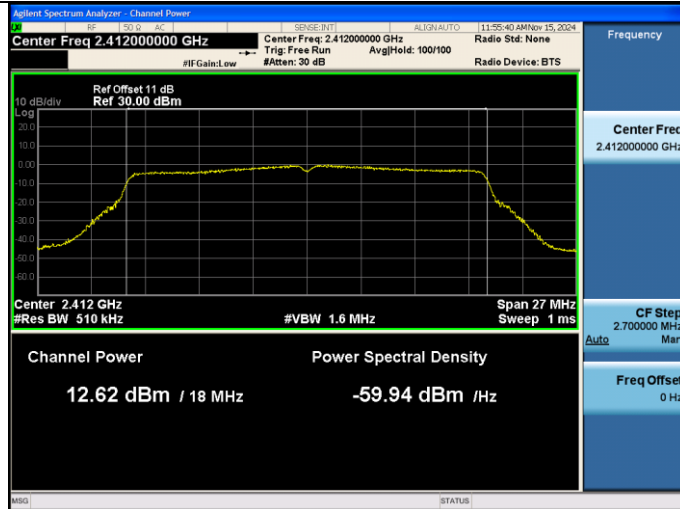


Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



Test CH6: 2437MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



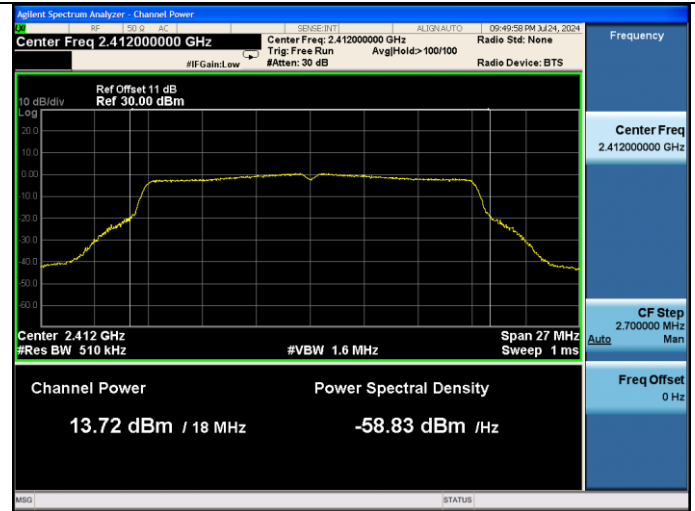
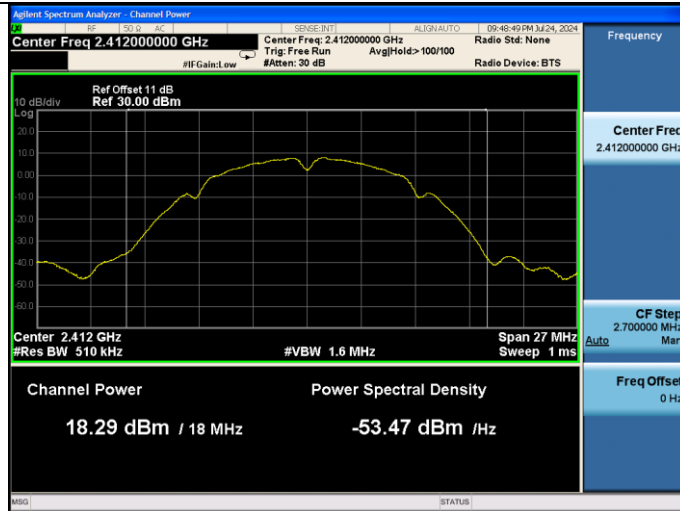
Test CH11: 2462MHz



ANT1

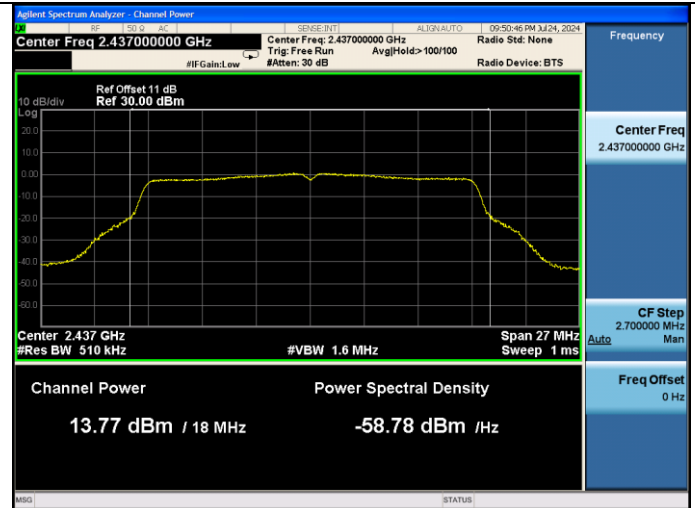
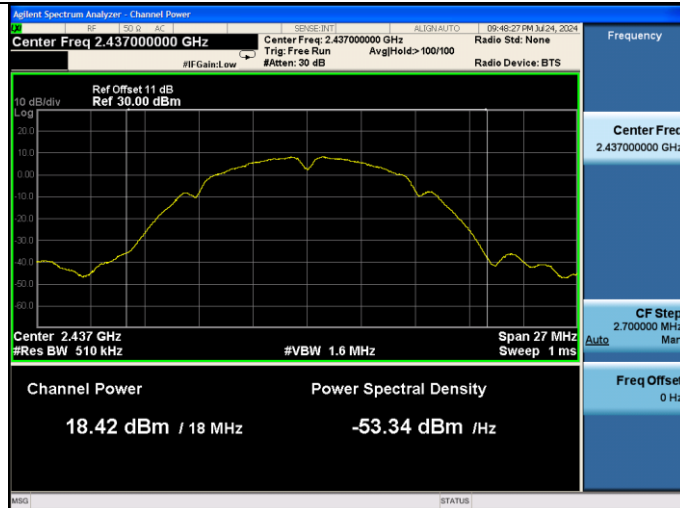
Test Mode: IEEE 802.11b
Test CH1: 2412MHz

