CHANNEL	TX Channel 39	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	49.62	57.19	74.00	-24.38	30.80	7.74	46.11	100	190	Peak
2390.000	38.99	46.56	54.00	-15.01	30.80	7.74	46.11	100	190	Average
2480.000	95.37	101.11	/	/	32.48	7.87	46.09	100	190	Peak
2480.000	93.97	99.71	/	/	32.48	7.87	46.09	100	190	Average
2483.500	51.34	57.08	74.00	-22.66	32.47	7.88	46.09	100	190	Peak
2483.500	41.19	46.93	54.00	-12.81	32.47	7.88	46.09	100	190	Average
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB /m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
2390.000	50.44	56.45	74.00	-23.56	32.36	7.74	46.11	100	105	Peak
2390.000	40.68	46.69	54.00	-13.32	32.36	7.74	46.11	100	105	Average
2480.000	89.36	96.28	/	/	31.30	7.87	46.09	100	105	Peak
2480.000	88.08	95.00	/	/	31.30	7.87	46.09	100	105	Average
2483.500	50.66	57.54	74.00	-23.34	31.33	7.88	46.09	100	105	Peak
2483.500	40.09	46.97	54.00	-13.91	31.33	7.88	46.09	100	105	Average

REMARKS:

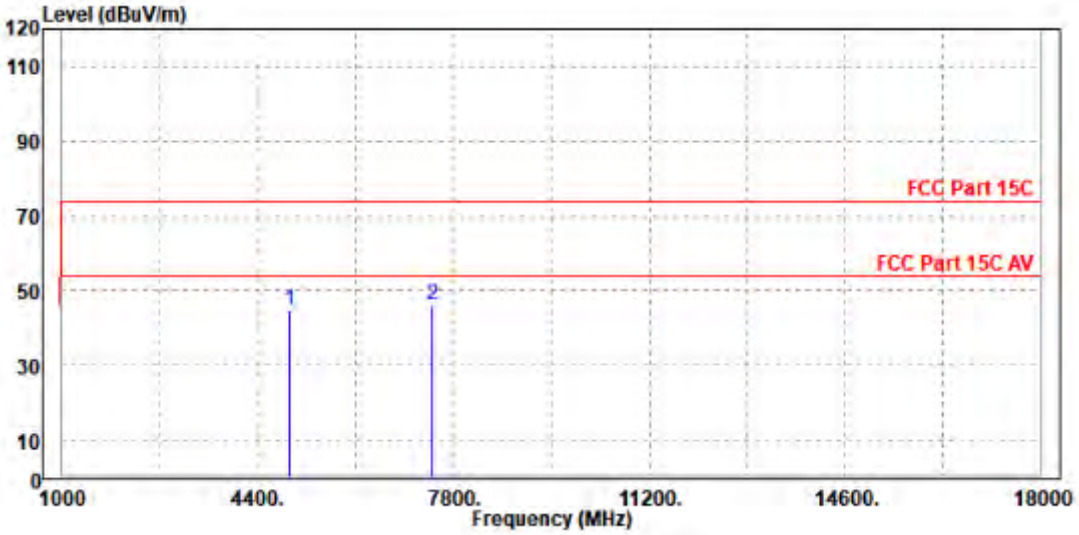
1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.

Worst case harmonic:

CHANNEL	TX Channel 39	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 25GHz		

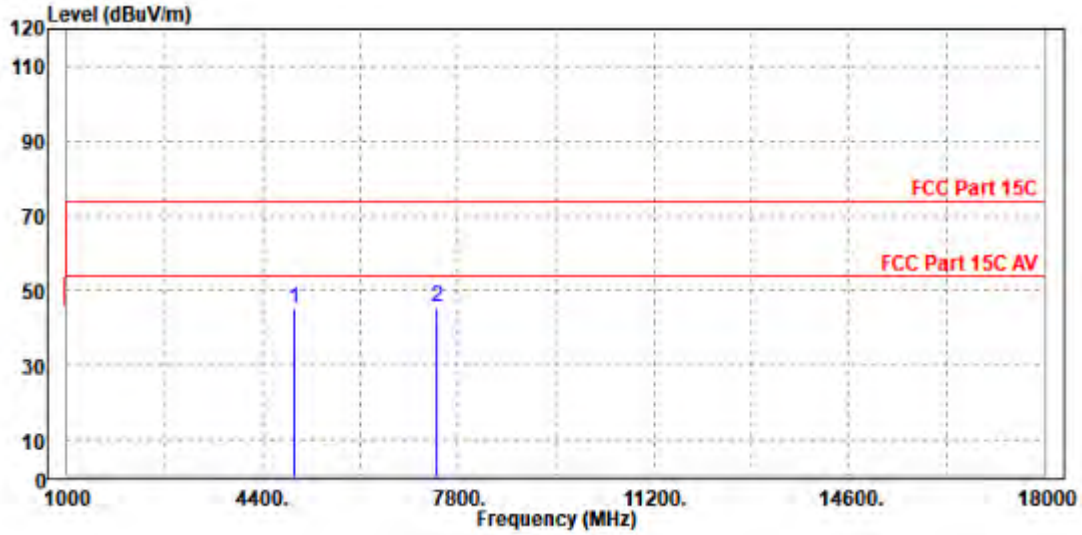
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	4960.000	44.69	46.42	74.00	-29.31	-1.73	Peak	Horizontal
2 PP	7443.000	46.29	43.86	74.00	-27.71	2.43	Peak	Horizontal



ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	4961.000	45.18	47.15	74.00	-28.82	-1.97	Peak	Vertical
2 PP	7440.000	45.74	43.36	74.00	-28.26	2.38	Peak	Vertical



REMARKS:

1. Emission Level = Read Level+ Antenna Factor + Cable Loss- Preamp Factor
   Margin value = Emission level – Limit value.
2. 2480MHz: Fundamental frequency.
3. For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet

3.3 6 dB BANDWIDTH MEASUREMENT

3.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

3.3.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Power Meter	ANRITSU	ML2495A	1506002	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-526	MY54510523	Feb. 14,24	Feb. 13,25
EXA Signal Analyzer	KEYSIGHT	N9010A-544	MY54510355	May.10,24	May.09,25
Power Sensor	ANRITSU	MA2411B	1339352	Feb. 14,24	Feb. 13,25

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in RF Oven room.

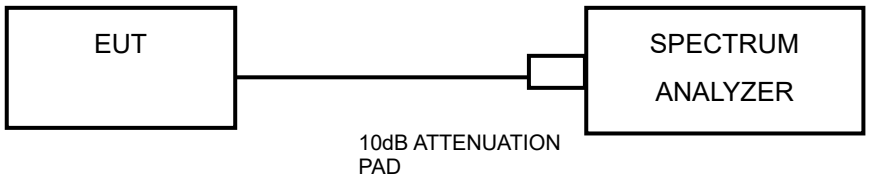
3.3.3 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) ≥ 3 RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

3.3.4 DEVIATION FROM TEST STANDARD

No deviation.

3.3.5 TEST SETUP



3.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.3.7 TEST RESULTS

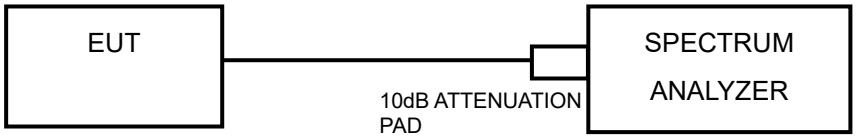
Please Refer to Appendix Of this test report.

3.4 CONDUCTED OUTPUT POWER

3.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

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

3.4.2 TEST SETUP



3.4.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.4.4 TEST PROCEDURES

For 2.4G WIFI:

a) Measure the duty cycle D of the transmitter output signal as described in 11.6.

b) Set span to >1.5 times the OBW.

c) Set RBW = 1% to 5% of the OBW, but do not exceed 1 MHz.

d) Set VBW ≥ [3 × RBW].

e) Number of points in sweep ≥ [2 × span / RBW]. (This gives bin-to-bin spacing ≤ RBW / 2, so that narrowband signals are not lost between frequency bins.)

f) Sweep time = auto.

g) Detector = Power averaging (rms), if available. Otherwise, use the sample detector mode.

h) Do not use sweep triggering. Allow the sweep to “free run.”

i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 until trace is stabilized

so that the average accurately represents the true average over the ON and OFF periods of the transmitter.

j) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band-power measurement function with band limits set equal to the OBW band-edges. If the instrument does not have a band-power function, then sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

k) Add [10 log (1 / D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.

For BLE：

a) Set the RBW ≥ DTS bandwidth.
b) Set VBW ≥ [3 × RBW].
c) Set span ≥ [3 × RBW].
d) Sweep time = No faster than coupled (auto) time.
e) Detector = peak.
f) Trace mode = max-hold.
g) Allow trace to fully stabilize.
h) Use peak marker function to determine the peak amplitude level.

3.4.5 DEVIATION FROM TEST STANDARD

No deviation.

3.4.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.4.7 TEST RESULTS

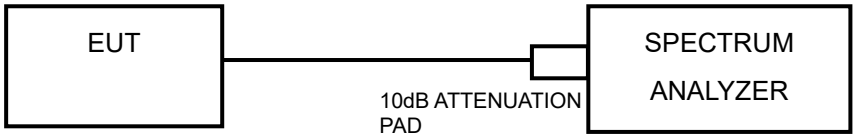
Please Refer to Appendix Of this test report.

3.5 POWER SPECTRAL DENSITY MEASUREMENT

3.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm/3KHz.

3.5.2 TEST SETUP



3.5.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.5.4 TEST PROCEDURE

1. Set the span to 1.5 times the DTS bandwidth
2. Set the RBW = 3 kHz, VBW ≥ 3 x RBW, Detector = peak.
3. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
4. Use the peak marker function to determine the maximum amplitude level.

3.5.5 DEVIATION FROM TEST STANDARD

No deviation.

3.5.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.5.7 TEST RESULTS

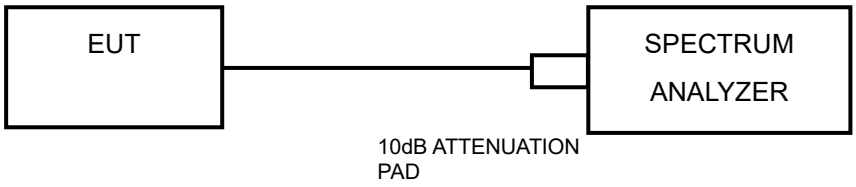
Please Refer to Appendix Of this test report.

3.6 OUT OF BAND EMISSION MEASUREMENT

3.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).(Based on peak power limits, If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required for test shall be 30 dB instead of 20 dB.)

3.6.2 TEST SETUP



3.6.3 TEST INSTRUMENTS

Refer to section 3.3.2 to get information of above instrument.

3.6.4 TEST PROCEDURE

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW ≥ 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 OOBE

1. Set RBW = 100 kHz.
2. Set VBW ≥ 300 kHz.
3. Set span to encompass the spectrum to be examined
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

3.6.5 DEVIATION FROM TEST STANDARD

No deviation.

3.6.6 EUT OPERATING CONDITION

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

3.6.7 TEST RESULTS

The spectrum plots are attached on the following images. D1 line indicates the highest level. D2 line indicates the 20dB/30db offset below D1. It shows compliance to the requirement.

Please Refer to Appendix Of this test report.

3.7 ANTENNA REQUIREMENTS

3.7.1 STANDARD APPLICABLE

If transmitting antenna directional gain is greater than 6 dBi, both the peak transmit power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

3.7.2 ANTENNA CONNECTED CONSTRUCTION

An embedded-in antenna design is used.

3.7.3 ANTENNA GAIN

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit and PSD limit.

