

FCC Part 15C
Measurement and Test Report
For
CAD Audio, LLC
6573 Cochran Rd, Bldg I, Solon, OH44139, USA

FCC ID: OQ5PDW-LHG

FCC Rule(s):	<u>FCC Part 15.249</u>
Product Description:	<u>Bodypack Microphone</u>
Tested Model:	<u>PDW-LHGAA</u>
Report No.:	<u>STR16098032I</u>
Tested Date:	<u>2016-09-05 to 2016-09-18</u>
Issued Date:	<u>2016-09-19</u>
Tested By:	<u>Iven Guo / Engineer</u> <i>Iven Guo</i>
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Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by Shenzhen SEM.Test Technology Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: CAD Audio, LLC
Address of applicant: 6573 Cochran Rd, Bldg I, Solon, OH44139, USA

Manufacturer: Enbao Electronic Co., Ltd.
Address of manufacturer: B3, 3 Zone, Enping Park, Industrial Transfer Park of Jiangmen, Guangdong, China

General Description of EUT	
Product Name:	Bodypack Microphone
Brand Name:	PROformance
Model No.:	PDW-LHGAA
Adding Model:	/
Rated Voltage:	DC 3V by 2AAA Batteries
<i>Note: The test data is gathered from a production sample provided by the manufacturer.</i>	

Technical Characteristics of EUT	
Frequency Range:	902.9MHz-926.8MHz
Max. Field Strength:	93.55dBuV/m
Modulation:	DQPSK
Antenna Type:	Internal antenna
Antenna Gain:	0dBi
Lowest Internal Frequency of EUT:	24.576MHz

1.2 Test Standards

The following report is prepared on behalf of the CAD Audio, LLC in accordance with FCC Part 15, Subpart B, Subpart C, and section 15.107, 15.203, 15.205, 15.207, 15.209 and 15.249 of the Federal Communication Commissions rules.

The objective is to determine compliance with FCC Part 15, Subpart C, and section 15.107,15.203, 15.205, 15.207, 15.209 and 15.249 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which results in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard for Testing Unlicensed Wireless Devices, and ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

1.4 Test Facility

FCC – Registration No.: 934118

Shenzhen SEM.Test Technology Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 934118.

Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Shenzhen SEM.Test Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

CNAS Registration No.: L4062

Shenzhen SEM.Test Technology Co., Ltd. is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L4062. All measurement facilities used to collect the measurement data are located at 1/F, Building A, Hongwei Industrial Park, Liuxian 2nd Road, Bao'an District, Shenzhen, P.R.C (518101).

1.5 EUT Setup and Test Mode

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. All testing shall be performed under maximum output power condition, and to measure its highest possible emissions level, more detailed description as follows:

Test Mode List		
Test Mode	Description	Remark
TM1	Channel	902.9MHz
TM2	Channel	909.3MHz
TM3	Channel	915.5MHz
TM4	Channel	926.8MHz

EUT Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Special Cable List and Details			
Cable Description	Length (m)	Shielded/Unshielded	With / Without Ferrite
/	/	/	/

Auxiliary Equipment List and Details			
Description	Manufacturer	Model	Serial Number
/	/	/	/

1.6 Measurement Uncertainty

Measurement uncertainty		
Parameter	Conditions	Uncertainty
RF Output Power	Conducted	$\pm 0.42\text{dB}$
Occupied Bandwidth	Conducted	$\pm 1.5\%$
Conducted Spurious Emission	Conducted	$\pm 2.17\text{dB}$
Conducted Emissions	Conducted	$\pm 2.88\text{dB}$
Transmitter Spurious Emissions	Radiated	$\pm 5.1\text{dB}$

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2016-06-04	2017-06-03
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2016-06-04	2017-06-03
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2016-06-04	2017-06-03
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2016-06-04	2017-06-03
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2016-06-04	2017-06-03
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2016-06-04	2017-06-03
SEMT-1042	Horn Antenna	ETS	3117	00086197	2016-06-04	2017-06-03
SEMT-1121	Horn Antenna	ETS	3116B	00088203	2016-06-04	2017-06-03
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2016-06-04	2017-06-03
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2016-06-04	2017-06-03
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2016-06-04	2017-06-03
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2016-06-04	2017-06-03

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§15.203	Antenna Requirement	Compliant
§15.205	Restricted Band of Operation	Compliant
§15.207(a)	Conducted Emission	N/A
§15.209(a)(f)	Radiated Spurious Emissions	Compliant
§15.249(a)	Field Strength of Emissions	Compliant
§15.249(d)	Out of Band Emission	Compliant
§15.215 (c)	Emission Bandwidth	Compliant

N/A: not applicable

3. Antenna Requirements

3.1 Standard Applicable

According to FCC Part 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

3.2 Test Result

This product has an internal antenna, fulfill the requirement of this section.

4. Radiated Emissions

4.1 Standard Applicable

According to §15.249(a), the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental Frequency	Field strength of fundamental (milli-volts/meter)	Field strength of Harmonics (micro-volts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

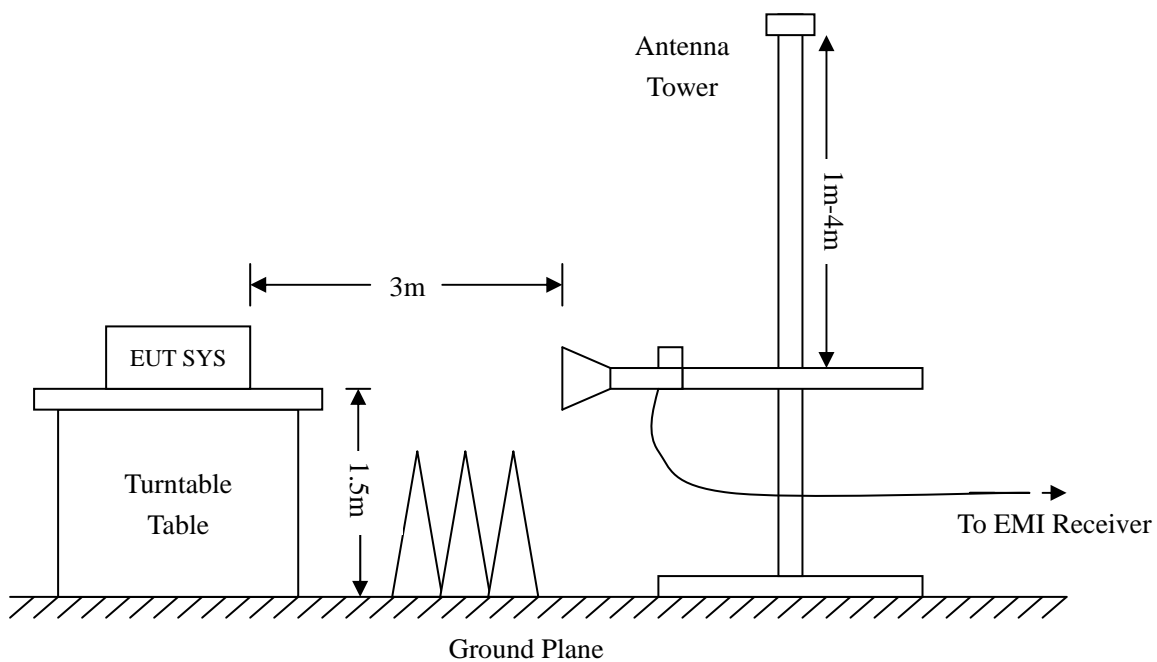
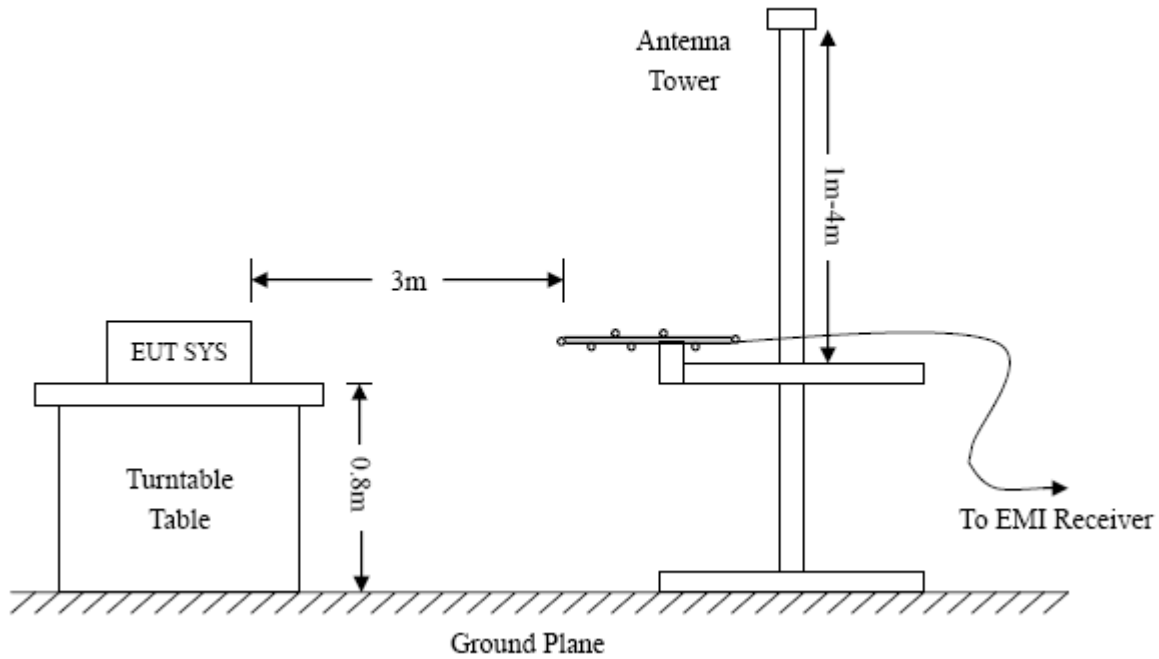
The emission limit in this paragraph is based on measurement instrumentation employing an average detector. The provisions in §15.35 for limiting peak emissions apply. Spurious Radiated Emissions measurements starting below or at the lowest crystal frequency.

