

Calibration Date: 08/06/20

Job No.: L20183

Model Number: QSP2350

Serial Number: 70783

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: 3.76E+12 quanta/cm²·sec per volt 6.25E-06 μEinsteins/cm²·sec per volt

Wet Calibration Factor: 6.65E+12 quanta/cm²·sec per volt 1.10E-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%	3.398	3.398	0%	100.00%	0.0	9.40E+15
0.3	50%	36.10%	2.946	2.955	0%	35.32%	2.2	3.32E+15
0.5	32%	27.60%	2.834	2.839	0%	27.27%	1.2	2.56E+15
1	10%	9.27%	2.358	2.365	0%	9.09%	2.0	8.55E+14
2	1%	1.11%	1.422	1.443	-1%	1.02%	9.1	9.57E+13
3	0.10%	0.05%	0.228	0.125	45%	0.03%	94.6	2.60E+12
RG780	0.00%	0.00%	0.190	0.002	99%	0.02%	-100.0	2.07E+12

Dark Before: 0.002 Volts

Light - No Filter Hldr.: 3.398 Volts

Dark After - NFH: 0.002 Volts

Average Dark 0.0022 Volts

Notes:

1. Annual calibration is recommended.

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