



Engineering Solutions & Electromagnetic Compatibility Services

**Certification Application Report for
FCC Part 15.247 & Industry Canada RSS-247**

Test Lab:		Applicant:	
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FCC ID/ IC	CFS8DLCOMR6/ 573F-COMR6	Test Report Date	August 21, 2017
Platform	RF6	RTL Work Order #	2016197
Model #/Model	SIX COMBO/COMR6	RTL Quote #	QRTL16-211A
American National Standard Institute	FCC: ANSI C63.10-2013: American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices		
FCC Classification	DTS – Part 15 Digital Transmission System		
FCC Rule Part(s)/Guidance	FCC Rules Part 15.247: Operation within the bands 920-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz Direct Sequence System (10-01-2015)		
Industry Canada	RSS-247 Issue 2: Digital Transmission Systems (DTSS), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices RSS-Gen Issue 4: General Requirements for Compliance of Radio Apparatus		
Frequency Range (MHz)	Output Power (W)*	Frequency Tolerance	Emission Designator
2405 – 2475	0.166	N/A	N/A

* power is peak integrated effective radiated power

I, the undersigned, hereby declare that the equipment tested and referenced in this report conforms to the identified standard(s) as described in this test report. No modifications were made to the equipment during testing in order to achieve compliance with these standards. Furthermore, there was no deviation from, additions to, or exclusions from, the applicable parts of FCC Part 2, FCC Part 15, Industry Canada RSS-247, RSS-Gen, and ANSI C63.10.

Signature: 

Date: August 21, 2017

Typed/Printed Name: Desmond A. Fraser

Position: President

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These test(s) are accredited under Rhein Tech Laboratories, Inc. ISO/IEC 17025 accreditation issued by ANAB. Refer to certificate and scope of accreditation AT-1445.

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1 General Information

1.1 Scope

This is an original FCC and Industry Canada certification application report.

Applicable Standards:

- FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz.
- Industry Canada RSS-247: Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices
- Industry Canada RSS-Gen: General Requirements for Compliance of Radio Apparatus

1.2 Description of EUT

Equipment Under Test	Wireless Smoke and CO Detector - RF6 Radio
Model #	SIX COMBO
Power Supply	Four 3V Lithium CR123A cells
Modulation Type	O-QPSK
Frequency Range	2405-2475 MHz
Antenna Type & Gain	Two Inverted F Type printed on PCB; -1.5 dBi

1.3 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located at 360 Herndon Parkway, Suite 1400, Herndon, Virginia 20170. This site has been fully described in a report and approved by the Federal Communications Commission to perform AC line conducted and radiated emissions testing.

1.4 Related Submittal(s)/Grant(s)

This is an original certification application for Honeywell Security, Model # SIX COMBO, FCC ID: CFS8DLCOMR6, IC: 573F-COMR6.

1.5 Modifications

No modifications were made to the equipment during testing in order to achieve compliance with these standards.

2 Test Information

2.1 Description of Test Modes

In accordance with FCC 15.31(m), and because the EUT utilizes an operating band greater than 10 MHz, the following frequencies were tested.

Table 2-1: Channels Tested

Channel	RF6 Frequency (MHz)
Low	2405
Middle	2445
High	2475

2.2 Exercising the EUT

The EUT was supplied with test firmware programmed with a low, middle, and high channel for testing. The EUT was tested in all three orthogonal planes in order to determine worst-case emissions. The EUT was provided with software to continuously transmit during testing. The carrier was also checked to verify that information was being transmitted. There were no deviations from the test standard(s) and/or methods. The test results reported relate only to the item tested.

2.3 Test Result Summary

Table 2-2: Test Result Summary – FCC Part 15 Subpart C (Section 15.247); IC RSS-247

FCC Standard	IC Standard	Test	Pass/Fail or N/A
15.247(b)(3)	RSS-247 5.4(4), RSS-Gen 6.12	Radiated Fundamental	Pass
15.247(d)	RSS-Gen 8.10	Band Edge Measurement	Pass
15.209	RSS-247 5.5, RSS-Gen 6.13	Radiated Emissions	Pass
15.207	RSS-Gen	AC Line Conducted	Pass

2.4 Test System Details

The test samples were received on September 19, 2016. The FCC identifiers for all applicable equipment, plus descriptions of all cables used in the tested system, are identified in the following table.

Table 2-3: Equipment under Test

Part	Manufacturer	Model #	Serial Number	FCC ID	Cable Description	RTL Bar Code
RF6 Transceiver (Test Mode)	Honeywell Security	SIX COMBO	MEL-113	CFS8DLCOMR6	N/A	22246
RF6 Transceiver (Normal Mode)	Honeywell Security	SIX COMBO	MEL-129	CFS8DLCOMR6	N/A	22247

