Section 15.231 and ANSI C63.4

This is a list of all test equipment used.

Test Equipment list for Honeywell OATS:

Equipment	Mfg	Model	Cal Date	Cal Due
Spectrum Analyzer	Rohde & Schwarz	FSEA20	10/14/08	10/14/09
Antenna ('Biconilog')	ETS (EMCO)Lindgren	3149	03/09/09	03/09/10
Transient Limiter	HP	11947A	10/17/08	10/17/09
LISN	EMCO	3825/2	10/17/08	10/17/09

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

ACCREDITED
Lab ID:1207.01-Calibration

ETS-LINDGREN™
An ESCO Technologies Company
1301 Arrow Point Drive
Cedar Park, Texas 78613
(512) 531-6498

ETS-LINDGREN
An ESCO Technologies Company

Track# S00015900 Ltd Cal ☐
By AS Date 09-Mar-09
Next Cal Due
www.ets-lindgren.com

Cert I.D.: 72154

Certificate of Calibration Conformance

The instrument identifed 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:	**S00015900**	**Alternate ID:**	
Date Completed:	09-Mar-09	**Customer:**	HONEYWELL SECURITY (NY)
Test Type:	3 meter, Horizontal and Vertical		

Calibration Uncertainty: k=2, (95% Confidence Level)	01m	80 - 1000 MHz, +/-0.9 dB; 1000 - 2000 MHz, +/-0.8 dB; 2000 - 6000 MHz, +/-1.2 dB
	03m	80 - 1000 MHz, +/-0.9 dB; 1000 - 2000 MHz, +/-0.8 dB; 2000 - 6000 MHz, +/-1.3 dB
	10m	80 - 1000 MHz, +/-1.0 dB; 1000 - 2000 MHz, +/-1.4 dB; 2000 - 6000 MHz, +/-2.3 dB

Test Remarks: Replaced damaged bracket mount. Performed special calibration from 26 MHz to 6GHz. Provided data on disk.

Calibration Traceability: All Measuring and Test Equipment (M/TE) identified below are traceable to the National Institute for Standards and Technology (NIST). Calibration Laboratory and Quality System controls are compliant with ISO/IEC 17025-2005.

Standards and Equipment Used:

Make / Model / Name / S/N / Recall Date				
Anritsu	MS4623A	Network Analyzer	992201	05-Sep-09

Condition of Instrument Upon Receipt:
Other

On Release:
In Tolerance to Internal Quality Standards

Calibration Completed By
Alan Schifferdecker, Calibration Technician

Attested and Issued on 09-Mar-09
Justin Tarr, Calibration Supervisor

Issue Date: 10/14/2008

GEN-CAL

General Calibration, Inc.

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

Certificate #: 12962MR
Purchase Order: 4965832
Work Order #: MR219
Customer #: 001464

GENERAL CALIBRATION, INC.
2 MARS COURT
MONTVILLE, NJ 07045

HONEYWELL SECURITY (1464)
2 CORPORATE CENTER DRIVE

MELVILLE, NY 11747

BarCode:	018675	Instrument I.D.:	10506
Manufacturer:	R&S	Model Number:	FSEA20
Description:	SPECTRUM ANALYZER	Serial Number:	DE23427
Current Location:	ALARMNET	Inspected By:	MR1
Temp./RH:	22 C / 40 %	Job Title:	METROLOGIST
Cal. Interval:	12 MONTHS	Calibration Result:	PASS
Cal Date:	10/14/2008	Cal. Due Date:	10/14/2009

Condition: Found In Tolerance and Left In Tolerance

GENERAL CALIBRATION	434	POWER SPLITTER	N/A	09/12/2009
GENERAL CALIBRATION	531	MEASURING RECEIVER	N/A	09/22/2009
GENERAL CALIBRATION	636	SYNTHESIZED SWEEPER	N/A	09/03/2009
GENERAL CALIBRATION	666	SENSOR MODULE	N/A	04/25/2009

The above instrument has been checked and calibrated against the above working standard(s) which are traceable to the NIST. The test limits stated in the report correspond to the published specifications of the equipment, at the points tested. Also, the collective uncertainties of measurement standards do not exceed 25% of the tolerance of the characteristics being calibrated, where possible. The metrology procedures utilized conform to and satisfy the requirements set forth in ANSI/NCSL Z540-1-1994, 10 CFR part 21, ISO 9001-2000, ISO 10012-2003, and MIL-STD 45662A.

Approved By _____

General Calibration, Inc. - Q. A. Manager

Certificate of Calibration

Issue Date: 05/12/2009

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

Certificate #: 14309MR
Purchase Order: 5105648
Work Order #: MR267
Customer #: 001464

Performed By:
GENERAL CALIBRATION, INC.
2 MARS COURT

MONTVILLE, NJ 07045

Location of Calibration:
HONEYWELL SECURITY (1464)
2 CORPORATE CENTER DRIVE

MELVILLE, NY 11747

Equipment Information

BarCode:	096188	Instrument I.D.:	10131
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:	PASS
Cal Date:	05/12/2009	Cal. Due Date:	5/12/2010

Calibration Notes
Condition: Found In Tolerance and Left In Tolerance

Standards Used To Calibrate Equipment

Company	I.D.	Description	Cal. Due Date
GENERAL CALIBRATION	503	SPECTRUM ANALYZER	03/11/2010
GENERAL CALIBRATION	838	SIGNAL GENERATOR	08/25/2009

The above instrument has been checked and calibrated against the above working standard(s) which are traceable to the NIST. The test limits stated in the report correspond to the published specifications of the equipment, at the points tested. Also, the collective uncertainties of measurement standards do not exceed 25% of the tolerance of the characteristics being calibrated, where possible. The metrology procedures utilized conform to and satisfy the requirements set forth in ANSI/NCSL Z540-1-1994, 10 CFR part 21, ISO 9001-2000, ISO 10012-2003, and MIL-STD 45662A.

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

Issue Date: 10/17/2008

General Calibration, Inc.

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

Certificate #: 13009MR
Purchase Order: 4965832
Work Order #: MR219
Customer #: 001464

GENERAL CALIBRATION, INC.
2 MARS COURT
MONTVILLE, NJ 07045

HONEYWELL SECURITY (1464)
2 CORPORATE CENTER DRIVE

MELVILLE, NY 11747

BarCode:	004345	Instrument I.D.:	04832
Manufacturer:	EMCO	Model Number:	3825/2
Description:	LISN	Serial Number:	1076
Current Location:	BLDG. 163	Inspected By:	MR1
Temp./RH:	22 C / 43 %	Job Title:	METROLOGIST
Cal. Interval:	12 MONTHS	Calibration Result:	PASS
Cal Date:	10/17/2008	Cal. Due Date:	10/17/2009

Condition: Found In Tolerance and Left In Tolerance

GENERAL CALIBRATION	511	DIGITAL MULTIMETER	N/A	09/08/2009
GENERAL CALIBRATION	700	DIGITAL MULTIMETER	N/A	01/10/2009

The above instrument has been checked and calibrated against the above working standard(s) which are traceable to the NIST. The test limits stated in the report correspond to the published specifications of the equipment, at the points tested. Also, the collective uncertainties of measurement standards do not exceed 25% of the tolerance of the characteristics being calibrated, where possible. The metrology procedures utilized conform to and satisfy the requirements set forth in ANSI/NCSL Z540-1-1994, 10 CFR part 21, ISO 9001-2000, ISO 10012-2003, and MIL-STD 45662A.

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