【P-02 : 분과초청】

LCD planar backlight employing the external electrode fluorescent lamps driven by square pulses

Hyun-Sook Kim*, Dai-Geun Joh*, Young-Guon Kim*, Jae-Jun Ko*,
Dae-Ill Kim*, Chun-Woo Lee*, Eun-Ha Choi* and Guangsup Cho*,
Byoung-Hee Hong**, Hong-Kyun Sohn**, Byung-kun Yu**
*Charged Particle Beam and Plasma Laboratory, Department of Electrophysics,
Kwangwoon University,**WooYoung Institute of Technology, Woo Young Co., Ltd.,
Kist-Academia-Industry Res.Hall P.O. Box 131, Cheongryang, Seoul, 130-650, Korea

The planar luminaries with the external electrode fluorescent lamps arrayed on a flat panel for the LCD-backlight have been improved by driving with the square pulses from a single switching inverter. With the square pulses of the driving frequency about 30 kHz, the high efficiency up to 40-70 lm/W and high brightness up to 30,000 cd/m2 along with the luminance uniformity 90% in the 15-inch, 18-inch, 21-inch diagonal panels, respectively, could be obtained.