FCC RF Test Report

For

Shenzhen Golden Vision Technology Development Co.,Ltd

Test Standards:	Part 15C Subpart C §15.247
Product Description:	Smart Camera
Tested Model:	XY/TA-R9820-K2
Additional Model No.:	XY/TA-R9820-F9, XY/TA-R9820-F10, XY/TA-R9820-K1, XY/TA-R9820-K3, XY/TA-R9820-K4, XY/TA-R9820-K5, XY/TA-R9820-K6, XY/TA-R9320-S2, XY/TA-R9320-S3, XY/TA-R9420-X2, XY/TA-R9420-X3, XY/TA-R9820-G1, XY/TA-R9820-G2, XY/TA-R9520-V3, XY/TA-R9520-V6, TA-R9520-HJ, TA-FD-BL3, BW-SHC1, DG-K2;
Brand Name:	N/A
FCC ID:	2APD7-R9820
Classification	(DTS) Digital Transmission System
Report No.:	EC1902016F
Tested Date:	2019-02-27 to 2019-03-14
Issued Date:	2019-03-14
Prepared By:	Jerry Wang / Engineer
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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	2019.03.14	Valid	Original Report

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Summary Of Test Result

FCC Rule	Description	Limit	Result	Remark
15.247(a)(2)	6dB Bandwidth	≥ 0.5MHz	Pass	-
-	99% Bandwidth	-	Pass	-
15.247(b)(3)	Peak Output Power	≤ 30dBm	Pass	-
15.247(e)	Power Spectral Density	≤ 8dBm/3kHz	Pass	-
15.247(d)	Conducted Band Edges and Spurious Emission	≤ 20dBc	Pass	-
15.247(d)	Radiated Band Edges and Spurious Emission	15.209(a) & 15.247(d)	Pass	Under limit 2.10 dB at 4824 MHz
15.207	AC Conducted Emission	15.207(a)	Pass	-
15.203 & 15.247(b)	Antenna Requirement	N/A	Pass	-

1 Test Laboratory

1.1 Test facility

CNAS (accreditation number: L11138)

Hunan Ecloud Testing Technology Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

FCC (Designation number: CN1244 , Test Firm Registration Number: 793308)

Hunan Ecloud Testing Technology Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

ISED(CAB identifier: CN0012)

Hunan Ecloud Testing Technology Co., Ltd. has been listed on the Wireless Device Testing Laboratories list of innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements.

A2LA (Certificate Code : 4895.01)

Hunan Ecloud Testing Technology Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

2 General Description

2.1 Applicant

Shenzhen Golden Vision Technology Development Co.,Ltd
No.6 Baofu Road，Baolai industrial Park, Shangmugu Village，Pinghu Street, Longgang District, Shenzhen City, Guangdong Province, 518000, China

2.2 Manufacturer

Shenzhen Golden Vision Technology Development Co.,Ltd
No.6 Baofu Road，Baolai industrial Park, Shangmugu Village，Pinghu Street, Longgang District, Shenzhen City, Guangdong Province, 518000, China

2.3 General Description Of EUT

Product	Smart Camera
Model No.	XY/TA-R9820-K2
Additional No.	XY/TA-R9820-F9, XY/TA-R9820-F10, XY/TA-R9820-K1, XY/TA-R9820-K3, XY/TA-R9820-K4, XY/TA-R9820-K5, XY/TA-R9820-K6, XY/TA-R9320-S2, XY/TA-R9320-S3, XY/TA-R9420-X2, XY/TA-R9420-X3, XY/TA-R9820-G1, XY/TA-R9820-G2, XY/TA-R9520-V3, XY/TA-R9520-V6, TA-R9520-HJ, TA-FD-BL3, BW-SHC1, DG-K2;
Difference Description	The naming is different and the appearance is slightly different.
FCC ID	2APD7-R9820
Power Supply	5Vdc (from adapter)
Modulation Technology	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Type	802.11b : DSSS 802.11g/n : OFDM
Operating Frequency	2412-2462MHz
Number Of Channel	11
Max. Output Power	802.11b : 10.74 dBm (0.012 W) 802.11g : 10.95 dBm (0.012 W) 802.11n HT20 : 11.07 dBm (0.013 W) 802.11n HT40 : 11.58 dBm (0.014 W)
Antenna Type	PCB Antenna type with 3dBi gain
I/O Ports	Refer to user's manual
Cable Supplied	USB cable: Unshielded, detachable, 1.0m

NOTE:

1. The EUT was powered by the following adapters:

ADAPTER 1	
BRAND:	SZTY
MODEL:	TPA-A6B050100UU
INPUT:	AC 100-240V, 50/60Hz, 0.2A
OUTPUT:	DC 5V, 1000mA
DC LINE:	N/A

2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

2.4 Modification of EUT

No modifications are made to the EUT during all test items.

2.5 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC Part 15 Subpart C §15.247
- ANSI C63.10-2013
- FCC KDB Publication No.558074 D01 15.247 Meas Guidance v05r01

3 Test Configuration of Equipment Under Test

3.1 Descriptions of Test Mode

11 channels are provided for 802.11b, 802.11g and 802.11n(HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

7 channels are provided for 802.11n(HT40):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
		7	2442 MHz
		8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz		
5	2432 MHz		
6	2437 MHz		

The transmitter has a maximum peak conducted output power as follows:

Frequency Range(MHz)	Mode	Output Power(dBm)	Output Power(mW)
2412~2462	802.11b	10.74	11.86
2412~2462	802.11g	10.95	12.45
2412~2462	802.11n HT20	11.07	12.79
2422~2452	802.11n HT40	11.58	14.39

a. Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

b. The fundamental of the EUT was investigated in three orthogonal orientations X, Y and Z it was determined that Y orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in Y orientation.

c. Based on the baseline scan, the worst-case data rates were:

802.11b mode: 1 Mbps

802.11g mode: 6 Mbps

802.11n HT20 mode: MCS0

802.11n HT40 mode: MCS0

3.2 Test Mode

3.2.1 Antenna Port Conducted Measurement

Summary table of Test Cases				
Test Item	**Modulation**			
	802.11 b	**802.11 g**	**802.11n HT20**	**802.11n HT40**
Conducted Test Cases	Mode 1: CH01 Mode 2: CH06 Mode 3: CH011	Mode 1: CH01 Mode 2: CH06 Mode 3: CH011	Mode 1: CH01 Mode 2: CH06 Mode 3: CH011	Mode 1: CH03 Mode 2: CH06 Mode 3: CH09

3.2.2 Radiated Emission Test (Below 1GHz)

Radiated Test Cases	802.11b
	Camera Record + WLAN Link + TF Card + USB Cable (charging from Adapter)

Note : 1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type.

2. Following channel(s) was (were) selected for the final test as listed above

3.2.3 Radiated Emission Test (Above 1GHz)

Test Item	**Modulation**			
	802.11 b	**802.11 g**	**802.11n HT20**	**802.11n HT40**
Radiated Test Cases	Mode 1: CH01 Mode 2: CH06 Mode 3: CH011	Mode 1: CH01 Mode 2: CH06 Mode 3: CH011	Mode 1: CH01 Mode 2: CH06 Mode 3: CH011	Mode 1: CH03 Mode 2: CH06 Mode 3: CH09

Note : 1. Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, XYZ axis, antenna ports (if EUT with antenna diversity architecture) and packet type.

2. Following channel(s) was (were) selected for the final test as listed above

3.2.4 Power Line Conducted Emission Test:

AC Conducted Emission	Mode 1 : Camera Record+WLAN Link+TF Card+USB Cable(Charging from Adapter)

3.3 Support Equipment

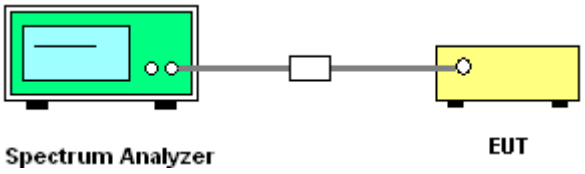
Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	WLAN AP	D-link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
3.	Notebook	Lenovo	E540	FCC DoC	N/A	shielded cable DC O/P 1.8 m unshielded AC I/P cable1.2 m

3.4 Test Setup

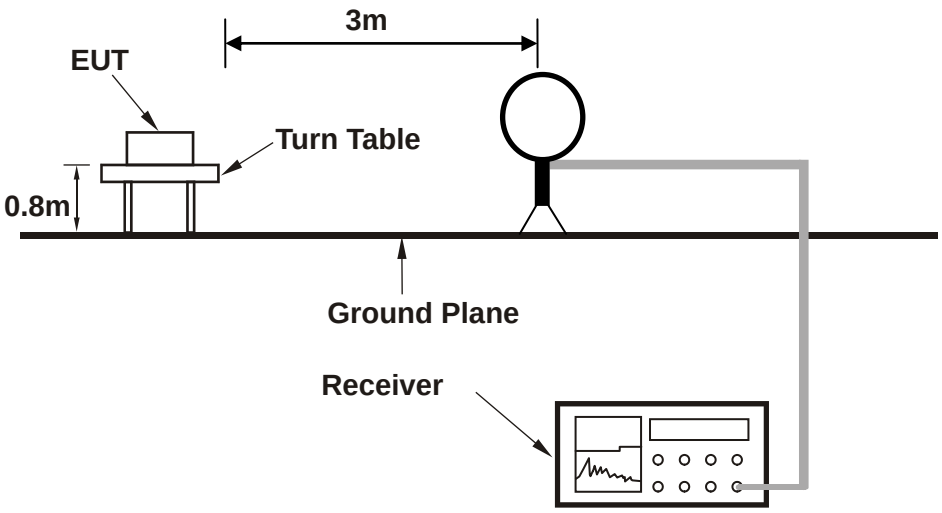
The EUT is continuously communicating to the WIFI tester during the tests.

EUT was set in the Hidden menu mode to enable WIFI communications.

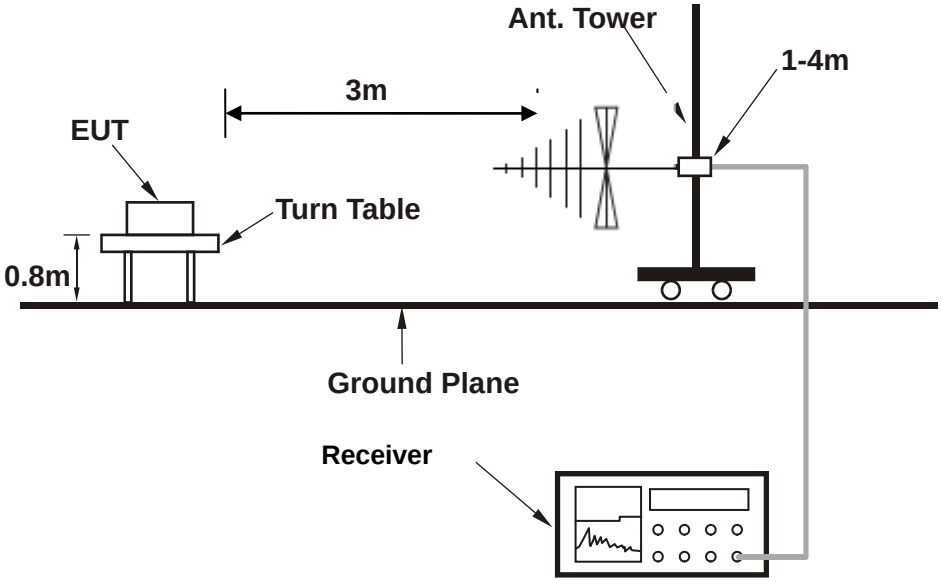
Setup diagram for Conducted Test



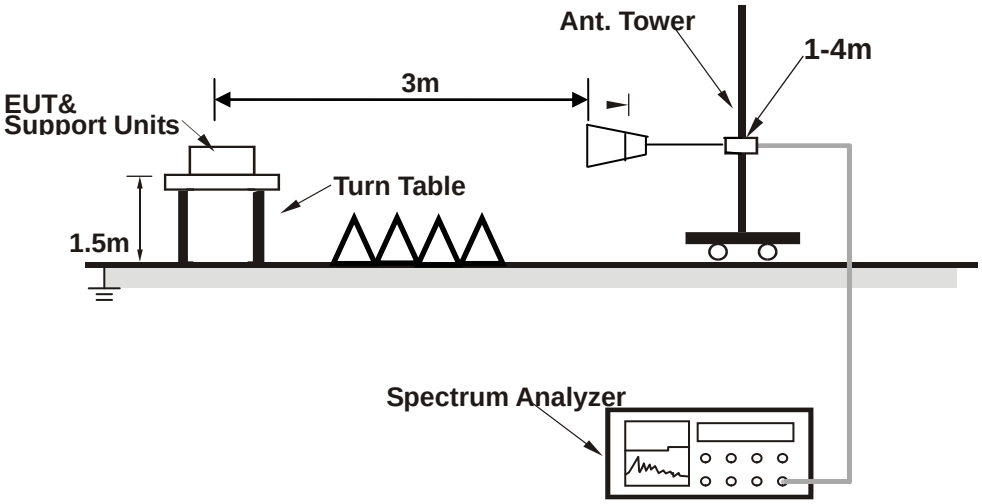
Setup diagram for Raidation(9KHz~30MHz) Test



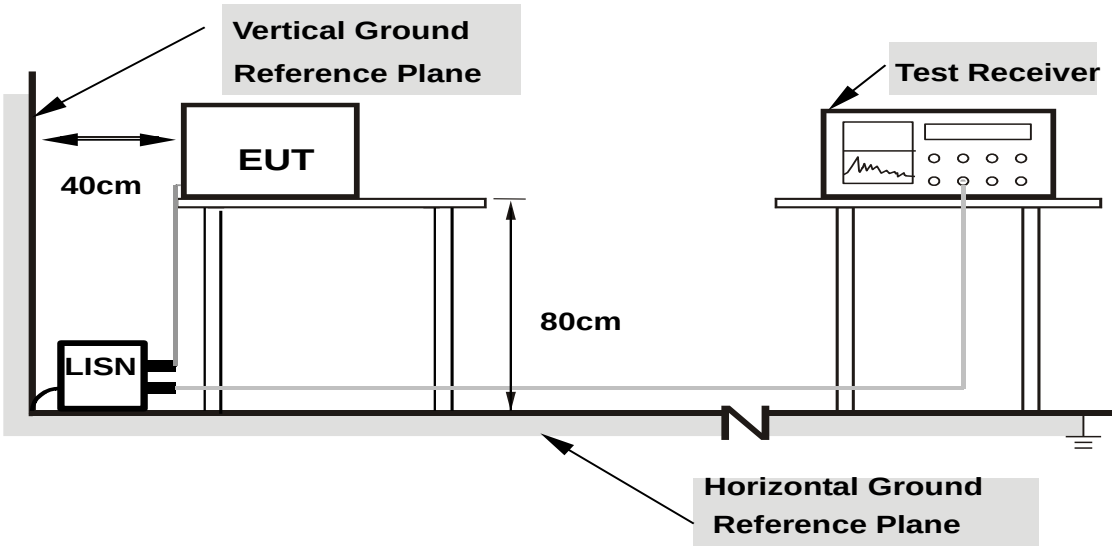
Setup diagram for Raidation(Below 1G) Test



Setup diagram for Raidation(Above1G) Test



Setup diagram for AC Conducted Emission Test



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.5 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

Example:
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 5 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 5 + 10 = 15 (dB)

4 Test Result

4.1 6dB and 99% Bandwidth Measurement

4.1.1 Limit of 6dB and 99% Bandwidth

FCC §15.247 (a) (2)

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

4.1.2 Test Procedures

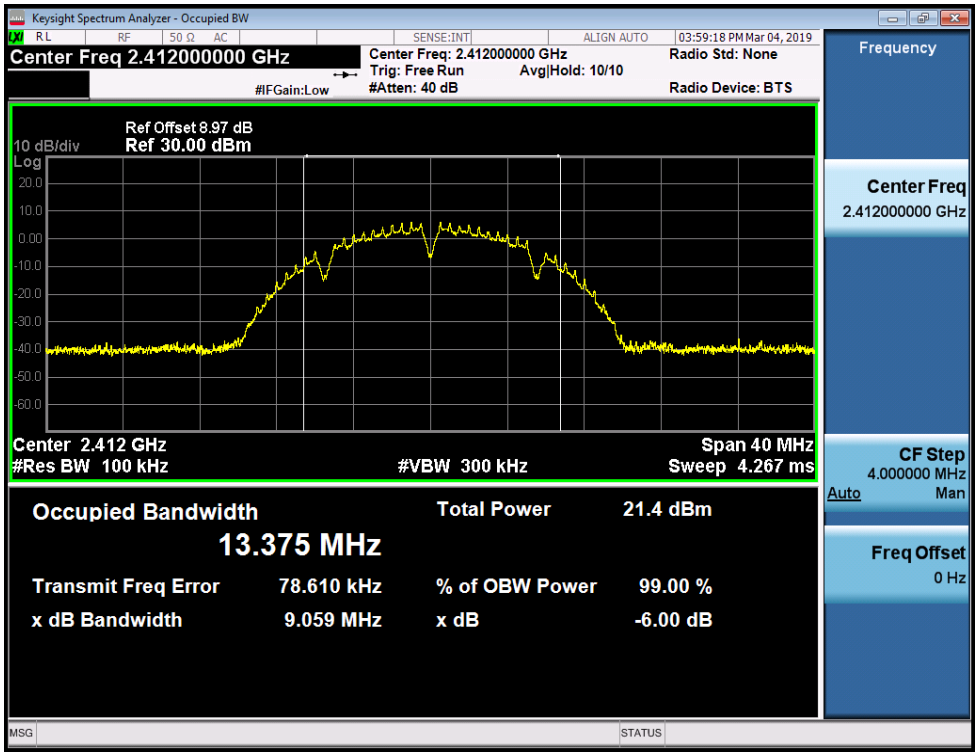
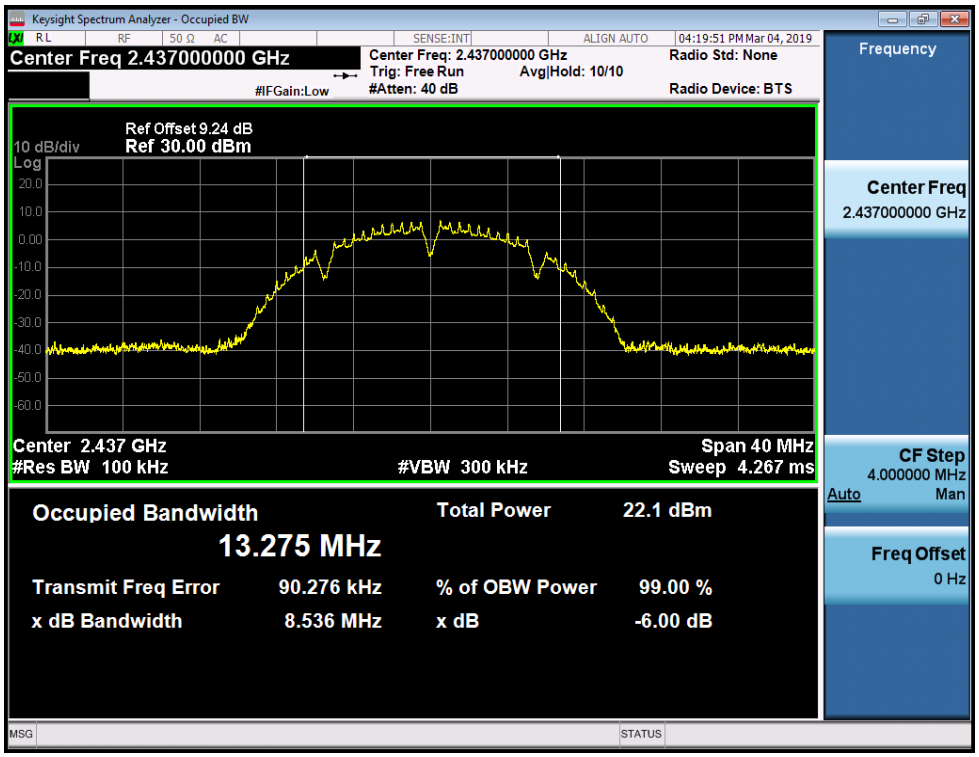
1. The testing follows FCC KDB Publication No. 558074 DTS D01 Meas. Guidance v05r01.
2. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
3. Turn on the EUT and connect it to measurement instrument.
4. Set to the maximum power setting and enable the EUT transmit continuously
5. 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 6 dB bandwidth must be greater than 500 kHz.
6. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) = 1MHz and set the Video bandwidth (VBW) = 3MHz.

