

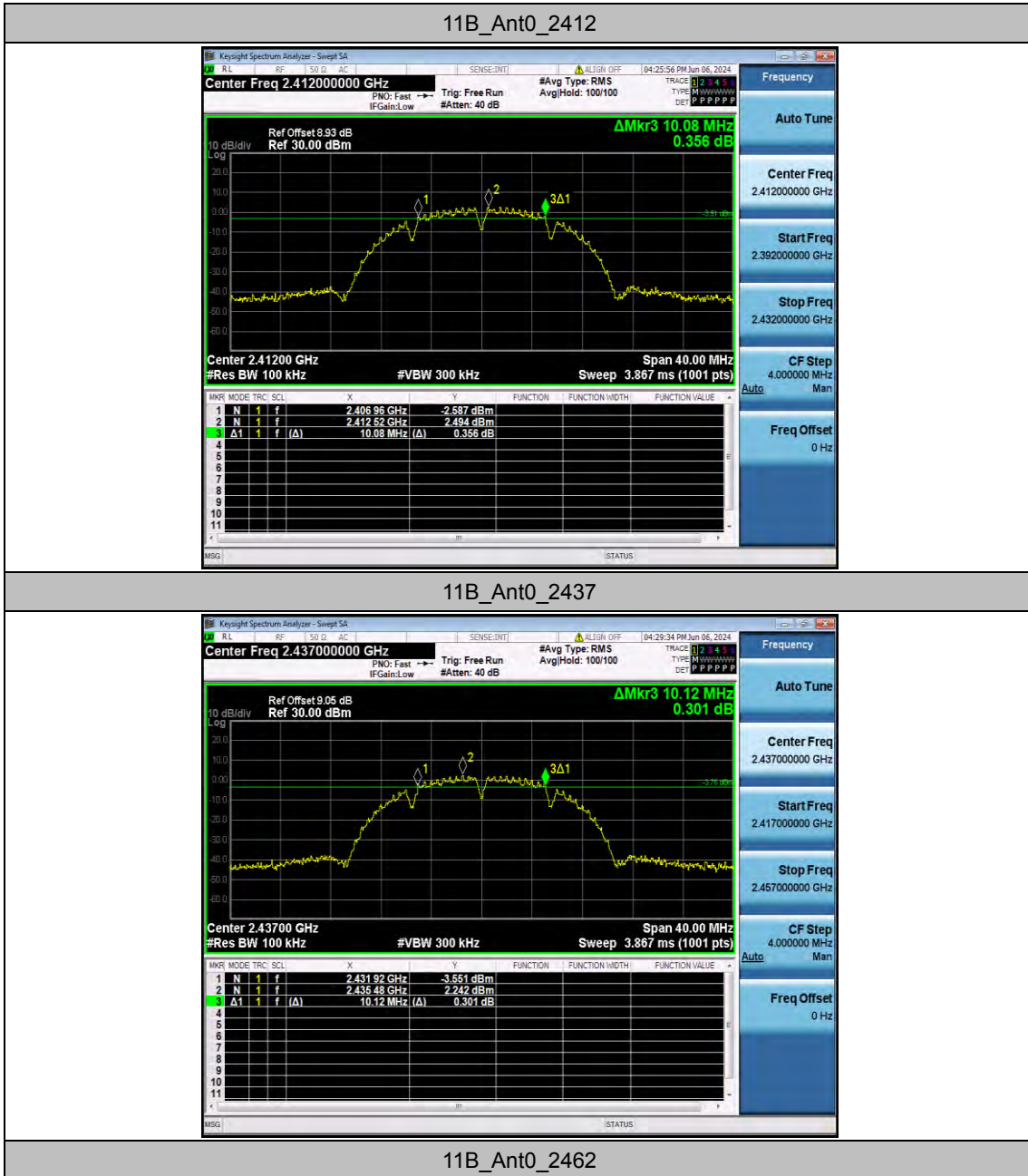
| |
|--|
| Case No. : <u>CTA24053000103</u> |
| Ambient Condition: <u>23</u> °C, <u>48</u> %RH, |
| Test Date: <u>2024.6.5</u> Test Engineer: <u>Evan ouyang</u> |

