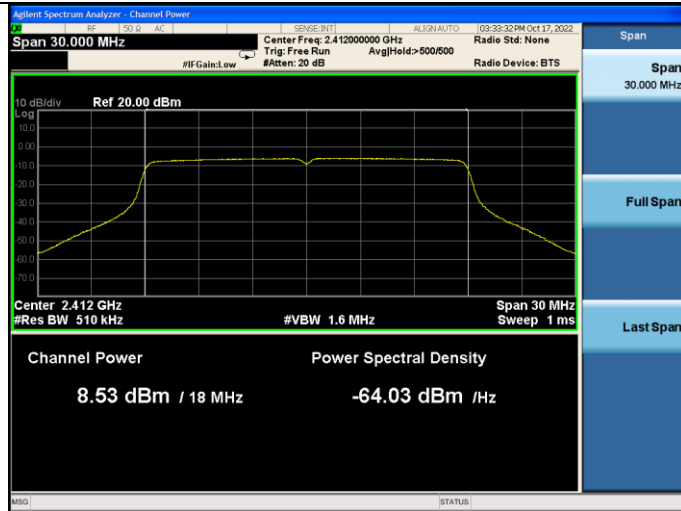


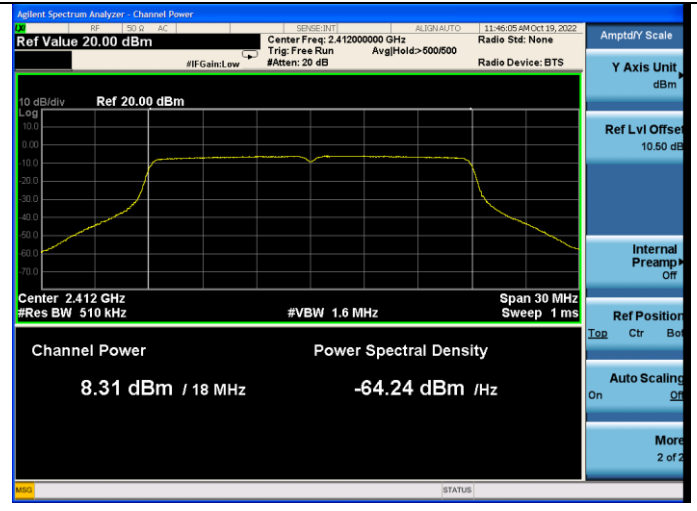
ANT1:

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

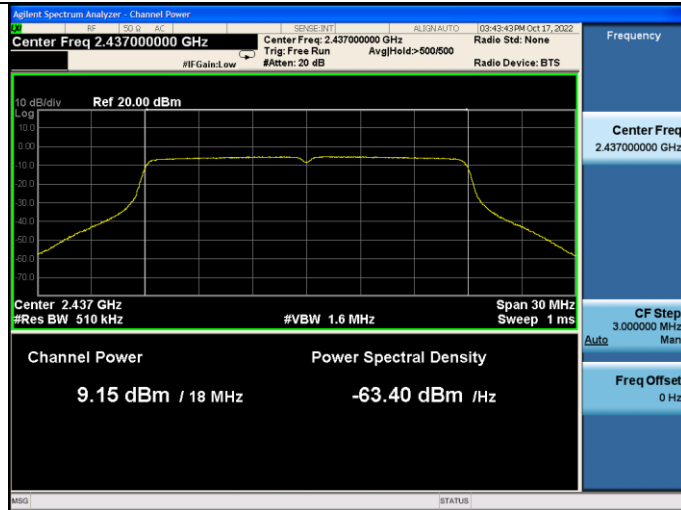


ANT2:

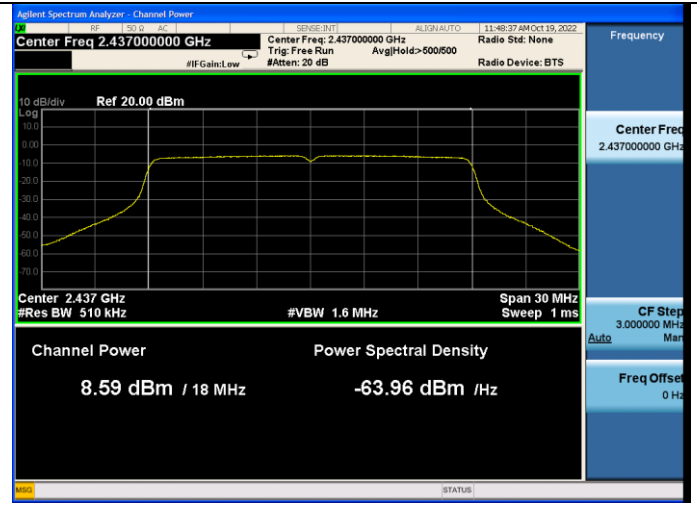
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



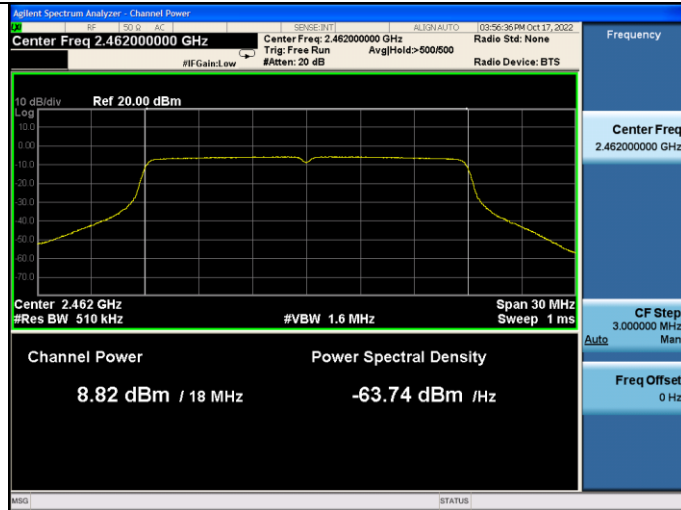
Test CH6: 2437MHz



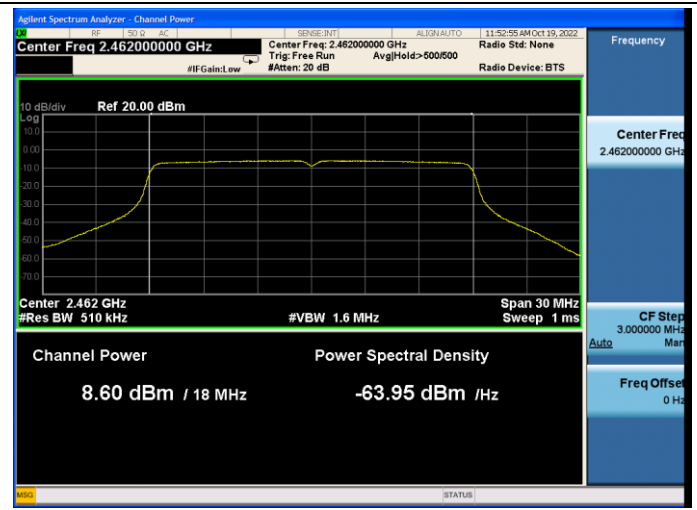
Test CH6: 2437MHz



Test CH11: 2462MHz

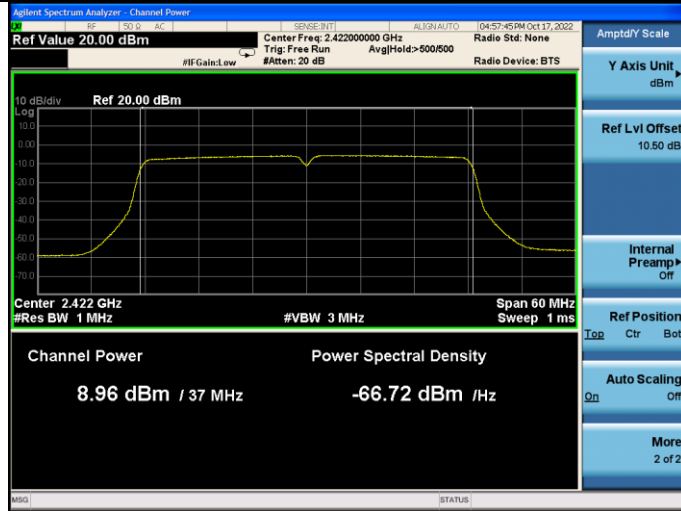


Test CH11: 2462MHz



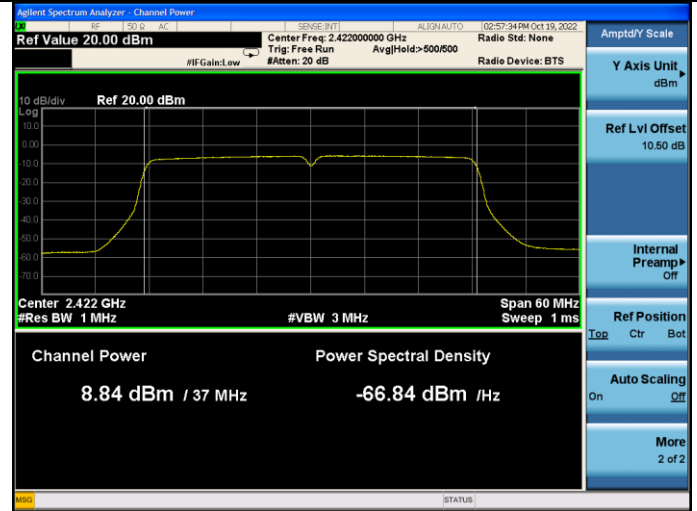
ANT1:

Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz

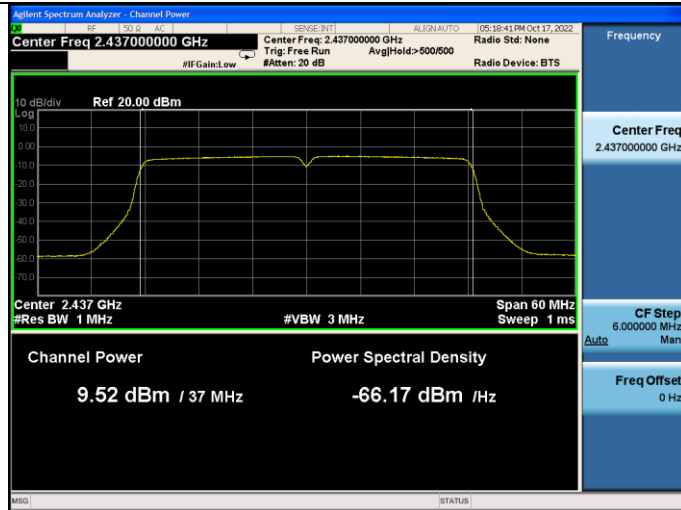


ANT2:

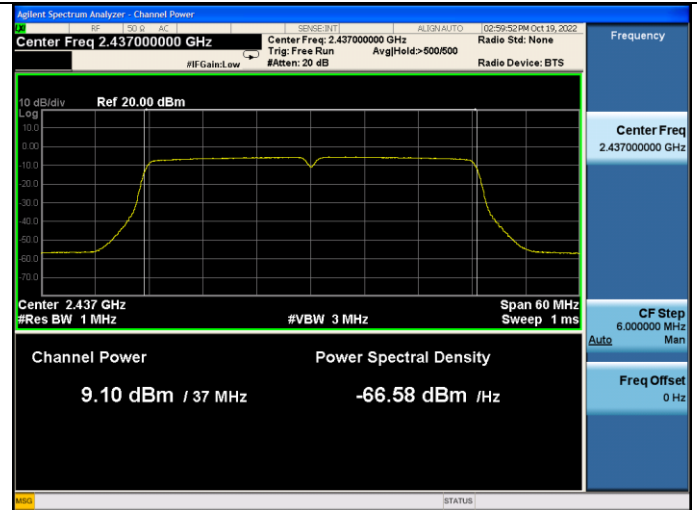
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



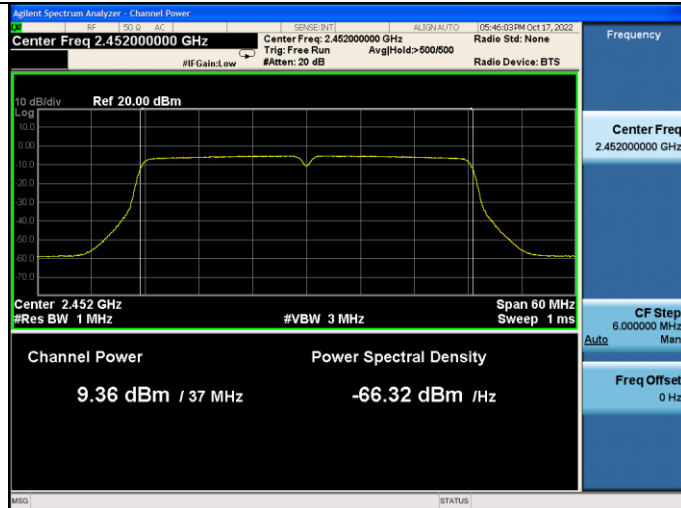
Test CH6: 2437MHz



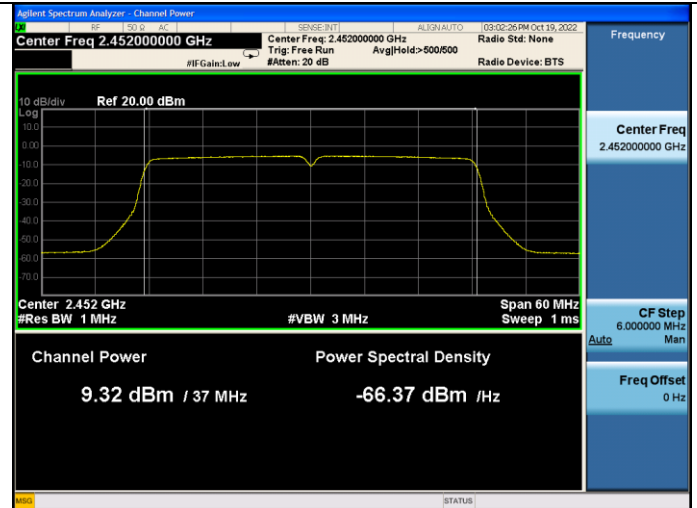
Test CH6: 2437MHz



Test CH9: 2452MHz

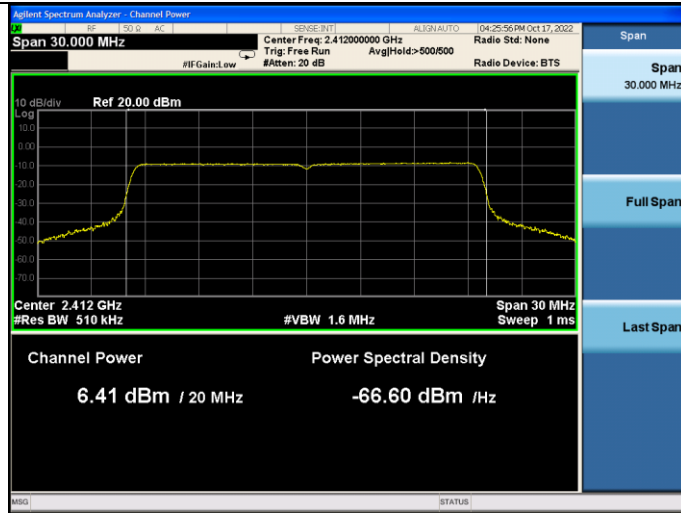


Test CH9: 2452MHz



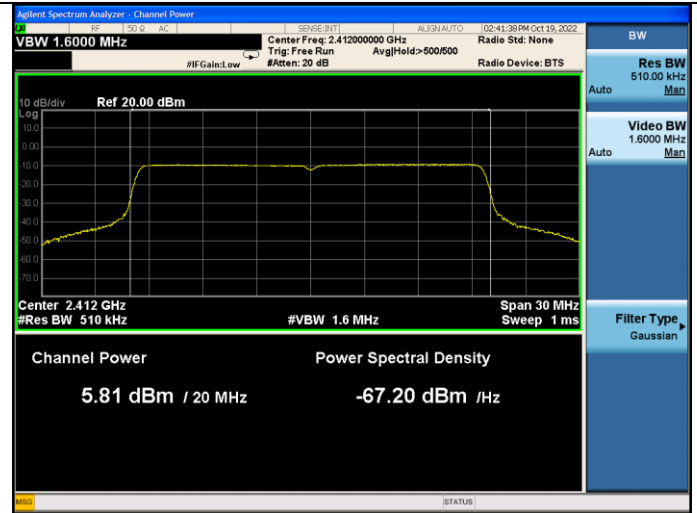
ANT1:

