**Calibration Date:** 

02/26/15

Job No.:

R12145

**Model Number:** 

QSP2300

**Serial Number:** 

70281

Operator:

**TPC** 

**Standard Lamp:** V-033(3/7/12)

**Operating Voltage Range:** 

VDC (+)

Note: The QSP2300 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)

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Dry Calibration Factor: 2.98E+12 quanta/cm<sup>2</sup>-sec per volt

4.95E-06 µEinsteins/cm<sup>2</sup>-sec per volt

Wet Calibration Factor: 5.26E+12 quanta/cm<sup>2</sup>-sec per volt

8.73E-06 µEinsteins/cm<sup>2</sup>-sec per volt

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

Sensor Supply Current (Dark):

3.5 mA

Supply Voltage:

Volts

Lamp Integrated PAR Irradiance:

quanta/cm<sup>2</sup>·sec 9.34E+15

0.01551

µEinsteins/cm²sec

Immersion Coefficient:

0.566

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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%	3.497	3.497	0%	100.00%	0.0	9.34E+15
0.3	50%	36.10%	3.058	3.054	0%	36.41%	-0.9	3.40E+15
0.5	32%	27.60%	2.942	2.937	0%	27.85%	-0.9	2.60E+15
1	10%	9.27%	2.470	2.464	0%	9.38%	-1.1	8.76E+14
2	1%	1.11%	1.548	1.542	0%	1.09%	1.5	1.02E+14
3	0.10%	0.05%	0.377	0.224	41%	0.04%	23.7	4.12E+12
RG780	0.00%	0.00%	0.052	0.012	77%	0.00%	-100.0	3.79E+11

Dark Before:

0.012

Light - No Filter Hldr.: Dark After - NFH:

Volts 3.497 Volts 0.012

Average Dark

0.0122

Volts Volts

Notes:

1. Annual calibration is recommended.

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