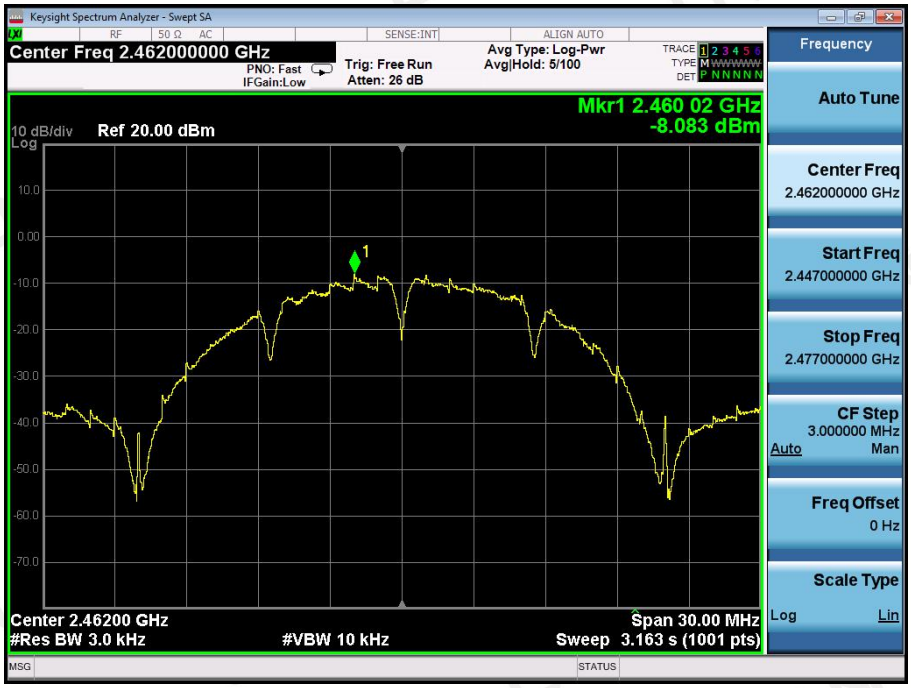
TX 802.11b Mode			
Frequency (MHz)	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2412	-7.42	8	PASS
2437	-8.60	8	PASS
2462	-8.08	8	PASS

