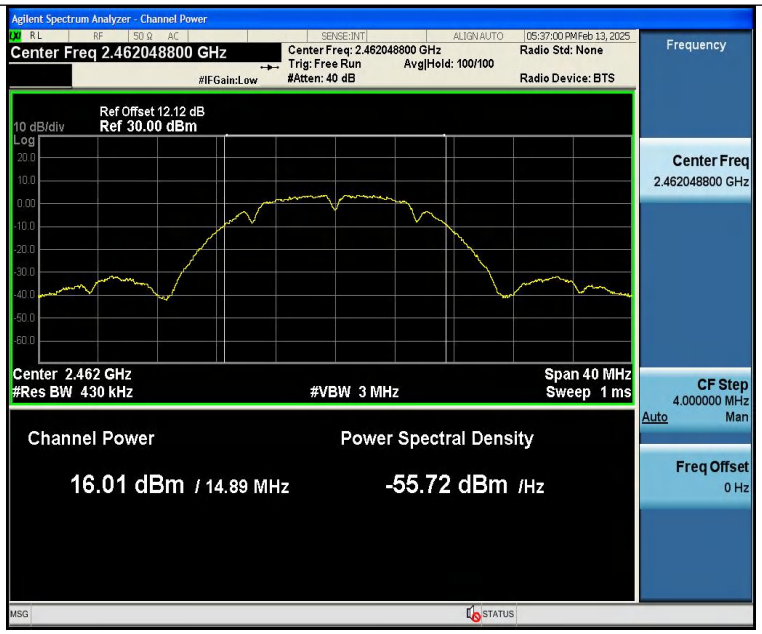
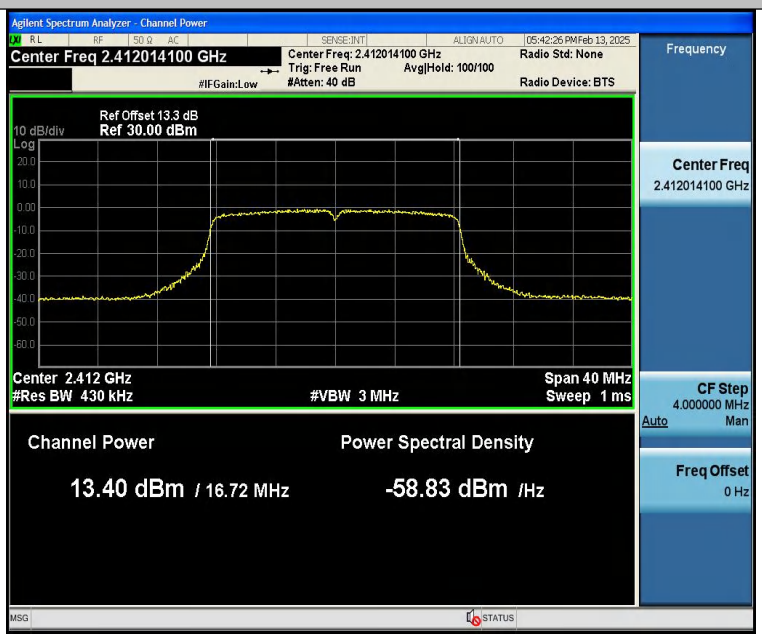
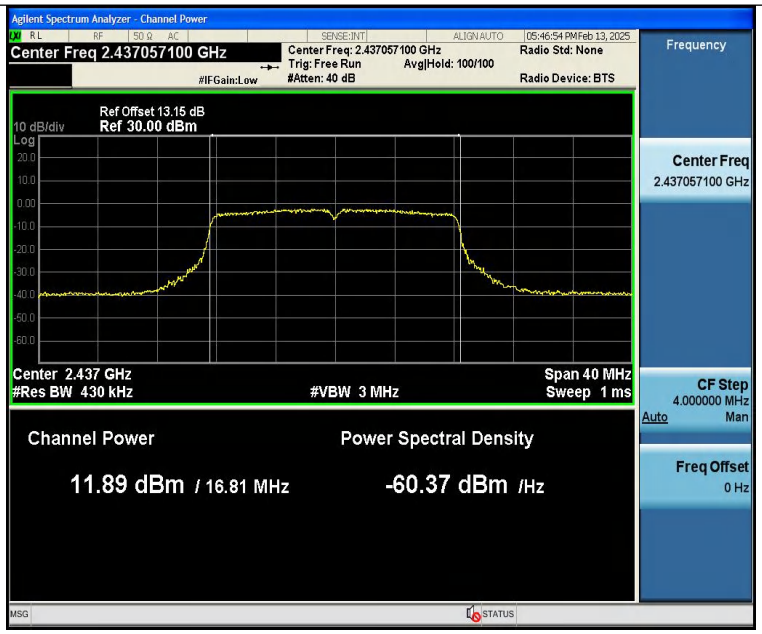


