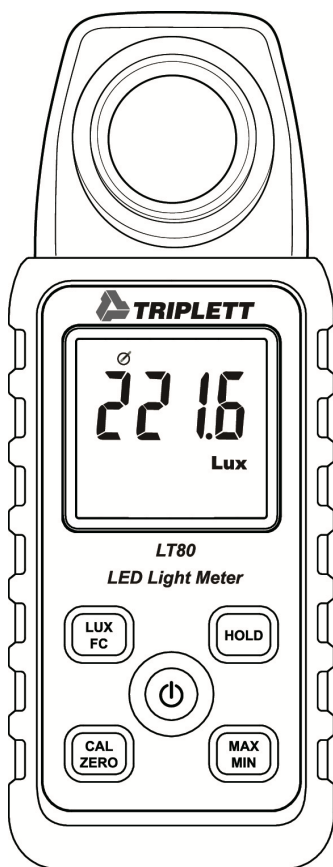


LT80

LED Light Meter



INTRODUCTION

Thank you for purchasing the Triplett LT80 LED Light Meter. The LT80 is designed to provide accurate and reliable measurement of light intensity from white LED light sources, making it an ideal tool for lighting installation, maintenance, and inspection applications. For reference purposes, it can also measure light from fluorescent, metal halide, high-pressure sodium, and incandescent sources (accuracy for these light sources is unspecified). With a measurement range of up to 40,000 Fc (400,000 Lux), the LT80 delivers dependable performance for a wide variety of lighting environments. To ensure safe operation and obtain the best performance from your meter, please read this manual thoroughly before use and retain it for future reference.

What's in the box:

- LT80 Light Meter
- Photo Detector Cover
- 2 × AAA batteries
- User Manual
- Case

Stay updated:

For the most recent version of this user manual, visit www.triplett.com and search for "LT80". You can also find the latest specifications, FAQs, and product datasheets on our website.

SAFETY



Use the meter only as specified in this manual; otherwise, the protection provided by the tester and its warranty may be voided.

- Do not operate the meter in environments containing explosive gases, combustible gases, flammable vapors, or excessive dust.
- To avoid inaccurate readings, replace the battery immediately when the low battery symbol appears on the LCD.
- To prevent damage from contamination or electrostatic discharge (ESD), avoid touching the circuit board unless appropriate ESD precautions have been taken.

Operating Environmental Conditions

Indoor use only. This instrument is designed for use in a Pollution Degree 2 environment.

- Altitude: ≤2000 meters
- Relative Humidity: 80%RH max
- Operating Temperature: 23 to 104°F (-5 to 40°C)

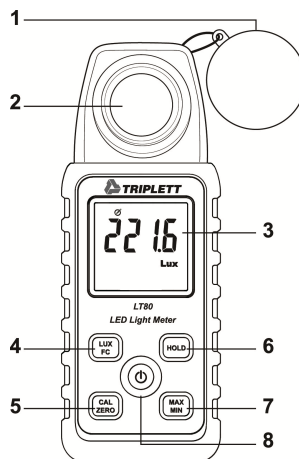
Maintenance and Cleaning

- Servicing not covered in this manual should be performed only by qualified personnel. Visit www.triplett.com/support for support.
- Periodically wipe the housing with a dry cloth. Do not use abrasives or solvents.

METER DESCRIPTION

1. Photo Detector Cover
2. Photo Detector Sensor
3. LCD Display
4. Lux/Fc Button
5. Calibration and ZERO Button
6. Data Hold Button
7. MAX/MIN/AVG Button
8. Power Button: ON/OFF

Note: Battery compartment and Tripod mount are located on the back side of the meter



BUTTON FUNCTIONS

Power Button - ON, OFF, and APO (Auto Power Off)

1. Long press the Power  button to turn ON the meter. To turn OFF, short press the button.
2. The APO icon  on the display indicates the Auto Power Off feature is present. To save battery life, the meter will power off in ~12 mins of inactivity (no button press).
3. To disable the APO feature, while the meter is ON, long press the  button. The APO icon  will disappear from the display. To enable it again, repeat this process.

LUX/FC Button

1. Press the LUX/FC button to select Lux or Fc (Foot-candles) measurement unit.

MAX/AVG/MIN Button

The meter can record the maximum, average, and minimum readings.