2.5 Configuration of Tested System

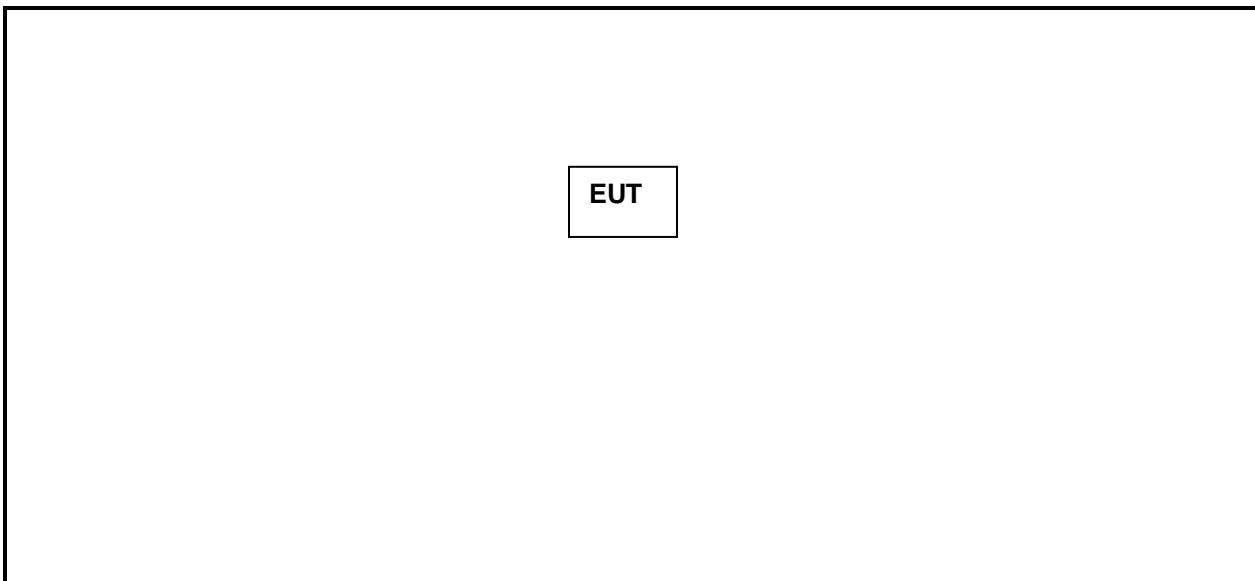


Figure 2-1: Configuration of System Under Test

3 Peak Output Power - 15.247(b)(3); IC RSS-247 5.4(4), RSS-Gen 6.12

3.1 Power Output Test Procedure

Measured per ANSI C63.10 (2013) section 11.9 Fundamental emission output power, section 11.9.1.2 Integrated band power method. A peak radiated field strength using max hold of the fundamental and a 1 MHz resolution bandwidth/3 MHz video bandwidth, was measured using the analyzers integrated channel power method and converted to peak power and correcting for the EUT antenna gain.
 (dBuV/m -104.77 + 20log(3m))

Table 3-1: Power Output Test Equipment

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
900772	EMCO	3161-02	Horn Antenna (2 - 4 GHz)	9804-1044	4/9/18
900878	Rhein Tech Laboratories	AM3-1197-0005	3 meter Antenna Mast, Polarizing	Outdoor Range 1	Not Required
901592	Insulated Wire Inc.	KPS-1503-3600-KPR	SMK RF Cables 20'	NA	8/3/17
901242	Rhein Tech Laboratories	WRT-000-0003	Wood Rotating Table	N/A	Not Required
901581	Rohde & Schwarz	FSU	Spectrum Analyzer	1166.1660.50	3/22/18

3.2 Power Output Test Data

Table 3-2: Radiated Power Output Test Data – Antenna #1

Frequency (MHz)	Effective Isotropic Radiated Power (EIRP) Peak Measurement (dBuV/m)	Site Correction Factor (dB/m)	EUT Antenna Gain (dBi)	Corrected Effective Radiated Power (ERP) Peak Measurement (dBuV/m)	Corrected Calculated Peak Power (W)
2405	90.1	25.3	-1.5	116.9	0.147
2445	90.1	25.6	-1.5	117.2	0.158
2475	90.3	25.7	-1.5	117.4	0.166

Table 3-3: Radiated Power Output Test Data – Antenna #2

Frequency (MHz)	Effective Isotropic Radiated Power (EIRP) Peak Measurement (dBuV/m)	Site Correction Factor (dB/m)	EUT Antenna Gain (dBi)	Corrected Effective Radiated Power (ERP) Peak Measurement (dBuV/m)	Corrected Calculated Peak Power (W)
2405	86.7	25.3	-1.5	113.6	0.068
2445	87.8	25.6	-1.5	114.9	0.092
2475	88.0	25.7	-1.5	115.2	0.098

Test Personnel:

Dan Baltzell

Test Engineer



Signature

September 20, 2016

Date of Test

4 Compliance with the Band Edge – FCC 15.247(d); RSS-247 8.10

4.1 Band Edge Test Procedure

The transmitter output was connected to its appropriate antenna. A delta measurement was performed from the highest peak in the restricted band to the peak of the fundamental, and subtracted from the average radiated field strength using a minimum bandwidth resolution of 1 MHz and an average detector; the result was compared to the limit per ANSI C63.10 (2013) Sections 6.10.6 and 4.1.4.2.2.

Table 4-1: Band Edge Test Equipment

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
900772	EMCO	3161-02	Horn Antenna (2 - 4 GHz)	9804-1044	4/9/18
900878	Rhein Tech Laboratories	AM3-1197-0005	3 meter Antenna Mast, Polarizing	Outdoor Range 1	Not Required
901592	Insulated Wire Inc.	KPS-1503-3600-KPR	SMK RF Cables 20'	NA	8/3/17
901242	Rhein Tech Laboratories	WRT-000-0003	Wood Rotating Table	N/A	Not Required
901581	Rohde & Schwarz	FSU	Spectrum Analyzer	1166.1660.50	3/22/18

Table 4-2: Field Strength Test Data – Antenna #1

Frequency (MHz)	Peak Radiated Measurement (dBuV/m)	Site Correction Factor (dB/m)	Corrected Peak Measurement (dBuV/m)	Calculated Average (Peak – 23.1 dB) (dBuV/m)
2405.000	91.8	25.4	117.2	94.1
2475.000	92.4	25.7	118.1	95.0

Table 4-3: Field Strength Test Data – Antenna #2

Frequency (MHz)	Peak Radiated Measurement (dBuV/m)	Site Correction Factor (dB/m)	Corrected Peak Measurement (dBuV/m)	Calculated Average (Peak – 23.1 dB) (dBuV/m)
2405.000	88.5	25.4	113.9	90.8
2475.000	90.0	25.7	115.6	92.5

4.2 Band Edge Test Results

4.2.1 Calculation of Lower Band Edge – Antenna #1

94.1 dBuV/m is the duty cycle calculated average field strength measurement, from which the delta measurement of 59.1 dB is subtracted, resulting in a level of 35 dB. This level has a margin of 19.0 dB below the limit of 54 dBuV/m.

