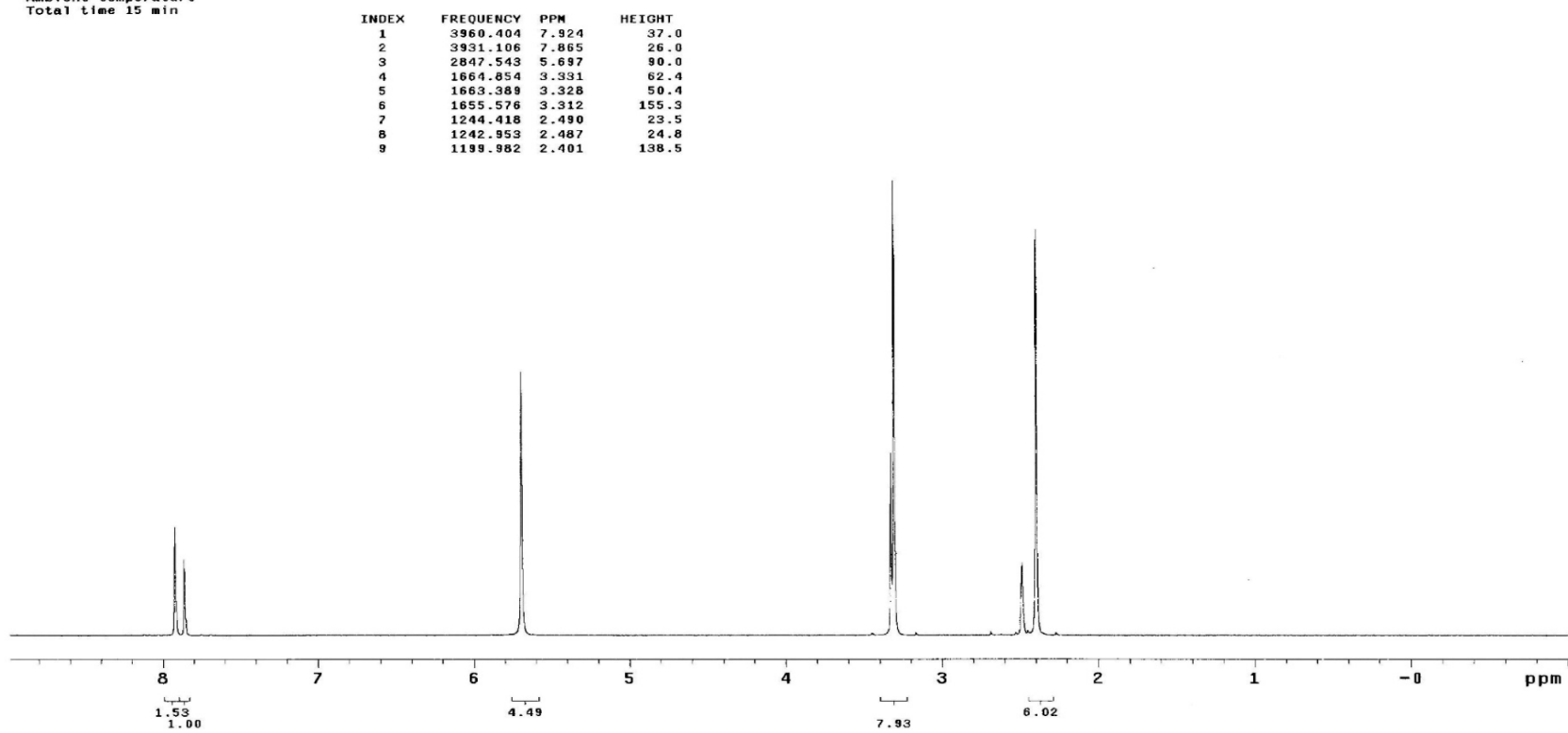


# Supplementary Materials

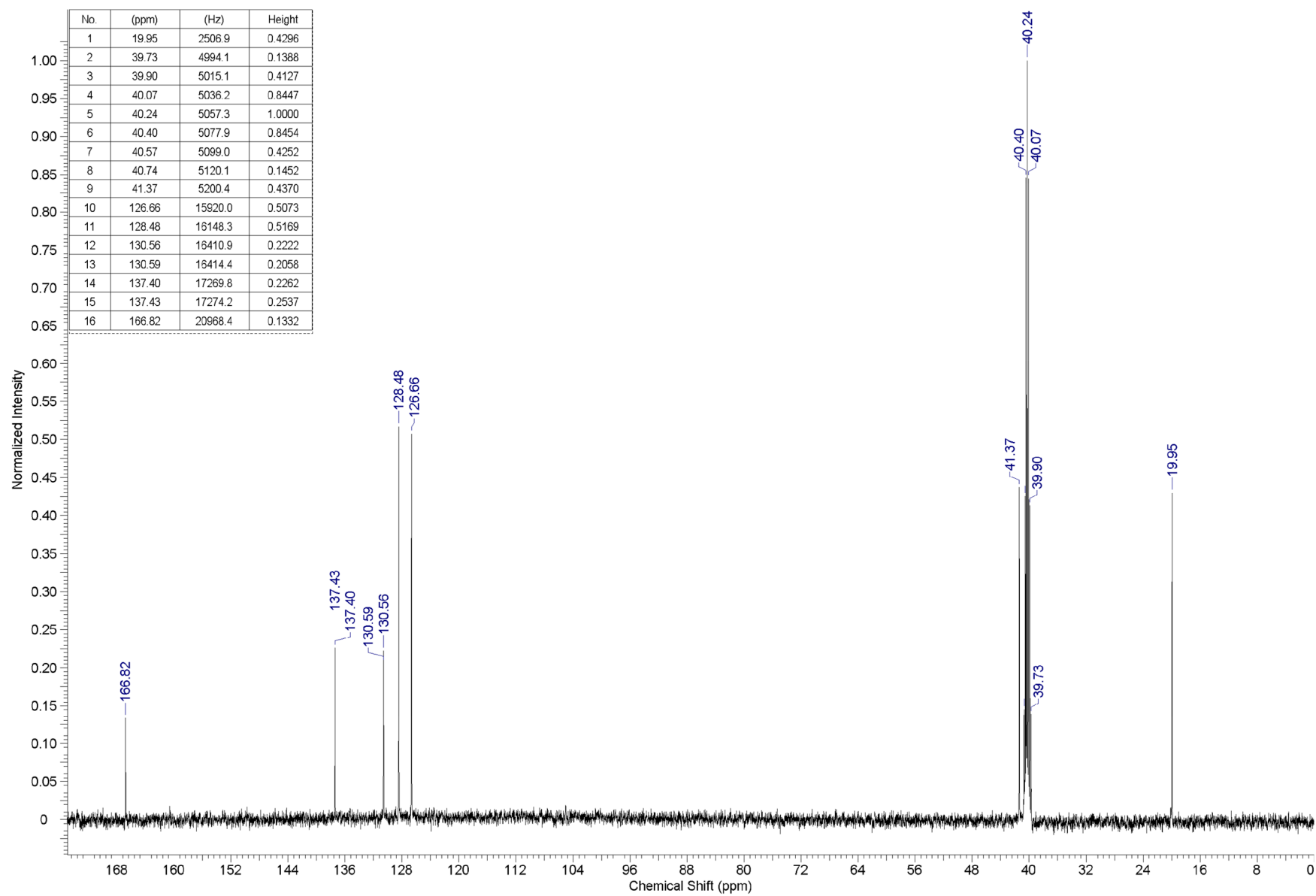
## Table of Contents

- Spectrum 1.**  $^1\text{H}$ -NMR of compd **2** (500 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 2.**  $^{13}\text{C}$ -NMR of compd **2** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 3.**  $^1\text{H}$ -NMR of compd **3** (500 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 4.**  $^{13}\text{C}$ -NMR of compd **3** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 5.**  $^1\text{H}$ -NMR of compd **4** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 6.**  $^{13}\text{C}$ -NMR of compd **4** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 7.**  $^1\text{H}$ -NMR of compd **6** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 8.**  $^{13}\text{C}$ -NMR of compd **6** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 9.**  $^1\text{H}$ -NMR of compd **7** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 10.**  $^{13}\text{C}$ -NMR of compd **7** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 11.**  $^1\text{H}$ -NMR of compd **8** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 12.**  $^1\text{H}$ -NMR of compd **11** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 13.**  $^1\text{H}$ -NMR of compd **12** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 14.**  $^{13}\text{C}$ -NMR of compd **12** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 15.**  $^1\text{H}$ -NMR of compd **13** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 16.**  $^{13}\text{C}$ -NMR of compd **13** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 17.**  $^1\text{H}$ -NMR of compd **16** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 18.**  $^{13}\text{C}$ -NMR of compd **16** (125 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 19.**  $^1\text{H}$ -NMR of compd **18** (200 MHz, DMSO-*d*<sub>6</sub>).
- Spectrum 20.**  $^{13}\text{C}$ -NMR of compd **18** (125 MHz, DMSO-*d*<sub>6</sub>).

