CH06: 2437MHz

CH11: 2462MHz

TX 802.11n/HT20 Mode			
Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-14.153	8	PASS
2437	-14.587	8	PASS
2462	-14.399	8	PASS

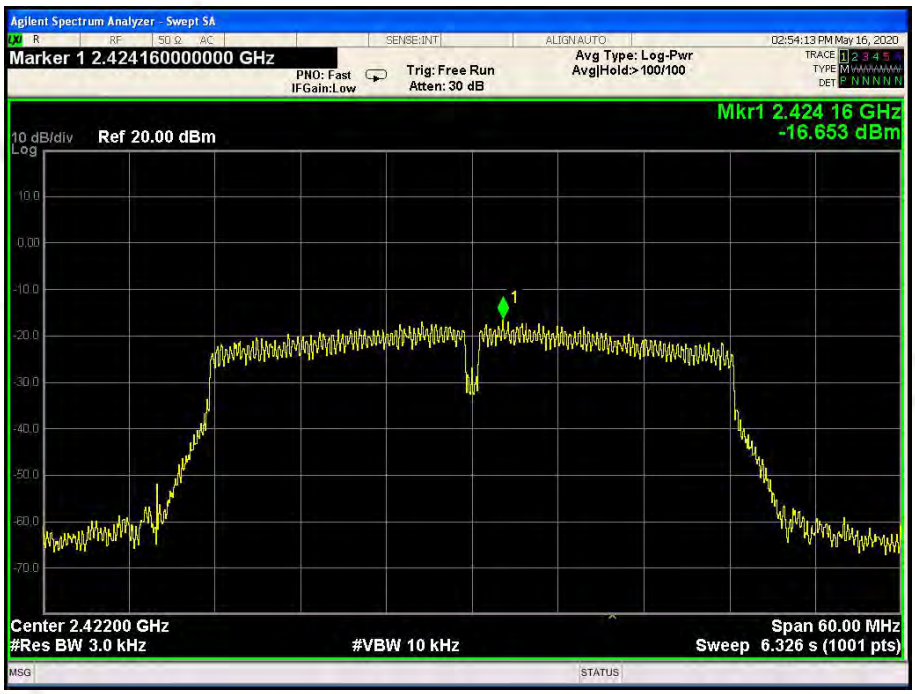
CH01: 2412MHz

CH06: 2437MHz

CH11: 2462MHz

TX 802.11n/HT40 Mode			
Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2422	-16.653	8	PASS
2437	-16.325	8	PASS
2452	-16.031	8	PASS

CH03: 2422MHz



CH06: 2437MHz

CH09: 2452MHz

#2

TX 802.11b Mode			
Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	0.484	8	PASS
2437	-0.385	8	PASS
2462	-0.744	8	PASS

CH01: 2412MHz

CH06: 2437MHz

CH11: 2462MHz

TX 802.11g Mode			
Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-13.774	8	PASS
2437	-14.827	8	PASS
2462	-15.310	8	PASS

CH01: 2412MHz

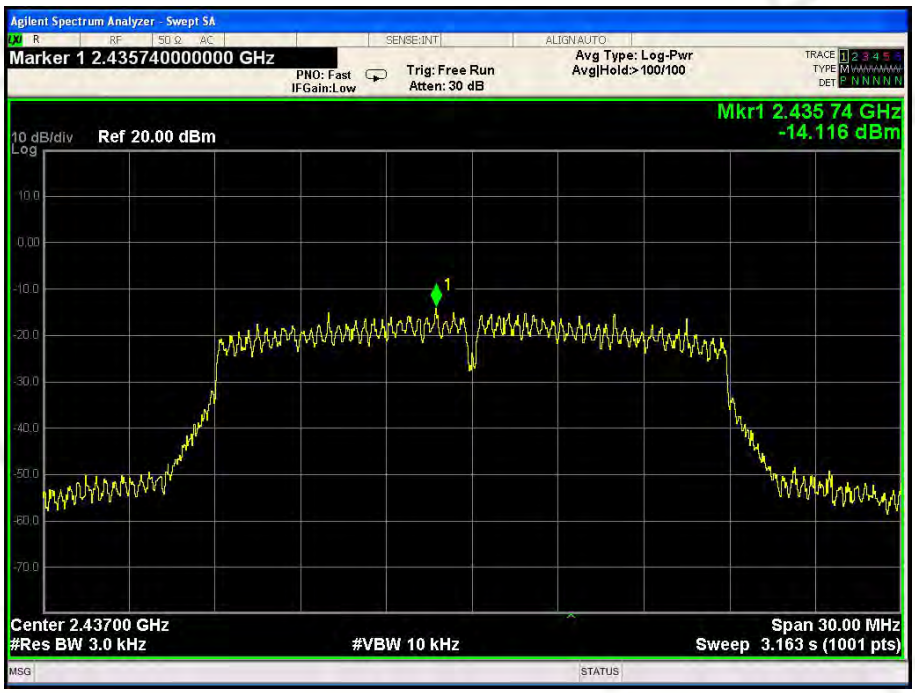
CH06: 2437MHz

CH11: 2462MHz

TX 802.11n/HT20 Mode			
Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2412	-13.535	8	PASS
2437	-14.116	8	PASS
2462	-15.490	8	PASS

CH01: 2412MHz

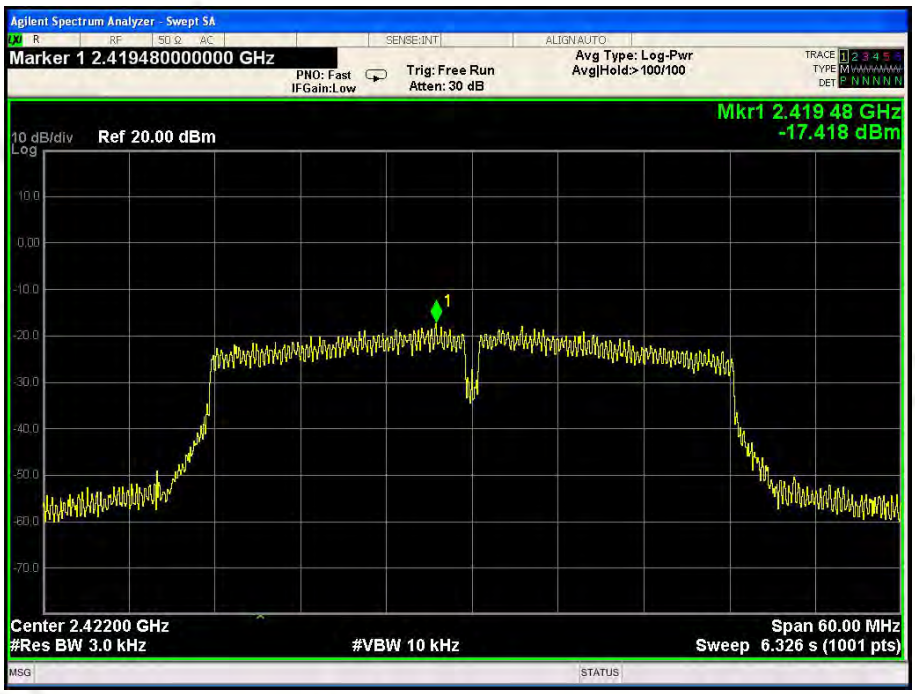
CH06: 2437MHz



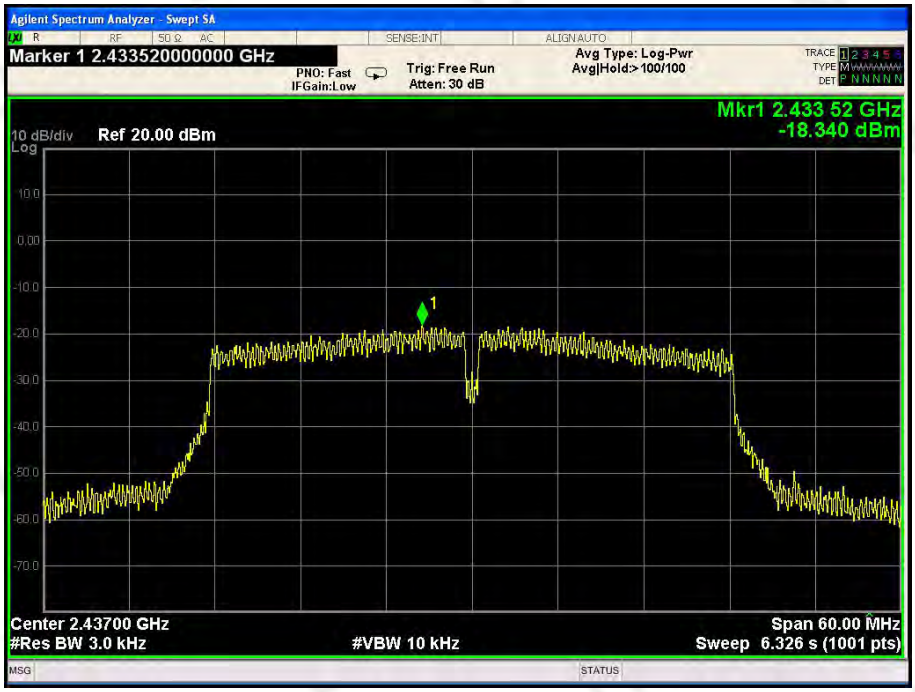
CH11: 2462MHz

TX 802.11n/HT40 Mode			
Frequency (MHz)	Power Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
2422	-17.418	8	PASS
2437	-18.340	8	PASS
2452	-17.551	8	PASS

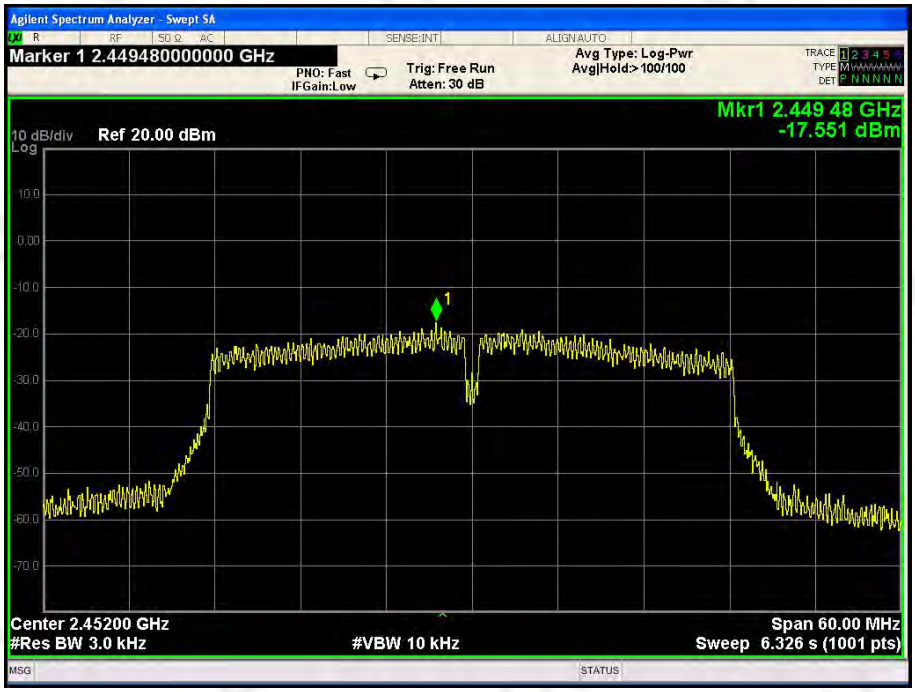
CH03: 2422MHz



CH06: 2437MHz



CH09: 2452MHz



7 PEAK OUTPUT POWER

7.1 TEST LIMIT

FCC Part15(15.247), Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

7.2 TEST PROCEDURE

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. The EUT was directly connected to the Power meter.

