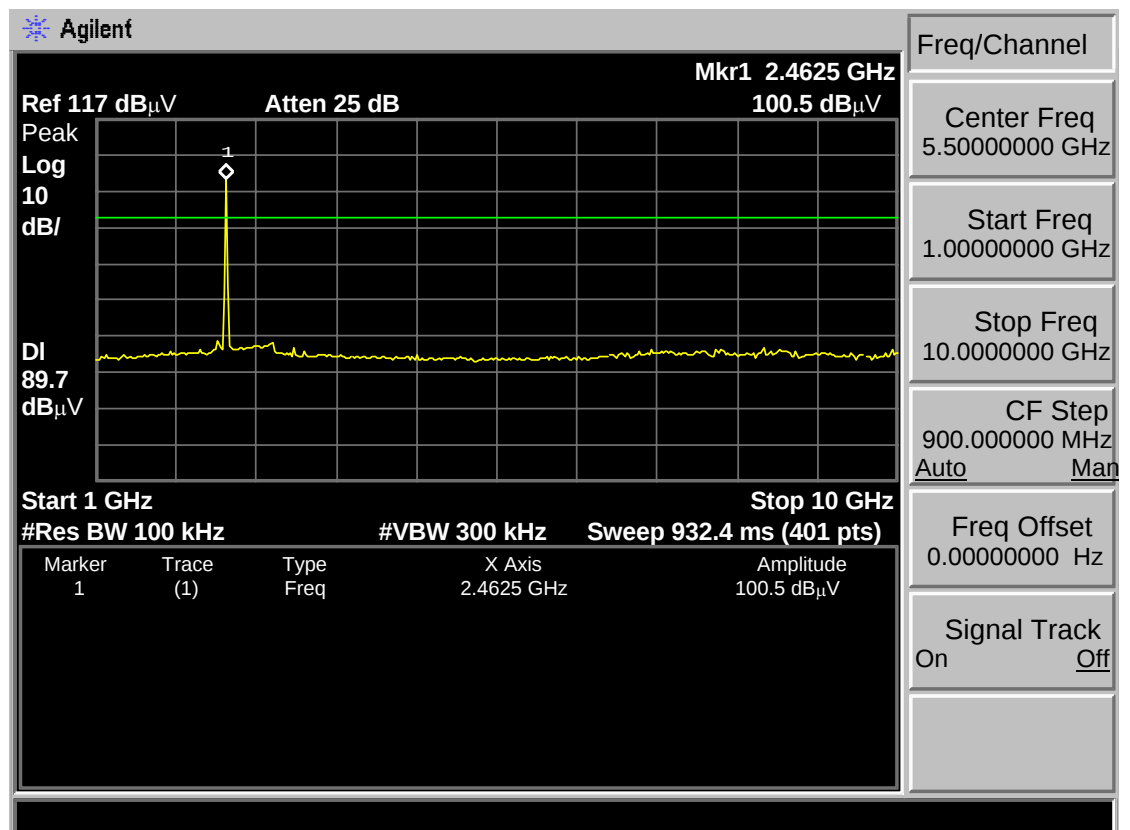
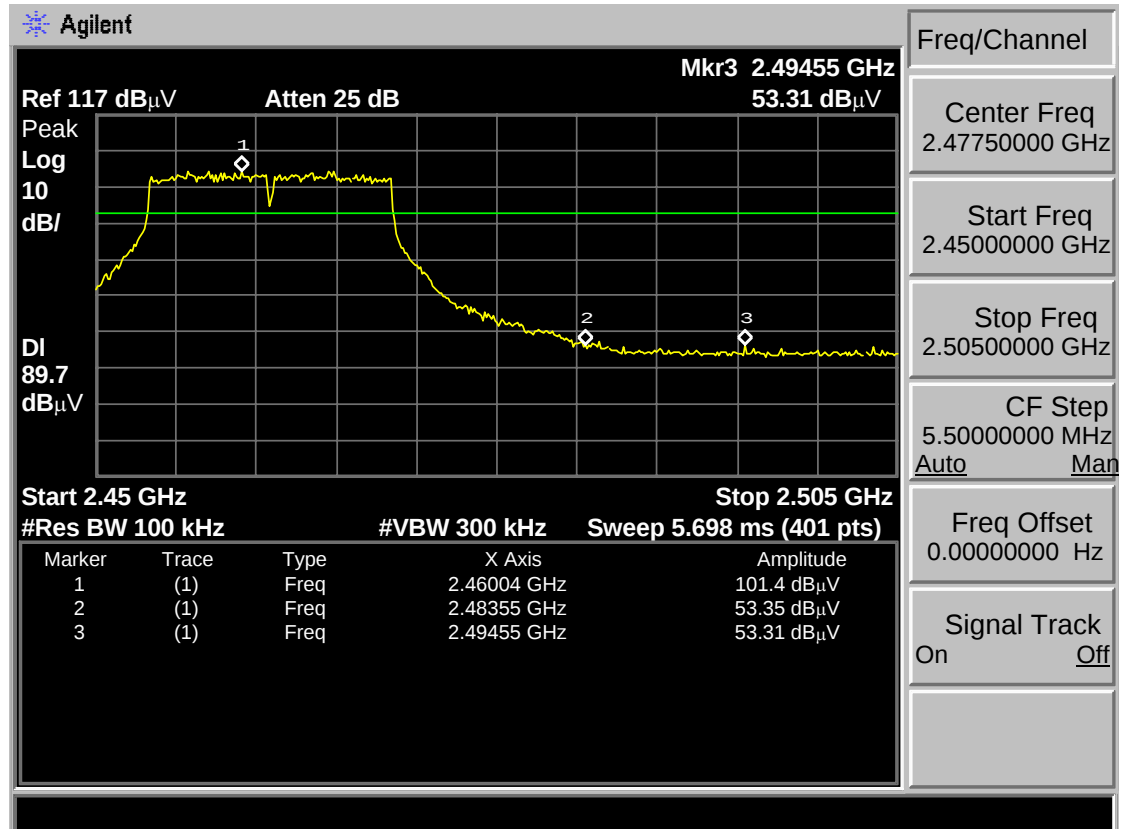
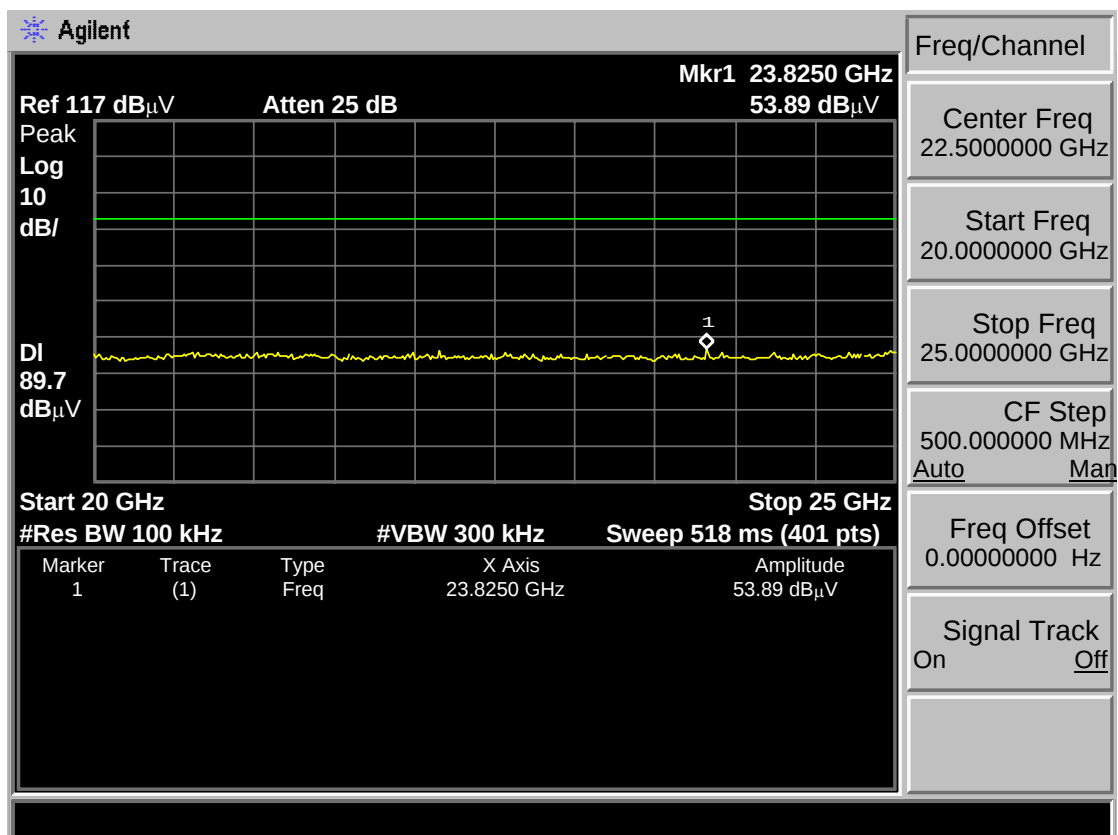
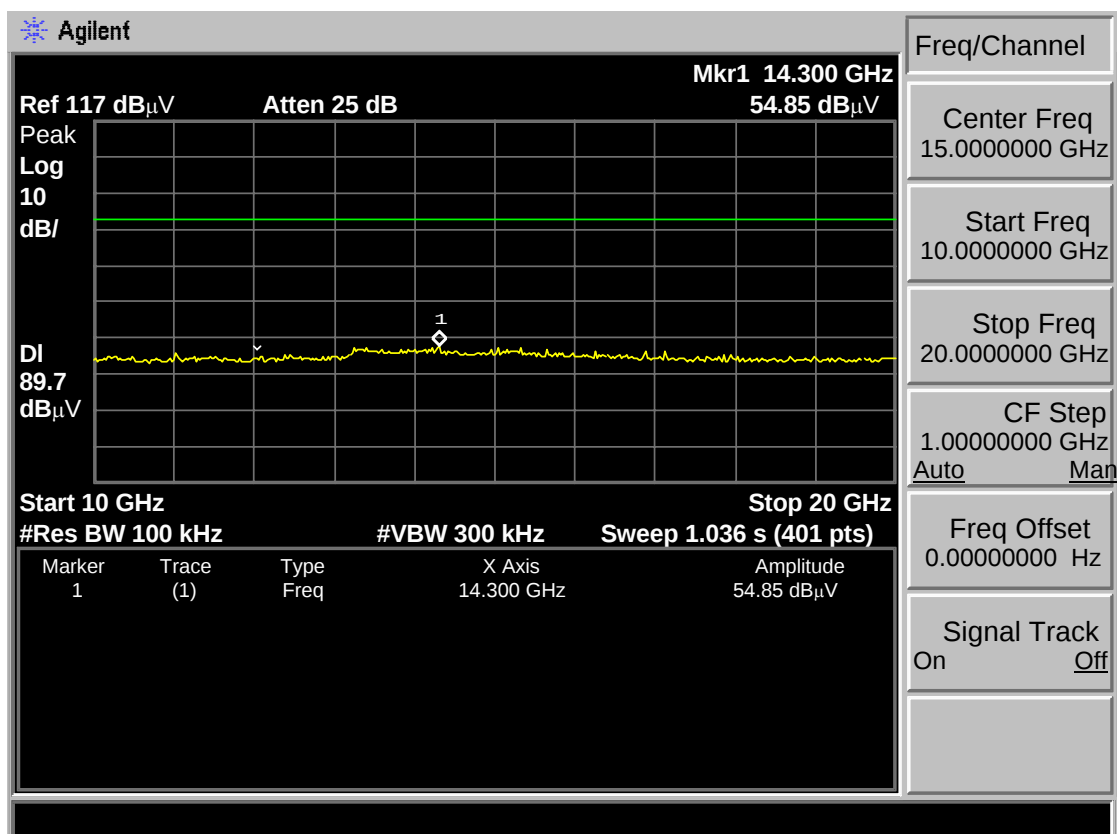
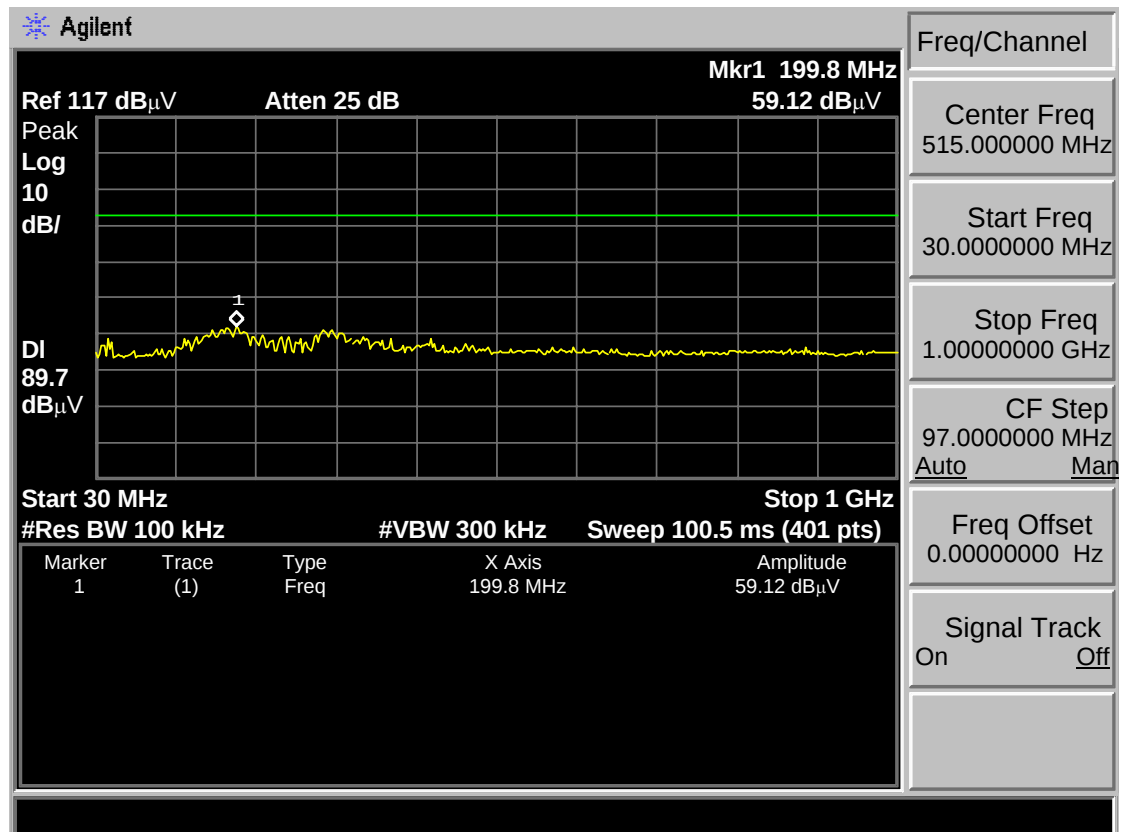


CH11

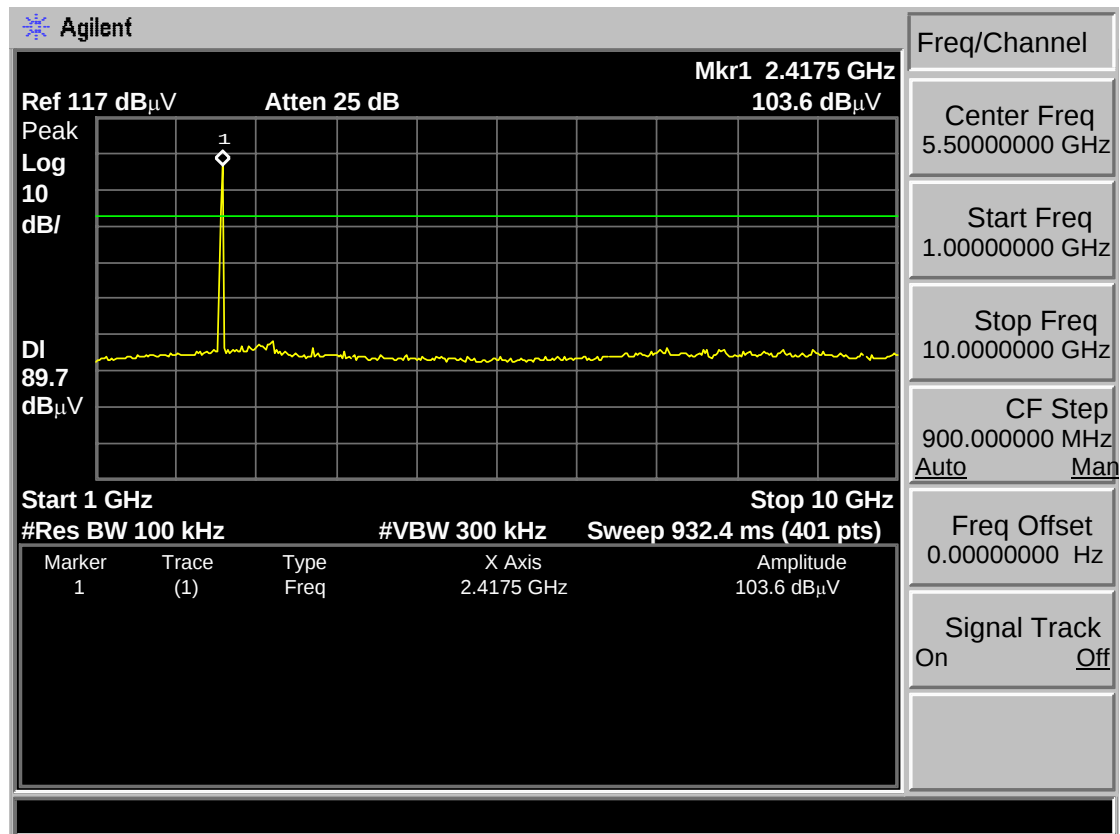
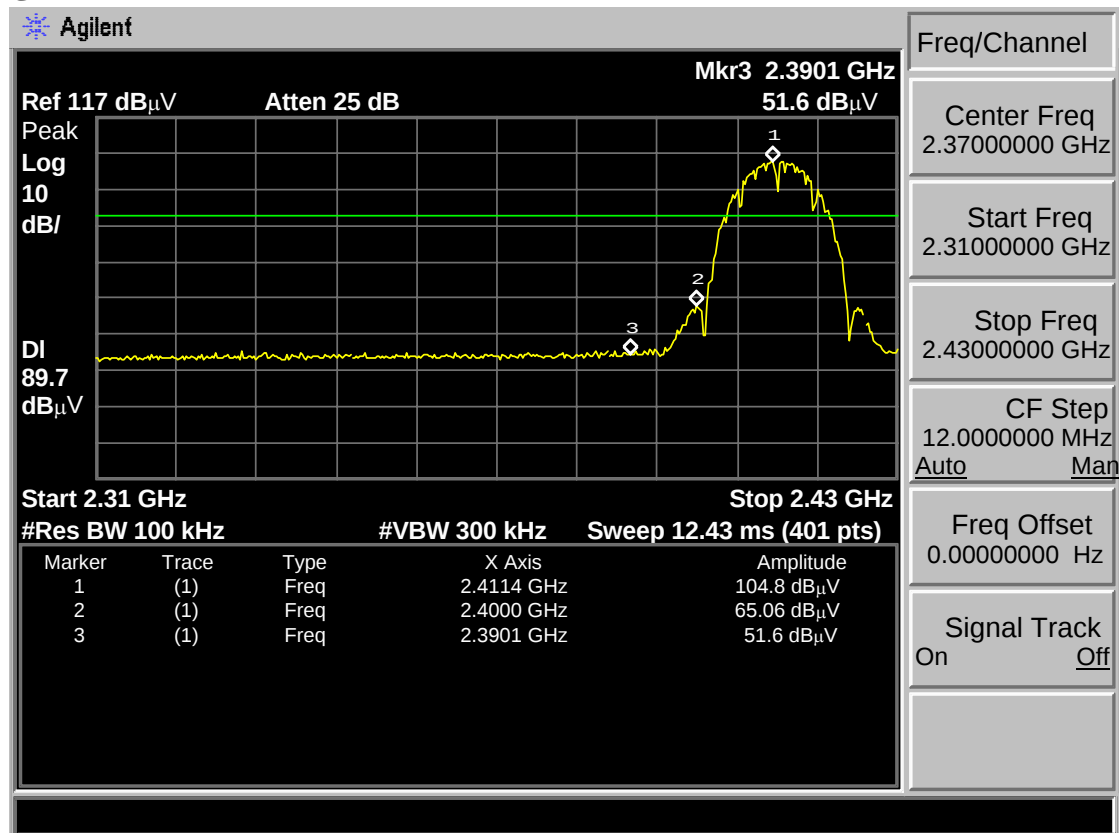


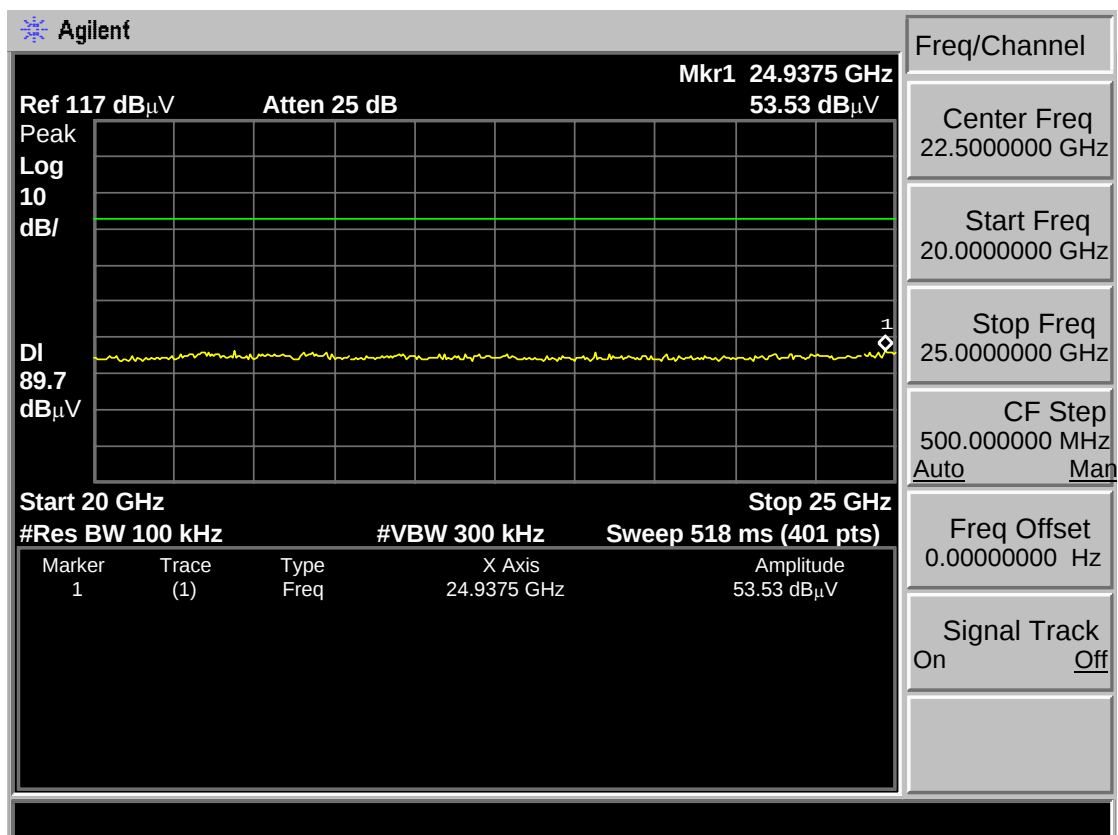
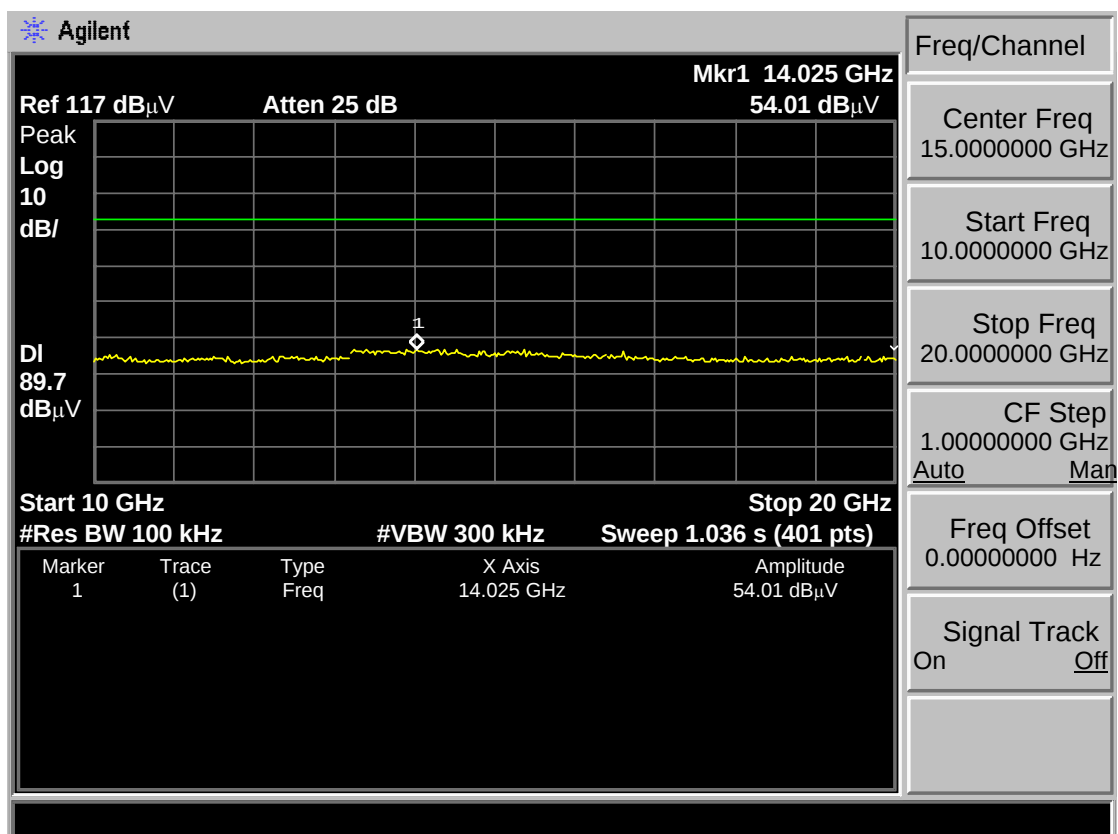


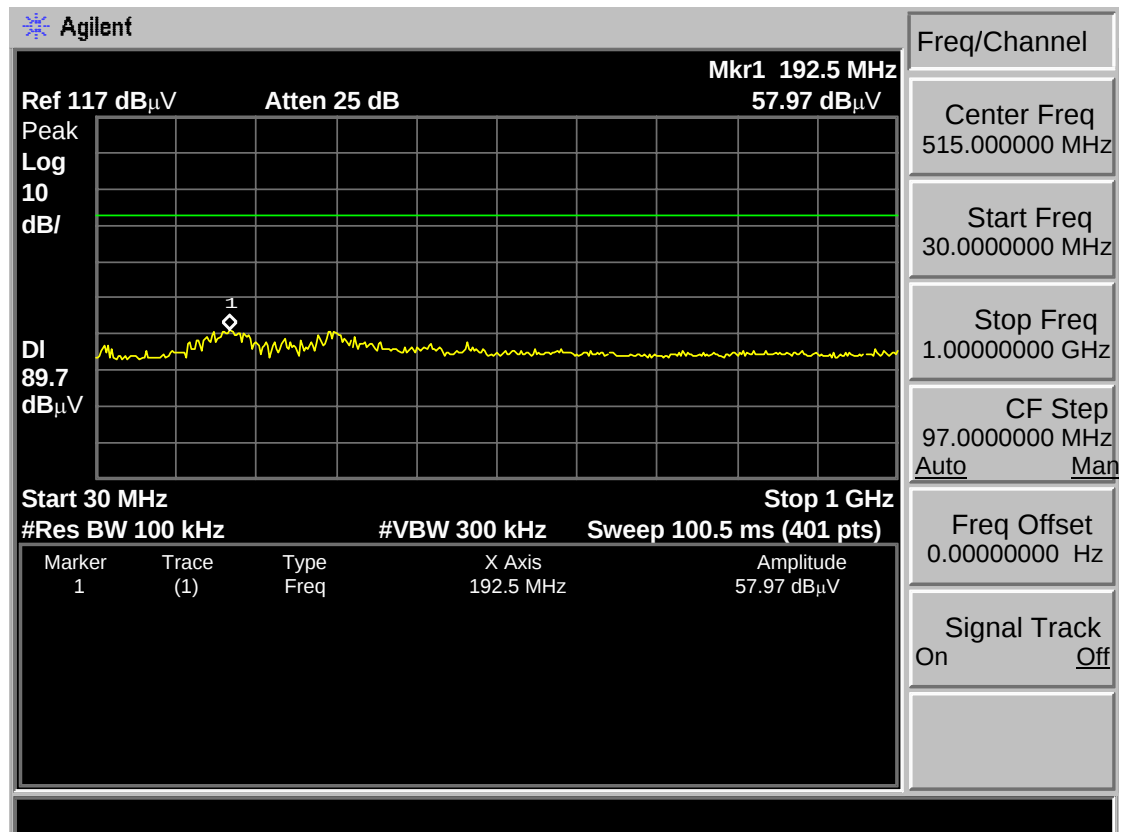


Test Mode: IEEE 802. 11b TX (Ant 2)

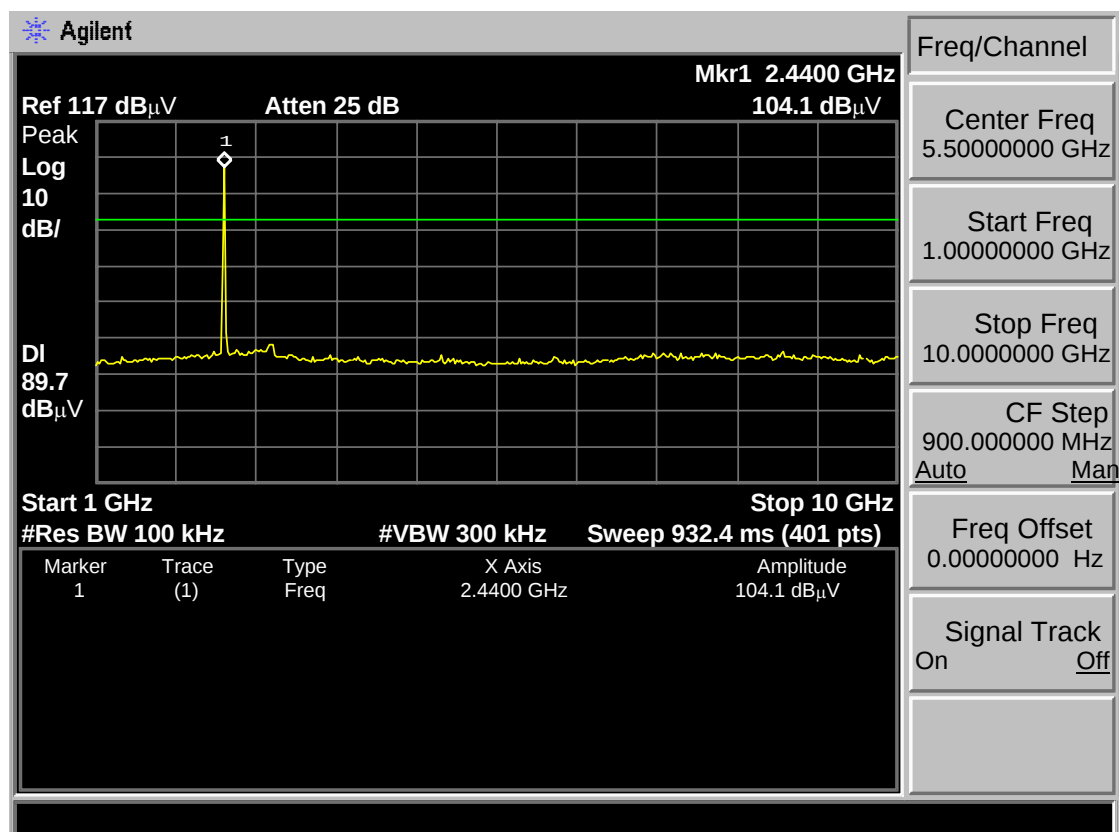
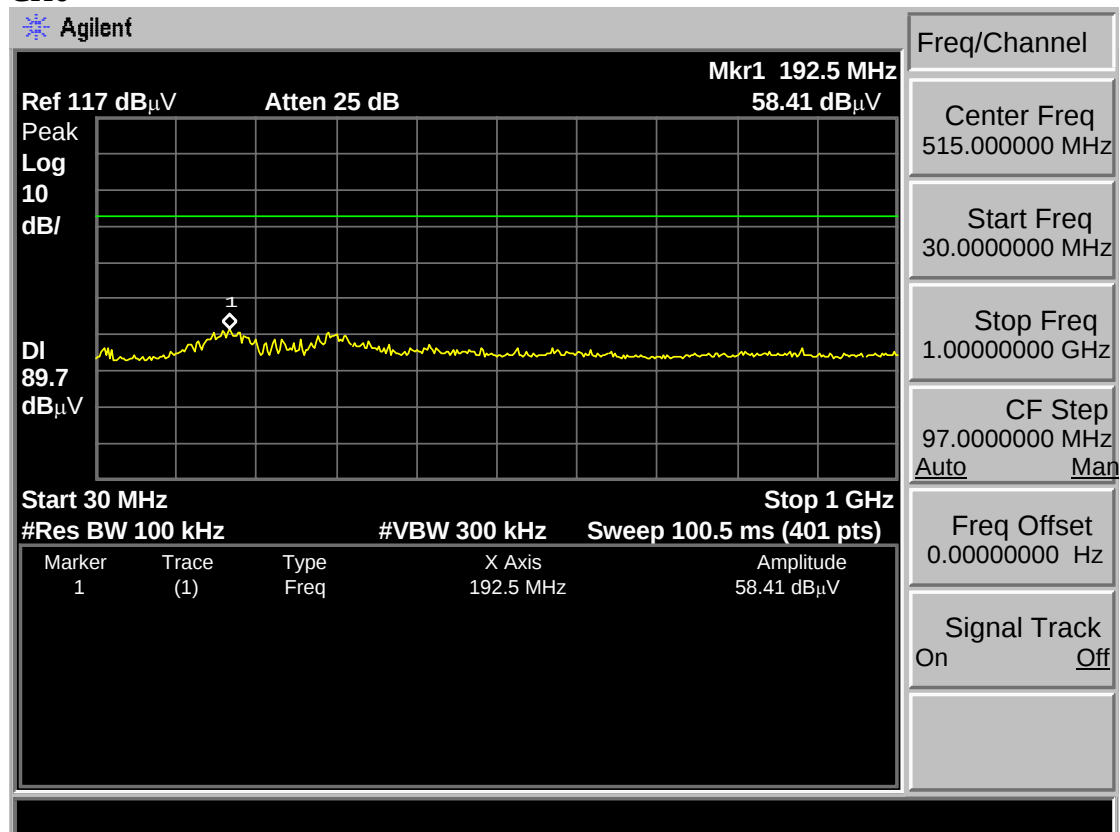
CH1

