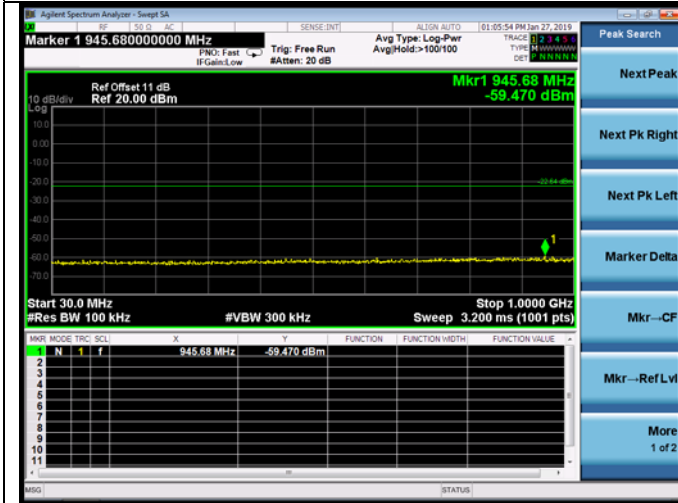
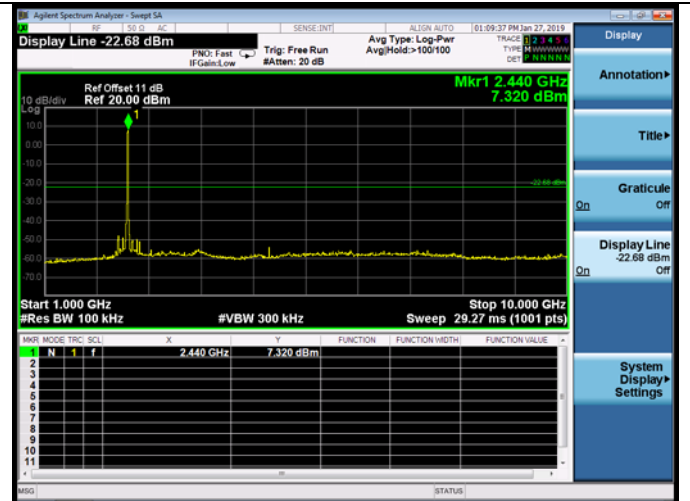
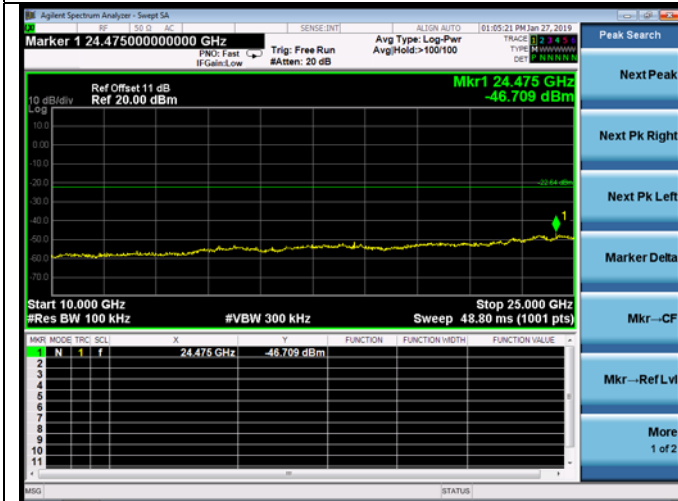
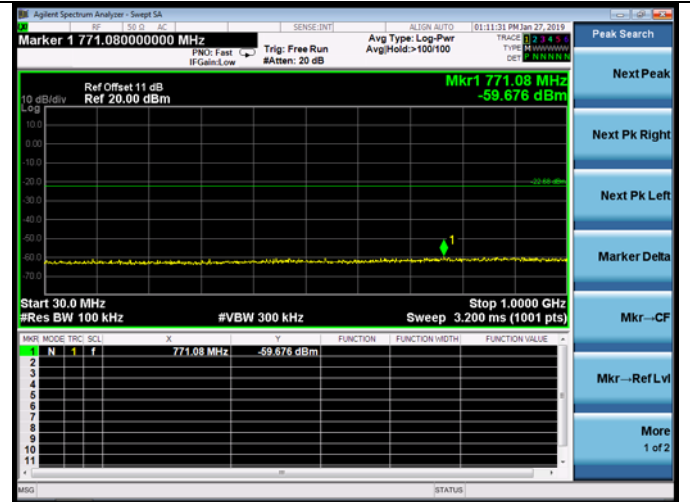
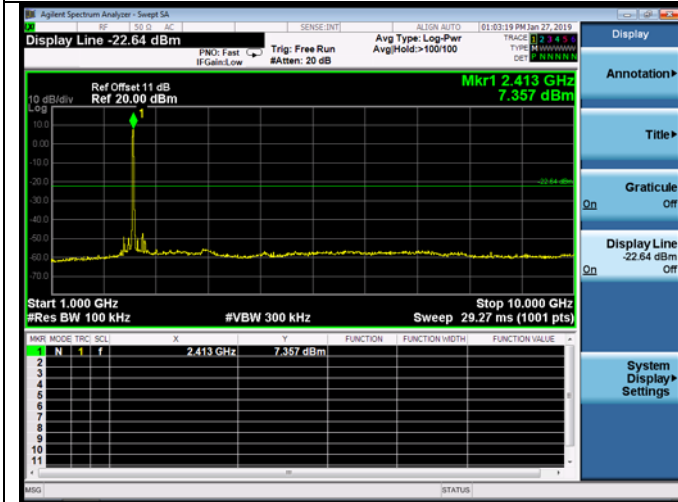


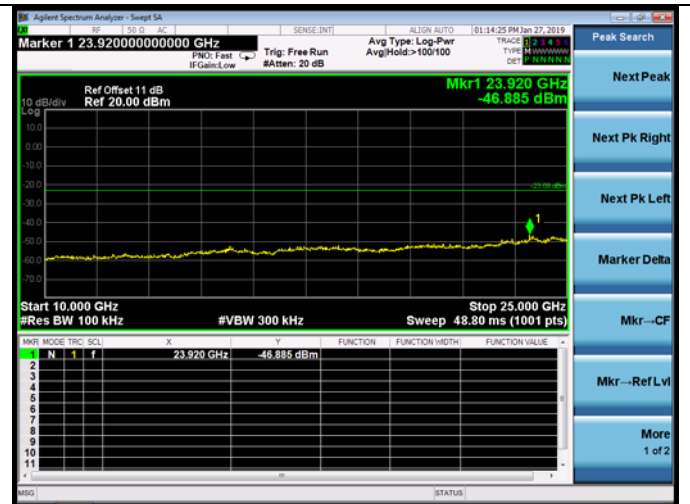
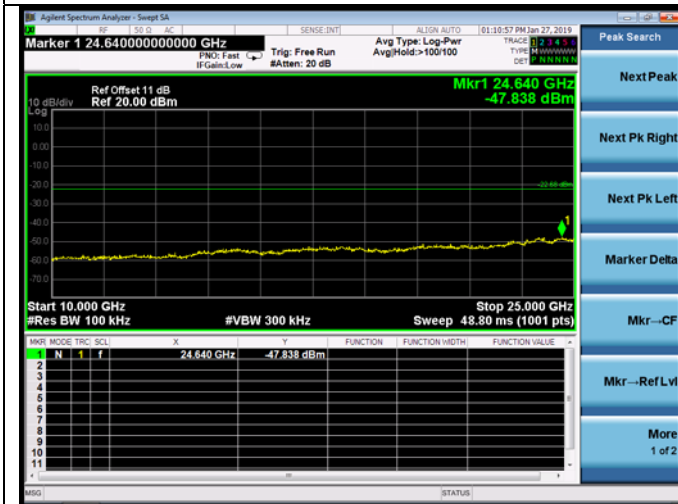
**ANT1:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz

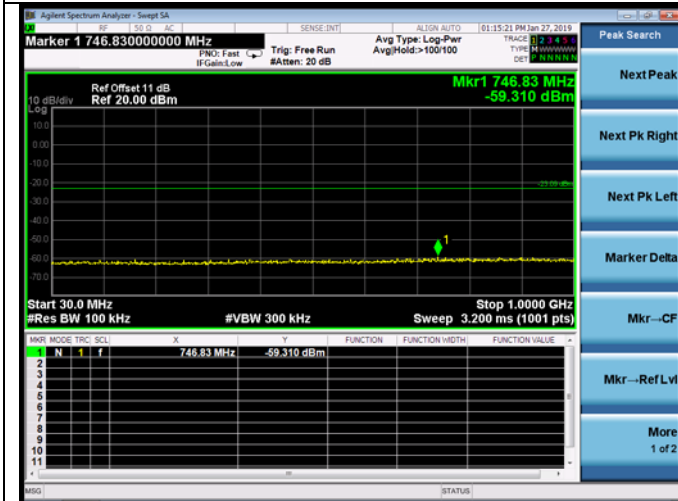


**Test CH6: 2437MHz**

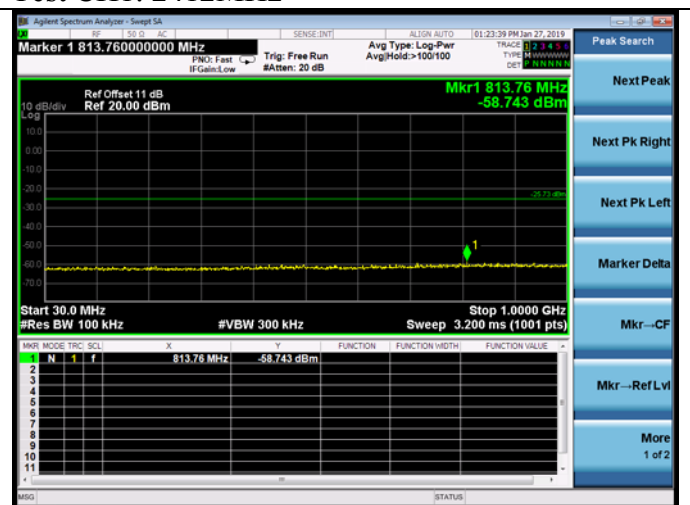
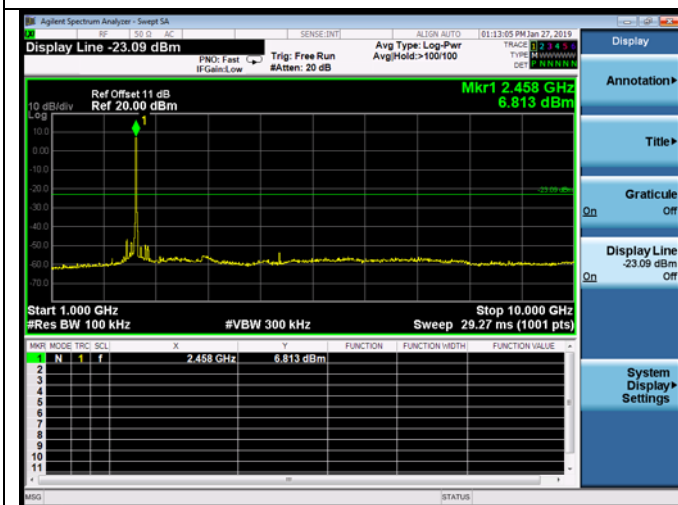




