TEST REPORT

Report Number: 100356542DEN-002E
Project Number: G100356542

Report Issue Date: 03/25/2011

Product Designation: **EN1233 & EN1235**

Standards: **FCC title 47 CFR part 15 subpart C**
RSS-210:2010 Issue 8
AS/NZS 4268:2008

Tested by:
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Client:
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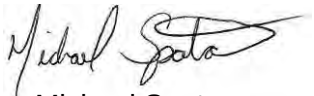

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1 Introduction and Conclusion

The tests indicated in section 2.0 were performed on the product constructed as described in section 3.0. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested Passed the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested.

2 Test Summary

Section	Test full name	Test date	Result
5	Radiated Emissions – Output power of the Fundamental & Harmonics of the Fundamental - FCC 247(b)(2) (d)/15.205 Covers RSS-210 A8.4(1)	11/12/2009	Pass
6	Radiated Emissions – Unintentional & Spurious - FCC 15.247(d) / FCC 15.209/109 Covers RSS-210 A8.5	12/11/2009	Pass
	20dB Bandwidth – FCC 15.247 (a)(1)(i) [Covers RSS-210, A8.1(c)]	-----	N/A
	Number of Hopping Channels – FCC 15.247(a)(1)(i) [Covers RSS-210, A8.1(c)]	-----	N/A
	Hopping Channel Carrier Separation – FCC 15.247(a)(1) [Covers RSS-210, A8.1(b)]	-----	N/A
	Band Edge Measurements – FCC 15.247(d) / 15.209 [Covers RSS-210, A8.5]	-----	N/A
	Duty Cycle & Duty Cycle Correction Factor	-----	N/A
	AC Conducted Emissions – FCC 15.207 (not applicable – product battery-powered)	-----	N/A

Notes:

1) Only the fundamental, harmonics of the fundamental and Spurious emissions are covered in this test report as requested by the customer.

2) Only the high channel of the transmitter at 927.58 MHz falls within the frequency band specified in AS/NZS 4268:2008

3) FCC CFR47 Part 15.31: Measurement Standards: In any case where the device is powered off a battery, a fresh battery was used during test. In cases where the device is powered off an AC supply, voltage was varied per Part 15.31 to find worst case emissions.

3 Description of Equipment Under Test

Equipment Under Test			
Description	Manufacturer	Model Number	Serial Number
902-928MHz wireless transmitter.	Inovonics	EN1233/EN1235	16228003/16228005

Receive Date:	11/12/2009
Received Condition:	Good
Type:	Production

Description of Equipment Under Test (provided by client)

The Inovonics wireless pendant transmitters are used in many applications including panic/duress, life safety, and custom applications. They feature a rugged design that are offered in configurations that include single, double, or four-button activation; single, dual, or three-condition alarm transmissions; and offered in necklace, belt clip or fixed position with back tamper alarm models. Four- button models are also available and offer multiple-condition alarm transmissions with button activation options.
The wireless pendant transmitter is available in two configurations for 868-870 Mhz Europe, or for 902-928 Mhz North America, 915-928 Mhz Australia and 922-928 Mhz New Zealand.

Equipment Under Test Power Configuration			
Rated Voltage	Rated Current	Rated Frequency	Number of Phases
3.3 VDC - Battery	----------	----------	----------

Operating modes of the EUT:

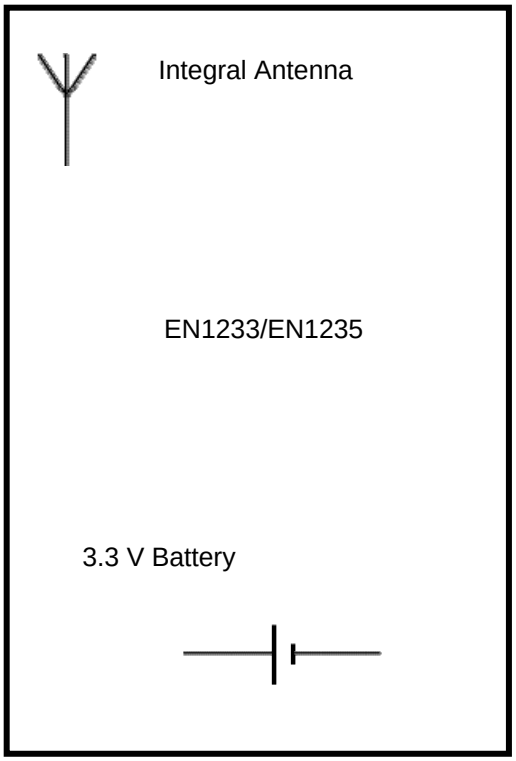
No.	Descriptions of EUT Exercising
1	For section 5 - Fundamental and Harmonics of the fundamental the EUT was placed in an unmodulated, continuous wave mode.
2	For section 6 – Unintentional and Spurious emissions the EUT was placed in normal operating mode.

4 System setup including cable interconnection details, support equipment and simplified block diagram

4.1 Method:

Record the details of EUT cabling, document the support equipment, and show the interconnections in a block diagram.

4.2 EUT Block Diagram:



4.3 Support Data:

ID	Description	Length	Shielding	Ferrites

Support Equipment			
Description	Manufacturer	Model Number	Serial Number

General notes:
1. Product has no I/O or signal cables.
2. Product did not require any support equipment.

5 Radiated Emissions – Intentional Radiators: Output Power - Fundamental & Harmonics of the Fundamental for 15.247

5.1 Method

Unless otherwise stated no deviations were made from ANSI C63.10 and FCC public notice DA 00-705.

This testing was performed at Intertek Denver's OATS site, located at 40 Meadow Rd., Pinewood Springs, CO 80540.

5.2 Test Equipment Used:

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
18913	Spectrum Analyzer	HP	E7405A	MY44211889	4/08/2009	4/08/2010
18737	Horn Antenna	EMCO	3105	2076	4/3/2009	4/3/2010
18900	RF Pre-Amplifier (4-8 GHz)	Avantek	AFT97-8434-10F	1007	5/12/2009	5/12/2010
18901	RF Pre-Amplifier (8-18 GHz)	Avantek	AWT-18037	1002	5/12/2009	5/12/2010
18906	Amplifier	Mini-Circuits	ZHL-42	N052792-2	5/12/2009	5/12/2010
18888	Log Periodic Antenna	EMCO	3146	9402-3775	11/21/2008	11/21/2009

5.3 Results:

The sample tested was found to Comply.