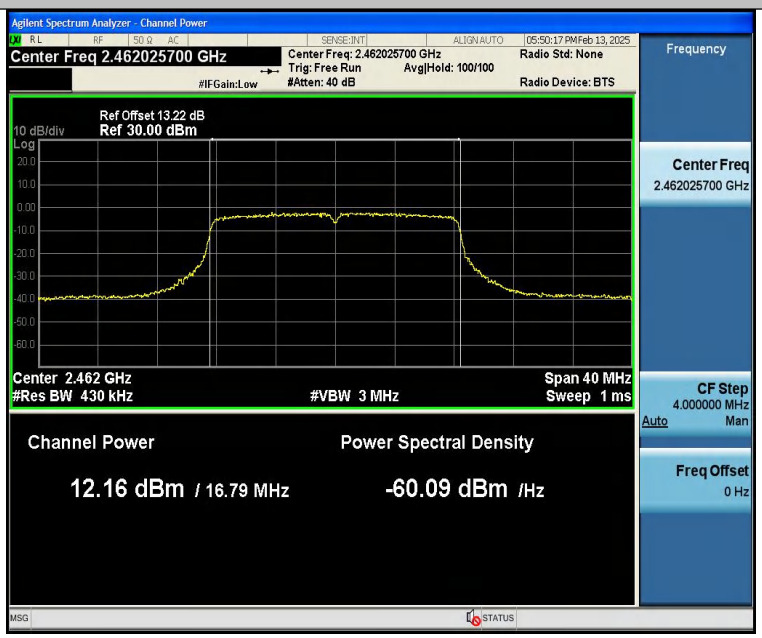
11G-Ant5-2412-PASS



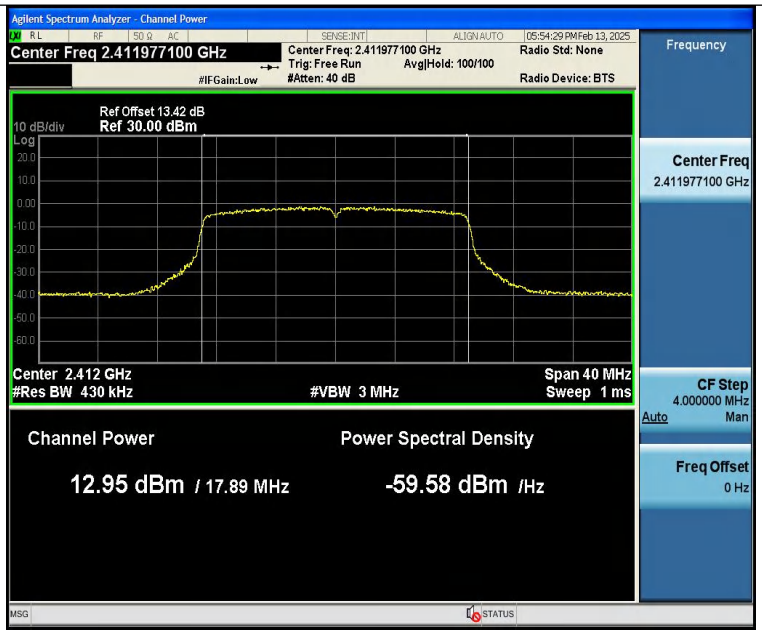
11G-Ant5-2437-PASS



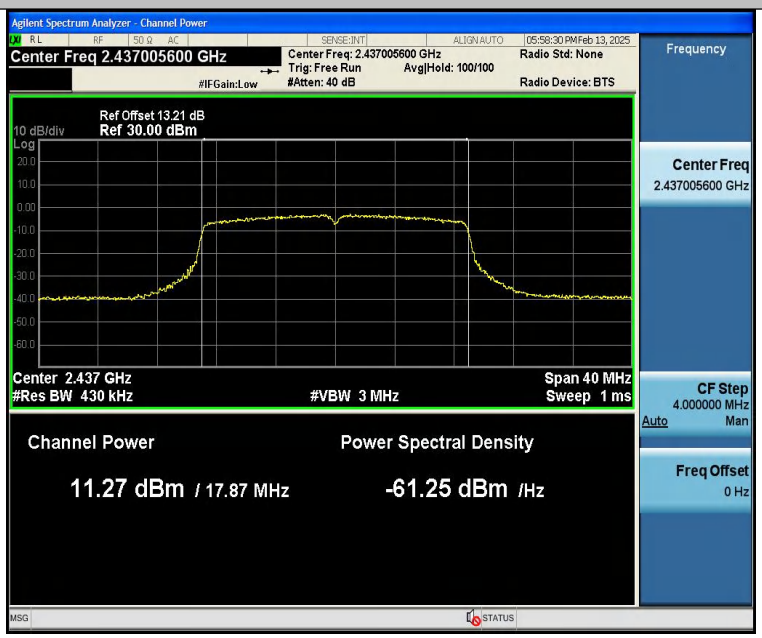
11G-Ant5-2462-PASS



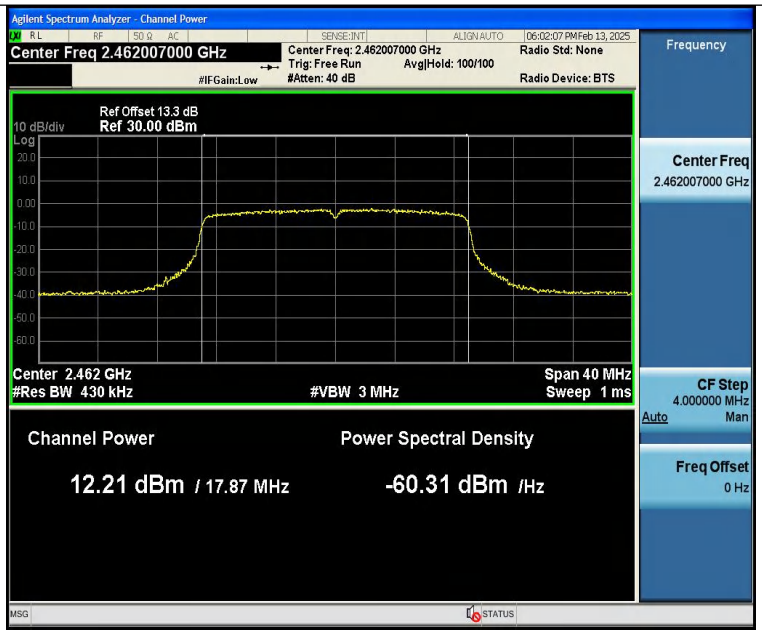
11N20SISO-Ant5-2412-PASS



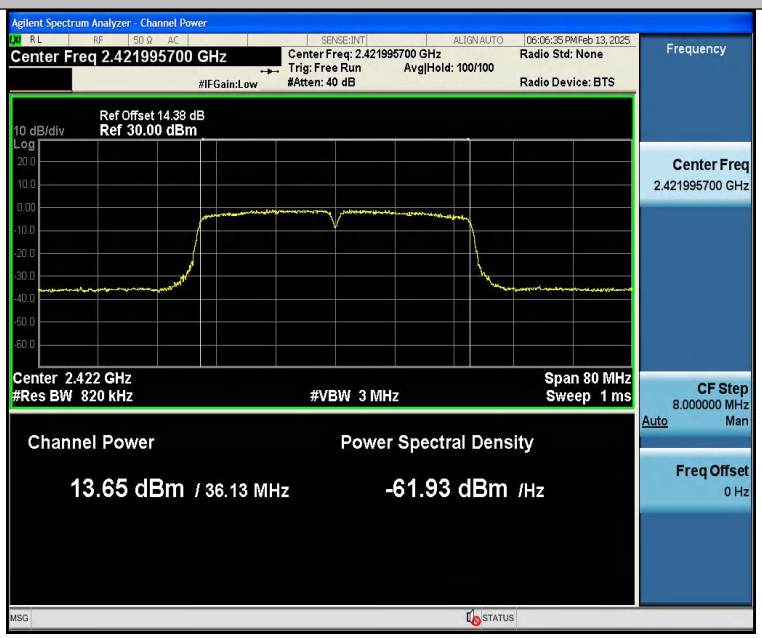
11N20SISO-Ant5-2437-PASS



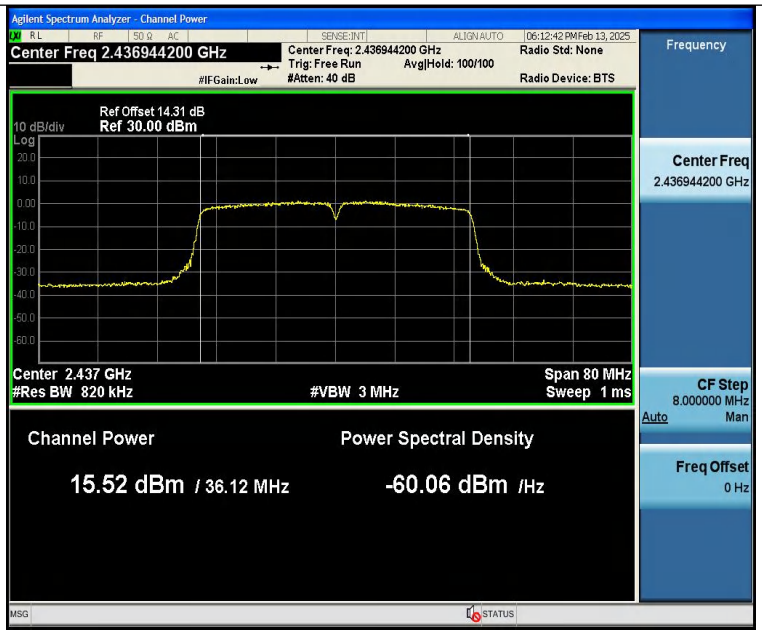
11N20SISO-Ant5-2462-PASS



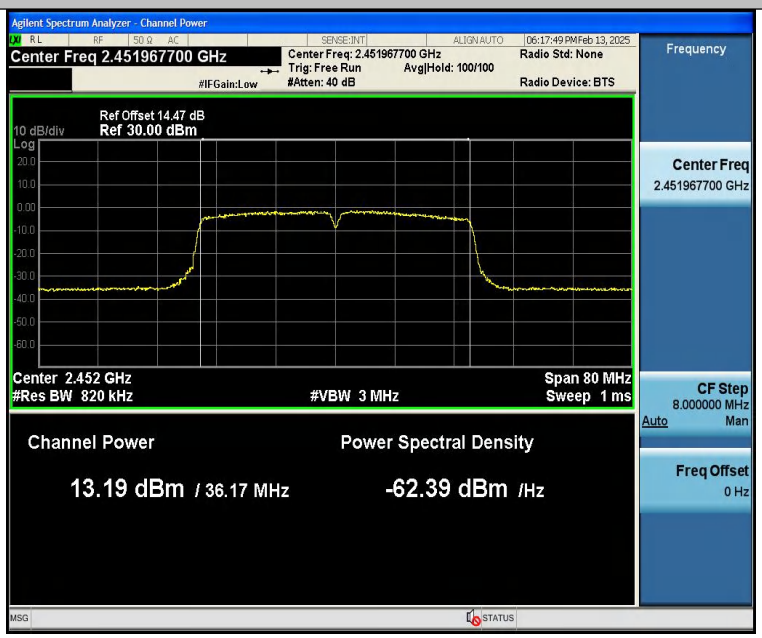
11N40SISO-Ant5-2422-PASS



11N40SISO-Ant5-2437-PASS



11N40SISO-Ant5-2452-PASS



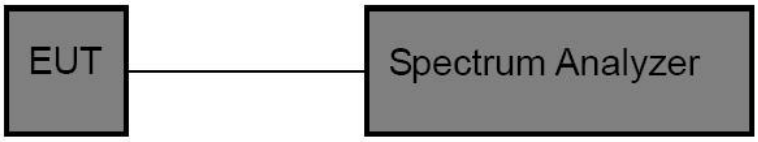
11 Power Spectral density

Test Requirement	:	FCC CFR47 Part 15 Section 15.247
Test Method	:	ANSI C63.10:2013
Test Limit	:	Regulation 15.247(f) The power spectral density conducted from the intentional radiator to the antenna due to the digital modulation operation of the hybrid system, with the frequency hopping operation turned off, shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

11.1Test Procedure

1. Connect the antenna port(s) to the spectrum analyzer input.
2. Configure the spectrum analyzer as shown below:
   Center frequency=DTS channel center frequency
   Span = 1.5 times the DTS bandwidth
   RBW = 3KHz, VBW = 10KHz
   Sweep time = auto couple
   Detector = peak
   Trace mode =max hold
3. Place the radio in continuous transmit mode, allow the trace to stabilize, view the transmitter wave form on the spectrum analyzer.
4. Use the peak marker function to determine the maximum amplitude level within the RBW.
5. If measured value exceeds limit, reduce RBW(no less than 3KHz) and repeat.

11.2Test Setup



11.3Test Result

Ant0:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant0	2412	-8.62	≤8.00	PASS
11B	Ant0	2437	-8.82	≤8.00	PASS
11B	Ant0	2462	-9.2	≤8.00	PASS
11G	Ant0	2412	-14.05	≤8.00	PASS
11G	Ant0	2437	-14.77	≤8.00	PASS
11G	Ant0	2462	-14.37	≤8.00	PASS
11N20SISO	Ant0	2412	-13.44	≤8.00	PASS
11N20SISO	Ant0	2437	-14.16	≤8.00	PASS
11N20SISO	Ant0	2462	-14.2	≤8.00	PASS
11N40SISO	Ant0	2422	-16.12	≤8.00	PASS
11N40SISO	Ant0	2437	-13.27	≤8.00	PASS
11N40SISO	Ant0	2452	-15.02	≤8.00	PASS

Ant1:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-16.49	≤8.00	PASS
11B	Ant1	2437	-17.52	≤8.00	PASS
11B	Ant1	2462	-17.43	≤8.00	PASS
11G	Ant1	2412	-19.28	≤8.00	PASS
11G	Ant1	2437	-18.88	≤8.00	PASS
11G	Ant1	2462	-19.73	≤8.00	PASS
11N20SISO	Ant1	2412	-17.21	≤8.00	PASS
11N20SISO	Ant1	2437	-20.23	≤8.00	PASS
11N20SISO	Ant1	2462	-19.5	≤8.00	PASS
11N40SISO	Ant1	2422	-19.58	≤8.00	PASS
11N40SISO	Ant1	2437	-20.71	≤8.00	PASS
11N40SISO	Ant1	2452	-17.57	≤8.00	PASS

Ant2:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant2	2412	-16.64	≤8.00	PASS
11B	Ant2	2437	-17.89	≤8.00	PASS
11B	Ant2	2462	-16.47	≤8.00	PASS
11G	Ant2	2412	-19.82	≤8.00	PASS
11G	Ant2	2437	-18.23	≤8.00	PASS
11G	Ant2	2462	-17.74	≤8.00	PASS
11N20SISO	Ant2	2412	-19	≤8.00	PASS
11N20SISO	Ant2	2437	-18.36	≤8.00	PASS
11N20SISO	Ant2	2462	-17.14	≤8.00	PASS
11N40SISO	Ant2	2422	-19.49	≤8.00	PASS
11N40SISO	Ant2	2437	-19.67	≤8.00	PASS
11N40SISO	Ant2	2452	-17.97	≤8.00	PASS

Ant3:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant3	2412	-13.75	≤8.00	PASS
11B	Ant3	2437	-13.32	≤8.00	PASS
11B	Ant3	2462	-14.3	≤8.00	PASS
11G	Ant3	2412	-15.82	≤8.00	PASS
11G	Ant3	2437	-15.77	≤8.00	PASS
11G	Ant3	2462	-16.71	≤8.00	PASS
11N20SISO	Ant3	2412	-15.32	≤8.00	PASS
11N20SISO	Ant3	2437	-14.75	≤8.00	PASS
11N20SISO	Ant3	2462	-16.71	≤8.00	PASS
11N40SISO	Ant3	2422	-17.72	≤8.00	PASS
11N40SISO	Ant3	2437	-15.74	≤8.00	PASS
11N40SISO	Ant3	2452	-17.01	≤8.00	PASS

Ant4:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant4	2412	-16.49	≤8.00	PASS
11B	Ant4	2437	-17.52	≤8.00	PASS
11B	Ant4	2462	-17.43	≤8.00	PASS
11G	Ant4	2412	-19.28	≤8.00	PASS
11G	Ant4	2437	-18.88	≤8.00	PASS
11G	Ant4	2462	-19.73	≤8.00	PASS
11N20SISO	Ant4	2412	-17.21	≤8.00	PASS
11N20SISO	Ant4	2437	-20.23	≤8.00	PASS
11N20SISO	Ant4	2462	-19.5	≤8.00	PASS
11N40SISO	Ant4	2422	-19.58	≤8.00	PASS
11N40SISO	Ant4	2437	-20.71	≤8.00	PASS
11N40SISO	Ant4	2452	-17.57	≤8.00	PASS

