

Calibration Date: 02/26/15
Model Number: QSP2300
Serial Number: 70297
Operator: TPC
Standard Lamp: V-033(3/7/12)
Operating Voltage Range: 6 to 15 VDC (+)

Job No.: R12147

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: 2.73E+12 quanta/cm²·sec per volt 4.54E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 4.82E+12 quanta/cm²·sec per volt 8.01E-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: 9.34E+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%	3.534	3.534	0%	100.00%	0.0	9.34E+15
0.3	50%	36.10%	3.092	3.092	0%	36.08%	0.1	3.37E+15
0.5	32%	27.60%	2.976	2.975	0%	27.67%	-0.2	2.58E+15
1	10%	9.27%	2.501	2.501	0%	9.23%	0.4	8.62E+14
2	1%	1.11%	1.569	1.579	-1%	1.05%	5.2	9.86E+13
3	0.10%	0.05%	0.373	0.262	30%	0.04%	35.2	3.72E+12
RG780	0.00%	0.00%	0.163	0.005	97%	0.01%	-100.0	1.24E+12

Dark Before: 0.005 Volts
 Light - No Filter Hldr.: 3.534 Volts
 Dark After - NFH: 0.005 Volts
 Average Dark 0.0045 Volts

Notes:

1. Annual calibration is recommended.

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