



# RF TEST REPORT

**Report No.:** SET2018-12007

**Product:** PoE Router

**FCC ID:** 2AG32EP3011

**IC:** 20982-EP3011

**Model No.:** EP3011

**Applicant:** Baicells Technologies Co., Ltd.

**Address:** 3F, Hui Yuan Development Building, No.1 Shangdi Information  
Industry Base, Haidian Dist., Beijing, China

**Dates of Testing:** 09/12/2018 — 10/10/2018

**Issued by:** CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd.

**Lab Location:** Building 28/29, East of Shigu Xili Industrial Zone, Nanshan  
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### Test Report

**Product Name** .....: PoE Router

**Brand Name** .....: BaiCells

**Trade Name** .....: BaiCells

**Applicant**.....: Baicells Technologies Co., Ltd.

**Applicant Address**.....: 3F, Hui Yuan Development Building, No.1 Shangdi  
Information Industry Base, Haidian Dist., Beijing, China

**Manufacturer** .....: Baicells Technologies Co., Ltd.

**Manufacturer Address** .....: 3F, Hui Yuan Development Building, No.1 Shangdi  
Information Industry Base, Haidian Dist., Beijing, China

**Test Standards**.....: 47 CFR Part 15 Subpart C  
IC RSS-Gen(Issue 5, April 2018)  
IC RSS-247(Issue 2, Feb. 2017)

**Test Result** .....: PASS

**Tested by** .....: Shallwe Yang 2018.10.11  
Shallwe Yang, Test Engineer

**Reviewed by** .....: Chris You 2018.10.11  
Chris You, Senior Engineer

**Approved by** .....: Zhu Qi 2018.10.11  
Zhu Qi, Manager



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Change History		
Issue	Date	Reason for change
1.0	2018.10.11	First edition

## 1. General Information

### 1.1. EUT Description

EUT Type	PoE Router
Hardware Version	V1
Software Version	BCE-AP-2.3C
EUT supports Radios application	WLAN2.4GHz 802.11b/g/n (HT20/HT40)
Frequency Range	802.11b/g/n-20MHz: 2.412GHz - 2.462GHz 802.11n-40MHz: 2.422GHz - 2.452GHz
Channel Number	802.11b/g/n-20MHz: 11 802.11n-40MHz: 7
Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n : up to 300 Mbps
Modulation Type	DSSS (802.11b), OFDM (802.11g/n)
MIMO	Support
Antenna Type	External Antenna
Antenna Gain	Antenna(0): 5dBi Antenna(1): 5dBi
Product Type	Refer to note
Conducted Output Power (Max.)	16.94dBm

Note 1: The EUT is a PoE Router, it contain WIFI operating at 2.4GHz ISM band; it supports 802.11b, 802.11g, 802.11n and they are all tested in this report.

Note 2: The frequencies allocated is  $F \text{ (MHz)} = 2412 + 5 * (n - 1)$  ( $1 \leq n \leq 11$ ). The lowest, middle, highest channel numbers of the EUT used and tested in this report are separately 1ch (2412MHz), 6ch(2437MHz), 11ch(2462MHz) for 802.11b/g/n-20MHz., and 3ch(2422MHz), 6ch(2437MHz), 9ch(2452MHz) for 802.11n-40MHz.

Note 3: For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

Note 4: The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

Note 5: The EUT incorporates a MIMO function. Physically, the EUT provides 2 completed transmitters and 2 receivers for 2.4GHz WLAN.

Frequency	Modulation Mode	TX / RX Function
2.4GHz	802.11b	1TX / 1RX
	802.11g	1TX / 1RX
	802.11n (HT20)	1TX / 1RX or 2TX / 2RX
	802.11n (HT40)	1TX / 1RX or 2TX / 2RX

## 1.2. Test Standards and Results

The objective of the report is to perform testing according to 47 CFR Part 15 Subpart C (WiFi, 2.4GHz ISM band radiators) for the EUT FCC Certification:

No.	Identity	Document Title
1	47 CFR Part 15 Subpart C 2017	Radio Frequency Devices
2	ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices
3	KDB Publication 6629911 D01 v02r01	Emission Testing of Transmitters with Multiple Outputs in the same Band(e.g., MIMO, Smart Antenna, etc)
4	RSS-Gen (Issue 5, April 2018)	General Requirements for Compliance of Radio Apparatus
5	RSS-247 (Issue 2, Feb. 2017)	Digital Transmission Systems (DTSs), Frequency Hopping Systems (FHSs) and Licence-Exempt Local Area Network (LE-LAN) Devices

Test detailed items/section required by FCC rules and results are as below:

No	FCC Rules	IC Rules	Description	Result
1	15.203	RSS-247, 5.4	Antenna Requirement	PASS
2	15.247(b)	RSS-247, 5.4	Peak Output Power	PASS
3	15.247(a)	RSS-GEN, 6.7 RSS-247, 5.2	Bandwidth	PASS
4	15.247(d)	RSS-247, 5.5	Conducted Band Edges and Spurious Emission	PASS
5	15.247(e)	RSS-247, 5.2	Power spectral density (PSD)	PASS
6	15.207	RSS-GEN, 8.8	Conducted Emission	PASS
7	15.209 15.247(d)	RSS-247, 5.5	Radiated Band Edges and Spurious Emission	PASS

The tests of Conducted Emission and Radiated Emission were performed according to the method of measurements prescribed in ANSI C63.10-2013.

These RF tests were performed according to the method of measurements prescribed in KDB558074 D01 DTS Meas Guidance v05.

### 1.3. Channel list

#### WLAN 2.4GHz

11 channels are provided for 802.11b, 802.11g, and 802.11n (20MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
1	2412	7	2442
2	2417	8	2447
3	2422	9	2452
4	2427	10	2457
5	2432	11	2462
6	2437		

7 channels are provided for 802.11n (40MHz)

Channel	Frequency(MHz)	Channel	Frequency(MHz)
3	2422	7	2442
4	2427	8	2447
5	2432	9	2452
6	2437		



#### 1.4. Test environment and mode

<b>Operating Environment</b>	
Temperature	24°C
Humidity	57 % RH
Atmospheric Pressure	1010 mbar
<b>Test mode:</b>	
Continuously transmitting mode	Keeps the EUT in 100% duty cycle transmitting with modulation in SISO and MIMO mode, duty cycle factor is not required.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

Test Items	Mode	Data Rate	Channel
Peak Conducted Output Power Power Spectral Density Bandwidth Conducted and Spurious Emission Radiated and Spurious Emission	11b/DSSS	1 Mbps	1/6/11
	11g/OFDM	6 Mbps	1/6/11
	11n(20MHz)/OFDM	MCS 0	1/6/11
	11n(40MHz)/OFDM	MCS 0	3/6/9
Band Edge	11b/DSSS	1 Mbps	1/11
	11g/OFDM	6 Mbps	1/11
	11n(20MHz)/OFDM	MCS 0	1/11
	11n(40MHz)/OFDM	MCS 0	3/9

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly have effect on EMI emission level. Each of these EUT operation modes or test configuration modes mentioned above was evaluated respectively.

Pretest Test Mode	Description
Mode 1	TX B Mode / CH1, CH6, CH11
Mode 2	TX G Mode / CH1, CH6, CH11
Mode 3	TX N20 Mode / CH1, CH6, CH11
Mode 4	TX N40 Mode / CH3, CH6, CH9
Mode 5	TX Mode

The EUT system operated these modes were found to be the worst case during the pre-scanning test as following:

For Conducted Test	
Final Test Mode	Description
Mode 5	TX Mode

For Radiated Test	
Final Test Mode	Description
Mode 1	TX B Mode / CH1, CH6, CH11
Mode 2	TX G Mode / CH1, CH6, CH11
Mode 3	TX N20 Mode / CH1, CH6, CH11
Mode 4	TX N40 Mode / CH3, CH6, CH9

### 1.5. Power level setup in software

Power level setup in software for 2.4G wifi		
Mode	Software setup	
	Antenna 0	Antenna 1
802.11b	12	12
802.11g	11	11
802.11n20	OE	OE
802.11n40	10	10



## 1.6. Table for Supporting Units

No.	Equipment	Brand Name	Model Name	Manufacturer	Serial No.	Note
1	Notebook	DELL	PP11L	DELL	H5914A03	FCC DOC

## 1.7. Facilities and Accreditations

### 1.7.1. Facilities

#### **CNAS-Lab Code: L1659**

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

#### **FCC-Registration No.: CN5031**

CCIC Southern Electronic Product Testing (Shenzhen) 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. Designation Number: CN5031, valid time is until December 31, 2018.

#### **ISED Registration: 11185A-1**

CCIC Southern Electronic Product Testing (Shenzhen) Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A-1 on Aug. 04, 2016, valid time is until Aug. 03, 2019.

#### **NVLAP Lab Code: 201008-0**

CCIC-SET is a third party testing organization accredited by NVLAP according to ISO/IEC 17025. The accreditation certificate number is 201008-0.

### 1.7.2. Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15°C - 35°C
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86KPa-106KPa

## 2. 47 CFR Part 15C Requirements

### 2.1. Antenna requirement

#### 2.1.1. Applicable Standard

According to FCC 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.

And according to FCC 47 CFR Section 15.247(c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 2.1.2. Antenna Information

**Antenna Category:** External antenna

The antenna was soldered to the antenna port of EUT via an adaptor cable, can't be removed.

##### Antenna General Information:

Antenna	Gain(dBi)
0	5
1	5
0+1	8.01

Note: 1. for 802.11n20/n40 mode, antenna 0, 1 can transmit/receive simultaneously (MIMO mode), for 802.11b/g, both antennas 0, 1 can transmit/receive at single mode (SISO mode)

2. Directional gain =  $G_{ANT} + 10 \log(N_{ANT})$  dBi

#### 2.1.3. Result: comply

The EUT has a permanently and irreplaceable attached antenna. Please refer to EUT internal photos.

## 2.2. Conducted Output Power

### 2.2.1. Limit of Conducted Output Power

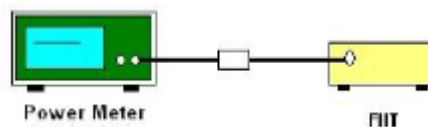
For systems using digital modulation in the 2400-2483.5MHz, the limit for peak output power is 30dBm. If transmitting antenna of directional gain greater than 6dBi is used, the peak output power from the intentional radiator shall be reduced below the above stated value by the amount in dB that the directional gain of the antenna exceeds 6 dBi. In case of point-to-point operation, the limit has to be reduced by 1dB for every 3dB that the directional gain of the antenna exceeds 6dBi.

For DTSs employing digital modulation techniques operating in the bands 902-928 MHz and 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W. The e.i.r.p. shall not exceed 4 W, except as provided in section 5.4(e).

### 2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.2.3. Test Setup



### 2.2.4. Test Procedures

1. The testing follows the Measurement Procedure of KDB558074 D01 DTS Meas Guidance v05.
2. The RF output of EUT was connected to the power meter by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Measure the conducted output power and record the results in the test report.

## 2.2.5. Test Result

### 802.11b Test mode conducted output power

Channel	Frequency (MHz)	Output Power(dBm)		Limits (dBm)	Result
		Ant. 0	Ant. 1		
1	2412	13.74	13.19	30	PASS
6	2437	13.39	13.41	30	PASS
11	2462	13.13	13.41	30	PASS

### 802.11b Test mode EIRP

Channel	Frequency (MHz)	Output Power(dBm)		Limits (dBm)	Result
		Ant. 0	Ant. 1		
1	2412	18.74	18.19	36	PASS
6	2437	18.39	18.41	36	PASS
11	2462	18.13	18.41	36	PASS

### 802.11g Test mode conducted output power

Channel	Frequency (MHz)	Output Power(dBm)		Limits (dBm)	Result
		Ant. 0	Ant. 1		
1	2412	14.20	14.31	30	PASS
6	2437	14.28	13.81	30	PASS
11	2462	14.15	14.04	30	PASS

### 802.11g Test mode EIRP

Channel	Frequency (MHz)	Output Power(dBm)		Limits (dBm)	Result
		Ant. 0	Ant. 1		
1	2412	19.20	19.31	36	PASS
6	2437	19.28	19.81	36	PASS
11	2462	19.15	19.04	36	PASS

## 802.11n-20MHz Test mode conducted output power

Channel	Frequency (MHz)	Output Power(dBm)			Limits (dBm)	Result
		Ant. 0	Ant. 1	Ant. 0+1		
1	2412	13.79	14.06	16.94	27.99	PASS
6	2437	13.09	14.05	16.61	27.99	PASS
11	2462	13.13	14.08	16.64	27.99	PASS

## 802.11n-20MHz Test mode EIRP

Channel	Frequency (MHz)	Output Power(dBm)	Limits (dBm)	Result
		Ant. 0+1		
1	2412	24.95	36	PASS
6	2437	24.62	36	PASS
11	2462	24.65	36	PASS

## 802.11n-40MHz Test mode conducted output power

Channel	Frequency (MHz)	Output Power(dBm)			Limits (dBm)	Result
		Ant. 0	Ant. 1	Ant. 0+1		
3	2422	13.54	13.96	16.77	27.99	PASS
6	2437	13.05	13.86	16.48	27.99	PASS
9	2452	13.14	13.90	16.55	27.99	PASS

## 802.11n-40MHz Test mode EIRP

Channel	Frequency (MHz)	Output Power(dBm)	Limits (dBm)	Result
		Ant. 0+1		
3	2422	24.78	36	PASS
6	2437	24.49	36	PASS
9	2452	24.56	36	PASS

Note1.: For 802.11n20/n40 mode, antenna 0 ,1 can transmit/receive simultaneously (MIMO mode), the directional gain of the transmitting antenna exceeds 6 dBi, the applicable output power limit shall be calculated as follows:  $P_{out}=P_{limit}-(G_{TX}-6)=30-(8.01-6)=27.99\text{dBm}$

Note2.: The EIRP=conducted output power + antenna gain

## 2.3. Occupied Bandwidth

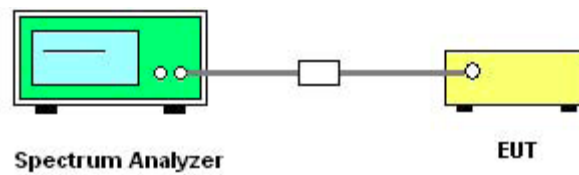
### 2.3.1. Limit of 6dB Bandwidth

The minimum 6 dB bandwidth shall be at least 500 kHz.

