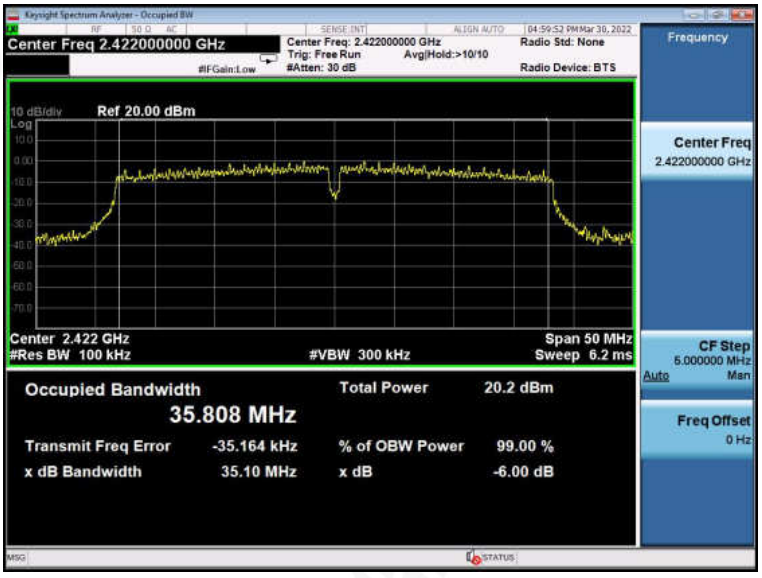
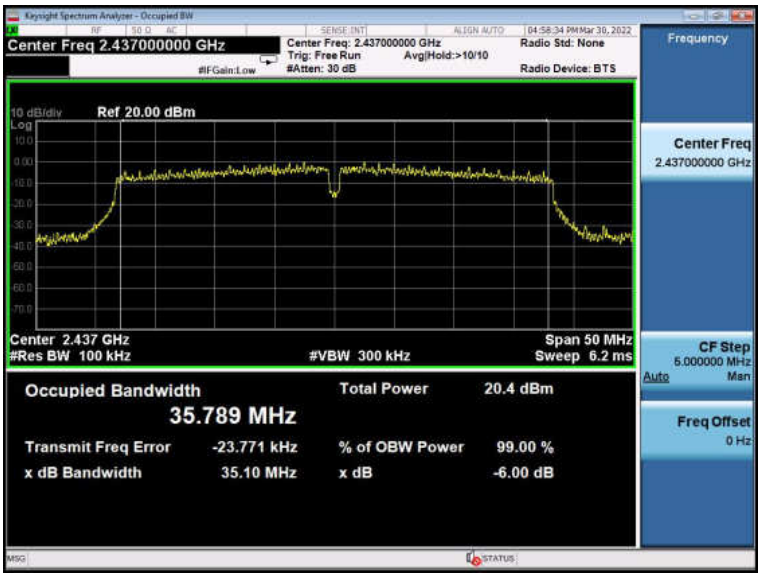
802.11n40

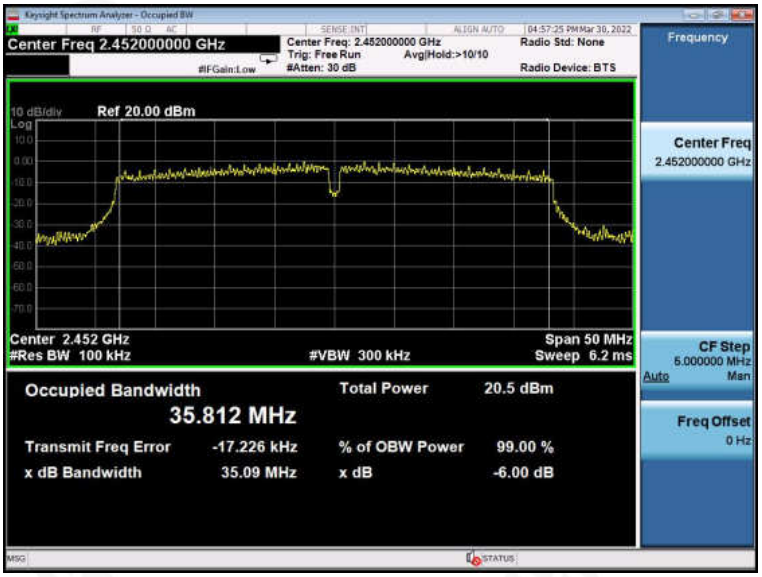
Lowest channel



Middle channel



Highest channel

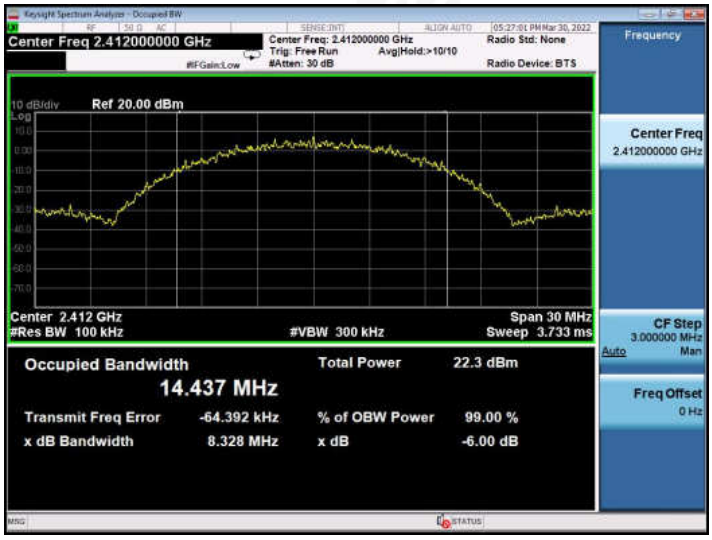


Ant D

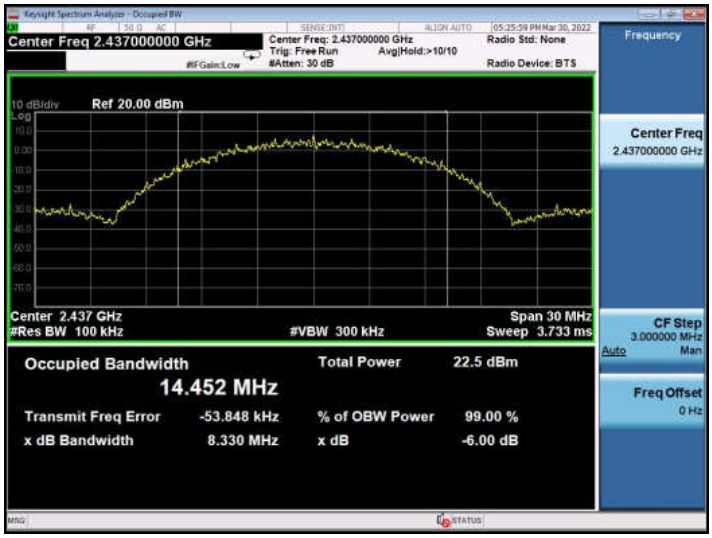
Test plot as follows:

