Electronic Supplementary Information

Blue-green emitting sulphonamido-imidazole derivatives. ESIPT based excited state dynamics

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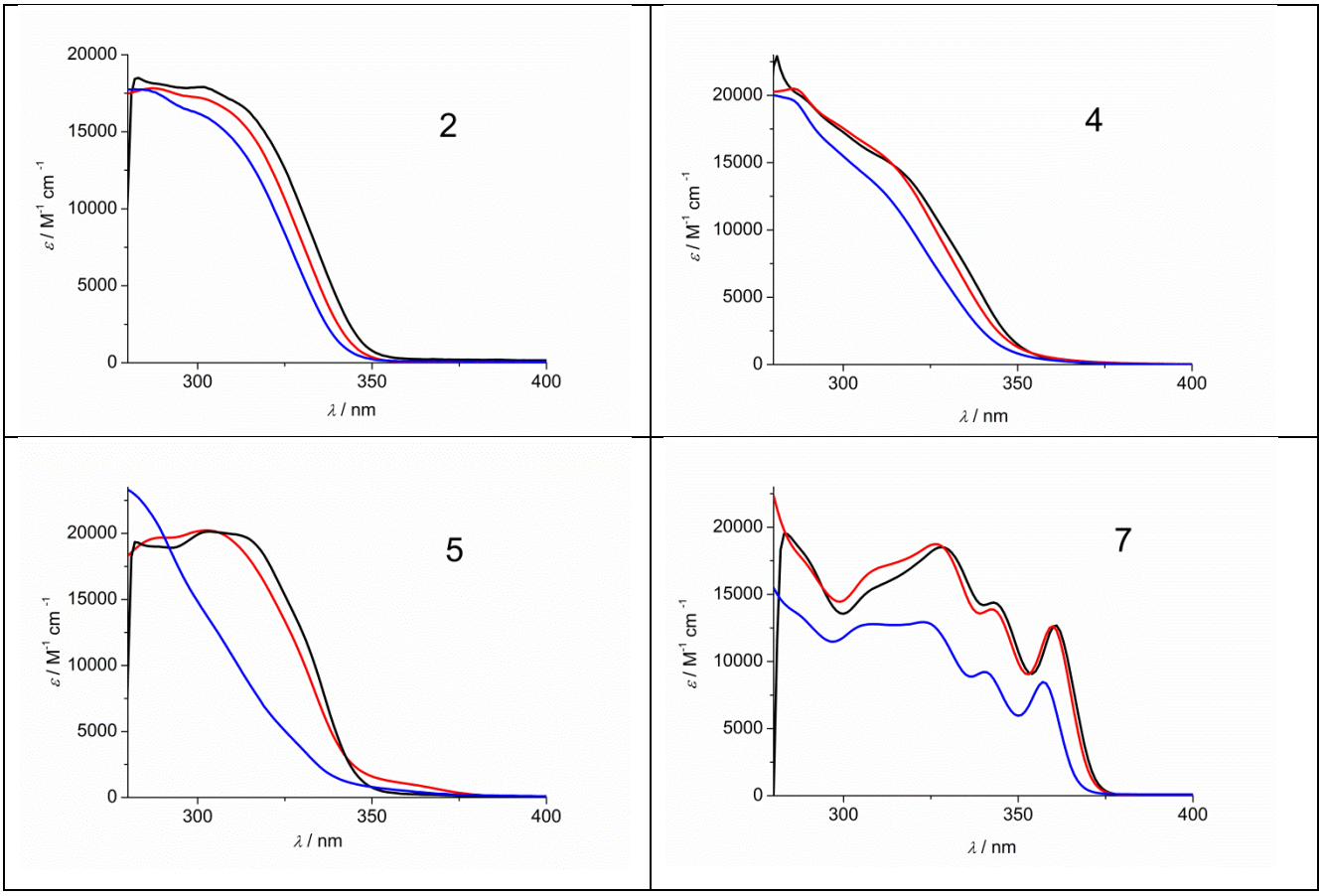


Figure S1. Absorption spectra of samples **2**, **4**, **5** and **7** in the various solvents: TOL (black), DCM (red) and MeOH (blue).

Table S1. Absorption band maxima and molar absorption coefficients in the various solvents.

