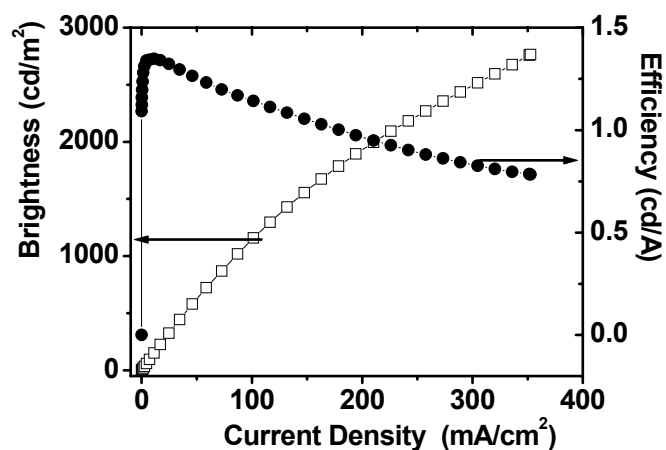Characterization data: The green needle (**BDPMB**). ^{1}HNMR (DMSO) 1.09-1.14 (m, 12H), 3.42-3.44 (m, 8H), 6.14 (s, 2H), 6.40-6.43 (d, 2H), 7.53-7.55 (d, 2H), 8.55 (s, 2H). Anal. Calcd. For $C_{26}H_{30}N_6O_2$: C, 68.10; H, 6.59; N, 18.33. Found: C, 68.27; H, 6.61; N, 18.54. MS: M/z, 458.
The green fine needle (**BDPMB-Zn**). ^{1}HNMR (DMSO) 1.09-1.13 (m, 12H), 3.37-3.39 (m, 8H), 5.80 (s, 2H), 6.18-6.22 (d, 2H), 7.12-7.15 (d, 2H), 8.09 (s, 2H). Anal. Calcd. For $C_{26}H_{28}N_6O_2Zn\bullet H_2O$: C, 57.84; H, 5.60; N, 15.56. Found: C, 57.56; H, 5.33; N, 15.65. MS: M/z, 521(M+1).

Efficiency-Luminance-Current density characteristics:

Efficiency-Luminance-Current density characteristics of device with configuration indium-tin oxide (ITO) / TPD (25nm) / TPD:Dopant (25nm) / Alq$_3$:Dopant (30nm) / Alq$_3$ (30nm) / Mg-Ag(200nm); doping concentration: 1%(wt%).