

Job No.: R50935

Calibration Date: 05/30/23

Model Number: QSP2350

Serial Number: 70368

Operator: TPC

Standard Lamp: V-043(7/24/19)

Operating Voltage Range: 6 to 15 VDC (+)

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: 3.63E+12 quanta/cm²·sec per volt 6.03E-06 μ Einsteins/cm²·sec per volt
Wet Calibration Factor: 6.41E+12 quanta/cm²·sec per volt 1.06E-05 μ Einsteins/cm²·sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.3 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.66E+15 quanta/cm²·sec 0.01605 μ Einsteins/cm²·sec

Immersion Coefficient: 0.566

Nominal Filter OD	Expected Transmission	Calibrated Trans.	Sensor Voltage	Expected Voltage	Voltage % Error	Measured Trans.	Transmission Error (%)	Test Irrad. (quanta/cm ² ·sec)
No Filter	100%	100.00%	3.426	3.426	0%	100.00%	0.0	9.66E+15
0.3	50%	36.10%	2.985	2.983	0%	36.24%	-0.4	3.50E+15
0.5	32%	27.60%	2.872	2.866	0%	27.92%	-1.2	2.70E+15
1	10%	9.27%	2.395	2.393	0%	9.29%	-0.2	8.98E+14
2	1%	1.11%	1.473	1.471	0%	1.08%	3.1	1.04E+14
3	0.10%	0.05%	0.252	0.153	39%	0.03%	83.0	2.85E+12
RG780	0.00%	0.00%	0.004	0.004	0%	0.00%	-100.0	3.36E+10

Dark Before: 0.004 Volts
Light - No Filter Hldr.: 3.424 Volts
Dark After - NFH: 0.004 Volts
Average Dark 0.0040 Volts

Notes:

1. Annual calibration is recommended.

2) This section is for internal use and for more advanced analysis.