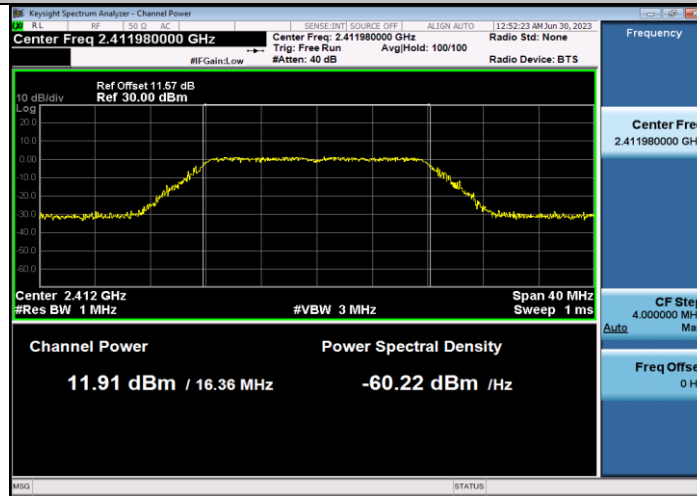


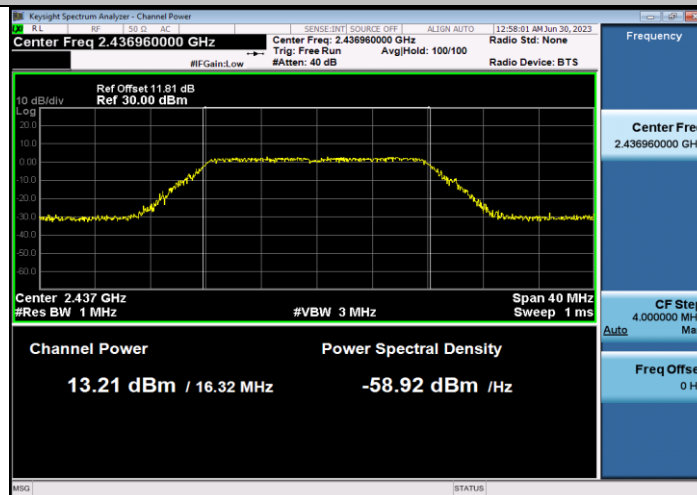


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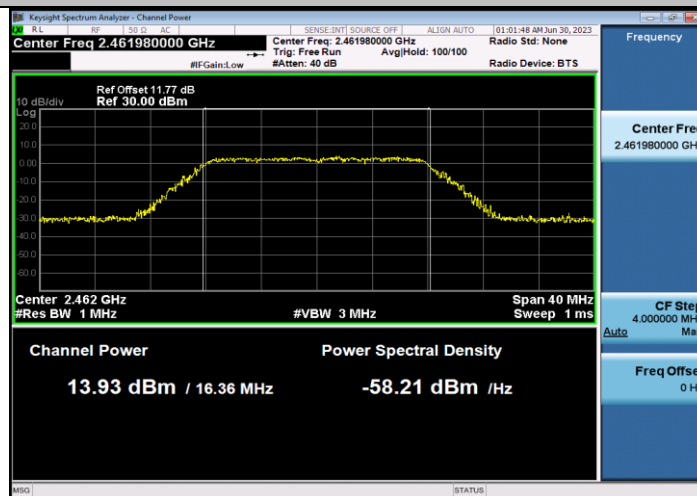
11G_Ant1_2412



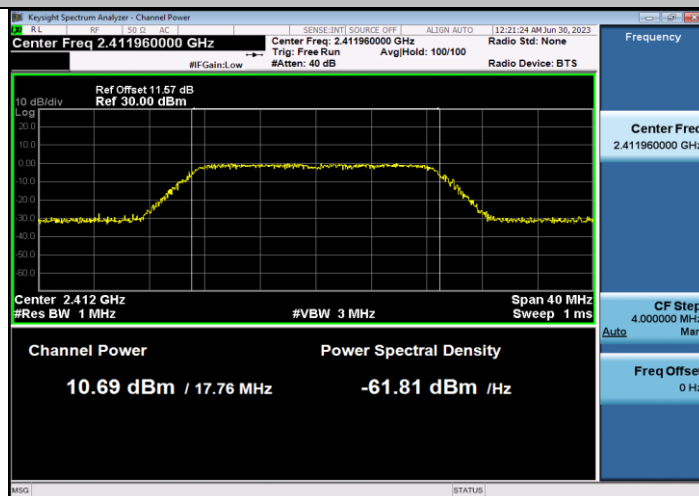
11G_Ant1_2437



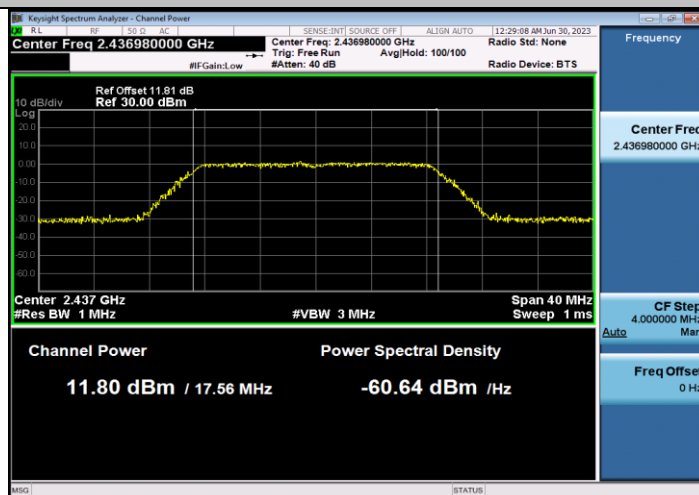
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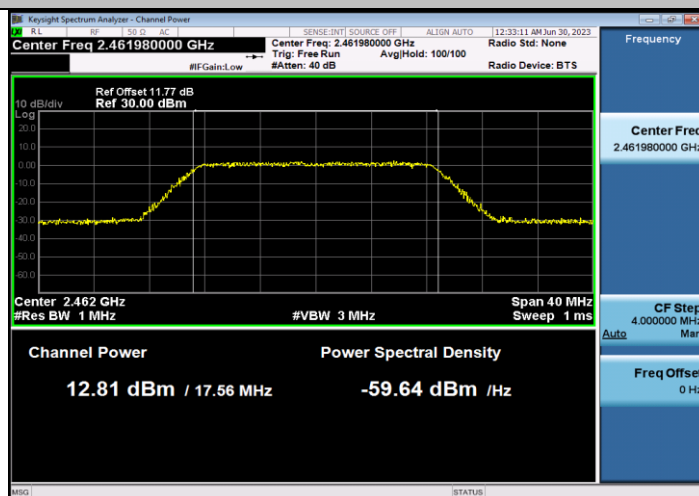
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



