AbstractID: 10668 Title: Development of a 15MsP super high resolution medical liquid crystal display for the digital mammography

We developed a new medical display by utilizing our independent sub-pixel drive (ISD) technology and anti reflection-coated panel, which realizes resolution of 15M sub-pixels to accept higher resolution output from modality devices. The ISD technology enables each of three sub-pixels constituting one pixel element of monochrome displays to be driven independently, and consequently three times resolution enhancement is achieved.

We evaluated its sharpness and noise characteristics quantitatively, and performed perceptual evaluations by radiologists by using clinical images for comparison with conventional displays. This new technology was considered effective for the accurate depiction of the fine anatomical structures such as micro-calcifications of the mammography.