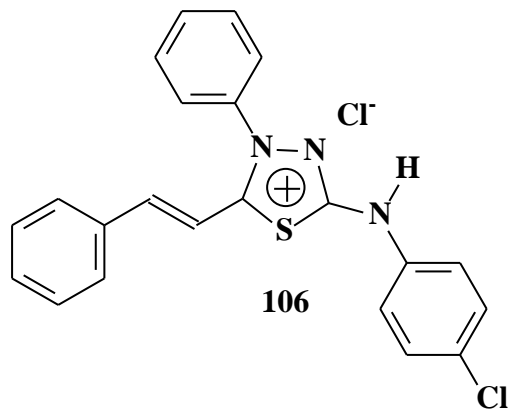
4.35 Espectro de IV do Cloreto de 4-fenil-5-(4''-cloro-esteril)-1,3,4-tiadiazólio-2-fenilamina (106) obtido em pastilha de KBr



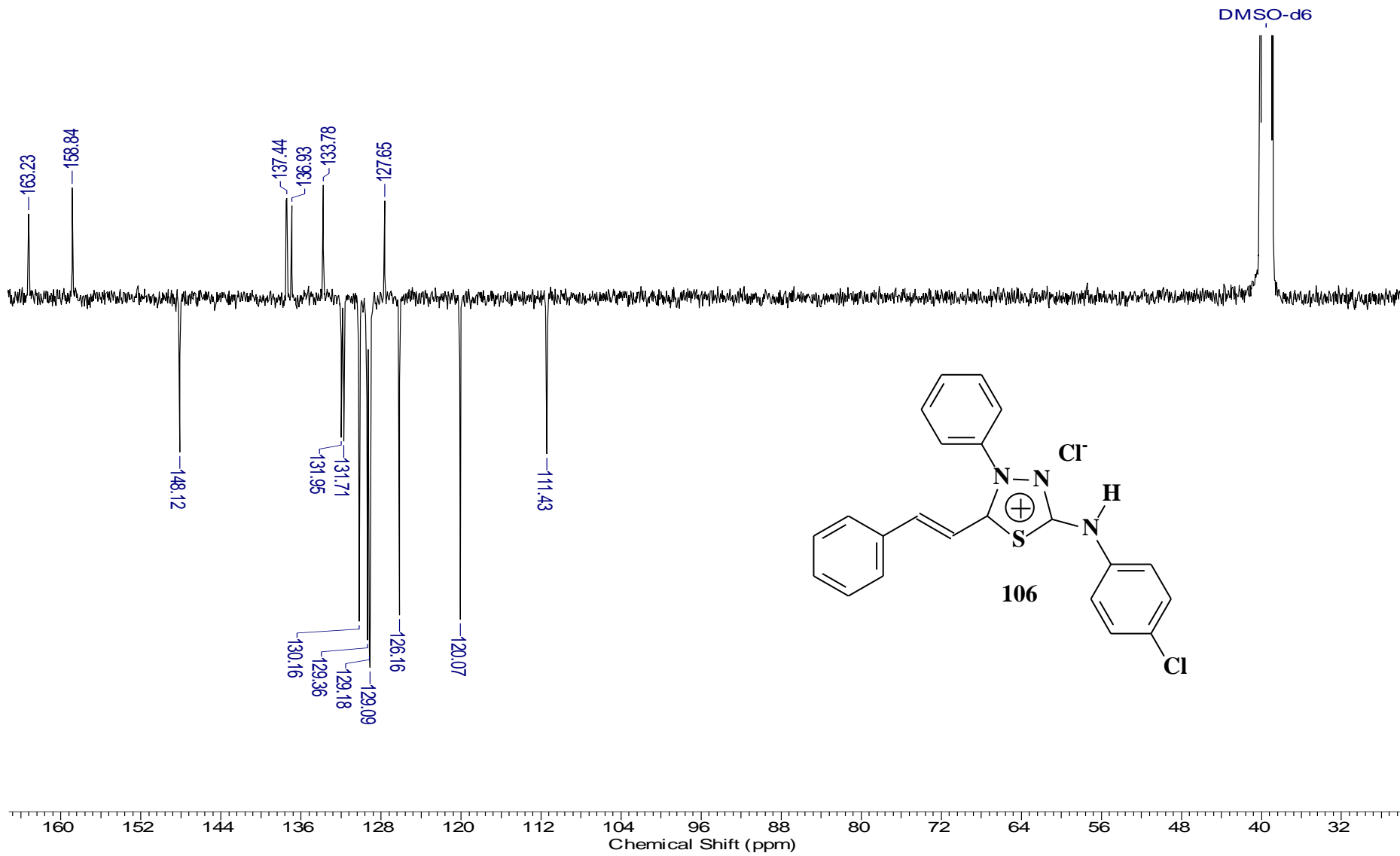
4.36 Espectro de RMN ^1H do Cloreto de 4-fenil-5-(4''''-cloro-esteril)-1,3,4-tiadiazólio-2-fenilamina (106) obtido em $\text{DMSO-}d_6$



