

## Supporting Information

### **Furil based ionic small molecules for green emitting non-doped LECs with improved color purity**

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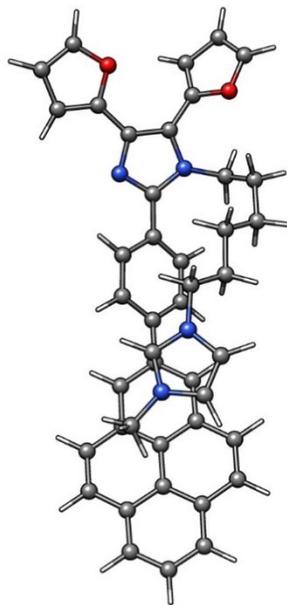
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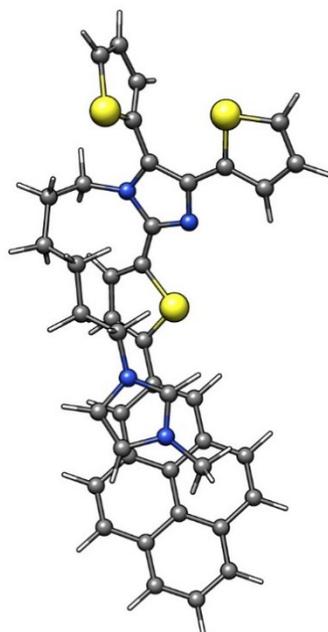
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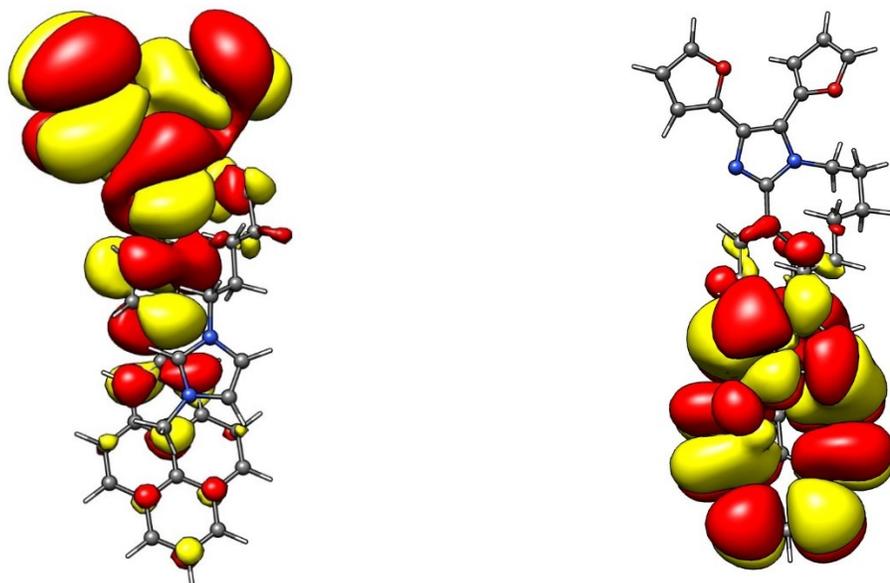
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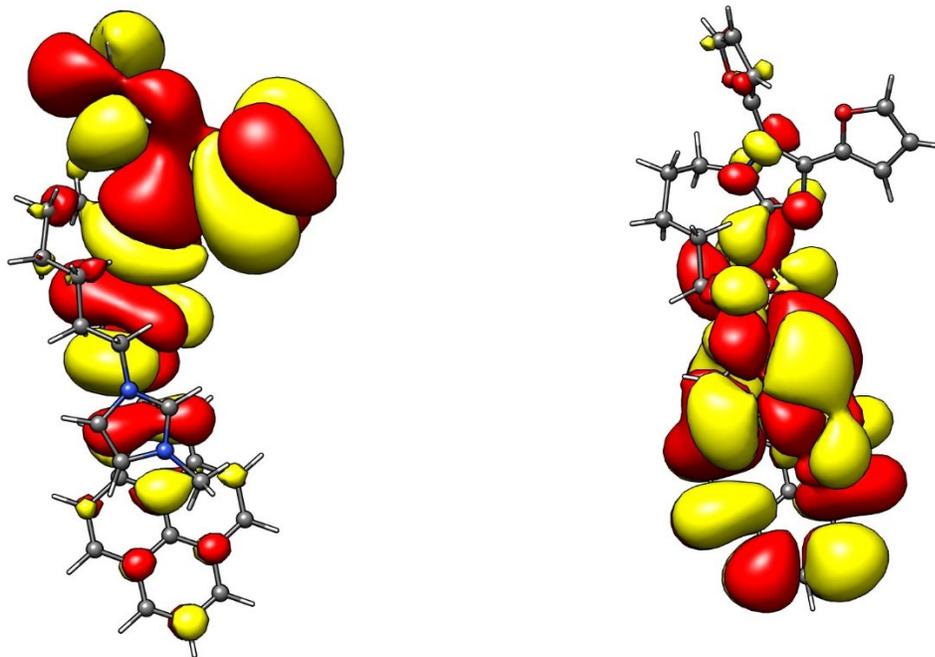
**Figure S1.** The DFT optimized ground state geometry of the FIBzPy.