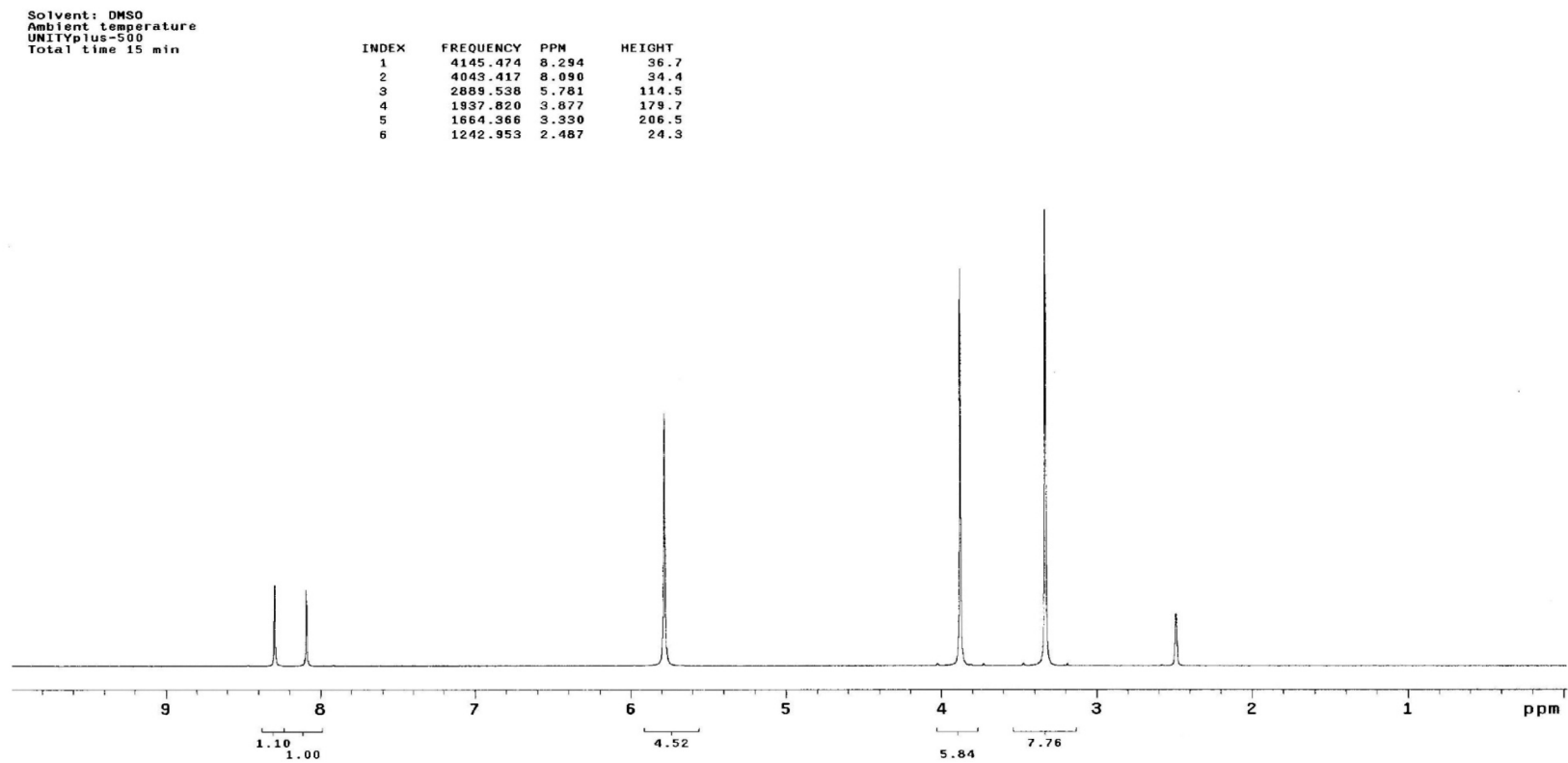
Solvent: DMSO  
Ambient temperature  
Total time 15 min



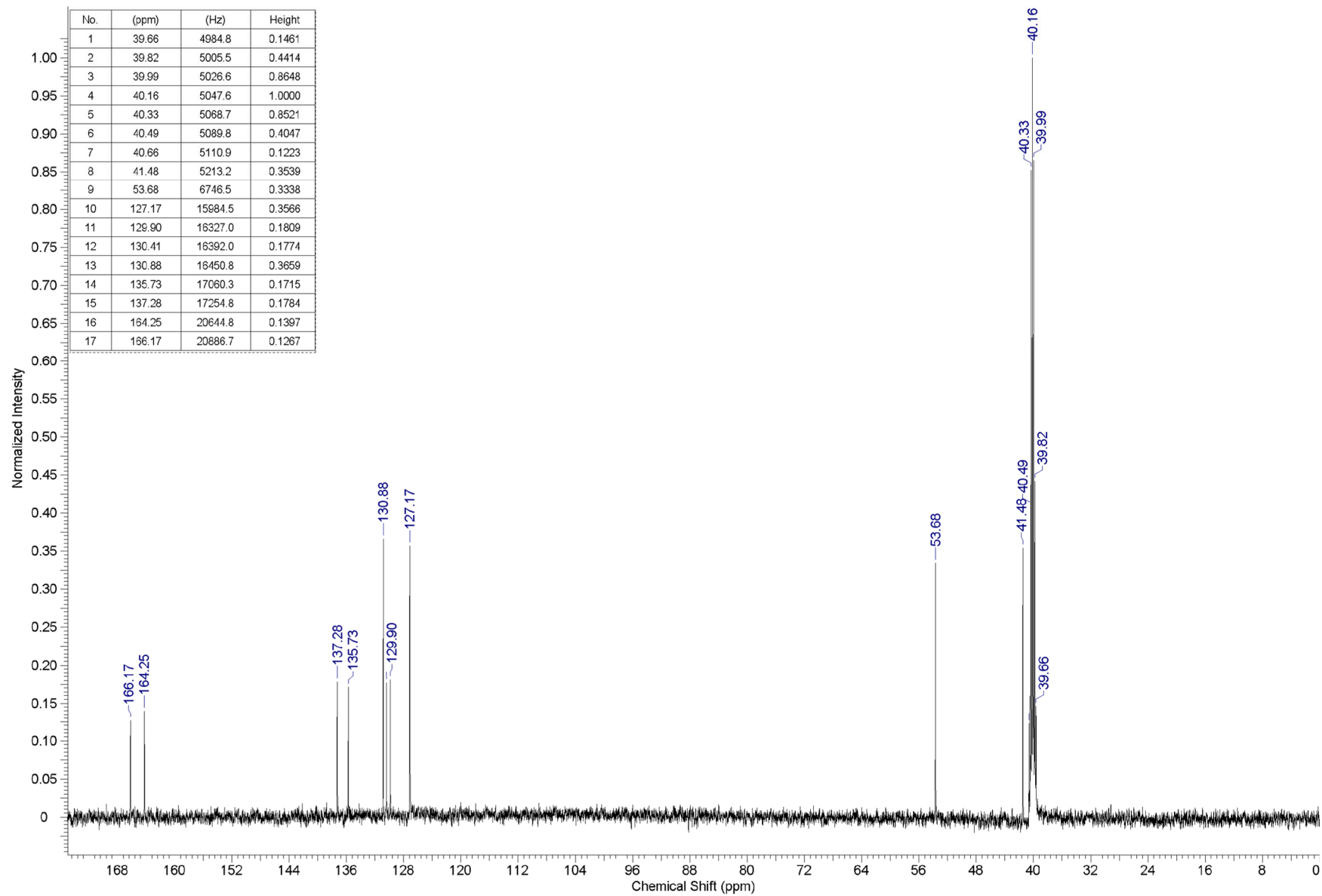
Spectrum 1.  $^1\text{H}$ -NMR of compd 2 (500 MHz,  $\text{DMSO-}d_6$ ).



**Spectrum 2.**  $^{13}\text{C}$ -NMR of compd 2 (125 MHz,  $\text{DMSO-}d_6$ ).



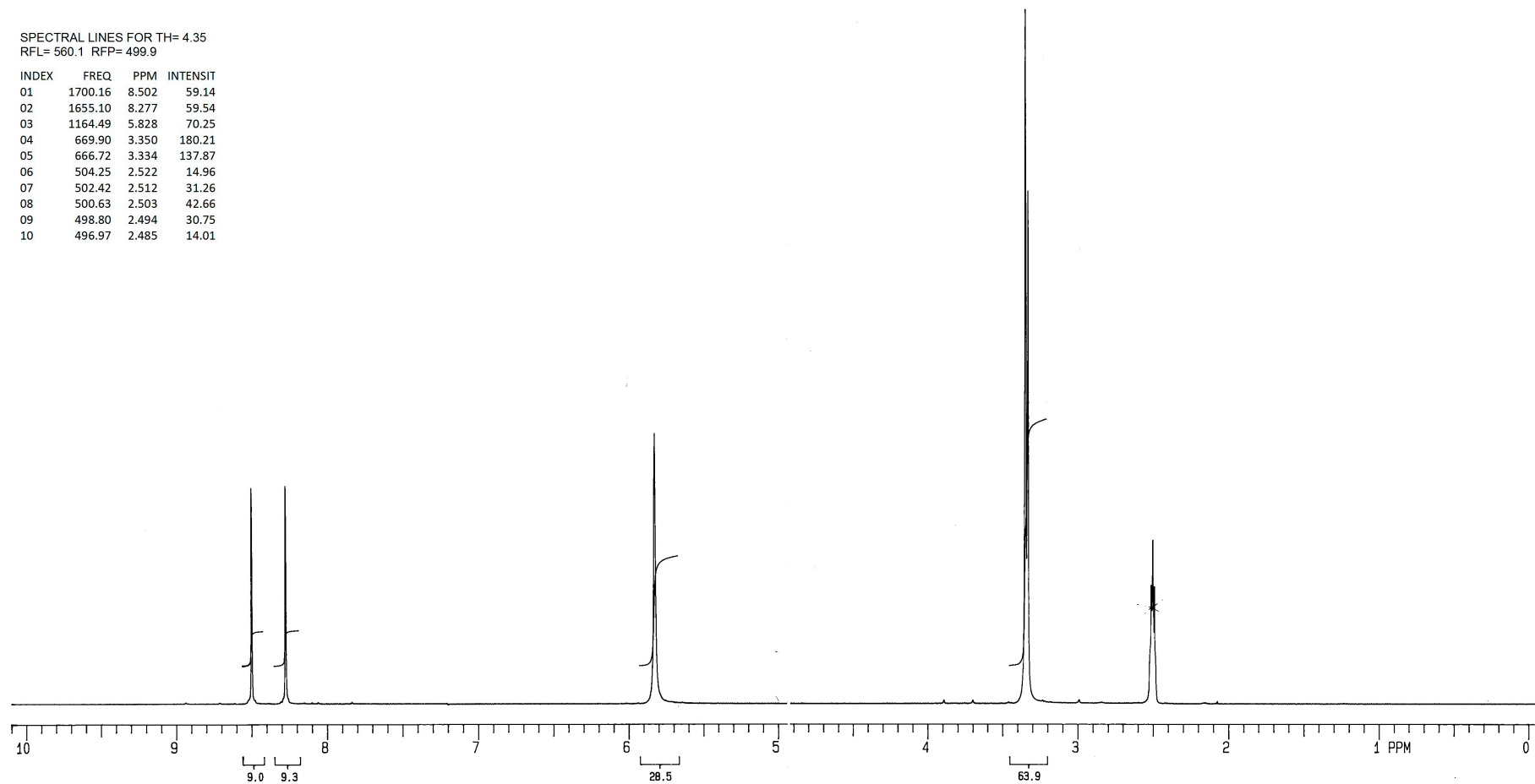
**Spectrum 3.**  $^1\text{H}$ -NMR of compd **3** (500 MHz,  $\text{DMSO-}d_6$ ).



