Supporting information

Pd EnCat™ 30 Recycling in Suzuki Cross-Coupling Reactions

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Table of Contents

Table S1: Isolated yields (%) at each reaction repetition. 3

^{1}**H NMR spectrum** of 2-methoxy-4'-nitrobiphenyl 4

^{13}**C NMR spectrum** of 2-methoxy-4'-nitrobiphenyl 5

Table S2: Mean isolated yields (%) ± Standard Deviations 6

Table S3: Overview of the synthesized additional products 7

Figure S1: Combined average FT-IR spectra 9

^{1}**H NMR spectrum** of 1,1'-biphenyl (entry 1) 10

^{1}**H NMR spectrum** of biphenyl-2-carboxaldehyde (entry 2) 11

^{1}**H NMR spectrum** of 4-acetylbiphenyl (entry 3) 12

^{1}**H NMR spectrum** of 1-(2'-methyl-[1,1'-biphenyl]-4-yl)ethan-1-one (entry 4) 13

^{1}**H NMR spectrum** of 4'-acetyl-[1,1'-biphenyl]-2-carbaldehyde (entry 5) 14

^{1}**H NMR spectrum** of 1-(2'-methoxy-[1,1'-biphenyl]-4-yl)ethan-1-one (entry 6) 15

^{1}**H NMR spectrum** of 2-methoxy-3'-nitro-1,1'-biphenyl (entry 7) 16

^{1}**H NMR spectrum** of 2-(thiophen-3-yl)benzaldehyde (entry 8) 17

^{1}**H NMR spectrum** of 1-phenylnaphthalene (entry 9) 18

^{1}**H NMR spectrum** of 2-(naphthalen-1-yl)benzaldehyde (entry 10) 19

^{1}**H NMR spectrum** of 1-(2-methoxyphenyl)naphthalene (entry 11) 20

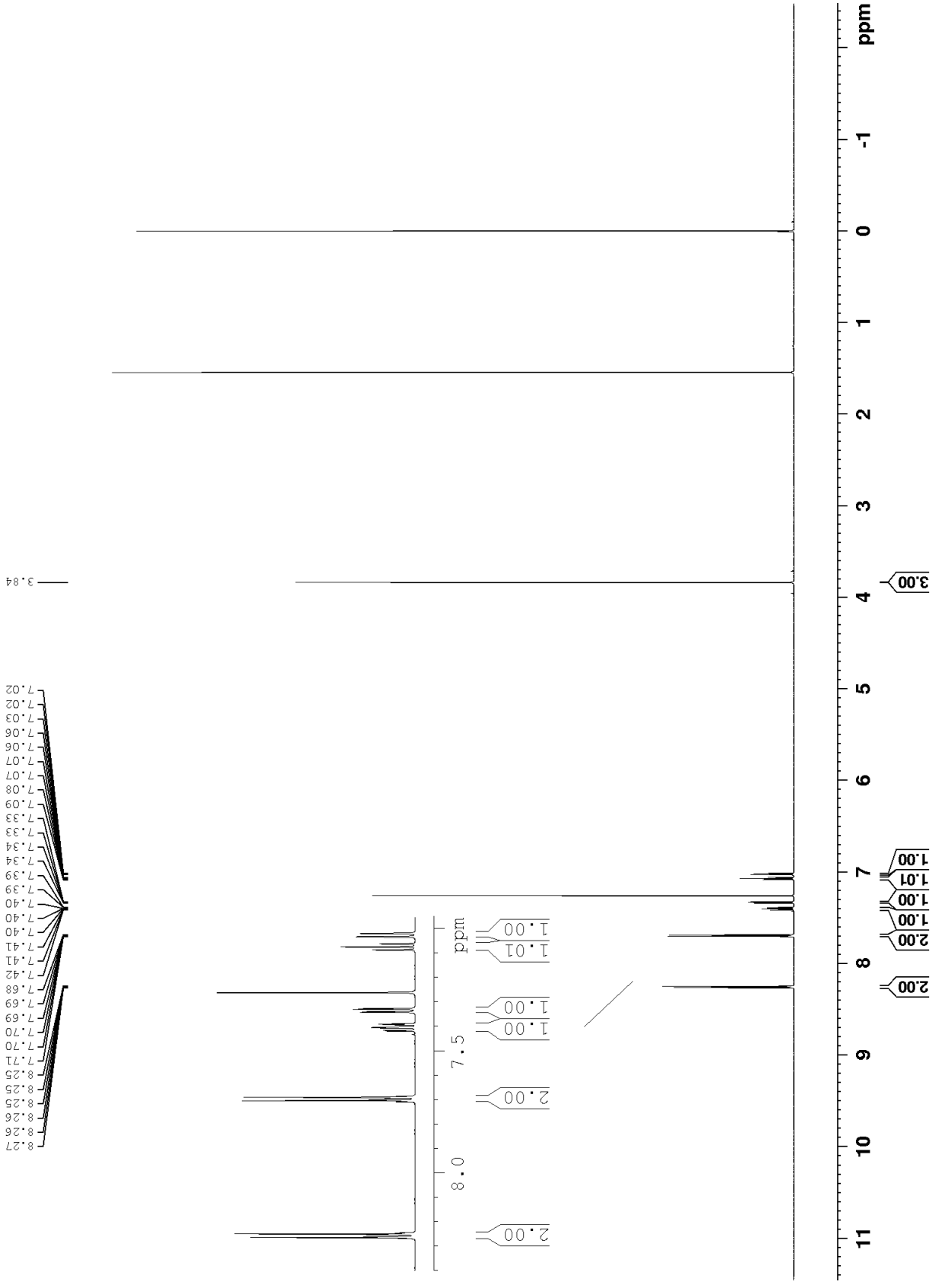
^{1}**H NMR spectrum** of 1-(o-tolyl)naphthalene (entry 12) 21

^{1}**H NMR spectrum** of 2-(naphthalen-1-yl)phenol (entry 13) 22

Table S1: Isolated yields (%) at each reaction repetition.

Cycle nr.	Yield (%)
1	93
2	92
3	85
4	87
5	81
6	79
7	76
8	70
9	62
10	63
11	57
12	56
13	53
14	51
15	53
16	52
17	44
18	38
19	37
20	36
21	35
22	34
23	33
24	32
25	30
26	30
27	27
28	24
29	20
30	14