5.4 Setup Photographs:

Front View

Photo:

Axis 1 – EUT Flat on Table

Axis 2 – EUT Vertical

Axis 3 – EUT Vertical & Rotated 90 degrees (worst-case)

5.5 Plots: None

5.6 Test Data:

Field Strength Measurements
Fundamental and Spurious of the Transmitter

Test Report #:	**100356542DEN-002E**	Test Area:	Pinewood Site 1 (3m)	Temperature:	21.8	°C
Test Method:	FCC Part 15.247	Test Date:	12-Nov-2009	Relative Humidity:	38.6	%
EUT Model #:	EN1235D	EUT Power:	3 VDC Battery	Air Pressure:	79	kPa
EUT Serial #:	16228003					
Manufacturer:	Inovonics			Level Key		
EUT Description:	Large Pendant (2-button)			Pk – Peak		
Notes:	Product part of Echo Stream System			Qp – QuasiPeak		
				Av - Average		

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	Duty Cycle Correction	Final Corrected	Limit	DELTA
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
The following Duty Cycle was declared by the manufacturer:								
21.0%								
Averaging method for pulsed signals and calculation in accordance to FCC CFR47 Part 15.35 utilized to calculate field strength emissions.								
The testing performed in accordance to FCC CFR47 Part 15.205 (restricted bands of operation) and 15.247 emissions and delta limits were calculated as follows:								
Final Corrected Peak Measurement – Duty Cycle Correction Factor* = Final Calculated Emission								
The Final Calculated Emission was then compared to the Limits in CFR47 Part 15.209 and 15.247 and the emission/limit delta was calculated.								
the DTCF is calculated as follows $20*\log_{10}$(duty cycle in 100mS) “not to exceed 20dB”								
Part 15.247 and 15.205 Respectively								
Fundamental Measurements								
Low Channel Axis 1 - EUT is Flat on the table.								
902.42	77.7 Pk	3.6 / 22.0 / 0.0	103.3	V / 1.4 / 198.0	0.0	103.3	119.2	-15.9
902.42	83.2 Pk	3.6 / 22.0 / 0.0	108.8	H / 1.5 / 172.0	0.0	108.8	119.2	-10.4
Axis 2 - EUT is Vertical on the table.								
902.42	83.8 Pk	3.6 / 22.0 / 0.0	109.4	H / 1.5 / 172.0	0.0	109.4	119.2	-9.8
902.42	82.9 Pk	3.6 / 22.0 / 0.0	108.5	V / 1.5 / 224.0	0.0	108.5	119.2	-10.7
Axis 3 - EUT is Vertical on the table & Rotated 90 Deg.								
902.42	87.7 Pk	3.6 / 22.0 / 0.0	113.2	V / 1.1 / 322.0	0.0	113.2	119.2	-6.0
902.42	79.7 Pk	3.6 / 22.0 / 0.0	105.3	H / 1.8 / 12.0	0.0	105.3	119.2	-13.9
Mid Channel Axis 1								
914.82	85.5 Pk	3.6 / 22.4 / 0.0	111.5	H / 1.1 / 318.0	0.0	111.5	119.2	-7.7
914.82	77.9 Pk	3.6 / 22.4 / 0.0	103.9	V / 1.3 / 62.0	0.0	103.9	119.2	-15.3
Axis 2								
914.82	83.9 Pk	3.6 / 22.4 / 0.0	109.9	V / 1.1 / 288.0	0.0	109.9	119.2	-9.3
914.82	84.2 Pk	3.6 / 22.4 / 0.0	110.2	H / 1.5 / 358.0	0.0	110.2	119.2	-9.0
Axis 3								
914.82	79.0 Pk	3.6 / 22.4 / 0.0	105	H / 1.8 / 158.0	0.0	105.0	119.2	-14.2

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	Duty Cycle Correction	Final Corrected	Limit	DELTA
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
914.82	**87.5 Pk**	**3.6 / 22.4 / 0.0**	**113.5**	**V / 1.1 / 82.0**	**0.0**	**113.5**	**119.2**	**-5.7**
High Channel Axis 1								
927.62	78.3 Pk	3.6 / 22.1 / 0.0	104	V / 1.4 / 15.0	0.0	104.0	119.2	-15.2
927.62	85.7 Pk	3.6 / 22.1 / 0.0	111.4	H / 1.3 / 146.0	0.0	111.4	119.2	-7.8
Axis 2								
927.62	84.9 Pk	3.6 / 22.1 / 0.0	110.6	H / 1.4 / 182.0	0.0	110.6	119.2	-8.6
927.62	86.0 Pk	3.6 / 22.1 / 0.0	111.8	V / 1.1 / 272.0	0.0	111.8	119.2	-7.4
Axis 3								
927.62	86.3 Pk	3.6 / 22.1 / 0.0	112.1	V / 1.1 / 10.0	0.0	112.1	119.2	-7.1
927.62	76.9 Pk	3.6 / 22.1 / 0.0	102.6	H / 1.8 / 12.0	0.0	102.6	119.2	-16.6
Axis 3 was determined to be the worst case axis								
All Harmonics will be measured in Axis 3 – Harmonics in Restricted Bands are Highlighted in Yellow								
Harmonics - Low Channel								
1804.84	69.0 Pk	2.8 / 26.0 / 35.7	62	V / 2.1 / 8.0	-13.6	48.4	93.2	-44.8
1804.84	70.3 Pk	2.8 / 26.0 / 35.7	63.3	H / 1.2 / 333.0	-13.6	49.7	93.2	-43.5
2707.26	59.5 Pk	3.5 / 28.2 / 36.7	54.4	V / 1.2 / 8.0	-13.6	40.8	54.0	-13.2
2707.26	60.8 Pk	3.5 / 28.2 / 36.7	55.7	H / 2.1 / 333.0	-13.6	42.1	54.0	-11.9
3609.68	55.9 Pk	4.5 / 30.9 / 37.3	54	V / 1.5 / 8.0	-13.6	40.4	54.0	-13.6
3609.68	63.4 Pk	4.5 / 30.9 / 37.3	61.4	H / 1.6 / 324.0	-13.6	47.8	54.0	-6.2
4512.1	65.0 Pk	5.3 / 32.2 / 38.8	63.5	H / 1.5 / 32.0	-13.6	49.9	54.0	-4.1
4512.1	65.6 Pk	5.3 / 32.2 / 38.8	64.2	V / 1.0 / 18.0	-13.6	50.6	54.0	-3.4
5414.52	47.5 Pk	6.0 / 32.8 / 36.5	49.8	H / 1.2 / 32.0	-13.6	36.2	54.0	-17.8
5414.52	51.5 Pk	6.0 / 32.8 / 36.5	53.8	V / 1.4 / 338.0	-13.6	40.2	54.0	-13.8
6316.94	46.5 Pk	6.6 / 33.8 / 35.8	51.1	H / 1.1 / 5.0	-13.6	37.5	93.2	-55.7
6316.94	50.8 Pk	6.6 / 33.8 / 35.8	55.3	V / 1.2 / 8.0	-13.6	41.7	93.2	-51.5
7219.36	42.3 Pk	7.3 / 35.2 / 35.1	49.6	H / 1.1 / 5.0	-13.6	36.0	93.2	-57.2
7219.36	42.6 Pk	7.3 / 35.2 / 35.1	49.9	V / 1.1 / 5.0	-13.6	36.3	93.2	-56.9
8121.78	51.7 Qp	7.7 / 36.2 / 46.3	49.3	V / 1.3 / 20.0	-13.6	35.7	54.0	-18.3
8121.78	53.7 Pk	7.7 / 36.2 / 46.3	51.3	H / 1.3 / 20.0	-13.6	37.7	54.0	-16.3
9024.2	55.8 Pk	8.4 / 36.8 / 47.5	53.4	V / 1.3 / 20.0	-13.6	39.8	54.0	-14.2
9024.2	55.2 Pk	8.4 / 36.8 / 47.5	52.8	H / 1.3 / 20.0	-13.6	39.2	54.0	-14.8
Harmonics - Mid Channel								
1829.63	72.5 Pk	2.8 / 26.0 / 35.8	65.6	H / 1.2 / 356.0	-13.6	52.0	93.5	-41.5
1829.63	69.7 Pk	2.8 / 26.0 / 35.8	62.7	V / 2.1 / 8.0	-13.6	49.1	93.5	-44.4
2744.45	62.4 Pk	3.5 / 28.3 / 36.7	57.4	H / 2.1 / 22.0	-13.6	43.8	54.0	-10.2
2744.45	58.2 Pk	3.5 / 28.3 / 36.7	53.2	V / 1.3 / 5.0	-13.6	39.6	54.0	-14.4
3659.28	60.3 Pk	4.5 / 31.0 / 37.3	58.5	H / 1.4 / 354.0	-13.6	44.9	54.0	-9.1
3659.28	54.4 Pk	4.5 / 31.0 / 37.3	52.6	V / 1.4 / 134.0	-13.6	39.0	54.0	-15.0
4574.1	**67.3 Pk**	**5.3 / 32.1 / 38.5**	**66.3**	**V / 1.4 / 319.0**	**-13.6**	**52.7**	**54.0**	**-1.3**
4574.1	67.3 Pk	5.3 / 32.1 / 38.5	66.2	H / 1.5 / 8.0	-13.6	52.6	54.0	-1.4
5488.92	50.3 Pk	6.1 / 32.9 / 36.4	52.8	V / 1.4 / 319.0	-13.6	39.2	93.5	-54.3
5488.92	48.1 Pk	6.1 / 32.9 / 36.4	50.6	H / 1.2 / 12.0	-13.6	37.0	93.5	-56.5
6403.74	51.0 Pk	6.7 / 33.8 / 35.6	56	V / 1.2 / 12.0	-13.6	42.4	93.5	-51.1
6403.74	47.4 Pk	6.7 / 33.8 / 35.6	52.3	H / 1.2 / 12.0	-13.6	38.7	93.5	-54.8
7318.56	46.1 Pk	7.4 / 35.4 / 34.8	54	V / 1.2 / 12.0	-13.6	40.4	54.0	-13.6

