

# FCC CFR47 PART 15 SUBPART C INDUSTRY CANADA RSS-210 ISSUE 8

#### **CERTIFICATION TEST REPORT**

**FOR** 

**Wireless Motion Sensor** 

**MODEL NUMBER: DXS-55AF** 

FCC ID: QNP-PIR315 IC: 4676A-DXS55AF

**REPORT NUMBER: 11U13830-1** 

**ISSUE DATE: 2011-06-08** 

Prepared for Secure Wireless, Inc. 5817 Dryden Place, Suite D

7 Dryden Place, Suite I Carlsbad, CA 92008

Prepared by

UNDERWRITERS LABORATORIES INC. 1285 WALT WHITMAN RD. MELVILLE, NY 11747, U.S.A.

TEL: (631) 271-6200 FAX: (877) 854-3577



# **Revision History**

Rev.	Issue Date	Revisions	Revised By
	2011- 06-08	Initial Issue	B. DeLisi

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# 1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Secure Wireless, Inc.

5817 Dryden Place, Suite D

Carlsbad, CA 92008

**EUT DESCRIPTION: Wireless Motion Sensor** 

**MODEL: DXS-55AF** 

**SERIAL NUMBER: None** 

DATE TESTED: 2011-06-02 to 2011-06-03

#### **APPLICABLE STANDARDS**

STANDARD TEST RESULTS

FCC PART 15 SUBPART C

Pass

INDUSTRY CANADA RSS-210 Issue 8, Annex 1

Pass

INDUSTRY CANADA RSS-GEN Issue 3

Pass

Underwriters Laboratories Inc. tested the above equipment in accordance with the requirements set forth in the above standards, using test results reported in the test report documents referenced below and/or documentation furnished by the applicant. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Inc. based on interpretations of these calculations. The results show that the equipment is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation, as described by the referenced documents. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For UL By:

Tested By:

Name: Joseph Danisi

Title: Lead Engineering Associate

UL

Name: Robert DeLisi Title: Senior Staff Engineer

UL

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2009, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 3, and RSS-210 Issue 8.

#### 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 1285 Walt Whitman Rd. Melville, NY 11747, USA.

UL Melville is accredited by NVLAP, Laboratory Code 100255-0. The full scope of accreditation can be viewed at http://ts.nist.gov/standards/scopes/1002550.htm.

## 4. CALIBRATION AND UNCERTAINTY

#### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

#### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB) 36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

#### 4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	± 3.3 dB
Radiated Disturbance, 30 to 1000 MHz	± 4.00 dB

Uncertainty figures are valid to a confidence level of 95%.

# 5. EQUIPMENT UNDER TEST

#### 5.1. DESCRIPTION OF EUT

The EUT is a Wireless Motion Sensor intended for security applications. The device is powered by a 3Vdc battery.

#### 5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an integral loop antenna, with an estimated gain of -15 dBi.

#### 5.3. SOFTWARE AND FIRMWARE

The EUT did not require software for proper operation.

# 5.4. WORST-CASE CONFIGURATION AND MODE

The EUT only has one mode of operation. The EUT is intended to be mounted in only one position. Testing was conducted on the channel of operation and in an orientation that simulates actual installation practices.

#### 5.5. MODIFICATIONS

No modifications were made during testing.