^{1}H NMR spectrum of 2-methoxy-4'-nitrobiphenyl



^{13}C NMR spectrum of 2-methoxy-4'-nitrobiphenyl

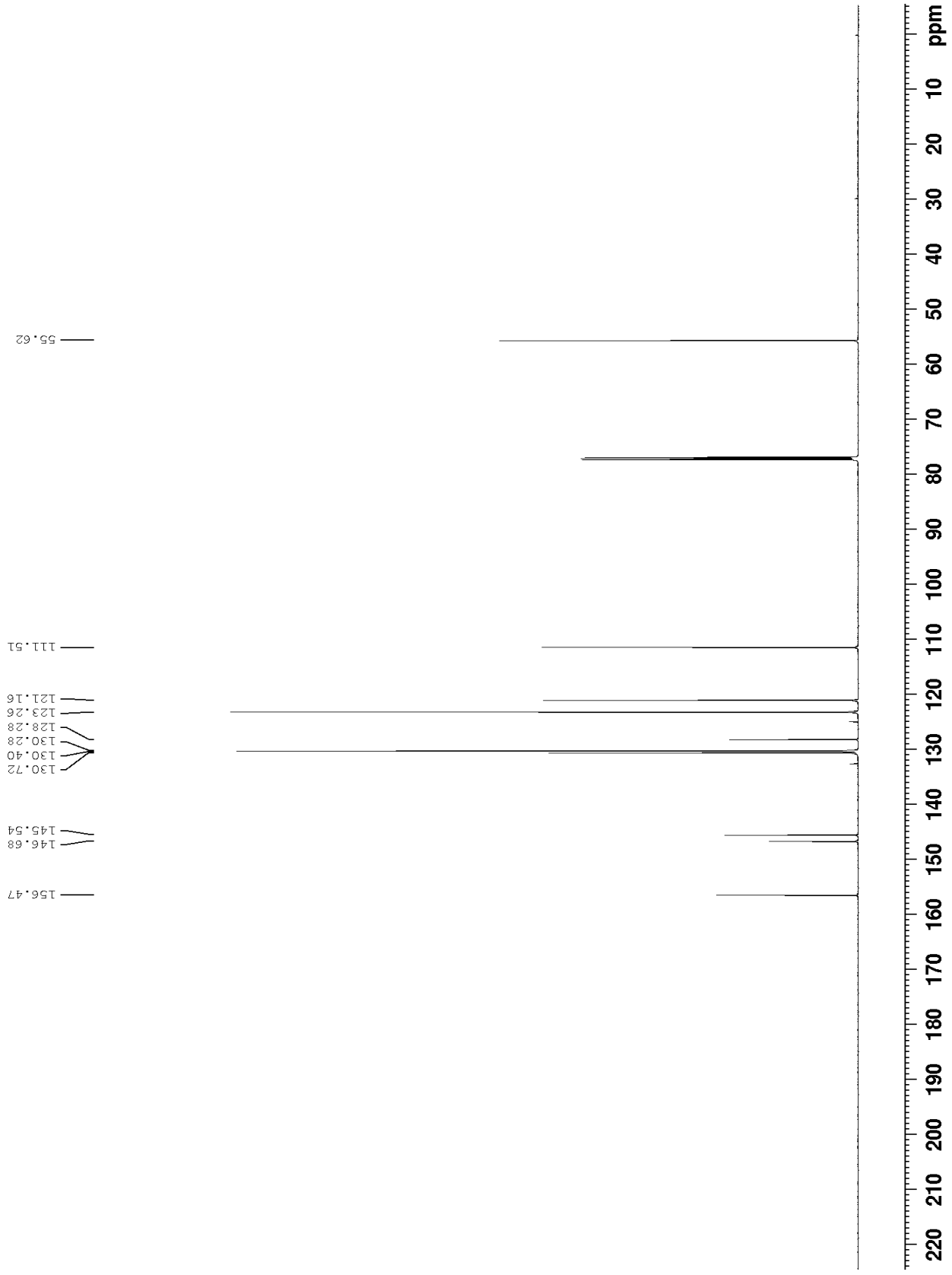
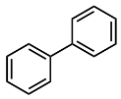
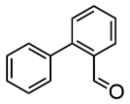
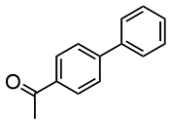
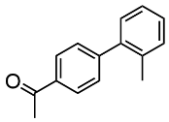
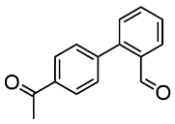
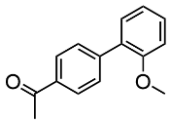
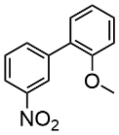
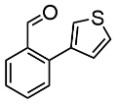
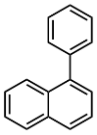


Table S2: Mean isolated yields (%) ± Standard Deviations at each reaction repetition.

Cycle nr.	Mean ± SD
1	92,33 ± 0,22
2	91,5 ± 2,15
3	85,17 ± 0,94
4	86,83 ± 0,85
5	80,33 ± 2,32
6	78,83 ± 3,68
7	75,5 ± 3,26
8	69,33 ± 1,31
9	62 ± 0,81
10	62,17 ± 2,78

Table S3: Overview of the synthesized additional products, their corresponding isolated yields (%), and boiling/melting points. The products were prepared in 0.5 mmol scale (aryl halide). Entry 8 is air and heat sensitive and quickly decomposed once heating was applied.

Entry	Products	Yields (%)	bp/mp (°C)
1		89	mp: 69 – 70
2		72	bp: 91 - 92
3		91	mp: 116 - 118
4		90	mp: 43 - 45
5		83	mp: 89 - 91
6		92	mp: 101 - 103
7		94	mp: 49 - 51
8		68	mp: decomposition
9		94	bp: 140 - 142

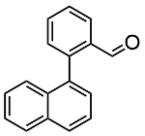
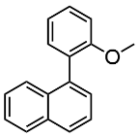
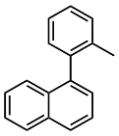
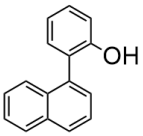
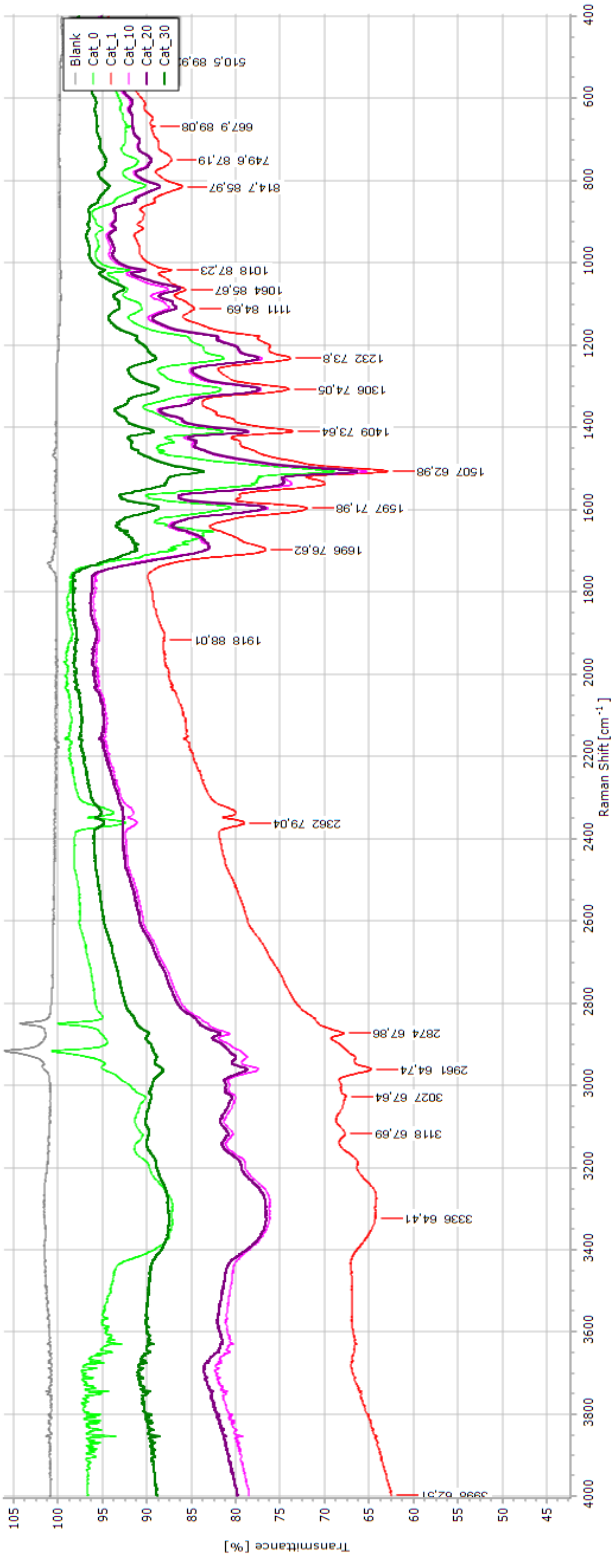
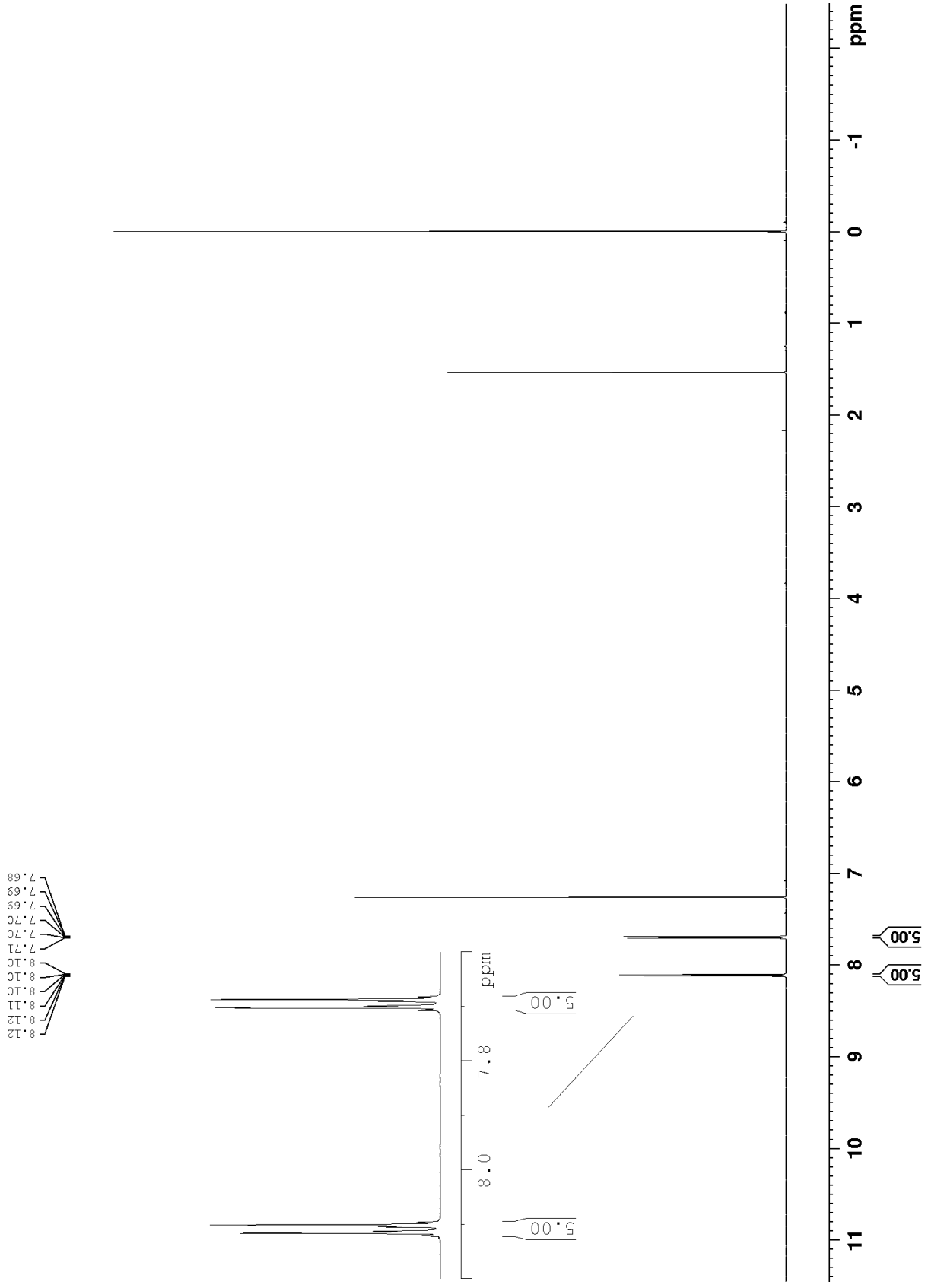
10		92	mp: 86 - 87
11		64	mp: 98 - 99
12		95	mp: 65 - 67
13		90	mp: 60 - 62

