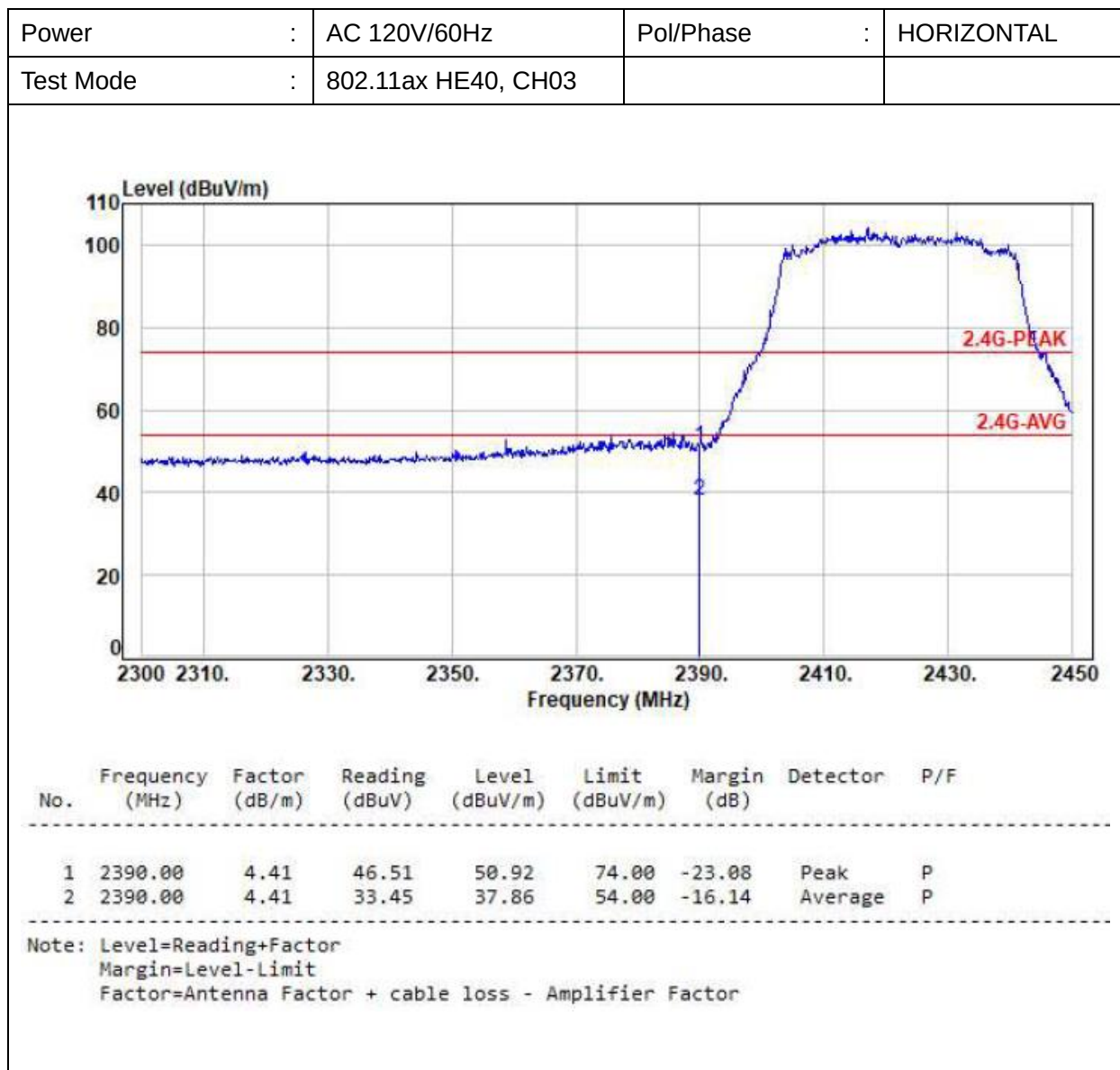
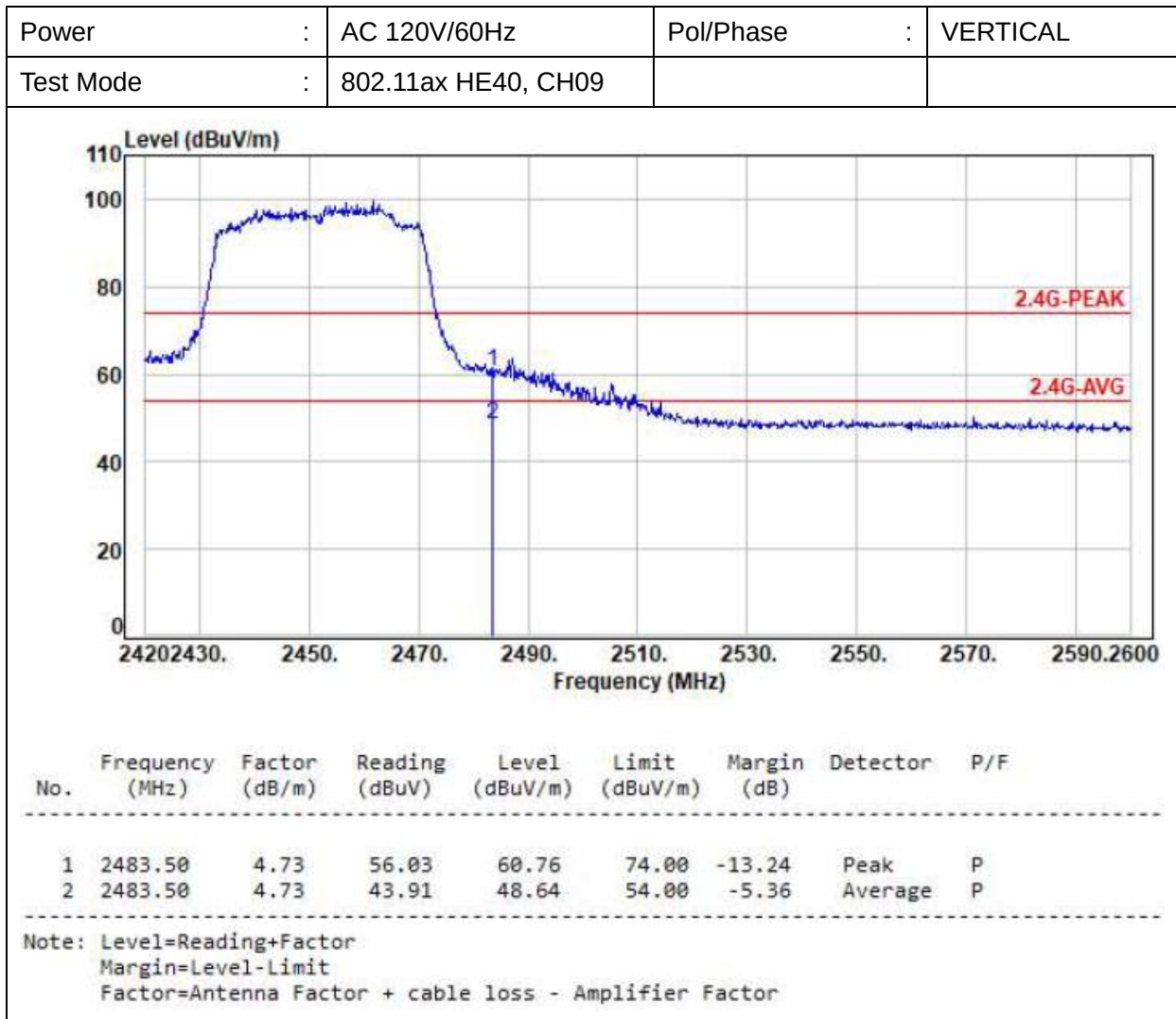
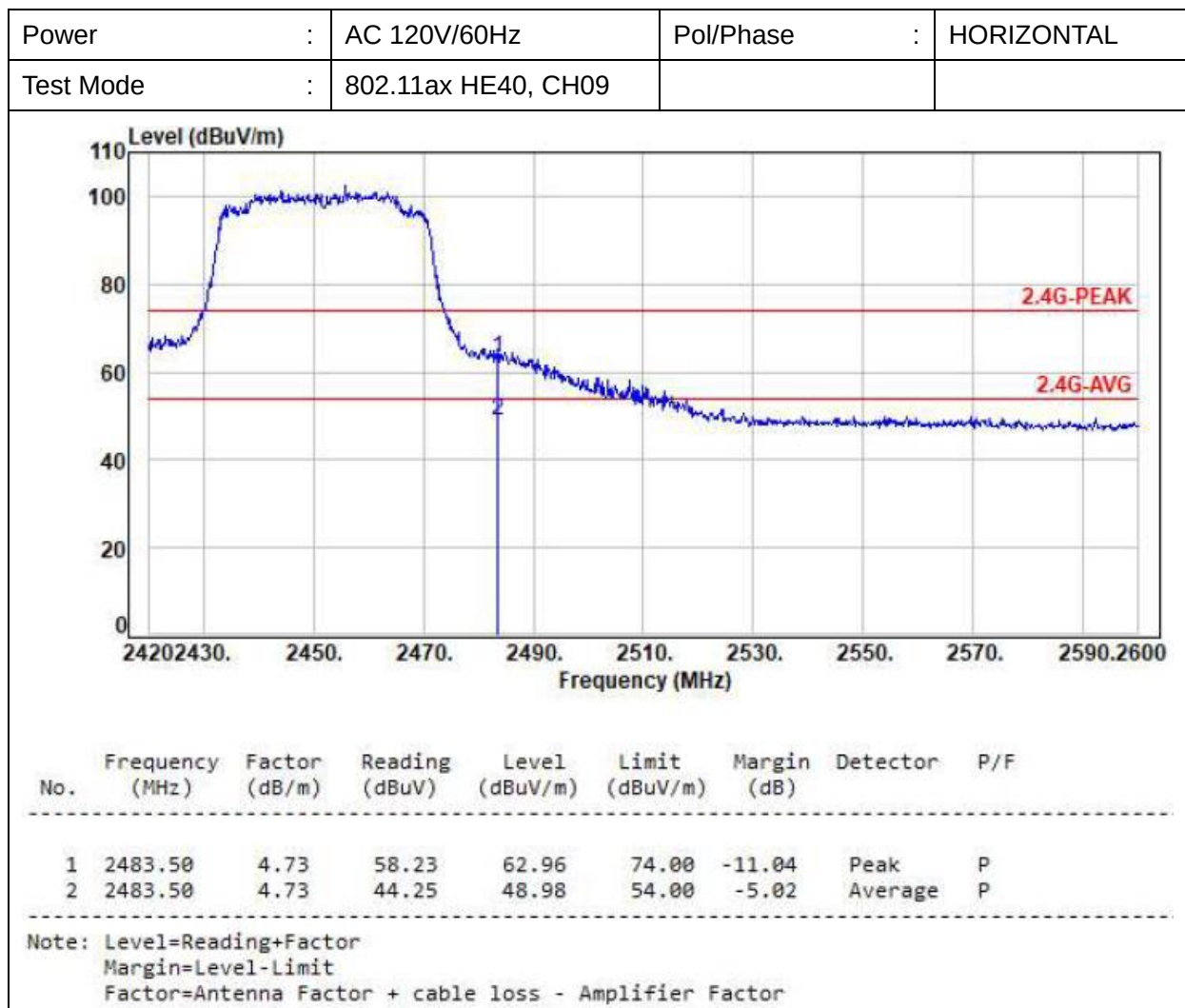










7. Test of Conducted Spurious Emission

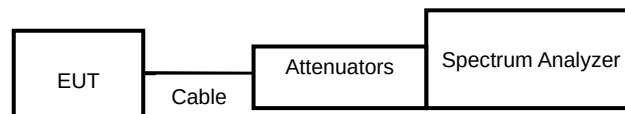
7.1 Test Limit

Below -20dB of the highest emission level of operating band (In 100 kHz Resolution Bandwidth)

7.2 Test Procedure

- The transmitter output was connected to the spectrum analyzer via a low loss cable.
- Set RBW of spectrum analyzer to 100 KHz and VBW of spectrum analyzer to 300 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
- Peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20dB relative to the maximum measured in-band peak PSD level.
- The band edges was measured and recorded.