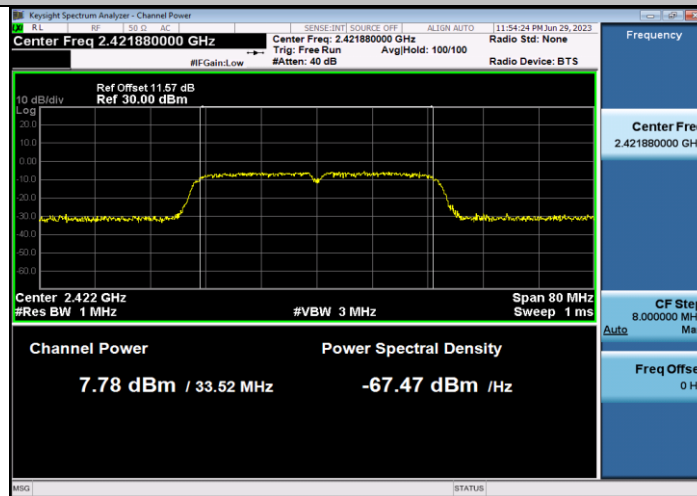
11N20SISO_Ant1_2462



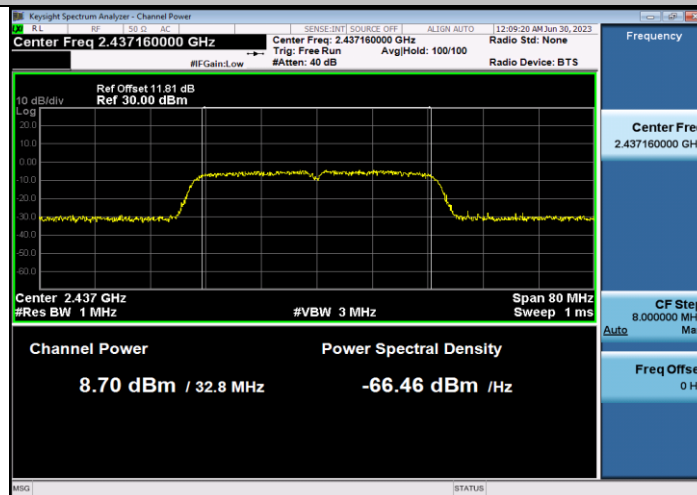


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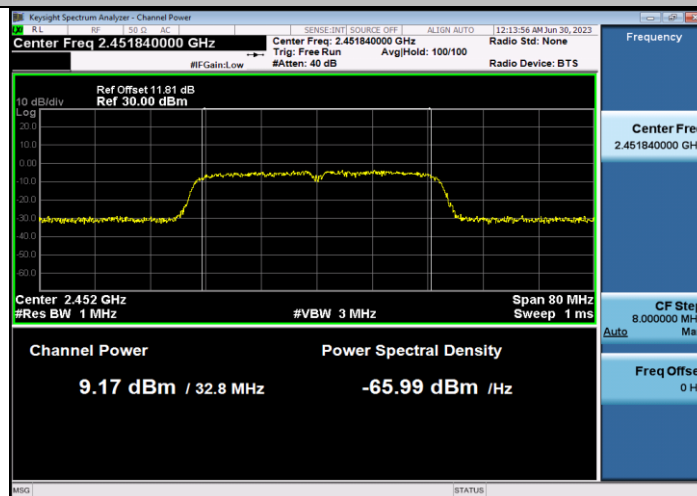
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

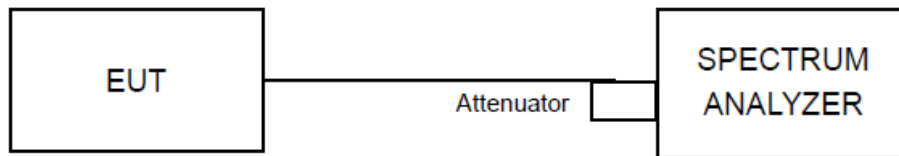


4.4 Power Spectral Density

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	-11.73	0.00	-11.73	<=8	PASS
		2437	-11.43	0.00	-11.43	<=8	PASS
		2462	-10.08	0.00	-10.08	<=8	PASS
11G	Ant1	2412	-20.3	0.02	-20.28	<=8	PASS
		2437	-19.08	0.02	-19.06	<=8	PASS
		2462	-18.37	0.02	-18.35	<=8	PASS
11N20SI SO	Ant1	2412	-20.91	0.02	-20.89	<=8	PASS
		2437	-19.82	0.02	-19.8	<=8	PASS
		2462	-18.79	0.03	-18.76	<=8	PASS
11N40SI SO	Ant1	2422	-26.38	0.05	-26.33	<=8	PASS
		2437	-25.19	0.05	-25.14	<=8	PASS
		2452	-24.86	0.05	-24.81	<=8	PASS