7.3 EQUIPMENT USED

Same as Radiated Emission Measurement.

7.4 TEST RESULT

PASS

Note: The prototype does not use MIMO technology. The prototype is a dual-antenna product, # 1 is the left antenna, # 2 is the right antenna

#1

Test Mode	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)	LIMIT (dBm)
802.11b	2412	14.03	30
	2437	14.16	30
	2462	14.23	30
802.11g	2412	13.68	30
	2437	13.64	30
	2462	13.72	30
802.11n/HT20	2412	13.06	30
	2437	13.24	30
	2462	13.69	30
802.11n/H420	2422	12.89	30
	2437	12.99	30
	2452	12.68	30

#2

Test Mode	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)	LIMIT (dBm)
802.11b	2412	14.15	30
	2437	14.19	30
	2462	14.07	30
802.11g	2412	13.72	30
	2437	13.89	30
	2462	13.62	30
802.11n/HT20	2412	13.42	30
	2437	13.34	30
	2462	13.32	30
802.11n/H420	2422	12.64	30
	2437	12.89	30
	2452	12.72	30

8 OUT OF BAND EMISSIONS

8.1 TEST LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

8.2 TEST SETUP

8.3 TEST PROCEDURE

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set EUT as TX operation and connect directly to the spectrum analyzer.
3. Based on FCC Part15 C Section 15.247: RBW=100kHz, VBW=300kHz.
4. Set detected by the spectrum analyzer with peak detector.

8.4 TEST RESULT

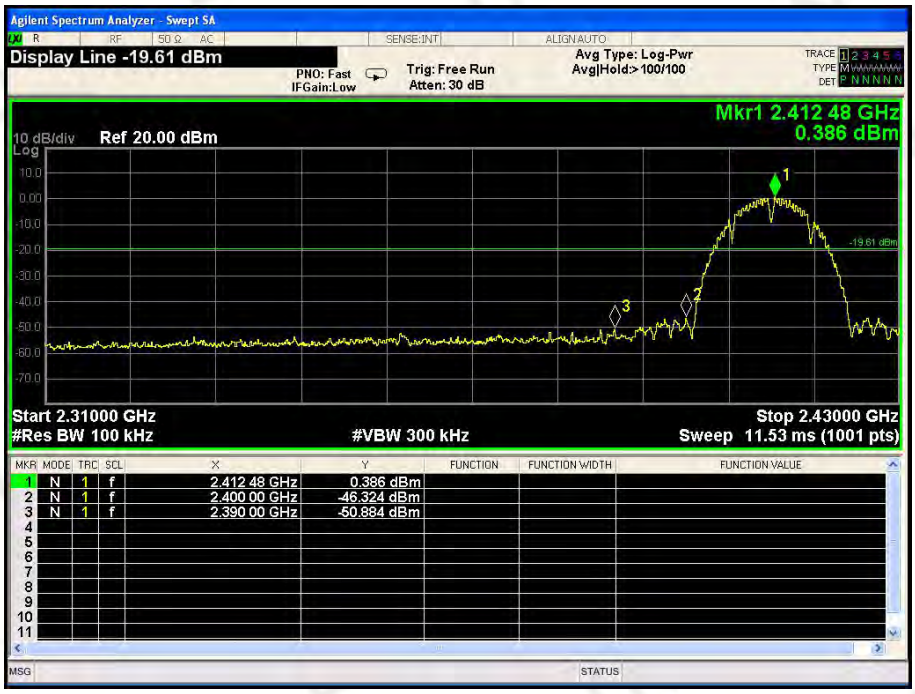
PASS

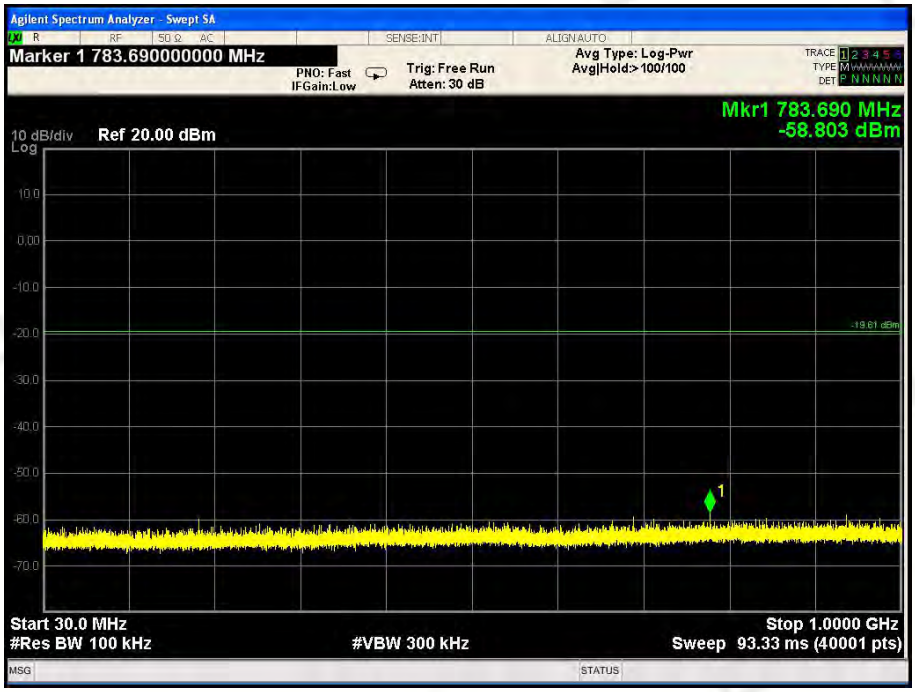
Note: The prototype does not use MIMO technology. The prototype is a dual-antenna product, # 1 is the left antenna, # 2 is the right antenna

#1

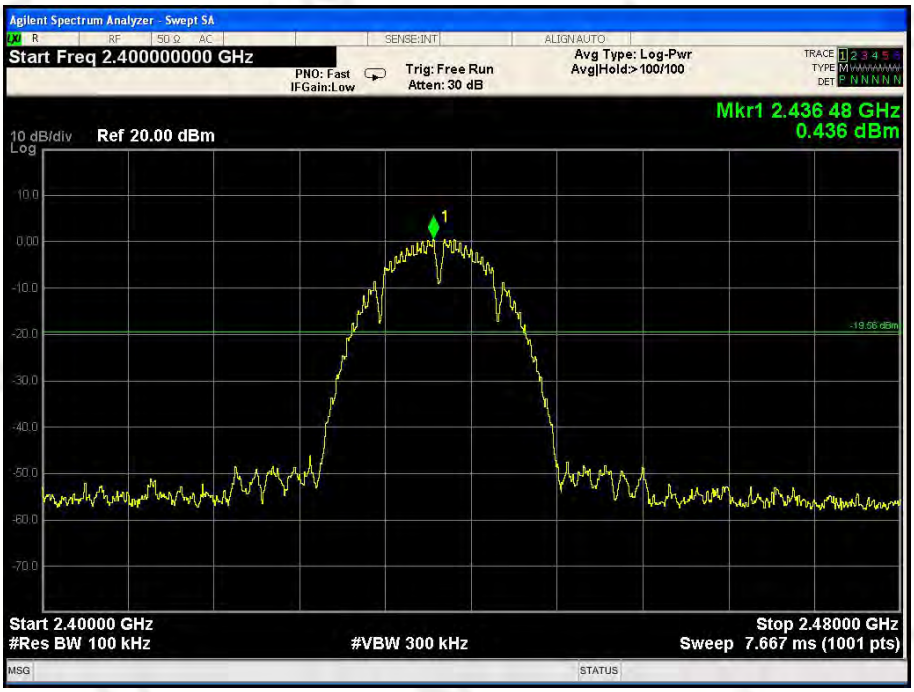
TX 802.11b Mode:

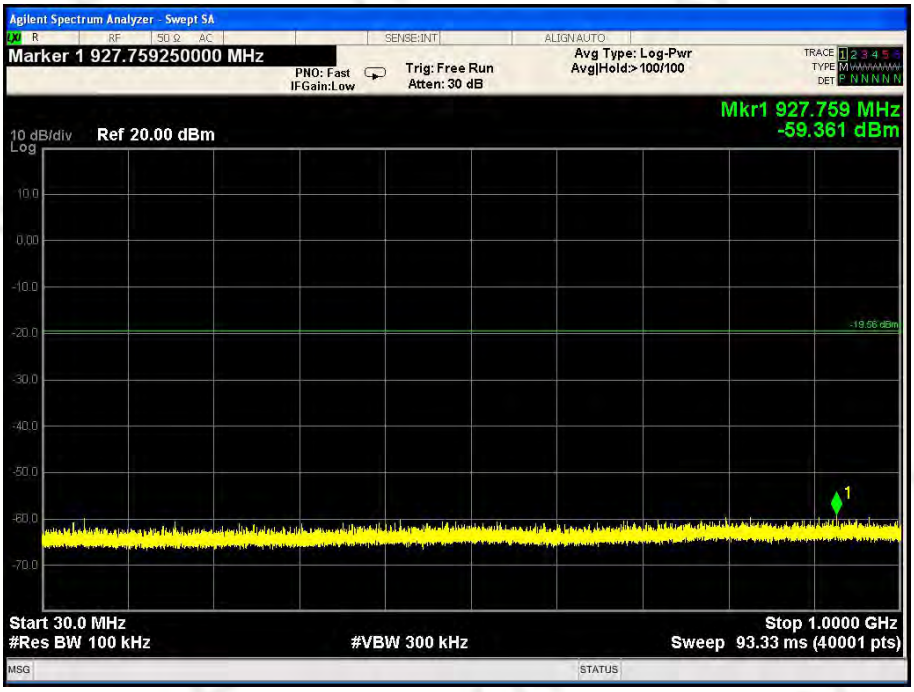
CH01: 2412MHz





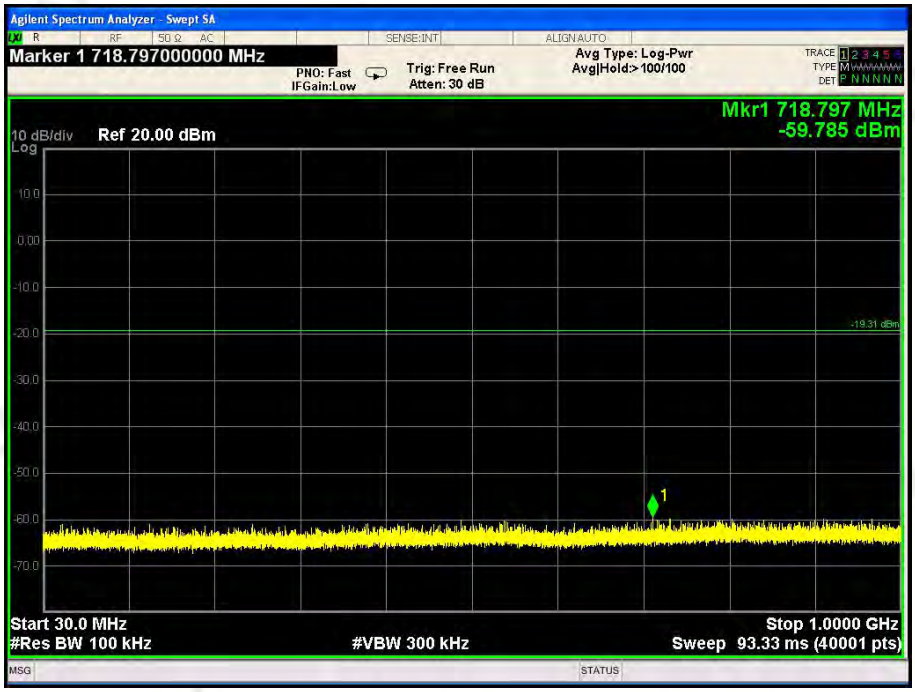
CH06: 2437MHz




Agilent Spectrum Analyzer - Swept SA
Marker 1 927.759250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 927.759 MHz
-59.361 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

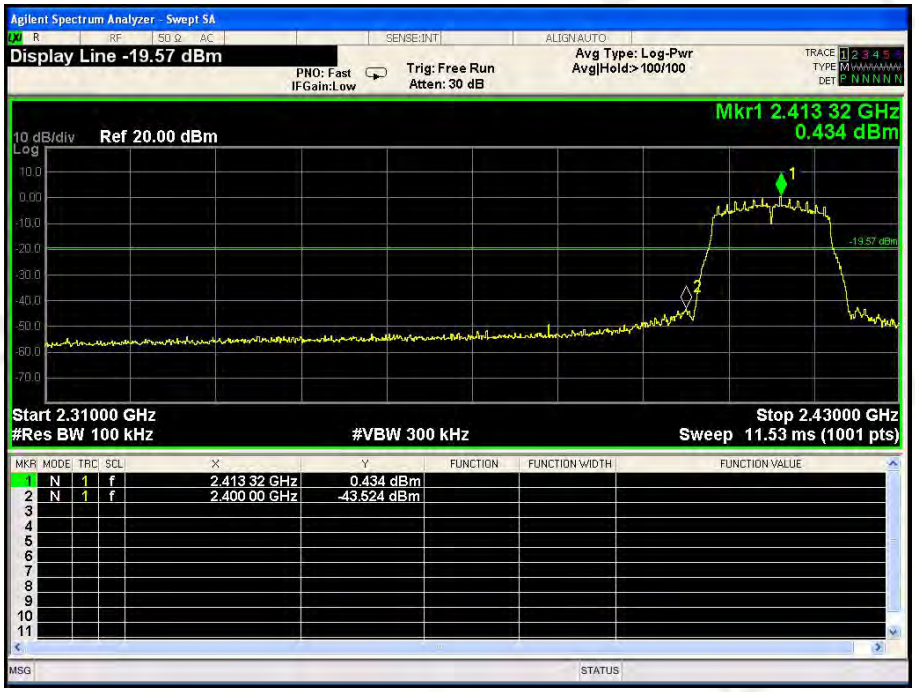

Agilent Spectrum Analyzer - Swept SA
Marker 1 24.753887500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 24.753 9 GHz
-43.552 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

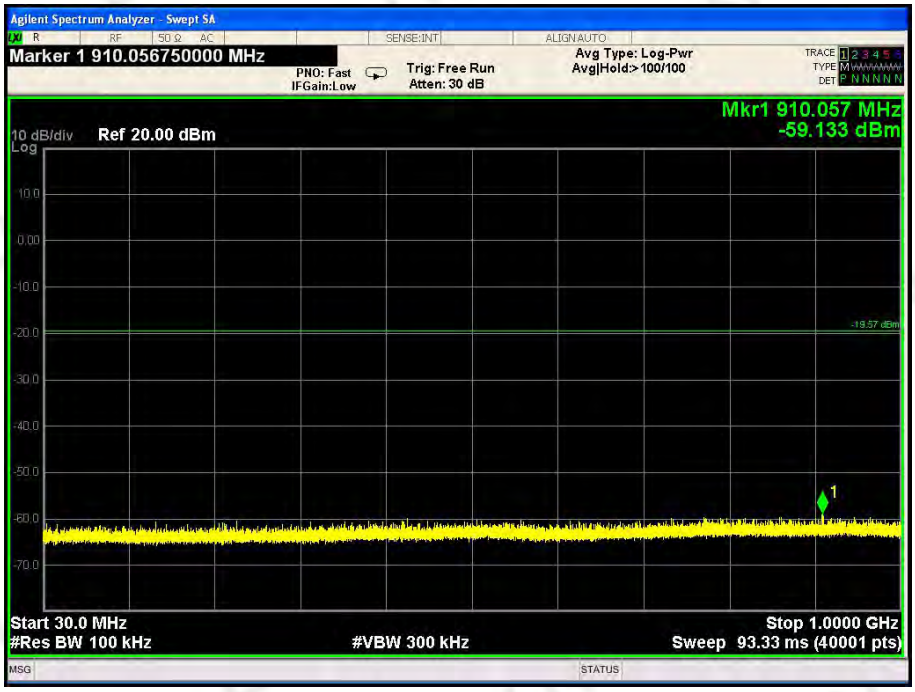
CH11: 2462MHz



TX 802.11g Mode:

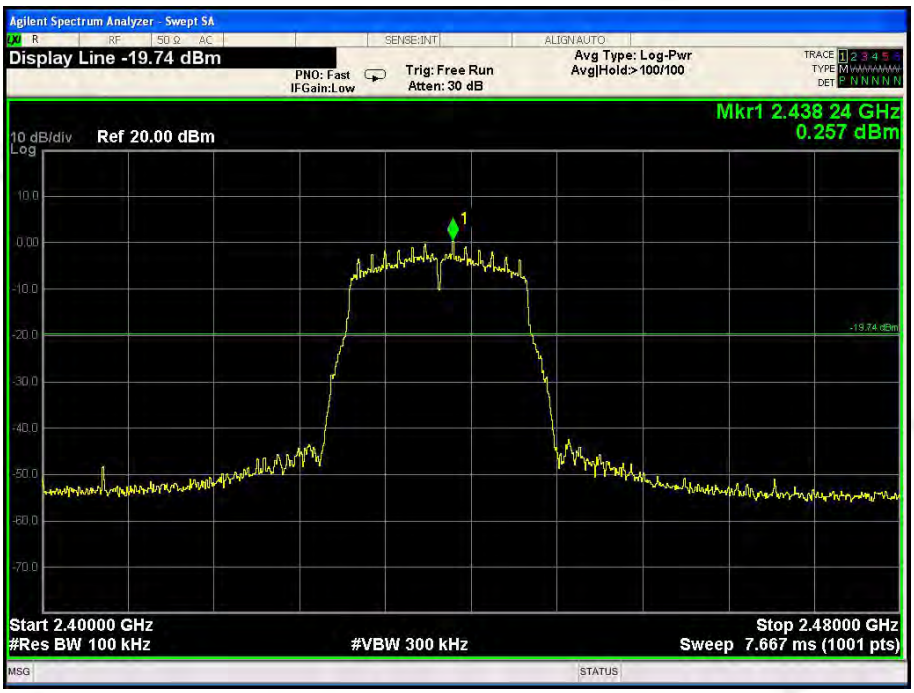
CH01: 2412MHz

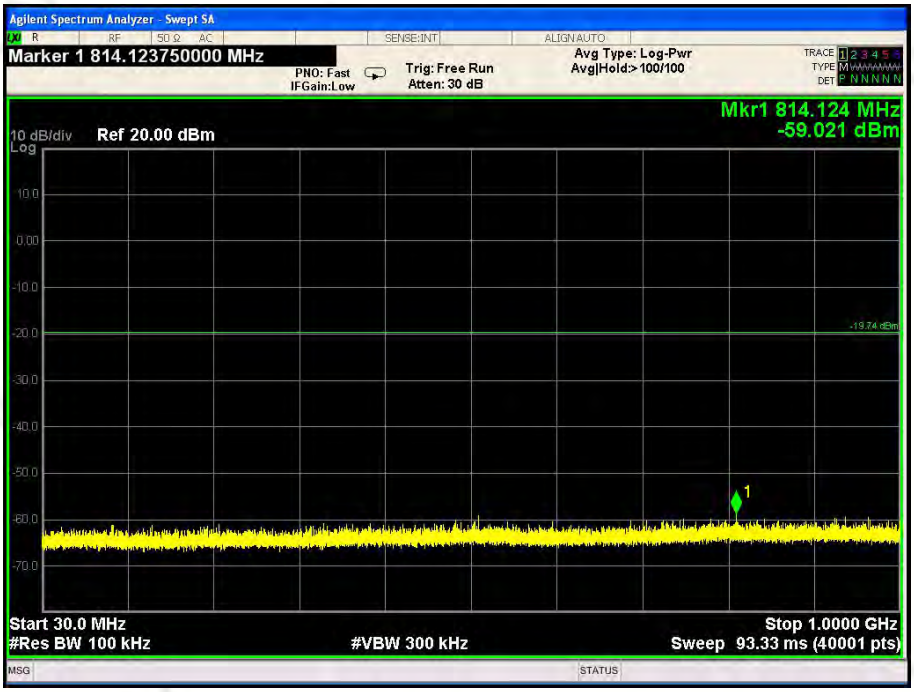



Agilent Spectrum Analyzer - Swept SA
Marker 1 910.056750000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 910.057 MHz
-59.133 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

