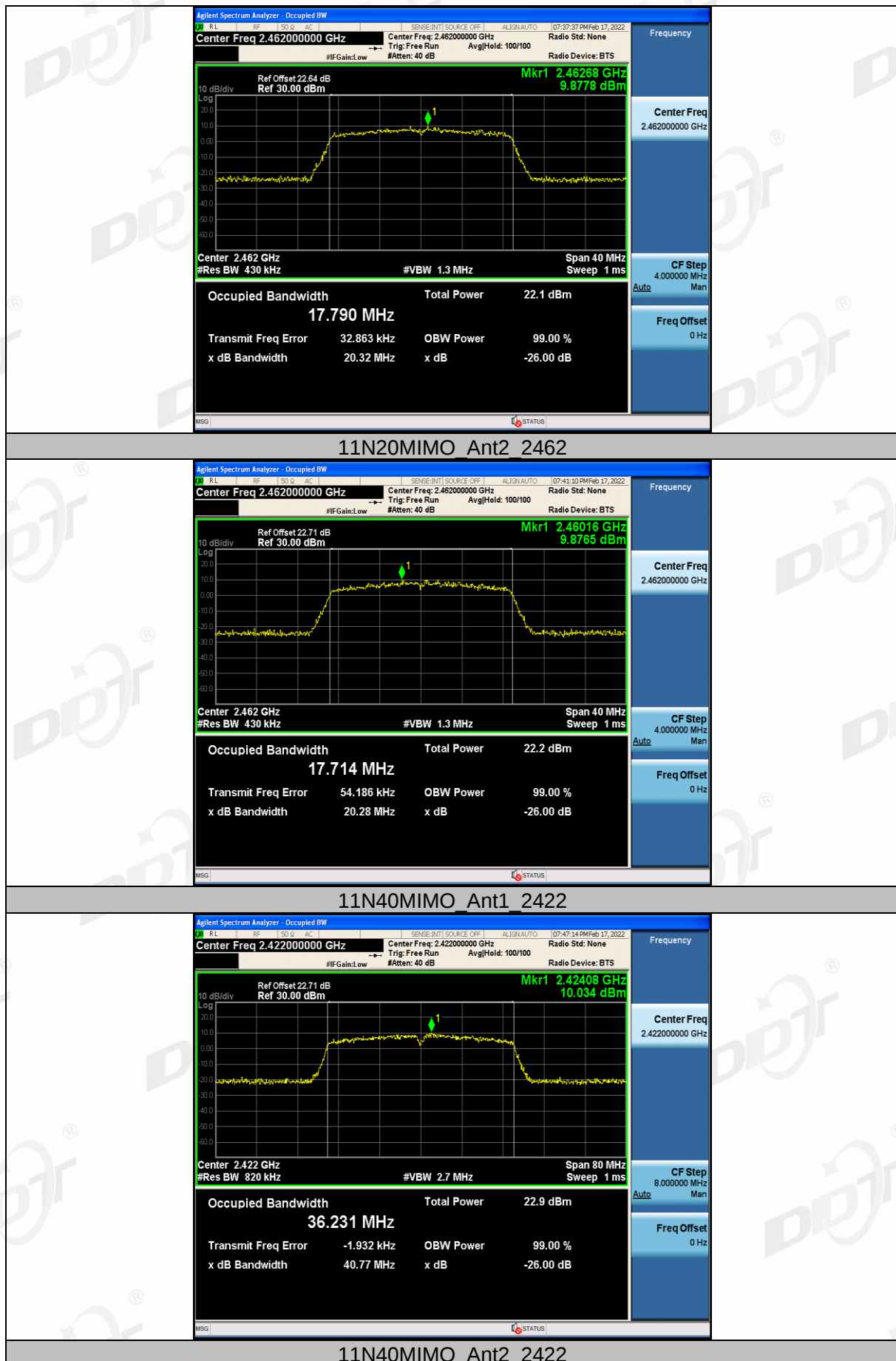
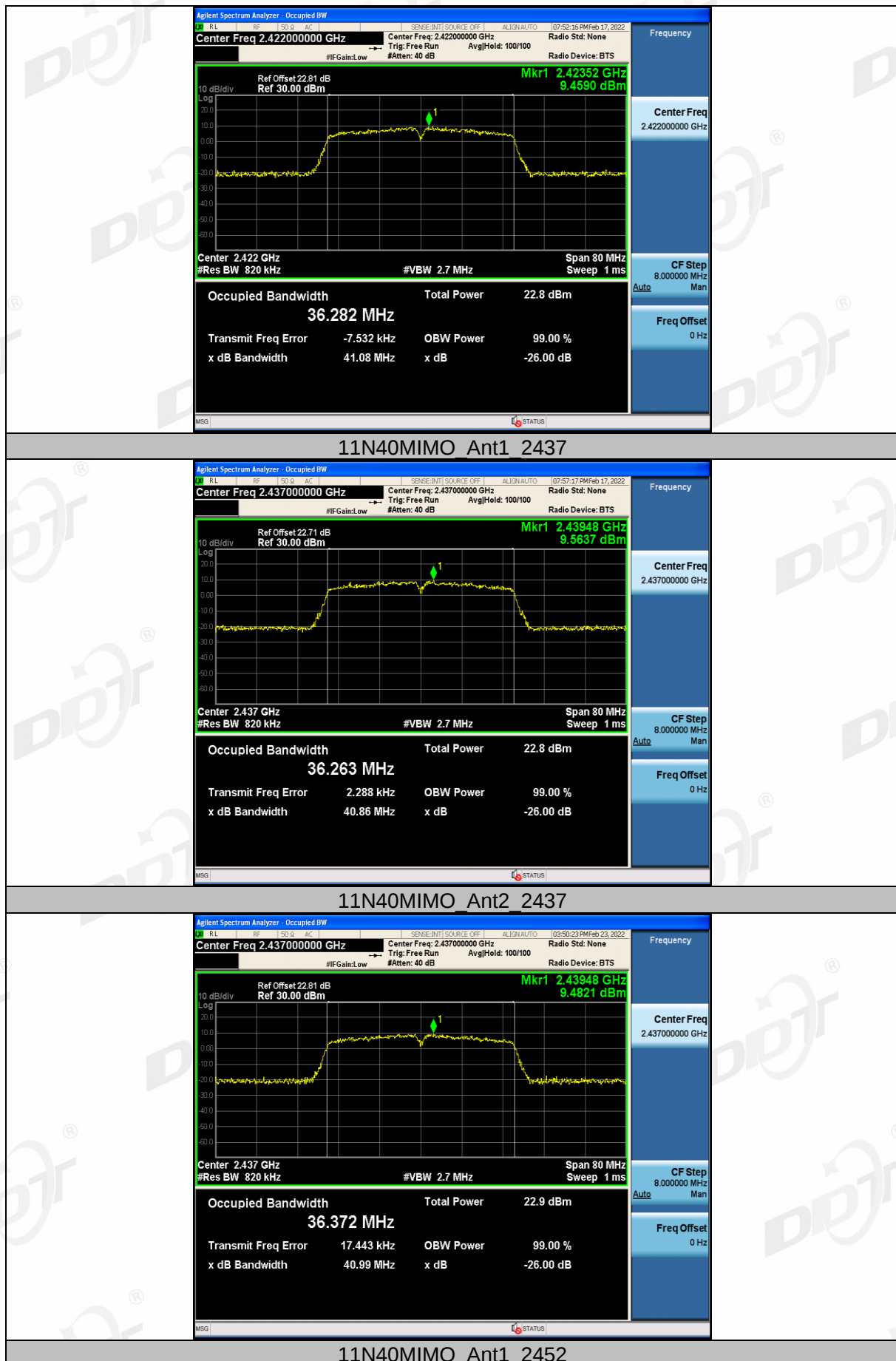
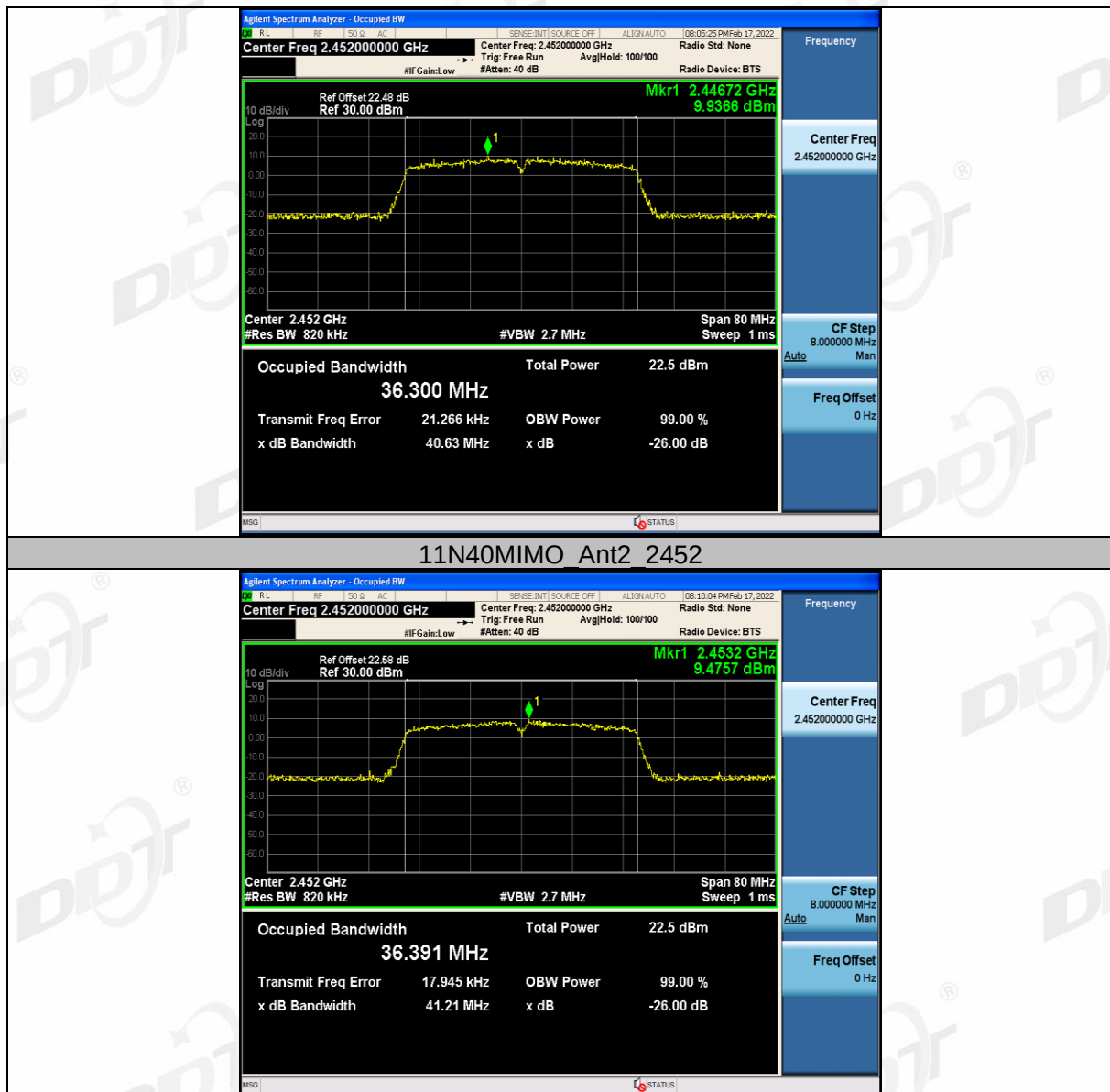








5. Conducted peak Output Power

5.1. Block diagram of test setup

Same as section 4.1

5.2. Limits

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

5.3. Test procedure

Connect each EUT's antenna output to power sensor by RF cable and attenuator

Measure the PK output power of each antenna port by power meter.

