Shenzhen Huatongwei International Inspection Co., Ltd.
1/F,Bldg 3,Hongfa Hi-tech Industrial Park,Genyu Road,Tianliao,Gongming,Shenzhen,China
Phone:86-755-26748019 Fax:86-755-26748089 http://www.szhtw.com.cn

TEST REPORT

Report No. ..... :	**CHTEW19120049** Report Verification:
Project No.....:	**SHT1912009501EW**
Contains FCC ID ..... :	**2AJTNDL01**
Contains IC..... :	**22057-DL01**
Applicant's name..... :	**Powervision Robot Inc.**
Address.....:	Building No.33,Yungu Park,No. 79 Shuangying West Road, Technology Park, Changping, Beijing, China
Manufacturer.....:	Powervision Robot Inc.
Address.....:	Building No.33,Yungu Park,No. 79 Shuangying West Road, Technology Park, Changping, Beijing, China
Test item description ..... :	**Datalink**
Trade Mark .....:	PowerVision
Model/Type reference.....:	DL01
Listed Model(s) .....:	-
Standard ..... :	**FCC CFR Title 47 Part 15 Subpart C Section 15.247** **RSS-247 Issue 2: February 2017**
Date of receipt of test sample.....:	Dec.03, 2019
Date of testing.....:	Dec.03, 2019- Dec.05, 2019
Date of issue.....:	Dec.05, 2019
Result..... .....:	**PASS**

Compiled by (Position+Printed name+Signature):	File administrator Fanghui Zhu	Fanghui Zhu
Supervised by (Position+Printed name+Signature):	Project Engineer Edward Pan	Edward Pan
Approved by (Position+Printed name+Signature):	RF Manager Hans Hu	Hans Hu

Testing Laboratory Name ..... :	**Shenzhen Huatongwei International Inspection Co., Ltd.**
Address.....:	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

Contents

1. TEST STANDARDS AND REPORT VERSION

1.1. Test Standards

The tests were performed according to following standards:

– FCC Rules Part 15.247: Frequency Hopping, Direct Spread Spectrum and Hybrid Systems that are in operation within the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz

– RSS-247 Issue 2:2017: Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

– ANSI C63.10:2013: American National Standard for Testing Unlicensed Wireless Devices

– KDB 558074 D01 15.247 Meas Guidance v05r02: Guidance for Compliance Measurements on Digital Transmission System, Frequency Hopping Spread Spectrum System, and Hybrid System Devices Operating under Section 15.247 of The FCC Rules

1.2. Report version

Revision No.	Date of issue	Description
N/A	2019-12-05	Original

2. TEST DESCRIPTION

Report clause	Test Items	Standard Requirement	Result
5.1	Antenna Requirement	15.203/15.247(c) RSS-Gen 8.3	N/A
5.2	AC Conducted Emission	15.207 RSS-Gen 8.8	N/A
5.3	Peak Output Power	15.247(b)(3) RSS-247 5.4 d)	PASS
5.4	Power Spectral Density	15.247(e) RSS-247 5.2 b)	PASS
5.5	6dB Bandwidth	15.247(a)(2) RSS-247 5.2 a)	N/A
5.6	99% Occupied Bandwidth	RSS-Gen 6.7	N/A
5.7	Duty cycle	-	N/A
5.8	Conducted Band Edge and Spurious Emission	15.247(d)/15.205 RSS-247 5.5	N/A
5.9	Radiated Band Edge Emission	15.205/15.209 RSS-247 5.5	N/A
5.10	Radiated Spurious Emission	15.247(d)/15.205/15.209 RSS-247 5.5	N/A

Note:

– The measurement uncertainty is not included in the test result.

3. SUMMARY

3.1. Client Information

Applicant:	Powervision Robot Inc.
Address:	Building No.33,Yungu Park,No. 79 Shuangying West Road, Technology Park, Changping, Beijing, China
Manufacturer:	Powervision Robot Inc.
Address:	Building No.33,Yungu Park,No. 79 Shuangying West Road, Technology Park, Changping, Beijing, China

3.2. Product Description

Name of EUT:	Datalink
Trade Mark:	PowerVision
Model No.:	DL01
Listed Model(s):	-
Power supply:	11.4V
Hardware version:	VF
Software version:	V2.7.18

3.3. Radio Specification Description

Support type*2:	802.11b, 802.11g, 802.11n(HT20)
Modulation:	DSSS for 802.11b OFDM for 802.11g/802.11n(HT20)
Operation frequency:	2412MHz~2462MHz for 802.11b/802.11g/802.11n(HT20)
Channel number:	11 for 802.11b/802.11g/802.11n(HT20)
Channel separation:	5MHz
Antenna type:	Built-in antenna
Antenna gain:	ANT 0:0.33dBi ANT 1:2.74dBi ANT 2:2.93dBi ANT 3:0.33dBi

Note:

*2: only show the RF function associated with this report.

3.4. Testing Laboratory Information

Laboratory Name	Shenzhen Huatongwei International Inspection Co., Ltd.	
Laboratory Location	1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China	
Qualifications	Type	Accreditation Number
	CNAS	L1225
	A2LA	3902.01
	FCC	762235
	Canada	5377A

4. TEST CONFIGURATION

4.1. Test frequency list

According to section 15.31(m), regards to the operating frequency range over 10 MHz, must select three channels which were tested. The Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, please see the below blue front.

802.11b/802.11g/802.11n(HT20)	
Channel	Frequency (MHz)
01	**2412**
02	2417
. :	. :
06	**2437**
. :	. :
10	2457
11	**2462**

4.2. Descriptions of Test mode

Preliminary tests were performed in different data rates, final test modes are considering the modulation and worse data rates as below table.

Modulation	Data rate
802.11b	1Mbps
802.11g	6Mbps
802.11n(HT20)	MCS0

Operation Mode	1Tx/1Rx	2Tx/2Rx
802.11b/g	ANT0, ANT1, ANT2, ANT3	
802.11n(HT20)	ANT0, ANT1, ANT2, ANT3	ANT0+ ANT2, ANT0+ ANT3, ANT1+ ANT2, ANT1+ ANT3,

4.3. Test mode

For RF test items
The engineering test program was provided and enabled to make EUT continuous transmit.
For AC power line conducted emissions:
The EUT was set to connect with the WLAN AP under large package sizes transmission.
For Radiated spurious emissions test item:
The engineering test program was provided and enabled to make EUT continuous transmit. The EUT in each of three orthogonal axis emissions had been tested, but only the worst case (X axis) data Recorded in the report.

