Fig. S1: Two-dimensional photoluminescence spectra of the PFB:F8BT blend – Total PL (410–690 nm) at $\lambda_{\text{ex}}$=375 nm (a), PFB PL (435-475 nm) at $\lambda_{\text{ex}}$=375 nm (b), F8BT PL (535-565 nm) at $\lambda_{\text{ex}}$=375 nm (c), Total PL (470-690 nm) at $\lambda_{\text{ex}}$=445 nm (d), F8BT PL (535-565 nm) at $\lambda_{\text{ex}}$=445 nm (e); PFB PL was not measured for $\lambda_{\text{ex}}$=445 nm because of the strong spectral overlap with the excitation beam.
Fig.S2: Unnormalized spectra at different regions ($\lambda_{ex}=445$ nm) as shown in Figure 7b; background (laser off) has been subtracted.