	Toluene	**Dichloromethane**	**Methanol**
	ε_{max}/ M^{-1} cm^{-1} (λ_{max}/ nm)	ε_{max}/ M^{-1} cm^{-1} (λ_{max}/ nm)	ε_{max}/ M^{-1} cm^{-1} (λ_{max}/ nm)
2	18000 (300)	17900 (287)	18100 (275)
3	16100 (312)	18100 (281) 16100 (310)	18100 (280) 14900 (308)
4	14500 (316)	20400 (287) 15200 (313)	20000 (279) 13200 (310)
5	19900 (311) 300 (360)	19600 (288) 20200 (302) 1000 (362)	23500 (277) 600 (355)
6	18700 (305) 2400 (370)	19500 (287) 16900 (310) 2900 (370)	19700 (286) 16000 (308) 3000 (364)
7	18500 (328) 14300 (344) 12700 (361)	57600 (262) 18700 (327) 13900 (343) 12600 (360)	52700 (259) 12900 (324) 9200 (341) 8500 (357)

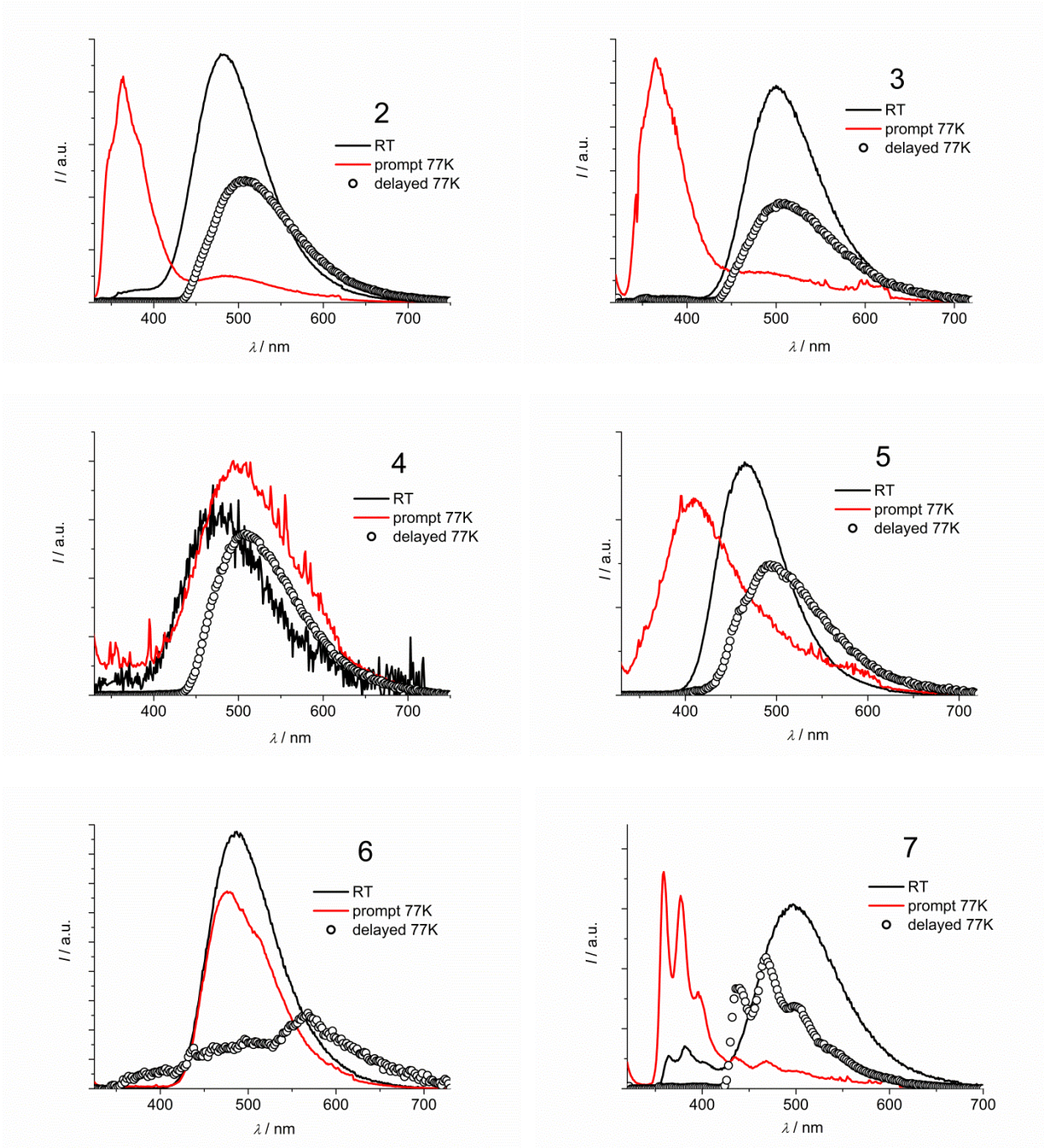


Figure S2. Arbitrary scaled prompt luminescence spectra at 77 K and room temperature in MeOH after excitation at 317 nm. The delayed luminescence spectra taken after 1 ms are also shown.

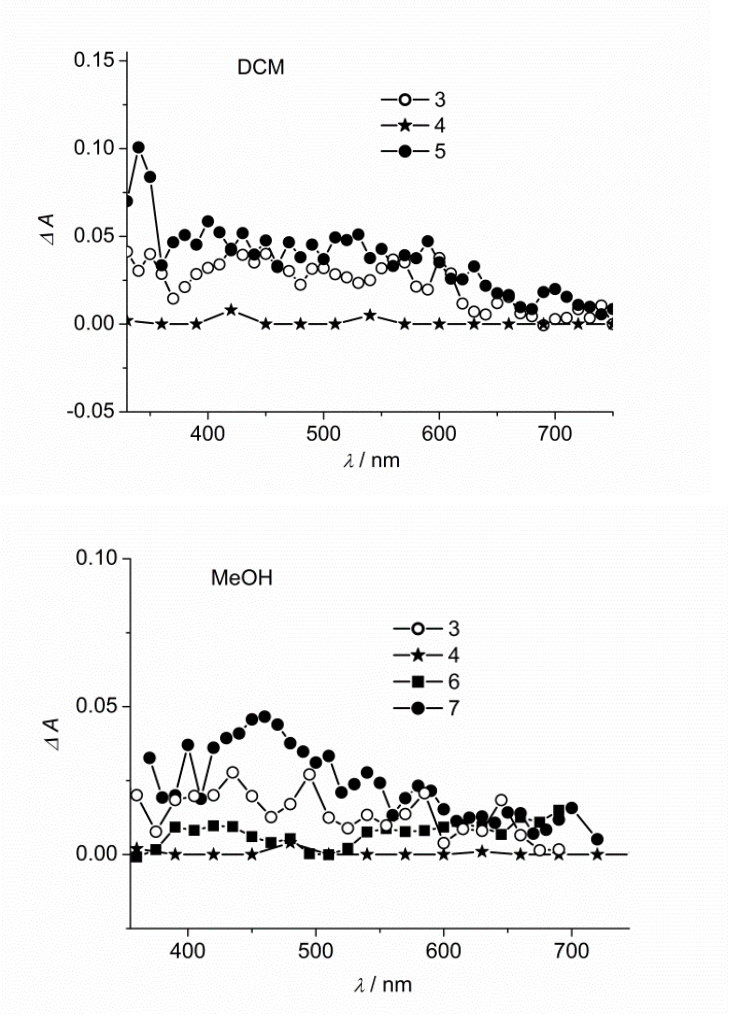
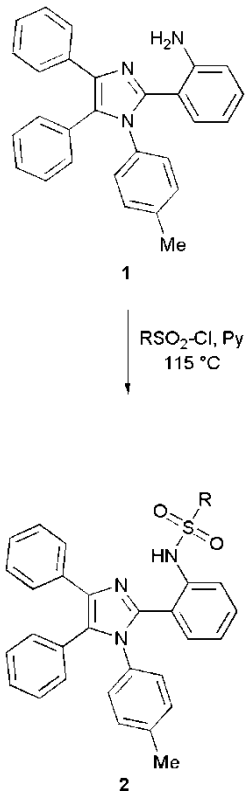
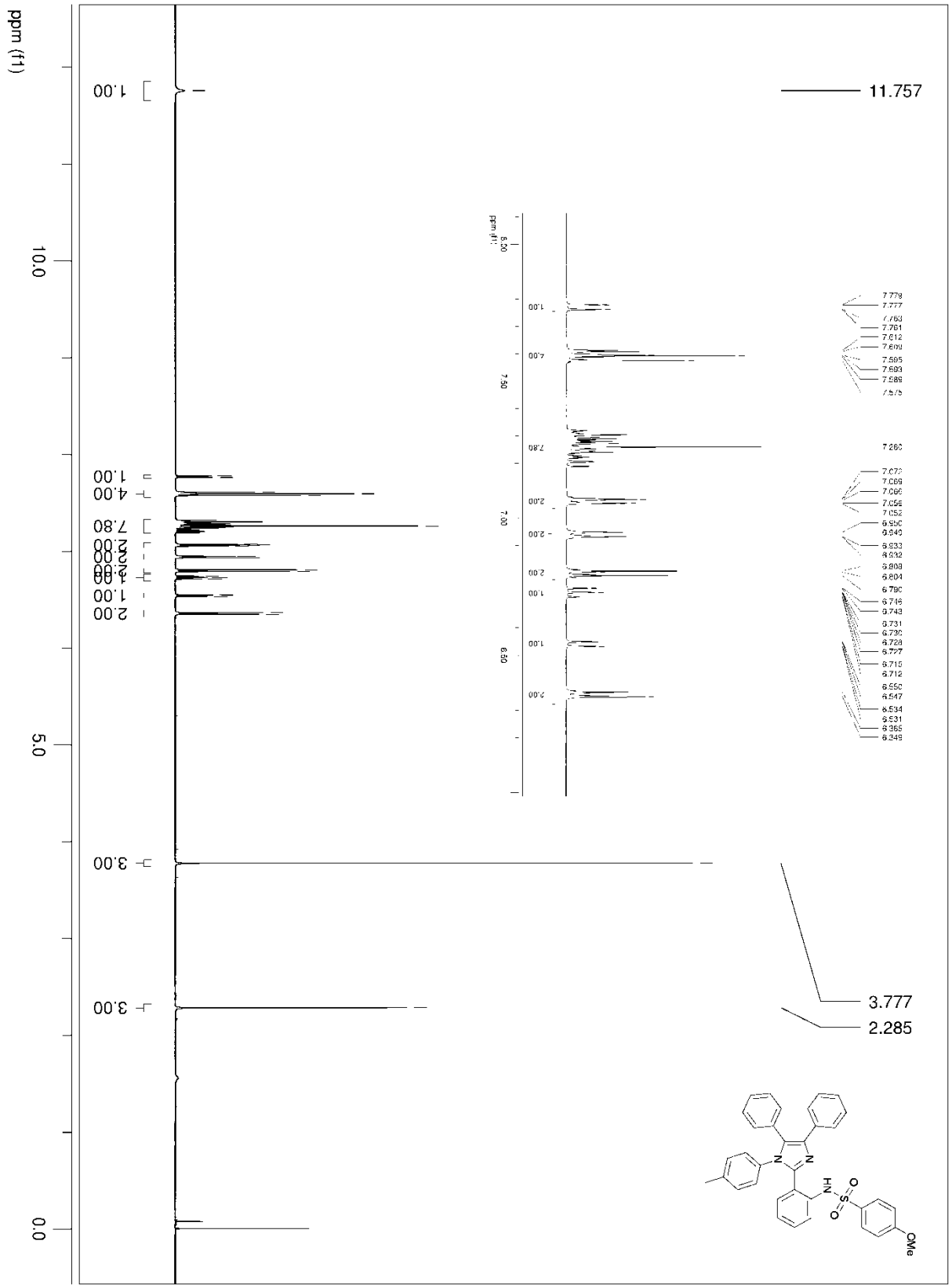


Figure S3. Transient absorption spectra at the end of pulse of **3**, **4** and **5** in DCM and of **3, 4, 6, 7** in MeOH after excitation with a 18 ns laser pulse (355 or 266 nm, 3 mJ/pulse) for optically matched solutions with *A* = 0.7 at the exciting wavelength.



