Supporting Information

Thickness opitimization of the printed PAL through optical density measurements.

Layers with different thicknesses were doctor-bladed on glass substrates; the optical density was measured via UV-VIS spectrometer (SHIMADZU UV-1800) and the thicknesses were measured with a profilometer (Tencor Alpha Step). In Fig. S1a the linear relation between active layer thickness and optical density peak (λ = 650 nm) is shown. Afterwards the PAL was slot-die coated on PET films with different film thicknesses and the optical density measured. This allowed a precise determination of the printed layer thickness, as shown in Fig. S1b.

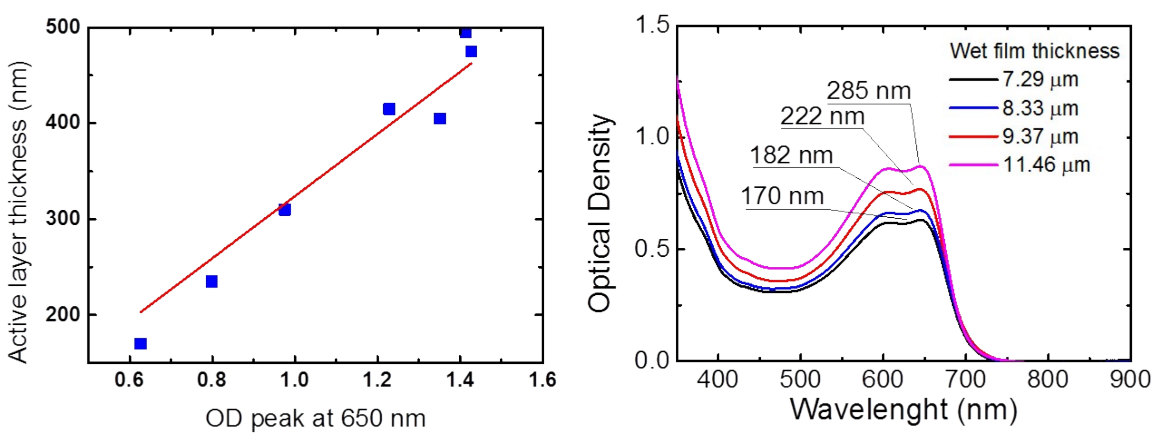

Figure S1: Active layer thickness optimization of roll coated layers by absorption measurements

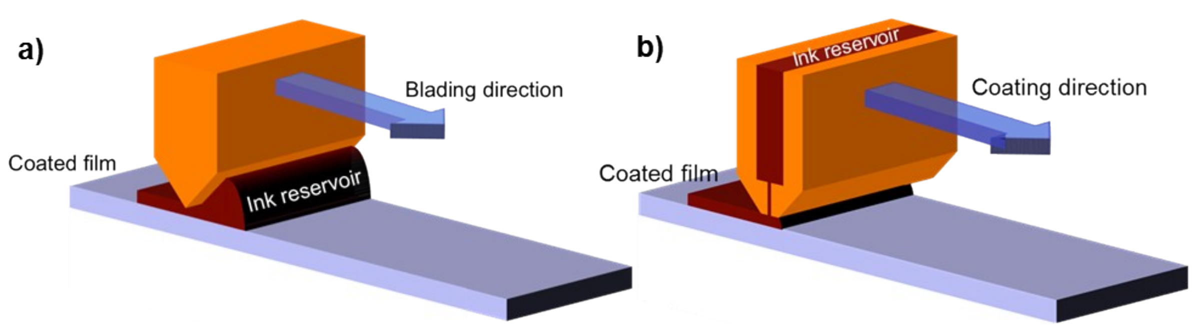

Fig. S2. a) Scheme explaining the working principle of doctor-blading and b) of slot-die coating.