4.2 Test Procedure

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.205 15.249(a) and FCC Part 15.209 Limit.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The spacing between the peripherals was 10 cm.



Frequency :9kHz-30MHz
 RBW=10KHz,
 VBW =30KHz
 Sweep time= Auto
 Trace = max hold
 Detector function = peak

Frequency :30MHz-1GHz
 RBW=120KHz,
 VBW=300KHz
 Sweep time= Auto
 Trace = max hold
 Detector function = peak, QP

Frequency :Above 1GHz
 RBW=1MHz,
 VBW=3MHz(Peak), 10Hz(AV)
 Sweep time= Auto
 Trace = max hold
 Detector function = peak, AV

4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Ant. Factor} + \text{Cable Loss} - \text{Ampl. Gain}$$

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dB μ V means the emission is 6dB μ V below the maximum limit. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{FCC Part 15C Limit}$$

4.4 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	60 %
ATM Pressure:	1012 mbar

4.5 Summary of Test Results/Plots

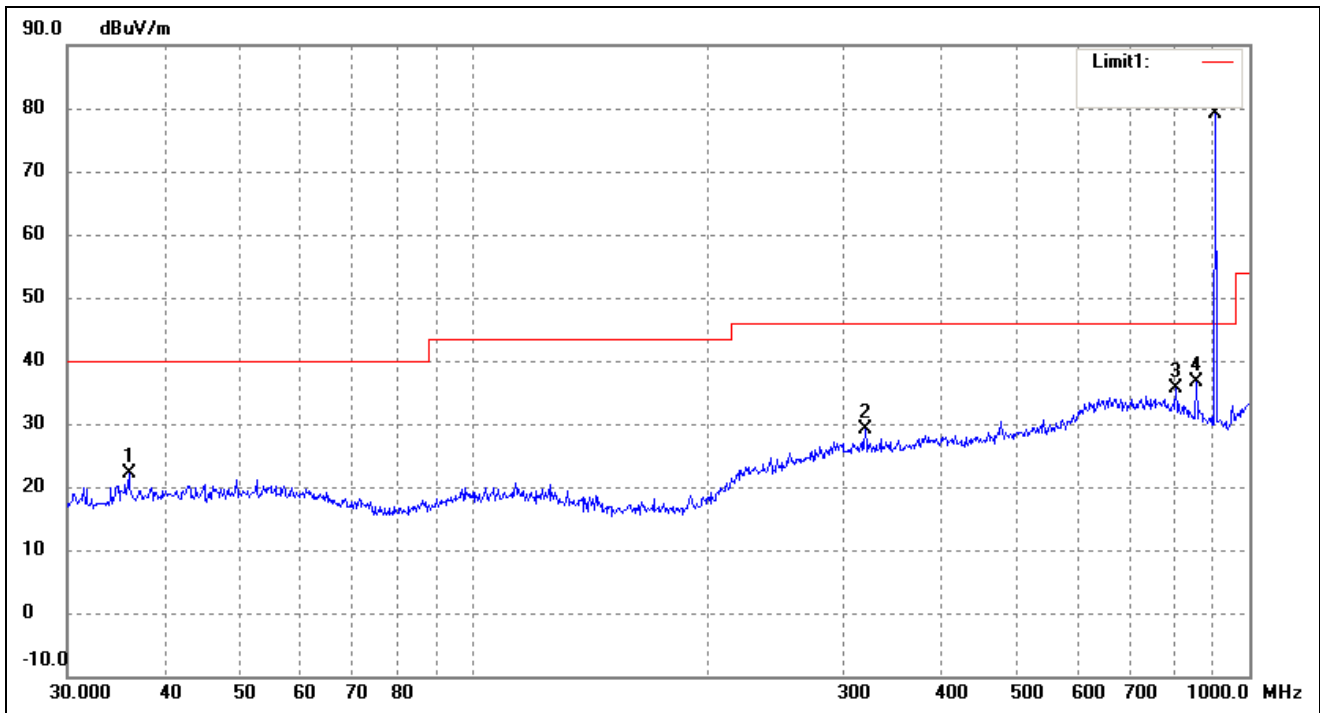
According to the data below, the [FCC Part 15.205](#), [15.209](#) and [15.249](#) standards, and had the worst margin of:

-0.78 dB at 854.0247 in the Vertical polarization, 9 kHz to 25 GHz, 3Meters

Note: this EUT was tested in 3 orthogonal positions and the worst case position data was reported.