Appendix C.1: DTS Bandwidth

Test Result

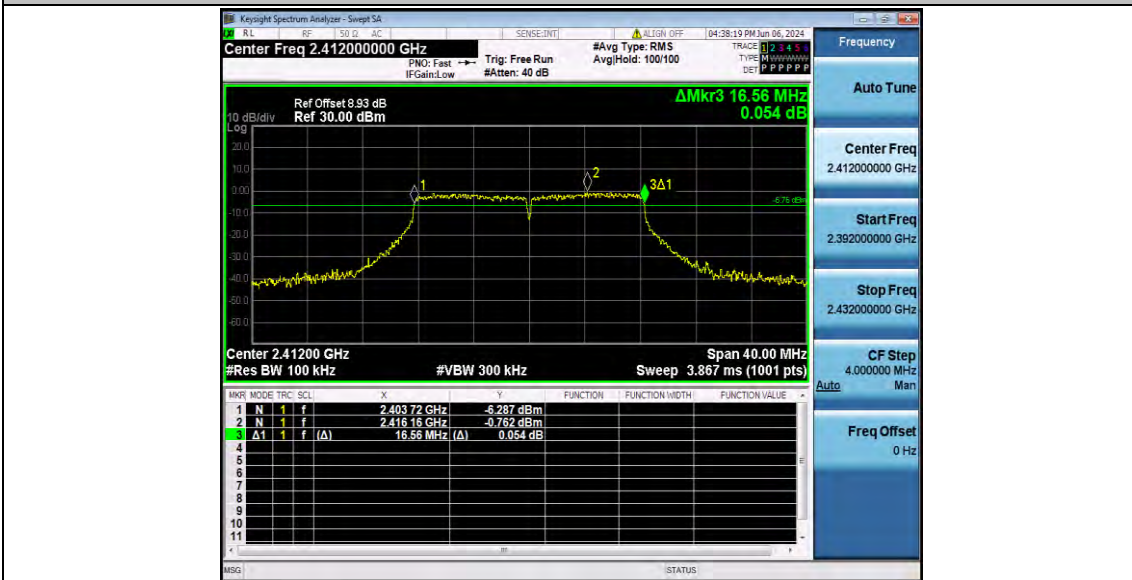
| TestMode | Antenna | Frequency[MHz] | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|-----------|---------|----------------|--------------|----------|----------|------------|---------|
| 11B | Ant0 | 2412 | 10.080 | 2406.960 | 2417.040 | 0.5 | PASS |
| | | 2437 | 10.120 | 2431.920 | 2442.040 | 0.5 | PASS |
| | | 2462 | 10.040 | 2456.960 | 2467.000 | 0.5 | PASS |
| 11G | Ant0 | 2412 | 16.560 | 2403.720 | 2420.280 | 0.5 | PASS |
| | | 2437 | 16.560 | 2428.720 | 2445.280 | 0.5 | PASS |
| | | 2462 | 16.520 | 2453.720 | 2470.240 | 0.5 | PASS |
| 11N20SISO | Ant0 | 2412 | 17.720 | 2403.160 | 2420.880 | 0.5 | PASS |
| | | 2437 | 17.760 | 2428.120 | 2445.880 | 0.5 | PASS |
| | | 2462 | 17.720 | 2453.120 | 2470.840 | 0.5 | PASS |
| 11N40SISO | Ant0 | 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 |

