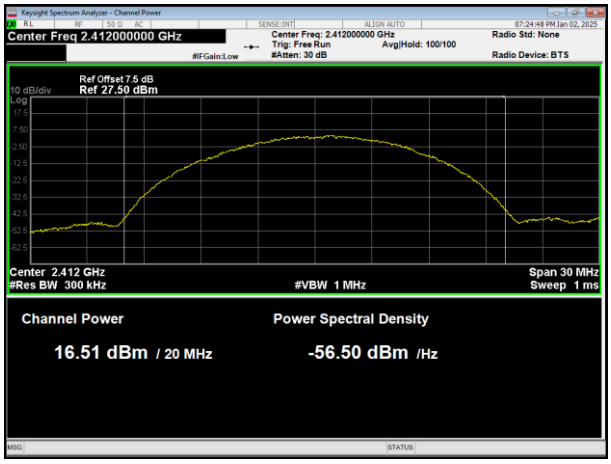
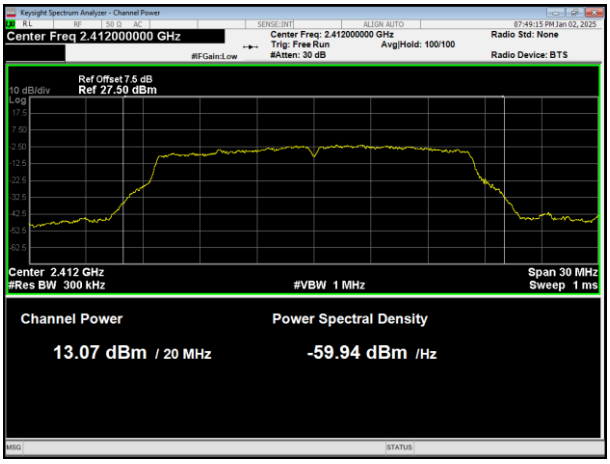
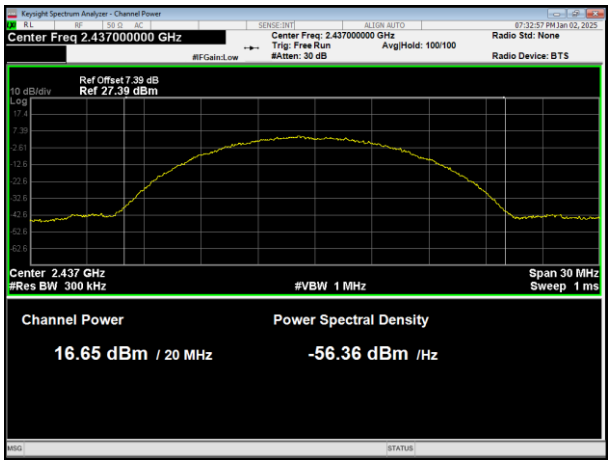
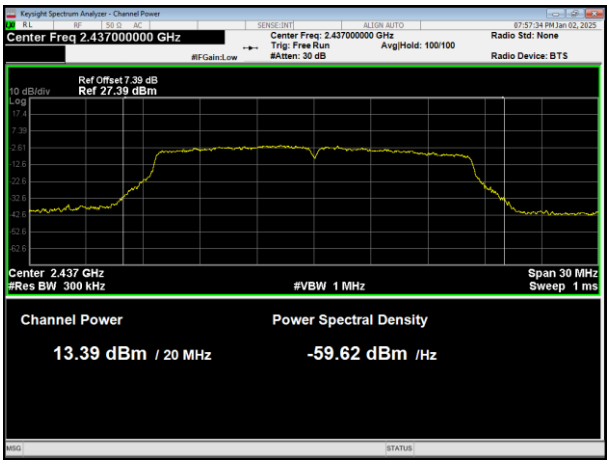
Antenna1:

802.11b	802.11g
	
2412MHz	2412MHz
	
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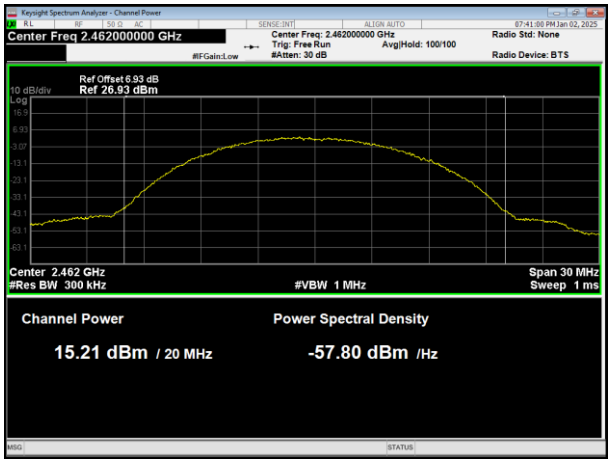
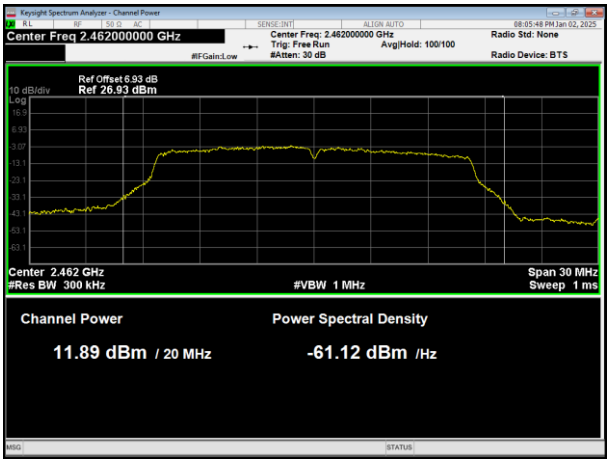
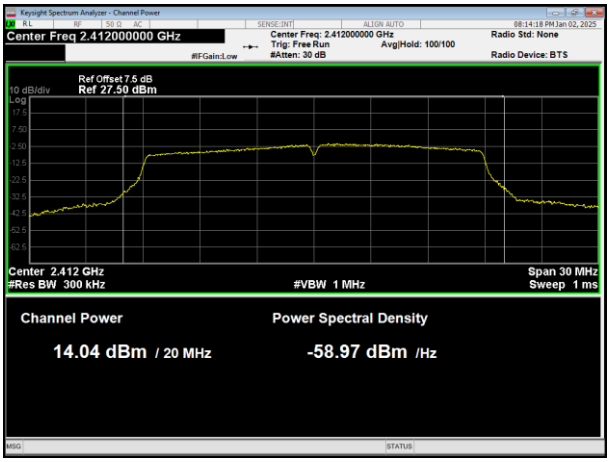
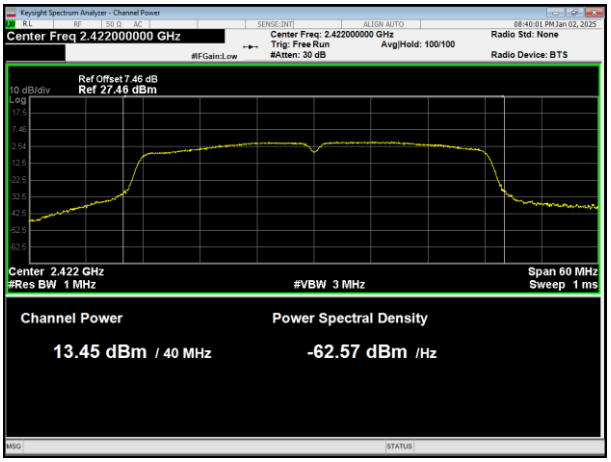
	
