| | |
|---|---|
| **Case No. :** GTS20241014025-3-03 | |
| **Ambient Condition**: 21 ℃, 51 %RH,<br>**According Standard:** ■Part15C | |
| **Test Date:** 2024.11.19 | **Test Engineer:** Evan ouyang |

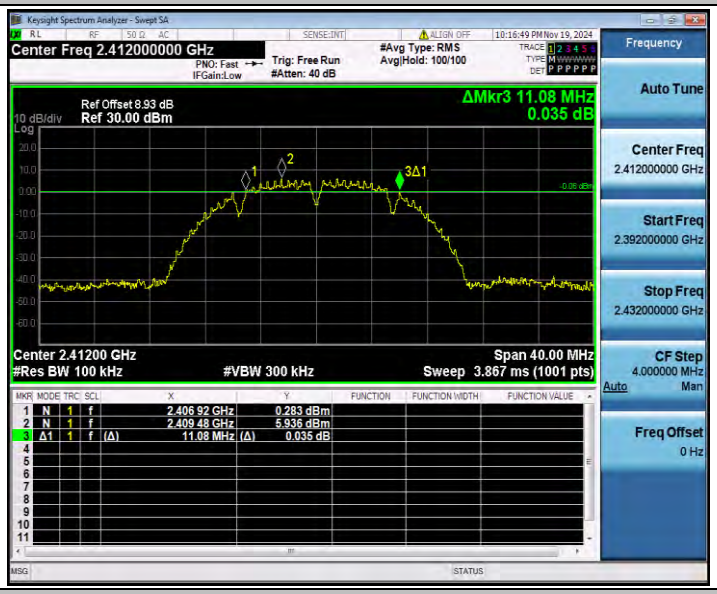
# Appendix C.1: DTS Bandwidth

## Test Result

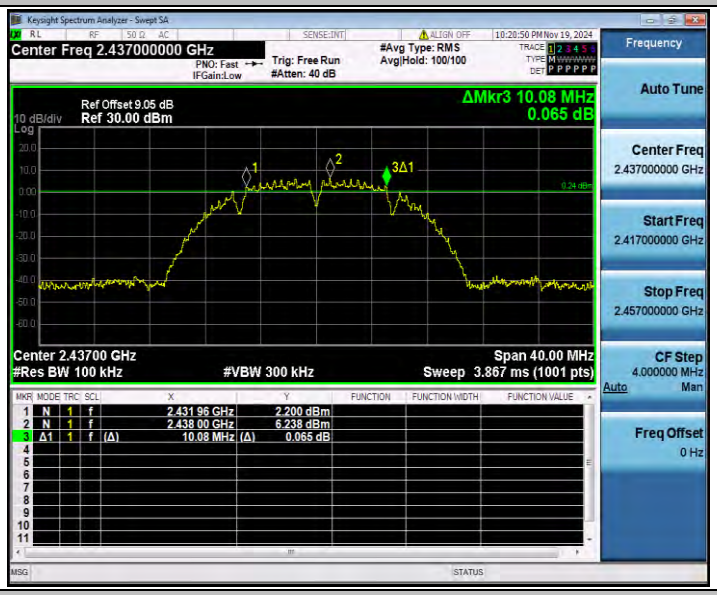
| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant2 | 2412 | 11.080 | 2406.920 | 2418.000 | 0.5 | PASS |
| | | 2437 | 10.080 | 2431.960 | 2442.040 | 0.5 | PASS |
| | | 2462 | 11.080 | 2455.960 | 2467.040 | 0.5 | PASS |
| 11G | Ant2 | 2412 | 16.480 | 2403.720 | 2420.200 | 0.5 | PASS |
| | | 2437 | 16.440 | 2428.800 | 2445.240 | 0.5 | PASS |
| | | 2462 | 16.440 | 2453.760 | 2470.200 | 0.5 | PASS |
| 11N20SISO | Ant2 | 2412 | 17.640 | 2403.160 | 2420.800 | 0.5 | PASS |
| | | 2437 | 17.600 | 2428.200 | 2445.800 | 0.5 | PASS |
| | | 2462 | 17.640 | 2453.160 | 2470.800 | 0.5 | PASS |
| 11N40SISO | Ant2 | 2422 | 36.480 | 2403.760 | 2440.240 | 0.5 | PASS |
| | | 2437 | 36.480 | 2418.760 | 2455.240 | 0.5 | PASS |
| | | 2452 | 36.480 | 2433.760 | 2470.240 | 0.5 | PASS |
| 11AX20SISO | Ant2 | 2412 | 19.000 | 2402.480 | 2421.480 | 0.5 | PASS |
| | | 2437 | 19.040 | 2427.480 | 2446.520 | 0.5 | PASS |
| | | 2462 | 19.000 | 2452.480 | 2471.480 | 0.5 | PASS |
| 11AX40SISO | Ant2 | 2422 | 38.080 | 2402.960 | 2441.040 | 0.5 | PASS |
| | | 2437 | 38.080 | 2417.960 | 2456.040 | 0.5 | PASS |
| | | 2452 | 38.000 | 2432.960 | 2470.960 | 0.5 | PASS |