### 2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.3.3. Test Setup



### 2.3.4. Test Procedures

1. The testing follows FCC KDB558074 D01 DTS Meas Guidance v05.

2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

3. Set to the maximum power setting and enable the EUT transmit continuously.

4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz.

Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6dB bandwidth must be greater than 500 kHz.

5. For 99% Bandwidth Measurement, the RBW shall be set to 1% to 5% of OBW.

6. Measure and record the results in the test report.

### 2.3.5. Test Results of 6dB Bandwidth

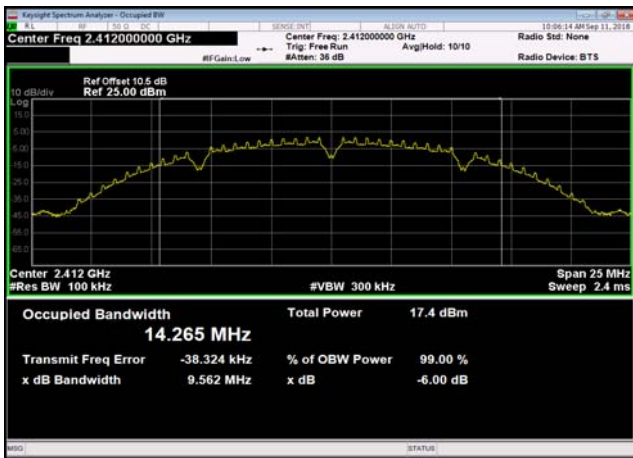
Antenna	Test mode	Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied bandwidth	Limits (MHz)	Result
Antenna 0	802.11b	1	2412	9.56	14.357	≥0.5	PASS
		6	2437	10.04	14.308		PASS
		11	2462	9.56	14.345		PASS
	802.11g	1	2412	16.34	16.715		PASS
		6	2437	16.29	16.701		PASS
		11	2462	16.32	16.710		PASS
	802.11n20	1	2412	17.56	17.596		PASS
		6	2437	17.32	17.601		PASS
		11	2462	17.58	17.597		PASS
	802.11n40	3	2422	35.10	35.915		PASS
		6	2437	35.11	35.915		PASS
		9	2452	35.11	35.920		PASS

Antenna	Test mode	Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	99% Occupied bandwidth	Limits (MHz)	Result
Antenna 1	802.11b	1	2412	9.55	14.298	≥0.5	PASS
		6	2437	9.09	14.570		PASS
		11	2462	9.55	14.307		PASS
	802.11g	1	2412	15.13	16.710		PASS
		6	2437	15.13	16.714		PASS
		11	2462	15.13	16.717		PASS
	802.11n20	1	2412	15.13	17.603		PASS
		6	2437	15.13	17.594		PASS
		11	2462	15.13	17.604		PASS
	802.11n40	3	2422	35.10	36.018		PASS
		6	2437	35.11	35.998		PASS
		9	2452	35.10	35.994		PASS

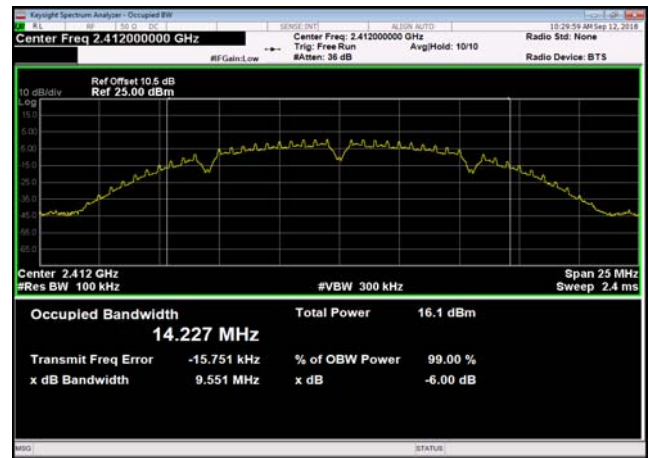


### 2.3.6. Test Results (plots) of 6dB and 99% Bandwidth

6dB Bandwidth-802.11b,2412MHz,Ant0



6dB Bandwidth-802.11b,2412MHz,Ant1



6dB Bandwidth-802.11b,2437MHz,Ant0



6dB Bandwidth-802.11b,2437MHz,Ant1



6dB Bandwidth-802.11b,2462MHz,Ant0



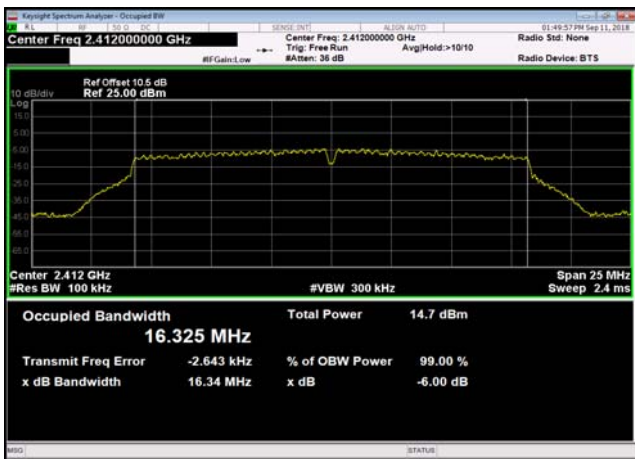
6dB Bandwidth-802.11b,2462MHz,Ant1



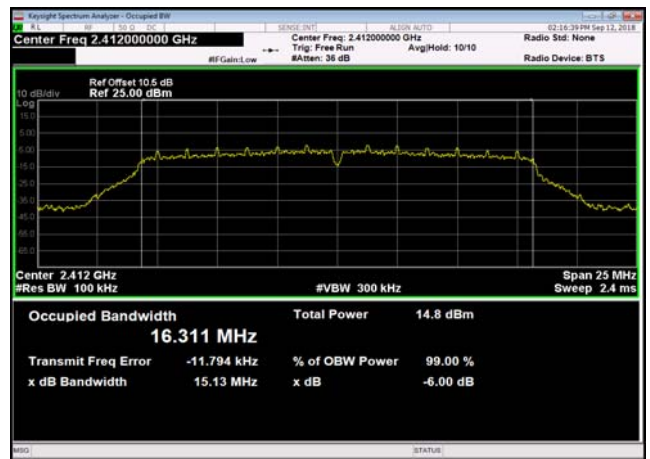




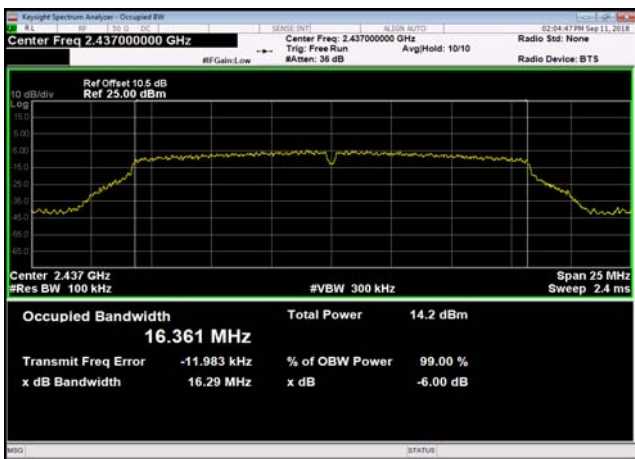
6dB Bandwidth-802.11g,2412MHz,Ant0



6dB Bandwidth-802.11g,2412MHz,Ant1



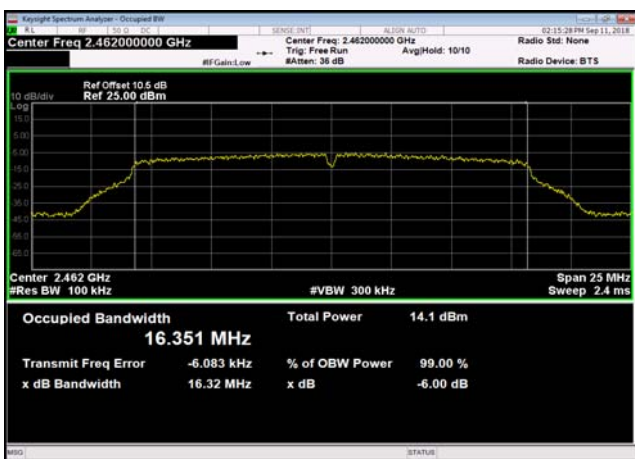
6dB Bandwidth-802.11g,2437MHz,Ant0



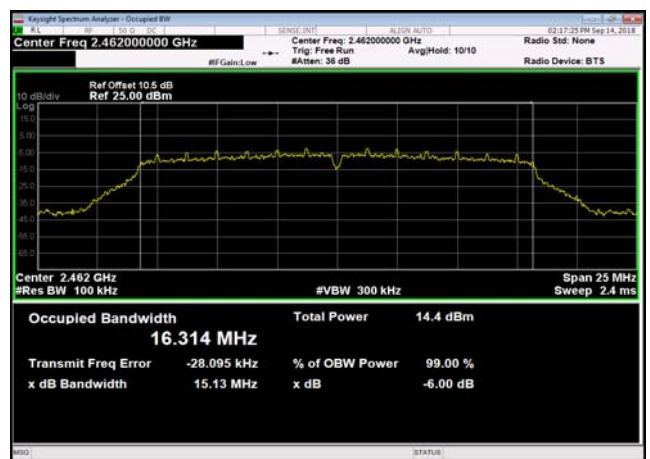
6dB Bandwidth-802.11g,2437MHz,Ant1



6dB Bandwidth-802.11g,2462MHz,Ant0

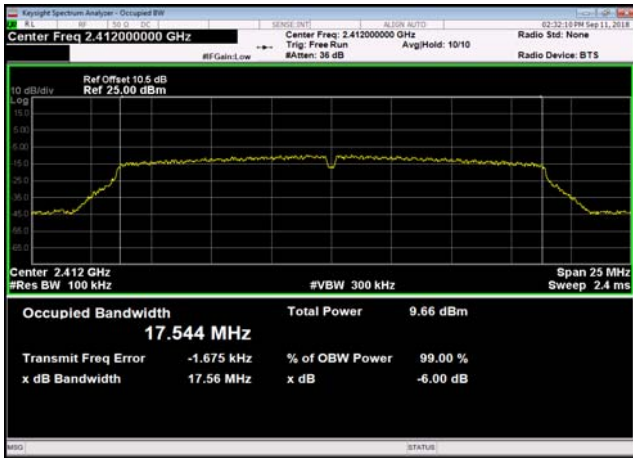


6dB Bandwidth-802.11g,2462MHz,Ant1

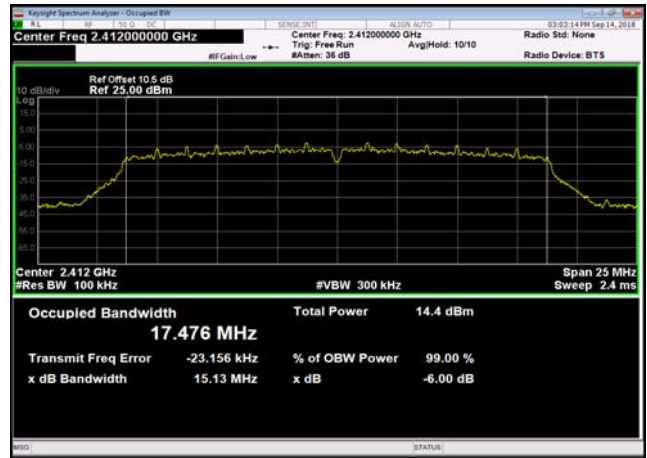




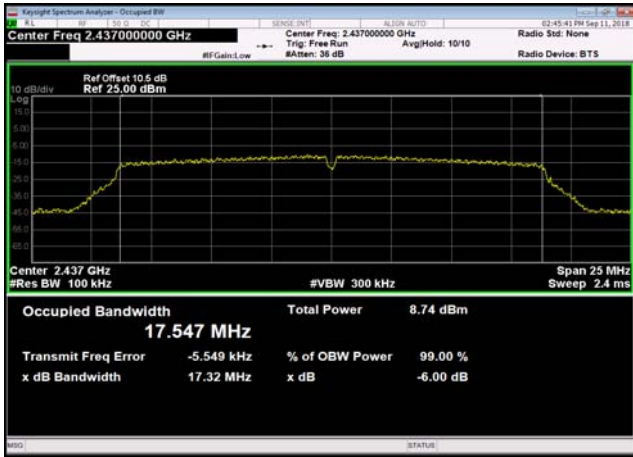
6dB Bandwidth-802.11n(HT20),2412MHz  
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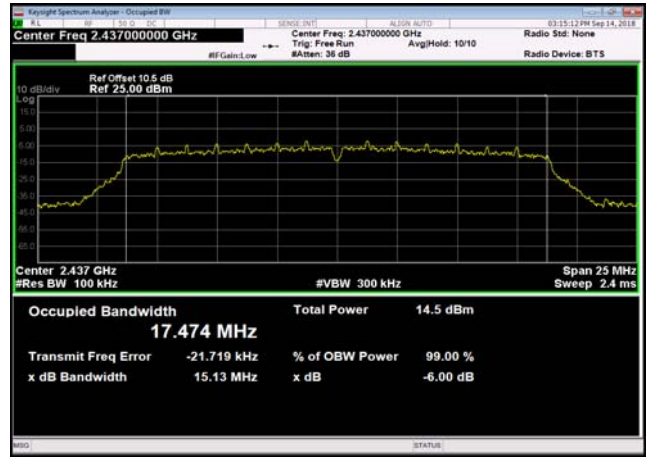
6dB Bandwidth-802.11n(HT20),2412MHz  
,Ant1



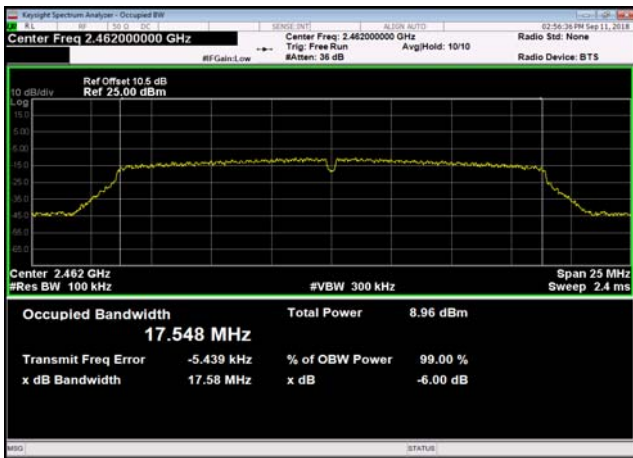
6dB Bandwidth-802.11n(HT20),2437MHz  
,Ant0