4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Whether support unit is used?					
✓ No					
Item	Equipement	Trade Name	Model No.	FCC ID	Power cord
1					
2					

4.5. Testing environmental condition

Type	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar

4.6. Measurement uncertainty

Test Item	Measurement Uncertainty
AC Conducted Emission (150kHz~30MHz)	3.02 dB
Radiated Emission (30MHz~1000MHz	4.90 dB
Radiated Emissions (1GHz~25GHz)	4.96 dB
Peak Output Power	0.51 dB
Power Spectral Density	0.51 dB
Conducted Spurious Emission	0.51 dB
6dB Bandwidth	70 Hz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

4.7. Equipment Used during the Test

● RF Conducted Method						
Used	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
●	Signal and spectrum Analyzer	R&S	FSV40	100048	2019/10/26	2020/10/25
●	Spectrum Analyzer	Agilent	N9020A	MY50510187	2019/10/26	2020/10/25
○	Radio communication tester	R&S	CMW500	137688-Lv	2019/10/26	2020/10/25

5. TEST CONDITIONS AND RESULTS

5.1. Antenna Requirement

Requirement

FCC CFR Title 47 Part 15 Subpart C Section 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

FCC CFR Title 47 Part 15 Subpart C Section 15.247(c) (1)(i):

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

RSS-Gen 8.3

A transmitter can only be sold or operated with antennas with which it was approved. Transmitter may be approved with multiple antenna types. An antenna type comprises antennas having similar in-band and out-of-band radiation patterns. Testing shall be performed using the highest gain antenna of each combination of transmitter and antenna type for which approval is being sought, with the transmitter output power set at the maximum level. Any antenna of the same type having equal or lesser gain as an antenna that had been successfully tested with the transmitter, will also be considered approved with the transmitter, and may be used and marketed with the transmitter. For Category I transmitters, the manufacturer shall include with the application for certification a list of acceptable antenna types to be used with the transmitter.
When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on measurement or on data from the antenna manufacturer. For transmitters of RF output power of 10 milliwatts or less, only the portion of the antenna gain that is in excess of 6 dBi (6 dB above isotropic gain) shall be added to the measured RF output power to demonstrate compliance with the radiated power limits specified in the applicable standard. For transmitters of output power greater than 10 milliwatts, the total antenna gain shall be added to the measured RF output power to demonstrate compliance to the specified radiated power limits.

TEST RESULT

☐ **Passed** ☒ **Not Applicable**

5.2. AC Conducted Emission

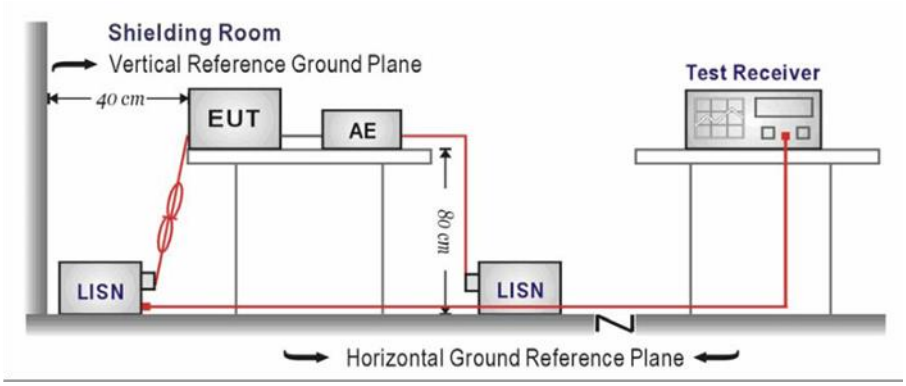
LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.207, RSS-Gen Section 8.8

Frequency range (MHz)	Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup according to ANSI C63.10 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment.
4. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
5. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
6. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
7. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
8. During the above scans, the emissions were maximized by cable manipulation.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

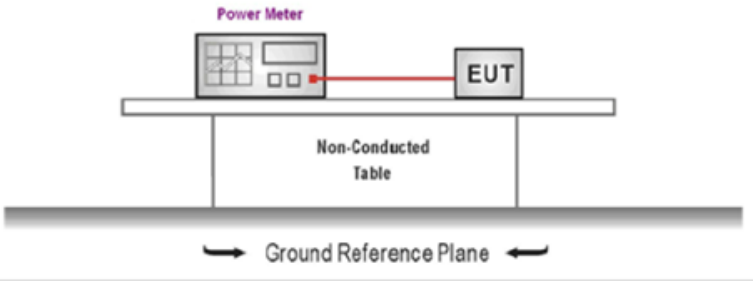
☐ **Passed** ☒ **Not Applicable**

5.3. Conduct Output Power

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (b)(3), RSS-247 5.4 d): 30dBm

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was tested according to ANSI C63.10 and KDB 558074 D01 requirements.
2. The maximum average conducted output power may be measured using a broadband average RF power meter.
3. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.
4. Record the measurement data.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

☒ **Passed** ☐ **Not Applicable**

TEST Data

Please refer to appendix A on the appendix report

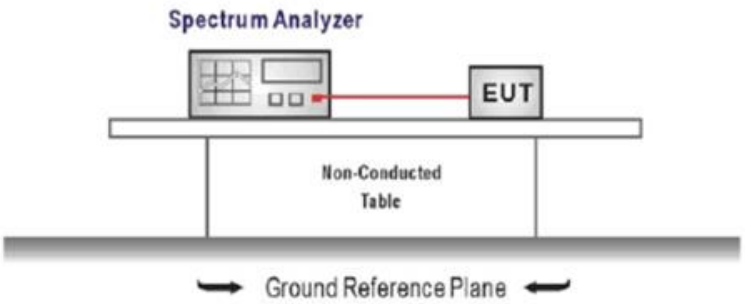
5.4. Power Spectral Density

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (e), RSS-247 5.2 b):

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8dBm in any 3 kHz band during any time interval of continuous transmission.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input,
2. Configure the spectrum analyzer as shown below:
   Center frequency=DTS channel center frequency
   Span =1.5 times the DTS bandwidth
   RBW = 3 kHz ≤ RBW ≤ 100 kHz, VBW ≥ 3 × RBW
   Sweep time = auto couple
   Detector = peak
   Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
4. Use the peak marker function to determine the maximum amplitude level within the RBW.
5. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