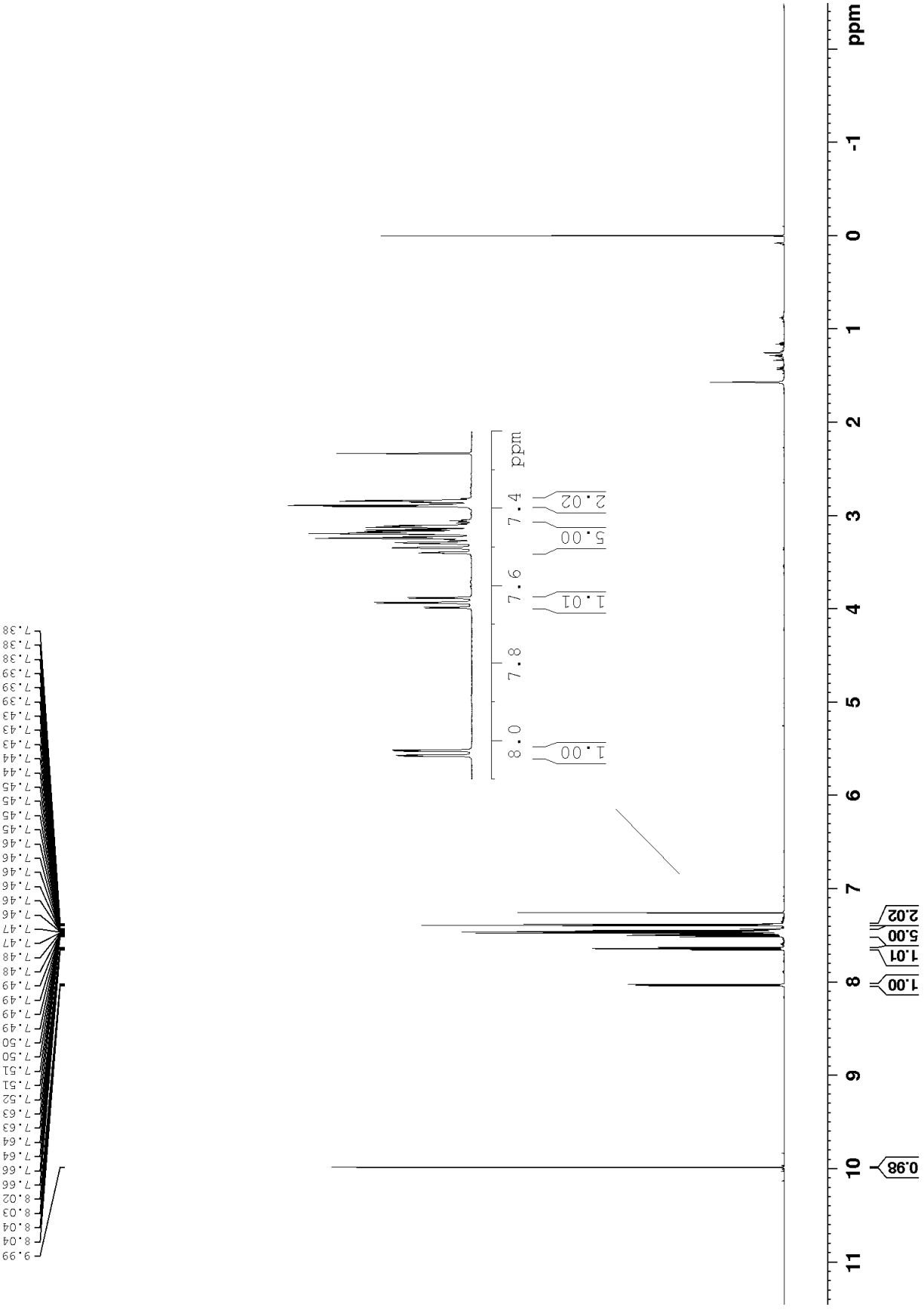
Figure S1: Combined average FT-IR spectra with the main peaks highlighted. Cat_0 refers to the unused Pd EnCat™ 30. Cat_1, Cat_10, Cat_20, and Cat_30 refer to catalysts' samples after the 1st, the 10th, the 20th, and the 30th reaction cycles, respectively. Each line represents the average of 3 readings.



