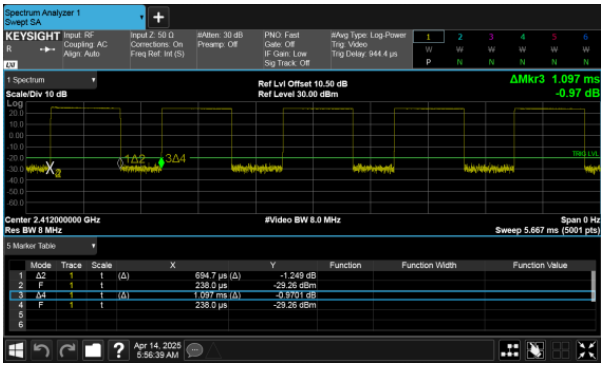
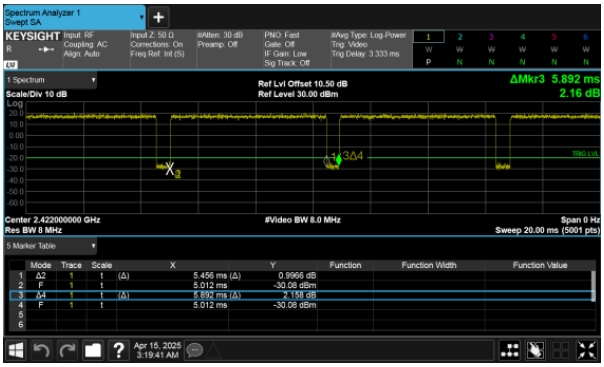
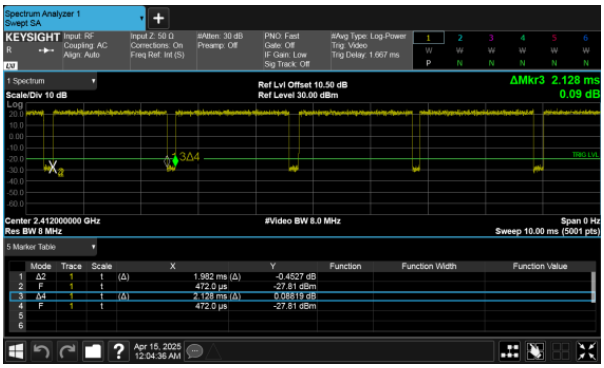
Modulation Type: 802.11b



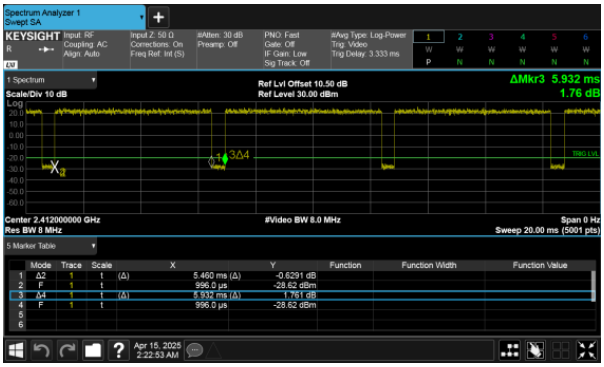
Modulation Type: 802.11ax HE40



Modulation Type: 802.11g



Modulation Type: 802.11ax HE20



9. 6dB Bandwidth Measurement Data

9.1 Test Limit

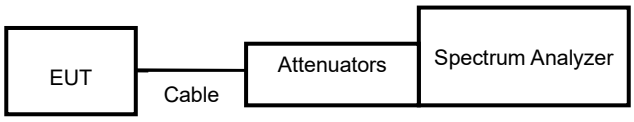
The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

9.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.8

a. The transmitter output was connected to the spectrum analyzer.
b. Set RBW of spectrum analyzer to 100 KHz and VBW to 300 KHz.
c. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.
d. The 6dB Bandwidth was measured and recorded.