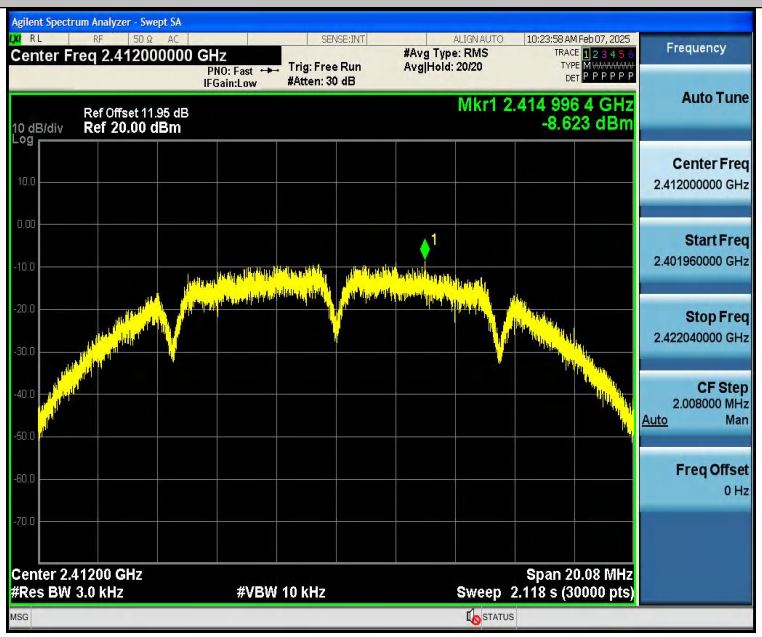
Ant5:

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant5	2412	-15.02	≤8.00	PASS
11B	Ant5	2437	-14.62	≤8.00	PASS
11B	Ant5	2462	-13.83	≤8.00	PASS
11G	Ant5	2412	-16.27	≤8.00	PASS
11G	Ant5	2437	-17.45	≤8.00	PASS
11G	Ant5	2462	-18.47	≤8.00	PASS
11N20SISO	Ant5	2412	-17.32	≤8.00	PASS
11N20SISO	Ant5	2437	-19.46	≤8.00	PASS
11N20SISO	Ant5	2462	-18.29	≤8.00	PASS
11N40SISO	Ant5	2422	-17.8	≤8.00	PASS
11N40SISO	Ant5	2437	-14.33	≤8.00	PASS
11N40SISO	Ant5	2452	-18.07	≤8.00	PASS

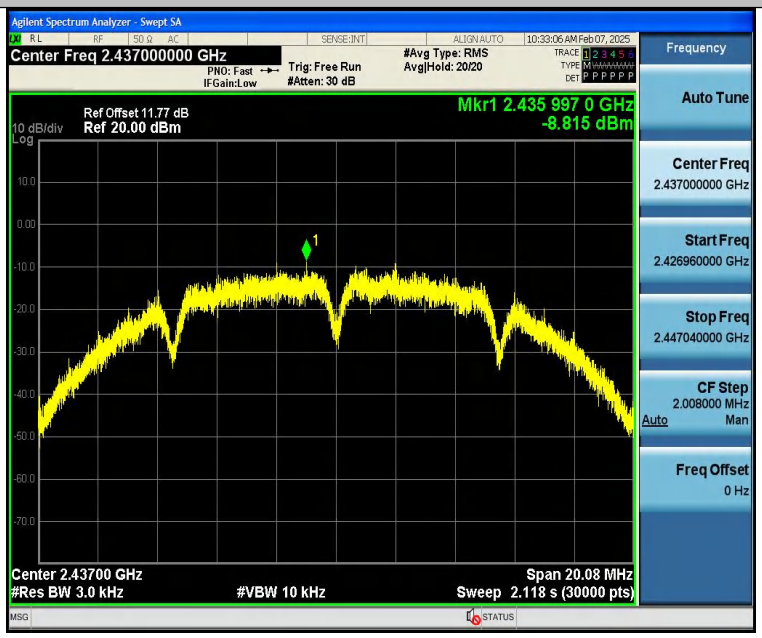
Test Graphs:

Ant0:

11B-Ant0-2412-PASS

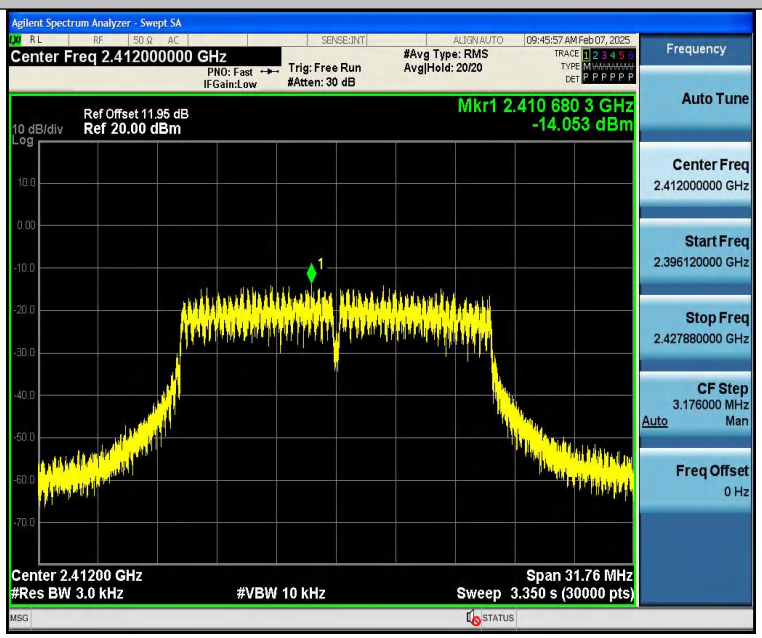


11B-Ant0-2437-PASS

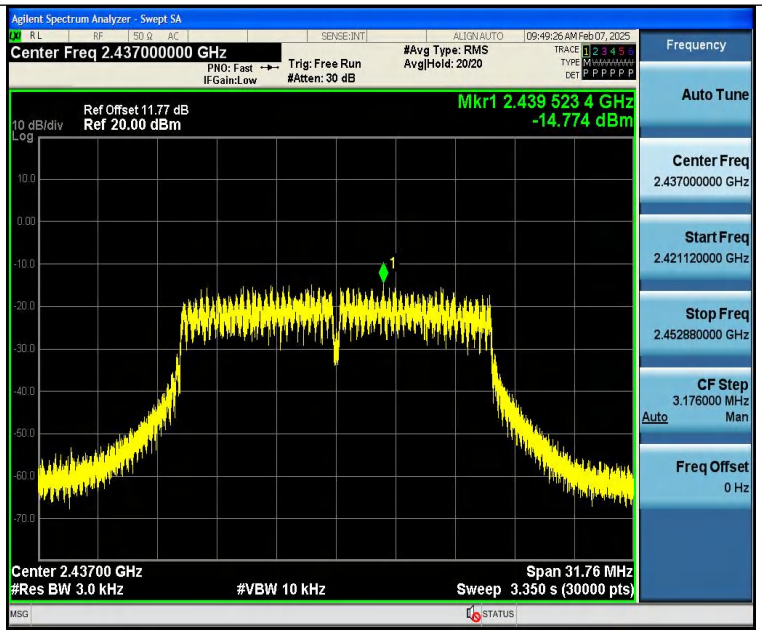


11B-Ant0-2462-PASS

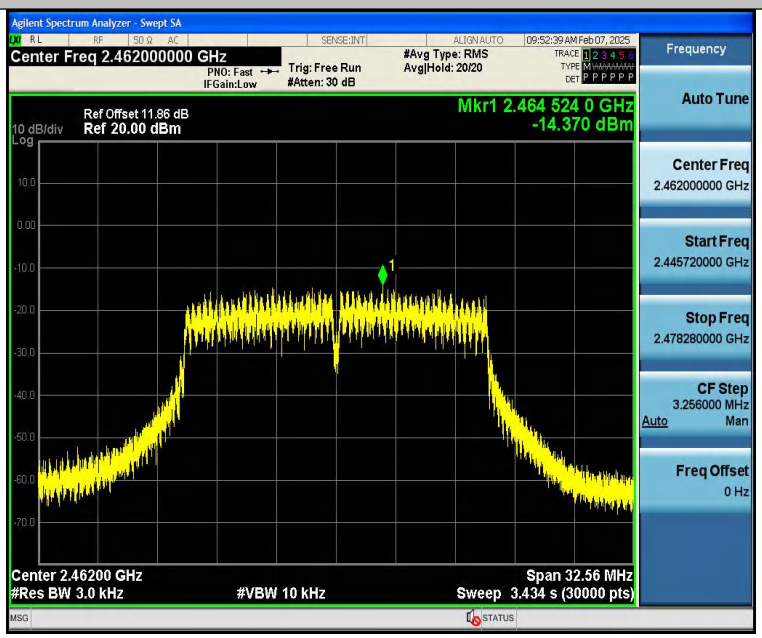
11G-Ant0-2412-PASS



11G-Ant0-2437-PASS



11G-Ant0-2462-PASS



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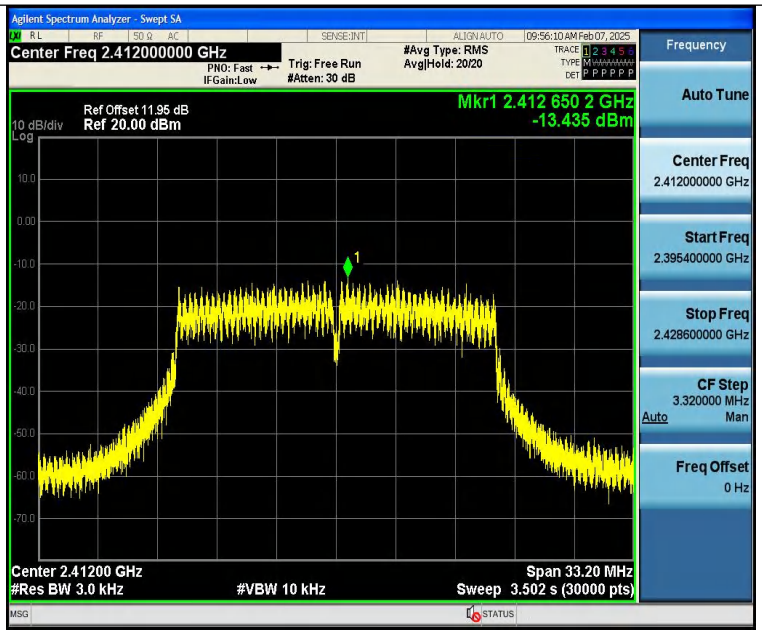
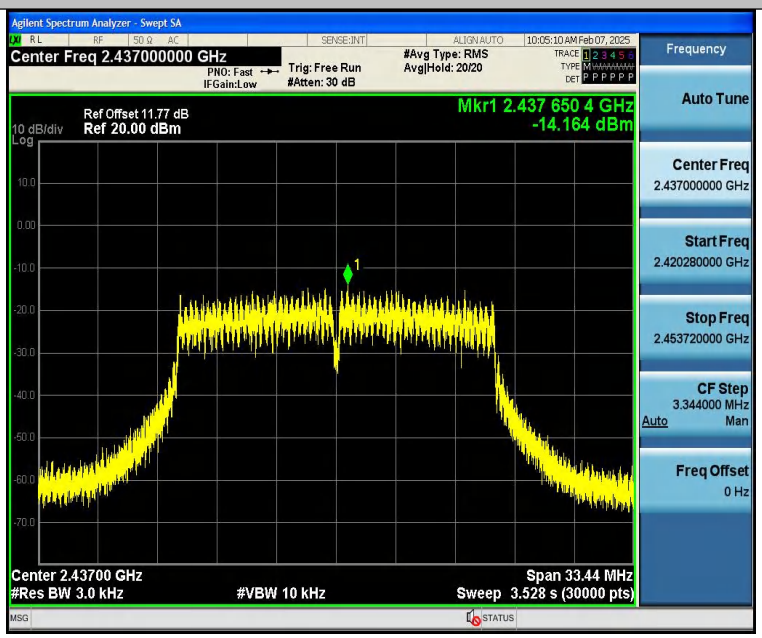
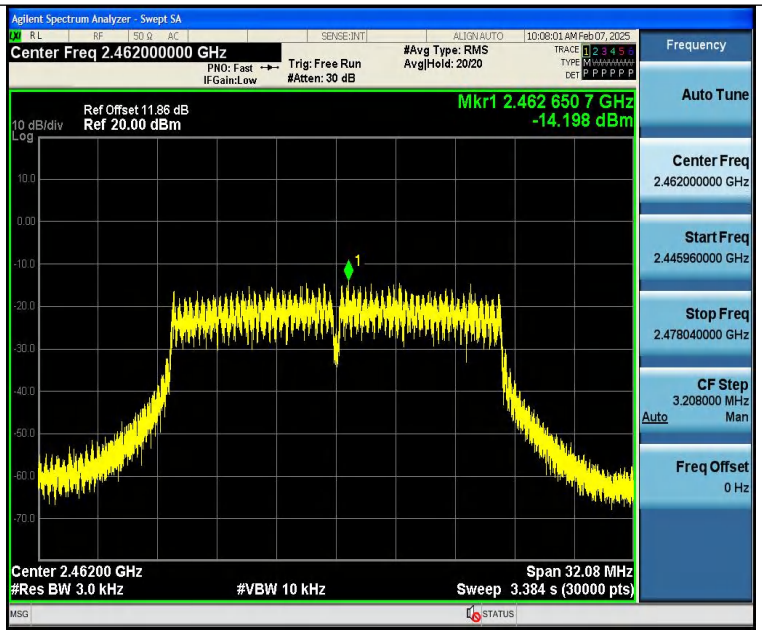