1. Short press the MAX/MIN button and the meter will begin to track the maximum, average, and minimum measurements.
2. The MAX icon will display at the top of the display showing the maximum reading. The reading will not change until a higher reading is registered.
3. Press the MAX/MIN button again to switch from maximum to average mode. AVG icon will appear and the average measurement value will be displayed.
4. Press the button again to change the mode from average to minimum. MIN icon will appear and the minimum measurement value will be displayed. The reading will not change until a lower reading is registered.
5. To exit this mode, hold the MAX/MIN button for ~2s. The MAX/AVG/MIN icons should disappear from the display returning to normal mode.

HOLD Button

1. Press the HOLD button to freeze the current reading on the display. HOLD icon will appear.
2. Press the HOLD button again to release the reading. The HOLD icon will disappear.

CAL ZERO Button – Zero Calibration Function

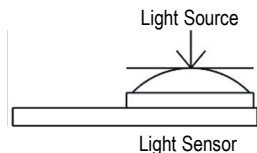
For better accuracy, perform the Zero calibration first before taking measurements.

1. Place the protective sensor cap on the light sensor.
2. Power the meter ON and the LCD should display 0.
3. Press CAL ZERO button to perform the zero adjustment (CAL icon will appear).
4. The CAL icon will disappear when the calibration has been completed.
5. If the protective cap is not covering the sensor during the Zero calibration, the display will read CAP. Cover the sensor with the cap and restart this process.

OPERATING INSTRUCTIONS

Measurement Tips

- For maximum accuracy, position the light sensor so that the light source strikes the sensor surface as close to perpendicular (90°) as possible. Minimize the angle of incidence to reduce measurement error.
- When the meter is not in use, keep the cap on the light sensor for protection.
- If the meter will not be used for an extended period, remove the batteries and store them separately to prevent battery leaks that may damage the meter.
- Do not use or store the meter in environments with excessive temperature or humidity, as this may affect measurement accuracy and damage the instrument.



LED Light Measurements

1. Install the batteries first before operating. See Battery section. Turn the meter ON and remove the protective cap from the light sensor. The LCD should power on. If the display does not turn on, verify that the batteries are installed correctly.
2. The meter measures the illuminance reaching the sensor and displays the result in Foot-candles (Fc) or Lux; $1 \text{ Fc} = 10.76 \text{ Lux}$.
3. Position the sensor so that the light strikes the sensor dome as close to perpendicular (90°) as possible.
4. The LCD can display readings up to 9999. For measurements exceeding this value, the meter automatically applies a multiplier:
 - $\times 10$ indicator: Multiply the displayed value by 10.
 - $\times 100$ indicator: Multiply the displayed value by 100.Example: If the display shows 1100 with the $\times 10$ indicator, the actual measured value is 11,000 Fc.

BATTERY INSTALLATION/REPLACEMENT & DISPOSAL

1. Meter should be OFF. Remove the battery cover from the back of the meter and install the batteries or replace out the old batteries with new ones.
2. When the low battery icon  appears, replace the batteries immediately.
3. Observe correct polarity when snapping in each battery.
4. Align the battery cover in place to close it securely.

Battery Disposal



- Never dispose used or rechargeable batteries in household wastebin.
- As consumers, users are legally required to take used batteries to a collection site or stores that sell batteries.
- Never dispose of batteries in a fire. Batteries may explode or leak.
- Never mix battery types. Always install the same type.

Meter Disposal

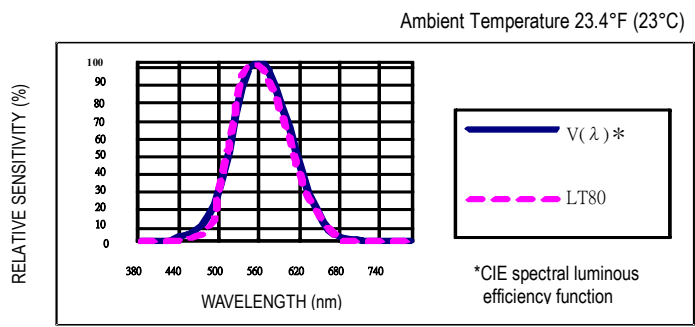
Do not dispose of this instrument in household wastebin. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment.