PAL thickness spatial distribution

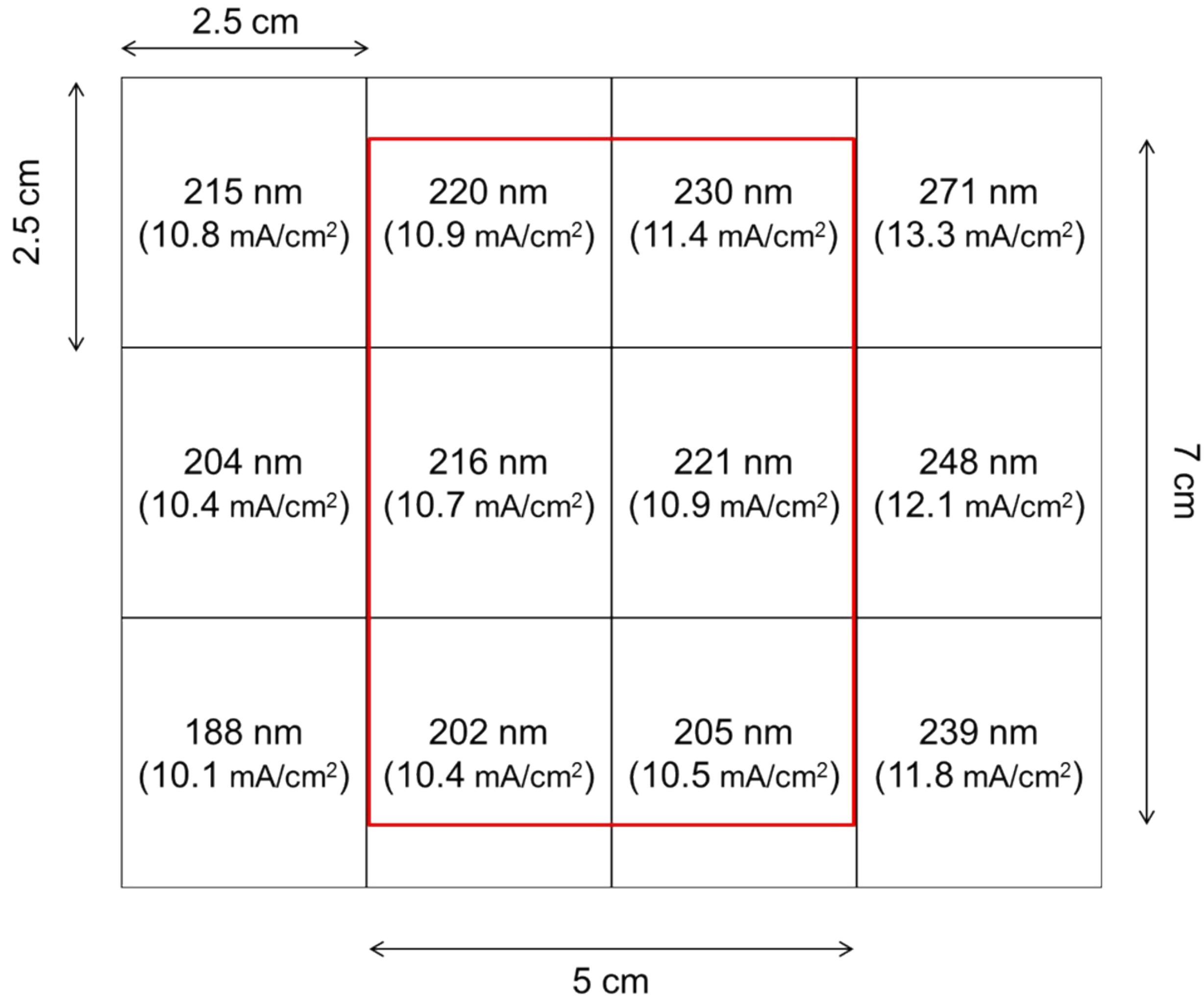

Fig. S3. Thickness distribution of the printed active layer on a bare PET substrate as determined by absoprtion measurements. In brackets the corresponding J_{sc} as simulated via TMF simulations. Each value is the average of two measurementes performed on 2.5x2.5 cm^2 squares. The red rectangular shape defines the postion of the printed active areas of the modules.

DLIT imaging of the modules prepared in this work.

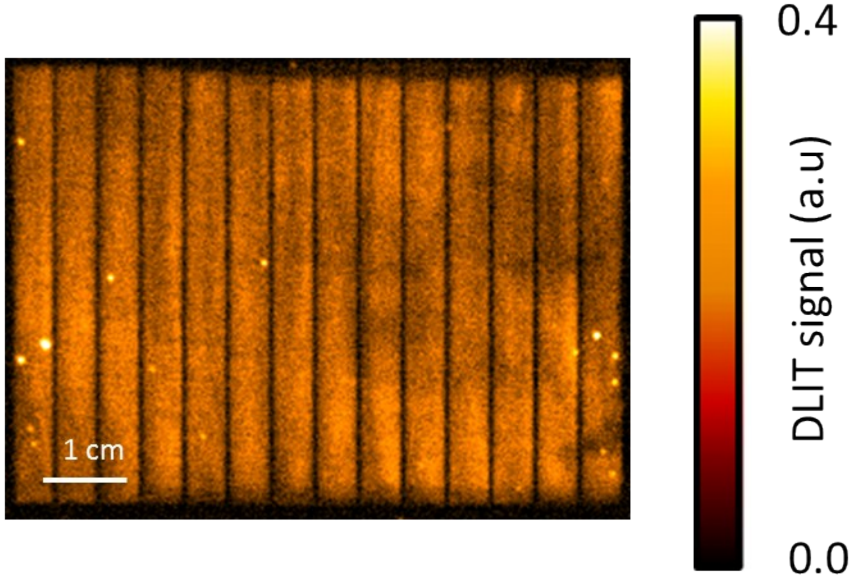

Fig. S4. DLIT image of a slot-die coated, 35 cm^2 module. The lock-in frequency was set to 10 Hz and the measurement was performed at 20V for 100s.