*Supplementary Materials*

# Green phosphors based on 9,10-bis((4-((3,7-dimethyloctyl) oxy) phenyl) ethynyl) anthracene for LED

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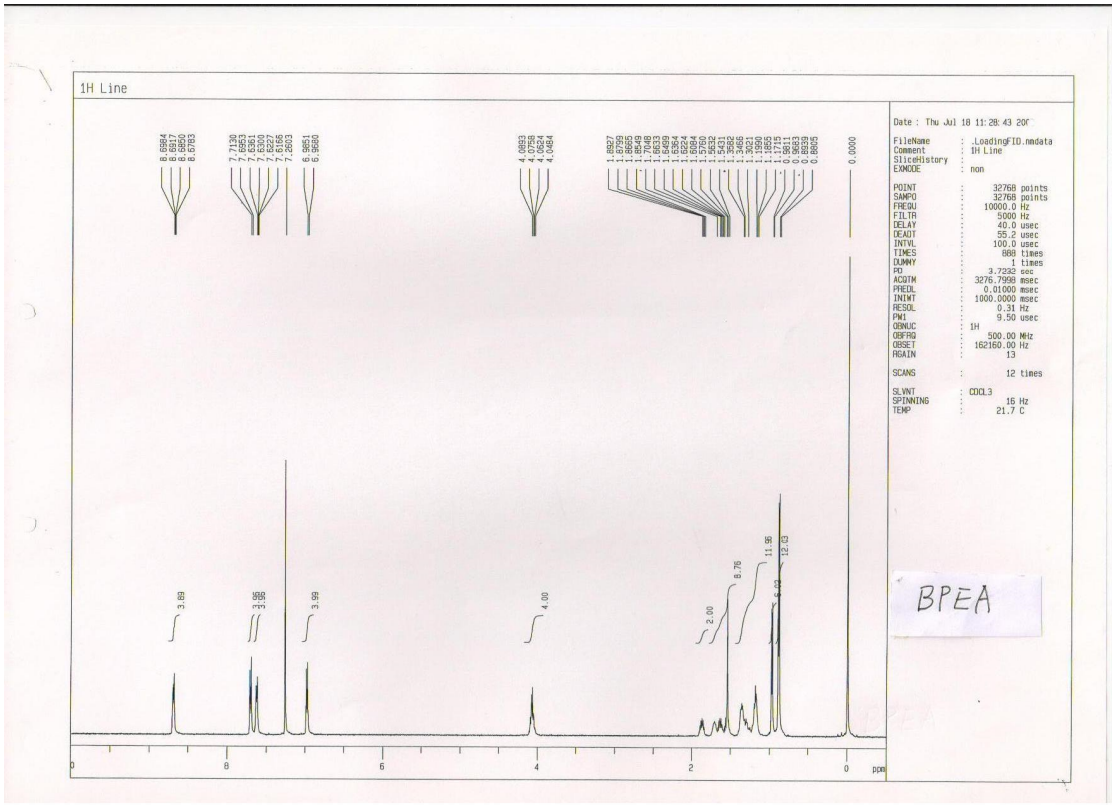