5.4. Test result

Test Mode	Antenna	Channel	Peak Power [dBm]	Conducted Limit [dBm]	Verdict
11B	Ant1	2412	17.44	≤30.00	Pass
	Ant2	2412	17.30	≤30.00	Pass
	Ant1	2437	17.78	≤30.00	Pass
	Ant2	2437	17.47	≤30.00	Pass
	Ant1	2462	17.41	≤30.00	Pass
	Ant2	2462	17.18	≤30.00	Pass
11G	Ant1	2412	16.78	≤30.00	Pass
	Ant2	2412	16.25	≤30.00	Pass
	Ant1	2437	16.74	≤30.00	Pass
	Ant2	2437	16.28	≤30.00	Pass
	Ant1	2462	16.65	≤30.00	Pass
	Ant2	2462	16.27	≤30.00	Pass
11N20MIMO	Ant1	2412	16.61	≤30.00	Pass
	Ant2	2412	16.40	≤30.00	Pass
	total	2412	19.52	≤30.00	Pass
	Ant1	2437	16.60	≤30.00	Pass
	Ant2	2437	16.35	≤30.00	Pass
	total	2437	19.49	≤30.00	Pass
	Ant1	2462	16.26	≤30.00	Pass
	Ant2	2462	16.41	≤30.00	Pass
	total	2462	19.35	≤30.00	Pass
11N40MIMO	Ant1	2422	16.63	≤30.00	Pass
	Ant2	2422	16.17	≤30.00	Pass
	total	2422	19.42	≤30.00	Pass
	Ant1	2437	16.60	≤30.00	Pass
	Ant2	2437	16.30	≤30.00	Pass
	total	2437	19.46	≤30.00	Pass
	Ant1	2452	16.55	≤30.00	Pass
	Ant2	2452	16.38	≤30.00	Pass

	total	2452	19.48	≤30.00	Pass
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6. Power Spectral Density

6.1. Block diagram of test setup

Same as section 4.1

6.2. Limits

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

6.3. Test procedure

- (1) Connect EUT's antenna output to spectrum analyzer by RF cable.
- (2) Set the spectrum analyzer as follows:

Center frequency	DTS Channel center frequency
RBW:	$3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
VBW:	$\geq 3\text{RBW}$
Span	1.5 times the DTS bandwidth
Detector Mode:	RMS
Sweep time:	auto
Trace mode	Max hold

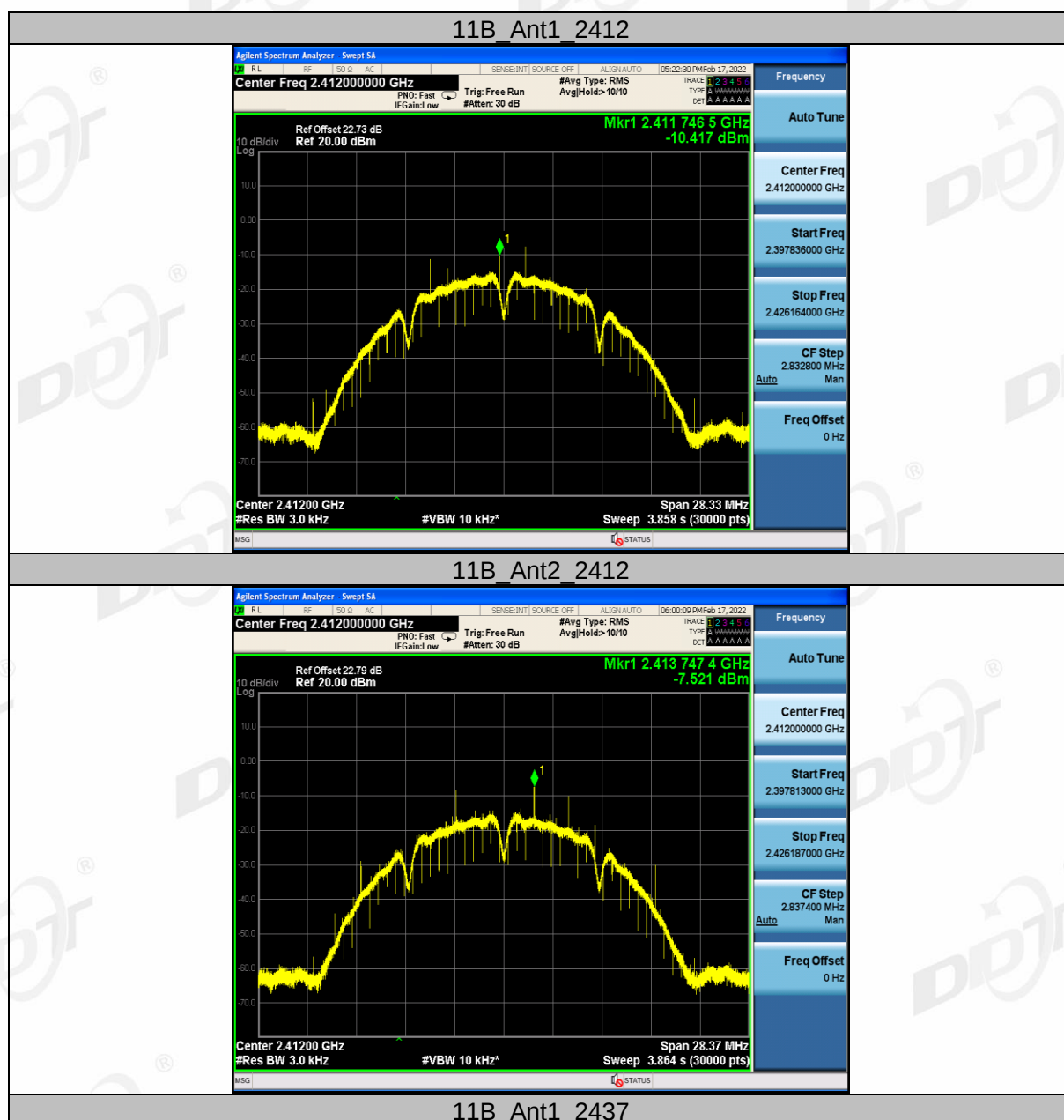
- (3) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude level within the RBW.
- (4) If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

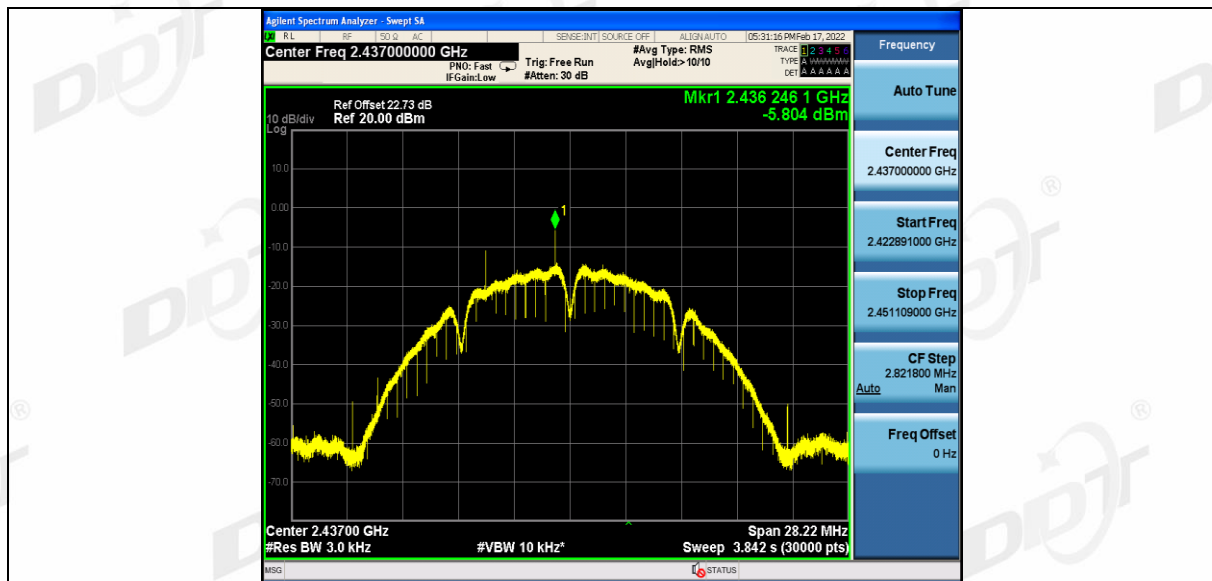
6.4. Test result

Test Mode	Antenna	Channel	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-10.42	≤ 8.00	Pass
	Ant2	2412	-7.52	≤ 8.00	Pass
	Ant1	2437	-5.42	≤ 8.00	Pass
	Ant2	2437	-9.90	≤ 8.00	Pass
	Ant1	2462	-9.93	≤ 8.00	Pass
	Ant2	2462	-8.50	≤ 8.00	Pass
11G	Ant1	2412	-12.51	≤ 8.00	Pass
	Ant2	2412	-13.35	≤ 8.00	Pass
	Ant1	2437	-12.35	≤ 8.00	Pass
	Ant2	2437	-13.00	≤ 8.00	Pass
	Ant1	2462	-12.01	≤ 8.00	Pass
	Ant2	2462	-13.02	≤ 8.00	Pass
11N20MIMO	Ant1	2412	-12.95	≤ 8.00	Pass
	Ant2	2412	-12.34	≤ 8.00	Pass
	total	2412	-9.62	≤ 8.00	Pass
	Ant1	2437	-12.58	≤ 8.00	Pass
	Ant2	2437	-11.31	≤ 8.00	Pass

