



VERIFICATION PROBE USER MANUAL

The OptiGauge II system uses an internal laser reference that continuously calibrates the equipment for optimal accuracy. For customers requiring thickness verification checks on their OptiGauge II equipment, Lumetrics, Inc. provides a self-contained verification probe (model number 13000-90) to ensure that the system is measuring properly. The verification probe contains a built-in glass sample with a known thickness.

The verification probe includes a certificate documenting its optical thickness value.

To use the verification probe, proceed as follows:

1. Carefully connect the fiber connector of the verification probe to the OptiGauge II.
2. Open the OptiGauge Control Center software.
3. On the System Configuration tab set values to:

Table 1: Control values

Start Point	1
Range	16000
LED Level	1 below saturation
Threshold	Exclude noise and ghost peaks
Peak Width	8
Noise Reduction	5
Sample Averages	30
Units	µm
Layers Displayed	1

4. In the Measurement Data window, select the numeric data tab and set the Refractive Index of layer 1 to 1.0.
5. Auto Zoom the Waveform Window by right clicking the mouse and selecting Auto Zoom.
6. Ghost Peaks
 - a. Using the recommended LED Level value, ghost peaks may appear on the waveform graph (indicated in figure 1). Raise the threshold to only include the two tallest peaks and ignore the ghost peaks.
7. If needed, the LED level should be adjusted such that the standard deviation in the numeric tab is reading its lowest value (less than or equal to 0.1).
8. Compare thickness value in OCC (highlighted in red in figure 1) to the thickness value on verification probe certificate (highlighted in red in figure 2).

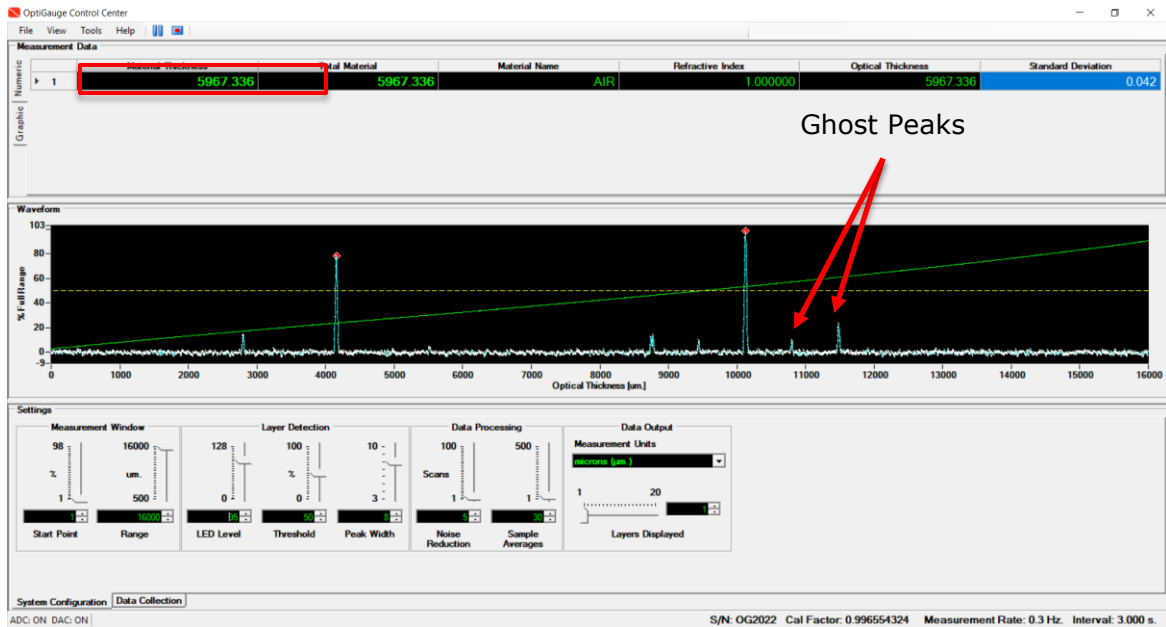


Figure 1: Example of how OCC should appear when configured to measure a verification probe

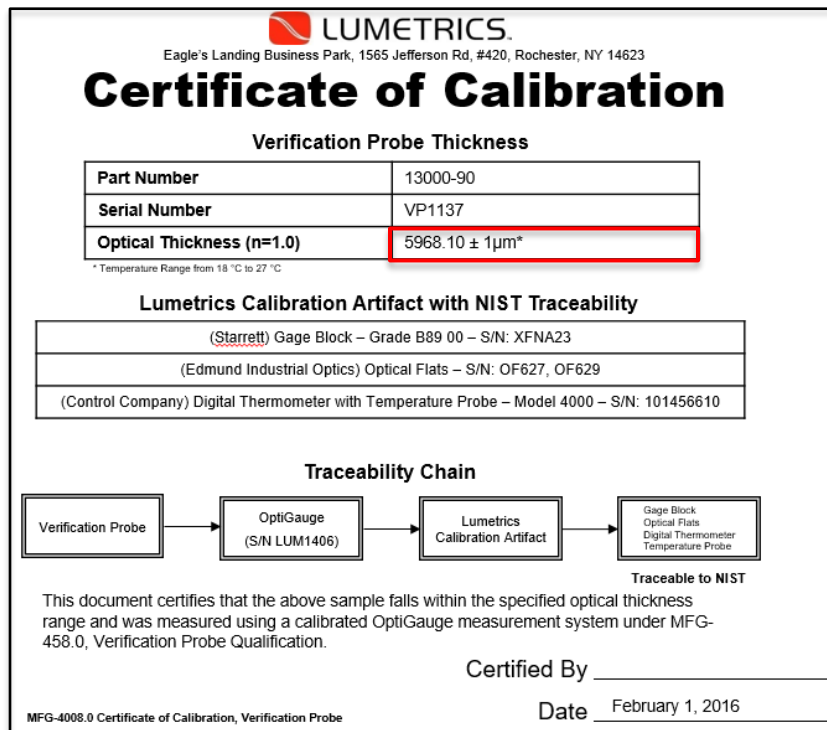


Figure 2: Example of verification probe certificate