Calculation: $94.1 \text{ dBuV/m} - 59.1 - 54 \text{ dBuV/m} = -19.0 \text{ dB}$

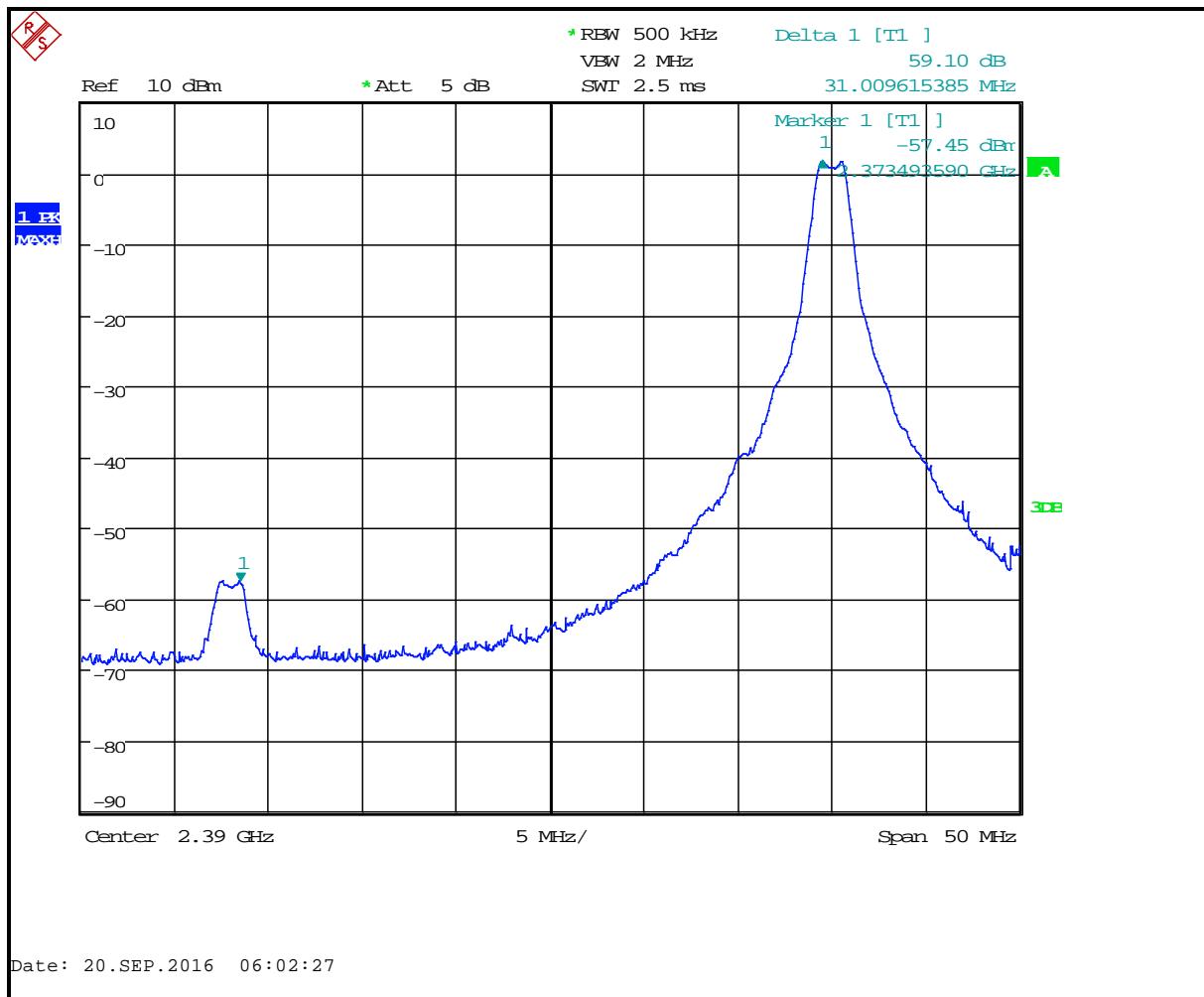
Peak Field Strength of Lower Band Edge = 117.2 dBuV/m

Calculated Average Field Strength of Lower Band Edge (Duty Cycle Correction = -23.1 dB) = 94.1 dBuV/m

Delta measurement = 59.1 dB

4.2.2 Lower Band Edge – Conducted Delta Plot – Antenna #1

Plot 4-1: Lower Band Edge – Antenna #1



4.2.3 Calculation of Upper Band Edge – Antenna #1

95.0 dB_{UV}/m is the duty cycle calculated average field strength average measurement, from which the delta measurement of 57.3 dB is subtracted, resulting in a level of 37.7 dB. This level has a margin of 16.3 dB below the limit of 54 dB_{UV}/m.