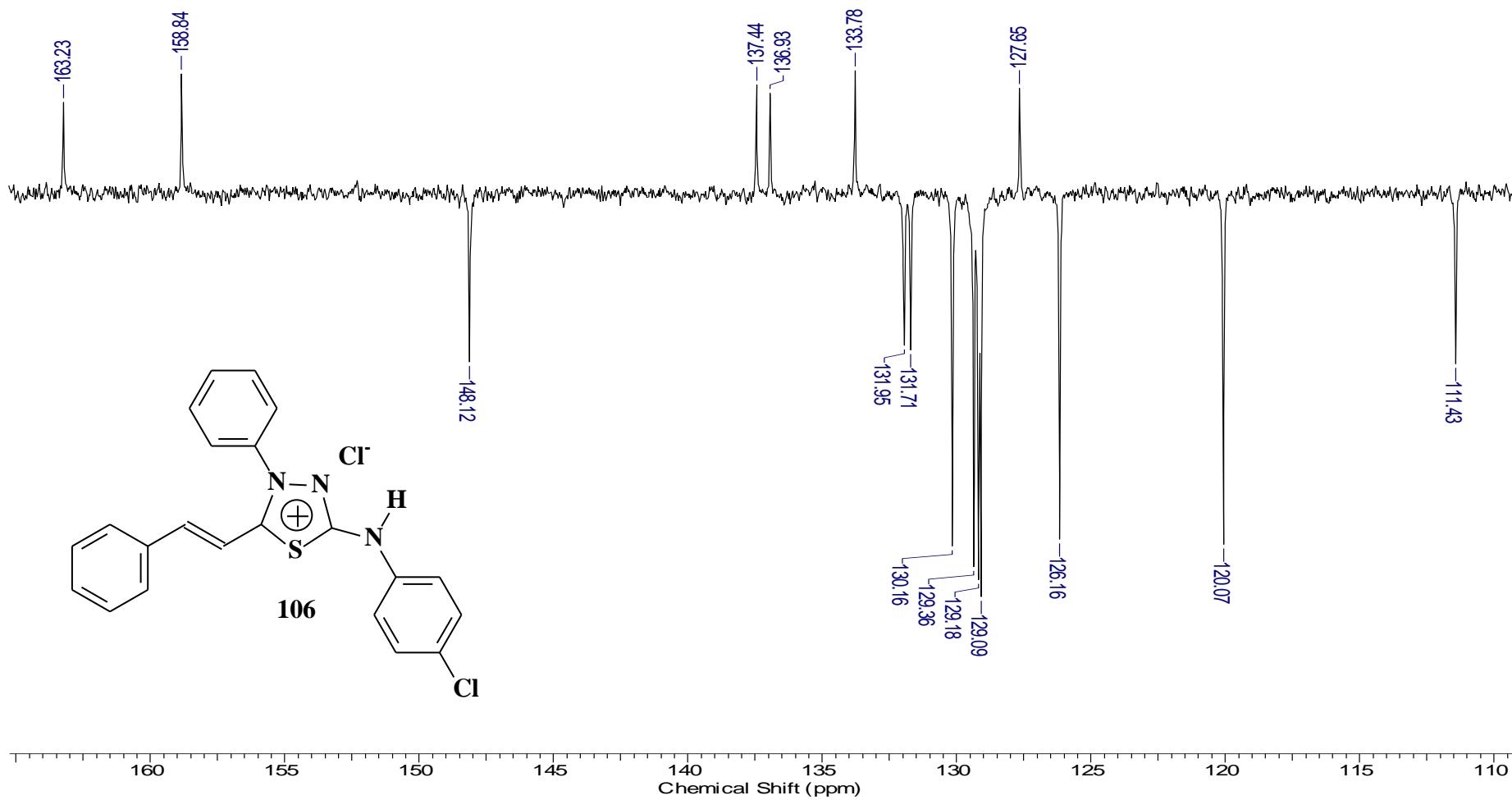
4.37 Expansão do espectro de RMN ¹H do Cloreto de 4-fenil-5-(4'''-cloro-esteril)-1,3,4-tiadiazólio-2-fenilamina (106) obtido em DMSO-*d*₆