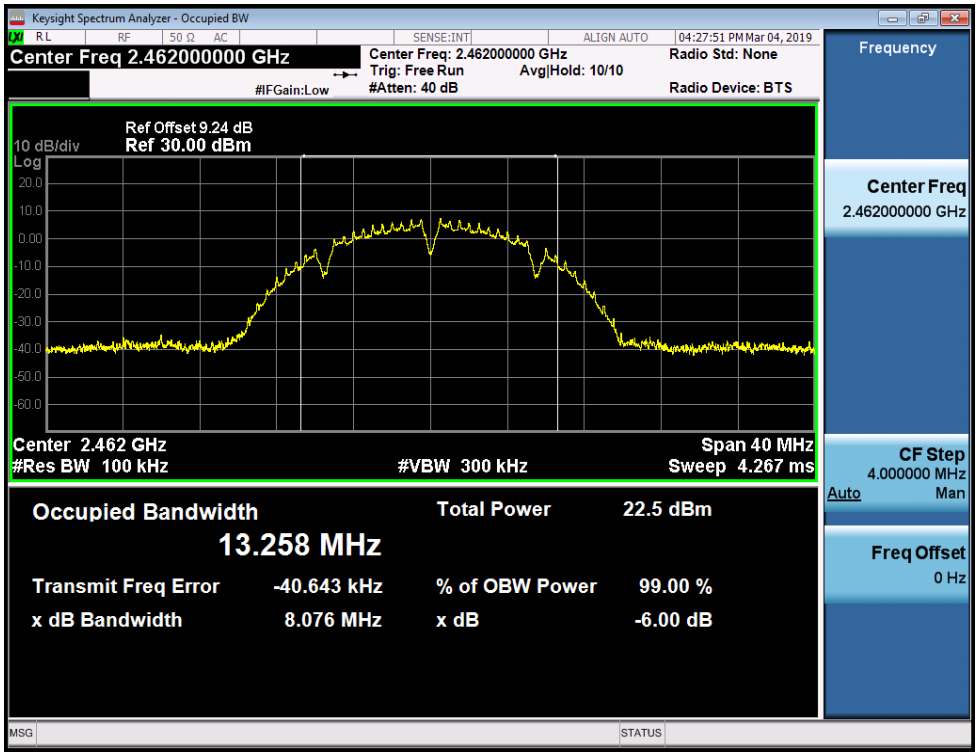
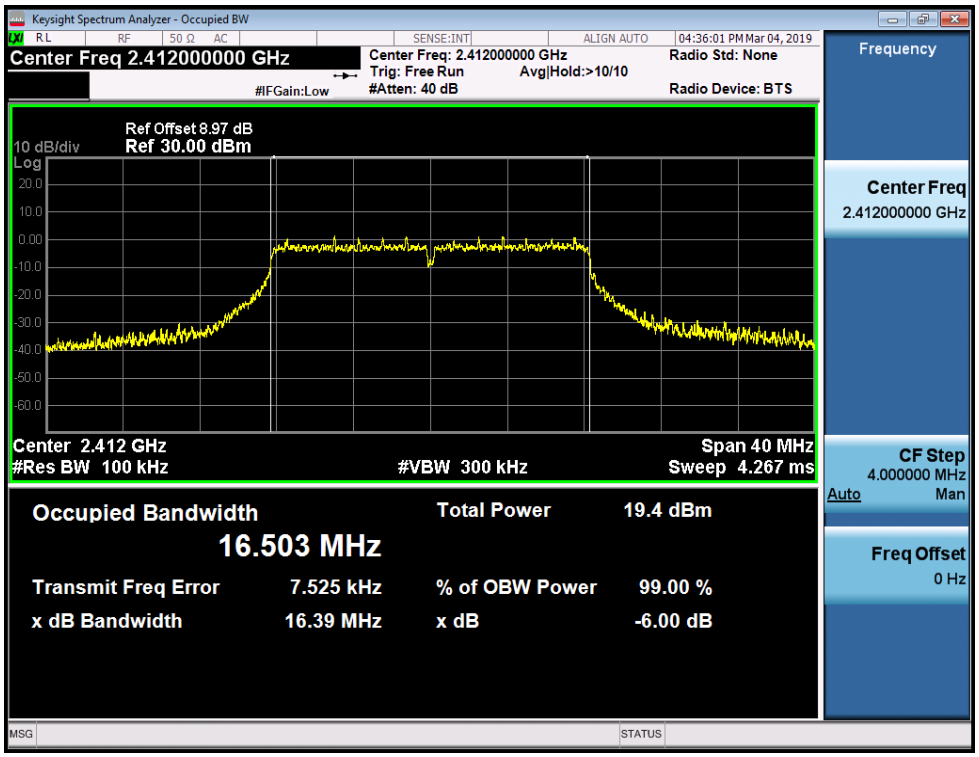
4.1.3 Test Result of 6dB and 99% Bandwidth

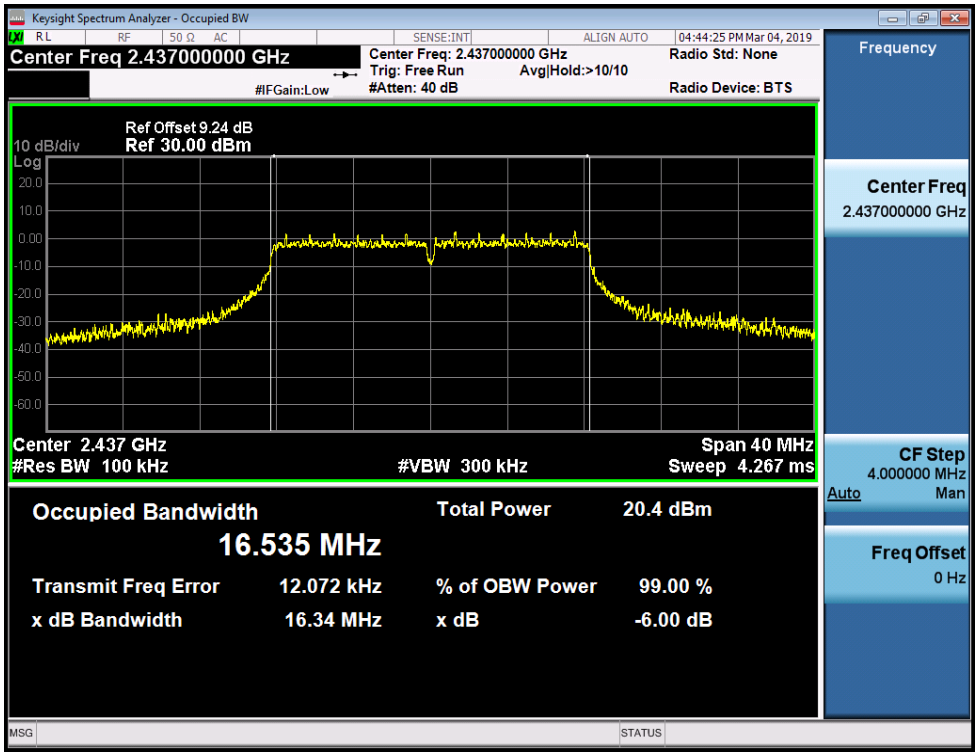
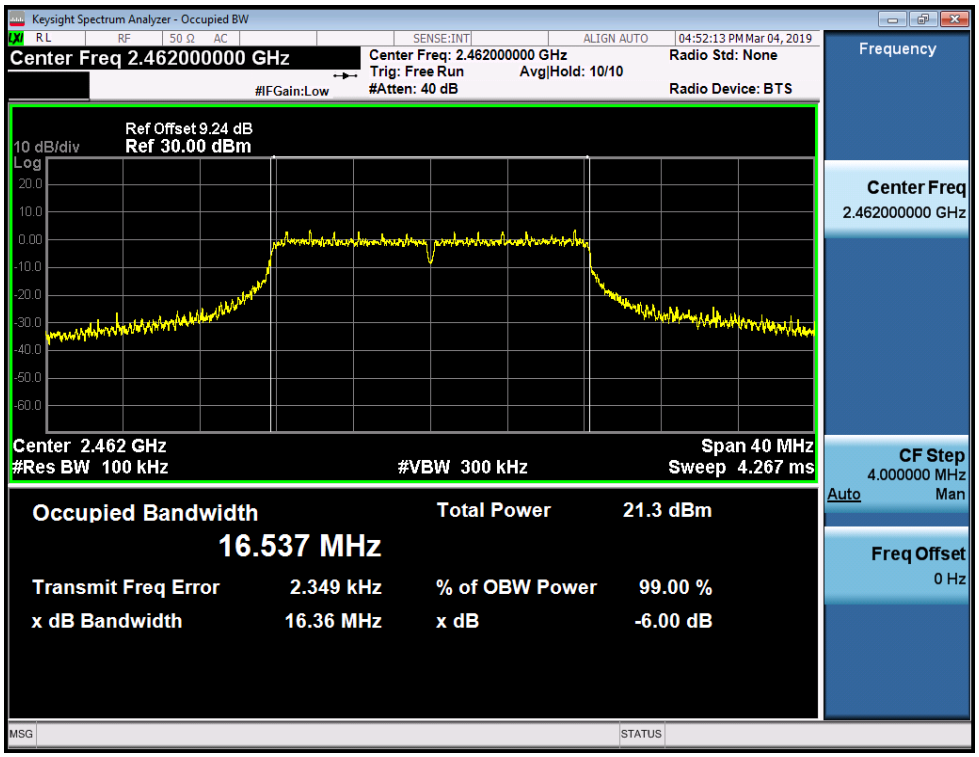
Test Mode :	WIFI	**Temperature :**	24~26℃
Test Engineer :	Tiny Yang	**Relative Humidity :**	50~53%

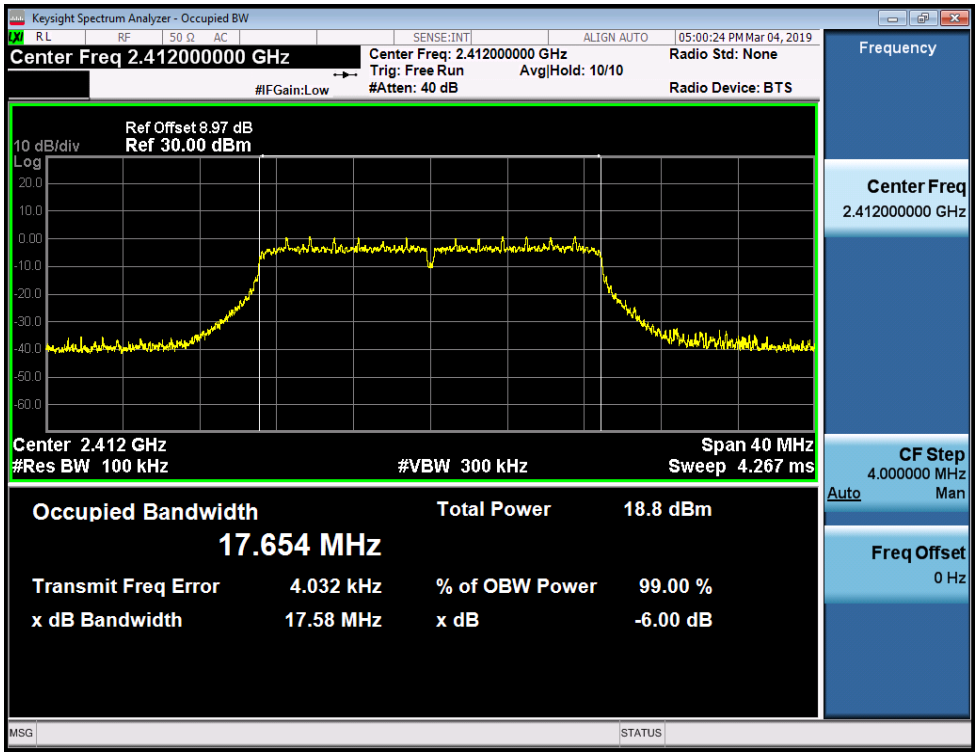
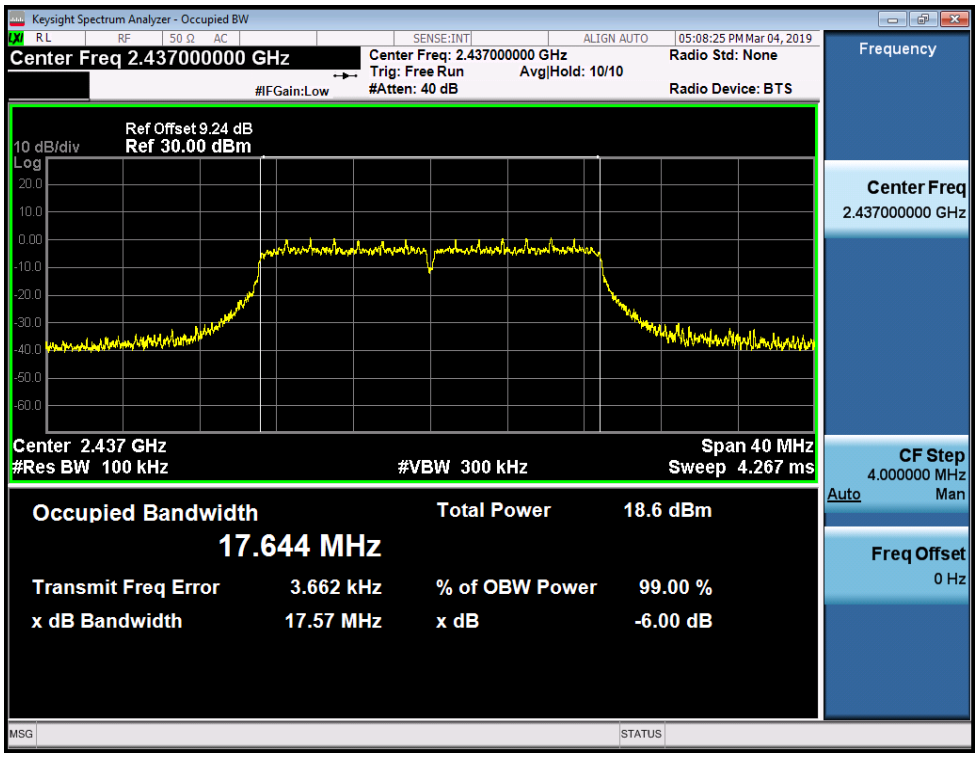
Mode	Channel	6dB Bandwidth [MHz]	99% OBW [MHz]	Verdict
11B	LCH	9.059	13.375	PASS
11B	MCH	8.536	13.275	PASS
11B	HCH	8.076	13.258	PASS
11G	LCH	16.39	16.503	PASS
11G	MCH	16.34	16.535	PASS
11G	HCH	16.36	16.537	PASS
11N20	LCH	17.58	17.654	PASS
11N20	MCH	17.57	17.644	PASS
11N20	HCH	17.56	17.662	PASS
11N40	LCH	36.05	36.104	PASS
11N40	MCH	36.29	36.139	PASS
11N40	HCH	36.02	36.177	PASS

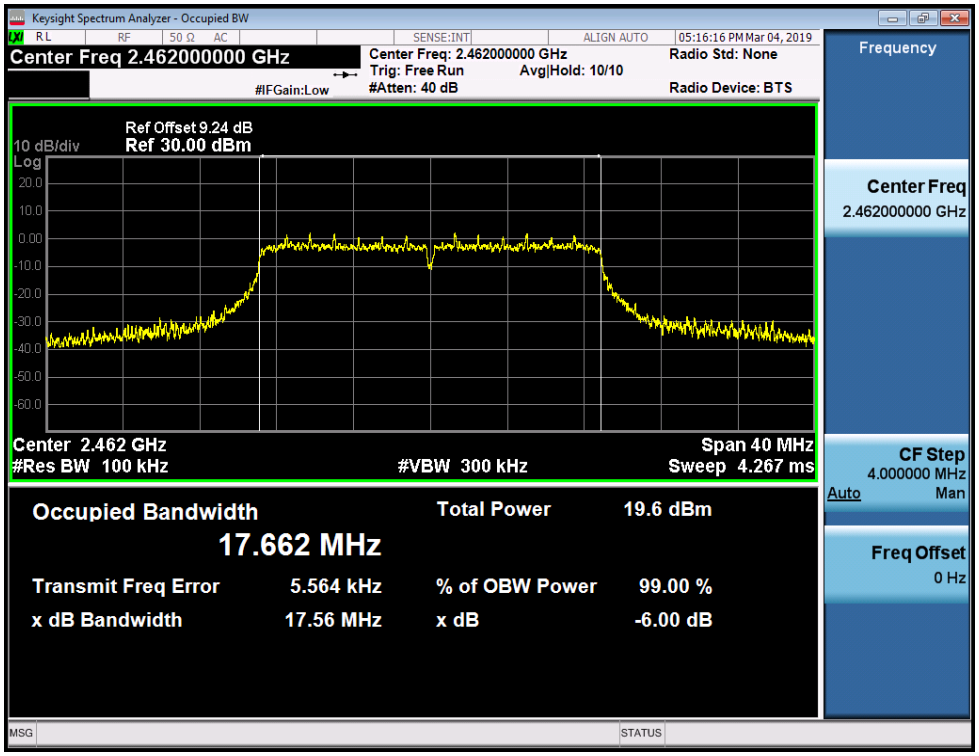
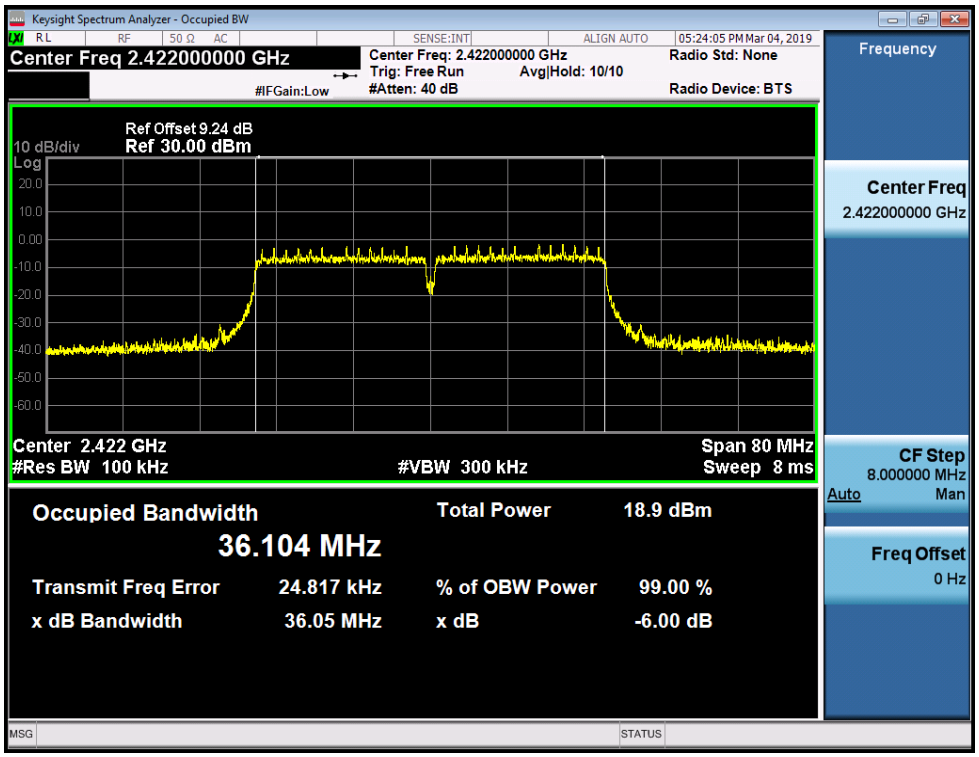
6dB and 99% Bandwidth Plot

