

| |
|---|
| Case No. : <u>GTS20231018011-1-17</u> |
| Ambient Condition: <u>23</u> °C, <u>49</u> %RH, Atmos100.1Kpa, |
| Test Date: <u>2023.12.4</u> Test Engineer: <u>Evan ouyang</u> |

Appendix C.1: DTS Bandwidth

Test Result

| Test Mode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B | Ant1 | 2412 | 7.600 | 2408.440 | 2416.040 | 0.5 | PASS |
| | | 2437 | 8.080 | 2432.960 | 2441.040 | 0.5 | PASS |
| | | 2462 | 8.080 | 2458.440 | 2466.520 | 0.5 | PASS |
| 11G | Ant1 | 2412 | 16.200 | 2403.960 | 2420.160 | 0.5 | PASS |
| | | 2437 | 15.280 | 2429.240 | 2444.520 | 0.5 | PASS |
| | | 2462 | 15.720 | 2454.440 | 2470.160 | 0.5 | PASS |
| 11N20SISO | Ant1 | 2412 | 16.640 | 2404.120 | 2420.760 | 0.5 | PASS |
| | | 2437 | 15.440 | 2429.120 | 2444.560 | 0.5 | PASS |
| | | 2462 | 12.520 | 2457.000 | 2469.520 | 0.5 | PASS |
| 11N40SISO | Ant1 | 2422 | 23.840 | 2414.480 | 2438.320 | 0.5 | PASS |
| | | 2437 | 32.560 | 2422.040 | 2454.600 | 0.5 | PASS |
| | | 2452 | 35.680 | 2433.840 | 2469.520 | 0.5 | PASS |

Test Graphs



11B_Ant1_2412



11B_Ant1_2437



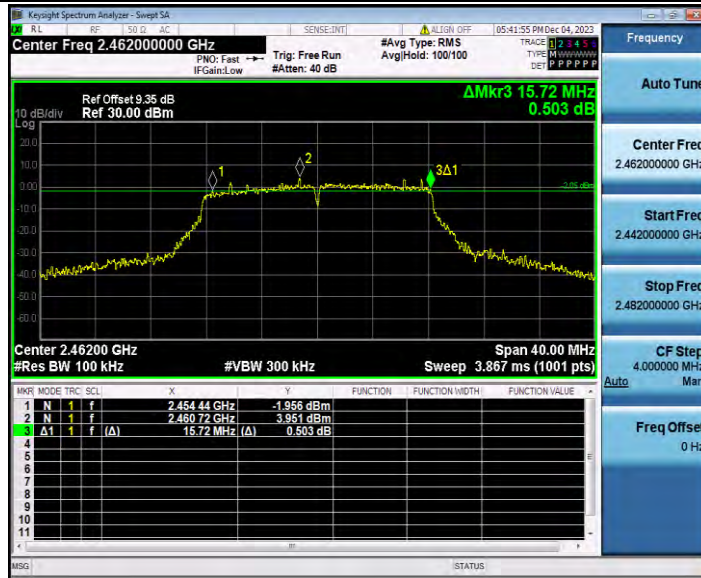
11B_Ant1_2462



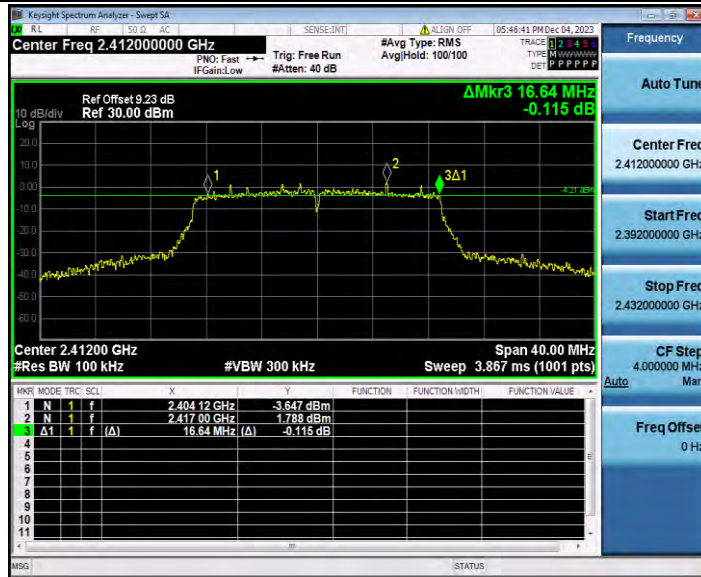
11G_Ant1_2412



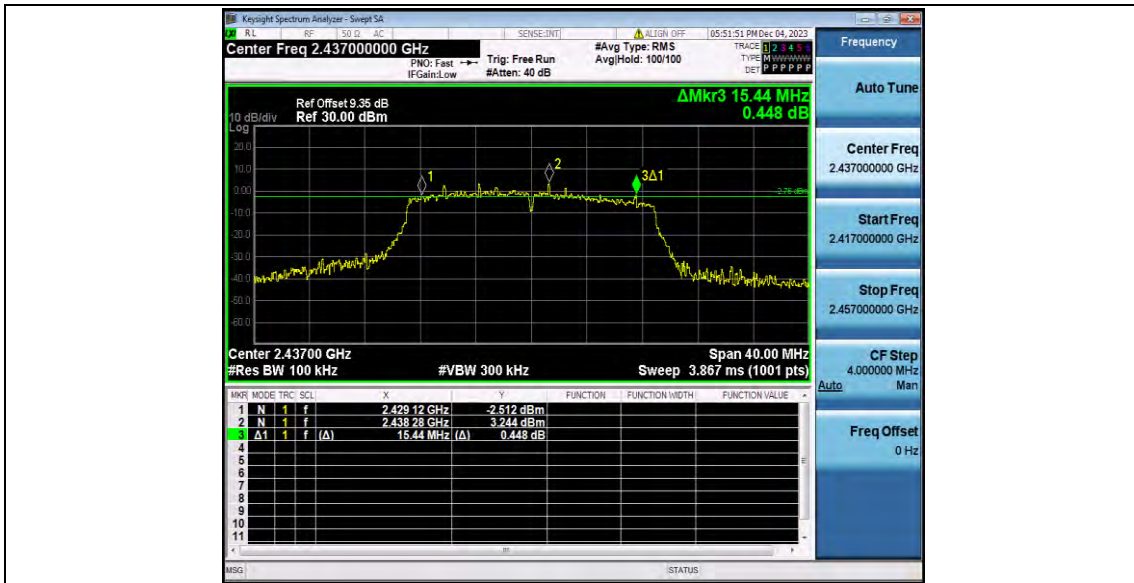
11G_Ant1_2437



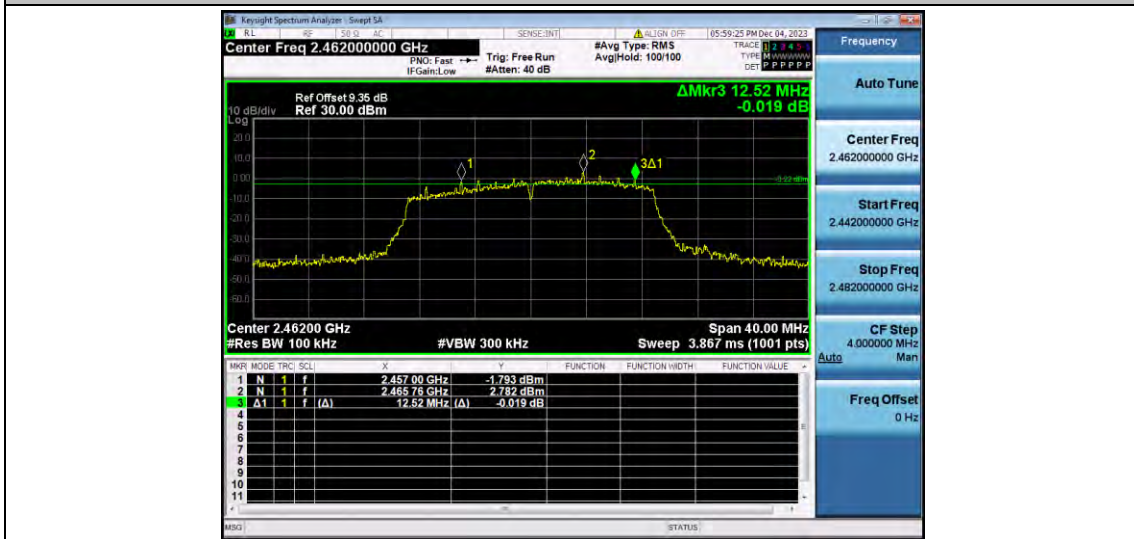
11G_Ant1_2462



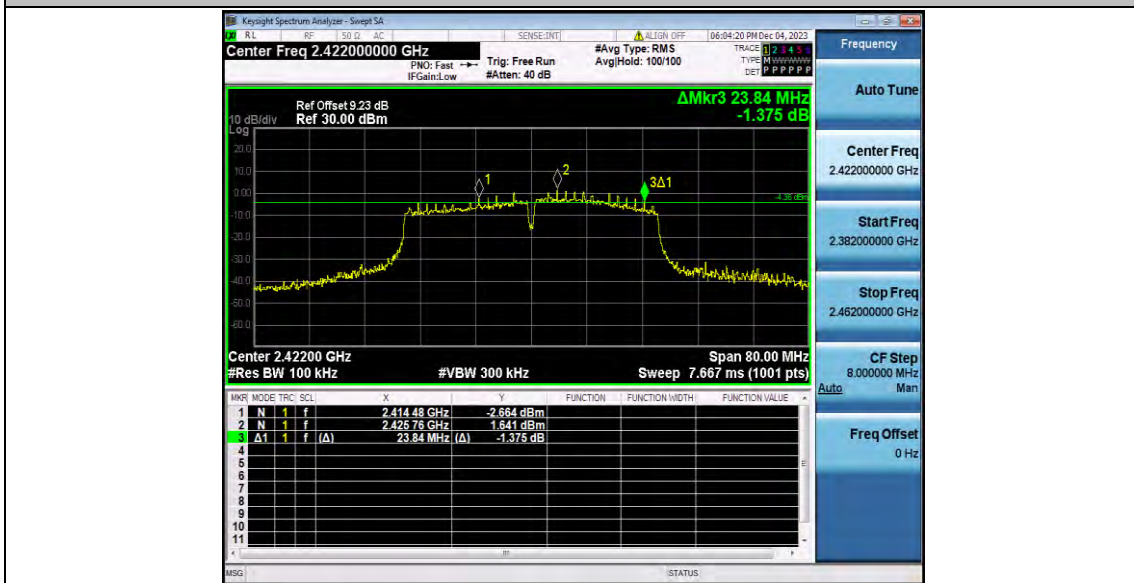
11N20SISO_Ant1_2412



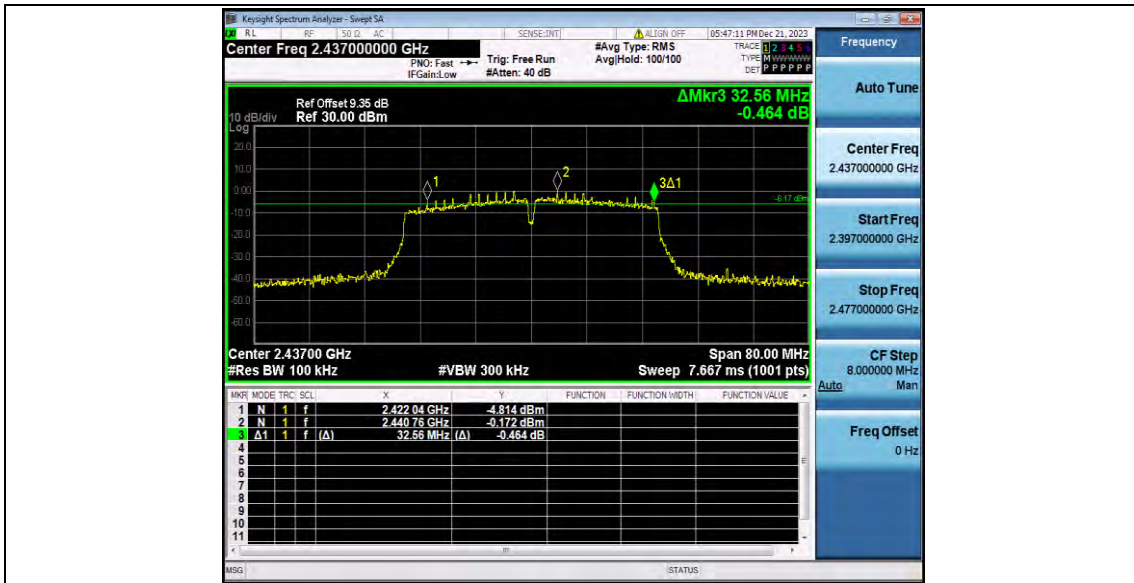
11N20SISO_Ant1_2437



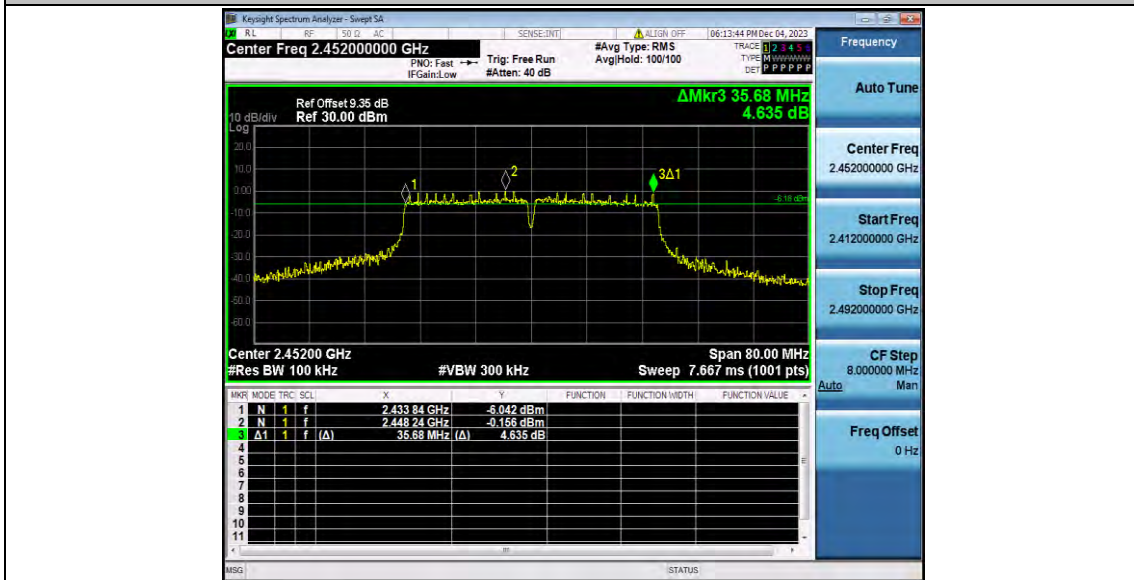
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix C.2: Occupied Channel Bandwidth