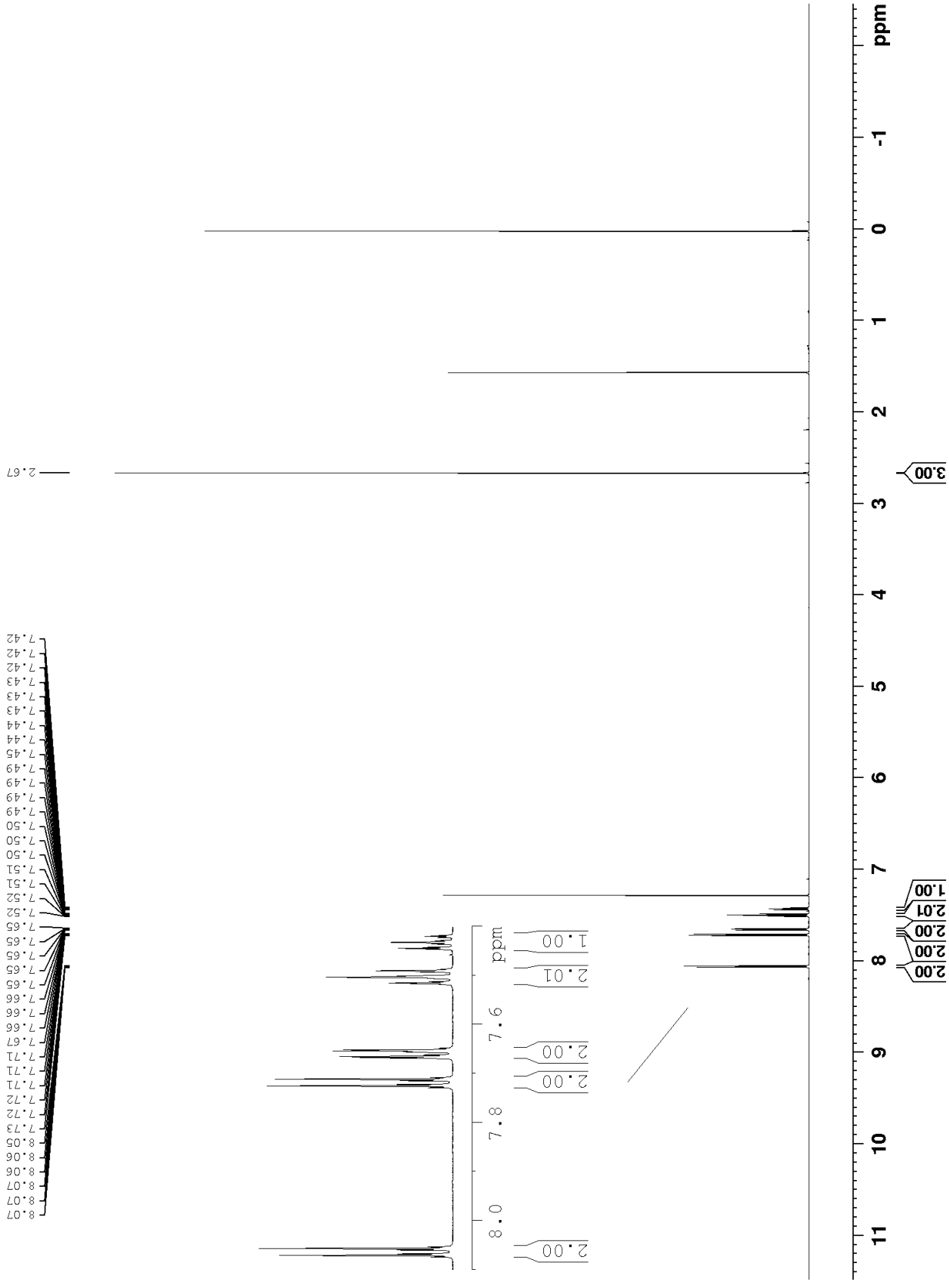
^{1}H NMR spectrum of 1,1'-biphenyl (entry 1)



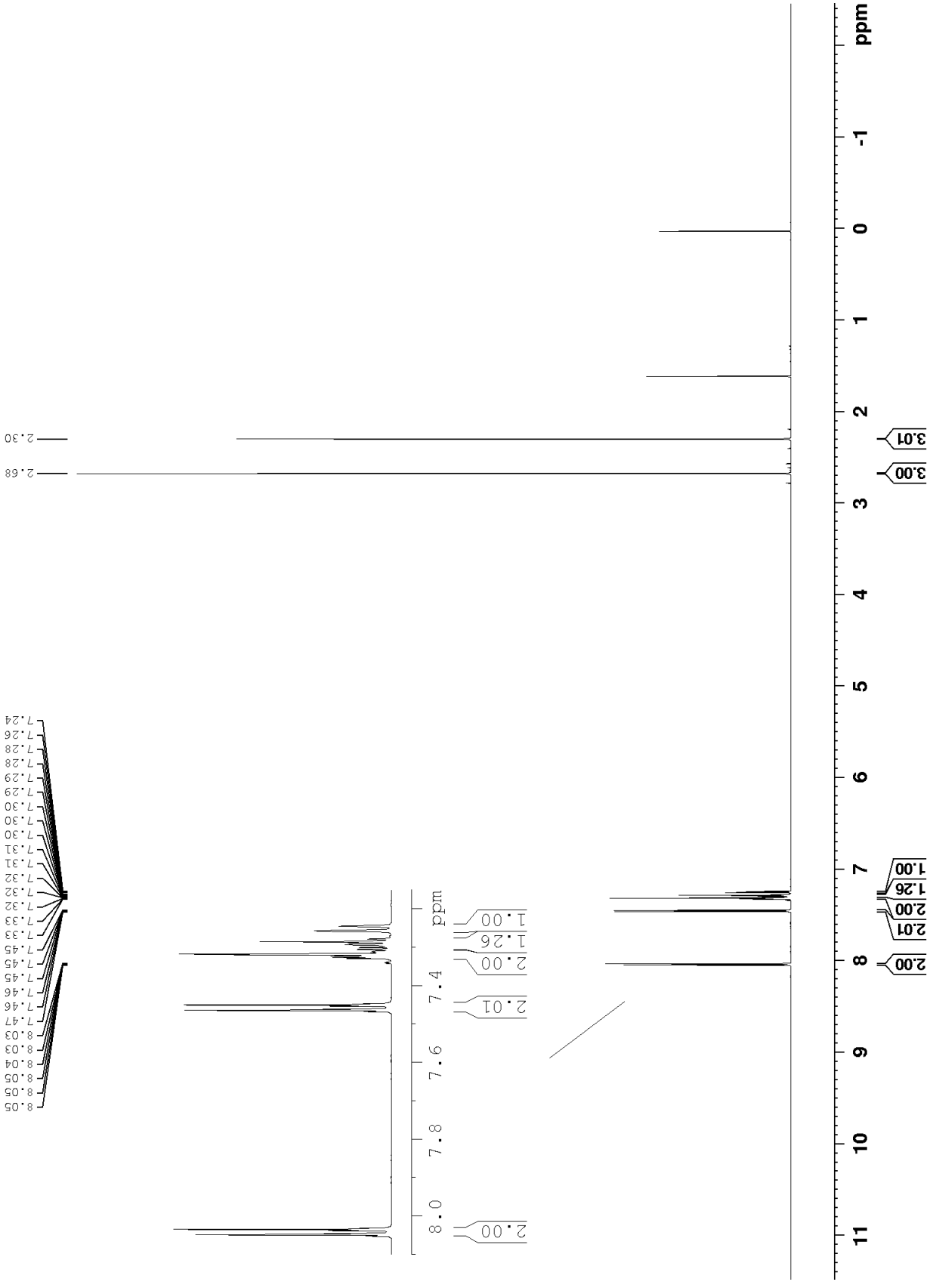
^{1}H NMR spectrum of biphenyl-2-carboxaldehyde (entry 2)



