Electronic Supplementary Information for

Bimetallic Cyclometalated Iridium Complexes Bridged by a BODIPY Linker

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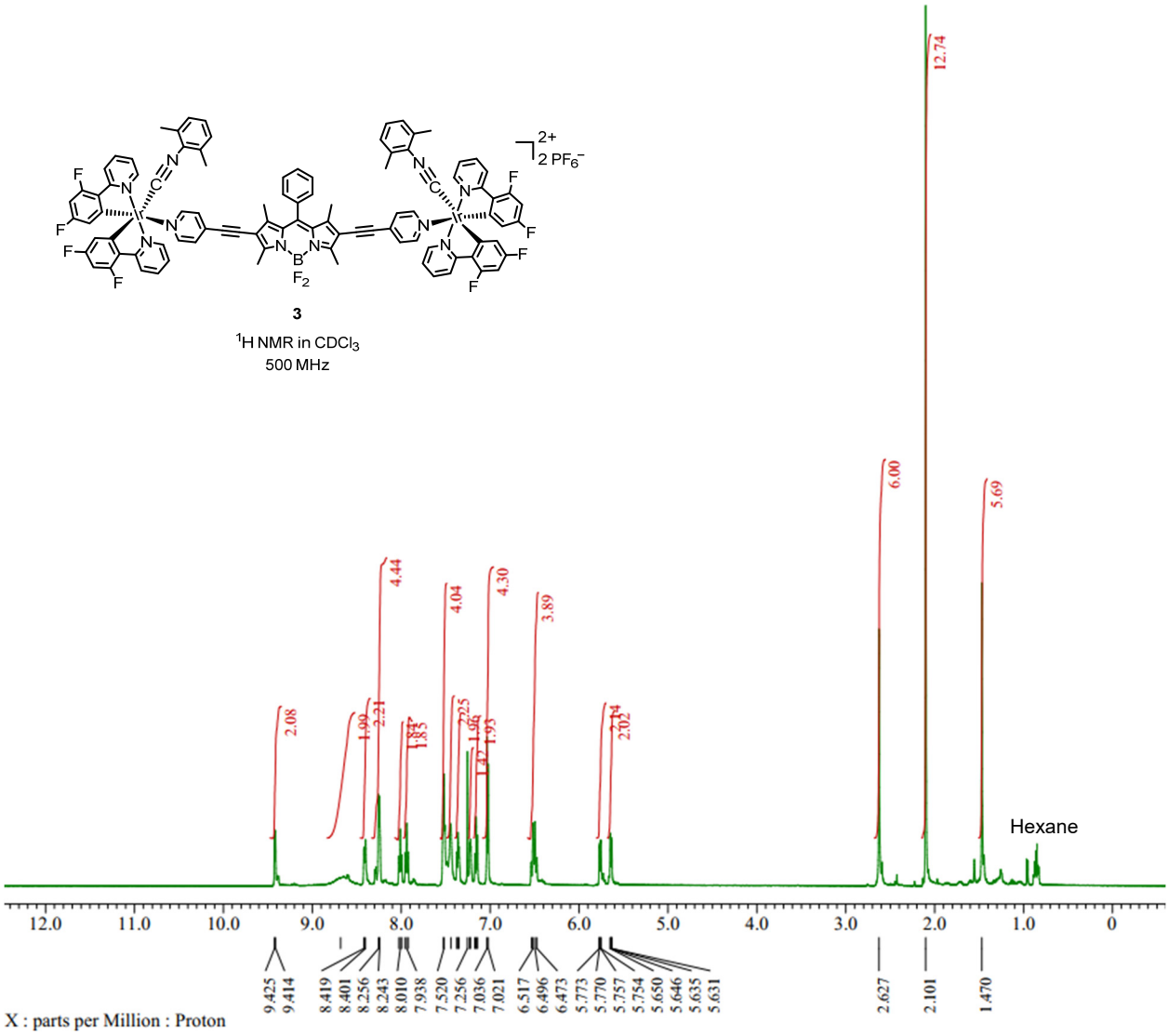

Fig. S1a. ^{1}H NMR spectrum of complex **3**, recorded at 500 MHz in $CDCl_3$.

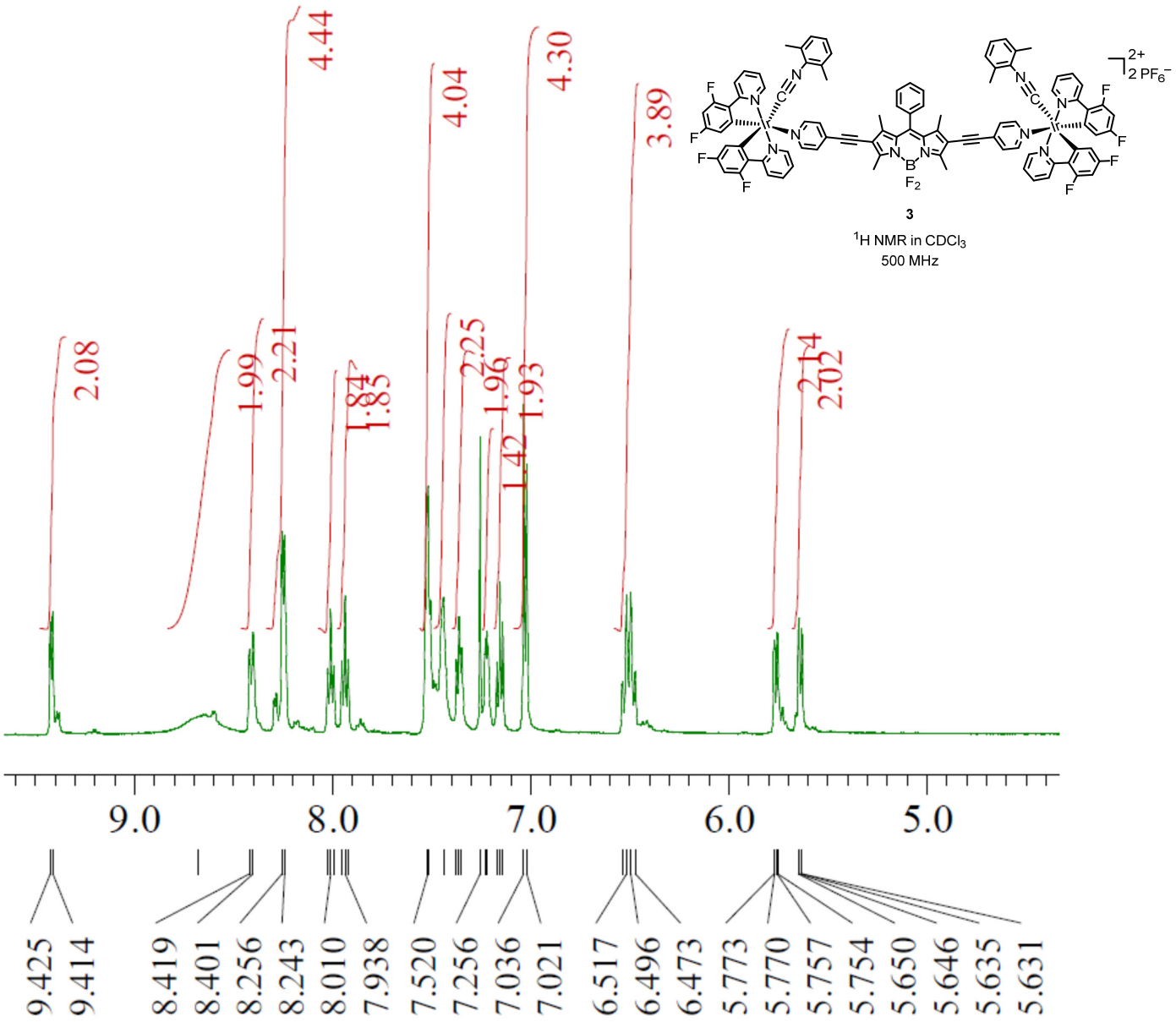

Fig. S1b. Expansion of ^{1}H NMR spectrum in the aromatic region of complex **3**, recorded at 500 MHz in $CDCl_3$.