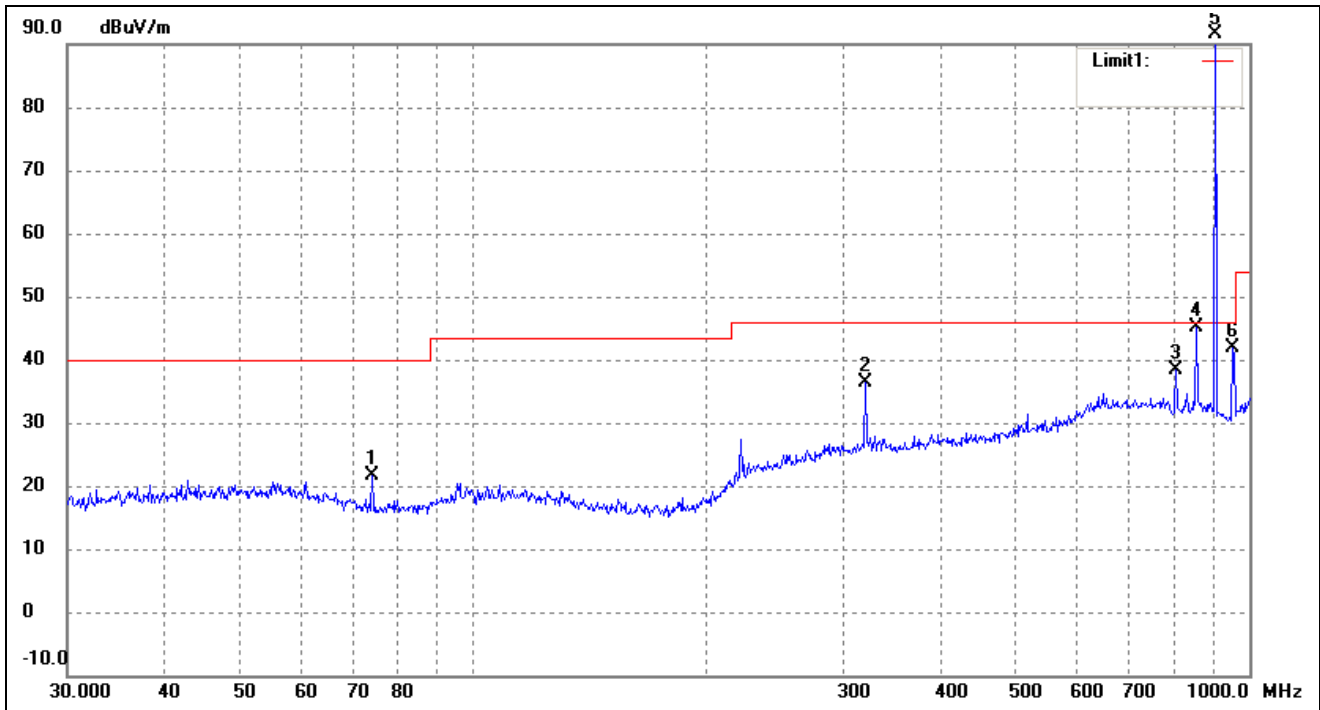
Plot of Radiated Emissions Test Data (30MHz to 1GHz)

EUT: *Bodypack Microphone*
 Tested Model: *PDW-LHGAA*
 Operating Condition: *Transmitting Channel (902.9MHz)*
 Comment: *DC 3.0V*
 Test Specification: *Horizontal*



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (m)	Remark
1	36.0007	17.79	4.33	22.12	40.00	-17.88	192	1.8	peak
2	319.9370	17.24	11.95	29.19	46.00	-16.81	178	1.7	peak
3	804.6028	19.57	16.17	35.74	46.00	-10.26	133	1.5	peak
4	854.0247	20.80	15.79	36.59	46.00	-9.41	133	1.5	peak
5	903.3094	64.17	15.01	79.18	/	/	/	/	Fundamental

Test Specification: Vertical

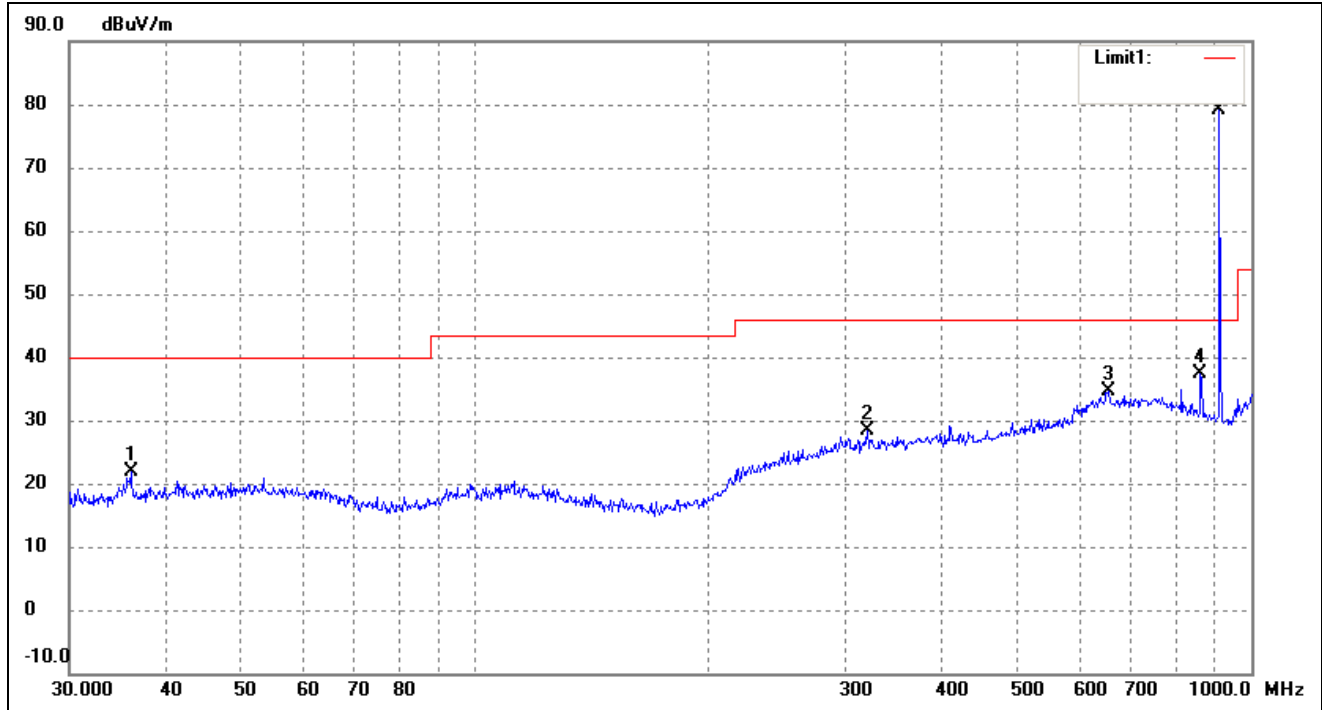


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	74.1351	19.25	2.39	21.64	40.00	-18.36	305	1.5	peak
2	319.9370	24.49	11.95	36.44	46.00	-9.56	139	1.6	peak
3	804.6028	22.20	16.17	38.37	46.00	-7.63	120	1.8	peak
4	854.0247	29.43	15.79	45.22	46.00	-0.78	120	1.8	peak
5	903.3094	76.66	15.01	91.67	/	/	/	/	Fundamental
6	952.0937	27.24	14.60	41.84	46.00	-4.16	295	1.4	peak

Operating Condition: Transmitting Channel (909.3MHz)

