Supporting Information

Structurally simple phenanthroimidazole-based bipolar hosts for high-performance green and red electroluminescent devices

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Fig. S1 DSC curves of \( m \)-DPPI and \( m \)-PPPI.

Fig. S2 TGA curves of \( m \)-DPPI and \( m \)-PPPI.
**Fig. S3** Room-temperature UV-vis absorption and emission spectra of PPI in CH$_2$Cl$_2$ and in neat films, as well as the phosphorescence spectra of PPI in 2-MeTHF ($10^{-5}$ M) at 77K.

**Fig. S4** Current density–voltage–luminance (J–V–L) characteristics of the green (a) and red (b) OLEDs.
Fig. S5 External quantum efficiency versus luminance curves of the devices.

Crystal Data of m-DPPI

C_{48}H_{30}N_{4}, M = 662.76, Orthorhombic, Pbcn, a = 24.996(5) Å, b = 9.4441(19) Å, c = 14.619(3) Å, α = 90°, β = 90°, γ = 90°, V = 3450.9(12) Å³, T = 293(2) K, Z = 4, μ (Mo Kα) = 0.075 mm⁻¹, 29007 reflections measured, 3915 unique.

The final wR₂ was 0.1213 (all data) and R₁ was 0.0462 (I ≥ 2σ(I)).