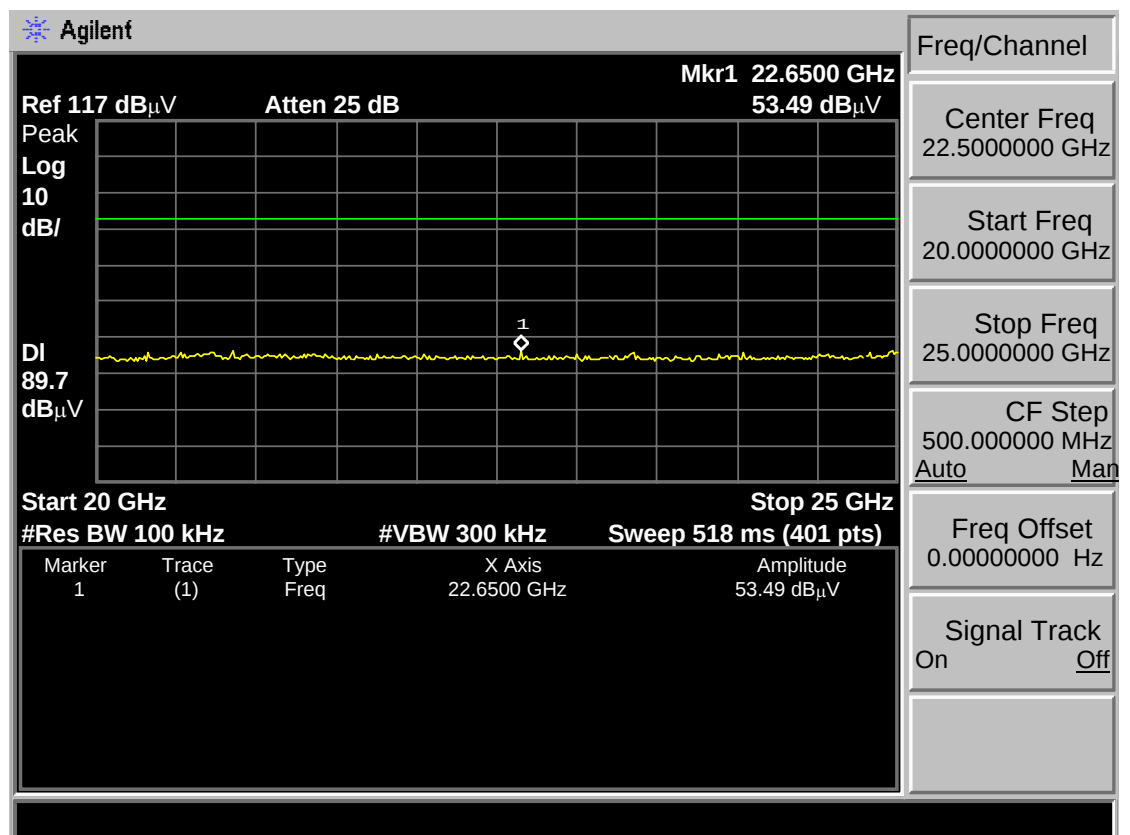
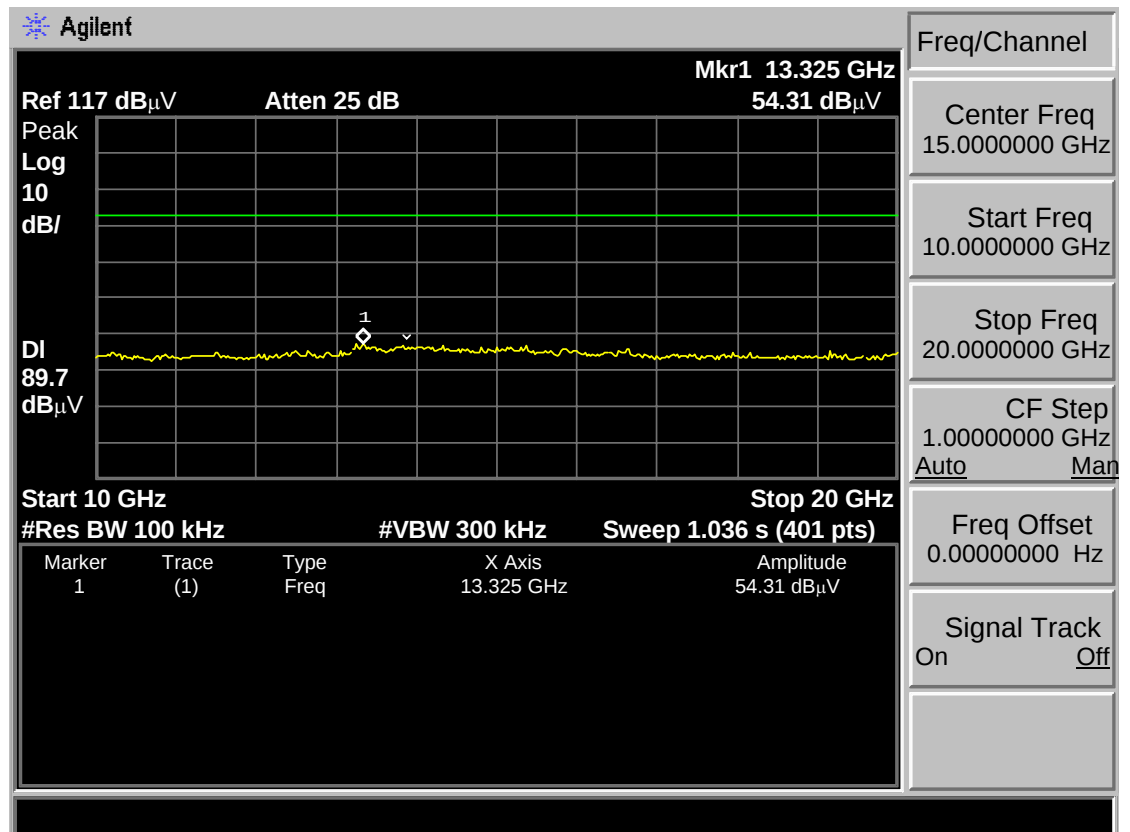




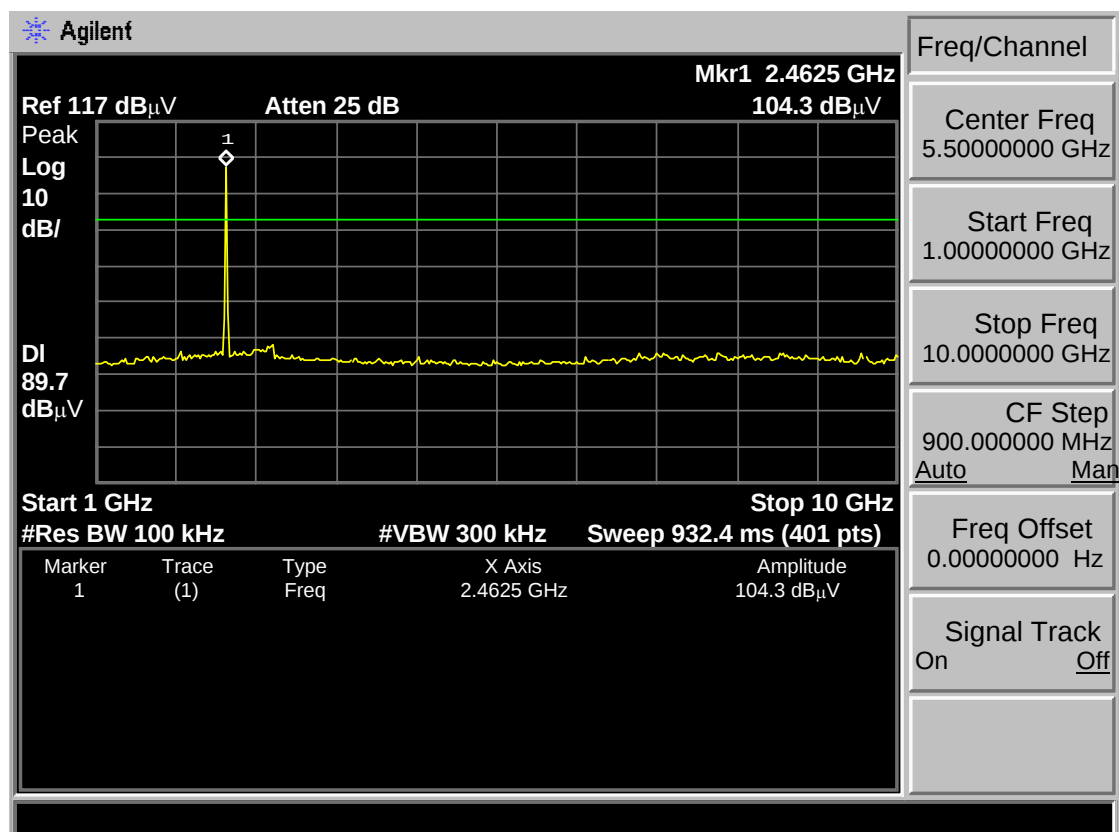
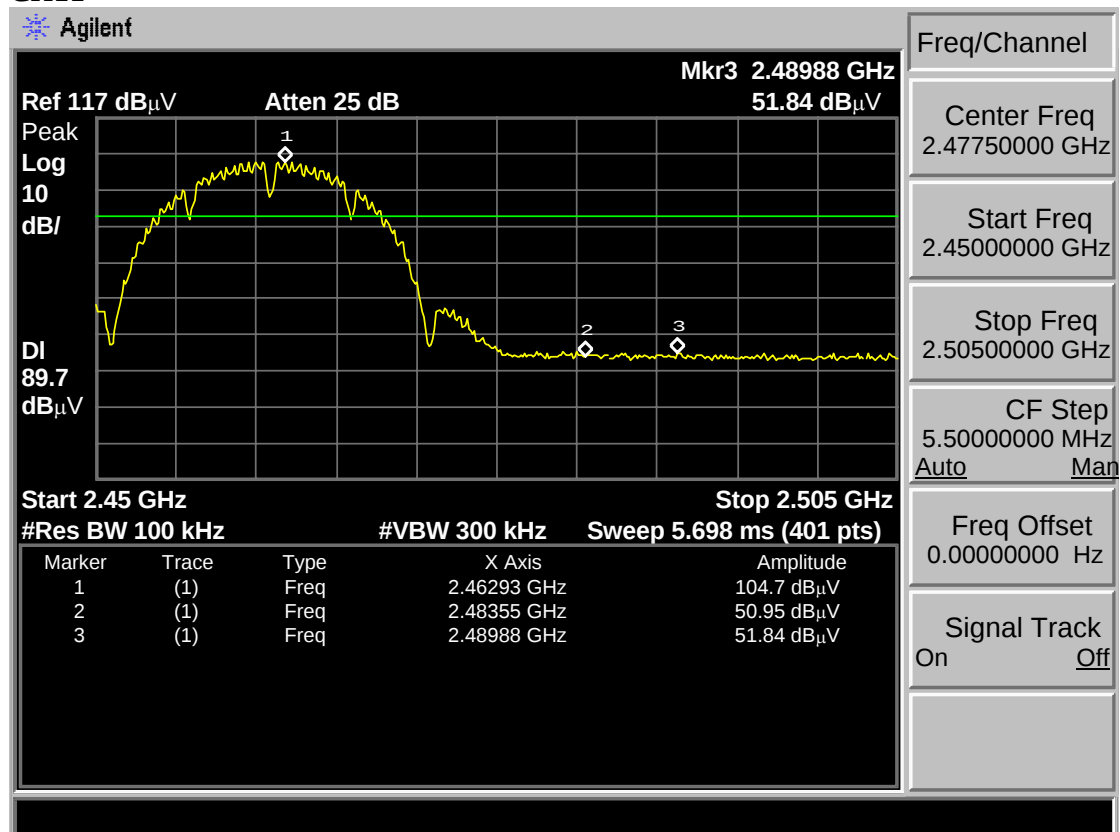


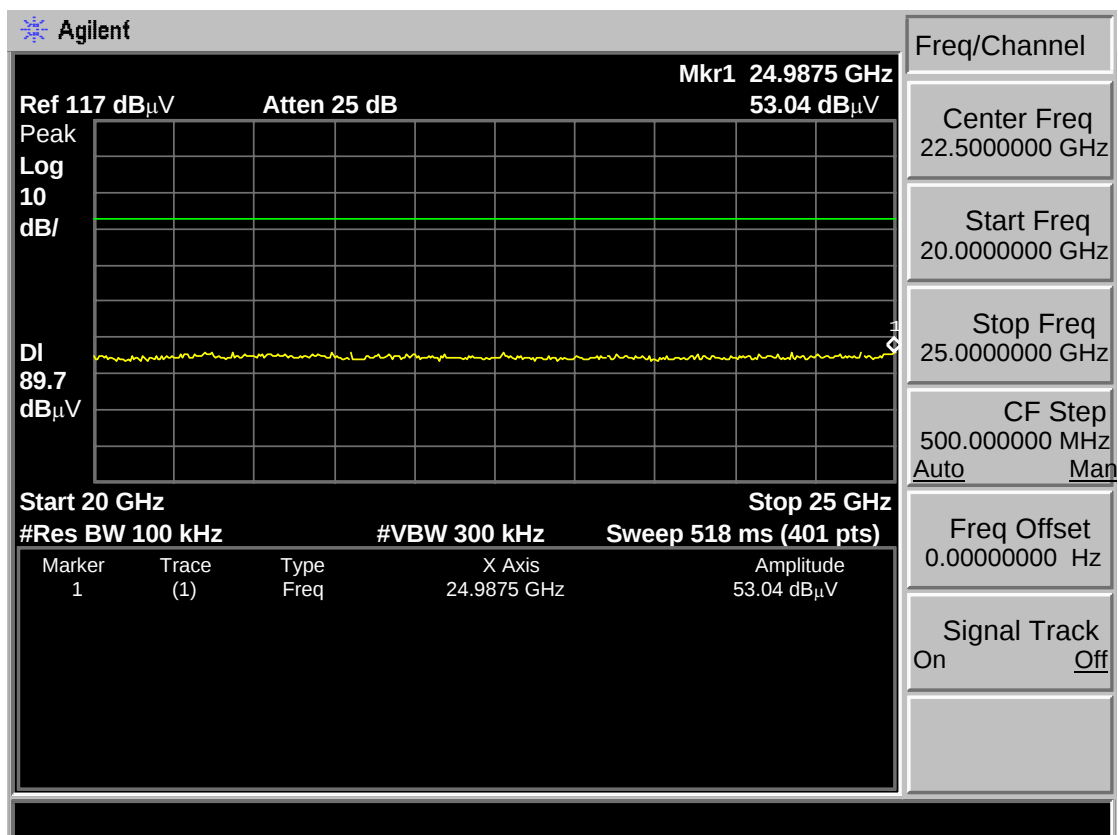
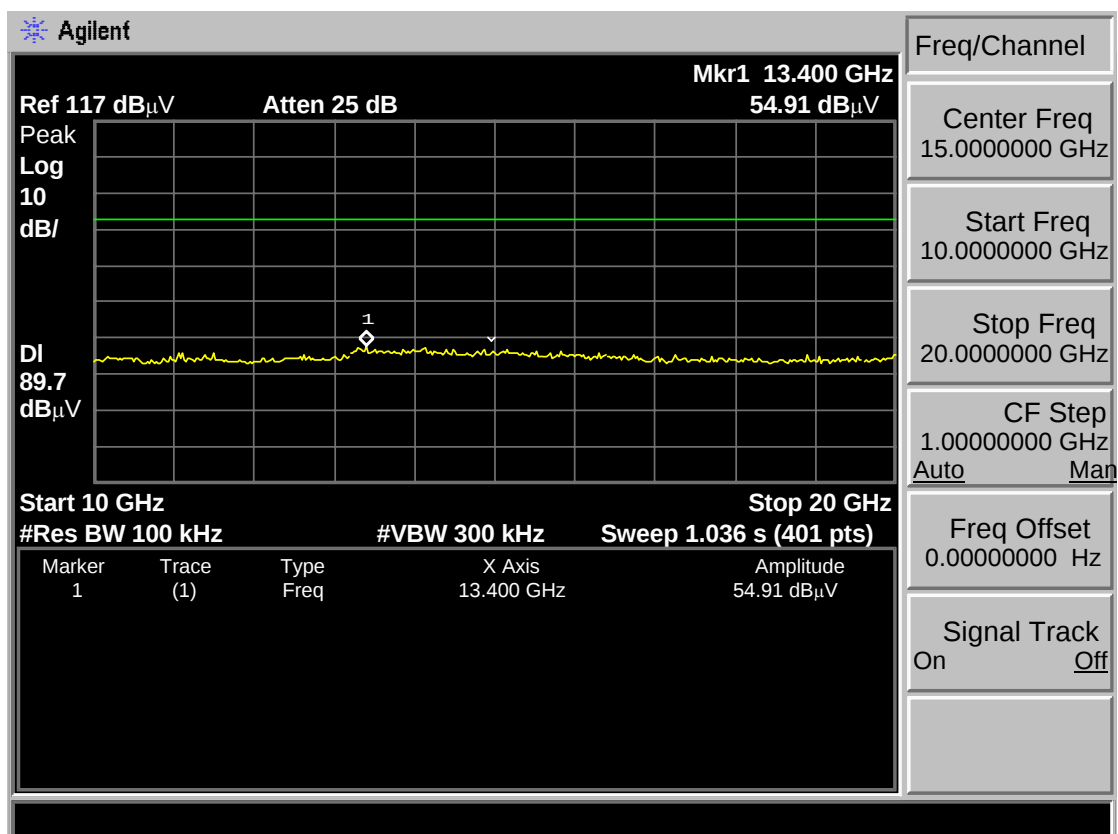
CH6

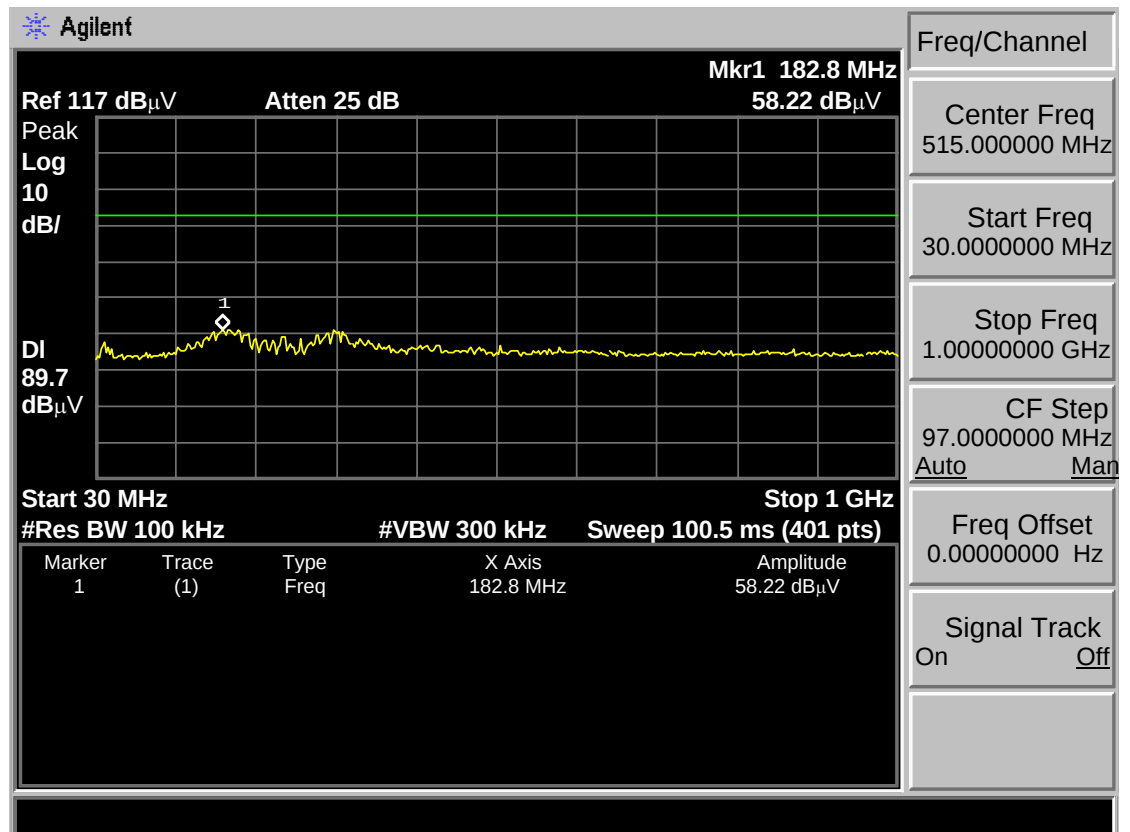




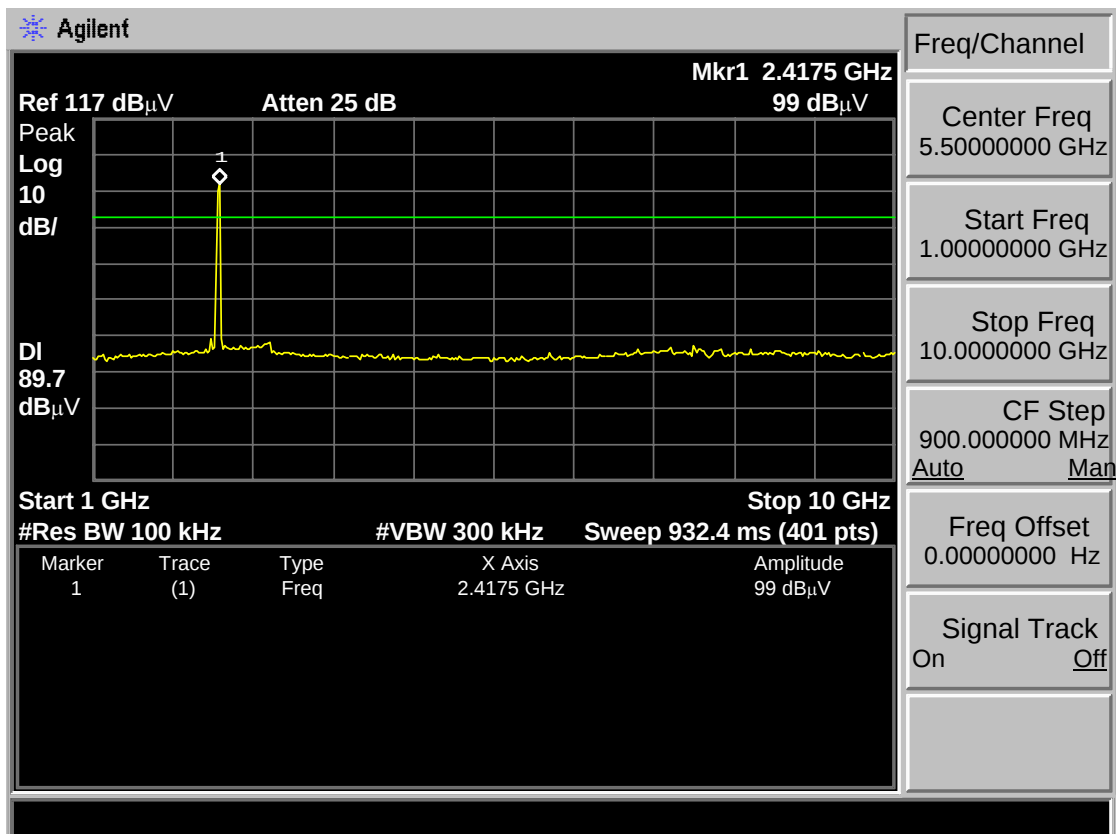
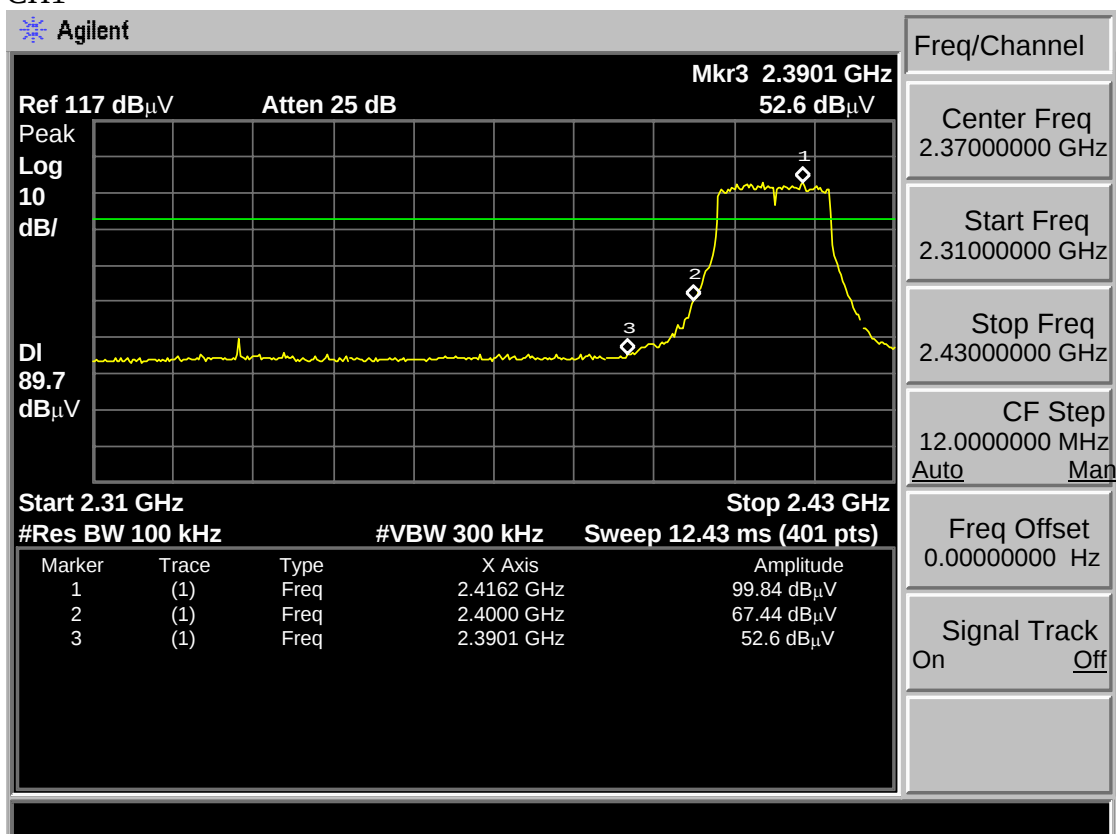
CH11

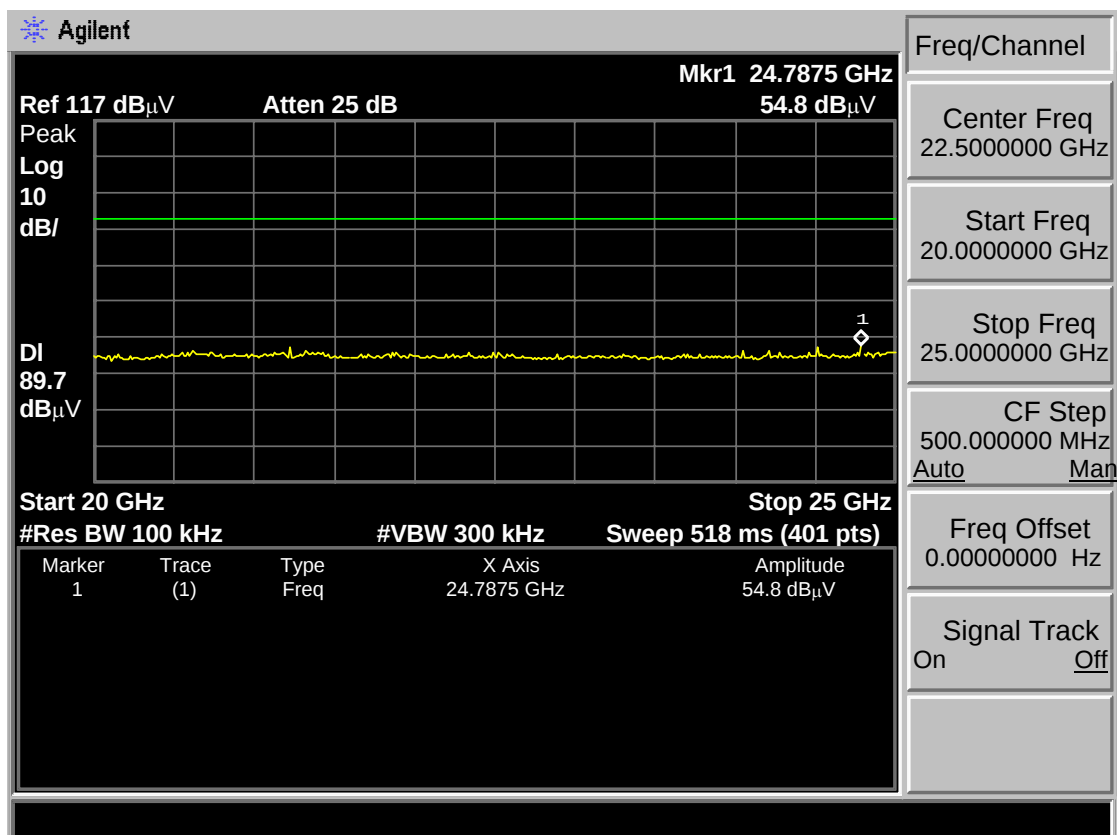
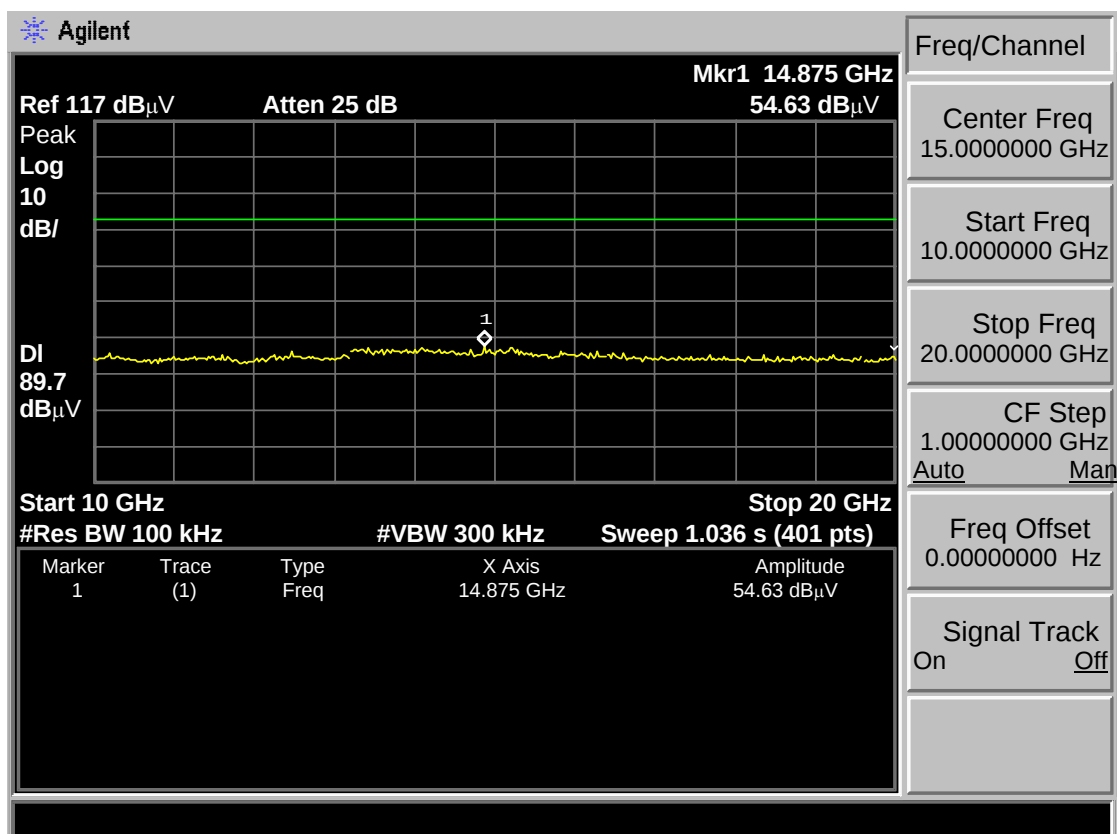