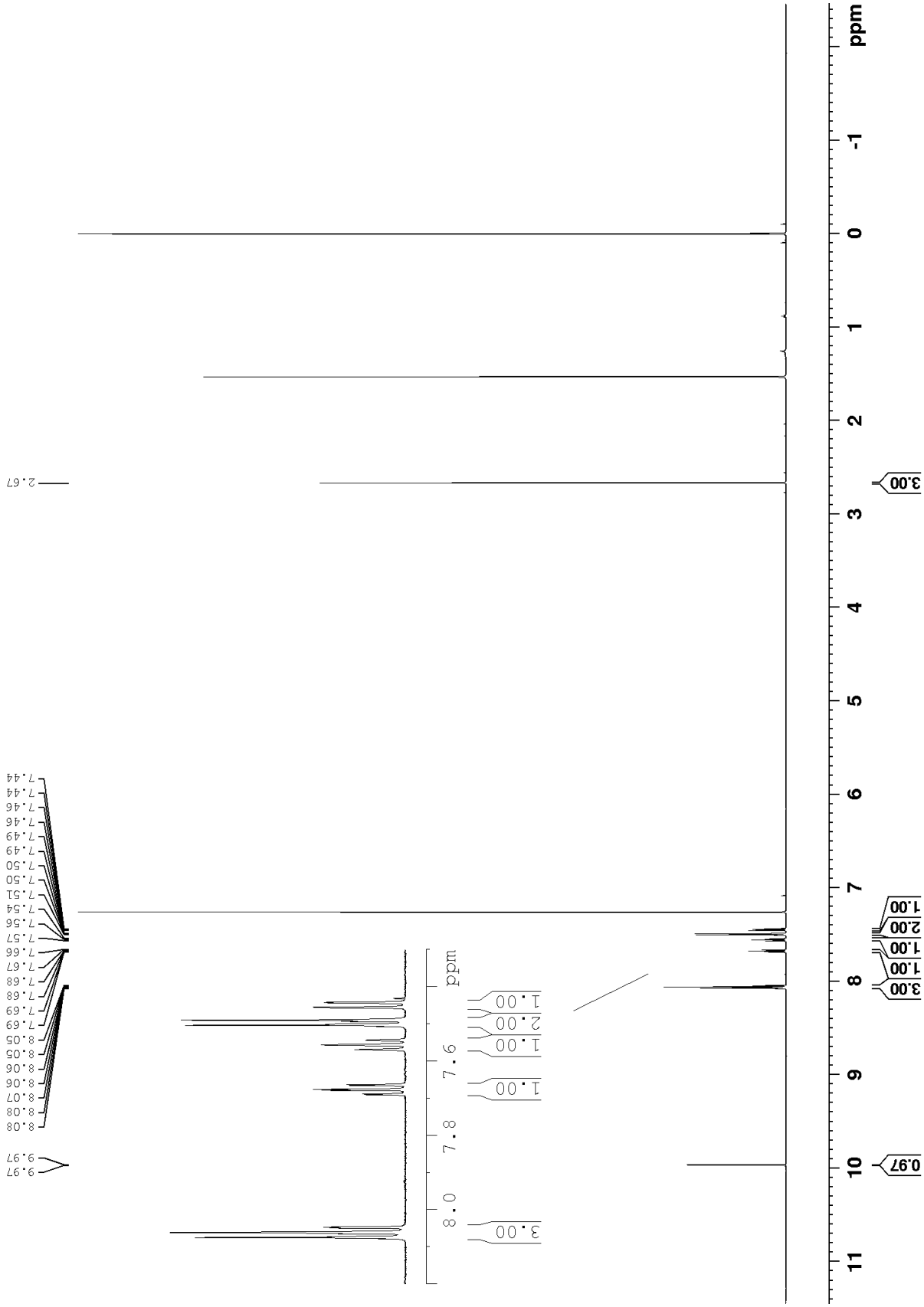
^{1}H NMR spectrum of 4-acetylbiphenyl (entry 3)



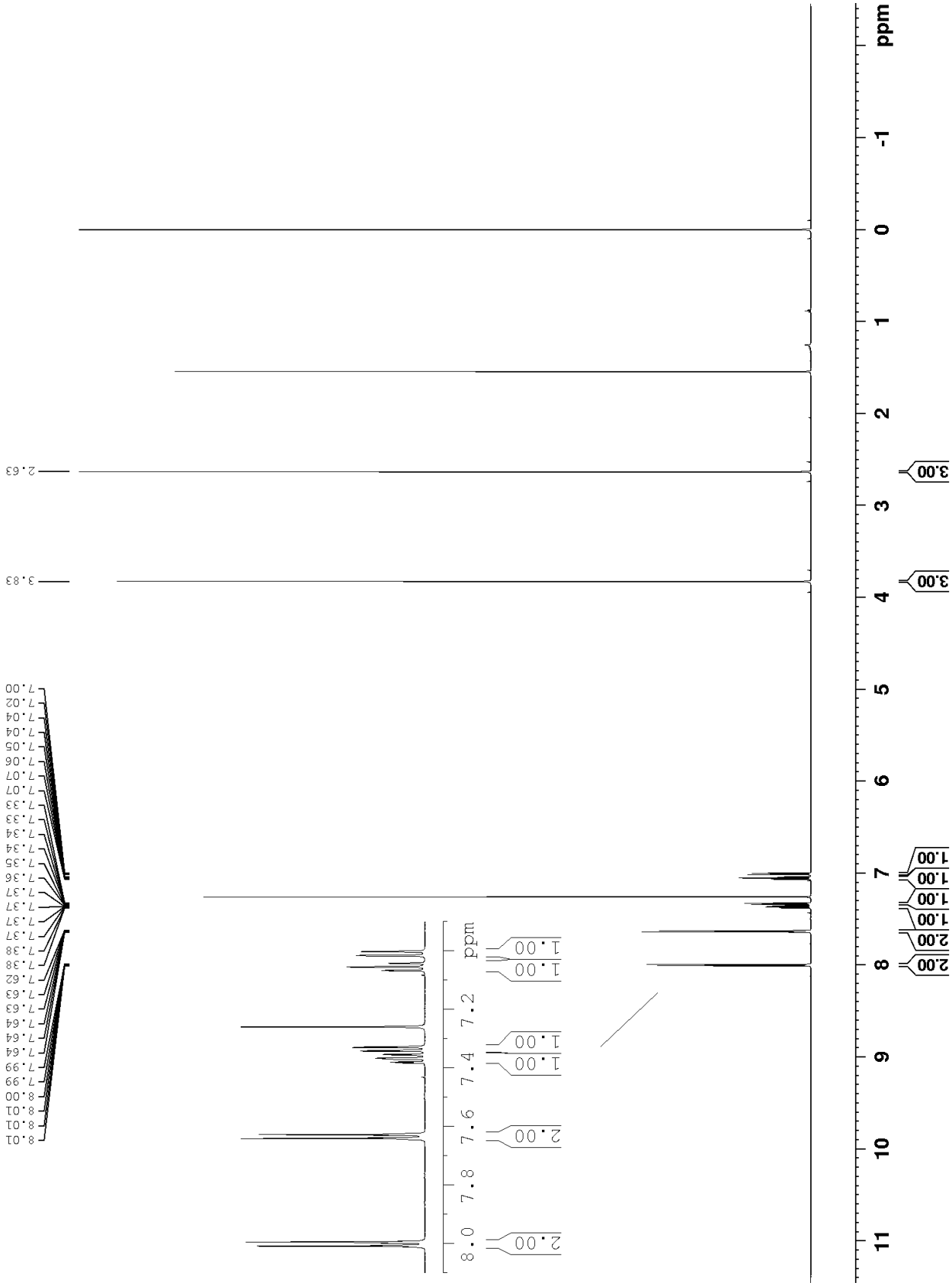
^{1}H NMR spectrum of 1-(2'-methyl-[1,1'-biphenyl]-4-yl)ethan-1-one (entry 4)



