Supplementary Information

# The Influence of Interfacial Layer on the Stability of All-Solution-Processed Organic Light-Emitting Diodes

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Keywords: organic semiconductor device, interfacial material, stability, solution-coated process, large-area device, burning Point.

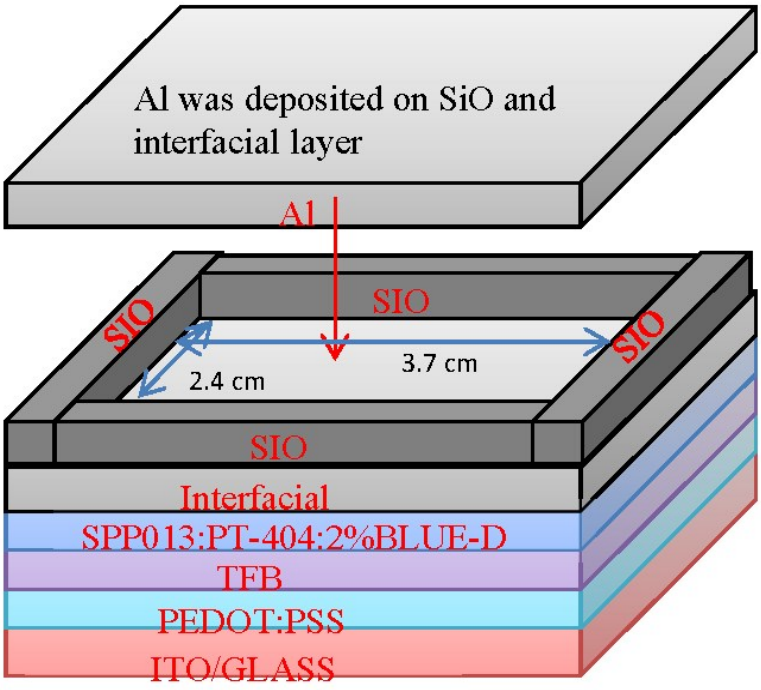


Figure S1 A layer of SiO was added to define the active area (3.7 cm x 2.4 cm) of the large-area OLEDs.

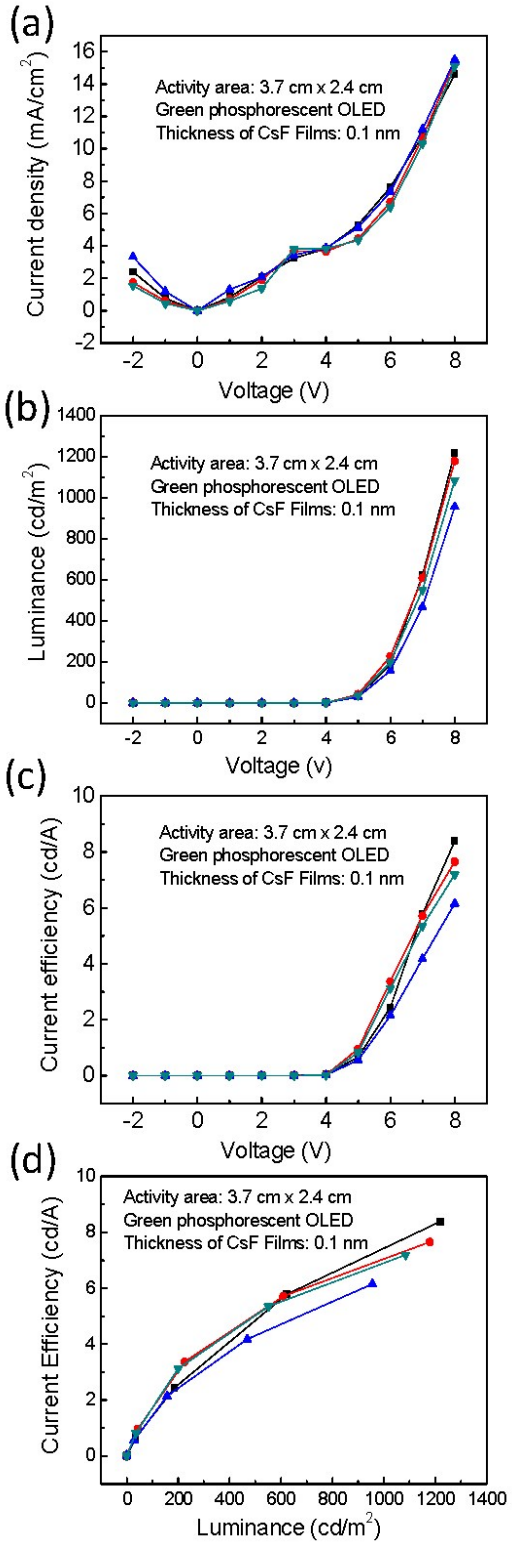


Figure S2 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of green OLED devices with 0.1 nm CsF.