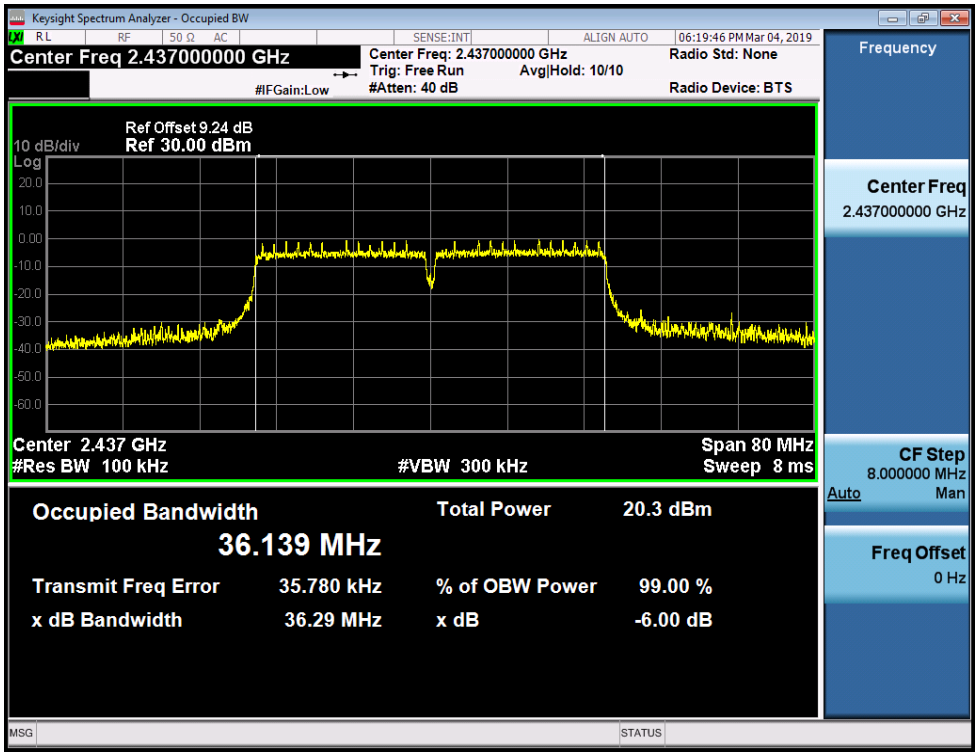
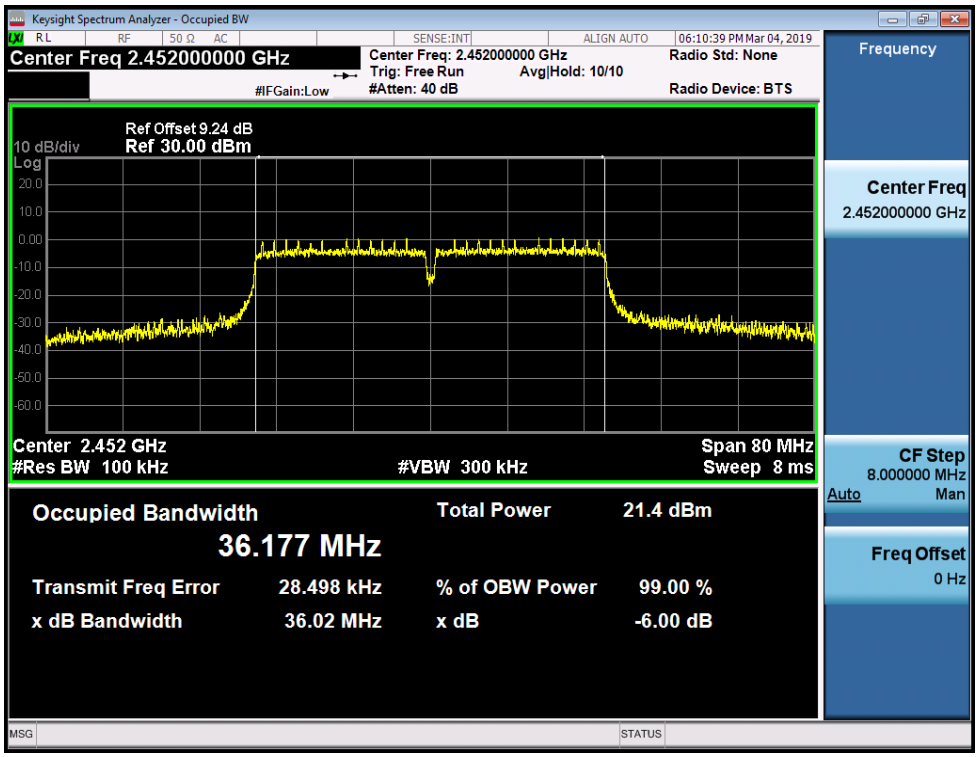
Graphs	
11B/LCH	
11B/MCH	

11B/HCH	
11G/LCH	

11G/MCH	
11G/HCH	

11N20/LCH	
11N20/MCH	

11N20/HCH	
11N40/LCH	

11N40/MCH	
11N40/HCH	

4.2 Output Power Measurement

4.2.1 Limit of Peak Output Power

FCC §15.247 (b)(3)

For systems using digital modulation in the 2400-2483.5 MHz bands: 30dBm.

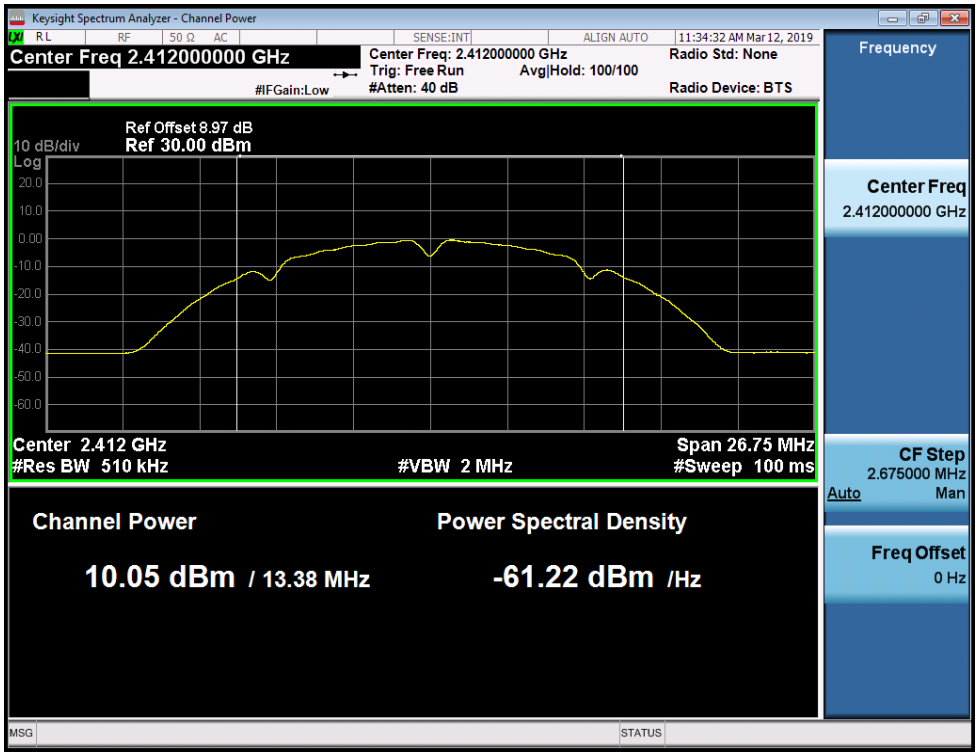
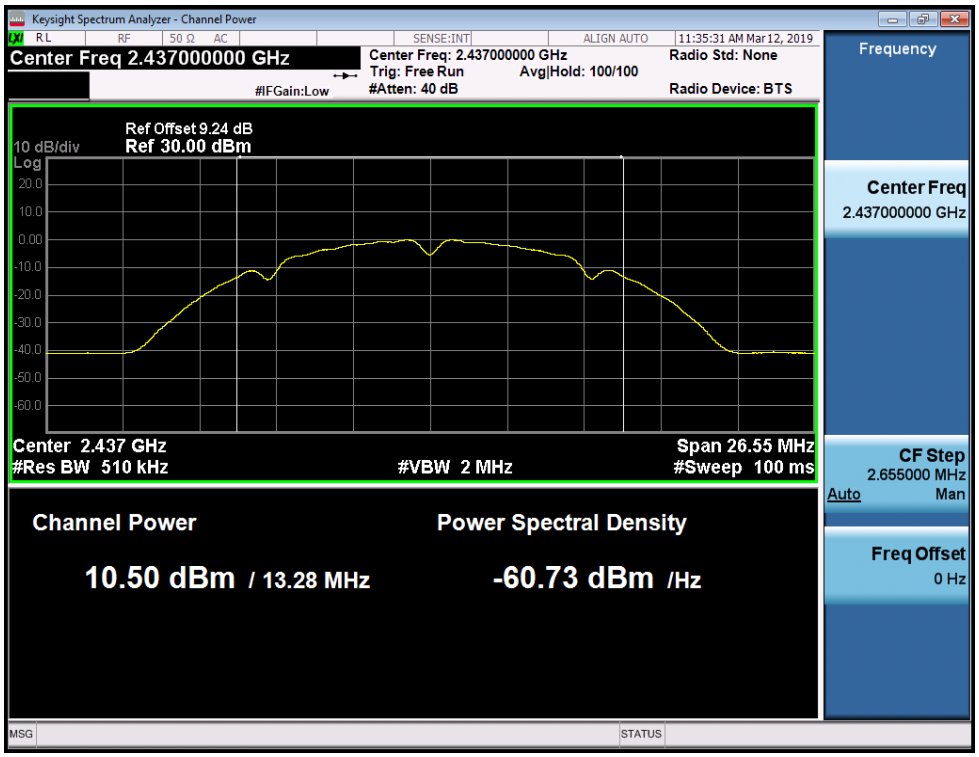
4.2.2 Test Procedures

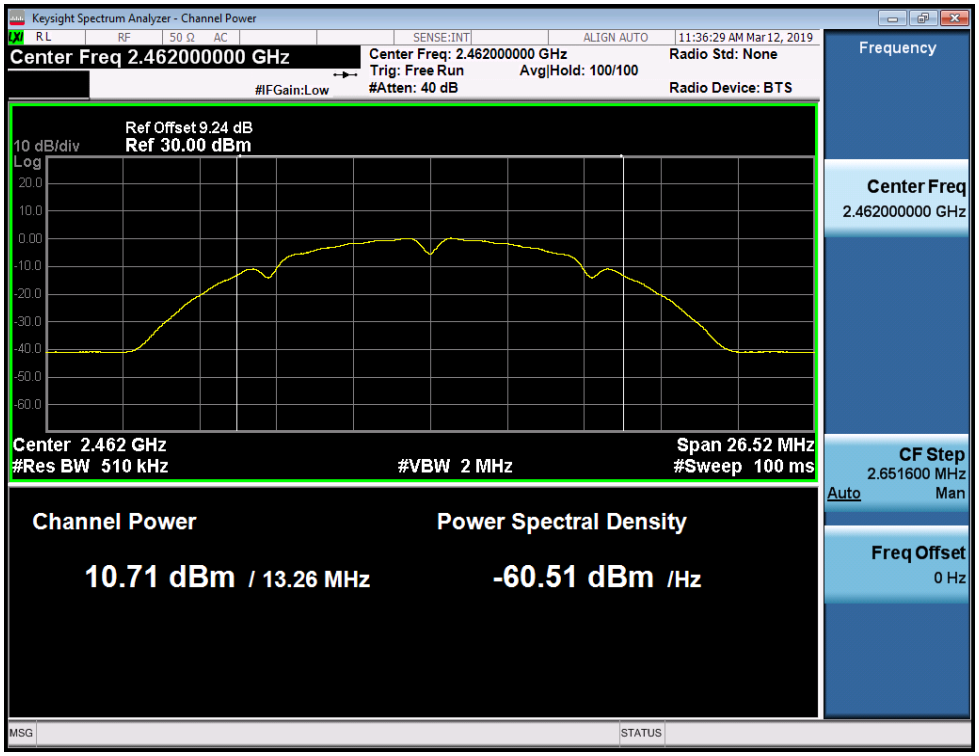
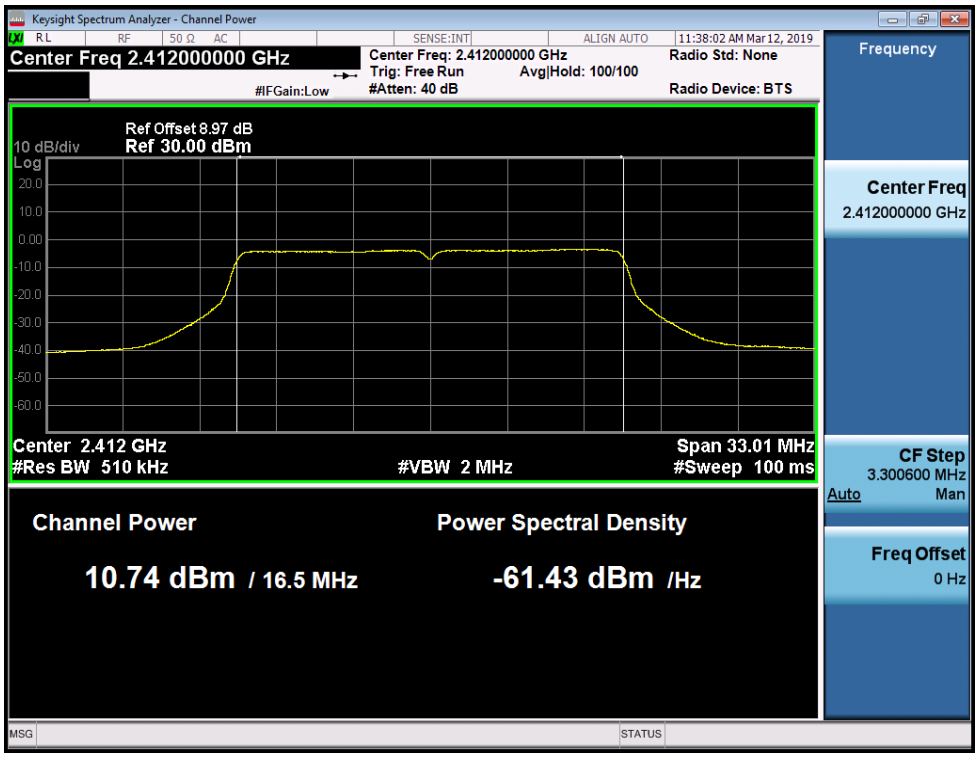
1. The testing follows the Measurement Procedure of FCC KDB No. 558074 DTS D01 Meas. Guidance v05r01 section 8.3.2.2 Measurement using a spectrum analyzer.
2. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
3. Turn on the EUT and connect it to spectrum analyzer.
4. Set to the maximum power setting and enable the EUT transmit continuously
5. Measure the duty cycle, x, of the transmitter output signal as described in below:
   a. Set the center frequency of the instrument to the center frequency of the transmission.
   b. Set RBW to the largest available value.
   c. Set detector = peak
6. Set span to at least 1.5*OBW.Set RBW=1MHz,VBW=3MHz, Number of points in sweep ≥ 2/3* span, Sweep time = auto. Detector = RMS
7. Allow the sweep to “free run”. Trace average 100 traces in RMS mode
8. Compute power by integrating the spectrum across the OBW of the signal using the instrument’s Channel power measurement function with band limits set equal to the OBW band edges.
9. Add 10 log (1/x), where x is the duty cycle.

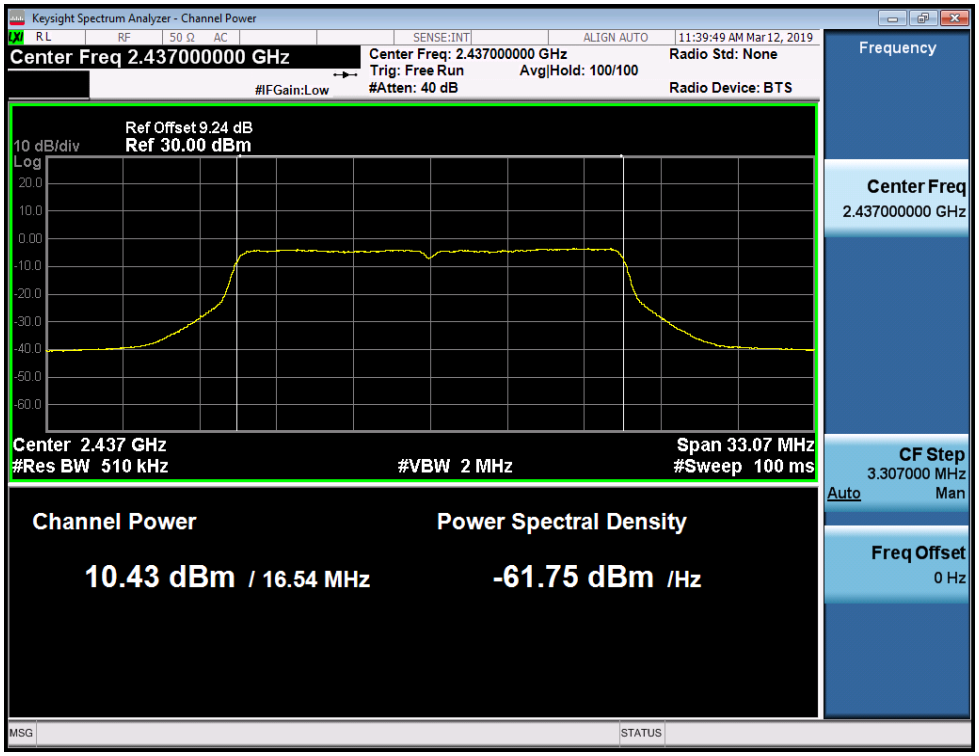
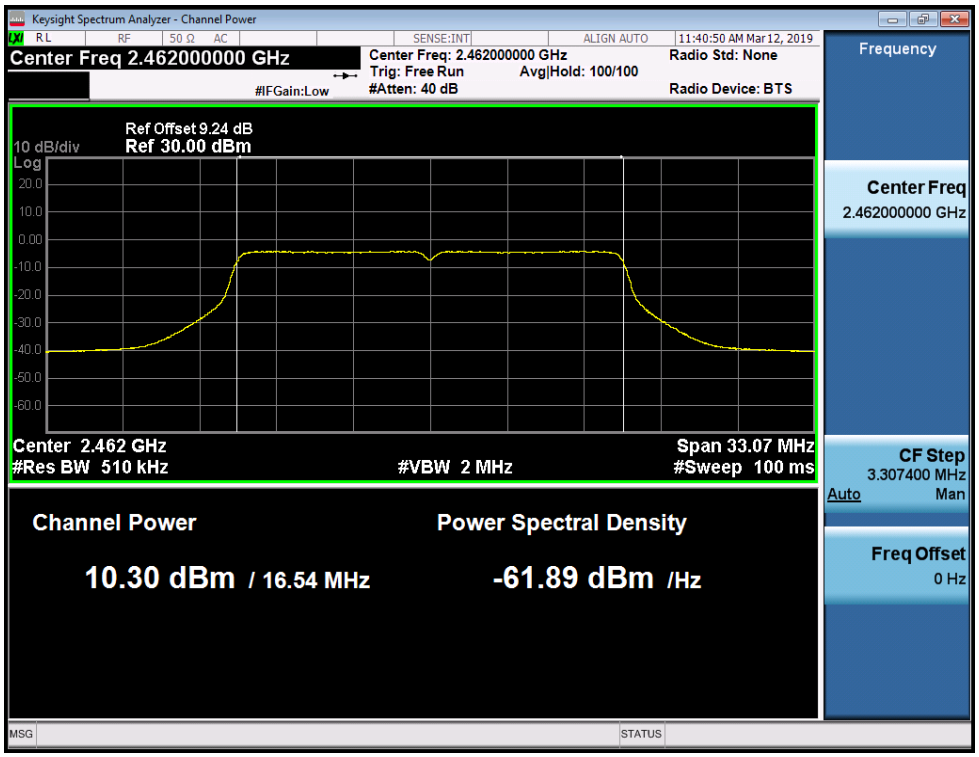
4.2.3 Test Result of Peak Output Power

