



**Kestrel Information:** 

Kestrel 4500NV

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## **Inspected By:**

Kestrel 4500NV Model Number							Hasan Jackson
							SIGNED
516794							Hasan Jackson
SERIAL NUMBER							PRINT NAME
621316							12 / 12 / 16
IMPELLER SERIAL NUMBER DATE							
1000	2000	2500	3000	3500	3500 DT	4000+	Methods Used in Calibration and Testing
							Wind Speed: The Kestrel Pocket Weather Meter impeller installed in this unit was individually tested in a subsonic wind tunnel operating at approximately 300 fpm (1.5 m/s) and 1200 fpm (6.1 m/s) monitored by a Gill Instruments Model 1350 ultrasonic time-of-flight anemometer. The Standard's maximum combined uncertainty is +/- 1.04% within the airspeed range 706.6 to 3923.9 fpm (3.59 to 19.93 m/s), and +/- 1.66% within the airspeed range 166.6 to 706.6 fpm (0.85 to 3.59 m/s).
NA						X	<b>Temperature:</b> Temperature response is verified in comparison with a Eutechnics 4600 Precision Thermometer or a standard Kestrel 4000 Pocket Weather Tracker calibrated weekly against the Eutechnics 4600. The Eutechnics 4600 is calibrated annually and is traceable to NIST with a system accuracy of +/- 0.05 °C.
NA	NA	NA					<b>Relative Humidity:</b> Relative humidity receives a two-point calibration in humidity and temperature controlled chambers at 75.3% RH and 32.8% RH at 25 °C. The calibration tanks are monitored with an Edgetech Model 2002 DewPrime II Standard Chilled Mirror Hygrometer. Following calibration, performance is further verified at an RH of approximately 43.2% against the Edgetech Hygrometer. The Edgetech Hygrometer is calibrated annually and is traceable to NIST with a maximum relative expanded uncertainty of +/- 0.2% RH.
NA	NA		NA				<b>Barometric Pressure:</b> Pressure response is verified against a Vaisala PTB210A Digital Barometer or a standard Kestrel 4000 Pocket Weather Tracker calibrated weekly against the Vaisala Barometer. The Vaisala Barometer is calibrated annually and is traceable to NIST with an accuracy of +/-0.15 hPa at +20°C defined as the root sum of the squares (RSS) of end point non-linearity, hysteresis error, repeatability error and calibration uncertainty at room temperature.
						X	New Battery / Batteries Installed: Kestrel 1000 - 3500: CR-2032 Kestrel 4000 - 4500: AAA (qty: 2)
						X	Battery Door Inspection: Battery door and battery door seal were visually inspected
						X	Battery Door Replacement: Battery door and seal were replaced
						X	Leak Testing: Instrument was leak tested to IP-67 standards.
							A unit that fails the pressurized leak test is water-resistant but will not withstand prolonged immersion in more than 6 inches of water. The usual cause of leak test failure in a unit from the field is microscopic fractures in the case seal as a result of impact. These fractures may allow pressurized water to enter the unit.
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Buttons & Display: Functional performance of buttons, display & backlight was verified.