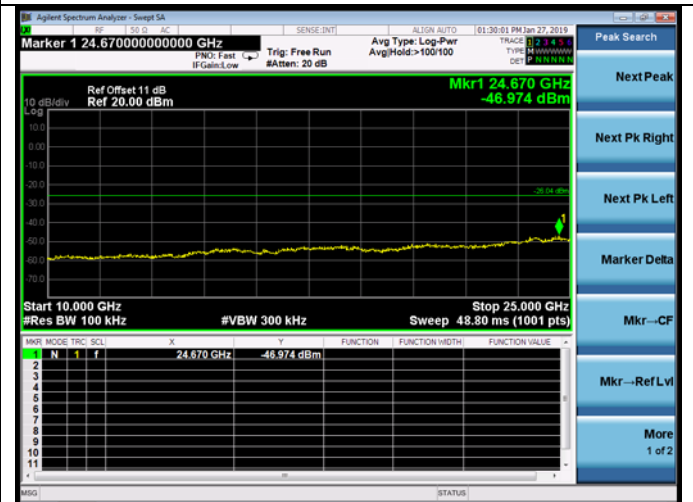
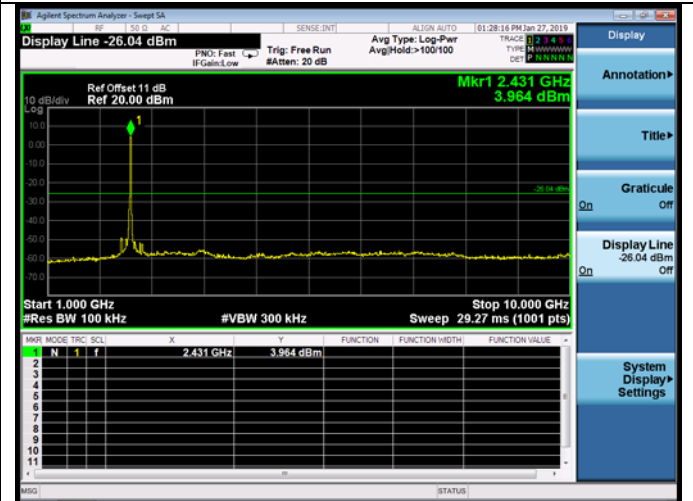
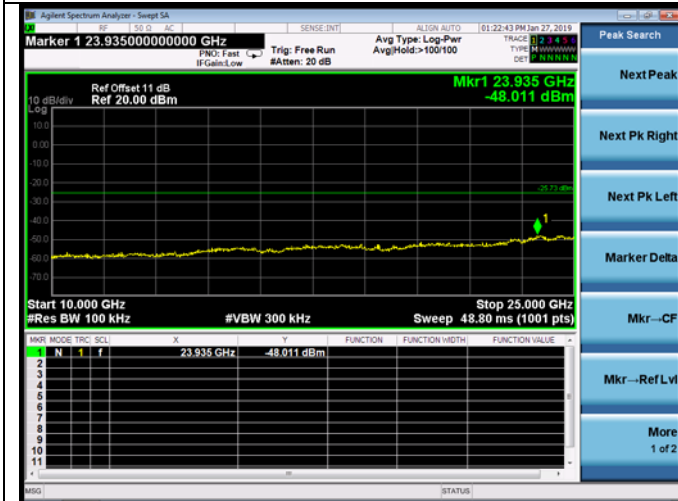
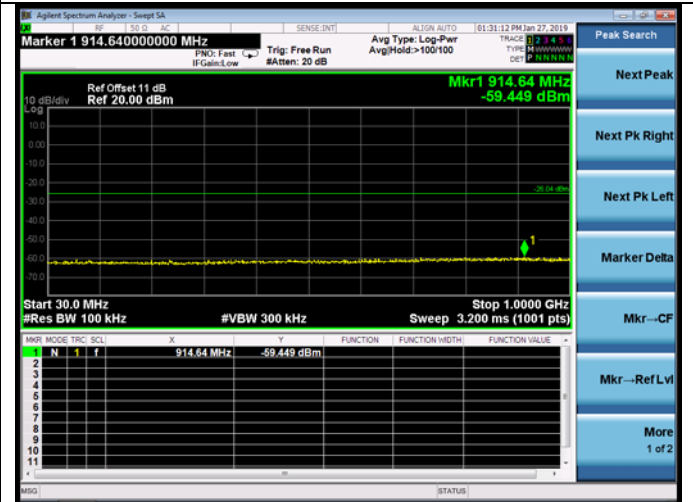
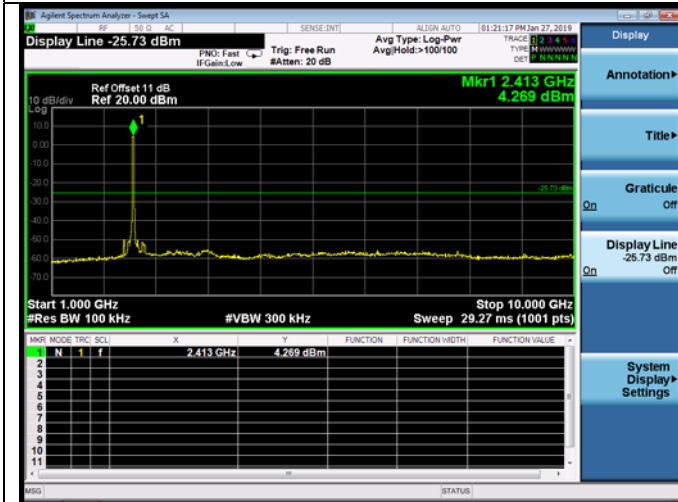
## Test CH11: 2462MHz



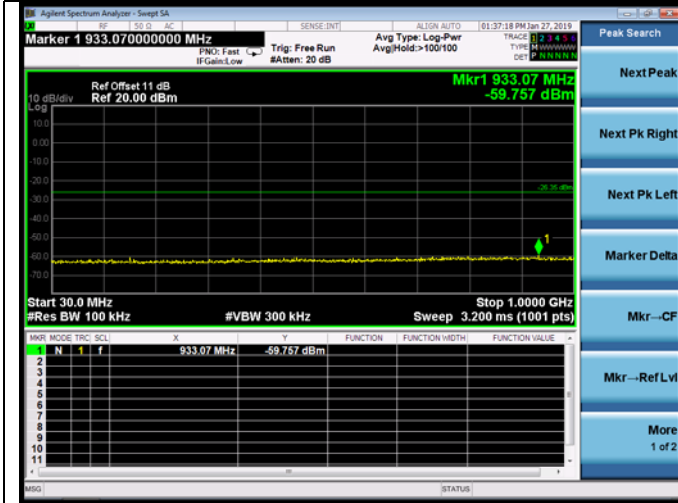
## Test Mode: IEEE 802.11g Test CH1: 2412MHz



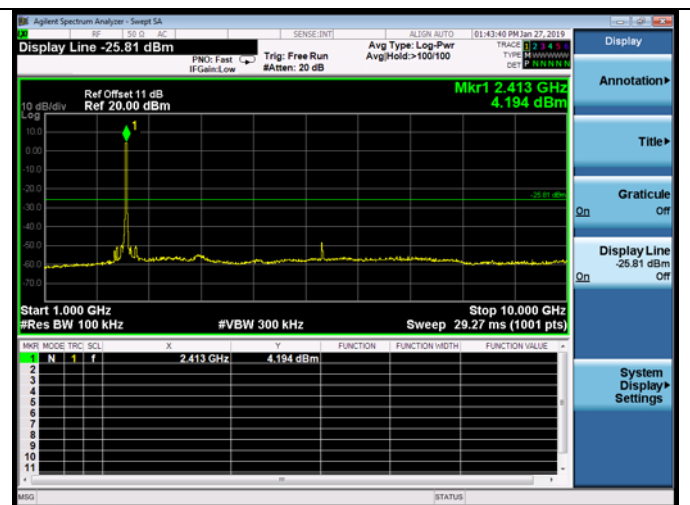
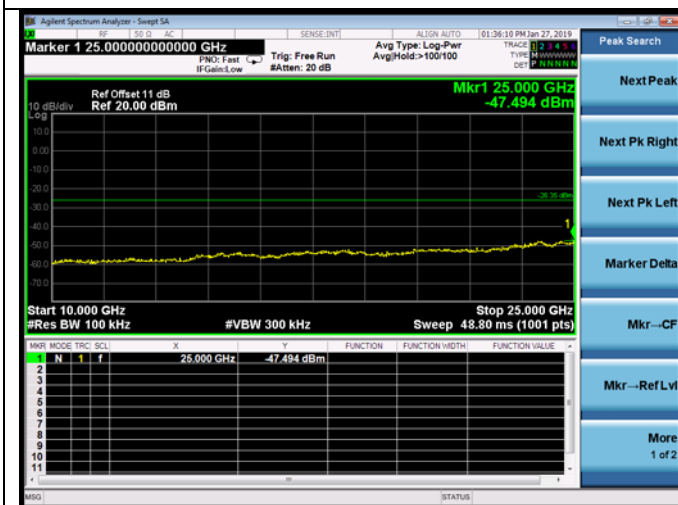
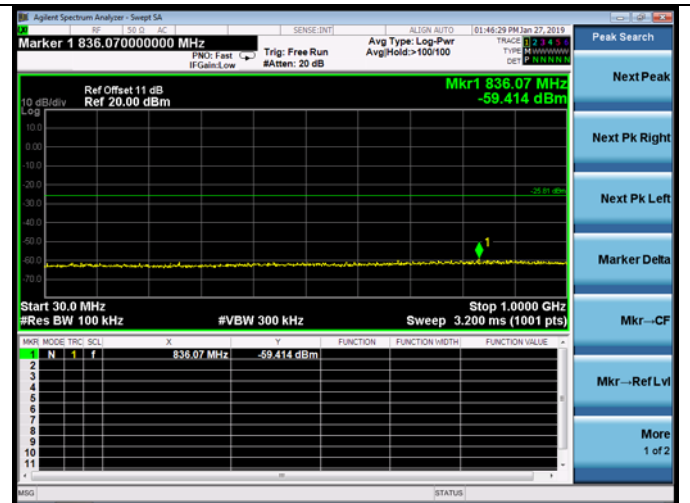
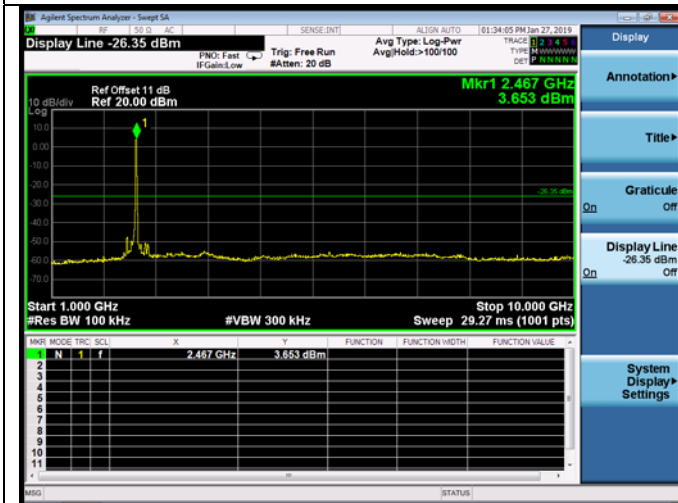
### Test CH6: 2437MHz