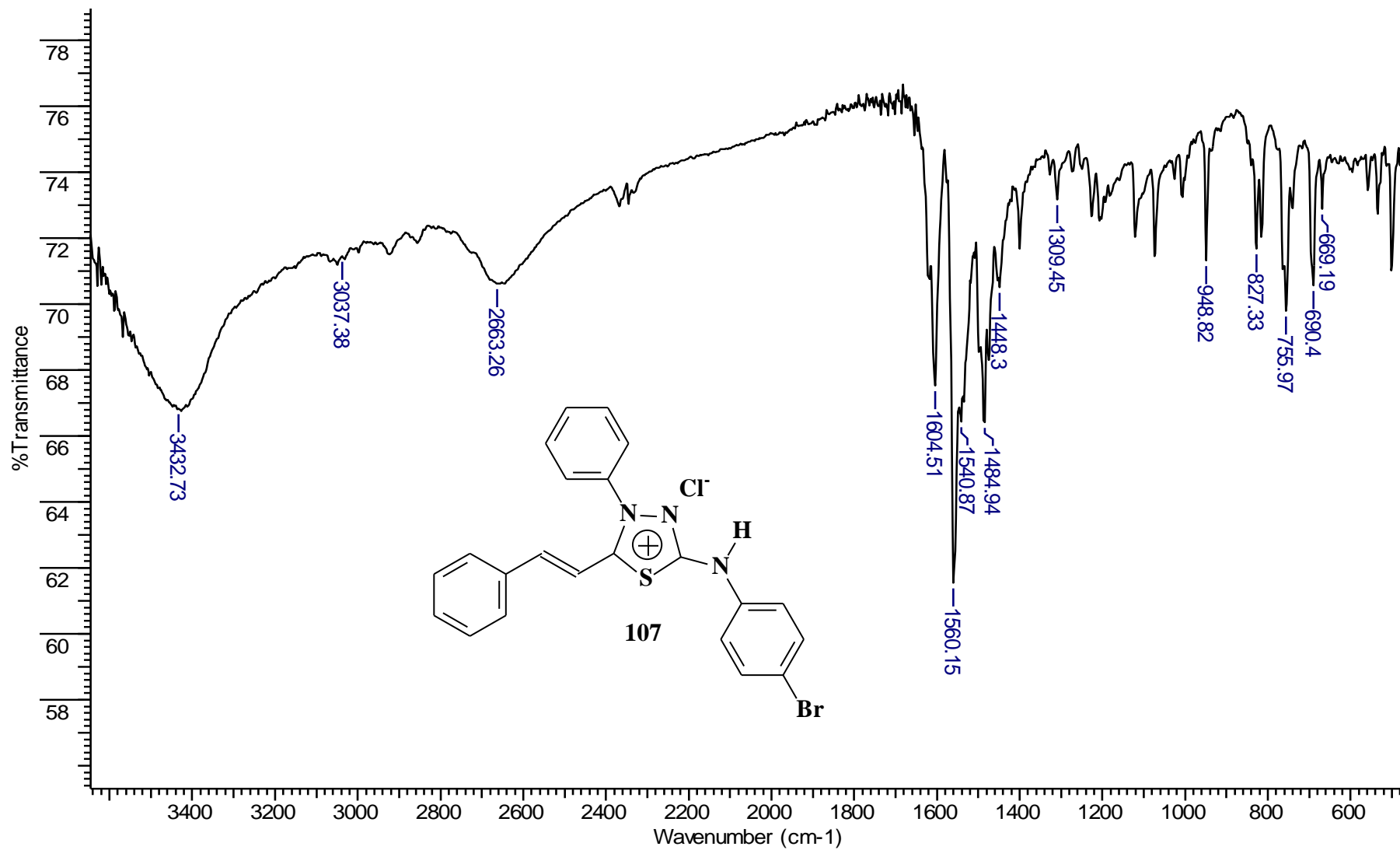
4.38 Espectro de RMN C¹³ (DEPTQ) do Cloreto de 4-fenil-5-(4'''-cloro-esteril)-1,3,4-tiadiazólio-2-fenilamina (106) obtido em DMSO-d₆



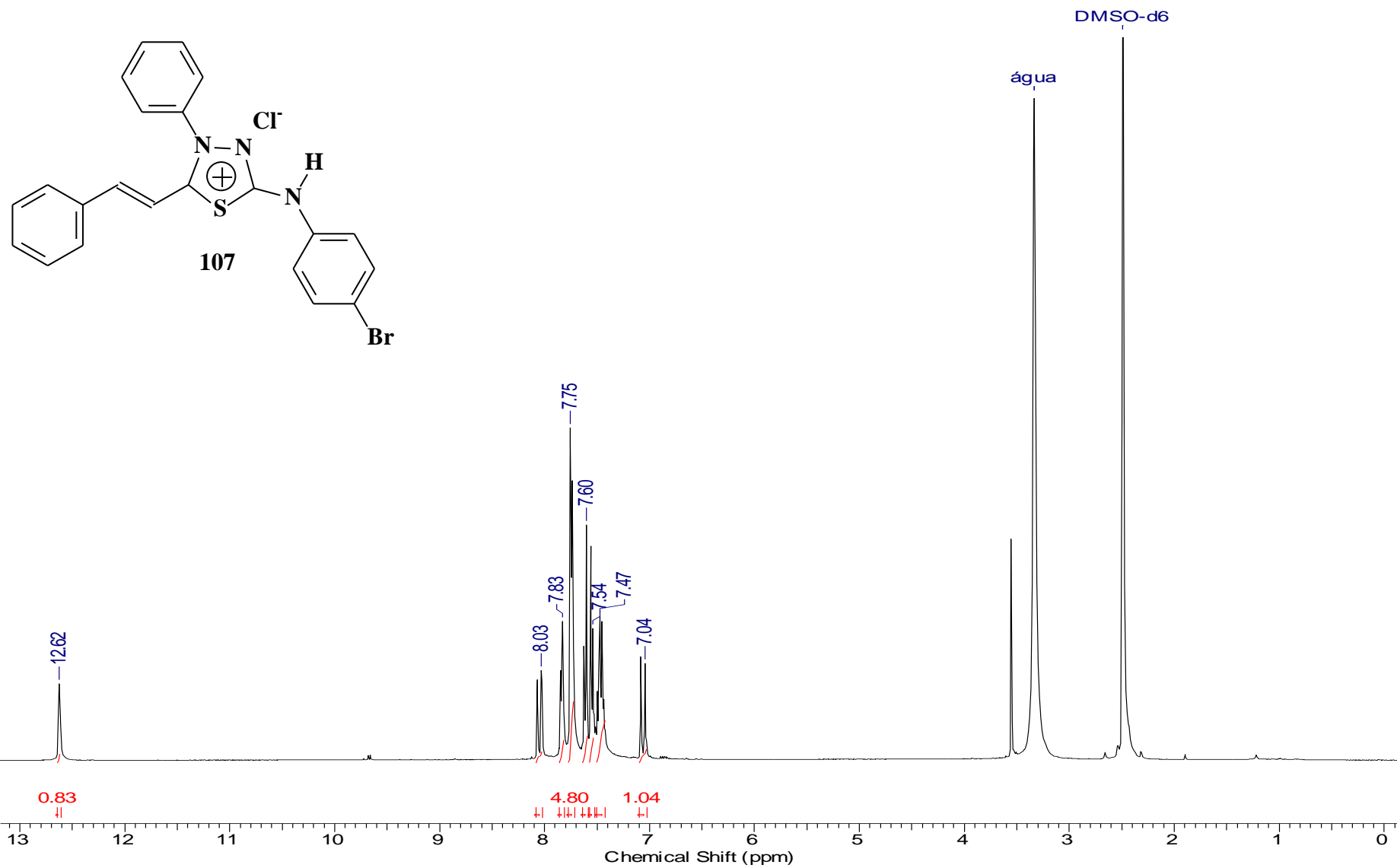
4.39 Expansão do espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4'''-cloro-esteril)-1,3,4-tiadiazólio-2-fenilamina (106) obtido em $DMSO-d_6$