Scheme 1. Synthesis of the imidazole-sulfonamide derivatives.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3.777
2.285
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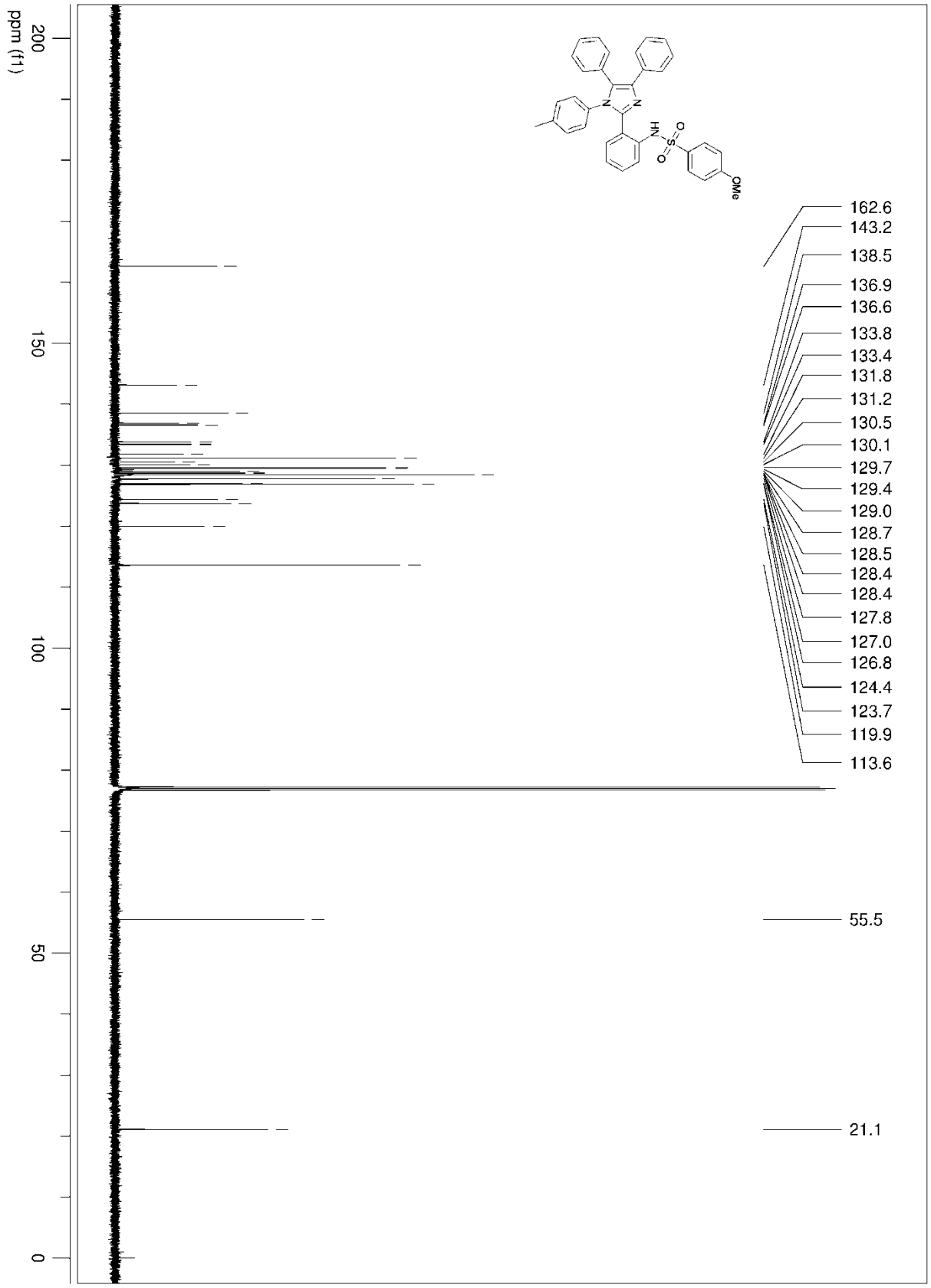
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O
OMe
