

Job No.: R12772

Calibration Date: 10/19/16
Model Number: QCP2300
Serial Number: 70250
Operator: TPC
Standard Lamp: 91453(7/20/16)
Operating Voltage Range: 6 to 15 VDC (+)

Note: The QCP2300 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: 2.82E+12 quanta/cm²-sec per volt 4.69E-06 μ Einsteins/cm²-sec per volt
Wet Calibration Factor: 3.03E+12 quanta/cm²-sec per volt 5.04E-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/cm²sec
Immersion Coefficient: 0.931

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%	3.473	3.473	0%	100.00%	0.0	8.38E+15
0.3	50%	36.10%	3.034	3.030	0%	36.37%	-0.7	3.05E+15
0.5	32%	27.60%	2.922	2.913	0%	28.11%	-1.8	2.36E+15
1	10%	9.27%	2.461	2.440	1%	9.71%	-4.5	8.13E+14
2	1%	1.11%	1.560	1.518	3%	1.19%	-6.5	9.96E+13
3	0.10%	0.05%	0.507	0.200	61%	0.07%	-27.5	6.25E+12
RG780	0.00%	0.00%	0.012	0.012	0%	0.00%	-100.0	7.84E+10

Dark Before: 0.012 Volts
Light - No Filter Hldr.: 3.473 Volts
Dark After - NFH: 0.012 Volts
Average Dark: 0.0119 Volts

Notes:

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