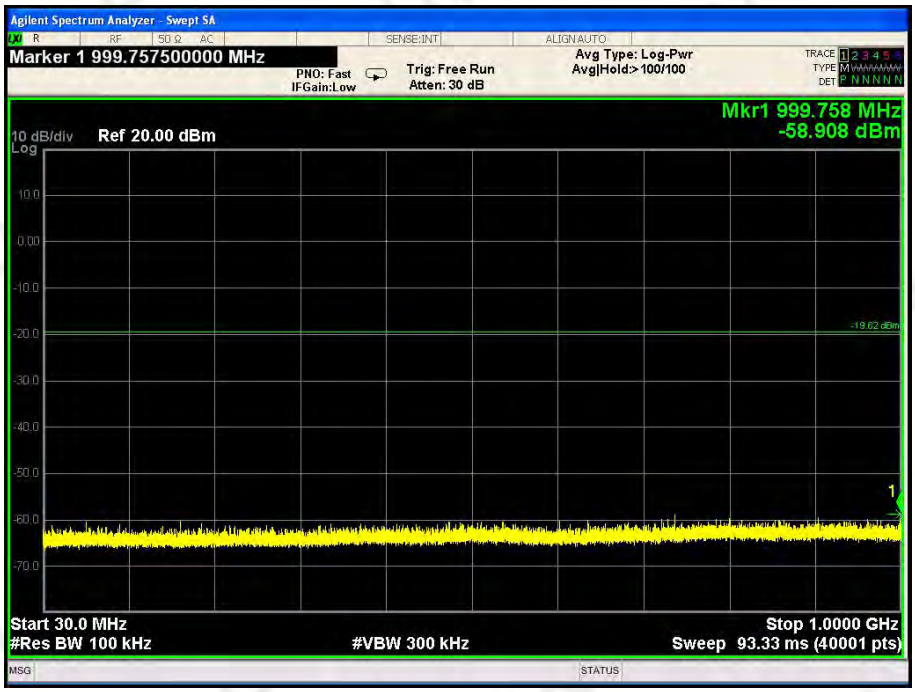

Agilent Spectrum Analyzer - Swept SA
Marker 1 21.962912500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 21.962 9 GHz
-44.083 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

CH106: 2437MHz





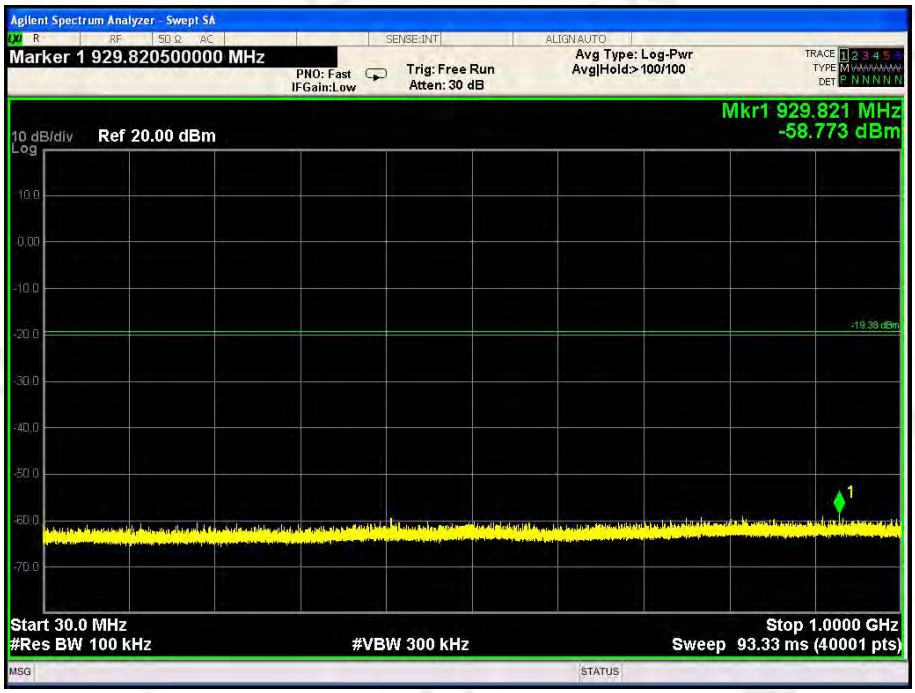
CH11: 2462MHz


Agilent Spectrum Analyzer - Swept SA
Marker 1 999.757500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 999.758 MHz
-58.908 dBm
10 dB/div
Log
Ref 20.00 dBm
-19.62 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

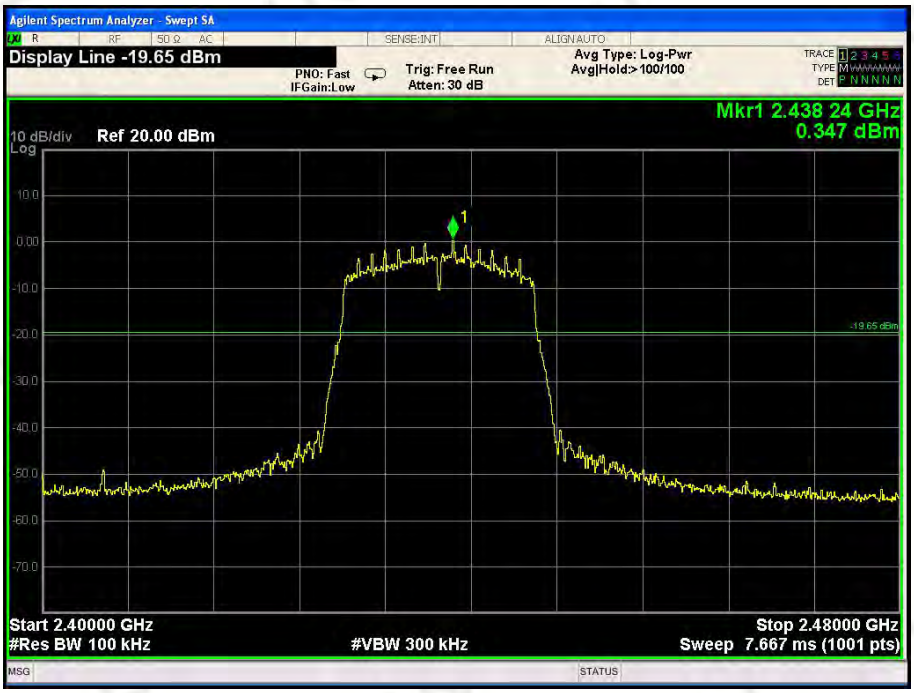

Agilent Spectrum Analyzer - Swept SA
Marker 1 21.327962500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 21.328 0 GHz
-44.409 dBm
10 dB/div
Log
Ref 20.00 dBm
-19.76 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

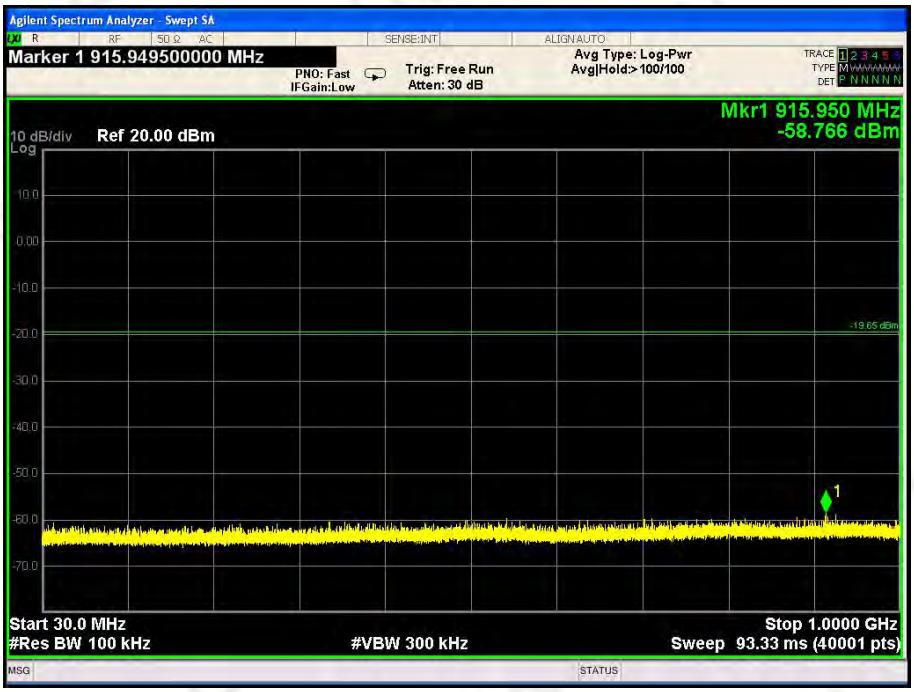
TX 802.11n/HT20 Mode:

CH01: 2412MHz



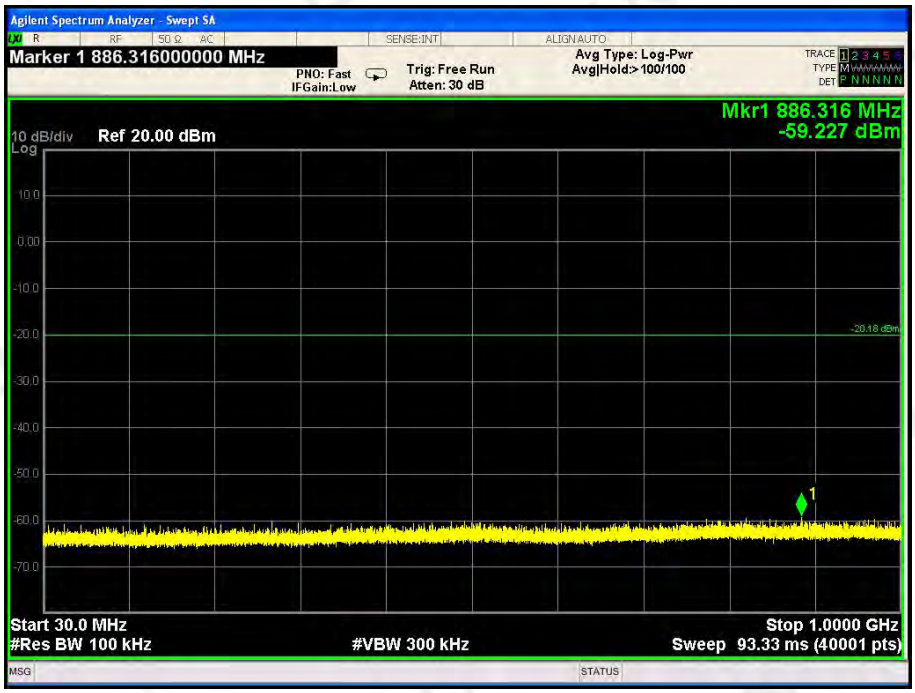
CH06: 2437MHz




Agilent Spectrum Analyzer - Swept SA
Marker 1 915.949500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 915.950 MHz
-58.766 dBm
10 dB/div
Log
Ref 20.00 dBm
-19.65 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

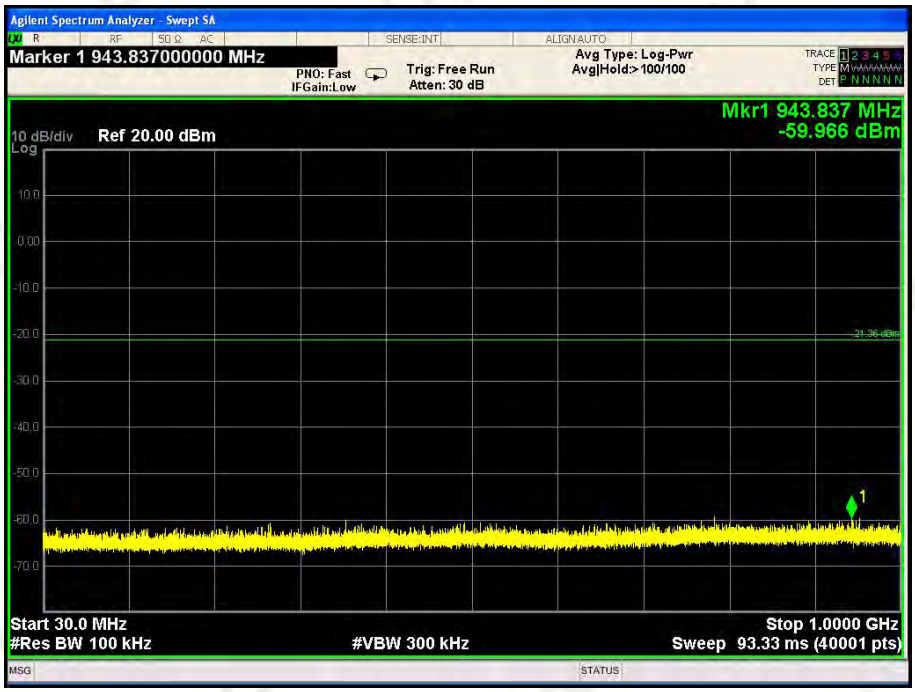

Agilent Spectrum Analyzer - Swept SA
Marker 1 21.468850000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 21.468 9 GHz
-44.003 dBm
10 dB/div
Log
Ref 20.00 dBm
-19.65 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

CH11: 2462MHz



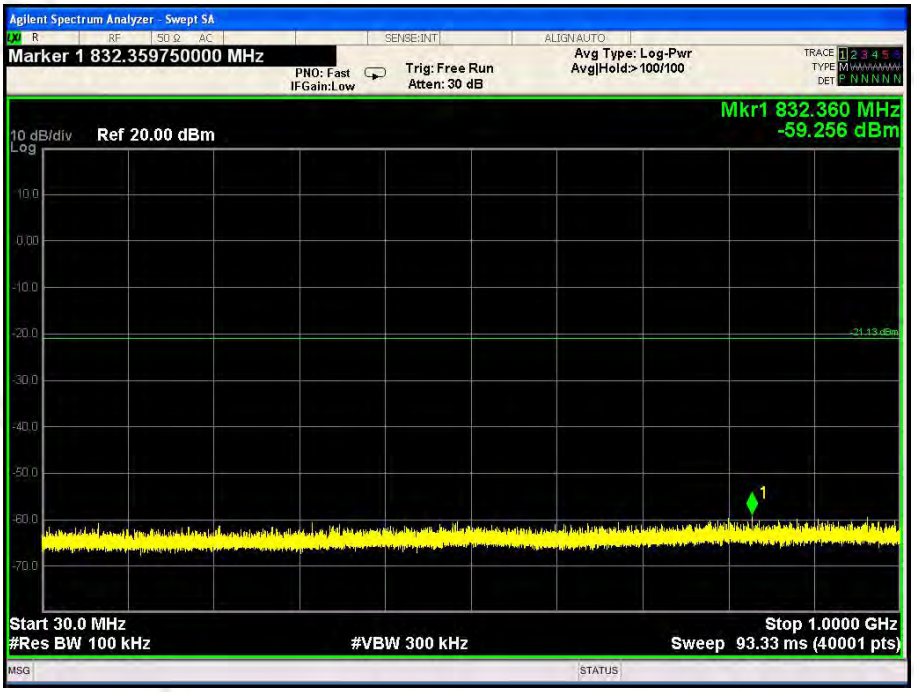
TX 802.11n/HT40 Mode:

CH03: 2422MHz

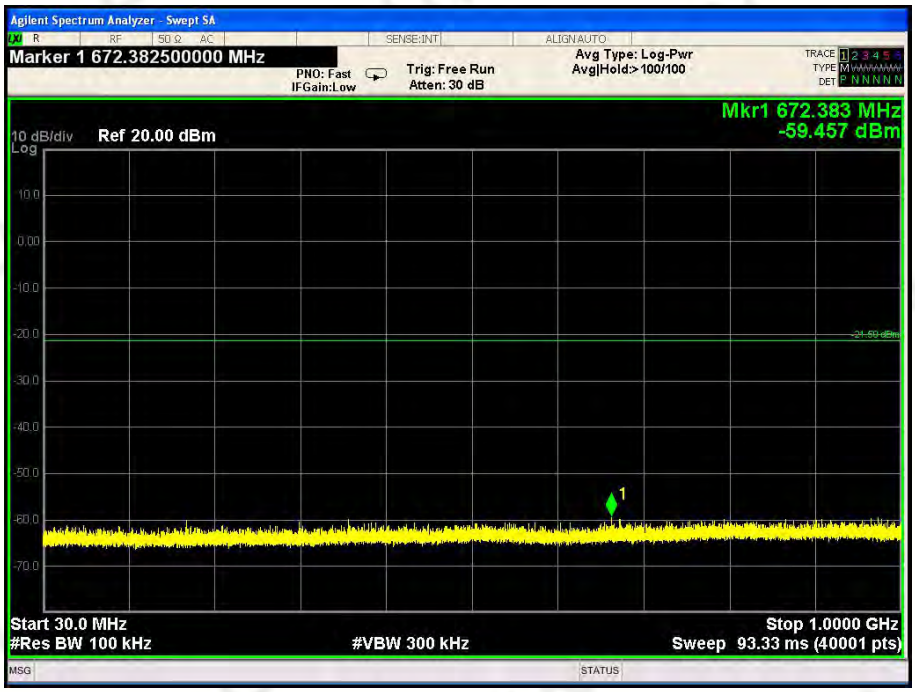

Agilent Spectrum Analyzer - Swept SA
Marker 1 943.837000000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 943.837 MHz
-59.966 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)


Agilent Spectrum Analyzer - Swept SA
Marker 1 21.456100000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 21.456 1 GHz
-44.439 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

CH06: 2437MHz



CH09: 2452MHz

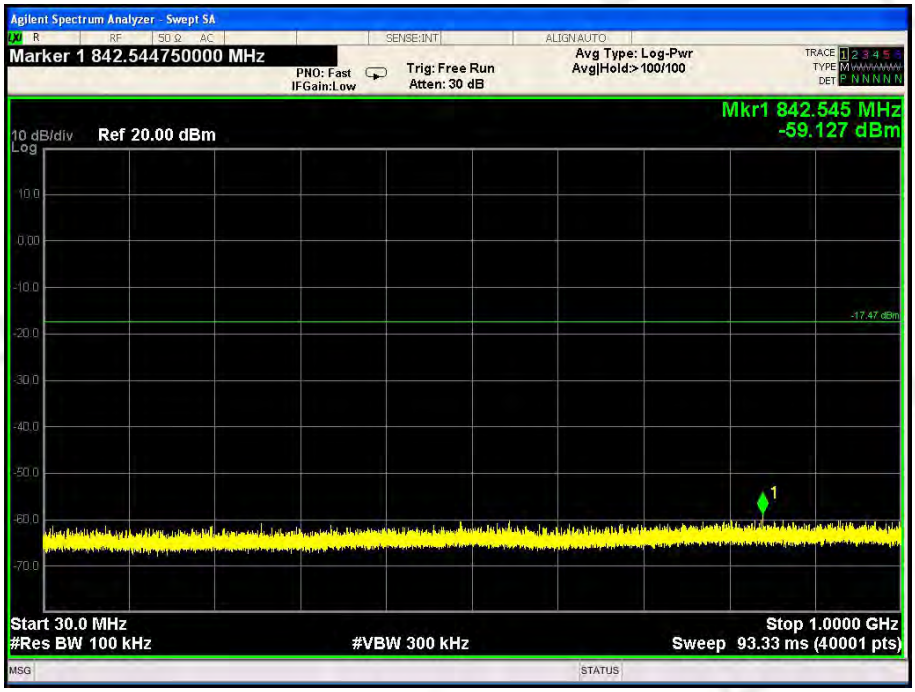

Agilent Spectrum Analyzer - Swept SA
Marker 1 672.382500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 672.383 MHz
-59.457 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)