6dB Bandwidth-802.11n(HT20),2437MHz  
,Ant1



6dB Bandwidth-802.11n(HT20),2462MHz  
,Ant0

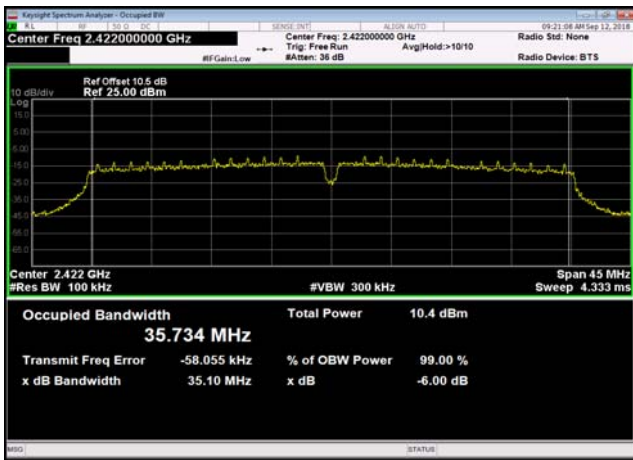


6dB Bandwidth-802.11n(HT20),2462MHz  
,Ant1

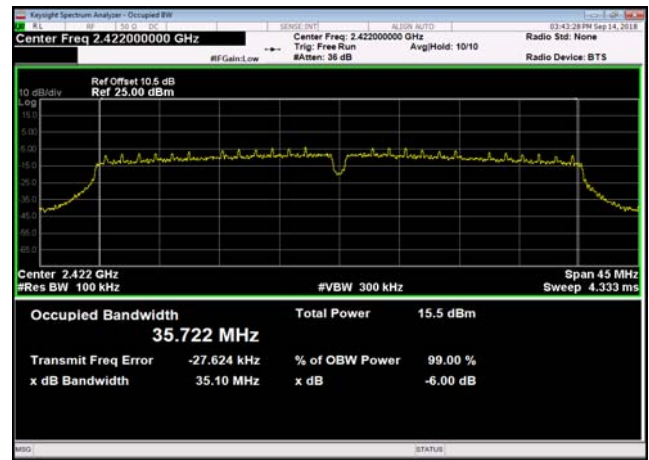




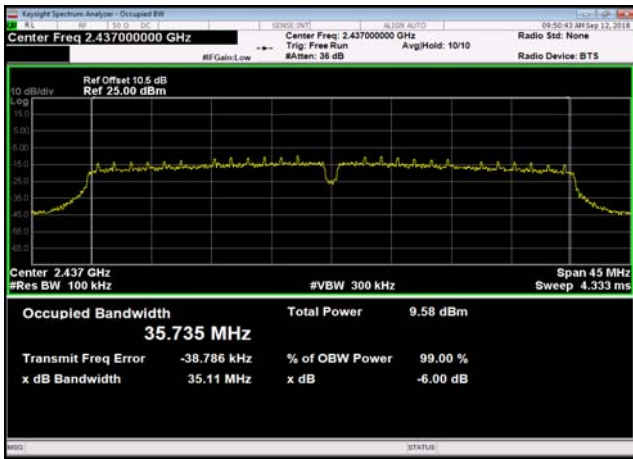
6dB Bandwidth-802.11n(HT40),2422MHz  
,Ant0



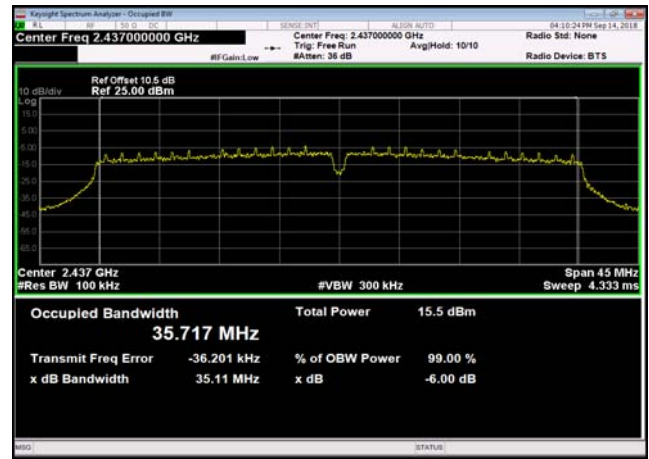
6dB Bandwidth-802.11n(HT40),2422MHz  
,Ant1



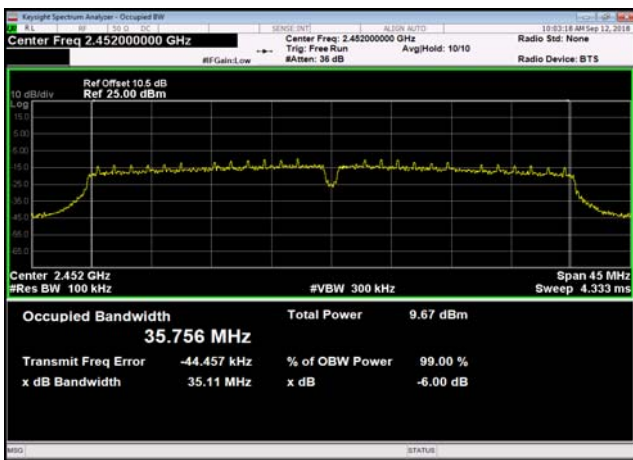
6dB Bandwidth-802.11n(HT40),2437MHz  
,Ant0



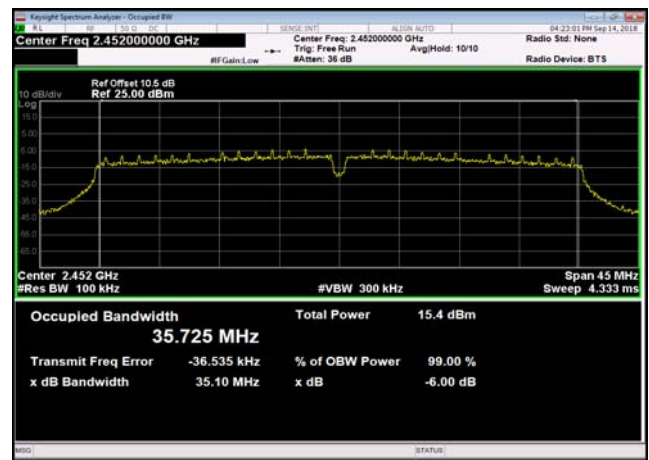
6dB Bandwidth-802.11n(HT40),2437MHz  
,Ant1



6dB Bandwidth-802.11n(HT40),2452MHz  
,Ant0



6dB Bandwidth-802.11n(HT40),2452MHz  
,Ant1

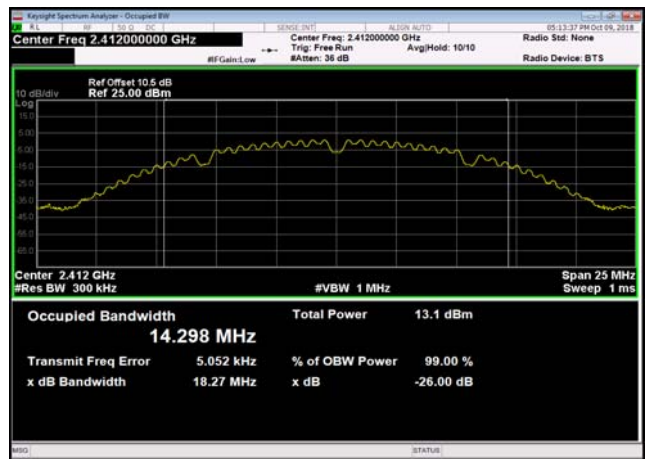




99% Bandwidth-802.11b,2412MHz,Ant0



99% Bandwidth-802.11b,2412MHz,Ant1



99% Bandwidth-802.11b,2437MHz,Ant0



99% Bandwidth-802.11b,2437MHz,Ant1



99% Bandwidth-802.11b,2462MHz,Ant0



99% Bandwidth-802.11b,2462MHz,Ant1



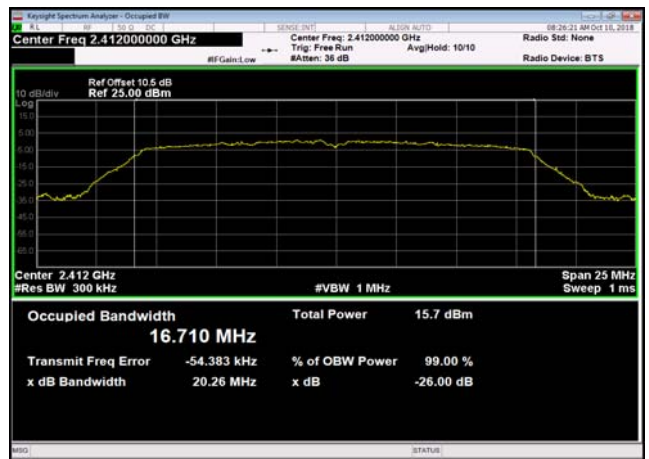




99% Bandwidth-802.11g,2412MHz,Ant0



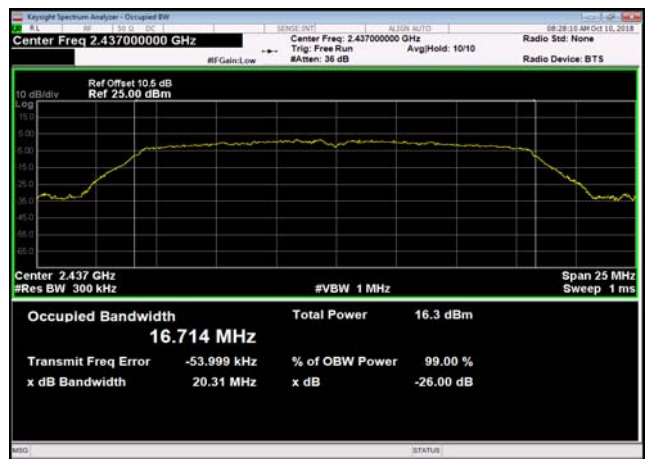
99% Bandwidth-802.11g,2412MHz,Ant1



99% Bandwidth-802.11g,2437MHz,Ant0



99% Bandwidth-802.11g,2437MHz,Ant1



99% Bandwidth-802.11g,2462MHz,Ant0

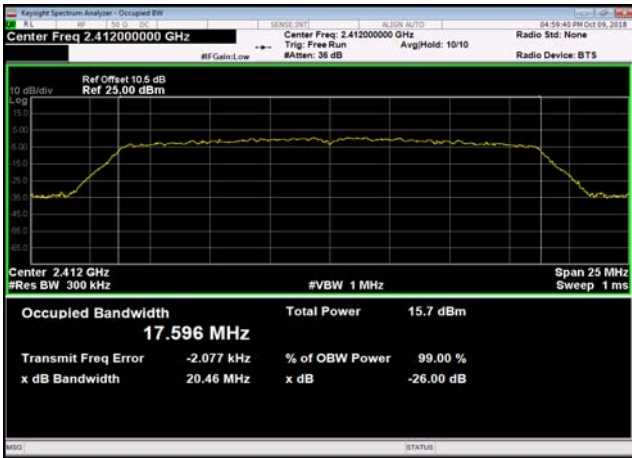


99% Bandwidth-802.11g,2462MHz,Ant1

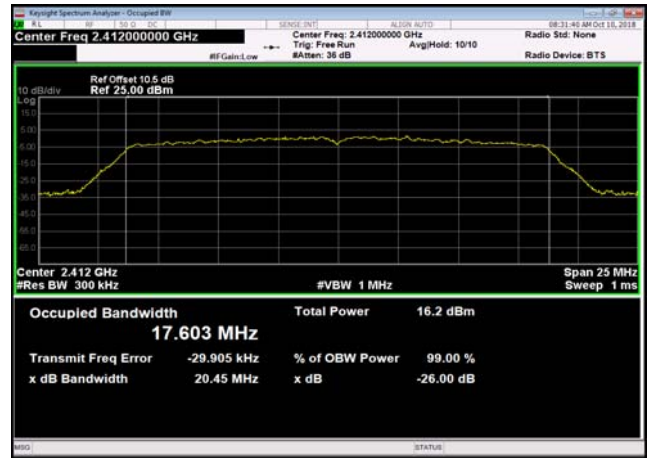




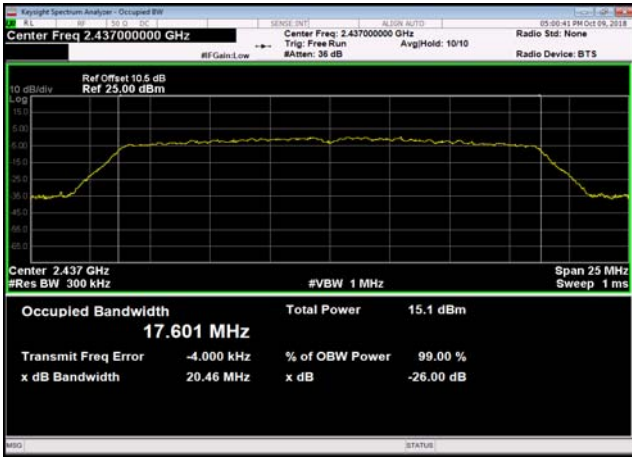
99% Bandwidth-802.11n(HT20),2412MHz  
,Ant0



