Part 15.231, ANSI C63.4, RSS 210

This is a list of all test equipment used in the exhibits.

Equipment	Mfg	Model	Cal	Date
Spectrum Analyzer	Rohde & Schwarz	FSU3	5/9/2013	5/9/2014
Spectrum Analyzer	Rohde & Schwarz	FSU26	5/9/2013	5/9/2014
Antenna ("Biconilog")	ETS (EMCO) Lindgren	3149	7/8/13	7/8/14
Horn Antenna	Electro Metrics	RGA-60	5/17/2013	5/17/2014
LNA 1 to 26 GHz	MITEQ	AFS42-00102650	Verified before use	
1.5 to 12 GHz HPF's	Microlab	HIGH PASS FILTER	Verified before use	
Transient Limiter	Agilent	HP11947A	5/9/2013	5/9/2014
LISN	Com-Power	LI-115	10/17/2013	10/17/2014

If you need any additional information from Honeywell please contact:

Ed Sayers, RF Engineer
Acting for Ken Eskildsen
Phone: (516) 577-5863
E-mail: Eduardo.Sayers@honeywell.com

Certificate of Calibration

Issue Date: 5/13/2013

GEN-CAL

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

Certificate #: 1034723
Work Order #: RH509
Customer #: 001464

Performed By:	**Location of Calibration:**
GENERAL CALIBRATION, INC. 2 MARS COURT BOONTON, NJ 07005	HONEYWELL SECURITY (001464) 2 CORPORATE CENTER DRIVE MELVILLE, NY 11747

Equipment Information:		**Purchase Order:**	**583920**
Job No.:	066615	Asset Tag No.:	11493
Manufacturer:	R&S	Model Number:	FSU3
Description:	SPECTRUM ANALYZER	Serial Number:	100029
Department:		Inspected By:	RHI
Temp./RH:	22.0 C / 53.0 %	Job Title:	METROLOGIST
Cal. Interval:	12 MONTHS	Calibration Result:	PASSED
Cal Date:	05/09/2013	Cal. Due Date:	05/09/2014

Procedure #GCP: RS FSU3

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	335	SYNTHESIZED SWEEPER, 50GHZ	3614A00157	08/02/2014
GENERAL CALIBRATION	661	POWER SENSOR	US37298428	07/06/2013
GENERAL CALIBRATION	676	LEVEL GENERATOR	2516A04043	05/21/2013
GENERAL CALIBRATION	856	FREQUENCY COUNTER	51002-5	06/28/2013
GENERAL CALIBRATION	974	POWER METER	2709A29063	06/04/2013

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.

Approved By Robert A. Mears
General Calibration, Inc. - Q. A. Manager

Certificate of Calibration

Issue Date: 5/13/2013

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

Certificate #: 1034725
Work Order #: RH509
Customer #: 001464

Performed By:	**Location of Calibration:**
GENERAL CALIBRATION, INC. 2 MARS COURT BOONTON, NJ 07005	HONEYWELL SECURITY (001464) 2 CORPORATE CENTER DRIVE MELVILLE, NY 11747

Equipment Information:		**Purchase Order:**	**583920**
Job No.:	066617	Asset Tag No.:	11496
Manufacturer:	R&S	Model Number:	FSU26
Description:	SPECTRUM ANALYZER	Serial Number:	100303
Department:		Inspected By:	RHI
Temp./RH:	22.0 C / 53.0 %	Job Title:	METROLOGIST
Cal. Interval:	12 MONTHS	Calibration Result:	PASSED
Cal Date:	05/09/2013	Cal. Due Date:	05/09/2014

Procedure #GCP: RS FSU26

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	335	SYNTHESIZED SWEEPER, 50GHZ	3614A00157	08/02/2014
GENERAL CALIBRATION	676	LEVEL GENERATOR	2516A04043	05/21/2013
GENERAL CALIBRATION	856	FREQUENCY COUNTER	51002-5	06/28/2013
GENERAL CALIBRATION	874	POWER SENSOR	3318A15971	10/18/2013
GENERAL CALIBRATION	974	POWER METER	2709A29063	06/04/2013

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Approved By Robert A. Weaver
General Calibration, Inc. - Q. A. Manager

ACCREDITED Calibration Laboratory Certificate 1207.01

Cert I.D.: 97937

ETS-LINDGREN™
An ESCO Technologies Company
1301 Arrow Point Drive
Cedar Park, Texas 78613
(512) 531-6400

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:	*00029390*	**Date Code:**	
Tracking Number:	**S 000028197**	**Alternate ID:**	11243
Date Completed:	08-Jul-13	**Customer:**	HONEYWELL (NY)
Test Type:	3 meter Horizontal and Vertical		

Calibration Uncertainty: k=2, (95% Confidence Level)

01m	26 - 1000 MHz, +/-0.9 dB; 1000 - 2000 MHz, +/-0.8 dB; 2000 - 6000 MHz, +/-1.2 dB
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: Extended Calibration: from 26 MHz to 6 GHz

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:
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 08-Jul-13
Doug Kramer, EMC/Wireless Lab Manager

ELECTRO-METRICS

CERTIFICATE # 21657 **DATE:** 05/17/2013

ELECTRO-METRICS
CERTIFICATE OF CONFORMANCE

MODEL: RGA-60 Double Ridged Guide Antenna
SERIAL # 3127
ID # 02973
CUSTOMER: HONEYWELL SECURITY
ADDRESS: 2 CORPORATE CENTER DRIVE, MELVILLE, NY 11747
P.O.# 5959111
LINE: 1

The above equipment has been calibrated and is within the manufacturer's published limit of error. Calibration is traceable to the National Institute of Standards & Technology. Calibration has been accomplished on the above-named instrument by comparison with some or all of the following standards that are maintained by Electro-Metrics or by an authorized facility.

