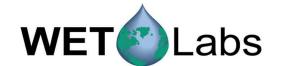
PO Box 518 620 Applegate St. Philomath, OR 97370



(541) 929-5650 Fax (541) 929-5277 www.wetlabs.com

FLNTU Characterization Sheet

Date: August 7, 2014 S/N: FLNTUS-1075

Chlorophyll Scale Factor

Chlorophyll concentration expressed in µg/l can be derived using the equation:

CHL (μ g/I) = Scale Factor x (Output - Dark Counts)

Dark Counts	Analog		Digital	
	0.089	V	60	counts
Scale Factor (SF)	20	μg/l/V	0.0246	μg/l/count
Maximum Output	4.98	V	4121	counts
Resolution	0.6	mV	1.0	counts
Ambient temperature during calibration	22.3	°C		

Nephelometric Turbidity Unit (NTU) Scale Factor

Turbidity units expressed in NTU can be derived using the equation:

NTU = Scale Factor x (Output - Dark Counts)

	Analog		Digital	
Dark Counts	0.075	V	51	counts
NTU Solution Value	1.32	V	1076	counts
Scale Factor (SF)	180	NTU/V	0.2189	NTU/count
Maximum Output	4.97	V	4121	counts
Resolution	0.1	mV	1.0	counts
Ambient temperature during calibration	22.3	°C		

Definition of terms:

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

NTU Solution Value: Signal output of the turbidity sensor when measuring a sample of interest.

SF (CHL): Determined using the following equation: $SF = x \div$ (output - 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.

SF (NTU): Scale factor is determined using the following equation: $SF = xx \div (Output - Dark counts)$, where xx is the value of a Formazin concentration. For example: $12.2 \div (2011 - 50) = 0.0062$.

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

Resolution: standard deviation of 1 minute of collected data.

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