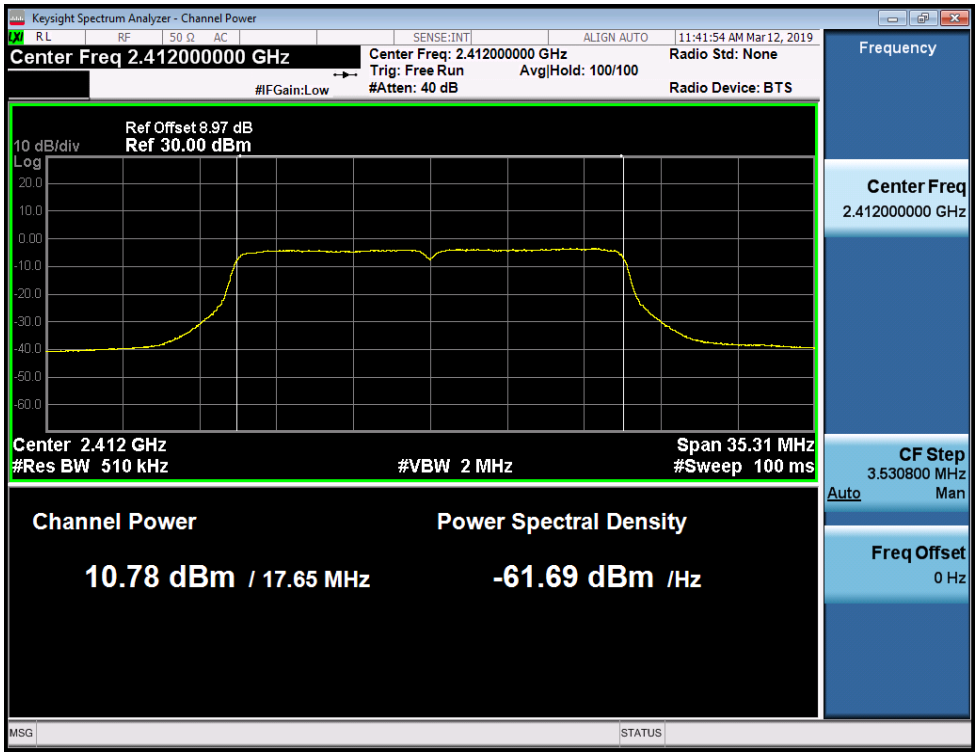
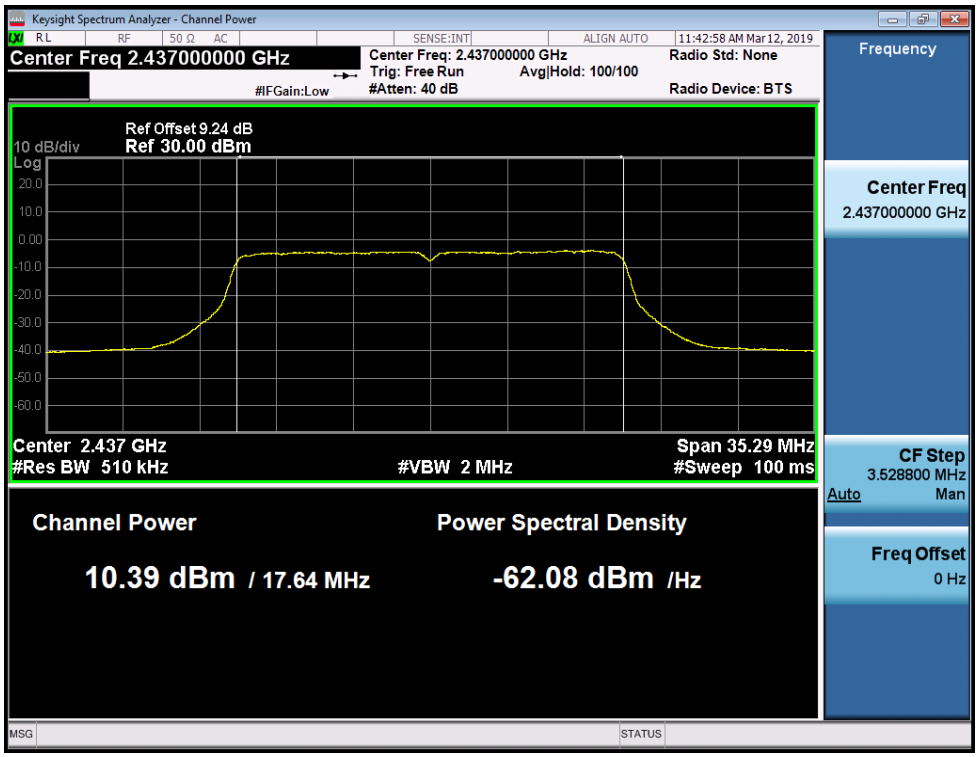
Test Mode :		WIFI	Temperature :		24~26℃	
Test Engineer :		Tiny Yang	Relative Humidity :		50~53%	
Mode	**Channel**	**Meas.Level [dBm]**	**DT**	**10 log (1/x)**	**AV.Power [dBm]**	**Verdict**
11B	LCH	10.05	97.95 %	0.09	10.14	PASS
11B	MCH	10.5	97.91 %	0.09	10.59	PASS
11B	HCH	10.71	99.38 %	0.03	10.74	PASS
11G	LCH	10.74	95.2 %	0.21	10.95	PASS
11G	MCH	10.43	94.02 %	0.27	10.7	PASS
11G	HCH	10.3	91.14 %	0.40	10.7	PASS
11N20	LCH	10.78	93.63 %	0.29	11.07	PASS
11N20	MCH	10.39	90.58 %	0.43	10.82	PASS
11N20	HCH	10.17	88.34 %	0.54	10.71	PASS
11N40	LCH	9.98	81.85 %	0.87	10.85	PASS
11N40	MCH	10.69	89.21 %	0.50	11.19	PASS
11N40	HCH	10.65	80.72 %	0.93	11.58	PASS

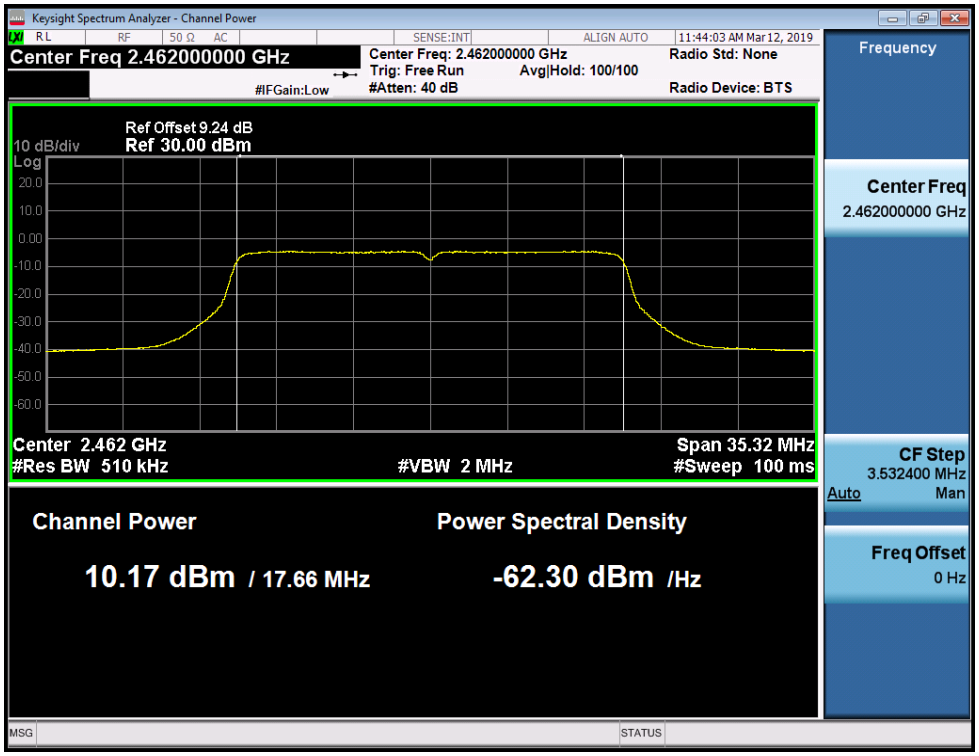
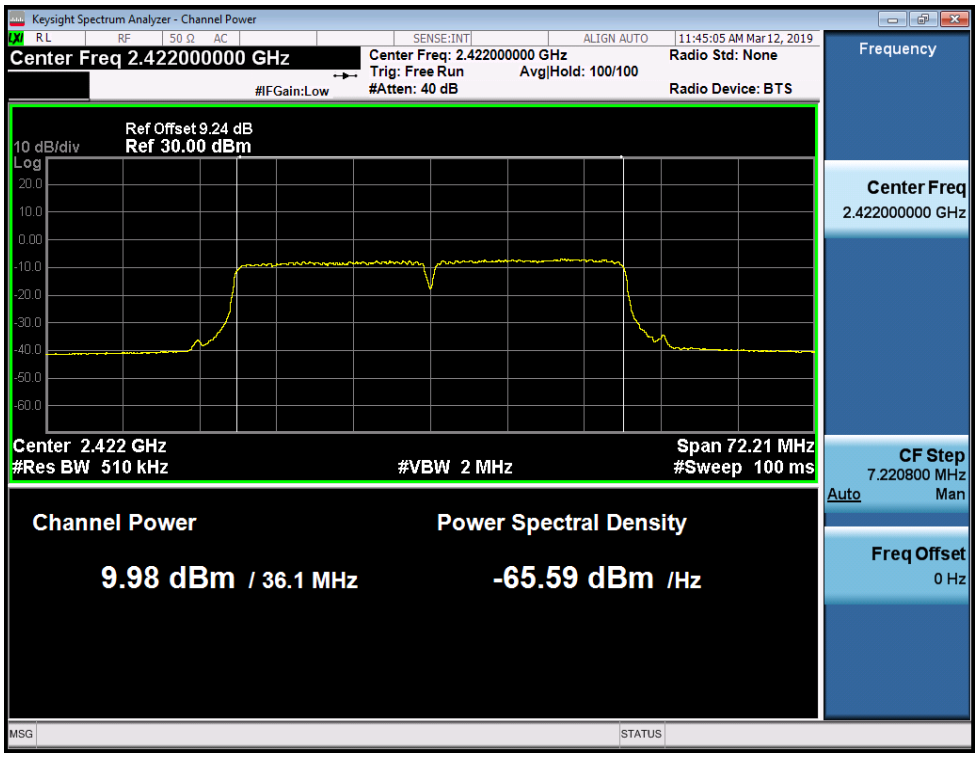
Meas.Level Plot

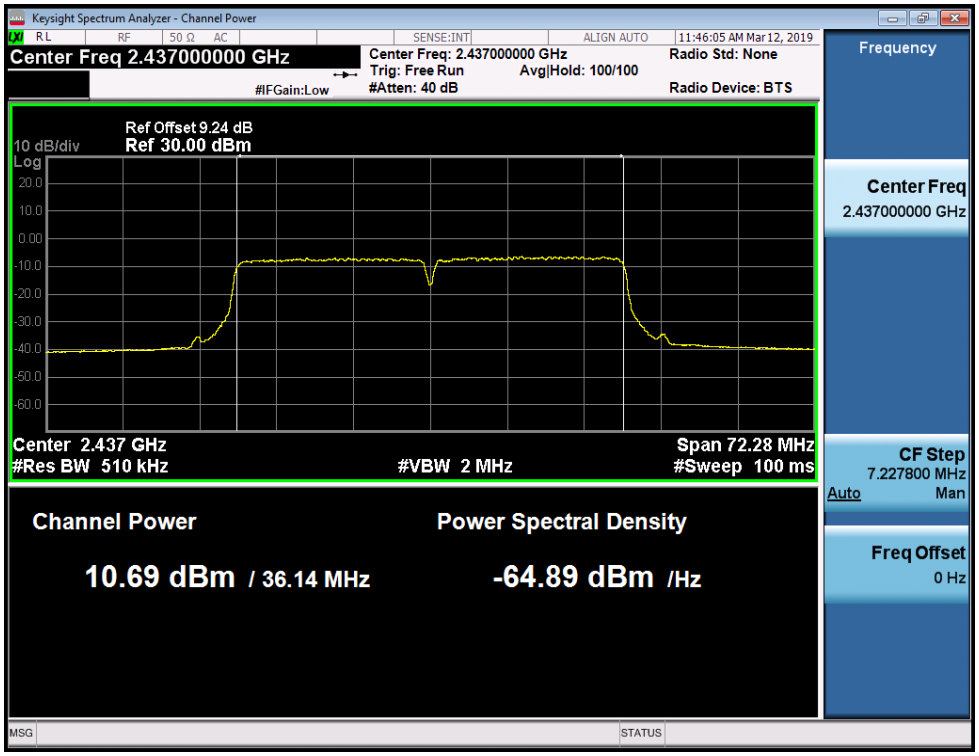
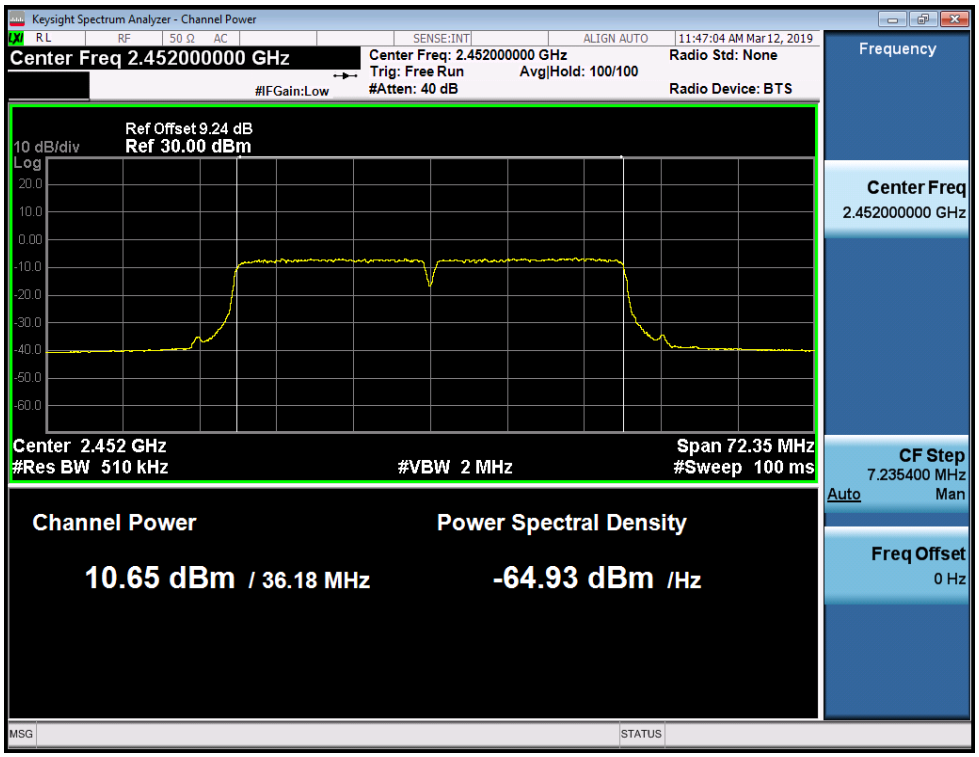
Graphs	
11B/LCH	
11B/MCH	

11B/HCH	
11G/LCH	

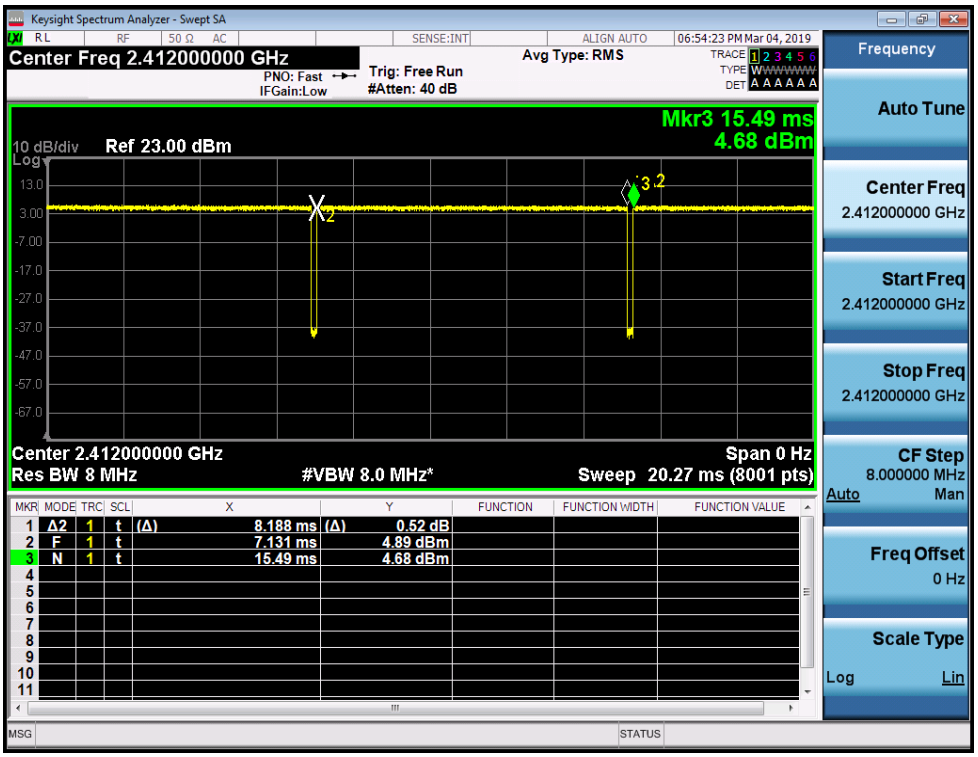
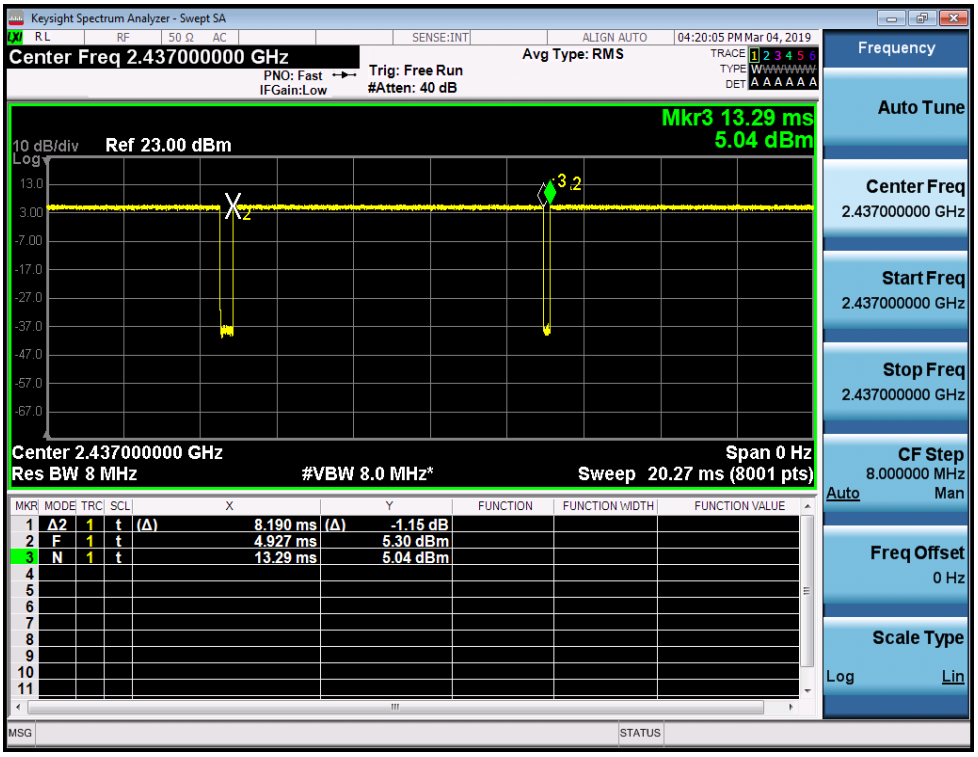
11G/MCH	
11G/HCH	

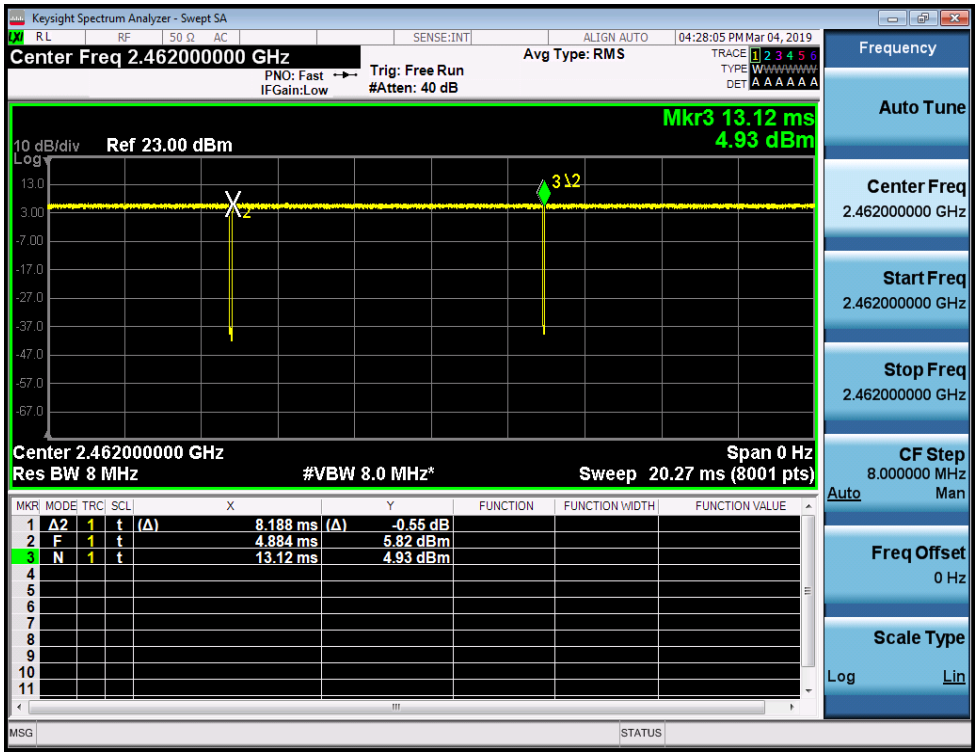
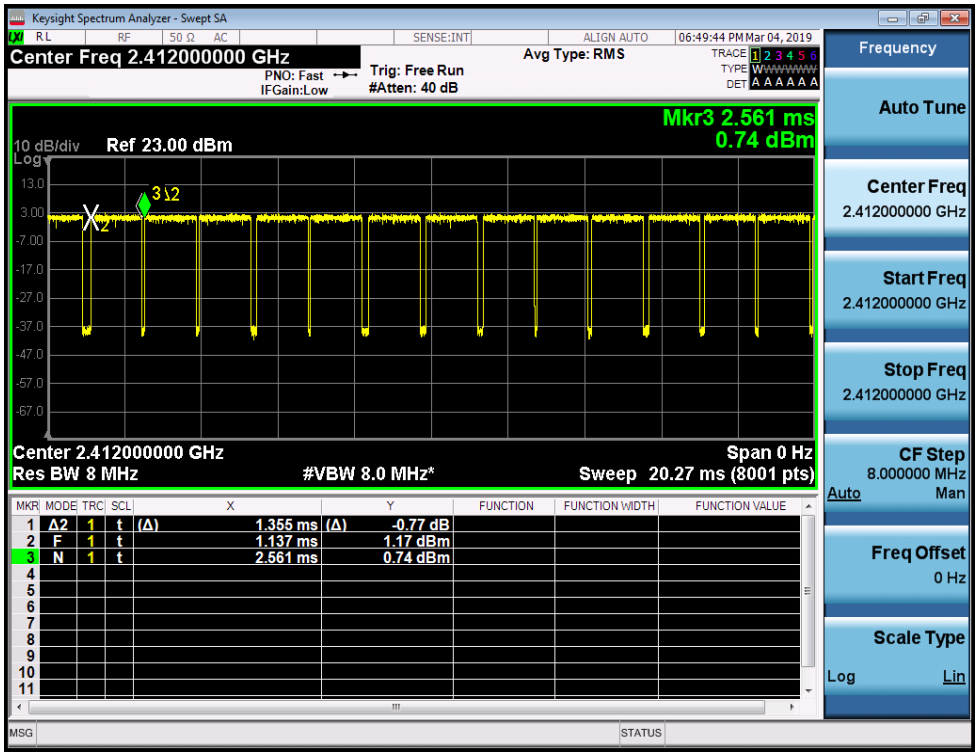
11N20/LCH	
11N20/MCH	

