

Using an organic molecule with low triplet energy as a host in a highly efficient blue electrophosphorescent device

Product Specifications

LT-N4101 POBPmDPA

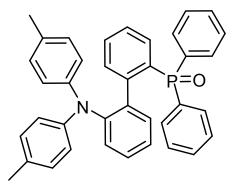
CAS No. 1579983-04-2

Grade Sublimed, > 99% (HPLC)

Formula C₃₈H₃₂NOP Molecular Weight 549.64 g/mole

Absorption 444 nm (in Toluene) **Photoluminenscence** 458 nm (in 2-MeTHF)

Reference: Angew. Chem. Int. Ed. 2014, 53, 2147-2151



Features

- In a three organic-layer device, the maximum current efficiency of 37 cdA-1 and power efficiency of 40 lmW-1 were achieved for the FIr6-based blue PhOLEDs.
- POBPmDPA shows low singlet energy (S1) of 2.80 eV and triplet energy of 2.71 eV can be used as the host material for the blue phosphor (FIr6; T1=2.73 eV)

Device Application

The Best Device:

ITO/ MoO3 (10 nm)/NPB(70 nm)/POBPmDPA:FIr6(20 nm)/TmPyPB(35 nm)/LiF(1 nm)/Al Related products from Lumtec :

MoO₃

1:5

LT-E003 MoO₃

LT-E101 NPB

LT-N620 FIr6

LT-N863 TmPyPB

LT-E001 LiF