☒ **Passed** ☐ **Not Applicable**

TEST Data

Please refer to appendix B on the appendix report

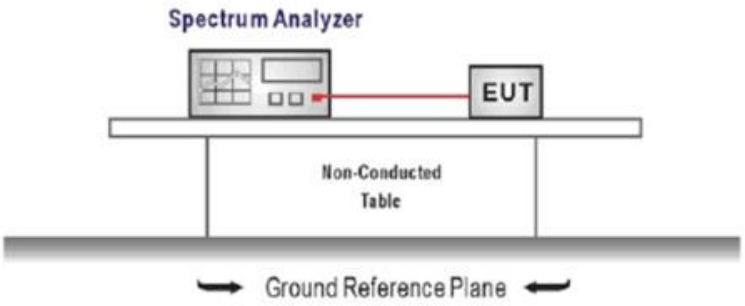
5.5. 6dB bandwidth

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (a)(2), RSS-247 5.2 a):

For digital modulation systems, the minimum 6 dB bandwidth shall be at least 500 kHz.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below (enter all losses between the transmitter output and the spectrum analyzer).

   Center Frequency =DTS channel center frequency

   Span=2 x DTS bandwidth

   RBW = 100 kHz, VBW ≥ 3 × RBW

   Sweep time= auto couple

   Detector = Peak

   Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
4. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission, and record the pertinent measurements.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

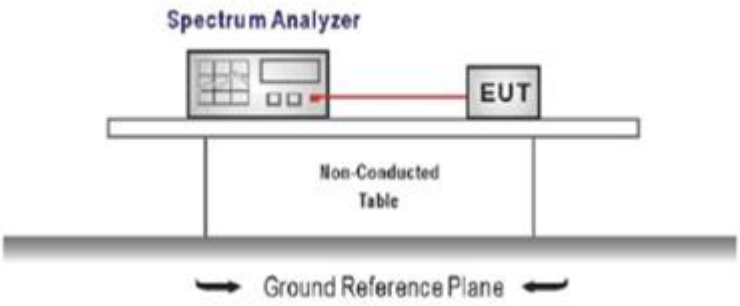
☐ **Passed** ☒ **Not Applicable**

5.6. 99% Occupied Bandwidth

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below (enter all losses between the transmitter output andthe spectrum analyzer).
   Center Frequency =channel center frequency
   Span≥1.5 x OBW
   RBW = 1%~5%OBW
   VBW ≥ 3 × RBW
   Sweep time= auto couple
   Detector = Peak
   Trace mode = max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

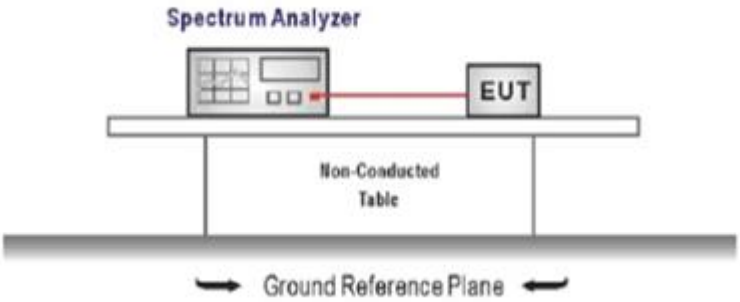
☐ **Passed** ☒ **Not Applicable**

5.7. Duty Cycle

LIMIT

N/A

TEST CONFIGURATION



TEST PROCEDURE

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:
   Span=zero span, Frequency=centered channel, RBW= 1 MHz, VBW ≥ RBW
   Sweep=as necessary to capture the entire dwell time,
   Detector function = peak, Trigger mode
4. Measure and record the duty cycle data

TEST MODE:

Please refer to the clause 4.2

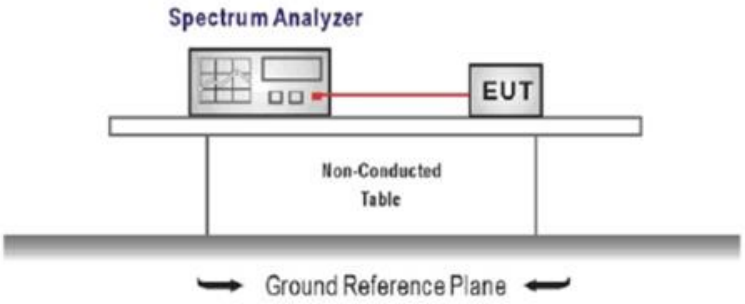
☐ **Passed** ☒ **Not Applicable**

5.8. Conducted Band edge and Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section15.247 (d), RSS-247 5.5: In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

TEST CONFIGURATION



TEST PROCEDURE

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Establish a reference level by using the following procedure
   Center frequency=DTS channel center frequency
   The span = 1.5 times the DTS bandwidth.
   RBW = 100 kHz, VBW ≥ 3 x RBW
   Detector = peak, Sweep time = auto couple, Trace mode = max hold
   Allow trace to fully stabilize
   Use the peak marker function to determine the maximum PSD level

   Note that the channel found to contain the maximum PSD level can be used to establish the reference level.
3. Emission level measurement
   Set the center frequency and span to encompass frequency range to be measured
   RBW = 100 kHz, VBW ≥ 3 x RBW
   Detector = peak, Sweep time = auto couple, Trace mode = max hold
   Allow trace to fully stabilize
   Use the peak marker function to determine the maximum amplitude level.
4. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter waveform on the spectrum analyzer.
5. Ensure that the amplitude of all unwanted emission outside of the authorized frequency band excluding restricted frequency bands) are attenuated by at least the minimum requirements specified (at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz). Report the three highest emission relative to the limit.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

☐ **Passed** ☒ **Not Applicable**

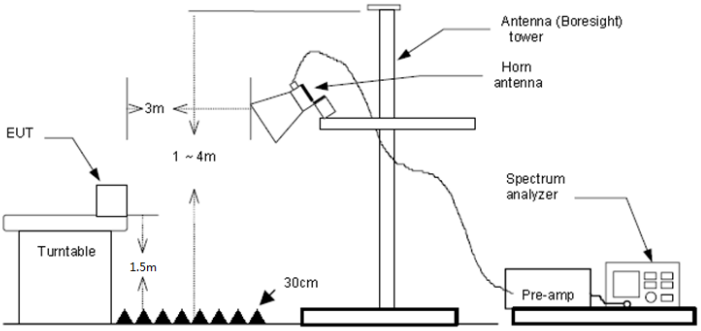
5.9. Radiated Band edge Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d), RSS-247 5.5:

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, Radiated Emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the Radiated Emissions limits specified in §15.209(a) (see §15.205(c)).

