

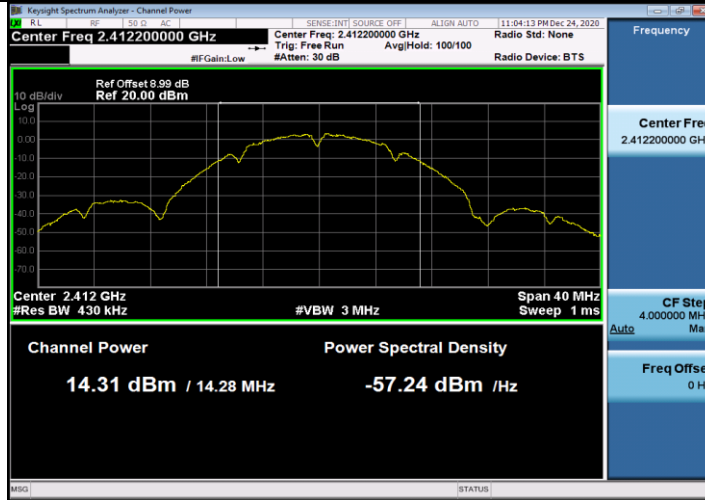


4.3.5 Test Results

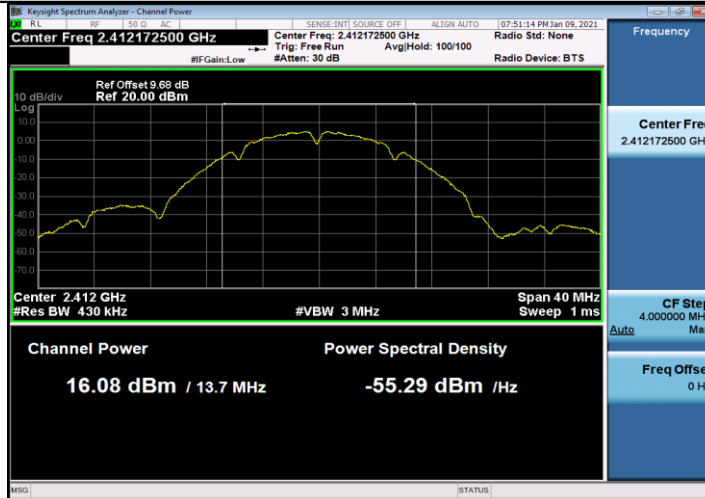
Test Mode	Antenna	Channel [MHz]	Level [dBm]	10log(1/x) Factor[dB]	Power [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	14.31	0.03	14.34	<=30	PASS
	Ant2	2412	16.08	0.03	16.11	<=30	PASS
	Ant1	2437	14.79	0.03	14.82	<=30	PASS
	Ant2	2437	15.00	0.03	15.03	<=30	PASS
	Ant1	2462	14.59	0.03	14.62	<=30	PASS
	Ant2	2462	16.21	0.03	16.24	<=30	PASS
11G	Ant1	2412	9.63	0.08	9.71	<=30	PASS
	Ant2	2412	11.30	0.08	11.38	<=30	PASS
	Ant1	2437	9.74	0.08	9.82	<=30	PASS
	Ant2	2437	10.44	0.08	10.52	<=30	PASS
	Ant1	2462	10.05	0.08	10.13	<=30	PASS
	Ant2	2462	11.63	0.08	11.71	<=30	PASS
11N20MIMO	Ant1	2412	9.35	0.09	9.44	<=30	PASS
	Ant2	2412	10.11	0.09	10.20	<=30	PASS
	total	2412	--	--	12.85	<=30	PASS
	Ant1	2437	9.60	0.09	9.69	<=30	PASS
	Ant2	2437	9.27	0.09	9.36	<=30	PASS
	total	2437	--	--	12.54	<=30	PASS
	Ant1	2462	9.64	0.09	9.73	<=30	PASS
	Ant2	2462	10.60	0.09	10.69	<=30	PASS
	total	2462	--	--	13.25	<=30	PASS
11N40MIMO	Ant1	2422	9.61	0.22	9.83	<=30	PASS
	Ant2	2422	10.03	0.22	10.25	<=30	PASS
	total	2422	--	--	13.06	<=30	PASS
	Ant1	2437	9.72	0.22	9.94	<=30	PASS
	Ant2	2437	9.35	0.22	9.57	<=30	PASS
	total	2437	--	--	12.77	<=30	PASS
	Ant1	2452	9.68	0.22	9.9	<=30	PASS
	Ant2	2452	9.81	0.22	10.03	<=30	PASS
	total	2452	--	--	12.98	<=30	PASS



