TEST EQUIPMENT USED

Part 15.231, ANSI C63.4, RSS 210

This is a list of all test equipment used.

Test Equipment list for Honeywell OATS & Conducted Line:

Mfg	Model	Cal Date	Cal Due		
Rohde & Schwarz	FSEA20	10/15/12	10/15/13		
ETS Lindgren	3149	08/25/12	08/25/13		
NOTE: THIS ANTENNA WAS CALIBRATED DOWN TO 26 MHz. PER OUR REQUEST.					
Agilent (HP)	HP11947A	05/09/12	05/09/13		
Com-Power	LI-115	10/19/12	10/19/13		
	Ronde & Schwarz ETS Lindgren ANTENNA WAS CALIBRATE Agilent (HP)	Rohde & Schwarz FSEA20 ETS Lindgren 3149 ANTENNA WAS CALIBRATED DOWN TO 26 MF Agilent (HP) HP11947A	Rohde & Schwarz FSEA20 10/15/12 ETS Lindgren 3149 08/25/12 ANTENNA WAS CALIBRATED DOWN TO 26 MHz. PER OUR REQU Agilent (HP) HP11947A 05/09/12		

PLEASE SEE PAGE 2-5 FOR TEST EQUIPMENT TRACEABILITY

If you need any additional information from Honeywell please contact:

Greg Barbato RF Engineer (Acting for Ken Eskildsen) Phone (Direct): (516) 577-5863 Email: greg.barbato@honeywell.com

Certificate of Calibration

Issue Date: 10/15/2012



General Calibration, Inc. 2 Mars Court, Boonton, New Jersey 07005 Phone (973) 299-2950 Fax (973) 299-0595

Certificate #: MR-22292 Work Order #: MR590 Customer #: 001464

Performed By:	Location of Calibration:
GENERAL CALIBRATION, INC.	HONEYWELL SECURITY

2 MARS COURT

HONEYWELL SECURITY (001464) 2 CORPORATE CENTER DRIVE

BOONTON, NJ 07005

MELVILLE, NY 11747 **Purchase Order:**

Equipment Information:		
Job No.:	018674	
Manufacturer:	R&S	
Description:	SPECTRUM ANALYZER	
Department:	ALARMNET	
Temp./RH:	22.0 C / 51.0 %	
Cal. Interval:	12 MONTHS	
Cal Date:	10/15/2012	

5294448 Asset Tag No .: 10503 Model Number: FSEA20 Serial Number: DE31589 Inspected By: MR1 Job Title: **METROLOGIST** Calibration Result: **PASSED** Cal. Due Date: 10/15/2013

Procedure #GCP: RS FSEA20

Calibration Notes:

Condition: Found In Tolerance and Left In Tolerance

Standards Used To Calibrate Equipment

Company	I.D.	Description	Serial Number	Cal. Due Date
GENERAL CALIBRATION	1031	SYNTHESIZED SWEEPER, 26GHZ	3050A02181	04/12/2013
GENERAL CALIBRATION	1124	FUNCTION GENERATOR	2847A11791	05/31/2013
GENERAL CALIBRATION	200	MEASURING RECEIVER	3438A05277	08/08/2013
GENERAL CALIBRATION	332	FREQUENCY COUNTER	CCN200100126	05/21/2013
GENERAL CALIBRATION	403	ATTENUATOR	219-05771	08/15/2013
GENERAL CALIBRATION	432	CALIBRATION KIT TYPE N 50-OHMS	2541A00233	10/29/2012
GENERAL CALIBRATION	434	POWER SPLITTER	11124	10/11/2013
GENERAL CALIBRATION	511	DIGITAL MULTIMETER	2201A04803	04/04/2013
GENERAL CALIBRATION	518	POWER SENSOR	US37292728	06/22/2013
GENERAL CALIBRATION	588	ATTENUATOR	2522A40468	07/18/2013

This is to certify that General Calibration, Inc. is A2LA accredited and that its calibration system is in compliance with ISO/IEC17025-2005, ANSI NCSL Z540-1, ANSI NCSL Z540-3, and ISO 9001:2008. The test limits stated in the report correspond to the Manufacturer calibration and published specifications of the equipment, at the points tested. Calibration of standards; reference standards and intermediate standards in this calibration have been checked and calibrated against the above working standard(s) which are traceable to the National Institute of Standards and Technology. Any accredited calibration under our A2LA scope of accreditation is denoted with A2LA accredited symbol on the calibration certificate. If the certificate includes any unaccredited items calibrated, they are clearly marked as unaccredited calibration.

