

Calibration Date: 01/11/17 Job No.: R12832
Model Number: QSP2300
Serial Number: 70368
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: 3.25E+12 quanta/cm²-sec per volt 5.39E-06 μ Einsteins/cm²-sec per volt
Wet Calibration Factor: 5.73E+12 quanta/cm²-sec per volt 9.52E-06 μ Einsteins/cm²-sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.3 mA
Supply Voltage: 6 Volts
Lamp Integrated PAR Irradiance: 8.38E+15 quanta/cm²-sec 0.01391 μ Einsteins/cm²sec
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%	3.412	3.412	0%	100.00%	0.0	8.38E+15
0.3	50%	36.10%	2.973	2.970	0%	36.35%	-0.7	3.05E+15
0.5	32%	27.60%	2.860	2.853	0%	28.00%	-1.4	2.35E+15
1	10%	9.27%	2.385	2.379	0%	9.36%	-1.0	7.84E+14
2	1%	1.11%	1.462	1.457	0%	1.08%	2.6	9.07E+13
3	0.10%	0.05%	0.253	0.140	45%	0.03%	76.3	2.57E+12
RG780	0.00%	0.00%	0.004	0.004	-1%	0.00%	-100.0	2.85E+10

Dark Before: 0.004 Volts
Light - No Filter Hldr.: 3.412 Volts
Dark After - NFH: 0.004 Volts
Average Dark: 0.0038 Volts

Notes:

1. Annual calibration is recommended.
- 2) This section is for internal use and for more advanced analysis.