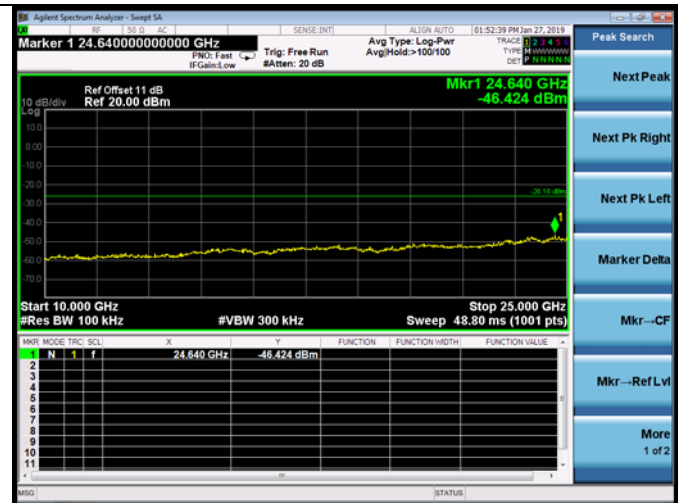
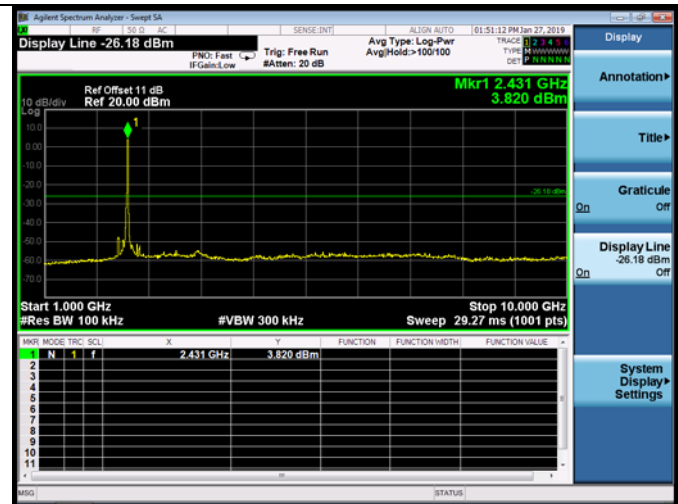
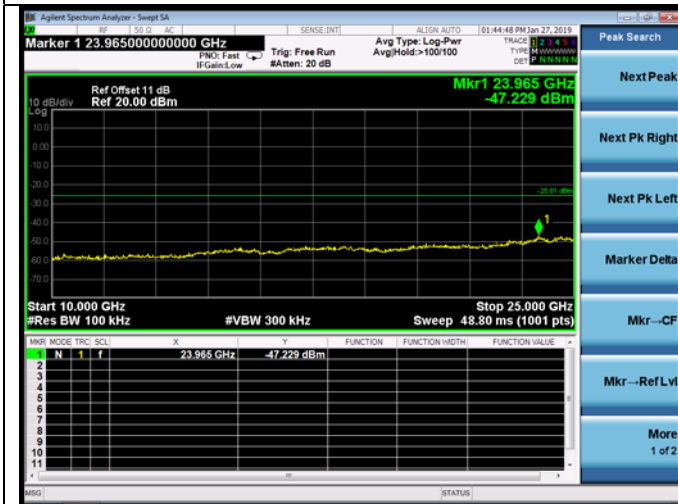


### Test CH11: 2462MHz

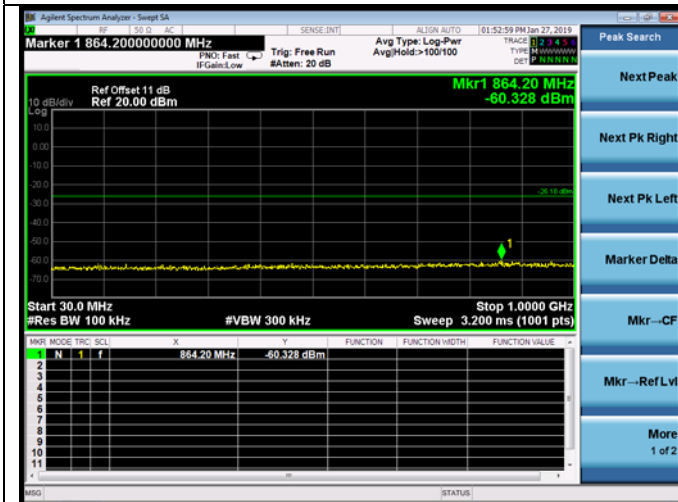


### Test Mode: IEEE 802.11n HT20 Test CH1: 2412MHz

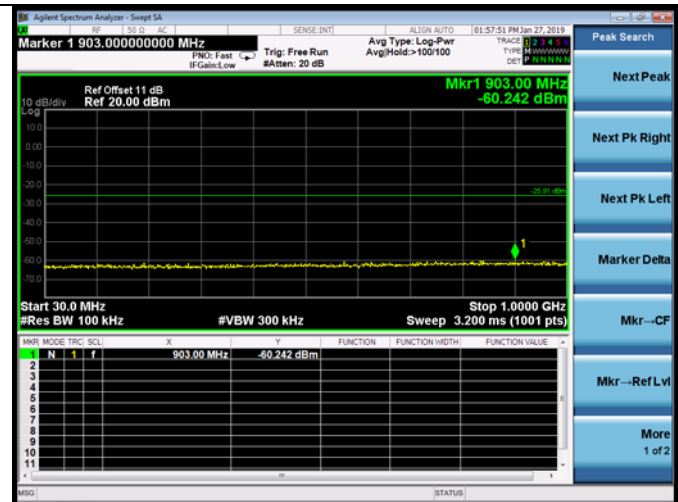




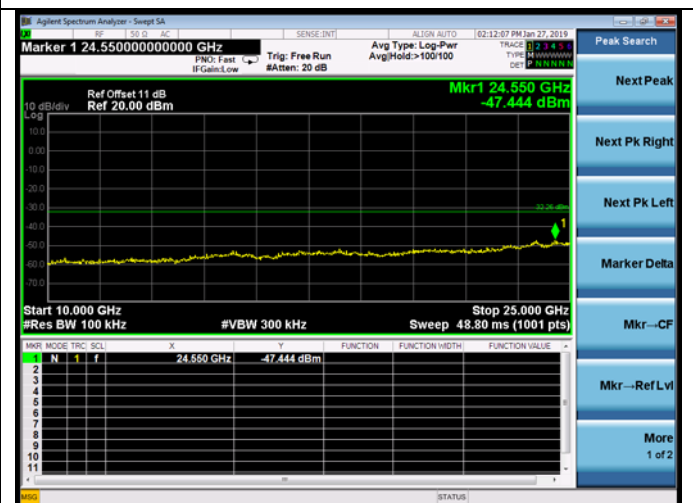
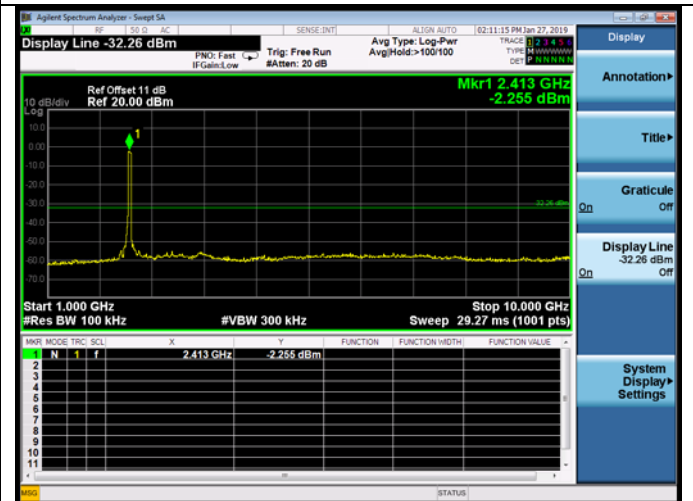
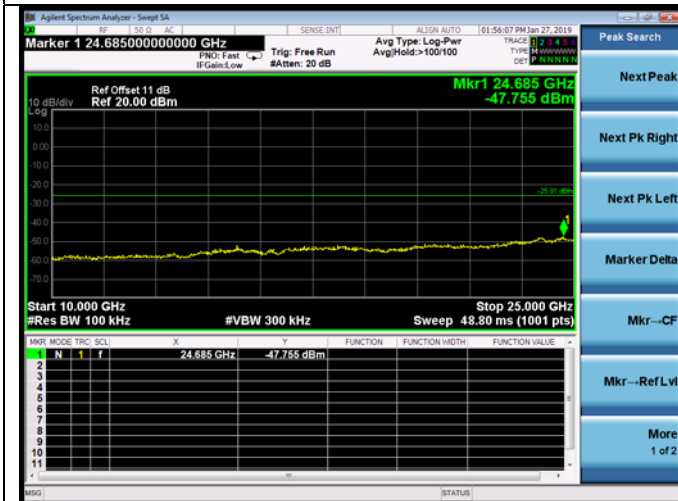
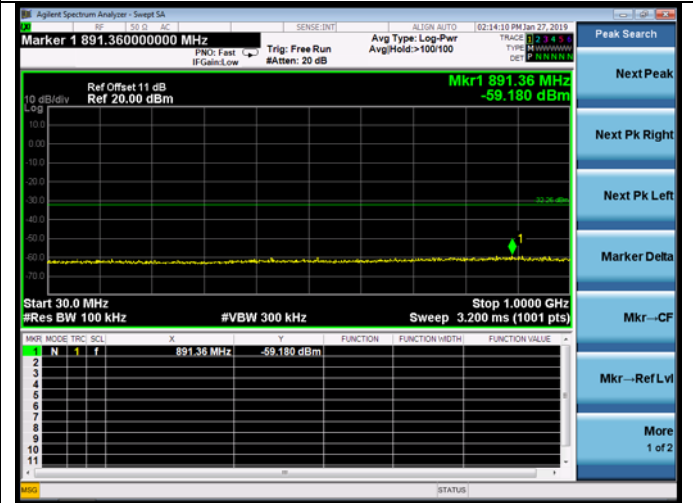
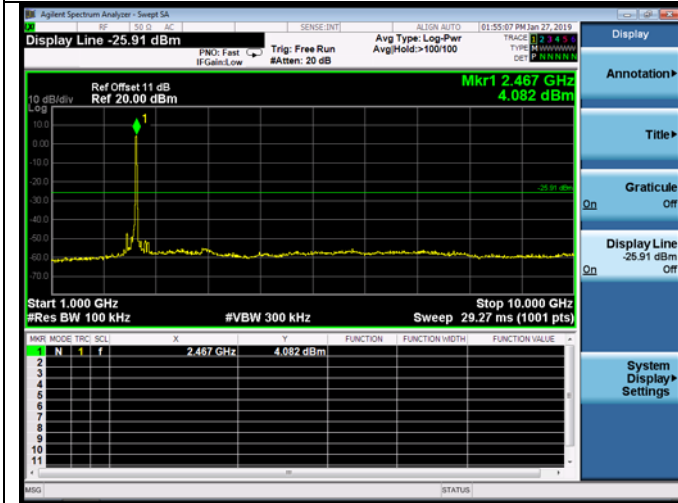
### Test CH6: 2437MHz