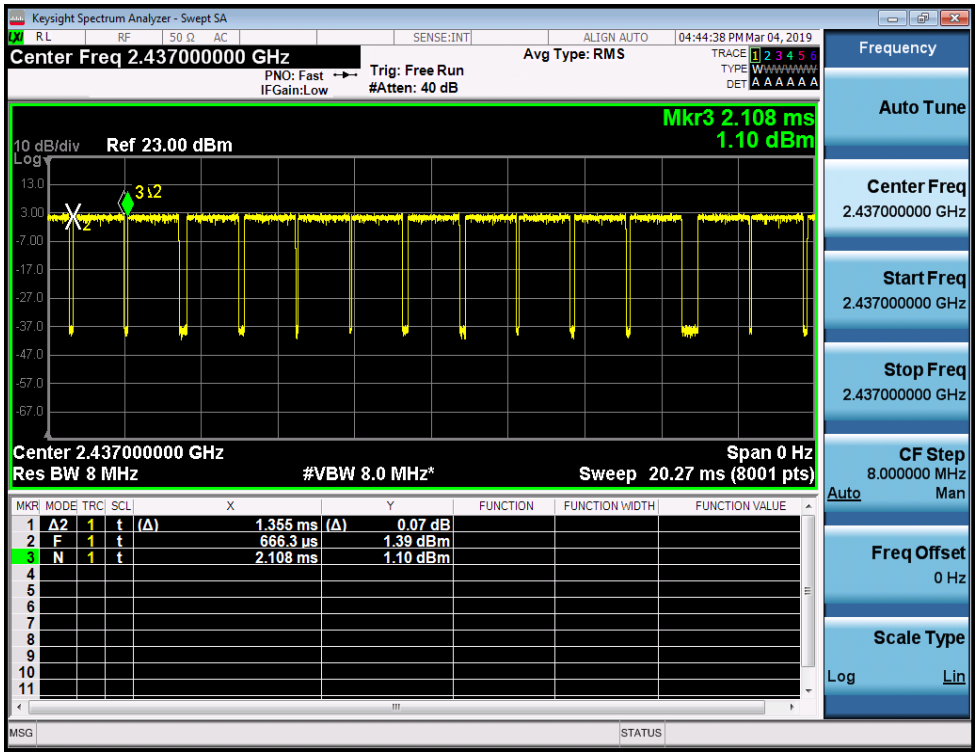
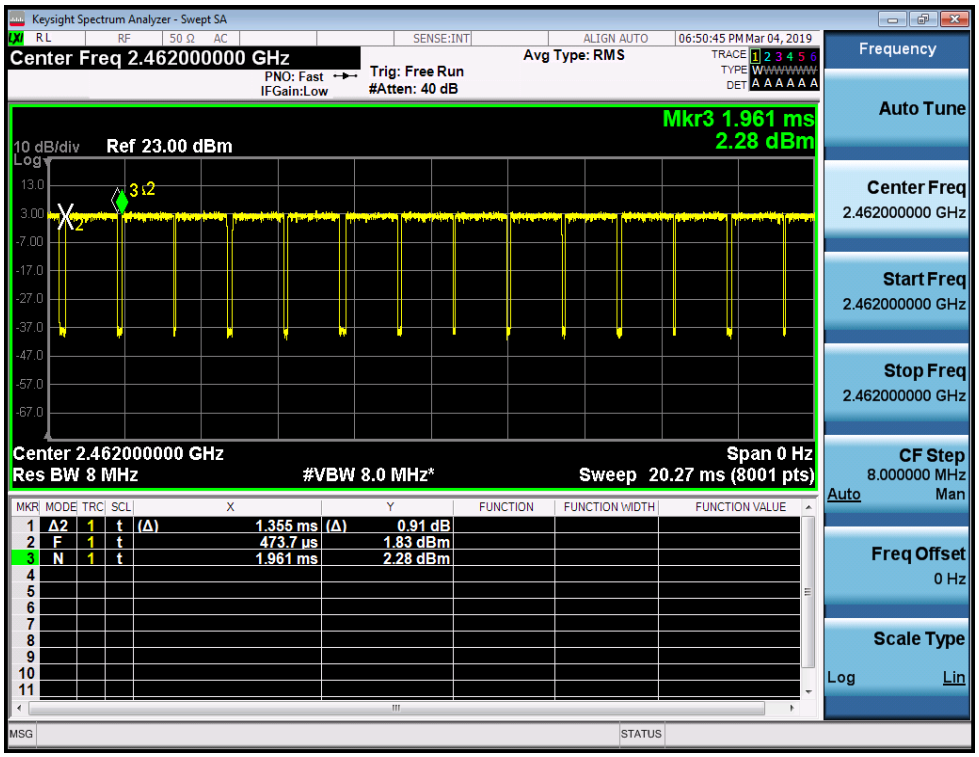
11N20/HCH	
11N40/LCH	

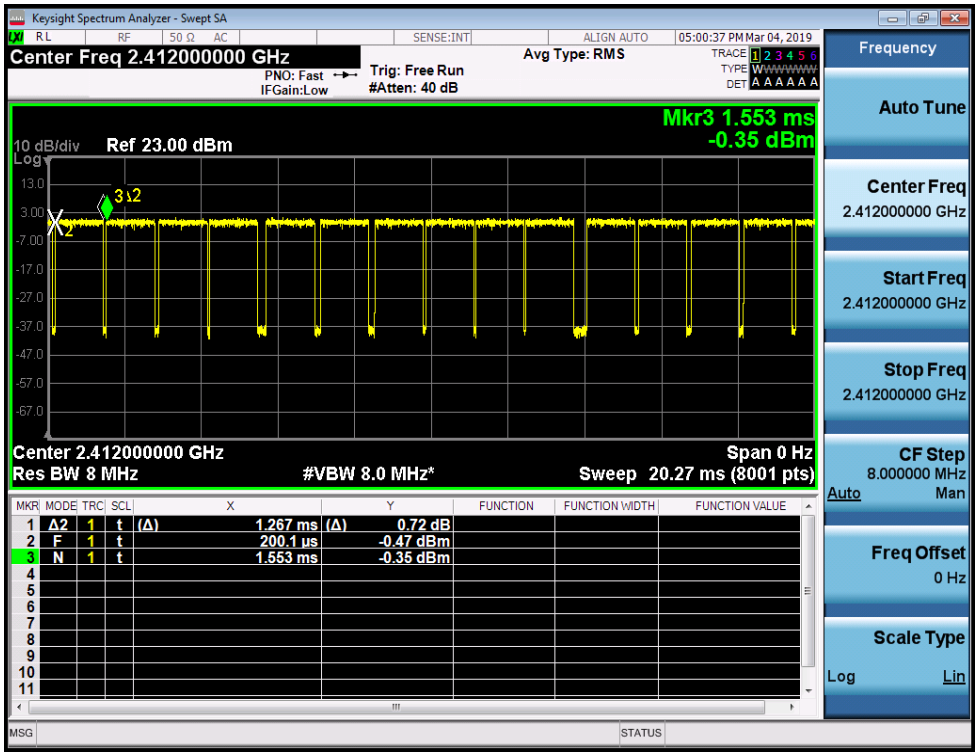
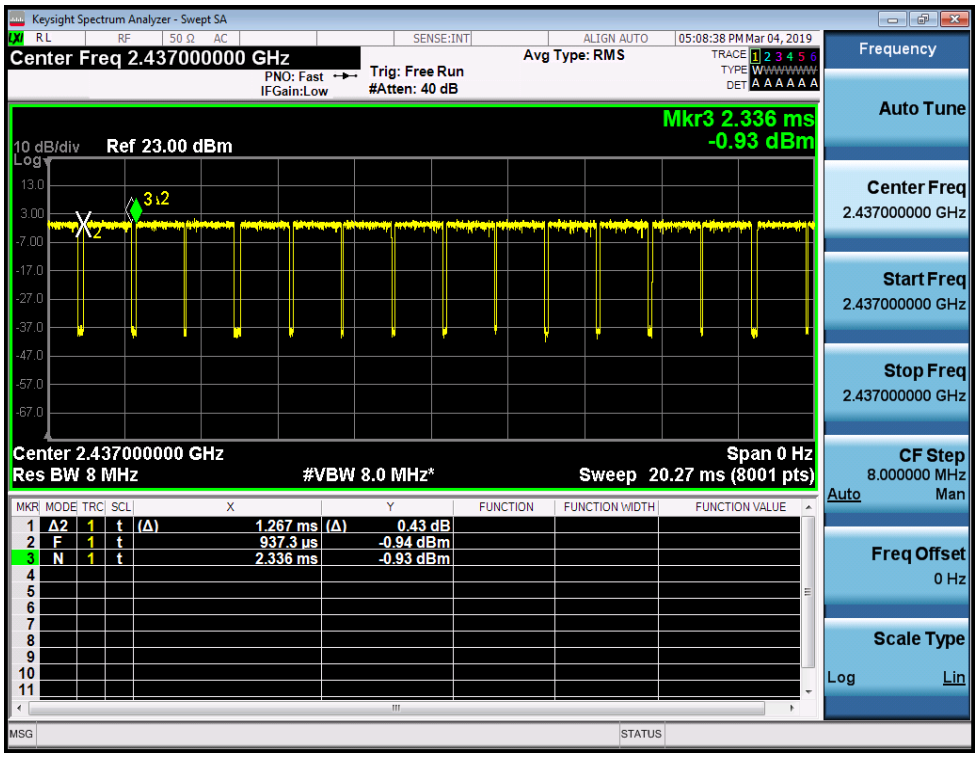
11N40/MCH	
11N40/HCH	

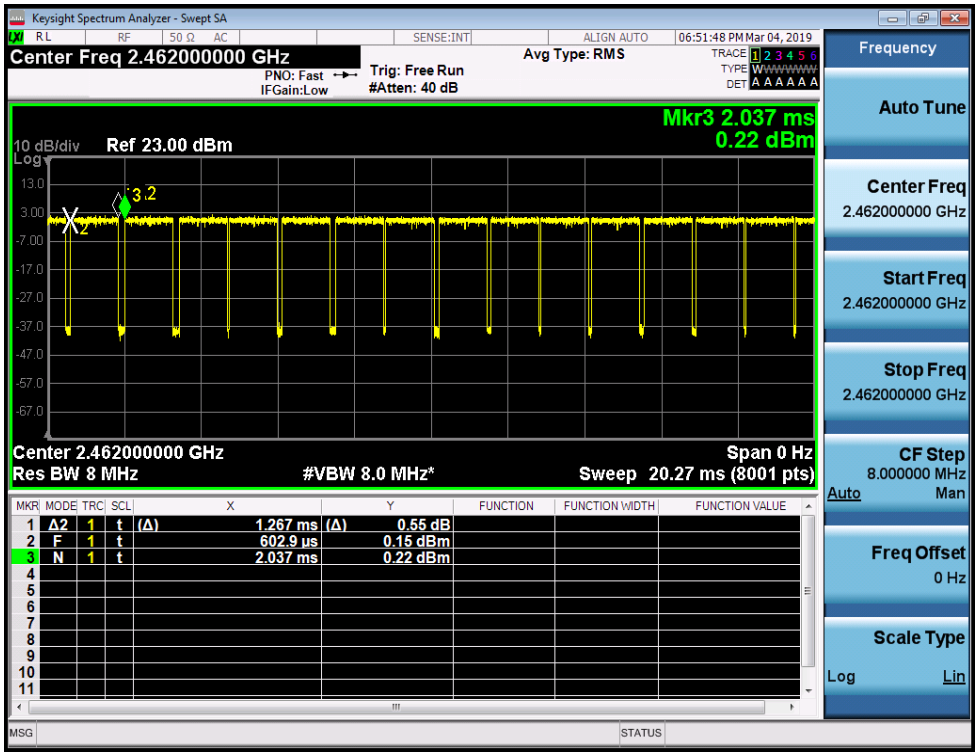
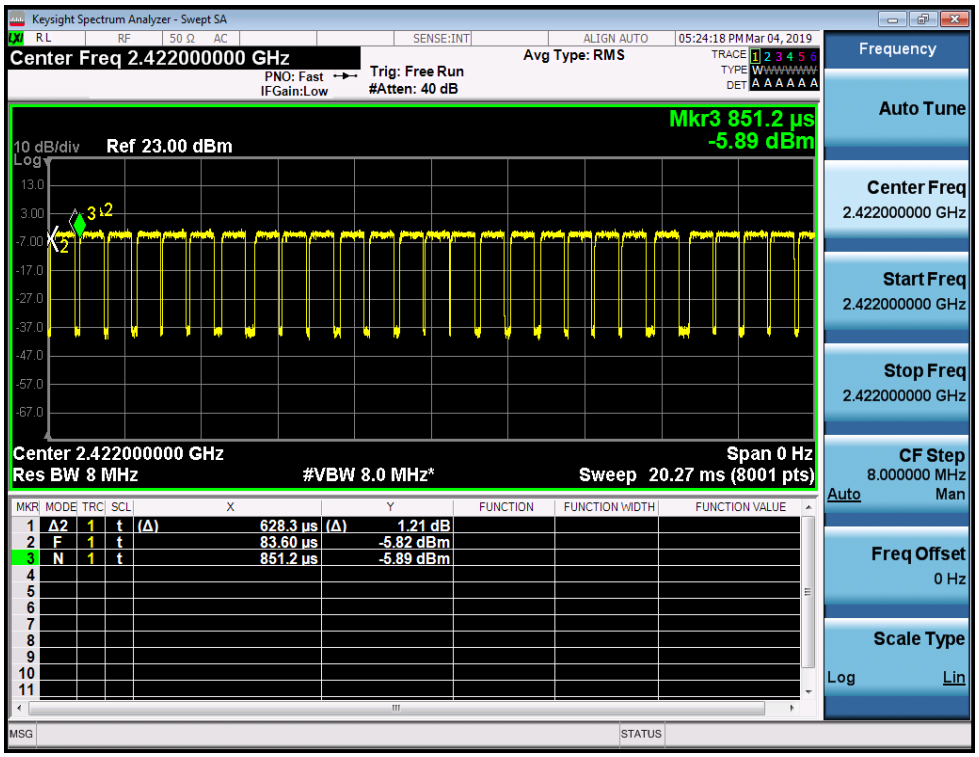
Duty cycle Plot

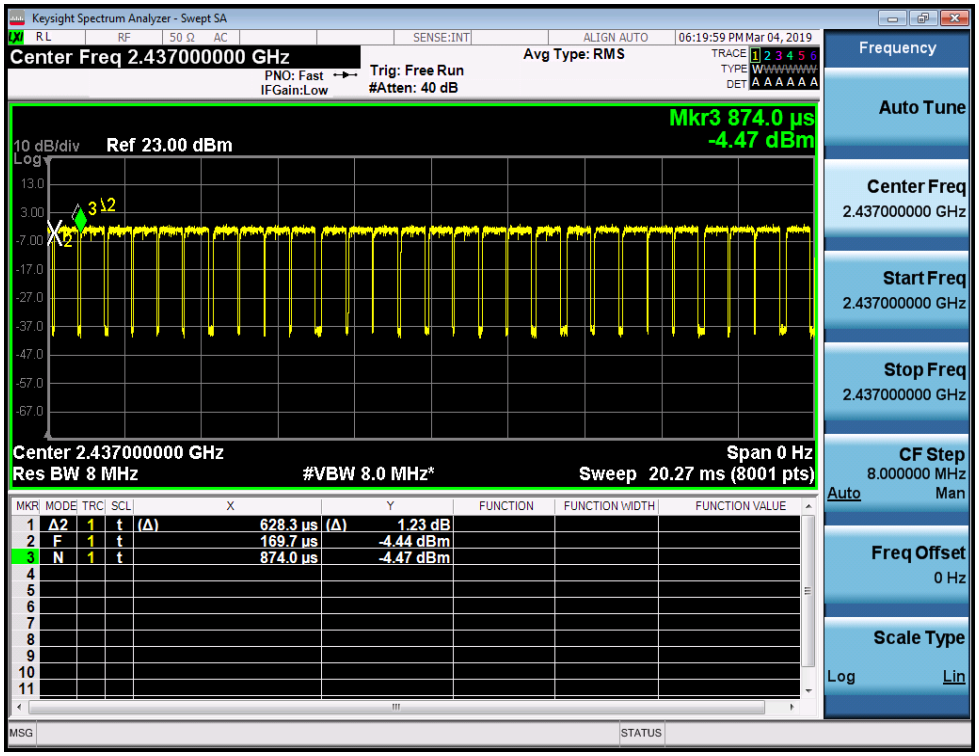
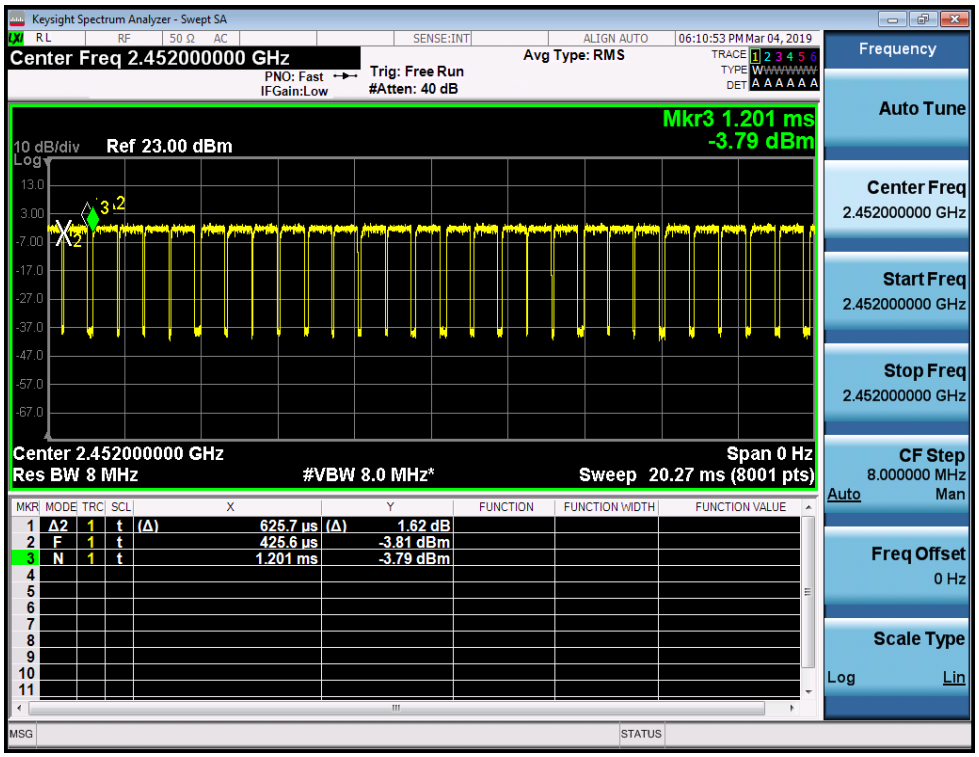
Graphs	
11B/LCH	
11B/MCH	

11B/HCH	
11G/LCH	

11G/MCH	
11G/HCH	

11N20/LCH	
11N20/MCH	

11N20/HCH	
11N40/LCH	

11N40/MCH	
11N40/HCH	

4.3 Power Spectral Density Measurement

4.3.1 Limits of Power Spectral Density

FCC § 15.247(e)

The peak power spectral density shall not be greater than 8dBm in any 3kHz band at any time interval of continuous transmission.

