

NTU Characterization Sheet

Date: 6/29/2011

650nm

S/N: BB2FL-843

Nephelometric Turbidity Unit (NTU) Scale Factor

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

$$\text{NTU} = \text{Scale Factor} \times (\text{Output} - \text{Dark Counts})$$

Dark Counts	50	Digital counts
NTU Solution Value	39	counts
Scale Factor (SF)	0.0121	NTU/count
Maximum Output	4130	counts
Resolution	1.4	counts
Ambient temperature during calibration	21.5	°C

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

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

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

Resolution: standard deviation of 1 minute of collected data.