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133.4
131.8
131.2
130.5
130.1
129.7
129.4
129.0
128.7
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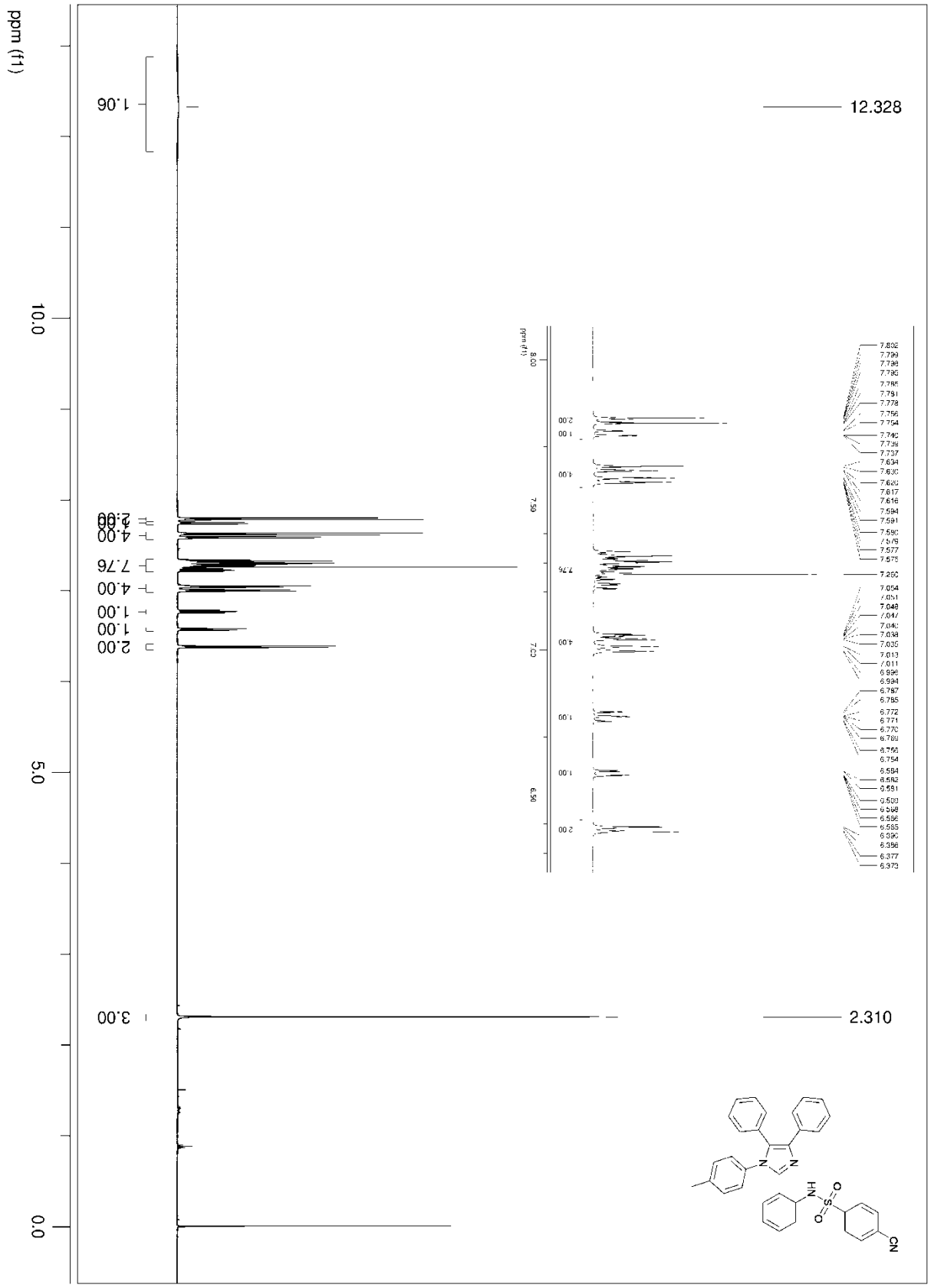
123.7
119.9
113.6
55.5
21.1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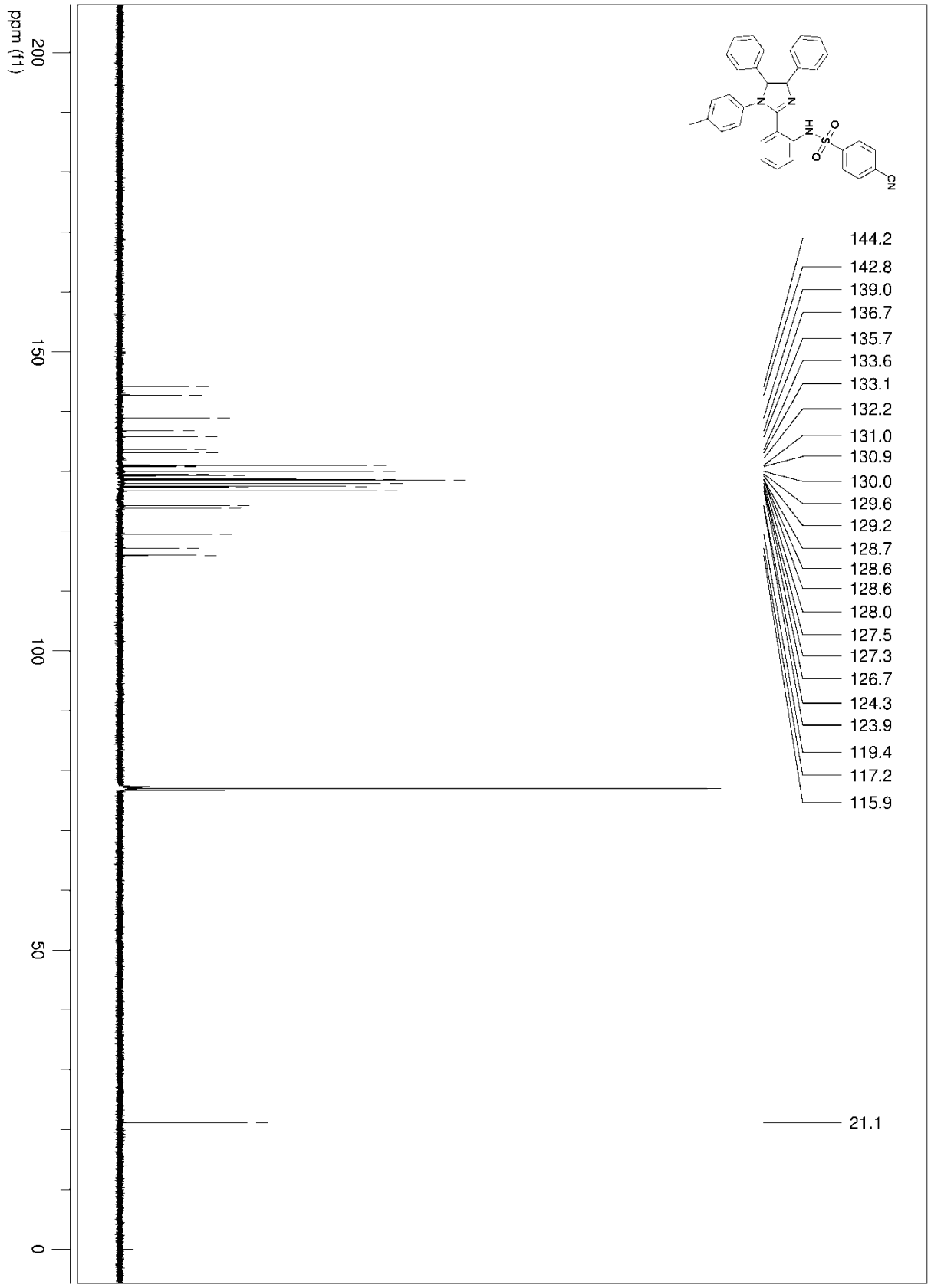
