| | |
|---|---|
| **Case No. :** GTS20220323004-1-3 | |
| **Ambient Condition**: 23.4 ℃, 52.7 %RH, | |
| **Test Date:** 2022-5-30 | **Test Engineer:** Jenny Zeng |

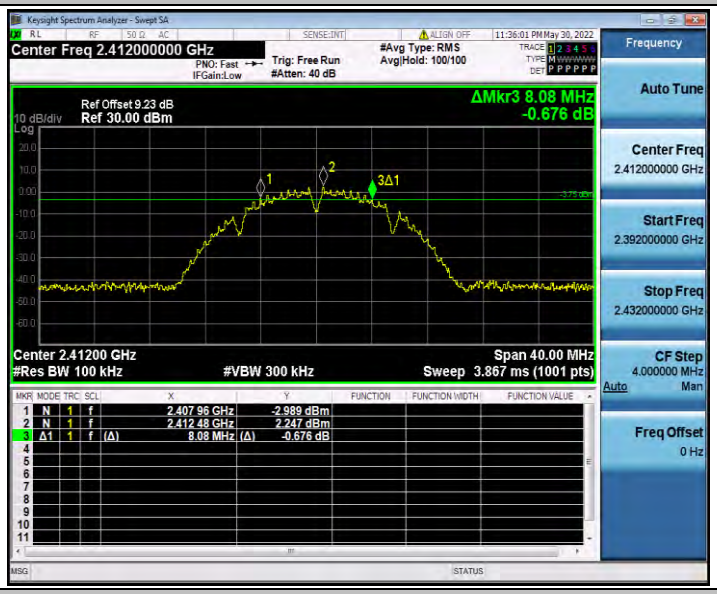
# Appendix C.1: DTS Bandwidth

## Test Result

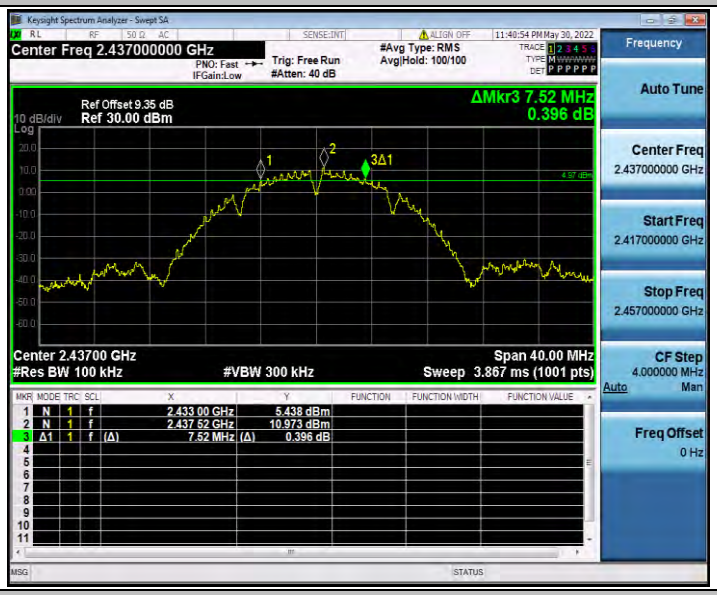
| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | 8.080 | 2407.960 | 2416.040 | 0.5 | PASS |
| | | 2437 | 7.520 | 2433.000 | 2440.520 | 0.5 | PASS |
| | | 2462 | 8.040 | 2458.000 | 2466.040 | 0.5 | PASS |
| 11G | Ant1 | 2412 | 16.360 | 2403.840 | 2420.200 | 0.5 | PASS |
| | | 2437 | 16.320 | 2428.840 | 2445.160 | 0.5 | PASS |
| | | 2462 | 16.320 | 2453.840 | 2470.160 | 0.5 | PASS |
| 11N20SISO | Ant1 | 2412 | 17.640 | 2403.200 | 2420.840 | 0.5 | PASS |
| | | 2437 | 17.600 | 2428.200 | 2445.800 | 0.5 | PASS |
| | | 2462 | 17.600 | 2453.200 | 2470.800 | 0.5 | PASS |
| 11N40SISO | Ant1 | 2422 | 35.040 | 2405.120 | 2440.160 | 0.5 | PASS |
| | | 2437 | 35.680 | 2419.480 | 2455.160 | 0.5 | PASS |
| | | 2452 | 36.320 | 2433.840 | 2470.160 | 0.5 | PASS |

