



## Milwaukee MI-MW700 PRO Lux (Light) Meter



### DESIGN FEATURES

- Fast, easy-to-read results with large digital LCD readout
- Waterproof silicon photodiode sensor attached to a 4.4' cable
- Three resolution settings - 1, 10, and 100 Lux
- Accuracy to  $\pm 6\%$  of reading  $\pm 1$  digit
- Lightweight and portable
- 150 hours of battery life with continuous use (battery included) with low battery warning.

### SPECIFICATIONS

- Range:** 0.000 to 1999 Lux; 2000 to 19999 Lux; 20000 to 50000 Lux
- Range Setting:** Manual through key buttons
- Resolution:** 0.000 to 1999 Lux:  $\pm 1$  Lux; 2000 to 19999 Lux -  $\pm 10$  Lux; 20000 to 50000 Lux -  $\pm 100$  Lux
- Accuracy:**  $\pm 6\%$  of reading  $\pm 1$  digits
- Peak wave length:** 560 (nm)
- Sensor type:** Silicon Photodiode (connected to meter)
- Sensor sensitivity:** 100 scotopic LUX
- Sensor stability:**  $\pm 2\%$  change per year (in first two years)
- Environment:** 0 to 50°C / 32 to 122°F; max RH 95%
- Battery Type:** 1 x 9V alkaline
- Battery Life:** Approx. 150 hours of continuous use
- Auto-off:** after about 5 minutes of non-use
- Dimensions:** 5.6 x 3.1 x 1.25 inches
- Weight (meter with sensor):** 9.5 ounces



Put the light sensor on a stable surface in the aquarium, and hold the meter at a proper distance to avoid any interference or disturb to the sensor illumination.



Turn the meter on by pressing the ON/OFF key. Press one of the three "Range keys" to select the proper scale according to the intensity of the light. 2000-19000 is recommended for measuring LUX in aquarium.



Wait for about 1 second for the reading to stabilize.

## DESCRIPTION

The MI-MW700 is a portable Lux meter designed to perform light measurements from 0 to 50000 Lux. This handy and ergonomically designed Lux meter is ideal for anyone looking for fast and reliable light measurements. This meter is suitable for a wide range of applications, such as Aquarium and Aquaculture, Hydroponic, Agriculture, Horticulture, and Environmental analysis.

The waterproof light sensor is attached to a 1.3 m (4.4') cable and is suitable to verify light intensity at the bottom of aquariums.

Average indoor lighting ranges from 100 to 1000 Lux and average outdoor sun lights about 50000 Lux. Lux is a unit that indicates the density of light that falls on a surface.

The human eye is sensitive only to blue, green, and red light, so in calculating the Lux falling on an object, only the light that the human eye sees is counted. When only infrared light falls on an object, the Lux is counted as zero since our eyes see nothing. Mathematically, a spectral weighting function becomes convolved with the actual illumination spectrum to calculate Lux exactly.

This is the formal definition of Lux and it makes Lux an unusual unit of measure. Still, Lux can be thought of as a way of measuring light in terms of what our eyes perceive. The metric unit of measure for luminance of a surface. One Lux is equal to one Lumen per square meter. One Lux equals 0.0929 footcandles.