## **Biospherical Instruments Inc.**

## CALIBRATION CERTIFICATE

Calibration Date	10/19/2011				
Model Number	QSR-2200				
Serial Number	20286				
Operator	TPC				
Standard Lamp	F-484 (7/22/11)				
Probe Excitation Voltage Range:		6	to	18	_VDC(+)
Output Polarity:	Positive				

Probe Conditions at Calibration(in air):

Calibration Voltage:	6	VDC(+)
Probe Current:	3.9	mA

Probe Output Voltage:

Probe Illuminated	106.6	mV
Probe Dark	1.3	mV
Probe Net Response	105.3	mV
RG780	1.3	mV

Corrected Lamp Output:

Output In Air (same condition as calibration):

1.024E+16	quanta/cm <sup>2</sup> sec
0.01700	uE/cm <sup>2</sup> sec

Calibration Scale Factor:

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

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).

3. The collector should be cleaned frequently with alcohol.

4. Calibration was performed with customer cable, when available.