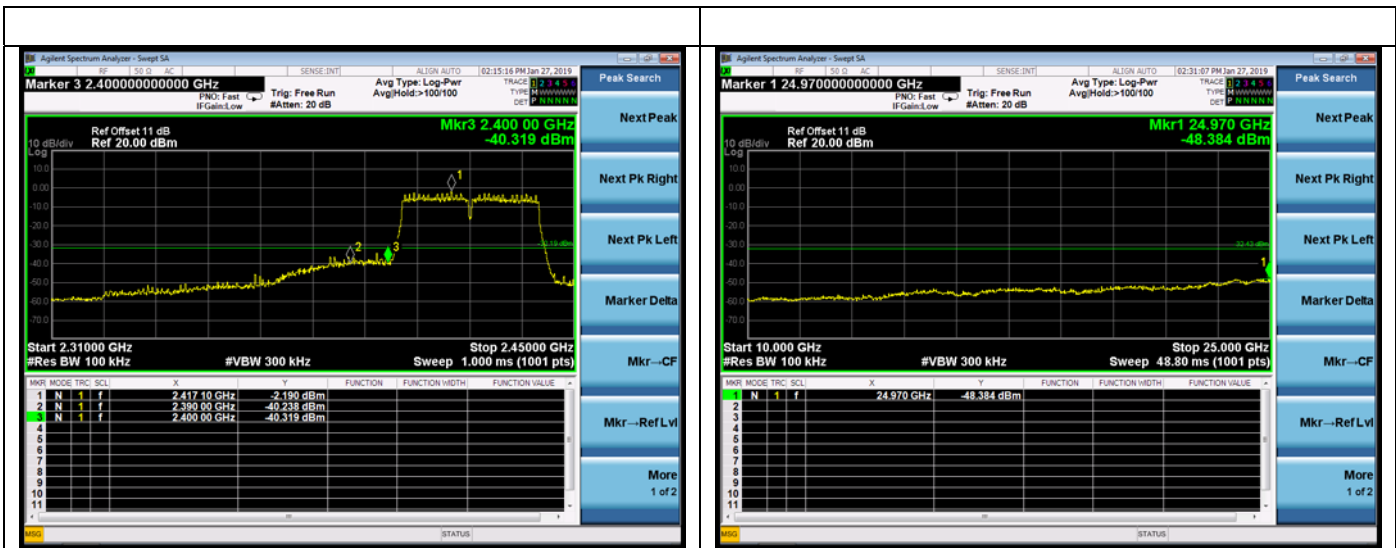
### Test CH11: 2462MHz



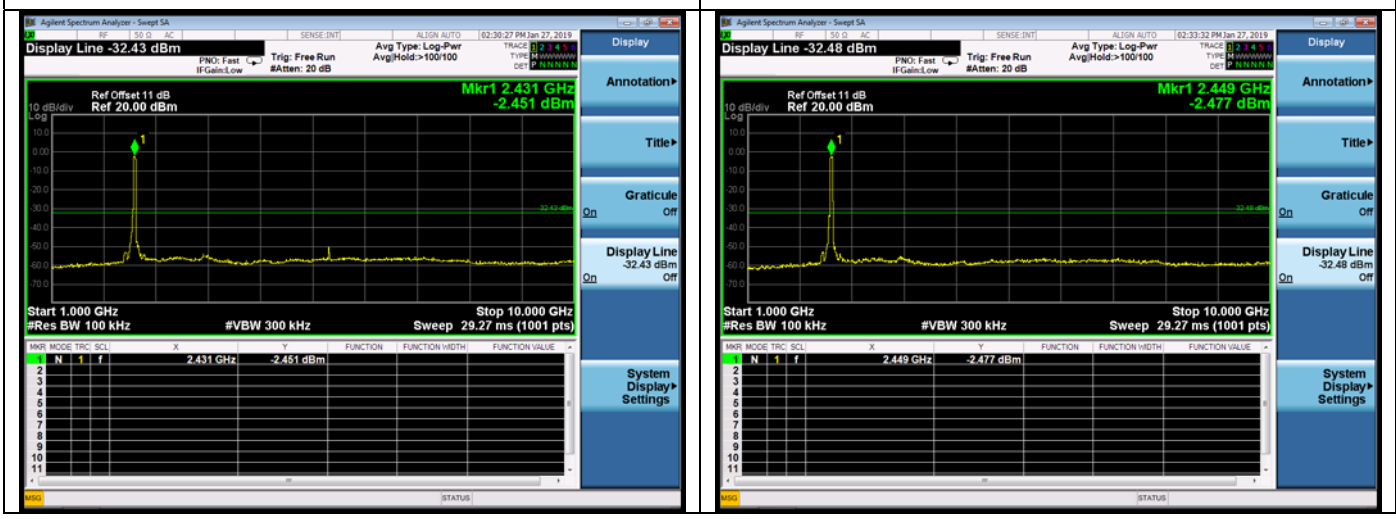
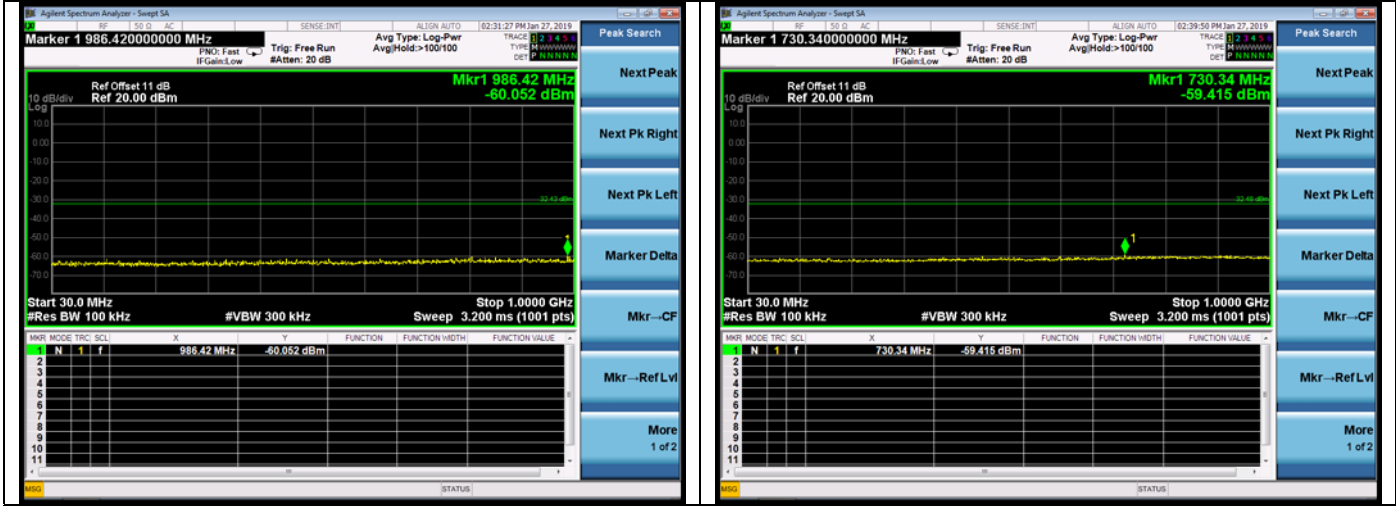
Test Mode: IEEE 802.11n HT40  
Test CH1: 2422MHz

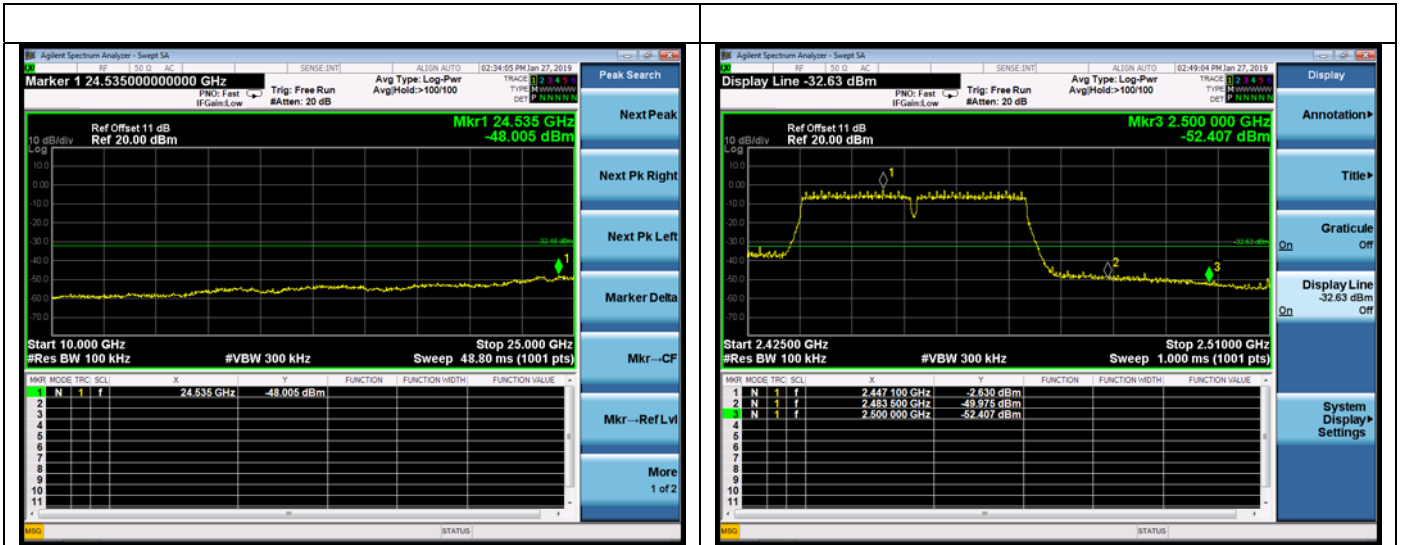






Test CH1: 2437MHz      Test CH1: 2452MHz







## 6. BAND EDGE COMPLIANCE TEST

### 6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Sep.08,18	1 Year
2.	Amplifier	HP	8449B	3008A02495	Apr.23.18	1 Year
3.	Horn Antenna	ETC	MCTD 1209	DRH15F03006	May.30,18	1 Year
4.	RF Cable	Hubersuhner	SUCOFLEX106	505239/6	Apr.23,18	1 Year

### 6.2. Limit

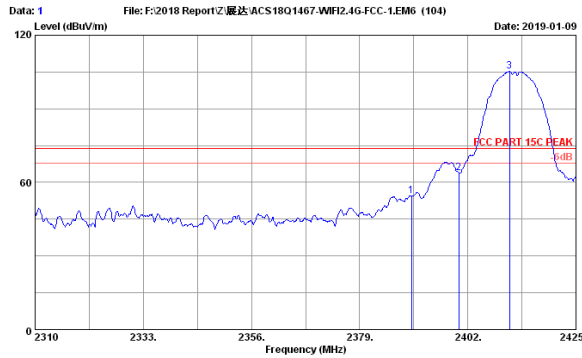
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

### 6.3. Test Procedure

1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:
  - (a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
  - (b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

### 6.4. Test Results

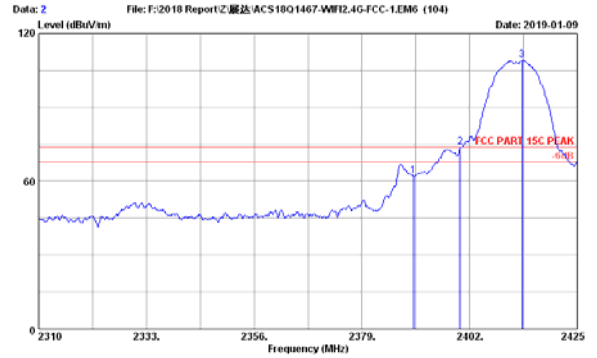
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.06	10.28	51.96	35.70	54.60	74.00	19.40	Peak
2	2400.05	28.06	10.28	61.29	35.70	63.93	74.00	10.07	Peak
3	2410.86	28.08	10.31	102.45	35.70	105.14	74.00	-31.14	Peak

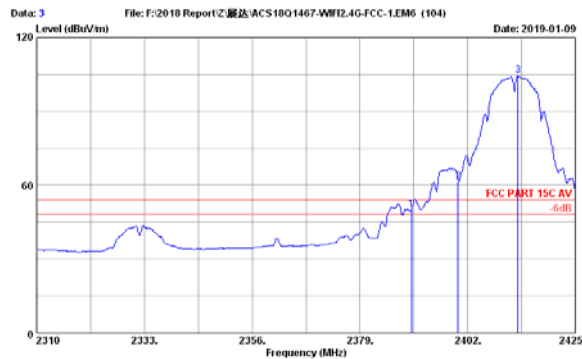
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.06	10.28	59.45	35.70	62.09	74.00	11.91	Peak
2	2400.00	28.06	10.28	71.25	35.70	73.09	74.00	0.11	Peak
3	2413.27	28.08	10.31	106.60	35.70	109.29	74.00	-35.29	Peak