7.3 Test Setup Layout

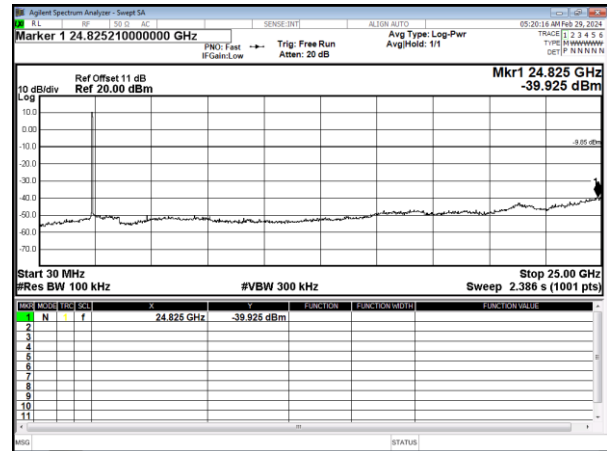
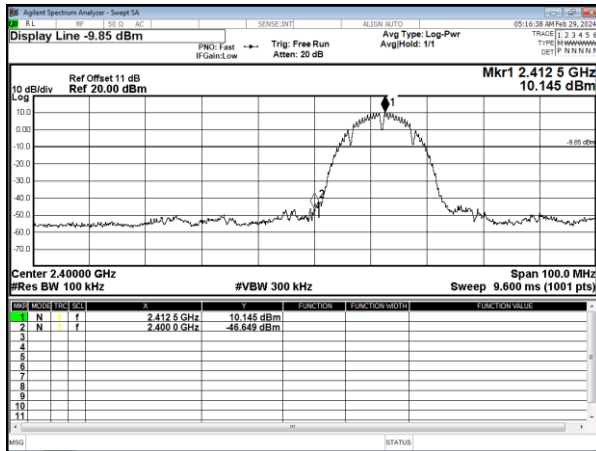


7.4 Test Result and Data

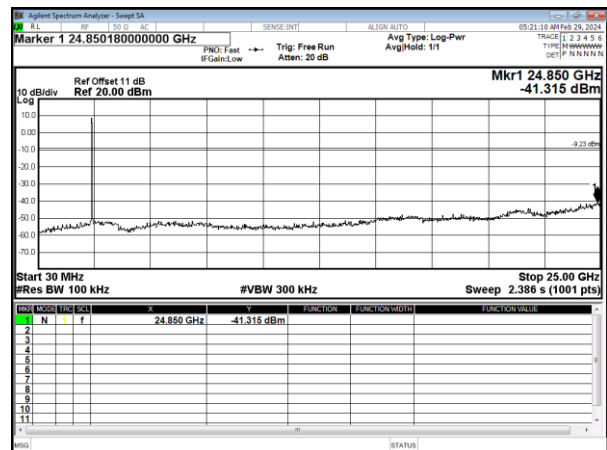
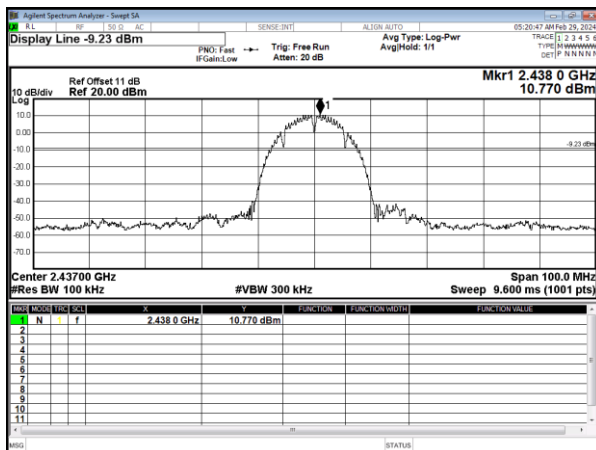
Note: Test plots refers to the following pages.



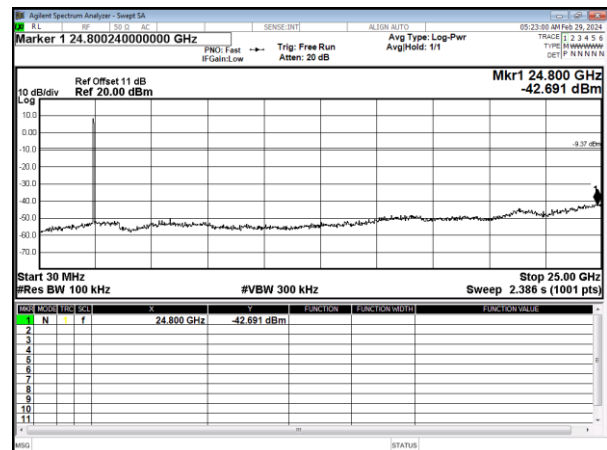
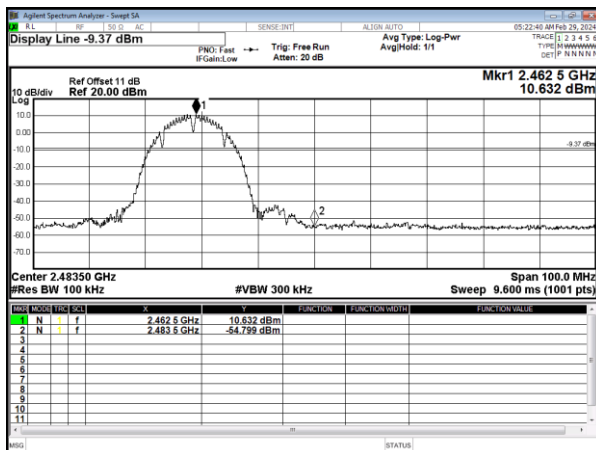
caused "Ant A" generated the worst case, it was reported as the final data
Modulation Standard: 802.11b
Channel: 01



Modulation Standard: 802.11b
Channel: 06

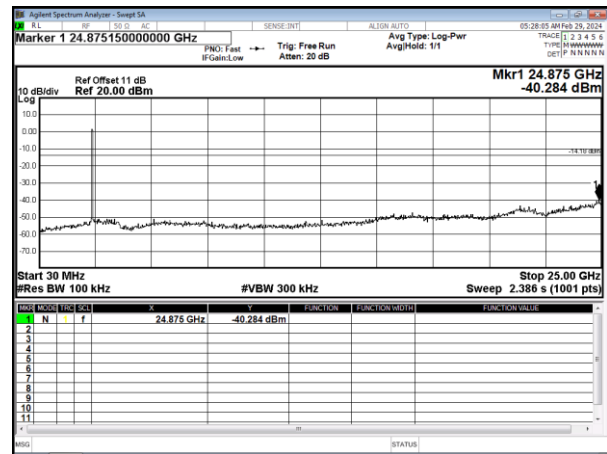
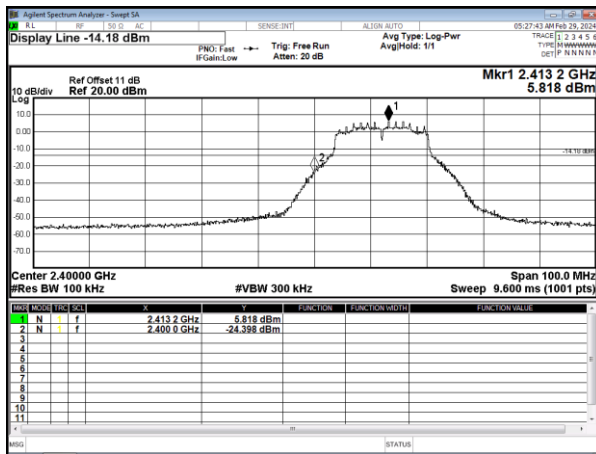


Modulation Standard: 802.11b
Channel: 11

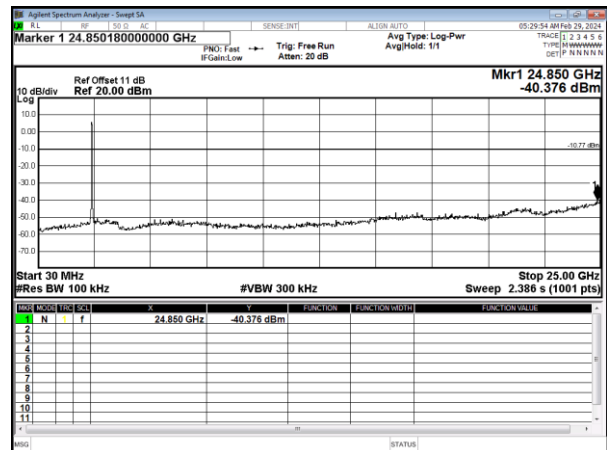
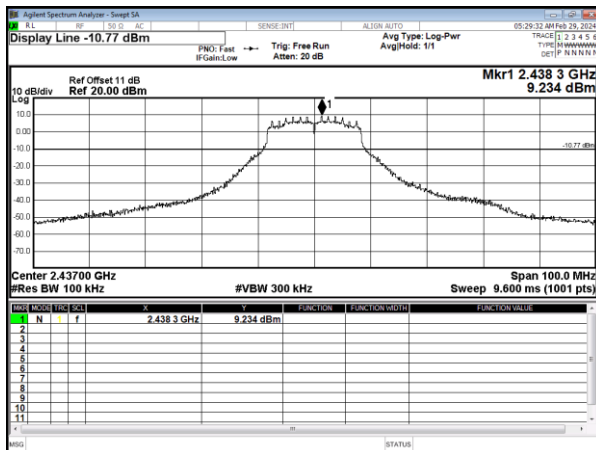




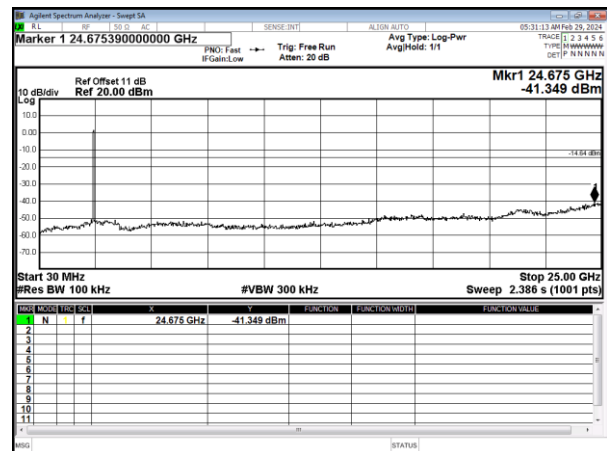
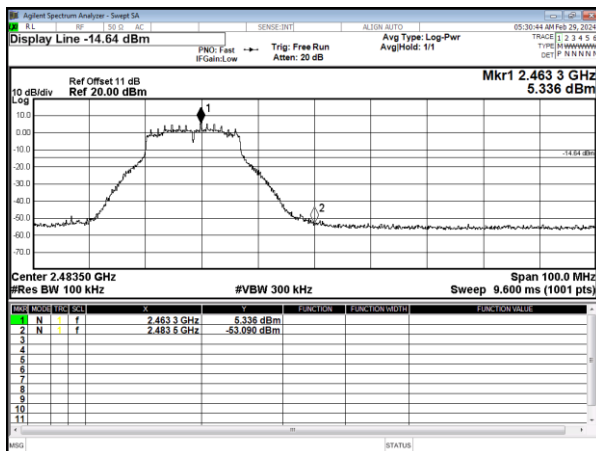
Modulation Standard: 802.11g
Channel: 01



Modulation Standard: 802.11g
Channel: 06

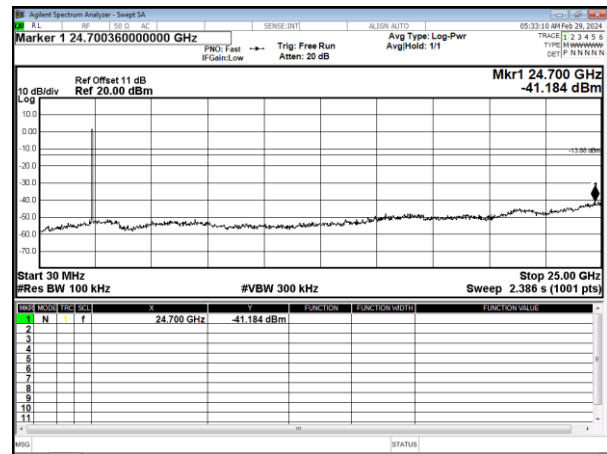
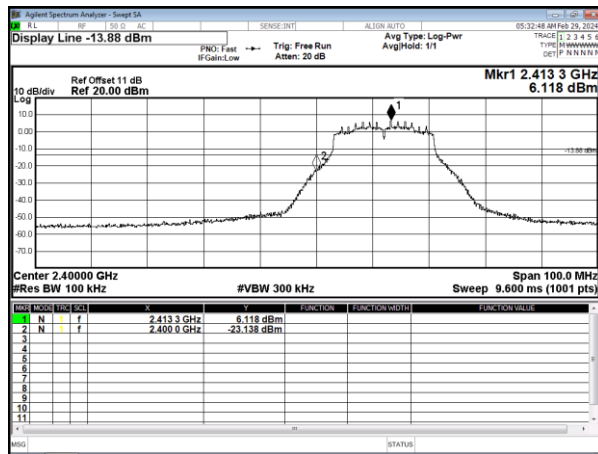


Modulation Standard: 802.11g
Channel: 11

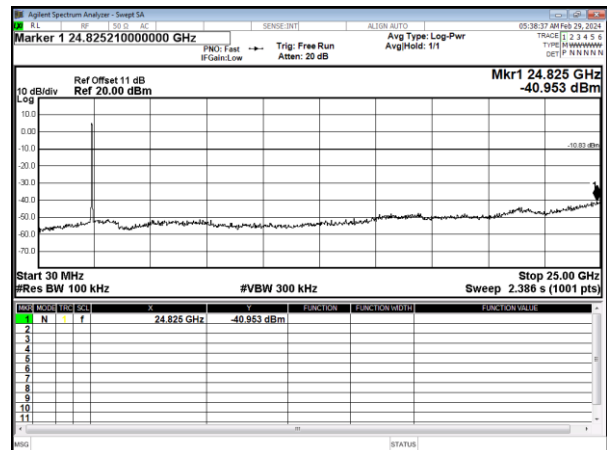
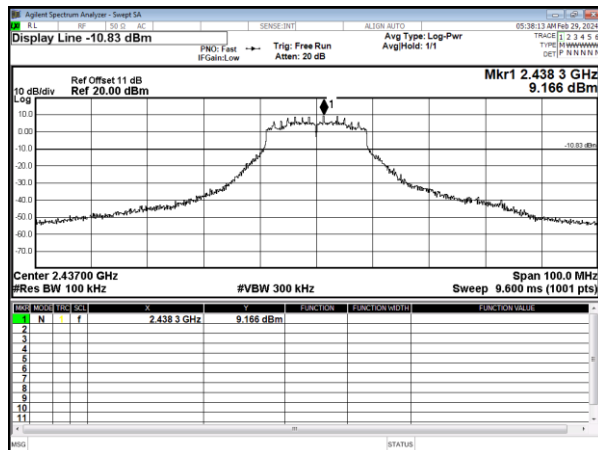