4.3.2 Test Procedure

1. The testing follows Measurement Procedure 8.4 DTS maximum power spectral density level in the fundamental emission of FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r01
2. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
3. Turn on the EUT and connect it to measurement instrument.
4. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz In order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
5. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
6. Measure and record the results in the test report.
7. The Measured power density (dBm)/ 100kHz is a reference level and used as 20dBc down limit line for Conducted Band Edges and Conducted Spurious Emission.

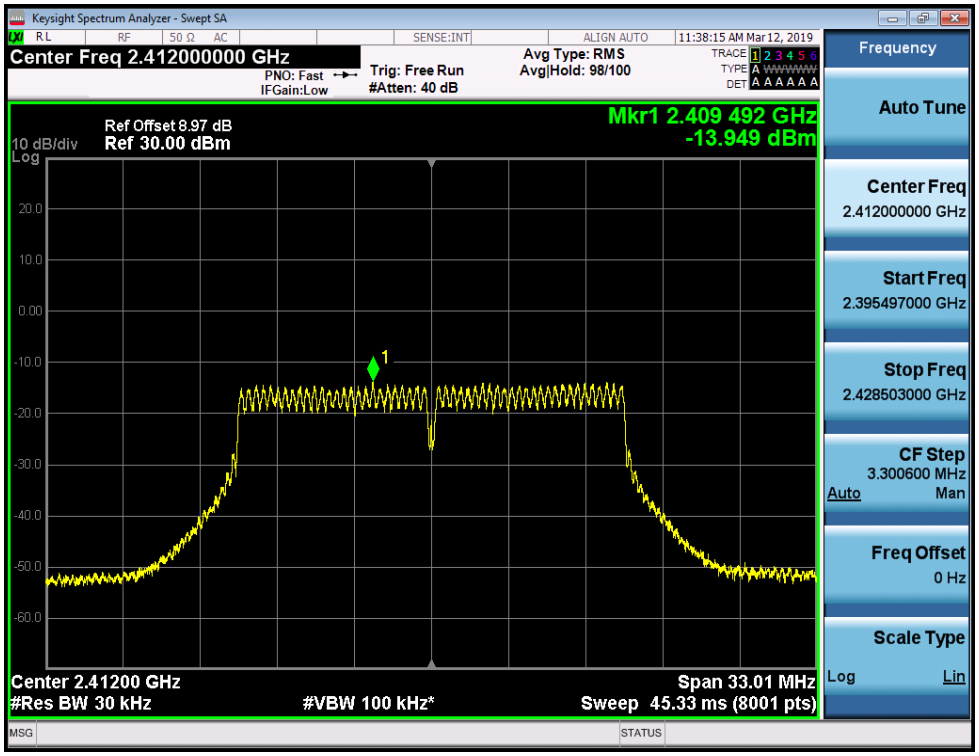
4.3.3 Test Result of Power Spectral Density

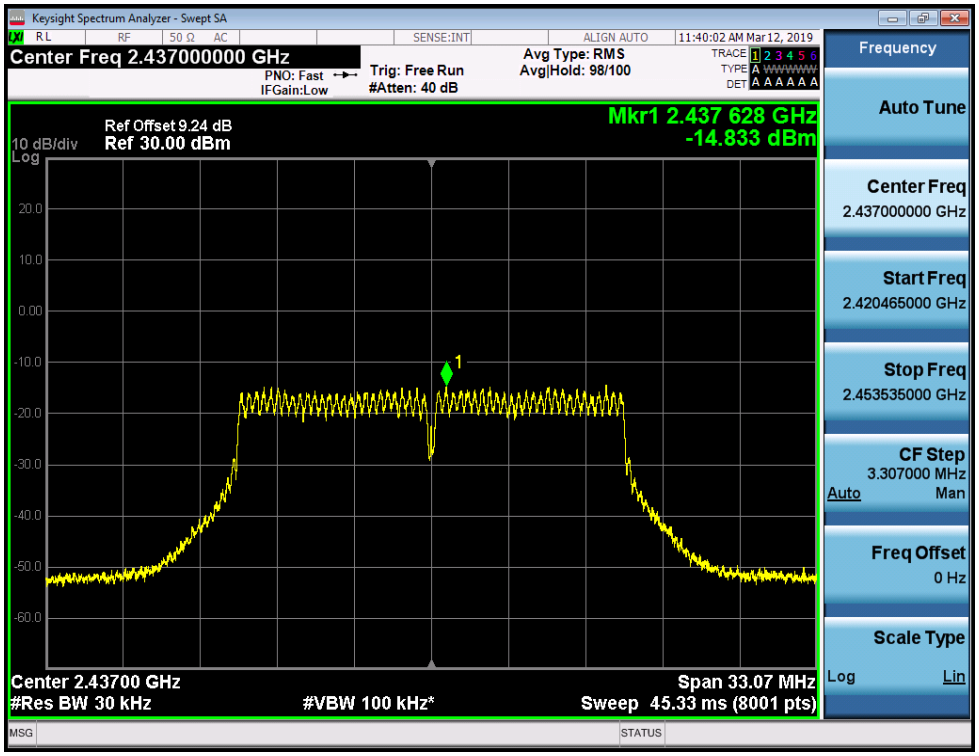
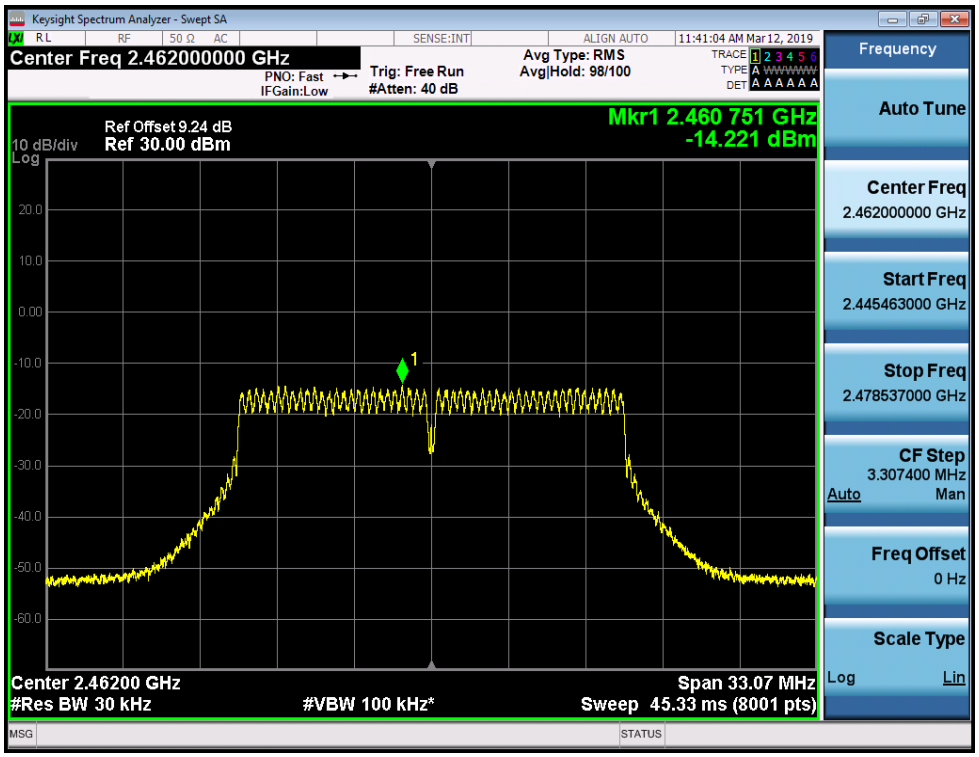
Test Mode :	WIFI	Temperature :	24~26℃
Test Engineer :	Tiny Yang	Relative Humidity :	50~53%

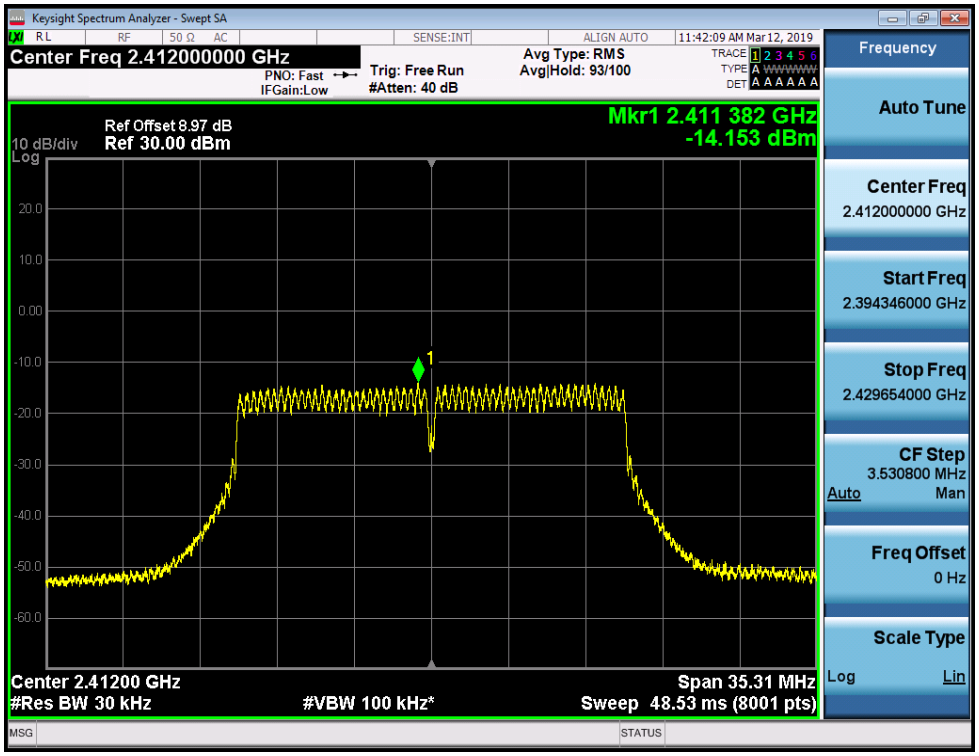
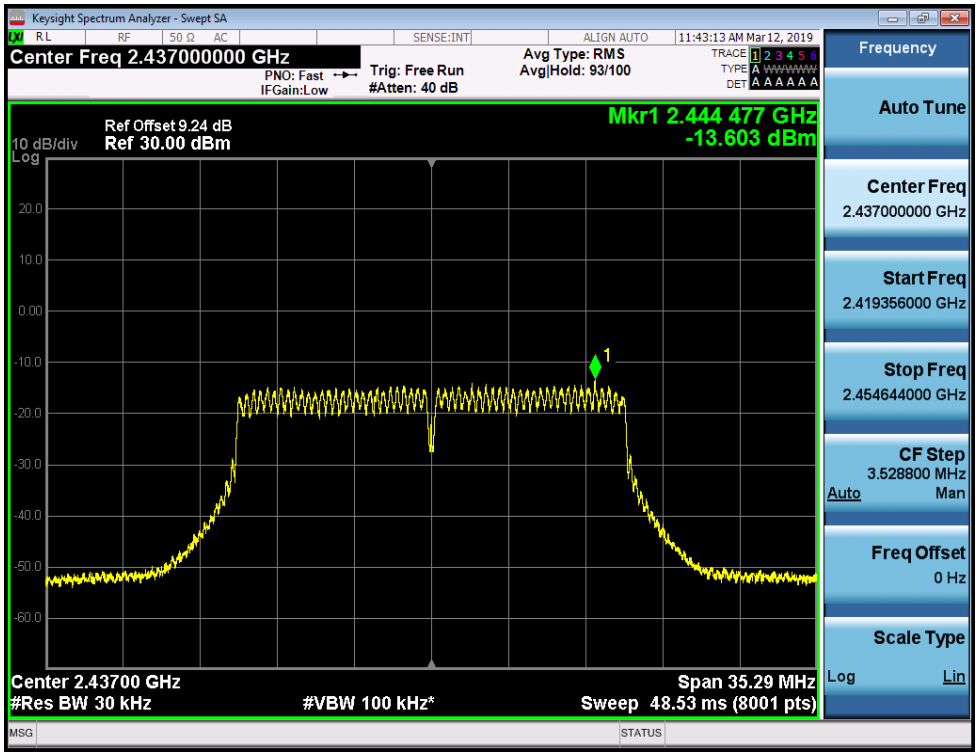
Mode	Channel	Meas.Level [dBm]	Av.PSD [dBm]	Verdict
11B	LCH	-11.665	-11.575	PASS
11B	MCH	-12.107	-12.017	PASS
11B	HCH	-10.765	-10.735	PASS
11G	LCH	-13.949	-13.739	PASS
11G	MCH	-14.833	-14.563	PASS
11G	HCH	-14.221	-13.821	PASS
11N20	LCH	-14.154	-13.864	PASS
11N20	MCH	-13.629	-13.199	PASS
11N20	HCH	-14.815	-14.275	PASS
11N40	LCH	-16.506	-15.636	PASS
11N40	MCH	-16.257	-15.757	PASS
11N40	HCH	-16.775	-15.845	PASS

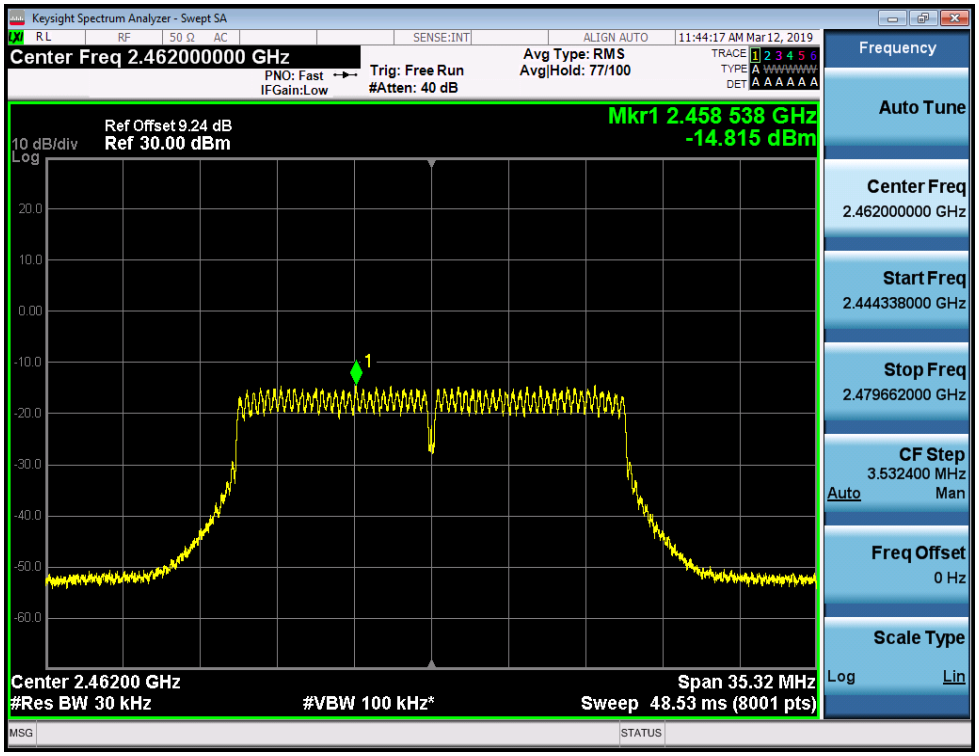
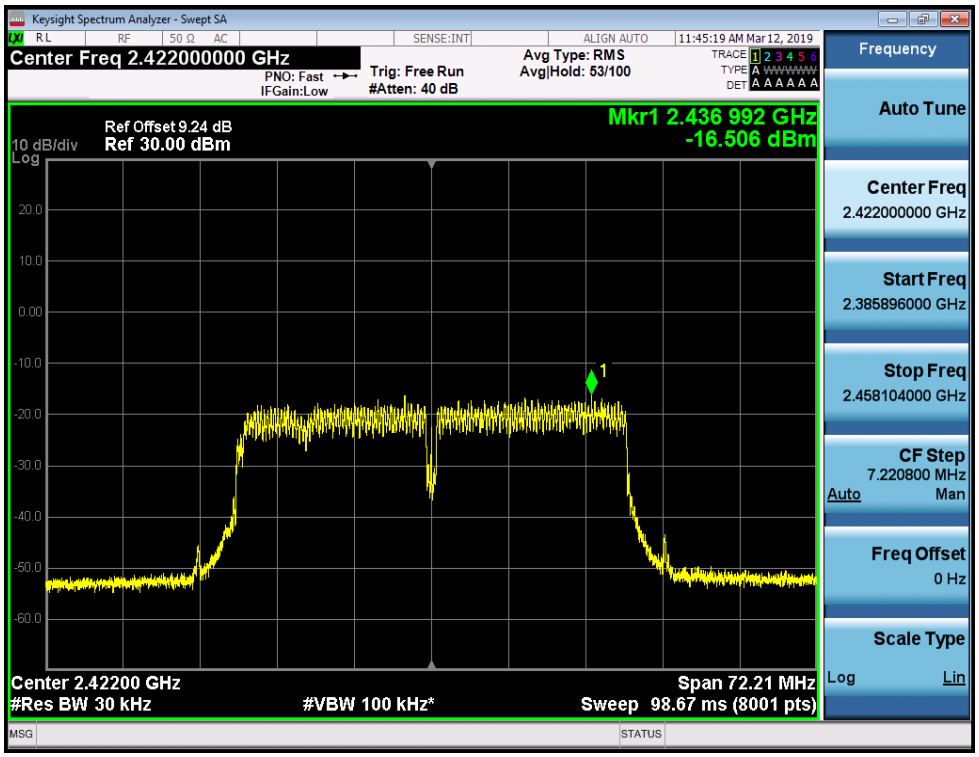
Power Spectral Density Plot

