

Job No.: R11383

Calibration Date: 08/20/12

Model Number: QSP2300

Serial Number: 70379

Operator: TPC

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

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:

Irradiance = Calibration factor * (10^Light Signal Voltage - 10^Dark Voltage)

Dry Calibration Factor: 3.01E+12 quanta/cm^2-sec per volt 5.00E-06 μEinsteins/cm^2-sec per volt
Wet Calibration Factor: 5.31E+12 quanta/cm^2-sec per volt 8.82E-06 μEinsteins/cm^2-sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.5 mA
Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.83E+15 quanta/cm^2-sec 0.01632 μEinsteins/cm^2sec
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%	3.514	3.514	0%	100.00%	0.0	9.83E+15
0.3	50%	36.10%	3.084	3.072	0%	37.13%	-2.8	3.65E+15
0.5	32%	27.60%	2.971	2.955	1%	28.59%	-3.5	2.81E+15
1	10%	9.27%	2.516	2.481	1%	10.02%	-7.4	9.84E+14
2	1%	1.11%	1.626	1.559	4%	1.26%	-12.1	1.24E+14
3	0.10%	0.05%	0.571	0.242	58%	0.08%	-35.5	8.20E+12
RG780	0.00%	0.00%	0.219	0.009	96%	0.02%	-100.0	1.97E+12

Dark Before: 0.009 Volts
Light - No Filter Hldr.: 3.514 Volts
Dark After - NFH: 0.009 Volts
Average Dark: 0.0087 Volts

Notes:

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