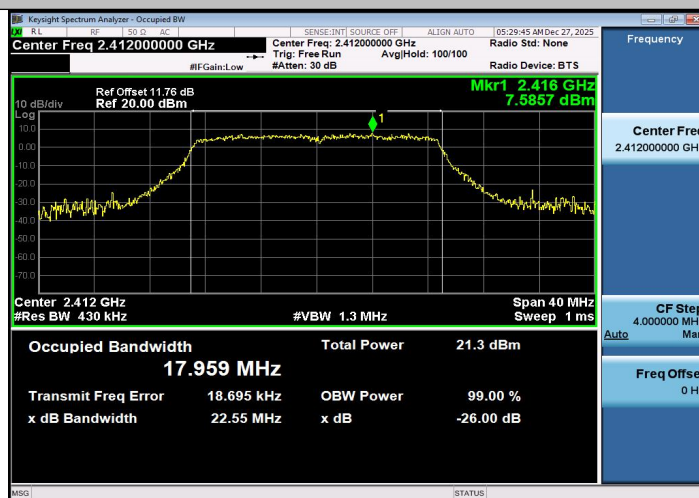


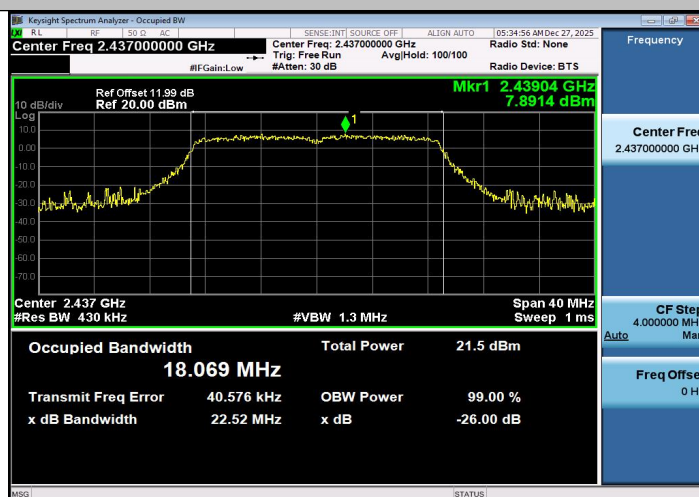


TEST REPORT N°: CRWJ-ESH-P25120941B-3

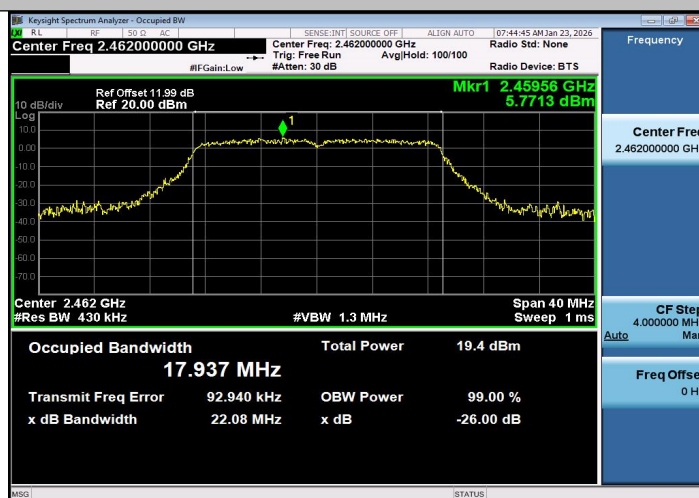
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



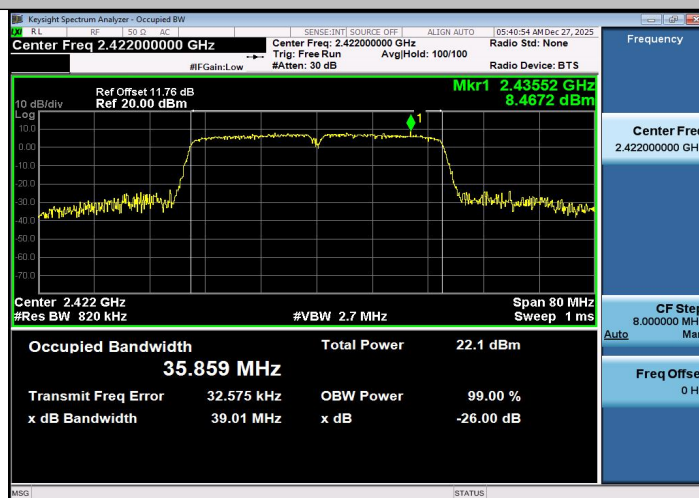
11N20SISO_Ant1_2462



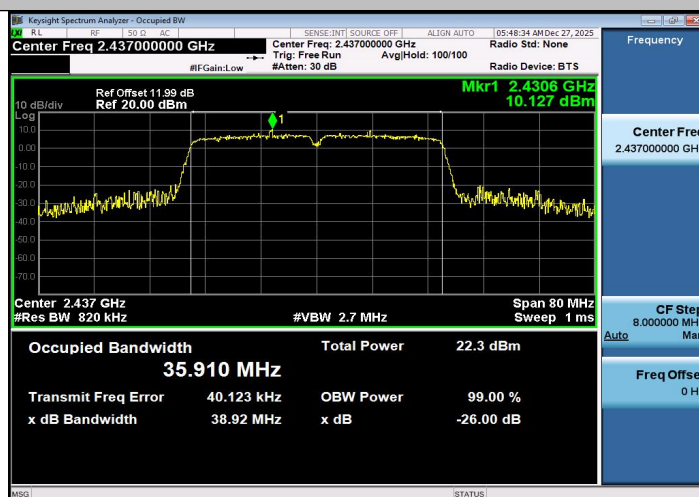


TEST REPORT N°: CRWJ-ESH-P25120941B-3

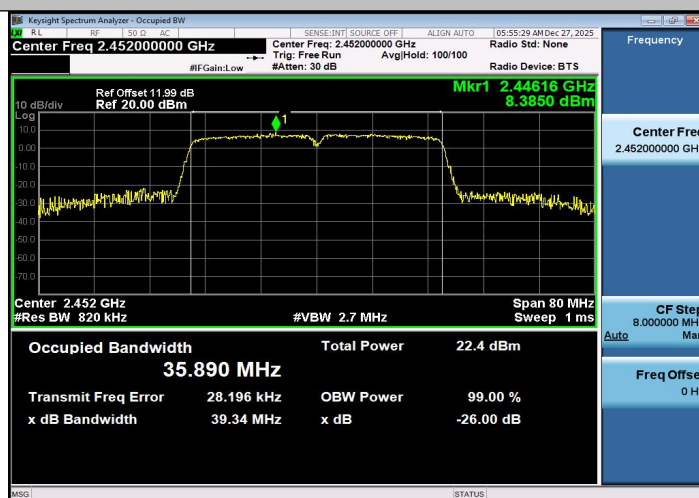
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