Calculation: 95.0 dBuV/m - 57.3 - 54 dBuV/m = -16.3 dB

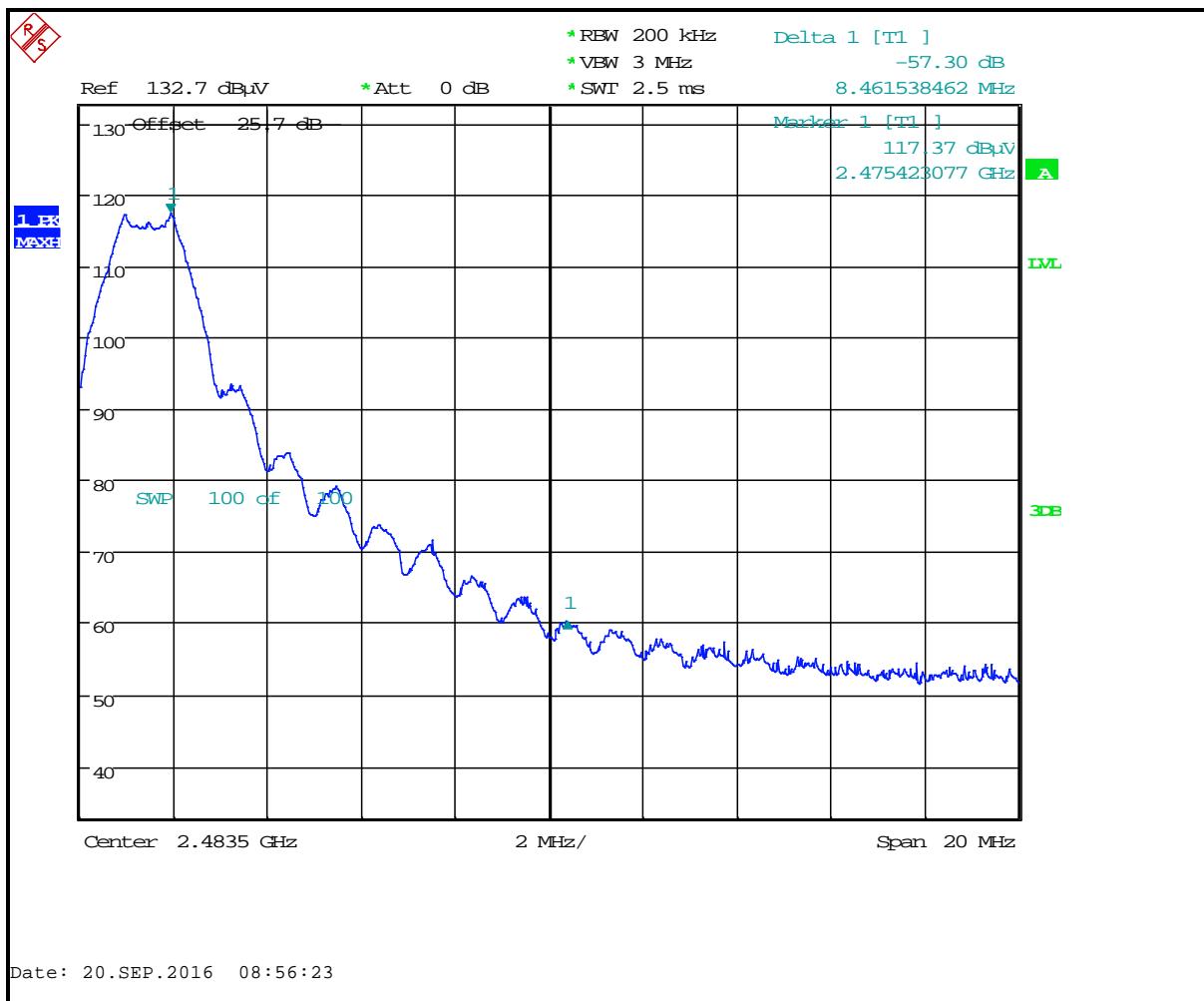
Peak Field Strength of Upper Band Edge = 118.1 dBuV/m

Calculated Average Field Strength of Upper Band Edge (Duty Cycle Correction = -23.1 dB) = 95.0 dBuV/m

Delta measurement = 57.3 dB

4.2.4 Upper Band Edge – Conducted Delta Plot – Antenna #1

Plot 4-2: Upper Band Edge - Antenna #1



4.2.5 Calculation of Lower Band Edge – Antenna #2

90.8 dBuV/m is the calculated average field strength average measurement, from which the delta measurement of 62.3 dB is subtracted, resulting in a level of 28.5 dB. This level has a margin of 25.5 dB below the limit of 54 dBuV/m.

Calculation: $90.8 \text{ dBuV/m} - 62.3 - 54 \text{ dBuV/m} = -25.5 \text{ dB}$

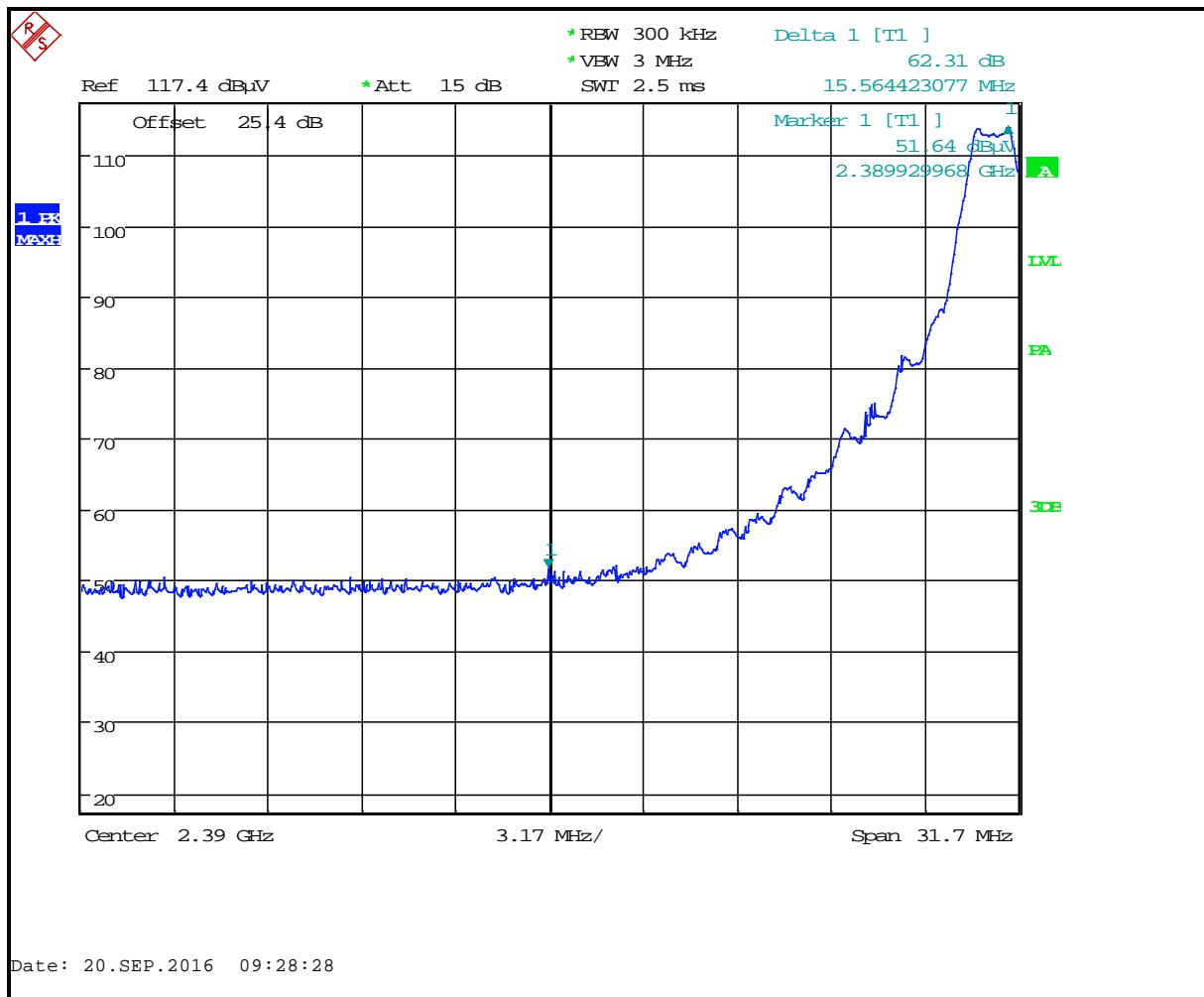
Peak Field Strength of Lower Band Edge = 113.9 dBuV/m

