WET Labs

Scattering Meter Calibration Sheet

6/16/2016
Wavelength: 700   S/N   FLBBRTD-4391

Use the following equation to obtain either digital or analog "scaled" output values:

$$\beta(\theta_c) \; m^{-1} \; sr^{-1} = \text{Scale Factor} \times (\text{Output} - \text{Dark Counts})$$

• **Scale Factor for 700 nm**	=	1.620E-06 $(m^{-1}sr^{-1})$/counts	1.330E-03 $(m^{-1}sr^{-1})$/volts
• **Output**	=	meter output counts	meter output volts
• **Dark Counts**	=	46 counts	0.0619 volts
Instrument Resolution	=	1.0 counts	1.62E-06 $(m^{-1}sr^{-1})$
		1.3170 mV	

Definitions:

• **Scale Factor**: Calibration scale factor, $\beta(\theta_c)$/counts. Refer to User's Guide for derivation.

• **Output**: Measured signal output of the scattering meter.

• **Dark Counts**: Signal obtained by covering detector with black tape and submersing sensor in water.
Instrument Resolution: Standard deviation of 1 minute of collected data.