**Figure S1** $^{1}$H NMR spectrum of **BPEA** (500 MHz, $CDCl_3$).

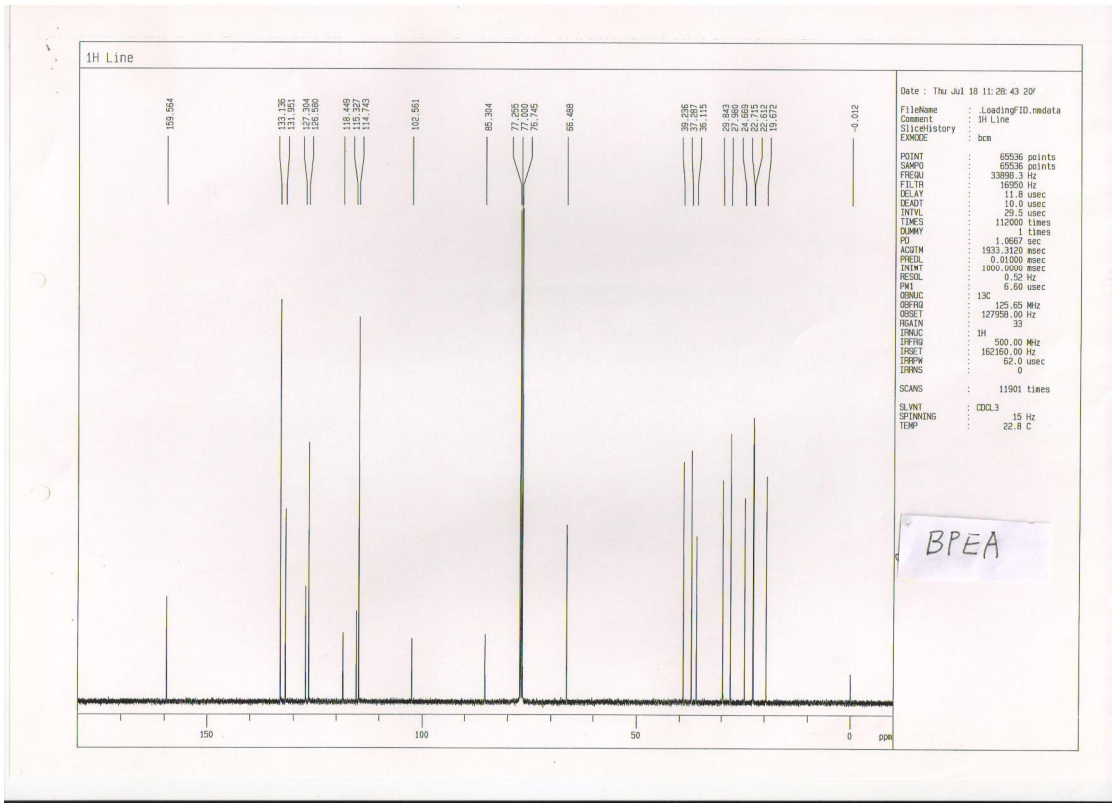


**Figure S2** $^{13}$C NMR spectrum of **BPEA** (125 MHz, $CDCl_3$).

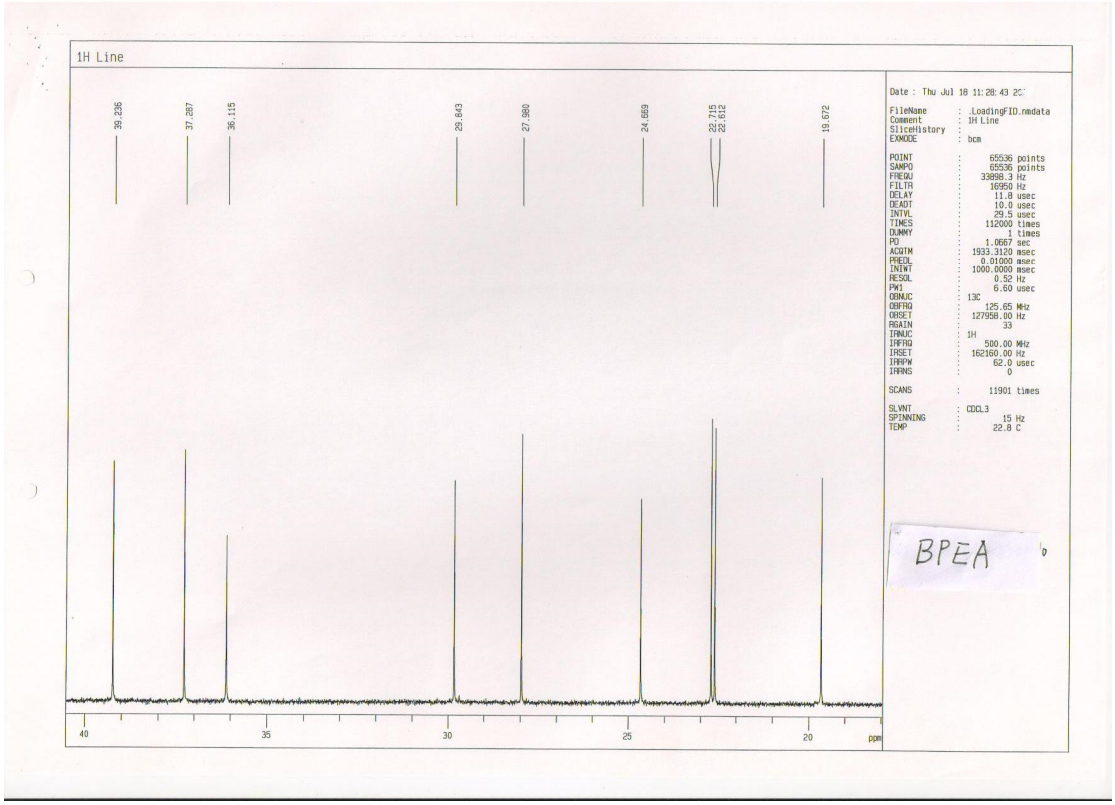


