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Radiant Presents *Laser Focus World* Webinar on Near-Infrared Sensing Applications and Solutions for Measuring LEDs and Lasers

REDMOND, Wash. – April 14, 2021 – Radiant Vision Systems, a leading provider of test and measurement for



light sources and displays, announces that it will host a webinar with *Laser Focus World* to discuss applications of near-infrared (NIR) sensing in consumer electronics, augmented/virtual/mixed reality (AR, VR, MR), and beyond. The webinar titled "<u>Measuring LEDs and Lasers for Near-IR Sensing Applications</u>" will emphasize the need to evaluate NIR light source performance using measurement solutions that meet production demands, and will include examples from Radiant's portfolio of test and measurement systems. The webinar will be broadcast live Tuesday, April 27, from 1:00 to 2:00 P.M. Eastern Daylight Time (EDT) (10:00 to 11:00 A.M. Pacific Daylight Time (PDT)) and includes a 50-minute presentation followed by a live audience question-and-answer session with presenter Mike Caputo from Radiant.

"Near-infrared light provides an invisible interface for our devices," states Caputo. "From smartphones to AR, VR, and MR headsets, NIR sensing systems are giving users more seamless device control and visual experiences. NIR light sources provide illumination for IR cameras, time of flight (TOF) functions, and patterns for 3D object analysis. These operations enable facial recognition, gesture commands, eye tracking, proximity detection, depth sensing, lidar, and 3D mapping. As NIR sources are integrated into more new products for use within the human visual field, light source testing during device design and manufacture has grown in importance. Particularly, there is a need for measurement systems that offer efficiency for inline testing to keep up with the high production demands of the electronics market."

The human eye does not respond to NIR wavelengths of light (above approximately 750 nanometers (nm) to as high as 2500 nm), which are outside the human visible spectrum. When NIR light is cast into a user's eyes for facial recognition or eye tracking, the user does not have an aversion response to blink or look away. As such, NIR light may be harmful to human vision if emitted at very high intensities or over long periods of time. Conversely, if intensities are too low, NIR light sources may not provide enough photons for IR sensors to interpret a signal from the environment. Insufficient emission intensity or poor distribution of light reduces the effectiveness and function of NIR sensing and may interfere with device operation.

To ensure the performance and eye safety of sensing devices, manufacturers must measure the intensity of beams and patterns produced by NIR LEDs and lasers. A proliferation of these light sources in consumer electronics devices has increased the need for NIR quality control on the line. Traditional measurement methods designed for light source modeling and characterization in lab settings are costly, slow, and complex, making production-level integration of these systems impractical. An effective measurement solution for in-line testing—particularly for consumer electronics production—must be fast, compact, and easy to deploy.

During his webinar presentation, Caputo will discuss the latest and future applications of NIR sensing in electronics, extended reality (XR), and other industries. Caputo will introduce the two primary light sources used for NIR sensing—NIR LEDs and vertical-cavity surface-emitting lasers (VCSELs). The webinar will review performance considerations critical to these sources, as well as illustrate each source's benefits and applications for invisible 2D imaging and 3D sensing. With an emphasis on measuring NIR light for consumer devices, Caputo will demonstrate the capabilities of Radiant's award-winning <u>NIR Intensity Lens</u> solution and <u>TT-NIRI™</u> light source measurement software for evaluating LEDs and lasers with the speed and efficiency needed in production testing.

Territory Sales Manager for the western U.S.A. at Radiant Vision Systems, Mike Caputo supports and sells advanced metrology solutions to leading innovators in optical design and sensing, including manufacturers across consumer electronics, XR, and emerging devices. Before joining Radiant, Mike spent 10 years in the machine vision industry solving inspection challenges across a diverse customer base, including electronics, aerospace, medical, and packaging.

For more information about this webinar or to register for the live broadcast on April 27, visit https://event.webcasts.com/starthere.jsp?ei=1446736&tp https://event.webcasts.com/starthere.jsp?ei=1446736&tp https://event.webcasts.c

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>.

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