CH: 2412MHz

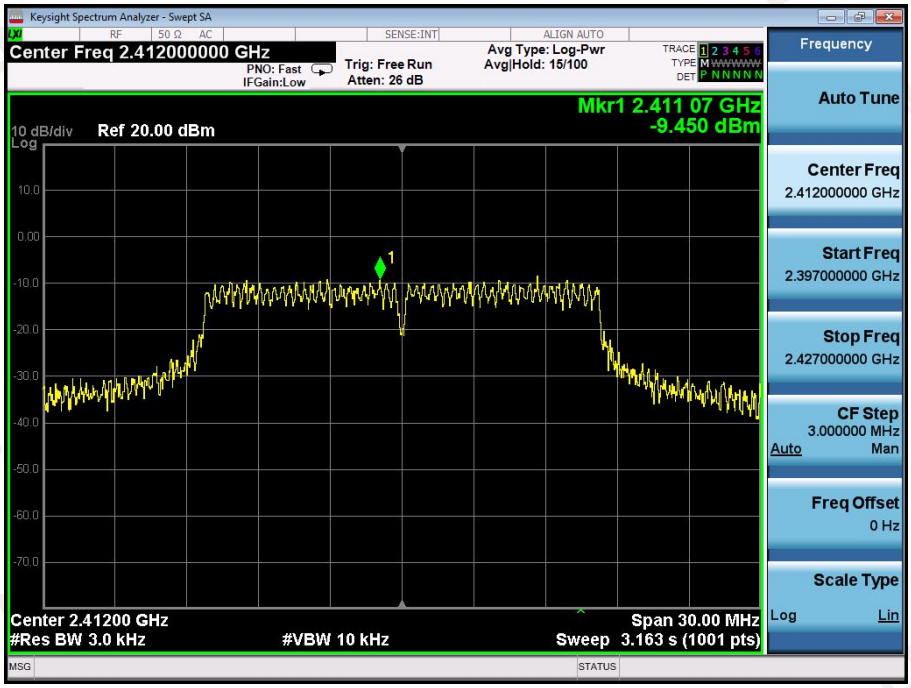
CH: 2437MHz

CH: 2462MHz

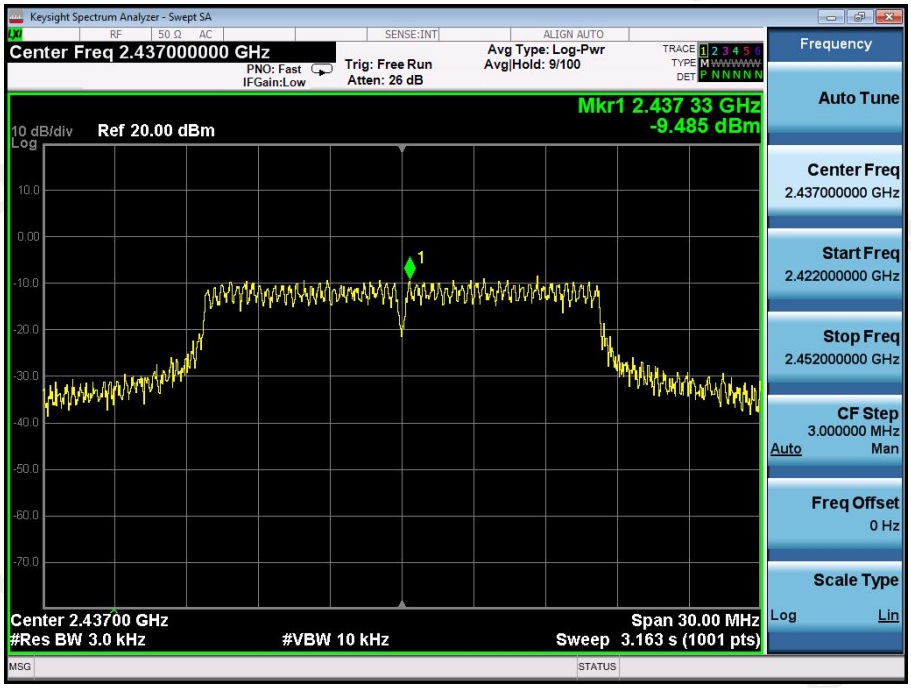


TX 802.11g Mode			
Frequency (MHz)	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2412	-9.45	8	PASS
2437	-9.49	8	PASS
2462	-8.46	8	PASS