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	Duty Cycle Correction	Final Corrected	Limit	DELTA
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV)	(m) (DEG)	(dB)	(dBuV/m)	(dBuV/m)	(dB)
7318.56	43.2 Pk	7.4 / 35.4 / 34.8	51.1	H / 1.2 / 12.0	-13.6	37.5	54.0	-16.5
8233.38	51.0 Pk	7.9 / 36.3 / 46.4	48.7	H / 1.3 / 22.0	-13.6	35.1	54.0	-18.9
8233.38	54.8 Pk	7.9 / 36.3 / 46.4	52.5	V / 1.3 / 20.0	-13.6	38.9	54.0	-15.1
9148.2	55.7 Pk	8.5 / 36.8 / 47.6	53.4	H / 1.3 / 22.0	-13.6	39.8	54.0	-14.2
9148.2	54.2 Pk	8.5 / 36.8 / 47.6	51.9	V / 1.3 / 20.0	-13.6	38.3	54.0	-15.7
Harmonics - High Channel								
1855.24	68.3 Pk	2.9 / 26.1 / 35.8	61.5	V / 1.8 / 354.0	-13.6	47.9	92.1	-44.2
1855.24	71.4 Pk	2.9 / 26.1 / 35.8	64.6	H / 1.3 / 8.0	-13.6	51.0	92.1	-41.1
2782.86	65.7 Pk	3.5 / 28.3 / 36.7	60.8	V / 1.1 / 5.0	-13.6	47.2	54.0	-6.8
2782.86	68.2 Pk	3.5 / 28.3 / 36.7	63.3	H / 2.0 / 312.0	-13.6	49.7	54.0	-4.3
3710.48	49.4 Pk	4.5 / 31.1 / 37.2	47.9	V / 1.4 / 12.0	-13.6	34.3	54.0	-19.7
3710.48	56.3 Pk	4.5 / 31.1 / 37.2	54.8	H / 1.3 / 354.0	-13.6	41.2	54.0	-12.8
4638.1	62.9 Pk	5.4 / 32.0 / 38.3	62	H / 1.5 / 8.0	-13.6	48.4	54.0	-5.6
4638.1	63.5 Pk	5.4 / 32.0 / 38.3	62.6	V / 1.5 / 12.0	-13.6	49.0	54.0	-5.0
5565.72	44.6 Pk	6.1 / 33.0 / 36.5	47.2	H / 1.5 / 8.0	-13.6	33.6	92.1	-58.5
5565.72	46.4 Pk	6.1 / 33.0 / 36.5	49	V / 1.2 / 12.0	-13.6	35.4	92.1	-56.7
6493.34	46.1 Pk	6.8 / 33.9 / 35.3	51.6	H / 1.5 / 8.0	-13.6	38.0	92.1	-54.1
6493.34	48.6 Pk	6.8 / 33.9 / 35.3	54.1	V / 1.2 / 12.0	-13.6	40.5	92.1	-51.6
7420.96	42.5 Pk	7.4 / 35.5 / 34.6	50.8	H / 1.5 / 8.0	-13.6	37.2	54.0	-16.8
7420.96	45.6 Pk	7.4 / 35.5 / 34.6	53.8	V / 1.2 / 12.0	-13.6	40.2	54.0	-13.8
8348.58	52.1 Pk	8.0 / 36.4 / 46.6	49.9	V / 1.5 / 12.0	-13.6	36.3	54.0	-17.7
8348.58	51.5 Pk	8.0 / 36.4 / 46.6	49.3	H / 1.3 / 22.0	-13.6	35.7	54.0	-18.3
9276.2	57.2 Pk	8.5 / 36.9 / 47.7	54.9	V / 1.3 / 33.0	-13.6	41.3	92.1	-50.8
9276.2	56.6 Pk	8.5 / 36.9 / 47.7	54.3	H / 1.3 / 22.0	-13.6	40.7	92.1	-51.4

Example calculation for Intentional Radiated Emissions:

Measured Level	**+**	**Transducer, Cable Loss Pre-Amplifier**	**=**	**Corrected Reading**	**-**	**Duty Cycle Correction**	**=**	**FINAL Measurement**	**-**	**Specification Limit**	**=**	**Delta from Specification Limit**
(dBµV)		(dB)		(dBµV/m)		(dBµV/m)		(dBµV/m)		(dBµV/m)		
24.0		**14.9**		**38.9**		**10.0**		**28.9**		**40.0**		**-11.1**

Electric Field to Power Conversion

From DA 00-705 – Alternative Test Procedures.

