

APPLICATION CERTIFICATION FCC Part 15C  
On Behalf of  
Xiamen Prima Technology Inc

WiFi module  
Model No.: WPC0GR2231

FCC ID: 2ADID-WPC0GR

Prepared for : Xiamen Prima Technology Inc.  
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Report No. : ATE20160895  
Date of Test : May 13, 2016--Aug 02, 2016  
Date of Report : Aug 03, 2016

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## Test Report Certification

Applicant : Xiamen Prima Technology Inc

Manufacturer : Xiamen Prima Technology Inc

EUT Description : WiFi module

- (A) MODEL NO.: WPC0GR2231
- (B) Trade Mark : PRIMA
- (C) Voltage: DC 12V

Measurement Procedure Used:

**FCC Rules and Regulations Part 15 Subpart C Section 15.247:2015  
ANSI C63.10: 2013**

The EUT was tested according to DTS test procedure of Apr 08, 2016 KDB558074 D01 DTS Meas Guidance v03r05 for compliance to FCC 47CFR 15.247 requirements

The device described above is tested by ACCURATE TECHNOLOGY CO. LTD to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and ACCURATE TECHNOLOGY CO. LTD is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of ACCURATE TECHNOLOGY CO. LTD.

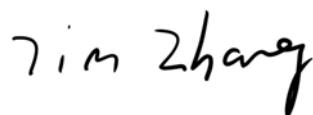
Date of Test :

May 13, 2016--Aug 02, 2016

Date of Report:

Aug 03, 2016

Prepared by :

  
( Tim.zhang, Engineer)

Approved & Authorized Signer :

  
( Sean Liu, Manager)

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

EUT	:	WiFi module
Model Number	:	WPC0GR2231
Frequency Range	:	802.11b/g/n(20MHz): 2412-2462MHz 802.11n(40MHz): 2422-2452MHz
Number of Channels	:	802.11b/g/n (20MHz):11 802.11n (40MHz): 7
G <sub>ANT</sub> MAX	:	2dBi(two antennas have the same gain)
Array Gain	:	For power spectral density (PSD) measurements on all devices, $\text{Array Gain} = 10 \log(N_{\text{ANT}}/N_{\text{SS}}) \text{ dB.} = 10 \log(2/1) = 3.01$ devices can operate with one spatial stream ( $N_{\text{SS}} = 1$ ), $N_{\text{ANT}}$ = number of transmit antennas. For power measurements on IEEE 802.11 devices $\text{Array Gain} = 0 \text{ dB}$ (i.e., no array gain) for $N_{\text{ANT}} \leq 4$
Directional gain	:	$G_{\text{ANT}} + \text{Array Gain} = 5.01$
Type of Antenna	:	MIMO Antenna
Power Supply	:	DC 12V
Data Rate	:	802.11b: 11, 5.5, 2, 1 Mbps 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: up to 150Mbps
Modulation Type	:	CCK, OFDM
Applicant Address	:	Xiamen Prima Technology Inc No.178, Xinfeng Road, Xiamen, Fujian, P.R. China.
Manufacturer Address	:	Xiamen Prima Technology Inc Wanlida, Industry Zone Building C, Nanjing Fujian, P.R. China.
Date of sample received	:	May 13, 2016
Date of Test	:	May 13, 2016--Aug 02, 2016

## 1.2.Description of Test Facility

EMC Lab	: Accredited by TUV Rheinland Shenzhen
	Listed by FCC The Registration Number is 752051
	Listed by Industry Canada The Registration Number is 5077A-2
	Accredited by China National Accreditation Committee for Laboratories The Certificate Registration Number is L3193
Name of Firm	: ACCURATE TECHNOLOGY CO. LTD
Site Location	: F1, Bldg. A, Changyuan New Material Port, Keyuan Rd. Science & Industry Park, Nanshan, Shenzhen, Guangdong P.R. China

## 1.3.Measurement Uncertainty

Conducted Emission Expanded Uncertainty	= 2.23dB, k=2
Radiated emission expanded uncertainty (9kHz-30MHz)	= 3.08dB, k=2
Radiated emission expanded uncertainty (30MHz-1000MHz)	= 4.42dB, k=2
Radiated emission expanded uncertainty (Above 1GHz)	= 4.06dB, k=2

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

Kind of equipment	Manufacturer	Type	S/N	Calibrated dates	Calibrated until
EMI Test Receiver	Rohde&Schwarz	ESCS30	100307	Jan. 10, 2016	Jan. 09, 2017
EMI Test Receiver	Rohde&Schwarz	ESPI3	101526/003	Jan. 10, 2016	Jan. 09, 2017
Spectrum Analyzer	Agilent	E7405A	MY45115511	Jan. 10, 2016	Jan. 09, 2017
Pre-Amplifier	Rohde&Schwarz	CBLU118354 0-01	3791	Jan. 10, 2016	Jan. 09, 2017
Loop Antenna	Schwarzbeck	FMZB1516	1516131	Jan. 14, 2016	Jan. 13, 2017
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	Jan. 14, 2016	Jan. 13, 2017
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	Jan. 14, 2016	Jan. 13, 2017
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	Jan. 14, 2016	Jan. 13, 2017
LISN	Rohde&Schwarz	ESH3-Z5	100305	Jan. 10, 2016	Jan. 09, 2017
LISN	Schwarzbeck	NSLK8126	8126431	Jan. 10, 2016	Jan. 09, 2017
Highpass Filter	Wainwright Instruments	WHKX3.6/18 G-10SS	N/A	Jan. 10, 2016	Jan. 09, 2017
Band Reject Filter	Wainwright Instruments	WRCG2400/2 485-2375/2510 -60/11SS	N/A	Jan. 10, 2016	Jan. 09, 2017

### 3. OPERATION OF EUT DURING TESTING

#### 3.1.Operating Mode

The mode is used: **1.802.11b Transmitting mode**

Low Channel: 2412MHz  
Middle Channel: 2437MHz  
High Channel: 2462MHz

**2.802.11g Transmitting mode**

Low Channel: 2412MHz  
Middle Channel: 2437MHz  
High Channel: 2462MHz

**3.802.11n (20MHz) Transmitting mode**

Low Channel: 2412MHz  
Middle Channel: 2437MHz  
High Channel: 2462MHz

**4.802.11n (40MHz) Transmitting mode**

Low Channel: 2422MHz  
Middle Channel: 2437MHz  
High Channel: 2452MHz

#### 3.2.Carrier Frequency of Channels

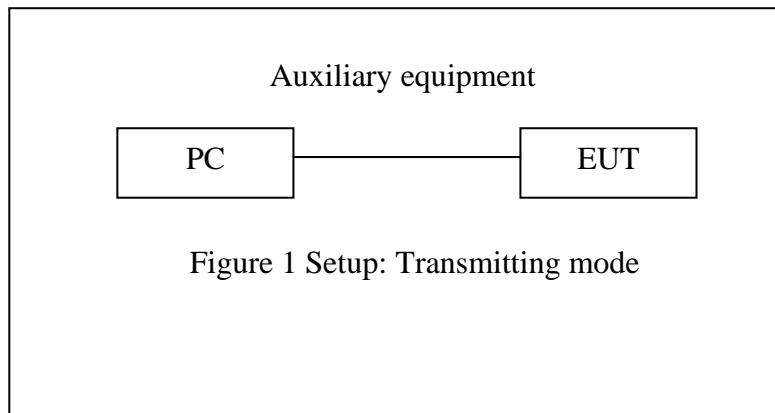
802.11b, 802.11g, 802.11n (20MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
01	2412	07	2442
02	2417	08	2447
03	2422	09	2452
04	2427	10	2457
05	2432	11	2462
06	2437	---	---

802.11n (40MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
---	---	07	2442
---	---	08	2447
03	2422	09	2452
04	2427	---	---
05	2432	---	---
06	2437	---	---

### 3.3.Configuration and peripherals



(EUT: WiFi module)

Note: The EUT have two antenna(1 and 2), They can transmit simultaneously,

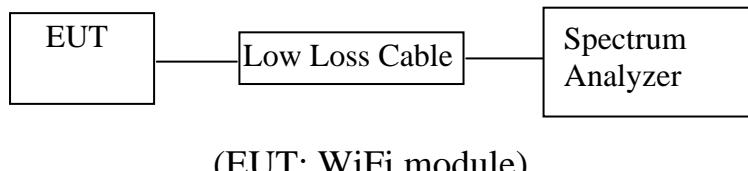
## 4. TEST PROCEDURES AND RESULTS

FCC Rules	Description of Test	Result
Section 15.207	AC power Line Conducted Emission Test	N/A
Section 15.247(a)(2)	6dB Occupied Bandwidth Test	Compliant
Section 15.247(b)(3)	Conducted Peak Output Power Test	Compliant
Section 15.247(e)	Power Spectral Density Test	Compliant
Section 15.205 Section 15.209	Radiated Spurious Emissions Test	Compliant
Section 15.247(d)	Band Edge Compliance Test	Compliant
Section 15.203	Antenna Requirement	Compliant

Note: The power supply mode of the EUT is DC 12V, According to the FCC standard requirements, conducted emission is not applicable.

## 5. 6DB OCCUPIED BANDWIDTH TEST

### 5.1. Block Diagram of Test Setup



### 5.2. The Requirement For Section 15.247(a)(1)

Section 15.247(a)(2): Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands. The minimum 6 dB band-width shall be at least 500 kHz

### 5.3. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 5.4. Operating Condition of EUT

5.4.1. Setup the EUT and simulator as shown as Section 5.1.

5.4.2. Turn on the power of all equipment.

5.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

### 5.5. Test Procedure

5.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

5.5.2. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz.

5.5.3. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

## 5.6. Test Result

The test was performed with 802.11b

Channel	Frequency (MHz)	6dB Bandwidth ANT 1 (MHz)	6dB Bandwidth ANT 2(MHz)	Limit (MHz)
Low	2412	10.072	10.072	> 0.5MHz
Middle	2437	10.101	10.101	> 0.5MHz
High	2462	10.101	10.101	> 0.5MHz

The test was performed with 802.11g

Channel	Frequency (MHz)	6dB Bandwidth ANT 1 (MHz)	6dB Bandwidth ANT 2(MHz)	Limit (MHz)
Low	2412	16.469	16.469	> 0.5MHz
Middle	2437	16.469	16.469	> 0.5MHz
High	2462	16.469	16.469	> 0.5MHz

The test was performed with 802.11n (Bandwidth: 20 MHz)

Channel	Frequency (MHz)	6dB Bandwidth ANT 1 (MHz)	6dB Bandwidth ANT 2(MHz)	Limit (MHz)
Low	2412	17.626	17.626	> 0.5MHz
Middle	2437	17.626	17.626	> 0.5MHz
High	2462	17.627	17.627	> 0.5MHz

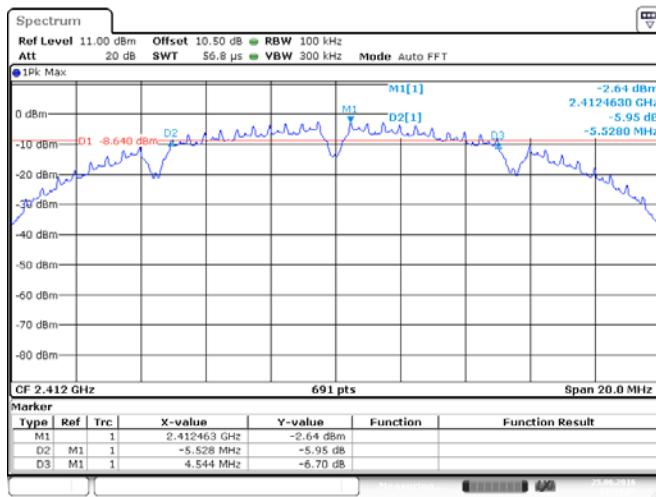
The test was performed with 802.11n (Bandwidth: 40 MHz)

Channel	Frequency (MHz)	6dB Bandwidth ANT 1 (MHz)	6dB Bandwidth ANT 2(MHz)	Limit (MHz)
Low	2422	36.006	36.006	> 0.5MHz
Middle	2437	35.882	35.882	> 0.5MHz
High	2452	35.875	35.875	> 0.5MHz

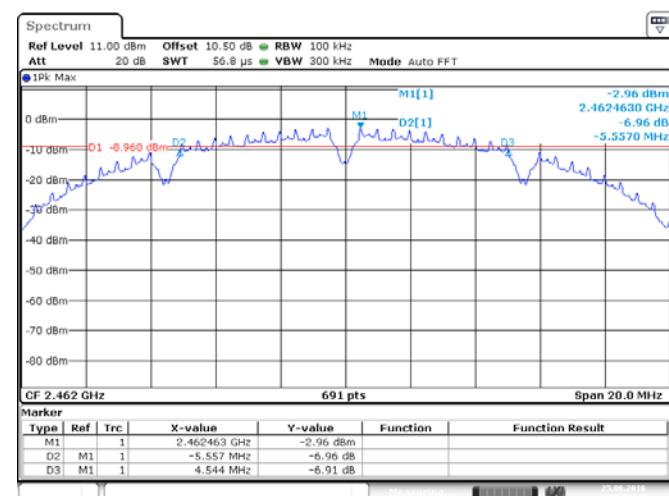
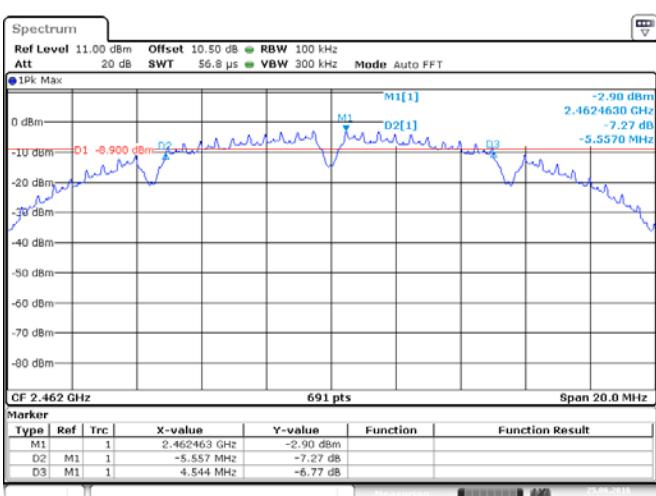
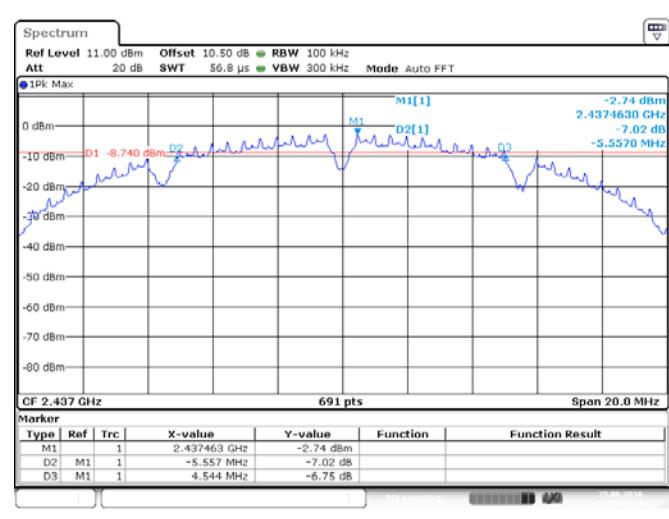
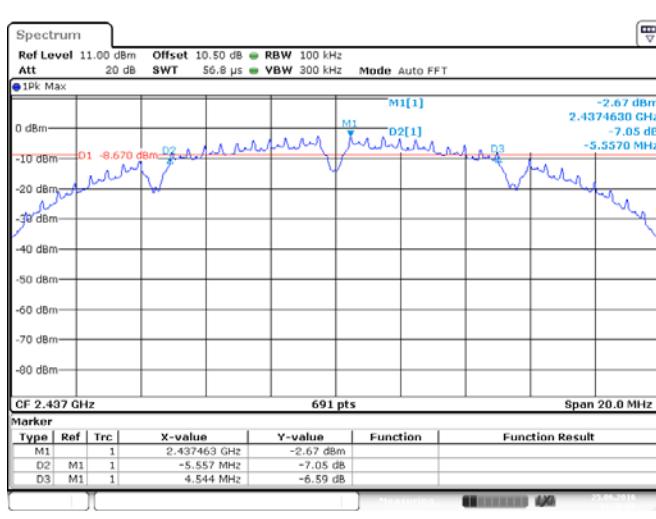
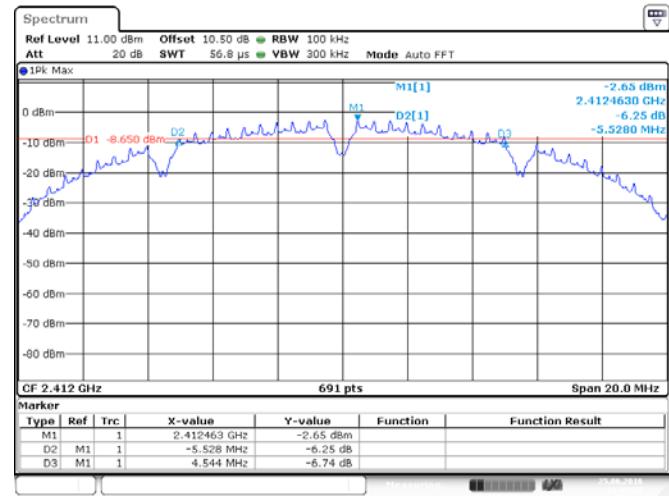
The spectrum analyzer plots are attached as below.