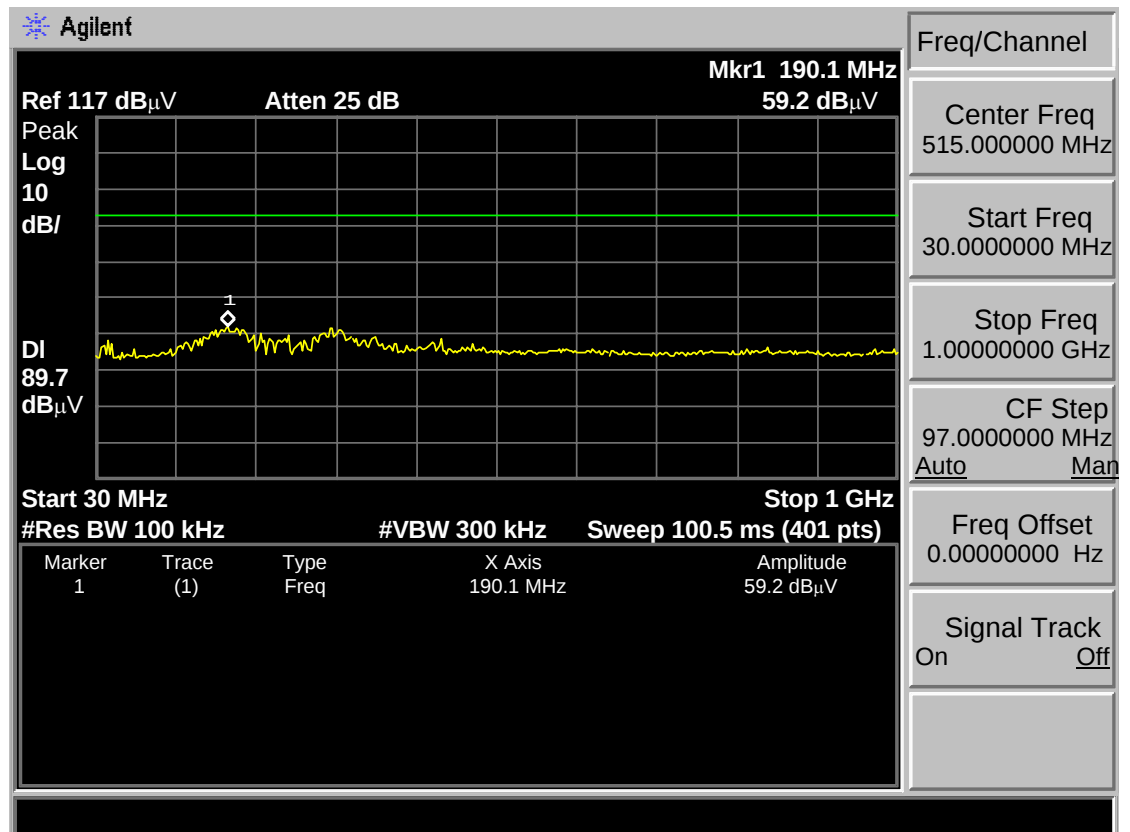




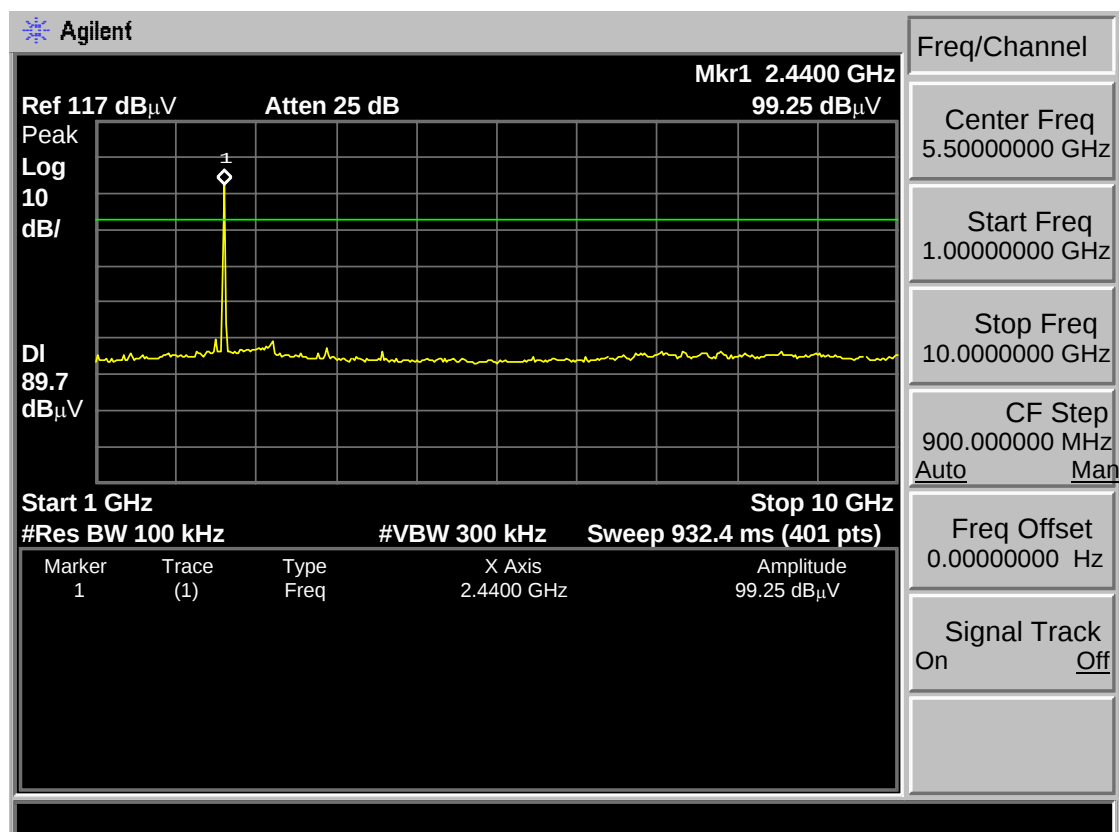
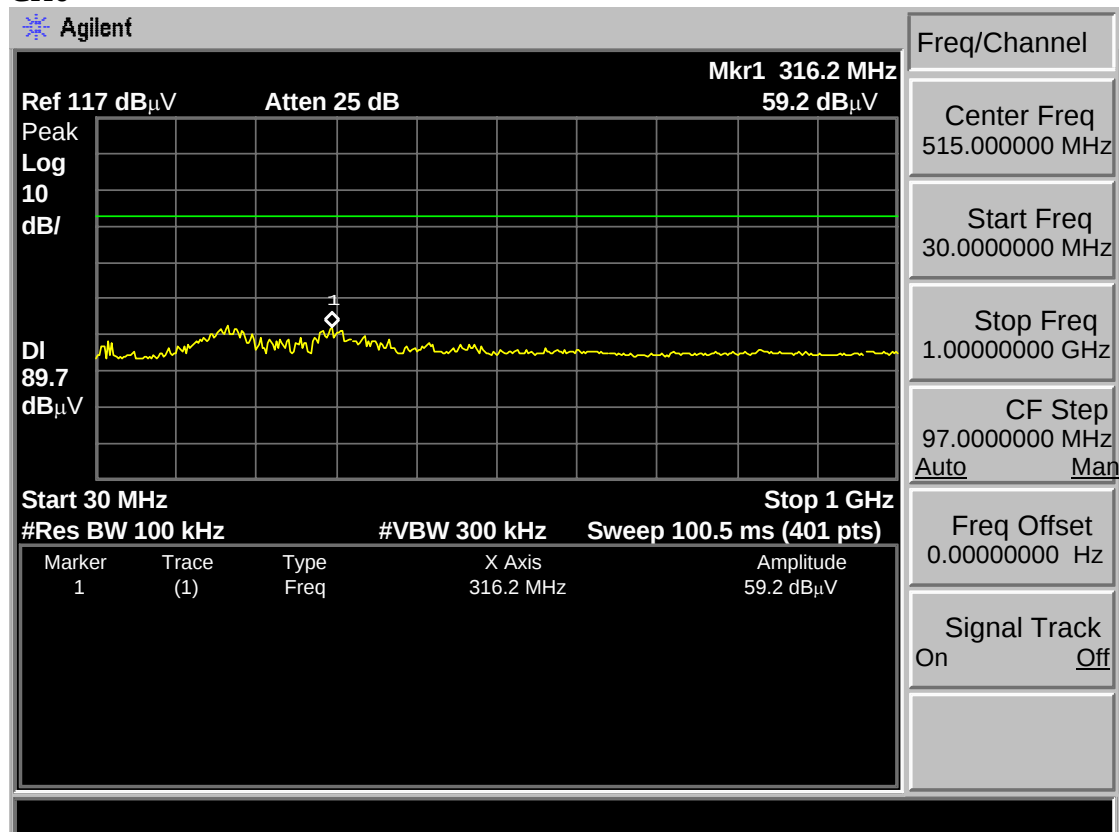
Test Mode: IEEE 802. 11g TX (Ant 2)
CH1

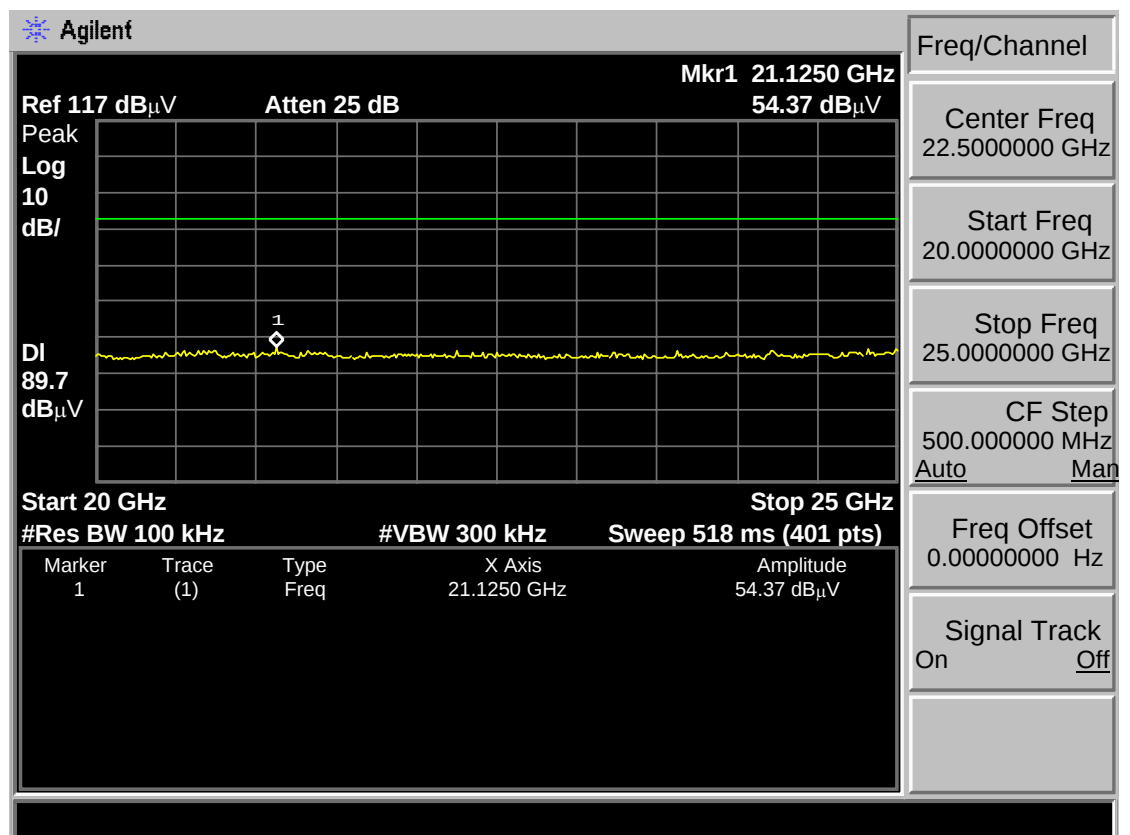
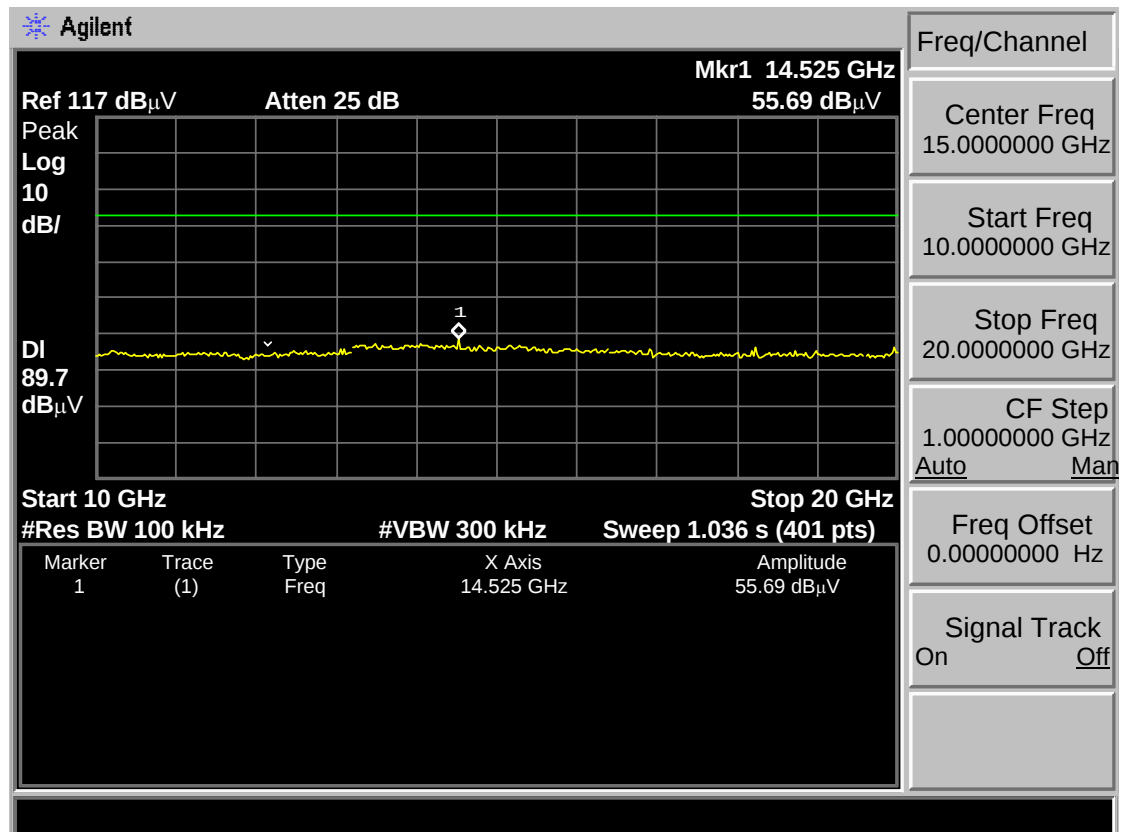




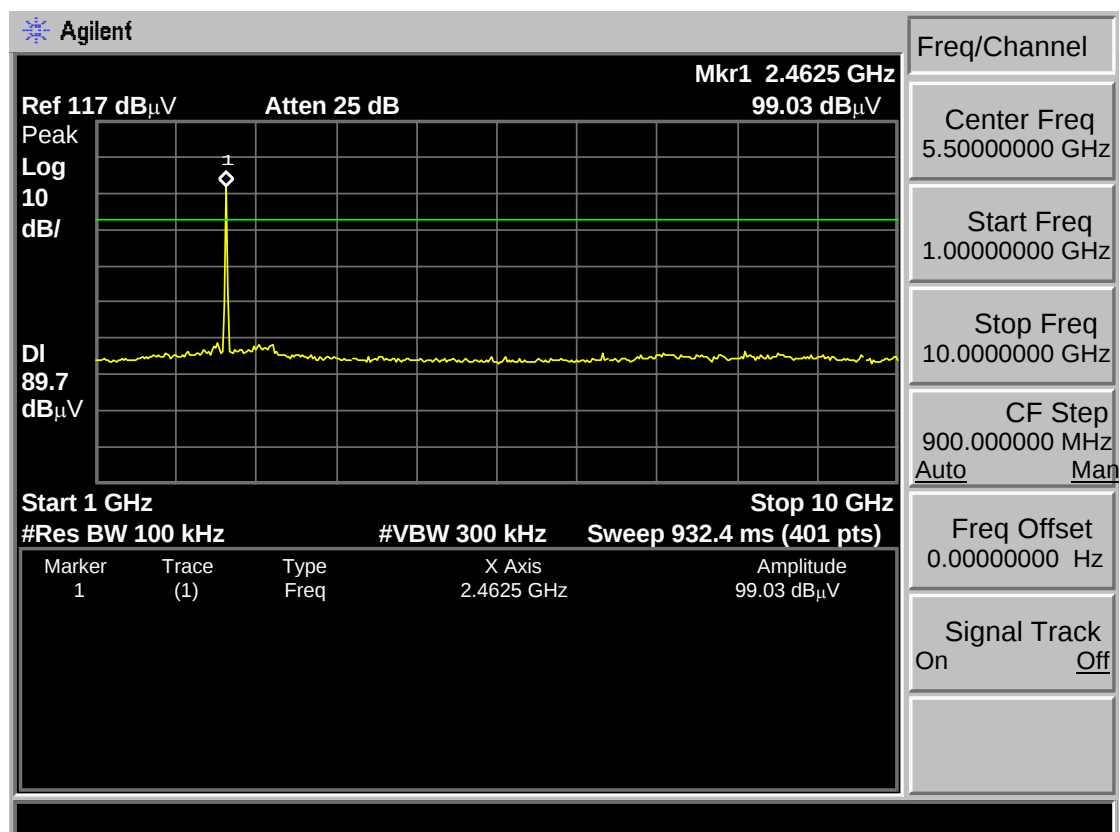
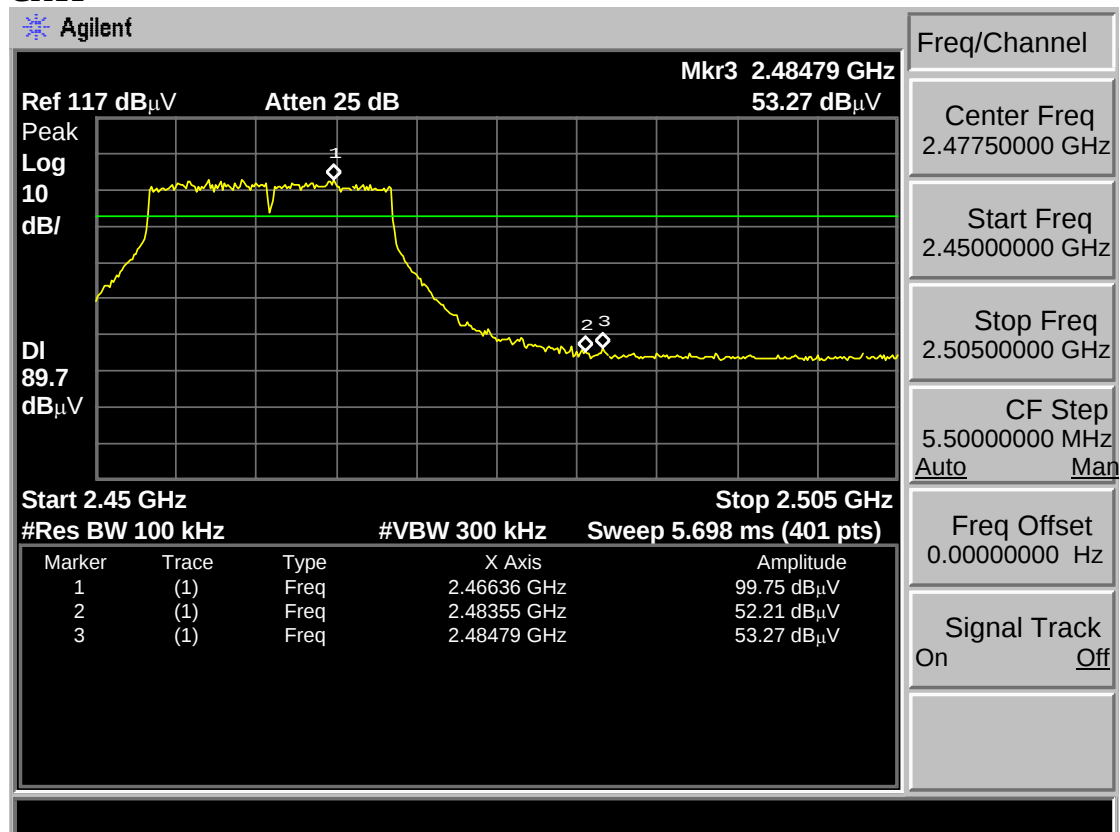


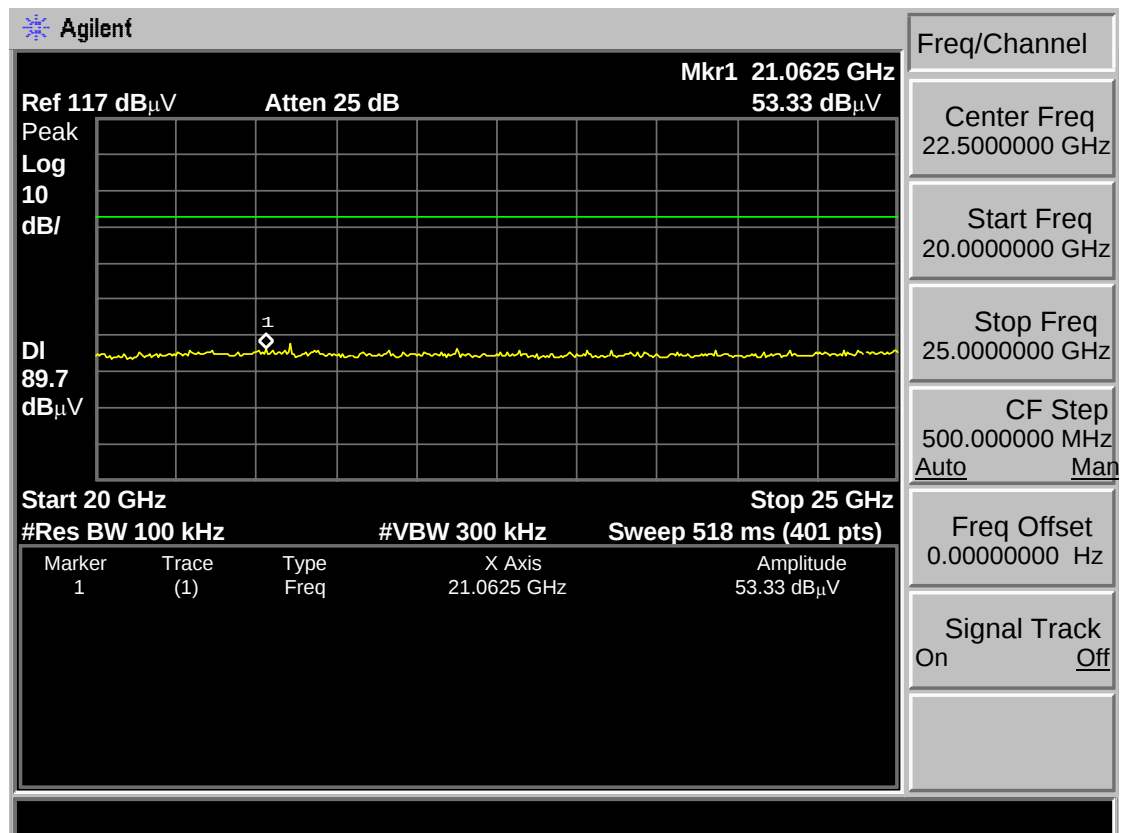
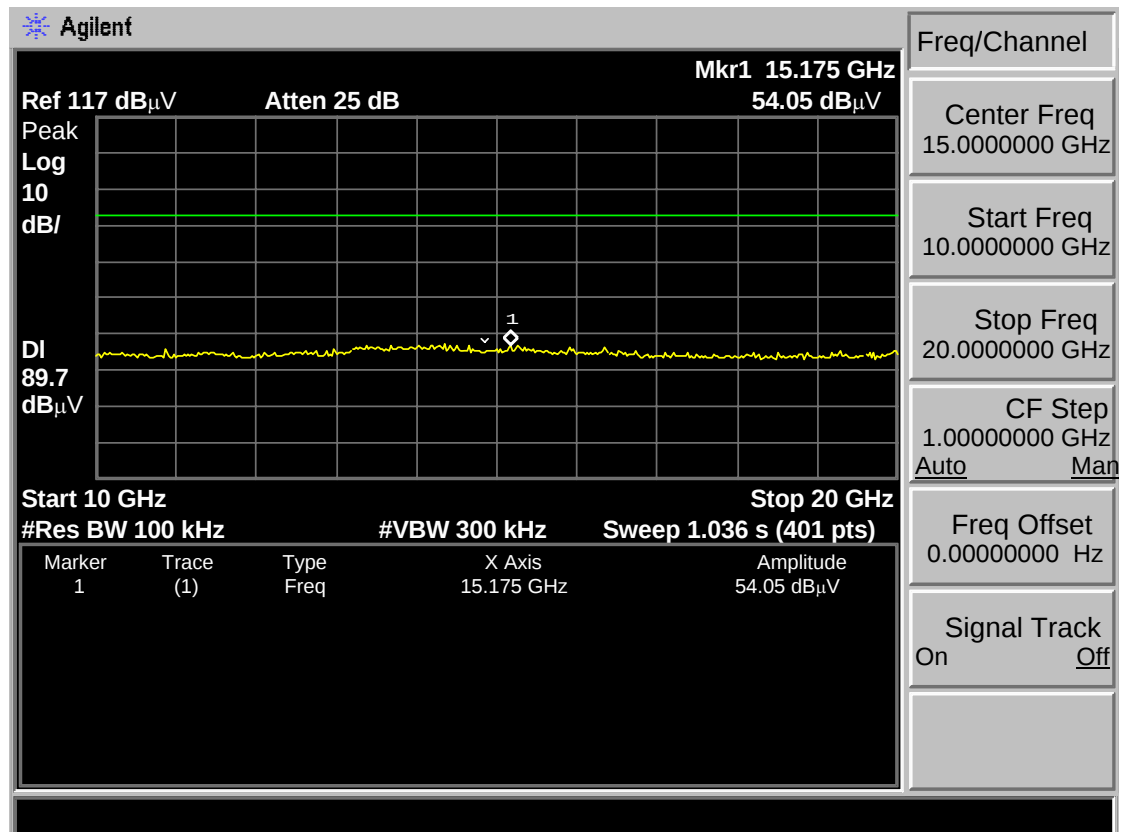
CH6

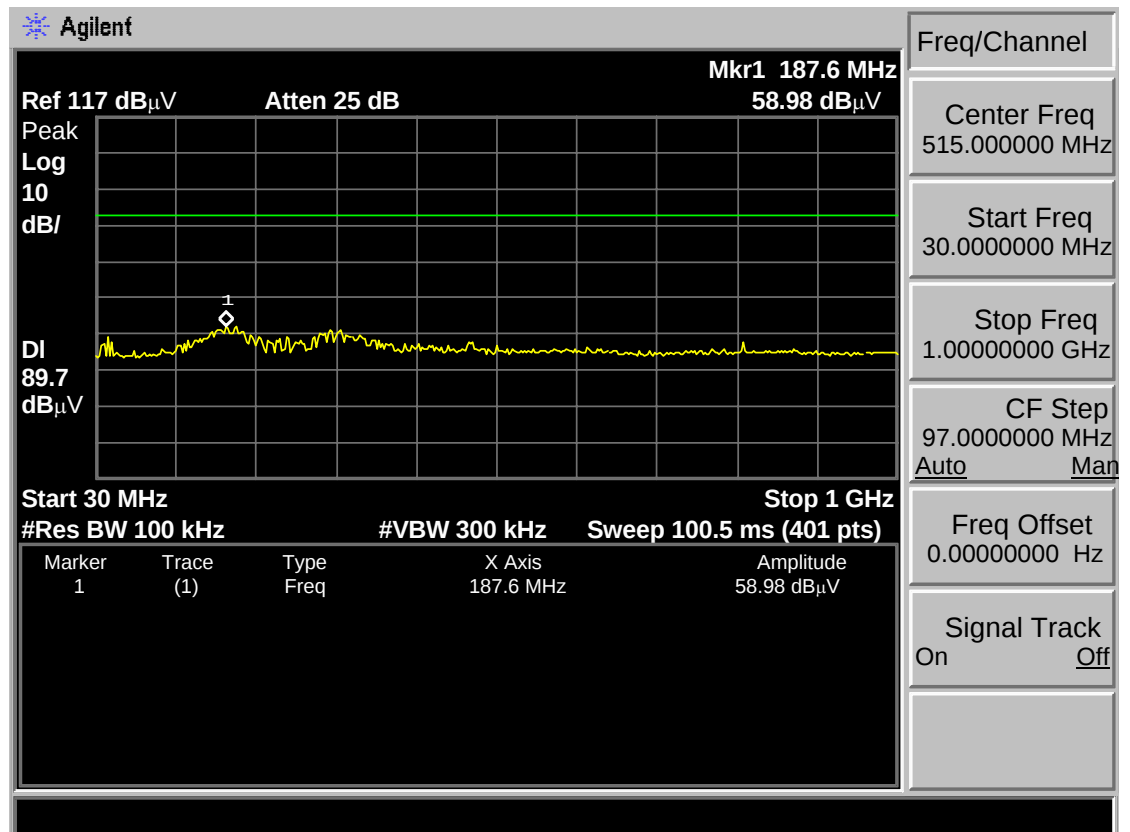




CH11







6. BAND EDGE COMPLIANCE TEST

6.1. 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

6.2. Test Procedure

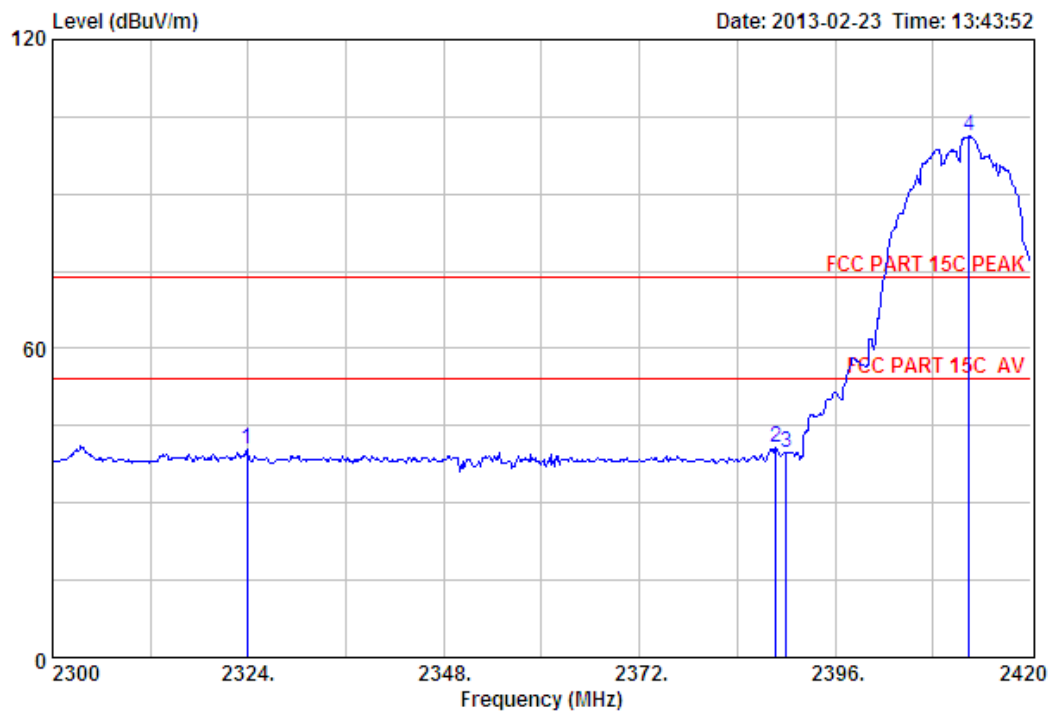
1. The EUT is placed on a turntable, which is 0.8m above the ground plane and worked at highest radiated power.
2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.
3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out 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

6.3. Test Result

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

- Note: 1、 For emissions above 1GHz, if peak level comply with average limit, then the average level is deemed to comply with average limit.
- 2、 The frequency 2412MHz 、 2437MHz and 2462 MHz is fundamental frequency which no limit, the limit on plots is automatically generated by the software, it's not fundamental limit, we can't remove it.

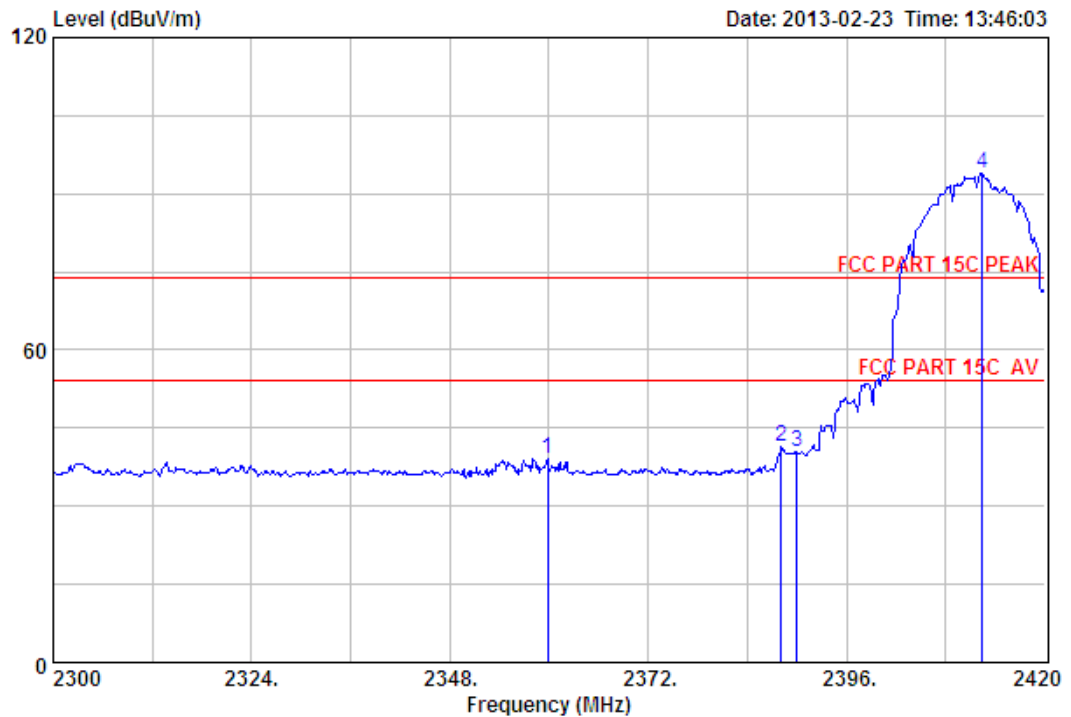
6.4. Test Data



Site no. : 3m Chamber Data no. : 101
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH1 2412TX (ANT 1)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2323.88	27.73	6.54	34.23	40.31	40.35	74.00	33.65	Peak
2	2388.68	27.64	6.62	34.19	40.60	40.67	74.00	33.33	Peak
3	2390.00	27.64	6.62	34.19	39.60	39.67	74.00	34.33	Peak
4	2412.44	27.60	6.64	34.15	101.22	101.31	74.00	-27.31	Peak

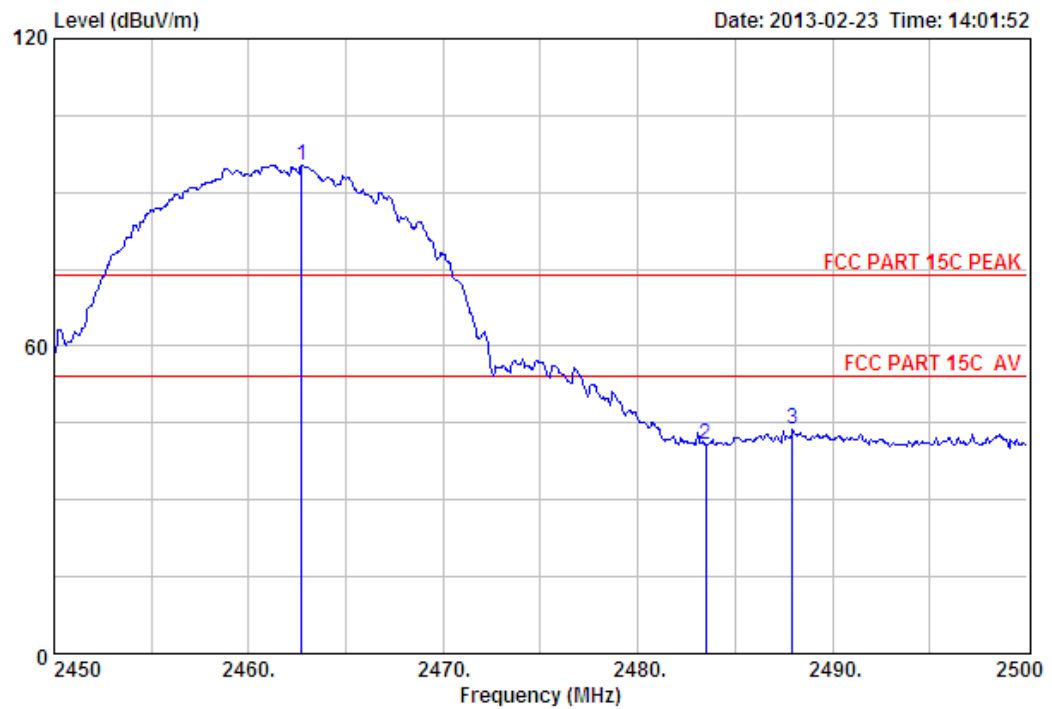
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 102
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH1 2412TX(ANT 1)

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2359.88	27.67	6.58	34.20	39.02	39.07	74.00	34.93	Peak
2	2388.08	27.64	6.62	34.19	41.25	41.32	74.00	32.68	Peak
3	2390.00	27.64	6.62	34.19	40.30	40.37	74.00	33.63	Peak
4	2412.44	27.60	6.64	34.15	93.83	93.92	74.00	-19.92	Peak

