Lumtec Luminescence Technology Corp.

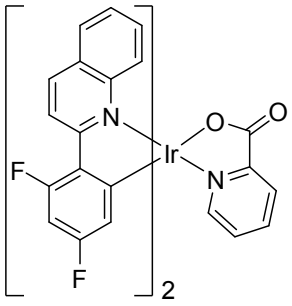
Yellowish-Green Phosphorescent Dopant Material for High Color Rendering Index in White OLEDs

Product Specifications

LT-N765 FPQIrpic

Formula	$C_{36}H_{20}F_4IrN_3O_2$
M.W.	794.77 g/mole
Absorption	345, 438 nm
Photoluminescence	554 nm
HOMO energy level	-5.51 eV
LUMO energy level	-3.22 eV
Energy gap	2.29 eV

Reference : Organic Electronics 14 (2013) 1504–1509



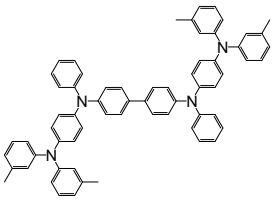
Features

- A yellowish-green phosphorescent dopant was synthesized and showed maximum emission peak at 550 nm and broad light emission with a full width at half maximum (FWHM) of 77 nm.
- The white PHOLEDs show high CRI of 86.8, and high quantum efficiency of 15.7%. And the color coordinates and CRI of the device at 100 cd/m^2, 1000 cd/m^2 and 3000 cd/m^2 were (0.36, 0.38) 86.8, (0.37, 0.39) 86.4 and (0.36, 0.39) 85.0, respectively.

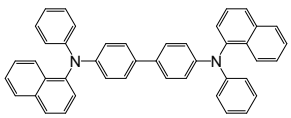
Device Application

White OLED device
ITO/DNTPD (60 nm)/NPB (5 nm)/mCP (25 nm)/mCP:FCNIrpic (20 nm, 10%)/TPBi:FPQIrpic:Ir(piq)$_2$acac (5 nm, 10%:0.8%)/TSPO1 (35 nm)/LiF (1 nm)/Al

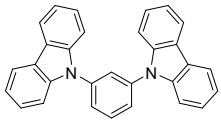
Related products from Lumtec :



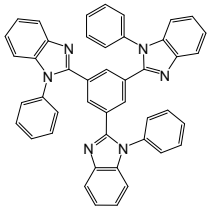
LT-N220 DNTPD



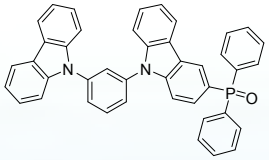
LT-E101 NPB



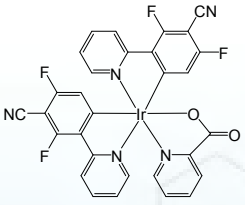
LT-E103 mCP



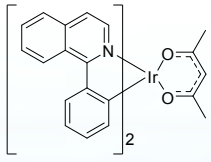
LT-E302 TPBi



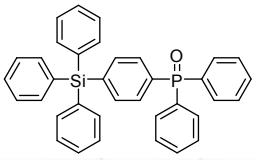
LT-N4047 mCPPO1



LT-N664 FCNIrpic



LT-E713 Ir(piq)$_2$acac



LT-N4048 TSPO1

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