Calculated Average Field Strength of Lower Band Edge (Duty Cycle Correction = -23.1 dB) = 90.8 dBuV/m

Delta measurement = 62.3 dB

4.2.6 Lower Band Edge – Conducted Delta Plot – Antenna #2

Plot 4-3: Lower Band Edge – Antenna #2



4.2.7 Calculation of Upper Band Edge – Antenna #2

92.5 dBuV/m is the duty cycle calculated average field strength average measurement, from which the delta measurement of 57.4 dB is subtracted, resulting in a level of 35.1 dB. This level has a margin of 18.9 dB below the limit of 54 dBuV/m.

Calculation: $92.5 \text{ dBuV/m} - 57.4 \text{ dB} - 54 \text{ dBuV/m} = -18.9 \text{ dB}$

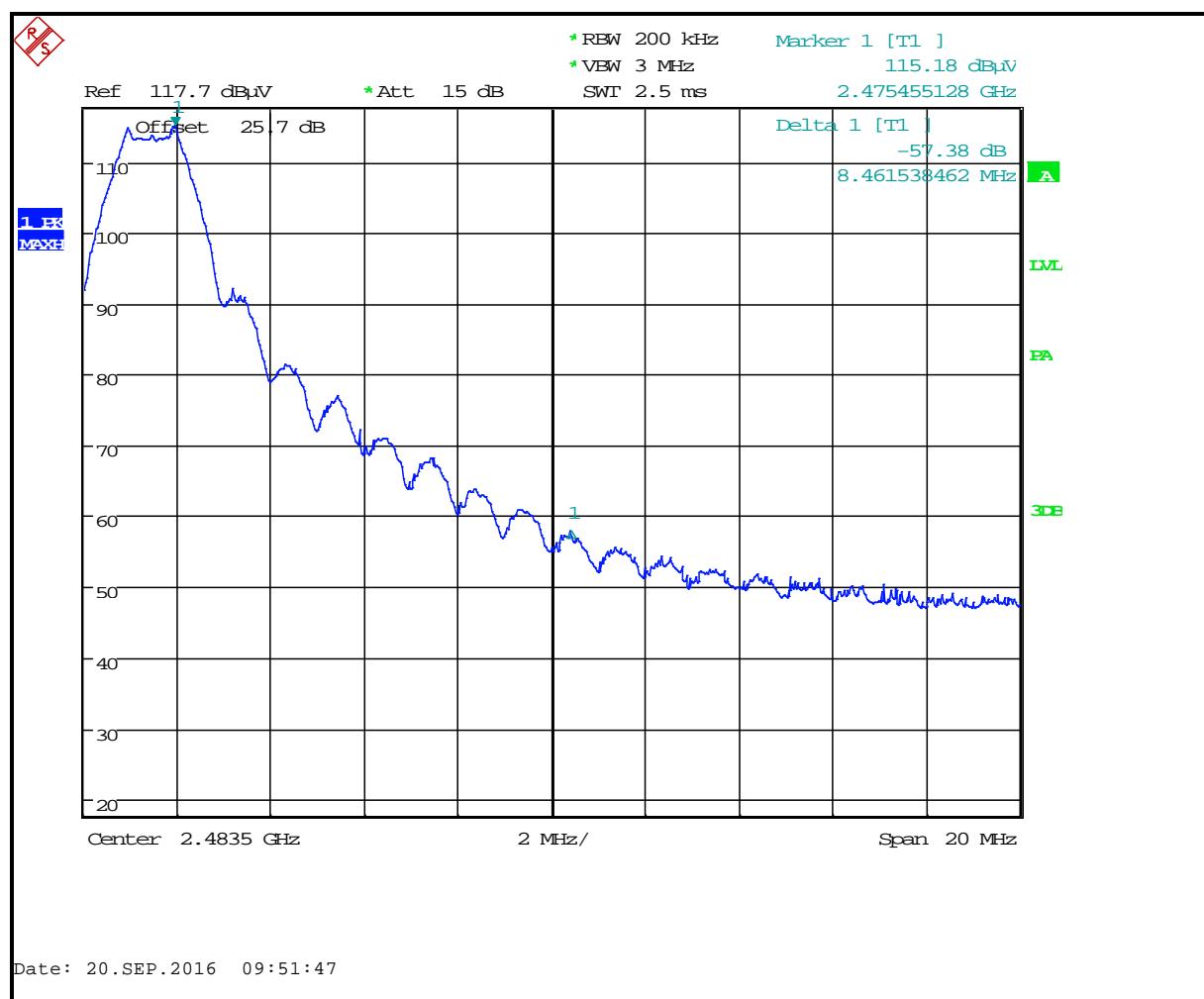
Peak Field Strength of Upper Band Edge = 115.6 dBuV/m

Calculated Average Field Strength of Upper Band Edge (Duty Cycle Correction = -23.1 dB) = 92.5 dBuV/m

Delta measurement = 57.4 dB

4.2.8 Upper Band Edge – Conducted Delta Plot – Antenna #2

Plot 4-4: Upper Band Edge - Antenna #2



Test Personnel:

Dan Baltzell

Test Engineer



Signature

September 20, 2016

Date of Test

5 Radiated Emissions – FCC 15.209; RSS-247 5.5; RSS-Gen 6.13

5.1 Limits of Radiated Emissions Measurement

Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009-0.490	2400/f (kHz)	300
0.490-1.705	2400/f (kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

As shown in 15.35(b), for frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any circumstances of modulation.

