Supporting Information

Efficient deep-blue electroluminescence with CIEy ∈ (0.05–0.07) from phenanthroimidazole–acridine derivative hybrid fluorophores

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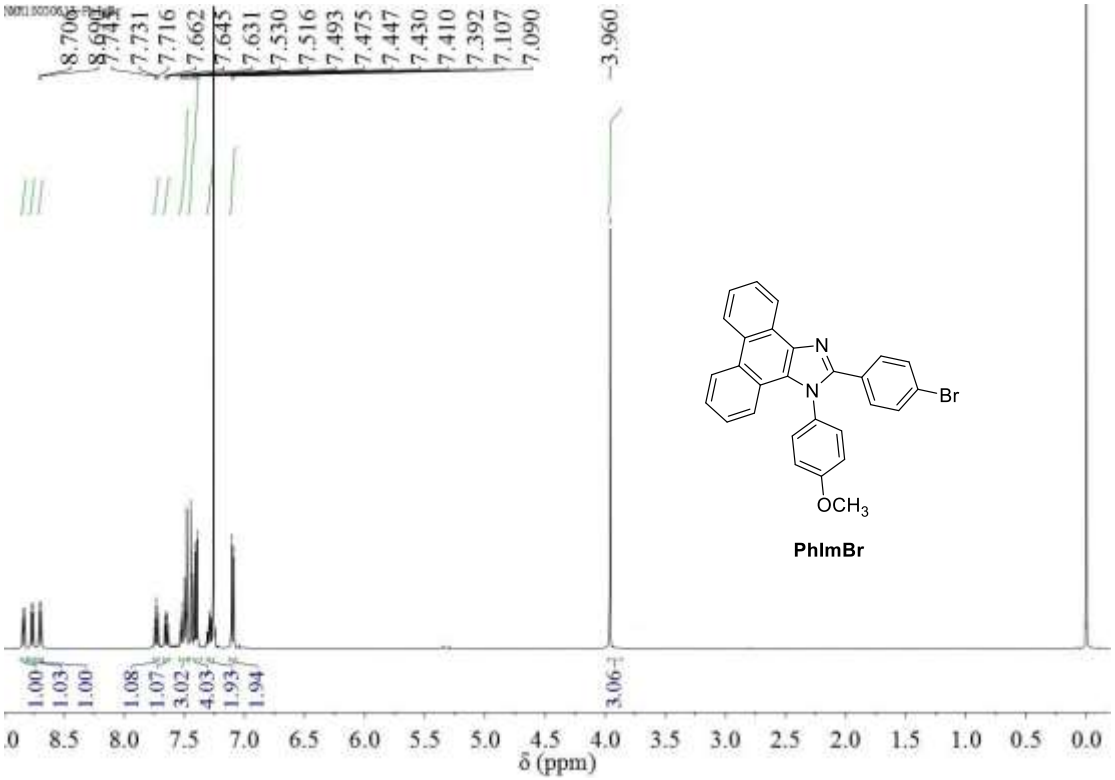

Figure S1. ^{1}H NMR spectrum of compound **PhImBr**.

