-0.0959

Calibration Date: 06/22/10 **Job No.:** R10694
Model Number: QSP2300
Serial Number: 70171
Operator: TPC
Standard Lamp: GS-1024(8/28/08)
Operating Voltage Range: 6 to 15 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)

Dry Calibration Factor: 3.41E+12 quanta/cm²·sec per volt 5.67E-06 µEinsteins/cm²·sec per volt
Wet Calibration Factor: 5.75E+12 quanta/cm²·sec per volt 9.54E-06 µEinsteins/cm²·sec per volt

Sensor Test Data and Results[2)]

Sensor Supply Current (Dark): 3.3 mA
Supply Voltage: 6 Volts
Lamp Integrated PAR Irradiance: 9.27E+15 quanta/cm²·sec 0.01540 µEinsteins/cm²sec
Immersion Coefficient: 0.594

Nominal Filter OD	Expected Transmission	Calibrated Trans.	Sensor Voltage	Expected Voltage	Voltage % Error	Measured Trans.	Transmission Error (%)	Test Irrad. (quanta/cm²·sec)
No Filter	100%	100.00%	3.434	3.434	0%	100.00%	0.0	9.27E+15
0.3	50%	36.10%	2.996	2.992	0%	36.45%	-1.0	3.38E+15
0.5	32%	27.60%	2.883	2.875	0%	28.09%	-1.8	2.60E+15
1	10%	9.27%	2.425	2.401	1%	9.76%	-5.0	9.05E+14
2	1%	1.11%	1.521	1.479	3%	1.19%	-6.3	1.10E+14
3	0.10%	0.05%	0.400	0.162	60%	0.06%	-3.8	5.16E+12
RG780	0.00%	0.00%	0.002	0.002	1%	0.00%	-100.0	1.73E+10

Dark Before: 0.002 Volts
Light - No Filter Hldr.: 3.433 Volts
Dark After - NFH: 0.002 Volts
Average Dark 0.0022 Volts

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

M = 1
B = 0

CW = $9.54e^{-6}$

Cal CON = $10^5 / 9.54E^{-6}$ = 10482180293.0

offset

$-(10^4 \times CW \times 10^V)$ = ~~94.98~~ -0.0959