

Precise optical measurements are critical to quality control, supplier comparison and simulation in industries as varied as medical instrumentation, automobiles, mechanical engineering, and many kinds of consumer goods. A new spatially resolving luminance measurement system from Germany's opsira GmbH gives these industries the capability to perform goniometric and videophotometric measurement of light sources that range from high-performance discharge lamps to mini-LEDS.

Next-Generation Luminance Measurement System

Called luca, this new system was widely hailed as a cutting-edge, third-generation system by visitors to the opsira exhibit stand at *MessComp 2002*, a specialty trade fair devoted to high-performance measurement held in early September in Wiesbaden, Germany. *MessComp's* savvy international crowd enjoyed a close-up look at luca, which now features a cooled, 12-bit camera with a pixel resolution of 1300 x 1030 and precision LINOS/Rodenstock lenses that virtually guarantee high image sharpness and a distortion-free

ating smooth structures like the thin elements that make up the back-lit symbols on control panels and similar hardware. Users can easily select and analyze peak luminance values in critical areas and can even define their own false-color imaging function to immediately identify areas where crucial limit values are exceeded or undercut.

A typical application for luca is described in a recently released PDF application sheet available from opsira on request. The application sheet richly illustrates the use of



Goniometer for 3-dimensional light source measurement.

Readers interested in learning more should visit the opsira website at www.opsira.com for a closer look at luca and its impressive capabilities. More detailed information is also available to readers of TNI on request. Please contact:

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measurement image. Each luca system also comes with a specially fit photometric filter and an available option that allows the system to measure radiance in the UV and IR spectra.

opsira GmbH, an optical measurement specialist based in Weingarten, bundles its luca hardware with lucatool, a software evaluation package that supports multiple exposures and precision sub-pixel spot analysis for evalu-

luca to gather and evaluate accurate luminance data from a PLANON flat panel backlight made by OSRAM. In this example, luca was configured with a LINOS/Rodenstock front lens with a focal length of 25 mm and a fixed iris setting of 5.6, delivering a measurement range from 0.2 cd/m² to 30 kcd/m². The application gives a detailed look at the use of lucatool to analyze the flat panel's luminance distribution. ■



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