

**. POWER SPECTRAL DENSITY TEST****APPLIED PROCEDURES / LIMIT**

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

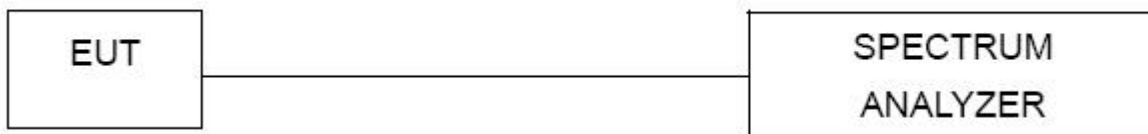
Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	= the frequency band of operation
RB	RBW $\geq$ 3kHz
VB	VBW $\geq$ 3RBW
Detector	power averaging (rms) or sample detector (when rms not available).
Trace	Max Hold
Sweep Time	Auto

TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

DEVIATION FROM STANDARD

No deviation.

TEST SETUP**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.

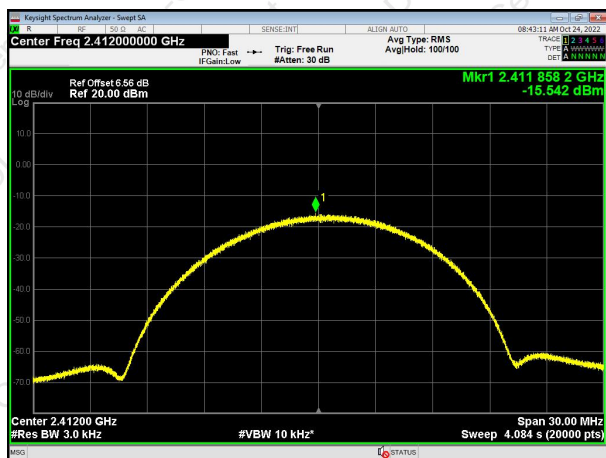
**TEST RESULTS**

Mode	Test Channel	Reading Level(dBm)		ANT1&ANT2 MIMO Power Spectral Density (dBm)	Limit (dBm)	Result
		Antenna1	Antenna2			
802.11b	Low	-15.542	-15.675	/	<8	PASS
	Middle	-15.710	-15.740	/	<8	PASS
	High	-16.247	-16.395	/	<8	PASS
802.11g	Low	-20.030	-19.994	/	<8	PASS
	Middle	-19.993	-19.729	/	<8	PASS
	High	-20.163	-20.625	/	<8	PASS
802.11n HT20	Low	-19.859	-20.471	-17.144	<8	PASS
	Middle	-20.162	-20.108	-17.125	<8	PASS
	High	-20.477	-20.467	-17.462	<8	PASS
802.11n HT40	Low	-22.134	-22.463	-19.285	<8	PASS
	Middle	-23.202	-23.334	-20.257	<8	PASS
	High	-20.990	-24.193	-19.292	<8	PASS

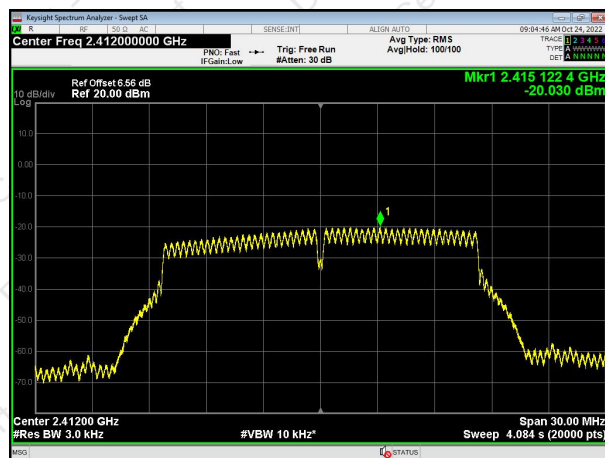


Antenna 1:

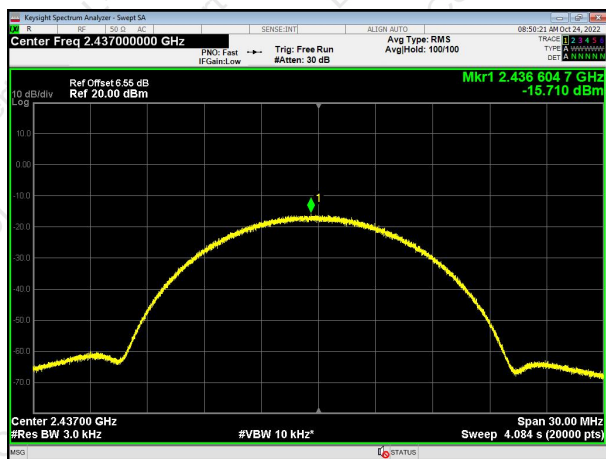
802.11b



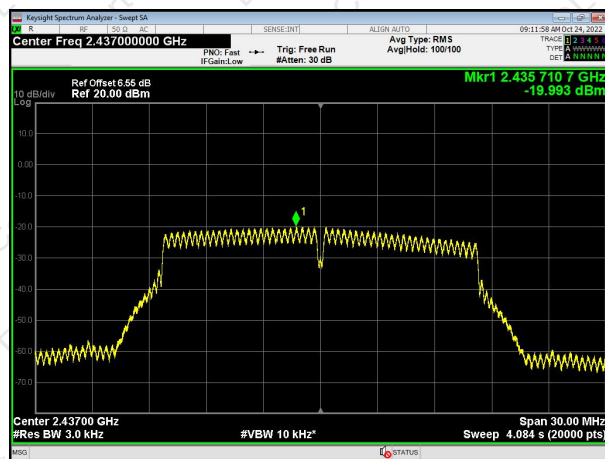
802.11g



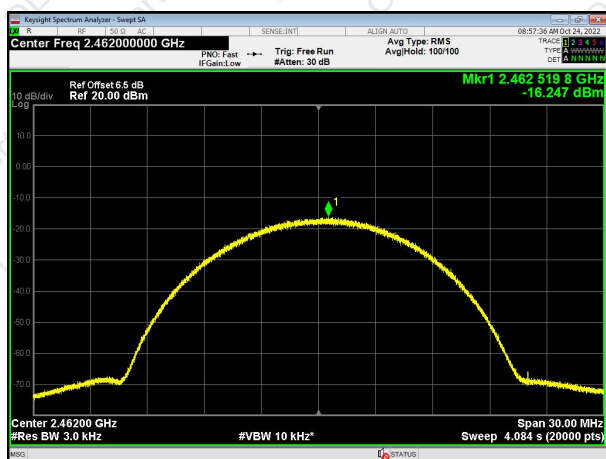
2412MHz



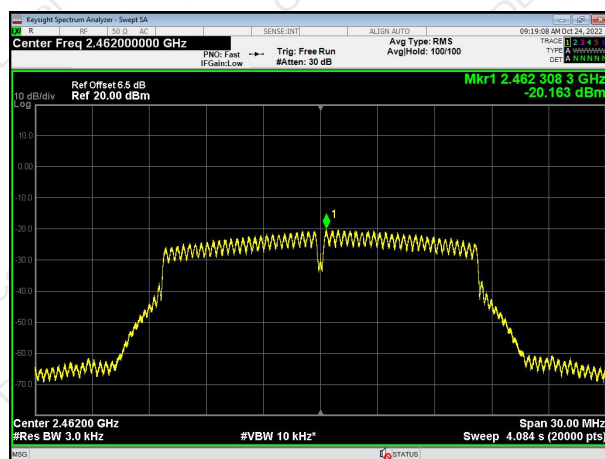
2412MHz



2437MHz