Test Graphs





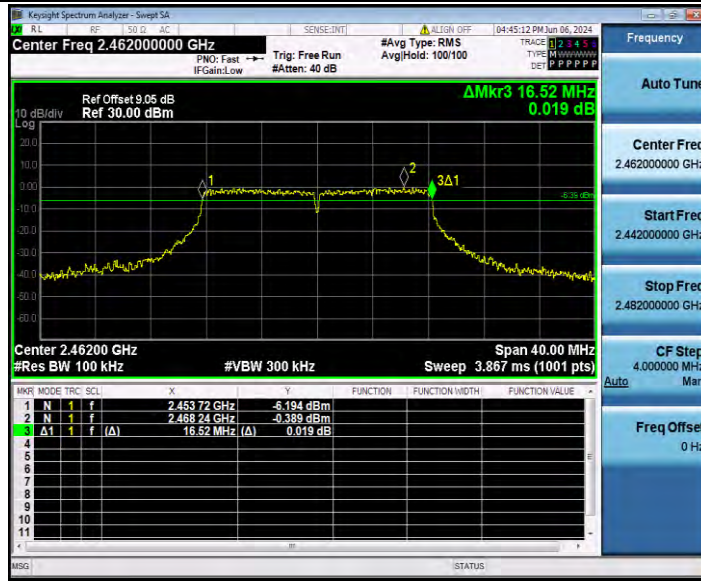
11G_Ant0_2412



11G_Ant0_2437



11G_Ant0_2462



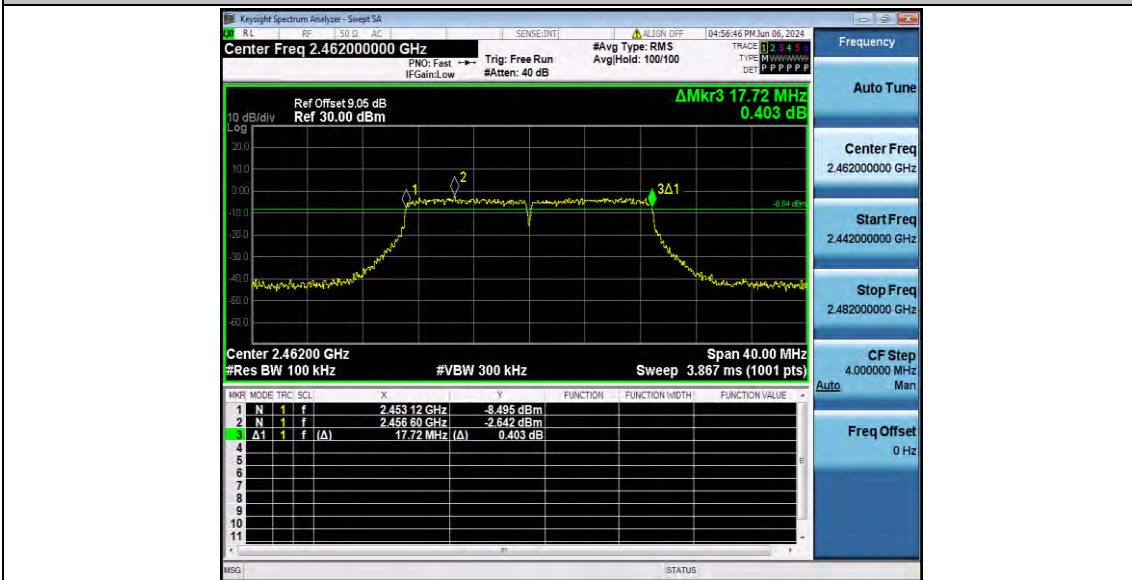
11N20SISO_Ant0_2412



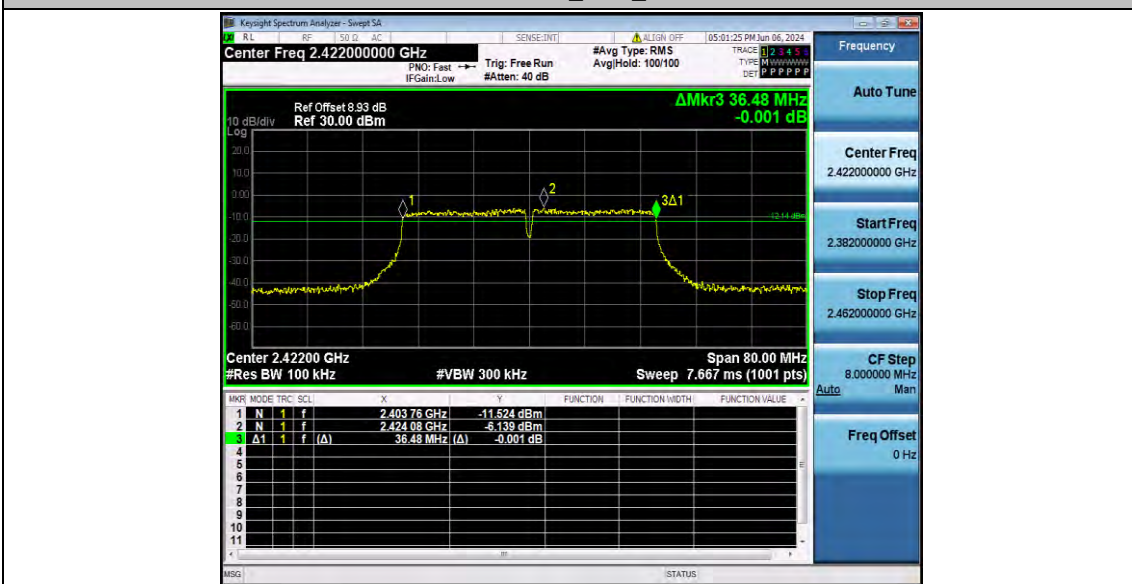
11N20SISO_Ant0_2437



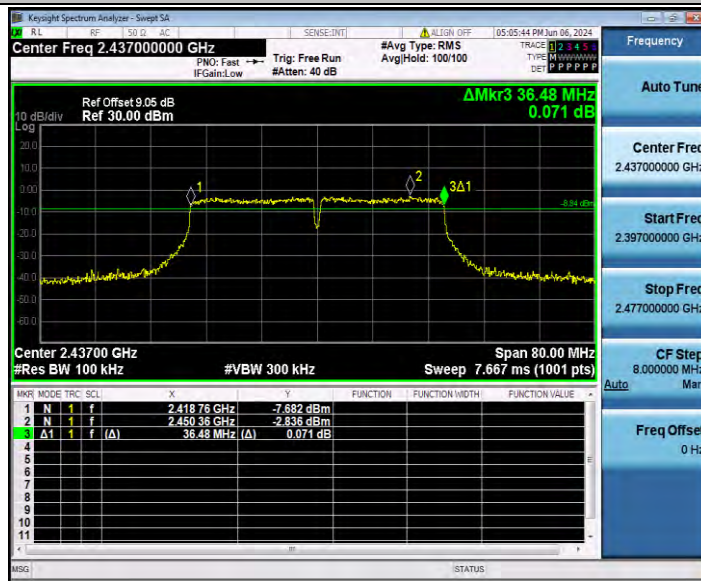
11N20SISO_Ant0_2462



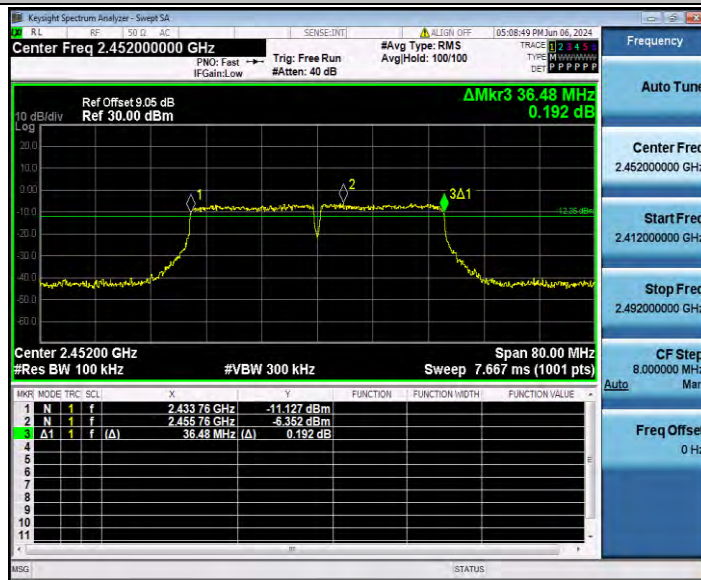
11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