If antenna conducted tests cannot be performed on this device, radiated tests to show compliance with the peak output power limit specified in Section 15.247(b) and the spurious RF conducted emission limit specified in Section 15.247(c) are acceptable. As stated previously, a pre-amp, and, in the latter case, a high pass filter, are required for the following measurements.

1) Calculate the transmitter's peak power using the following equation:

$$E = \frac{\sqrt{30PG}}{d}$$

Where: E is the measured maximum fundamental field strength in V/m, utilizing a RBW ≥ the 20 dB bandwidth of the emission, VBW > RBW, peak detector function. Follow the procedures in C63.4-1992 with respect to maximizing the emission.

G is the numeric gain of the transmitting antenna with reference to an isotropic radiator.

d is the distance in meters from which the field strength was measured.

P is the power in watts for which you are solving:

$$P = \frac{(E*d)^2}{30G}$$

In this case:

E = 113.5 dB/uV (from above mid channel axis 3) = 0.4732V/m
D = 3 meters
G = 4 unknown

P = 0.0168 W

Limit from 15.247(b)(2) = .25W

Delta = 0.0168 - .25 = -0.2332W

6 Radiated Emissions Unintentional & Spurious

6.1 Method

Unless otherwise stated no deviations were made from ANSI C63.10 and FCC public notice DA 00-705.

This testing was performed at Intertek Denver's OATS site, located at 40 Meadow Rd., Pinewood Springs, CO 80540.

6.2 Test Equipment Used:

Asset	Description	Manufacturer	Model	Serial	Cal Date	Cal Due
18882	Spectrum Analyzer	HP	8566B	2410A00154	11/12/2009	11/12/2010
18880	Q.P Adapter	HP	85650A	2811A01300	11/12/2009	11/12/2010
18912	9 kHz- 1.3GHz Pre Amp	HP	8447F	3113A05545	5/12/2009	5/12/2010
18906	RF Pre-Amplifier (1-4 GHz)	Mini-Circuits L	ZHL-42	N052792-2	5/12/2009	5/12/2010
18900	RF Pre-Amplifier (4-8 GHz)	Avantek	AFT97-8434-10F	1007	5/12/2009	5/12/2010
18901	RF Pre-Amplifier (8-18 GHz)	Avantek	AWT-18037	1002	5/12/2009	5/12/2010
19937	Bilog Antenna 30MHz - 6GHz	Sunol	JB6	A050707-2	12/17/2009	12/17/2010
18737	Horn Antenna	EMCO	3105	2076	4/3/2009	4/3/2010

6.3 Results:

The sample tested was found to Comply.

6.4 Setup Photographs:

Front View

Rear View

Pendant Transmitter located in center of table

6.5 Plots: None

6.6 Data:

Radiated Electromagnetic Emissions

Test Report #:	**100356542DEN-002E**	Test Area:	Pinewood Site 1 (10m)	Temperature:	23.8	°C
Test Method:	15.209	Test Date:	11-Dec-2009	Relative Humidity:	34.2	%
EUT Model #:	**EN1233**	EUT Power:	3VDC Battery	Air Pressure:	79	kPa
EUT Serial #:	16228005					
Manufacturer:	Inovonics Wireless					
EUT Description:	Large Pendant (2-button)					
Notes:						

Level Key
Pk – Peak
Qp – QuasiPeak
Av - Average

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	NA	FCC 15.209
MEASURE RECEIVER LO'S						
59.30	37.1 Qp	2.1 / 7.7 / 28.1	19.0	V / 1.0 / 184.0	-	-10.5
974.00	31.8 Pk	9.2 / 22.5 / 27.4	36.1	V / 1.0 / 184.0	-	-7.4
30-1000MHz Vertical 0 degrees						
32.00	32.0 Qp	1.6 / 19.5 / 28.1	25.0	V / 1.0 / 0.0	-	-4.5
48.00	39.1 Qp	1.8 / 9.3 / 28.1	22.2	V / 1.0 / 0.0	-	-7.3
64.00	44.6 Qp	2.2 / 7.8 / 28.1	26.6	V / 1.0 / 0.0	-	-2.9
80.00	39.8 Qp	2.4 / 7.8 / 28.0	22.0	V / 1.0 / 0.0	-	-7.5
112.00	31.1 Qp	2.8 / 13.0 / 27.9	19.0	V / 1.0 / 0.0	-	-14.0
128.00	32.5 Qp	2.9 / 13.4 / 27.9	21.0	V / 1.0 / 0.0	-	-12.0
144.00	33.2 Qp	3.1 / 12.7 / 27.8	21.3	V / 1.0 / 0.0	-	-11.7
144.00	32.5 Qp	3.1 / 12.7 / 27.8	20.6	V / 1.0 / 0.0	-	-12.4
160.00	20.1 Qp	3.3 / 12.4 / 27.7	8.1	V / 1.0 / 0.0	-	-24.9
208.00	17.9 Qp	3.9 / 10.6 / 27.5	5.0	V / 1.0 / 0.0	-	-28.0
224.00	37.0 Qp	4.0 / 10.9 / 27.4	24.5	V / 1.0 / 0.0	-	-11.0
240.00	20.2 Qp	4.1 / 11.6 / 27.3	8.6	V / 1.0 / 0.0	-	-26.9
256.00	19.6 Qp	4.3 / 11.7 / 27.2	8.4	V / 1.0 / 0.0	-	-27.1
272.00	16.8 Qp	4.4 / 13.4 / 27.2	7.4	V / 1.0 / 0.0	-	-28.1
288.00	16.8 Qp	4.5 / 13.6 / 27.1	7.9	V / 1.0 / 0.0	-	-27.6
320.00	19.0 Qp	4.8 / 14.1 / 27.3	10.6	V / 1.0 / 0.0	-	-24.9
336.00	23.9 Qp	5.0 / 14.3 / 27.4	15.8	V / 1.0 / 0.0	-	-19.7
336.00	30.6 Qp	5.0 / 14.3 / 27.4	22.5	V / 1.0 / 0.0	-	-13.0
416.00	32.0 Qp	5.6 / 16.0 / 27.9	25.7	V / 1.0 / 0.0	-	-9.8
960.00	30.6 Qp	9.1 / 22.4 / 27.5	34.6	V / 1.0 / 0.0	-	-0.9
72.01	25.9 Pk	2.3 / 8.0 / 28.0	8.2	V / 1.0 / 0.0	-	-21.3
72.01	29.6 Qp	2.3 / 8.0 / 28.0	11.9	V / 1.0 / 0.0	-	-17.6
72.01	28.2 Pk	2.3 / 8.0 / 28.0	10.5	V / 1.0 / 0.0	-	-19.0
76.32	31.2 Qp	2.4 / 7.9 / 28.0	13.5	V / 1.0 / 0.0	-	-16.0
172.09	22.8 Qp	3.5 / 11.8 / 27.6	10.4	V / 1.0 / 0.0	-	-22.6