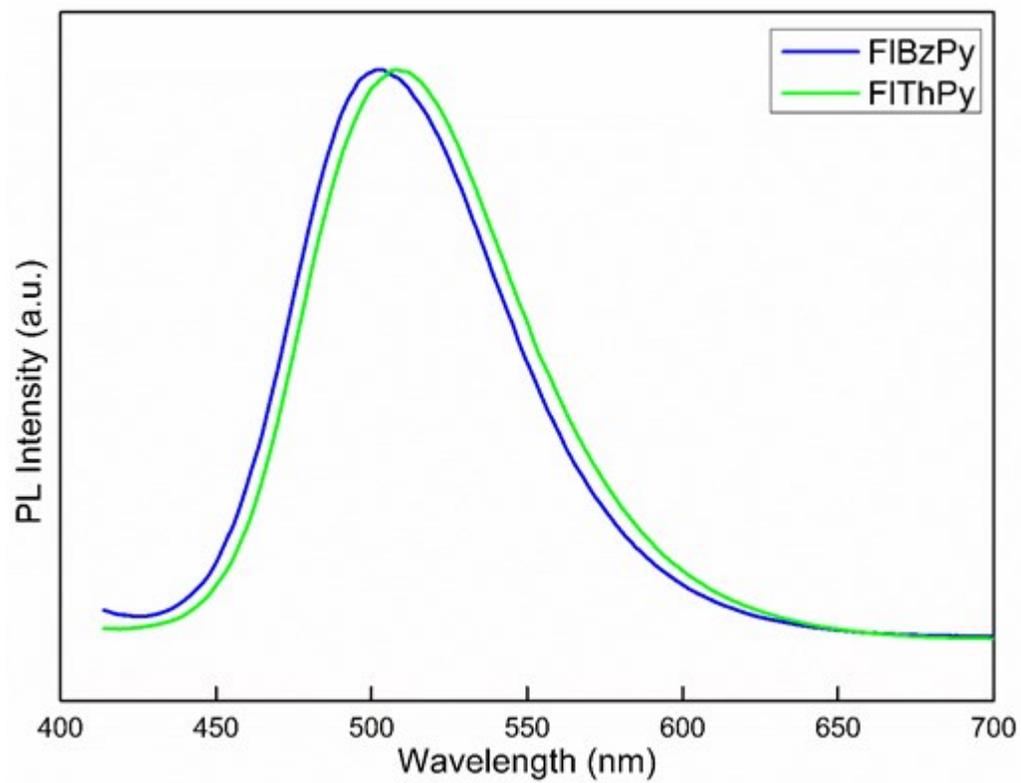


**Figure S3.** Calculated molecular orbital amplitude plots of HOMO and LUMO of FIBxPy calculated at B3LYP/def2-TZVP level.