Appendix C.2: Occupied Channel Bandwidth

Test Result

| TestMode | Antenna | Channel Frequency[MHz] | OCB [MHz] | FL[MHz] | FH[MHz] |
|-----------|---------|------------------------|-----------|-----------|-----------|
| 11B | Ant0 | 2412 | 15.187 | 2404.4573 | 2419.6443 |
| | | 2437 | 15.201 | 2429.3982 | 2444.5992 |
| | | 2462 | 15.145 | 2454.4296 | 2469.5746 |
| 11G | Ant0 | 2412 | 17.005 | 2403.5055 | 2420.5105 |
| | | 2437 | 17.121 | 2428.3462 | 2445.4672 |
| | | 2462 | 17.010 | 2453.4506 | 2470.4606 |
| 11N20SISO | Ant0 | 2412 | 18.004 | 2403.0173 | 2421.0213 |
| | | 2437 | 18.080 | 2427.9302 | 2446.0102 |
| | | 2462 | 17.962 | 2453.0137 | 2470.9757 |
| 11N40SISO | Ant0 | 2422 | 36.800 | 2403.7318 | 2440.5318 |
| | | 2437 | 36.722 | 2418.6520 | 2455.3740 |
| | | 2452 | 36.763 | 2433.6633 | 2470.4263 |

Test Graphs

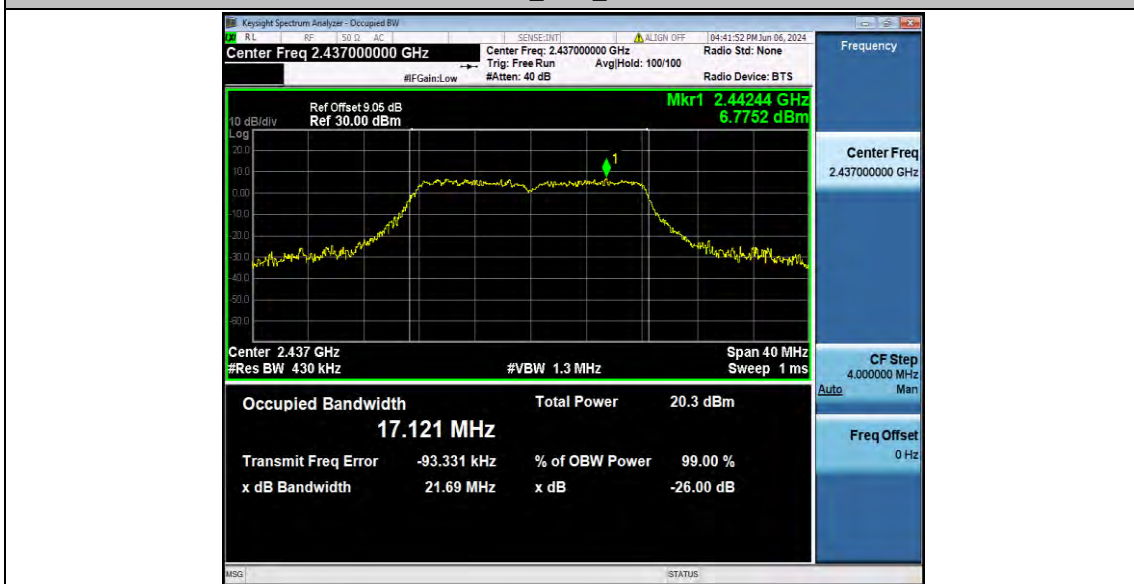




11G_Ant0_2412



11G_Ant0_2437



11G_Ant0_2462



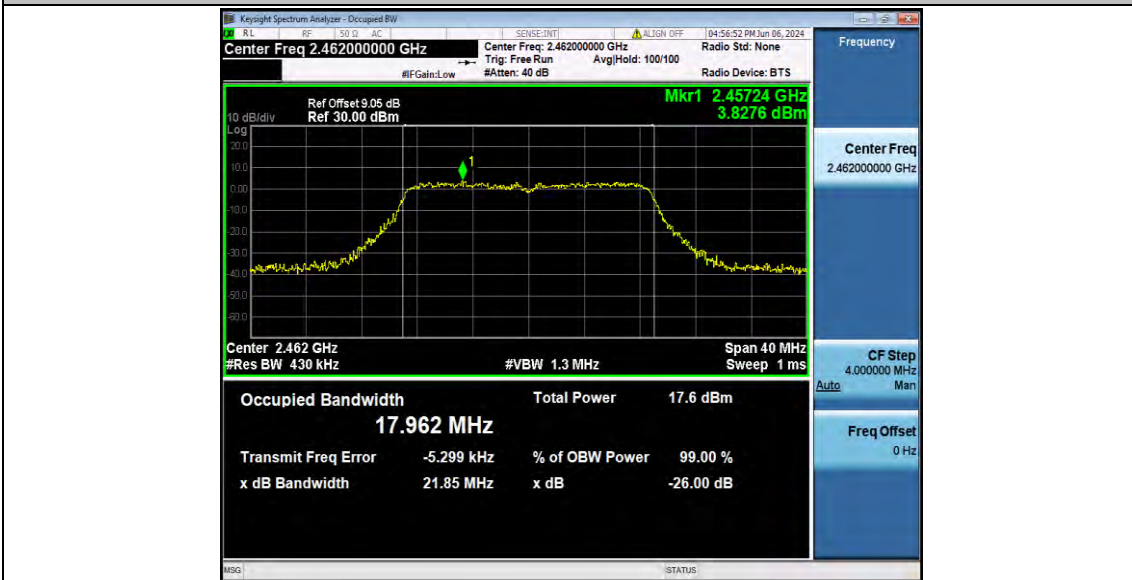
11N20SISO_Ant0_2412



11N20SISO_Ant0_2437



11N20SISO_Ant0_2462



11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



Appendix C.3: Maximum conducted output power

Test Result -CHP

| Test Mode | Antenna | Frequency[MHz] | Peak power [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|------------------|-------------|---------|
| 11B | Ant0 | 2412 | 15.79 | ≤30.00 | PASS |
| | | 2437 | 15.73 | ≤30.00 | PASS |
| | | 2462 | 16.21 | ≤30.00 | PASS |
| 11G | Ant0 | 2412 | 20.36 | ≤30.00 | PASS |
| | | 2437 | 21.36 | ≤30.00 | PASS |
| | | 2462 | 20.72 | ≤30.00 | PASS |
| 11N20SISO | Ant0 | 2412 | 18.92 | ≤30.00 | PASS |
| | | 2437 | 21.64 | ≤30.00 | PASS |
| | | 2462 | 18.79 | ≤30.00 | PASS |
| 11N40SISO | Ant0 | 2422 | 18.21 | ≤30.00 | PASS |
| | | 2437 | 21.32 | ≤30.00 | PASS |
| | | 2452 | 18.29 | ≤30.00 | PASS |