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	NA	FCC 15.209
203.74	28.9 Qp	3.9 / 11.5 / 27.5	16.8	V / 1.0 / 0.0	-	-16.2
512.32	29.2 Qp	6.2 / 17.9 / 28.4	25.0	V / 1.0 / 0.0	-	-10.5
984.80	22.4 Qp	9.2 / 22.6 / 27.4	26.9	V / 1.0 / 0.0	-	-16.6
982.80	20.6 Qp	9.2 / 22.6 / 27.4	25.1	V / 1.0 / 0.0	-	-18.4
979.60	21.4 Qp	9.2 / 22.5 / 27.4	25.7	V / 1.0 / 0.0	-	-17.8
30-1000MHz Vertical 90 degrees						
32.00	24.1 Qp	1.6 / 19.5 / 28.1	17.0	V / 1.0 / 90.0	-	-12.5
48.00	30.0 Qp	1.8 / 9.3 / 28.1	13.1	V / 1.0 / 90.0	-	-16.4
59.30	24.9 Qp	2.1 / 7.7 / 28.1	6.7	V / 1.0 / 90.0	-	-22.8
61.70	31.7 Qp	2.2 / 7.8 / 28.1	13.6	V / 1.0 / 90.0	-	-15.9
64.00	27.9 Qp	2.2 / 7.8 / 28.1	9.9	V / 1.0 / 90.0	-	-19.6
72.01	23.2 Qp	2.3 / 8.0 / 28.0	5.5	V / 1.0 / 90.0	-	-24.0
76.32	26.4 Qp	2.4 / 7.9 / 28.0	8.7	V / 1.0 / 90.0	-	-20.8
80.00	35.4 Qp	2.4 / 7.8 / 28.0	17.6	V / 1.0 / 90.0	-	-11.9
112.00	30.4 Qp	2.8 / 13.0 / 27.9	18.2	V / 1.0 / 90.0	-	-14.8
160.00	19.1 Qp	3.3 / 12.4 / 27.7	7.2	V / 1.0 / 90.0	-	-25.8
172.09	26.9 Qp	3.5 / 11.8 / 27.6	14.5	V / 1.0 / 90.0	-	-18.5
203.74	29.5 Qp	3.9 / 11.5 / 27.5	17.4	V / 1.0 / 90.0	-	-15.6
208.00	20.2 Qp	3.9 / 10.6 / 27.5	7.3	V / 1.0 / 90.0	-	-25.7
224.00	21.0 Qp	4.0 / 10.9 / 27.4	8.5	V / 1.0 / 90.0	-	-27.0
240.00	26.6 Qp	4.1 / 11.6 / 27.3	14.9	V / 1.0 / 90.0	-	-20.6
288.00	20.4 Qp	4.5 / 13.6 / 27.1	11.4	V / 1.0 / 90.0	-	-24.1
320.00	17.2 Qp	4.8 / 14.1 / 27.3	8.8	V / 1.0 / 90.0	-	-26.7
512.32	23.5 Qp	6.2 / 17.9 / 28.4	19.3	V / 1.0 / 90.0	-	-16.2
960.00	29.7 Qp	9.1 / 22.4 / 27.5	33.7	V / 1.0 / 90.0	-	-1.8
974.00	17.2 Qp	9.2 / 22.5 / 27.4	21.5	V / 1.0 / 90.0	-	-22.0
979.60	21.1 Qp	9.2 / 22.5 / 27.4	25.5	V / 1.0 / 90.0	-	-18.0
982.80	20.4 Qp	9.2 / 22.6 / 27.4	24.8	V / 1.0 / 90.0	-	-18.7
30-1000MHz Vertical 180 degrees						
48.00	26.1 Qp	1.8 / 9.3 / 28.1	9.2	V / 1.0 / 180.0	-	-20.3
76.32	31.0 Qp	2.4 / 7.9 / 28.0	13.3	V / 1.0 / 180.0	-	-16.2
80.00	30.1 Qp	2.4 / 7.8 / 28.0	12.4	V / 1.0 / 180.0	-	-17.1
160.00	23.1 Qp	3.3 / 12.4 / 27.7	11.1	V / 1.0 / 180.0	-	-21.9
172.09	24.4 Qp	3.5 / 11.8 / 27.6	12.1	V / 1.0 / 180.0	-	-20.9
203.74	29.6 Qp	3.9 / 11.5 / 27.5	17.5	V / 1.0 / 180.0	-	-15.5
960.00	28.0 Qp	9.1 / 22.4 / 27.5	32.0	V / 1.0 / 180.0	-	-3.5
979.60	22.1 Qp	9.2 / 22.5 / 27.4	26.4	V / 1.0 / 180.0	-	-17.1
982.80	20.3 Qp	9.2 / 22.6 / 27.4	24.7	V / 1.0 / 180.0	-	-18.8
30-1000MHz Vertical 270 degrees						
48.00	28.9 Qp	1.8 / 9.3 / 28.1	12.0	V / 1.0 / 180.0	-	-17.5
72.01	31.1 Qp	2.3 / 8.0 / 28.0	13.4	V / 1.0 / 180.0	-	-16.1
203.74	28.8 Qp	3.9 / 11.5 / 27.5	16.7	V / 1.0 / 180.0	-	-16.3
960.00	29.1 Qp	9.1 / 22.4 / 27.5	33.1	V / 1.0 / 180.0	-	-2.4

