
Project 12104-10

Prepared for:

EmSense Corp.
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San Francisco, CA 94105

By

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February 23, 2011

CERTIFICATION
Wireless Test Report
EmSense Corp.
Y8M4011102
9511A-4011102

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(3) The significance of this report is dependent on the representative character of the test sample submitted for evaluation and the results apply only in reference to the sample tested. The manufacturer must continuously implement the changes shown herein to attain and maintain the required degree of compliance.



Applicant: EmSense Corp.
Applicant's Address: 150 Spear Street
San Francisco, CA 94105
FCC ID: Y8M4011102
IC Number: 9511A-4011102
Project Number: 12104-10
Test Dates: January 13, 31, February 3, 2011

The **EmSense EmBand** was tested to and found to be in compliance with FCC 47 CFR Part 15 and IC RSS-210 issue 8.

The highest emissions generated by the above equipment are listed below:

Parameter	Frequency (MHz)	Level	Limit	Margin (dB)
Transmitter: Radiated Spurious	1830	63.0 dB μ V/m @ 1 m	63.5 dB μ V/m	-0.5
Transmitter: Fundamental Field Strength @ 3m	927.1	82.8 dB μ V/m @ 3 m	94 dB μ V/m	-11.2

Occupied Bandwidth	
20 dB	26 dB
306.039 kHz	354.167 kHz

I, Jason Anderson, for Professional Testing (EMI), Inc., being familiar with the FCC rules and test procedures have reviewed the test setup, measured data and this report. I believe them to be true and accurate.

Jason Anderson
Director of Testing Services

This report has been reviewed and accepted by EmSense Corp. The undersigned is responsible for ensuring that this device will continue to comply with the FCC and IC rules.

1.0 Introduction

1.1 Scope

This report describes the extent of the Equipment Under Test (EUT) conformance to the Intentional Radiator requirements of the USA and Canada.

1.2 EUT Description

The EmBand is a biometric sensing device that is placed on the head much like a sports sweatband used when exercising. The headband makes several passive measurements of biometric states of the user. This data is transmitted from the headset to a base station using a 915 MHz radio link. The base station is connected to a computer using a USB connection. The data is sent from the base station to the computer over USB. The EUT was tested while in a continuous transmit mode. The EUT was tuned to a low, middle, and high channel to perform power, occupied bandwidth, and harmonic tests. The EUT was tuned to a middle channel to perform spurious tests. The EUT continuously transmitted at maximum power. The system tested consisted of the following:

Manufacturer	Model	FCC ID Number	IC Identifier
EmSense Corp.	EmBand	Y8M4011102	9511A-4011102

The following rules apply to the operation of the EUT:

Guidelines	FCC Rules	IC Rules	
	Part 15	RSS-GEN Issue 3	RSS-210 Issue 8
Transmitter Characteristics	15.249	4.1-4.6, 7	2.2, 2.6-2.7, A2.9, A8, A9
Spurious Radiated Power	15.209	4.2, 4.7, 4.8, 6, 7	2.2, 2.6-2.7, A2.9, A8, A9
Antenna Requirement	15.203	7.1, 7.1.4	

1.3 Test Site

Measurements were made at the PTI semi-anechoic facility designated Site 45 (FCC 459644, IC 3036B-1) in Austin, Texas. This site is registered with the FCC under Section 2.948 and Industry Canada per RS-212 and is subsequently confirmed by laboratory accreditation (NVLAP). The test site is located at 11400 Burnett Rd., Austin, Texas, 78758 while the main office is located at 1601 N. A.W. Grimes Blvd., Suite B, Round Rock, Texas, 78665. Professional Testing (EMI), Inc. (PTI), follows the guidelines of NIST for all uncertainty calculations, estimates and expressions thereof for EMC testing. The procedure of ANSI C63.4:2009 were utilized for making all emissions measurements.

1.4 Applicable Documents

The data collected for this report are presented entirely in Appendix B.

Document	Title	Release
ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low Voltage Electrical and Electronic Equipment.	2009
ANSI C63.10	American National Standard for Testing Unlicensed Wireless Devices	2009
47 CFR	Part 15 – Radio Frequency Devices Subpart C -Intentional Radiators	
RSS-210	Low-power License-exempt Radio communication Devices (All Frequency Bands): Category I Equipment	Issue 8
RSS-Gen	General Requirements and Information for the Certification of Radio communication Equipment	Issue 3

2.0 Fundamental Field Strength Measurements

Fundamental Field Strength measurements were made on selected fundamental transmit frequencies of the EUT for the lowest, most center, and highest transmit frequency.

Tests of the fundamental field strength of the EUT also determined the worse case polarization of the device. The emissions of the device were measured with the EUT in three orthogonal axes.

2.1 Test Procedure

Radiated emission measurements were made of the Fundamental Field Strength level for the EUT. The EUT was placed on a non-conductive table 0.8 meters above the ground plane. The table was centered on a motorized turntable which allows 360 degree rotation. For measurements of the fundamental signal, a measurement antenna was positioned at a distance of 3 meters as measured from the closest point of the EUT. The field strength emissions were maximized by rotating the EUT.

A drawing showing the test setup is given in Appendix A.

2.2 Test Criteria

The maximum field strength of the fundamental frequency is 94 dBuV/m @ 3 m for devices operating in the frequency range 902-928 MHz according to FCC 15.249 and RSS-210.

3.0 Occupied Bandwidth

Occupied bandwidth measurements were performed on the EUT to determine compliance with FCC 15.249(a)(2) and RSS-210.

3.1 Test Procedure

The occupied bandwidth was measured with a spectrum analyzer connected to a double-ridged guide horn while the EUT was operating in continuous transmit mode at the appropriate center frequency. The analyzer center frequency was set to the EUT carrier frequency. Display line and marker delta functions were used to measure the occupied bandwidth of the EUT. However, the 20 or 26 dB bandwidth is referenced to a peak power measurement taken at the entire bandwidth or more for RBW, then using 1% RBW for the 20 or 26 dB bandwidth.

Measurements were made at three frequencies. A drawing showing the test setup is given in Appendix A.

3.2 Test Criteria

The minimum 6 dB occupied bandwidth for the EUT is 500 kHz as stated in 15.249(a)(2) and RSS-210. The 20 dB bandwidth must be measured and reported for the FCC and the 26 dB bandwidth must be measured and reported for IC.

4.0 Out of Band Spurious Emissions

Out of band spurious/harmonic emissions measurements were performed on the EUT to determine compliance to FCC sections 15.249(c), 15.209 and RSS-210.

