Lumtec Luminescence Technology Corp.

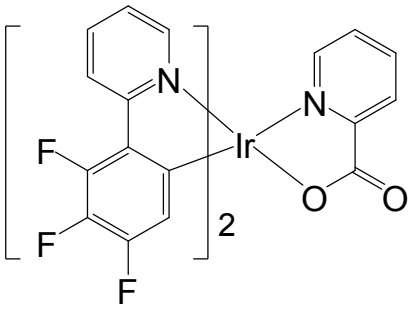
Highly Efficient Blue and White Phosphorescent OLEDs Based On An Iridium Complex

Product Specifications

LT-N679 Ir(tfpd)$_2$pic

CAS No.	1417790-60-3
Grade	> 99% (HPLC)
Formula	$C_{28}H_{14}F_6IrN_3O_2$
Molecular Weight	730.64 g/mole
Absorption	254 nm (in CH_2Cl_2)
Photoluminenscence	483 nm (in CH_2Cl_2)
TGA	> 280°C(0.5% weight loss)

Reference : Dyes and Pigments (2013), 96(1), 237-241



Features

- Ir(tfpd)$_2$pic used to fabricate blue phosphorescent organic light-emitting devices with a maximum efficiency up to 41.4 lm/W (52.6 cd/A).
- By combining the blue phosphorescence of Ir(tfpd)$_2$pic and the yellow emission of iridium(III) bis [2-(2-naphthyl)-pyridine](acetylacetonate) (Ir(npy)$_2$acac), highly efficient white emission with a maximum efficiency of 49.0 lm/W & 54.5 cd/A has been achieved.

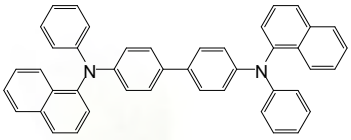
Device Application

The Best Device :

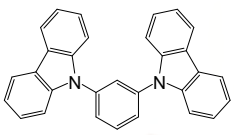
Blue OLED: ITO/NPB(35 nm)/mCP(15 nm)/6% Ir(tfpd)$_2$pic : SPPO1(30 nm)/SPPO1(25 nm)/LiF(1 nm)/Al(120 nm)

White OLED: ITO/NPB(40 nm)/1% Ir(npy)2acac : mCP(10 nm)/6% Ir(tfpd)$_2$pic : SPPO1(20 nm)/TPBi(40 nm)/LiF(1 nm)/Al(120 nm)

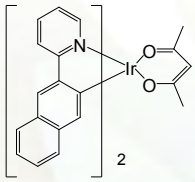
Related products from Lumtec :



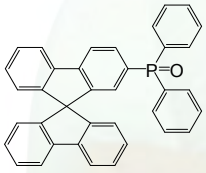
LT-E101 NPB



LT-E107 MCP



LT-N529 Ir(npy)$_2$acac



LT-N496 SPPO1

LiF

LT-E001 LiF

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