SPECIFICATIONS

Feature	
Display	9999 count LCD (displays 9999 maximum)
Sensor	Silicon photodiode with cosine correction filter
Light Source Types	White LED, Fluorescent, metal halide, high-pressure sodium, and incandescent
Range	Lux: 999.9, 9999, 99990, 400,000 Lux Foot candles: 99.99, 999.9, 9999, 40,000 Fc
Resolution	Lux: 0.1, 1, 10, 100 Lux Foot candles: 0.01, 0.1, 1, 10 Fc
Accuracy	0 to 50 Fc (0 to 500 Lux) range: $\pm 3\%$ of reading ± 30 digits >50 Fc (>500 Lux) range: $\pm 3\%$ of reading (Calibrated to standard incandescent lamp 2856°K) $\pm 8\%$ of reading other visible light source
Angle deviation from cosine characteristics	30°; $\pm 2\%$
	60°; $\pm 6\%$
	80°; $\pm 25\%$
Operating Temperature/Humidity	23 to 104°F (-5 to 40°C); <80% RH
Storage Temperature/Humidity	14 to 140°F (-10 to 60°C); 0 to 70% RH
Standards	EMC: EN61326-1(2006), IEC 61000-4-2(2008, IEC 61000-4-3(2006) + (2007).
Power	2 × AAA batteries (1.5V, MN2400 LR03 AM4)
Battery life	~200 hours
Dimensions	5.3 × 1.9 × 0.2" (133 × 48 × 23mm)
Weight	8.8oz (250g) including battery

RELATIVE SPECTRAL SENSITIVITY

The deviation from the comparative standards for luminosity is determined by JIS standard C 1609-1993. Peak sensitivity wavelength: 550 nm.



TYPICAL LIGHT LEVELS (1 Fc = 10.76 Lux)

Factories	Fc	Lux	Home	Lux	Fc
Emergency Stairs, Warehouse	2-7	20-75	Washing	100-150	10-15
Exit/Entrance Passages	7-15	75-150	Recreational Activities	150-200	15-20
Packing Work	15-30	150-300	Drawing Room, Table	200-300	20-30
Visual Work: Production Line	30-75	300-750	Makeup	300-500	30-50
Typesetting: Inspection Work	75-150	750-1,500	Reading, Study	500-1,500	50-150
Electronic Assembly, Drafting	150-300	1,500-3,000	Sewing	1,000-2,000	100-200
Office	Fc	Lux	Restaurant	Lux	Fc
Indoor Emergency Stairs	7-10	75-100	Corridor Stairs	75-150	7-15
Corridor Stairs	10-20	100-200	Entrance, Washroom	150-300	15-30
Conference, Reception Room	20-75	200-750	Cooking Room, Dining Table	300-750	30-75
Clerical Work	75-150	750-1,500	Show Window	750-1,500	75-150
Typing, Drafting	150-2000	1,500-2,000			
Store	Fc	Lux	Hospital	Lux	Fc
Indoors	7-15	75-150	Emergency Stairs	30-75	3-7
Corridor/Stairs	15-20	150-200	Stairs	75-100	7-10
Reception	20-30	200-300	Sick Room, Warehouse	100-150	10-15
Display Stand	30-50	300-500	Waiting Room	150-200	15-20
Elevator	50-75	500-750	Medical Exam Room	200-750	20-75
Show Window, Packing Table	75-150	750-1,500	Operating Room	750-1,500	75-150
Storefront, Show Window	150-300	1,500-3,000	Eye Inspection	5,000-10,000	500-1000

CERTIFICATIONS



This product complies with applicable CE requirements, is RoHS compliant, and has been tested to applicable IEC standards.

WARRANTY

Triplett offers warranty to the original purchaser of its products. We guarantee that our products will be free from defects in workmanship and materials for two (2) years from the purchase date.

This warranty does not cover:

- Products purchased from unauthorized distributors.
- Items that have been repaired or altered by unauthorized individuals.
- Damage from misuse, abuse, misapplication, negligence, or accidents.
- Products with altered, defaced, or removed serial numbers.
- Accessories, including batteries.

For product support, registration, FAQs, or to request calibration or repair services, visit www.triplett.com/support.

Imagery is for reference and may be enhanced for clarity. Actual product appearance and screen content may vary slightly. Specifications are subject to change without notice.

For the latest information, visit www.triplett.com.

Copyright © 2026 Triplett. All rights reserved.