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

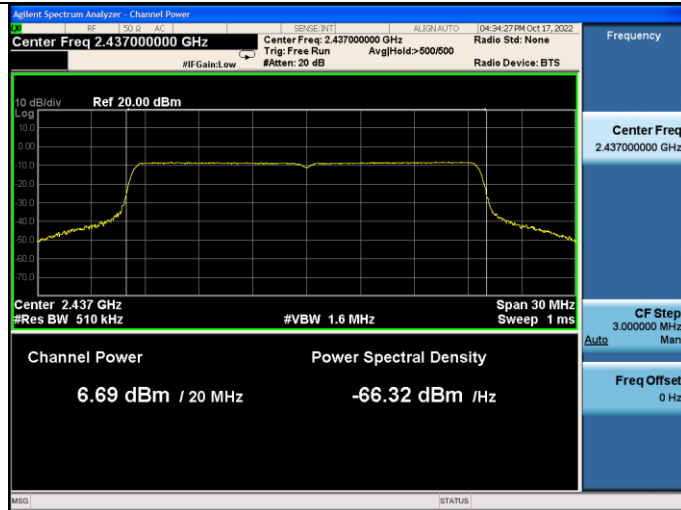


ANT2:

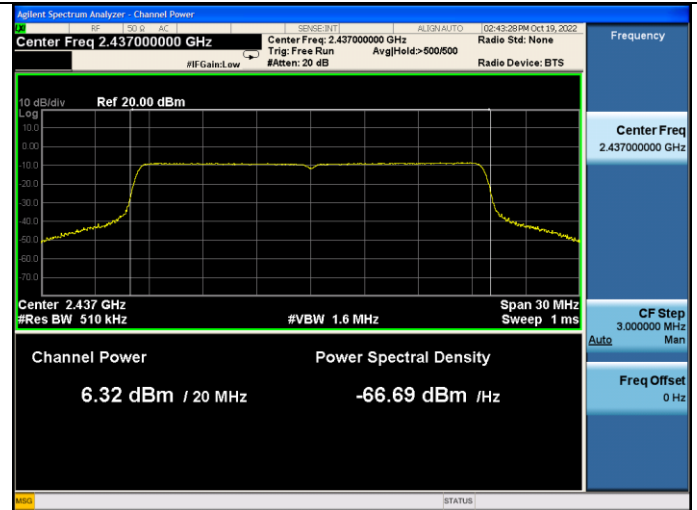
Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



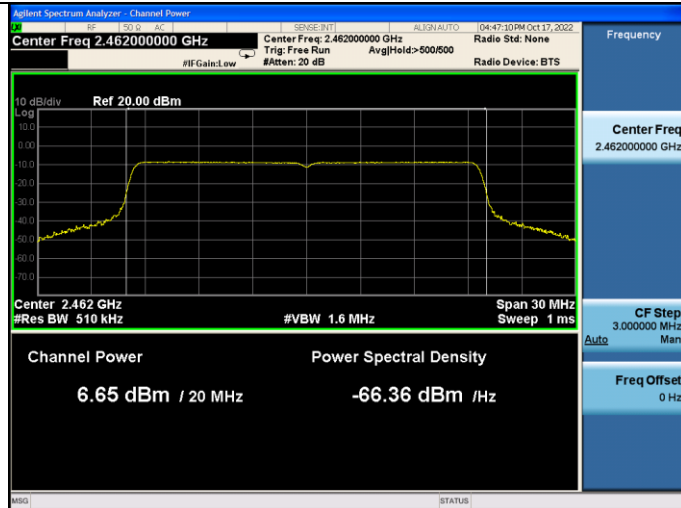
Test CH6: 2437MHz



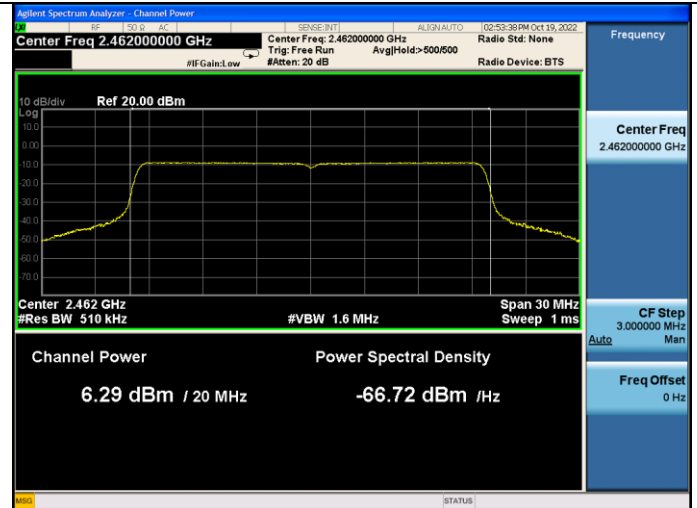
Test CH6: 2437MHz



Test CH11: 2462MHz

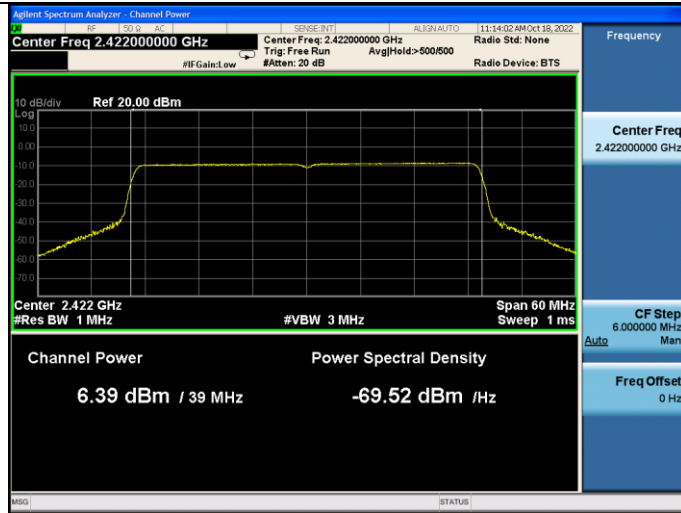


Test CH11: 2462MHz



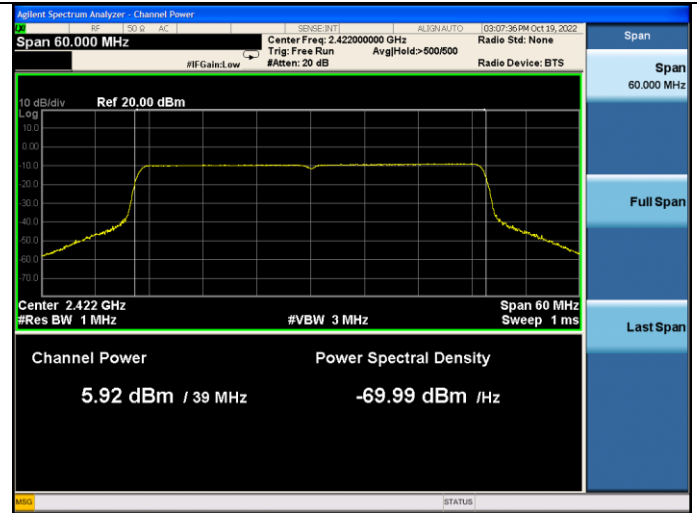
ANT1:

Test Mode: IEEE 802.11ax HE40
Test CH3: 2422MHz

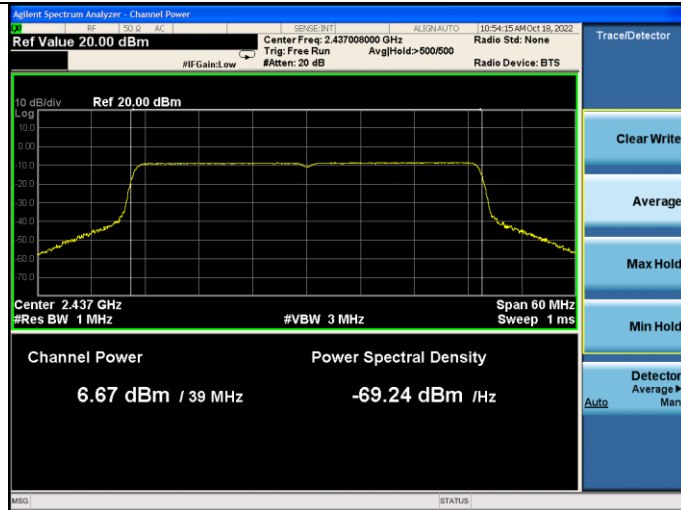


ANT2:

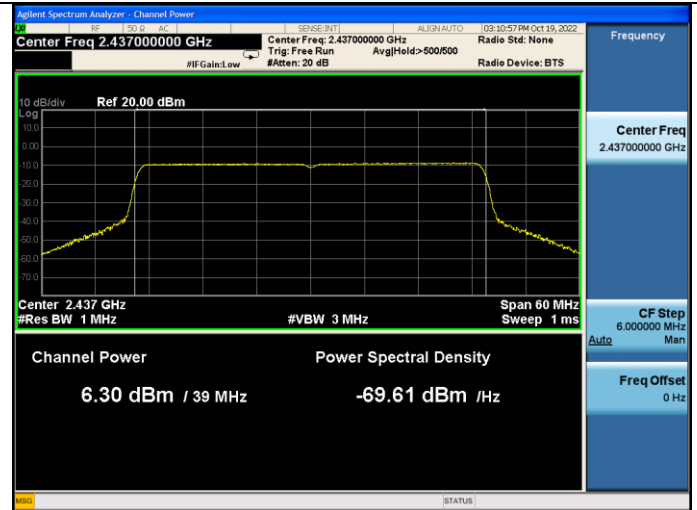
Test Mode: IEEE 802.11ax HE40
Test CH3: 2422MHz



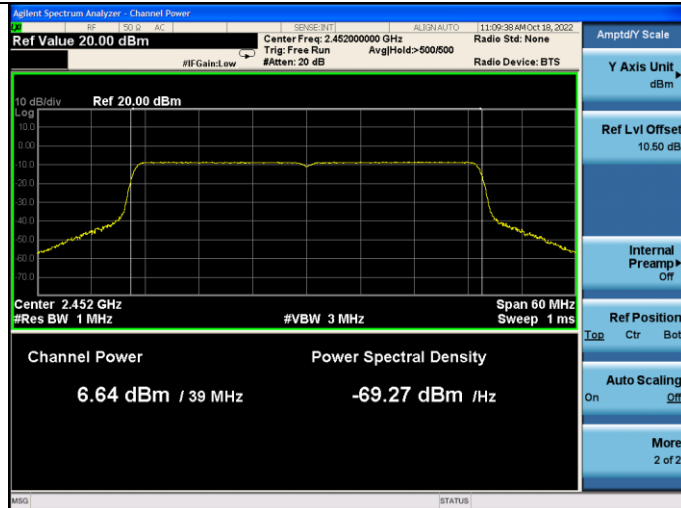
Test CH6: 2437MHz



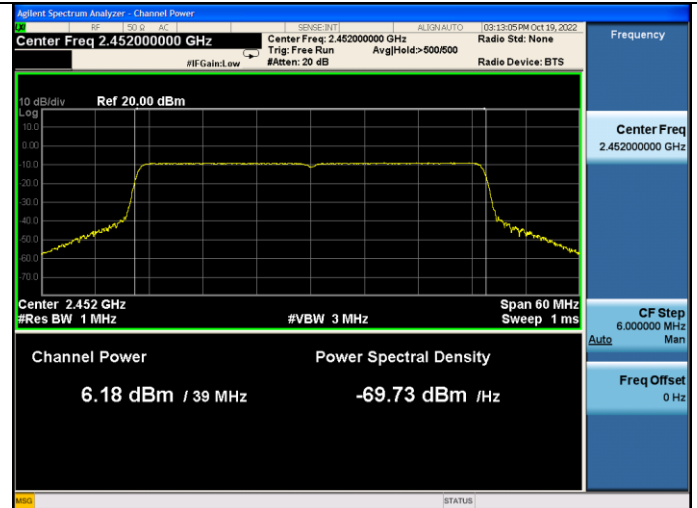
Test CH6: 2437MHz



Test CH9: 2452MHz



Test CH9: 2452MHz

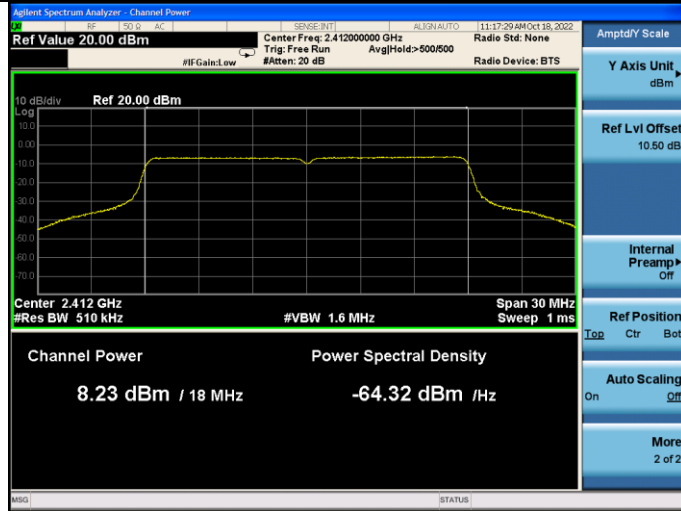


MIMO

ANT1:

Test Mode: IEEE 802.11n HT20

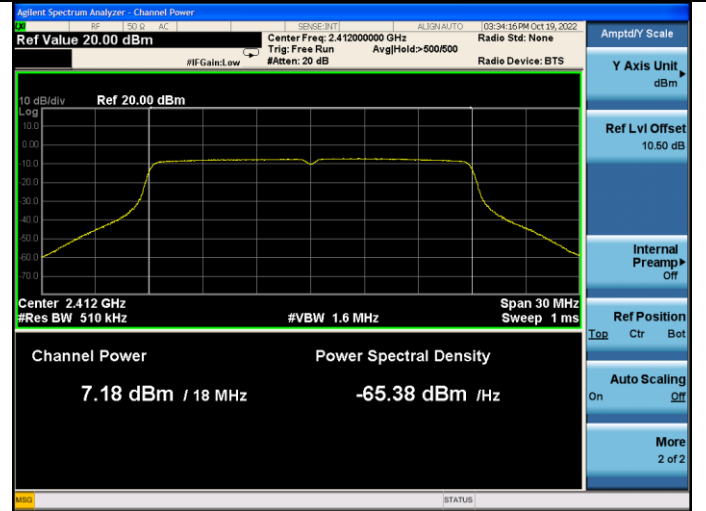
Test CH1: 2412MHz



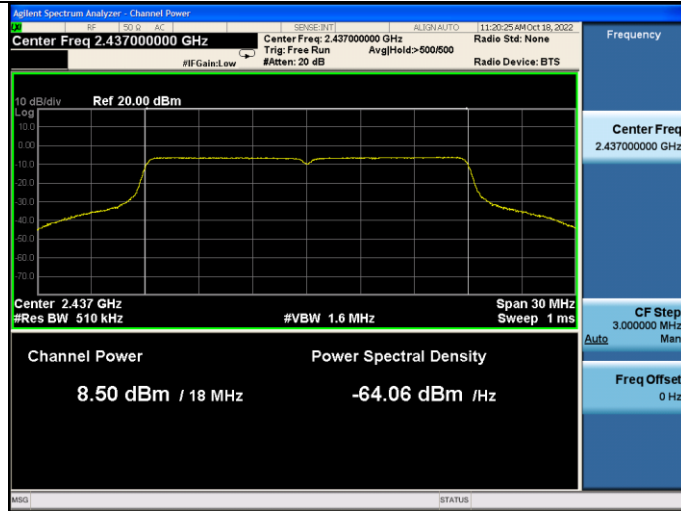
ANT2:

Test Mode: IEEE 802.11n HT20

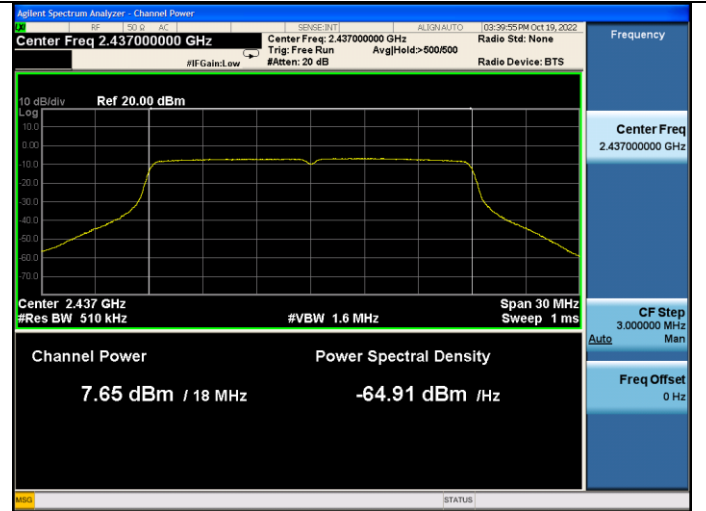
Test CH1: 2412MHz



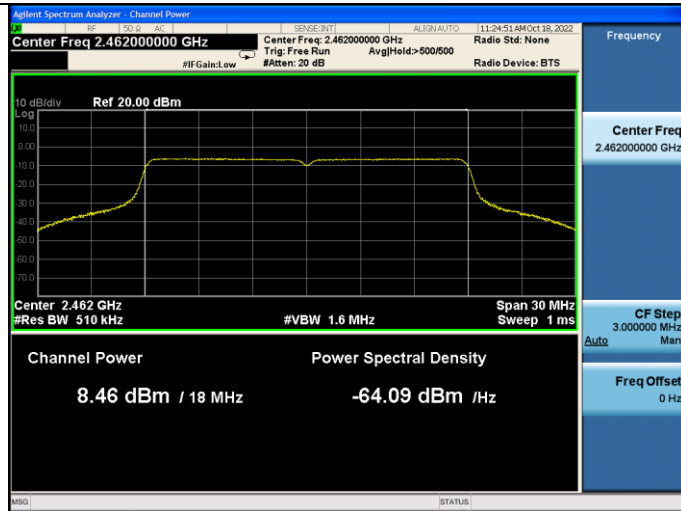
Test CH6: 2437MHz



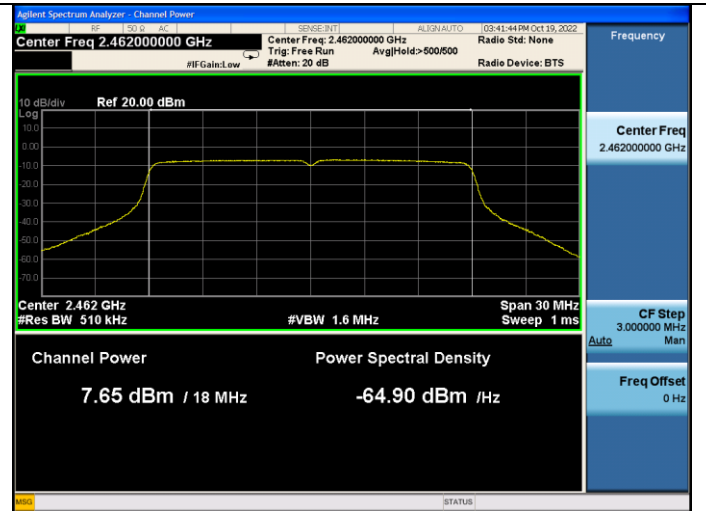
Test CH6: 2437MHz



Test CH11: 2462MHz

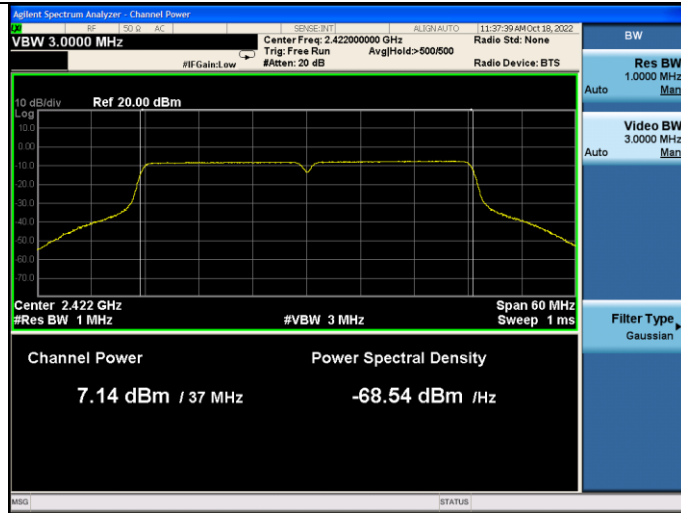


Test CH11: 2462MHz



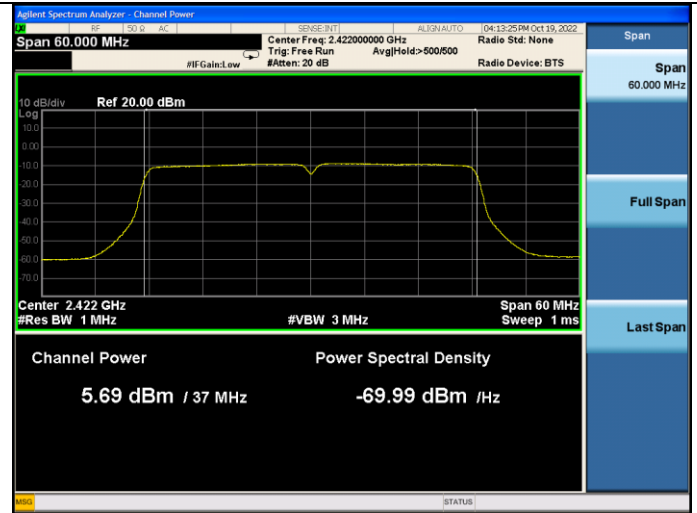
ANT1:

Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz

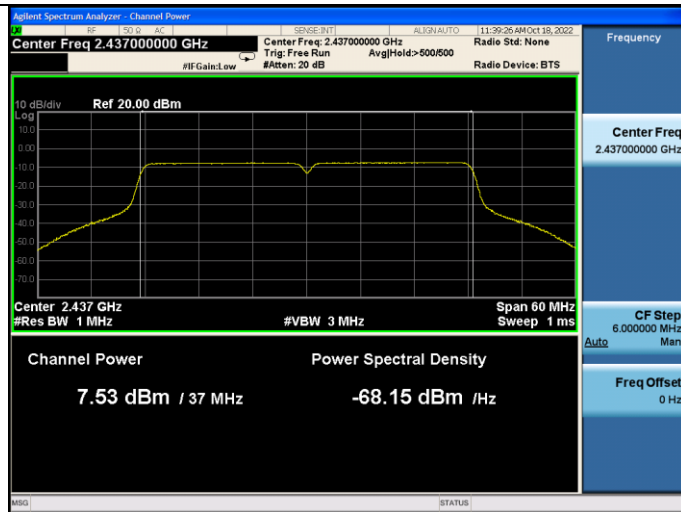


ANT2:

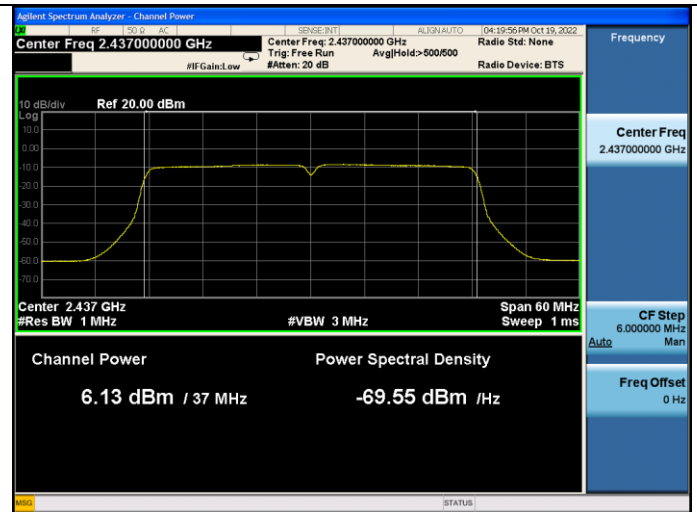
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