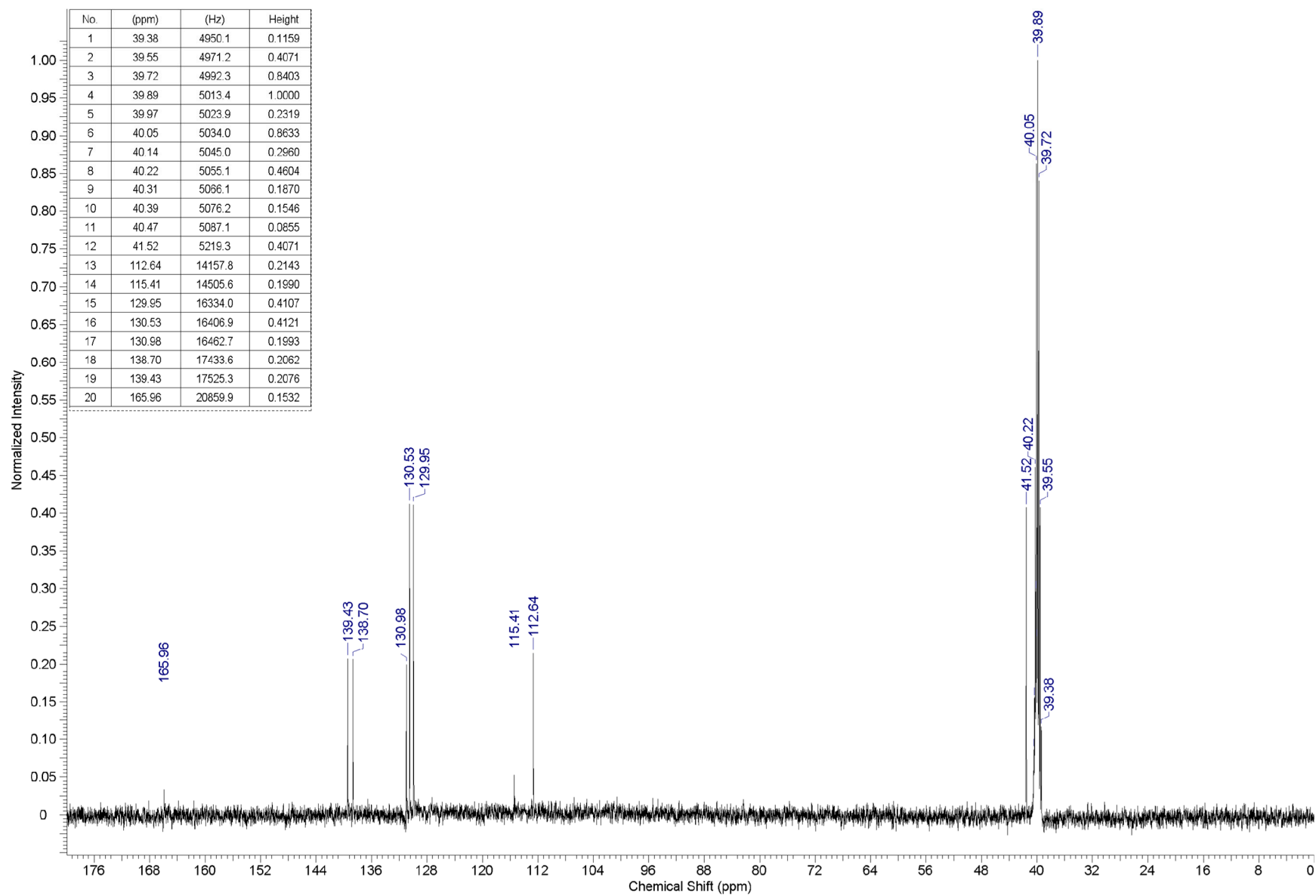
Spectrum 4.  $^{13}\text{C}$ -NMR of compd **3** (125 MHz,  $\text{DMSO-}d_6$ ).

SPECTRAL LINES FOR TH= 4.35  
RFL= 560.1 RFP= 499.9

| INDEX | FREQ    | PPM   | INTENSIT |
|-------|---------|-------|----------|
| 01    | 1700.16 | 8.502 | 59.14    |
| 02    | 1655.10 | 8.277 | 59.54    |
| 03    | 1164.49 | 5.828 | 70.25    |
| 04    | 669.90  | 3.350 | 180.21   |
| 05    | 666.72  | 3.334 | 137.87   |
| 06    | 504.25  | 2.522 | 14.96    |
| 07    | 502.42  | 2.512 | 31.26    |
| 08    | 500.63  | 2.503 | 42.66    |
| 09    | 498.80  | 2.494 | 30.75    |
| 10    | 496.97  | 2.485 | 14.01    |



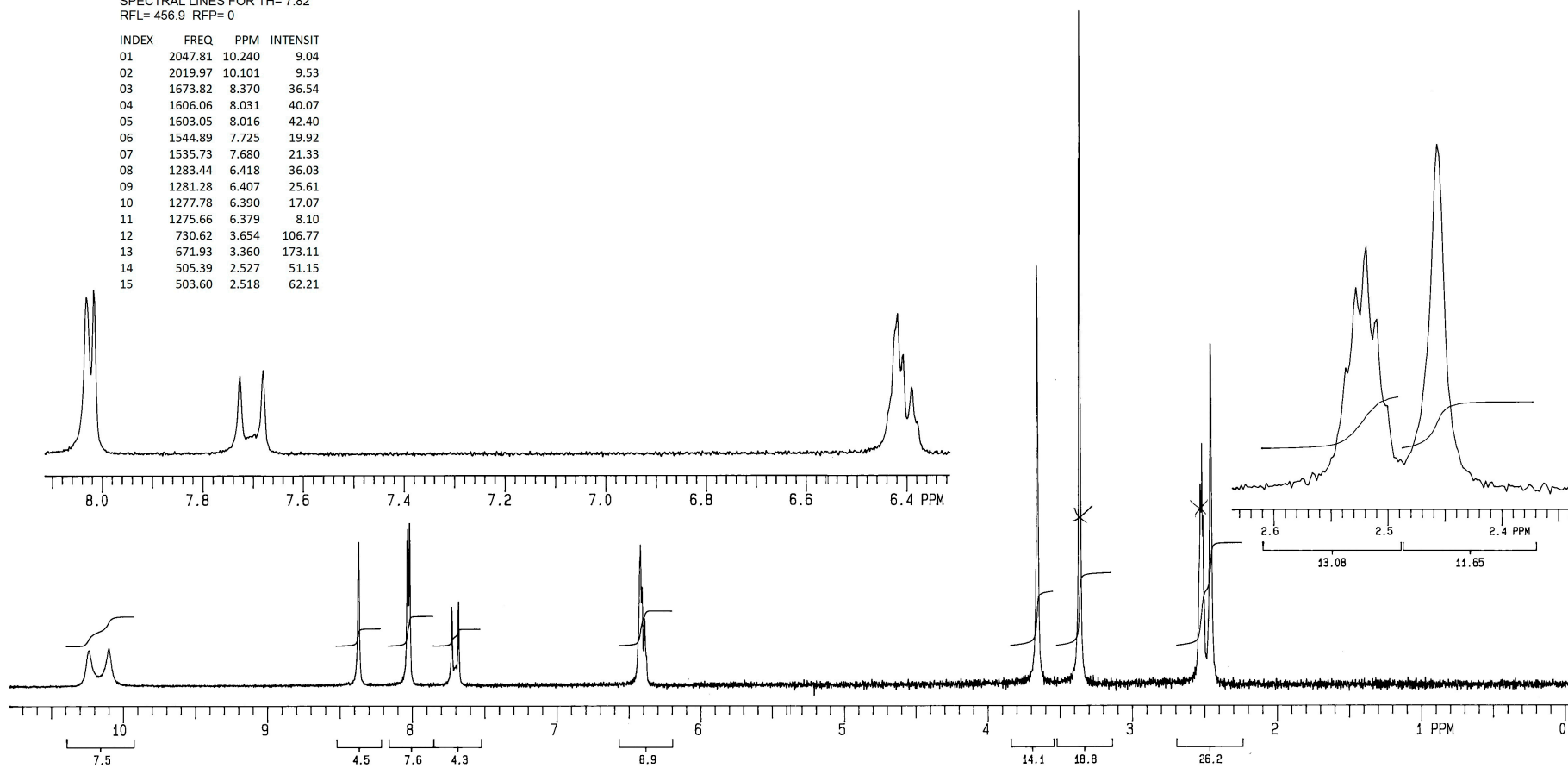
**Spectrum 5.**  $^1\text{H}$ -NMR of compd **4** (200 MHz,  $\text{DMSO-}d_6$ ).