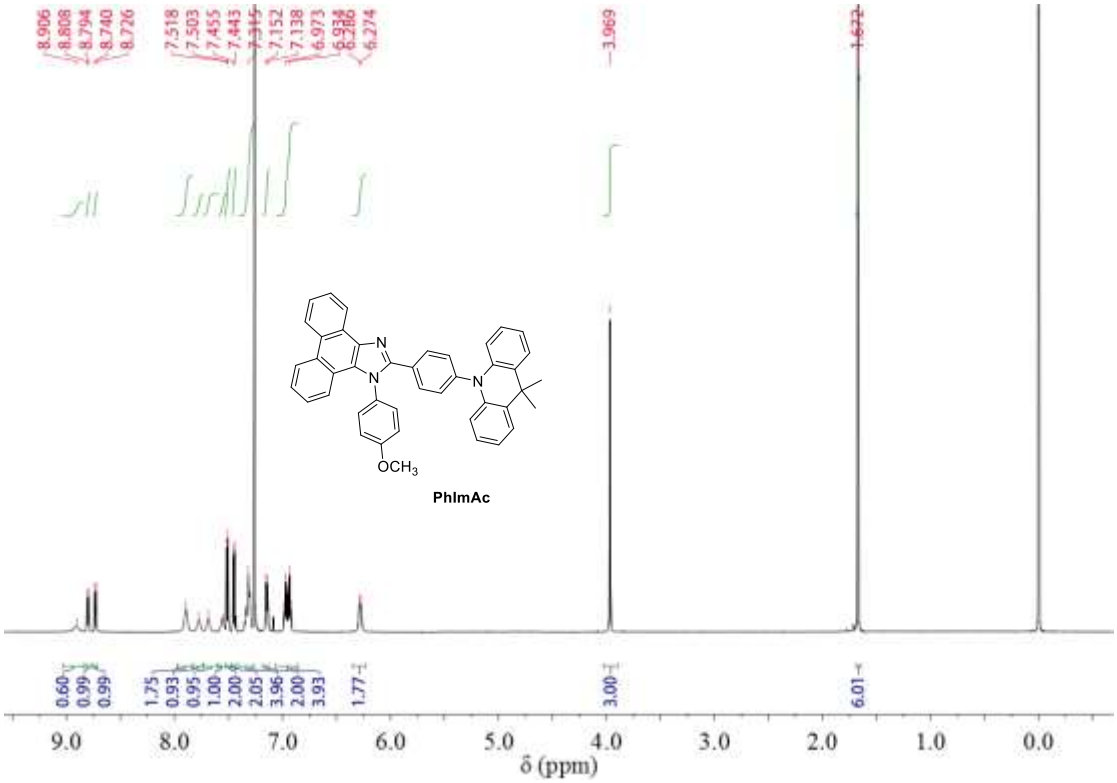

Figure S2. ^{1}H NMR spectrum of compound **PhImAc**.