TEST CONFIGURATION



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT waspositioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. Thisis repeated for both horizontal and vertical polarization of the antenna. In order to find themaximum emission, all of the interface cables were manipulated according to ANSI C63.10 on radiated measurement.
5. Use the following spectrum analyzer settings:
   a) Span shall wide enough to fully capture the emission being measured
   b) Set RBW=100kHz for <1GHz, VBW=3*RBW, Sweep time=auto, Detector=peak, Trace=max hold
   c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

      For average measurement:

      – VBW=10Hz, When duty cycle is no less than 98 percent
      – VBW≥1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clasue 5.6 duty cycle.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

☐ **Passed** ☒ **Not Applicable**

5.10. Radiated Spurious Emission

LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209, RSS-247 5.5

Frequency	Limit (dBuV/m)	Value
0.009 MHz ~0.49 MHz	2400/F(kHz) @300m	Quasi-peak
0.49 MHz ~ 1.705 MHz	24000/F(kHz) @30m	Quasi-peak
1.705 MHz ~30 MHz	30 @30m	Quasi-peak

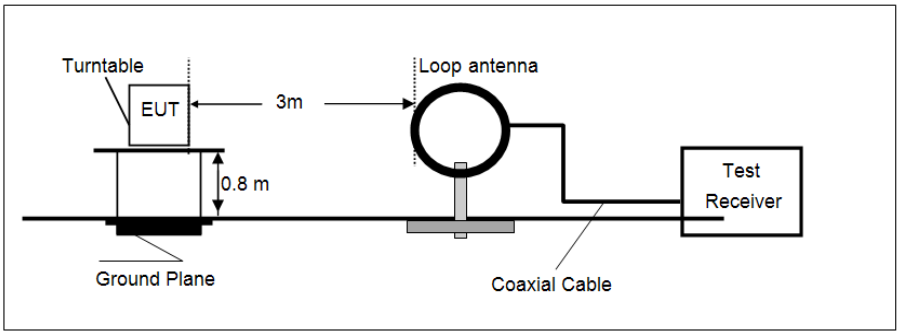
Note: Limit dBuV/m @3m = Limit dBuV/m @300m + 40*log(300/3)= Limit dBuV/m @300m +80,

Limit dBuV/m @3m = Limit dBuV/m @30m +40*log(30/3)= Limit dBuV/m @30m + 40.

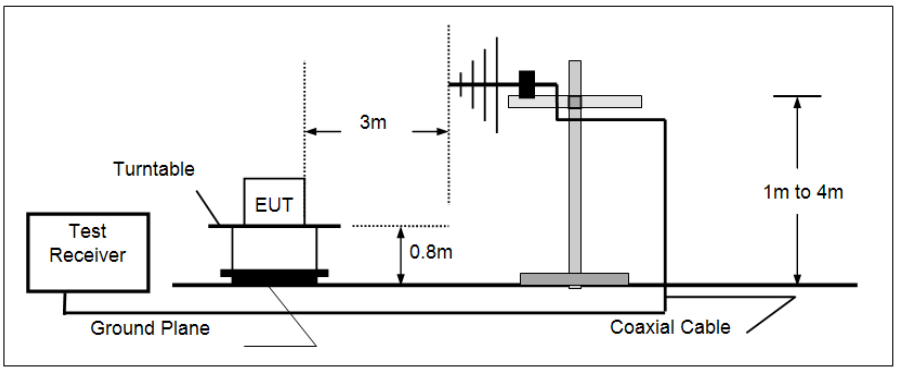
Frequency	Limit (dBuV/m @3m)	Value
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz~1GHz	54.00	Quasi-peak
Above 1GHz	54.00	Average
	74.00	Peak

TEST CONFIGURATION

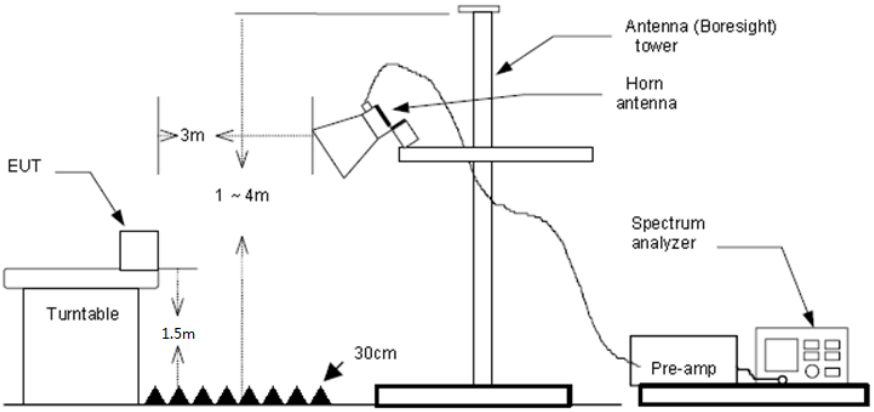
- 9 kHz ~ 30 MHz



- 30 MHz ~ 1 GHz



- Above 1 GHz



TEST PROCEDURE

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
   a) Span shall wide enough to fully capture the emission being measured;
   b) Below 1 GHz:

      RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;

      If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
   c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement

      For average measurement:
      – VBW=10Hz, When duty cycle is no less than 98 percent
      – VBW≥1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation, so refer to this clasue 5.6 duty cycle.

TEST MODE:

Please refer to the clause 4.2

TEST RESULT

☐ **Passed** ☒ **Not Applicable**

6. TEST SETUP PHOTOS

N/A.

7. EXTERANAL AND INTERNAL PHOTOS

N/A.