2437MHz

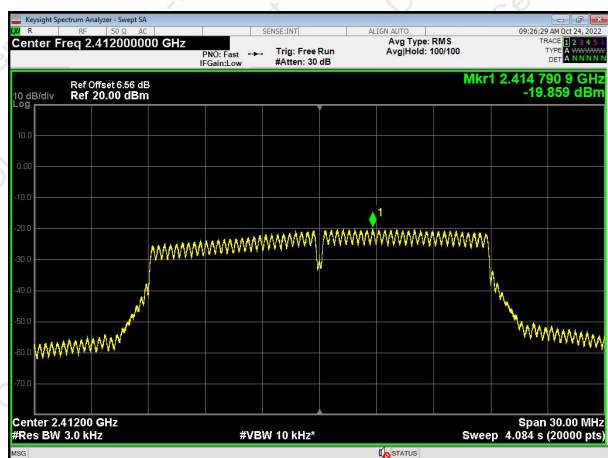


2462MHz

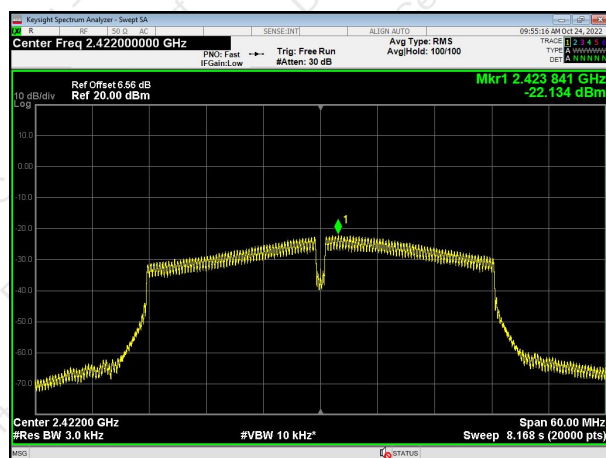
2462MHz



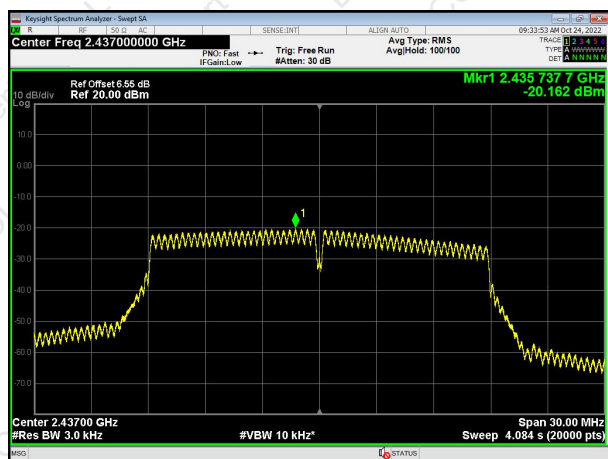
802.11n HT20



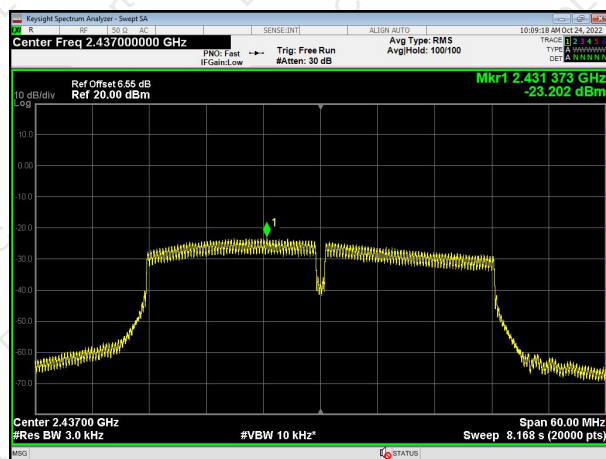
