

Calibration Date: 06/10/13
Model Number: QSP2300
Serial Number: 70500
Operator: TPC
Standard Lamp: V-031(3/7/12)

Job No.: L11541

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: 2.90E+12 quanta/cm²·sec per volt 4.81E-06 μEinsteins/cm²·sec per volt

Wet Calibration Factor: 5.11E+12 quanta/cm²·sec per volt 8.49E-06 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: 1.04E+16 quanta/cm²·sec 0.01733 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. (quanta/ cm ² ·sec)
No Filter	100%	100.00%	3.557	3.557	0%	100.00%	0.0	1.04E+16
0.3	50%	36.10%	3.118	3.115	0%	36.35%	-0.7	3.79E+15
0.5	32%	27.60%	3.003	2.998	0%	27.91%	-1.1	2.91E+15
1	10%	9.27%	2.535	2.524	0%	9.47%	-2.2	9.89E+14
2	1%	1.11%	1.624	1.602	1%	1.14%	-2.5	1.19E+14
3	0.10%	0.05%	0.457	0.285	38%	0.05%	4.0	5.40E+12
RG780	0.00%	0.00%	0.006	0.006	0%	0.00%	-100.0	3.99E+10

Dark Before: 0.006 Volts

Light - No Filter Hldr.: 3.557 Volts

Dark After - NFH: 0.006 Volts

Average Dark 0.0059 Volts

Notes:

1. Annual calibration is recommended.

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