Test Result

| Test Mode | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|------------------------|-----------|----------|----------|------------|---------|
| 11B | Ant1 | 2412 | 13.771 | 2405.217 | 2418.988 | --- | --- |
| | | 2437 | 13.327 | 2430.079 | 2443.406 | --- | --- |
| | | 2462 | 13.402 | 2455.542 | 2468.944 | --- | --- |
| 11G | Ant1 | 2412 | 17.097 | 2403.503 | 2420.600 | --- | --- |
| | | 2437 | 16.794 | 2428.465 | 2445.259 | --- | --- |
| | | 2462 | 16.884 | 2453.708 | 2470.592 | --- | --- |
| 11N20SISO | Ant1 | 2412 | 18.034 | 2403.043 | 2421.077 | --- | --- |
| | | 2437 | 17.761 | 2428.008 | 2445.769 | --- | --- |
| | | 2462 | 17.807 | 2453.246 | 2471.053 | --- | --- |
| 11N40SISO | Ant1 | 2422 | 35.896 | 2404.124 | 2440.020 | --- | --- |
| | | 2437 | 36.059 | 2419.165 | 2455.224 | --- | --- |
| | | 2452 | 36.764 | 2433.609 | 2470.373 | --- | --- |

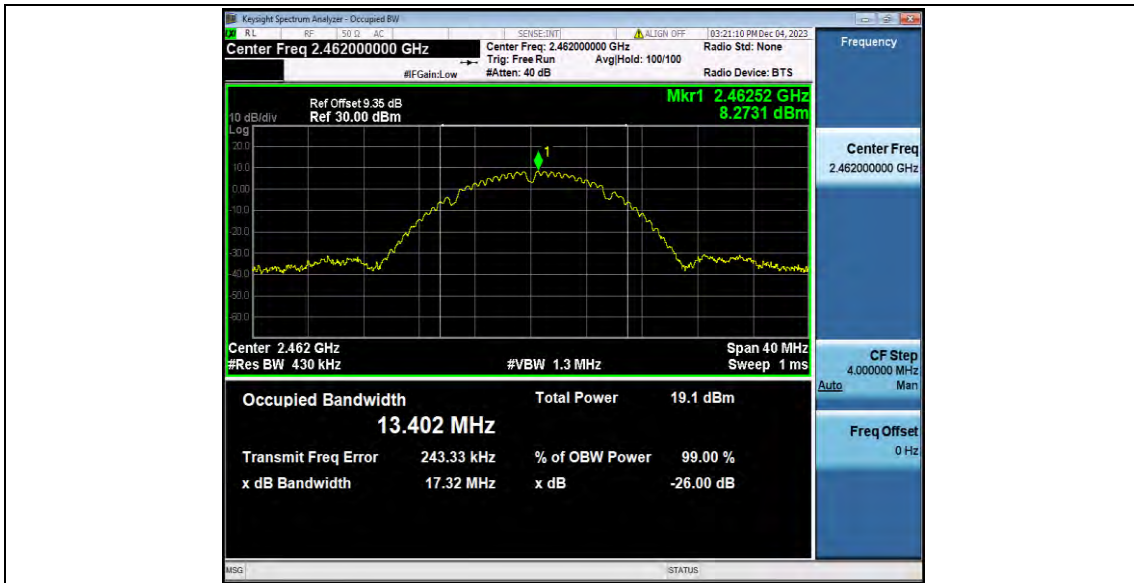
Test Graphs



11B_Ant1_2412



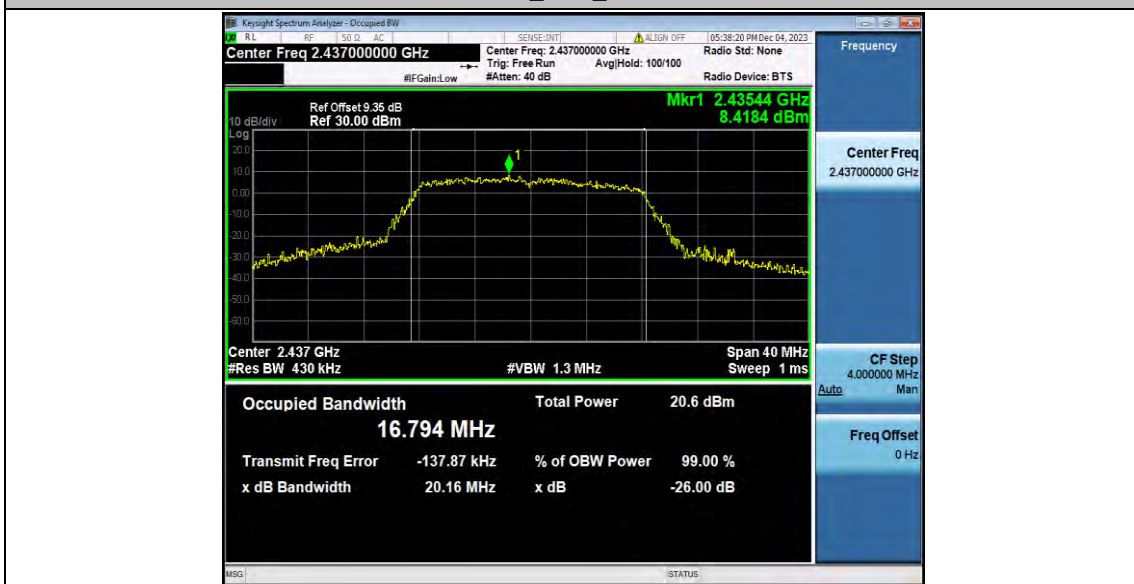
11B_Ant1_2437



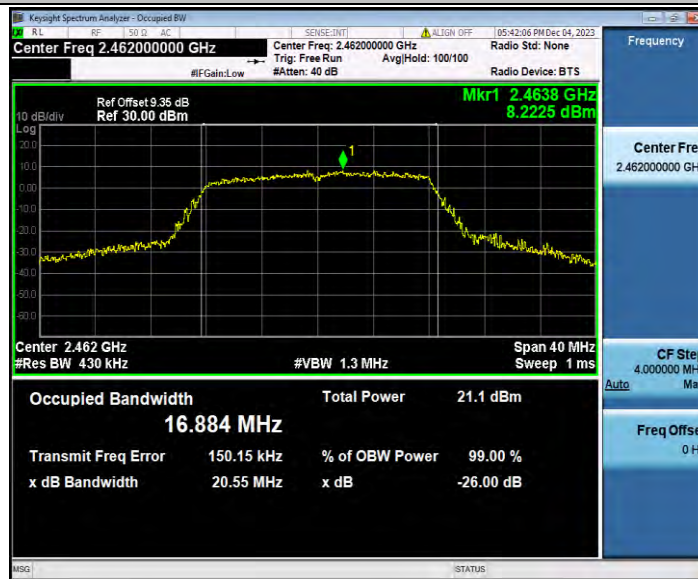
11B_Ant1_2462



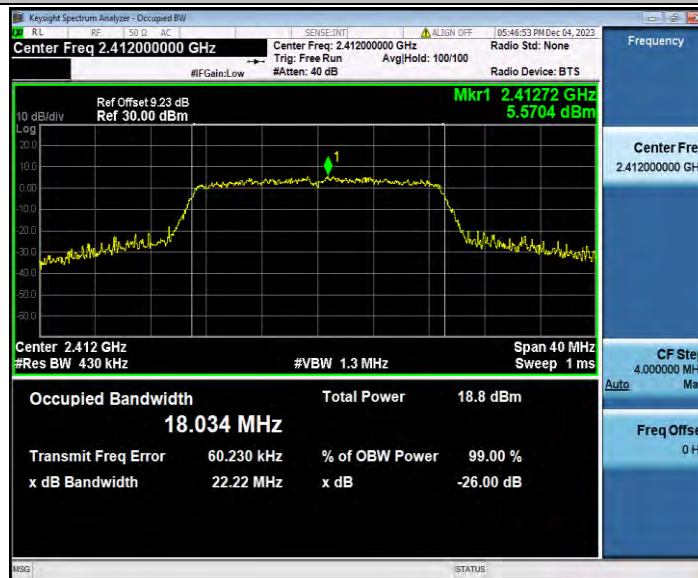
11G_Ant1_2412



11G_Ant1_2437



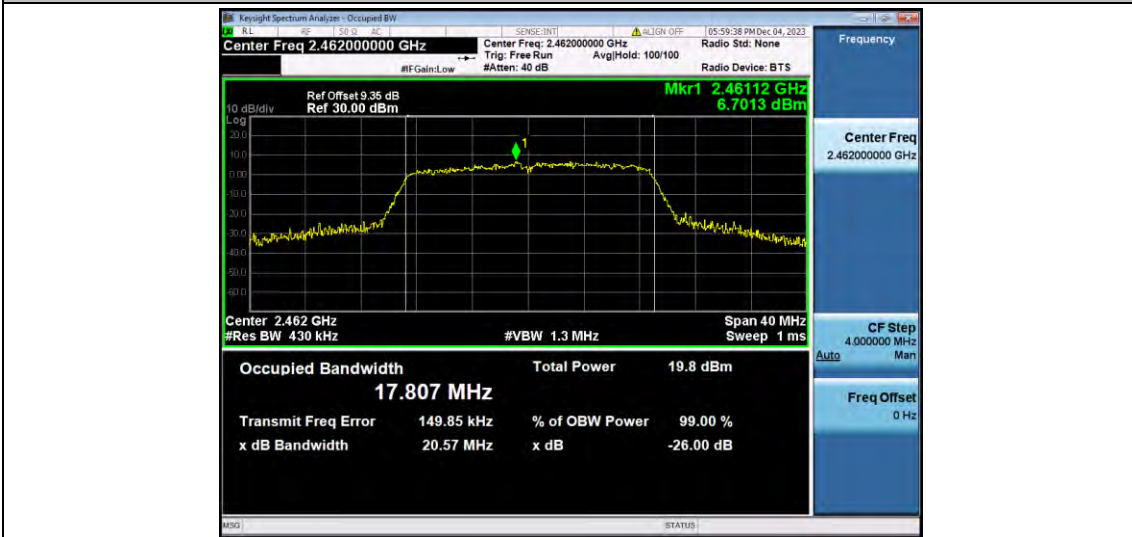
11G_Ant1_2462



11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



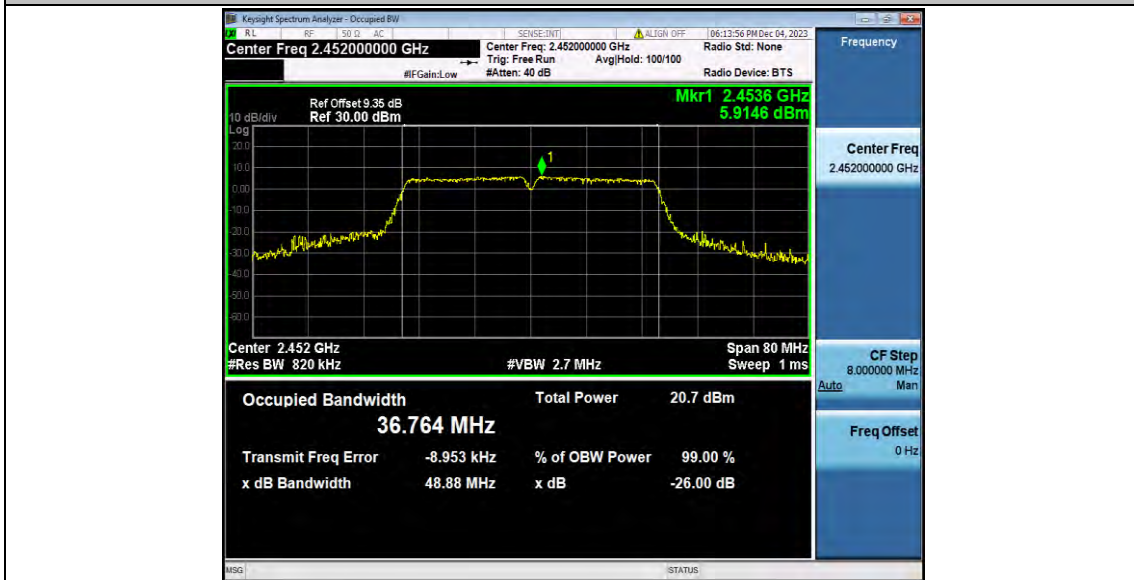
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



11N40SISO_Ant1_2452

Appendix C.3: Maximum conducted output power

Test Result Peak

| Test Mode | Antenna | Frequency[M Hz] | Peak Power[dBm] | Conducted Limit[dBm] | Verdict |
|-----------|---------|-----------------|-----------------|----------------------|---------|
| 11B | Ant1 | 2412 | 17.76 | ≤30.00 | PASS |
| | | 2437 | 18.07 | ≤30.00 | PASS |
| | | 2462 | 19.11 | ≤30.00 | PASS |
| 11G | Ant1 | 2412 | 20.90 | ≤30.00 | PASS |
| | | 2437 | 21.82 | ≤30.00 | PASS |
| | | 2462 | 22.15 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 2412 | 20.19 | ≤30.00 | PASS |
| | | 2437 | 21.11 | ≤30.00 | PASS |
| | | 2462 | 20.88 | ≤30.00 | PASS |
| 11N40SISO | Ant1 | 2422 | 20.54 | ≤30.00 | PASS |
| | | 2437 | 20.59 | ≤30.00 | PASS |
| | | 2452 | 20.99 | ≤30.00 | PASS |

Appendix C.4: Maximum power spectral density

Test Result

| Test Mode | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|----------------|----------------------|-----------------|---------|
| 11B | Ant1 | 2412 | -8 | ≤8.00 | PASS |
| | | 2437 | -7.9 | ≤8.00 | PASS |
| | | 2462 | -6.7 | ≤8.00 | PASS |
| 11G | Ant1 | 2412 | -13.11 | ≤8.00 | PASS |
| | | 2437 | -10.01 | ≤8.00 | PASS |
| | | 2462 | -10.93 | ≤8.00 | PASS |
| 11N20SISO | Ant1 | 2412 | -14.05 | ≤8.00 | PASS |
| | | 2437 | -11.18 | ≤8.00 | PASS |
| | | 2462 | -13.29 | ≤8.00 | PASS |
| 11N40SISO | Ant1 | 2422 | -13.35 | ≤8.00 | PASS |
| | | 2437 | -14.55 | ≤8.00 | PASS |
| | | 2452 | -14.95 | ≤8.00 | PASS |