Appendix C.4: Maximum power spectral density

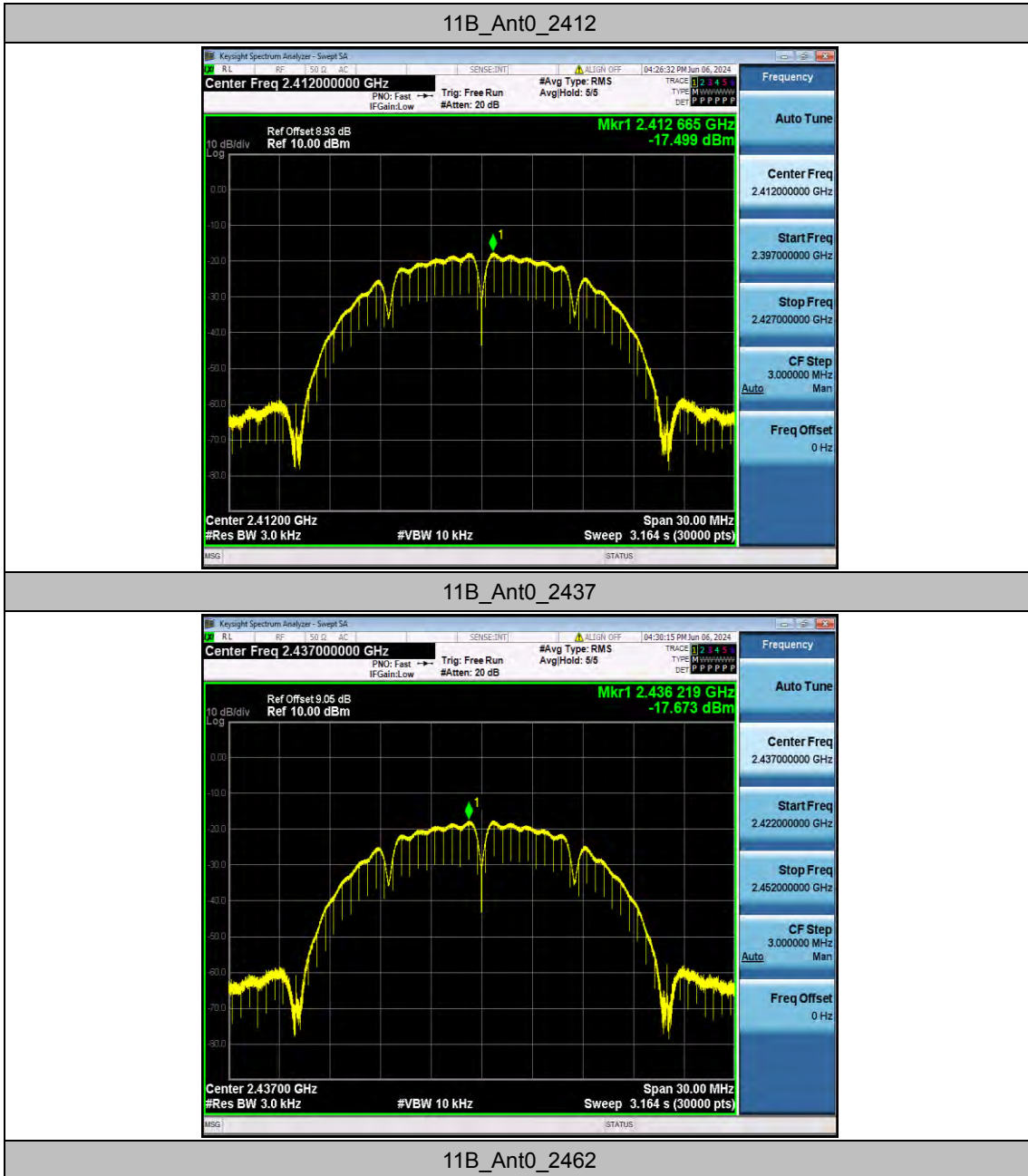
Test Result

| TestMode | Antenna | Frequency[MHz] | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|-----------|---------|----------------|----------------------|-----------------|---------|
| 11B | Ant0 | 2412 | -17.50 | ≤8.00 | PASS |
| | | 2437 | -17.67 | ≤8.00 | PASS |
| | | 2462 | -17.12 | ≤8.00 | PASS |
| 11G | Ant0 | 2412 | -14.72 | ≤8.00 | PASS |
| | | 2437 | -14.09 | ≤8.00 | PASS |
| | | 2462 | -14.86 | ≤8.00 | PASS |
| 11N20SISO | Ant0 | 2412 | -15.44 | ≤8.00 | PASS |
| | | 2437 | -13.37 | ≤8.00 | PASS |
| | | 2462 | -16.78 | ≤8.00 | PASS |
| 11N40SISO | Ant0 | 2422 | -18.21 | ≤8.00 | PASS |
| | | 2437 | -14.72 | ≤8.00 | PASS |
| | | 2452 | -18.31 | ≤8.00 | PASS |