4.1 Test Procedure

The EUT was placed on a non-conductive table 0.8 meters above the ground plane. The table was centered on a rotating turntable at a distance of 10 meters from the measurement antenna.

For spurious emissions below 1 GHz quasi-peak detection is used with a resolution bandwidth of 120 kHz. All measurements below 1 GHz were normalized to 3 meters using a 20 dB/decade distance extrapolation. The emissions were maximized by rotating the EUT and raising and lowering the measurement antenna from 1-4 meters. The test setup is included in Appendix A.

Spurious/harmonic emissions above 1 GHz peak are measured with average and peak detection with a resolution bandwidth of 1 MHz and measured at a distance of 1 meter. Average detection is used to determine compliance of the EUT if the peak does not meet the average limit. Non-harmonic emissions must satisfy the average limit and the peak limit (20 dB above average). The test setup is included in Appendix A.

Above 1 GHz testing was completed at 3 transmit frequencies to determine compliance.

4.2 Test Criteria

The radiated limits of FCC 15.209 and RSS-210 are shown below. The limits specified are at 3 meters. The limits are quasi-peak for emissions below 1 GHz and average for emissions above 1 GHz. Also above 1 GHz the peak limit is 20 dB above the average limit.

Frequency MHz	Specification Distance (Meters)	Field Strength (dBuV/m)	Test Distance (Meters)	Field Strength (dBuV/m)
30 to 88	3	40.0	10	29.5
88 to 216	3	43.5	10	33
216 to 960	3	46.0	10	35.5
Above 960	3	54.0	1	63.5

5.0 Antenna Requirements

An antenna evaluation was performed on the EUT to determine compliance with FCC sections 15.203, 15.249(b) and RSS-210.

5.1 Evaluation Procedure

The design of the EUT antenna is evaluated for conformance to engineering requirements for gain and to prevent substitution of unapproved antennae. Gain of the antenna is assessed by reviewing the antenna manufacturer's data sheet.

5.2 Evaluation Criteria

The antenna design must meet at least one of the following criteria:

- a) Antenna is permanently attached to the unit.
- b) Antenna must use a unique type of connector to attach to the EUT.
- c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

Section 15.249(b)(4)(i) states that if the transmitting antenna has a directional gain greater than 6 dBi the power shall be reduced the amount in dB that the directional gain is greater than 6 dBi.

5.3 Evaluation Results

The EmSense EmBand meets the criteria of this rule by virtue of having an internal antenna inaccessible to the user. The EUT is therefore compliant.

6.0 Modifications

N/A

7.0 Test Equipment

A list of the test equipment utilized to perform the testing is given below. The date of calibration is given for each.

Radiated Test Equipment

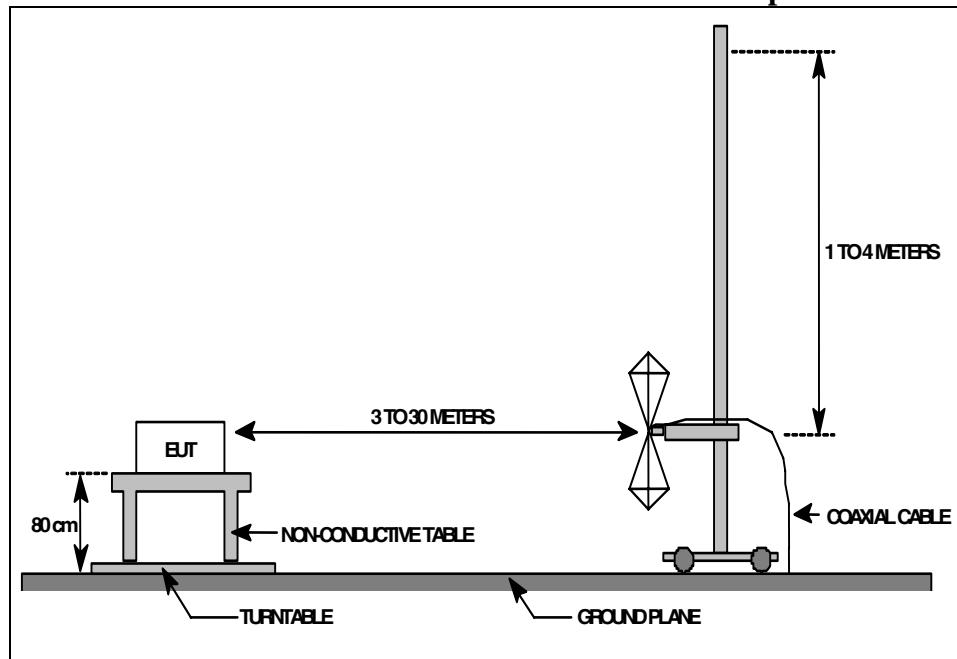
Asset #	Manufacturer	Model #	Description	Calibration Due
0085	HP	85650A	Quasi-peak Adapter (high band)	July 28, 2011
0949	HP	85662A	Spectrum Analyzer Display (high band)	NCR
1841	HP	8566B	Spectrum Analyzer (high band)	June 8, 2011
0990	HP	85685A	RF Preselector (high band)	March 24, 2011
1281	HP	85650A	Quasi-peak Adapter (low band)	January 13, 2011
1834	HP	85662A	Spectrum Analyzer Display (low band)	NCR
1145	HP	8568B	Spectrum Analyzer (low band)	July 28, 2011
1035	HP	85685A	RF Preselector (low band)	March 3, 2011
1454	HP	8447D	RF Preamplifier	July 06, 2011
1497	Emco	3108	Biconical Antenna	August 4, 2011
1486	Emco	3147	Log Periodic Dipole Array Antenna	August 4, 2011
C026	none	none	Coaxial Cable (low band)	August 02, 2011
C027	none	none	Coaxial Cable (high band)	August 02, 2011

Microwave Radiated Test Equipment

Asset #	Manufacturer	Model #	Description	Calibration Due
1780	ETS-Lindgren	3117	Ridge Guide Antenna	November 11, 2011
1529	Miteq	Antenna Mounted	Microwave Preamplifier (preamp 1)	July 16, 2011
1841	HP	8566B	Spectrum Analyzer	June 8, 2011
0949	HP	85662A	Spectrum Analyzer Display	NCR
1530	Miteq	None	Microwave Preamplifier (preamp 2)	July 16, 2011
C030	None	None	Coaxial Cable (MRE band)	March 22, 2011