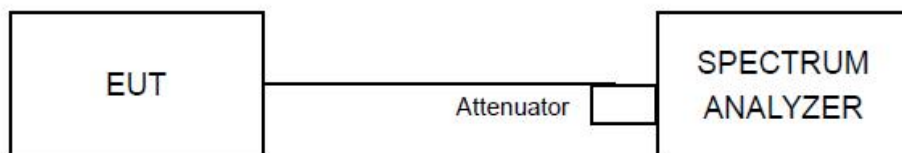
TEST REPORT N°: CRWJ-ESH-P25120941B-3

3.3 Conducted Output Power

3.3.1 Limit

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30 dBm)

3.3.2 Test Setup



3.3.3 Test Procedures

The EUT was tested according to DTS test procedure of “KDB558074 D01 DTS Meas Guidance” for compliance to FCC 47CFR 15.247 requirements (clause 9.2.2.4).

1. Set RBW $\geq$ DTS bandwidth
2. Set VBW $\geq$ 3 RBW.
3. Set Span $\geq$ 3 RBW.
4. Sweep time = No faster than coupled (auto) time.
5. Detector = peak
6. Trace mode = max hold.
7. Allow trace to fully stabilize
8. Use peak marker function to determine the peak amplitude level.

3.3.4 Deviation of Test Standard

No deviation.



TEST REPORT N°: CRWJ-ESH-P25120941B-3

3.3.5 Test Results

Test Mode	Antenna	Frequen cy[MHz]	Average power [dBm]	Duty Cycle [%]	DC Factor [dBm]	Result [dBm]	Limit [dBm]	Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Verdict
11B	Ant1	2412	15.57	98.89	0.05	15.62	≤30.0 0	1.05	16.67	≤36.00	PASS
		2437	16.06	98.96	0.05	16.11	≤30.0 0	1.05	17.16	≤36.00	PASS
		2462	16.80	98.89	0.05	16.85	≤30.0 0	1.05	17.9	≤36.00	PASS
11G	Ant1	2412	15.12	94.06	0.27	15.39	≤30.0 0	1.05	16.44	≤36.00	PASS
		2437	15.24	94.09	0.26	15.50	≤30.0 0	1.05	16.55	≤36.00	PASS
		2462	15.27	94.09	0.26	15.53	≤30.0 0	1.05	16.58	≤36.00	PASS
11N20SI SO	Ant1	2412	14.70	93.66	0.28	14.98	≤30.0 0	1.05	16.03	≤36.00	PASS
		2437	15.15	94.12	0.26	15.41	≤30.0 0	1.05	16.46	≤36.00	PASS
		2462	13.09	93.66	0.28	13.37	≤30.0 0	1.05	14.42	≤36.00	PASS
11N40SI SO	Ant1	2422	14.53	87.96	0.56	15.09	≤30.0 0	1.05	16.14	≤36.00	PASS
		2437	14.83	87.85	0.56	15.39	≤30.0 0	1.05	16.44	≤36.00	PASS
		2452	14.98	87.85	0.56	15.54	≤30.0 0	1.05	16.59	≤36.00	PASS