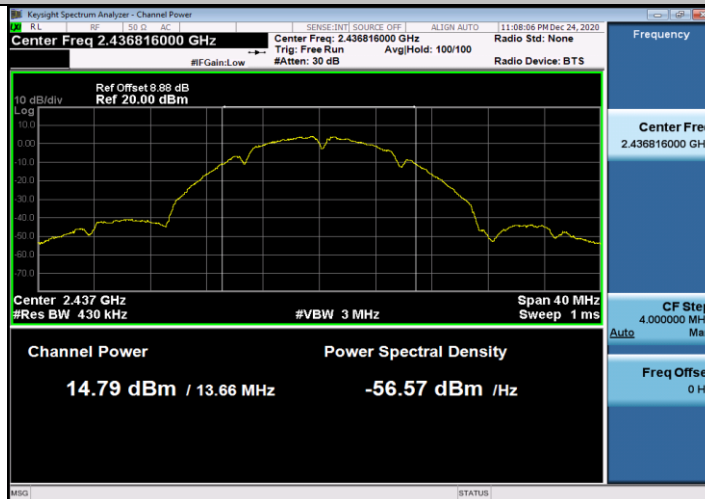
11B_Ant1_2412



11B_Ant2_2412

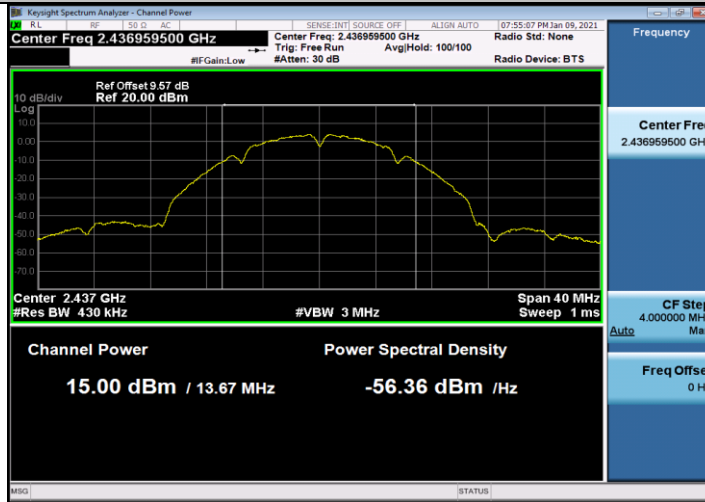


11B_Ant1_2437

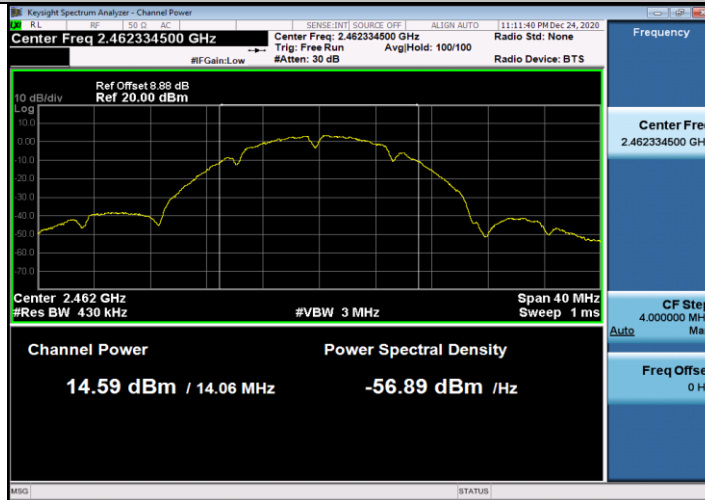




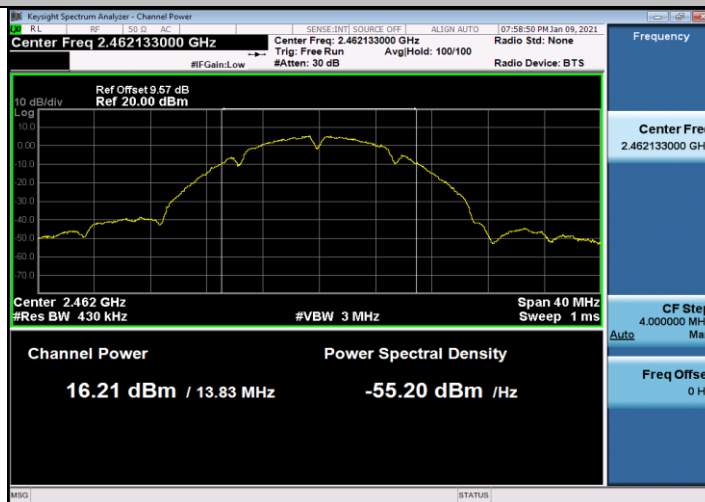
11B_Ant2_2437



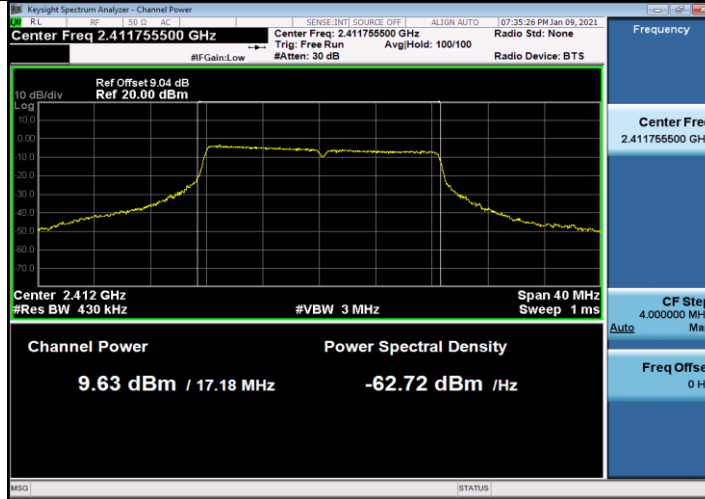
11B_Ant1_2462



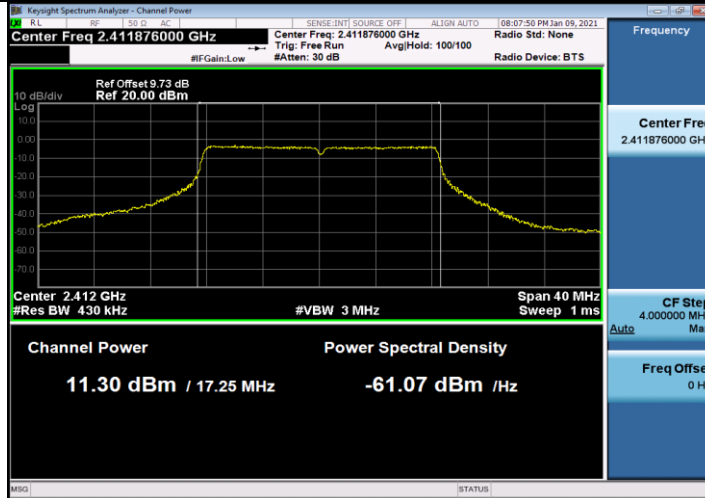
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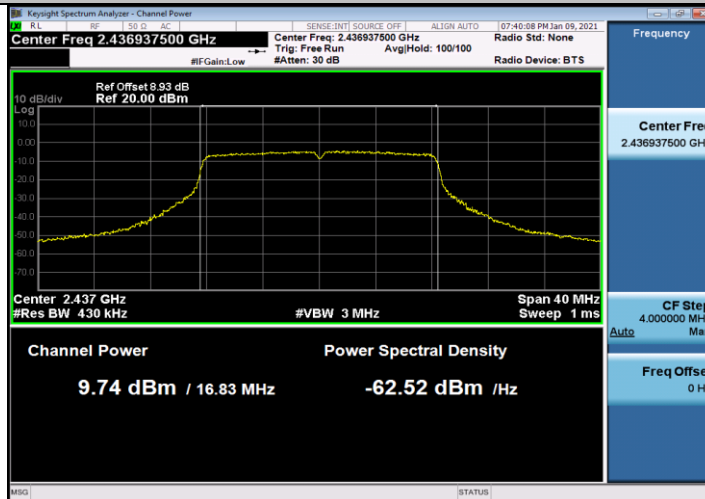
11G_Ant1_2412



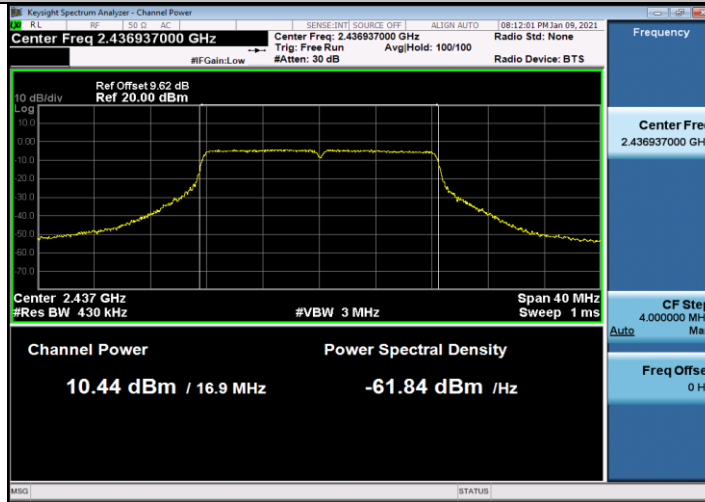
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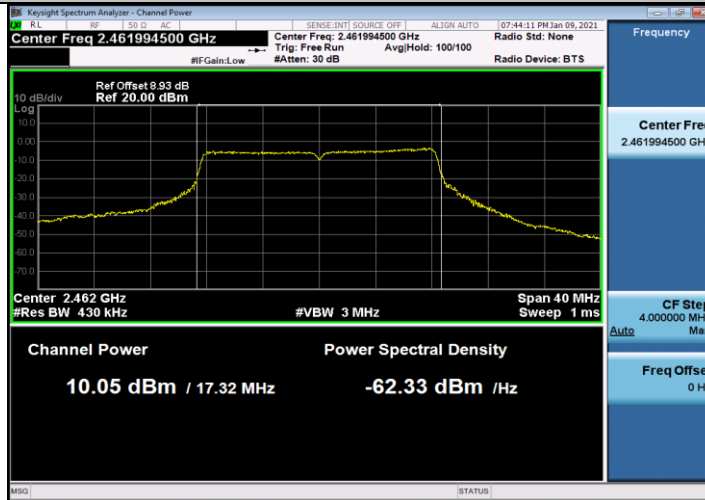
11G_Ant1_2437