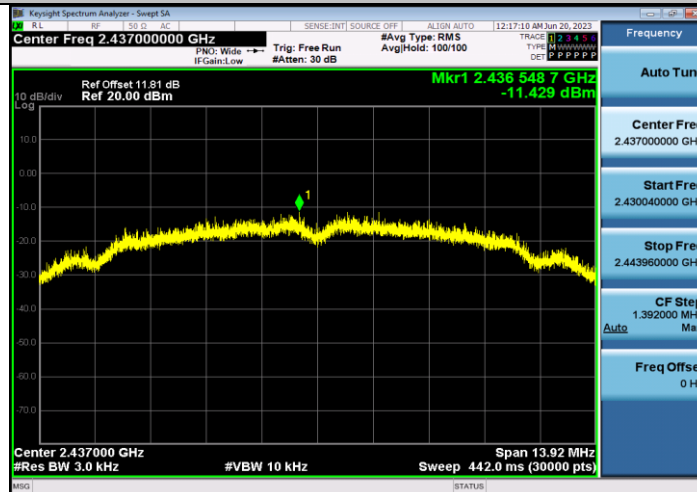


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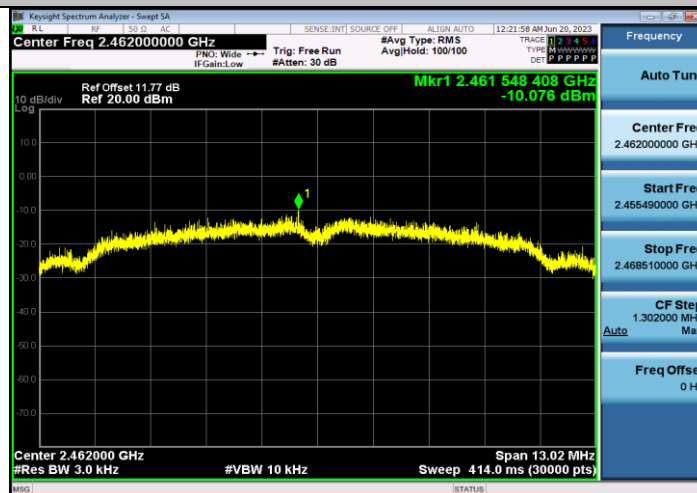
11B_Ant1_2412



11B_Ant1_2437



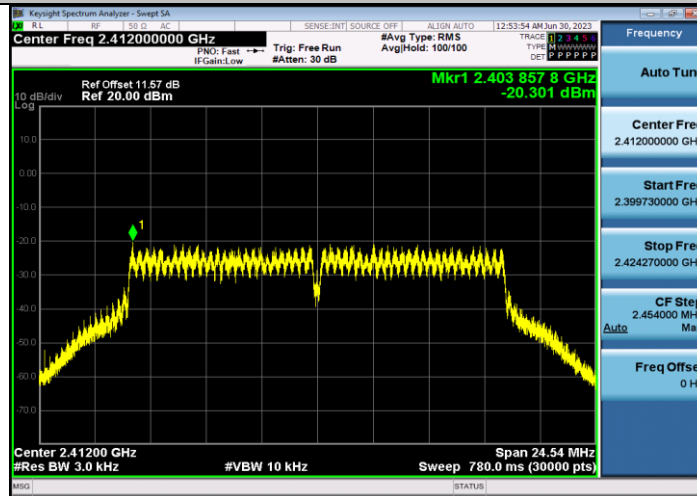
11B_Ant1_2462



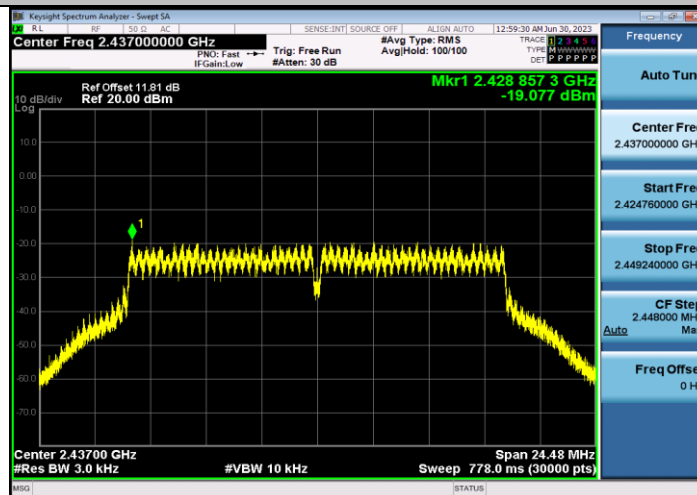


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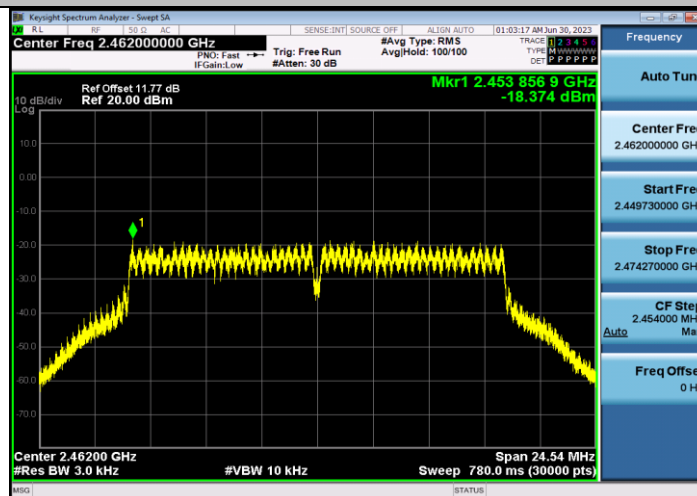
11G_Ant1_2412