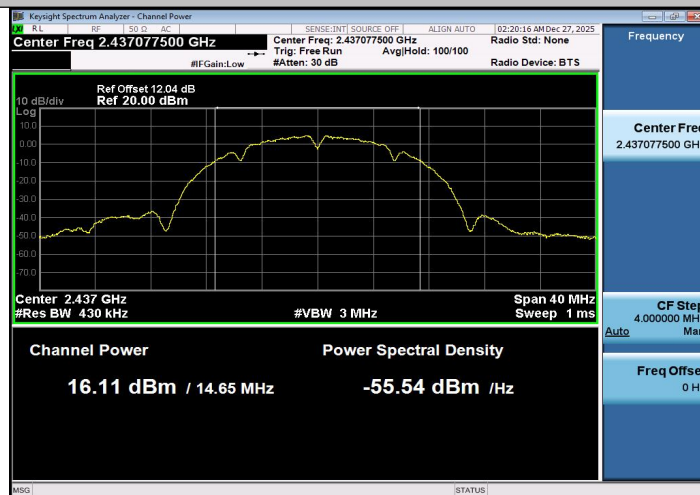


TEST REPORT N°: CRWJ-ESH-P25120941B-3

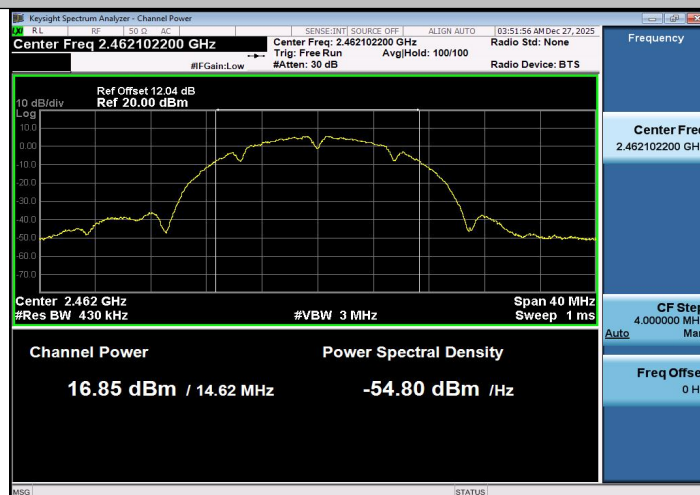
11B_Ant1_2412



11B_Ant1_2437



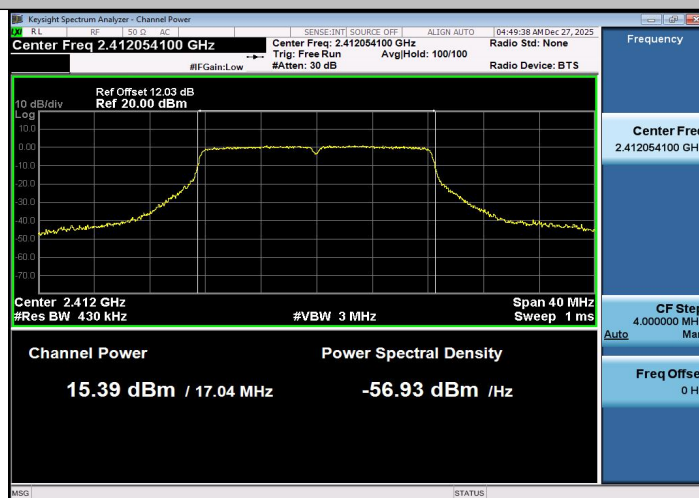
11B_Ant1_2462



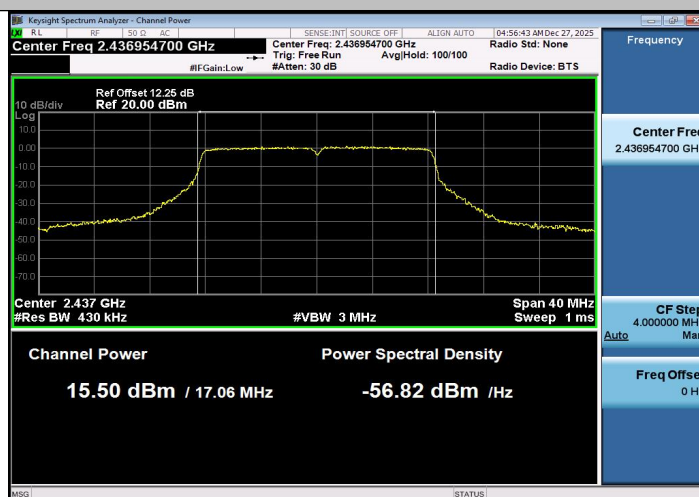


TEST REPORT N°: CRWJ-ESH-P25120941B-3

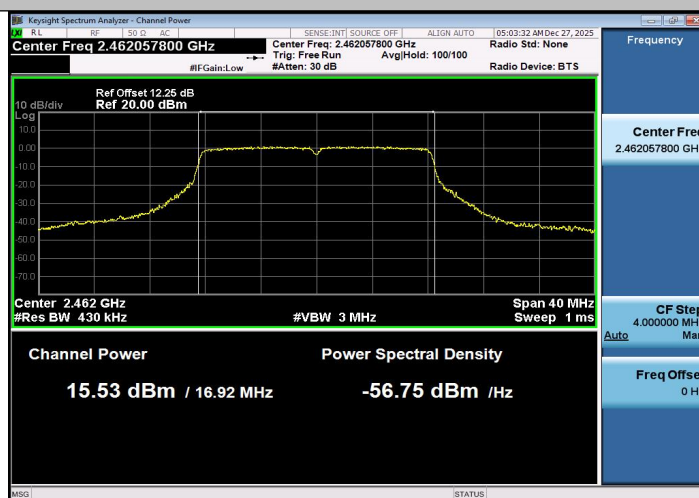
11G_Ant1_2412



11G_Ant1_2437



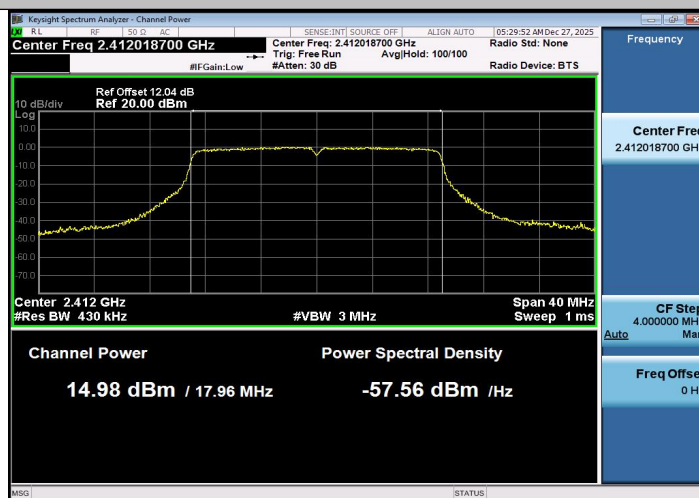
11G_Ant1_2462



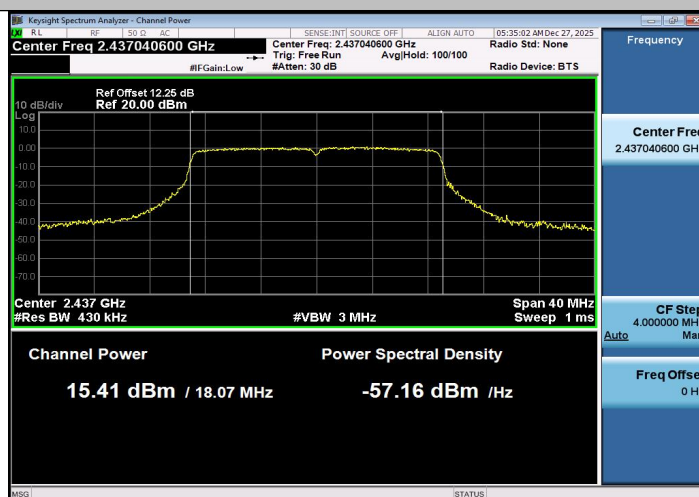


TEST REPORT N°: CRWJ-ESH-P25120941B-3

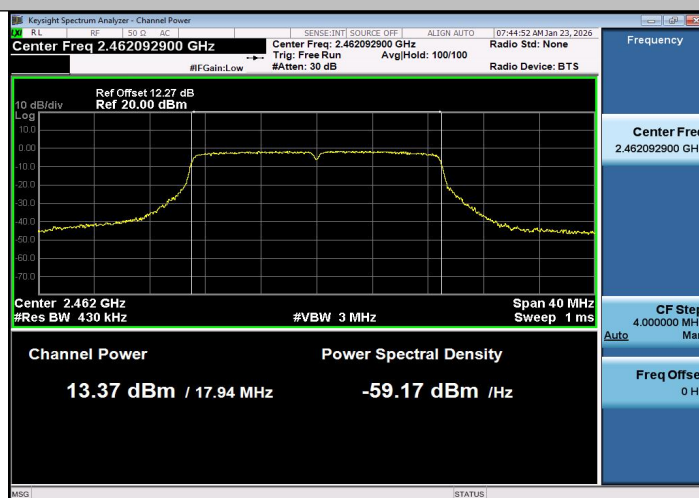
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