## 6dB Bandwidth

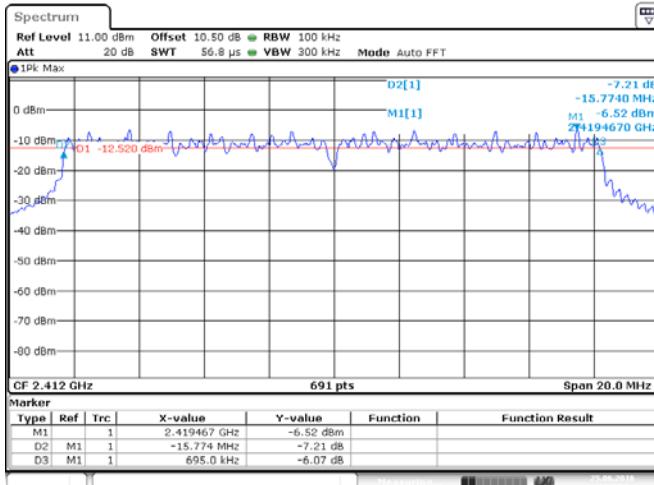
ANT 1(802.11b)



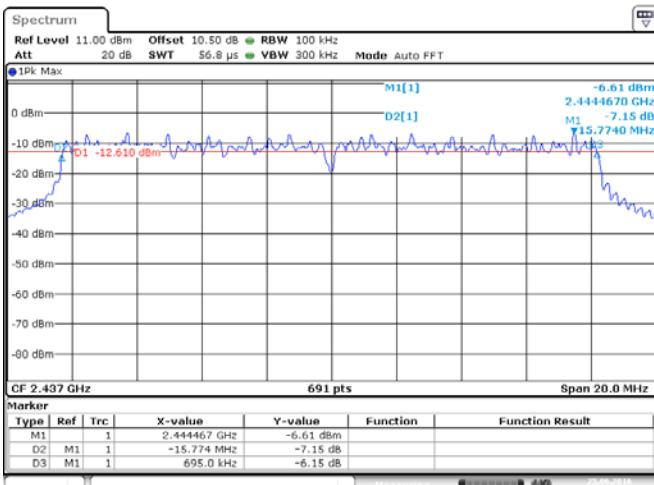
ANT 2(802.11b)



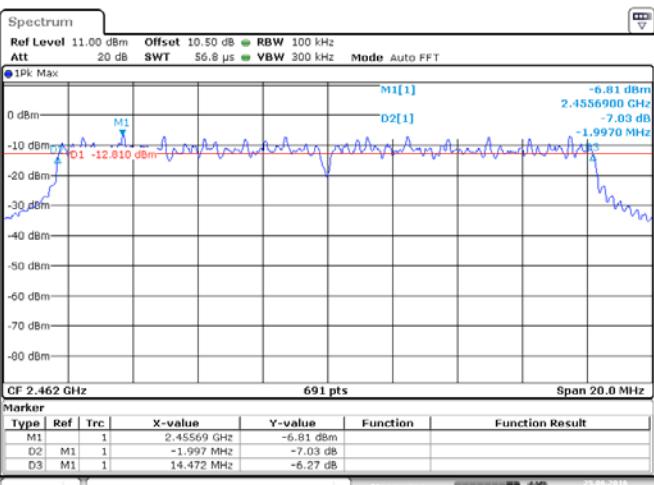
## ANT 1(802.11g)



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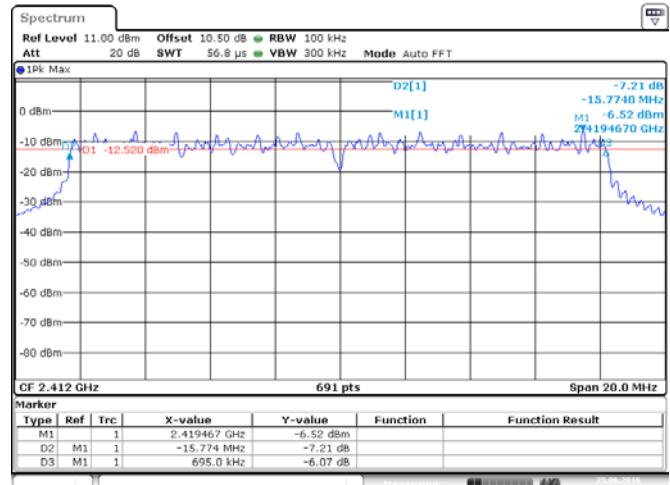


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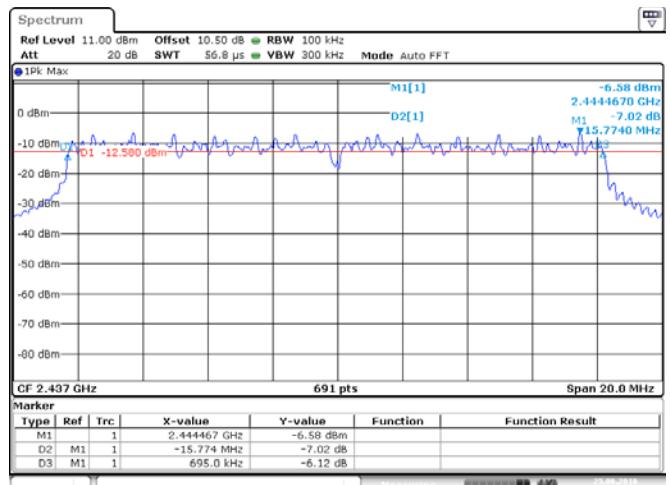


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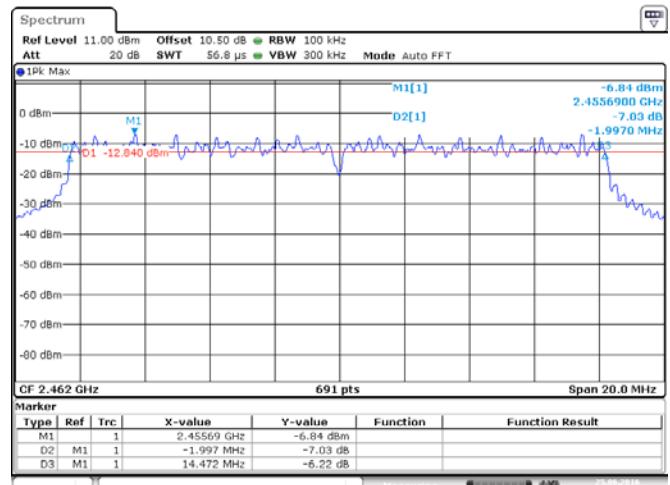
## ANT 2(802.11g)



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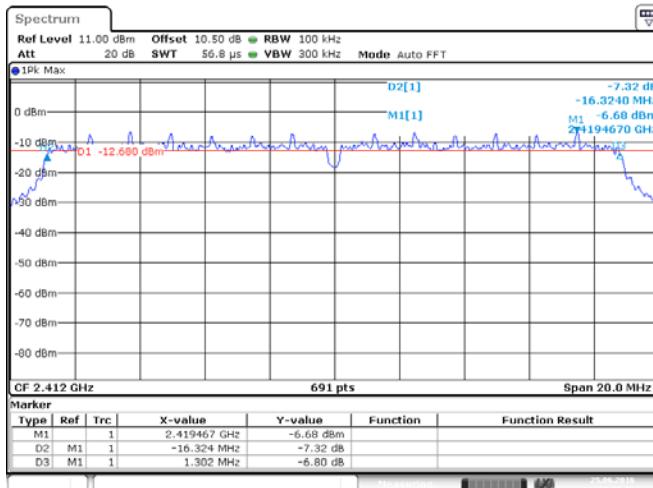


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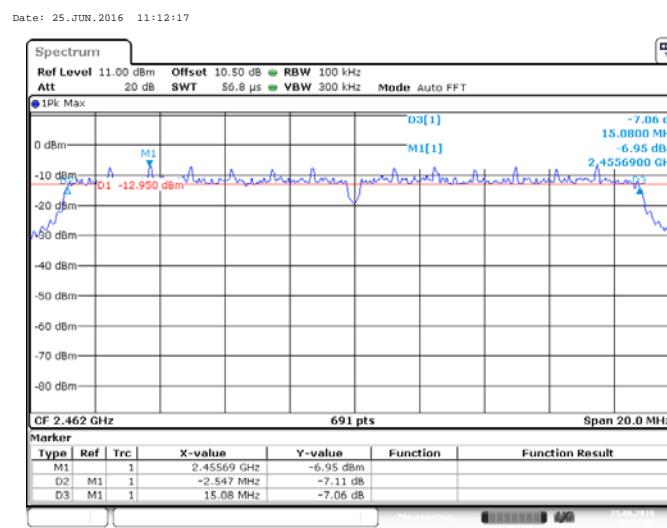
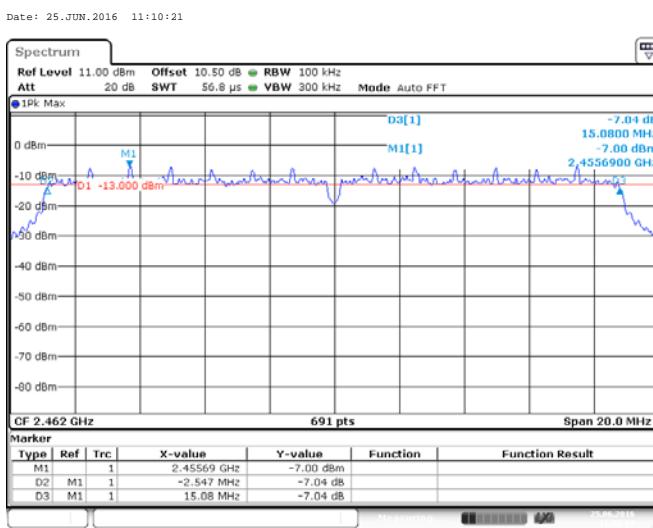
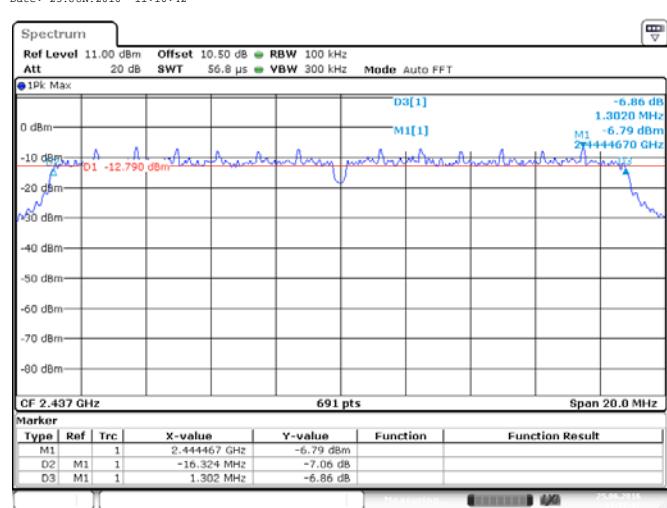
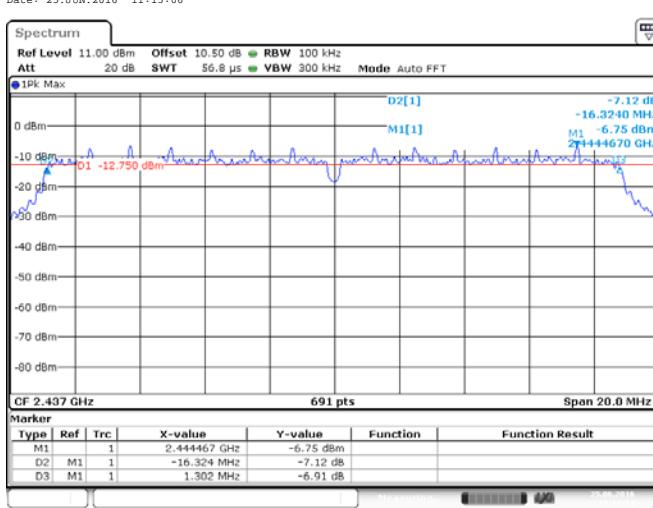
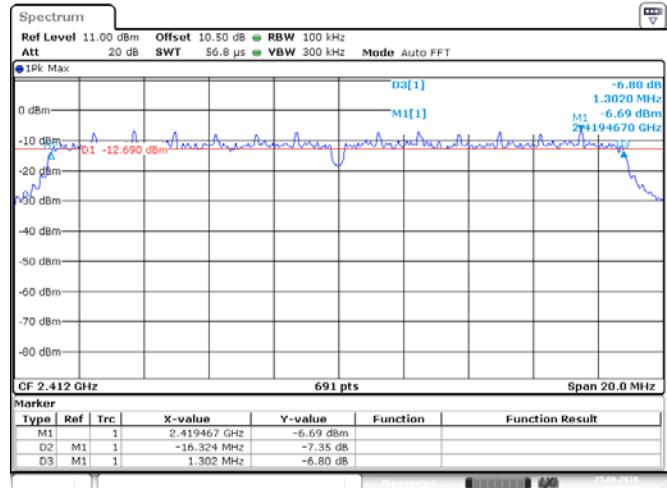