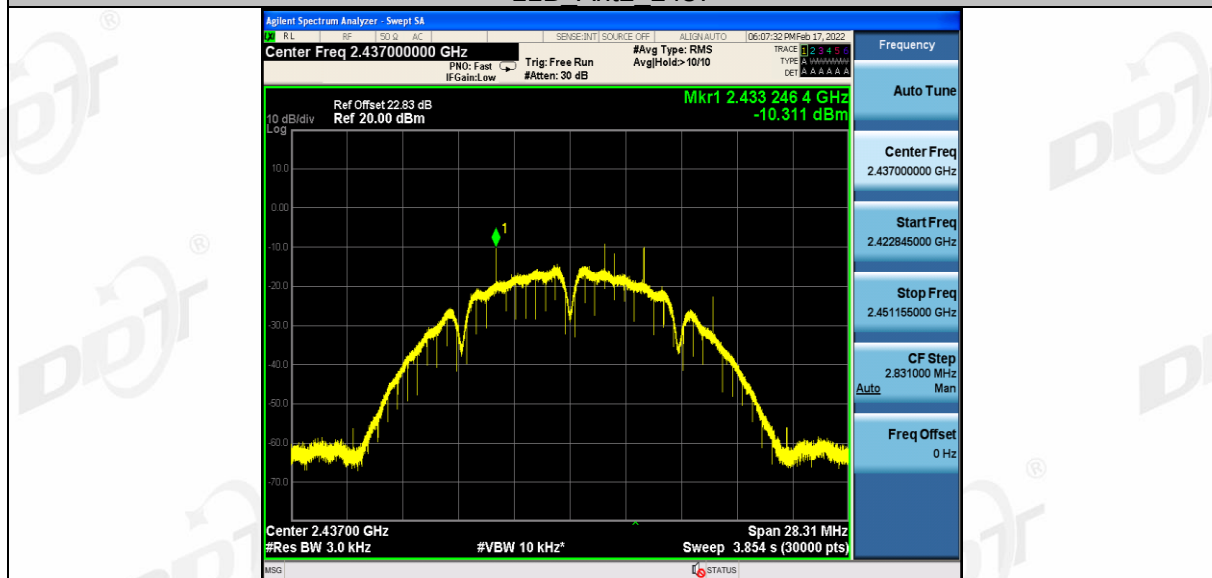
11N40MIMO	total	2437	-8.89	≤8.00	Pass
	Ant1	2462	-12.72	≤8.00	Pass
	Ant2	2462	-12.21	≤8.00	Pass
	total	2462	-9.45	≤8.00	Pass
	Ant1	2422	-13.45	≤8.00	Pass
	Ant2	2422	-13.28	≤8.00	Pass
	total	2422	-10.35	≤8.00	Pass
	Ant1	2437	-13.74	≤8.00	Pass
	Ant2	2437	-13.10	≤8.00	Pass
	total	2437	-10.40	≤8.00	Pass
	Ant1	2452	-14.13	≤8.00	Pass
	Ant2	2452	-12.08	≤8.00	Pass
	total	2452	-9.97	≤8.00	Pass
	total	2452	-9.97	≤8.00	Pass