Test Mode: IEEE 802.11g
Test CH1: 2412MHz



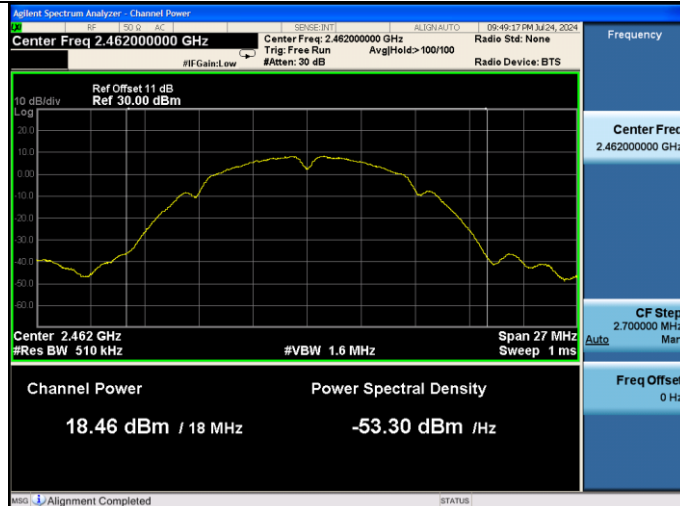
Test CH6: 2437MHz

Test CH6: 2437MHz

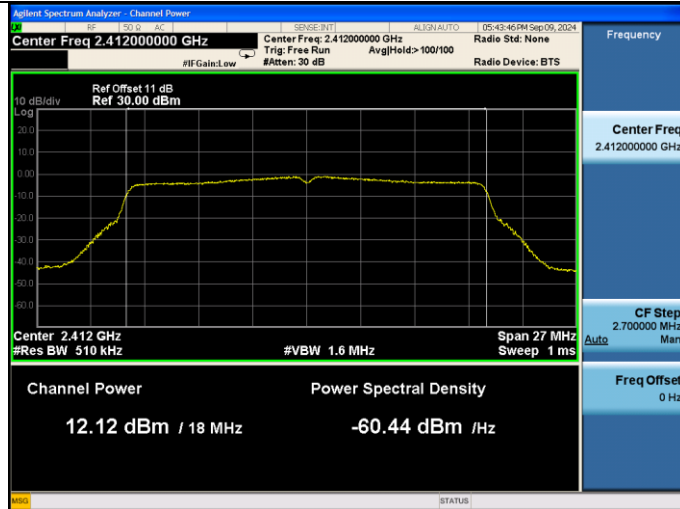


Test CH11: 2462MHz

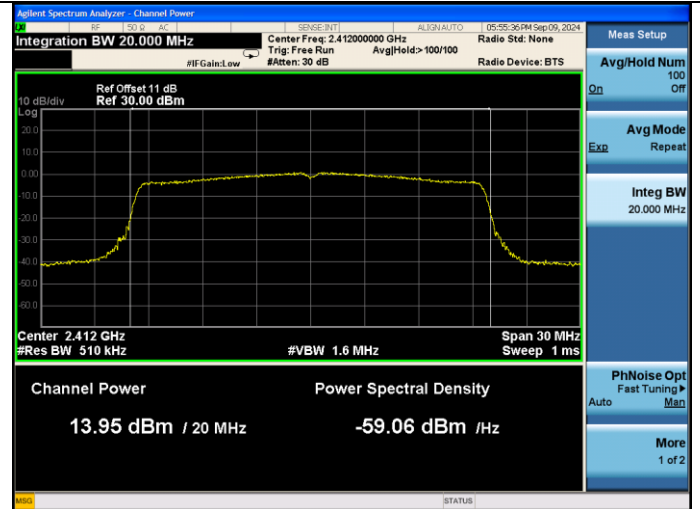
Test CH11: 2462MHz



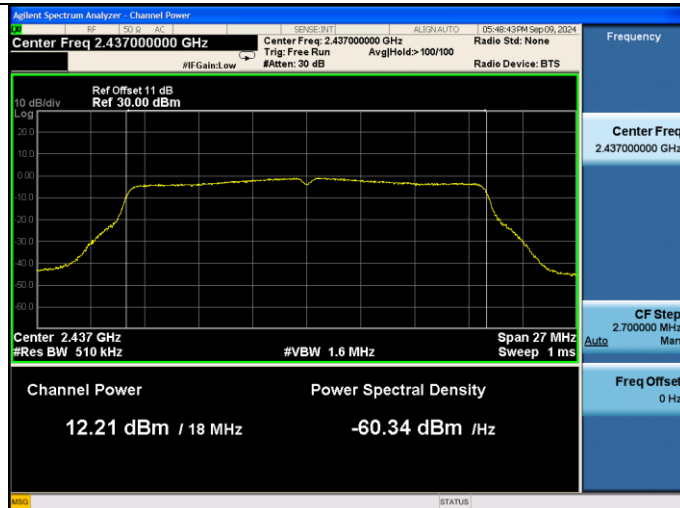
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



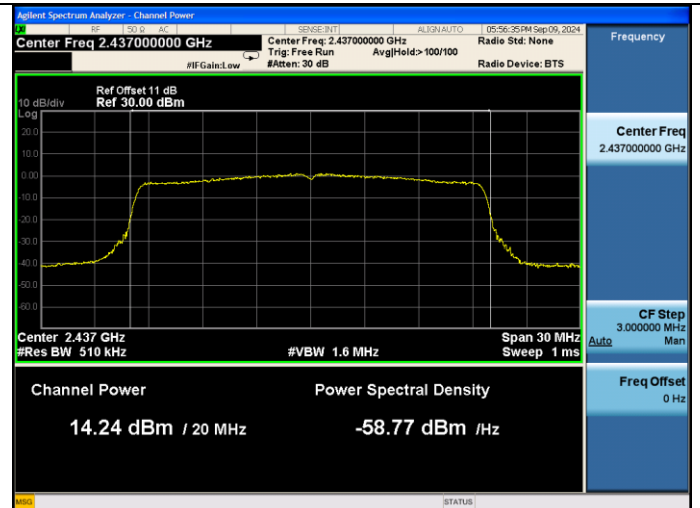
Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



Test CH6: 2437MHz



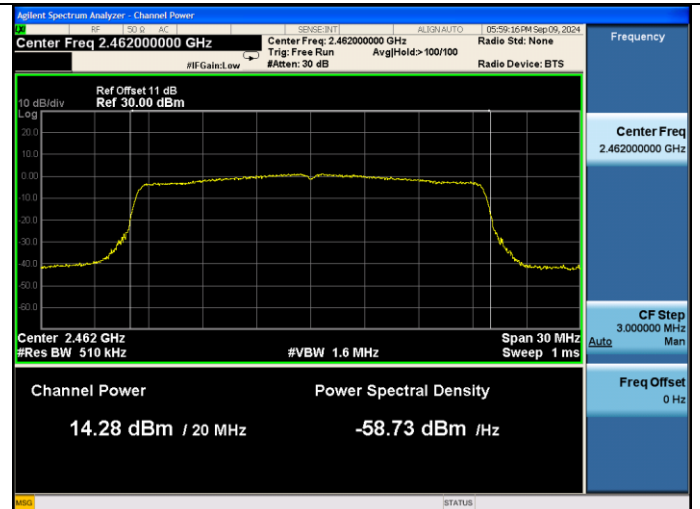
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH11: 2462MHz

