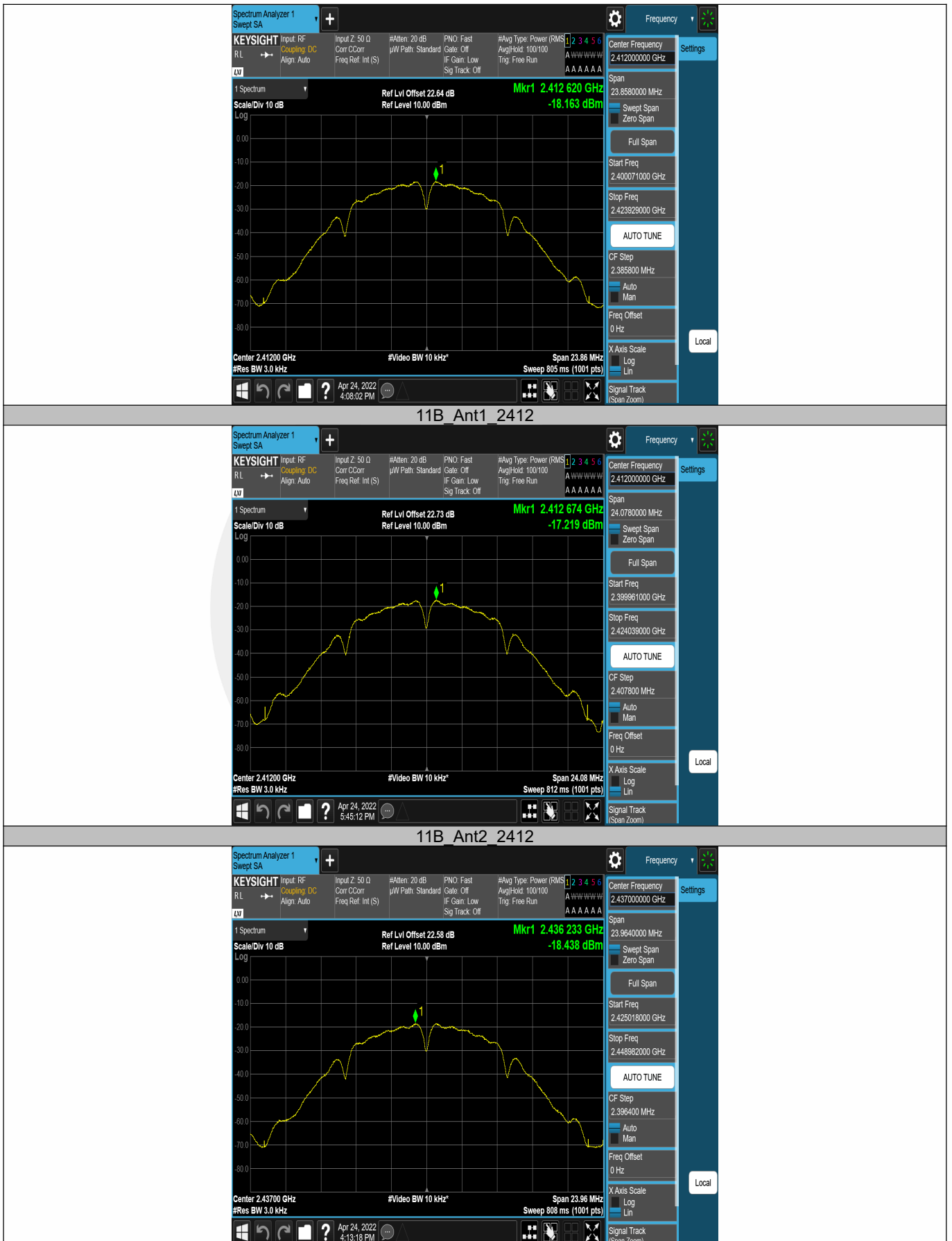




11B_Ant1_2437



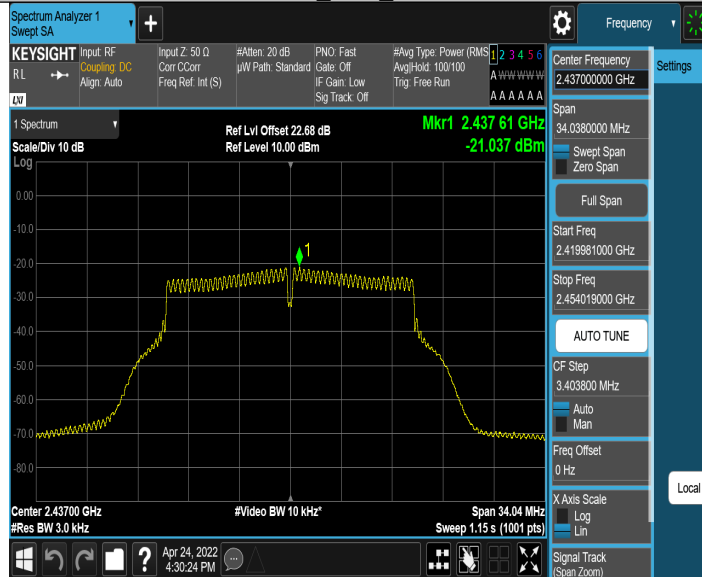
11B_Ant2_2437



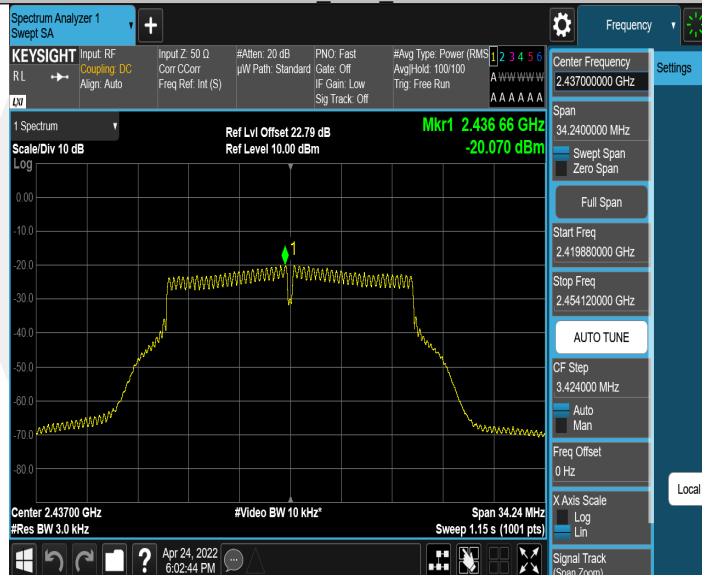
11B_Ant1_2462



11G_Ant2_2412



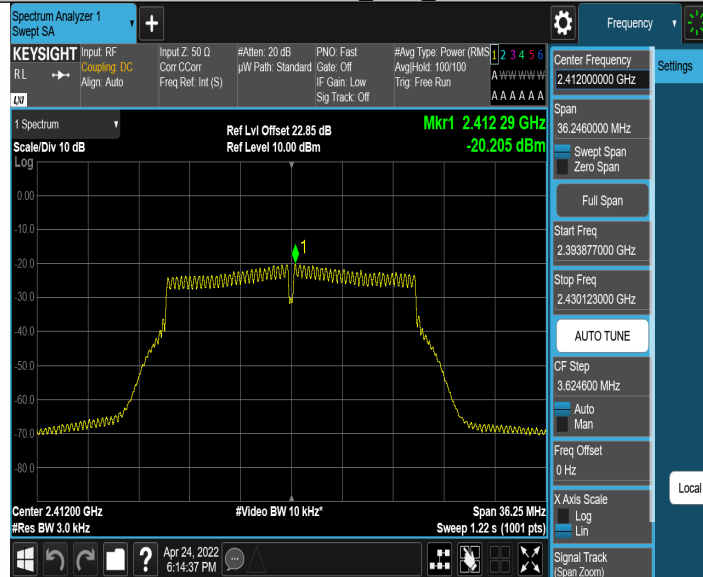
11G_Ant1_2437



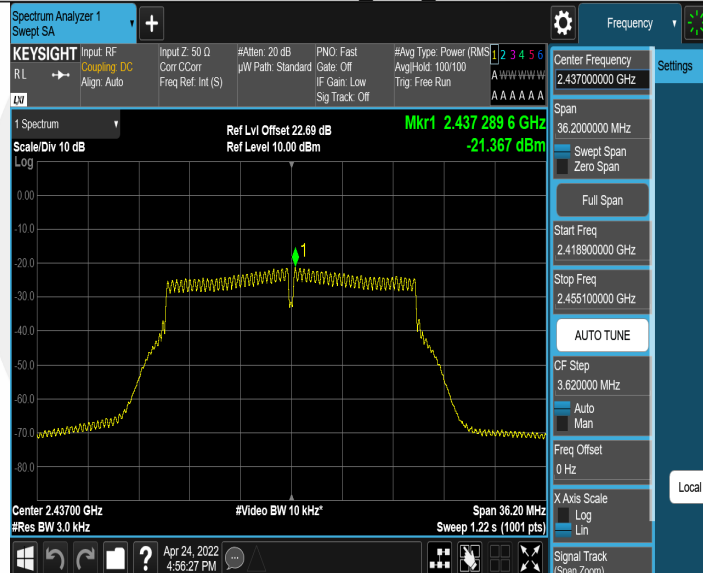
11G_Ant2_2437



11N20SISO_Ant1_2412



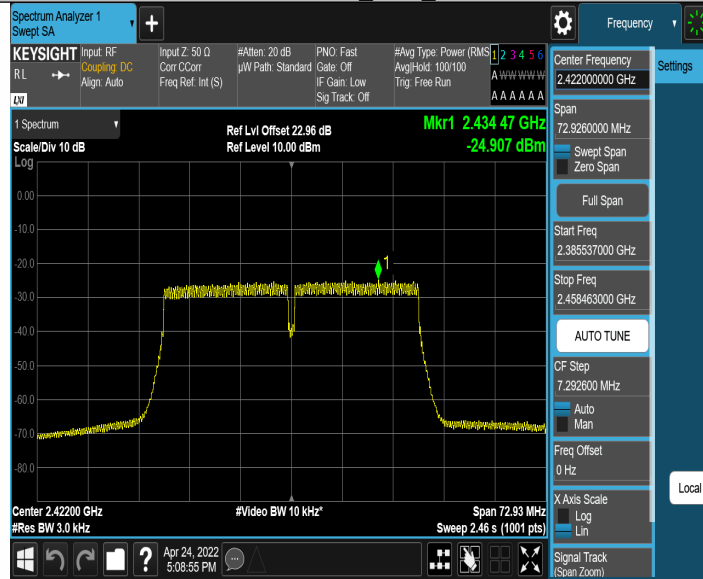
11N20SISO_Ant2_2412



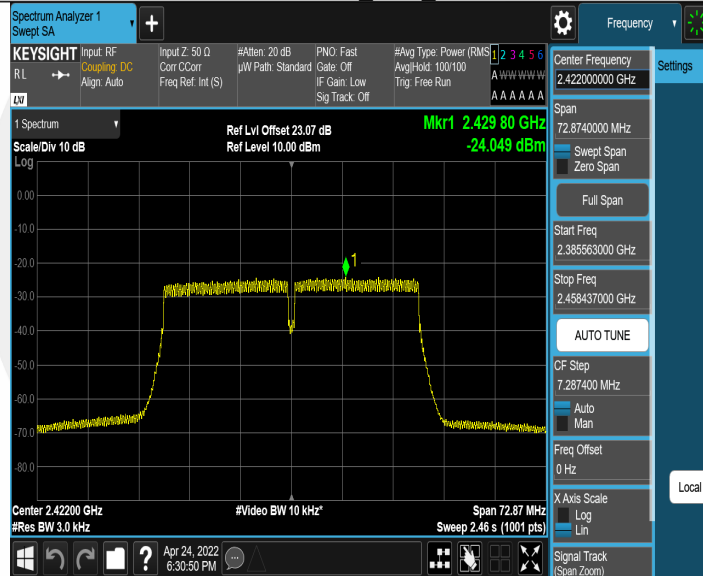
11N20SISO_Ant1_2437



11N20SISO_Ant2_2462

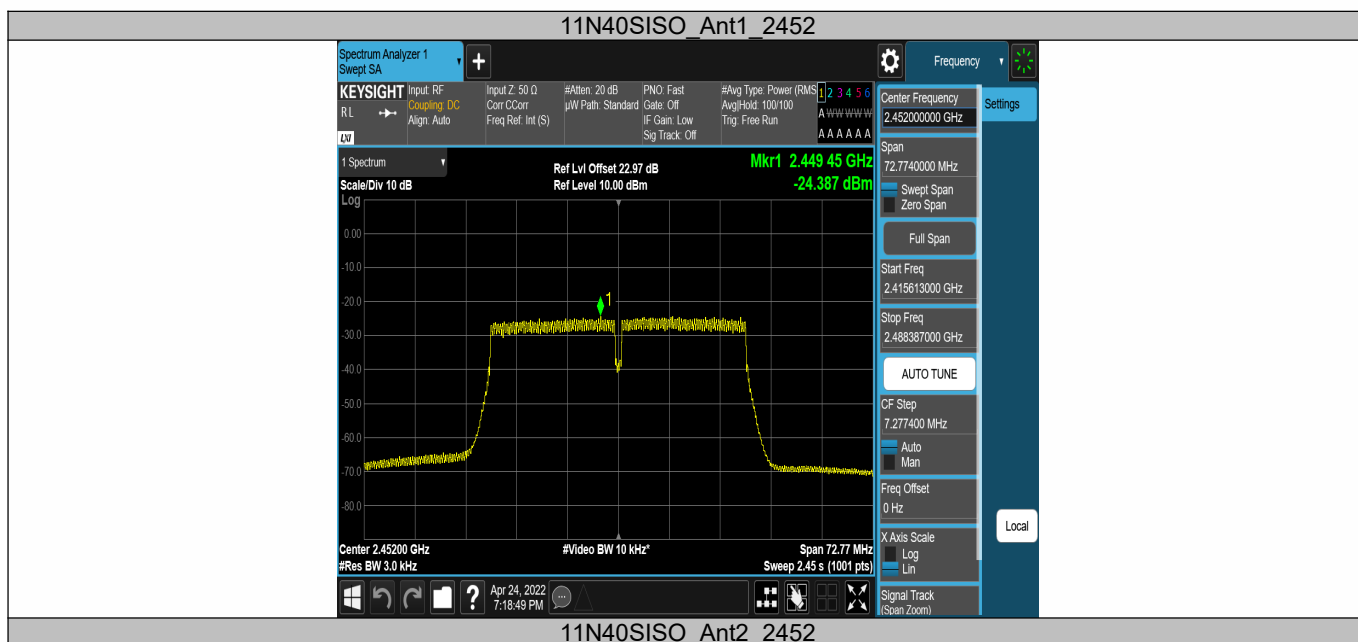


11N40SISO_Ant1_2422



11N40SISO_Ant2_2422





8.4 UNWANTED EMISSIONS IN NON-RESTRICTED FREQUENCY BANDS

8.4.1 Applicable Standard

According to FCC Part 15.247(d) and KDB 558074 D01 15.247 Meas Guidance v05r02

8.4.2 Conformance Limit

According to FCC Part 15.247(d):

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

8.4.3 Test Configuration

Test according to clause 7.1 radio frequency test setup 1

8.4.4 Test Procedure

The transmitter output (antenna port) was connected to the spectrum analyzer

■ Reference level measurement

Establish a reference level by using the following procedure:

Set instrument center frequency to DTS channel center frequency.

Set the span to ≥ 1.5 times the DTS bandwidth.

Set the RBW = 100 kHz.

Set the VBW $\geq 3 \times$ RBW.

Set Detector = peak.

Set Sweep time = auto couple.

Set Trace mode = max hold.

Allow trace to fully stabilize.

Use the peak marker function to determine the maximum PSD level.

Note that the channel found to contain the maximum PSD level can be used to establish the reference level.

■ Emission level measurement

Set the center frequency and span to encompass frequency range to be measured.

Set the RBW = 100 kHz.

Set the VBW = 300 kHz.

Set Detector = peak

Sweep time = auto couple.

Trace mode = max hold.

Allow trace to fully stabilize.