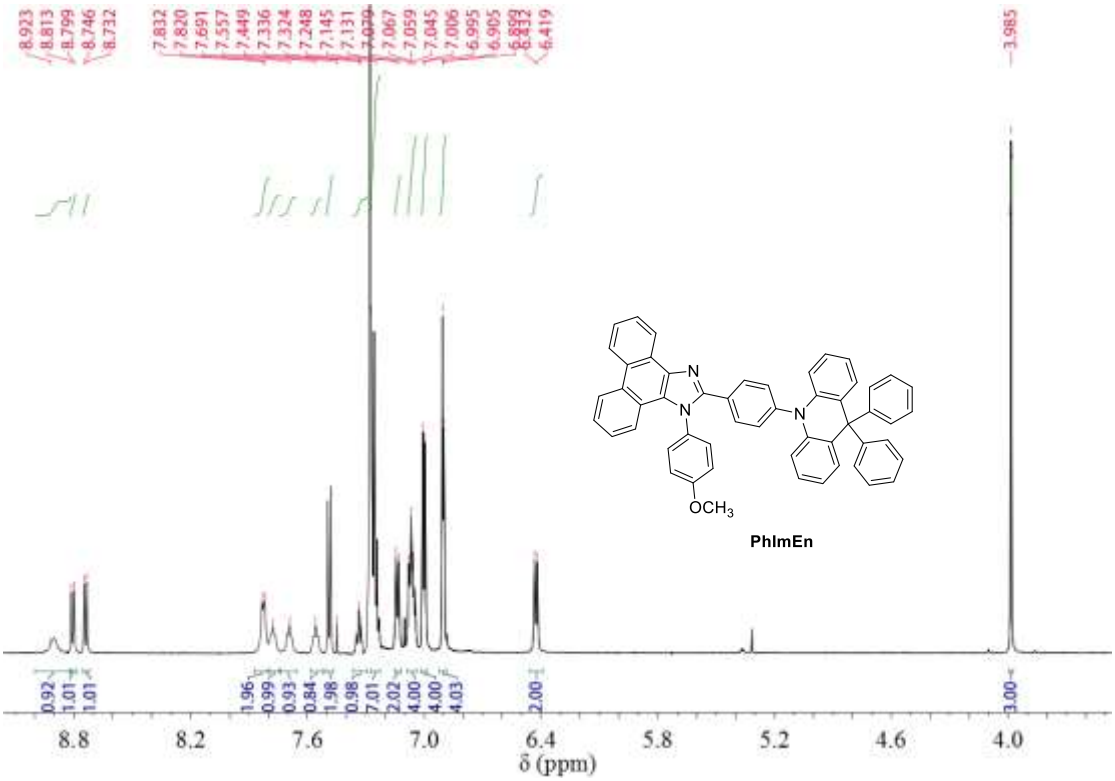

Figure S3. ^{1}H NMR spectrum of compound **PhImEn**.

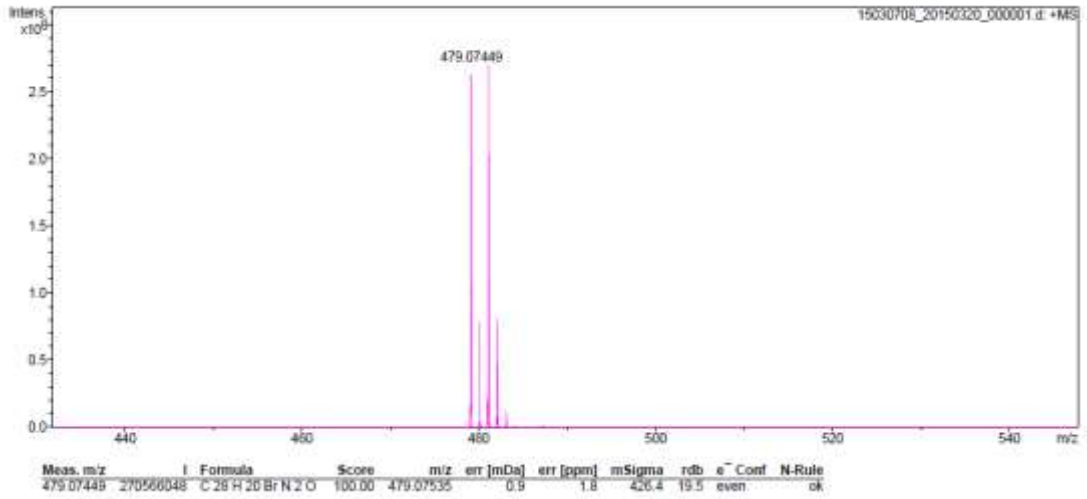

Figure S4. HR-MS spectrum of compound **PhImBr**.