## 5.6. DESCRIPTION OF TEST SETUP

#### **SUPPORT EQUIPMENT**

None

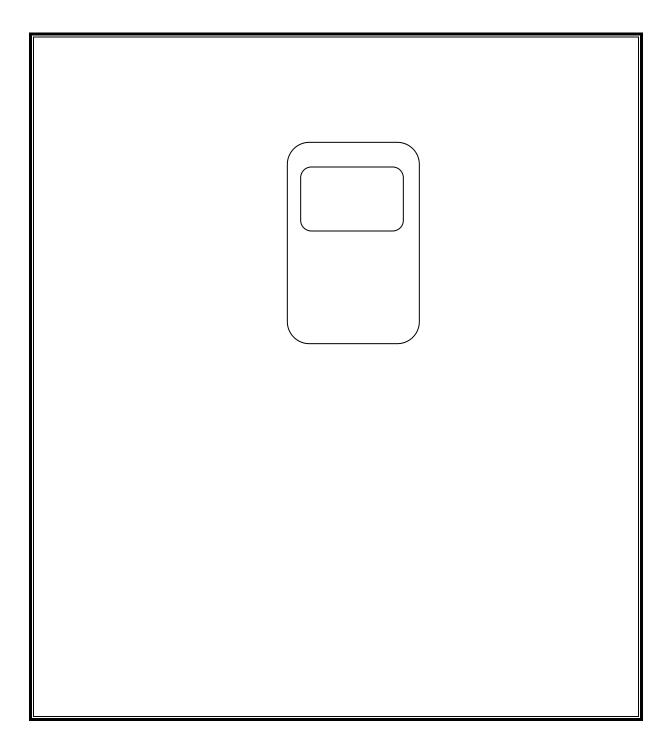
# **I/O CABLES**

None

#### **TEST SETUP**

The EUT was tested as a stand-alone battery operated device.

# **SETUP DIAGRAM FOR TESTS**



REPORT NO: 11U13830-1 FCC ID: QNP-PIR315

# **6. TEST AND MEASUREMENT EQUIPMENT**

The following test and measurement equipment was utilized for the tests documented in this report:

DATE: 2011-06-08

IC: 4676A-DXS55AF

Radiated Emissions - 10 Meter Chamber

Test Equipment Used								
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date			
30-1000MHz		•						
	Rohde &							
EMI Receiver	Schwarz	chwarz ESIB40		2011-03-01	2012-03-01			
Bicon Antenna	Schaffner	VBA6106A	54	2011-04-05	2012-04-05			
Log-P Antenna	Schaffner	UPA6109	44067	2011-04-29	2012-04-29			
Bias Tee	Miteq	AM-1523- 7687	44392	N/A	N/A			
Bias Tee	Miteq	AM-1523- 7687	44393	N/A	N/A			
Preamp	Miteq	AM-3A- 000110-7687	44391	N/A	N/A			
Preamp	Miteq	AM-3A- 000110-7687	44394	N/A	N/A			
Switch Driver	HP	11713A	ME7A-627	N/A	N/A			
System Controller	Sunol Sciences	SC99V	44396	N/A	N/A			
Camera Controller	Panasonic	WV-CU254	44395	N/A	N/A			
RF Switch Box	UL	1	44398	N/A	N/A			
Measurement Software	UL	Version 9.3	44740	N/A	N/A			
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-12-07	2012-12-07			
Multimeter	Fluke	83V	43443	2011-02-01	2012-02-29			
Above 1GHz (Band Optimized Sys		_						
EMI Receiver	Rohde & Schwarz	ESIB40	34968	2011-03-01	2012-03-01			
Horn Antenna (1-2 GHz)	ETS	3161-01	51442	2008-03-28	See * below			
Horn Antenna (2-4 GHz)	ETS	3161-02	48107	2007-09-27	See * below			
Signal Path Controller	HP	11713A	50250	N/A	N/A			
Gain Controller	HP	11713A	50251	N/A	N/A			
RF Switch / Preamp Fixture	UL	BOMS1	50249	N/A	N/A			
System Controller	UL	BOMS2	50252	N/A	N/A			
Measurement Software	UL	Version 9.3	44740	N/A	N/A			
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-12-07	2012-12-07			
Multimeter	Fluke	83V	43443	2011-02-01	2012-02-29			

Test Equipment Used							
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date		

<sup>\* -</sup> Note: As allowed by the calibration standard ANSI C63.4 Section 4.4.2, standard gain horns need only a one-time calibration. Only if physical damage occurs will the horn antenna require re-calibration.
\* Gain standard horn antennas (sometimes called standard gain horn antennas) need not be calibrated

Occupied Bandwidth / Cease Operation

Cocapica Bariawiatii	Occupied Baridwidth / Cease Operation							
Test Equipment Used								
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date			
EMI Receiver	Rohde & Schwarz	ESIB40	34968	2011-03-01	2012-03-01			
Bicon Antenna	Schaffner	VBA6106A	54	2011-04-05	2012-04-05			
Log-P Antenna	Schaffner	UPA6109	44067	2011-04-29	2012-04-29			
Bias Tee	Miteq	AM-1523- 7687	44392	N/A	N/A			
Bias Tee	Miteq	AM-1523- 7687	44393	N/A	N/A			
Preamp	Miteg	AM-3A- 000110- 7687	44391	N/A	N/A			
Preamp	Miteg	AM-3A- 000110- 7687	44394	N/A	N/A			
•								
Switch Driver	HP	11713A	ME7A-627	N/A	N/A			
System Controller	Sunol Sciences	SC99V	44396	N/A	N/A			
Camera Controller	Panasonic	WV-CU254	44395	N/A	N/A			