6.5. original test data

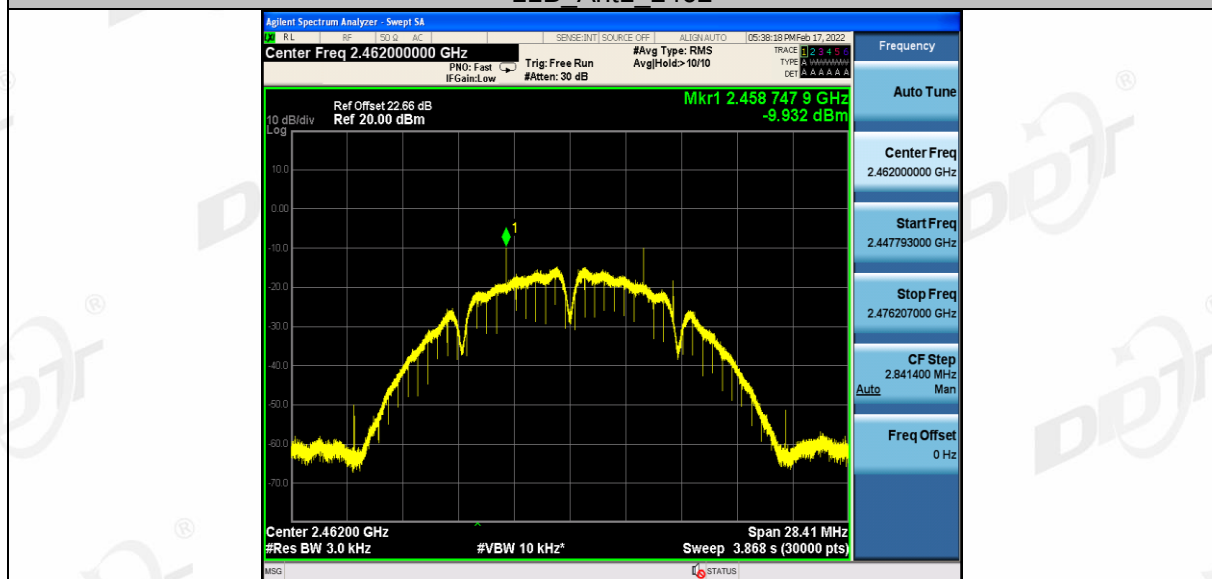




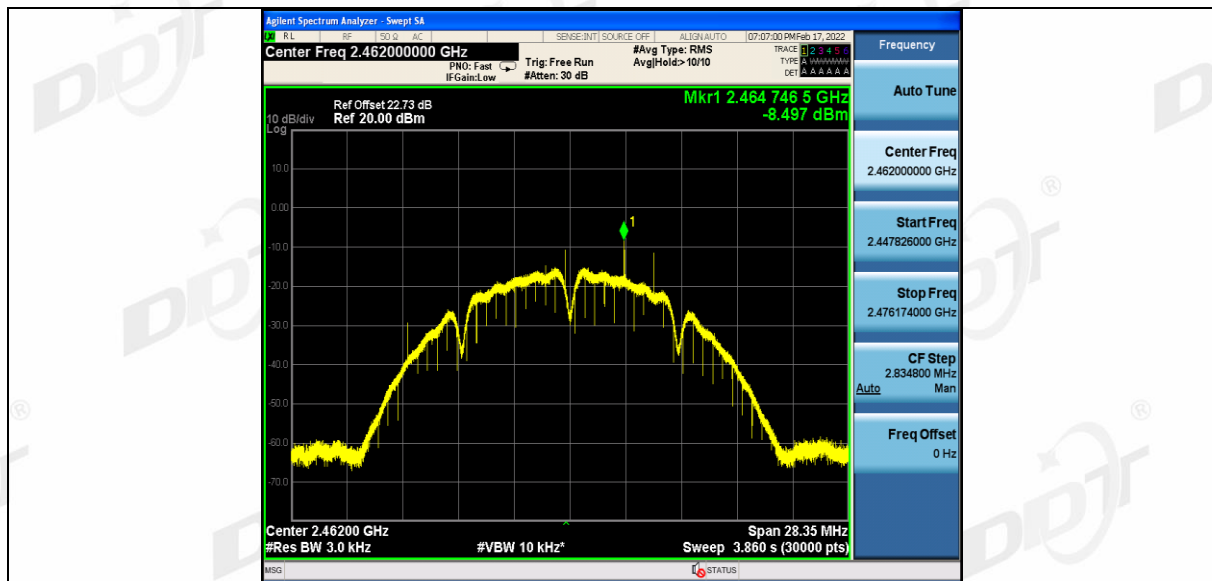
11B Ant2 2437



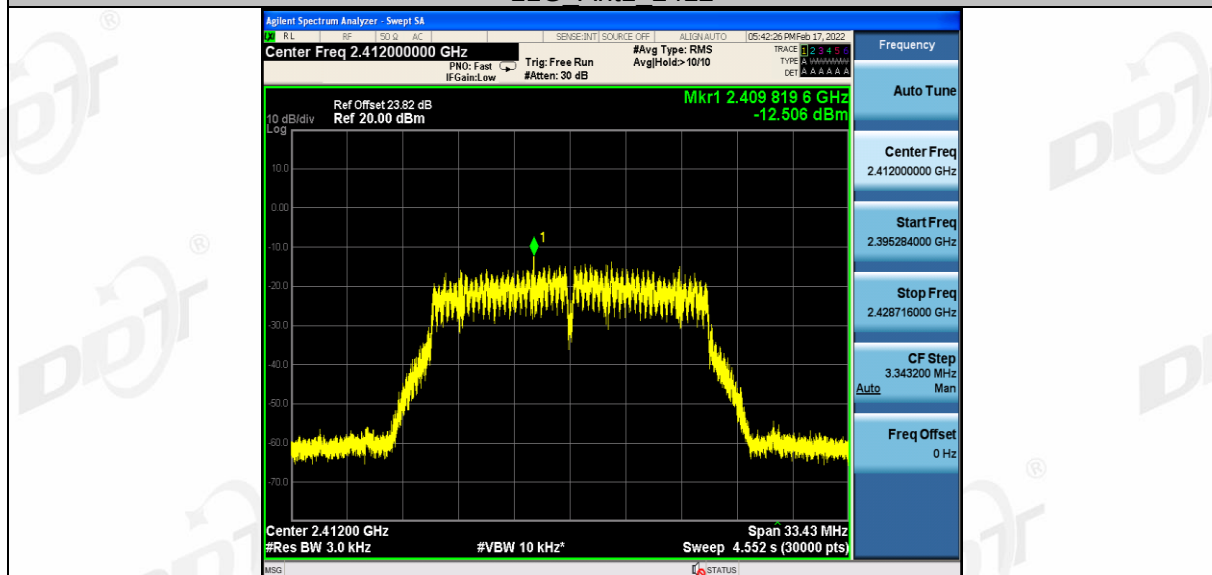
11B Ant1 2462



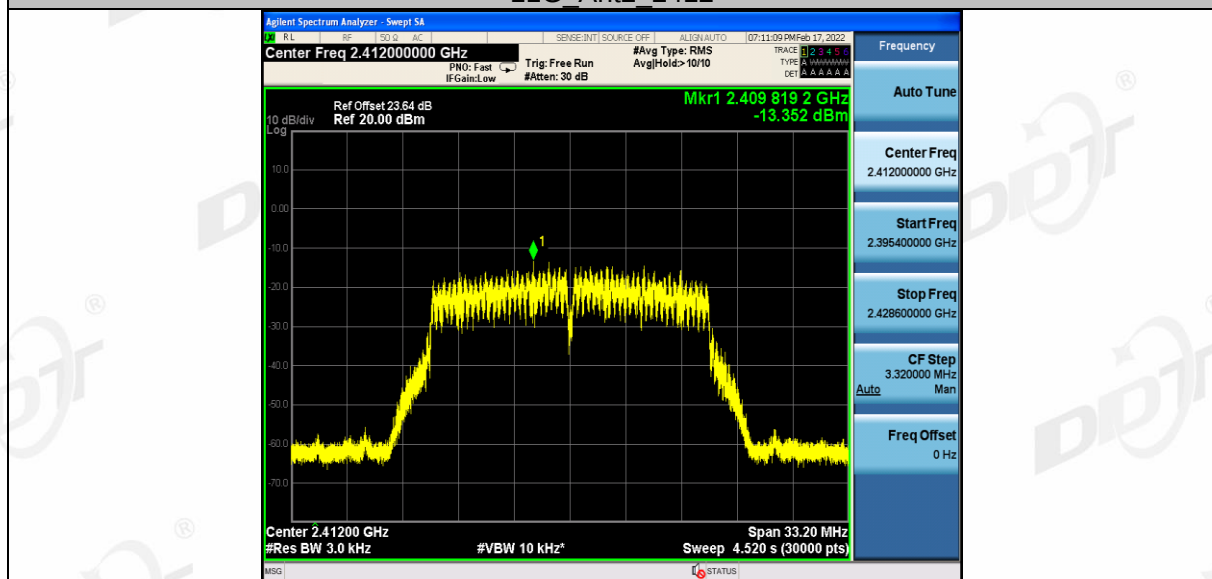
11B Ant2 2462



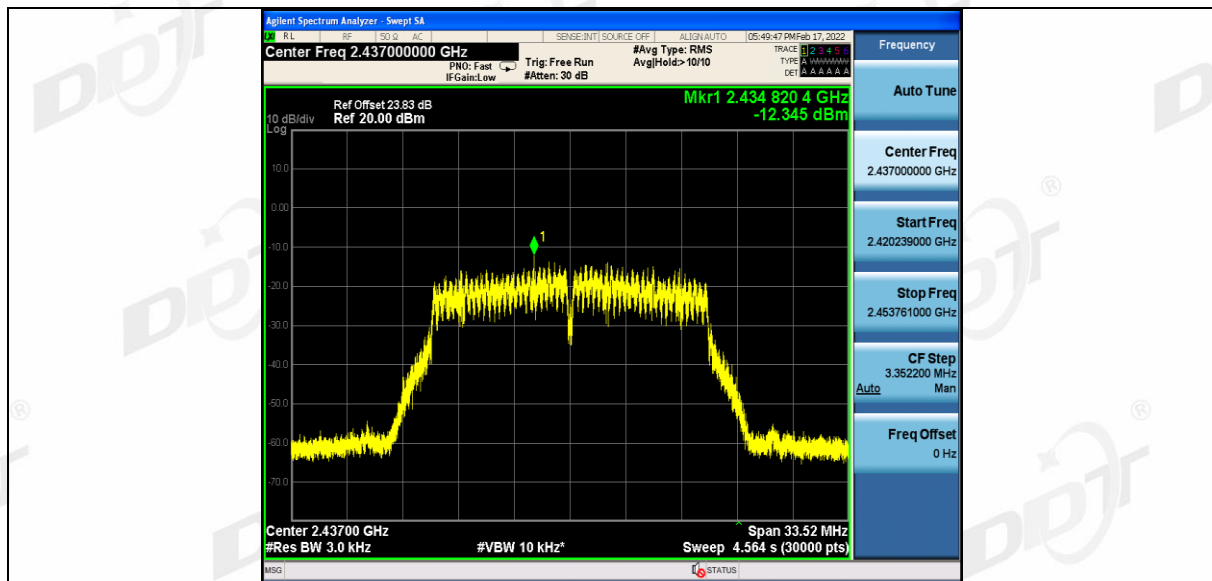
11G Ant1 2412



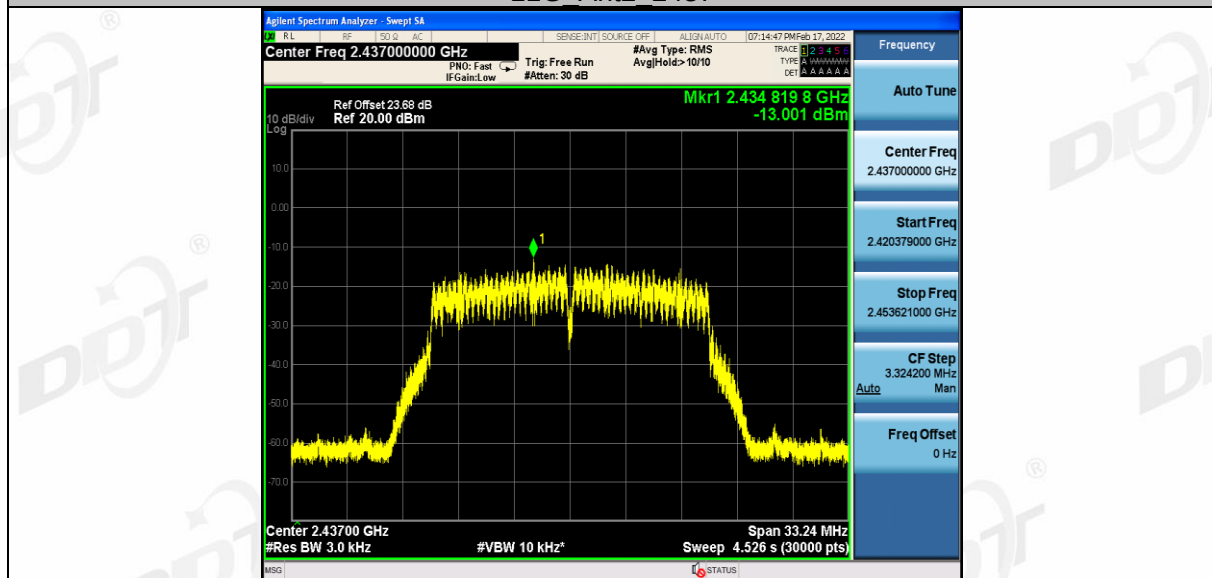
11G Ant2 2412



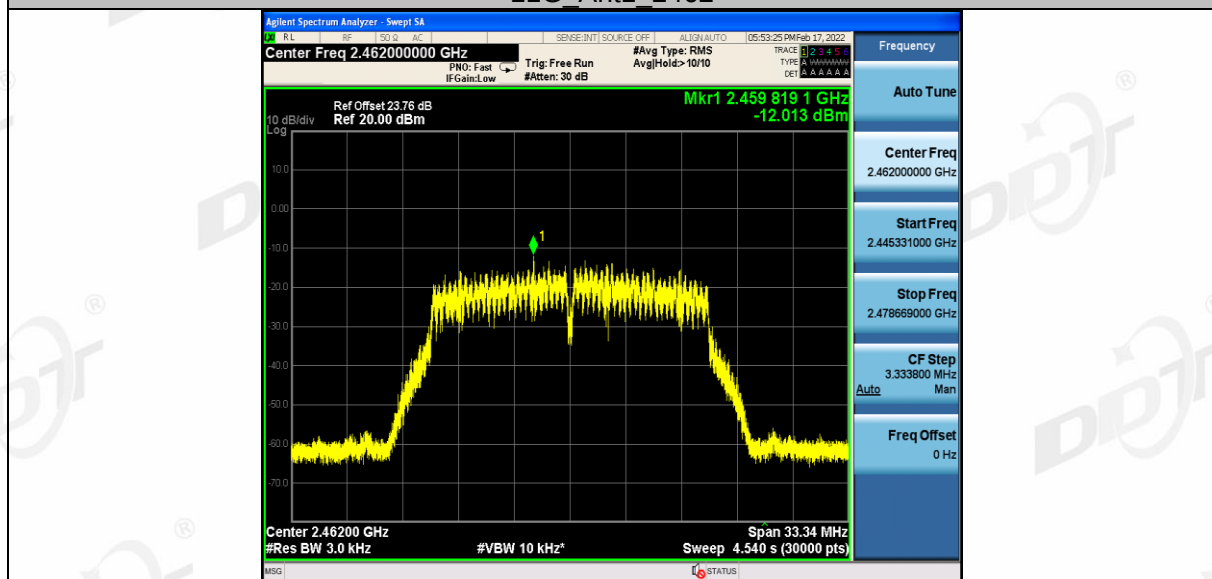
11G Ant1 2437



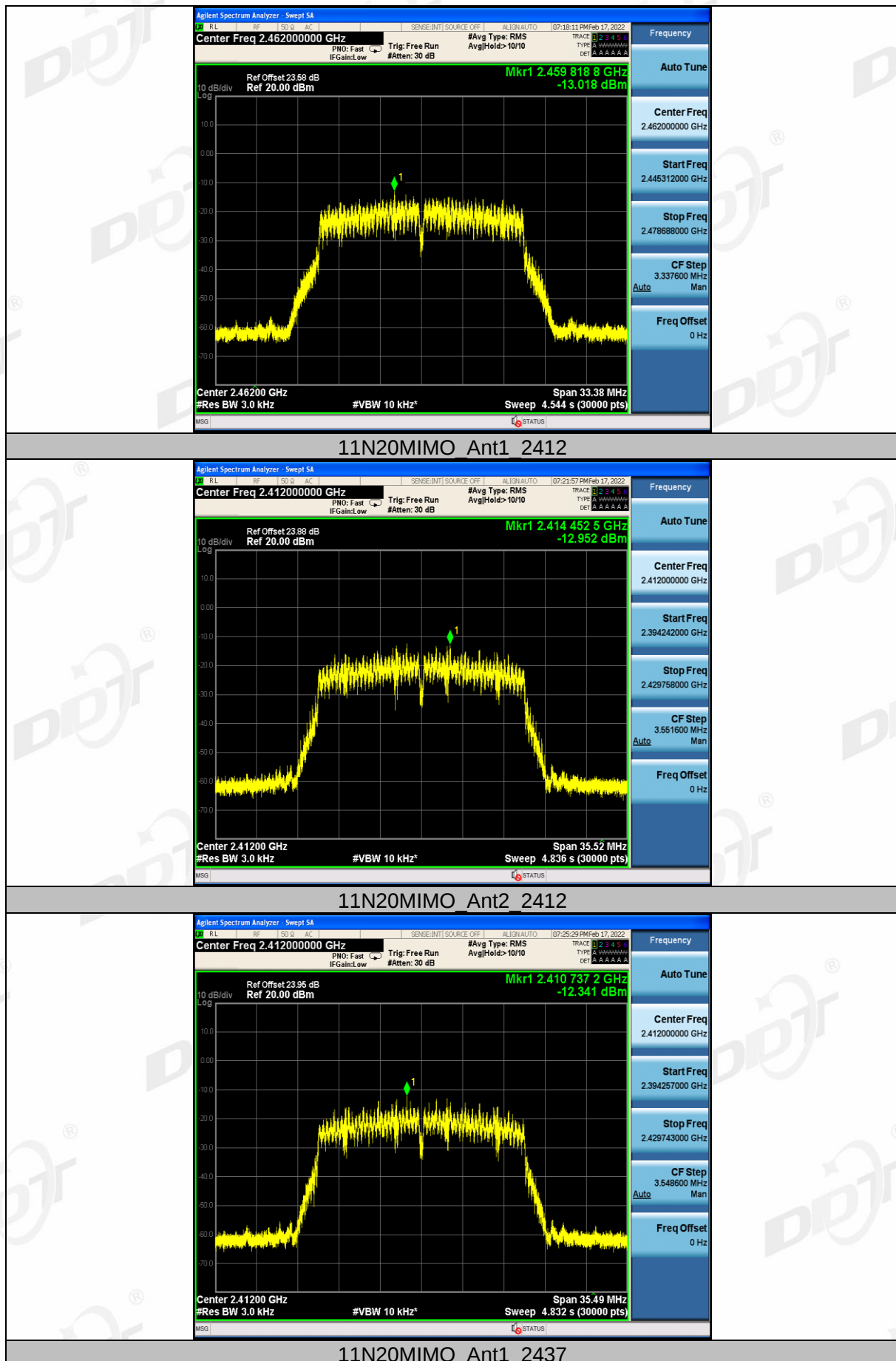
11G Ant2 2437

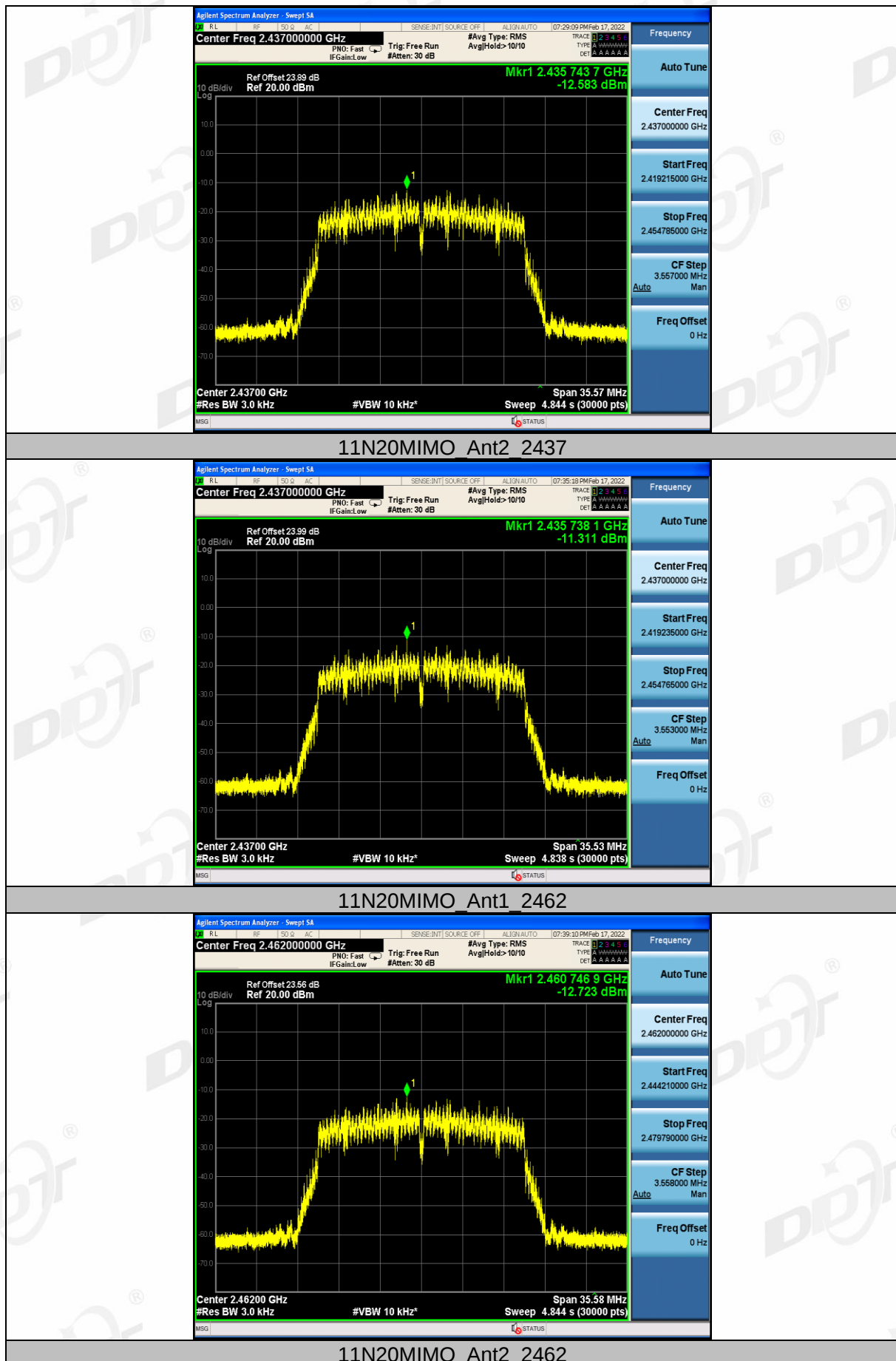


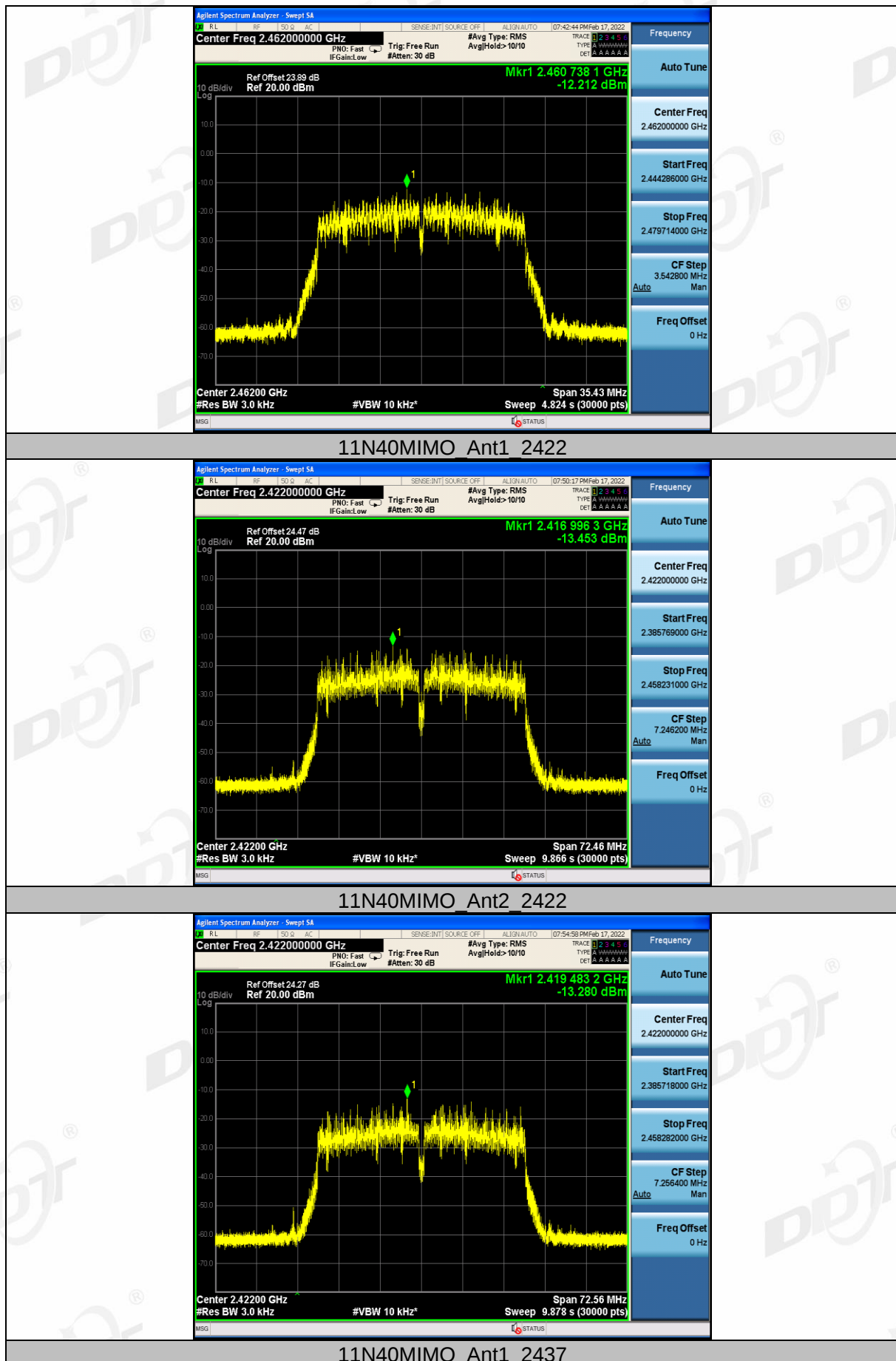
11G Ant1 2462

