Biospherical Instruments Inc.

CALIBRATION CERTIFICATE

Calibration Date	04/30/13				
Model Number	QSR2150A		Firmware \	/ersion	v 2.06
Serial Number	50173				
Operator	TPC				
Standard Lamp	V-031(3/7/12)				
Sensor Operating	Voltage Range:	6	to	15	VDC (+)
Output Polarity:	Positive				

Sensor Output Voltage:

Sensor Illuminated	116.1	mV
Sensor Dark	10.3	_mV
Sensor Net Response	105.8	_ mV
RG780	10.3	mV

Corrected Lamp Output:

Output In Air (same condition as calibration):

1.733E-02 uE/cm²sec 1.044E+16 Quanta/cm²sec

Calibration Scale Factor:

(To calculate irradiance, divide the net voltage reading in Volts by this value.)

6.106E+00 Volts/(uE/cm²sec)

6.106E-04 Volts/(**uE/m²sec**)

Notes

- 1. Annual calibration is recommended.
- Calibration is performed using a Standard of Spectral Irradiance traceable to the National Institute of Standards and Technology (NIST).
- To approximate the sensor's saturating irradiance, multiply the calibration factor by the sensor power supply voltage, minus one volt.
- 4. The collector should be cleaned frequently with alcohol.