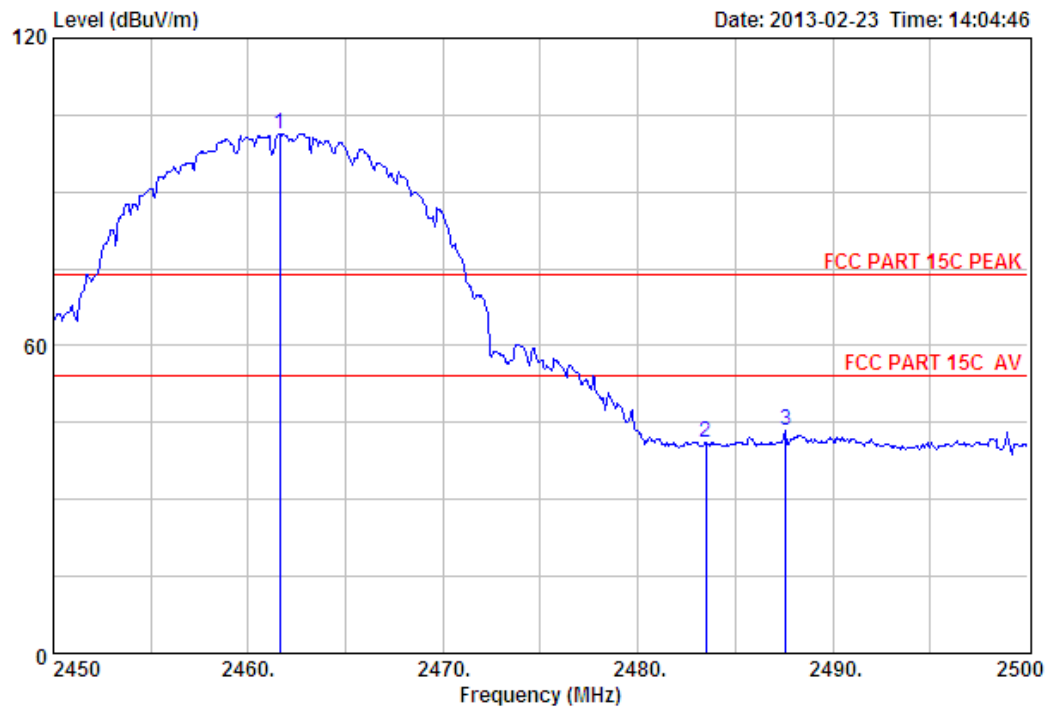
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 107
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH11 2462TX(ANT 1)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.70	27.58	6.69	34.06	95.20	95.41	74.00	-21.41	Peak
2	2483.50	27.58	6.71	34.03	40.48	40.74	74.00	33.26	Peak
3	2487.95	27.58	6.73	34.03	43.44	43.72	74.00	30.28	Peak

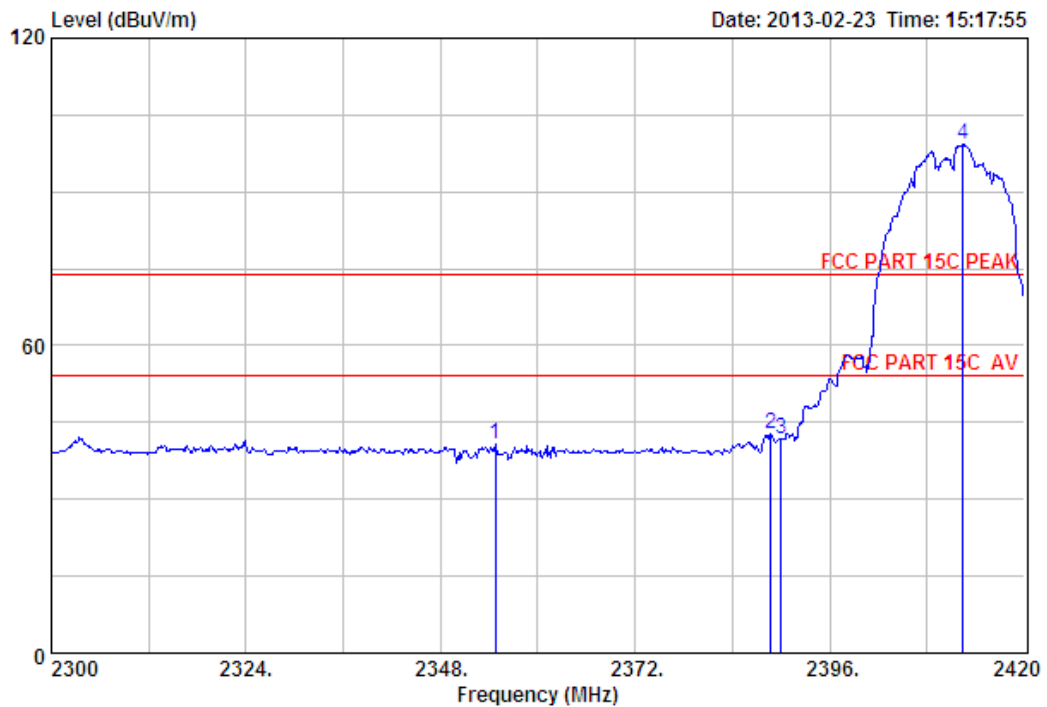
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 108
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH11 2462TX(ANT 1)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.60	27.58	6.69	34.06	101.15	101.36	74.00	-27.36	Peak
2	2483.50	27.58	6.71	34.03	40.77	41.03	74.00	32.97	Peak
3	2487.60	27.58	6.73	34.03	43.28	43.56	74.00	30.44	Peak

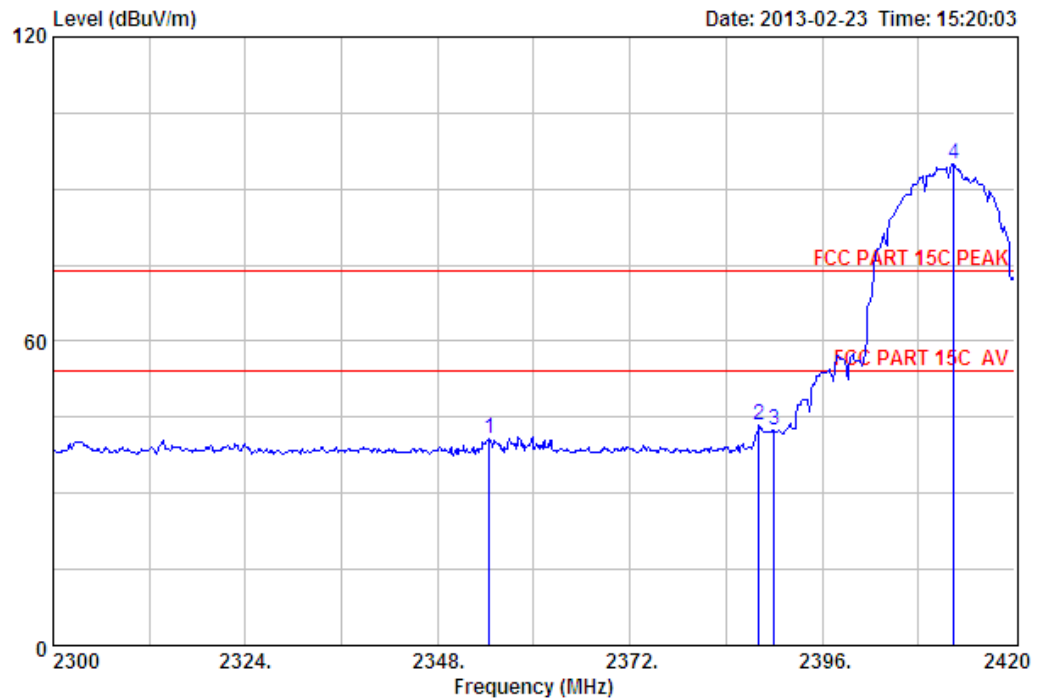
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 133
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH1 2412TX(ANT 2)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2354.72	27.70	6.58	34.22	40.64	40.70	74.00	33.30	Peak
2	2388.68	27.64	6.62	34.19	42.60	42.67	74.00	31.33	Peak
3	2390.00	27.64	6.62	34.19	41.60	41.67	74.00	32.33	Peak
4	2412.44	27.60	6.64	34.15	99.22	99.31	74.00	-25.31	Peak

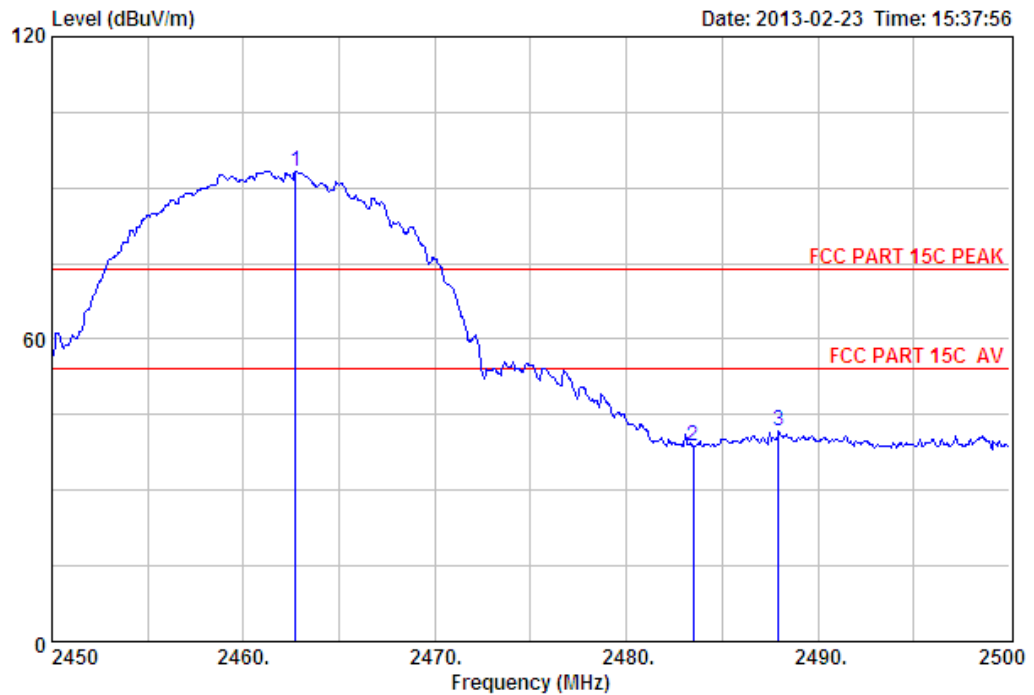
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 134
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH1 2412TX(ANT 2)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2354.48	27.70	6.58	34.22	40.56	40.62	74.00	33.38	Peak
2	2388.08	27.64	6.62	34.19	43.25	43.32	74.00	30.68	Peak
3	2390.00	27.64	6.62	34.19	42.30	42.37	74.00	31.63	Peak
4	2412.44	27.60	6.64	34.15	94.83	94.92	74.00	-20.92	Peak

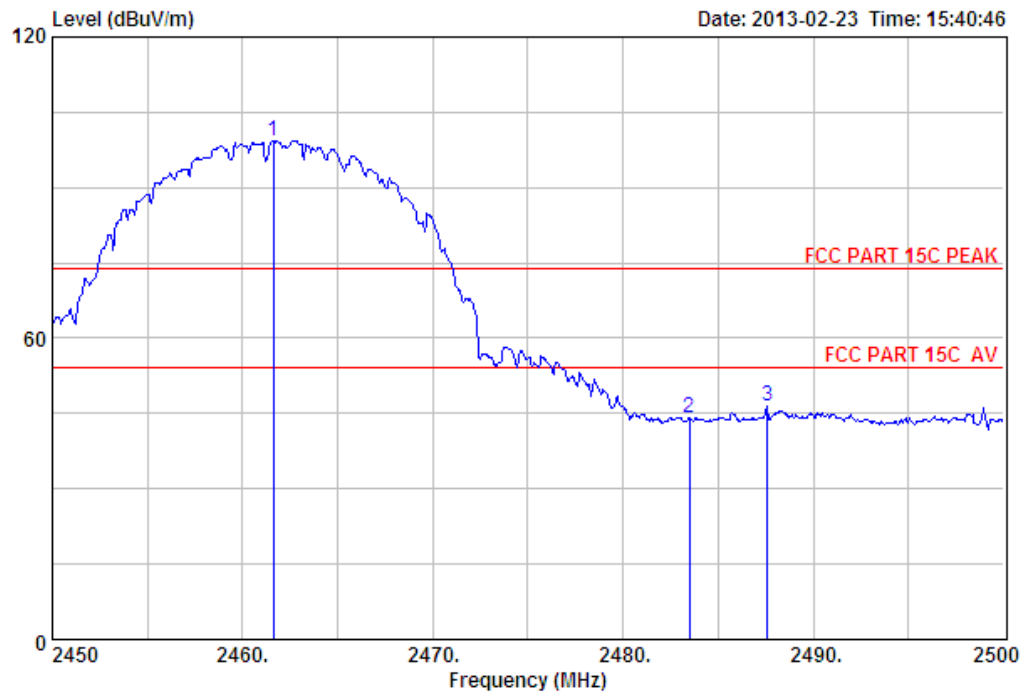
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 139
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH11 2462TX(ANT 2)

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2462.70	27.58	6.69	34.06	93.20	93.41	74.00	-19.41	Peak
2	2483.50	27.58	6.71	34.03	38.48	38.74	74.00	35.26	Peak
3	2487.95	27.58	6.73	34.03	41.44	41.72	74.00	32.28	Peak

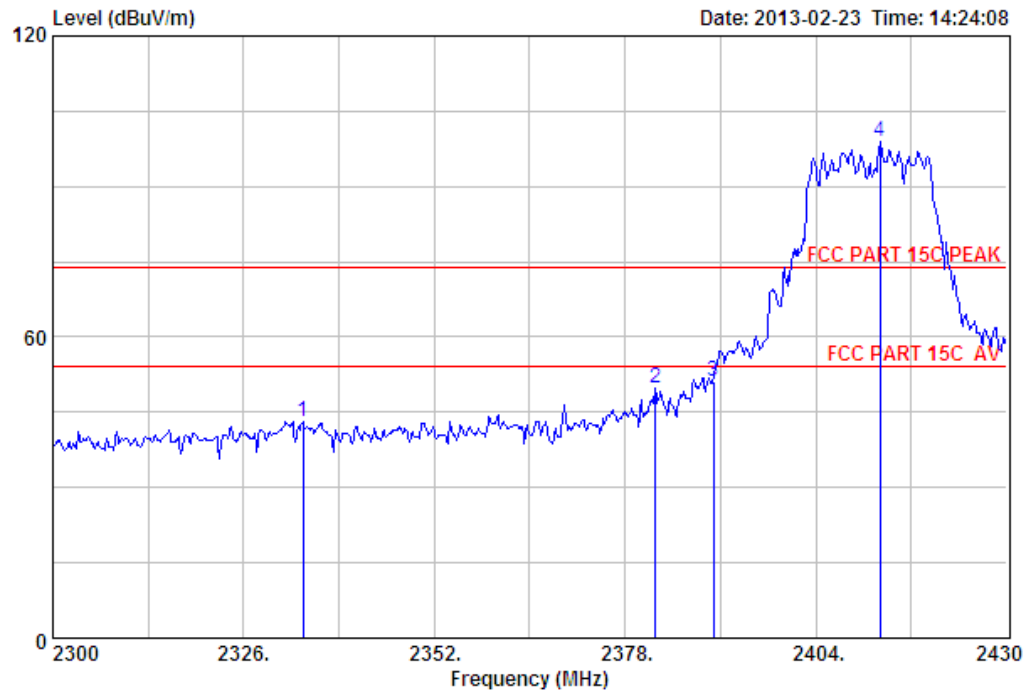
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 140
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11b CH11 2462TX(ANT 2)

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2461.60	27.58	6.69	34.06	99.15	99.36	74.00	-25.36	Peak
2	2483.50	27.58	6.71	34.03	43.77	44.03	74.00	29.97	Peak
3	2487.60	27.58	6.73	34.03	46.28	46.56	74.00	27.44	Peak

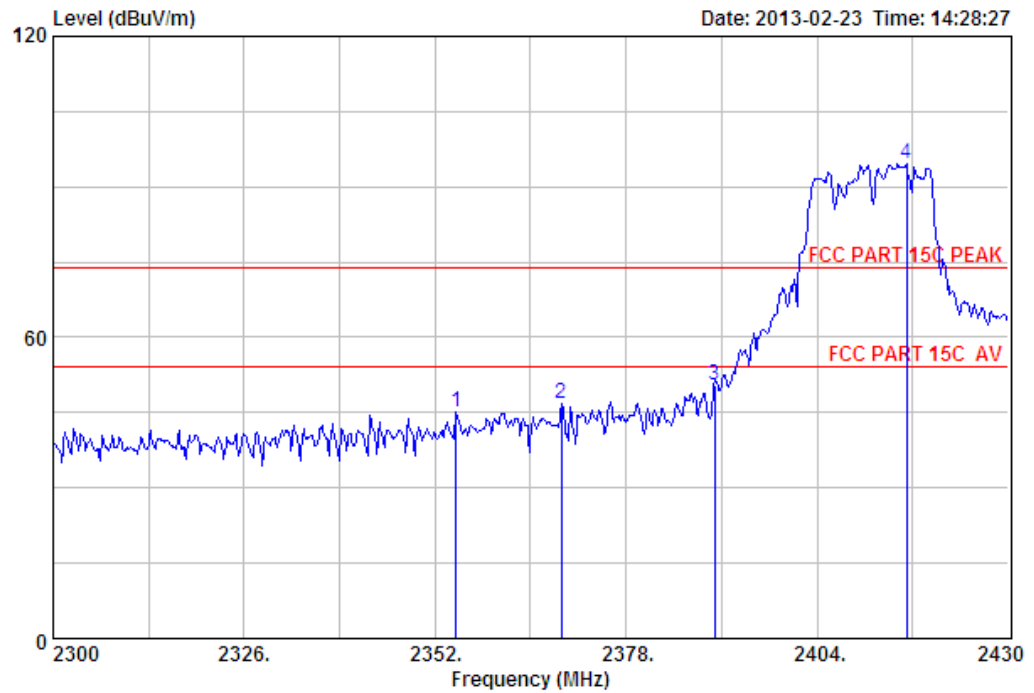
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 117
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH1 2412TX(ANT 1)

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2334.06	27.73	6.54	34.23	43.21	43.25	74.00	30.75	Peak
2	2382.16	27.64	6.60	34.19	49.72	49.77	74.00	24.23	Peak
3	2390.00	27.64	6.62	34.19	51.04	51.11	74.00	22.89	Peak
4	2412.71	27.60	6.64	34.15	98.94	99.03	74.00	-25.03	Peak

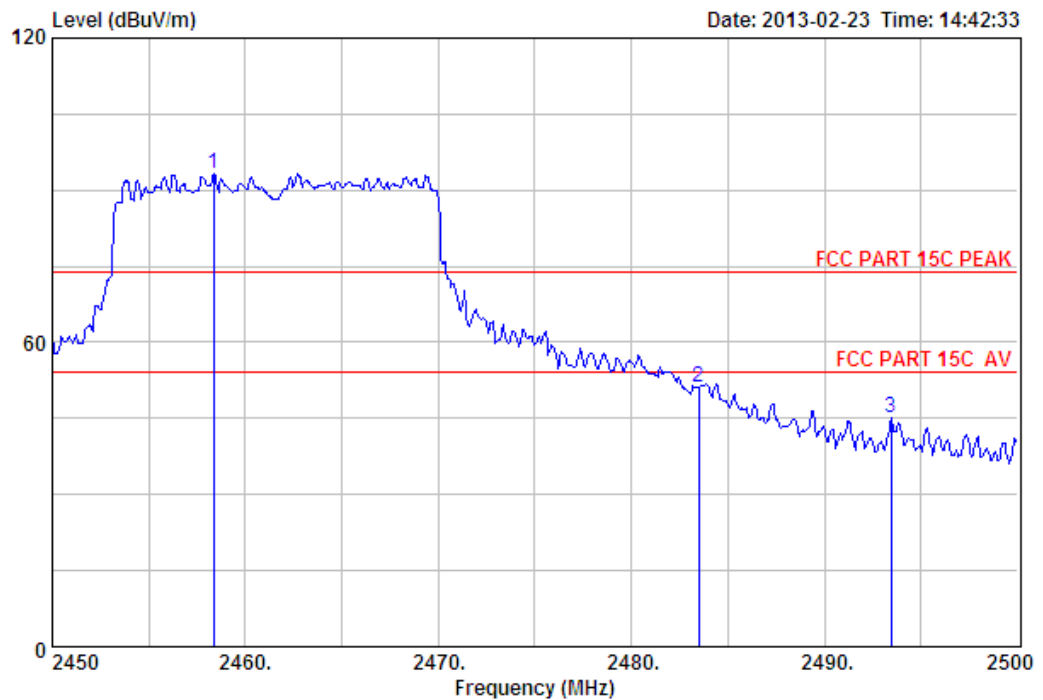
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 118
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH1 2412TX(ANT 1)

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2354.86	27.70	6.58	34.22	45.04	45.10	74.00	28.90	Peak
2	2369.16	27.67	6.60	34.20	46.71	46.78	74.00	27.22	Peak
3	2390.00	27.64	6.62	34.19	50.34	50.41	74.00	23.59	Peak
4	2416.22	27.60	6.64	34.15	94.52	94.61	74.00	-20.61	Peak

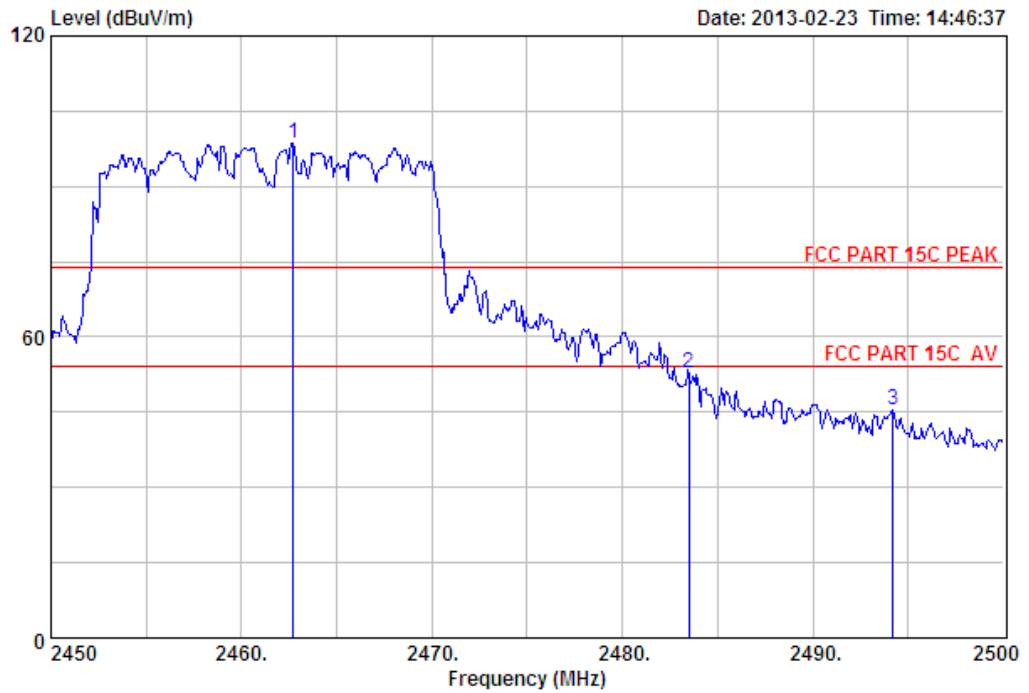
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 123
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH11 2462TX(ANT 1)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2458.35	27.59	6.69	34.09	93.21	93.40	74.00	-19.40	Peak
2	2483.50	27.58	6.71	34.03	51.02	51.28	74.00	22.72	Peak
3	2493.45	27.58	6.73	34.03	45.01	45.29	74.00	28.71	Peak

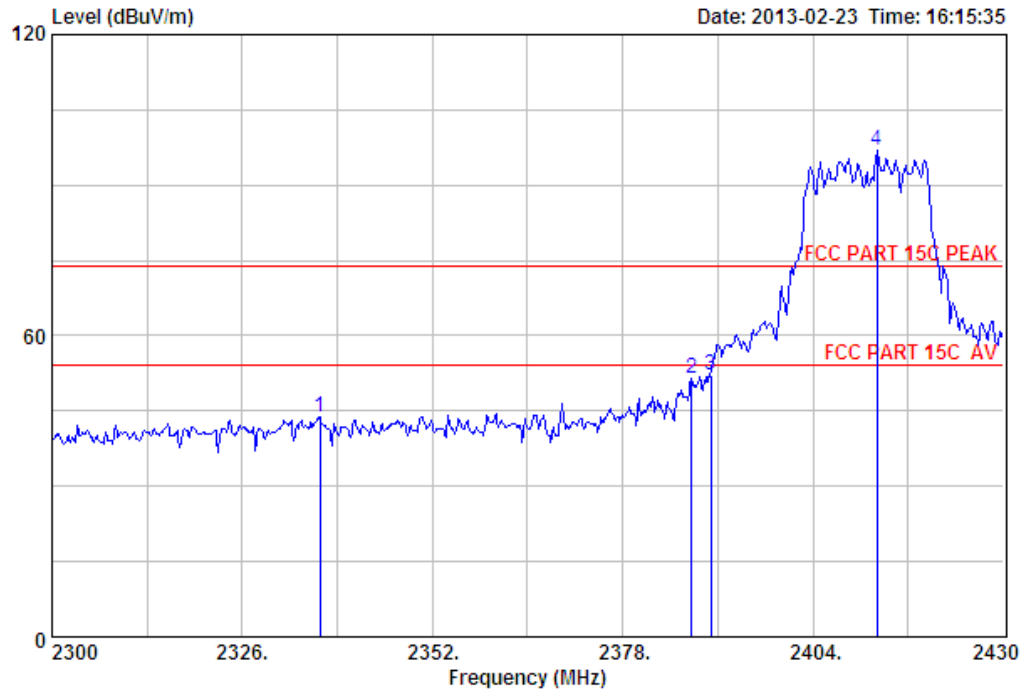
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 124
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH11 2462TX(ANT 1)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.70	27.58	6.69	34.06	98.42	98.63	74.00	-24.63	Peak
2	2483.50	27.58	6.71	34.03	52.40	52.66	74.00	21.34	Peak
3	2494.20	27.58	6.73	34.03	45.11	45.39	74.00	28.61	Peak

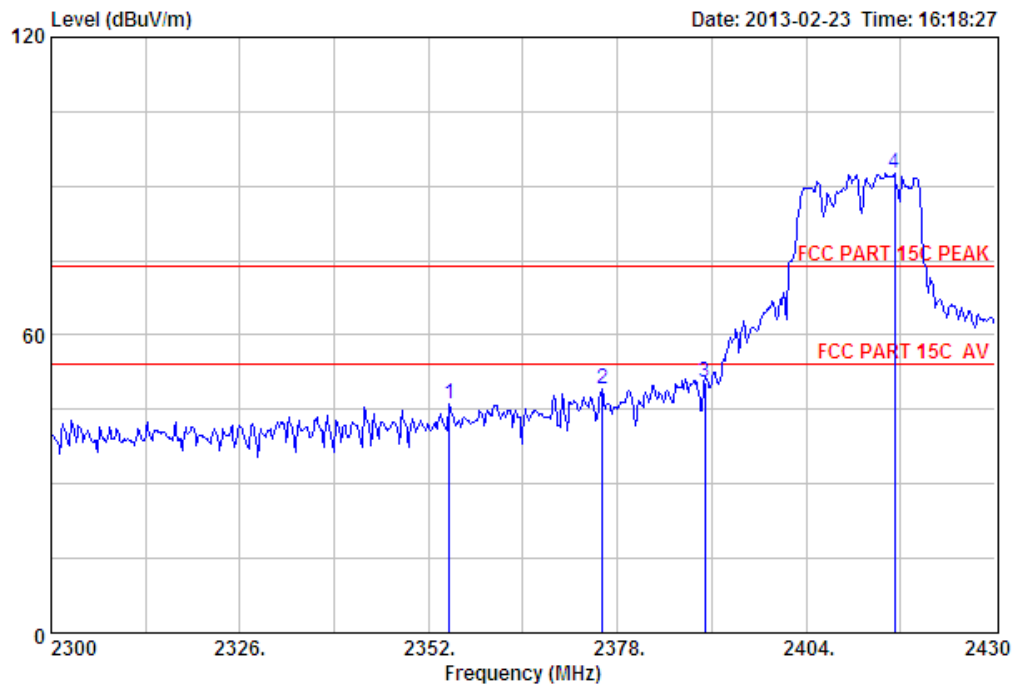
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 149
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH1 2412TX (ANT 2)

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2336.66	27.73	6.56	34.23	43.76	43.82	74.00	30.18	Peak
2	2387.36	27.64	6.62	34.19	51.55	51.62	74.00	22.38	Peak
3	2390.00	27.64	6.62	34.19	52.04	52.11	74.00	21.89	Peak
4	2412.71	27.60	6.64	34.15	96.94	97.03	74.00	-23.03	Peak

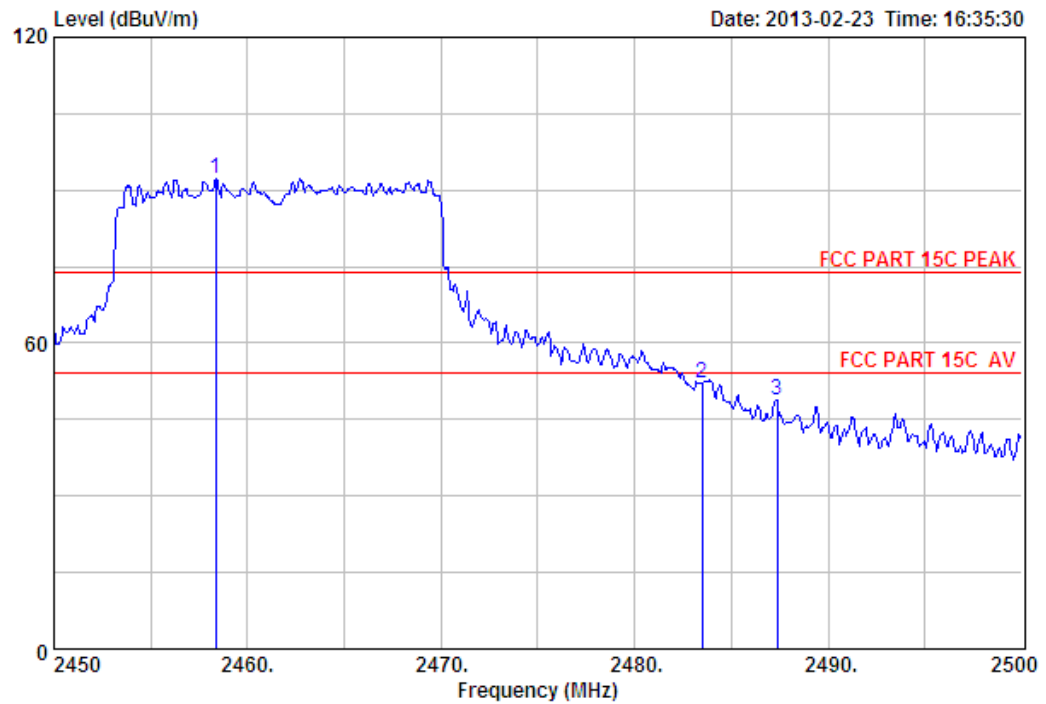
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 150
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH1 2412TX (ANT 2)

		Ant.	Cable	Amp	Emission				
	Freq.	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
	(MHz)	(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2354.86	27.70	6.58	34.22	46.04	46.10	74.00	27.90	Peak
2	2375.92	27.64	6.60	34.19	48.95	49.00	74.00	25.00	Peak
3	2390.00	27.64	6.62	34.19	50.34	50.41	74.00	23.59	Peak
4	2416.22	27.60	6.64	34.15	92.52	92.61	74.00	-18.61	Peak

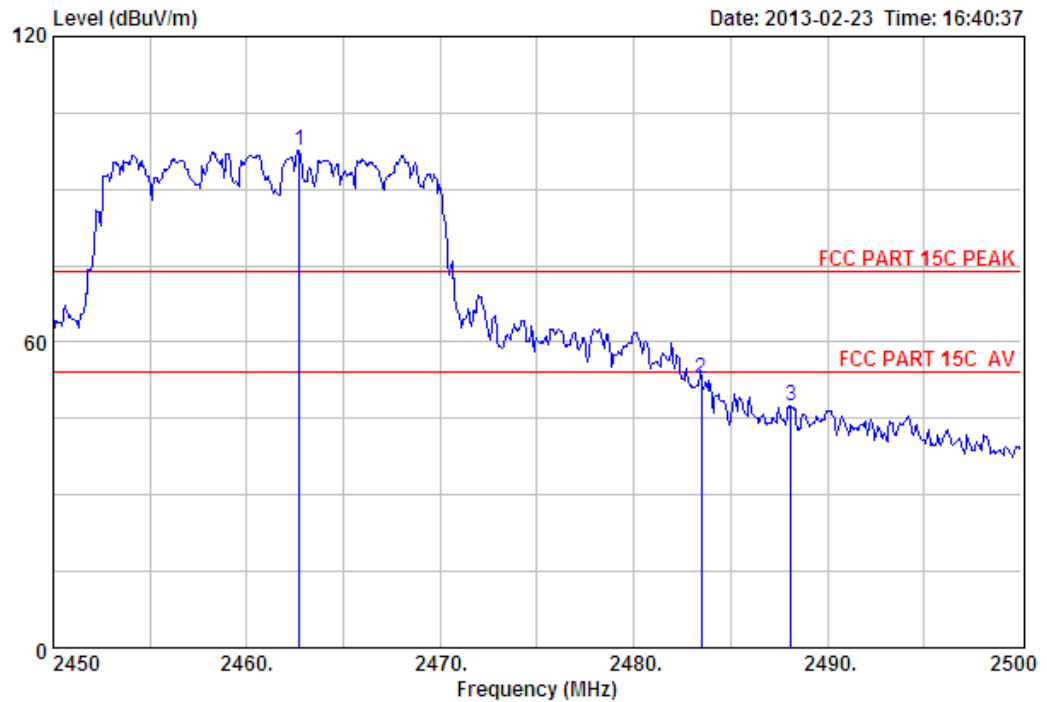
Remarks: 1. Emission Level= Antenna Factor + Cable Loss - Amp Factor + Reading.
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 155
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH11 2462TX(ANT 2)

	Freq.	Ant.	Cable	Amp	Emission				
	(MHz)	Factor	Loss	Factor	Reading	Level	Limits	Margin	Remark
		(dB/m)	(dB)	(dB)	(dBuV)	(dBuV/m)	(dBuV/m)	(dB)	
1	2458.35	27.59	6.69	34.09	92.21	92.40	74.00	-18.40	Peak
2	2483.50	27.58	6.71	34.03	52.02	52.28	74.00	21.72	Peak
3	2487.35	27.58	6.71	34.03	48.70	48.96	74.00	25.04	Peak

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



Site no. : 3m Chamber Data no. : 156
 Dis. / Ant. : 3m ANT 1-18G Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : Temp:25.6';Humi:56%;Press:101.52kPa
 Engineer : Tony
 EUT : Audio Amplifier
 Power : AC 120V/60Hz
 M/N : airstream A100
 Test Mode : IEEE 802.11g CH11 2462TX(ANT 2)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.70	27.58	6.69	34.06	97.42	97.63	74.00	-23.63	Peak
2	2483.50	27.58	6.71	34.03	52.40	52.66	74.00	21.34	Peak
3	2488.10	27.58	6.73	34.03	47.03	47.31	74.00	26.69	Peak

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

7. 6dB Bandwidth Test

7.1. Limit

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

7.2. Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device.
- 2, Follow the test procedure as described in KDB 558074
 - (1). Set resolution bandwidth (RBW) = 1-5% or DTS BW, not to exceed 100 kHz.
 - (2). Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
 - (3). Detector = Peak.
 - (4). Trace mode = max hold.
 - (5). Sweep = auto couple.
 - (6). Allow the trace to stabilize.
 - (7). Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

