

Calibration Date: 06/01/16
Model Number: QSP2300
Serial Number: 70545
Operator: TPC
Standard Lamp: V-035(3/4/15)
Operating Voltage Range: 6 to 15 VDC (+)

Job No.: R12599

Note: The QSP2300 output is a voltage that is proportional to the log of the incident irradiance.
To calculate irradiance, use this formula:

$$\text{Irradiance} = \text{Calibration factor} * (10^{\wedge}\text{Light Signal Voltage} - 10^{\wedge}\text{Dark Voltage})$$

Dry Calibration Factor: 2.99E+12 quanta/cm²-sec per volt 4.97E-06 μ Einsteins/cm²-sec per volt
Wet Calibration Factor: 5.28E+12 quanta/cm²-sec per volt 8.77E-06 μ Einsteins/cm²-sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.3 mA
Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 1.03E+16 quanta/cm²-sec 0.01713 μ Einsteins/cm²sec
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%	3.538	3.538	0%	100.00%	0.0	1.03E+16
0.3	50%	36.10%	3.100	3.096	0%	36.42%	-0.9	3.76E+15
0.5	32%	27.60%	2.983	2.979	0%	27.82%	-0.8	2.87E+15
1	10%	9.27%	2.518	2.505	1%	9.52%	-2.6	9.82E+14
2	1%	1.11%	1.604	1.583	1%	1.13%	-2.2	1.17E+14
3	0.10%	0.05%	0.446	0.266	40%	0.05%	4.0	5.36E+12
RG780	0.00%	0.00%	0.009	0.009	-2%	0.00%	-100.0	6.26E+10

Dark Before: 0.009 Volts
Light - No Filter Hldr.: 3.538 Volts
Dark After - NFH: 0.009 Volts
Average Dark: 0.0092 Volts

Notes:

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