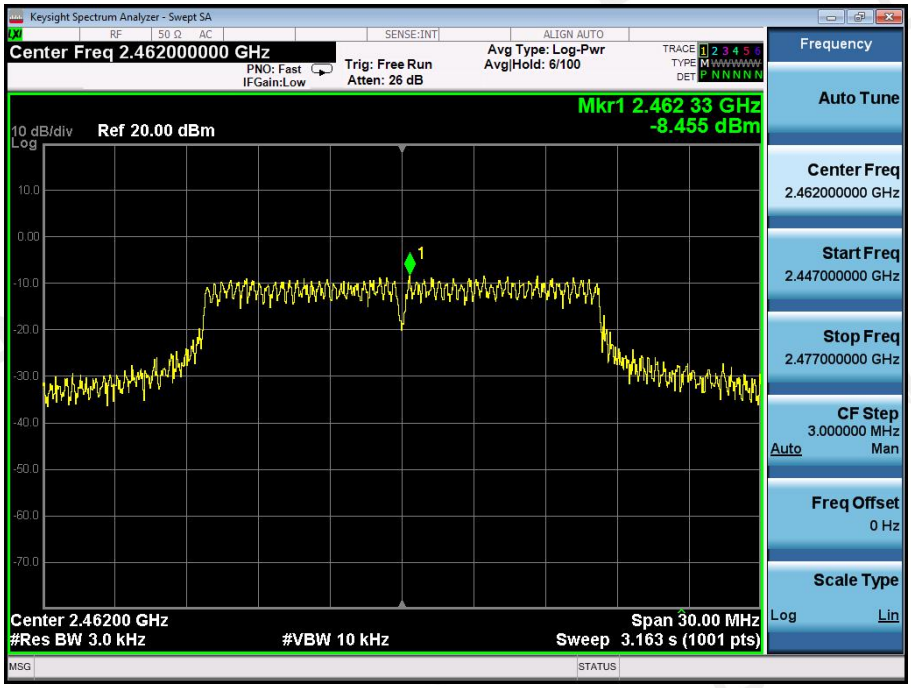
CH: 2412MHz



CH: 2437MHz

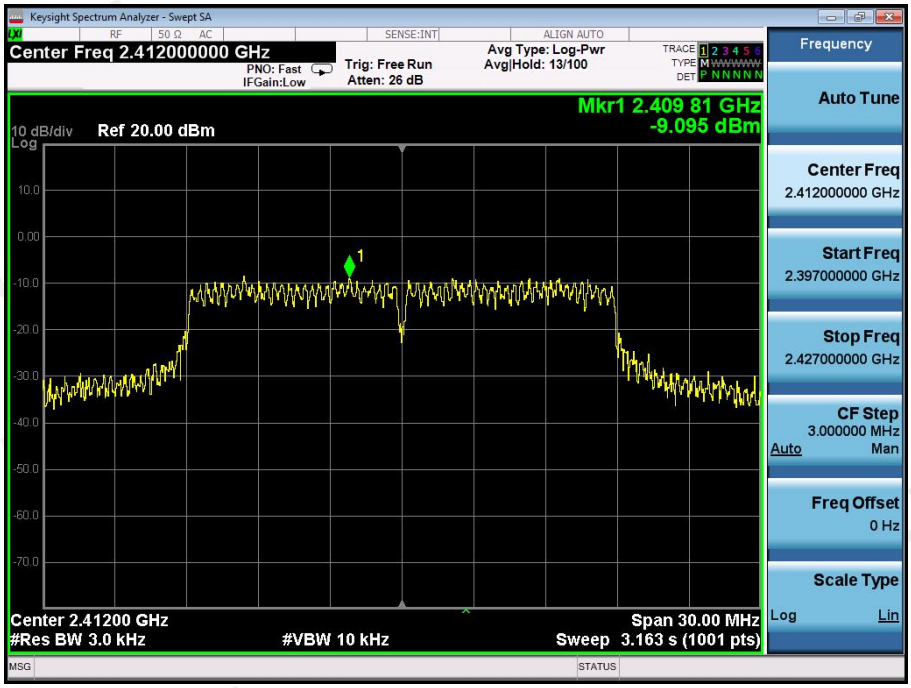


CH: 2462MHz

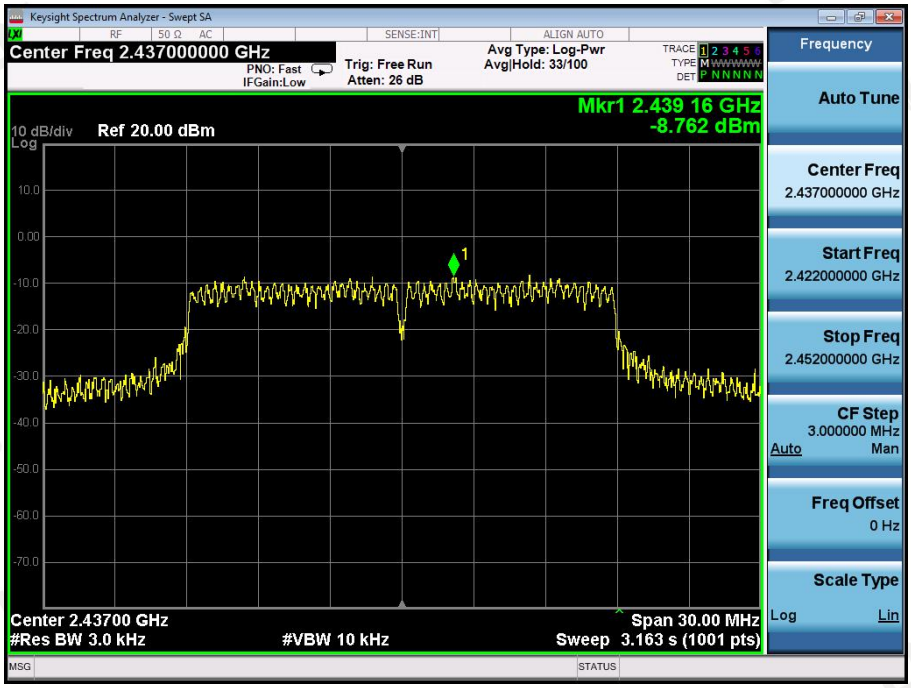


TX 802.11n/HT20 Mode			
Frequency (MHz)	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2412	-9.10	8	PASS
2437	-8.76	8	PASS
2462	-7.79	8	PASS

