

Job No.: R12598

Calibration Date: 04/18/16

Model Number: QSP2300

Serial Number: 70500

Operator: TPC

Standard Lamp: V-035(3/4/15)

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:

Irradiance = Calibration factor * (10^Light Signal Voltage - 10^Dark Voltage)

Dry Calibration Factor: 2.85E+12 quanta/cm²·sec per volt 4.73E-06 μEinsteins/cm²·sec per volt

Wet Calibration Factor: 5.03E+12 quanta/cm²·sec per volt 8.35E-06 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: 1.03E+16 quanta/cm²·sec 0.01713 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%	3.559	3.559	0%	100.00%	0.0	1.03E+16
0.3	50%	36.10%	3.120	3.117	0%	36.35%	-0.7	3.75E+15
0.5	32%	27.60%	3.006	3.000	0%	27.95%	-1.3	2.88E+15
1	10%	9.27%	2.538	2.526	0%	9.49%	-2.3	9.79E+14
2	1%	1.11%	1.627	1.605	1%	1.14%	-2.7	1.18E+14
3	0.10%	0.05%	0.467	0.287	39%	0.05%	0.9	5.50E+12
RG780	0.00%	0.00%	0.005	0.005	0%	0.00%	-100.0	3.56E+10

Dark Before: 0.005 Volts
Light - No Filter Hldr.: 3.559 Volts
Dark After - NFH: 0.005 Volts
Average Dark: 0.0054 Volts

Notes:

1. Annual calibration is recommended.

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