Agilent Spectrum Analyzer - Swept SA
Marker 1 21.914462500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 21.914 5 GHz
-43.078 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

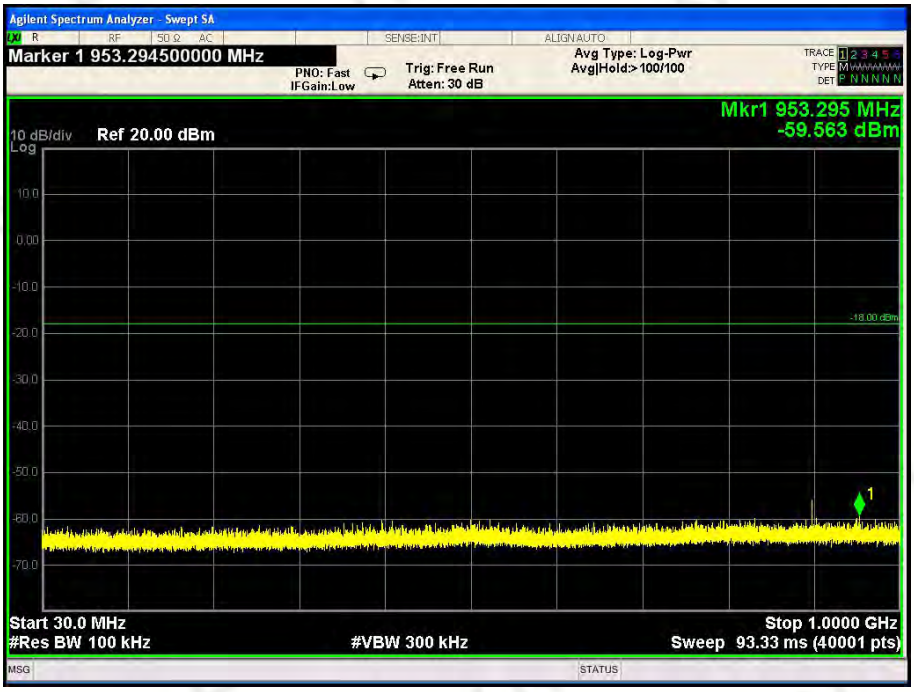
#2

TX 802.11b Mode:

CH01: 2412MHz

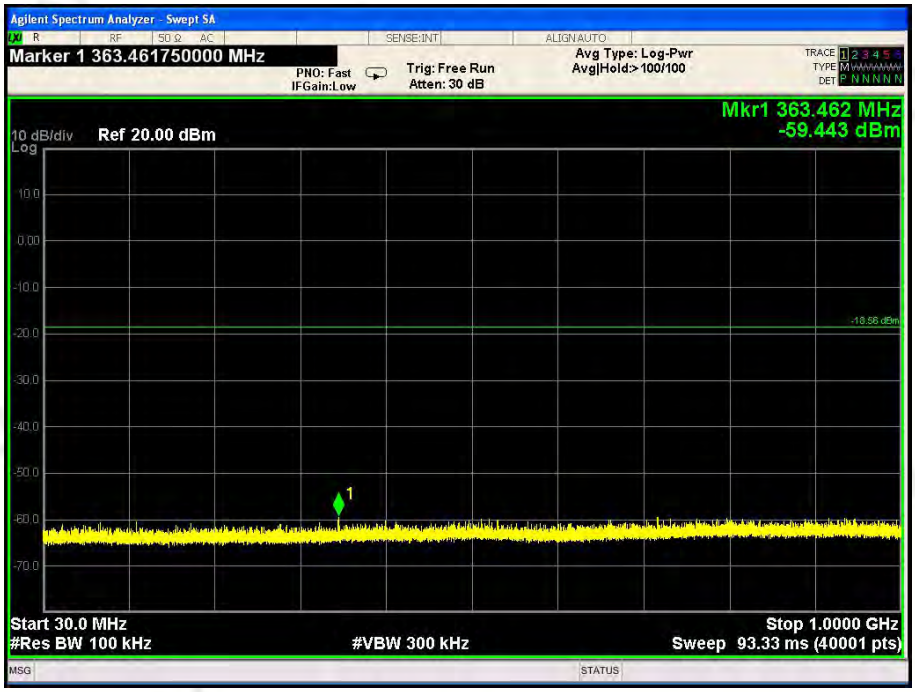


CH06: 2437MHz


Agilent Spectrum Analyzer - Swept SA
Marker 1 953.294500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 953.295 MHz
-59.563 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

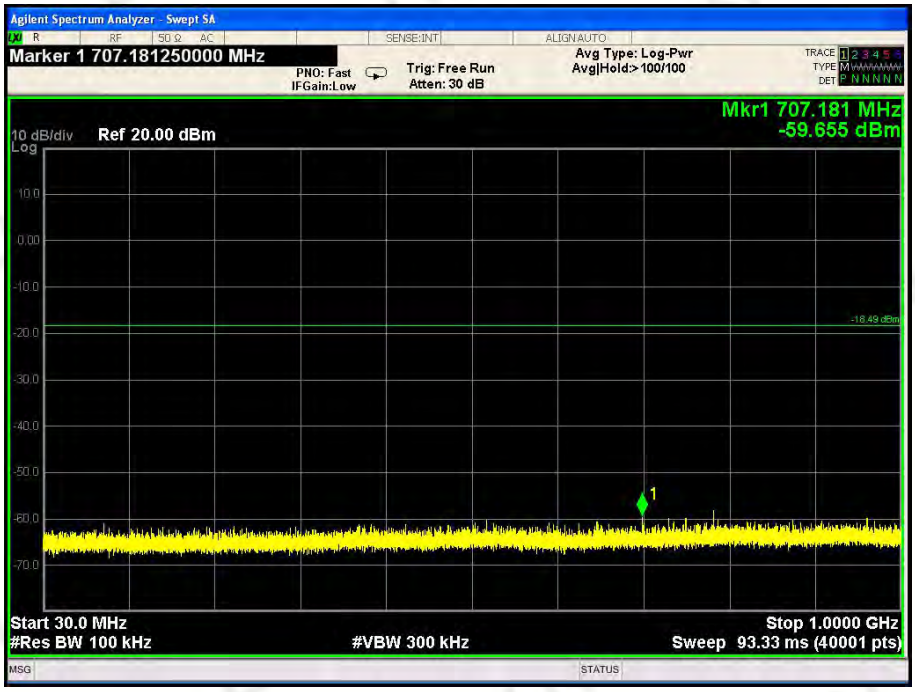

Agilent Spectrum Analyzer - Swept SA
Marker 1 21.952712500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 21.952 7 GHz
-43.884 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

CH11: 2462MHz



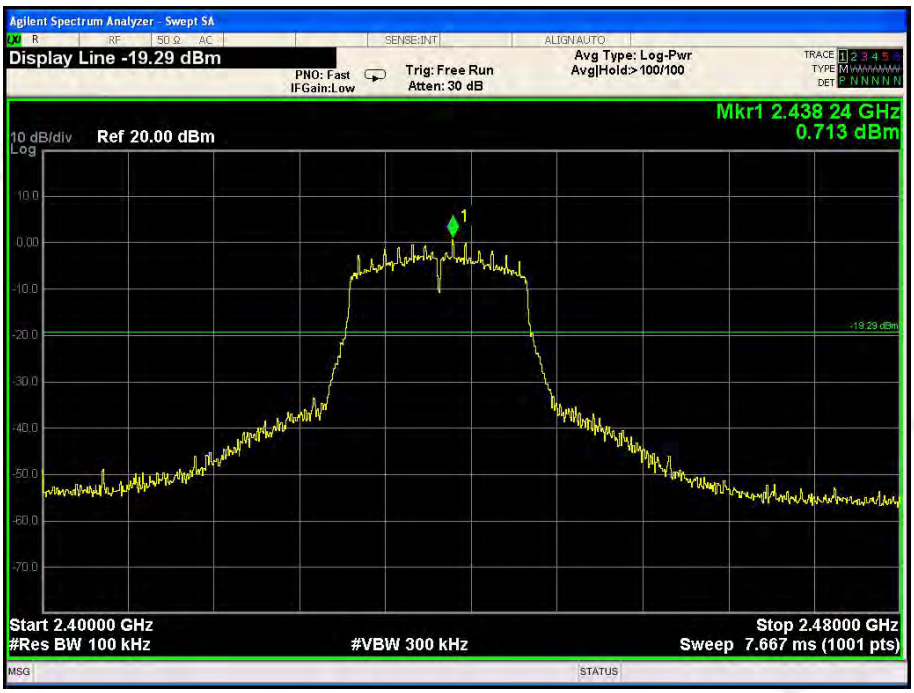
TX 802.11g Mode:

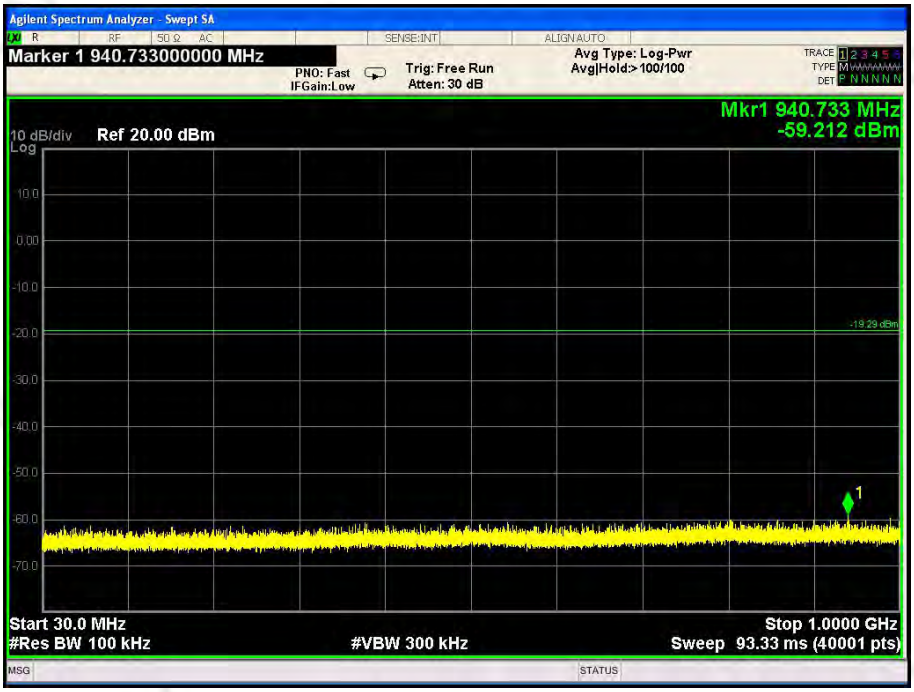
CH01: 2412MHz


Agilent Spectrum Analyzer - Swept SA
Marker 1 707.181250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 707.181 MHz
-59.655 dBm
10 dB/div
Log
Ref 20.00 dBm
-18.49 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