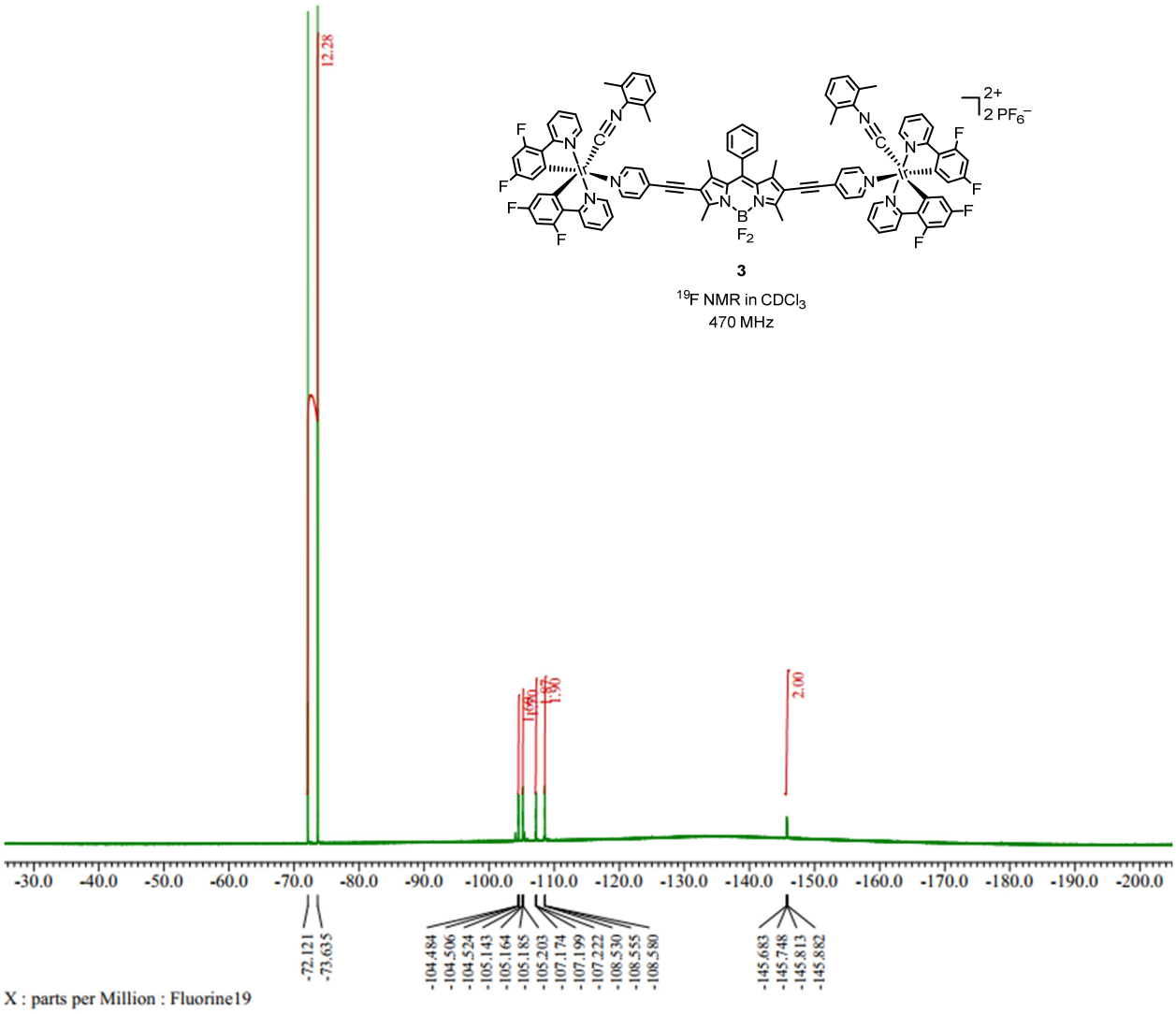

Fig. S2a. ^{19}F NMR spectrum of complex **3**, recorded at 470 MHz in $CDCl_3$.

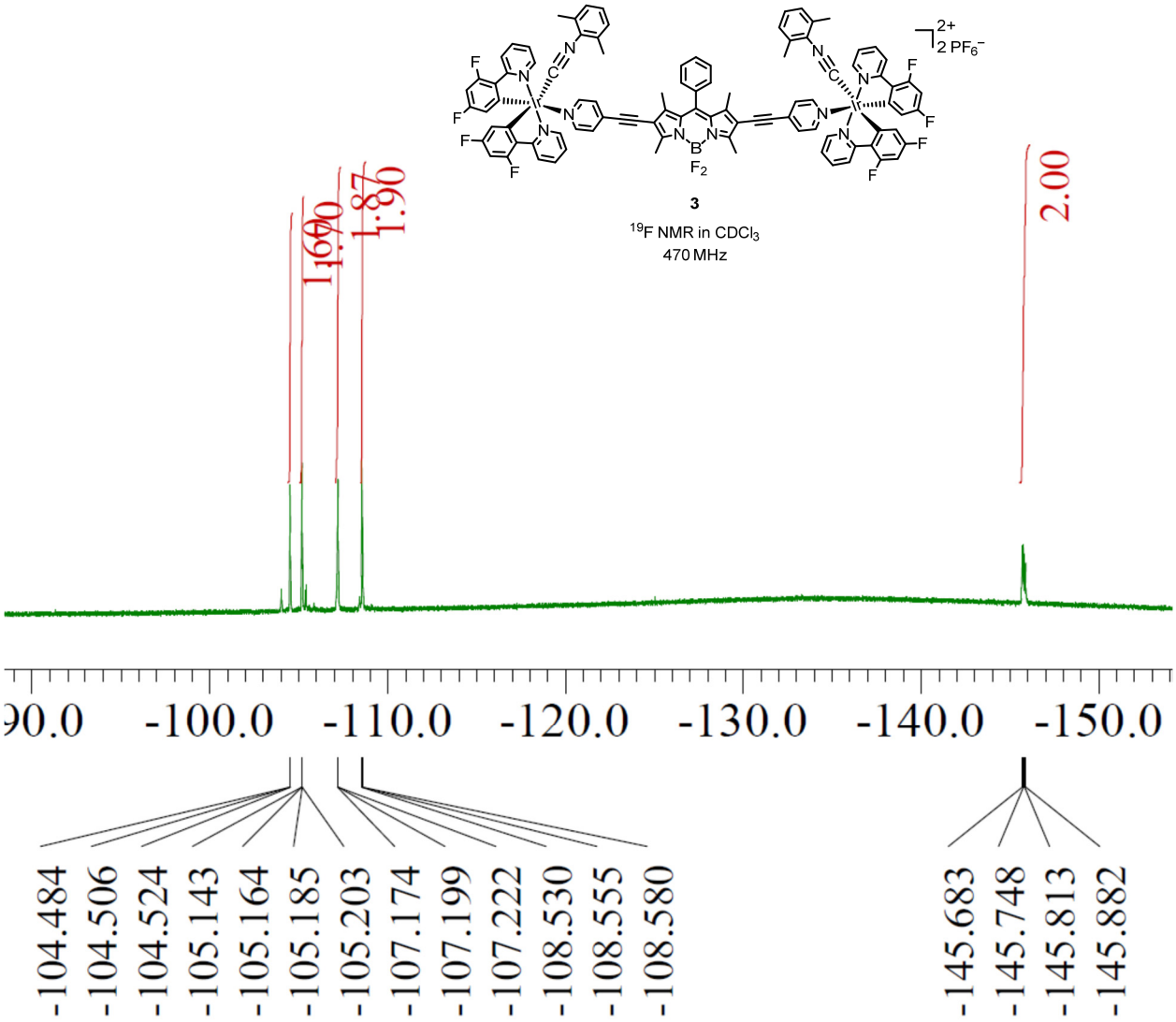

Fig. S2b. Expansion of ^{19}F NMR spectrum of complex **3**, recorded at 470 MHz in $CDCl_3$.

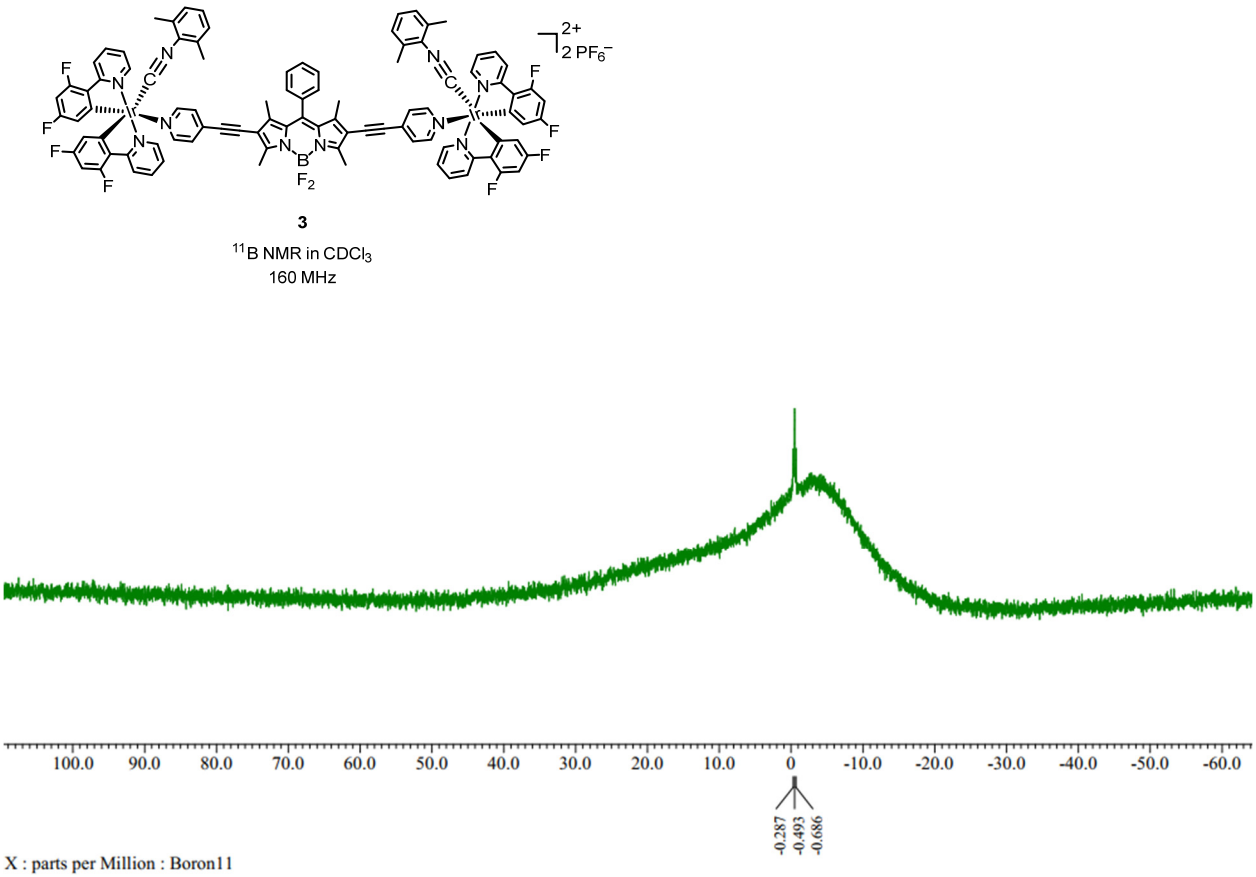

Fig. S3. ^{11}B NMR spectrum of complex **3**, recorded at 160 MHz in $CDCl_3$.