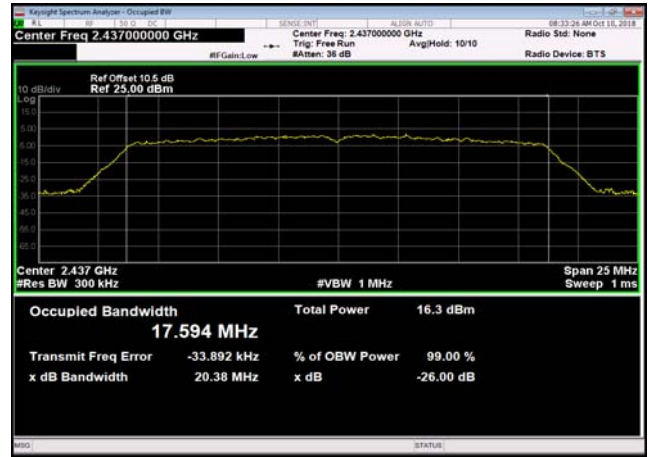
99% Bandwidth-802.11n(HT20),2412MHz  
,Ant1



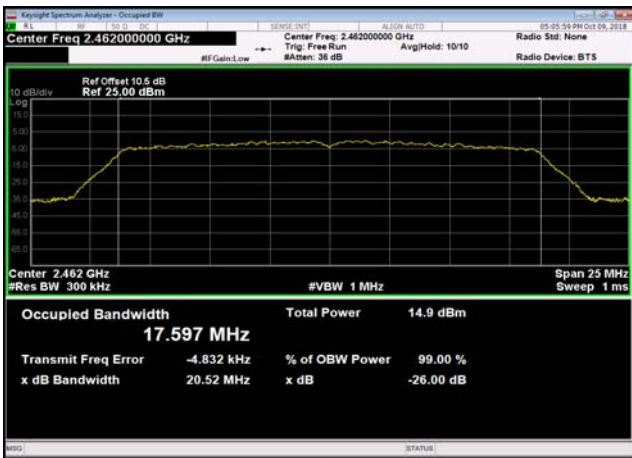
99% Bandwidth-802.11n(HT20),2437MHz  
,Ant0



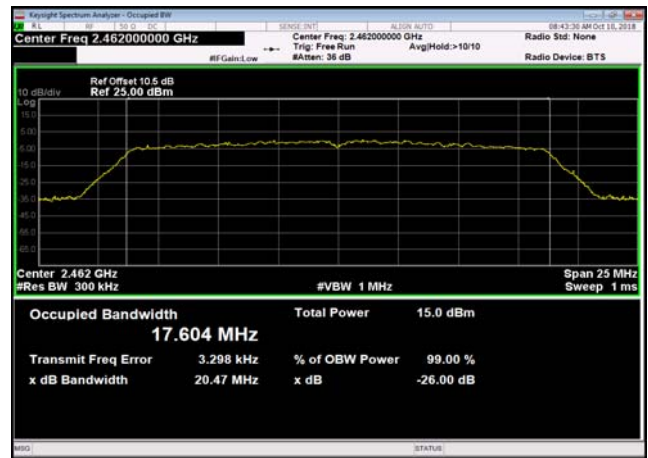
99% Bandwidth-802.11n(HT20),2437MHz  
,Ant1



99% Bandwidth-802.11n(HT20),2462MHz  
,Ant0

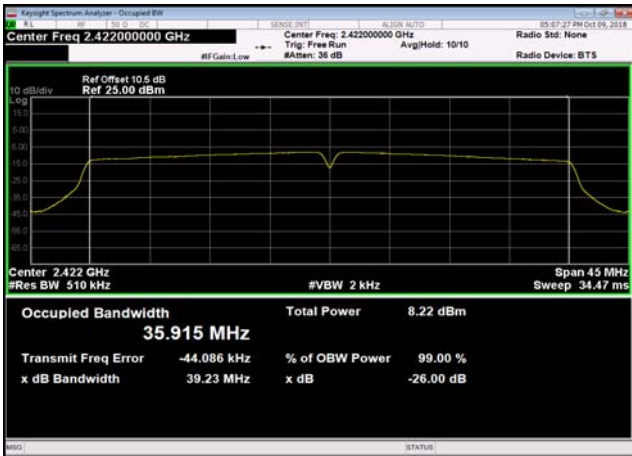


99% Bandwidth-802.11n(HT20),2462MHz  
,Ant1

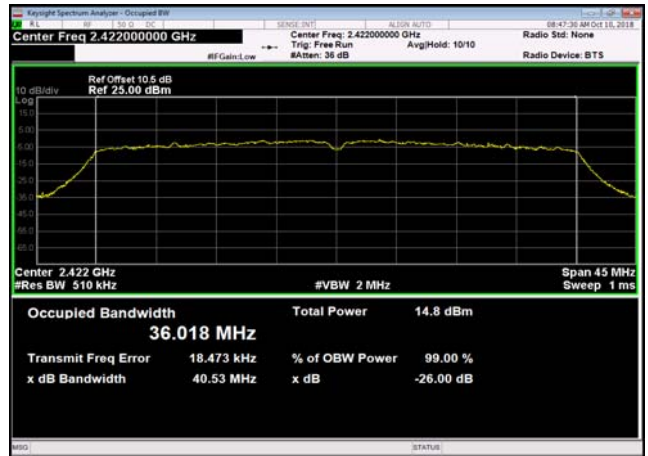




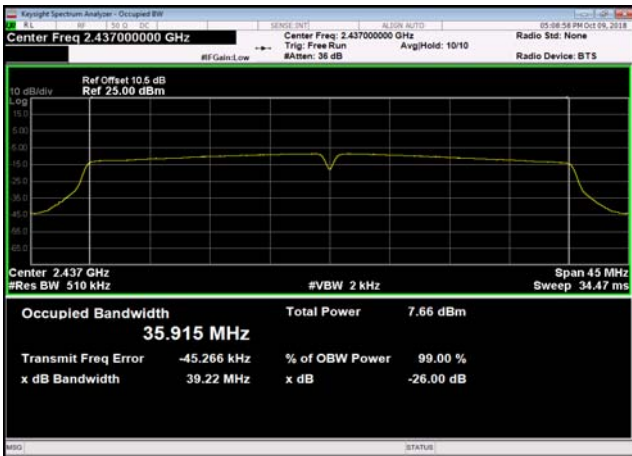
99% Bandwidth-802.11n(HT40),2422MHz  
,Ant0



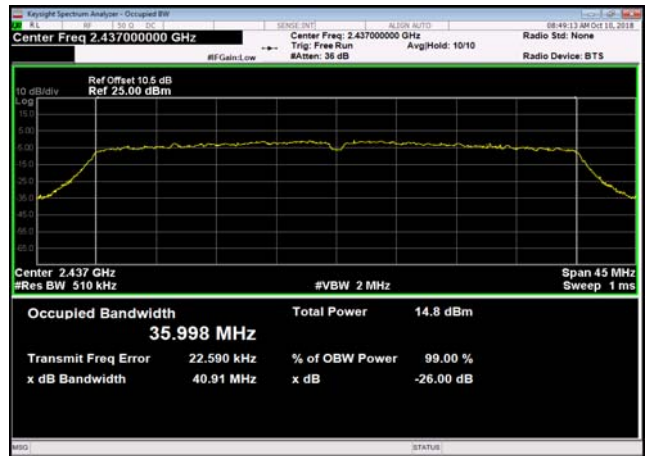
99% Bandwidth-802.11n(HT40),2422MHz  
,Ant1



99% Bandwidth-802.11n(HT40),2437MHz  
,Ant0



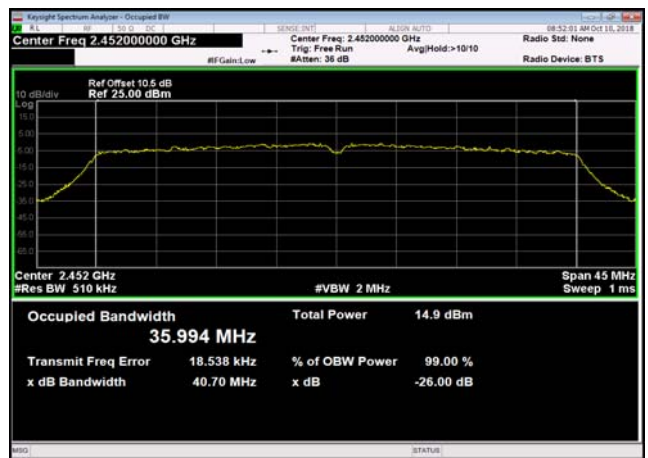
99% Bandwidth-802.11n(HT40),2437MHz  
,Ant1



99% Bandwidth-802.11n(HT40),2452MHz  
,Ant0



99% Bandwidth-802.11n(HT40),2452MHz  
,Ant1



## 2.4. Conducted Band Edges and Spurious Emissions

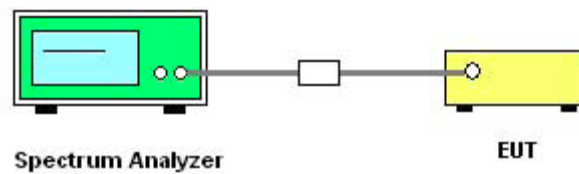
### 2.4.1. Limit of Conducted Band Edges and Spurious Emissions

All harmonics/spurious must be at least 20 dB down from the highest emission level within the authorized band.

### 2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

### 2.4.3. Test Setup



### 2.4.4. Test Procedure

1. The testing follows FCC KDB558074 D01 DTS Meas Guidance v05.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. Set to the maximum power setting and enable the EUT transmit continuously.
4. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100kHz bandwidth outside of the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when maximum peak conducted output power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB per 15.247(d).
5. Measure and record the results in the test report.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