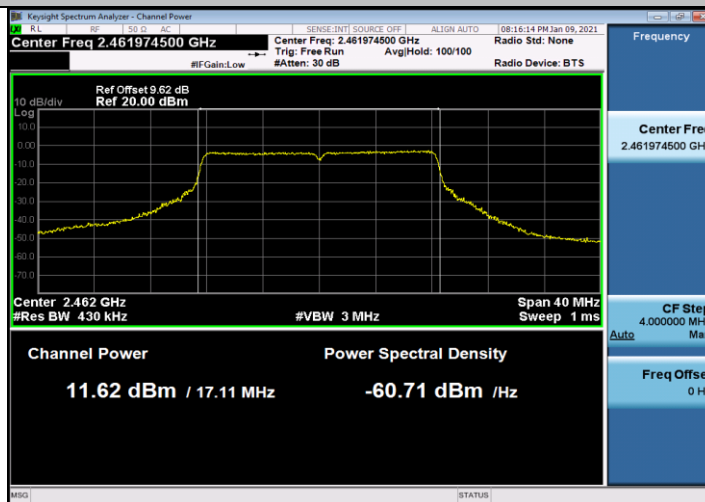
11G_Ant2_2437



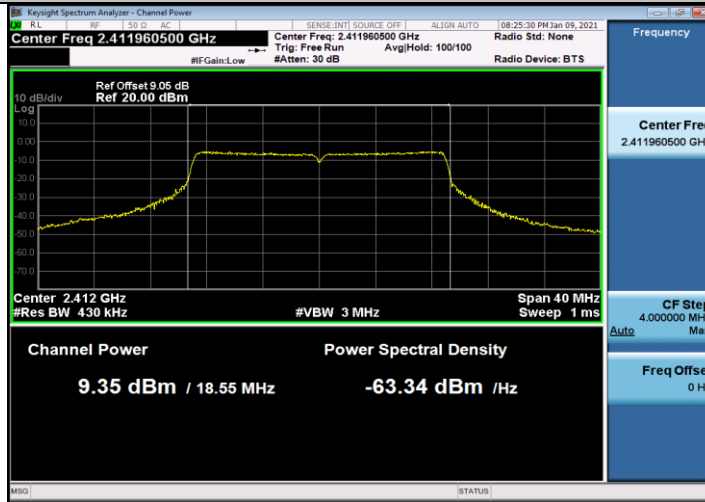
11G_Ant1_2462



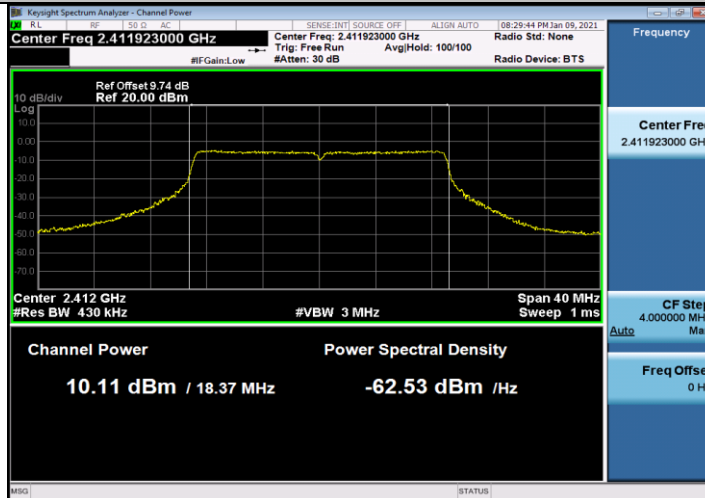
11G_Ant2_2462



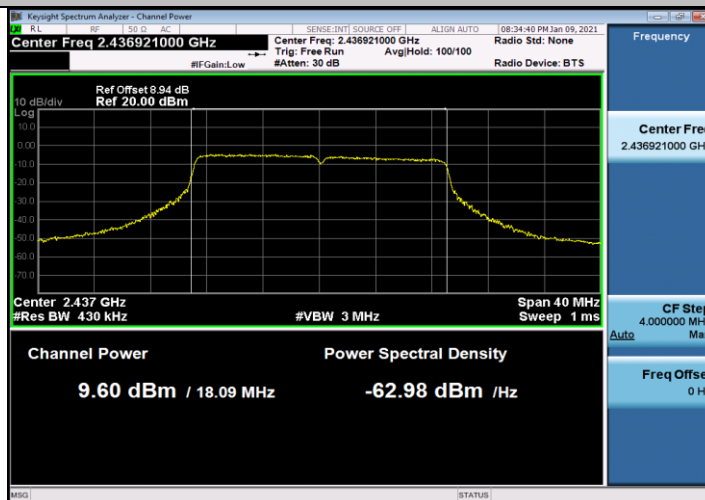
11N20MIMO_Ant1_2412



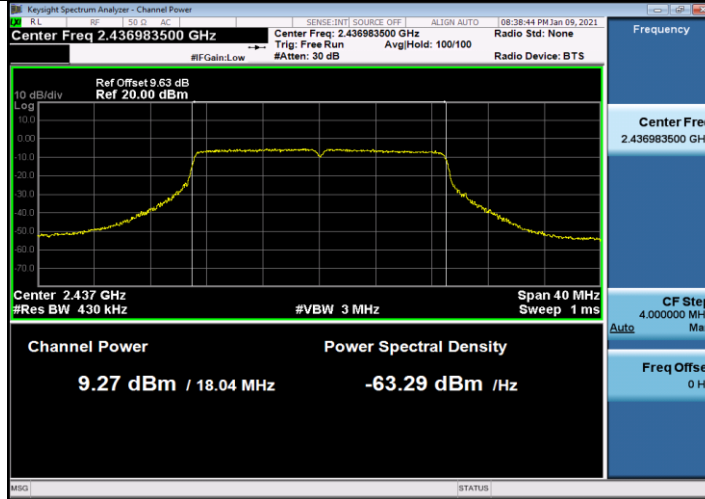
11N20MIMO_Ant2_2412



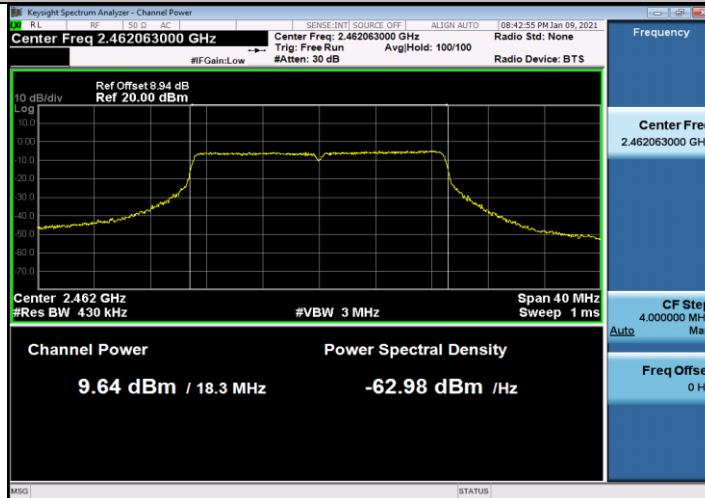
11N20MIMO_Ant1_2437



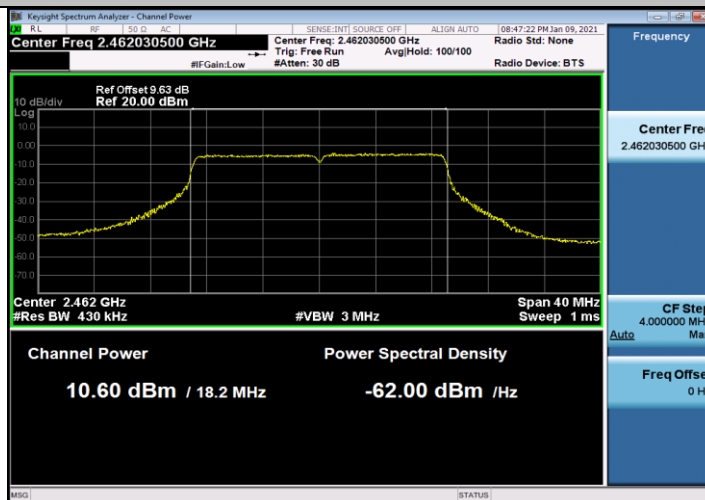
11N20MIMO_Ant2_2437



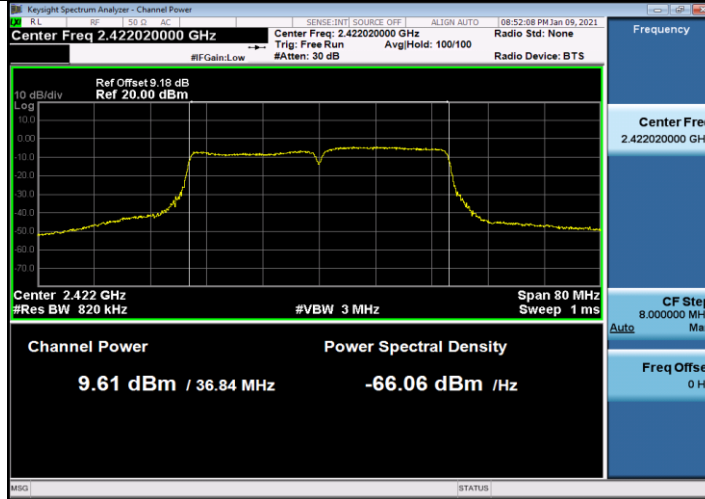
11N20MIMO_Ant1_2462



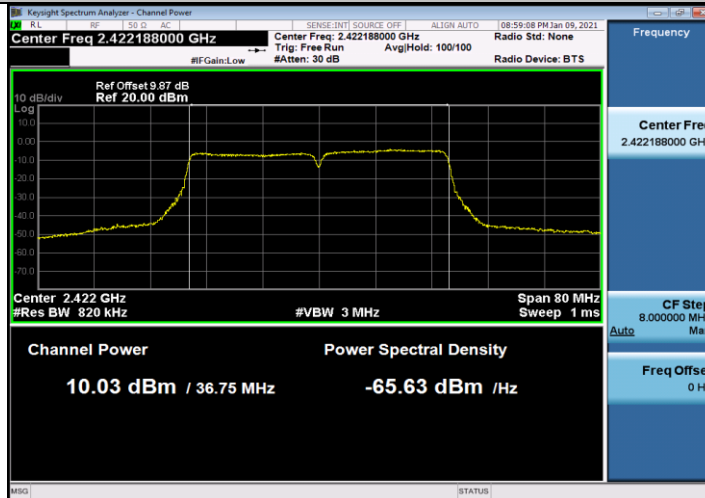
11N20MIMO_Ant2_2462



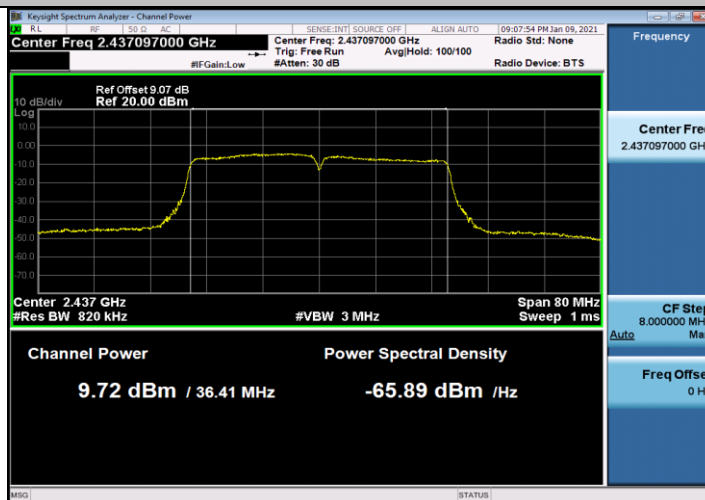
11N40MIMO_Ant1_2422



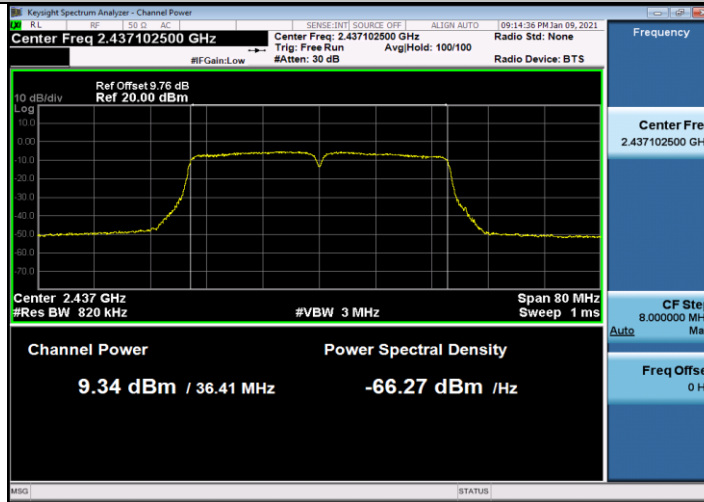
11N40MIMO_Ant2_2422



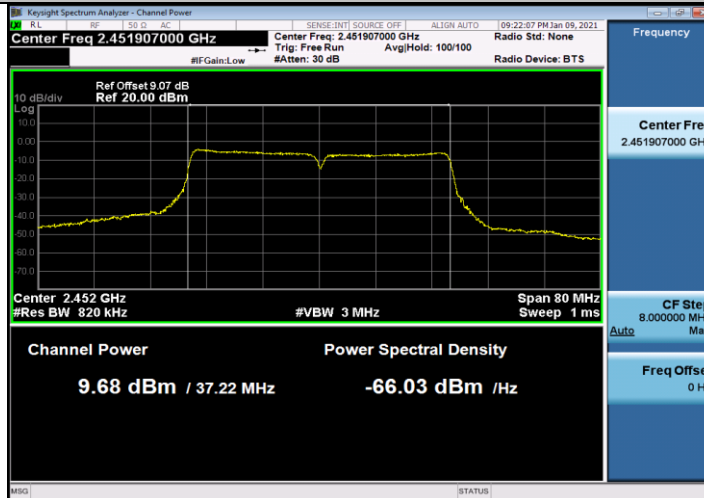
11N40MIMO_Ant1_2437



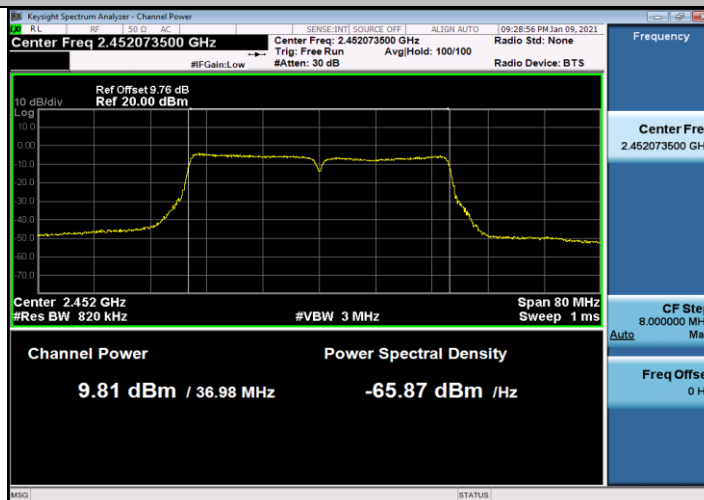
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

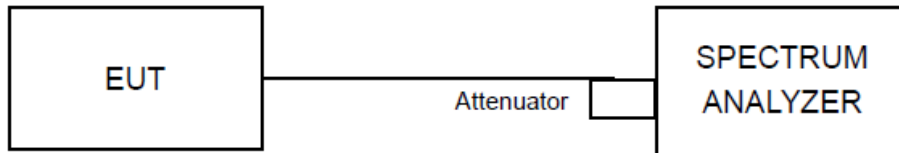


4.4 Power Spectral Density

4.4.1 Limit

The Maximum of Power Spectral Density Measurement is 8 dBm in any 3 kHz band.

4.4.2 Test Setup



4.4.3 Test Procedures

The power output per FCC § 15.247(e) was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” (clause 10.5) for compliance to FCC 47CFR 15.247 requirements.