4 PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

5 MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.

6 APPENDIX

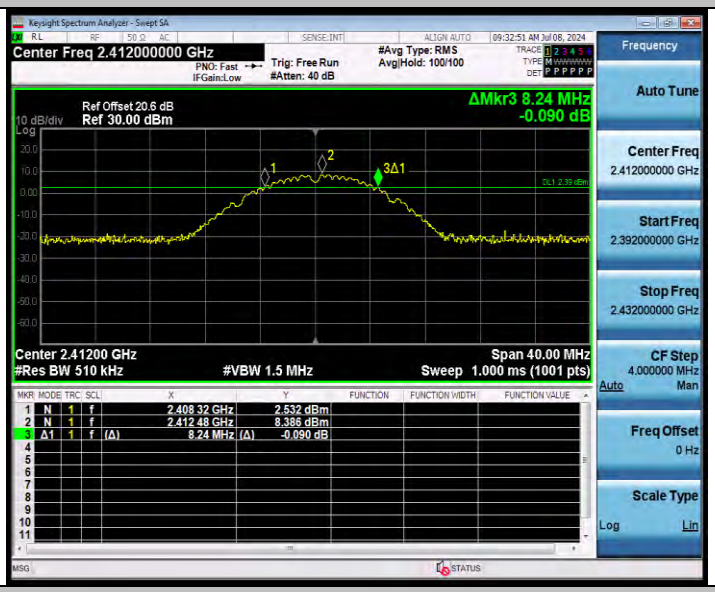
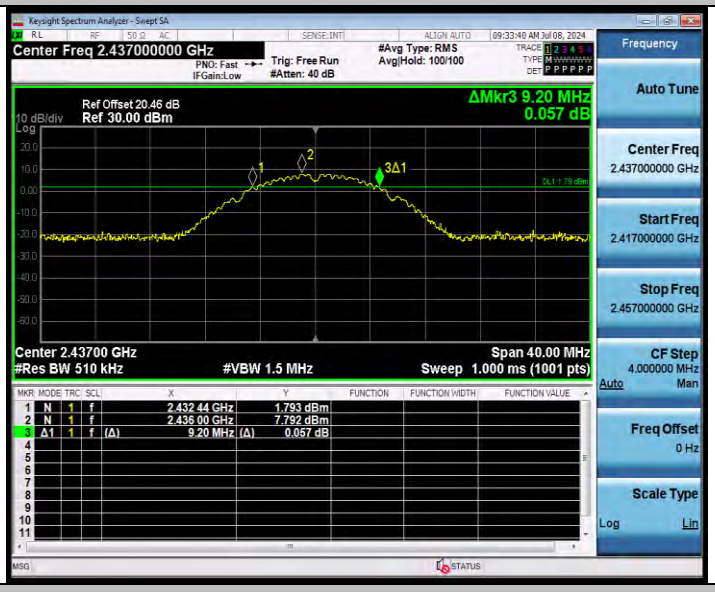
WLAN

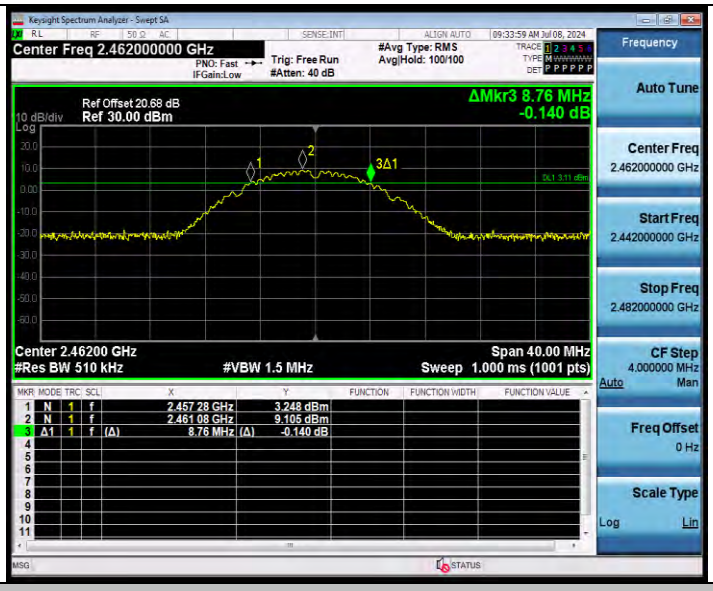
DTS BANDWIDTH

TEST RESULT

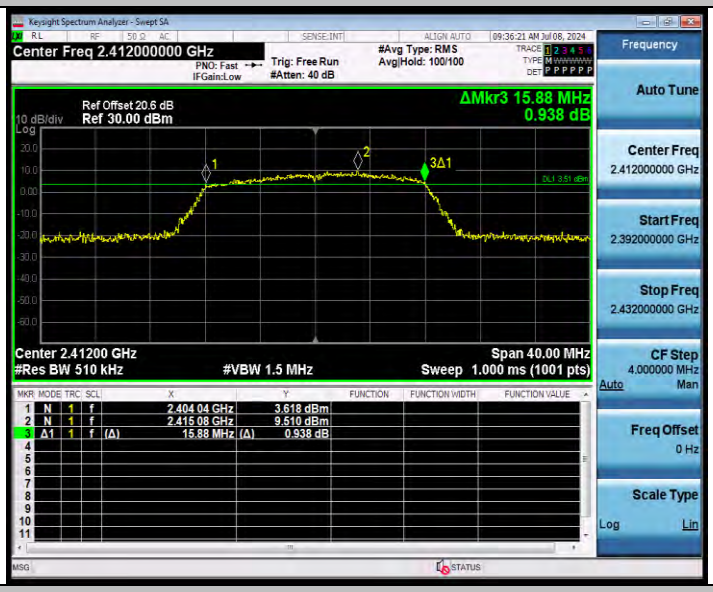
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.240	2408.320	2416.560	0.5	PASS
		2437	9.200	2432.440	2441.640	0.5	PASS
		2462	8.760	2457.280	2466.040	0.5	PASS
11G	Ant1	2412	15.880	2404.040	2419.920	0.5	PASS
		2437	16.360	2428.840	2445.200	0.5	PASS
		2462	16.080	2453.760	2469.840	0.5	PASS
11N20SISO	Ant1	2412	16.240	2404.360	2420.600	0.5	PASS
		2437	17.680	2428.160	2445.840	0.5	PASS
		2462	17.120	2453.240	2470.360	0.5	PASS

TEST GRAPHS

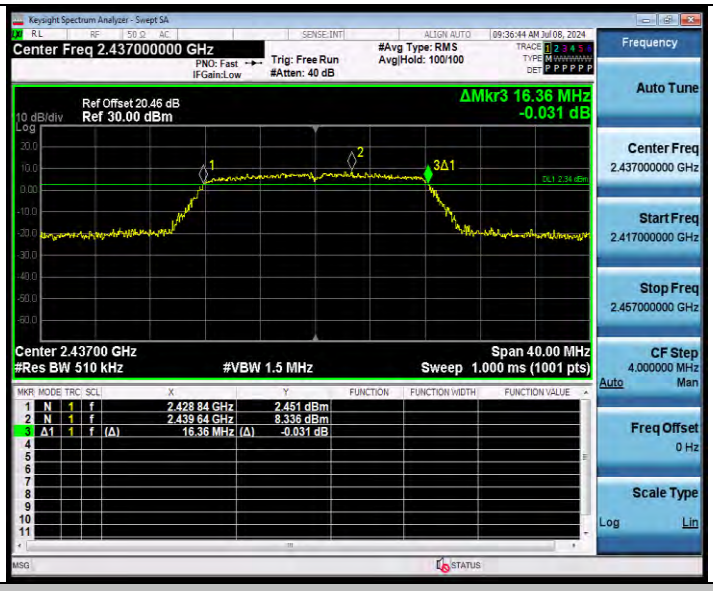
11B_Ant1_2412

11B_Ant1_2437

11B_Ant1_2462



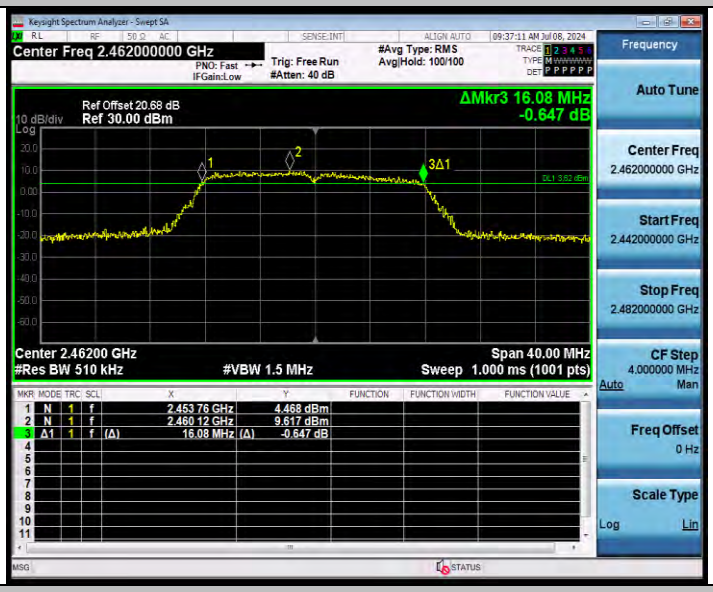
11G_Ant1_2412



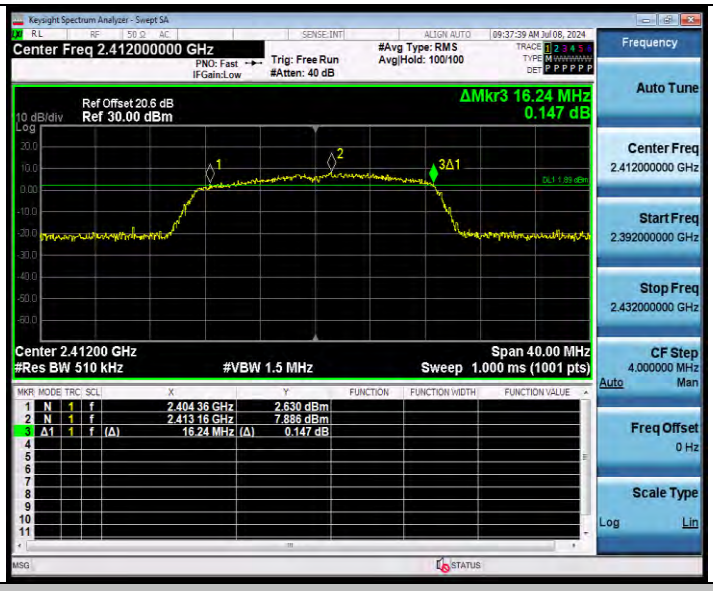
11G_Ant1_2437



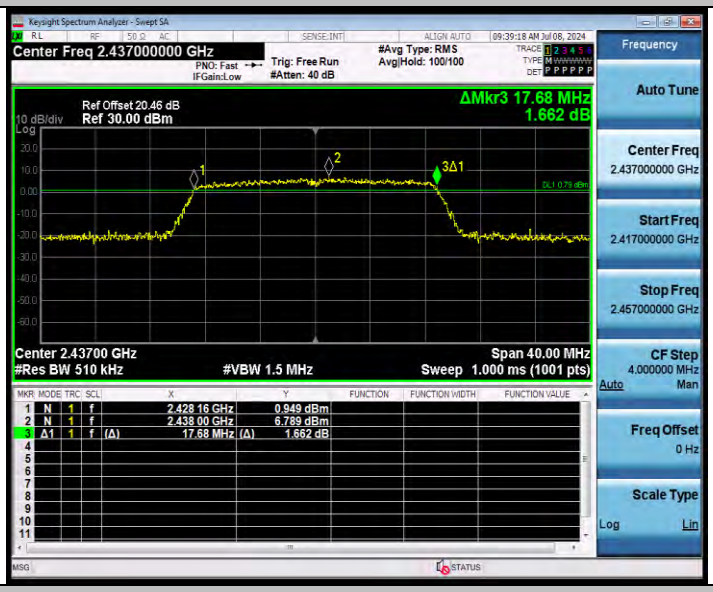
11G_Ant1_2462



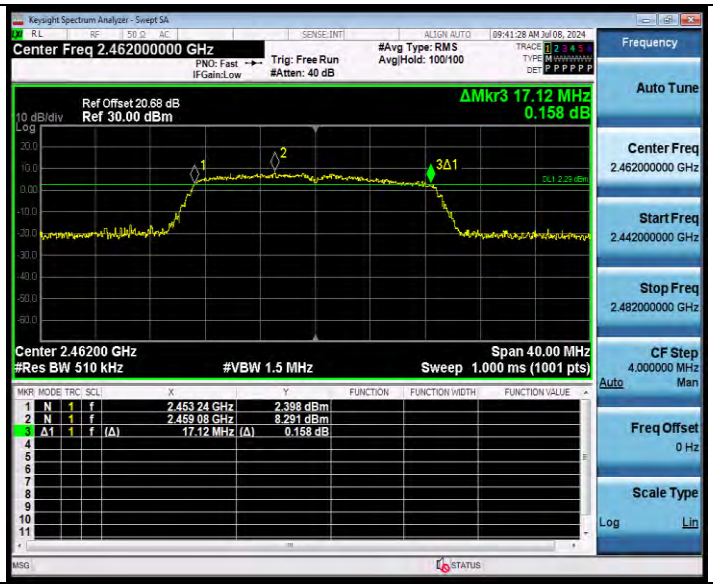
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462