Note:

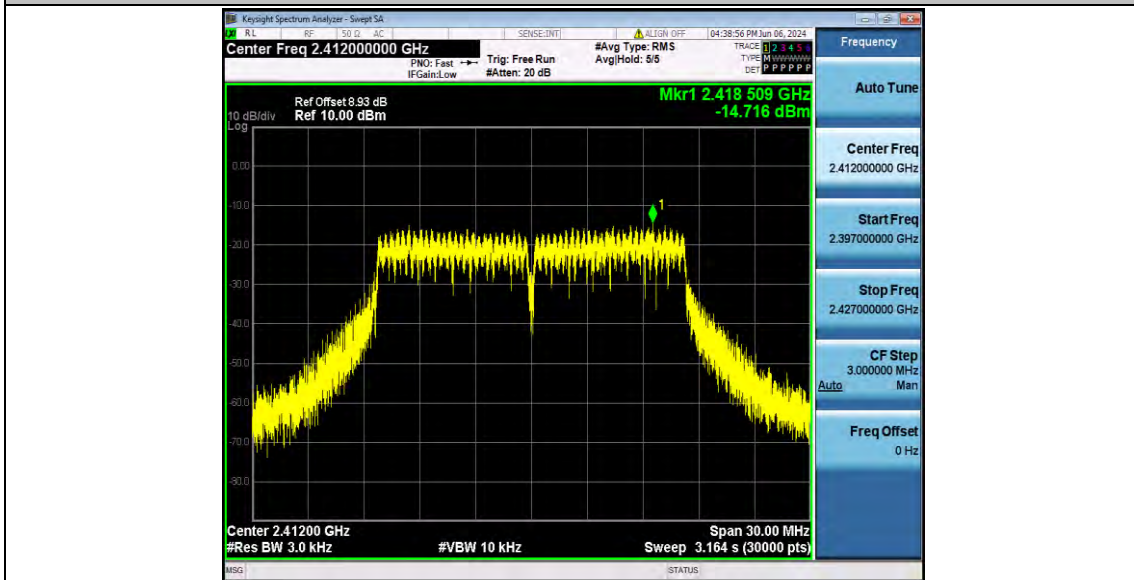
1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs

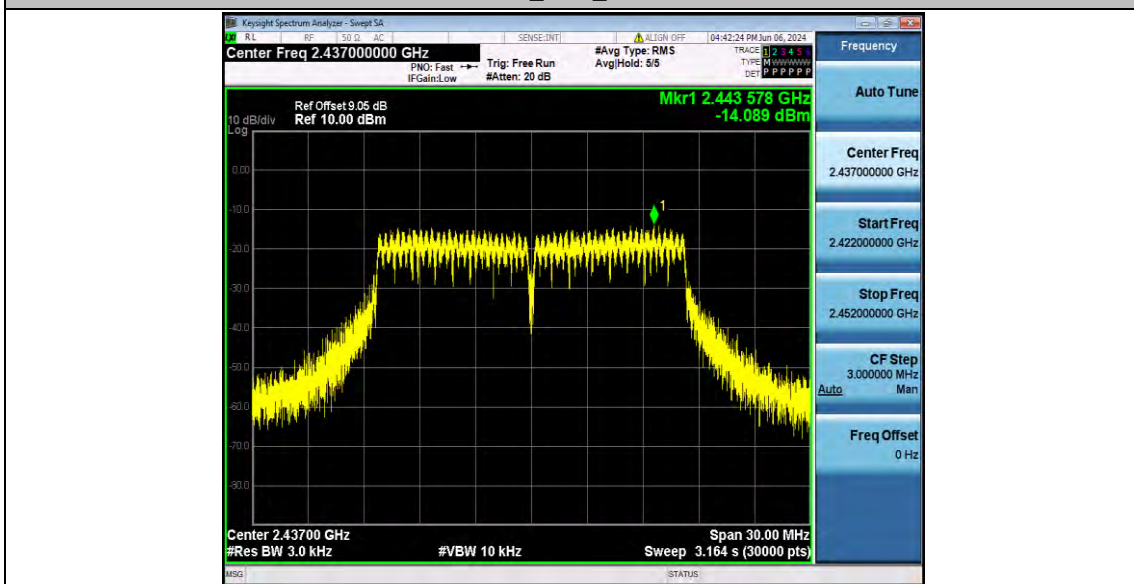




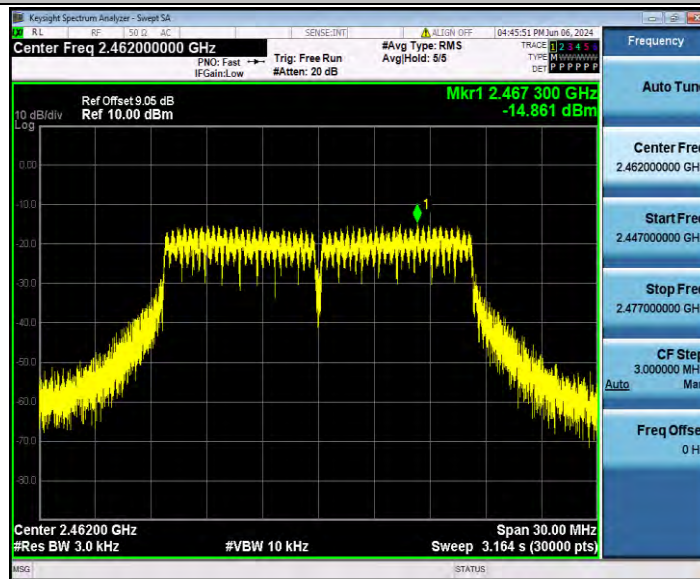
11G_Ant0_2412



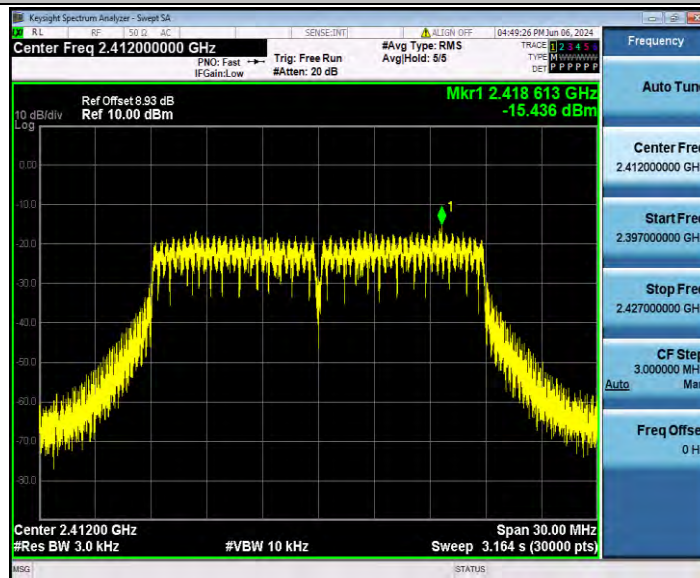
11G_Ant0_2437



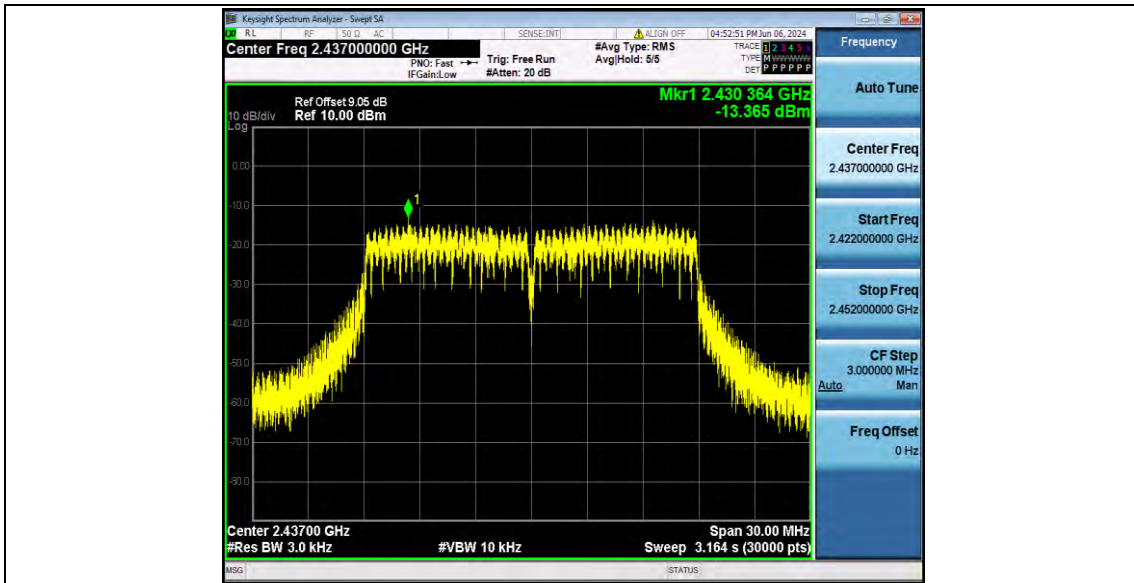
11G_Ant0_2462



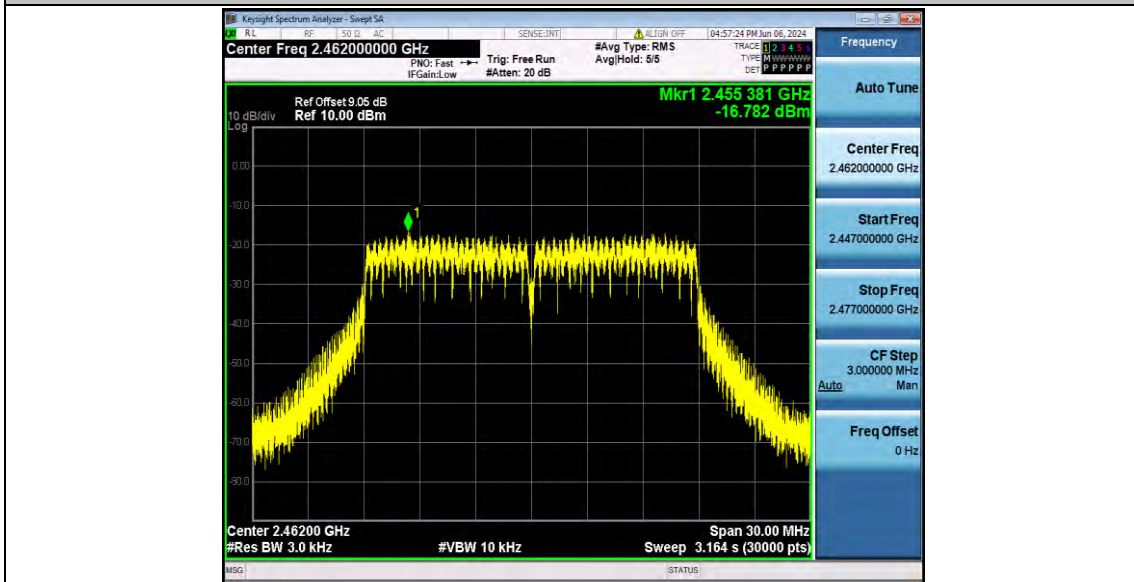