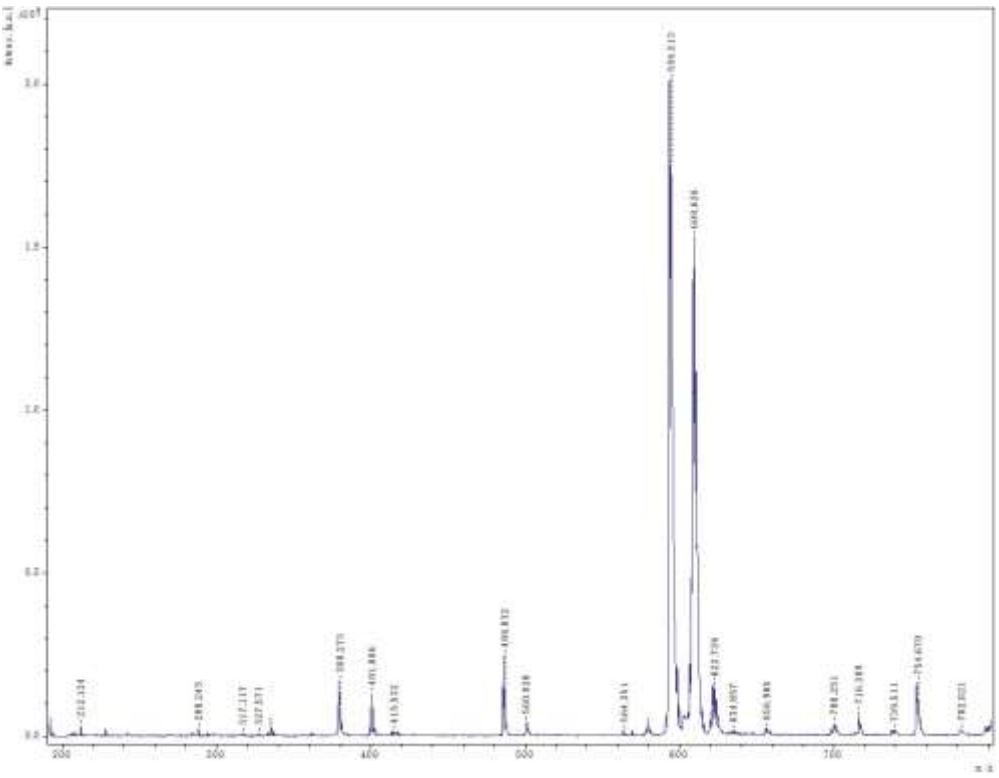

Figure S5. HR-MS spectrum of compound **PhImAc**.

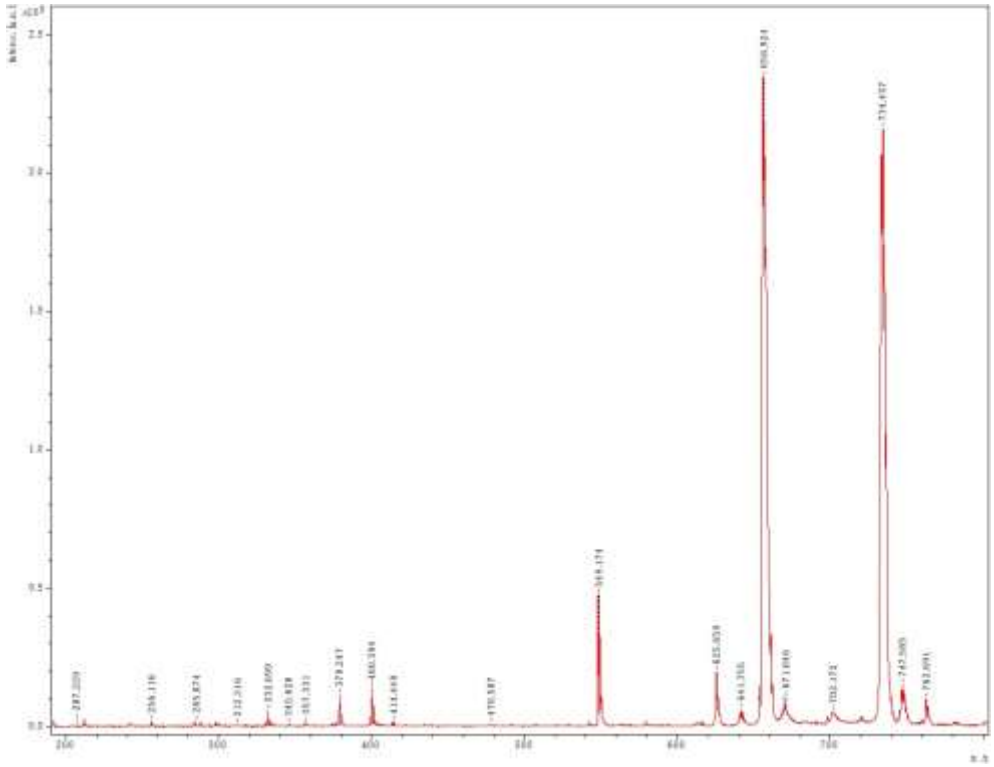

Figure S6. HR-MS spectrum of compound **PhImEn**.

