Supplementary information

Effect of dendrimer generation and surface groups on the optoelectronic properties of green emitting bis-tridentate iridium(III) complexes designed for OLEDs

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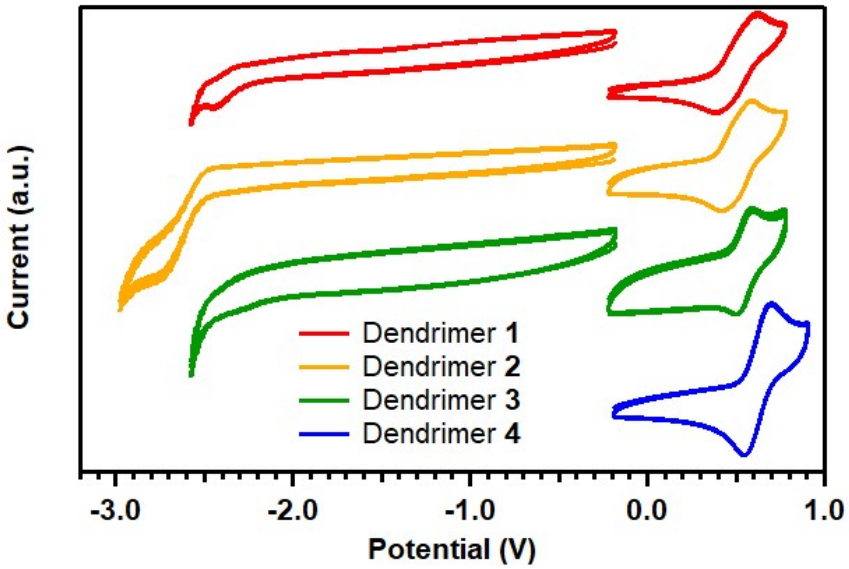

*Fig. S1. Cyclic Voltammograms of dendrimers **1**, **2**, **3** and **4** in dichloromethane (oxidations) and tetrahydrofuran (reductions) in the presence of 0.1 M tetra-n-butylammonium perchlorate at room temperature.*