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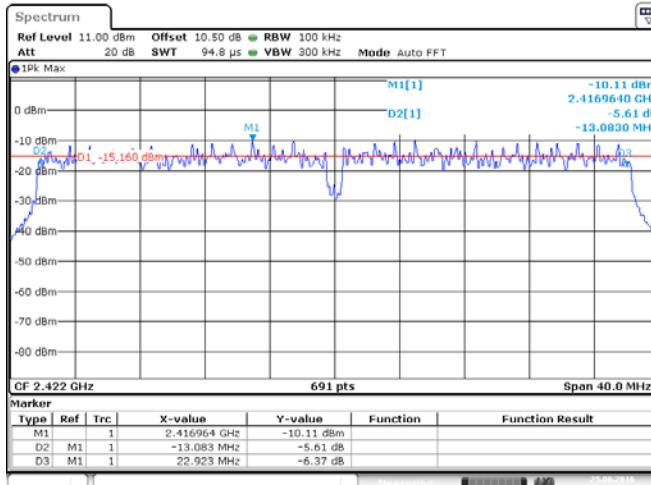
## ANT 1(802.11n20)



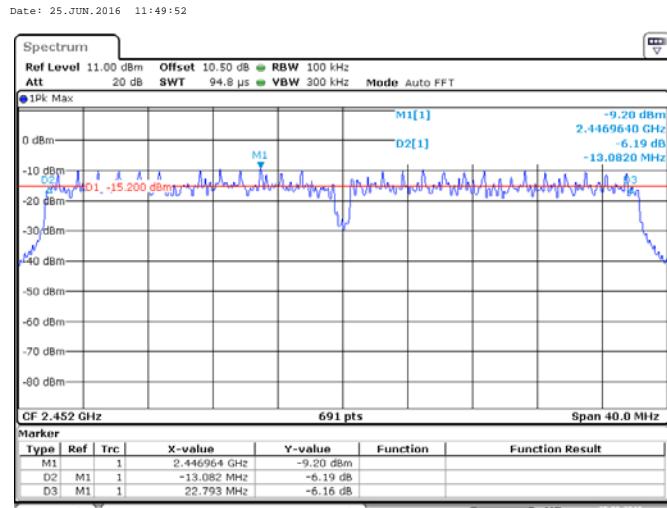
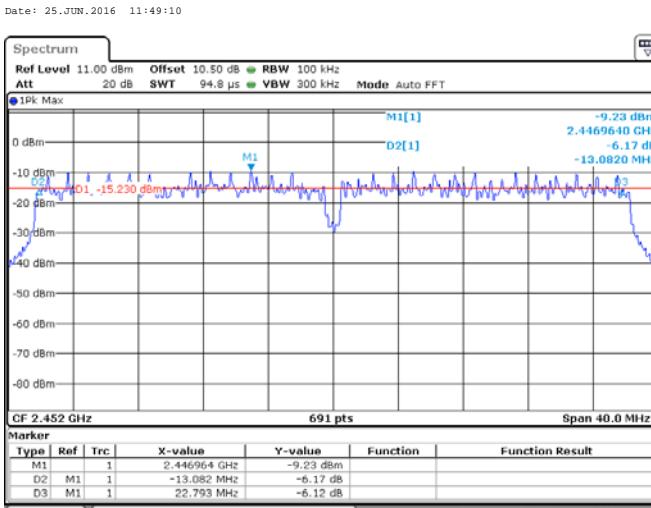
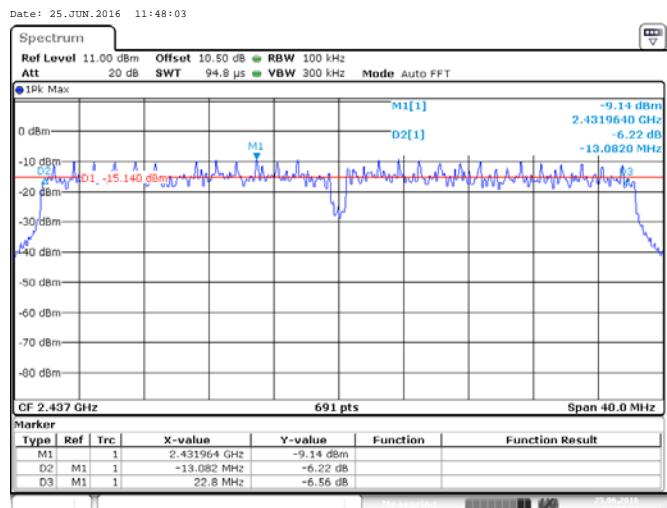
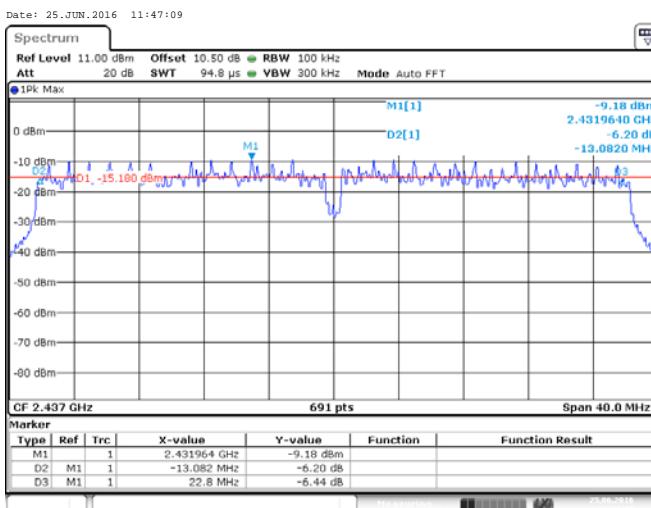
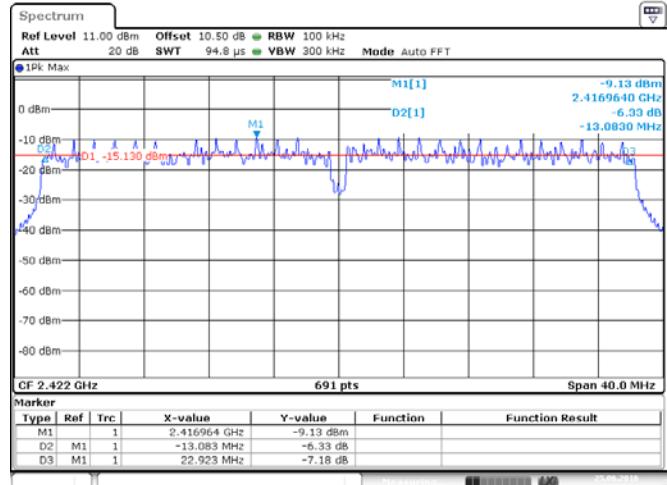
## ANT 2(802.11 n20)



## ANT 1(802.11n40)

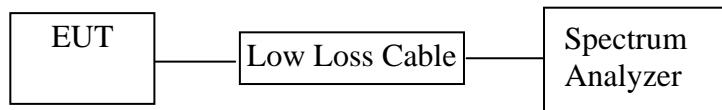


## ANT 2(802.11n40)



## 6. 20DB BANDWIDTH MEASUREMENT

### 6.1. Block Diagram of Test Setup



### 6.2. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 6.3. Operating Condition of EUT

6.3.1. Setup the EUT and simulator as shown as Section 6.1.

6.3.2. Turn on the power of all equipment.

6.3.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

### 6.4. Test Procedure

1. Set resolution bandwidth (RBW) = 1%-5% OBW.
2. Set the video bandwidth (VBW)  $\geq 3 \times RBW$ .
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Once the reference level is established, the equipment is conditioned with typical modulating signals to produce the worst-case (i.e., the widest) bandwidth. Unless otherwise specified for an unlicensed wireless device, measure the bandwidth at the -20 dB levels with respect to the reference level

## 6.5. Test Result

The test was performed with 802.11b			
Channel	Frequency (MHz)	20dB Bandwidth ANT1 (MHz)	20dB Bandwidth ANT2 (MHz)
Low	2412	17.308	17.308
Middle	2437	17.250	17.308
High	2462	17.250	17.250

The test was performed with 802.11g			
Channel	Frequency (MHz)	20dB Bandwidth ANT1 (MHz)	20dB Bandwidth ANT2 (MHz)
Low	2412	18.871	18.929
Middle	2437	18.813	18.871
High	2462	18.871	18.813

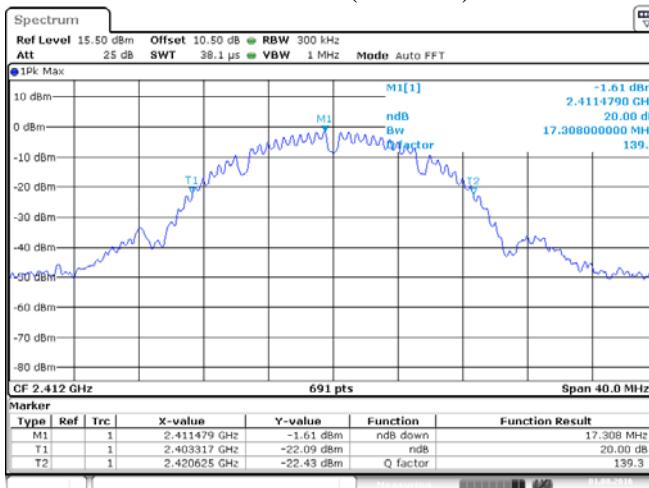
The test was performed with 802.11n20			
Channel	Frequency (MHz)	20dB Bandwidth ANT1 (MHz)	20dB Bandwidth ANT2 (MHz)
Low	2412	20.384	20.644
Middle	2437	20.644	20.579
High	2462	20.579	20.644

The test was performed with 802.11n40			
Channel	Frequency (MHz)	20dB Bandwidth ANT1 (MHz)	20dB Bandwidth ANT2 (MHz)
Low	2412	40.116	40.116
Middle	2437	40.116	40.203
High	2462	40.203	40.203

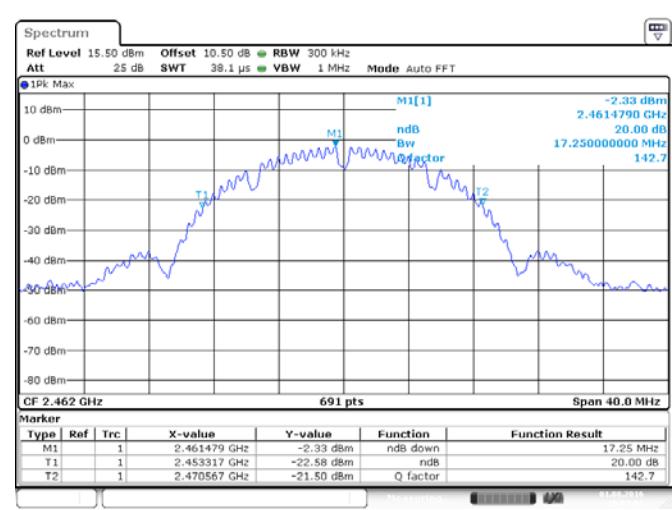
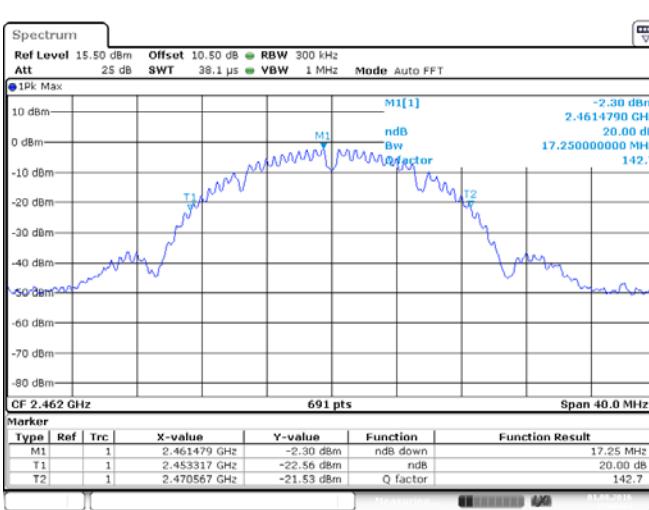
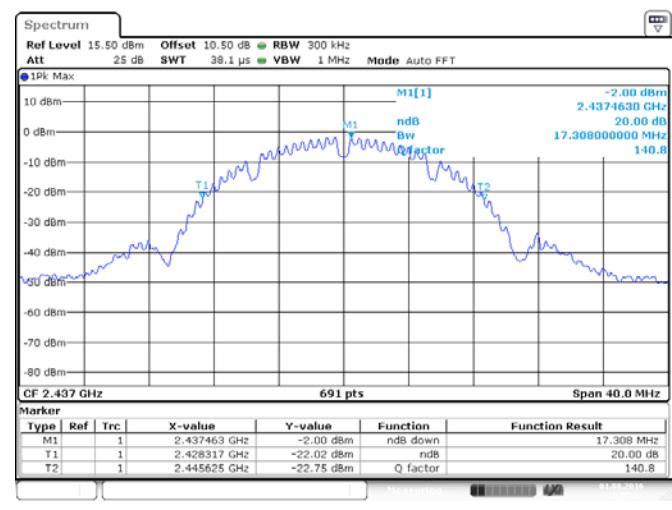
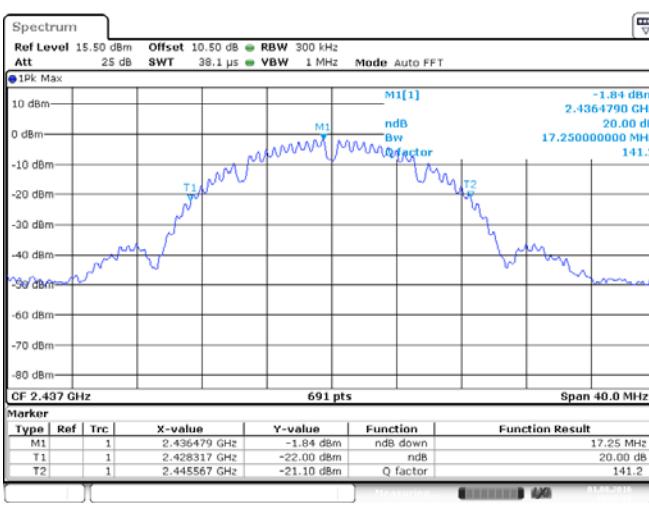
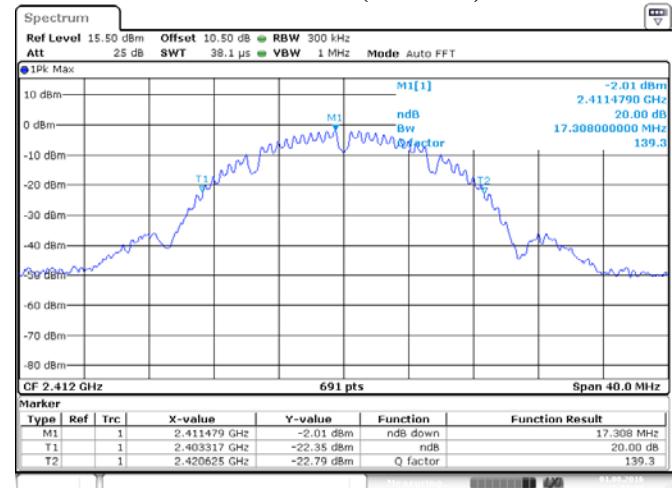
The spectrum analyzer plots are attached as below.

