PHOTOMETRIC MEASUREMENTS

GENERAL

Photometric measurements investigate the characteristics (e.g. performance and ergonomic aspects) of light sources and lighting installations. These characteristics are very important for example for engineers and architects who are carrying out illumination design for products or spaces.

The variables measured by SGS Fimko are:

- Luminous intensity distribution
- Luminance distribution of lamps, luminaries, displays, background-lit symbols (cd/m^2)
- Luminous flux (lm = lumen)
- Utilization factor (h)
- Service illuminance (lx = lux)
- Optical power (W = Watt)
- Color rendering power index (Ra-index)
- Color temperature (K= Kelvin)
- Chromaticity coordinates (x and y)
- Spectrum distribution wave of visual light

SGS Fimko carries out measurements of these variables on luminaires for normal use, safety luminaries, incandescent, fluorescent and discharge lamps, control gear for lighting fittings (i.e

- EULUM-DAT
- TM14
- IES/86
- IES/91
- IES/95
- CALCULUX

Goniophotometer

The customer will also receive a separate measuring report. Test Report Example (PDF 191 KB)

Measurement of the luminance values and luminance distribution of various objects is also possible with our goniophotometer. Luminance values can be determined or obtained from the luminance distribution data that is a kind of "digital photo".
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These characteristics are mainly measured with our goniophotometer and integrating sphere (Ulbricht sphere), in which products which are a maximum of 1.8 meters long products can be tested. We use lux meters to measure the utilization factor. Photometric measurements can be carried out in a week as follows:


Integrated sphere

- In combination with safety, EMC and ROHS testing as well as certification (FI, CB, CB-EMC; GS, ENEC, NRTL)
- As benchmarking tests
- As product development tests
- As quality control tests

An impartial "Statement of Test Result" based on our tests and used as a marketing tool will give you a competitive edge on the market.

CONTACT:
For help with any questions, email us at sgs.fimko@sgs.com