Global EMC Inc. Labs

EMC & RF Test Report

As per

RSS 210 Issue 8:2010

&

FCC Part 15 Subpart C:2010

Unlicensed Intentional Radiators

on the

Miss On the Go

Abderrahmane Ferhat, Eng.
Project Engineer
Global EMC Inc. Laval
2972 Joseph-A-Bombardier
Laval, QC, H7P 6E3 CANADA
Ph: (450) 687- 4976

Testing produced for

Miss VV Mystery inc.

See Appendix A for full customer & EUT details.

Industry Canada

LAB REGISTRATION #6844A-2

FCC REGISTRATION #612361

ACCREDITED

Testing Laboratory Certificate #2555.01

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Report Scope

This report addresses the EMC verification testing and test results of the Miss On the Go, herein referred to as EUT (Equipment Under Test) performed at Global EMC Labs.

The EUT was tested for compliance against the following standards:

RSS 210 Issue 8
FCC Part 15 Subpart C 15

Test procedures, results, justifications, and engineering considerations, if any, follow later in this report.

The results contained in this report relate only to the item(s) tested.

This report does not imply product endorsement by A2LA or any other accreditation agency, any government, or Global EMC Inc.

Opinions/interpretations expressed in this report, if any, are outside the scope of Global EMC Inc accreditation. Any opinions expressed do not necessarily reflect the opinions of Global EMC Inc, unless otherwise stated.

Client	Miss VV Mystery inc.
Product	Miss On the Go
Standard(s)	RSS 210 Issue 8:2010 / FCC Part 15 Subpart C 15:2010

Summary

The results contained in this report relate only to the item(s) tested.

EUT FCC Certification #, FCC ID:	2AG6D-MOTG
EUT Industry Canada Certification #, IC:	21001-MOTG
EUT Passed all tests performed.	Yes (see test results summary)
Tests conducted by	Abderrahmane Ferhat

Client	Miss VV Mystery inc.
Product	Miss On the Go
Standard(s)	RSS 210 Issue 8:2010 / FCC Part 15 Subpart C 15:2010

Test Results Summary

Standard/Method	Description	Class/Limit	Result
FCC 15.203 RSS 210 Annex 8	Antenna Requirement	None	Pass See Justification
FCC 15.205 RSS 210 Annex 8	Restricted Bands for intentional operation	None	Pass See Justification
FCC 15.207 RSS 210 Annex 8	Power line conducted emissions	Average	Pass
FCC 15.209 RSS 210 Annex 8	Radiated emissions Fundamental Harmonics	QuasiPeak Average	Pass
FCC 15.249(a) RSS 210 Annex 8		< 50mV/m < 500uV/m	Pass
Overall Result			**PASS**

If the product as tested or otherwise complies with the specification, the EUT is deemed to comply with the requirement and is deemed a ‘PASS’ grade. If not ‘FAIL’ grade will be issued. Note that ‘PASS’ / ‘FAIL’ grade is independent of any measurement uncertainties. A ‘PASS’ / ‘FAIL’ grade within measurement uncertainty is marked with a ‘*’.

Justifications, Descriptions, or Deviations

The following justifications for tests not performed or deviations from the above listed specifications apply:

For the Antenna requirement specified in FCC 15.203, this device is provided with a non-detachable antenna.

For the Restricted Bands of operation as specified in FCC 15.205 and RSS-Gen (Table 6), the EUT is designed to operate only between 2400 to 2483.5 MHz.

Applicable Standards, Specifications and Methods

ANSI C63.4:2014	- Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
ANSI C63.10:2013	- American national standard for testing unlicensed wireless devices
CFR 47 FCC 15:2015	- Code of Federal Regulations – Radio Frequency Devices
CISPR 22:2008	- Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement
ICES-003:2012	- Digital Apparatus - Spectrum Management and Telecommunications Policy Interference-Causing Equipment Standard
ISO 17025:2005	- General Requirements for the competence of testing and calibration laboratories
RSS 210:2010	- Issue 8: Spectrum Management and Telecommunications Policy. Radio Standards Specification Low Power Licence-Exempt Radiocommunication Devices

Sample calculation(s)

Radiated Emission Test
Margin = Limit – (Received Signal + Antenna Factor + Cable Loss – Pre-Amp Gain)
Margin = 50.5dBµV/m – (50dBµV + 10dB/m + 2.5dB – 20dB)
Margin = 8.0 dB (pass)

Power Line Conducted Emission Test
Margin = Limit – (Received Signal + Attenuation Factor + Cable Loss + LISN Factor)
Margin = 73.0dBµV – (50dBµV + 10dB + 2.5dB + 0.5dB)
Margin = 10.0 dB (pass)

Document Revision Status

Revision 1 - March 07, 2016.

Revision 2 - April 14, 2016. Revisions as per TCB request.

Definitions and Acronyms

The following definitions and acronyms are applicable in this report.
See also ANSI C63.14.

AE – Auxiallary Equipment.

BW – Bandwidth. Unless otherwise stated, this is refers to the 6 dB bandwidth.

EMC – Electro-Magnetic Compatibility

EMI – Electro-Magnetic Immunity

EUT – Equipment Under Test

ITE – Information Technology Equipment with a primary function(s) of entry, storage, display, retrieval, transmission, processing, switching, or control, of data.

LISN – Line impedance stabilization network

NCR – No Calibration Required

RF – Radio Frequency

Testing Facility

Testing for EMC on the EUT was carried out at Global EMC labs in Montréal, Québec, Canada. The testing lab consists of a 3m semi-anechoic chamber calibrated to be able to allow measurements on an EUT with a maximum width or length of up to 2m and height up to 3m. The chamber is equipped with a turn table that is capable of testing devices up to 3300lb in weight. This facility is capable of testing products that are rated for 120 Vac and 240Vac single phase, or 208 Vac 3 phase input. DC capability is also available. The chamber is equipped with an antenna mast that controls polarization and height from the control room adjoining the shielded chamber. Radiated emissions measurements are performed using a Bilog, and Horn antenna where applicable. Conducted emissions, unless otherwise stated, are performed using a LISN and using the Vertical Ground plane.

Calibrations and Accreditations

The 3m semi-anechoic chamber is registered with Federal Communications Commission (FCC, 382292), and Industry Canada (IC, 6844B-1). This chamber was calibrated for Normalized Site Attenuation (NSA) using test procedures outlined in ANSI C63.4 "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz". The chamber is lined with ferrite tiles and absorption cones to minimize any undesired reflections. The NSA data is kept on file at Global EMC. For radiated susceptibility testing, a 16 point field calibration has been performed on the chamber. The field uniformity data is kept on file at Global EMC. Global EMC Inc is accredited to ISO 17025 by A2LA with Testing Certificate #2555.01. The laboratories current scope of accreditation listing can be found as listed on the A2LA website. All measuring equipment is calibrated on an annual or bi-annual basis as listed for each respective test.

Testing Environmental Conditions and Dates

Following were the environmental conditions in the facility during time of testing:

Date	Test	Init.	Temperature (ºC)	Humidity (%)	Pressure (kPa)
22-Dec-2015 to 15-Feb-2016	Radiated emissions	AF	20-25ºC	30-45%	100 -103kPa

Detailed Test Results Section

Power Line Conducted Emissions

Purpose

The purpose of this test is to ensure that the RF energy unintentionally emitted from the EUT's power line does not exceed the limits listed below as defined in the applicable test standard, as measured from a LISN. This helps protect lower frequency radio services such as AM radio, shortwave radio, amateur radio operators, maritime radio, CB radio, and so on, from unwanted interference.

Limits & Method

The limits are as defined in 47 CFR FCC Part 15 Section 15.207
Method is as defined in ANSI C64:2009

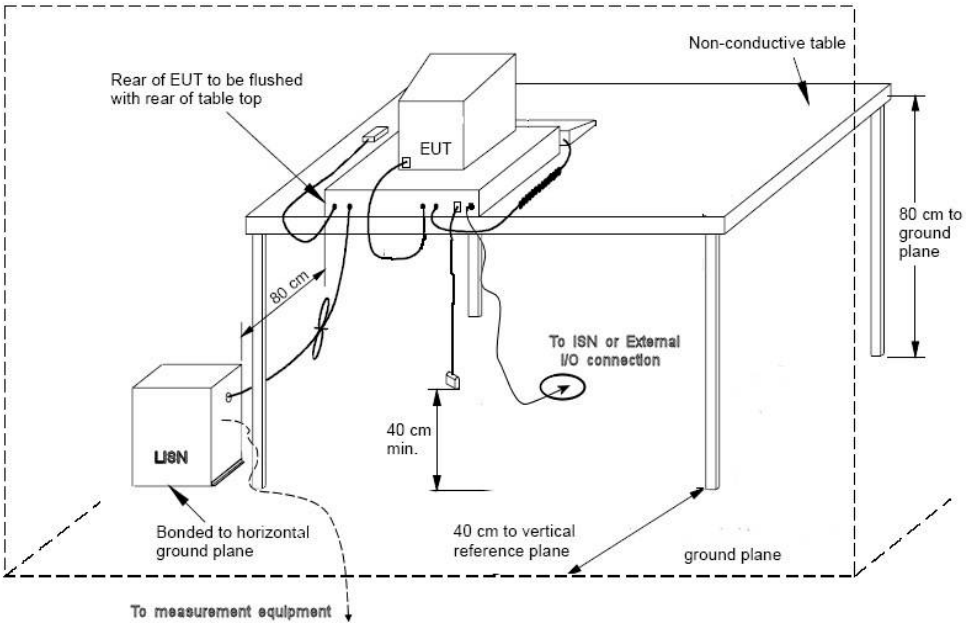
Average Limits		QuasiPeak Limits	
150 kHz – 500 kHz	56 to 46 dBuV	150 kHz – 500 kHz	66 to 56 dBuV
500 kHz – 5 MHz	46 dBuV	500 kHz – 5 MHz	56 dBuV
5 MHz – 30 MHz	50 dBuV	500 kHz – 30 MHz	60 dBuV

The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

Note: If the Peak or Quasi Peak detector measurements do not exceed the Average limits, then the EUT is deemed to have passed the requirements.

Both limits are applicable, and each is specified as being measured with a 9 kHz measurement bandwidth .