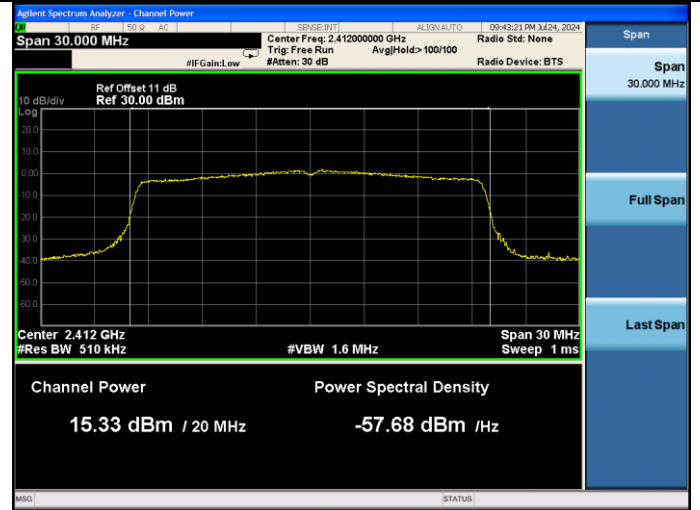
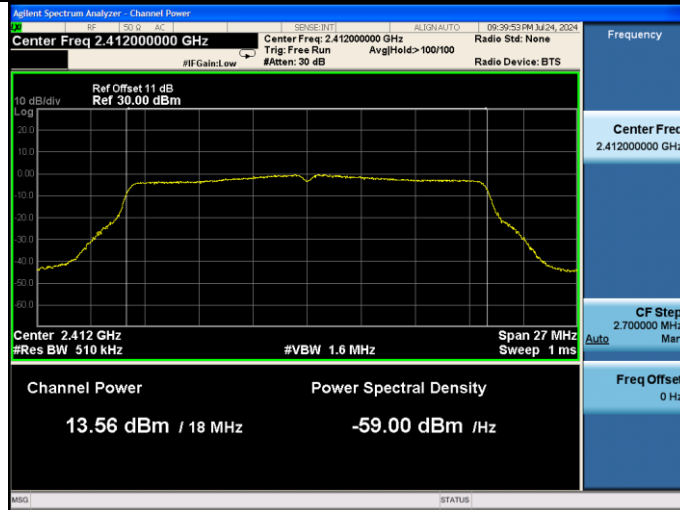


MIMO:

ANT0

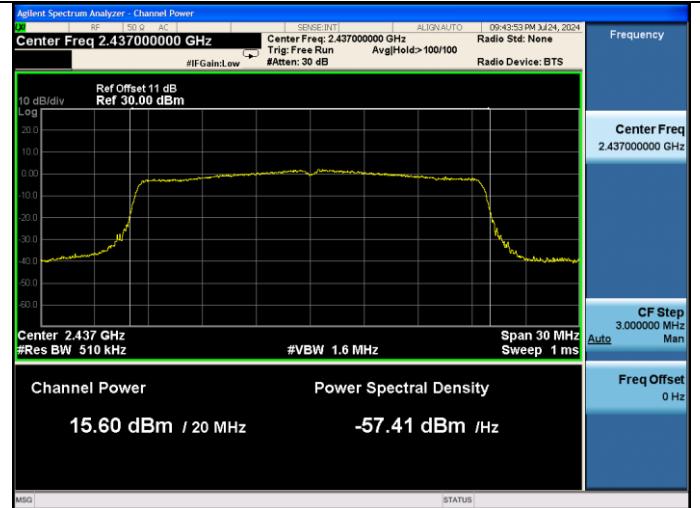
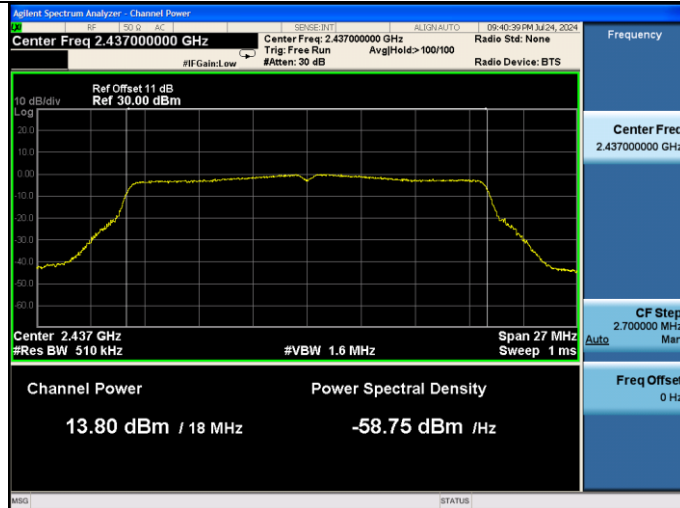
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



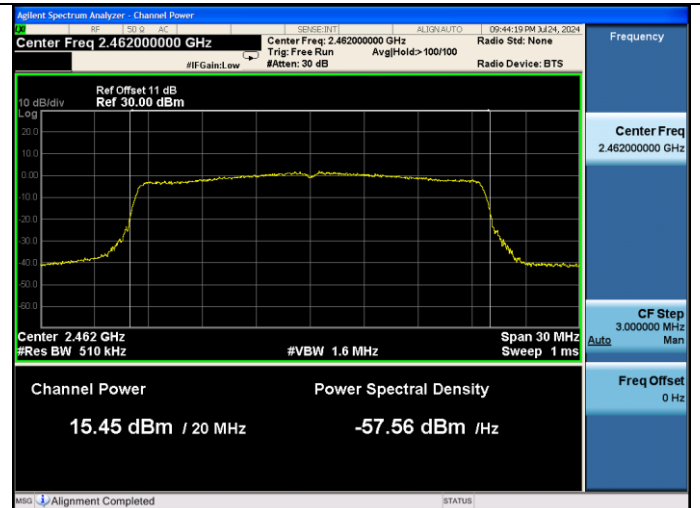
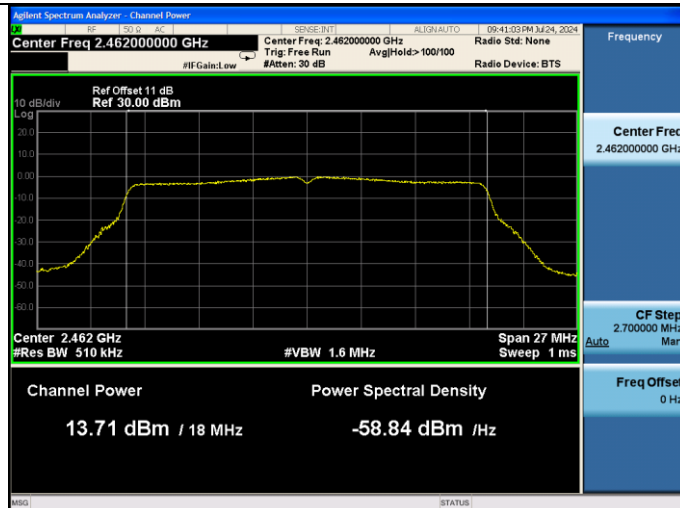
Test CH6: 2437MHz