#### Pulse Train

Test Equipment Used							
Description	Manufacturer	Model	Identifier	Cal Date	Cal Due Date		
EMI Receiver	Rohde & Schwarz	ESIB40	34968	2011-03-01	2012-03-01		
Oscilliscope	Tektronix	TDS680B	5A258	2011-02-01	2011-02-29		
Dipole Antenna	EMCO	3121C	3359	2010-12-08	2011-12-08		
Temp/Humidity/Pressure Meter	Cole Parmer	99760-00	4268	2010-12-07	2012-12-07		

beyond that which is provided by the manufacturer unless they are damaged or deterioration is suspected, or they are used at a distance closer than  $2D^2/\lambda$ . Gain standard horn antennas have gains that are fixed by their dimensions and dimensional tolerances.

#### 6.1. 20 dB AND 99% BW

#### **LIMITS**

#### FCC §15.231 (c)

The bandwidth of the emission shall be no wider than 0.25% of the center frequency for devices operating above 70 MHz and below 900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency. Bandwidth is determined at the points 20 dB down from the modulated carrier.

#### IC A1.1.3

For the purpose of Section A1.1, the 99% Bandwidth shall be no wider than 0.25% of the center frequency for devices operating between 70-900 MHz. For devices operating above 900 MHz, the emission shall be no wider than 0.5% of the center frequency.

#### **TEST PROCEDURE**

#### ANSI C63.4

The transmitter output is connected to the spectrum analyzer.

20dB Bandwidth: The RBW is set to 10 KHz. The VBW is set to 100 KHz. The sweep time is coupled. Bandwidth is determined at the points 20 dB down from the modulated carrier.

99% Bandwidth: The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

# **RESULTS**

No non-compliance noted:

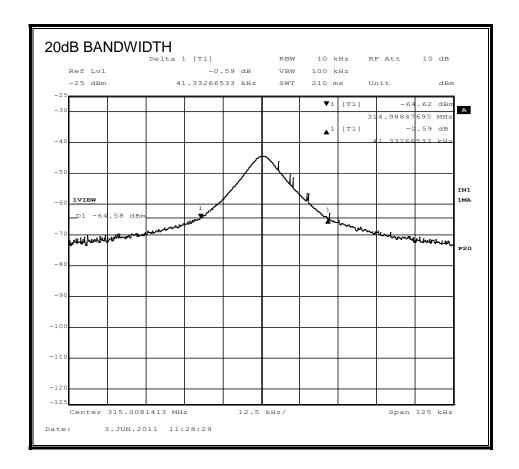
#### 20dB Bandwidth

Frequency	20dB Bandwidth	Limit	Margin
(MHz)	(kHz)	(kHz)	(kHz)
315	41.3	787.5	-746.2

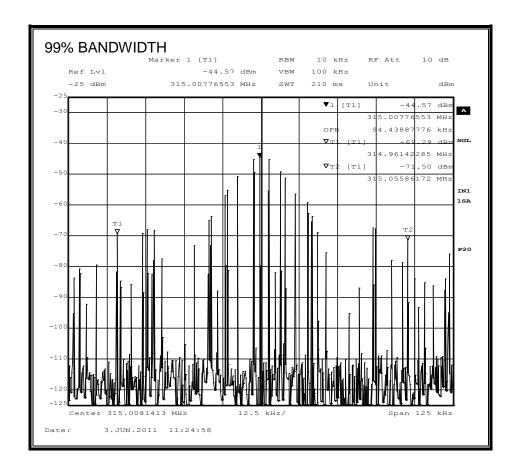
#### 99% Bandwidth

Frequency 99% Bandwidth		Limit	Margin
(MHz)	(kHz)	(kHz)	(kHz)
315	94.4	787.5	-693.1

#### **20dB BANDWIDTH**



#### 99% BANDWIDTH



## 6.2. DUTY CYCLE

#### **LIMITS**

#### FCC §15.35 (c)

The measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to notification or verification.

