

Calibration Date: 02/26/15
Model Number: QSP2300
Serial Number: 70296
Operator: TPC

Job No.: R12146

Standard Lamp: V-033(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:

$$\text{Irradiance} = \text{Calibration factor} * (10^{\text{Light Signal Voltage}} - 10^{\text{Dark Voltage}})$$

Dry Calibration Factor: 2.96E+12 quanta/cm²·sec per volt 4.91E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 5.22E+12 quanta/cm²·sec per volt 8.66E-06 μEinsteins/cm²·sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.5 mA
Supply Voltage: 6 Volts
Lamp Integrated PAR Irradiance: 9.34E+15 quanta/cm²·sec 0.01551 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%	3.500	3.500	0%	100.00%	0.0	9.34E+15
0.3	50%	36.10%	3.056	3.058	0%	35.91%	0.5	3.36E+15
0.5	32%	27.60%	2.941	2.941	0%	27.58%	0.1	2.58E+15
1	10%	9.27%	2.471	2.467	0%	9.33%	-0.6	8.71E+14
2	1%	1.11%	1.548	1.545	0%	1.09%	2.3	1.01E+14
3	0.10%	0.05%	0.348	0.228	35%	0.04%	38.6	3.63E+12
RG780	0.00%	0.00%	0.004	0.004	-1%	0.00%	-100.0	3.01E+10

Dark Before: 0.004 Volts
Light - No Filter Hldr.: 3.501 Volts
Dark After - NFH: 0.004 Volts
Average Dark 0.0044 Volts

Notes:

1. Annual calibration is recommended.

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