802.11n HT40



2412MHz



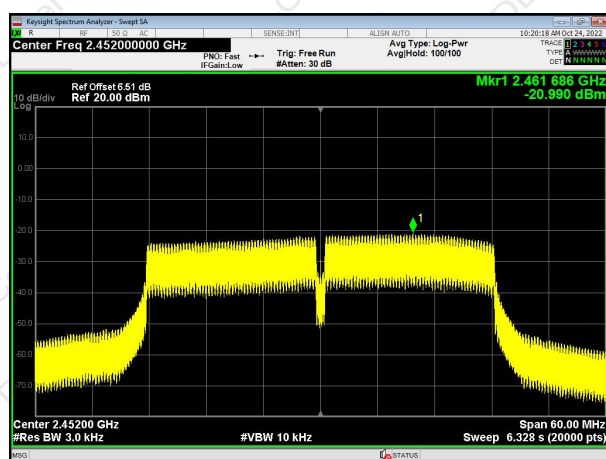
2422MHz



2437MHz



2437MHz



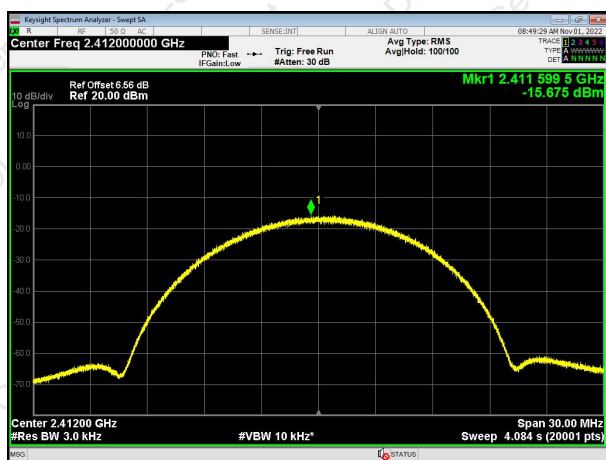
2462MHz

2452MHz

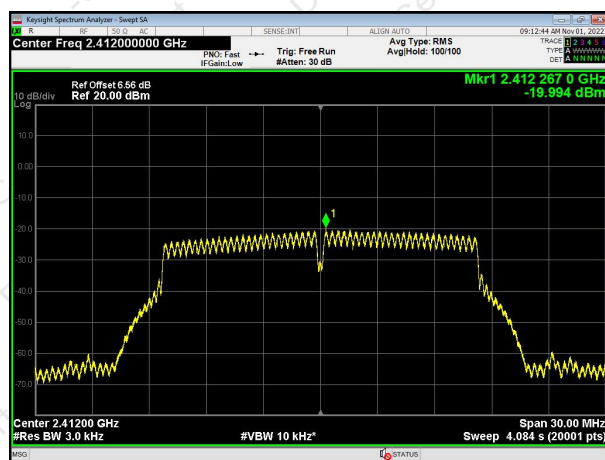


Antenna 2:

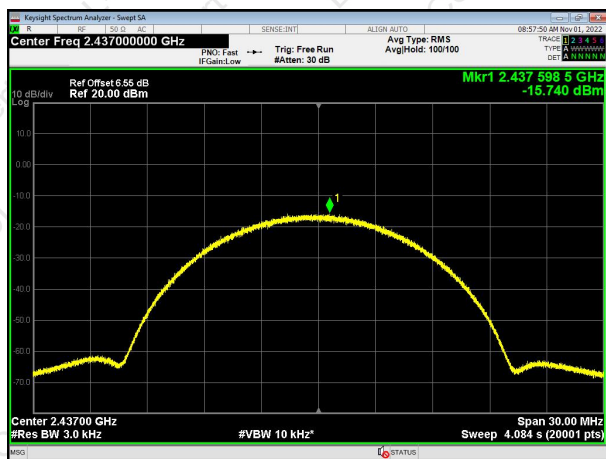
802.11b



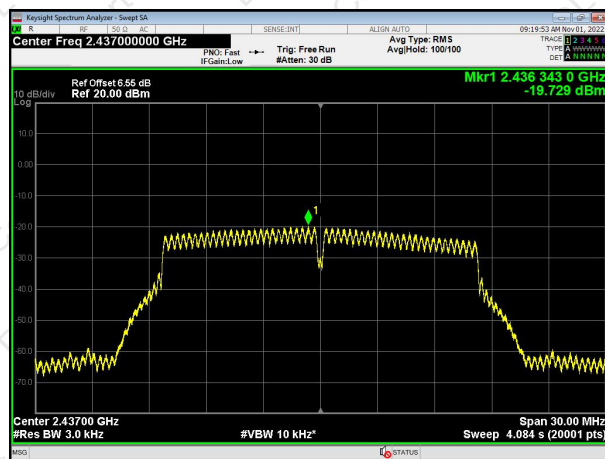
802.11g



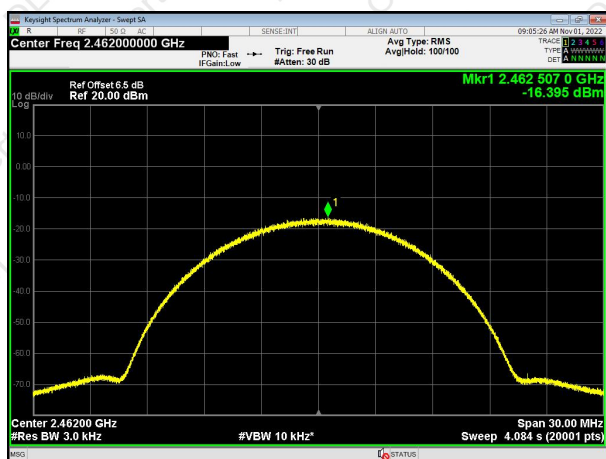
2412MHz



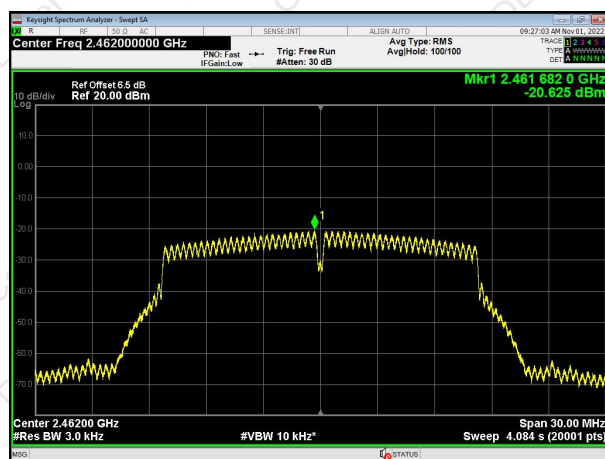
2412MHz



2437MHz



2437MHz

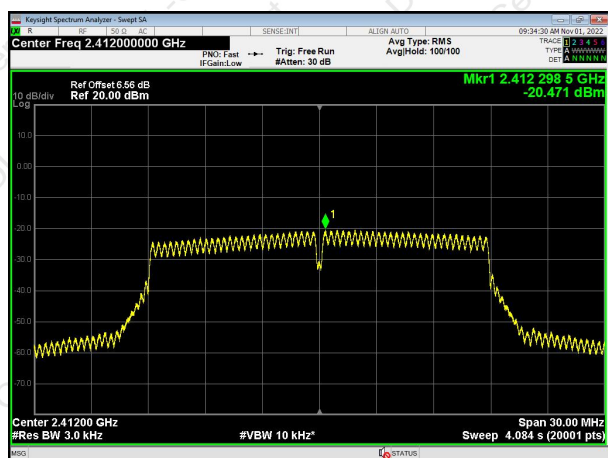


2462MHz

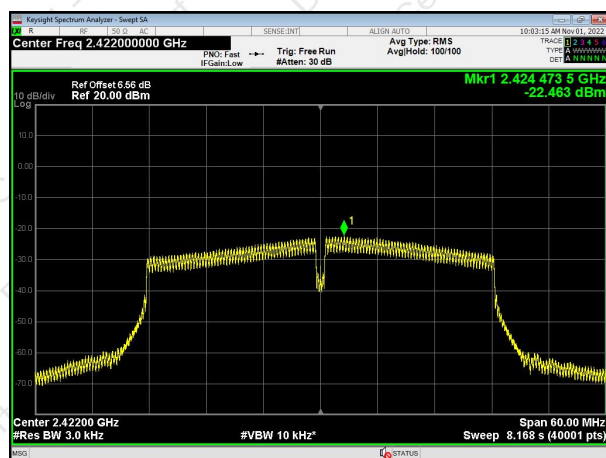
2462MHz



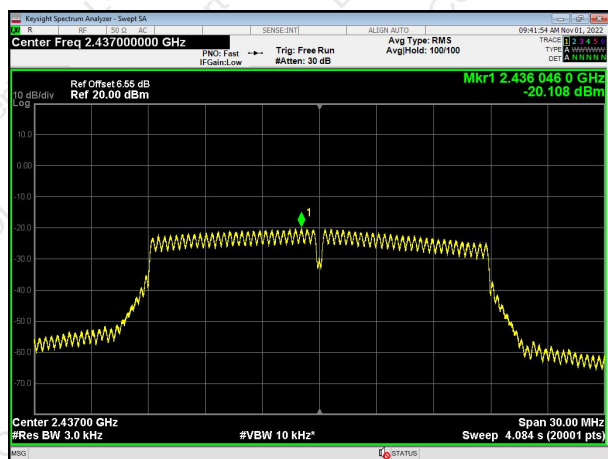
802.11n HT20



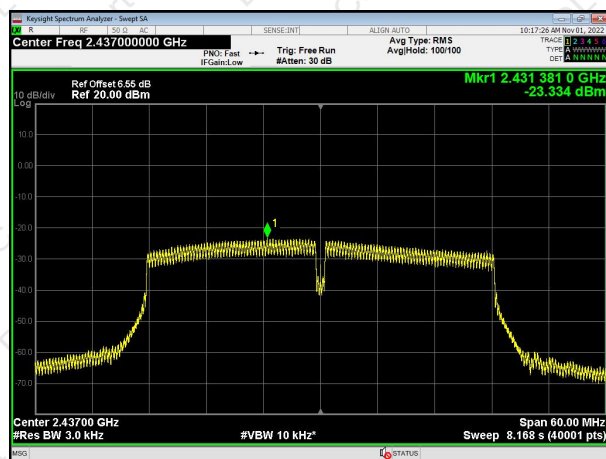
802.11n HT40



2412MHz



2422MHz



2437MHz



2437MHz



2462MHz

2452MHz

**. 6DB BANDWIDTH TEST****APPLIED PROCEDURES / LIMIT**

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range(MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq$ 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 frequencies) that are attenuated by 20 dB relative to the maximum level measured in the fundamental emission.

