

MK350N Premium Handheld Spectroradiometer



The MK350N Premium is a lightweight, portable and easy-to-use spectral illuminance (lux) meter or spectral light meter. It is designed for fast and accurate illuminance measurements for general lighting and LED applications. Designed to be intuitive and user-friendly, it is ideal for measuring light parameters such as lux, CCT, CRI, CIE Chromaticity Coordinates, Ra, R1 to R15, wavelength and others. The device also includes an integrated flicker meter.

Precision, Power and Portability In a Compact & Lightweight Package

With an intuitive, user-friendly interface, the MK350N Premium offers a dynamic range from 5 to 100,000 lux. The advanced CCD high-speed spectral sensor enables stable and accurate data capture in as little as 3 seconds.

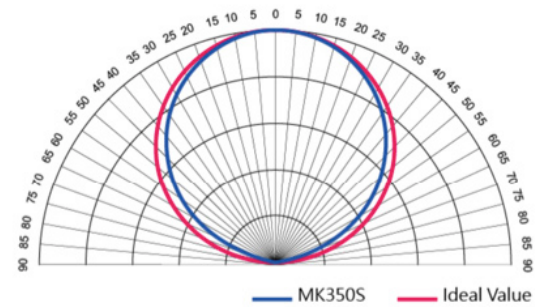
- Completely Stand-Alone Operation - no other equipment necessary (e.g., PC, Smartphone, etc.)
- More than 40 units of measurement
- Built-in file browser allows for quick access to previously saved data
- 3.5" color touch screen with intuitive menu selection
- Conforms to ISO 14001, JIS, DIN and IECQ standards
- Wi-Fi remote control option with IOS or Android applications
- Automatic continuous measurements with data-save to an SD card
- NIST Traceable calibration

MK350N Premium Spectrometer

Key Measurement Modes & Display Results

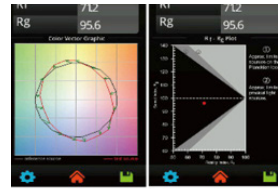
Integrated Cosine Receptor

The integrated cosine receptor is optimized to conform to both JIS AA and DIN B standards.



TM 30-15

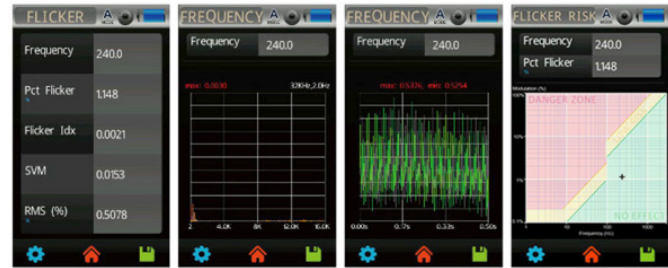
This standard, developed by the Illuminating Engineering Society (IES) in 2015 provides for an accurate and consistent method of measuring lighting parameters such as CRI, GAI and CQS.



Rf (Color Fidelity)	0-100	80†
Rg (Color Saturation)	0-140	80-120

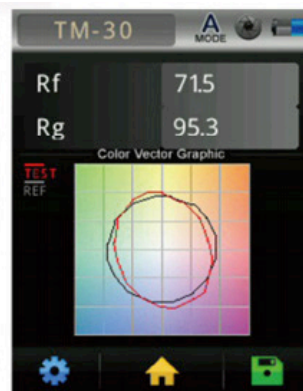
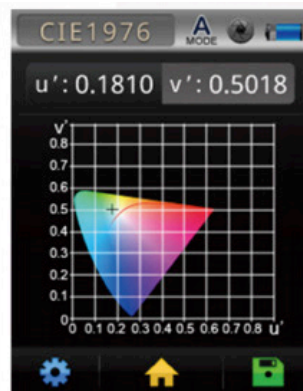
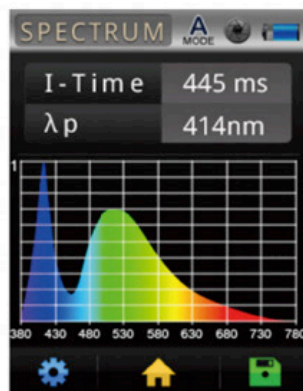
Flicker

With a sampling rate of 100kHz, parameters such as Flicker percentage, Flicker Index and Stroboscopic Effect Visibility and Flicker Risk Mode can be accurately determined.



