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For Immediate Release

Radiant Vision Systems Honored by 2021 Laser Focus World Innovators Award Program

REDMOND, Wash. – October 7, 2021 – Radiant Vision Systems, a leading provider of automated visual inspection solutions for illuminated components, announced today that its VIP™ (Vision Inspection Pack) Software was recognized among the best by the 2021 Laser Focus World Innovators Awards. An esteemed and experienced panel of judges from the optics and photonics community recognized Radiant as a Silver honoree.

"On behalf of the Laser Focus World Innovators Awards, I would like to congratulate Radiant Vision Systems on their Silver-level honoree status," said *Laser Focus Word* Publisher Paul Andrews. "This competitive program allows *Laser Focus World* to celebrate and recognize the most innovative products impacting the photonics community this year."

The visual quality of a backlit component is determined equally by the photometric and dimensional properties of its illuminated regions. Backlit components often include symbols and characters on analog controls—like dials and knobs in a car, buttons on electronics and appliances, keys on keypads, etc. These components may also be illuminated shapes like halos around USB ports or decorative light strips in vehicle interiors, taking a range of forms. Evaluating the quality of these components is challenging for image analysis software because of the unpredictable and bespoke nature of the shapes and symbols that must be registered, the need for defect detection based on these shapes, and the need to additionally measure brightness, color, and uniformity as part of overall visual quality.

Due to the multiple inspection criteria, the process of evaluating backlit components has historically relied on either human inspection or the combination of systems—machine vision (traditionally applied to identify characters or shapes within two-dimensional images) and photometric systems (designed to measure values of light, such as brightness and color). While human inspection lacks objective and quantifiable inspection data, a combination of machine vision and photometric systems is costly and complex. Each system accomplishes only part of the quality control objective. Further, the photometric system's measurements lack precision because it is unable to rely on the machine vision system for contextual information about the area and shape of the illuminated region.

Released on May 18, 2020, Radiant's VIP (Vision Inspection Pack) Software provides the first all-in-one solution for backlit symbol inspection that simultaneously performs photometric measurement with machine vision-based registration and defect detection. Leveraging a scientific-grade imaging photometer or colorimeter from Radiant, VIP measures absolute values of luminance (Lv, cd/m^2), chromaticity (CIE xy, u'v'), L*a*b* color scale, Correlated Color Temperature (CCT), and dominant wavelength (nm) to evaluate symbol brightness, color, and uniformity. Advanced registration functionality in VIP dynamically applies unique inspection regions⸺called regions of interest (ROI)—to match the exact shape of each illuminated element regardless of component position or orientation. Precise ROI enable VIP to measure the exact brightness, color, and uniformity values of each element or symbol and detect defects within the ROI, identifying issues in substrate etch (ROI shape completeness and integrity), dead LEDs, poorly diffused backlight, and particles within substrate layers.
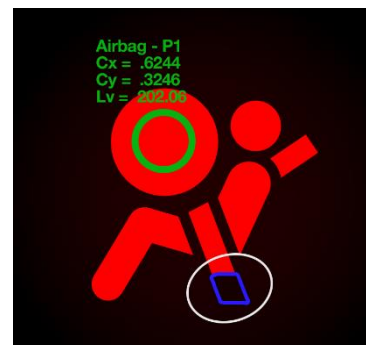
By combining photometric and machine vision capabilities, VIP Software greatly reduces time and cost for lab testing and production-level quality control. Manufacturers who utilize VIP benefit from a single camera/software system that evaluates all visual qualities of backlit components out of the box. The solution provides quantifiable and objective data, rapid pass/fail routines, and easy integration into automated systems and inline inspection operations.

For more information about VIP Software, visit www.RadiantVisionSystems.com.

About Laser Focus World
Published since 1965, Laser Focus World has become the most trusted global resource for engineers, researchers, scientists, and technical professionals by providing comprehensive coverage of photonics technologies, applications, and markets. Laser Focus World reports on and analyzes the latest developments and significant trends in both the technology and business of photonics worldwide — and offers greater technical depth than any other publication in the field.

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, South Korea, and Vietnam. 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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