DEVIATION FROM STANDARD

No deviation.

TEST SETUP**EUT OPERATION CONDITIONS**

The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

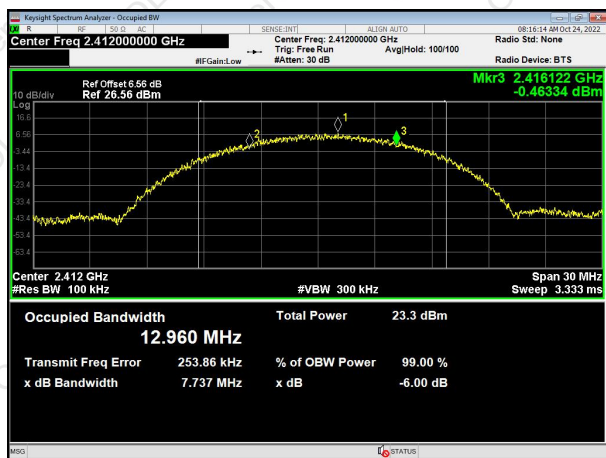
**TEST RESULTS**

Test CH		Channel Bandwidth (MHz)		Limit(KHz)	Result
		Antenna1	Antenna2		
802.11b	Low	7.737	8.191	>500	Pass
	Middle	8.914	7.569		
	High	7.672	8.005		
802.11g	Low	15.774	15.739		
	Middle	15.773	15.754		
	High	15.058	15.382		
802.11n HT20	Low	16.249	15.940		
	Middle	16.283	12.954		
	High	13.881	13.847		
802.11n HT40	Low	22.589	30.032		
	Middle	34.996	35.087		
	High	35.110	35.049		

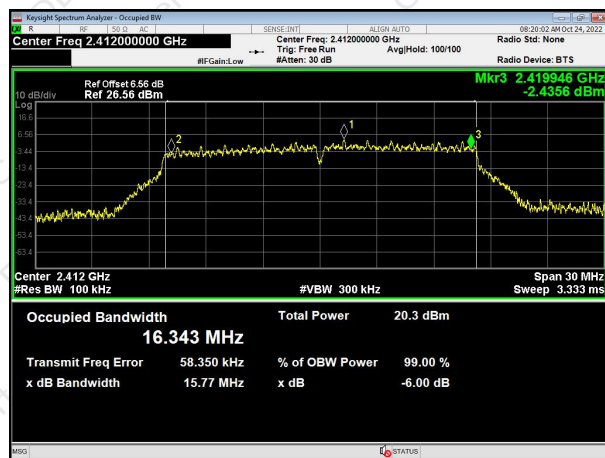


Antenna 1:

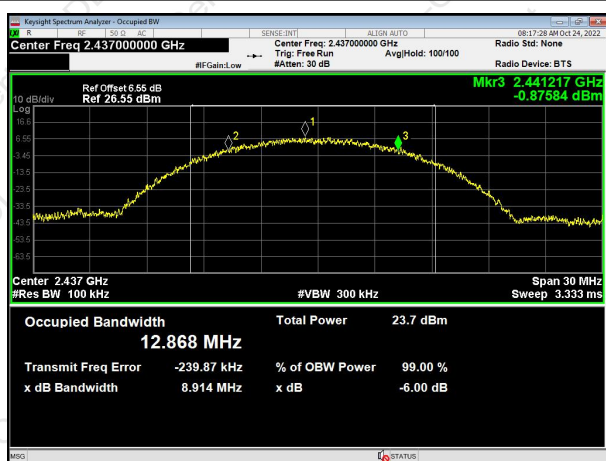
802.11b



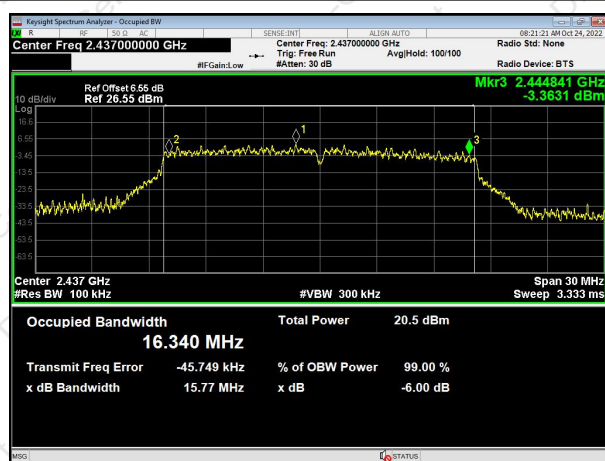
802.11g



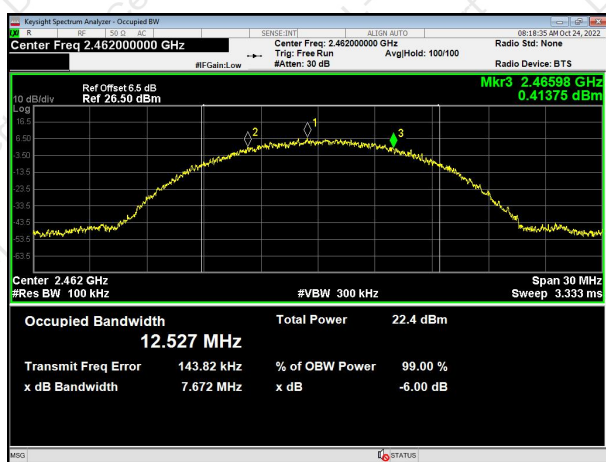
2412MHz



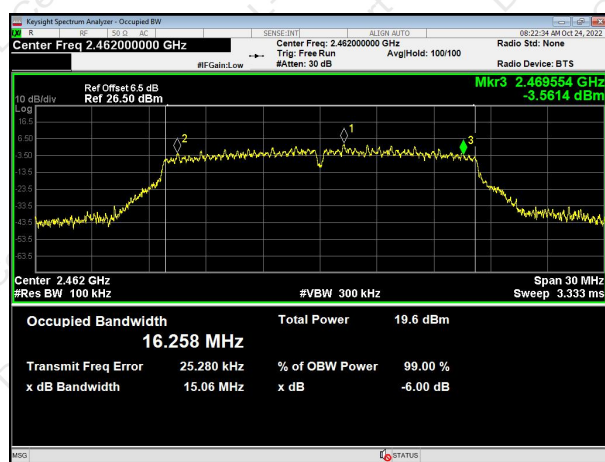
2412MHz



2437MHz



2437MHz

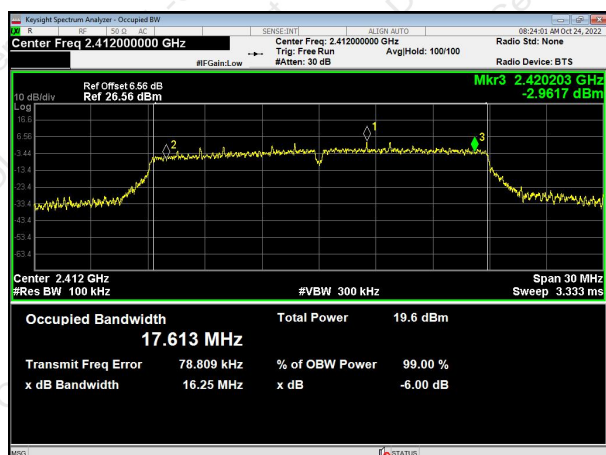


2462MHz

