

Calibration Date: 01/30/18

Job No.: R13169

Model Number: QSP2300

Serial Number: 70547

Operator: TPC

Standard Lamp: V-041(7/21/16)

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: 3.56E+12 quanta/cm²·sec per volt 5.91E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 6.28E+12 quanta/cm²·sec per volt 1.04E-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: 9.73E+15 quanta/cm²·sec 0.01615 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%	3.437	3.437	0%	100.00%	0.0	9.73E+15
0.3	50%	36.10%	3.003	2.995	0%	36.78%	-1.9	3.58E+15
0.5	32%	27.60%	2.889	2.878	0%	28.29%	-2.4	2.75E+15
1	10%	9.27%	2.422	2.404	1%	9.62%	-3.6	9.36E+14
2	1%	1.11%	1.516	1.482	2%	1.16%	-4.5	1.13E+14
3	0.10%	0.05%	0.396	0.165	58%	0.05%	-1.1	5.30E+12
RG780	0.00%	0.00%	0.005	0.006	-14%	0.00%	-100.0	4.12E+10

Dark Before: 0.006 Volts

Light - No Filter Hldr.: 3.438 Volts

Dark After - NFH: 0.006 Volts

Average Dark 0.0057 Volts

Notes:

1. Annual calibration is recommended.

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