**Figure S3.** Magnified $^{13}$C NMR spectrum of **BPEA** (125 MHz, $CDCl_3$).

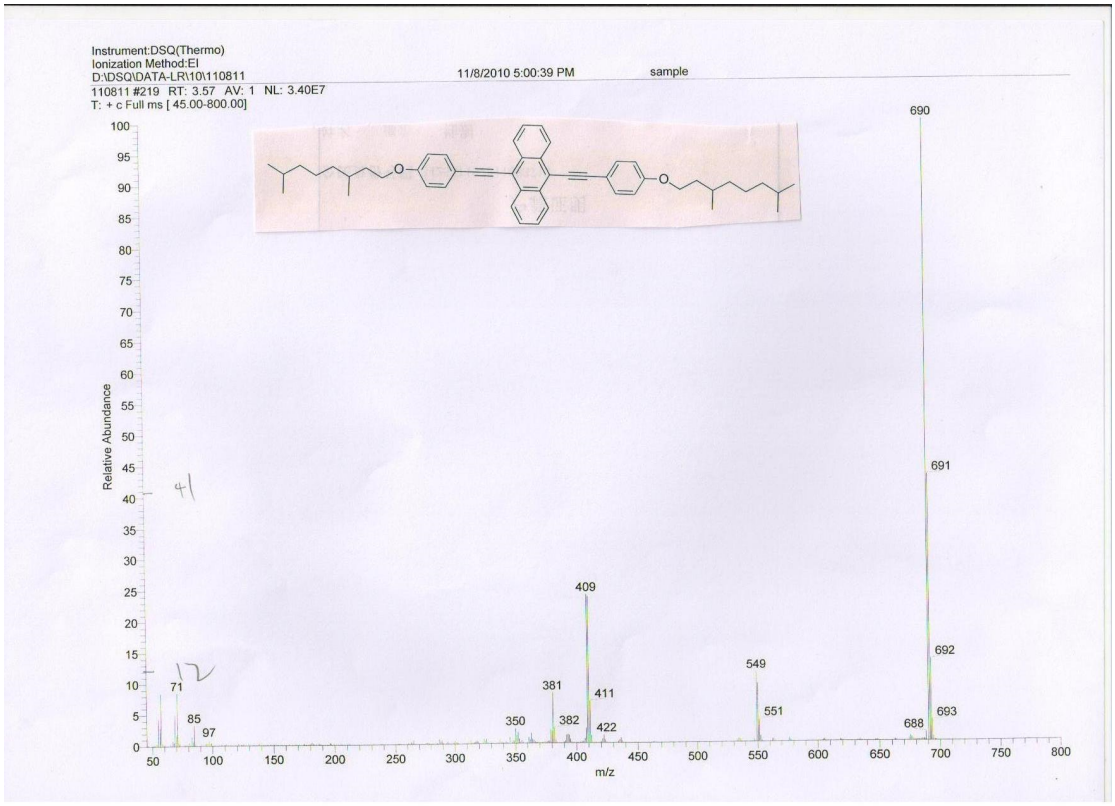


**Figure S4** EI-MS spectrum of **BPEA.**

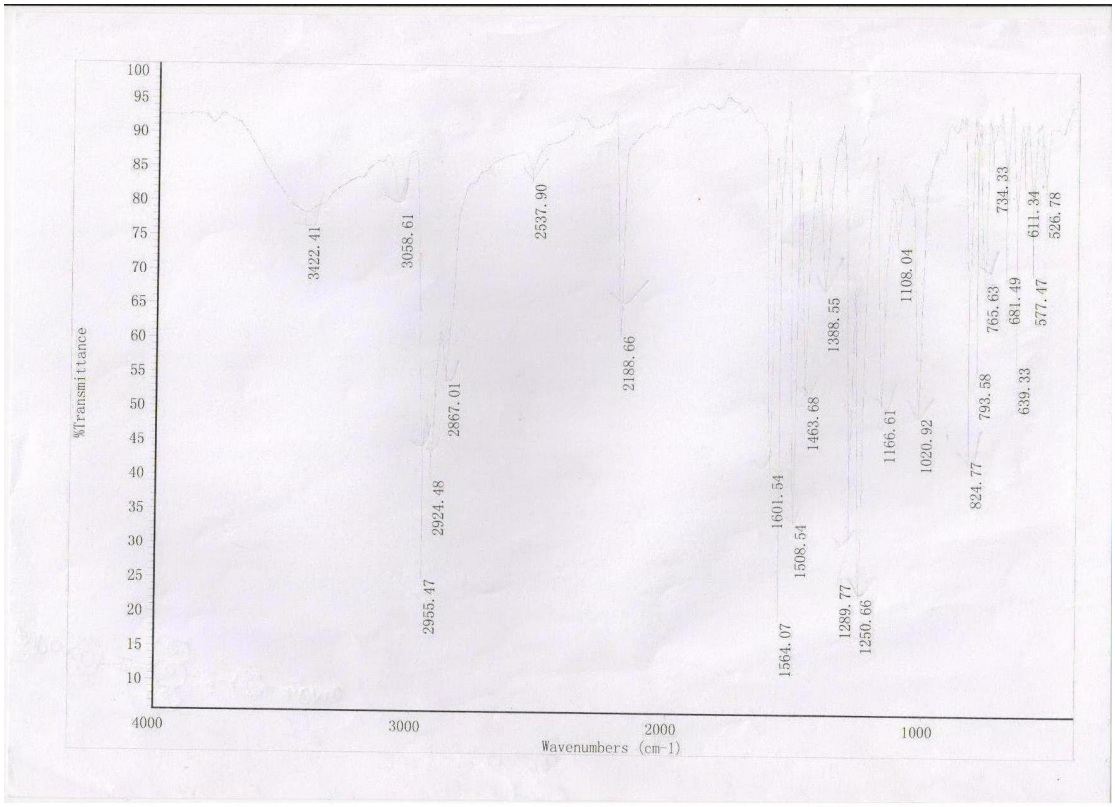