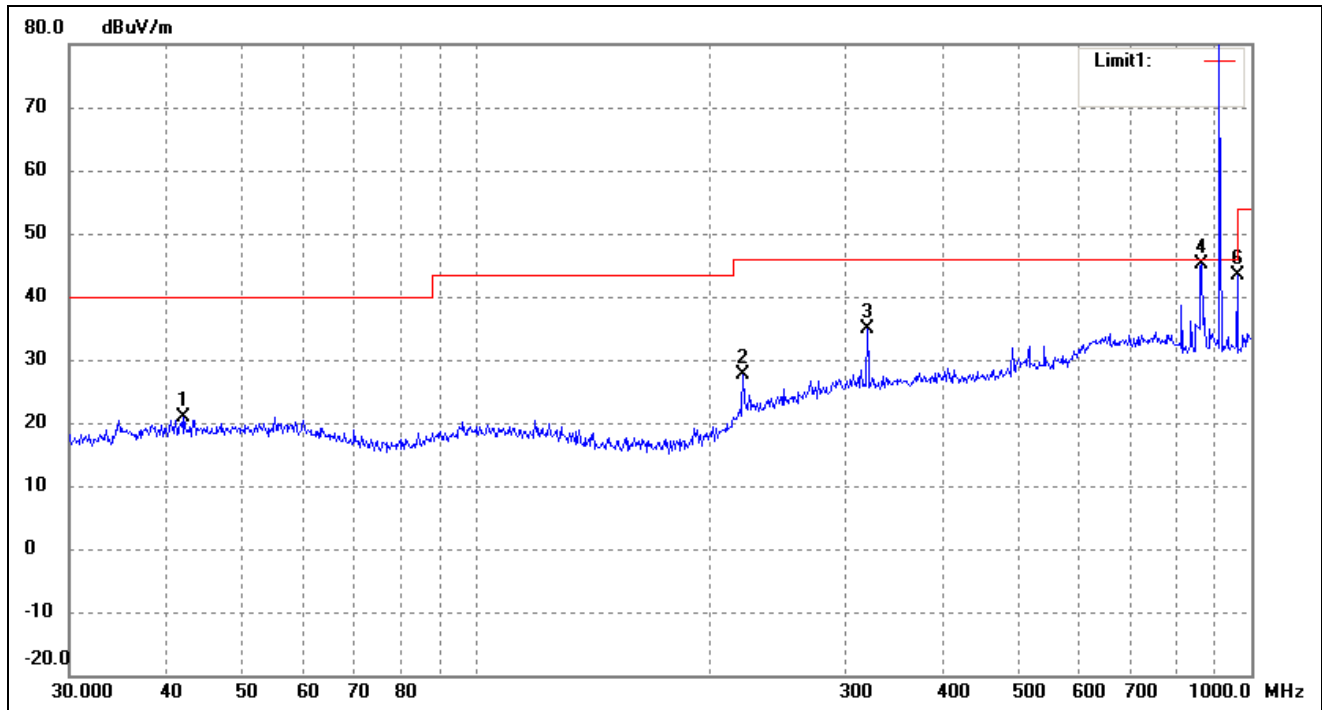
Comment: DC 3.0V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	36.0007	17.64	4.33	21.97	40.00	-18.03	243	1.8	peak
2	319.9370	16.45	11.95	28.40	46.00	-17.60	165	1.3	peak
3	654.2318	16.84	17.71	34.55	46.00	-11.45	253	1.4	peak
4	860.0352	21.73	15.70	37.43	46.00	-8.57	253	1.4	peak
5	909.6667	64.52	14.57	79.09	/	/	/	/	Fundamental

Test Specification: Vertical

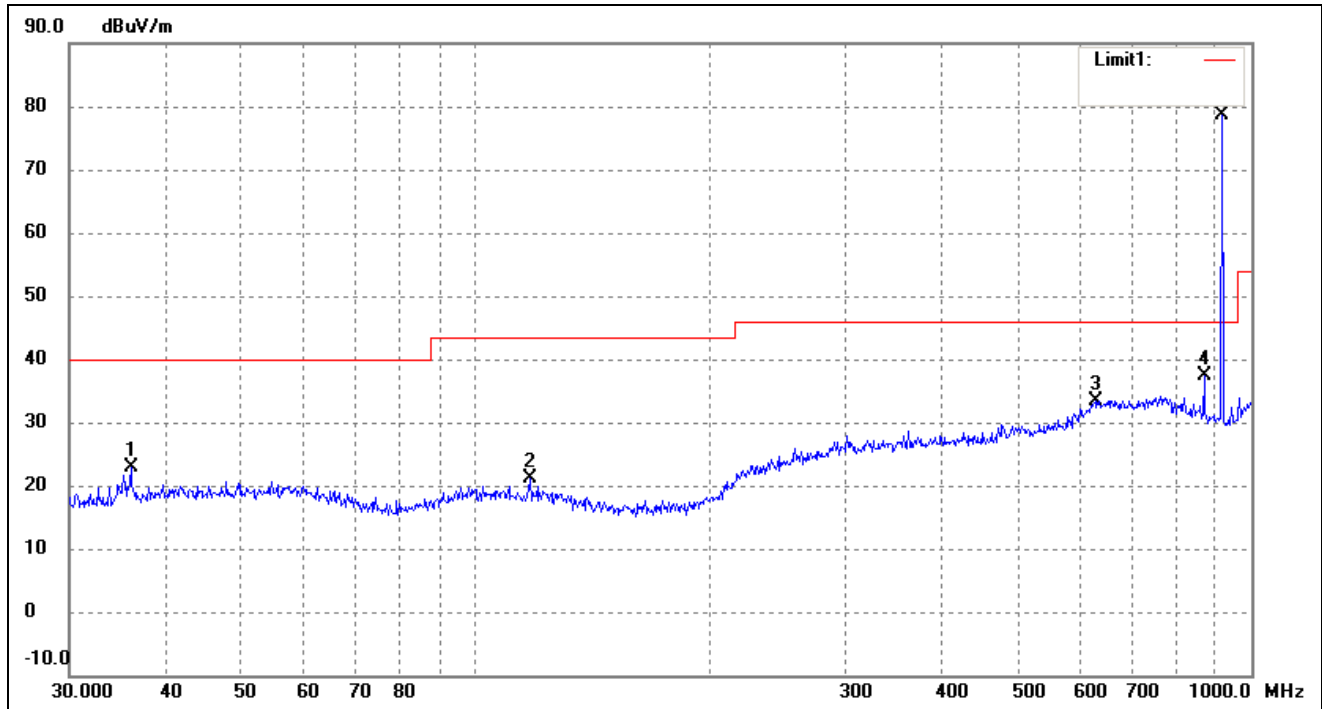


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	42.1542	15.86	4.94	20.80	40.00	-19.20	160	1.6	peak
2	221.3921	19.95	7.76	27.71	46.00	-18.29	116	1.4	peak
3	319.9370	22.82	11.95	34.77	46.00	-11.23	119	1.8	peak
4	863.0562	29.41	15.79	45.20	46.00	-0.80	119	1.8	peak
5	909.6667	75.99	14.57	90.56	/	/	/	/	Fundamental
6	958.7943	28.68	14.63	43.31	46.00	-2.69	195	1.5	peak

Operating Condition: Transmitting Channel (915.5MHz)

