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## TCL and Zhijiang Nanotech Collaborate on pQD Solutions for LCD TVs

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China-based Zhijiang Nanotech develops perovskite-QD film (PQDF) technologies for the display industry, and the company demonstrated its first prototypes in 2018.

Perovskite-Info has talked with the company's management, which updated us that it recently concluded a successful pilot with [TCL](#). TCL, in collaboration with [Zhijiang Nanotech](#), produced 500 75-inch QD-enhanced LCD TVs (TCL 4K 75M10) with Zhijiang's PQDF films.

The company reports that the TVs featured a wide color gamut, 147% BT709 - which is higher than most QD TV's on the market, and higher than TCL's original 75M10 TVs.

The TVs use a green PQDF film, and the blue LEDs were covered with red KSF phosphors. Zhijiang produces its films by using an in-situ fabrication - the films are produced by coating a mixture of perovskite precursor and a polymer powder.

The luminous efficiency is 90% and the films offer a very high transparency. Zhijiang says that the two main advantages of its PQDF films, beyond the good optical properties, are the lower cost and the fact that these are cadmium-free.

Zhijiang updated us that TCL actually sold these 500 TVs which sold well, and the company hopes to achieve a mass production design win with TCL in 2021. Zhijiang also produced a prototype LCD display with a red-green perovskite QD composite film with Mini-LED backlight.

Read the [original article](#) on Perovskite Info.