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Scattering Meter Calibration Sheet

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Wavelength: 470

S/N BBRTD-501B

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

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

| | | | |
|----------------------------------|---|--|---|
| • Scale Factor for 470 nm | = | 1.026E-05 (m ⁻¹ sr ⁻¹)/counts | 8.451E-03 (m ⁻¹ sr ⁻¹)/volts |
| • Output | = | meter output counts | meter output volts |
| • Dark Counts | = | 51 counts | 0.0488 volts |
| Instrument Resolution | = | 1.0 counts 0.5246 mV | 1.03E-05 (m ⁻¹ sr ⁻¹) |

Definitions:

- **Scale Factor:** Calibration scale factor, $\beta(\theta_c)/\text{counts}$. 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.