## 20dB Bandwidth

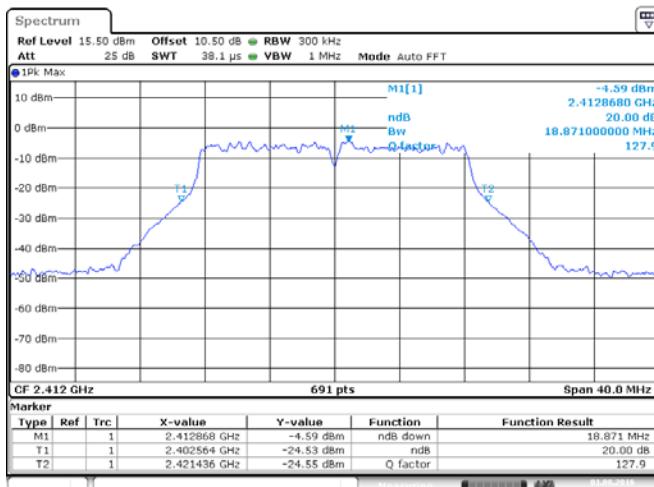
ANT 1(802.11b)



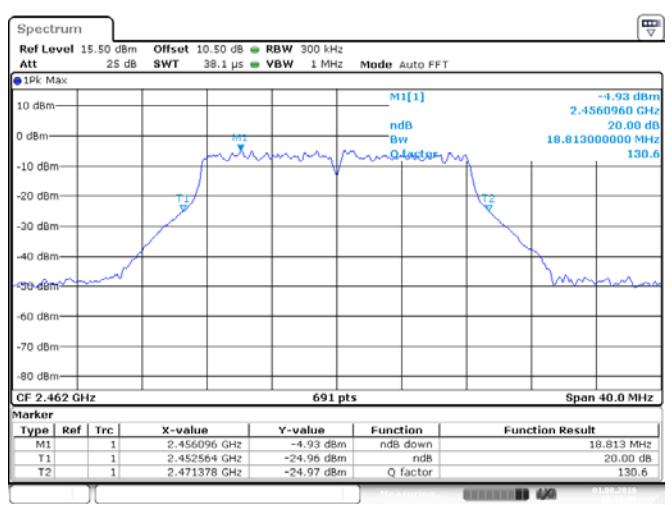
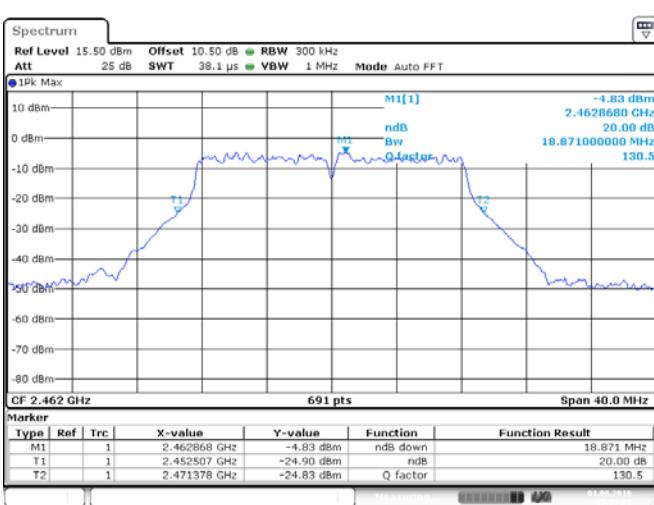
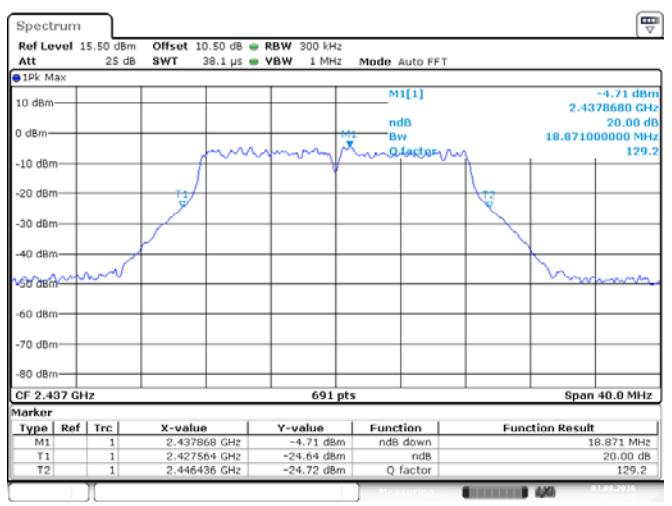
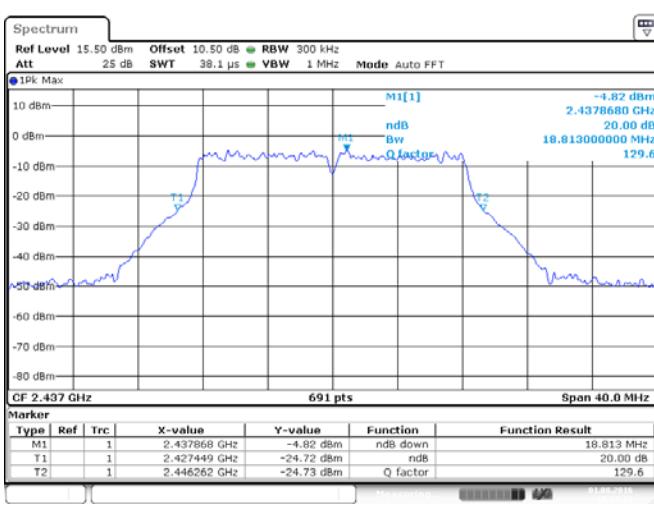
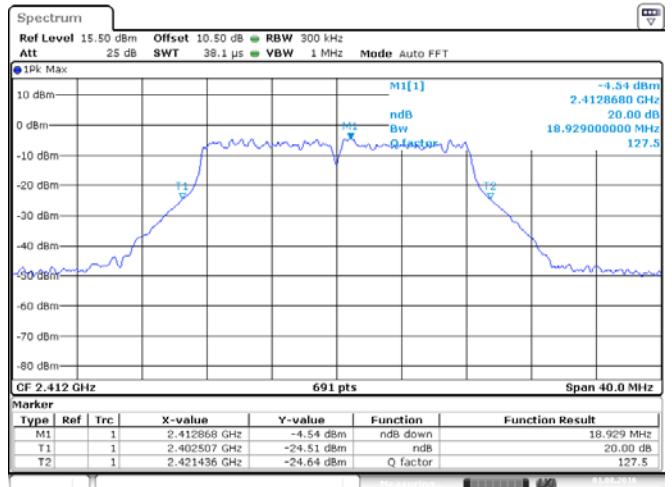
ANT 2(802.11b)



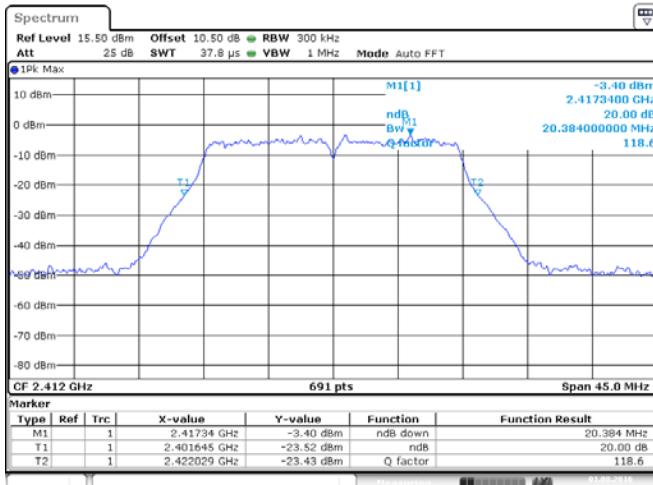
## ANT 1(802.11g)



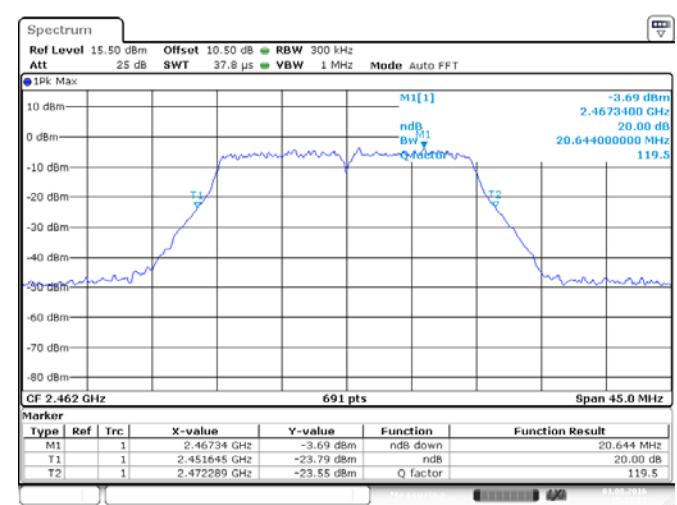
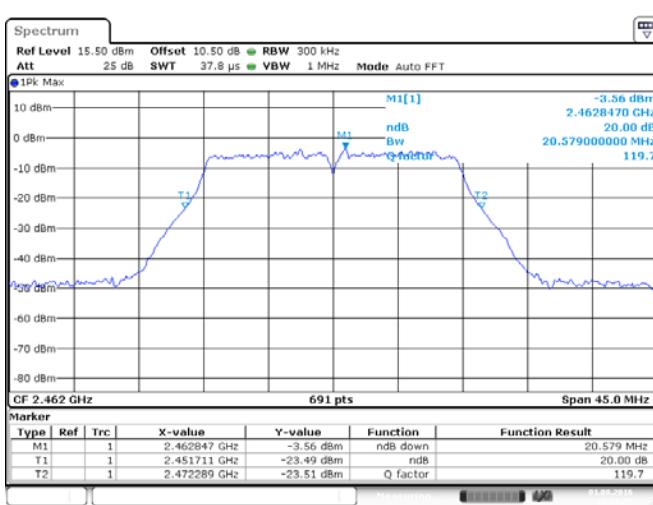
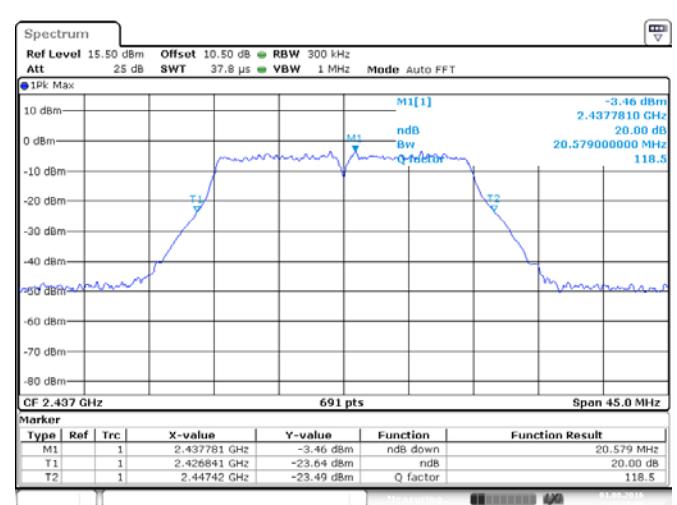
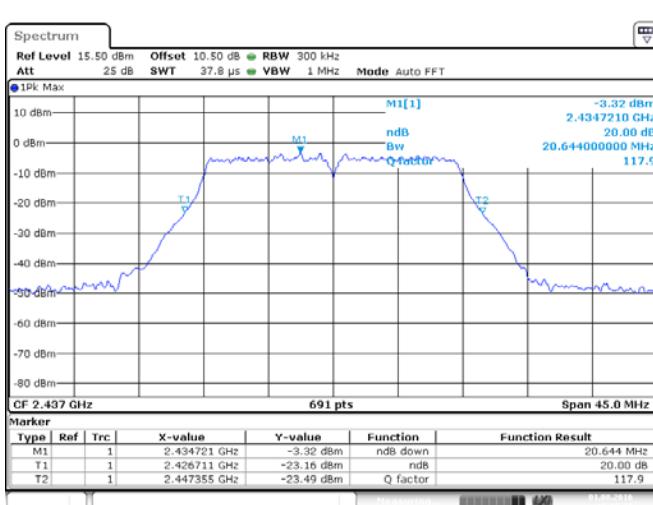
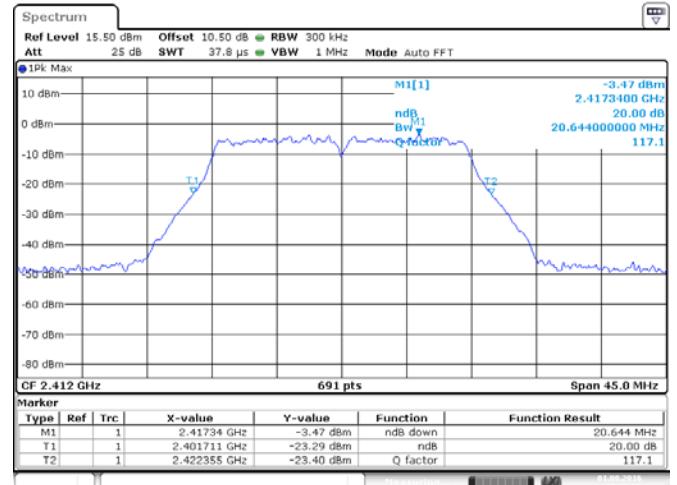
## ANT 2(802.11g)



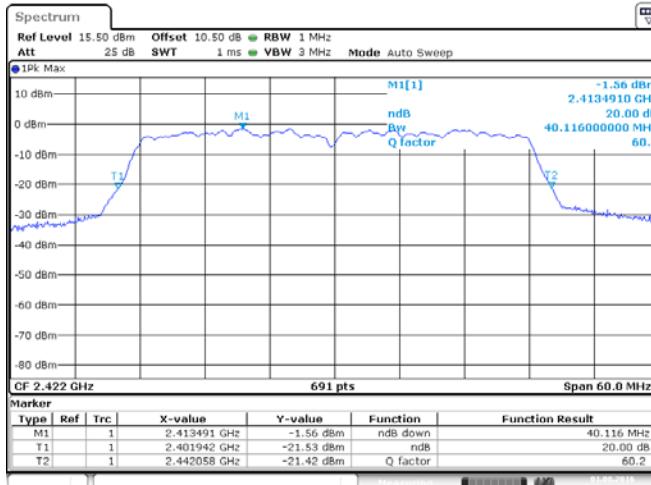
## ANT 1(802.11n20)



