



MAVOLUX 5032 B/C USB

This high precision luxmeter

is available in class B and class C versions in accordance with DIN 5032-7, appendix B of IEC 13032-1 and CIE 69. Both variants are equipped with $V(\lambda)$ adaptation as well as cosine correction, and reliably measure the illuminance of daylight and artificial sources of light. Even in the case of very bright sunlight or light from headlights, no accessories are required.

MAVOLUX 5032 B USB

Due to its outstanding accuracy in accordance with class B, the MAVOLUX 5032 B USB is used primarily for certification and inspection applications. An additional measuring range with high initial sensitivity of 0.01 lx makes it possible to measure extremely small light intensities. This even permits reliable measurement of emergency lighting. After pressing the HOLD key, the measured value is saved to memory and display illumination included with this version is activated, making it possible to read the display in dark environments. Adaptation to the spectral brightness sensitivity of the human eye $V(\lambda)$ is highly precise with minimal deviation of just $f1' < 3\%$.

With accuracy according to class C, the industrial luxmeter Mavolux 5032 C USB is primarily used for general applications. The smallest of four measuring ranges begins with an initial sensitivity of 0.1 lx. $V(\lambda)$ adaptation deviation,

which amounts to $f1' < 7.5\%$, is considerably better than the admissible error limit for class C.

Both variants can be used as unclassified luminance meters with the help of an optional luminance attachment with an acceptance angle of 15° . Luminance is measured in candelas per square meter (cd/m^2) or foot-lamberts (fL), and defines the perceived brightness of a back-lighted or reflecting surface.

At GOSSEN, great emphasis is placed upon reliability by means of calibration. For purposes of documented evidence, a factory calibration certificate or a DAkkS calibration certificate can be ordered along with either variant. Depending on how the meter is used, we recommend a calibration interval of 12 to 24 months..





Specifications

Maximum precision – Classified measurement of illuminance in lx or fc in accordance with class B or class C per DIN 5032-7, appendix B of IEC 13032-1 and CIE 69.

Broad measuring range – High initial sensitivity and a resolution of 0.01 lx or 0.001 fc for the MAVOLUX 5032 B USB, right on up to large illuminance values of 199,900 lx or 19,990 fc.

V(λ) adaptation – The spectral sensitivity of the silicon photodiode is color corrected and corresponds to the spectral brightness sensitivity of the human eye V(λ). The quality of this adaptation represents a significant difference between the class B and class C variants.

Cosine correction – The luminosity of a flat measuring surface is proportional to the cosine of the incident angle of light. This relationship is taken into consideration by the sensor during evaluation.

Simple expansion of functions – Unclassified measurement of luminance in cd/m^2 or fL is made possible by the optional luminance attachment. An additional adapter disc prevents erroneous measurements due to incidence of light from the side.

Convenient everyday use – Simple operation, easy to read display, compact design, protection during transport in a high quality aluminum case.

Non-volatile memory – 100 measured values can be saved, retrieved or transmitted to a PC via the integrated USB port. Average illuminance values can also be calculated as a result.

Computer-aided measurement – The meter's continuous operating mode is assured thanks to power supply via the USB port. Meter control, as well as acquisition, display and storage of measured values, is managed with the free GLUX 2 software.