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	NA	FCC 15.209
Following signals maximized between 30 & 1000MHz Vertical						
32.00	26.7 Pk	1.6 / 19.5 / 28.1	19.6	V / 1.0 / 180.0	-	-9.9
48.00	32.6 Qp	1.8 / 9.3 / 28.1	15.7	V / 1.0 / 174.0	-	-13.8
61.70	35.0 Qp	2.2 / 7.8 / 28.1	16.9	V / 1.0 / 174.0	-	-12.6
64.00	37.3 Qp	2.2 / 7.8 / 28.1	19.3	V / 1.0 / 276.0	-	-10.2
224.00	27.8 Pk	4.0 / 10.9 / 27.4	15.3	V / 1.0 / 276.0	-	-20.2
960.00	27.3 Pk	9.1 / 22.4 / 27.5	31.3	V / 1.0 / 268.0	-	-4.2
974.00	24.3 Qp	9.2 / 22.5 / 27.4	28.6	V / 1.0 / 268.0	-	-14.9
979.60	24.8 Qp	9.2 / 22.5 / 27.4	29.1	V / 1.0 / 315.0	-	-14.4
982.80	24.4 Qp	9.2 / 22.6 / 27.4	28.8	V / 1.0 / 315.0	-	-14.7
MEASURE RECEIVER LO's						
59.30	24.6 Qp	2.1 / 7.7 / 28.1	6.5	H / 1.0 / 0.0	-	-23.0
974.00	26.2 Qp	9.2 / 22.5 / 27.4	30.5	H / 1.0 / 0.0	-	-13.0
30-1000MHz Horizontal 0 degrees						
32.00	22.2 Qp	1.6 / 19.5 / 28.1	15.2	H / 1.0 / 0.0	-	-14.3
48.00	25.7 Qp	1.8 / 9.3 / 28.1	8.8	H / 1.0 / 0.0	-	-20.7
59.30	25.8 Qp	2.1 / 7.7 / 28.1	7.6	H / 1.0 / 0.0	-	-21.9
61.70	23.0 Qp	2.2 / 7.8 / 28.1	4.9	H / 1.0 / 0.0	-	-24.6
64.00	21.8 Qp	2.2 / 7.8 / 28.1	3.8	H / 1.0 / 0.0	-	-25.7
72.01	24.8 Qp	2.3 / 8.0 / 28.0	7.0	H / 1.0 / 0.0	-	-22.5
76.32	29.2 Qp	2.4 / 7.9 / 28.0	11.5	H / 1.0 / 0.0	-	-18.0
80.00	23.3 Qp	2.4 / 7.8 / 28.0	5.5	H / 1.0 / 0.0	-	-24.0
112.00	22.5 Qp	2.8 / 13.0 / 27.9	10.3	H / 1.0 / 0.0	-	-22.7
128.00	21.9 Qp	2.9 / 13.4 / 27.9	10.3	H / 1.0 / 0.0	-	-22.7
144.00	19.3 Qp	3.1 / 12.7 / 27.8	7.4	H / 1.0 / 0.0	-	-25.6
160.00	24.6 Qp	3.3 / 12.4 / 27.7	12.7	H / 1.0 / 0.0	-	-20.3
172.09	24.9 Qp	3.5 / 11.8 / 27.6	12.6	H / 1.0 / 0.0	-	-20.4
203.74	32.8 Qp	3.9 / 11.5 / 27.5	20.7	H / 1.0 / 0.0	-	-12.3
208.00	27.0 Qp	3.9 / 10.6 / 27.5	14.0	H / 1.0 / 0.0	-	-19.0
224.00	21.2 Qp	4.0 / 10.9 / 27.4	8.7	H / 1.0 / 0.0	-	-26.8
240.00	22.6 Qp	4.1 / 11.6 / 27.3	11.0	H / 1.0 / 0.0	-	-24.5
256.00	21.7 Qp	4.3 / 11.7 / 27.2	10.4	H / 1.0 / 0.0	-	-25.1
272.00	21.8 Qp	4.4 / 13.4 / 27.2	12.4	H / 1.0 / 0.0	-	-23.1
288.00	19.3 Qp	4.5 / 13.6 / 27.1	10.4	H / 1.0 / 0.0	-	-25.1
320.00	20.7 Qp	4.8 / 14.1 / 27.3	12.3	H / 1.0 / 0.0	-	-23.2
336.00	16.6 Qp	5.0 / 14.3 / 27.4	8.6	H / 1.0 / 0.0	-	-26.9
416.00	19.1 Qp	5.6 / 16.0 / 27.9	12.7	H / 1.0 / 0.0	-	-22.8
512.32	24.1 Qp	6.2 / 17.9 / 28.4	19.9	H / 1.0 / 0.0	-	-15.6
960.00	23.4 Qp	9.1 / 22.4 / 27.5	27.5	H / 1.0 / 0.0	-	-8.0
974.00	20.4 Qp	9.2 / 22.5 / 27.4	24.7	H / 1.0 / 0.0	-	-18.8
979.60	23.4 Qp	9.2 / 22.5 / 27.4	27.7	H / 1.0 / 0.0	-	-15.8
982.80	20.2 Qp	9.2 / 22.6 / 27.4	24.6	H / 1.0 / 0.0	-	-18.9
63.59	29.4 Qp	2.2 / 7.8 / 28.1	11.4	H / 1.0 / 0.0	-	-18.1
60.00	27.9 Qp	2.1 / 7.8 / 28.1	9.7	H / 1.0 / 0.0	-	-19.8

