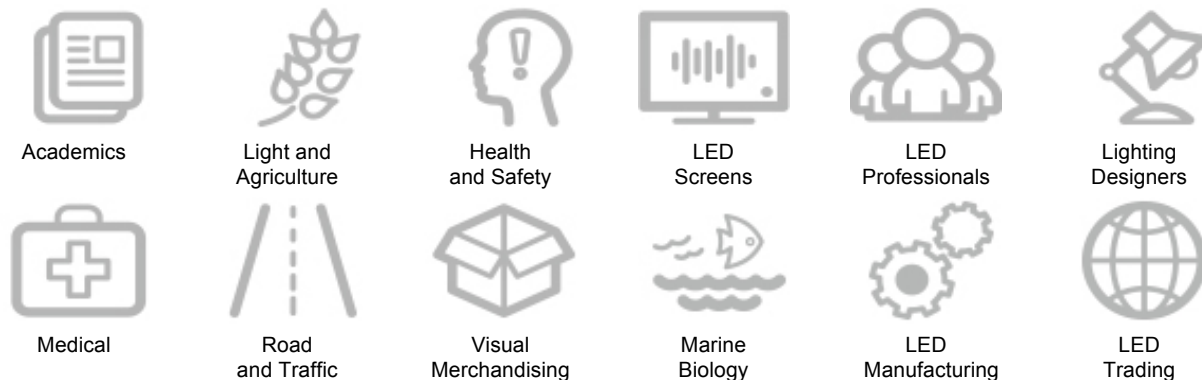# COMPACT MK350D
Handheld Spectrometer

The MK350D is a lightweight, portable, easy-to-operate spectrometer with Bluetooth remote control operations and Micro SD Card data storage. This product has a lot of advanced features for fast and easy light analysis and reporting.

↘ Features

- 70g pocket size, the lightest portable spectrometer in the world.
- Flicker measurement.
- Standalone operation
- Supports Micro SD card for data storage in excel format and jpg format
- Spectrum diagram and 27 other measuring features.
- Compatible with smart iOS or Android devices, wireless controlled by Bluetooth.
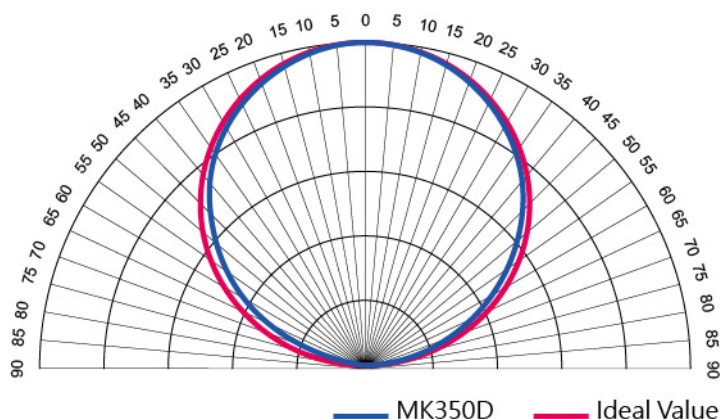- Including uSPECTRUM App and PC analysis and reporting software.

Application

Academics

Light and Agriculture

Health and Safety

LED Screens

LED Professionals

Lighting Designers

Medical

Road and Traffic

Visual Merchandising

Marine Biology

LED Manufacturing

LED Trading

Specification

Spectrum		
Sensor	CMOS Linear Image Sensor	
Wavelength Range	380 to 780 nm	
Wavelength Data Increment	1 nm	
Spectral Bandwidth	Approximately 12 nm (Half Bandwidth)	
Wavelength Reproducibility	± 1 nm [*1]	
Measurement Range	70 to 70,000 lx	
Illuminance Accuracy	Illuminant A @ 2,856 K at 20,000 lx [*2]	± 5%
Color Accuracy		± 0.0025 in CIE 1931 x,y
Color Repeatability		x y : 0.0005
CCT Accuracy		± 2%
CRI Accuracy @ Ra		± 1.5%
Stray Light	-25 dB max. [*3]	
Integration Time Range	6 to 1,000 ms	
Digital Resolution	16 bits	
Flicker		
Frequency Range	10 to 165Hz	
Feature		
Capture Function	One time	
Operation Mode	Standalone Mode / Bluetooth Mode [*4] USB Mode（PC connection）	
Integration Mode	Auto	

Measuring Capabilities	1. Illuminance (LUX)/Foot Candle (fc)
	2. Correlated Color Temperature (CCT)
	3. CIE Chromaticity Coordinates
	(1) CIE 1931 x,y Coordinates
	(2) CIE 1976 u',v' Coordinates
	4. Color Rendering Index (CRI, Ra) / R9
	5. Percent Flicker
	6. Spectral Power Distribution (SPD) mW/m^2
	7. Peak Wavelength (λp)

System Configurations

Display	0.96" 128X64 mono OLED
Max. Files	≒ 1.2 million Files @ 8GB Micro SD Card（Excel）
Battery Operation Time	≦ 3 hours / Fully Charged
Power	USB Power; 700 mAh（3.7V Rechargeable Li-ion Battery）
Data Output Interface	Micro SD Card（SD2.0,SDHC / up to 32G）/
	Mini USB Port（USB 2.0）/
	Bluetooth 3.0 and 4.0 compatible with iOS and Android
Data Format	Compatible Excel
Dimensions	90 x 30 x 32.2 mm（H x W x D）
Weight（with Battery）	70 g ± 5 g
Operating Temperature / Humidity	0 to 35 ℃, relative humidity 70% or less without condensation
Storage Temperature / Humidity	-10 to 40 ℃, relative humidity 70% or less without condensation
Display languages	English

Cosine Correction

—— MK350D —— Ideal Value

*1：Input source must be a stable light source.

*2：Temperature 23±2℃ and relative humidity 50% or less.

*3：Input the 550nm monochromatic light and measure the stray light ratio at 550nm ± 40nm.

*4：It can be connected to mobile phones and tablets.

The company reserves the right to change product specifications at any time without prior notice.