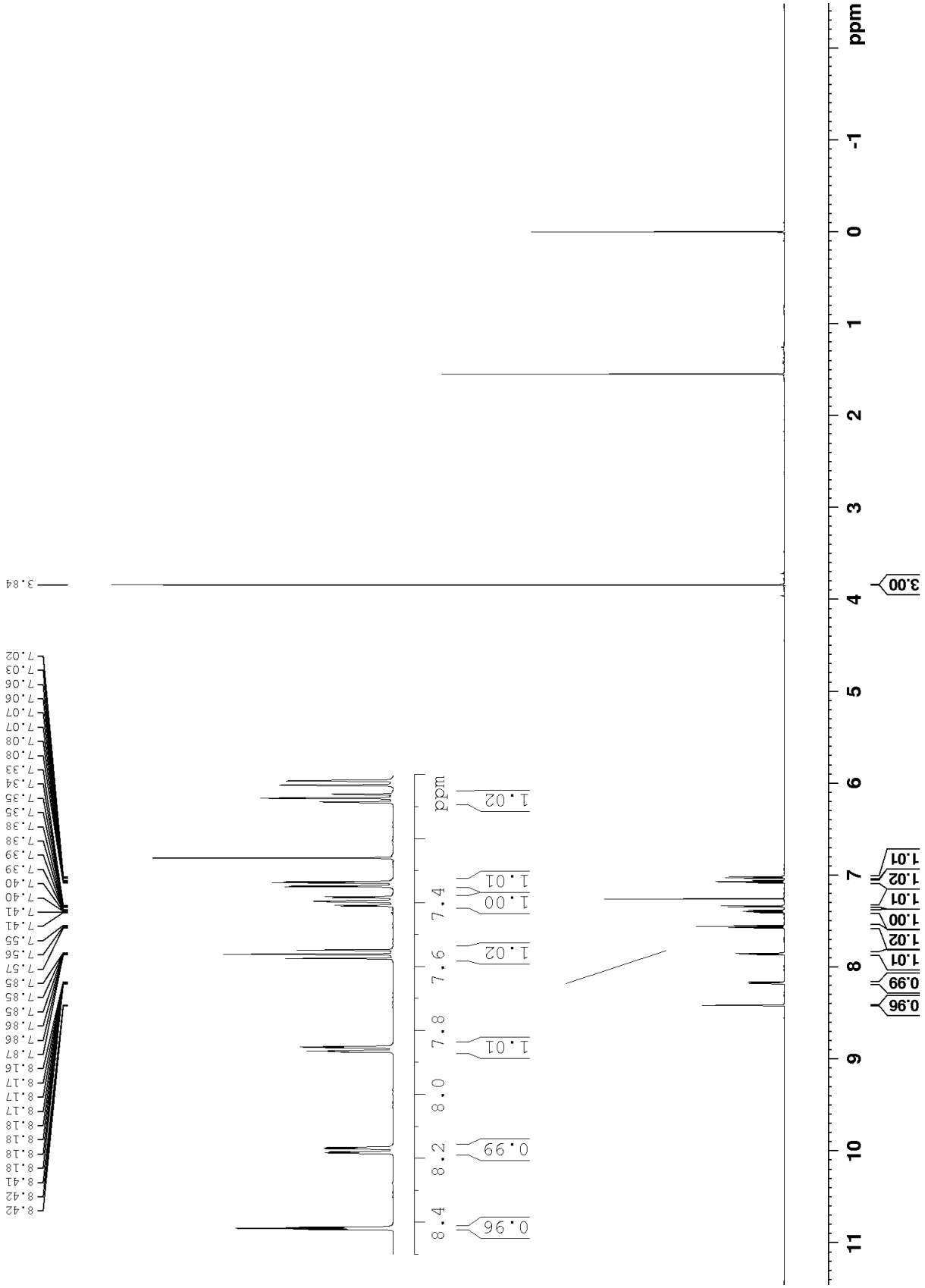
^{1}H NMR spectrum of 4'-acetyl-[1,1'-biphenyl]-2-carbaldehyde (entry 5)



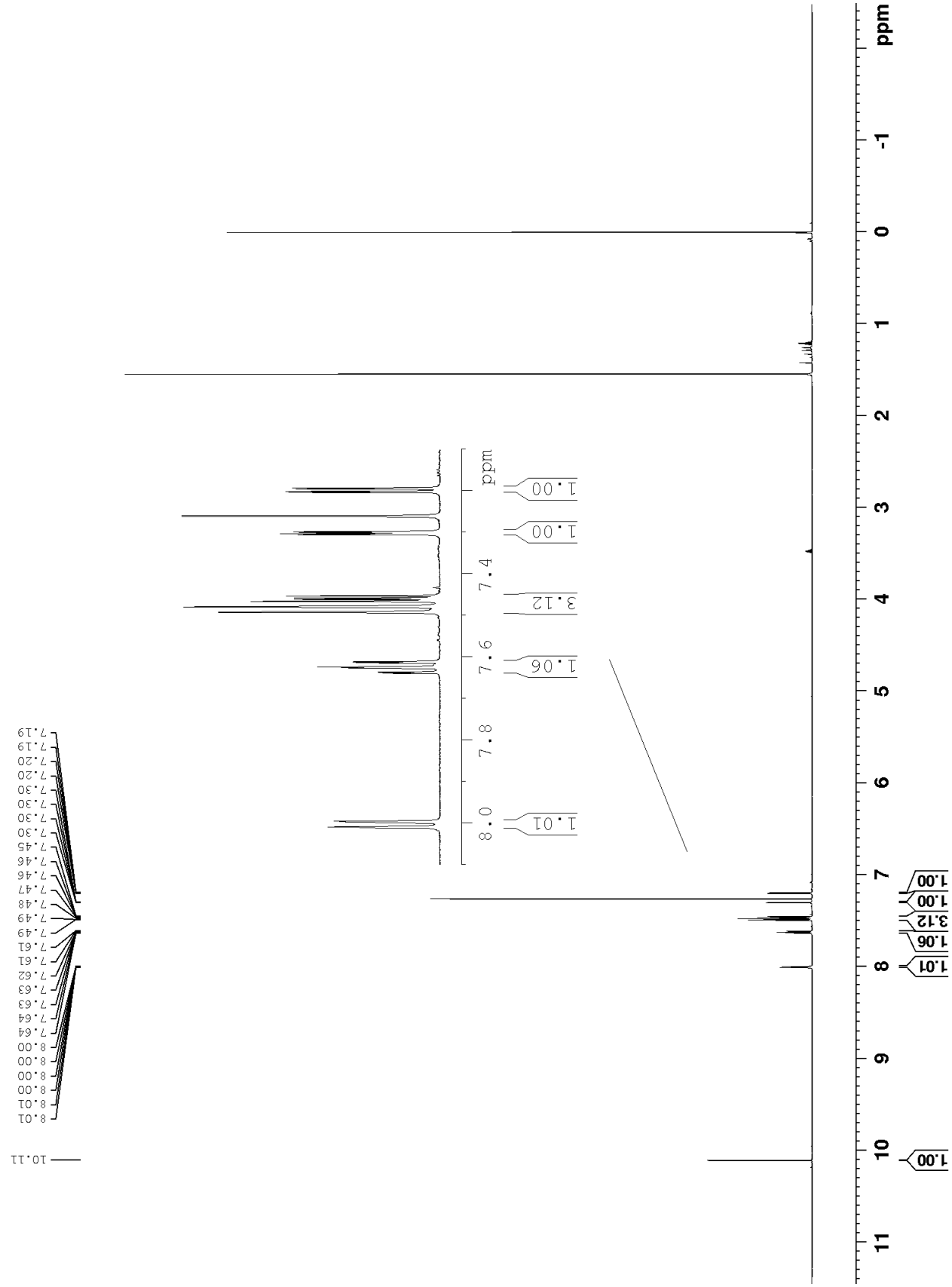
^{1}H NMR spectrum of 1-(2'-methoxy-[1,1'-biphenyl]-4-yl)ethan-1-one (entry 6)