Test Graphs



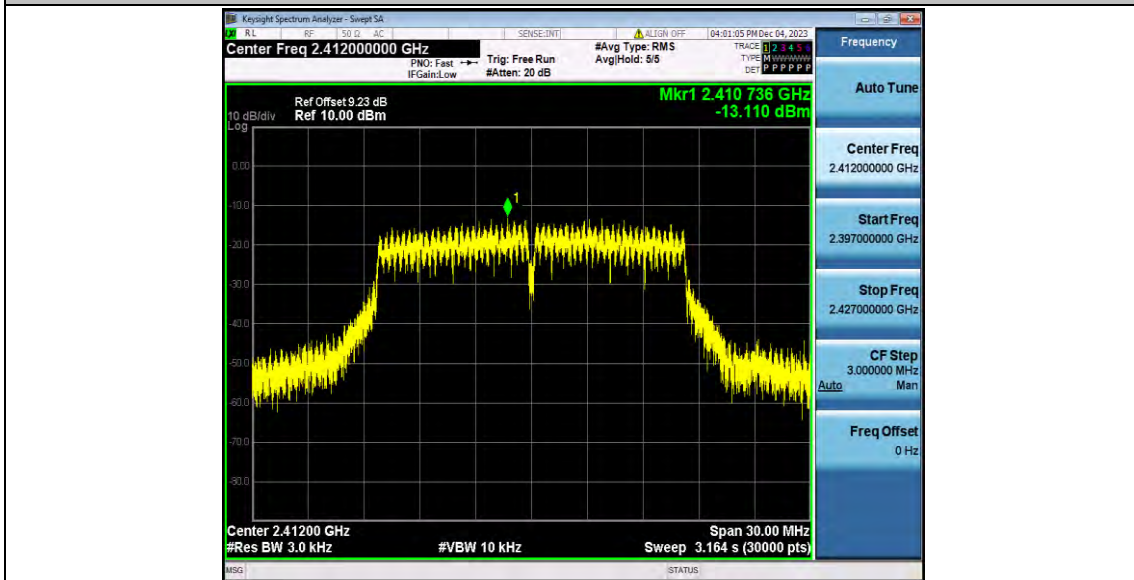
11B_Ant1_2412



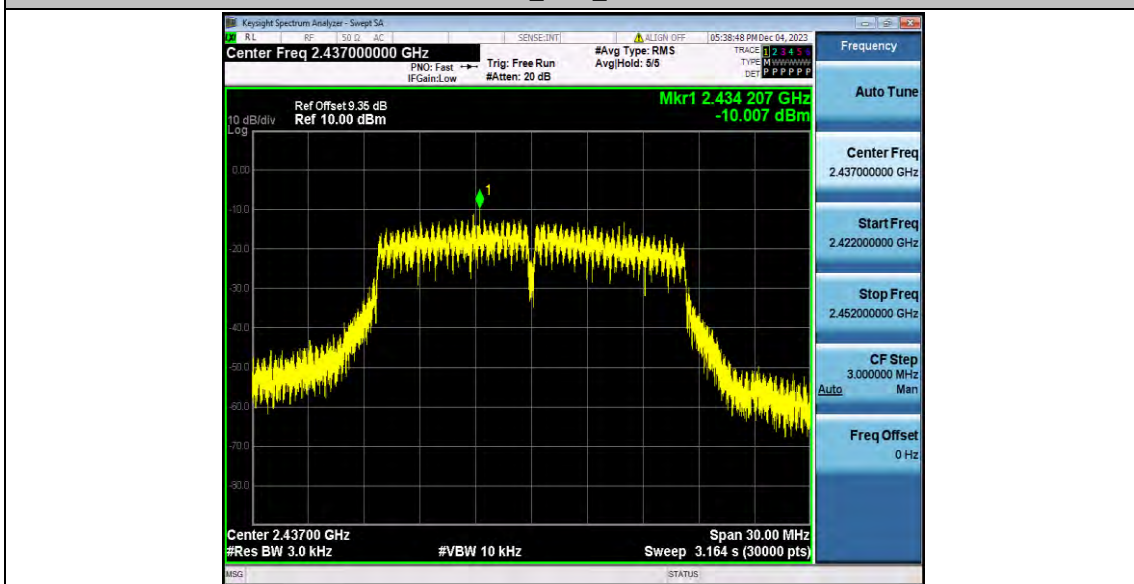
11B_Ant1_2437



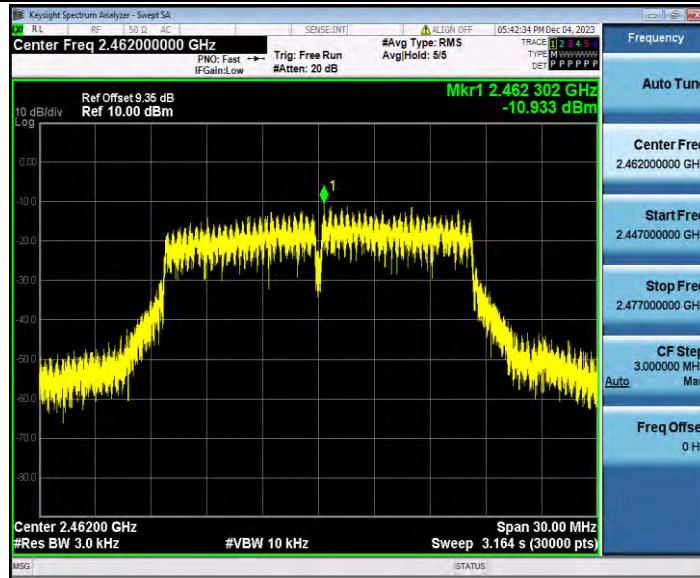
11B_Ant1_2462



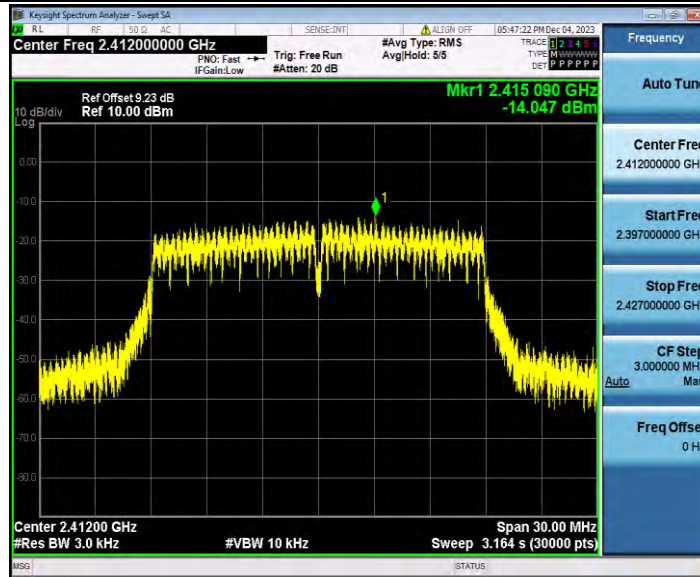
11G_Ant1_2412



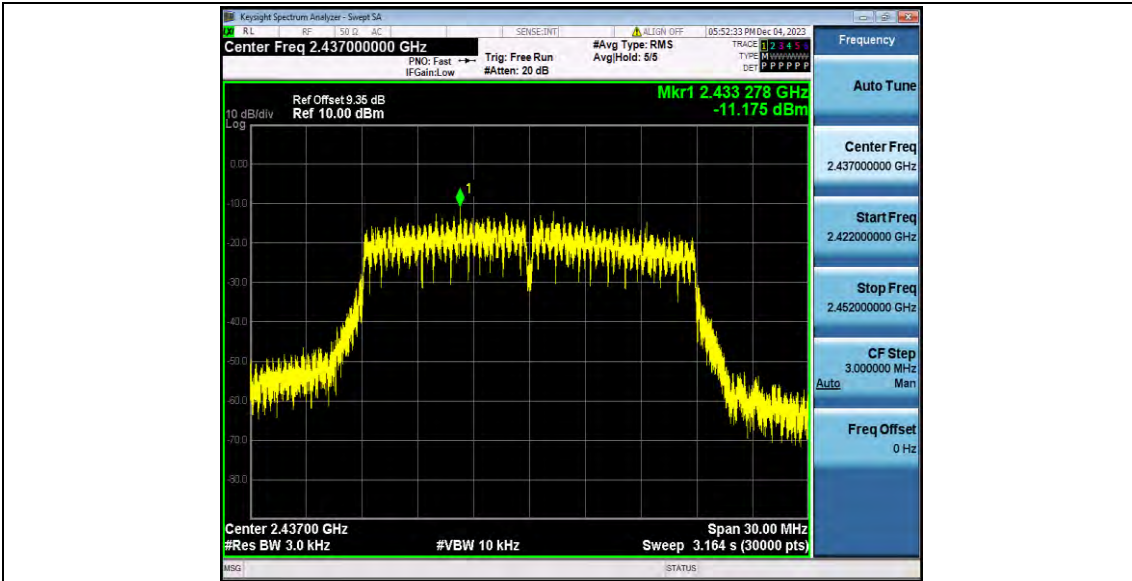
11G_Ant1_2437



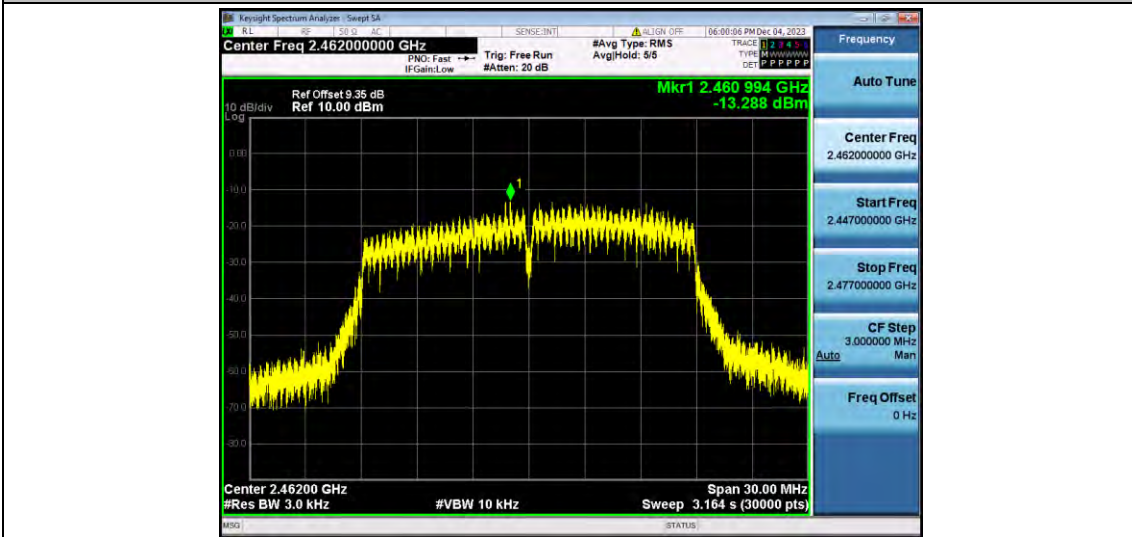
11G_Ant1_2462



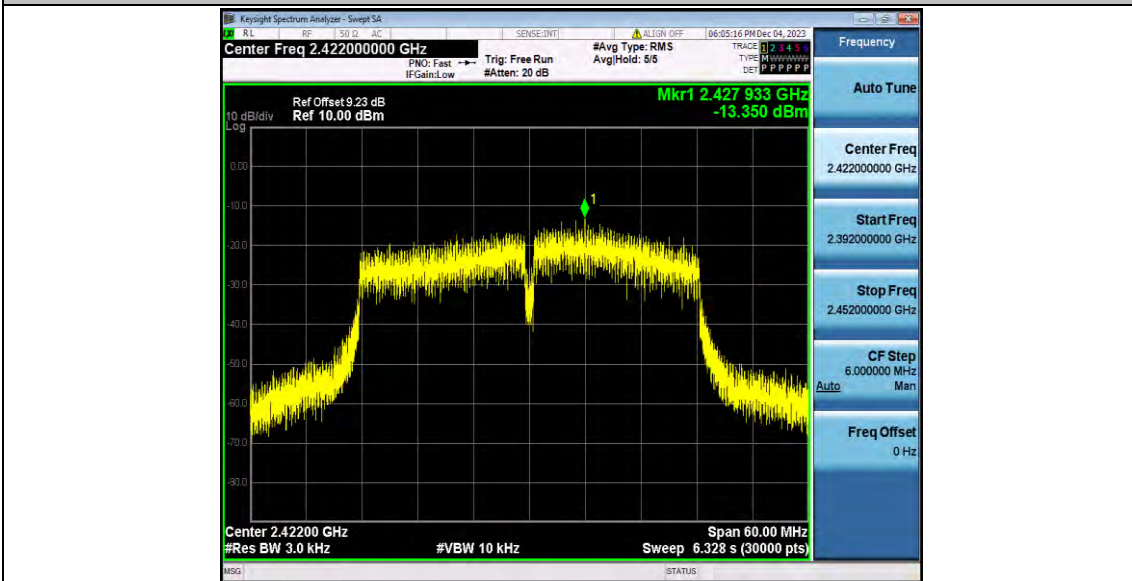
11N20SISO_Ant1_2412



11N20SISO_Ant1_2437



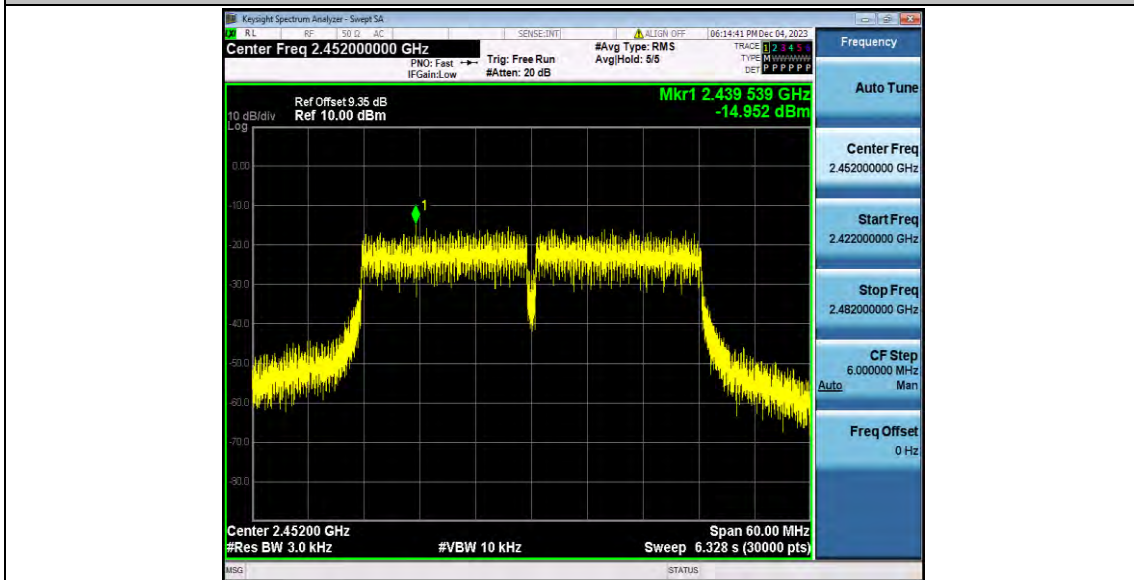
11N20SISO_Ant1_2462



11N40SISO_Ant1_2422



11N40SISO_Ant1_2437



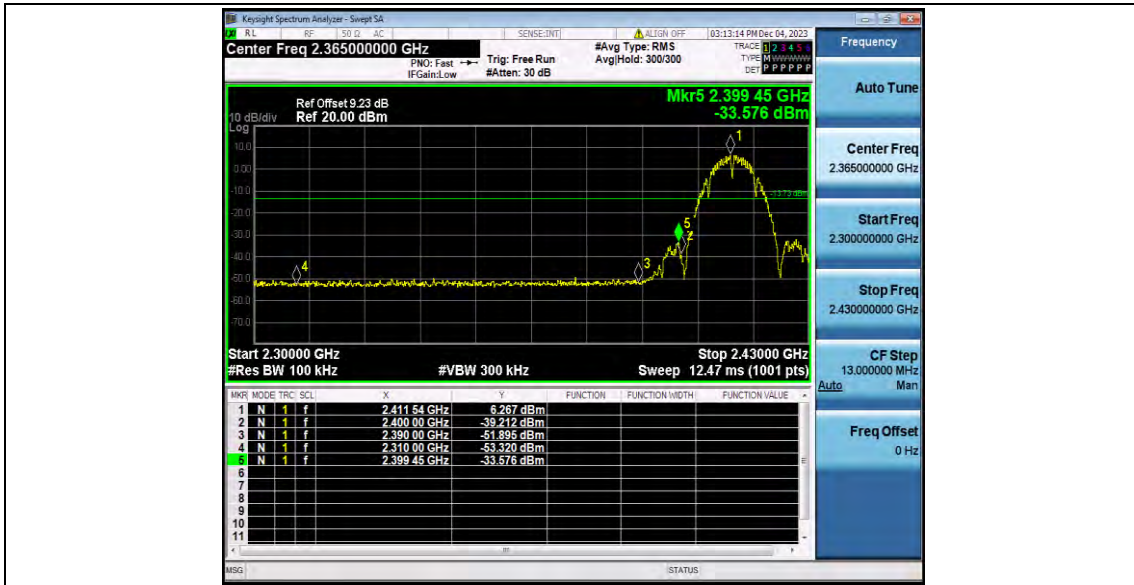
11N40SISO_Ant1_2452

Appendix C.5: Band edge measurements

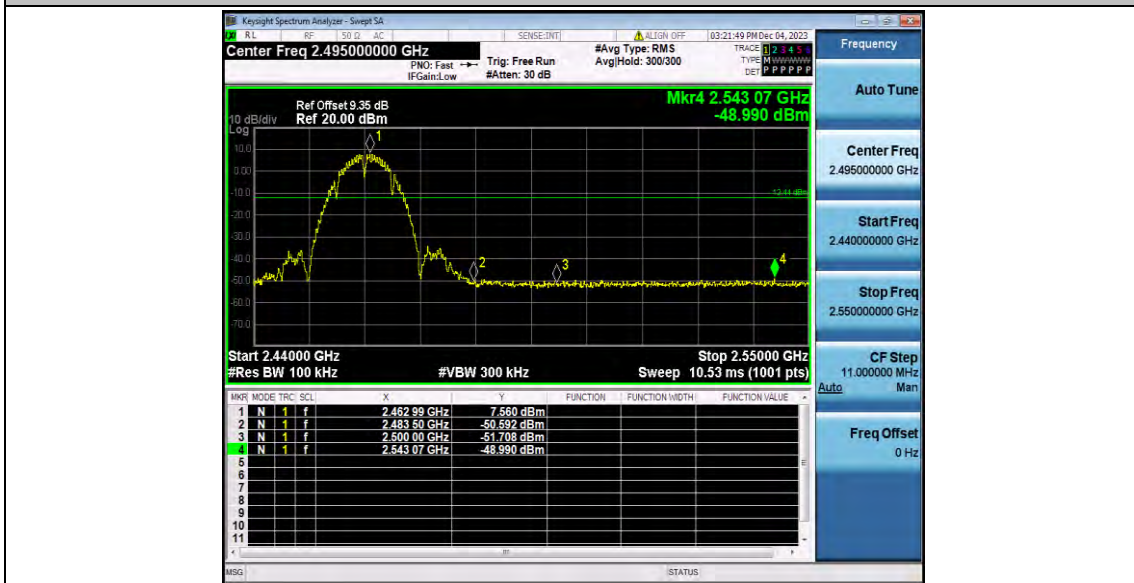
Test Result

| Test Mode | Antenna | ChName | Frequency [MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------|-----------------|---------------|-------------|------------|---------|
| 11B | Ant1 | Low | 2412 | 6.27 | -33.58 | ≤-13.73 | PASS |
| | | High | 2462 | 7.56 | -48.99 | ≤-12.44 | PASS |
| 11G | Ant1 | Low | 2412 | 2.85 | -27.89 | ≤-17.15 | PASS |
| | | High | 2462 | 5.27 | -44.04 | ≤-14.73 | PASS |
| 11N20SISO | Ant1 | Low | 2412 | 1.76 | -29.91 | ≤-18.24 | PASS |
| | | High | 2462 | 2.65 | -47.14 | ≤-17.35 | PASS |
| 11N40SISO | Ant1 | Low | 2422 | 1.58 | -33.48 | ≤-18.42 | PASS |
| | | High | 2452 | 0.11 | -36.86 | ≤-19.89 | PASS |

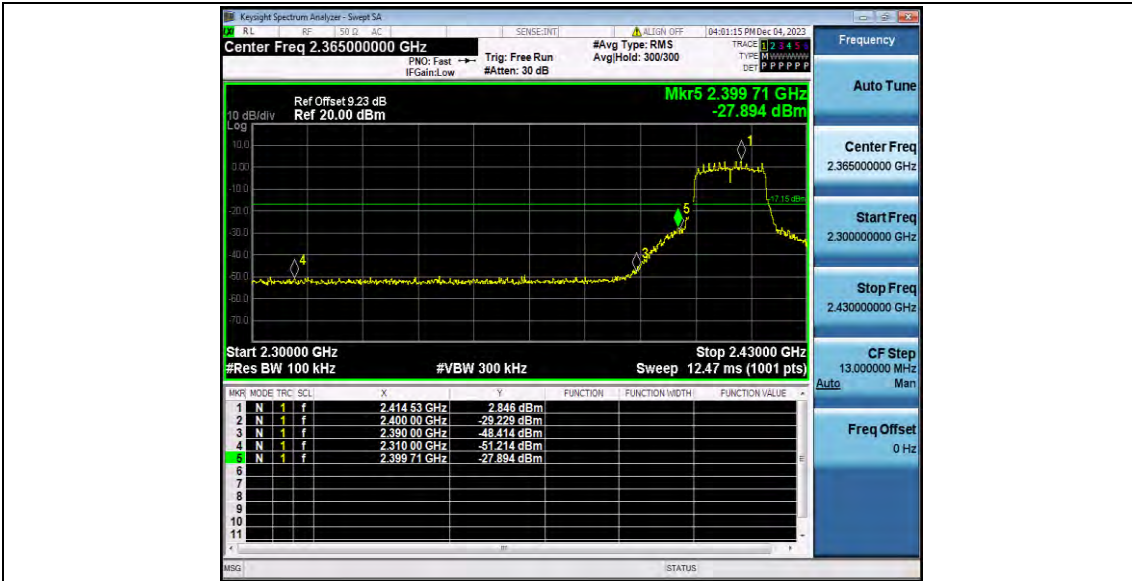
Test Graphs



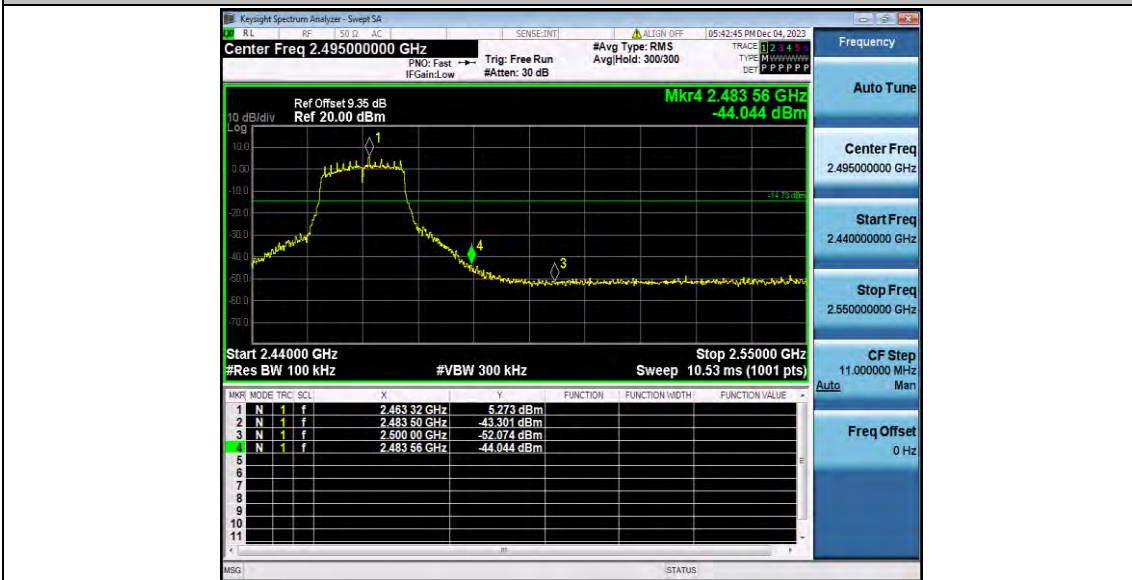
11B_Ant1_Low_2412



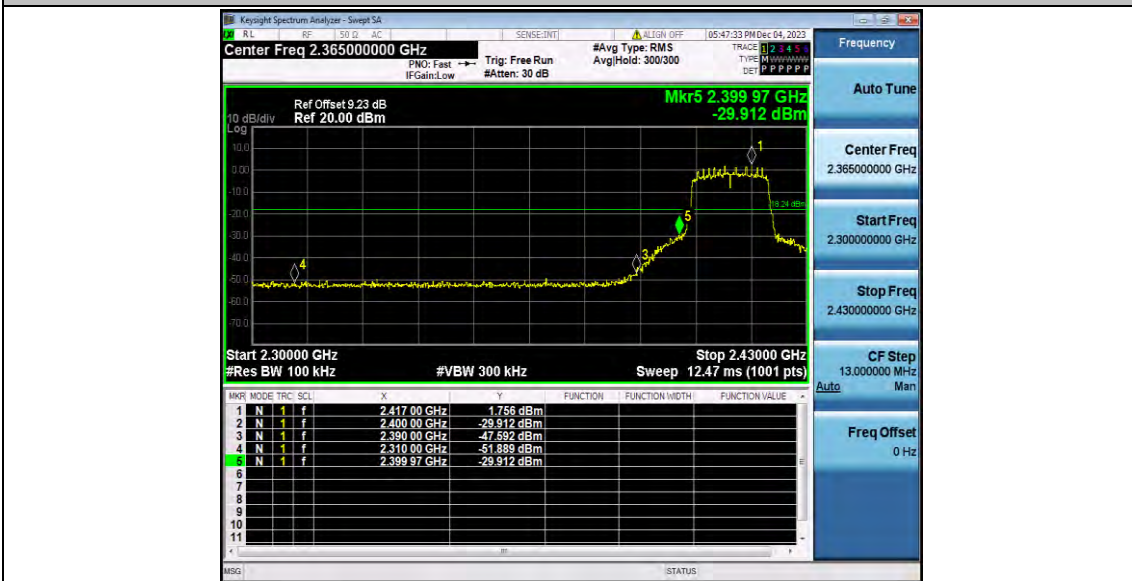
11B_Ant1_High_2462



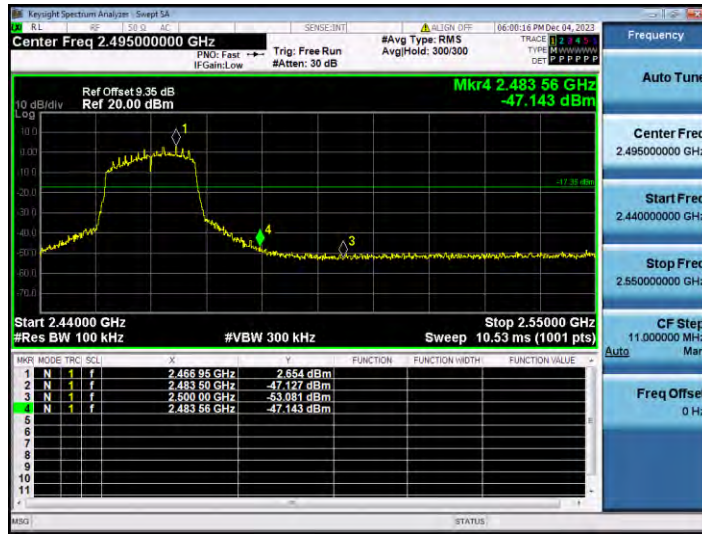
11G_Ant1_Low_2412



11G_Ant1_High_2462



11N20SISO_Ant1_Low_2412



11N20SISO_Ant1_High_2462



11N40SISO_Ant1_Low_2422



11N40SISO_Ant1_High_2452

Appendix C.6: Conducted Spurious Emission

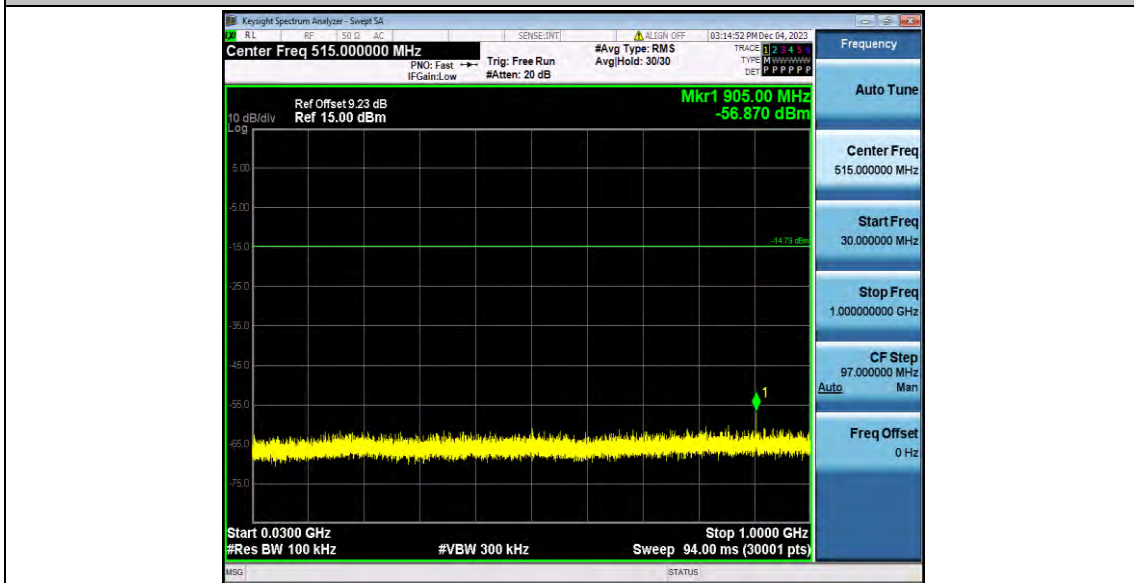
Test Result

| Test Mode | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|-----------------|----------------|--------------|-------------|---------|