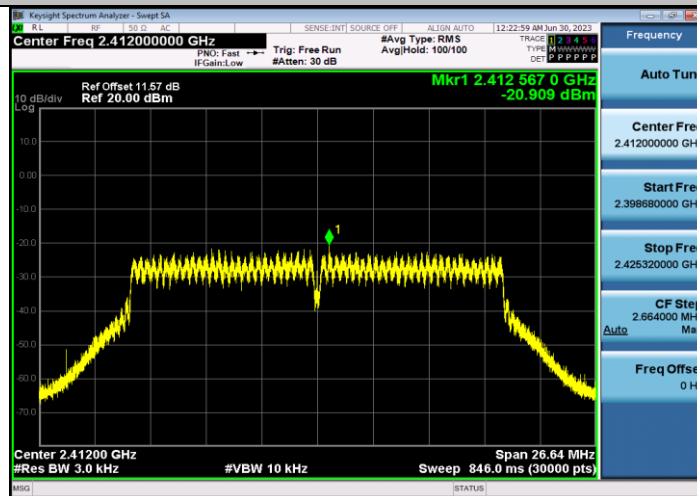
11G_Ant1_2437



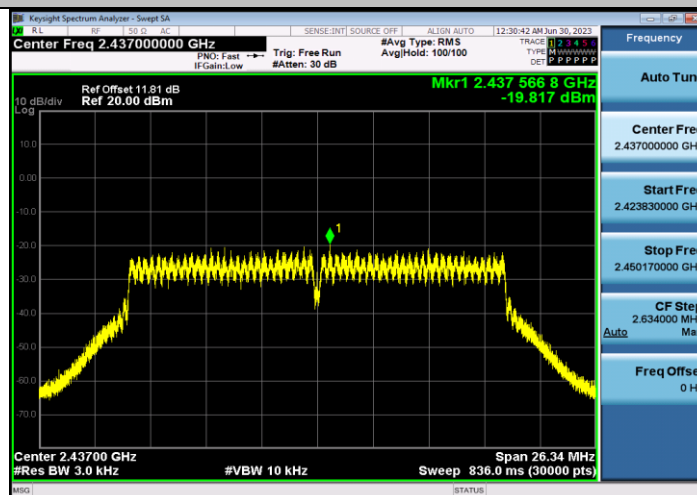
11G_Ant1_2462



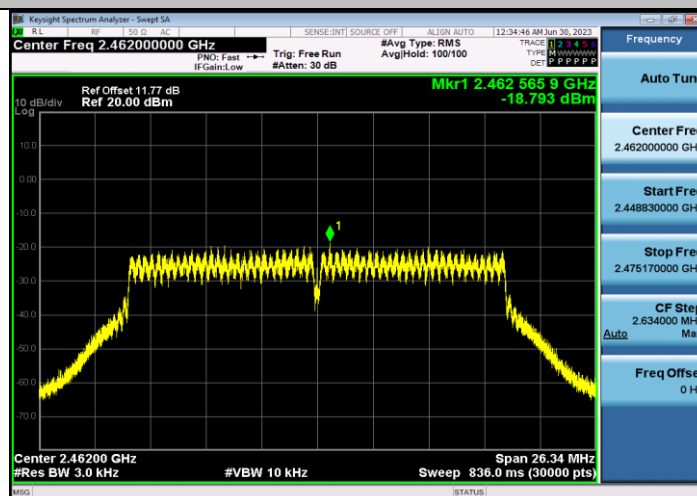
11N20SISO_Ant1_2412



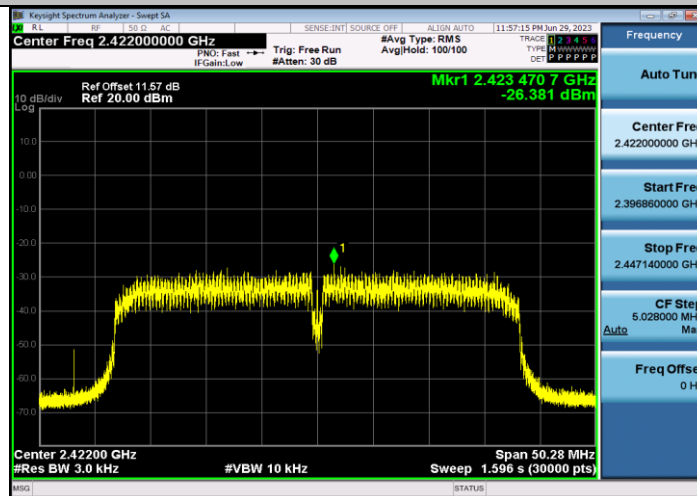
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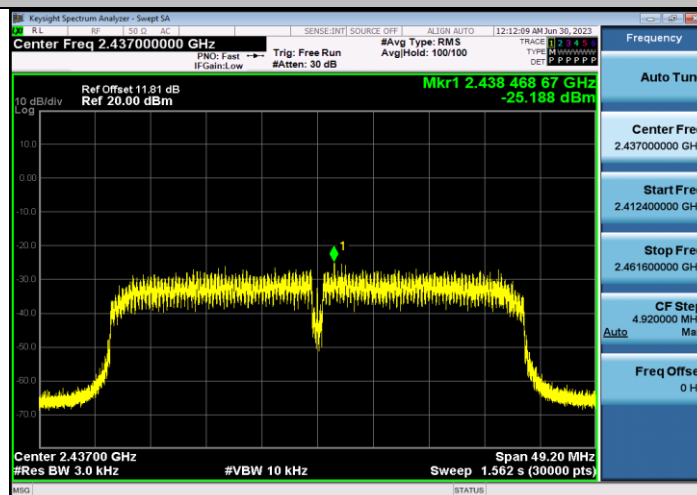
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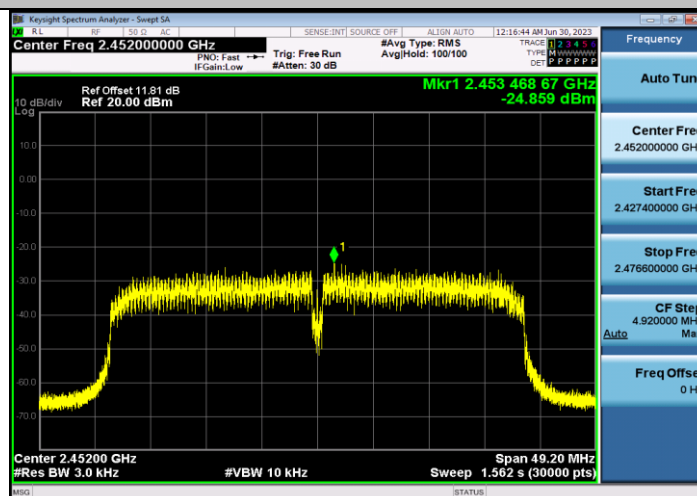
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