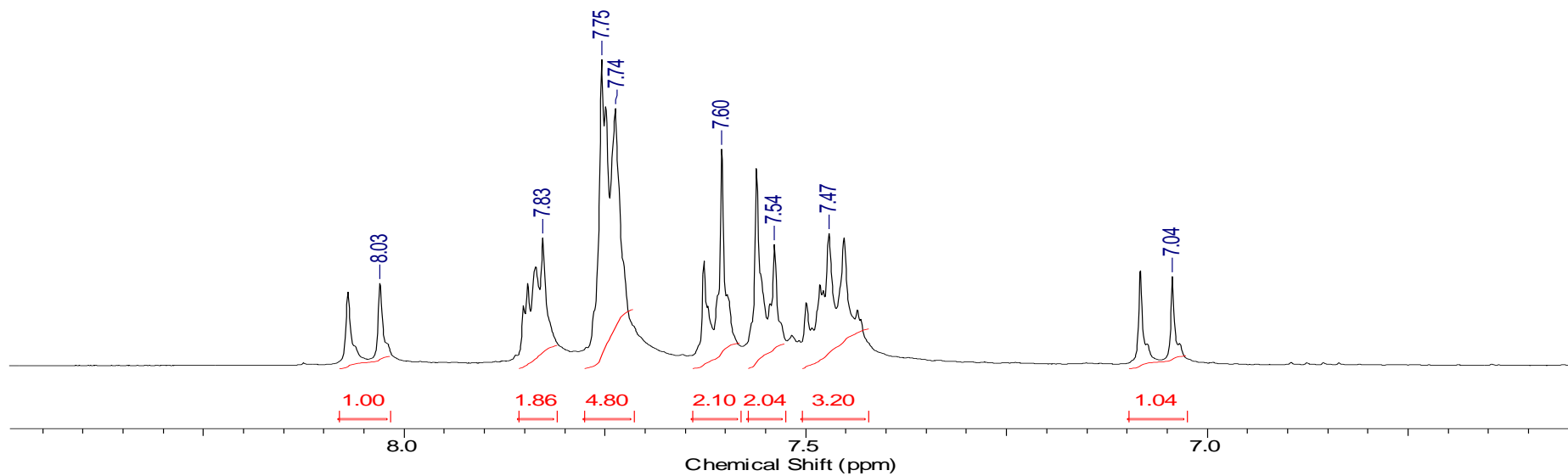
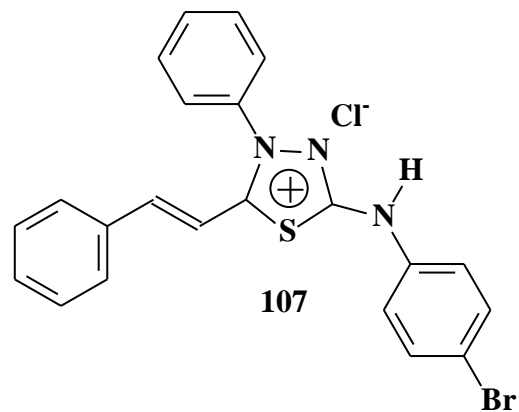
4.40 Espectro de IV do Cloreto de 4-fenil-5-(4'''-bromo-esteril)-1,3,4-tiadiazólio-2-fenilamina (107) obtido em pastilha de KBr



