

Job No.: R11743

Calibration Date: 10/29/13

Model Number: QSP2300

Serial Number: 70379

Operator: TPC

Standard Lamp: V-032(3/7/12)

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: 2.87E+12 quanta/cm^2·sec per volt 4.76E-06 μEinstein/cm^2·sec per volt

Wet Calibration Factor: 5.06E+12 quanta/cm^2·sec per volt 8.40E-06 μEinstein/cm^2·sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.5 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.26E+15 quanta/cm^2·sec 0.01538 μEinstein/cm^2·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%	3.510	3.510	0%	100.00%	0.0	9.26E+15
0.3	50%	36.10%	3.071	3.067	0%	36.35%	-0.7	3.37E+15
0.5	32%	27.60%	2.957	2.951	0%	27.99%	-1.4	2.59E+15
1	10%	9.27%	2.505	2.477	1%	9.85%	-5.9	9.13E+14
2	1%	1.11%	1.616	1.555	4%	1.25%	-10.9	1.15E+14
3	0.10%	0.05%	0.544	0.237	56%	0.08%	-30.4	7.16E+12
RG780	0.00%	0.00%	0.202	0.009	96%	0.02%	-100.0	1.70E+12

Dark Before: 0.009 Volts
 Light - No Filter Hldr.: 3.510 Volts
 Dark After - NFH: 0.009 Volts
 Average Dark: 0.0088 Volts

Notes:

1. Annual calibration is recommended.

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