Asset #	Manufacturer	Model #	Description	Calibration Due
XXXX	Pasternack	LLS	2 sections, total 12ft	Cal Before Use
0819	EMCO	3115	Ridge Guide Antenna	October 15, 2011
0897 (Rental unit)	Miteq Rohde & Schwarz	AFS44-00102650 FSQ	Microwave Preamplifier (preamp 1) Spectrum Analyzer	July 14, 2011 August 24, 2011
1542	A.H. Systems	SAS 572	Antenna, Horn 18-26.5GHz	NCR

FIGURE 1: Radiated Emissions Test Setup



Appendix B

Test Results

Fundamental Power Data Sheet

PROJECT #	DATE	RULE	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 31, 2011	15.249	3m	Log Periodical	1 MHz	1 MHz	Peak

COMMENT	Transmitting
---------	--------------

Frequency Measured (MHz)	Test Distance (Meters)	EUT Direction (Degrees)	Antenna Height (Meters)	Detector Function	Recorded Amplitude (dB μ V)	Corrected Level (dB μ V/m)	Limit Level (dB μ V/m)	Margin (dB)
902.8	3	1	1	Peak	80.9	80.5	94	-13.5
914.6	3	1	1	Peak	79.7	79.4	94	-14.6
927.1	3	1	1	Peak	83.0	82.8	94	-11.2

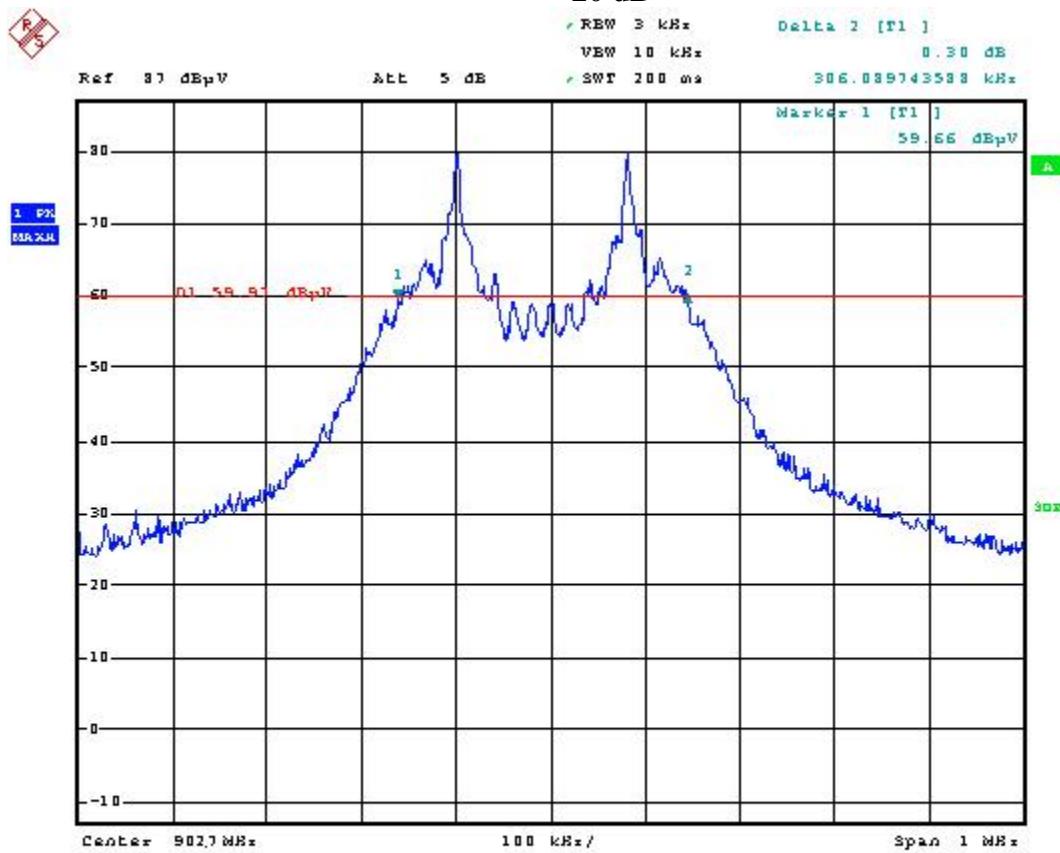
Occupied Bandwidth Data Sheet

PROJECT #	DATE	RULE	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	February 3, 2011	15.249	1m	Log Periodical	3 kHz	10Hz	Peak

COMMENT	Transmitting Low Channel 20 dB Bandwidth – 306.039 kHz 26 dB Bandwidth – 354.167 kHz
---------	--

