

HT309

Rel. 2.00 of 10/07/24

Digital Luxmeter with LED illuminance measurements

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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: Accuracy on angular deviation from cosine curve: CIE Photopic. (CIE human eye response 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(λ) as shown below.



Wavelenght (nm)

Photo detector

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



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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

Meter dimensions (L x W x H): Sensor dimension (L x W x H) : Lenght of sensor cable: Weight (including battery): Mechanical protection: 190 x 65 x 45mm 110 x 60 x 35mm approx.1m 255g IP40

Supply

Battery type: Low battery indication: Battery life: Auto Power OFF: 1x9V type IEC NEDA 1604 IEC 6F22 "Imm" symbol displayed ca 60h (backlight ON), ca 180h (backlight OFF) after 5min of idleness

Display

Characteristics: Sample rate: LCD, 6 digit, 4000 points, with "OL" indication and backlight 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: Operating temperature: Operating humidity: Storage temperature: Storage humidity: Max altitude of use: Pollution degree:

25°C -5°C ÷ 40°C <80%RH -10°C ÷ 60°C <70%RH 2000m 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)