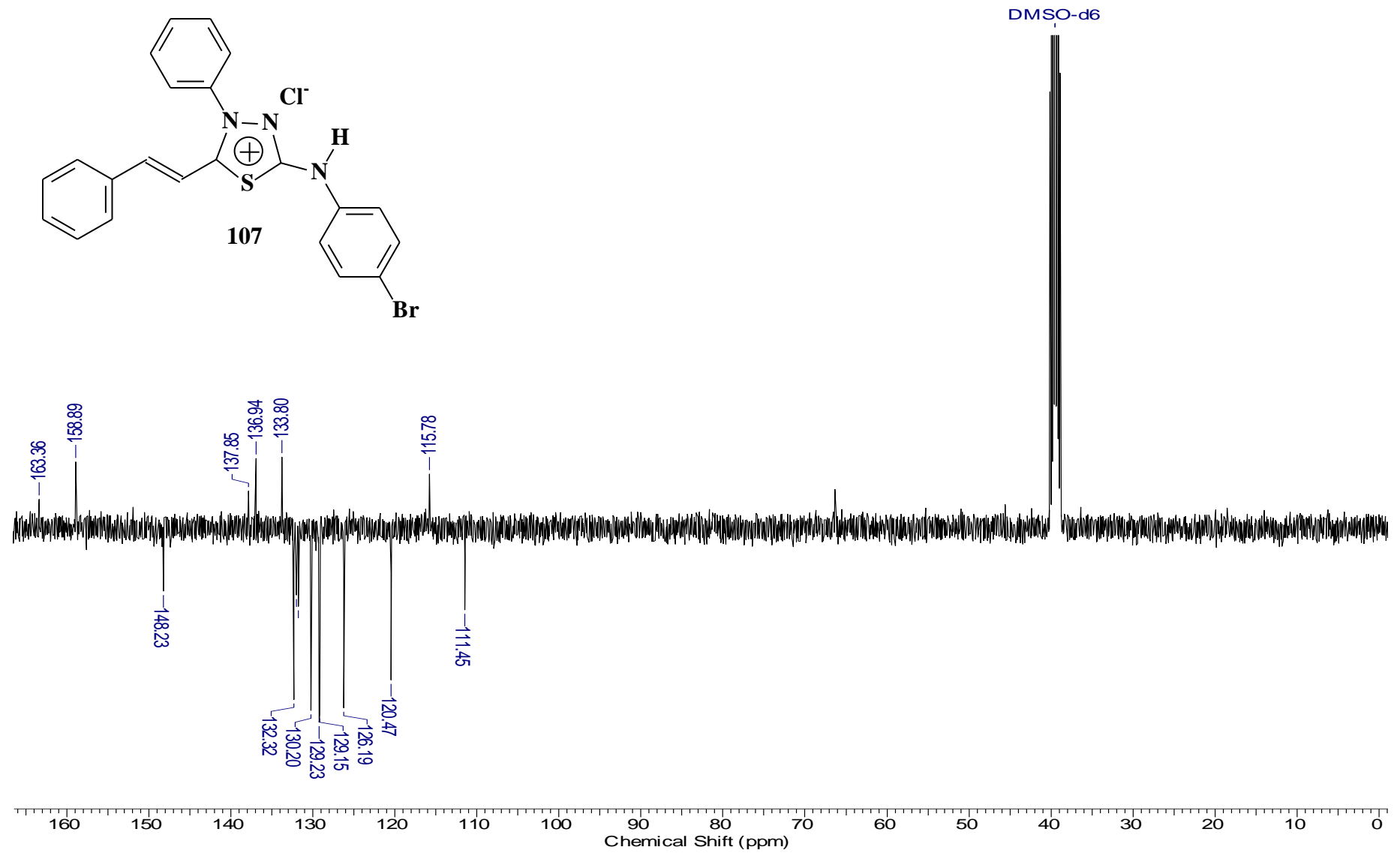
4.41 Espectro de RMN ^1H do Cloreto de 4-fenil-5-(4''''-bromo-esteril)-1,3,4-tiadiazólio-2-fenilamina (107) obtido em $\text{DMSO-}d_6$