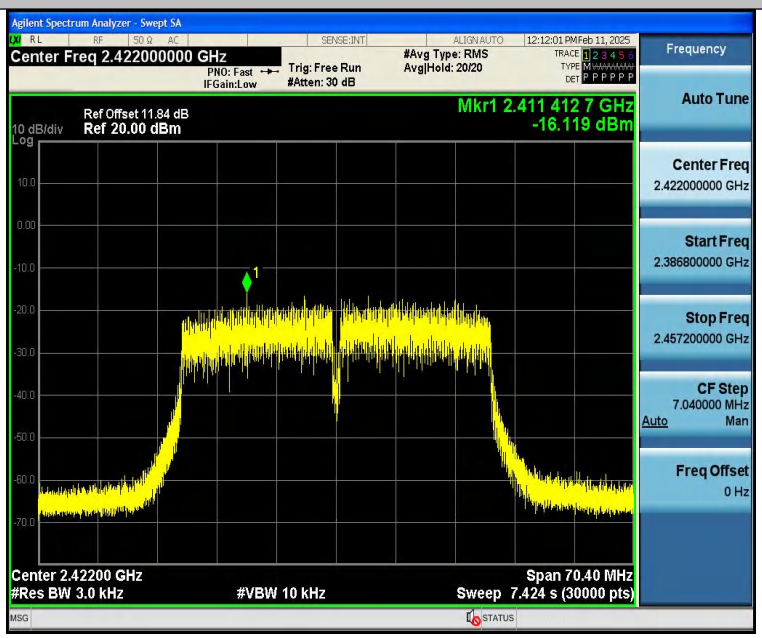
11N20SISO-Ant0-2437-PASS



11N20SISO-Ant0-2462-PASS



11N40SISO-Ant0-2422-PASS



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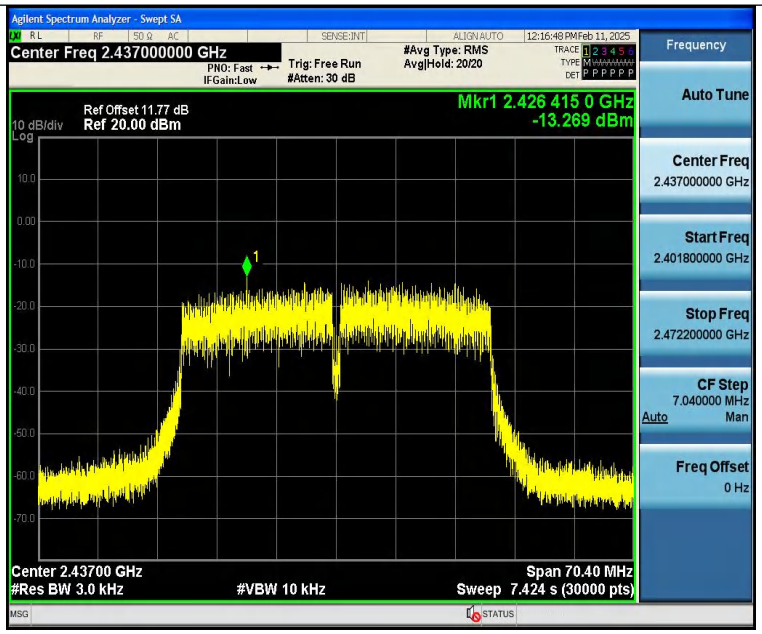

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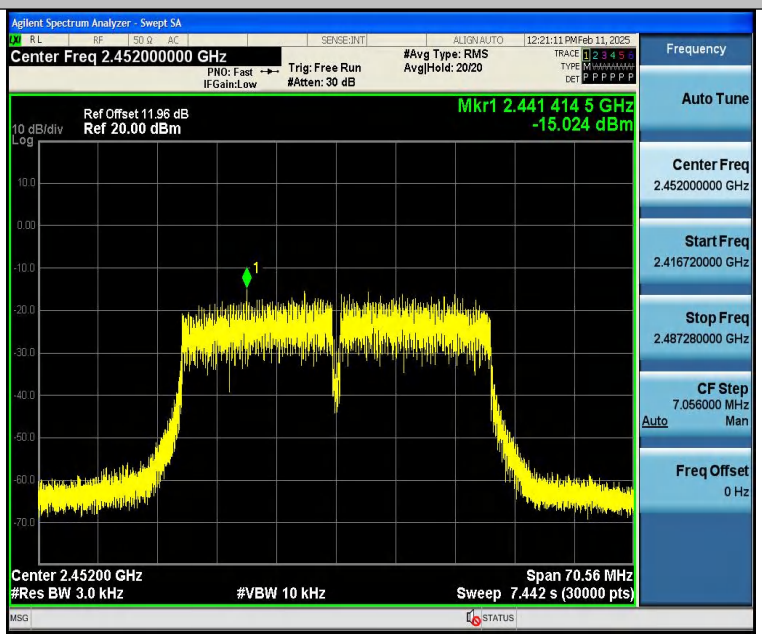
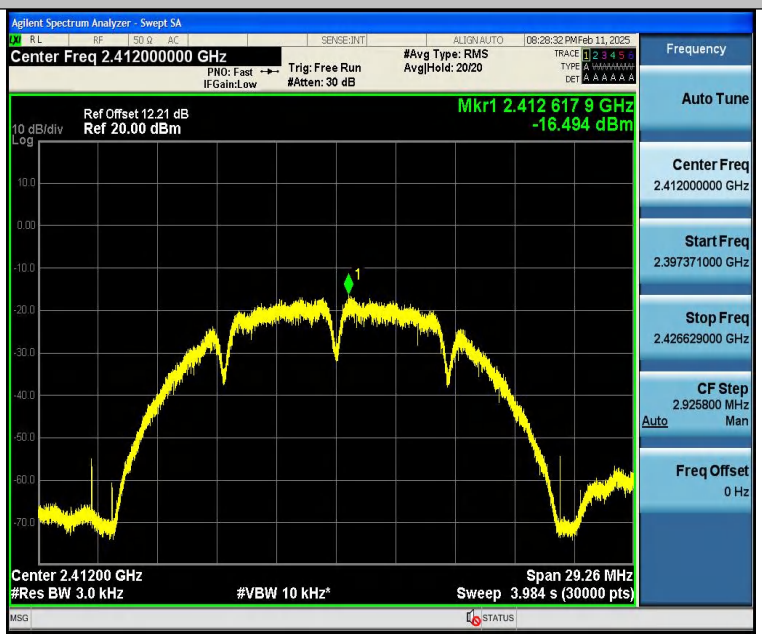
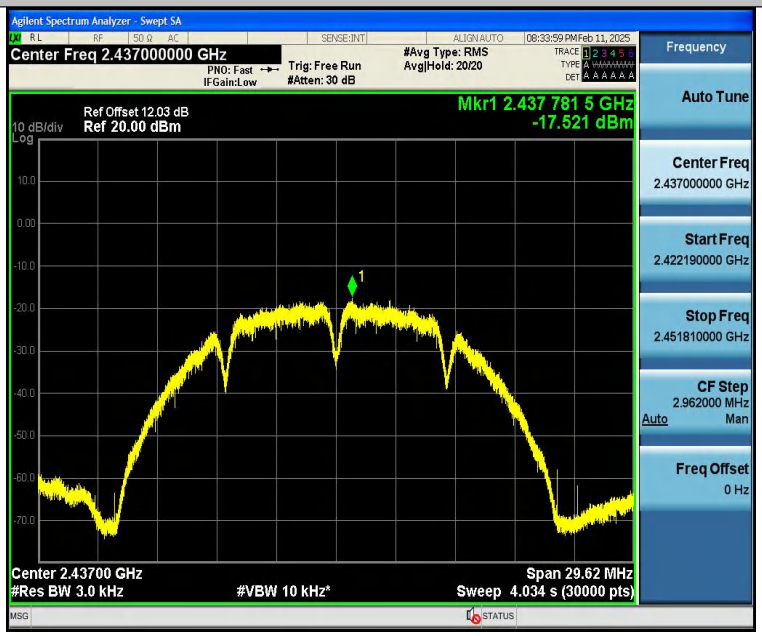


Ant1:

11B-Ant1-2412-PASS

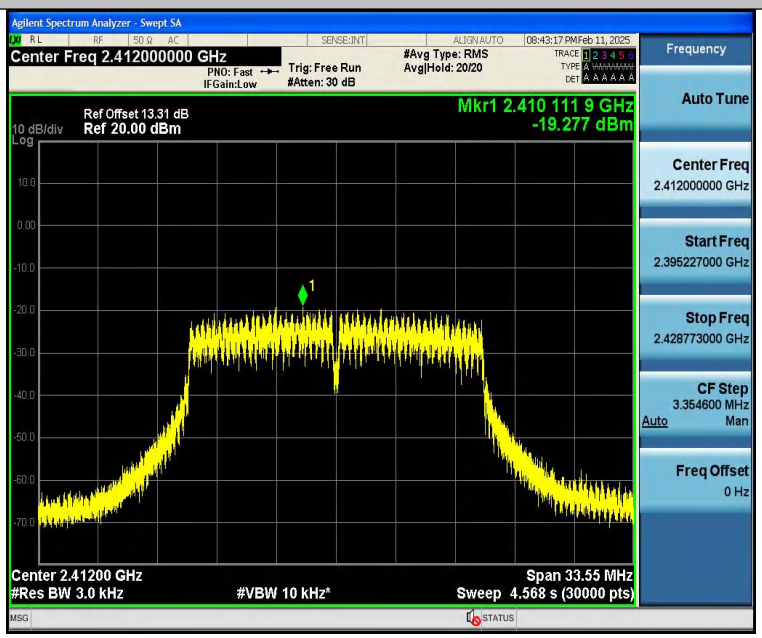


11B-Ant1-2437-PASS

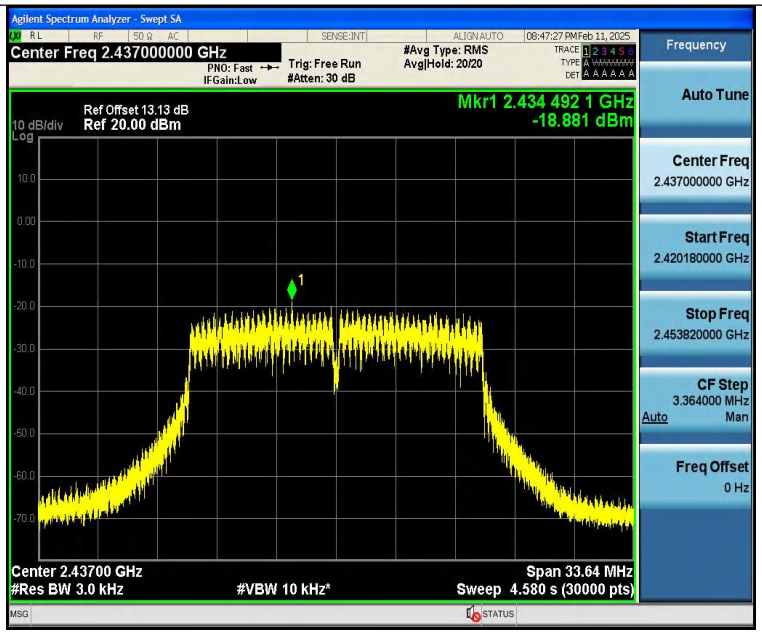


11B-Ant1-2462-PASS

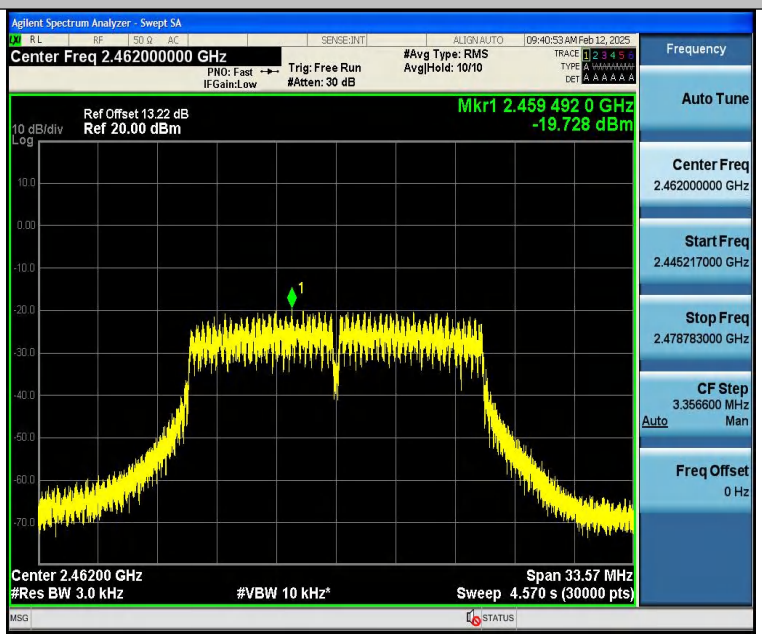
11G-Ant1-2412-PASS



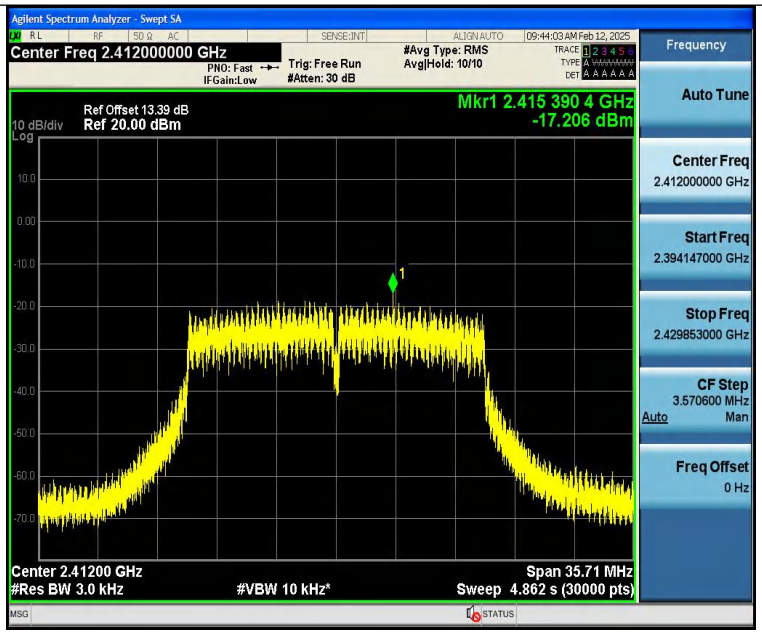
11G-Ant1-2437-PASS



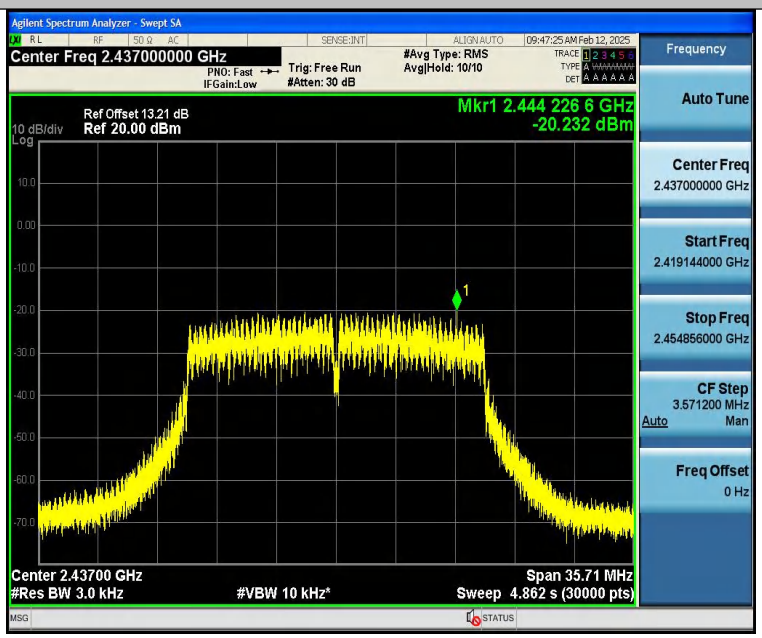
11G-Ant1-2462-PASS



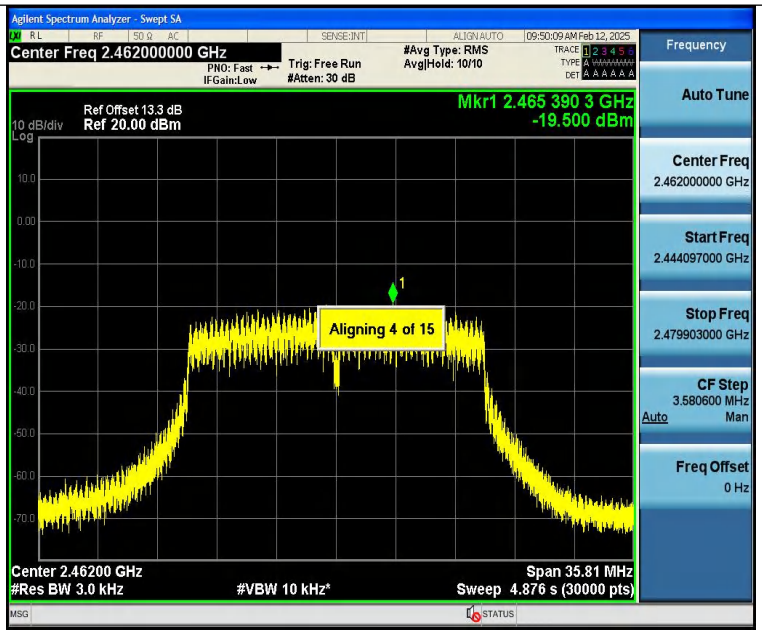