Typical Setup Diagram



Note: The vertical reference plane is optional as per ANSI C63.4 section 5.2.2

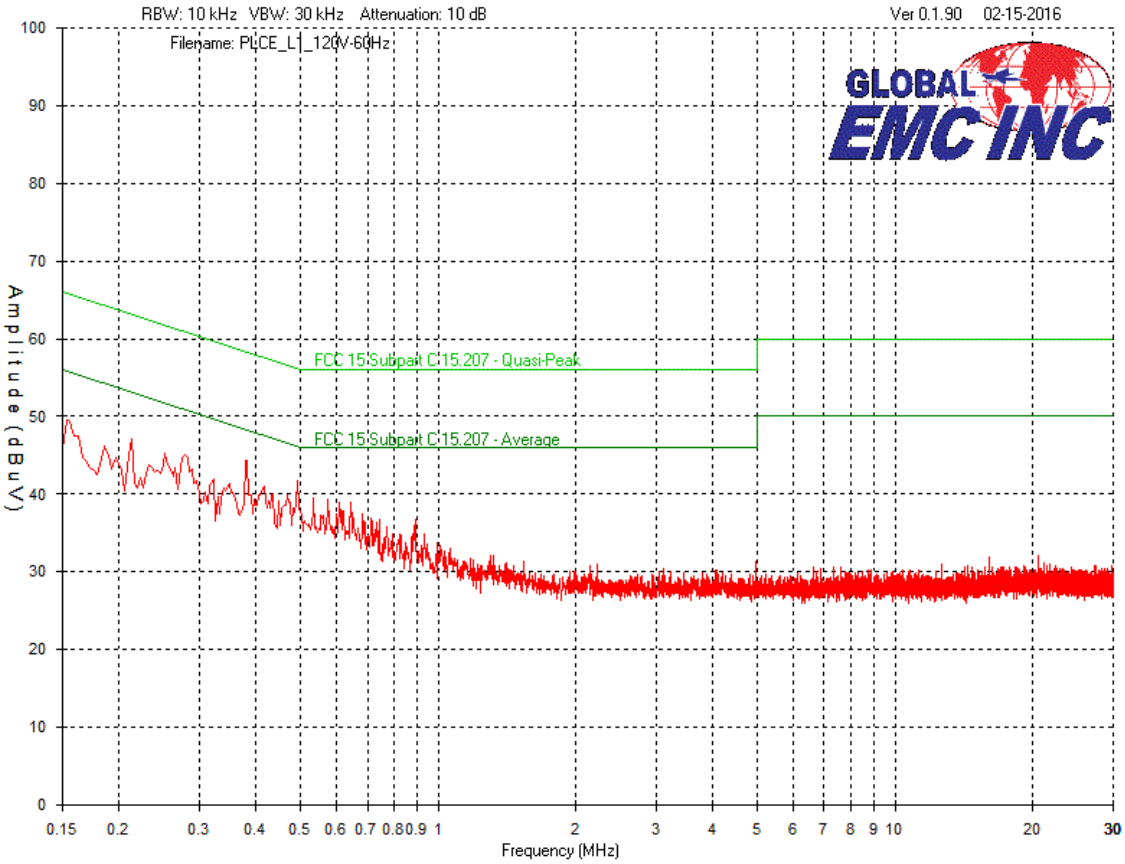
Measurement Uncertainty

The expanded measurement uncertainty is calculated in accordance with CISPR 16-4-2 and is +/-3.6 dB with a 'k=2' coverage factor and a 95% confidence level.

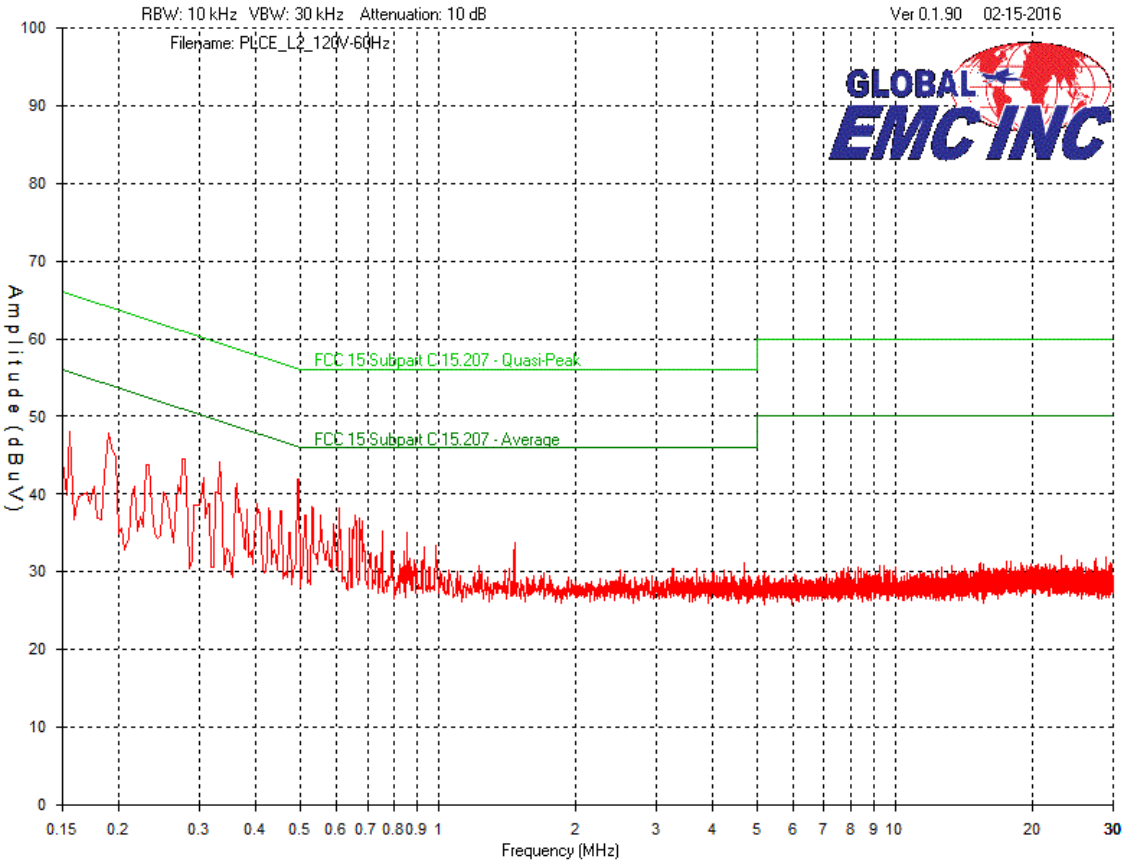
Preliminary Graphs

Note the graphs shown below are for graphical illustration only. For final measurements with the appropriate detector where applicable, please refer to the table. The graph shown below is a peak measurement graph, measured with a resolution bandwidth greater then or equal to the final required detector. These graphs are performed as a worst case measurement to enable the detection of frequencies of concern and for considerable time savings.

Phase – L1 – (Black/Brown)



Neutral – L2 – (White/Blue)



Final Measurements

Average Emission reading table – Line 1

Frequency (MHz)	Raw (dBuV)	Atten Factor (dB)	LISN Factor (dB)	Cable (dB)	Level (dBuV)	Limit (dB)	Margin (dB)	Pass/Fail
0.3789	26.4	10	0.3	0	36.7	48.3	11.6	Pass
0.4916	26.3	10	0.2	0	36.5	46.1	9.6	Pass
0.1986	33.2	10	0.9	0	44.1	53.1	9	Pass
0.1533	32.9	10	1.5	0	44.4	55.8	11.4	Pass
0.8896	20.4	10	0.2	0	30.6	46	15.4	Pass
0.9759	19.6	10	0.2	0	29.8	46	16.2	Pass

Average Emission reading table – Line 2

Frequency (MHz)	Raw (dBuV)	Atten Factor (dB)	LISN Factor (dB)	Cable (dB)	Level (dBuV)	Limit (dB)	Margin (dB)	Pass/Fail
0.4949	21.6	10	0.2	0	31.8	46.1	14.3	Pass
0.3324	22.7	10	0.4	0	33.1	49.4	16.3	Pass
0.1898	26.7	10	1.1	0	37.8	54	16.2	Pass
0.276	23.8	10	0.6	0	34.4	50.9	16.5	Pass
0.3623	22.3	10	0.3	0	32.6	48.7	16.1	Pass
0.1566	27.2	10	1.4	0	38.6	55.6	17	Pass

Note: See 'Appendix B – EUT & Test Setup Photographs' for photos showing the test set-up for the highest line conducted emission

Test Equipment List Test Equipment List

Equipment	Model No.	Manufacturer	Last calibration date	Next calibration due date	Asset#
HP Spectrum Analyzer	8566B	HP	1-28-15	1-28-17	4169
Spectrum Analyzer Display	8566B	HP	1-28-15	1-28-17	4168
Quasi Peak Adapter	85650A	HP	1-28-15	1-28-17	4170
LISN	FCC-LISN-50/250-16-2-01	FCC	3-20-15	3-20-17	4005
RF Cable 7m	LMR-400-7M-50OHM-MN-MN	LexTec	1-28-15	1-28-17	4025
RF Cable 1m	LMR-400-1M-50OHM-MN-MN	LexTec	1-28-15	1-28-17	4026
Attenuator 10 dB	FP-50-10	Trilithic	1-28-15	1-28-17	4027

1: For cables and attenuators, verification dates apply.

Radiated Emissions

Purpose

The purpose of this test is to ensure that the RF energy unintentionally emitted from the EUT does not exceed the limits listed below as defined in the applicable test standard, as measured from a receiving antenna. This helps protect broadcast radio services such as television, FM radio, pagers, cellular telephones, emergency services, and so on, from unwanted interference.

