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1. TECHNICAL SPECIFICATIONS

Accuracy is indicated as [% rdg]. It is referred to the following reference conditions: 25°C with <80%RH. 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) measurements			
Range distance	0.01 ÷ 30.47m (0.01 ÷ 99.99ft)			

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

Specifications

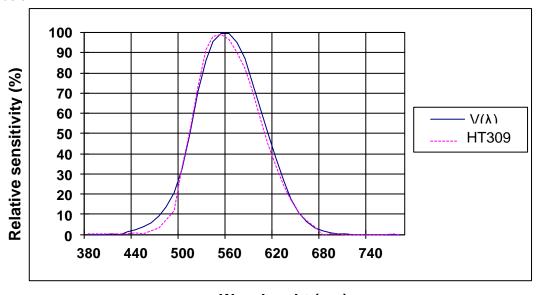
Spectral response: CIE Photopic. (CIE human eye response curve).

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. 2.00 of 10/07/24

Digital Luxmeter with LED illuminance measurements

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2. GENERAL SPECIFICATIONS

Features

Data HOLD MAX/MIN/AVG

Digital Zero adjustment

Autorange

Internal memory: max 99 locations

Recall and Clear memory

Auto Power OFF

Mechanical characteristics

 $\begin{array}{lll} \text{Meter dimensions (L x W x H):} & 190 \text{ x } 65 \text{ x } 45 \text{mm} \\ \text{Sensor dimension (L x W x H):} & 110 \text{ x } 60 \text{ x } 35 \text{mm} \\ \text{Lenght of sensor cable:} & \text{approx.1m} \\ \text{Weight (including battery):} & 255g \\ \text{Mechanical protection:} & \text{IP40} \\ \end{array}$

Supply

Battery type: 1x9V type IEC NEDA 1604 IEC 6F22

Low battery indication: "Two symbol displayed

Battery life: ca 60h (backlight ON), ca 180h (backlight OFF)

Auto Power OFF: after 5min of idleness

Display

Characteristics: LCD, 6 digit, 4000 points, with "OL" indication and backlight

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: 25°C Operating temperature: $-5^{\circ}\text{C} \div 40^{\circ}\text{C}$ Operating humidity: <80%RHStorage temperature: $-10^{\circ}\text{C} \div 60^{\circ}\text{C}$ Storage humidity: <70%RHMax altitude of use: 2000mPollution degree: 2

This instrument satisfies the requirements of EMC Directive 2014/30/EU
This instrument satisfies the requirements of European Directive 2011/65/EU (RoHS)
and 2012/19/EU (WEEE)