802.11b

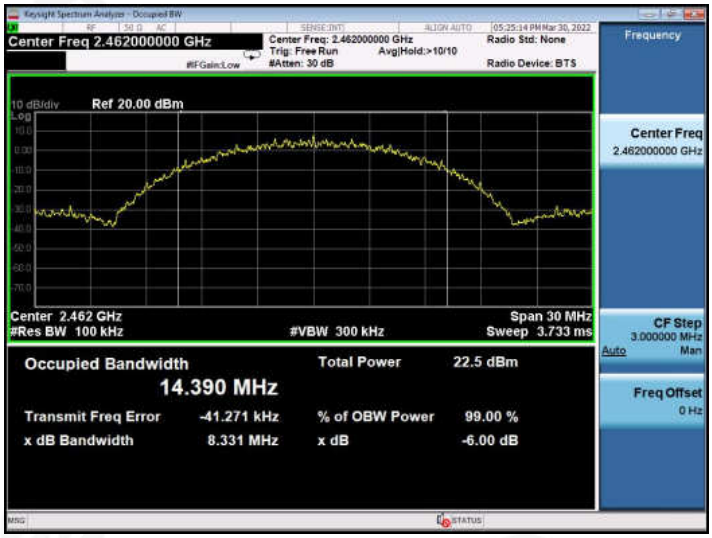
Lowest channel



Middle channel

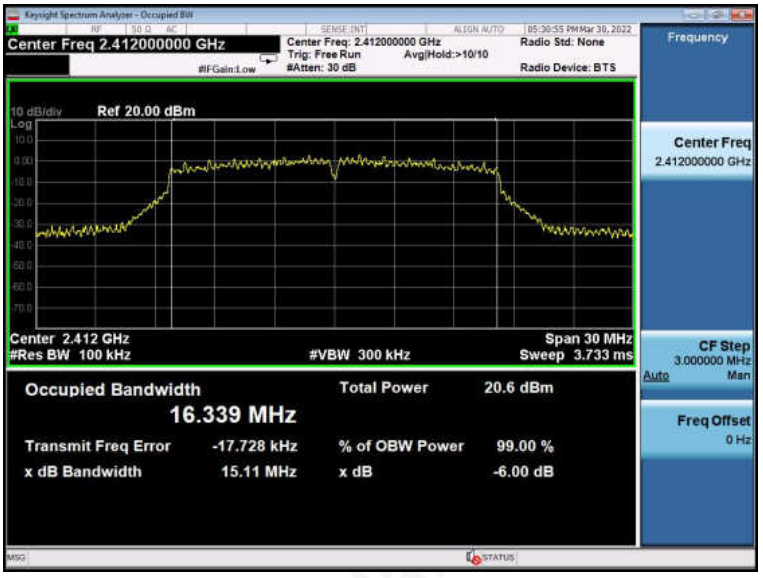


Highest channel

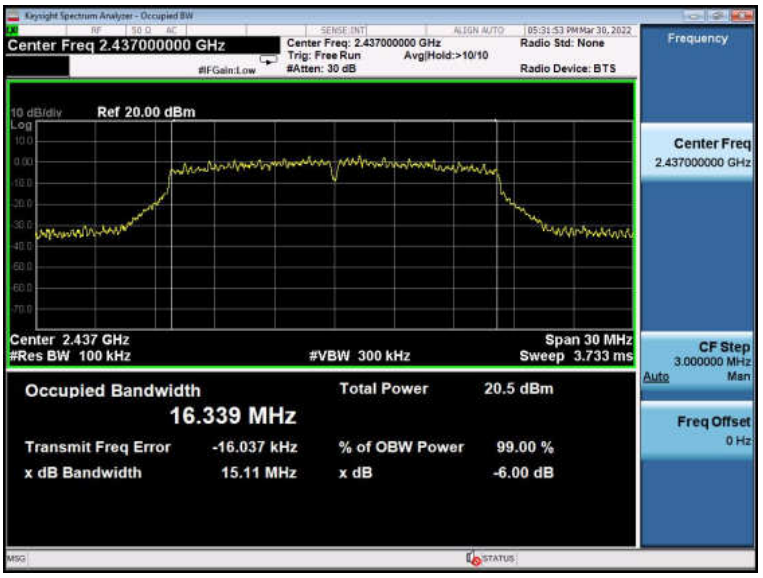


802.11g

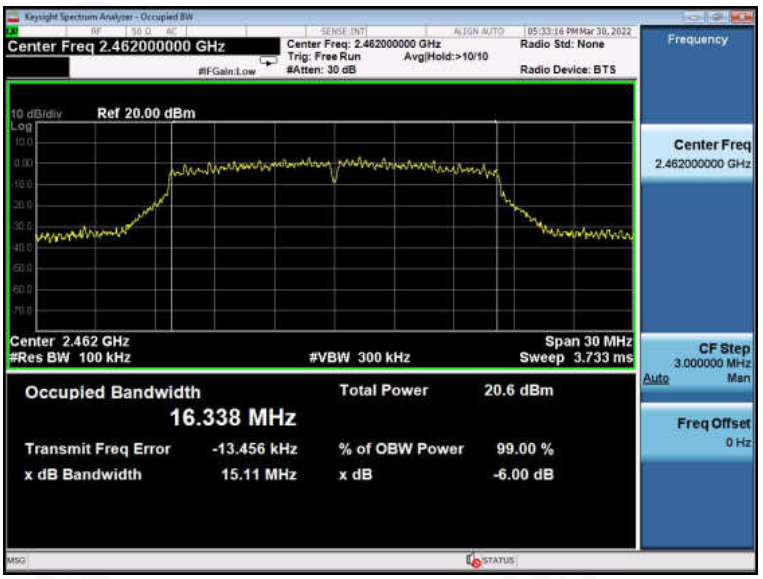
Lowest channel



Middle channel

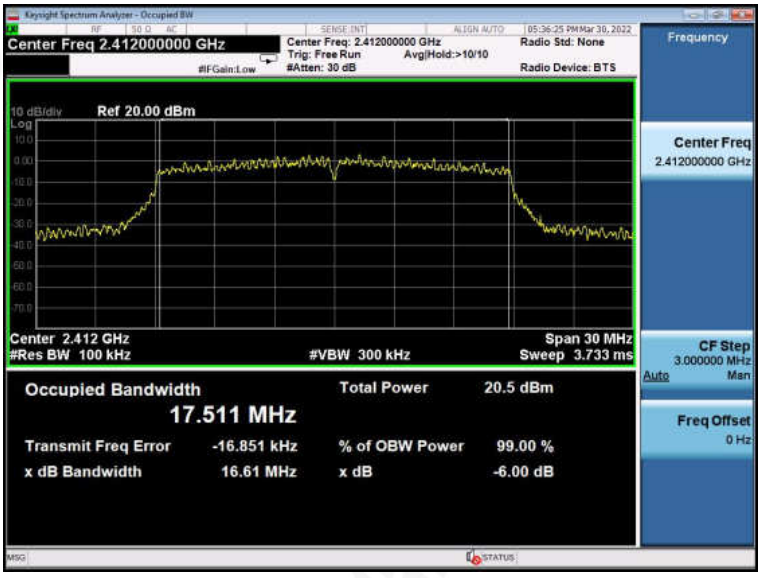


Highest channel

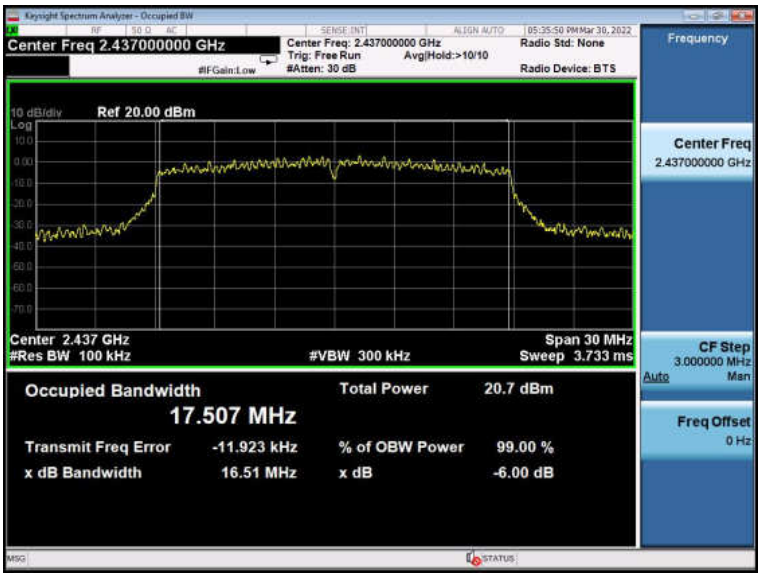


802.11n20

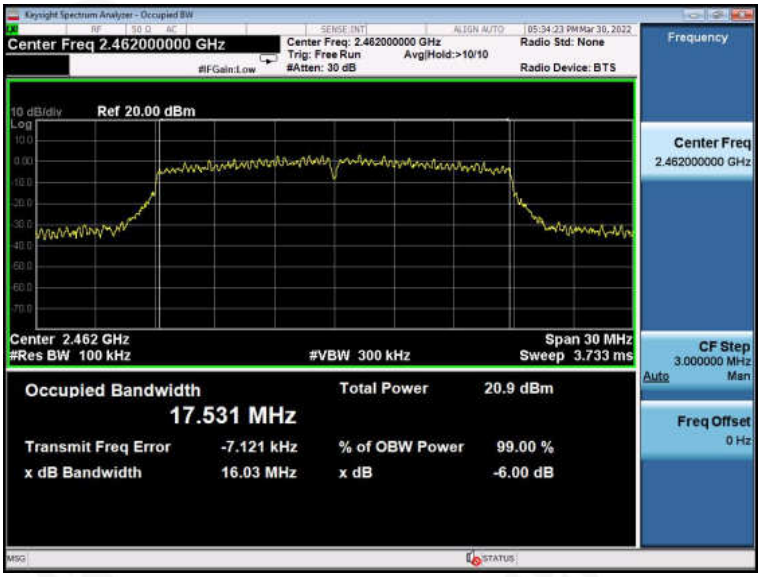
Lowest channel



Middle channel

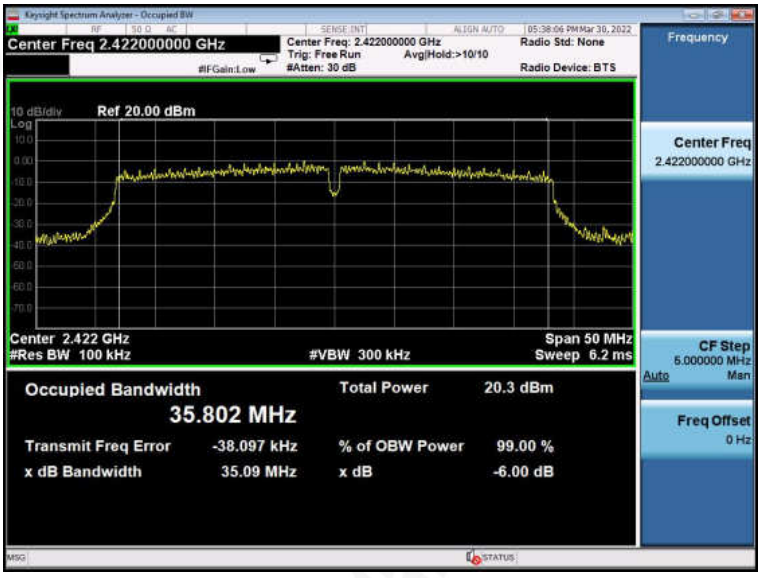


Highest channel

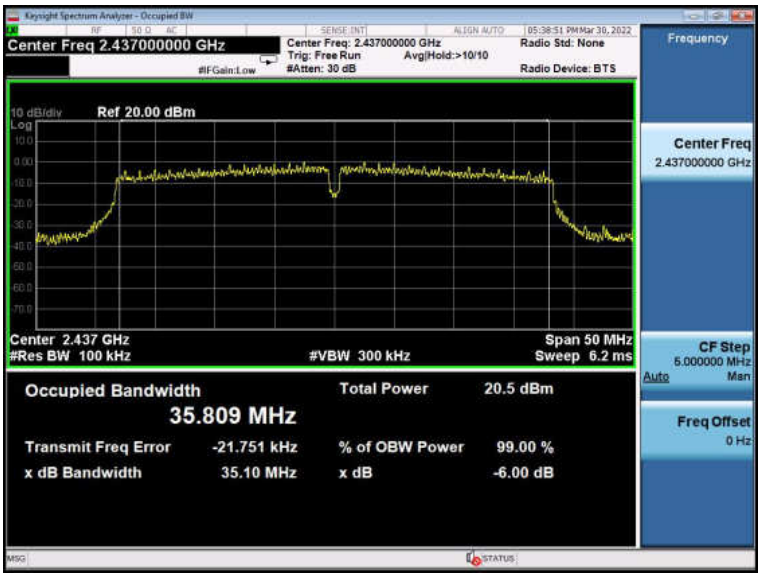


802.11n40

Lowest channel



Middle channel



Highest channel

8.PEAK OUTPUT POWER TEST

Test Requirement:	FCC Part15 C Section 15.247 (b)(3)
Test Method:	KDB558074 D0115.247 Meas Guidancev05r02

8.1 APPLIED PROCEDURES/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

a. The EUT was directly connected to the Power meter

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP

8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

8.6 TEST RESULT

Temperature :	26℃	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	AC 120V/60Hz

Type	Peak Output Power (dBm)						Limit(dBm)	Result
	Test CH	Ant A	Ant B	Ant C	Ant D	Total		
802.11b	Lowest	9.802	9.320	9.182	9.684	/	30.00	Pass
	Middle	9.348	9.176	9.453	9.447	/		
	Highest	10.228	9.185	9.475	9.431	/		
802.11g	Lowest	7.889	7.645	7.858	7.344	/	30.00	Pass