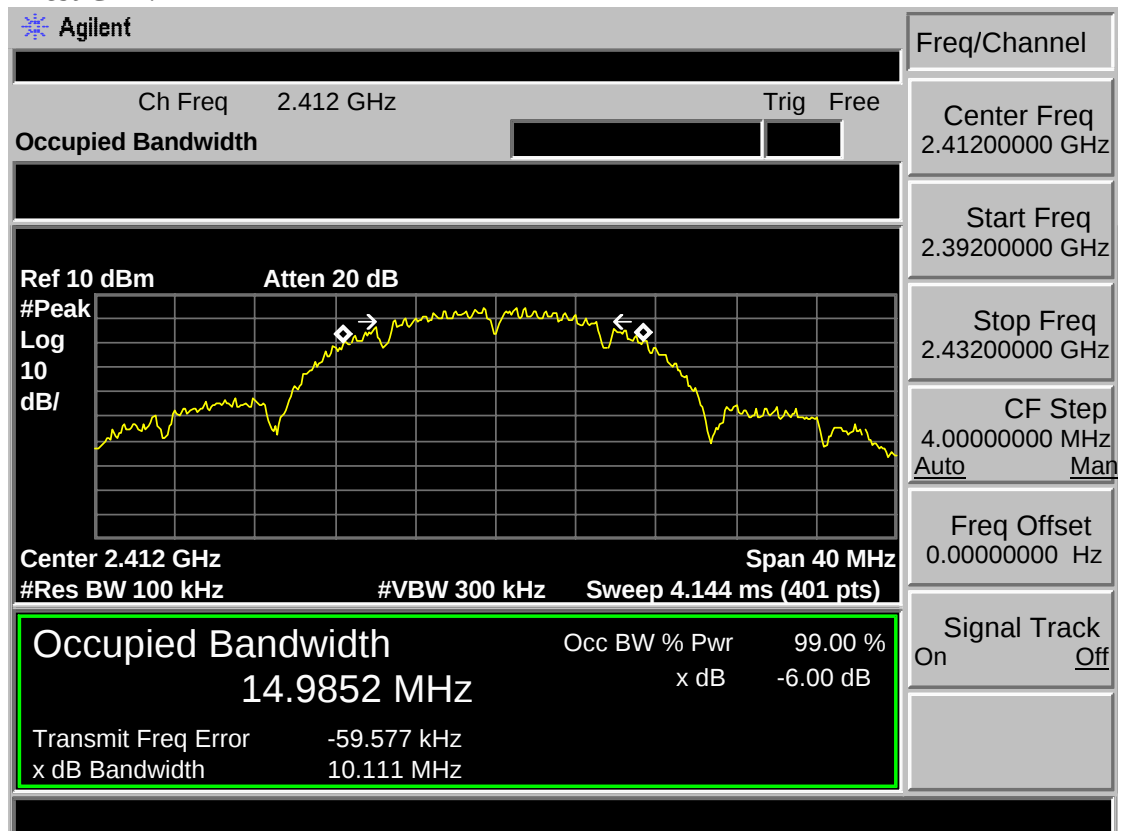
7.3. Test Result

EUT: Audio Amplifier			
M/N: airstream A100			
Test date: Feb.23, 2013		Tested by: Tony.Tang	Test site: RF Site
Test Mode	CH	6dB bandwidth (MHz)	Limit (KHz)
11b (Ant 1)	CH1	10.111	>500
	CH6	10.129	>500
	CH11	10.064	>500
11g (Ant 1)	CH1	16.623	>500
	CH6	16.620	>500
	CH11	16.625	>500
11b (Ant 2)	CH1	10.139	>500
	CH6	10.079	>500
	CH11	10.146	>500
11g (Ant 2)	CH1	16.630	>500
	CH6	16.619	>500
	CH11	16.608	>500
Conclusion : PASS			

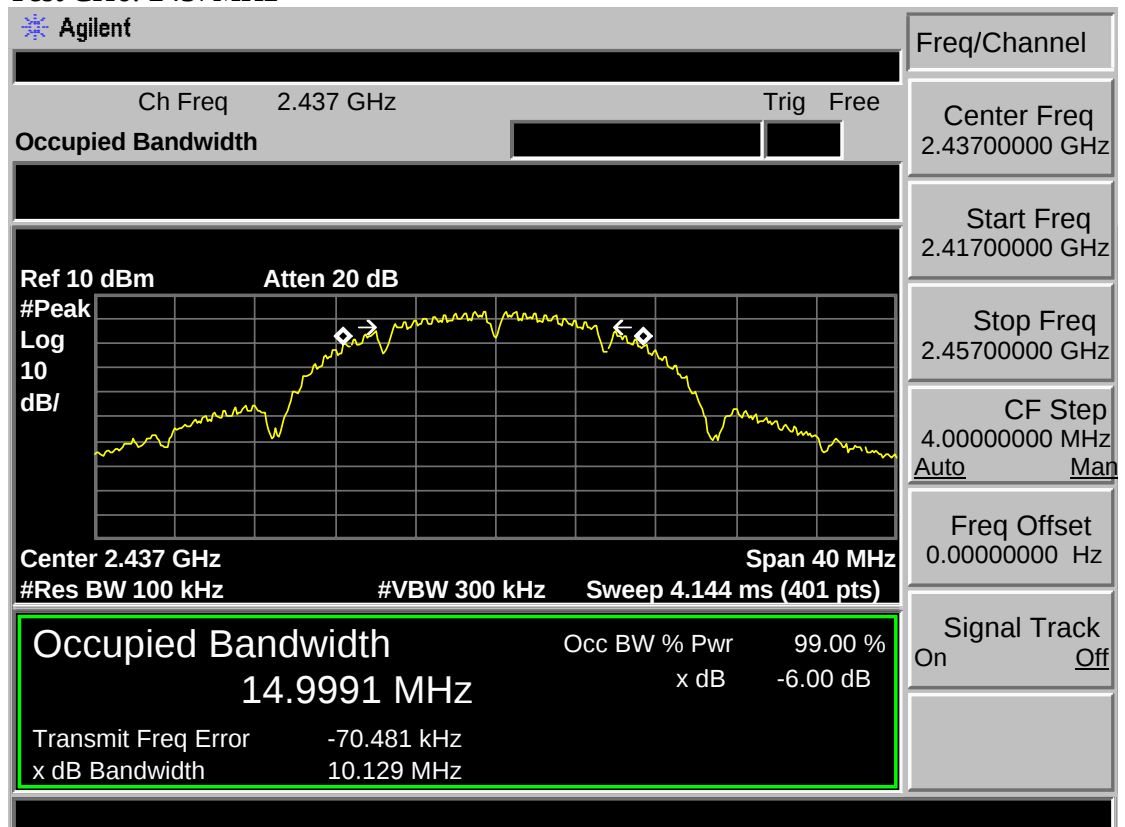
7.4. Test Data

Test Mode: IEEE 802.11b TX (Ant 1)

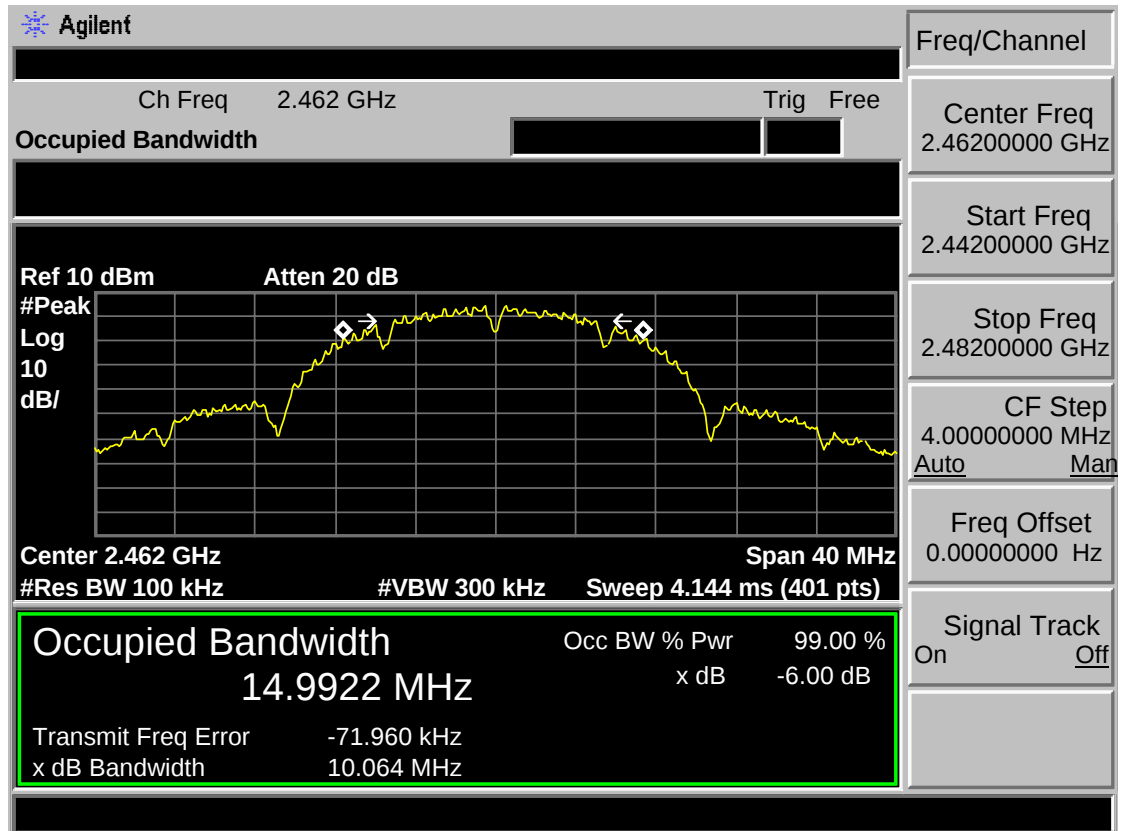
Test CH1: 2412MHz



Test CH6: 2437MHz

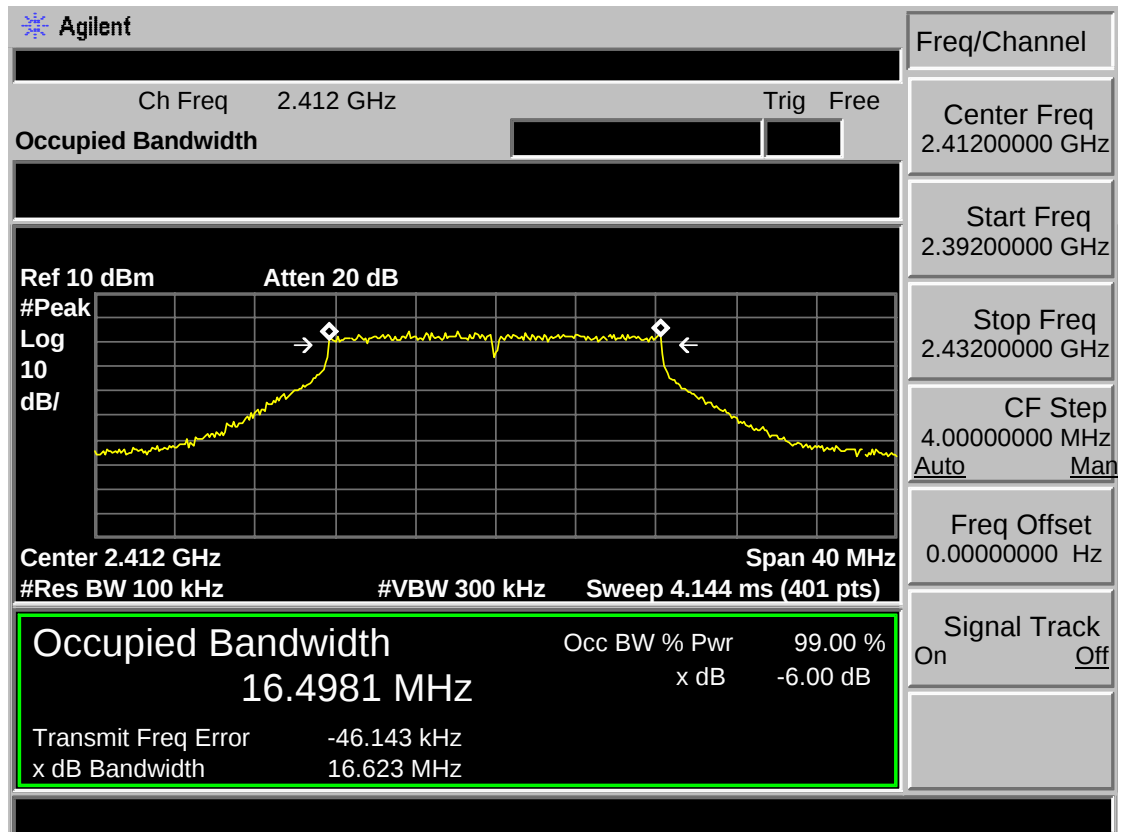


Test CH11: 2462MHz

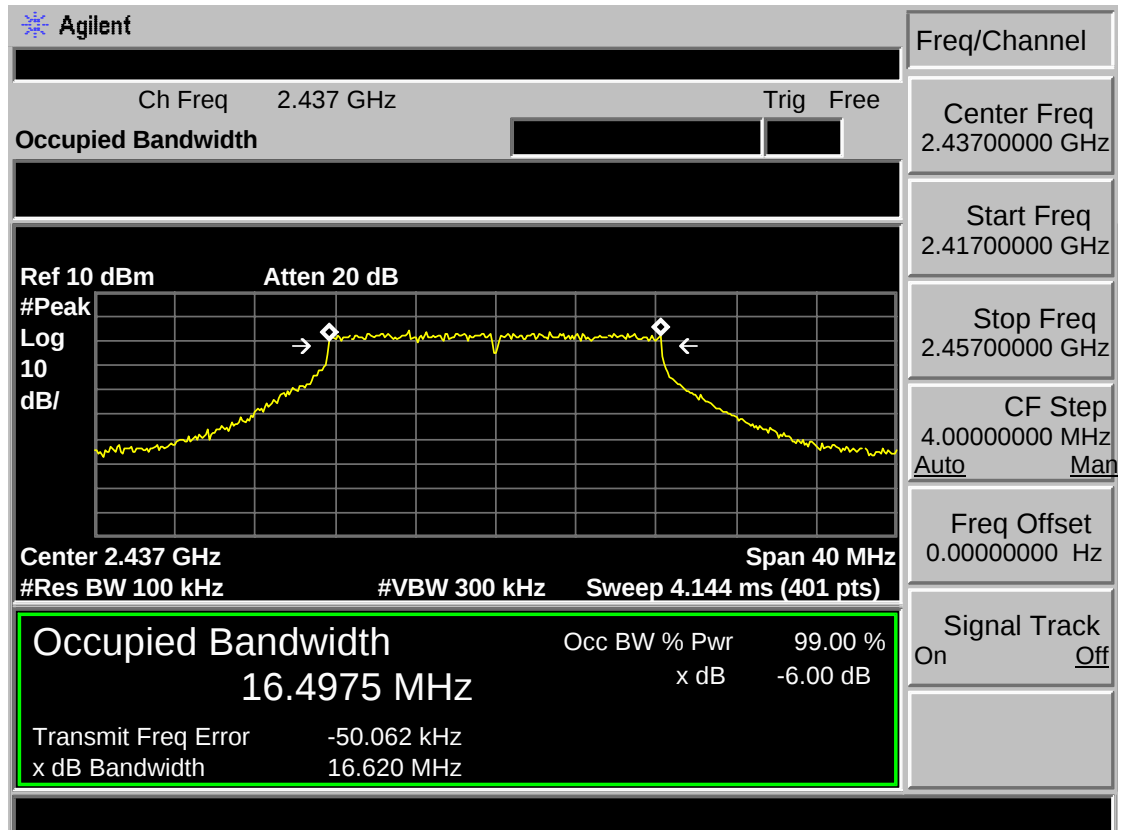


Test Mode: IEEE 802.11g TX (Ant 1)

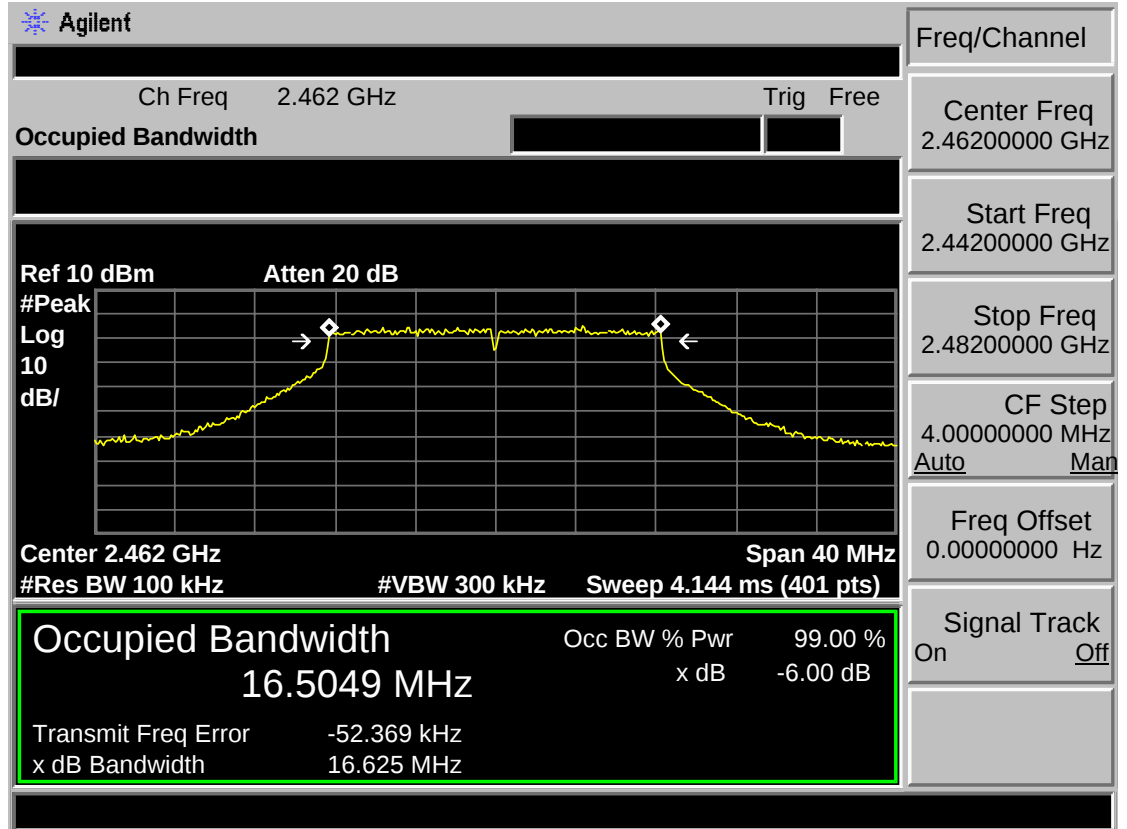
Test CH1: 2412MHz



Test CH6: 2437MHz

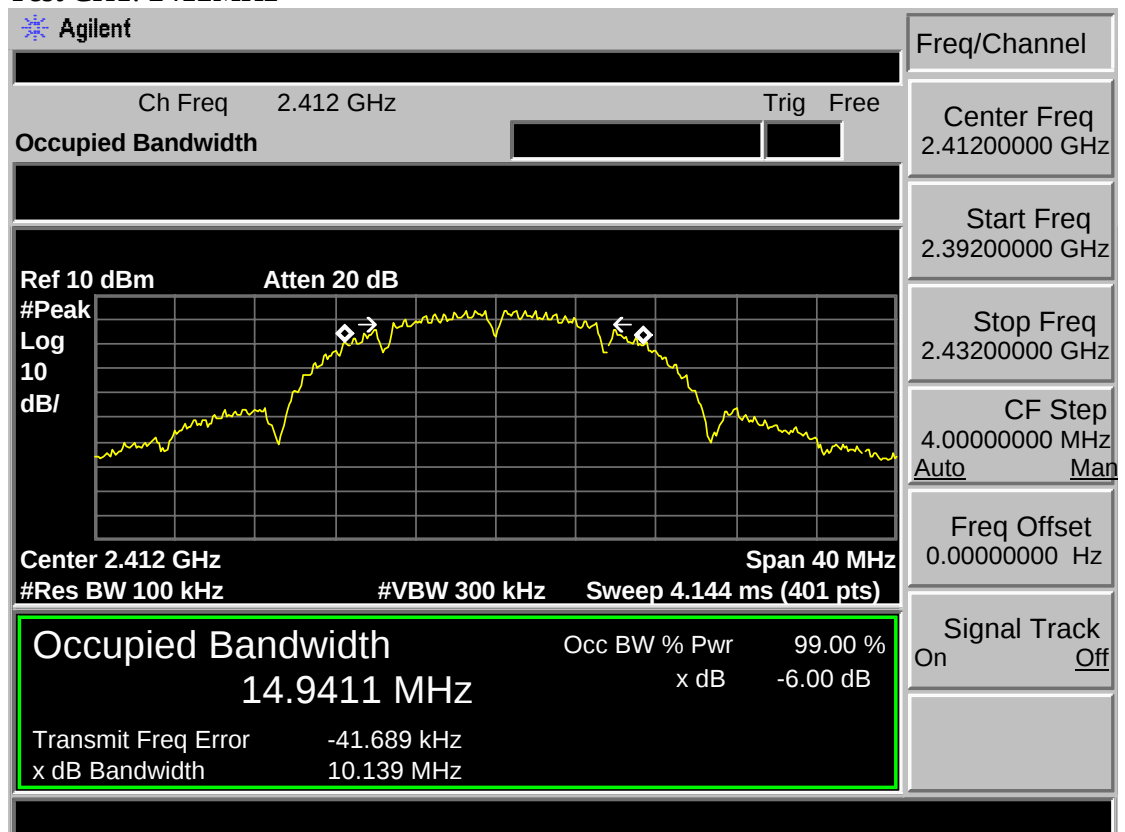


Test CH11: 2462MHz

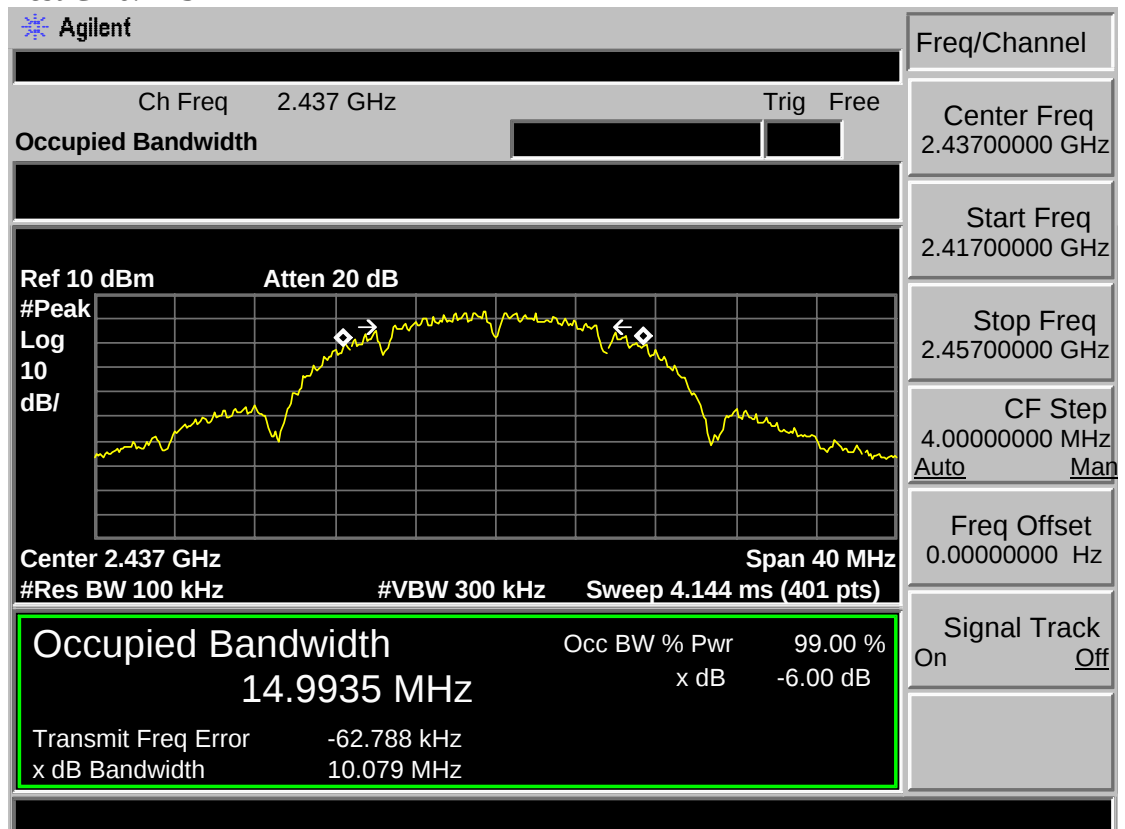


Test Mode: IEEE 802. 11b TX (Ant 2)

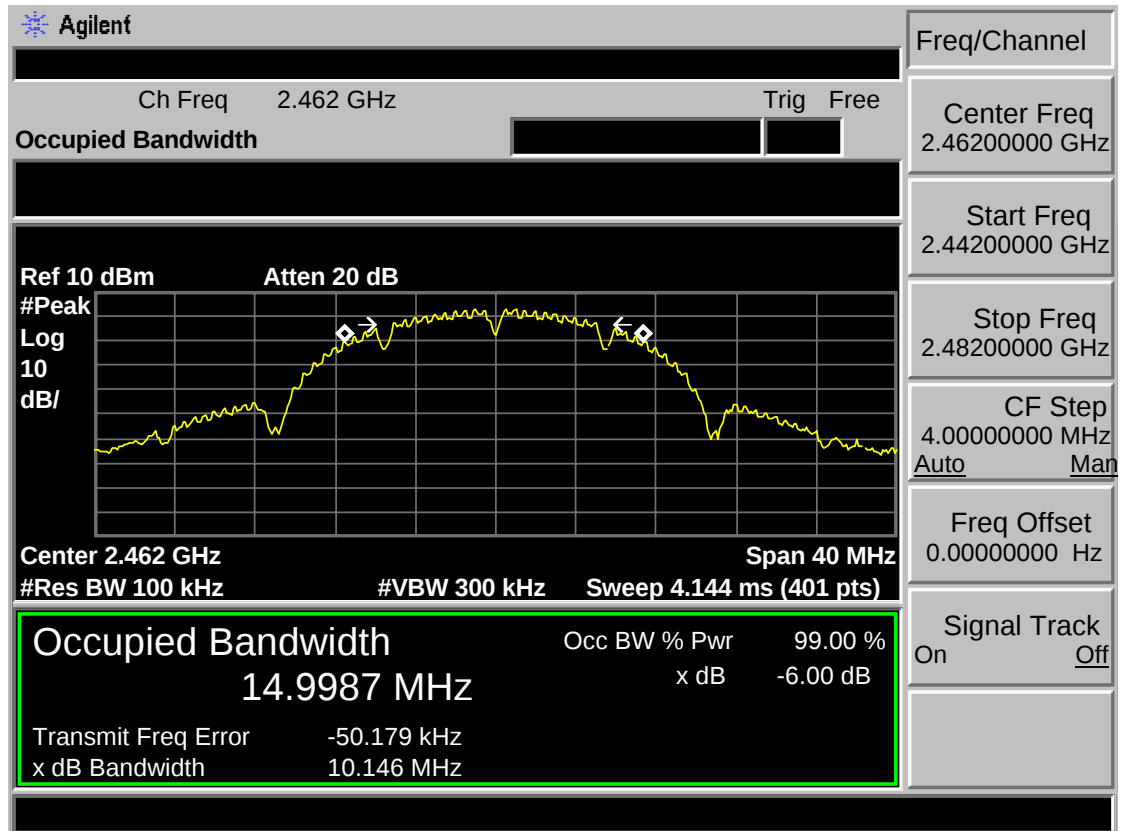
Test CH1: 2412MHz



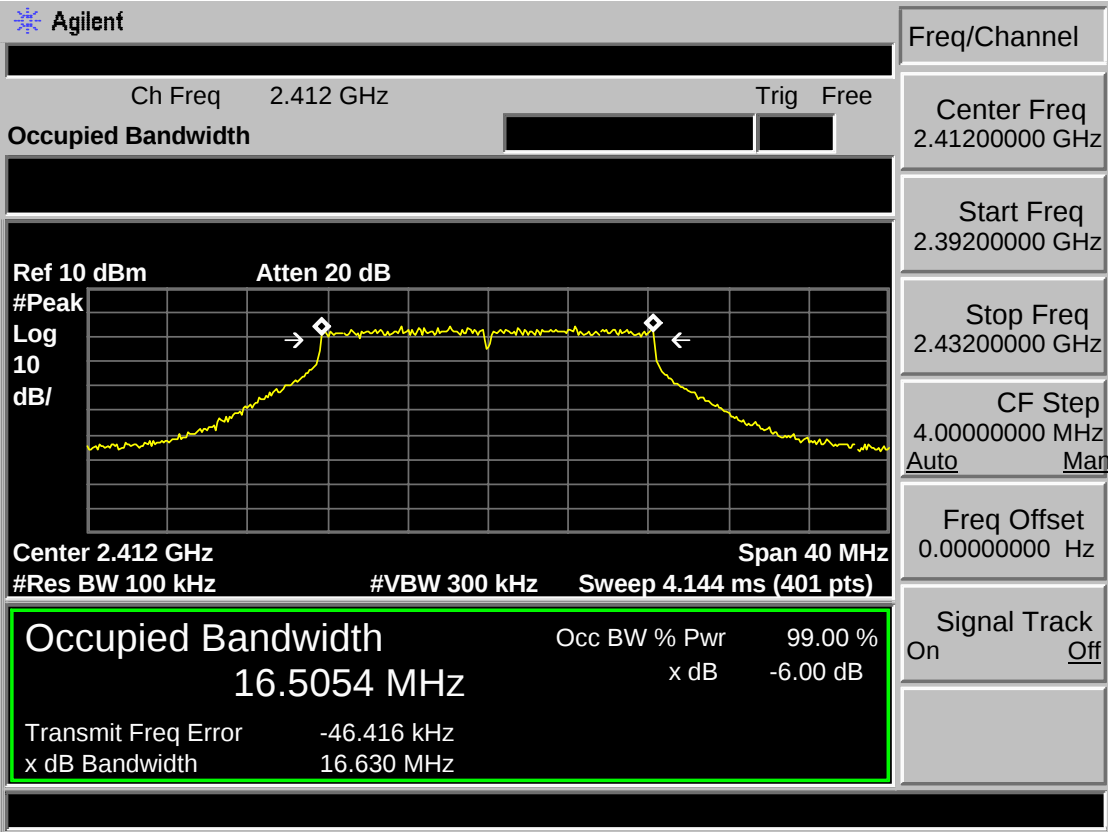
Test CH6: 2437MHz



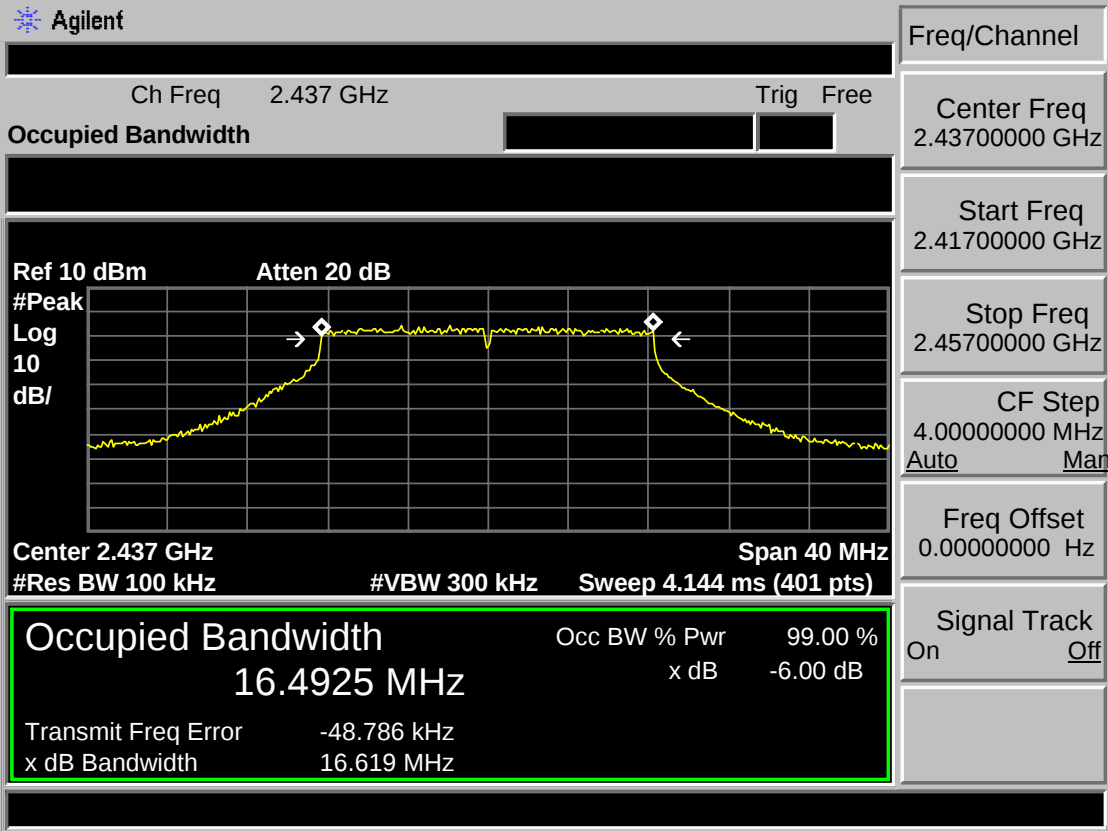
Test CH11: 2462MHz



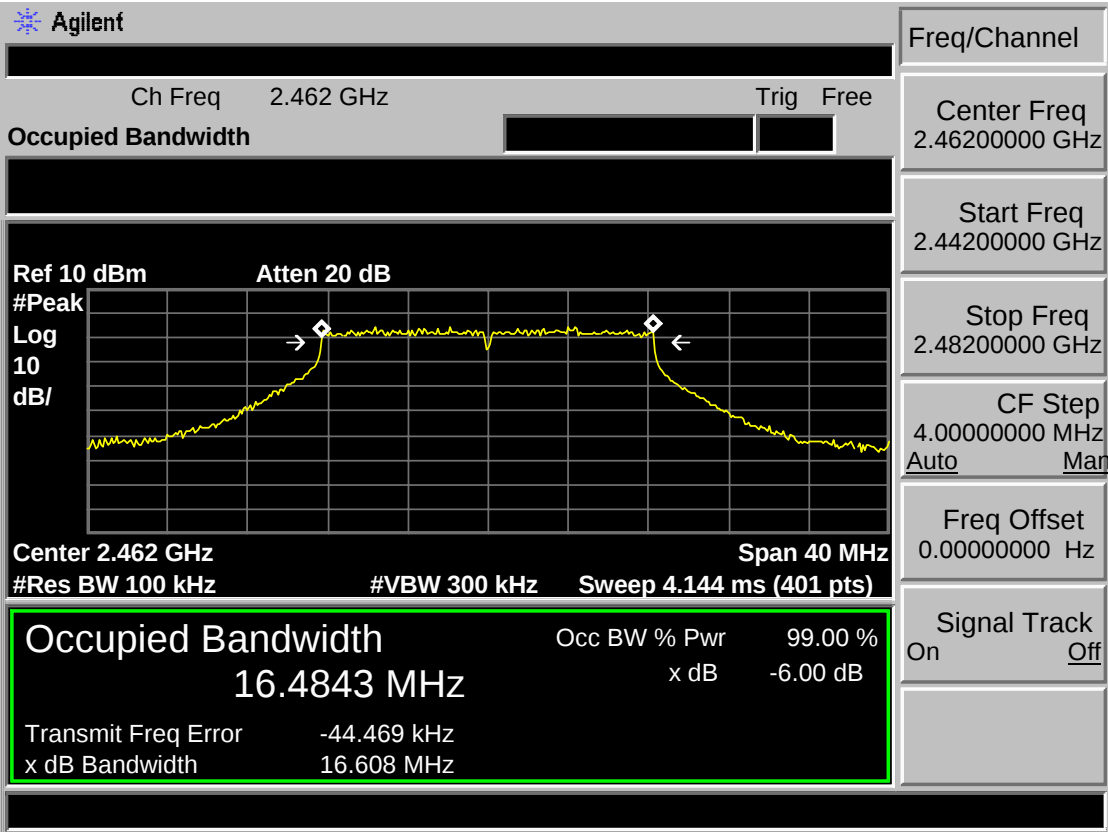
Test Mode: IEEE 802. 11g TX (Ant 2)
Test CH1: 2412MHz



