Supporting Information

Carrier transport manipulation for efficiency enhancement in blue

phosphorescent organic light-emitting devices with 4,4'-bis(N-

carbazolyl)-2.2'-biphenyl host

Ziwei Yu, Haiwei Feng, Jiaxin Zhang, Shihao Liu, Yi Zhao, Letian Zhang* and Wenfa Xie*

State key Laboratory of Integrated Optoelectronics, College of Electronics Science and

Engineering, Jilin University, Changchun, 130012, People's Republic of China.

*E-mail: zlt@jlu.edu.cn; xiewf@jlu.edu.cn



Figure S1. he current density-voltage curves of blue devices (a) B1 and (b) B3 and probe devices (a) A1 to A8 and (b) B3-1 to B3-8.



Figure S2. The distribution of hole and electron at different voltages (5 V and 8V) in (a), (b) device B1 and (c), (d) device B3 calculated by drift-diffusion simulations by SimOLED; The electron density/hole density curves of devices B1 and B3 at (e) 5 V and (f) 8V.



Figure S3. The normalized EL spectra of device (a) B1 and (c) B2; The EL spectra of device (b) B1 and (d) B2.