11N20SISO-Ant1-2412-PASS



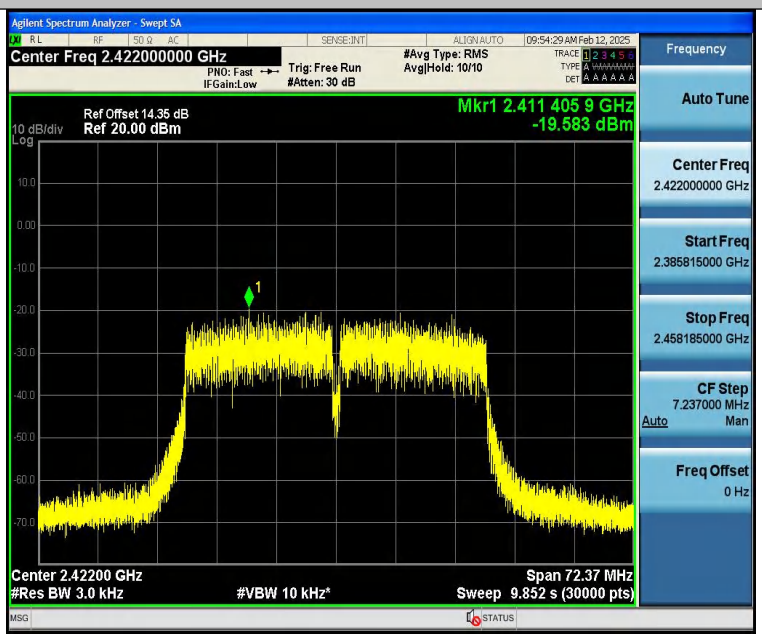
11N20SISO-Ant1-2437-PASS



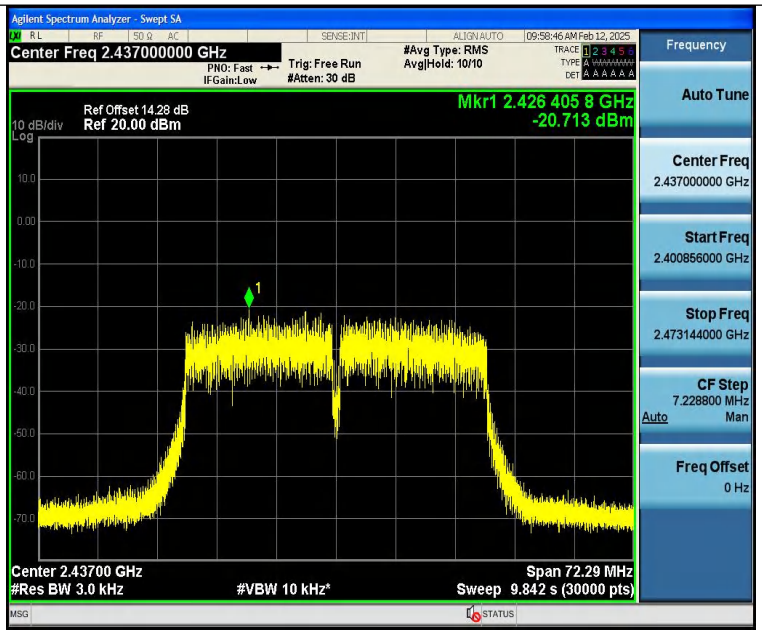
11N20SISO-Ant1-2462-PASS



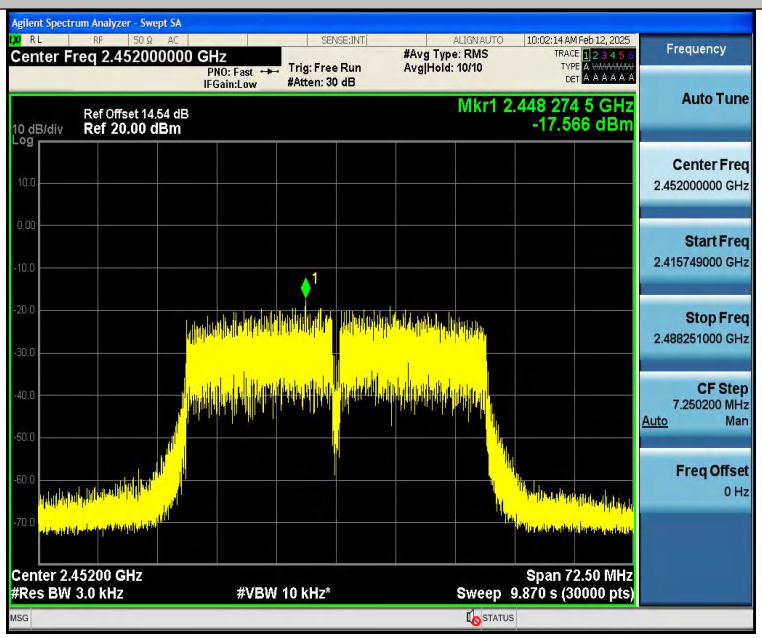
11N40SISO-Ant1-2422-PASS



11N40SISO-Ant1-2437-PASS

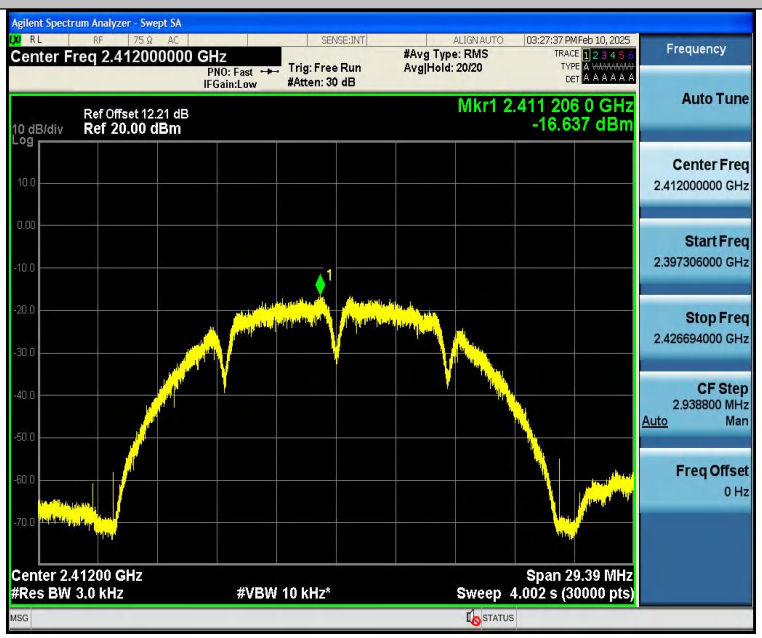


11N40SISO-Ant1-2452-PASS

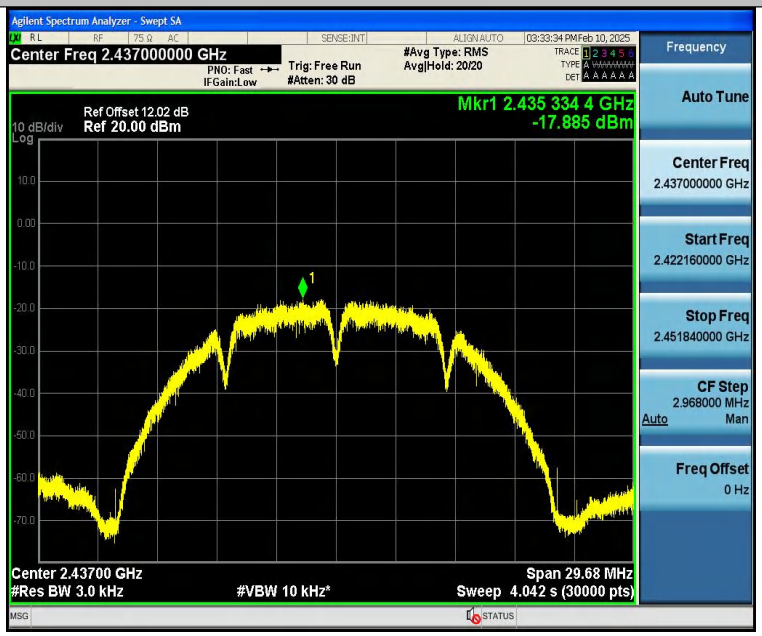


Ant2:

11B-Ant2-2412-PASS

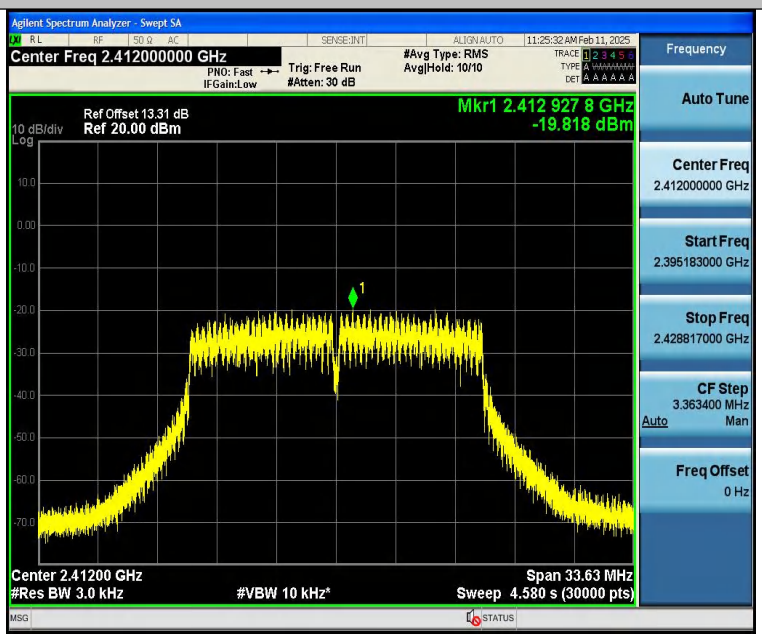


11B-Ant2-2437-PASS

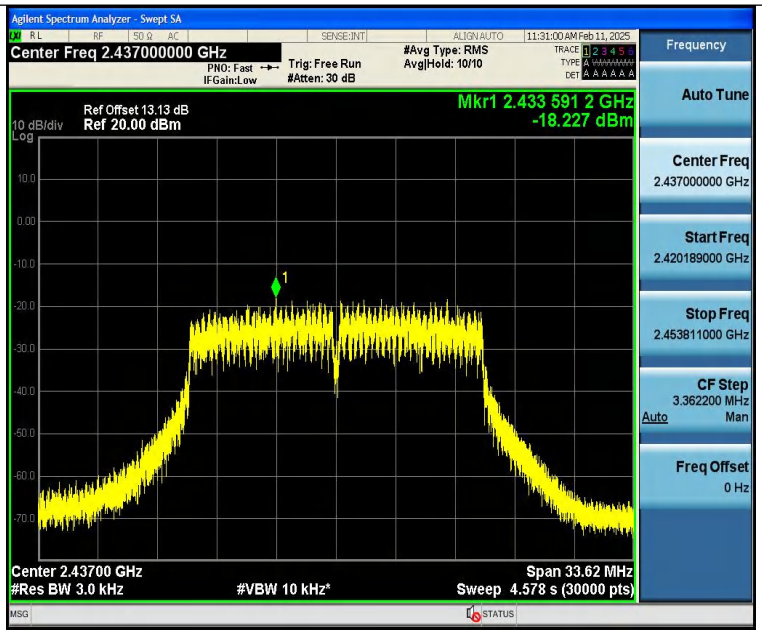


11B-Ant2-2462-PASS

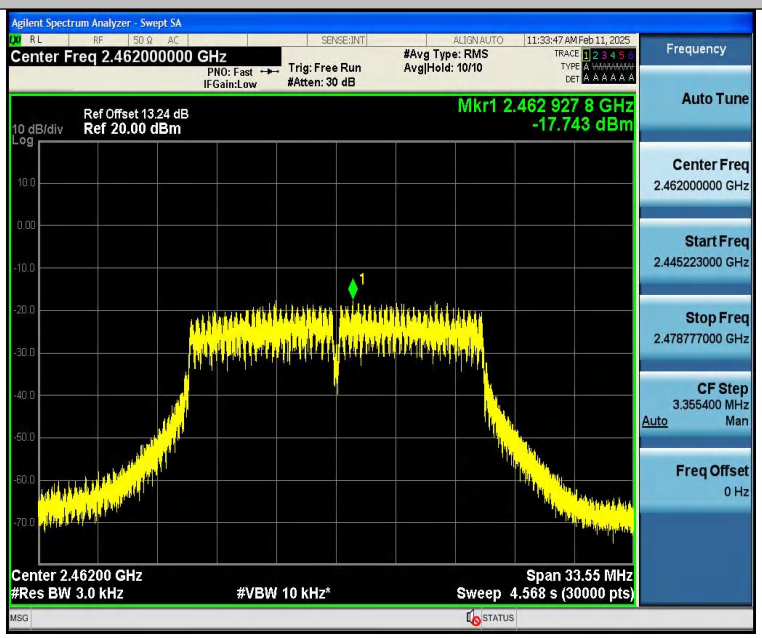
11G-Ant2-2412-PASS



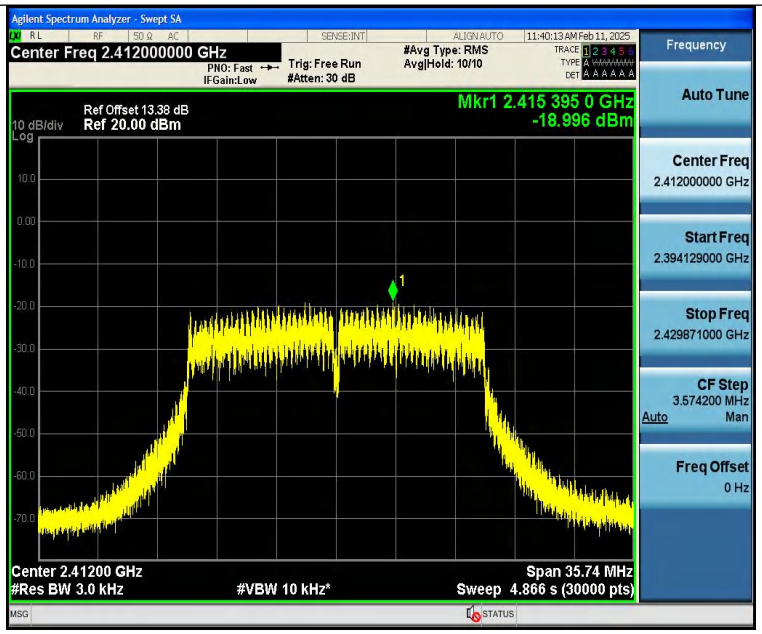
11G-Ant2-2437-PASS



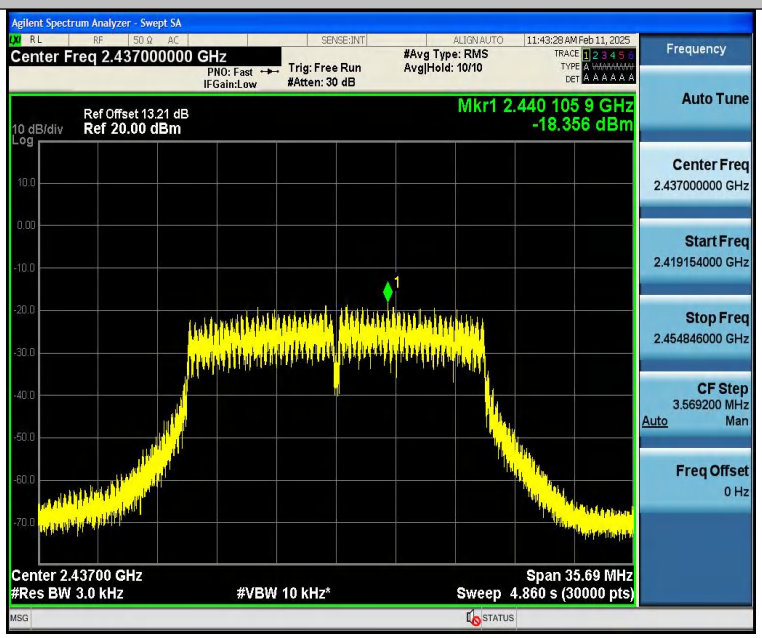
11G-Ant2-2462-PASS



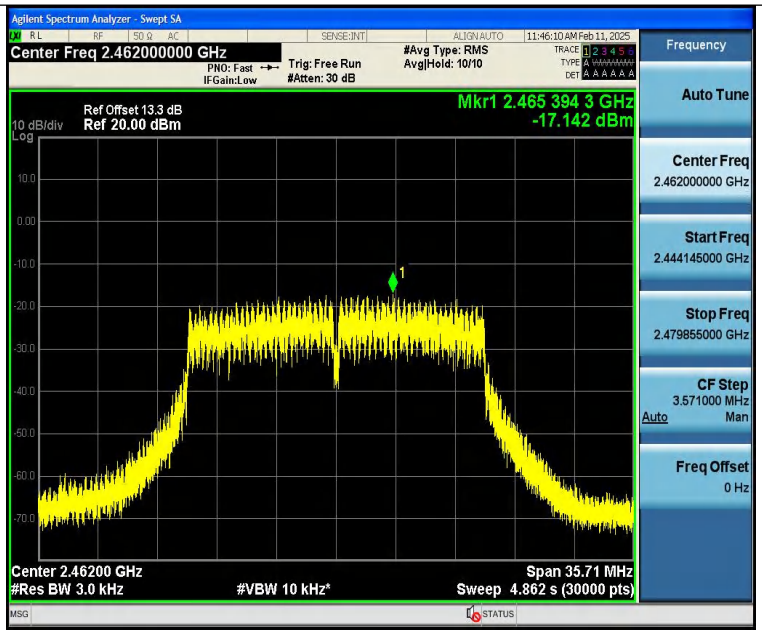
11N20SISO-Ant2-2412-PASS



11N20SISO-Ant2-2437-PASS



11N20SISO-Ant2-2462-PASS



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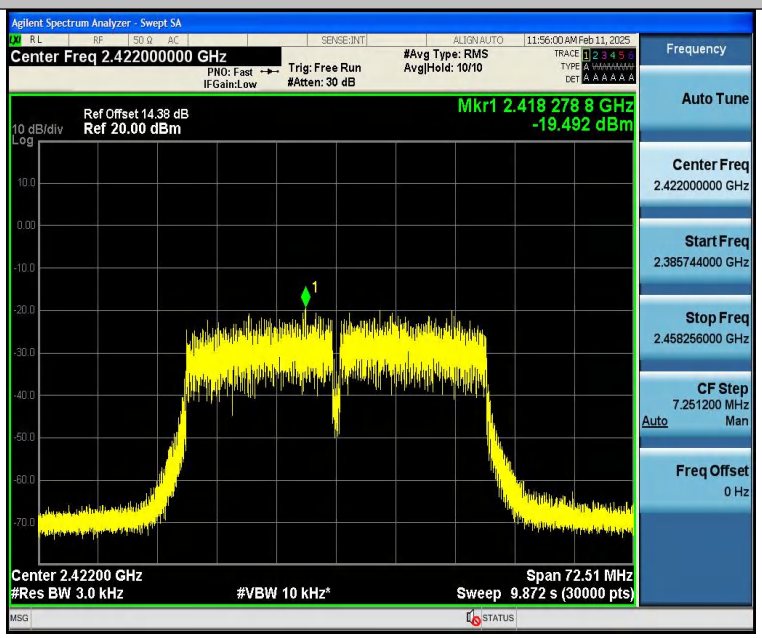

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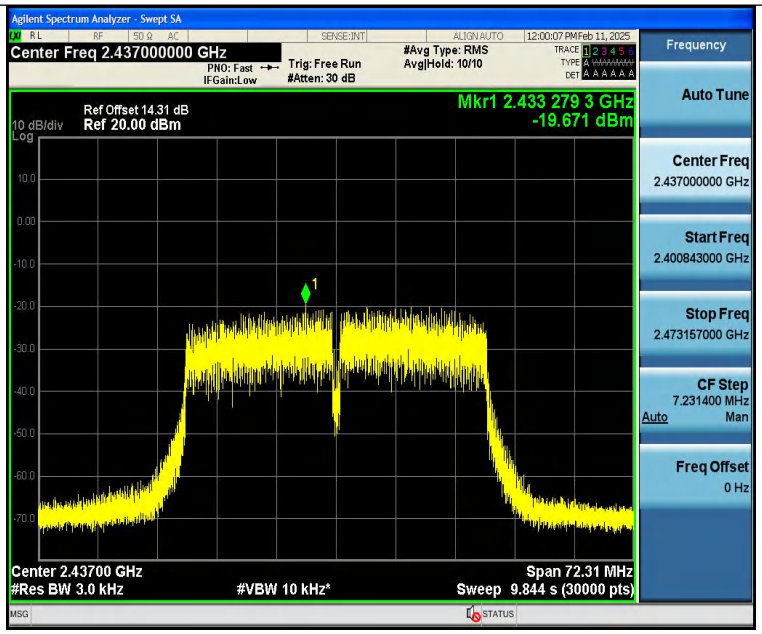

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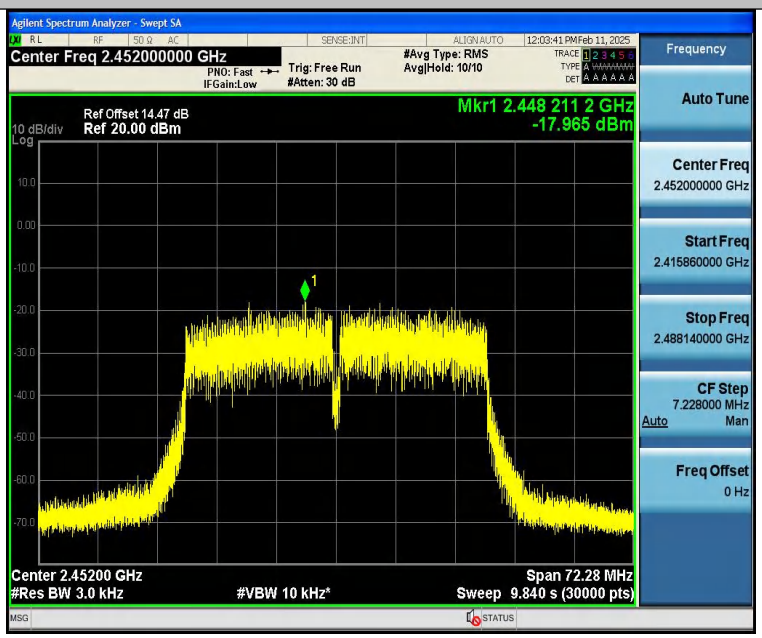
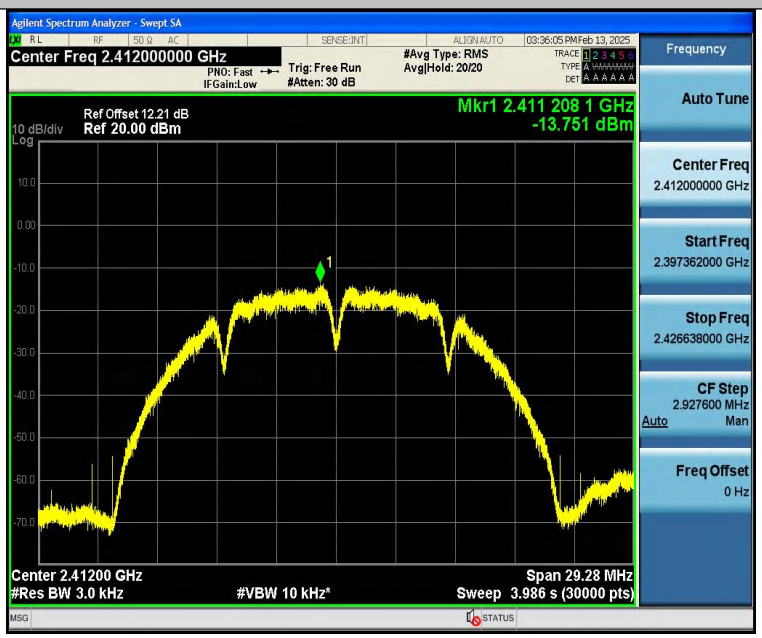


Ant3:

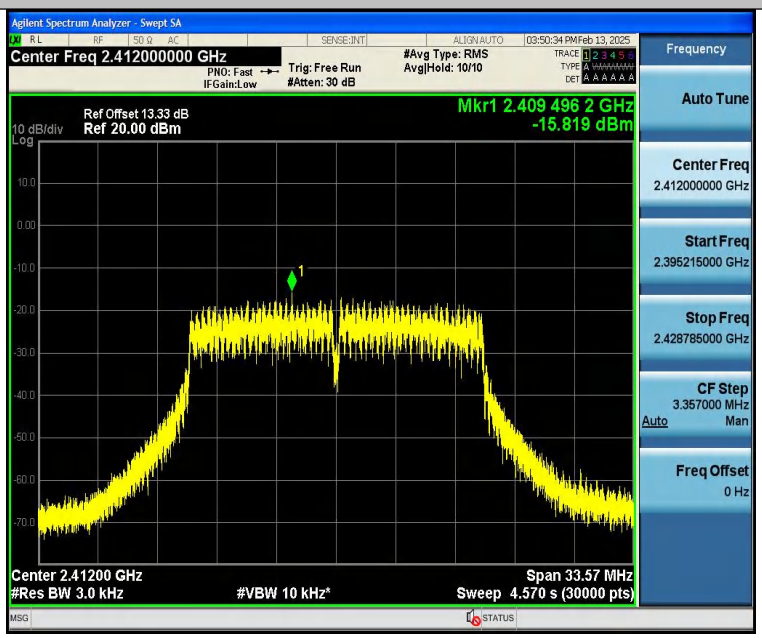
11B-Ant3-2412-PASS



11B-Ant3-2437-PASS

11B-Ant3-2462-PASS

11G-Ant3-2412-PASS



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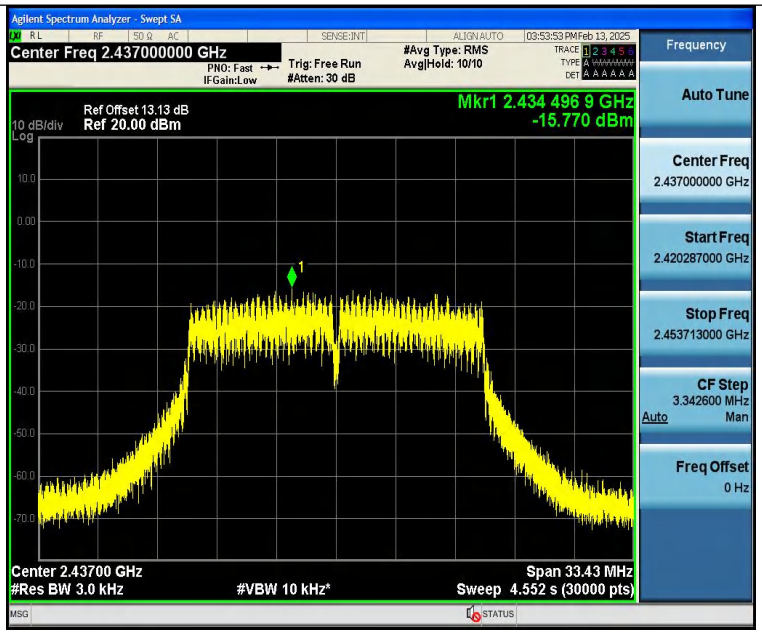
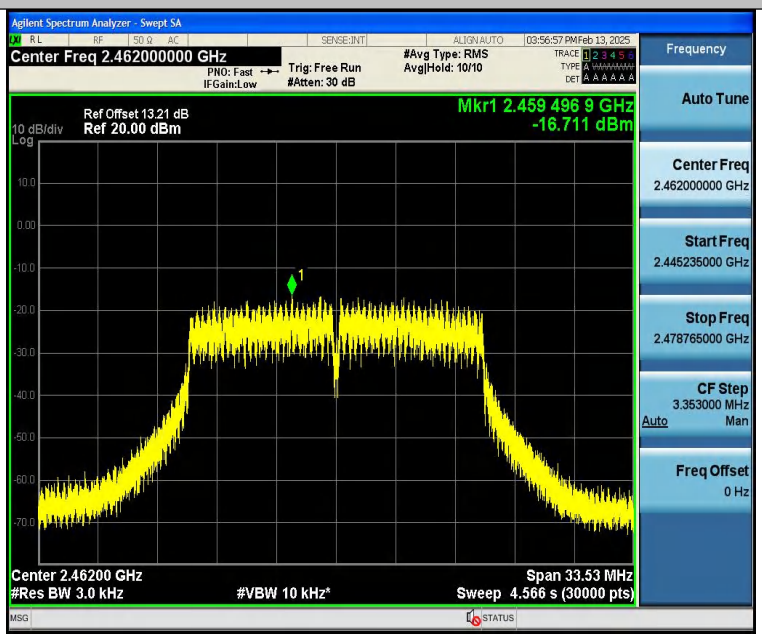


11G-Ant3-2462-PASS



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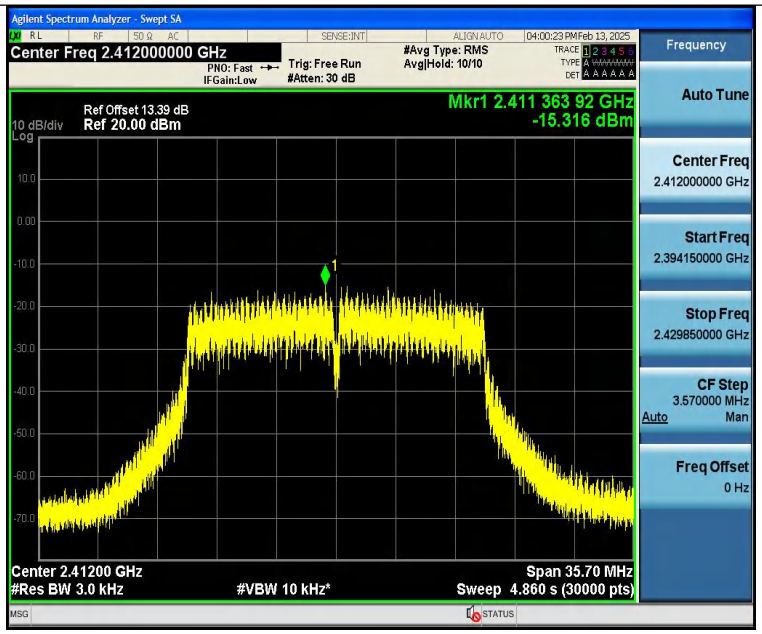

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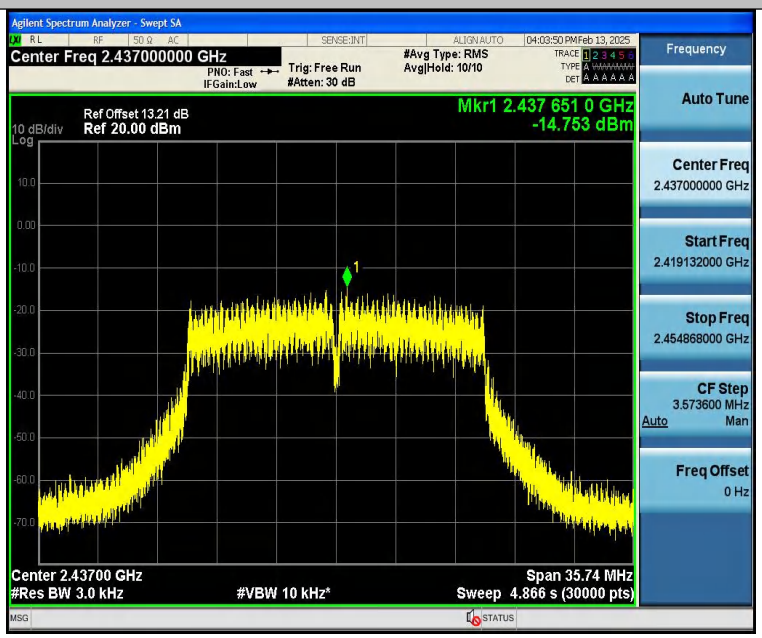
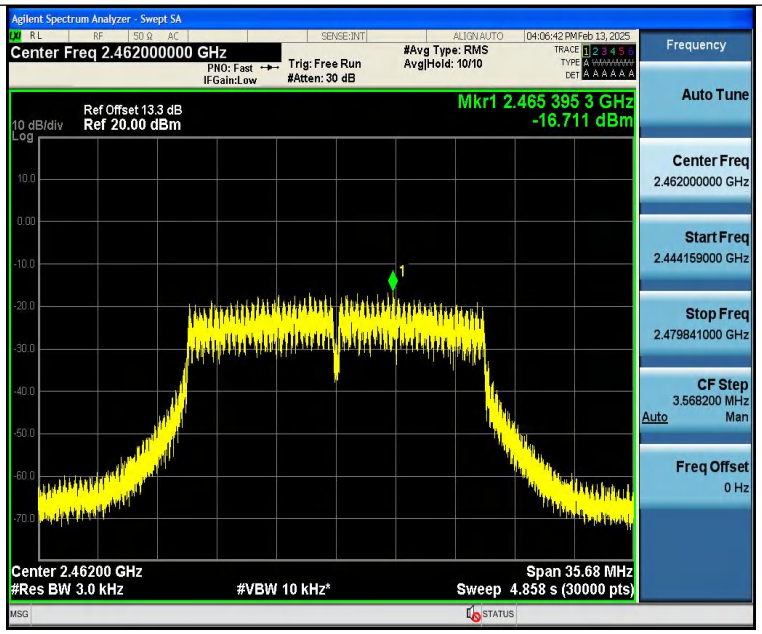
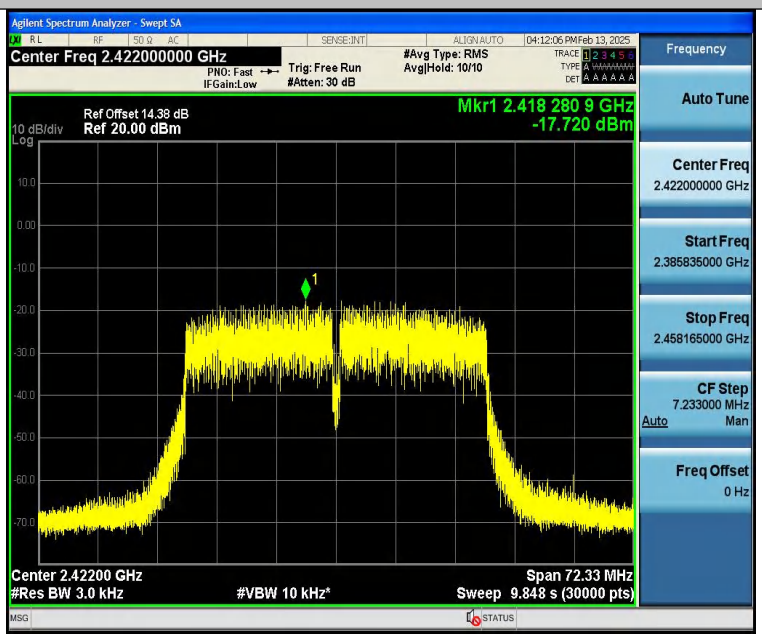


11N20SISO-Ant3-2462-PASS



11N40SISO-Ant3-2422-PASS



11N40SISO-Ant3-2437-PASS