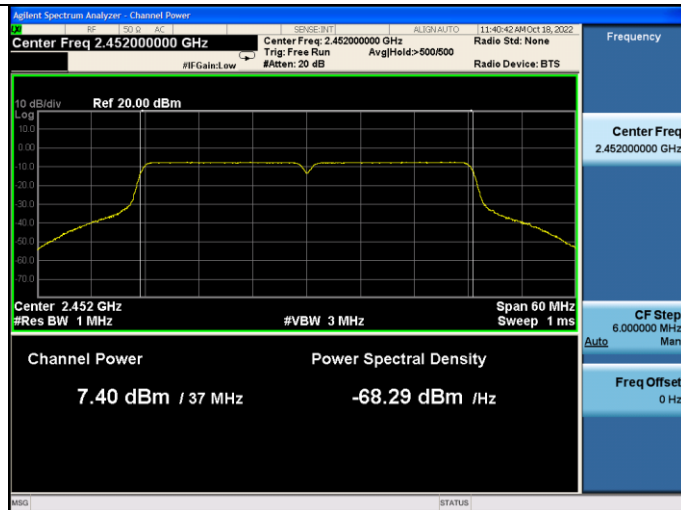
Test CH6: 2437MHz



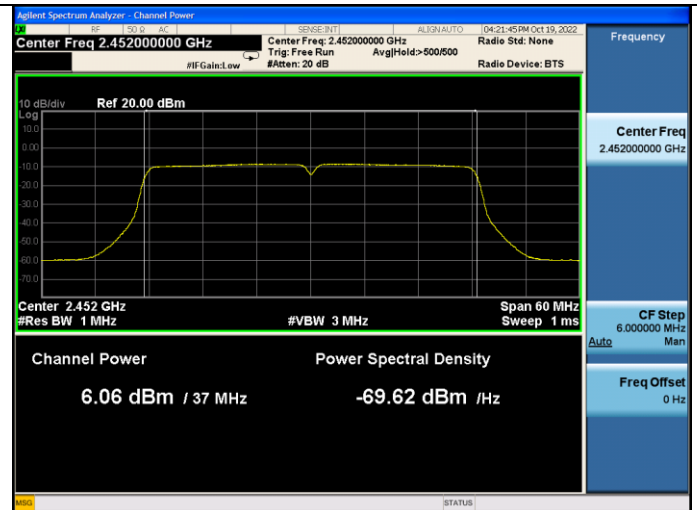
Test CH6: 2437MHz



Test CH9: 2452MHz

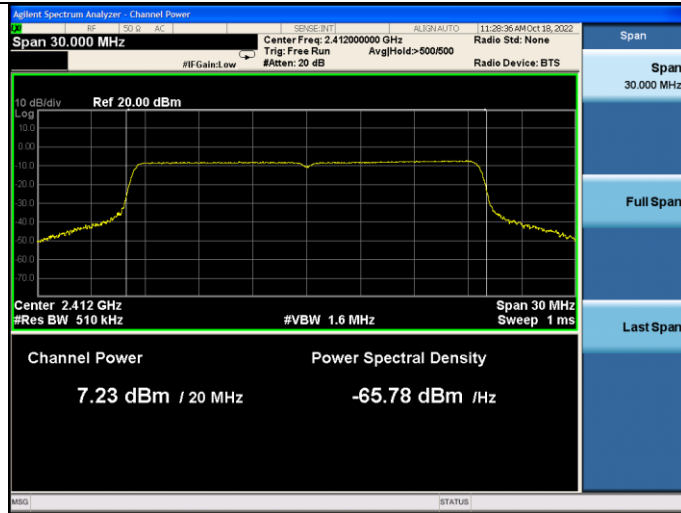


Test CH9: 2452MHz



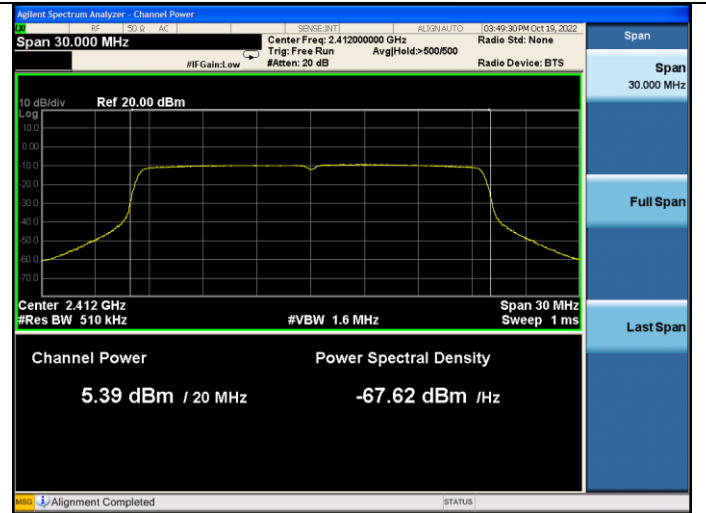
ANT1:

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

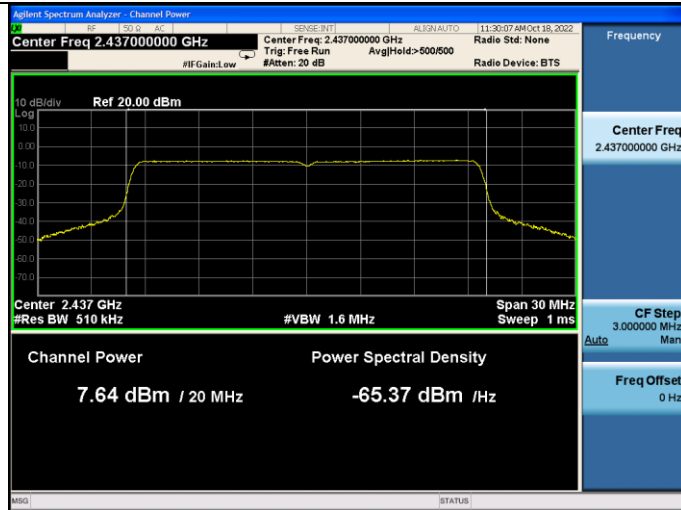


ANT2:

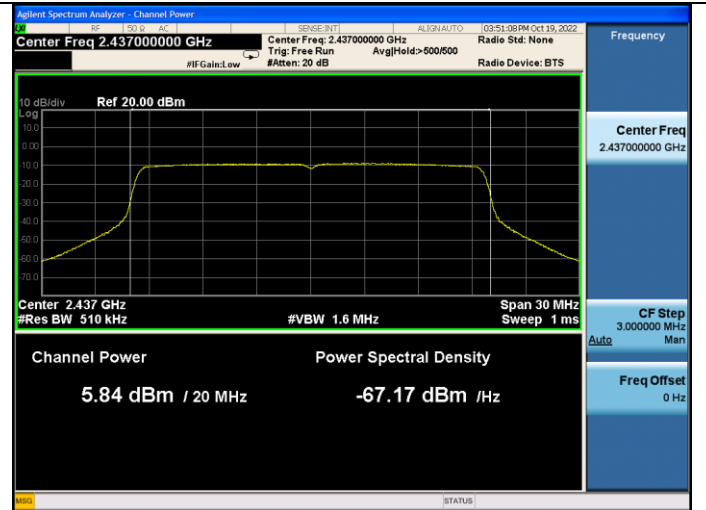
Test Mode: IEEE 802.11ax HE20
Test CH1: 2412MHz



