

ECO Phycoerythrin Fluorometer Characterization Sheet

Date: 2/22/2017

S/N: FL3BAC-4660

Phycoerythrin concentration expressed in ppb can be derived using the equation:

$$\text{Phycoerythrin (ppb)} = \text{Scale Factor} * (\text{Output} - \text{Dark Counts})$$

Dark Counts	Digital
Scale Factor (SF)	50 counts
Maximum Output	0.0423 ppb/count
Resolution	4130 counts
	1.0 counts
Ambient temperature during characterization	21.5 °C

Dark Counts: Signal output of the meter in clean water with black tape over detector.

SF: Determined using the following equation: $SF = x \div (\text{output} - \text{dark counts})$, where x is the concentration of the solution used during instrument characterization. SF is used to derive instrument output concentration from the raw signal output of the fluo

Maximum Output: Maximum signal output the fluorometer is capable of.

Resolution: Standard deviation of 1 minute of collected data.