

FOR IMMEDIATE RELEASE

Radiant Imaging Announces General Availability of TrueMURA™ Defect Analysis Software Module for ProMetric™ Systems

Module Provides Analysis of Flat Panel Displays Correlated with Human Perception of Just Noticeable Defects

(Duvall, WA – 5 December 2007) Radiant Imaging, the worldwide leader in imaging systems for color and light measurement, announced the general availability of the TrueMURA Analysis Module for ProMetric 9.1. This module provides automated defect detection analysis for flat panel display (FPD) systems that is well correlated to human judgment of brightness, color, and blemishes. This module is available for use with Radiant Imaging's ProMetric 9.1 control and analysis software. When used in conjunction with ProMetric Series Imaging Colorimeters it provides a complete characterization and testing system for FPDs - especially LCD panels and displays - in R&D and production.

Automation of human judgment of display defects or blemishes (referred to as "mura") is difficult because human visual recognition of uniformity variations and other defects is dependent on many factors including brightness, color, and spatial relationships. Most available image analysis techniques for display defect analysis are based on simple thresholding techniques which are useful in identifying gross defects, but which do not accurately discriminate what are referred to as "just noticeable differences" (JND) - artifacts just noticeable by a human observer. In contrast, TrueMURA is based on a model of human perception which allows a grading of LCD mura in a way designed to match human observers, ignoring mura that cannot be seen by humans and ranking different mura which are distinguished by humans into categories matching those assigned by human observers.

Radiant Imaging's TrueMURA Analysis Module is the first commercial system available to provide advanced image analysis algorithms for computing JND. This augments the Defect Analysis functions already available in ProMetric 9.1. The JND detection algorithm incorporated in TrueMURA is based on patent pending "Standard Spatial Observer" technology licensed by Radiant Imaging from the National Aeronautics and Space Administration (NASA).

"TrueMURA enables automation of flat panel display quality measurements in a way that more closely matches human perception of defects and so creates the opportunity for display and module manufacturers to make display quality testing much more efficient," said Hubert Kostal, Vice President of Sales and Marketing at Radiant Imaging. "Together with PM Series™ Imaging Colorimeters, TrueMURA provides an accurate, repeatable, and objective means of assessing LCD display image quality."

TrueMURA™ is the most recent addition to Radiant Imaging's portfolio of display image quality measurement and improvement tools. ProMetric 9.1, the control and analysis software for Radiant Imaging's PM Series imaging colorimeters and photometers, incorporates additional automated defect analysis tools to



identify mura, bright pixels, dark pixels, and line defects for a broad range of display technologies. In addition, Radiant Imaging provides ProMetric systems for display color balancing, LED screen measurement and correction, and view angle performance measurement.

Additional information about TrueMURA can be obtained by contacting Radiant Imaging at sales@radiantimaging.com.

About Radiant Imaging. Radiant Imaging, Inc., founded in 1992, is the worldwide leader in imaging systems for light and color measurement, and illumination engineering tools and services. Radiant Imaging's technologies are focused on providing lighting and display system manufacturers with enhanced design capabilities, greater product development efficiency, improved manufacturing productivity and increased competitive effectiveness in the world marketplace. Radiant Imaging's four major product areas include ProMetric® light and color measurement systems; Radiant Sources light source characterization systems and source data; Imaging Sphere systems for characterizing scatter and appearance, measuring luminous intensity and characterizing view angle performance; and Application Engineering Services and Software to support development of application-specific solutions incorporating ProMetric® technology.

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