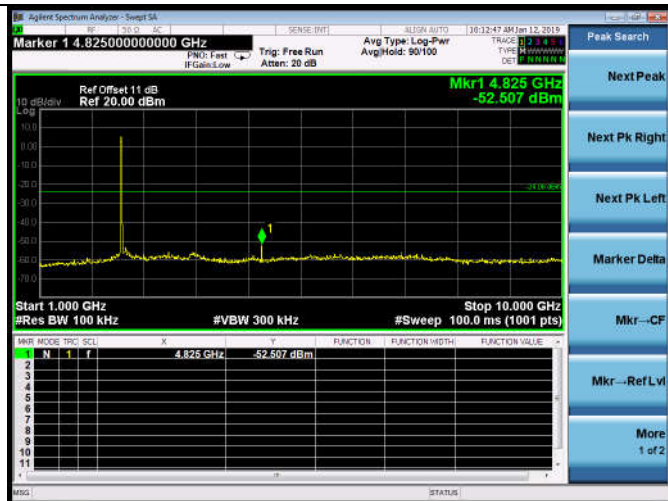
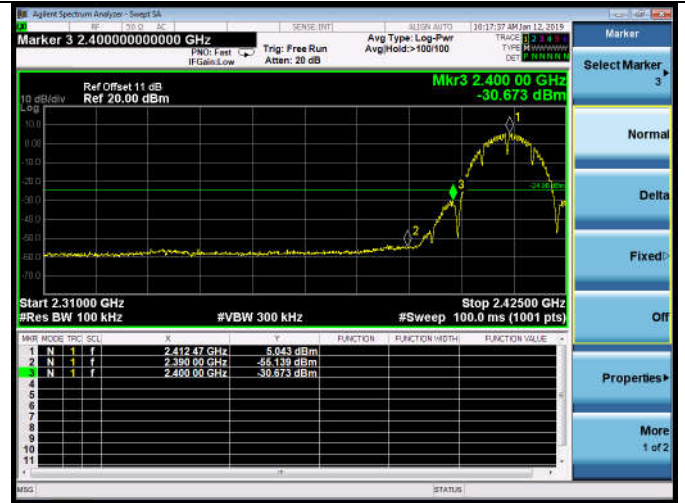
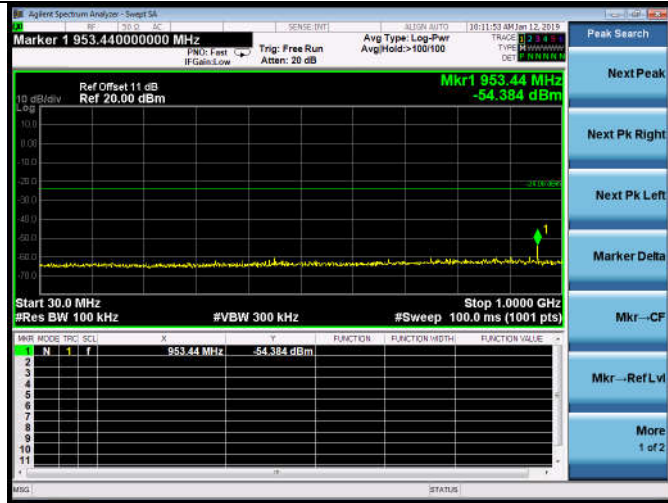
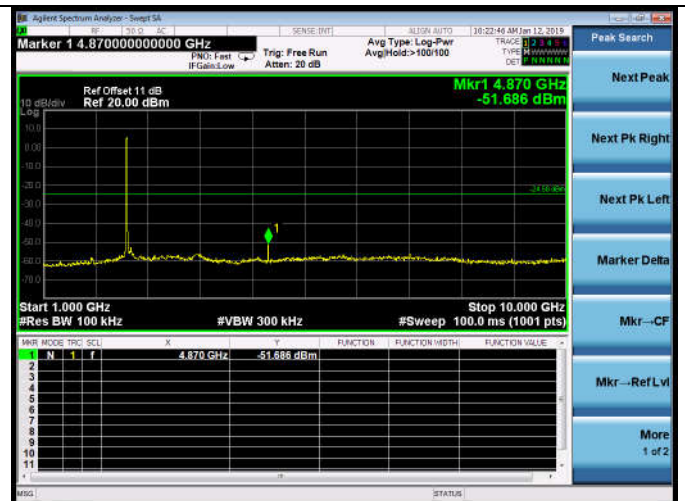
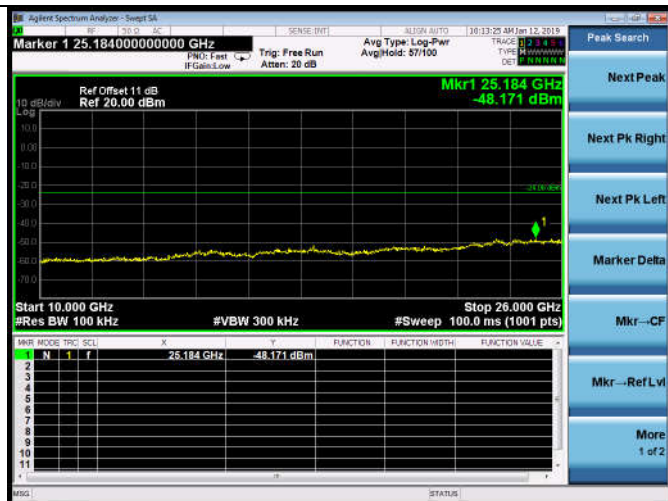
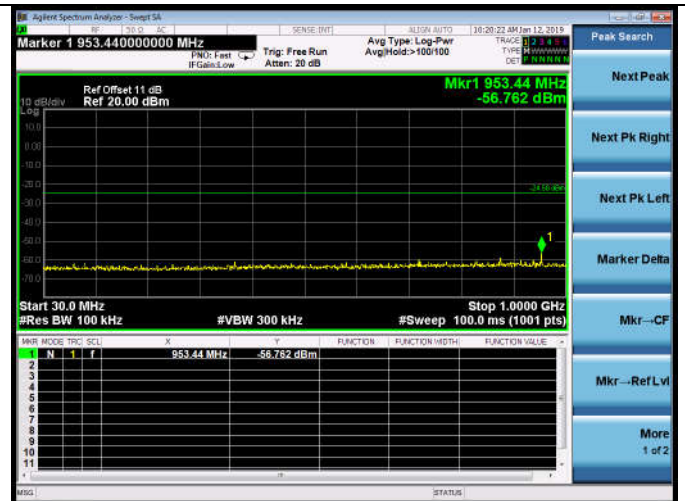


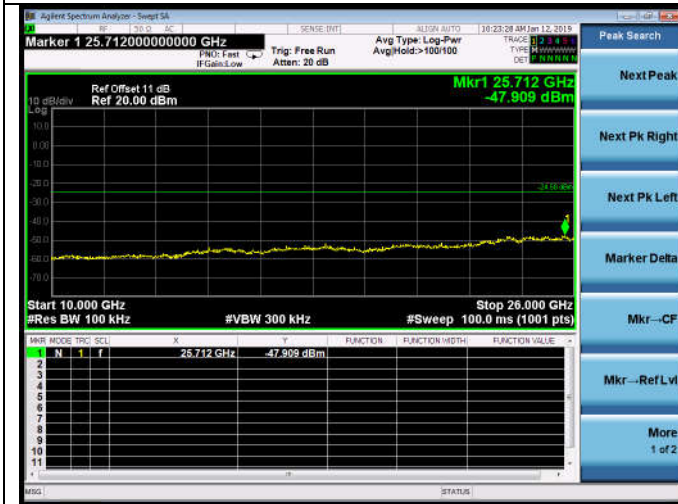
**ANT1:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz

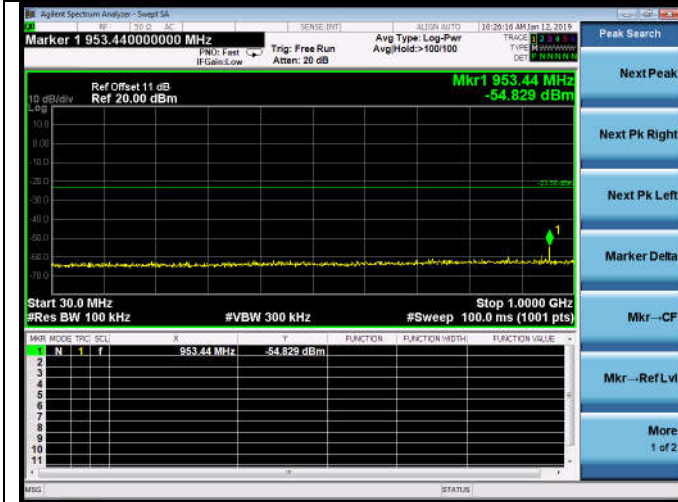


**Test CH6: 2437MHz**

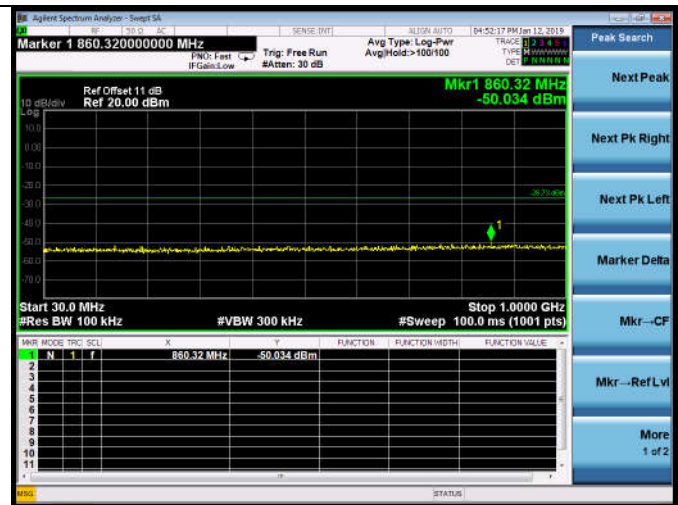
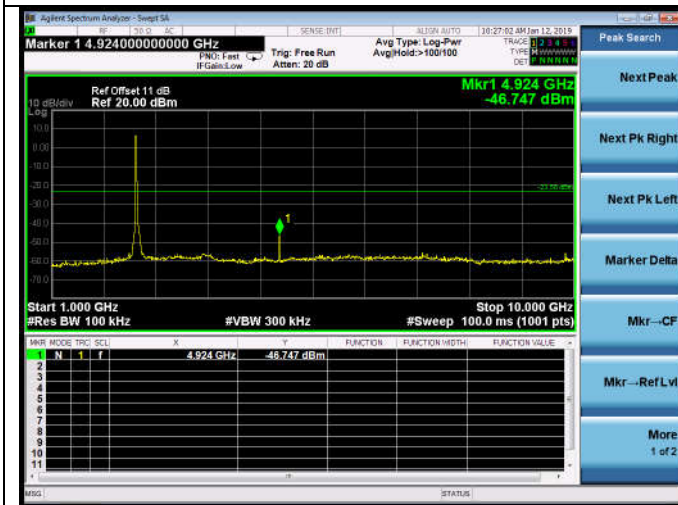




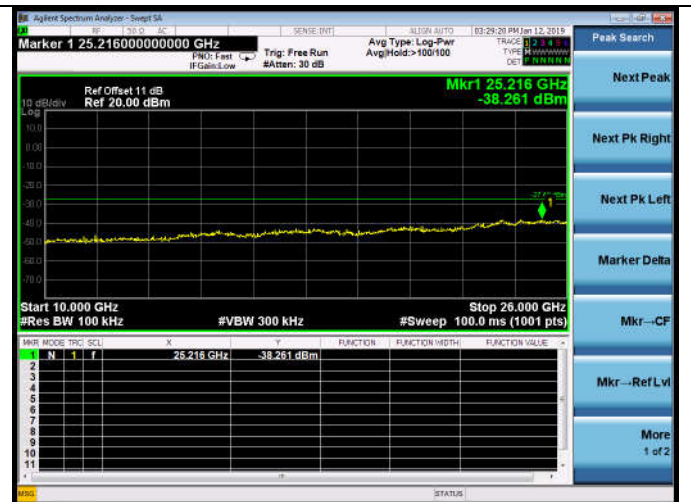
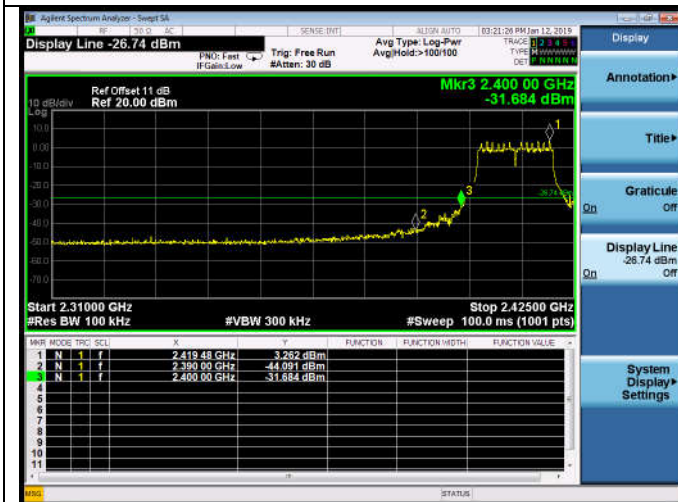
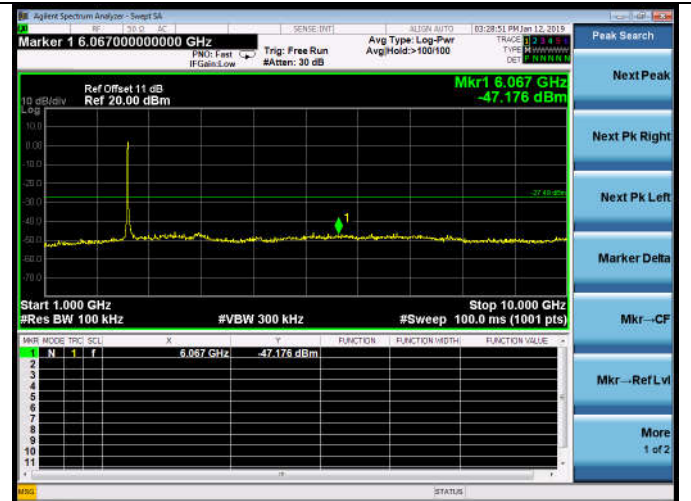
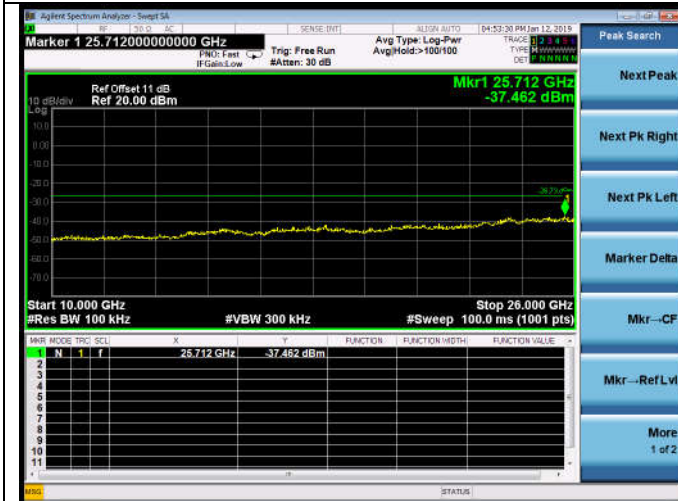
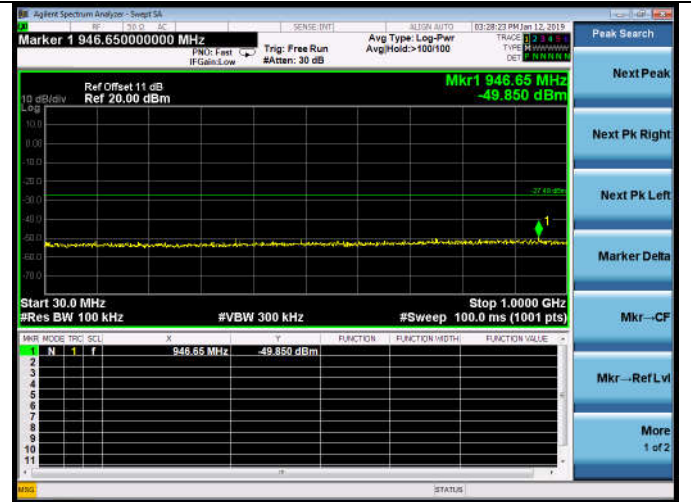
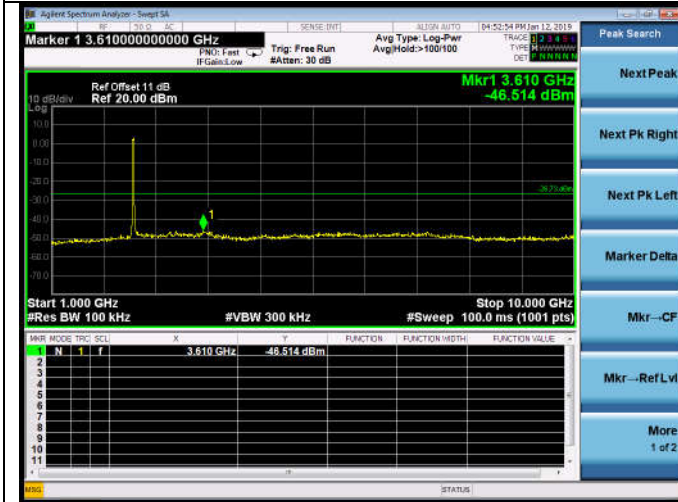
## Test CH11: 2462MHz



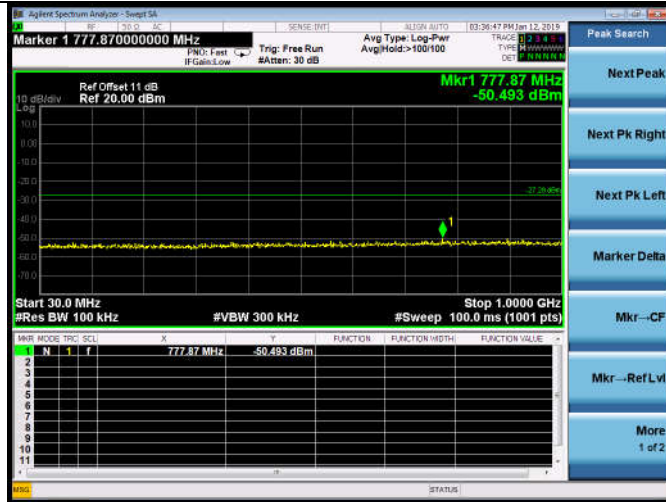
## Test Mode: IEEE 802.11g Test CH1: 2412MHz