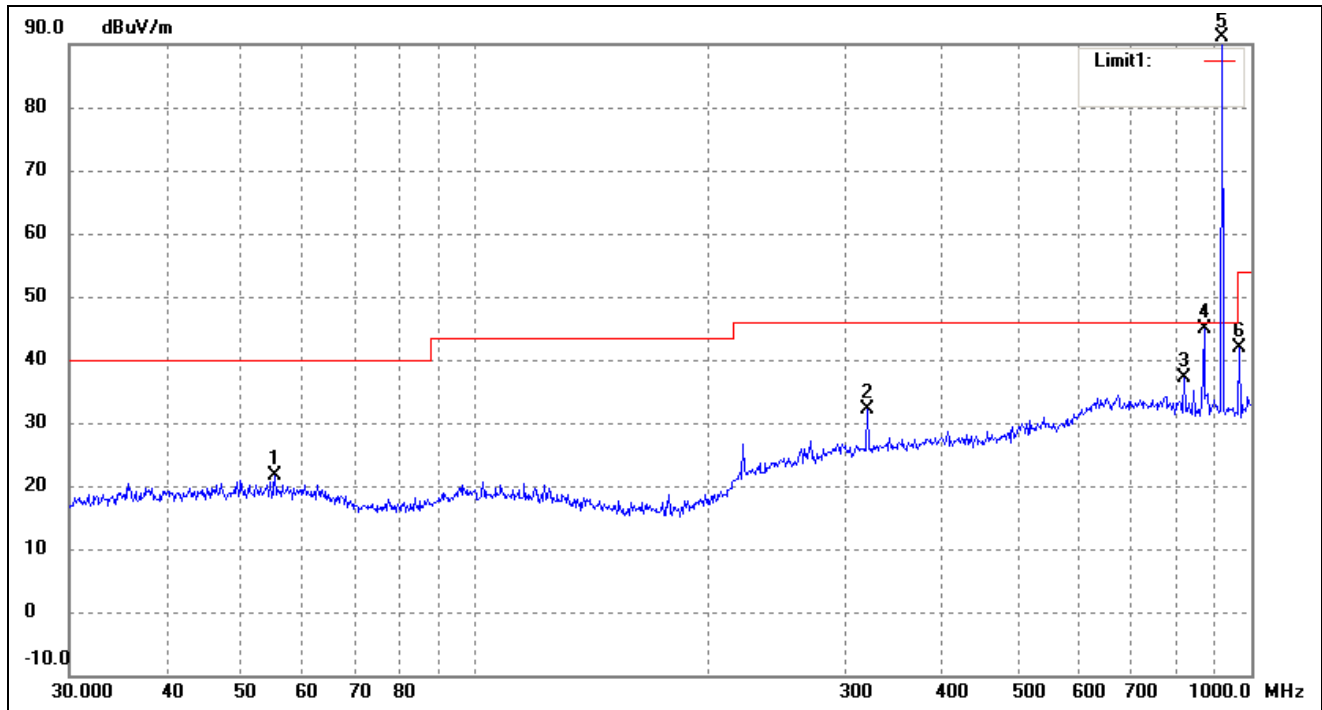
Comment: DC 3.0V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct dB/m	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	36.0007	18.58	4.33	22.91	40.00	-17.09	210	1.4	peak
2	117.7725	16.27	4.82	21.09	43.50	-22.41	230	1.5	peak
3	629.4772	15.79	17.70	33.49	46.00	-12.51	265	1.6	peak
4	869.1302	21.33	15.94	37.27	46.00	-8.73	265	1.6	peak
5	916.0687	64.40	14.14	78.54	/	/	/	/	Fundamental

Test Specification: Vertical

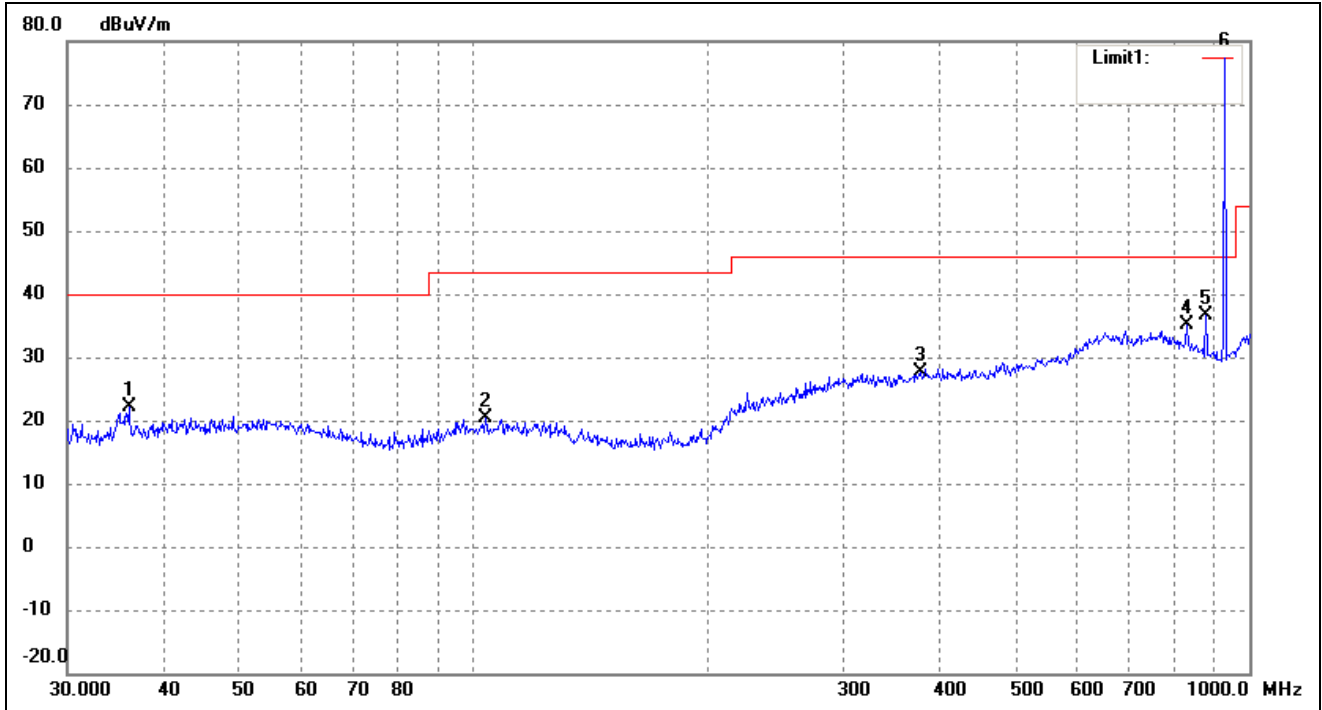


No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	55.2207	16.54	5.02	21.56	40.00	-18.44	306	1.5	peak
2	319.9370	20.11	11.95	32.06	46.00	-13.94	268	1.5	peak
3	818.8341	21.39	15.71	37.10	46.00	-8.90	234	1.4	peak
4	869.1302	29.06	15.94	45.00	46.00	-1.00	234	1.4	peak
5	916.0687	77.05	14.14	91.19	/	/	/	/	Fundamental
6	965.5421	27.10	14.72	41.82	54.00	-12.18	227	1.7	peak

Operating Condition: Transmitting Channel (926.8MHz)

