

Calibration Date: 04/07/21

Job No.: R50265

Model Number: QSP2300

Serial Number: 70546

Operator: TPC

Standard Lamp: V-042(11/12/20)

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: 2.74E+12 quanta/cm<sup>2</sup>·sec per volt 4.54E-06 μEinsteins/cm<sup>2</sup>·sec per volt  
Wet Calibration Factor: 4.83E+12 quanta/cm<sup>2</sup>·sec per volt 8.02E-06 μEinsteins/cm<sup>2</sup>·sec per volt

Sensor Test Data and Results<sup>2)</sup>

Sensor Supply Current (Dark): 3.4 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.43E+15 quanta/cm<sup>2</sup>·sec 0.01566 μEinsteins/cm<sup>2</sup>·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 <sup>2</sup> ·sec)
No Filter	100%	100.00%	3.538	3.538	0%	100.00%	0.0	9.43E+15
0.3	50%	36.10%	3.096	3.095	0%	36.15%	-0.1	3.41E+15
0.5	32%	27.60%	2.981	2.979	0%	27.73%	-0.5	2.62E+15
1	10%	9.27%	2.514	2.505	0%	9.44%	-1.8	8.90E+14
2	1%	1.11%	1.598	1.583	1%	1.12%	-0.9	1.06E+14
3	0.10%	0.05%	0.406	0.265	35%	0.04%	20.8	4.23E+12
RG780	0.00%	0.00%	0.010	0.010	0%	0.00%	-100.0	6.07E+10

Dark Before: 0.010 Volts

Light - No Filter Hldr.: 3.538 Volts

Dark After - NFH: 0.010 Volts

Average Dark 0.0095 Volts

Notes:

1. Annual calibration is recommended.

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