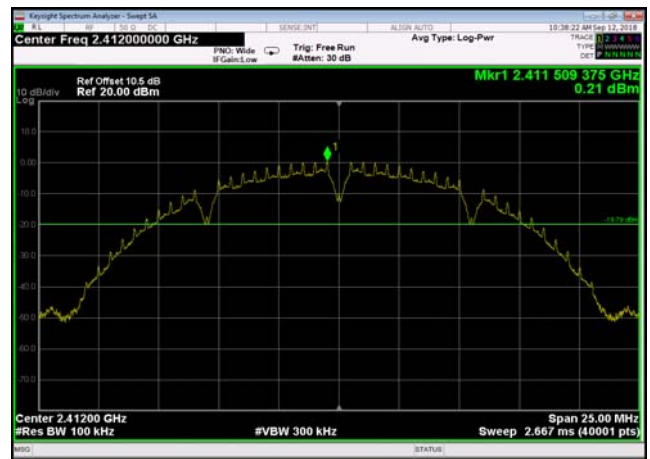


### 2.4.5. Test Results of Conducted Band Edges

Reference Level-802.11b  
,2412MHz,Ant0



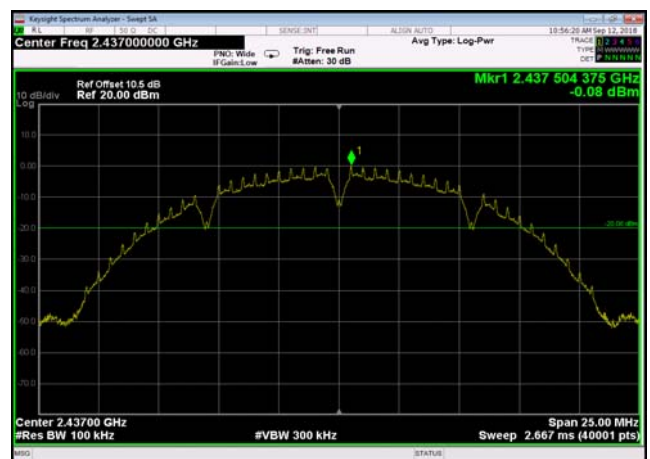
Reference Level-802.11b  
,2412MHz,Ant1



Reference Level-802.11b  
,2437MHz,Ant0



Reference Level-802.11b  
,2437MHz,Ant1



Reference Level-802.11b  
,2462MHz,Ant0

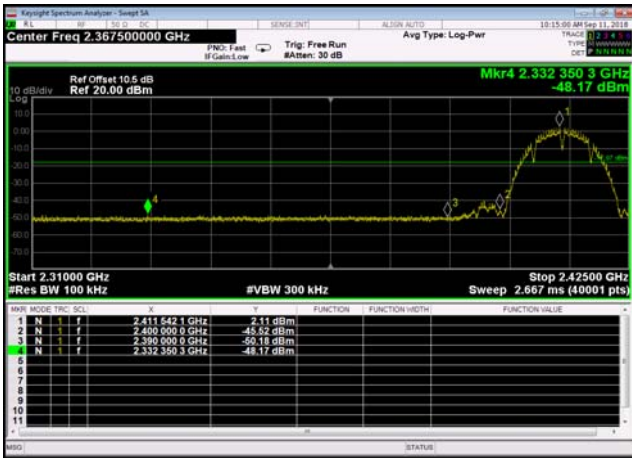


Reference Level-802.11b  
,2462MHz,Ant1

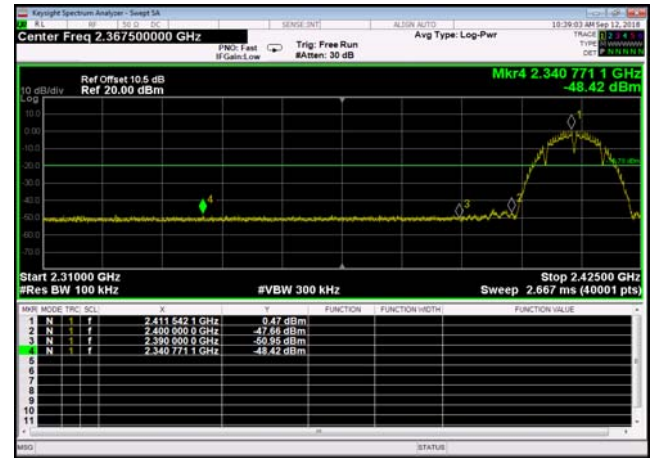




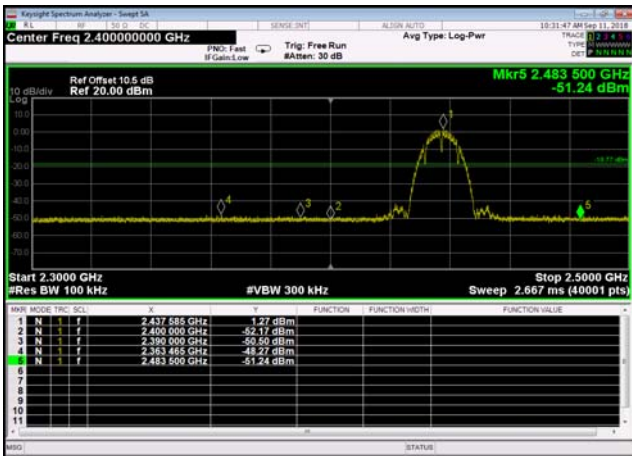
Band Edge-802.11b,2412MHz  
,Ant0



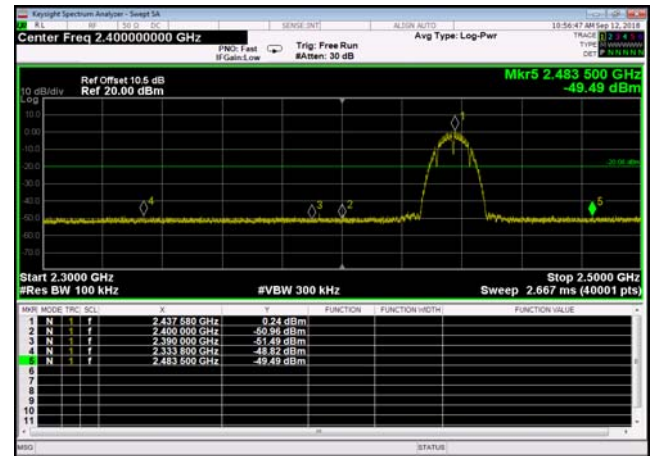
Band Edge-802.11b,2412MHz  
,Ant1



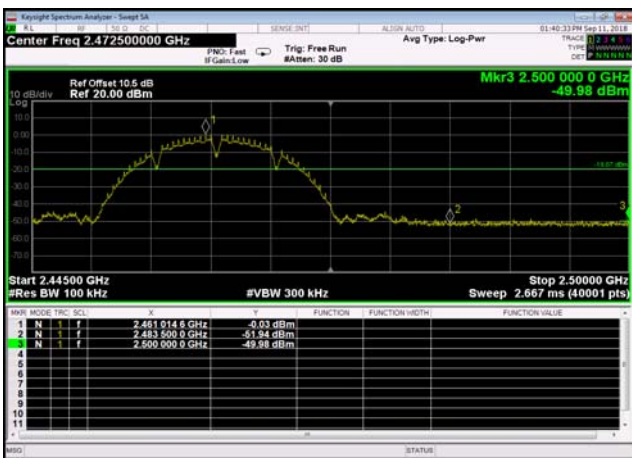
Band Edge-802.11b,2437MHz  
,Ant0



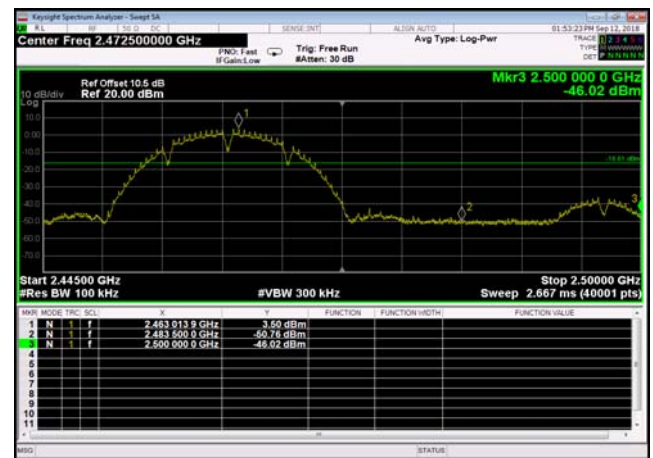
Band Edge-802.11b,2437MHz  
,Ant1



Band Edge-802.11b,2462MHz  
,Ant0

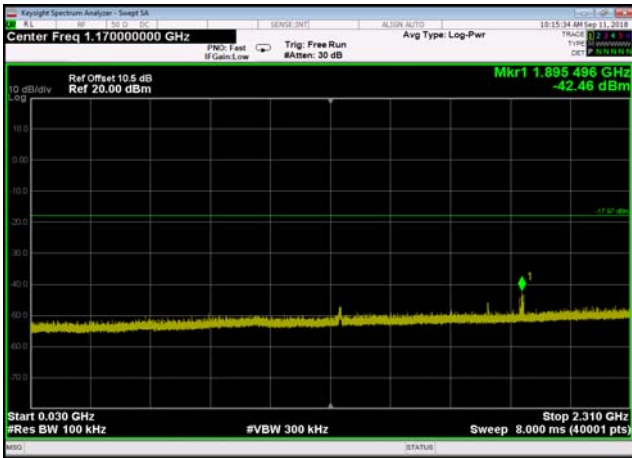


Band Edge-802.11b,2462MHz  
,Ant1

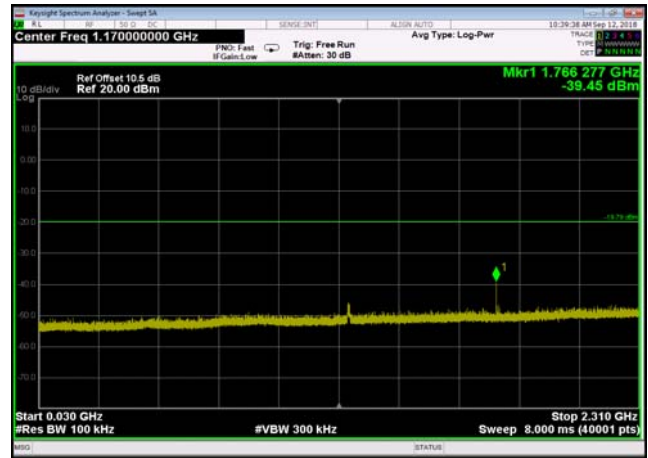




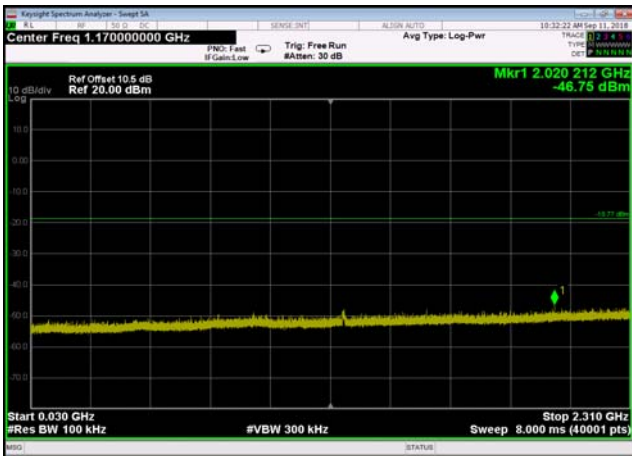
30MHz~2310MHz-802.11b,2412MHz  
,Ant0



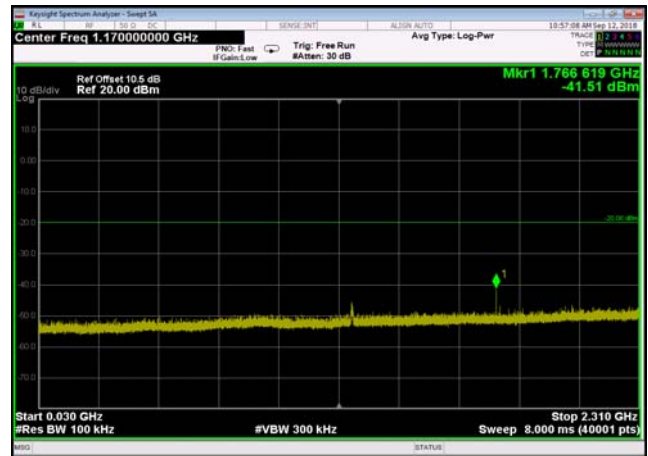
30MHz~2310MHz-802.11b,2412MHz  
,Ant1



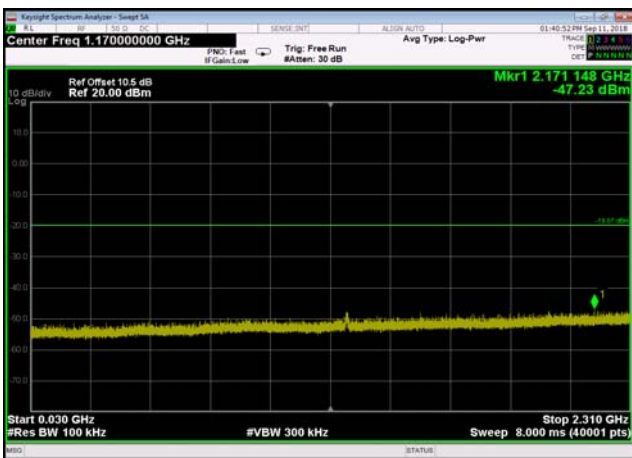
30MHz~2310MHz-802.11b,2437MHz  
,Ant0



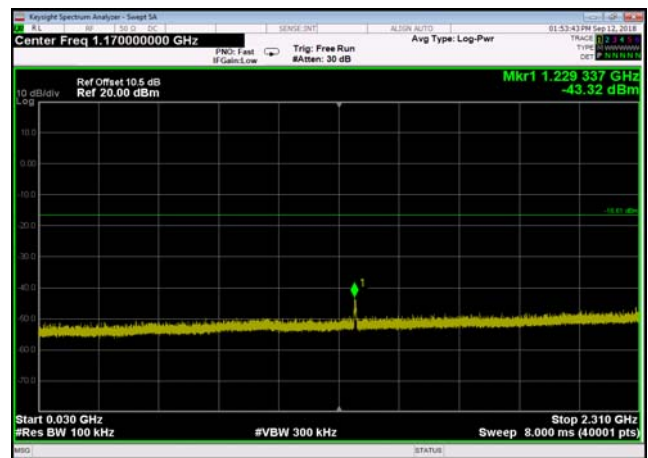
30MHz~2310MHz-802.11b,2437MHz  
,Ant1



30MHz~2310MHz-802.11b,2462MHz  
,Ant0



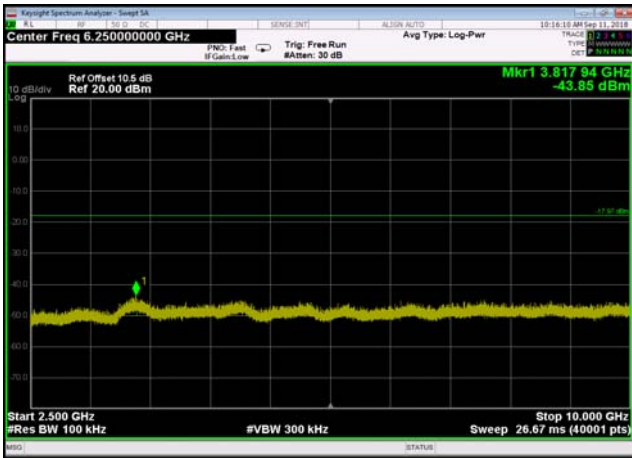
30MHz~2310MHz-802.11b,2462MHz  
,Ant1



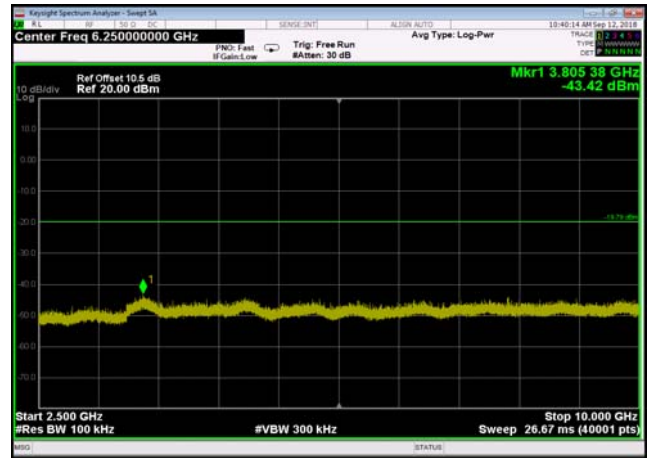




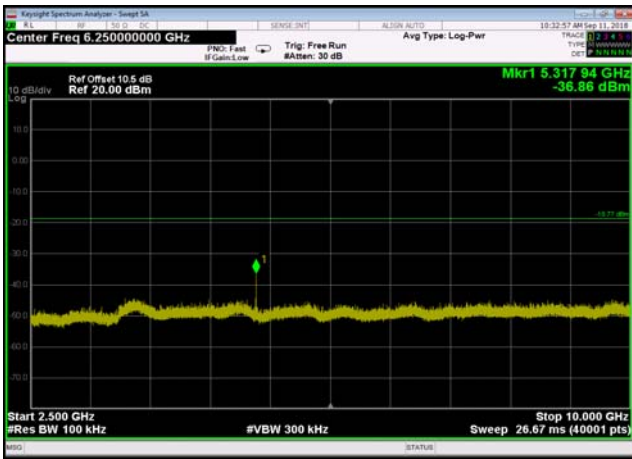
2500MHz~10000MHz-802.11b  
,2412MHz,Ant0



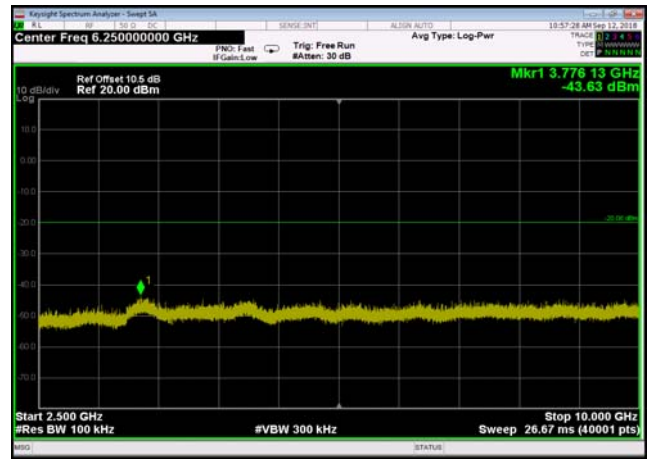
2500MHz~10000MHz-802.11b  
,2412MHz,Ant1