8. APPENDIX REPORT

APPENDIX REPORT

Project No.	SHT1912009501EW	Radio Specification	WIFI 2.4G
Test sample No.	-	Model No.	DL01
Start test date	2019/9/11	Finish date	2019/9/11
Temperature	25°C	Humidity	50%
Test Engineer	-	Auditor	-

Appendix clause	Test item	Result
A	Conducted Peak Output Power	PASS
B	Power Spectral Density	PASS

Appendix A：Conducted Peak Output Power

ANT1:

Type	Channel	Average Output power (dBm)	Antenna Gain(dBi)	EIRP(dBm)	Limit (dBm)	Result
802.11b	01	16.42	2.74	19.16	≤30.00	Pass
	06	17.62	2.74	20.36		
	11	16.22	2.74	18.96		
802.11g	01	16.46	2.74	19.20	≤30.00	Pass
	06	18.20	2.74	20.94		
	11	16.71	2.74	19.45		
802.11n(HT20)	01	16.78	2.74	19.52	≤30.00	Pass
	06	18.07	2.74	20.81		
	11	16.56	2.74	19.30		

ANT2:

Type	Channel	Average Output power (dBm)	Antenna Gain(dBi)	EIRP(dBm)	Limit (dBm)	Result
802.11b	01	16.10	2.93	19.03	≤30.00	Pass
	06	17.90	2.93	20.83		
	11	16.10	2.93	19.03		
802.11g	01	16.10	2.93	19.03	≤30.00	Pass
	06	17.90	2.93	20.83		
	11	16.20	2.93	19.13		
802.11n(HT20)	01	15.48	2.93	18.41	≤30.00	Pass
	06	17.93	2.93	20.86		
	11	15.49	2.93	18.42		

MIMO:

Type	Channel	Average Output power (dBm)	MIMO Antenna Gain(dBi)	EIRP(dBm)	Limit (dBm)	Result
802.11n(HT20)	01	19.19	3.84	23.030	≤30.00	Pass
	06	21.01	3.84	24.850		
	11	19.07	3.84	22.910		

Note:
numeric gain=10^(antenna gain(dBi)/10)
antenna gain(dBi)=10*log(numeric gain)

Appendix B：Power Spectral Density

ANT1:

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	1.46	≤8.00	Pass
	06	2.72		
	11	1.38		
802.11g	01	-3.38	≤8.00	Pass
	06	-1.39		
	11	-3.08		
802.11n(HT20)	01	-4.19	≤8.00	Pass
	06	-3.42		
	11	-4.51		

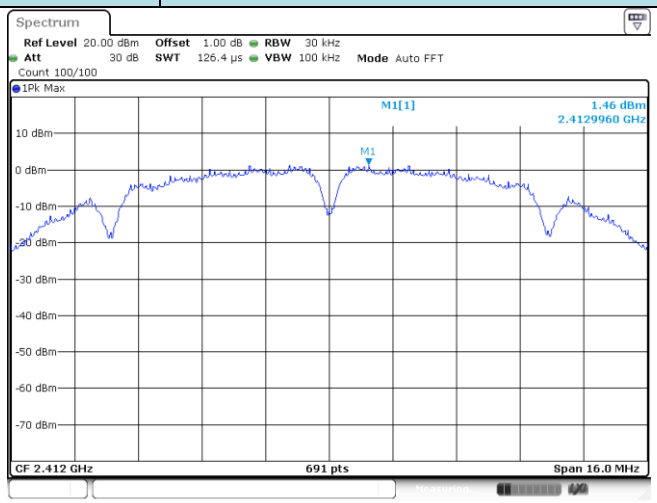
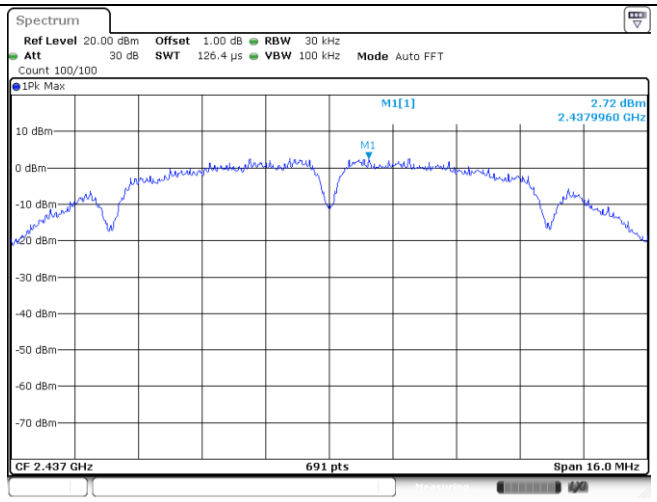
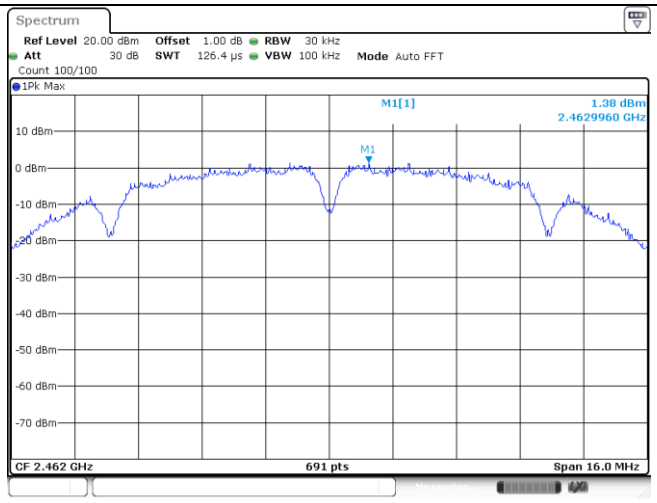
ANT2:

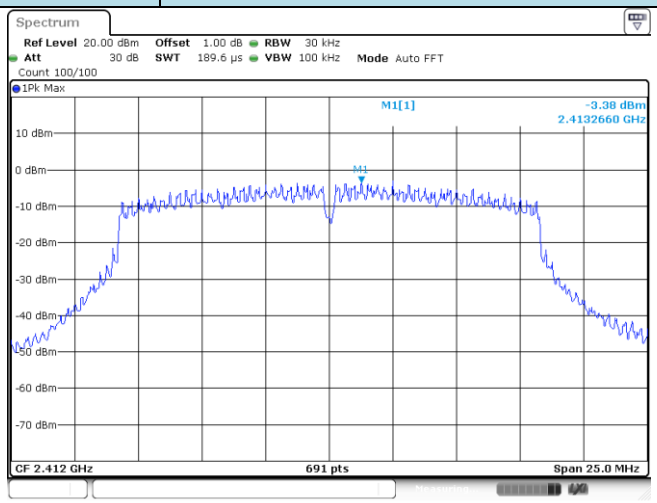
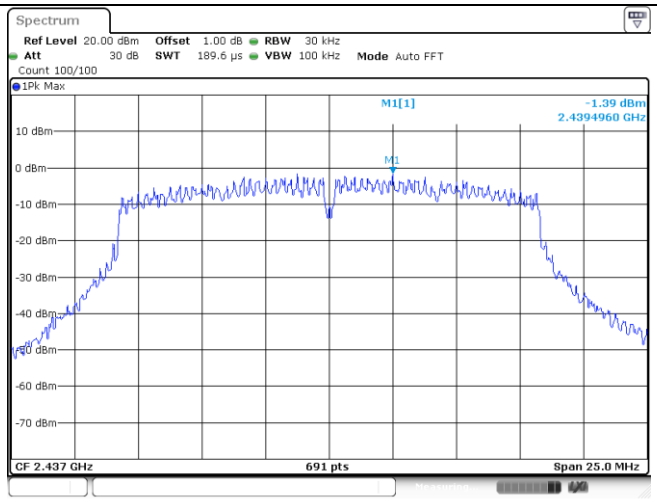
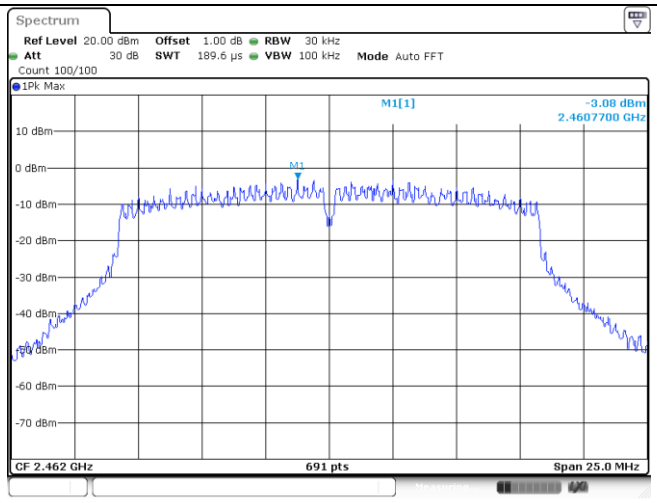
Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11b	01	1.23	≤8.00	Pass
	06	2.45		
	11	1.66		
802.11g	01	-3.56	≤8.00	Pass
	06	-2.18		
	11	-3.61		
802.11n(HT20)	01	-4.05	≤8.00	Pass
	06	-2.11		
	11	-3.66		

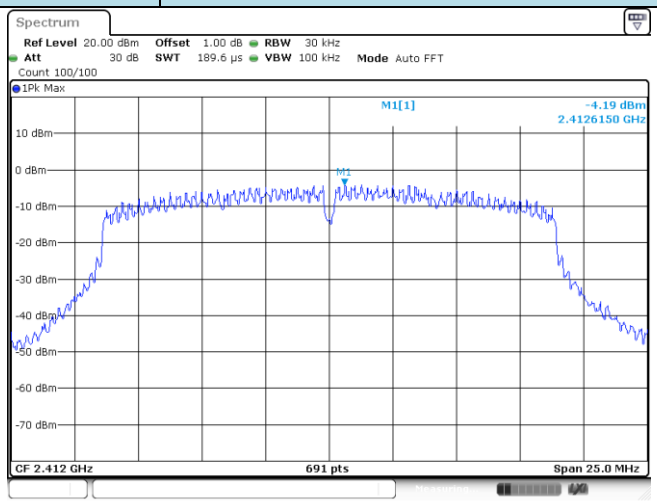
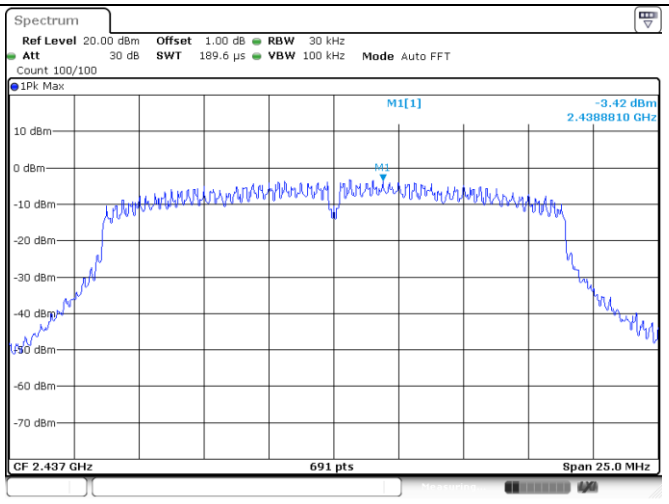
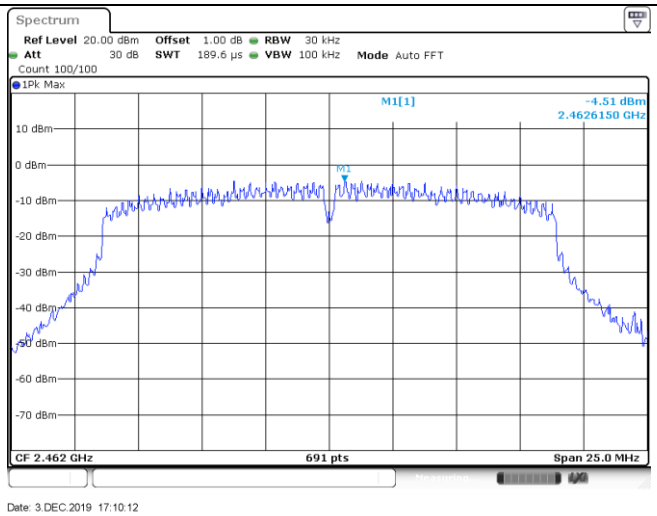
MIMO:

Type	Channel	Power Spectral Density (dBm/30KHz)	Limit (dBm/3KHz)	Result
802.11n(HT20)	01	0.14	≤8.00	Pass
	06	1.61		
	11	0.54		