Low Channel

20 dB



Date: 22.FEB.2011 20:52:49



Date: 22.FEB.2011 23:53:29

Result = Pass

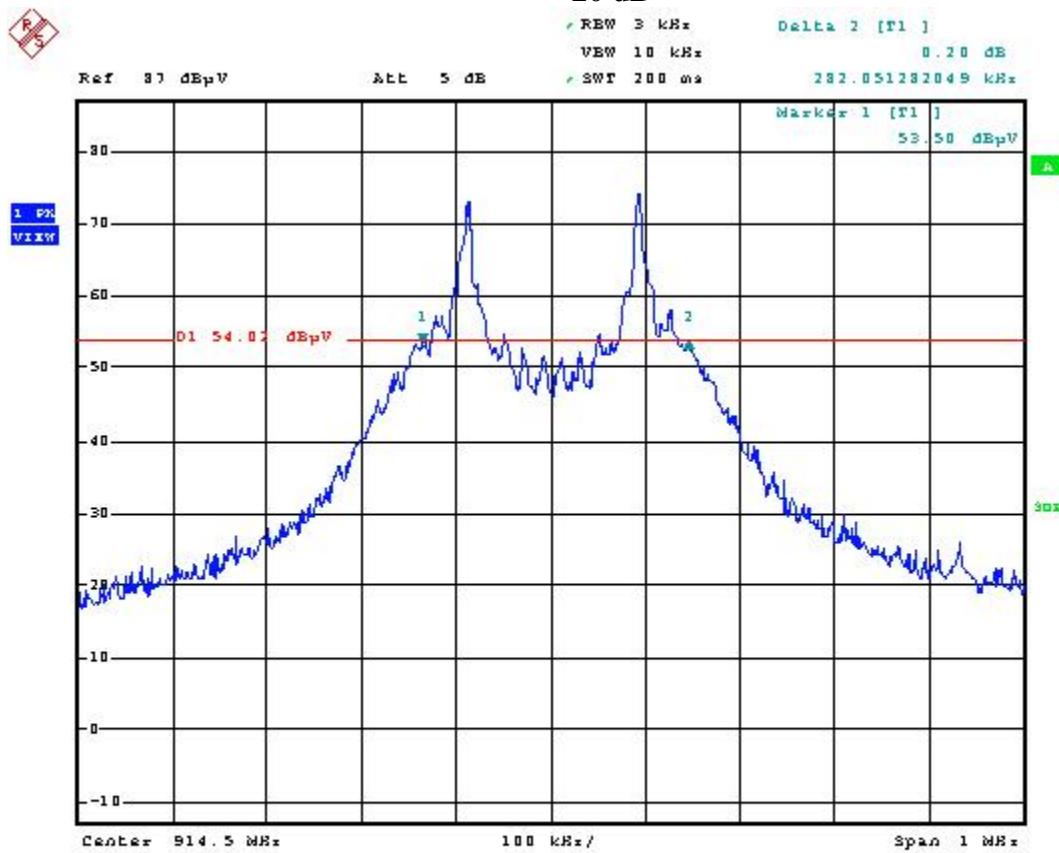
Occupied Bandwidth Data Sheet

PROJECT #	DATE	RULE	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	February 3, 2011	15.249	1m	Log Periodical	3 kHz	10 kHz	Peak

COMMENT	Transmitting Middle Channel 20 dB Bandwidth – 282.051 kHz 26 dB Bandwidth – 342.944 kHz
---------	---