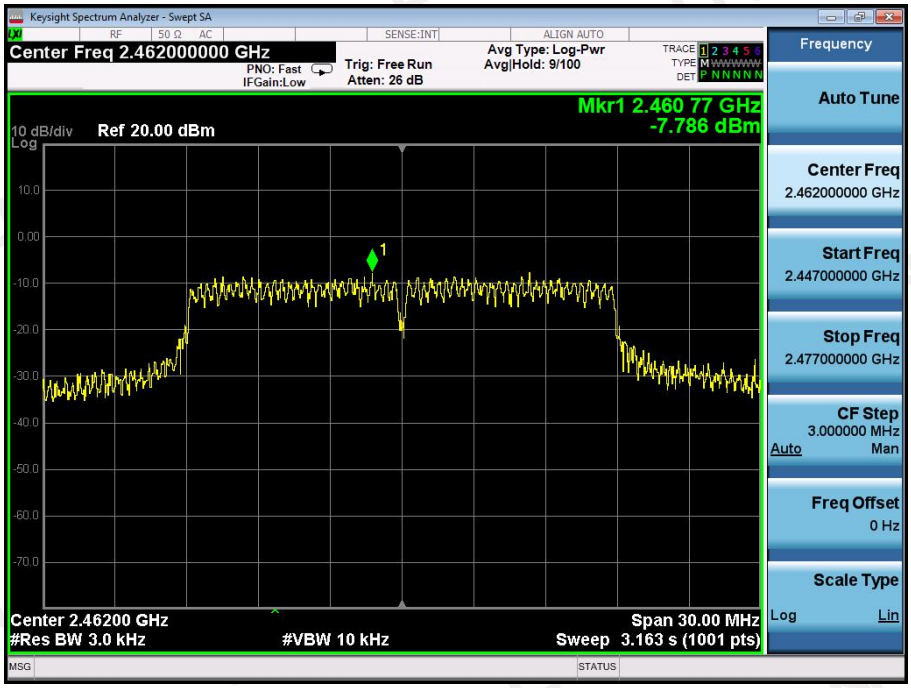
CH: 2412MHz



CH: 2437MHz

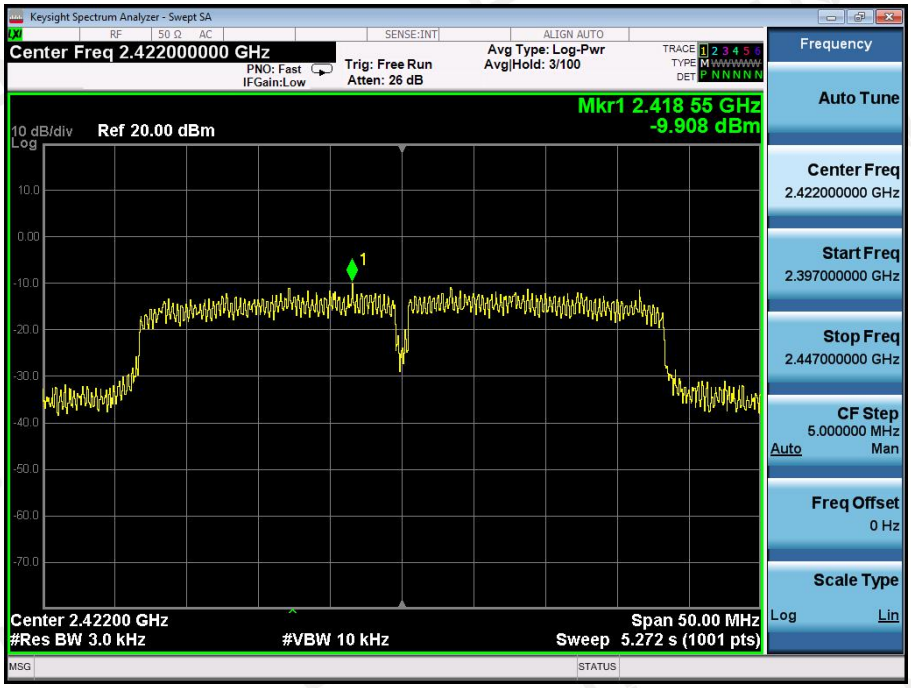


CH: 2462MHz

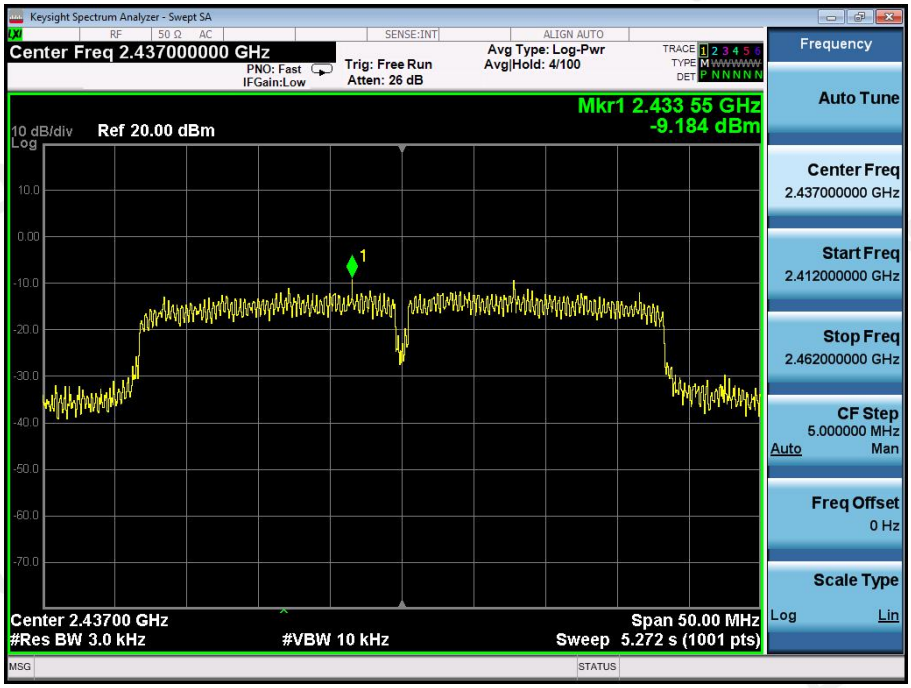


TX 802.11n/HT40 Mode			
Frequency (MHz)	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2422	-9.91	8	PASS
2437	-9.18	8	PASS
2452	-8.75	8	PASS

