

Job No.: R12284

Calibration Date: 06/22/15
Model Number: QCP2300-HP
Serial Number: 70444
Operator: TPC
Standard Lamp: V-031(3/3/15)
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:

$$\text{Irradiance} = \text{Calibration factor}^* (10^{\wedge}\text{Light Signal Voltage} - 10^{\wedge}\text{Dark Voltage})$$

Dry Calibration Factor: 2.80E+12 quanta/cm²-sec per volt 4.65E-06 μ Einsteins/cm²-sec per volt
Wet Calibration Factor: 3.01E+12 quanta/cm²-sec per volt 5.00E-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: 1.05E+16 quanta/cm²-sec 0.01750 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%	3.576	3.576	0%	100.00%	0.0	1.05E+16
0.3	50%	36.10%	3.141	3.133	0%	36.73%	-1.7	3.87E+15
0.5	32%	27.60%	3.024	3.016	0%	28.07%	-1.7	2.96E+15
1	10%	9.27%	2.565	2.543	1%	9.74%	-4.8	1.03E+15
2	1%	1.11%	1.668	1.621	3%	1.21%	-8.3	1.28E+14
3	0.10%	0.05%	0.510	0.303	41%	0.06%	-9.3	6.26E+12
RG780	0.00%	0.00%	0.010	0.010	0%	0.00%	-100.0	6.19E+10

Dark Before: 0.010 Volts
Light - No Filter Hldr.: 3.576 Volts
Dark After - NFH: 0.010 Volts
Average Dark: 0.0095 Volts

Notes:

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