The FDA has recently published the document (21 CFR Parts 201 and 310 Labeling and Effective Testing: Sunscreen Drug Products for Over-the-Counter Human Use) to address effectiveness testing for over the counter (OTC) sunscreen products containing specified active ingredients. This FDA document contains specific sections that pertain to Sunscreen Protection Factor (SPF) testing and specifies criteria that relate to the use of the Solar Light SPF-290AS™ Sunscreen Protection Factor instrument.

The following points address specific technical issues called out by the FDA document and how they compare with or parallel the SPF-290S™ instrument and its capability.

The above information indicates that the SPF-290AS™ is suitable for the testing as outlined in the FDA document (21 CFR Parts 201 and 310) for effectiveness testing for over the counter (OTC) sunscreen products.

**Measurements**
The SPF-290AS™ is a recording UV spectrophotometer designed and optimized for the determination of SPF values on a variety of sunscreen and cosmetic products reducing the need for in-vivo testing.

Covering both the UVB and UVA spectral regions, the system automatically scans from 290nm to 400nm. Accumulating and storing data at intervals of 1, 2 or 5nm. The Monochromatic protection factor (MPF) is determined for each of the selected wavelengths and is used to calculate the SPF value, using solar irradiance and erythemal constants that are programmed into the software but which can be easily modified.

In addition to sunscreen products, the SPF-290AS™ also complies with the AATCC-183 Fabric Test. Method, enabling its use in a number of testing environments.

The SPF-290AS™ provides highly repeatable results, and has a Windows software interface, allowing for ease of use and high throughput. This results in faster formulation and lower development costs due to the reduction in the need for expensive and time consuming in-vivo panel studies.

For additional information, consult factory.