## ANT 2(802.11 n20)

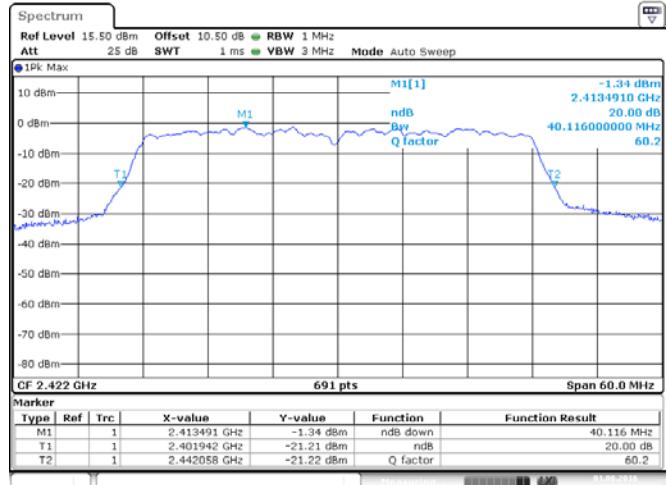


## ANT 1(802.11n40)

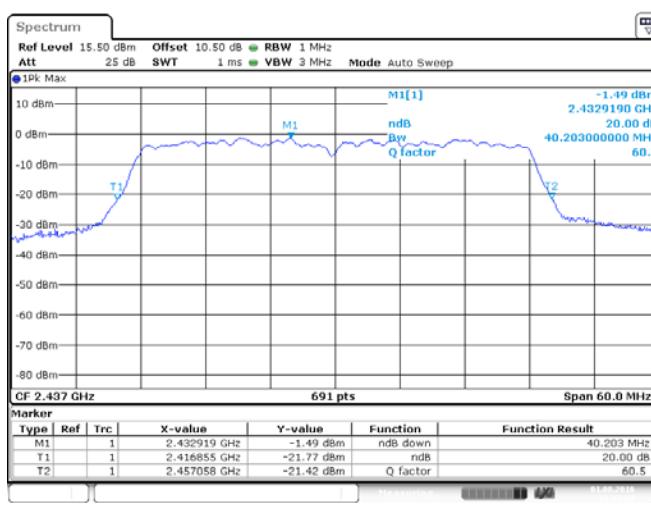


Date: 1.AUG.2016 15:22:31

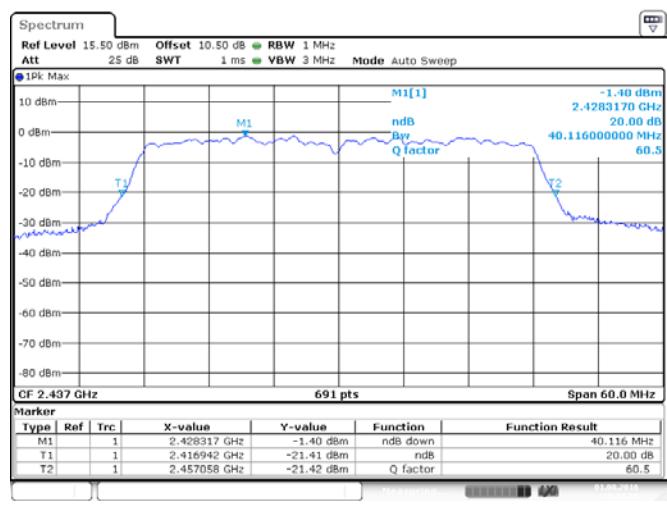
## ANT 2(802.11n40)



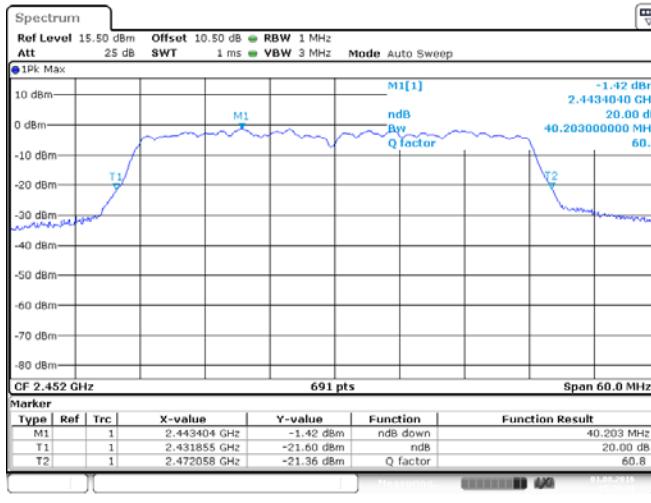
Date: 1.AUG.2016 15:22:56



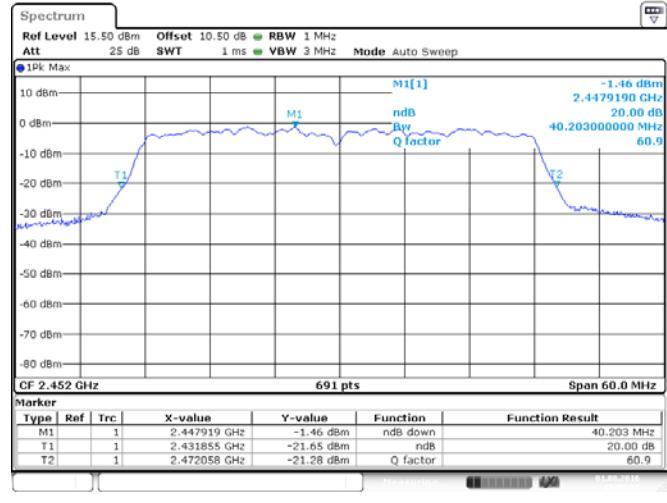
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Date: 1.AUG.2016 15:23:56



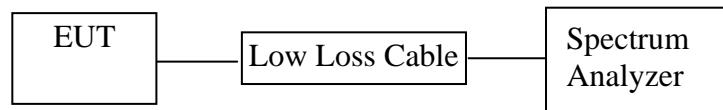
Date: 1.AUG.2016 15:24:41



Date: 1.AUG.2016 15:25:08

## 7. POWER SPECTRAL DENSITY TEST

### 7.1. Block Diagram of Test Setup



### 7.2. The Requirement For Section 15.247(e)

Section 15.247(e): For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

### 7.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

### 7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.2. Measurement Procedure PKPSD:

This procedure must be used if maximum peak conducted output power was used to demonstrate compliance to the fundamental output power limit, and is optional if the maximum (average) conducted output power was used to demonstrate compliance.

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. Set the RBW  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .

4. Set the VBW  $\geq 3 \times$  RBW.
5. Detector = peak.
6. Sweep time = auto couple.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

#### 7.5.3. Measurement the maximum power spectral density.

### 7.6. Test Result

The test was performed with 802.11b(SISO)				
Channel	Frequency (MHz)	Power Spectral Density ANT 1(dBm)	Power Spectral Density ANT 2(dBm)	Limits (dBm)
Low	2412	-19.03	-19.06	8 dBm
Middle	2437	-19.15	-19.17	8 dBm
High	2462	-19.43	-19.40	8 dBm

The test was performed with 802.11g(SISO)				
Channel	Frequency (MHz)	Power Spectral Density ANT 1(dBm)	Power Spectral Density ANT 2(dBm)	Limits (dBm)
Low	2412	-26.53	-26.36	8 dBm
Middle	2437	-26.33	-26.30	8 dBm
High	2462	-26.41	-26.55	8 dBm

The test was performed with 802.11n20(SISO)				
Channel	Frequency (MHz)	Power Spectral Density ANT 1(dBm)	Power Spectral Density ANT 2(dBm)	Limits (dBm)
Low	2412	-26.46	-26.53	8 dBm
Middle	2437	-27.02	-26.65	8 dBm
High	2462	-26.83	-26.77	8 dBm

The test was performed with 802.11n40(SISO)				
Channel	Frequency (MHz)	Power Spectral Density ANT 1(dBm)	Power Spectral Density ANT 2(dBm)	Limits (dBm)
Low	2422	-29.86	-29.45	8 dBm
Middle	2437	-29.69	-29.55	8 dBm
High	2452	-29.61	-29.79	8 dBm

The test was performed with 802.11n20(MIMO)

Channel	Frequency (MHz)	Power Spectral Density ANT 1(dBm)	Power Spectral Density ANT 2(dBm)	Power Spectral Density total(dBm)	Limits (dBm)
Low	2412	-29.56	-29.86	-26.70	8 dBm
Middle	2437	-29.71	-29.60	-26.64	8 dBm
High	2462	-29.85	-29.72	-26.78	8 dBm

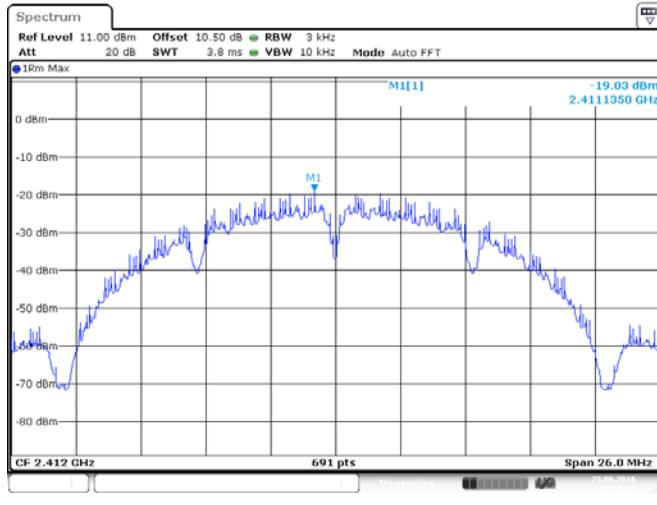
The test was performed with 802.11n40(MIMO)

Channel	Frequency (MHz)	Power Spectral Density ANT 1(dBm)	Power Spectral Density ANT 2(dBm)	Power Spectral Density total(dBm)	Limits (dBm)
Low	2422	-33.35	-33.30	-30.31	8 dBm
Middle	2437	-33.42	-33.52	-30.46	8 dBm
High	2452	-32.52	-32.45	-29.45	8 dBm

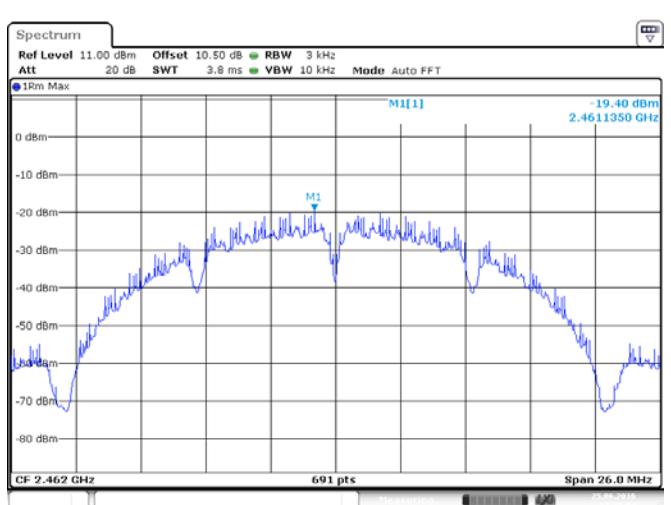
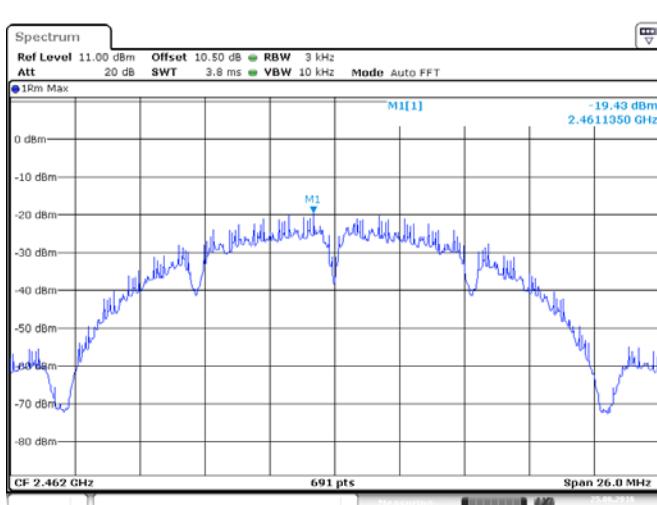
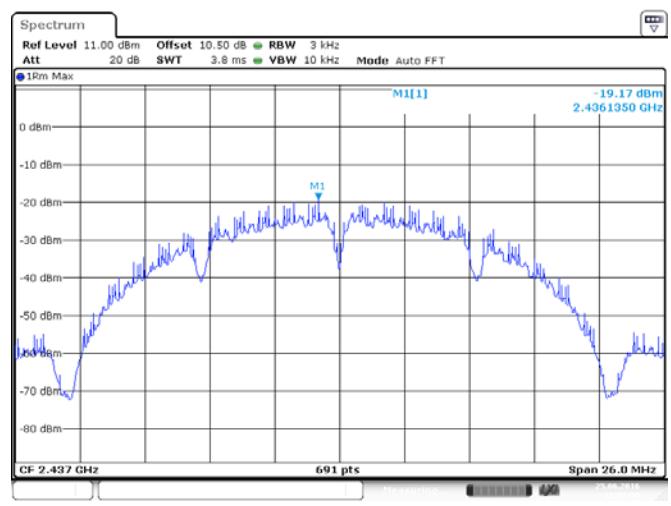
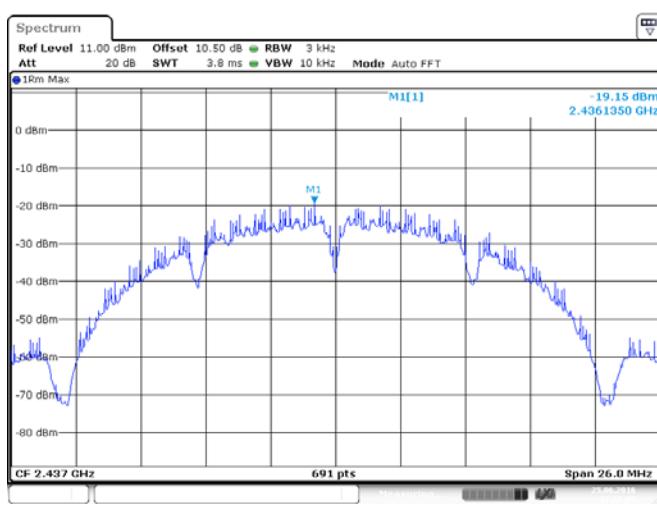
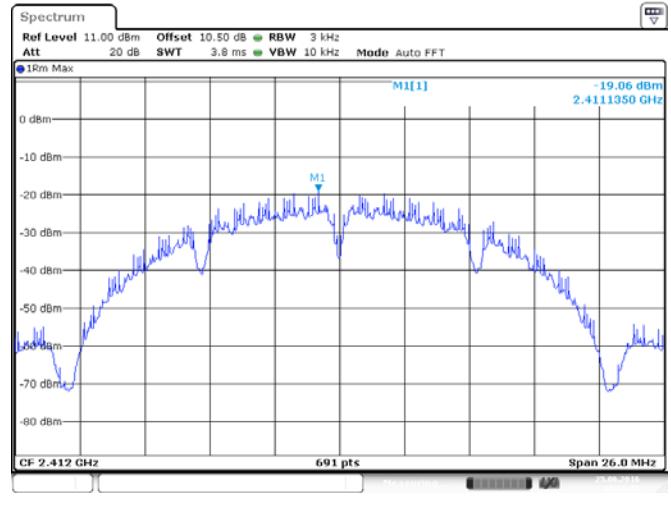
Test mode: SISO

The spectrum analyzer plots are attached as below.