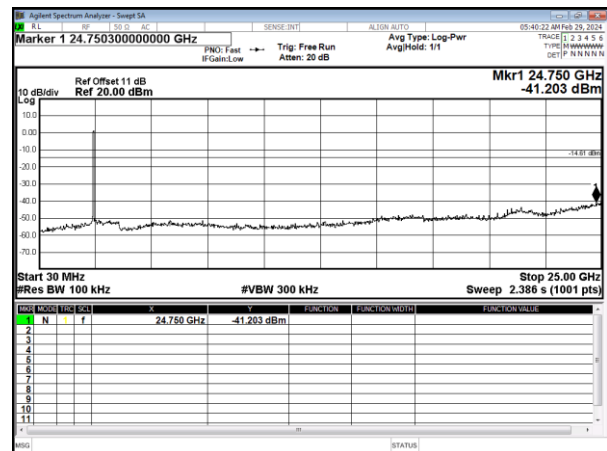
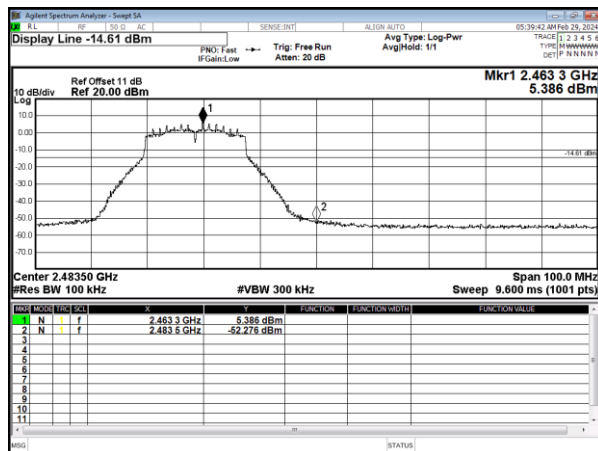
Modulation Standard: 802.11n HT20
Channel: 01



Modulation Standard: 802.11n HT20
Channel: 06

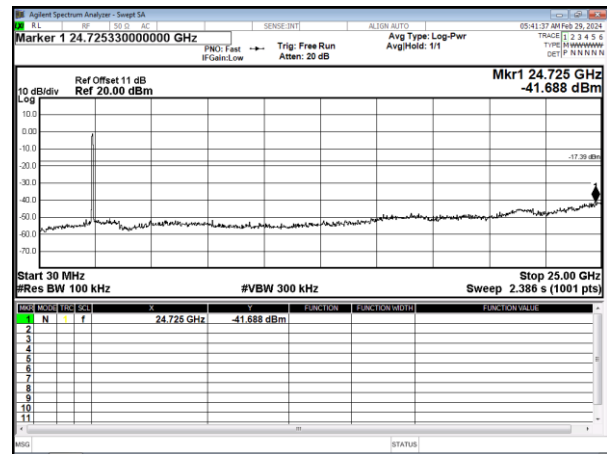
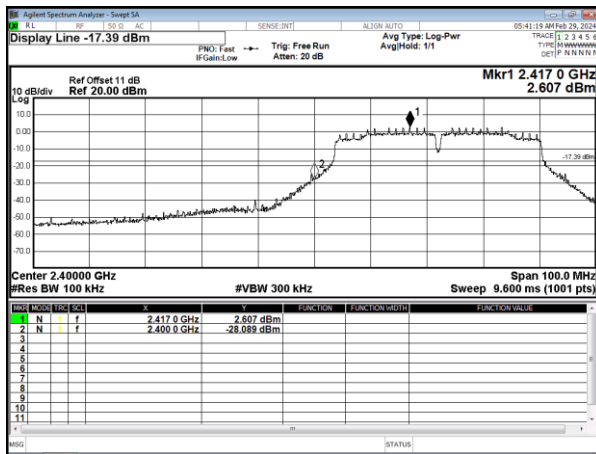


Modulation Standard: 802.11n HT20
Channel: 11

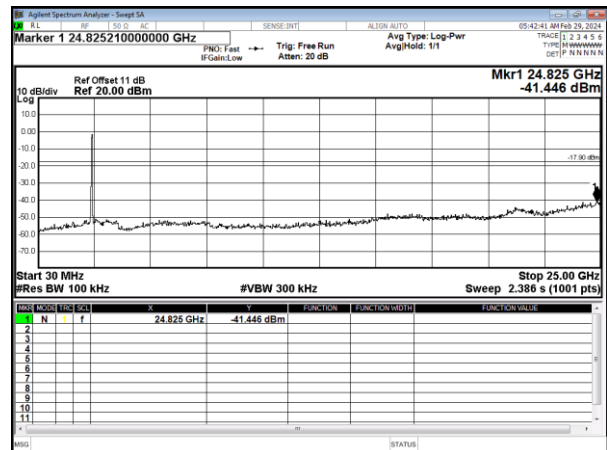
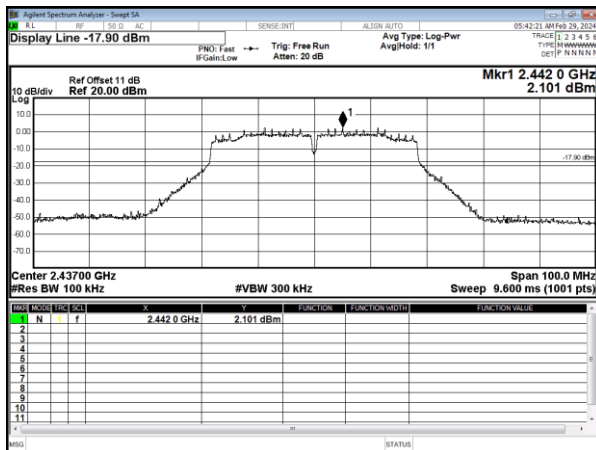




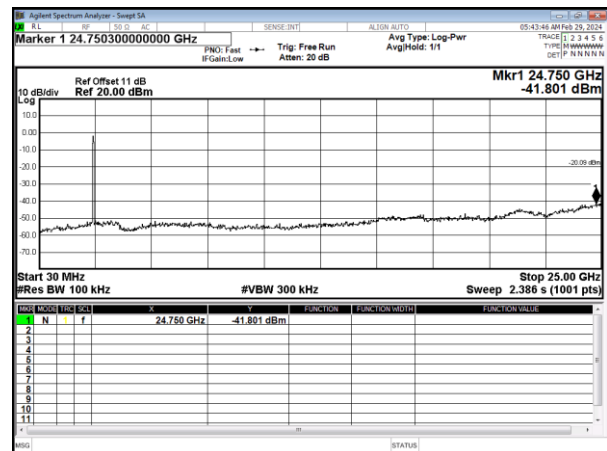
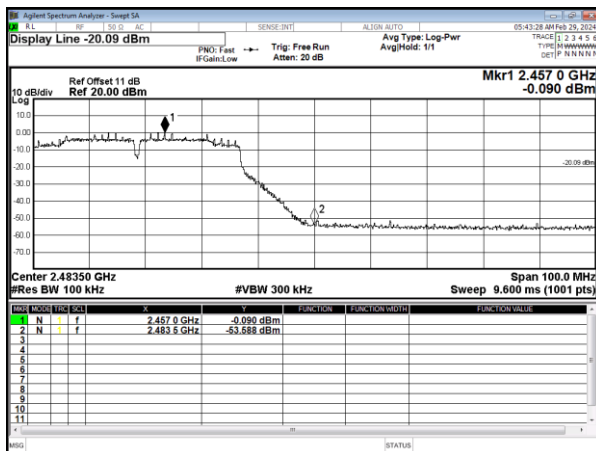
Modulation Standard: 802.11n HT40
Channel: 03



Modulation Standard: 802.11n HT40
Channel: 06

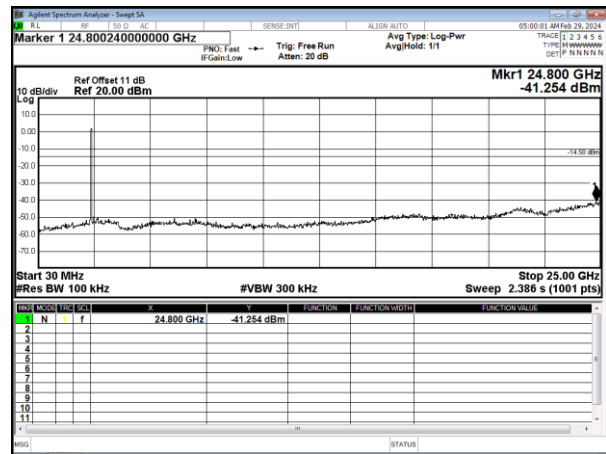
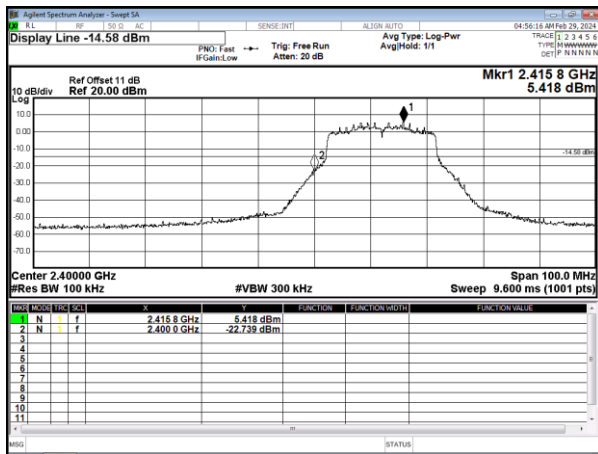


Modulation Standard: 802.11n HT40
Channel: 09

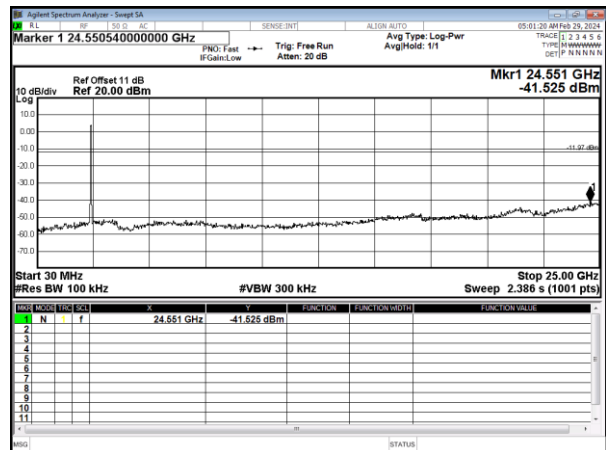
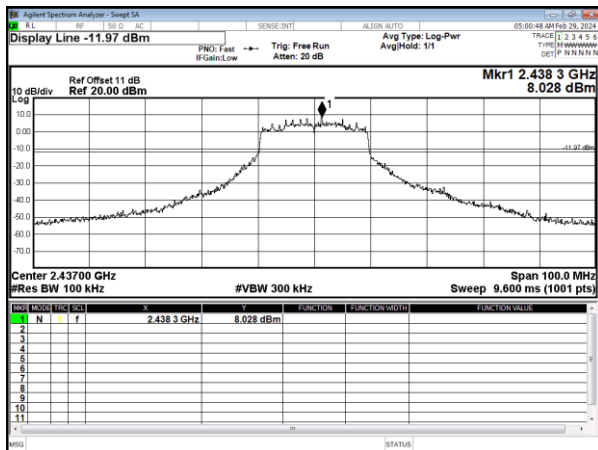




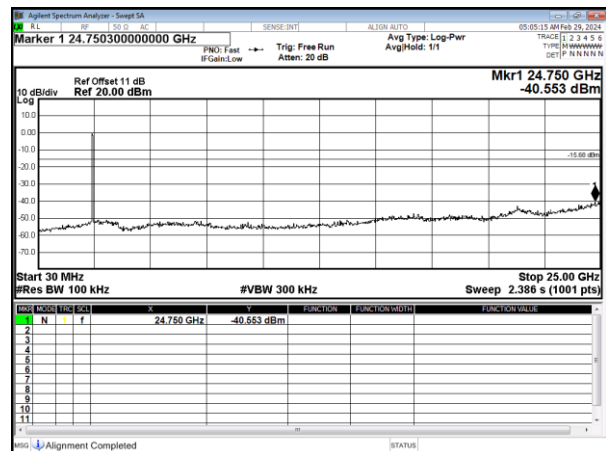
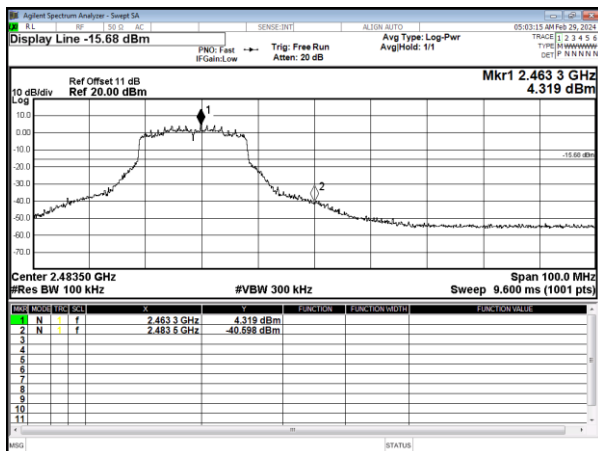
Modulation Standard: 802.11ax HE20
Channel: 01



