

Calibration Date: 11/04/10

Job No.: R10801

Model Number: QCP2300

Serial Number: 70250

Operator: TPC

Standard Lamp: GS-1024(8/28/08)

Operating Voltage Range: 6 to 15 VDC (+)

Note: The QCF2300 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: 3.00E+12 quanta/cm²-sec per volt 4.99E-06 μEinsteins/cm²-sec per volt

Wet Calibration Factor: 3.16E+12 quanta/cm²-sec per volt 5.25E-06 μEinsteins/cm²-sec per volt

Sensor Test Data and Results²⁾

Sensor Supply Current (Dark): 3.4 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 9.27E+15 quanta/cm²-sec 0.01540 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%	3.490	3.490	0%	100.00%	0.0	9.27E+15
0.3	50%	36.10%	3.052	3.047	0%	36.48%	-1.0	3.38E+15
0.5	32%	27.60%	2.939	2.931	0%	28.09%	-1.7	2.60E+15
1	10%	9.27%	2.481	2.457	1%	9.77%	-5.1	9.06E+14
2	1%	1.11%	1.582	1.535	3%	1.20%	-7.8	1.12E+14
3	0.10%	0.05%	0.462	0.217	53%	0.06%	-11.8	5.70E+12
RG780	0.00%	0.00%	0.012	0.012	0%	0.00%	-100.0	8.33E+10

Dark Before: 0.012 Volts

Light - No Filter Hldr.: 3.490 Volts

Dark After - NFH: 0.012 Volts

Average Dark 0.0119 Volts

Notes:

1. Annual calibration is recommended.

2) This section is for internal use and for more advanced analysis.