

# Calibration Report: Quantum Sensor

## S/N: Q123342

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### Summary

Calibration date: 2024 Sept 30

Next Calibration date: As needed

A collection, analysis, and calibration of data from a Quantum Sensor, S/N: Q123342 has been completed. Li-Cor, Inc., the manufacturer of the instrument, performed the calibration. The data was collected by Li-Cor on 2024 Sept 30.

Model: LI-190

Serial Number: Q123342

The calibration constant and assigned multiplier values show the calibration variables of the sensor. The certificate of calibration displays how the calibration was performed, including traceability to national standards.

The Quantum Sensor is calibrated against a standardized lamp. The following pages provide more detail into the calibration process and results.

Application: The Li-Cor sensor is read by a Campbell Scientific data logger that collects raw voltage data. The correction that would be applied during processing of raw data is the "SMV sensor" multiplier listed on the certificate of calibration.

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# CERTIFICATE of CALIBRATION for LI-COR SENSOR

Quantum Sensor  
Model Number: LI-190

Serial Number: Q123342

Calibration Date: **September 30, 2024**  
Manufacture Date: **September 27, 2024**

## Calibration Constant(s):

Output: 6.74 microamps per 1000  $\text{umol s}^{-1} \text{m}^{-2}$

## For use with LI-COR handheld meters and loggers:

Multiplier: -148.39  $\text{umol s}^{-1} \text{m}^{-2}$  per microamp

## If this is an LI-190-BL (3-wire bare leads):

Multiplier: 148.39  $\text{umol s}^{-1} \text{m}^{-2}$  per microamp

## For use with LI-COR 2290 (604 ohm) millivolt Adapter:

Multiplier: -245.68  $\text{umol s}^{-1} \text{m}^{-2}$  per millivolt

## If this is an SL or SMV sensor:

Multiplier: -200  $\text{umol s}^{-1} \text{m}^{-2}$  per millivolt

**IMPORTANT:** Read the appropriate instruction manual ([www.licor.com/Quantum-manual](http://www.licor.com/Quantum-manual)) before using this sensor

**IMPORTANT:** It is recommended that sensors be recalibrated every two years after field deployment.

Calibration Technician: Linh Nguyen

Calibration standard used: Working standard lamp 1677C

Calibration traceable to the National Institute of Standards and Technologies (NIST) through NIST-calibration lamp number F-226.  
(NBS Test No. 534/237689-86)

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