

Calibration Date: 01/30/18

Job No.: R13172

Model Number: QSP2300

Serial Number: 70497

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: 3.32E+12 quanta/cm²·sec per volt 5.52E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 5.87E+12 quanta/cm²·sec per volt 9.74E-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%	3.467	3.467	0%	100.00%	0.0	9.73E+15
0.3	50%	36.10%	3.030	3.024	0%	36.57%	-1.3	3.56E+15
0.5	32%	27.60%	2.916	2.908	0%	28.09%	-1.7	2.73E+15
1	10%	9.27%	2.447	2.434	1%	9.53%	-2.7	9.27E+14
2	1%	1.11%	1.538	1.512	2%	1.14%	-3.0	1.11E+14
3	0.10%	0.05%	0.411	0.194	53%	0.05%	-0.5	5.24E+12
RG780	0.00%	0.00%	0.002	0.002	-4%	0.00%	-100.0	1.76E+10

Dark Before: 0.002 Volts

Light - No Filter Hldr.: 3.466 Volts

Dark After - NFH: 0.002 Volts

Average Dark 0.0024 Volts

Notes:

1. Annual calibration is recommended.

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