O
CN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129.2
128.7
128.6
128.6
128.0
127.5
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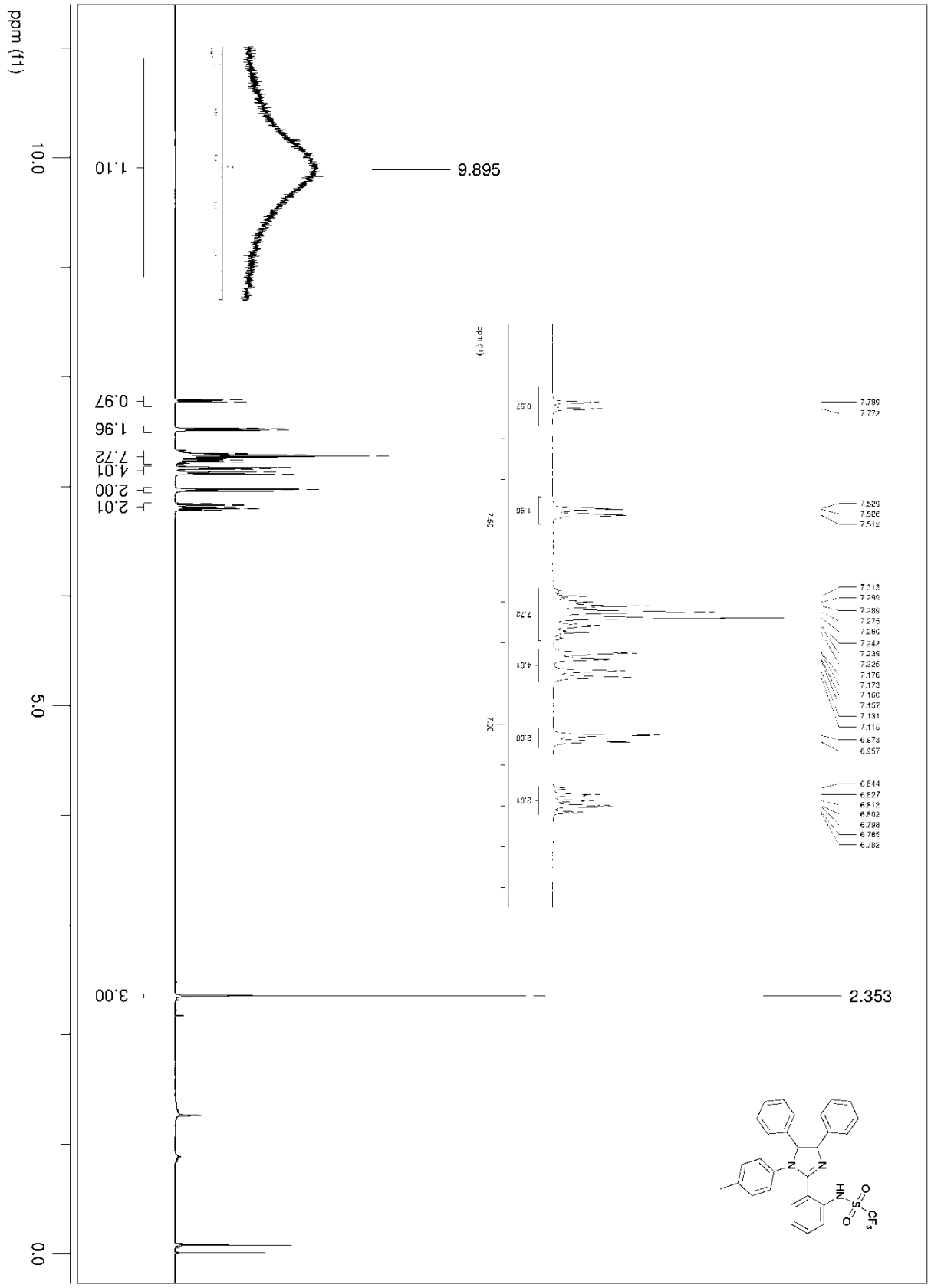
126.7
124.3
123.9
119.4
117.2
115.9
21.1
HN
O
S
O
