



Scattering Meter Calibration Sheet

10/10/2011

Wavelength: 700

S/N FLNTU-873

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 700 nm	=	3.053E-06 (m ⁻¹ sr ⁻¹)/counts	2.496E-03 (m ⁻¹ sr ⁻¹)/volts
• Output	=	meter output counts	meter output volts
• Dark Counts	=	59 counts	0.1451 volts
Instrument Resolution	=	1.1 counts 0.6059 mV	3.28E-06 (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.