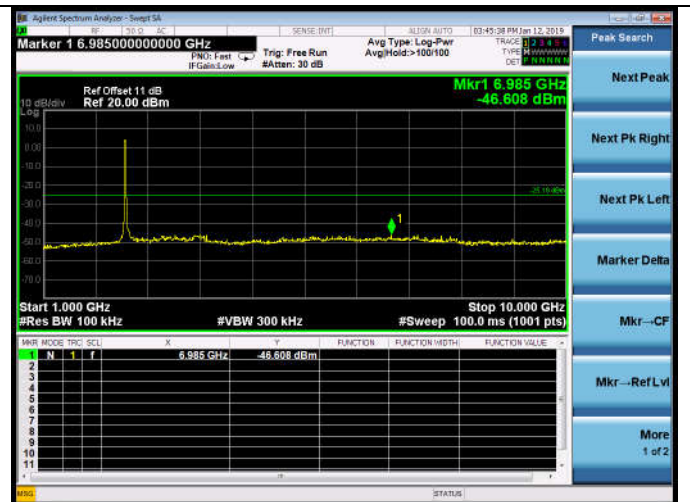
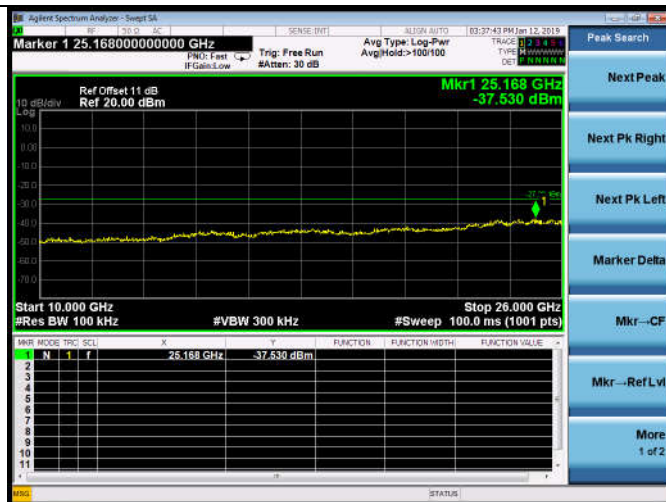
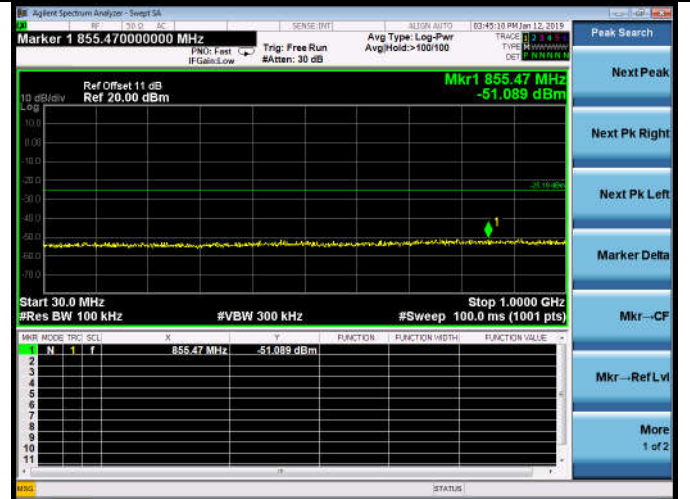
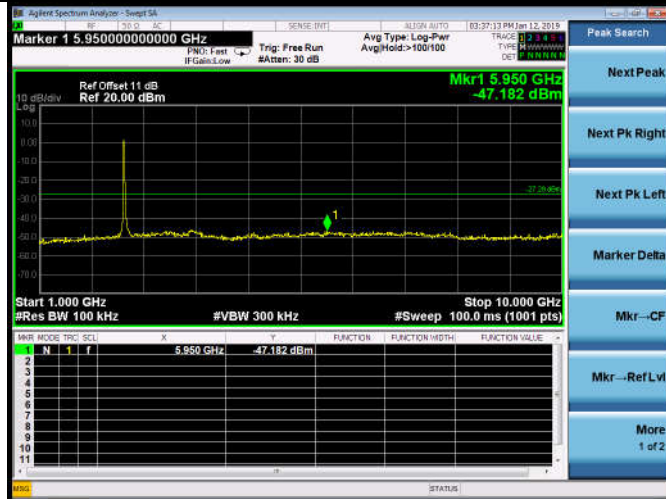
### Test CH6: 2437MHz

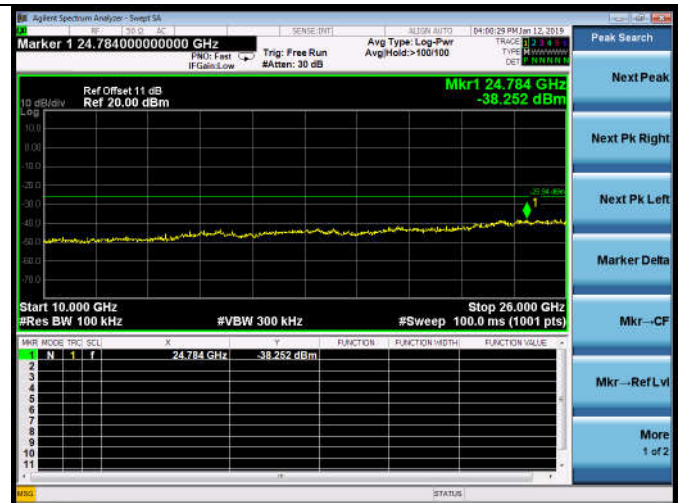
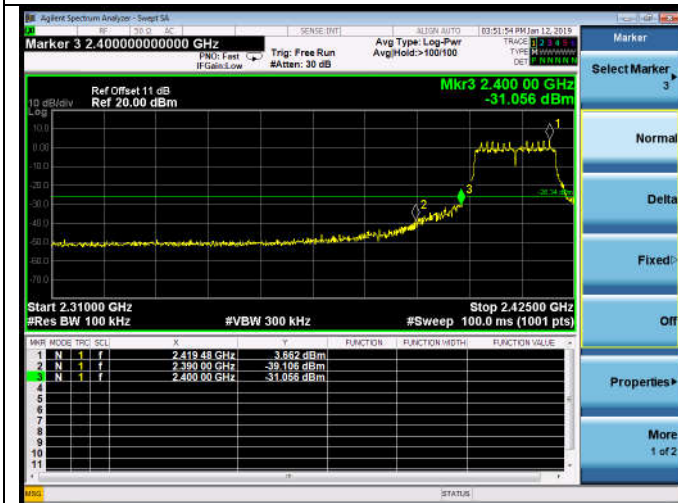
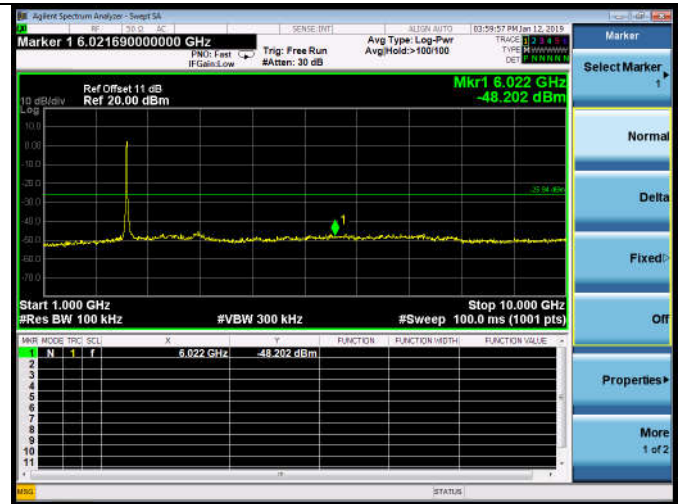
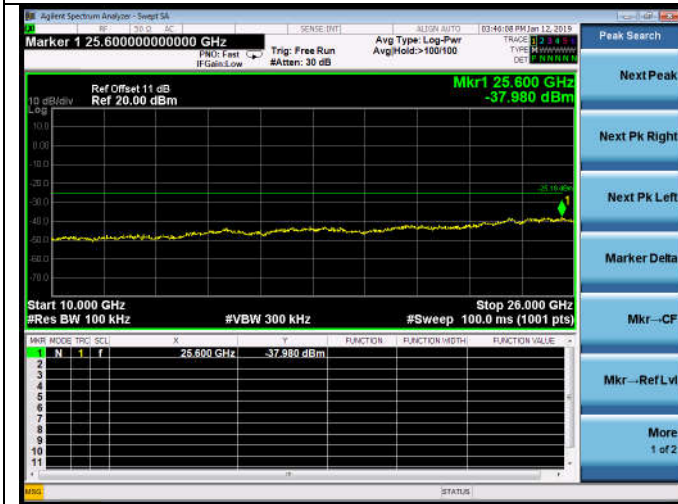


Test CH11: 2462MHz

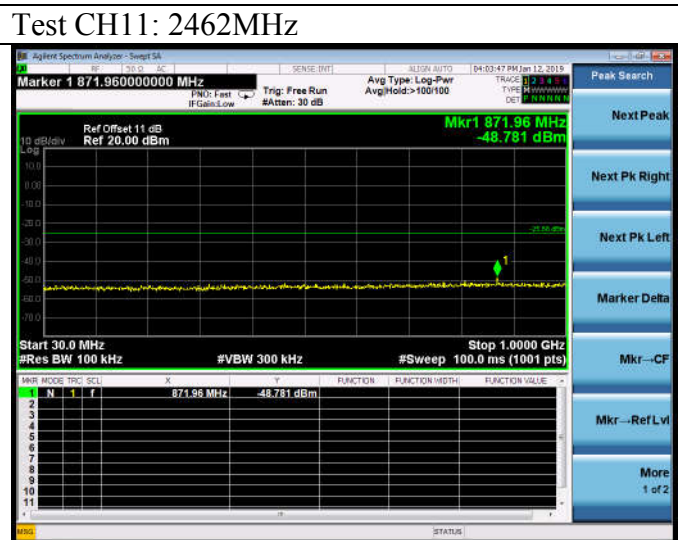
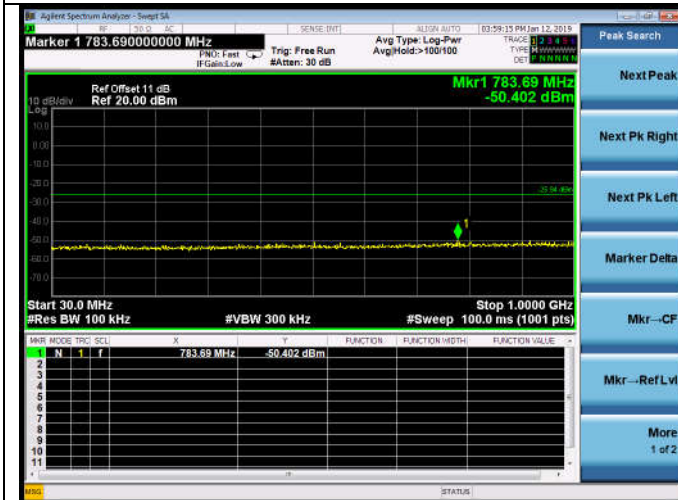


Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz

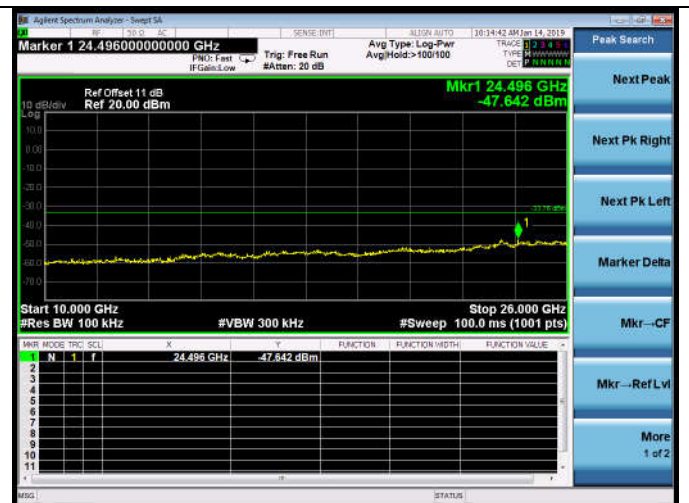
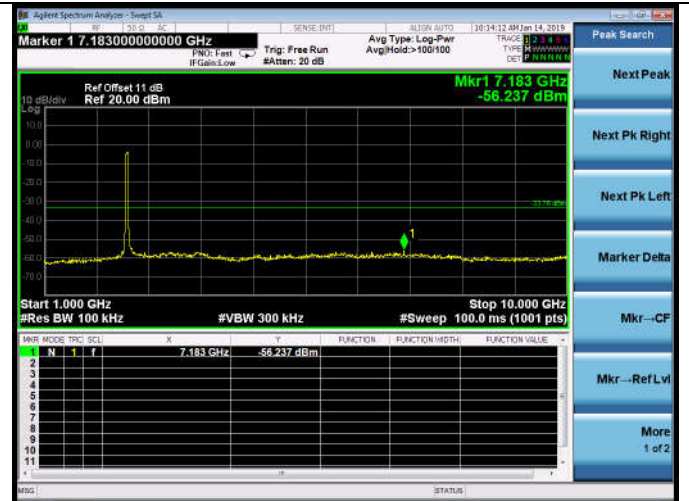
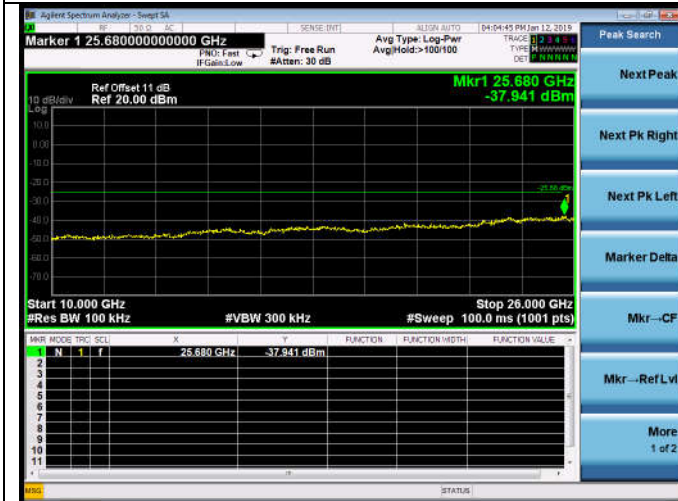
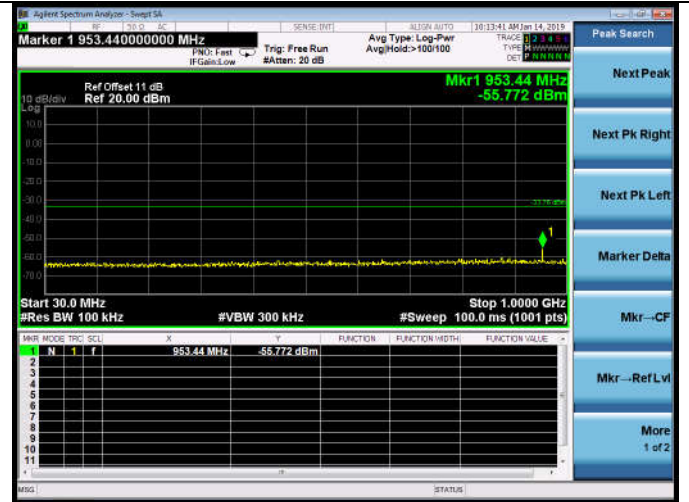
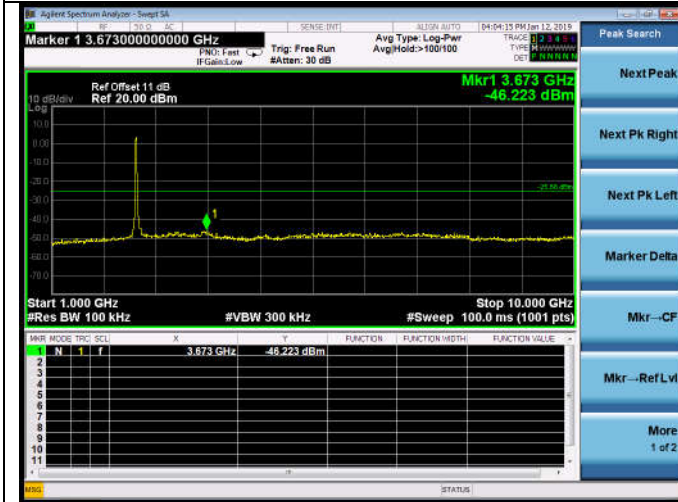


