

# FLNTU Characterization Sheet

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S/N: FLNTU-873

## Chlorophyll Scale Factor

Chlorophyll concentration expressed in  $\mu\text{g/l}$  can be derived using the equation:

$$\text{CHL } (\mu\text{g/l}) = \text{Scale Factor} \times (\text{Output} - \text{Dark Counts})$$

	Analog		Digital	
Dark Counts	0.085	V	49	counts
Scale Factor (SF)	6	$\mu\text{g/l/V}$	0.0072	$\mu\text{g/l/count}$
Maximum Output	5.02	V	4121	counts
Resolution	0.6	mV	1.0	counts
Ambient temperature during calibration	22.3	$^{\circ}\text{C}$		

### Definition of terms:

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

**SF (CHL):** Determined using the following equation:  $\text{SF} = x \div (\text{output} - \text{dark counts})$ , 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 fluorometer.

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

**Resolution:** standard deviation of 1 minute of collected data.