

The Electrode Effect on Definition of Transparent Display

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Display technology have been developed to replace CRT (cathode ray tube) by LCD (liquid crystal display), and three-dimensional display, transparent display, and flexible display have been being developed. The transparent displays got one`s attention through the movie or other media and they are being used for advertisement and so on. The color gamut, definition of image, and transparency are important factors for the transparent display to be used widely.

In this paper we have investigated the quality of transparent display, and we analyzed the diffraction and definition of the transparent display in terms of electrode materials. To improve the definition of the transparent display, diffraction by the pattern should be reduced. And also, when we compared with metal electrode and transparent electrode ITO (Indium Tin Oxide), ITO gives less diffraction than maetal electrode. Fig. 1 shows the experimental setup for diffraction experiment for the display panel and Fig. 2 shows diffraction pattern for metal electrode and ITO electrode.

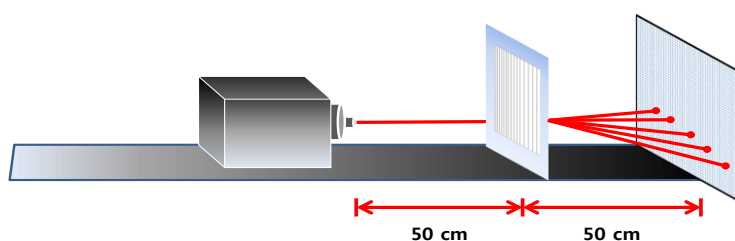


Fig. 1. Diffraction experiments with display panel.

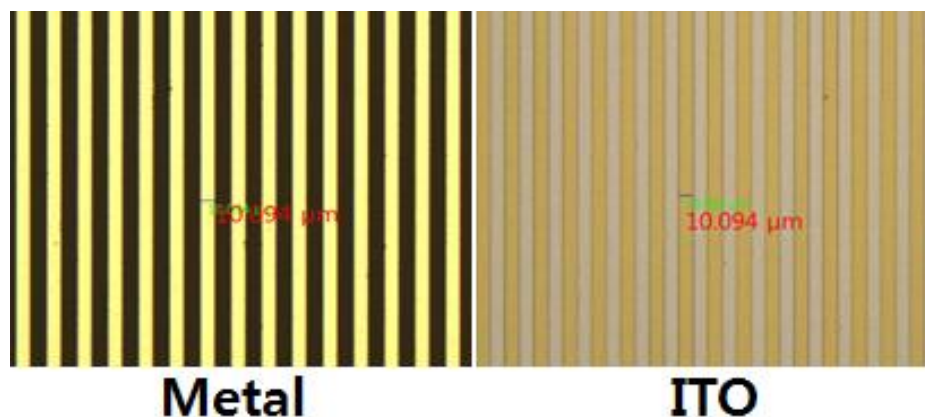


Fig. 2. Diffraction pattern, a) for metal and b) ITO electrode.