CN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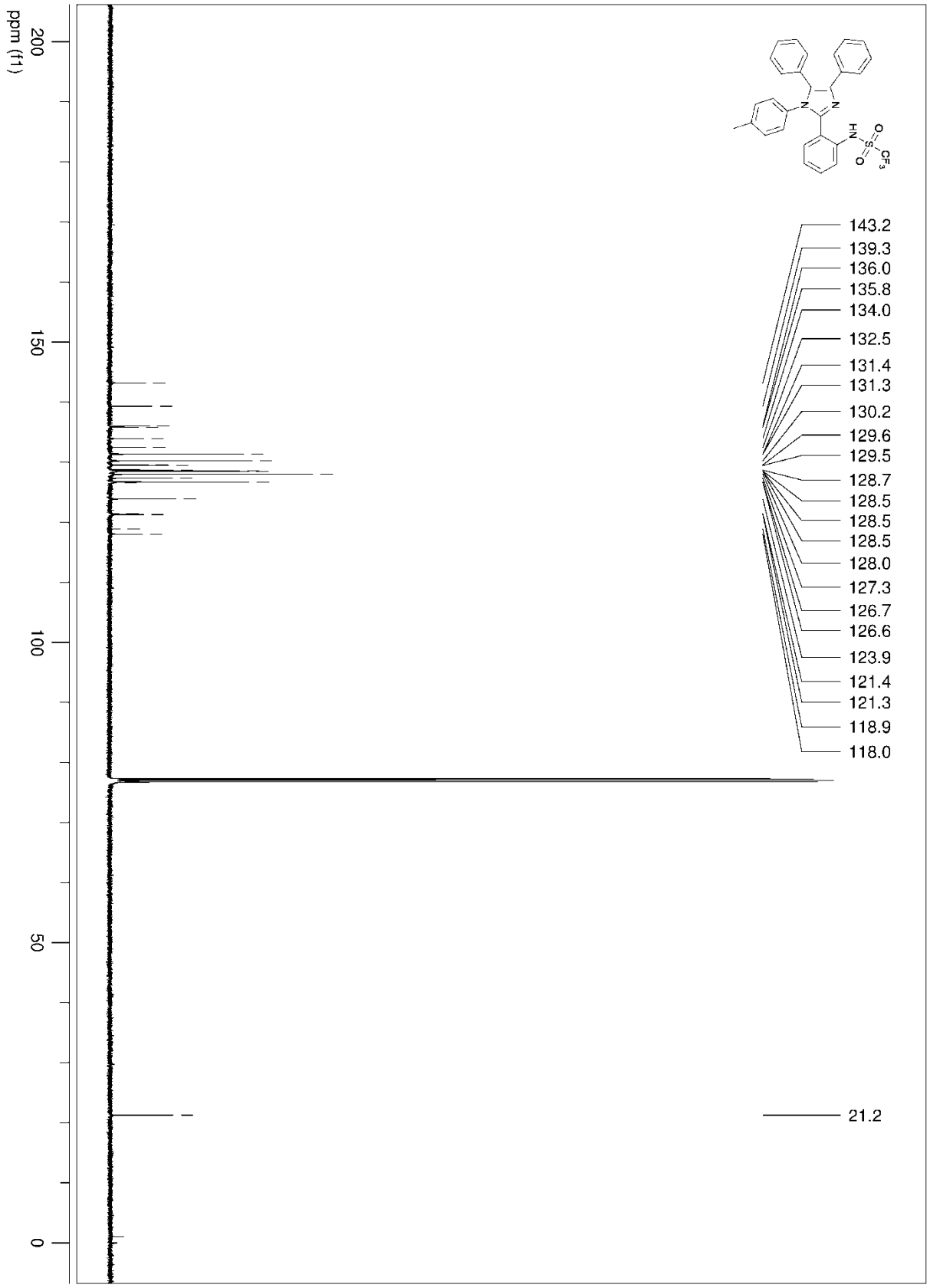
CF3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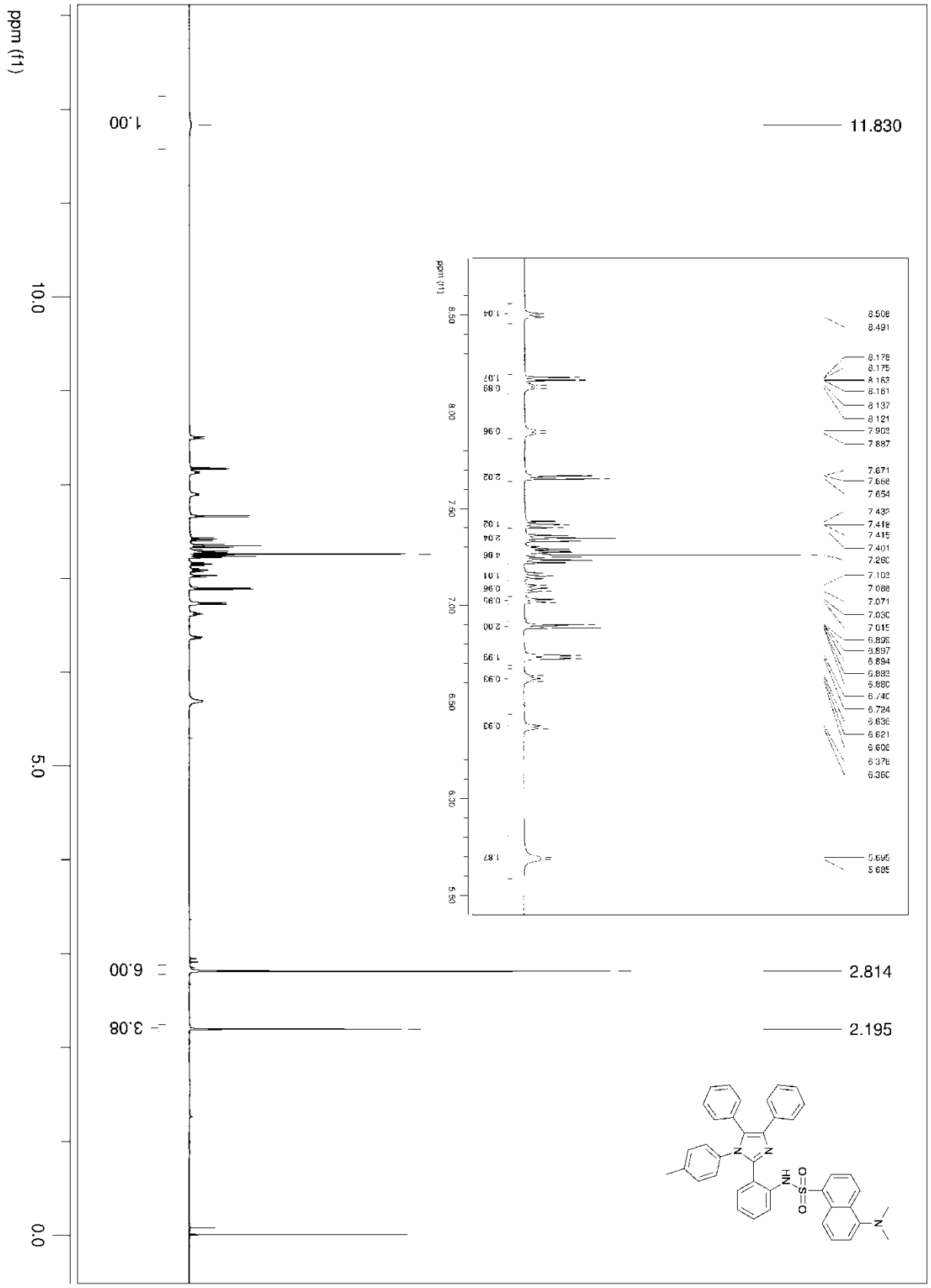
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7.654
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7.418
7.415
