

Calibration Date: 05/01/13
Model Number: QSP2300
Serial Number: 70497
Operator: TPC
Standard Lamp: V-031(3/7/12)

Job No.: L11541

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: 3.31E+12 quanta/cm²·sec per volt 5.49E-06 μEinsteins/cm²·sec per volt

Wet Calibration Factor: 5.84E+12 quanta/cm²·sec per volt 9.70E-06 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: 1.04E+16 quanta/cm²·sec 0.01733 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	1.04E+16
0.3	50%	36.10%	3.060	3.057	0%	36.36%	-0.7	3.80E+15
0.5	32%	27.60%	2.945	2.940	0%	27.90%	-1.1	2.91E+15
1	10%	9.27%	2.479	2.466	1%	9.51%	-2.5	9.93E+14
2	1%	1.11%	1.562	1.544	1%	1.12%	-1.3	1.17E+14
3	0.10%	0.05%	0.416	0.227	46%	0.05%	5.3	5.31E+12
RG780	0.00%	0.00%	0.003	0.003	1%	0.00%	-100.0	2.09E+10

Dark Before: 0.003 Volts

Light - No Filter Hldr.: 3.499 Volts

Dark After - NFH: 0.003 Volts

Average Dark 0.0027 Volts

Notes:

1. Annual calibration is recommended.

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