2462MHz	2462MHz

802.11n HT20	802.11n HT40
	
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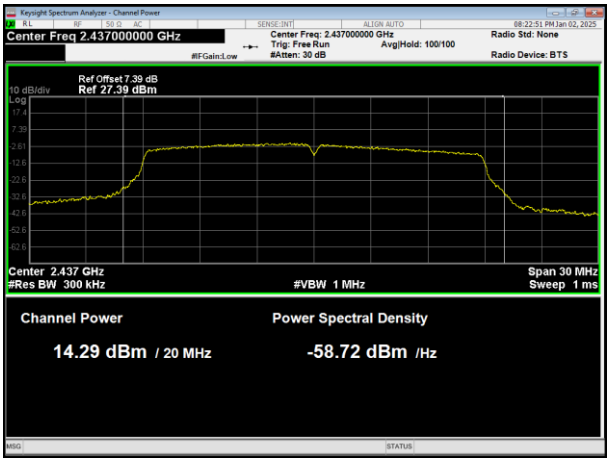	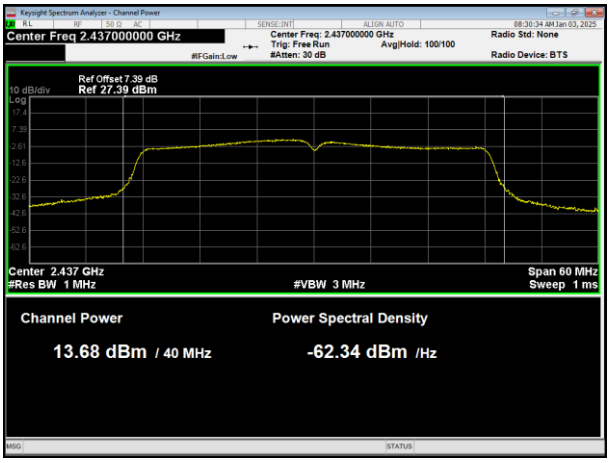
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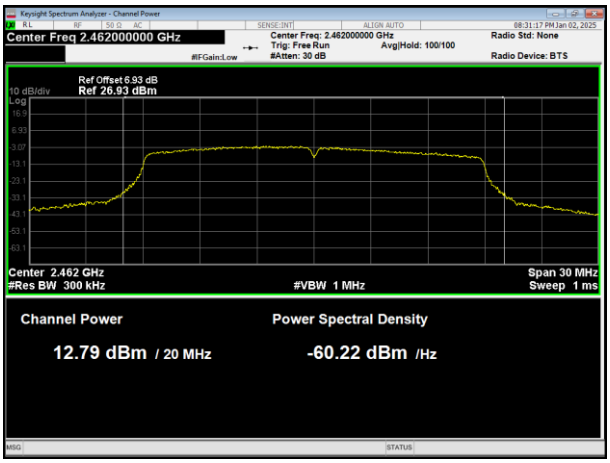
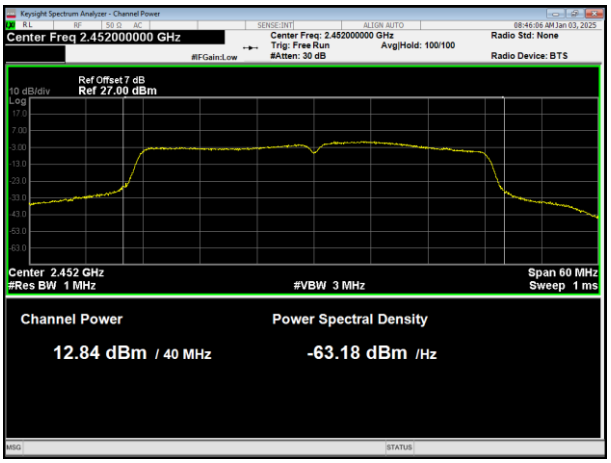
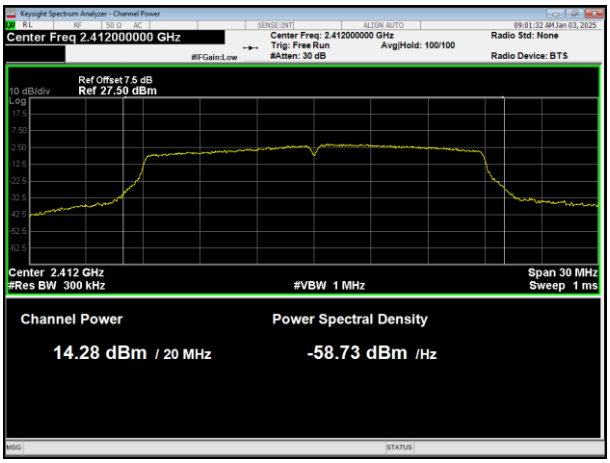
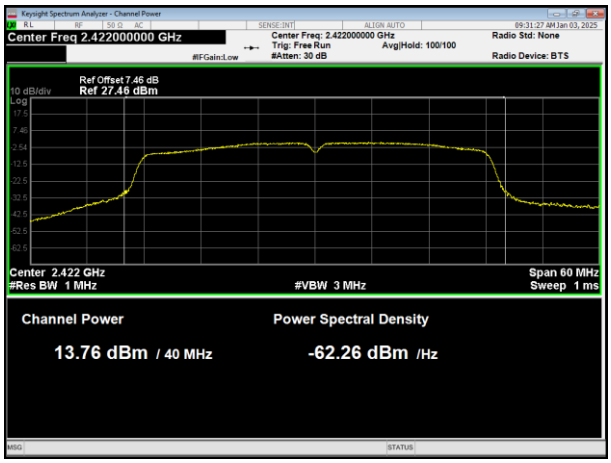
	
2462MHz	2452MHz

802.11ax HT20	802.11ax HT40
	
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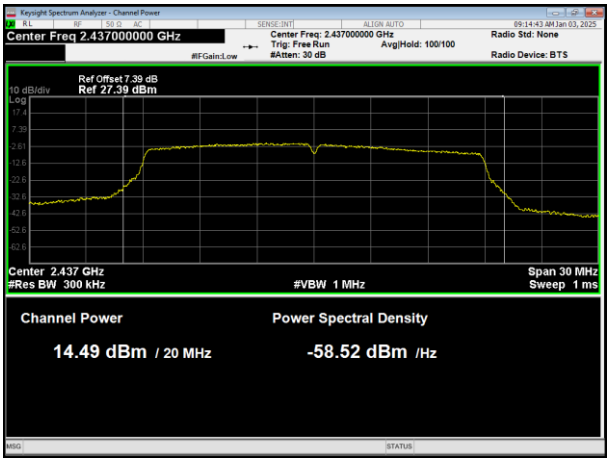	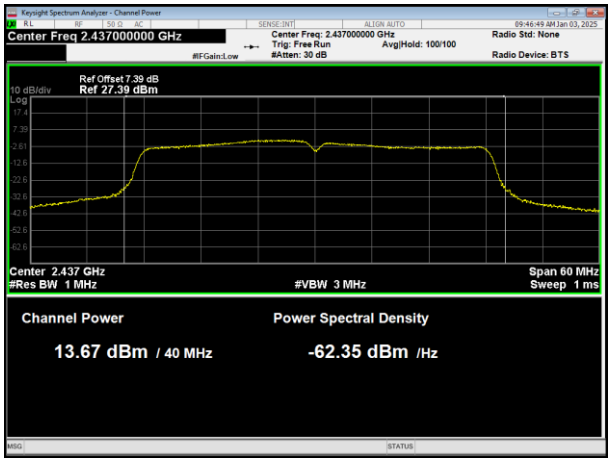
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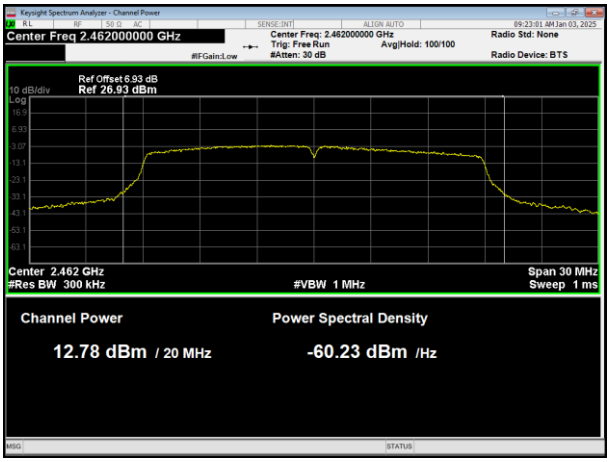	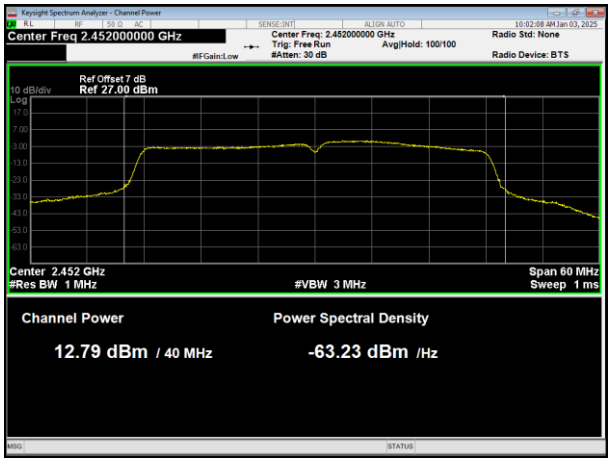
2462MHz	2452MHz

Antenna2:

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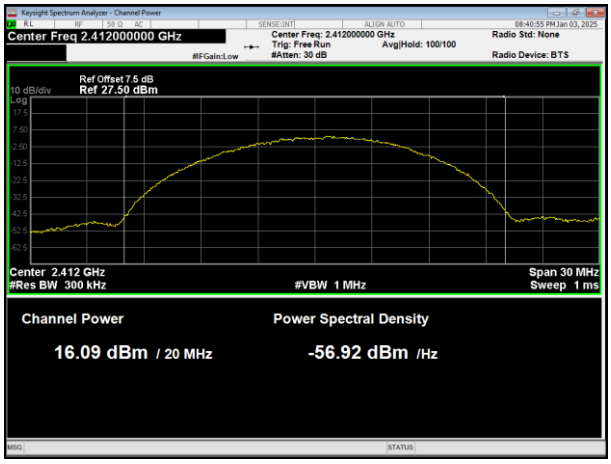	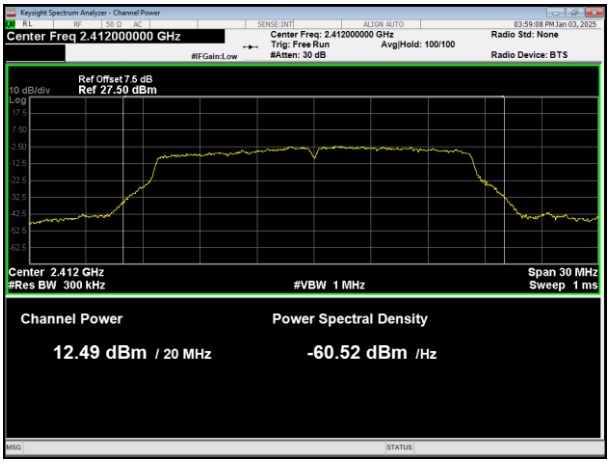
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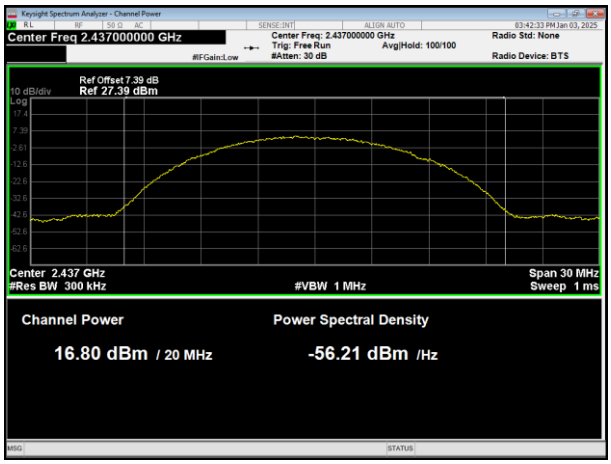	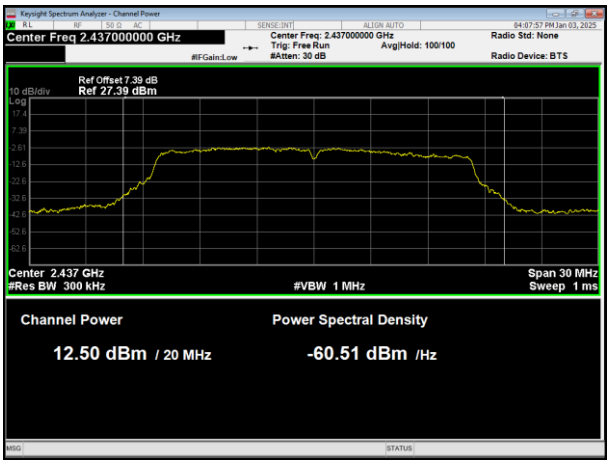
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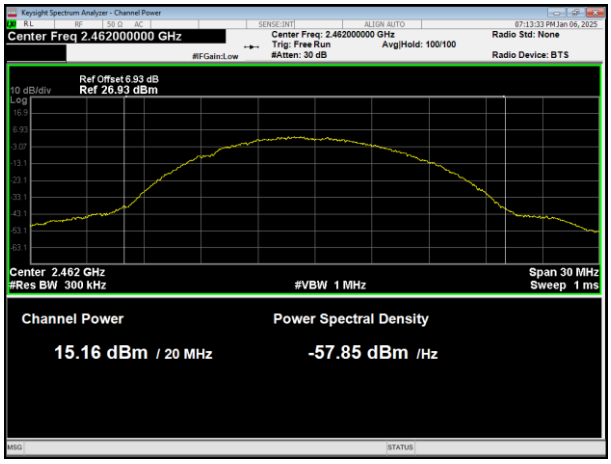
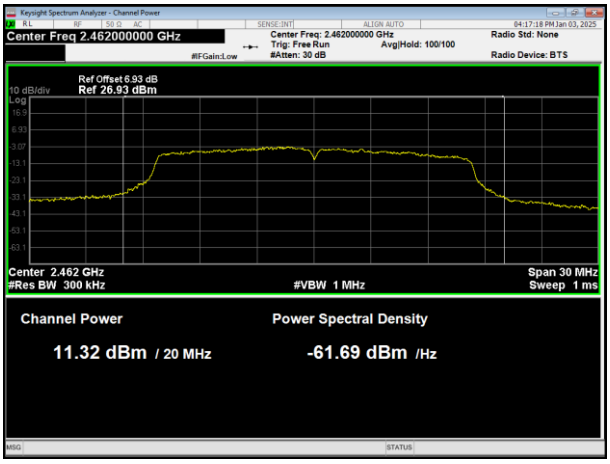
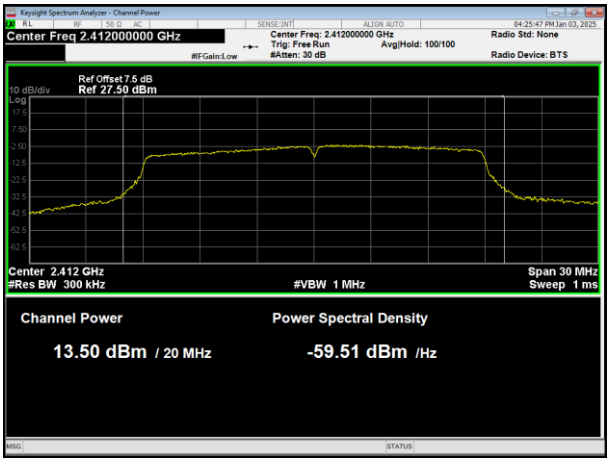
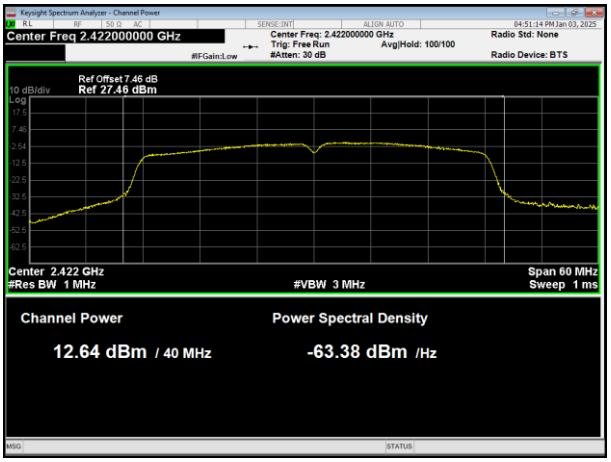
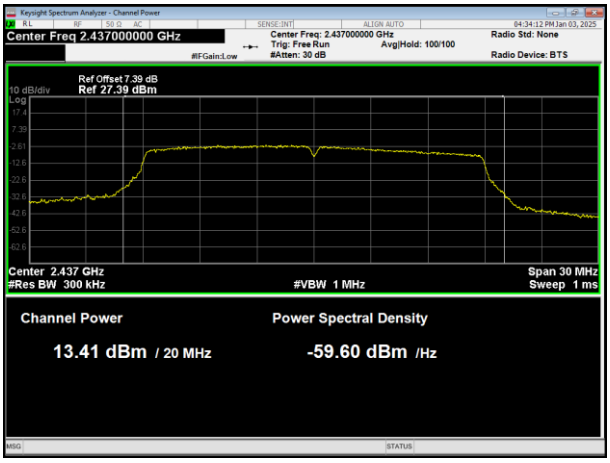
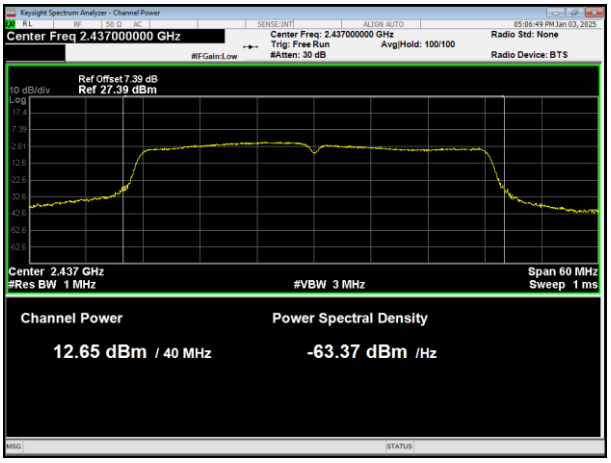
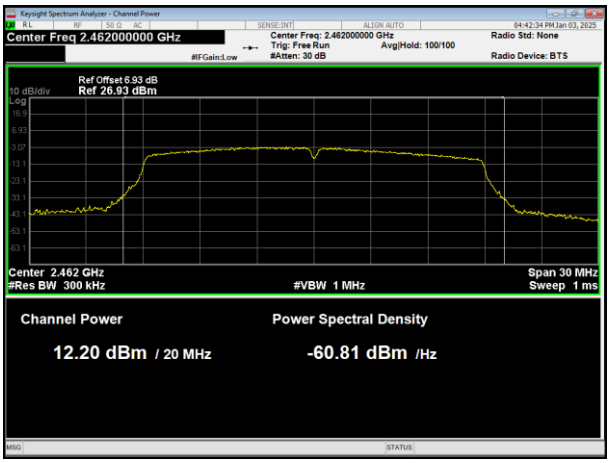
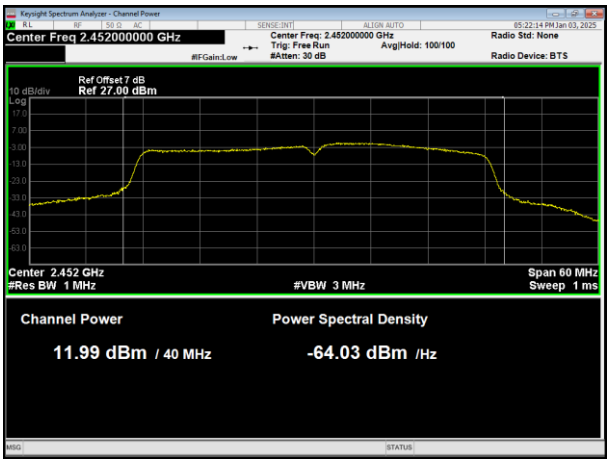
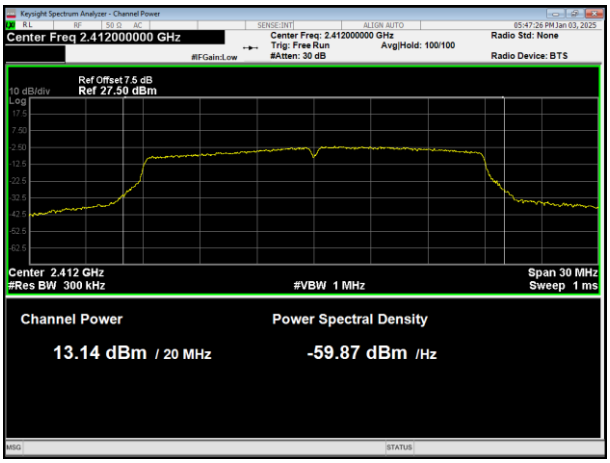
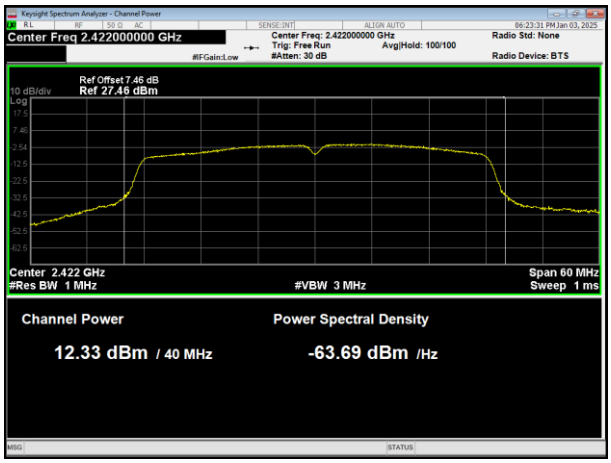
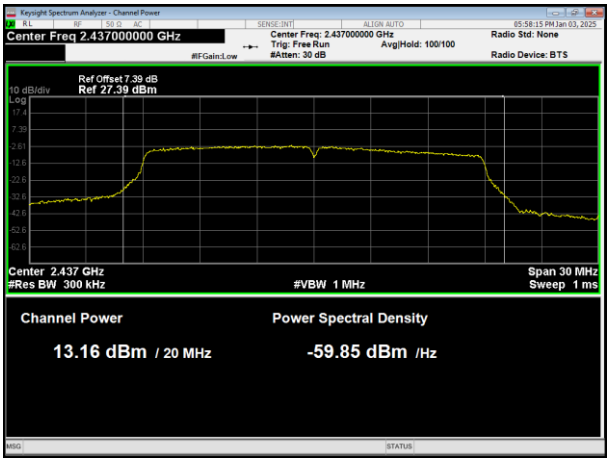
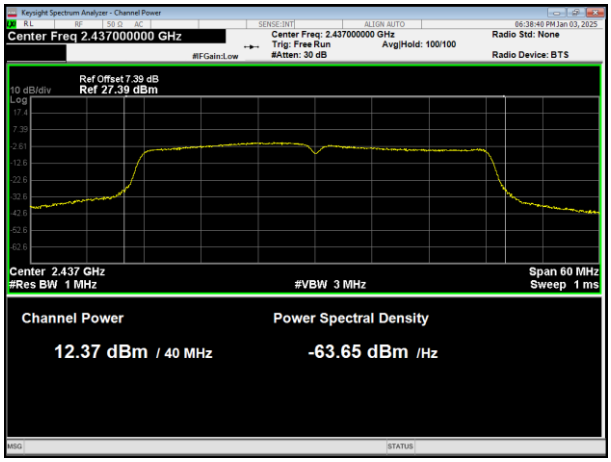
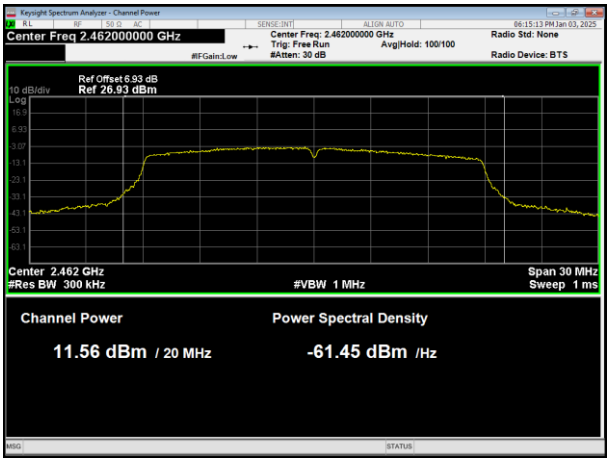
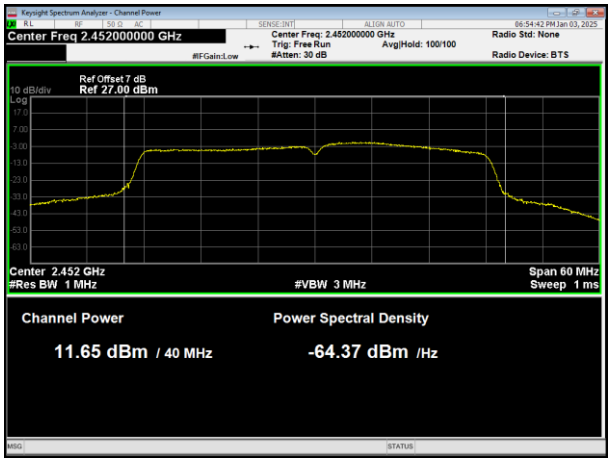
	