Limit(s) and Method

The method is as defined in ANSI C63.4
The limits are as defined in FCC Part 15, Section 15.249 (a) , (d) and 15.209

FCC 15.249 (a) Emission Limits:

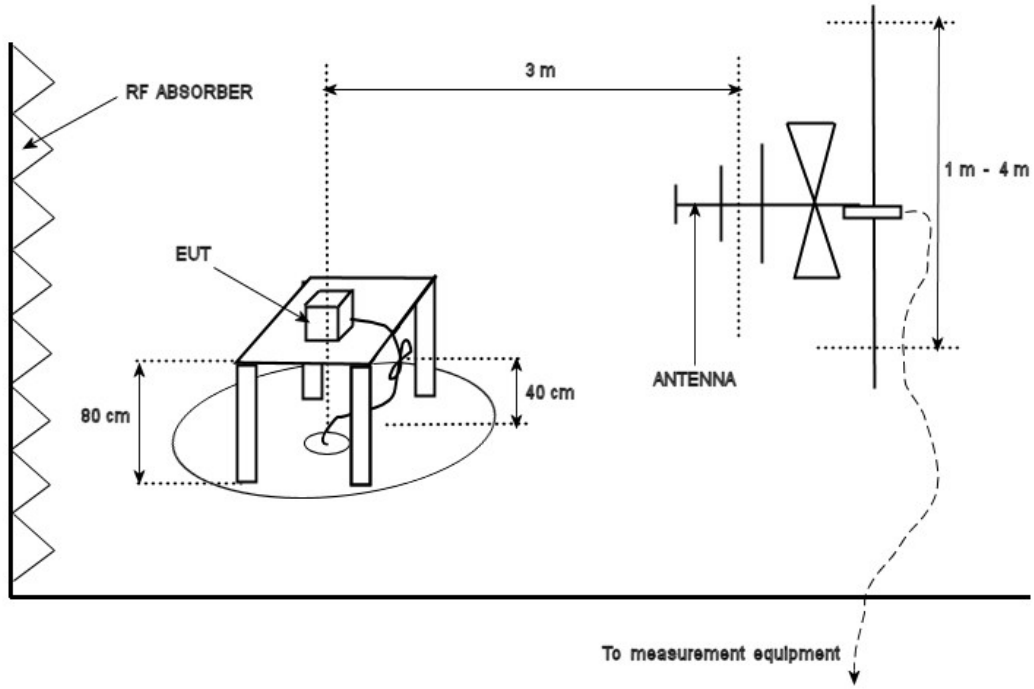
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

FCC 15.209 Emission Limits:

0.009 MHz – 0.490 MHz, 2400/F(kHz) uV/m at 300 m[4]
0.490 MHz – 1.705 MHz, 24000/F(kHz) uV/m at 30 m[4]
1.705 MHz – 30 MHz, 30 uV/m at 30 m[4]
30 MHz – 88 MHz, 100 uV/m (40.0 dBuV/m[1]) at 3 m
88 MHz – 216 MHz, 150 uV/m (43.5 dBuV/m[1]) at 3 m
216 MHz – 960 MHz, 200 uV/m (46.0 dBuV/m[1]) at 3 m
Above 960 MHz, 500 uV/m (54.0 dBuV/m[1]) at 3 m
Above 1000 MHz, 500 uV/m (54 dBuV/m[2]) at 3m
Above 1000 MHz, 5000 uV/m (74 dBuV/m[3]) at 3m

[1]Limit is with 120 kHz measurement bandwidth and a using a Quasi Peak detector.
[2]Limit is with 1 MHz measurement bandwidth and using an Average detector
[3]Limit is with 1 MHz measurement bandwidth and using an Peak detector
[4]Limit is with using a Quasi-peak detector with a bandwidth as defined in CISPR 16-1-1

Typical Radiated Emissions Setup



Measurement Uncertainty

The expanded measurement uncertainty is calculated in accordance with CISPR 16-4-2 and is +/-4.4 dB with a 'k=2' coverage factor and a 95% confidence level.

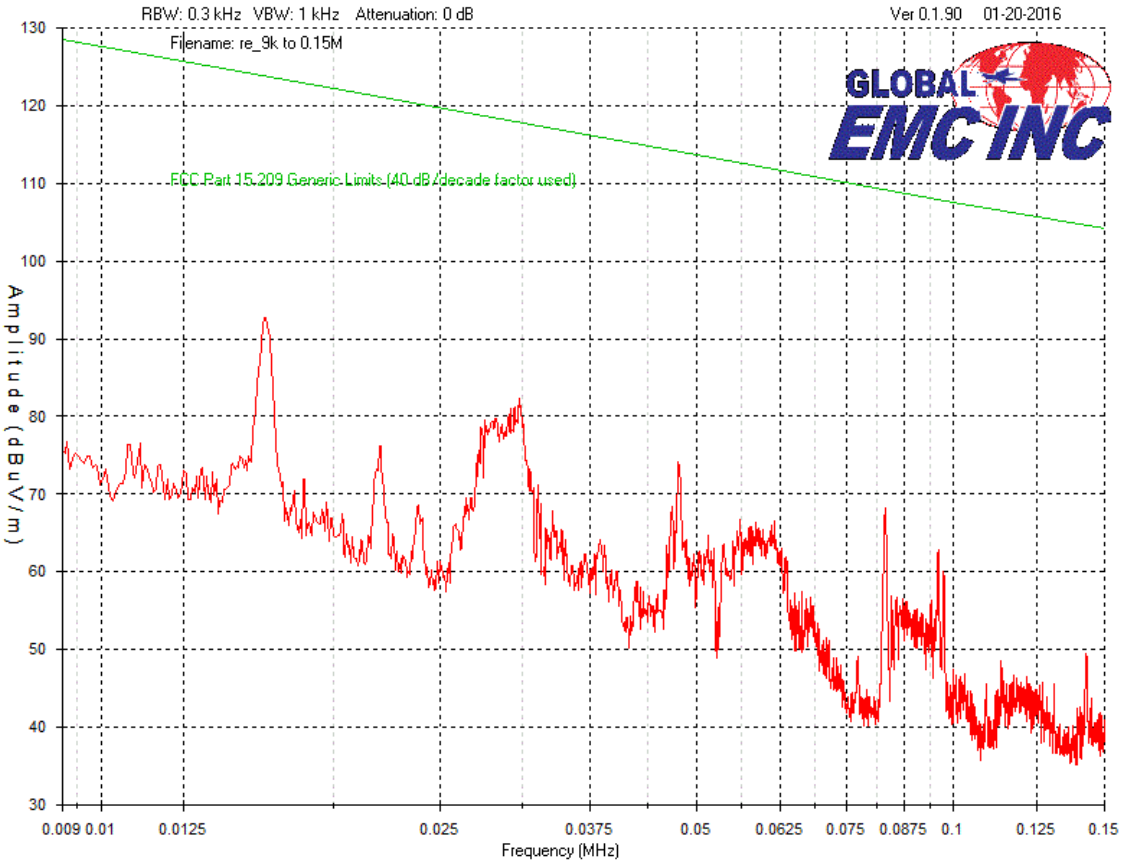
Preliminary Graphs

Note the graphs shown below are for graphical illustration only. For final measurements with the appropriate detector, please refer to the final measurement table where applicable. The graph shown below is a maximized peak measurement graph, measured with a resolution bandwidth greater than the final required detector and over a full 0-360 rotation. This peaking process is done as a worst case measurement. This process enables the detection of frequencies of concern for final measurement, and provides considerable time savings. Final measurements are performed over a full 0-360 degrees rotation and 1 – 4 meter height of measurement antenna.

In accordance with FCC Part 15, Subpart A, Section 15.33, the device was scanned to the 10^{th} harmonic (a minimum of a 1 GHz).

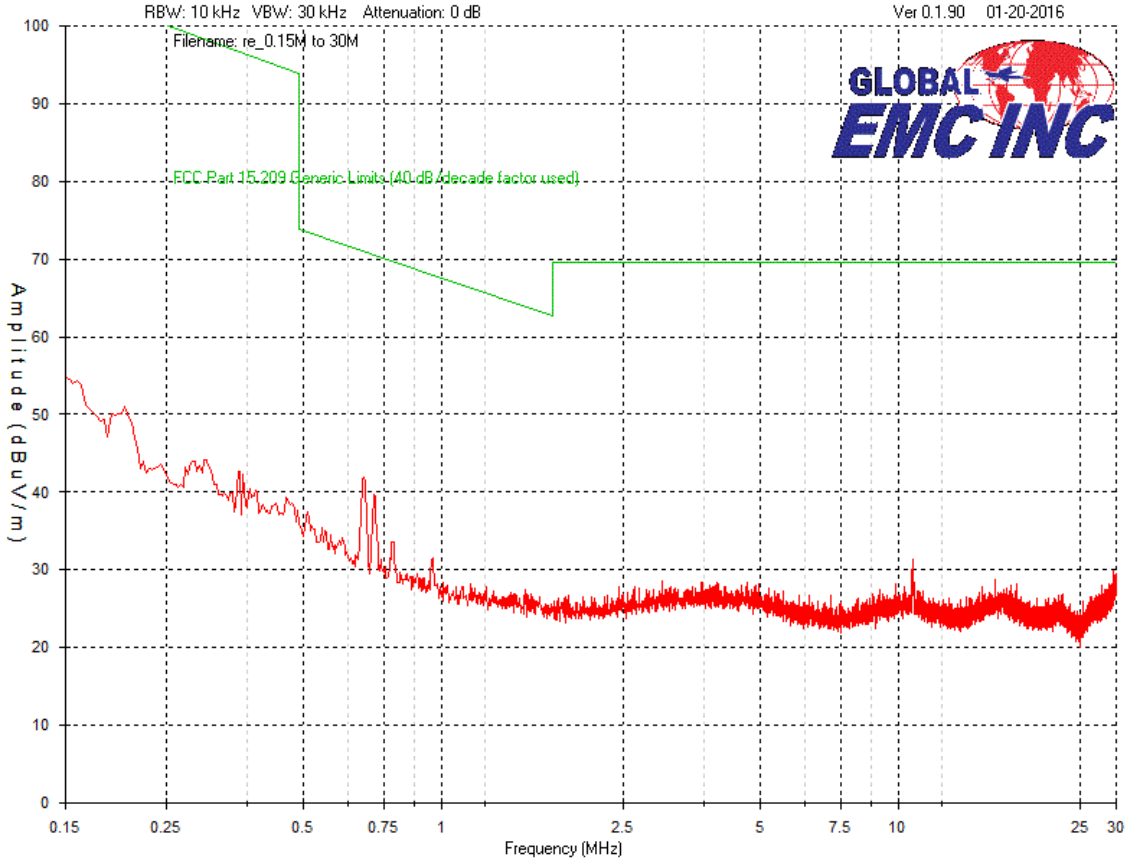
Devices scanned above 1GHz may be scanned at a closer test distance, and in accordance with FCC Part 15, Subpart A, Section 15.31, an extrapolation factor of 20 dB/decade was used above 30 MHz, and 40 dB/decade below 30 MHz.