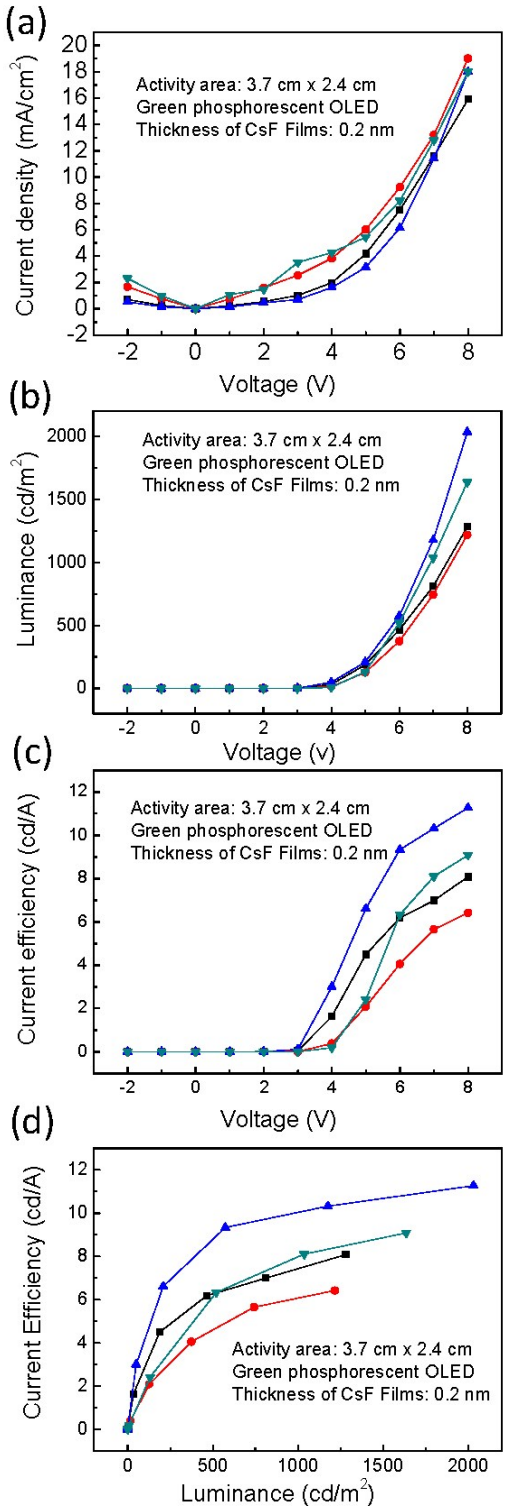


Figure S3 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of green OLED devices with 0.2 nm CsF.

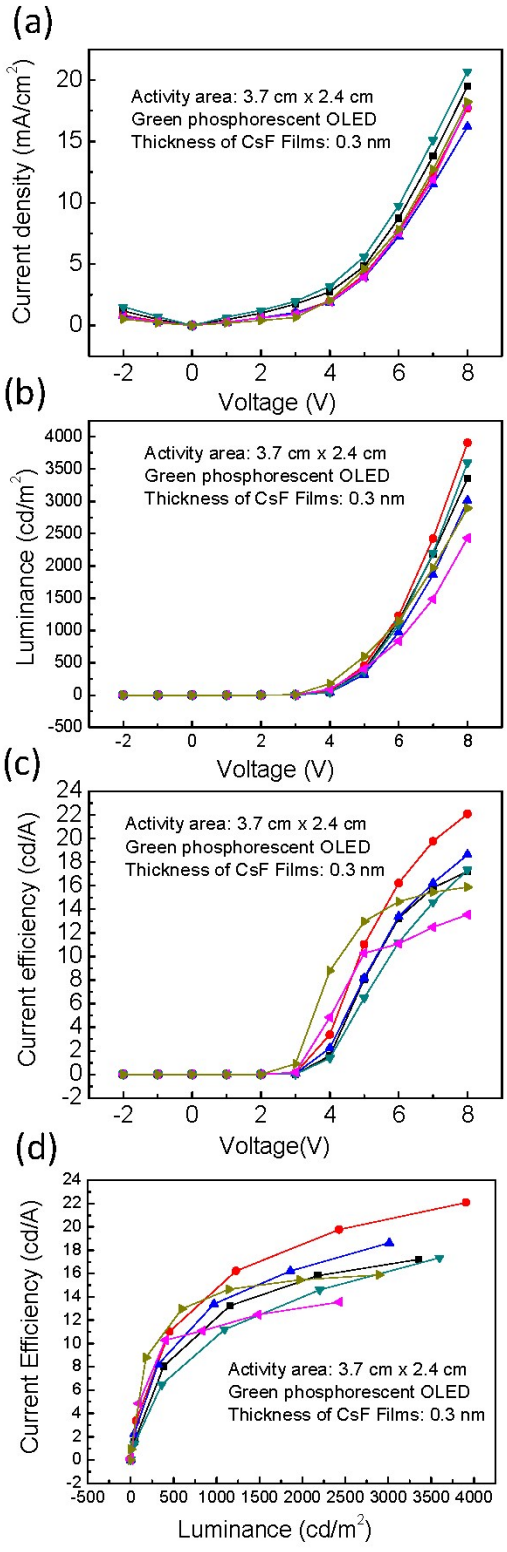


Figure S4 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of green OLED devices with 0.3 nm CsF.