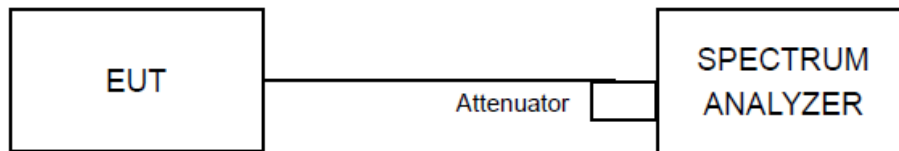


4.5 Conducted Band Edges Measurement

4.5.1 Limit

Below 20 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.

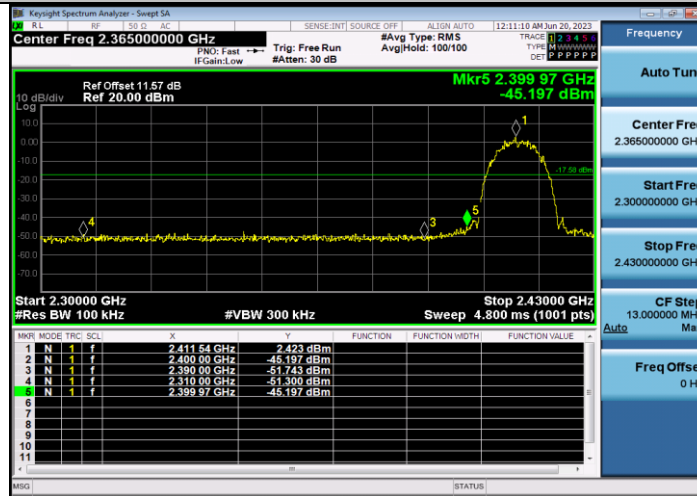
4.5.5 Test Results

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	2.42	-45.2	≤-17.58	PASS
		High	2462	1.78	-46.85	≤-18.22	PASS
11G	Ant1	Low	2412	-8.55	-41.67	≤-28.55	PASS
		High	2462	-4.94	-47.63	≤-24.94	PASS
11N20SISO	Ant1	Low	2412	-8.64	-43.79	≤-28.64	PASS
		High	2462	-7.32	-47.96	≤-27.32	PASS
11N40SISO	Ant1	Low	2422	-13.89	-47.21	≤-33.89	PASS
		High	2452	-12.84	-47.9	≤-32.84	PASS

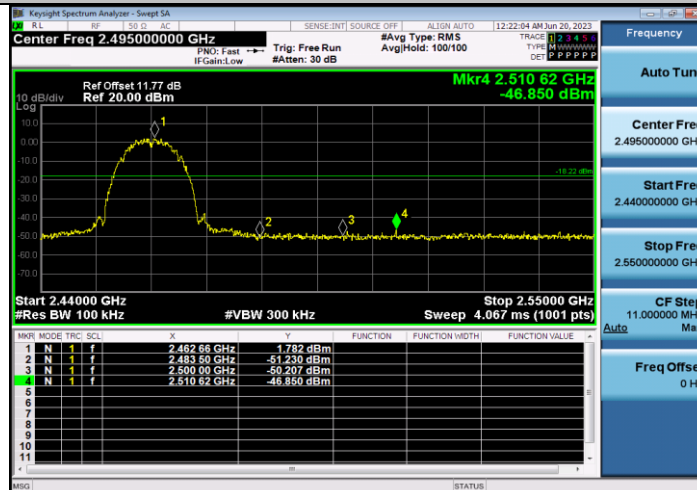


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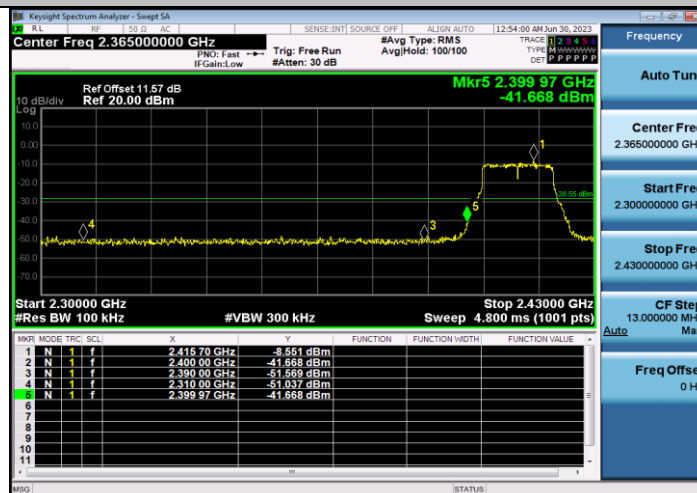
11B_Ant1_Low_2412