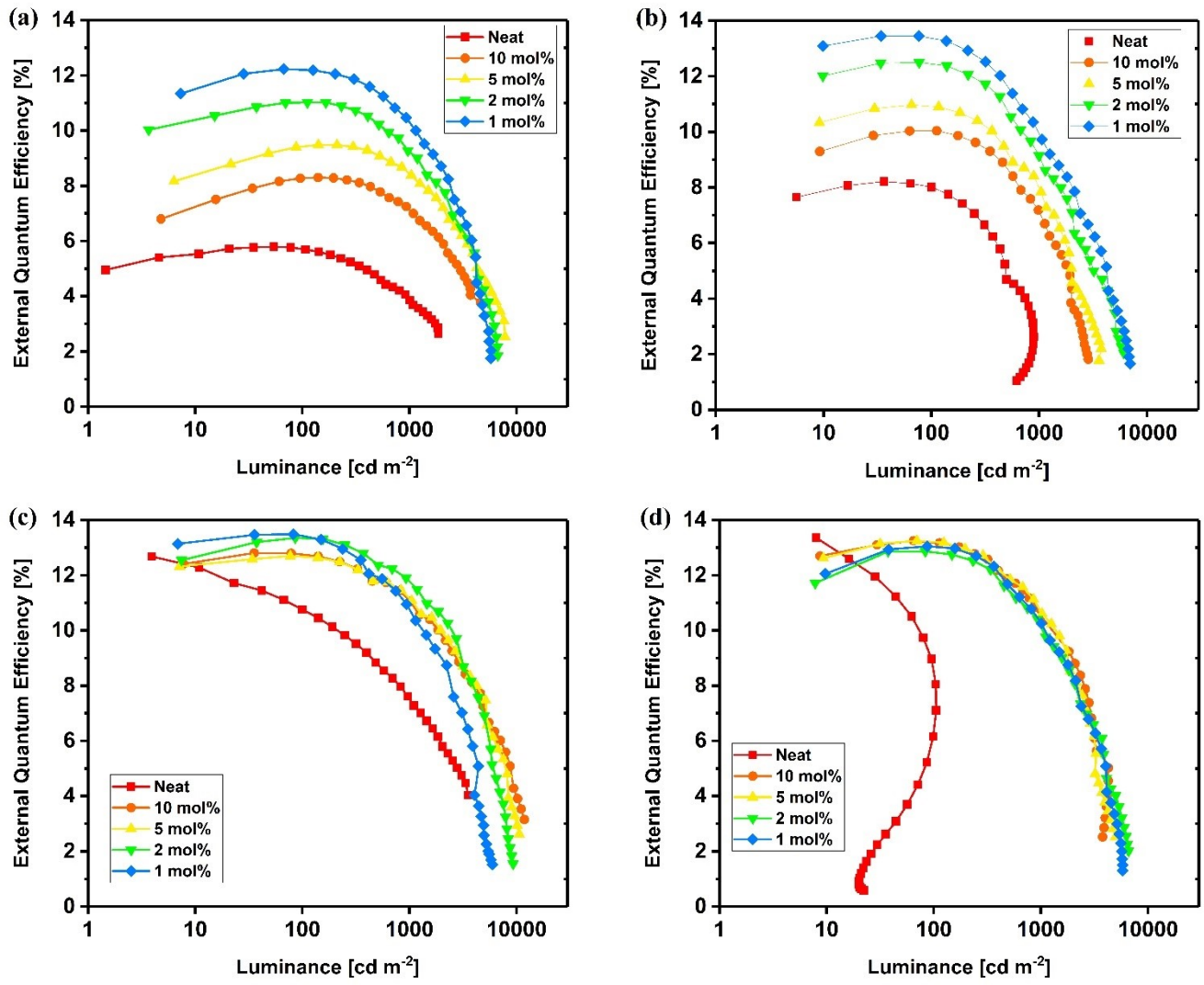

*Fig. S2. EQE versus Luminance with various blend concentrations for devices incorporating dendrimer **1** (a), **2** (b), **3** (c) and **4** (d).*

*Table S1. Photophysical properties of dendrimers **1**, **2**, **3** and **4** films (2 mol% in TCTA) at 298±3 K*

Sample	TCTA PL (%)	TCTA PLQY	Emitter PL (%)	Emitter PLQY
Dendrimer **1**	8	4.6	92	58.0
Dendrimer **2**	8	4.6	92	54.2
Dendrimer **3**	26	11.9	74	33.4
Dendrimer **4**	10	5.5	90	49.3