This certificate shall not be altered or reproduced, except in full, without written approval of Electro-Metrics.

- **CONDITION OF EQUIPMENT RECEIVED:** Non-Operational (RE: Repair Letter)
- **DATE CALIBRATED:** 05/17/13
- **CALIBRATION RANGE/DISTANCE:** 1 GHz to 18 GHz/3 Meter (As per customer request).
- **CALIBRATION ORIENTATION:** Horizontal/Vertical (As per customer request).
- **ENVIRONMENTAL CONDITIONS:** TEMPERATURE 52 Degrees F HUMIDITY 59%
- **CALIBRATION PROCEDURE:** TS-J800-MOD
- **CALIBRATION DUE DATE:** 05/17/14
- **CALIBRATION STANDARDS:** ARP958A
- **COMMENTS/REMARKS:** Refer to repair letter for problems/solutions.

TYPE	DESCRIPTION	TRACE	ASSET#
FREQUENCY	EIP 371 Frequency Counter	13H34	B#2476
A.C./D.C.	Keithley 195 System DMM	13H35	B#0093
RF AMPLITUDE	Boonton 9200A RF Millivoltmeter	8P673	B#0246
ATTENUATION	JFW Model 50R-079 Attenuator	280687	B#0405
IMPULSE	Electro-Metrics CIG-25	811/268663-03	B#2772
POWER	HP 435B Powermeter	5194746	B#0077
POWER	HP 8484A Sensor	5161373	B#0078
POWER	HP 8485A Sensor	5175560	B#0114
ENVIRONMENTAL	Lufft Model HTAB169B Hygrometer	204709	B#2790

Certified by: _____
Quality Assurance

231 Enterprise Road, Johnstown, New York 12095 Phone: (518) 762-2600 Fax: (518) 762-2812
EMAIL: info@emihq.com WEB: http://www.electro-metrics.com

Certificate of Calibration

Issue Date: 5/9/2013

GEN-CAL

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

Certificate #: RH-20292
Work Order #: RH509
Customer #: 001464

Performed By:	Location of Calibration:
GENERAL CALIBRATION, INC. 2 MARS COURT BOONTON, NJ 07005	HONEYWELL SECURITY (001464) 2 CORPORATE CENTER DRIVE MELVILLE, NY 11747

Equipment Information:		Purchase Order:	583920
Job No.:	096188	Asset Tag No.:	10131
Manufacturer:	HP	Model Number:	11947A
Description:	TRANSIENT LIMITER	Serial Number:	3107A02782
Department:		Inspected By:	RHI
Temp./RH:	22.0 C / 53.0 %	Job Title:	METROLOGIST
Cal. Interval:	12 MONTHS	Calibration Result:	PASSED
Cal Date:	05/09/2013	Cal. Due Date:	05/09/2014

Procedure #GCP: HP 11947A

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	335	SYNTHESIZED SWEEPER, 50GHZ	3614A00157	08/02/2014
GENERAL CALIBRATION	593	SPECTRUM ANALYZER	3017A05102	08/22/2013
GENERAL CALIBRATION	676	LEVEL GENERATOR	2516A04043	05/21/2013
GENERAL CALIBRATION	789	POWER SENSOR	3318A26887	07/06/2013
GENERAL CALIBRATION	974	POWER METER	2709A29063	06/04/2013

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.

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Approved By Robert A. Mezo

General Calibration, Inc. - Q. A. Manager

Certificate of Calibration

Issue Date: 10/17/2013

GEN-CAL

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

Certificate #: GC49-10365
Work Order #: GC49 -135
Customer #: 001464

Performed By:
GENERAL CALIBRATION, INC.
2 MARS COURT

BOONTON, NJ 07005

Location of Calibration:
HONEYWELL SECURITY (001464)
2 CORPORATE CENTER DRIVE

MELVILLE, NY 11747

Equipment Information:

Job No.:	076905	**Purchase Order:**	**583920**
Manufacturer:	COM-POWER	Asset Tag No.:	11262
Description:	LISN	Model Number:	LI-115
Department:	DAVID KALMUS	Serial Number:	241050
Temp./RH:	22.0 C / 24.0 %	Inspected By:	MR1
Cal. Interval:	12 MONTHS	Job Title:	METROLOGIST
Cal Date:	10/17/2013	Calibration Result:	PASSED
		Cal. Due Date:	10/17/2014

Procedure #GCP: COM-POWER LI-115
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	418	DIGITAL MULTIMETER	2201A12339	01/16/2014
GENERAL CALIBRATION	700	DIGITAL MULTIMETER	77820175	02/11/2014

This is to certify that General Calibration, Inc. is accredited by A2LA 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's calibration and published specifications of the equipment, at the points tested. To the best of Gen-Cal's knowledge, the data obtained and as reported was accurate at the time of calibration. Many factors beyond the control of Gen-Cal may affect the performance of equipment after the calibration (verification) on the equipment. 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 SI units of measurement through National Institute of Standards and Technology or other National Measurement Institutes under CIPM MRA. Any accredited calibration under our A2LA scope of accreditation is denoted with A2LA accredited symbol on the calibration certificate. If the Accredited certificate includes any unaccredited items calibrated, they are clearly marked as unaccredited calibration.

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Approved By _____
General Calibration, Inc. - Q. A. Manager