

Calibration Date: 01/30/18

Job No.: R13171

Model Number: QSP2300

Serial Number: 70361

Operator: TPC

Standard Lamp: V-041(7/21/16)

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: 4.80E+12 quanta/cm²·sec per volt 7.97E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 8.47E+12 quanta/cm²·sec per volt 1.41E-05 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: 9.73E+15 quanta/cm²·sec 0.01615 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%	3.307	3.307	0%	100.00%	0.0	9.73E+15
0.3	50%	36.10%	2.868	2.865	0%	36.36%	-0.7	3.54E+15
0.5	32%	27.60%	2.752	2.748	0%	27.83%	-0.8	2.71E+15
1	10%	9.27%	2.278	2.274	0%	9.30%	-0.3	9.04E+14
2	1%	1.11%	1.357	1.352	0%	1.07%	3.5	1.04E+14
3	0.10%	0.05%	0.191	0.035	82%	0.03%	98.2	2.65E+12
RG780	0.00%	0.00%	0.003	0.003	0%	0.00%	-100.0	2.99E+10

Dark Before: 0.003 Volts

Light - No Filter Hldr.: 3.307 Volts

Dark After - NFH: 0.003 Volts

Average Dark 0.0027 Volts

Notes:

1. Annual calibration is recommended.

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