

# TM-217 Quantum Meter



## Functions:

PPFD, LUX, foot-candle, CD measurement.

PPFD and LUX 2 Light detector.

Daily light integral

Data hold.

Auto power off and disable auto power off.

LED Back light.

Max /Min hold

Low battery indication

AVG: 5-point method

Real zero function

Calibration adjustment.

Light transmittance %.

Totalized intensity of illumination

Time Hold

Color Correction Factor(LED measurement)

Comparator alarm function.

Specifications:

Display : 4 digits LCD with maximum reading 4000

Datalogging capacity up to 50,000 records.

Manual record capacity up to 200 records.

Applicable system :Windows 7/8/10

Dimension :Meter→172x56x38mm (LxWxH)

Sensor→81x56x38mm (LxWxH)

Length of wring for light sensor: Approx. 100 cm.

Weight : 300g (including battery)

PPFD:

Measuring range	0 to 3,000 $\mu\text{mol m}^{-2}\text{S}^{-1}$
Resolution	1 $\mu\text{mol m}^{-2}\text{S}^{-1}$
Accuracy	$\pm 5\%$
Spectral response	400nm -700nm
Cosine response	10°: $\pm 1.5\%$ 30°: $\pm 3\%$ 50°: $\pm 6\%$ 60°: $\pm 10\%$ 80°: $\pm 30\%$

Illuminance:

Standard	<p>Conforms to DIN 5032 Part 7 Class C</p> <p>Conforms to JIS C 1609-1: 2006 Class A</p> <p>Conforms to JJG 245-2005 Class B</p>
Measuring range	<p>400.0/4000/40,000/400,000 Lux</p> <p>40.00/400.0//4,000/40,000 foot-candle</p>
Resolution	<p>0.1/1/10/100 Lux</p> <p>0.01/0.1/1/10 foot-candle</p>
Relative spectral responsivity ( $f_1'$ )	<p><math>\pm 8</math> % of the CIE spectral luminous efficiency <math>V(\lambda)</math></p>
Cosine correction characteristics ( $f_2$ )	<p><math>\pm 6</math> %</p>
Angled incident light characteristics	<p>Angle of</p> <p>10°: <math>\pm 1.5</math> %</p> <p>30°: <math>\pm 3</math> %</p> <p>60°: <math>\pm 10</math> %</p> <p>80°: <math>\pm 30</math> %</p>

Accuracy	$\pm 3\%$ (Calibrated to standard incandescent lamp 2856°K and < 3000 Lux)
Linearity( $f_3$ ) (accuracy)	< 3000 Lux : $\pm 5\%$ of reading $\pm 1$ digit 3000 Lux to 9999 Lux : $\pm 7.5\%$ of reading $\pm 1$ digit > 10000Lux(930 fc) N/A
Initial Adjustment ( $f_{ADJ}$ ) DIN5032 Part7 JJG 245-2005	$\pm 5\%$ with reading $\pm 1$
Linearity( $f_3$ ) DIN5032 Part7 JJG 245-2005	$\pm 2.5\%$
Range change( $f_{11}$ )	$\pm 2\%$
Fatigue( $f_5$ )	-1%
IR response( $f_{IR}$ )	$\pm 4\%$
UV response( $f_{UV}$ )	$\pm 2.5\%$
Temperature( $f_{6T}$ )	$\pm 1\%/^{\circ}\text{C}$
Response time	Auto range: < 5 seconds; Manual range: < 2 seconds