- a) Measure the duty cycle (x) of the transmitter output signal.
- b) Set instrument center frequency to DTS channel center frequency.
- c) Set span to at least 1.5 OBW.
- d) Set RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
- e) Set VBW $\geq 3 \text{ RBW}$.
- f) Detector = power averaging (RMS) or sample detector (when RMS not available).
- g) Ensure that the number of measurement points in the sweep $\geq 2 \text{ span/RBW}$.
- h) Sweep time = auto couple.
- i) Do not use sweep triggering. Allow sweep to “free run”.
- j) Employ trace averaging (RMS) mode over a minimum of 100 traces.
- k) Use the peak marker function to determine the maximum amplitude level.
- l) Add $10 \log(1/x)$, where x is the duty cycle measured in step (a), to the measured PSD to compute the average PSD during the actual transmission time.
- m) If resultant value exceeds the limit, then reduce RBW (no less than 3 kHz) and repeat (note that this may require zooming in on the emission of interest and reducing the span in order to meet the minimum measurement point requirement as the RBW is reduced).

4.4.4 Deviation of Test Standard

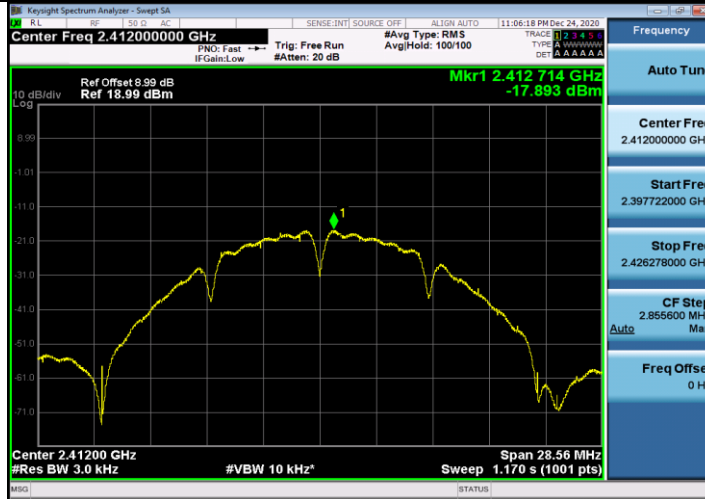
No deviation.



4.4.5 Test Results