Middle Channel

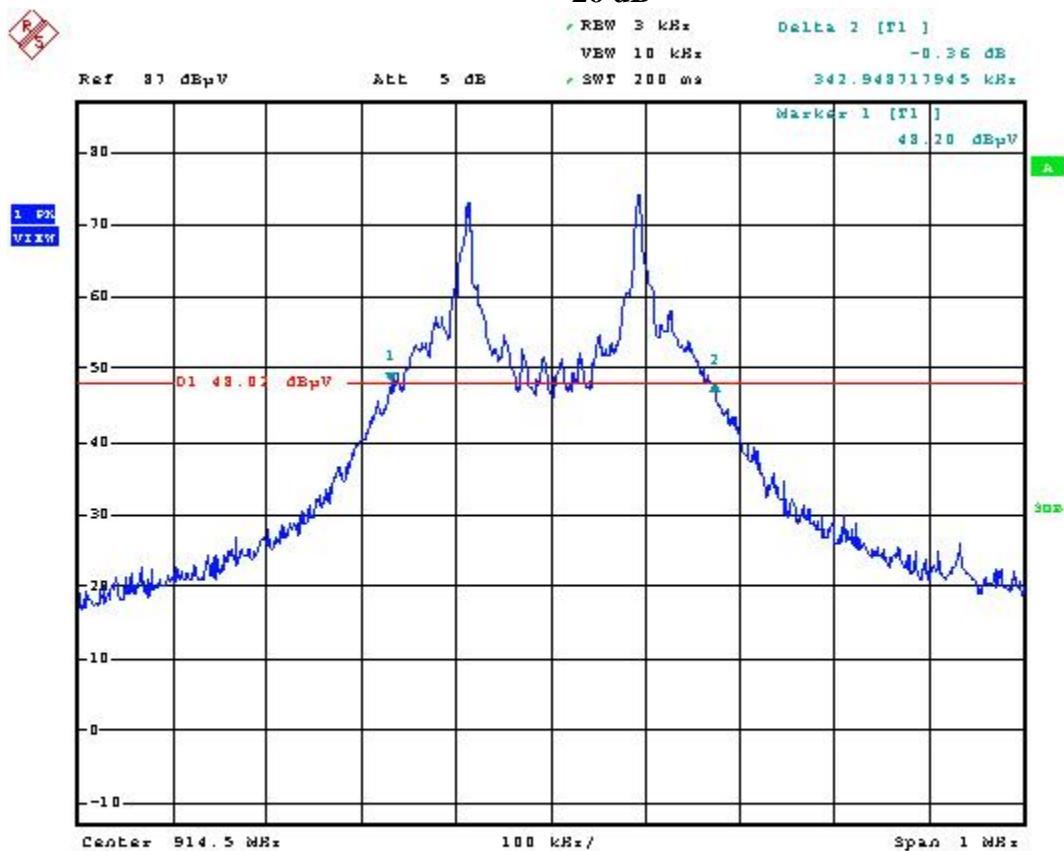
20 dB



Date: 22.FEB.2011 20:55:43

Middle Channel

26 dB



Date: 22.FEB.2011 23:58:44

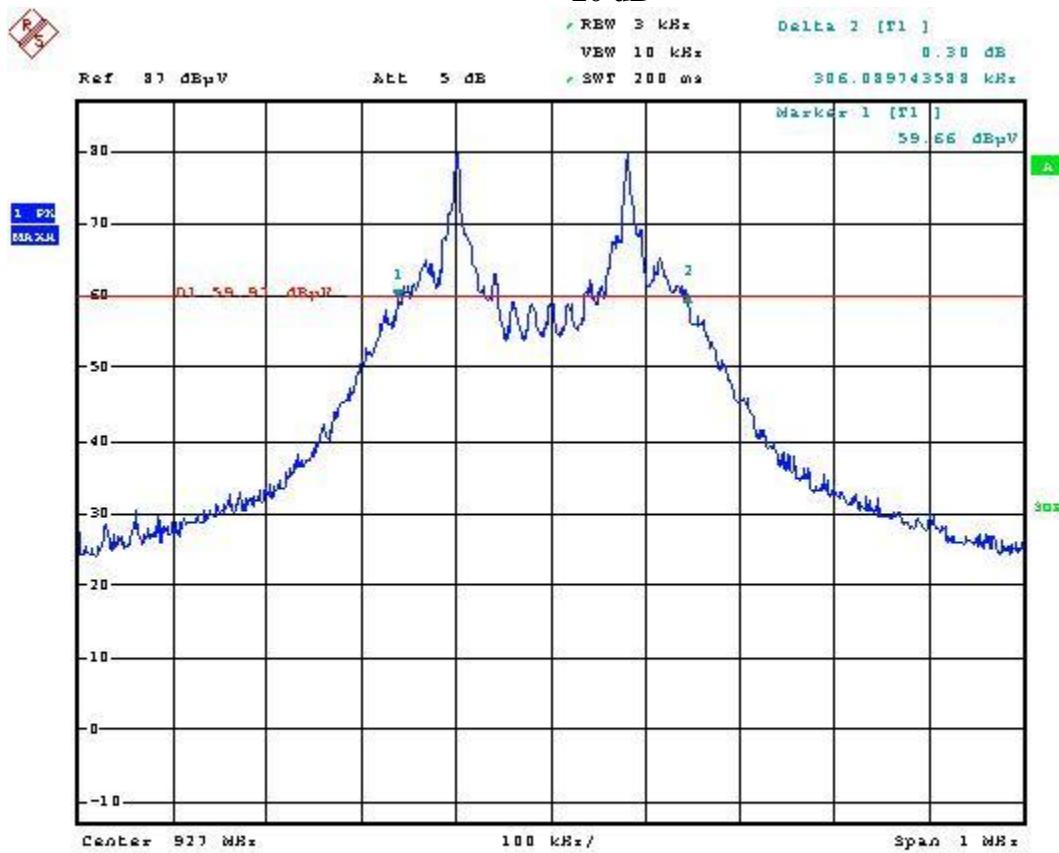
Result = Pass

Occupied Bandwidth Data Sheet

PROJECT #	DATE	RULE	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	February 3, 2011	15.249	1m	Log Periodical	3 kHz	10 kHz	Peak

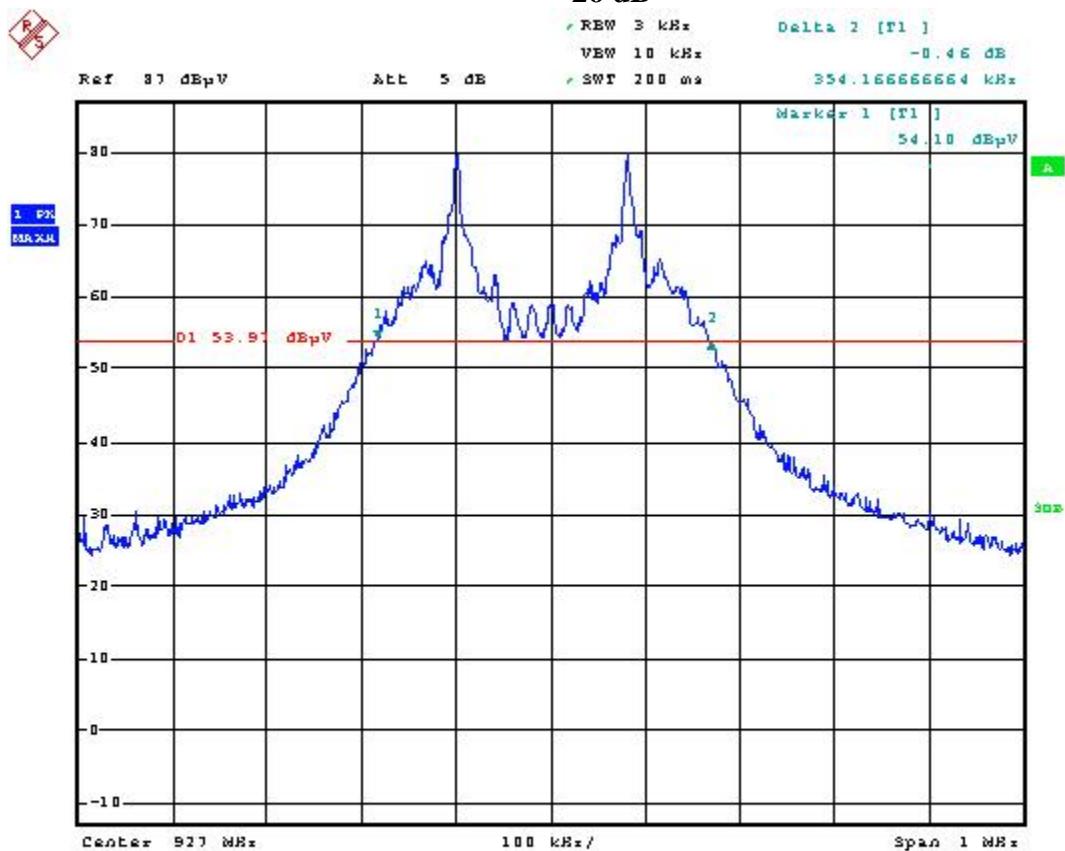
COMMENT	Transmitting High Channel 20 dB Bandwidth -306.039 kHz 26 dB Bandwidth - 354.167 kHz
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High Channel 20 dB



Date: 22.FEB.2011 20:52:49

**High Channel
26 dB**



Date: 22.FEB.2011 23:53:29

Result = Pass

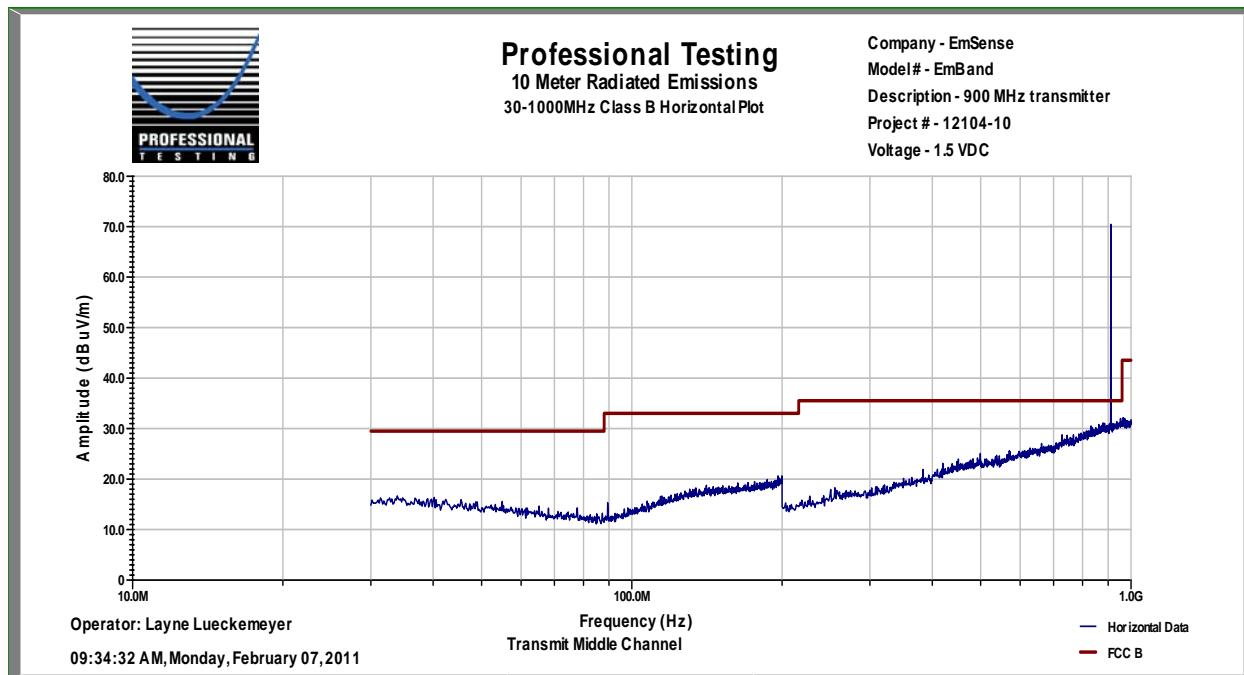
Spurious Radiated Emissions Data Sheet
Emissions 30 MHz ... 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 13, 2011	FCC B	10 m	Bicon Log	CISPR 120 kHz	1 MHz	Quasi Peak