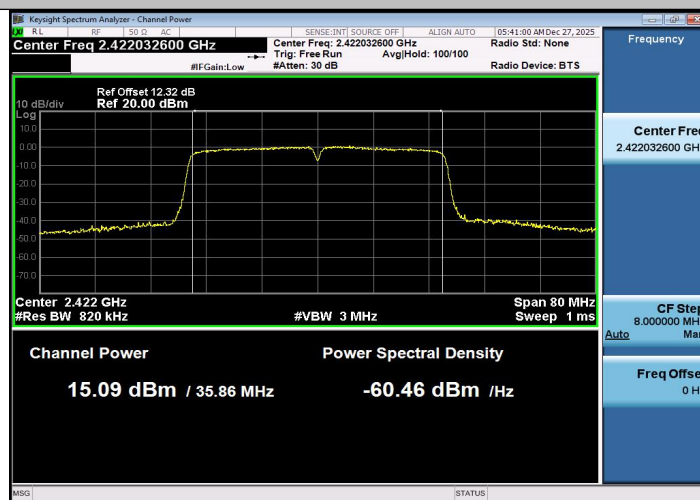
11N20SISO_Ant1_2462



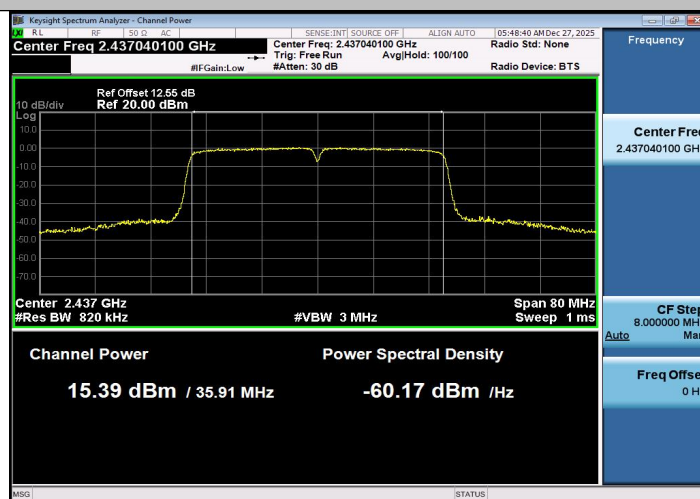


TEST REPORT N°: CRWJ-ESH-P25120941B-3

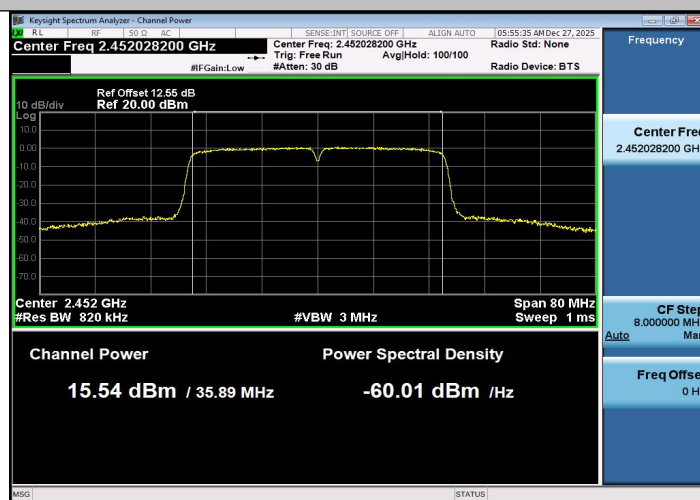
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





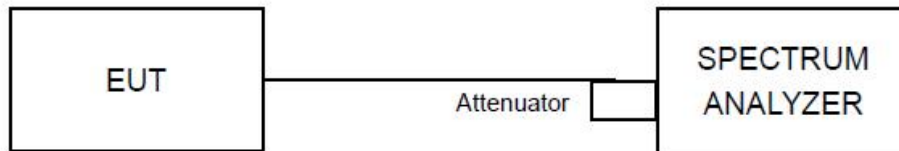
TEST REPORT N°: CRWJ-ESH-P25120941B-3

3.4 Power Spectral Density

3.4.1 Limit

The Maximum of Power Spectral Density Measurement is 8 dBm.

3.4.2 Test Setup



3.4.3 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.

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to: $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$.
4. Set the VBW $\geq 3 \times \text{RBW}$.
5. Detector = peak.
6. Sweep time = No faster than coupled (auto) time.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

3.4.4 Deviation of Test Standard

No deviation.



TEST REPORT N°: CRWJ-ESH-P25120941B-3

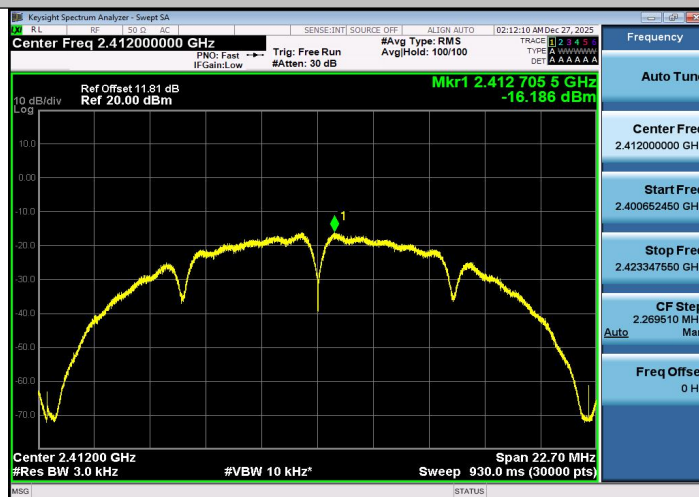
3.4.5 Test Results

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-16.19	≤8.00	PASS
		2437	-14.85	≤8.00	PASS
		2462	-14.59	≤8.00	PASS
11G	Ant1	2412	-15.83	≤8.00	PASS
		2437	-16.16	≤8.00	PASS
		2462	-15.79	≤8.00	PASS
11N20SISO	Ant1	2412	-16.51	≤8.00	PASS
		2437	-16.75	≤8.00	PASS
		2462	-17.73	≤8.00	PASS
11N40SISO	Ant1	2422	-18.07	≤8.00	PASS
		2437	-17.87	≤8.00	PASS
		2452	-17.00	≤8.00	PASS