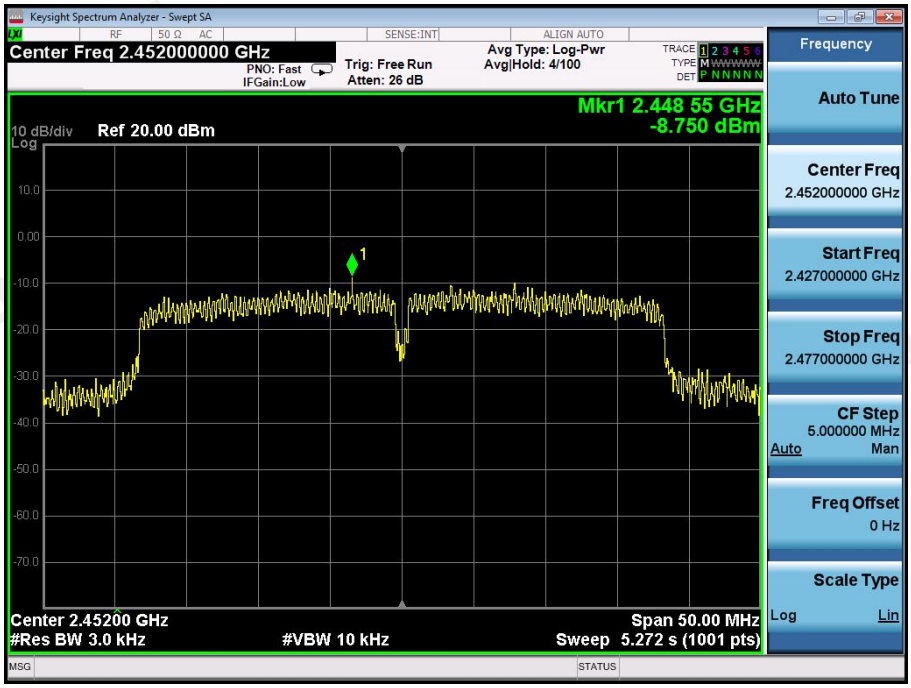
CH: 2422MHz



CH: 2437MHz



CH: 2452MHz



8.PEAK OUTPUT POWERTEST

8.1 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

8.2 Test Procedure

1. The EUT was directly connected to the Power meter.

8.3 Measurement Equipment Used

Same asRadiated Emission Measurement

8.4 Test Result

PASS

All the test modes completed for test.

TX 802.11b Mode			
Test Channel	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)	LIMIT (dBm)
CH01	2412	11.500	30
CH06	2437	11.663	30
CH11	2462	**12.081**	30
TX 802.11g Mode			
CH01	2412	9.079	30
CH06	2437	9.383	30
CH11	2462	9.036	30
TX 802.11n20 Mode			
CH01	2412	8.857	30
CH06	2437	8.920	30
CH11	2462	8.630	30
TX 802.11n40 Mode			
CH03	2422	7.798	30
CH06	2437	7.408	30
CH09	2452	7.054	30

Note:

1) Measured output power at difference data rate for each mode and recorded worst case for each mode.

2). Test results including cable loss.

9.OUT OF BAND EMISSIONSTEST

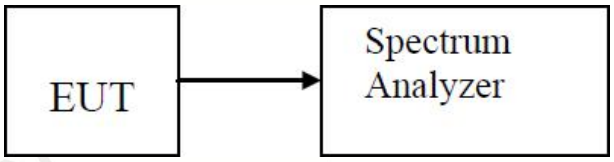
9.1 Test Limit

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.

9.2 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.