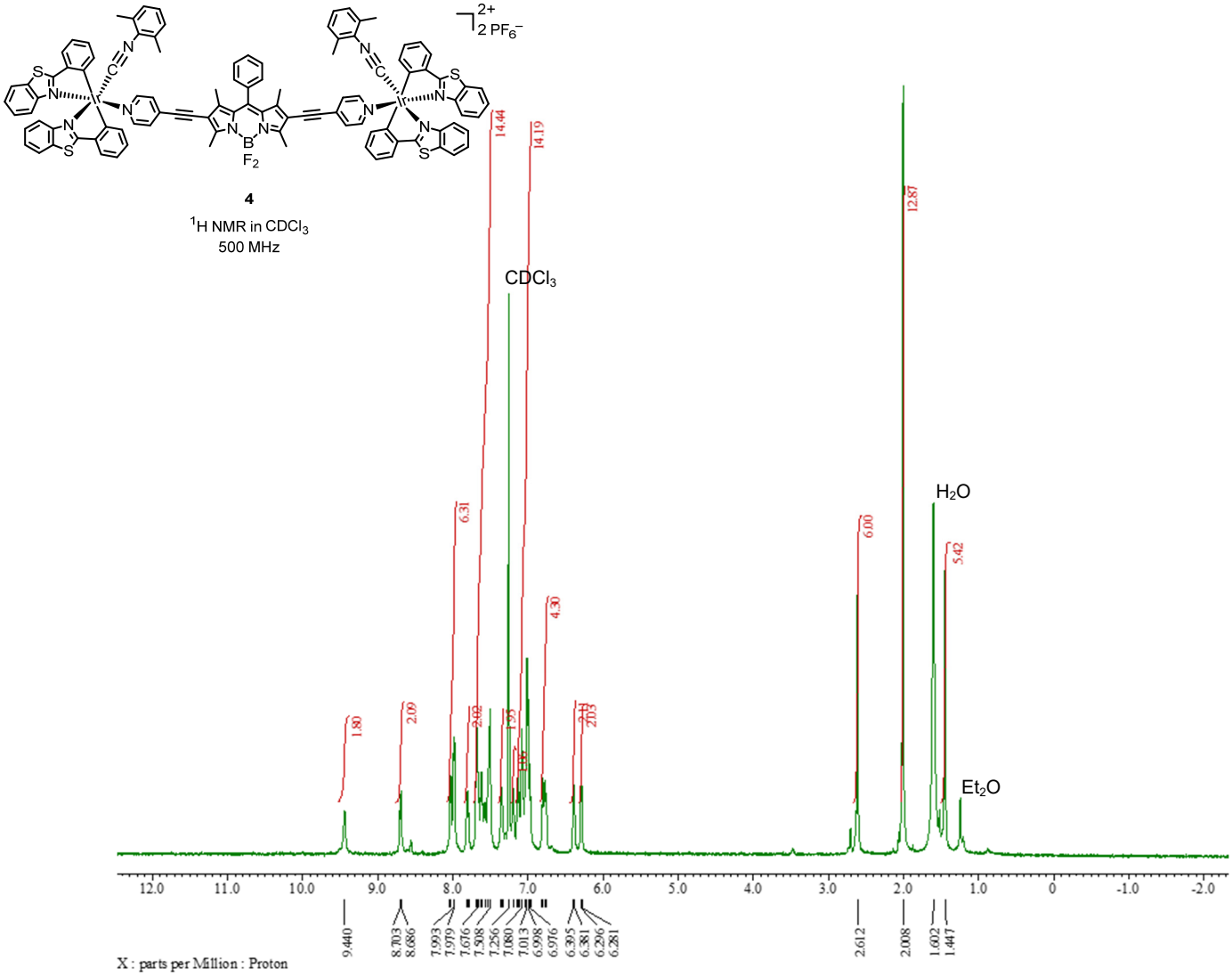

Fig. S4a. ^{1}H NMR spectrum of complex **4**, recorded at 500 MHz in $CDCl_3$.

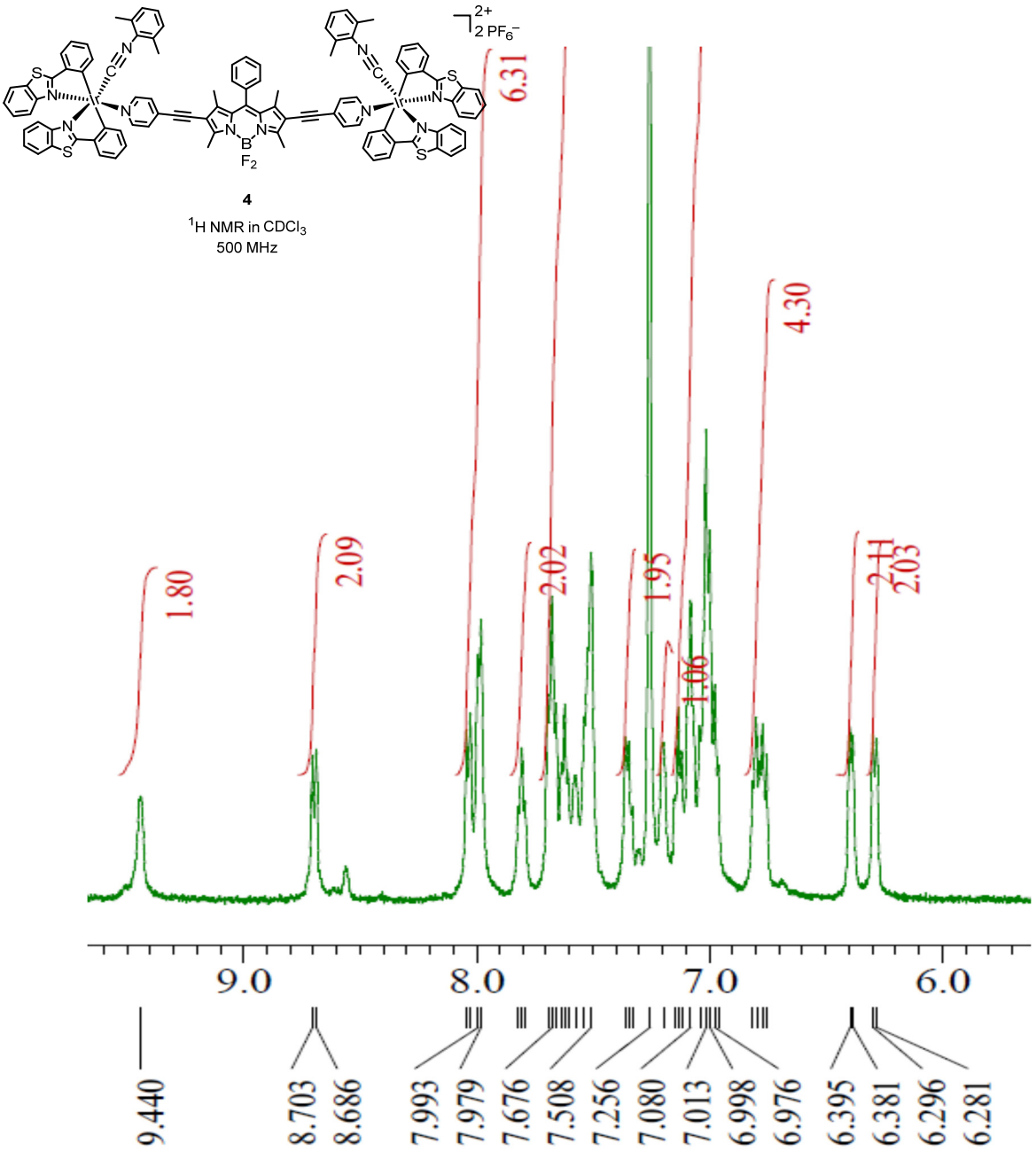

Fig. S4b. Expansion of ^{1}H NMR spectrum in the aromatic region of complex **4**, recorded at 500 MHz in $CDCl_3$.