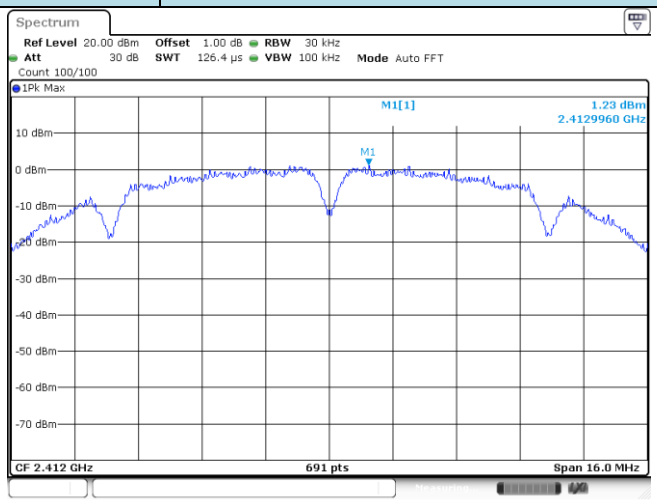
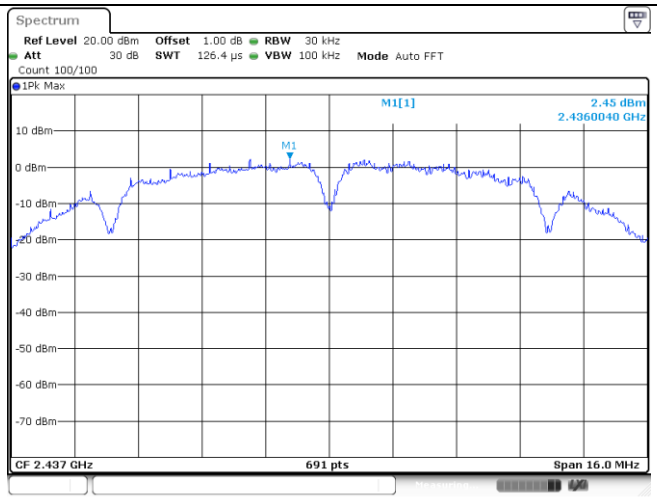
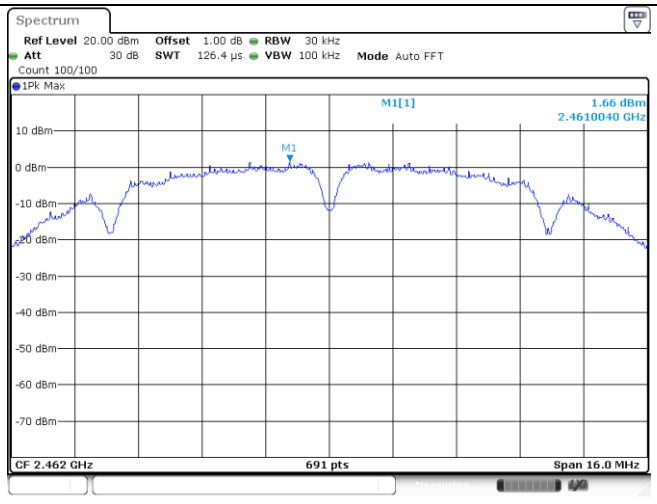
ANT1:

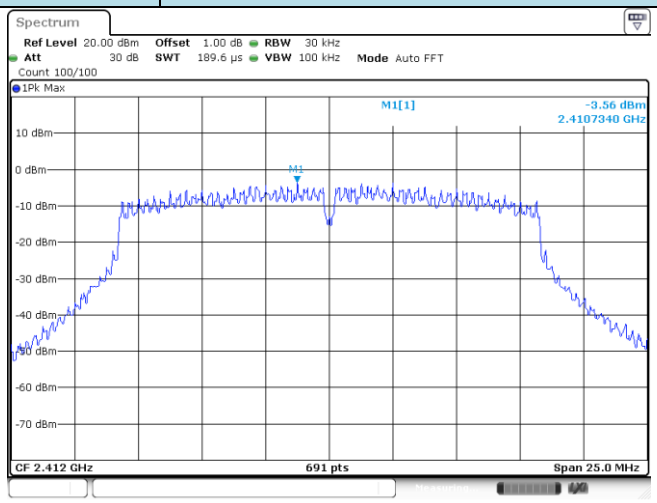
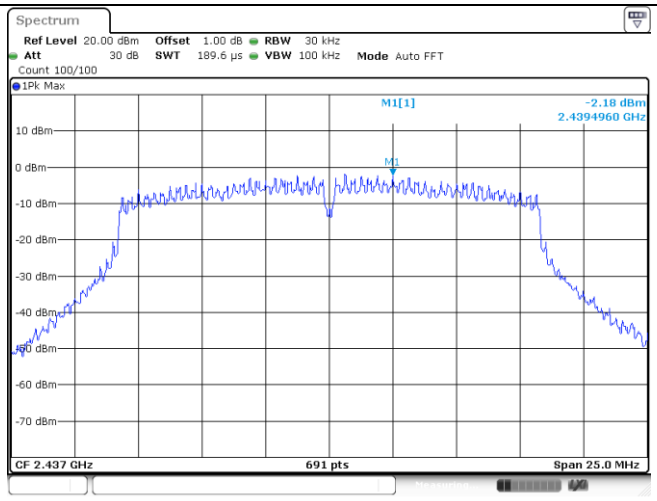
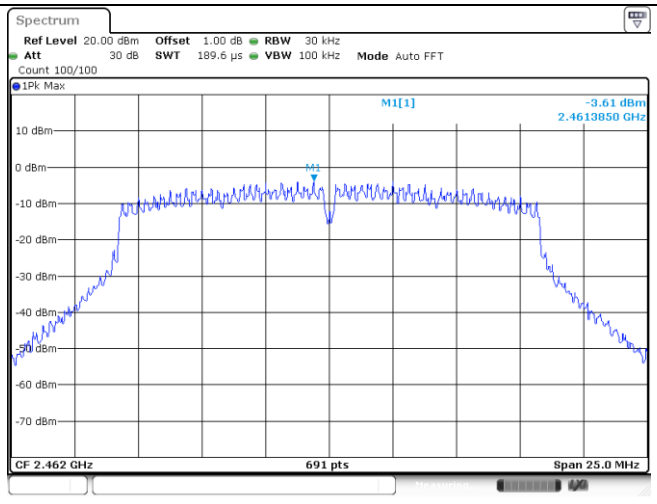
Type:	**802.11 b**
CH01	
CH06	
CH11	

