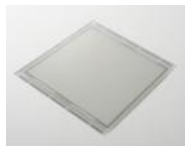
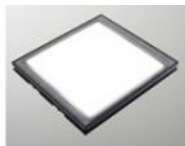


Panasonic turns on OLED lighting roadmap, announces record efficiency

2 September 2011, by Nancy Owano



[OLED Lighting Panel]



[OLED Lighting Module]



(PhysOrg.com) -- Japan-based Panasonic Electric Works (PEW) has announced an aggressive roadmap to make organic light-emitting diodes (OLED) lighting a part of the not so distant future. The company has said it will launch easy to embed OLED lighting modules with built-in control circuits in December for use by lighting fixture manufacturers locally and overseas. PEW will cultivate new customers to create a new lighting device market. The modules are targeted as products that can be part of thin lighting fixtures that blend into building facilities designed with a trendy minimalist look in lighting.

The PEW roadmap calls for more marketing research through March of next year. PEW makes numerous products, from [home appliances](#) to communication equipment but one of its key focal points has been [OLED](#) lighting. Elsewhere in the news, Panasonic Electric Works announced at the 72th Meeting of the Japan Society of Applied Physics that it has [developed](#) an OLED device with a luminous efficiency of 128lm/W, topping the 102lm/W efficiency that Universal Display Corp (UDC) reported in 2008.

The latest presentation at the Society said that the company drastically improved its light extraction techniques for white organic light-emitting diodes (WOLEDs). The researchers inserted a [light extraction](#) board composed of a highly-refractive material between a light-emitting layer and a [glass](#)

[substrate](#). Company spokesman Takuya Komoda said, "It is possible that OLED lamps will rapidly become popular in about 2020. In the future, lighting apparatuses will possibly disappear."

Panasonic Electric Works is one of the earliest companies to have bet on OLED as the next-generation source of lighting. The company has a goal to become the No.1 Green Innovation Company in the [electronics industry](#). A market footing in OLED would work nicely to that end. Unfortunately, market watchers do not all see firm markers of an OLED revolution to come.

OLEDs most likely will not be replacing conventional illuminators like incandescent and compact fluorescent lightbulbs in the foreseeable future, according to consultants at [Lux Research](#). They predict OLED will represent a small, niche technology through 2020. It will be too expensive for widespread adoption; high-end display needs and upscale environments in hotels and resorts will most likely use OLED lighting.

Nonetheless, OLED technology marks an environmental advance in lighting. OLEDs could save more than 90 percent of the energy used now for powering incandescents and consume less than half the electricity needed by compact fluorescents. Because of this potential, the U.S. Department of Energy has invested about \$40 million in OLED lighting research, according to [IEEE Spectrum](#).

Another recent announcement is that Panasonic Idemitsu OLED Lighting (PIOL), PEW's joint-venture with Idemitsu Kosan, is now shipping OLED lighting panels to local and global markets. The panels are small (80x80mm), thin (2mm) and [light](#) (38g).

More information: [Press release](#)

© 2011 PhysOrg.com

APA citation: Panasonic turns on OLED lighting roadmap, announces record efficiency (2011, September 2) retrieved 14 October 2019 from <https://phys.org/news/2011-09-panasonic-oled-roadmap-efficiency.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.