	Middle	8.336	7.417	7.135	7.414	/		
	Highest	8.092	7.910	7.663	7.966	/		
802.11n(HT20)	Lowest	8.085	7.509	7.354	7.736	13.70	28.99	Pass
	Middle	8.215	7.465	7.283	7.187	13.58		
	Highest	8.313	7.783	7.327	7.216	13.70		
802.11n(HT40)	Lowest	5.465	5.227	5.245	5.122	11.29	28.99	Pass
	Middle	5.600	5.122	5.135	5.243	11.30		
	Highest	5.546	5.249	5.284	5.126	11.32		

9. CONDUCTED BAND EDGE AND SPURIOUS EMISSION

Test Requirement:	FCC Part15 C Section 15.247 (d)
Test Method:	KDB558074 D0115.247 Meas Guidancev05r02

9.1 APPLICABLE STANDARD

in any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator in operating, the radio frequency power that is produced by the intentional radiator shall be at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, In addition, radiated emissions which fall in the restricted bands, as defined in§15.205(a), must also comply with the radiated emission limits specified in15.209(a).

9.2 TEST PROCEDURE

Using the following spectrum analyzer setting:

A) Set the RBW = 100KHz.
B) Set the VBW = 300KHz.
C) Sweep time = auto couple.
D) Detector function = peak.
E) Trace mode = max hold.
F) Allow trace to fully stabilize.

9.3 DEVIATION FROM STANDARD

No deviation.

9.4 TEST SETUP

9.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

9.6 TEST RESULTS

Ant A

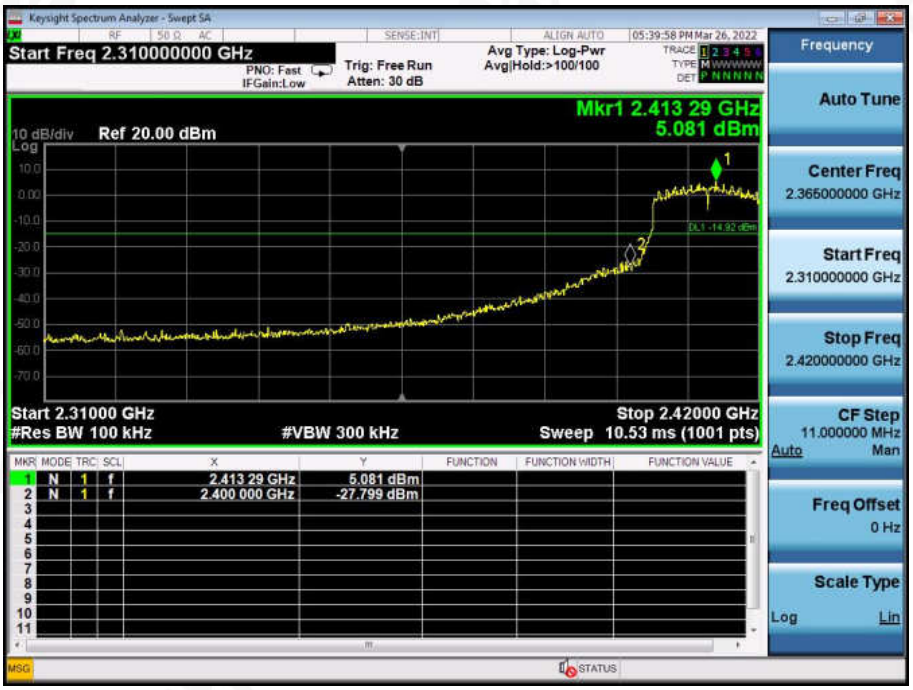
802.11b Test plot as follows:

Lowest channel

Highest channel

802.11g Test plot as follows:

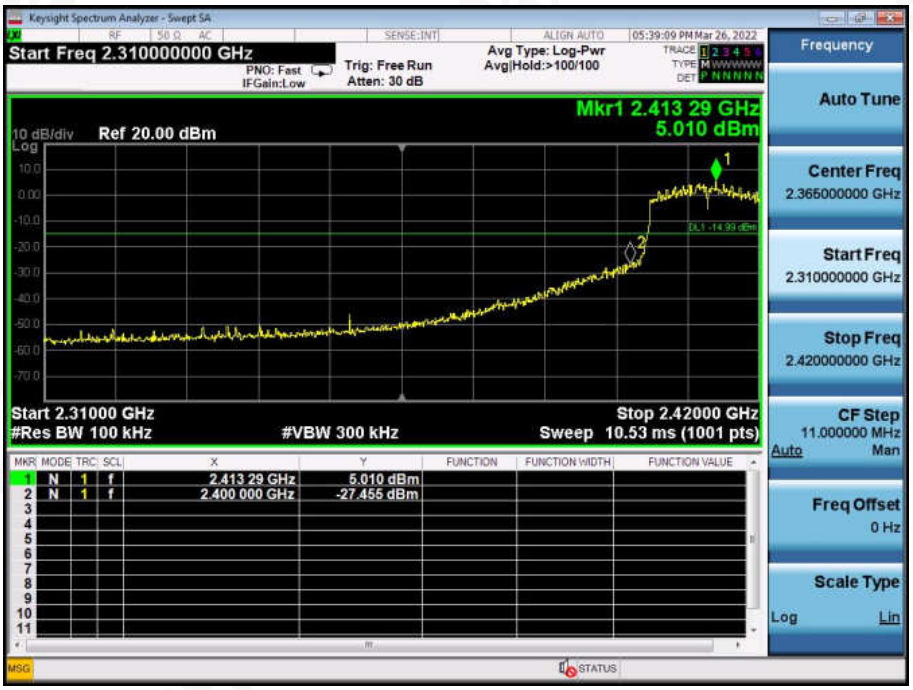
Lowest channel



Highest channel

802.11n(HT20) Test plot as follows:

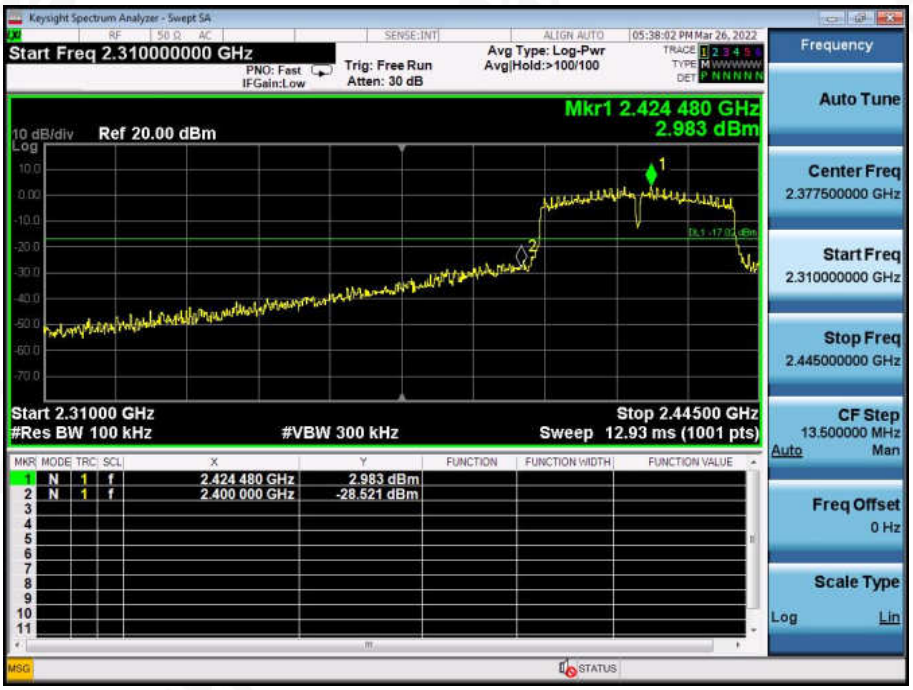
Lowest channel



Highest channel

802.11n(HT40) Test plot as follows:

Lowest channel

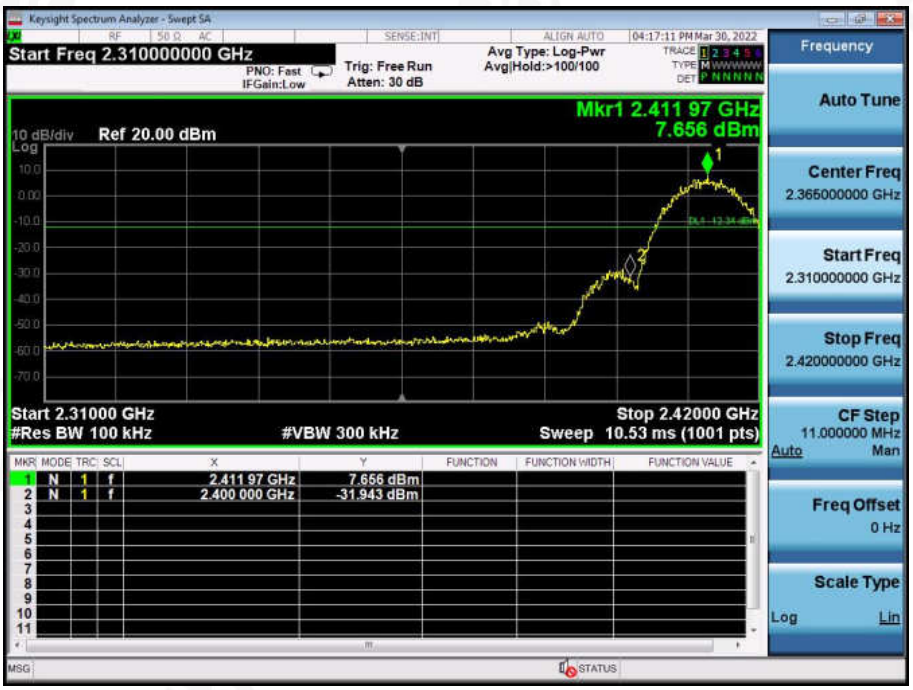


Highest channel

Ant B

802.11b Test plot as follows:

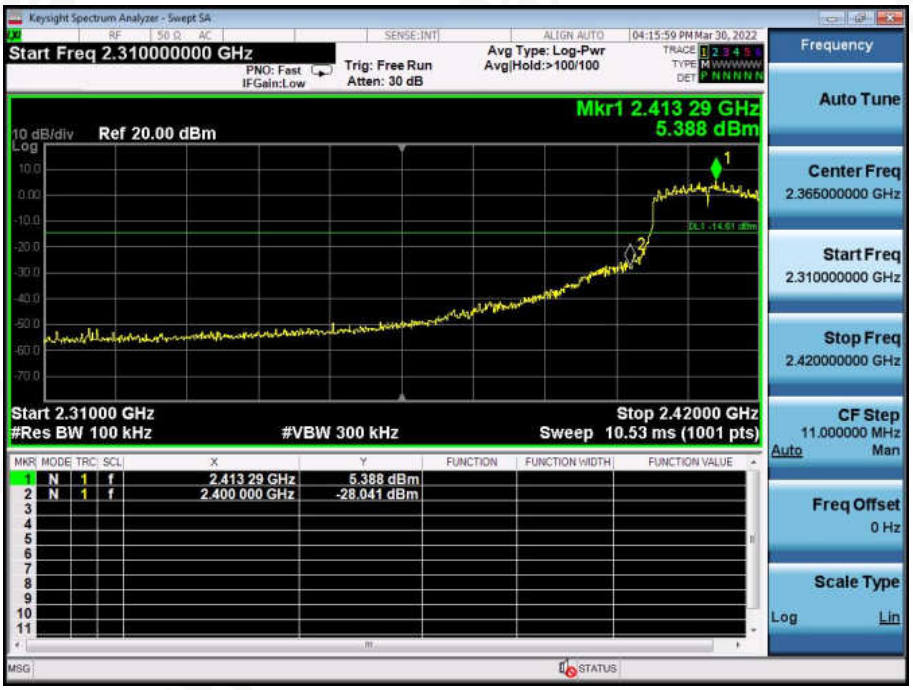
Lowest channel



Highest channel

802.11g Test plot as follows:

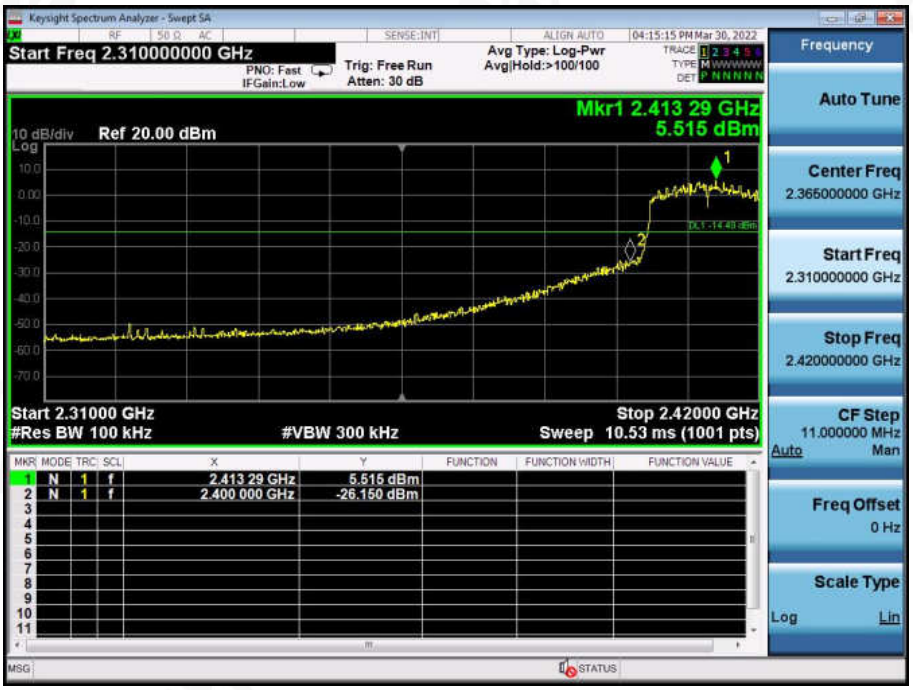
Lowest channel



Highest channel

802.11n(HT20) Test plot as follows:

Lowest channel

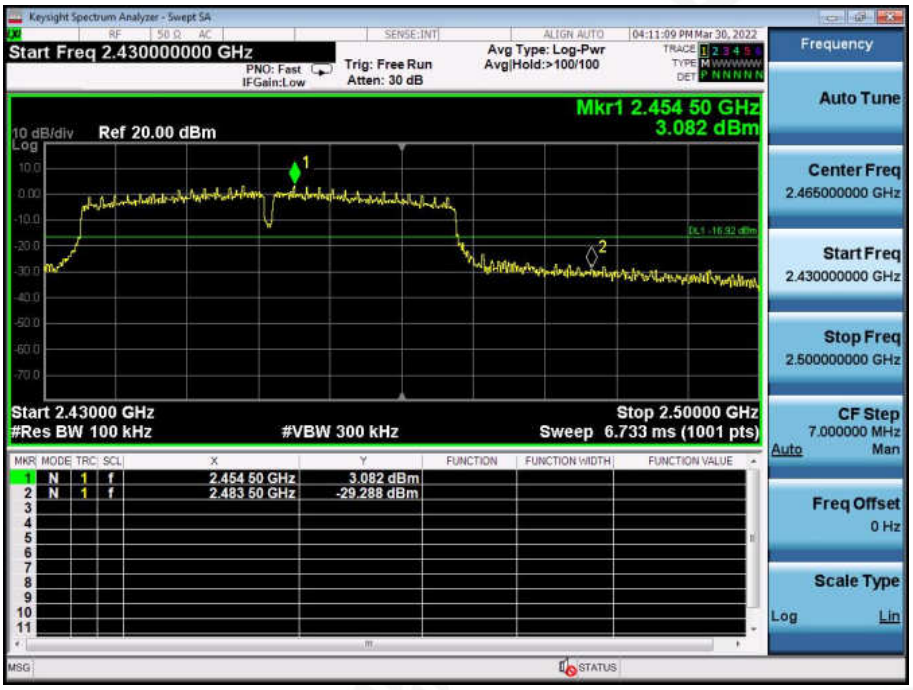


Highest channel

802.11n(HT40) Test plot as follows:

Lowest channel

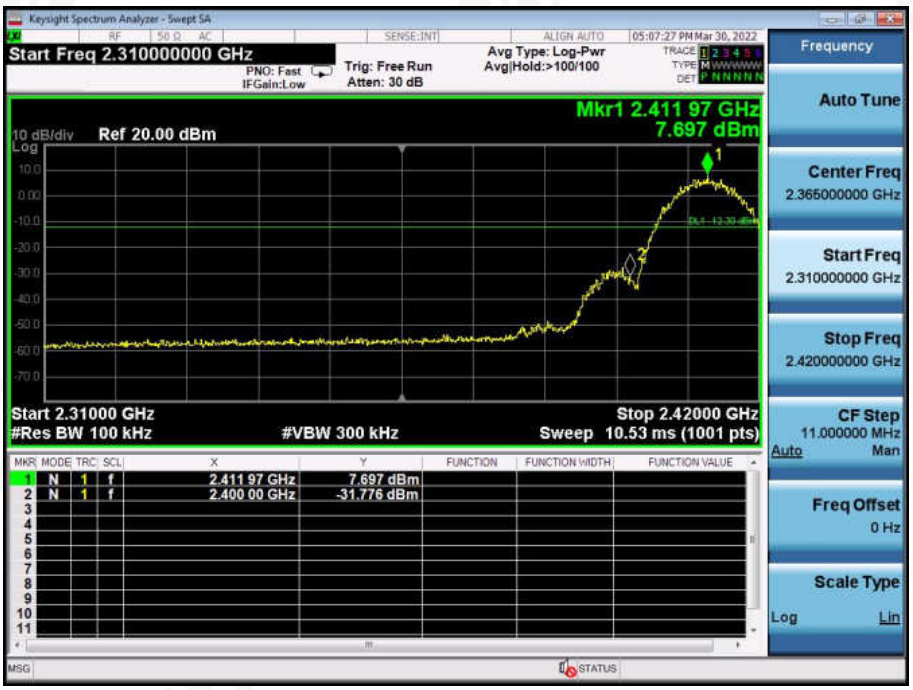
Highest channel



Ant C

802.11b Test plot as follows:

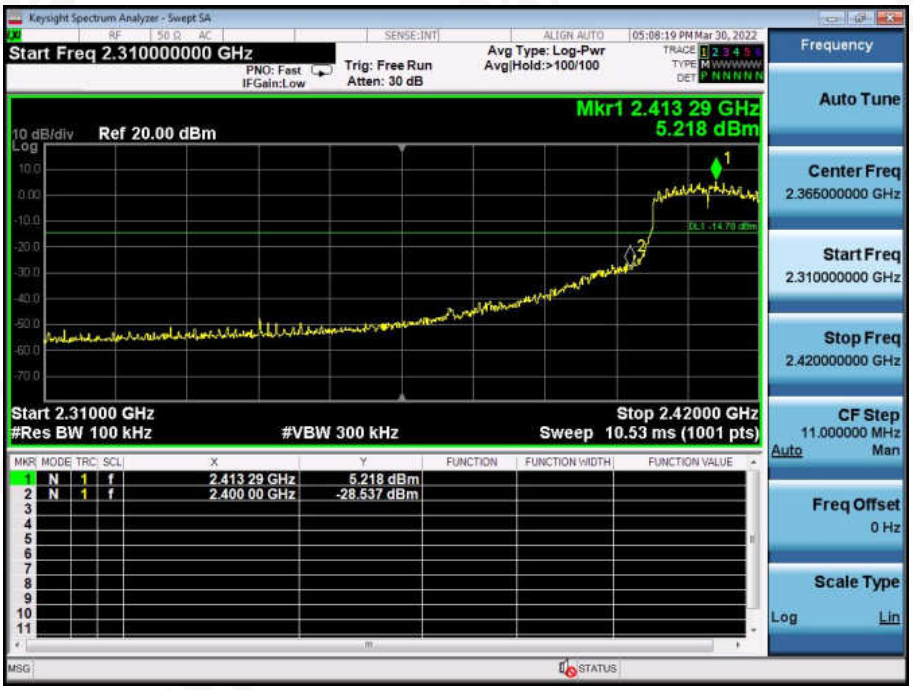
Lowest channel



Highest channel

802.11g Test plot as follows:

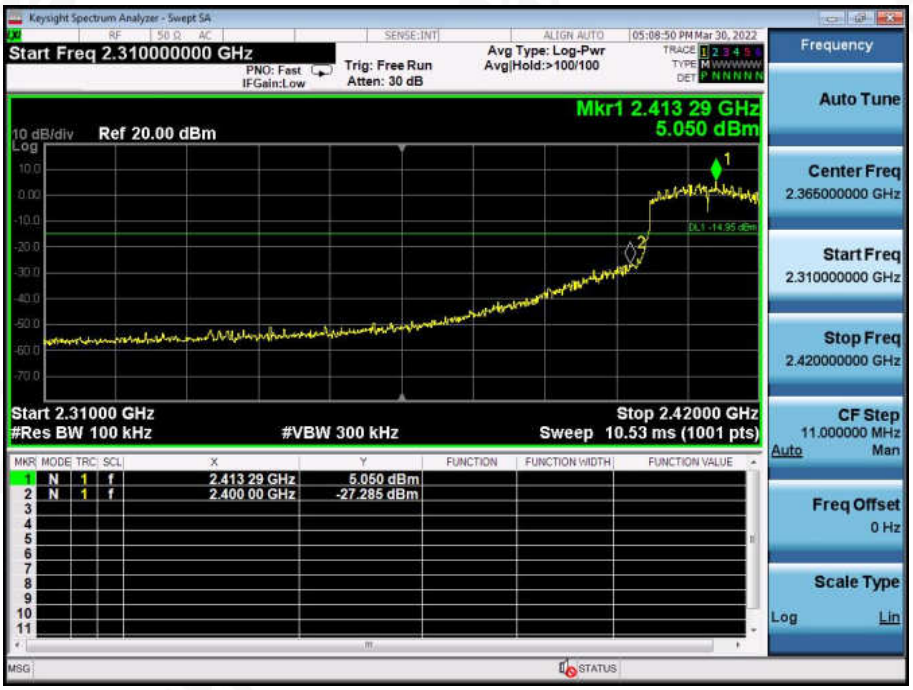
Lowest channel



Highest channel

802.11n(HT20) Test plot as follows:

Lowest channel

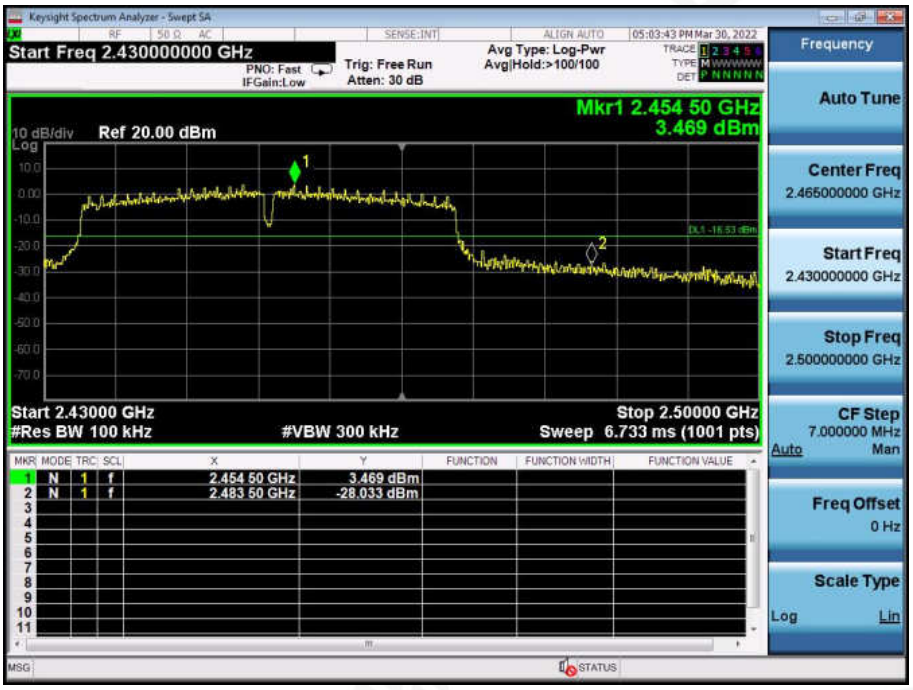


Highest channel

802.11n(HT40) Test plot as follows:

Lowest channel

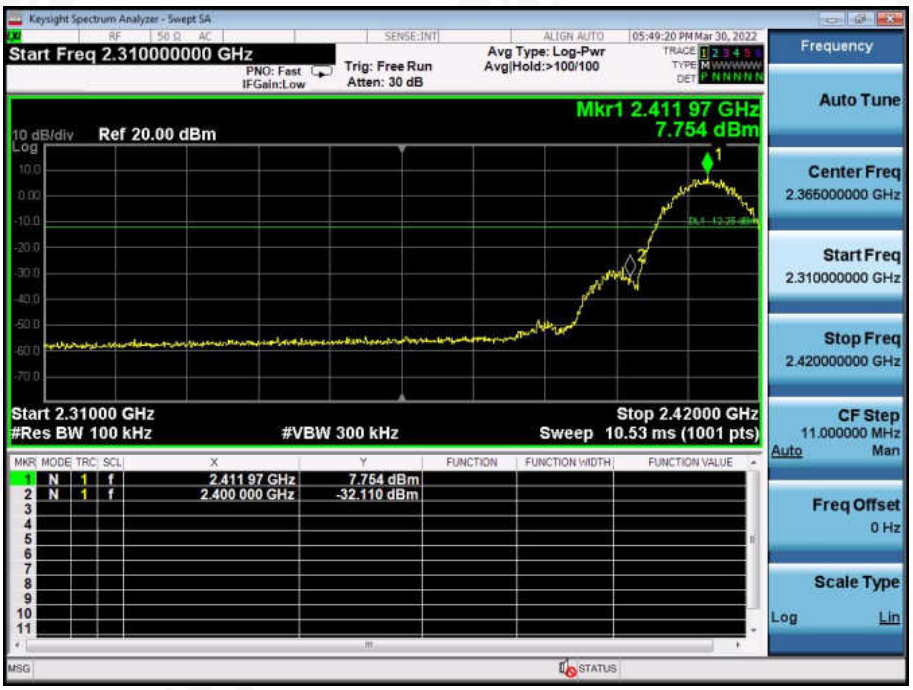
Highest channel



Ant D

802.11b Test plot as follows:

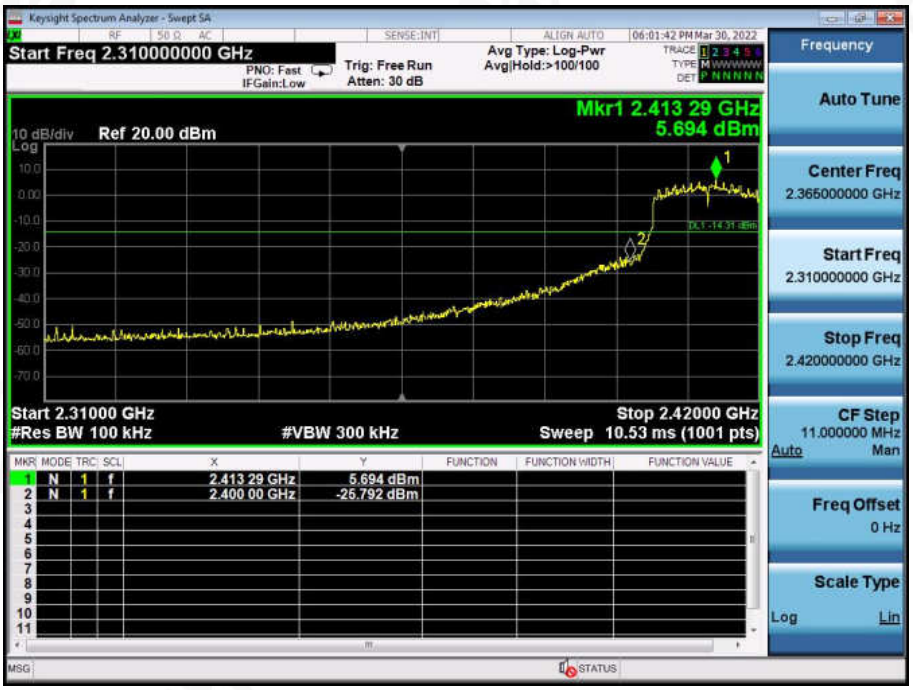
Lowest channel



Highest channel

802.11g Test plot as follows:

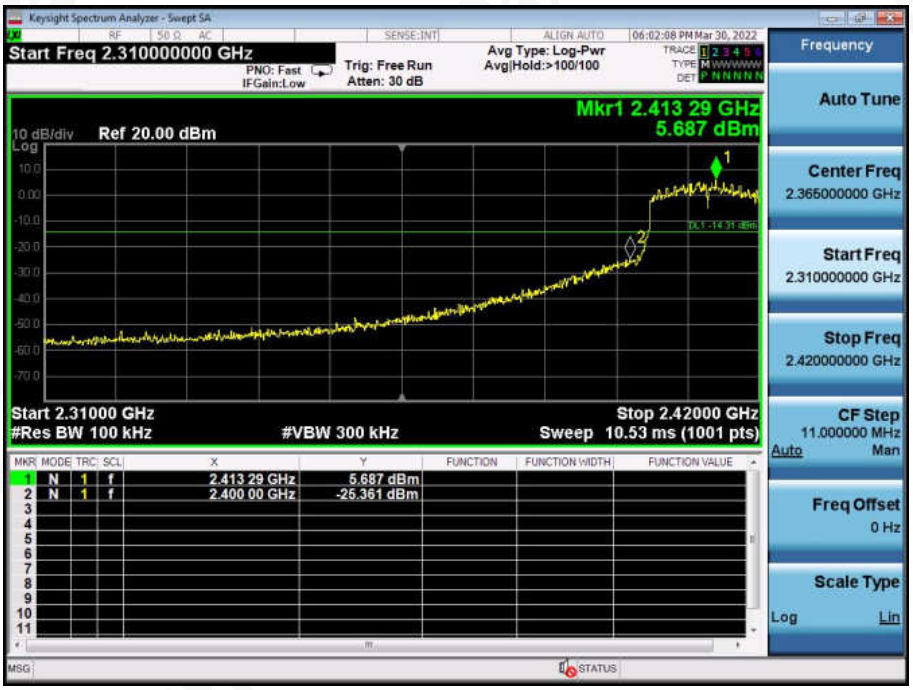
Lowest channel



Highest channel

802.11n(HT20) Test plot as follows:

Lowest channel

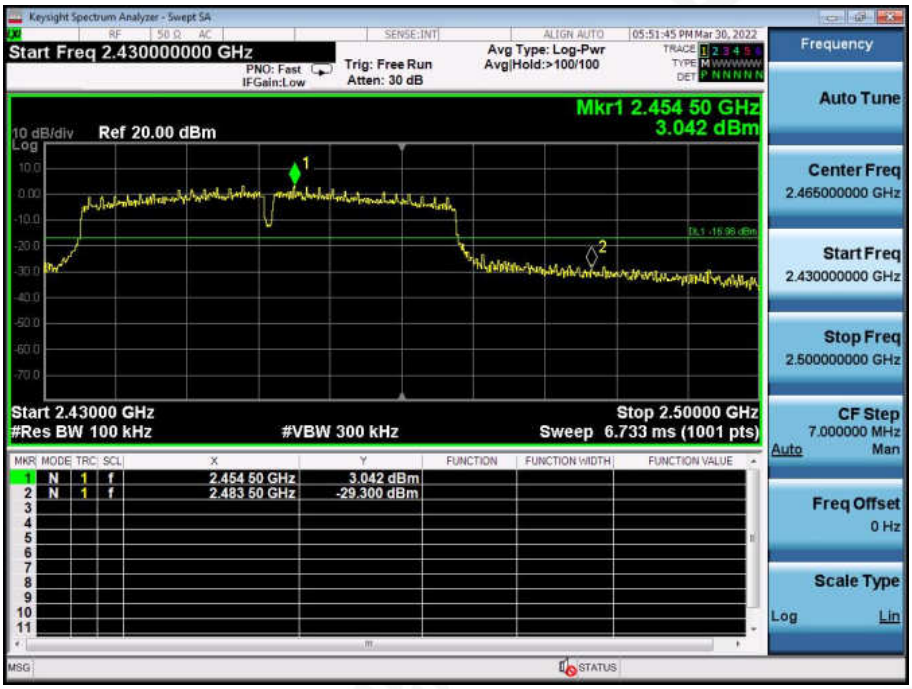


Highest channel

802.11n(HT40) Test plot as follows:

Lowest channel

Highest channel



Test plot as follows:

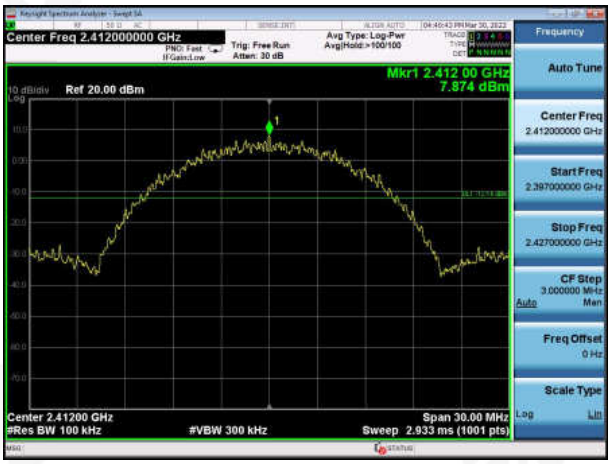
Remark: Spurious Emission all modes of 802.11b, 802.11g, 802.11n(HT20), 802.11n(HT40) were tested, only the worst result of 802.11b