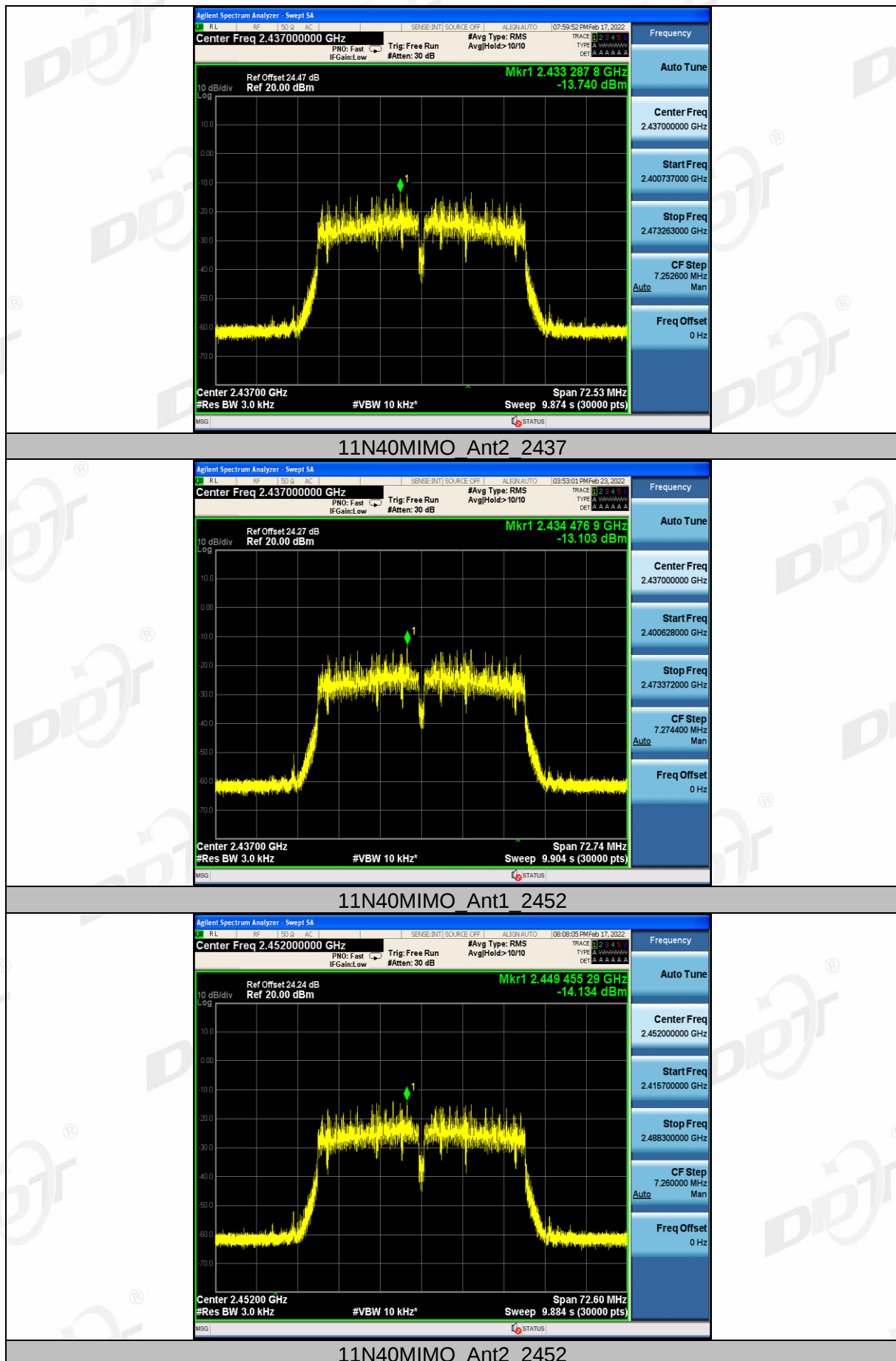


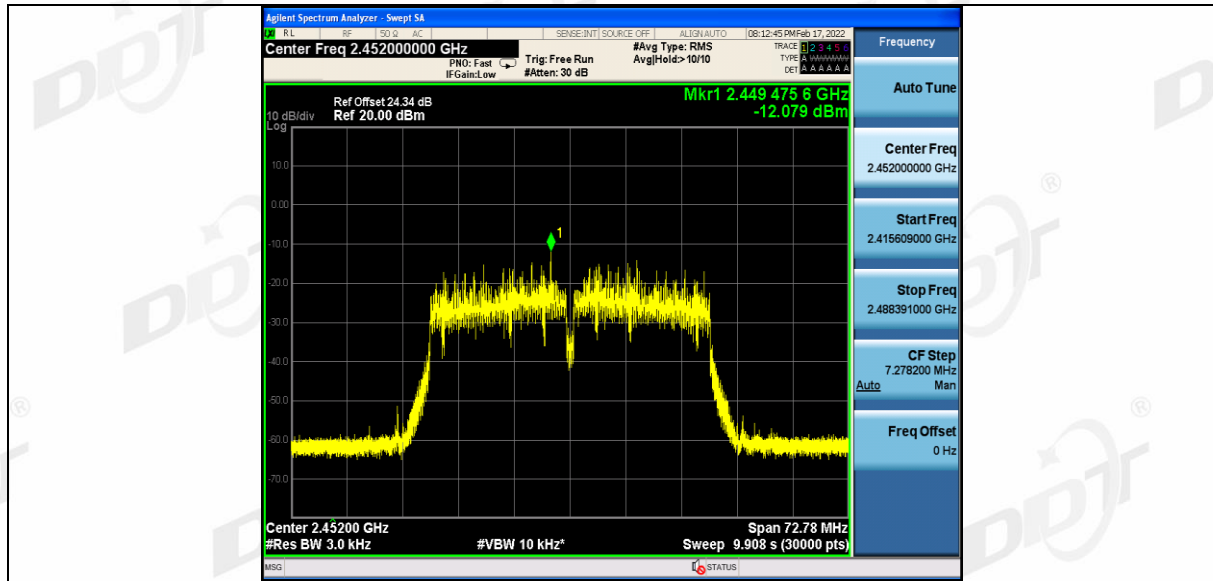
11G Ant2 2462











7. Band Edge and Spurious Emissions (Conducted)

7.1. Block diagram of test setup

Same as section 4.1

7.2. Limits

In any 100 kHz bandwidth outside the frequency bands in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power.

7.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

(2) Establish a reference level by using the following procedure:

Center frequency	DTS Channel center frequency
RBW:	100 kHz
VBW:	300 kHz
Span	1.5 times the DTS bandwidth
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

