

### Lumtec Luminescence Technology Corp.

### Stable Blue TADF Emitters for High Efficiency and Long Lifetime

# Product Specifications

#### LT-N689 DCzTrz

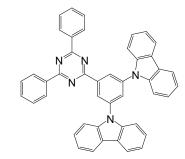
 CAS No.
 1106730-48-6 

 Grade
 > 99% (HPLC)

 Formula
  $C_{45}H_{29}N_5$ 

Molecular Weight 639.75g/mole

**Absorption** 377 nm (in toluene) **Photoluminenscence** 409 nm (in toluene)



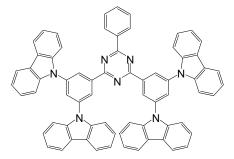
### LT-N690 DDCzTrz

 CAS No.
 1685282-47-6 

 Grade
 > 99% (HPLC)

 Formula
  $C_{69}H_{43}N_7$ 

Molecular Weight 970.13 g/mole
Absorption 337 nm (in toluene)
Photoluminenscence 461 nm (in toluene)
Reference: J. Am. Chem. Soc. 2014, 136, 7837-7840



## Features

- DDCzTrz was efficient as a blue TADF emitter and could show high maximum quantum efficiency of 18.9% and lifetime of 52 h up to 80% of initial luminanceat 500 cdm<sup>-2</sup>.
- The DCzTrz and DDCzTrz devices, color coordinates of each device at 15% doping concentration were (0.15, 0.14) and (0.16, 0.22).

# Device Application

LT-N220 DNTPD

#### The Best Device:

 $ITO~(120~nm)/DNTPD(60~nm)/HTL(30~nm)/30wt\%~DDCzTrz: mCBP(25~nm)/LG201(35~nm)/LiF(1~nm)/Al(200~nm)\\ Related~products~from~Lumtec:$ 



LT-N4069 mCBP