

UNIVERSAL LIGHTPROBE™ SPECTRA USB SENSOR

Universal LightProbe Spectra USB Sensors test a wide range of LED intensities and any color in the visual spectrum, plus white, providing a linear response with a serial digital output via a PC. A standard USB Cable is provided to connect to a mini-type B five-pin USB connector, which is integrated into the Spectra USB Sensor.



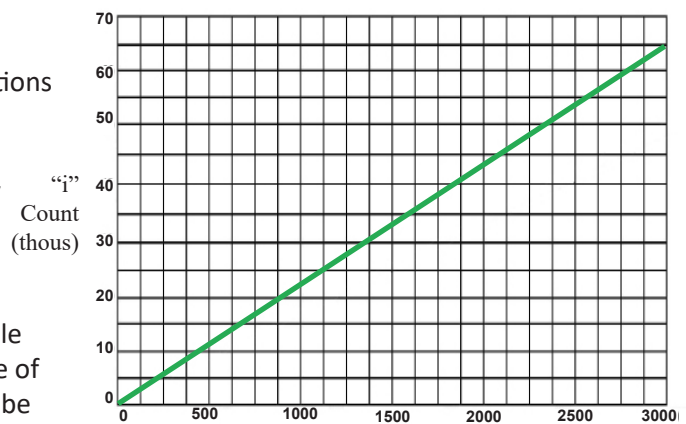
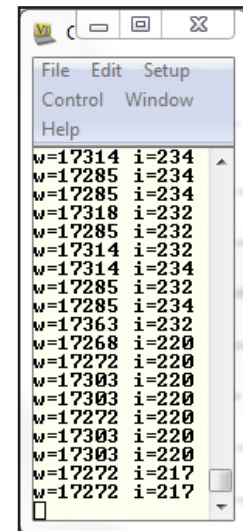
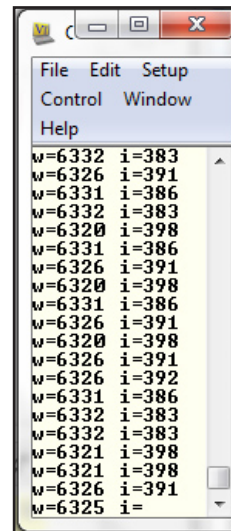
Part Number: ULP SPECTRA USB

COLOR AND WHITE RESPONSE

- Test any color wavelength, from 400-700nm & white.
- Provides serial-digital output of LED color
- “w” = color wavelength in tenths of nanometers
- Or, for white, “w” = a value that corresponds to CCT (see Application Note 39)
- Display/print-out the linear response on either Windows or Linux operating systems
- Color output is independent of LED intensity
- Unique streaming technology enables LED color wavelength (and intensity) to be rapidly and simultaneously accessed by a PC and displayed/printed-out
- Reduces test time and provides continuous automatic data logging for statistical process control (SPC).
- Multipoint display is available

INTENSITY RESPONSE

- Provides serial digital output for LED intensity
- “i” = intensity, from 0 to 65,0000
- Output corresponds to LED luminous intensity in millicandelas, as seen in most LED manufacturers’ specifications
- C.I.E. photopic-curve-corrected
- Tests Leds from 0.03mcd to 18,300mcd; up to 293,000mcd with the Spectra USB Very-Low Sensitivity Sensor
- Read-out of 4 indicates under-ranging - LED is too dim
- Read-out > over 65,000 indicates over-ranging - LED too bright; Spectra USB Low-Sensitivity Sensors available
- Intensity response depends on size of LED, the aperture of the fiber-optic probe and the distance between the probe tip and the LED emitter; for more information on Sensor Sensitivity Responses in millicandelas, please see Application Note 35
- Available in Low and Very-Low Sensitivity models for the test of extremely bright LEDs



Luminous Intensity (mcd)
Typical response for PLCC green LED tested with Universal LightProbe Spectra USB Sensor and Small-Aperture Fiber-Optic Probe

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All Universal LightProbe Sensors share the same form, and are pre-programmed to suit specific LED test requirements. The small size and non-conductive housing is specifically designed to accommodate today's high-density test fixtures.

SPECTRA USB SENSOR CHARACTERISTICS:

Operating temperature range: 0°C to 70°C

Output Port: A standard mini-type B five-pin USB connector is integrated into the Spectra USB Sensor, and a standard USB Cable is provided to connect to a USB port

Sensor Size: 0.560 in. dia x 1.38 in. long.

Typical response time: < 250mS for color and intensity as a serial bit- stream (19200 baud rate)

Fiber-Optic Probes: Can be paired with any of a wide range Universal LightProbe Fiber-Optic Probes