5.2 Radiated Emissions Measurement Test Procedure

Per ANSI C63.10 (2013) Section 11.12.2.7 Radiated spurious emission test, Section 6.3 Radiated emissions testing – common requirements.

Before final measurements of radiated emissions were made on the open-field three/ten meter range, the EUT was scanned indoors at one and three meter distances. This was done in order to determine its emissions spectrum signature. The physical arrangement of the test system and associated cabling was varied in order to determine the effect on the EUT's emissions in amplitude, direction and frequency. This process was repeated during final radiated emissions measurements on the open-field range, at each frequency, in order to ensure that maximum emission amplitudes were attained.

Final radiated emissions measurements were made on the three/ten-meter, open-field test site. The EUT was placed on a nonconductive turntable 0.8 meters for measurements less than 1 GHz and 1.5 meters above the ground plane for measurements above 1 GHz. The spectrum was examined from 9 kHz to the 10th harmonic of the highest fundamental transmitter frequency (24.8 GHz).

At each frequency, the EUT was rotated 360°, and the antenna was raised and lowered from 1 to 4 meters in order to determine the emission's maximum level. Measurements were taken using both horizontal and vertical antenna polarizations. For frequencies between 30 and 1000 MHz, the spectrum analyzer's 6 dB bandwidth was set to 120 kHz, and the analyzer was operated in the CISPR quasi-peak detection mode. For emissions above 1000 MHz, average emissions are measured using the average detector function with a minimum resolution bandwidth of 1 MHz. The highest emission amplitudes relative to the appropriate limit were measured and recorded in this report.

Average values are calculated as specified by ANSI C63.10(2013) Section 7.5 using a duty cycle correction as specified by Honeywell of 6.976%, $20 * \log (0.06976) = -23.1$ dB

Table 5-1: Radiated Emissions Test Equipment

RTL Asset #	Manufacturer	Model	Part Type	Serial Number	Calibration Due Date
900878	Rhein Tech Laboratories	AM3-1197-0005	3 meter Antenna Mast, Polarizing	Outdoor Range 1	Not Required
901592	Insulated Wire Inc.	KPS-1503-3600-KPR	SMK RF Cables 20'	NA	8/3/17
901242	Rhein Tech Laboratories	WRT-000-0003	Wood Rotating Table	N/A	Not Required
901581	Rohde & Schwarz	FSU	Spectrum Analyzer	1166.1660.50	3/22/18
900772	EMCO	3161-02	Horn Antenna (2 - 4 GHz)	9804-1044	4/9/18
900321	EMCO	3161-03	Horn Antenna (4.0 - 8.2 GHz)	9508-1020	4/9/18
900323	EMCO	3160-07	Horn Antenna (8.2 - 12.4 GHz)	9605-1054	4/9/18
900356	EMCO	3160-08	Horn Antenna (12.4 - 18 GHz)	9607-1044	4/9/18
900325	EMCO	3160-9	Horn Antennas (18 - 26.5 GHz)	9605-1051	4/9/18
900791	Chase	CBL6111B	Bilog Antenna (30 MHz – 2000 MHz)	N/A	6/11/17

5.3 Radiated Emissions Test Results

5.3.1 Radiated Emissions Harmonics/Spurious Test Data

Table 5-2: Radiated Emissions Harmonics/Spurious - Peak - 2405 MHz – Antenna #1

Emission Frequency (MHz)	Peak Analyzer Reading (dBuV) (1 MHz RBW/VBW)	Site Correction Factor (dB/m)	Peak Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)
2372.885	35.3	25.3	60.6	74.0	-13.4
4810.000	31.5	33.5	65.0	74.0	-9.0
12025.000	20.4	44.0	64.4	74.0	-9.6
19240.000	-2.3	52.9	50.6	74.0	-23.4

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Client: Honeywell Security
 Model #: SIX COMBO
 Standards: FCC 15.247/IC RSS-247
 ID's: CFS8DLCOMR6 / 573F-COMR6
 Report #: 2016211

Table 5-3: Radiated Emissions Harmonics/Spurious – Average - 2405 MHz – Antenna #1

Emission Frequency (MHz)	Duty Cycle Calculated Average (-23.1 dB) (dBuV)	Site Correction Factor (dB/m)	Average Emission Level (dBuV/m)	Average Limit (dBuV/m)	Average Margin (dB)
2372.885	12.2	25.3	37.5	54.0	-16.5
4810.000	8.4	33.5	41.9	54.0	-12.1
12025.000	-2.7	44.0	41.2	54.0	-12.8
19240.000	-25.4	52.9	27.5	54.0	-26.5

Table 5-4: Radiated Emissions Harmonics/Spurious – Peak - 2445 MHz – Antenna #1

Emission Frequency (MHz)	Peak Analyzer Reading (dBuV) (1 MHz RBW/VBW)	Site Correction Factor (dB/m)	Peak Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)
4890.000	28.2	33.6	61.8	74.0	-12.2
7335.000	38.0	35.7	73.7	74.0	-0.3
12225.000	20.5	44.0	64.5	74.0	-9.5
19560.000	-6.5	53.0	46.5	74.0	-27.5

Table 5-5: Radiated Emissions Harmonics/Spurious – Average - 2445 MHz – Antenna #1