**Spectrum 6.**  $^{13}\text{C}$ -NMR of compd 4 (125 MHz,  $\text{DMSO-}d_6$ ).

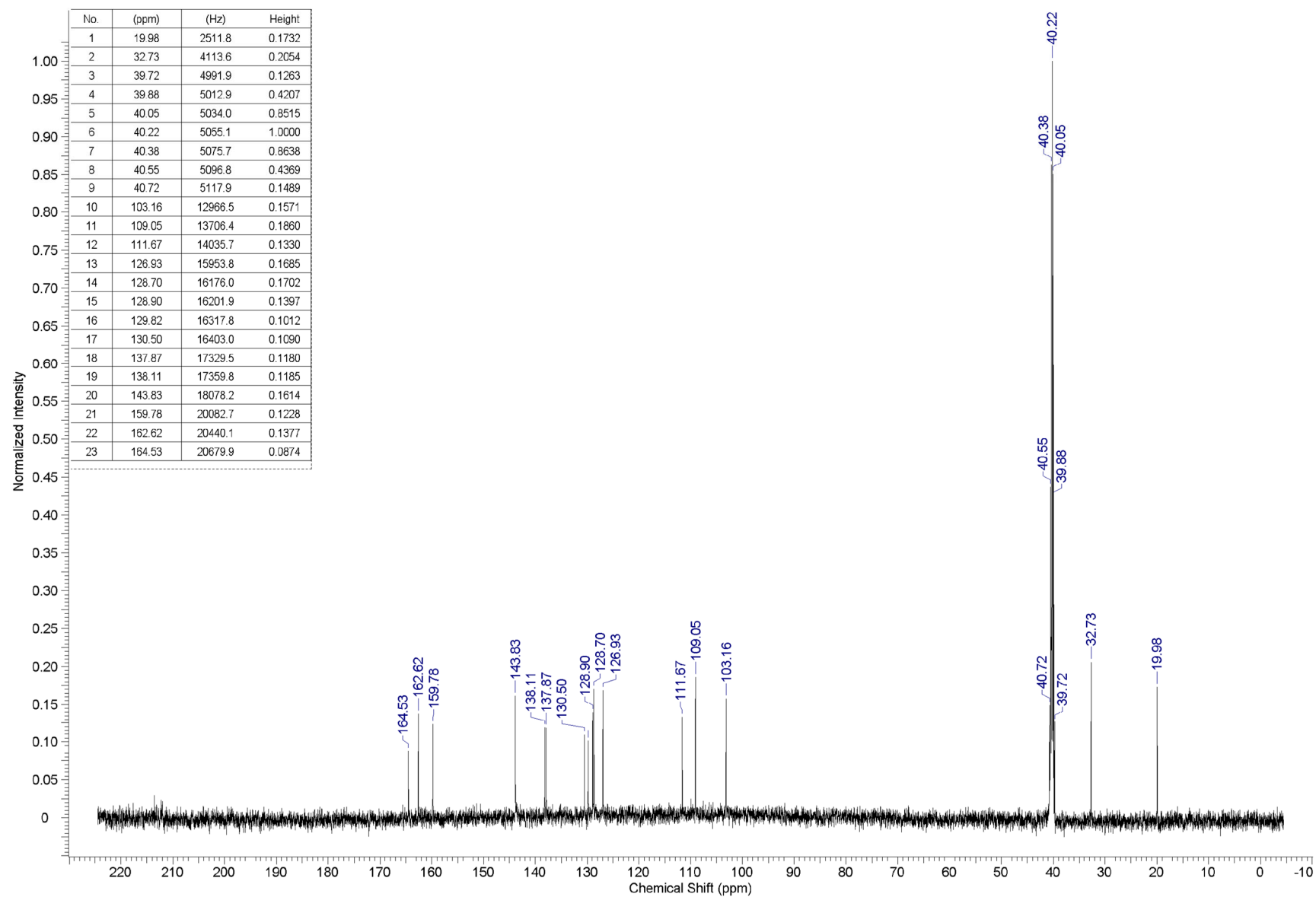
SPECTRAL LINES FOR TH= 7.82  
RFL= 456.9 RFP= 0

| INDEX | FREQ    | PPM    | INTENSIT |
|-------|---------|--------|----------|
| 01    | 2047.81 | 10.240 | 9.04     |
| 02    | 2019.97 | 10.101 | 9.53     |
| 03    | 1673.82 | 8.370  | 36.54    |
| 04    | 1606.06 | 8.031  | 40.07    |
| 05    | 1603.05 | 8.016  | 42.40    |
| 06    | 1544.89 | 7.725  | 19.92    |
| 07    | 1535.73 | 7.680  | 21.33    |
| 08    | 1283.44 | 6.418  | 36.03    |
| 09    | 1281.28 | 6.407  | 25.61    |
| 10    | 1277.78 | 6.390  | 17.07    |
| 11    | 1275.66 | 6.379  | 8.10     |
| 12    | 730.62  | 3.654  | 106.77   |
| 13    | 671.93  | 3.360  | 173.11   |
| 14    | 505.39  | 2.527  | 51.15    |
| 15    | 503.60  | 2.518  | 62.21    |

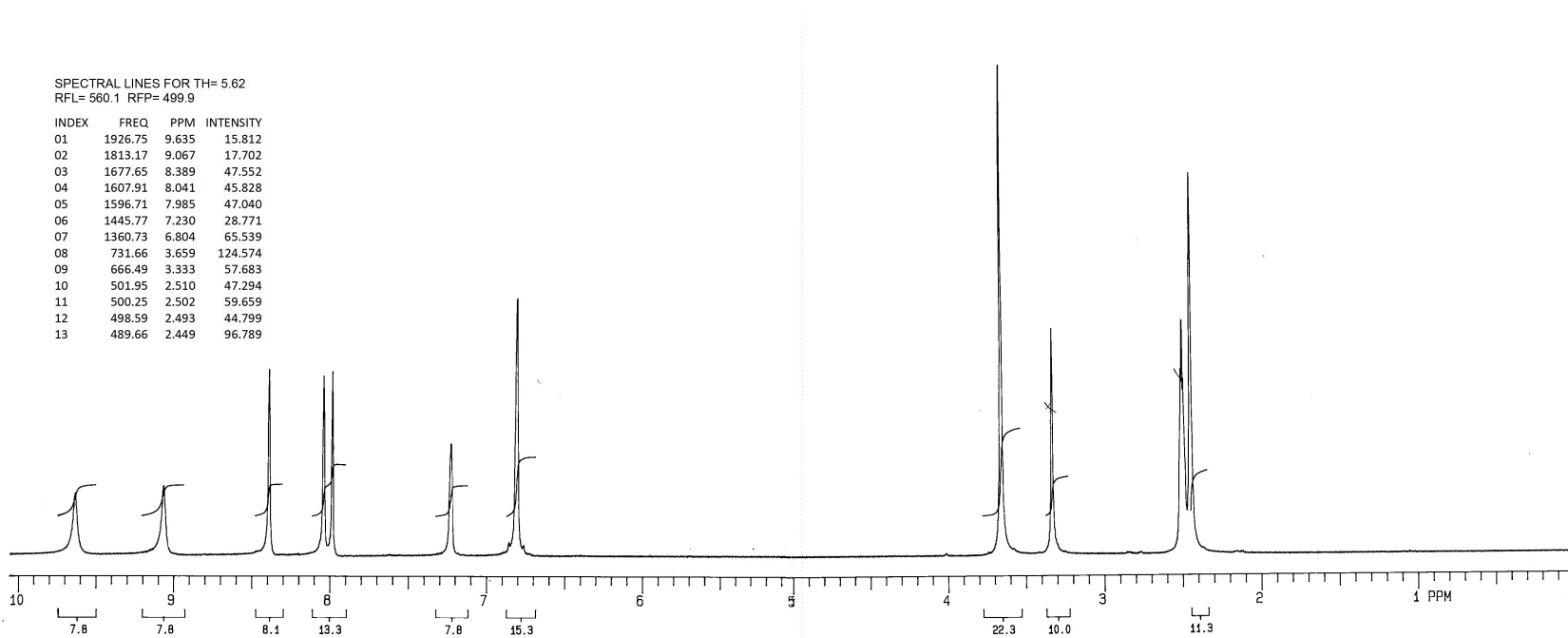


Spectrum 7. <sup>1</sup>H-NMR of compd 6 (200 MHz, DMSO-*d*<sub>6</sub>).