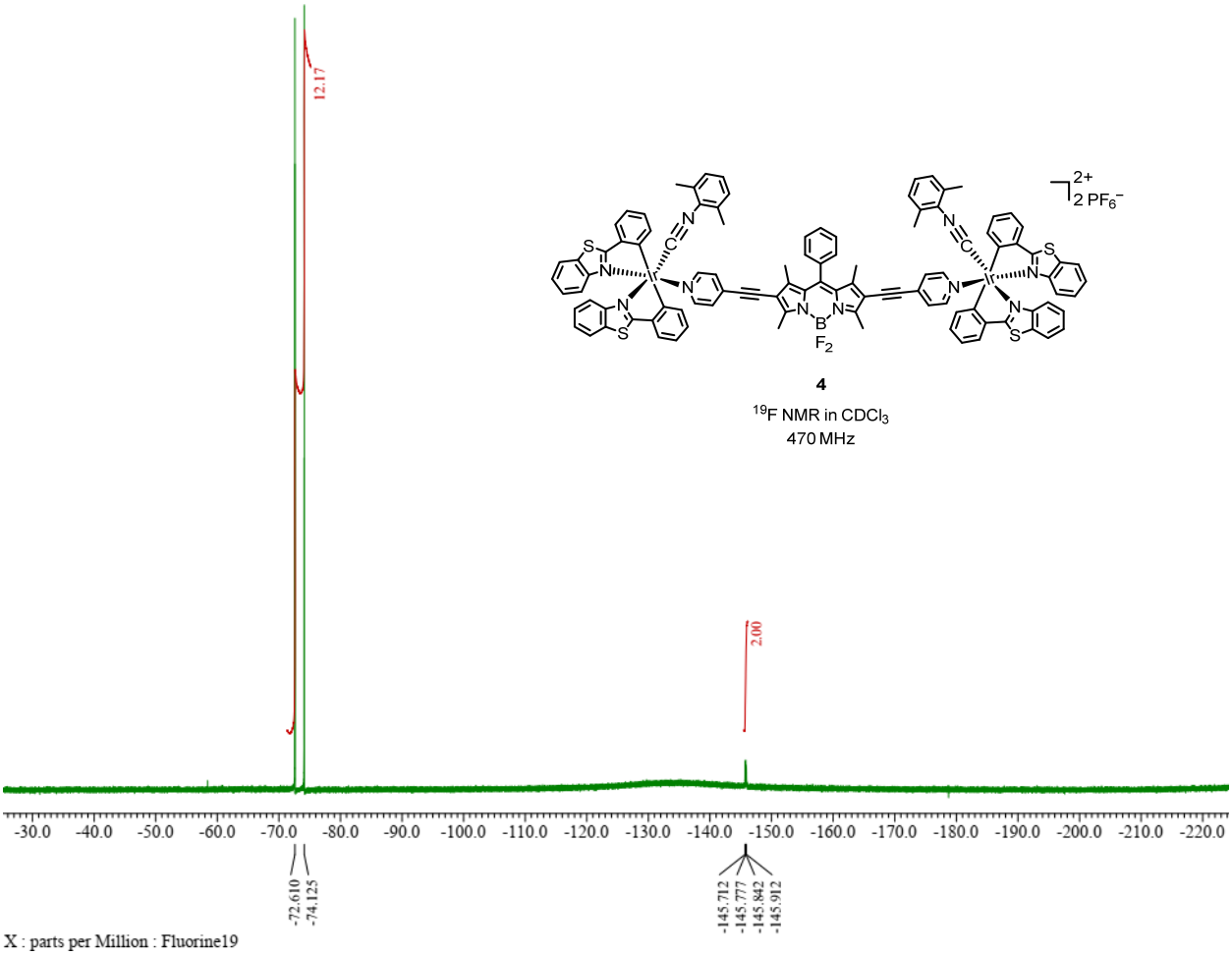

Fig. S5. ^{19}F NMR spectrum of complex **4**, recorded at 470 MHz in $CDCl_3$.

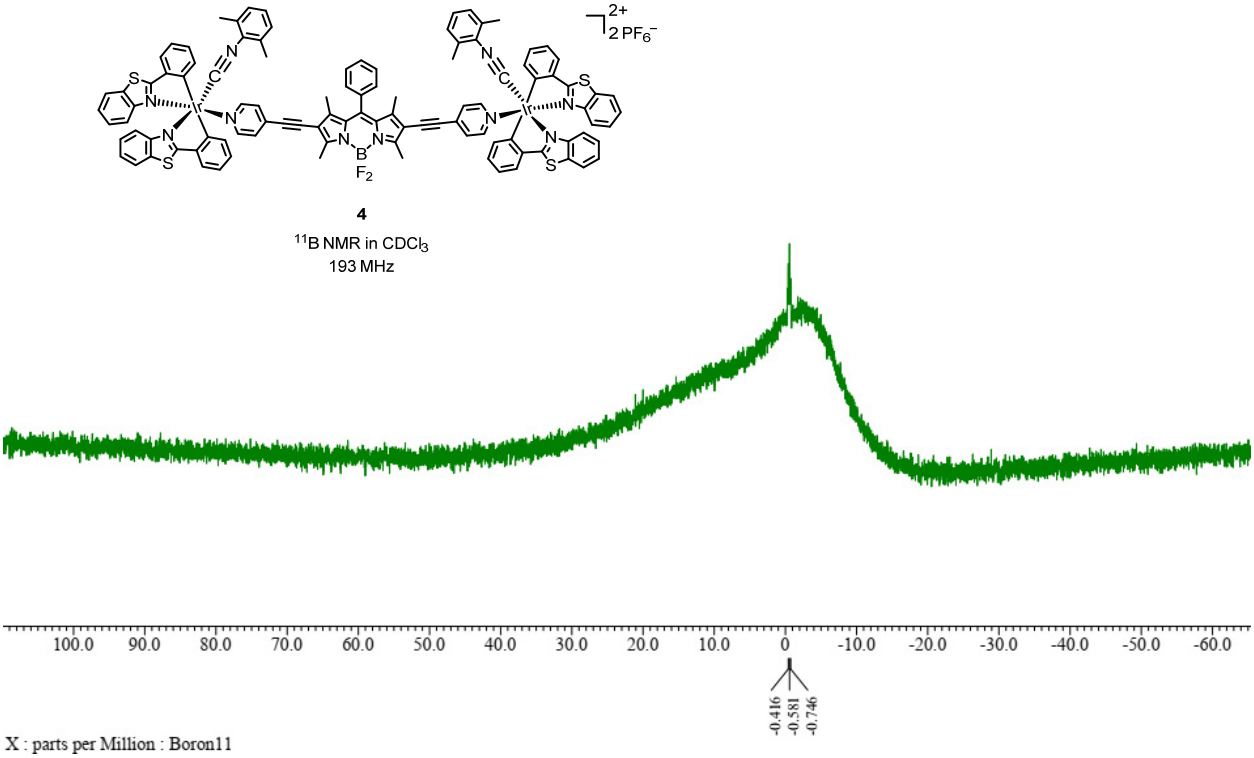

Fig. S6. ^{11}B NMR spectrum of complex **4**, recorded at 193 MHz in $CDCl_3$.

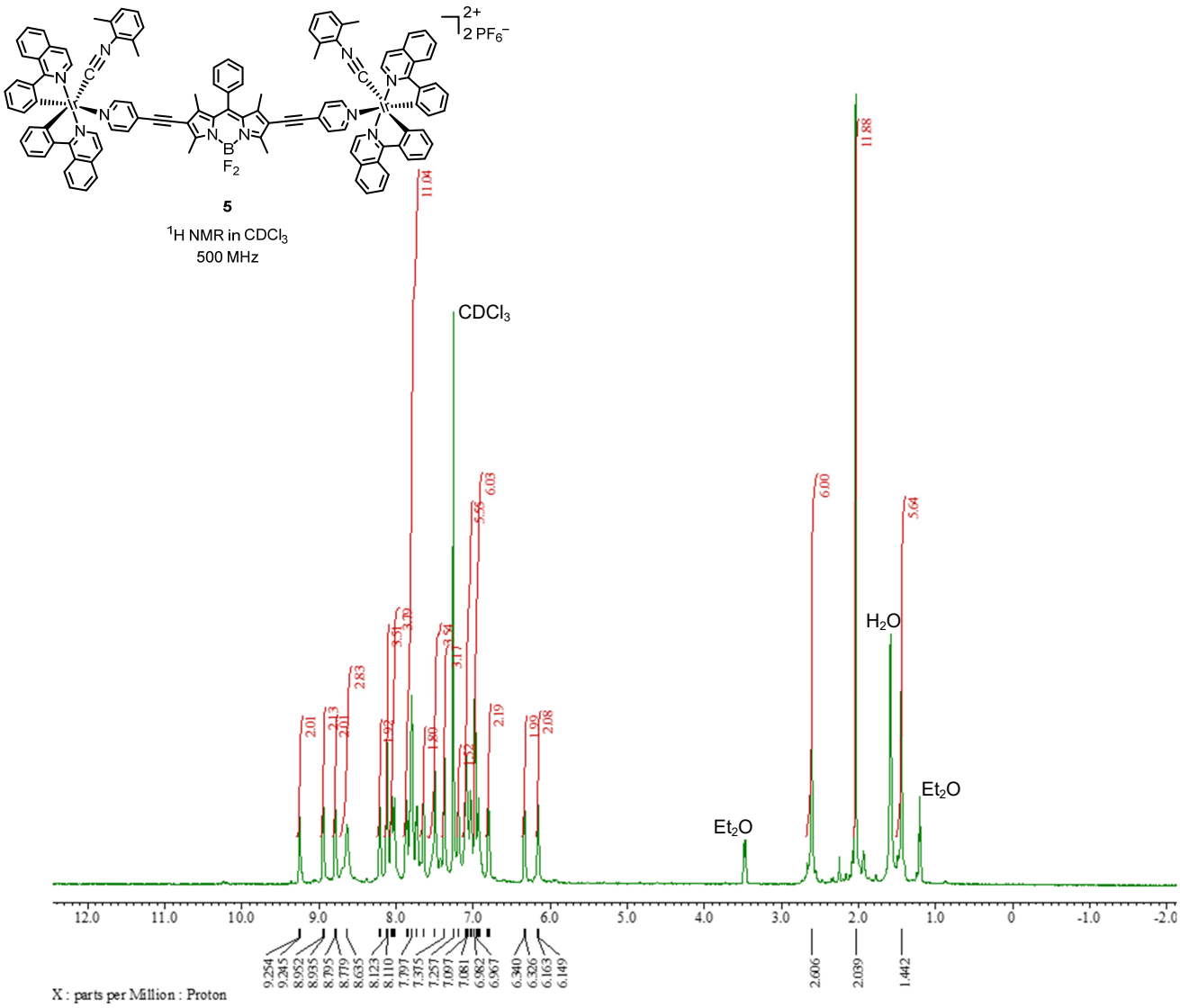

Fig. S7a. ^{1}H NMR spectrum of complex **5**, recorded at 500 MHz in $CDCl_3$.

