

Digital Luxmeter with LED illuminance measurements

Page 1 of 2

1. TECHNICAL SPECIFICATIONS

Accuracy is indicated as [% rdg]. It is referred to the following reference conditions: $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$ with RH < 80%. The luxmeter is calibrated with standard incandescent lamp at color temperature 2856 K and corrected LED in white, yellow, green, blue, red LED light spectrum

Illuminance measurements (Autorange)							
Range (Lux)	40	400	4k	40k	400k		
Resolution (Lux)	0.01	0.1	1	10	100		
Accuracy	± (3% rdg)						

Range (Fc)	40	400	4k	40k		
Resolution (Fc)	0.01	0.1	1	10		
Accuracy	± (3% rdg)					

- 1Fc (Footcandle)=10.76Lux, 1Klux=1000Lux, 1Kfc=1000fc.
- For temperature/color different form reference, accuracy its 6%rdg

Luminous intensity measurements (Autorange)Range (Cd)depend on Lux(Fc) measurementsRange distance0.01 ÷ 30.47m (0.01 ÷ 99.99ft)

Luminous intensity (Cd) = Illumination (Lx/Fc) x distance (m²/ft²)

Specifications

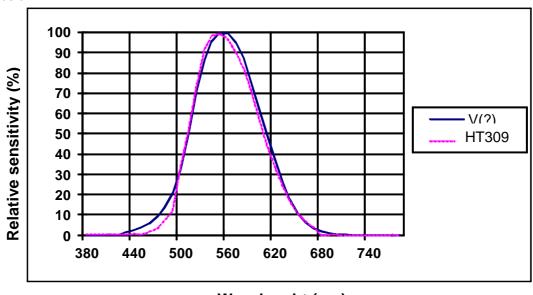
Spectral response: CIE Photopic. (CIE human eye response curve).

Accuracy on angular deviation from cosine curve: 30° (± 2%), 60° (± 6%), 80° (± 25%)

Light source specifications								
LED colour	White	Red	Yellow	Green	Blue	Purple		
Light source factor	0.99	0.516	0.815	1.216	1.475	1.148		

Spectral sensitivity

The photodiode with filters makes the spectral sensitivity almost meet the CIE photo-optic curve $V(\lambda)$ as shown below.



Wavelenght (nm)

Photo detector

The photo detector is a silicon photodiode with spectral response filter.



HT309

Rel. 1.00 of 07/12/11

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Page 2 of 2

2. GENERAL SPECIFICATIONS

Features

Data HOLD MAX/MIN/AVG

Digital Zero adjustment

Autorange

Internal memory: max 99 locations

Recall and Clear memory

Mechanical characteristics

Meter sizes: 130(L) x 55(W) x 38(H)mm Sensor sizes: 80(L) x 55 (W) x 25(H) mm

Weight (including battery): 250g

Supply

Battery type: 1x9V type IEC 6F22 JIS 006P

Low battery indication: "

"is displayed when the battery level is too low.

Battery life: about 200 hours

Auto Power OFF: after 5 minutes of idleness (disable)

Display

Characteristics: LCD, 4000 points, with "OL" indication.

Sample rate: 2.5 times/sec

Standards considered

Standard guidelines: JIS C 1609:1993 and CNS 5119

general Class A specification

ENVIRONMENTAL CONDITIONS

Climatic conditions

Reference temperature: $23^{\circ} \pm 5^{\circ}$ COperating temperature: $-5 \div 40^{\circ}$ COperating humidity:<80% RHStorage temperature: $-10 \div 60^{\circ}$ CStorage humidity:<70% RHMax altitude of use:2000mPollution degree:2

This product conforms to the prescriptions of the EMC directive 2004/108/EEC