



MK350N Premium

Handheld Spectrometer

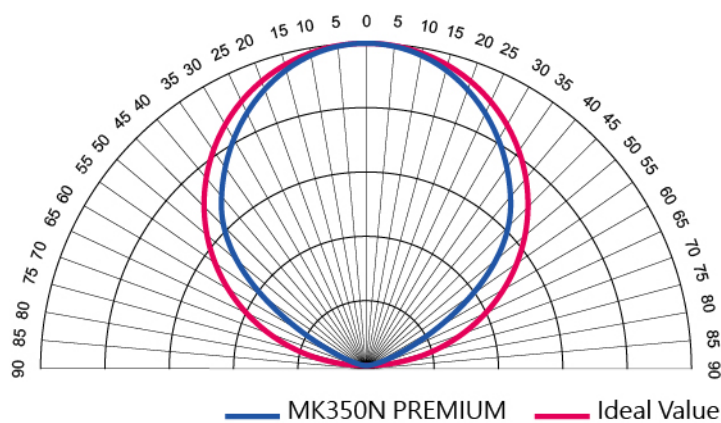
Specification

| 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 | $\pm 1 \text{ nm}^{*1}$ | |
| Measurement Range | Illuminant A @ 2,856 K at 20,000 lx ^{*2} | 5 to 100,000 lx |
| Illuminance Accuracy | | $\pm 2.5\%$ |
| Illuminance Repeatability (2 σ) | | 0.2% (100 ~ 100,000 lx) |
| | | 0.5% (5 ~ 100 lx) |
| Color Accuracy | | x y: ± 0.002 (100 to 100,000 lx) |
| | | x y: ± 0.0025 (5 to 100 lx) |
| Color Repeatability (2 σ) | | x y: 0.0002 (500 to 100,000 lx) |
| | | x y: 0.0004 (30 to 500 lx) |
| | | x y: 0.001 (5 to 30 lx) |
| CCT Accuracy | | $\pm 2\%$ |
| CRI Accuracy @ Ra | $\pm 1.5\%$ | |
| Stray Light | -25 dB max. ^{*3} | |
| Integration Time Range | 100 us to 1,000 ms | |
| Digital Resolution | 16 bits | |
| Flicker | | |
| Measurement Range | 5 to 100,000 lx | |

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|------------------------|---|
| Sampling Rate | 100k sample/sec |
| Frequency Range | 5 to 50k Hz |
| Frequency Resolution | 2, 4, 8, 16, 32 Hz |
| Flicker Accuracy | ± 5% |
| Feature | |
| Capture Function | One time / Continuous |
| Operation Mode | Standalone Mode / WiFi Mode *4 USB Mode (MSC Mode *5+PC connection) |
| Integration Mode | Auto/Manual |
| Measuring Modes | 1. Basic Mode |
| | 2. Spectrum Mode |
| | 3. CIE 1931/1976 Chromaticity Mode |
| | 4. TM-30-15 Mode |
| | 5. Browser Mode |
| | 6. Flicker Mode |
| | 7. Frequency Mode |
| | 8. Compare Mode |
| | 9. Option Mode |
| 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 (3) CIE 1931 XYZ Value |
| | 4. Δx , Δy , $\Delta u'$, $\Delta v'$ |
| | 5. Delta uv (Duv) |
| | 6. Dominant Wavelength (λ_d) |
| | 7. Excitation Purity |
| | 8. Color Rendering Index (CRI, Ra)/R1 to R15 |
| | 9. Color Quality Scale (CQS) |
| | 10. Television Lighting Consistency Index (TLCI) |
| | 11. TM-30-15 (Rf, Rg, Color Vector Graphic) |
| | 12. Flicker Frequency |
| | 13. Percent Flicker |
| | 14. Flicker Index |
| | 15. Stroboscopic Effect Visibility Measure (SVM) |
| | 16. Spectral Power Distribution (SPD) mW/m ² |

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|----------------------------------|---|
| | 17. Peak Wavelength (λ_p) |
| | 18. Peak Wavelength Value (λ_pV) |
| | 19. Intergration Time (I-Time) |
| | 20. Scotopic and Photopic Ratio (S/P) |
| System Configurations | |
| Display | 3.5" 320X240 Resistive Touch LCD |
| Max. Files | ≈ 68,000 Files @ 8GB SD Card (Excel + JPG) |
| Battery Operation Time | ≤ 5 hours / Fully Charged |
| Power | Adapter; 2500 mAh (3.7V Rechargeable Li-ion Battery) |
| Data Output Interface | SD Card (SD2.0,SDHC / up to 32G) / Mini USB Port (USB 2.0) / WiFi SD Card compatible with iOS and Android |
| Data Format | Compatible Excel / JPG |
| Dimensions | 147.5 x 78 x 24 mm (H x W x D) |
| Weight (with Battery) | 255 g ± 10 g |
| Operating Temperature / Humidity | 0 to 35 °C, relative humidity 70% or less without condensation |
| Storage Temperature / Humidity | -10 to 40 °C, relative humidity 70% or less without condensation |
| Display languages | English / Traditional Chinese / Simplified Chinese / Japanese / Spanish / German / French / Italian / Russian |

Cosine Correction



- *1 : Input source must be a stable light source.
- *2 : Temperature 23±2°C 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.
- *5 : MSC- Mass Storage Class.

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