COMMENT Transmitting Middle Channel

Horizontal

Frequency Measured (MHz)	Test Distance (Meters)	EUT Direction (Degrees)	Antenna Height (Meters)	Detector Function	Recorded Amplitude (dB μ V)	Corrected Level (dB μ V/m)	Limit Level (dB μ V/m)	Margin (dB)
100	10	Noise	Floor	Quasi-peak	16.5	1.7	33	-31.3
200	10	Noise	Floor	Quasi-peak	19	-2.1	33	-35.1
300	10	Noise	Floor	Quasi-peak	17.8	-0.5	35.5	-36.0
400	10	Noise	Floor	Quasi-peak	21.2	6.1	35.5	-29.4
500	10	Noise	Floor	Quasi-peak	24.1	11.8	35.5	-23.7
600	10	Noise	Floor	Quasi-peak	25.3	14.9	35.5	-20.6



Result = Pass

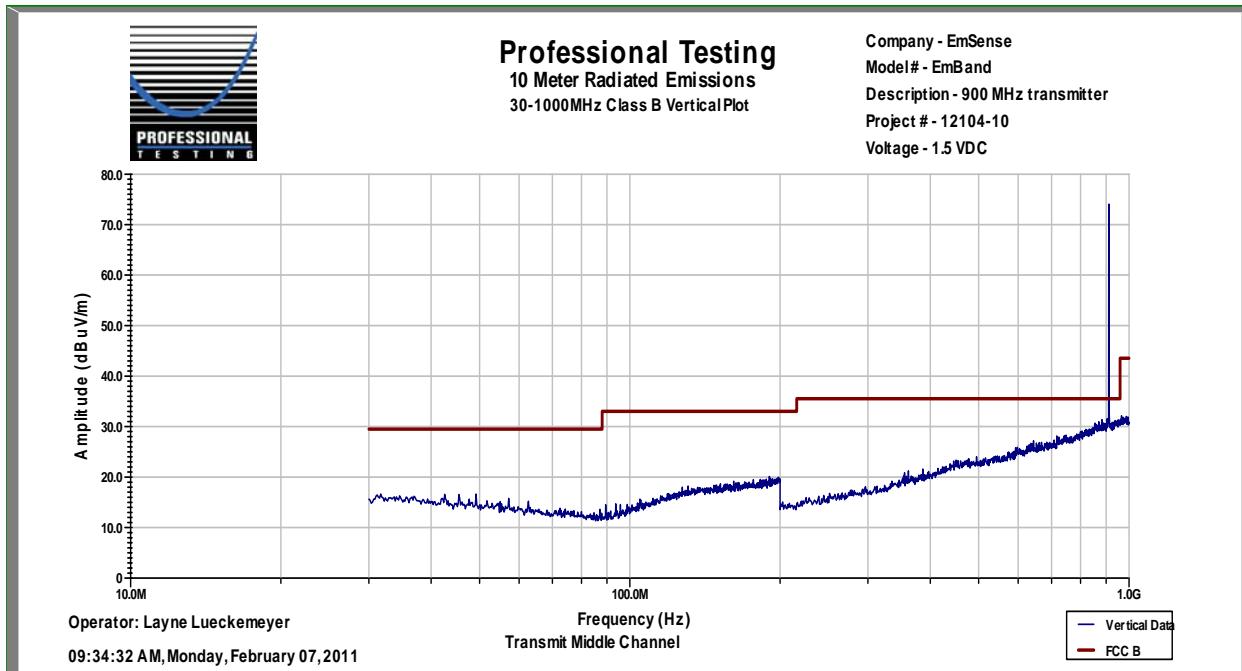
Spurious Radiated Emissions Data Sheet
Emissions 30 MHz ... 1 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 13, 2011	FCC B	10 m	Bicon Log	CISPR 120 kHz	1 MHz	Quasi Peak

COMMENT	Transmitting Middle Channel
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Vertical

Frequency Measured (MHz)	Test Distance (Meters)	EUT Direction (Degrees)	Antenna Height (Meters)	Detector Function	Recorded Amplitude (dB μ V)	Corrected Level (dB μ V/m)	Limit Level (dB μ V/m)	Margin (dB)
100	10	Noise	Floor	Quasi-peak	16.5	1.7	33	-31.3
200	10	Noise	Floor	Quasi-peak	19	-2.1	33	-35.1
300	10	Noise	Floor	Quasi-peak	17.8	-0.5	35.5	-36.0
400	10	Noise	Floor	Quasi-peak	21.2	6.1	35.5	-29.4
500	10	Noise	Floor	Quasi-peak	24.1	11.8	35.5	-23.7
600	10	Noise	Floor	Quasi-peak	25.3	14.9	35.5	-20.6