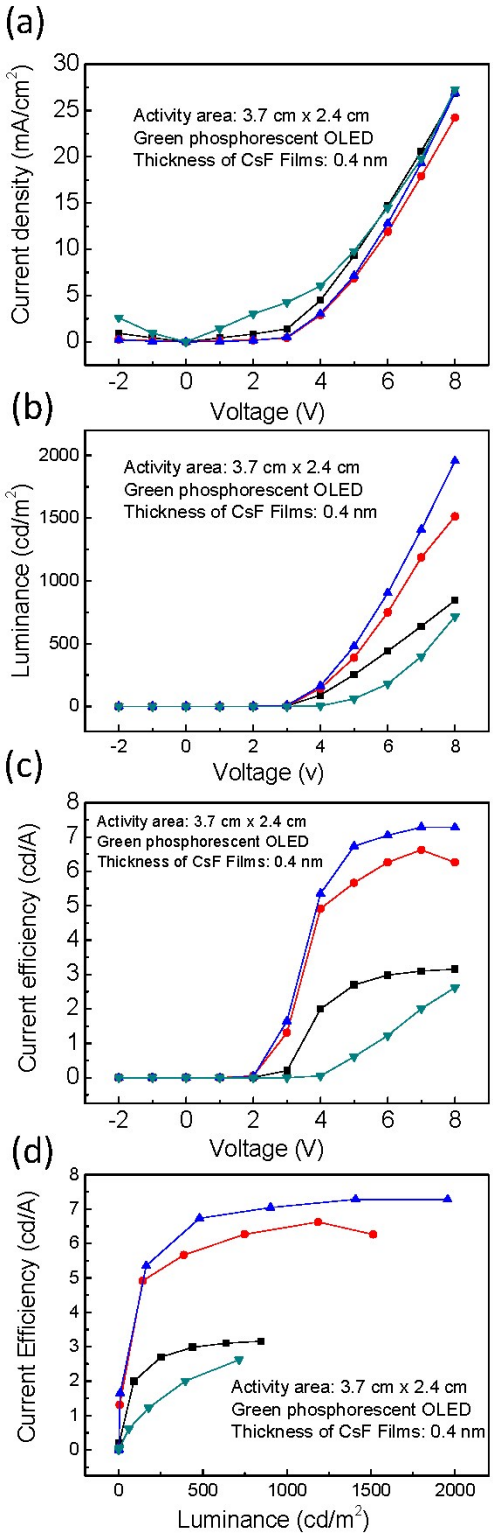


Figure S5 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of green OLED devices with 0.4 nm CsF.

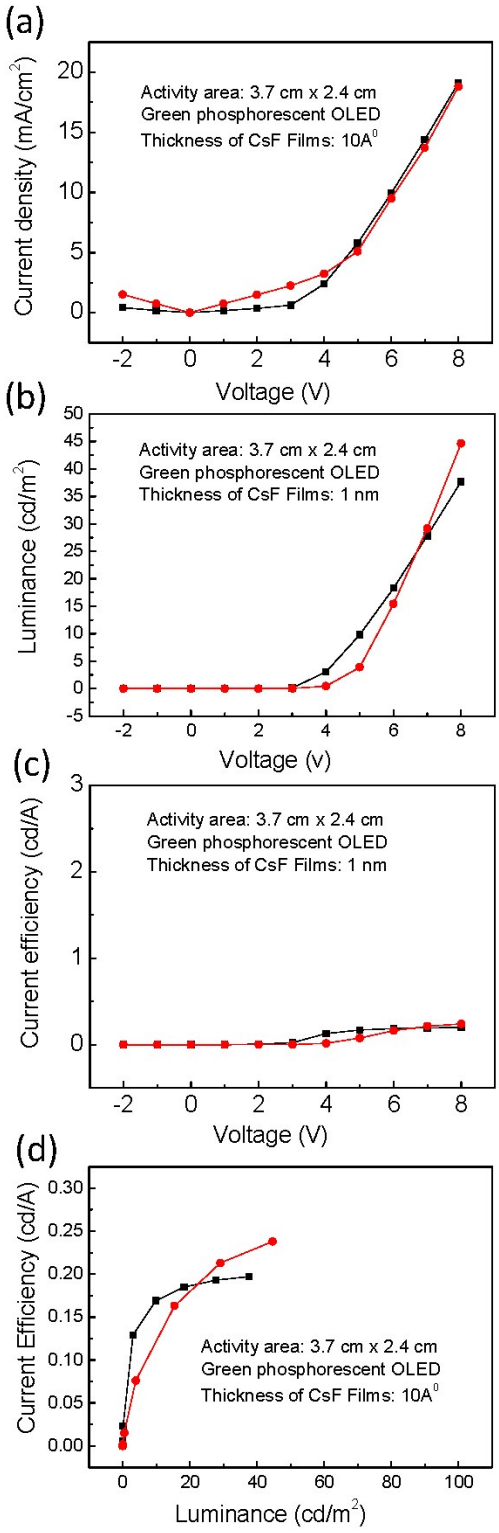


Figure S6 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of green OLED devices with 1 nm CsF.

