

Calibration Date: 01/29/09

Model Number: QCP2300

Serial Number: 70135

Operator: TPC

Standard Lamp: 91537(10/25/2006)

Operating Voltage Range: 6 to 15 VDC (+)

Job No.: R10157

Note: The QCP2300 output is a voltage that is proportional to the log of the incident irradiance. To calculate irradiance, use this formula:

Irradiance = Calibration factor \* (10^Light Signal Voltage - 10^Dark Voltage)

Dry Calibration Factor: 3.11E+12 quanta/cm²-sec per volt 5.16E-06 µEinsteins/cm²-sec per volt

Wet Calibration Factor: 3.27E+12 quanta/cm²-sec per volt 5.43E-06 µEinsteins/cm²-sec per volt

Sensor Test Data and Results<sup>2)</sup>

Sensor Supply Current (Dark): 3.4 mA

Supply Voltage: 6 Volts

Lamp Integrated PAR Irradiance: 8.83E+15 quanta/cm²-sec 0.01467 µEinsteins/cm²sec

Immersion Coefficient: 0.95

Test Irrad.

Nominal Filter OD	Expected Transmission	Calibrated Trans.	Sensor Voltage	Expected Voltage	Voltage % Error	Measured Trans.	Transmission Error (%)	(quanta/cm²-sec)
No Filter	100%	100.00%	3.454	3.454	0%	100.00%	0.0	8.83E+15
0.3	50%	36.10%	3.013	3.012	0%	36.18%	-0.2	3.20E+15
0.5	32%	27.60%	2.899	2.895	0%	27.83%	-0.8	2.46E+15
1	10%	9.27%	2.429	2.421	0%	9.41%	-1.5	8.31E+14
2	1%	1.11%	1.512	1.499	1%	1.11%	0.2	9.79E+13
3	0.10%	0.05%	0.359	0.182	49%	0.04%	18.9	3.99E+12
RG780	0.00%	0.00%	0.004	0.004	0%	0.00%	-100.0	2.76E+10

Dark Before: 0.004 Volts  
 Light - No Filter Hldr.: 3.455 Volts  
 Dark After - NFH: 0.004 Volts  
 Average Dark: 0.0038 Volts

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