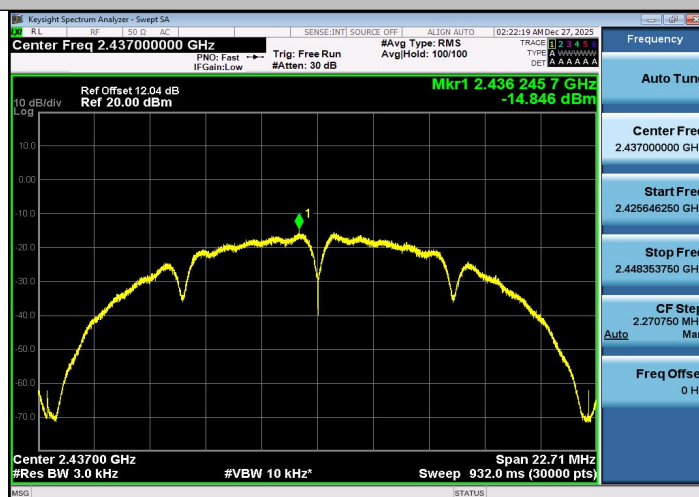


TEST REPORT N°: CRWJ-ESH-P25120941B-3

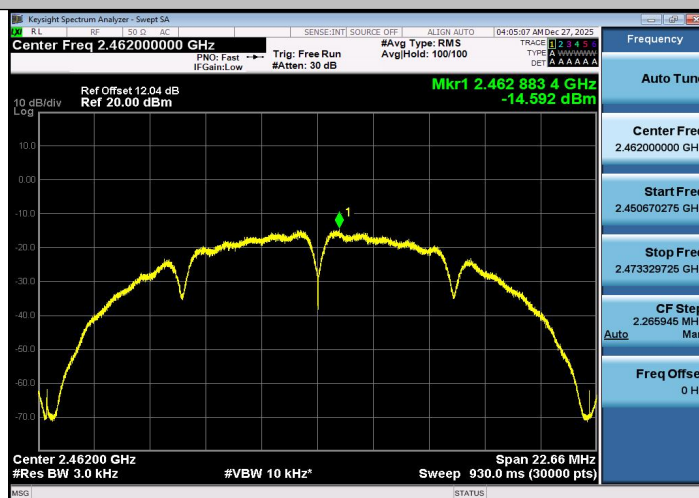
11B_Ant1_2412



11B_Ant1_2437



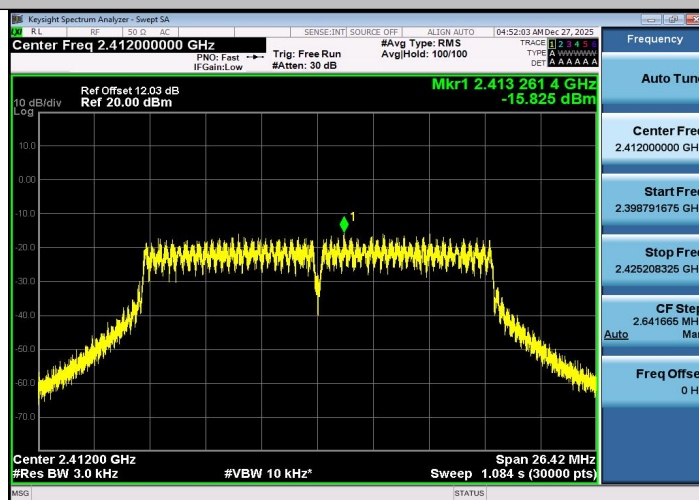
11B_Ant1_2462



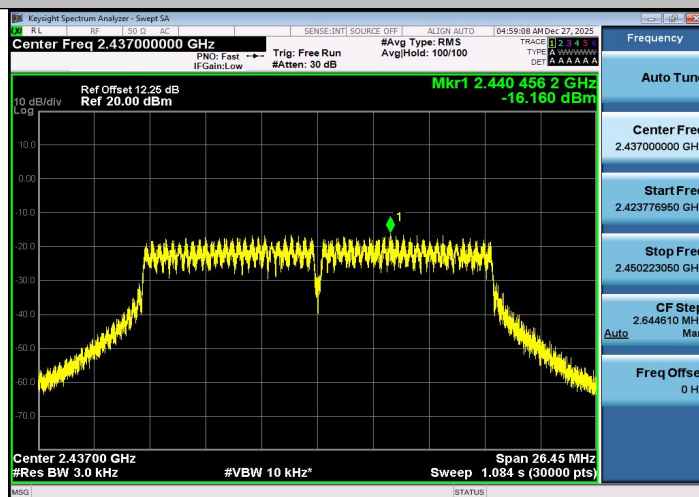


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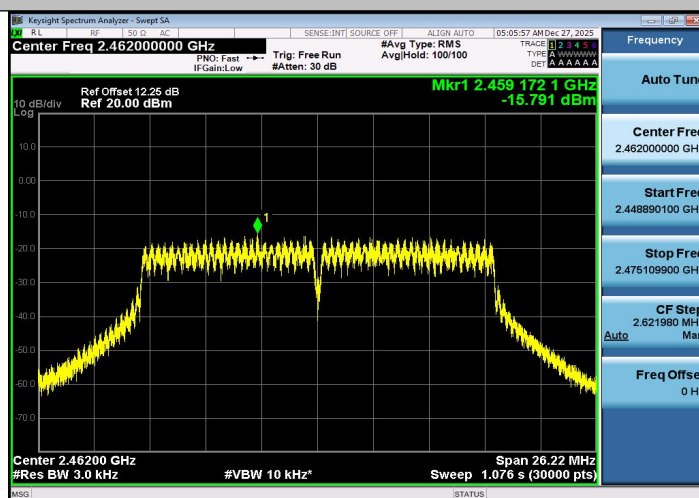
11G_Ant1_2412



11G_Ant1_2437



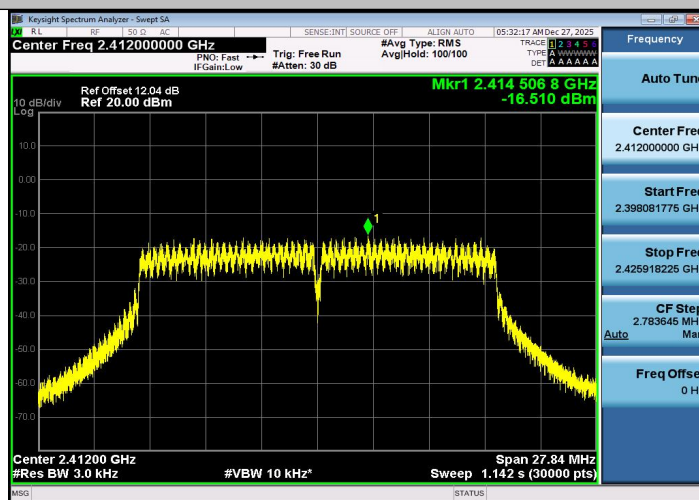
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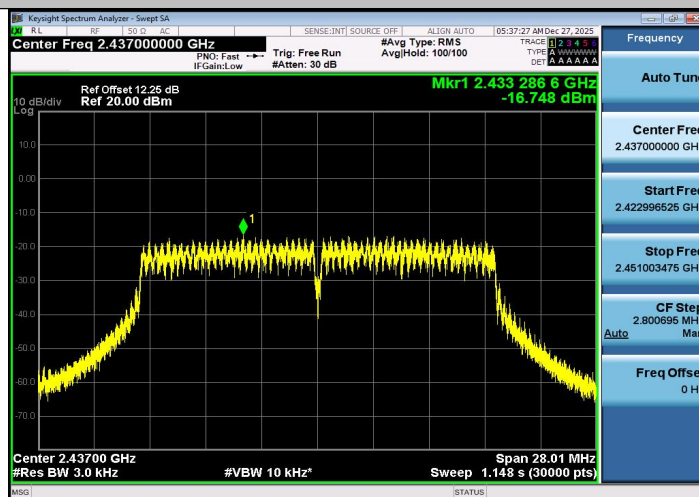