| 11B | Ant1 | 2412 | Reference | 5.21 | 5.21 | --- | PASS |
| | | | 30~1000 | 5.21 | -56.87 | ≤-14.79 | PASS |
| | | | 1000~26500 | 5.21 | -47.5 | ≤-14.79 | PASS |
| | | 2437 | Reference | 4.64 | 4.64 | --- | PASS |
| | | | 30~1000 | 4.64 | -53.11 | ≤-15.36 | PASS |
| | | | 1000~26500 | 4.64 | -46.96 | ≤-15.36 | PASS |
| | | 2462 | Reference | 6.26 | 6.26 | --- | PASS |
| | | | 30~1000 | 6.26 | -60.25 | ≤-13.74 | PASS |
| | | | 1000~26500 | 6.26 | -47.25 | ≤-13.74 | PASS |
| 11G | Ant1 | 2412 | Reference | 1.14 | 1.14 | --- | PASS |
| | | | 30~1000 | 1.14 | -49.91 | ≤-18.86 | PASS |
| | | | 1000~26500 | 1.14 | -47.71 | ≤-18.86 | PASS |
| | | 2437 | Reference | 0.68 | 0.68 | --- | PASS |
| | | | 30~1000 | 0.68 | -60.15 | ≤-19.32 | PASS |
| | | | 1000~26500 | 0.68 | -47.51 | ≤-19.32 | PASS |
| | | 2462 | Reference | 0.62 | 0.62 | --- | PASS |
| | | | 30~1000 | 0.62 | -59.53 | ≤-19.38 | PASS |
| | | | 1000~26500 | 0.62 | -46.91 | ≤-19.38 | PASS |
| 11N20SISO | Ant1 | 2412 | Reference | -0.77 | -0.77 | --- | PASS |
| | | | 30~1000 | -0.77 | -60.32 | ≤-20.77 | PASS |
| | | | 1000~26500 | -0.77 | -47.59 | ≤-20.77 | PASS |
| | | 2437 | Reference | 1.13 | 1.13 | --- | PASS |
| | | | 30~1000 | 1.13 | -60.38 | ≤-18.87 | PASS |
| | | | 1000~26500 | 1.13 | -47.42 | ≤-18.87 | PASS |
| | | 2462 | Reference | 1.27 | 1.27 | --- | PASS |
| | | | 30~1000 | 1.27 | -57.46 | ≤-18.73 | PASS |
| | | | 1000~26500 | 1.27 | -46.73 | ≤-18.73 | PASS |
| 11N40SISO | Ant1 | 2422 | Reference | 1.51 | 1.51 | --- | PASS |
| | | | 30~1000 | 1.51 | -55.82 | ≤-18.49 | PASS |
| | | | 1000~26500 | 1.51 | -47.78 | ≤-18.49 | PASS |
| | | 2437 | Reference | -0.33 | -0.33 | --- | PASS |
| | | | 30~1000 | -0.33 | -59.21 | ≤-20.33 | PASS |
| | | | 1000~26500 | -0.33 | -47.65 | ≤-20.33 | PASS |
| | | 2452 | Reference | -1.19 | -1.19 | --- | PASS |
| 30~1000 | -1.19 | | -50.99 | ≤-21.19 | PASS | | |