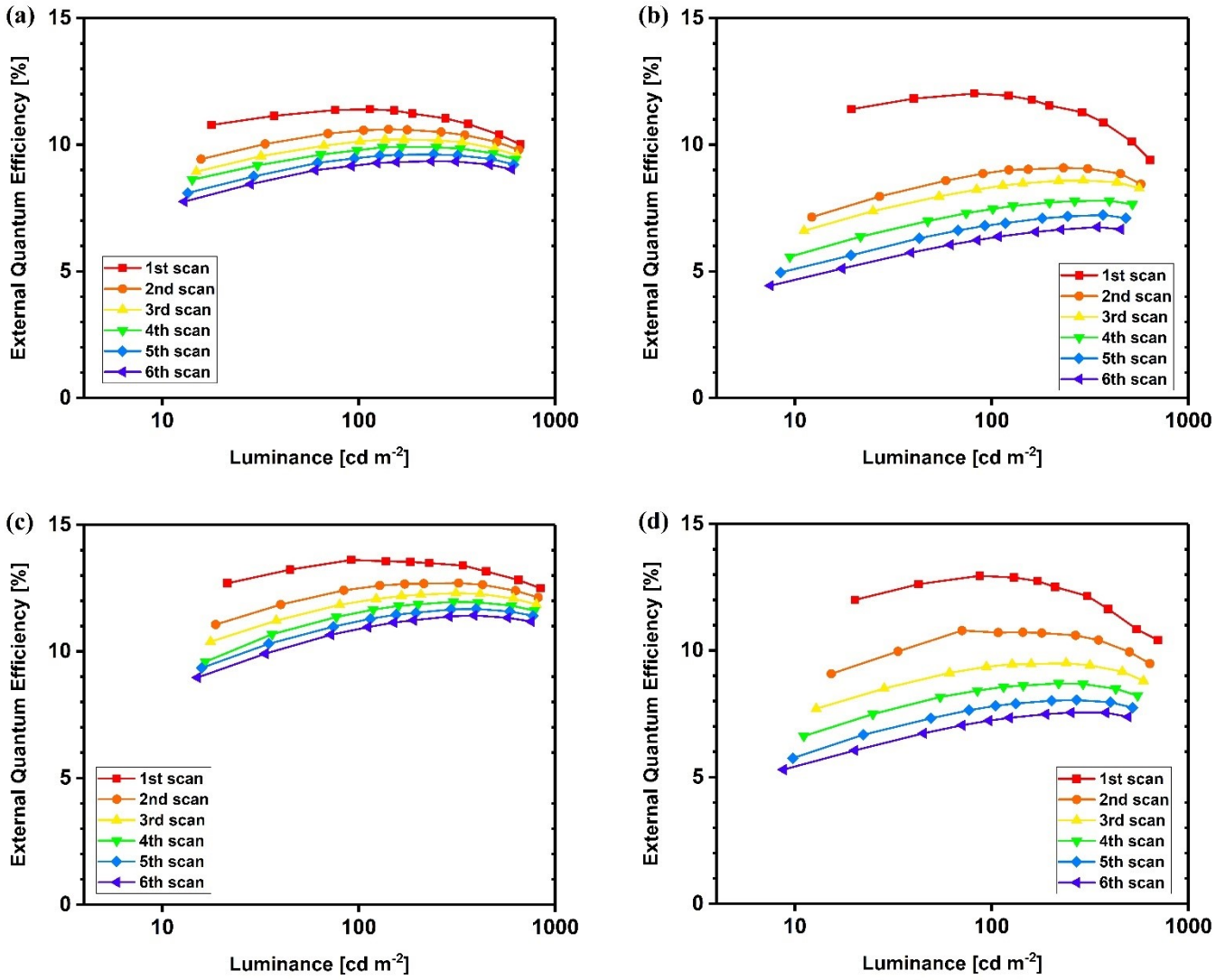

Fig. S3. Changing EQE vs. Luminance curves as a function of electrical stress of (a) Dendrimer 1 (b) Dendrimer 2 (c) Dendrimer 3 (d) Dendrimer 4 blended in TCTA 2 mol%.