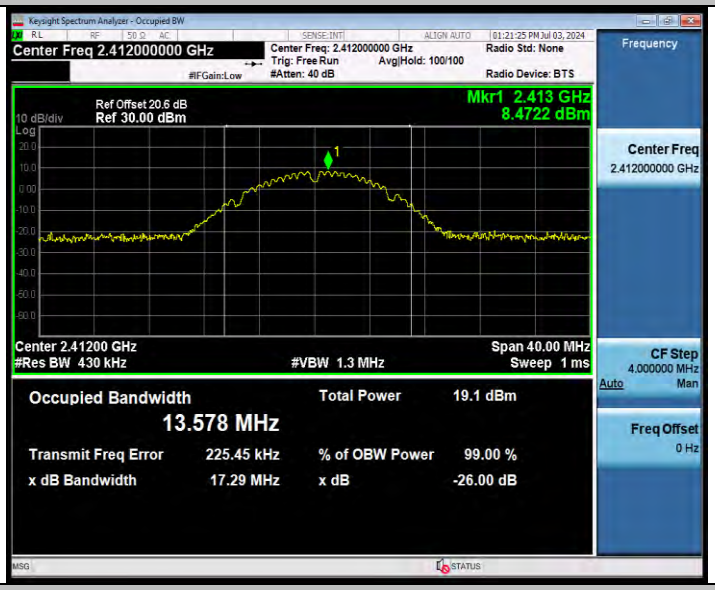
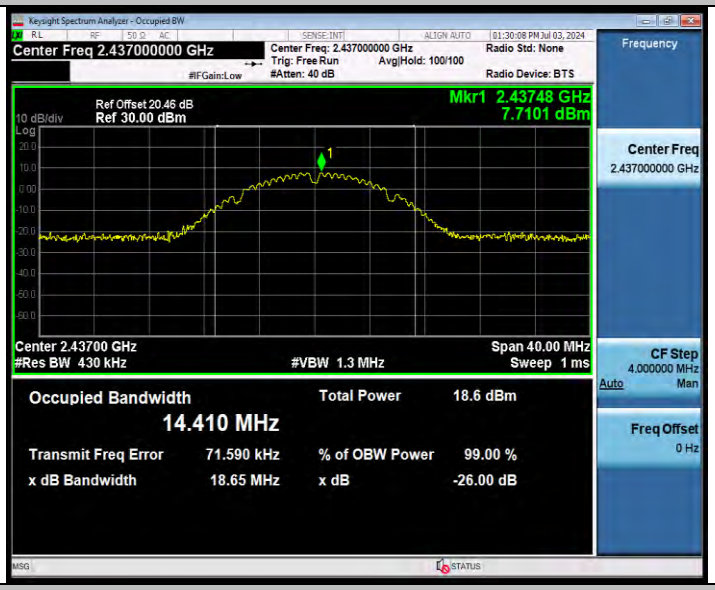

Keysight Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 100/100
09:41:28 AM Jul 08, 2024
Ref Offset 20.68 dB
10 dB/div
Ref 30.00 dBm
ΔMkr3 17.12 MHz
0.158 dB
Center 2.46200 GHz
#Res BW 510 kHz
#VBW 1.5 MHz
Span 40.00 MHz
Sweep 1.000 ms (1001 pts)
1 N 1 f 2.453 24 GHz 2.398 dBm
2 N 1 f 2.459 08 GHz 8.291 dBm
3 Δ1 1 f (Δ) 17.12 MHz (Δ) 0.158 dB
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.442000000 GHz
Stop Freq
2.482000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

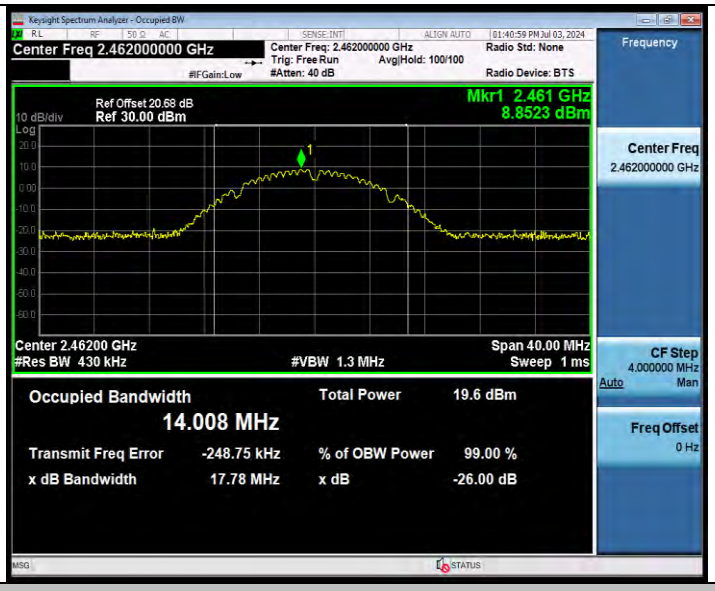
OCCUPIED CHANNEL BANDWIDTH

TEST RESULT

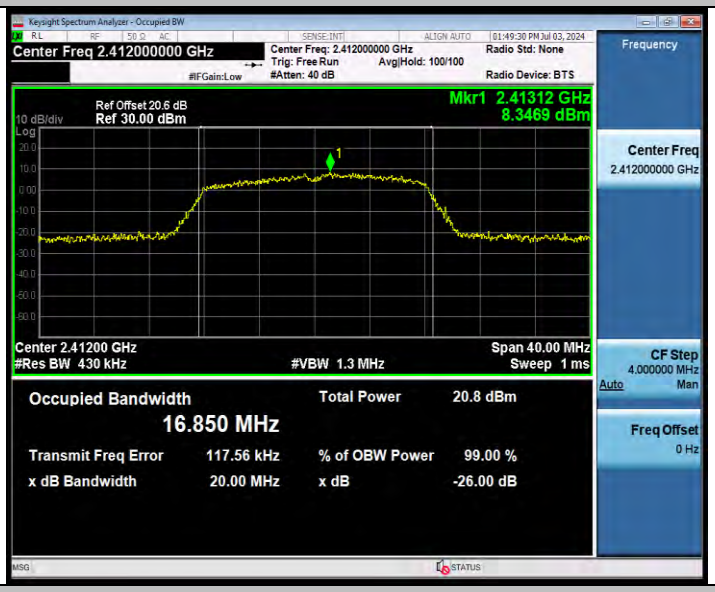
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	13.578	2405.4365	2419.0145	---	---
		2437	14.410	2429.8666	2444.2766	---	---
		2462	14.008	2454.7473	2468.7553	---	---
11G	Ant1	2412	16.850	2403.6926	2420.5426	---	---
		2437	17.322	2428.4133	2445.7353	---	---
		2462	17.090	2453.3026	2470.3926	---	---
11N20SISO	Ant1	2412	17.831	2403.1978	2421.0288	---	---
		2437	18.268	2427.9428	2446.2108	---	---
		2462	18.049	2452.8371	2470.8861	---	---

TEST GRAPHS

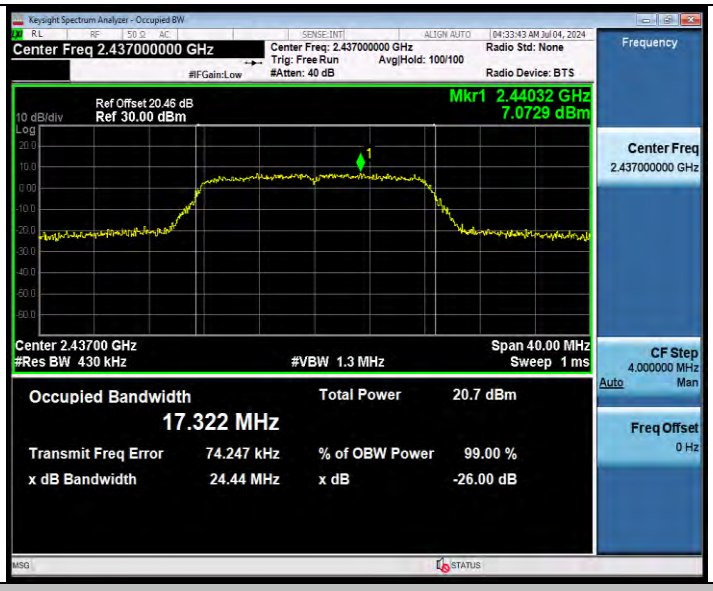
11B_Ant1_2412

11B_Ant1_2437

11B_Ant1_2462



11G_Ant1_2412

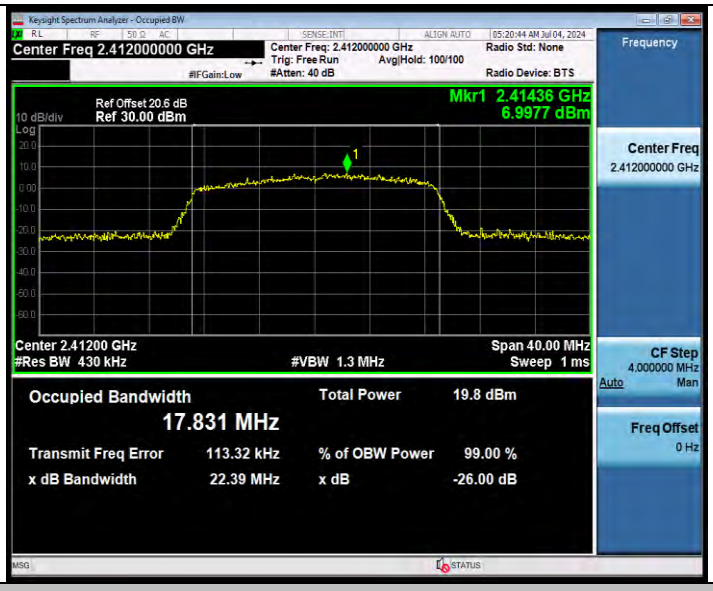


11G_Ant1_2437



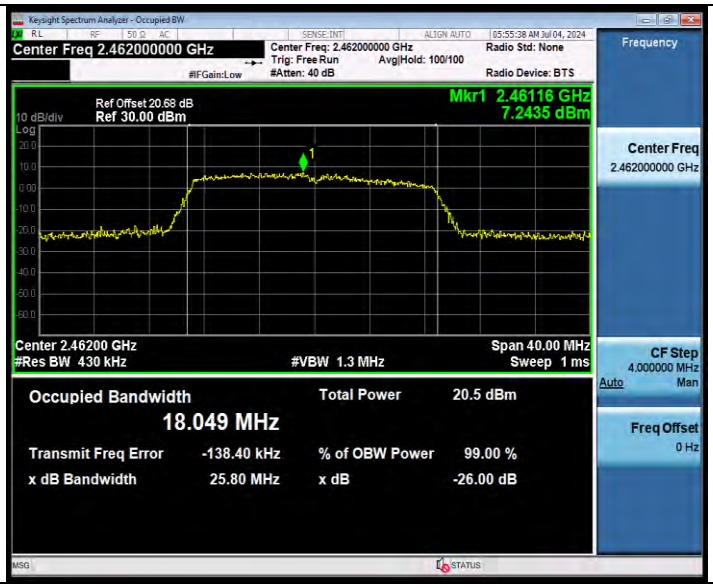
11G_Ant1_2462

11N20SISO_Ant1_2412



11N20SISO_Ant1_2437

11N20SISO_Ant1_2462


Keysight Spectrum Analyzer - Occupied BW
Center Freq 2.462000000 GHz
Center Freq: 2.462000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Ref Offset 20.68 dB
10 dB/div
Ref 30.00 dBm
Mkr1 2.46116 GHz
7.2435 dBm
Center 2.46200 GHz
#Res BW 430 kHz
#VBW 1.3 MHz
Span 40.00 MHz
Sweep 1 ms
Occupied Bandwidth
18.049 MHz
Total Power 20.5 dBm
Transmit Freq Error -138.40 kHz
% of OBW Power 99.00 %
x dB Bandwidth 25.80 MHz
x dB -26.00 dB
Frequency
Center Freq
2.462000000 GHz
CF Step
4.000000 MHz
Auto
Man
Freq Offset
0 Hz