Best Uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.

The results documented in this certificate relate only to the item(s) calibrated or tested.

Behard D- MIZare
General Calibration, Inc. - Q. A. Manager





An ESCO Technologies Company

1301 Arrow Point Drive Cedar Park, Texas 78613 (512) 531-6498



Cert I.D.: 93421

Certificate of Calibration Conformance

Page 1 of 5

The instrument identified below has been individually calibrated in compliance with the following standard(s):

SAE, ARP-958 - 2003, Electromagnetic Interference Measurement Antennas; Standard Calibration Method, Society of Automotive Engineers, Aerospace Recommended Practice. Fixed height, three antenna rotation, 1 meter separation. 3 meter separation performed per Annex C. Vertical calibration performed per above listed methodology.

Environment: Laboratory MTE is maintained in a temperature controlled environment with ambient conditions from 18 to 28 C, relative humidity less than 90%. The instrument under test has been calibrated on an open air test site (OATS) with environment temperature conditions ranging from 0 to 40 C which has no known influences on measurement quality.

Manufacturer:

ETS-Lindgren

Operating Range:

80 MHz - 6 GHz

Model Number:

3149.

Instrument Type:

Biconilog (Type 5)

Serial Number/ ID:

00045682

Date Code:

11242

Tracking Number:

S 000026017

Alternate ID:

Date Completed:

25-Sep-12

Customer:

HONEYWELL (NY)

Test Type:

3 meter, Horizontal and Vertical

Calibration Uncertainty:

01m

26 - 1000 MHz, +/-0.9 dB; 1000 - 2000 MHz, +/-0.8 dB; 2000 - 6000 MHz, +/-1.2 dB

k=2, (95% Confidence Level)

03m

26 - 1000 MHz, +/-0.9 dB; 1000 - 2000 MHz, +/-0.8 dB; 2000 - 6000 MHz, +/-1.3 dB

10m

26 - 1000 MHz, +/-1.0 dB; 1000 - 2000 MHz, +/-1.4 dB; 2000 - 6000 MHz, +/-2.3 dB

Test Remarks:

Calibration Traceability: All Measuring and Test Equipment (M/TE) identified below are traceable to the SI units through the National Institute for Standards and Technology (NIST) or other recognized National Metrology Institute. Calibration Laboratory and Quality System controls are compliant with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994.

Standards and Equipment Used: Make / Model / Name / S/N / Recall Date

Agilent

N5230C

PNA-L Net/Wrk Analyzer MY49002145

13-Jul-13

Condition of Instrument Upon Receipt:

25-Sep-12

In Tolerance to Internal Quality Standards

On Release:

In Tolerance to Internal Quality Standards

calibration Completed By

James Hansell, Calibration Technician

Attested and Issued on

Terry D. O'Neill, Calibration Manager

This document provides traceability of measurements to recognized national standards using controlled processes at the ETS-Lindgren Calibration Laboratory. Uncertainties listed are derived from the methods described by NIST Tech Note 1297. This certificate and report may not be reproduced, except in full, without the written approval of ETS-Lindgren Calibration Laboratory in accordance with ISO/IEC 17025-2005 and ANSI/NCSL Z540-1-1994. QAF 1127 (03/11)

Certificate of Calibration

Issue Date: 5/9/2012



The results documented in this certificate relate only to the item(s) calibrated or tested.

General Calibration, Inc. 2 Mars Court, Boonton, New Jersey 07005

2 Mars Court, Boonton, New Jersey 07005 Phone (973) 299-2950 Fax (973) 299-0595 Certificate #: MR-21481 Work Order #: MR554 Customer #: 001464