Emission Frequency (MHz)	Duty Cycle Calculated Average (-23.1 dB) (dBuV)	Site Correction Factor (dB/m)	Average Emission Level (dBuV/m)	Average Limit (dBuV/m)	Average Margin (dB)
4890.000	5.1	33.6	38.6	54.0	-15.4
7335.000	14.9	35.7	50.6	54.0	-3.4
12225.000	-2.6	44.0	41.4	54.0	-12.6
19560.000	-29.6	53.0	23.4	54.0	-30.6

Table 5-6: Radiated Emissions Harmonics/Spurious – Peak - 2475 MHz – Antenna #1

Emission Frequency (MHz)	Peak Analyzer Reading (dBuV) (1 MHz RBW/VBW)	Site Correction Factor (dB/m)	Peak Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)
4950.000	26.3	33.7	60.0	74.0	-14.0
7425.000	36.3	35.8	72.1	74.0	-1.9
12375.000	18.9	44.0	62.9	74.0	-11.1
19800.000	-5.7	53.2	47.5	74.0	-26.5
22275.000	-3.5	54.2	50.7	74.0	-23.3

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Client: Honeywell Security
 Model #: SIX COMBO
 Standards: FCC 15.247/IC RSS-247
 ID's: CFS8DLCOMR6 / 573F-COMR6
 Report #: 2016211

Table 5-7: Radiated Emissions Harmonics/Spurious – Average - 2475 MHz – Antenna #1

Emission Frequency (MHz)	Duty Cycle Calculated Average (-23.1 dB) (dBuV)	Site Correction Factor (dB/m)	Average Emission Level (dBuV/m)	Average Limit (dBuV/m)	Average Margin (dB)
4950.000	3.2	33.7	36.9	54.0	-17.1
7425.000	13.2	35.8	48.9	54.0	-5.1
12375.000	-4.2	44.0	39.8	54.0	-14.2
19800.000	-28.8	53.2	24.3	54.0	-29.7
22275.000	-26.6	54.2	27.6	54.0	-26.4

Table 5-8: Radiated Emissions Harmonics/Spurious - Peak - 2405 MHz – Antenna #2

Emission Frequency (MHz)	Peak Analyzer Reading (dBuV) (1 MHz RBW/VBW)	Site Correction Factor (dB/m)	Peak Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)
2373.114	32.5	25.3	57.8	74.0	-16.2
4810.000	31.1	33.5	64.6	74.0	-9.4
12025.000	18.5	44.0	62.5	74.0	-11.5
19240.000	-5.9	52.9	47.0	74.0	-27.0

Table 5-9: Radiated Emissions Harmonics/Spurious – Average - 2405 MHz – Antenna #2

Emission Frequency (MHz)	Duty Cycle Calculated Average (-23.1 dB) (dBuV)	Site Correction Factor (dB/m)	Average Emission Level (dBuV/m)	Average Limit (dBuV/m)	Average Margin (dB)
2373.114	9.4	25.3	34.7	54.0	-19.3
4810.000	8.0	33.5	41.5	54.0	-12.5
12025.000	-4.6	44.0	39.3	54.0	-14.7
19240.000	-29.0	52.9	23.9	54.0	-30.1

Table 5-10: Radiated Emissions Harmonics/Spurious – Peak - 2445 MHz – Antenna #2

Emission Frequency (MHz)	Peak Analyzer Reading (dBuV) (1 MHz RBW/VBW)	Site Correction Factor (dB/m)	Peak Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)
4890.000	29.4	33.6	63.0	74.0	-11.0
7335.000	36.4	35.7	72.1	74.0	-1.9
12225.000	19.9	44.0	63.9	74.0	-10.1
19560.000	-16.2	53.0	36.8	74.0	-37.2

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 ID's: CFS8DLCOMR6 / 573F-COMR6
 Report #: 2016211

Table 5-11: Radiated Emissions Harmonics/Spurious – Average - 2445 MHz – Antenna #2

Emission Frequency (MHz)	Duty Cycle Calculated Average (-23.1 dB) (dBuV)	Site Correction Factor (dB/m)	Average Emission Level (dBuV/m)	Average Limit (dBuV/m)	Average Margin (dB)
4890.000	6.3	33.6	39.8	54.0	-14.2
7335.000	13.3	35.7	49.0	54.0	-5.0
12225.000	-3.2	44.0	40.8	54.0	-13.2
19560.000	-39.3	53.0	13.7	54.0	-40.3

Table 5-12: Radiated Emissions Harmonics/Spurious – Peak - 2475 MHz – Antenna #2

Emission Frequency (MHz)	Peak Analyzer Reading (dBuV) (1 MHz RBW/VBW)	Site Correction Factor (dB/m)	Peak Emission Level (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)
4950.000	29.0	33.7	62.7	74.0	-11.3
7425.000	36.4	35.8	72.2	74.0	-1.8
12375.000	18.0	44.0	62.0	74.0	-12.0
19800.000	-6.5	53.2	46.7	74.0	-27.3
22275.000	-4.5	54.2	49.7	74.0	-24.3

Table 5-13: Radiated Emissions Harmonics/Spurious – Average - 2475 MHz – Antenna #2

Emission Frequency (MHz)	Duty Cycle Calculated Average (-23.1 dB) (dBuV)	Site Correction Factor (dB/m)	Average Emission Level (dBuV/m)	Average Limit (dBuV/m)	Average Margin (dB)
4950.000	5.9	33.7	39.6	54.0	-14.4
7425.000	13.3	35.8	49.0	54.0	-5.0
12375.000	-5.1	44.0	38.9	54.0	-15.1
19800.000	-29.6	53.2	23.5	54.0	-30.5
22275.000	-27.6	54.2	26.6	54.0	-27.4