2462MHz	2462MHz

802.11n HT20	802.11n HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

802.11ax HT20	802.11ax HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

5.. POWER SPECTRAL DENSITY TEST

5.1. 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 ≥ 3kHz
VB	VBW ≥ 3RBW
Detector	power averaging (rms) or sample detector (when rms not available).
Trace	rms/average
Sweep Time	Auto

5.1.1. TEST PROCEDURE

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

5.1.2. DEVIATION FROM STANDARD

No deviation.

5.1.3. TEST SETUP

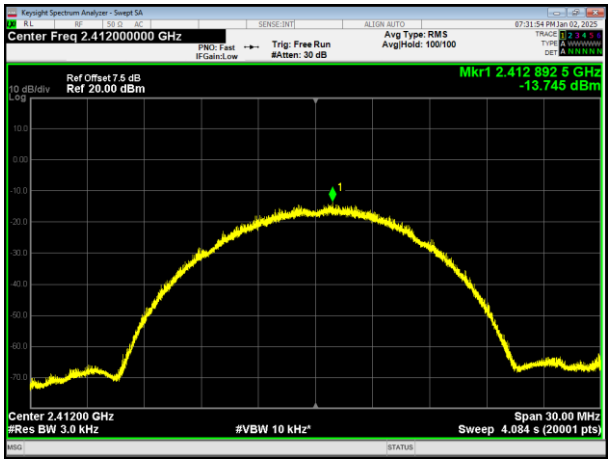
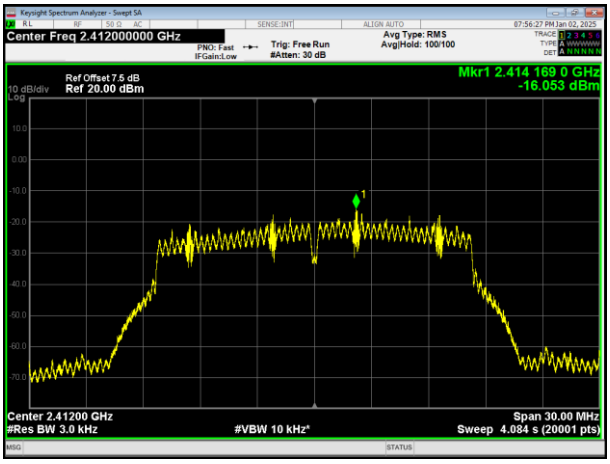
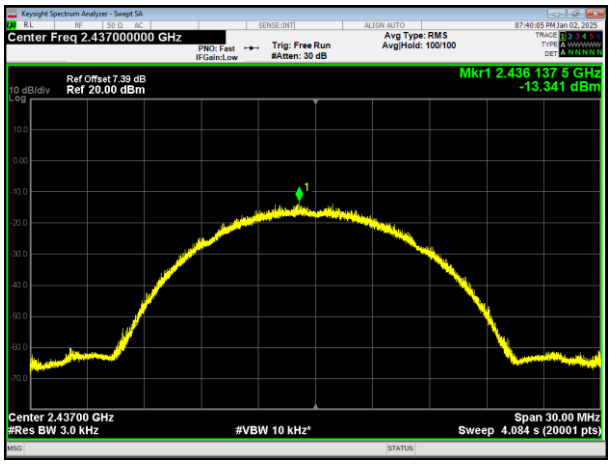
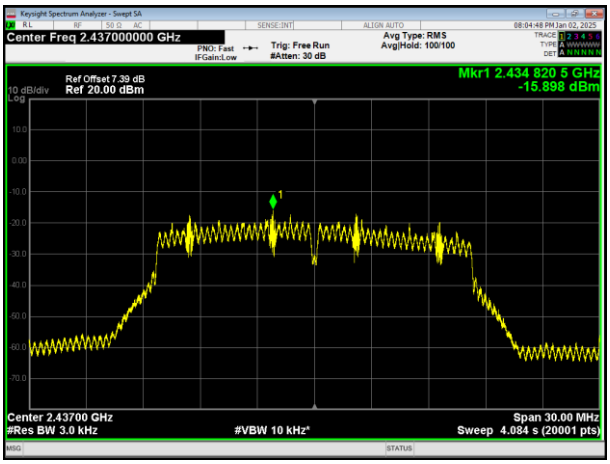
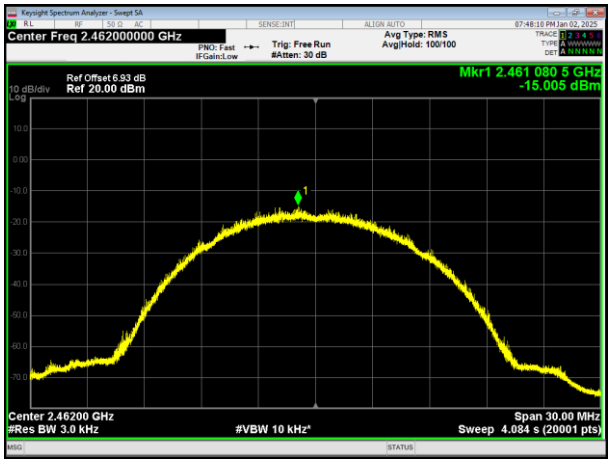
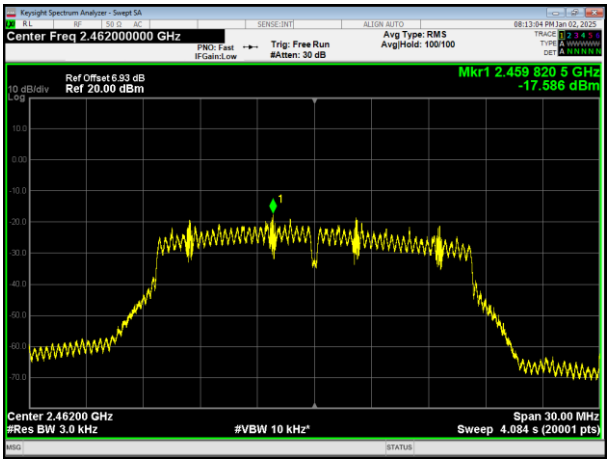
5.1.4. EUT OPERATION CONDITIONS