Modulation Standard: 802.11ax HE20
Channel: 06

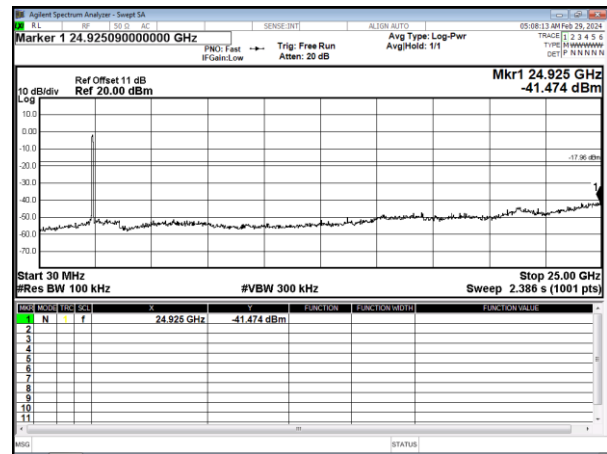
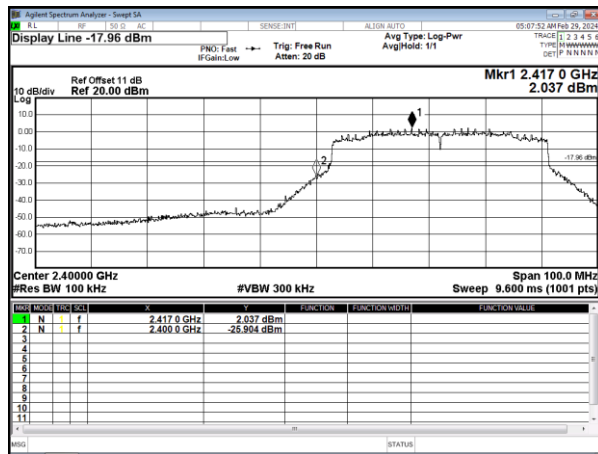


Modulation Standard: 802.11ax HE20
Channel: 11

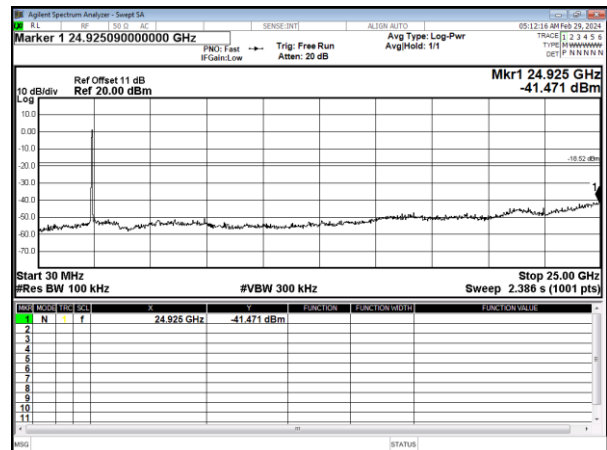
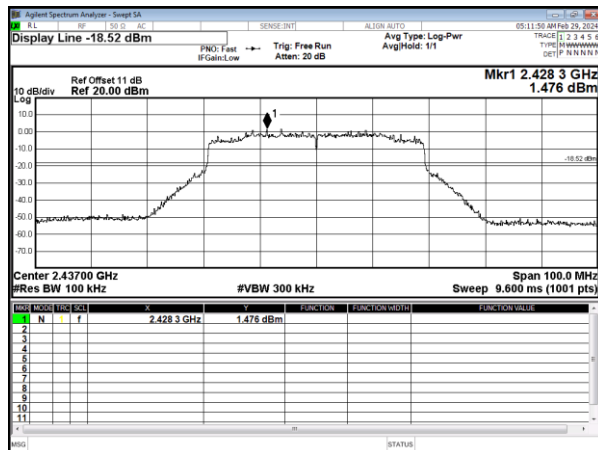




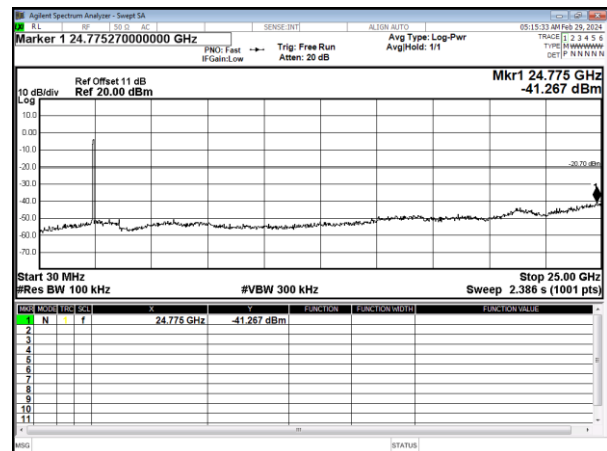
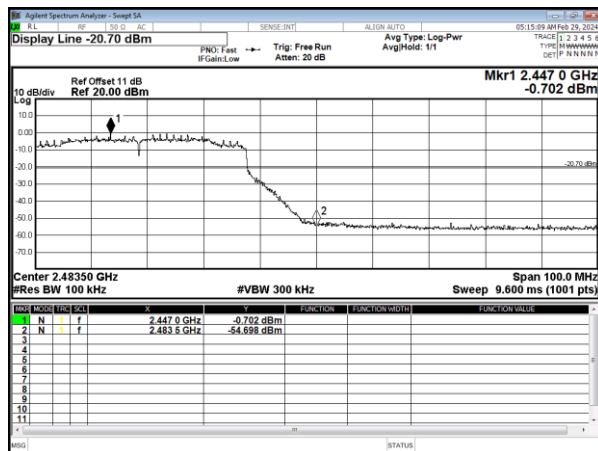
Modulation Standard: 802.11ax HE40
Channel: 03



Modulation Standard: 802.11ax HE40
Channel: 06



Modulation Standard: 802.11ax HE40
Channel: 09





8. On Time, Duty Cycle and Measurement methods

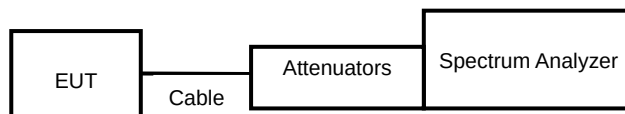
8.1 Test Limit

None; for reporting purposes only.

8.2 Test Procedure

Zero-Span Spectrum Analyzer Method.

8.3 Test Setup Layout

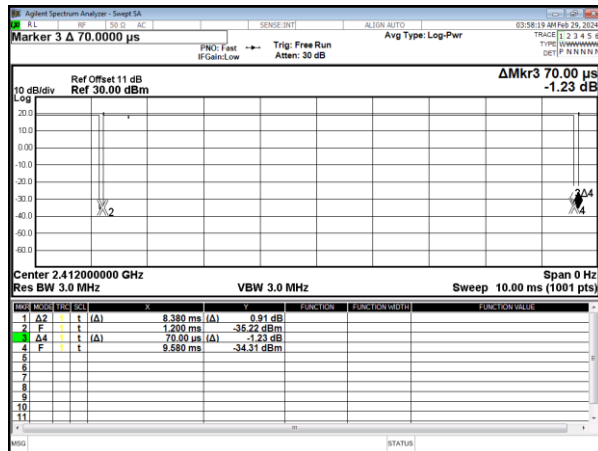


8.4 Test Result and Data

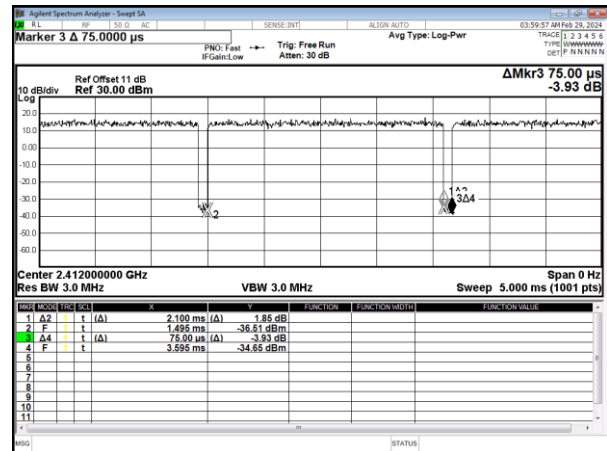
Modulation Type	On Time (ms)	Period Time (ms)	Duty Cycle (%)
11b	8.380	8.450	99.17%
11g	2.100	2.175	96.55%
11n HT20	3.985	4.025	99.01%
11n HT40	3.985	4.015	99.25%
11ax HE20	4.005	4.040	99.13%
11ax HE40	3.990	4.030	99.01%



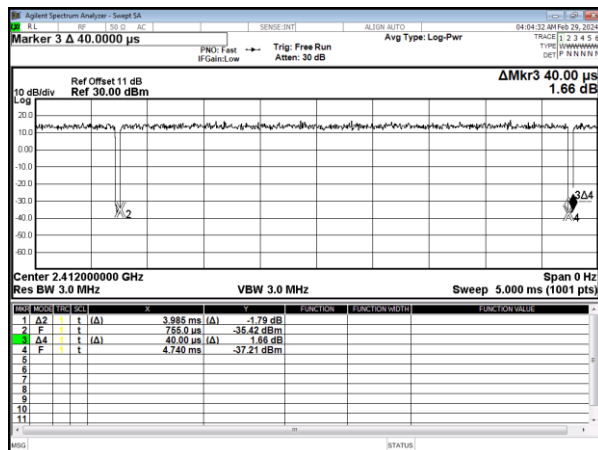
Modulation Type: 802.11b(1Mbps)



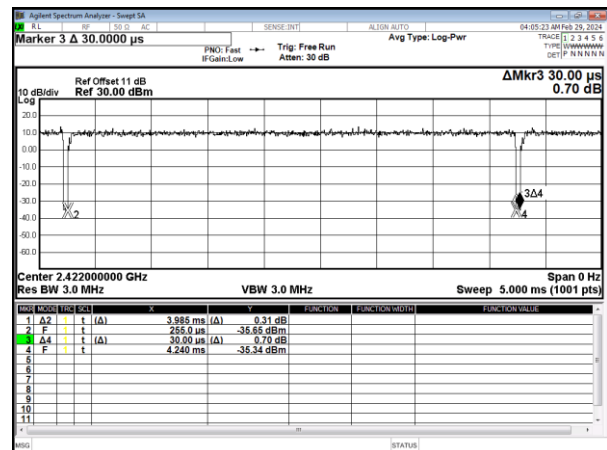
Modulation Type: 802.11g(6Mbps)



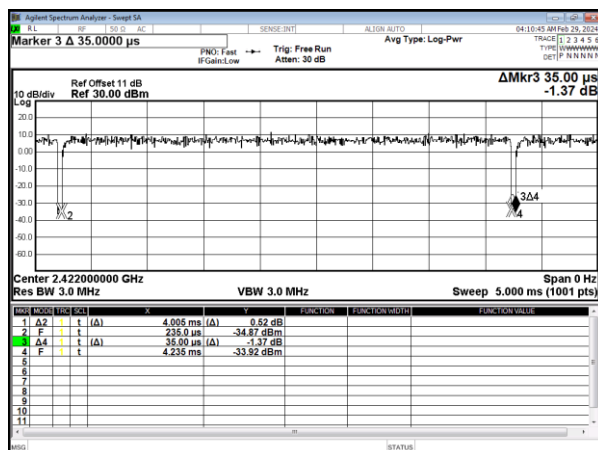
Modulation Type: 802.11n HT20(6.5Mbps)



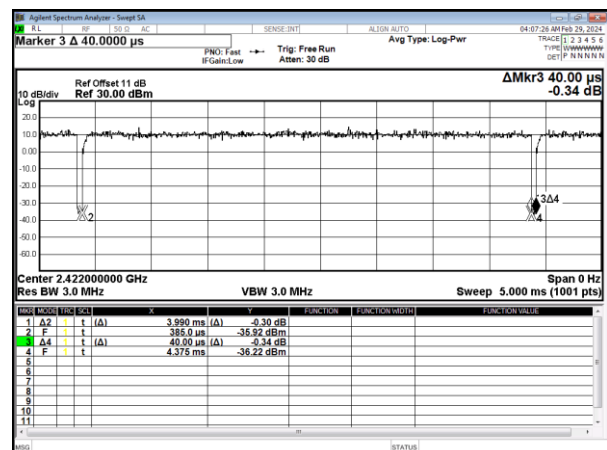
Modulation Type: 802.11n HT40(13.5Mbps)



Modulation Type: 802.11ax HE20 (7.3Mbps)



Modulation Type: 802.11 ax HE40(14.6Mbps)





9. 6dB Bandwidth Measurement Data

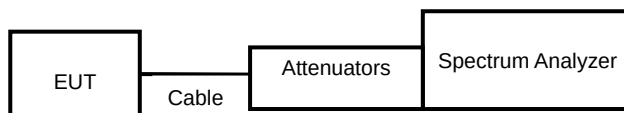
9.1 Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

9.2 Test Procedures

- The transmitter output was connected to the spectrum analyzer.
- Set RBW of spectrum analyzer to 100 KHz and VBW to 300 KHz.
- Set spectrum analyzer X dB to 6 dB.
- Set spectrum analyzer peak detector with maximum hold.