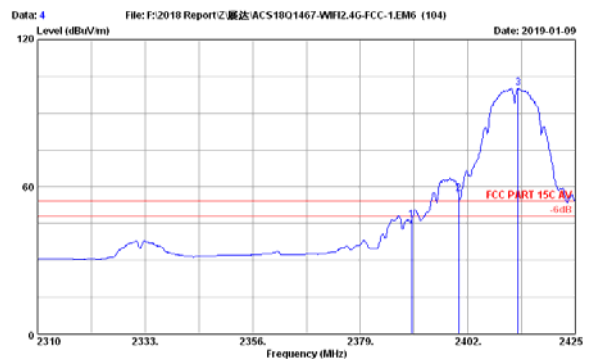
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 3  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	28.06	10.28	47.56	35.70	50.20	54.00	3.80	Average
2	2400.00	28.06	10.28	58.93	35.70	61.57	54.00	-7.57	Average
3	2412.81	28.08	10.31	101.93	35.70	104.62	54.00	-50.62	Average

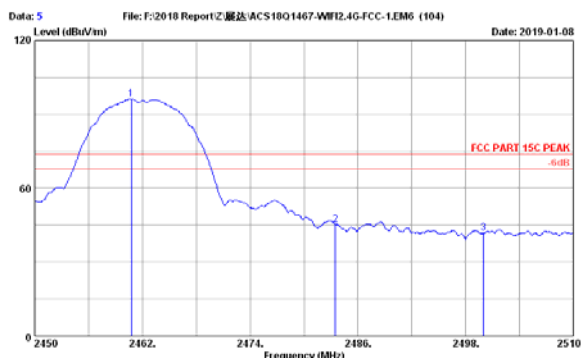
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 4  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.06	10.28	43.77	35.70	46.41	54.00	7.59	Average
2	2400.05	28.06	10.28	54.50	35.70	57.14	54.00	-3.14	Average
3	2412.81	28.08	10.31	97.67	35.70	100.36	54.00	-46.36	Average

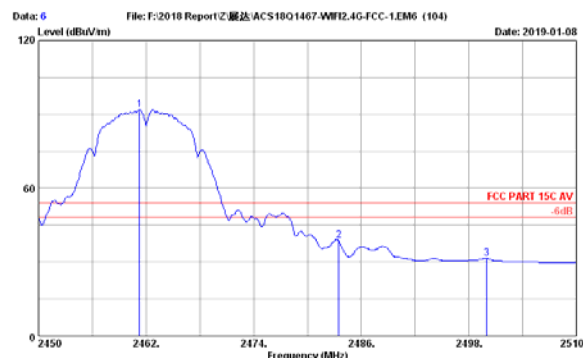
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 5  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.74	20.15	10.42	90.10	32.51	96.24	74.00	-22.24	Peak
2	2463.50	20.10	10.45	39.13	32.40	45.20	74.00	26.72	Peak
3	2500.00	28.20	10.48	35.66	32.46	41.88	74.00	32.12	Peak

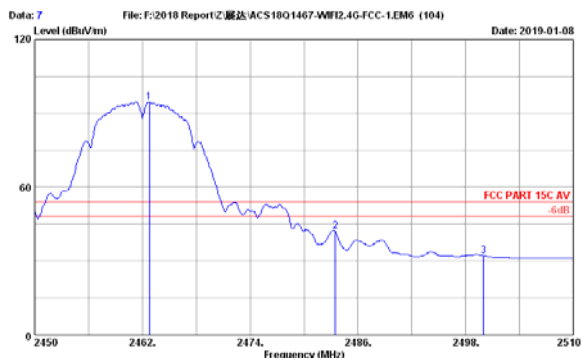
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 6  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.20	20.15	10.42	95.04	32.51	91.90	54.00	-37.90	Average
2	2463.50	20.10	10.45	32.54	32.40	30.69	54.00	15.31	Average
3	2500.00	28.20	10.48	25.18	32.46	31.40	54.00	22.60	Average

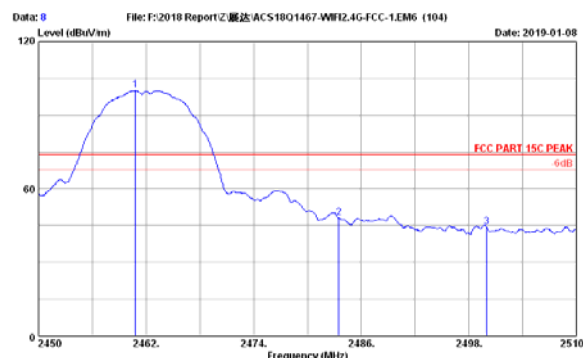
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 7  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.70	20.15	10.42	90.64	32.51	94.70	54.00	-40.70	Average
2	2463.50	20.10	10.45	35.03	32.40	41.90	54.00	12.02	Average
3	2500.00	28.20	10.48	26.03	32.46	32.25	54.00	21.75	Average

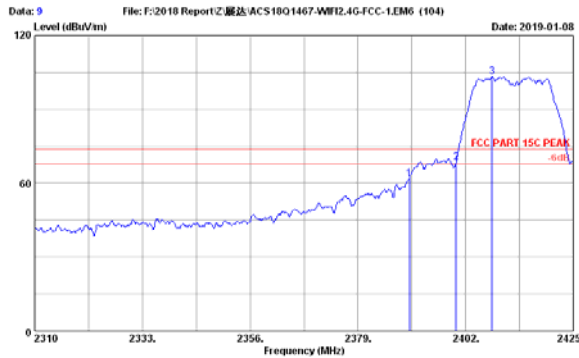
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.80	28.15	10.42	94.05	32.51	100.11	74.00	-26.11	Peak
2	2463.50	20.10	10.45	42.07	32.40	40.22	74.00	25.70	Peak
3	2500.00	28.20	10.48	38.35	32.46	44.57	74.00	29.43	Peak

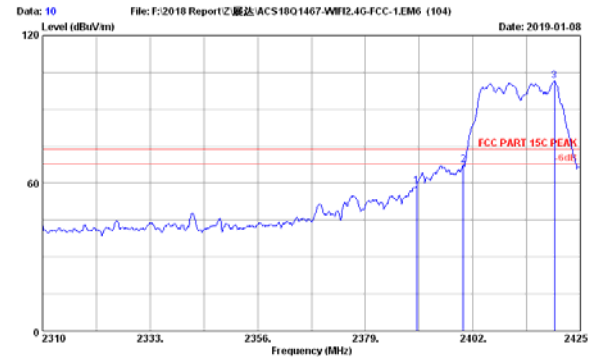
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	20.06	10.20	56.21	32.56	61.99	74.00	12.01	Peak
2	2400.00	20.06	10.20	62.79	32.56	60.57	74.00	5.43	Peak
3	2407.64	28.08	10.31	97.38	32.56	103.21	74.00	-29.21	Peak

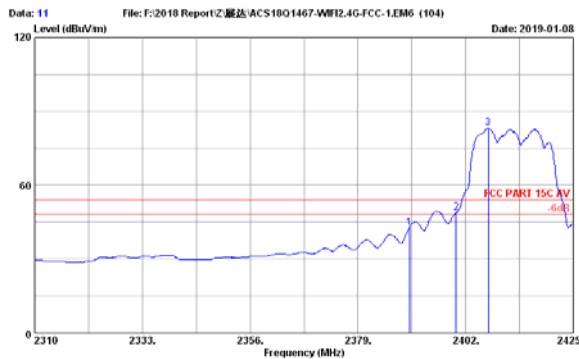
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 10  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	20.06	10.20	52.99	32.56	50.77	74.00	15.23	Peak
2	2400.00	20.06	10.20	61.60	32.56	67.46	74.00	6.54	Peak
3	2419.48	28.08	10.31	95.60	32.53	101.46	74.00	-27.46	Peak

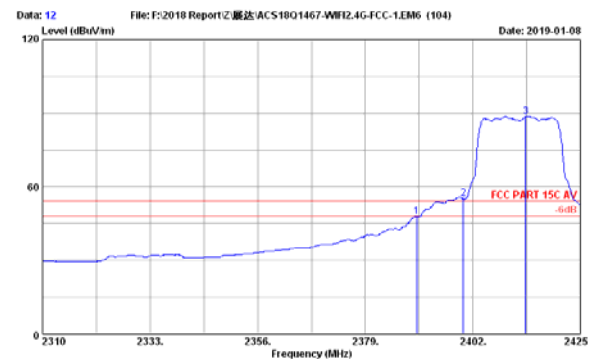
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 11  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	20.06	10.20	37.16	32.56	42.94	54.00	11.06	Average
2	2400.00	20.06	10.20	43.00	32.56	40.66	54.00	5.14	Average
3	2406.83	28.08	10.31	77.40	32.56	83.23	54.00	-29.23	Average

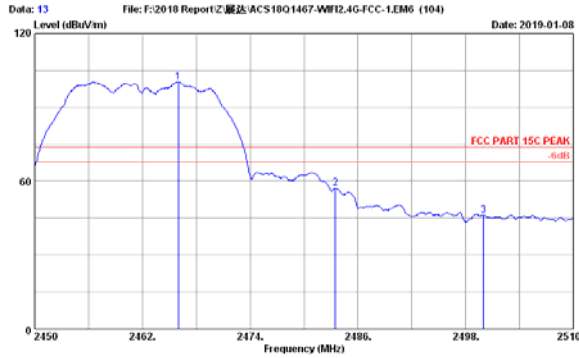
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 12  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2412MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	20.06	10.20	41.91	32.56	47.69	54.00	6.31	Average
2	2400.00	20.06	10.20	49.26	32.56	55.04	54.00	-1.04	Average
3	2413.39	28.08	10.31	82.77	32.53	88.63	54.00	-34.63	Average

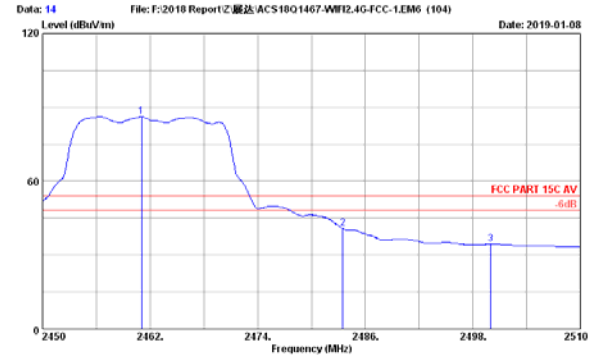
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 13  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2466.02	20.15	10.42	94.19	32.40	100.29	74.00	-26.20	Peak
2	2403.50	20.10	10.45	50.90	32.40	57.13	74.00	16.07	Peak
3	2500.00	28.20	10.48	40.05	32.46	46.27	74.00	27.73	Peak

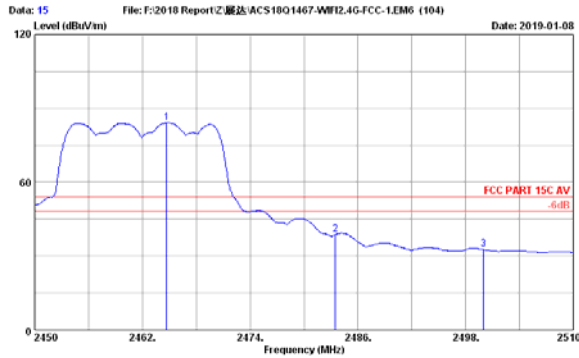
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 14  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.04	20.15	10.42	90.16	32.51	86.22	54.00	-32.22	Average
2	2403.50	20.10	10.45	34.60	32.40	40.03	54.00	13.17	Average
3	2500.00	28.20	10.48	28.08	32.46	34.30	54.00	19.70	Average