## Test Graphs

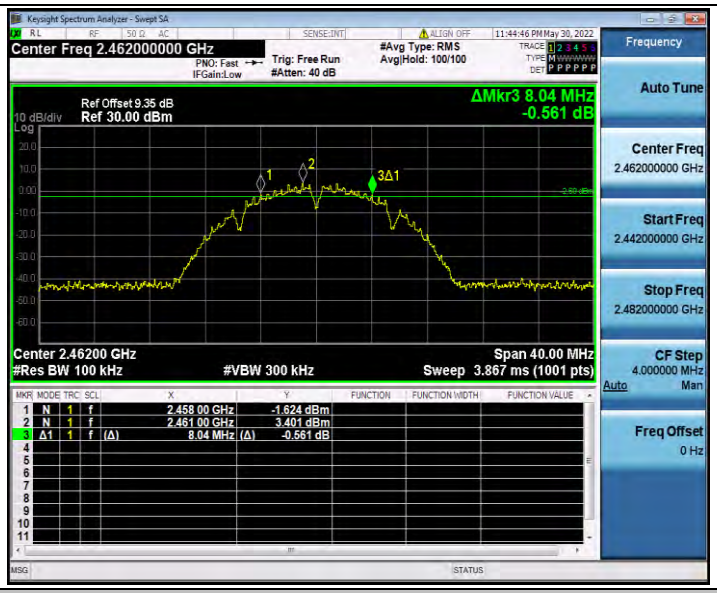
11B_Ant1_2412



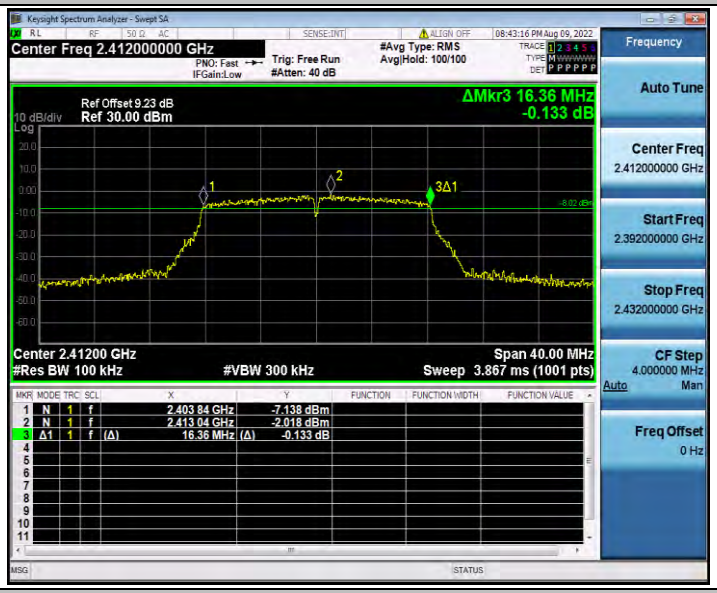

11B_Ant1_2437



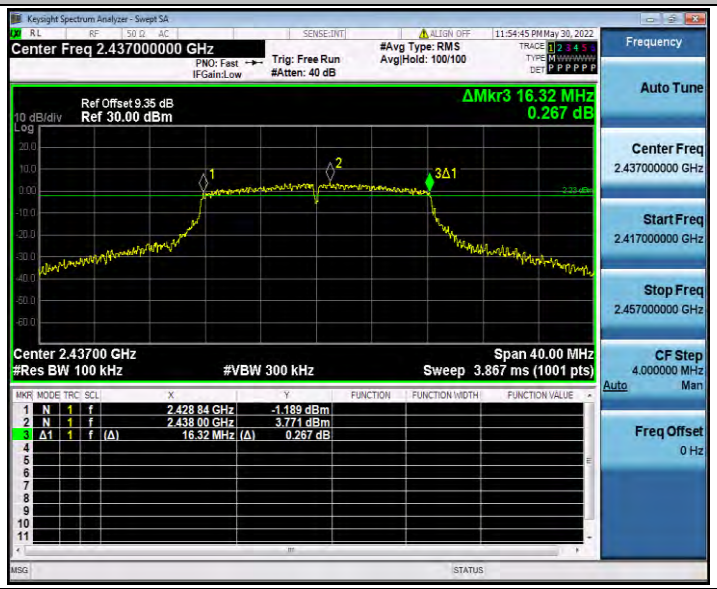

11B_Ant1_2462



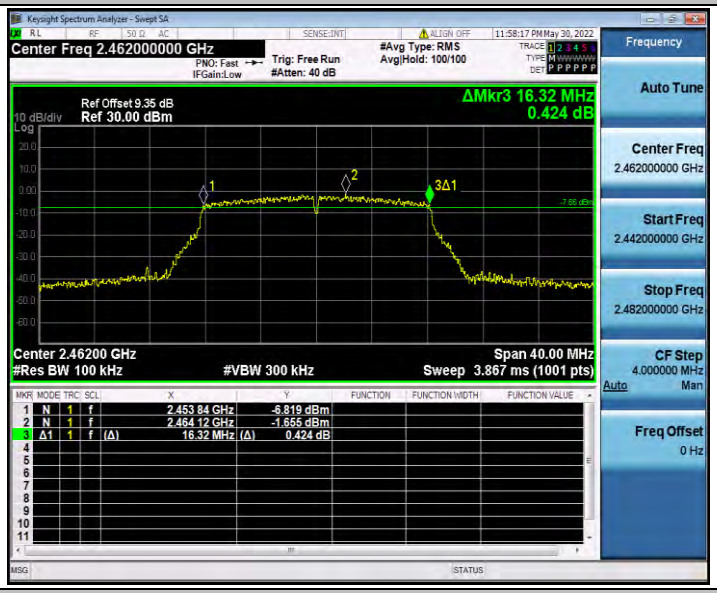

11G_Ant1_2412



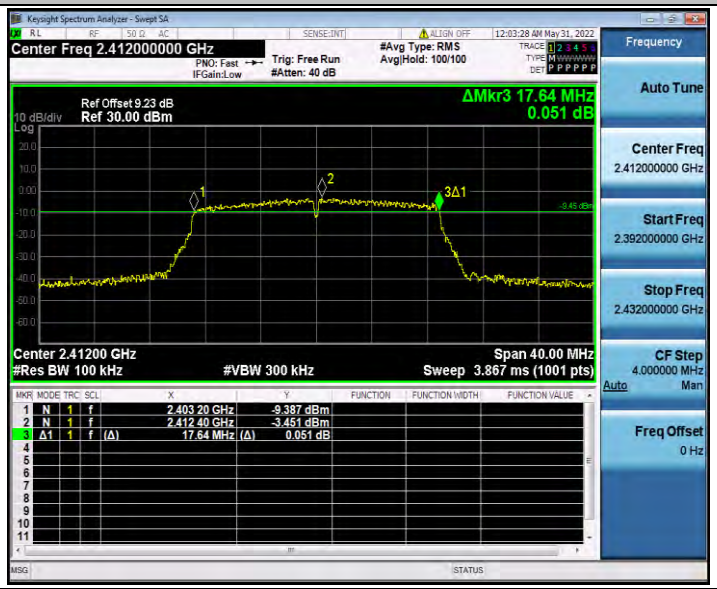

11G_Ant1_2437



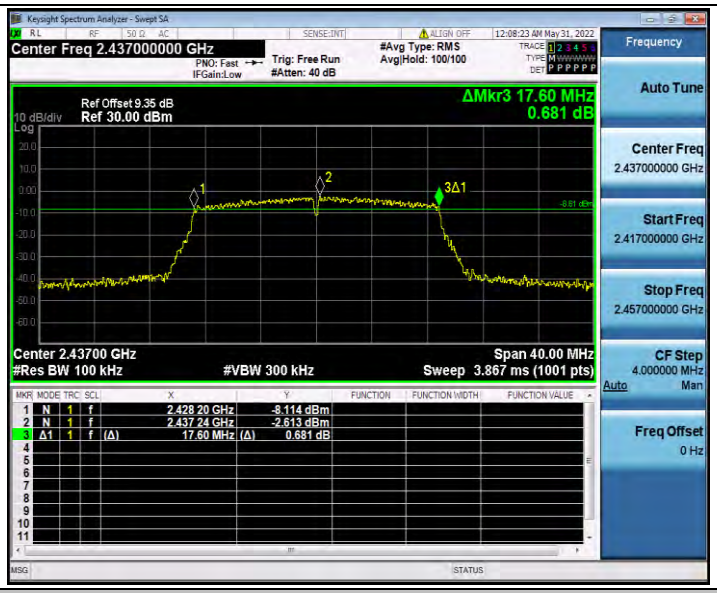
11G_Ant1_2462



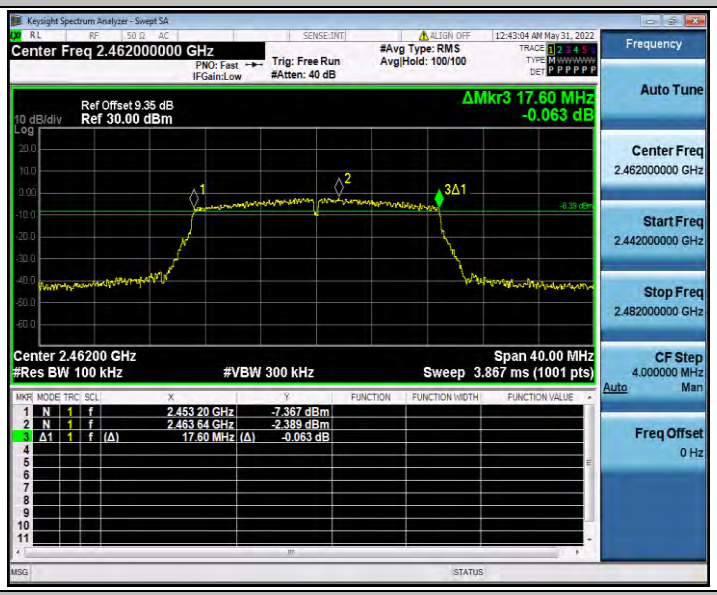

11N20SISO_Ant1_2412



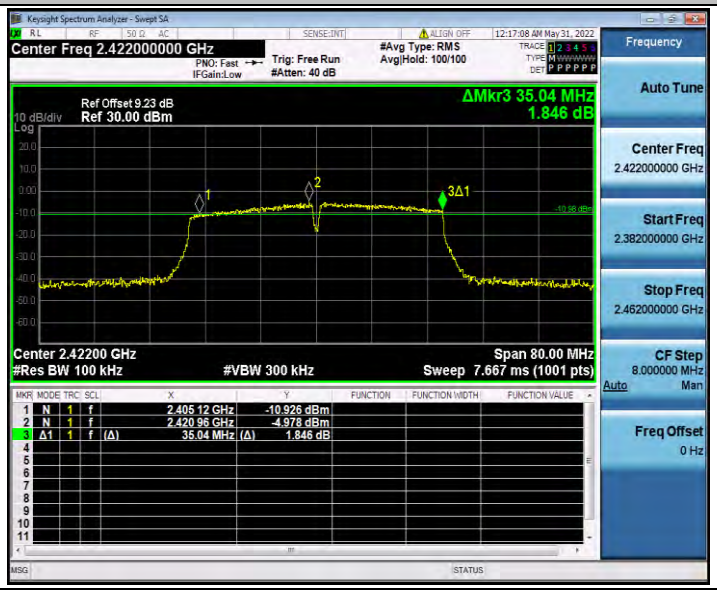

11N20SISO_Ant1_2437



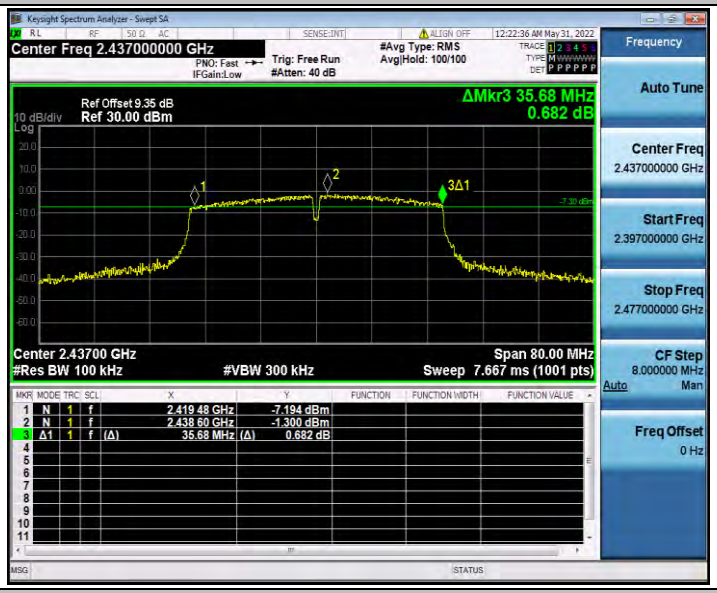

11N20SISO_Ant1_2462



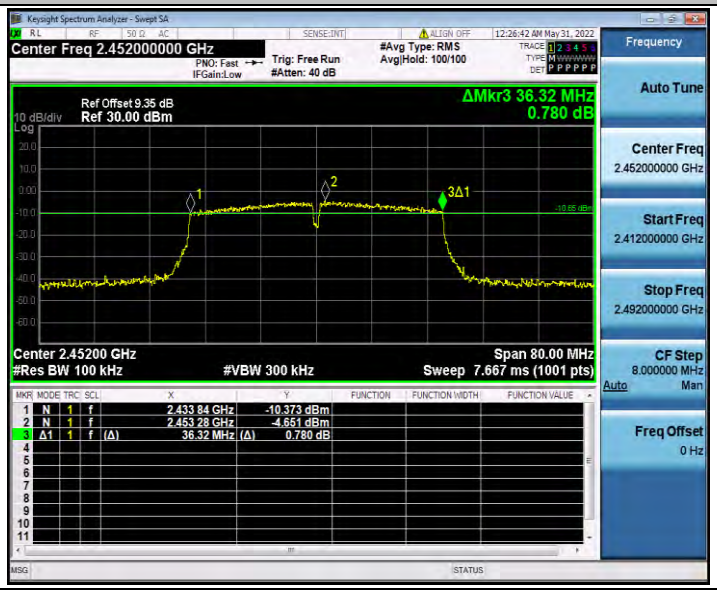

11N40SISO_Ant1_2422



## 11N40SISO_Ant1_2437




## 11N40SISO_Ant1_2452



# Appendix C.2: Occupied Channel Bandwidth

## Test Result

| TestMode | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | 12.970 | 2405.587 | 2418.557 | --- | --- |
| | | 2437 | 13.286 | 2430.413 | 2443.699 | --- | --- |
| | | 2462 | 12.880 | 2455.577 | 2468.457 | --- | --- |
| 11G | Ant1 | 2412 | 16.923 | 2403.623 | 2420.546 | --- | --- |
| | | 2437 | 16.934 | 2428.555 | 2445.489 | --- | --- |
| | | 2462 | 16.804 | 2453.606 | 2470.410 | --- | --- |
| 11N20SISO | Ant1 | 2412 | 17.895 | 2403.133 | 2421.028 | --- | --- |
| | | 2437 | 17.839 | 2428.103 | 2445.942 | --- | --- |
| | | 2462 | 17.842 | 2453.083 | 2470.925 | --- | --- |
| 11N40SISO | Ant1 | 2422 | 36.115 | 2404.081 | 2440.196 | --- | --- |
| | | 2437 | 36.202 | 2419.003 | 2455.205 | --- | --- |
| | | 2452 | 36.150 | 2433.995 | 2470.145 | --- | --- |