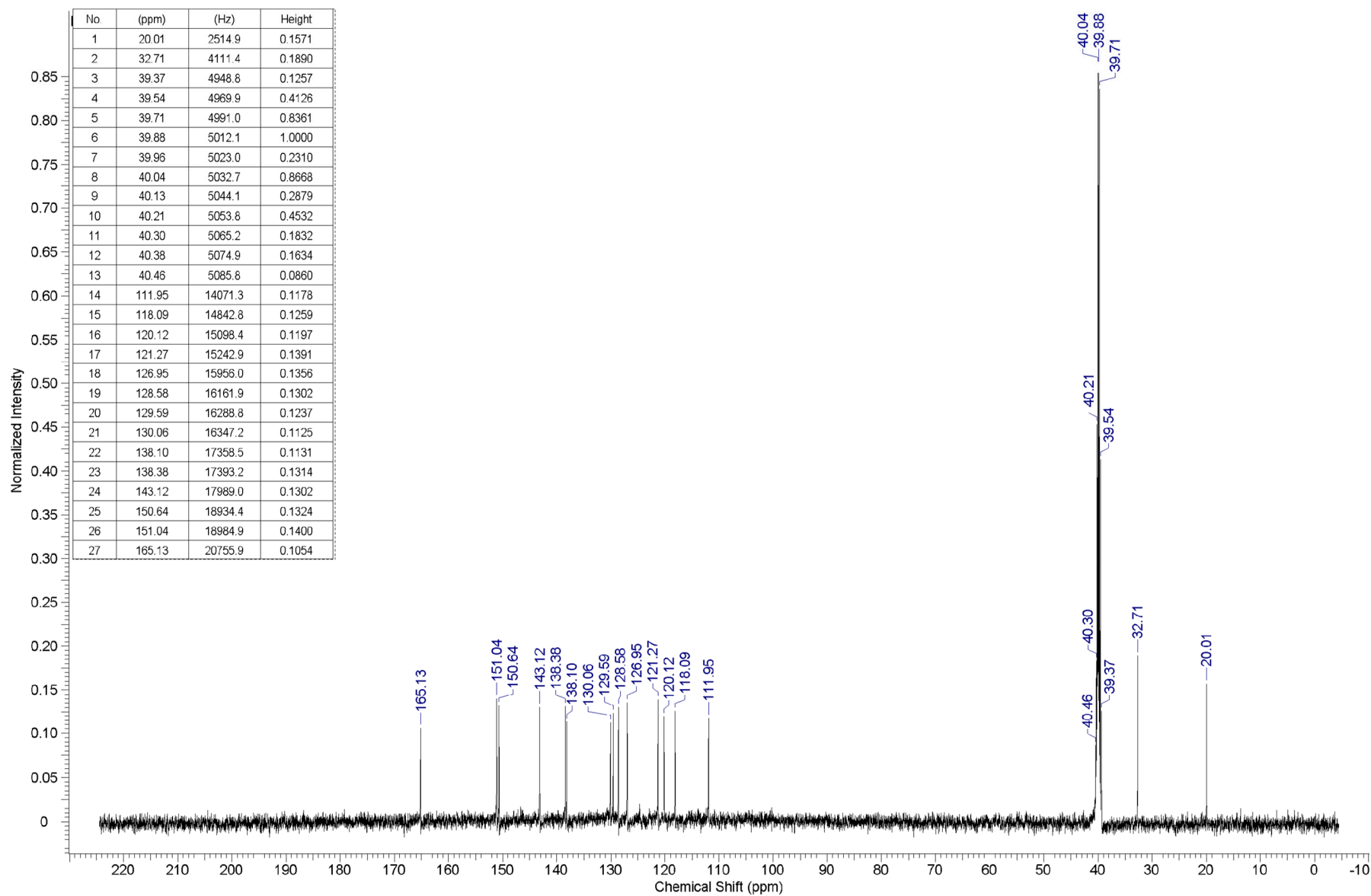




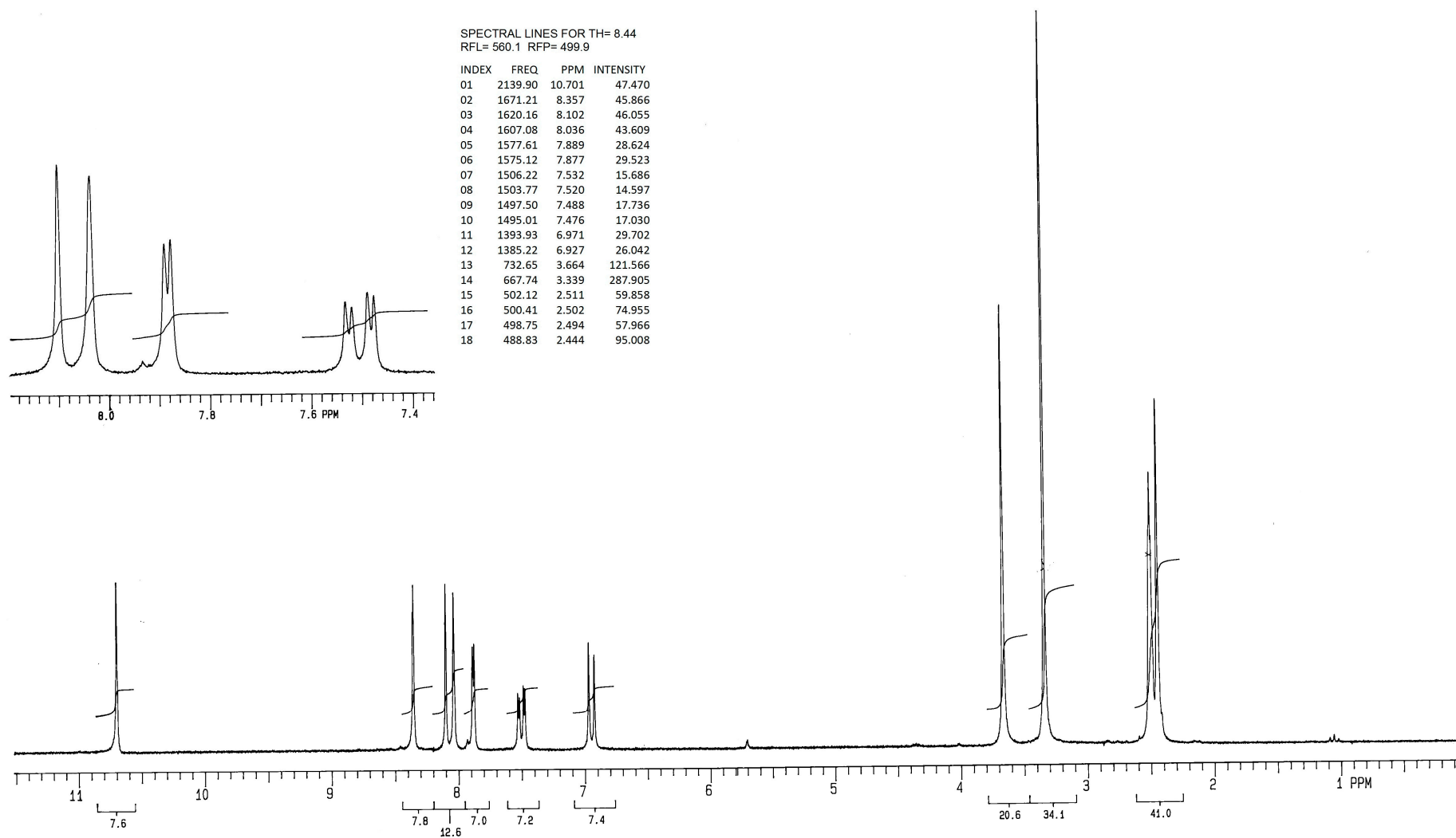
Spectrum 8.  $^{13}\text{C}$ -NMR of compd 6 (125 MHz,  $\text{DMSO-}d_6$ ).



**Spectrum 9.**  $^1\text{H-NMR}$  of compd **7** (200 MHz,  $\text{DMSO-}d_6$ ).



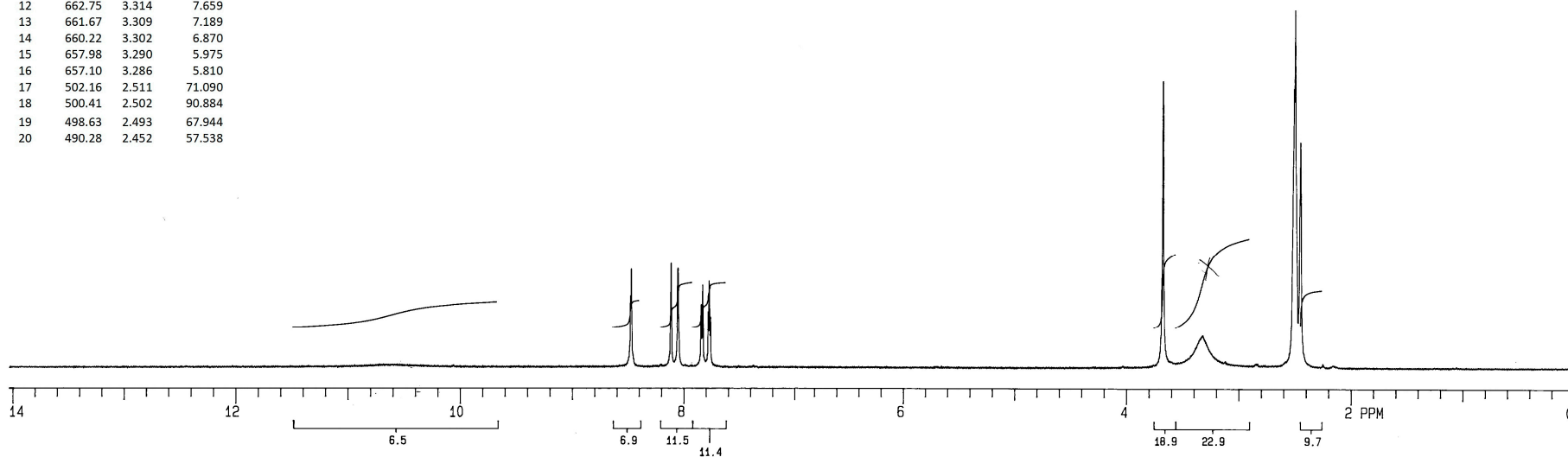
Spectrum 10.  $^{13}\text{C}$ -NMR of compd 7 (125 MHz,  $\text{DMSO-}d_6$ ).