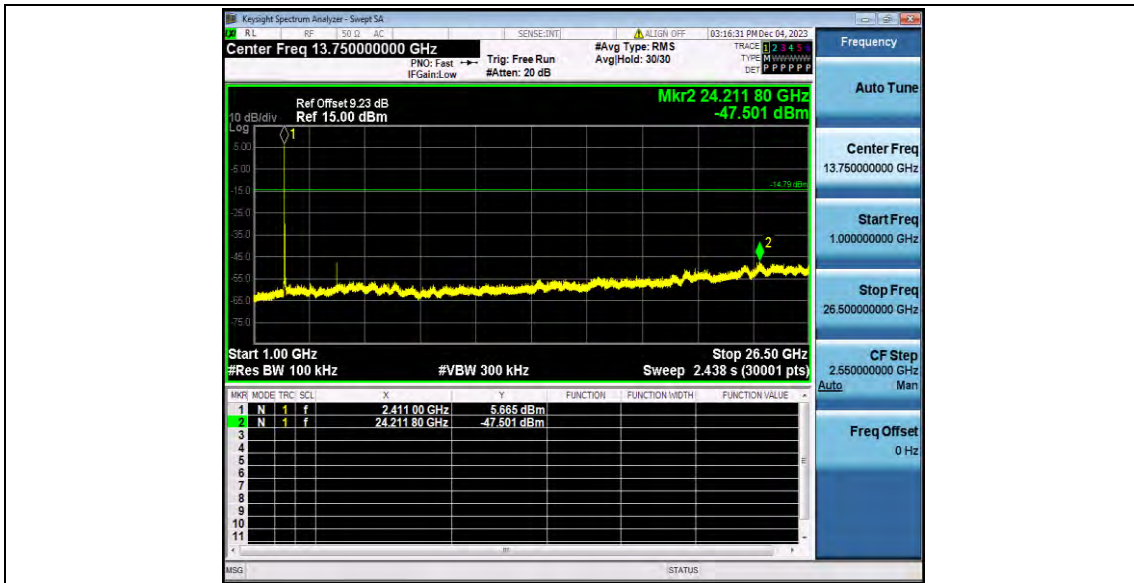
Test Graphs



11B_Ant1_2412_0~Reference



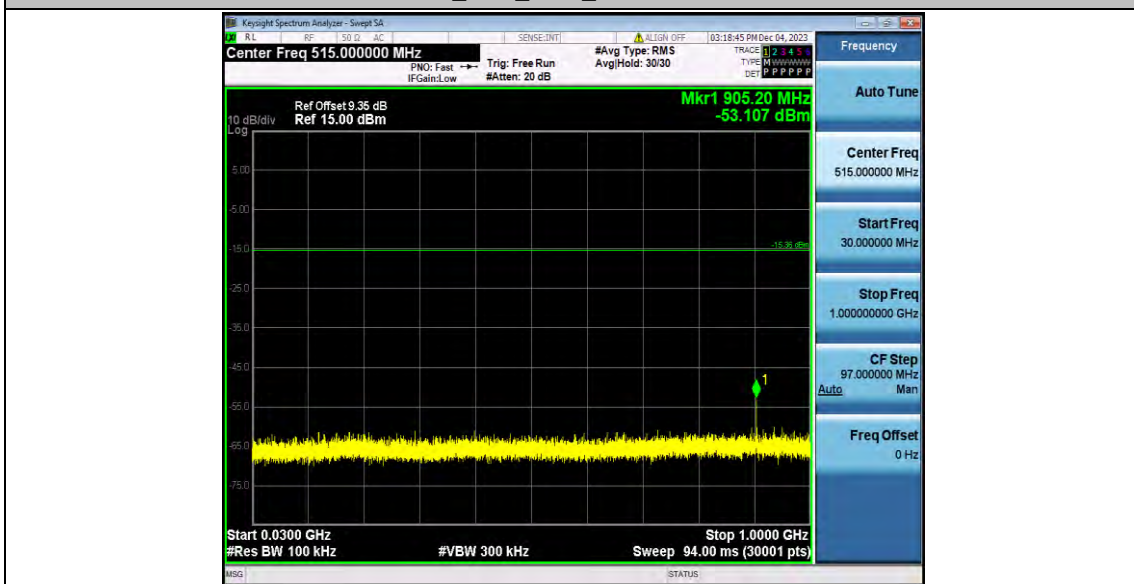
11B_Ant1_2412_30~1000



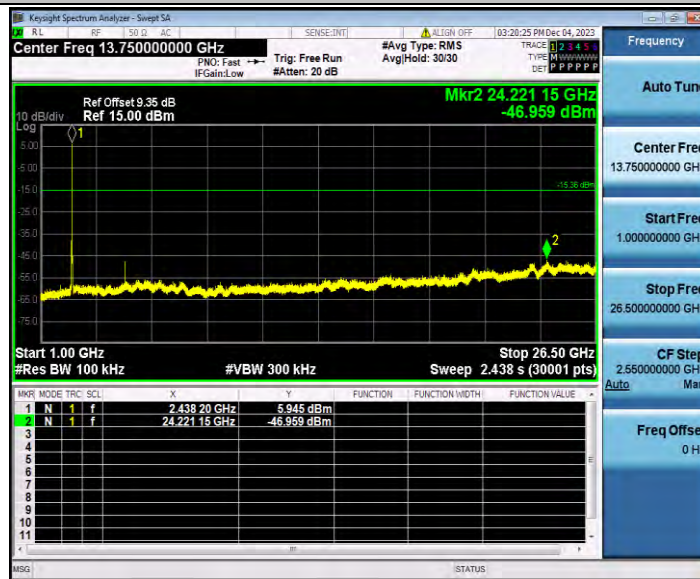
11B_Ant1_2412_1000~26500



11B_Ant1_2437_0~Reference



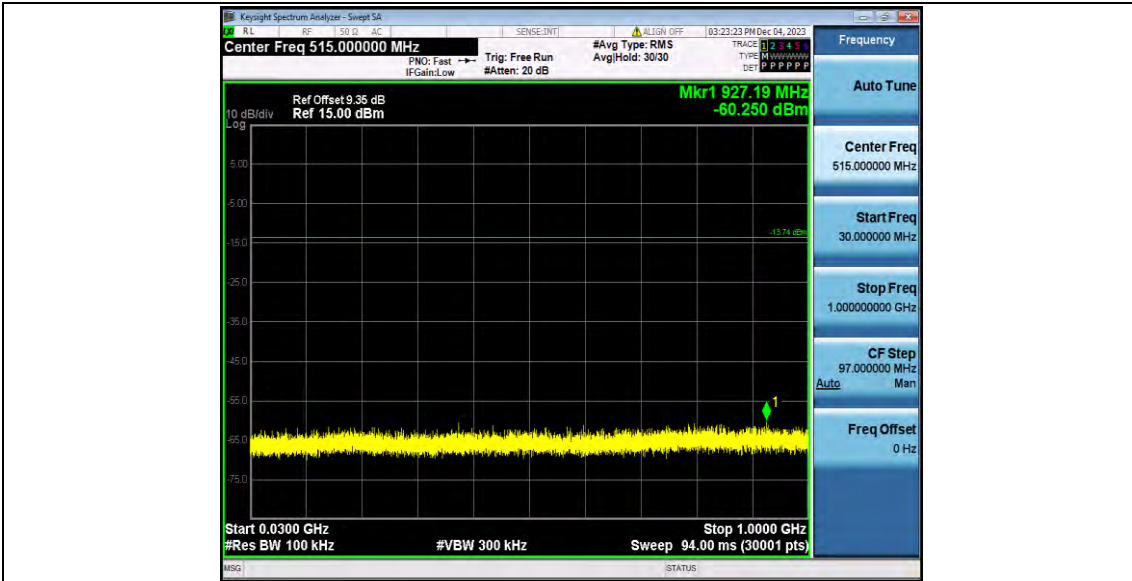
11B_Ant1_2437_30~1000



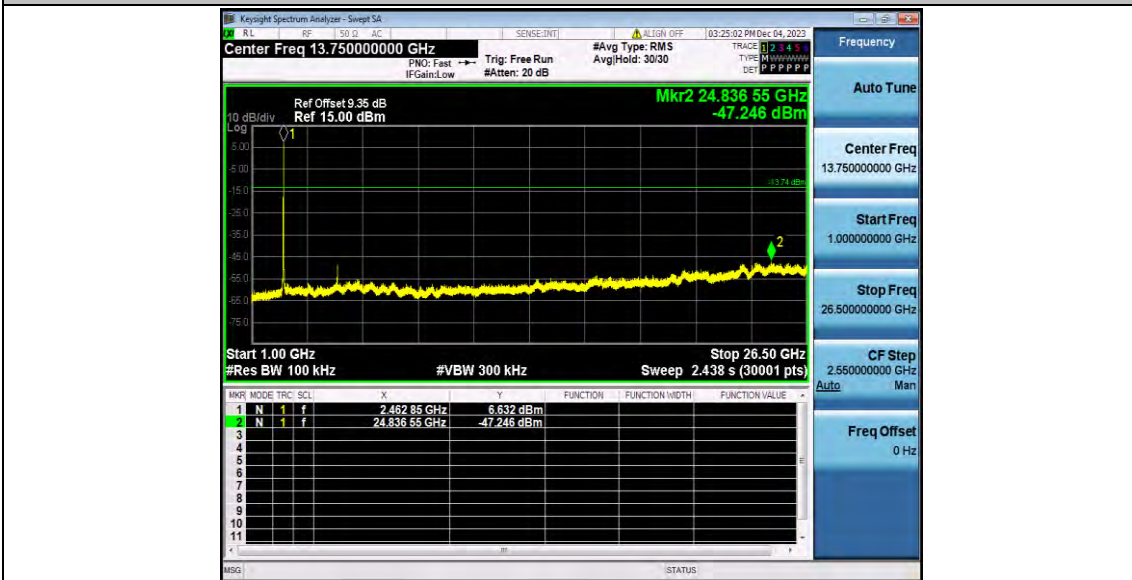
11B_Ant1_2437_1000~26500



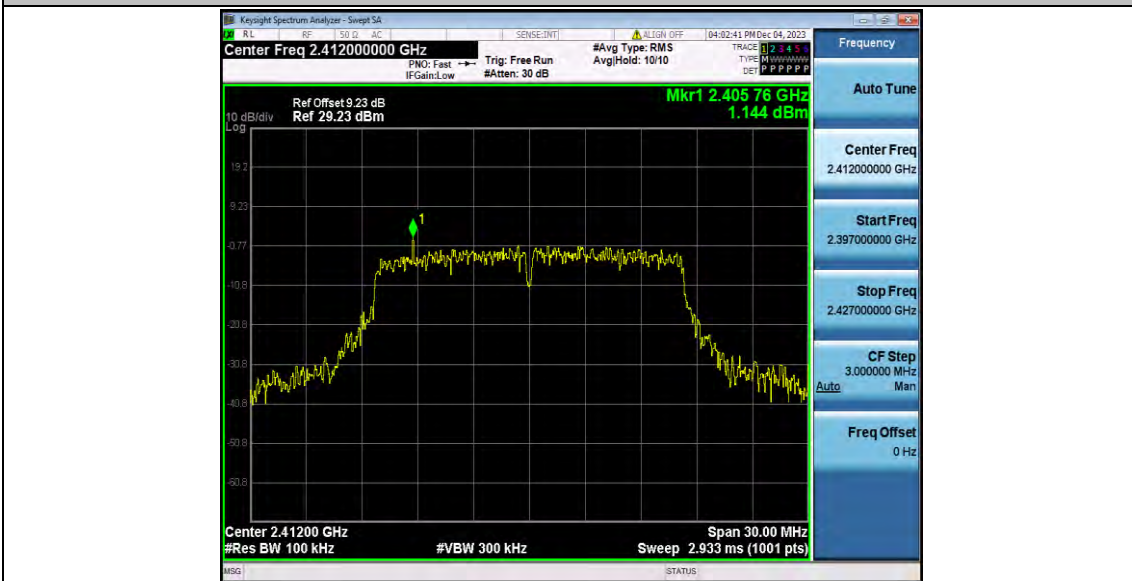
11B_Ant1_2462_0~Reference



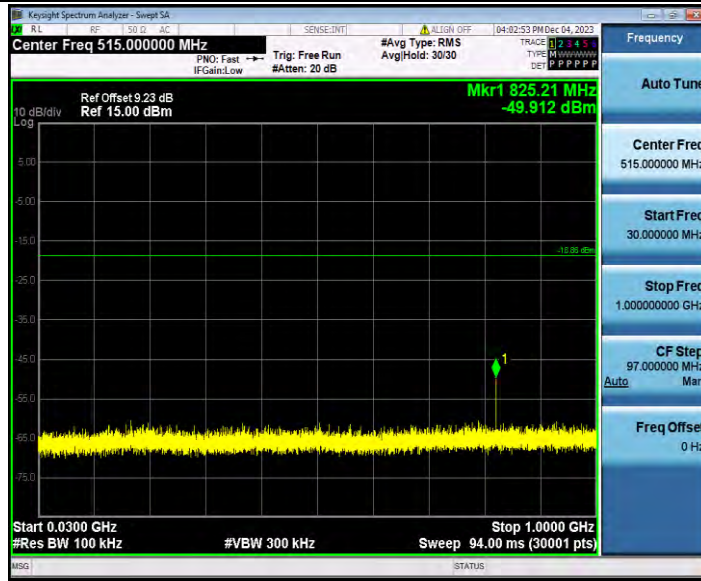
11B_Ant1_2462_30~1000



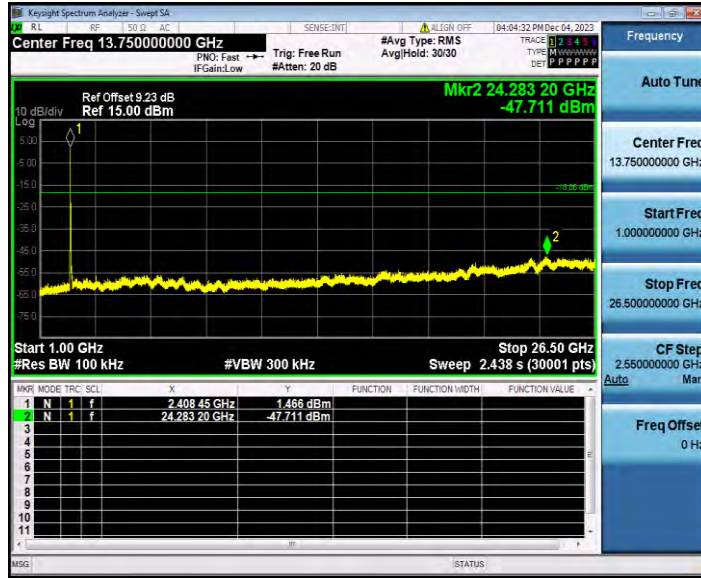
11B_Ant1_2462_1000~26500



11G_Ant1_2412_0~Reference



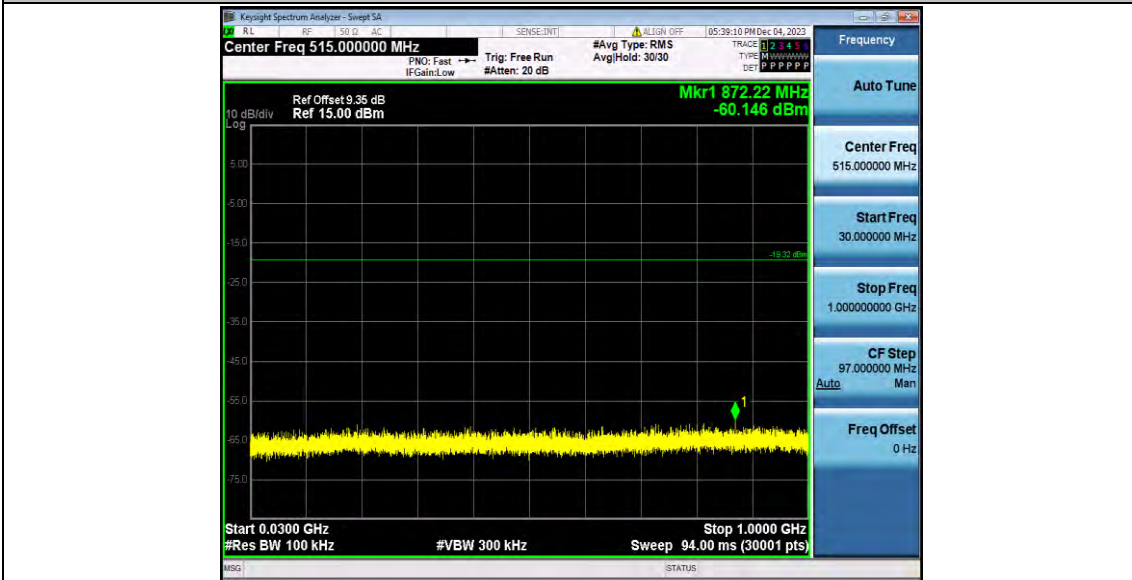
11G_Ant1_2412_30~1000



11G_Ant1_2412_1000~26500



11G_Ant1_2437_0~Reference



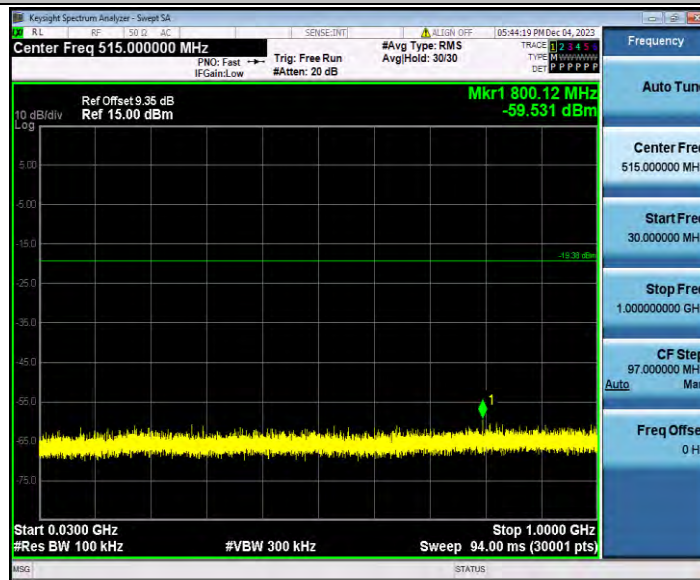
11G_Ant1_2437_30~1000



11G_Ant1_2437_1000~26500



11G_Ant1_2462_0~Reference



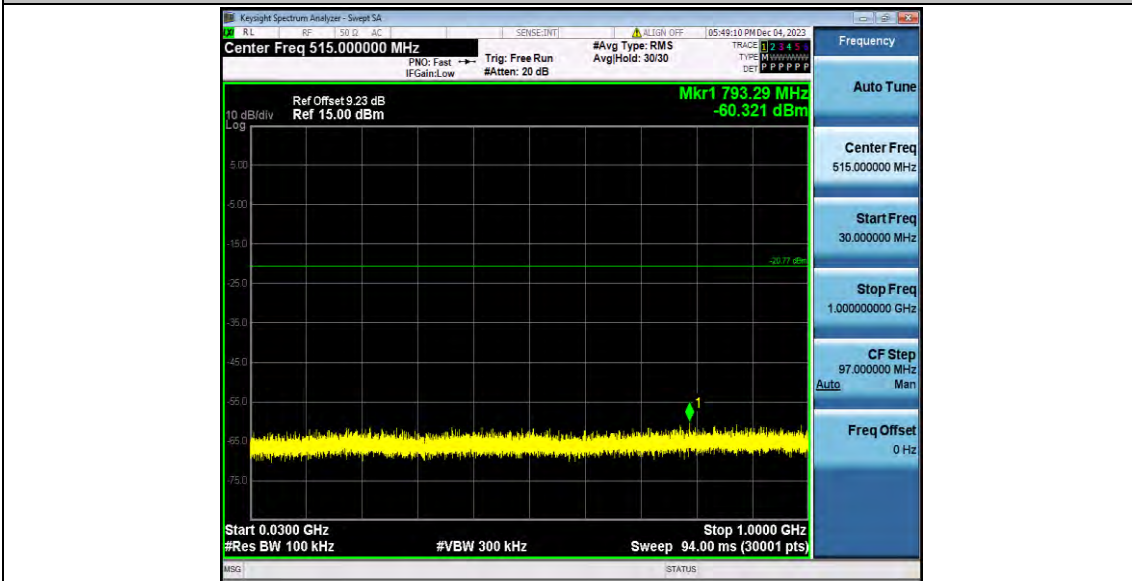
11G_Ant1_2462_30~1000



11G_Ant1_2462_1000~26500



11N20SIS0_Ant1_2412_0~Reference



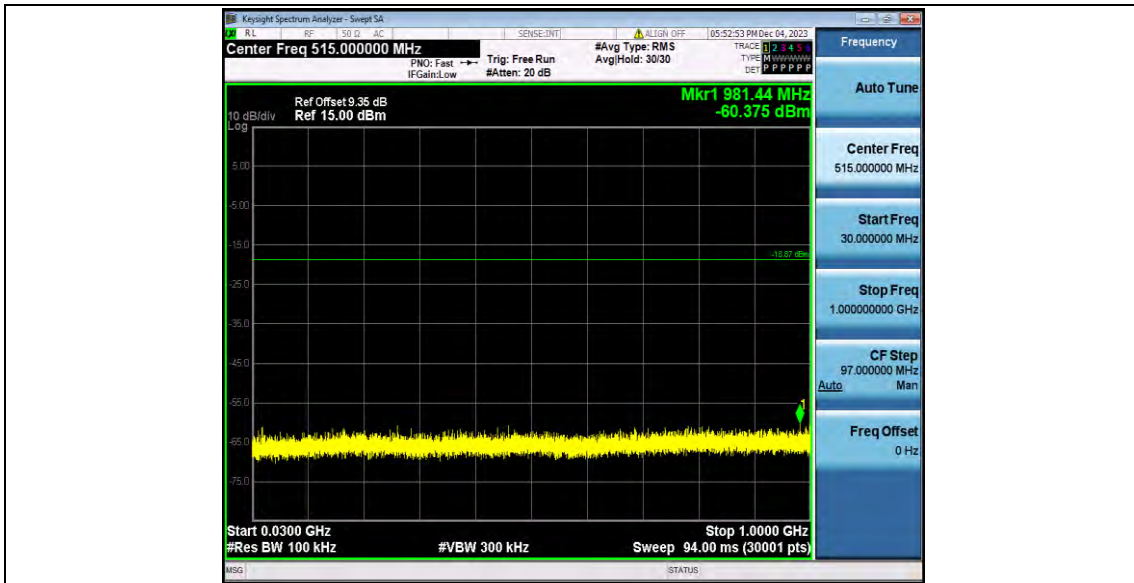
11N20SISO_Ant1_2412_30~1000



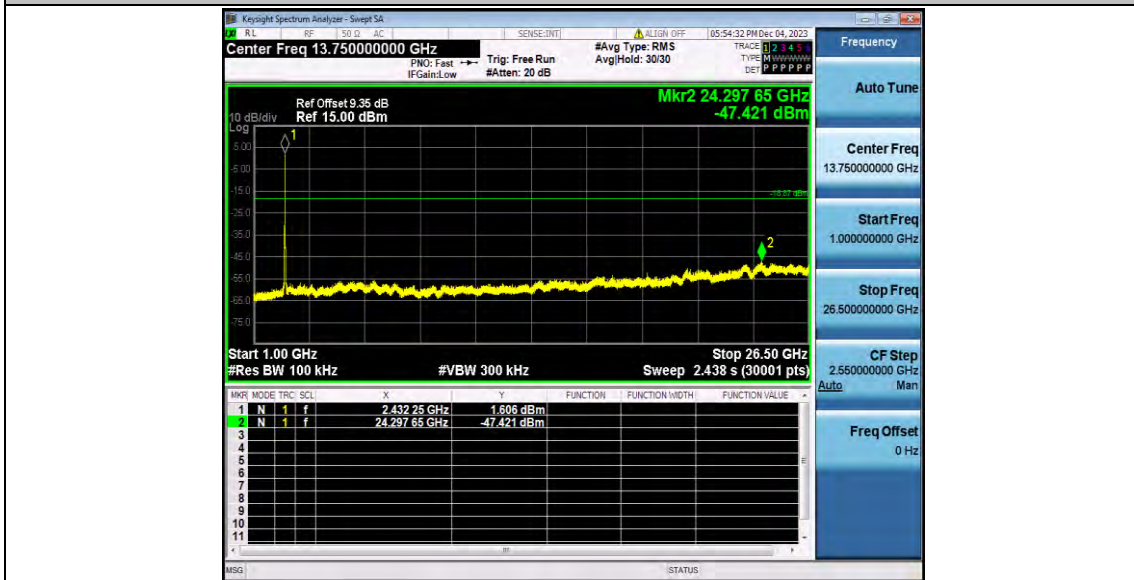
11N20SISO_Ant1_2412_1000~26500



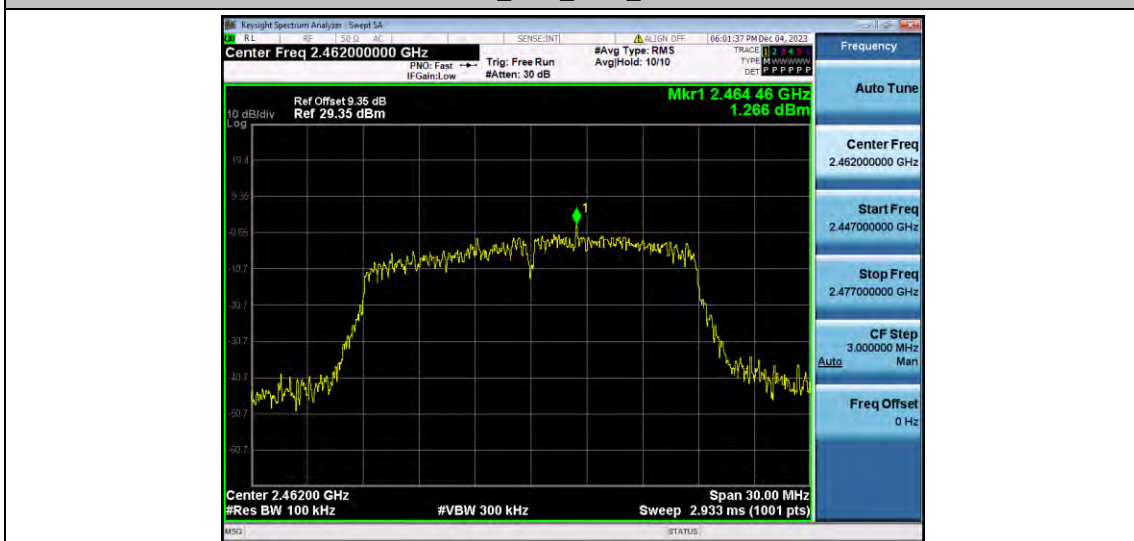
11N20SISO_Ant1_2437_0~Reference



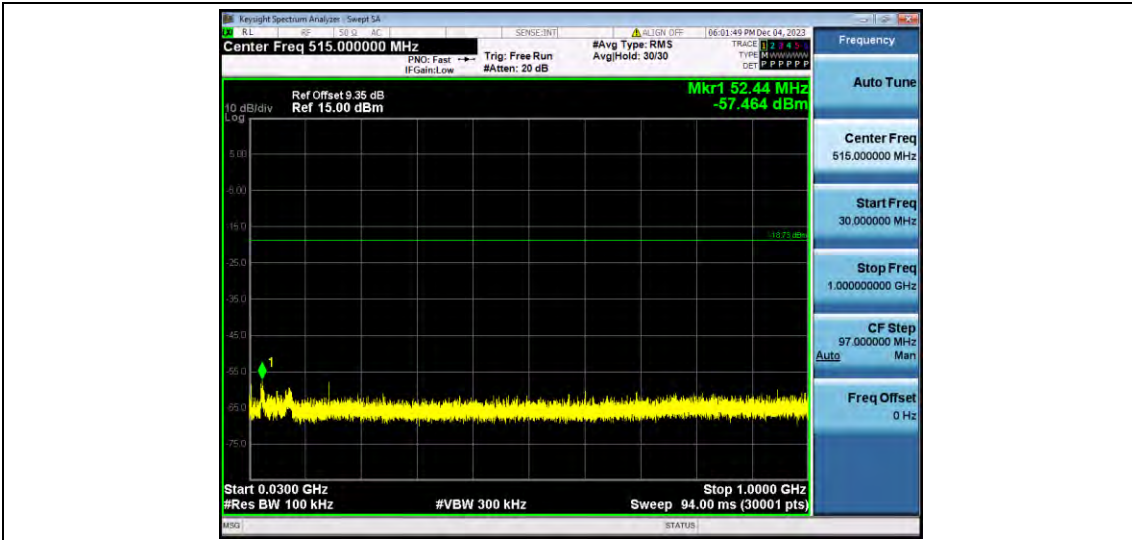
11N20SISO_Ant1_2437_30~1000



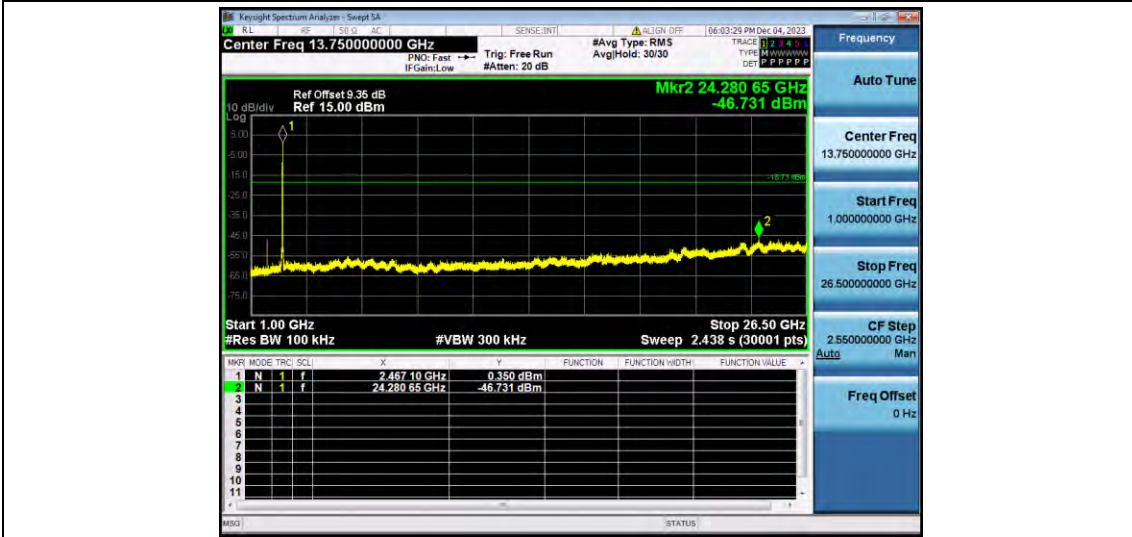
11N20SISO_Ant1_2437_1000~26500



11N20SISO_Ant1_2462_0~Reference



11N20SISO_Ant1_2462_30~1000



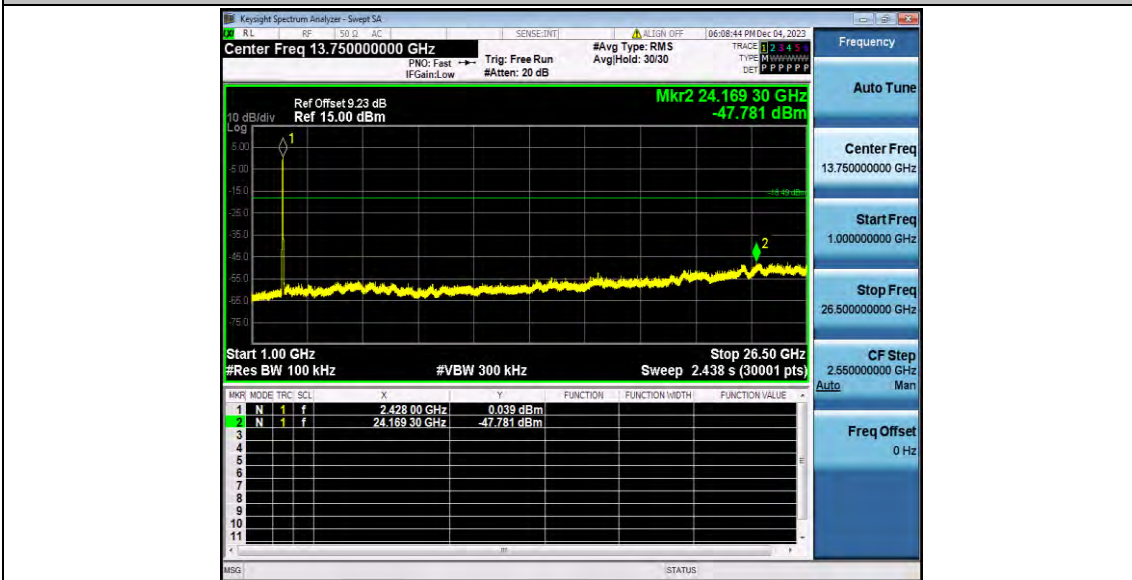
11N20SISO_Ant1_2462_1000~26500



11N40SISO_Ant1_2422_0~Reference



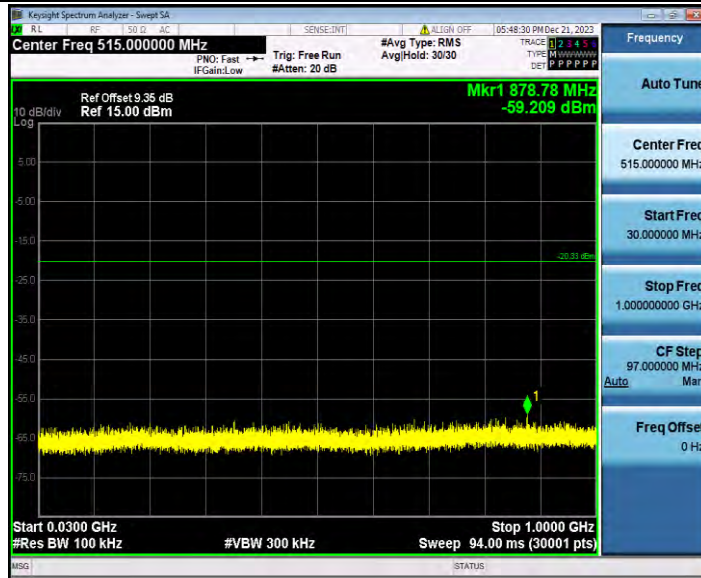
11N40SISO_Ant1_2422_30~1000



11N40SISO_Ant1_2422_1000~26500



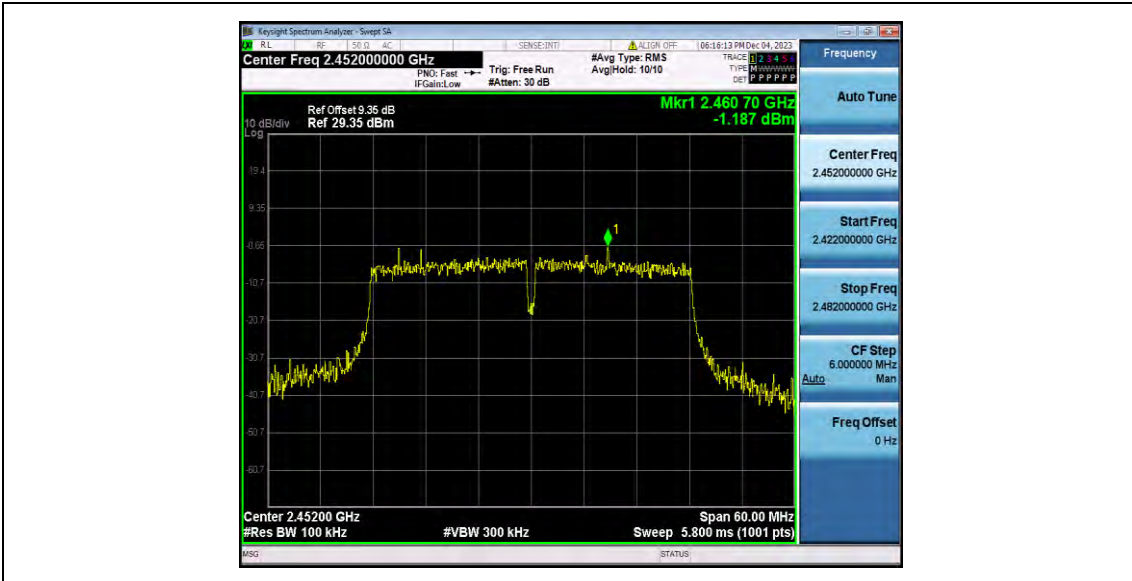
11N40SISO_Ant1_2437_0~Reference



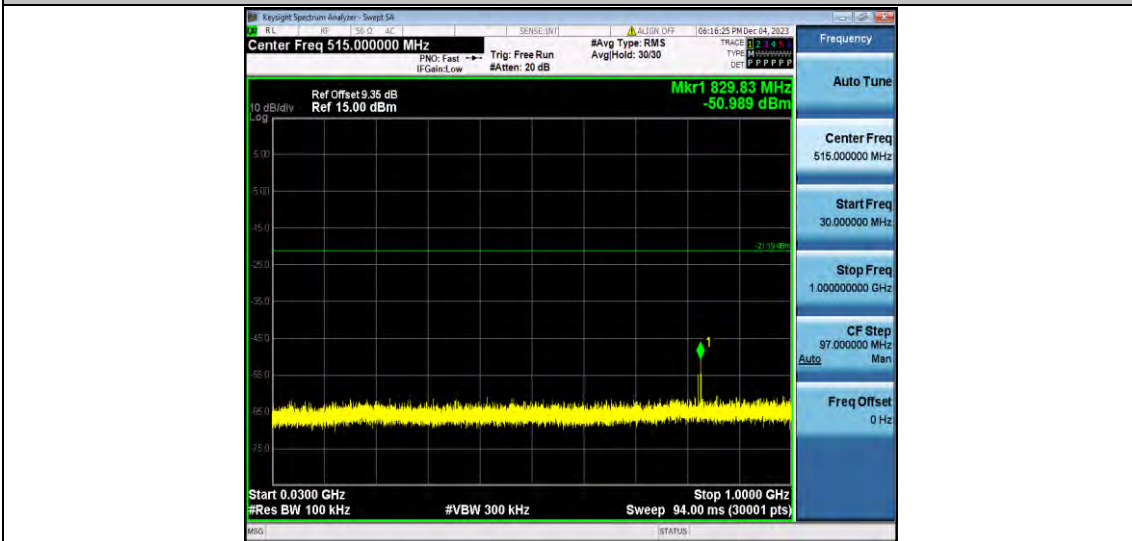
11N40SISO_Ant1_2437_30~1000



11N40SISO_Ant1_2437_1000~26500



11N40SISO_Ant1_2452_0~Reference



11N40SISO_Ant1_2452_30~1000

Appendix C.7: Emissions in Restricted Bands