## 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

11N40SISO_Ant1_2422

## 11N40SISO_Ant1_2437

## 11N40SISO_Ant1_2452

# Appendix C.3: Maximum power spectral density

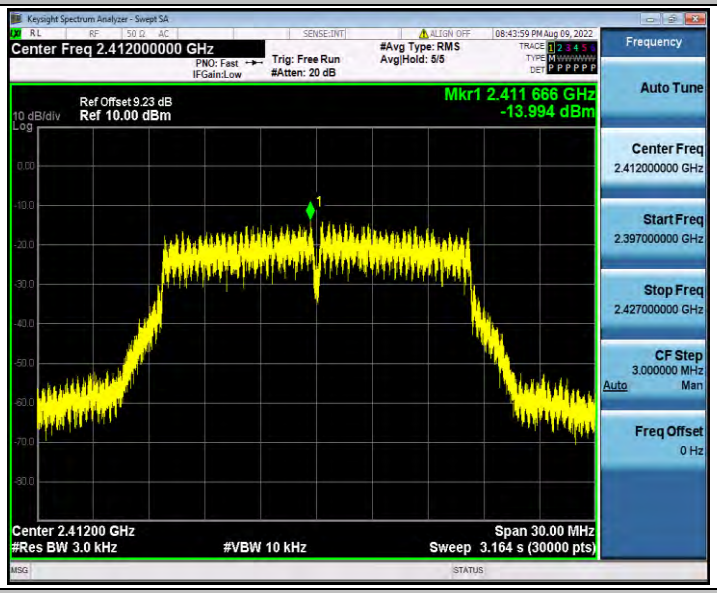
## Test Result

| TestMode | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | -11.84 | ≤8.00 | PASS |
| | | 2437 | -3.65 | ≤8.00 | PASS |
| | | 2462 | -9.91 | ≤8.00 | PASS |
| 11G | Ant1 | 2412 | -13.99 | ≤8.00 | PASS |
| | | 2437 | -7.35 | ≤8.00 | PASS |
| | | 2462 | -13.77 | ≤8.00 | PASS |
| 11N20SISO | Ant1 | 2412 | -13.9 | ≤8.00 | PASS |
| | | 2437 | -13.42 | ≤8.00 | PASS |
| | | 2462 | -13.66 | ≤8.00 | PASS |
| 11N40SISO | Ant1 | 2422 | -16.15 | ≤8.00 | PASS |
| | | 2437 | -12.03 | ≤8.00 | PASS |
| | | 2452 | -15.14 | ≤8.00 | PASS |

