

## Thermo Scientific NanoDrop<sup>TM</sup> 1000 Spectrophotometer

# **Q: Does the NanoDrop 1000 produce results for a continuous spectrum or just selected wavelengths? A**: Continuous spectrum from 220-750 nm.

### Q: What sort of accuracy should I expect with the NanoDrop 1000?

**A:** Typically within 2%.

#### Q: What sort of reproducibility should I expect with the NanoDrop 1000?

A: Typically +/-0.003 A at low concentrations. For reference, this corresponds to +/-1.5 ng/ul for dsDNA. For higher concentrations (>100 ng/ul), coefficients of variation are typically <2%.

#### Q: Is simply wiping the pedestal surface enough to prevent carryover?

**A**: Yes. The highly polished quartz and stainless steel surfaces of the sample retention system are resistant to sample adherence, making the use of dry laboratory wipes very effective in removing the sample.

#### Q: Do nucleic acids require purification prior to measurement on the NanoDrop 1000?

**A**: Yes. Absorbance measurements are not specific for a particular nucleic acid and will be affected by the presence of nucleotides and other molecules which absorb at 260 nm.

#### Q: Are there solvent restrictions?

**A**: Hydrofluoric acid can etch the quartz optical fiber. Most other laboratory solvents typically used in life science labs, including dilute acids, are compatible with the pedestal as long as they are immediately wiped away.

#### Q: How do I check the accuracy of the NanoDrop 1000?

**A**: CF-1 calibration check fluid should be used with our Calibration Check software which is available for download under the Nano-Drop website Support Tab. CF-1 is a NIST traceable standard used to calibrate and certify each instrument. Visit our <u>website</u> for more information about CF-1.

#### Q: How often do I need to check the accuracy of the NanoDrop 1000?

**A**: We recommend every 6 months using the CF-1 Calibration Check Fluid available from Thermo Fisher Scientific or one of its authorized distributors.

#### Q: What kind of light source does the NanoDrop 1000 use?

A: A pulsed xenon flash lamp.

#### Q: How long before I need to replace the flashlamp?

A: The lamp is rated to last for a minimum of 30000 measurements before replacement could be required.

#### Q: Is the flash lamp continuously on, or is it on only when performing a measurement?

A: The lamp is only on during measurements.

## Q: Does the NanoDrop 1000 require a computer to operate?

**A**: Yes, the NanoDrop 1000 connects to a computer with a USB cable. The cable, operating software and a one year warranty are supplied with each instrument.

## Q: What are the computer requirements for the NanoDrop 1000?

A: Visit our <u>website</u> for more information