11B_Ant1_High_2462



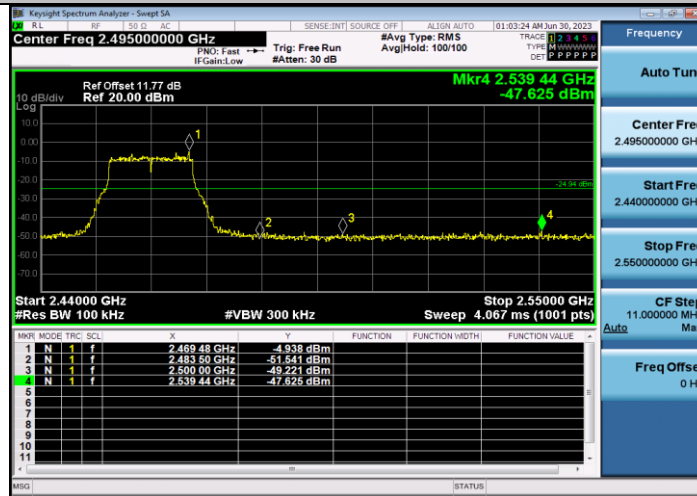
11G_Ant1_Low_2412



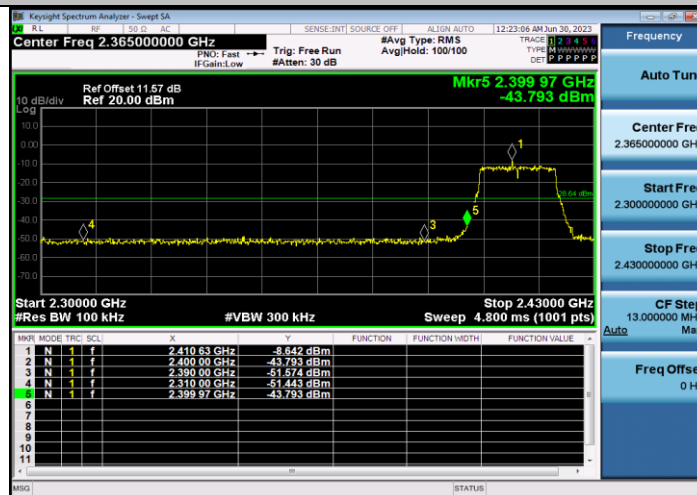


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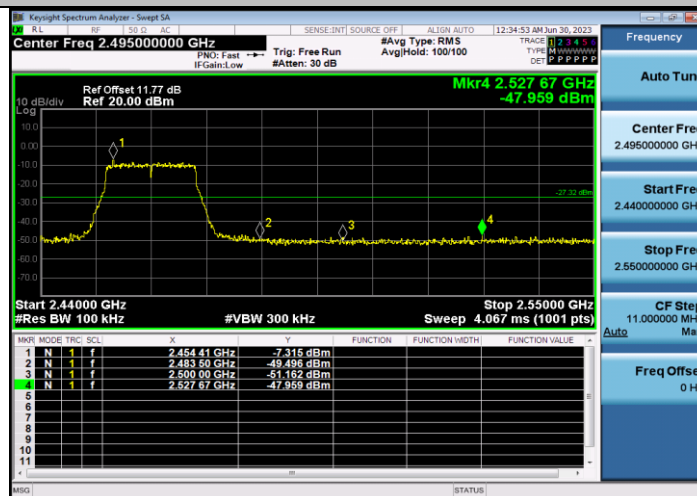
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



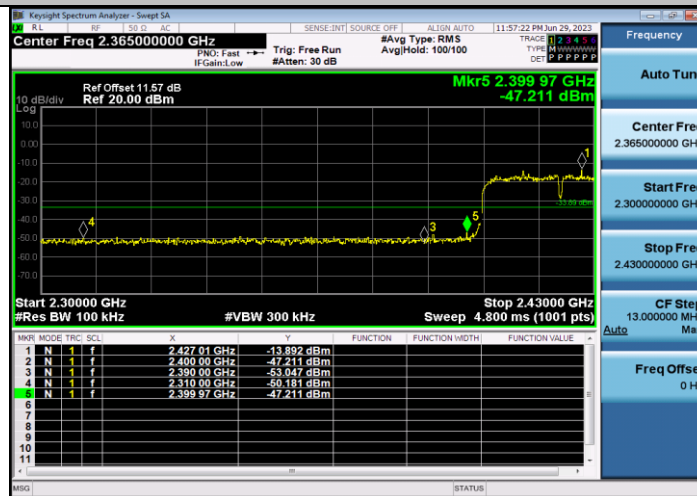
11N20SISO_Ant1_High_2462



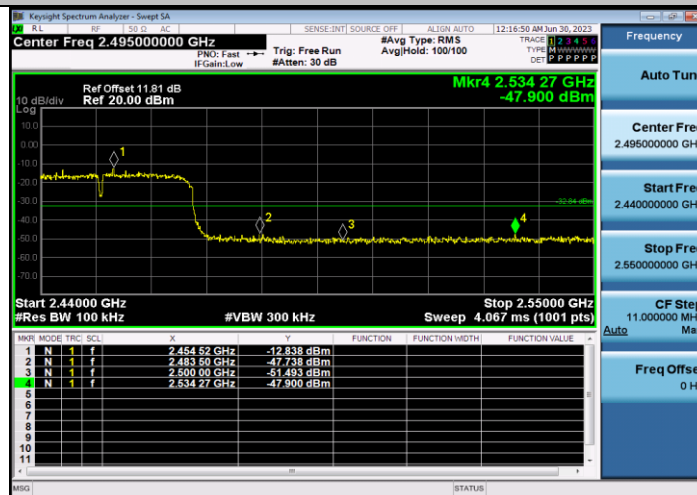


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11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

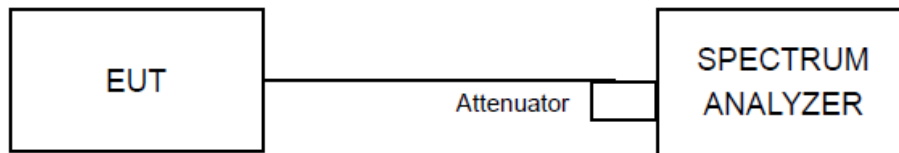


4.6 Conducted Spurious Emissions

4.6.1 Limit

Below 20 dB of the highest emission level of operating band (in 100 kHz Resolution Bandwidth).