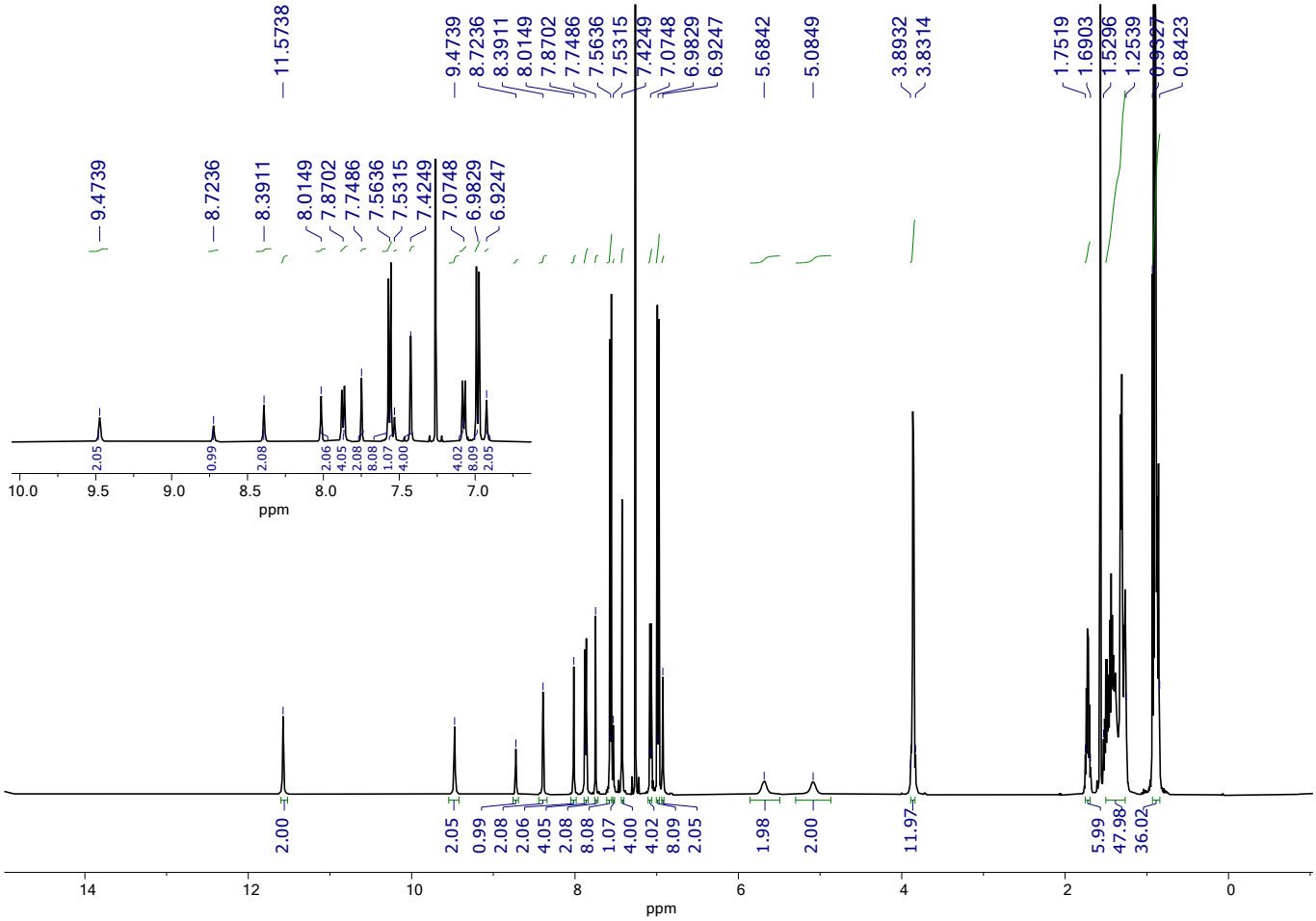

*Fig S4. [1]H NMR of Compound **4** in $CDCl_3$.*

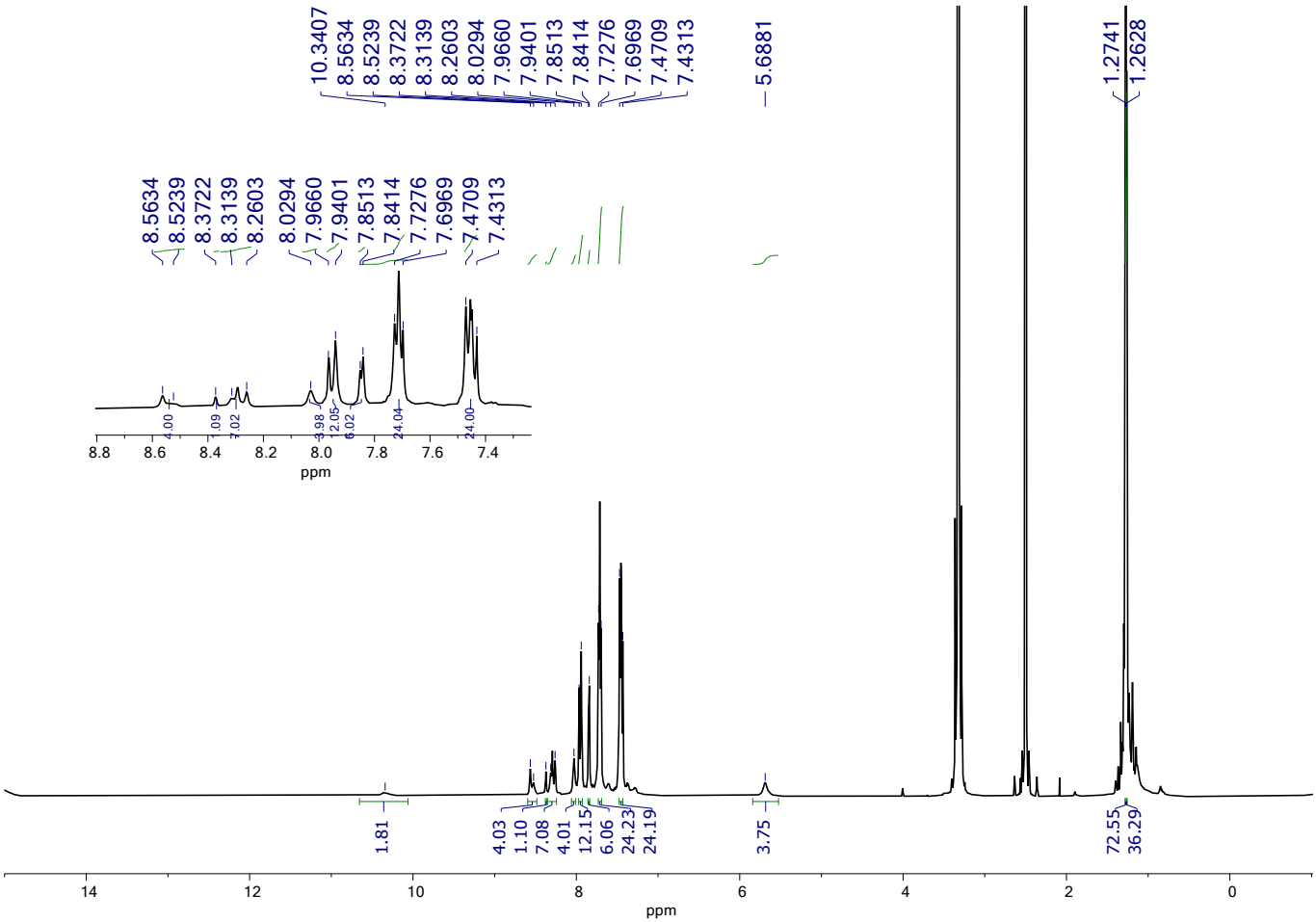