802.11b

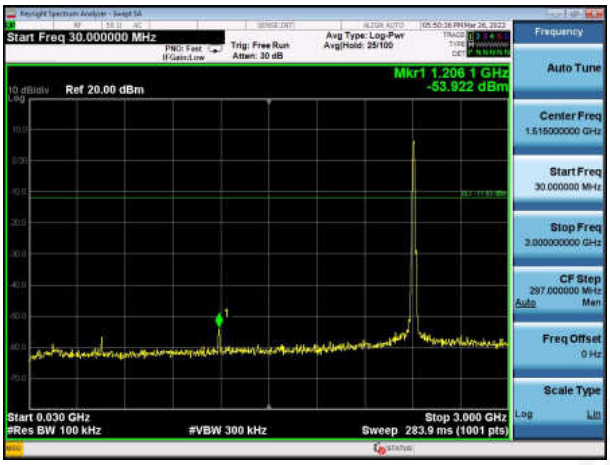
Lowest channel

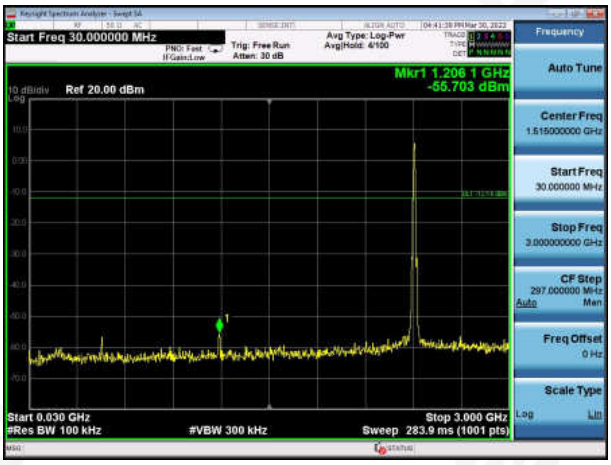
Ant A

Ant B



CH01





30MHz~3GHz

3GHz~25GHz

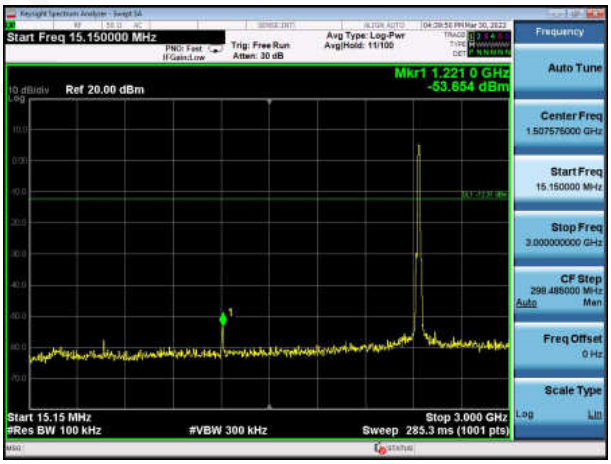
802.11b

Middle channel

Ant A

Ant B

CH06



30MHz~3GHz

3GHz~25GHz

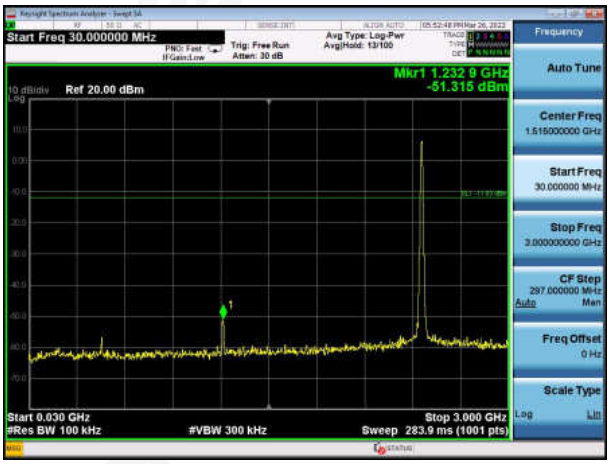
802.11b

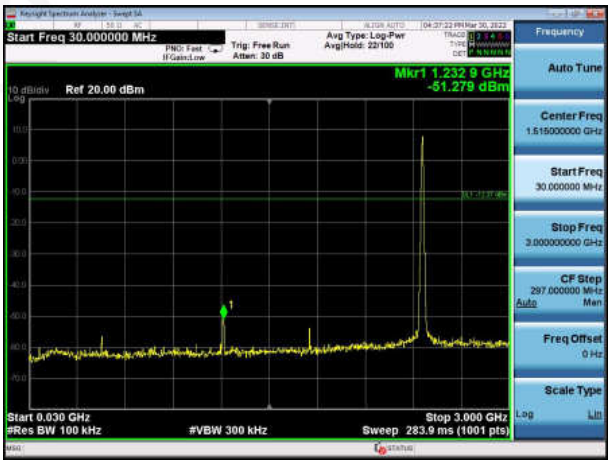
Highest channel

Ant A

Ant B

CH06





30MHz~3GHz

3GHz~25GHz

802.11b

Lowest channel

Ant C

Ant D

CH01

30MHz~3GHz

3GHz~25GHz

802.11b

Middle channel

Ant C

Ant D

CH06

30MHz~3GHz

3GHz~25GHz

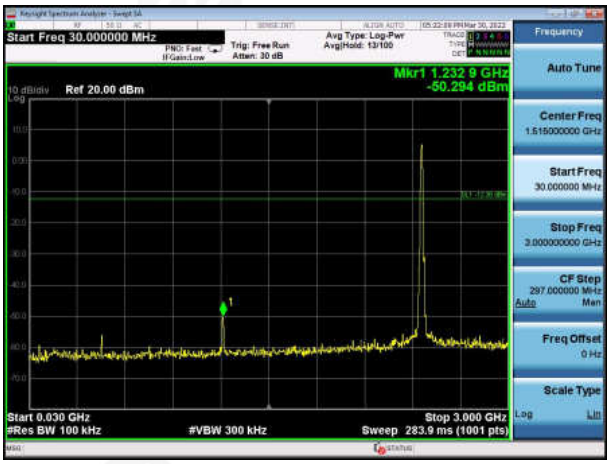
802.11b

Highest channel

Ant C

Ant D

CH06



30MHz~3GHz

3GHz~25GHz

10. ANTENNA REQUIREMENT

Standard requirement:	FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

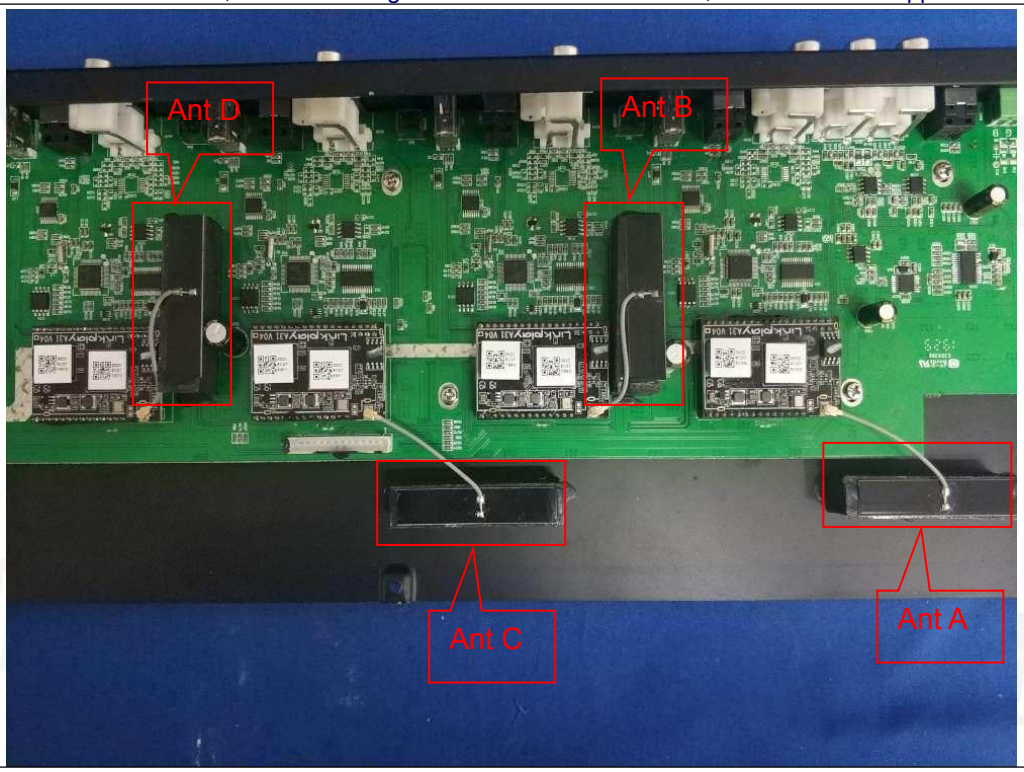
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

EUT Antenna:

The antenna is Internal Antenna, the best case gain of the antenna is 2.15dBi, reference to the appendix II for details



11. TEST SETUP PHOTO

Reference to the appendix I for details.

12. EUT CONSTRUCTIONAL DETAILS

Reference to the appendix II for details.

※※※※※ END OF REPORT ※※※※※