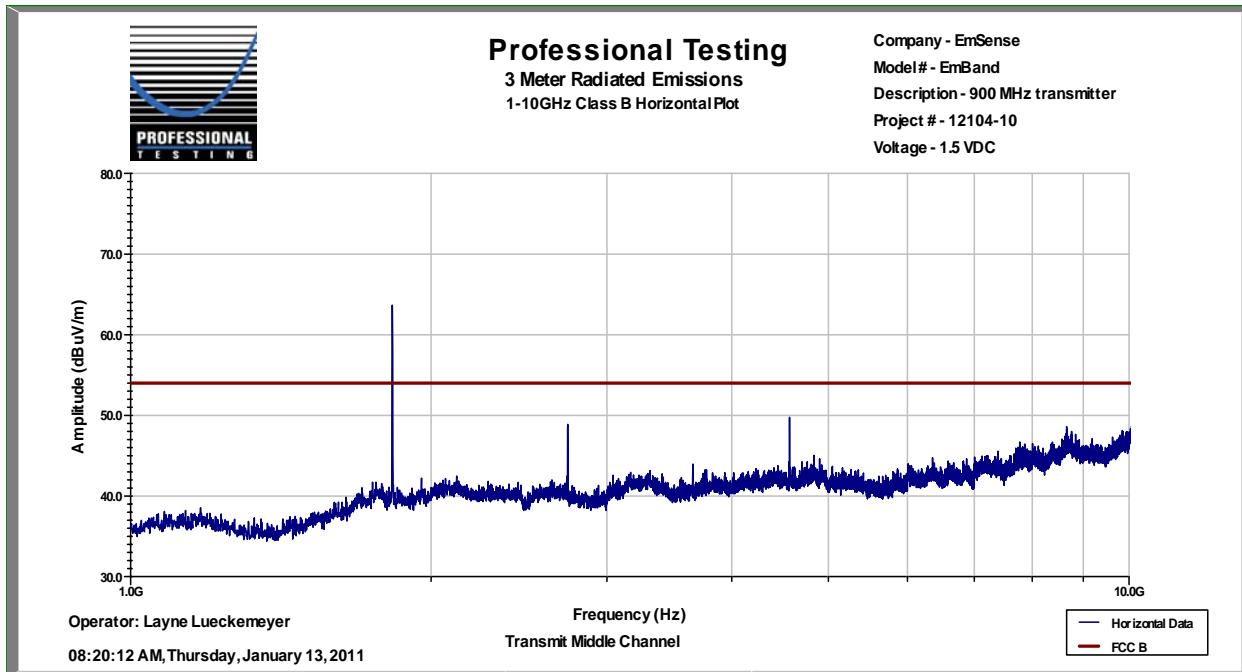
Result = Pass

Spurious Radiated Emissions Data Sheet
1 GHz...12 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 13, 2011	FCC B	3 m	Horn	1 MHz	1 MHz	Average

COMMENT	Transmit Middle Channel
---------	-------------------------

Horizontal



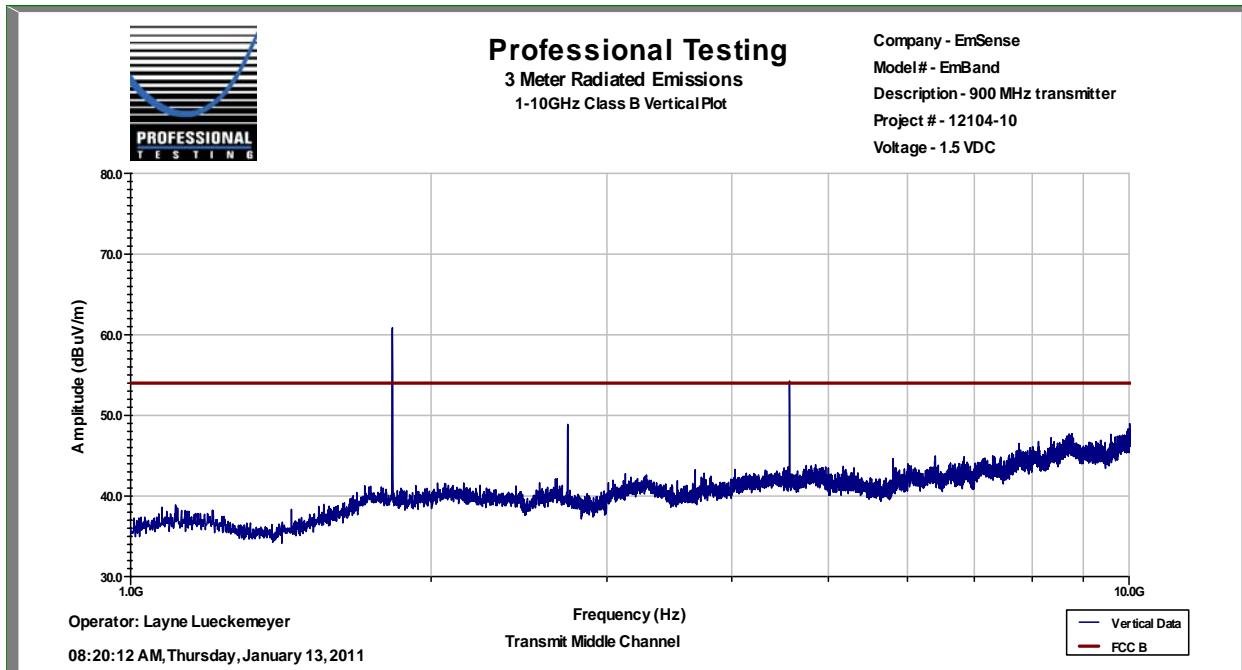
NOTE: Graphical Data for overview only. Pre scan used to determine if spurious signals other than harmonics were present.

Spurious Radiated Emissions Data Sheet
1 GHz...10 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 13, 2011	FCC B	3 m	Horn	1 MHz	1 MHz	Average

COMMENT	Transmit Middle Channel
---------	-------------------------

Vertical



NOTE: Graphical Data for overview only. Pre scan used to determine if spurious signals other than harmonics were present.

Spurious/Harmonic Emissions
1 GHz ... 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 31, 2011	FCC B	1 m	Horn	1 MHz	1 MHz	Average

COMMENT	Transmitting Low Channel Harmonics and spurious investigated up to 10 GHz.
---------	---

Horizontal

Frequency (GHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dB μ V)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dB μ V /m)	Limit (dB μ V /m)	Margin (dB)	Detector Function
1.8056	0	1	51.1	24.4	27.6	2.9	57.2	63.5	-6.3	Average
1.8056	0	1	59.6	24.4	27.6	2.9	65.7	83.5	-17.8	Peak Hold
2.7084	0	1	46.2	28.0	29.4	3.0	50.6	63.5	-12.9	Average
3.6112	0	1	44.8	25.8	32.1	3.3	54.4	63.5	-9.1	Average
4.514	0	1	37.2	24.7	32.0	3.9	48.4	63.5	-15.1	Average
5.4168	0	1	30.3	21.5	34.7	4.7	48.2	63.5	-15.3	Average
6.3196	0	1	31	22.3	35.4	4.7	48.8	63.5	-14.7	Average
7.2224	0	1	30.2	23.9	36.8	5.1	48.2	63.5	-15.3	Average
8.1252	0	1	31	22.8	37.4	4.7	50.3	63.5	-13.2	Average
9.028	0	1	29.8	26.0	37.6	4.9	46.3	63.5	-17.2	Average