Test CH4: 2437MHz



Test CH7: 2462MHz



8. OUTPUT POWER TEST

8.1. Limit

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

8.2. Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device.
- 2, Follow the test procedure as described in KDB 558074
 - (1). Set the RBW = maximum available (at least 1 MHz).
 - (2). Set the VBW = 3 x RBW or maximum available setting (must be $\geq$ RBW).
 - (3). Set the span to fully encompass the DTS bandwidth.
 - (4). Detector = peak.
 - (5). Sweep time = auto couple.
 - (6). Trace mode = max hold.
 - (7). Allow trace to fully stabilize.
 - (8). Use the spectrum analyzer's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some analyzers, this may require a manual override to ensure use of peak detector). If the spectrum analyzer does not have a band power function, sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

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

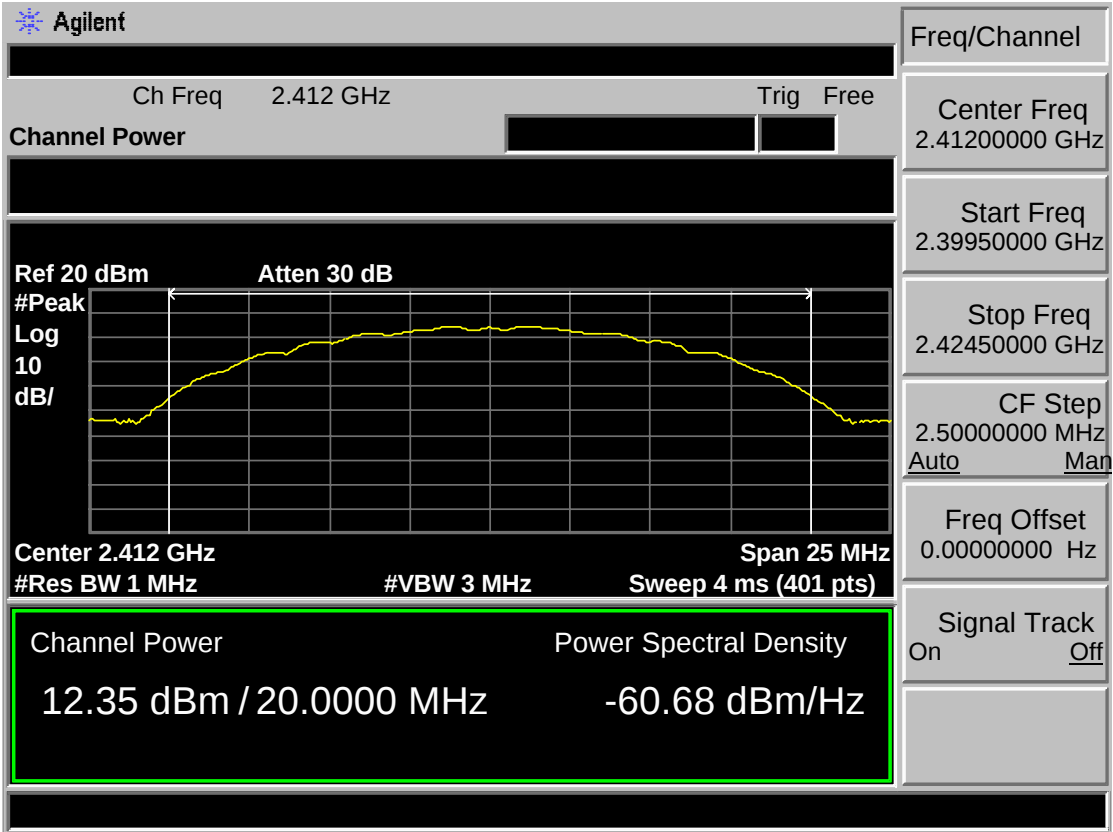
8.3. Test Result

EUT: Audio Amplifier		
M/N: airstream A100		
Test date: Feb.21, 2013	Test site: 3m Chamber	Tested by: Tony Tang
Pass		

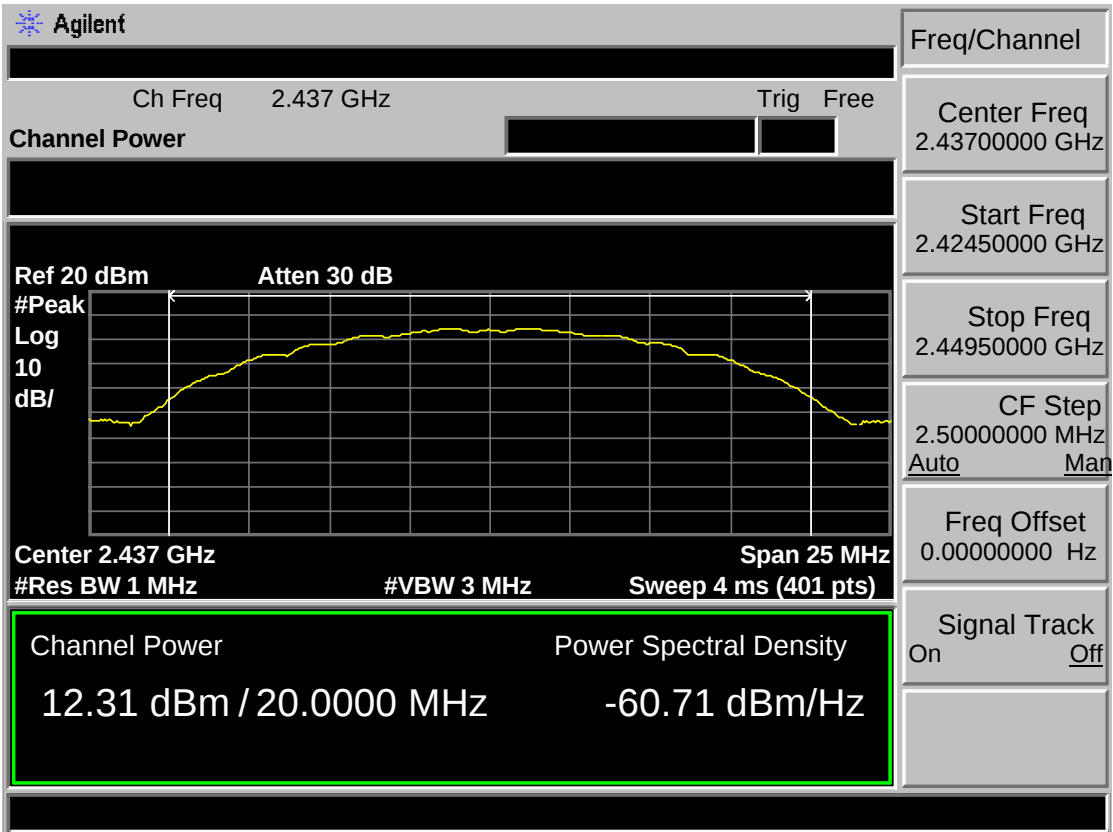
Test Mode	CH	Peak output Power (dBm)	Limit (dBm)
11b (Ant 1)	CH1	12.35	30
	CH6	12.31	30
	CH11	12.75	30
11g (Ant 1)	CH1	10.17	30
	CH6	10.18	30
	CH11	10.37	30
11b (Ant 2)	CH1	10.47	30
	CH6	10.25	30
	CH11	10.07	30
11g (Ant 2)	CH1	7.88	30
	CH6	8.21	30
	CH11	8.34	30
Conclusion : PASS			

8.4. Test Data

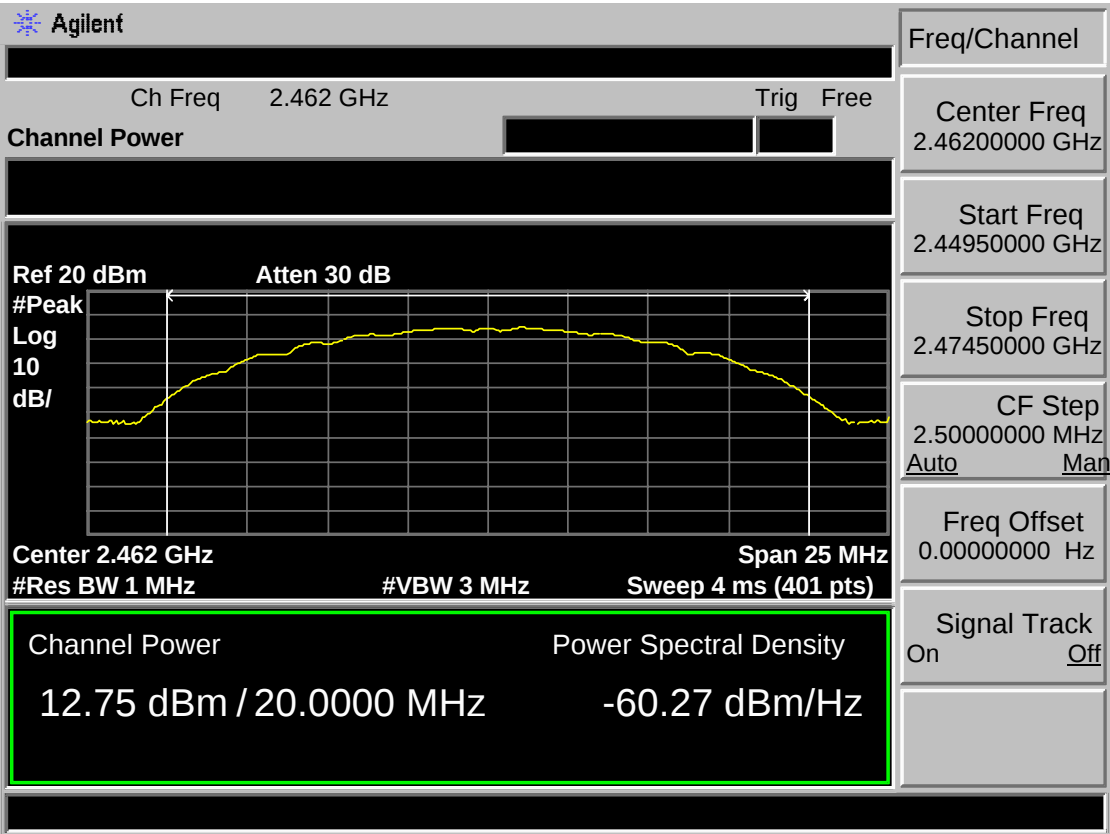
Test Mode: IEEE 802. 11b (Ant 1)
CH 1



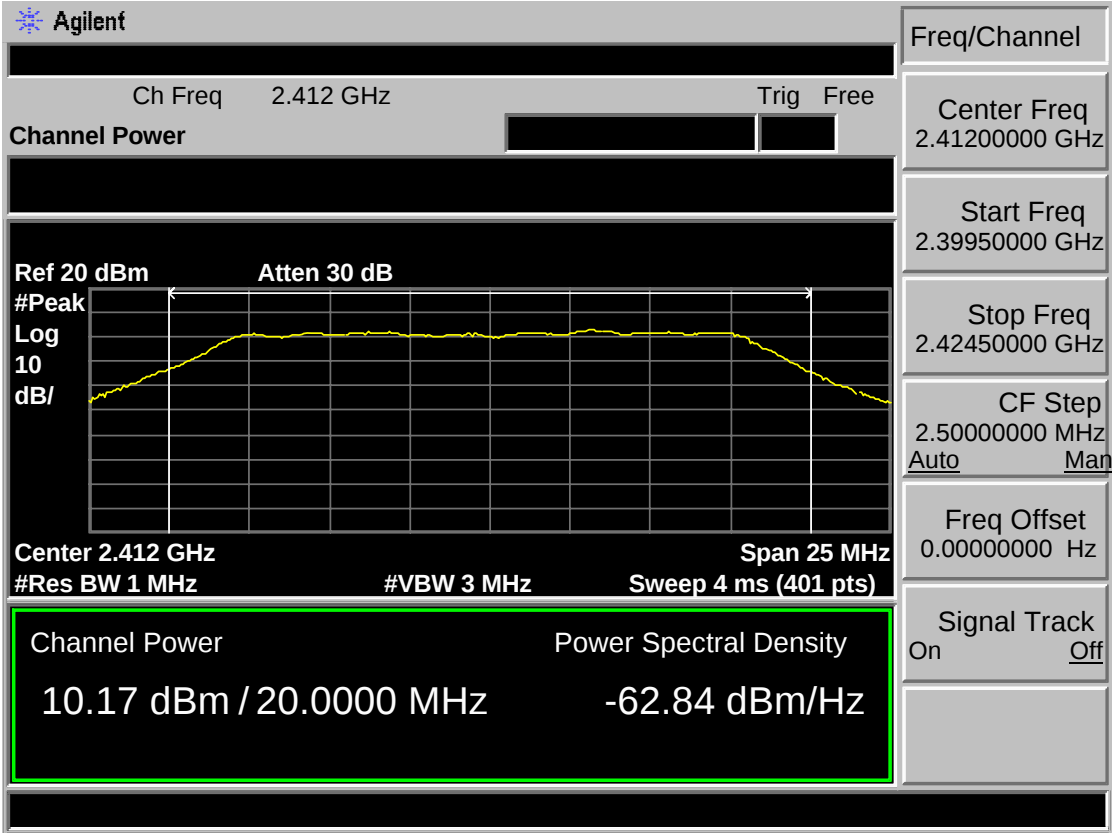
CH 6



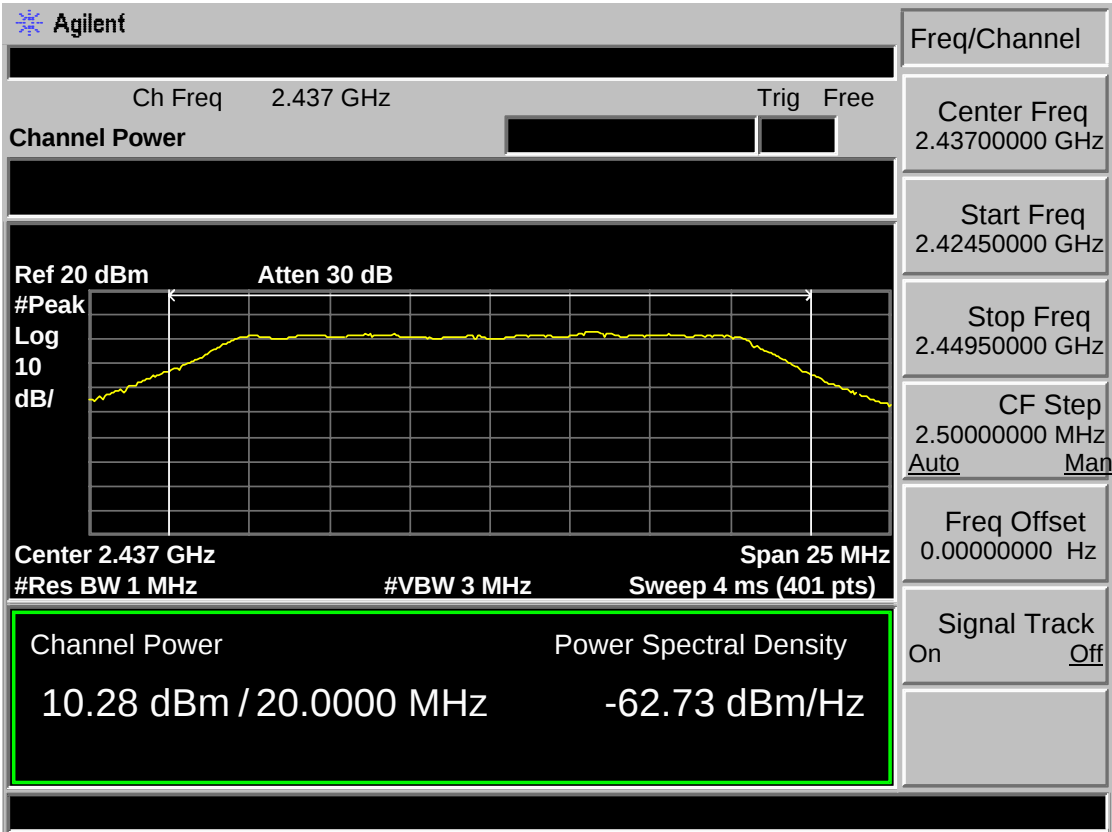
CH 11



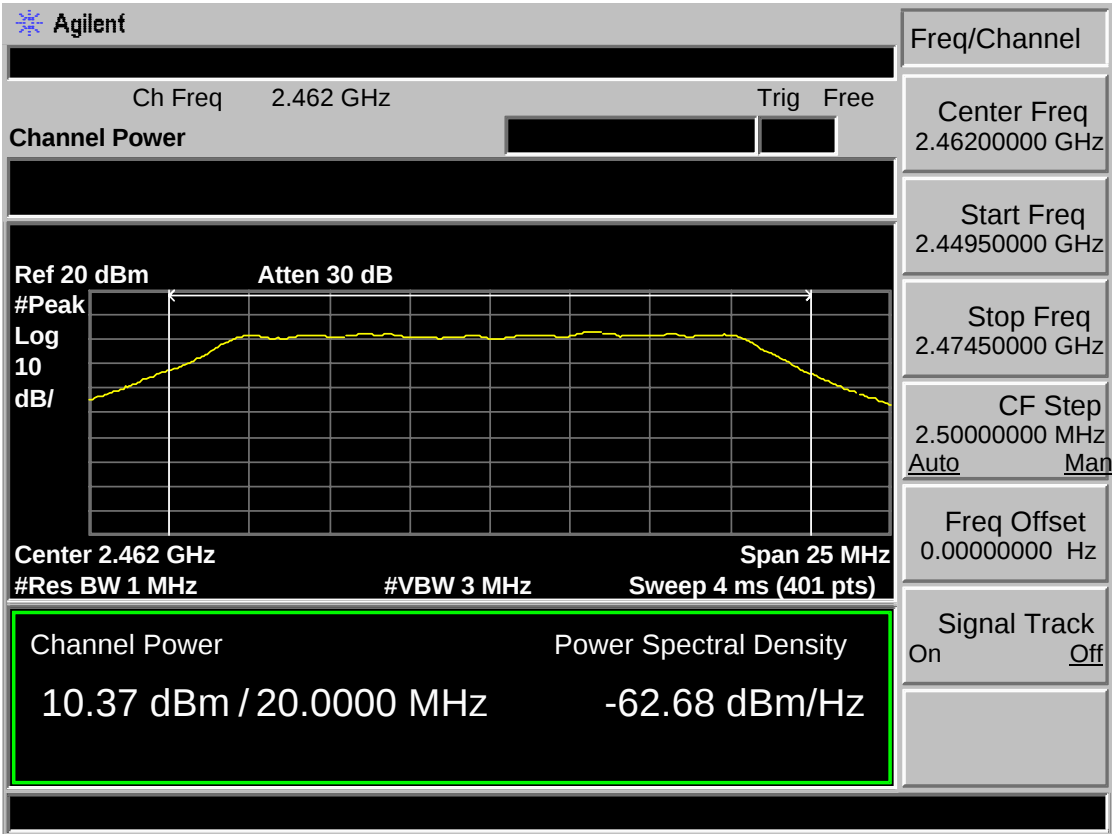
Test Mode: IEEE 802.11g (Ant 1)
CH 1



CH 6



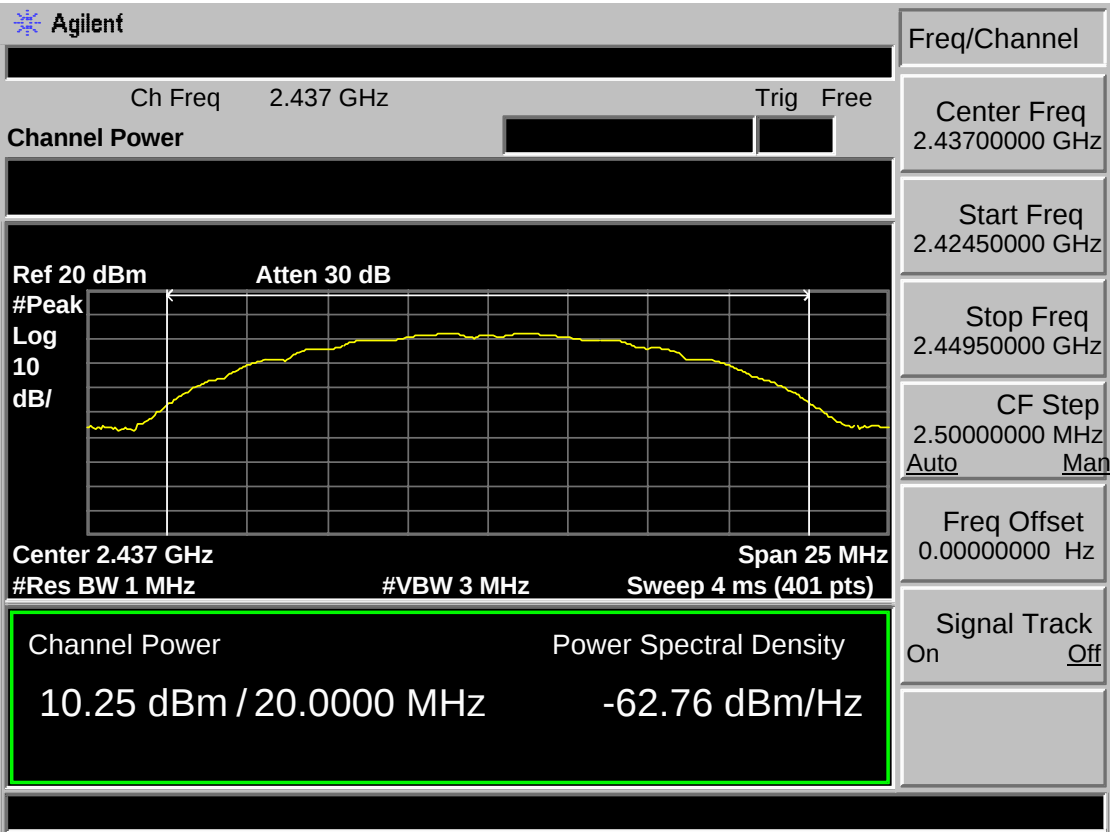
CH 11



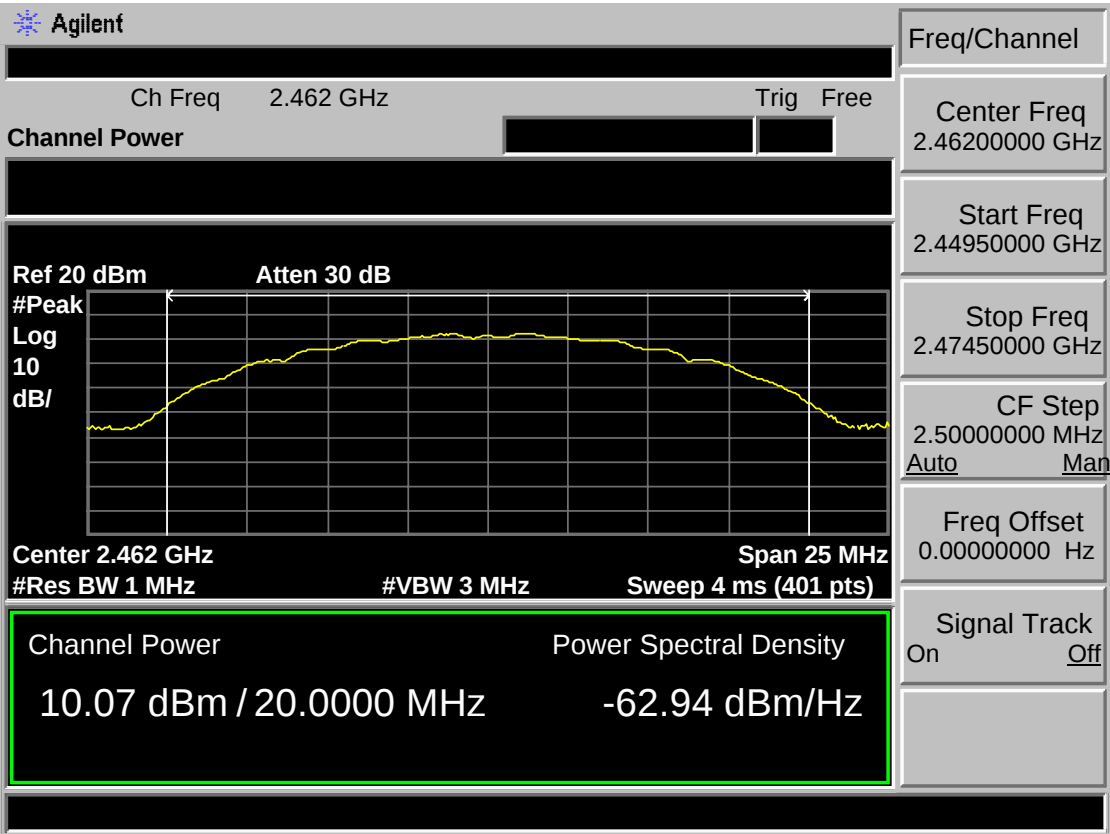
Test Mode: IEEE 802. 11b (Ant 2)
CH 1



CH 6



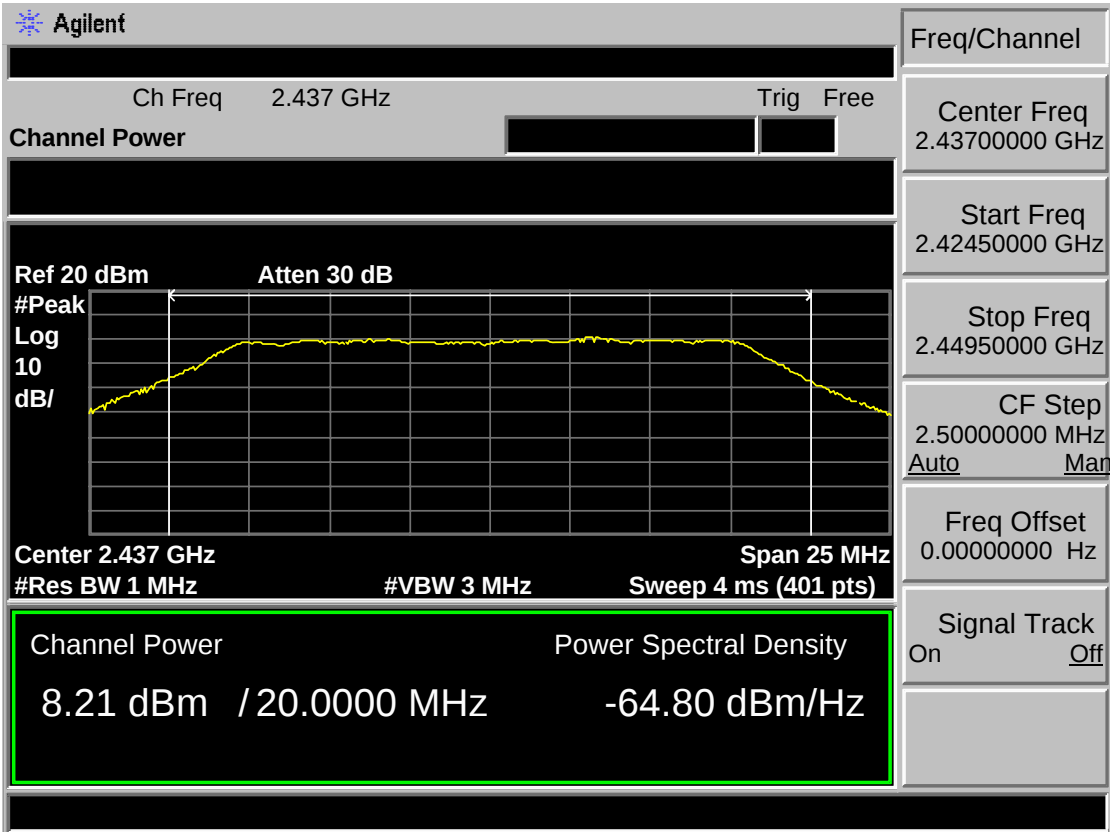
CH 11



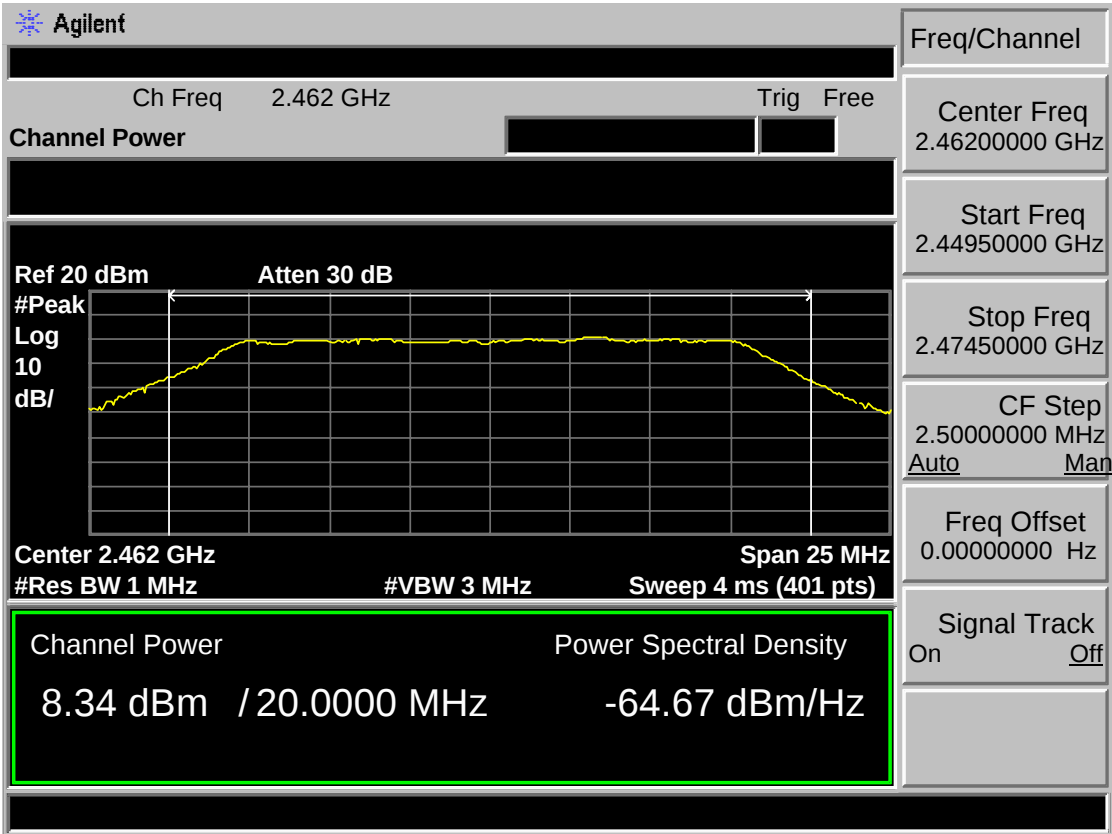
Test Mode: IEEE 802. 11g (Ant 2)
CH 1



CH 6



CH 11



9. POWER SPECTRAL DENSITY TEST

9.1. 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.

