

Calibration Date: 08/06/20

Job No.: L20183

Model Number: QSP2350

Serial Number: 70784

Operator: TPC

Standard Lamp: V-040(1/3/2019)

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: 3.78E+12 quanta/cm²·sec per volt 6.28E-06 μEinsteins/cm²·sec per volt

Wet Calibration Factor: 6.67E+12 quanta/cm²·sec per volt 1.11E-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: 9.40E+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%	3.396	3.396	0%	100.00%	0.0	9.40E+15
0.3	50%	36.10%	2.948	2.954	0%	35.62%	1.4	3.35E+15
0.5	32%	27.60%	2.836	2.837	0%	27.49%	0.4	2.58E+15
1	10%	9.27%	2.358	2.363	0%	9.12%	1.7	8.57E+14
2	1%	1.11%	1.427	1.441	-1%	1.03%	7.4	9.72E+13
3	0.10%	0.05%	0.210	0.124	41%	0.02%	121.0	2.35E+12
RG780	0.00%	0.00%	0.200	0.009	96%	0.02%	-100.0	2.21E+12

Dark Before: 0.009 Volts

Light - No Filter Hldr.: 3.395 Volts

Dark After - NFH: 0.009 Volts

Average Dark 0.0089 Volts

Notes:

1. Annual calibration is recommended.

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