

# Lux Meters

Various environments need appropriate illumination, whether it be ordinary homes, offices, or factories. Inadequate illumination or too much illumination can lead to false recognition, reduced work efficiency, and loss of vision caused by fatigue. Since appropriate illumination helps to improve work efficiency and assure work safety, the control of illumination is re-

garded as a very important element. The illuminance meter indicates, by values in the unit of LUX, how much light shines on each place. It is used for the purpose of assuring appropriate illumination suitable for every environment. JIS (Japanese Industrial Standards) has a standard given below as recommended values for each environment.

Type	LUX	1500	700	300	150	70	30	15	-LUX-
Housing		*Sewing (Dark material)	*Studying, Sewing *Reading (Long time or small letters)	*Reading *Makeup *Eating meal	Living room, child room, reception room, dining room, kitchen	Hall, stairway, corridor, escape stairway, garage			
School		*Precision drawing *Machine-sewing *Precision experiment	Drafting room *Blackboard *Sewing *Library reading room *Precision machining	Ordinary classroom, special classroom, library reading room	Auditorium, meeting room, hallway, stairway	Escape stairway			
Office		*Designing *Drawing *Typing *Calculation *Key-punching	Office, drafting room, gage board, telephone exchange room, distribution board	Executive room, conference room, reception room, hall, elevator	Work room, change room, stairway, warehouse	Escape stairway			
Road, park					Tunnel of expressway (Illumination at the entrance and exit should be higher than this value.)	70~15 Tunnel	15~3 Road with busy traffic	1.5~0.3 Road with scarce traffic, park, other open spaces	
Hospital	Surgical table 10,000 over	*Autopsy *First-aid treatment *Drug formulation	Surgical room, first-aid station, ocular inspection, drug preparation *Technological research *Injection	Clinic, examination room, dispensary, waiting room, medical office	Doctor's room, hospital room, X-ray room, medicine room				
Theater, movie theater				*Ticket counter, doorway, back stage	Projection booth, corridor, stairway	Spectators' seat (during a break), escape stairway, garden	3~1.5 Spectators' seats (while showing)		
Inn, hotel			Accounting office	Front desk, dining room	Guest room, amusement hall, corridor, lobby				
Diner, restaurant			*Sample case	*Register, kitchen, *dining table	Guest room, waiting room hallway				
Beauty parlor, barber			*Hairdo *Hair setting *Makeup	*Hairdo, *dressing	In shop				
Shop		*Highlighted display in show window *Highlighted show case	*Highlighted display in shop *Show window, ordinary show case	Ordinary display of shop Overall shop					
Department store		*Show window, main part on the 1st floor *Highlighted show case	Ordinary display Ordinary show case	Atmospheric display					

The combined use of local illumination is allowed in places marked with \*. In these cases, it is desirable that the overall illumination should be 1 / 10 or more of the illumination by the local illumination.

\* Reference: Illumination level JIS Z9110

\*Each country has its own standard. Please check the standards for your own country.

## Pocket Size



**mobiken** Series

Pocket size meter but with high accuracy and wide ranges. Sensor / Probes can be all neatly contained and protected within the folding case. Easy to carry in a shirt pocket.

### LX2

#### Easy to use lux meter

- Small stick shape sensor probe (sensor diameter  $\phi 9\text{mm}$ )
- 3999 count with analog bar graph
- Silicon photodiode
- Measuring range 0.1lx~399.9klx
- Data hold
- Auto power save (30min.)
- Cord length 900mm

APS DATA HOLD

Optical sensor	Si photodiode with approximated relative luminous efficiency ( $\phi 9\text{mm}$ )
Display	Numeric : 3999 full scale, Bargraph:42-segment
Sampling rate	Approx. 2 times/sec. for numeral display. Approx. 20 times/sec. for bar graph.
Measuring range	400.0/4000/40.00k/400.0klx
Accuracy	$\pm (5\%+1)$ below 3000 lx $\pm (7.5\%+1)$ 3000 lx or higher Compatible JIS standard A class $23^\circ\text{C} \pm 2^\circ\text{C}$
Temperature Characteristics	$\pm 5\%$ at $23^\circ\text{C}$ within operating temperature/humidity range
Relative spectral sensitivity	Approximation of spectral luminous efficiency of the standard photometric observer
Grazing-incidence light characteristics	Cosine curve approximation
Battery	SR-44 or LR-44X2
Power consumption	Approx. 10mW
Operating temperature	$0^\circ\text{C} \sim 40^\circ\text{C}$ max. 80% RH no condensation
Storage temperature	$-10^\circ\text{C} \sim 50^\circ\text{C}$ max. 80% RH no condensation
Size / weight	Main body : H117XW76XD18mm/approx. 120g Sensor probe : H84X W16XD10mm
Standard accessories included	Instruction manual

## Analog Type



### LX3132

#### Max 10000 lux measurable

- Various light source can be measured such as filament lamp, fluor lamp, and mercury lamp.
- Silicon photodiode
- Taut-band drop shock proof meter

#### Optional accessories

Carrying case : C-01

Range	100/300/1000/3000/10000LUX
Accuracy	$\pm 10\%$ of full scale Receiver angle $30^\circ$ (less than -3%) Receiver angle $60^\circ$ (less than -10%)
Optical sensor	Si photodiode with approximated relative luminous efficiency
Indicator	Analog pointer Taut-band
Battery	R6P X2
Size / Weight	H163XW100XD47mm/300g
Standard accessories included	Instruction manual