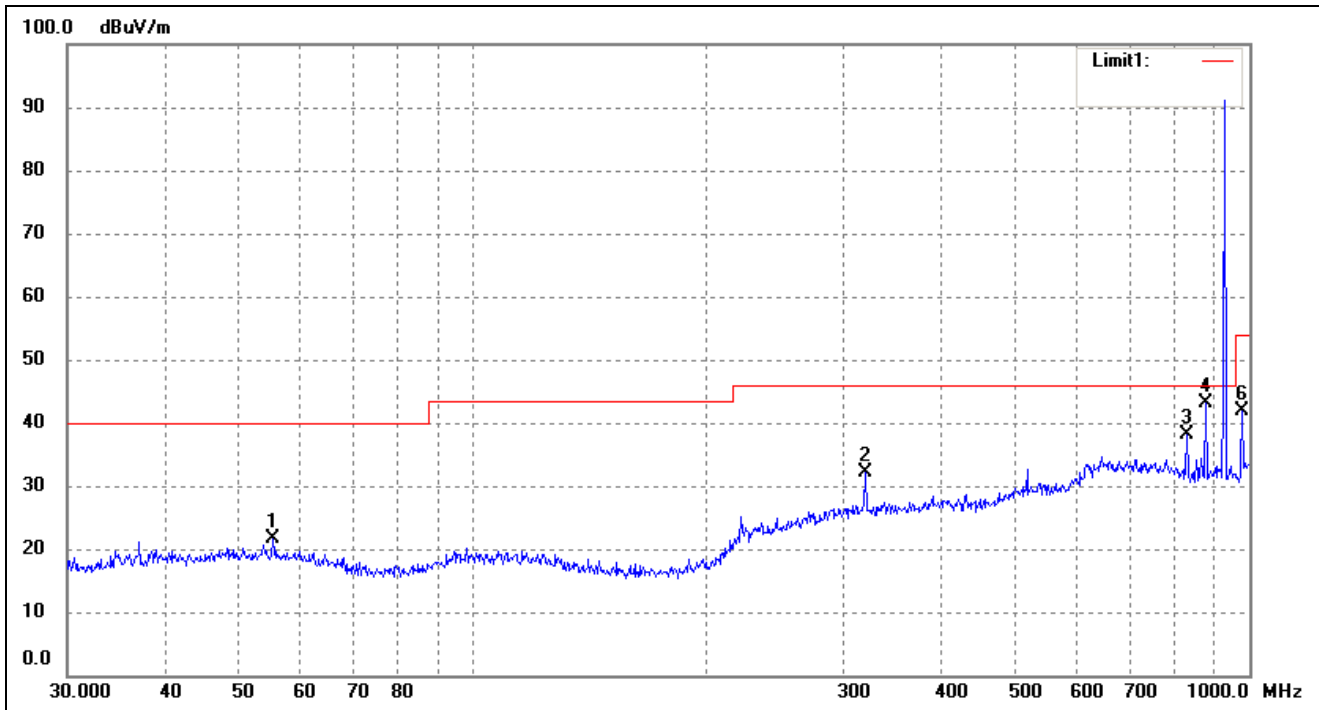
Comment: DC 3.0V

Test Specification: Horizontal



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	36.0007	17.69	4.33	22.02	40.00	-17.98	213	1.7	peak
2	103.8055	15.42	4.89	20.31	43.50	-23.19	157	1.6	peak
3	377.2591	15.92	11.81	27.73	46.00	-18.27	303	1.7	peak
4	830.4002	19.22	15.86	35.08	46.00	-10.92	303	1.7	peak
5	878.3214	20.33	16.18	36.51	46.00	-9.49	176	1.3	peak
6	929.0082	63.11	14.18	77.29	/	/	/	/	Fundamental

Test Specification: Vertical



No.	Frequency (MHz)	Reading (dBuV/m)	Correct (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Degree ()	Height (cm)	Remark
1	55.2207	16.57	5.02	21.59	40.00	-18.41	201	1.5	peak
2	319.9370	20.07	11.95	32.02	46.00	-13.98	140	1.6	peak
3	830.4002	22.39	15.86	38.25	46.00	-7.75	128	1.6	peak
4	878.3214	26.84	16.18	43.02	46.00	-2.98	128	1.6	peak
5	929.0082	77.00	14.18	91.18	/	/	/	/	Fundamental
6	979.1804	27.06	14.92	41.98	54.00	-12.02	272	1.6	peak

Spurious Emissions Above 1GHz

Frequency (MHz)	Receiver		Turntable Degree	Rx Antenna		Corrected Factor (dB)	Corrected Amplitude (dB μ V/m)	FCC Part 15.249/15.205/15.209	
	Reading (dB μ V)	Detector (PK/QP/Ave.)		Height (m)	Polar (H/V)			Limit (dB μ V/m)	Margin (dB)
Channel (902.9MHz)									
902.90	91.23	PK	148	1.3	H	1.45	92.68	114	-21.32
902.90	91.34	PK	273	1.8	V	1.45	92.79	114	-21.21
902.90	89.85	AV	265	1.7	H	1.45	91.30	94	-2.70
902.90	91.00	AV	113	1.7	V	1.45	92.45	94	-1.55
1805.80	52.37	PK	146	1.7	H	4.91	57.28	74	-16.72
1805.80	49.93	PK	293	1.4	V	4.91	54.84	74	-19.16
1805.80	47.86	AV	241	1.6	H	4.91	52.77	54	-1.23
1805.80	47.76	AV	111	1.5	V	4.91	52.67	54	-1.33
2708.70	50.87	PK	175	1.6	H	7.32	58.19	74	-15.81
2708.70	51.32	PK	183	1.6	V	7.32	58.64	74	-15.36
2708.70	42.74	AV	236	1.7	H	7.32	50.06	54	-3.94
2708.70	42.58	AV	174	1.5	V	7.32	49.90	54	-4.10
3611.60	43.72	PK	255	1.4	H	8.92	52.64	74	-21.36
3611.60	48.11	PK	258	1.6	V	8.92	57.03	74	-16.97
3611.60	42.68	AV	252	1.7	H	8.92	51.60	54	-2.40
3611.60	43.81	AV	296	1.4	V	8.92	52.73	54	-1.27
Channel (909.3 MHz)									
909.30	84.89	PK	255	1.8	H	1.56	86.45	114	-27.55
909.30	90.02	PK	115	1.7	V	1.56	91.58	114	-22.42
909.30	87.04	AV	246	1.3	H	1.56	88.60	94	-5.40
909.30	91.22	AV	146	1.6	V	1.56	92.78	94	-1.22
1818.60	52.20	PK	288	1.5	H	4.96	57.16	74	-16.84
1818.60	51.86	PK	188	1.7	V	4.96	56.82	74	-17.18
1818.60	47.08	AV	302	1.4	H	4.96	52.04	54	-1.96
1818.60	47.21	AV	285	1.7	V	4.96	52.17	54	-1.83
2727.90	50.56	PK	307	1.4	H	7.39	57.95	74	-16.05
2727.90	48.28	PK	242	1.7	V	7.39	55.67	74	-18.33
2727.90	42.34	AV	224	1.7	H	7.39	49.73	54	-4.27
2727.90	43.21	AV	264	1.4	V	7.39	50.60	54	-3.40
3637.20	46.02	PK	290	1.7	H	8.95	54.97	74	-19.03
3637.20	47.57	PK	189	1.3	V	8.95	56.52	74	-17.48
3637.20	41.41	AV	186	1.4	H	8.95	50.36	54	-3.64
3637.20	44.29	AV	275	1.4	V	8.95	53.24	54	-0.76
Channel (915.5 MHz)									
915.50	87.79	PK	229	1.4	H	1.67	89.46	114	-24.54
915.50	89.71	PK	231	1.7	V	1.67	91.38	114	-22.62