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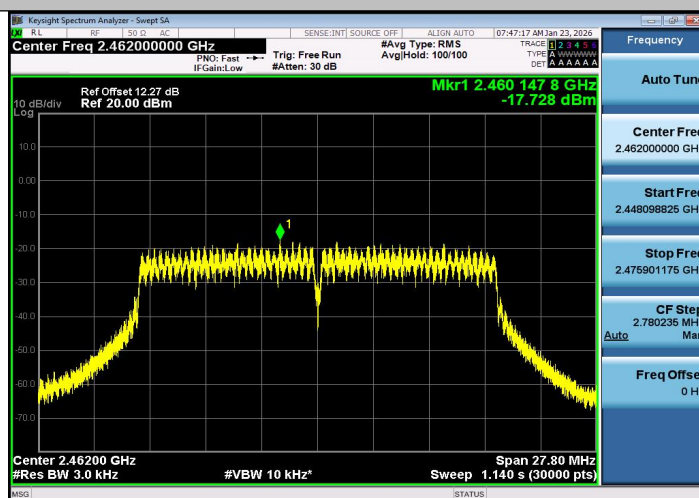
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



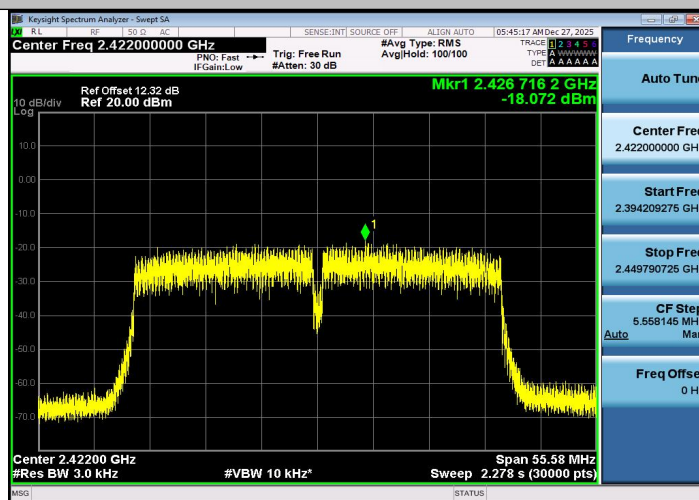
11N20SISO_Ant1_2462



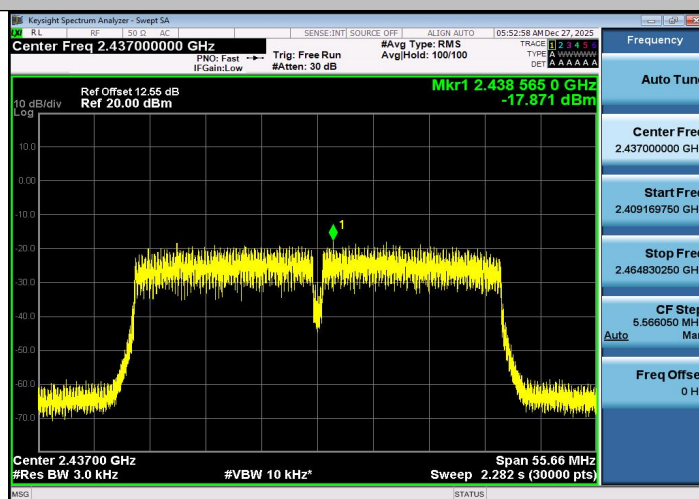


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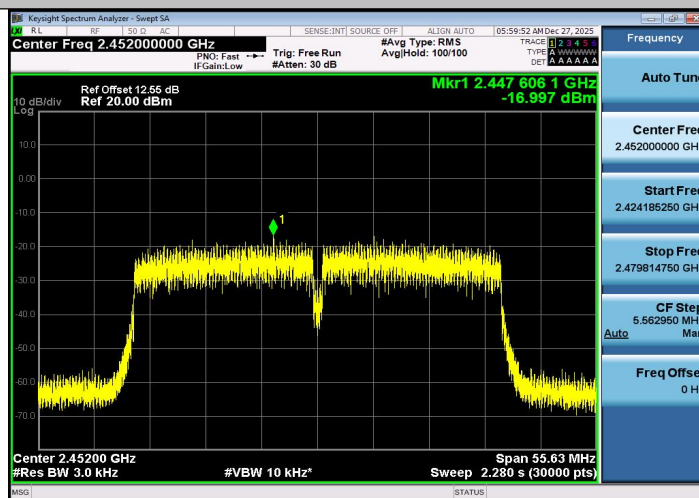
11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452





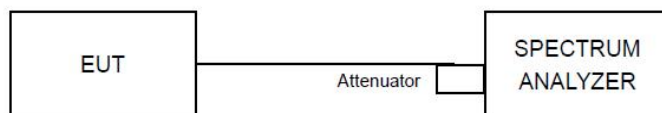
TEST REPORT N°: CRWJ-ESH-P25120941B-3

3.5 Conducted Band Edges Measurement

3.5.1 Limit

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

3.5.2 Test Setup



3.5.3 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 instrument center frequency to DTS channel center frequency.
2. Set the span to ≥ 1.5 times the DTS bandwidth.
3. Set the RBW = 100 kHz.
4. Set the VBW $\geq [3 \times \text{RBW}]$
5. Detector = average.
6. Sweep time = No faster than coupled (auto) time.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. 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.