4.6.2 Test Setup



4.6.3 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.

4.6.4 Deviation of Test Standard

No deviation.

4.6.5 Test Results

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	2.63	2.63	---	PASS
			30~1000	2.63	-60.7	≤-17.37	PASS
			1000~26500	2.63	-43.95	≤-17.37	PASS
		2437	Reference	1.12	1.12	---	PASS
			30~1000	1.12	-60.59	≤-18.88	PASS
			1000~26500	1.12	-42.9	≤-18.88	PASS
		2462	Reference	2.68	2.68	---	PASS
			30~1000	2.68	-60.62	≤-17.32	PASS
			1000~26500	2.68	-43.45	≤-17.32	PASS
11G	Ant1	2412	Reference	-10.13	-10.13	---	PASS
			30~1000	-10.13	-60.66	≤-30.13	PASS
			1000~26500	-10.13	-42.8	≤-30.13	PASS
		2437	Reference	-6.04	-6.04	---	PASS
			30~1000	-6.04	-60.03	≤-26.04	PASS
			1000~26500	-6.04	-43.88	≤-26.04	PASS
		2462	Reference	-8.10	-8.10	---	PASS
			30~1000	-8.10	-60.16	≤-28.1	PASS
			1000~26500	-8.10	-43.38	≤-28.1	PASS
11N20SISO	Ant1	2412	Reference	-11.38	-11.38	---	PASS
			30~1000	-11.38	-60.89	≤-31.38	PASS
			1000~26500	-11.38	-44.09	≤-31.38	PASS
		2437	Reference	-10.44	-10.44	---	PASS
			30~1000	-10.44	-60.32	≤-30.44	PASS
			1000~26500	-10.44	-42.58	≤-30.44	PASS
		2462	Reference	-8.88	-8.88	---	PASS
			30~1000	-8.88	-60.57	≤-28.88	PASS
			1000~26500	-8.88	-43.3	≤-28.88	PASS
11N40SISO	Ant1	2422	Reference	-16.56	-16.56	---	PASS
			30~1000	-16.56	-61.09	≤-36.56	PASS
			1000~26500	-16.56	-43.68	≤-36.56	PASS
		2437	Reference	-15.74	-15.74	---	PASS



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TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
			30~1000	-15.74	-60.08	$\leq$ -35.74	PASS
			1000~26500	-15.74	-43.4	$\leq$ -35.74	PASS
		2452	Reference	-12.87	-12.87	---	PASS
			30~1000	-12.87	-60.36	$\leq$ -32.87	PASS
			1000~26500	-12.87	-42.65	$\leq$ -32.87	PASS

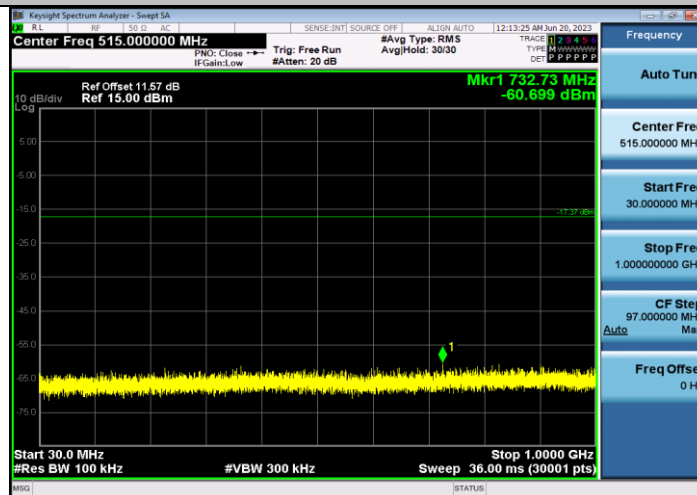


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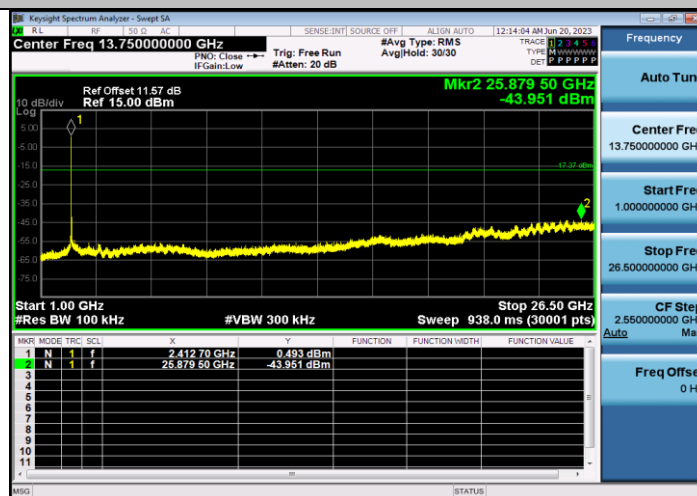
11B_Ant1_2412_0~Reference



