PRO-LITE TECHNOLOGY

Press Release

Fast & Affordable LED Measurement from Pro-Lite

March 18th 2008: Pro-Lite Technology LLP (Cranfield, England) has released an LED measurement system that stands out as being both highly affordable as well as quick and easy to use. Based around the USB4000 CCD spectrometer from Ocean Optics together with integrating sphere collection optics, measurements are provided of spectral radiant flux, luminous flux, CIE chromaticity, correlated colour temperature, dominant wavelength, spectral purity and colour rendering.

The compact, 38mm diameter integrating sphere included with the USB4000 LED spectroradiometer is particularly well suited to measuring the forward (or partial) flux in lumens from individual LED emitters. For LED clusters, or for testing the output of those LEDs mounted in reflectors or with lenses, Pro-Lite offers a range of larger integrating spheres from Labsphere. These interior access integrating spheres are available from 25cm to 2m diameter and provide for the measurement of total as well as forward flux. In addition, the upgrade spheres provide for auxiliary correction which fully compensates for the self absorption errors which arise when the LED is measured in the sphere together with optics, heat sinks or drive electronics. Without auxiliary correction, the flux readings would be under-recorded. Auxiliary correction also corrects for reflection errors if the LED sample is placed at the sphere port.

The 3648 element CCD detector used in the USB4000 records the complete spectral flux from the LED in a fraction of a second. Rapid sampling times benefit overall measurement accuracy as the output of the LED does not have time to drift during the scan. The USB4000 LED system provides for calibrated measurements at wavelengths from 350 to 1000nm, which covers the full visible (photopic) range. Integrating sphere collection optics allow for measurements at up to 260,000 lumens, accommodating any size or power of sample. The pre-configured LED system ships complete with CCD spectrometer, optical fibre patchcord, FOIS-1 integrating sphere, LS-1-CAL calibration source and SpectraSuite application software.

The USB4000 LED is the latest addition to Pro-Lite's comprehensive product portfolio which encompasses instruments that can be used to characterise the total flux, spectrum, intensity, illuminance, luminance, colour as well as the spatial and angular emission of light from lamps, LEDs and displays. In terms of the optical properties of materials, applications supported include diffuse as well as specular reflectance, transmittance, absorbance, fluorescence and scatter (BRDF). In addition to its sales and technical support activities, Pro-Lite also provides contract measurement services for those clients with short-term requirements.

About Pro-Lite: Pro-Lite is a specialist distributor providing value-added service to the laser and optical radiation measurement communities in the UK and Ireland. Pro-Lite supplies lasers, laser safety eyewear, laser power and energy meters, precision opto-mechanics, as well as a complete spectrum of equipment for measuring optical radiation and the optical properties of materials. Pro-Lite also designed and delivers the popular "Practical Light & Colour Measurement" course in association with Birmingham-based Photonics Cluster (UK).

FOR FURTHER INFORMATION:

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