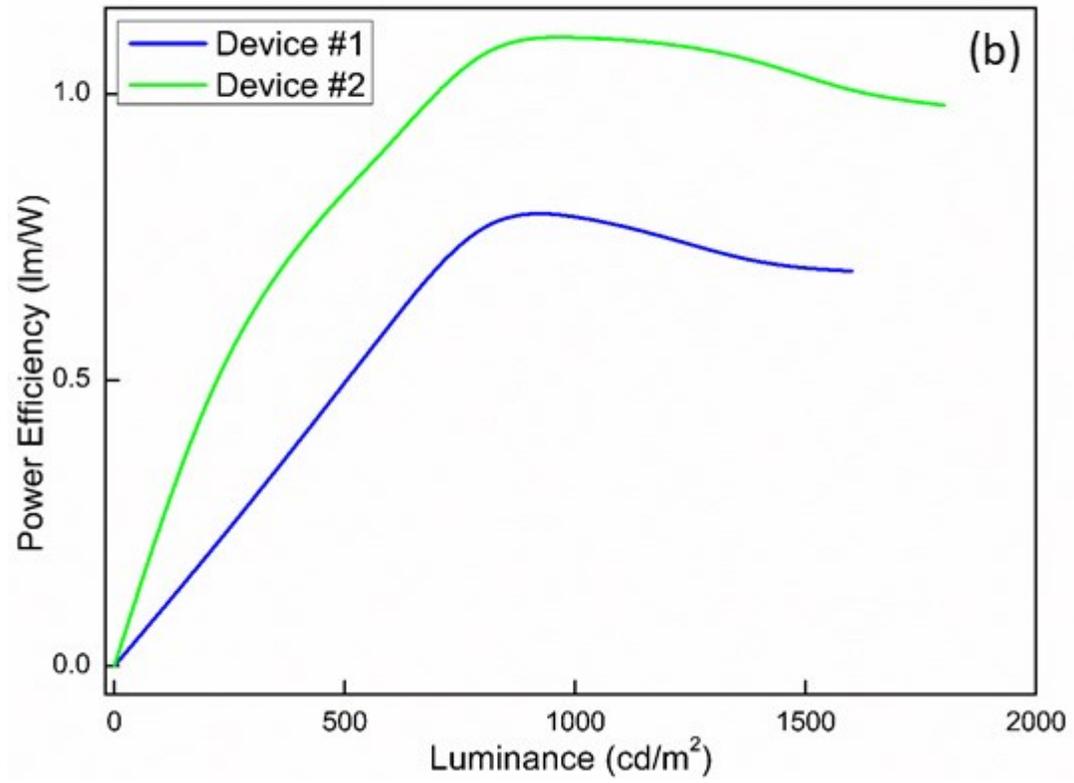
**Figure S8.** The DFT optimized ground state geometry of the FThPy.



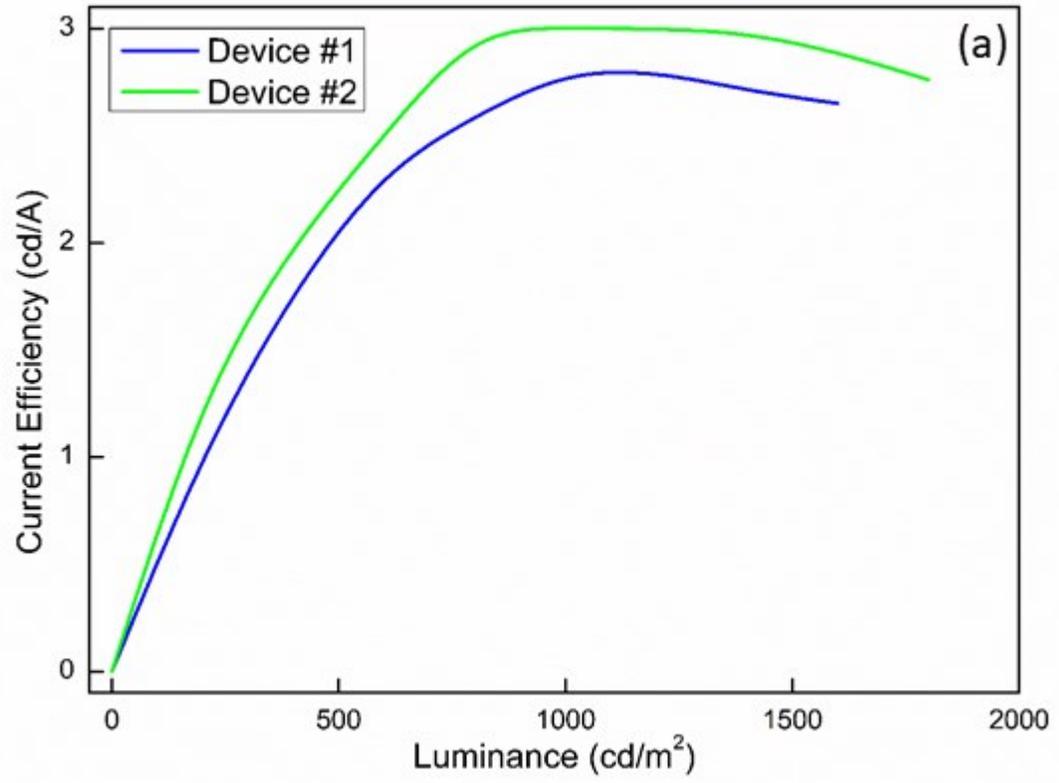
**Figure S4.** Calculated molecular orbital amplitude plots of HOMO and LUMO of F1ThPy calculated at B3LYP/def2-TZVP level.