GENERAL CALIBRATION, INC. HONEYWELL SECURITY (001464) 2 MARS COURT BOONTON, NJ 07005 MELVILLE, NY 11747 Equipment Information: Purchase Order: 5294448 Job No.: 096188 Asset Tag No.: 10131 Manufacturer: HP Model Number: 11947A	
BOONTON, NJ 07005 MELVILLE, NY 11747 Equipment Information: Job No.: 096188 Asset Tag No.: 10131	
Equipment Information:Purchase Order:5294448Job No.:096188Asset Tag No.:10131	
Job No.: 096188 Asset Tag No.: 10131	
Abset Fig 190.	
Manufacturer: HP Model Number: 11947A	
Description: TRANSIENT LIMITER Serial Number: 3107A02782	
Department: Inspected By: MR1	
Temp./RH: 22 C / 45 % Job Title: METROLOGIST	
Cal. Interval: 12 MONTHS Calibration Result: PASSED	
Cal Date: 05/09/2012 Cal. Due Date: 05/09/2013	
Procedure #GCP: HP 11947A Calibration Notes: Condition: Found In Tolerance and Left In Tolerance Standards Used To Calibrate Equipment	\$\$4.
Company I.D. Description Serial Number Cal. Description	ie Date
GENERAL CALIBRATION 593 SPECTRUM ANALYZER 3017A05102 08/	24/2012
GENERAL CALIBRATION 907 CALIBRATION KIT, 26.5 GHZ, 3.5 MM 3101A05556 02/	26/2013
GENERAL CALIBRATION 970 FUNCTION GENERATOR 2847A07354 10/	04/2012
This is to certify that General Calibration, Inc. is A2LA accredited and that its calibration system is in compliance with ISO/IEC17025-2005, ANSI NCSL Z540-1, ANSI Z540-3, and ISO 9001:2008. The test limits stated in the report correspond to the Manufacturer calibration and published specifications of the equipment, at the points to Calibration of standards; reference standards and intermediate standards in this calibration have been checked and calibrated against the above working standard(s) which traceable to the National Institute of Standards and Technology. Any accredited calibration under our A2LA scope of accreditation is denoted with A2LA accredited symptotic calibration certificate. If the certificate includes any unaccredited items calibrated, they are clearly marked as unaccredited calibration. Best Uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.	ested.

General Calibration, Inc. - Q. A. Manager

Certificate of Calibration

Issue Date: 10/19/2012



General Calibration, Inc. 2 Mars Court, Boonton, New Jersey 07005 Phone (973) 299-2950 Fax (973) 299-0595 Certificate #: MR-22320 Work Order #: MR590 Customer #: 001464

Performed By:	Location of Calibration:
GENERAL CALIBRATION, INC.	HONEYWELL SECURITY (001464)
2 MARS COURT	2 CORPORATE CENTER DRIVE

MELVILLE, NY 11747

BOONTON, NJ 07005

		1.100,111,11	
Equipment Infor	mation:	Purchase Order:	5294448
Job No.:	076905	Asset Tag No.:	11262
Manufacturer:	COM-POWER	Model Number:	LI-115
Description:	LISN	Serial Number:	241050
Department:	DAVID KALMUS	Inspected By:	MR1
Temp./RH:	22.0 C / 45.0 %	Job Title:	METROLOGIST
Cal. Interval:	12 MONTHS	Calibration Result:	PASSED
Cal Date:	10/19/2012	Cal. Due Date:	10/19/2013
NAME OF TAXABLE PARTY.			

Procedure #GCP: COM-POWER LI-115

Calibration Notes:

Condition: Found In Tolerance and Left In Tolerance

Company	I.D.	Description	Serial Number	Cal. Due Date
GENERAL CALIBRATION	511	DIGITAL MULTIMETER	2201A04803	04/04/2013
GENERAL CALIBRATION	700	DIGITAL MULTIMETER	77820175	02/10/2013

This is to certify that General Calibration, Inc. is A2LA accredited and that its calibration system is in compliance with ISO/IEC17025-2005, ANSI NCSL Z540-1, ANSI NCSL Z540-3, and ISO 9001:2008. The test limits stated in the report correspond to the Manufacturer calibration and published specifications of the equipment, at the points tested. Calibration of standards; reference standards and intermediate standards in this calibration have been checked and calibrated against the above working standard(s) which are traceable to the National Institute of Standards and Technology. Any accredited calibration under our A2LA scope of accreditation is denoted with A2LA accredited symbol on the calibration certificate. If the certificate includes any unaccredited items calibrated, they are clearly marked as unaccredited calibration.

Best Uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k=2.

The results documented in this certificate relate only to the item(s) calibrated or tested.

General Calibration, Inc. - Q. A. Manager