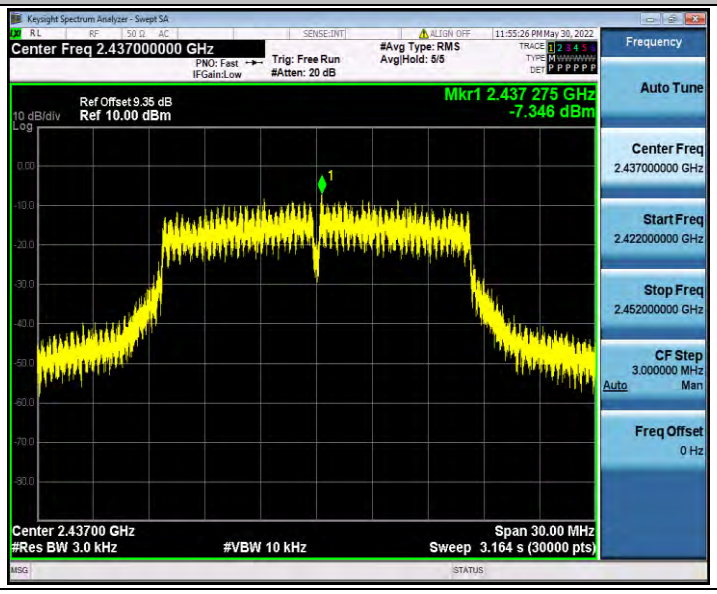
## Test Graphs

| 11B_Ant1_2412 |
| --- |
| |
| 11B_Ant1_2437 |
| |
| 11B_Ant1_2462 |

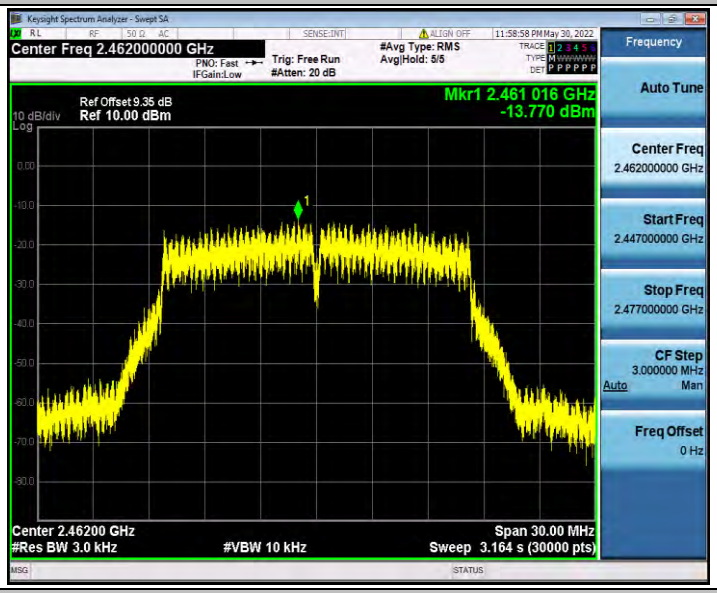
11G_Ant1_2412



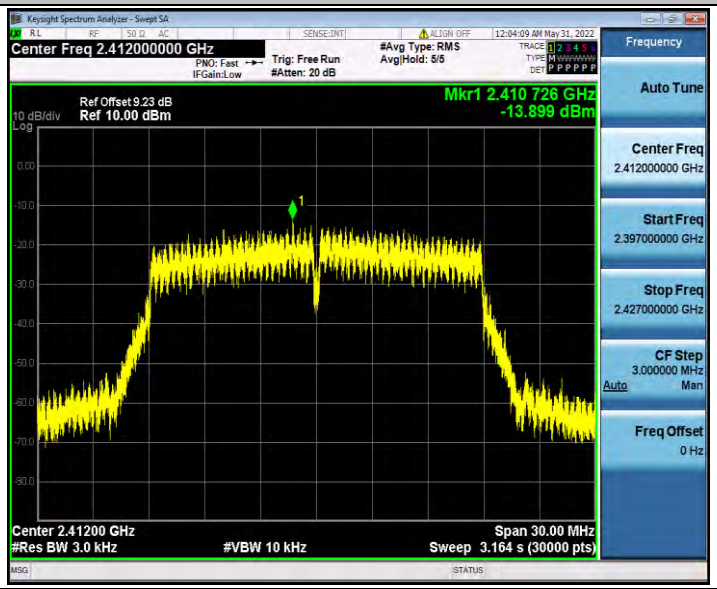

11G_Ant1_2437



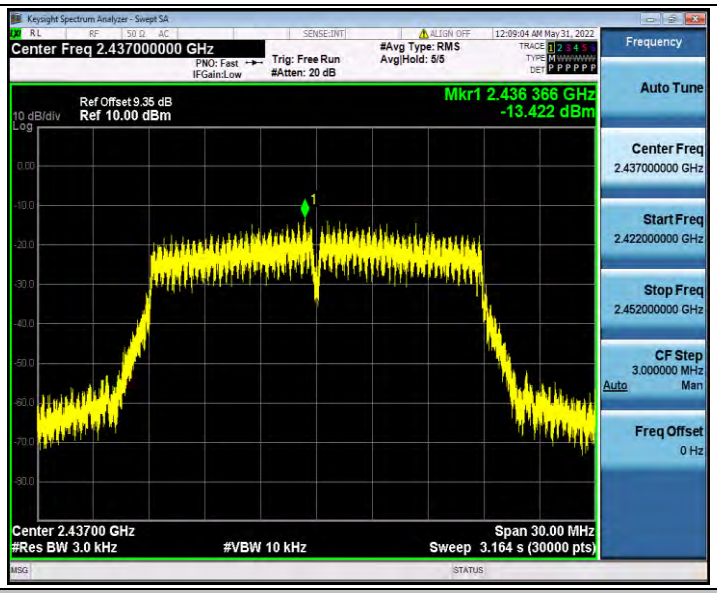
11G_Ant1_2462



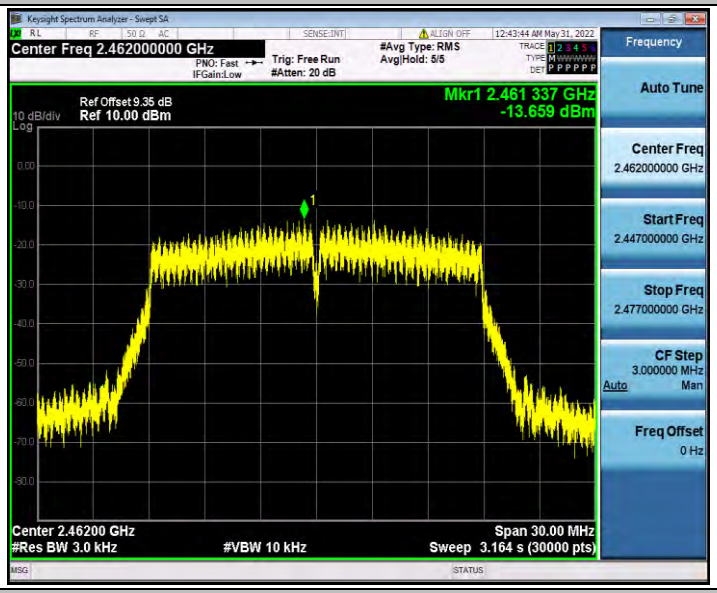

11N20SISO_Ant1_2412



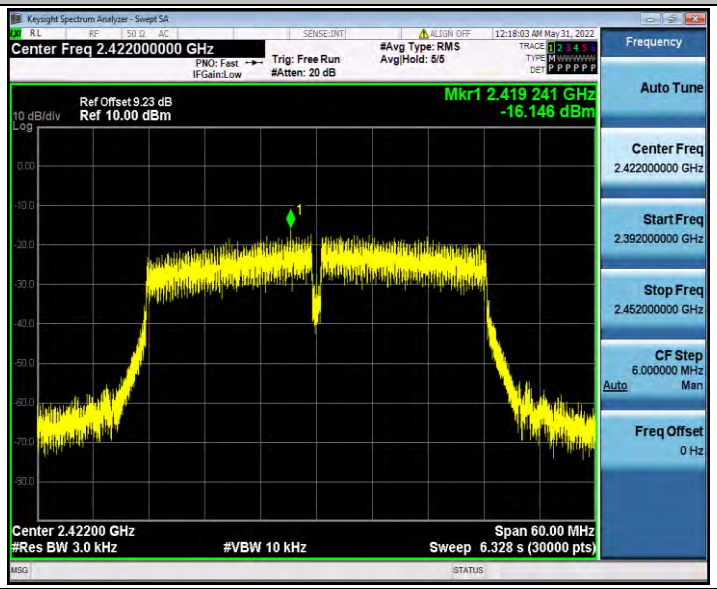

11N20SISO_Ant1_2437

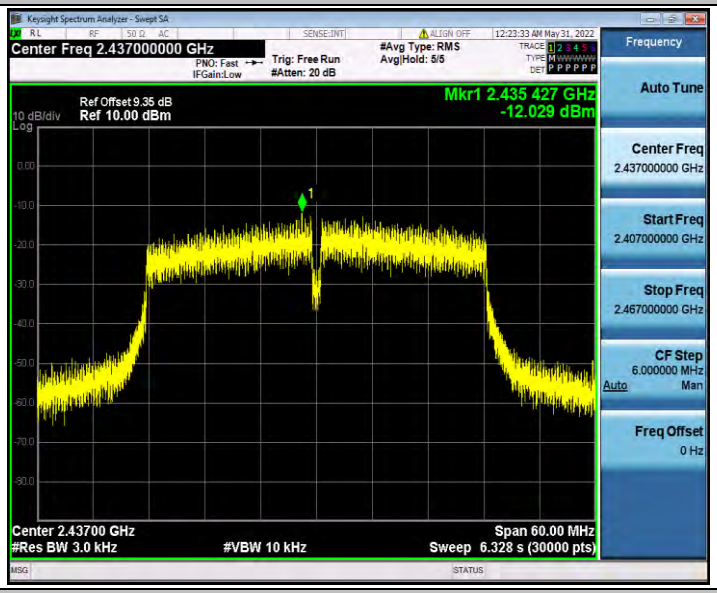



11N20SISO_Ant1_2462

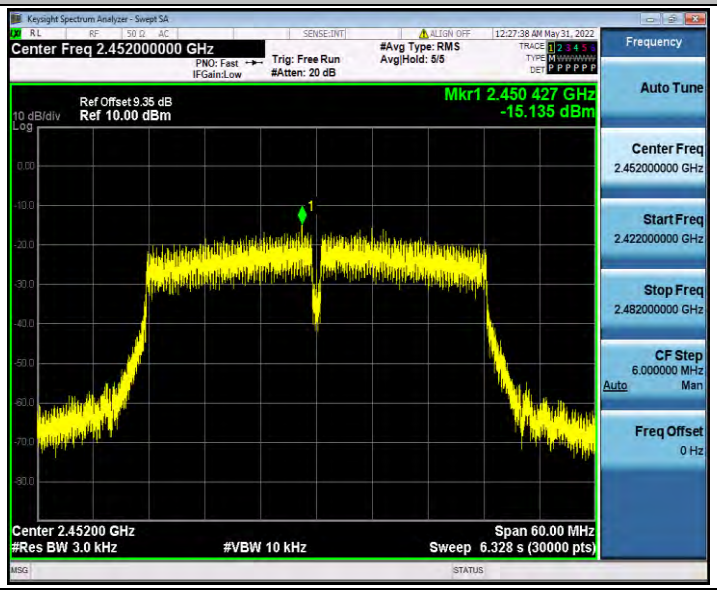



11N40SISO_Ant1_2422



| 11N40SISO_Ant1_2437 |
| --- |
|  |



| 11N40SISO_Ant1_2452 |
| --- |
|  |

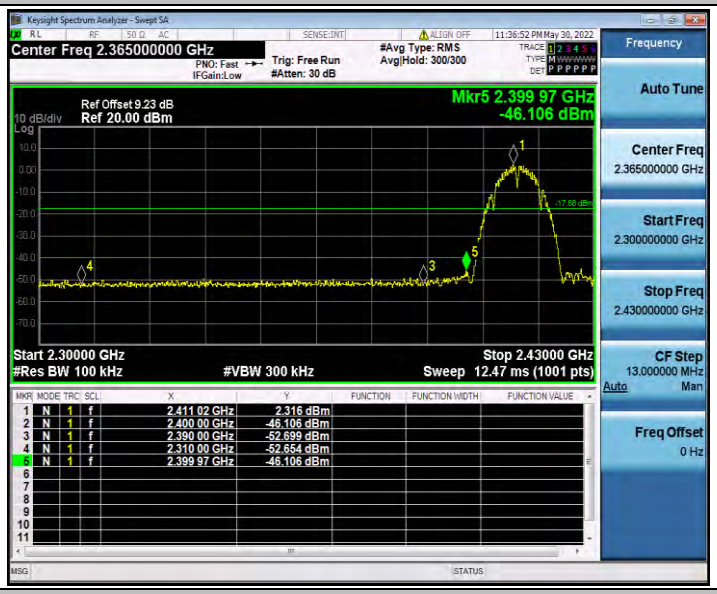
# Appendix C.4: Band edge measurements

## Test Result

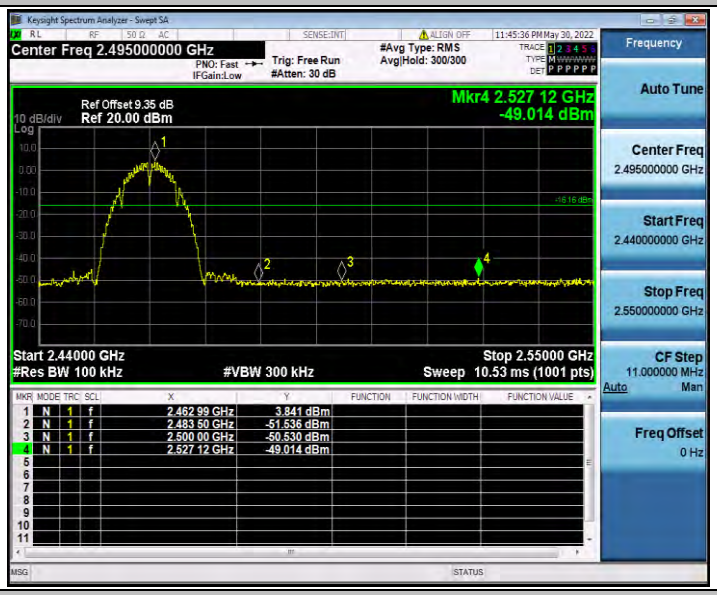
| TestMode | Antenna | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant1 | Low | 2412 | 2.32 | -46.11 | ≤-17.68 | PASS |
| | | High | 2462 | 3.84 | -49.01 | ≤-16.16 | PASS |
| 11G | Ant1 | Low | 2412 | -1.90 | -36.34 | ≤-21.9 | PASS |
| | | High | 2462 | -1.61 | -47.49 | ≤-21.61 | PASS |
| 11N20SISO | Ant1 | Low | 2412 | -3.22 | -38.19 | ≤-23.22 | PASS |
| | | High | 2462 | -1.93 | -48.46 | ≤-21.93 | PASS |
| 11N40SISO | Ant1 | Low | 2422 | -5.34 | -39.82 | ≤-25.34 | PASS |
| | | High | 2452 | -4.73 | -46.49 | ≤-24.73 | PASS |

