

A Konica Minolta Company

For Immediate Release

Radiant Presents Technical Paper during the Virtual Display Week Symposium Introducing a Method for Improving Accuracy in Pixel-Level Measurement

REDMOND, Wash. – July 15, 2020 — Radiant Vision Systems, a leading provider of photometric imaging solutions for light and display measurement, announces that it will present a technical paper during the 2020 <u>Display Week Symposium</u> taking place online from August 3-7. The Symposium is one of several events planned over the course of <u>Display Week 2020</u> including a virtual technical program and exhibition



organized by <u>The Society for Information Display (SID)</u>. Doug Kreysar, Chief Executive Officer at Radiant Vision Systems, will present the company's paper titled "Fractional Pixel Method for Improved Pixel-Level Measurement and Correction (Demura) of High-Resolution Displays" authored by Kreysar, Gary R. Pedeville (Senior Principal Engineer), and Joshua H. Rouse (Senior Optical Software Engineer III) from Radiant. The presentation will be available for registered attendees to view online in *Session 71: Spatial Uniformity* beginning Thursday, August 6.

"Display resolution and pixel density continue to increase dramatically, and so does the importance of measuring displays from the pixel level," says Kreysar. "Technologies like OLED, mini-, and microLED are illuminated by their emissive pixels and subpixels, which can vary in output. This variation results in nonuniform brightness and color across the display, making measurement and correction processes a critical part of quality control. Measuring the characteristics of individual display pixels, however, has become more challenging for image-based measurement technology, which must apply several sensor pixels per display pixel for accurate measurement. A new fractional-sensor-pixel measurement method was developed by Radiant to improve the accuracy of image-based measurements specifically for 'demura' or pixel uniformity correction applications. This method enables highly flexible display pixel registration to ensure accurate calculation of display pixel correction factors to improve display uniformity."

An online presentation of Radiant's technical paper during the virtual Display Week Symposium will introduce the company's fractional pixel method and provide data demonstrating the method's accuracy for pixel-level luminance measurement over traditional "whole pixel" methods. The results will show that luminance data obtained using imaging systems with limited sensor resolution (achieving as few as 3 x 3 image sensor pixels per display pixel)—when a fractional pixel method is applied—provide a very close match to luminance data obtained using an extremely high-resolution imaging system (achieving as many as 30 x 30 image sensor pixels per display pixel). Without a fractional pixel approach, pixel-level luminance measurements obtained using available imaging systems may have significant inaccuracies. These inaccuracies can impact correction processes, resulting in noticeably poor visual quality in "corrected" displays.

Presenting the paper on behalf of Radiant Vision Systems, CEO Doug Kreysar has a background in engineering, physics, and management, having led multiple departments at Radiant since joining the company in 2000. Formerly the company's Chief Solutions Officer, Kreysar has overseen the development of Radiant's optical technologies for light and color measurement across production applications worldwide. Kreysar earned a B.S. in Physics from Vanderbilt University and an M.S. in Applied Physics from the University of Michigan, Ann Arbor. He is the author of multiple technical papers and a regular speaker for organizations including the Society for Information Display (SID). He has received an Excellence in Oral Presentation Award from the Society of Automotive Engineers (SAE) and holds eight U.S. patents.

For more information about the Display Week Symposium or to register the virtual Display Week conference, visit <u>www.displayweek.org</u>. Learn more about Radiant Vision Systems at <u>www.RadiantVisionSystems.com</u>.

About Radiant Vision Systems

Radiant Vision Systems works with world-class brands and manufacturers to deliver creative visual inspection solutions that improve quality, reduce costs, and increase customer satisfaction. Radiant's legacy of technology innovation in photometric imaging and worldwide install base date back more than 25 years and address applications from consumer electronics to automotive manufacturing. Radiant Vision Systems product lines include TrueTest[™] automated visual inspection software for quality control, and ProMetric^{*} imaging colorimeters, photometers, and light source measurement systems. Radiant is headquartered in Redmond, Washington, USA, with strategic offices in California, Michigan, China, Vietnam, and South Korea. Radiant has been a part of Konica Minolta's Sensing Business Unit since August 2015. For more information, visit <u>www.RadiantVisionSystems.com</u>.

Press Contact:

Shaina Warner Creative Marketing Specialist Radiant Vision Systems +1 (425) 844-0152 x587 Shaina.Warner@RadiantVS.com

###