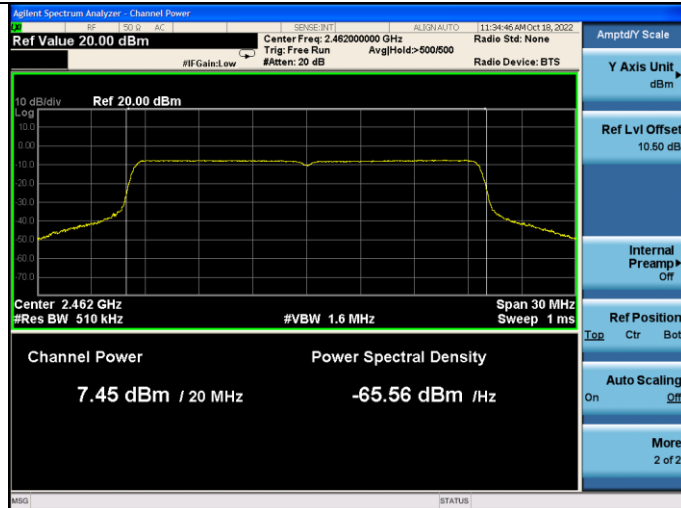
Test CH6: 2437MHz



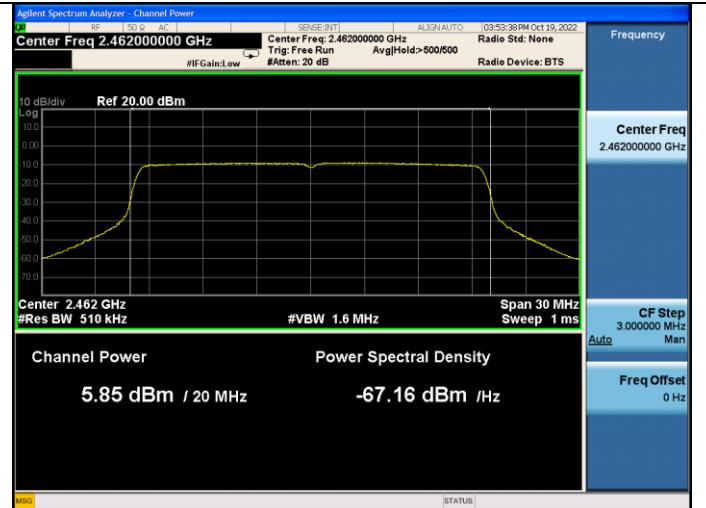
Test CH6: 2437MHz



Test CH11: 2462MHz

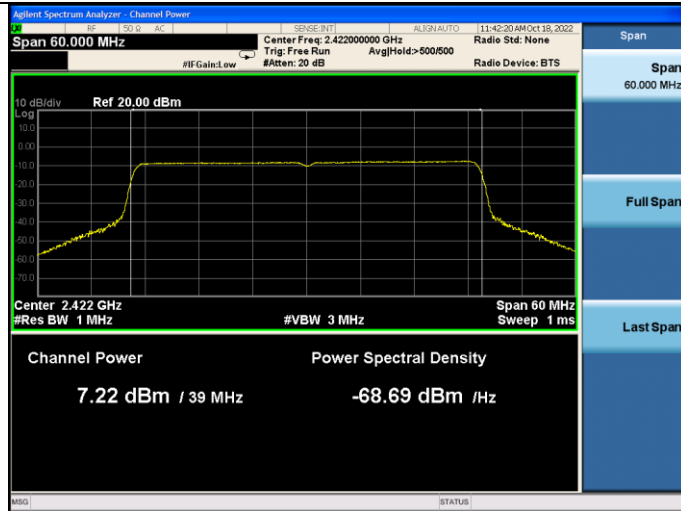


Test CH11: 2462MHz



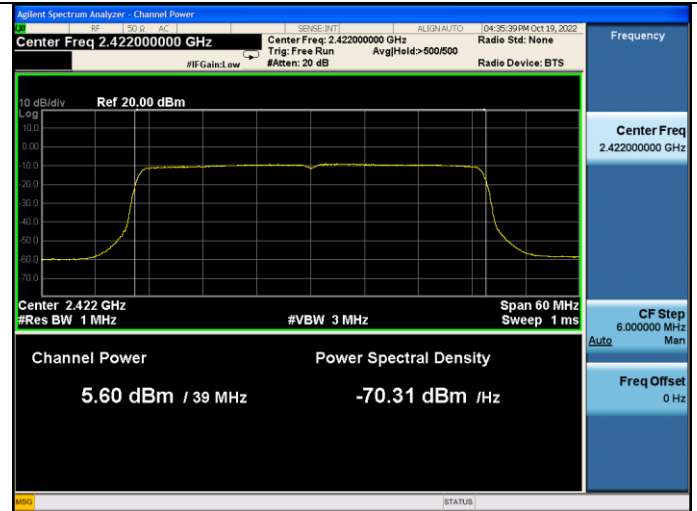
ANT1:

Test Mode: IEEE 802.11ax HE40
Test CH3: 2422MHz

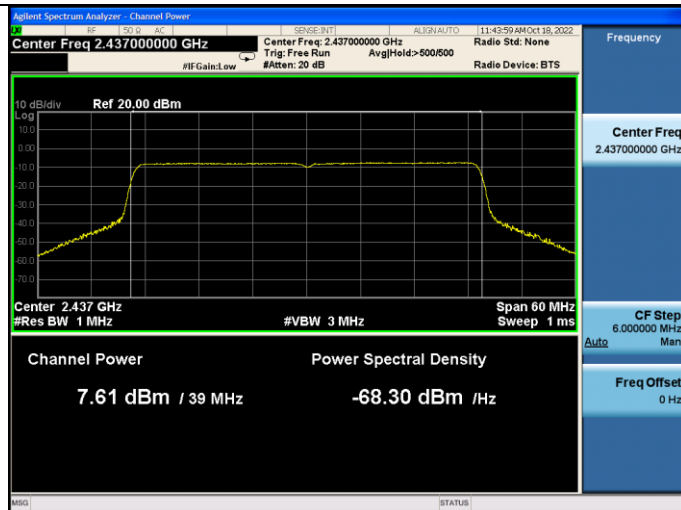


ANT2:

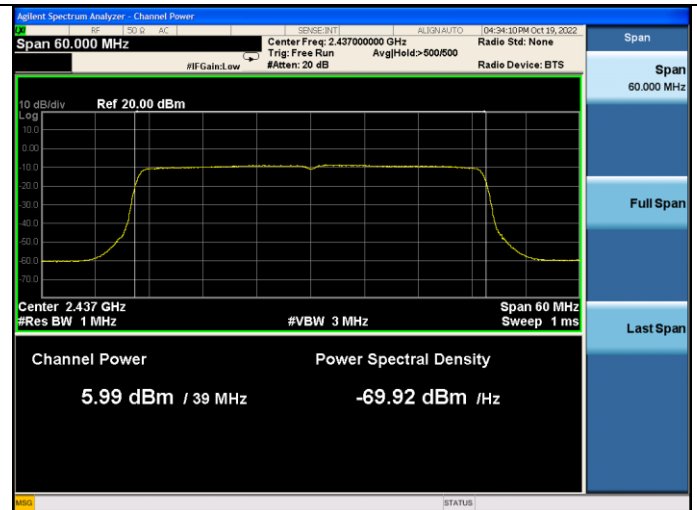
Test Mode: IEEE 802.11ax HE40
Test CH3: 2422MHz



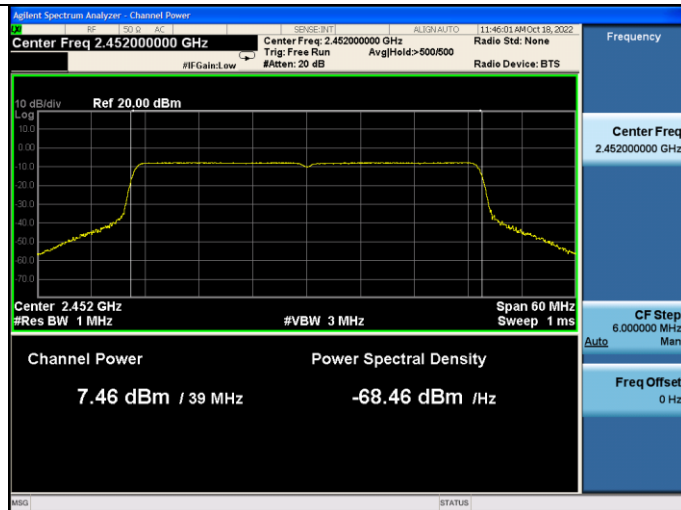
Test CH6: 2437MHz



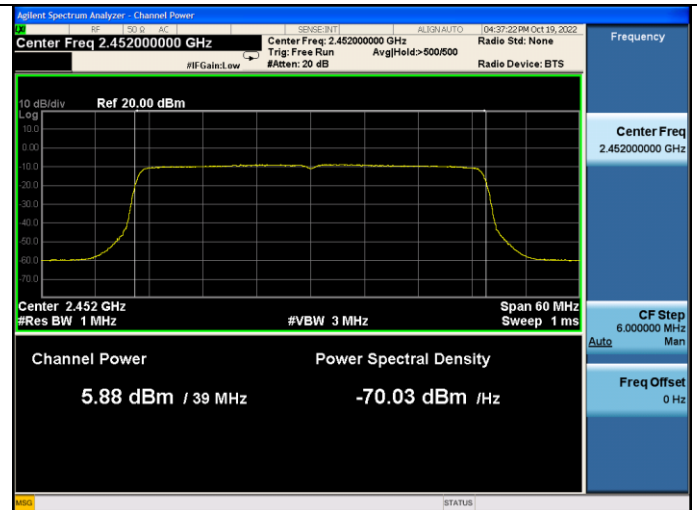
Test CH6: 2437MHz



Test CH9: 2452MHz



Test CH9: 2452MHz



9. POWER SPECTRAL DENSITY TEST

9.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.07,22	1 Year
2.	RF Cable	Mini-Circults	CBL-1M-SMSM+	No.7	Oct.10,22	1 Year

9.2. 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.

9.3. 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.

