

**Calibration Date:** 07/01/14  
**Model Number:** QSP2300  
**Serial Number:** 70547  
**Operator:** TPC  
**Standard Lamp:** V-034(3/7/12)  
**Operating Voltage Range:** 6 to 15 VDC (+)

**Job No.:** L11854

**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:** 3.19E+12 quanta/cm<sup>2</sup>·sec per volt 5.29E-06 μEinsteins/cm<sup>2</sup>·sec per volt  
**Wet Calibration Factor:** 5.62E+12 quanta/cm<sup>2</sup>·sec per volt 9.34E-06 μEinsteins/cm<sup>2</sup>·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:** 9.78E+15 quanta/cm<sup>2</sup>·sec 0.01625 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%	3.488	3.488	0%	100.00%	0.0	9.78E+15
0.3	50%	36.10%	3.053	3.045	0%	36.71%	-1.7	3.59E+15
0.5	32%	27.60%	2.935	2.928	0%	27.99%	-1.4	2.74E+15
1	10%	9.27%	2.472	2.455	1%	9.62%	-3.6	9.41E+14
2	1%	1.11%	1.563	1.533	2%	1.16%	-4.0	1.13E+14
3	0.10%	0.05%	0.416	0.215	48%	0.05%	3.0	5.12E+12
RG780	0.00%	0.00%	0.006	0.006	0%	0.00%	-100.0	4.49E+10

**Dark Before:** 0.006 Volts  
**Light - No Filter Hldr.:** 3.488 Volts  
**Dark After - NFH:** 0.006 Volts  
**Average Dark** 0.0061 Volts

**Notes:**

1. Annual calibration is recommended.

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