(3) Allow the trace to stabilize, use the peak marker function to determine the maximum peak power level to establish the reference level.

(4) Set the spectrum analyzer as follows:

RBW:	100 kHz
VBW:	300 kHz
Span	Encompass frequency range to be measured
Number of measurement points	$\geq \text{span/RBW}$
Detector Mode:	Peak
Sweep time:	auto
Trace mode	Max hold

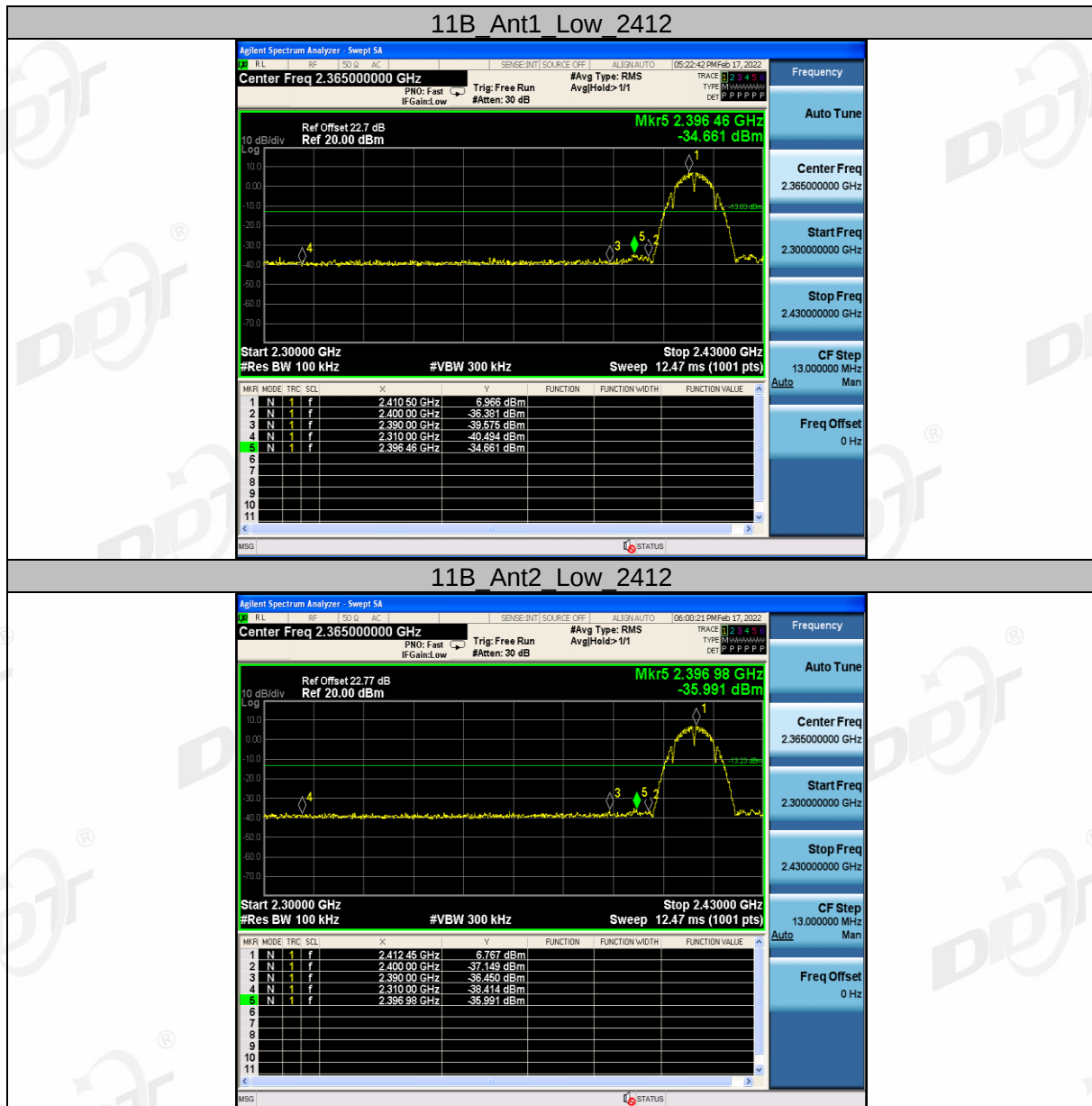
(5) Allow the trace to stabilize, use the peak marker function to determine the maximum amplitude of all unwanted emissions outside of the authorized frequency band