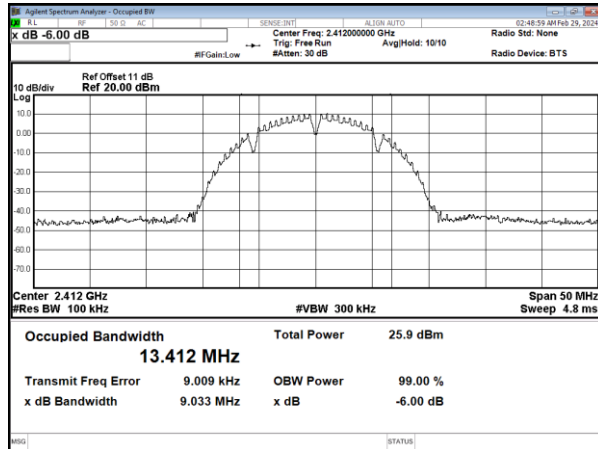
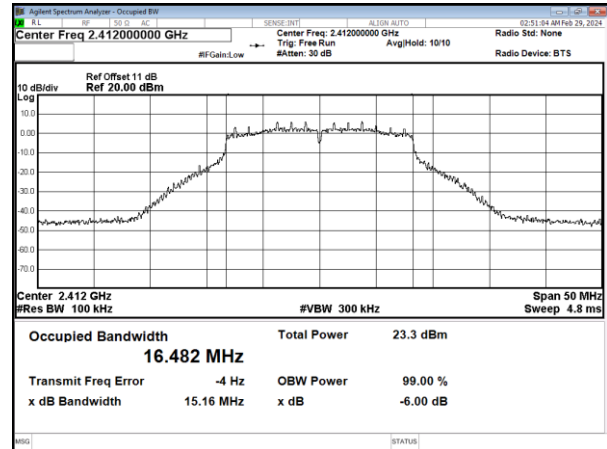
9.3 Test Setup Layout



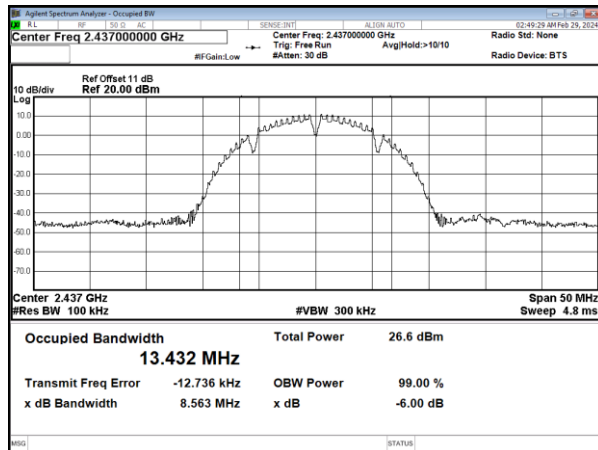


9.4 Test Result and Data

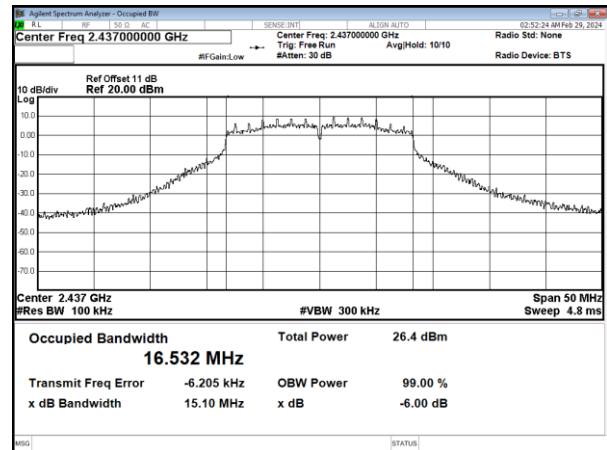
Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)
			ANT A	
IEEE 802.11b	01	2412	9.03	0.5
	06	2437	8.56	0.5
	11	2462	8.62	0.5
IEEE 802.11g	01	2412	15.16	0.5
	06	2437	15.10	0.5
	11	2462	15.15	0.5
IEEE 802.11n HT20	01	2412	15.67	0.5
	06	2437	15.16	0.5
	11	2462	16.45	0.5
IEEE 802.11n HT40	03	2422	35.14	0.5
	06	2437	33.84	0.5
	09	2452	35.09	0.5
IEEE 802.11ax HE20	01	2412	17.12	0.5
	06	2437	16.96	0.5
	11	2462	17.66	0.5
IEEE 802.11ax HE40	03	2422	34.23	0.5
	06	2437	32.67	0.5
	09	2452	32.95	0.5

Modulation Type: 802.11b
CH01Modulation Type: 802.11g
CH01

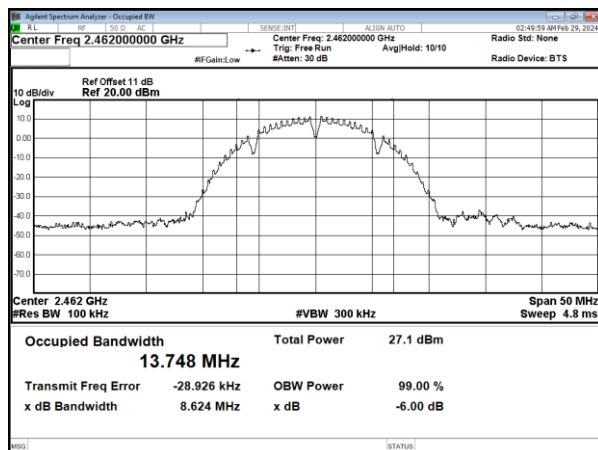
CH06



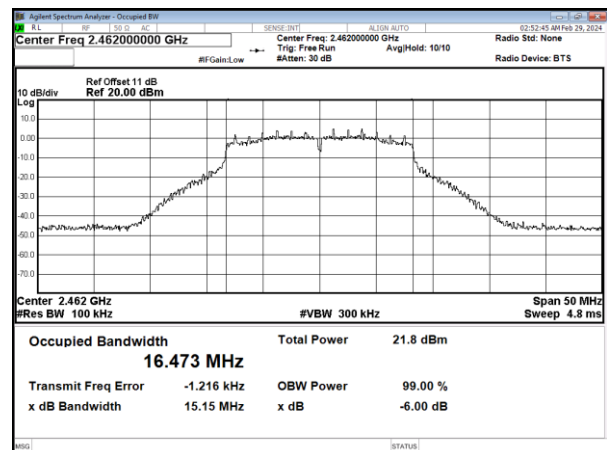
CH06

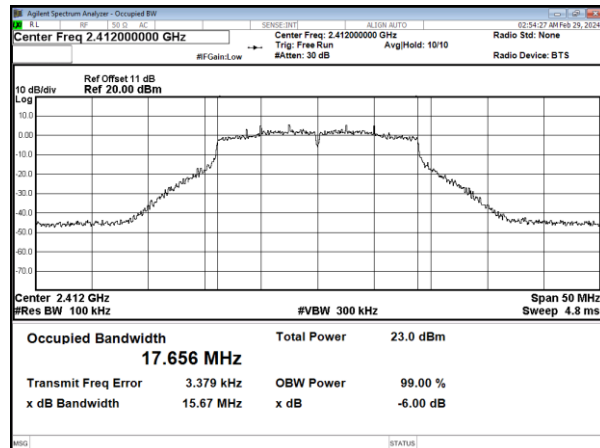
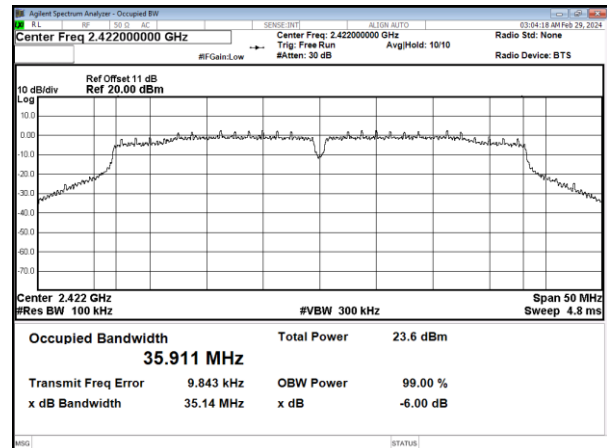


