

Calibration Date: 01/26/23

Model Number: QSP2300

Serial Number: 70777

Operator: TPC

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

Operating Voltage Range: 6 to 15 VDC (+)

Job No.: R50897

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: 3.91E+12 quanta/cm²·sec per volt 6.50E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 6.91E+12 quanta/cm²·sec per volt 1.15E-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%	3.393	3.393	0%	100.00%	0.0	9.66E+15
0.3	50%	36.10%	2.953	2.951	0%	36.28%	-0.5	3.51E+15
0.5	32%	27.60%	2.838	2.834	0%	27.81%	-0.8	2.69E+15
1	10%	9.27%	2.360	2.360	0%	9.23%	0.5	8.92E+14
2	1%	1.11%	1.446	1.438	1%	1.09%	2.0	1.05E+14
3	0.10%	0.05%	0.308	0.121	61%	0.04%	31.8	4.04E+12
RG780	0.00%	0.00%	0.238	0.013	94%	0.03%	-100.0	2.85E+12

Dark Before: 0.013 Volts

Light - No Filter Hldr.: 3.393 Volts

Dark After - NFH: 0.013 Volts

Average Dark 0.0134 Volts

Notes:

1. Annual calibration is recommended.

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