

Job No.: R12830

Calibration Date: 01/11/17

Model Number: QSP2300

Serial Number: 70296

Operator: TPC

Standard Lamp: 91453(7/20/16)

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:

$$\text{Irradiance} = \text{Calibration factor} * (10^{\wedge} \text{Light Signal Voltage} - 10^{\wedge} \text{Dark Voltage})$$

Dry Calibration Factor: 3.05E+12 quanta/cm²-sec per volt 5.07E-06 μ Einsteins/cm²-sec per volt

Wet Calibration Factor: 5.39E+12 quanta/cm²-sec per volt 8.95E-06 μ Einsteins/cm²-sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.4 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 8.38E+15 quanta/cm²-sec 0.01391 μ Einsteins/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%	3.439	3.439	0%	100.00%	0.0	8.38E+15
0.3	50%	36.10%	3.015	2.996	1%	37.68%	-4.2	3.16E+15
0.5	32%	27.60%	2.902	2.880	1%	29.07%	-5.0	2.44E+15
1	10%	9.27%	2.433	2.406	1%	9.84%	-5.8	8.24E+14
2	1%	1.11%	1.511	1.484	2%	1.15%	-3.1	9.60E+13
3	0.10%	0.05%	0.352	0.166	53%	0.05%	18.3	3.81E+12
RG780	0.00%	0.00%	0.014	0.004	70%	0.00%	-100.0	1.00E+11

Dark Before: 0.004 Volts

Light - No Filter Hldr.: 3.439 Volts

Dark After - NFH: 0.004 Volts

Average Dark 0.0042 Volts

Notes:

1. Annual calibration is recommended.

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