Test Result

| Test Mode | Antenna | ChName | Frequency [MHz] | Detector | Freq [MHz] | Result [dBm] | Limit [dBm] | Result [dBuV/m] | Limit [dBuV/m] | Verdict |
|---------------|---------|--------|-----------------|----------|------------|--------------|-------------|-----------------|----------------|---------|
| 11B | Ant1 | Low | 2412 | AV | 2310.000 | -49.43 | ≤-41.20 | 45.77 | ≤54 | PASS |
| | | | | AV | 2387.230 | -48.24 | ≤-41.20 | 46.96 | ≤54 | PASS |
| | | | | AV | 2390.000 | -48.72 | ≤-41.20 | 46.48 | ≤54 | PASS |
| | | | | Peak | 2310.000 | -43.08 | ≤-21.20 | 52.12 | ≤74 | PASS |
| | | | | Peak | 2342.120 | -39.92 | ≤-21.20 | 55.28 | ≤74 | PASS |
| | | | | Peak | 2390.000 | -48.05 | ≤-21.20 | 47.15 | ≤74 | PASS |
| | | High | 2462 | AV | 2483.500 | -47.91 | ≤-41.20 | 47.29 | ≤54 | PASS |
| | | | | AV | 2486.530 | -47.67 | ≤-41.20 | 47.53 | ≤54 | PASS |
| | | | | AV | 2500.000 | -48.7 | ≤-41.20 | 46.50 | ≤54 | PASS |
| | | | | Peak | 2483.500 | -42.82 | ≤-21.20 | 52.38 | ≤74 | PASS |
| | | | | Peak | 2495.440 | -40.57 | ≤-21.20 | 54.63 | ≤74 | PASS |
| | | | | Peak | 2500.000 | -46.58 | ≤-21.20 | 48.62 | ≤74 | PASS |
| 11G | Ant1 | Low | 2412 | AV | 2310.000 | -49.39 | ≤-41.20 | 45.81 | ≤54 | PASS |
| | | | | AV | 2389.960 | -44.25 | ≤-41.20 | 50.95 | ≤54 | PASS |
| | | | | AV | 2390.000 | -44.25 | ≤-41.20 | 50.95 | ≤54 | PASS |
| | | | | Peak | 2310.000 | -45.2 | ≤-21.20 | 50.00 | ≤74 | PASS |
| | | | | Peak | 2389.570 | -38.01 | ≤-21.20 | 57.19 | ≤74 | PASS |
| | | | | Peak | 2390.000 | -41.63 | ≤-21.20 | 53.57 | ≤74 | PASS |
| | | High | 2462 | AV | 2483.500 | -42.44 | ≤-41.20 | 52.76 | ≤54 | PASS |
| | | | | AV | 2483.560 | -42.63 | ≤-41.20 | 52.57 | ≤54 | PASS |
| | | | | AV | 2500.000 | -47.04 | ≤-41.20 | 48.16 | ≤54 | PASS |
| | | | | Peak | 2483.500 | -39.63 | ≤-21.20 | 55.57 | ≤74 | PASS |
| | | | | Peak | 2485.320 | -37.96 | ≤-21.20 | 57.24 | ≤74 | PASS |