#### **TEST PROCEDURE**

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is coupled and the span is set to 0 Hz. The number of pulses is measured and calculated in a 100 ms scan.

#### **CALCULATION**

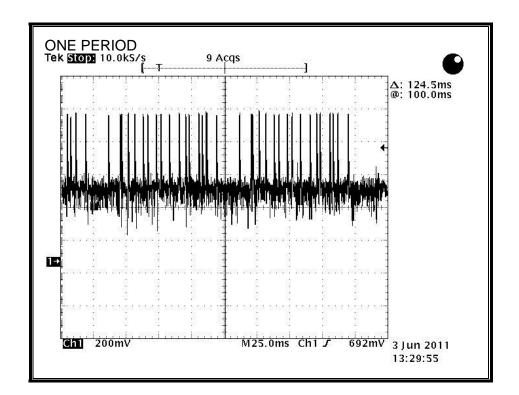
Average Reading = Peak Reading (dBuV/m) + 20log (Duty Cycle), Where Duty Cycle is (# of long pulses \* long pulse width) + (# of short pulses \* short pulse width) / 100 or T

#### **RESULTS**

No non-compliance noted:

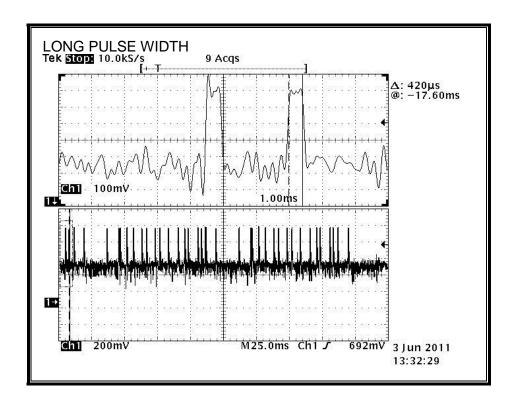
One	Long Pulse	# of	Short	# of	Short	# of	Duty	20*Log
Period (ms)	Width (ms)	Long Pulses	Width (ms)	Short Pulses	Width (ms)	Short Pulses	Cycle	Duty Cycle (dB)
100	0.42	8	0.38	13	0.16	1	0.085	-21.4

# PULSES IN 100mS



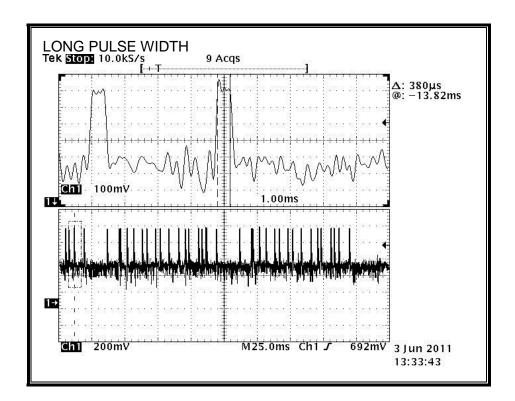
DATE: 2011-06-08

# **LONG PULSE WIDTH 1**



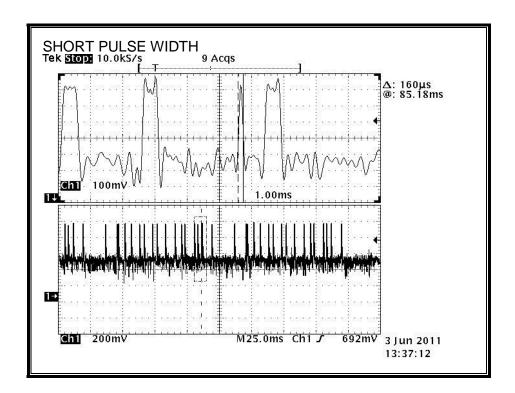
DATE: 2011-06-08

#### **LONG PULSE WIDTH 2**



DATE: 2011-06-08

# **SHORT PULSE WIDTH**



DATE: 2011-06-08

#### 6.3. TRANSMISSION TIME

## **LIMITS**

FCC §15.231 (a) (2)

IC A1.1.1 (b)

A transmitter activated automatically shall cease transmission within 5 seconds after activation.

#### **TEST PROCEDURE**

The transmitter output is connected to a spectrum analyzer or radiated field strength. The RBW is set to 100 kHz and the VBW is set to 100 kHz. The sweep time is set to 10 seconds and the span is set to 0 Hz.