**Figure S5** IR spectrum of **BPEA.**

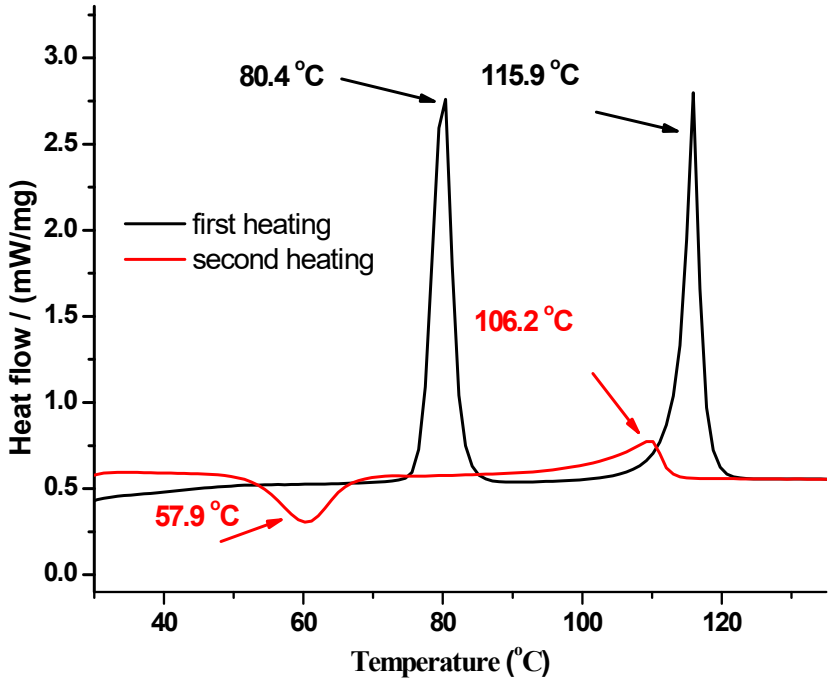


**Figure S6** DSC profile of **BPEA**.

(**a**) (**b**)

**Figure S7** Fluorescence emission of BPEA in $CH_2Cl_2$ ($3.70 \times 10^{-7}$ mol/L) (**a**: $\lambda_{ex}$ = 254 nm; **b**: $\lambda_{ex}$ = 365 nm).

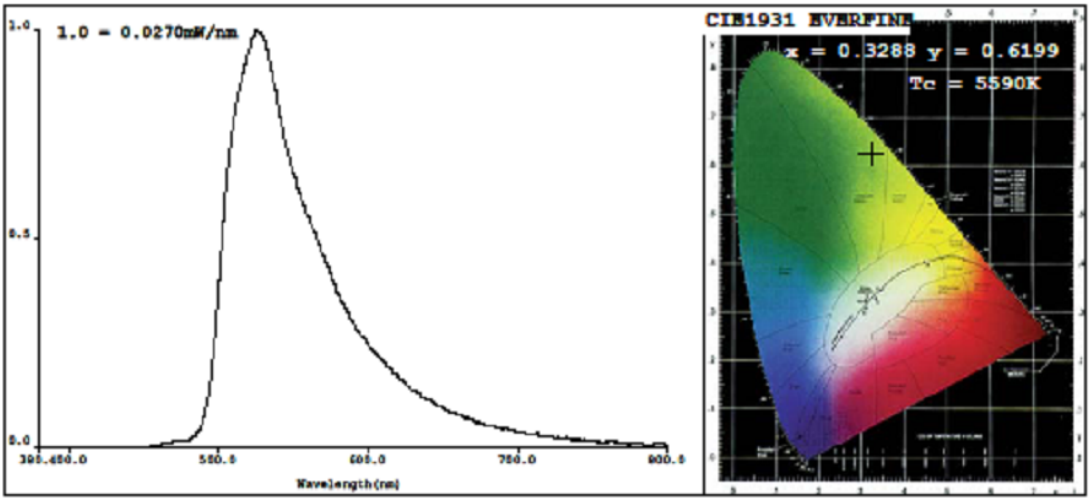


**Figure S8** Emission spectrum of the fabricated LED with **BPEA** as phosphors.