9.3 Test Setup Layout



9.4 Test Result and Data

Modulation Type	Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Limit (MHz)
			ANT A	ANT B	
11b	1	2412	8.57	8.10	0.5
	6	2437	7.59	7.59	0.5
	11	2462	8.54	7.15	0.5
11g	1	2412	13.75	15.08	0.5
	6	2437	15.27	13.71	0.5
	11	2462	11.27	15.10	0.5
11ax HE20	1	2412	12.53	13.82	0.5
	6	2437	15.03	11.39	0.5
	11	2462	14.37	15.09	0.5
11ax HE40	3	2422	32.59	28.35	0.5
	6	2437	35.97	33.79	0.5
	9	2452	35.03	32.29	0.5

6dB Bandwidth
Modulation Type: 802.11b
CH01 Ant 1

Modulation Type: 802.11b
CH01 Ant 2

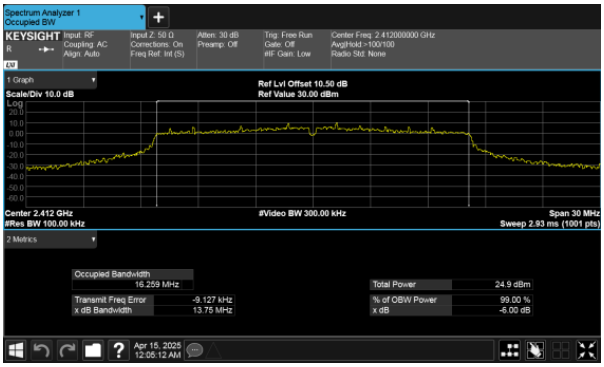
CH06 Ant 1

CH06 Ant 2

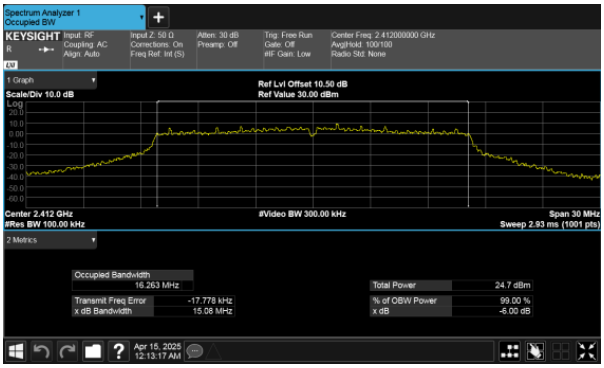
CH11 Ant 1

CH11 Ant 2

6dB Bandwidth
Modulation Type: 802.11g
CH01 Ant 1



Modulation Type: 802.11g
CH01 Ant 2

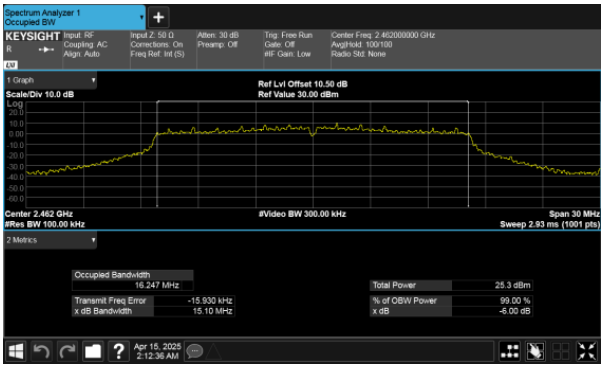


CH06 Ant 1

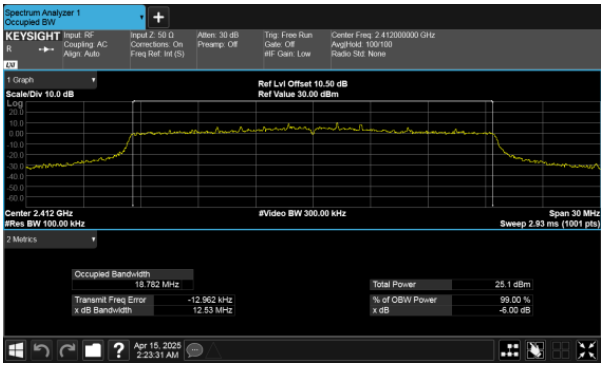
CH06 Ant 2

CH11 Ant 1

CH11 Ant 2



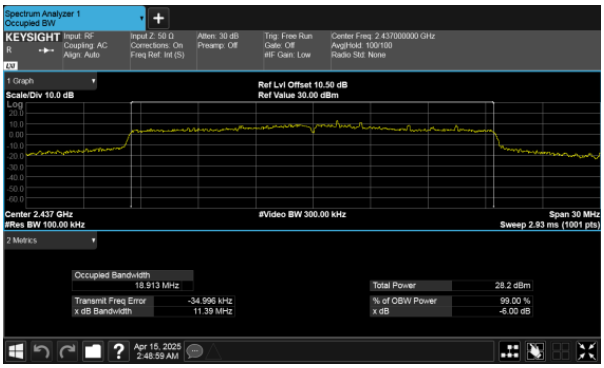
6dB Bandwidth
Modulation Type: 802.11ax HE20
CH01 Ant 1