7.4. Test result

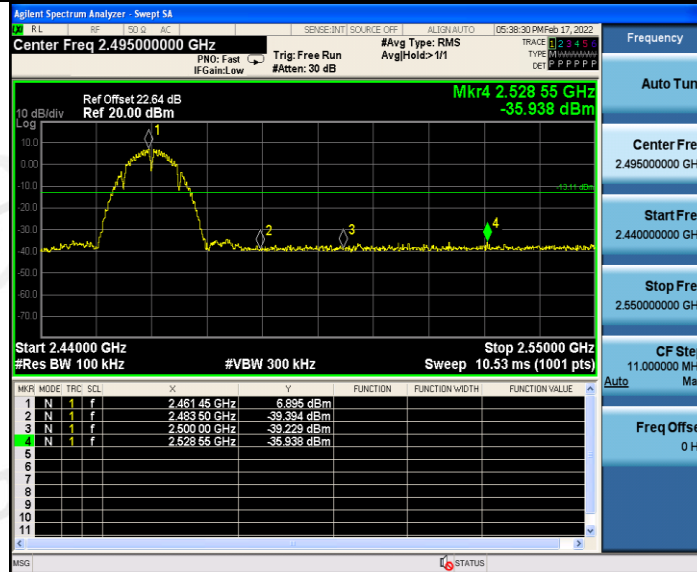
EUT Set Mode	CH or Frequency	Result (dBm)	EUT Set Mode	CH or Frequency	Result Result (dBm)
11b	CH1	Pass	11n HT 20	CH1	Pass
	CH6	Pass		CH6	Pass
	CH11	Pass		CH11	Pass
11g	CH1	Pass	11n HT 40	CH3	Pass
	CH6	Pass		CH6	Pass
	CH11	Pass		CH9	Pass