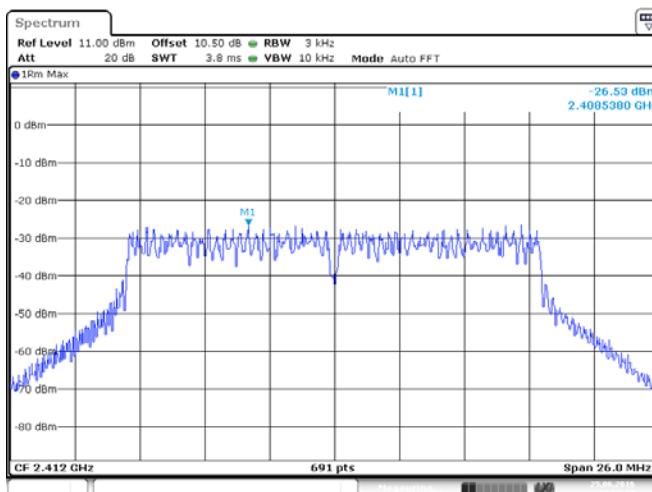
ANT 1(802.11b)



ANT 2(802.11b)

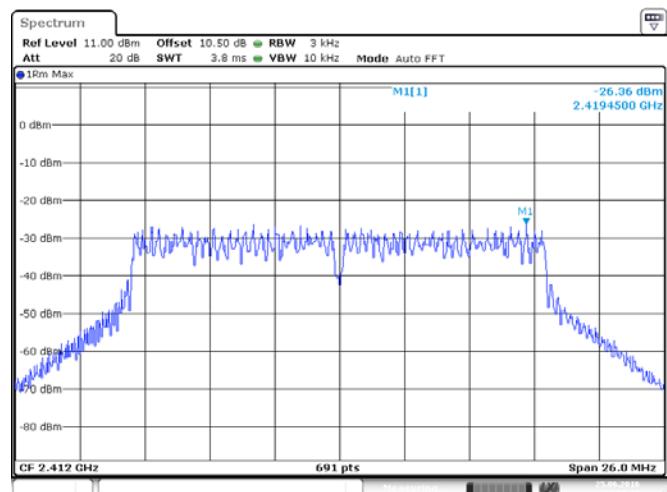


## ANT 1(802.11g)

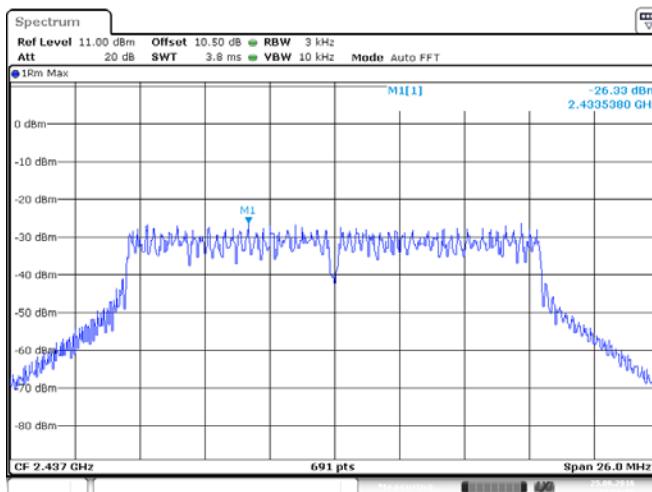


Date: 25.JUN.2016 12:52:17

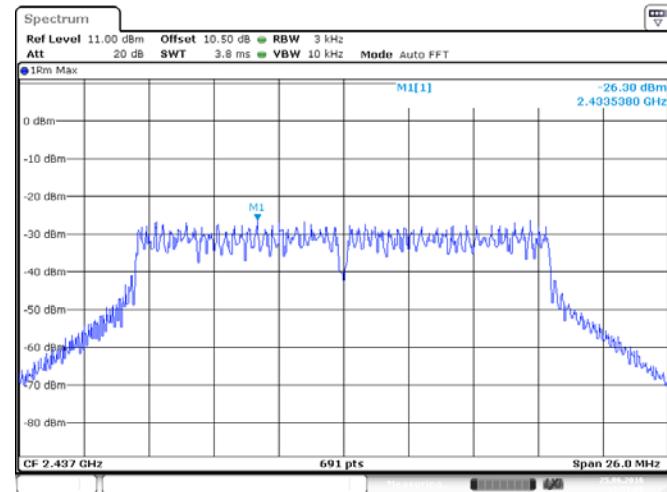
## ANT 2(802.11g)



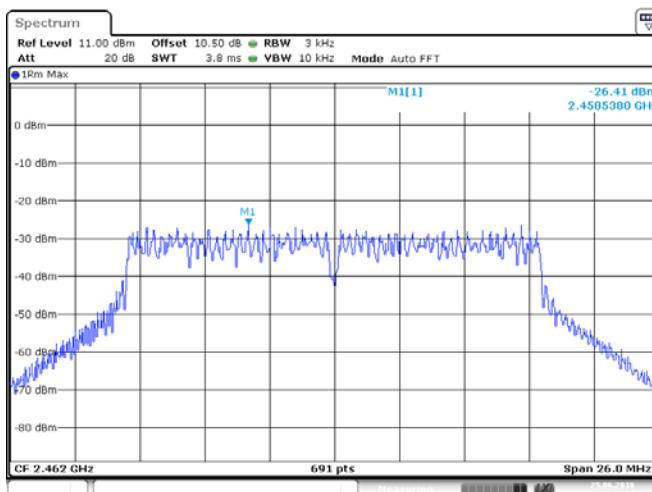
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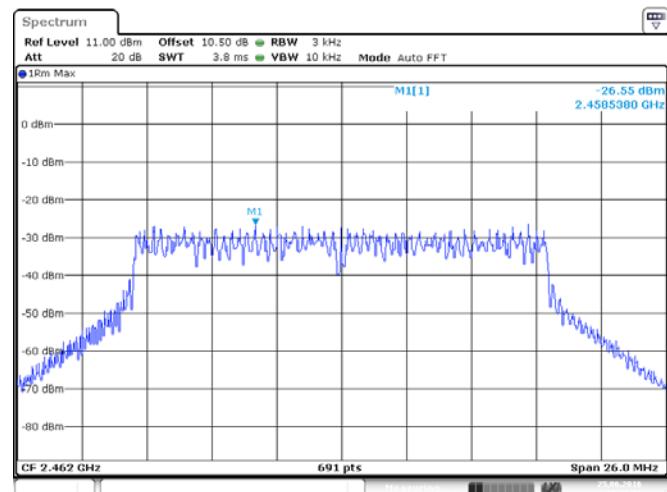
Date: 25.JUN.2016 12:50:26



Date: 25.JUN.2016 12:51:28

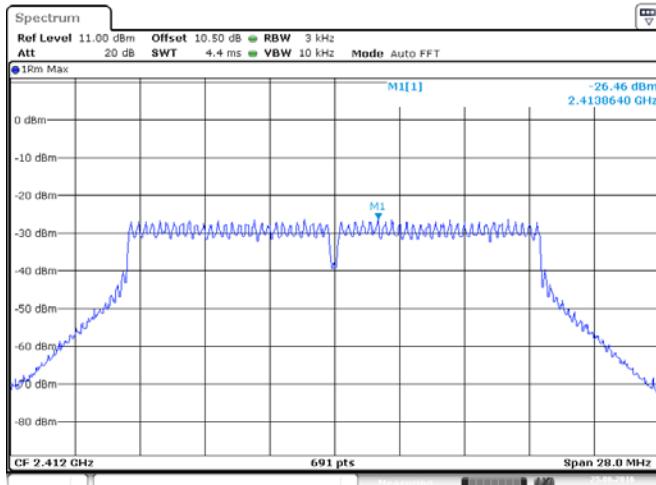


Date: 25.JUN.2016 12:46:59

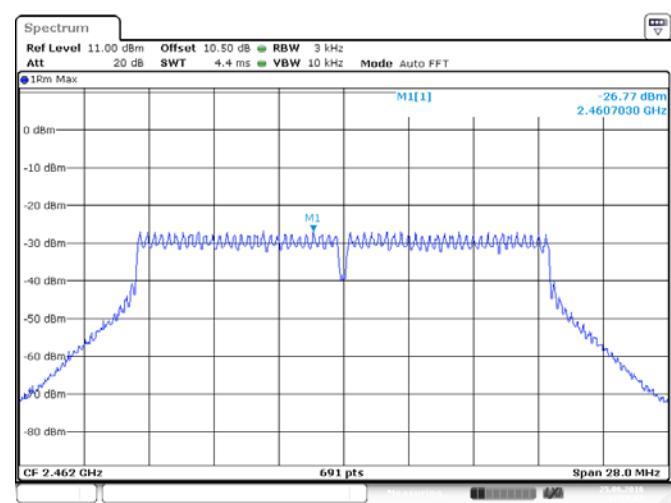
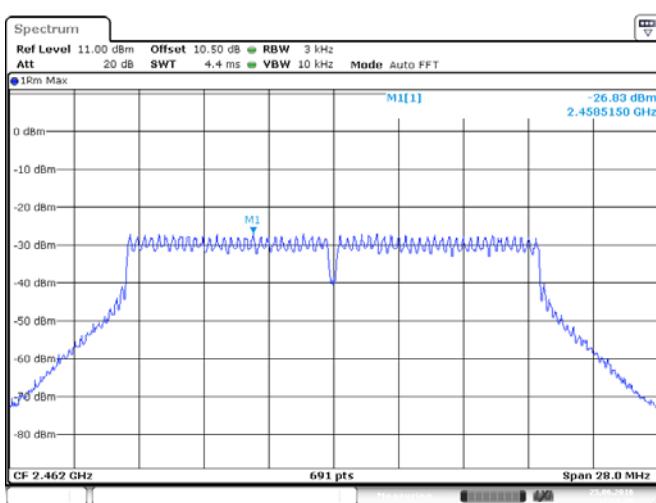
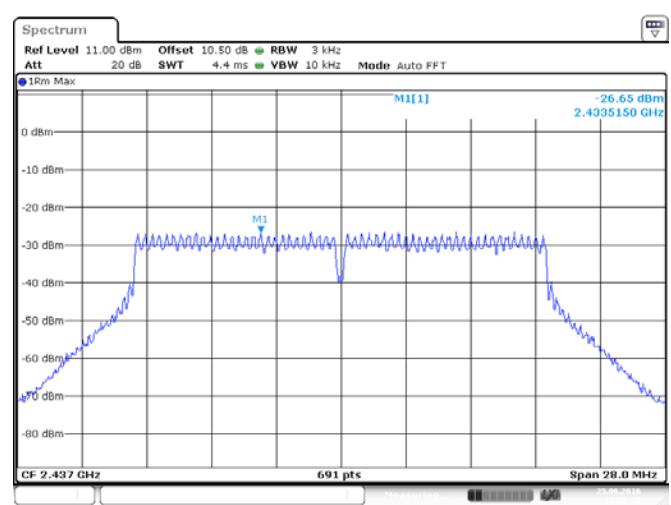
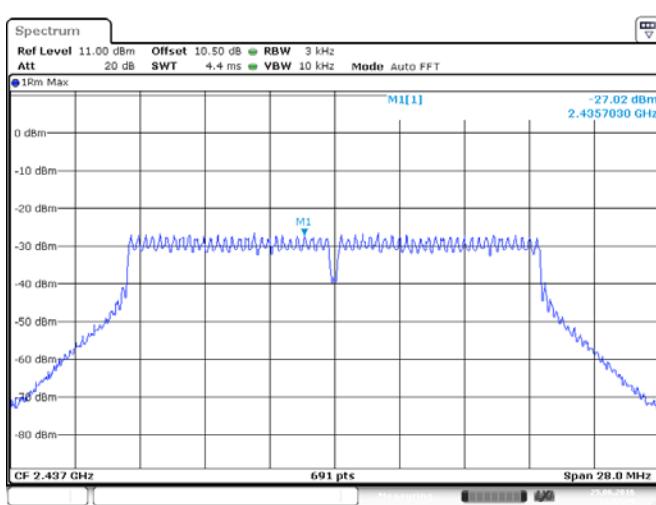
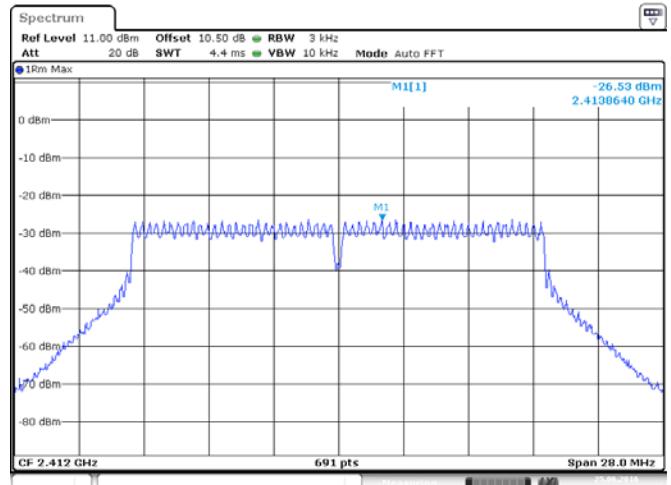


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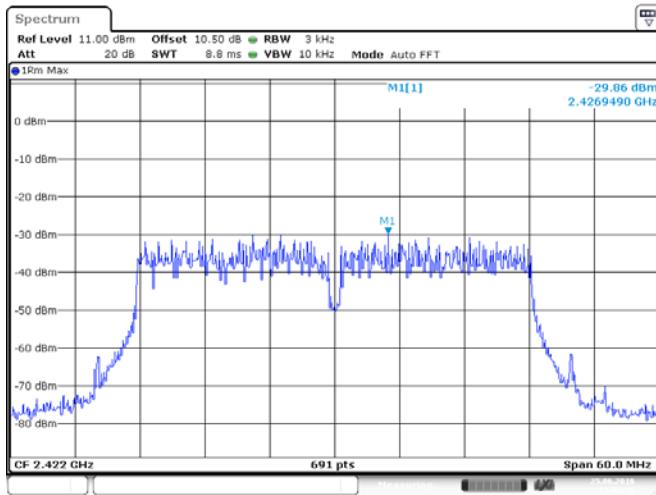
## ANT 1(802.11n20)