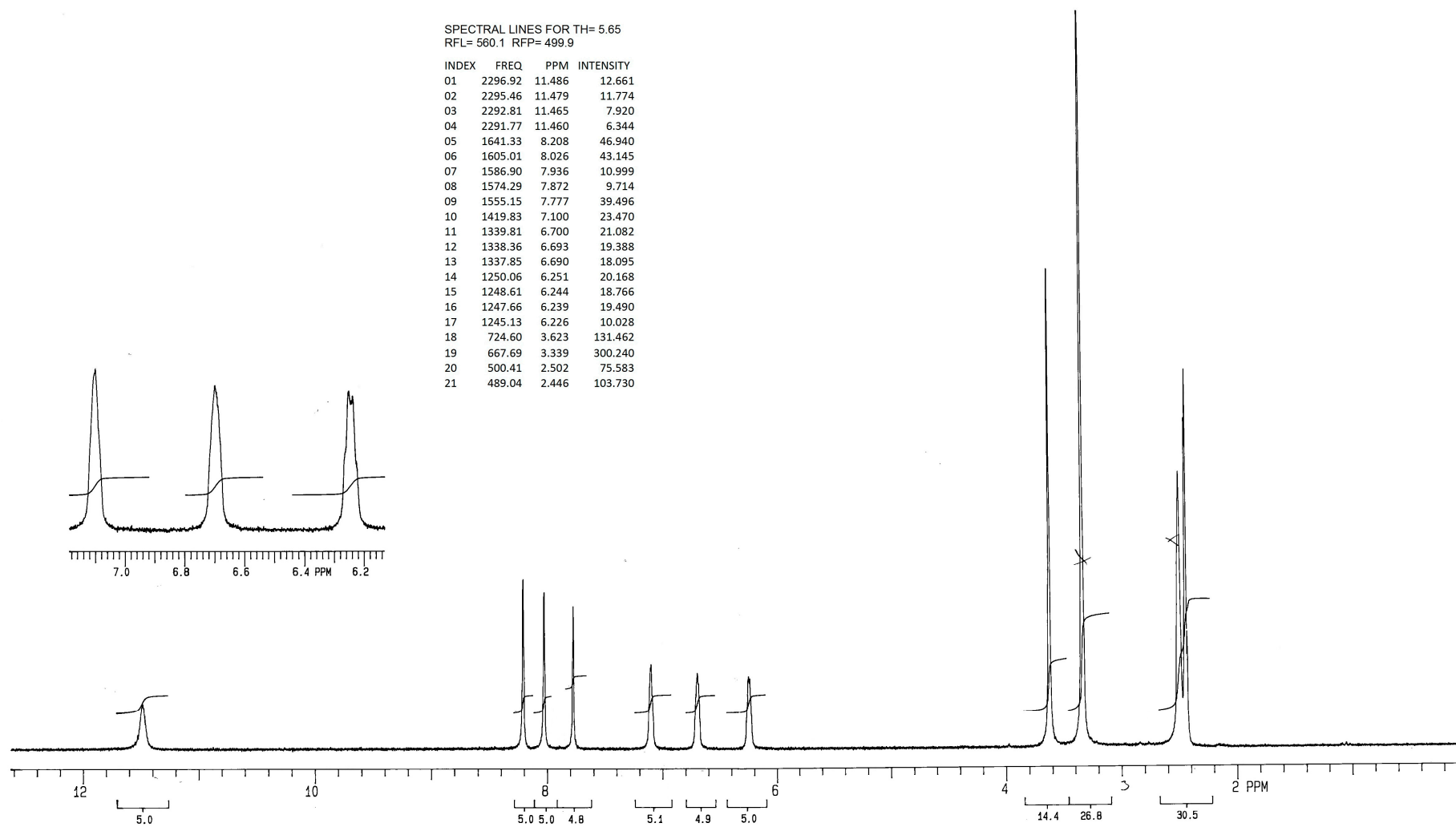
Spectrum 11.  $^1\text{H-NMR}$  of compd **8** (200 MHz,  $\text{DMSO-}d_6$ ).

SPECTRAL LINES FOR TH= 5.62  
RFL= 560.1 RFP= 499.9

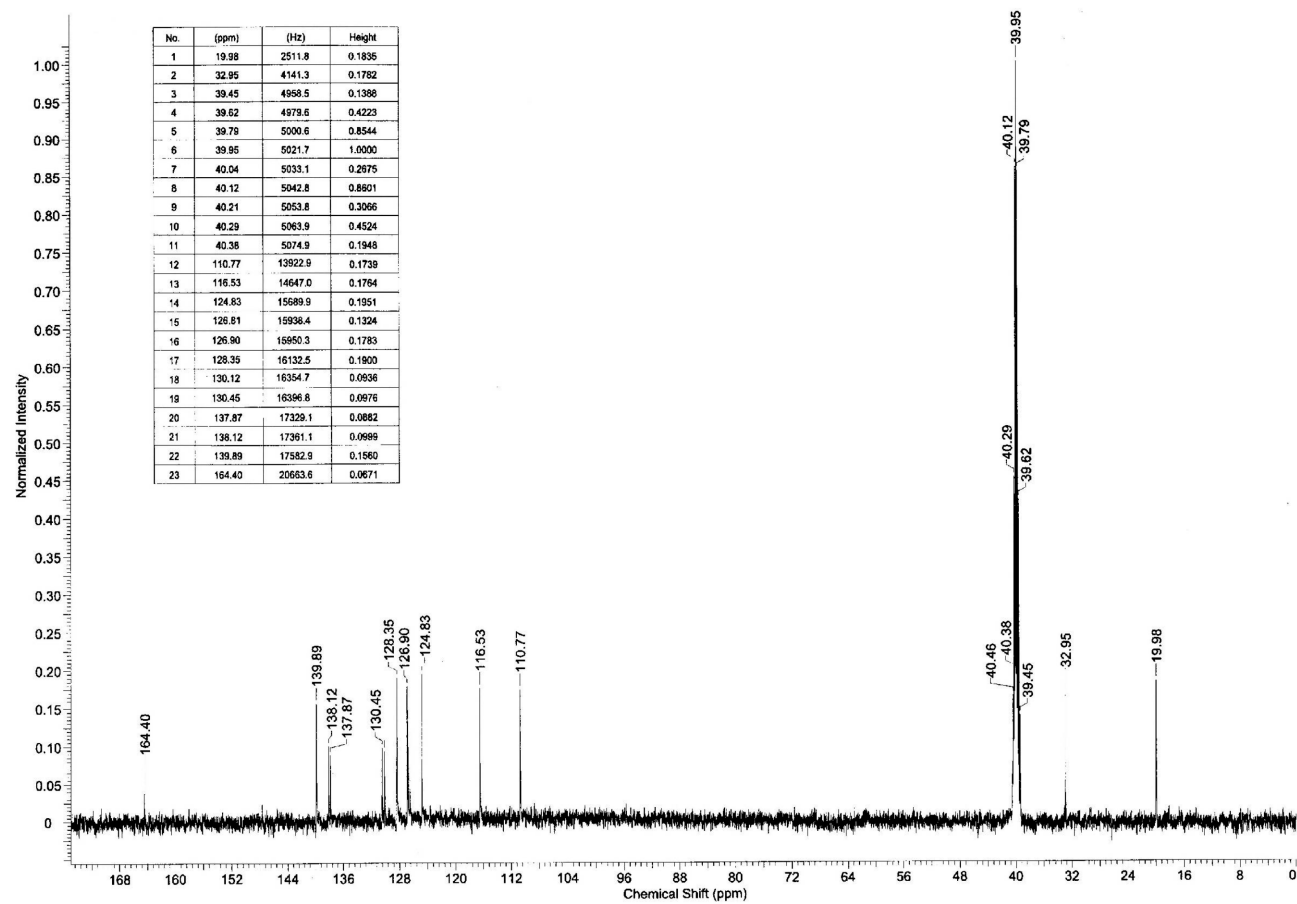
| INDEX | FREQ    | PPM   | INTENSITY |
|-------|---------|-------|-----------|
| 01    | 1694.25 | 8.472 | 25.027    |
| 02    | 1622.69 | 8.114 | 26.467    |
| 03    | 1610.20 | 8.052 | 25.218    |
| 04    | 1568.48 | 7.843 | 15.858    |
| 05    | 1565.94 | 7.831 | 21.100    |
| 06    | 1555.04 | 7.776 | 22.064    |
| 07    | 1552.50 | 7.763 | 15.933    |
| 08    | 735.19  | 3.676 | 72.962    |
| 09    | 672.05  | 3.361 | 6.487     |
| 10    | 668.93  | 3.345 | 7.346     |
| 11    | 664.88  | 3.325 | 8.182     |
| 12    | 662.75  | 3.314 | 7.659     |
| 13    | 661.67  | 3.309 | 7.189     |
| 14    | 660.22  | 3.302 | 6.870     |
| 15    | 657.98  | 3.290 | 5.975     |
| 16    | 657.10  | 3.286 | 5.810     |
| 17    | 502.16  | 2.511 | 71.090    |
| 18    | 500.41  | 2.502 | 90.884    |
| 19    | 498.63  | 2.493 | 67.944    |
| 20    | 490.28  | 2.452 | 57.538    |