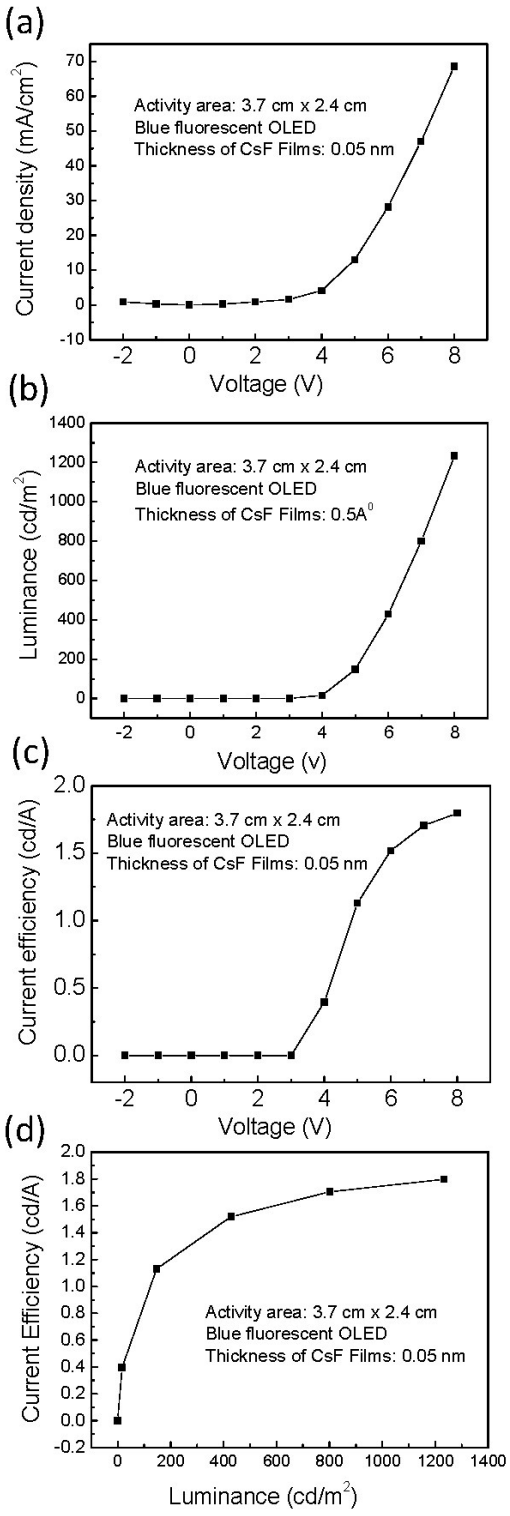


Figure S7 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of blue OLED devices with 0.05 nm CsF.

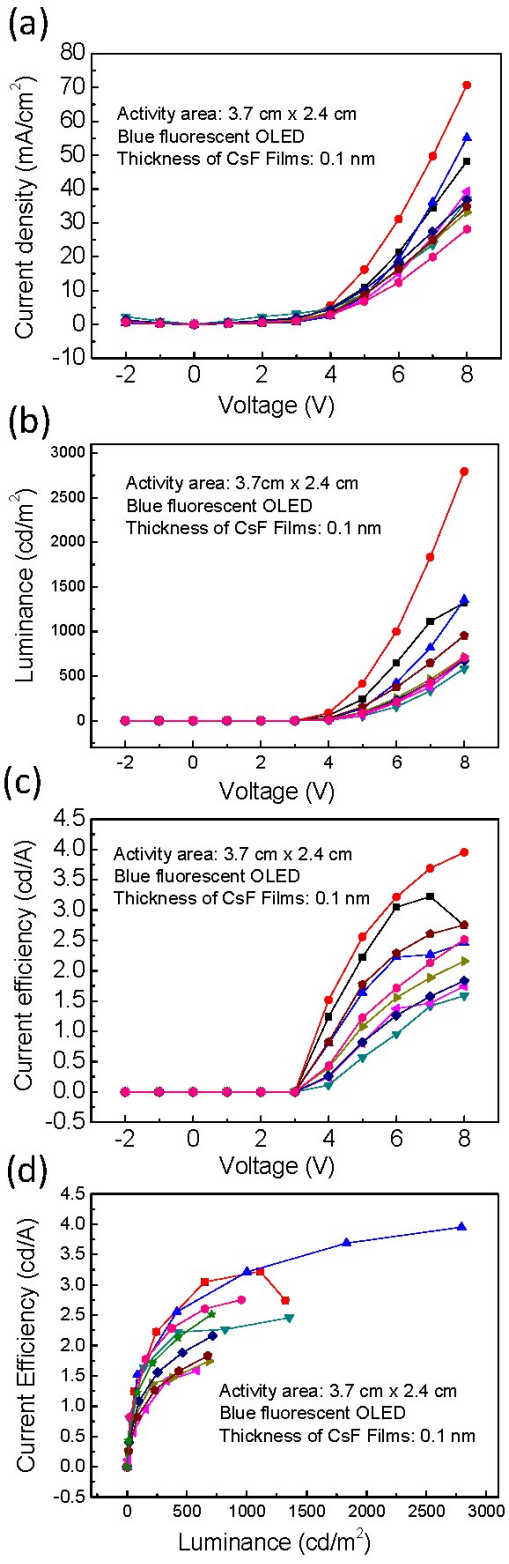


Figure S8 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of blue OLED devices with 0.1 nm CsF.