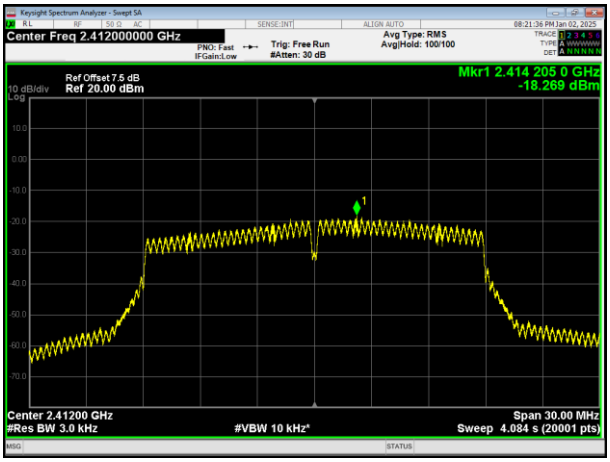
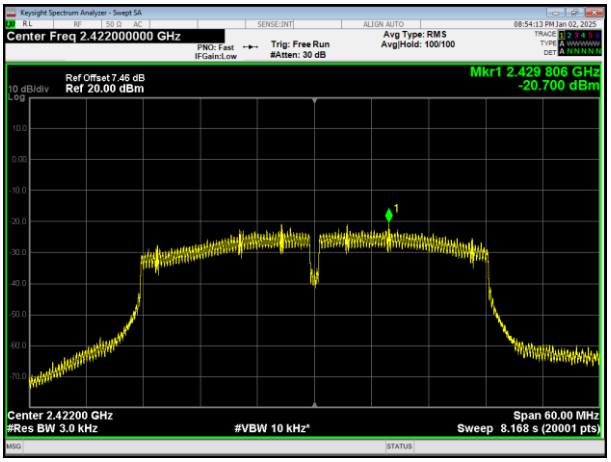
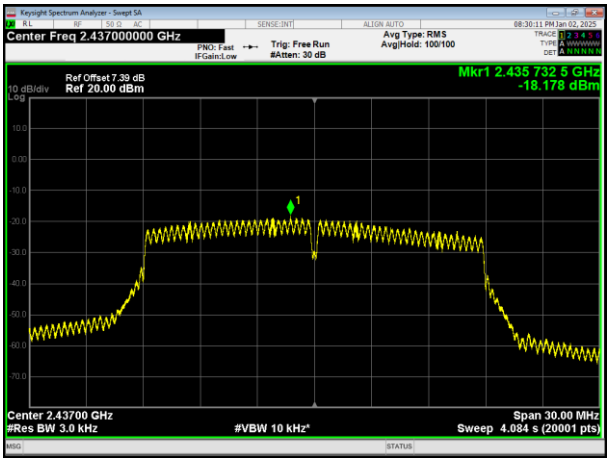
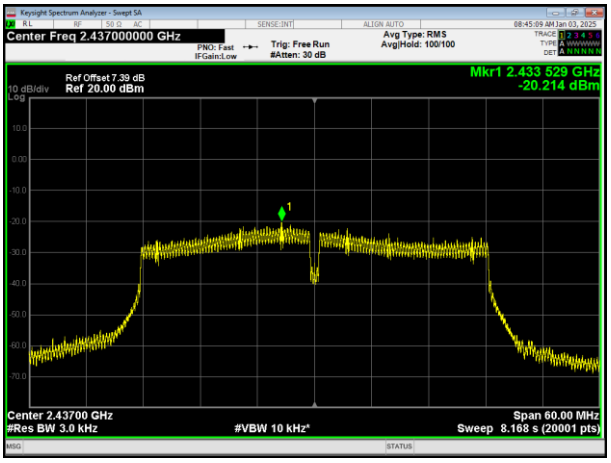
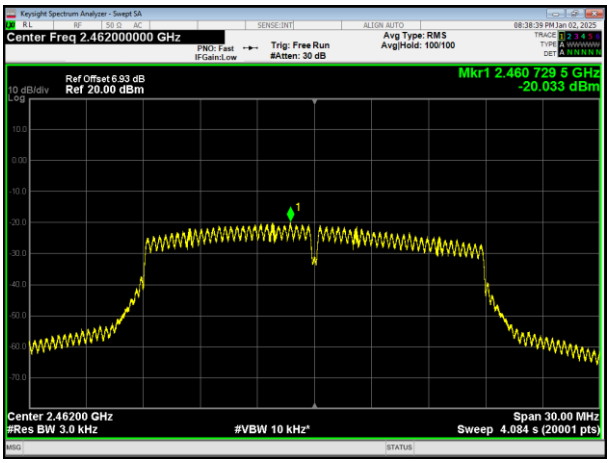
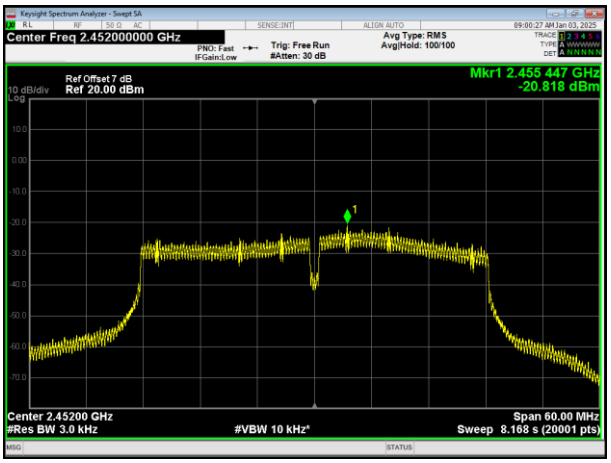
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

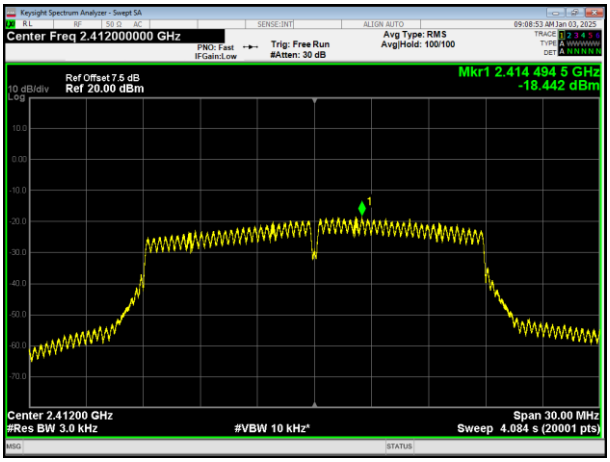
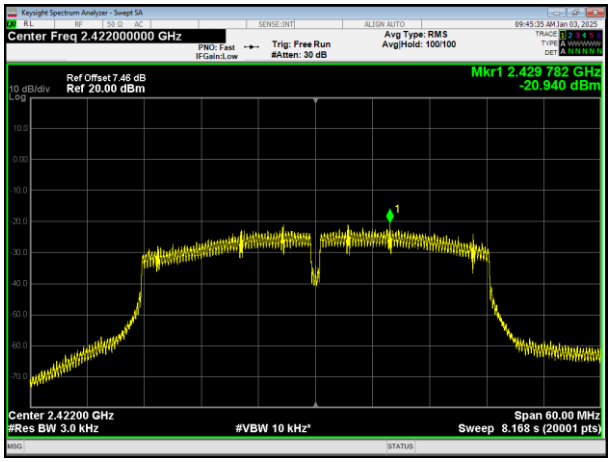
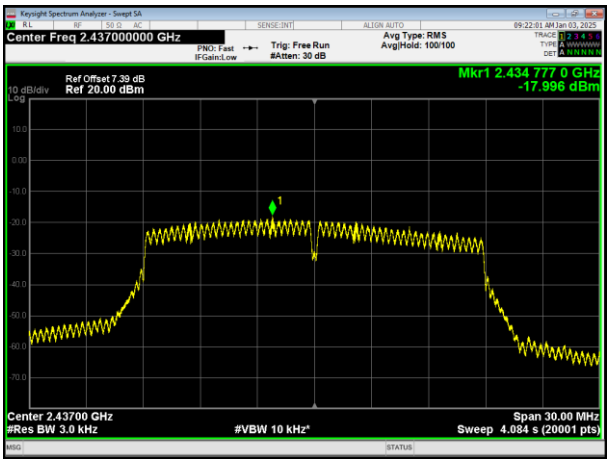
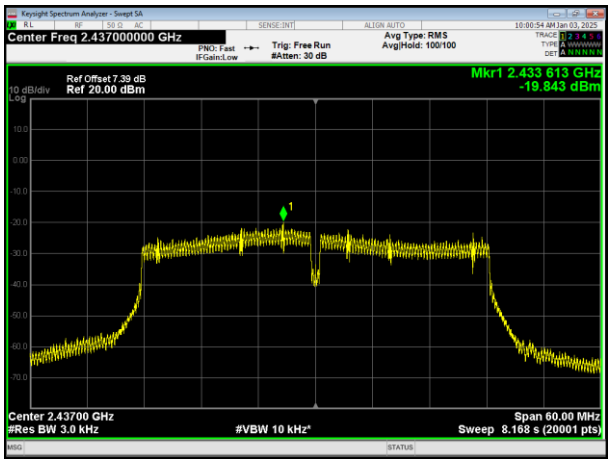
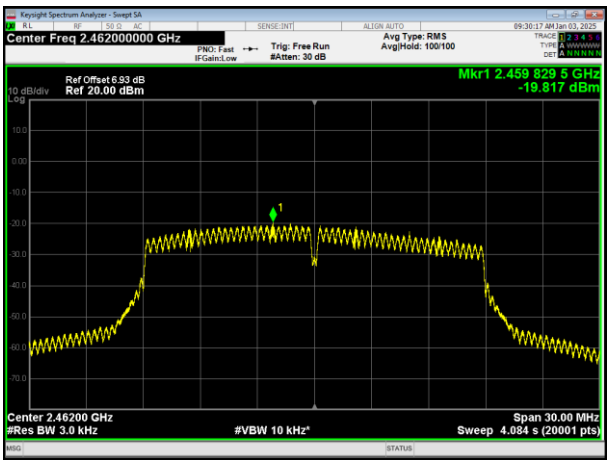
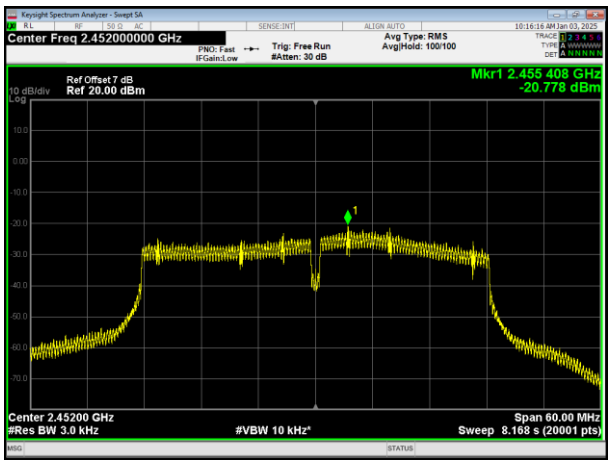
5.1.5. TEST RESULTS