Modulation Type: 802.11ax HE20
CH01 Ant 2

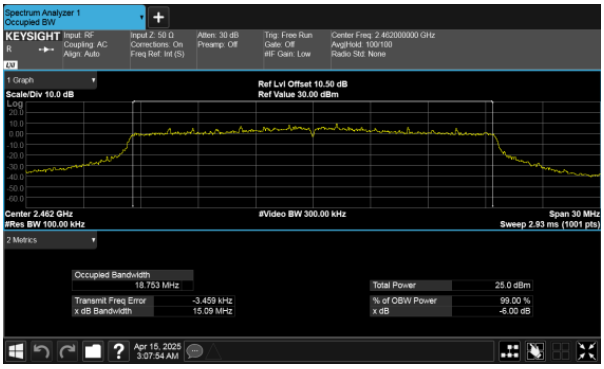
CH06 Ant 1

CH06 Ant 2



CH11 Ant 1

CH11 Ant 2



6dB Bandwidth
Modulation Type: 802.11ax HE40
CH03 Ant 1

Modulation Type: 802.11ax HE40
CH03 Ant 2

CH06 Ant 1

CH06 Ant 2

CH09 Ant 1

CH09 Ant 2

10. Maximum Average Output Power

10.1 Test Limit

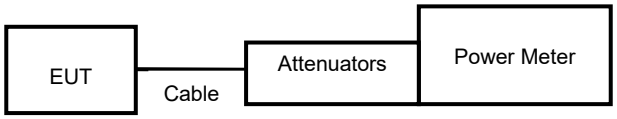
The Maximum Average Output Power Measurement is 30dBm.
If transmitting antennas of directional gain greater than 6 dBi are used, the average output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi

10.2 Test Procedures

According to the methods defined in ANSI C63.10-2013 Section 11.9.2.3.2

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

Non Beamforming

Data Rate	Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)		Total AV power (dBm)	Total AV power (mW)	Powe Limit (dBm)
					ANT A	ANT B			
1	21	11b	1	2412	20.95	20.99	23.98	250.054	30.00
	18		6	2437	18.73	19.11	21.93	156.115	30.00
	17.5		11	2462	17.57	17.88	20.74	118.524	30.00
6	18.5	11g	1	2412	18.75	18.77	21.77	150.325	30.00
	21.5		6	2437	21.28	21.27	24.29	268.244	30.00
	19		11	2462	19.03	19.38	22.22	166.680	30.00
NSS1-MCS0	18	11ax HE20	1	2412	17.80	18.01	20.92	123.497	30.00
	22		6	2437	21.31	21.57	24.45	278.756	30.00
	18.5		11	2462	18.37	18.47	21.43	139.014	30.00
NSS1-MCS0	16	11ax HE40	3	2422	15.82	16.12	18.98	79.120	30.00
	17.5		6	2437	17.11	17.58	20.36	108.684	30.00
	17		9	2452	16.81	17.25	20.05	101.062	30.00

Beamforming

Data Rate	Setting	Modulation Mode	Channel	Frequency (MHz)	Conducted(average) output power (dBm)		Total AV power (dBm)	Total AV power (mW)	Powe Limit (dBm)
					ANT A	ANT B			
NSS1-MCS0	15	11ax HE20	1	2412	15.06	14.52	17.81	60.377	30.00
	18.5		6	2437	18.57	18.14	21.37	137.108	30.00
	15.5		11	2462	15.71	15.20	18.47	70.352	30.00
NSS1-MCS0	13	11ax HE40	3	2422	13.18	12.48	15.85	38.498	30.00
	14		6	2437	14.22	13.74	17.00	50.083	30.00
	14		9	2452	14.27	13.70	17.00	50.172	30.00

11. Power Spectral Density

11.1 Test Limit

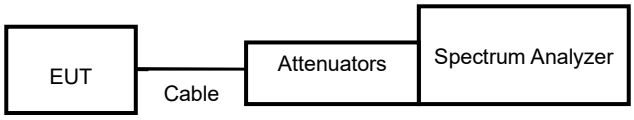
The Maximum of Power Spectral Density Measurement is 8dBm.