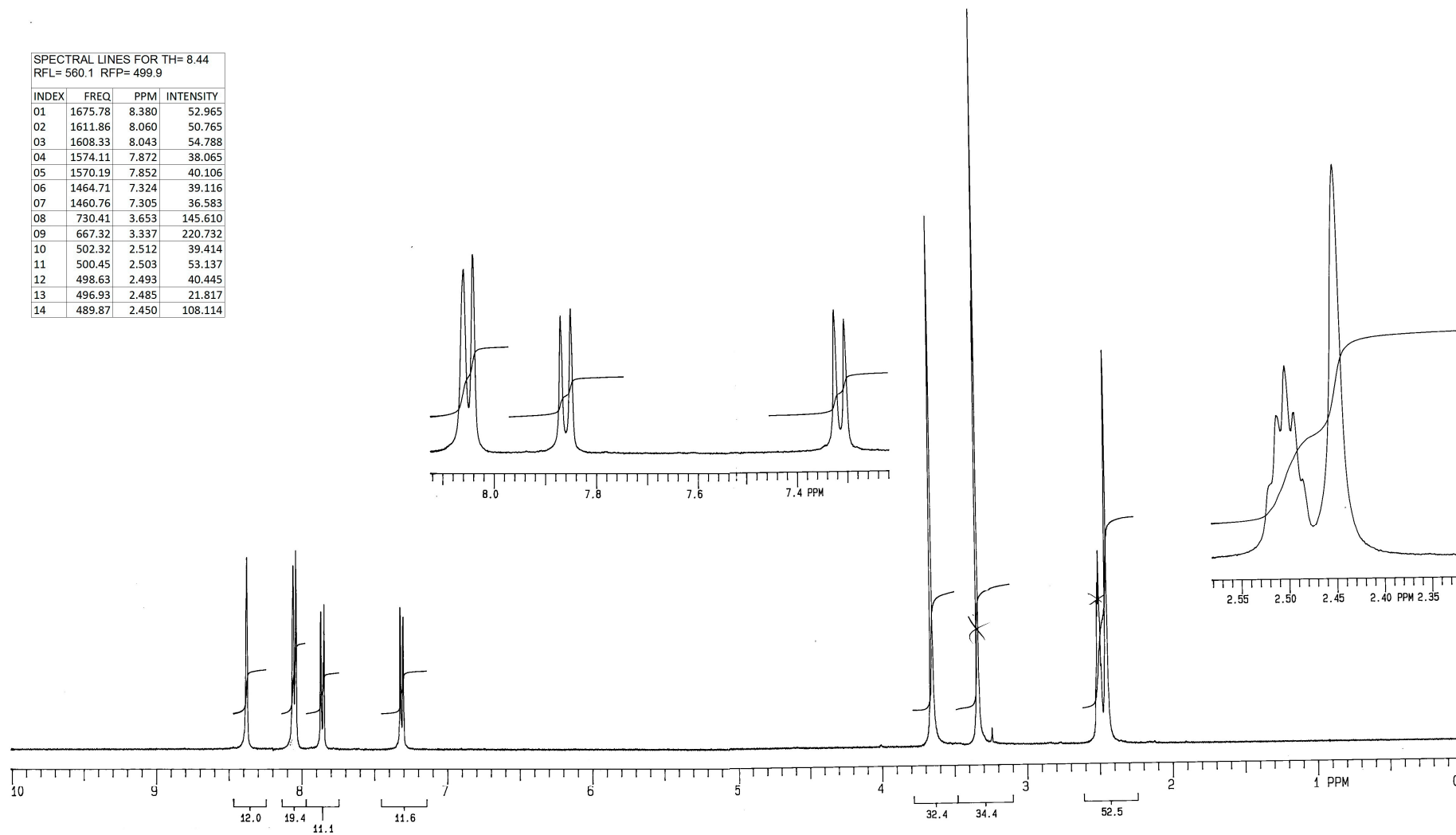
**Spectrum 12.**  $^1\text{H}$ -NMR of compd **11** (200 MHz,  $\text{DMSO-}d_6$ ).



**Spectrum 13.**  $^1\text{H-NMR}$  of compd **12** (200 MHz,  $\text{DMSO-}d_6$ ).

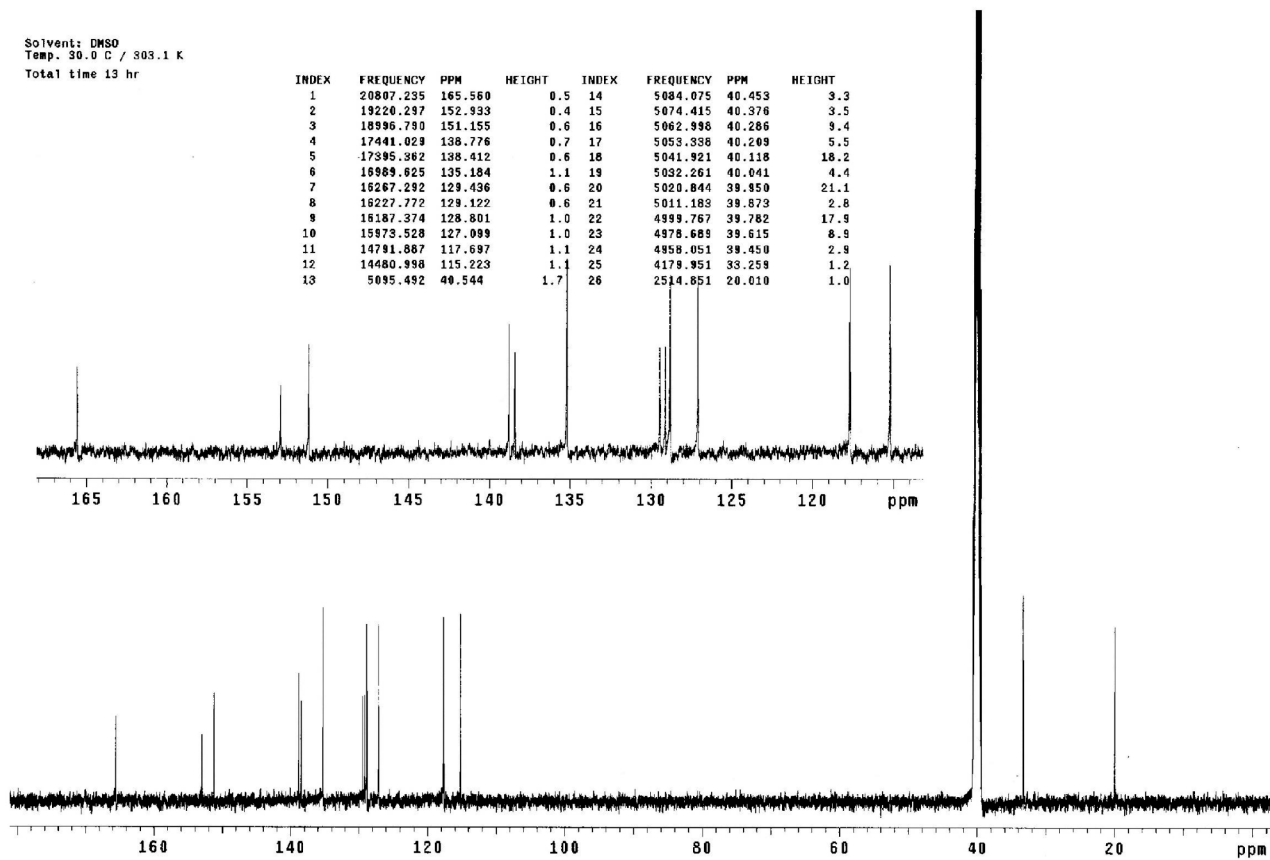


Spectrum 14. <sup>13</sup>C-NMR of compd 12 (125 MHz, DMSO-*d*<sub>6</sub>).