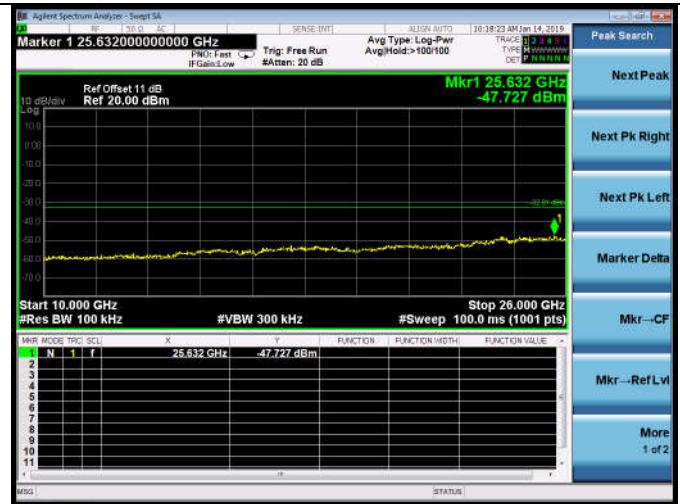


Test CH6: 2437MHz

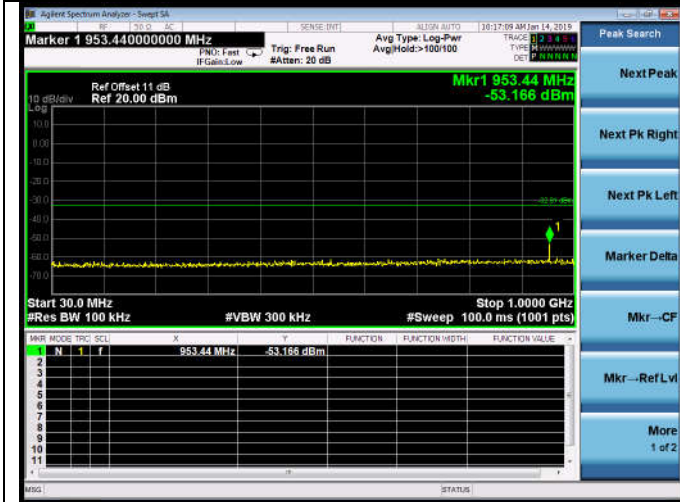


Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz

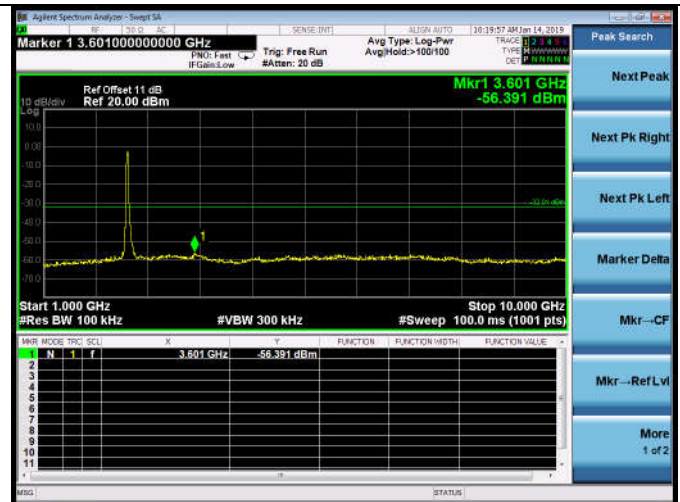
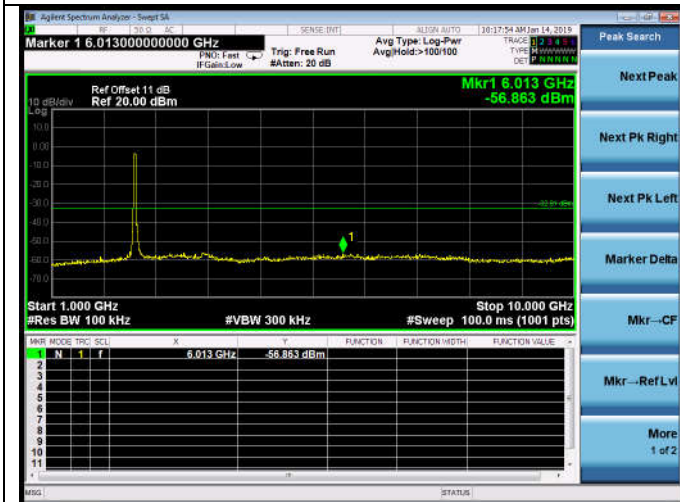
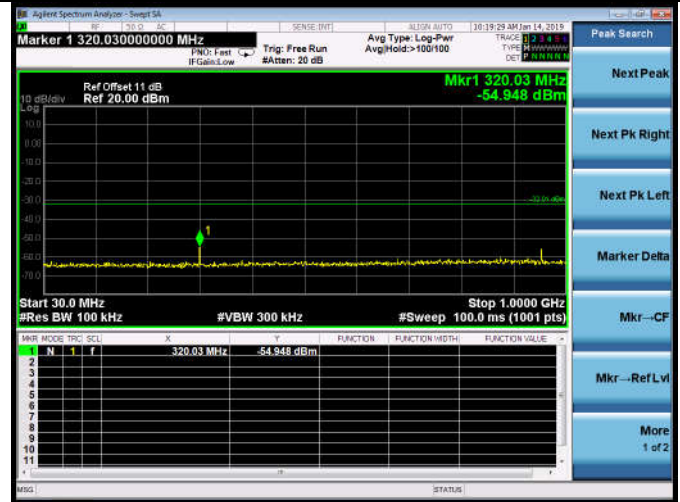


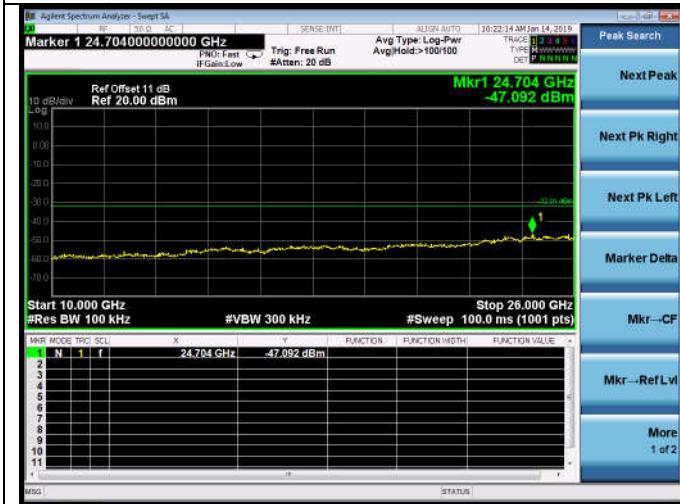


## Test CH6: 2437MHz



## Test CH9: 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	N/A	RF Cable	No.7	Oct.15,18	1 Year

### 6.2. Limit

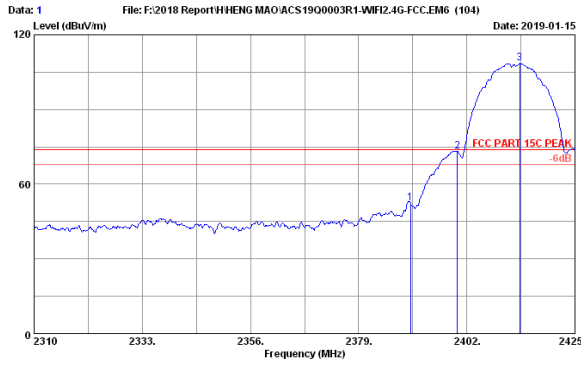
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental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

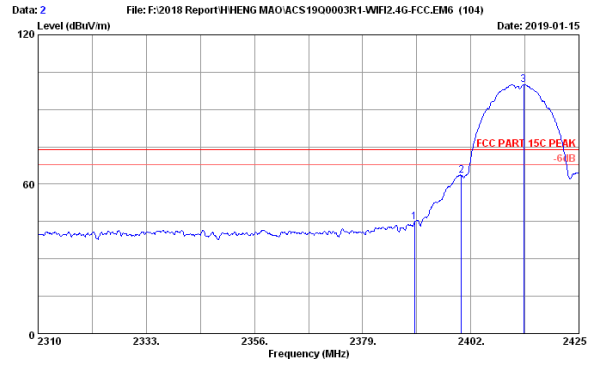
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : 300N Access Point M/N:525404-300N  
 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	49.94	35.70	52.58	74.00	21.42	Peak
2	2400.00	28.06	10.28	70.59	35.70	73.23	74.00	0.77	Peak
3	2413.27	28.08	10.31	105.60	35.70	106.49	74.00	-34.49	Peak

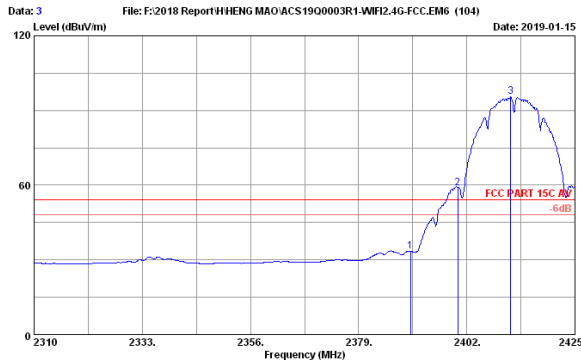
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : 300N Access Point M/N:525404-300N  
 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	42.15	35.70	44.79	74.00	29.21	Peak
2	2400.00	28.06	10.28	60.81	35.70	63.45	74.00	10.55	Peak
3	2413.27	28.08	10.31	97.38	35.70	100.07	74.00	-26.07	Peak

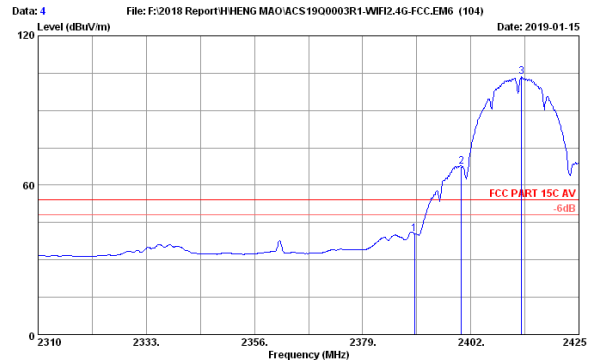
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 3  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : 300N Access Point M/N:525404-300N  
 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	30.64	35.70	33.28	54.00	20.72	Average
2	2400.05	28.06	10.28	56.22	35.70	58.86	54.00	-4.86	Average
3	2411.32	28.08	10.31	92.86	35.70	95.55	54.00	-41.55	Average

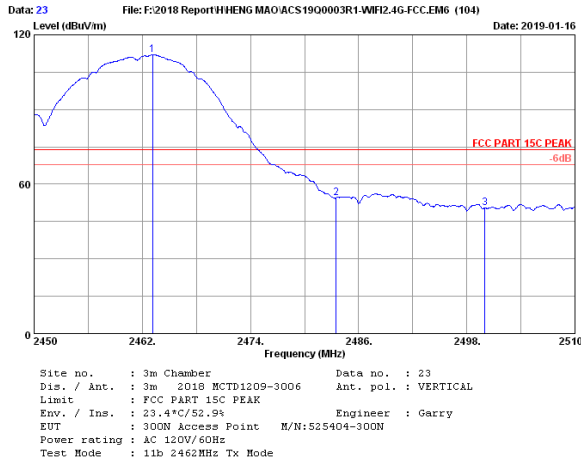
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 4  
 Dis. / Ant. : 3m 2018 MCTD1209-3006 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV  
 Env. / Ins. : 23.4°C/52.9% Engineer : Garry  
 EUT : 300N Access Point M/N:525404-300N  
 Power rating : AC 120V/60Hz  
 Test Mode : 11b 2412MHz Tx Mode

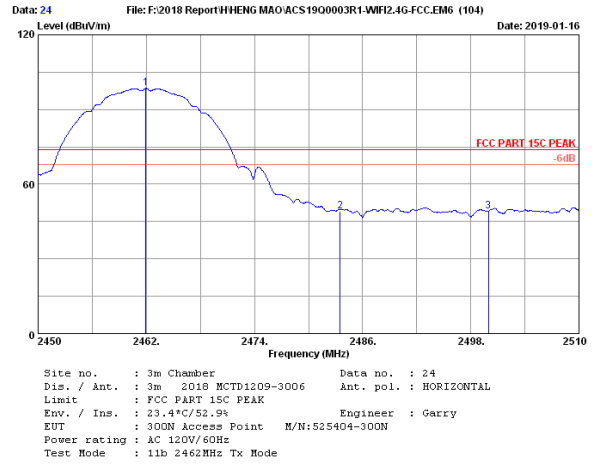
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.06	10.28	37.88	35.70	40.52	54.00	13.48	Average
2	2400.00	28.06	10.28	64.73	35.70	67.37	54.00	-13.37	Average
3	2412.81	28.08	10.31	100.77	35.70	103.46	54.00	-49.46	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.



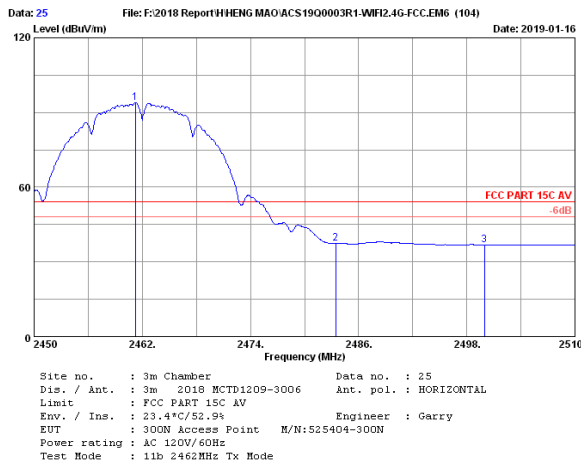
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.14	28.15	10.42	109.12	35.65	112.04	74.00	-38.04	Peak
2	2483.50	28.18	10.45	51.54	35.62	54.55	74.00	19.45	Peak
3	2500.00	28.20	10.48	47.34	35.60	50.42	74.00	23.58	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.



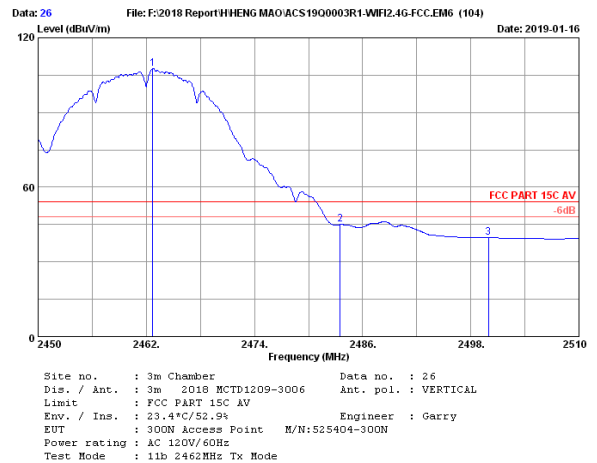
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.94	28.15	10.42	95.60	35.65	98.52	74.00	-24.52	Peak
2	2483.50	28.18	10.45	46.27	35.62	49.28	74.00	24.72	Peak
3	2499.98	28.20	10.48	46.08	35.60	49.16	74.00	24.84	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.



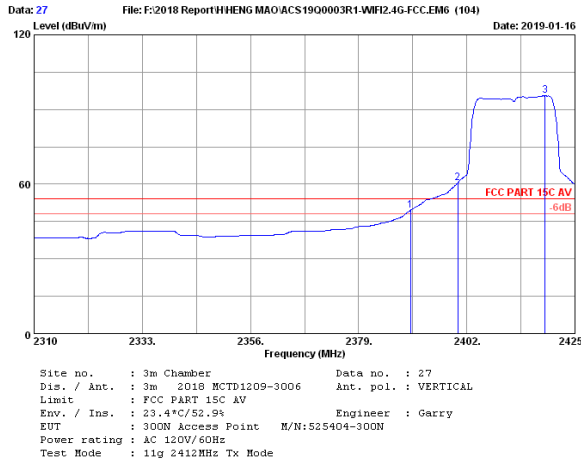
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.22	28.15	10.42	91.00	35.65	93.92	54.00	-39.92	Peak
2	2483.48	28.18	10.45	34.33	35.62	37.34	54.00	16.66	Peak
3	2499.98	28.20	10.48	33.83	35.60	36.91	54.00	17.09	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.



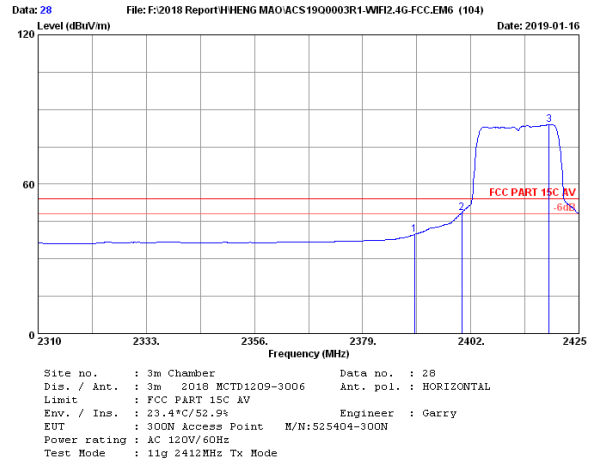
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.72	28.15	10.42	104.69	35.65	107.61	54.00	-53.61	Peak
2	2483.50	28.18	10.45	41.96	35.62	44.97	54.00	9.03	Peak
3	2499.98	28.20	10.48	36.57	35.60	39.65	54.00	14.35	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.



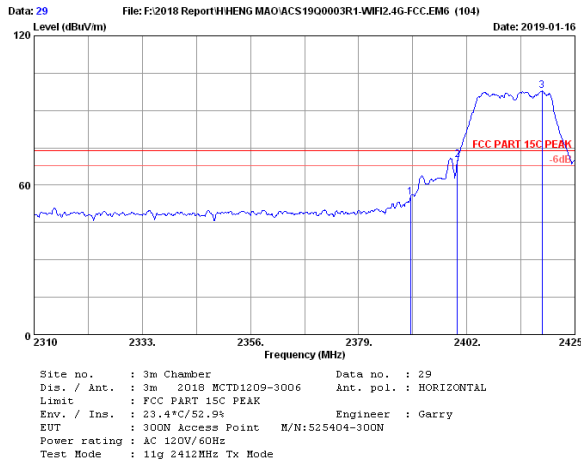
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.06	10.28	46.87	35.70	49.51	54.00	4.49	Average
2	2400.05	28.06	10.28	57.87	35.70	60.51	54.00	-6.51	Average
3	2418.68	28.08	10.31	92.80	35.67	95.52	54.00	-41.52	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.



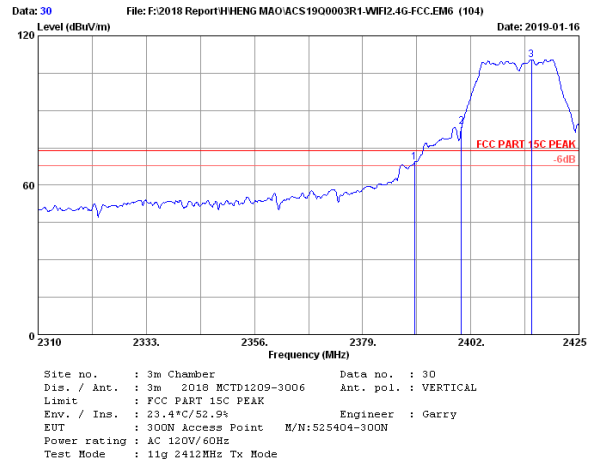
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	28.06	10.28	37.14	35.70	39.78	54.00	14.22	Average
2	2400.05	28.06	10.28	45.86	35.70	45.50	54.00	5.50	Average
3	2418.68	28.08	10.31	81.10	35.67	83.82	54.00	-29.82	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.



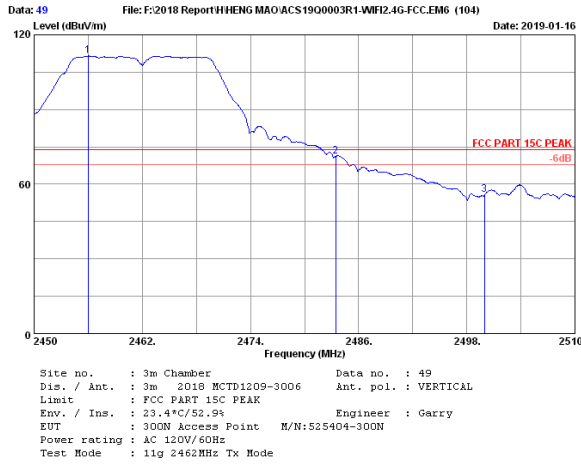
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	28.06	10.28	52.58	35.70	55.22	74.00	18.78	Peak
2	2400.00	28.06	10.28	67.42	35.70	70.06	74.00	3.94	Peak
3	2417.99	28.08	10.31	95.07	35.67	97.79	74.00	-23.79	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.