## Test Graphs

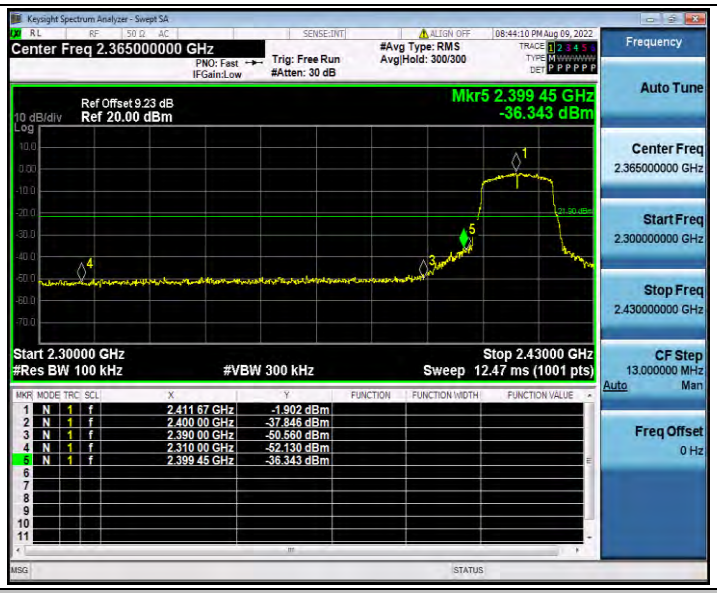
11B_Ant1_Low_2412



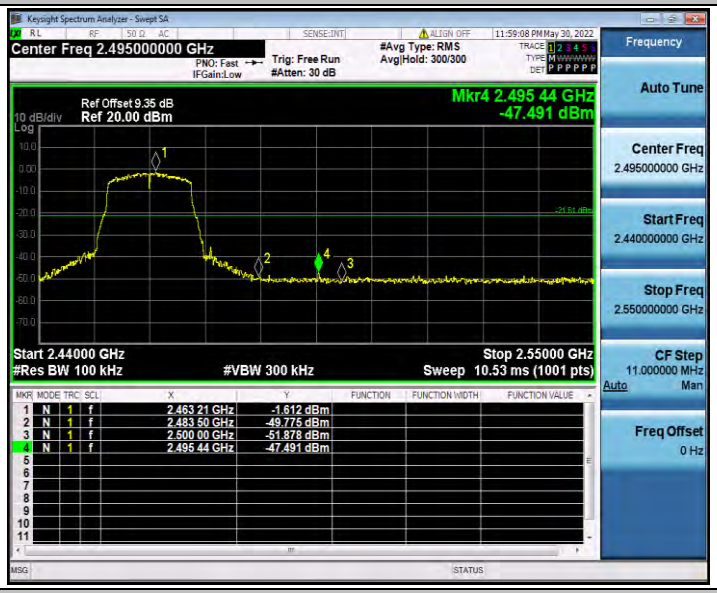

11B_Ant1_High_2462



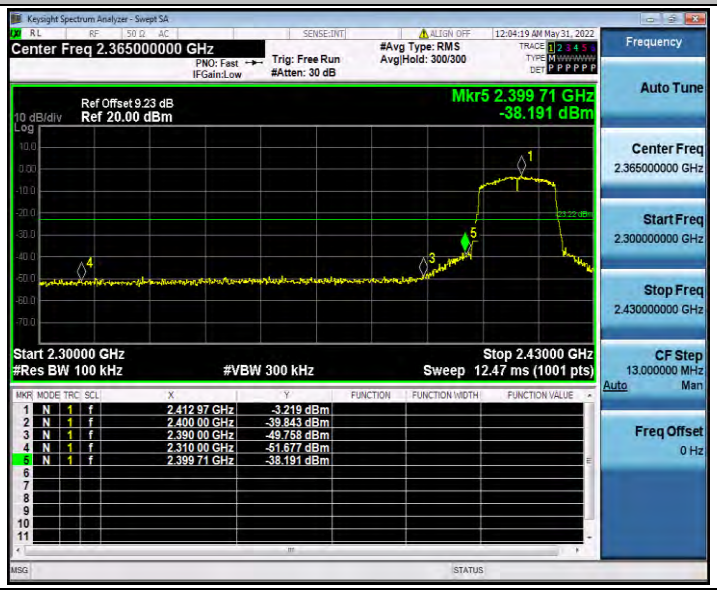

11G_Ant1_Low_2412



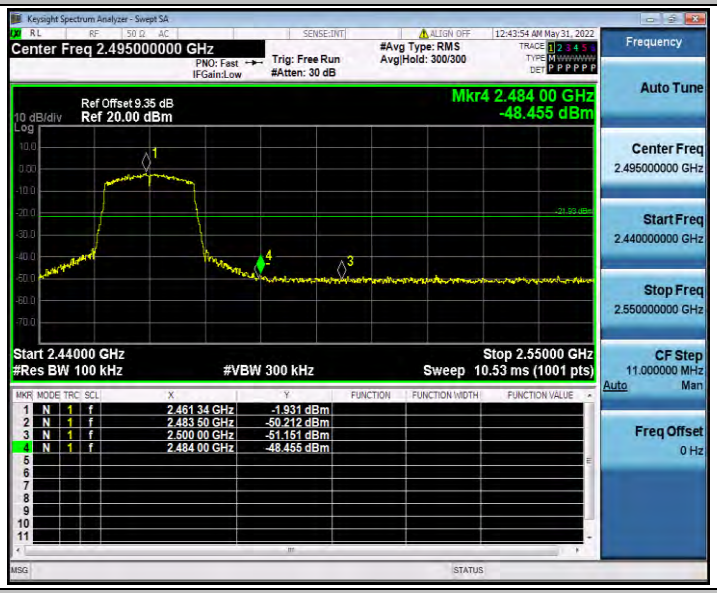

11G_Ant1_High_2462




11N20SISO_Ant1_Low_2412

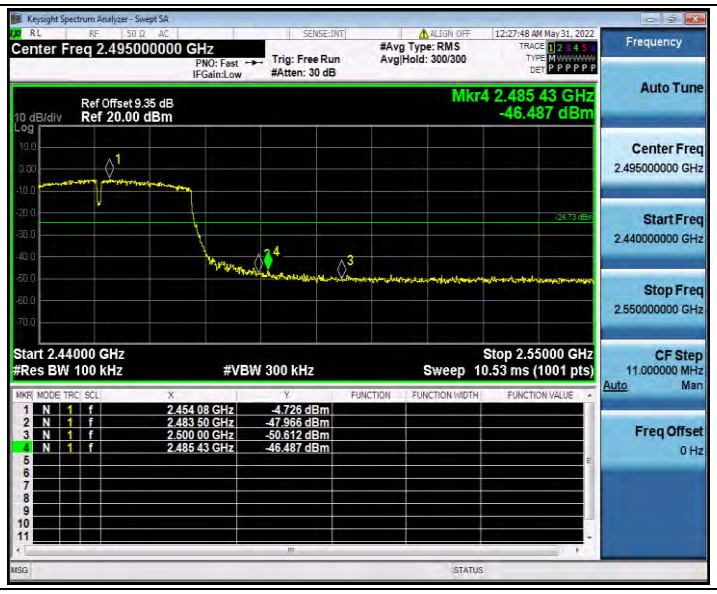


11N20SISO_Ant1_High_2462




11N40SISO_Ant1_Low_2422

11N40SISO_Ant1_High_2452


Keysight Spectrum Analyzer - Swept SA
Center Freq 2.495000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 300/300
12:27:48 AM May 31, 2022
Ref Offset 9.35 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr4 2.485 43 GHz
-46.487 dBm
Start 2.44000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.55000 GHz
Sweep 10.53 ms (1001 pts)
1 N 1 f 2.454 08 GHz -4.726 dBm
2 N 1 f 2.483 50 GHz -47.966 dBm
3 N 1 f 2.500 00 GHz -50.612 dBm
4 N 1 f 2.485 43 GHz -46.487 dBm
Frequency
Auto Tune
Center Freq
2.495000000 GHz
Start Freq
2.440000000 GHz
Stop Freq
2.550000000 GHz
CF Step
11.000000 MHz
Auto
Man
Freq Offset
0 Hz

# Appendix C.5: Conducted Spurious Emission

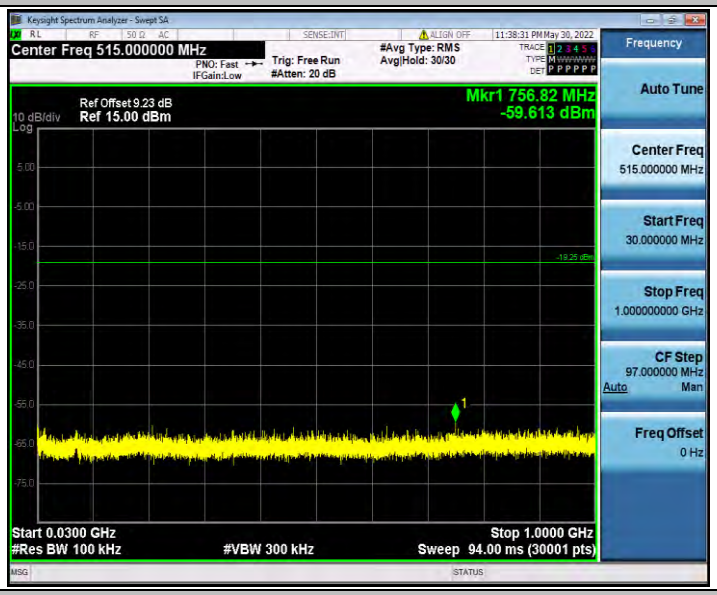
## Test Result

| TestMode | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | Reference | 0.75 | 0.75 | --- | PASS |
| | | | 30~1000 | 0.75 | -59.61 | ≤-19.25 | PASS |
| | | | 1000~26500 | 0.75 | -47.39 | ≤-19.25 | PASS |
| | | 2437 | Reference | 8.91 | 8.91 | --- | PASS |
| | | | 30~1000 | 8.91 | -58.81 | ≤-11.09 | PASS |
| | | | 1000~26500 | 8.91 | -41.31 | ≤-11.09 | PASS |
| | | 2462 | Reference | 1.99 | 1.99 | --- | PASS |
| | | | 30~1000 | 1.99 | -58.99 | ≤-18.01 | PASS |
| | | | 1000~26500 | 1.99 | -47.46 | ≤-18.01 | PASS |
| 11G | Ant1 | 2412 | Reference | -2.36 | -2.36 | --- | PASS |
| | | | 30~1000 | -2.36 | -59.38 | ≤-22.36 | PASS |
| | | | 1000~26500 | -2.36 | -47.51 | ≤-22.36 | PASS |
| | | 2437 | Reference | 3.38 | 3.38 | --- | PASS |
| | | | 30~1000 | 3.38 | -59.44 | ≤-16.62 | PASS |
| | | | 1000~26500 | 3.38 | -47.58 | ≤-16.62 | PASS |
| | | 2462 | Reference | -2.29 | -2.29 | --- | PASS |
| | | | 30~1000 | -2.29 | -58.67 | ≤-22.29 | PASS |
| | | | 1000~26500 | -2.29 | -47.65 | ≤-22.29 | PASS |
| 11N20SISO | Ant1 | 2412 | Reference | -3.99 | -3.99 | --- | PASS |
| | | | 30~1000 | -3.99 | -59.22 | ≤-23.99 | PASS |
| | | | 1000~26500 | -3.99 | -47.73 | ≤-23.99 | PASS |
| | | 2437 | Reference | -3.50 | -3.50 | --- | PASS |
| | | | 30~1000 | -3.50 | -59.98 | ≤-23.5 | PASS |
| | | | 1000~26500 | -3.50 | -47.88 | ≤-23.5 | PASS |
| | | 2462 | Reference | -3.04 | -3.04 | --- | PASS |
| | | | 30~1000 | -3.04 | -60.49 | ≤-23.04 | PASS |
| | | | 1000~26500 | -3.04 | -47.47 | ≤-23.04 | PASS |
| 11N40SISO | Ant1 | 2422 | Reference | -5.78 | -5.78 | --- | PASS |
| | | | 30~1000 | -5.78 | -59.81 | ≤-25.78 | PASS |
| | | | 1000~26500 | -5.78 | -47.53 | ≤-25.78 | PASS |
| | | 2437 | Reference | -1.86 | -1.86 | --- | PASS |
| | | | 30~1000 | -1.86 | -51.75 | ≤-21.86 | PASS |
| | | | 1000~26500 | -1.86 | -46.95 | ≤-21.86 | PASS |
| | | 2452 | Reference | -5.39 | -5.39 | --- | PASS |
| | | | 30~1000 | -5.39 | -60.05 | ≤-25.39 | PASS |
| | | | 1000~26500 | -5.39 | -47.43 | ≤-25.39 | PASS |