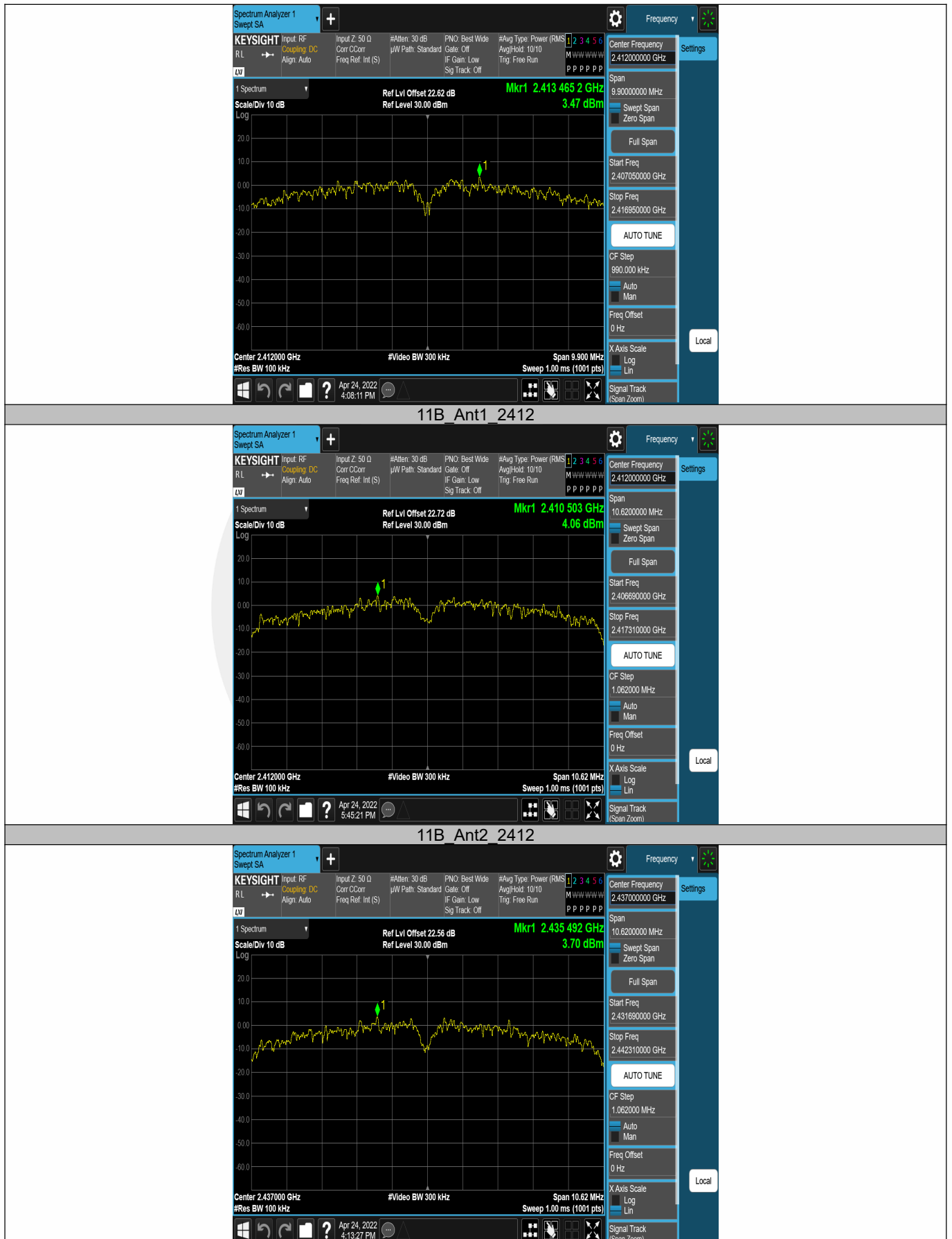
Use the peak marker function to determine the maximum amplitude level.

Ensure that the amplitude of all unwanted emissions outside of the authorized frequency band (excluding restricted frequency bands) are attenuated by at least the minimum requirements. Report the three highest emissions relative to the limit.

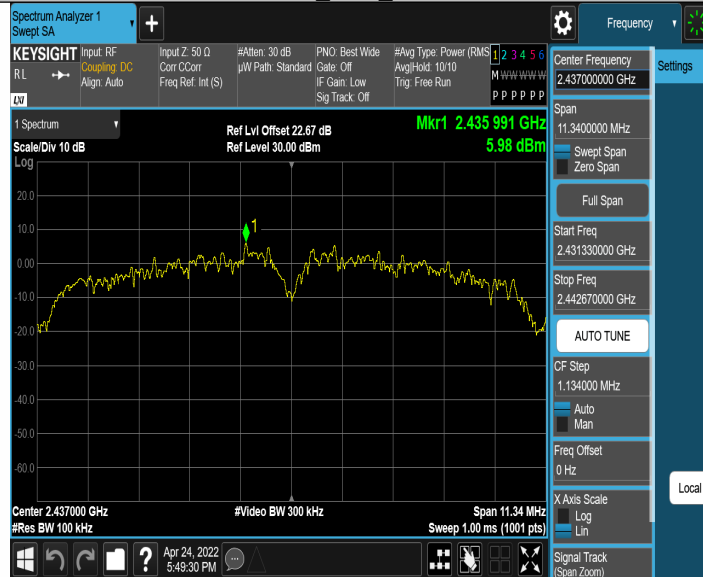
8.4.5 Test Results

Reference level measurement

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2413.47	3.47
	Ant2	2412	2410.50	4.06
	Ant1	2437	2435.49	3.70
	Ant2	2437	2435.99	5.98
	Ant1	2462	2463.50	3.57
	Ant2	2462	2461.47	6.25
11G	Ant1	2412	2411.00	-0.17
	Ant2	2412	2410.73	-0.15
	Ant1	2437	2436.34	-0.94
	Ant2	2437	2438.84	-0.83
	Ant1	2462	2462.61	-1.03
	Ant2	2462	2460.97	-0.45
11N20SISO	Ant1	2412	2419.48	0.73
	Ant2	2412	2408.21	-0.19
	Ant1	2437	2438.21	-1.64
	Ant2	2437	2430.76	-0.21
	Ant1	2462	2461.58	-2.05
	Ant2	2462	2462.58	-0.90
11N40SISO	Ant1	2422	2439.43	-2.94
	Ant2	2422	2414.48	-3.34
	Ant1	2437	2454.43	-4.49
	Ant2	2437	2450.73	-2.38
	Ant1	2452	2460.72	-2.66
	Ant2	2452	2435.71	-2.76