Test CH6: 2437MHz



Test CH11: 2462MHz

Test CH11: 2462MHz

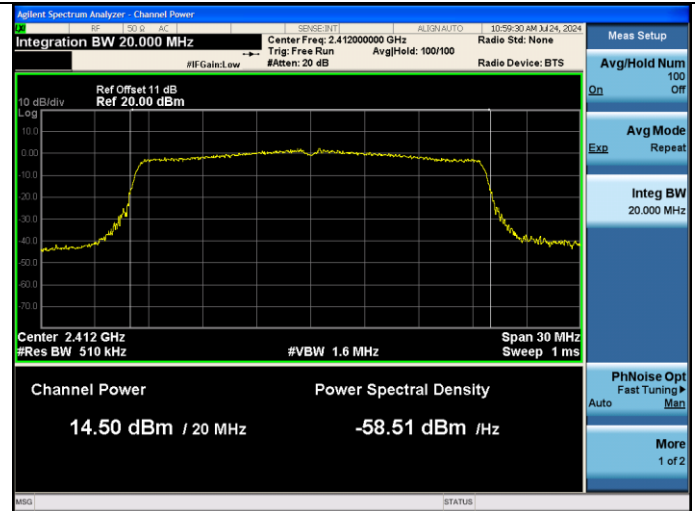


ANT1

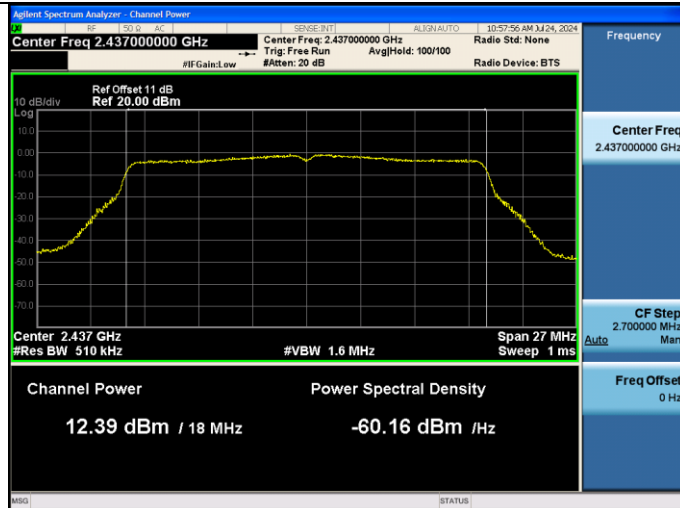
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



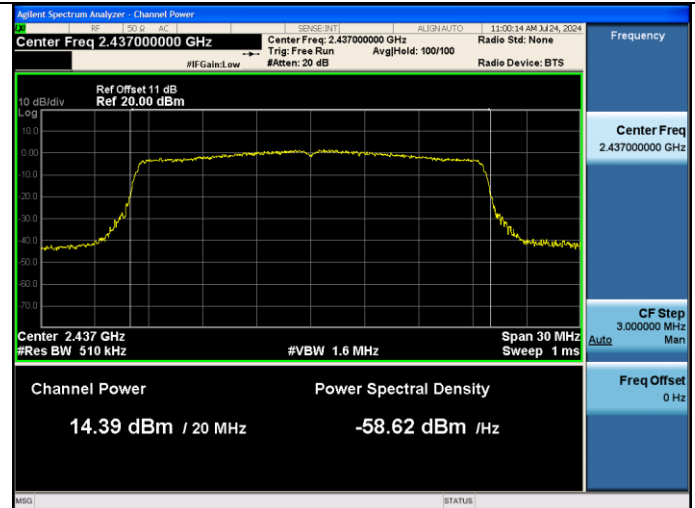
Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



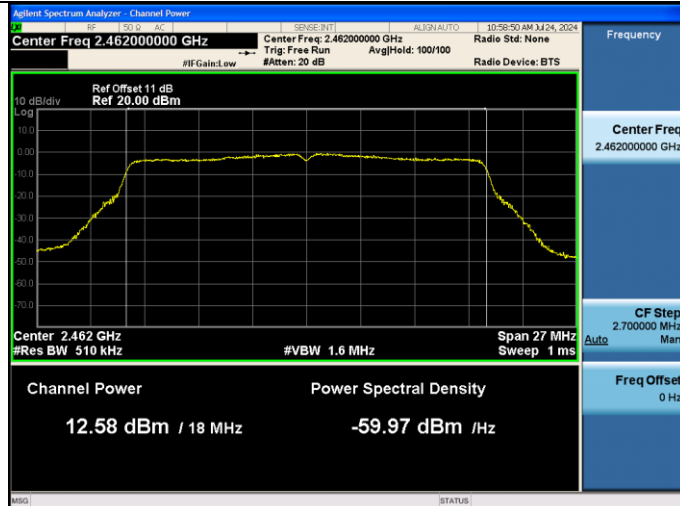
Test CH6: 2437MHz



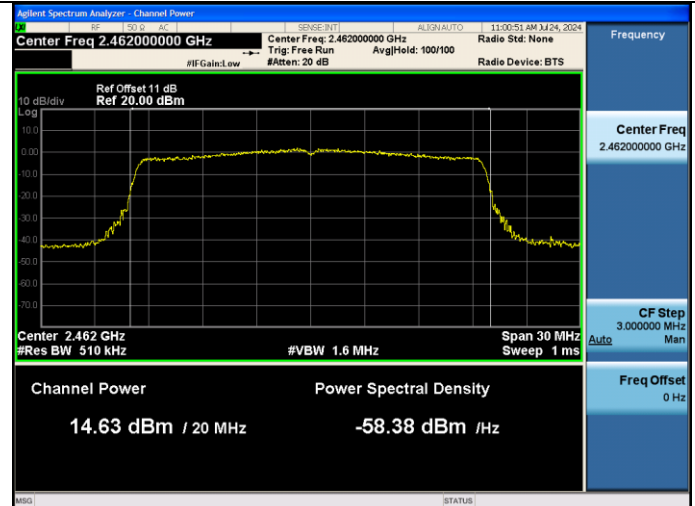
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH11: 2462MHz



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

- a) Set analyzer center frequency to DTS channel center frequency.
- b) Set the span to 1.5 DTS bandwidth.
- c) Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- d) Set the VBW $\geq [3 \times \text{RBW}]$.
- e) Detector = peak.
- f) Sweep time = auto couple.
- g) Trace mode = max hold.
- h) Allow trace to fully stabilize.
- i) Use the peak marker function to determine the maximum amplitude level within the RBW.