Medium channel – 9 kHz to 150 kHz



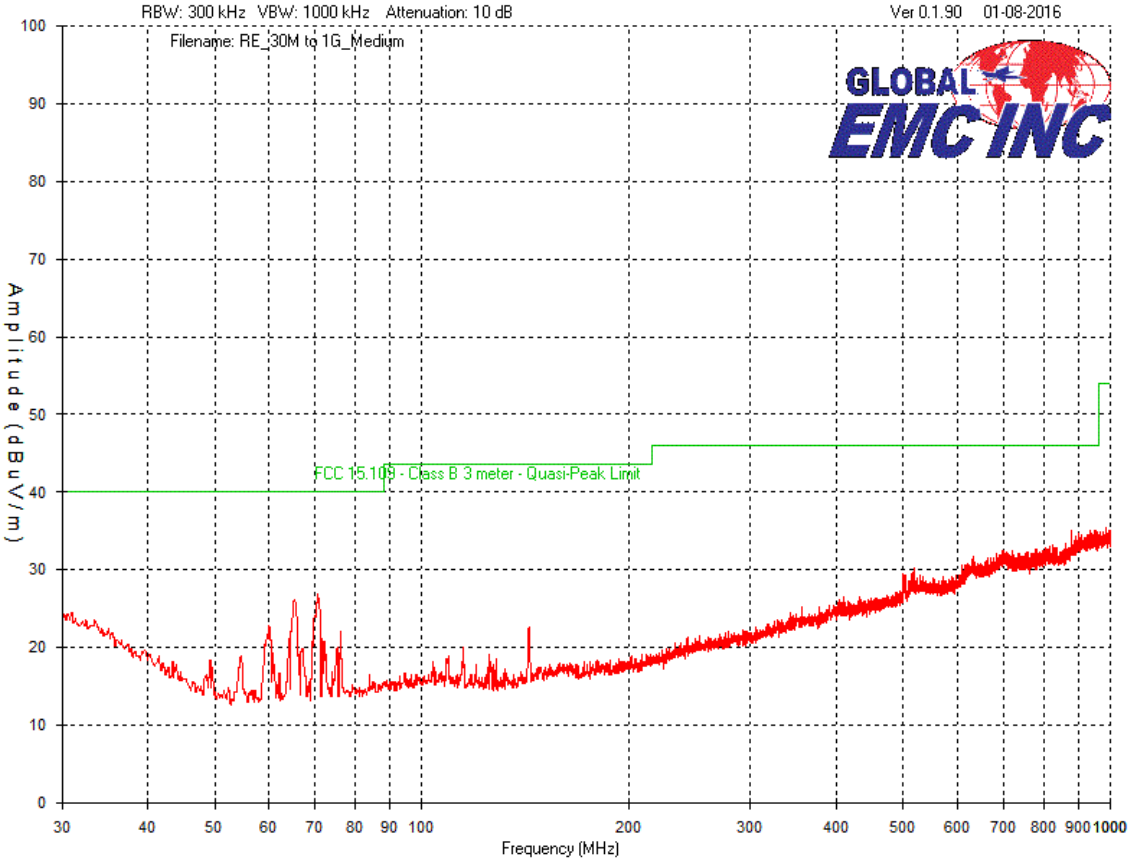
For this frequency band, all spurious emissions were greater than 20 dB below the limit. EUT was scanned 0-360 degrees in each of the three orthogonal axes, for each receive loop antenna alignment. When the loop was in vertical orientation, the receive loop was also rotated 0-360 degrees. Exploratory emissions were scanned with the receive loop in vertical and horizontal orientations, worst case emissions are shown above.

Medium channel – 150 kHz to 30 MHz

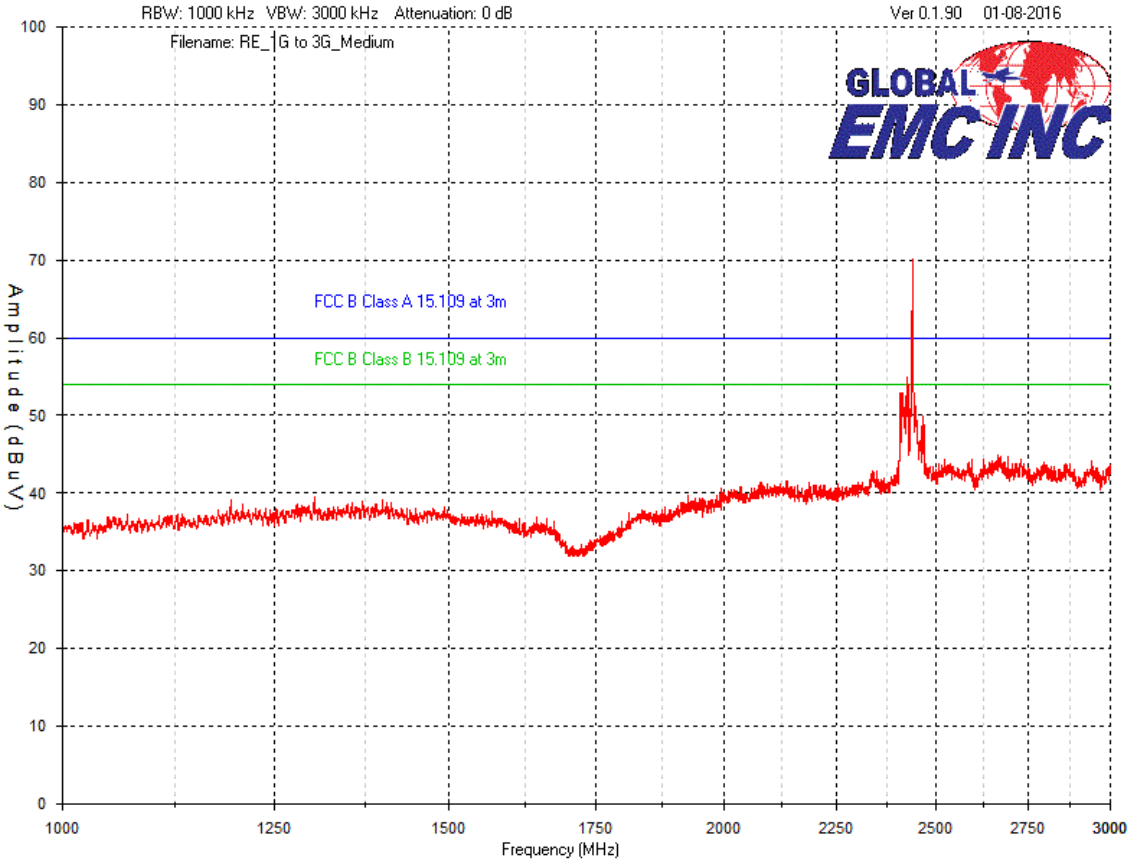


The EUT was scanned 0-360 degrees in each of the three orthogonal axes, for each receive loop antenna alignment. When the loop was in vertical orientation, the receive loop was also rotated 0-360 degrees. Exploratory emissions were scanned with the receive loop in vertical and horizontal orientations, worst case emissions are shown above.

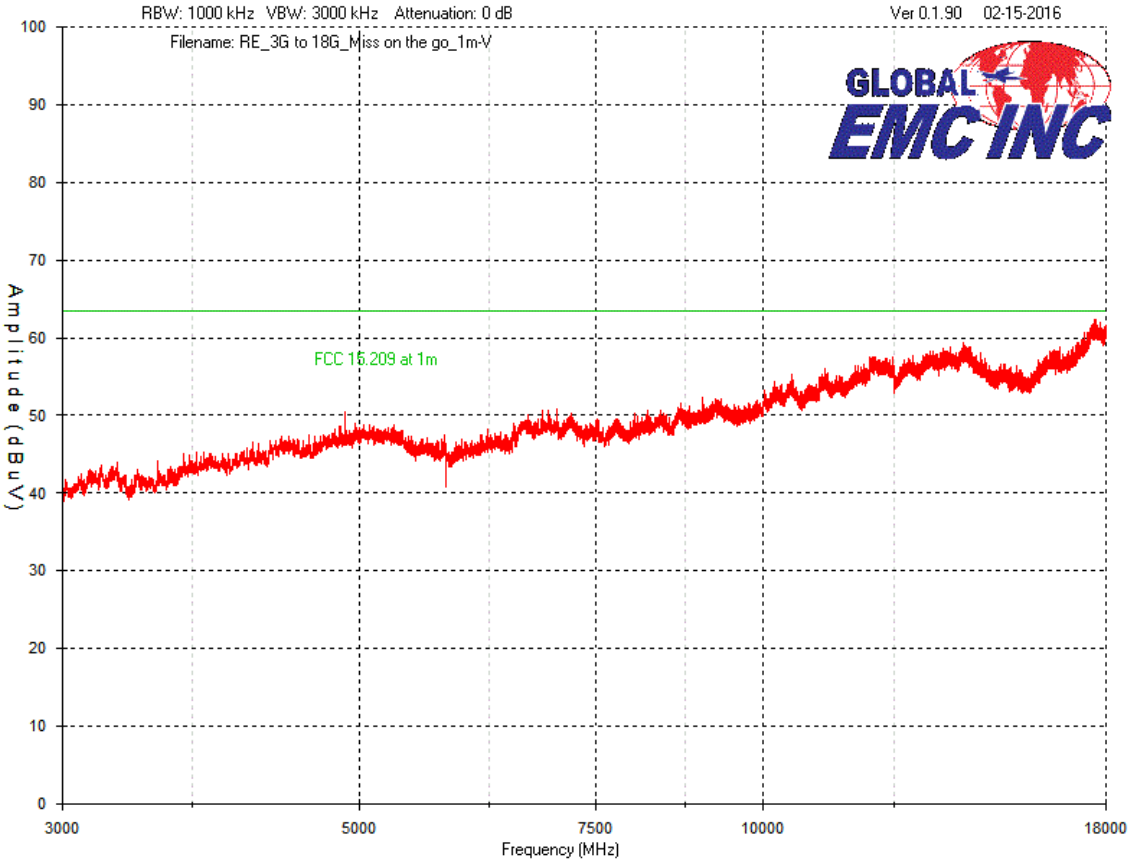
Vertical – Peak Emissions Graph – Medium channel – 30MHz to 1GHz