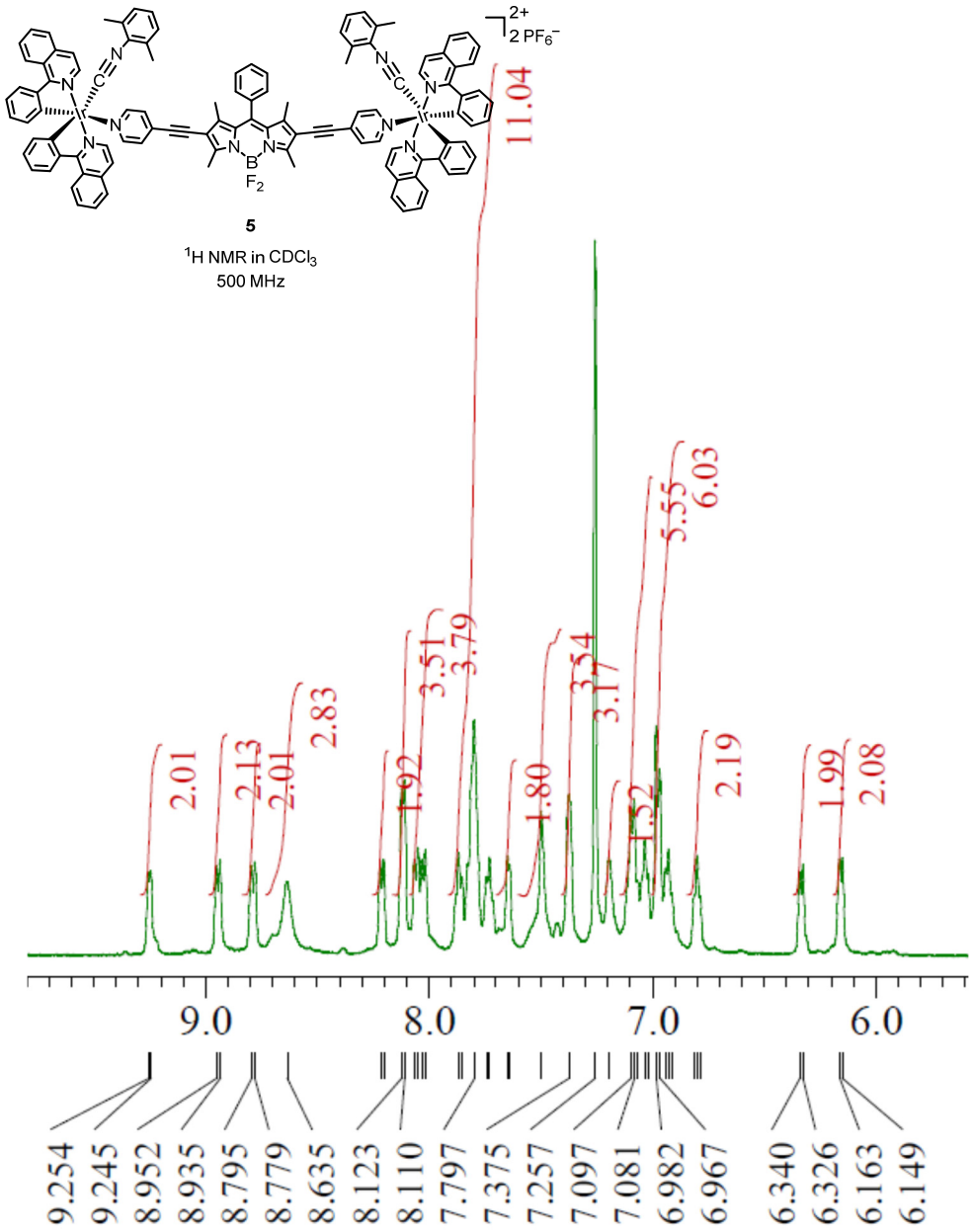

Fig. S7b. Expansion of ^{1}H NMR spectrum in the aromatic region of complex **5**, recorded at 500 MHz in $CDCl_3$.

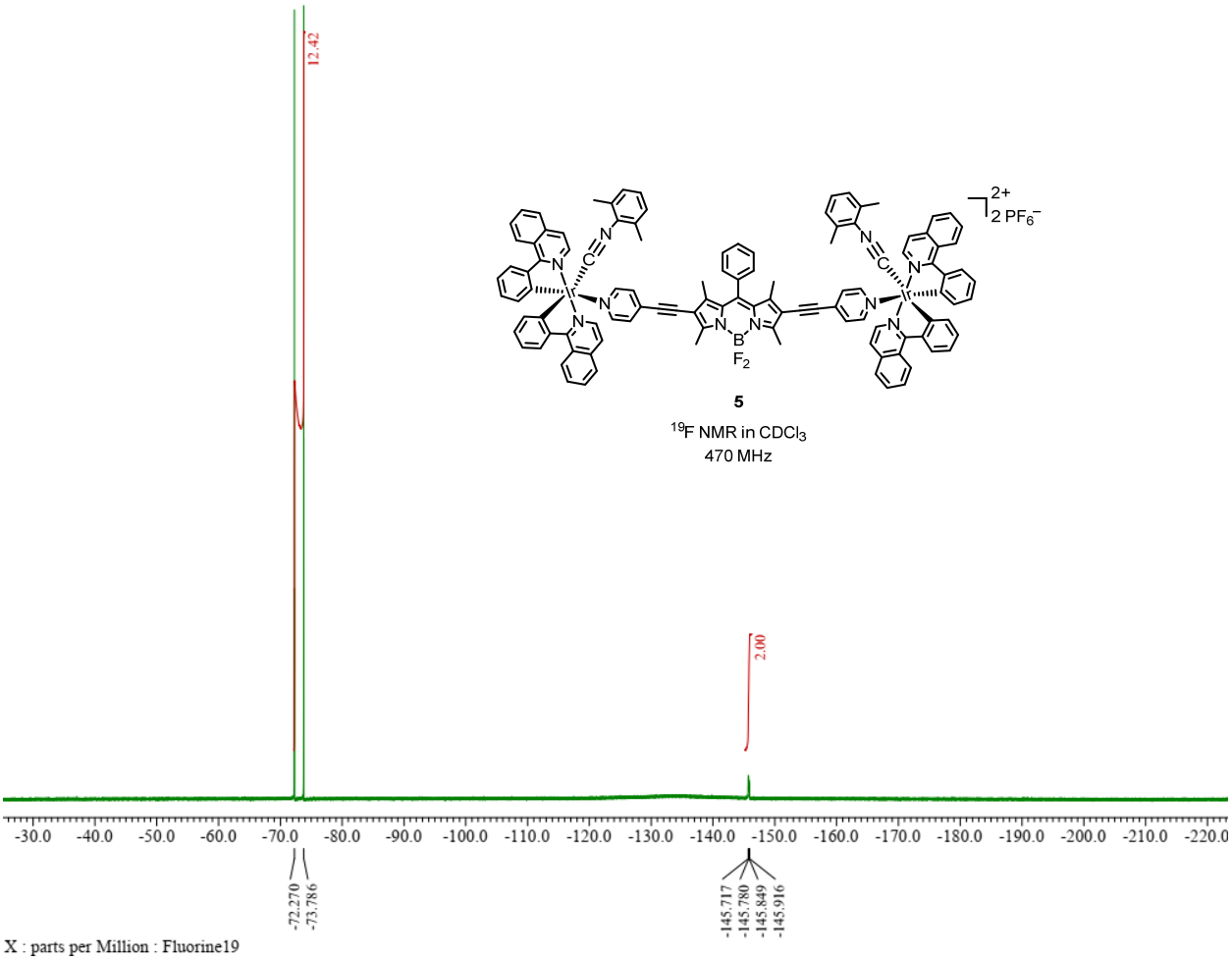

Fig. S8. ^{19}F NMR spectrum of complex **5**, recorded at 470 MHz in $CDCl_3$.

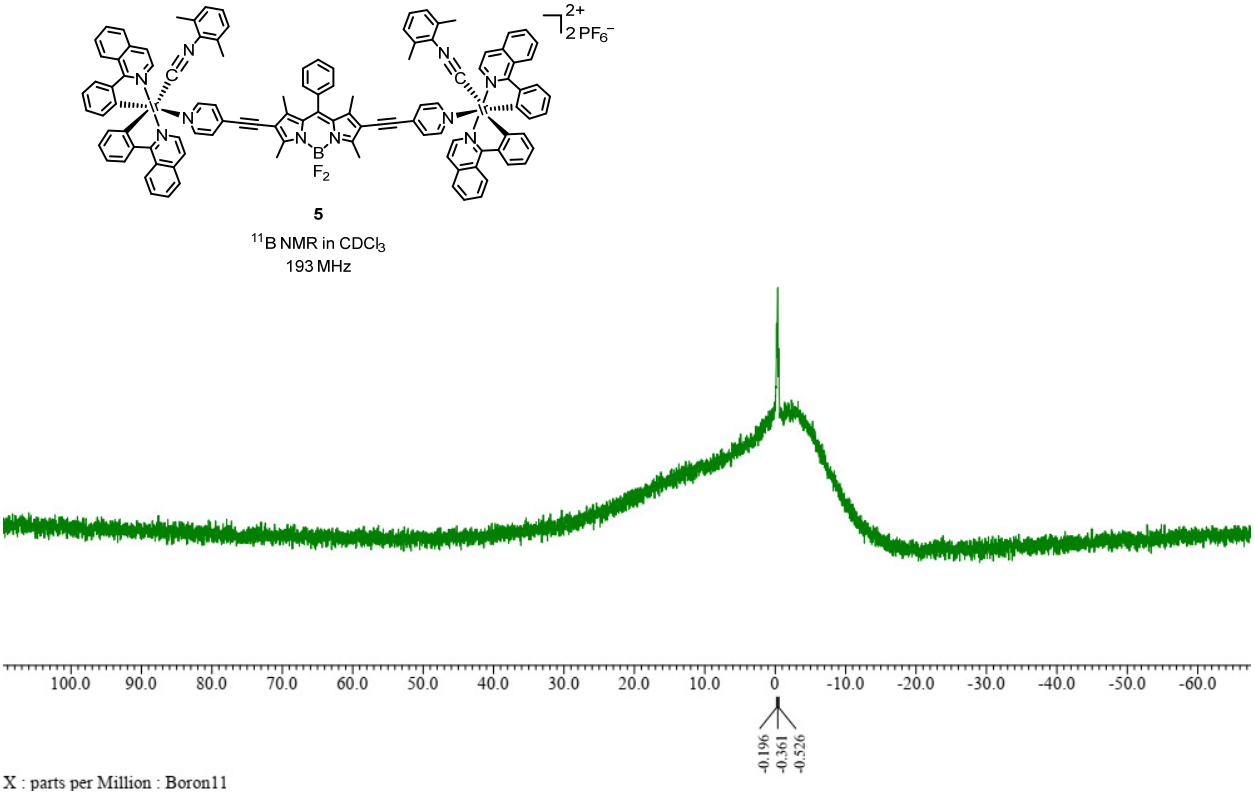

Fig. S9. ^{11}B NMR spectrum of complex **5**, recorded at 193 MHz in $CDCl_3$.

