

Report of Measurements

Measurements for the Intentional Radiator, and OBW were made in accordance with the procedures and reporting requirements at:

Honeywell's OATS (FCC No: 152762 & IC No:573F-1)
which is located at:
2 Corporate Center Drive, Melville, NY 11747.

Measurements were made in accordance with the procedure and reporting requirements of ANSI C63.4-2003.

The Test Set-Up (C63.4 section 10.1.3) is shown in EXHIBIT 5-2; "Test Setup Photos". The sequence of testing (C63.4 section 10.1.7) for radiated emissions is as follows: A preliminary scan was conducted with the receiver antenna close to the EUT in order to identify the emission characteristics of the EUT (C63.4 section 8.3.1.1). The antenna and EUT were then placed at the proper separation (3 Meters) with the EUT positioned at 80 cm on a non-conducting turntable. The EUT was rotated on the turntable to maximize the received signal strength, then the receiver antenna height was varied between one (1) and four (4) Meters to further maximize the received reading. Thereafter, the device was again rotated to a peak output position and the antenna height was re-adjusted for maximum received signal. This procedure was re-iterated until there was no further increase in signal level. This procedure was performed with the EUT rotating in three orthogonal planes (C63.4 section 13.1.4.1) to generate a final maximum reading which is recorded on the radiated emissions result sheet. Similar measurements were made on the receiver to ensure compliance as an unintentional radiator.

Note, The Spectrum Analyzer resolution bandwidths set as follows;
(Video Bandwidth is always set 3X greater than RBW)

For occupied bandwidth measurements, RBW = 30KHz and VBW = 100KHz.

For radiated emissions below 1 GHz, the RBW = 100kHz.
Detector function set to peak.

For radiated emissions above 1 GHz, the RBW = 1MHz.
Detector function set to peak.

TRANSMITTER RADIATED EMISSIONS are recorded in "EXHIBIT 5-3".

OCCUPIED BANDWIDTH is recorded in "EXHIBIT 5-4".

TEST EQUIPMENT (per C63.4 section 10.1.4) is recorded in "EXHIBIT 6".

HONEYWELL SECURITY & CUSTOM ELECTRONICS
2 Corporate Center Drive
Melville, NY 11747

