Pyridine-Containing Electron-Transport Materials for Highly Efficient Blue Phosphorescent OLEDs with Ultralow Operating Voltage and Reduced Efficiency Roll-Off

Product Specifications

LT-N889 Tm3PyP26PyB

CAS No. 1492917-78-8

Grade Sublimed, > 99%(HPLC)

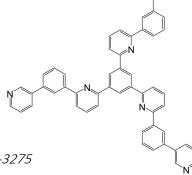
Formula $C_{54}H_{36}N_6$

Molecular Weight 768.9 g/mole

Absorption 255 nm (in CH₂Cl₂) **Photoluminenscence** 357 nm (film)

HOMO/LUMO -6.35 / -1.89 eV

Reference: Advanced Functional Materials (2014), 24(21), 3268-3275



Features

- Tm3PyP26PyB was developed as an ETL of the Firpic-based blue phosphorescent OLEDs.
- Unprecedented low operating voltages of 2.61 and 3.03 V were realized at 1 and 100 cd m⁻², giving ever highest hp values of 65.8 and 59.7 lm W⁻¹ and hext values of 24.4% and 25.7%, respectively.

Device Application

The Best Device:

ITO/TPDPES (20 nm)/TAPC (30 nm)/26DCzPPy: 13 wt% Flrpic (10 nm)/Tm3PyP26PyB (50 nm)/LiF (0.5 nm)/Al (100 nm) Related products from Lumtec:

LT-N137 TAPC LT-N491 26DCzPPy



LT-E607 FIrPic

LiF

Αl

LT-E001 LiF

LT-E005 Al