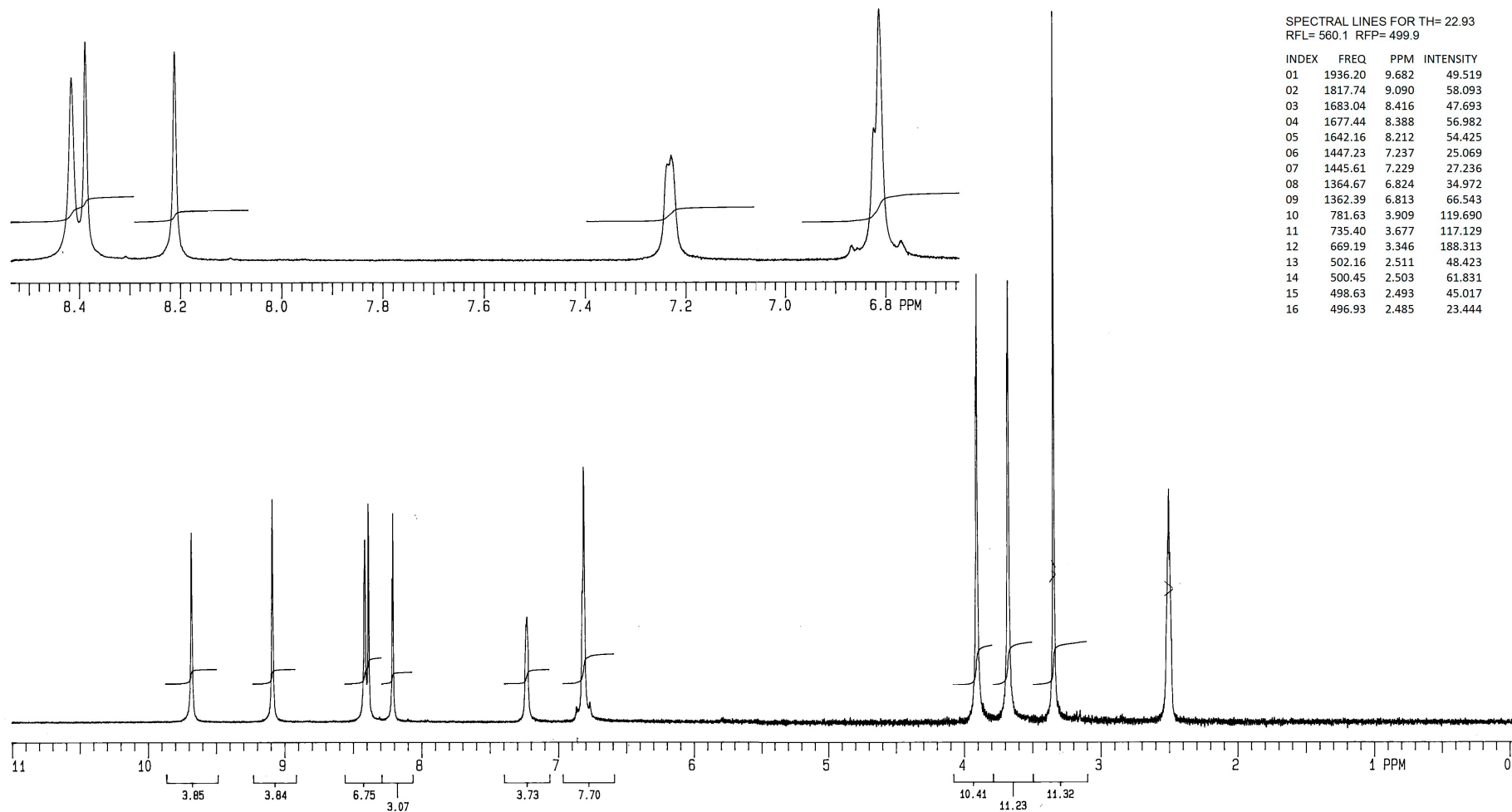


**Spectrum 15.**  $^1\text{H-NMR}$  of compd 13 (200 MHz,  $\text{DMSO-}d_6$ ).

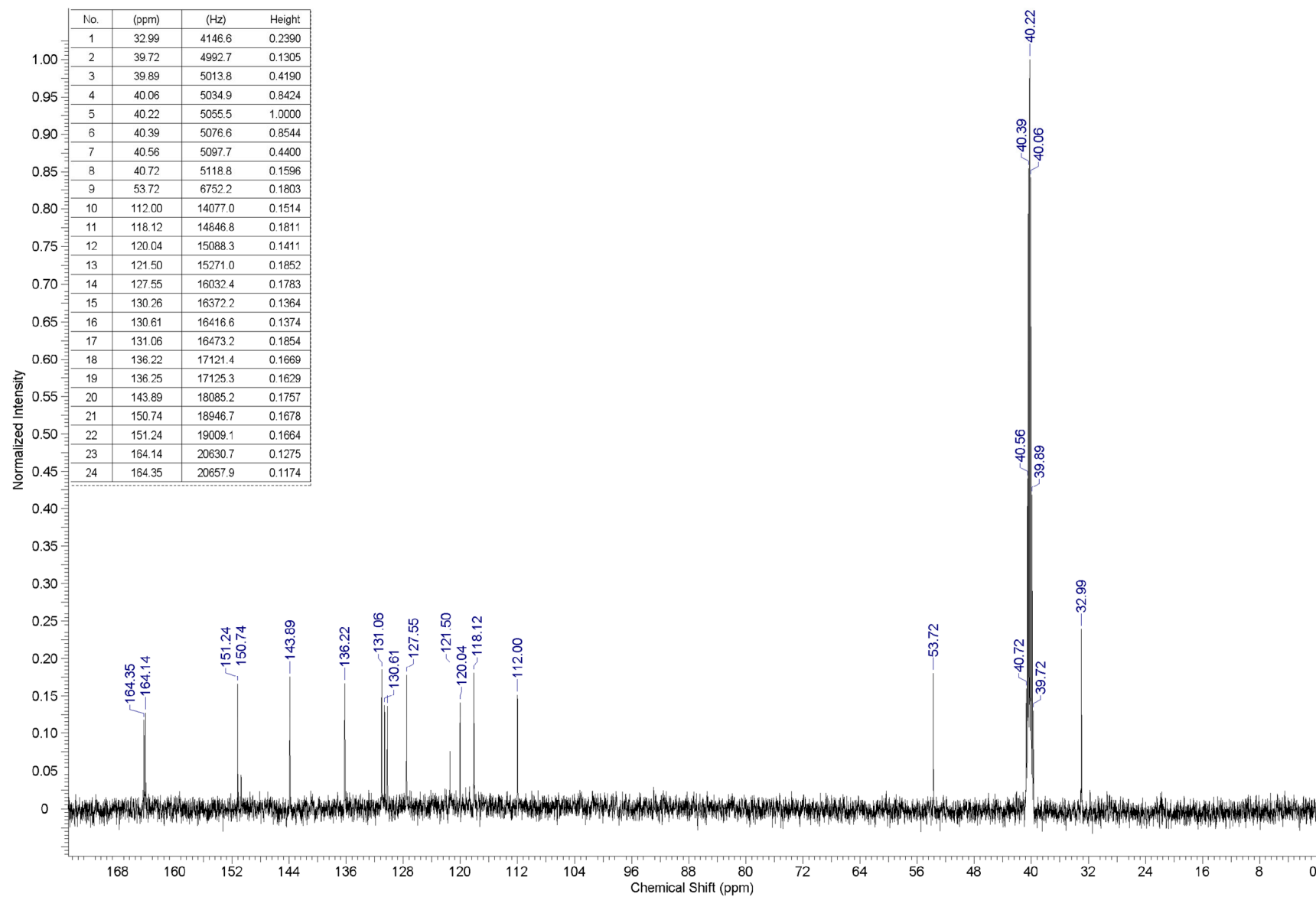




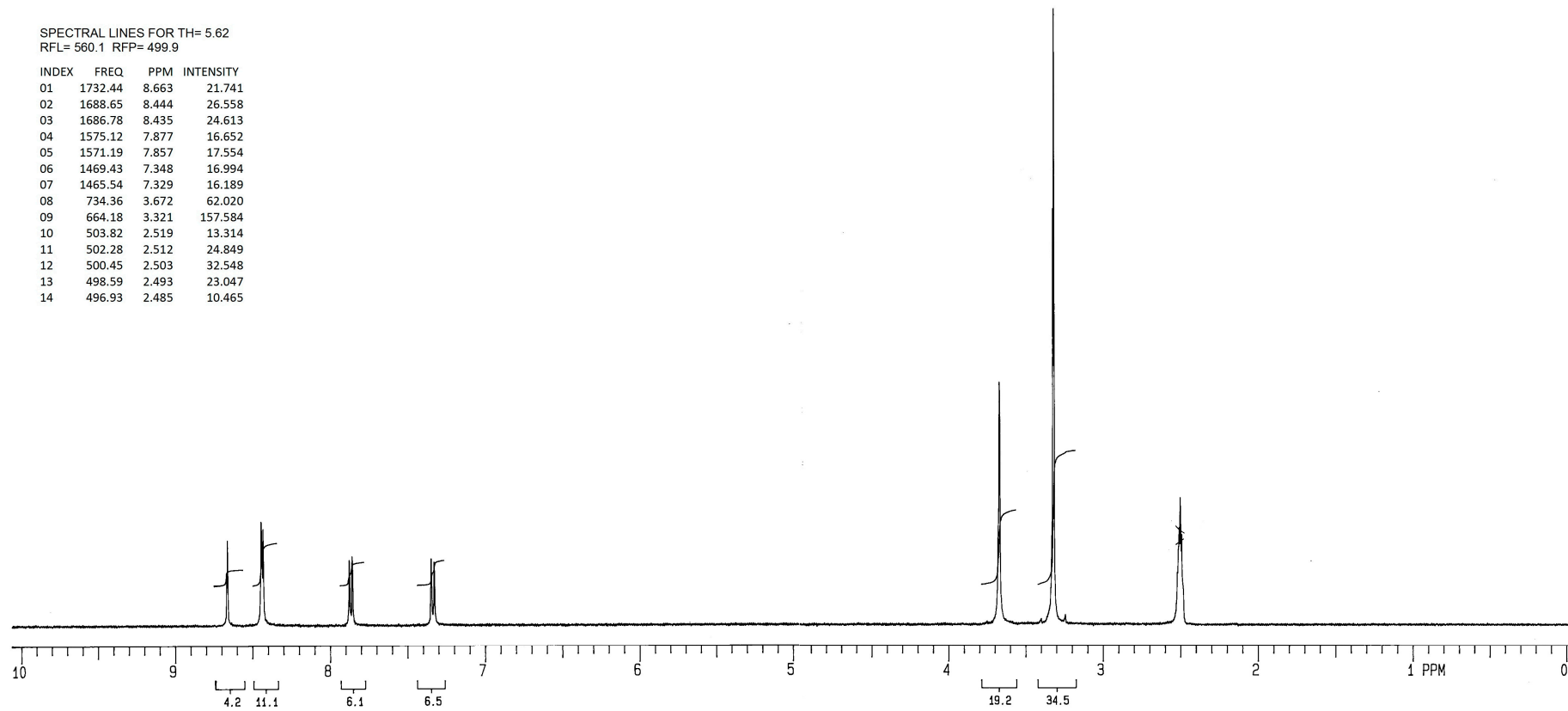
Spectrum 16.  $^{13}\text{C}$ -NMR of compd **13** (125 MHz, DMSO- $d_6$ ).



Spectrum 17.  $^1\text{H}$ -NMR of compd 16 (200 MHz,  $\text{DMSO}-d_6$ ).



Spectrum 18.  $^{13}\text{C}$ -NMR of compd 16 (125 MHz,  $\text{DMSO-}d_6$ ).



Spectrum 19.  $^1\text{H-NMR}$  of compd **18** (200 MHz,  $\text{DMSO-}d_6$ ).