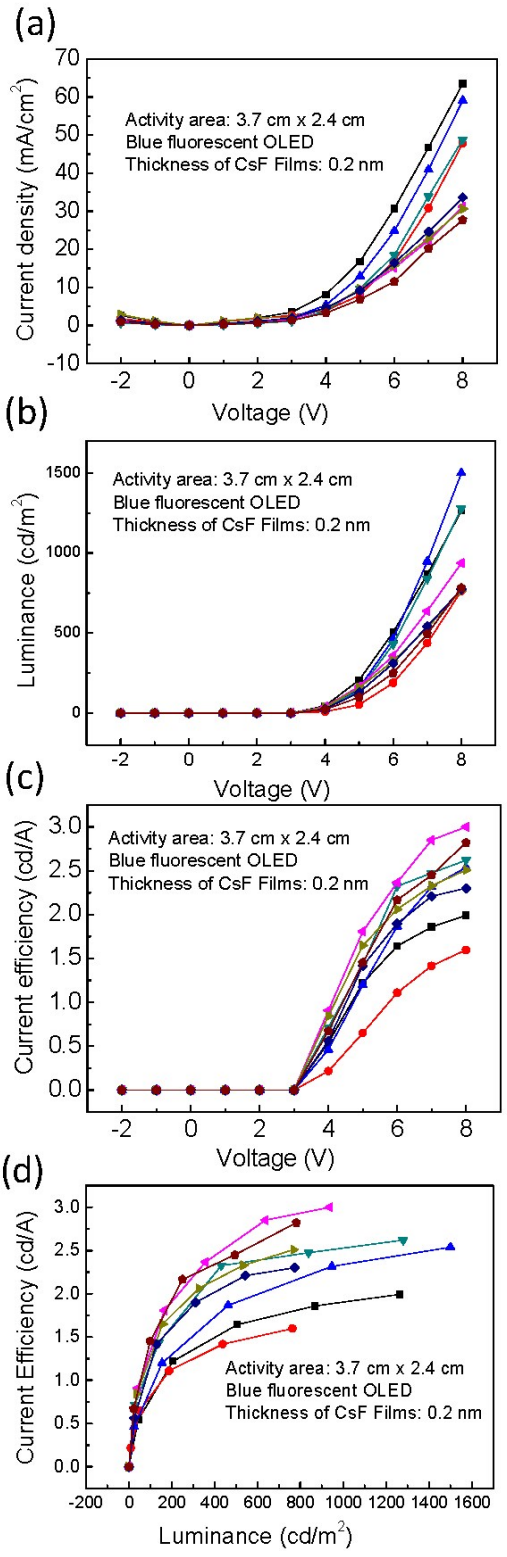


Figure S9 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of blue OLED devices with 0.2 nm CsF.

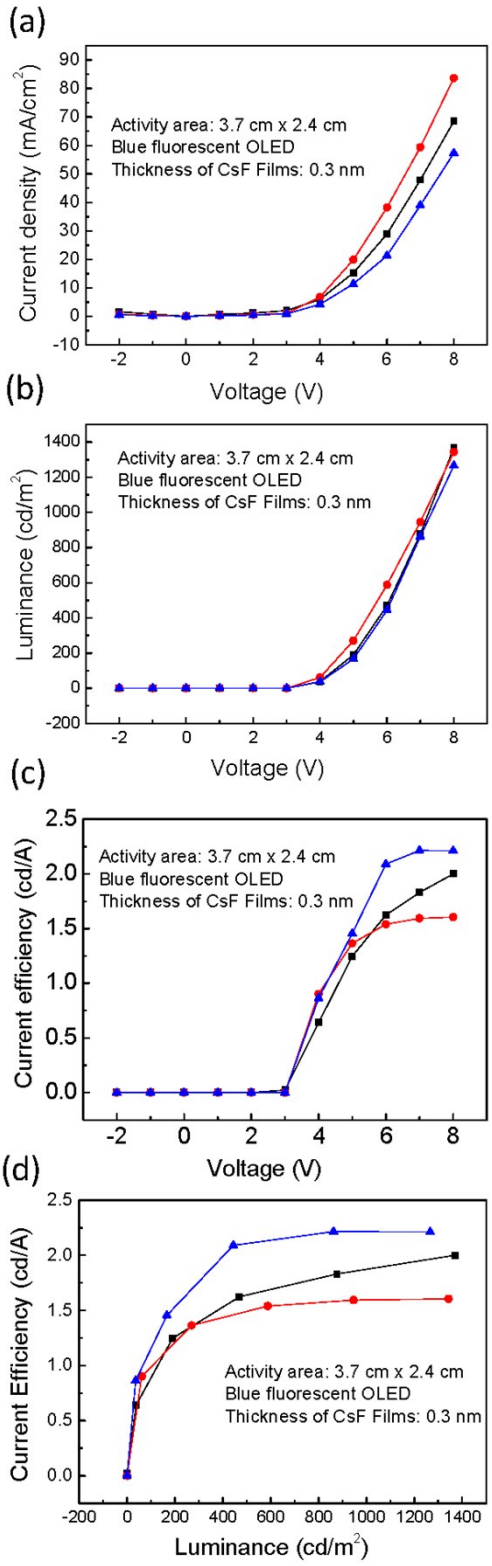


Figure S10 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of blue OLED devices with 0.3 nm CsF.