9.3.Test Results

EUT: STB		
M/N: H200W		
Test date: 2024-08-15~09-09	Pressure: 103.1±1.0 kpa	Humidity: 51.5±3.0%
Tested by: Epoch	Test site: RF site	Temperature: 22.5±0.6℃

SISO:

Test Mode	Frequency (MHz)	Power Spectral Density (dBm/3KHz)	Limit (dBm/3KHz)
11b ANT0	2412	1.028	8
	2437	1.928	
	2462	0.234	
11b ANT1	2412	-1.510	8
	2437	-1.244	
	2462	-0.968	
11g ANT0	2412	-8.002	8
	2437	-7.873	
	2462	-8.235	
11g ANT1	2412	-9.423	8
	2437	-9.482	
	2462	-9.547	
Conclusion : PASS			

Note: 1. Directional Gain= $10 \log[(10^{3/10} + 10^{3.3/10})/2]$ dBi = 3.15dBi < 6dBi.

2. The transmit signals are uncorrelated.

MIMO:

Test Mode	Frequency (MHz)	Power Spectral Density (dBm/3KHz)			Limit (dBm/3KHz)
		ANT0	ANT1	Total	
11n HT20	2412	-9.500	-10.892	-7.130	8
	2437	-9.118	-11.153	-7.007	
	2462	-9.545	-10.815	-7.123	
11ax HE20	2412	-6.960	-8.946	-4.830	8
	2437	-8.374	-9.279	-5.793	
	2462	-7.487	-8.567	-4.983	
Conclusion : PASS					

Note: 1. Directional Gain= $10 \log[(10^{3/10} + 10^{3.3/10})/2]$ dB = 3.15 dB < 6 dB.

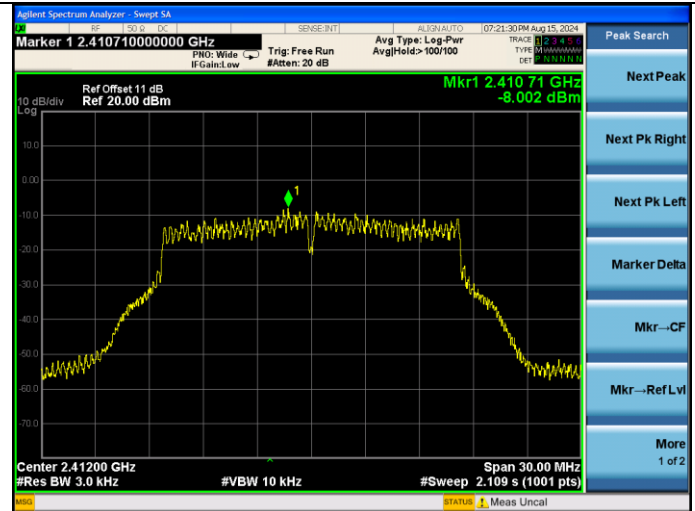
2. The transmit signals are uncorrelated.

3. $10 * \log(10^{(ant0/10)} + 10^{(ant1/10)})$

ANT0

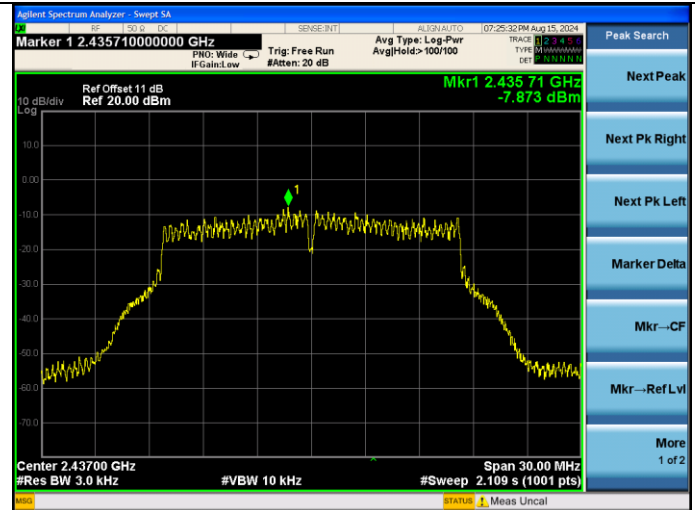
Test Mode: IEEE 802.11b
Test CH1: 2412MHz