Mode	Test Channel	Reading Level (dBm/3kHz)		ANT1&ANT2 MIMO Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)	Result
		Antenna1	Antenna2			
802.11b	Low	-13.745	-13.554	/	8	PASS
	Middle	-13.341	-13.377	/	8	PASS
	High	-15.005	-14.535	/	8	PASS
802.11g	Low	-16.053	-16.617	-13.32	8	PASS
	Middle	-15.898	-16.859	-13.34	8	PASS
	High	-17.586	-18.316	-14.93	8	PASS
802.11n20	Low	-18.269	-19.154	-15.68	8	PASS
	Middle	-18.178	-19.578	-15.81	8	PASS
	High	-20.033	-20.693	-17.34	8	PASS
802.11n40	Low	-20.7	-21.223	-17.94	8	PASS
	Middle	-20.214	-20.45	-17.32	8	PASS
	High	-20.818	-21.366	-18.07	8	PASS
802.11ax HT20	Low	-18.442	-19.524	/	8	PASS
	Middle	-17.996	-19.623	/	8	PASS
	High	-19.817	-20.729	/	8	PASS
802.11ax HT40	Low	-20.94	-21.95	/	8	PASS
	Middle	-19.843	-21.23	/	8	PASS
	High	-20.778	-22.535	/	8	PASS

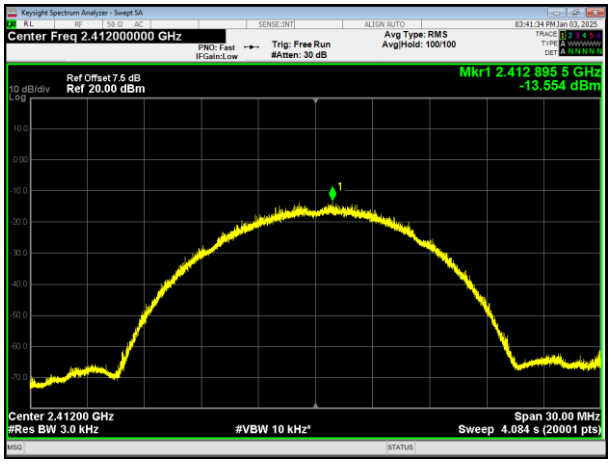
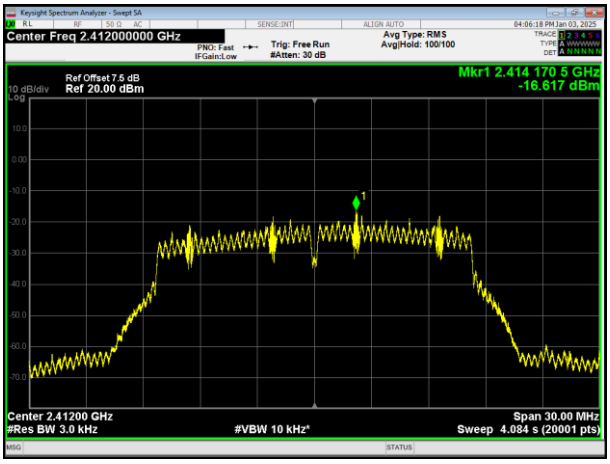
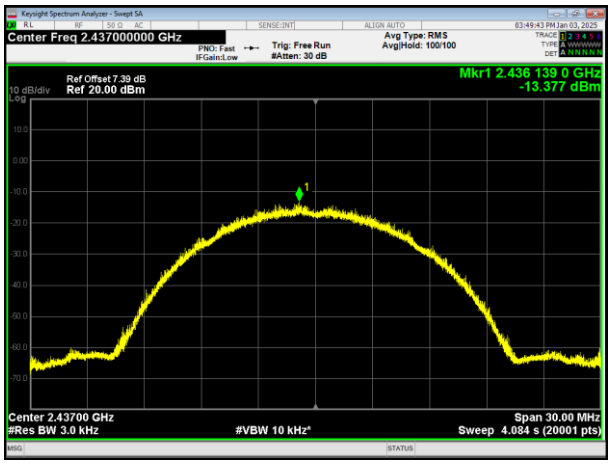
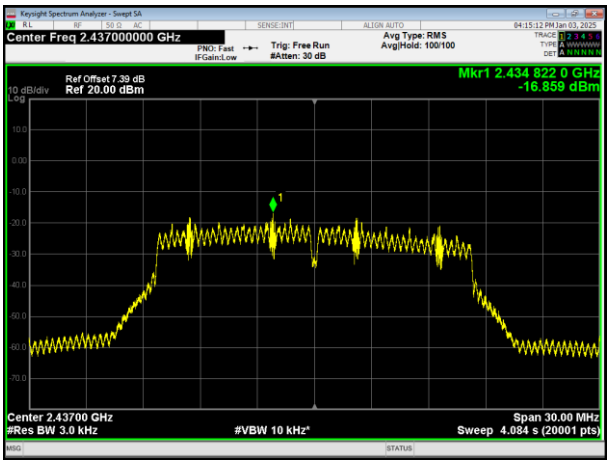
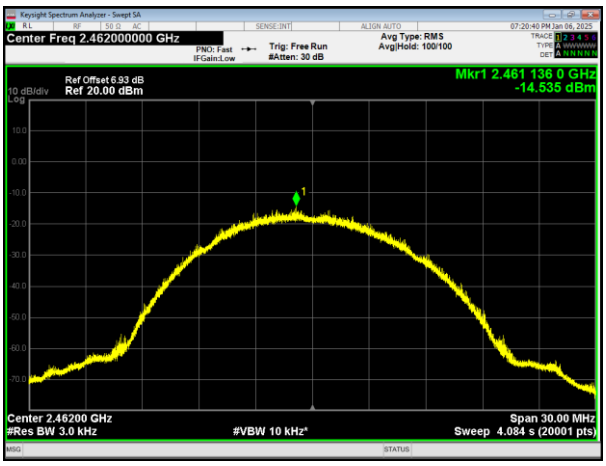
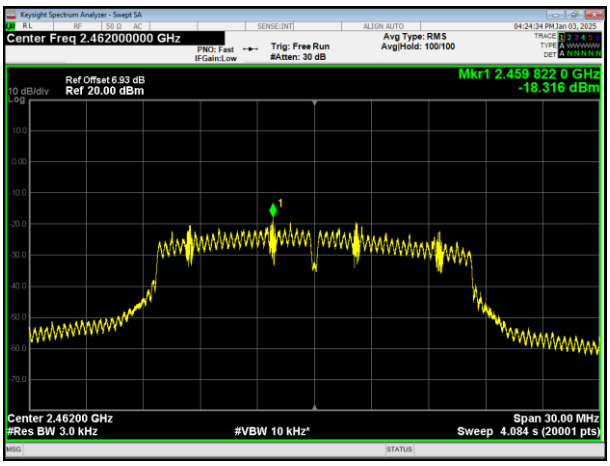
Antenna1:

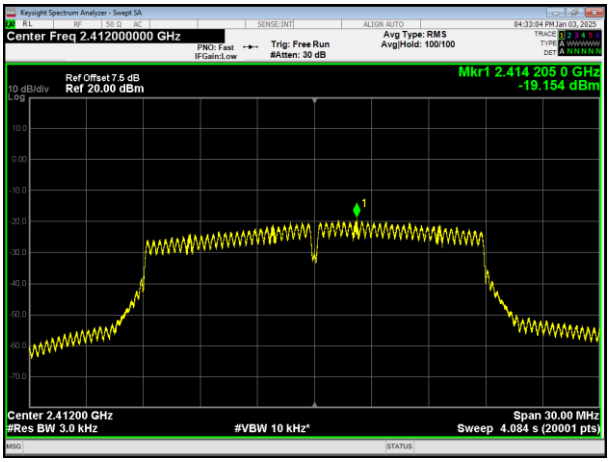
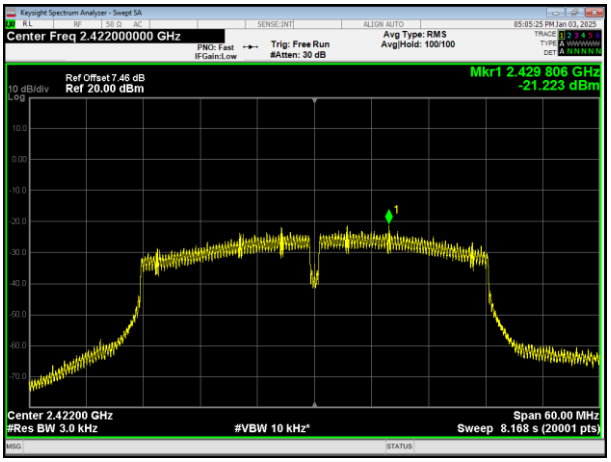
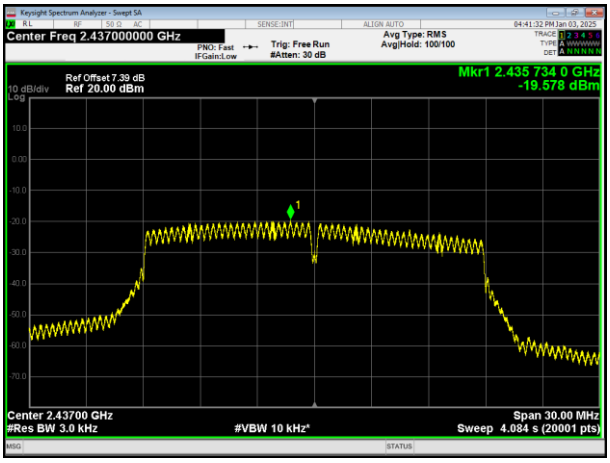
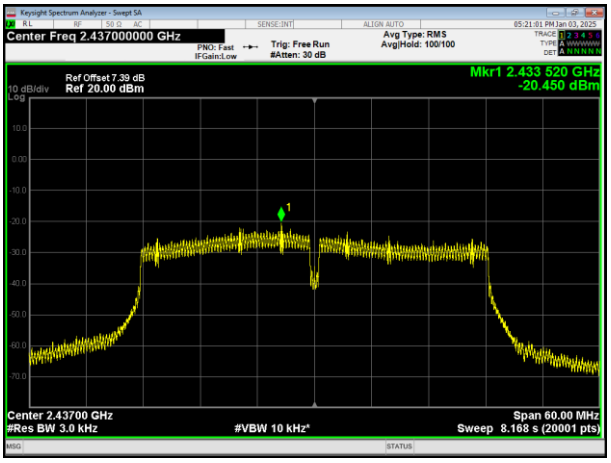
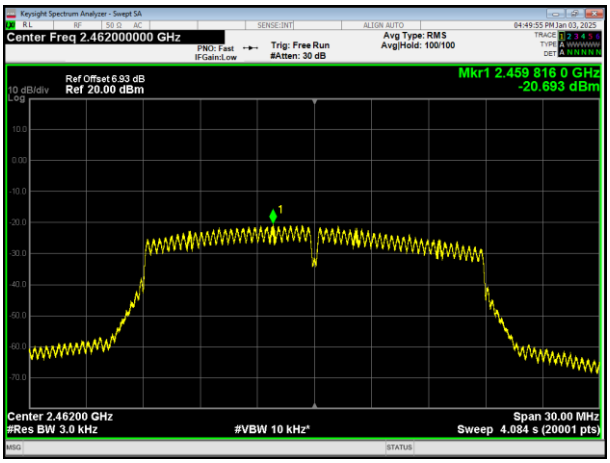
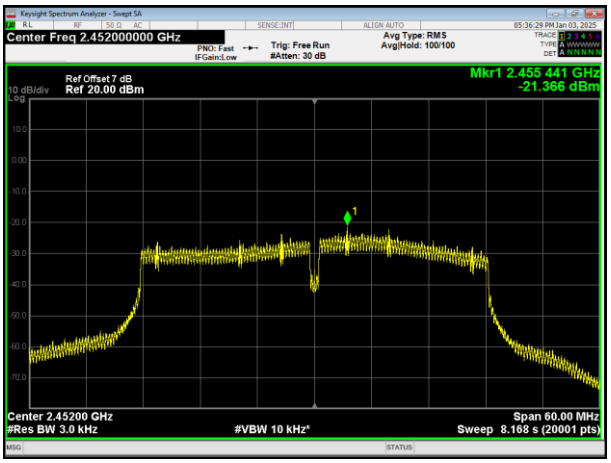
802.11b	802.11g
	