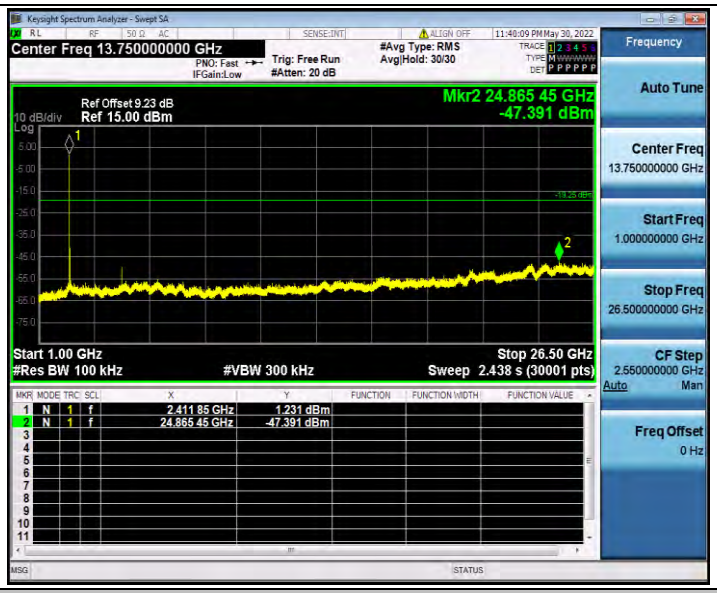
## Test Graphs

11B_Ant1_2412_0~Reference

11B_Ant1_2412_30~1000

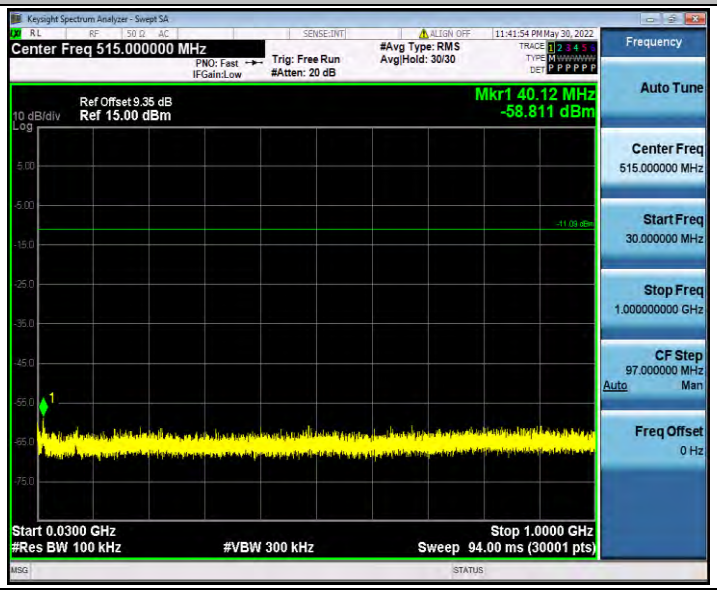



11B_Ant1_2412_1000~26500

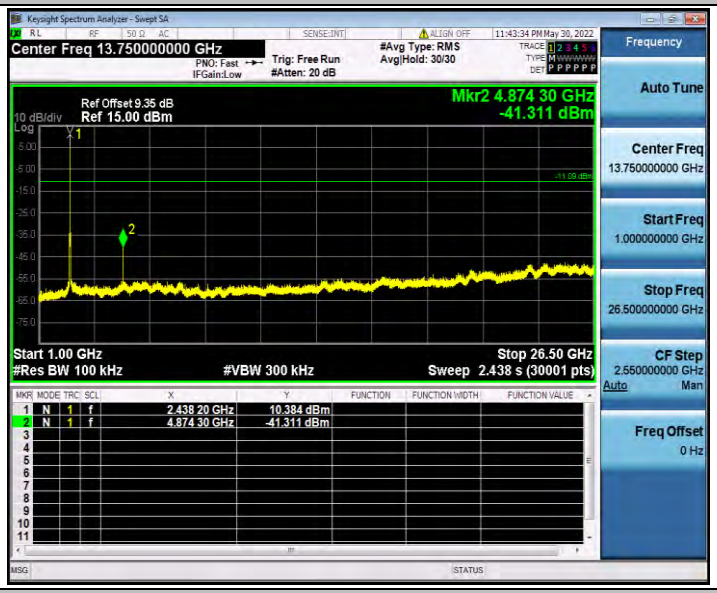



11B_Ant1_2437_0~Reference

11B_Ant1_2437_30~1000

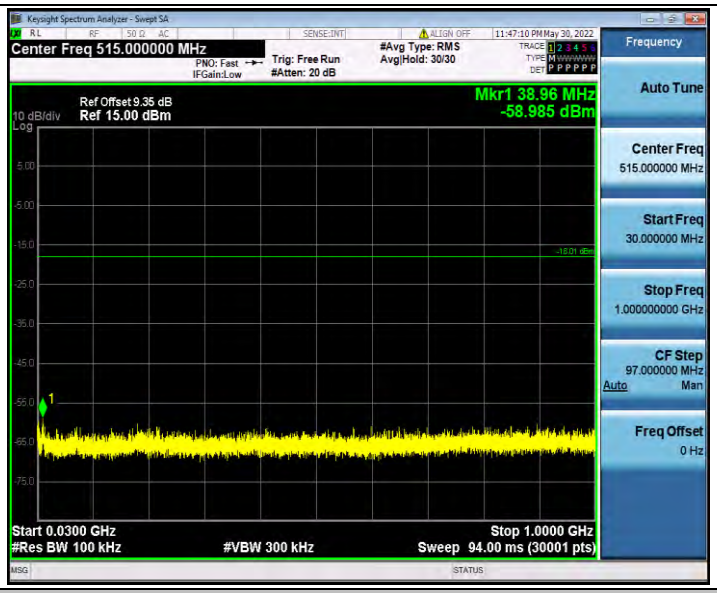


11B_Ant1_2437_1000~26500

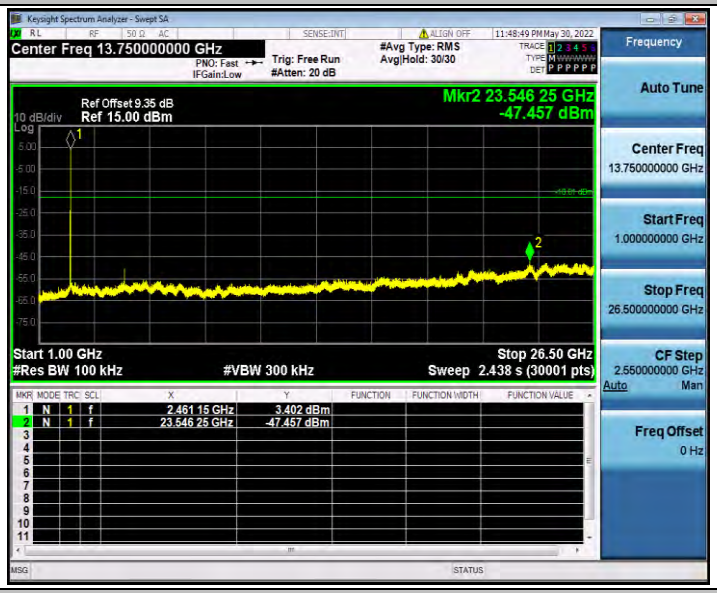



11B_Ant1_2462_0~Reference

11B_Ant1_2462_30~1000



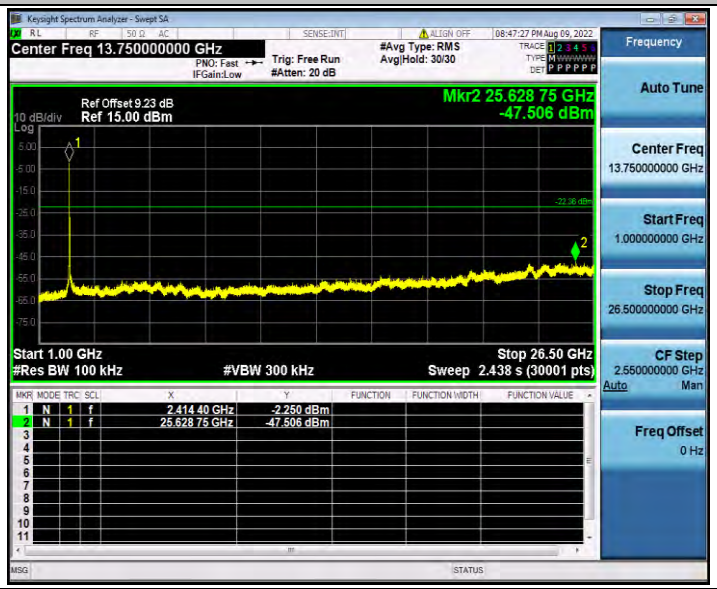

11B_Ant1_2462_1000~26500




11G_Ant1_2412_0~Reference

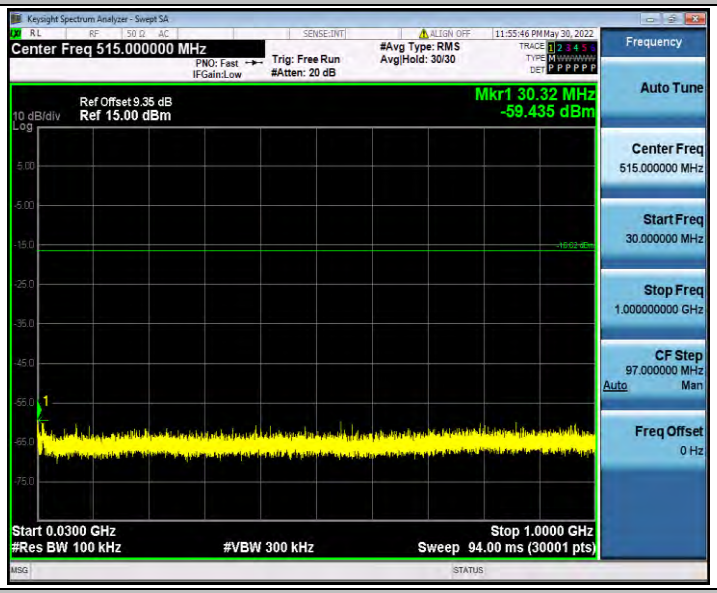
11G_Ant1_2412_30~1000

11G_Ant1_2412_1000~26500