9.2. Test Procedure

- 1, Connected the EUT's antenna port to spectrum analyzer device.
- 2, Follow the test procedure as described in KDB 558074
 - (1). Set analyzer center frequency to DTS channel center frequency.
 - (2). Set the span to 1.5 times the DTS channel bandwidth.
 - (3). Set the RBW ≥ 3 kHz.
 - (4). Set the VBW $\geq 3 \times$ RBW.
 - (5). Detector = peak.
 - (6). Sweep time = auto couple.
 - (7). Trace mode = max hold.
 - (8). Allow trace to fully stabilize.
 - (9). Use the peak marker function to determine the maximum amplitude level. 10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

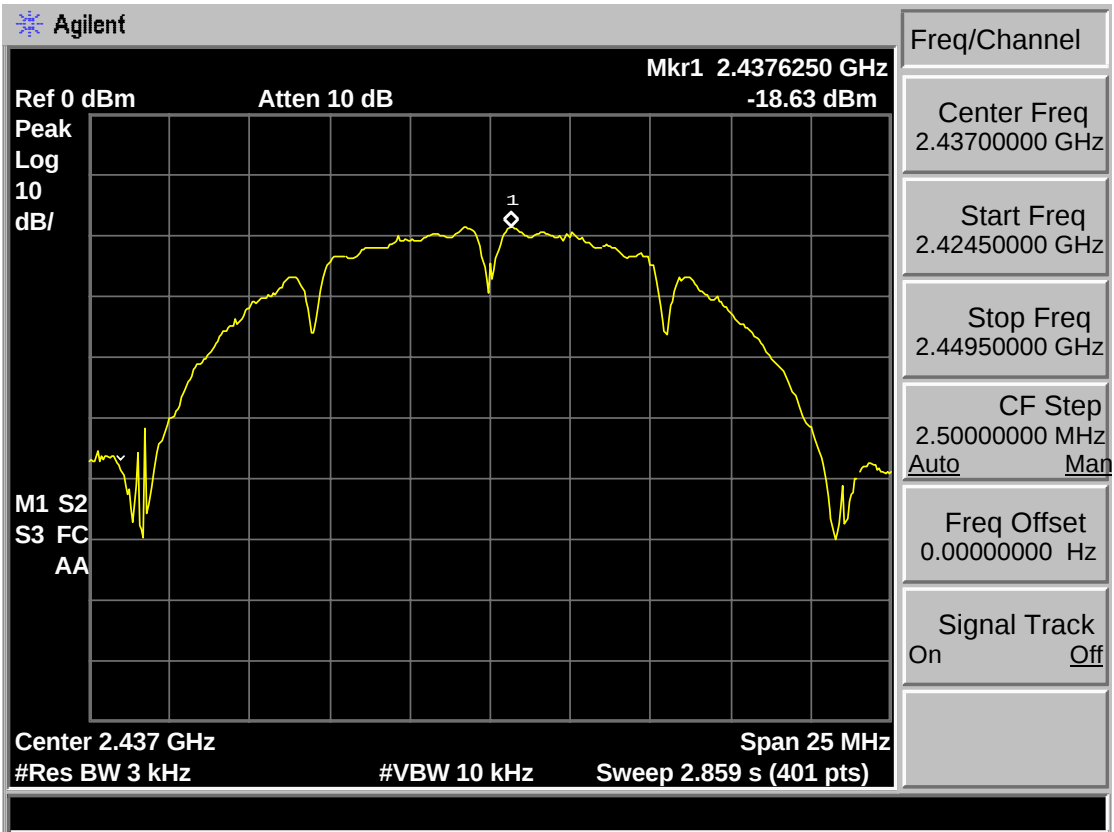
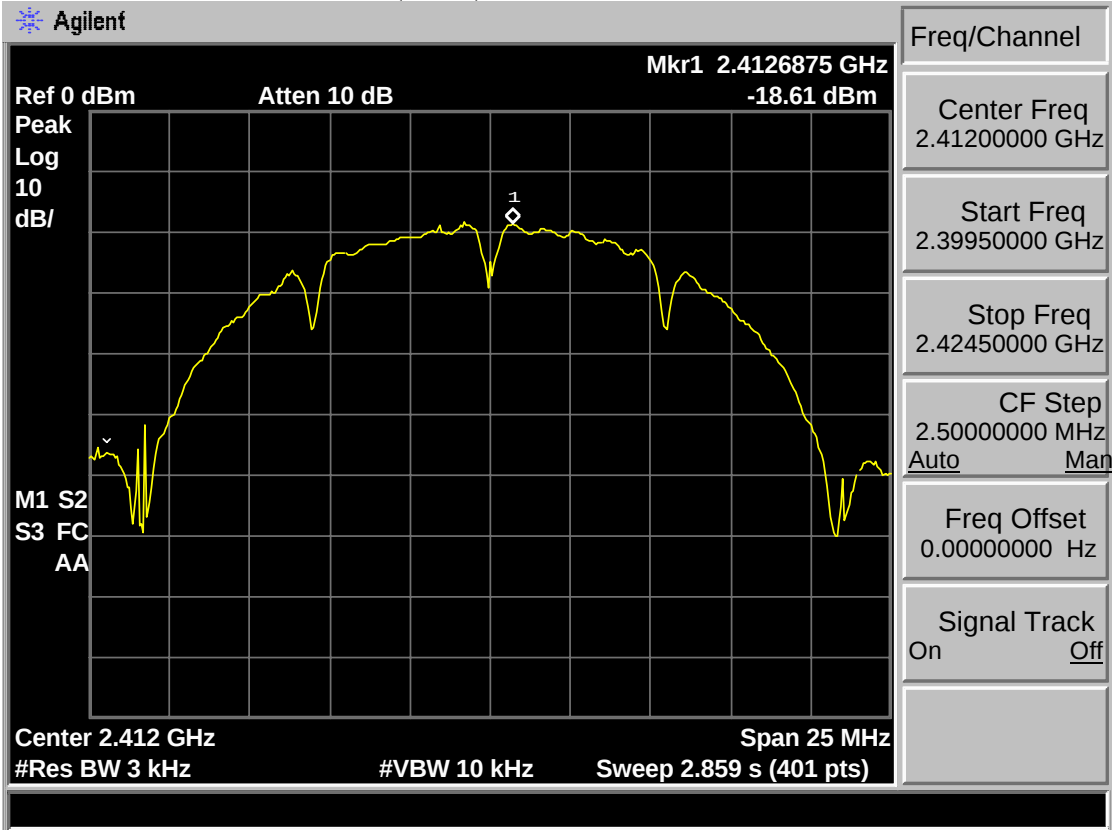
9.3. Test Result

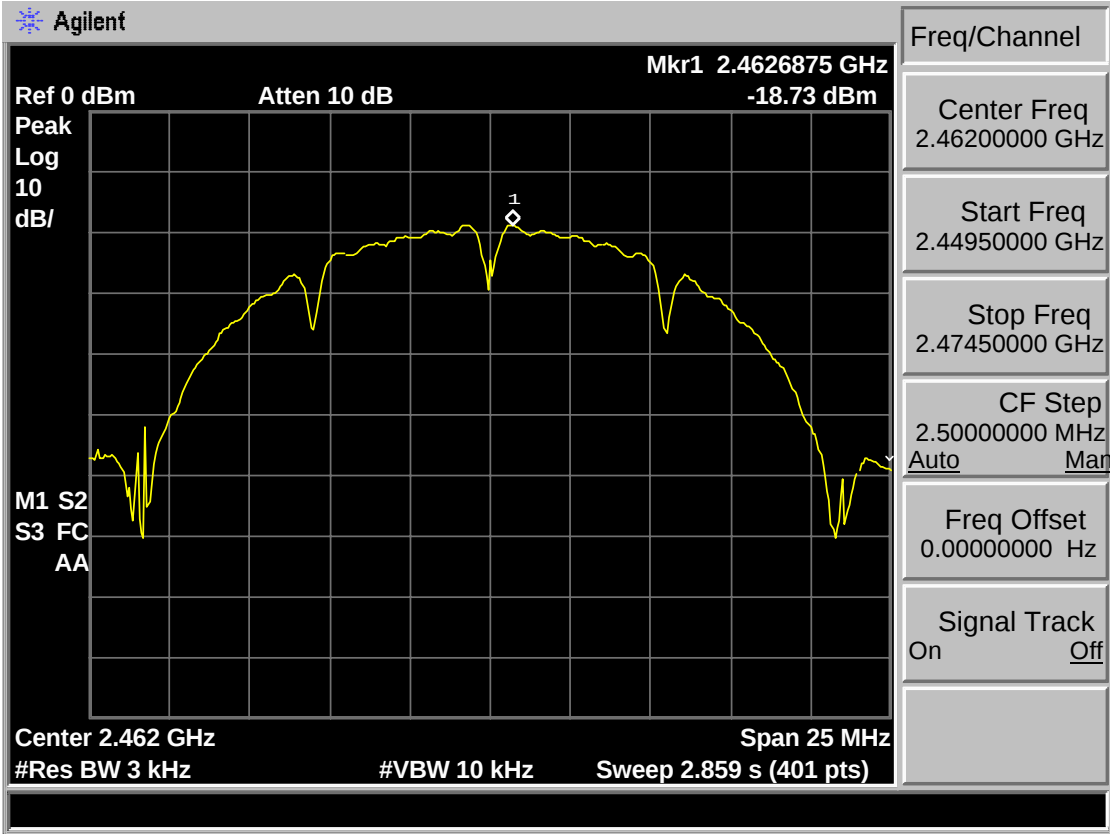
EUT: Audio Amplifier		
M/N: airstream A100		
Test date: Feb.21, 2013	Test site: 3m Chamber	Tested by: Tony Tang
Pass		

Test Mode	CH	Power density (dBm/3kHz)	Limit (dBm/3kHz)
11b (Ant 1)	CH1	-18.61	8
	CH6	-18.63	8
	CH11	18.73	8
11g (Ant 1)	CH1	-18.02	8
	CH6	-18.32	8
	CH11	-18.26	8
11b (Ant 2)	CH1	-19.77	8
	CH6	-19.61	8
	CH11	-19.76	8
11g (Ant 2)	CH1	-19.67	8
	CH6	-19.74	8
	CH11	-19.80	8
Conclusion : PASS			

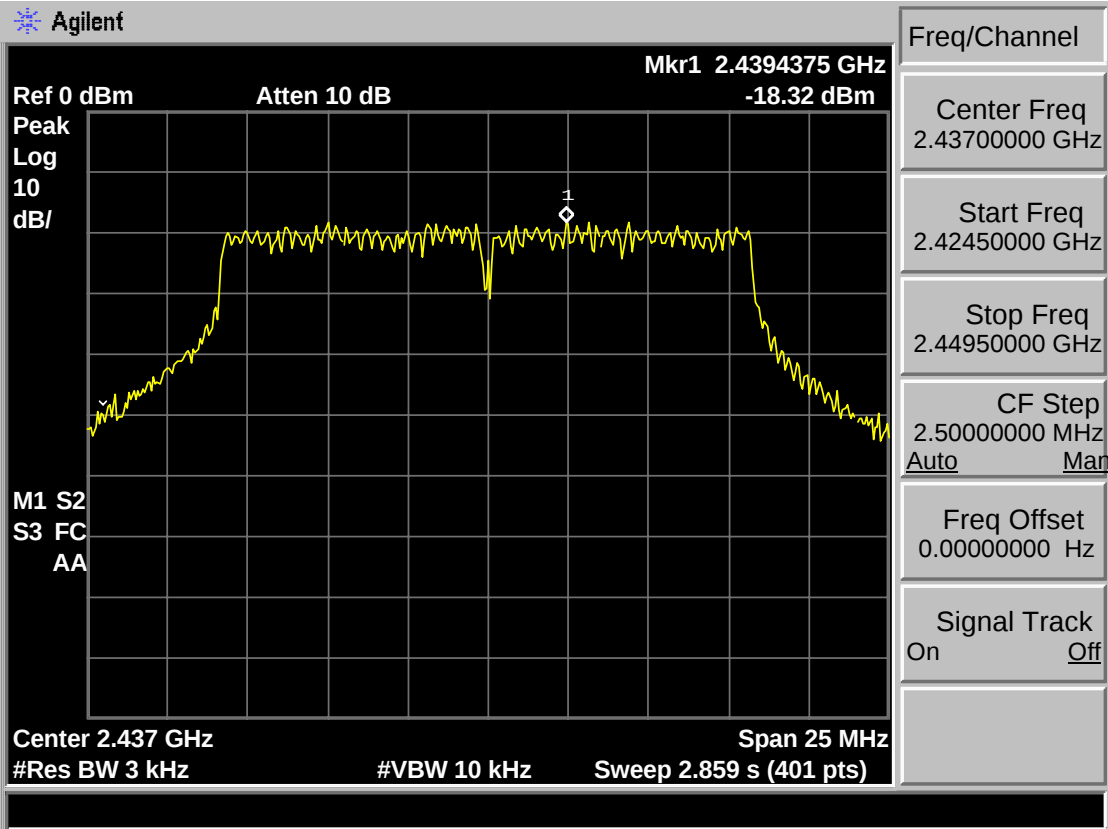
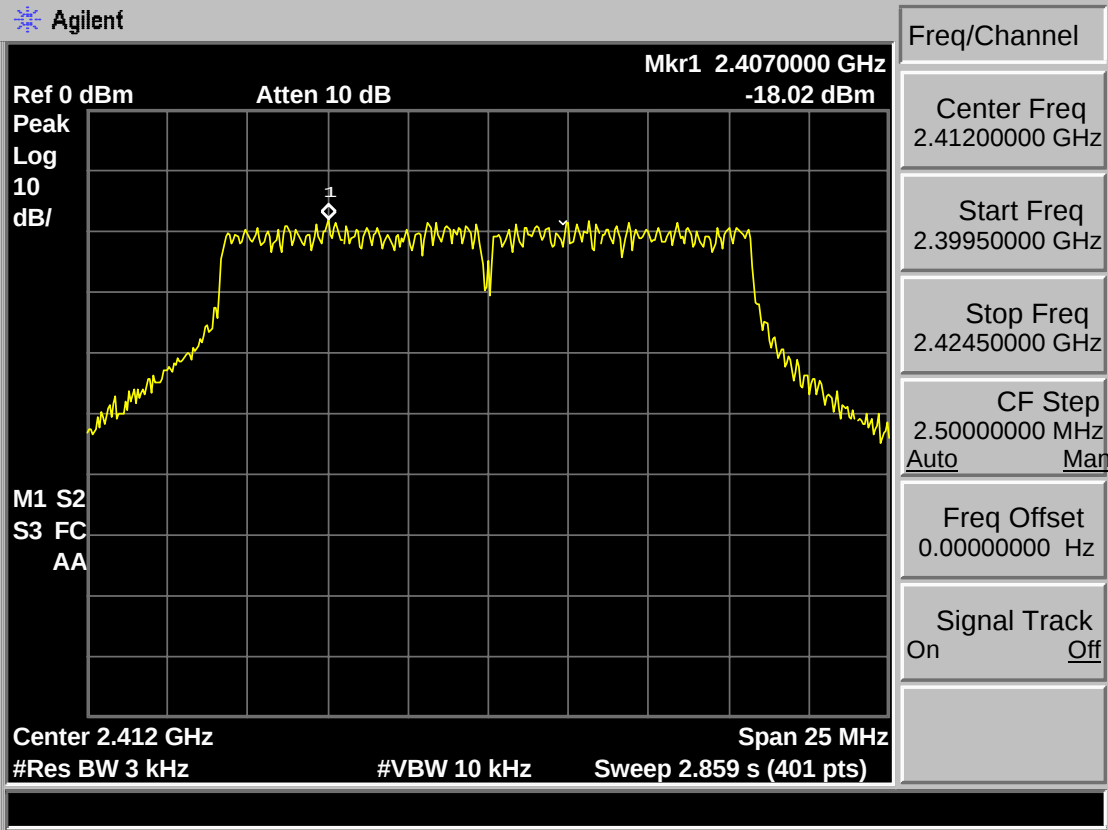
9.4. Test Data

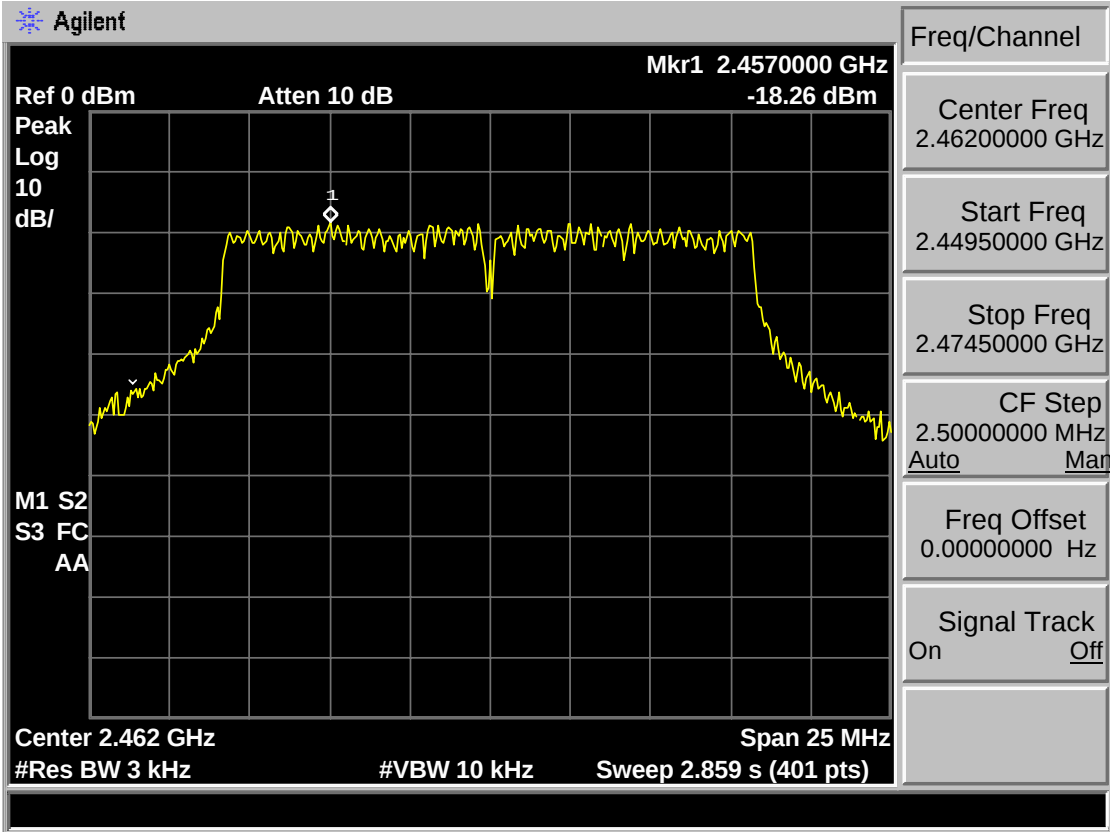
Test Mode: IEEE 802.11b TX (Ant 1)



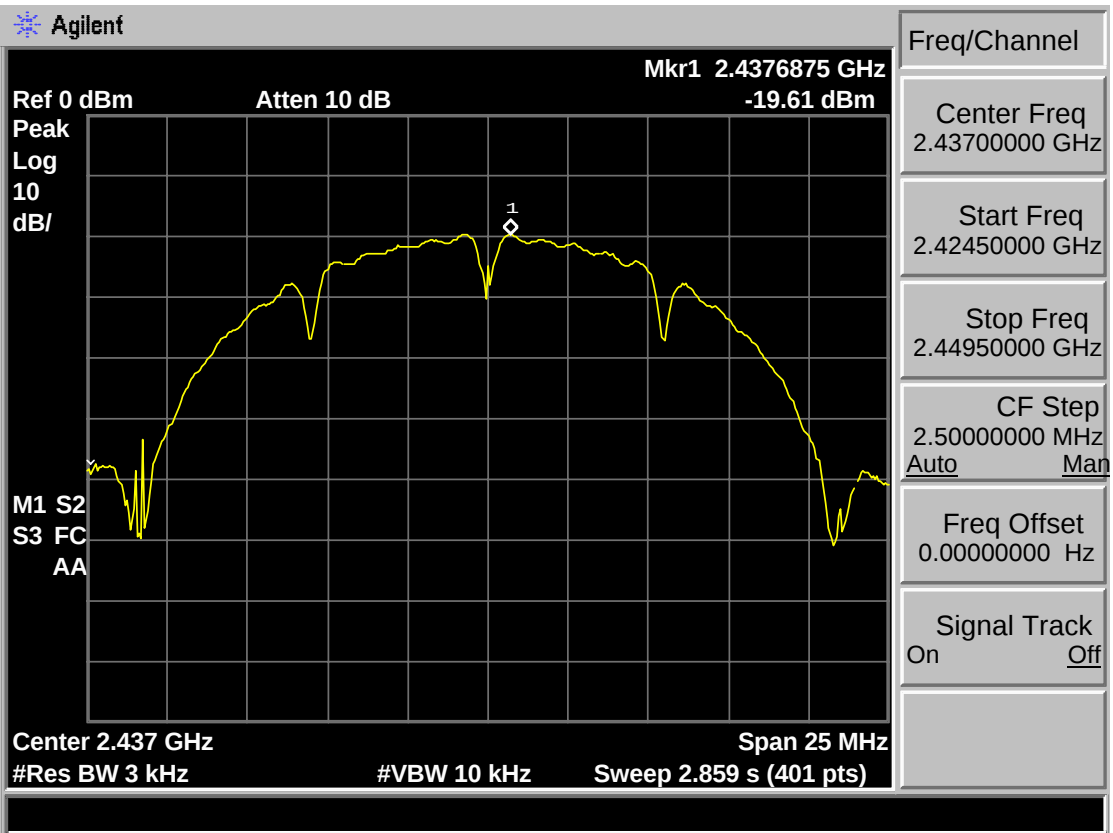
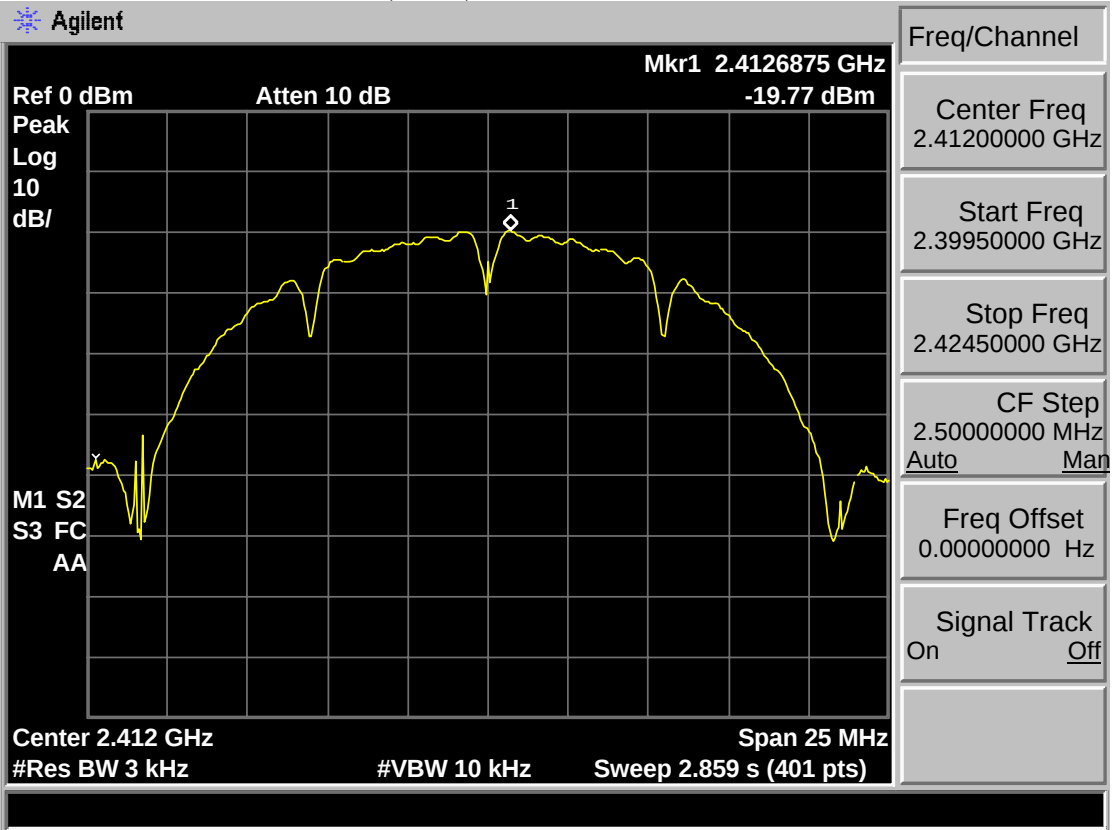


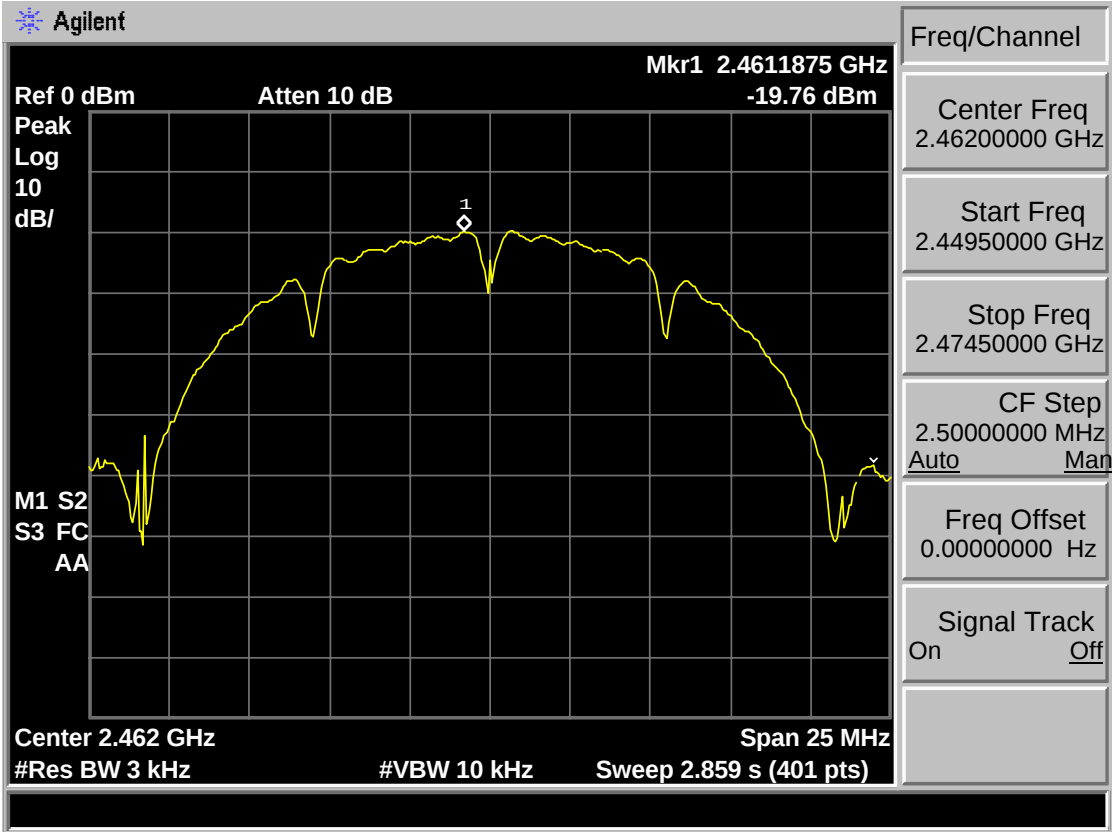
Test Mode: IEEE 802.11g TX (Ant 1)



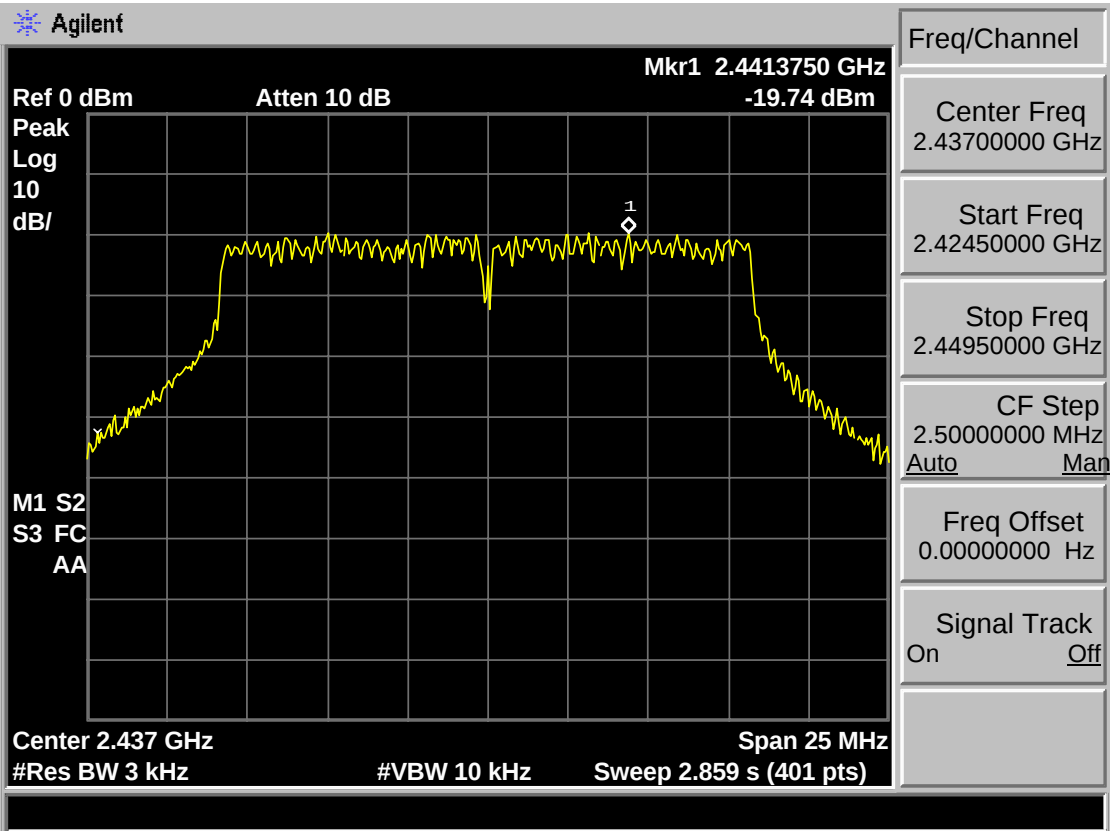
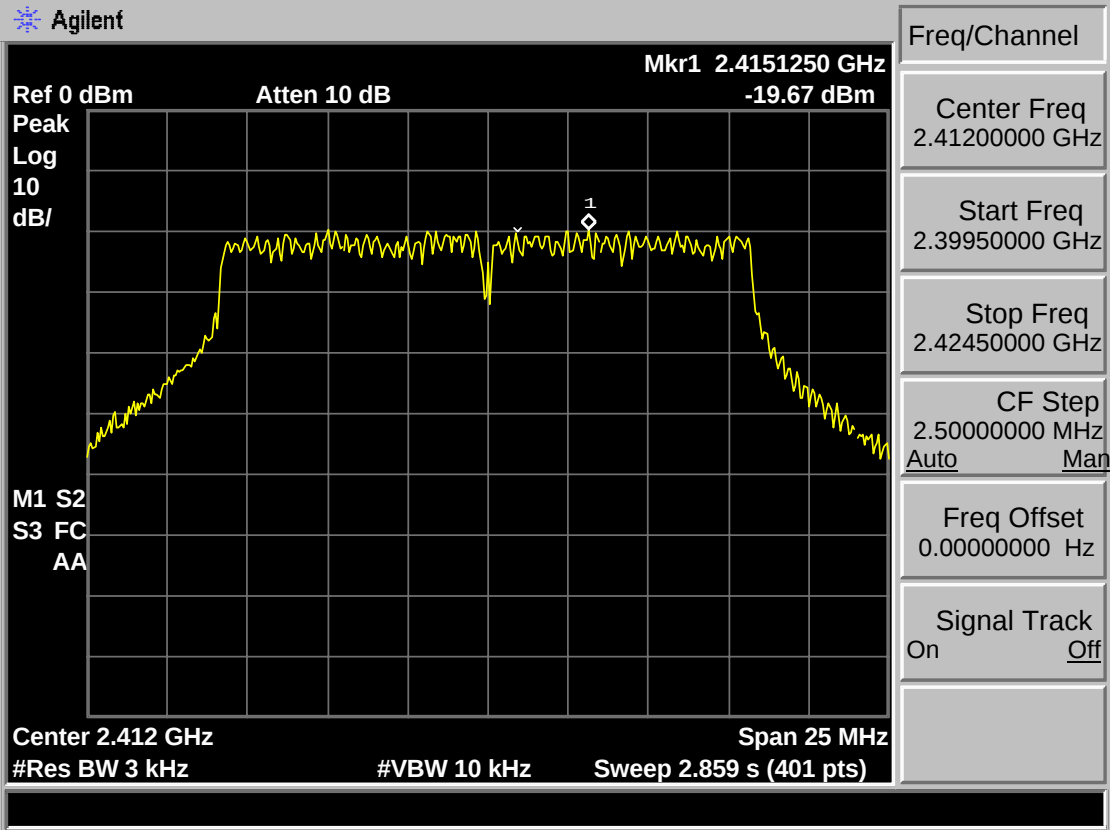


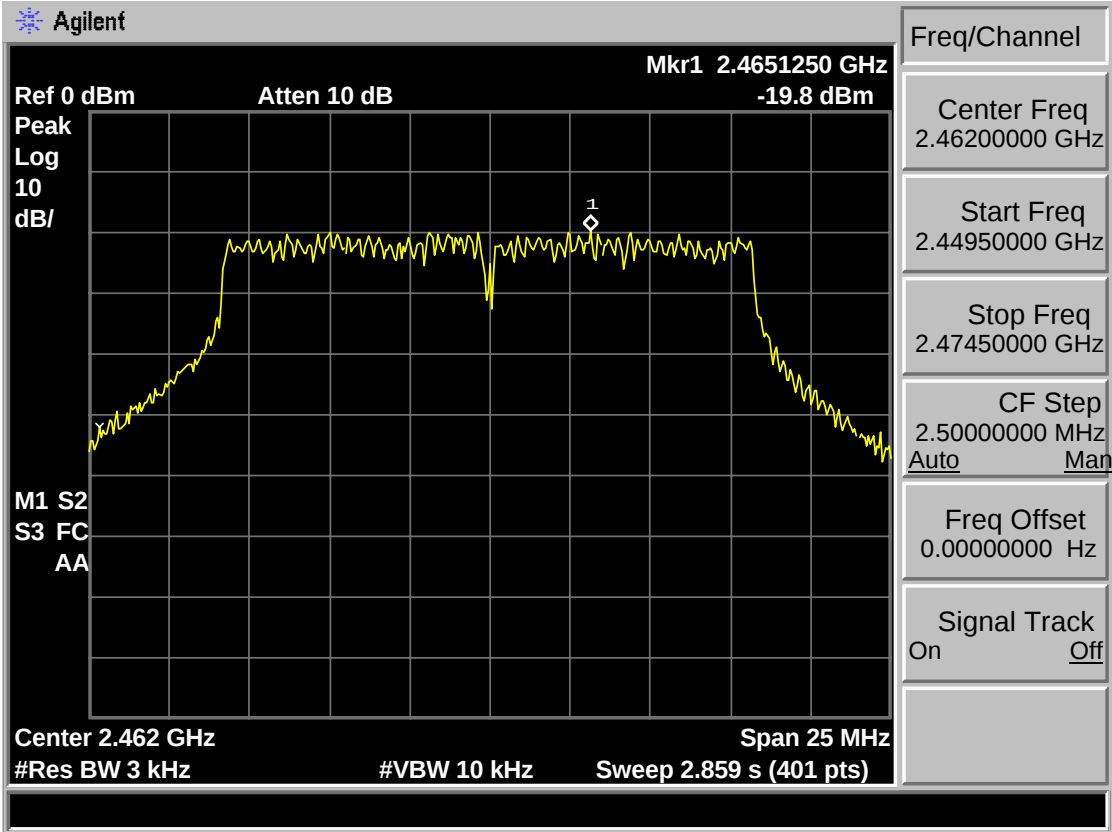
Test Mode: IEEE 802.11b TX (Ant 2)





Test Mode: IEEE 802. 11g TX (Ant 2)





10. ANTENNA REQUIREMENTS

10.1. Limit

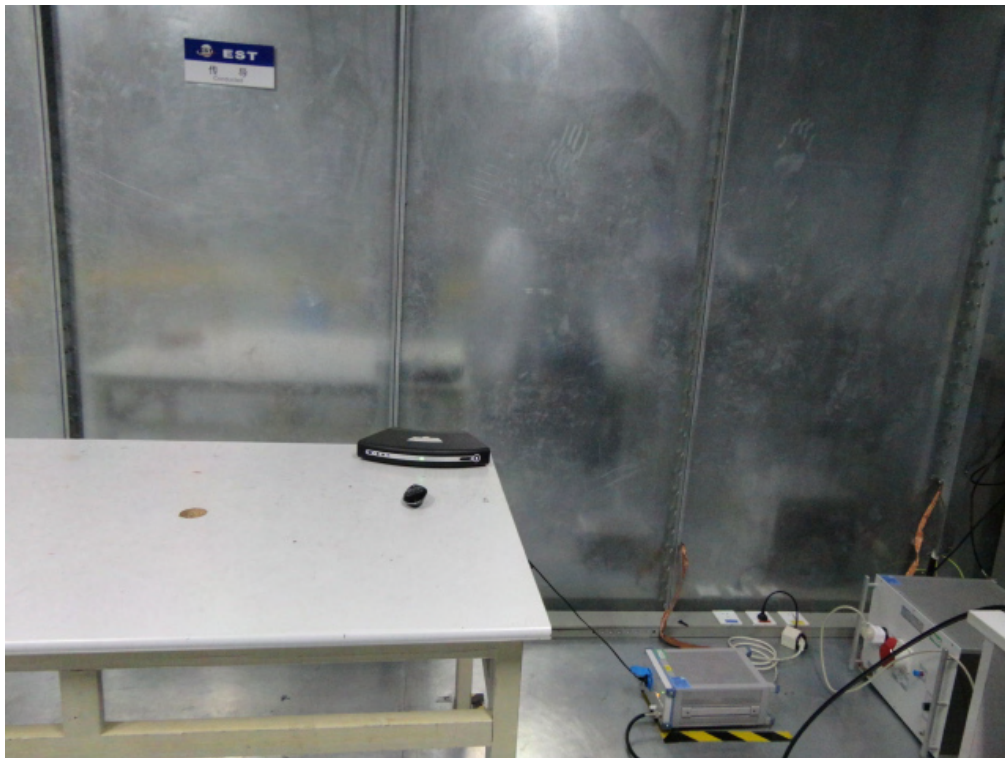
For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional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

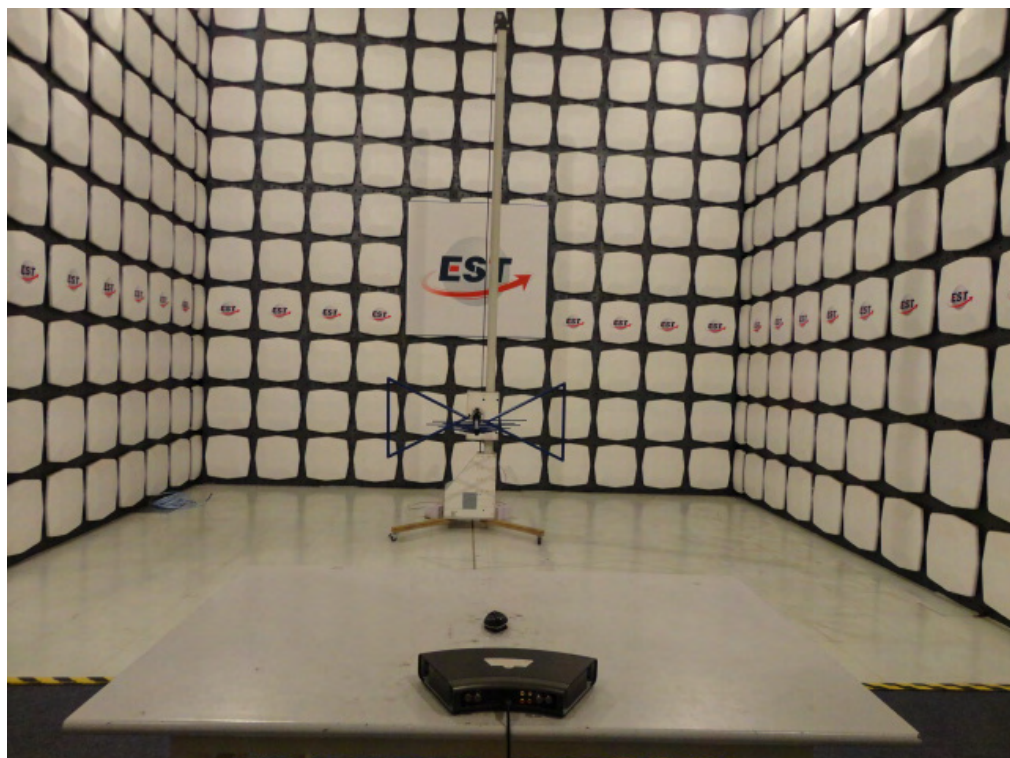
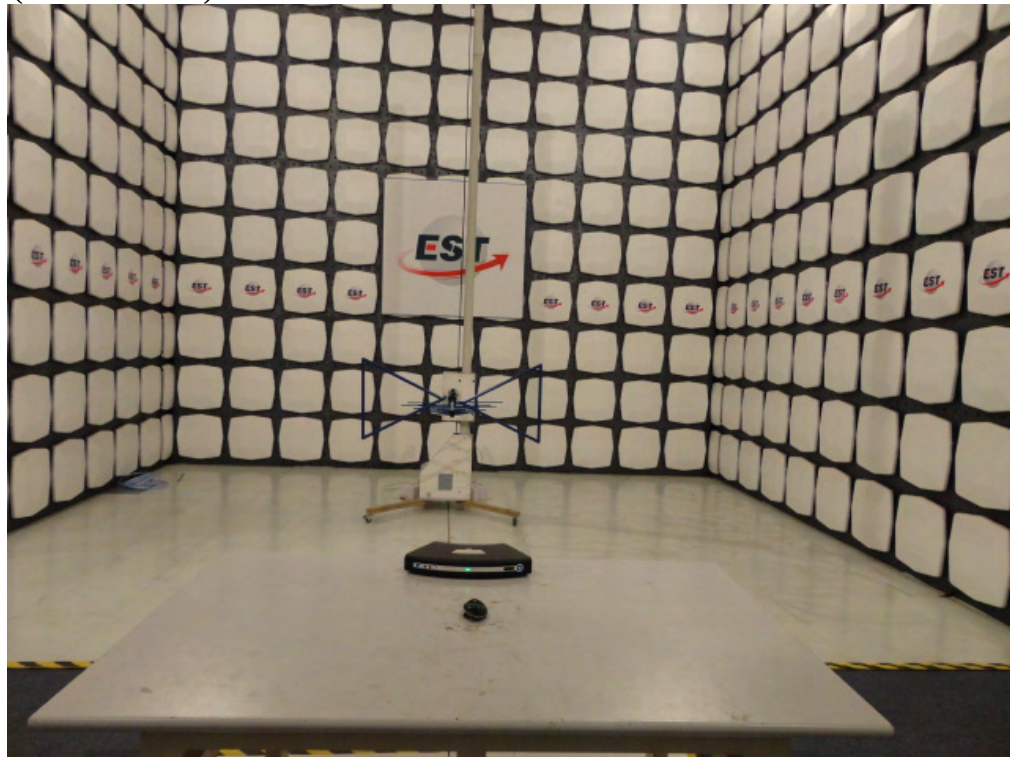
The antennas used for this product are integral Patch Antenna and that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is only 2.2 dBi.