MAXIMUM CONDUCTED OUTPUT POWER

TEST RESULT

Test Mode	TX Mod.	Freq. [MHz]	Ant.	Average power [dBm]	Peak power [dBm]	Peak power [mw]	Conducted Power Limit [dBm]	EIRP power [dBm]	EIRP power [mw]	EIRP Limit [dBm]	Verdict	Power Setting
11B	SISO	2412	ANT1	15.97	18.32	67.92	≤30.00	20.32	107.65	≤36.00	PASS	16.5
		2437	ANT1	16.14	18.43	69.66	≤30.00	20.43	110.41	≤36.00	PASS	16.5
		2462	ANT1	16.23	18.64	73.11	≤30.00	20.64	115.88	≤36.00	PASS	16.5
11G	SISO	2412	ANT1	14.91	24.85	305.49	≤30.00	26.85	484.17	≤36.00	PASS	15.5
		2437	ANT1	15.07	23.86	243.22	≤30.00	25.86	385.48	≤36.00	PASS	15.5
		2462	ANT1	15.21	23.95	248.31	≤30.00	25.95	393.55	≤36.00	PASS	15.5
11N20	SISO	2412	ANT1	13.90	24.46	279.25	≤30.00	26.46	442.59	≤36.00	PASS	14.5
		2437	ANT1	14.17	23.98	250.03	≤30.00	25.98	396.28	≤36.00	PASS	14.5
		2462	ANT1	14.04	24.21	263.63	≤30.00	26.21	417.83	≤36.00	PASS	14.5
Note:The Average power with duty cycle factor.												

MAXIMUM POWER SPECTRAL DENSITY

TEST RESULT

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-5.53	≤8.00	PASS
		2437	-5.31	≤8.00	PASS
		2462	-5.01	≤8.00	PASS
11G	Ant1	2412	-8.28	≤8.00	PASS
		2437	-9.02	≤8.00	PASS
		2462	-7.91	≤8.00	PASS
11N20SISO	Ant1	2412	-8.52	≤8.00	PASS
		2437	-9.84	≤8.00	PASS
		2462	-8.32	≤8.00	PASS

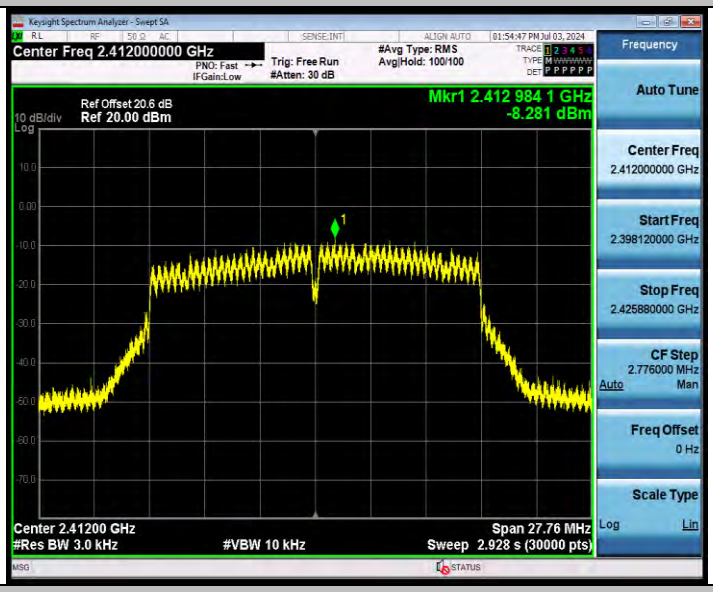
TEST GRAPHS

11B_Ant1_2412

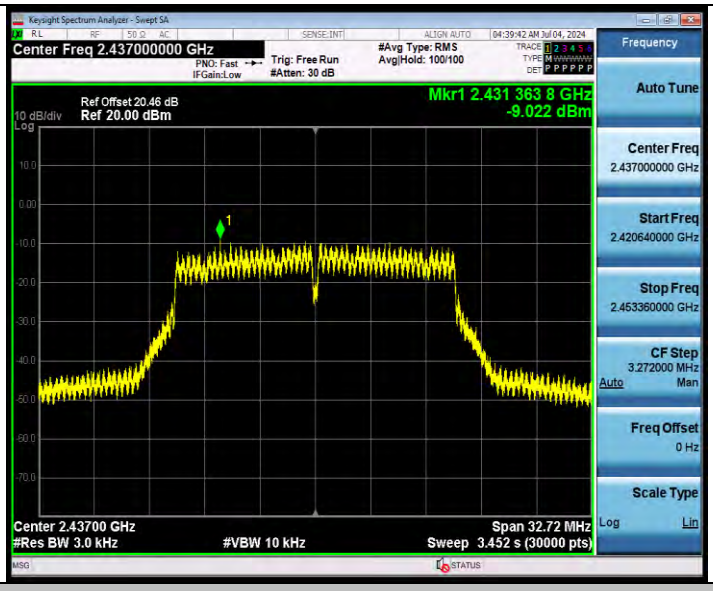
11B_Ant1_2437

11B_Ant1_2462

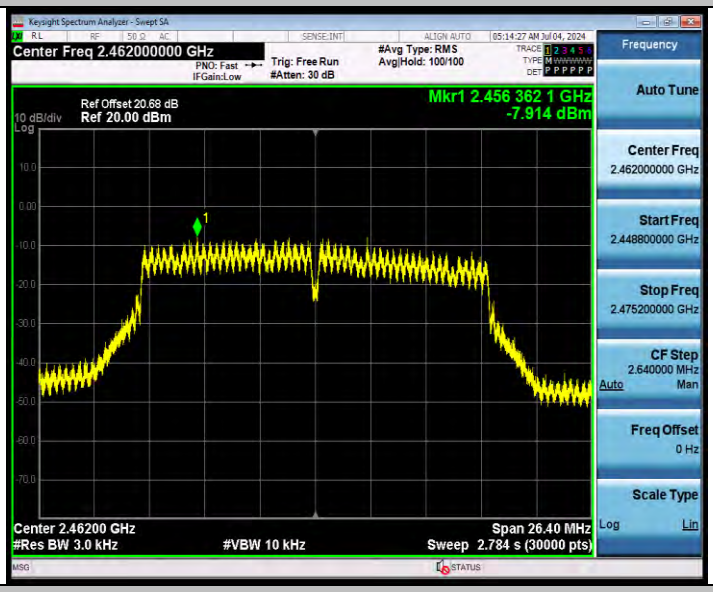
11G_Ant1_2412



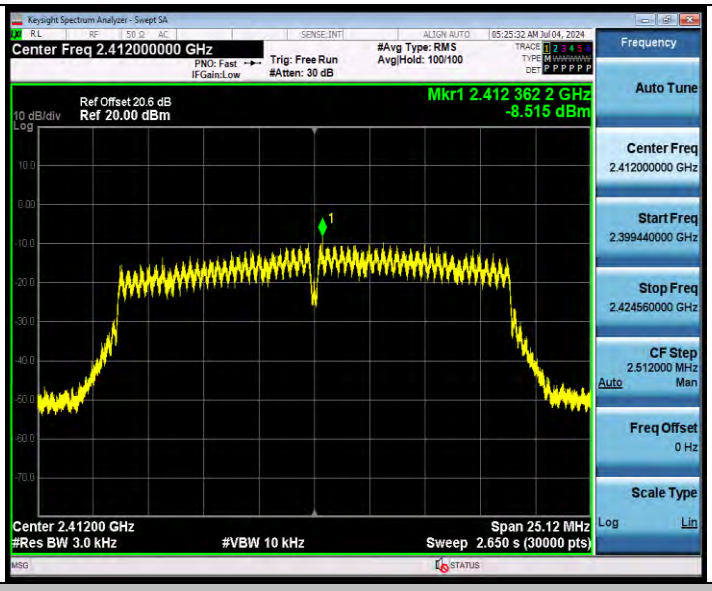
11G_Ant1_2437



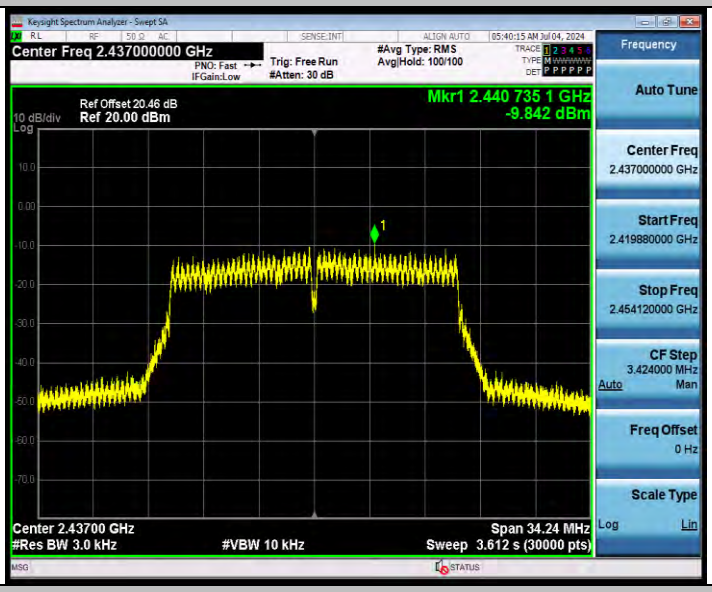
11G_Ant1_2462



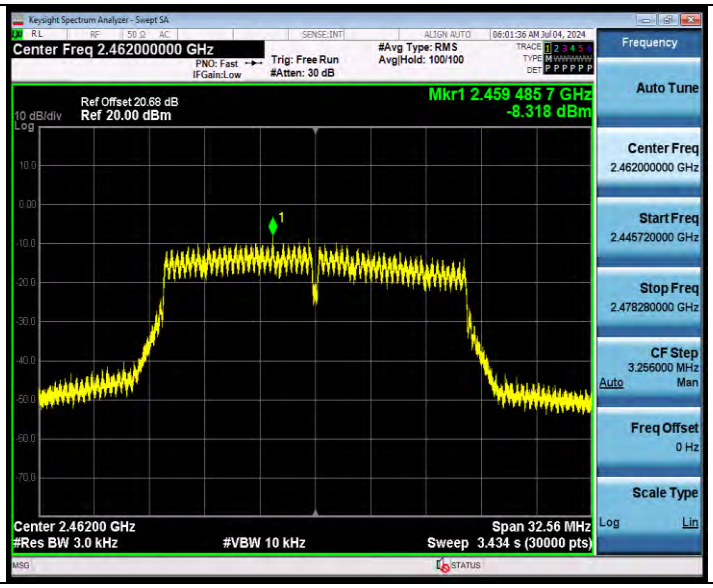
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



11N20SISO_Ant1_2462


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.462000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 100/100
06:01:36 AM Jul 04, 2024
Ref Offset 20.68 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.459 485 7 GHz
-8.318 dBm
Center 2.46200 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 32.56 MHz
Sweep 3.434 s (30000 pts)
Frequency
Auto Tune
Center Freq
2.462000000 GHz
Start Freq
2.445720000 GHz
Stop Freq
2.478280000 GHz
CF Step
3.256000 MHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin
MSG
STATUS