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

According to the methods defined in ANSI C63.10-2013 Section 11.10

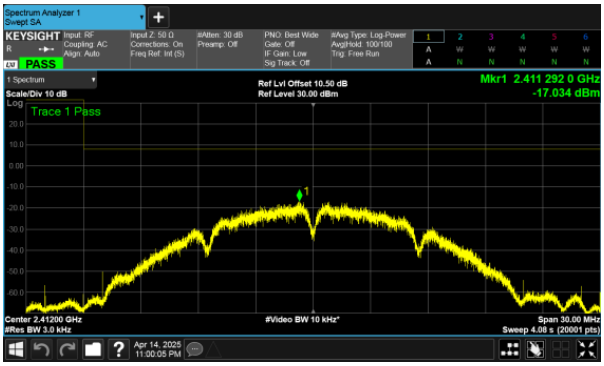
11.3 Test Setup Layout



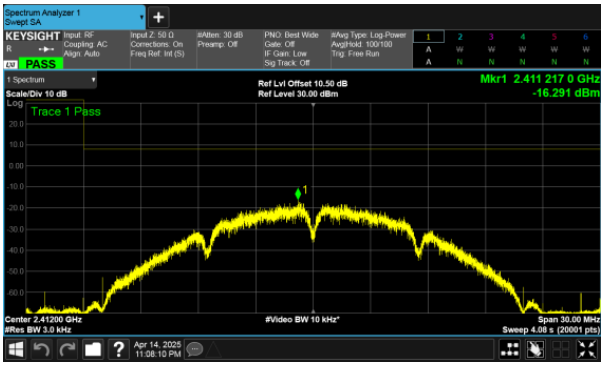
11.4 Test Result and Data

Modulation Type	Channel	Frequency (MHz)	Maximum Power Density of 100KHz Bandwidth(dBm)		Sum chain (dBm)	Duty Cycle CF(dB)	Total PSD (dBm)	Limit (dBm)
			ANT A	ANT B				
11b	1	2412	-17.034	-16.291	-13.64	1.98	-11.66	8.00
	6	2437	-18.63	-18.248	-15.42	1.98	-13.44	8.00
	11	2462	-19.976	-20.371	-17.16	1.98	-15.18	8.00
11g	1	2412	-13.825	-14.161	-10.98	0.31	-10.67	8.00
	6	2437	-10.544	-11.859	-8.14	0.31	-7.83	8.00
	11	2462	-13.775	-13.63	-10.69	0.31	-10.38	8.00
11ax HE20	1	2412	-19.421	-19.69	-16.54	0.36	-16.18	8.00
	6	2437	-15.655	-16.13	-12.88	0.36	-12.52	8.00
	11	2462	-18.696	-18.612	-15.64	0.36	-15.28	8.00
11ax HE40	3	2422	-10.426	-12.294	-8.25	0.33	-7.92	8.00
	6	2437	-9.554	-9.872	-6.70	0.33	-6.37	8.00
	9	2452	-9.528	-10.851	-7.13	0.33	-6.80	8.00