## ANT 2(802.11 n20)

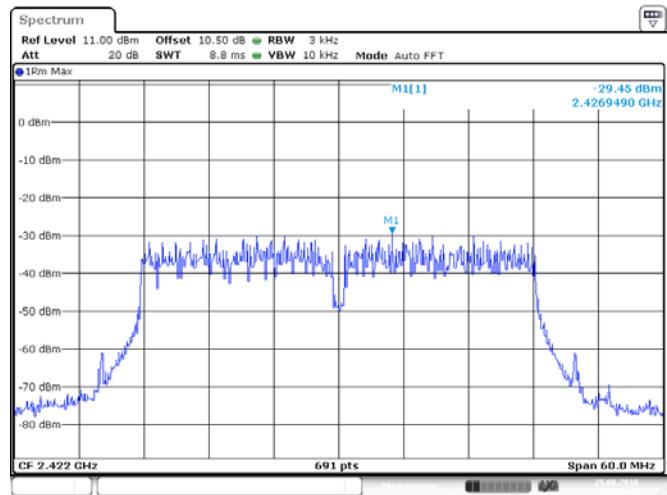


ANT 1(802.11n40)

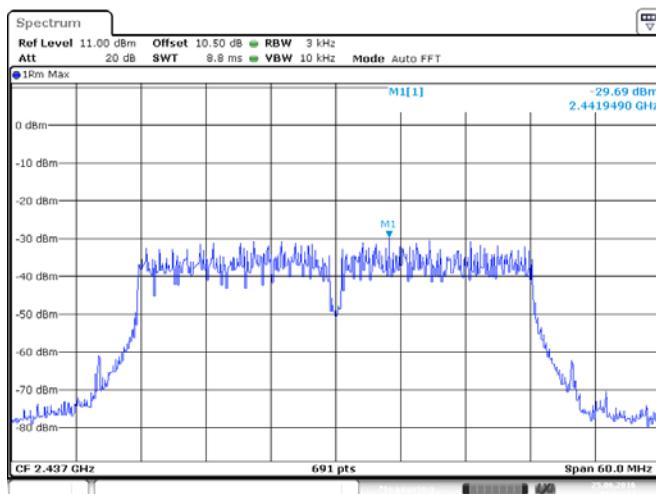


Date: 25.JUN.2016 13:02:16

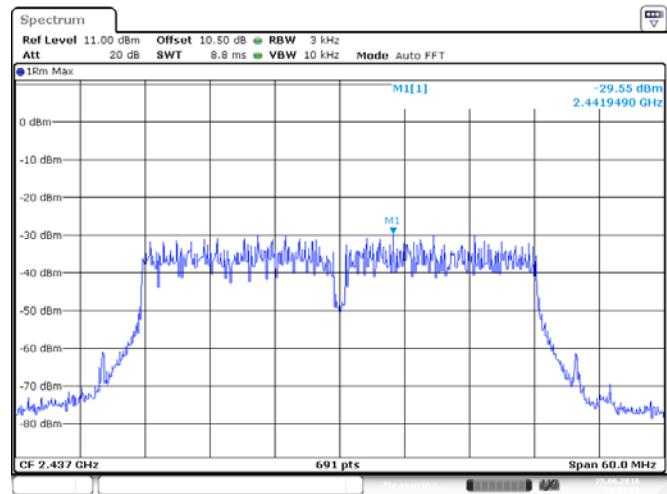
ANT 2(802.11n40)



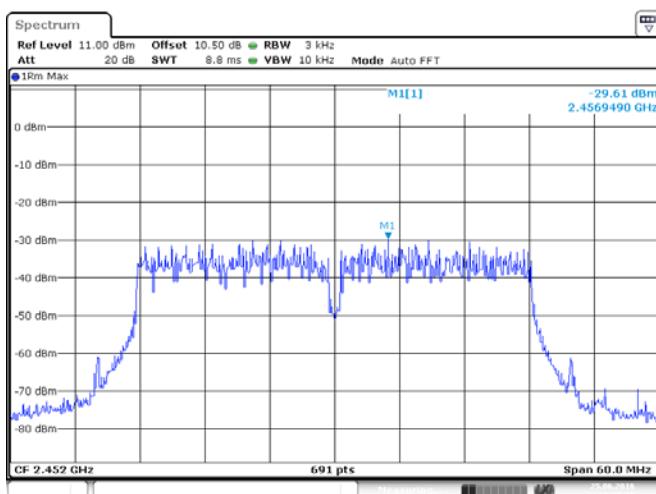
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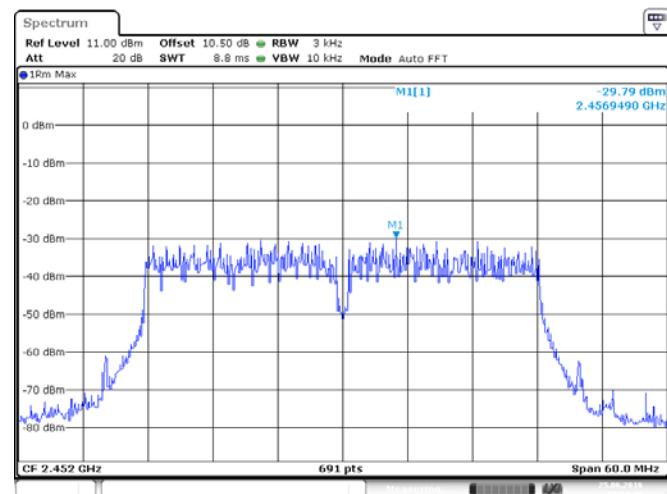
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Date: 25.JUN.2016 13:03:59



Date: 25.JUN.2016 13:05:17

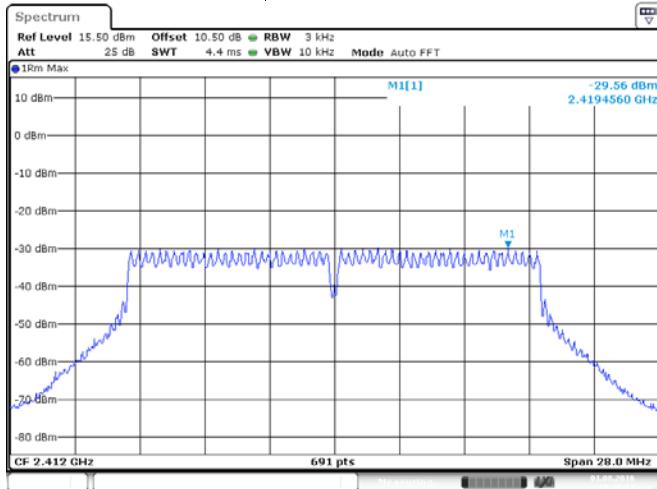


Date: 25.JUN.2016 13:04:49

## Test mode: MIMO

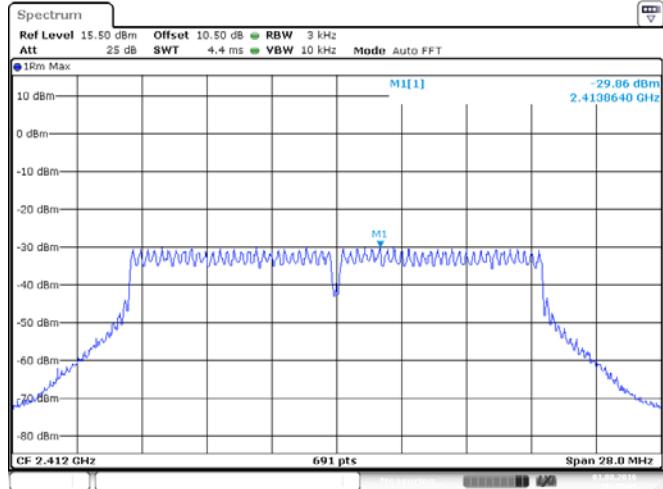
The spectrum analyzer plots are attached as below.

ANT 1(802.11n20)

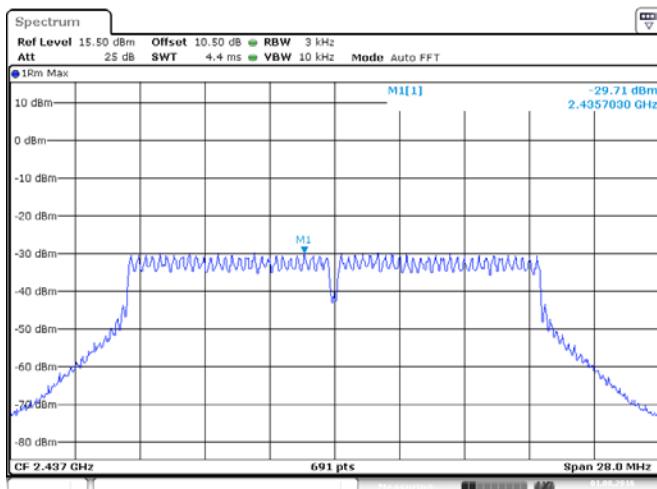


Date: 1.AUG.2016 18:49:32

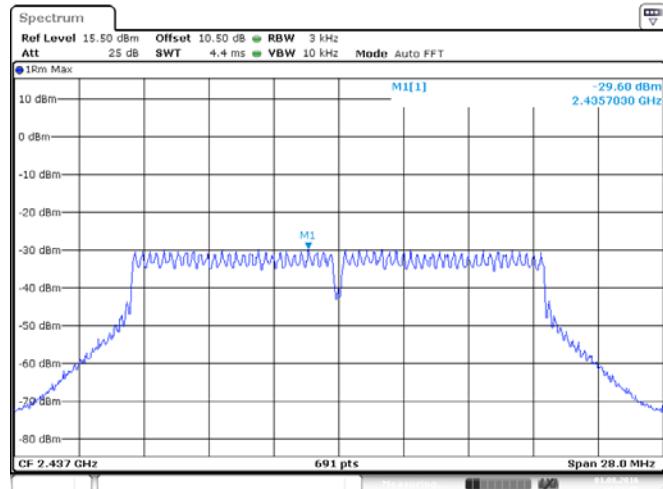
ANT 2(802.11 n20)



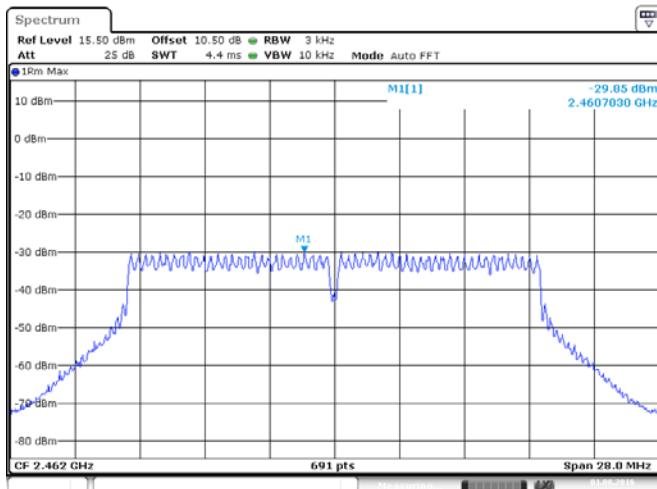
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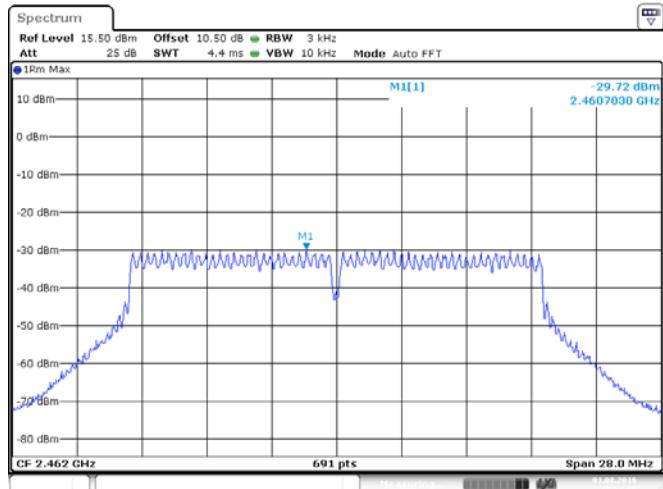
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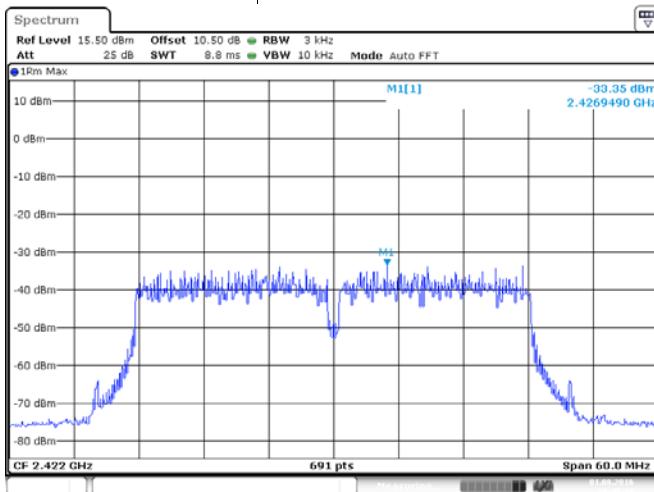


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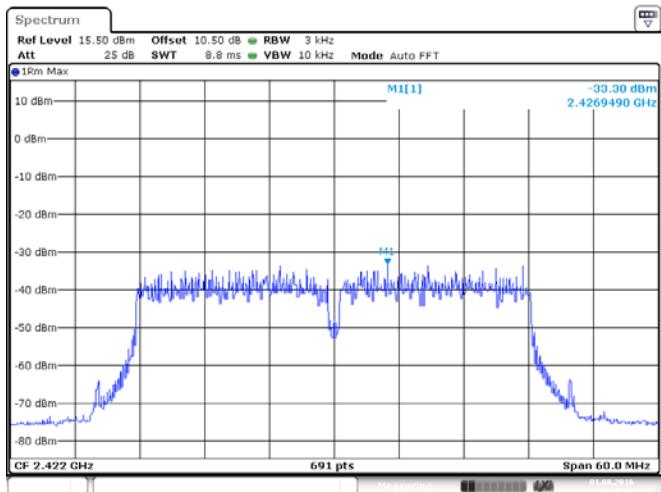
Date: 1.AUG.2016 18:51:56