9.4.Test Results

EUT: Display Head Unit		
M/N: DHU 1.0		
Test date: 2022-10-17~31	Pressure: 102.1 ±1.0 kpa	Humidity: 53.2 ±3.0%
Tested by: Xinyao	Test site: RF site	Temperature: 22.3 ±0.6 °C

Test Mode	CH	Power Spectral Density(dBm/3KHz)			Limit (dBm/3KHz)
		ANT1	ANT2	Total	
11b	CH1	-10.187	-15.401	N/A	8
	CH6	-9.774	-14.304	N/A	
	CH11	-10.219	12.921	N/A	
11g	CH1	-17.268	-17.853	N/A	8
	CH6	-17.652	-17.165	N/A	
	CH11	-16.716	-16.336	N/A	
11n HT20	CH1	-15.165	-15.551	-12.34	8
	CH6	-14.786	-15.161	-11.96	
	CH11	-14.820	-15.201	-12.00	
11n HT40	CH3	-19.198	-19.512	-16.34	8
	CH6	-17.748	-18.587	-15.14	
	CH9	-18.378	-18.992	-15.66	
11ax HE20	CH1	-19.253	-20.611	-16.87	8
	CH6	-19.614	-20.169	-16.87	
	CH11	-19.650	-19.784	-16.71	
11ax HE40	CH3	-22.560	-22.391	-19.46	8
	CH6	-21.771	-22.832	-19.26	
	CH9	-22.382	-22.984	-19.66	

Conclusion:Pass

Note: 1. For 11n HT20/11n HT40 Mode

$$\text{Directional Gain} = 10 \log[(10^{2.4/10}) + (10^{1.4/10})/2] \text{dBi} = 1.9 \text{dBi} < 6 \text{dBi}$$

2. The transmit signals are uncorrelated.

ANT1:

Test Mode: IEEE 802.11b
Test CH1: 2412MHz



ANT2:

Test Mode: IEEE 802.11b
Test CH1: 2412MHz



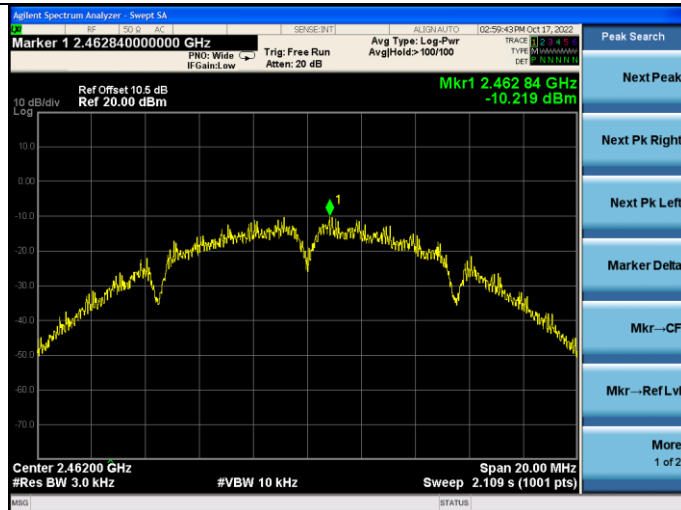
Test CH6: 2437MHz



Test CH6: 2437MHz



Test CH11: 2462MHz

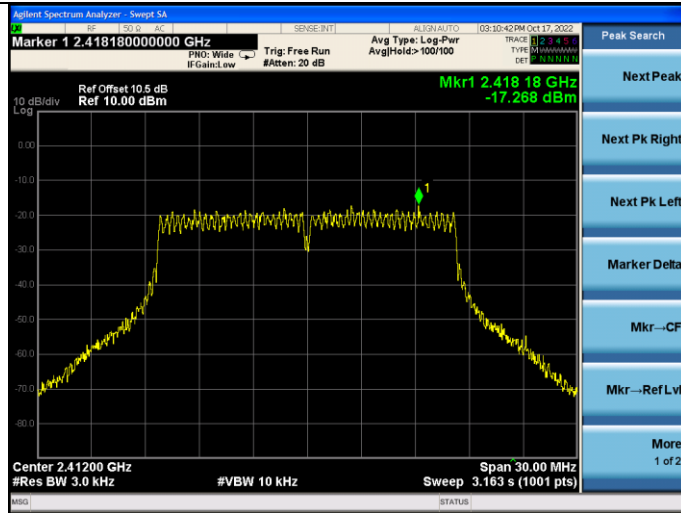


Test CH11: 2462MHz



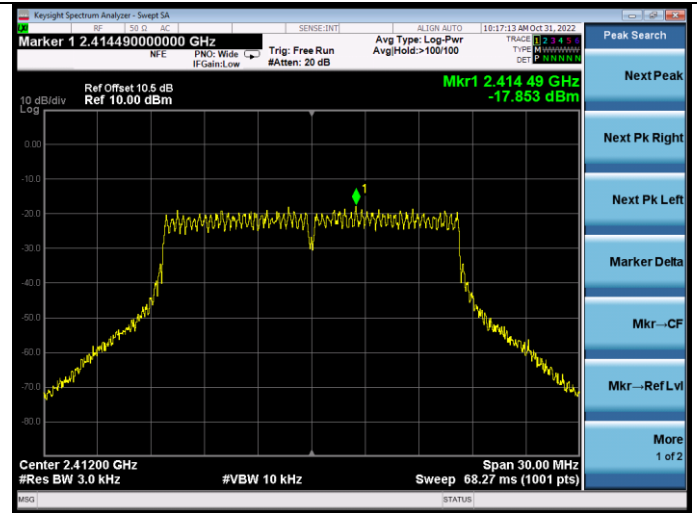
ANT1:

Test Mode: IEEE 802.11g
Test CH1: 2412MHz

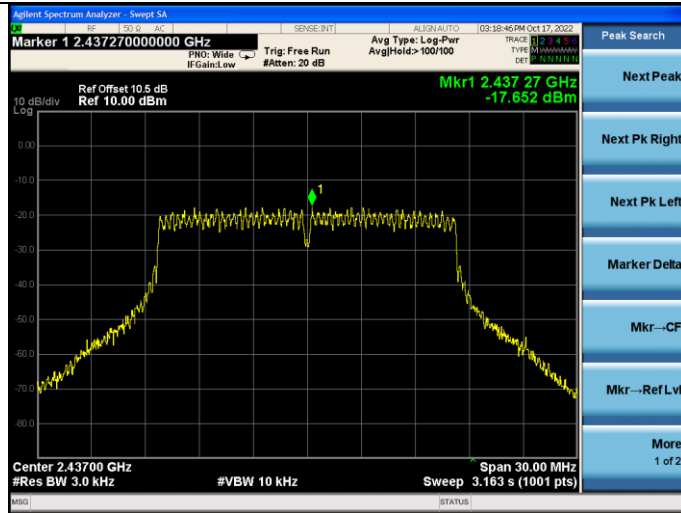


ANT2:

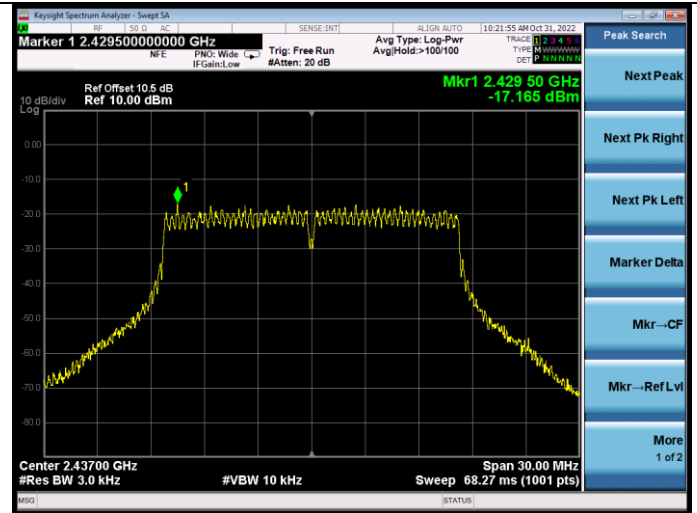
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



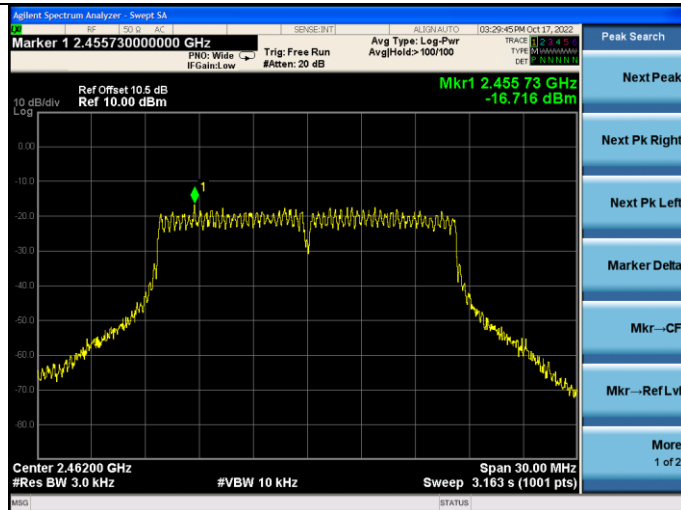
Test CH6: 2437MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH11: 2462MHz