| | | | | Peak | 2500.000 | -45.61 | ≤-21.20 | 49.59 | ≤74 | PASS |
| 11N20SIS O | Ant1 | Low | 2412 | AV | 2310.000 | -49.39 | ≤-41.20 | 45.81 | ≤54 | PASS |
| | | | | AV | 2389.960 | -44.3 | ≤-41.20 | 50.90 | ≤54 | PASS |
| | | | | AV | 2390.000 | -44.31 | ≤-41.20 | 50.89 | ≤54 | PASS |
| | | | | Peak | 2310.000 | -43.06 | ≤-21.20 | 52.14 | ≤74 | PASS |
| | | | | Peak | 2388.010 | -36.69 | ≤-21.20 | 58.51 | ≤74 | PASS |
| | | | | Peak | 2390.000 | -37.99 | ≤-21.20 | 57.21 | ≤74 | PASS |
| | | High | 2462 | AV | 2483.500 | -45.48 | ≤-41.20 | 49.72 | ≤54 | PASS |
| | | | | AV | 2483.560 | -45.56 | ≤-41.20 | 49.64 | ≤54 | PASS |
| | | | | AV | 2500.000 | -48.65 | ≤-41.20 | 46.55 | ≤54 | PASS |
| | | | | Peak | 2483.500 | -42.33 | ≤-21.20 | 52.87 | ≤74 | PASS |
| | | | | Peak | 2484.220 | -37.6 | ≤-21.20 | 57.60 | ≤74 | PASS |
| | | | | Peak | 2484.220 | -37.6 | ≤-21.20 | 57.60 | ≤74 | PASS |

| | | | | | | | | | | |
|---------------|------|------|------|------|----------|--------|---------------|-------|-----------|------|
| | | | | Peak | 2500.000 | -48.42 | ≤ -21.20 | 46.78 | ≤ 74 | PASS |
| 11N40SIS O | Ant1 | Low | 2422 | AV | 2310.000 | -49.32 | ≤ -41.20 | 45.88 | ≤ 54 | PASS |
| | | | | AV | 2389.960 | -41.43 | ≤ -41.20 | 53.77 | ≤ 54 | PASS |
| | | | | AV | 2390.000 | -41.43 | ≤ -41.20 | 53.77 | ≤ 54 | PASS |
| | | | | Peak | 2310.000 | -48.01 | ≤ -21.20 | 47.19 | ≤ 74 | PASS |
| | | | | Peak | 2389.960 | -35.42 | ≤ -21.20 | 59.78 | ≤ 74 | PASS |
| | | | | Peak | 2390.000 | -35.42 | ≤ -21.20 | 59.78 | ≤ 74 | PASS |
| | | High | 2452 | AV | 2483.500 | -47.53 | ≤ -41.20 | 47.67 | ≤ 54 | PASS |
| | | | | AV | 2483.560 | -47.54 | ≤ -41.20 | 47.66 | ≤ 54 | PASS |
| | | | | AV | 2500.000 | -48.96 | ≤ -41.20 | 46.24 | ≤ 54 | PASS |
| | | | | Peak | 2483.500 | -45.98 | ≤ -21.20 | 49.22 | ≤ 74 | PASS |
| | | | | Peak | 2484.880 | -40.17 | ≤ -21.20 | 55.03 | ≤ 74 | PASS |
| | | | | Peak | 2500.000 | -46.9 | ≤ -21.20 | 48.30 | ≤ 74 | PASS |