## ANT 1(802.11n40)

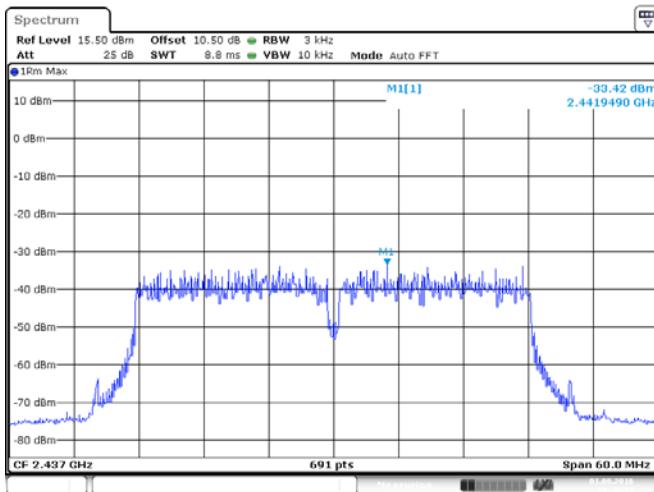


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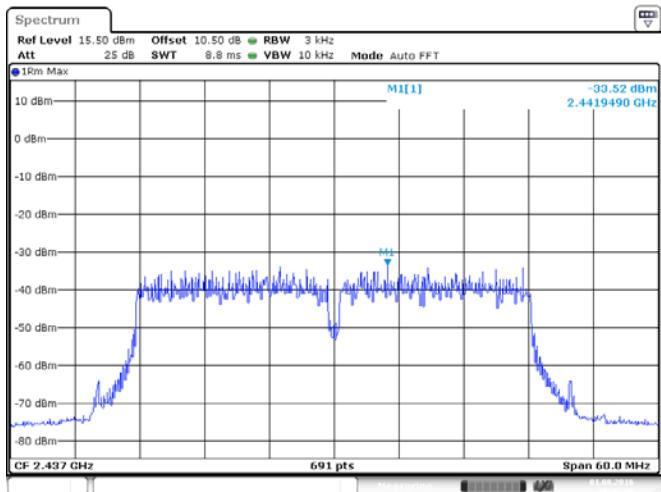
## ANT 2(802.11n40)



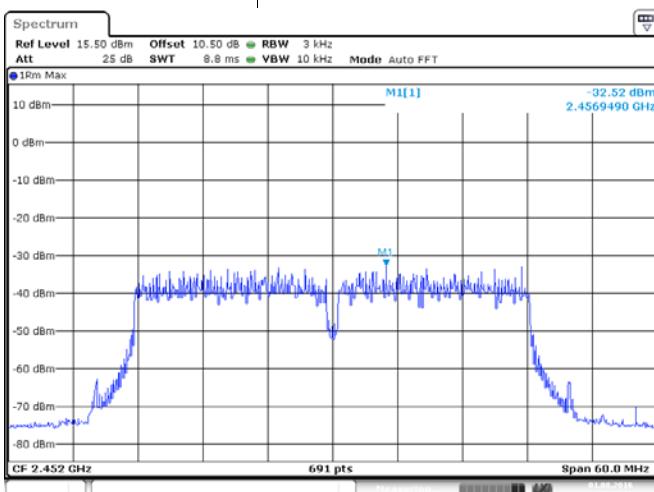
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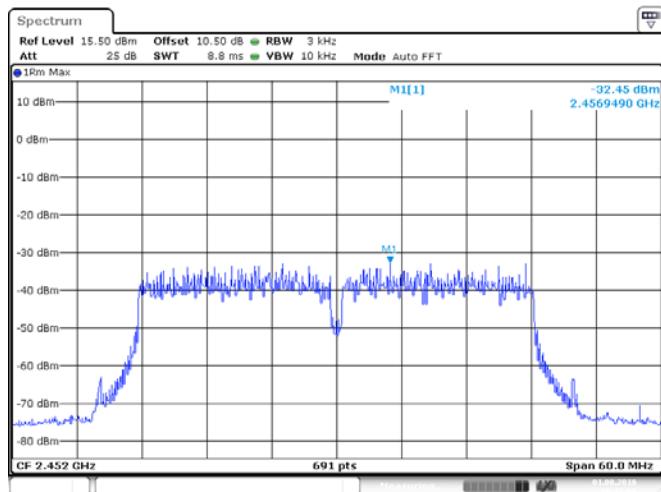
Date: 1.AUG.2016 18:46:33



Date: 1.AUG.2016 18:46:46



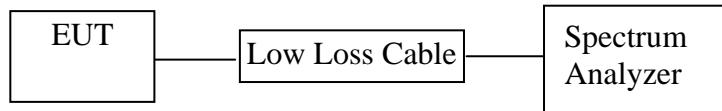
Date: 1.AUG.2016 18:47:43



Date: 1.AUG.2016 18:47:56

## 8. MAXIMUM CONDUCTED (AVERAGE) OUTPUT POWER

### 8.1. Block Diagram of Test Setup



### 8.2. The Requirement For Section 15.247(b)(3)

Section 15.247(b)(3): For systems using digital modulation in the 902-928MHz, 2400-2483.5MHz, and 5725-5850MHz bands: 1 Watt.

### 8.3. EUT Configuration on Measurement

The equipment is installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 8.4. Operating Condition of EUT

8.4.1. Setup the EUT and simulator as shown as Section 8.1.

8.4.2. Turn on the power of all equipment.

8.4.3. Let the EUT work in TX modes measure it. The transmit frequency are 2412-2462 and 2422-2452MHz. We select 2412MHz, 2437MHz, 2462MHz and 2422MHz, 2437MHz, 2452MHz TX frequency to transmit.

### 8.5. Test Procedure

8.5.1. The EUT was tested according to DTS test procedure of Apr 08, 2016 KDB558074 D01 DTS Meas Guidance v03r05 for compliance to FCC 47CFR 15.247 requirements.

8.5.2. The transmitter output was connected to the spectrum analyzer through a low loss cable.

8.5.3. Set RBW = 1-5% of the OBW, not to exceed 1 MHz, VBW  $\geq 3 \times$  RBW, Sweep time = auto, Set span to at least 1.5 times the OBW, Detector = RMS.

8.5.4. Measurement the Maximum conducted (average) output power.

## 8.6. Test Result

The test was performed with 802.11b

Channel	Frequency (MHz)	Ave output power ANT 1(dBm)	Ave output power ANT 2 (dBm)	Ave output power ANT 1(mW)	Ave output power ANT 2 (mW)	Limits dBm / W
Low	2412	13.09	13.04	20.37	20.14	30 dBm / 1 W
Middle	2437	12.97	12.94	19.82	19.68	30 dBm / 1 W
High	2462	12.66	12.65	18.45	18.41	30 dBm / 1 W

The test was performed with 802.11g

Channel	Frequency (MHz)	Ave output power ANT 1(dBm)	Ave output power ANT 2 (dBm)	Ave output power ANT 1(mW)	Ave output power ANT 2 (mW)	Limits dBm / W
Low	2412	11.67	11.65	14.69	14.62	30 dBm / 1 W
Middle	2437	11.61	11.63	14.49	14.55	30 dBm / 1 W
High	2462	11.32	11.37	13.55	13.71	30 dBm / 1 W

The test was performed with 802.11n20

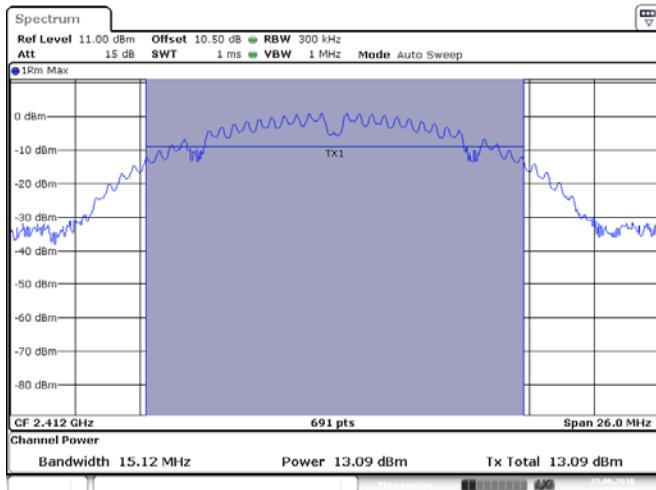
Channel	Frequency (MHz)	Ave output power ANT 1(dBm)	Ave output power ANT 2 (dBm)	Ave output Total power (dBm)	Ave output Total power (mW)	Limits dBm / W
Low	2412	11.03	11.06	14.06	25.441	30 dBm / 1 W
Middle	2437	11.34	10.98	14.17	26.145	30 dBm / 1 W
High	2462	10.68	10.70	13.70	23.444	30 dBm / 1 W

The test was performed with 802.11n40

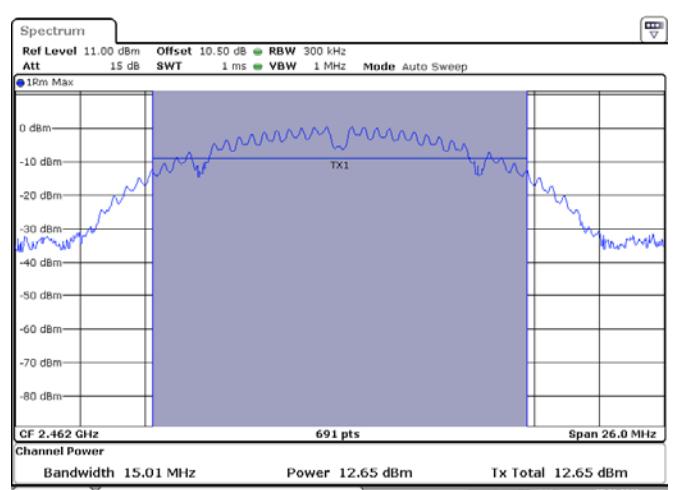
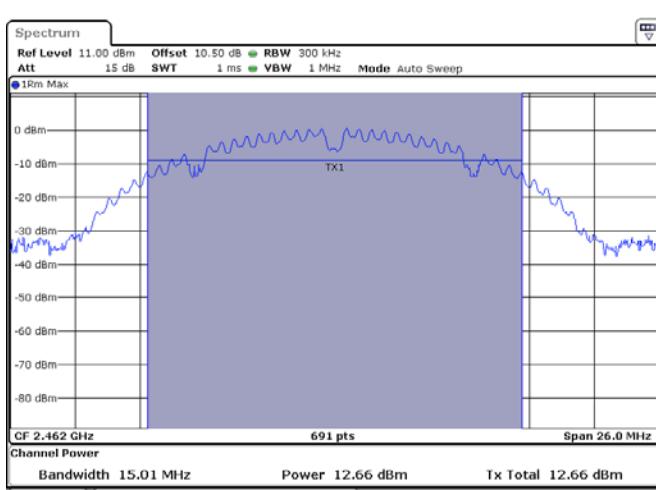
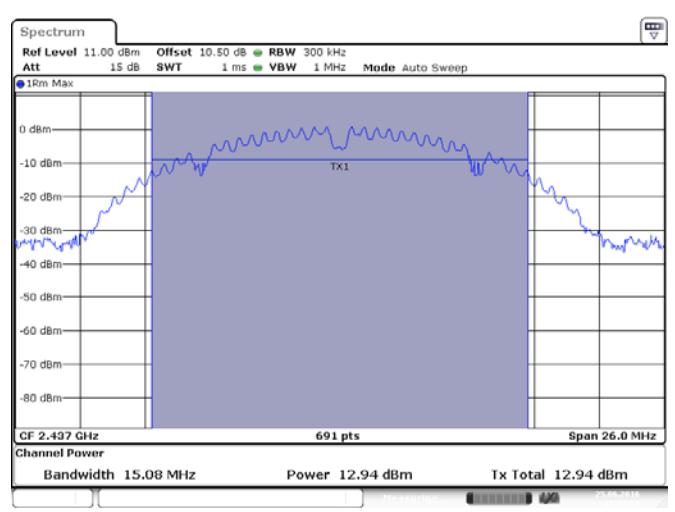
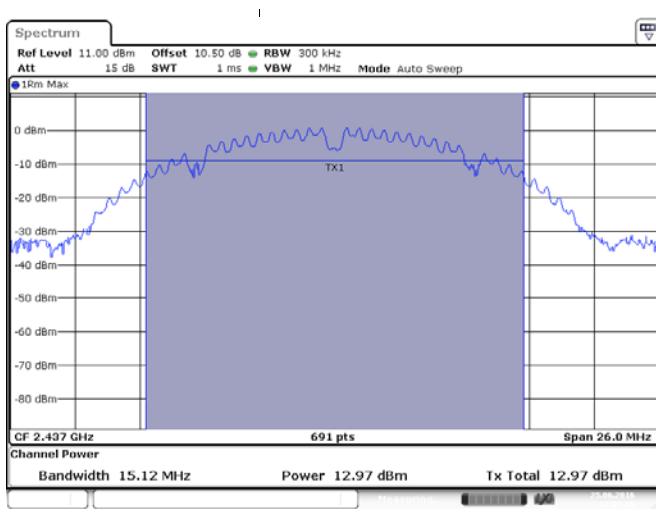
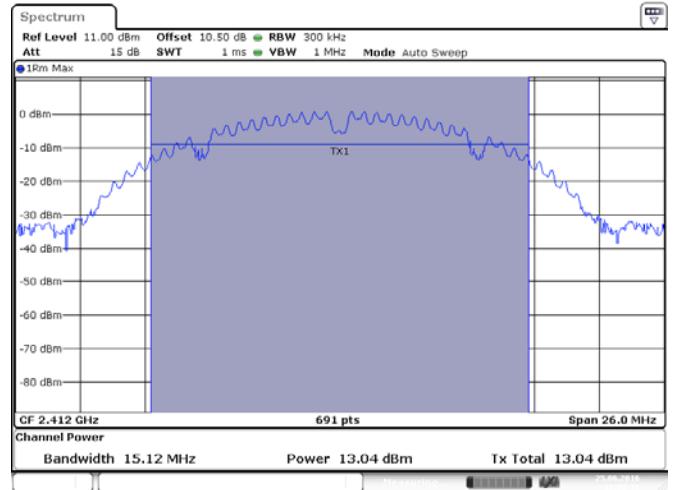
Channel	Frequency (MHz)	Ave output power ANT 1(dBm)	Ave output power ANT 2 (dBm)	Ave output Total power (dBm)	Ave output Total power (mW)	Limits dBm / W
Low	2412	8.84	8.82	11.84	15.277	30 dBm / 1 W
Middle	2437	8.80	8.78	11.80	15.137	30 dBm / 1 W
High	2462	8.65	8.68	11.68	14.707	30 dBm / 1 W

The spectrum analyzer plots are attached as below.

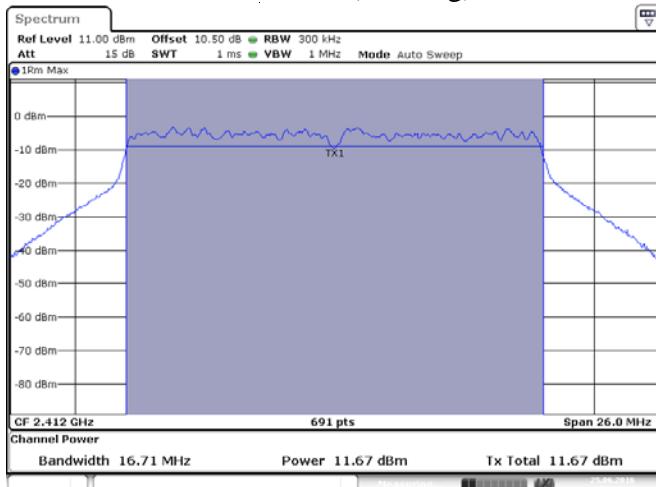
ANT 1(802.11b)



ANT 2(802.11b)



## ANT 1(802.11g)



## ANT 2(802.11g)