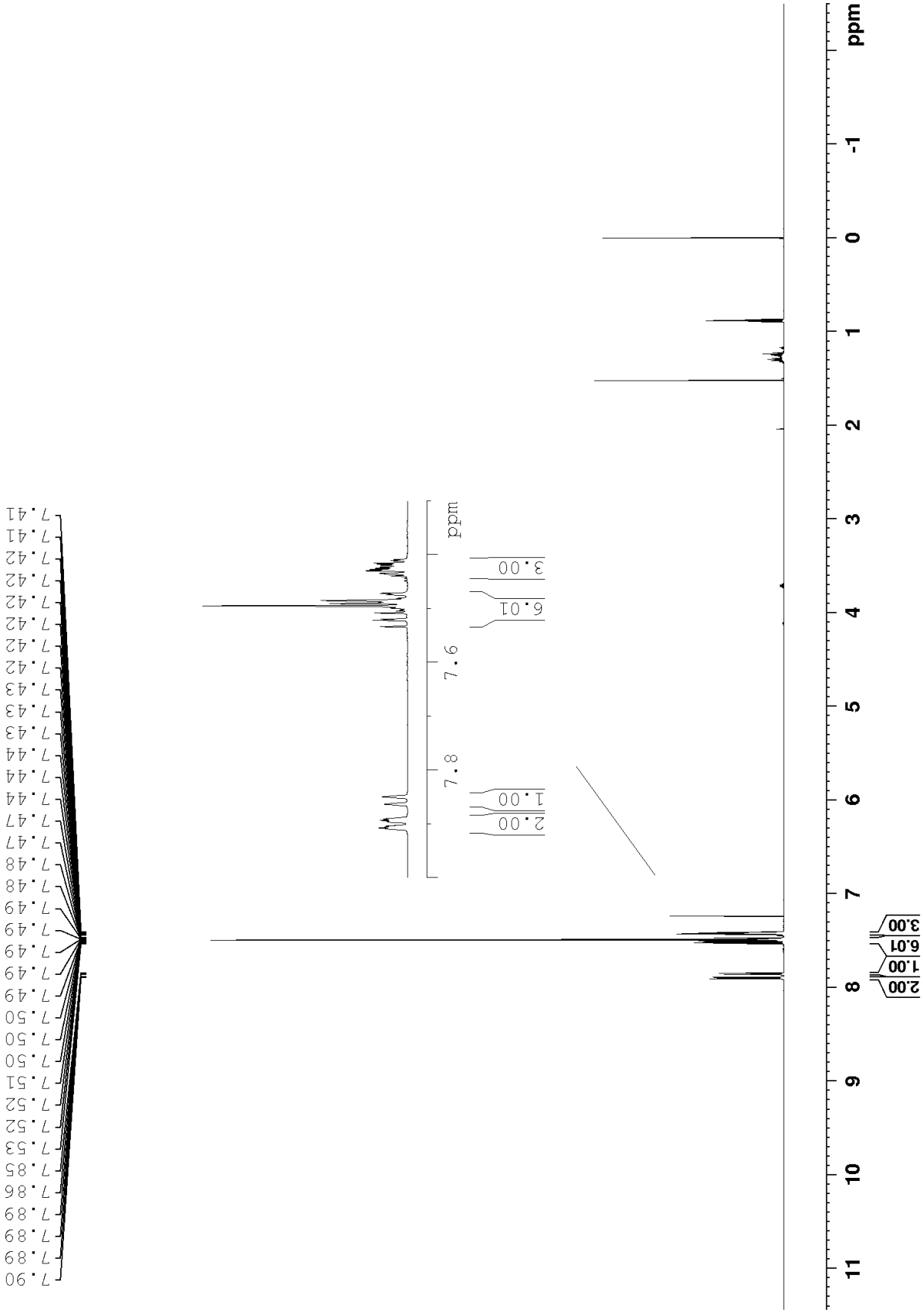
^{1}H NMR spectrum of 2-methoxy-3'-nitro-1,1'-biphenyl (entry 7)



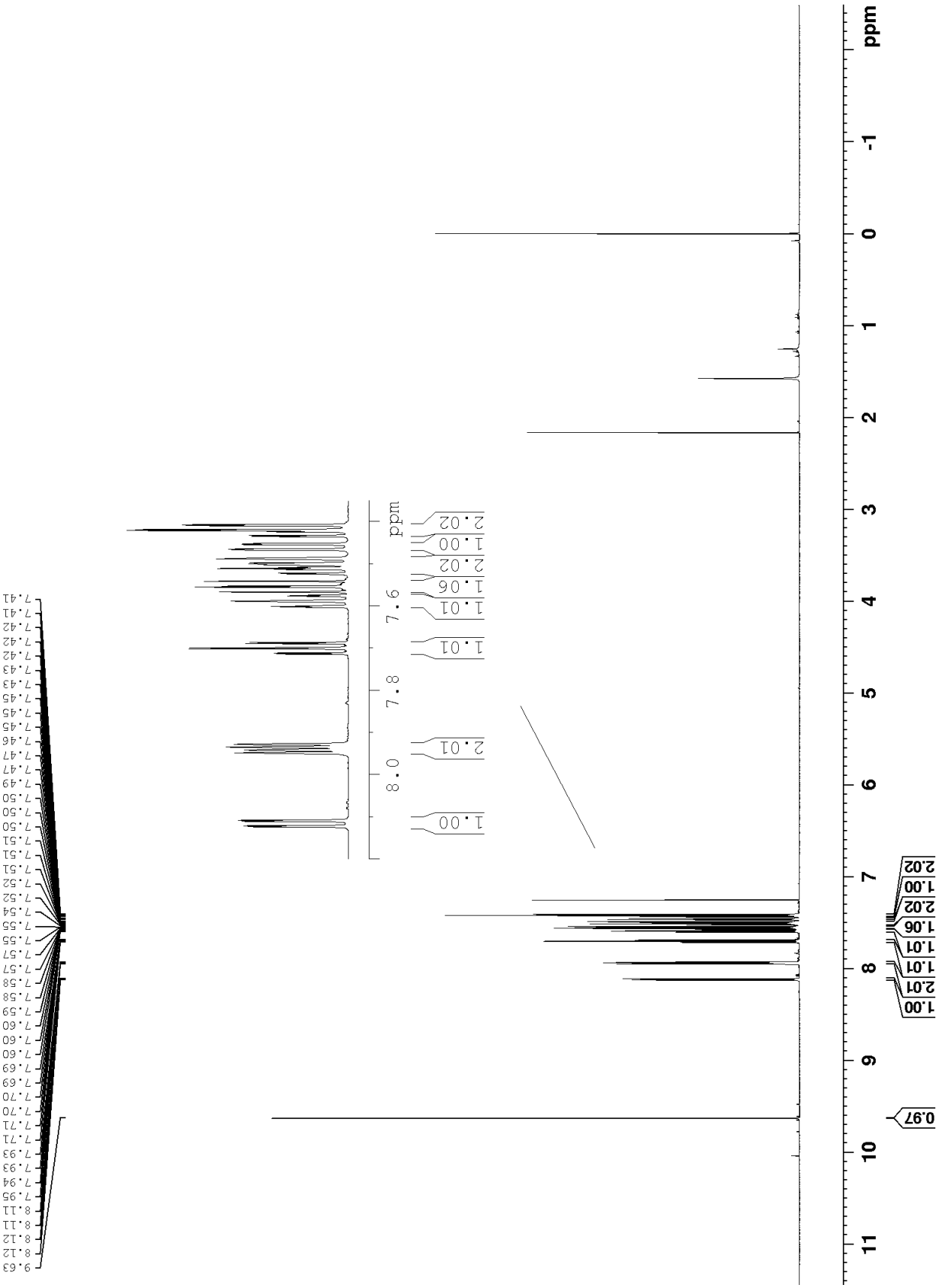
^{1}**H NMR spectrum** of 2-(thiophen-3-yl)benzaldehyde (entry 8)