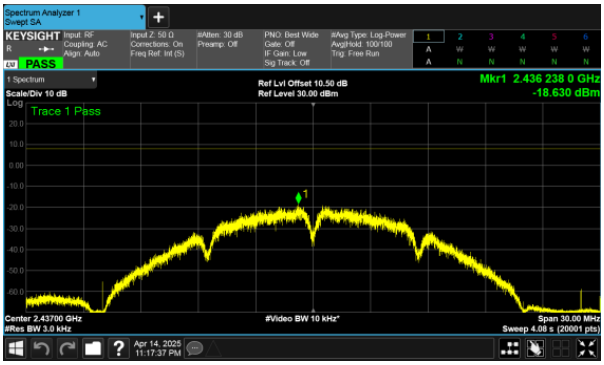
Modulation Type: 802.11b
CH01 Ant 1



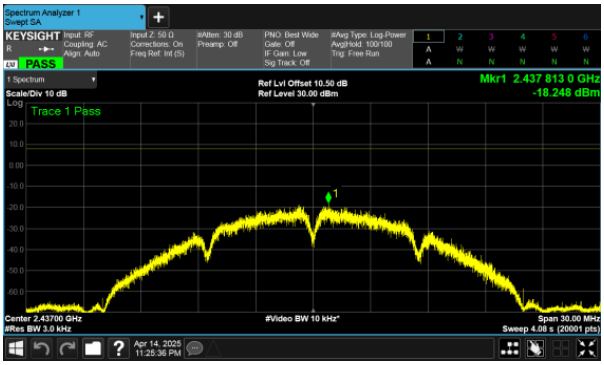
Modulation Type: 802.11b
CH01 Ant 2



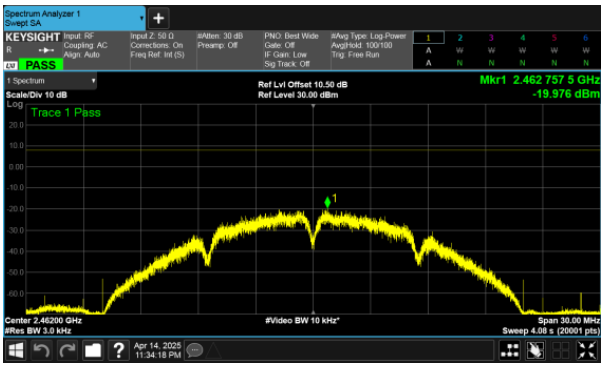
CH06 Ant 1



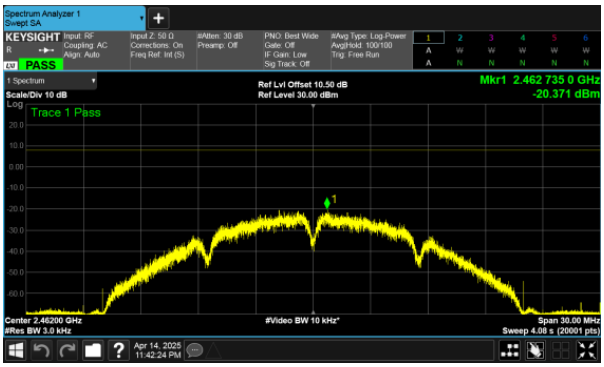
CH06 Ant 2



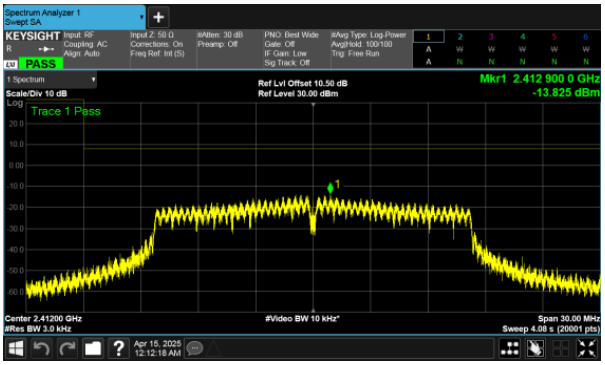