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	NA	FCC 15.209
30-1000MHz Horizontal 90 degrees						
32.00	22.6 Qp	1.6 / 19.5 / 28.1	15.5	H / 1.0 / 90.0	-	-14.0
59.30	24.9 Qp	2.1 / 7.7 / 28.1	6.7	H / 1.0 / 90.0	-	-22.8
60.00	27.1 Qp	2.1 / 7.8 / 28.1	8.9	H / 1.0 / 90.0	-	-20.6
61.70	29.1 Qp	2.2 / 7.8 / 28.1	11.0	H / 1.0 / 90.0	-	-18.5
63.59	21.8 Qp	2.2 / 7.8 / 28.1	3.8	H / 1.0 / 90.0	-	-25.7
80.00	22.1 Qp	2.4 / 7.8 / 28.0	4.3	H / 1.0 / 90.0	-	-25.2
128.00	20.5 Qp	2.9 / 13.4 / 27.9	9.0	H / 1.0 / 90.0	-	-24.0
160.00	25.1 Qp	3.3 / 12.4 / 27.7	13.1	H / 1.0 / 90.0	-	-19.9
203.74	32.9 Qp	3.9 / 11.5 / 27.5	20.8	H / 1.0 / 90.0	-	-12.2
224.00	20.4 Qp	4.0 / 10.9 / 27.4	7.8	H / 1.0 / 90.0	-	-27.7
288.00	21.4 Qp	4.5 / 13.6 / 27.1	12.5	H / 1.0 / 90.0	-	-23.0
30-1000MHz Horizontal 180 degrees						
48.00	25.1 Qp	1.8 / 9.3 / 28.1	8.2	H / 1.0 / 180.0	-	-21.3
60.00	24.7 Qp	2.1 / 7.8 / 28.1	6.5	H / 1.0 / 180.0	-	-23.0
160.00	20.1 Qp	3.3 / 12.4 / 27.7	8.2	H / 1.0 / 180.0	-	-24.8
984.80	21.1 Qp	9.2 / 22.6 / 27.4	25.6	H / 1.0 / 180.0	-	-17.9
No higher signals found: 30-1000MHz Horizontal 270 degrees						
Following signals maximized between 30 & 1000MHz Horizontal						
32.00	25.2 Qp	1.6 / 19.5 / 28.1	18.2	H / 2.2 / 112.0	-	-11.3
61.70	31.3 Qp	2.2 / 7.8 / 28.1	13.2	H / 2.2 / 112.0	-	-16.3
64.00	38.2 Qp	2.2 / 7.8 / 28.1	20.2	H / 2.2 / 246.0	-	-9.3
224.00	25.8 Pk	4.0 / 10.9 / 27.4	13.3	H / 1.9 / 176.0	-	-22.2
960.00	25.4 Qp	9.1 / 22.4 / 27.5	29.5	H / 1.6 / 24.0	-	-6.0
974.00	24.4 Pk	9.2 / 22.5 / 27.4	28.7	H / 1.6 / 24.0	-	-14.8

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	NA	FCC 15.209
********** Measurement Summary **********						
974.00	32.5 Qp	9.2 / 22.5 / 27.4	36.7	V / 1.0 / 184.0	-	-6.8
960.00	30.6 Qp	9.1 / 22.4 / 27.5	34.6	V / 1.0 / 0.0	-	-0.9
64.00	44.6 Qp	2.2 / 7.8 / 28.1	26.6	V / 1.0 / 0.0	-	-2.9
61.70	43.8 Qp	2.2 / 7.8 / 28.1	25.6	V / 1.0 / 184.0	-	-3.9
32.00	32.0 Qp	1.6 / 19.5 / 28.1	25.0	V / 1.0 / 0.0	-	-4.5
224.00	37.0 Qp	4.0 / 10.9 / 27.4	24.5	V / 1.0 / 0.0	-	-11.0
48.00	39.1 Qp	1.8 / 9.3 / 28.1	22.2	V / 1.0 / 0.0	-	-7.3
80.00	39.8 Qp	2.4 / 7.8 / 28.0	22.0	V / 1.0 / 0.0	-	-7.5
979.60	24.8 Qp	9.2 / 22.5 / 27.4	29.1	V / 1.0 / 315.0	-	-14.4
982.80	24.4 Qp	9.2 / 22.6 / 27.4	28.8	V / 1.0 / 315.0	-	-14.7
144.00	33.2 Qp	3.1 / 12.7 / 27.8	21.3	V / 1.0 / 0.0	-	-11.7
128.00	32.5 Qp	2.9 / 13.4 / 27.9	21.0	V / 1.0 / 0.0	-	-12.0
203.74	32.9 Qp	3.9 / 11.5 / 27.5	20.8	H / 1.0 / 90.0	-	-12.2
416.00	32.0 Qp	5.6 / 16.0 / 27.9	25.7	V / 1.0 / 0.0	-	-9.8
984.80	22.4 Qp	9.2 / 22.6 / 27.4	26.9	V / 1.0 / 0.0	-	-16.6
59.30	37.1 Qp	2.1 / 7.7 / 28.1	19.0	V / 1.0 / 184.0	-	-10.5
512.32	29.2 Qp	6.2 / 17.9 / 28.4	25.0	V / 1.0 / 0.0	-	-10.5
112.00	31.1 Qp	2.8 / 13.0 / 27.9	19.0	V / 1.0 / 0.0	-	-14.0
336.00	30.6 Qp	5.0 / 14.3 / 27.4	22.5	V / 1.0 / 0.0	-	-13.0
172.09	26.9 Qp	3.5 / 11.8 / 27.6	14.5	V / 1.0 / 90.0	-	-18.5
76.32	31.2 Qp	2.4 / 7.9 / 28.0	13.5	V / 1.0 / 0.0	-	-16.0
208.00	27.0 Qp	3.9 / 10.6 / 27.5	14.0	H / 1.0 / 0.0	-	-19.0
72.01	31.1 Qp	2.3 / 8.0 / 28.0	13.4	V / 1.0 / 180.0	-	-16.1
160.00	25.1 Qp	3.3 / 12.4 / 27.7	13.1	H / 1.0 / 90.0	-	-19.9
63.59	29.4 Qp	2.2 / 7.8 / 28.1	11.4	H / 1.0 / 0.0	-	-18.1
60.00	27.9 Qp	2.1 / 7.8 / 28.1	9.7	H / 1.0 / 0.0	-	-19.8
240.00	26.6 Qp	4.1 / 11.6 / 27.3	14.9	V / 1.0 / 90.0	-	-20.6
288.00	21.4 Qp	4.5 / 13.6 / 27.1	12.5	H / 1.0 / 90.0	-	-23.0
272.00	21.8 Qp	4.4 / 13.4 / 27.2	12.4	H / 1.0 / 0.0	-	-23.1
320.00	20.7 Qp	4.8 / 14.1 / 27.3	12.3	H / 1.0 / 0.0	-	-23.2
256.00	21.7 Qp	4.3 / 11.7 / 27.2	10.4	H / 1.0 / 0.0	-	-25.1

Radiated Electromagnetic Emissions

Test Report #:	**100356542DEN-002E**	Test Area:	Pinewood Site 1 (3m)	Temperature:	25.9	°C
Test Method:	FCC Part 15.209	Test Date:	11-Dec-2009	Relative Humidity:	35.1	%
EUT Model #:	**EN1233**	EUT Power:	Battery	Air Pressure:	79	kPa
EUT Serial #:	16228005					
Manufacturer:	Inovonics Wireless					
EUT Description:	Pendant Tx					
Notes:						