## Test Graphs

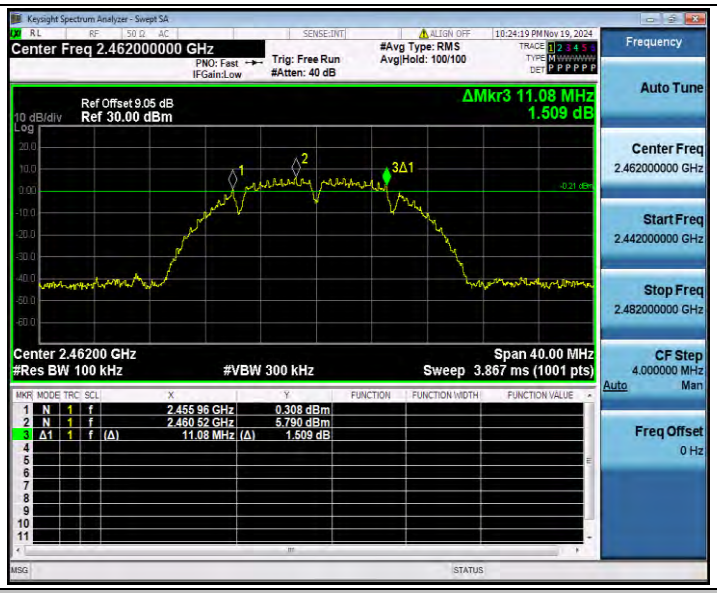
11B_Ant2_2412



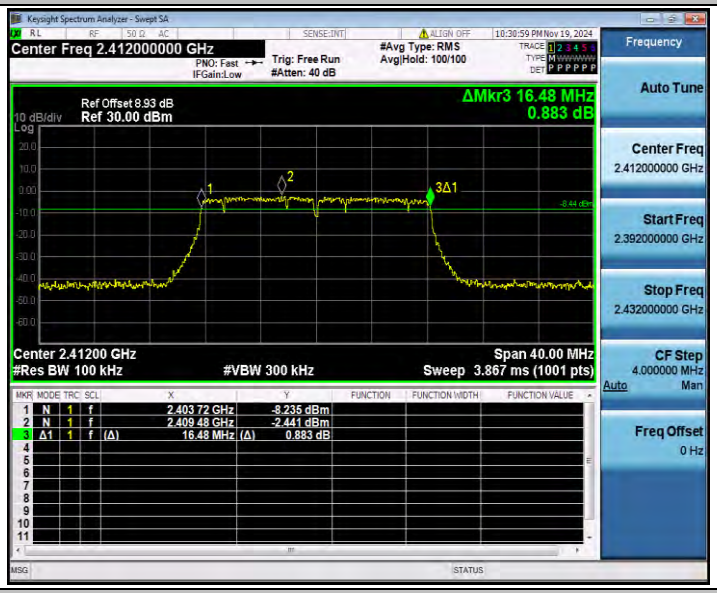

11B_Ant2_2437



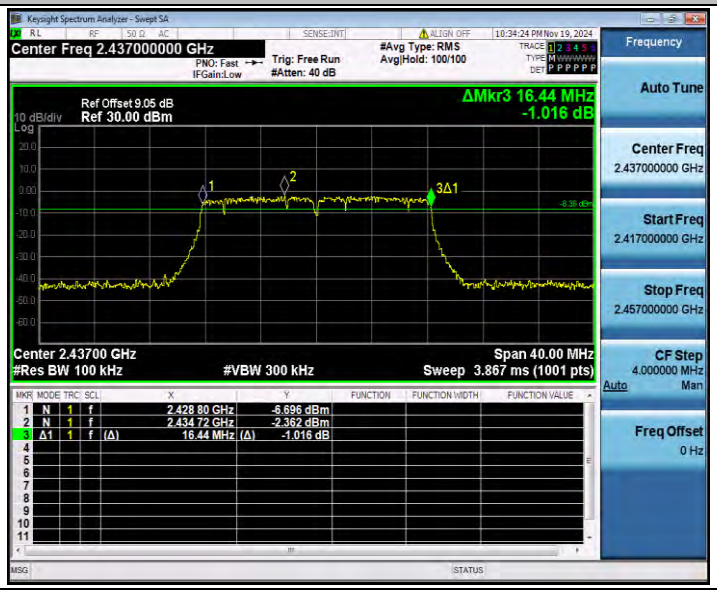

11B_Ant2_2462



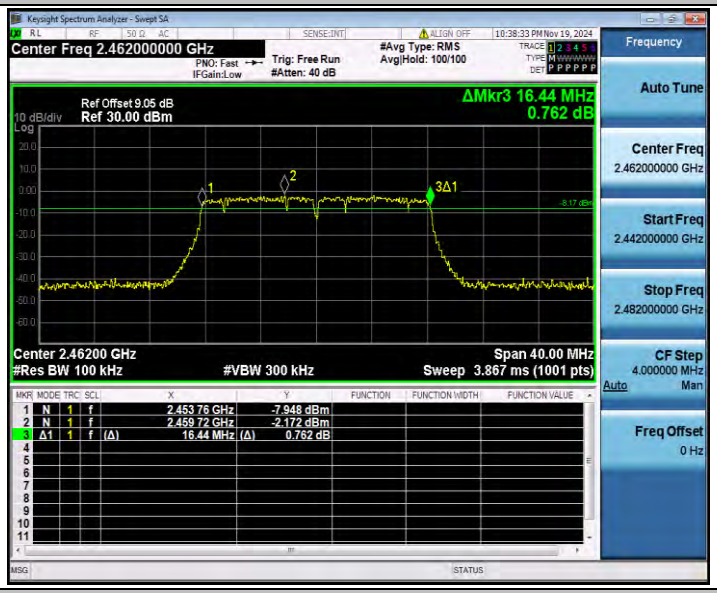

11G_Ant2_2412



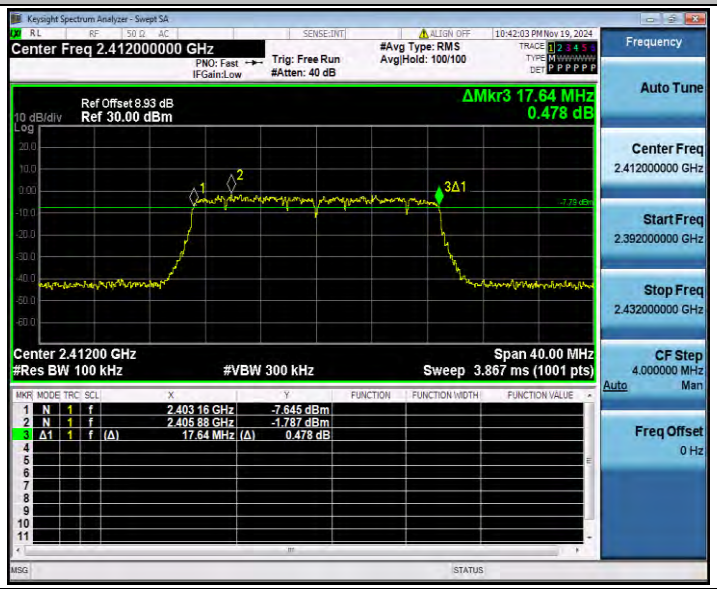

11G_Ant2_2437



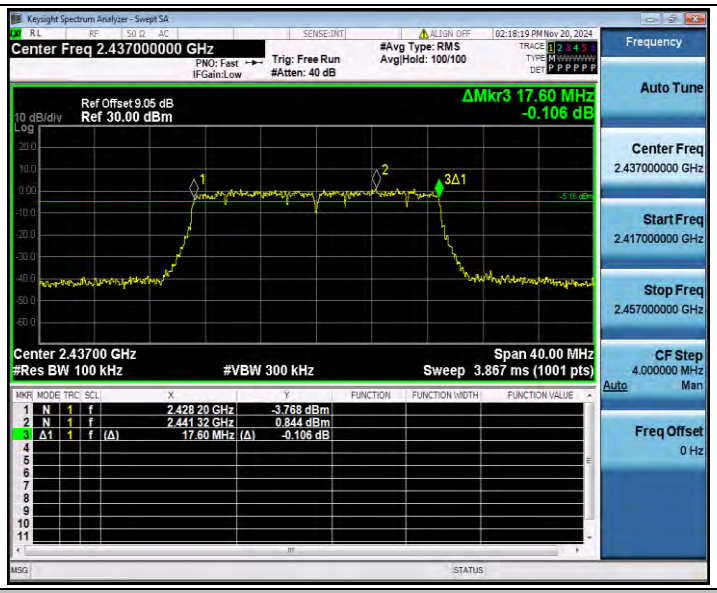
11G_Ant2_2462



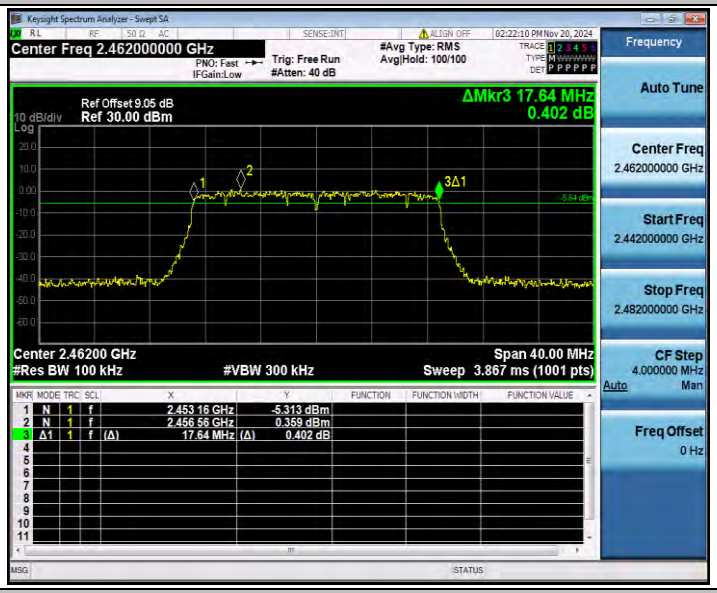

11N20SISO_Ant2_2412



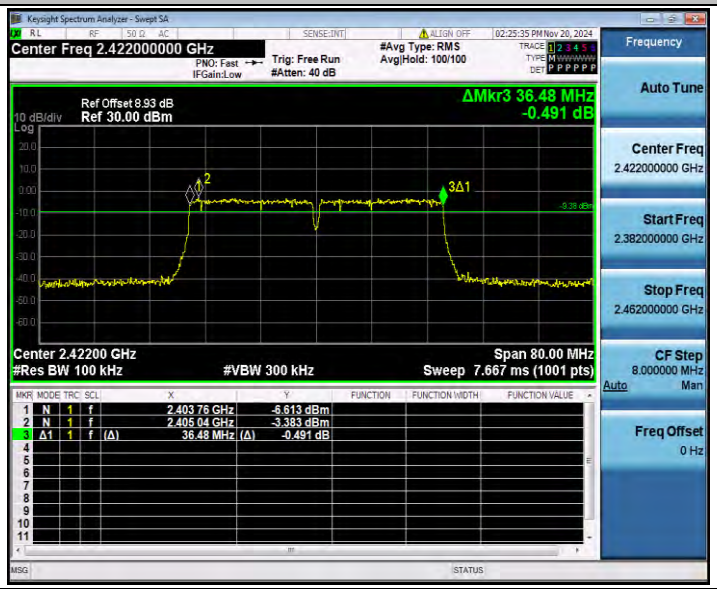

11N20SISO_Ant2_2437



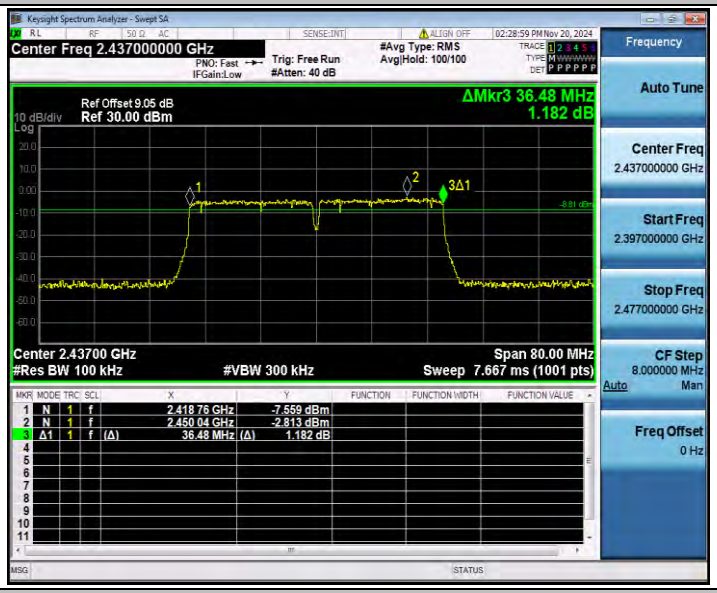

11N20SISO_Ant2_2462



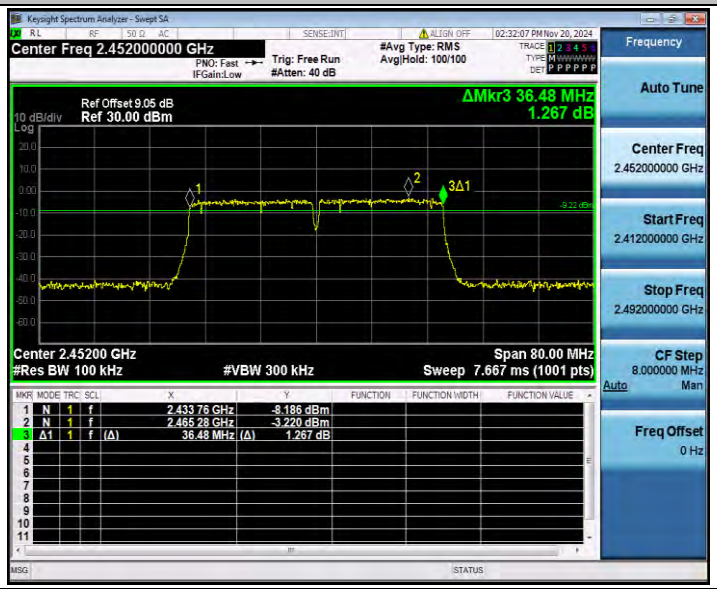

11N40SISO_Ant2_2422



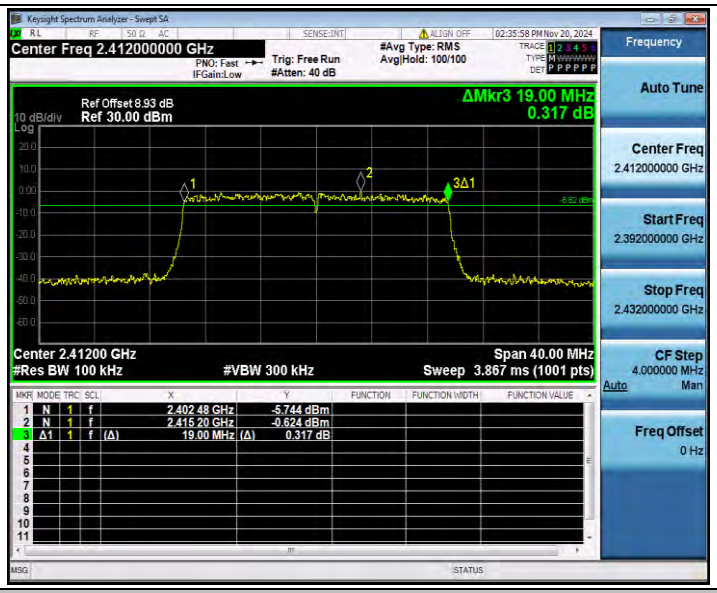
11N40SISO_Ant2_2437



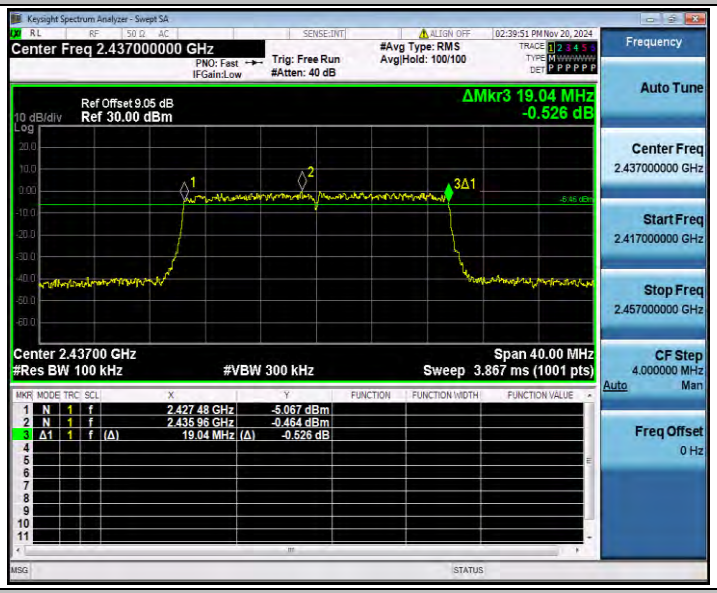

11N40SISO_Ant2_2452



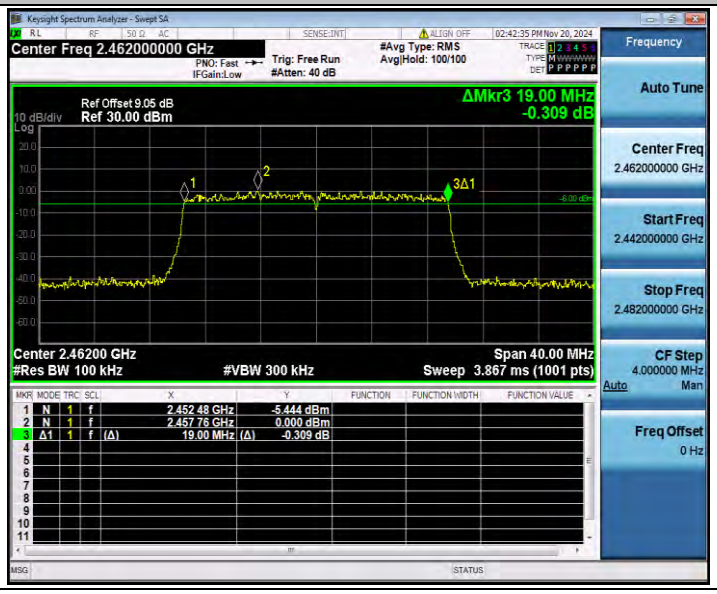

11AX20SISO_Ant2_2412