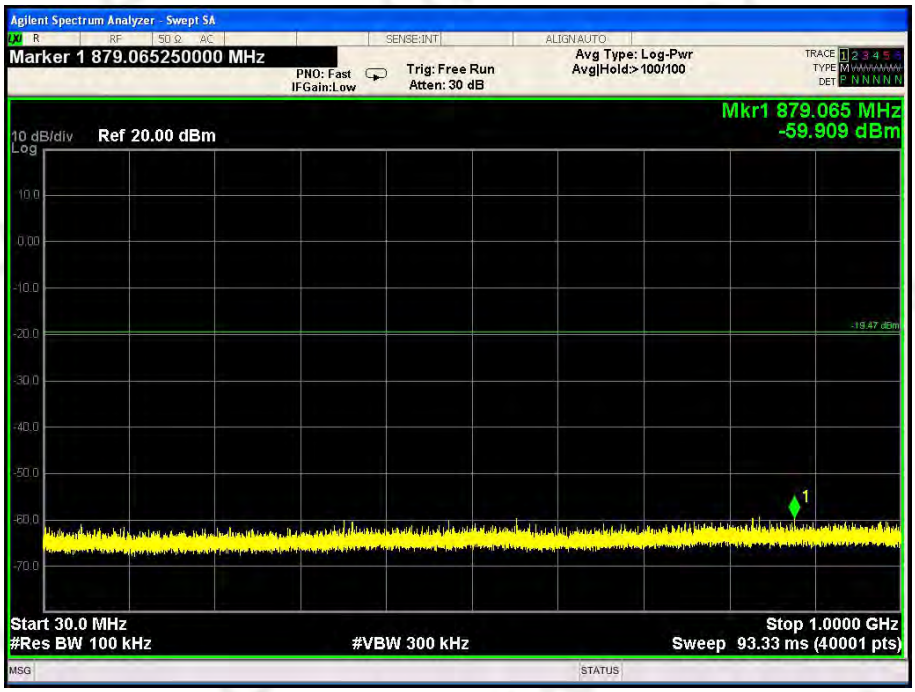

Agilent Spectrum Analyzer - Swept SA
Marker 1 25.305962500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 25.306 0 GHz
-43.518 dBm
10 dB/div
Log
Ref 20.00 dBm
-18.49 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

CH106: 2437MHz





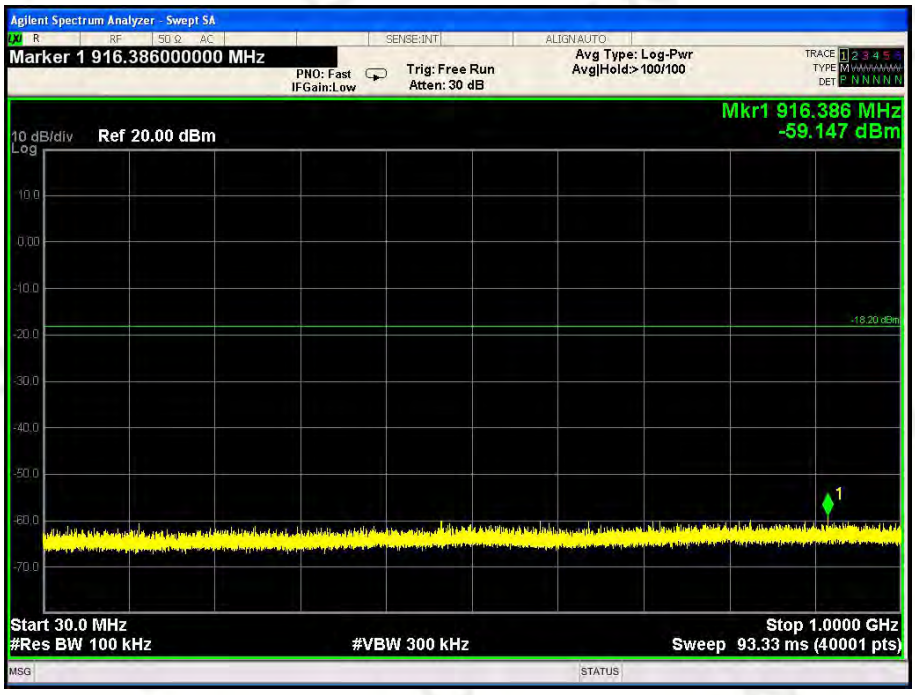
CH11: 2462MHz


Agilent Spectrum Analyzer - Swept SA
Marker 1 879.065250000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 879.065 MHz
-59.909 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

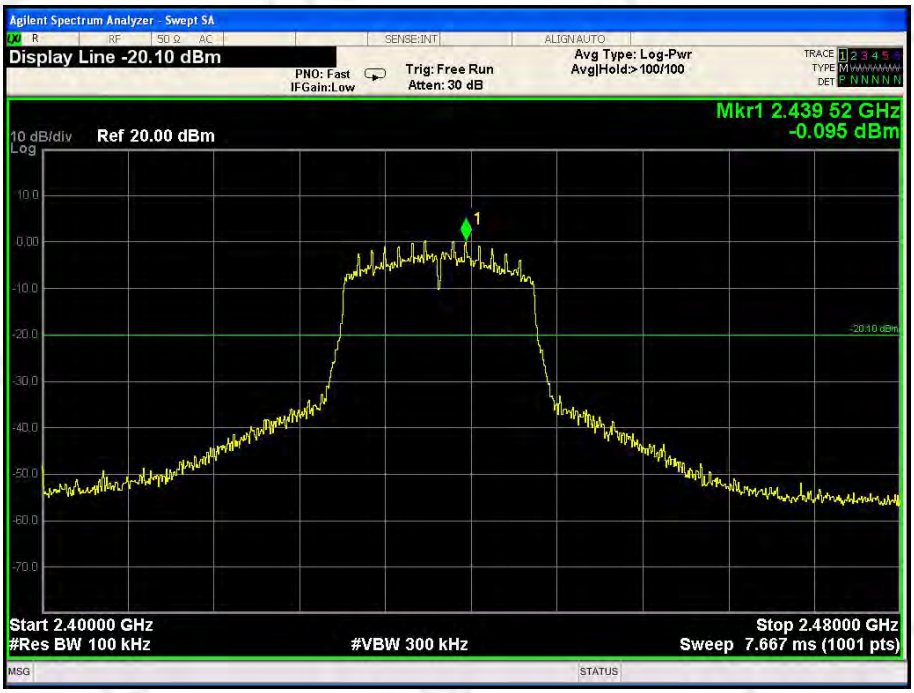

Agilent Spectrum Analyzer - Swept SA
Marker 1 26.029525000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 26.029 5 GHz
-42.538 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

TX 802.11n/HT20 Mode:

CH01: 2412MHz



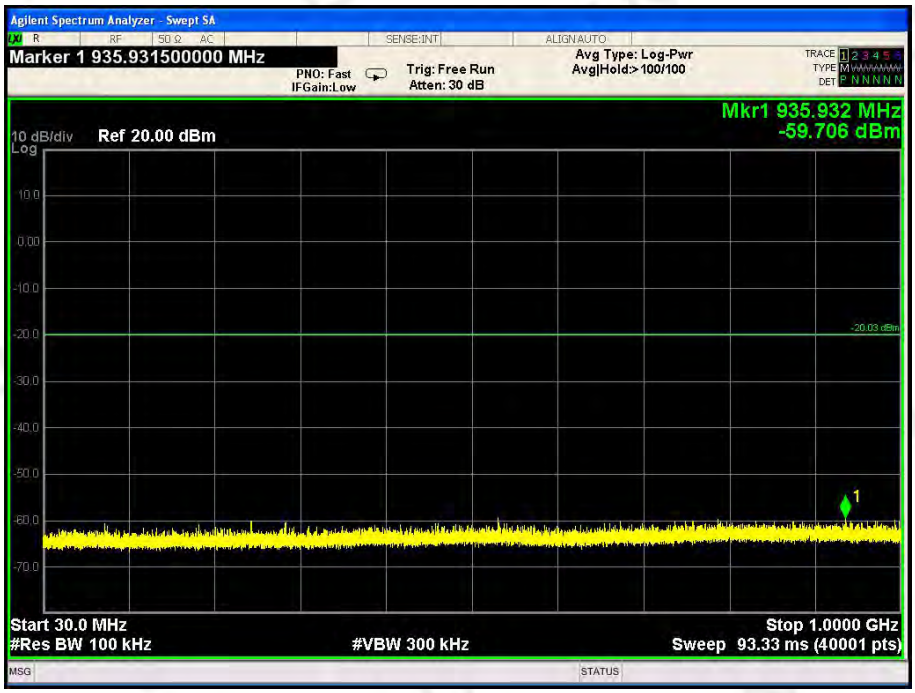
CH06: 2437MHz




Agilent Spectrum Analyzer - Swept SA
Marker 1 867.764750000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 867.765 MHz
-59.903 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