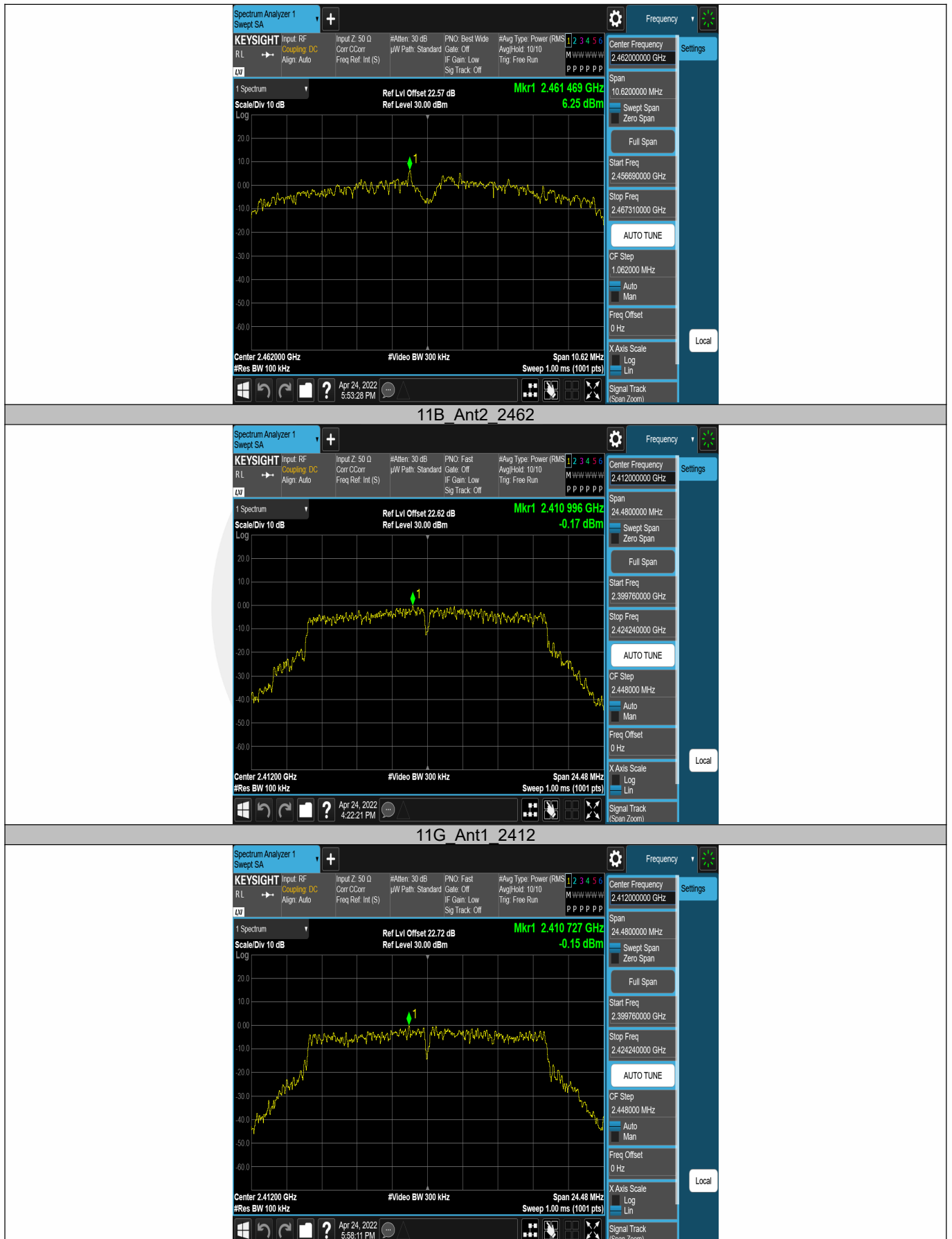
11B_Ant1_2437



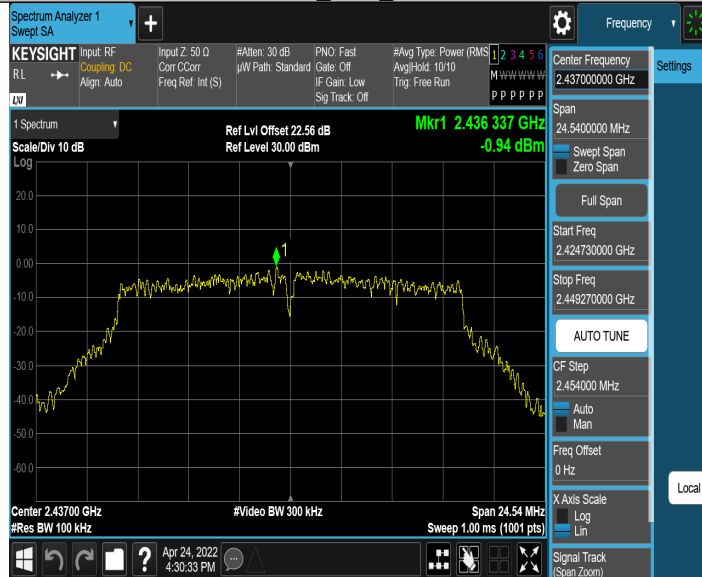
11B_Ant2_2437



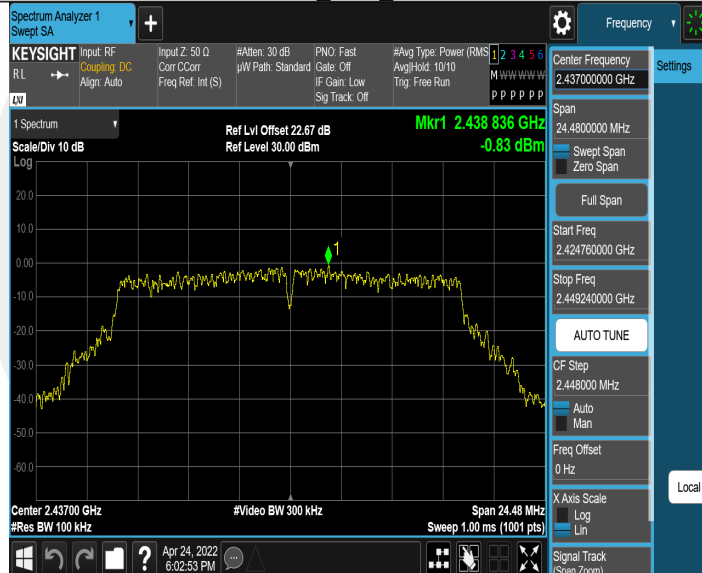
11B_Ant1_2462



11G_Ant2_2412



11G_Ant1_2437



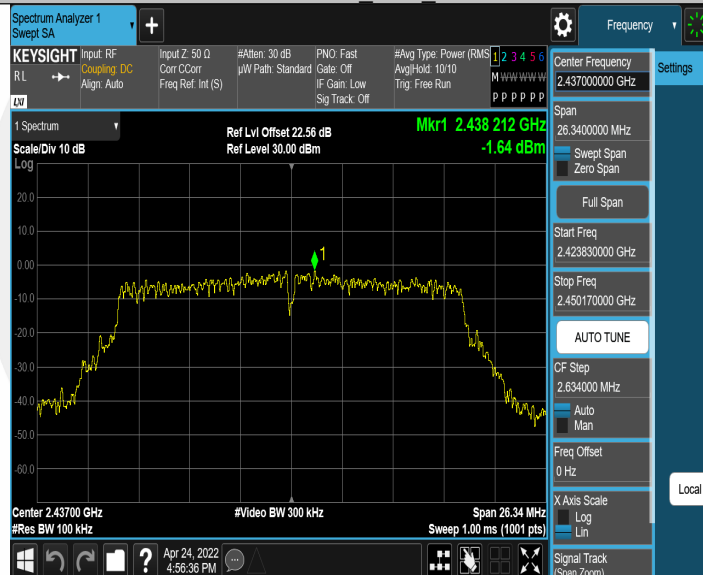
11G_Ant2_2437



11N20SISO_Ant1_2412



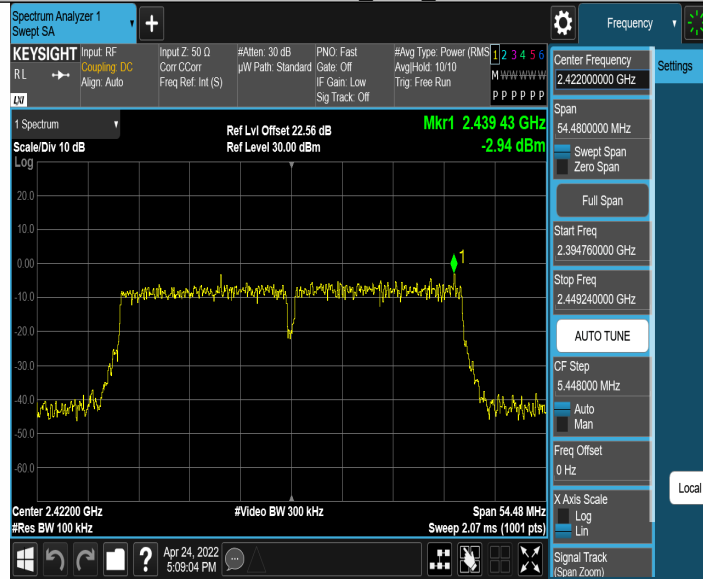
11N20SISO_Ant2_2412



11N20SISO_Ant1_2437



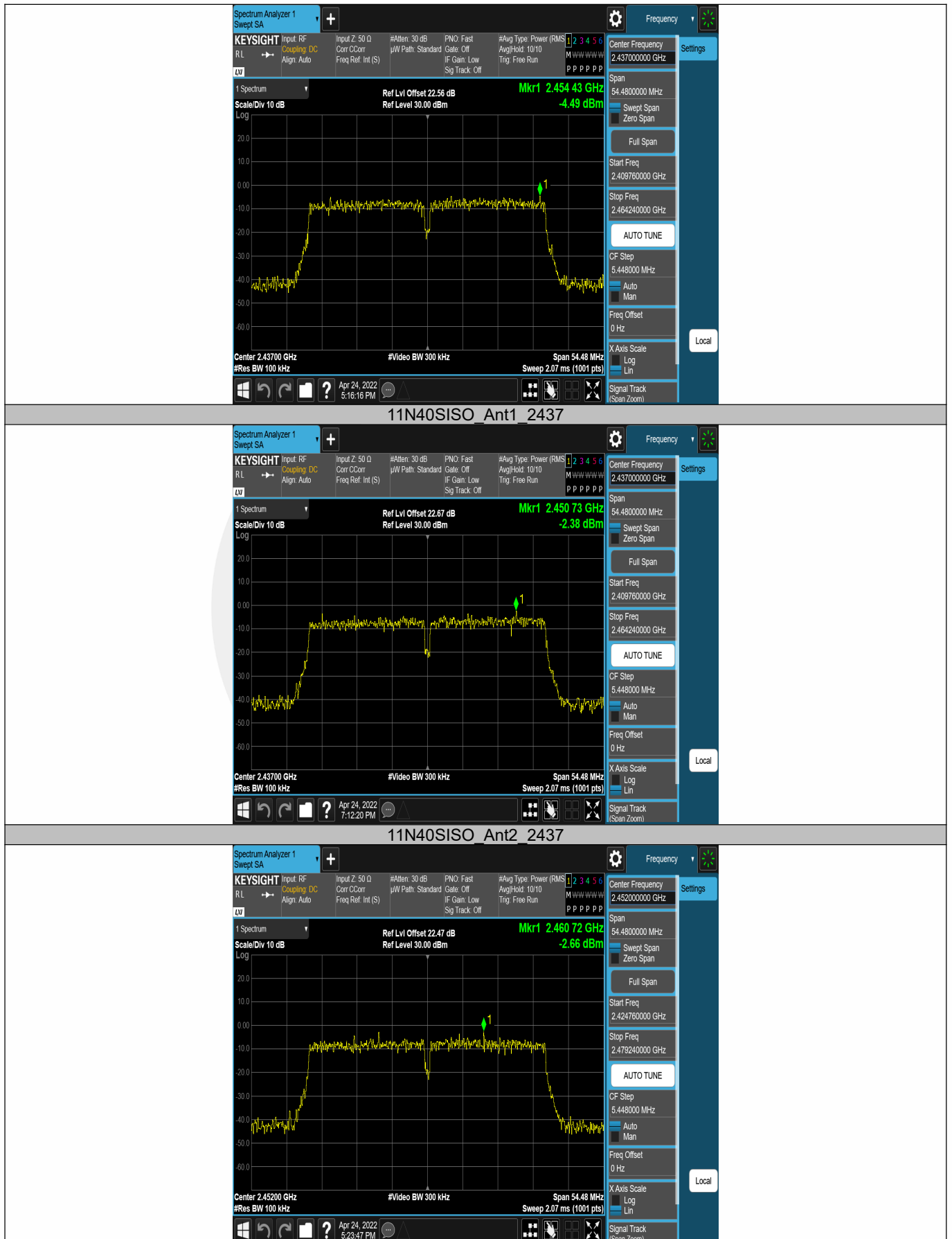
11N20SISO_Ant2_2462



11N40SISO_Ant1_2422



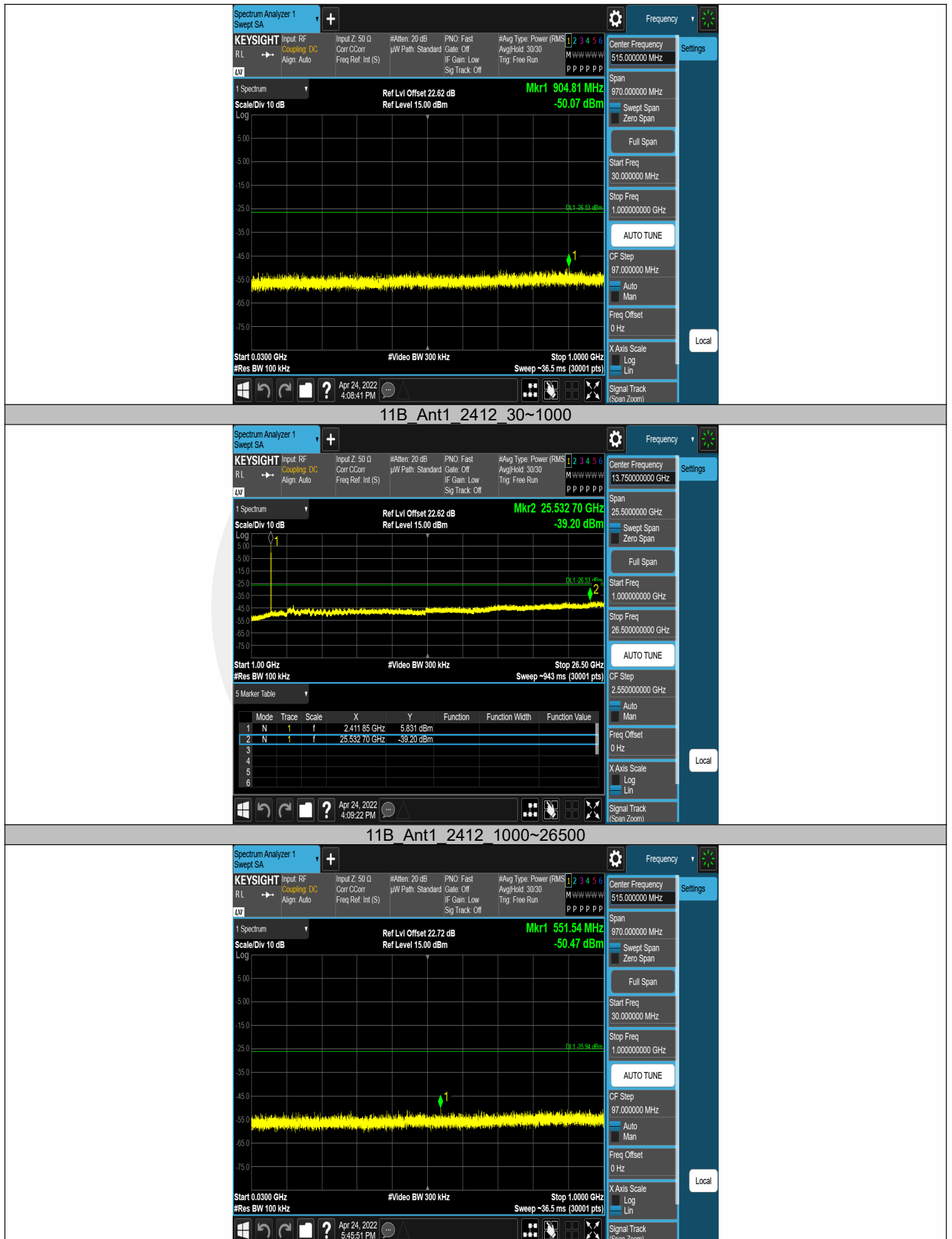
11N40SISO_Ant2_2422



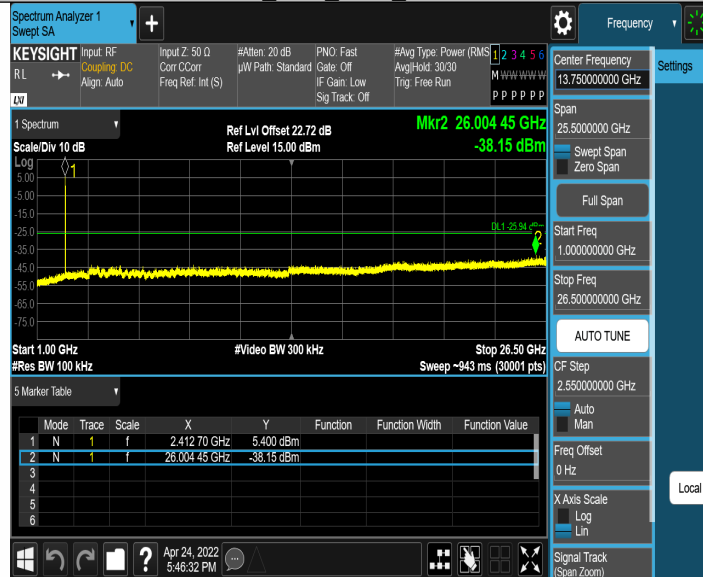


Emission level measurement

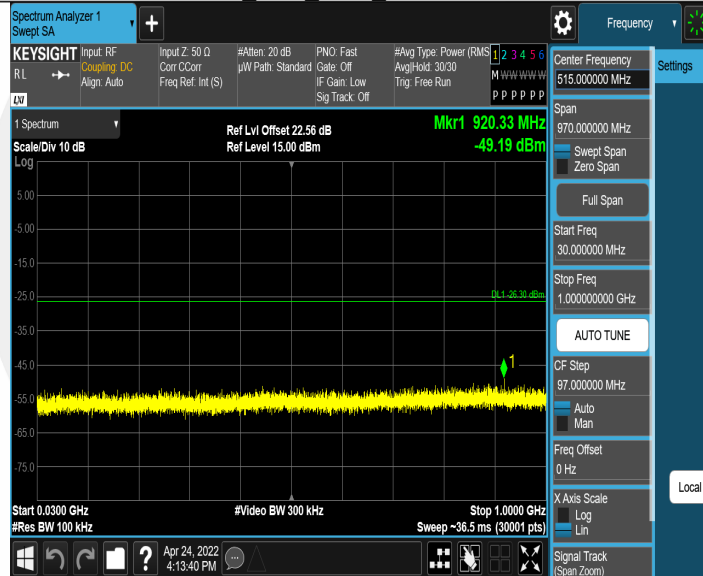
TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	30~1000	3.47	-50.07	≤-26.53	PASS
