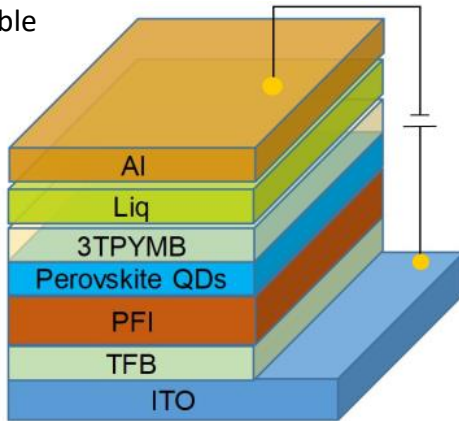


# Perovskite ABX3 Quantum Dots for QD LEDs

QD LEDs is an emerging technology that promises to enhance current OLED displays with higher brightness, durability and color purity. It will be an ultimate solution for flexible and curved displays in TVs, mobile and wearable devices, virtual and augmented reality glasses, automotive displays and signage. QDot™ Perovskite ABX3 Quantum Dots show a promise in that field alongside with InP and CdSe quantum dots. QDot™ Perovskite ABX3 powders QDs are especially efficient for blue and green QD LEDs.

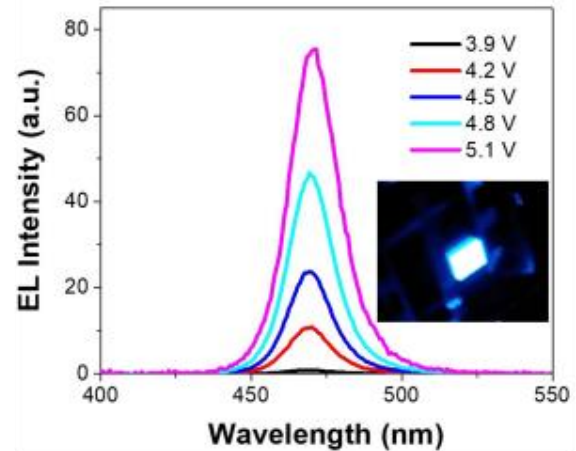
## BENEFITS:

- High brightness (from 500 Cd/m<sup>2</sup> for blue and from 1000 Cd/m<sup>2</sup> for green lights)
- High EQE (from 2% for blue and 5% for green)
- Short decay time (< 5-20 ns)
- Solution processable



## DEVICES EXAMPLE:

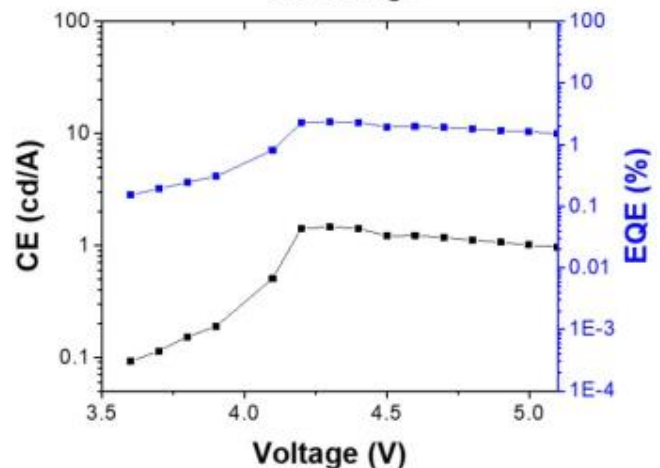
QD LED based on green QDot™ ABX3-510 powder exhibits strong electroluminescence at 510 nm with FWHM 18 nm. EQE max is > 5 % with luminance max > 1000 Cd/m<sup>2</sup>. QD LED based on blue QDot™ ABX3-450 powder demonstrates the emission at 450 nm with FWHM 20 nm. It has relatively high EQE max over 2 % with brightness 500 Cd/m<sup>2</sup>.



## QD LED PERFORMANCE:

	QDot™ ABX3-450 powder	QDot™ ABX3-510 powder
QDs core type	CsPb(Cl/Br) <sub>3</sub>	CsPbBr <sub>3</sub>
Emission	450 nm	510 nm
FWHM	< 20 nm	< 20-25 nm
Decay time	< 5-20 ns	< 5-20 ns
EQE max	> 2 %	> 5 %
Luminance max	> 500 cd/m <sup>2</sup>	> 1000 cd/m <sup>2</sup>

## CE & EQE



## Products portfolio:

[QDot™ Perovskite ABX3 Quantum Dots](#)