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SEASOFT COEFFICIENTS
FOR THE LI-COR QUANTUM SENSOR
S/N XXXXX

Your Sea-Bird Instrument has been adapted to record light data from a LI-COR Instruments underwater type SA Quantum sensor. The current output of this sensor is measured through a log amplifier in your CTD (or through the PN 90310 Log Amp Module) to obtain adequate resolution over the measurement range.

Log Amplifier Transfer Function:

$I\ (\mu A) = 10^6 * 10^{((volts-B)/M)}$

I (µA) = Current into the log amplifier.

volts = Measured voltage out of the log amplifier.

Make the following entries in SEASOFT

M = -0.767 (Slope of log amplifier)
B = -3.430 (Offset of log amplifier)

From the LI-COR calibration sheet obtain:

Calibration Constant = 4.200 (in water) Units : microamps per 1000 µmol s^{-1} m^{-2}

Multiplier = 1 (for output units in µEinsteins/m^2sec)

Offset = 0 (typically)

Do not enter the LI-1000 Multiplier from the Licor calibration certificate as the multplier.

Set multiplier to 1 for output in µEinsteins/m^2sec. See Application Note 11 General for information on output in units other than µEinsteins/m^2sec. See Application Note 11LICOR for information regarding this calibration sheet.