Test Mode: IEEE 802.11g
Test CH1: 2412MHz



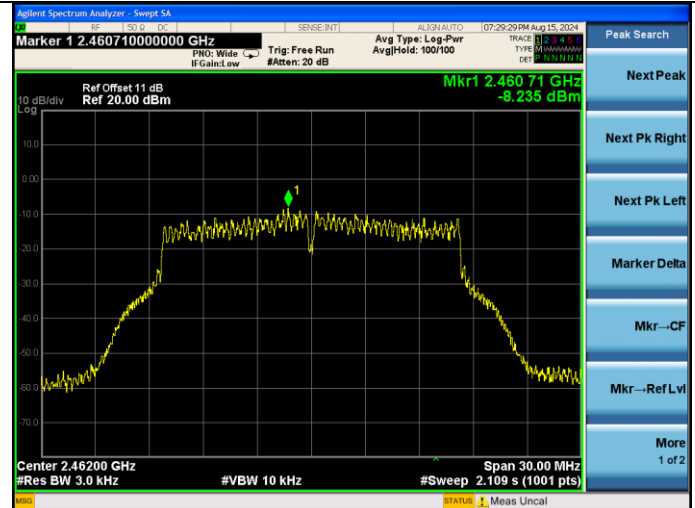
Test CH6: 2437MHz

Test CH6: 2437MHz



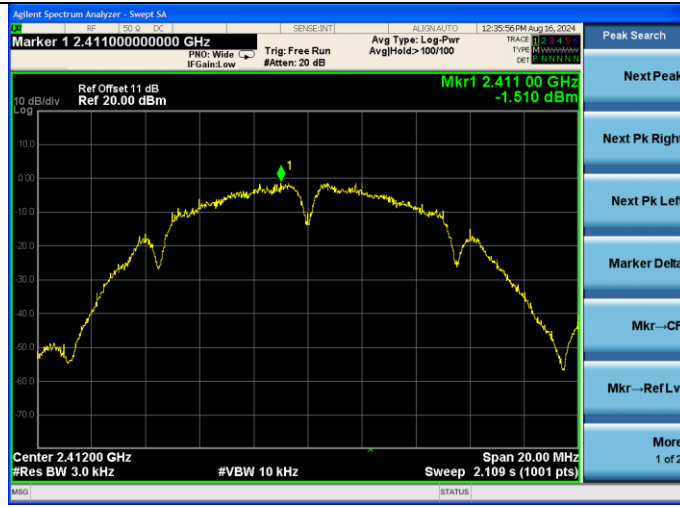
Test CH11: 2462MHz

Test CH11: 2462MHz

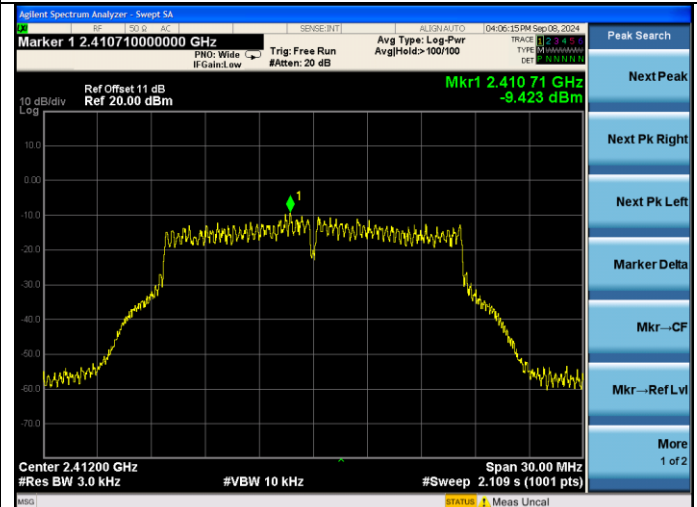


ANT1

Test Mode: IEEE 802.11b
Test CH1: 2412MHz



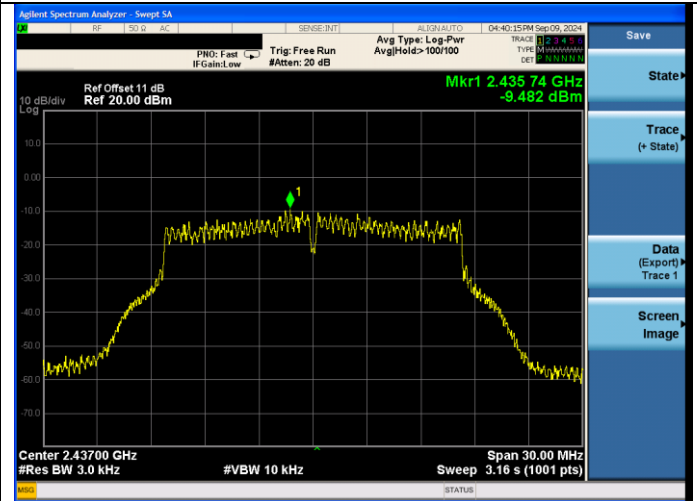
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



Test CH6: 2437MHz



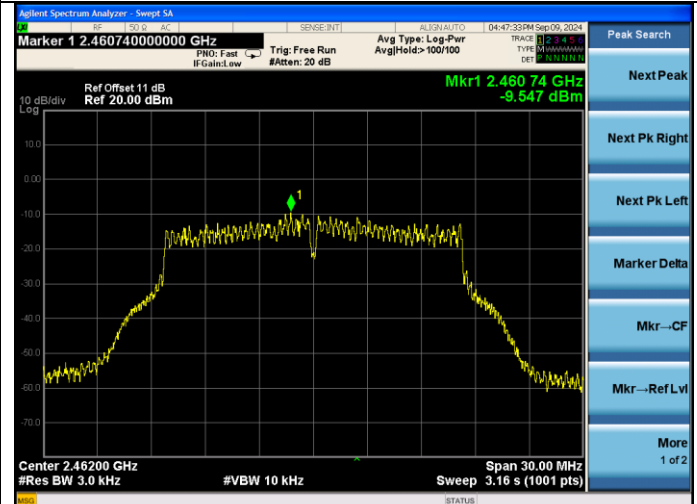
Test CH6: 2437MHz



Test CH11: 2462MHz



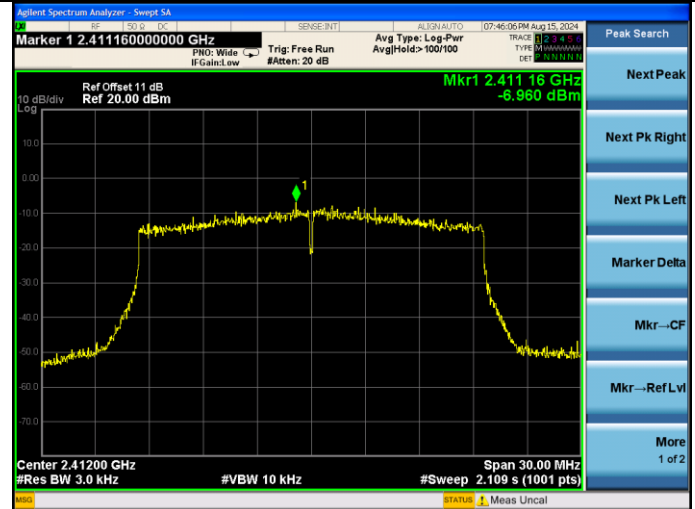
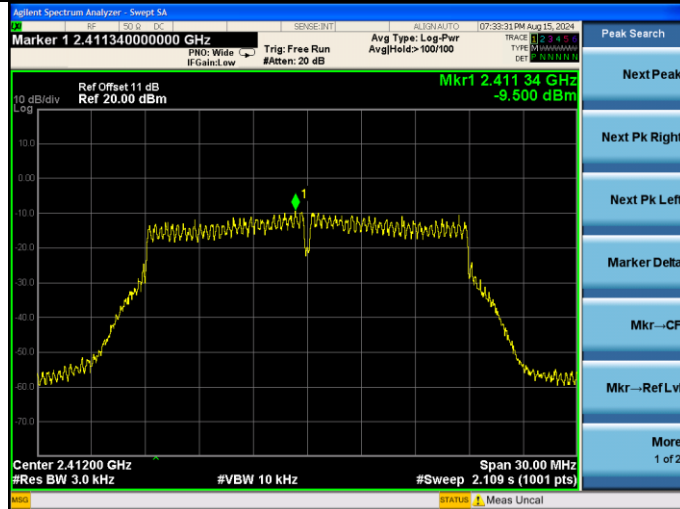
Test CH11: 2462MHz