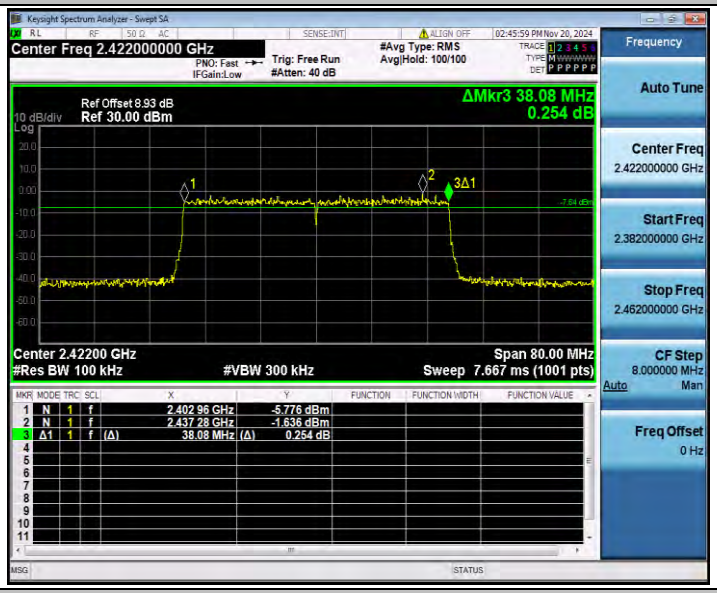

11AX20SISO_Ant2_2437



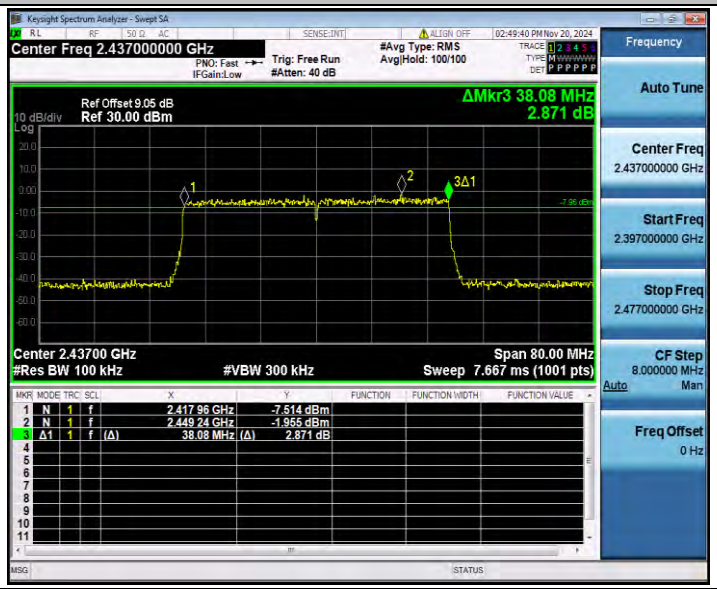

11AX20SISO_Ant2_2462



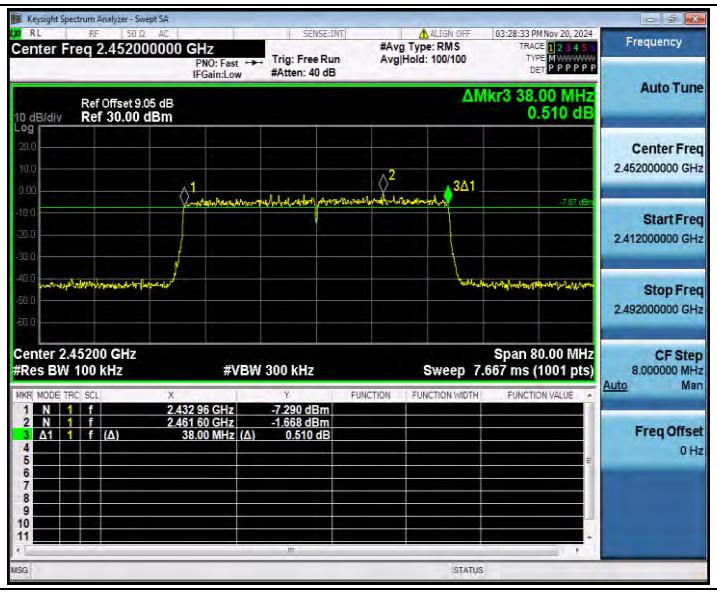
11AX40SISO_Ant2_2422




11AX40SISO_Ant2_2437




11AX40SISO_Ant2_2452


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.452000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
#Avg Type: RMS
Avg|Hold: 100/100
03:28:33 PM Nov 20, 2024
Ref Offset 9.05 dB
10 dB/div
Ref 30.00 dBm
ΔMkr3 38.00 MHz
0.510 dB
Center 2.45200 GHz
#Res BW 100 kHz
#VBW 300 kHz
Span 80.00 MHz
Sweep 7.667 ms (1001 pts)
1 N 1 f 2.432 96 GHz -7.290 dBm
2 N 1 f 2.461 60 GHz -1.668 dBm
3 Δ1 1 f (Δ) 38.00 MHz (Δ) 0.510 dB
Frequency
Auto Tune
Center Freq
2.452000000 GHz
Start Freq
2.412000000 GHz
Stop Freq
2.492000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz

# Appendix C.2: Occupied Channel Bandwidth

## Test Result

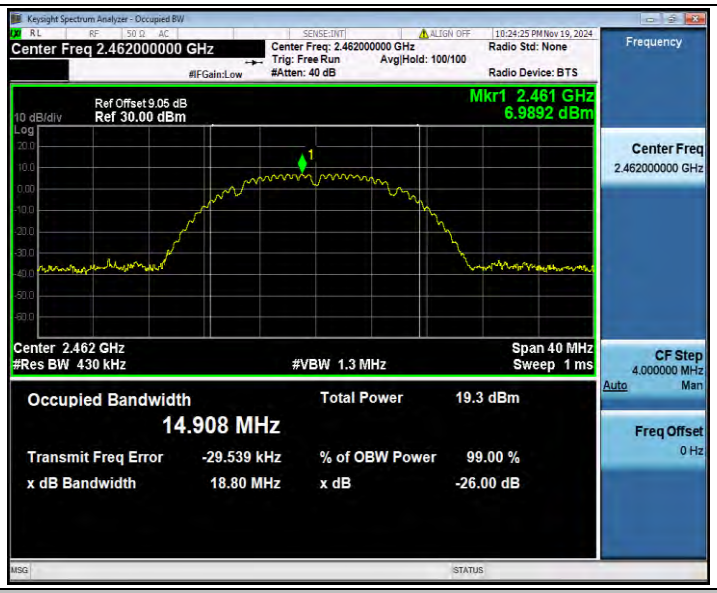
| TestMode | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant2 | 2412 | 14.906 | 2404.5822 | 2419.4882 | --- | --- |
| | | 2437 | 14.954 | 2429.5106 | 2444.4646 | --- | --- |
| | | 2462 | 14.908 | 2454.5165 | 2469.4245 | --- | --- |
| 11G | Ant2 | 2412 | 16.513 | 2403.7068 | 2420.2198 | --- | --- |
| | | 2437 | 16.491 | 2428.7558 | 2445.2468 | --- | --- |
| | | 2462 | 16.456 | 2453.7664 | 2470.2224 | --- | --- |
| 11N20SISO | Ant2 | 2412 | 17.556 | 2403.1991 | 2420.7551 | --- | --- |
| | | 2437 | 17.557 | 2428.2351 | 2445.7921 | --- | --- |
| | | 2462 | 17.587 | 2453.2086 | 2470.7956 | --- | --- |
| 11N40SISO | Ant2 | 2422 | 36.269 | 2403.8755 | 2440.1445 | --- | --- |
| | | 2437 | 36.259 | 2418.9151 | 2455.1741 | --- | --- |
| | | 2452 | 36.140 | 2433.9694 | 2470.1094 | --- | --- |
| 11AX20SISO | Ant2 | 2412 | 18.925 | 2402.5277 | 2421.4527 | --- | --- |
| | | 2437 | 18.932 | 2427.5465 | 2446.4785 | --- | --- |
| | | 2462 | 18.891 | 2452.5660 | 2471.4570 | --- | --- |
| 11AX40SISO | Ant2 | 2422 | 37.962 | 2403.0444 | 2441.0064 | --- | --- |
| | | 2437 | 37.918 | 2418.0865 | 2456.0045 | --- | --- |
| | | 2452 | 37.857 | 2433.1321 | 2470.9891 | --- | --- |

