

Scattering Meter Calibration Sheet

8/26/2009

Wavelength: 510

S/N BB9-132

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 510 nm** = 1.767E-05 (m⁻¹sr⁻¹)/counts
- **Output** = meter reading counts
- **Dark counts** = 52 counts

Instrument Resolution = 0.9 counts 1.54E-05 (m⁻¹sr⁻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.