ANT0

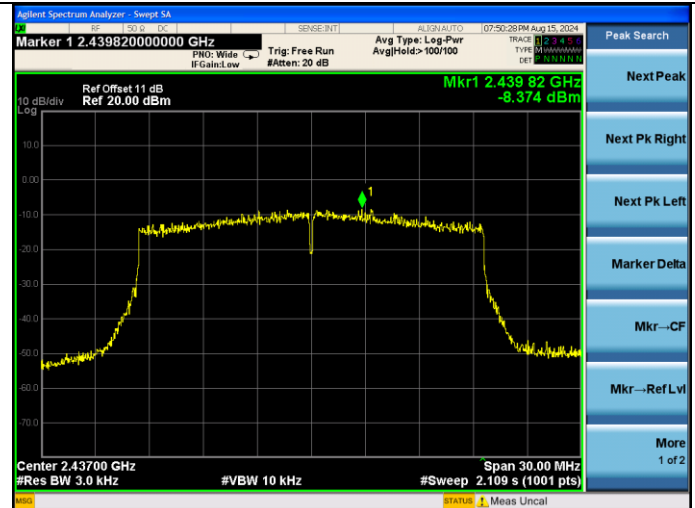
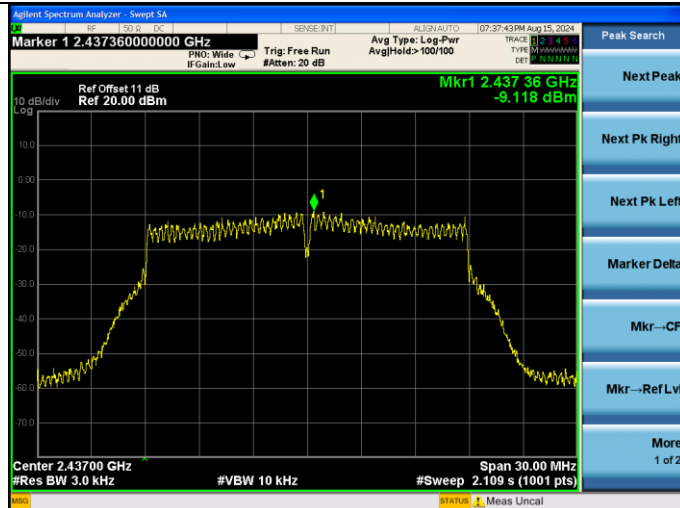
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



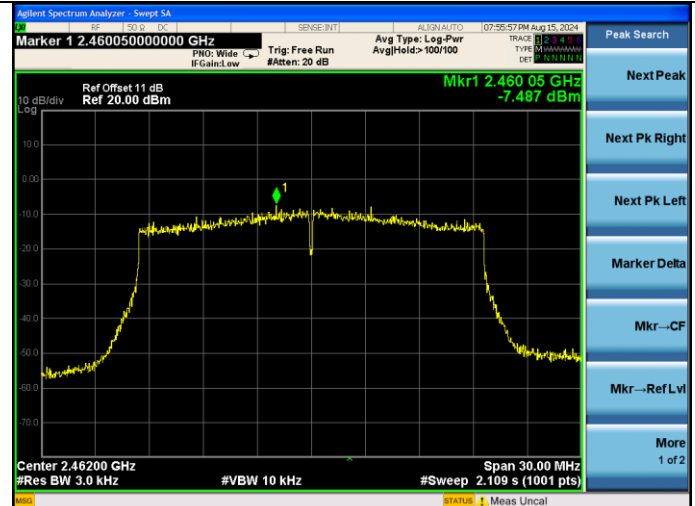
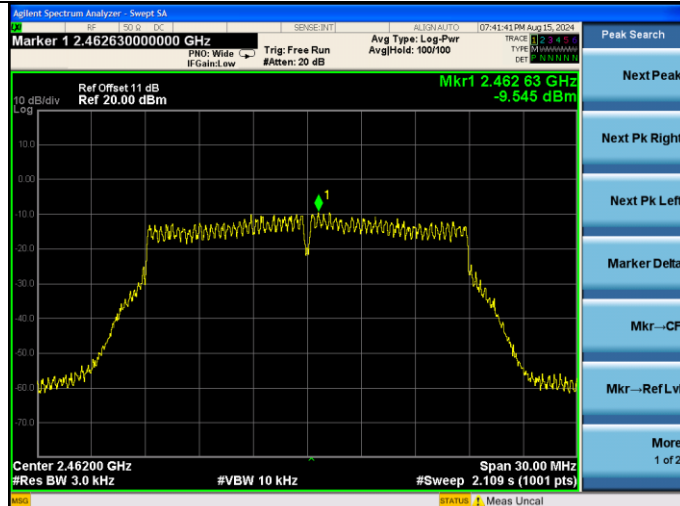
Test CH6: 2437MHz