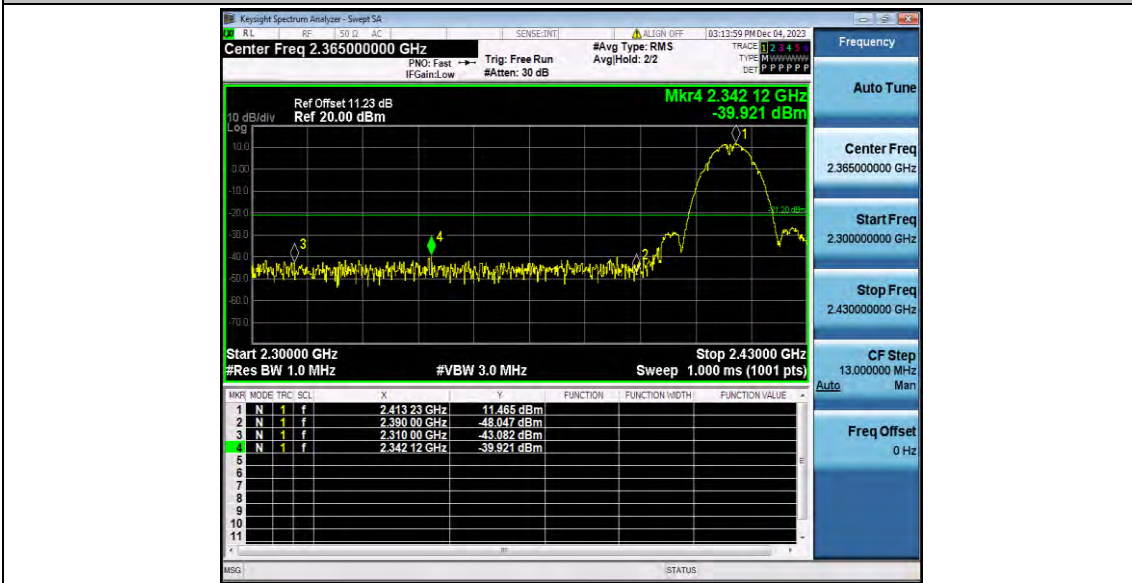
Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

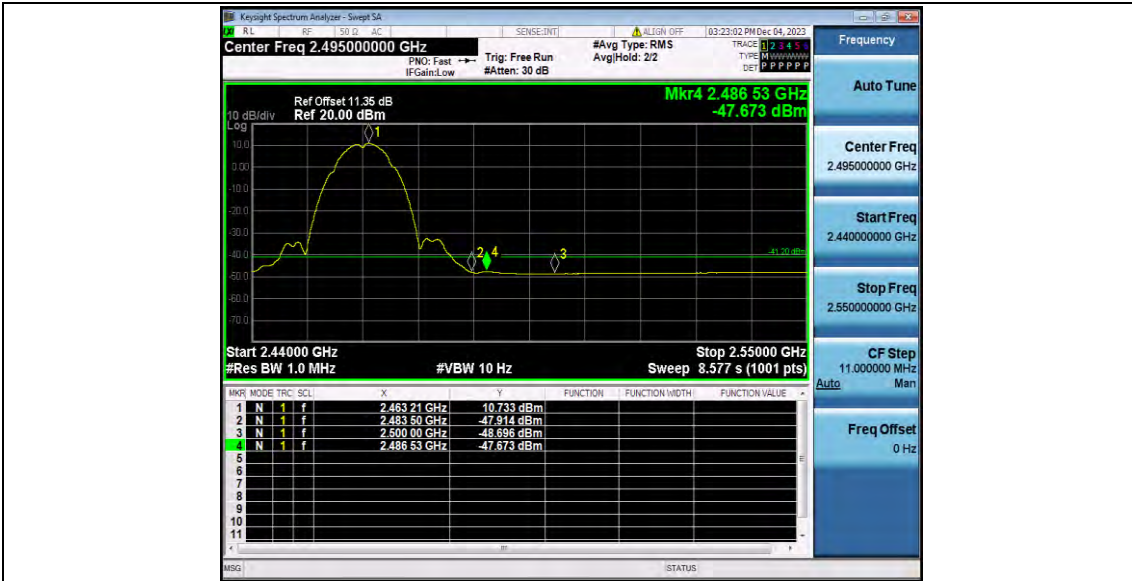
Test Graphs



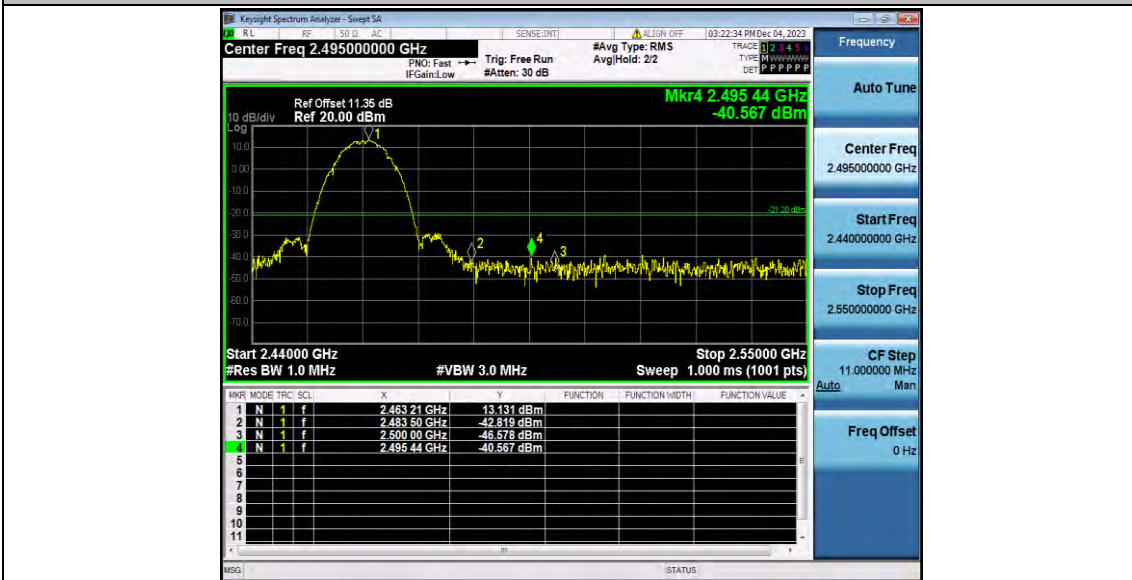
11B_Ant1_Low_2412_AV



11B_Ant1_Low_2412_Peak



11B_Ant1_High_2462_AV



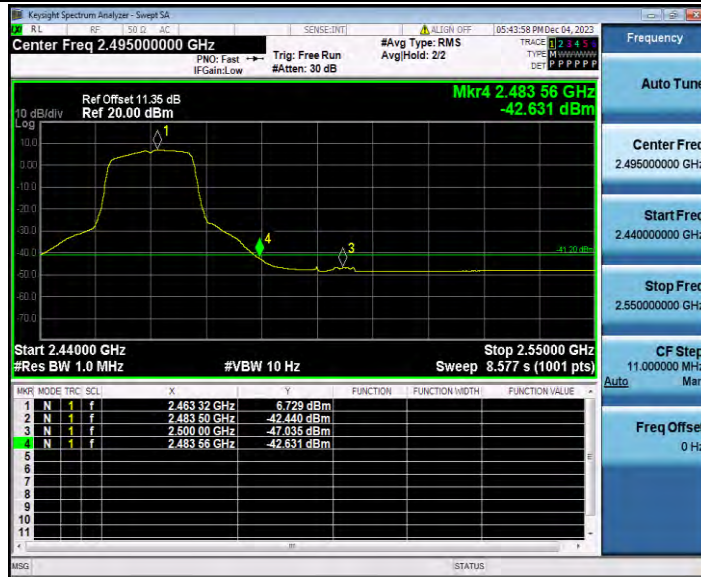
11B_Ant1_High_2462_Peak



11G_Ant1_Low_2412_AV



11G_Ant1_Low_2412_Peak



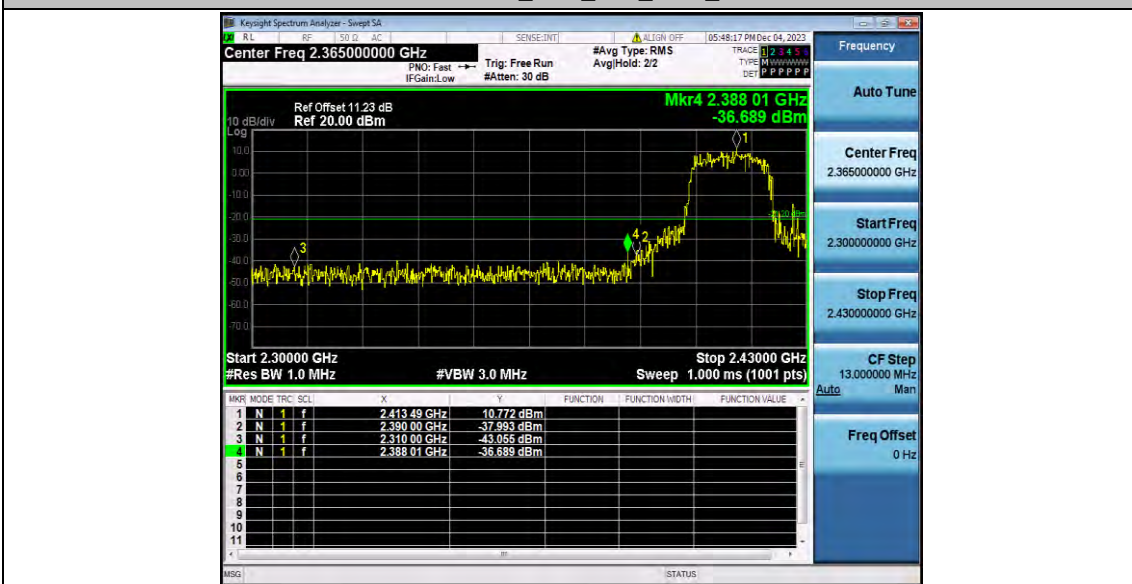
11G_Ant1_High_2462_AV



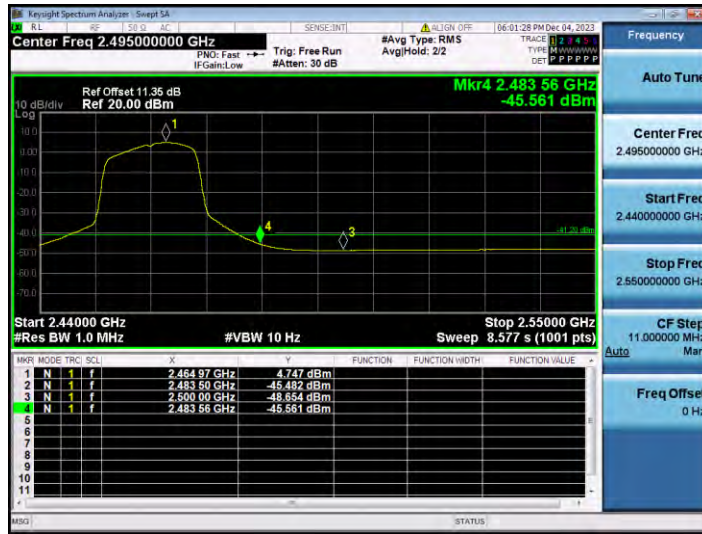
11G_Ant1_High_2462_Peak



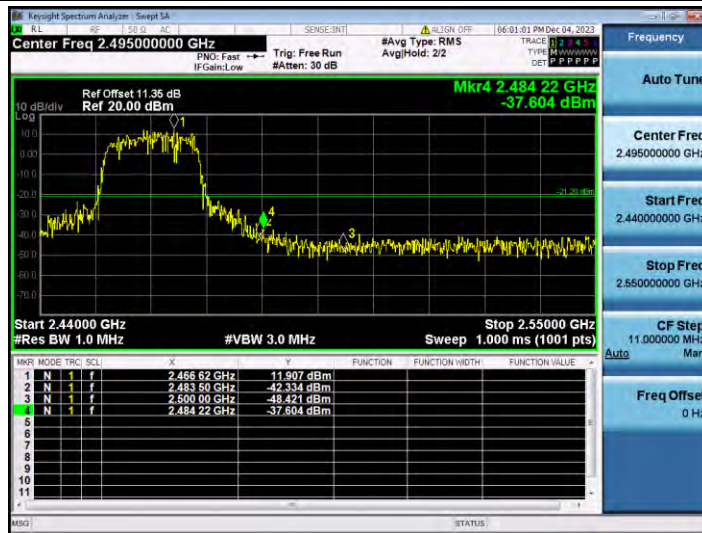
11N20SISO_Ant1_Low_2412_AV



11N20SISO_Ant1_Low_2412_Peak



11N20SISO_Ant1_High_2462_AV



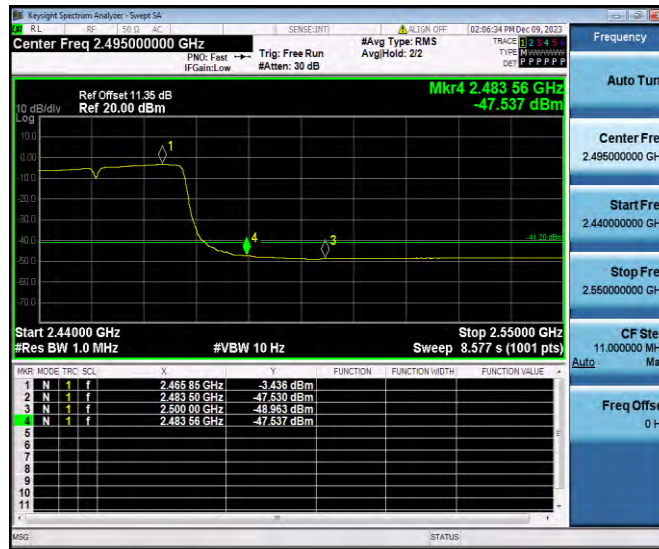
11N20SISO_Ant1_High_2462_Peak



11N40SISO_Ant1_Low_2422_AV



11N40SISO_Ant1_Low_2422_Peak



11N40SISO_Ant1_High_2452_AV



11N40SISO_Ant1_High_2452_Peak