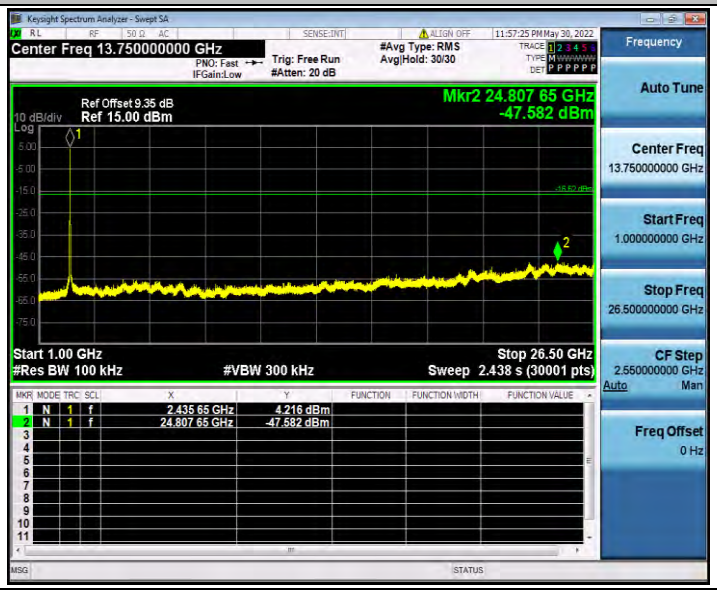



11G_Ant1_2437_0~Reference

11G_Ant1_2437_30~1000

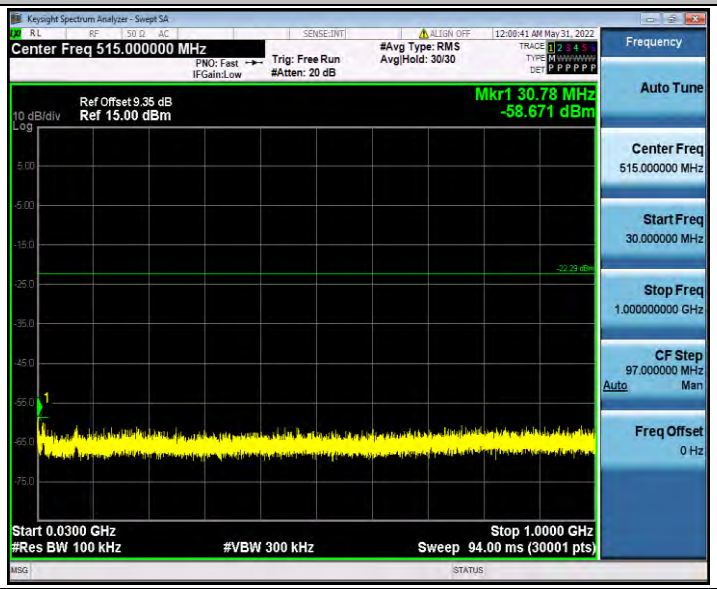



11G_Ant1_2437_1000~26500

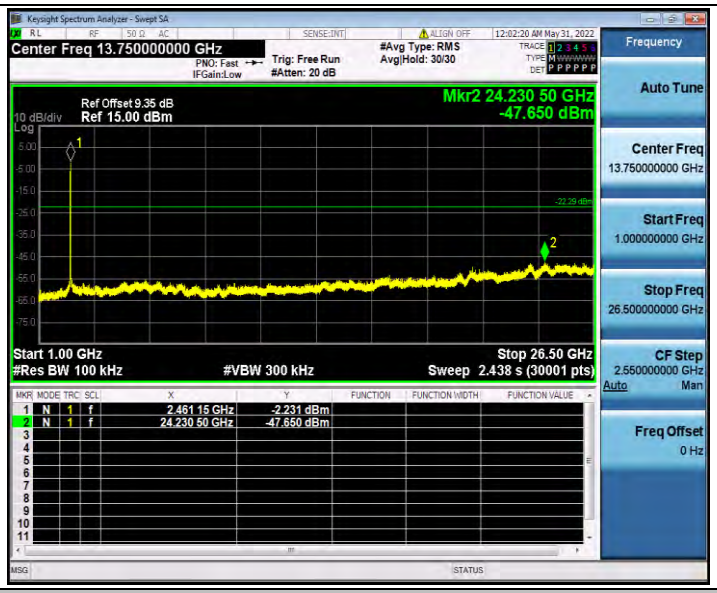


11G_Ant1_2462_0~Reference

11G_Ant1_2462_30~1000

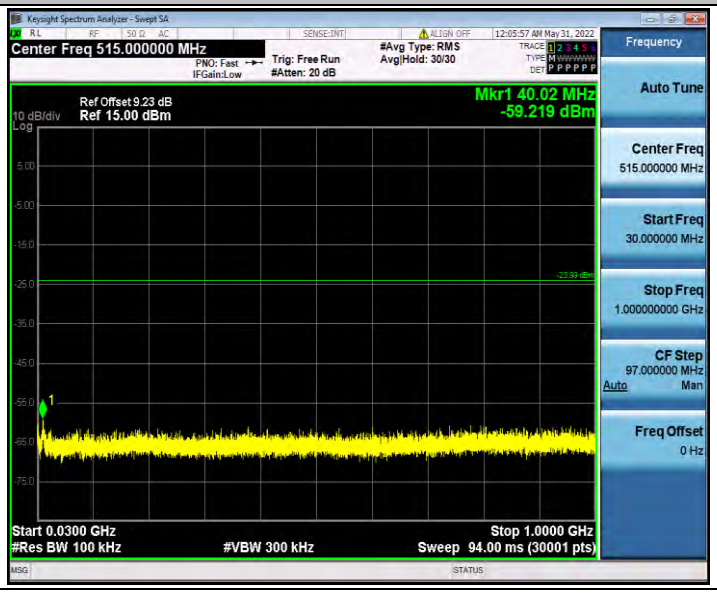



11G_Ant1_2462_1000~26500

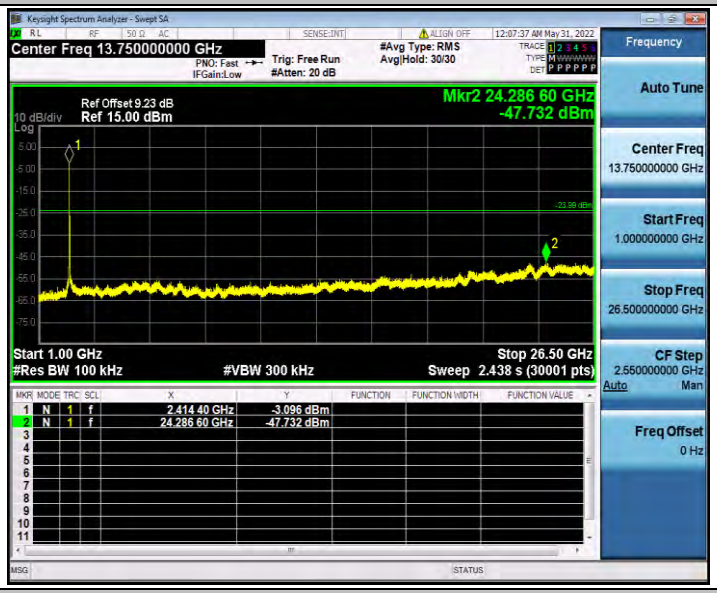



11N20SISO_Ant1_2412_0~Reference

11N20SISO_Ant1_2412_30~1000

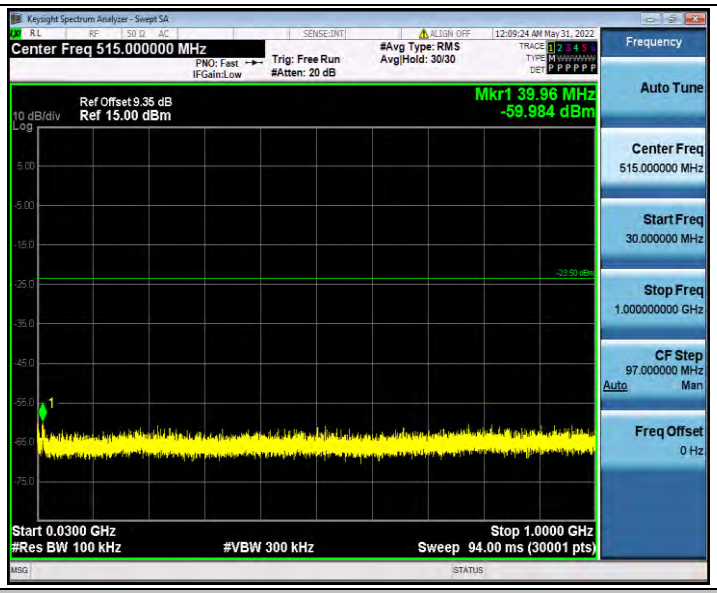


11N20SISO_Ant1_2412_1000~26500

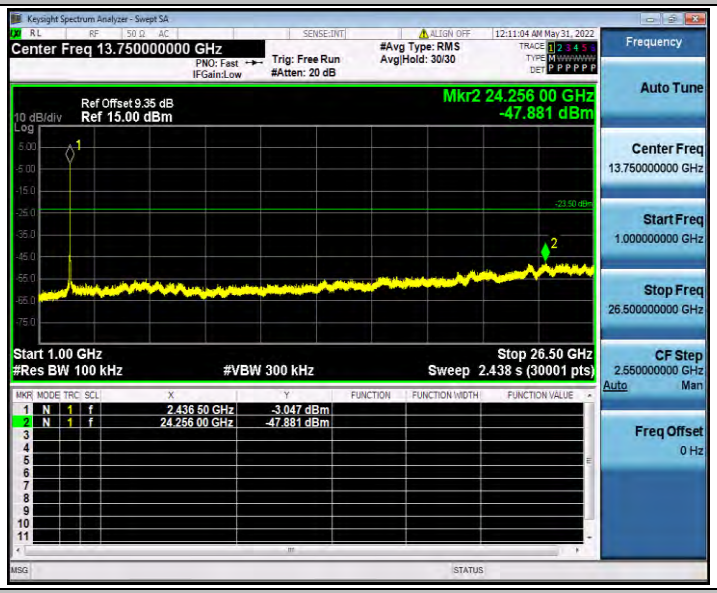



11N20SISO_Ant1_2437_0~Reference

11N20SISO_Ant1_2437_30~1000




11N20SISO_Ant1_2437_1000~26500