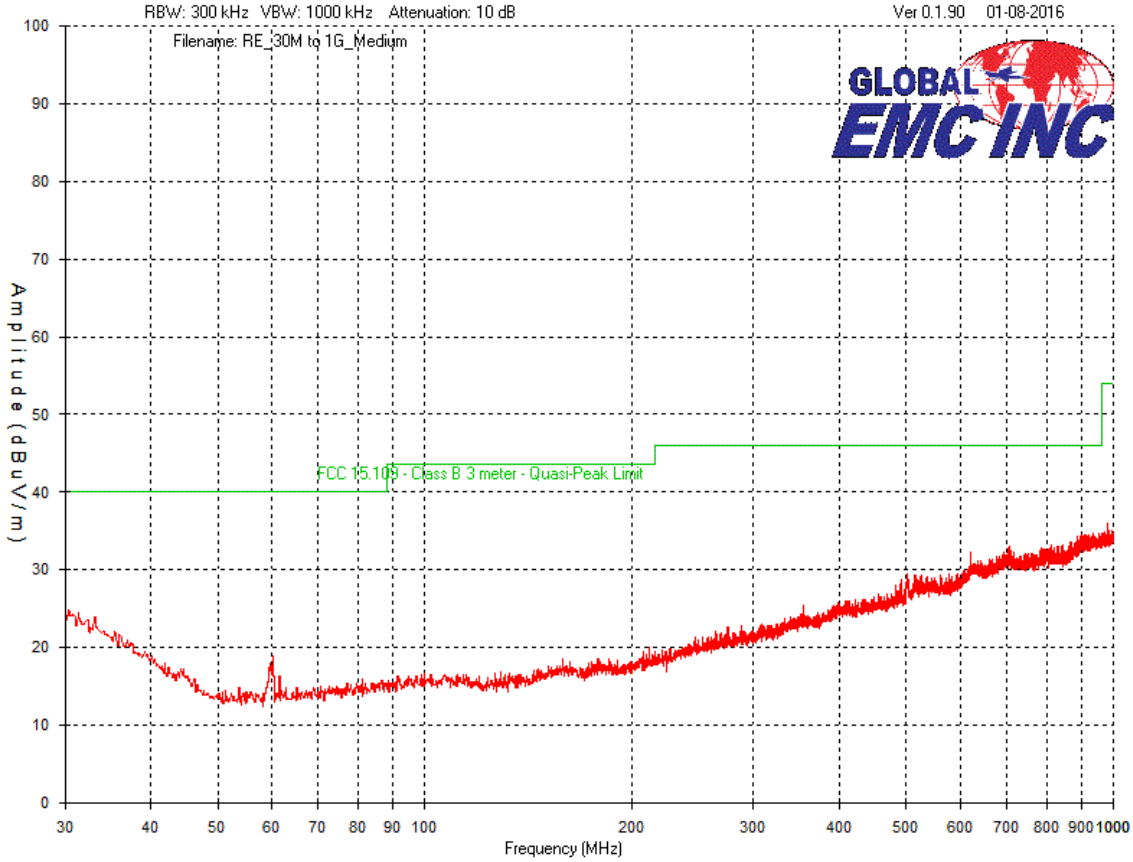
Vertical – Peak Emissions Graph – Medium channel – 1GHz to 3GHz



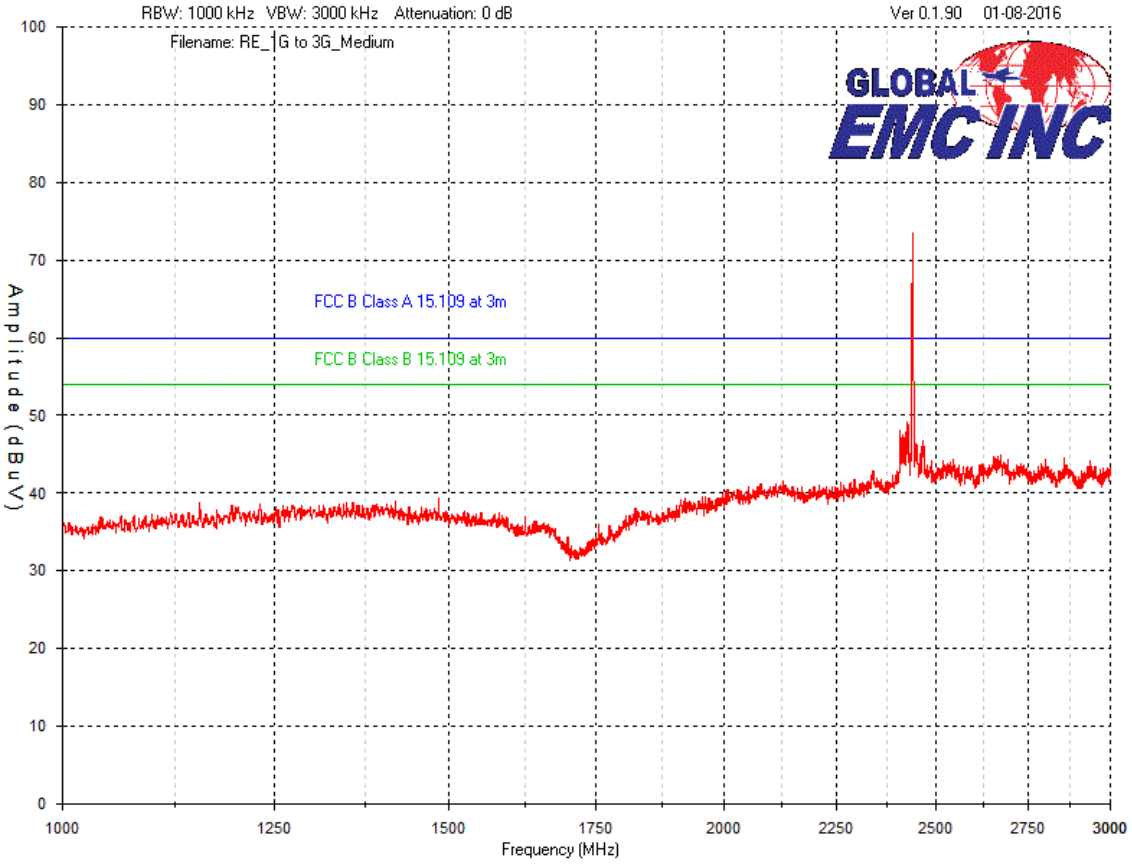
Vertical – Peak Emissions Graph – Medium channel – 3GHz to 18GHz



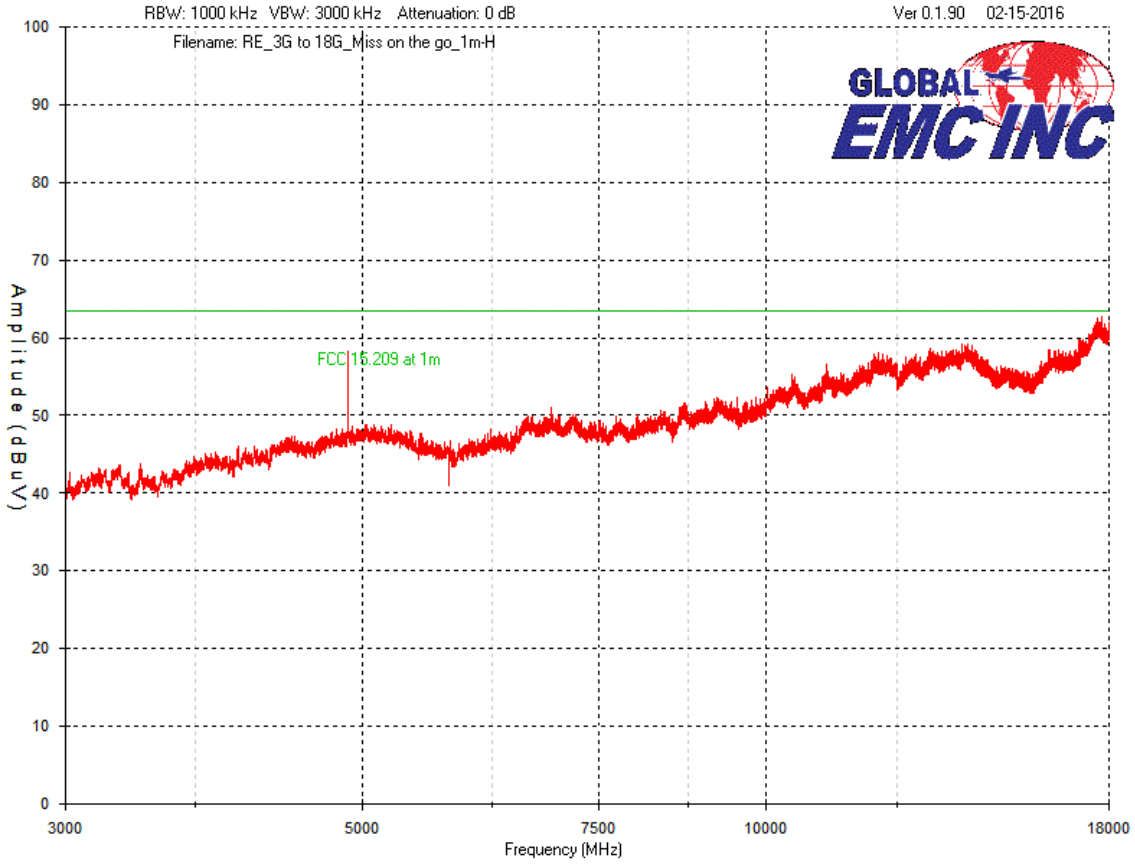
Horizontal – Peak Emissions Graph – Medium channel – 30MHz to 1GHz



