

## Calculation of Conversion Factor for Biospherical QSP2300L & QSP-200L Underwater PAR

For use with Seasave .CON file

See SBE Application Note #11 QSP-L, revised June 2005

Calibration constant =  $10^5 / Cw$

Offset =  $-(10^4 * Cw * 10^{V_{Dark}})$

Multiplier = 1 unless units other than  $\mu E/m^2 * sec$  desired

M = 1.0, B = 0.0

| Serial<br>Number | Calibration<br>Date | Wet Calibration<br>Factor (Cw)<br>( $\mu E/cm^2 Sec/Amps$ ) | $10^{V_{Dark}}$<br>(Amps) | Calibration<br>Constant | Offset<br>( $\mu E/m^2 Sec$ ) |
|------------------|---------------------|-------------------------------------------------------------|---------------------------|-------------------------|-------------------------------|
| 4701             | 28-Oct-04           | 6.940E-05                                                   | 1.502969                  | 1.4409E+09              | -1.043060                     |
| 4701             | 24-Feb-06           | 5.250E-05                                                   | 1.512342                  | 1.9048E+09              | -0.793980                     |
| 4701             | 28-Mar-08           | 6.210E-05                                                   | 1.492451                  | 1.6103E+09              | -0.926812                     |
| 4701             | 15-Oct-09           | 5.530E-05                                                   | 1.504874                  | 1.8083E+09              | -0.832195                     |
| 4479             | 02-Jun-03           | 1.910E-05                                                   | 1.803018                  | 5.2356E+09              | -0.344376                     |
| 4479             | 07-Jan-05           | 1.270E-05                                                   | 1.787516                  | 7.8740E+09              | -0.227015                     |
| 4479             | 08-Feb-07           | 1.230E-05                                                   | 1.766038                  | 8.1301E+09              | -0.217223                     |
| 4479             | 04-May-10           | 2.560E-05                                                   | 1.789575                  | 3.9063E+09              | -0.458131                     |