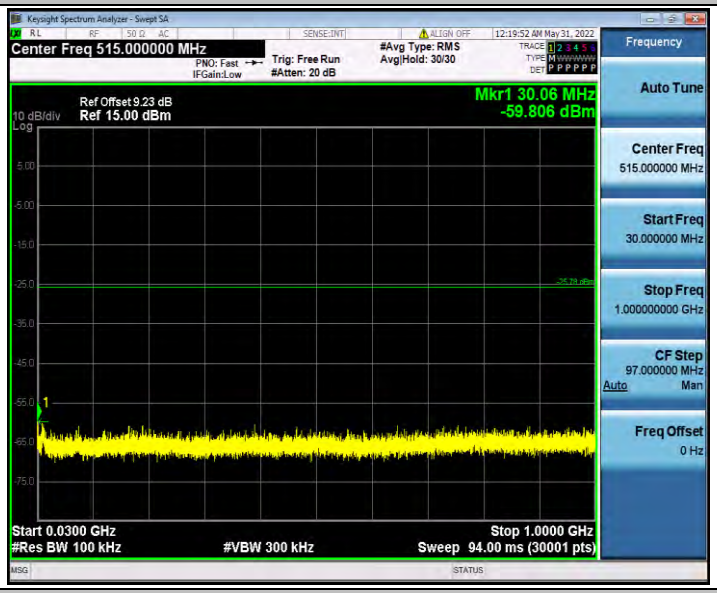

11N20SISO_Ant1_2462_0~Reference

11N20SISO_Ant1_2462_30~1000

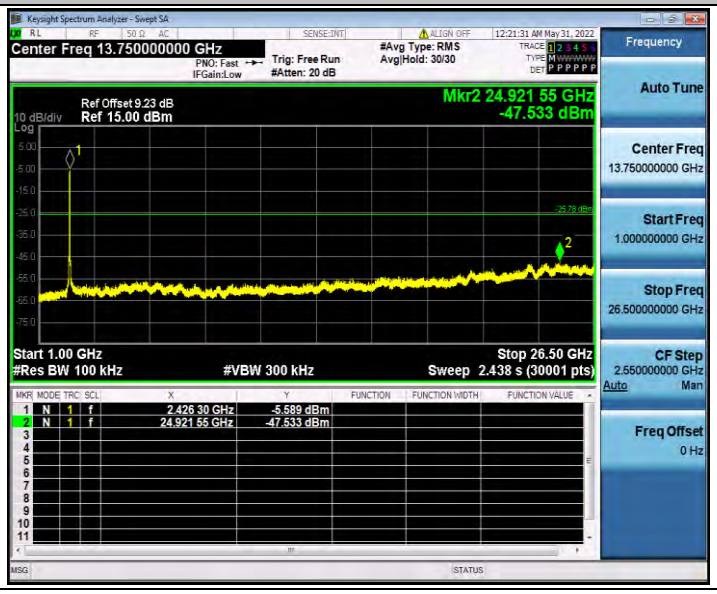
11N20SISO_Ant1_2462_1000~26500

11N40SISO_Ant1_2422_0~Reference

11N40SISO_Ant1_2422_30~1000

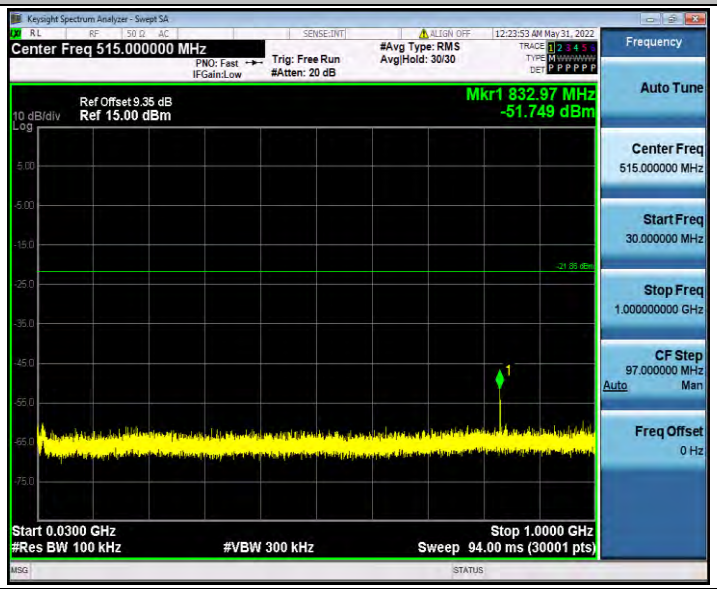



11N40SISO_Ant1_2422_1000~26500

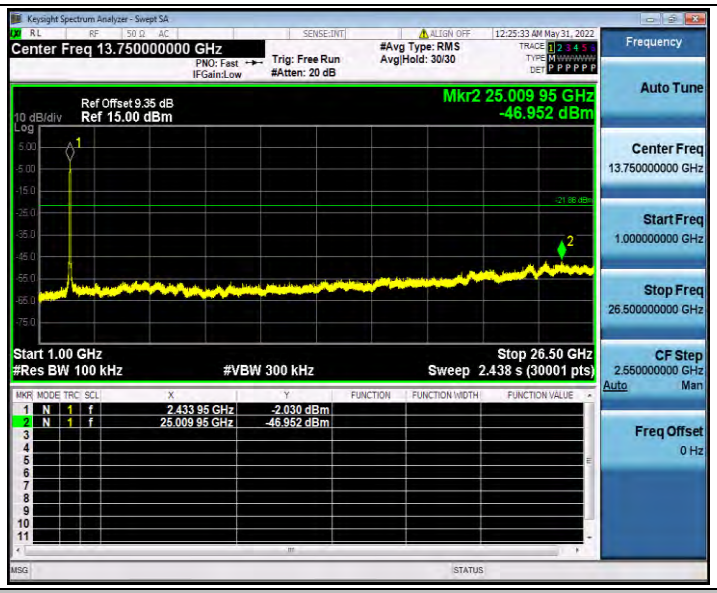


11N40SISO_Ant1_2437_0~Reference

11N40SISO_Ant1_2437_30~1000

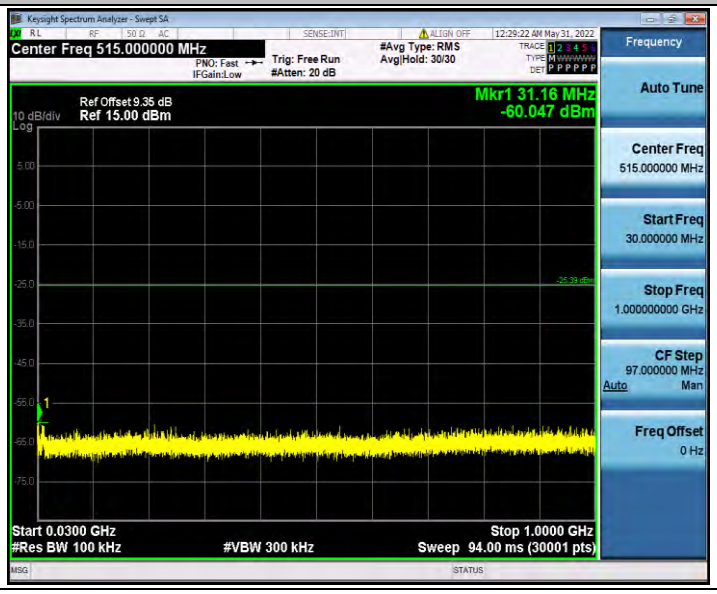


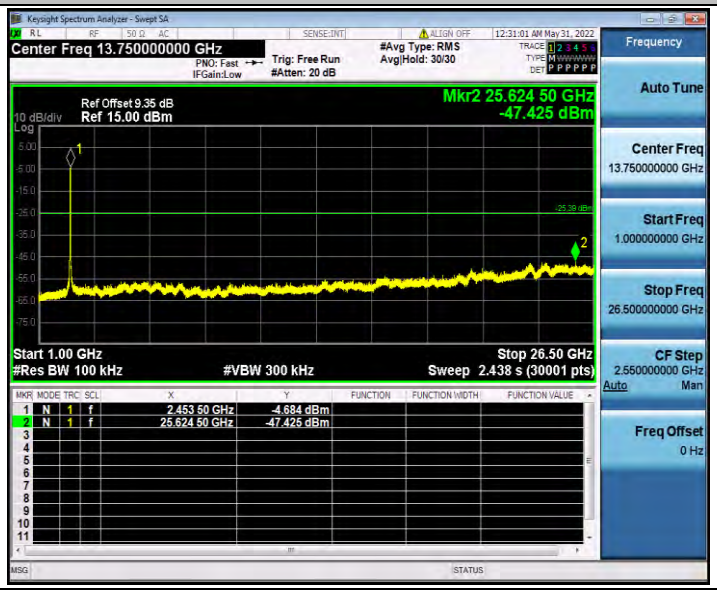

11N40SISO_Ant1_2437_1000~26500




11N40SISO_Ant1_2452_0~Reference

11N40SISO_Ant1_2452_30~1000



| 11N40SISO_Ant1_2452_1000~26500 |
| --- |
|  |