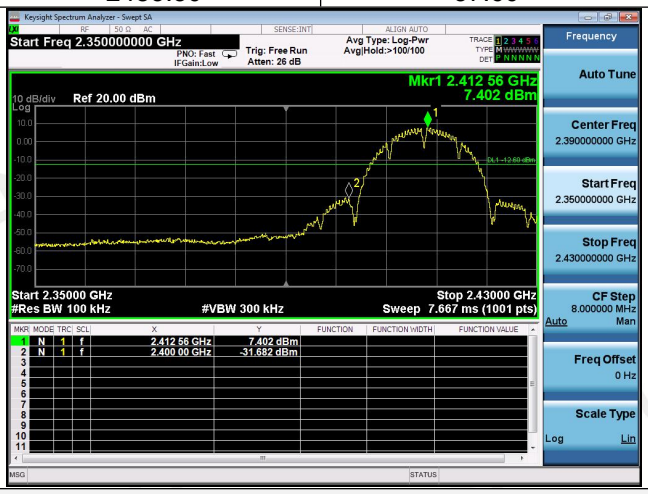
9.3 TestSetup



9.4 Test Result

PASS

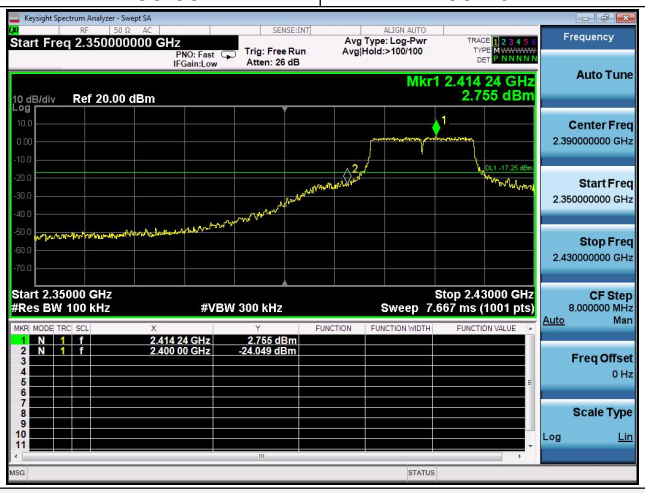
802.11b			
Frequency (MHz)	Delta Peak to Band emission (dBc)	Limit (dBc)	Verdict
2400.00	39.084	20	PASS
2483.50	57.60	20	PASS



2412

2462

802.11g			
Frequency (MHz)	Delta Peak to Band emission (dBc)	Limit (dBc)	Verdict
2400.00	26.804	20	PASS
2483.05	35.101	20	PASS



2412

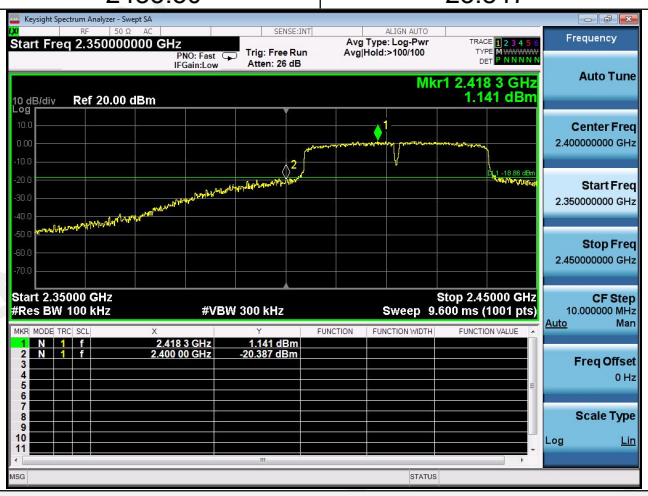
2462

802.11n HT20			
Frequency (MHz)	Delta Peak to Band emission (dBc)	Limit (dBc)	Verdict
2400.00	24.251	20	PASS
2483.50	31.251	20	PASS

2412

2462

802.11n HT40			
Frequency (MHz)	Delta Peak to Band emission (dBc)	Limit (dBc)	Verdict
2400.00	21.528	20	PASS
2483.50	23.847	20	PASS



2422

2452

10.SPURIOUS RF CONDUCTED EMISSION

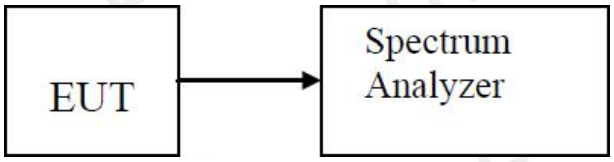
10.1 Test Limit

1. Below -20dB of the highest emission level in operating band.
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.
3.For below 30MHz,For 9KHz-150kHz,150K-10MHz,We use the RBW 1KHz,10KHz, So the limit need to calculated by “10lg(BW1/BW2)“. for example For9KHz-150kHz,RBW 1KHz, The Limit= the highest emission level-20-10log(100/1)= the highest emission level-40.

10.2 Test Procedure

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013, For 9KHz-150kHz, Set RBW=1kHz and VBW=3KHz; For 150KHz-10MHz, Set RBW=10kHz and VBW=30KHz:For 10MHz-25GHz ,Set RBW=100kHz and VBW=300KHz in order to measurethepeakfieldstrength, and mwasure frequeny range from 9KHz to 25GHz.