## Test Graphs

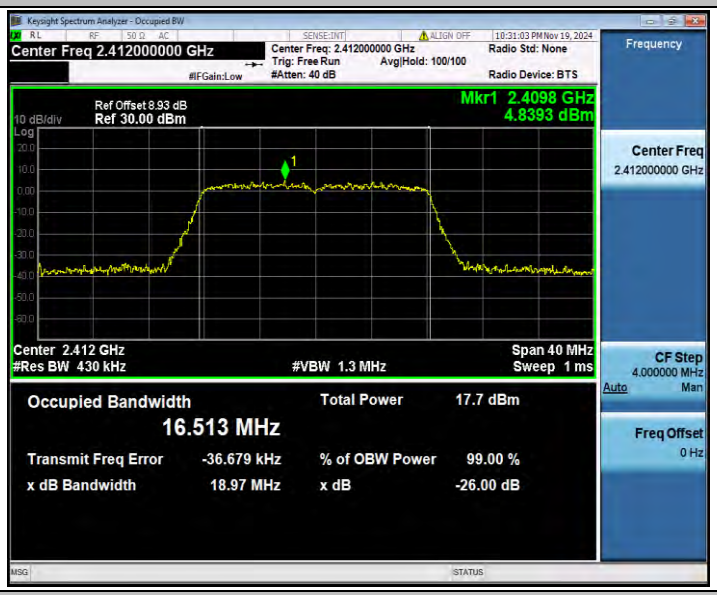
11B_Ant2_2412

11B_Ant2_2437

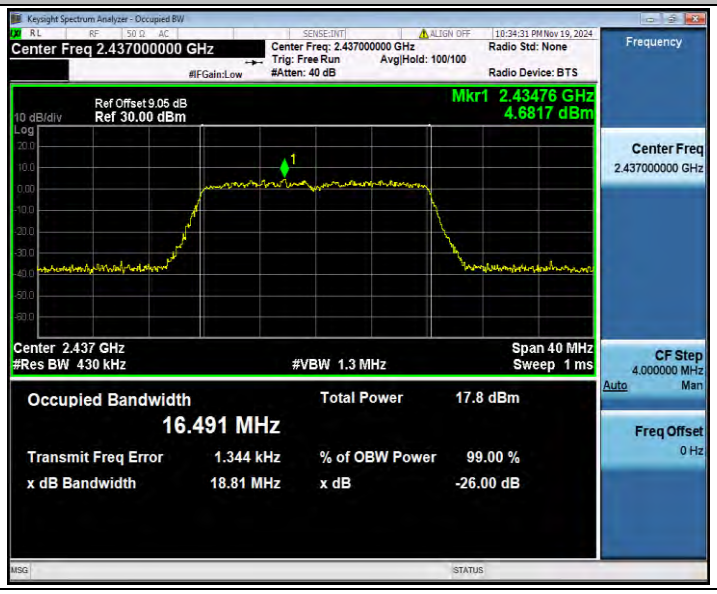
11B_Ant2_2462



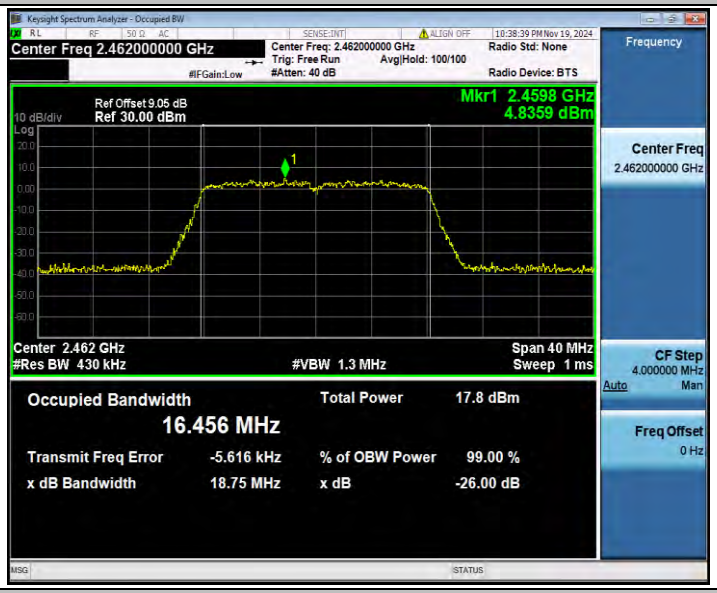

11G_Ant2_2412




11G_Ant2_2437

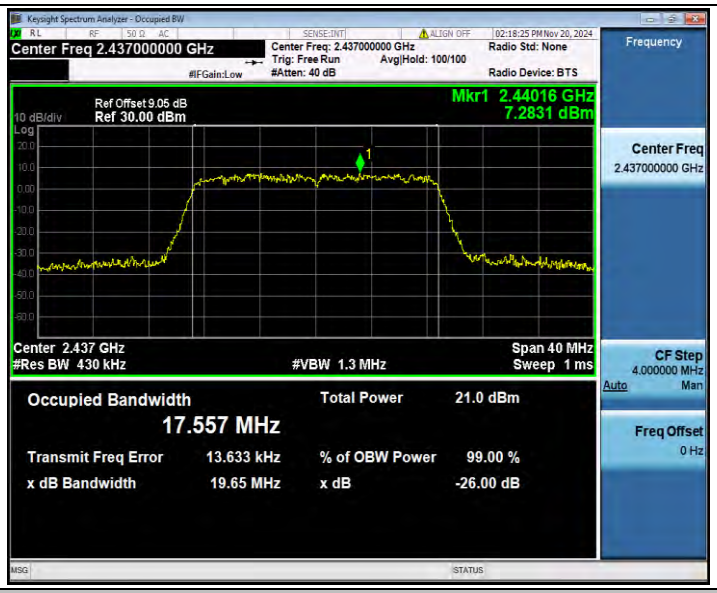


11G_Ant2_2462

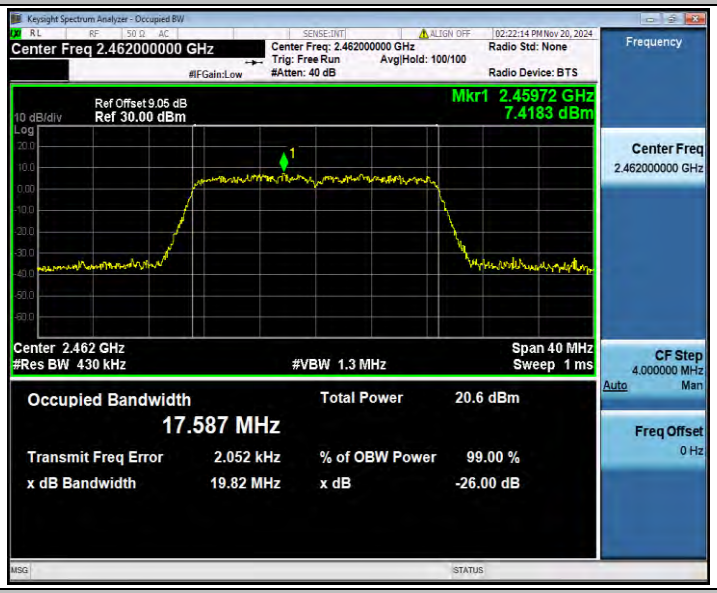



11N20SISO_Ant2_2412

11N20SISO_Ant2_2437

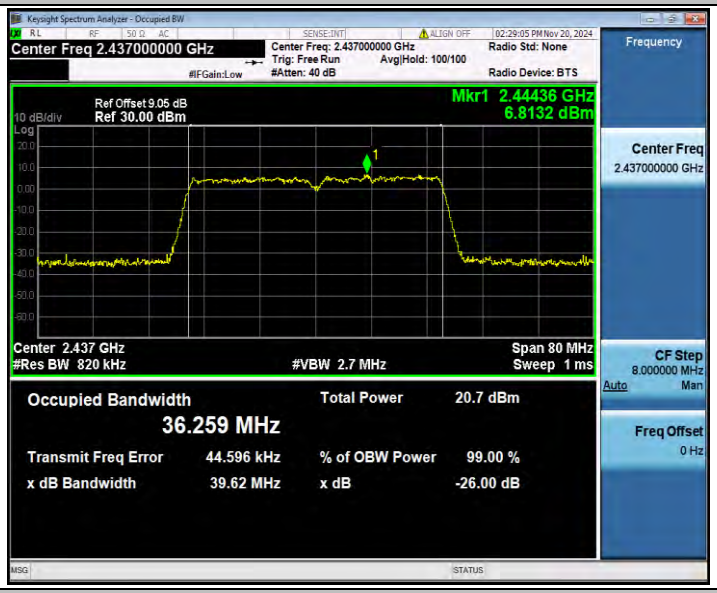



11N20SISO_Ant2_2462

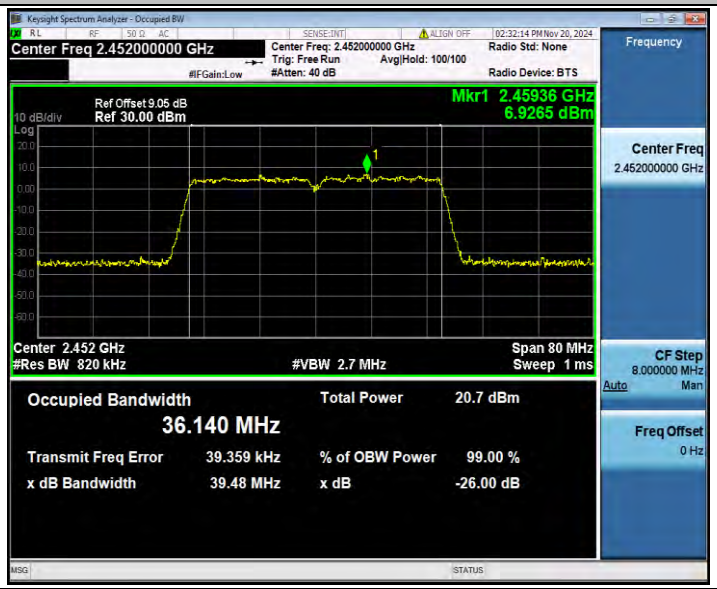



11N40SISO_Ant2_2422

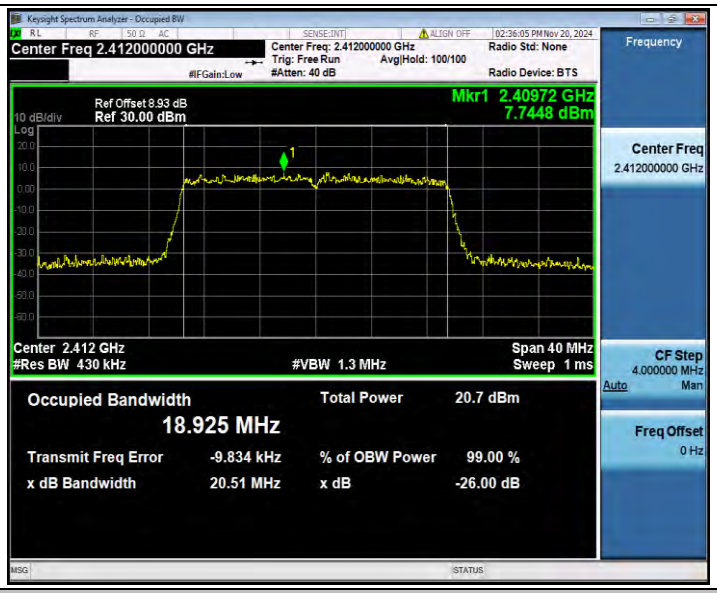
11N40SISO_Ant2_2437



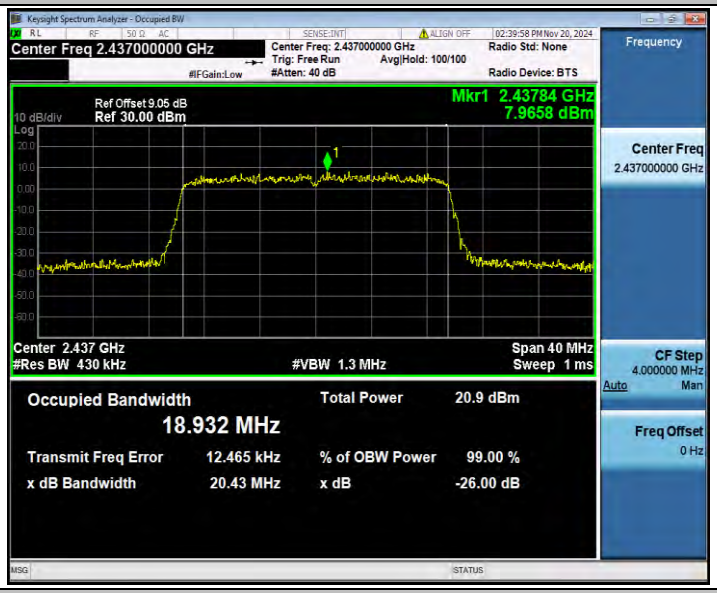

11N40SISO_Ant2_2452



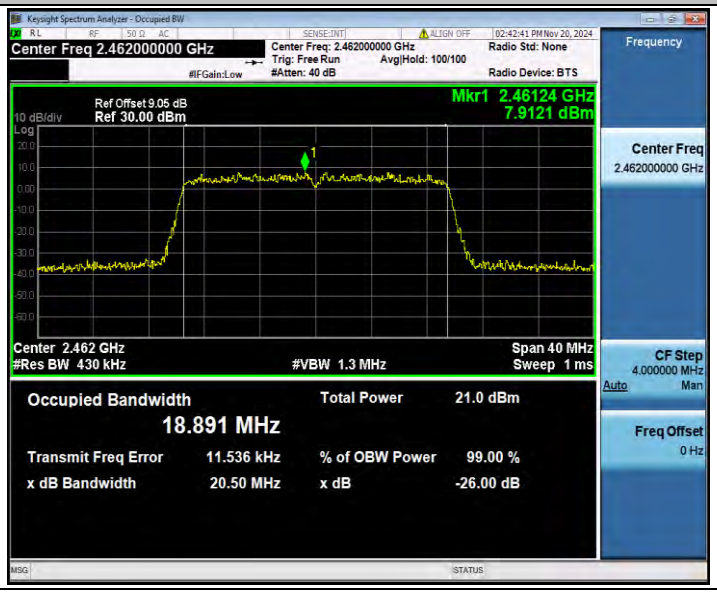

11AX20SISO_Ant2_2412



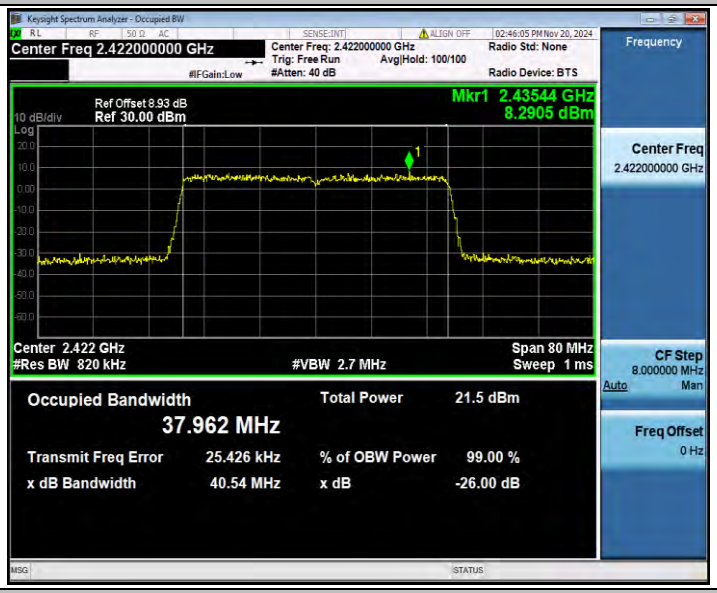

11AX20SISO_Ant2_2437



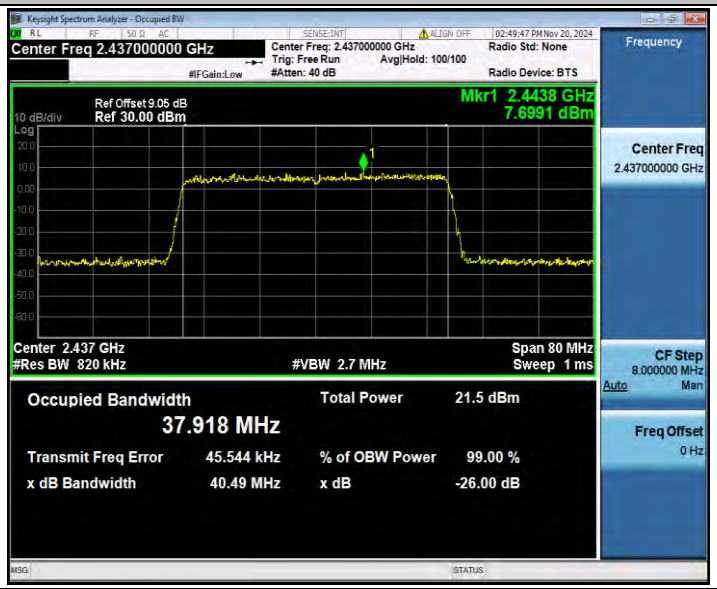

11AX20SISO_Ant2_2462



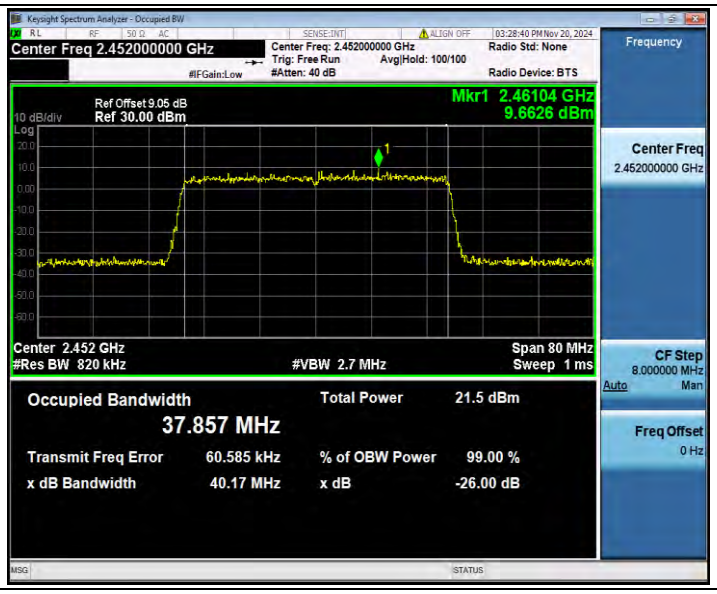
11AX40SISO_Ant2_2422




11AX40SISO_Ant2_2437




11AX40SISO_Ant2_2452


Keysight Spectrum Analyzer - Occupied BW
Center Freq 2.452000000 GHz
Center Freq: 2.452000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#Atten: 40 dB
Radio Std: None
Radio Device: BTS
Frequency
Ref Offset 9.05 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr1 2.46104 GHz
9.6626 dBm
Center Freq
2.452000000 GHz
Center 2.452 GHz
#Res BW 820 kHz
#VBW 2.7 MHz
Span 80 MHz
Sweep 1 ms
CF Step
8.000000 MHz
Auto
Man
Occupied Bandwidth
37.857 MHz
Total Power 21.5 dBm
Transmit Freq Error 60.585 kHz
% of OBW Power 99.00 %
x dB Bandwidth 40.17 MHz
x dB -26.00 dB
Freq Offset
0 Hz
MSG
STATUS

# Appendix C.3: Maximum conducted output power

| Test Mode | Antenna | Frequency[MHz] | Peak power [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|