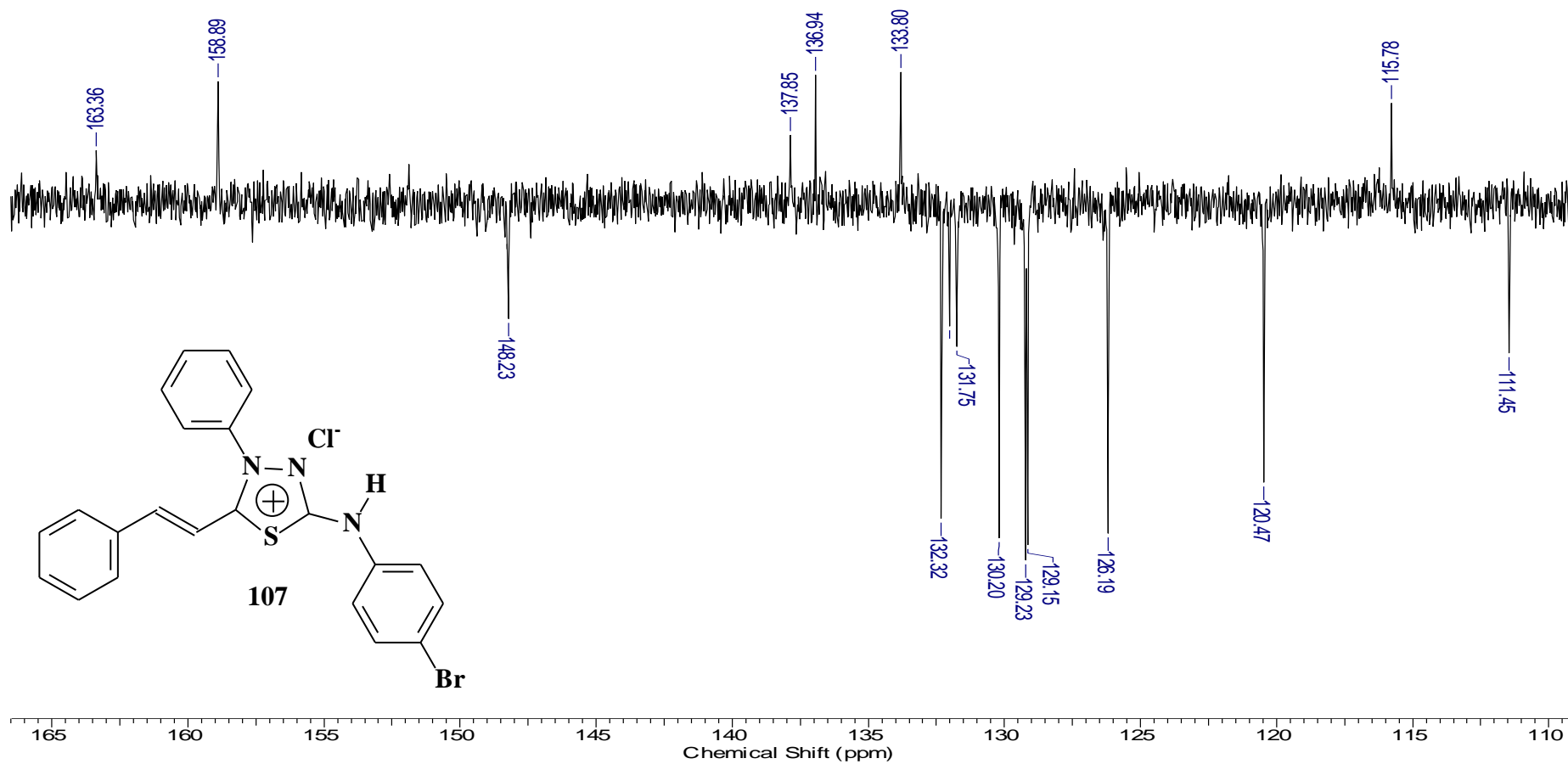
4.42 Expansão do espectro de RMN ¹H do Cloreto de 4-fenil-5-(4'''-bromo-esteril)-1,3,4-tiadiazólio-2-fenilamina (107) obtido em DMSO-*d*₆



4.43 Espectro de RMN C¹³ (DEPTQ) do Cloreto de 4-fenil-5-(4'''-bromo-esteril)-1,3,4-tiadiazólio-2-fenilamina (107) obtido em DMSO-d₆

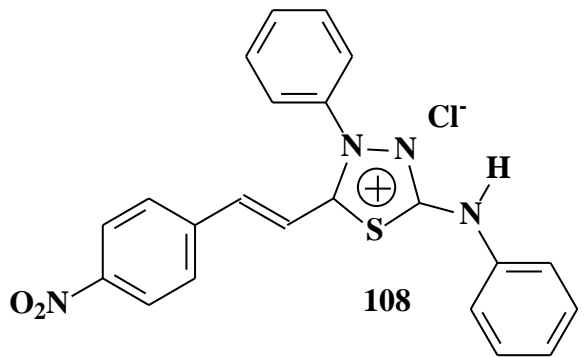
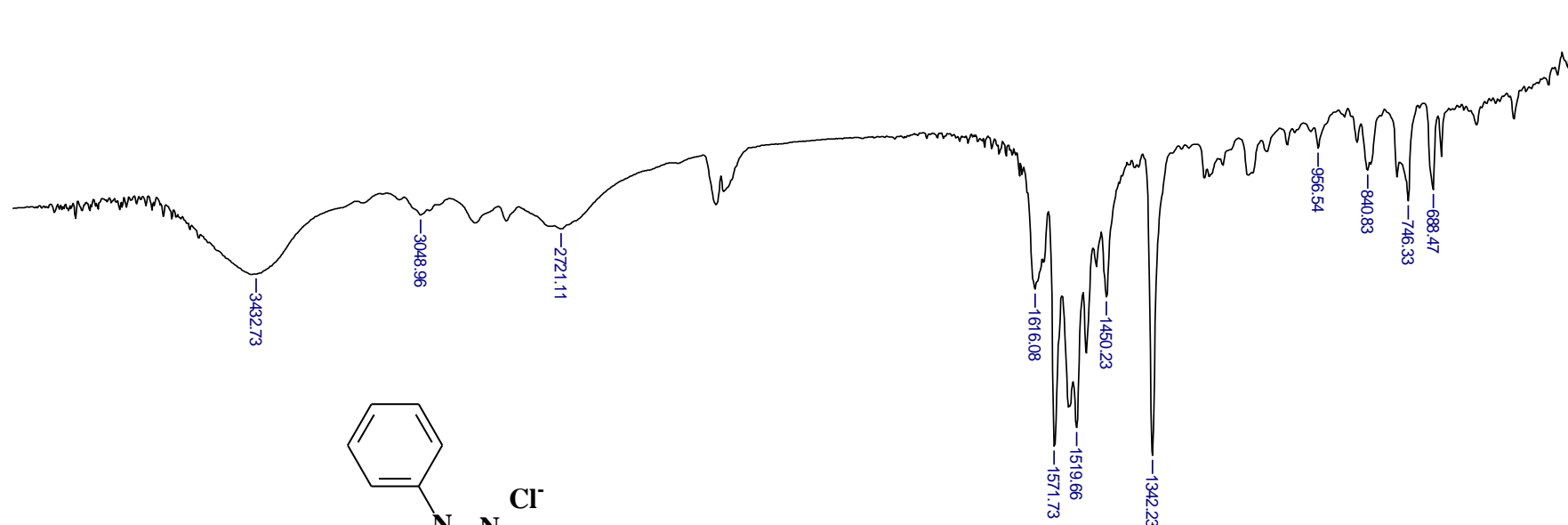


