

Job No.: R9929

Calibration Date: 06/06/08
Model Number: QCP2300-HP
Serial Number: 70136
Operator: TPC
Standard Lamp: 91537(10/25/2006)
Operating Voltage Range: 6 to 15 VDC (+)

Note: The QCP2300-HP 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: 2.96E+12 quanta/cm²-sec per volt 4.91E-06 μEinsteins/cm²-sec per volt
Wet Calibration Factor: 3.11E+12 quanta/cm²-sec per volt 5.17E-06 μEinsteins/cm²-sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.4 mA
Supply Voltage: 6 Volts
Lamp Integrated PAR Irradiance: 8.83E+15 quanta/cm²-sec 0.01467 μEinsteins/cm²sec
Immersion Coefficient: 0.95

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%	3.476	3.476	0%	100.00%	0.0	8.83E+15
0.3	50%	36.10%	3.035	3.033	0%	36.24%	-0.4	3.20E+15
0.5	32%	27.60%	2.923	2.917	0%	27.97%	-1.3	2.47E+15
1	10%	9.27%	2.457	2.443	1%	9.55%	-2.9	8.44E+14
2	1%	1.11%	1.541	1.521	1%	1.13%	-1.7	9.98E+13
3	0.10%	0.05%	0.370	0.203	45%	0.04%	19.3	3.97E+12
RG780	0.00%	0.00%	0.003	0.003	0%	0.00%	-100.0	1.83E+10

Dark Before: 0.003 Volts
Light - No Filter Hldr.: 3.475 Volts
Dark After - NFH: 0.003 Volts
Average Dark: 0.0027 Volts

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