

Calibration Date: 05/30/23

Job No.: R50938

Model Number: QSP2300

Serial Number: 70545

Operator: TPC

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

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: 3.45E+12 quanta/cm²·sec per volt 5.74E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 6.10E+12 quanta/cm²·sec per volt 1.01E-05 μEinsteins/cm²·sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.4 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.66E+15 quanta/cm²·sec 0.01605 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%	3.447	3.447	0%	100.00%	0.0	9.66E+15
0.3	50%	36.10%	3.006	3.005	0%	36.20%	-0.3	3.50E+15
0.5	32%	27.60%	2.894	2.888	0%	27.96%	-1.3	2.70E+15
1	10%	9.27%	2.429	2.414	1%	9.56%	-3.0	9.24E+14
2	1%	1.11%	1.523	1.492	2%	1.15%	-3.8	1.12E+14
3	0.10%	0.05%	0.361	0.175	52%	0.05%	17.3	4.48E+12
RG780	0.00%	0.00%	0.009	0.009	0%	0.00%	-100.0	7.58E+10

Dark Before: 0.009 Volts
Light - No Filter Hldr.: 3.447 Volts
Dark After - NFH: 0.009 Volts
Average Dark 0.0094 Volts

Notes:

1. Annual calibration is recommended.
- 2) This section is for internal use and for more advanced analysis.