

**Calibration Date:** 02/28/24  
**Model Number:** QSP2300  
**Serial Number:** 70546  
**Operator:** TPC  
**Standard Lamp:** V-045(7/21/16)  
**Operating Voltage Range:** 6 to 15 VDC (+)

**Job No.:** R50512

**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:** 3.49E+12 quanta/cm<sup>2</sup>·sec per volt      5.80E-06 μEinsteins/cm<sup>2</sup>·sec per volt  
**Wet Calibration Factor:** 6.17E+12 quanta/cm<sup>2</sup>·sec per volt      1.02E-05 μEinsteins/cm<sup>2</sup>·sec per volt

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

**Sensor Supply Current (Dark):** 3.3 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%	3.422	3.422	0%	100.00%	0.0	9.22E+15
0.3	50%	36.10%	2.980	2.979	0%	36.13%	-0.1	3.33E+15
0.5	32%	27.60%	2.868	2.863	0%	27.91%	-1.1	2.57E+15
1	10%	9.27%	2.402	2.389	1%	9.52%	-2.6	8.78E+14
2	1%	1.11%	1.487	1.467	1%	1.12%	-1.2	1.04E+14
3	0.10%	0.05%	0.306	0.149	51%	0.04%	40.9	3.57E+12
RG780	0.00%	0.00%	0.010	0.010	0%	0.00%	-100.0	7.72E+10

**Dark Before:** 0.010 Volts  
**Light - No Filter Hldr.:** 3.422 Volts  
**Dark After - NFH:** 0.010 Volts  
**Average Dark:** 0.0095 Volts

**Notes:**

1. Annual calibration is recommended.

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