CH11 Ant 1



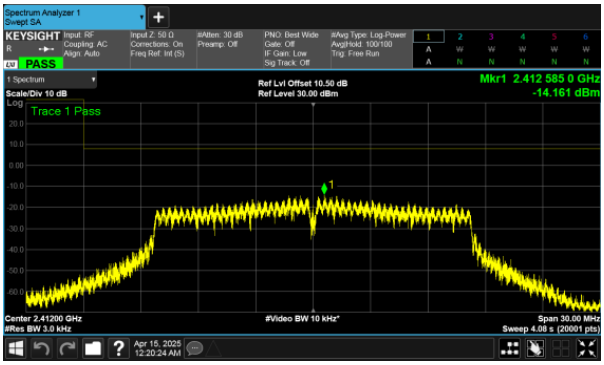
CH11 Ant 2



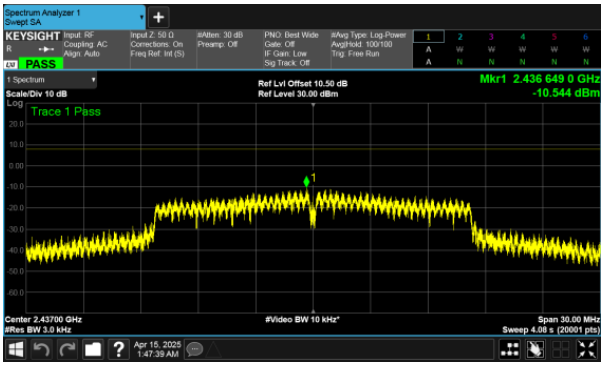
Modulation Type: 802.11g
CH01 Ant 1



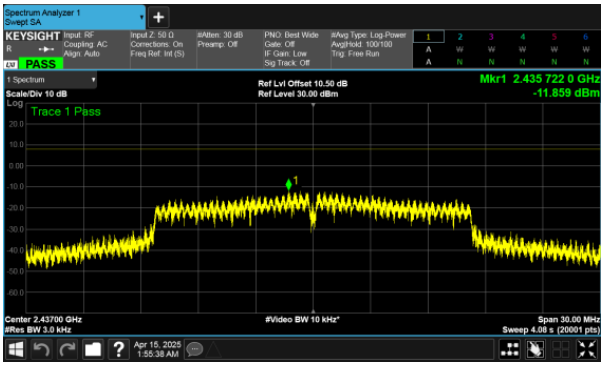
Modulation Type: 802.11g
CH01 Ant 2



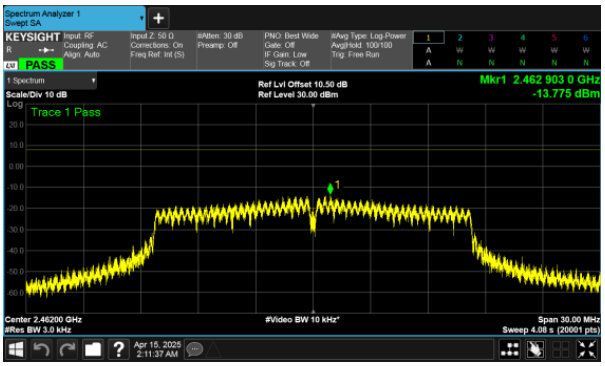
CH06 Ant 1



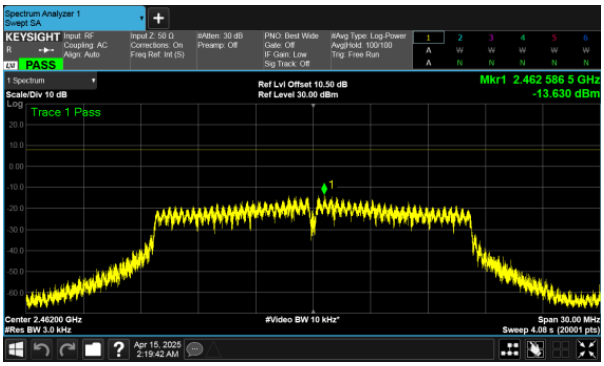