System Specifications

Capture Function	One-time or continuous			
Operation Mode	Stand-alone, WiFi or USB (to PC, mobile device or tablet)			
Integration Mode	Auto or Manual			
Automatic Dark Calibration	Auto mode			
Measuring Modes	Basic CIE 1976 Chromaticity Browser	Spectrum TM30-15 Option	CRI Flicker	CIE 1931 Chromaticity Frequency
Measuring Capabilities	Light & Color Parameter	Illuminance (lux) or Foot-candle (FC) Correlated Color Temperature (K) CIE Chromaticity Coordinates CIE 1931 x,y CIE 1976 u', v' CIE 1931 XYZ $\Delta X, \Delta Y, \Delta U', \Delta V'$ Delta UV; DUUV Dominant wavelength; Hue, λ_d (nm) Chroma Purity (%) Scotopic and Photopic ratio: S/P		
	Light & Color Evaluation	Color Rendering Index (CRI, Ra) R1 to R15 Color Quality Scale (CQS) Gamut Area Index (GAI) TM-30-15 (Rf, Rg, Color Vector Graphic) Television Lighting Consistency Index (TLCI)		
	Flicker	Flicker Frequency (Hz) Flicker Percentage (%) Flicker Index Stroboscopic Effect Visibility Measure (SVM)		
	Spectral Radiation	Spectral Power Distribution (SPD) mW/m ² Peak Wavelength (λ_p) nm Peak Wavelength Value ($\lambda_p V$) mW/m ² Integration time (I-time) Scotopic and Photopic ratio (s/P)		



System Specifications

Sensor	CMOS linear image sensor	
Wavelength Range	380 nm to 780 nm	
Wavelength Data Increment	1 nm	
Spectral Bandwidth	12 nm	(half power bandwidth)
Wavelength Reproducibility	± 1 nm	(assumes stable input light source)
Measurement Range	5 to 100,000 lux	
Illuminance ¹	Accuracy	± 5%
	Repeatability (2σ)	± 0.2% from 100 to 100,000 lux ± 0.5% from 5 to 100 lux
Color ^{1,2}	Accuracy	x y: ± 0.002 from 100 to 100,000 lux x y: ± 0.0025 from 5 to 100 lux
	Repeatability	± 0.0005 in CIE 1931 x,y
	Repeatability (2σ)	x y: ± 0.0002 from 500 to 100,000 lux x y: ± 0.0004 from 30 to 500 lux x y: ± 0.001 from 5 to 30 lux
CCT Accuracy	± 2%	
CRI Accuracy at Ra	± 1.5%	
Stray Light	-25 dB maximum	(550 ± 40nm monochromatic source)
Integration Time Range	100 μsec to 1 sec	
Digital Resolution	16 bitv	

Flicker

Measurement Range	5 to 100,000 lux	
Sampling Rate	100 kHz	
Frequency Range	5 to 50 kHz	
Frequency Resolution	2, 4, 8, 16, 32 Hz	
Flicker Accuracy	± 5%	

System Configuration

Display	320 x 240 (3.5 in) resistive touch LCD	
Maximum Files	68000 with 8 GB SD card, compatible with Excel® and JPG	
Battery Operation	Up to 5 hours, onboard 3.7 V Li-ion	
External Power	Adapter (included), 2500mAh via USB connector	
Data Interface	SD card (SD2.0.SDHC up to 32 GB) or mini USB port (USB 2.0) or WiFi SD card (IOS or Android)	
Dimensions	148 mm (5.9 in) H x 78 mm (3.1 in) W x 24 mm (.95 in) D	225 g (0.5 lbs) including battery
Language Options	English, Traditional Chinese, Simplified Chinese, Japanese, Spanish, German, French, Italian, Russian	
Camera Resolution	2M pixels	

¹ At 23 ± 2° C and relative humidity ≤ 50%

² Illuminant A at 2,856 K at 20,000 lux

³ 0 Hz AC/DC 10% sine wave unless otherwise specified

Specifications are subject to change without notice.