Horizontal – Peak Emissions Graph – Medium channel – 1GHz to 3GHz



Horizontal – Peak Emissions Graph – Medium channel – 3GHz to 18GHz



Final Measurements

Low channel – Below 1GHz

Product Category			Class B							
Supply			3.7Vdc, Battery powered							
Frequency (MHz)	**Detector Peak/ QP**	**Received Signal (dBµV)**	**Antenna Factor (dB/m)**	**Atten Factor (dB)**	**Cable Factor (dB)**	**Pre-Amp (dB)**	**Level (dBµV/m)**	**QP Limit (dB)**	**QP Margin (dB)**	**Pass/ Fail**
Horizontal Antenna Polarization										
516.067	Peak	43.2	19.3	3	2.1	-33.2	34.4	46	11.6	Pass
500.935	Peak	43.9	18.5	3	2.1	-33.2	34.3	46	11.7	Pass
38.342	Peak	44.9	12.4	3	0.6	-32.7	28.2	40	11.8	Pass
65.211	Peak	48.5	7.2	3	0.8	-33.4	26.1	40	13.9	Pass
60.167	Peak	44.5	6.8	3	0.8	-33.3	21.8	40	18.2	Pass
148.049	Peak	43.2	9.4	3	1.2	-33.4	23.4	43.5	20.1	Pass
Vertical Antenna Polarization										
516.843	Peak	41.1	19.3	3	2.1	-33.2	32.3	46	13.7	Pass
33.298	Peak	39.3	15.5	3	0.6	-32.5	25.9	40	14.1	Pass
999.709	Peak	38	24.4	3	2.9	-31.8	36.5	54	17.5	Pass
70.643	Peak	42.2	7.6	3	0.8	-33.4	20.2	40	19.8	Pass
75.105	Peak	40.7	7.8	3	0.8	-33.4	18.9	40	21.1	Pass
148.631	Peak	40.2	9.5	3	1.2	-33.4	20.5	43.5	23	Pass

Low channel – Above 1GHz

Product Category			Class B						
Supply			3.7Vdc, Battery powered						
Frequency (MHz)	**Detector AVG/ Peak/ QP**	**Received Signal (dBµV)**	**Antenna Factor (dB/m)**	**Cable Factor (dB)**	**Pre-Amp (dB)**	**Level (dBµV/ m)**	**AVG Limit (dB)**	**AVG Margin (dB)**	**Pass/ Fail**
Horizontal Antenna Polarization									
2400.33	Peak	76.8	28.9	5	-33.1	77.6	94	16.4	Pass
2461	Peak	49.8	29.2	5.1	-33.1	51	94	43	Pass
2413.67	Peak	46	29	5	-33.1	46.9	94	47.1	Pass
2670	Peak	43.9	29.5	5.3	-33.1	45.6	54	8.4	Pass
2446.33	Peak	44	29.2	5.1	-33.1	45.2	94	48.8	Pass
1000	Peak	43.6	23.7	3	-34.4	35.9	54	18.1	Pass
Vertical Antenna Polarization									
2400.33	Peak	70.1	28.9	5	-33.1	70.9	94	23.1	Pass
2437.67	Peak	49	29.1	5.1	-33.1	50.1	94	43.9	Pass
2419	Peak	47.8	29	5	-33.1	48.7	94	45.3	Pass
2461	Peak	47.3	29.2	5.1	-33.1	48.5	94	45.5	Pass
2684	Peak	43.8	29.5	5.3	-33.1	45.5	54	8.5	Pass
1000	Peak	43.3	23.7	3	-34.4	35.6	54	18.4	Pass

Medium channel – Below 1GHz

Product Category			Class B							
Supply			3.7Vdc, Battery powered							
Frequency (MHz)	**Detector Peak/ QP**	**Received Signal (dBµV)**	**Antenna Factor (dB/m)**	**Atten Factor (dB)**	**Cable Factor (dB)**	**Pre-Amp (dB)**	**Level (dBµV/ m)**	**QP Limit (dB)**	**QP Margin (dB)**	**Pass/ Fail**
Horizontal Antenna Polarization										
30.388	Peak	36.4	17.3	3	0.5	-32.4	24.8	40	15.2	Pass
502.487	Peak	39.1	18.6	3	2.1	-33.2	29.6	46	16.4	Pass
492.399	Peak	38.6	18.3	3	2.1	-33.3	28.7	46	17.3	Pass
978.563	Peak	37.7	24.2	3	2.9	-31.9	35.9	54	18.1	Pass
60.167	Peak	41.7	6.8	3	0.8	-33.3	19	40	21	Pass
211.681	Peak	38.2	10.8	3	1.4	-33.3	20.1	43.5	23.4	Pass
Vertical Antenna Polarization										
70.643	Peak	49	7.6	3	0.8	-33.4	27	40	13	Pass
65.405	Peak	48.5	7.2	3	0.8	-33.4	26.1	40	13.9	Pass
30.97	Peak	36.5	16.9	3	0.6	-32.4	24.6	40	15.4	Pass
59.876	Peak	45.6	6.8	3	0.8	-33.3	22.9	40	17.1	Pass
76.269	Peak	43.8	7.8	3	0.8	-33.4	22	40	18	Pass
71.613	Peak	43.2	7.6	3	0.8	-33.4	21.2	40	18.8	Pass

Medium channel – Above 1GHz

Product Category			Class B						
Supply			3.7Vdc, Battery powered						
Frequency (MHz)	**Detector AVG/ Peak/ QP**	**Received Signal (dBµV)**	**Antenna Factor (dB/m)**	**Cable Factor (dB)**	**Pre-Amp (dB)**	**Level (dBµV/ m)**	**AVG Limit (dB)**	**AVG Margin (dB)**	**Pass/ Fail**
Horizontal Antenna Polarization									
2438	Peak	72.4	29.1	5.1	-33.1	73.5	94	20.5	Pass
2425.67	Peak	48.2	29	5	-33.1	49.1	94	44.9	Pass
2405.67	Peak	47.2	28.9	5	-33.1	48	94	46	Pass
1484	Peak	43.8	25.4	3.6	-33.4	39.4	54	14.6	Pass
1440.67	Peak	41.1	25.6	3.6	-33.5	36.8	54	17.2	Pass
1000	Peak	43.7	23.7	3	-34.4	36	54	18	Pass
Vertical Antenna Polarization									
2438	Peak	69	29.1	5.1	-33.1	70.1	94	23.9	Pass
2425.67	Peak	53.9	29	5	-33.1	54.8	94	39.2	Pass
2407.67	Peak	52.1	28.9	5	-33.1	52.9	94	41.1	Pass
1303	Peak	44.3	25.6	3.4	-33.7	39.6	54	14.4	Pass
1000	Peak	43	23.7	3	-34.4	35.3	54	18.7	Pass
1728.33	Peak	36.7	25.2	3.9	-33.2	32.6	54	21.4	Pass

High channel – Below 1GHz

Product Category			Class B							
Supply			3.7Vdc, Battery powered							
Frequency (MHz)	**Detector Peak/ QP**	**Received Signal (dBµV)**	**Antenna Factor (dB/m)**	**Atten Factor (dB)**	**Cable Factor (dB)**	**Pre-Amp (dB)**	**Level (dBµV/ m)**	**QP Limit (dB)**	**QP Margin (dB)**	**Pass/ Fail**
Horizontal Antenna Polarization										
514.903	Peak	40.9	19.2	3	2.1	-33.2	32	46	14	Pass
30.194	Peak	36.1	17.4	3	0.5	-32.4	24.6	40	15.4	Pass
529.744	Peak	38.6	19.7	3	2.1	-33.2	30.2	46	15.8	Pass
499.577	Peak	39.2	18.5	3	2.1	-33.3	29.5	46	16.5	Pass
997.963	Peak	37.9	24.4	3	2.9	-31.8	36.4	54	17.6	Pass
256.107	Peak	36.3	12.7	3	1.6	-33.3	20.3	46	25.7	Pass
Vertical Antenna Polarization										
70.837	Peak	49.3	7.6	3	0.8	-33.4	27.3	40	12.7	Pass
65.211	Peak	49.2	7.2	3	0.8	-33.4	26.8	40	13.2	Pass
65.599	Peak	49	7.2	3	0.8	-33.4	26.6	40	13.4	Pass
71.225	Peak	47.4	7.6	3	0.8	-33.4	25.4	40	14.6	Pass
30.582	Peak	36.2	17.1	3	0.6	-32.4	24.5	40	15.5	Pass
76.075	Peak	44.4	7.8	3	0.8	-33.4	22.6	40	17.4	Pass

High channel – Above 1GHz

Product Category			Class B						
Supply			3.7Vdc, Battery powered						
Frequency (MHz)	**Detector AVG/ Peak/ QP**	**Received Signal (dBµV)**	**Antenna Factor (dB/m)**	**Cable Factor (dB)**	**Pre-Amp (dB)**	**Level (dBµV/ m)**	**AVG Limit (dB)**	**AVG Margin (dB)**	**Pass/ Fail**
Horizontal Antenna Polarization									
2477	Peak	72.4	29.3	5.1	-33.1	73.7	94	20.3	Pass
2427	Peak	48.6	29	5	-33.1	49.5	94	44.5	Pass
2407.67	Peak	47.5	28.9	5	-33.1	48.3	94	45.7	Pass
2446.33	Peak	46.5	29.2	5.1	-33.1	47.7	94	46.3	Pass
2203.67	Peak	41.7	27.7	4.6	-33.1	40.9	54	13.1	Pass
1000	Peak	43.1	23.7	3	-34.4	35.4	54	18.6	Pass
Vertical Antenna Polarization									
2477	Peak	69.2	29.3	5.1	-33.1	70.5	94	23.5	Pass
2407.67	Peak	54.6	28.9	5	-33.1	55.4	94	38.6	Pass
2426.33	Peak	54.3	29	5	-33.1	55.2	94	38.8	Pass
2443	Peak	50.8	29.1	5.1	-33.1	51.9	94	42.1	Pass
1986.67	Peak	42.5	26.9	4.3	-33.1	40.6	54	13.4	Pass
1000	Peak	43.8	23.7	3	-34.4	36.1	54	17.9	Pass

Test Equipment List

Equipment	Model No.	Manufacturer	Last Calibration Date[1]	Next Calibration Date[1]	Asset #
Spectrum Analyzer Display	8566B	HP	1-28-15	1-28-17	4168
Spectrum Analyzer	8566B	HP	1-28-15	1-28-17	4169
Quasi Peak Adapter	85650A	HP	1-28-15	1-28-17	4170
BiLog Antenna	3142-C	ETS	9-8-14	9-8-16	8
Horn Antenna	ATH1G18G	AR	4-23-15	4-23-17	4003
Biconical Antenna	EM-6913	Electro-Metrics	4/28/15	4/28/17	4060
Log Periodic Antenna	LPA-25	Electro-Metrics	4/14/15	4/14/17	4087
Attenuator 3 dB	FP-50-3	Trilithic	1-28-15	1-28-17	4028
LNA pre-amp	LNA-1450	RF Bay Inc.	7/22/15	7/22/16	4089
1-26.5GHz preamp	8449B	Agilent	9-9-14	9-9-16	6351
RF Cable 10m	LMR-400-10M-50OHM-MN-MN	LexTec	1-28-15	1-28-17	4025
RF Cable 7m	LMR-400-7M-50OHM-MN-MN	LexTec	1-28-15	1-28-17	4026
Emission software	0.1.87	Global EMC	1-28-15	1-28-17	58

1: For cables and attenuators, verification dates apply.