CH11

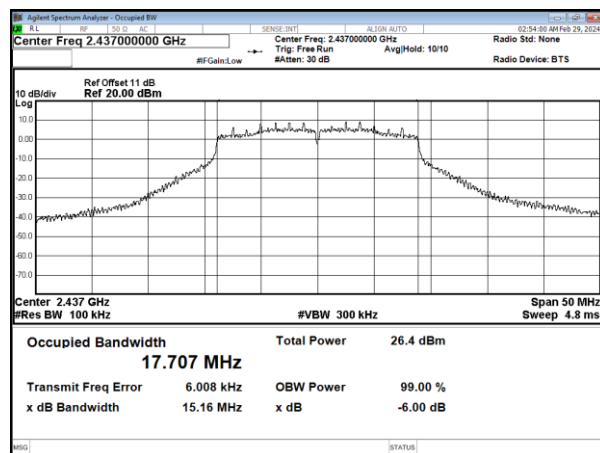


CH11

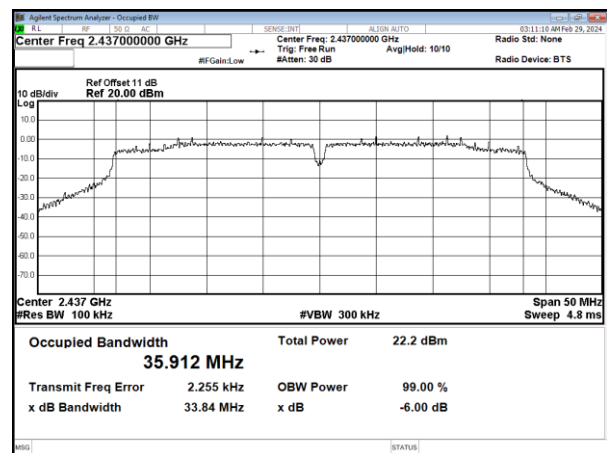


Modulation Type: IEEE 802.11n HT20
CH01Modulation Type: IEEE 802.11n HT40
CH03

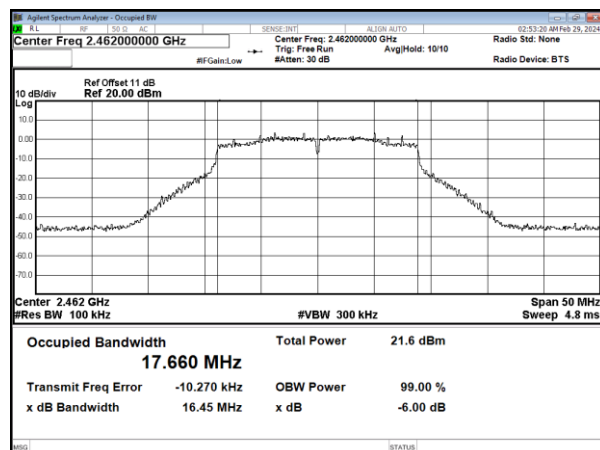
CH06



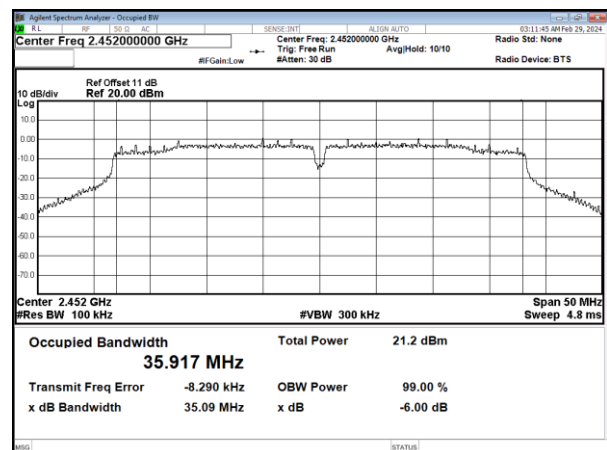
CH06



CH11

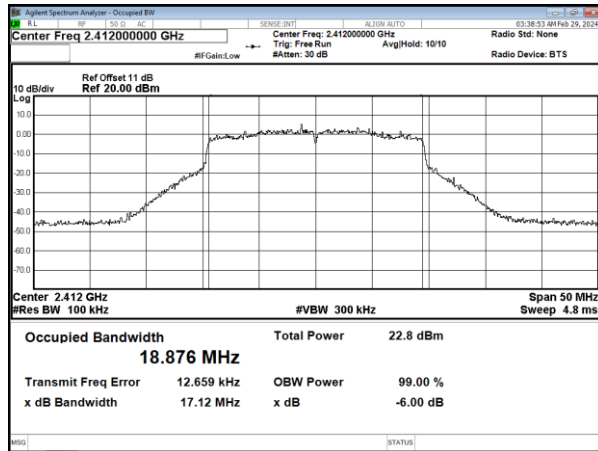


CH09

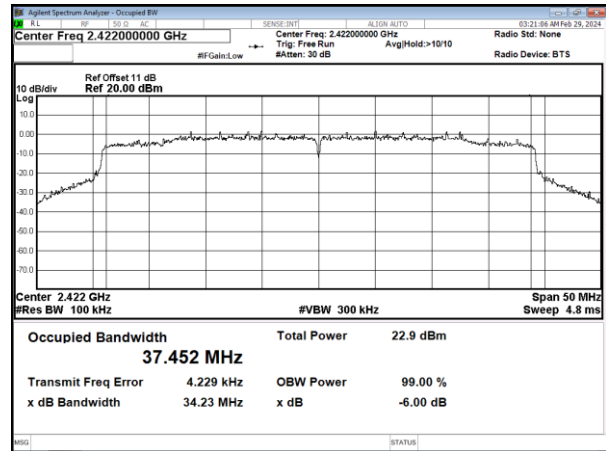




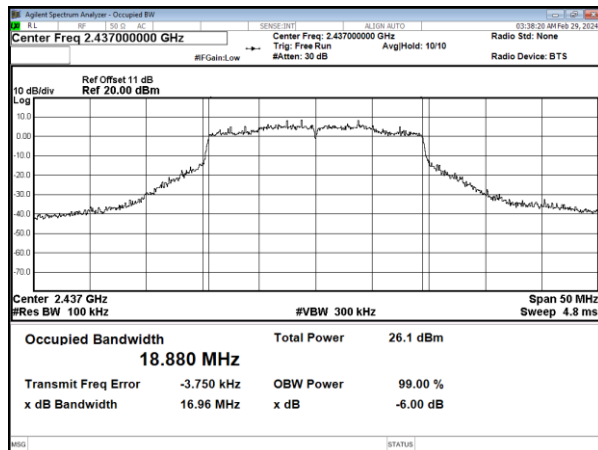
Modulation Type: IEEE 802.11ax HE20
CH01



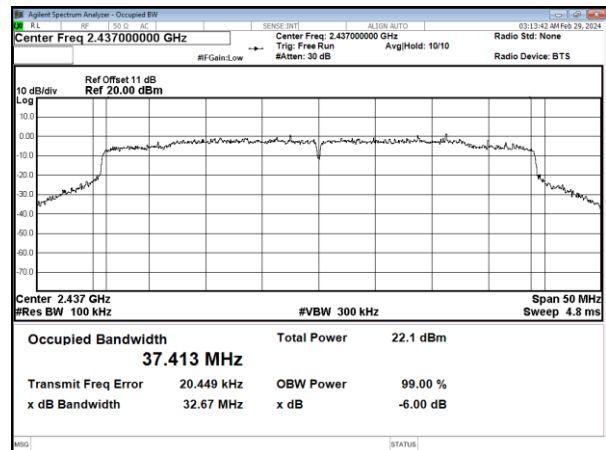
Modulation Type: IEEE 802.11ax HE40
CH03



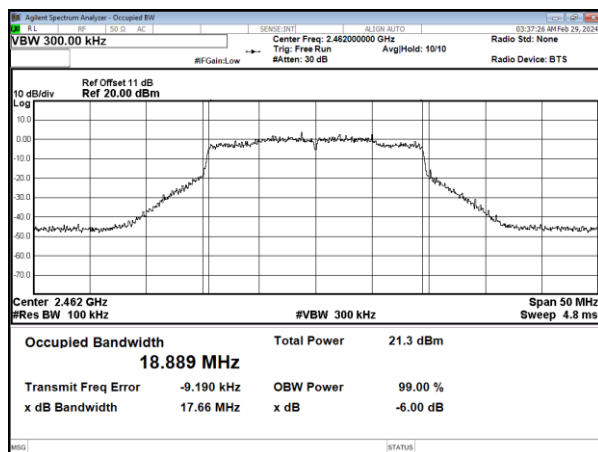
CH06



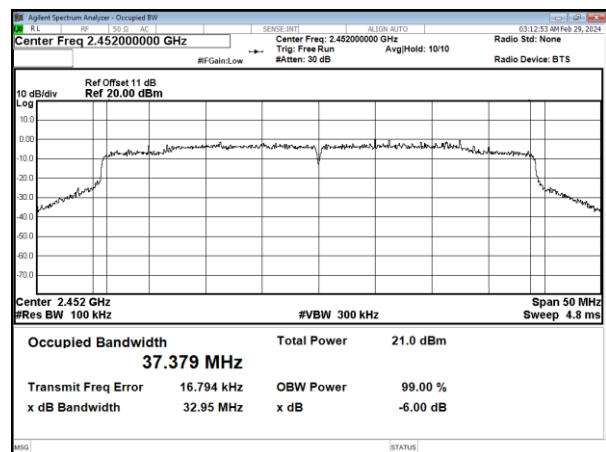
CH06



CH11



CH09





10. Maximum Peak Output Power

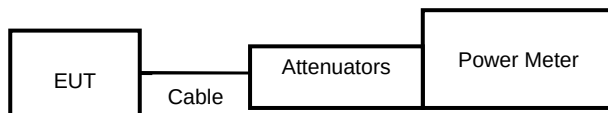
10.1 Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

10.2 Test Procedures

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

10.3 Test Setup Layout



**10.4 Test Result and Data**

Modulation Type	Channel	Frequency (MHz)	Conducte d(peak) output power (dBm)	Total peak power (mW)	Power Limit (dBm)
			ANT A		
11b	1	2412	21.46	139.959	30.00
	6	2437	22.37	172.584	30.00
	11	2462	22.25	167.880	30.00
11g	1	2412	23.43	220.293	30.00
	6	2437	26.72	469.894	30.00
	11	2462	22.62	182.810	30.00
11n HT20	1	2412	23.48	222.844	30.00
	6	2437	26.57	453.942	30.00
	11	2462	22.46	176.198	30.00
11n HT40	3	2422	23.35	216.272	30.00
	6	2437	23.06	202.302	30.00
	9	2452	20.79	119.950	30.00
802.11ax HE20	1	2412	23.83	241.546	30.00
	6	2437	26.75	473.151	30.00
	11	2462	22.43	174.985	30.00
802.11ax HE40	3	2422	23.92	246.604	30.00
	6	2437	23.68	233.346	30.00
	9	2452	21.56	143.219	30.00

Modulation Type	Channel	Frequency (MHz)	Conducte d(peak) output power (dBm)	Total peak power (mW)	Power Limit (dBm)
			ANT B		
11b	1	2412	21.37	137.088	30.00
	6	2437	22.28	169.044	30.00
	11	2462	22.14	163.682	30.00
11g	1	2412	23.42	219.786	30.00
	6	2437	26.28	424.620	30.00
	11	2462	22.43	174.985	30.00
11n HT20	1	2412	23.35	216.272	30.00
	6	2437	25.70	371.535	30.00
	11	2462	21.32	135.519	30.00
11n HT40	3	2422	23.07	202.768	30.00
	6	2437	22.40	173.780	30.00
	9	2452	20.64	115.878	30.00
802.11ax HE20	1	2412	23.47	222.331	30.00
	6	2437	26.35	431.519	30.00
	11	2462	21.48	140.605	30.00
802.11ax HE40	3	2422	23.55	226.464	30.00
	6	2437	22.63	183.231	30.00
	9	2452	21.19	131.522	30.00



11. Power Spectral Density

11.1 Test Limit

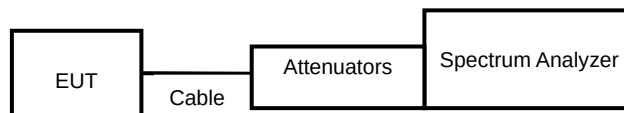
The Maximum of Power Spectral Density Measurement is 8dBm.

If transmitting antennas of directional gain greater than 6 dBi are used, the power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

11.2 Test Procedures

- The transmitter output was connected to spectrum analyzer.
- The spectrum analyzer's resolution bandwidth were set at 3kHz RBW and 10KHz VBW as that of the fundamental frequency. Set the sweep time=auto couple.
- The power spectral density was measured and recorded.

11.3 Test Setup Layout





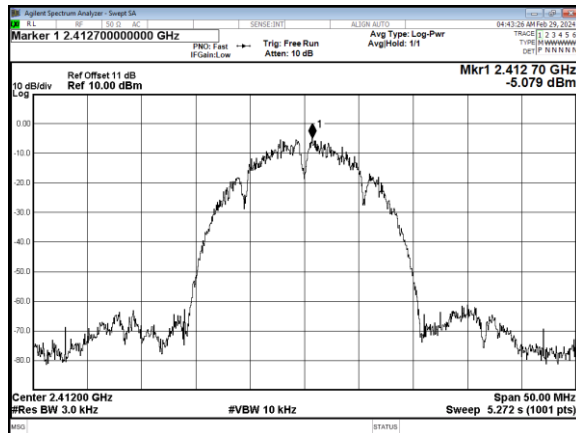
11.4 Test Result and Data

SISO

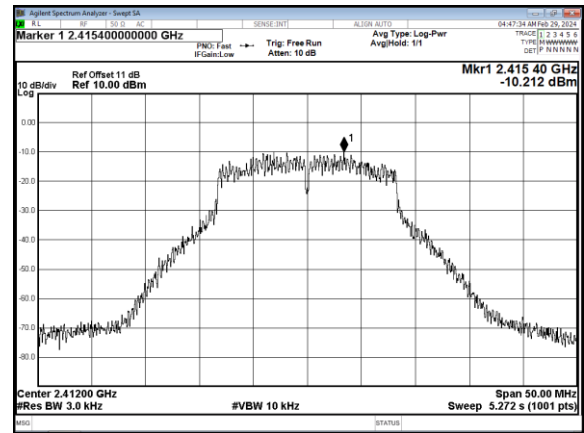
Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 3KHz Bandwidth(dBm)		Limit (dBm)
			ANT A	ANT B	
11b	1	2412	-5.079	-5.8	8.00
	6	2437	-3.524	-4.107	8.00
	11	2462	-4.324	-2.977	8.00
11g	1	2412	-10.212	-9.257	8.00
	6	2437	-6.636	-6.49	8.00
	11	2462	-10.037	-12.122	8.00
11n HT20	1	2412	-9.283	-9.728	8.00
	6	2437	-6.818	-7.634	8.00
	11	2462	-10.744	-11.192	8.00
11n HT40	3	2422	-13.203	-12.312	8.00
	6	2437	-13.742	-12.485	8.00
	9	2452	-15.097	-15.246	8.00
802.11ax HE20	1	2412	-11.282	-11.138	8.00
	6	2437	-7.483	-7.29	8.00
	11	2462	-11.57	-12.198	8.00
802.11ax HE40	3	2422	-13.679	-13.757	8.00
	6	2437	-14.473	-14.879	8.00
	9	2452	-14.645	-15.754	8.00



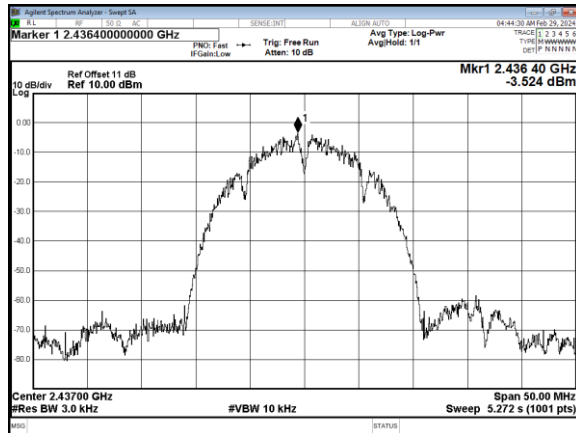
SISO (ANT A)
Modulation Type: 802.11b
CH01