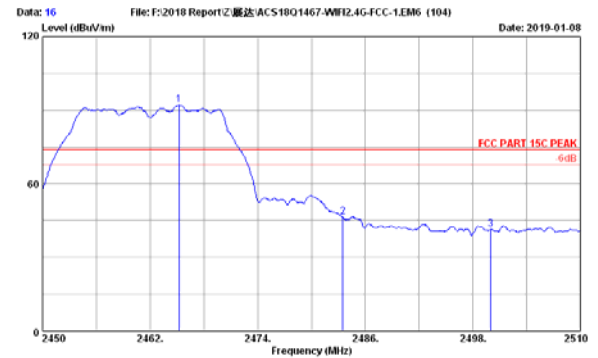
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 15  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2464.70	20.15	10.42	70.00	32.40	84.17	54.00	-30.17	Average
2	2403.50	20.10	10.45	32.50	32.40	30.65	54.00	15.35	Average
3	2500.00	28.20	10.48	26.46	32.46	32.68	54.00	21.32	Average

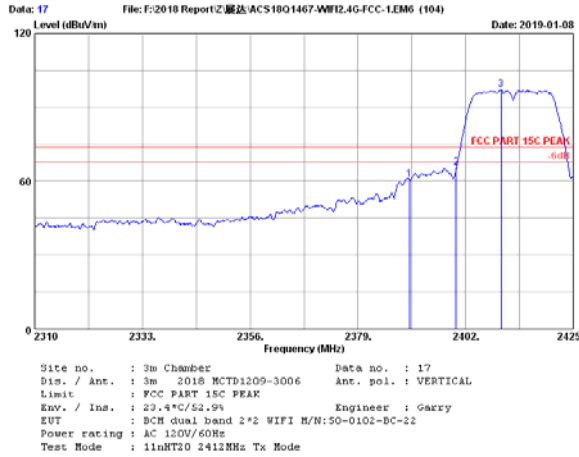
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 16  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11g 2462MHz Tx Mode

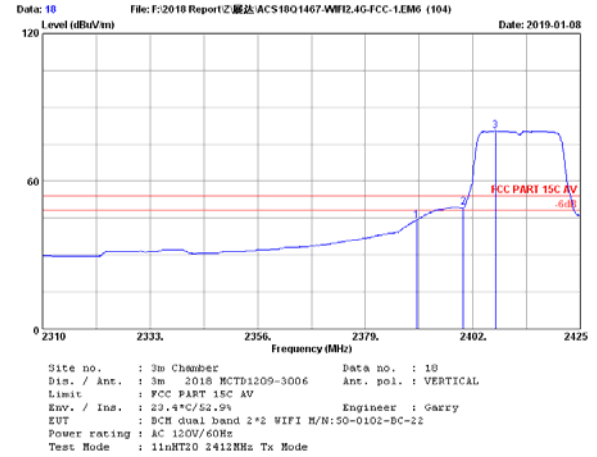
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2465.24	20.15	10.42	86.02	32.48	92.11	74.00	-18.11	Peak
2	2403.50	20.10	10.45	40.20	32.40	46.35	74.00	27.65	Peak
3	2500.00	28.20	10.48	35.07	32.46	41.29	74.00	32.71	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



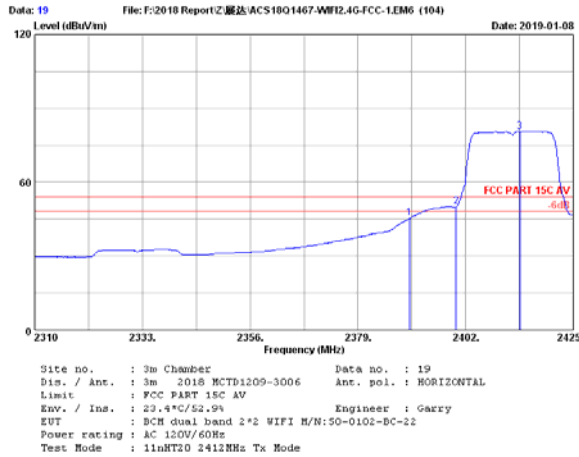
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	20.06	10.20	55.01	32.56	60.79	74.00	13.21	Peak
2	2400.00	20.06	10.20	59.02	32.56	65.60	74.00	0.40	Peak
3	2409.59	28.08	10.31	91.31	32.56	97.14	74.00	-23.14	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



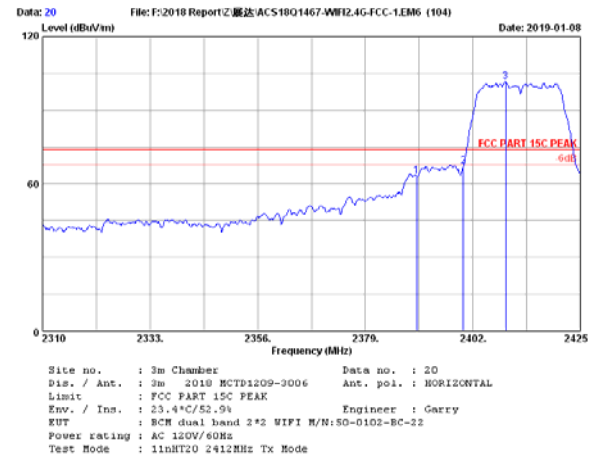
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	20.06	10.20	30.50	32.56	44.20	54.00	9.72	Average
2	2400.00	20.06	10.20	43.56	32.56	49.34	54.00	4.66	Average
3	2406.83	28.08	10.31	74.59	32.56	80.42	54.00	-26.42	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



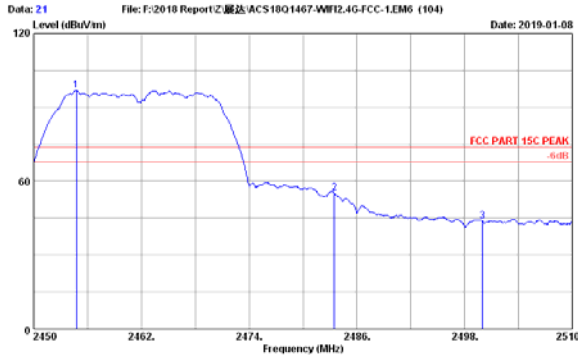
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	20.06	10.20	39.51	32.56	45.29	54.00	8.71	Average
2	2400.00	20.06	10.20	44.20	32.56	50.06	54.00	3.94	Average
3	2413.62	28.08	10.31	74.86	32.53	80.72	54.00	-26.72	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	20.06	10.28	57.52	32.56	63.30	74.00	10.70	Peak
2	2400.00	20.06	10.28	61.56	32.56	67.34	74.00	6.66	Peak
3	2409.02	28.08	10.31	95.77	32.56	101.60	74.00	-27.60	Peak

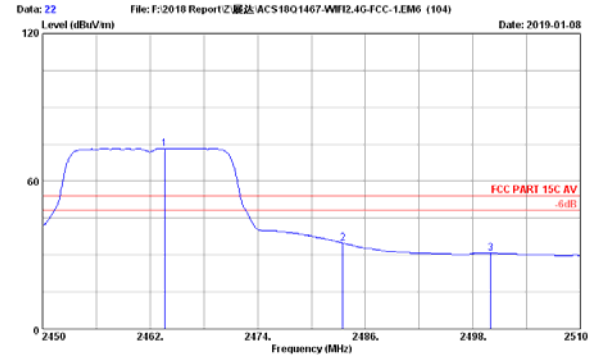
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 21  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2454.74	20.15	10.42	90.70	32.51	96.04	74.00	-22.04	Peak
2	2403.50	20.10	10.45	49.15	32.40	55.30	74.00	16.70	Peak
3	2500.00	28.20	10.48	37.65	32.46	43.87	74.00	30.13	Peak

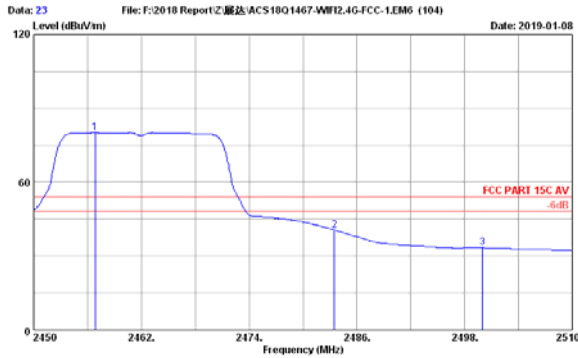
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 22  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.62	20.15	10.42	67.26	32.40	73.35	54.00	-19.35	Average
2	2403.50	20.10	10.45	26.73	32.40	34.00	54.00	19.12	Average
3	2500.00	28.20	10.48	24.69	32.46	30.91	54.00	23.09	Average

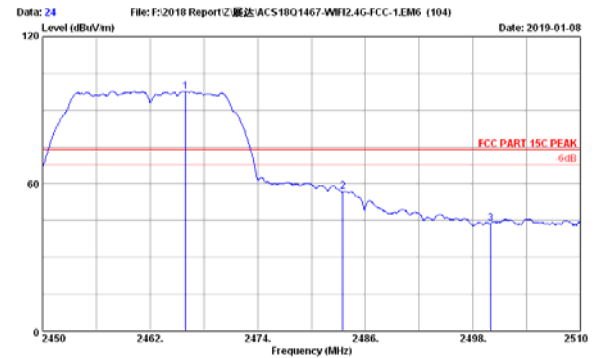
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 23  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2456.04	20.15	10.42	74.07	32.51	80.13	54.00	-26.13	Average
2	2403.50	20.10	10.45	34.43	32.40	40.50	54.00	13.42	Average
3	2500.00	28.20	10.48	27.09	32.46	33.31	54.00	20.69	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

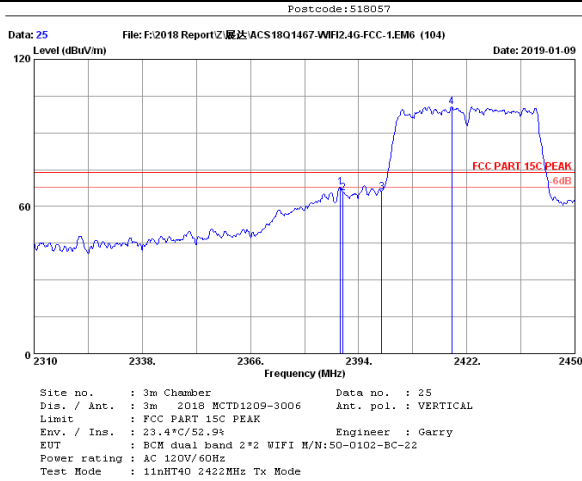


Site no. : 3m Chamber Data no. : 24  
 Dis. / Ant. : 3m 2018 NCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : BCM dual band 2\*2 WIFI M/N:50-0102-BC-22  
 Power rating : AC 120V/60Hz  
 Test Mode : 11nHT20 2462MHz Tx Mode

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2465.96	28.15	10.42	91.59	32.48	97.68	74.00	-23.68	Peak
2	2403.50	20.10	10.45	50.61	32.40	56.76	74.00	17.24	Peak
3	2500.00	28.20	10.48	37.62	32.46	43.84	74.00	30.16	Peak

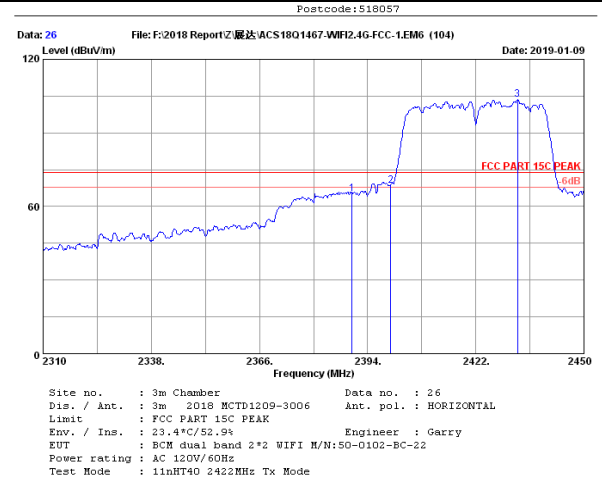
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.