*Fig. S5. [1]H NMR of Compound **15** in DMSO-d6.*

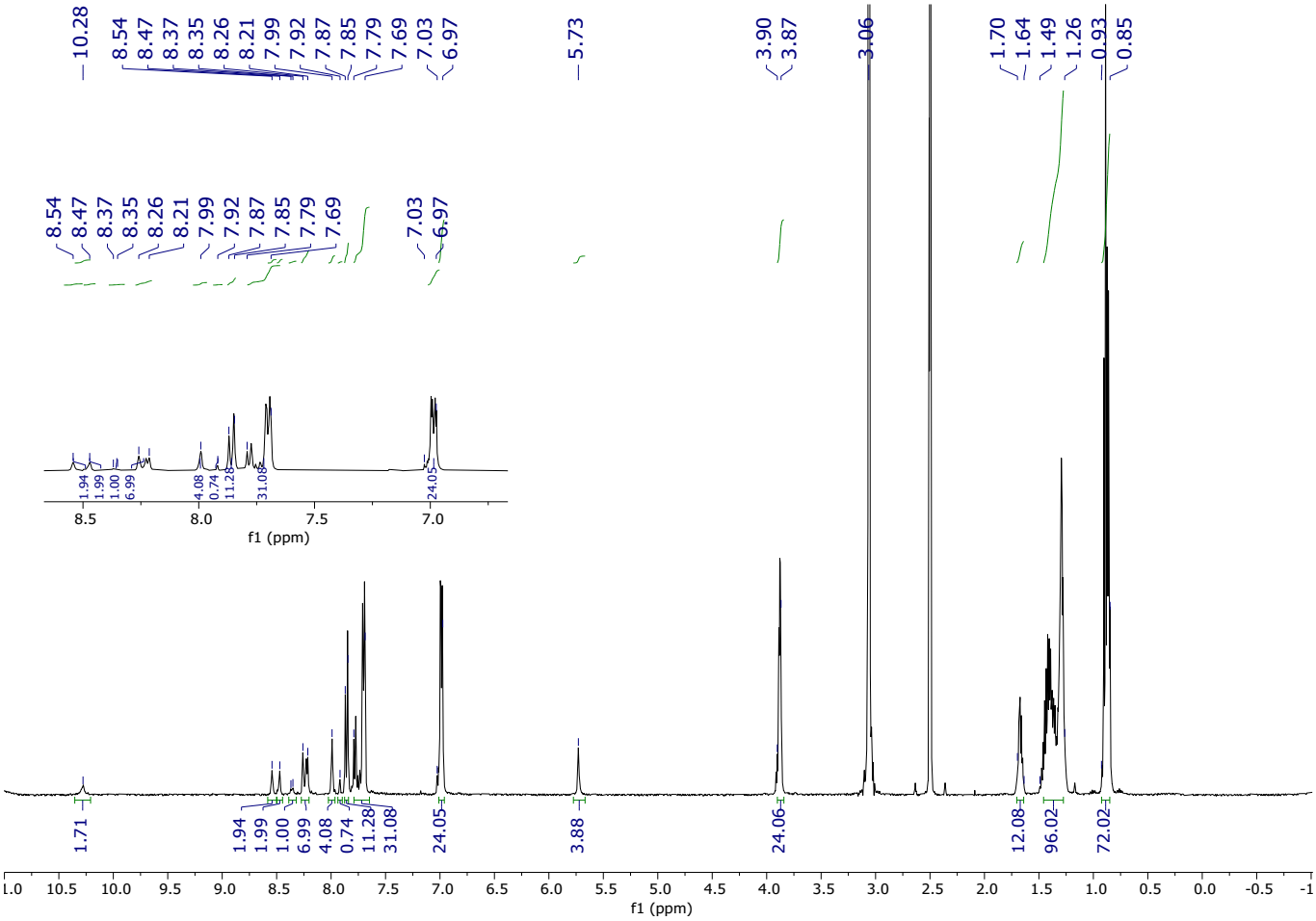

*Fig. S6. [1]H NMR of Compound **21** in DMSO-d6.*