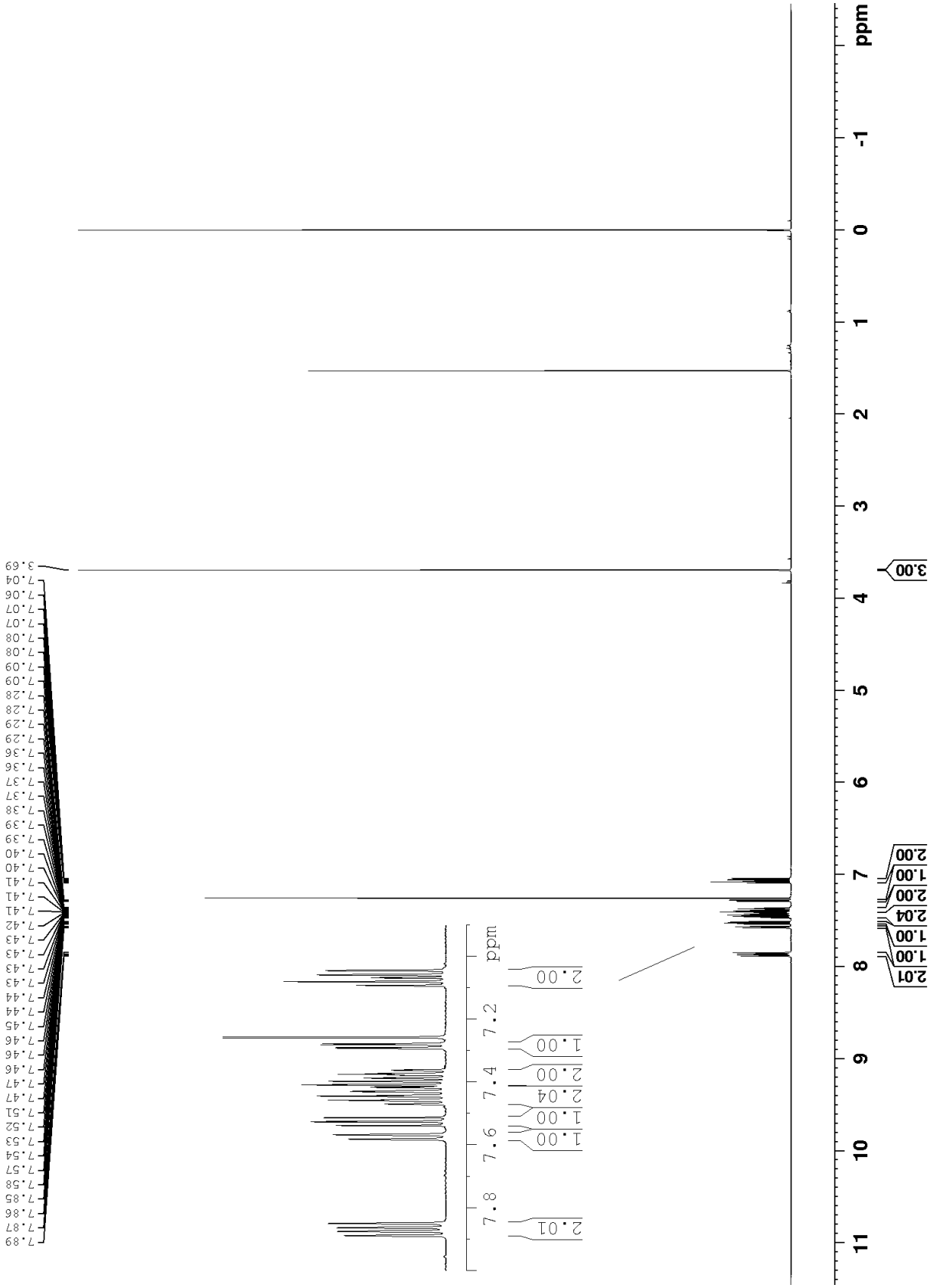
^{1}H NMR spectrum of 1-phenylnaphthalene (entry 9)



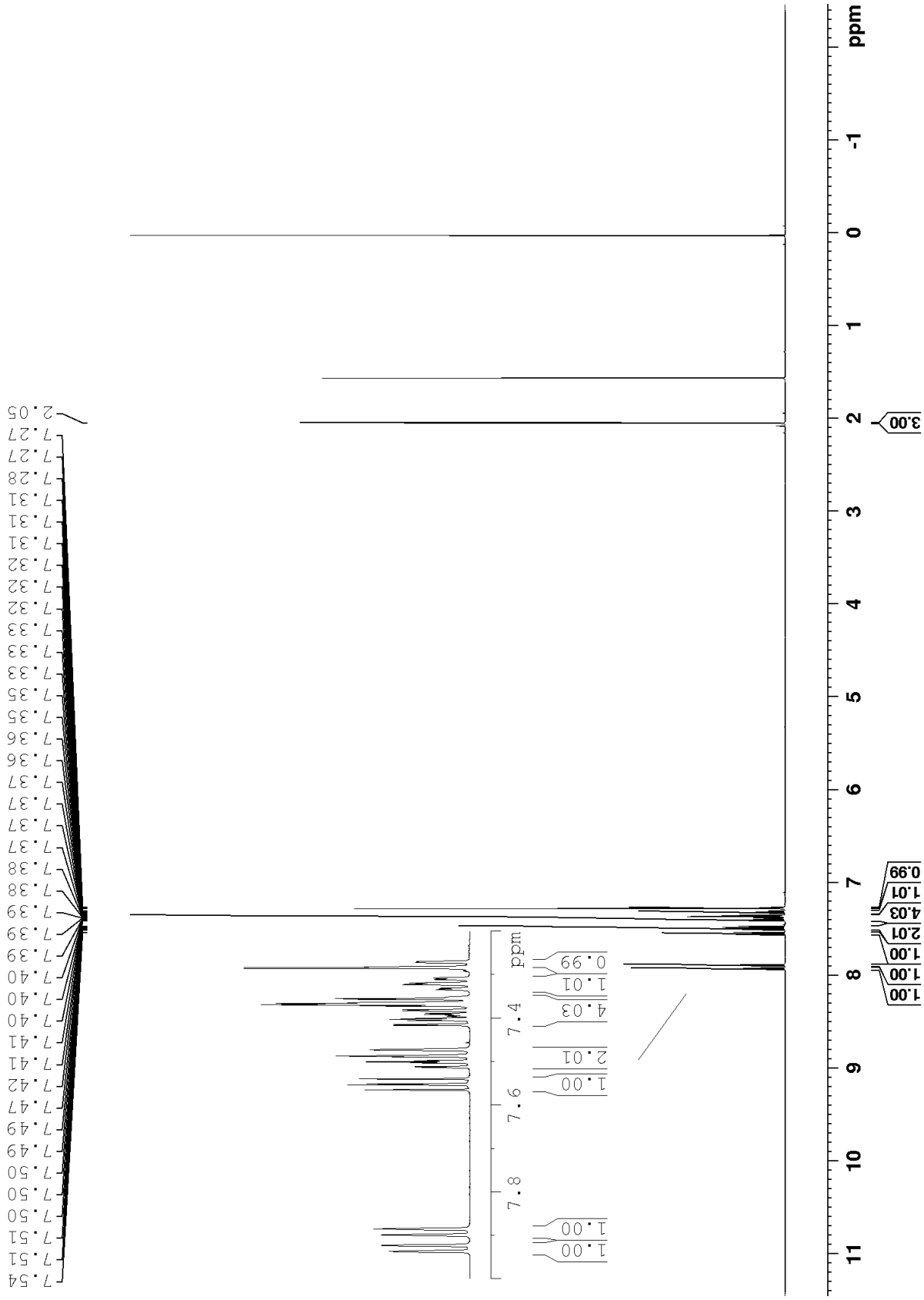
[1]**H NMR spectrum** of 2-(naphthalen-1-yl)benzaldehyde (entry 10)



^{1}H NMR spectrum of 1-(2-methoxyphenyl)naphthalene (entry 11)



^{1}H NMR spectrum of 1-(o-tolyl)naphthalene (entry 12)



[1]**H NMR spectrum** of 2-(naphthalen-1-yl)phenol (entry 13)

