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CHARGE TRANSPORT LAYERS IN OC_1C_{10}-PPV **PLEDS**

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This work deals with OC_1C_{10}-PPV based active layer PLEDs. A study of the device performance enhancement with nanolayers of Alq3 [tris-(8-hydroxyquinolate)-aluminum] deposited at the contact interface between the electroluminescent layer and the cathode was conducted. Alq3 layers of different thicknesses were applied to the structures. A fourfold gain in the luminance of the devices was observed in the studied range. Operating voltage has a strong dependence on Alq3 layer thickness. Luminance values over 500 cd/m^2 for 1 nm Alq3 thick films were observed.

Keywords: PLED, ETL, electron transport layer, OC_1C_{10}-PPV.