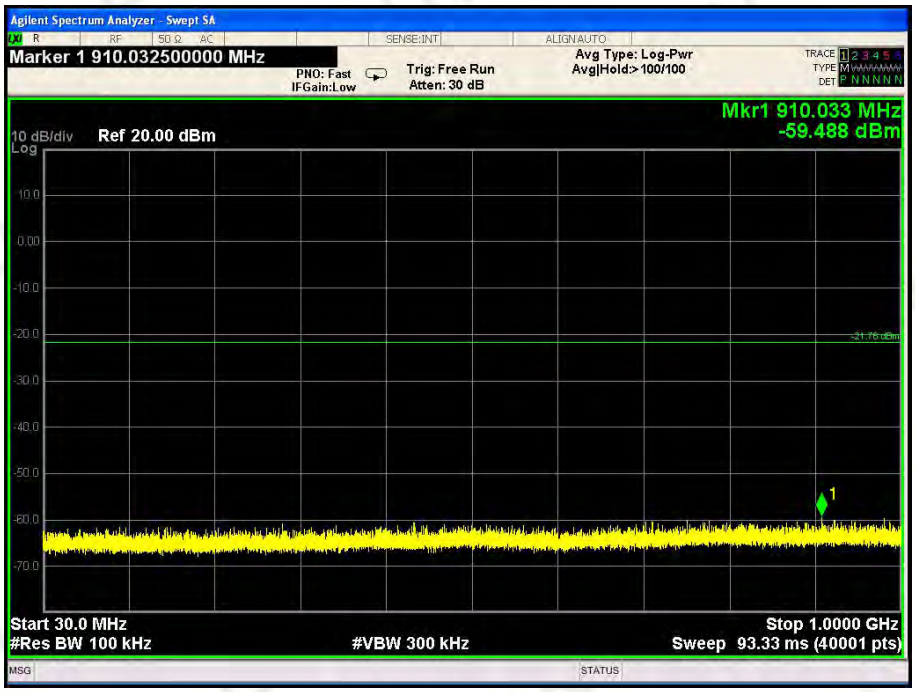

Agilent Spectrum Analyzer - Swept SA
Marker 1 22.243412500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 22.243 4 GHz
-44.340 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

CH11: 2462MHz



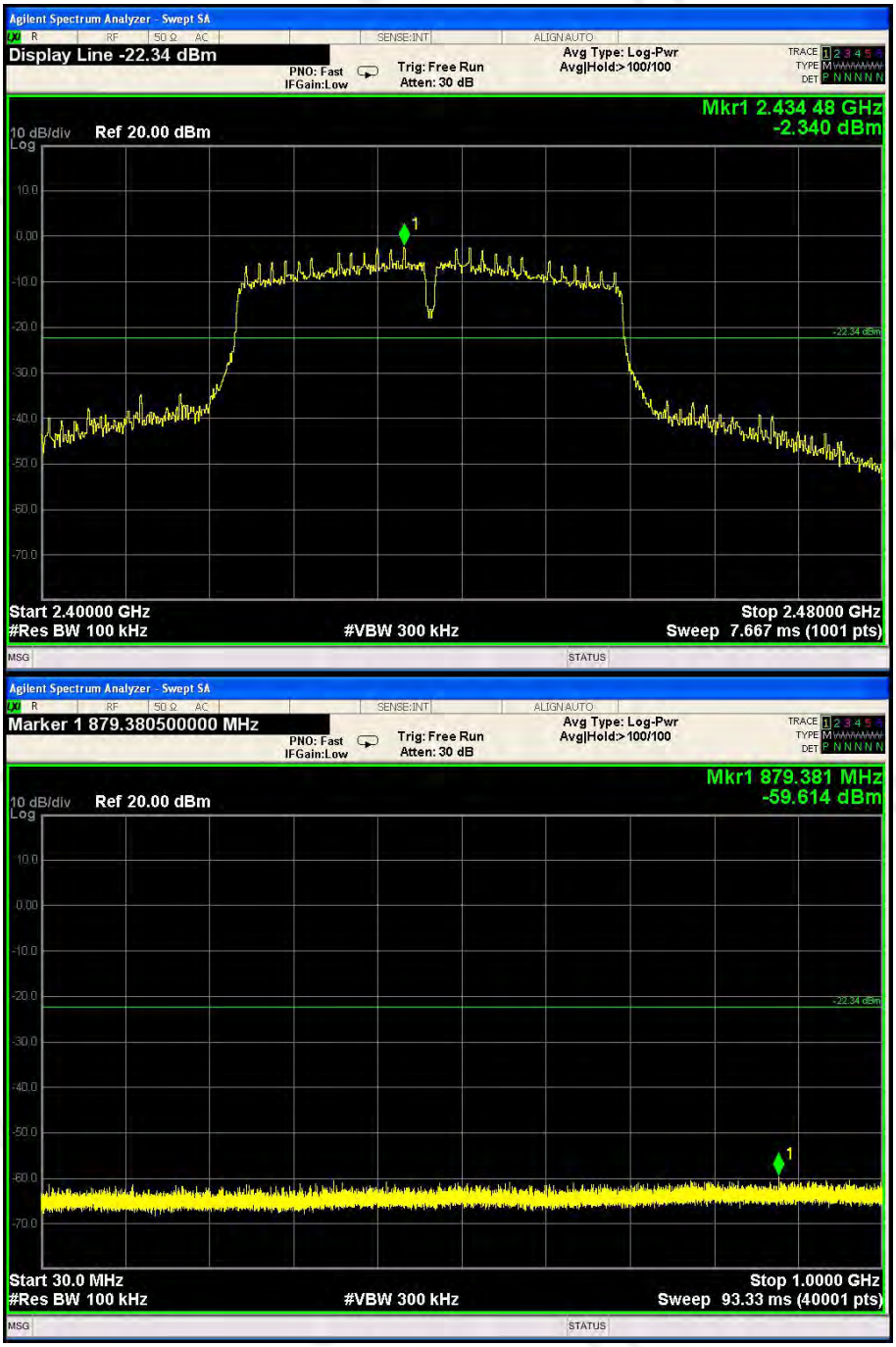
TX 802.11n/HT40 Mode:

CH03: 2422MHz

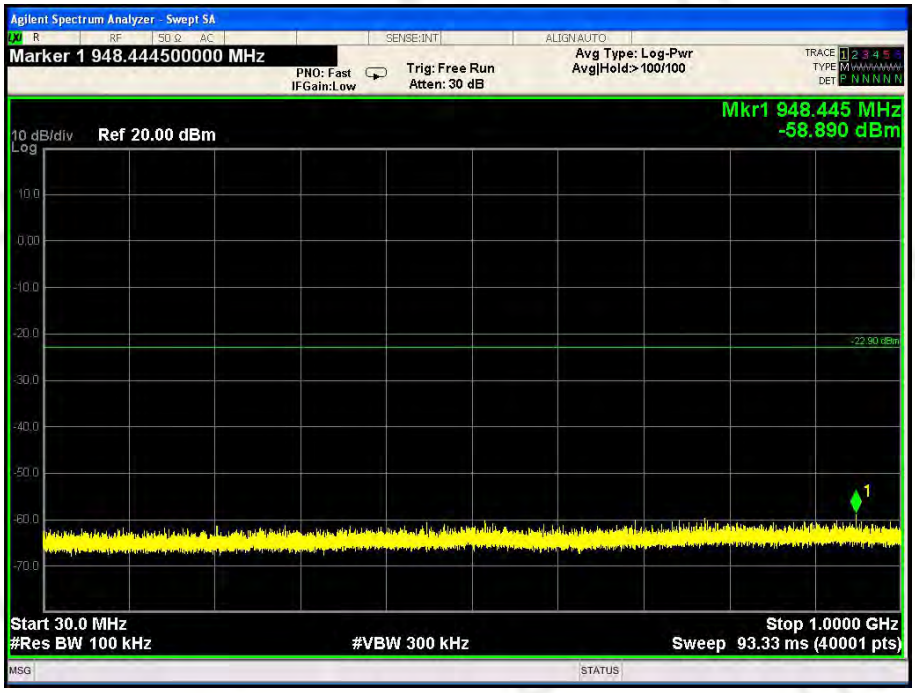

Agilent Spectrum Analyzer - Swept SA
Marker 1 910.032500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 910.033 MHz
-59.488 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)


Agilent Spectrum Analyzer - Swept SA
Marker 1 24.360550000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 24.360 6 GHz
-44.251 dBm
10 dB/div
Log
Ref 20.00 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

CH06: 2437MHz



CH09: 2452MHz


Agilent Spectrum Analyzer - Swept SA
Marker 1 948.444500000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 948.445 MHz
-58.890 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.90 dBm
Start 30.0 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 1.0000 GHz
Sweep 93.33 ms (40001 pts)

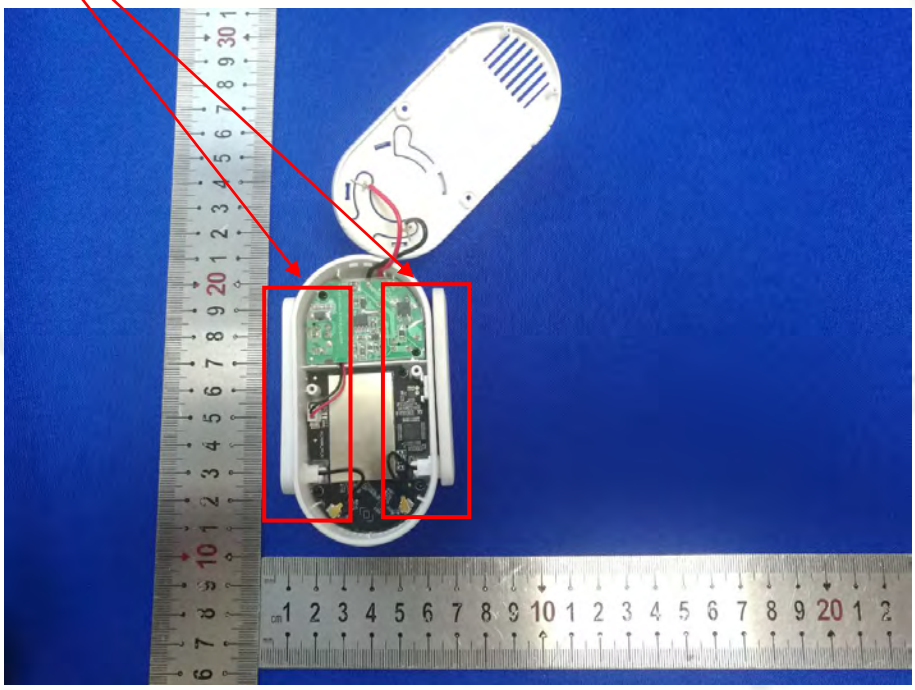

Agilent Spectrum Analyzer - Swept SA
Marker 1 22.322462500000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold:>100/100
Mkr1 22.322 5 GHz
-44.126 dBm
10 dB/div
Log
Ref 20.00 dBm
-22.90 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.437 s (40001 pts)

9 ANTENNA REQUIREMENT

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.

Antenna Connected Construction
The antenna used in this product is an Internal Antenna, The directional gains of antenna used for transmitting is 2dBi.

ANTENNA:



10 PHOTO OF TEST

10.1 RADIATED EMISSION

10.2 CONDUCTED EMISSION

End of Report