10.3 TestSetup

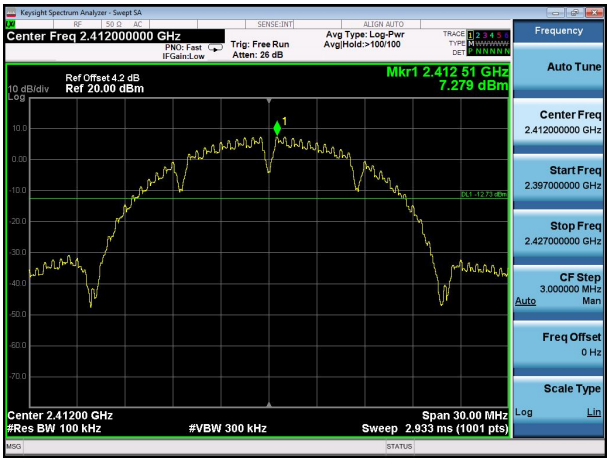


10.4 Test Result

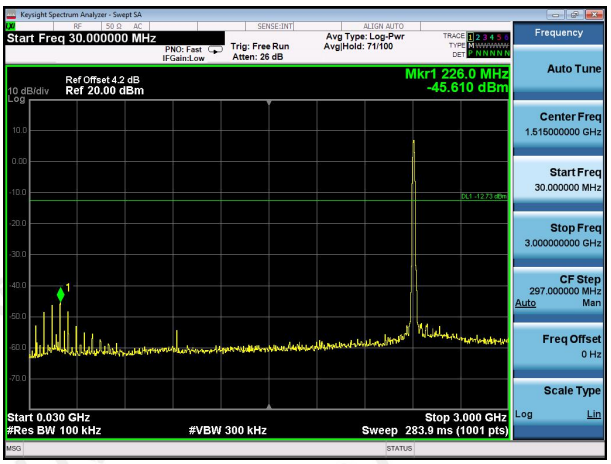
PASS

Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and bandege measurement data. and record the worstest data for 802.11b in report .