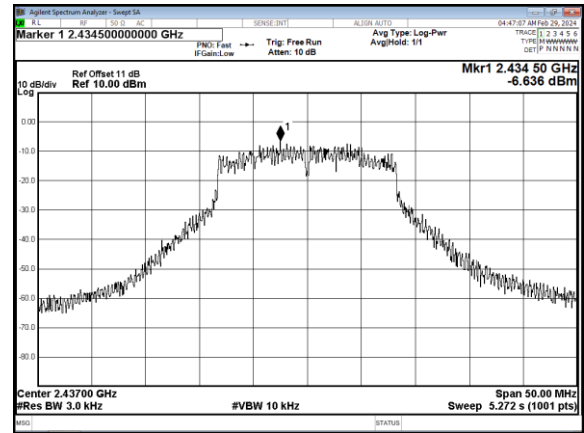
Modulation Type: 802.11g
CH01



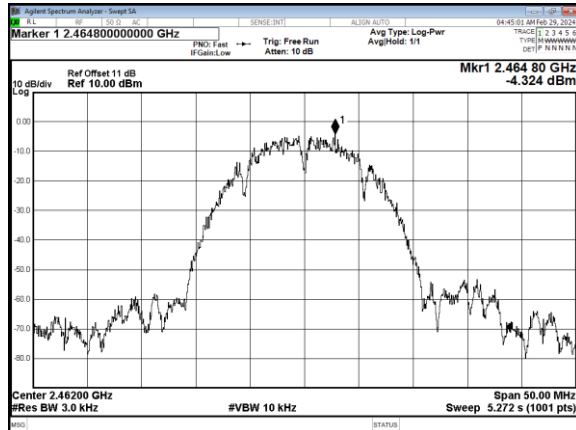
CH06



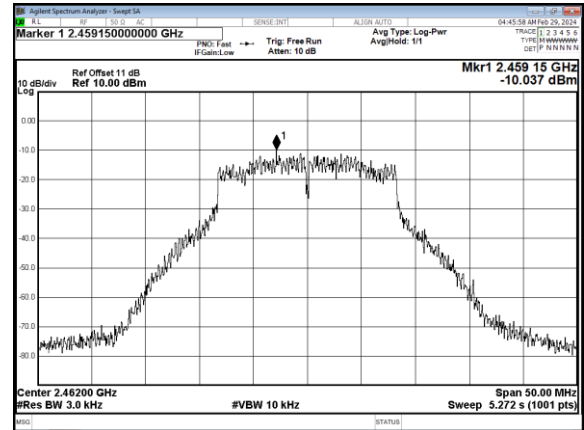
CH06

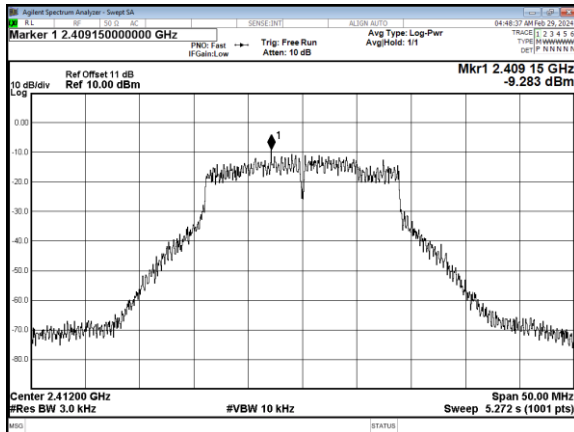
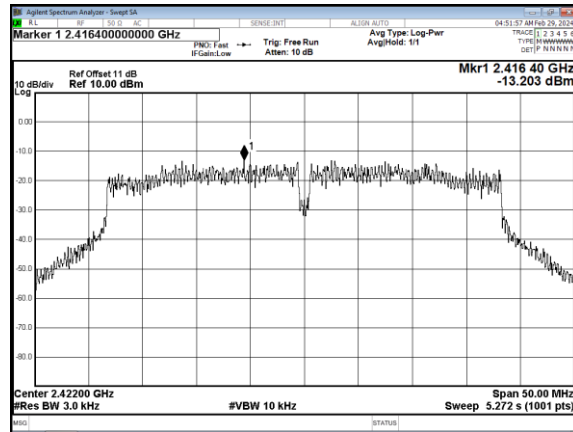


CH11

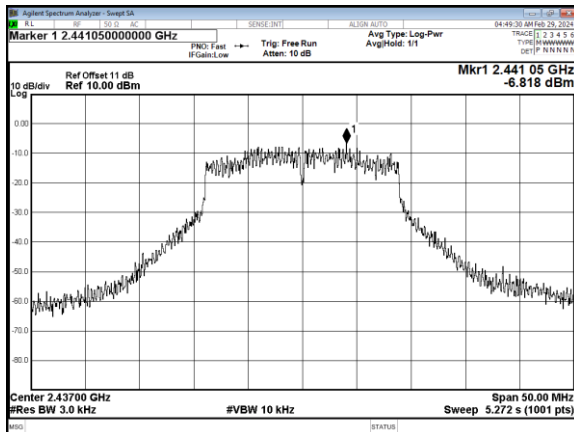


CH11

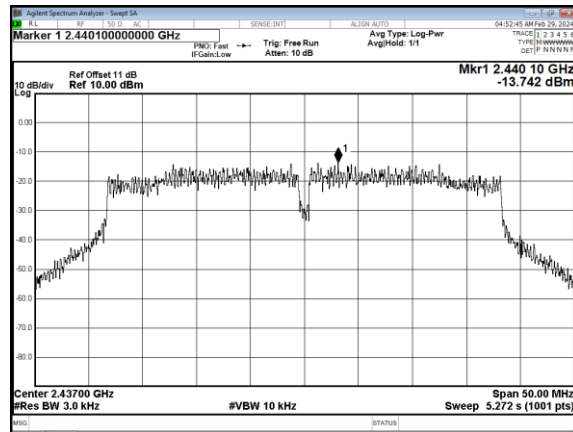


Modulation Type: 802.11n HT20
CH01Modulation Type: 802.11n HT40
CH03

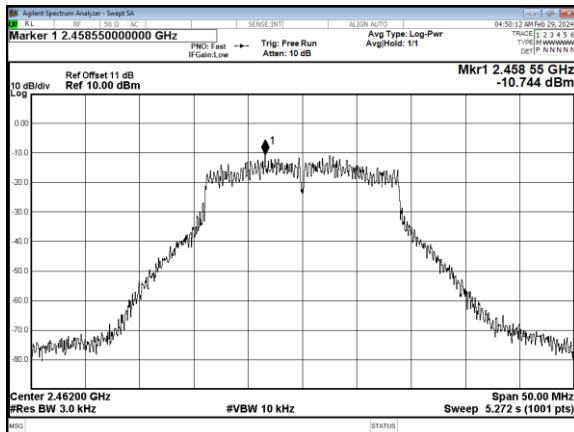
CH06



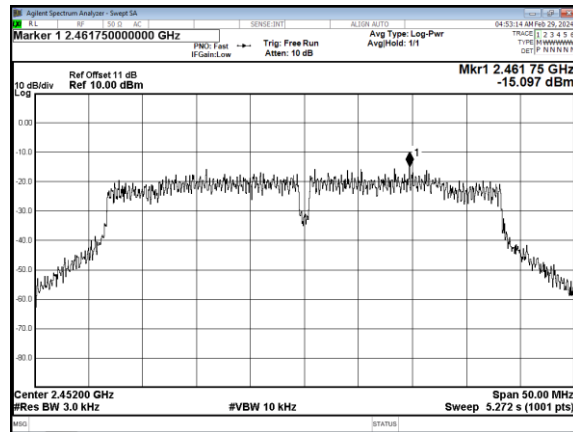
CH06

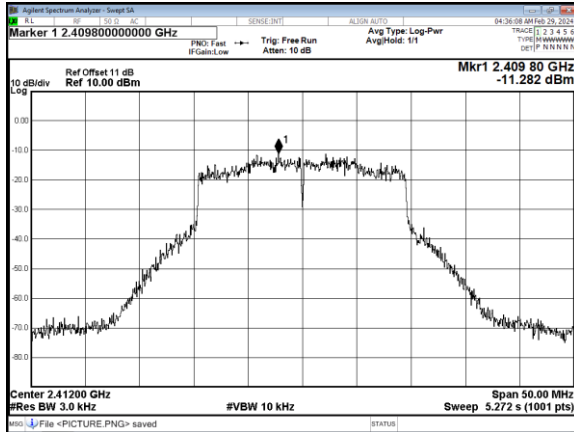
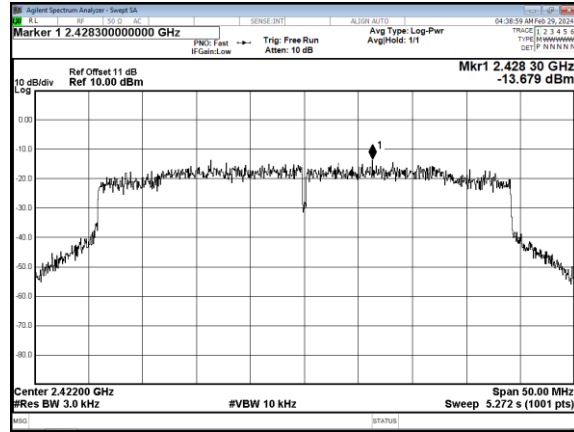


CH11

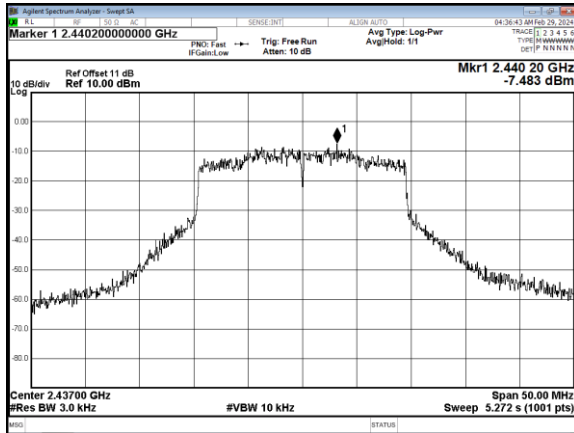


CH09

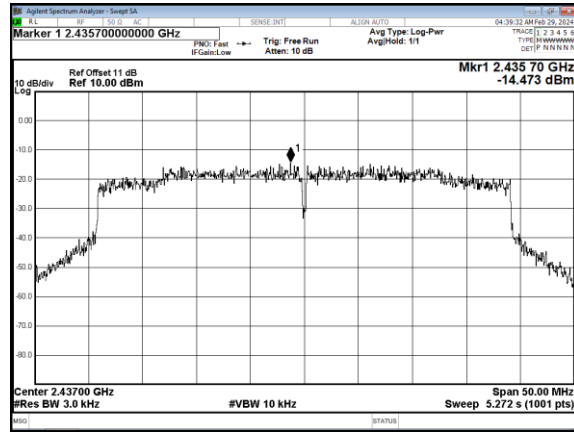


Modulation Type: 802.11ax HE20
CH01Modulation Type: 802.11ax HE40
CH03

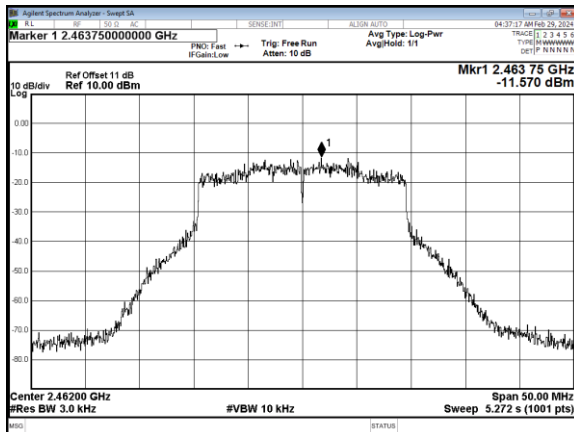
CH06



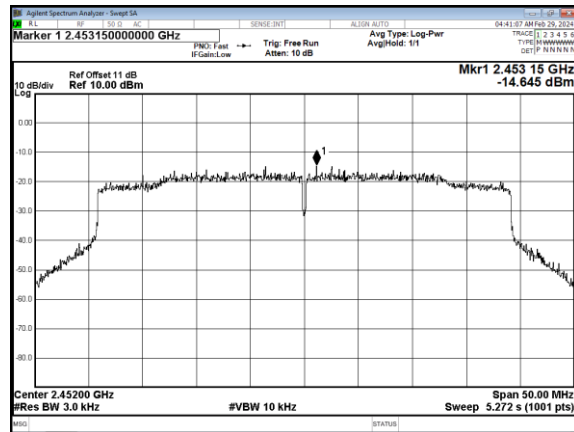
CH06



CH11



CH09

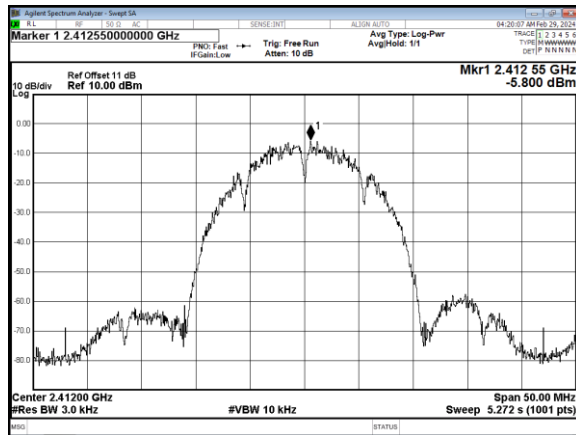




SISO (ANT B)

