PO Box 518 620 Applegate St. Philomath, OR 97370



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

## **Scattering Meter Calibration Sheet**

2/25/2016 Wavelength: 700

S/N BB2FLB-1410

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

| $\beta(\theta_c) \text{ m}^{-1} \text{ sr}^{-1} = \text{Sc}$ | $\beta(\theta_c) \text{ m}^{-1} \text{ sr}^{-1} = \text{Scale Factor } \times \text{(Output - Dark Counts)}$ |                            |  |  |  |  |
|--|--|----------------------------|--|--|--|--|
| <ul> <li>Scale Factor for 700 nm</li> <li>Output</li> </ul>  | =  | 3.024E-06<br>meter reading | (m <sup>-1</sup> sr <sup>-1</sup> )/<br>counts | counts                                       |  |  |
| Dark Counts  | =  | 48                         | counts   |  |  |  |
| Instrument Resolution  | =  | 1.2                        | counts   | 3.59E-06 (m <sup>-1</sup> sr <sup>-1</sup> ) |  |  |

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.