

## Supporting Information

### Effect of Main Ligands on Organic Photovoltaic Performance of Ir(III) Complexes

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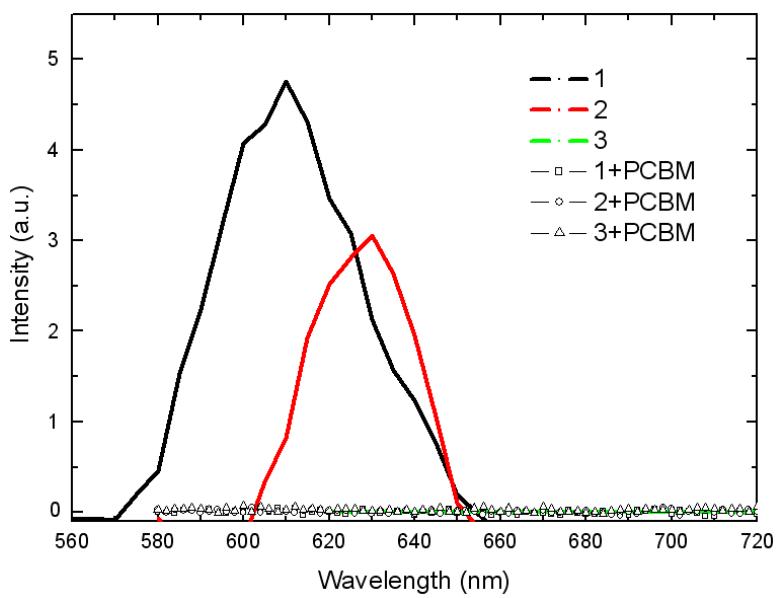
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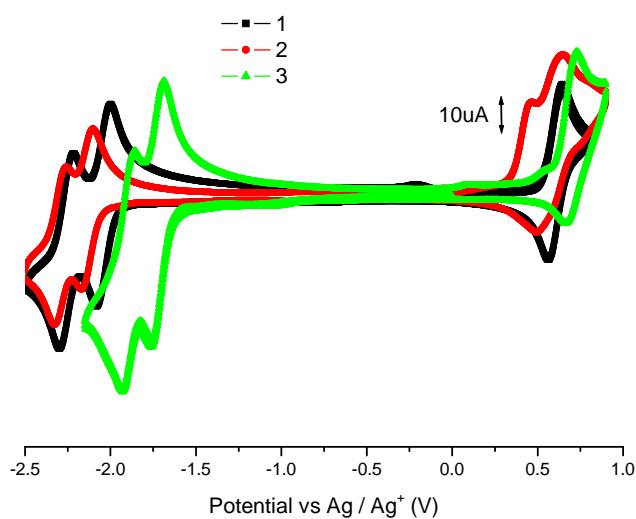
**Fig. S3** Electron Only Device Data

