

**Calibration Date:** 02/28/24 **Job No.:** R50517  
**Model Number:** QSP2300  
**Serial Number:** 70500  
**Operator:** TPC  
**Standard Lamp:** V-045(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: 3.93E+12 quanta/cm<sup>2</sup>·sec per volt 6.52E-06 μEinsteins/cm<sup>2</sup>·sec per volt  
 Wet Calibration Factor: 6.93E+12 quanta/cm<sup>2</sup>·sec per volt 1.15E-05 μEinsteins/cm<sup>2</sup>·sec per volt

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

Sensor Supply Current (Dark): 3.5 mA  
 Supply Voltage: 6 Volts  
 Lamp Integrated PAR Irradiance: 9.22E+15 quanta/cm<sup>2</sup>·sec 0.01531 μEinsteins/cm<sup>2</sup>·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 <sup>2</sup> ·sec)
No Filter	100%	100.00%	3.371	3.371	0%	100.00%	0.0	9.22E+15
0.3	50%	36.10%	2.931	2.928	0%	36.27%	-0.5	3.34E+15
0.5	32%	27.60%	2.817	2.812	0%	27.91%	-1.1	2.57E+15
1	10%	9.27%	2.345	2.338	0%	9.38%	-1.2	8.65E+14
2	1%	1.11%	1.429	1.416	1%	1.10%	0.8	1.02E+14
3	0.10%	0.05%	0.247	0.098	60%	0.03%	66.4	3.01E+12
RG780	0.00%	0.00%	0.005	0.005	-2%	0.00%	-100.0	4.82E+10

Dark Before: 0.005 Volts  
 Light - No Filter Hldr.: 3.370 Volts  
 Dark After - NFH: 0.005 Volts  
 Average Dark: 0.0054 Volts

Notes:

1. Annual calibration is recommended.

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