Vertical

Frequency (GHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dB μ V)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dB μ V /m)	Limit (dB μ V /m)	Margin (dB)	Detector Function
1.8056	0	1	53.7	24.4	27.6	2.9	59.8	63.5	-3.7	Average
1.8056	0	1	58.9	24.4	27.6	2.9	65.0	83.5	-18.5	Peak Hold
2.7084	0	1	51	28.0	29.4	3.0	55.4	63.5	-8.1	Average
3.6112	0	1	44.7	25.8	32.1	3.3	54.3	63.5	-9.2	Average
4.514	0	1	31.6	24.7	32.0	3.9	42.8	63.5	-20.7	Average
5.4168	0	1	30.2	21.5	34.7	4.7	48.1	63.5	-15.4	Average
6.3196	0	1	35.9	22.3	35.4	4.7	53.7	63.5	-9.8	Average
7.2224	0	1	30.3	23.9	36.8	5.1	48.3	63.5	-15.2	Average
8.1252	0	1	30.8	22.8	37.4	4.7	50.1	63.5	-13.4	Average
9.028	0	1	30.5	26.0	37.6	4.9	47.0	63.5	-16.5	Average

Result = Pass

Spurious/Harmonic Emissions
1 GHz ... 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 31, 2011	FCC B	1 m	Horn	1 MHz	1 MHz	Average

COMMENT	Transmitting Middle Channel Harmonics and spurious investigated up to 10 GHz.
---------	--

Horizontal

Frequency (GHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dB μ V)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dB μ V /m)	Limit (dB μ V /m)	Margin (dB)	Detector Function
1.83	0	1	54.4	24.4	27.7	2.9	60.5	63.5	-3.0	Average
1.83	0	1	65.2	24.4	27.7	2.9	71.3	83.5	-12.2	Peak Hold
2.745	0	1	47.2	28.0	29.4	3.0	51.6	63.5	-11.9	Average
3.66	0	1	43.5	25.8	32.1	3.3	53.1	63.5	-10.4	Average
4.575	0	1	35	24.7	32.0	3.9	46.2	63.5	-17.3	Average
5.49	0	1	29.9	21.5	34.7	4.7	47.8	63.5	-15.7	Average
6.405	0	1	30.1	22.3	35.6	4.5	47.8	63.5	-15.7	Average
7.32	0	1	30.2	23.9	36.8	5.1	48.2	63.5	-15.3	Average
8.235	0	1	31.2	22.8	37.2	5.0	50.6	63.5	-12.9	Average
9.15	0	1	29.9	26.0	37.6	4.9	46.4	63.5	-17.1	Average

Vertical

Frequency (GHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dB μ V)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dB μ V /m)	Limit (dB μ V /m)	Margin (dB)	Detector Function
1.83	0	1	56.9	24.4	27.7	2.9	63.0	63.5	-0.5	Average
1.83	0	1	64.9	24.4	27.7	2.9	71.0	83.5	-12.5	Peak Hold
2.745	0	1	52.7	28.0	29.4	3.0	57.1	63.5	-6.4	Average
3.66	0	1	43.7	25.8	32.1	3.3	53.3	63.5	-10.2	Average
4.575	0	1	49	24.7	32.0	3.9	60.2	63.5	-3.3	Average
5.49	0	1	32.1	21.5	34.7	4.7	50.0	63.5	-13.5	Average
6.405	0	1	31.4	22.3	35.6	4.5	49.1	63.5	-14.4	Average
7.32	0	1	30.1	23.9	36.8	5.1	48.1	63.5	-15.4	Average
8.235	0	1	31.4	22.8	37.2	5.0	50.8	63.5	-12.7	Average
9.15	0	1	29.3	26.0	37.6	4.9	45.8	63.5	-17.7	Average

Result = Pass

Spurious/Harmonic Emissions
1 GHz ... 25 GHz

PROJECT #	DATE	CLASS	DISTANCE	ANTENNA	RBW	VBW	DETECTOR
12104-10	January 31, 2011	FCC B	1 m	Horn	1 MHz	1 MHz	Average

COMMENT	Transmitting High Channel Harmonics and spurious investigated up to 10 GHz.
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Horizontal

Frequency (GHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dB μ V)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dB μ V /m)	Limit (dB μ V /m)	Margin (dB)	Detector Function
1.8542	0	1	56.1	24.4	27.7	2.9	62.3	63.5	-1.2	Average
1.8542	0	1	64.2	24.4	27.7	2.9	70.4	83.5	-13.1	Peak Hold
2.7813	0	1	43.3	28.0	29.5	3.0	47.8	63.5	-15.7	Average
3.7084	0	1	41.1	25.8	32.1	3.3	50.7	63.5	-12.8	Average
4.6355	0	1	41	24.7	32.7	4.2	53.1	63.5	-10.4	Average
5.5626	0	1	39.7	21.5	34.7	4.7	57.6	63.5	-5.9	Average
6.4897	0	1	31	22.3	35.6	4.5	48.8	63.5	-14.7	Average
7.4168	0	1	30.2	23.9	37.3	4.5	48.1	63.5	-15.4	Average
8.3439	0	1	31	22.8	37.2	5.0	50.4	63.5	-13.1	Average
9.271	0	1	29.8	26.0	37.6	5.2	46.5	63.5	-17.0	Average

Vertical

Frequency (GHz)	EUT Direction (degrees)	Antenna Elevation (Meters)	Recorded Level (dB μ V)	Amplifier Gain (dB)	Antenna Factor (dB/m)	Cable Loss (dB)	Corrected Level (dB μ V /m)	Limit (dB μ V /m)	Margin (dB)	Detector Function
1.8542	0	1	55.8	24.4	27.7	2.9	62.0	63.5	-1.5	Average
1.8542	0	1	63.7	24.4	27.7	2.9	69.9	83.5	-13.6	Peak Hold
2.7813	0	1	46.3	28.0	29.5	3.0	50.8	63.5	-12.7	Average
3.7084	0	1	41.7	25.8	32.1	3.3	51.3	63.5	-12.2	Average
4.6355	0	1	37.2	24.7	32.7	4.2	49.3	63.5	-14.2	Average
5.5626	0	1	30.3	21.5	34.7	4.7	48.2	63.5	-15.3	Average
6.4897	0	1	31	22.3	35.6	4.5	48.8	63.5	-14.7	Average
7.4168	0	1	30.2	23.9	37.3	4.5	48.1	63.5	-15.4	Average
8.3439	0	1	31	22.8	37.2	5.0	50.4	63.5	-13.1	Average
9.271	0	1	29.8	26.0	37.6	5.2	46.5	63.5	-17.0	Average

Result = Pass