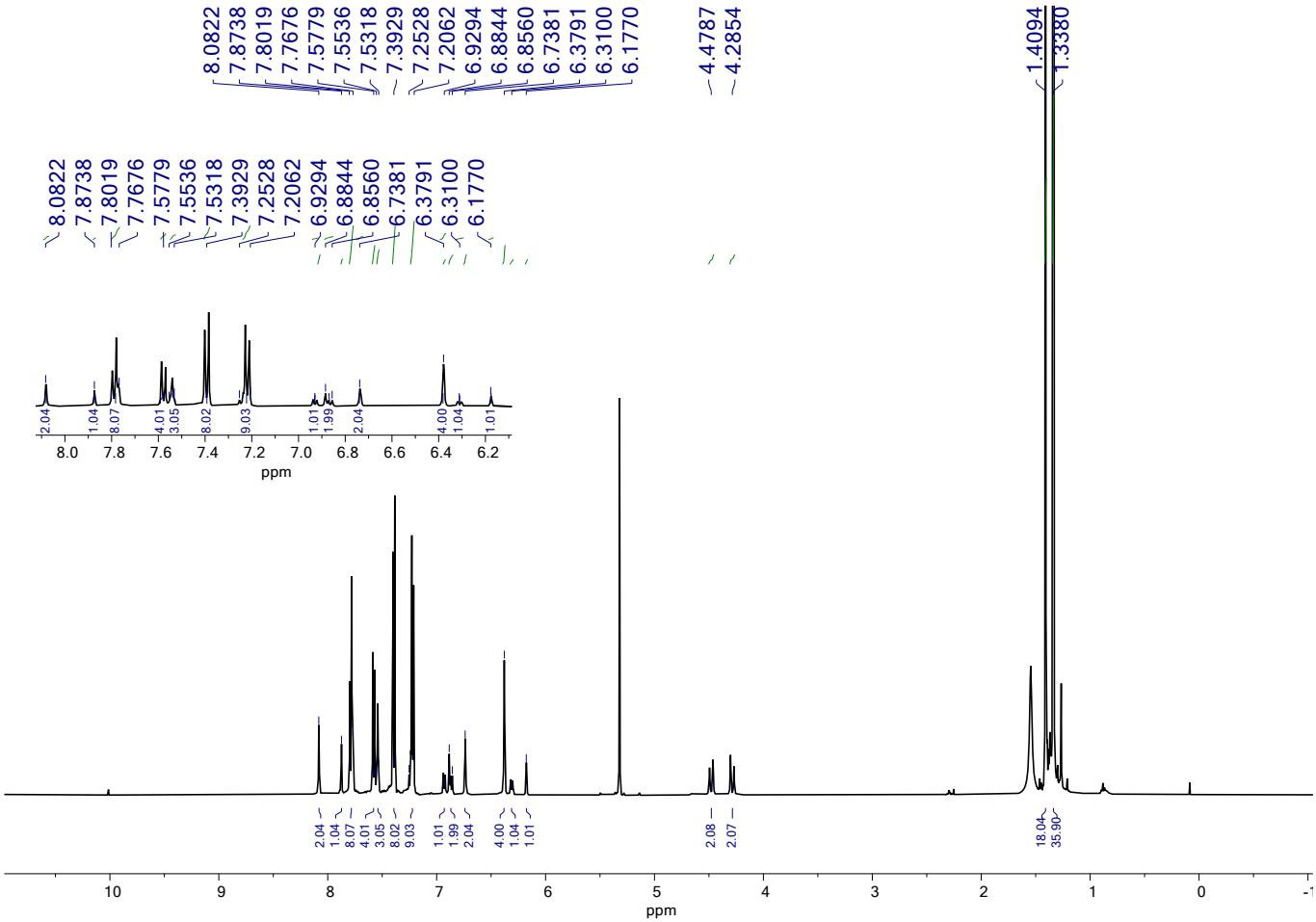

*Fig. S7. [1]H NMR of Dendrimer **1** in CD_2Cl_2.*

