

Calibration Date: 06/02/20 **Job No.:** R-50028
Model Number: QSP2300
Serial Number: 70360
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: 4.15E+12 quanta/cm²·sec per volt 6.90E-06 μEinsteins/cm²·sec per volt
 Wet Calibration Factor: 7.33E+12 quanta/cm²·sec per volt 1.22E-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%	3.355	3.355	0%	100.00%	0.0	9.40E+15
0.3	50%	36.10%	2.913	2.913	0%	36.14%	-0.1	3.40E+15
0.5	32%	27.60%	2.800	2.796	0%	27.83%	-0.8	2.62E+15
1	10%	9.27%	2.327	2.322	0%	9.34%	-0.7	8.78E+14
2	1%	1.11%	1.407	1.400	0%	1.08%	2.6	1.02E+14
3	0.10%	0.05%	0.243	0.083	66%	0.03%	62.8	3.11E+12
RG780	0.00%	0.00%	0.003	0.003	0%	0.00%	-100.0	3.07E+10

Dark Before: 0.003 Volts
 Light - No Filter Hldr.: 3.355 Volts
 Dark After - NFH: 0.003 Volts
 Average Dark 0.0032 Volts

Notes:

1. Annual calibration is recommended.

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