



Extensive lineup (from 2.4 inch-10 inch)

#### Main Specifications

Frontal contrast ratio : 1000 : 1

Viewing angle : All-around 160° (contrast > 100)

Response speed ( halftone ) : maximum 30msec

## Product Features

- Delivers ultra-wide viewing angles of  $\pm 80^\circ$  from the left, right, top, and bottom, allowing hardly any color change even with a low viewing angle.
- The contrast is high even with a low-viewing angle, and delivers approximately 100:1 contrast even at angles of  $\pm 80^\circ$  from the left, right, top, and bottom.
- Low electricity consumption is possible due to the high aperture ratio.
- Consumes less electricity than other wide-viewing angle technologies.
- It is easy to create a flat module as the normal polarizer possesses a sufficiently wide viewing angle.
- It is ideal for video playback, for example digital terrestrial broadcasting, due to similar response speeds for each tone.

## Birth of the Product and Background

Users of mobile devices including medium- and small-sized liquid crystal displays seek fine images, a wide color gamut, a wide viewing angle, high response speed, light weight, compactness, and ultra-low electricity consumption. In particular, the demand for higher resolution mobile displays increased because of market developments such as the diversification of in-car displays, the improvement of mobile device functionality, and the introduction of mobile phones with high-tech, high-definition digital cameras (DSC) and one-segment viewing capability.

To meet these needs, Epson developed a display technology that produced beautiful and bright images from any angle, and which excelled at video playback. Photo Fine Vistarich delivers all the features sought after in mobile displays, including overwhelming superior viewing angles, high contrast, high brightness, optimum video playback, and thinness.

## Achievements and Market Response

Photo Fine Vistarich features such as high-resolutions, wide viewing angle, and video playback capability have been highly rated by manufacturers in the mobile phone, DSC, and in-car device markets in which there is strong demand for beautiful, mobile displays. Many products in Epson Imaging Devices Corporation's lineup have Photo Fine Vistarich installed, and it has become a key technology for the company.

( Written in July, 2009 )