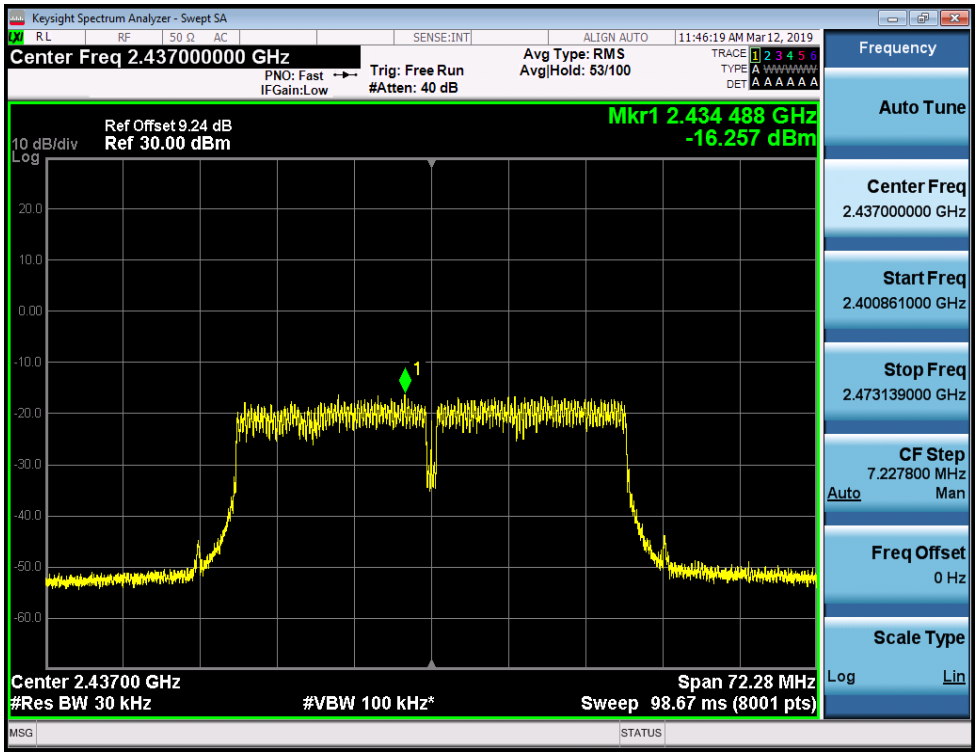
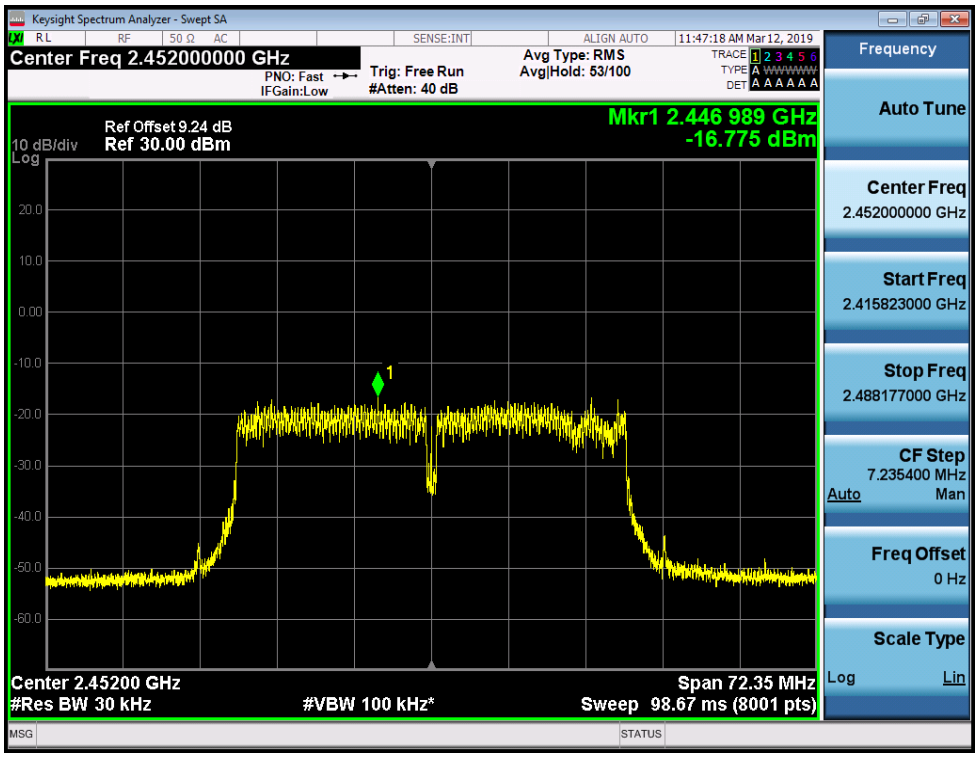
Graphs	
11B/LCH	
11B/MCH	

11B/HCH	
11G/LCH	

11G/MCH	
11G/HCH	

11N20/LCH	
11N20/MCH	

11N20/HCH	
11N40/LCH	

11N40/MCH	
11N40/HCH	

4.4 Conducted Band Edges and Spurious Emission Measurement

4.4.1 Limit of Conducted Band Edges and Spurious Emission

FCC §15.247 (d)

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

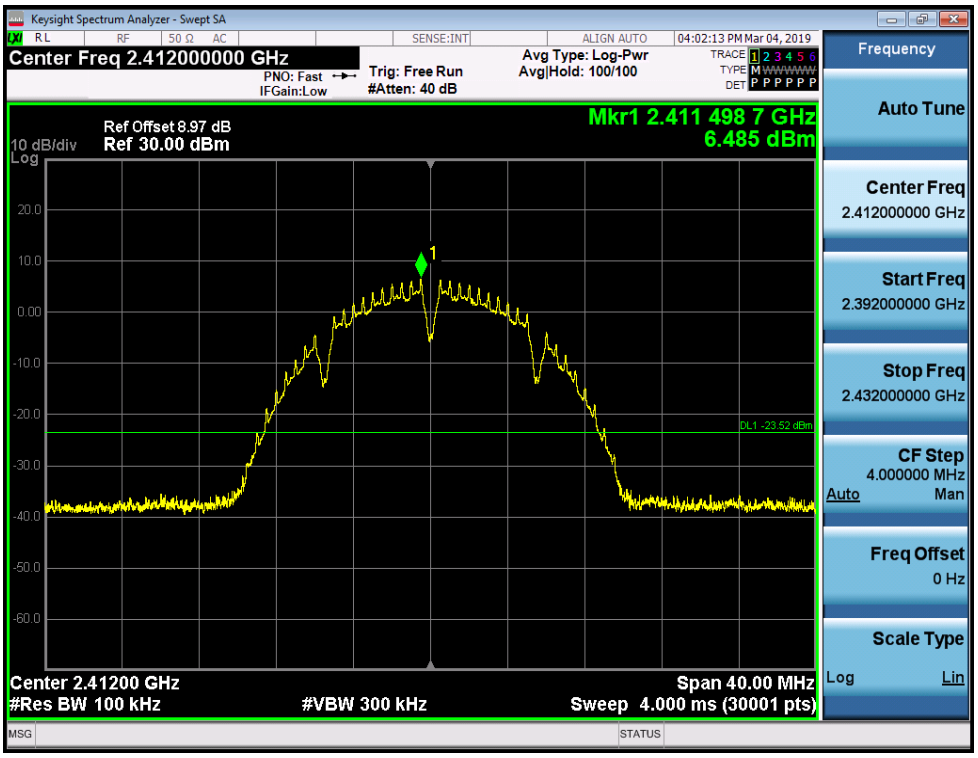
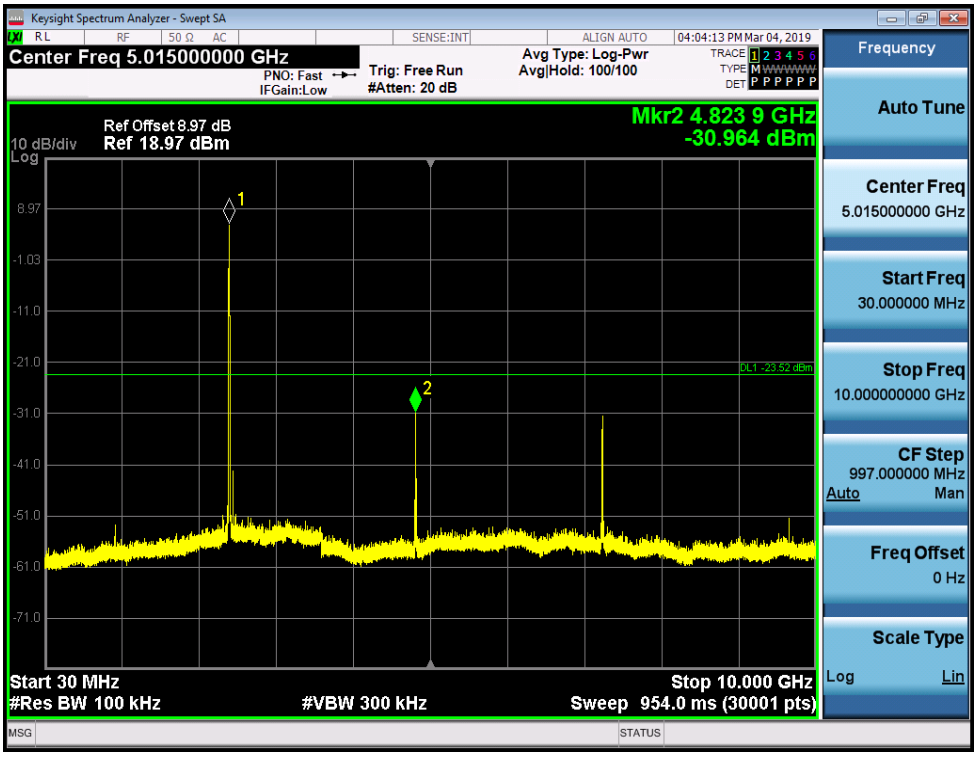
4.4.2 Test Procedures

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Turn on the EUT and connect it to measurement instrument.
3. Set RBW = 100 kHz, VBW=300 kHz, Peak Detector. Unwanted Emissions measured in any 100 kHz 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).
4. Measure and record the results in the test report.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

4.4.3 Test Result of Conducted Band Edges and Spurious Emission

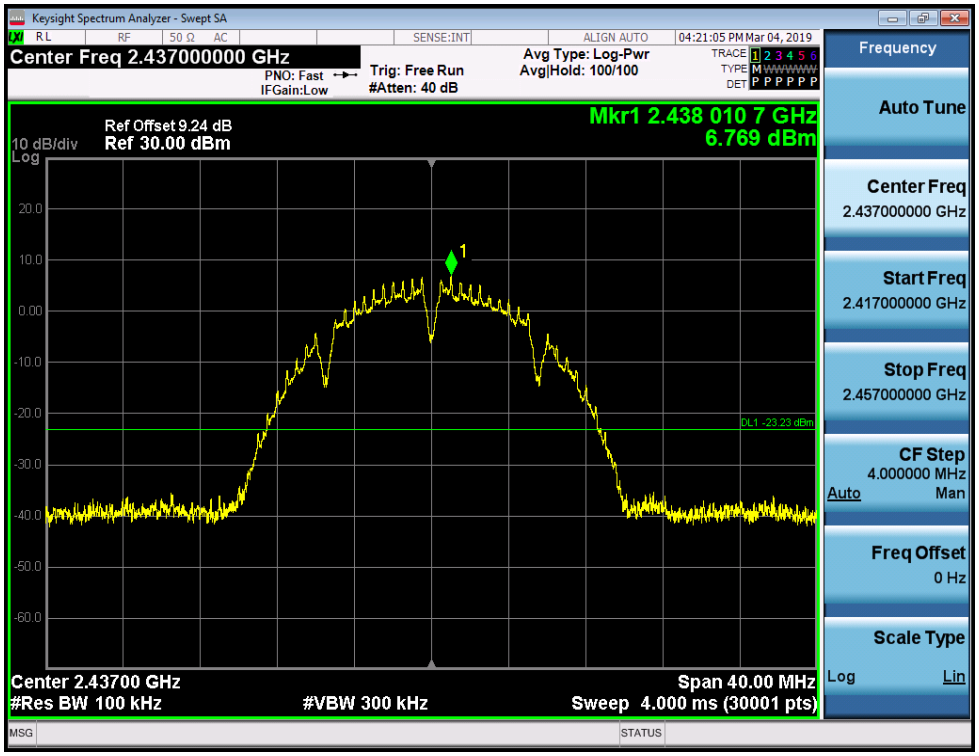
Test Mode :		WIFI	Temperature :	24~26℃	
Test Engineer :		Tiny Yang	Relative Humidity :	50~53%	
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
11B	LCH	6.100	-36.298	-23.90	PASS
11B	HCH	7.214	-36.970	-22.79	PASS
11G	LCH	1.560	-33.730	-28.44	PASS
11G	HCH	3.964	-31.960	-26.04	PASS
11N20	LCH	1.276	-36.158	-28.72	PASS
11N20	HCH	1.521	-33.758	-28.48	PASS
11N40	LCH	-1.834	-33.622	-31.83	PASS
11N40	HCH	-0.509	-30.192	-20.51	PASS

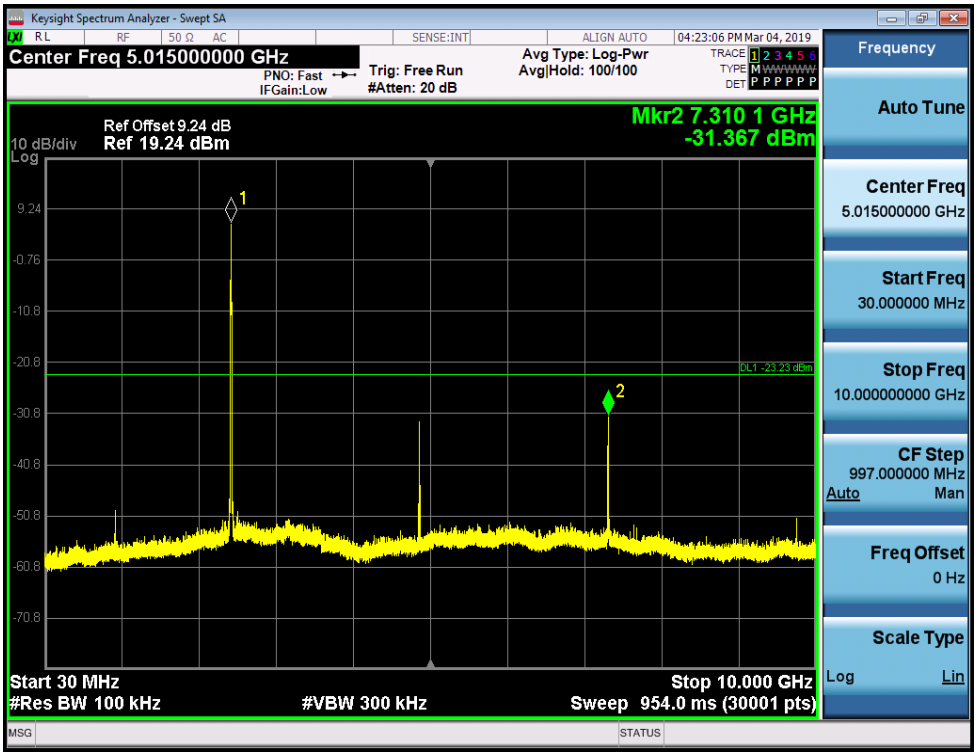
Conducted Band Edges and Spurious Emission Plot

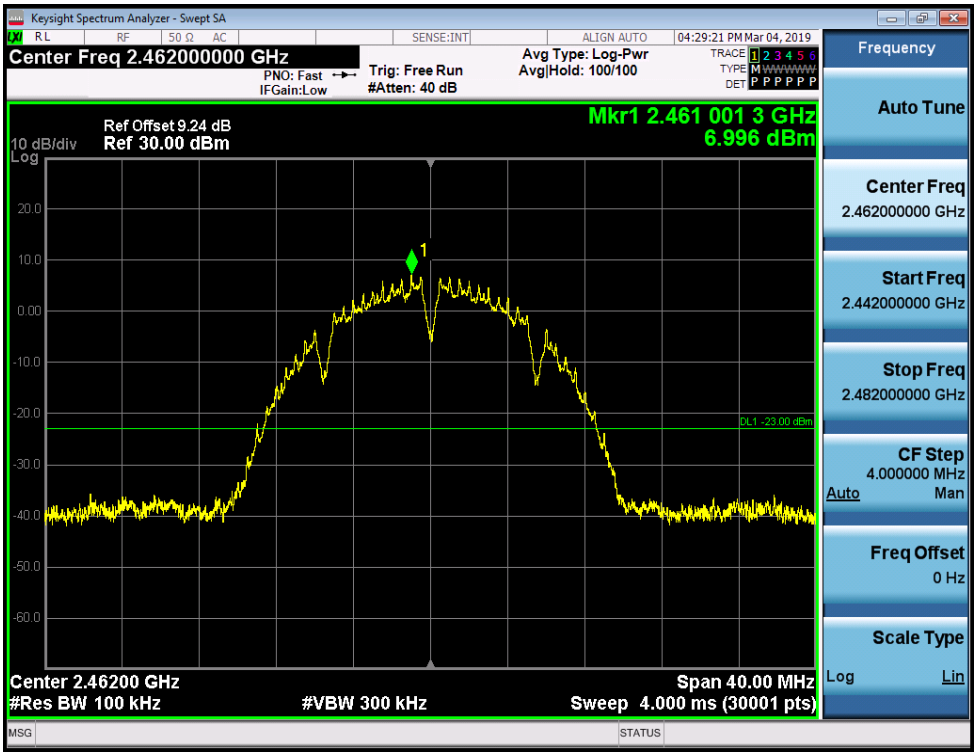
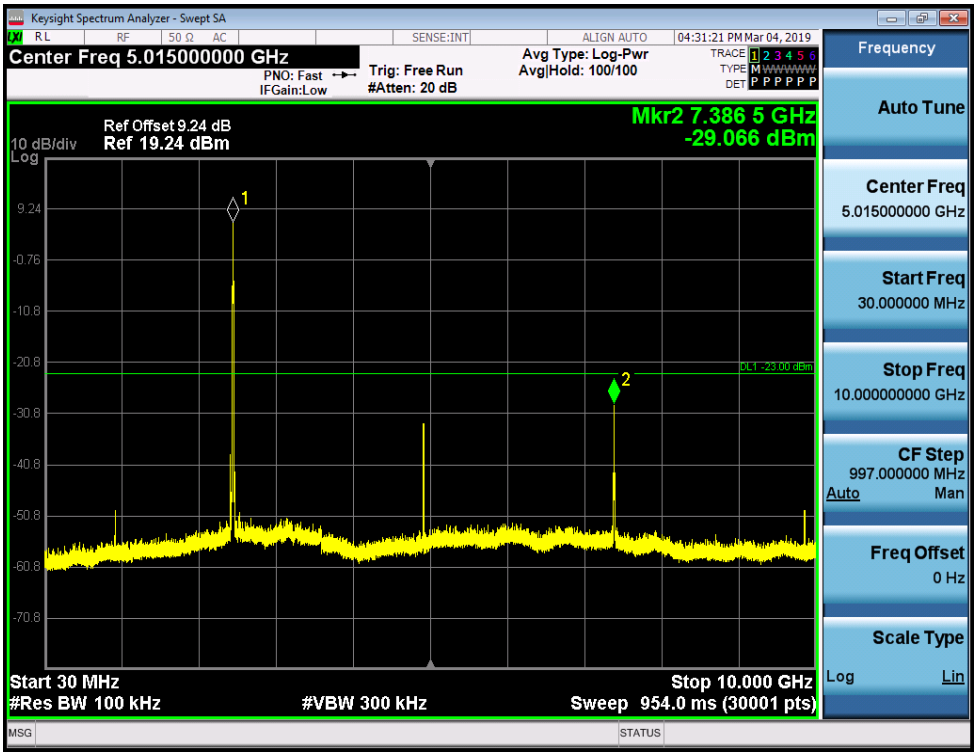
11B_LCH_Graphs	
Pref/11B/LCH	
Puw/11B/LCH	

11B_MCH_Graphs

Pref/11B/MCH

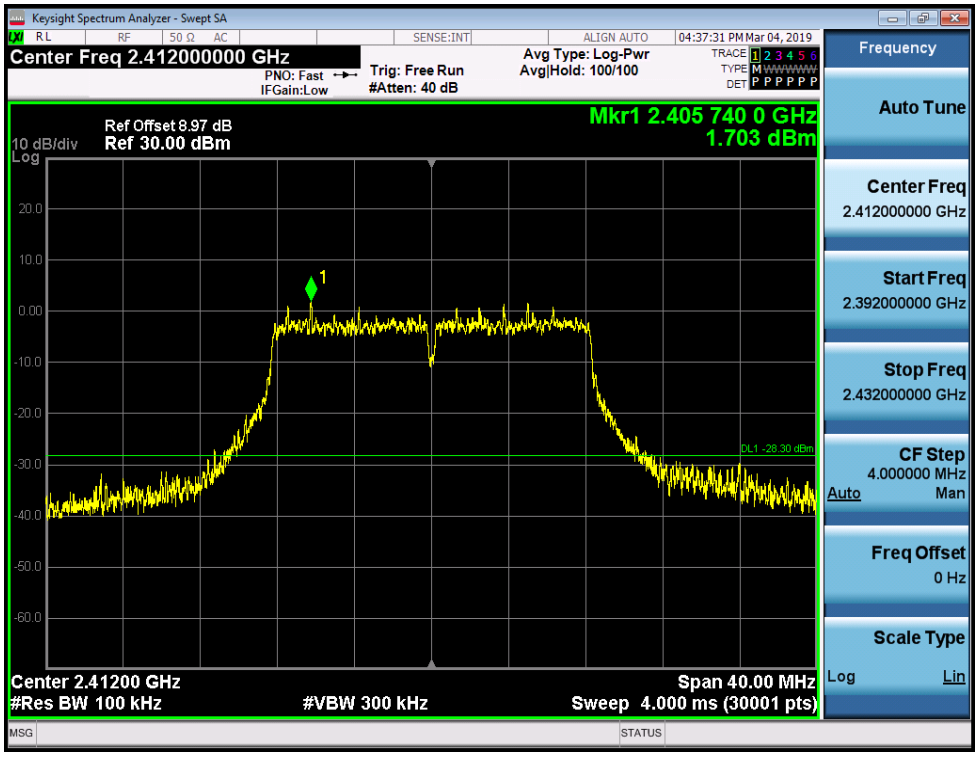


Puw/11B/MCH	 

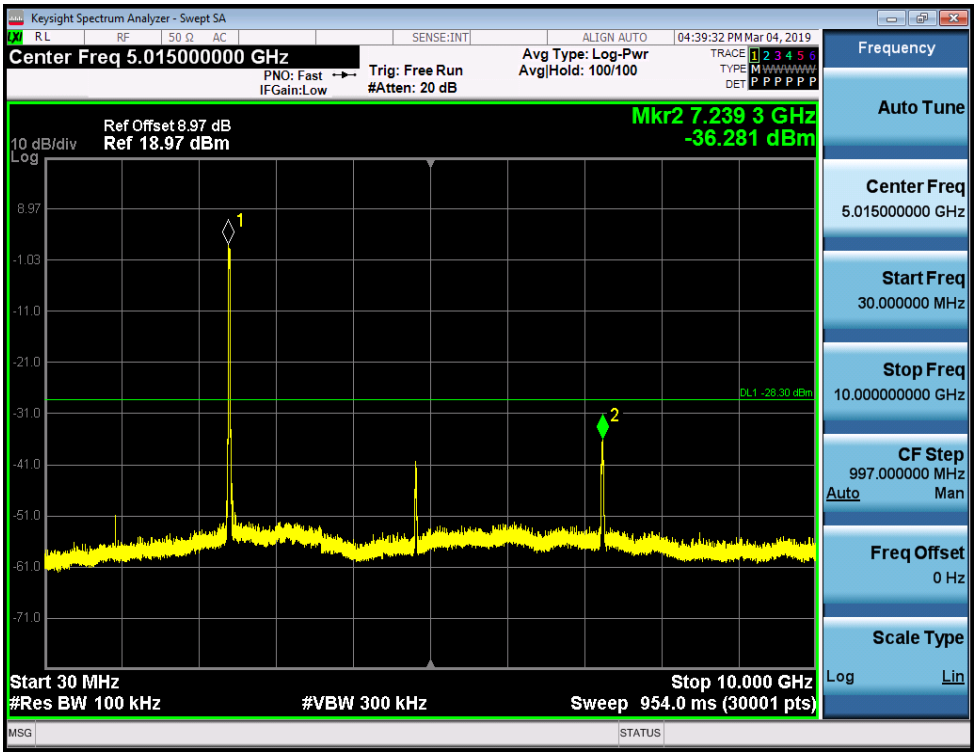
11B_HCH_Graphs	
Pref/11B/HCH	
Puw/11B/HCH	

