

Calibration Date: 03/24/08
Model Number: QSP-2300
Serial Number: 70171
Operator: TPC
Standard Lamp: 1537(10/25/2006)
Operating Voltage Range: 6 to 15VDC (+)

Job No.: L9877

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: 3.11E+12 quanta/cm²·sec per volt 5.17E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 5.24E+12 quanta/cm²·sec per volt 8.71E-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: 8.83E+15 quanta/cm²·sec 0.01467 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%	3.453	3.453	0%	100.00%	0.0	8.83E+15
0.3	50%	36.10%	3.011	3.011	0%	36.08%	0.1	3.19E+15
0.5	32%	27.60%	2.897	2.894	0%	27.77%	-0.6	2.45E+15
1	10%	9.27%	2.428	2.420	0%	9.40%	-1.4	8.31E+14
2	1%	1.11%	1.517	1.498	1%	1.12%	-1.3	9.94E+13
3	0.10%	0.05%	0.392	0.181	54%	0.05%	3.8	4.57E+12
RG780	0.00%	0.00%	0.003	0.003	0%	0.00%	-100.0	1.88E+10

Dark Before: 0.003 Volts
 Light - No Filter Hldr.: 3.454 Volts
 Dark After - NFH: 0.003 Volts
 Average Dark 0.0026 Volts

Notes:

1. Annual calibration is recommended.

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