

Calibration Date: 08/04/11
Model Number: QCP2300-HP
Serial Number: 70136
Operator: TPC
Standard Lamp: GS-1024(7/22/11)

Job No.: R11052

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: 3.08E+12 quanta/cm²·sec per volt 5.11E-06 μEinsteins/cm²·sec per volt
Wet Calibration Factor: 3.24E+12 quanta/cm²·sec per volt 5.38E-06 μEinsteins/cm²·sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.6 mA
 Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.30E+15 quanta/cm²·sec 0.01544 μEinsteins/cm²·sec
 Immersion Coefficient: 0.950

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%	3.480	3.480	0%	100.00%	0.0	9.30E+15
0.3	50%	36.10%	3.047	3.038	0%	36.84%	-2.0	3.43E+15
0.5	32%	27.60%	2.937	2.921	1%	28.62%	-3.6	2.66E+15
1	10%	9.27%	2.477	2.447	1%	9.90%	-6.4	9.21E+14
2	1%	1.11%	1.577	1.525	3%	1.22%	-8.8	1.13E+14
3	0.10%	0.05%	0.444	0.208	53%	0.06%	-9.1	5.48E+12
RG780	0.00%	0.00%	0.003	0.003	1%	0.00%	-100.0	1.89E+10

Dark Before: 0.003 Volts
 Light - No Filter Hldr.: 3.480 Volts
 Dark After - NFH: 0.003 Volts
 Average Dark: 0.0026 Volts

Notes:

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