

Calibration Date: 07/13/10
Model Number: QCP2300-HP
Serial Number: 70136
Operator: TPC
Standard Lamp: GS-1024(8/28/08)

Job No.: R10685

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: 2.96E+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): 3.6 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.27E+15 quanta/cm²·sec 0.01540 μEinsteins/cm²·sec

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%	3.497	3.497	0%	100.00%	0.0	9.27E+15
0.3	50%	36.10%	3.058	3.054	0%	36.36%	-0.7	3.37E+15
0.5	32%	27.60%	2.944	2.938	0%	27.99%	-1.4	2.59E+15
1	10%	9.27%	2.481	2.464	1%	9.62%	-3.6	8.92E+14
2	1%	1.11%	1.570	1.542	2%	1.15%	-3.6	1.07E+14
3	0.10%	0.05%	0.422	0.224	47%	0.05%	2.4	4.85E+12
RG780	0.00%	0.00%	0.003	0.003	0%	0.00%	-100.0	1.85E+10

Dark Before: 0.003 Volts
 Light - No Filter Hldr.: 3.496 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.