2412MHz	2412MHz
	
2437MHz	2437MHz
	
2462MHz	2462MHz

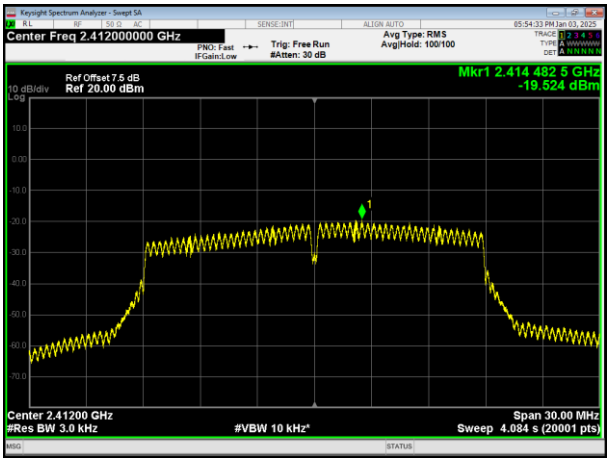
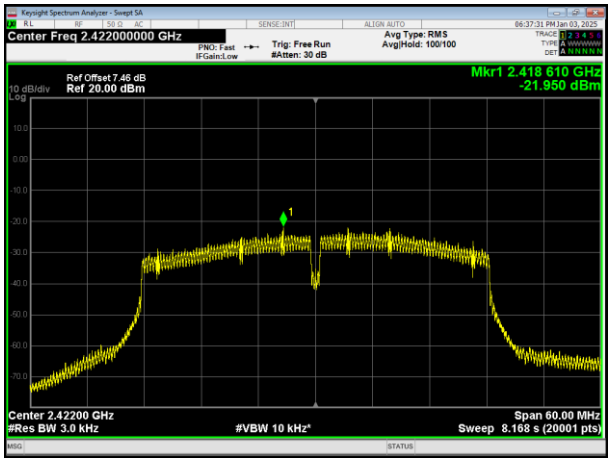
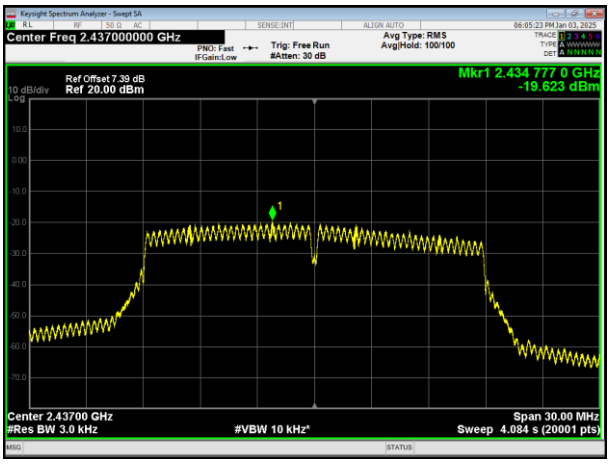
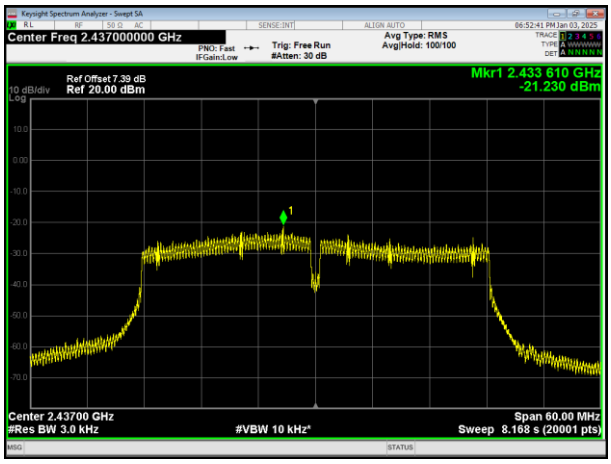
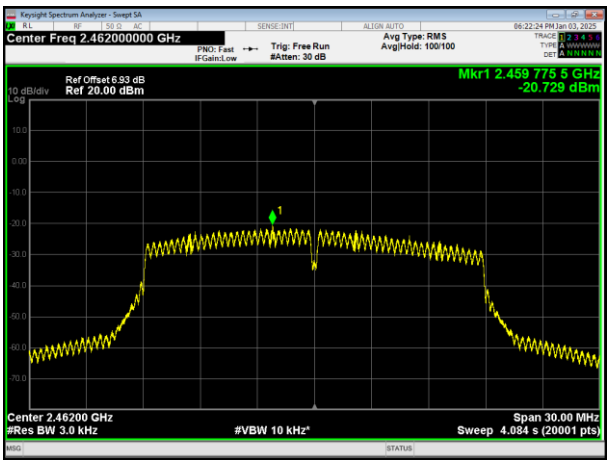
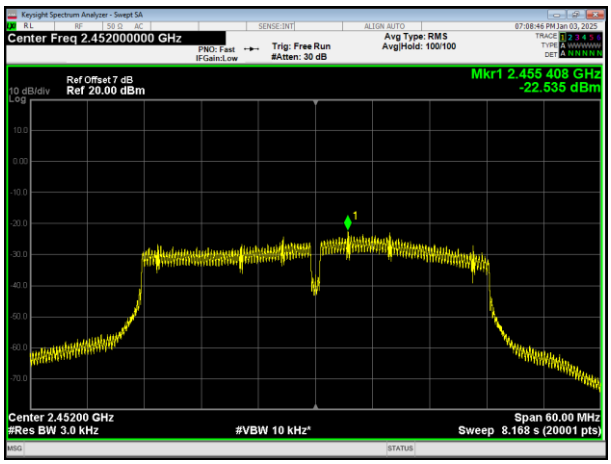
802.11n HT20	802.11n HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

802.11ax HT20	802.11ax HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

Antenna2:

802.11b	802.11g
	
2412MHz	2412MHz
	
2437MHz	2437MHz
	
2462MHz	2462MHz

802.11n HT20	802.11n HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

802.11ax HT20	802.11ax HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz

6.. 6DB BANDWIDTH TEST

6.1. APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range(MHz)	Result
15.247(a)(2)	Bandwidth	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

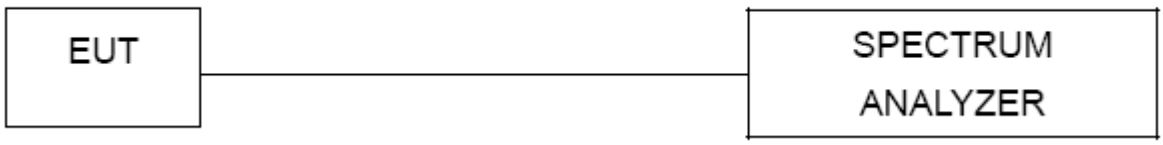
6.1.1. TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥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.

6.1.2. DEVIATION FROM STANDARD

No deviation.