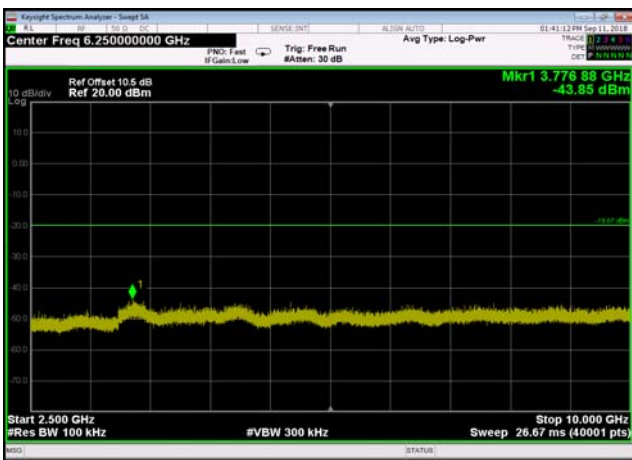
2500MHz~10000MHz-802.11b  
,2437MHz,Ant0



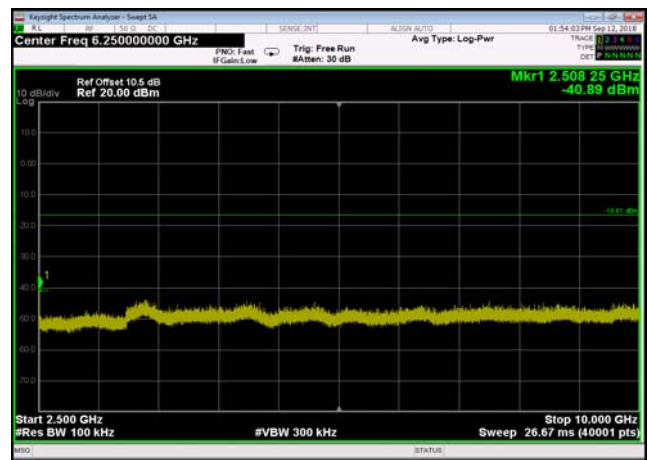
2500MHz~10000MHz-802.11b  
,2437MHz,Ant1



2500MHz~10000MHz-802.11b  
,2462MHz,Ant0

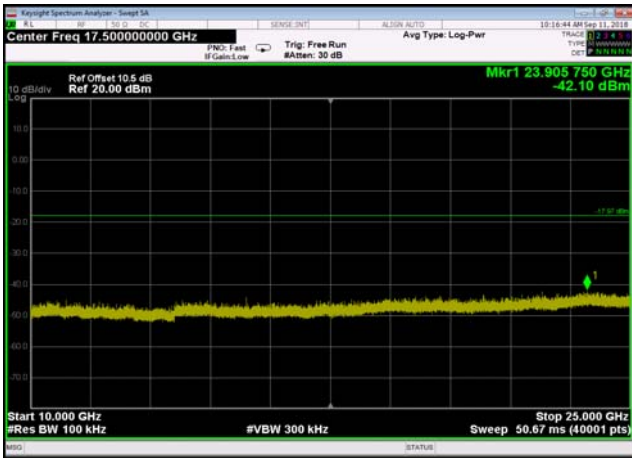


2500MHz~10000MHz-802.11b  
,2462MHz,Ant1

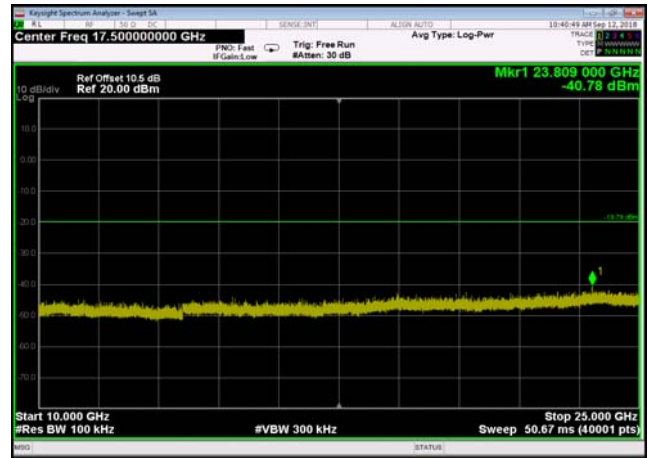




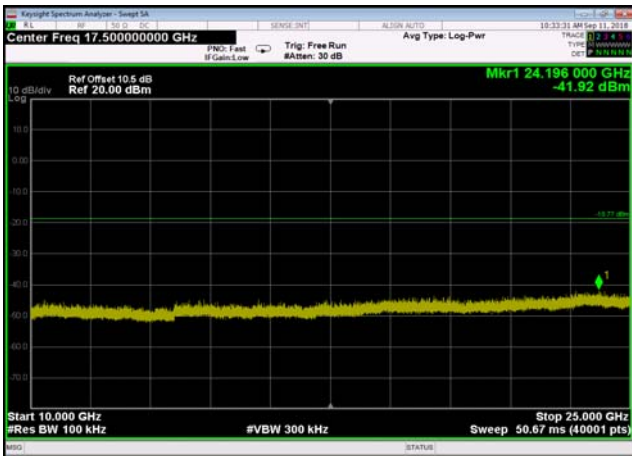
10000MHz~25000MHz-802.11b  
,2412MHz,Ant0



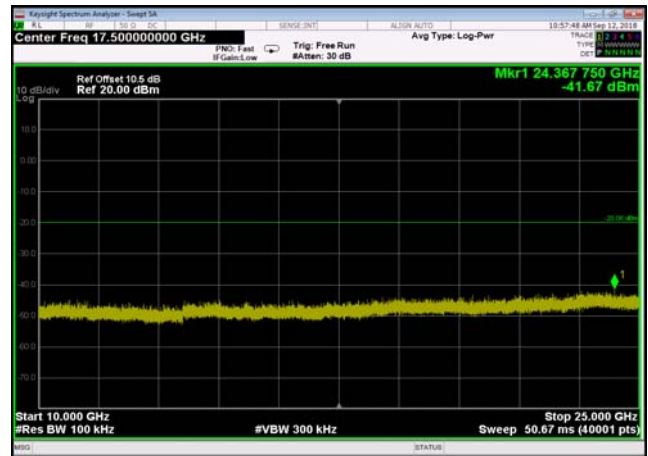
10000MHz~25000MHz-802.11b  
,2412MHz,Ant1



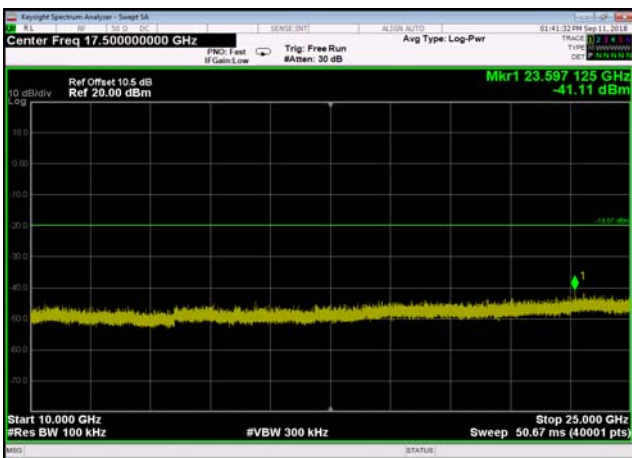
10000MHz~25000MHz-802.11b  
,2437MHz,Ant0



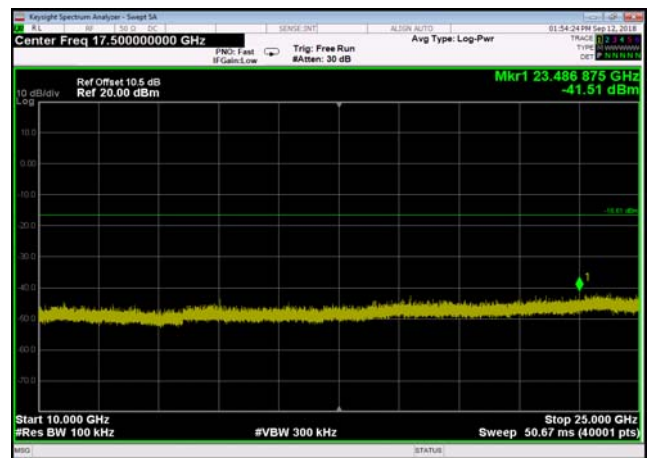
10000MHz~25000MHz-802.11b  
,2437MHz,Ant1



10000MHz~25000MHz-802.11b  
,2462MHz,Ant0

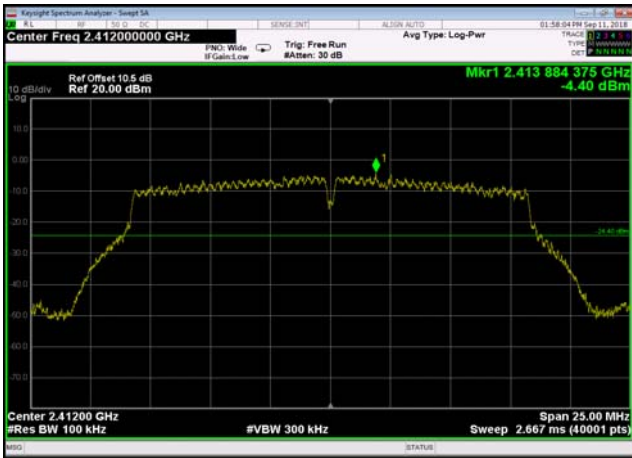


10000MHz~25000MHz-802.11b  
,2462MHz,Ant1

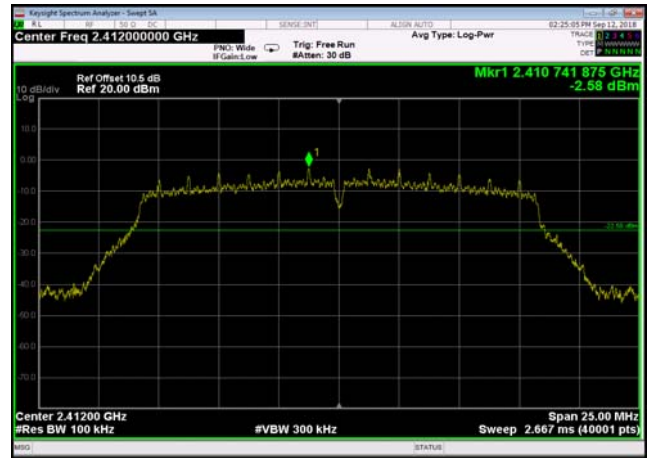




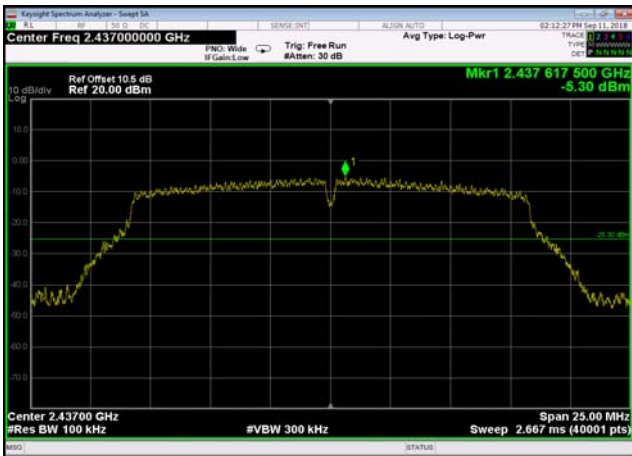
Reference Level-802.11g  
,2412MHz,Ant0



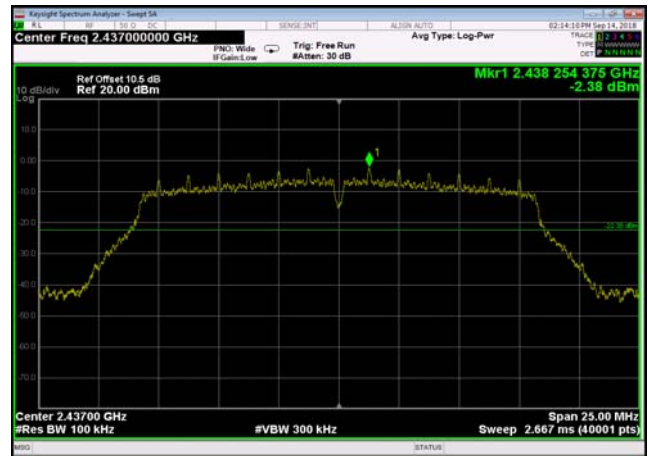
Reference Level-802.11g  
,2412MHz,Ant1



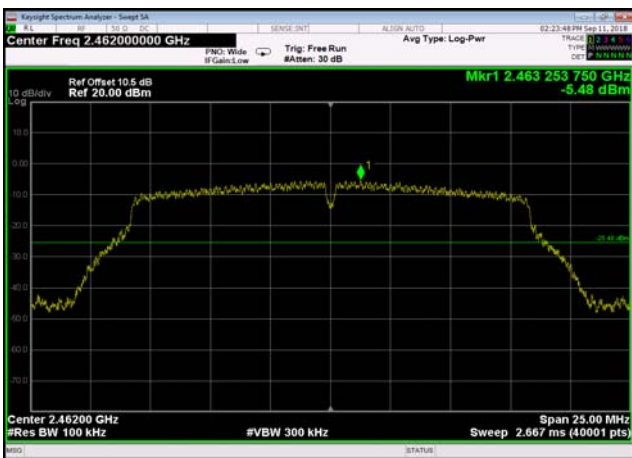
Reference Level-802.11g  
,2437MHz,Ant0



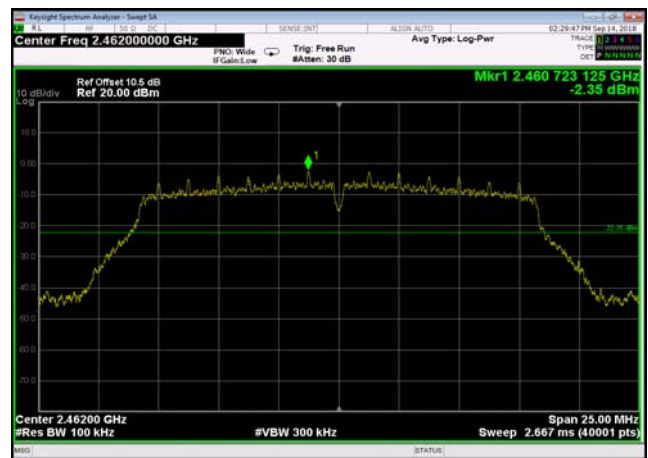
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Reference Level-802.11g  
,2462MHz,Ant0