11G_LCH_Graphs

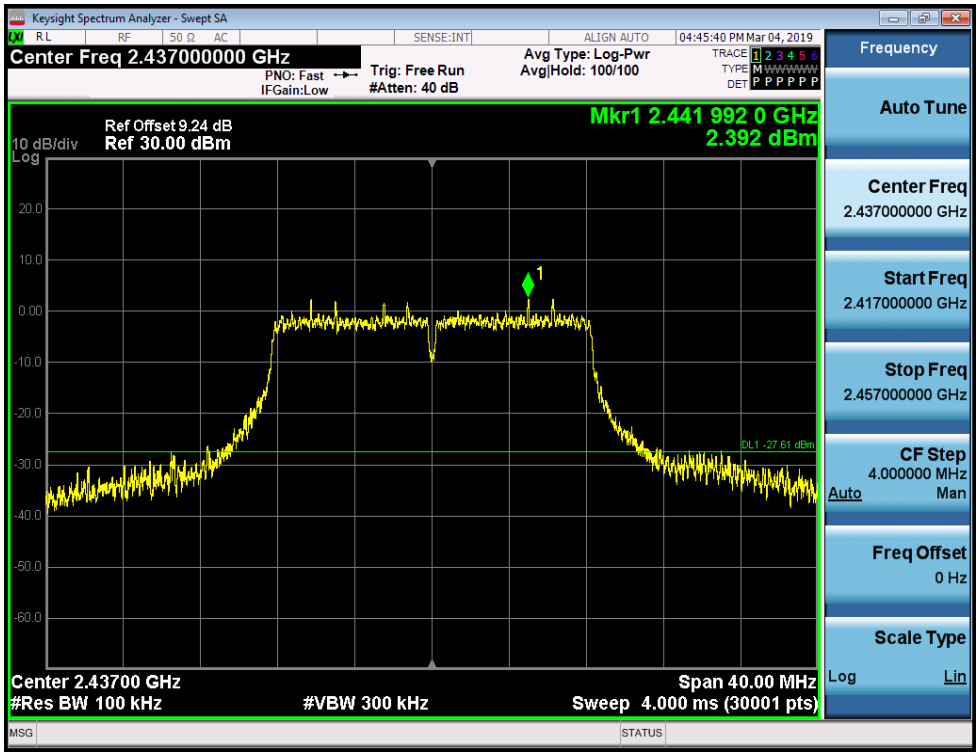
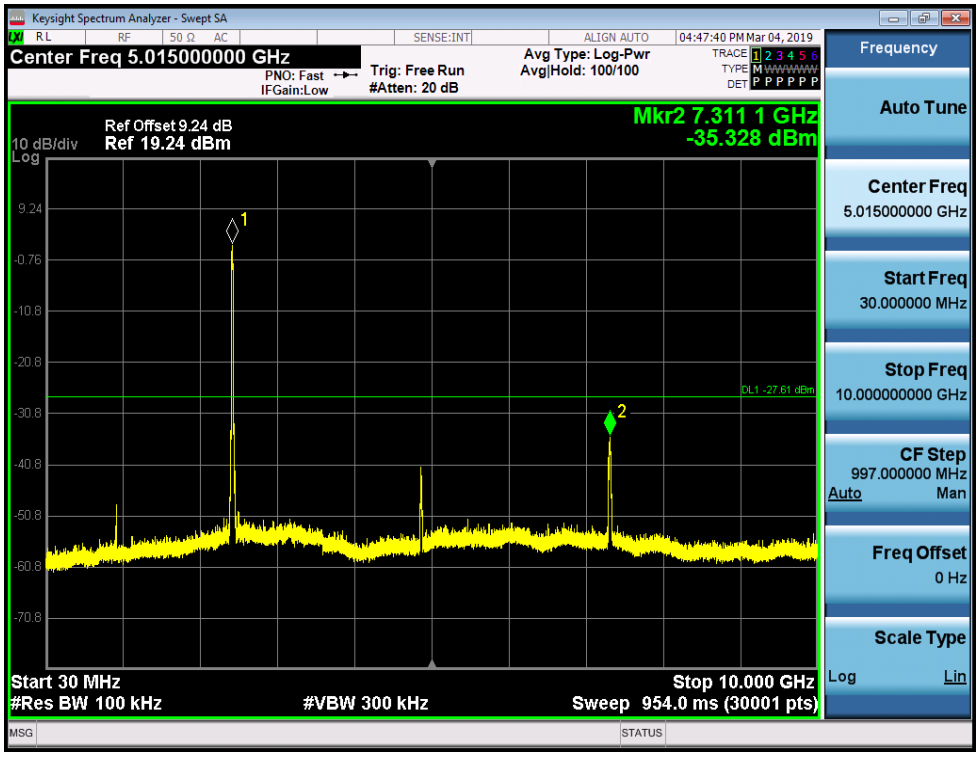
Pref/11G/LCH



Puw/11G/LCH

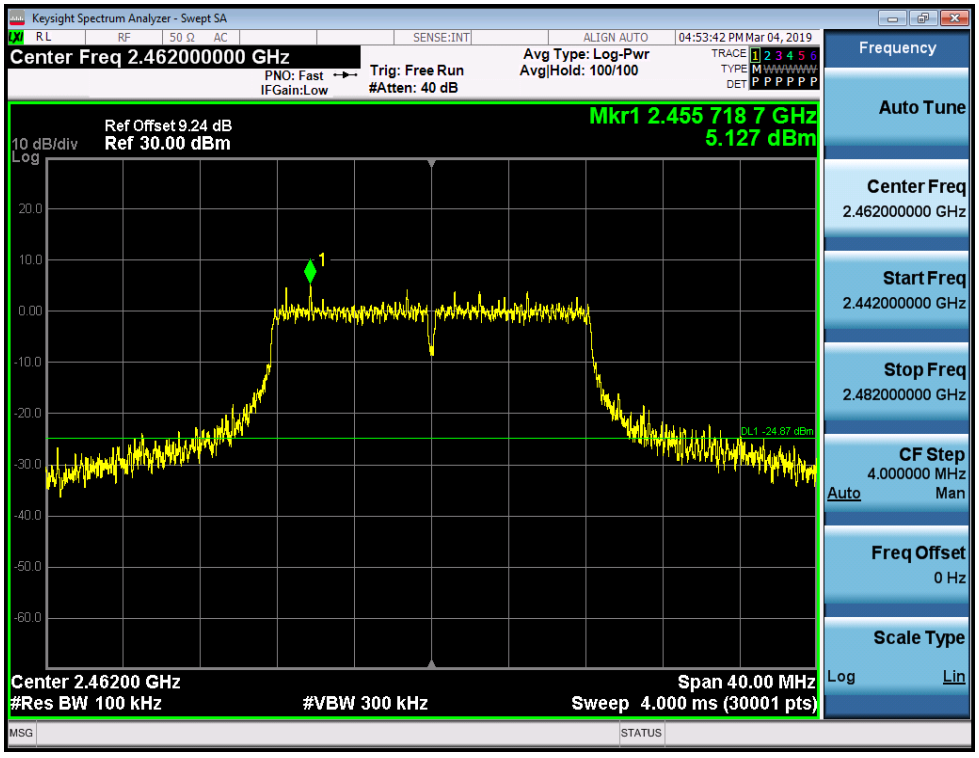

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 100/100
04:39:32 PM Mar 04, 2019
Ref Offset 8.97 dB
10 dB/div
Ref 18.97 dBm
Log
Mkr2 7.239 3 GHz
-36.281 dBm
DL1 -28.30 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.0 ms (30001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin


Keysight Spectrum Analyzer - Swept SA
Center Freq 18.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 100/100
04:43:00 PM Mar 04, 2019
Ref Offset 8.97 dB
10 dB/div
Ref 18.97 dBm
Log
Mkr1 25.351 5 GHz
-37.276 dBm
DL1 -28.30 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.000 GHz
Sweep 1.530 s (30001 pts)
Frequency
Auto Tune
Center Freq
18.000000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
26.000000000 GHz
CF Step
1.600000000 GHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

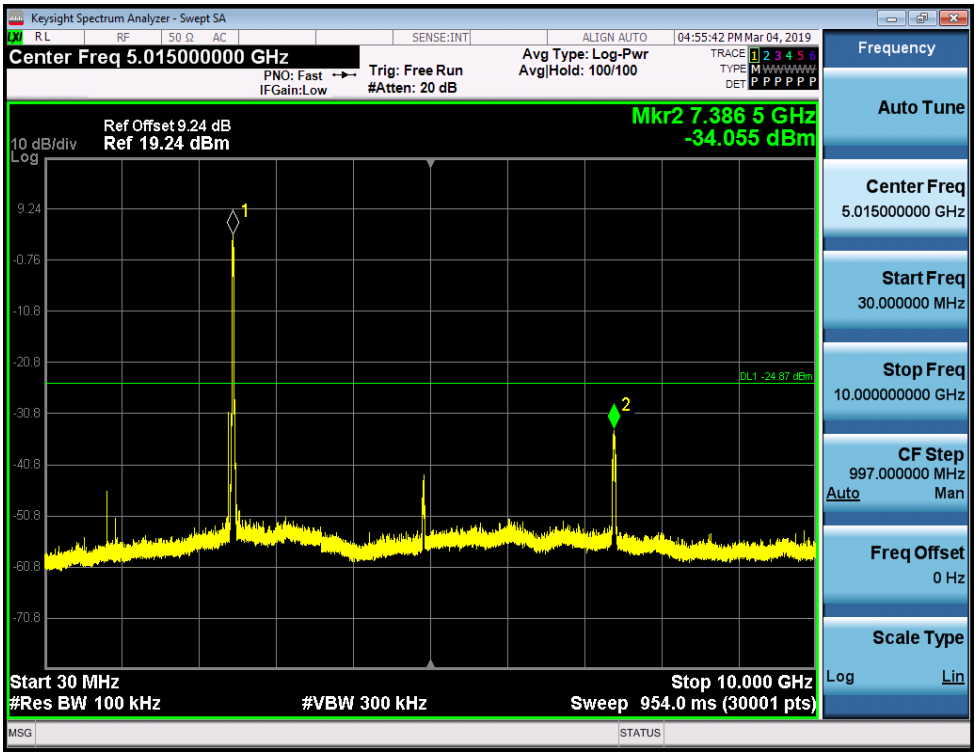
11G_MCH_Graphs	
Pref/11G/MCH	
Puw/11G/MCH	

11G_HCH_Graphs

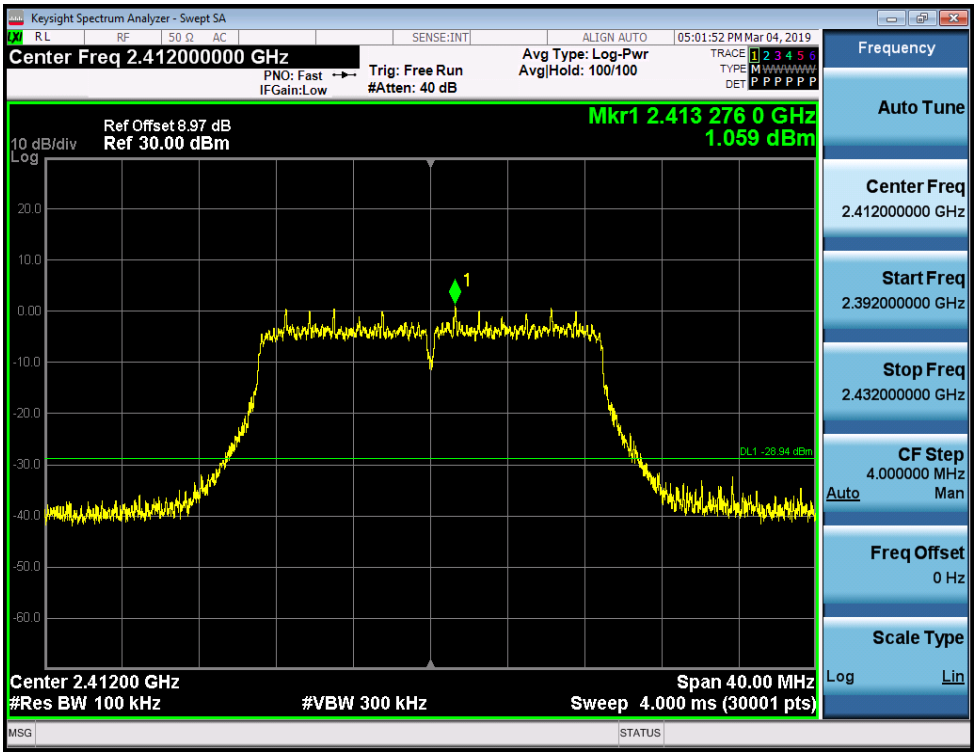
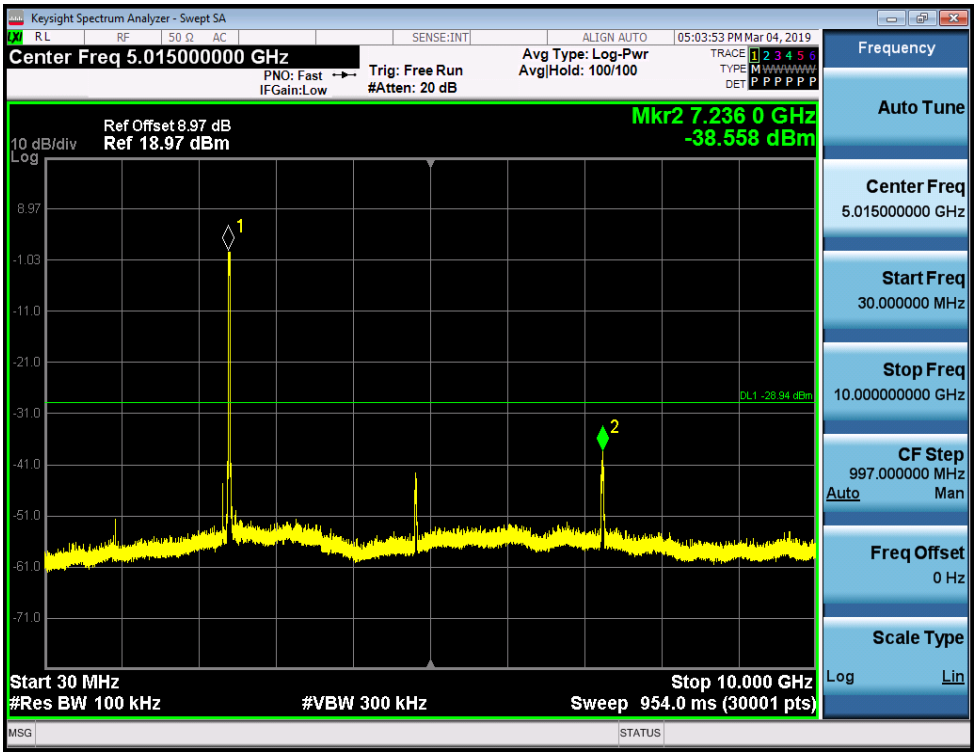
Pref/11G/HCH



Puw/11G/HCH

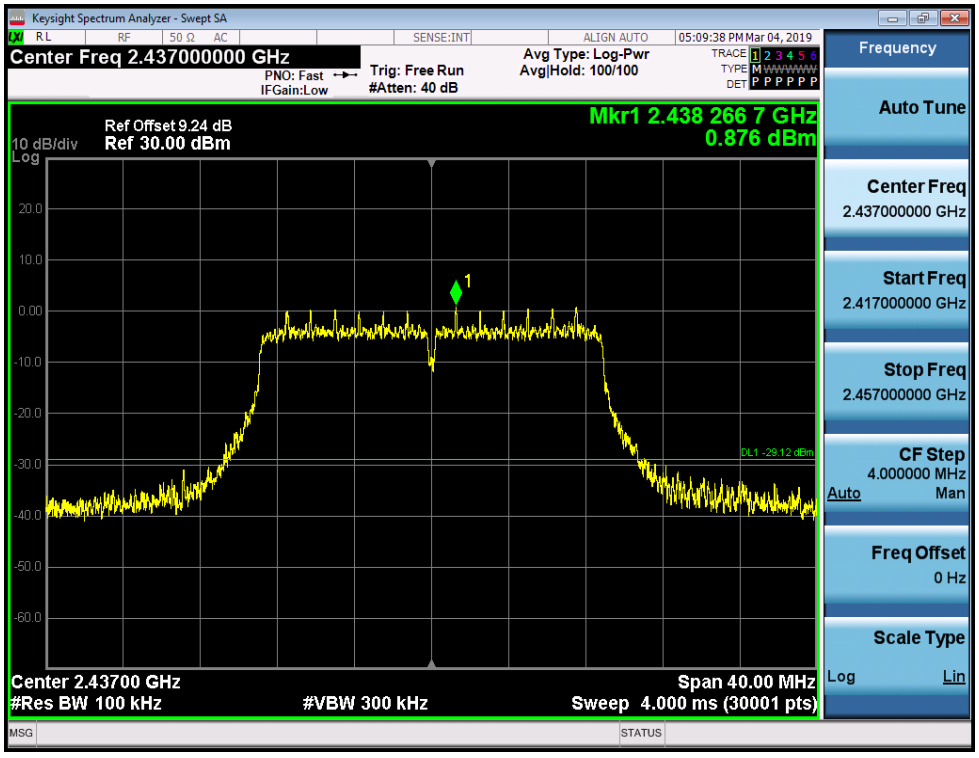

Keysight Spectrum Analyzer - Swept SA
Center Freq 5.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 100/100
04:55:42 PM Mar 04, 2019
Ref Offset 9.24 dB
10 dB/div
Ref 19.24 dBm
Log
Mkr2 7.386 5 GHz
-34.055 dBm
DL1 -24.87 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 10.000 GHz
Sweep 954.0 ms (30001 pts)
Frequency
Auto Tune
Center Freq
5.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
10.000000000 GHz
CF Step
997.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin


Keysight Spectrum Analyzer - Swept SA
Center Freq 18.000000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
Avg Type: Log-Pwr
Avg|Hold: 100/100
04:59:11 PM Mar 04, 2019
Ref Offset 9.24 dB
10 dB/div
Ref 19.24 dBm
Log
Mkr1 25.395 7 GHz
-36.763 dBm
DL1 -24.87 dBm
Start 10.000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.000 GHz
Sweep 1.530 s (30001 pts)
Frequency
Auto Tune
Center Freq
18.000000000 GHz
Start Freq
10.000000000 GHz
Stop Freq
26.000000000 GHz
CF Step
1.600000000 GHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

11N20_LCH_Graphs	
Pref/11N20/LCH	
Puw/11N20/LCH	

11N20_MCH_Graphs

Pref/11N20/MCH



Puw/11N20/MCH