

Calibration Date: 03/27/09
Model Number: QSP2300
Serial Number: 70172
Operator: TPC
Standard Lamp: BSI-1(8/28/08)

Job No.: R10212

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: 2.70E+12 quanta/cm²-sec per volt 4.49E-06 μEinsteins/cm²-sec per volt
Wet Calibration Factor: 4.55E+12 quanta/cm²-sec per volt 7.56E-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: 9.83E+15 quanta/cm²-sec 0.01632 μEinsteins/cm²-sec
Immersion Coefficient: 0.594

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%	3.560	3.560	0%	100.00%	0.0	9.83E+15
0.3	50%	36.10%	3.118	3.118	0%	36.11%	0.0	3.55E+15
0.5	32%	27.60%	3.006	3.001	0%	27.88%	-1.0	2.74E+15
1	10%	9.27%	2.539	2.527	0%	9.49%	-2.3	9.33E+14
2	1%	1.11%	1.627	1.606	1%	1.14%	-2.5	1.12E+14
3	0.10%	0.05%	0.460	0.288	37%	0.05%	4.3	5.10E+12
RG780	0.00%	0.00%	0.010	0.010	0%	0.00%	-100.0	6.41E+10

Dark Before: 0.010 Volts
Light - No Filter Hldr.: 3.562 Volts
Dark After - NFH: 0.010 Volts
Average Dark 0.0102 Volts

Notes:

1. Annual calibration is recommended.

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