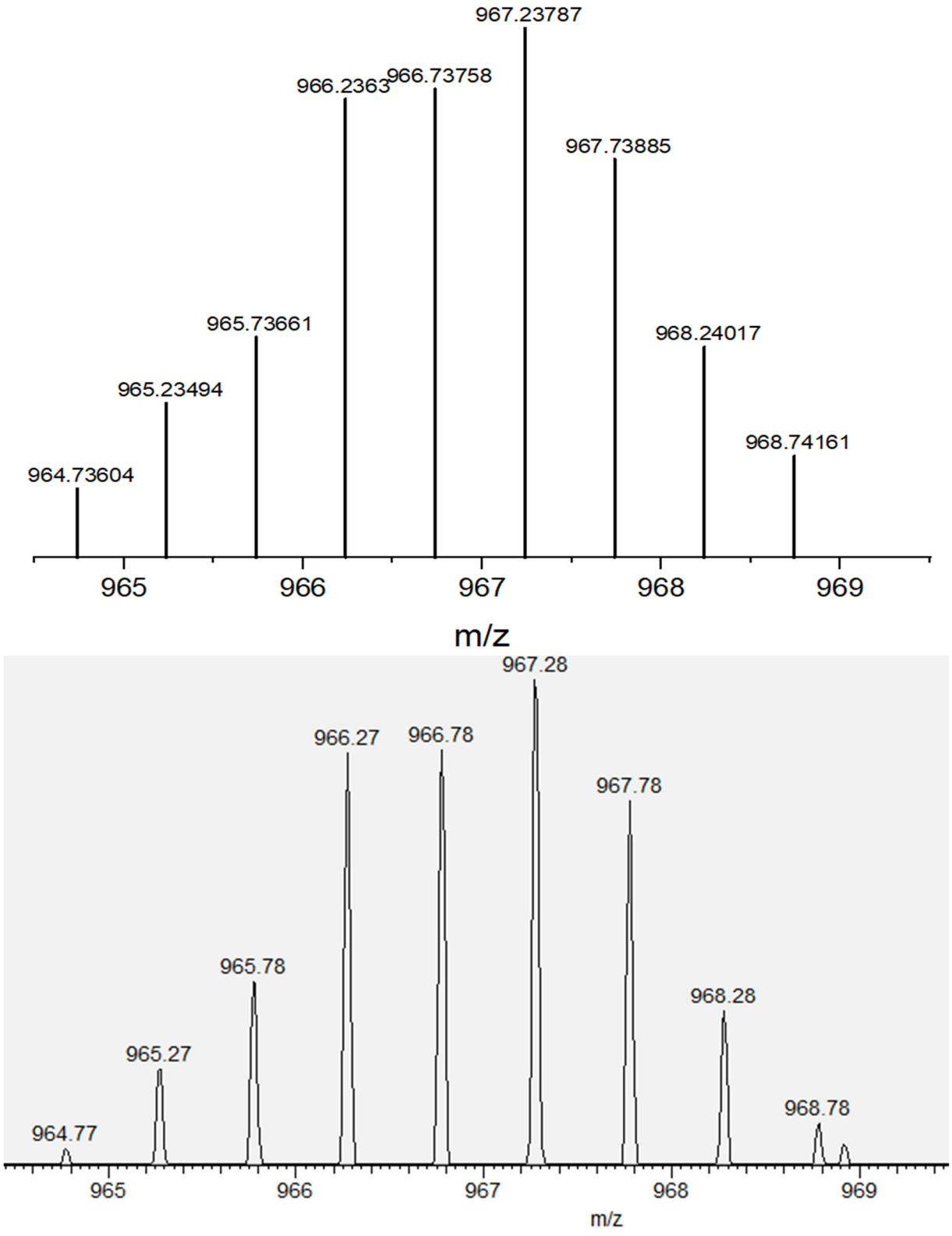

Fig. S10. Simulated (top) and experimental (bottom) ESI-MS data for complex **3**, showing the isotropic distribution pattern for the molecular ion peak ($[M - PF_6]^{2+}$).

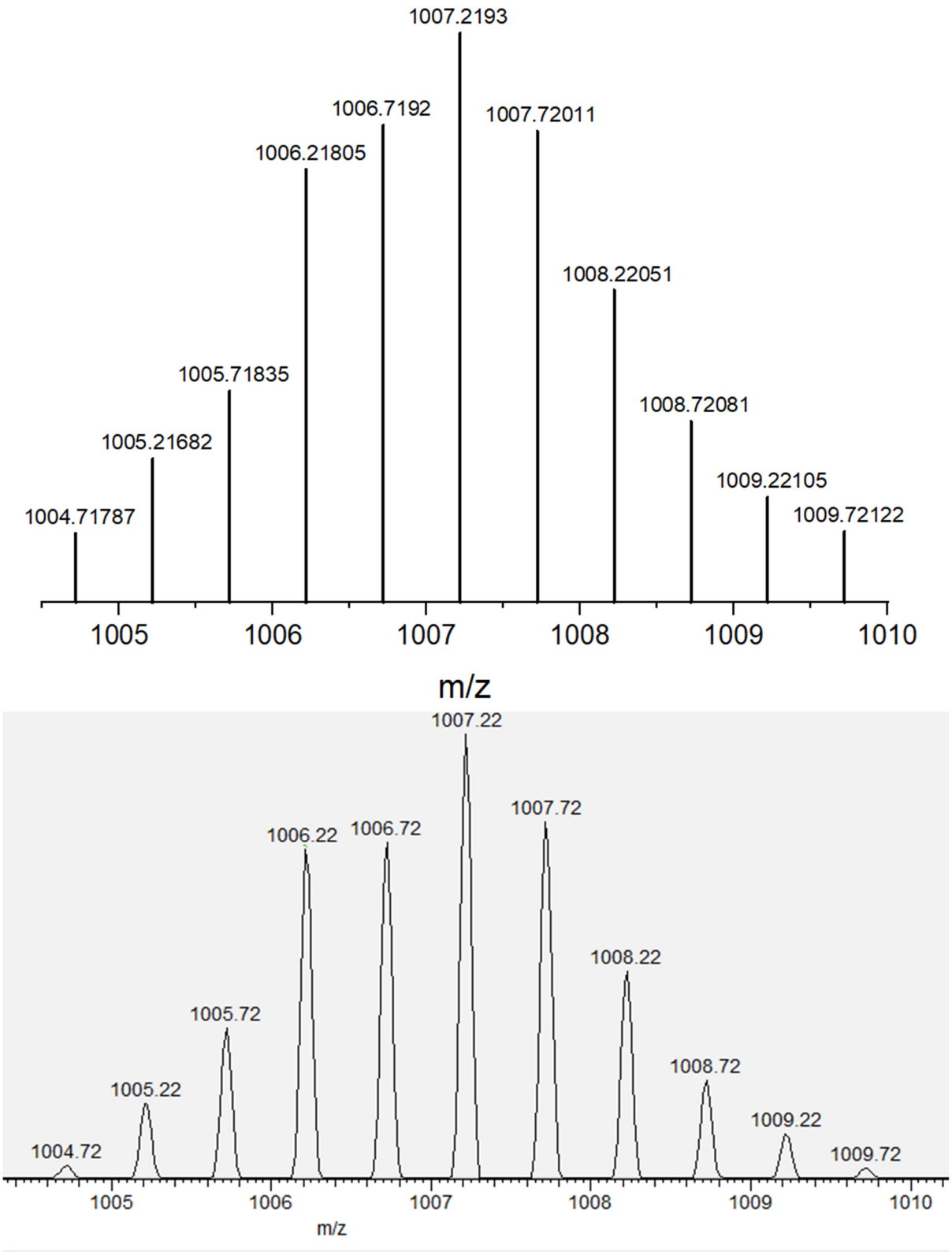

Fig. S11. Simulated (top) and experimental (bottom) ESI-MS data for complex **4**, showing the isotropic distribution pattern for the molecular ion peak ($[M - PF_6]^{2+}$).