MEASUREMENT PROCEDURE OOB

1. Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution. NOTE—the number of points can also be increased for large spans to retain frequency resolution

2. Set RBW = 100 kHz.
 3. Set VBW $\geq [3 \times \text{RBW}]$
 4. Detector = average.
 5. Sweep = No faster than coupled (auto) time.
 6. Trace Mode = max hold.
 7. Allow trace to fully stabilize.
 8. 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) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

3.5.4 Deviation of Test Standard

No deviation.



TEST REPORT N°: CRWJ-ESH-P25120941B-3

3.5.5 Test Results

TestMode	Antenna	ChName	Frequency[MHz]	RefReadingI[dBm]	Reading[dBm]	Duty Cycle Factor
11B	Ant1	Low	2412	3.32	-40.47	0.05
		High	2462	3.42	-48.37	0.05
11G	Ant1	Low	2412	-0.10	-37.41	0.27
		High	2462	1.10	-43.58	0.26
11N20SISO	Ant1	Low	2412	-3.26	-41.25	0.28
		High	2462	1.41	-40.85	0.28
11N40SISO	Ant1	Low	2422	-2.04	-41.95	0.56
		High	2452	-0.85	-37.75	0.56

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	3.37	-40.42	≤-26.63	PASS
		High	2462	3.47	-48.32	≤-26.53	PASS
11G	Ant1	Low	2412	0.17	-37.14	≤-29.83	PASS
		High	2462	1.36	-43.32	≤-28.64	PASS
11N20SISO	Ant1	Low	2412	-2.98	-40.97	≤-32.98	PASS
		High	2462	1.69	-40.57	≤-28.31	PASS
11N40SISO	Ant1	Low	2422	-1.48	-41.39	≤-31.48	PASS
		High	2452	-0.29	-37.19	≤-30.29	PASS

Remarks:

Reflevel = RefReading + Duty Cycle Factor

Result = Reading + Duty Cycle Factor

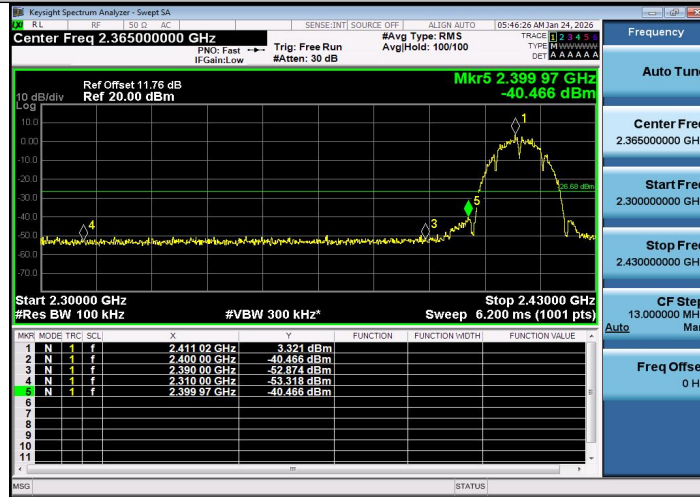
Limit = Reflevel - 30dB



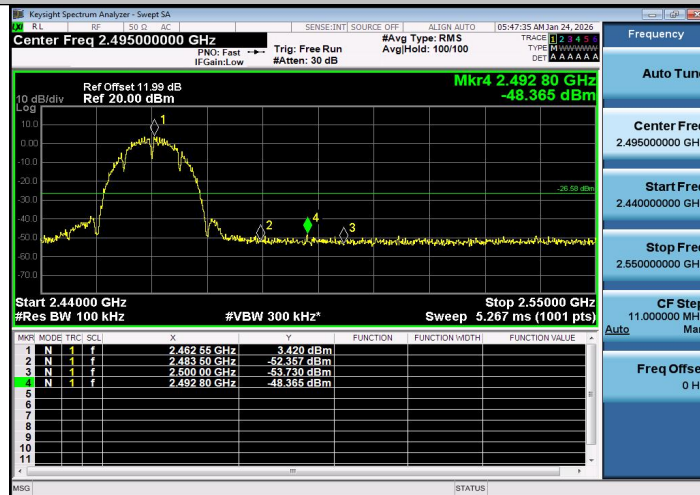
LCIE

TEST REPORT N°: CRWJ-ESH-P25120941B-3

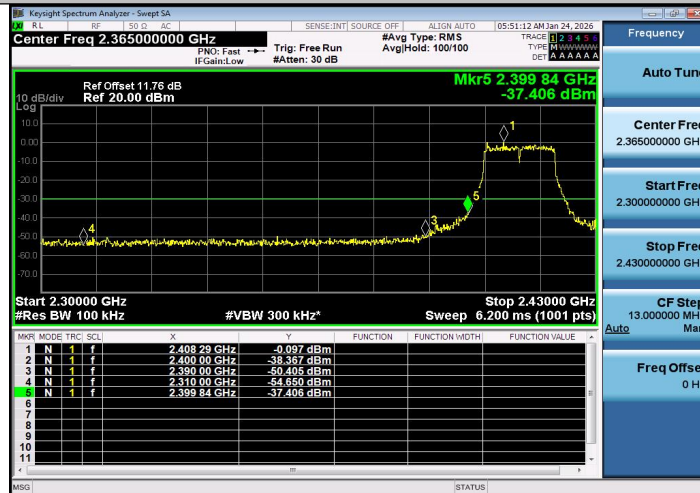
11B_Ant1_Low_2412



11B_Ant1_High_2462



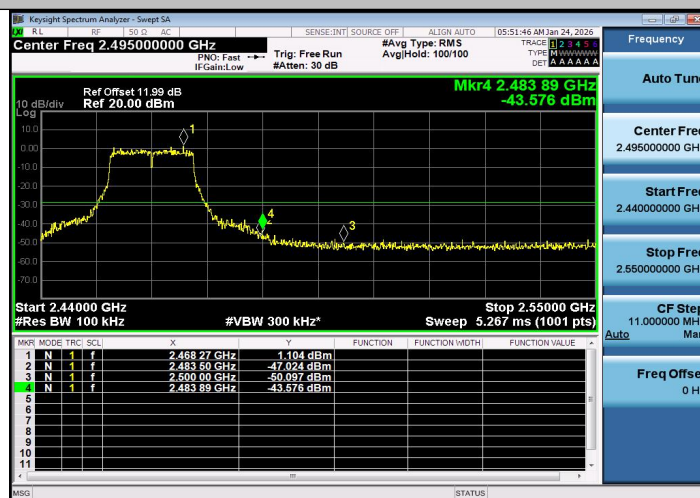
11G_Ant1_Low_2412



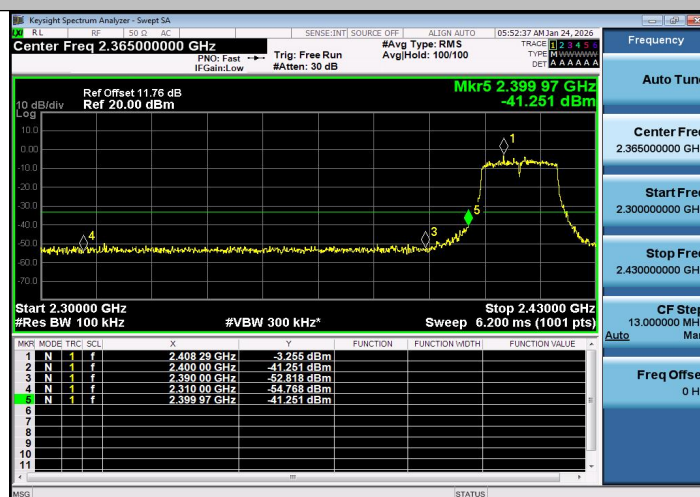


TEST REPORT N°: CRWJ-ESH-P25120941B-3

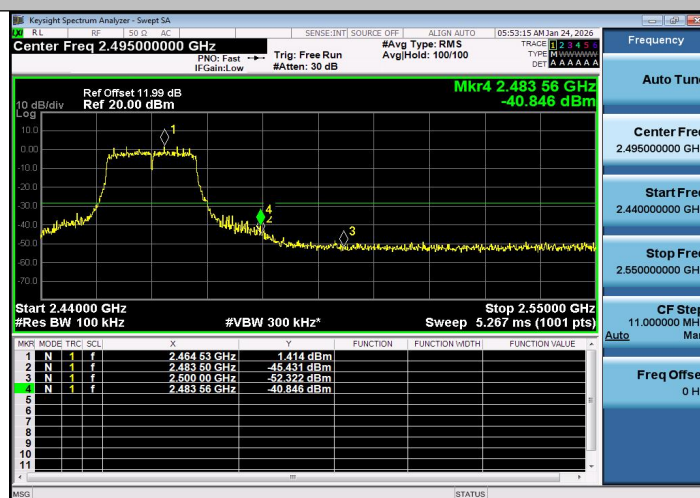
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



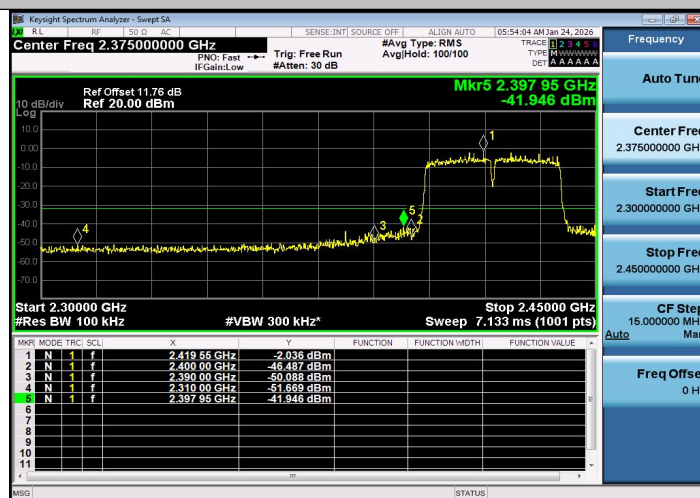
11N20SISO_Ant1_High_2462



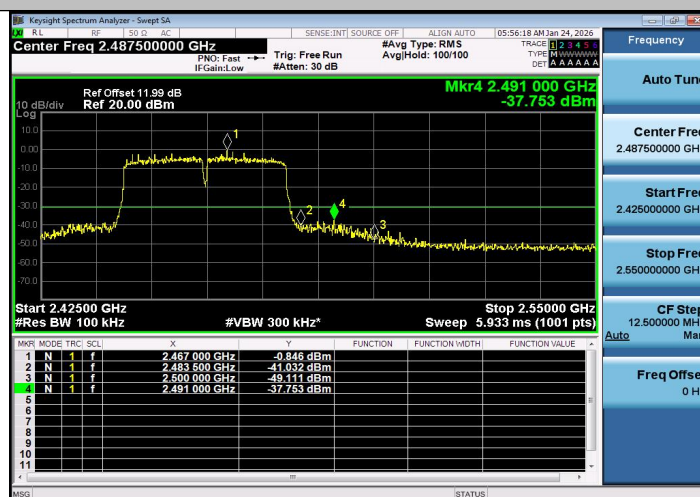


TEST REPORT N°: CRWJ-ESH-P25120941B-3

11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452





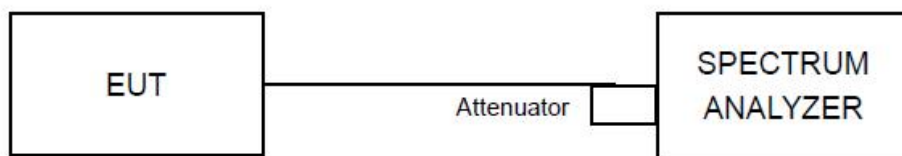
TEST REPORT N°: CRWJ-ESH-P25120941B-3

3.6 Conducted Spurious Emissions

3.6.1 Limit

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

3.6.2 Test Setup



3.6.3 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 instrument center frequency to DTS channel center frequency.
2. Set the span to ≥ 1.5 times the DTS bandwidth.
3. Set the RBW = 100 kHz.
4. Set the VBW $\geq [3 \times \text{RBW}]$.
5. Detector = peak.
6. Sweep time = No faster than coupled (auto) time.
7. Trace mode = max hold.
8. Allow trace to fully stabilize.
9. 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

MEASUREMENT PROCEDURE OOB

1. Set the center frequency and span to encompass frequency range to be measured. Note that the frequency range might need to be divided into multiple frequency ranges to retain frequency resolution.

NOTE—the number of points can also be increased for large spans to retain frequency resolution.

2. Set RBW = 100 kHz.
3. Set VBW $\geq [3 \times \text{RBW}]$.
4. Detector = peak.
5. Sweep = No faster than coupled (auto) time.
6. Trace Mode = max hold.
7. Allow trace to fully stabilize.
8. 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) is attenuated by at least the minimum requirements specified in 11.11. Report the three highest emissions relative to the limit.

3.6.4 Deviation of Test Standard

No deviation.