| 11B | Ant2 | 2412 | 19.04 | ≤30.00 | PASS |
| | | 2437 | 19.34 | ≤30.00 | PASS |
| | | 2462 | 19.41 | ≤30.00 | PASS |
| 11G | Ant2 | 2412 | 18.90 | ≤30.00 | PASS |
| | | 2437 | 18.95 | ≤30.00 | PASS |
| | | 2462 | 18.95 | ≤30.00 | PASS |
| 11N20SISO | Ant2 | 2412 | 19.40 | ≤30.00 | PASS |
| | | 2437 | 21.98 | ≤30.00 | PASS |
| | | 2462 | 21.66 | ≤30.00 | PASS |
| 11N40SISO | Ant2 | 2422 | 20.93 | ≤30.00 | PASS |
| | | 2437 | 20.85 | ≤30.00 | PASS |
| | | 2452 | 20.88 | ≤30.00 | PASS |
| 11AX20SISO | Ant2 | 2412 | 21.99 | ≤30.00 | PASS |
| | | 2437 | 22.28 | ≤30.00 | PASS |
| | | 2462 | 22.30 | ≤30.00 | PASS |
| 11AX40SISO | Ant2 | 2422 | 21.60 | ≤30.00 | PASS |
| | | 2437 | 21.53 | ≤30.00 | PASS |
| | | 2452 | 21.56 | ≤30.00 | PASS |

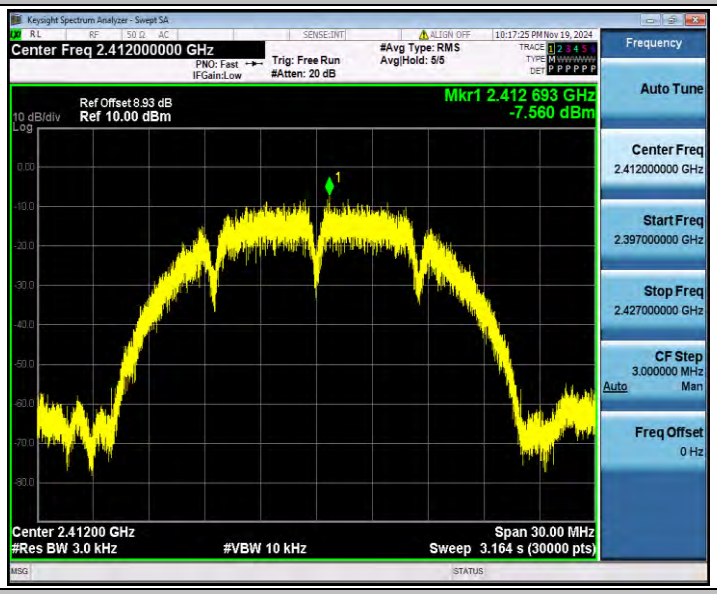
# Appendix C.4: Maximum power spectral density

## Test Result

| TestMode | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|---|---|---|---|---|---|
| 11B | Ant2 | 2412 | -7.56 | ≤8.00 | PASS |
| | | 2437 | -8.12 | ≤8.00 | PASS |
| | | 2462 | -7.96 | ≤8.00 | PASS |
| 11G | Ant2 | 2412 | -5.73 | ≤8.00 | PASS |
| | | 2437 | -5.68 | ≤8.00 | PASS |
| | | 2462 | -5.69 | ≤8.00 | PASS |
| 11N20SISO | Ant2 | 2412 | -5.43 | ≤8.00 | PASS |
| | | 2437 | -2.77 | ≤8.00 | PASS |
| | | 2462 | -3.11 | ≤8.00 | PASS |
| 11N40SISO | Ant2 | 2422 | -7.17 | ≤8.00 | PASS |
| | | 2437 | -6.62 | ≤8.00 | PASS |
| | | 2452 | -6.59 | ≤8.00 | PASS |
| 11AX20SISO | Ant2 | 2412 | -10.20 | ≤8.00 | PASS |
| | | 2437 | -9.82 | ≤8.00 | PASS |
| | | 2462 | -9.85 | ≤8.00 | PASS |
| 11AX40SISO | Ant2 | 2422 | -12.52 | ≤8.00 | PASS |
| | | 2437 | -12.24 | ≤8.00 | PASS |
| | | 2452 | -12.53 | ≤8.00 | PASS |

