

Calibration Date: 06/07/23

Job No.: R50976

Model Number: QSP2350

Serial Number: 70709

Operator: TPC

Standard Lamp: V-043(7/24/19)

Operating Voltage Range: 6 to 15 VDC (+)

Note: The QSP2350 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: 4.14E+12 quanta/cm²·sec per volt 6.88E-06 μEinsteins/cm²·sec per volt
 Wet Calibration Factor: 7.32E+12 quanta/cm²·sec per volt 1.21E-05 μEinsteins/cm²·sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.4 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.66E+15 quanta/cm²·sec 0.01605 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%	3.368	3.368	0%	100.00%	0.0	9.66E+15
0.3	50%	36.10%	2.927	2.926	0%	36.18%	-0.2	3.50E+15
0.5	32%	27.60%	2.814	2.809	0%	27.87%	-1.0	2.69E+15
1	10%	9.27%	2.350	2.335	1%	9.55%	-2.9	9.23E+14
2	1%	1.11%	1.445	1.413	2%	1.15%	-3.6	1.11E+14
3	0.10%	0.05%	0.346	0.096	72%	0.05%	3.5	5.05E+12
RG780	0.00%	0.00%	0.258	0.007	97%	0.03%	100.0	3.36E+12

Dark Before: 0.007 Volts
 Light - No Filter Hldr.: 3.368 Volts
 Dark After - NFH: 0.007 Volts
 Average Dark: 0.0065 Volts

M = 1.0
B = 0.0
 Calibration constant = 8.264462810 = 8.2645 e+9
 Offset = -0.12282460
 Multiplier = 1.0

Notes:

- Annual calibration is recommended.
- This section is for internal use and for more advanced analysis.