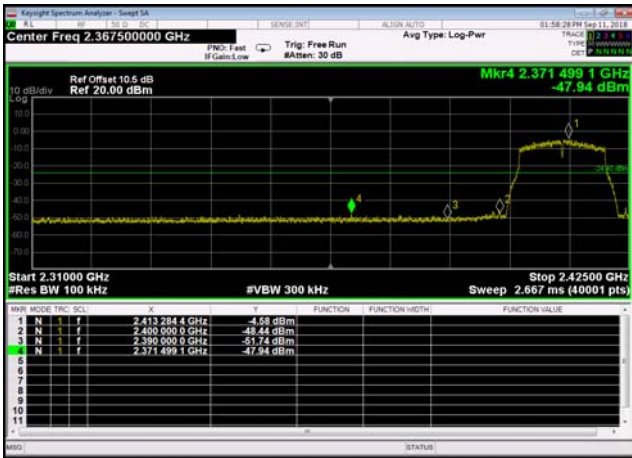
Reference Level-802.11g  
,2462MHz,Ant1



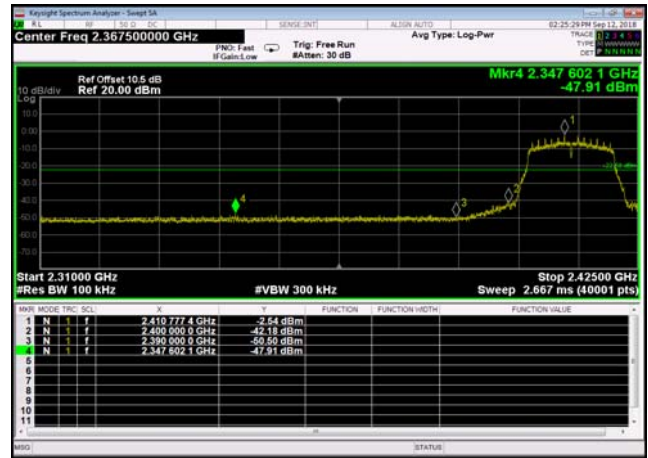




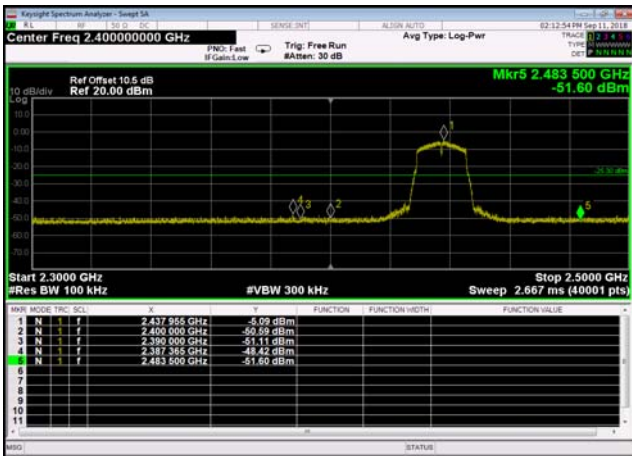
Band Edge-802.11g,2412MHz  
,Ant0



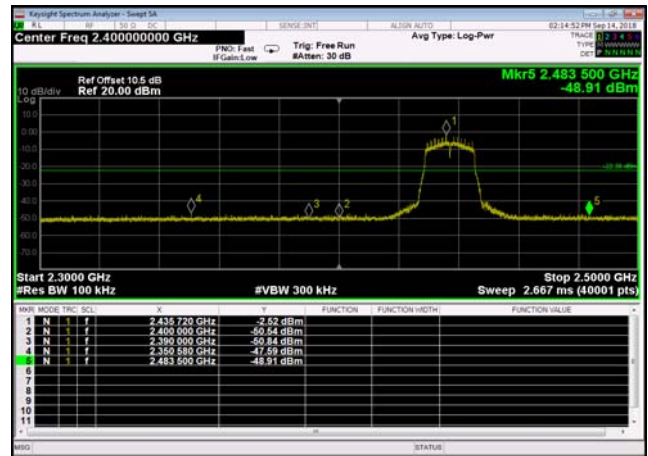
Band Edge-802.11g,2412MHz  
,Ant1



Band Edge-802.11g,2437MHz  
,Ant0



Band Edge-802.11g,2437MHz  
,Ant1



Band Edge-802.11g,2462MHz  
,Ant0

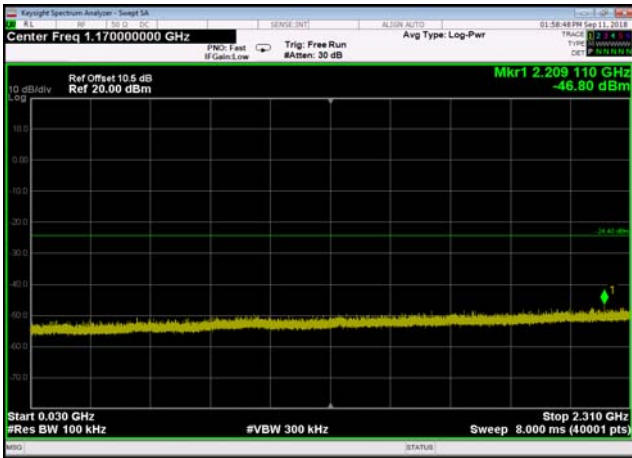


Band Edge-802.11g,2462MHz  
,Ant1

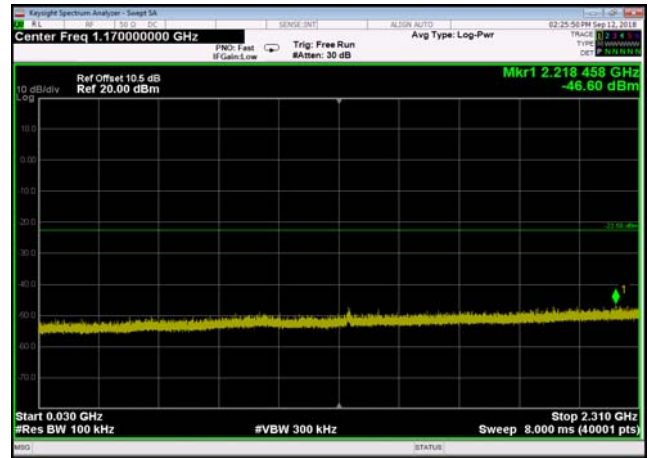




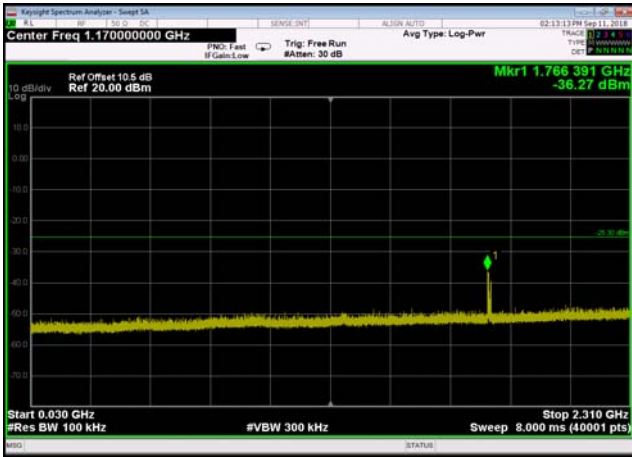
30MHz~2310MHz-802.11g,2412MHz  
,Ant0



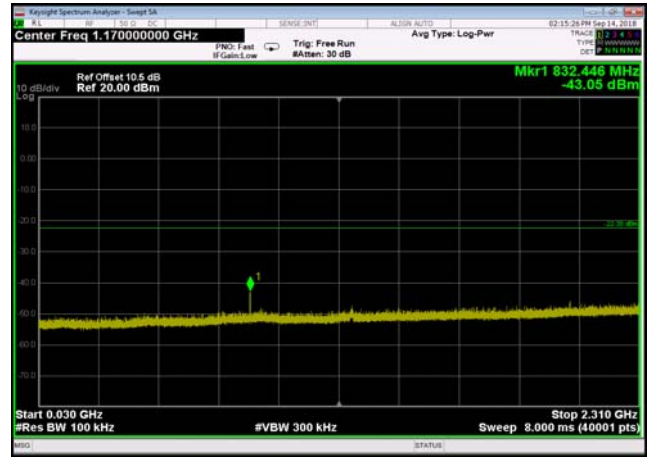
30MHz~2310MHz-802.11g,2412MHz  
,Ant1



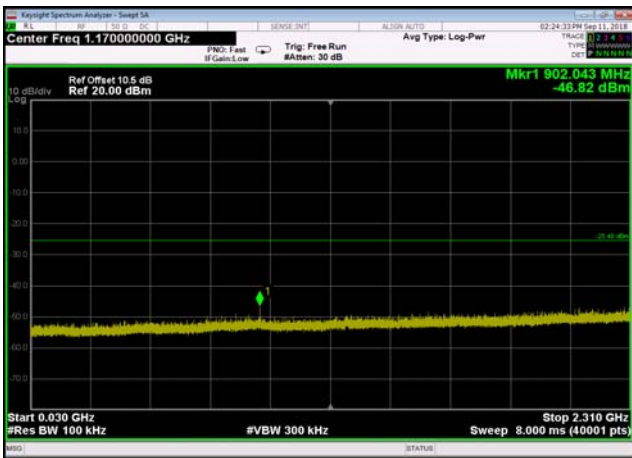
30MHz~2310MHz-802.11g,2437MHz  
,Ant0



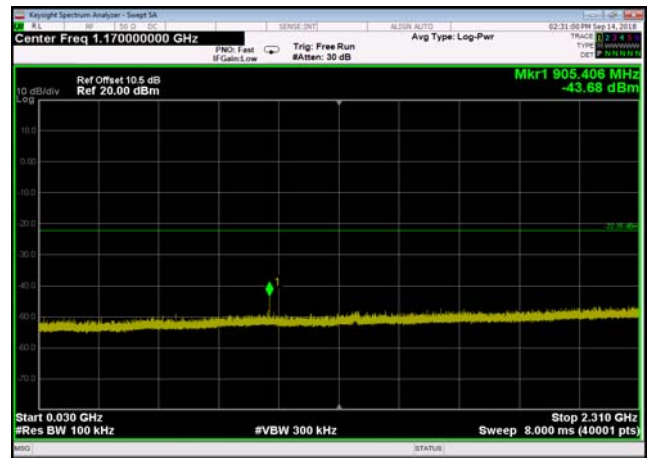
30MHz~2310MHz-802.11g,2437MHz  
,Ant1



30MHz~2310MHz-802.11g,2462MHz  
,Ant0



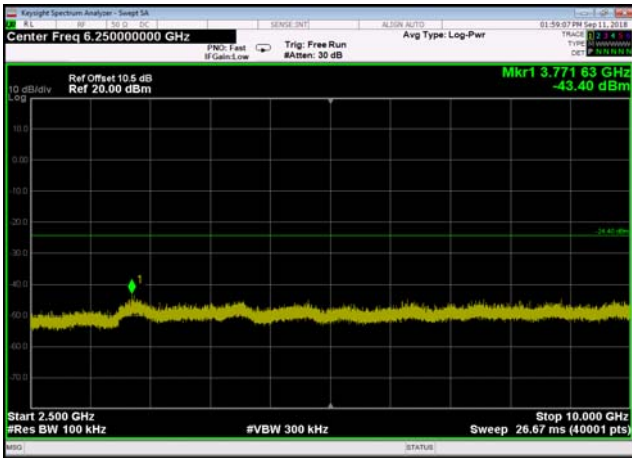
30MHz~2310MHz-802.11g,2462MHz  
,Ant1



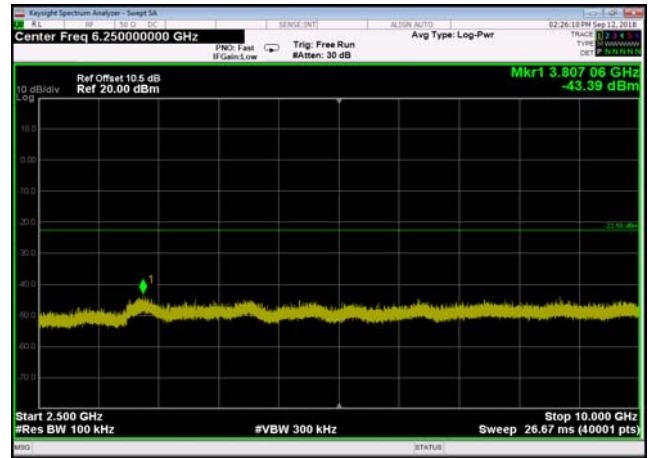




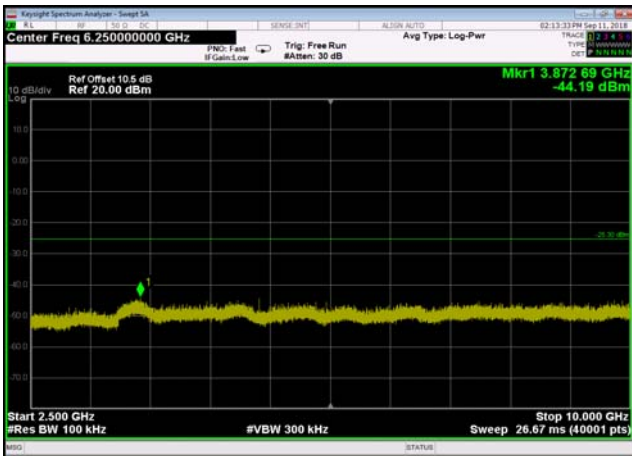
2500MHz~10000MHz-802.11g  
,2412MHz,Ant0



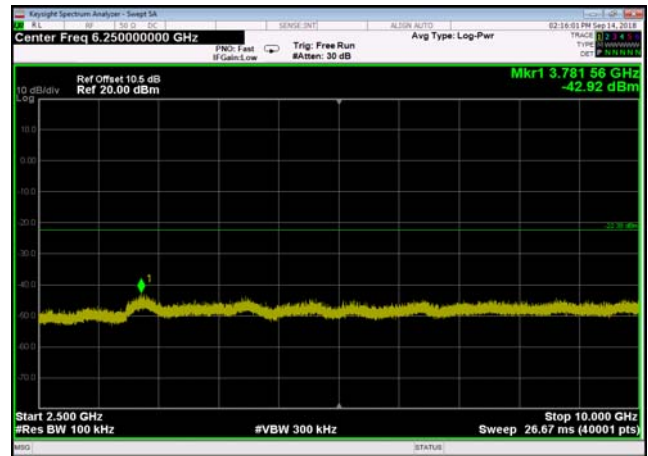
2500MHz~10000MHz-802.11g  
,2412MHz,Ant1



