

Calibration Report:

Temperature/Relative Humidity Sensor

S/N: T0420063

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Summary

Calibration Date : 15 July 2004 Next Calibration Date : 15 July 2005

A collection, analysis and calibration of data from Temperature/Relative Humidity Sensor, SN: T0420063, has been completed. The calibration was performed by the calibration laboratory, Wyle Laboratories. These data were collected by Wyle Laboratories on July 15, 2004.

MANUFACTURER : Campbell Scientific
MODEL : CS500
SERIAL NUMBER : T0420063

The test data presented in data table format show the Temperature/Relative Humidity sensor output in mV from select data points.

Sensor scaling are from 0 – 1 V for 0 –100% RH and 0 – 1 V for –40 to 60 °C. RH deviation from standard indication was –0.4% @ 20.1% RH, 2.1% @ 50% RH, 1.4% @ 80% RH and 2.5% @ 50.1% RH. Temperature deviation from standard indication was 0.1 °C @ 21.2 °C and 0.1 °C @ 29.9 °C . Units were powered by 12 VDC using a Campbell Scientific 21x datalogger. Probe offset = –50mV. The sensor meets the Manufacturer's tolerance of +/- 3.2% for RH and +/- 1°C for Temperature.

Linear fits with Coefficients are provided on plots on the following pages.

NOTE: This probe with S/N: T0420063 is the same probe that has S/N: LT418838. The LT # is on the cable and the T0420063 is on the probe itself. Will document the S/N on the probe for future calibrations.

Wyle Laboratories - Report of Calibration
Humidity Probe

Manufacturer: Vaisala Humitter
Serial Number: T0420063
Work Order: 478489

Calibration Procedure: C614T.0022

ECN: A030992
Model: 50YC
Range: See Below
Humidity: 43 Percent

Tech: 2907
Date: 7/15/2004
Approved: 2675
Temperature: 23 deg C

Humidity Test

Standard Indication (@21.2 Deg C) % Relative Humidity	UUT Indication (@21.2 Deg C) % Relative Humidity	UUT Indication in mV	Deviation (% Relative Humidity)	Manufacturer's Tolerance ± % Relative Humidity
20.1	19.7	196.78	-0.4	3.2
50.0	52.1	520.94	2.1	3.2
80.0	81.4	814.42	1.4	3.2
50.1	52.6	525.76	2.5	3.2

Temperature Test

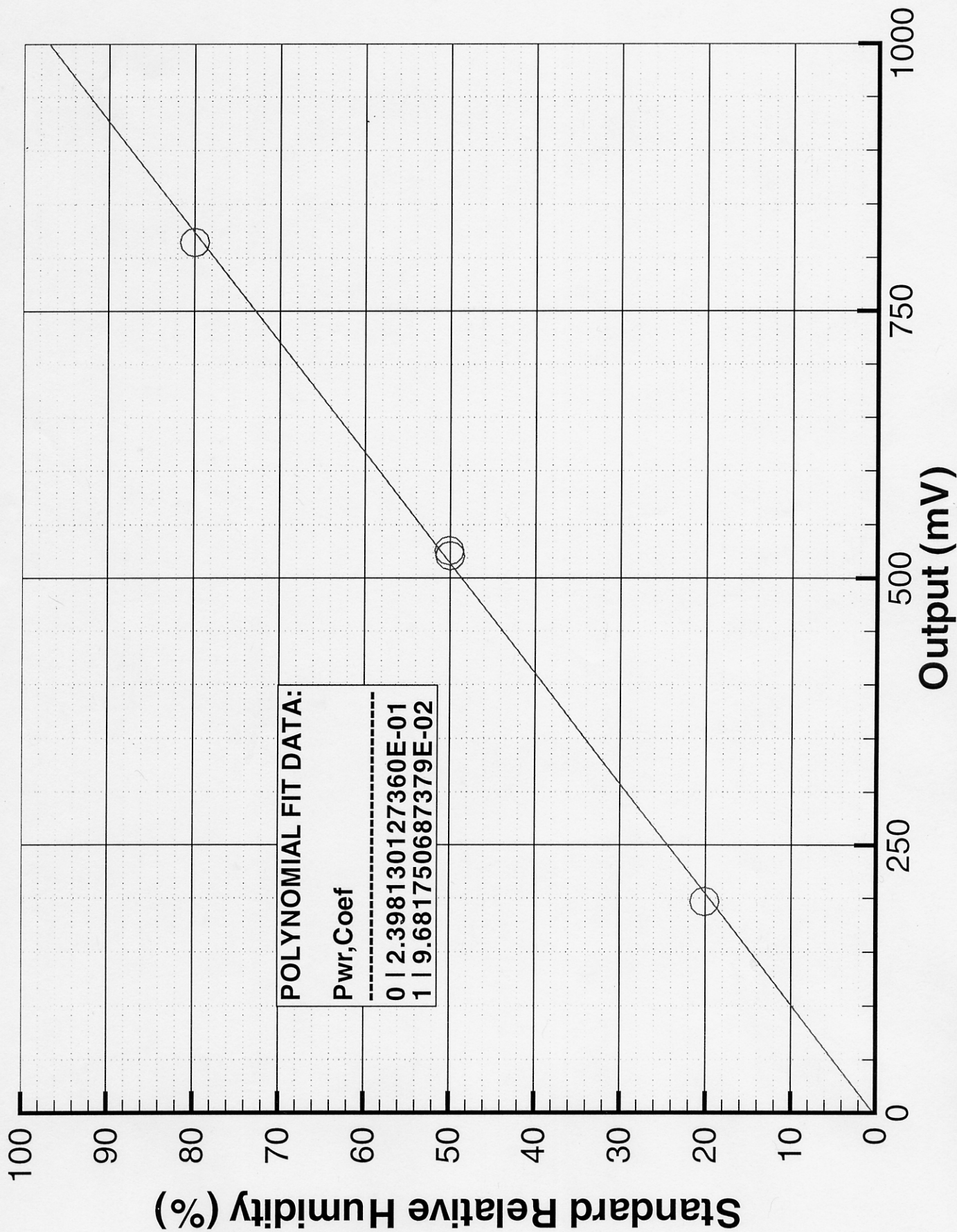
Standard Indication Degrees C	UUT Indication Degrees C	UUT Indication mV	Deviation Degrees C	Manufacturer's Tolerance Degrees C
21.2	21.3	613.25	0.1	± 1
29.9	30.0	699.85	0.1	± 1

Note: Humidity probe calibrated with Campbell Scientific 21X.
Reference voltage set to mfg. Spec on 21X data logger.

Manufacturer: Campbell Scientific
Serial Number: 5955
Work Order: 478488
ECN: 0056368
Model: 21X

Analog output = 0-1 V 0-100% RH.
Analog output = 0-1 V -40 to 60°C.
Probe offset = - 50 mV

Relative Humidity Linear fit from Temp/TH sensor (SN: T0420063)



Temperature Linear Fit from Temp/RH sensor (SN-T0420063)