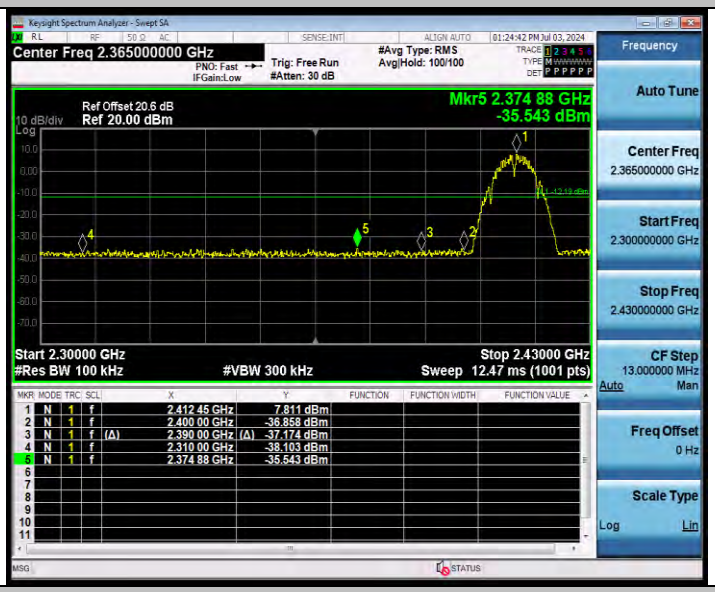
BAND EDGE MEASUREMENTS

TEST RESULT

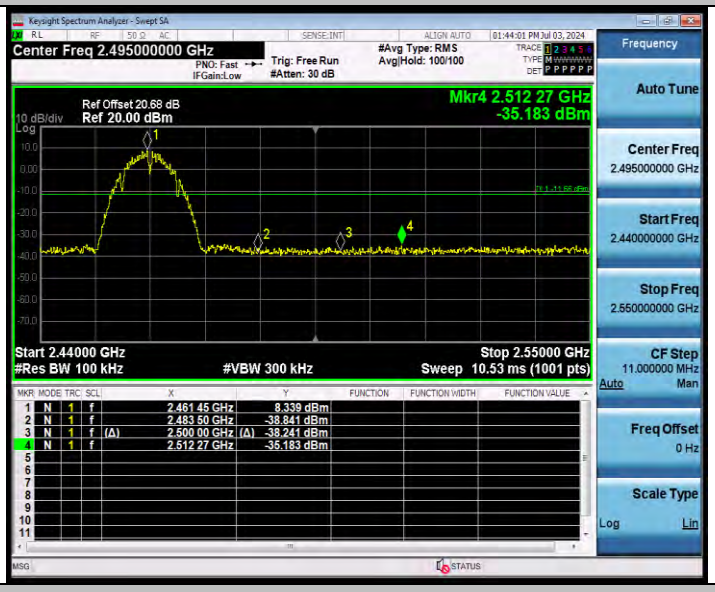
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
11B	Ant1	Low	2412	7.81	-35.54	≤-12.19	PASS
		High	2462	8.34	-35.18	≤-11.66	PASS
11G	Ant1	Low	2412	4.09	-31.15	≤-15.91	PASS
		High	2462	4.87	-35.09	≤-15.13	PASS
11N20SISO	Ant1	Low	2412	2.47	-33.88	≤-17.53	PASS
		High	2462	4.04	-34.77	≤-15.96	PASS

TEST GRAPHS

11B_Ant1_Low_2412

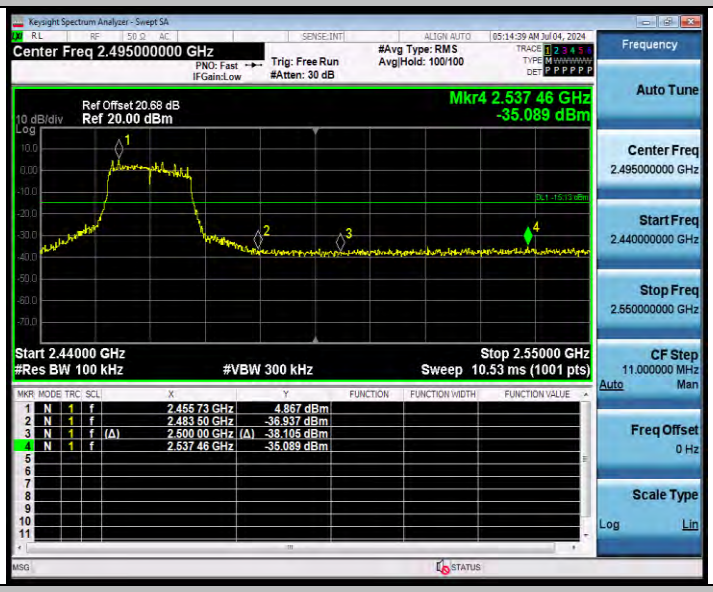


11B_Ant1_High_2462

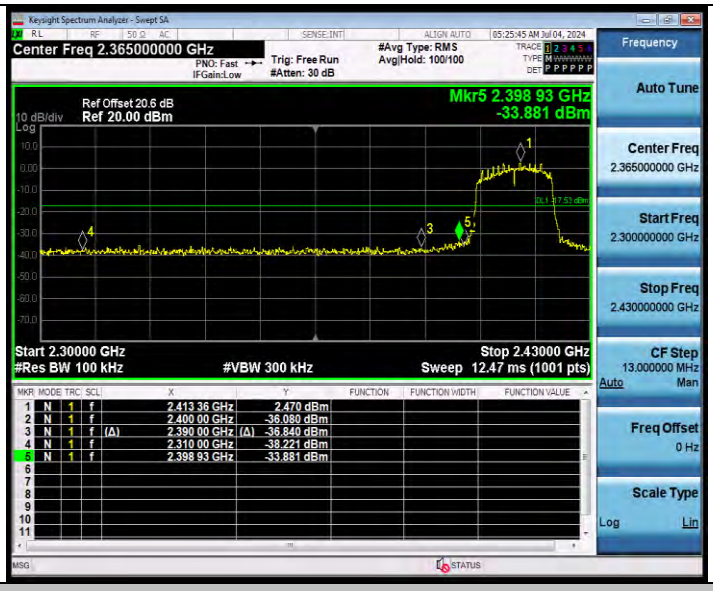


11G_Ant1_Low_2412

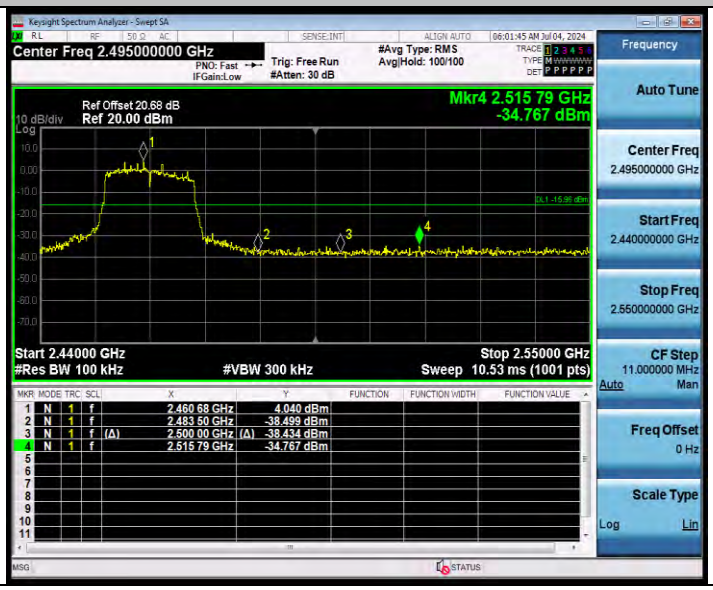
11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



CONDUCTED SPURIOUS EMISSION

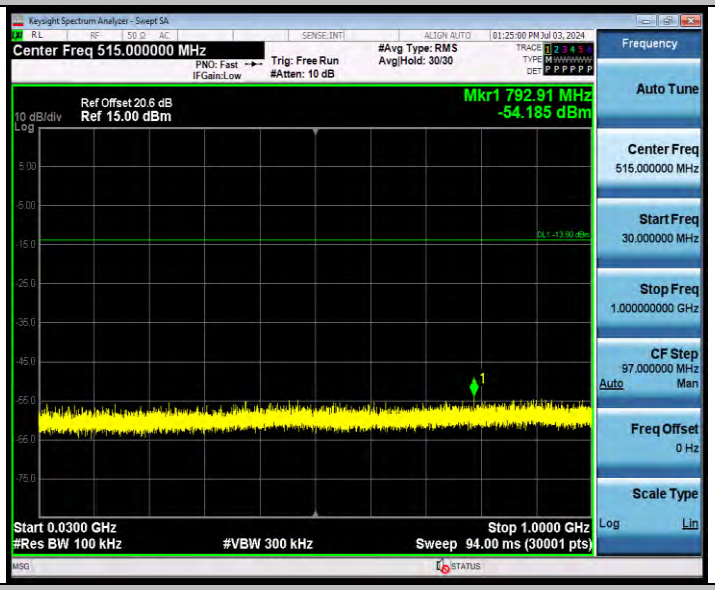
TEST RESULT

TestMode	Antenna	Frequency[MHz]	FreqRange [Mhz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
11B	Ant1	2412	Reference	6.10	6.10	---	PASS
			30~1000	6.10	-54.19	≤-13.9	PASS
			1000~26500	6.10	-34.96	≤-13.9	PASS
		2437	Reference	7.39	7.39	---	PASS
			30~1000	7.39	-54.43	≤-12.61	PASS
			1000~26500	7.39	-35.3	≤-12.61	PASS
		2462	Reference	5.87	5.87	---	PASS
			30~1000	5.87	-53.92	≤-14.13	PASS
			1000~26500	5.87	-34.91	≤-14.13	PASS
11G	Ant1	2412	Reference	1.36	1.36	---	PASS
			30~1000	1.36	-54.44	≤-18.64	PASS
			1000~26500	1.36	-35.33	≤-18.64	PASS
		2437	Reference	2.79	2.79	---	PASS
			30~1000	2.79	-54.07	≤-17.21	PASS
			1000~26500	2.79	-35.59	≤-17.21	PASS
		2462	Reference	4.36	4.36	---	PASS
			30~1000	4.36	-54.31	≤-15.64	PASS
			1000~26500	4.36	-34.62	≤-15.64	PASS
11N20SISO	Ant1	2412	Reference	0.09	0.09	---	PASS
			30~1000	0.09	-53.87	≤-19.91	PASS
			1000~26500	0.09	-35.85	≤-19.91	PASS
		2437	Reference	2.56	2.56	---	PASS
			30~1000	2.56	-54.17	≤-17.44	PASS
			1000~26500	2.56	-35.3	≤-17.44	PASS
		2462	Reference	3.30	3.30	---	PASS
			30~1000	3.30	-54.13	≤-16.7	PASS
			1000~26500	3.30	-35.19	≤-16.7	PASS

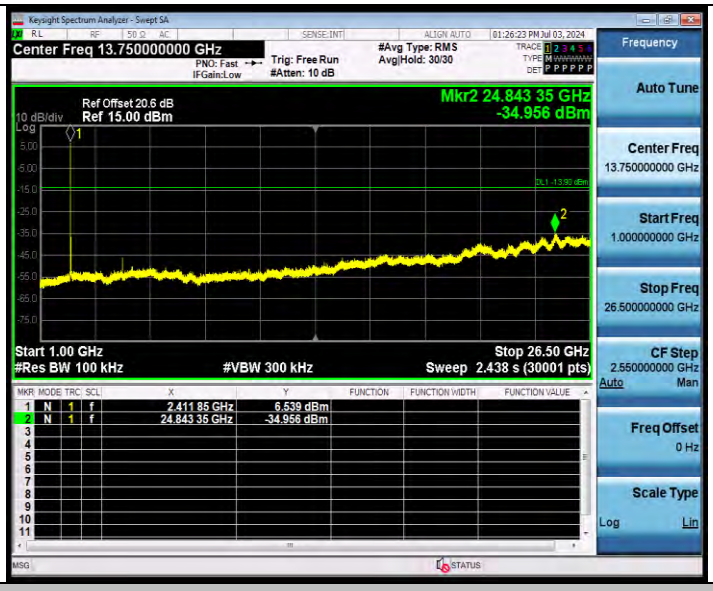
TEST GRAPHS

11B_Ant1_2412_0~Reference

11B_Ant1_2412_30~1000



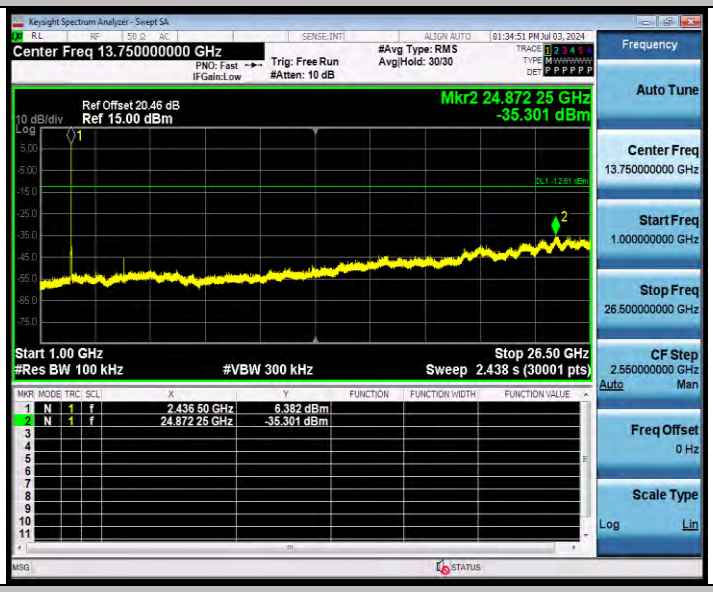
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference

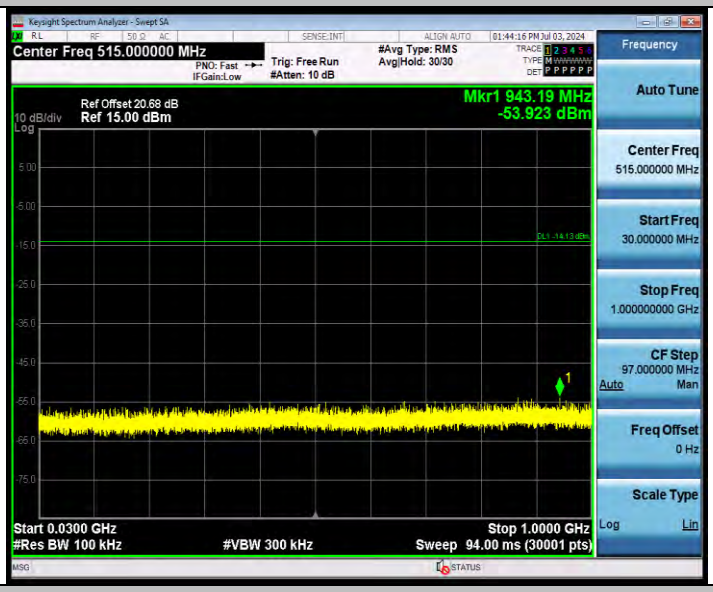
11B_Ant1_2437_30~1000

11B_Ant1_2437_1000~26500

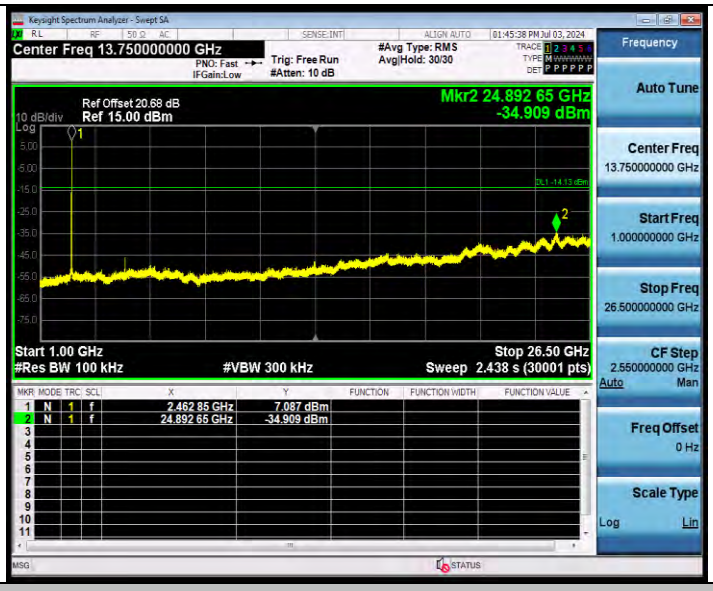


11B_Ant1_2462_0~Reference

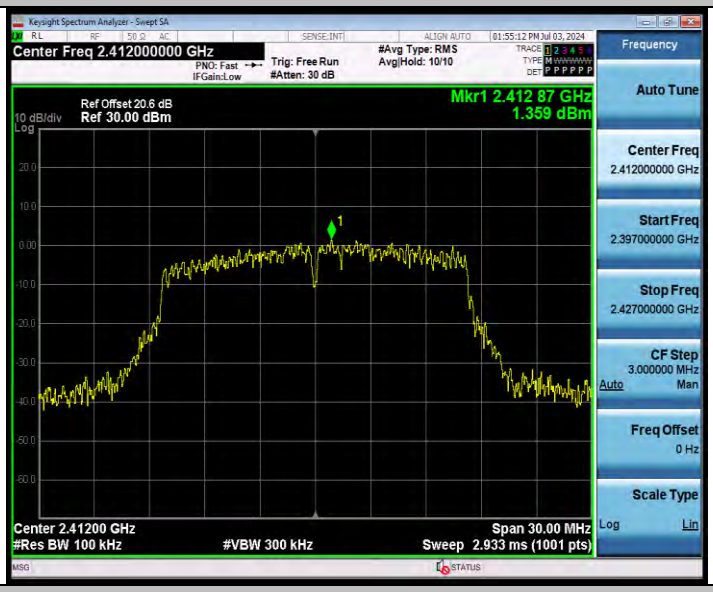
11B_Ant1_2462_30~1000



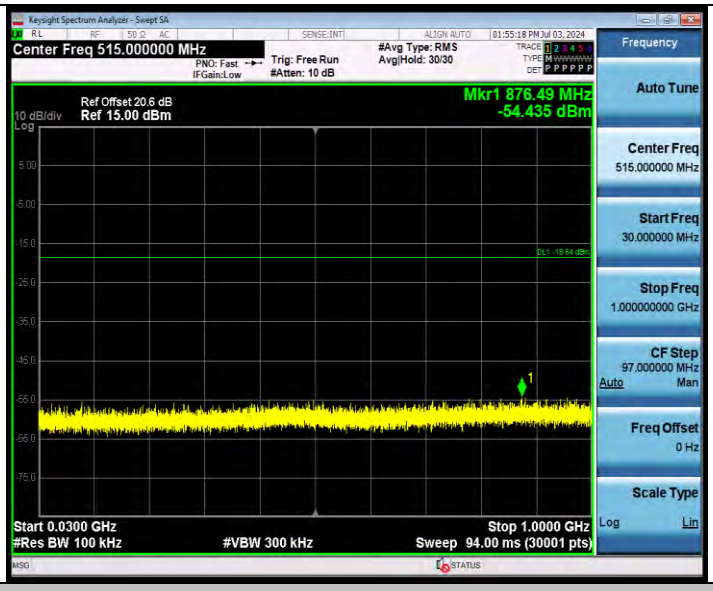
11B_Ant1_2462_1000~26500



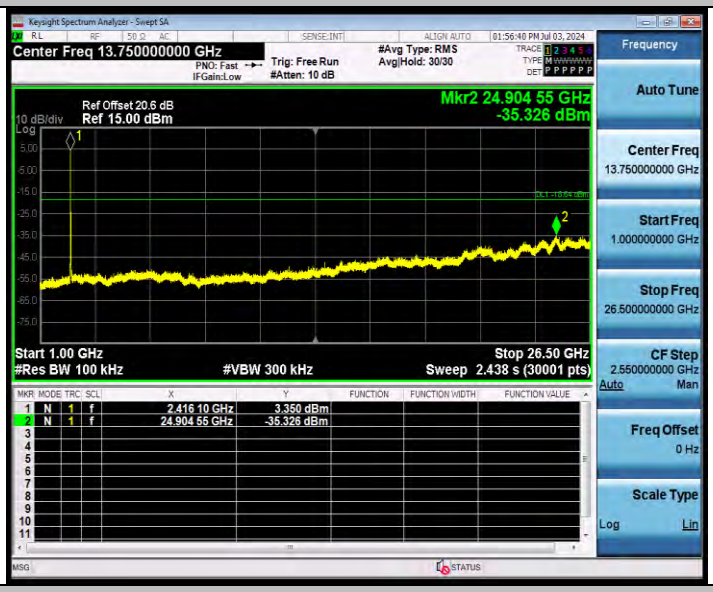
11G_Ant1_2412_0~Reference



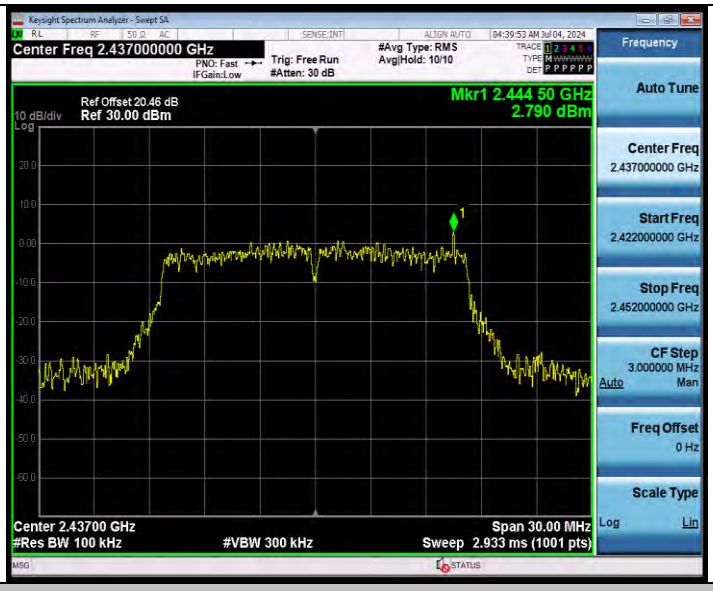
11G_Ant1_2412_30~1000



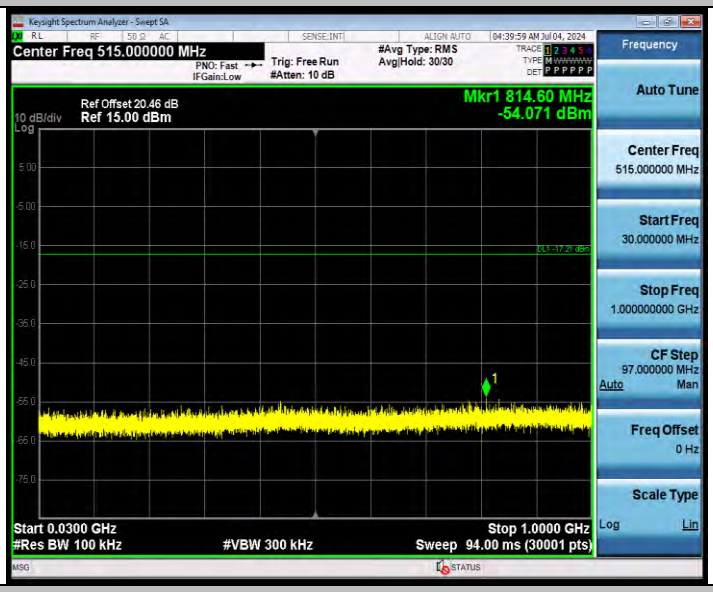
11G_Ant1_2412_1000~26500



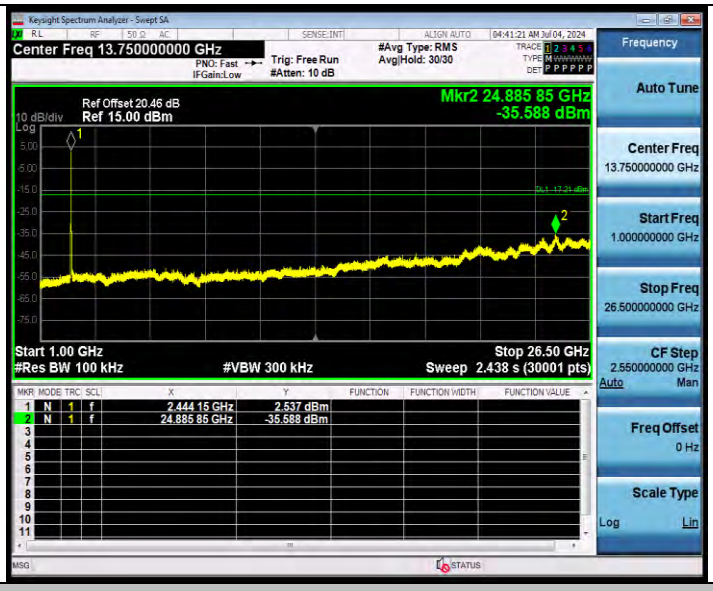
11G_Ant1_2437_0~Reference



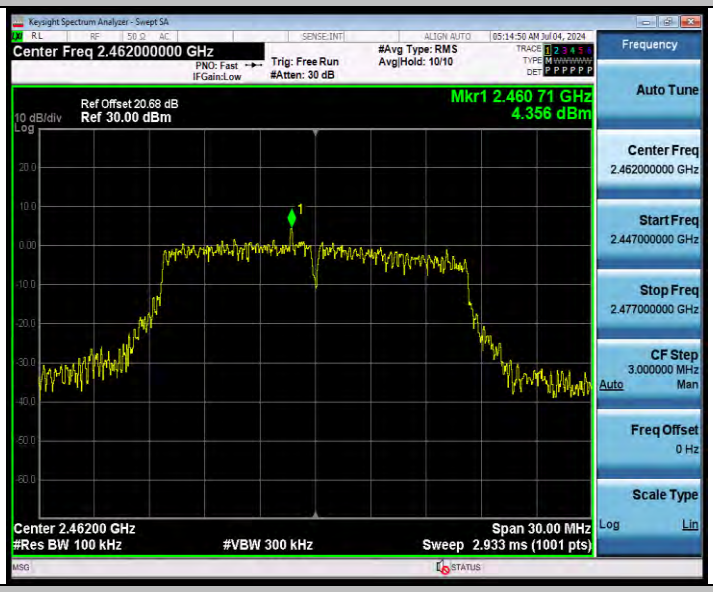
11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500