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7.280
7.102
7.088
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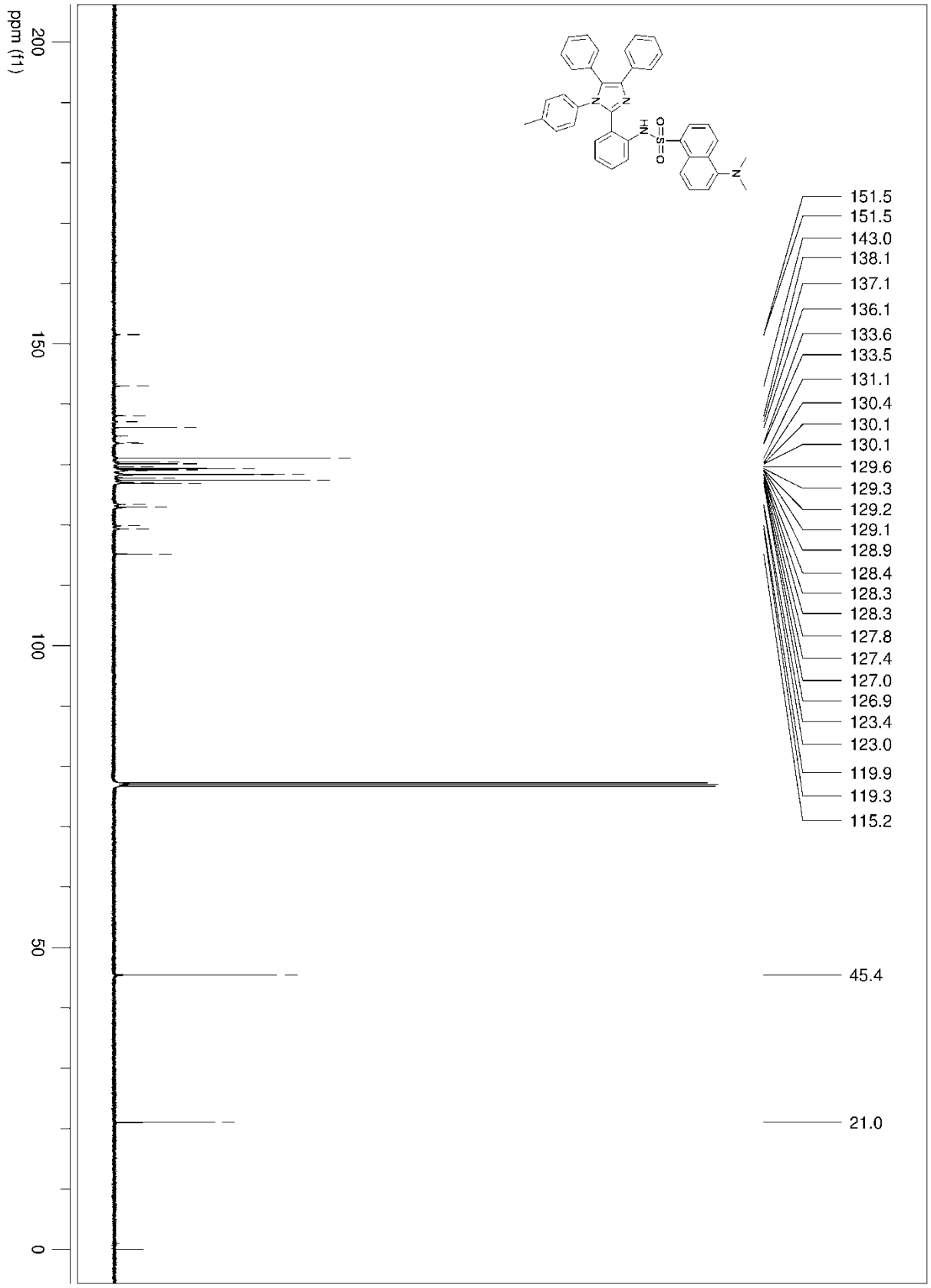
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126.9
123.4
123.0
119.9
119.3
115.2
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21.0