Field Spectroradiometers | SS-110 and SS-120
Easy-to-use, cost-effective spectral measurement with USB interface.

Wavelength Range Options
Two wavelength range options are available: 340 to 820 nm (SS-110) and 635 to 1100 nm (SS-120).

Portable Design
The Field Spectroradiometer is small and lightweight, and contains all measurement components in a durable, weatherproof housing.

Spectral Measurements
Lighting quality is just as important as lighting quantity. In addition to measuring total PPFD, the new Field Spectroradiometer splits light to individually measure each color intensity or wavelength. Spectral output measurements can be used to maximize light efficiency, change the light characteristics to mimic seasonal changes, optimize visual appearance of displays, and many other applications.

Complete Package
Package includes spectroradiometer and cosine-corrected detector mounted in the housing, 180° FOV head, AL-200 bubble-level, USB cable for computer interface, and USB drive with required drivers and software (Windows compatible, XP and later; Mac compatible 10.9 and later), and carrying case.

Field of View Options
Three field of view (FOV) options are available: 180° FOV hemispherical head for measurement of incoming radiation (included), and 150° FOV wide (AS-010 accessory) and 25° FOV narrow (AS-011 accessory) to measure reflected radiation.

Typical Applications
Measurement of spectral output (energy flux density, photon flux density, or illuminance) of different radiation sources (often for plant or human lighting), and reflectance and transmittance measurements of natural and synthetic surfaces and materials (often plant leaves and canopies).
Sensitivity was determined by collecting spectra under a quartz halogen lamp with an NIST traceable calibration and calculating the ratio of counts measured with the spectrometer to energy flux density from the lamp. Maximum sensitivity of the SS-110 is near 600 nm and maximum sensitivity of the SS-120 is near 750 nm. Sensitivity of the SS-110 is at least 10% of the maximum value at all wavelengths greater than 380 nm and sensitivity of the SS-120 is at least 10% of the maximum value at all wavelengths less than 1030 nm.