REV K FEB 10

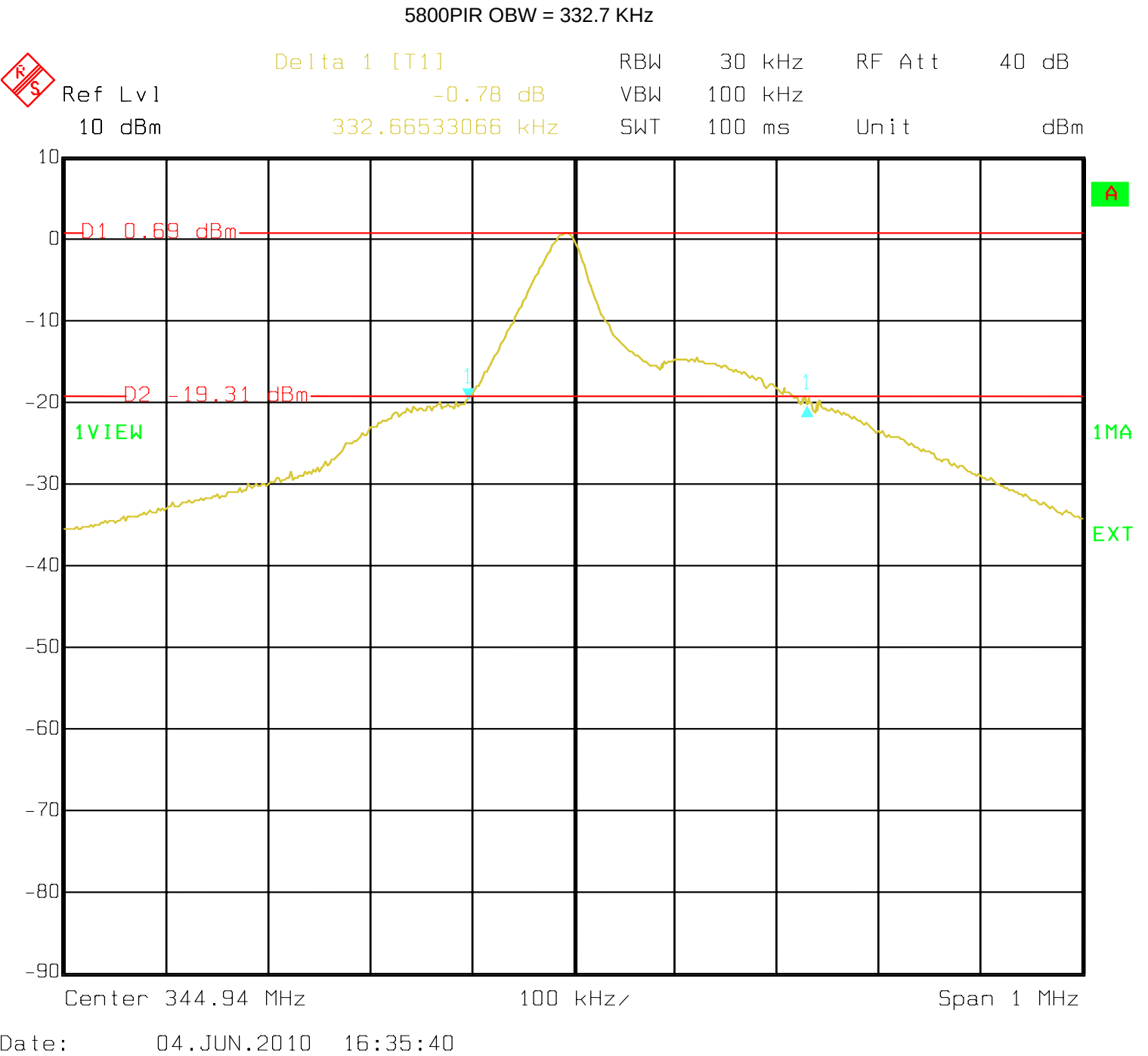
EXHIBIT 5-3

FCC ID: CFS8DL5800PIR1

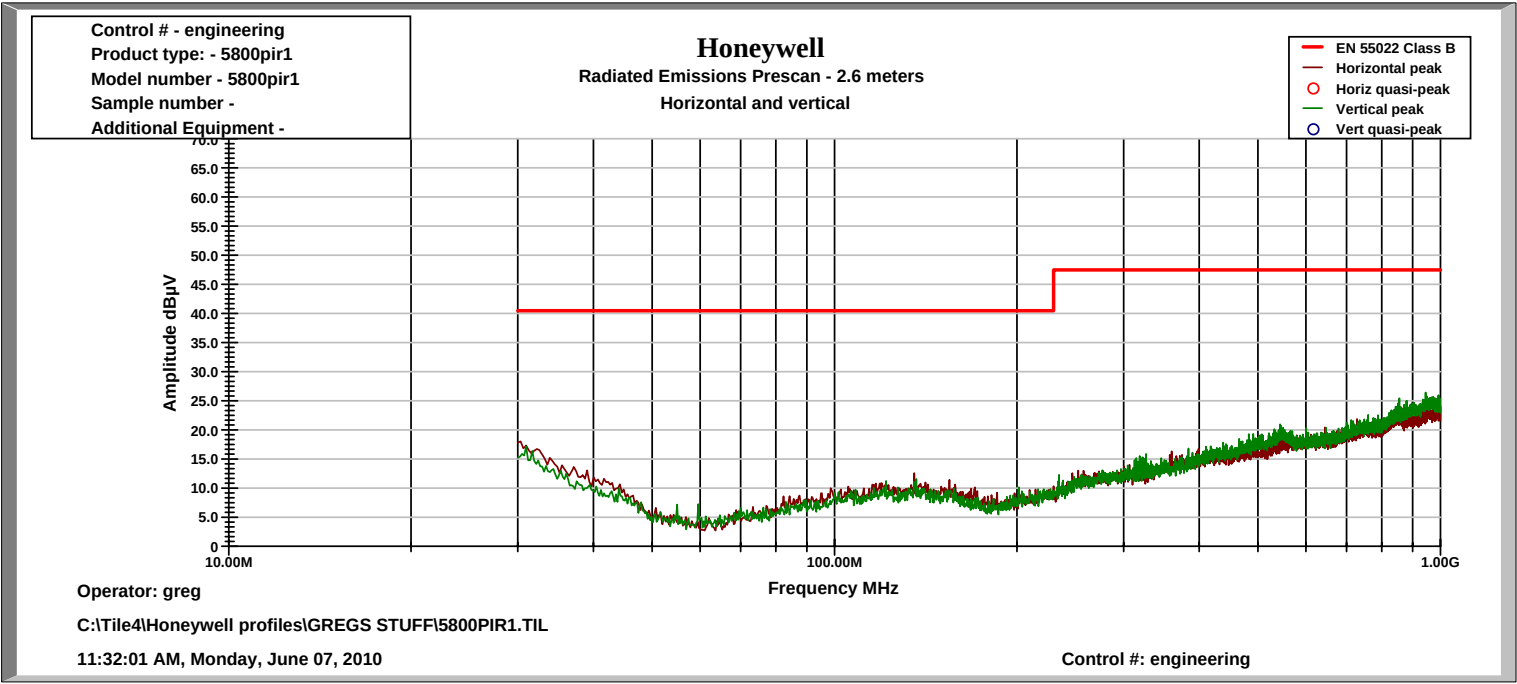
Date : 06/04/2010 Tested by : G. BARBATO Approved by : K. Eskildsen
 Test Sample (model) : 344.94 MHz 5800PIR1
 Test method: ANSI C63.4 - 2004
 Test specification: FCC Part 15, Sub-part C and RSS 210 , Issue 7
 Notes: (1) Fo = 345MHz. (2) Detector = Peak (3) Frequency range scanned to 4 GHz.
 Emissions not reported were more than 20dB below the specified unit.
 [(Meter reading + Cable/Amp factor + Antenna factor) / 20]]
 (4) Conv. Reading = 10
 (5) Corr. Reading = Conv. Reading X Duty Cycle
 (6) Six Highest Emissions Recorded