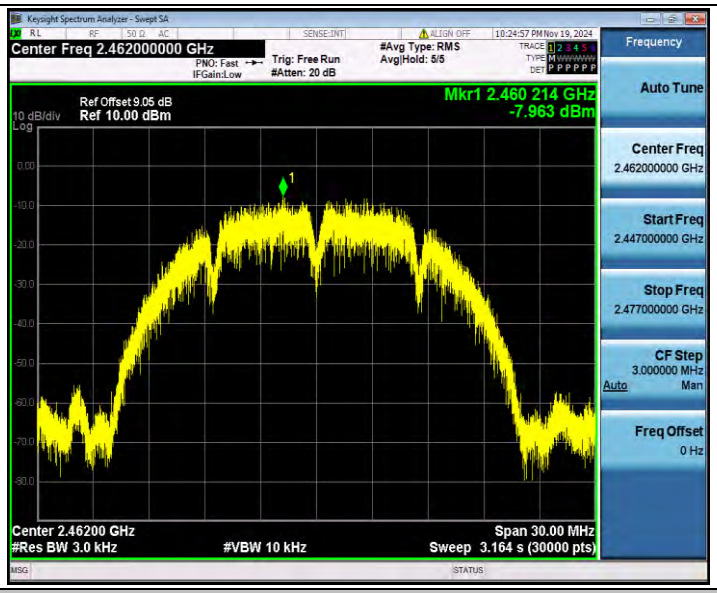
## Test Graphs

11B_Ant2_2412

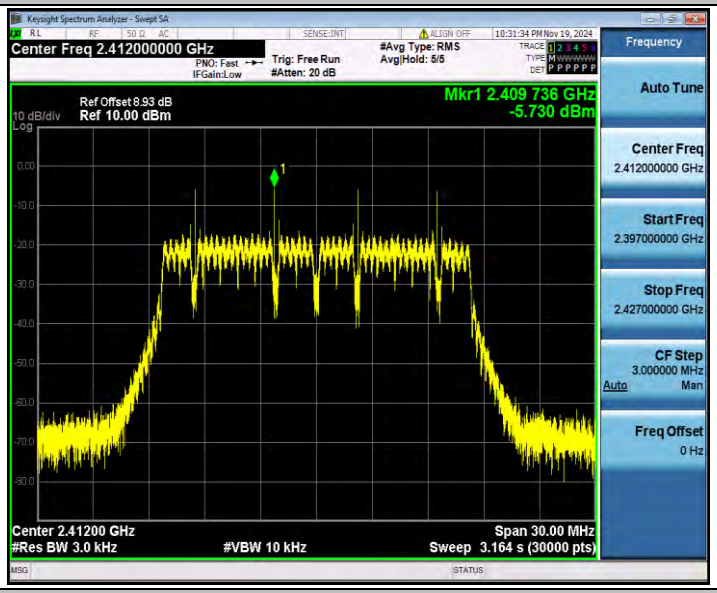



11B_Ant2_2437

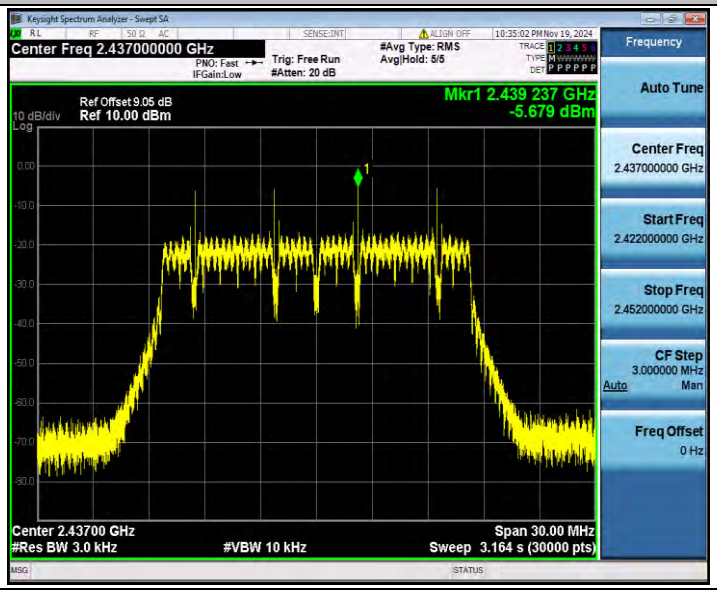
11B_Ant2_2462



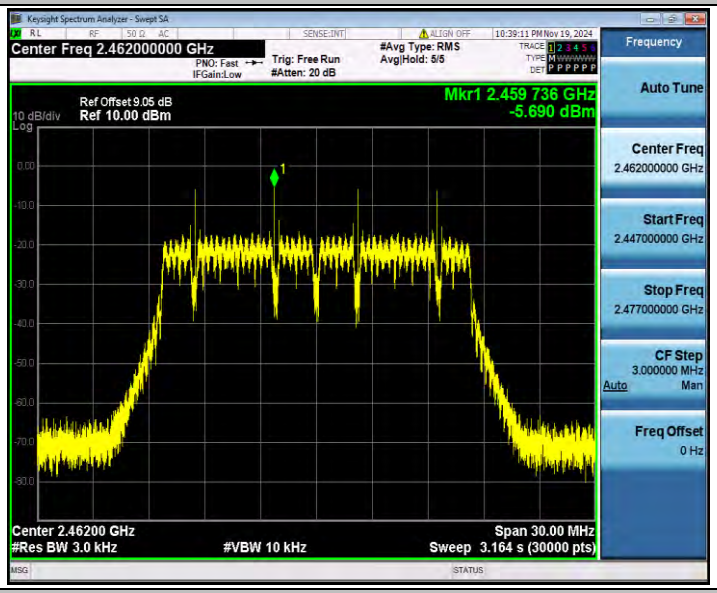

11G_Ant2_2412



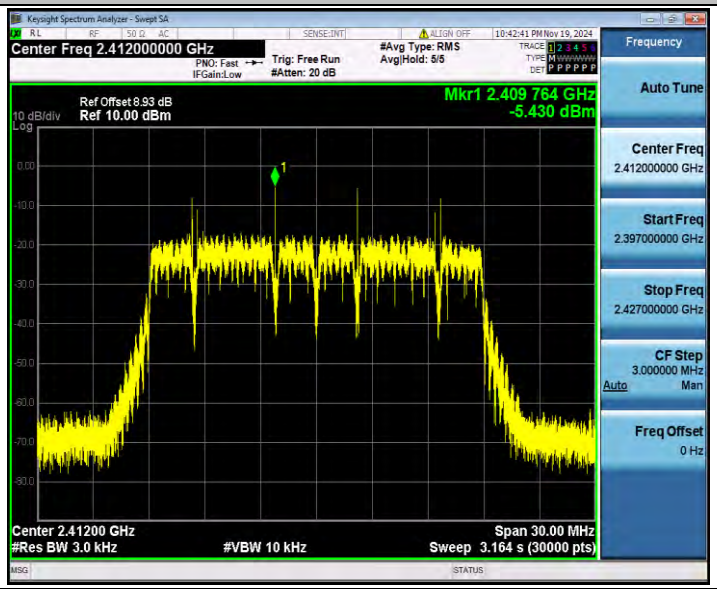

11G_Ant2_2437



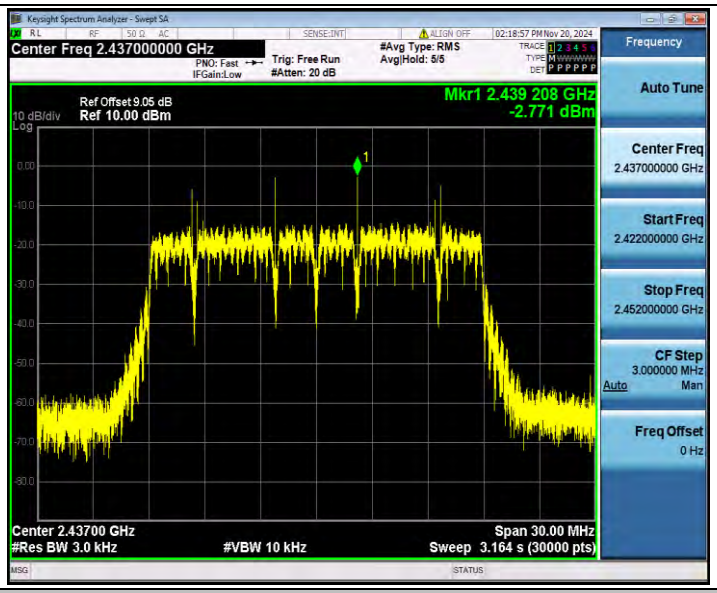
11G_Ant2_2462



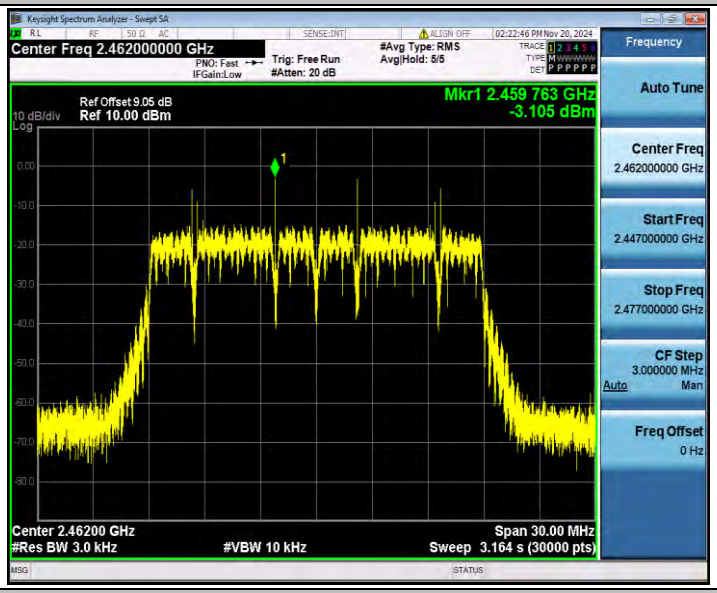

11N20SISO_Ant2_2412



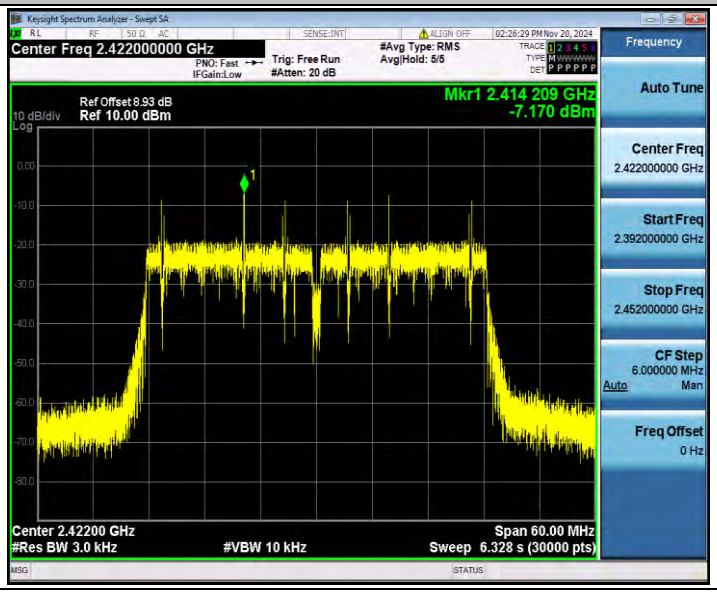

11N20SISO_Ant2_2437



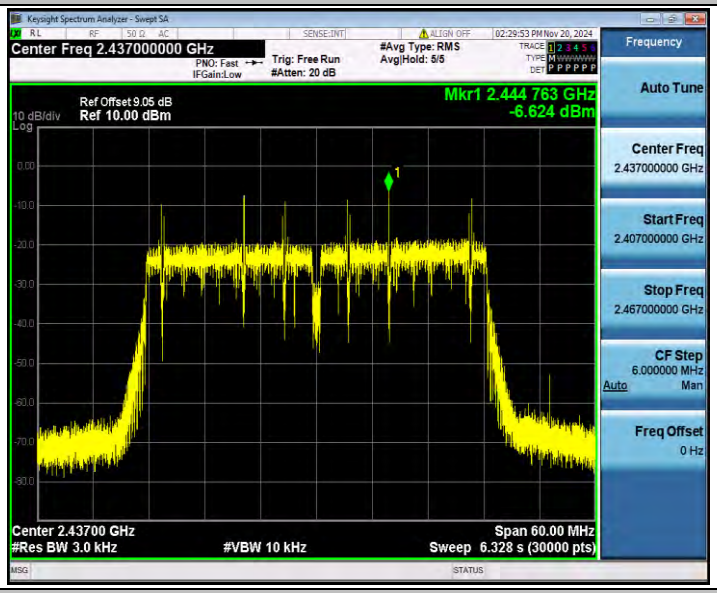

11N20SISO_Ant2_2462



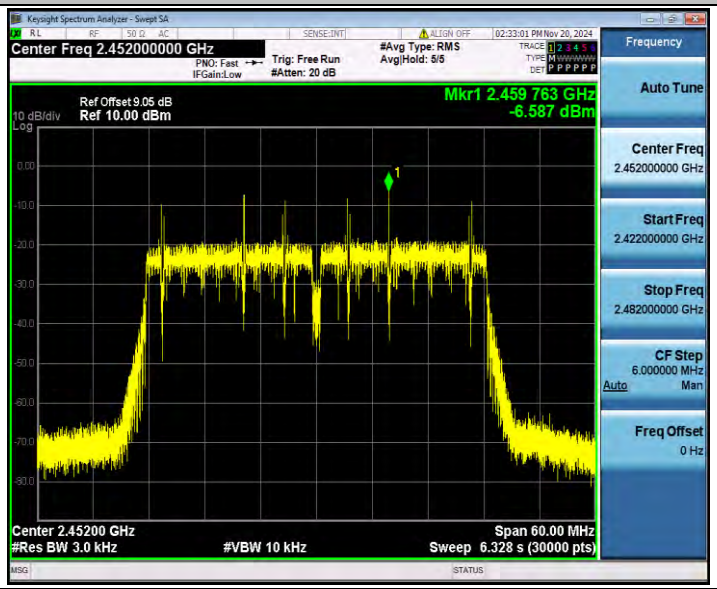

11N40SISO_Ant2_2422



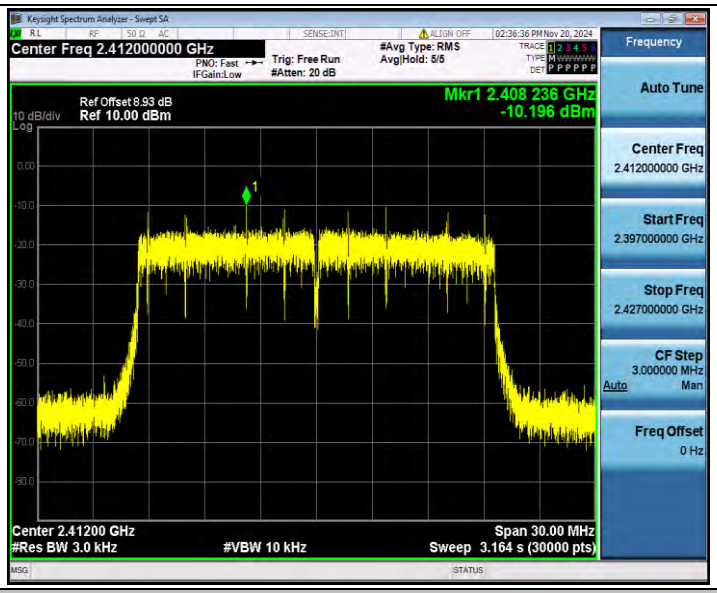
11N40SISO_Ant2_2437



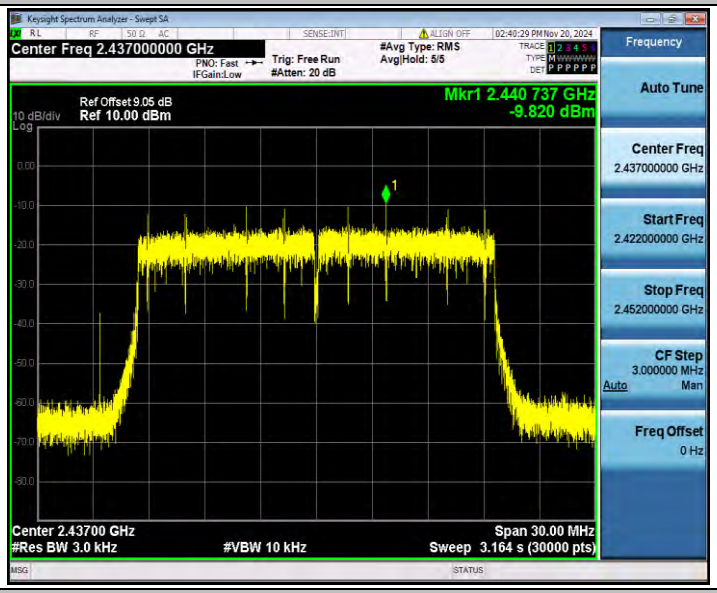

11N40SISO_Ant2_2452