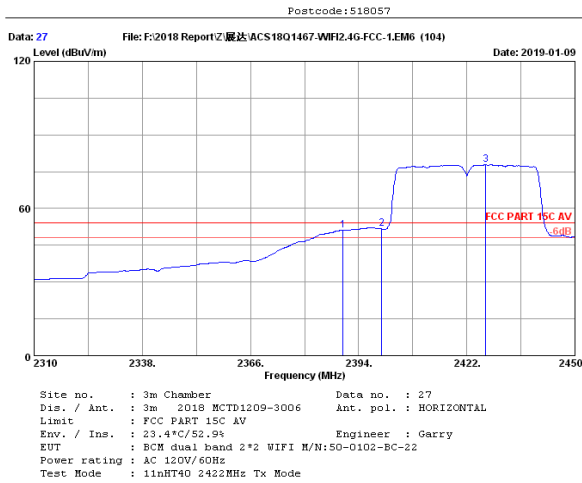
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.24	28.06	10.28	65.14	35.72	67.76	74.00	6.24	Peak
2	2389.94	28.06	10.28	63.04	35.70	65.68	74.00	8.32	Peak
3	2400.00	28.06	10.28	63.19	35.70	65.63	74.00	8.17	Peak
4	2418.08	28.08	10.31	97.96	35.67	100.68	74.00	-26.68	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



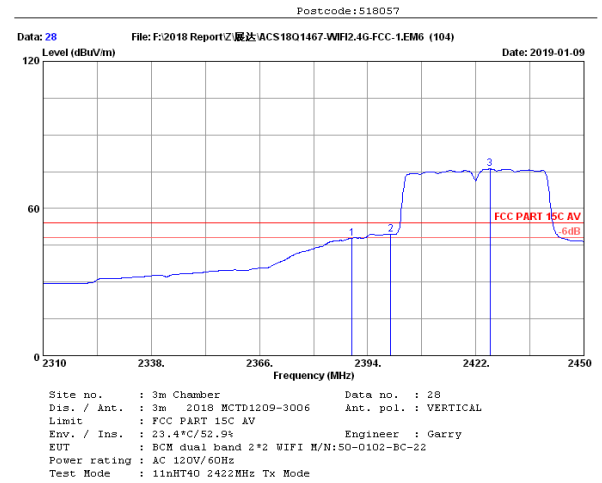
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.06	10.28	62.67	35.70	65.31	74.00	8.69	Peak
2	2400.02	28.06	10.28	65.78	35.70	68.42	74.00	5.58	Peak
3	2432.78	28.10	10.35	100.86	35.67	139.64	74.00	-29.64	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



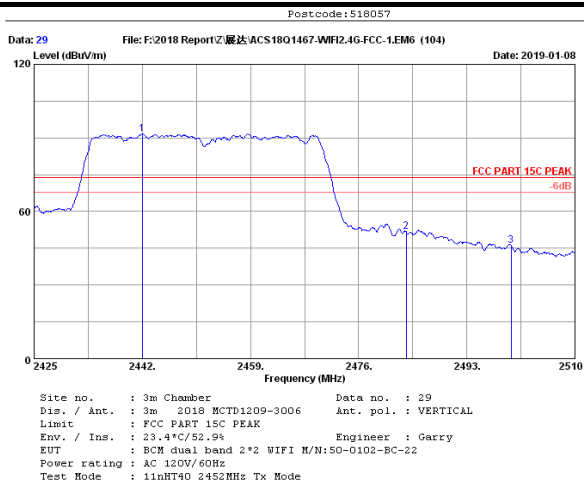
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.94	28.06	10.28	48.41	35.70	51.05	54.00	2.95	Average
2	2400.02	28.06	10.28	49.03	35.70	51.67	54.00	2.33	Average
3	2426.90	28.10	10.35	75.06	35.67	77.84	54.00	-23.84	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



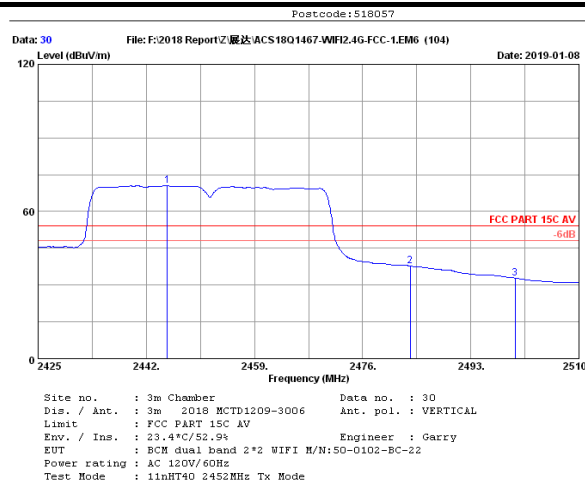
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.94	28.06	10.28	45.22	35.70	47.86	54.00	6.14	Average
2	2400.00	28.06	10.28	46.98	35.70	49.62	54.00	4.38	Average
3	2425.64	28.10	10.35	73.39	35.67	76.17	54.00	-22.17	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



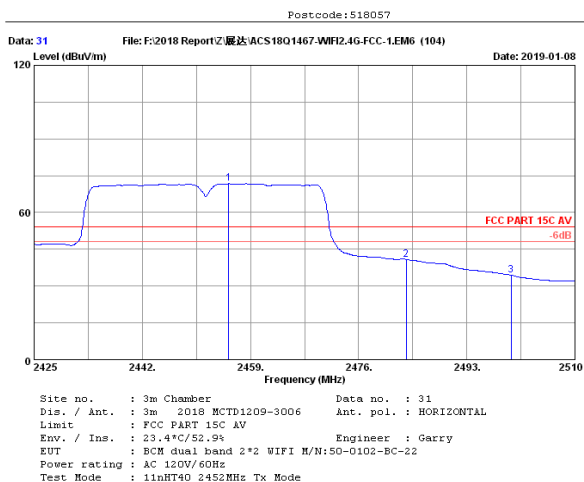
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2442.00	28.13	10.38	85.54	32.51	91.54	74.00	-17.54	Peak
2	2483.48	28.18	10.45	45.88	32.48	51.73	74.00	22.27	Peak
3	2500.00	28.20	10.48	39.88	32.46	46.10	74.00	27.90	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



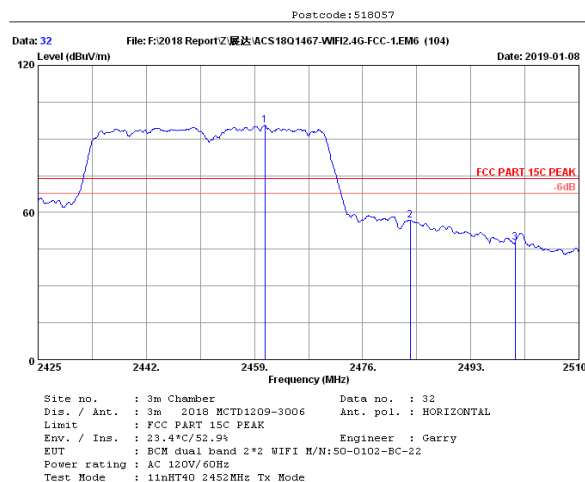
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2445.32	28.13	10.38	64.47	32.51	70.47	54.00	-16.47	Average
2	2483.48	28.18	10.45	31.63	32.48	37.78	54.00	16.22	Average
3	2500.00	28.20	10.48	26.65	32.46	32.87	54.00	21.13	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2455.60	28.15	10.42	68.65	32.51	71.71	54.00	-17.71	Average
2	2483.48	28.18	10.45	34.77	32.48	40.92	54.00	13.08	Average
3	2500.00	28.20	10.48	28.28	32.46	34.50	54.00	19.50	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.62	28.15	10.42	89.46	32.51	95.52	74.00	-21.52	Peak
2	2483.48	28.18	10.45	50.73	32.48	56.88	74.00	17.12	Peak
3	2500.00	28.20	10.48	41.55	32.46	47.77	74.00	26.23	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.

## 7. 6dB Bandwidth Test

### 7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Sep.08,18	1 Year
2.	Attenuator	Agilent	8491B	MY39269170	Oct.14,18	1 Year
3.	RF Cable	Hubersuhner	SUCOFLEX106	505239/6	Apr.23,18	1 Year

### 7.2. Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

### 7.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

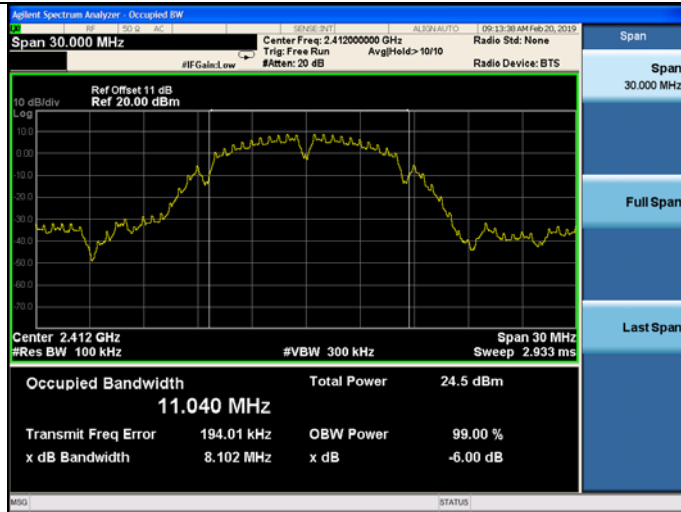
### 7.4. Test Results

EUT: BCM dual band 2*2 WiFi		
M/N: 50-0102-BC-22		
Test date: 2019-02-20	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Garry	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)		Limit (kHz)
		ANT0	ANT1	
11b	CH1	8.102	8.095	≥ 500
	CH6	8.108	8.097	≥ 500
	CH11	8.113	8.090	≥ 500
11g	CH1	16.39	16.37	≥ 500
	CH6	16.39	16.38	≥ 500
	CH11	16.39	16.38	≥ 500
11n HT20	CH1	17.64	17.61	≥ 500
	CH6	17.64	17.60	≥ 500
	CH11	17.63	17.57	≥ 500
11n HT40	CH3	36.38	36.37	≥ 500
	CH6	36.39	36.39	≥ 500
	CH9	36.38	36.39	≥ 500
Conclusion : PASS				