Test Mode	Antenna	Channel [MHz]	Level [dBm]	10log(1/x) Factor[dB]	PSD [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
11B	Ant1	2412	-17.89	0.03	-17.86	<=8	PASS
	Ant2	2412	-15.02	0.03	-14.99	<=8	PASS
	Ant1	2437	-17.05	0.03	-17.02	<=8	PASS
	Ant2	2437	-17	0.03	-16.97	<=8	PASS
	Ant1	2462	-17.5	0.03	-17.47	<=8	PASS
	Ant2	2462	-15.35	0.03	-15.32	<=8	PASS
11G	Ant1	2412	-24.44	0.08	-24.36	<=8	PASS
	Ant2	2412	-23.69	0.08	-23.61	<=8	PASS
	Ant1	2437	-25.12	0.08	-25.04	<=8	PASS
	Ant2	2437	-24.52	0.08	-24.44	<=8	PASS
	Ant1	2462	-24.1	0.08	-24.02	<=8	PASS
	Ant2	2462	-23.21	0.08	-23.13	<=8	PASS
11N20M IMO	Ant1	2412	-25.56	0.09	-25.47	<=8	PASS
	Ant2	2412	-24.88	0.09	-24.79	<=8	PASS
	total	2412	--	--	-22.11	<=8	PASS
	Ant1	2437	-25.05	0.09	-24.96	<=8	PASS
	Ant2	2437	-25.58	0.09	-25.49	<=8	PASS
	total	2437	--	--	-22.21	<=8	PASS
	Ant1	2462	-25.45	0.09	-25.36	<=8	PASS
	Ant2	2462	-24.34	0.09	-24.25	<=8	PASS
	total	2462	--	--	-21.76	<=8	PASS
11N40M IMO	Ant1	2422	-27.6	0.22	-27.38	<=8	PASS
	Ant2	2422	-27.74	0.22	-27.52	<=8	PASS
	total	2422	--	--	-24.44	<=8	PASS
	Ant1	2437	-27.37	0.22	-27.15	<=8	PASS
	Ant2	2437	-28.39	0.22	-28.17	<=8	PASS
	total	2437	--	--	-24.62	<=8	PASS
	Ant1	2452	-27.25	0.22	-27.03	<=8	PASS
	Ant2	2452	-27.59	0.22	-27.37	<=8	PASS
	total	2452	--	--	-24.19	<=8	PASS

