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## **A Novel LED Light-Source Module for Large Scale Direct Backlight**

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### Abstract

A novel LED light-source module is presented for large scale direct backlight. This light-source module consists of an LED light source, a new lens structure, and a squared parabolic reflector so that an evenly-distributed light pattern can be obtained. An application of this light-source module to a 43-inch backlight module can yield a predicted luminance uniformity of 94% without any diffuser sheet.

Key words : LED;Light-source module;Lens structure;

Parabolic reflector;Direct backlight