4.44 Expansão do espectro de RMN C^{13} (DEPTQ) do Cloreto de 4-fenil-5-(4'''-bromo-esteril)-1,3,4-tiadiazólio-2-fenilamina (107) obtido em $DMSO-d_6$



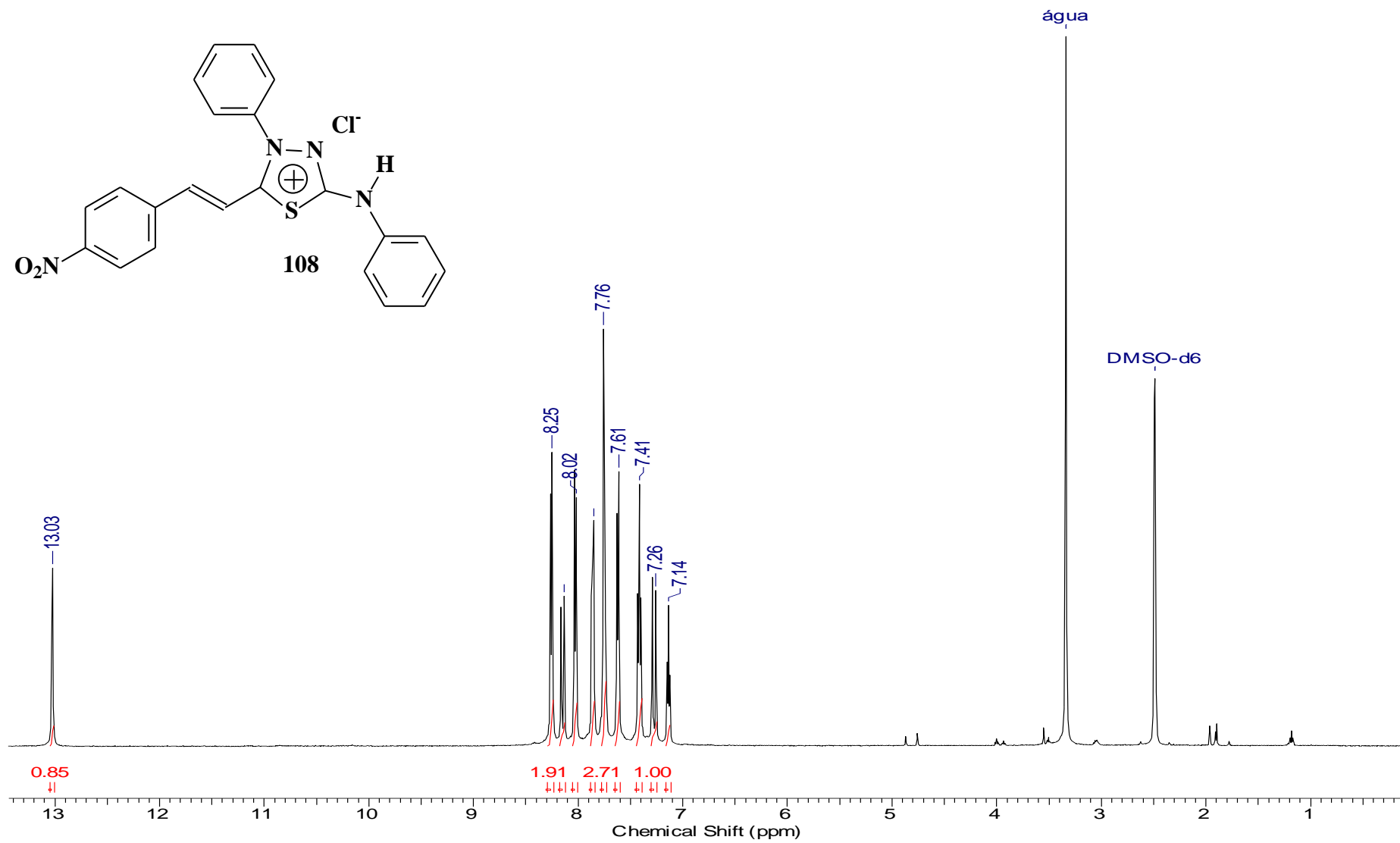
4.45 Espectro de IV do Cloreto de 4-fenil-5-(4'-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (108) obtido em pastilha de KBr

