

Job No.: R50897

Calibration Date: 01/26/23

Model Number: QSP2300

Serial Number: 70777

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:

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

Dry Calibration Factor: 3.91E+12 quanta/cm^2·sec per volt 6.50E-06 μEinsteins/cm^2·sec per volt

Wet Calibration Factor: 6.91E+12 quanta/cm^2·sec per volt 1.15E-05 μEinsteins/cm^2·sec per volt

Sensor Test Data and Results<sup>2)</sup>

Sensor Supply Current (Dark): 3.4 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.66E+15 quanta/cm^2·sec 0.01605 μEinsteins/cm^2sec

Immersion Coefficient: 0.566

Test Irrad.

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%	3.393	3.393	0%	100.00%	0.0	9.66E+15
0.3	50%	36.10%	2.953	2.951	0%	36.28%	-0.5	3.51E+15
0.5	32%	27.60%	2.838	2.834	0%	27.81%	-0.8	2.69E+15
1	10%	9.27%	2.360	2.360	0%	9.23%	0.5	8.92E+14
2	1%	1.11%	1.446	1.438	1%	1.09%	2.0	1.05E+14
3	0.10%	0.05%	0.308	0.121	61%	0.04%	31.8	4.04E+12
RG780	0.00%	0.00%	0.238	0.013	94%	0.03%	-100.0	2.85E+12

Dark Before: 0.013 Volts  
 Light - No Filter Hldr.: 3.393 Volts  
 Dark After - NFH: 0.013 Volts  
 Average Dark: 0.0134 Volts

Notes:

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