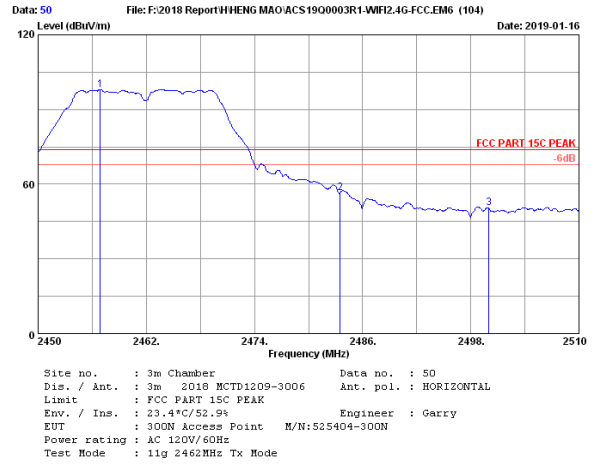
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	28.06	10.28	66.64	35.70	69.28	74.00	4.72	Peak
2	2400.00	28.06	10.28	81.06	35.70	83.70	74.00	-9.70	Peak
3	2414.88	28.08	10.31	107.77	35.70	110.46	74.00	-36.46	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.



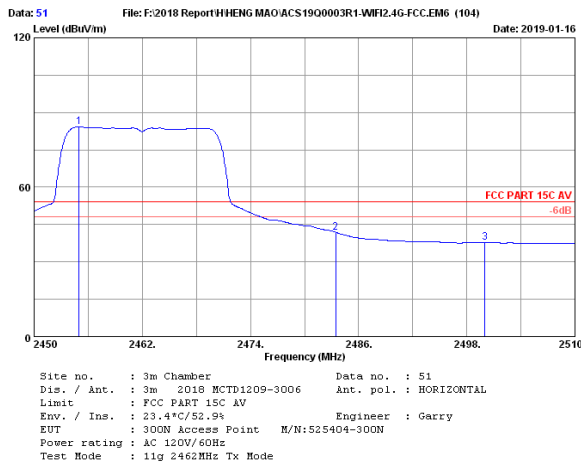
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2456.00	28.15	10.42	108.56	35.65	111.48	74.00	-37.48	Peak
2	2483.48	28.18	10.45	68.24	35.62	71.25	74.00	2.75	Peak
3	2499.98	28.20	10.48	52.74	35.60	55.82	74.00	18.18	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.



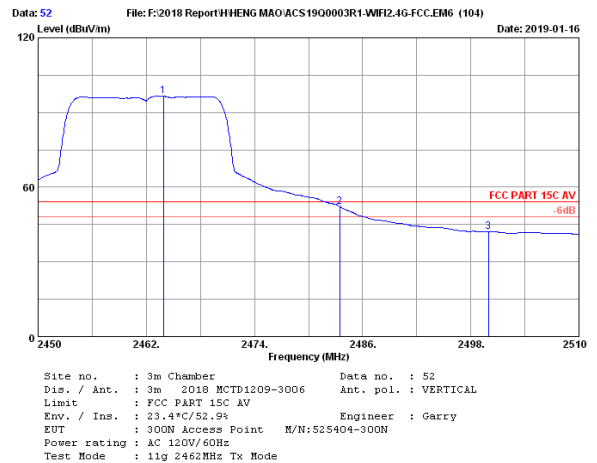
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2456.90	28.15	10.42	95.14	35.65	98.06	74.00	-24.06	Peak
2	2483.50	28.18	10.45	53.55	35.62	56.56	74.00	17.44	Peak
3	2500.00	28.20	10.48	47.27	35.60	50.35	74.00	23.65	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.



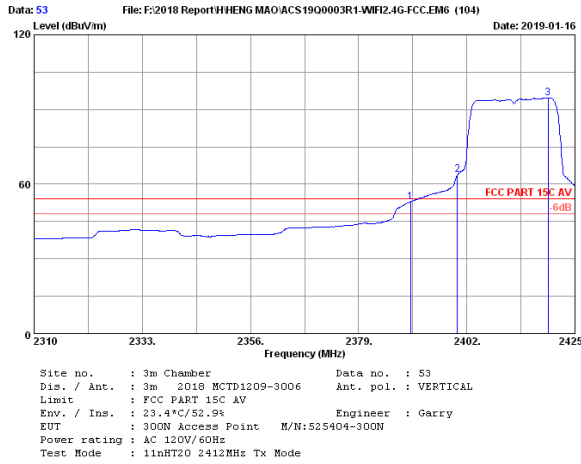
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2454.98	28.15	10.42	81.30	35.65	84.22	54.00	-30.22	Average
2	2483.48	28.18	10.45	38.89	35.62	41.90	54.00	12.10	Average
3	2500.00	28.20	10.48	34.62	35.60	37.70	54.00	16.30	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.



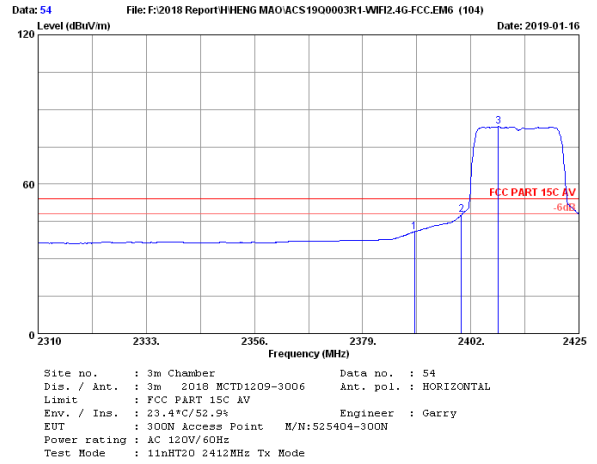
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.92	28.15	10.42	93.66	35.65	96.58	54.00	-42.58	Average
2	2483.48	28.18	10.45	49.23	35.62	52.24	54.00	1.76	Average
3	2499.98	28.20	10.48	38.97	35.60	42.05	54.00	11.95	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.



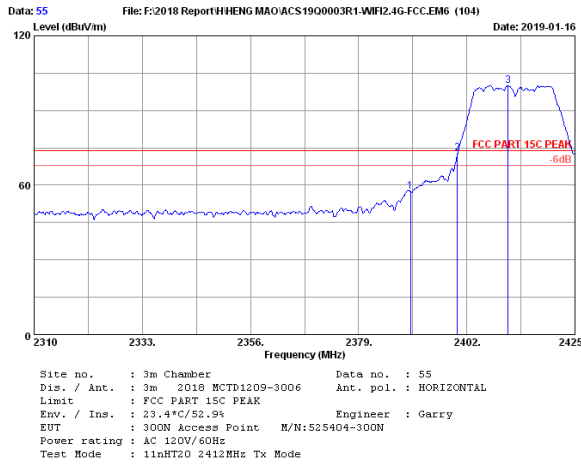
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	28.06	10.28	50.30	35.70	52.94	54.00	1.06	Average
2	2400.00	28.06	10.28	61.23	35.70	63.87	54.00	-9.87	Average
3	2419.25	28.08	10.31	91.97	35.67	94.69	54.00	-40.69	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.



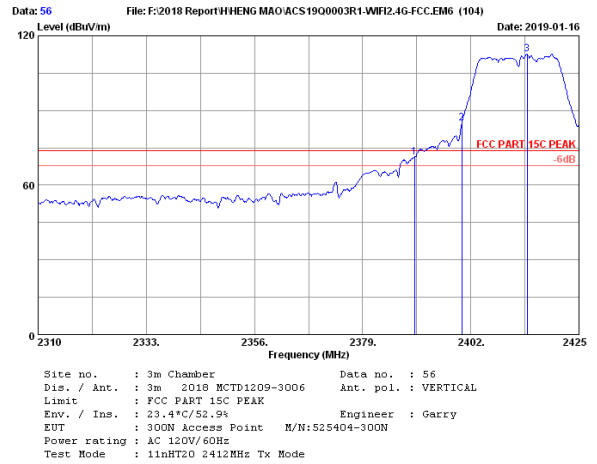
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	28.06	10.28	38.26	35.70	40.90	54.00	13.10	Average
2	2400.00	28.06	10.28	45.20	35.70	47.84	54.00	6.16	Average
3	2407.87	28.08	10.31	80.54	35.70	83.23	54.00	-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.



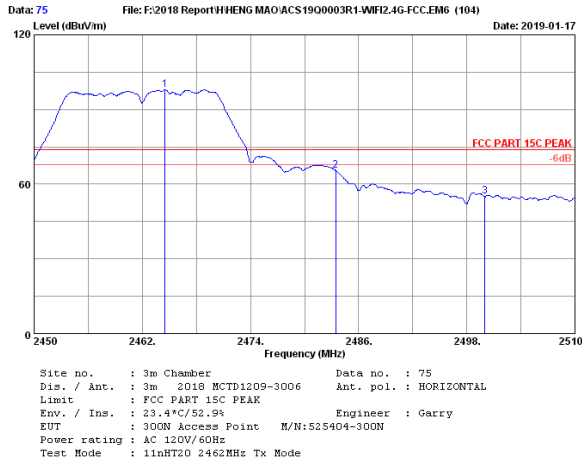
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.06	10.28	54.71	35.70	57.35	74.00	16.65	Peak
2	2400.00	28.06	10.28	70.31	35.70	72.95	74.00	1.05	Peak
3	2410.74	28.08	10.31	97.28	35.70	99.97	74.00	-25.97	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.



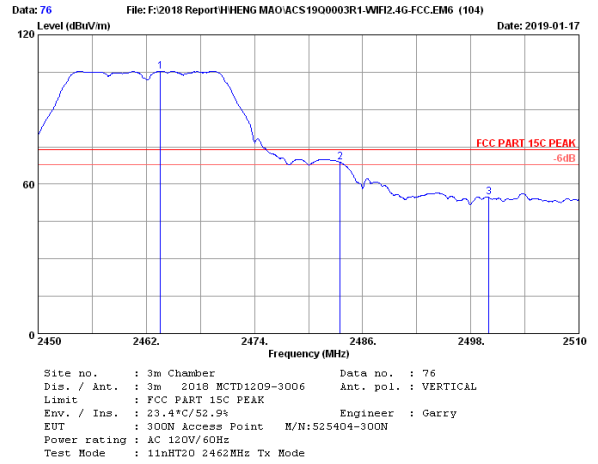
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.04	28.06	10.28	68.65	35.70	71.29	74.00	2.71	Peak
2	2400.05	28.06	10.28	82.10	35.70	84.74	74.00	-10.74	Peak
3	2413.96	28.08	10.31	109.91	35.70	112.60	74.00	-38.60	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.



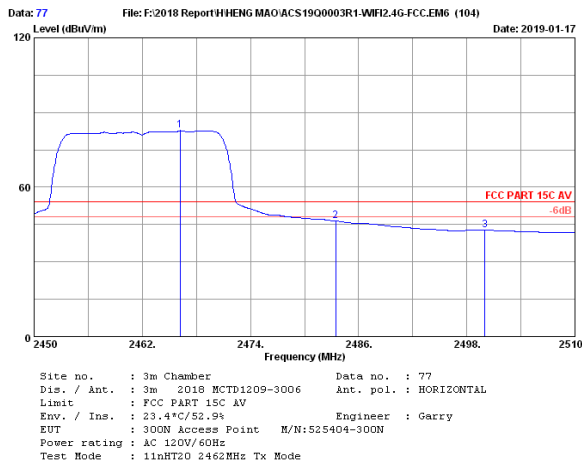
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2464.52	28.15	10.42	94.99	35.65	97.91	74.00	-23.91	Peak
2	2483.48	28.18	10.45	62.45	35.62	65.46	74.00	8.54	Peak
3	2500.00	28.20	10.48	51.94	35.60	55.02	74.00	18.98	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.



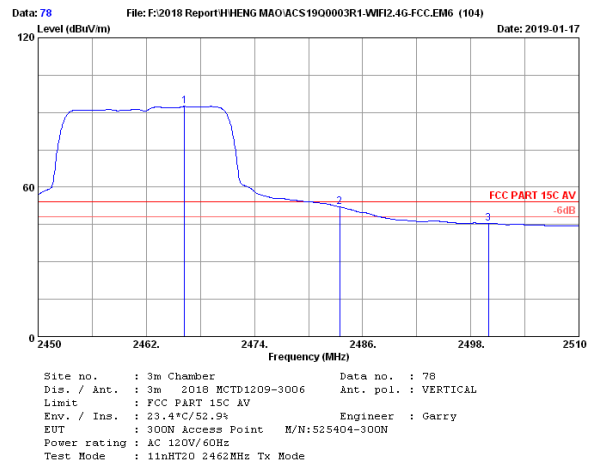
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.56	28.15	10.42	102.48	35.65	105.40	74.00	-31.40	Peak
2	2483.50	28.18	10.45	65.81	35.62	68.82	74.00	5.18	Peak
3	2500.00	28.20	10.48	51.61	35.60	54.69	74.00	19.31	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.



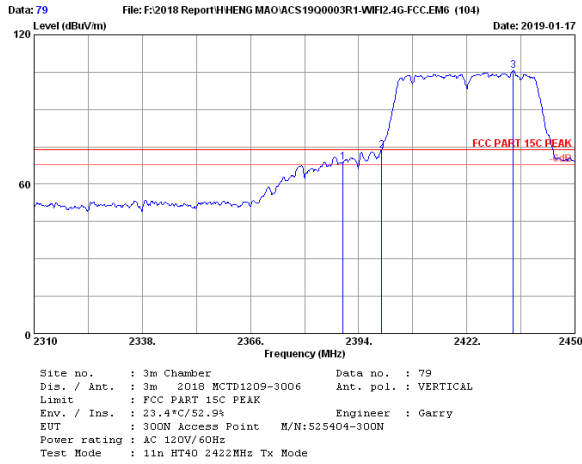
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2466.20	28.15	10.42	79.82	35.65	82.74	54.00	-28.74	Peak
2	2483.48	28.18	10.45	43.41	35.62	46.42	54.00	7.58	Peak
3	2500.00	28.20	10.48	39.67	35.60	42.75	54.00	11.25	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.



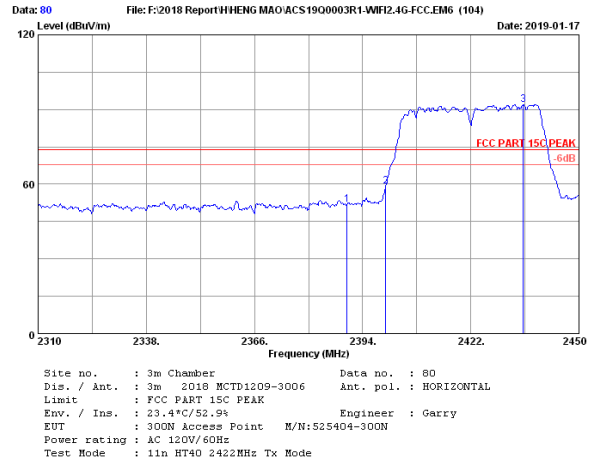
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2466.26	28.15	10.42	89.59	35.62	92.54	54.00	-38.54	Peak
2	2483.48	28.18	10.45	49.12	35.62	52.13	54.00	1.87	Peak
3	2499.98	28.20	10.48	42.38	35.60	45.46	54.00	8.54	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.



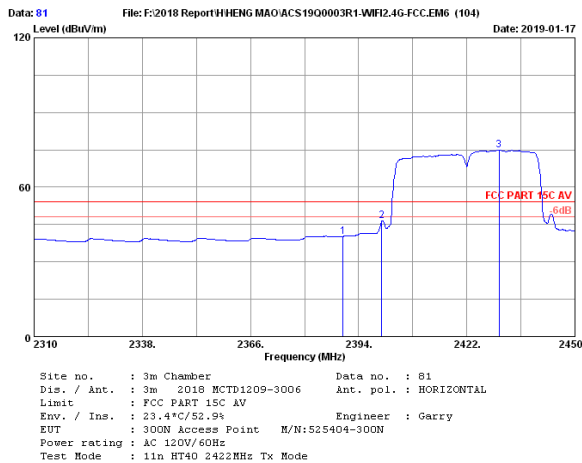
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.94	28.06	10.28	66.10	35.70	68.74	74.00	5.26	Peak
2	2400.00	28.06	10.28	70.96	35.70	73.60	74.00	0.40	Peak
3	2434.04	28.10	10.35	102.77	35.67	105.55	74.00	-31.55	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.



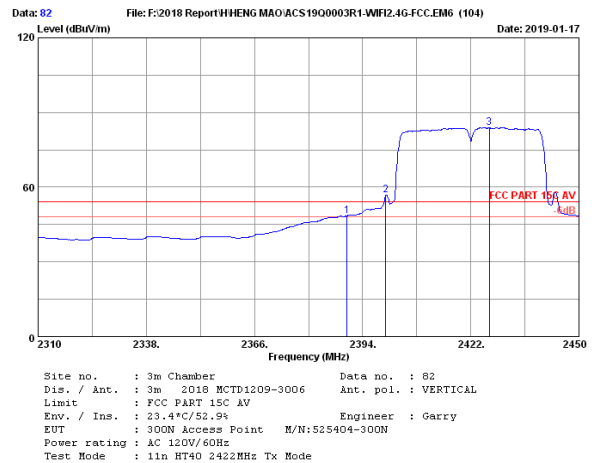
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.94	28.06	10.28	49.03	35.70	51.67	74.00	22.33	Peak
2	2400.00	28.06	10.28	56.60	35.70	59.24	74.00	14.76	Peak
3	2435.58	28.10	10.35	89.27	35.67	92.05	74.00	-18.05	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	37.62	35.70	40.26	54.00	13.74	Average
2	2400.02	28.06	10.28	43.69	35.70	46.33	54.00	7.67	Average
3	2430.40	28.10	10.35	72.06	35.67	74.84	54.00	-20.84	Average

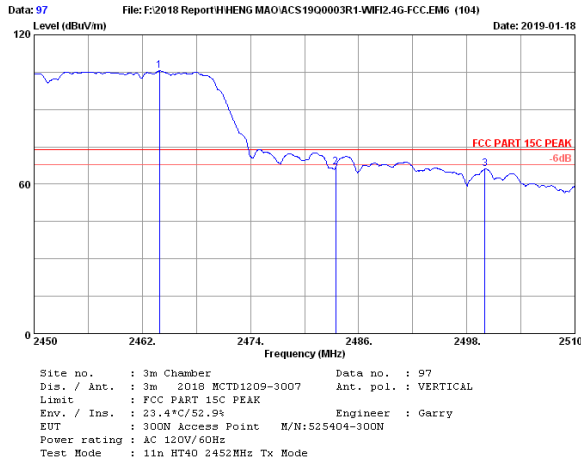
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor.  
 2. The emission levels that are 20dB below the official limit are not reported.