915.50	84.65	AV	134	1.8	H	1.67	86.32	94	-7.68
915.50	90.84	AV	226	1.5	V	1.67	92.51	94	-1.49
1831.00	52.83	PK	157	1.7	H	5.25	58.08	74	-15.92
1831.00	51.92	PK	115	1.6	V	5.25	57.17	74	-16.83
1831.00	47.29	AV	226	1.5	H	5.25	52.54	54	-1.46
1831.00	45.83	AV	165	1.5	V	5.25	51.08	54	-2.92
2746.50	50.63	PK	281	1.5	H	7.43	58.06	74	-15.94
2746.50	49.82	PK	296	1.7	V	7.43	57.25	74	-16.75
2746.50	41.78	AV	195	1.4	H	7.43	49.21	54	-4.79
2746.50	44.86	AV	199	1.8	V	7.43	52.29	54	-1.71
3662.00	49.43	PK	278	1.8	H	9.01	58.44	74	-15.56
3662.00	48.34	PK	200	1.6	V	9.01	57.35	74	-16.65
3662.00	42.58	AV	215	1.4	H	9.01	51.59	54	-2.41
3662.00	42.06	AV	205	1.7	V	9.01	51.07	54	-2.93
Channel (926.8 MHz)									
926.80	88.96	PK	221	1.3	H	1.93	90.89	114	-23.11
926.80	91.62	PK	223	1.5	V	1.93	93.55	114	-20.45
926.80	83.03	AV	230	1.7	H	1.93	84.96	94	-9.04
926.80	88.84	AV	115	1.8	V	1.93	90.77	94	-3.23
1853.60	50.20	PK	268	1.4	H	5.52	55.72	74	-18.28
1853.60	50.52	PK	235	1.5	V	5.52	56.04	74	-17.96
1853.60	47.09	AV	306	1.4	H	5.52	52.61	54	-1.39
1853.60	45.54	AV	129	1.6	V	5.52	51.06	54	-2.94
2780.40	49.89	PK	234	1.6	H	7.69	57.58	74	-16.42
2780.40	45.67	PK	144	1.7	V	7.69	53.36	74	-20.64
2780.40	40.88	AV	300	1.5	H	7.69	48.57	54	-5.43
2780.40	40.27	AV	138	1.7	V	7.69	47.96	54	-6.04
3707.20	43.79	PK	282	1.4	H	9.06	52.85	74	-21.15
3707.20	45.46	PK	257	1.7	V	9.06	54.52	74	-19.48
3707.20	43.24	AV	143	1.5	H	9.06	52.30	54	-1.70
3707.20	41.81	AV	270	1.5	V	9.06	50.87	54	-3.13

Note: Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 3th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured. The measurements greater than 20dB below the limit from 9kHz to 30MHz.

5. Out of Band Emissions

5.1 Standard Applicable

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

5.2 Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

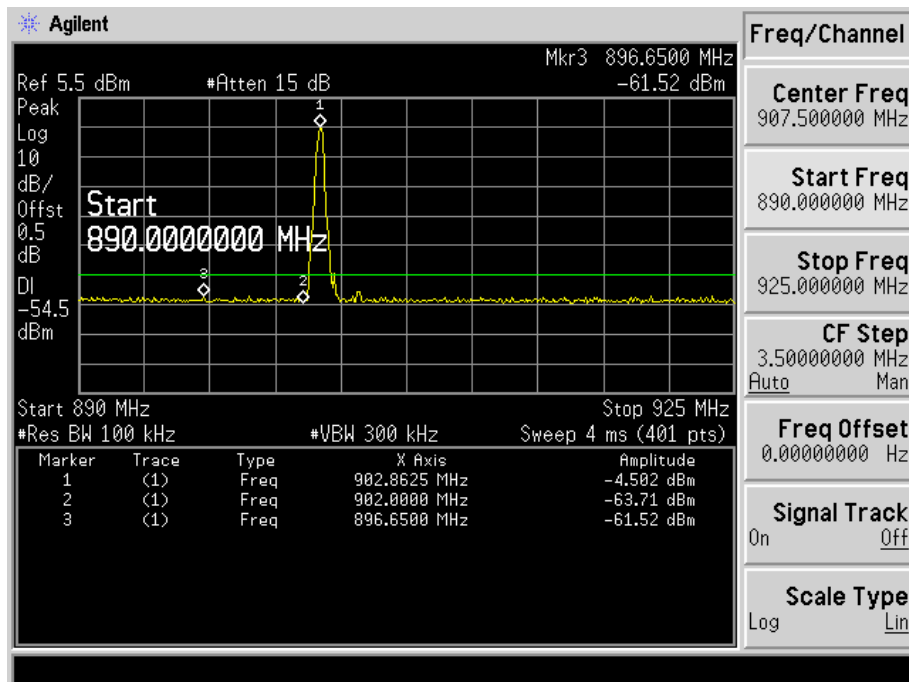
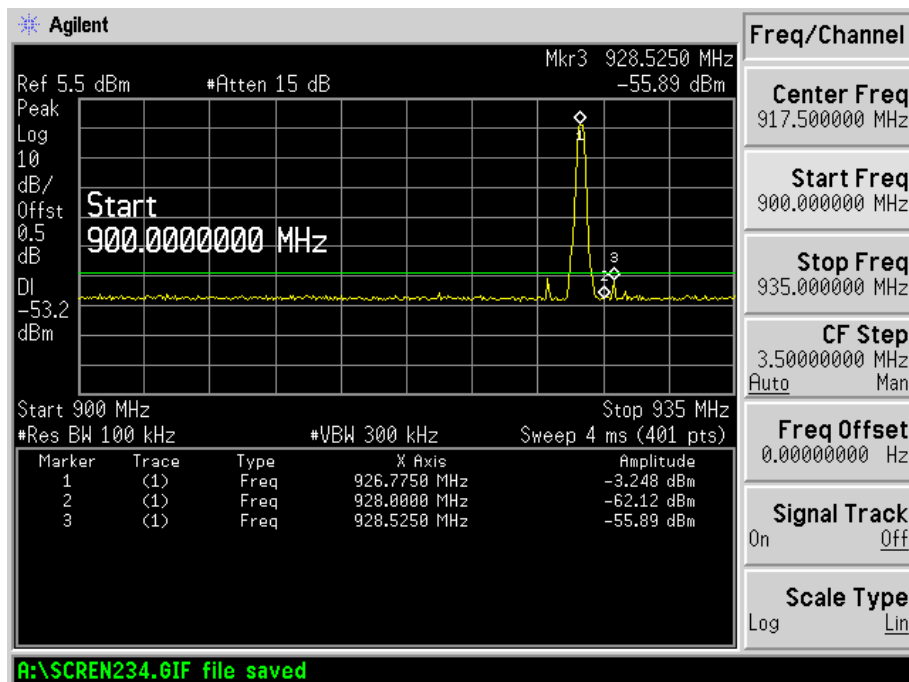
5.3 Environmental Conditions

Temperature:	24 °C
Relative Humidity:	60 %
ATM Pressure:	1012 mbar

5.4 Summary of Test Results/Plots

The edge emissions are below the FCC 15.209 Limits or complies with the 15.249 requirements.

Please refer to the test plots as below.

Band edge -Left Side

Band edge -Right Side


6. Emission Bandwidth

6.1 Standard Applicable

According to 15.215 (c), intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

6.2 Test Procedure

According to the ANSI 63.10-2013, the emission bandwidth test method as follows.

Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to the spectrum analyzer.

Set span = 1MHz, centered on a transmitting channel

RBW \geq 1% 20dB Bandwidth, VBW \geq RBW

Sweep = auto

Detector function = peak

Trace = max hold

All the trace to stabilize, use the marker-to-peak function to set the marker to the peak of the emission, use the marker-delta function to measure and record the 20dB down and 99% bandwidth of the emission.

