

## Supporting information

### **Over 20% external quantum efficiency in red thermally activated delayed fluorescent organic light-emitting diodes using a reverse intersystem crossing activating host**

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Figure S1. Current density-voltage and luminance-voltage curves of CBP:HAP-3TPA devices according to HAP-3TPA doping concentration.

Figure S2. Quantum efficiency-luminance curves of CBP:HAP-3TPA devices according to HAP-3TPA doping concentration.

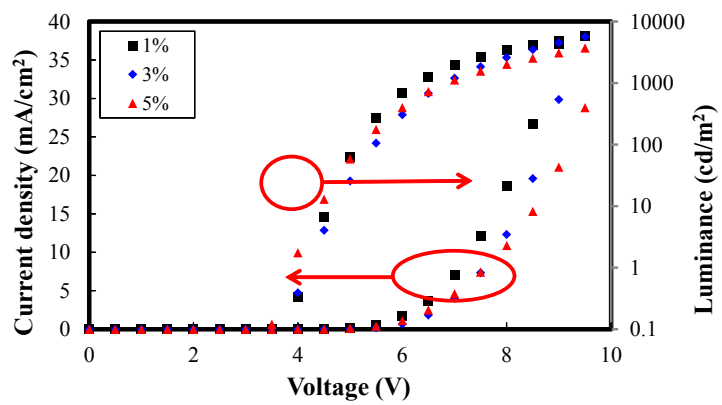


Figure S1

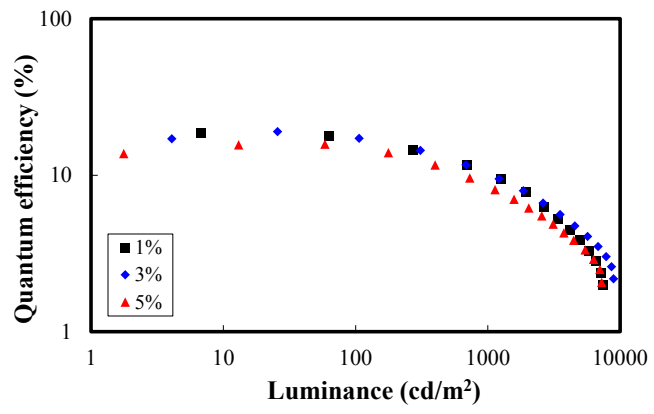


Figure S2