WET Labs

Scattering Meter Calibration Sheet

8/26/2009
Wavelength: 650   S/N BB9-132

Use the following equation to obtain "scaled" output values:

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

- **Scale Factor for 650 nm**   =   1.083E-05 $(\text{m}^{-1}\text{sr}^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark Counts**   =   46 counts

   Instrument Resolution   =   0.9   counts   9.46E-06 $(\text{m}^{-1}\text{sr}^{-1})$

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.