Level Key
Pk – Peak
Qp – QuasiPeak
Av - Average

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	FCC 15.209	N/A
1-4 GHz Vertical 0 degrees						
1000.78	40.0 Av	2.0 / 23.8 / 37.0	28.8	V / 1.0 / 0.0	-25.2	N/A
1078.84	40.0 Av	2.1 / 24.0 / 37.1	29.0	V / 1.0 / 0.0	-25.0	N/A
1148.38	40.0 Av	2.1 / 24.2 / 37.1	29.3	V / 1.0 / 0.0	-24.7	N/A
1227.64	40.0 Av	2.2 / 24.4 / 36.9	29.7	V / 1.0 / 0.0	-24.3	N/A
2152.47	40.0 Av	3.1 / 27.0 / 37.1	33.0	V / 1.0 / 0.0	-21.0	N/A
2152.59	40.0 Av	3.1 / 27.0 / 37.1	33.0	V / 1.0 / 0.0	-21.0	N/A
2957.90	40.0 Av	3.7 / 28.8 / 37.3	35.3	V / 1.0 / 0.0	-18.7	N/A
2994.00	40.0 Av	3.7 / 29.0 / 37.1	35.6	V / 1.0 / 0.0	-18.4	N/A
3992.00	40.0 Av	4.7 / 31.8 / 36.6	39.9	V / 1.0 / 0.0	-14.1	N/A
1166.50	40.0 Av	2.2 / 24.2 / 37.0	29.4	V / 1.0 / 0.0	-24.6	N/A
1-4 GHz Vertical 90 degrees						
1078.84	40.0 Av	2.1 / 24.0 / 37.1	29.0	V / 1.0 / 90.0	-25.0	N/A
1148.38	40.0 Av	2.1 / 24.2 / 37.1	29.3	V / 1.0 / 90.0	-24.7	N/A
1166.50	40.0 Av	2.2 / 24.2 / 37.0	29.4	V / 1.0 / 90.0	-24.6	N/A
1227.64	40.0 Av	2.2 / 24.4 / 36.9	29.7	V / 1.0 / 90.0	-24.3	N/A
2957.90	40.0 Av	3.7 / 28.8 / 37.3	35.3	V / 1.0 / 90.0	-18.7	N/A
2994.00	40.0 Av	3.7 / 29.0 / 37.1	35.6	V / 1.0 / 90.0	-18.4	N/A
1-4 GHz Vertical 180 degrees						
1078.84	40.0 Av	2.1 / 24.0 / 37.1	29.0	V / 1.0 / 180.0	-25.0	N/A
1148.38	40.0 Av	2.1 / 24.2 / 37.1	29.3	V / 1.0 / 180.0	-24.7	N/A
1227.64	40.0 Av	2.2 / 24.4 / 36.9	29.7	V / 1.0 / 180.0	-24.3	N/A
2957.90	40.0 Av	3.7 / 28.8 / 37.3	35.3	V / 1.0 / 180.0	-18.7	N/A
Following signals maximized between 1 & 4 GHz Vertical						
1078.84	35.7 Av	2.1 / 24.0 / 37.1	24.7	V / 1.1 / 216.0	-29.3	N/A
1148.38	38.0 Av	2.1 / 24.2 / 37.1	27.3	V / 1.4 / 224.0	-26.7	N/A
1166.50	41.6 Av	2.2 / 24.2 / 37.0	31.0	V / 1.4 / 186.0	-23.0	N/A
1227.64	35.5 Av	2.2 / 24.4 / 36.9	25.1	V / 1.4 / 186.0	-28.9	N/A
2957.90	38.5 Av	3.7 / 28.8 / 37.3	33.7	V / 1.2 / 64.0	-20.3	N/A

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	FCC 15.209	N/A
No signals found: 4-6 GHz						

FREQ	LEVEL	CABLE / ANT / PREAMP	FINAL	POL / HGT / AZ	DELTA1 (dB)	DELTA2 (dB)
(MHz)	(dBuV)	(dB) (dB\m) (dB)	(dBuV/m)	(m) (DEG)	FCC 15.209	N/A
********** Measurement Summary **********						
3992.00	40.0 Av	4.7 / 31.8 / 36.6	39.9	V / 1.0 / 0.0	-14.1	N/A
2994.00	40.0 Av	3.7 / 29.0 / 37.1	35.6	V / 1.0 / 90.0	-18.4	N/A
2957.90	40.0 Av	3.7 / 28.8 / 37.3	35.3	V / 1.0 / 0.0	-18.7	N/A
2152.59	40.0 Av	3.1 / 27.0 / 37.1	33.0	V / 1.0 / 0.0	-21.0	N/A
1166.50	41.6 Av	2.2 / 24.2 / 37.0	31.0	V / 1.4 / 186.0	-23.0	N/A
1227.64	40.0 Av	2.2 / 24.4 / 36.9	29.7	V / 1.0 / 180.0	-24.3	N/A
1148.38	40.0 Av	2.1 / 24.2 / 37.1	29.3	V / 1.0 / 180.0	-24.7	N/A
1078.84	40.0 Av	2.1 / 24.0 / 37.1	29.0	V / 1.0 / 180.0	-25.0	N/A
1000.78	40.0 Av	2.0 / 23.8 / 37.0	28.8	V / 1.0 / 0.0	-25.2	N/A

Example calculation for Unintentional Radiated Emissions:

Measured Level	+	**Transducer, Cable Loss & Amplifier corrections**	=	**Corrected Reading**	**Specification Limit**	-	**Corrected Reading**	=	**Delta Specification**
(dBμV)		(dB)		(dBμV/m)	(dBμV/m)		(dBμV/m)		
14.0		**14.9**		**28.9**	**40.0**		**28.9**		**-11.1**

Deviations, Additions, or Exclusions: None

7 Measurement Uncertainty

The measured value related to the corresponding limit will be used to decide whether the equipment meets the requirements.

The measurement uncertainty figures were calculated and correspond to a coverage factor of k = 2, providing a confidence level of respectively 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian).

Measurement uncertainty Table

Parameter	Uncertainty ±	Notes
Radiated emissions, 10kHz to 1000 MHz	4.8 dB	
Radiated emissions, 1 to 18 GHz	4.9 dB	
AC mains Conducted emissions, 150kHz to 30 MHz	3.14 dB	
Disturbance Power 30 to 1000 MHz	3.3 dB	
Telecom Port Conducted emissions, Voltage 150 kHz to 30 MHz	TBD	In Process
Harmonics	-	Meets the requirements specified by the standard.
Flicker	-	Meets the requirements specified by the standard.
ESD	4.4 %	
Radiated RF field immunity 80MHz to 2.7GHz	2.2 dB	
EFT	4.3 %	
Surge	4.3 %	
Conducted RF immunity	2.1 dB	
Power frequency magnetic field immunity	2.3 dB	
Voltage dips / interruptions immunity	0.3 mV	

8 Revision History

Revision Level	Date	Report Number	Notes
1	03/25/2011	100356542DEN-002E	This report is an update of report numbers: 3195062DEN-001 and 3197687DEN-001 No additional testing was performed, the two reports are combined into one and a validation for the latest version of RSS-210 was performed. Michael Spataro