Test Mode:	802.11b	Test channel :	01



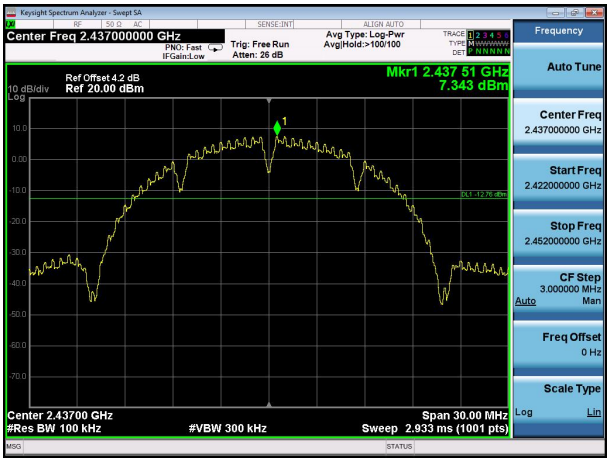
Channel 01



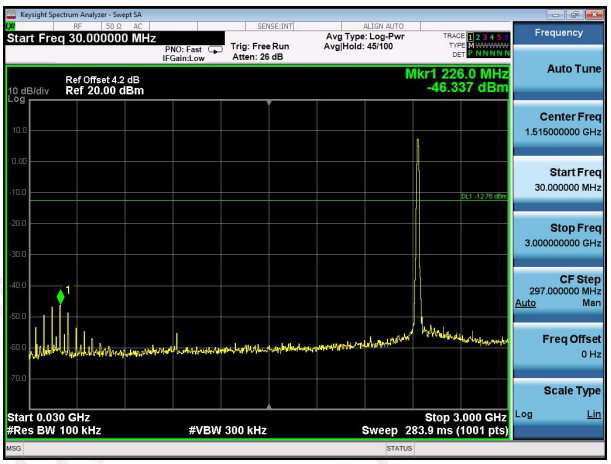
30MHz ~3GHz

3GHz~25GHz

Test Mode:	802.11b	Test channel :	06



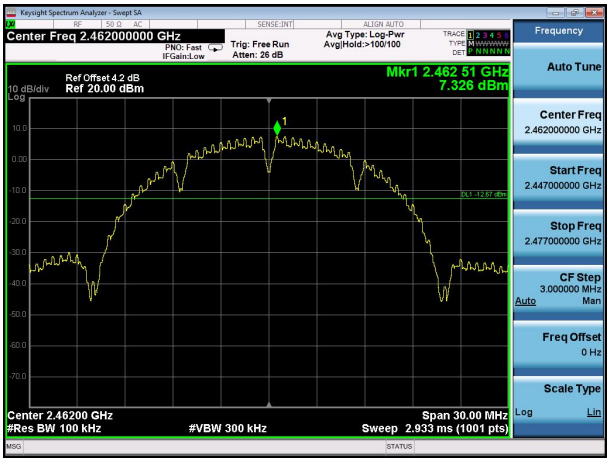
Channel 06



30MHz ~3GHz

3GHz~25GHz

Test Mode:	802.11b	Test channel :	11



Channel 11

30MHz ~3GHz

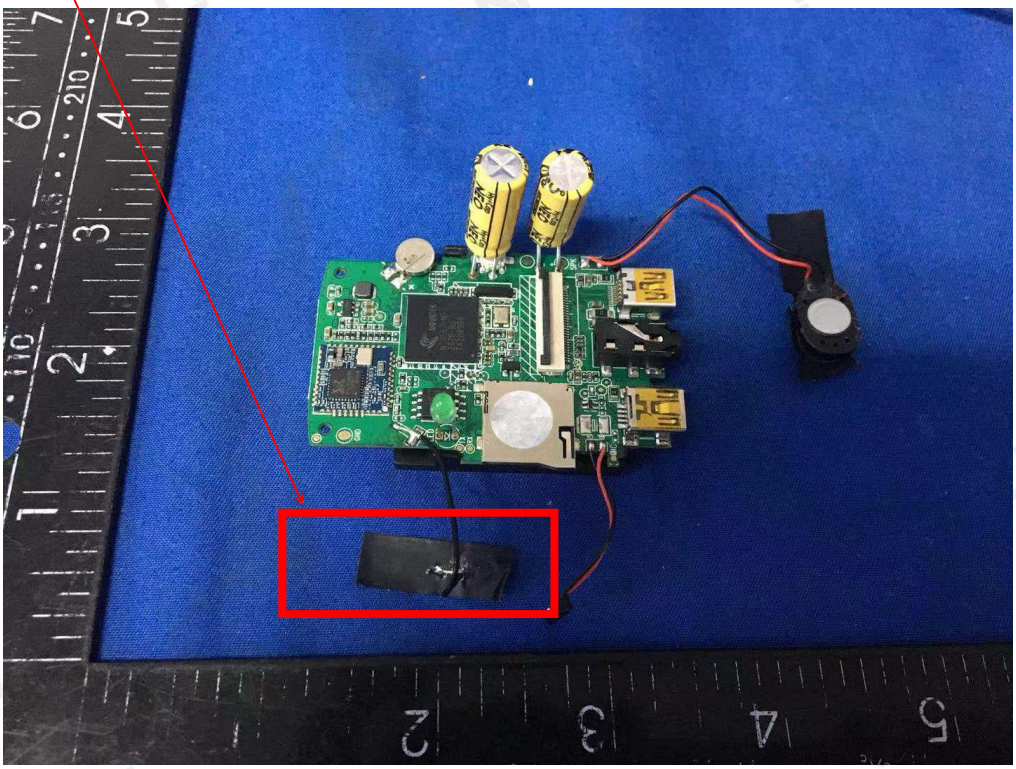
3GHz~25GHz

11.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 usedwith the device.

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

ANTENNA:



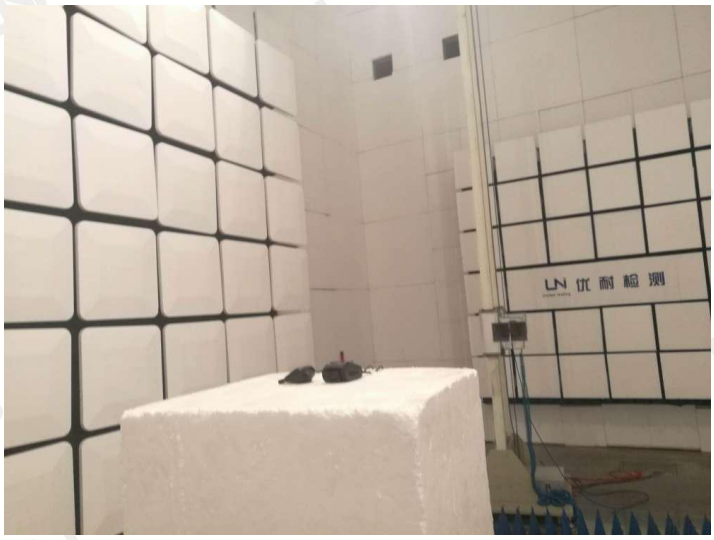
12.PHOTOGRAPH OF TEST

RadiatedEmission

(Below 1G)

Radiated Emission

(Above 1G)



End of Report