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	45.91	35.70	45.55	54.00	5.45	Average
2	2400.00	28.06	10.28	54.09	35.70	56.73	54.00	-2.73	Average
3	2426.76	28.10	10.35	81.10	35.67	83.88	54.00	-29.88	Average

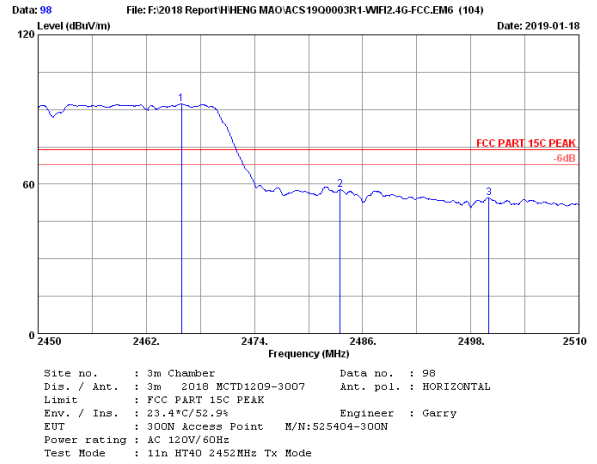
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor.  
 2. The emission levels that are 20dB below the official limit are not reported.





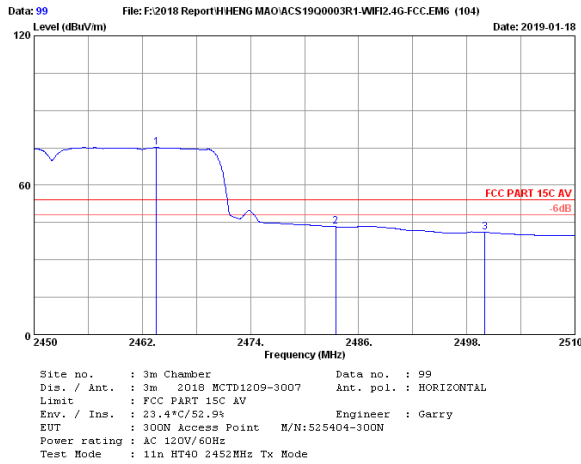
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.92	28.04	10.42	102.69	35.65	105.50	74.00	-31.50	Peak
2	2483.48	28.07	10.45	64.02	35.62	66.92	74.00	7.08	Peak
3	2500.00	28.10	10.48	63.08	35.60	66.06	74.00	7.94	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.



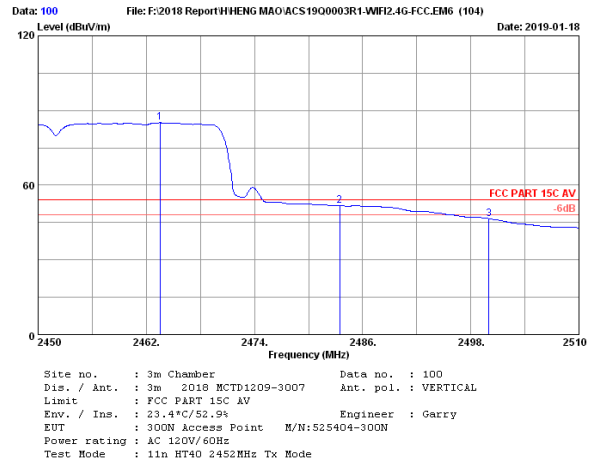
No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Amp factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2465.90	28.04	10.42	89.31	35.65	92.12	74.00	-18.12	Peak
2	2483.50	28.07	10.45	54.79	35.62	57.69	74.00	16.31	Peak
3	2500.00	28.10	10.48	51.57	35.60	54.55	74.00	19.45	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	2463.56	28.04	10.42	72.37	35.65	75.18	54.00	-21.18	Peak
2	2483.48	28.07	10.45	40.40	35.62	43.30	54.00	10.70	Peak
3	2500.00	28.10	10.48	38.13	35.60	41.11	54.00	12.89	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	2463.50	28.04	10.42	82.29	35.65	85.10	54.00	-31.10	Peak
2	2483.48	28.07	10.45	48.93	35.62	51.83	54.00	2.17	Peak
3	2500.00	28.10	10.48	43.61	35.60	46.59	54.00	7.41	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	MY39262165	Oct.14,18	1 Year
3.	RF Cable	EMCI	EMC102-KM-KM 3500	170702	Oct.14,18	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: 300N Access Point		
M/N: 525404-300N		
Test date: 2019-01-11	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Lynn	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)		Limit (kHz)
		ANT0	ANT1	
11b	CH1	15.158	15.145	≥ 500
	CH6	15.193	15.161	≥ 500
	CH11	15.879	15.137	≥ 500
11g	CH1	16.527	16.530	≥ 500
	CH6	16.770	16.603	≥ 500
	CH11	18.685	18.524	≥ 500
11n HT20	CH1	17.731	17.727	≥ 500
	CH6	17.897	17.836	≥ 500
	CH11	19.494	19.435	≥ 500
11n HT40	CH3	36.073	36.280	≥ 500
	CH6	37.104	36.909	≥ 500
	CH9	40.324	39.871	≥ 500
Conclusion : PASS				

**ANT0:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz

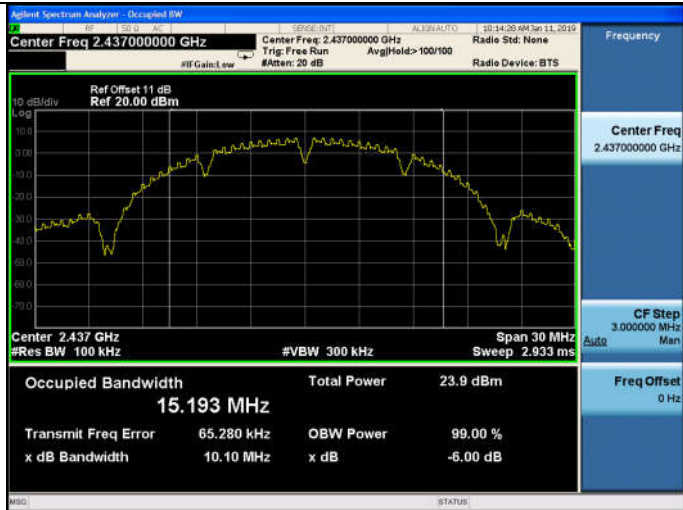
**ANT1:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz



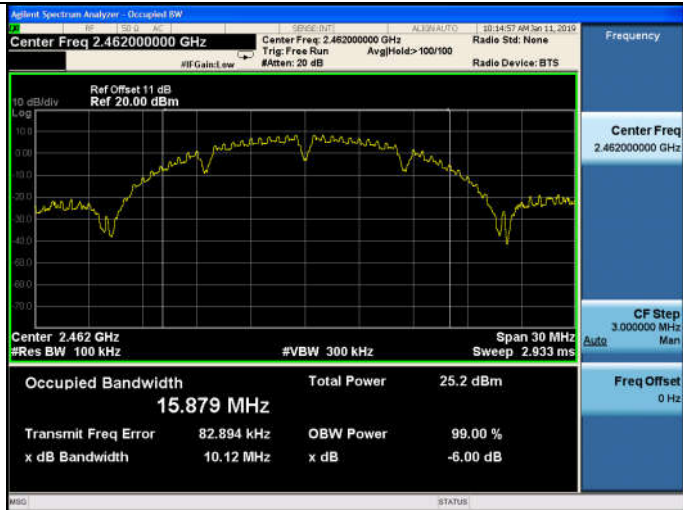
**Test CH6: 2437MHz**

**Test CH6: 2437MHz**



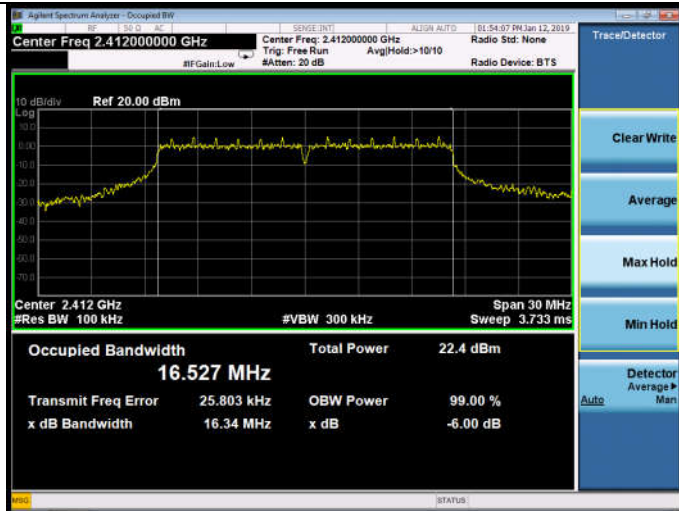
**Test CH11: 2462MHz**

**Test CH11: 2462MHz**



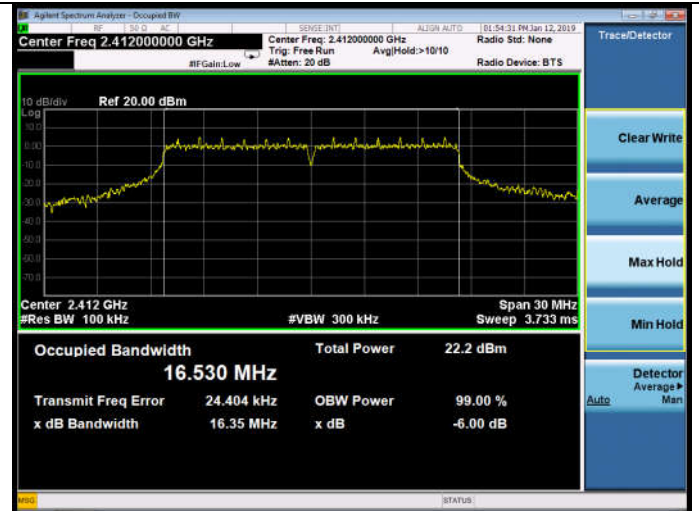
**ANT0:**

Test Mode: IEEE 802.11g  
Test CH1: 2412MHz

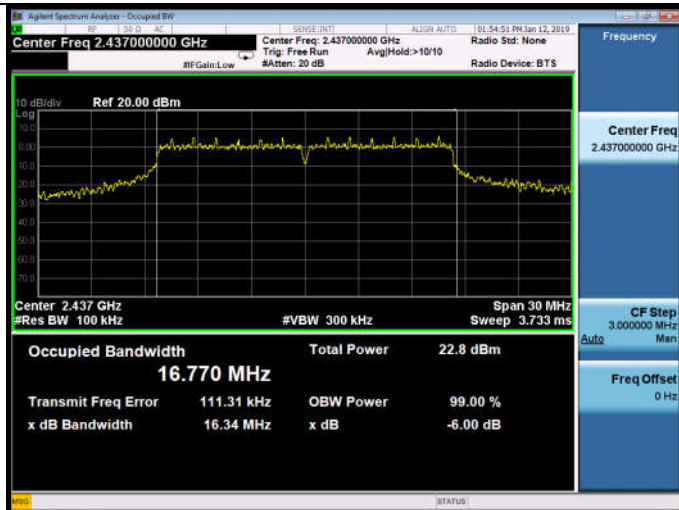


**ANT1:**

Test Mode: IEEE 802.11g  
Test CH1: 2412MHz



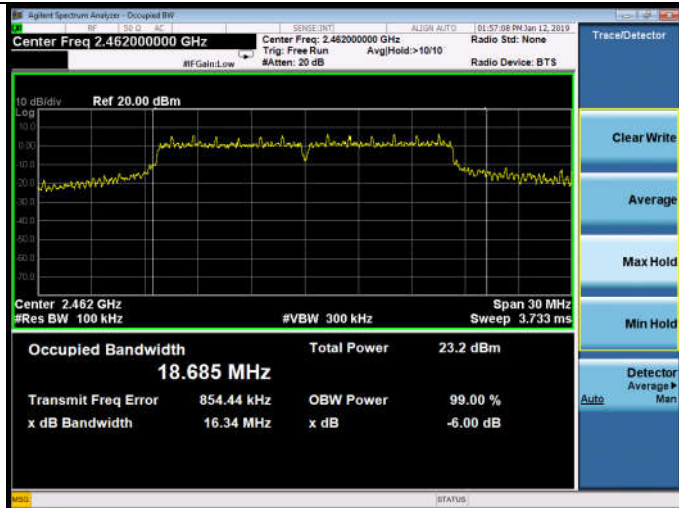
**Test CH6: 2437MHz**



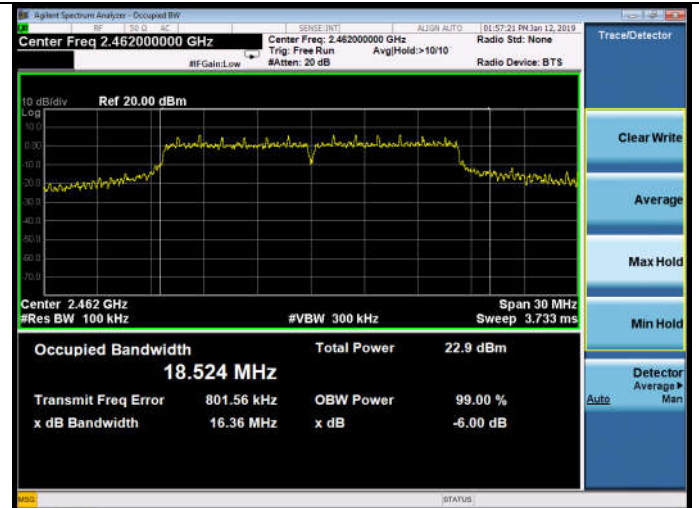
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**

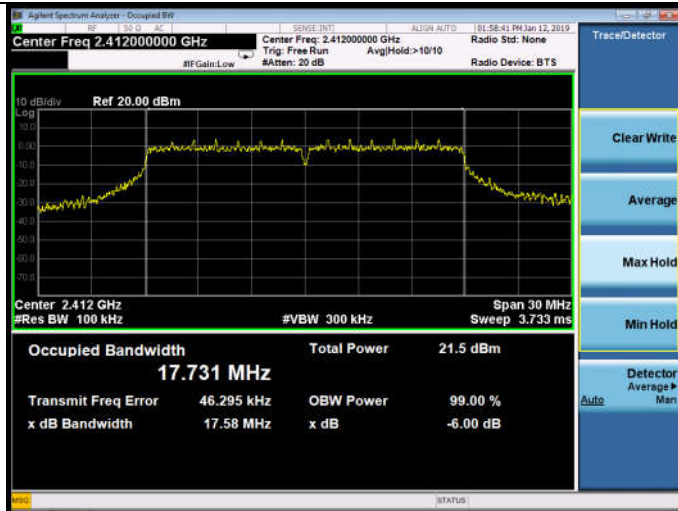


**Test CH11: 2462MHz**



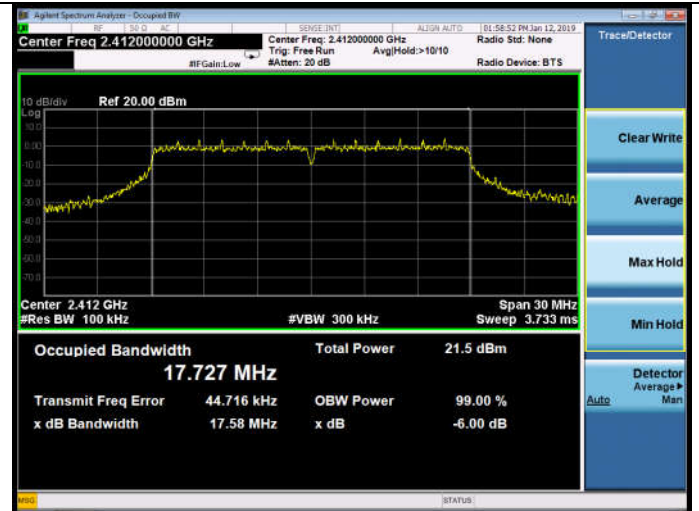
**ANT0:**

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

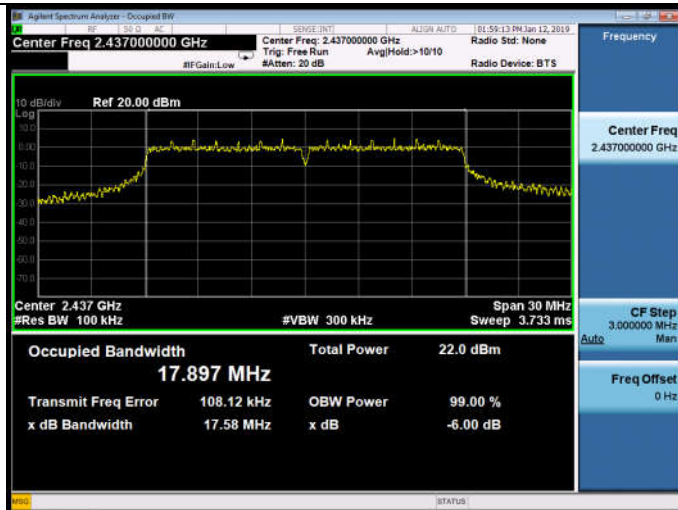


**ANT1:**

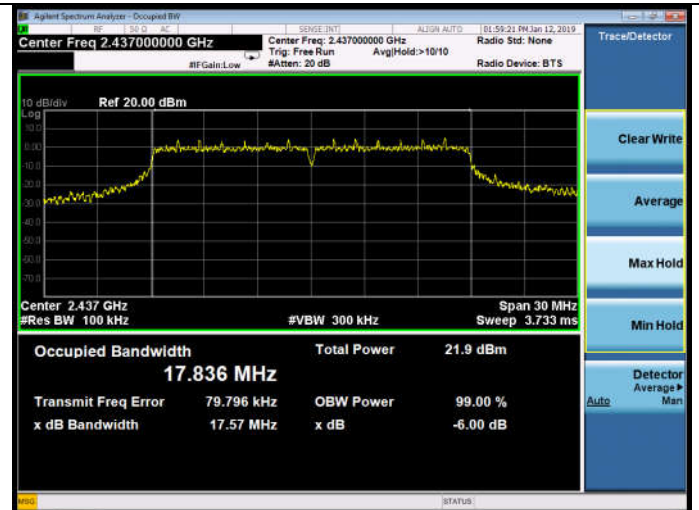
Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz



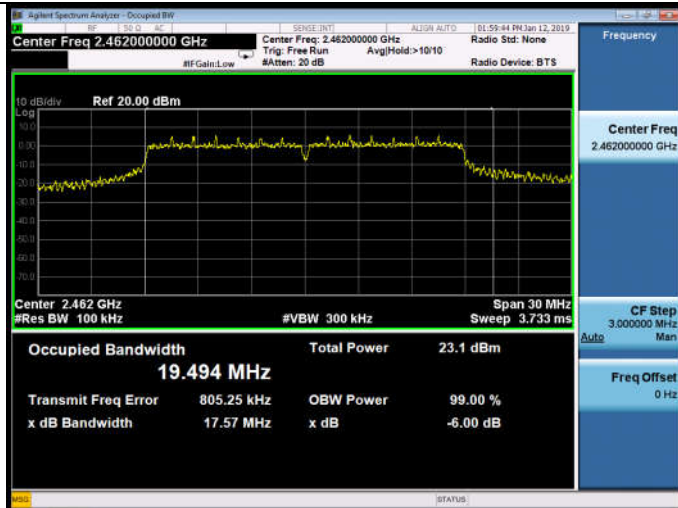
**Test CH6: 2437MHz**



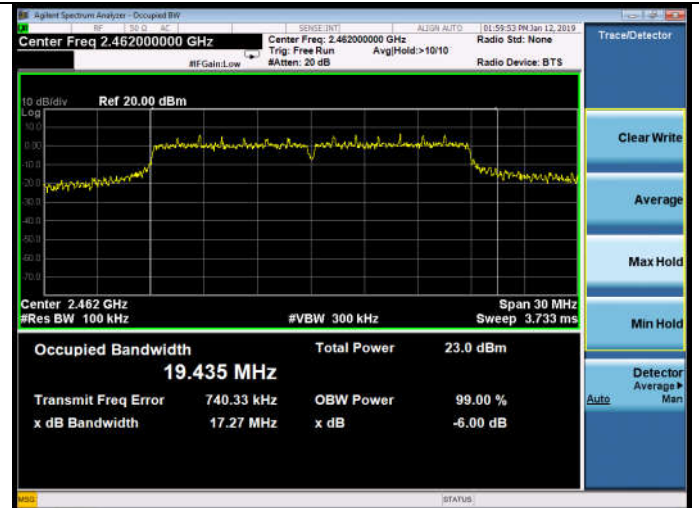
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**

