Z540.1

FLUKE®

Certificate of Calibration

Everett Service Center

ISO 9001:2008 (10100/2)

Certificate Number: 649084-708600863:1386265731

Result Summary:	PASS	**Date of Calibration:**	05 December 2013
Data Type:	FOUND-LEFT	**Recommended Due Date:**	05 December 2014
Manufacturer:	FLUKE	**Date of Certificate:**	05 December 2013
Model:	70 III	**Received Date:**	27 November 2013
Serial Number:	708600863	**Temperature:**	21.0 °C
Description:	MULTIMETER	**Relative Humidity:**	25 %RH
Procedure Name:	Fluke 70-3: (1 year) CAL VER/Alt 5520A	**Procedure Revision:**	1.0

Customer Name:	STATE OF WASHINGTON
City, State:	SEATTLE, WA
Customer Item ID:	
PO Number:	WSP/CCS
RMA Number:	30420722

This calibration is traceable to the International System of Units (SI), through National Metrology Institutes, ratiometric techniques, or natural physical constants. This certificate applies only to the item identified and shall not be reproduced other than in full, without the specific written approval by Fluke Corporation. Calibration certificates without signature are not valid. The calibration has been completed in accordance with Fluke Electronics Corporation Quality System Document 111.0 Rev 116 08/12 and Fluke Customer Support Services QAM 400 Rev. 002 03/22/2012.

The Data Type found in this certificate must be interpreted as:

- As - Found Calibration data collected before the unit is adjusted and / or repaired.
- As - Left Calibration data collected after the unit has been adjusted and / or repaired.
- Found-Left Calibration data collected without any adjustment and / or repair performed.

This calibration conforms to the requirements of ANSI/NCSL Z540-1-1994 (R2002).

In the attached measurement results, deviation may be expressed with units, Measured Value (MV) - Nominal Value (NV) or as a proportion of the nominal value ((MV-NV)/NV), expressed without units with a scalar multiplier such as % (0.01), or as a ratio of the units (mA/A, µV/V, etc.) Descriptions such as µA/A, µV/V, and others, where used to annotate results or column headings are the preferred replacements for what was historically labeled as "ppm" or parts-per-million and described the results in that column, unless otherwise noted by units symbols.

Where applicable, the expanded uncertainty of measurement at the time of test is given in the following pages. They are calculated in accordance with the method described in the ISO Guide to the Expression of Uncertainty in Measurement (GUM). The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k, such that the confidence level approximates 95%.

Where applicable, the Test Uncertainty Ratio (TUR) is provided in the following pages. Unless otherwise stated, the TUR for a given measurement result is 4:1 or greater.

Results are reviewed to establish where any measurement results exceeded the manufacturer's specifications.

Measured values (MV) greater than the Manufacturer's specification (Spec) are indicated by "!".

Caleb Brothers
Metrology Technician

Randy Lemon
Lead Metrologist

FLUKE ®

Certificate Number: 649084-708600863:1386265731

Calibration Date: 5-Dec-13

Standards Used

Asset #	Instrument Model	Cal Date	Cal Due
J1670	FLUKE 5520A CALIBRATOR	13 May 2013	13 February 2014

Calibration Results

Function/Range	Nominal Value	Measured Value	TUR	Manufacturer's Specifications Lower Limit	Manufacturer's Specifications Upper Limit
DISPLAY TEST					
Result of Operator Evaluation		PASS			
RESISTANCE TEST					
320Ohm Range					
0.0 Ohm	0.00	0.0		0.0	0.2
100.0 Ohm	100.00	99.9		99.3	100.7
3200Ohm Range					
1000 Ohm	1000.0	1000		994	1006
32kOhm Range					
10.00 kOhm	10.000	10.00		9.94	10.06
320kOhm Range					
100.0 kOhm	100.00	100.0		99.4	100.6
3.2MOhm Range					
1.000 MOhm	1.0000	1.000		0.994	1.006
32MOhm Range					
10.00 MOhm	10.000	10.01		9.79	10.21
DIODE TEST					
Beeper Audible		PASS			
Beeper OFF		PASS			
DC VOLTAGE TEST					
320mV Range					
300.0 mV	300.00	299.6		299.0	301.0
DC VOLTAGE TEST					
3.2V Range					
2.700 V	2.7000	2.698		2.691	2.709
32V Range					
27.00 V	27.000	26.98		26.91	27.09
320V Range					
270.0 V	270.00	269.8		269.1	270.9
600V Range					
600 V	600.0	600		597	603
AC VOLTAGE TEST					
3.2V Range					
2.700 V @ 100 Hz	2.7000	2.692		2.644	2.756
2.700 V @ 500 Hz	2.7000	2.681		2.644	2.756
600V Range					
600 V @ 100 Hz	600.0	598		586	614
600 V @ 1 kHz	600.0	598		586	614

End of Report