

MEASUREMENT AND R&D SERVICES

Free of charge measurement services for our customers

Optical, thermal, environmental and electrical testing laboratories

EXAMPLES OF LABORATORY EQUIPMENT:



Spectroradiometer *Everfine HAAS-2000* + Integrating sphere Ø200 cm

- » Scientific accuracy measurements for all types of luminaires including large light fixtures
- » Measuring of spectrum, CCT, CRI, luminous intensity distribution and total luminous flux
- » Wavelength measurement reange 380–780 nm with ± 0.3 nm accuracy
- » Illuminance measurement range 0.0001–200.000 lx



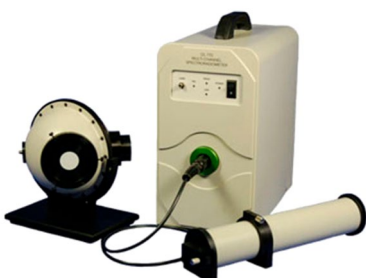
Goniophotometer *Everfine GO-2000A*

- » Luminous intensity distribution and total luminous flux measurements for all types of luminaires
- » Customer customizable output protocols including LDT data for simulations
- » Goniometer rotation angle $\pm 180^\circ$ with 60 kg maximum load
- » Can be used for steady state (DC) measurement as well as transient (pulses) measurement of LEDs due to the millisecond measurement speed



Luxmeter *Minolta T-10A*

- » Highly accurate luxmeter with automatic calibration function
- » Measuring range 0.01–299,000 lx



Single LED measuring system *OL 770*

- » High-speed CCD-based spectroradiometer operating in 380–780 nm range
- » Designed to precisely characterize LED components for R&D purposes
- » Measurement of brightness under A and B conditions, luminous flux in the integrating sphere and angular radiation characteristics in the automatic goniometer



Luminance and color meter *Minolta CS-200*

- » Measuring of brightness and chromaticity of light emitting products, e.g. flat panel displays, outdoor screens, illuminated advertisements...
- » Measurement range 0.01–20,000,000 cd/m²
- » Selectable measurement angle 0.1° / 0.2° / 1°



Handheld LED-Spectrometer *UPRtek MK350*

- » For fast measurements of visible light spectrum 360-750 nm
- » Can display illuminance (lx), spectral irradiance, CIE coordinates 1931 and 1976, peak wave length, CCT, CRI, Ra (rendering average)...



Source Measure Unit *Keithley 2400*

- » Highly stable and accuracy DC power four-quadrant source with voltage and current source/load with integrated measurement capabilities
- » Up to 200V or 1A at 20 Watts, 0.012% basic measure accuracy with 6½-digit resolution



Dynamic climate chamber *Binder MKF 240*

- » Cold, heat and climate testing methods according to DIN and IEC standards
- » Temperature range from -40 to +180 °C, humidity range 10-98 % RH
- » Programmable temperature and humidity cycles and condensation protection of test material



Thermal camera *Fluke Ti27*

- » Delivers clear images 240 x 180 infrared resolution, infrared and visible spectrum with temperature range -20 to +600 °C, sensitivity of ≤ 0.05 °C at 30 °C (50 mK)
- » Features automatic parallax correction and wide angle lenses for added versatility and special applications



IR thermometer *Testo 845*

- » Switchable optics for contactless temperature measurement at any distance with minimum spot diameter of up to 1mm²
- » Measuring range from -35 to +950 °C, accuracy up to ±0.75 °C with ultra-fast 100 ms measurement time

Let's work together!

YOUR CZECH MATE IN LED LIGHTING

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