Test CH6: 2437MHz



Test CH11: 2462MHz

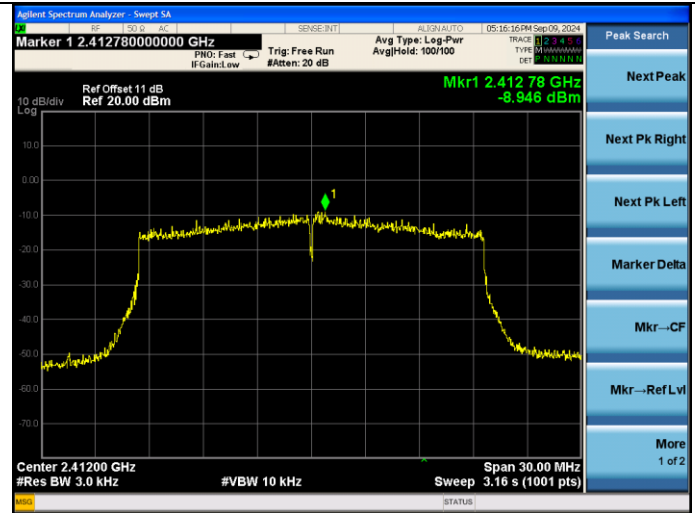
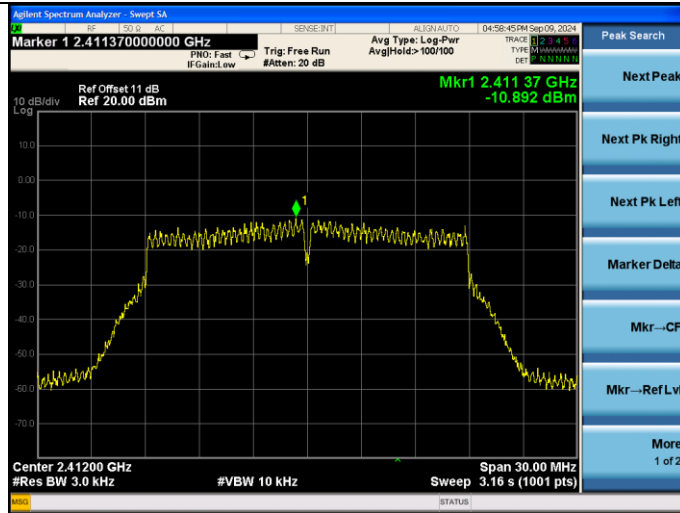
Test CH11: 2462MHz



ANT1

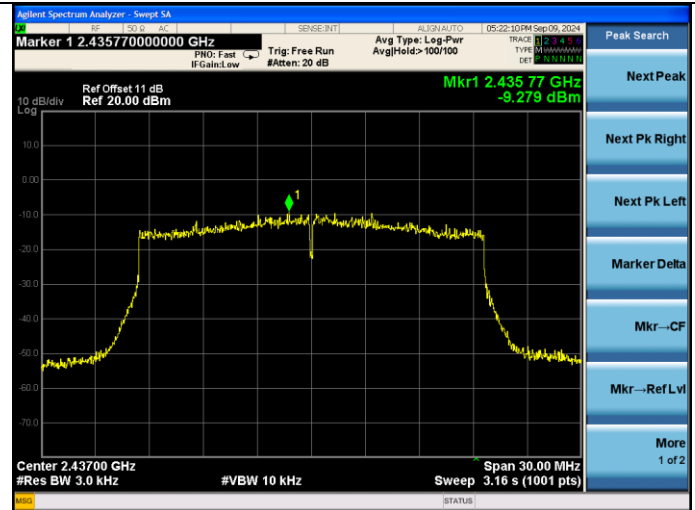
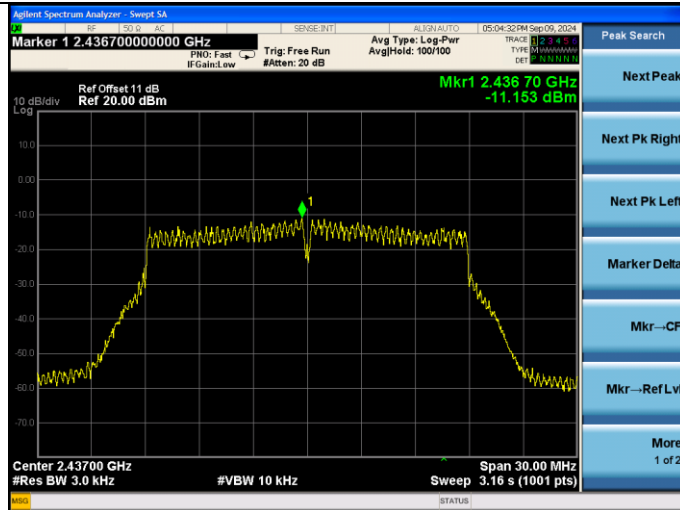
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



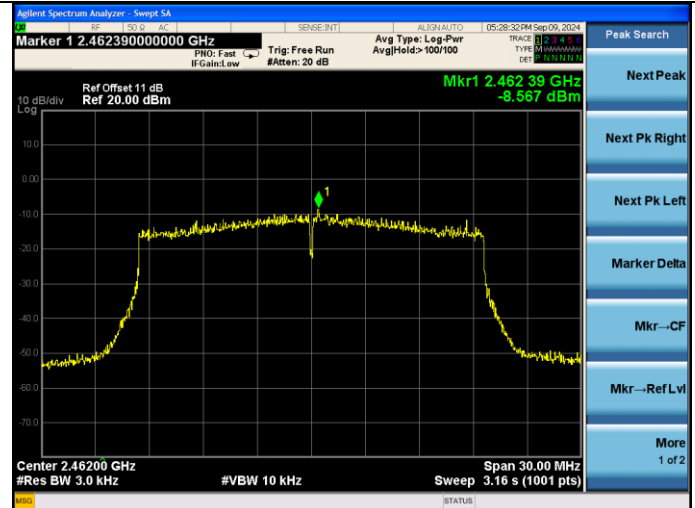
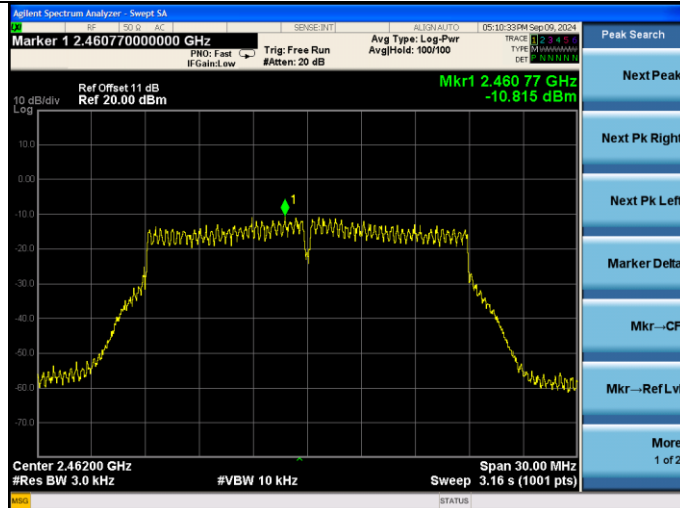
Test CH6: 2437MHz

Test CH6: 2437MHz



Test CH11: 2462MHz

Test CH11: 2462MHz



10. ANTENNA REQUIREMENT

10.1. 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. 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. Antenna Connected Construction

The antennas used for this product are PCB antenna 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 DTS Band: ant0: 3dBi ; ant1: 3.3dBi.

11. DEVIATION TO TEST SPECIFICATIONS

[NONE]

..... THE END