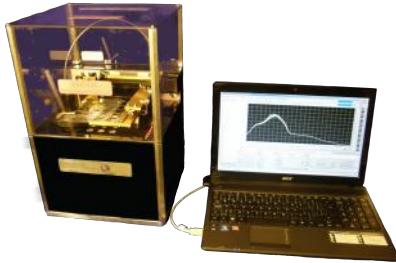




S-40 SPF UV Penetration and Protection Measurement System



The S-40-SPF solid state UV spectrophotometer uses technology developed in the last decade to advance the state of the art of the determination of SPF and UPF values for the sunscreen, cosmetic and textile industries.

Using a high efficiency, long-life LED array combined with an integration sphere coated with a proprietary self-cleaning, high UV reflectance paint, the system automatically captures spectra and saves the processed data in multiple formats (UVPF, SPF, UVAPF, TUV-A, TUV-B, Boots Star rating, and transmission spectra) as well as the monochromatic protection factor (MPF) for any selected wavelength.

Resonance Ltd. gives you unprecedented control and flexibility over your measurements. By using an LED array as the light source, **the S-40-SPF allows the user to define the parameters of the test.** By adjusting the intensity of each LED individually, you can set the exposure spectrum and intensity to match your needs exactly, with the default setting being a solar simulated spectrum.

And if you want to focus on a small band, you can simply turn off any LED's you wont need and further extend the already long life-time of your system.

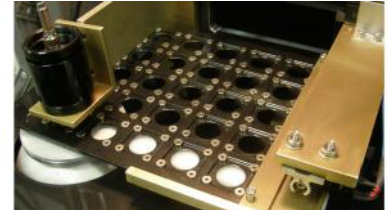
With so much flexibility, the S-40-SPF is an ideal instrument for any laboratory.

Features

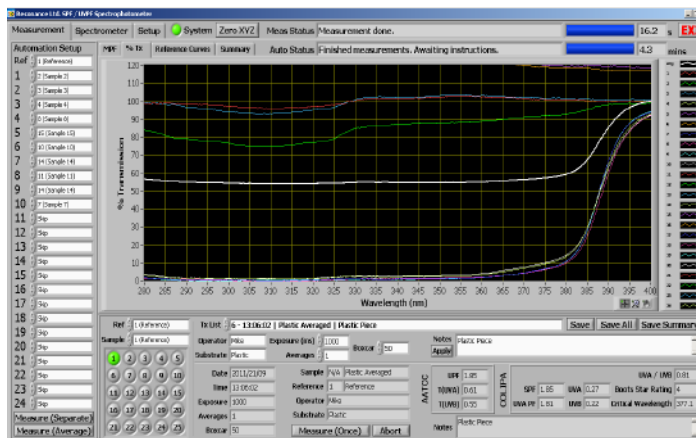
- Wavelength regions can be user-selected from 0.1 to 5nm with CCD Spectrometer
- Meets FDA/UVA in vitro test procedure guidelines
- Flexible LabVIEW™-based software
- Ability to specify exact sample locations using the XYZ stage
- USB interface - only 1 port required
- New dual beam measurement can correct for sample reflectance



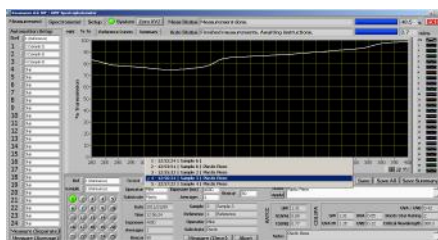
SP-40SPF Specifications	
Excitation Lamp	UV-Vis LED Array
Excitation Wavelength Range	270 - 400nm
Resolution	<1nm
Wavelength Intervals	User selected from 1 - 10nm
Lifetime	>5000 hours
Detection Type	CCD Spectrometer
Sample Selection	2-axis (x,y) motorized sample stage
Number of Samples	24 + 1 reference sample position
Motor Drives	Stepper Controlled
Software	LabVIEW based software
Suitable for Standards	BS 7914 1998; AS/NZS 4399



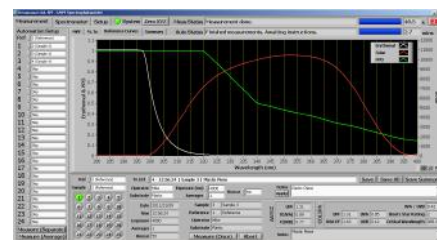
24 + 1 sample holder



Example transmission measurements of multiple samples.



Example sample transmission measurement (plastic sheet)



Erythmal, solar and PPD reference measurement curves.