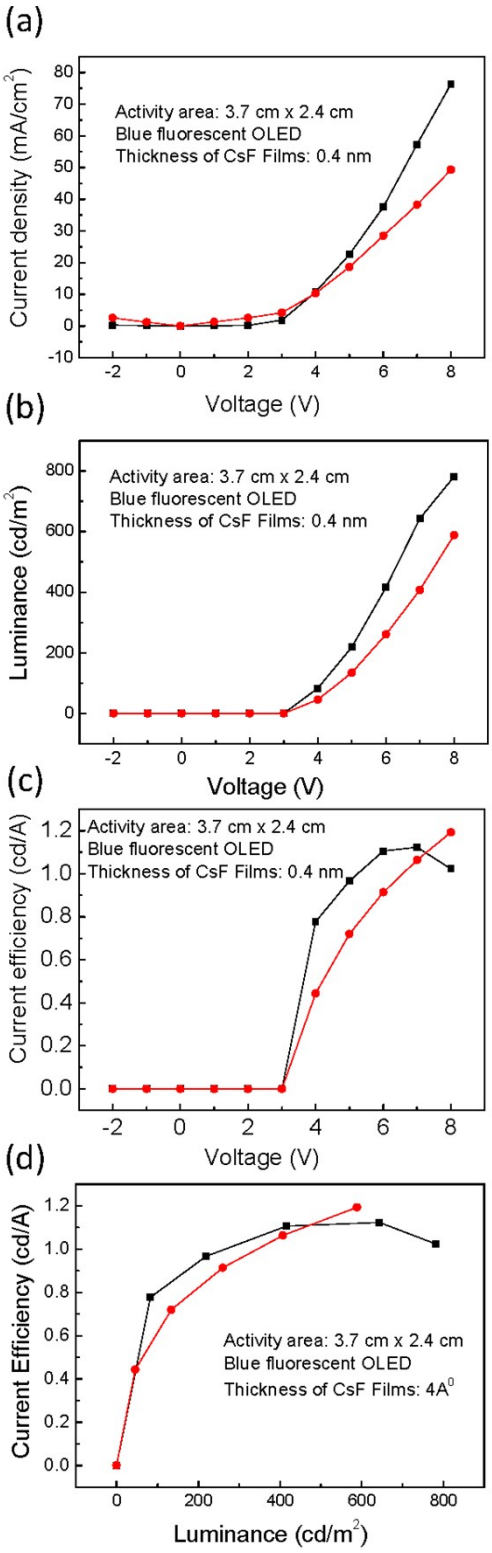


Figure S11 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of blue OLED devices with 0.4 nm CsF.

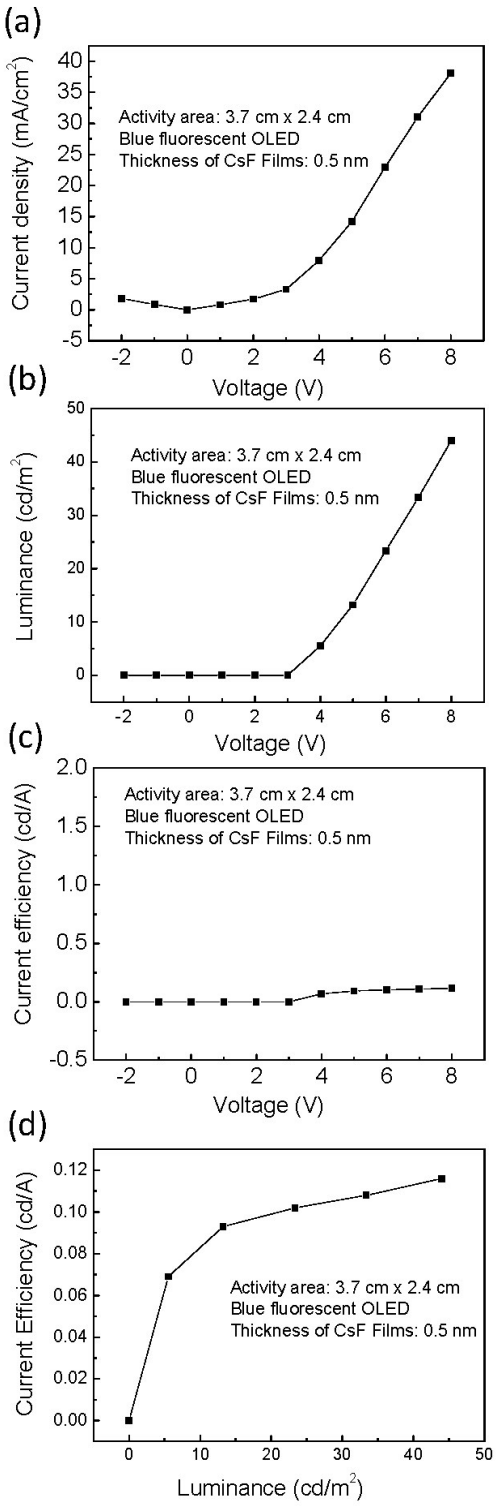


Figure S12 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of blue OLED devices with 0.5 nmCsF.

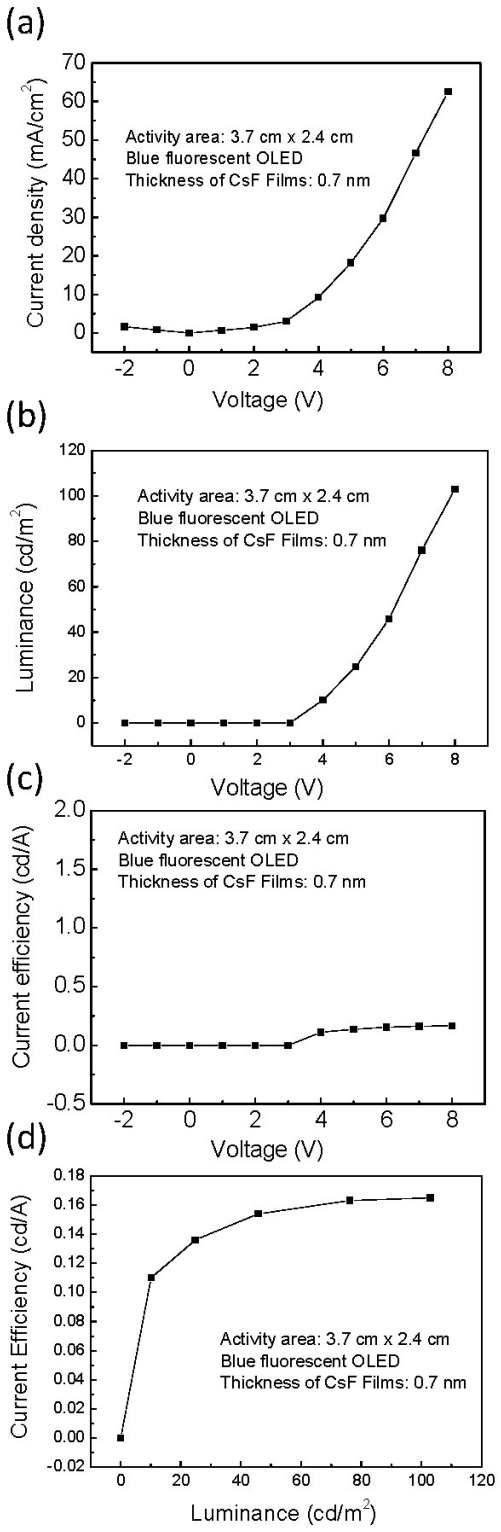


Figure S13 The current density versus voltage, the luminance versus voltage, current efficiency versus voltage, and the current efficiency versus luminance of blue OLED devices with 0.7 nm CsF.