7.5. original test data

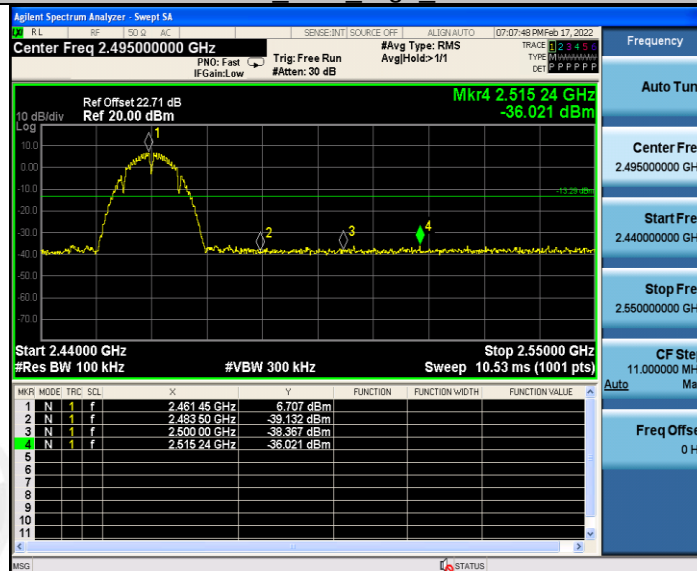
Band Edge



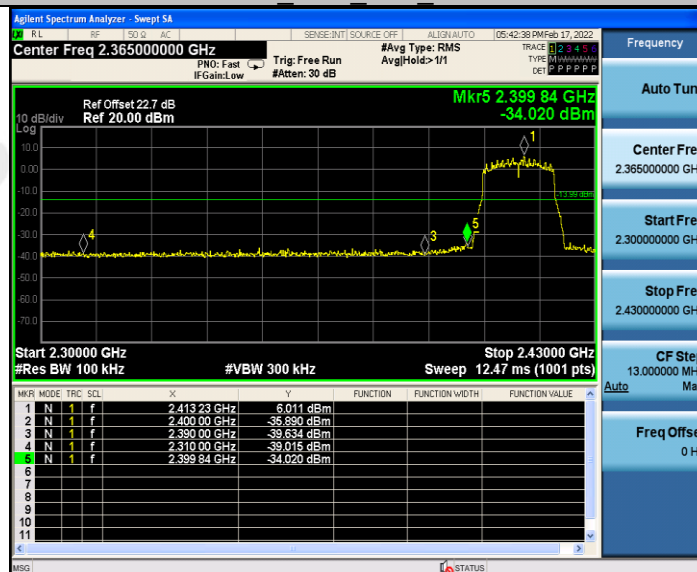
11B Ant1 High 2462



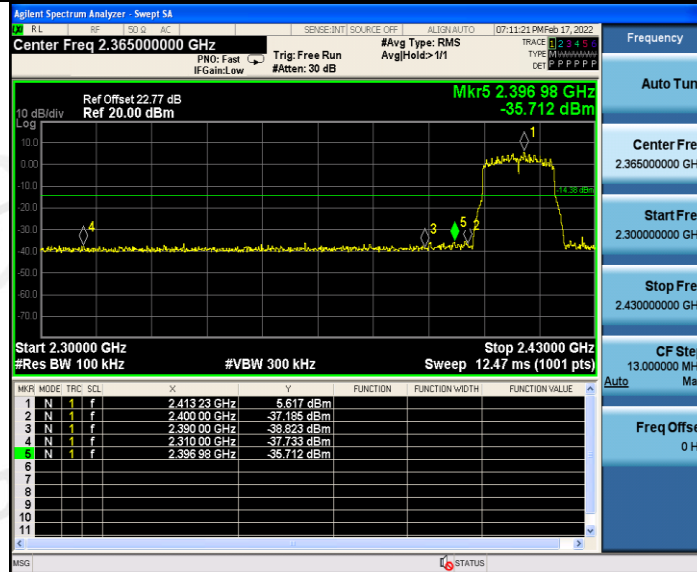
11B Ant2 High 2462



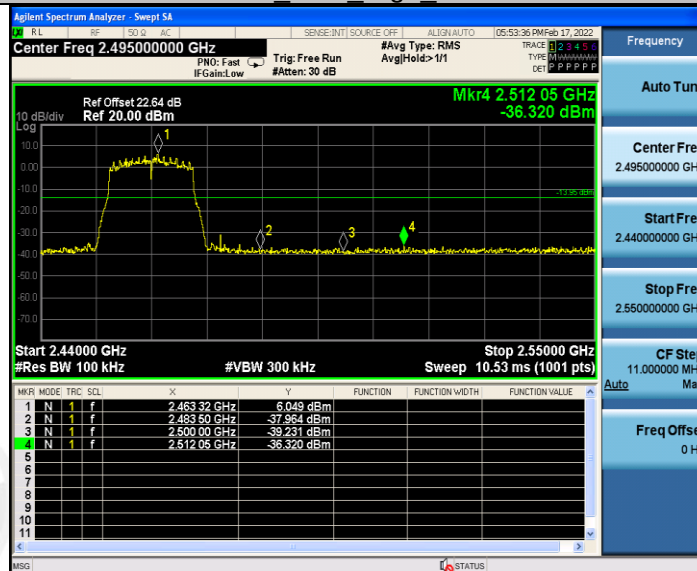
11G Ant1 Low 2412



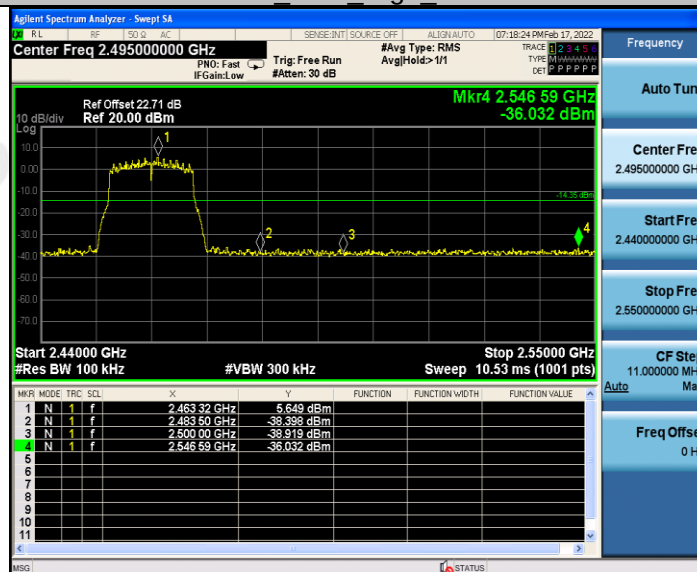
11G Ant2 Low 2412



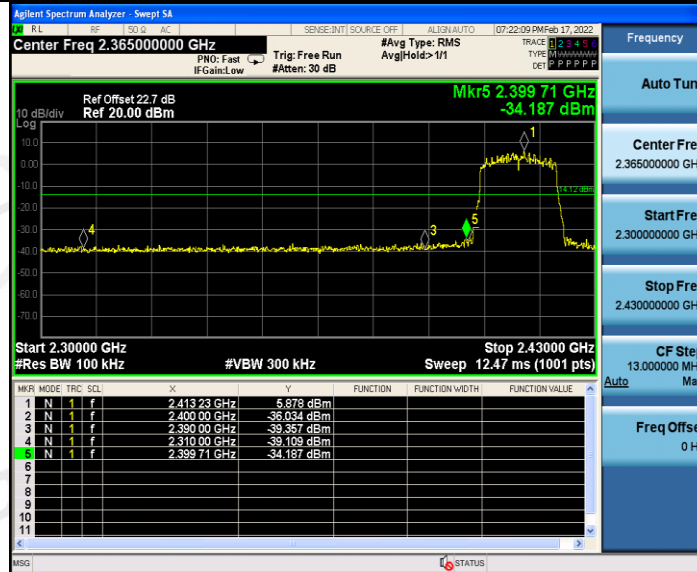
11G Ant1 High 2462



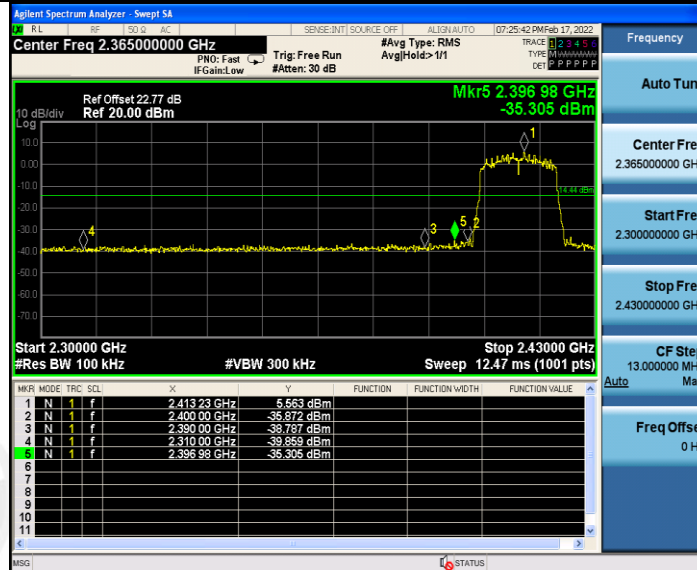
11G Ant2 High 2462



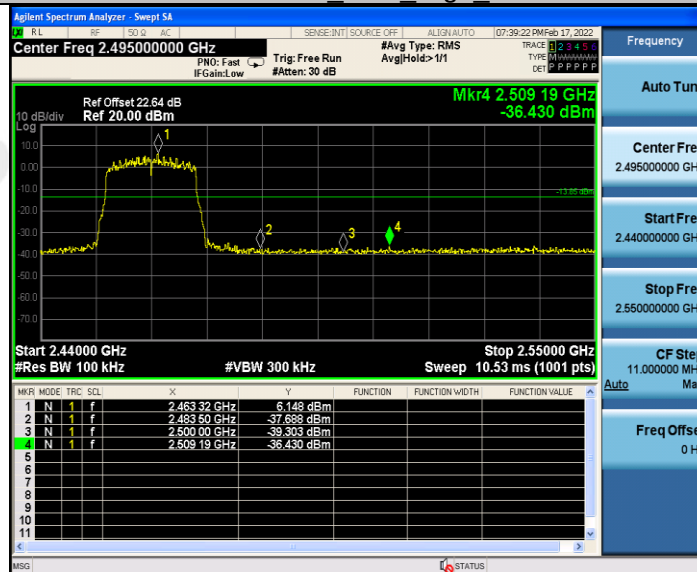
11N20MIMO Ant1 Low 2412



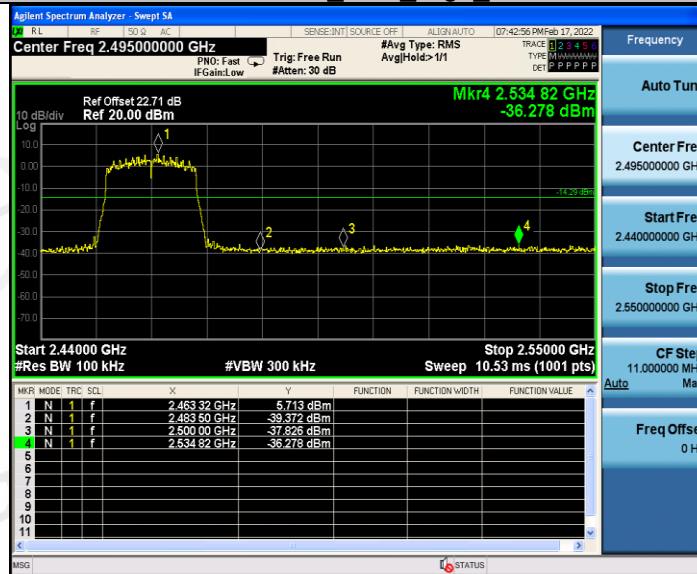
11N20MIMO Ant2 Low 2412



11N20MIMO Ant1 High 2462



11N20MIMO Ant2 High 2462



Frequency

Auto Tune

Center Freq
2.495000000 GHz

Start Freq
2.440000000 GHz

Stop Freq
2.550000000 GHz

CF Step
11.000000 MHz

Man

Freq Offset
0 Hz

11N40MIMO Ant1 Low 2422



Frequency

Auto Tune

Center Freq
2.365000000 GHz

Start Freq
2.300000000 GHz

Stop Freq
2.430000000 GHz

CF Step
13.000000 MHz

Man

Freq Offset
0 Hz

11N40MIMO Ant2 Low 2422



Frequency

Auto Tune

Center Freq
2.365000000 GHz

Start Freq
2.300000000 GHz

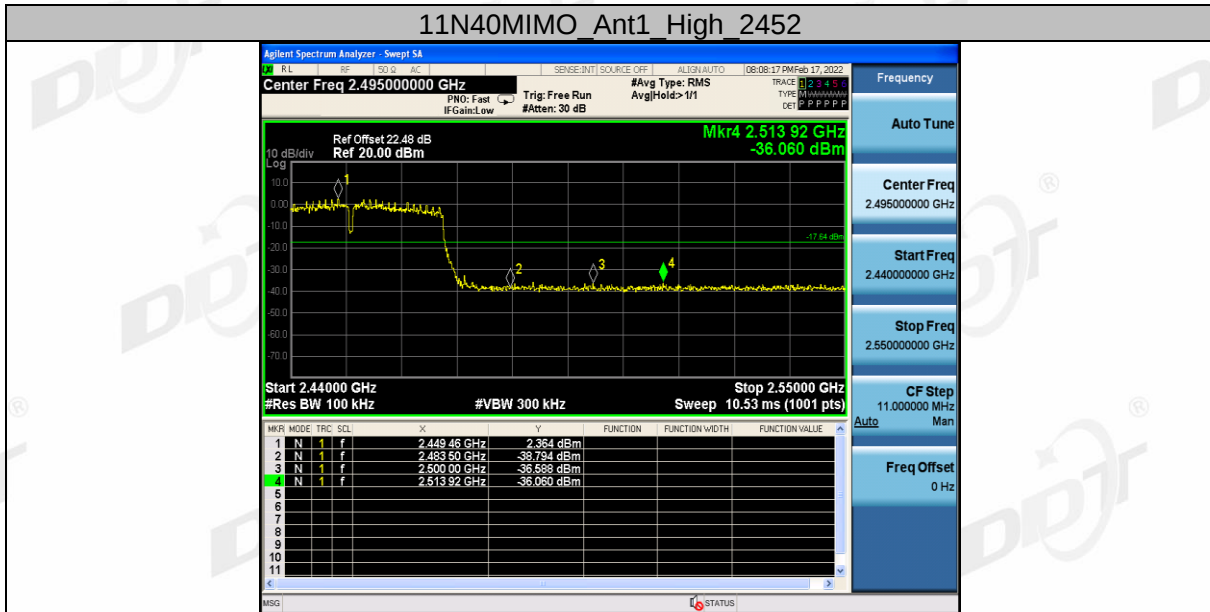
Stop Freq
2.430000000 GHz

CF Step
13.000000 MHz

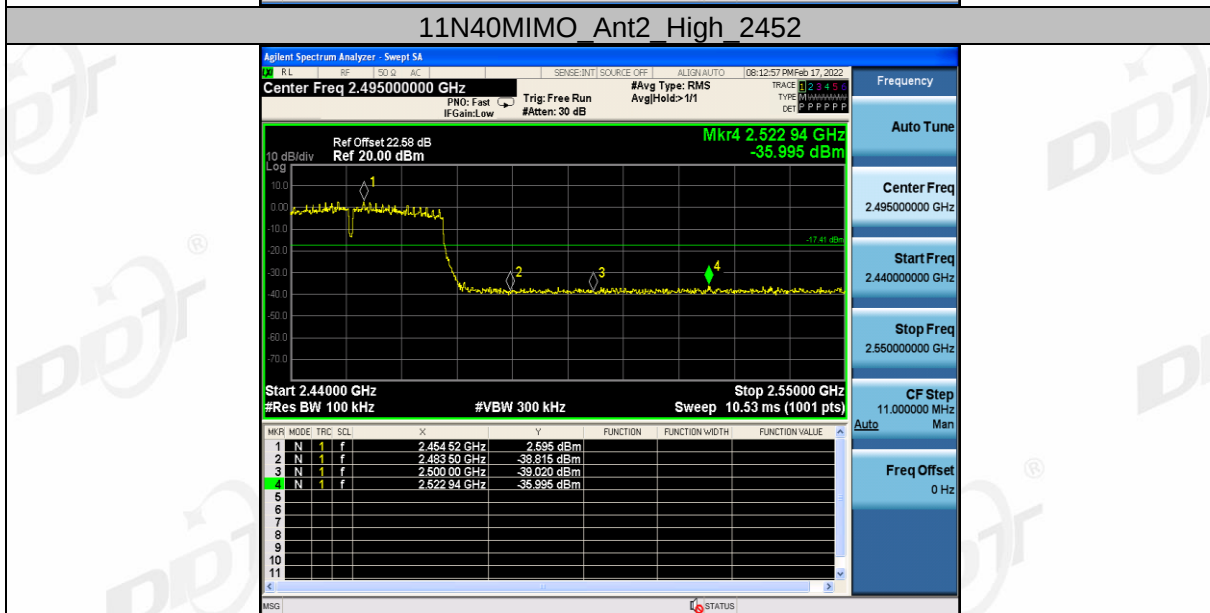
Man

Freq Offset
0 Hz

11N40MIMO Ant1 High 2452



11N40MIMO Ant2 High 2452



Spurious Emissions

11B_Ant1_2412_0~Reference

