

Job No.: R12109

CTD5

Calibration Date: 12/19/14
 Model Number: QCP2300
 Serial Number: 70250
 Operator: TPC
 Standard Lamp: V-033(3/7/12)
 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: 2.86E+12 quanta/cm²-sec per volt 4.75E-06 μ Einsteins/cm²-sec per volt
 Wet Calibration Factor: 3.07E+12 quanta/cm²-sec per volt 5.10E-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: 9.34E+15 quanta/cm²-sec 0.01551 μ Einsteins/cm²sec
 Immersion Coefficient: 0.931

Nominal Filter OD No Filter	Expected Transmission	Calibrated Trans.	Sensor Voltage	Expected Voltage	Voltage % Error	Measured Trans.	Transmission Error (%)	Test Irrad. (quanta/cm ² -sec)
0.3	100%	100.00%	3.514	3.514	0%	100.00%	0.0	9.34E+15
0.5	50%	36.10%	3.076	3.072	0%	36.46%	-1.0	3.41E+15
1	32%	27.60%	2.962	2.955	0%	28.00%	-1.4	2.62E+15
2	10%	9.27%	2.502	2.481	1%	9.69%	-4.3	9.05E+14
3	1%	1.11%	1.599	1.559	2%	1.19%	-6.3	1.11E+14
RG780	0.10%	0.05%	0.516	0.242	53%	0.07%	-22.6	6.53E+12
	0.00%	0.00%	0.012	0.012	1%	0.00%	-100.0	8.29E+10

Dark Before: 0.012 Volts
 Light - No Filter Hldr.: 3.514 Volts
 Dark After - NFH: 0.012 Volts
 Average Dark: 0.0122 Volts

Notes:

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