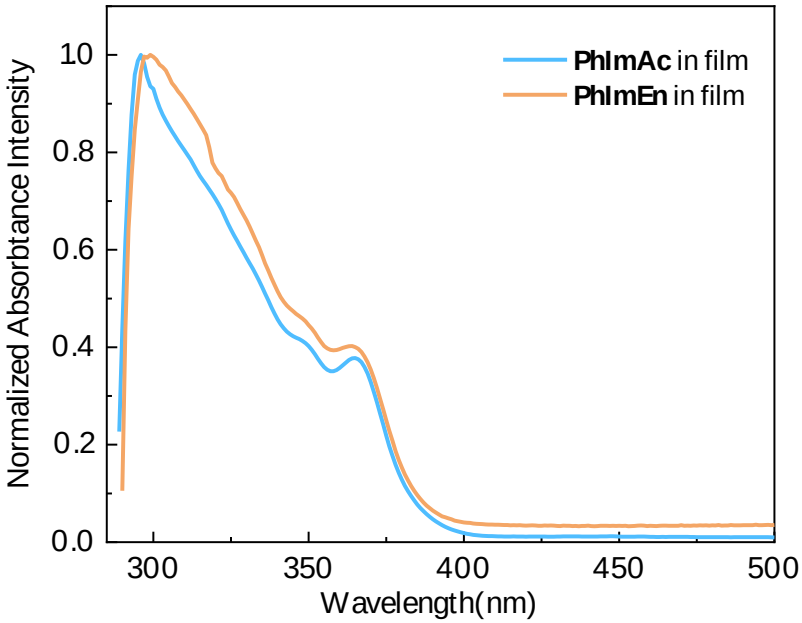

Figure S7. Stead-state absorption spectra of **PhImAc** and **PhImEn** in neat film at room temperature.

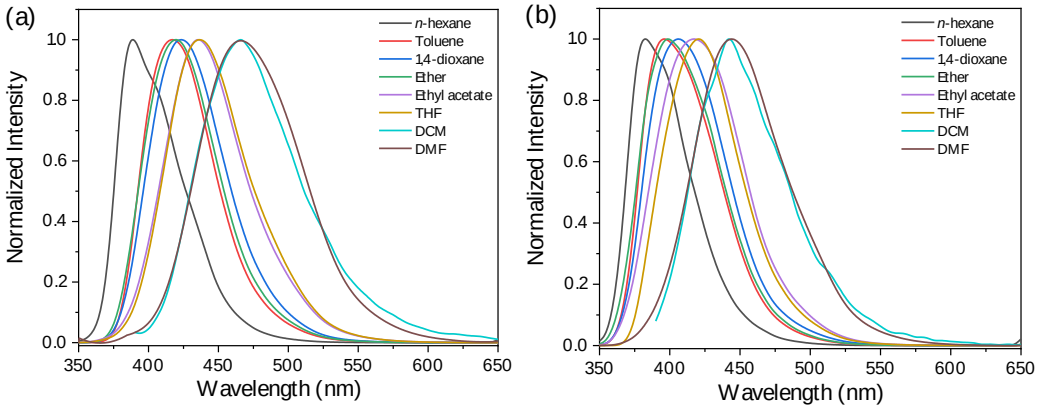

Figure S8. Solvatochromic shifts of PL spectra of **PhImAc** (a) and **PhImEn** (b).

