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For Immediate Release

## Radiant Presents MicroLED Test and Correction Methods at the 2020 Vehicle Displays Virtual Event

**REDMOND, Wash. – September 23, 2020** Radiant Vision Systems, a leading provider of automated visual inspection solutions for lighting and displays, announces that it will exhibit and lead a technical presentation at the virtual <u>Vehicle Displays Symposium &</u> Expo, organized by the Society for BOCIETY FOR INFORMATION DISPLAY

Information Display (SID). The event will take place online October 14 and 15 (accessible to registered attendees 24 hours a day), where Radiant will host a virtual booth demonstrating photometric and colorimetric imaging solutions for display testing throughout the vehicle. Radiant will also host Symposium Session 4.2, "Measuring MicroLEDs for Color Non-Uniformity Correction," on Thursday, October 15, to share proven methods for ensuring the quality of microLED components and supporting their viability for automotive integrations.

The world's only technical symposium and exhibition focused exclusively on vehicle displays and interfaces, <u>Vehicle Displays</u> has provided a forum to further automotive innovation for 27 years. Radiant sponsors Vehicle Displays each year to support display development and knowledge exchange, with an emphasis on scientific measurement solutions to ensure the visual performance and quality of new display types. Radiant solutions leverage imaging and automated software routines to maximize efficiency in automotive display design, quality control, and production. Radiant has developed a solution portfolio to specifically address automotive applications—including HUD measurement, curved and freeform display testing, emissive (OLED, microLED) display correction, backlit symbol inspection, and near-infrared light measurement (used in sensing for lidar and driver monitoring systems (DMS)).

The Vehicle Displays <u>Technical Program</u> will provide a series of web sessions led by display leaders and automotive experts, which can be viewed by registered attendees during the web event and on demand until February 15, 2021. As part of Session 4: Display Metrology on the second day of the virtual symposium, Radiant Regional Sales Manager Mike Naldrett will present the company's technical paper "Measuring MicroLEDs for Color Non-Uniformity Correction," which discusses methods for ensuring microLED quality to enable new technologies. MicroLEDs offer improvements in brightness, contrast, color gamut, and power efficiency that benefit automotive display panels, head-up displays, and lighting. However, production of microLED components has been impeded by several factors, including visual quality challenges due to inherent variability in the individual output of microLED brightness and color. With solutions already deployed in consumer electronics production, Radiant's

presentation will share how imaging colorimeters and novel image processing techniques can be applied to measure and correct microLED output in automotive applications. Naldrett will discuss proven methods and system advantages for acquiring highly accurate light and color measurement data for each microLED in a wafer or panel. These advantages safeguard production resources, supporting the viability of microLED commercialization in automotive applications and beyond. Session 4.2 will become available to view October 15, with an opportunity to discuss questions and applications with the Radiant team throughout the event.

In addition to its technical presentation, Radiant will host a virtual booth at the online Vehicle Displays exhibition. Members of the Radiant Automotive Solutions Team will be available over live video chat to discuss display test and measurement applications with visitors. Digital resources at the Radiant booth will include video demonstrations of Radiant's portfolio of high-resolution ProMetric® imaging systems and software used for metrology and production qualification of automotive displays. Radiant's featured video will demonstrate a complete hardware/software system for HUD measurement, based on SAE and ISO standards and developed in cooperation with OEMs and tiered suppliers. This solution employs a ProMetric<sup>®</sup> I Imaging Colorimeter with electronic lens, capable of automatically focusing on virtual images at variable distances and calculating image distance in real-distance units (ideal for new AR-HUD systems). <u>TT-HUD™ Software</u> powers the test system, controlling test patterns displayed on the HUD and enabling fully automated inspections including evaluation of luminance, chromaticity, contrast, warping, ghosting, and modulation transfer function (MTF), among other qualities. To demonstrate the effectiveness of the microLED test and correction methods presented during the company's symposium presentation, the Radiant virtual booth will also provide a video case study of the microLED correction process as applied by a display component manufacturer. This solution uses a Radiant <u>ProMetric Y Imaging Photometer</u>, <u>Microscope Lens</u>, and <u>TrueTest™</u> <u>Automated Visual Inspect</u>ion Software with proprietary demura algorithms for pixel-level measurement and uniformity correction.

For information or to register for the virtual Vehicle Displays Symposium & Expo, visit <u>www.vehicledisplay.org</u>. Learn more about Radiant at the company's virtual booth, or 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<sup>™</sup> automated visual inspection software for quality control, and ProMetric<sup>®</sup> 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 www.RadiantVisionSystems.com.

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