5.3.2 Radiated Unintentional Emissions Test Data

Temperature: 83°F Humidity: 42%											
Emission Frequency (MHz)	Test Detector	Antenna Polarity (H/V)	Turntable Azimuth (deg)	Antenna Height (m)	Analyzer Reading (dBuV)	Site Correction Factor (dB/m)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Pass/Fail	
171.474	Qp	V	0	1.0	-3.3	11.0	7.7	43.5	-35.8	Pass	
191.426	Qp	V	0	1.0	-5.9	10.5	4.6	43.5	-38.9	Pass	
247.115	Qp	V	0	1.0	-9.6	13.4	3.8	46.0	-42.2	Pass	
243.269	Qp	V	0	1.0	-13.2	13.0	-0.1	46.0	-46.1	Pass	
274.840	Qp	V	0	1.0	-10.0	14.7	4.7	46.0	-41.3	Pass	
290.785	Qp	V	0	1.0	-11.6	14.6	2.9	46.0	-43.1	Pass	
306.731	Qp	V	0	1.0	-13.8	14.9	1.1	46.0	-44.9	Pass	
314.824	Qp	V	0	1.0	-15.4	15.0	-0.3	46.0	-46.3	Pass	
438.301	Qp	H	0	1.0	-16.3	18.4	2.1	46.0	-43.9	Pass	
446.314	Qp	H	0	1.0	-15.2	18.7	3.5	46.0	-42.5	Pass	
657.452	Qp	V	0	1.0	-11.7	21.0	9.2	46.0	-36.8	Pass	
806.010	Qp	V	0	1.0	-15.6	22.1	6.5	46.0	-39.5	Pass	

Test Personnel:

Daniel W. Baltzell
 Test Engineer



Signature

September 21, 2016

Date of Test

6 Conclusion

The data in this measurement report shows that the EUT as tested, Honeywell Security Model # SIX COMBO, FCC ID: CFS8DLCOMR6, IC: 573F-COMR6, complies with the applicable requirements of Parts 2 and 15 of the FCC Rules and Regulations and Industry Canada RSS-247 and RSS-Gen.

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Appendix A: Test Photographs



Photograph 1: Radiated Emissions Testing – Front View (Less than 1 GHz)

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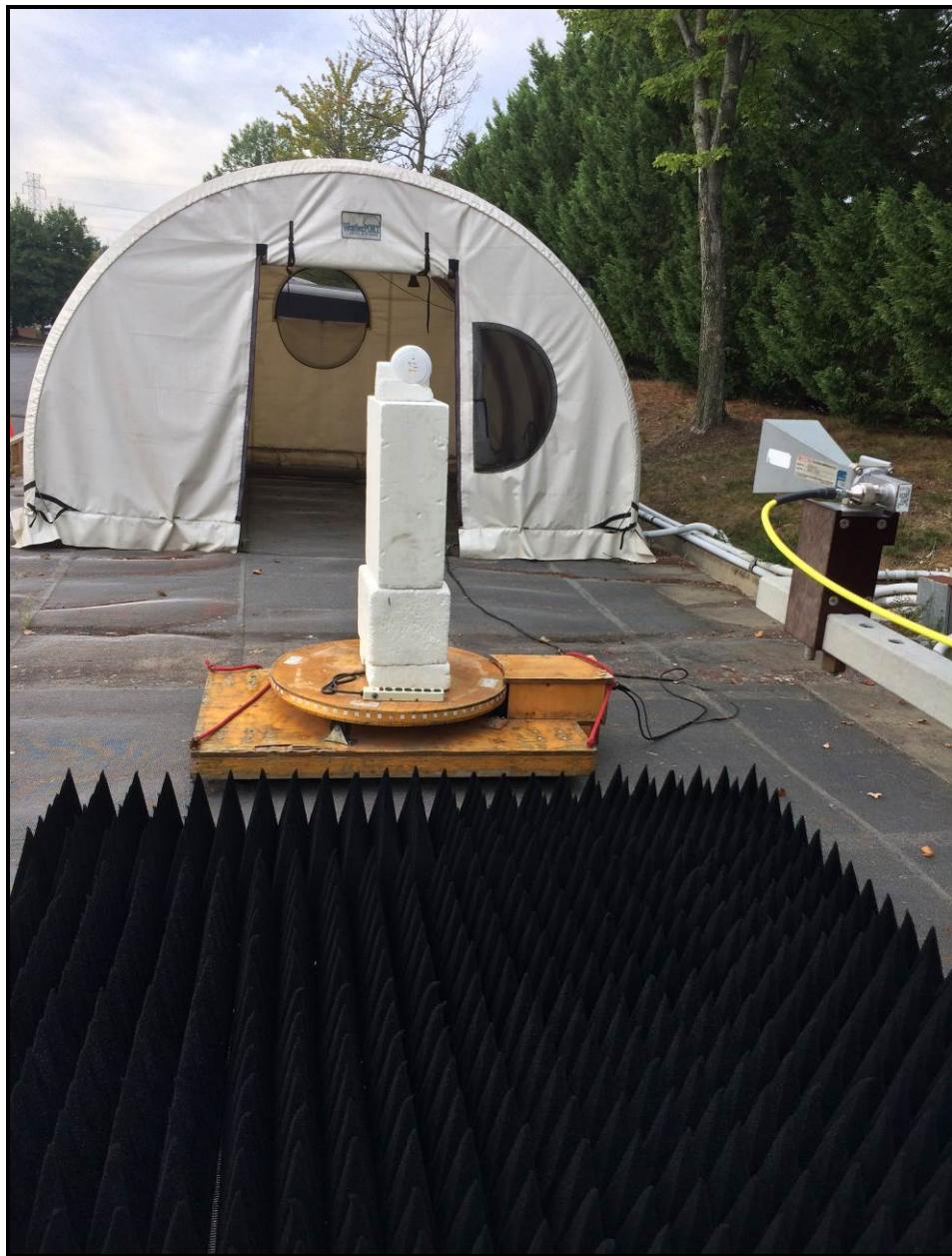
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Photograph 2: Radiated Emissions Testing – Back View (Less than 1 GHz)

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Photograph 3: Radiated Emissions Testing – Front View (Greater than 1 GHz)

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Photograph 4: Radiated Emissions Testing – Back View (Greater than 1 GHz)