WET ⬤ Labs

Scattering Meter Calibration Sheet

5/28/2013
Wavelength: 650   S/N BB2FLMBA-1073

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

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

- **Scale Factor for 650 nm**   =   3.515E-06 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark Counts**   =   30 counts

   Instrument Resolution   =   1.5 counts   5.39E-06 $(m^{-1}sr^{-1})$

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.