6.3 Environmental Conditions

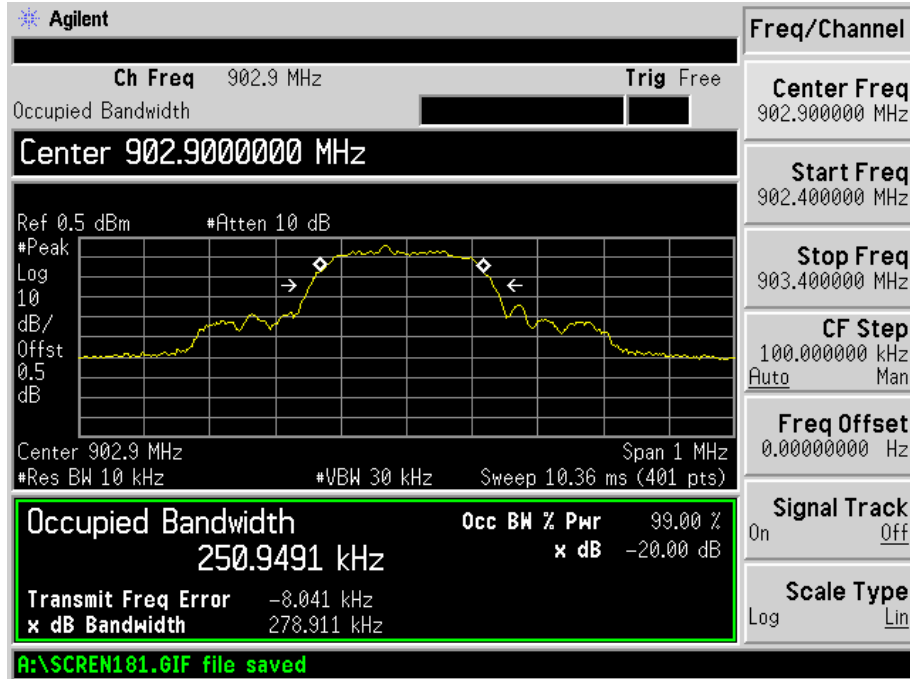
Temperature:	25 °C
Relative Humidity:	53%
ATM Pressure:	1018 mbar

6.4 Summary of Test Results/Plots

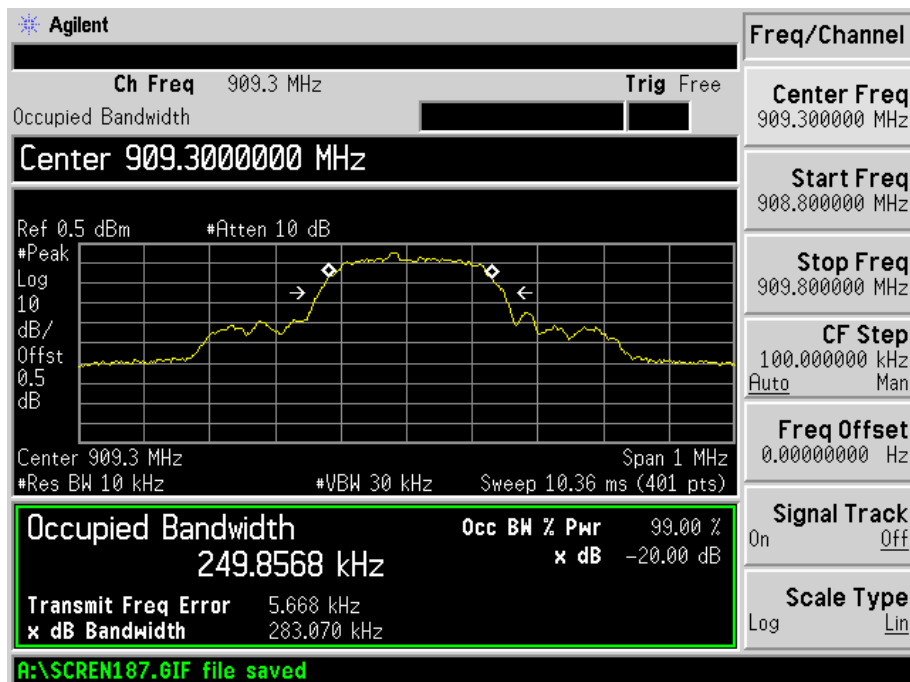
Frequency MHz	20dB Bandwidth kHz	99% Bandwidth kHz
902.9	278.911	250.9491
909.3	283.070	249.8568
915.5	279.033	249.9543
926.8	279.689	250.2288

Please refer to the following test plots

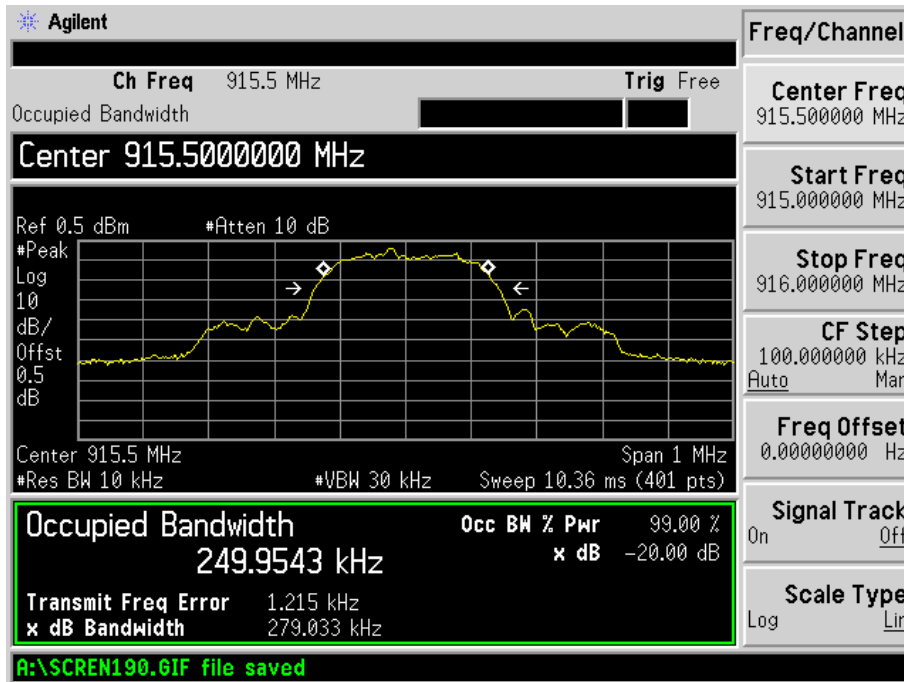
Channel 902.9MHz:



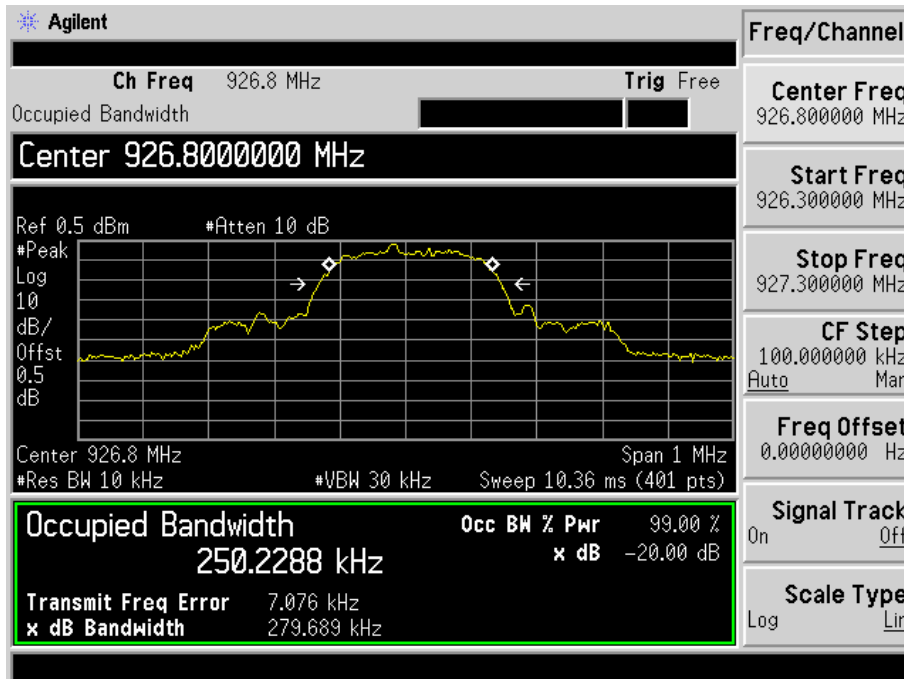
Channel 909.3MHz:



Channel 915.5MHz:



Channel 926.8MHz:



***** END OF REPORT *****