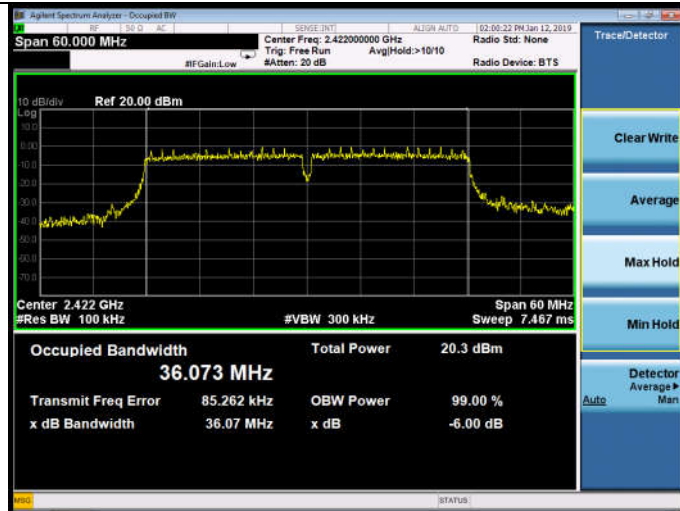


**Test CH11: 2462MHz**



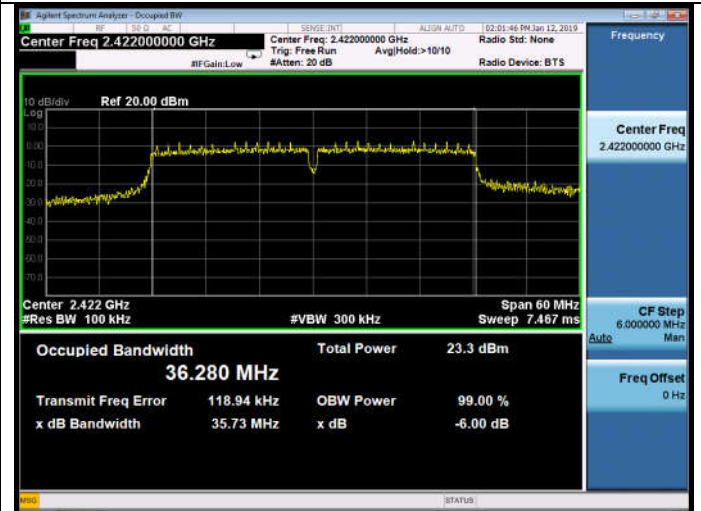
**ANT0:**

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

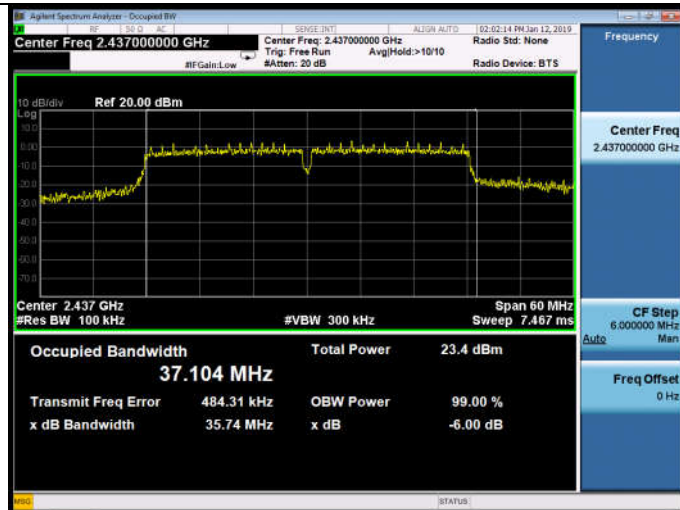


**ANT1:**

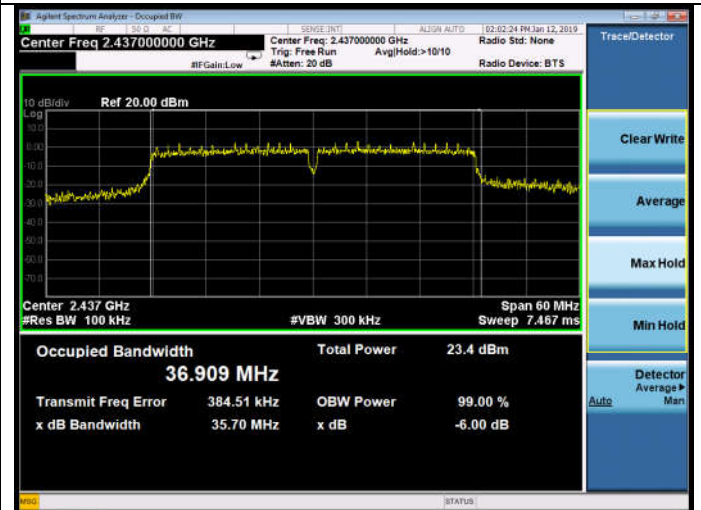
Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz



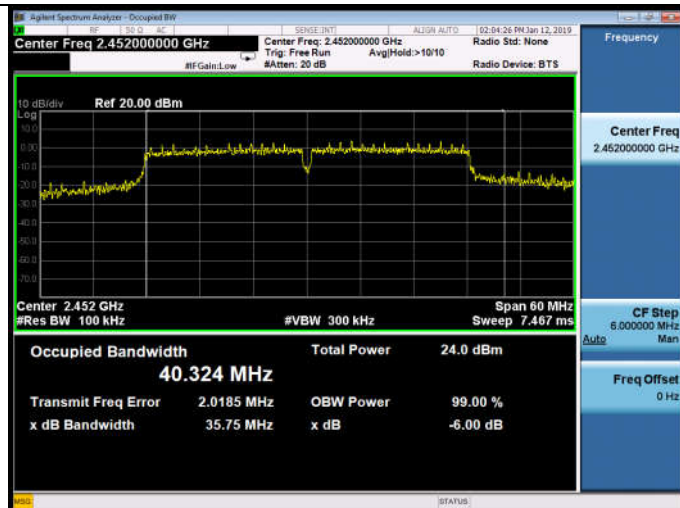
**Test CH6: 2437MHz**



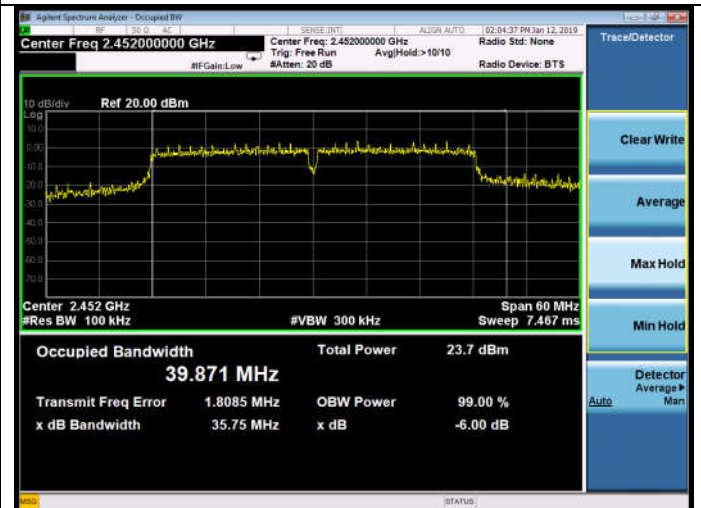
**Test CH6: 2437MHz**



**Test CH9: 2452MHz**



**Test CH9: 2452MHz**



## 8. OUTPUT POWER TEST

### 8.1. 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.	Power meter	Anritsu	ML2487A	6K00002472	Oct.14,18	1 Year
3.	Power sensor	Anritsu	MA2491A	033005	Oct.13,18	1 Year
4.	Attenuator	Agilent	8491B	MY39262165	Oct.14,18	1 Year
5.	RF Cable	EMCI	EMC102-K M-KM 3500	170702	Oct.14,18	1 Year

### 8.2. Limit (FCC Part 15C 15.247 b(3))

For systems using digital modulation in the 2400—2483.5MHz, The Peak output Power shall not exceed 1W(30dBm), As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level.

### 8.3. Test Procedure

- 1, Connected the EUT's antenna port to measure device by 20dB attenuator.
- 2, Use the test method described in KDB 558074 clause 9.2.2.
  - 1) Set span to at least 1.5 OBW.
  - 2) Set RBW = 1 % to 5 % of the OBW, not to exceed 1 MHz.
  - 3) Set VBW  $\geq$  3 RBW.
  - 4) Number of points in sweep  $\geq$  2 span / RBW.
  - 5) Sweep time = auto.
  - 6) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
  - 7) If transmit duty cycle < 98 %, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire 558074 D01 DTS Meas Guidance v04 Page 8 duration of every sweep. If the EUT transmits continuously or at duty cycle  $\geq$  98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".
  - 8) Trace average at least 100 traces in power averaging mode.
  - 9) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

### 8.4. Test Results

EUT: 300N Access Point		
M/N: 525404-300N		
Test date: 2019-01-21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Lynn	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	Output Power (dBm)			Limit (dBm)
		ANT0	ANT1	Total	
11b	CH1	16.77	16.62	N/A	30
	CH6	17.33	16.62	N/A	30
	CH11	17.24	16.83	N/A	30
11g	CH1	14.51	14.19	N/A	30
	CH6	14.77	14.14	N/A	30
	CH11	15.37	14.74	N/A	30
11n HT20	CH1	7.42	7.74	10.59	28
	CH6	7.25	7.01	10.14	28
	CH11	7.23	7.60	10.43	28
11n HT40	CH3	6.60	6.20	9.41	28
	CH6	6.45	6.56	9.52	28
	CH9	6.48	6.60	9.55	28

Conclusion: PASS

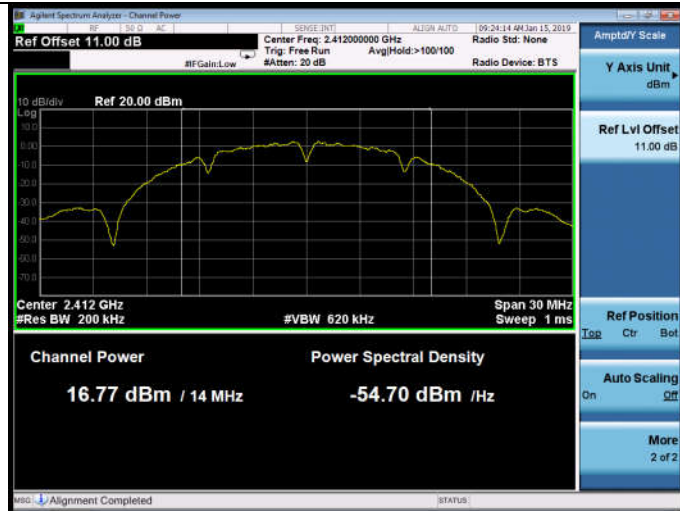
Note: For 11nHT20/40 Mode

$$\begin{aligned}
 \text{Directive gain} &= 5\text{dBi} + 10\log 2 \\
 &= 5\text{dBi} + 3\text{dB} \\
 &= 8\text{dBi} > 6\text{dBi}
 \end{aligned}$$



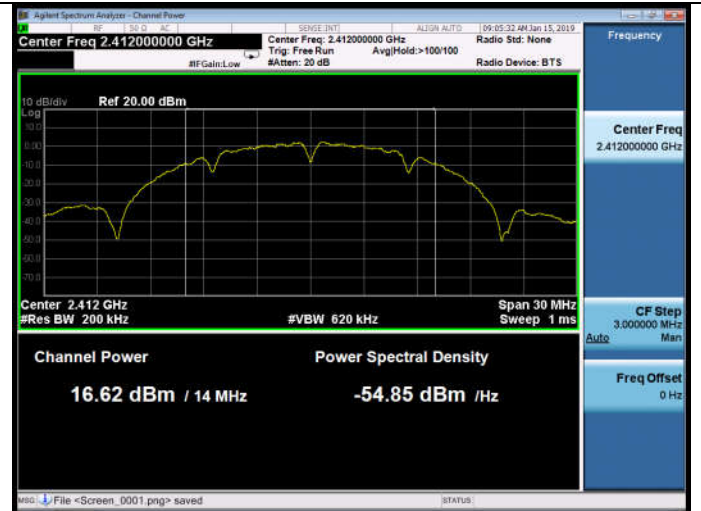
**ANT0:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz

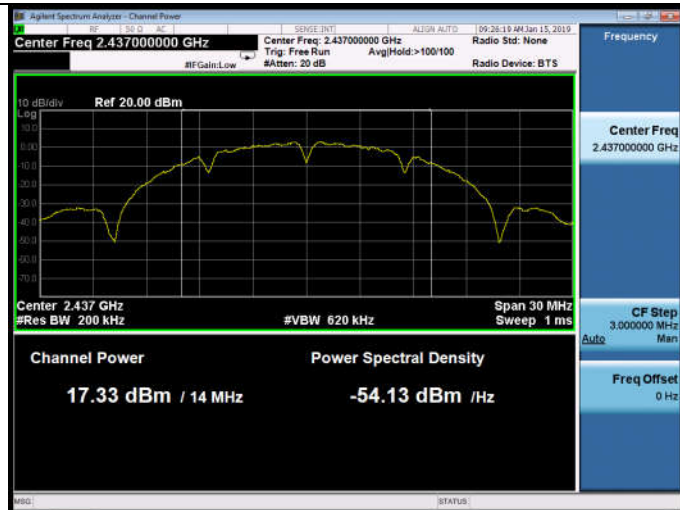


**ANT1:**

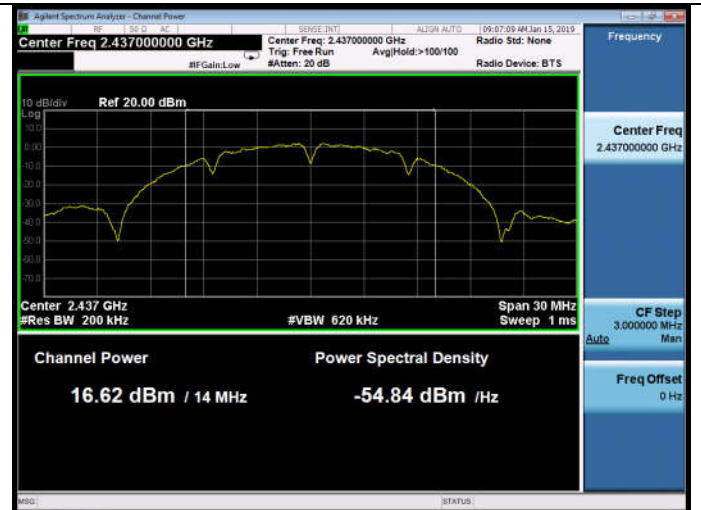
Test Mode: IEEE 802.11b  
Test CH1: 2412MHz



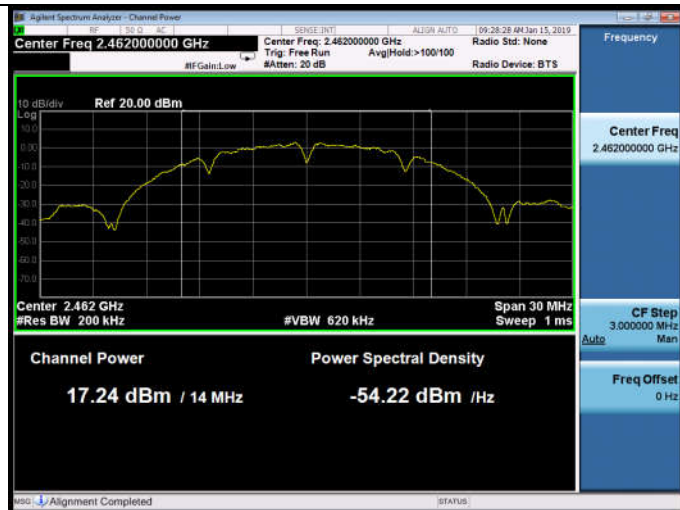
**Test CH6: 2437MHz**



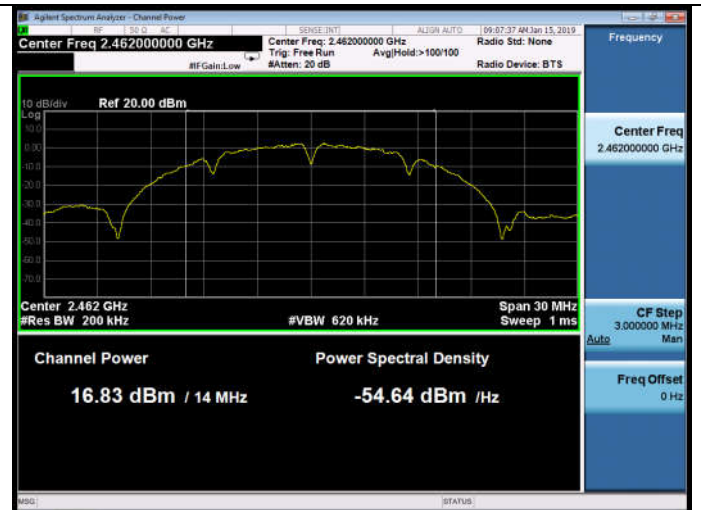
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**