6.1.3. TEST SETUP



6.1.4. EUT OPERATION CONDITIONS

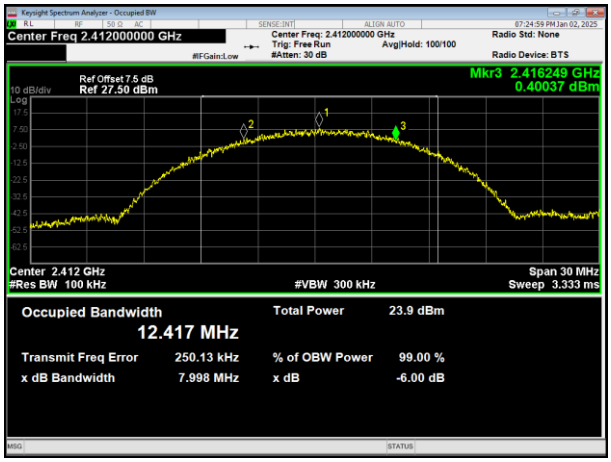
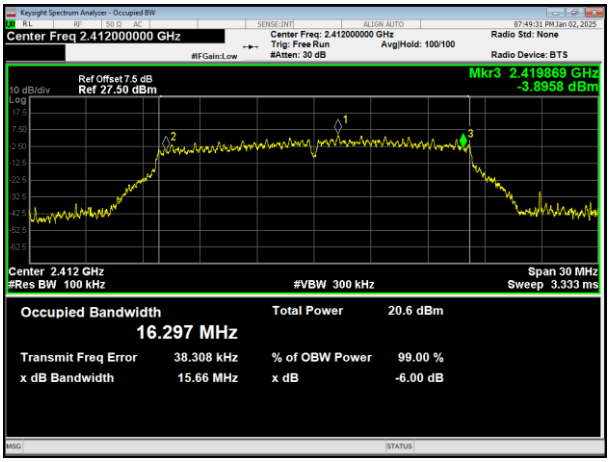
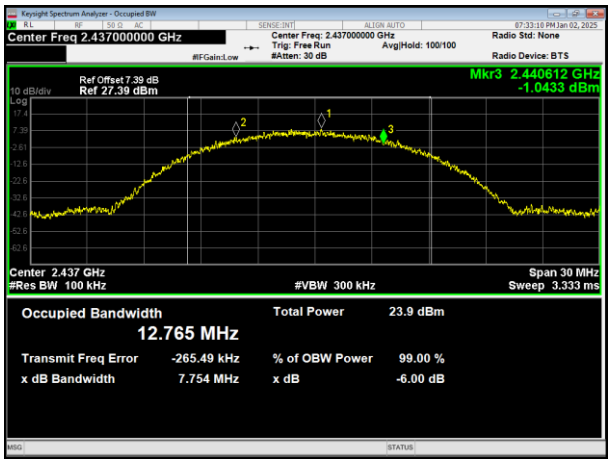
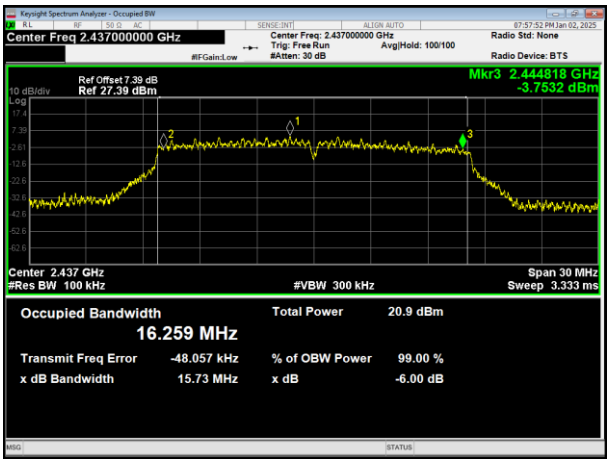
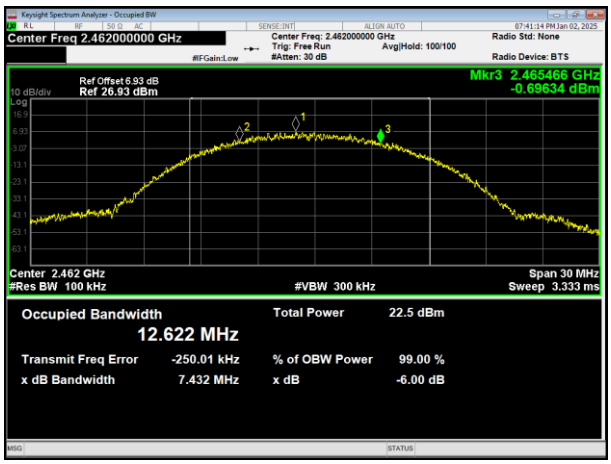
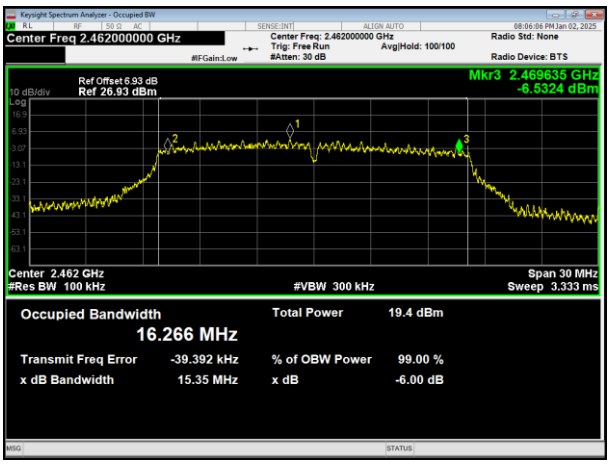
The EUT tested system was configured as the statements of 2.3 Unless otherwise a special operating condition is specified in the follows during the testing.

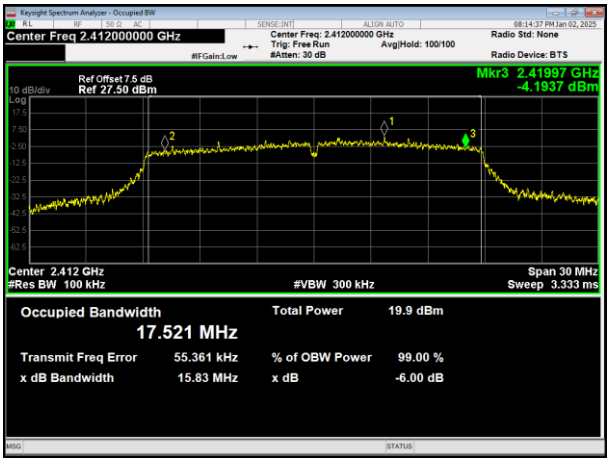
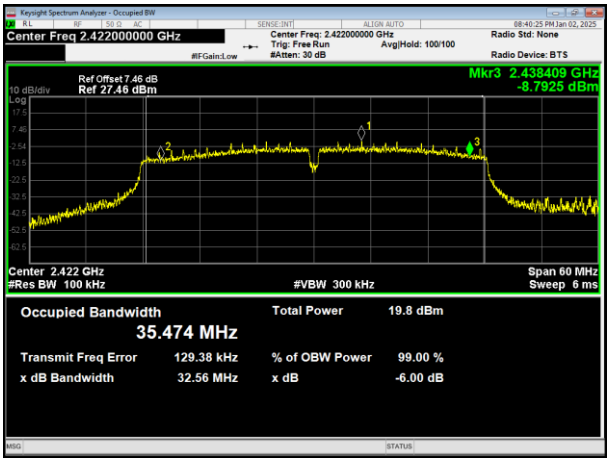
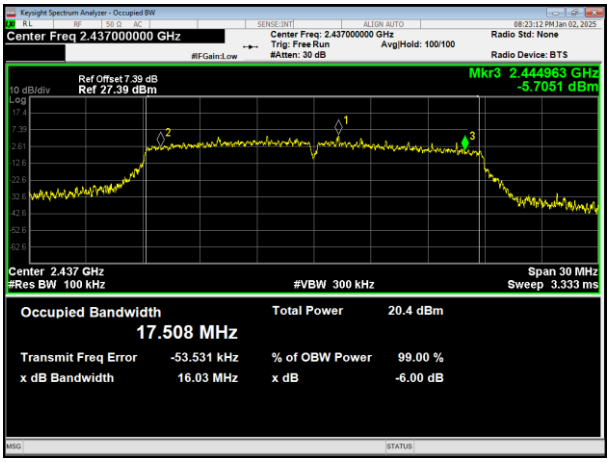
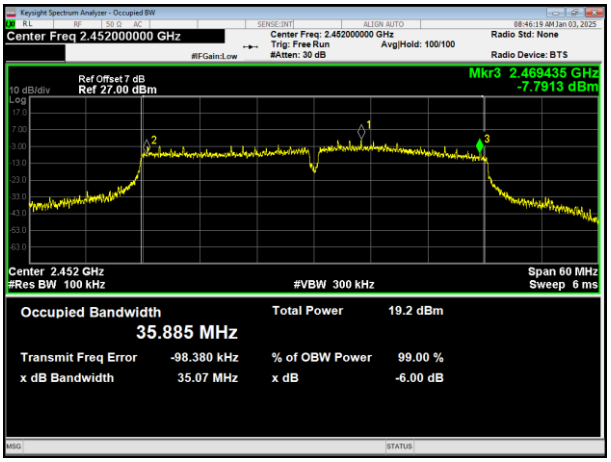
6.1.5. TEST RESULTS

	Test Channel	6dB Bandwidth (MHz)		Limit (MHz)	Result
		Antenna1	Antenna2		
802.11b	Low	7.998	7.925	0.5	Pass
	Middle	7.754	6.861	0.5	Pass
	High	7.432	7.824	0.5	Pass
802.11g	Low	15.661	15.669	0.5	Pass
	Middle	15.731	15.696	0.5	Pass
	High	15.349	15.713	0.5	Pass
802.11n HT20	Low	15.83	13.439	0.5	Pass
	Middle	16.034	16.265	0.5	Pass
	High	15.274	15.65	0.5	Pass
802.11n HT40	Low	32.56	32.518	0.5	Pass
	Middle	32.563	34.98	0.5	Pass
	High	35.066	35.047	0.5	Pass
802.11ax HT20	Low	14.013	15.043	0.5	Pass
	Middle	13.432	15.924	0.5	Pass
	High	15.03	11.966	0.5	Pass
802.11ax HT40	Low	32.524	31.275	0.5	Pass
	Middle	35.013	35.076	0.5	Pass
	High	32.596	32.533	0.5	Pass

	Test Channel	99%Bandwidth (MHz)		Result
		Antenna1	Antenna2	
802.11b	Low	12.387	12.495	Pass
	Middle	12.630	12.679	Pass
	High	12.638	12.505	Pass
802.11g	Low	16.314	16.364	Pass
	Middle	16.365	16.391	Pass
	High	16.262	16.319	Pass
802.11n HT20	Low	17.501	17.593	Pass
	Middle	17.560	17.583	Pass
	High	17.464	17.390	Pass
802.11n HT40	Low	35.658	35.574	Pass
	Middle	36.058	36.150	Pass
	High	36.028	35.927	Pass
802.11ax HT20	Low	17.525	17.542	Pass
	Middle	17.529	17.571	Pass
	High	17.488	17.400	Pass
802.11ax HT40	Low	35.586	35.453	Pass
	Middle	36.140	36.109	Pass
	High	36.001	35.957	Pass

Antenna1: 6dB Bandwidth

802.11b	802.11g
	
2412MHz	2412MHz
	
2437MHz	2437MHz
	
2462MHz	2462MHz

802.11n HT20	802.11n HT40
	
2412MHz	2422MHz
	
2437MHz	2437MHz
	
2462MHz	2452MHz