**Fig. S4** EL spectra

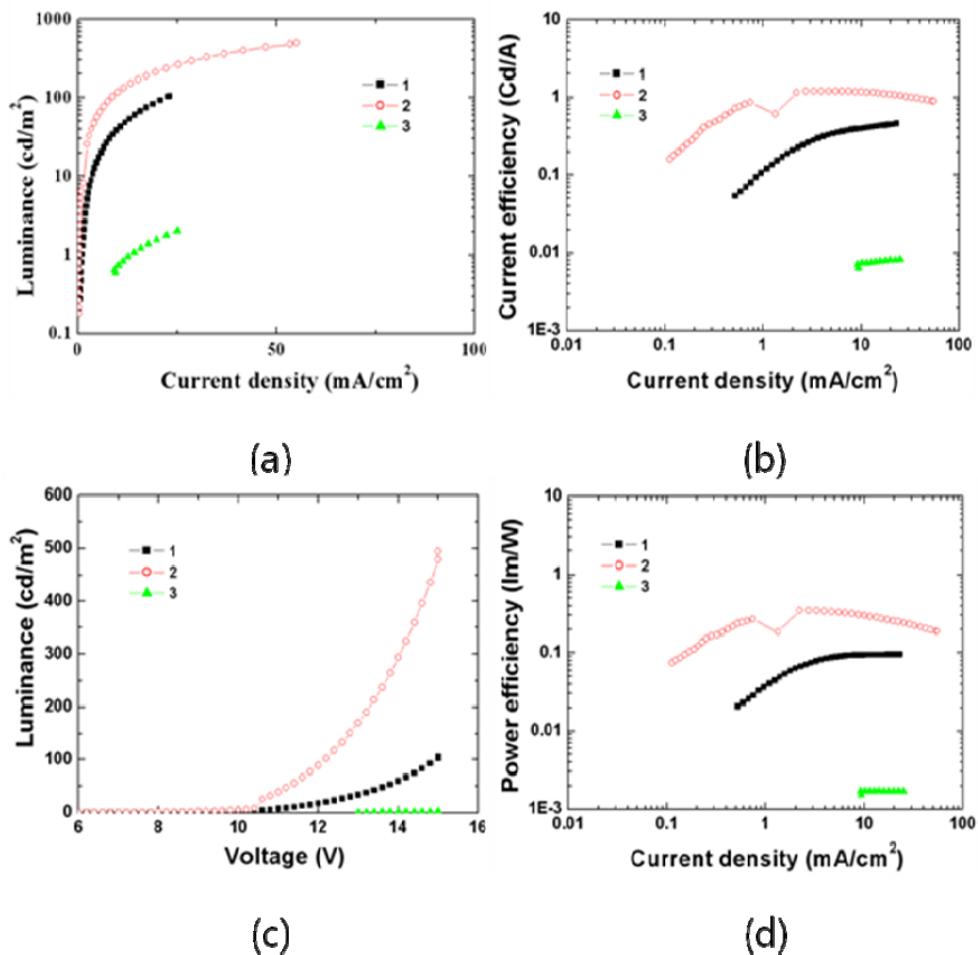


**Fig. S1.** PL spectra of Ir complexes neat film and a blending film of Ir complexes:PCBM =

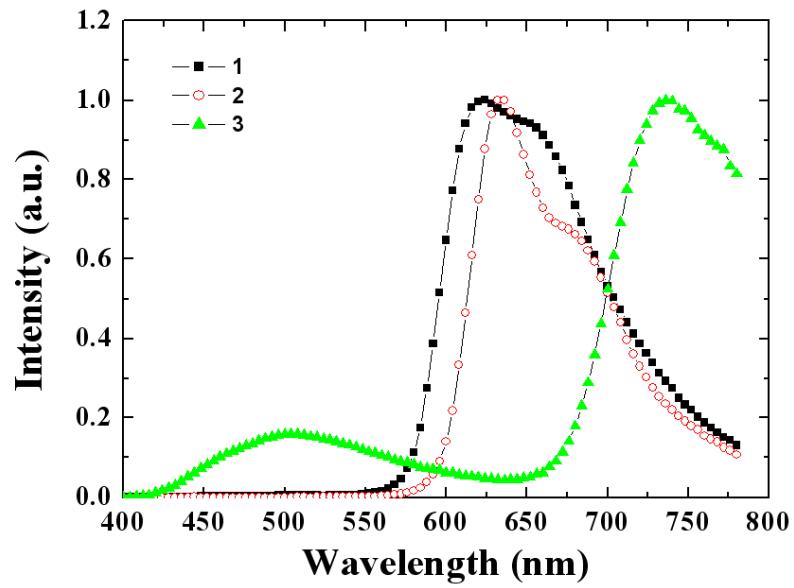
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**Fig. S2.** Cyclic voltammograms of **1**, **2** and **3** (each 1.00 mM in dichloromethane).



**Fig. S3.** Performance of electron-only OLED device of **1**, **2** and **3**; (a) luminance ( $\text{cd m}^{-2}$ ) vs. current density  $J$  ( $\text{mA cm}^{-2}$ ), (b) current efficiency ( $\text{cd A}^{-1}$ ) vs. current density  $J$  ( $\text{mA cm}^{-2}$ ), (c) luminance ( $\text{cd m}^{-2}$ ) vs. voltage (V), (d) power efficiency ( $\text{lm W}^{-1}$ ) vs. current density  $J$  ( $\text{mA cm}^{-2}$ ).



**Fig. S4.** EL spectra of OLED devices of **1**, **2** and **3**.