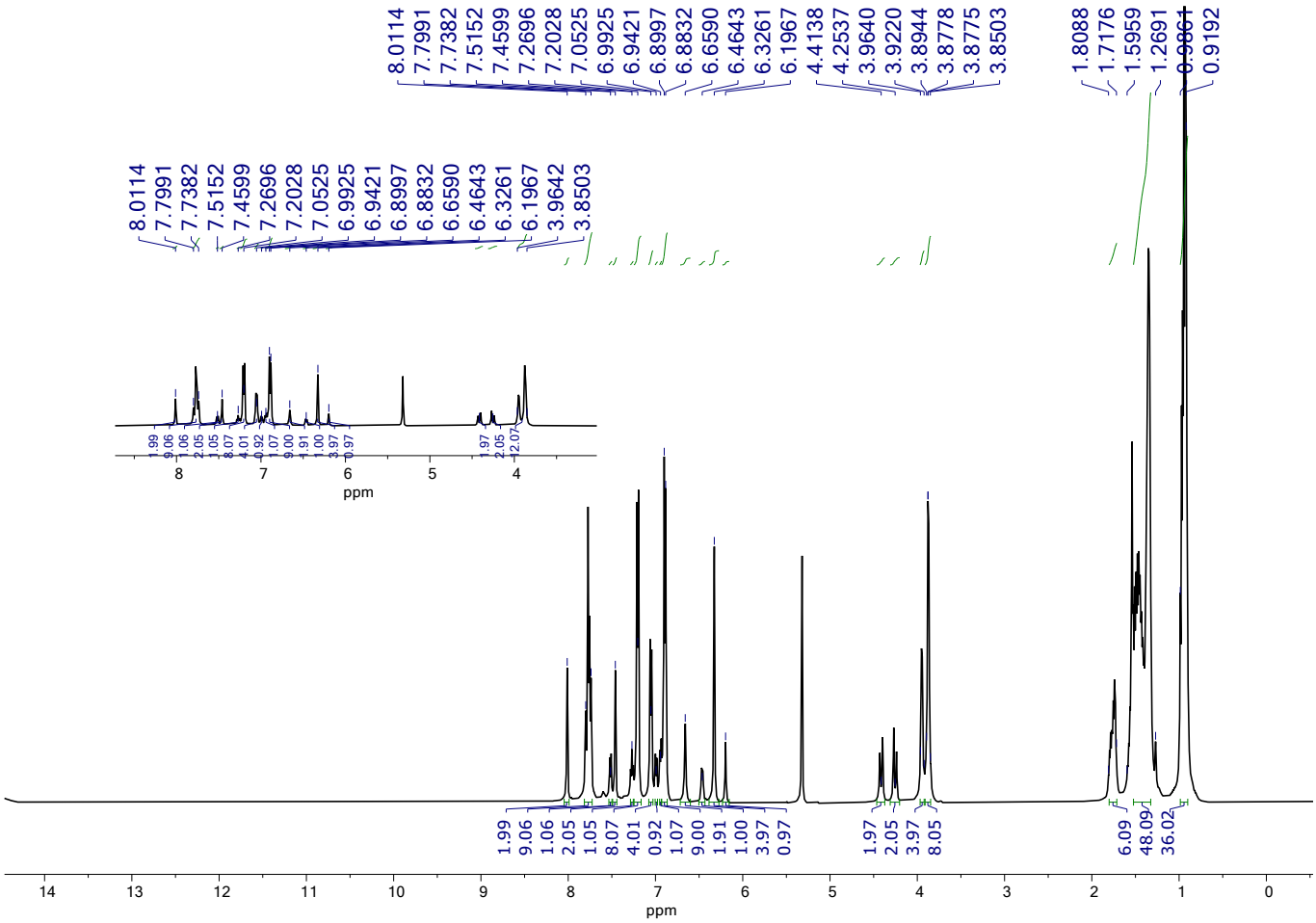

*Fig. S8. [1]H NMR of Dendrimer **2** in CD_2Cl_2.*

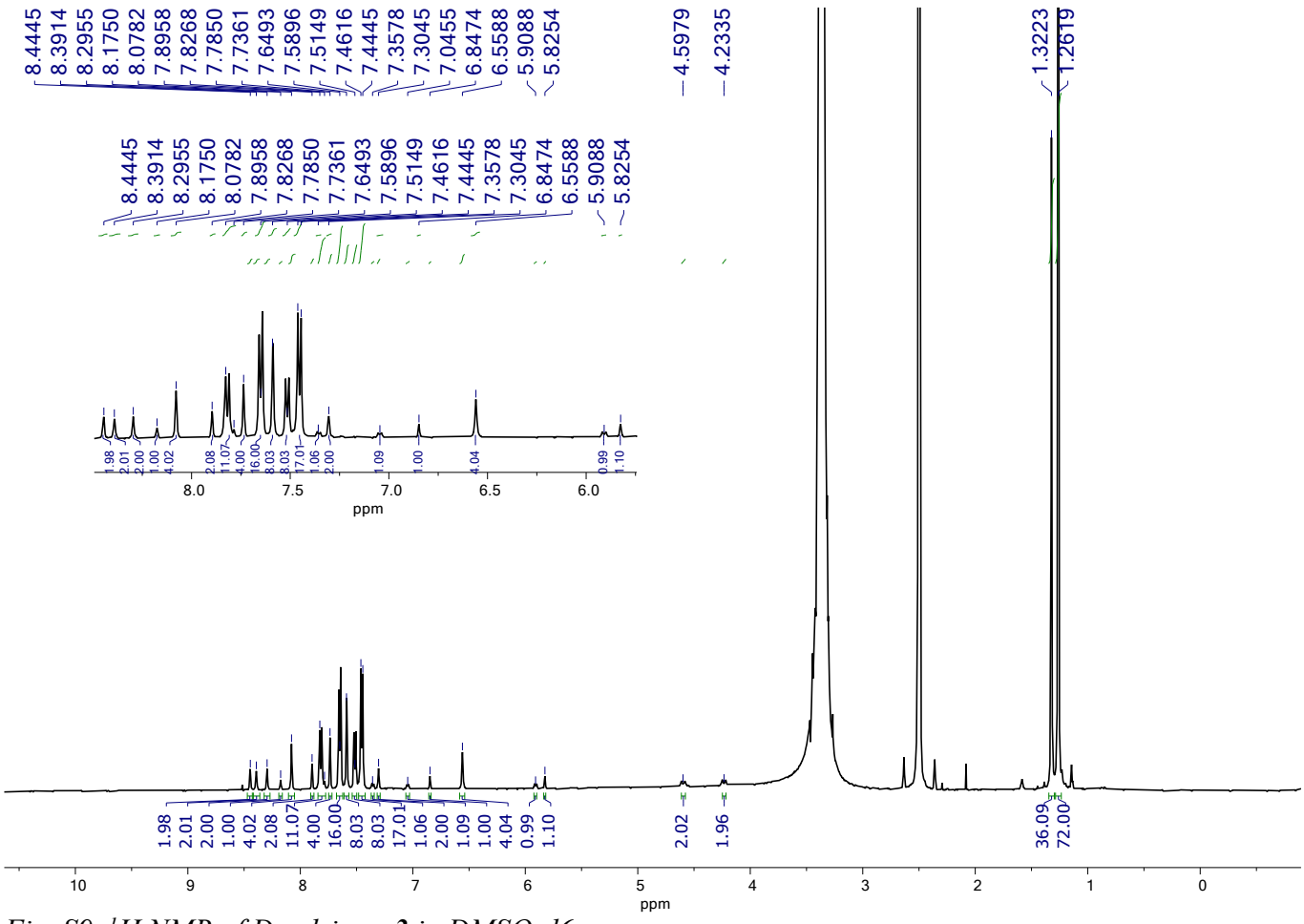