#### **RESULTS**

No non-compliance noted:

Automatic transmissions, polling, occurs every 70 minutes. A single transmission is less than 1 second so the device does not transmit more than 2 seconds per hour.

DATE: 2011-06-08

# 7. RADIATED EMISSION TEST RESULTS

# 7.1. TX RADIATED SPURIOUS EMISSION

#### **LIMITS**

FCC §15.231 (b)

IC A1.1.2

In addition to the provisions of § 15.205, the field strength of emissions from Intentional radiators operated under this section shall not exceed the following:

Fundamental	Field Strength of	Field Strength of
Frequency	Fundamental Frequency	Spurious Emissions
(MHz)	(microvolts/meter)	(microvolts/meter)
40.66 - 40.70	2,250	225
70 - 130	1,250	125
130 - 174	1,250 to 3,7501	125 to 3751
174 - 260	3,750	375
260 - 470	3,750 to 12,5001	375 to 1,2501
Above 470	12,500	1,250

<sup>1</sup> Linear interpolation

§15.205 (a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 -	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.52525	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	156.7 - 156.9	3260 - 3267	23.6 - 24.0
12.29 - 12.293	162.0125 - 167.17	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	167.72 - 173.2	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	240 - 285	3600 - 4400	( <sup>2</sup> )
13.36 – 13.41	322 - 335.4		

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DATE: 2011-06-08

1 Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz. 2 Above 38.6

§15.205 (b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

§15.209 (a) Except as provided elsewhere in this Subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
30 88	100 **	3
88 216	150 **	3
216 960	200 **	3
Above 960	500	3

<sup>\*\*</sup> Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this Section shall not be located in the frequency bands 54 72 MHz, 76 88 MHz, 174 216 MHz or 470 806 MHz. However, operation within these frequency bands is permitted under other sections of this Part, e.g., Sections 15.231 and 15.241.

§15.209 (b) In the emission table above, the tighter limit applies at the band edges.

#### **TEST PROCEDURE**

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.4. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

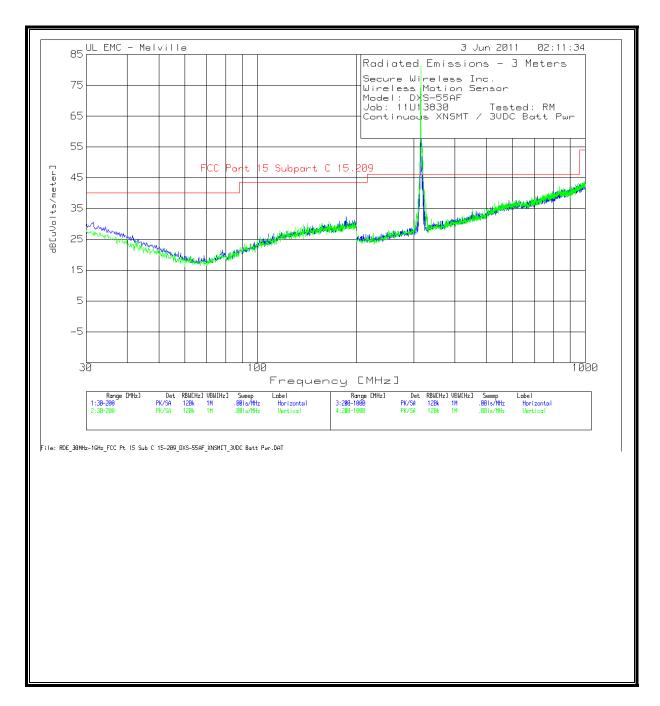
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

#### **RESULTS**

No non-compliance noted:

# FUNDAMENTAL, HARMONICS AND TX SPURIOUS EMISSION (30 - 1000 MHz)



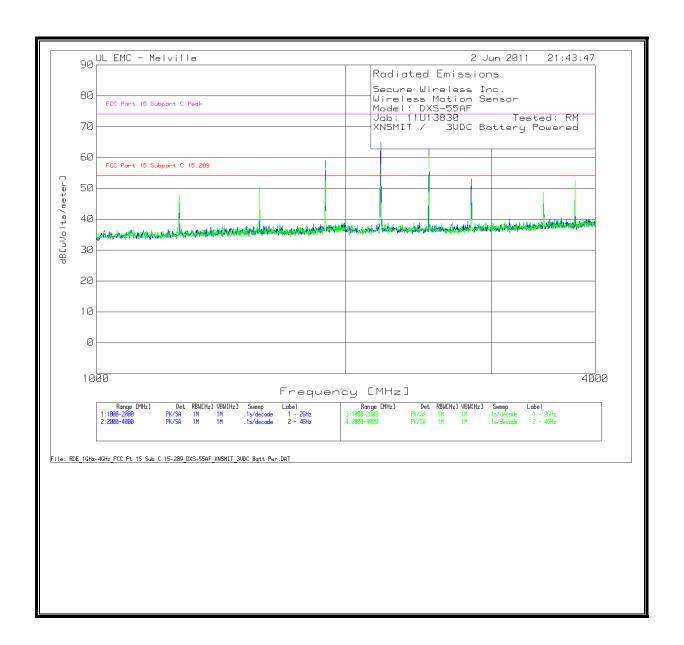
							Corrected		Margin		Margin		Margin	Azimuth	Height	
Test	Meter	Detector	Gain/Loss	Transducer	Level dB[uVolts/	DCF	Level Li dB[uVolts/	imit 1	1[dB]	Limit 2	2[dB]	Limit 3	3[dB]	[degs]	[cm]	Polarity
Frequency	Reading	Type	Factor	Factor	meter]	[dB]	meter]									
[MHz]	[dB(uV)]	.,,,,	[dB]	[dB]		[]										
	200 - 1000MHz															
312.7648*	29.	5 PK	1.9	14.1	L 45.5	-21.4	24.1 -		-	55.6	-31.5	75.6	-30.1	148	241	Horz
314.1552*	39.2	7 PK	1.9	14.2	2 55.37	-21.4	33.97 -		-	55.6	-21.63	75.6	-20.23	184	218	Horz
315.0053	65.2	4 PK	1.9	14.2	2 81.34	-21.4	59.94 -		-	75.6	-15.66	95.6	-14.26	185	233	Horz
317.247	35.9	3 PK	2	14.2	2 52.13	-21.4	30.73 -		-	55.6	-24.87	75.6	-23.47	179	199	Horz
318.5975*	32.0	8 PK	2	14.3	48.38	-21.4	26.98 -		-	55.6	-28.62	75.6	-27.22	167	230	Horz
							-		-							
Vertical 20	0 - 1000MHz						-		-							
312.878*	37.4	8 PK	1.9	) 14	53.38	-21.4	31.98 -		-	55.6	-23.62	75.6	-22.22	89	205	Vert
315.0045	72.8	9 PK	1.9	14	1 88.79	-21.4	67.39 -		-	75.6	-8.21	95.6	-6.81	82	192	Vert
317.2692*	43.4	8 PK	2	! 14	59.48	-21.4	38.08 -		-	55.6	-17.52	75.6	-16.12	89	198	Vert
320.0738*	34.2	3 PK	2	14.1	L 50.33	-21.4	28.93 -		-	55.6	-26.67	75.6	-25.27	104	193	Vert
311.277*	29.3	4 PK	1.9	14.1	L 45.34	-21.4	23.94 -		-	55.6	-31.66	75.6	-30.26	110	218	Vert
834.7174*	13.5	7 PK	3.3	3 23.4	40.27	-21.4	18.87 -		-	55.6	-36.73	75.6	-35.33	180	358	Vert

\* Prodcut of fundental considered spurious

LIMIT 1: FCC Part 15 Subpart C 15.209 LIMIT 2: FCC Part 15 Subpart C 15.231 LIMIT 3: FCC Part 15 Subpart C Peak

PK - Peak detector
QP - Quasi-Peak detector
LnAv - Linear Average detector
LgAv - Log Average detector
Av - Average detector
CAV - CISPR Average detector
RMS - RMS detection
CRMS - CISPR RMS detection

