PO Box 518
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WET Labs

(541) 929-5650
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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 412   S/N BB9-279

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

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

- **Scale Factor for 412 nm**   =   2.969E-05 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark counts**   =   53   counts

    Instrument Resolution   =   1.8   counts   5.25E-05 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 440   S/N BB9-279

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

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

- **Scale Factor for 440 nm**   =   1.226E-05 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark Counts**   =   58 counts

    Instrument Resolution   =   1.4   counts   1.72E-05 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 488   S/N BB9-279

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

$$\beta(\theta_c) \; m^{-1} \; sr^{-1} = \textbf{Scale Factor} \; x \; \textbf{(Output - Dark Counts)}$$

- **Scale Factor for 488 nm**   =   1.210E-05 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading counts
- **Dark counts**   =   54   counts

  Instrument Resolution   =   1.1   counts   1.33E-05 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 510   S/N BB9-279

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

$$\beta(\theta_c)\ m^{-1}\ sr^{-1} = \textcolor{red}{\textbf{Scale Factor}}\ x\ \textbf{(Output - Dark Counts)}$$

- **Scale Factor for 510 nm**   =   8.293E-06 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark counts**   =   60   counts

   Instrument Resolution   =   1.3   counts   1.09E-05 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 532   S/N BB9-279

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

$$\beta(\theta_c)\ \mathbf{m^{-1}\ sr^{-1}} = \textbf{\textcolor{red}{Scale Factor}}\ x\ \textbf{(Output - Dark Counts)}$$

- **Scale Factor for 532 nm** = 8.098E-06 $(m^{-1}sr^{-1})$/counts
- **Output** = meter reading   counts
- **Dark Counts** = 57 counts

  Instrument Resolution = 1.0 counts 8.12E-06 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 595   S/N BB9-279

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

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

- **Scale Factor for 595 nm**   =   5.758E-06 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark counts**   =   57   counts

  Instrument Resolution   =   1.1   counts   6.22E-06 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 660   S/N BB9-279

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

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

- **Scale Factor for 660 nm**   =   3.576E-06 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark Counts**   =   57 counts

  Instrument Resolution   =   1.4   counts   5.01E-06 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength:676   S/N#: BB9-279

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

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

- **Scale Factor for 676 nm**   =   4.128E-06 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading counts
- **Dark counts**   =   54   counts

  Instrument Resolution   =   1.0   counts   4.21E-06 $(m^{-1}sr^{-1})$

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.

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Scattering Meter Calibration Sheet

3/23/2016
Wavelength: 715   S/N BB9-279

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

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

- **Scale Factor for 715nm**   =   3.426E-06 $(m^{-1}sr^{-1})$/counts
- **Output**   =   meter reading   counts
- **Dark Counts**   =   56 counts

  Instrument Resolution   =   1.2   counts   4.15E-06 $(m^{-1}sr^{-1})$

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.