INTRODUCTION

The i1 Photo, i1 Publish, and i1 Pro Bundle instruments can read ambient light. You can use the reading to create ProfileMaker profiles that match under specific lighting conditions.

An ambient light measurement is useful for measuring the spectral power distribution (“color” of light) from a light source, such as room lighting or a standard viewing booth.

The measurement can be used to make profiles in ProfileMaker Pro 4.1.5, 5.0.1, or higher, that will match the original under the measured lighting condition. It cannot be used in i1 Match 2.

Contrary to popular belief, the measurement has no application in monitor profiling, unless you just want to check the value of the ambient light.

HOW TO MEASURE

Step One: Gather the necessary tools.
- i1 Photo or i1 Publish instrument (older i1 Pro must be factory-upgraded)
- Ambient Light Head (clear diffuser and black protective/calibration cap)
- i1 Share 1.3 or 1.4 software (Mac or Windows, available from www.i1color.com)

Step Two: Set up the device.
1. Plug the i1 Photo or i1 Print into your computer’s USB port and launch i1 Share.
2. Place the instrument on the white calibration plaque without the ambient light head and calibrate (Device > Calibrate).
3. Place the ambient light head and cap on the instrument.
4. Select “E” (Evaluate) from the navigation circle (upper left corner of window) and then select “Light” from the Evaluate menu.

Step Three: Calibrate.
1. Select one of the following:
   - Press the measurement button on the i1.
   - Select Measure from the “Device” menu.
   - Select command+M on the keyboard.
2. i1 Share will ask you to attach the ambient light head and the ambient light protective/calibration cover (see photo) and take a reading to calibrate the instrument for ambient light readings.

Measurement Tools

Ambient light head assembly for the i1 Photo and i1 Publish instrument (left) includes the head (center, with white dot), calibration cap (right), and carrying case (top).

To measure ambient light, use the i1 Share 1.3 or 1.4 > Evaluate (“E”) > Light function.
**Step Four: Take a reading.**
1. Point the ambient light head toward the light source you want to measure and take a reading.

2. The ambient light measurement should appear as a spectral power distribution curve in the “Illuminance” section (right side of i1 Share window).

**Step Five: Use the measurement.**
You can use the ambient light measurement to make a profile if you have ProfileMaker 4.1.5, 5.0.1, or later (but not i1 Match). There are three ways to do this:

• Drag the light source directly to the ProfileMaker Printer profile window.

• Save the measurement as a CXF file and open it ProfileMaker's light source menu.

• Place the CXF file into the ProfileMaker > Measurement Files > Light Sources folder which will enable it to appear in the ProfileMaker Light Source pop-up.

The following information will be available:

• **CRI.** Color rendering index, a value from 0–100 that describes the quality of illumination in terms of evenness of spectral distribution. CRI can be misleading as the standard for color temperatures below 5000 K is incandescent light, which produces an artificially high value.

• **Spectral Power Distribution.** A spectral curve showing the power output of the light. Some light sources will exhibit strong peaks that correlate with lower CRI values.

• **Color Temperature.** The “color” of light on the Kelvin temperature scale, in which lower values are warmer illumination and higher values are cooler.

• **Luminance.** Brightness of light in lux.