



Biospherical Instruments Inc.

Calibration Date: 01/28/25
Model Number: QSP2350
Serial Number: 70513
Operator: FG
Standard Lamp: V-037 (1/3/19)
Operating Voltage Range: 6 to 15VDC

Job No.: R-50648

Note: The QSP2350 output is a voltage that is proportional to the log of the incident irradiance.
To calculate irradiance, use this formula:

$$\text{Irradiance} = \text{Calibration factor} * (10^{\text{Light Signal Voltage}} - 10^{\text{Dark Voltage}})$$

Dry Calibration Factor: $3.51\text{E}+12$ quanta/cm²-sec per volt $5.83\text{E}-06$ μEinsteins/cm²-sec per volt
Wet Calibration Factor: $6.19\text{E}+12$ quanta/cm²-sec per volt $1.03\text{E}-05$ μEinsteins/cm²-sec per volt

Sensor Test Data and Results

Sensor Supply Current (Dark): 3.4 mA
Sensor Supply Voltage: 6 Volts

Sensor Calibration Signal Voltage: 3.424 Volts
Sensor Dark Voltage: 0.0063 Volts

Lamp Integrated PAR Irradiance: $9.31\text{E}+15$ quanta/cm²-sec 0.01546 μEinsteins/cm²sec
Immersion Coefficient: 0.5664

M=1.0
B=0.0
use calibration constant = 9615384615
use offset = -0.10551965
multiplier = 1
μE/m² sec
μmol photon/m² sec

Note:

Annual calibration is recommended.