			1000~26500	3.47	-39.2	≤-26.53	PASS
	Ant2	2412	30~1000	4.06	-50.47	≤-25.94	PASS
			1000~26500	4.06	-38.15	≤-25.94	PASS
	Ant1	2437	30~1000	3.70	-49.19	≤-26.3	PASS
			1000~26500	3.70	-39.31	≤-26.3	PASS
	Ant2	2437	30~1000	5.98	-49.31	≤-24.02	PASS
			1000~26500	5.98	-38.41	≤-24.02	PASS
	Ant1	2462	30~1000	3.57	-50.06	≤-26.43	PASS
			1000~26500	3.57	-39.86	≤-26.43	PASS
	Ant2	2462	30~1000	6.25	-50.52	≤-23.75	PASS
			1000~26500	6.25	-39.5	≤-23.75	PASS
11G	Ant1	2412	30~1000	-0.17	-49.89	≤-30.17	PASS
			1000~26500	-0.17	-39.07	≤-30.17	PASS
	Ant2	2412	30~1000	-0.15	-49.04	≤-30.15	PASS
			1000~26500	-0.15	-38.62	≤-30.15	PASS
	Ant1	2437	30~1000	-0.94	-50.46	≤-30.94	PASS
			1000~26500	-0.94	-39.4	≤-30.94	PASS
	Ant2	2437	30~1000	-0.83	-49.58	≤-30.83	PASS
			1000~26500	-0.83	-39.44	≤-30.83	PASS
	Ant1	2462	30~1000	-1.03	-47.12	≤-31.03	PASS
			1000~26500	-1.03	-39	≤-31.03	PASS
	Ant2	2462	30~1000	-0.45	-49.87	≤-30.45	PASS
			1000~26500	-0.45	-38.25	≤-30.45	PASS
11N20SISO	Ant1	2412	30~1000	0.73	-49.88	≤-29.27	PASS
			1000~26500	0.73	-38.45	≤-29.27	PASS
	Ant2	2412	30~1000	-0.19	-50.13	≤-30.19	PASS
			1000~26500	-0.19	-38.94	≤-30.19	PASS
	Ant1	2437	30~1000	-1.64	-50.07	≤-31.64	PASS
			1000~26500	-1.64	-39.58	≤-31.64	PASS
	Ant2	2437	30~1000	-0.21	-50.06	≤-30.21	PASS
			1000~26500	-0.21	-38.25	≤-30.21	PASS
	Ant1	2462	30~1000	-2.05	-50.18	≤-32.05	PASS