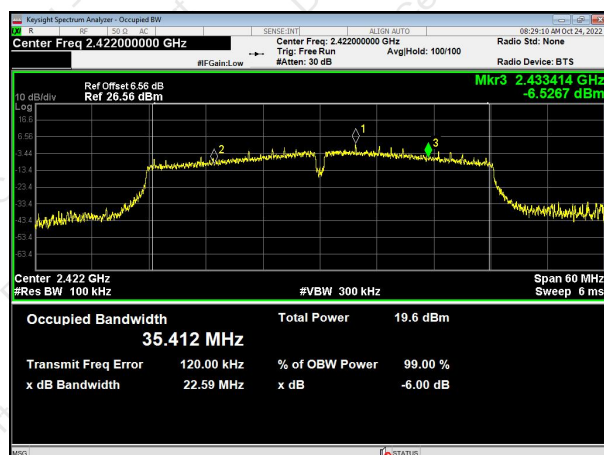
2462MHz



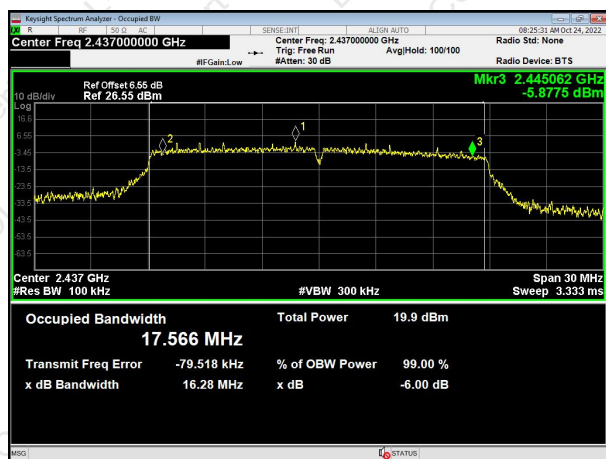
802.11n HT20



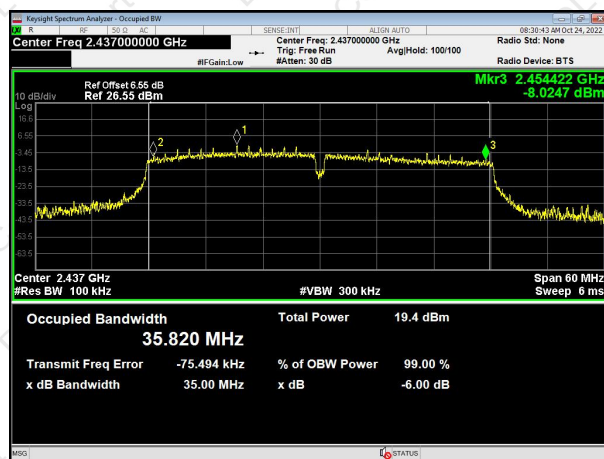
802.11n HT40



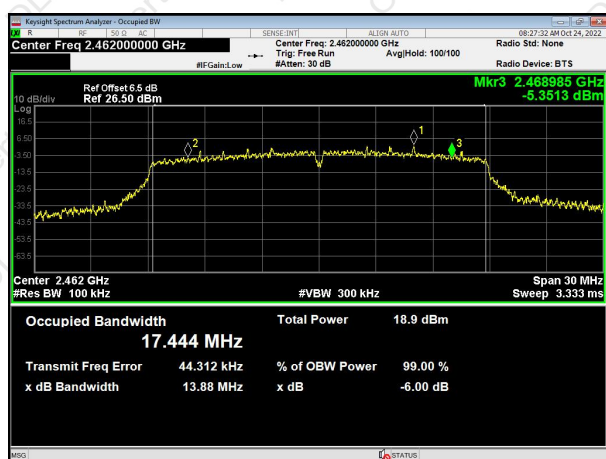
2412MHz



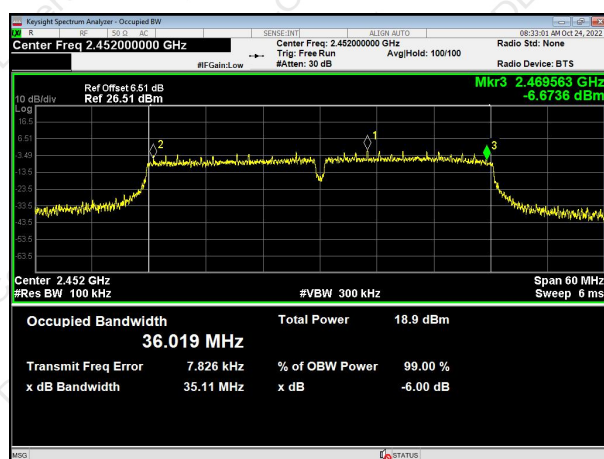
2422MHz



2437MHz



2437MHz



2462MHz

2452MHz