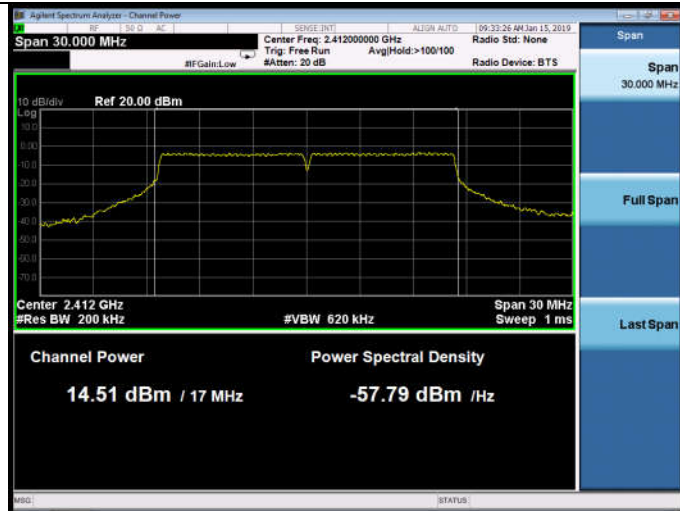


**Test CH11: 2462MHz**



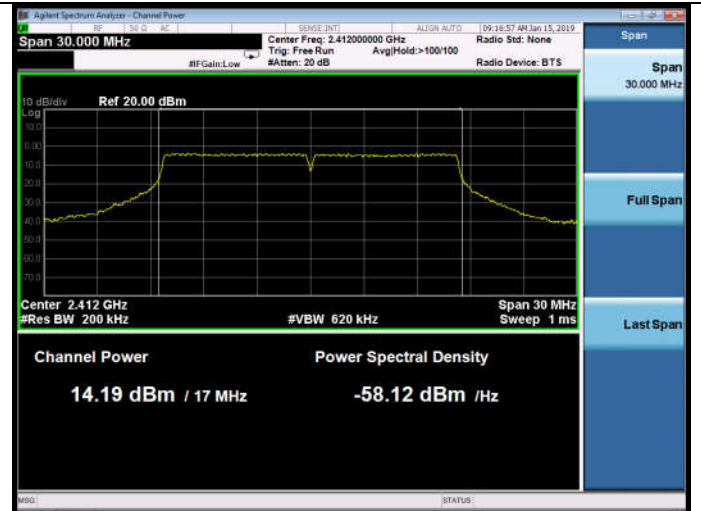
**ANT0:**

Test Mode: IEEE 802.11g  
Test CH1: 2412MHz

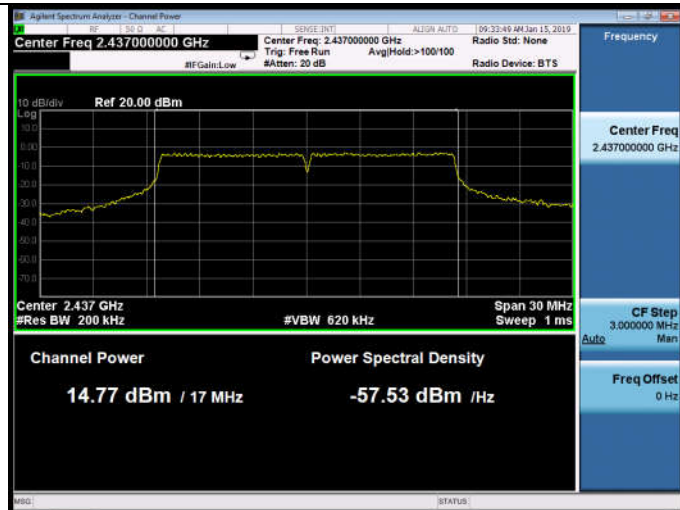


**ANT1:**

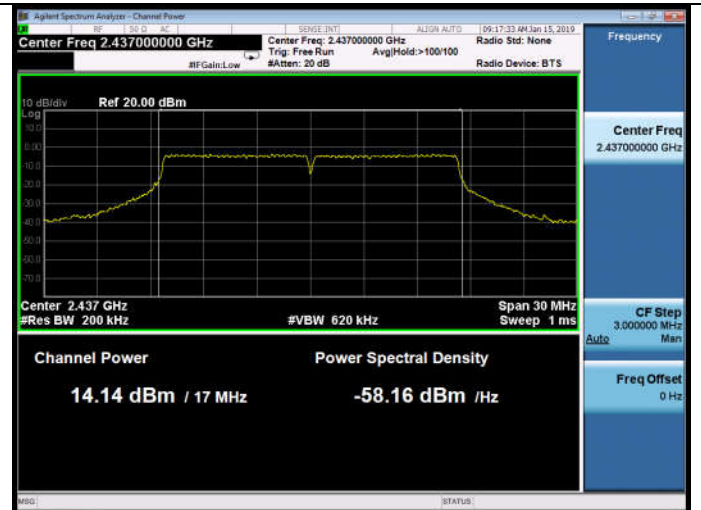
Test Mode: IEEE 802.11g  
Test CH1: 2412MHz



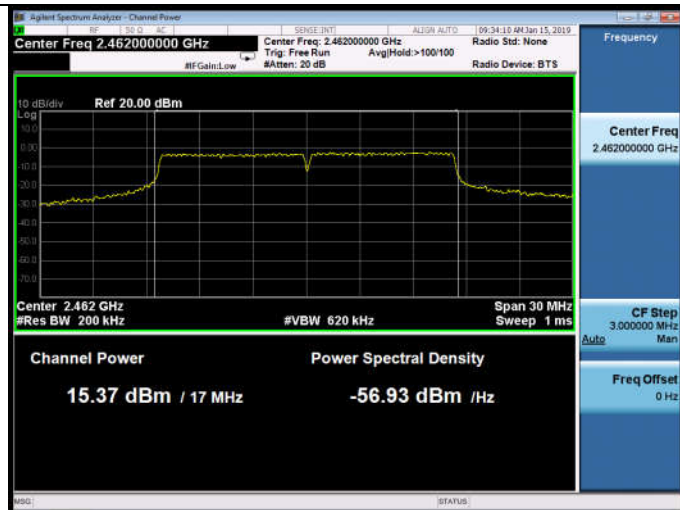
**Test CH6: 2437MHz**



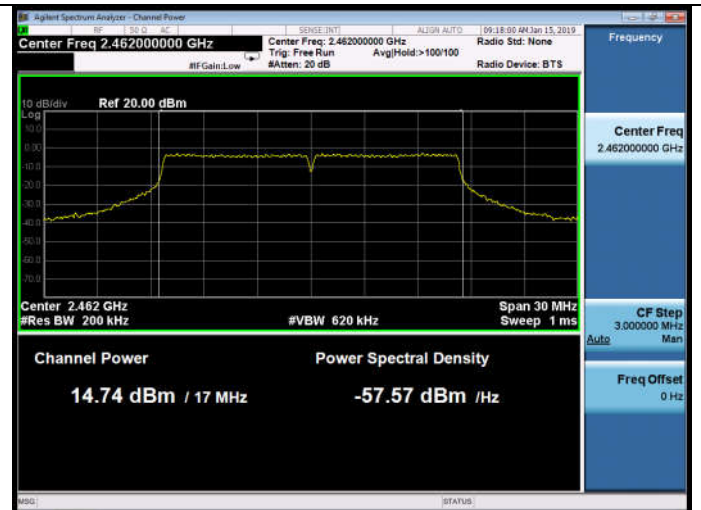
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**



**Test CH11: 2462MHz**



**ANT0:**

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



**ANT1:**

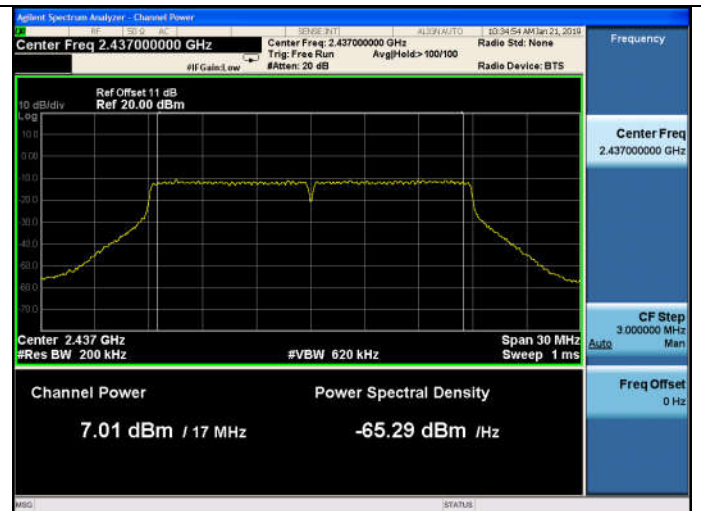
Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz



**Test CH6: 2437MHz**



**Test CH6: 2437MHz**



**Test CH11: 2462MHz**



**Test CH11: 2462MHz**



**ANT0:**

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



**ANT1:**

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



**Test CH6: 2437MHz**



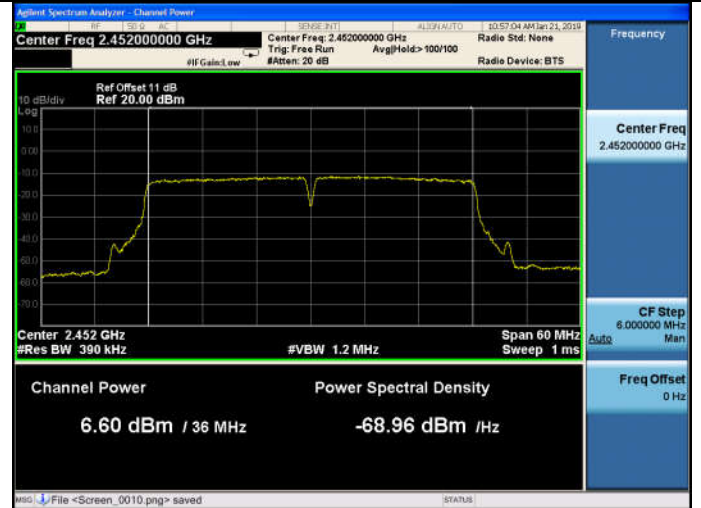
**Test CH6: 2437MHz**



**Test CH9: 2452MHz**



**Test CH9: 2452MHz**



## 9. POWER SPECTRAL DENSITY TEST

### 9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Sep.08,18	1Year
2.	Attenuator	Agilent	8491B	MY39262165	Oct.14,18	1 Year
3.	RF Cable	Mini-Circults	CBL-1M-SMSM+	No.4	Oct.14,18	1 Year

### 9.2. Limit

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

### 9.3. Test Procedure

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 DTS bandwidth.
- c) Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
- d) Set the VBW  $\geq [3 \times \text{RBW}]$ .
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.

### 9.4. Test Results

EUT: 300N Access Point		
M/N: 525404-300N		
Test date: 2019-01-15~21	Pressure: 102.1±1.0 kpa	Humidity: 51.1±3.0%
Tested by: Lynn	Test site: RF site	Temperature: 22.8±0.6 °C

Test Mode	CH	Power Density (dBm/3kHz)			Limit (dBm/3kHz)
		ANT0	ANT1	Total	
11b	CH1	1.925	2.037	N/A	8
	CH6	2.290	2.883	N/A	8
	CH11	2.844	3.289	N/A	8
11g	CH1	-9.814	-9.399	N/A	8
	CH6	-9.204	-9.036	N/A	8
	CH11	-8.487	-7.858	N/A	8
11n HT20	CH1	-17.798	-17.895	-14.84	6
	CH6	-18.368	-18.297	-15.32	6
	CH11	-18.402	-18.229	-15.30	6
11n HT40	CH3	-20.415	-21.397	-17.87	6
	CH6	-21.317	-20.990	-18.14	6
	CH9	-21.504	-21.261	-18.37	6

Conclusion: PASS

Note: For 11nHT20/40 Mode

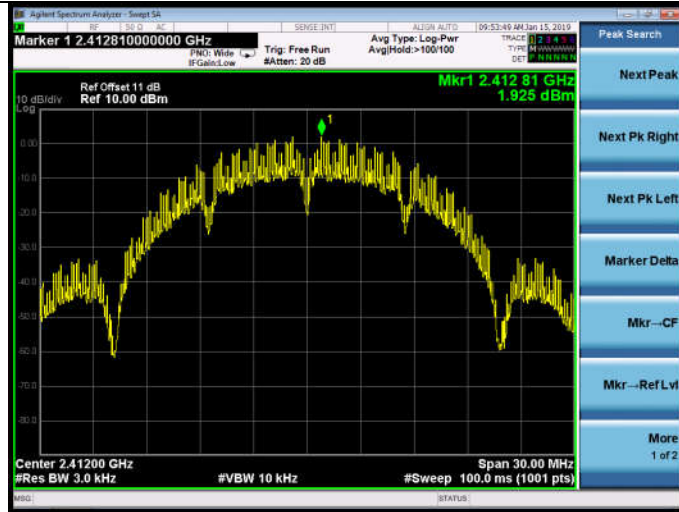
Directive gain=5dBi+10log2

=5dBi+3dB

=8dBi>6dBi

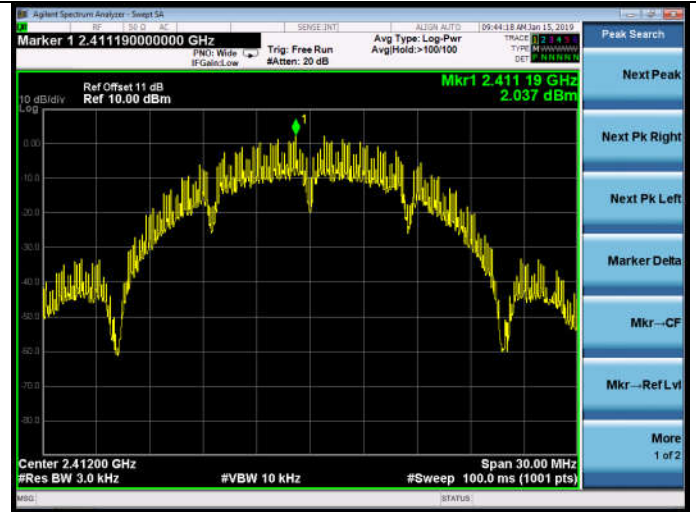
**ANT0:**

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz

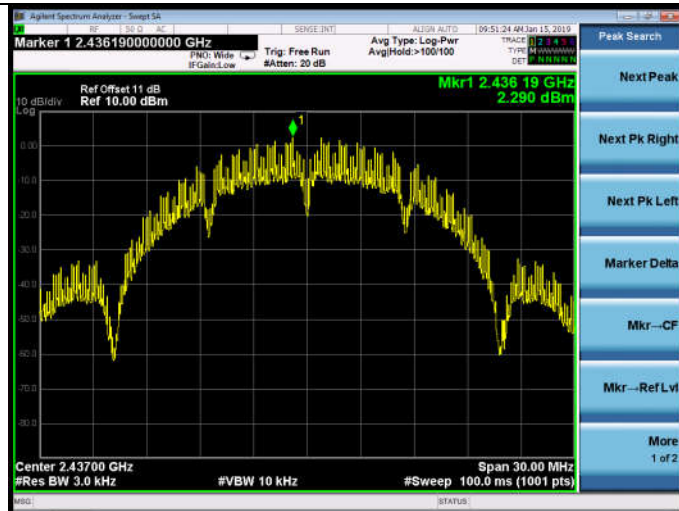


**ANT1:**

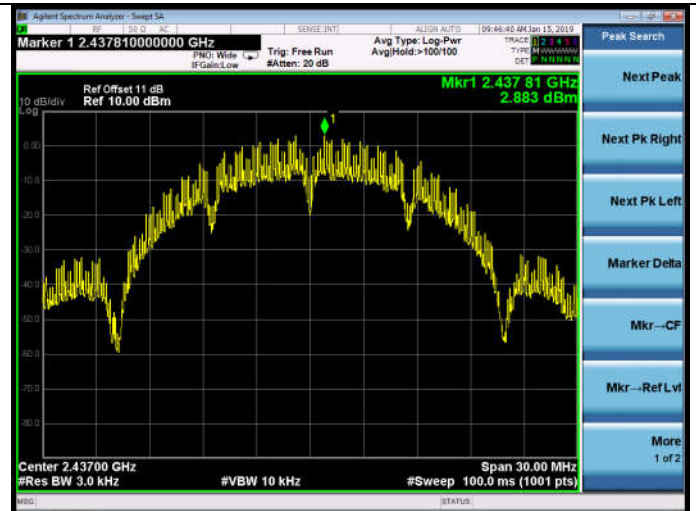
Test Mode: IEEE 802.11b  
Test CH1: 2412MHz



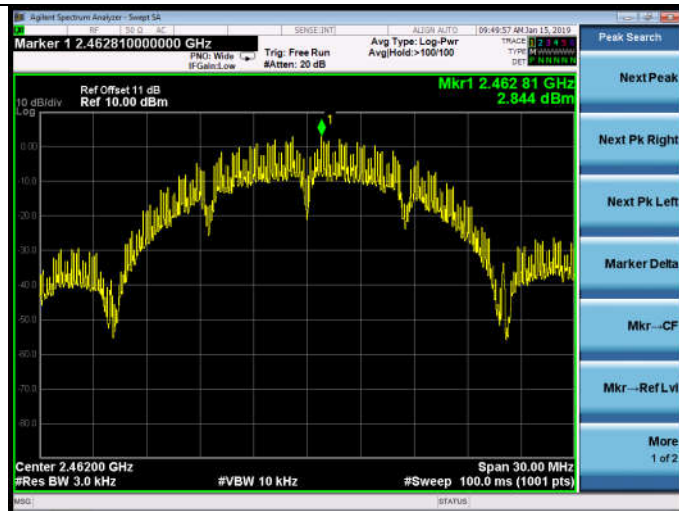
**Test CH6: 2437MHz**



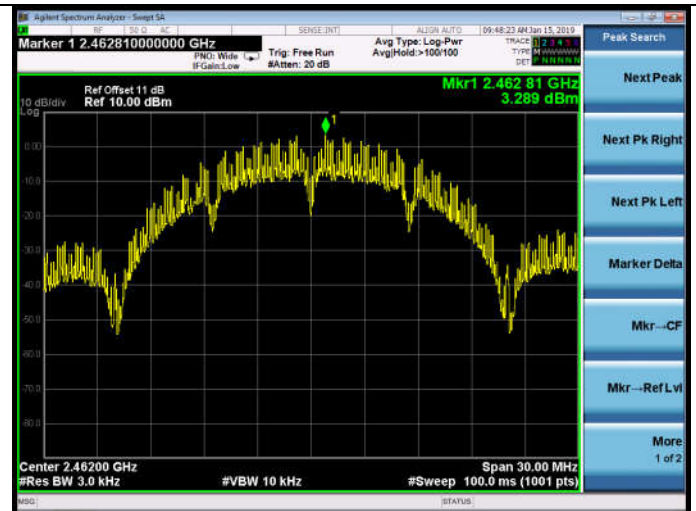
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**