Occupied Bandwidth

Purpose

The purpose of this test is to measure the bandwidth occupied.

Limits

No limit applies for 15.249, however the device must be within 2400 to 2483.5 MHz.

Method

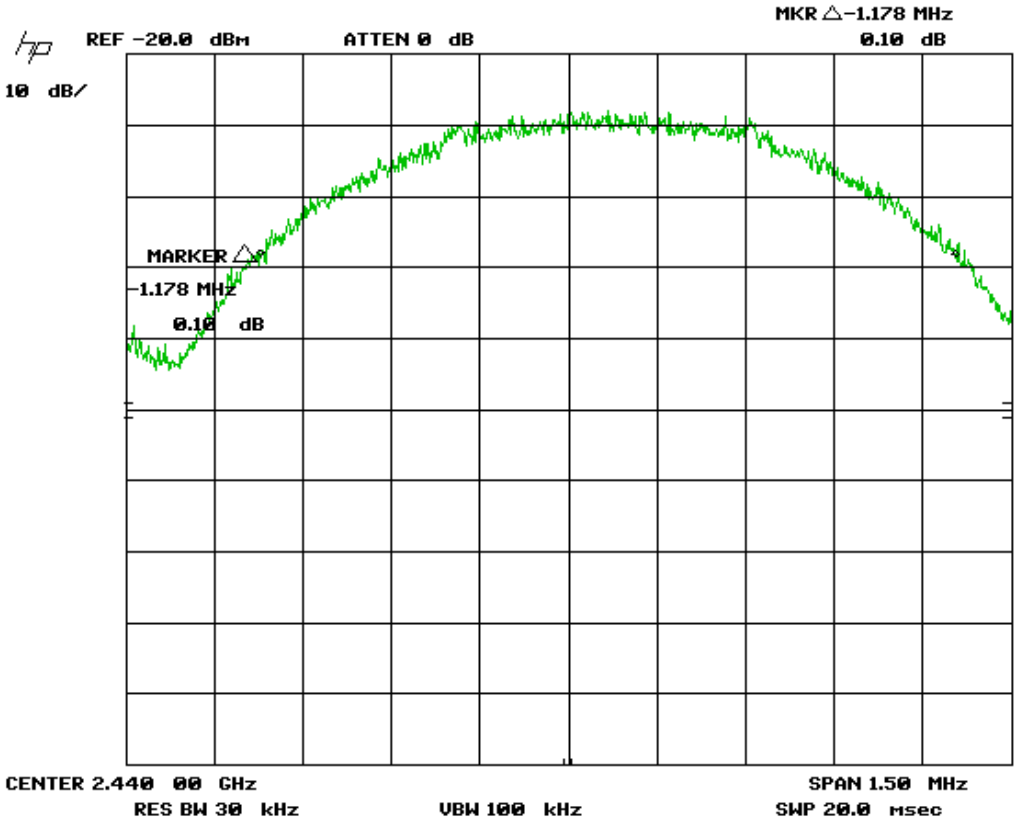
For the 20 dB or occupied BW, FCC KDB 558074, Section 2.0 references ANSI C63.10 for occupied bandwidth. ANSI C63.10 Section 6.9.1 was used for occupied bandwidth.

Results

For information purposes, the 99% occupied BW was measured to be 1.178 MHz

Graph(s)

The graphs shown below shows the max hold on the spectrum analyzer and the highest resolution bandwidth that is sufficiently low to exhibit the occupied bandwidth of a channel during operation of the EUT. The worst case/representative bandwidth is presented of all low, middle and high channel. This measurement is a peak measurement. Max hold is performed for a duration of not less than 1 minute.



Note: See 'Appendix B – EUT & Test Setup Photographs' for photos showing the test set-up.

Test Equipment List

Equipment	Model No.	Manufacturer	Last calibration date	Next calibration due date	Asset #
Attenuator 20 dB	FP-50-20	Trilithic	1-28-15	1-28-17	4038
Spectrum Analyzer	ESL6	Rohde & Schwarz	Nov 25, 2015	Nov 25, 2017	4169
RF Cable 0.5M	LMR-400-0.5M-50OHM-MN-MN	LexTec	1-28-15	1-28-17	4029

This report module is based on GEMC template "FCC – Power Line Conducted Emissions Class B_Rev1"

Appendix A – EUT Summary

For further details for filing purposes, refer to filing package.

General EUT Description

Manufacturer	Miss VV Mystery inc.
EUT Name	Miss On the Go
FCCID	2AG6D-MOTG
IC #	21001-MOTG
Approximate Size (LxWxH)	25cm(including antenna) x 3.6cm x3.6cm
Equipment Category (Commercial / Residential / Medical)	Residential
Input Voltage and Frequency	battery powered 3.7Vdc (2 batteries in parallel)
Rated Input Current	
Intentional RF (If yes describe)	
Table Top / Wall mount / Floor standing (choose table top if unsure)	
I/O Connectors available on EUT	None
Peripherals required for test	
Minimum Separation distance from operator	
Types and lengths of all I/O cables	

Note the EUT is considered to have been received the date of the commencement of the first test, unless otherwise stated. For a close-up picture of the EUT, see 'Appendix B – EUT & Test Setup Photographs'.

EUT Functional Description

Miss On The Go™ (referred to as EUT) is a sex toy in the vibrating Chinese balls category to help women tone up their pelvic muscles by enhancing Kegel exercises experience.

EUT Configuration

The EUT was configured in the following way during the tests:
The device was set to low, middle and high channel.

Operational Setup

These devices are required to be attached to the EUT for its normal operation.
(Ex Monitor to track progress)

None.

Test Signals Required For Test

The following patterns or signals were generated during test by the peripherals as described above to exercise the EUT during testing.

None. The device was tested with special test firmware.

Modifications Required for Compliance

None.

Appendix B – EUT and Test Setup Photographs

Note: These photos are for information purposes only. Also refer to PDF files that are separate from this test report.