11B_Ant1_2412



11B_Ant2_2412



11B_Ant1_2437



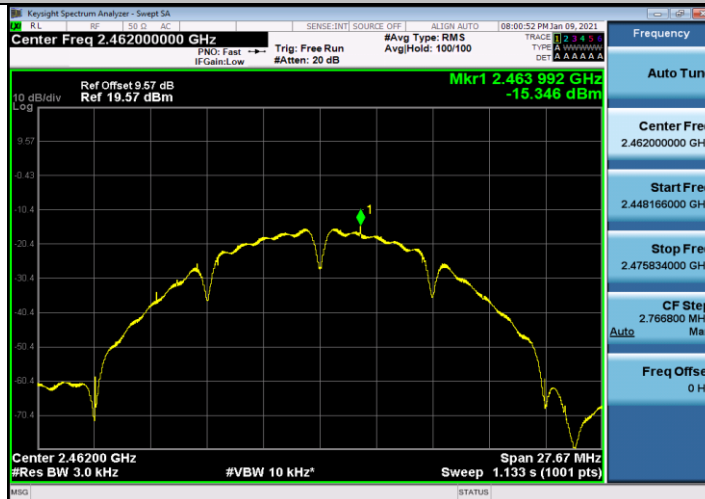
11B_Ant2_2437



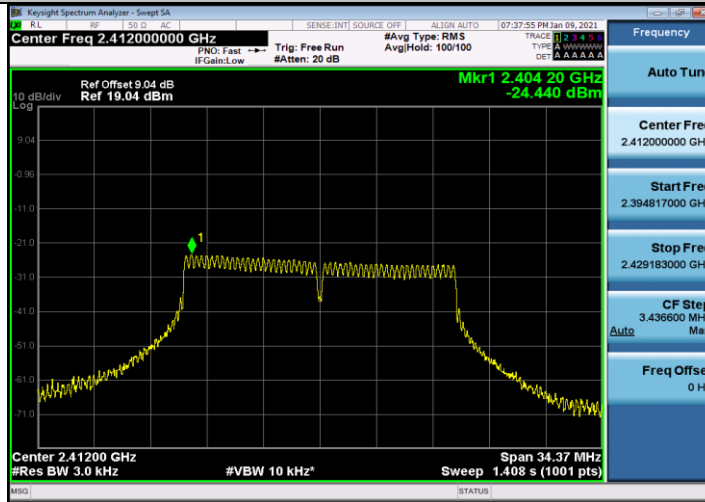
11B_Ant1_2462



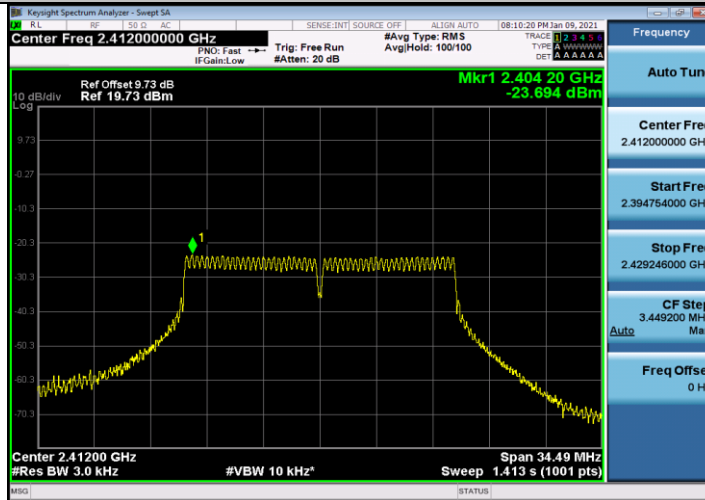
11B_Ant2_2462



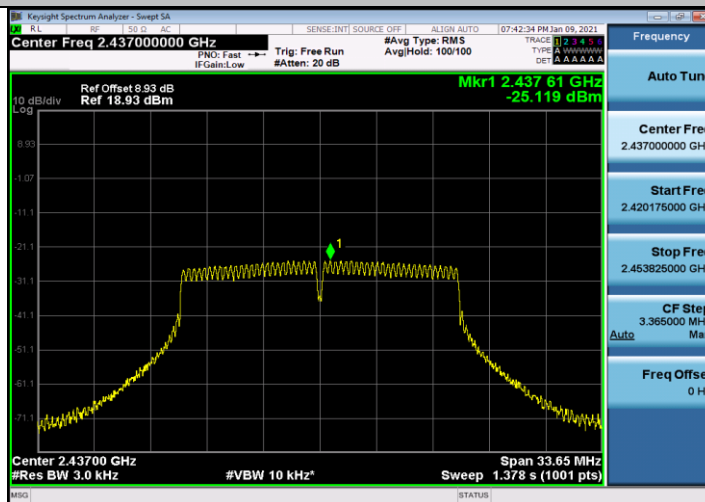
11G_Ant1_2412



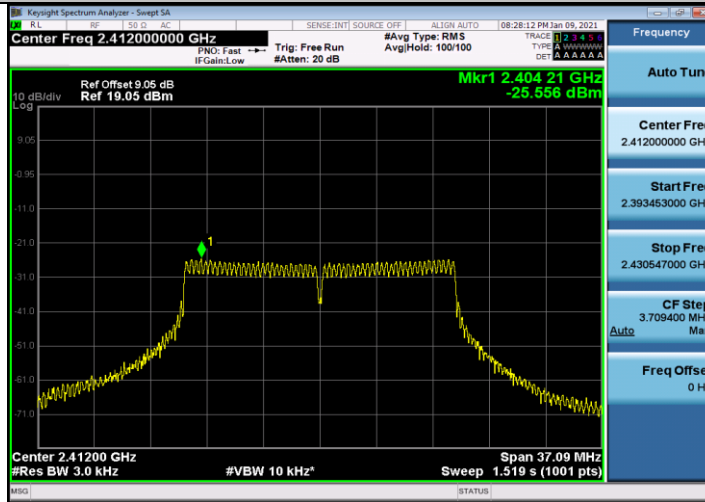
11G_Ant2_2412



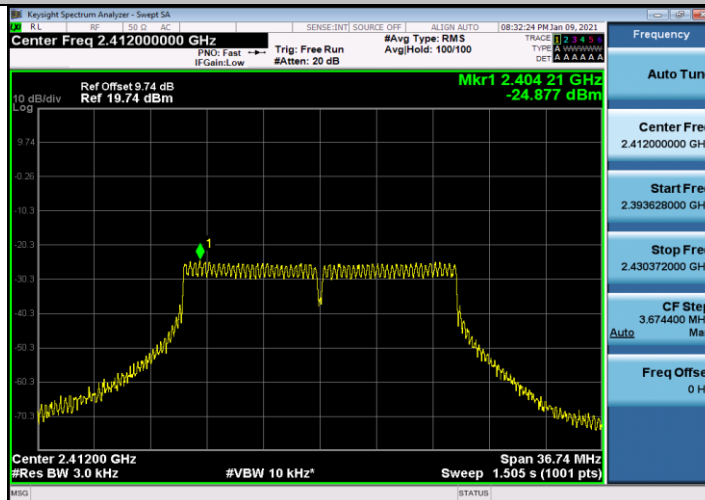
11G_Ant1_2437



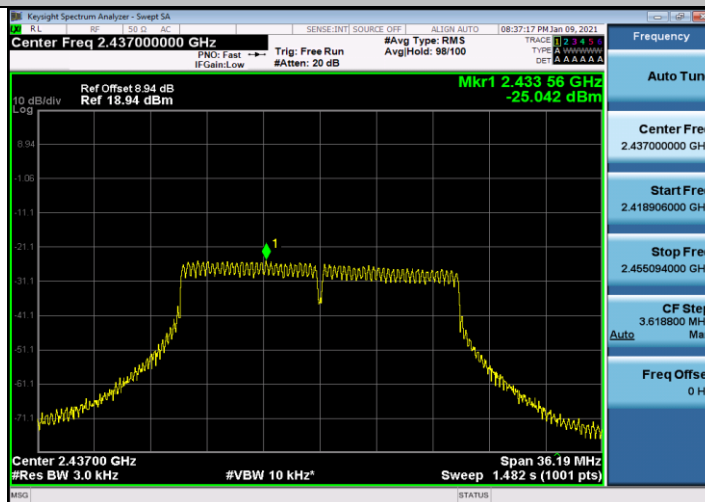
11N20MIMO_Ant1_2412



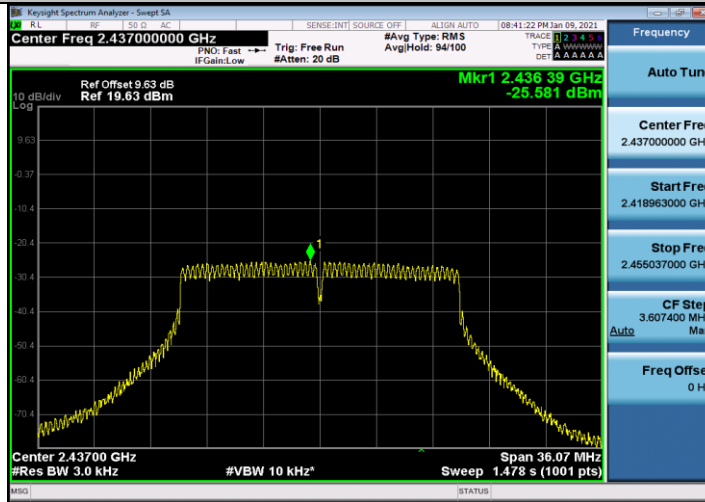
