UV Meter FAQs

Why should I purchase a UV meter?

- UV meters can be a wise investment for any salon. They help to determine when it is time to change your lamps.
- Also, they can be used to check UV transmission through acrylics. Over a period of time, the composition of acrylic material will actually break down and block a certain percentage of UV light. Using a meter helps you figure out how much UV light is being blocked, and can signal when it is time for acrylic replacement.

How accurate are UV meters?

- Pocket-sized UV meters provide a comparative reading, not an absolute reading. They are only helpful when comparing original readings to current readings.
- Every manufacturer calibrates their meter to give you a reading relative to the original calibration. Therefore, each brand will give different readings.
- UV meters can only read from a small portion of the spectrum of light. Different lamp manufacturers design their lamps to emit UV rays from a particular section of that spectrum. The UV meter may or may not read those rays. Therefore, readings will vary between each brand –and each type—of lamp.
- To get a truly accurate reading of the spectrum of UV light emitted from a tanning lamp, a highly specialized (and very expensive) piece of laboratory equipment would be needed.

How do I take UV readings on my lamps? When do I replace my lamps?

- Since UV readings vary by meter brand, lamp brand, ballasts, voltage, age, and acrylic transmission, lamps need to be measured when they are new to determine what they should read in OEM equipment.
- Since it takes a "burn in" period for tanning lamps to evenly distribute the gases and mercury, wait until you have 10 or more hours on the lamps before taking your first reading.
- To take a reading, allow the unit to run for a warm-up period of at least 3 minutes.
- With the acrylic in place, take a reading in the center of the lamp.
- Take readings from 2 or 3 different lamps in the same manner. The lamps you choose should be in the center of the unit.
- From the 3 lamps you have measured, calculate the average of those readings.
- Record the reading for this unit, as well as the date and current lamp hours.
- Periodically perform this same procedure, recording your findings each time. When the readings reach approximately 70% of the original readings, it is time to replace your lamps.
- Use these readings in conjunction with your lamp hours to determine the lamp replacement schedule that is best for your salon.

Does it really matter where I hold the meter when taking readings?

- Above, we recommended that readings be taken from the center of the lamp.
- However, it does not matter from where on the lamp the readings are taken. As long as you measure every time in the same place and at the same distance from the lamp, your readings will provide more accurate comparisons.

If my lamps are not new, how will I know what they should read?

- If you are taking readings on existing lamps in your unit, you cannot tell if they are "good" or "bad" the reading that you get. There are no original readings to compare them to.
- Replace two adjacent lamps with the new ones of the exact same brand.
- Compare the readings taken from the old lamps to the new ones to determine the difference.
- Please keep in mind that lamps will perform differently in different equipment. Therefore, Brand X may give different readings in Bed A than Brand X in Bed B.

How can I tell when an acrylic needs to be replaced?

- Most UVB should pass through acrylics. As acrylics age, however, they will begin to block or absorb these UV rays.
- Using a meter will help you to determine how much UV transmission your acrylic is blocking.
- See the instructions on how to properly take a UV meter reading above. Follow these instructions with the acrylic removed.
- Then, repeat the procedure with the acrylics in place.
- Compare the first set of readings to the second set of readings. If there is a difference of 20% or more, replace the acrylic as soon as possible.

How do I know which UV meter to purchase?

- The UV meters featured in the Four Seasons catalog and website are manufactured by SolarTech. They come in several different models.
- FS# 01380, Model 5.0: reads UVA + UVB. The primary use of this meter is to measure overall lamp intensity versus aging. This is the most popular UV meter.
- FS# 01384, Model 6.0: reads UVB. The primary use of this meter is to measure UVB intensity and acrylic transmission. You can determine the % of UVB if you divide the 6.0 reading by the 5.0 reading.
- FS# 01385, Model 6.5: reads UV index. It measures solar intensity and is primarily used for outdoor readings.
- FS# 06050, Model 7.0: reads MED/HR output. The primary use of this model is to measure MED/HR, acrylic shield transmission, and for use as an eyewear UV block comparison.