

Scattering Meter Calibration Sheet

10/20/2016

Wavelength: 470

S/N BB3-1502

Use the following equation to obtain "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	=	1.066E-05	(m ⁻¹ sr ⁻¹)/counts	
• Output	=	meter reading	counts	
• Dark Counts	=	50	counts	
Instrument Resolution	=	1.4	counts	1.50E-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.