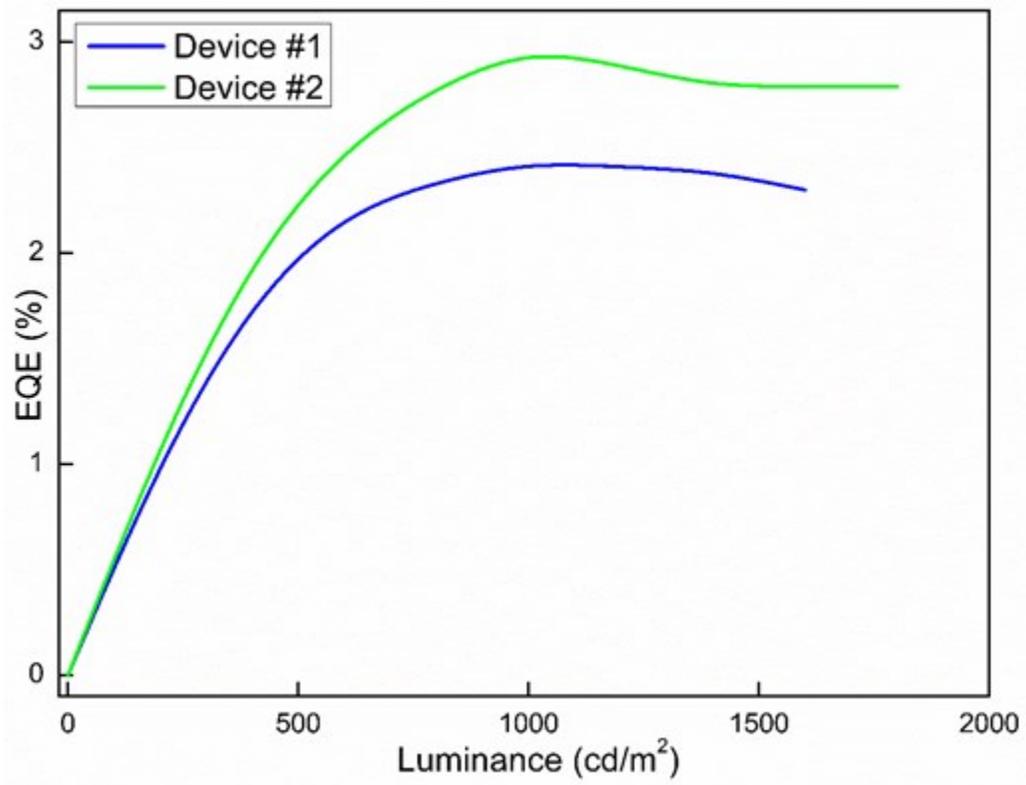
**Figure S5.** PL intensity of FIBzPy and FITHyPy in thin films



