

Suppl. Fig. 1. Dispersion relations of the complex refractive index (n, k) of the PVK:QD film, determined from spectroscopic ellipsometry measurement .



Suppl. Fig. 2. Cross-sectional SEM image of the 1D PC phosphor structure taken after a trial of imaging in high magnification. The boxed region indicates a deformed (or shrunk in thickness) area by electron bombardment during high magnification imaging.



Suppl. Fig. 3. AFM images showing the surface morphology of the polymer-based 1D PC phosphor structure.



Suppl. Fig. 4. FDTD simulation results for dipole radiation patterns: (a) PC phosphor, (b) bulk-like phosphor, (c) bulk phosphor, all at the emission wavelength tuned at the photonic band-edge of $\lambda_{+1} = 580$ nm, and (d) PC phosphor at the emission wavelength tuned at the center of the photonic band-gap $\lambda_0 = 420$ nm for comparison.