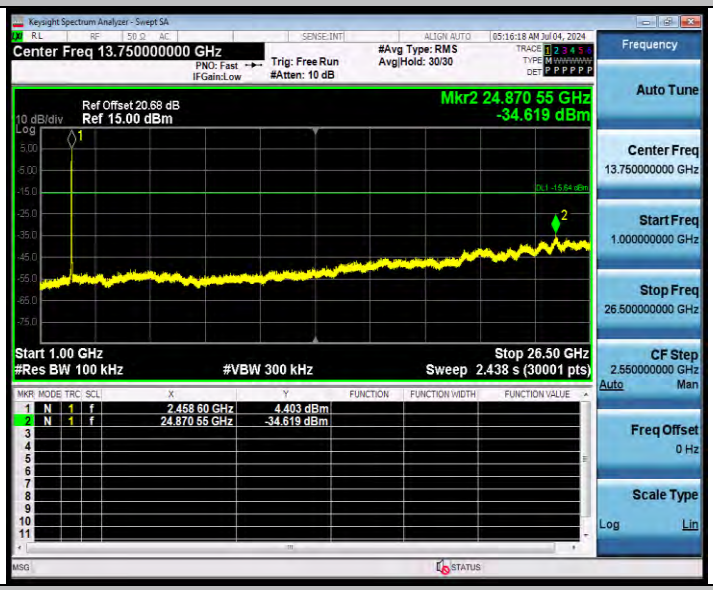


11G_Ant1_2462_0~Reference



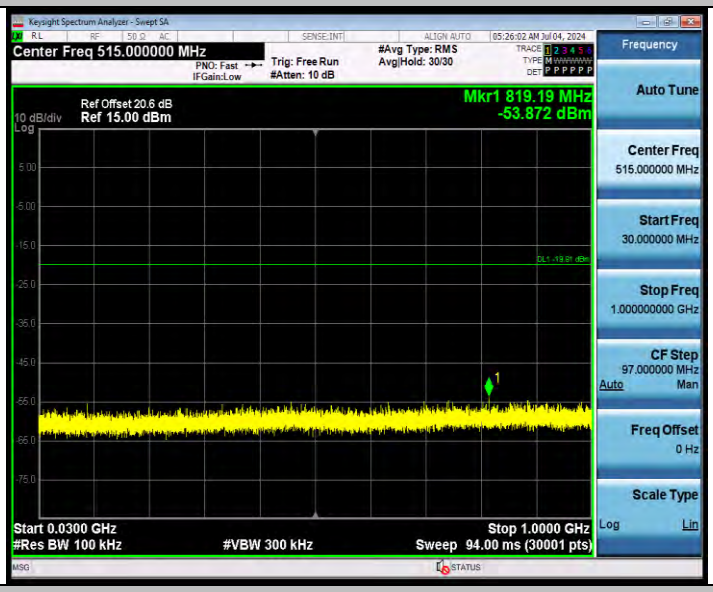
11G_Ant1_2462_30~1000

11G_Ant1_2462_1000~26500

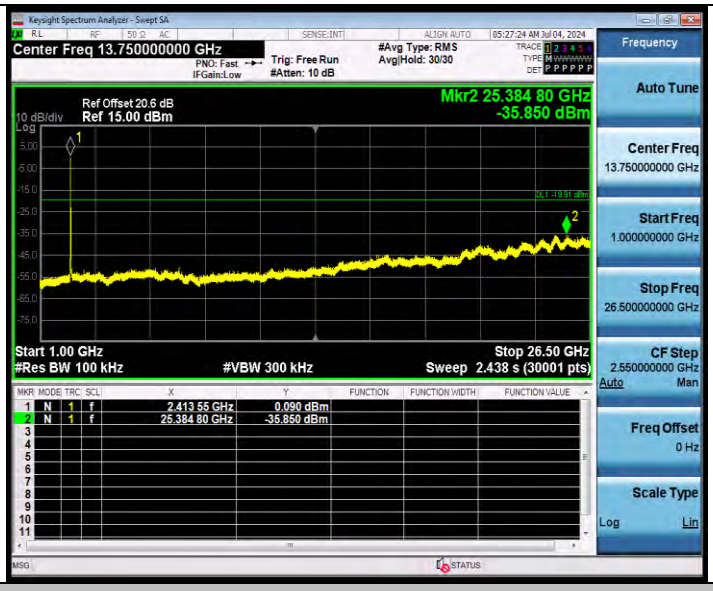


11N20SISO_Ant1_2412_0~Reference

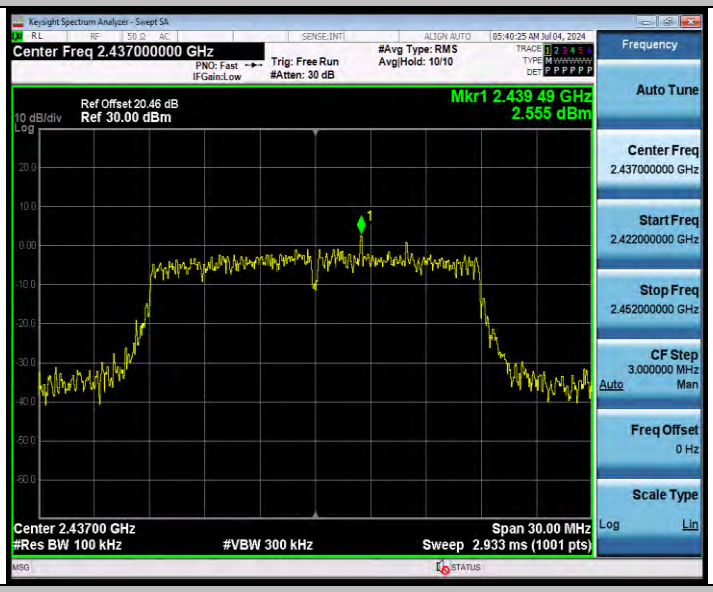
11N20SISO_Ant1_2412_30~1000



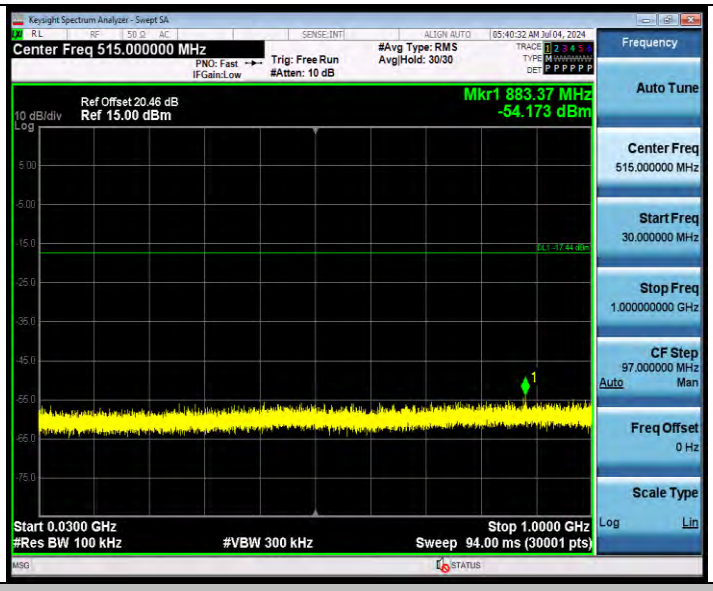
11N20SISO_Ant1_2412_1000~26500



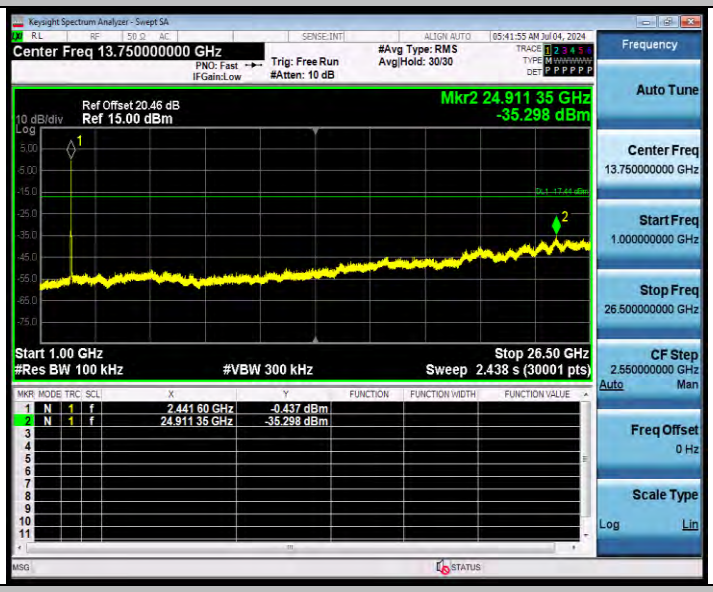
11N20SISO_Ant1_2437_0~Reference



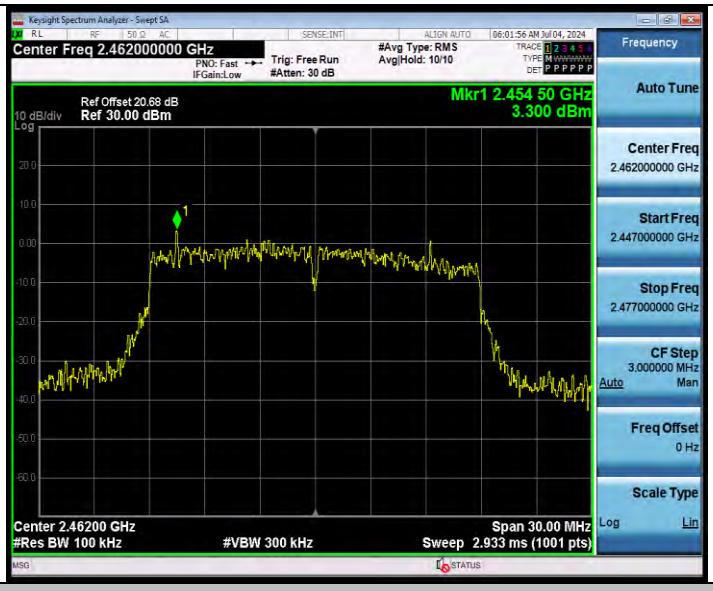
11N20SISO_Ant1_2437_30~1000



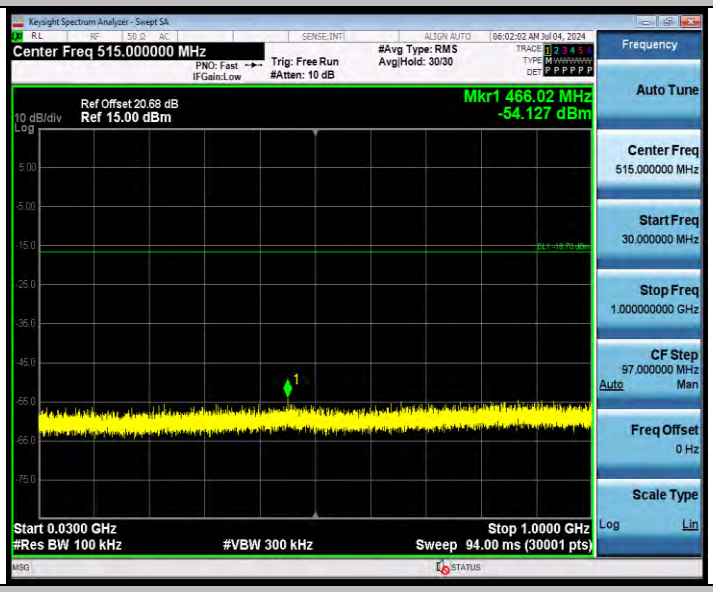
11N20SISO_Ant1_2437_1000~26500



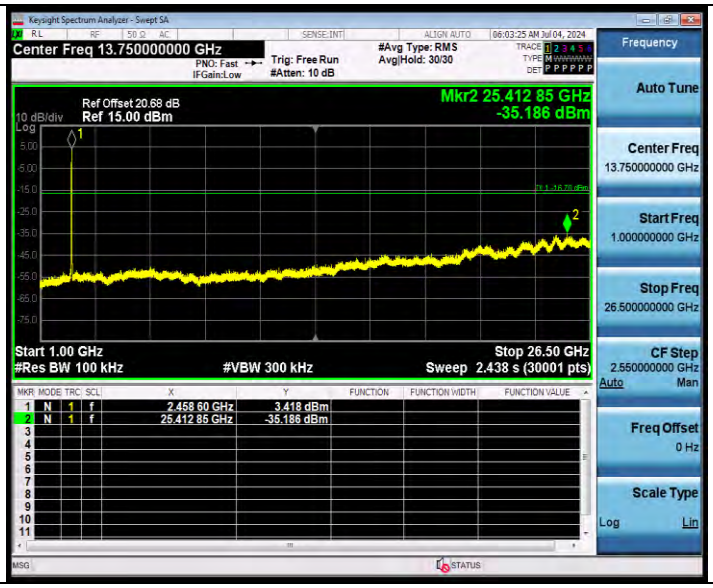
11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



11N20SISO_Ant1_2462_1000~26500

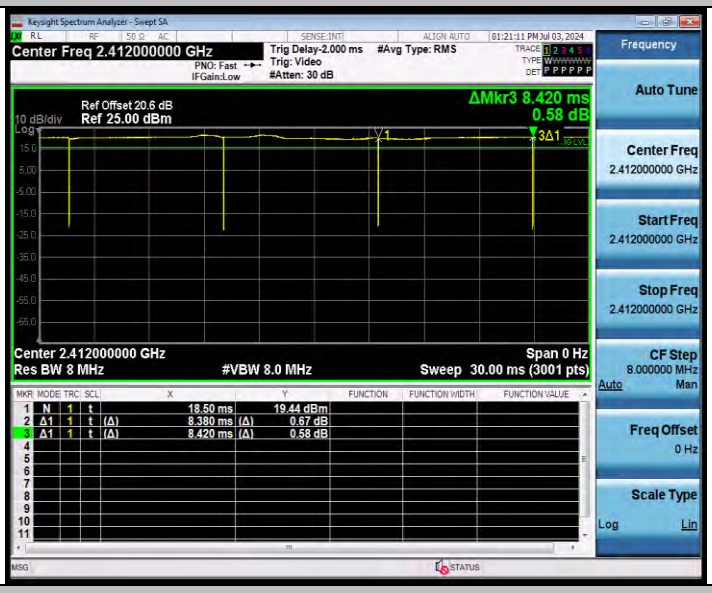
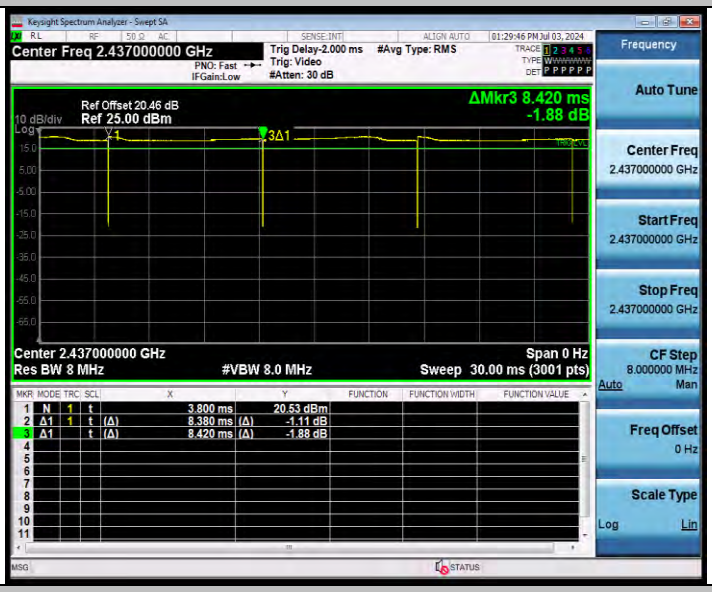

Keysight Spectrum Analyzer - Swept SA
Center Freq 13.750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
#Avg Type: RMS
Avg|Hold: 30/30
06:03:25 AM Jul 04, 2024
