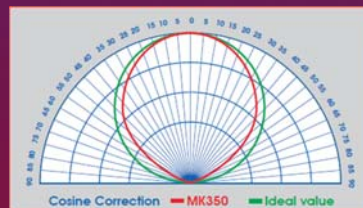


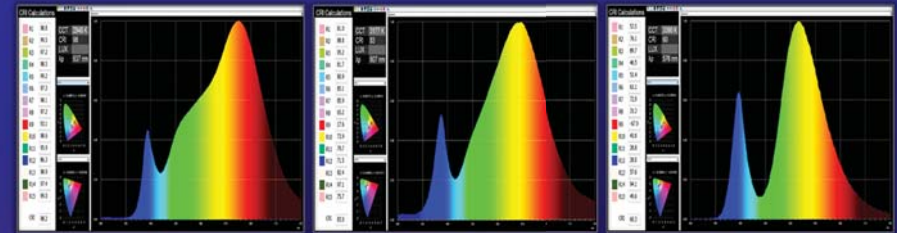
<b>MODEL NUMBER</b>	MK 350
<b>DETECTOR TYPE</b>	CMOS LINEAR SPECTRUM IMAGE SENSOR
<b>COSINE RECEIPT AREA</b>	6.6 ± 0.1 NM
<b>MEASUREMENT RANGE</b>	70 ~ 70000 LUX
<b>WAVELENGTH RANGE</b>	360 ~ 760 NM
<b>EXPOSURE TIME RANGE</b>	8 ~ 1000 MS
<b>CAPTURE MODE</b>	ONCE / CONTINUE
<b>INTEGRATING MODE</b>	AUTO / MANUAL
<b>MEASURING MODES</b>	<ul style="list-style-type: none"> <li>· BASIC VALUE MODE</li> <li>· SPECTRUM GRAPH MODE</li> <li>· C.I.E. 1931 CHROMATICITY DIAGRAM MODE</li> <li>· C.I.E. 1976 U.C.S CHROMATICITY DIAGRAM MODE</li> <li>· ILLUMINANCE / LUX</li> <li>· SPECTRAL IRRADIANCE</li> <li>· C.I.E. CHROMATICITY <ul style="list-style-type: none"> <li>(1) C.I.E. 1931 x,y COORDINATES</li> <li>(2) C.I.E. 1976 U.C.S. u',v' COORDINATES</li> </ul> </li> <li>· PEAK WAVELENGTH</li> <li>· CORRELATED COLOR TEMPERATURE: CCT (IN KELVINS)</li> <li>· COLOR RENDERING INDEX: RA (RENDERING AVERAGE)</li> </ul>
<b>MEASURING CAPABILITIES</b>	16 BITS
<b>DIGITAL RESOLUTION</b>	Yes
<b>DARK CALIBRATION</b>	-25 dB MAX. *1
<b>STRAY LIGHT</b>	1 NM *2
<b>WAVELENGTH DATA INCREMENT</b>	± 0.5 NM *3
<b>WAVELENGTH ACCURACY</b>	± 5%
<b>ILLUMINANCE ACCURACY</b>	ILLUMINANT A @ 2856K ± 0.002 IN CIE x,y
<b>COLOR ACCURACY</b>	AT 20000 LUX ± 0.0005 NM IN CIE x,y
<b>COLOR REPEATABILITY</b>	± 2%
<b>CCT ACCURACY</b>	± 1.5%
<b>CRI ACCURACY @ RA</b>	3.5" LCD 320 x 240 TOUCH PANEL
<b>DISPLAY</b>	≤ 250000 FILES
<b>MAX. FILES @ 2GB SD CARD</b>	≤ 5 HOURS / ONE FULL CHARGE
<b>BATTERY OPERATION TIME</b>	2500 MAH / RECHARGEABLE LI-ION BATTERY
<b>BATTERY</b>	SD CARD / USB 2.0
<b>DATA OUTPUT INTERFACE</b>	COMPATIBLE MICROSOFT OFFICE EXCEL DATE FORMAT
<b>DATA FORMAT</b>	144.2 x 78 x 24 MM (H x W x D)
<b>DIMENSIONS</b>	250 GRAMS ± 20 GRAMS
<b>WEIGHT (WITH BATTERY)</b>	0 ~ 35 °C
<b>OPERATING TEMPERATURE RANGE</b>	

\*1: When monochromatic light of the 550 nm wavelength is input, spectral stray light is defined as the ration of count measured at the input wavelength, to the measured in a region of the input wavelength ± 40 nm.  
\*2: Spectral resolution. 1 nm in saved files, 12 nm on meter screen.  
\*3: Measured under constant light input conditions.