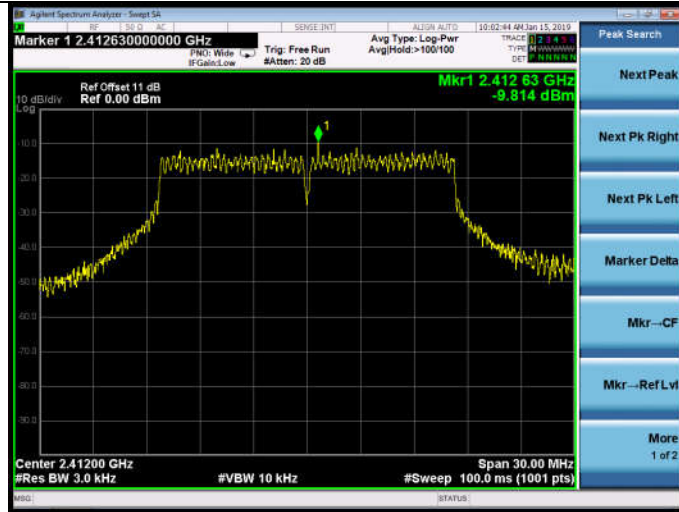


**Test CH11: 2462MHz**



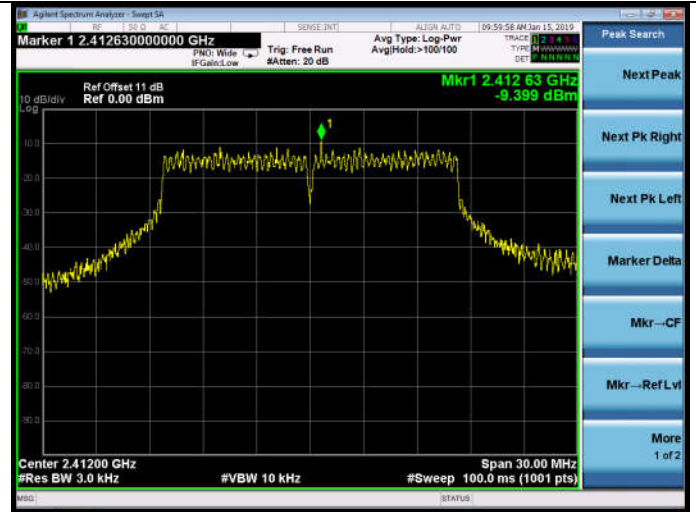
**ANT0:**

Test Mode: IEEE 802.11g  
Test CH1: 2412MHz

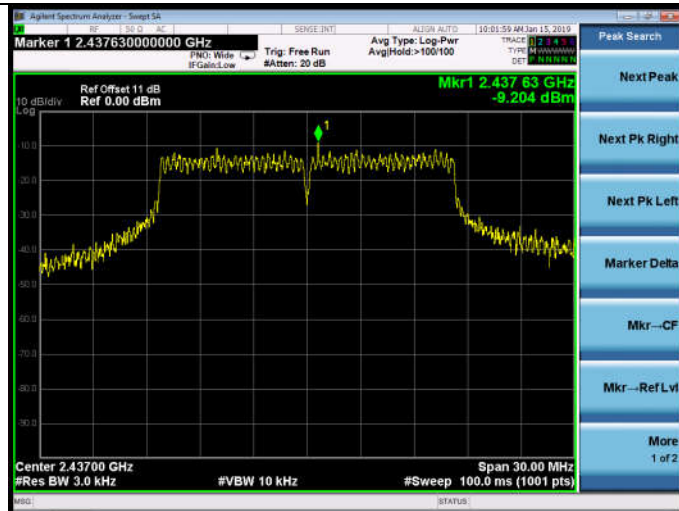


**ANT1:**

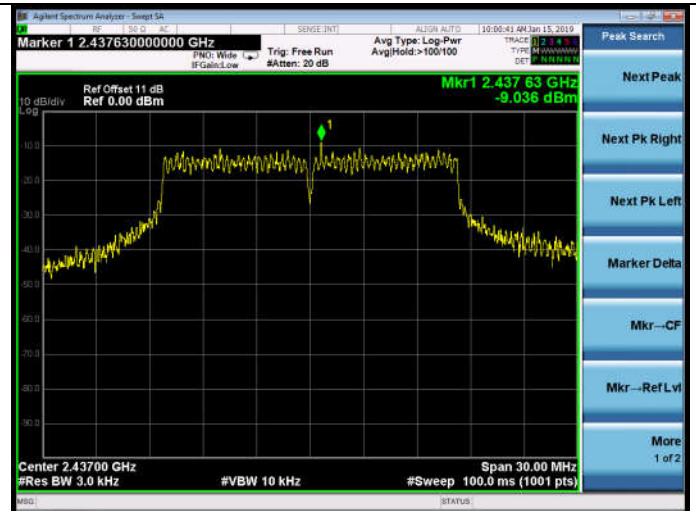
Test Mode: IEEE 802.11g  
Test CH1: 2412MHz



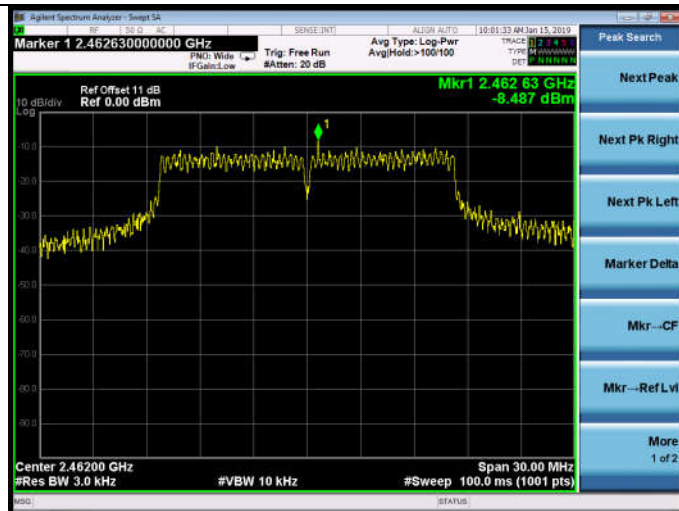
**Test CH6: 2437MHz**



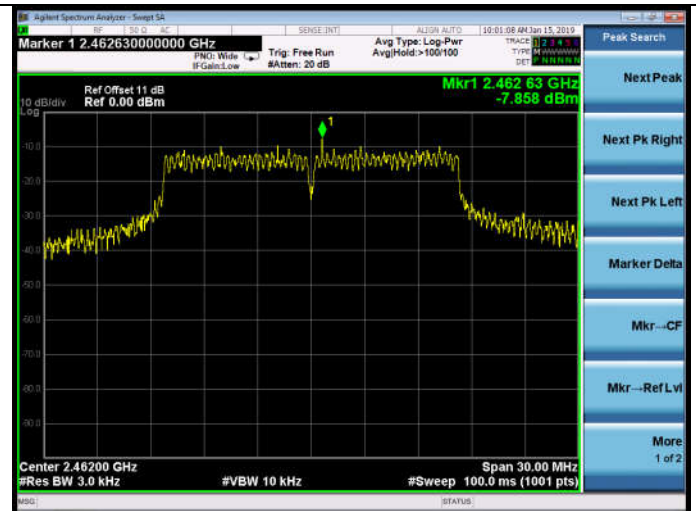
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**



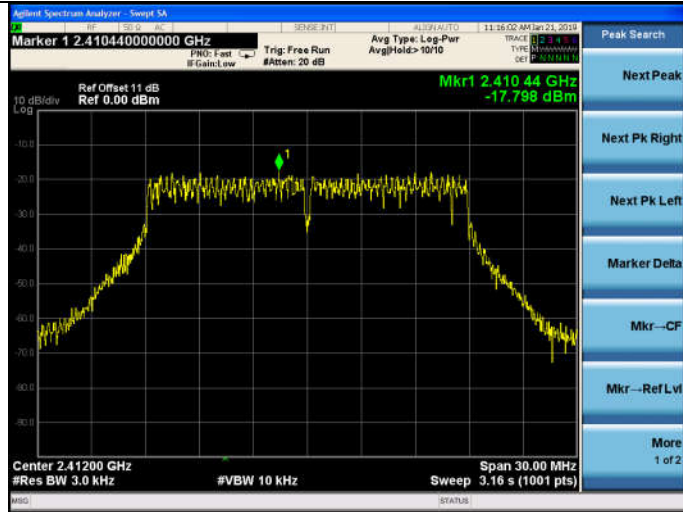
**Test CH11: 2462MHz**





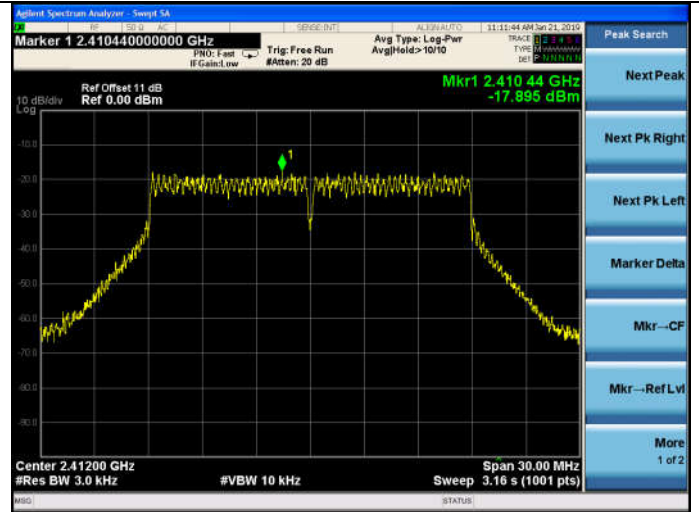
**ANT0:**

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

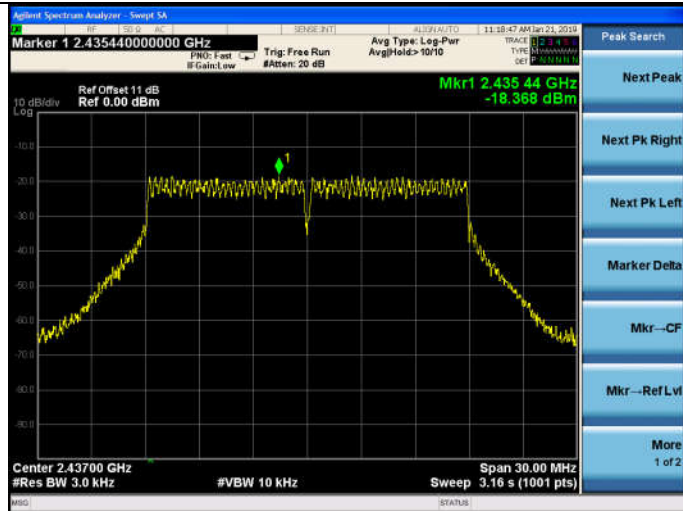


**ANT1:**

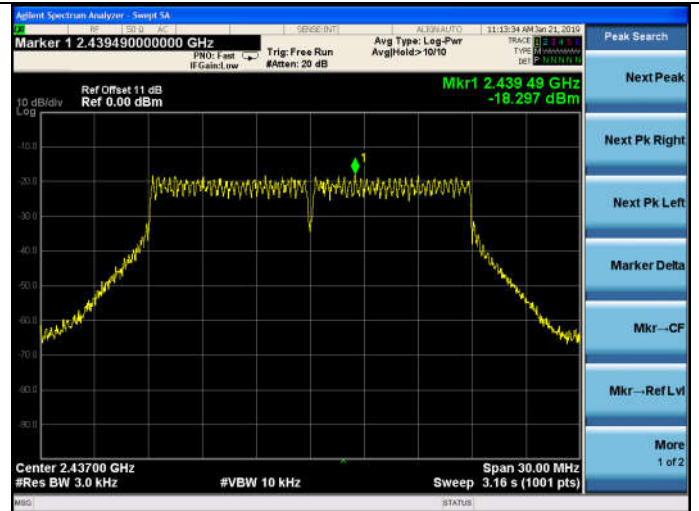
Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz



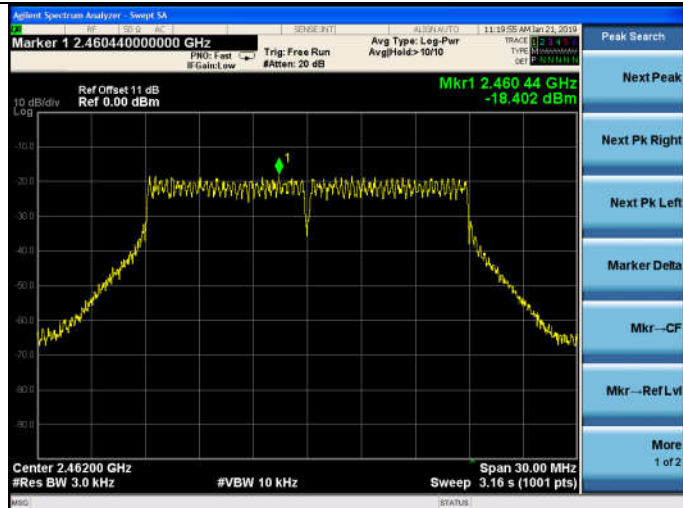
**Test CH6: 2437MHz**



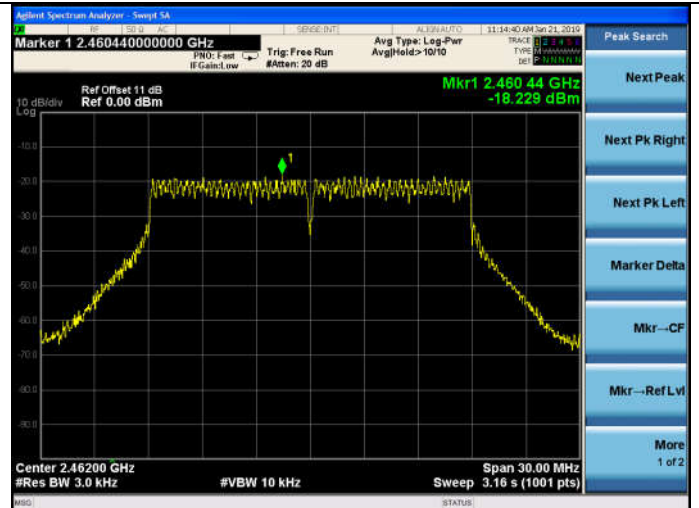
**Test CH6: 2437MHz**



**Test CH11: 2462MHz**

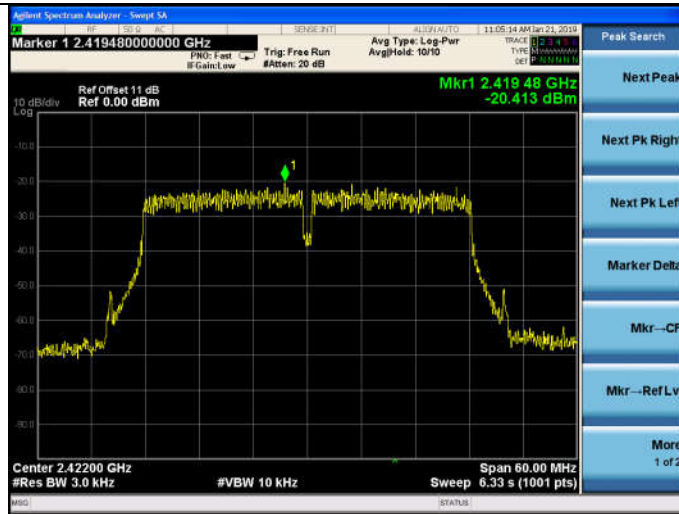


**Test CH11: 2462MHz**



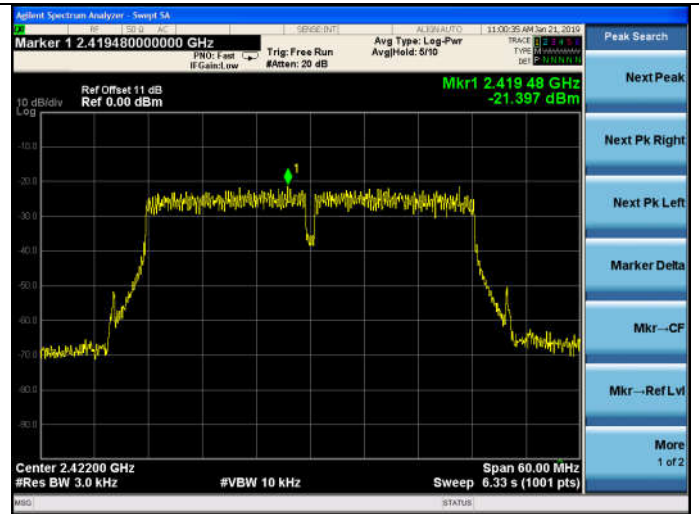
### ANT0:

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

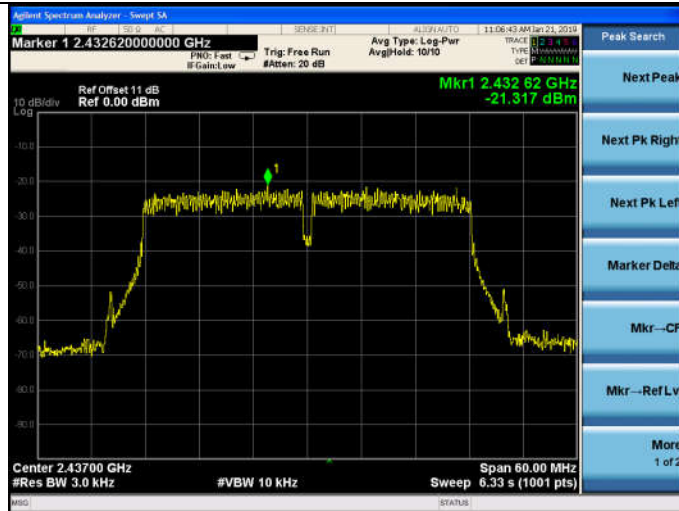


### ANT1:

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



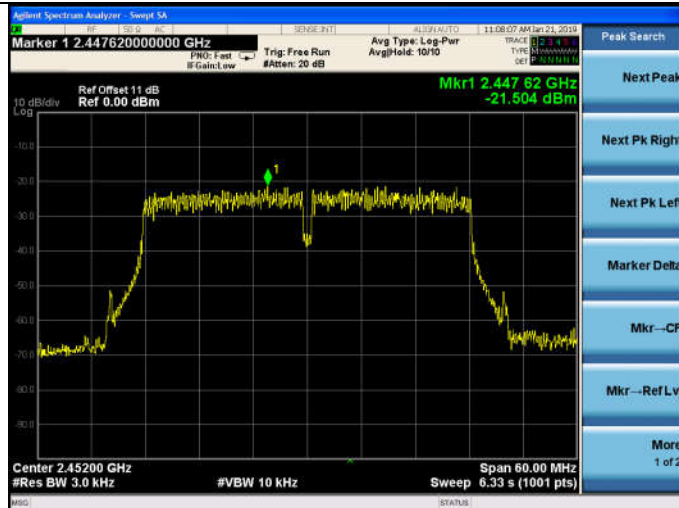
### Test CH6: 2437MHz



### Test CH6: 2437MHz



### Test CH9: 2452MHz



### Test CH9: 2452MHz



## **10. ANTENNA REQUIREMENT**

### **10.1. Standard Applicable**

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), 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.

### **10.2. Antenna Connected Construction**

The antennas used for this product are antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 5dBi.

## 11.DEVIATION TO TEST SPECIFICATIONS

[ NONE ]