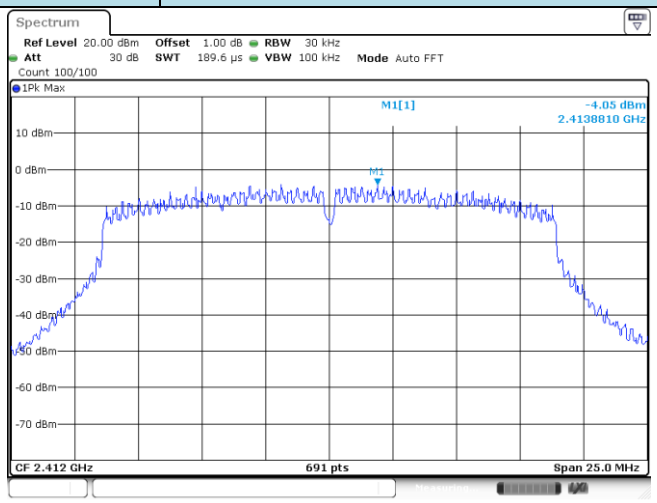
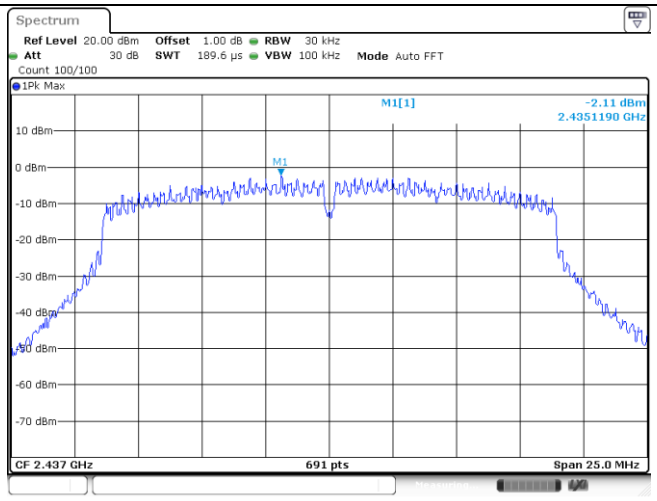
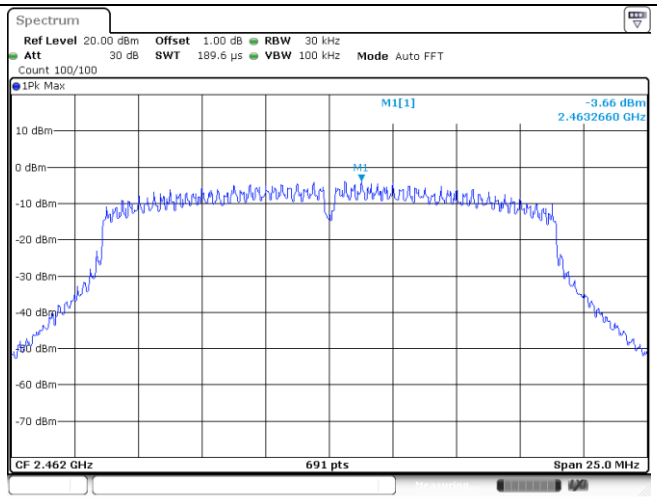
Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

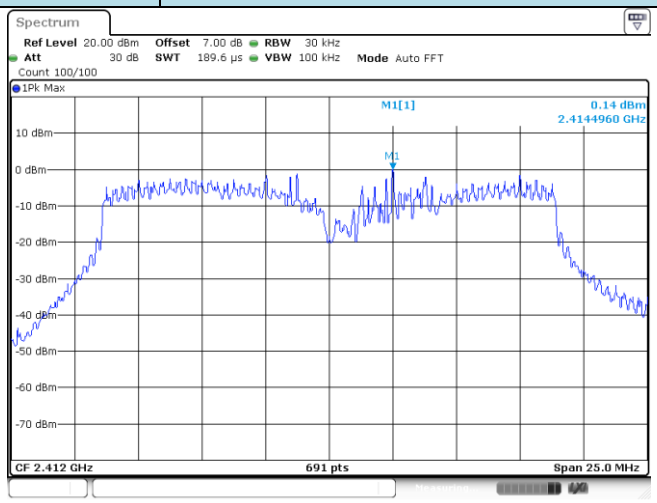
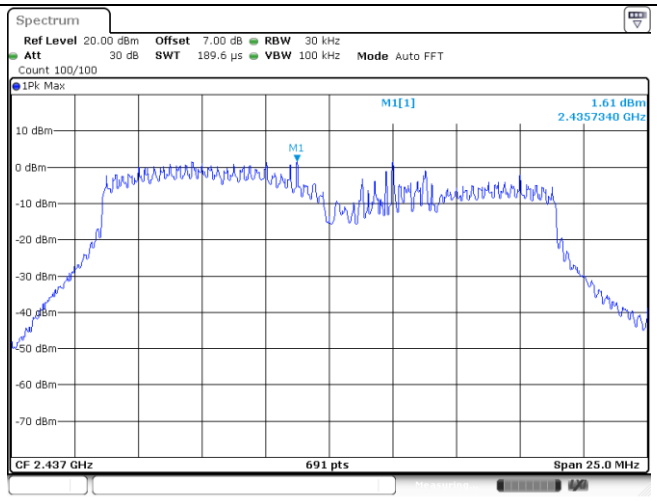
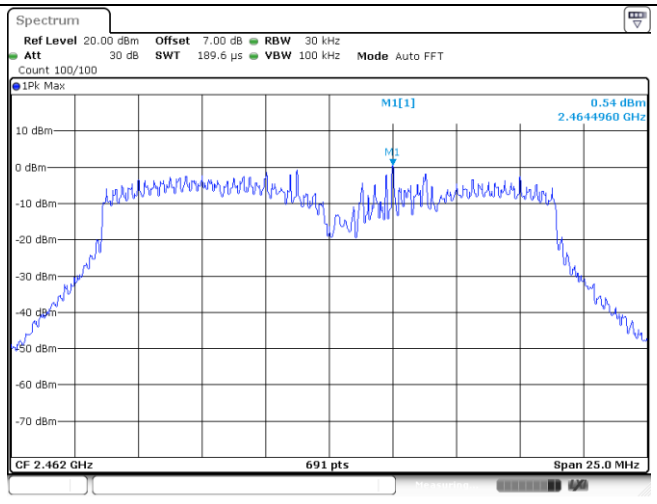
ANT2:

Type:	**802.11 b**
CH01	
CH06	
CH11	

Type:	802.11 g
CH01	
CH06	
CH11	

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

MIMO:

Type:	802.11n(HT20)
CH01	
CH06	
CH11	

--------End of Report--------