			1000~26500	-2.05	-39.34	≤-32.05	PASS
	Ant2	2462	30~1000	-0.90	-50.38	≤-30.9	PASS
			1000~26500	-0.90	-39.59	≤-30.9	PASS
11N40SISO	Ant1	2422	30~1000	-2.94	-50.24	≤-32.94	PASS
			1000~26500	-2.94	-39.36	≤-32.94	PASS
	Ant2	2422	30~1000	-3.34	-50.73	≤-33.34	PASS
			1000~26500	-3.34	-38.46	≤-33.34	PASS
	Ant1	2437	30~1000	-4.49	-50.48	≤-34.49	PASS
			1000~26500	-4.49	-39.11	≤-34.49	PASS
	Ant2	2437	30~1000	-2.38	-49.21	≤-32.38	PASS
			1000~26500	-2.38	-38.92	≤-32.38	PASS
	Ant1	2452	30~1000	-2.66	-49.87	≤-32.66	PASS
			1000~26500	-2.66	-39.21	≤-32.66	PASS
	Ant2	2452	30~1000	-2.76	-50.56	≤-32.76	PASS
			1000~26500	-2.76	-39.71	≤-32.76	PASS



11B_Ant2_2412_30~1000



11B_Ant2_2412_1000~26500



11B_Ant1_2437_30~1000