

Calibration Date: 04/11/12
Model Number: QCP2300-HP
Serial Number: 70135
Operator: TPC
Standard Lamp: 97539(3/7/12)

Job No.: R11291

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:

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

Dry Calibration Factor: 2.97E+12 quanta/cm²-sec per volt 4.92E-06 μEinsteins/cm²-sec per volt
Wet Calibration Factor: 3.19E+12 quanta/cm²-sec per volt 5.29E-06 μEinsteins/cm²-sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.5 mA
 Supply Voltage: 6 Volts
 Lamp Integrated PAR Irradiance: 1.05E+16 quanta/cm²-sec 0.01746 μEinsteins/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%	3.550	3.550	0%	100.00%	0.0	1.05E+16
0.3	50%	36.10%	3.109	3.107	0%	36.23%	-0.4	3.81E+15
0.5	32%	27.60%	3.003	2.991	0%	28.37%	-2.7	2.98E+15
1	10%	9.27%	2.530	2.517	1%	9.53%	-2.7	1.00E+15
2	1%	1.11%	1.613	1.595	1%	1.13%	-1.7	1.19E+14
3	0.10%	0.05%	0.438	0.277	37%	0.05%	9.3	5.17E+12
RG780	0.00%	0.00%	0.004	0.004	0%	0.00%	-100.0	2.81E+10

Dark Before: 0.004 Volts
 Light - No Filter Hldr.: 3.553 Volts
 Dark After - NFH: 0.004 Volts
 Average Dark 0.0041 Volts

Notes:

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