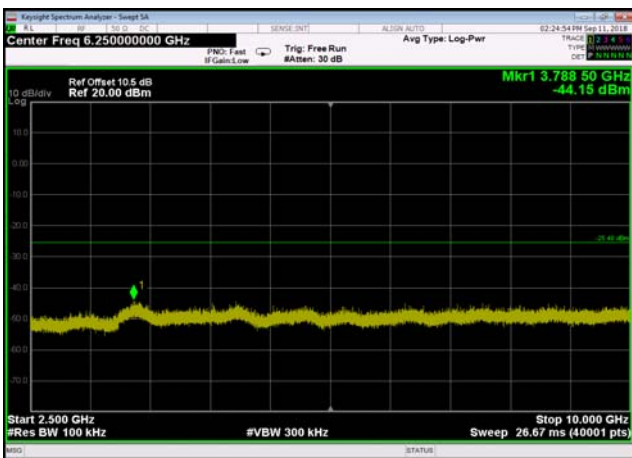
2500MHz~10000MHz-802.11g  
,2437MHz,Ant0



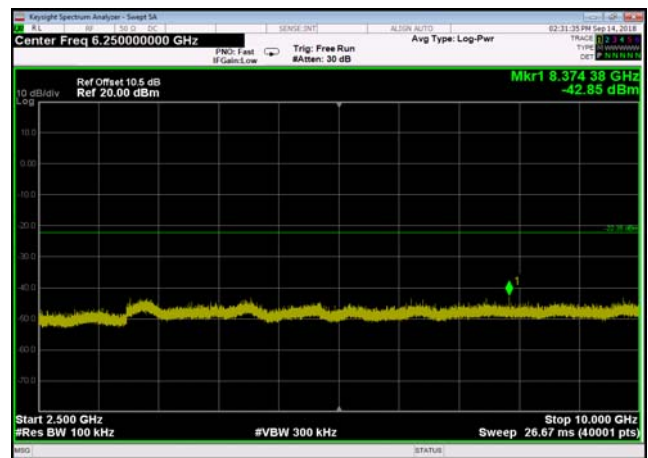
2500MHz~10000MHz-802.11g  
,2437MHz,Ant1



2500MHz~10000MHz-802.11g  
,2462MHz,Ant0

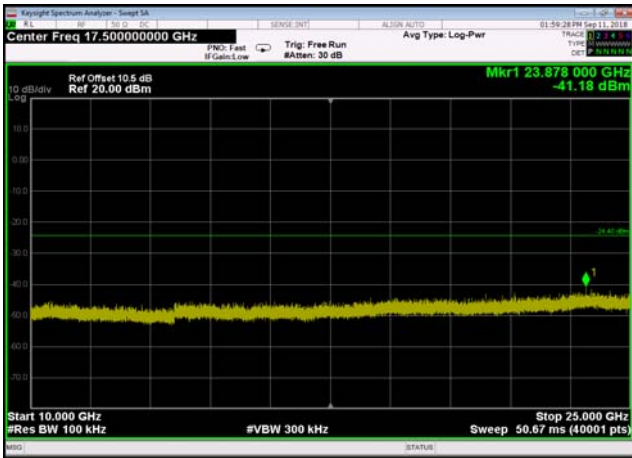


2500MHz~10000MHz-802.11g  
,2462MHz,Ant1

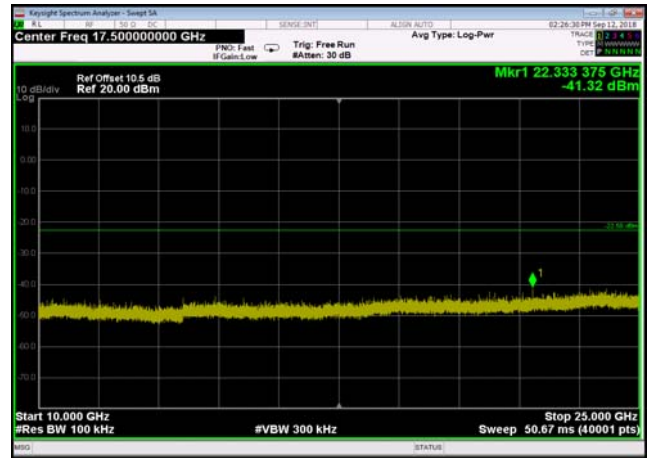




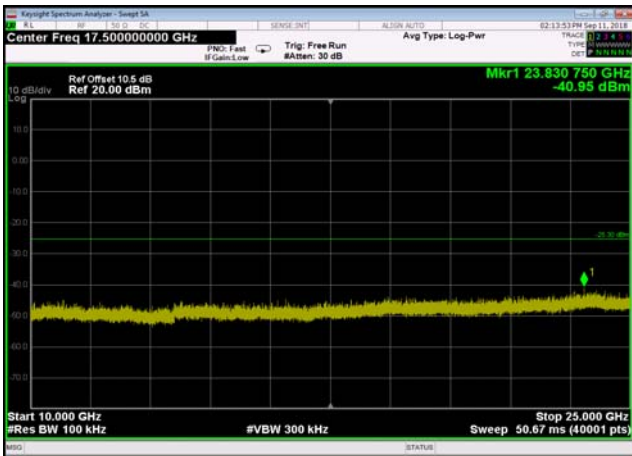
10000MHz~25000MHz-802.11g  
,2412MHz,Ant0



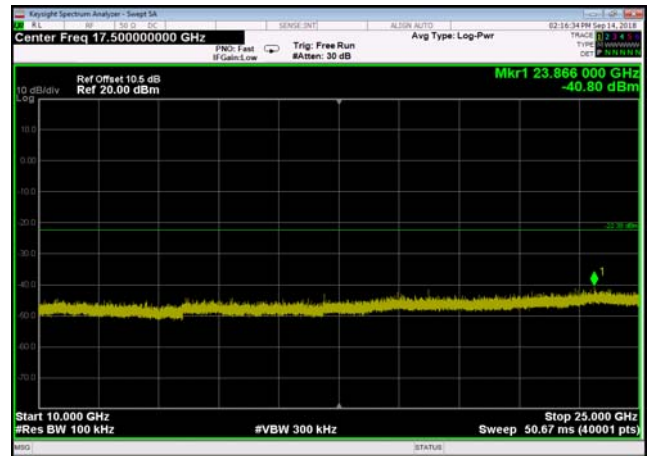
10000MHz~25000MHz-802.11g  
,2412MHz,Ant1



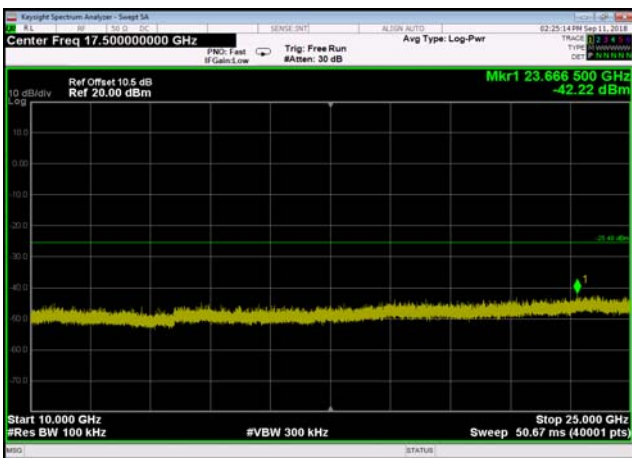
10000MHz~25000MHz-802.11g  
,2437MHz,Ant0



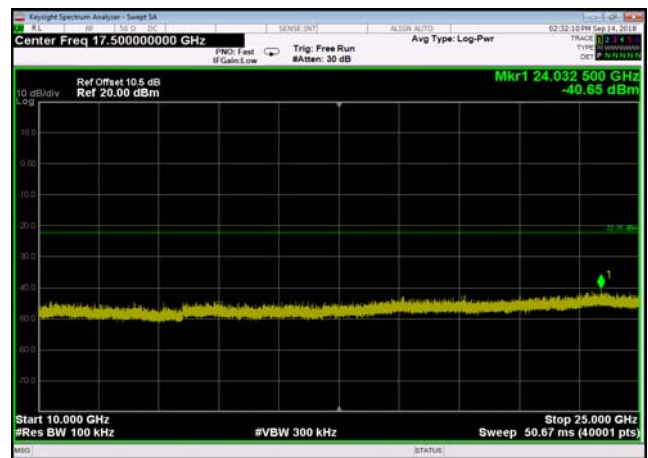
10000MHz~25000MHz-802.11g  
,2437MHz,Ant1



10000MHz~25000MHz-802.11g  
,2462MHz,Ant0

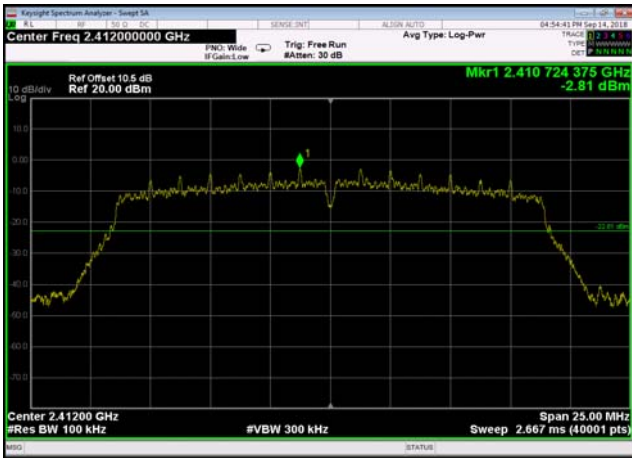


10000MHz~25000MHz-802.11g  
,2462MHz,Ant1

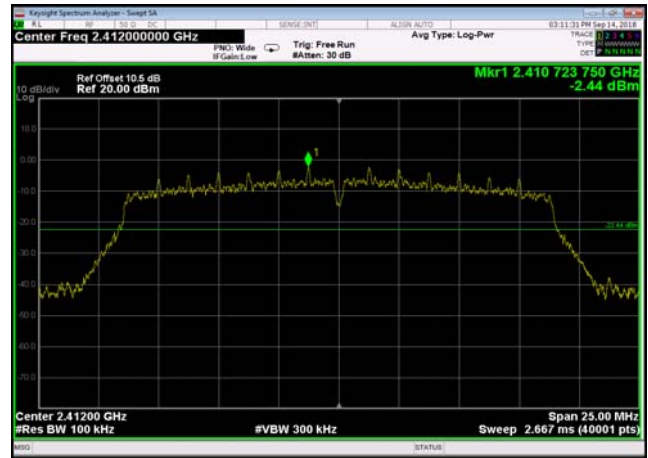




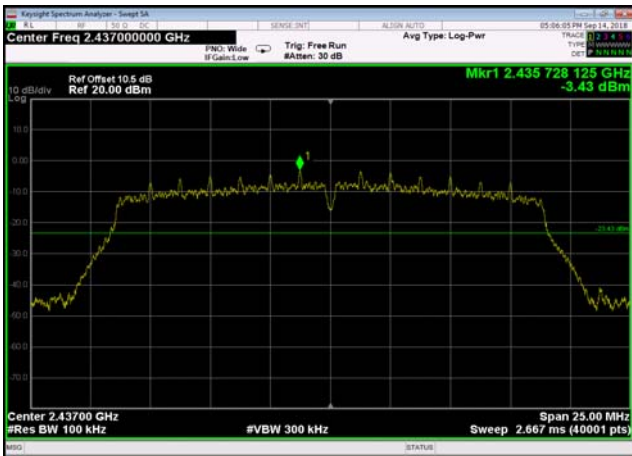
Reference Level-802.11n(HT20)  
,2412MHz,Ant0



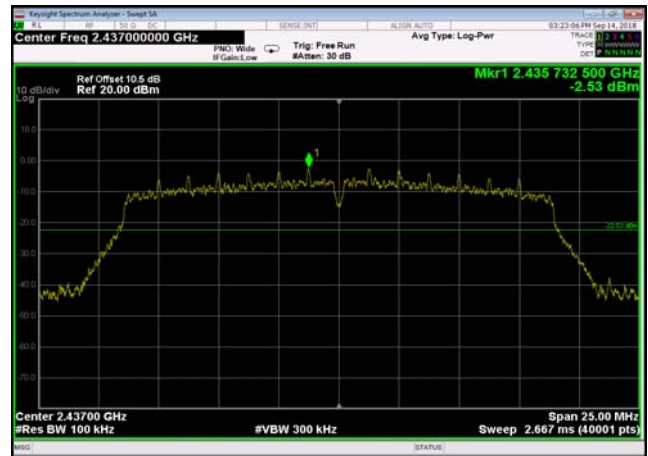
Reference Level-802.11n(HT20)  
,2412MHz,Ant1



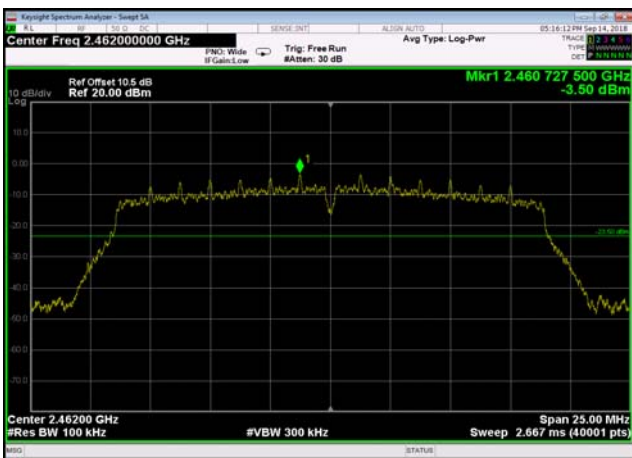
Reference Level-802.11n(HT20)  
,2437MHz,Ant0



Reference Level-802.11n(HT20)  
,2437MHz,Ant1



Reference Level-802.11n(HT20)  
,2462MHz,Ant0



Reference Level-802.11n(HT20)  
,2462MHz,Ant1