CH06 Ant 2



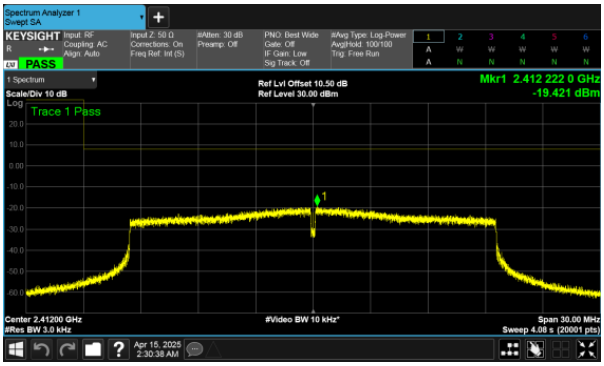
CH11 Ant 1



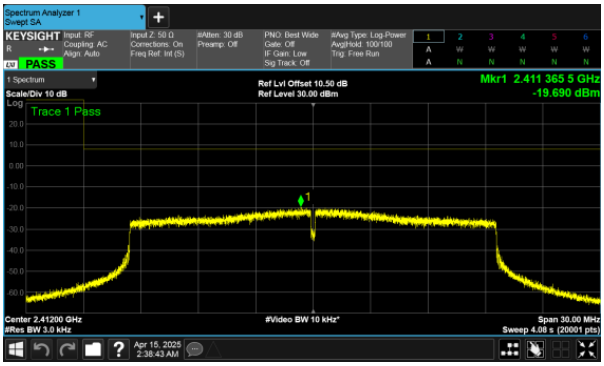
CH11 Ant 2



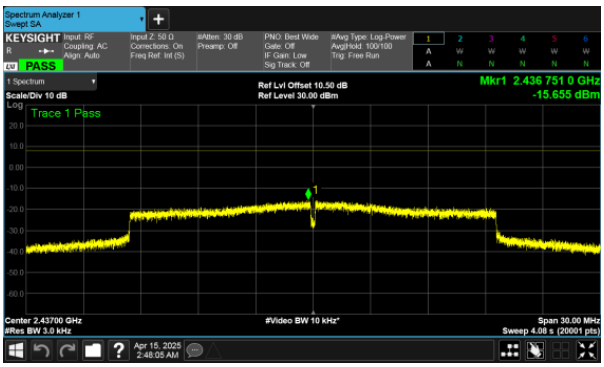
Modulation Type: 802.11ax HE20
CH01 Ant 1



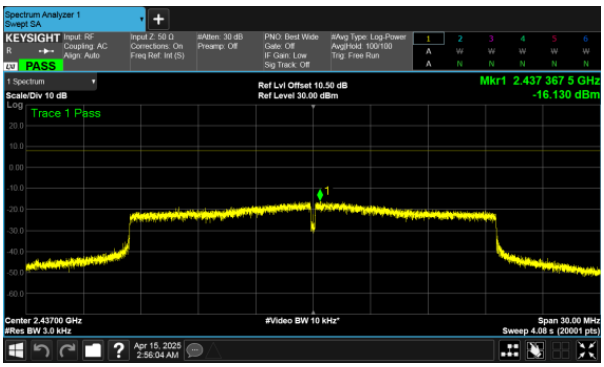
Modulation Type: 802.11ax HE20
CH01 Ant 2