11B_Ant1_2412_30~1000



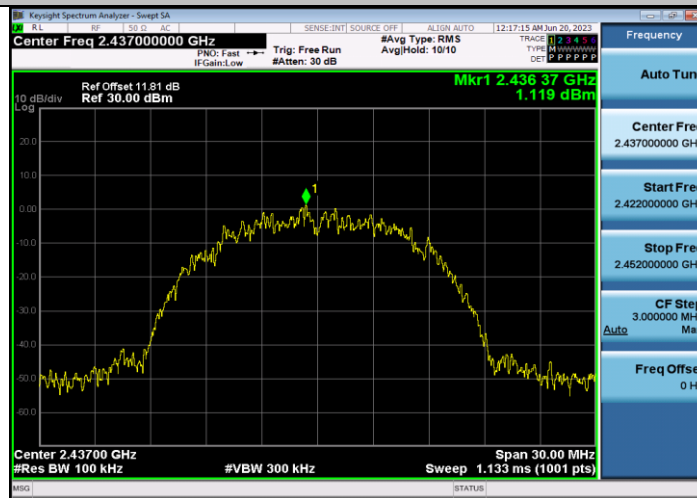
11B_Ant1_2412_1000~26500



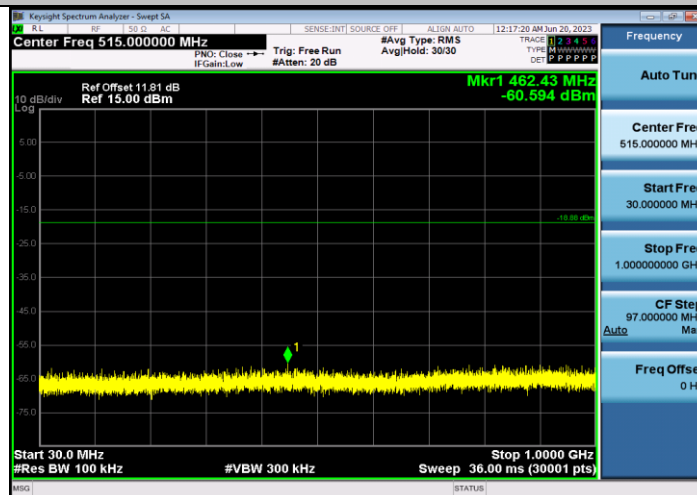


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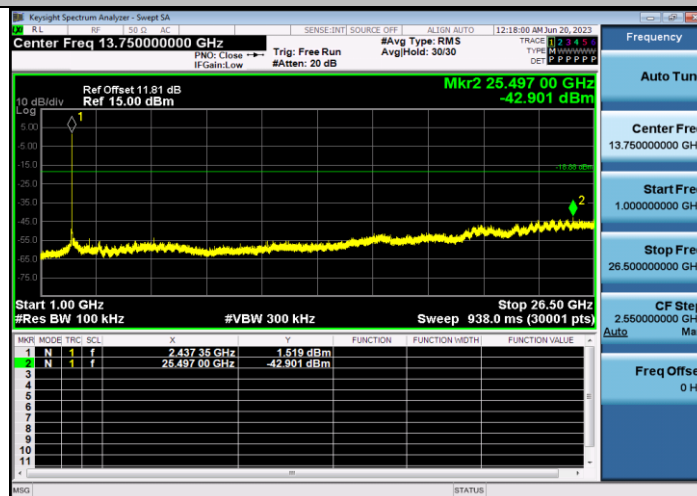
11B_Ant1_2437_0~Reference



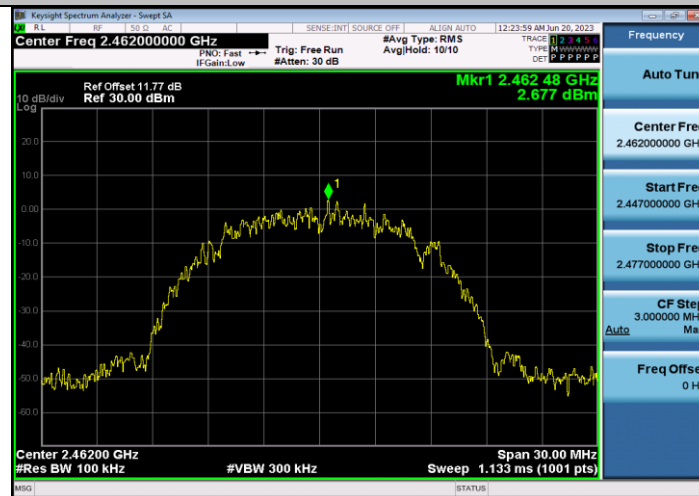
11B_Ant1_2437_30~1000



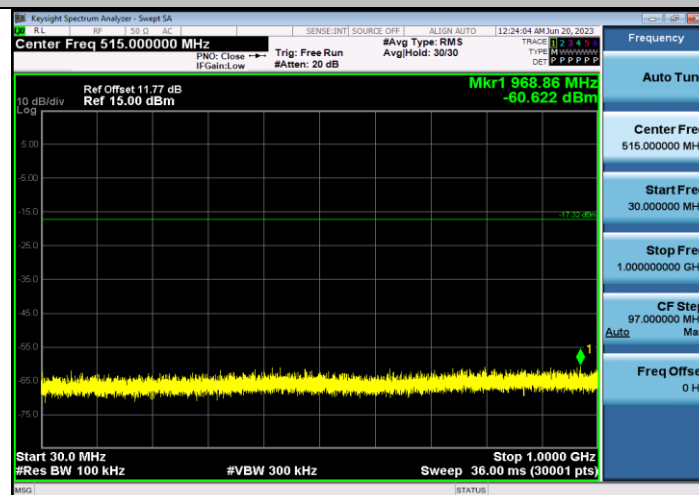
11B_Ant1_2437_1000~26500



11B_Ant1_2462_0~Reference



11B_Ant1_2462_30~1000



11B_Ant1_2462_1000~26500