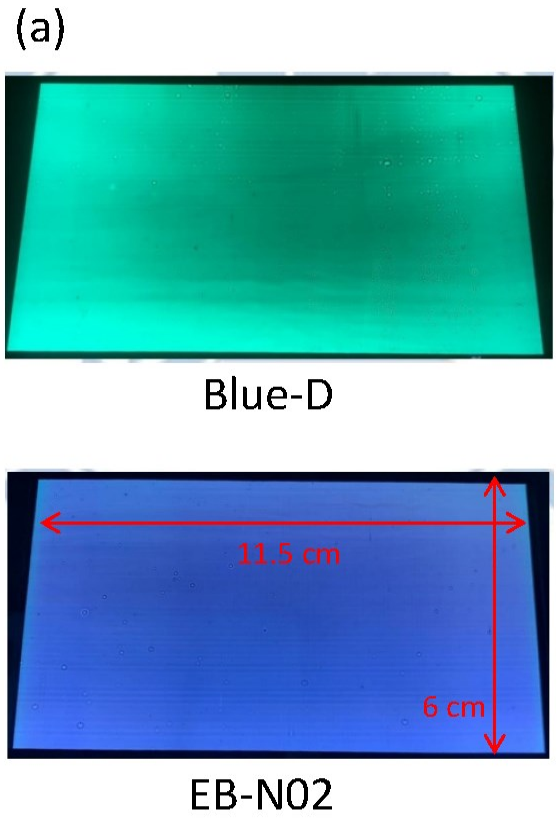


Figure S14 (a) The photograghs and (b) CIE coordinates of 6 cm x 11.5 cm blue OLED device with Blue-D and EB-N02 as blue emitter.

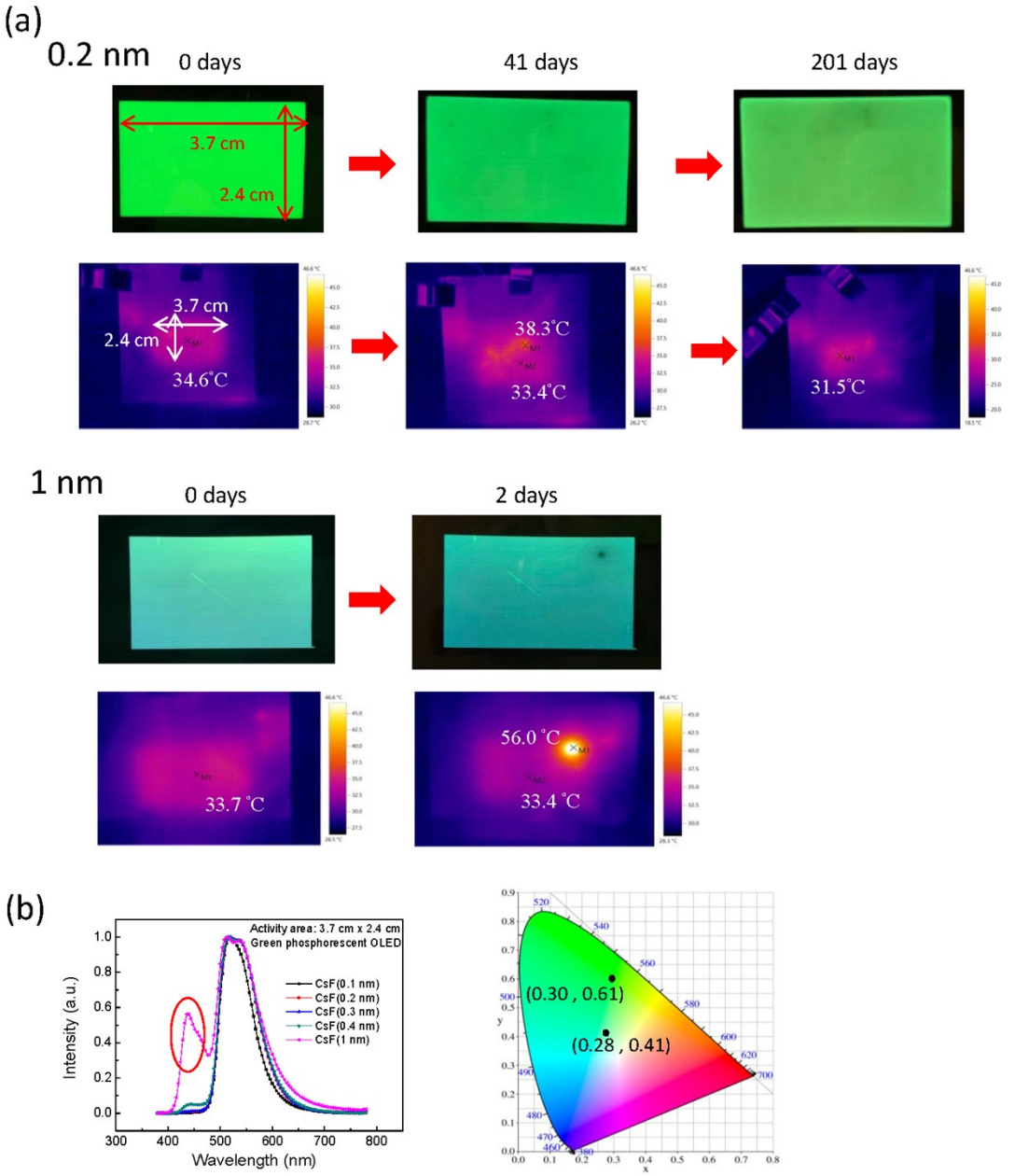


Figure S15 (a) The photographs and thermal images, (b) spectra and CIE coordinates for the green devices with different thickness of CsF.