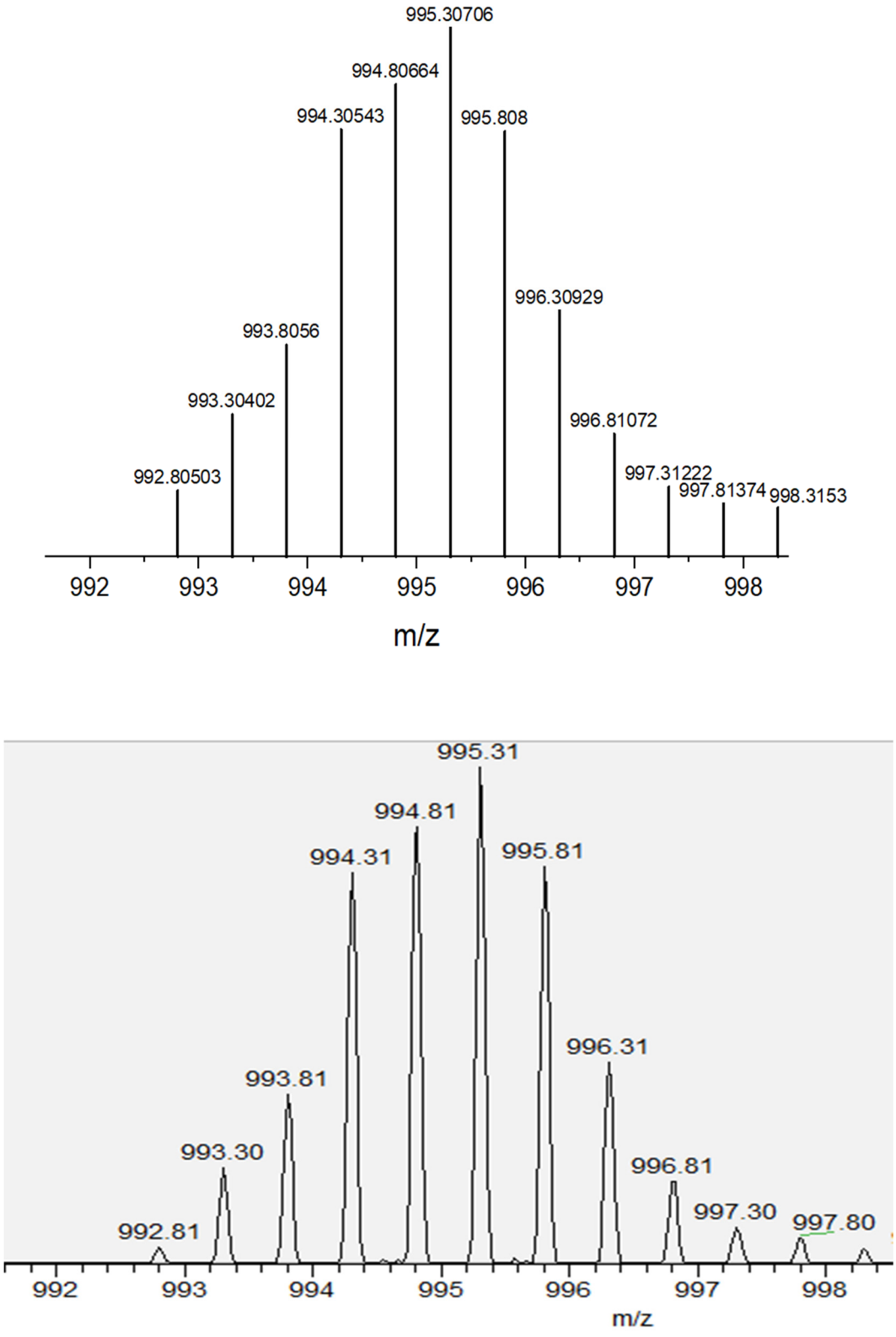

Fig. S12. Simulated (top) and experimental (bottom) ESI-MS data for complex **5**, showing the isotropic distribution pattern for the molecular ion peak ($[M - PF_6]^{2+}$).

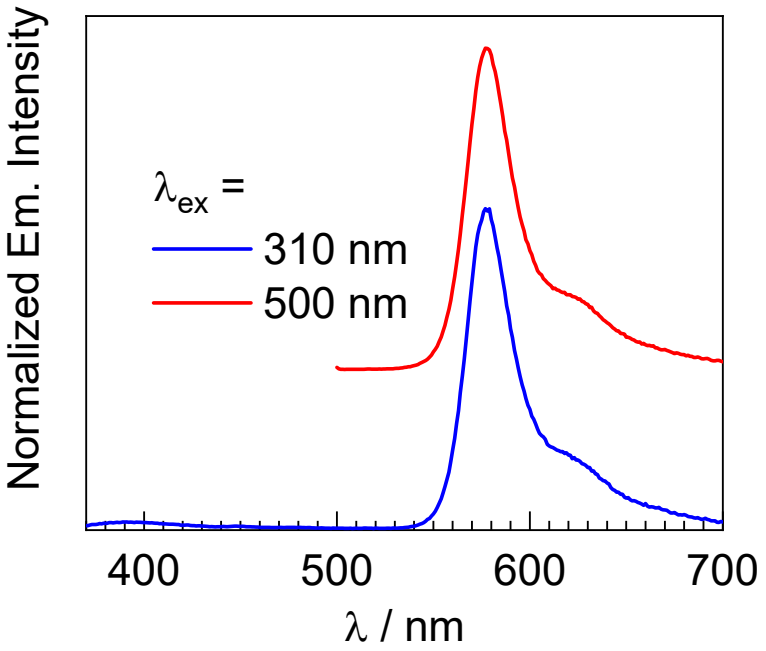

Fig. S13. Overlaid photoluminescence spectra of complex **3** with 310 nm and 500 nm excitation. Spectra were recorded in CH_2Cl_2 at room temperature.

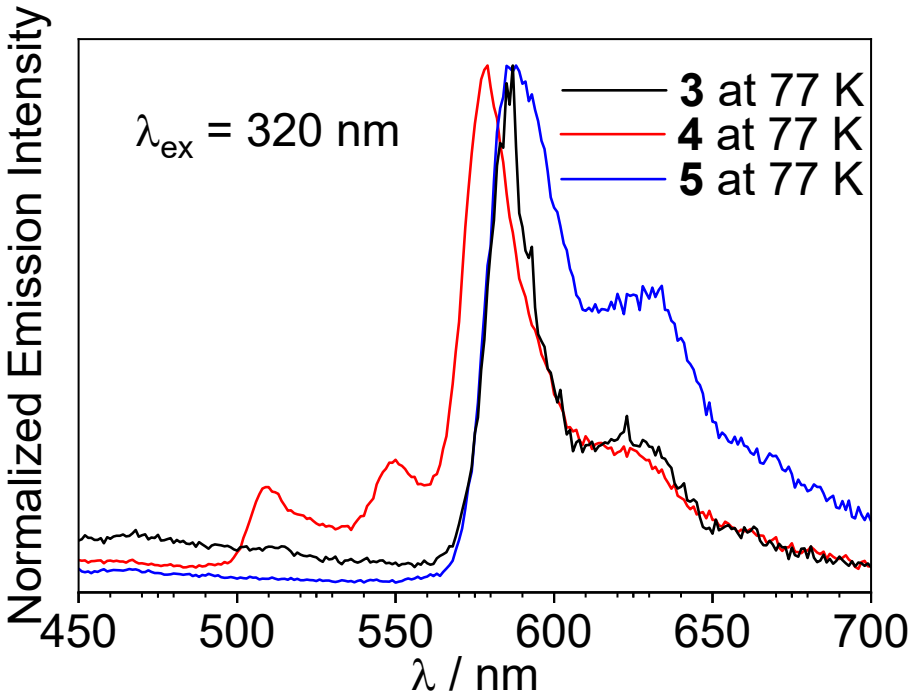

Fig. S14. Overlaid emission spectra of complexes **3 – 5** at 77 K. Spectra were excited at 320 nm and recorded in a 1 : 3 mixture of CH_2Cl_2 : toluene.

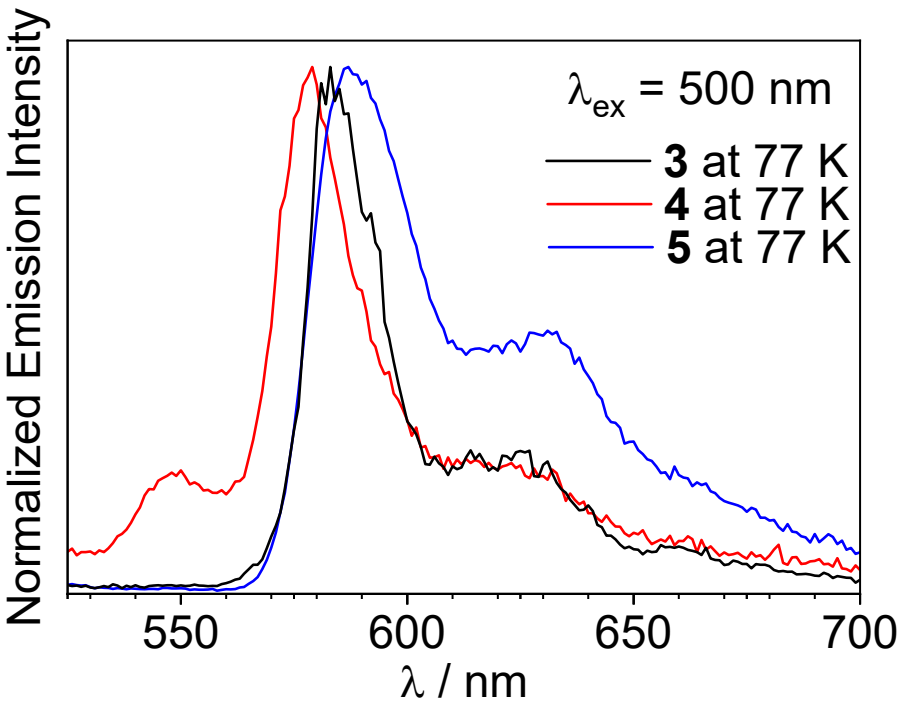

Fig. S15. Overlaid emission spectra of complexes **3 – 5** at 77 K. Spectra were excited at 500 nm and recorded in a 1 : 3 mixture of CH_2Cl_2 : toluene.

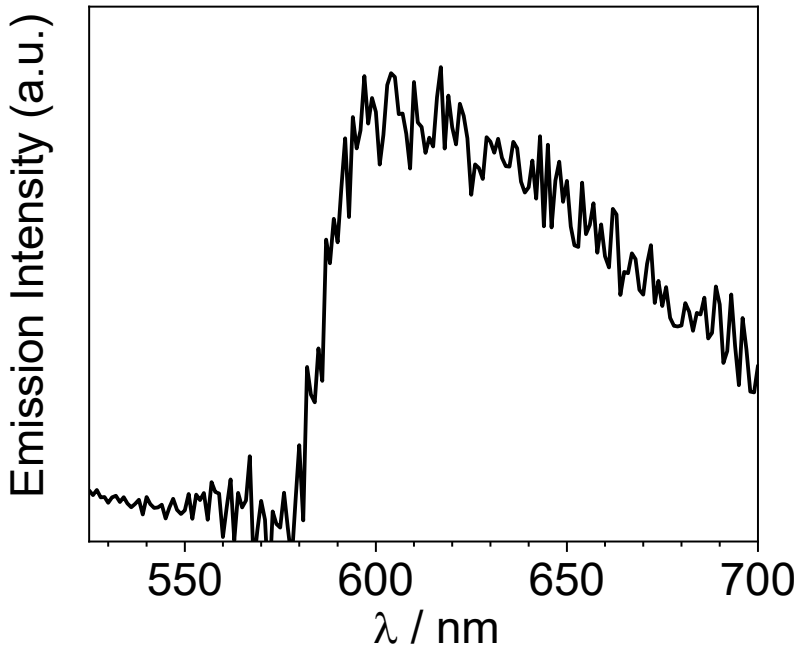

Fig. S16. Difference spectrum of complex **5**, determined by subtracting the PL spectrum obtained with 500 nm excitation from the spectrum obtained with 310 nm excitation..