Title	MIDSAL NO2	Date	25/07/07 07:51:57	Technique	Infrared	Spectral Region	IR
Spectrum Range	349.0582 - 3999.7045 cm ⁻¹		Points Count	1894	Data Spacing	1.9285 cm ⁻¹	

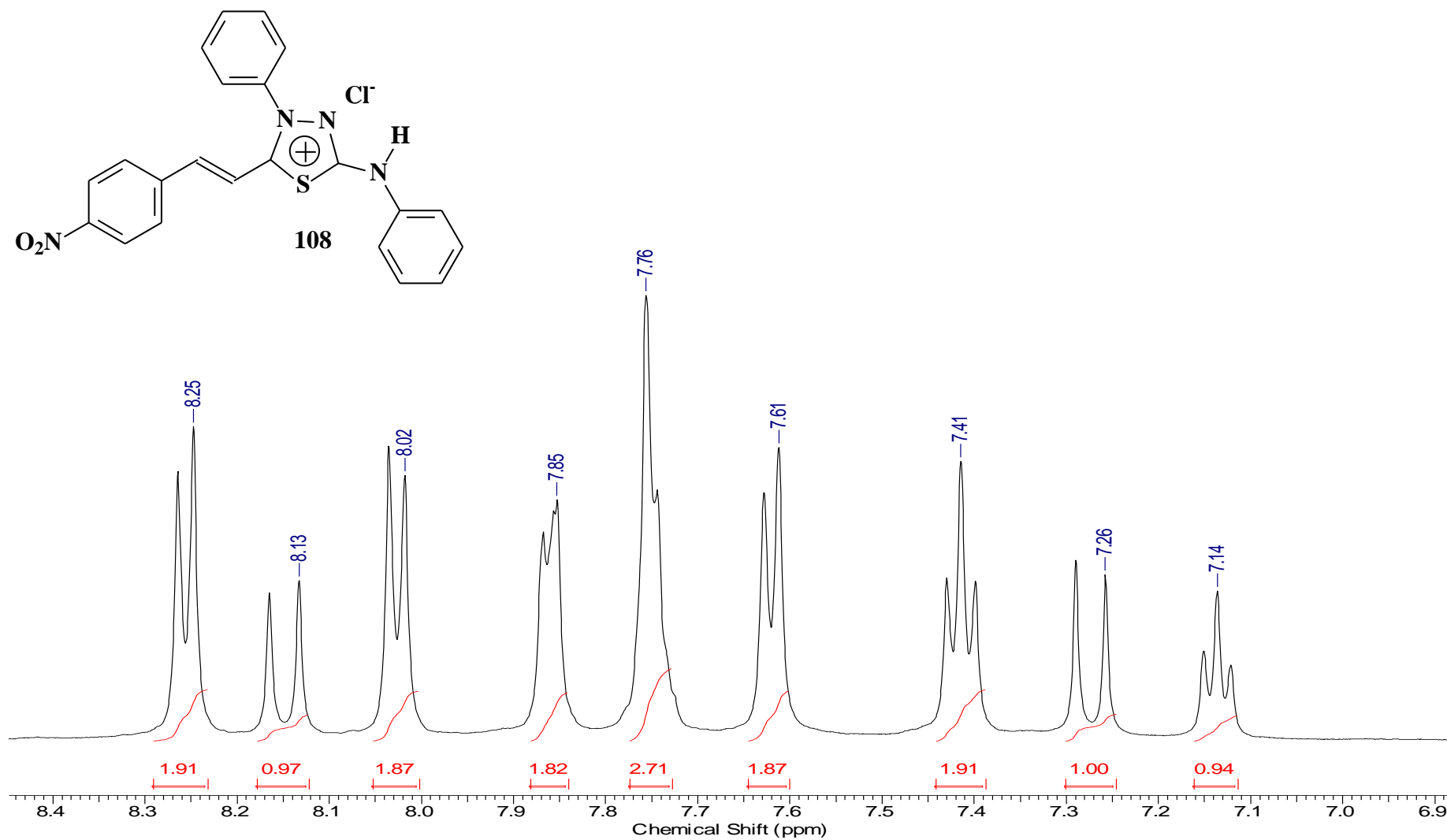


4000 3000 2000 1000
Wavenumber (cm⁻¹)

4.46 Espectro de RMN ^1H do Cloreto de 4-fenil-5-(4'-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (108) obtido em $\text{DMSO-}d_6$



4.47 Expansão do espectro de RMN ^1H do Cloreto de 4-fenil-5-(4'-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (108) obtido em $\text{DMSO-}d_6$



4.48 Espectro de RMN C¹³ (DEPTQ) do Cloreto de 4-fenil-5-(4'-nitro-esteril)-1,3,4-tiadiazólio-2-fenilamina (108) obtido em DMSO-d₆