11. TEST SETUP PHOTO

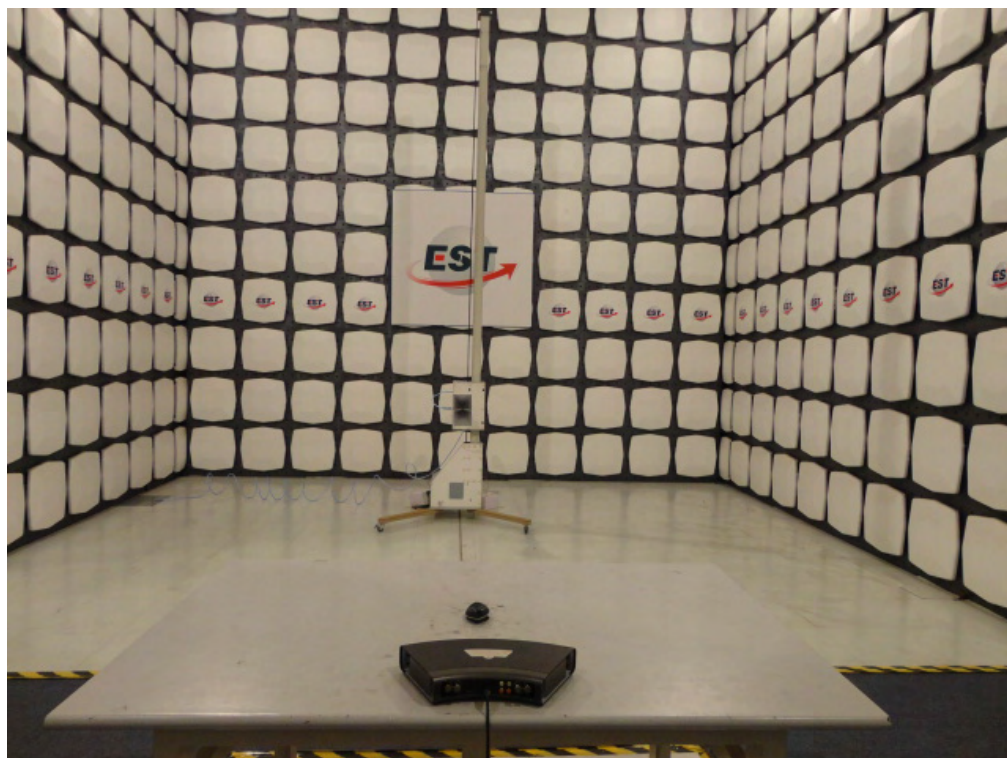
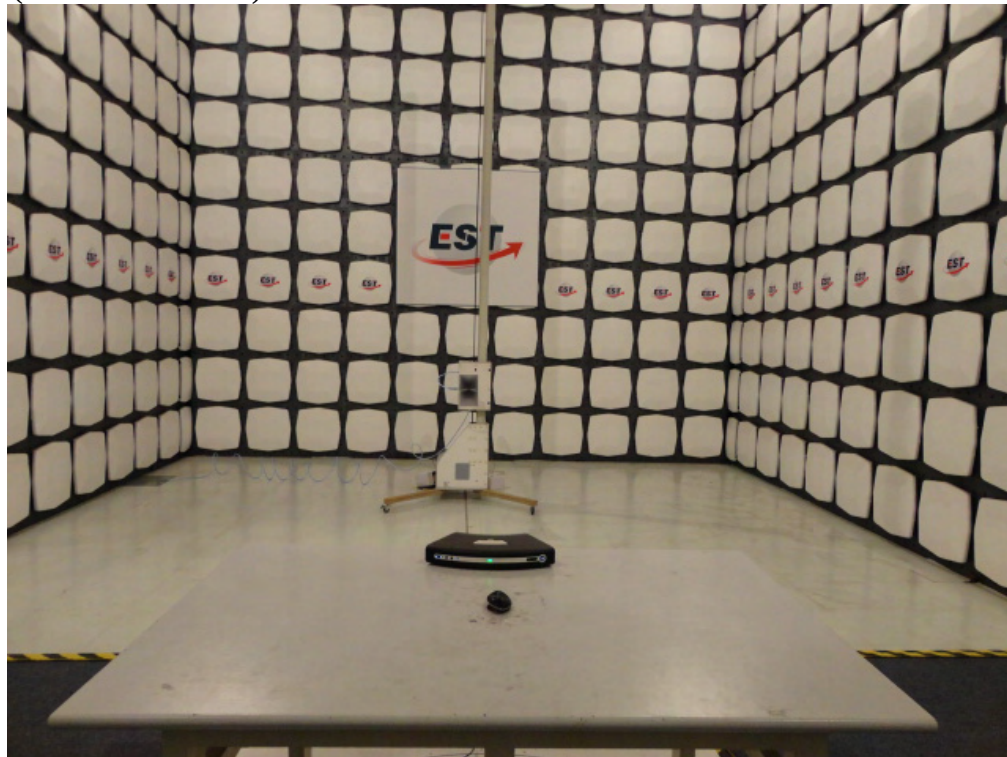
Conducted Test



Radiated Test (30-1000 MHz)



Radiated Test (1000-25000 MHz)



12. PHOTOS OF EUT

External Photos



External Photos



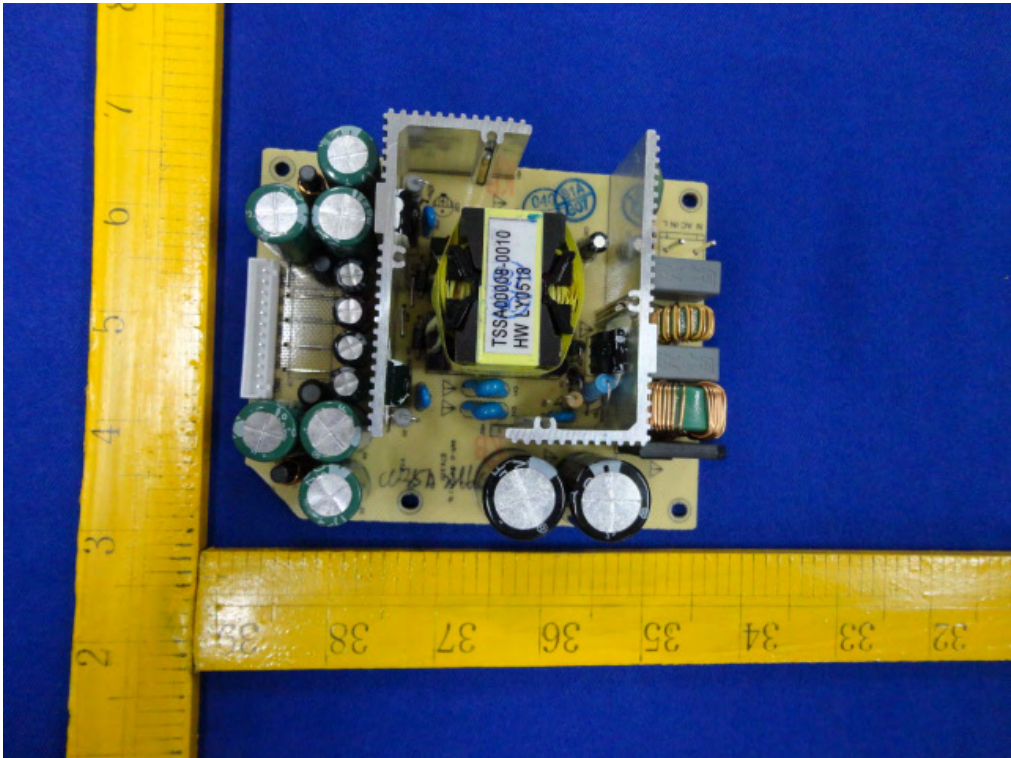
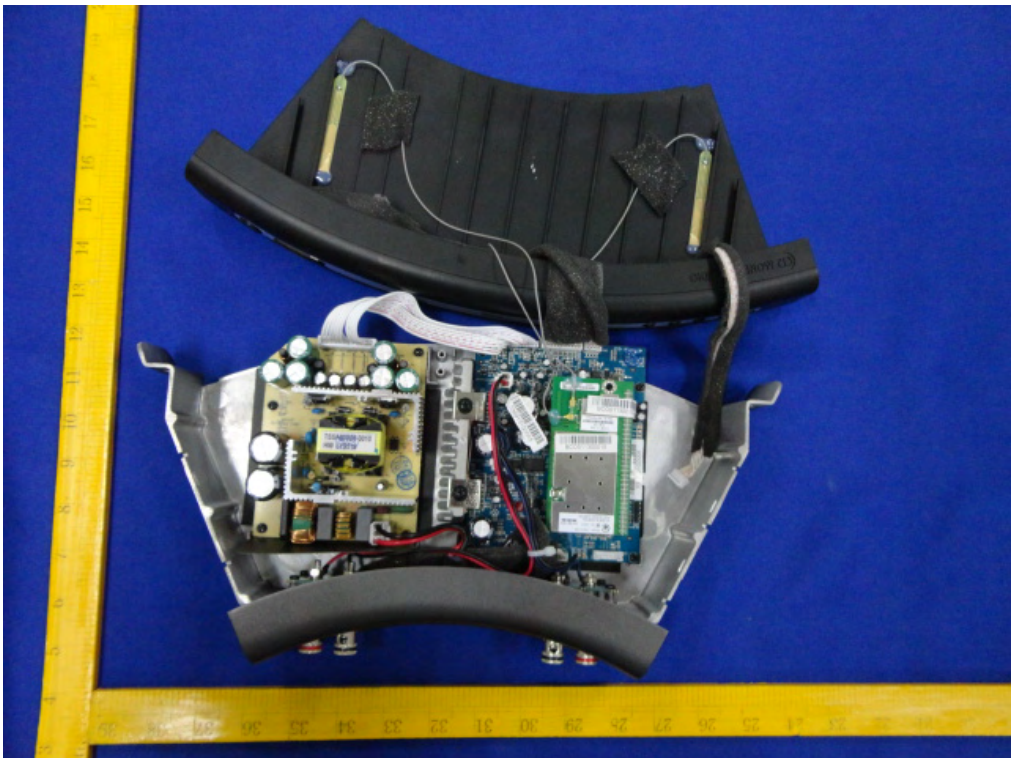
External Photos



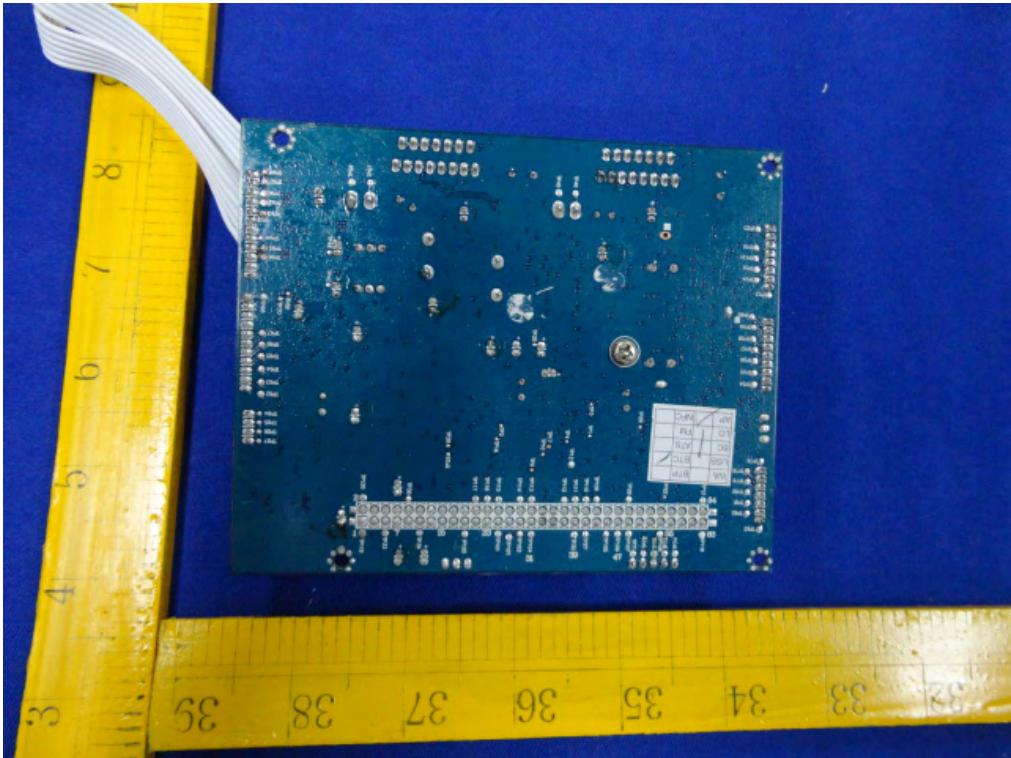
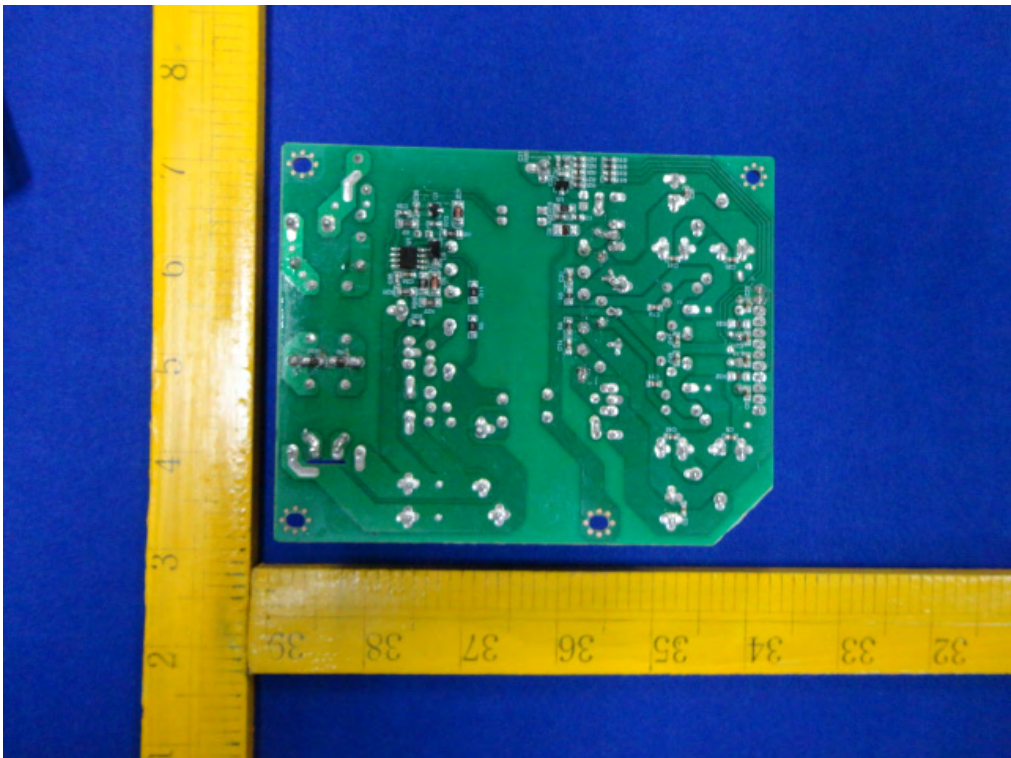
External Photos



Internal Photos



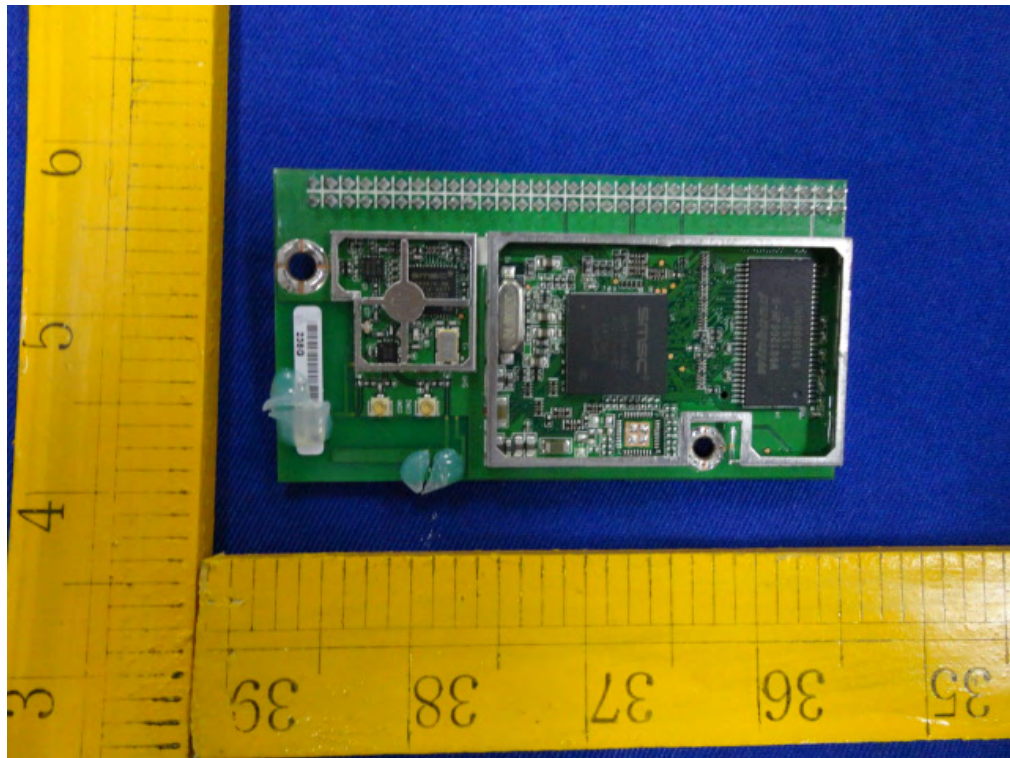
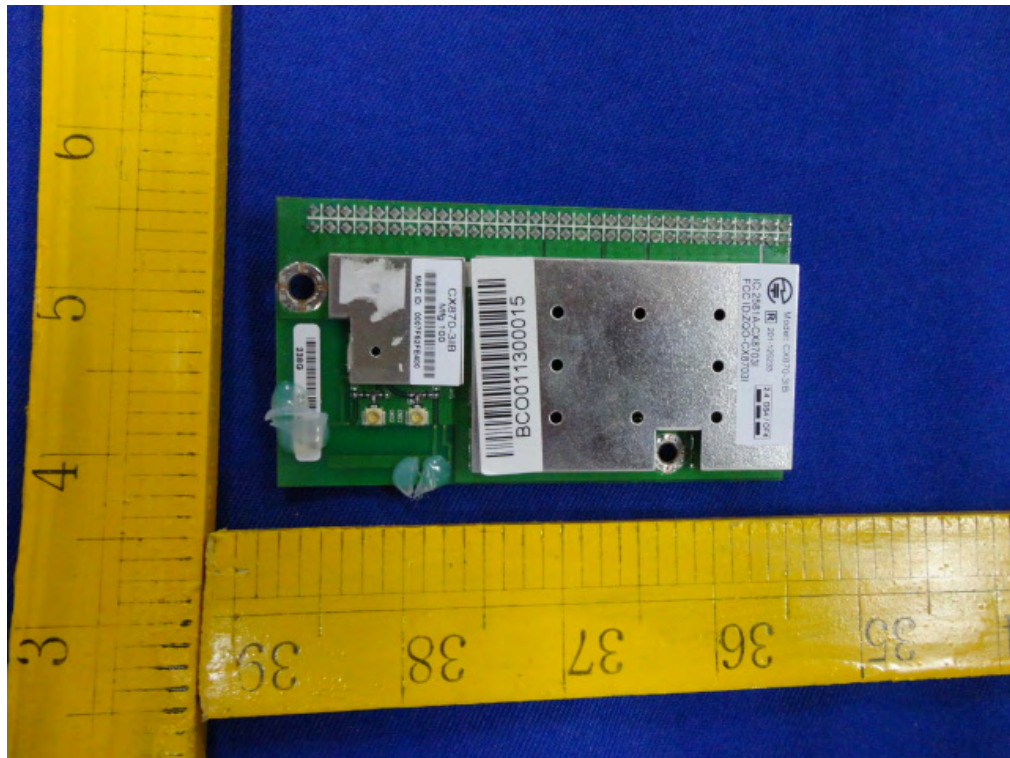
Internal Photos



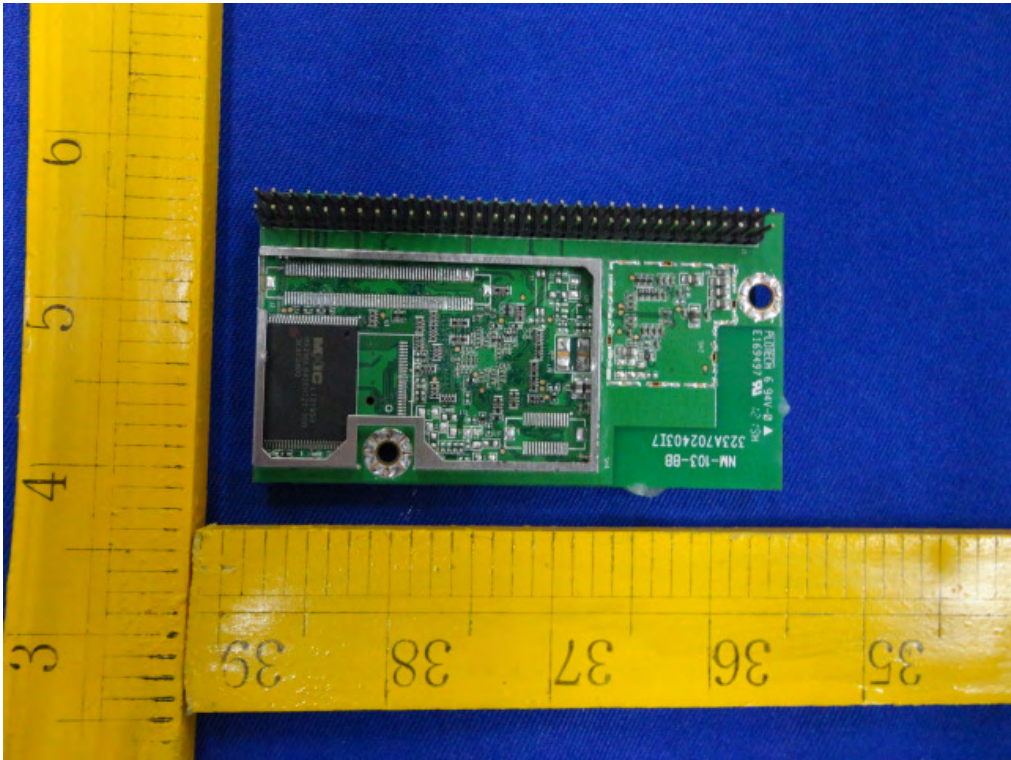
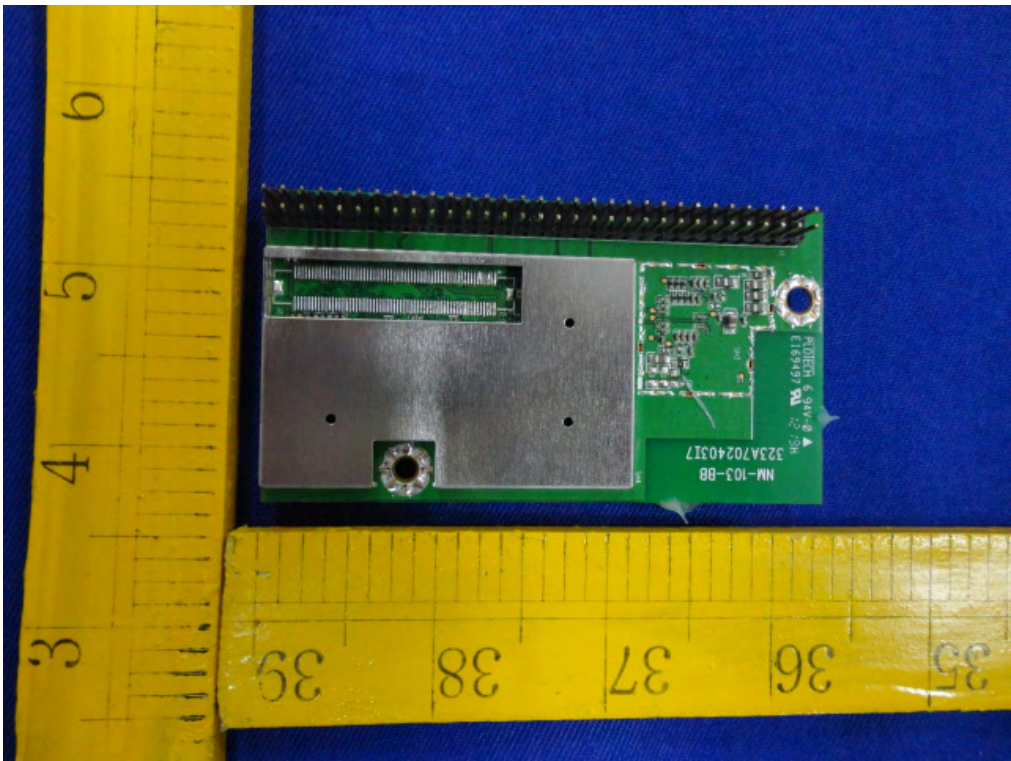
Internal Photos



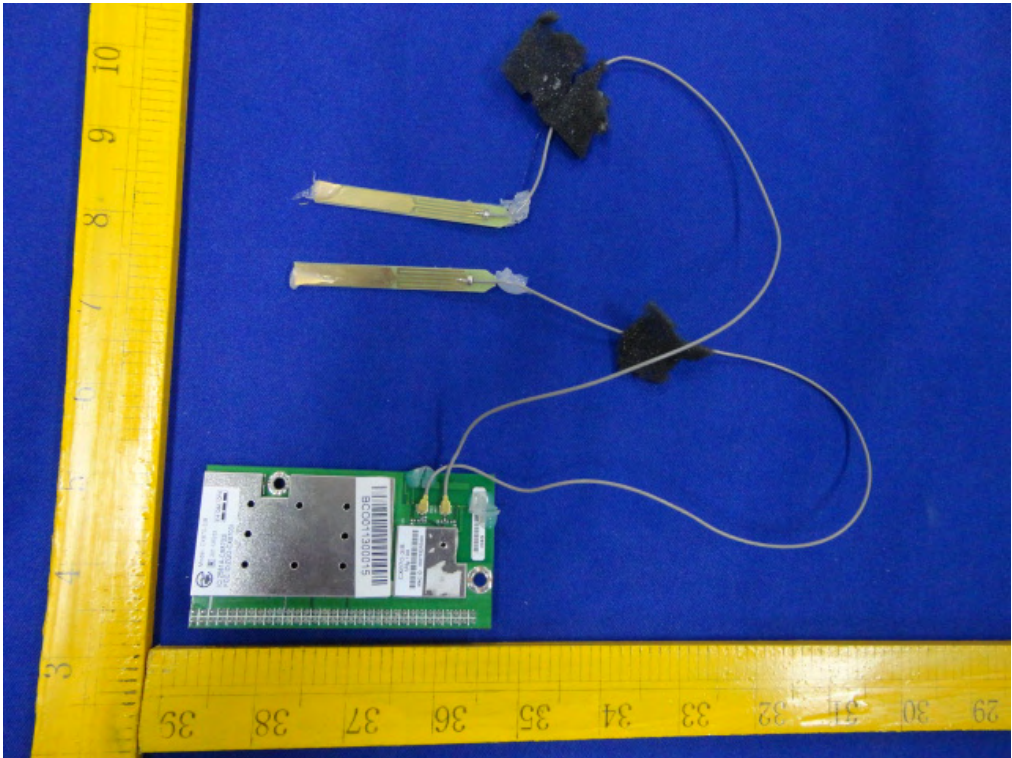
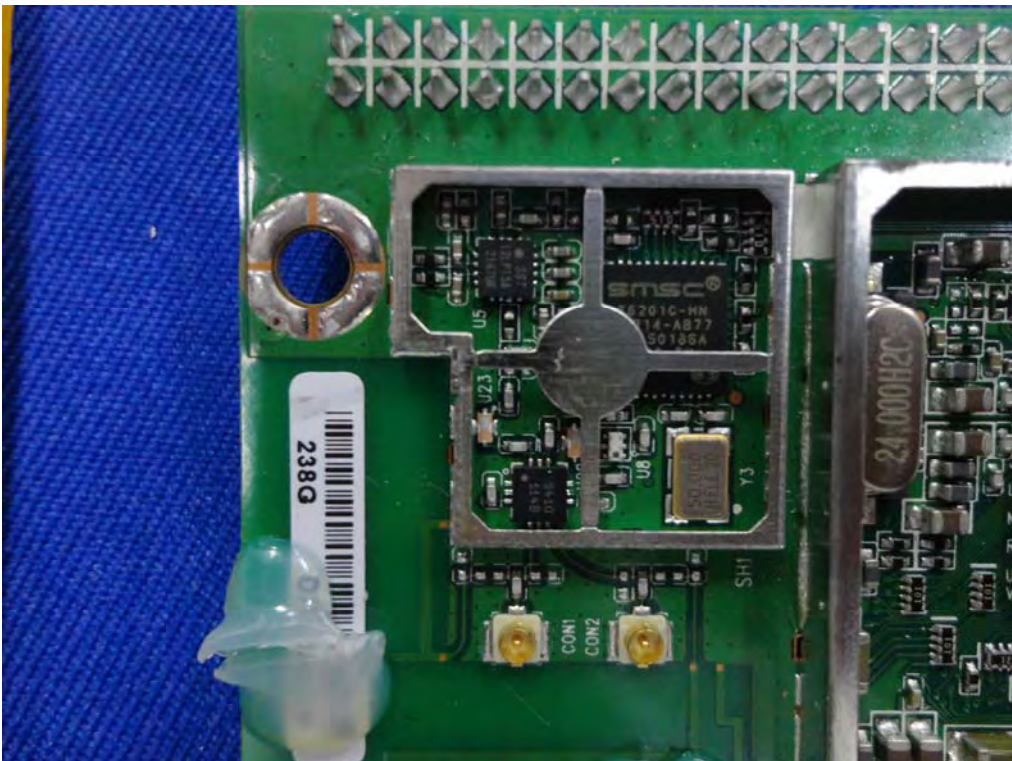
Internal Photos



Internal Photos



Internal Photos



Internal Photos

