

Calibration Date: 02/26/15
Model Number: QSP2300
Serial Number: 70359
Operator: TPC
Standard Lamp: V-033(3/7/12)

Job No.: R12148

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): 3.5 mA
Supply Voltage: 6 Volts
Lamp Integrated PAR Irradiance: 9.34E+15 quanta/cm²·sec 0.01551 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%	3.451	3.451	0%	100.00%	0.0	9.34E+15
0.3	50%	36.10%	3.012	3.009	0%	36.33%	-0.6	3.39E+15
0.5	32%	27.60%	2.899	2.892	0%	28.03%	-1.5	2.62E+15
1	10%	9.27%	2.428	2.418	0%	9.45%	-1.9	8.82E+14
2	1%	1.11%	1.512	1.496	1%	1.11%	-0.4	1.04E+14
3	0.10%	0.05%	0.337	0.179	47%	0.04%	29.4	3.88E+12
RG780	0.00%	0.00%	0.003	0.003	-1%	0.00%	-100.0	2.45E+10

Dark Before: 0.003 Volts
Light - No Filter Hldr.: 3.451 Volts
Dark After - NFH: 0.003 Volts
Average Dark 0.0032 Volts

Notes:

1. Annual calibration is recommended.

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