### ANT0:

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz

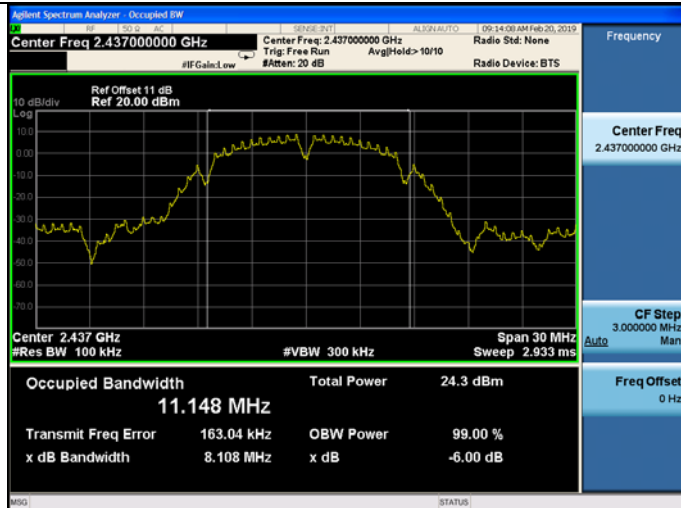


### ANT1:

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz



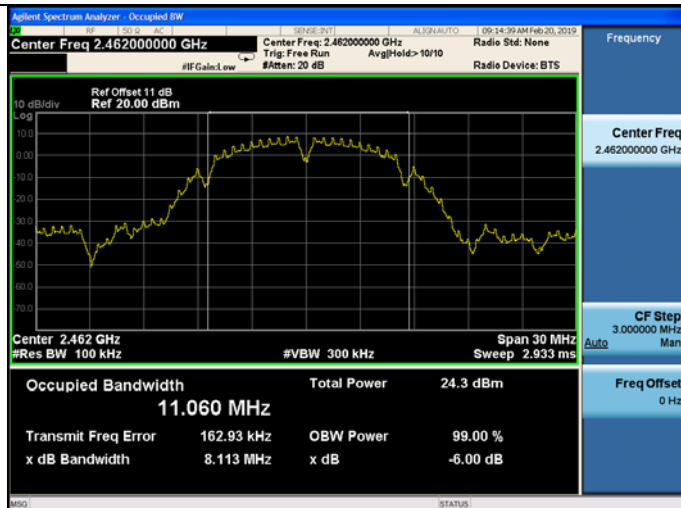
### Test CH6: 2437MHz



### Test CH6: 2437MHz



### Test CH11: 2462MHz



### Test CH11: 2462MHz



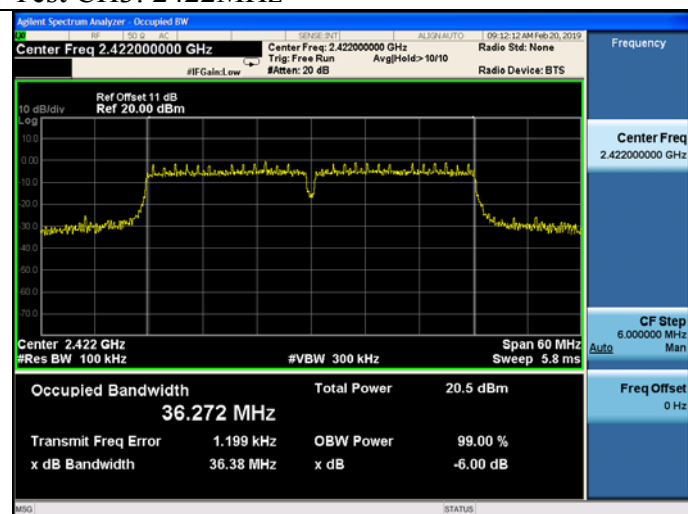
<p><b>ANT0:</b></p>	<p><b>ANT1:</b></p>
<p>Test Mode: IEEE 802.11g Test CH1: 2412MHz</p>	<p>Test Mode: IEEE 802.11g Test CH1: 2412MHz</p>
<p>Center Freq 2.412000000 GHz</p> <p>Occupied Bandwidth: 16.564 MHz</p> <p>Total Power: 23.5 dBm</p> <p>Transmit Freq Error: 2.609 kHz</p> <p>x dB Bandwidth: 16.39 MHz</p>	<p>Center Freq 2.412000000 GHz</p> <p>Occupied Bandwidth: 16.558 MHz</p> <p>Total Power: 22.7 dBm</p> <p>Transmit Freq Error: -13.253 kHz</p> <p>x dB Bandwidth: 16.37 MHz</p>
<p>Test CH6: 2437MHz</p>	<p>Test CH6: 2437MHz</p>
<p>Center Freq 2.437000000 GHz</p> <p>Occupied Bandwidth: 16.558 MHz</p> <p>Total Power: 23.3 dBm</p> <p>Transmit Freq Error: -6.301 kHz</p> <p>x dB Bandwidth: 16.39 MHz</p>	<p>Center Freq 2.437000000 GHz</p> <p>Occupied Bandwidth: 16.564 MHz</p> <p>Total Power: 22.8 dBm</p> <p>Transmit Freq Error: -22.295 kHz</p> <p>x dB Bandwidth: 16.38 MHz</p>
<p>Test CH11: 2462MHz</p>	<p>Test CH11: 2462MHz</p>
<p>Center Freq 2.462000000 GHz</p> <p>Occupied Bandwidth: 16.560 MHz</p> <p>Total Power: 23.5 dBm</p> <p>Transmit Freq Error: -9.221 kHz</p> <p>x dB Bandwidth: 16.39 MHz</p>	<p>Center Freq 2.462000000 GHz</p> <p>Occupied Bandwidth: 16.560 MHz</p> <p>Total Power: 22.8 dBm</p> <p>Transmit Freq Error: -28.271 kHz</p> <p>x dB Bandwidth: 16.38 MHz</p>



<p><b>ANT0:</b></p>	<p><b>ANT1:</b></p>
<p>Test Mode: IEEE 802.11n HT20 Test CH1: 2412MHz</p>	<p>Test Mode: IEEE 802.11n HT20 Test CH1: 2412MHz</p>
<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center Freq 2.412000000 GHz</p> <p>Span 30 MHz</p> <p>Occupied Bandwidth 17.763 MHz</p> <p>Total Power 23.8 dBm</p> <p>Transmit Freq Error -10.561 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 17.64 MHz</p> <p>x dB -6.00 dB</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.412000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center Freq 2.412000000 GHz</p> <p>Span 30 MHz</p> <p>Occupied Bandwidth 17.736 MHz</p> <p>Total Power 23.0 dBm</p> <p>Transmit Freq Error -8.600 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 17.61 MHz</p> <p>x dB -6.00 dB</p>
<p><b>Test CH6: 2437MHz</b></p>	<p><b>Test CH6: 2437MHz</b></p>
<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center Freq 2.437000000 GHz</p> <p>Span 30 MHz</p> <p>Occupied Bandwidth 17.752 MHz</p> <p>Total Power 23.8 dBm</p> <p>Transmit Freq Error -24.961 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 17.64 MHz</p> <p>x dB -6.00 dB</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.437000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center Freq 2.437000000 GHz</p> <p>Span 30 MHz</p> <p>Occupied Bandwidth 17.741 MHz</p> <p>Total Power 23.0 dBm</p> <p>Transmit Freq Error -16.881 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 17.60 MHz</p> <p>x dB -6.00 dB</p>
<p><b>Test CH11: 2462MHz</b></p>	<p><b>Test CH11: 2462MHz</b></p>
<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center Freq 2.462000000 GHz</p> <p>Span 30 MHz</p> <p>Occupied Bandwidth 17.751 MHz</p> <p>Total Power 23.8 dBm</p> <p>Transmit Freq Error -18.442 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 17.63 MHz</p> <p>x dB -6.00 dB</p>	<p>Agilent Spectrum Analyzer - Occupied BW</p> <p>Center Freq 2.462000000 GHz</p> <p>Ref Offset 11 dB Ref 20.00 dBm</p> <p>Center Freq 2.462000000 GHz</p> <p>Span 30 MHz</p> <p>Occupied Bandwidth 17.706 MHz</p> <p>Total Power 22.4 dBm</p> <p>Transmit Freq Error -23.656 kHz</p> <p>OBW Power 99.00 %</p> <p>x dB Bandwidth 17.57 MHz</p> <p>x dB -6.00 dB</p>

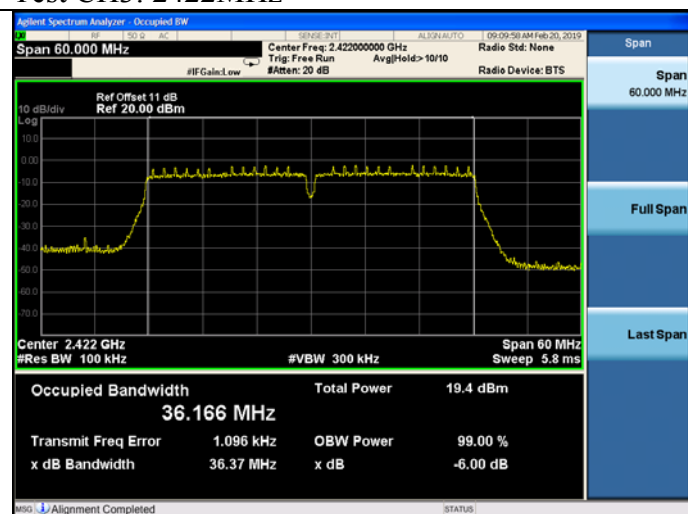
### ANT0:

Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz

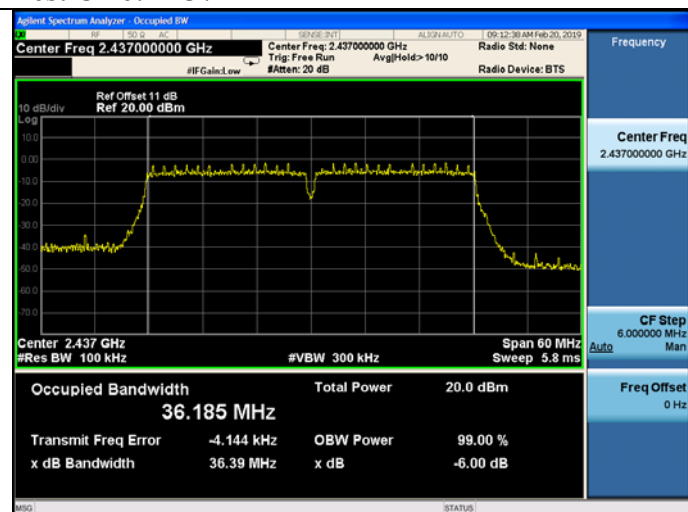


### ANT1:

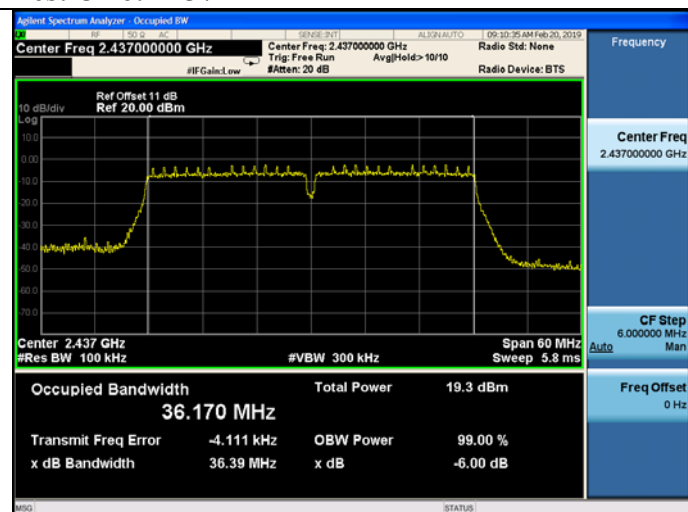
Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz



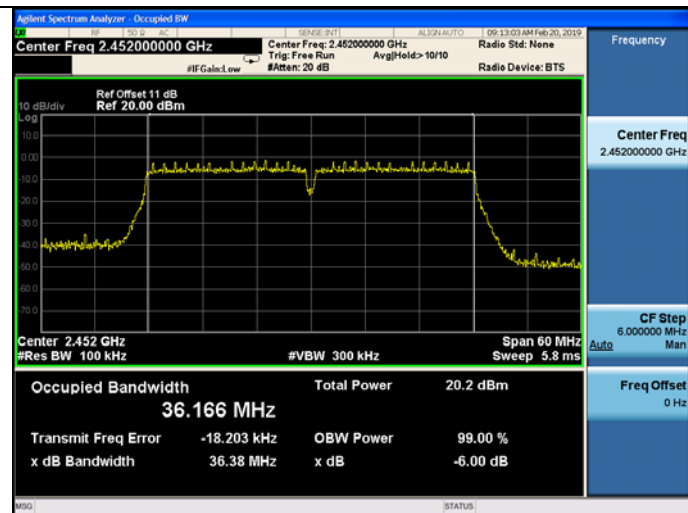
### Test CH6: 2437MHz



### Test CH6: 2437MHz



### Test CH9: 2452MHz



### Test CH9: 2452MHz

