

Job No.: R50898

Calibration Date: 01/23/23

Model Number: QSP2300

Serial Number: 70778

Operator: TPC

Standard Lamp: V-043(7/24/19)

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:

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

Dry Calibration Factor: 4.12E+12 quanta/cm²-sec per volt 6.85E-06 μEinsteins/cm²-sec per volt

Wet Calibration Factor: 7.28E+12 quanta/cm²-sec per volt 1.21E-05 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: 9.66E+15 quanta/cm²-sec 0.01605 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.
No Filter	100%	100.00%	3.370	3.370	0%	100.00%	0.0	9.66E+15
0.3	50%	36.10%	2.925	2.928	0%	35.82%	0.8	3.46E+15
0.5	32%	27.60%	2.809	2.811	0%	27.45%	0.6	2.65E+15
1	10%	9.27%	2.330	2.337	0%	9.08%	2.1	8.78E+14
2	1%	1.11%	1.403	1.415	-1%	1.04%	7.1	1.00E+14
3	0.10%	0.05%	0.289	0.098	66%	0.04%	33.4	3.90E+12
RG780	0.00%	0.00%	0.297	0.003	99%	0.04%	-100.0	4.05E+12

Dark Before: 0.003 Volts
 Light - No Filter Hldr.: 3.370 Volts
 Dark After - NFH: 0.003 Volts
 Average Dark: 0.0032 Volts

Notes:

1. Annual calibration is recommended.

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