

Calibration Date: 02/20/13

Model Number: QSP2300

Serial Number: 70172

Operator: TPC

Standard Lamp: V-030(3/7/12)

Operating Voltage Range: 6 to 15 VDC (+)

Job No.: R11579

Note: The QSP2300 output is a voltage that is proportional to the log of the incident irradiance. To calculate irradiance, use this formula:

Irradiance = Calibration factor * (10^ΔLight Signal Voltage - 10^ΔDark Voltage)

Dry Calibration Factor: 3.60E+12 quanta/cm²-sec per volt 5.99E-06 μEinsteins/cm²-sec per volt

Wet Calibration Factor: 6.36E+12 quanta/cm²-sec per volt 1.06E-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: 9.83E+15 quanta/cm²-sec
Immersion Coefficient: 0.566 0.01632 μEinsteins/cm²-sec

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%	3.436	3.436	0%	100.00%	0.0	9.83E+15
0.3	50%	36.10%	2.992	2.993	0%	35.98%	0.3	3.54E+15
0.5	32%	27.60%	2.882	2.877	0%	27.92%	-1.1	2.74E+15
1	10%	9.27%	2.415	2.403	0%	9.49%	-2.3	9.33E+14
2	1%	1.11%	1.496	1.481	1%	1.11%	-0.2	1.09E+14
3	0.10%	0.05%	0.355	0.163	54%	0.05%	17.2	4.56E+12
RG780	0.00%	0.00%	0.010	0.010	0%	0.00%	-100.0	8.23E+10

Dark Before: 0.010 Volts
Light - No Filter Hldr.: 3.436 Volts
Dark After - NFH: 0.010 Volts
Average Dark: 0.0098 Volts

Notes:
1. Annual calibration is recommended.
2) This section is for internal use and for more advanced analysis.