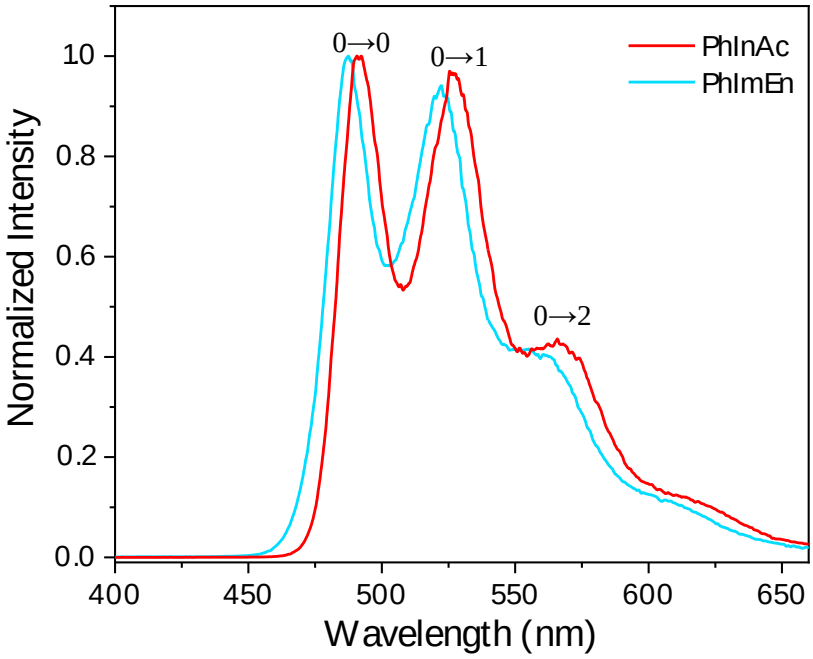

Figure S9. Phosphorescence spectra of **PhImAc** and **PhImEn** in toluene at 77 K.

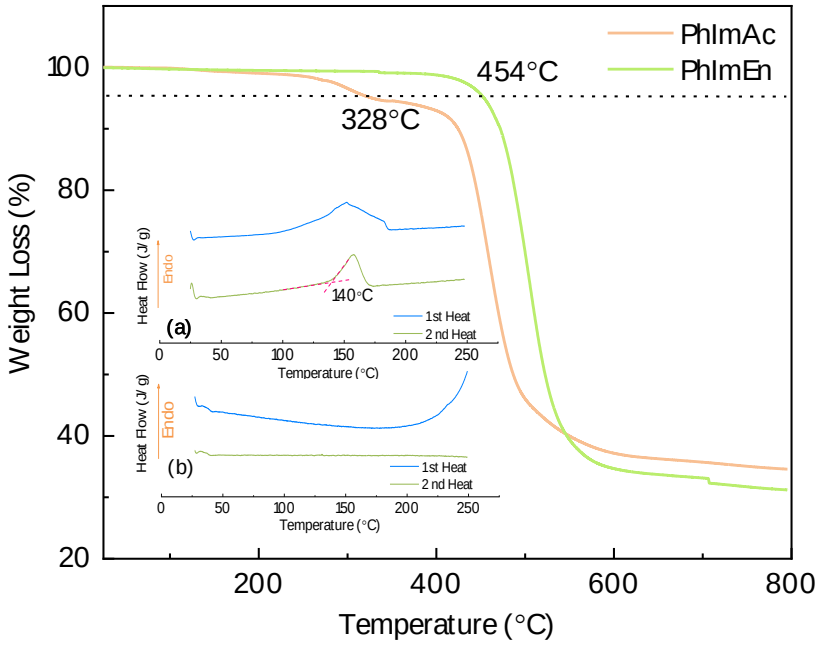

Figure S10. TGA thermograms of **PhImAc** and **PhImEn** measured at 10 °C min^{-1} under nitrogen flushing. Insert: DSC spectra of the first and second heating cyclings for **PhImAc** (a) and **PhImEn** (b), at a heating rate of 10 °C min^{-1} under nitrogen flushing.

