

Calibration Date: 01/30/18

Job No.: R13173

Model Number: QSP2300

Serial Number: 70297

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: 2.68E+12 quanta/cm²·sec per volt 4.45E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 4.73E+12 quanta/cm²·sec per volt 7.86E-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: 9.73E+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%	3.560	3.560	0%	100.00%	0.0	9.73E+15
0.3	50%	36.10%	3.117	3.117	0%	36.02%	0.2	3.50E+15
0.5	32%	27.60%	3.002	3.001	0%	27.67%	-0.2	2.69E+15
1	10%	9.27%	2.527	2.527	0%	9.24%	0.3	8.99E+14
2	1%	1.11%	1.595	1.605	-1%	1.06%	5.1	1.03E+14
3	0.10%	0.05%	0.390	0.287	26%	0.04%	34.1	3.90E+12
RG780	0.00%	0.00%	0.156	0.005	97%	0.01%	-100.0	1.16E+12

Dark Before: 0.005 Volts

Light - No Filter Hldr.: 3.559 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.