#### **HARMONICS AND TX SPURIOUS EMISSIONS ABOVE 1GHz**



Secure Wireless Inc. Wireless Motion Sensor Model: DXS-55AF

Job: 11U13830 Tested: RM XNSMIT / 3VDC Battery Powered

							Corrected	orrected Ma		Margin		Azimuth	Height	
Test	Meter	Detector	Gain/Loss	Transducer	Level	DCF	Level	Limit 1	1[dB]	Limit 2	2[dB]	[degs]	[cm]	Polarity
					dB[uVolts/		dB[uVolts/							
Frequency	Reading		Factor	Factor	meter]	[dB]	meter]							
[MHz]	[dB(uV)]		[dB]	[dB]										
1 - 2GHz 10	00 - 2000ľ	ИHz												
1260.0802	74.86	5 PK	-44.36	20.	2 50.7	-21.4	29.3	54	-24.7	74	-23.3	175	281	Horz
1575.0589	74.49	) PK	-44.23	21.	1 51.36	-21.4	29.96	54	-24.04	74	-22.64	117	125	Horz
1890.1232	85.04	₽K	-43.85	21.	5 62.69	-21.4	41.29	54	-12.71	74	-11.31	214	161	Horz
2 - 4GHz 20														
2205.1022	86.42	2 PK	-43.09	21.	5 64.83	-21.4	43.43	54	-10.57	74	-9.17	220	181	Horz
2520.1633	87.18	3 PK	-42.77	21.	4 65.81	-21.4	44.41	54	-9.59	74	-8.19	151	314	Horz
2835.1216	78.44	₽K	-42.24	21.	3 58	-21.4	36.6	54	-17.4	74	-16	135	333	Horz
3465.1152	74.24	ŀ PK	-41.81	22.	2 54.63	-21.4	33.23	54	-20.77	74	-19.37	16	338	Horz
3780.1459	72.86	5 PK	-41.88	22.	4 53.38	-21.4	31.98	54	-22.02	74	-20.62	19	380	Horz
1 - 2GHz 10	00 - 20001	ЛΗτ												
1260.0441			-44.36	20.	2 50.94	-21.4	29.54	54	-24.46	74	-23.06	281	376	Vert
1575.0489			-44.23											Vert
1890.0679			-43.85											Vert
2 - 4GHz 20	00 - 4000ľ	ИHz												
2205.1072	82.71	L PK	-43.09	21.	3 60.92	-21.4	39.52	54	-14.48	74	-13.08	326	398	Vert
2520.1202	82.71	L PK	-42.77	21.	7 61.64	-21.4	40.24	54	-13.76	74	-12.36	309	386	Vert
2835.1307	79.64	₽K	-42.24	21.	8 59.2	-21.4	37.8	54	-16.2	74	-14.8	188	116	Vert
3465.1052	76.83	3 PK	-41.81	22.	3 57.32	-21.4	35.92	54	-18.08	74	-16.68	259	234	Vert
3780.0962	76.41	L PK	-41.88	22.	5 57.03	-21.4	35.63	54	-18.37	74	-16.97	292	231	Vert

LIMIT 1: FCC Part 15 Subpart C 15.209 LIMIT 2: FCC Part 15 Subpart C Peak

PK - Peak detector

QP - Quasi-Peak detector

LnAv - Linear Average detector

LgAv - Log Average detector

Av - Average detector

CAV - CISPR Average detector

RMS - RMS detection

CRMS - CISPR RMS detection

# 8. SETUP PHOTOS

# **DUTY CYCLE**



DATE: 2011-06-08

# OCCUPIED BANDWIDTH AND TRANSMISSION TIME



DATE: 2011-06-08

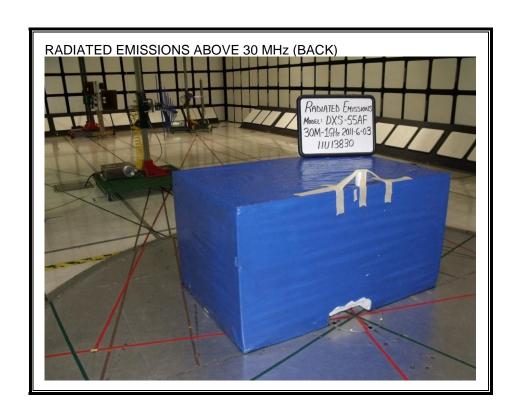
IC: 4676A-DXS55AF

# **RADIATED EMISSION CONFIGURATION**



#### **RADIATED EMISSION ABOVE 30 MHz**





DATE: 2011-06-08

IC: 4676A-DXS55AF

# **END OF REPORT**