Figure 1 – EUT Close Up – ON/OFF button side

Figure 2 – EUT Close Up – Charging connector side

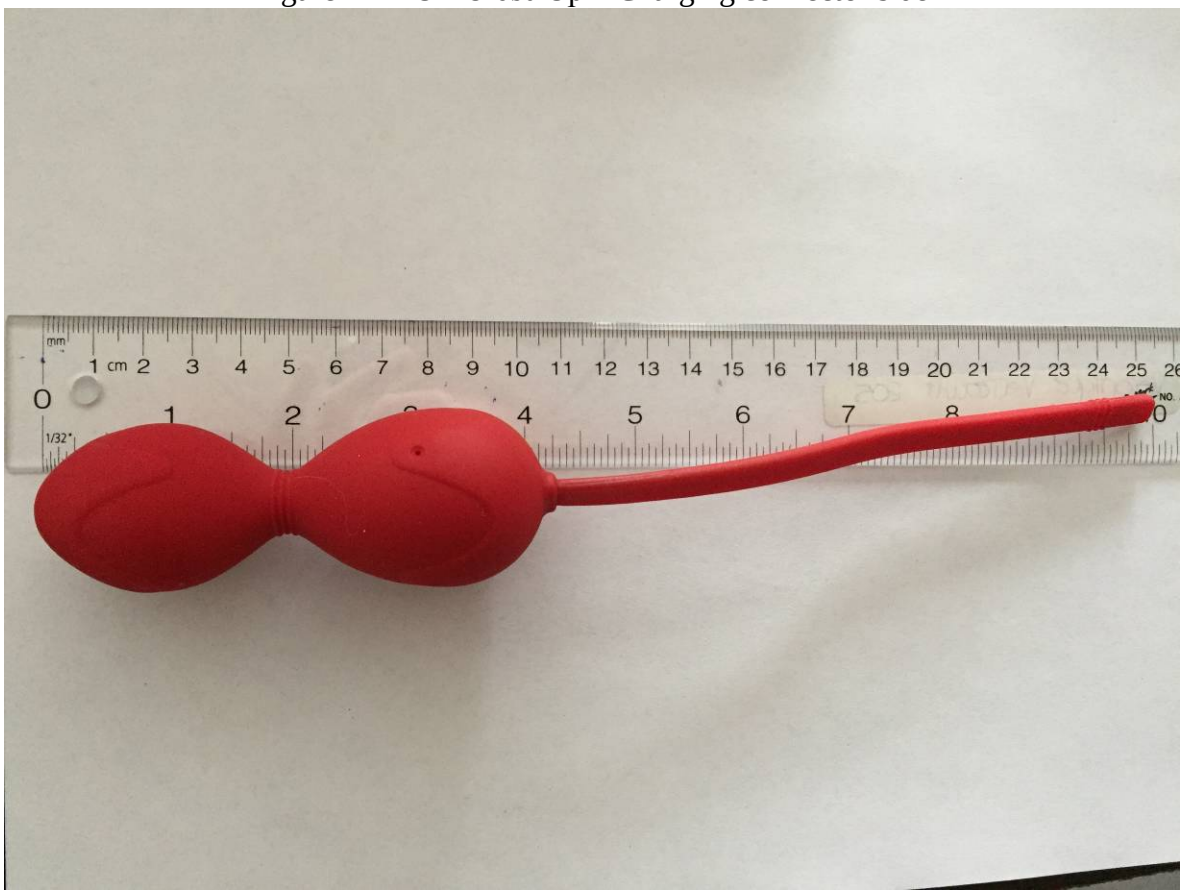


Figure 3 – Conducted Emissions – setup close up view

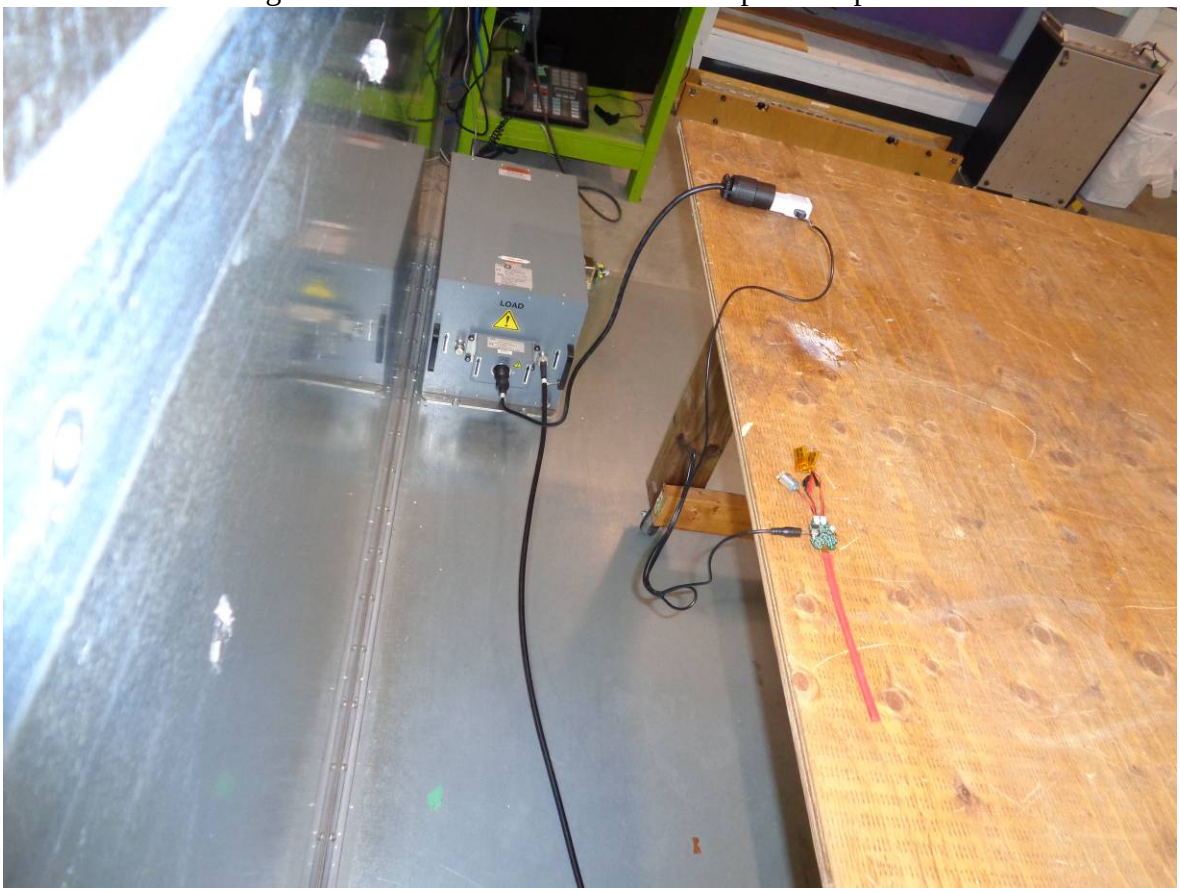


Figure 4 – Conducted Emissions setup

Figure 5 – Radiated Emissions – setup close up view

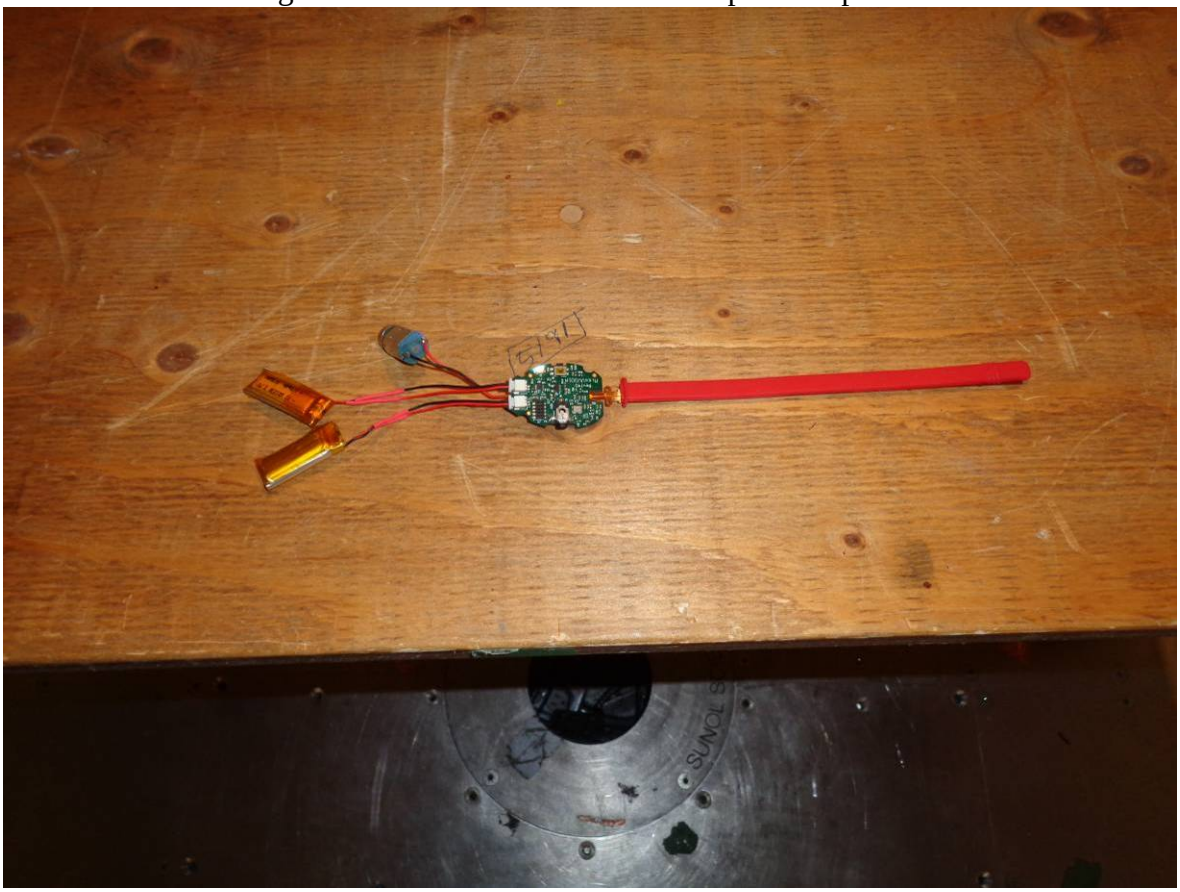


Figure 6 – Radiated Emissions below 30 MHz

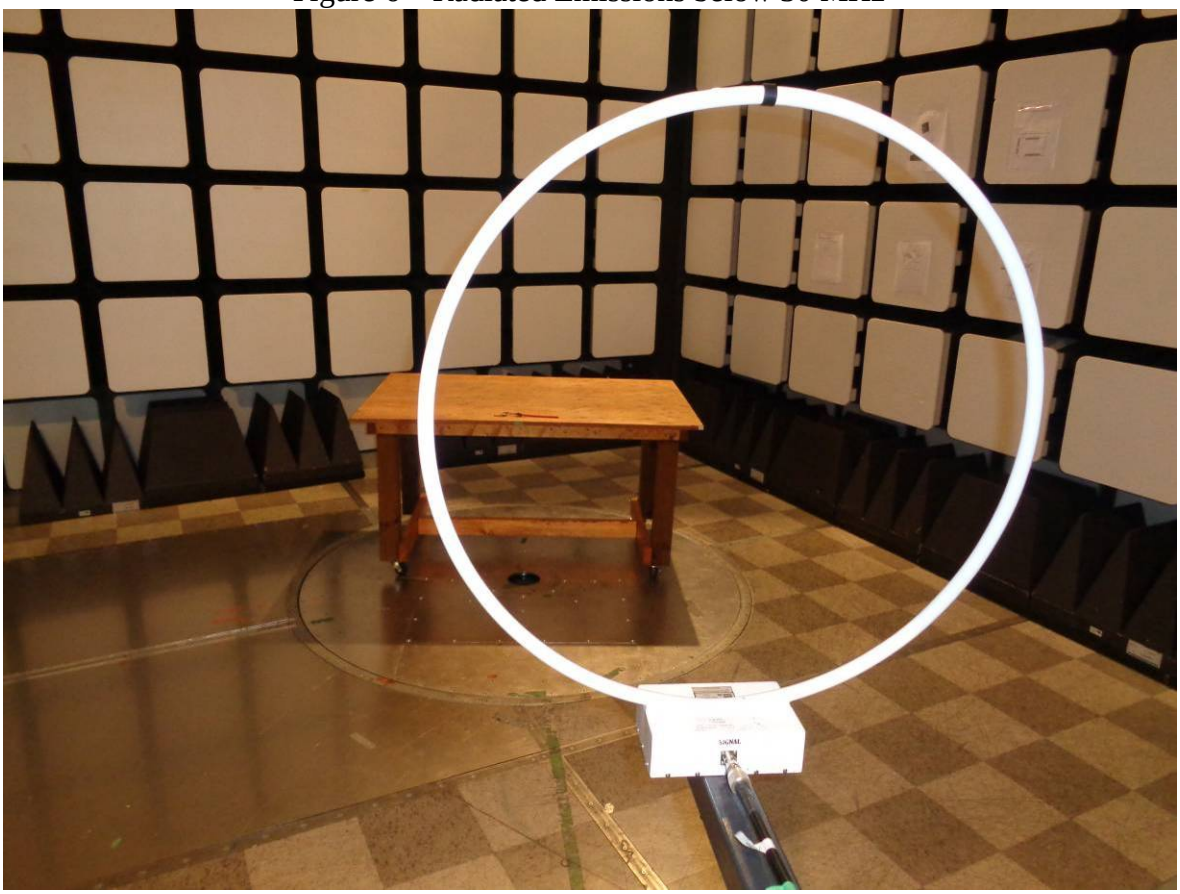


Figure 7 – Radiated Emissions 30MHz to 1GHz

Figure 8 – Radiated Emissions above 1GHz