11N20MIMO_Ant2_2412



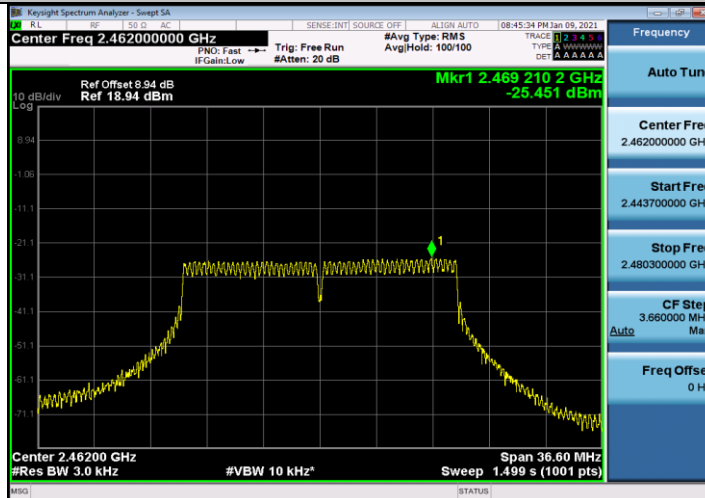
11N20MIMO_Ant1_2437



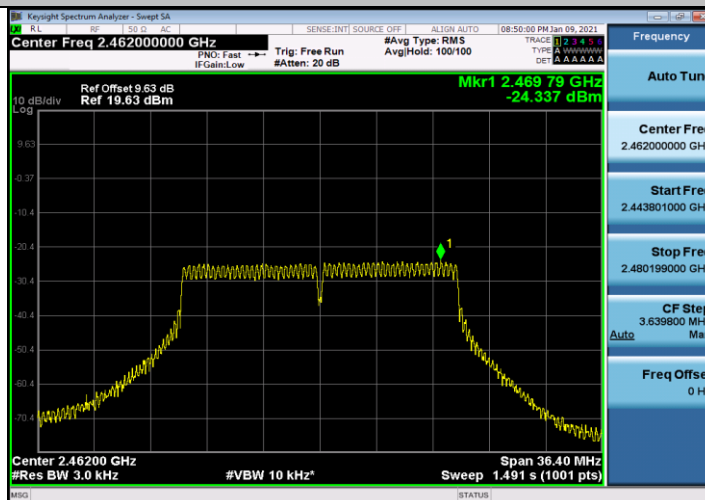
11N20MIMO_Ant2_2437



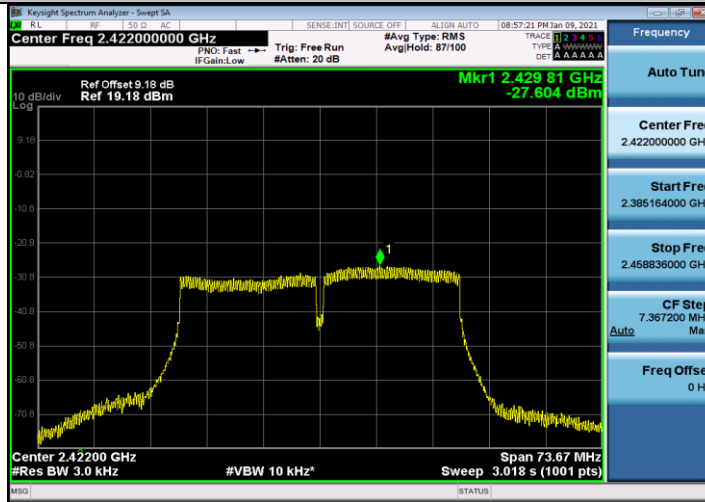
11N20MIMO_Ant1_2462



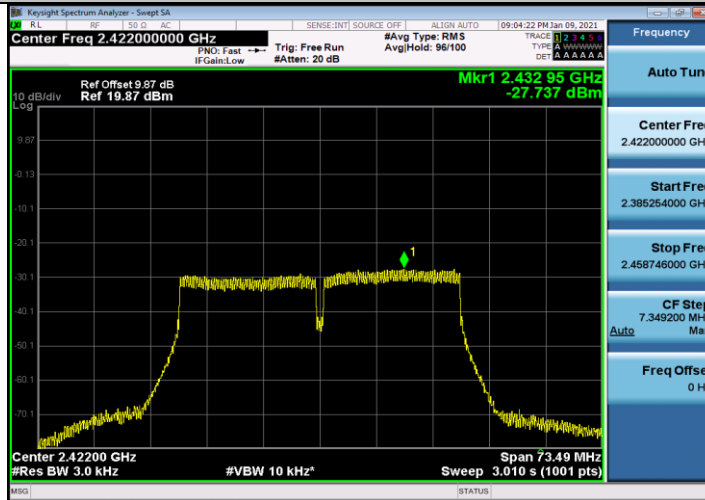
11N20MIMO_Ant2_2462



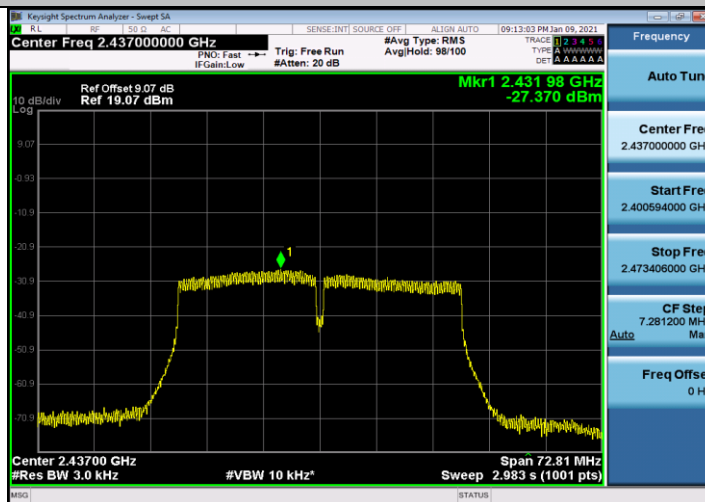
11N40MIMO_Ant1_2422



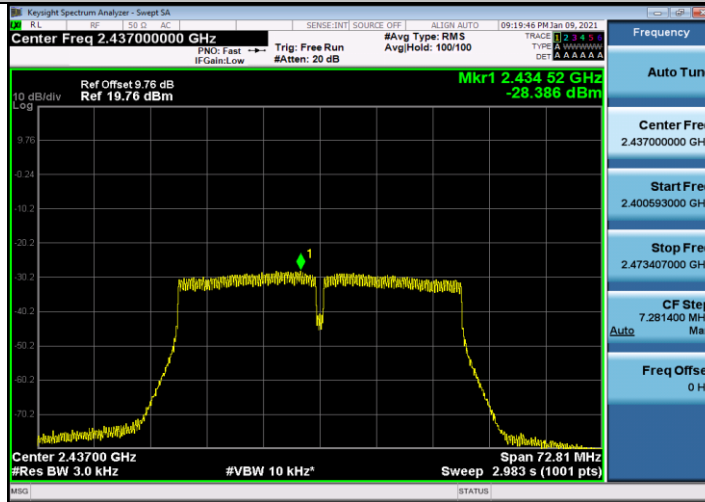
11N40MIMO_Ant2_2422



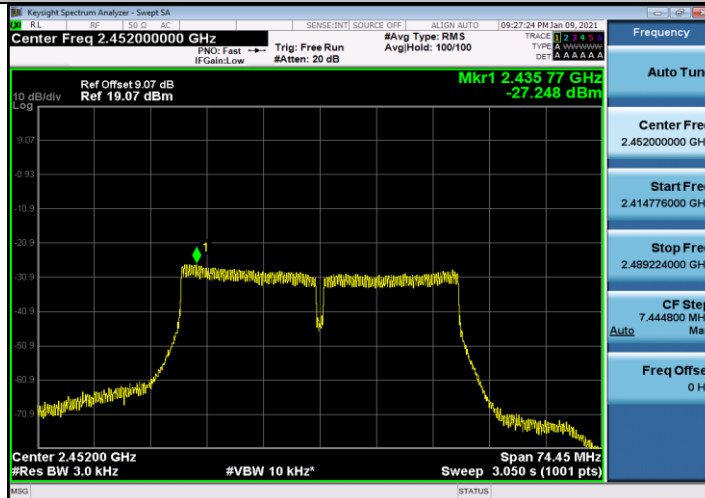
11N40MIMO_Ant1_2437



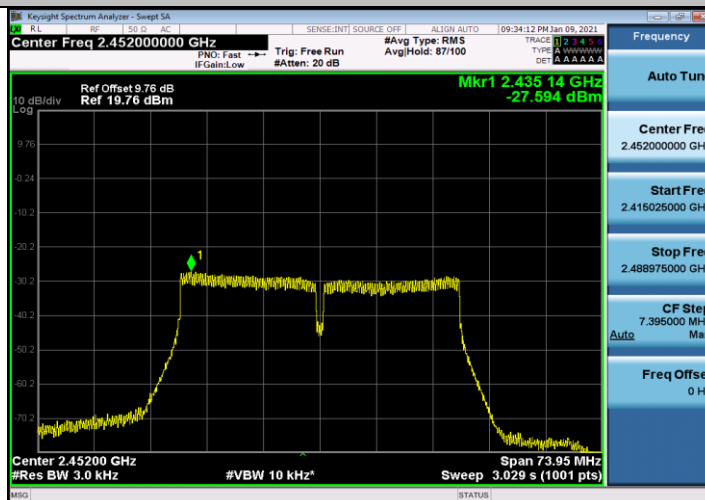
11N40MIMO_Ant2_2437



11N40MIMO_Ant1_2452



11N40MIMO_Ant2_2452

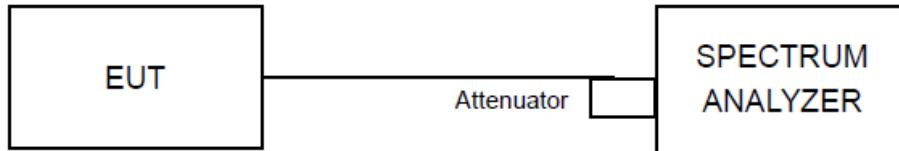


4.5 Conducted Band Edges Measurement

4.5.1 Limit

Below 30 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

4.5.2 Test Setup



4.5.3 Test Procedures

The EUT was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” (clause 11.0) for compliance to FCC 47CFR 15.247 requirements.

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.5.4 Deviation of Test Standard

No deviation.