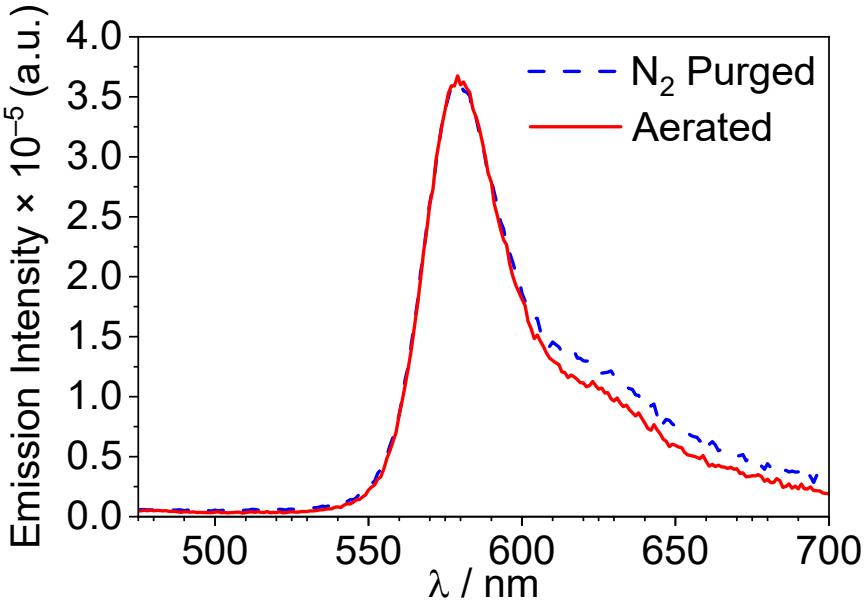

Fig. S17. Emission spectra of complex **5** measured at room temperature in CH_2Cl_2 under N_2-purged and aerated conditions (λ_{ex} = 310 nm).

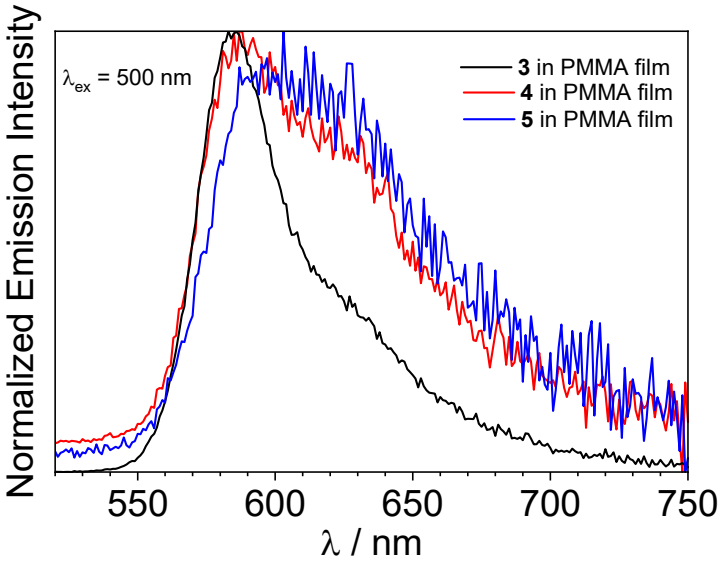

Fig. S18. Overlaid emission spectra of complexes **3 – 5** in PMMA films, doped at 2.5 wt%. Spectra were excited at 500 nm.

Table S1. Summary of emission data (λ_{ex} = 500 nm) for Ir-BODIPY constructs **3 – 5** in PMMA films.

	λ_{em}/nm	Φ_{PL}[a]	τ/ns[b]
3	583	0.87	2.8
4	588	0.44	4.8
5	603	0.059	13

[a] Excited at 400 nm. [b] Excited at 455 nm.

Table S2. Summary of emission data (λ_{ex} = 564 nm) for Ir-BODIPY constructs **3**–**5** in CH_2Cl_2 solution, along with radiative and nonradiative rate constants.

	λ_{em}/nm	Φ_{PL}	τ/ns	$k_r \times 10^{-8}/s^{-1}$	$k_{nr} \times 10^{-8}/s^{-1}$
2	580	0.53	3.7	1.4	1.3
3	577	0.58	3.4	1.7	1.2
4	579	0.87	2.6	3.3	0.50
5	578	0.18	2.0	0.90	4.1

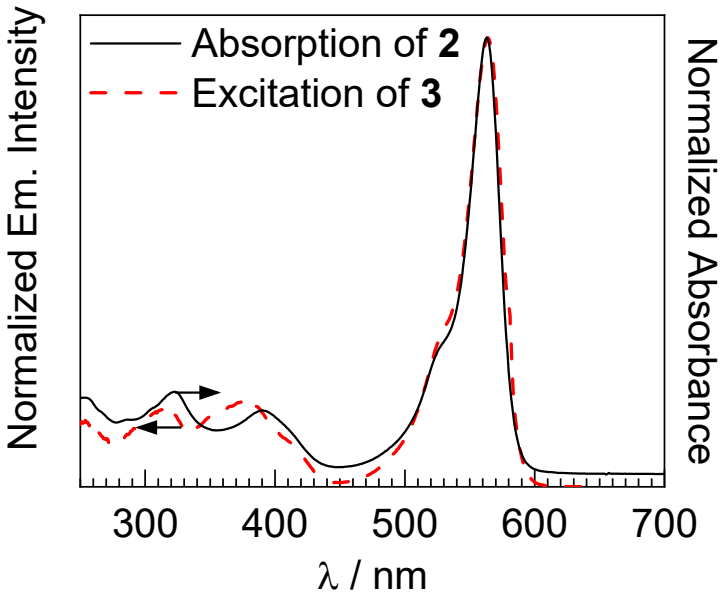

Fig. S19. Overlaid UV-vis absorption spectrum of BODIPY **2** (black solid line) and photoluminescence excitation spectrum of complex **3** (red dashed line). Spectra were recorded in CH_2Cl_2 at room temperature, and for the excitation spectrum λ_{em} = 564 nm.

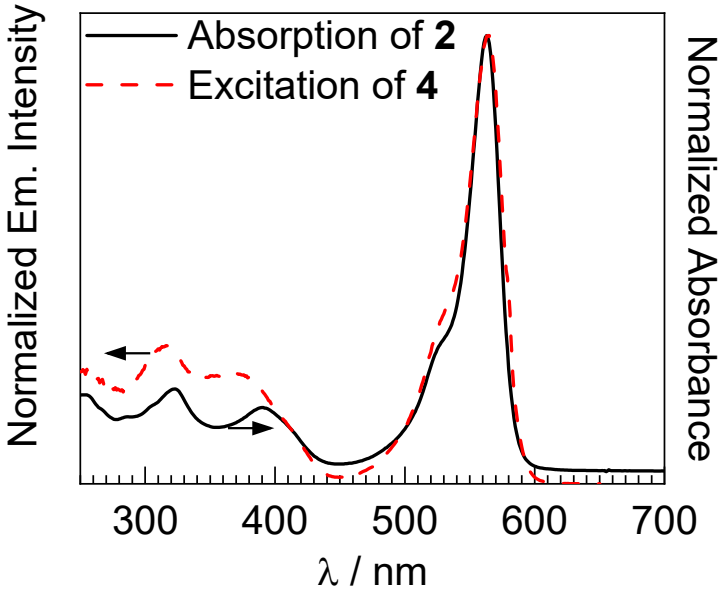

Fig. S20. Overlaid UV-vis absorption spectrum of BODIPY **2** (black solid line) and photoluminescence excitation spectrum of complex **4** (red dashed line). Spectra were recorded in CH_2Cl_2 at room temperature, and for the excitation spectrum λ_{em} = 564 nm.

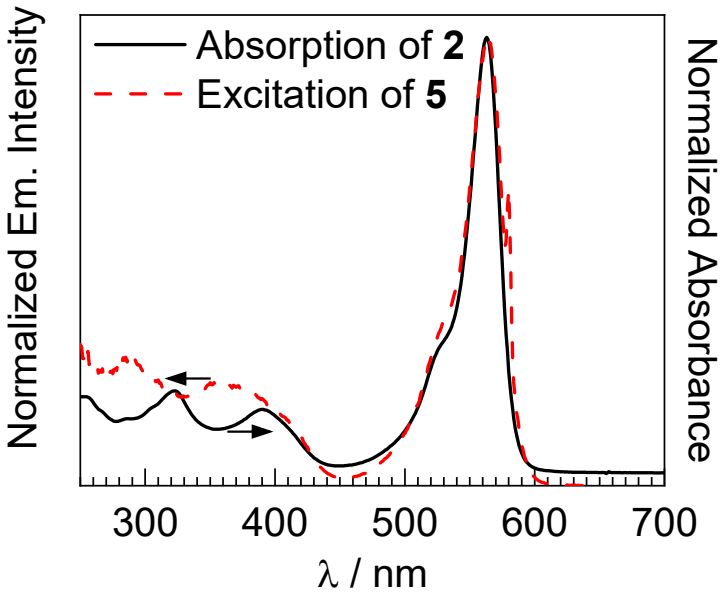

Fig. S21. Overlaid UV-vis absorption spectrum of BODIPY **2** (black solid line) and photoluminescence excitation spectrum of complex **5** (red dashed line). Spectra were recorded in CH_2Cl_2 at room temperature, and for the excitation spectrum λ_{em} = 564 nm.