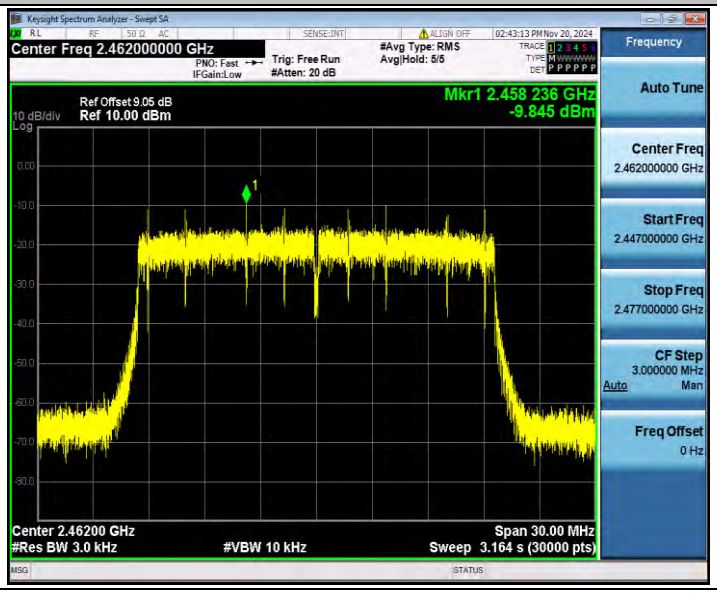

11AX20SISO_Ant2_2412



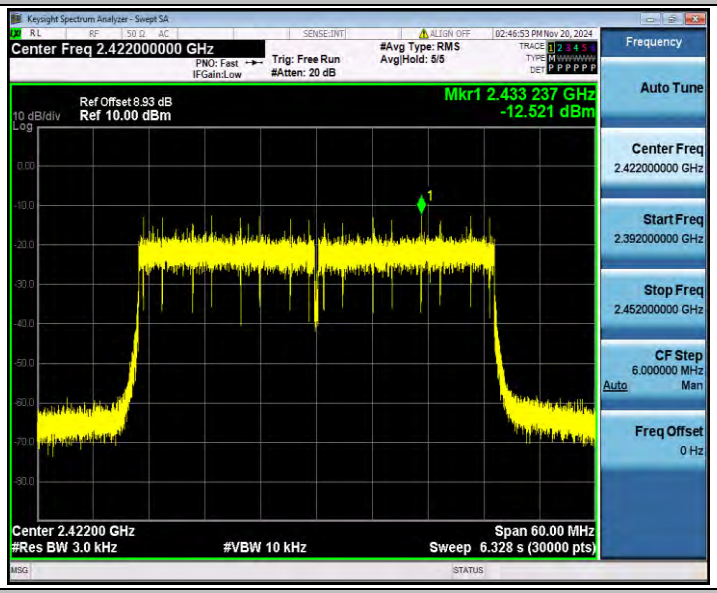

11AX20SISO_Ant2_2437



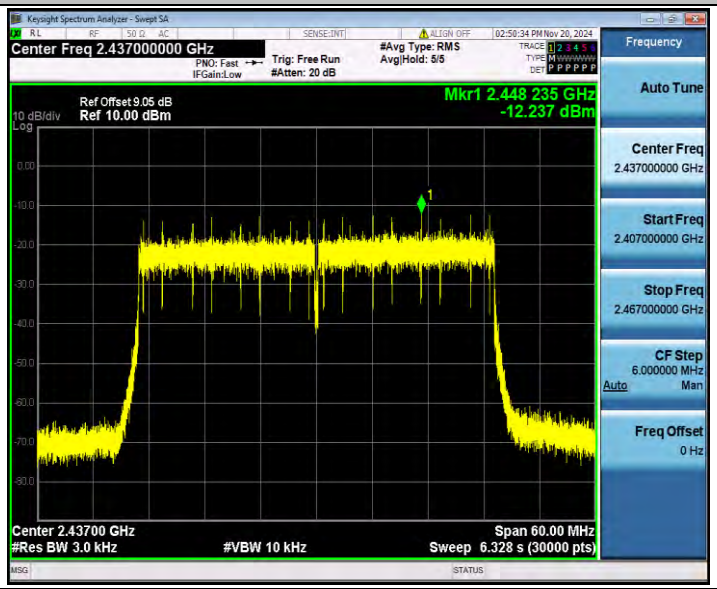

11AX20SISO_Ant2_2462



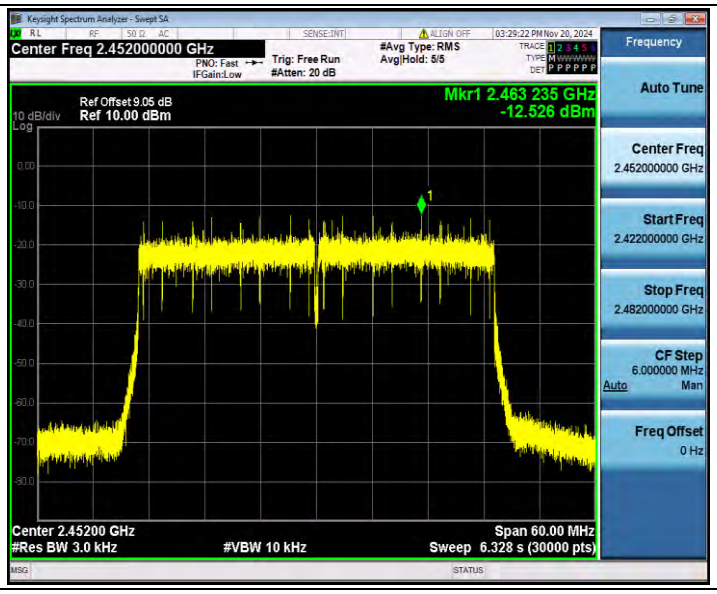
11AX40SISO_Ant2_2422




11AX40SISO_Ant2_2437




11AX40SISO_Ant2_2452


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.452000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 5/5
03:29:22 PM Nov 20, 2024
Ref Offset 9.05 dB
10 dB/div
Ref 10.00 dBm
Log
Mkr1 2.463 235 GHz
-12.526 dBm
Center 2.45200 GHz
#Res BW 3.0 kHz
#VBW 10 kHz
Span 60.00 MHz
Sweep 6.328 s (30000 pts)
Frequency
Auto Tune
Center Freq
2.452000000 GHz
Start Freq
2.422000000 GHz
Stop Freq
2.482000000 GHz
CF Step
6.000000 MHz
Auto
Man
Freq Offset
0 Hz