*Fig. S9. [1]H NMR of Dendrimer **3** in DMSO-d6.*

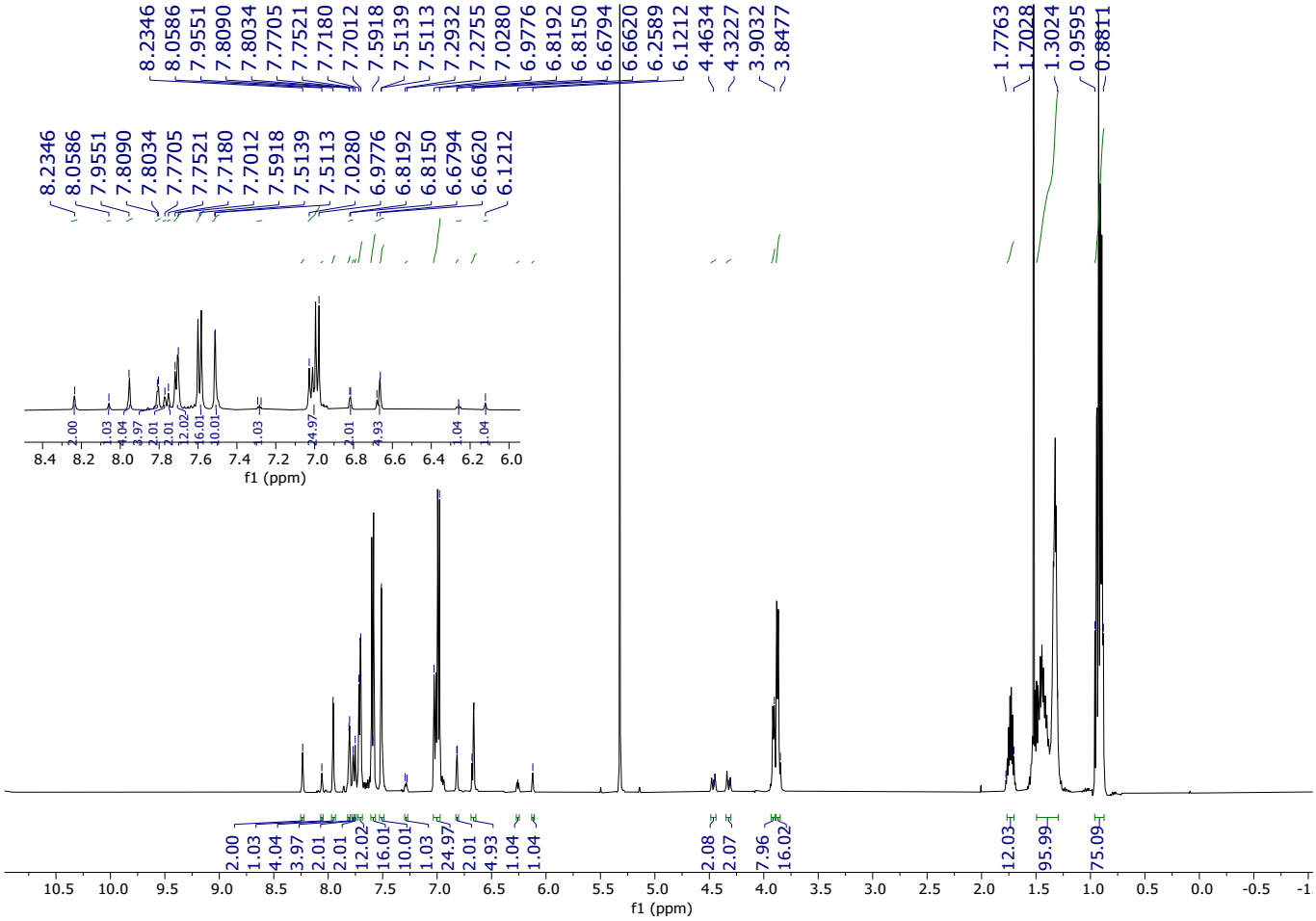

*Fig. S10. ^{1}H NMR of Dendrimer **4** in CD_2Cl_2.*