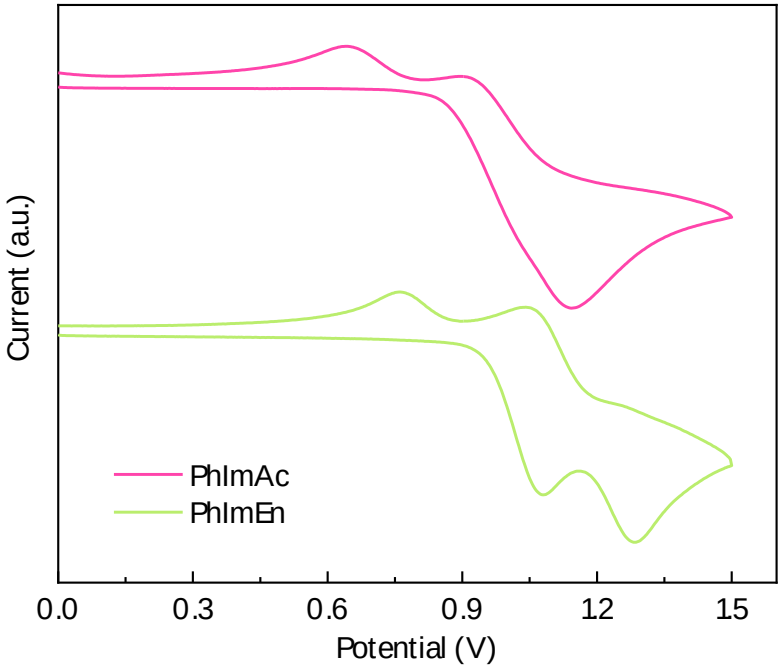

Figure S11. Cyclic voltammogram of compouds **PhImAc** and **PhImEn** in the anode scan.

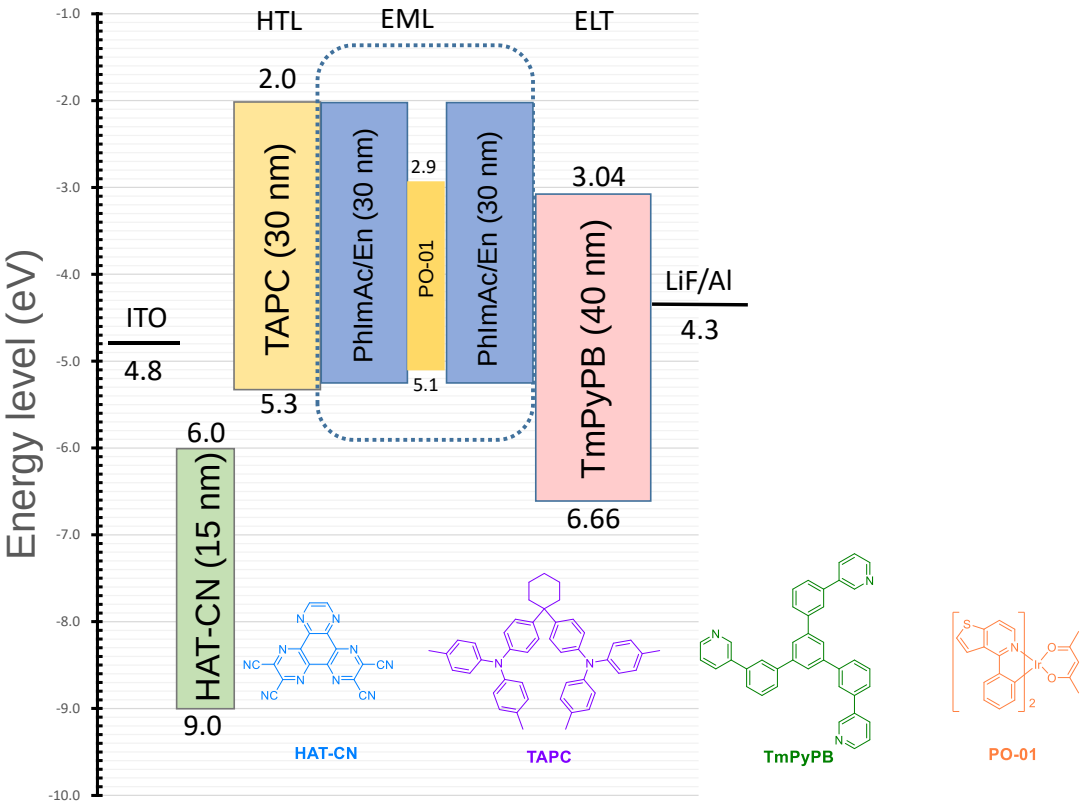

Figure 12. Energy level diagrams of the WOLEDs C and D based on **PhImAc** and **PhImEn** as host and PO-01 as dopant.