**Moreland Lighting LLC**  
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[info@morelandlighting.com](mailto:info@morelandlighting.com)  
(818) 635-9662

# THE GOOD THE BAD AND THE UGLY



"A Unique and Significant Advancement in the Art and Science of Lighting"

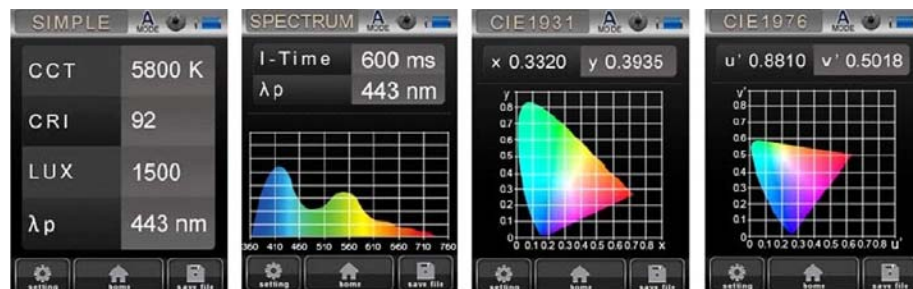


## MK350 SPECTROMETER

**With today's light sources Color Temperature and CRI are not enough information!**

**Now available with Wi-Fi data down load to your computer or pad device.**

The UPRtek MK350 Spectrometer is the first truly compact, lightweight illuminance spectrometer which can be used without a computer for evaluation of next-generation lamps such as LED, OLED and EL illumination, as well as, conventional architectural and stage/ studio lighting. With its advanced sensor and stand-alone design, it will easily measure CRI (Color Rendering Index), illuminance, chromaticity, dominant wavelength, spectral distribution and color temperature of virtually any light source in the lab or out in the field. Readings appear instantly on the easy to read 3.5 inch color touch screen with full screen color graphics. Measurement results stored via an SD card in raw data MS Excel format.



METER SCREEN EXAMPLES OF A HIGH CRI LED WITH POOR RED (R9) OUTPUT.

Lighting sources often show good CRI ratings but may be almost completely devoid of portions of the color spectrum important to the lighting task. As lamps age, phosphors deteriorate at different rates possibly making the light no longer suitable for the application. The MK350 will analyze the light in the field or in the lab quickly and reliably.

## The MK350 Spectrometer Features

- Free first year calibration and Free 1 year warranty extension (\$400 value)
- Modern pocket-sized design
- 3.5" color touch screen interface with full color graphics
- User-friendly controls
- CRI (Color Rendering Index), illuminance (Lux), chromaticity, dominant wavelength, spectral distribution and CCT (correlated color temperature in Kelvin)



## MORESPECTRA SOFTWARE

MoreSpectra software is designed to make light and color measurements easy to use while providing very high resolution and fine detail.

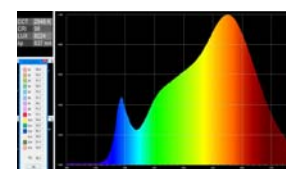
Using the UPRtek MK350 saved files in Excel format, MoreSpectra displays the high 1nm resolution files in brilliant color with simple to understand information while offering the fine details required of a seasoned expert.

Zoom in on any portion of a spectral graph, or CIE chart to closely analyze small details or zoom into a bin chart to see the position and box number. Cursor tools help you check measured values of every NM in the Spectrum or zoom in to a CIE chart and use the cursor tool to see your delta from any point to the measured point. Copy and paste spectral graphs or CIE 1931 and CIE 1976 or the entire screen shot to Word documents, Power Point presentations, Excel files, photo programs, sales brochures, or even emails easily.

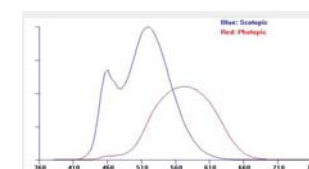


Requires Windows XP or newer with Microsoft Excel.

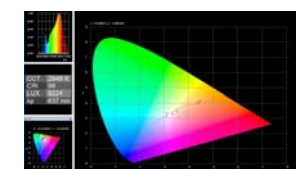
- Correlated Color Temperature (CCT)
- Lux-corrected to V ( $\lambda$ ) spectral response of the human eye
- Spectral Radiance
- Spectral Graph With Zoom
- Dominant Wavelength
- CIE Chromaticity
- CIE 1931 and CIE 1976 Charts With Zoom
- ANSI white bin boxes with color references and Zoom
- Color Rendering Index (CRI)
- Ra Special CRI R1-R15 with color references
- Scotopic & Photopic ratio and graph
- Curser position references with Delta on CIE 1931 & 1976



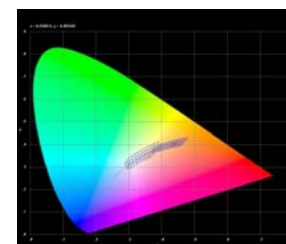
Color Spectrum with CRI 1-15 and color references.



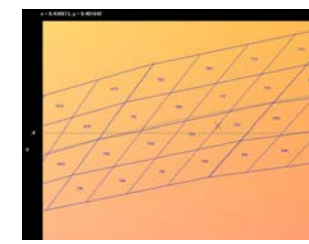
Scotopic & Photopic Graph with ratio.



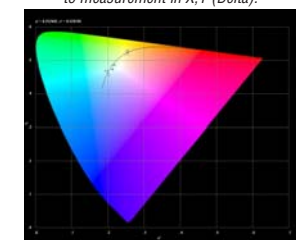
C.I.E. 1931 with six digit X,Y and cursor tool, position of curser in X,Y and distance to measurement in X,Y (Delta).



C.I.E. 1931 with ANSI white bin chart and Cree references.



Zoom available with Color Spectrum and C.I.E. charts. Zoom in to see detail like the Bin box and position in box.



C.I.E. 1976 with six digit U,V, and cursor tool, position of curser in U,V, and distance to measurement in U,V (Delta).