Vikuiti™ Display Enhancement Newsletter – January 2009

New film enhances energy efficiency in LCD TVs

3M recently launched a new optical film for LCD TVs - Vikuiti Dual Brightness Enhancement Film (DBEF) D3 300. It can reduce power consumption in LCD TVs by up to 37 percent without sacrificing image quality. Vikuiti DBEF D3 300 increases brightness by recycling polarized light. It also enhances the viewing angle and uniformity, and eliminates the need for a diffuser sheet while reducing the overall bill of materials.

Power consumption has become an increasingly important issue in electronic devices. Vikuiti™ Optical Films manage light in displays to help reduce power consumption in notebooks, handheld devices and monitors as well as LCD TVs. Innovative Vikuiti films enhance the energy efficiency of today's electronic devices without sacrificing display performance.

LCD Optics 101 examines reflective polarizers

Learn more about the optical physics behind LCD technology, including reflective polarizers, through LCD Optics 101. Reflective polarizers manage light in LCD displays by transmitting one polarization to the viewer while reflecting the other polarization back into the display. Light that normally would be absorbed by the rear polarizer of the liquid crystal panel is recycled, increasing the overall amount of light exiting the display.

Vikuiti™ Dual Brightness Enhancement Films (DBEF) are reflective polarizers that use 3M's multi-layer optical film technology. Vikuiti DBEF films increase

display brightness without reducing the viewing angle. To further increase the efficiency of an LCD display, Vikuiti DBEF films can be used in conjunction with Vikuiti Brightness Enhancement Films (BEF) and Vikuiti Enhanced Specular Reflector (ESR) films.

Your free screen-saver adventure is just a click away

Watch as your screen is transformed into a colorful tropical aquarium. Experience the sensation of soaring through the clouds. See nature unleash its power in the form of an alpine blizzard and a summer thunderstorm. Be amazed as bright oranges rain down from your screen and pile up deliciously. Or look up through the snow-covered pines and watch as the clouds break to reveal a beautiful starry night.

If you have any questions or comments regarding this information, simply contact us.