Freq. (MHz)	Antenna Polarity (V/H)	Meter Reading (dB uV)	Cable/Amp Factor (dB)	Antenna Factor (dB/m)	Conv. Reading (uV/M)	Duty Cycle (%)	Corr. Reading (uV/M)	Limit @ 3M (uV/M)
30			LAST CAL 16 FEB 09 CABLE C	LAST CAL 10 JUL 09 BICONILOG S/N:00045682				729
344.94	H	77.00	2.3	15.35	54013.2	10.0%	5401.3	7292
689.88	H	29.89	3.2	20.02	452.4	10.0%	45.2	729
1034.82	H	31.60	4.4	24.85	1102.8	10.0%	110.3	500
1379.76	H	21.67	4.9	25.93	421.7	10.0%	42.2	500
1724.70	H	22.89	5.5	26.96	585.5	10.0%	58.5	729
2069.64	H	20.08	6.4	31.36	779.8	10.0%	78.0	729
2414.58	H	25.21	6.9	32.15	1633.1	10.0%	163.3	729
2759.52	H	21.01	7.4	32.37	1094.0	10.0%	109.4	500
3104.46	H	22.86	7.9	32.73	1494.5	10.0%	149.5	729
3449.40	H	22.25	9.2	33.00	1669.2	10.0%	166.9	729
4000			LAST CAL 16 FEB 09 CABLE C	LAST CAL 10 JUL 09 BICONILOG S/N:00045682				

h	v
15.35	14.37
20.02	19.66
24.85	25.22
25.93	26.35
26.96	27.49
31.36	31.34
32.15	31.81
32.37	31.56
32.73	32.34
33.00	33.09



RECEIVER EMISSIONS



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	10/12/09	10/12/10
Antenna ('Biconilog')	ETS (EMCO)Lindgren	3149	07/10/09	07/10/10

PLEASE SEE PAGE 2-6 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: 10/12/2009



General Calibration, Inc.

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

Certificate #: 15395MR
Purchase Order: 5105648
Work Order #: MR309
Customer #: 001464

Performed By:

GENERAL CALIBRATION, INC.
2 MARS COURT

Location of Calibration:

HONEYWELL SECURITY (001464)
2 CORPORATE CENTER DRIVE

MONTVILLE, NJ 07045

MELVILLE, NY 11747

Equipment Information

Job No.: 018675
Manufacturer: R&S
Description: SPECTRUM ANALYZER
Department: ALARMNET
Temp./RH: 22 C / 45 %
Cal. Interval: 12 MONTHS
Cal Date: 10/12/2009

Asset Tag No.: 10506
Model Number: FSEA20
Serial Number: DE23427
Inspected By: MR1
Job Title: METROLOGIST
Calibration Result: PASS
Cal. Due Date: 10/12/2010

Calibration Notes

Condition: Found In Tolerance and Left In Tolerance

Procedure #GCP: R&S FSEA20

Standards Used To Calibrate Equipment

Company	I.D.	Description	Cal. Due Date
GENERAL CALIBRATION	1031	SYNTHESIZED SWEEPER	02/02/2010
GENERAL CALIBRATION	434	POWER SPLITTER	09/18/2010
GENERAL CALIBRATION	650	POWER SPLITTER	12/08/2009
GENERAL CALIBRATION	774	POWER SENSOR	07/13/2010
GENERAL CALIBRATION	967	FUNCTION GENERATOR	09/15/2010

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

Robert D. McEwen
General Calibration, Inc. - Q. A. Manager



Cert I.D.: 74136

Certificate of Calibration Conformance

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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:	EMCO	Operating Range:	80 MHz - 6 GHz
Model Number:	3149	Instrument Type:	Biconilog (Type 5)
Serial Number/ ID:	00045682	Date Code:	
Tracking Number:	S000016846	Alternate ID:	11242
Date Completed:	10-Jul-09	Customer:	HONEYWELL (NY)
Test Type:	3 meter, Horizontal and Vertical		
Calibration Uncertainty:	01m		80 - 1000 MHz, +/-0.9 dB; 1000 - 2000 MHz, +/-0.8 dB; 2000 - 6000 MHz, +/-1.2 dB
k=2, (95% Confidence Level)	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: Unit was calibrated down to 26 MHz.

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

Hewlett Packard	8753C	Network Analyzer	3029A01587	11-Feb-10
Hewlett Packard	85047A	S-parameter Test Set	3033A02186	11-Feb-10
Rohde & Schwarz	ZVK	Vector Network Analyzer	1127.8651.60	26-Feb-10

Condition of Instrument Upon Receipt:

In Tolerance to Internal Quality Standards

On Release:

In Tolerance to Internal Quality Standards

Calibration Completed By

Slav Ligai, Calibration Technician

Attested and Issued on 10-Jul-09

Justin Tarr, Calibration Supervisor