

Transmission of a Typical SW Filter after Exposure to SW UV.

Exposure times were new (0 hr.), at 103 hr., and at 6969 hr.

Set up Conditions

An Ocean Optics USB2000 spectrometer with UV CCD array was used.

The Analytical Instrument Systems, Inc. DT-1000 with just the UV deuterium lamp was used as a source.

A custom Ocean Optics ZP1000-36"-UV/VIS fiber optic cable was attached to the DT-1000 and going to the Ocean Optics 74-UV collimation lens which was focused on to the opening of the FOIS-1 (Fiber Optics Integrating Sphere).

A UV SYSTEMS, Inc. TripleBright SW lamp (LS-60-254) was used to expose the SW filter.

The irradiation on the SW filter (at the start) was approximate 8 mw/cm^2 of 254 nm UV.

A custom fiber optic cable ZP1000-18"-UV/VIS was between the FOIS and the USB2000 spectrometer.

The filter under test was inserted in-between the 74-UV lens and the opening of the FOIS.

A Dell 5000e Inspiron laptop computer was used with Ocean Optics software OOIBase32.

Scan setting

Wavelength range is from 230 to 405 nm.

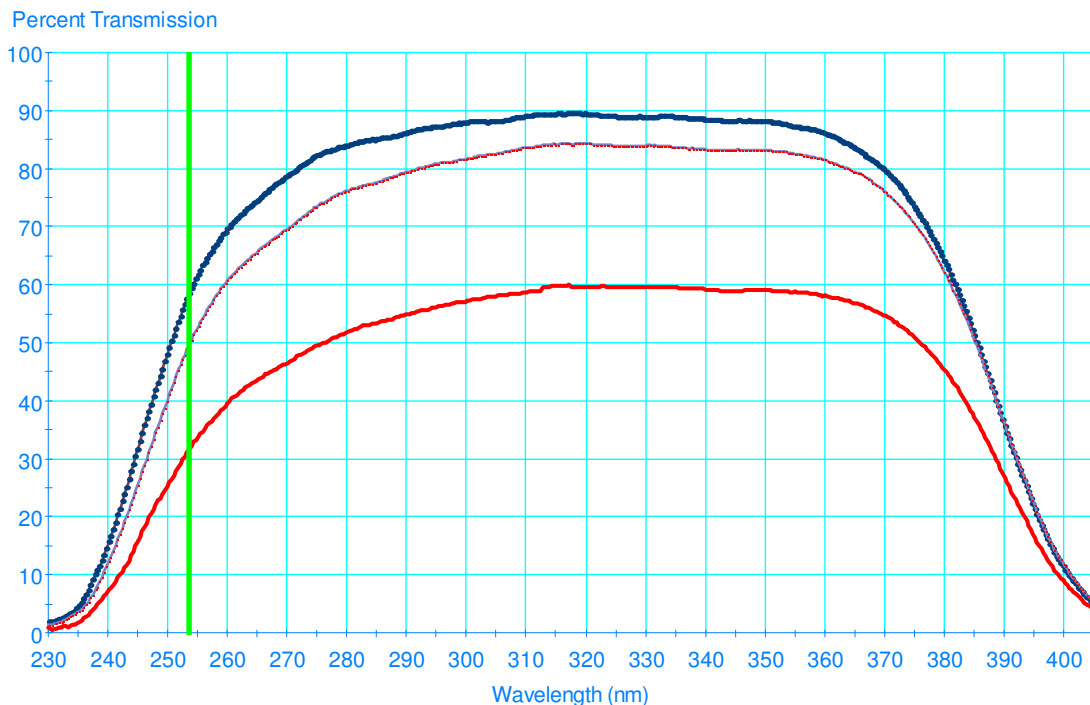
Integ. Time = **4000**

Average = **10**

Boxcar = **6**

Flash Delay = **6**

No electrical zero correction



Measurements of a typical SW filter when exposed to SW UV (254 nm).

The graph shows the effect of different hours of exposure; at new, at 103 hr., and at 6969 hr.

Top graph is unexposed (new), and middle graph is at 103 hours and bottom graph is at 6969 hours.

Transmission at 253.64 nm (green line) is approximately 57.44% for the top (0 hours), 48.81% for the middle (103 hr.), and 31.77% for the bottom (6969 hr.).

Measured by DEN on 4/3/04