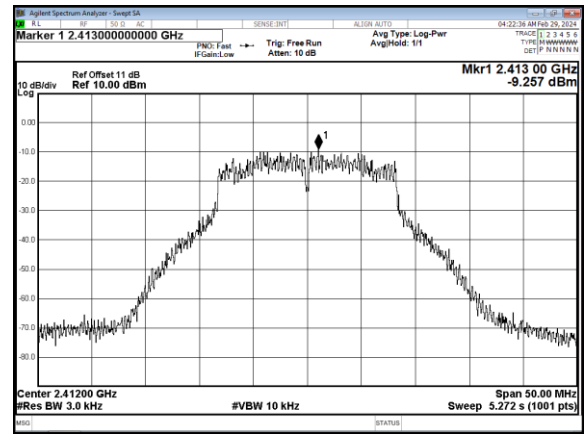
Modulation Type: 802.11b

CH01

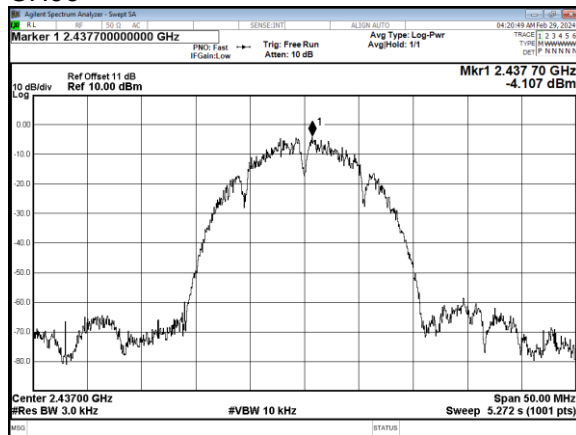


Modulation Type: 802.11g

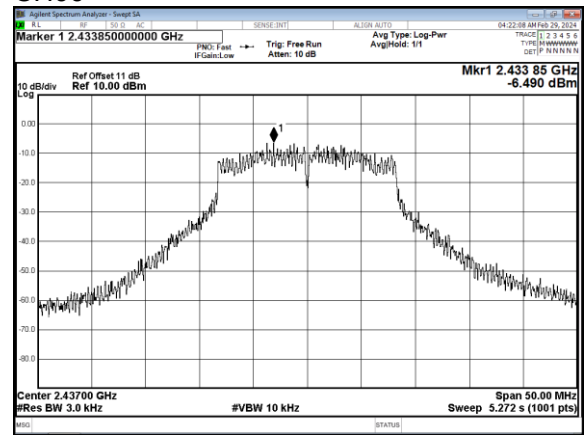
CH01



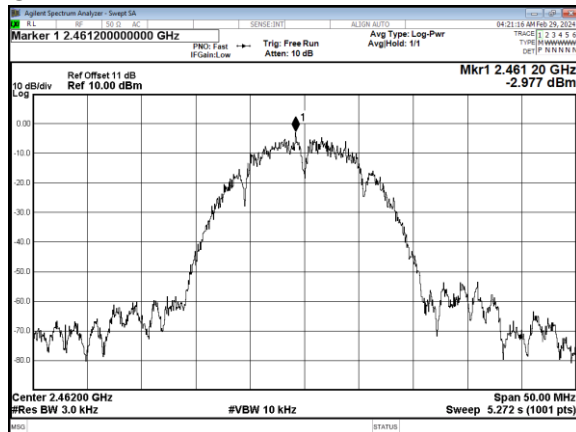
CH06



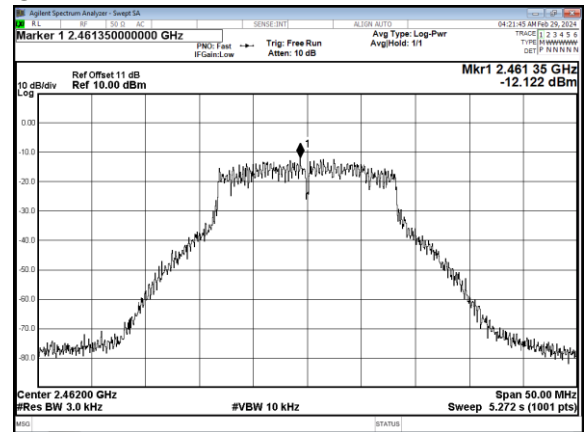
CH06

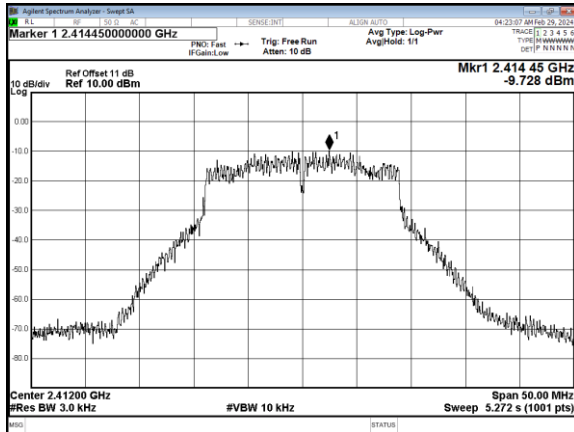
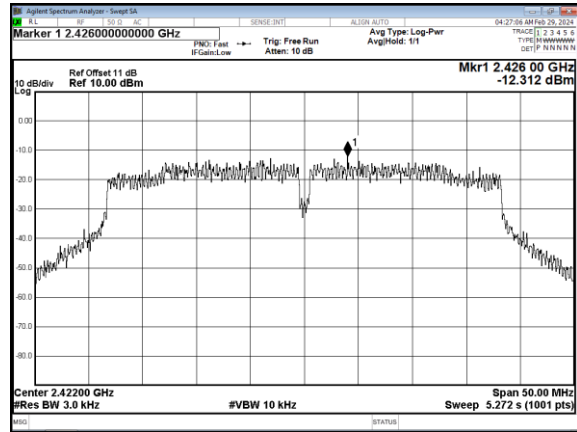


CH11

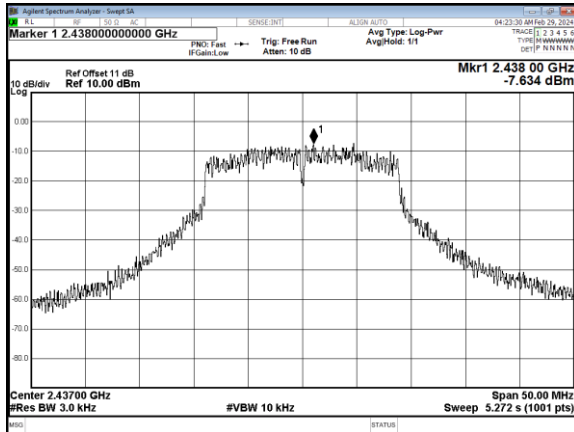


CH11

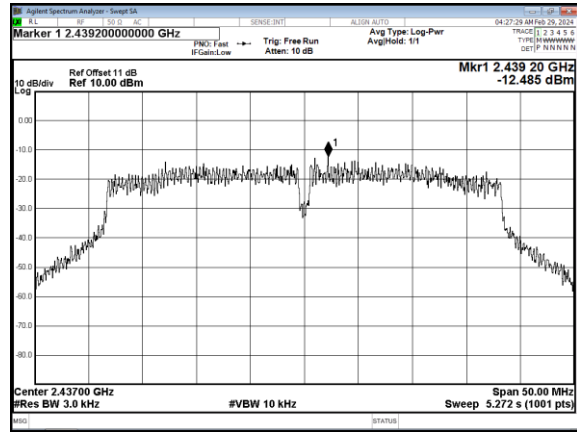


Modulation Type: 802.11n HT20
CH01Modulation Type: 802.11n HT40
CH03

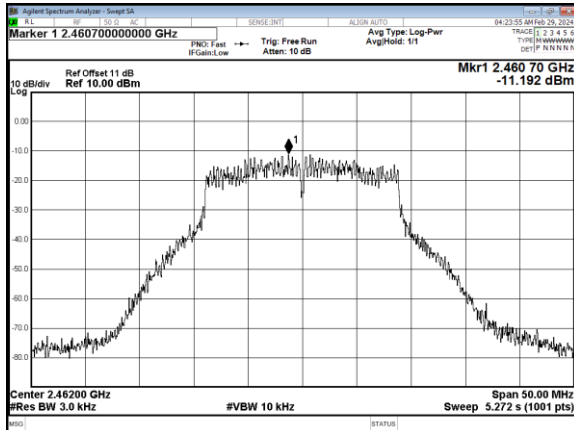
CH06



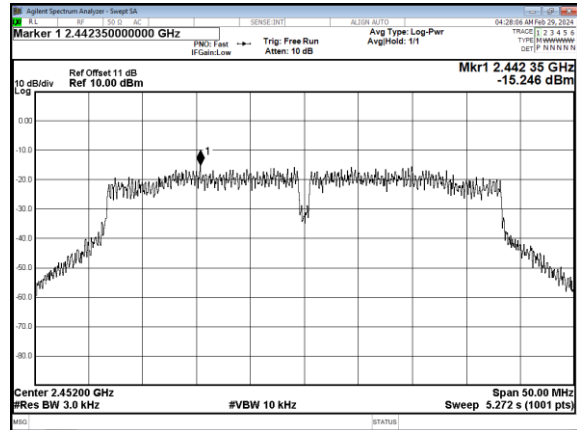
CH06

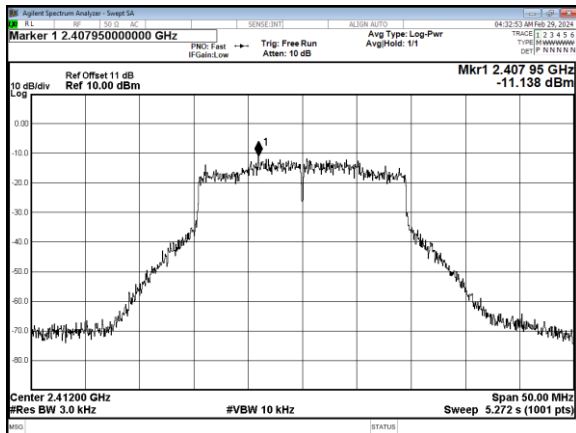
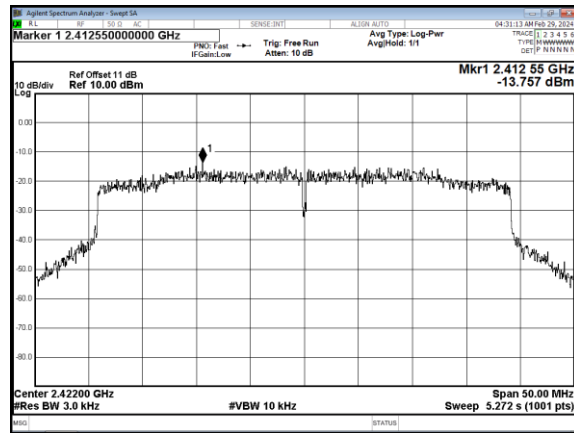


CH11

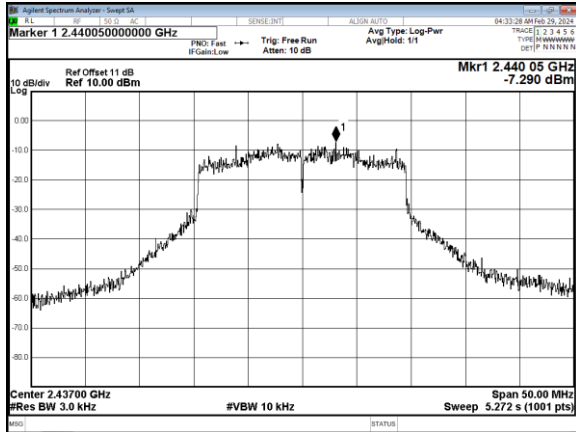


CH09

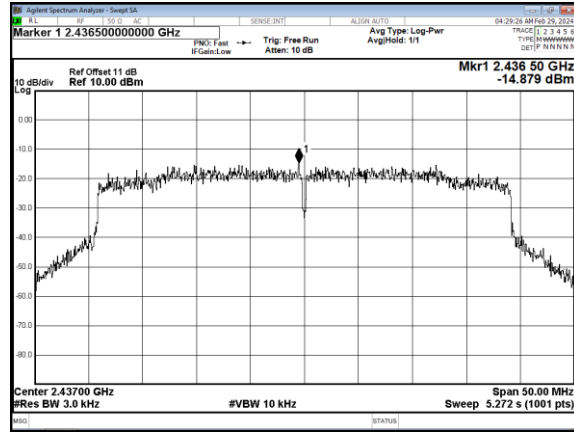


Modulation Type: 802.11ax HE20
CH01Modulation Type: 802.11ax HE40
CH03

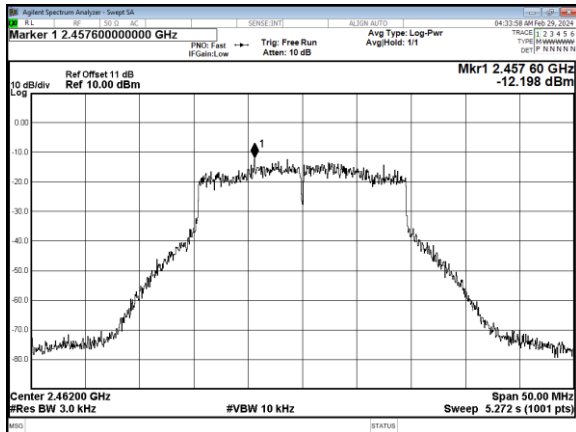
CH06



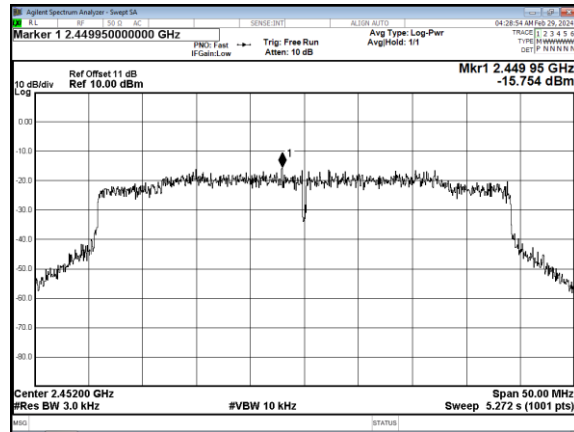
CH06



CH11



CH09



----- End of the report -----