Ref Offset 20.68 dB
10 dB/div
Ref 15.00 dBm
Log
Mkr2 25.412 85 GHz
-35.186 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep 2.438 s (30001 pts)
1 N 1 f 2.458 60 GHz 3.418 dBm
2 N 1 f 25.412 85 GHz -35.186 dBm
Frequency
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz
Scale Type
Log
Lin

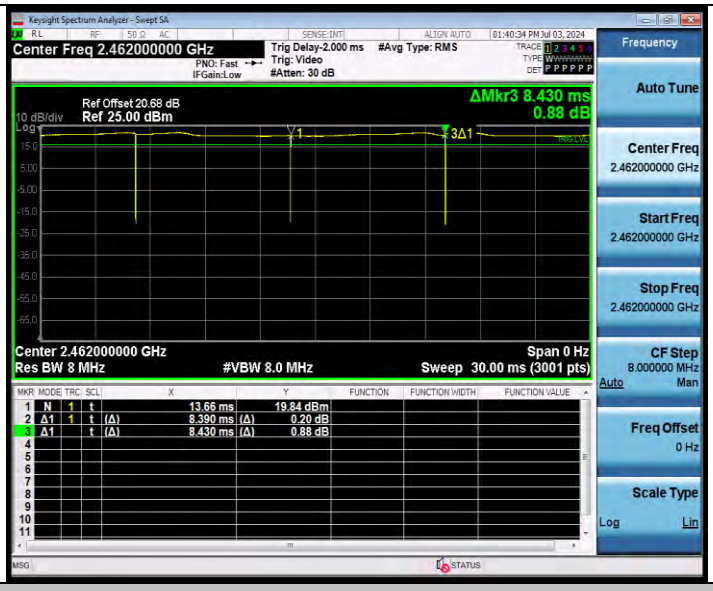
DUTY CYCLE

TEST RESULT

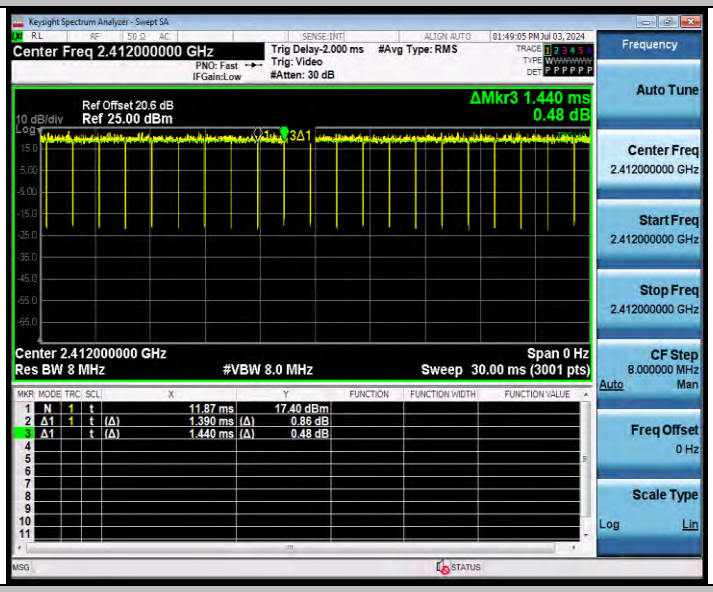
TestMode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Factor
11B	Ant1	2412	8.38	8.42	99.52	0.02
		2437	8.38	8.42	99.52	0.02
		2462	8.39	8.43	99.53	0.02
11G	Ant1	2412	1.39	1.44	96.53	0.15
		2437	1.39	1.44	96.53	0.15
		2462	1.39	1.44	96.53	0.15
11N20SISO	Ant1	2412	1.30	1.35	96.30	0.16
		2437	1.30	1.35	96.30	0.16
		2462	1.30	1.35	96.30	0.16

TEST GRAPHS

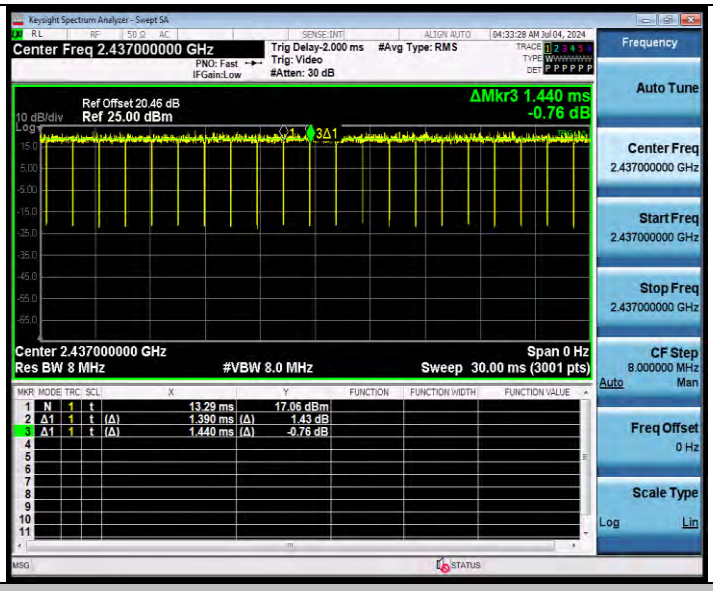
11B_Ant1_2412

11B_Ant1_2437

11B_Ant1_2462



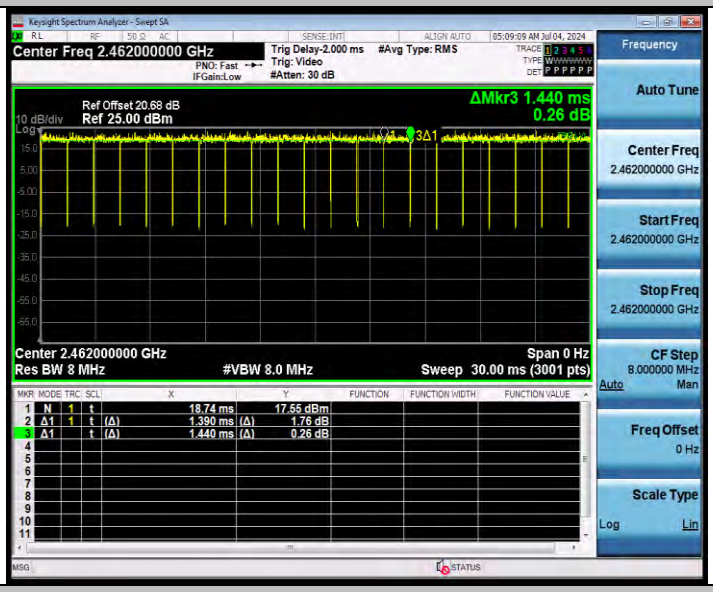
11G_Ant1_2412



11G_Ant1_2437



11G_Ant1_2462



11N20SISO_Ant1_2412