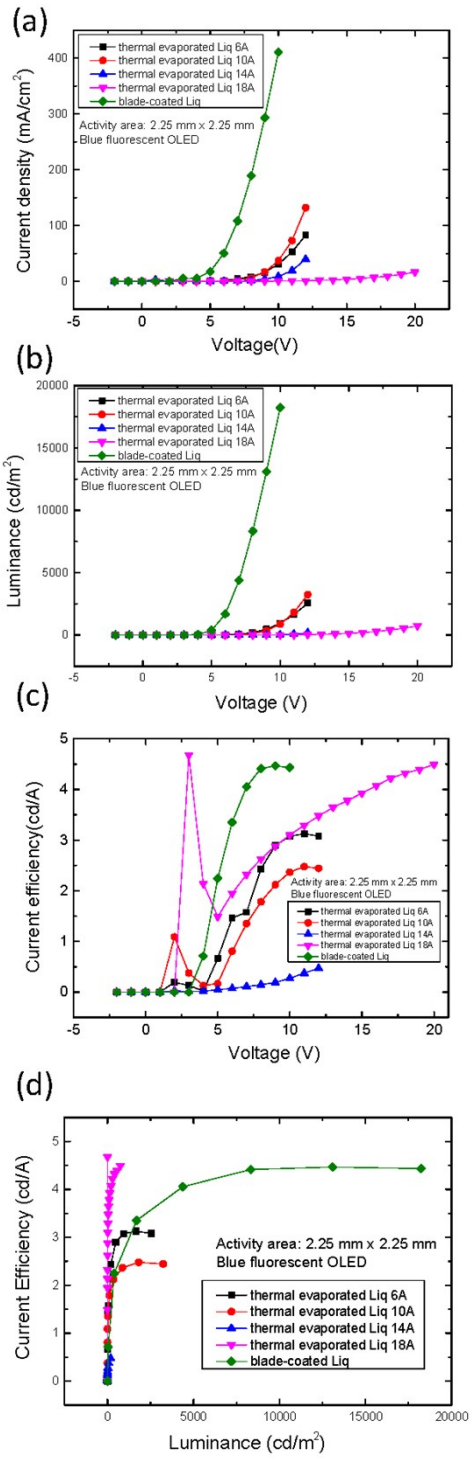


Figure S16 The current density versus voltage, (b) the luminance versus voltage, (c) current efficiency versus voltage, and (d) the current efficiency versus luminance of OLED devices with Liq as the interfacial layer.

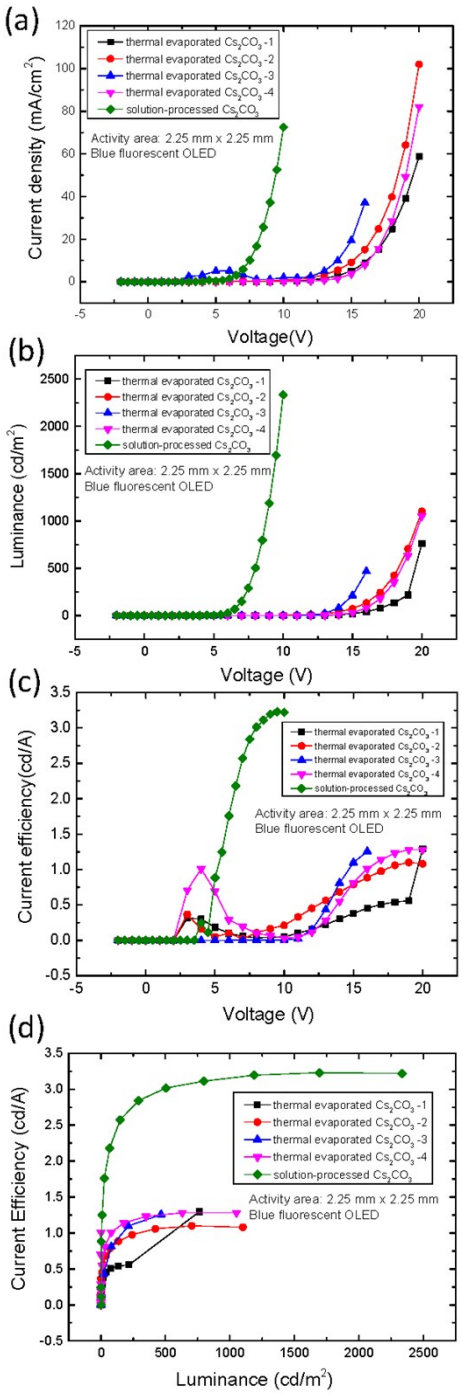


Figure S17 The current density versus voltage, (b) the luminance versus voltage, (c) current efficiency versus voltage, and (d) the current efficiency versus luminance of OLED devices with $Cs_2CO_3$ as the interfacial layer.