

LG Chem ups bending radius in OLED lighting milestone

January 29 2015, by Nancy Owano



South Korea-based LG Chem continues to work on the potential of OLED technology. Tom Dawson, editor in chief of *AndroidHeadlines*, said, "LG has quickly become a name when it comes to flexible OLED displays and if there's one company that can find a [solution](#) to use this sort of technology in everyday life, then it's LG." He said, "LG Chem

has taken flexible OLED to a whole new level with new displays that can still be lit and be flexed in ways we never thought possible." The company recently announced two milestones in their work on OLED lighting. First, they announced the completion of the R&D phase for a new plastic-based OLED light panel; second, they announced the start of manufacturing of a 320 x 320 mm OLED light panel. They said it is the world's largest available in the market.

The [company](#) has a flexible plastic OLED lighting panel and samples are available for customers. This is important as "bending" news. The current OLED lighting modules are bendable but can only provide a limited bending of 75mm. The company's new plastic-based panels increase the flexibility to 30mm. Also noteworthy is that LG has made a change from glass to plastic, leveraging expertise in "barrier and encapsulation technology." Specifications of LG Chem's new plastic-based OLED light panel are 60lm/W efficiency, 75lm brightness, 3,000K in color temperature, and CRI over 85. Engineering samples are available at \$250 per panel. The company said mass production of the flexible panel is scheduled to begin in July. "The price will be adjusted accordingly once [mass](#) production starts."

Meanwhile, LG Chem talked about the world's largest OLED lighting panel; it measures 320 x 320 mm (or 12.5 by 12.5 inches). Earlier this month, LG Chem exhibited the OLED panel at a lighting event in Japan focusing on LED/OLED lighting technology. *DIGITIMES* said the panel had the highest lumen-price ratio of 5lm/US\$ among similar products at the [show](#).

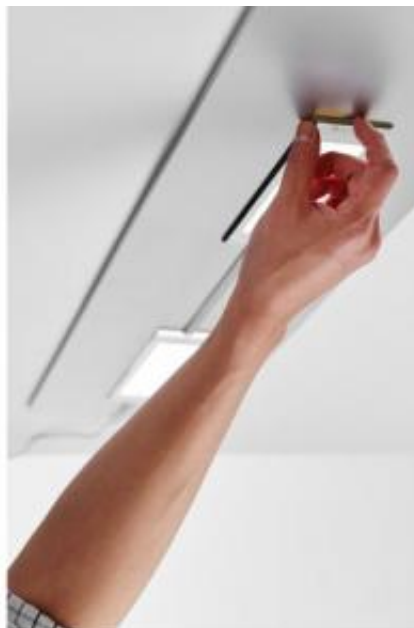
"With LG Chem having begun mass producing the 320x320mm panels in January," said the company, "the panels can be ordered at \$680USD per panel, with a lower negotiated price for bulk orders." The 320x320mm OLED light product is a 0.88mm thick panel and has an efficiency of 60lm/W, CRI over 90, and has output levels of 800lm with

a nominal input (8.5V 1,600mA). The panel's output can reach 1,200lm, similar to a common 60-75 Watt incandescent lamp. This is significant, said the company, because it marks the first time that OLEDs can be considered as an "energy-efficient/human-friendly light source available for general purpose use."



LG Chem is an OLED light panel manufacturer, which provides OLED light panels in various shapes and sizes. Nine models are available with two different color temperatures (3,000K/4,000K), "which deliver high color rendering levels (CRI>90) as well as achieving high luminance,

high efficacy and long lifespan," said LG Chem.



More information: [news.oled-display.net/lg-chem- ... ighting-panels-2015/](https://news.oled-display.net/lg-chem-...ighting-panels-2015/)

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