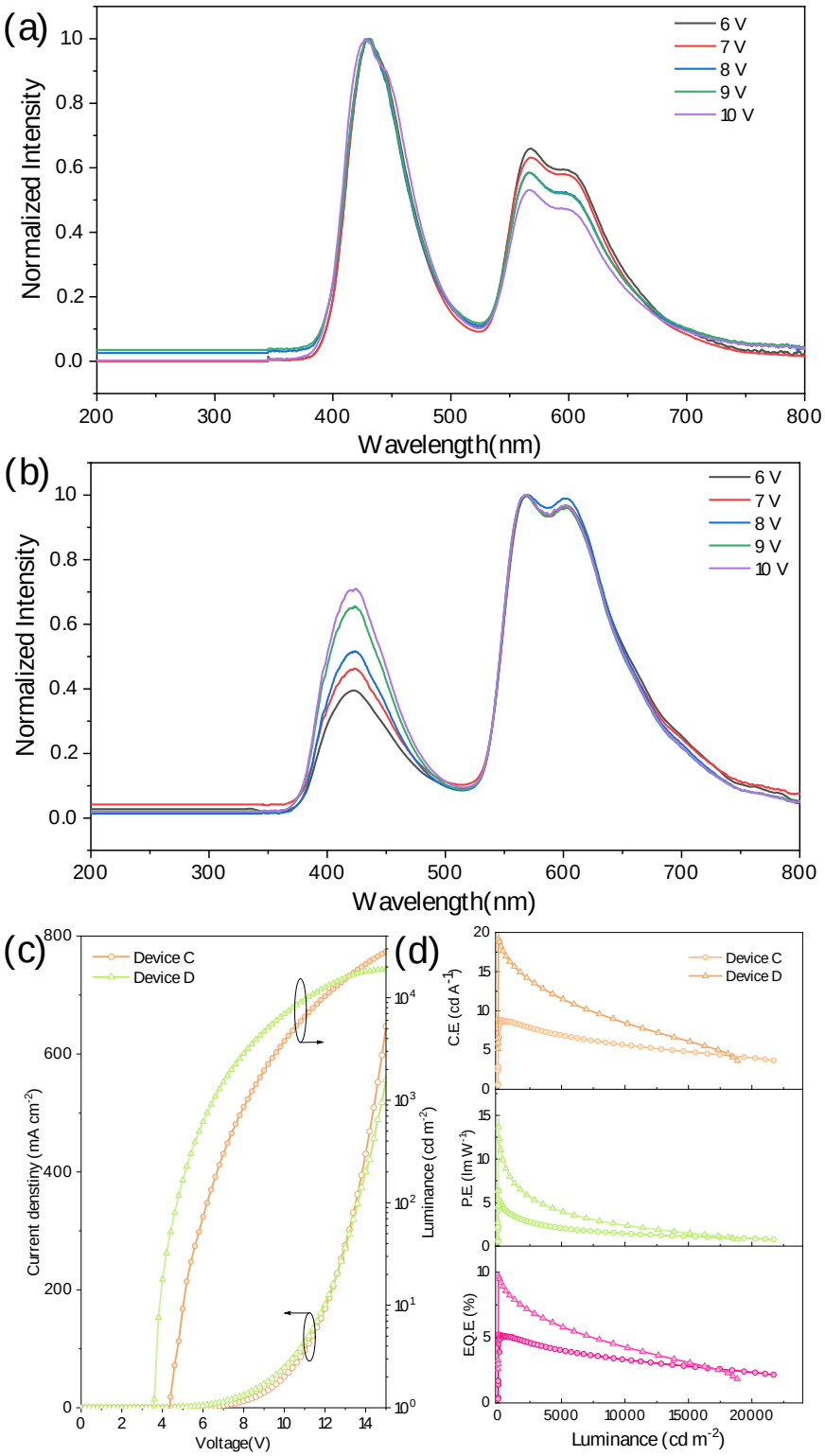

Figure S13. (a) Electroluminescence spectra for WOLED C. (b) Electroluminescence spectra for WOLED D at different voltages. (c) Current density–voltage–luminance characteristics. (d) Efficiency versus luminance curves.