

Calibration Date: 04/07/21

Job No.: R50263

Model Number: QSP2300

Serial Number: 70281

Operator: TPC

Standard Lamp: V-042(11/12/20)

Operating Voltage Range: 6 to 15 VDC (+)

Note: The QSP2300 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: 2.99E+12 quanta/cm²·sec per volt 4.97E-06 μEinsteins/cm²·sec per volt

Wet Calibration Factor: 5.28E+12 quanta/cm²·sec per volt 8.77E-06 μEinsteins/cm²·sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.5 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.43E+15 quanta/cm²·sec 0.01566 μEinsteins/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%	3.499	3.499	0%	100.00%	0.0	9.43E+15
0.3	50%	36.10%	3.058	3.057	0%	36.20%	-0.3	3.41E+15
0.5	32%	27.60%	2.944	2.940	0%	27.84%	-0.9	2.63E+15
1	10%	9.27%	2.474	2.466	0%	9.41%	-1.5	8.88E+14
2	1%	1.11%	1.558	1.544	1%	1.11%	-0.2	1.05E+14
3	0.10%	0.05%	0.382	0.227	41%	0.04%	22.0	4.22E+12
RG780	0.00%	0.00%	0.060	0.012	79%	0.00%	-100.0	4.43E+11

Dark Before: 0.012 Volts

Light - No Filter Hldr.: 3.499 Volts

Dark After - NFH: 0.012 Volts

Average Dark 0.0124 Volts

Notes:

1. Annual calibration is recommended.

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