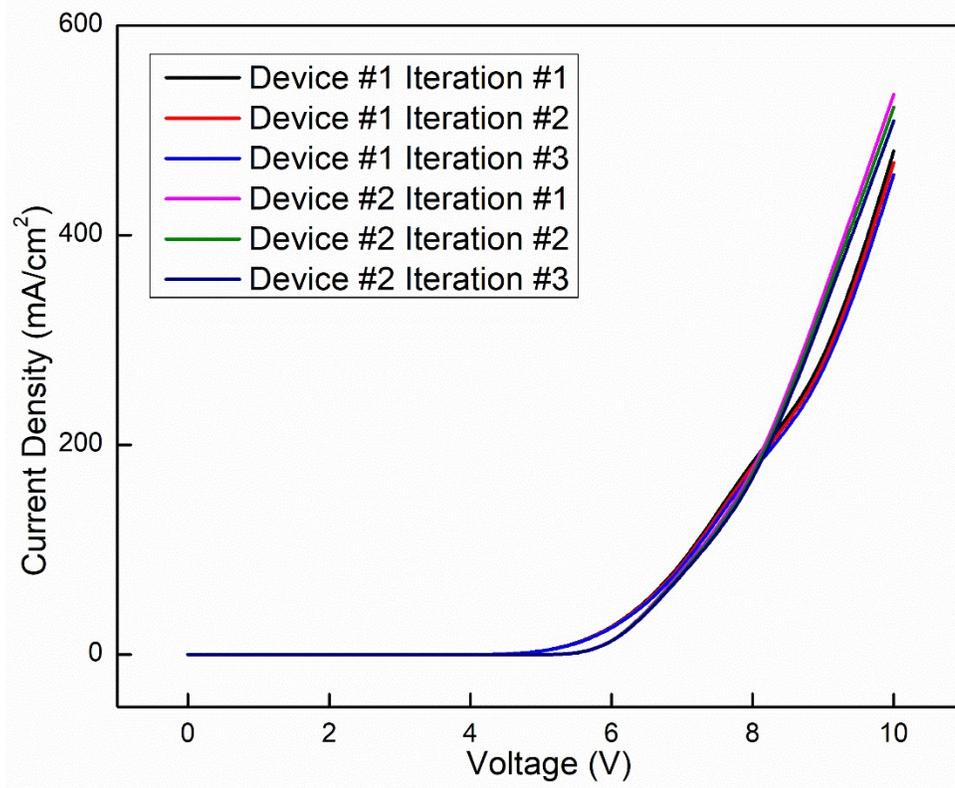
**Figure S6.** Power efficiency vs luminance of device #1 and device #2



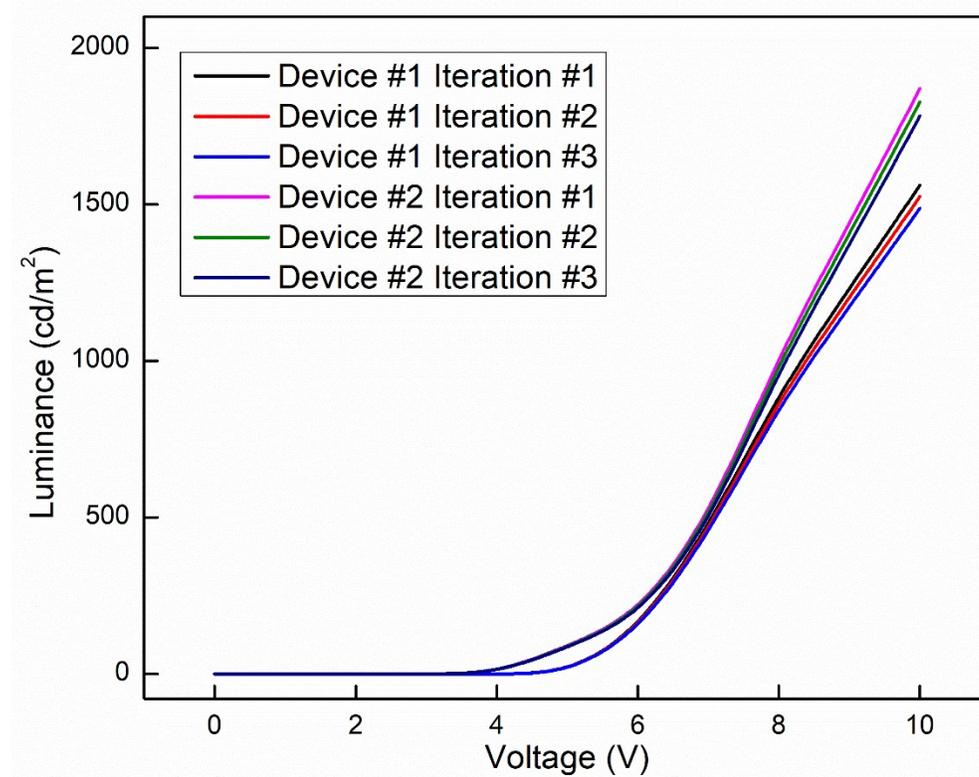
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**Figure S8.** External quantum efficiency vs luminance of device #1 and device #2



**Figure S9.** Current density vs voltage of device #1 and device #2 (repetitive run)



**Figure S10.** Luminance vs voltage of device #1 and device #2 (repetitive run)