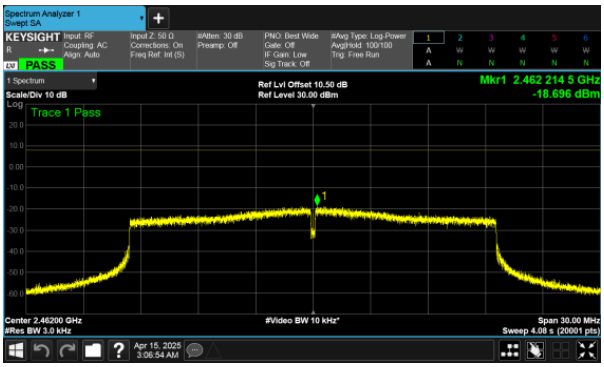
CH06 Ant 1



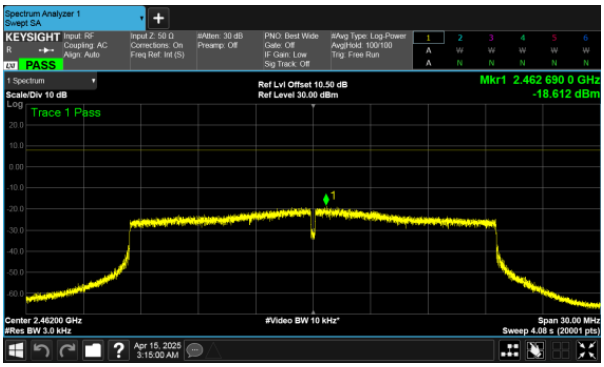
CH06 Ant 2



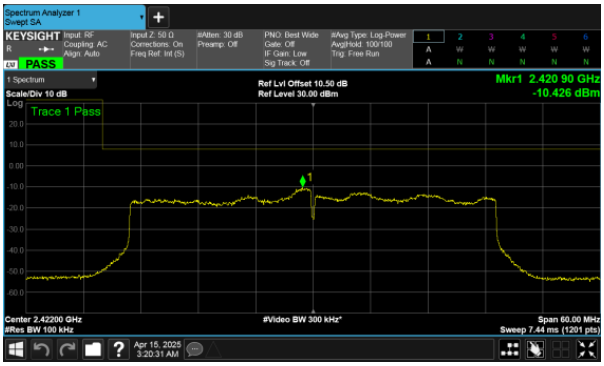
CH11 Ant 1



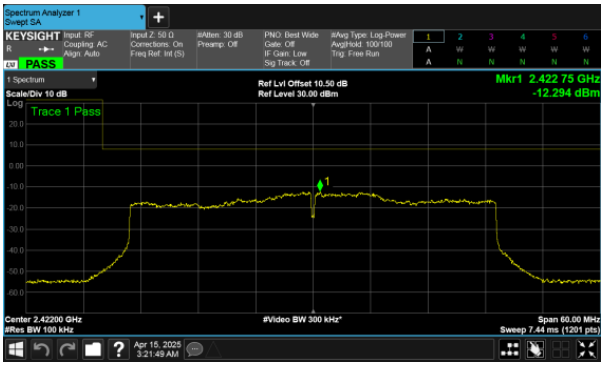
CH11 Ant 2



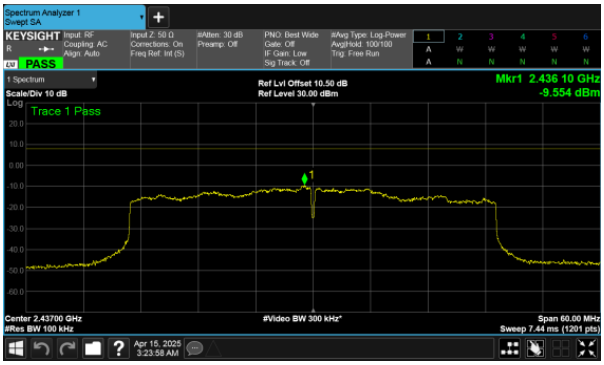
Modulation Type: 802.11ax HE40
CH03 Ant 1



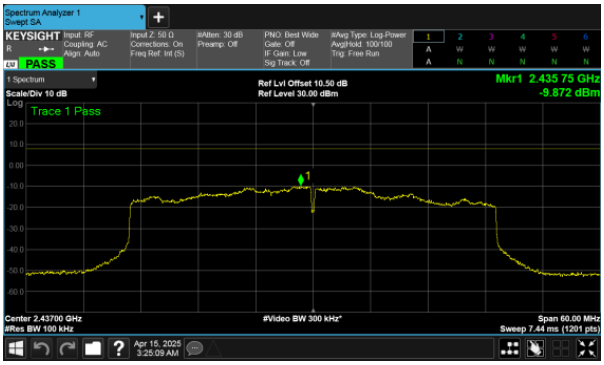
Modulation Type: 802.11ax HE40
CH03 Ant 2



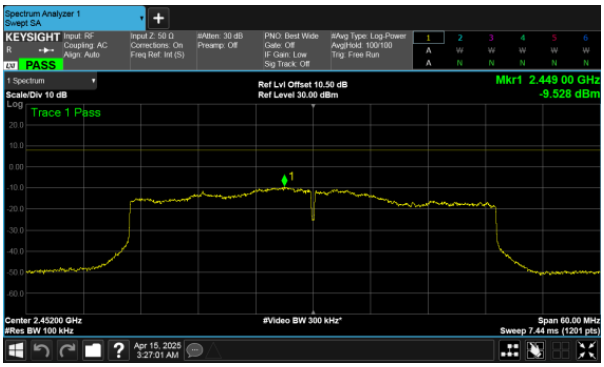
CH06 Ant 1



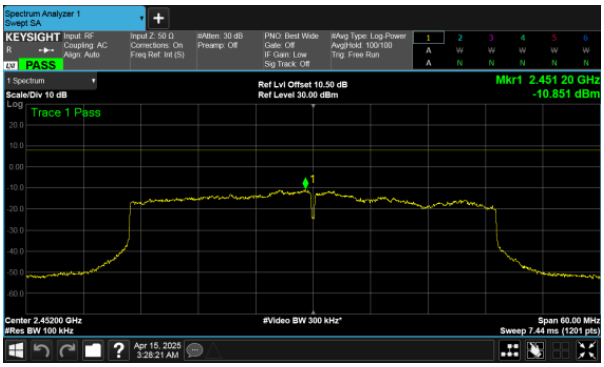
CH06 Ant 2



CH09 Ant 1



CH09 Ant 2



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