

Calibration Date: 06/02/20 **Job No.:** R-50030
Model Number: QSP2300
Serial Number: 70500
Operator: TPC
Standard Lamp: V-040(1/3/2019)
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: 3.86E+12 quanta/cm²·sec per volt 6.41E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 6.81E+12 quanta/cm²·sec per volt 1.13E-05 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: 9.40E+15 quanta/cm²·sec 0.01561 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%	3.387	3.387	0%	100.00%	0.0	9.40E+15
0.3	50%	36.10%	2.946	2.945	0%	36.20%	-0.3	3.40E+15
0.5	32%	27.60%	2.834	2.828	0%	27.95%	-1.2	2.63E+15
1	10%	9.27%	2.365	2.354	0%	9.47%	-2.1	8.90E+14
2	1%	1.11%	1.447	1.432	1%	1.11%	0.3	1.04E+14
3	0.10%	0.05%	0.288	0.115	60%	0.04%	40.2	3.63E+12
RG780	0.00%	0.00%	0.005	0.005	0%	0.00%	-100.0	4.83E+10

Dark Before: 0.005 Volts
Light - No Filter Hldr.: 3.387 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.