| | | | | | |
|---|---|---|---|---|---|
| **Calibration Date:** | 05/30/23 | | | **Job No.:** | R50937 |
| Model Number: | QSP2300 | | | | |
| Serial Number: | 70547 | | | | |
| Operator: | TPC | | | | |
| Standard Lamp: | V-043(7/24/19) | | | | |
| 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: | 3.55E+12 | quanta/cm²·sec per volt | 5.90E-06 | µEinsteins/cm²·sec per volt |
| Wet Calibration Factor: | 6.27E+12 | quanta/cm²·sec per volt | 1.04E-05 | µEinsteins/cm²·sec per volt |

Sensor Test Data and Results[2)]

| | | | | |
|---|---|---|---|---|
| Sensor Supply Current (Dark): | 3.4 | mA | | |
| Supply Voltage: | 6 | Volts | | |
| Lamp Integrated PAR Irradiance: | 9.66E+15 | quanta/cm²·sec | 0.01605 | µEinsteins/cm²sec |
| Immersion Coefficient: | 0.566 | | | |

| 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% | 3.435 | 3.435 | 0% | 100.00% | 0.0 | 9.66E+15 |
| 0.3 | 50% | 36.10% | 2.998 | 2.993 | 0% | 36.51% | -1.1 | 3.53E+15 |
| 0.5 | 32% | 27.60% | 2.886 | 2.876 | 0% | 28.20% | -2.1 | 2.72E+15 |
| 1 | 10% | 9.27% | 2.418 | 2.402 | 1% | 9.58% | -3.2 | 9.26E+14 |
| 2 | 1% | 1.11% | 1.514 | 1.480 | 2% | 1.16% | -4.5 | 1.12E+14 |
| 3 | 0.10% | 0.05% | 0.358 | 0.163 | 55% | 0.05% | 14.7 | 4.55E+12 |
| RG780 | 0.00% | 0.00% | 0.006 | 0.006 | -2% | 0.00% | -100.0 | 4.69E+10 |

| | | |
|---|---|---|
| Dark Before: | 0.006 | Volts |
| Light - No Filter Hldr.: | 3.435 | Volts |
| Dark After - NFH: | 0.006 | Volts |
| Average Dark | 0.0058 | Volts |

Notes:

1. Annual calibration is recommended.

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