11N20SISO_Ant0_2412



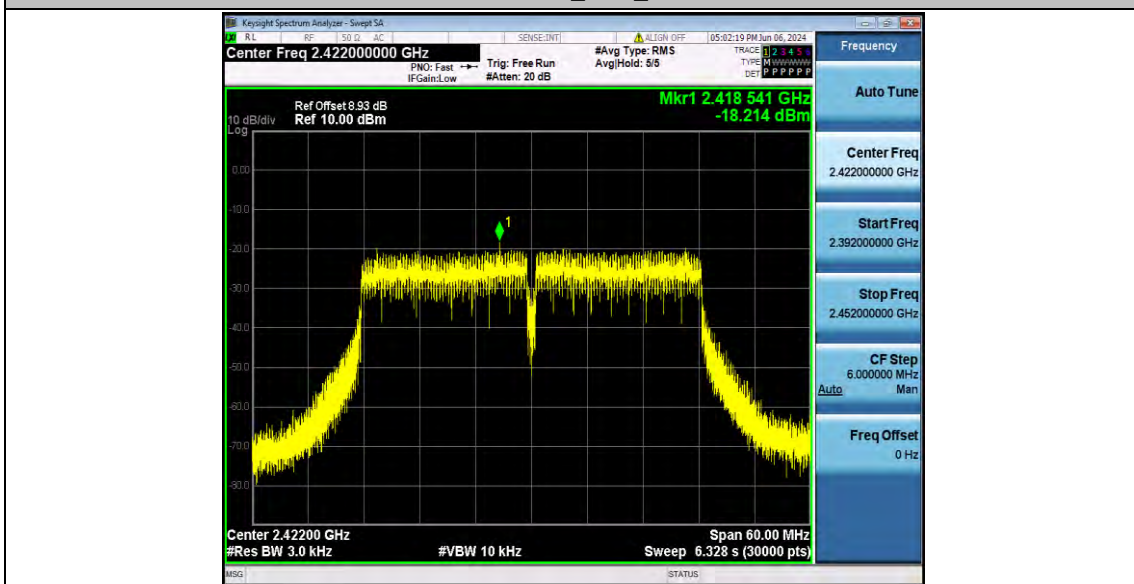
11N20SISO_Ant0_2437



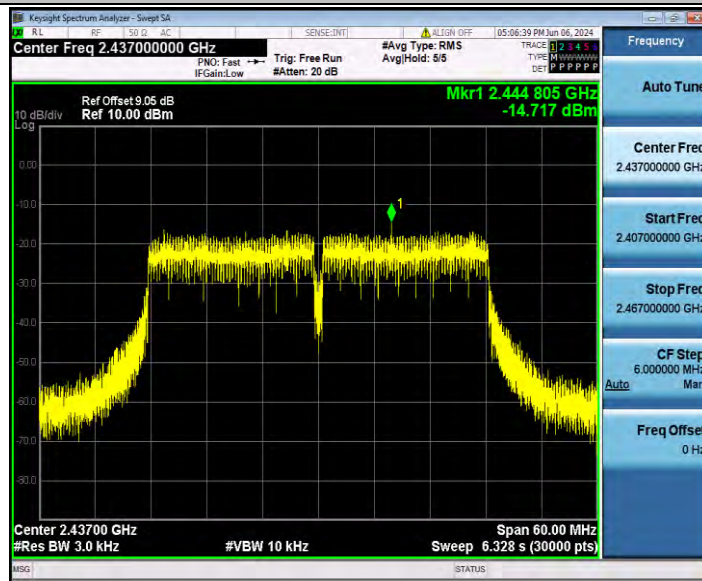
11N20SISO_Ant0_2462



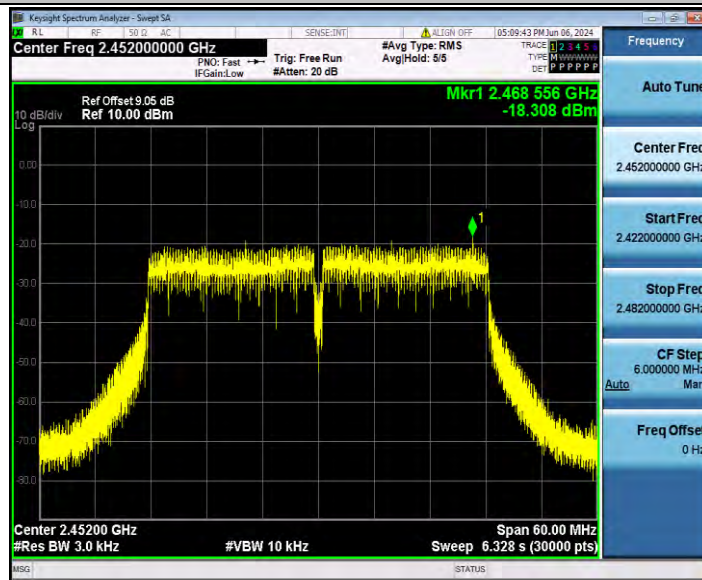
11N40SISO_Ant0_2422



11N40SISO_Ant0_2437



11N40SISO_Ant0_2452



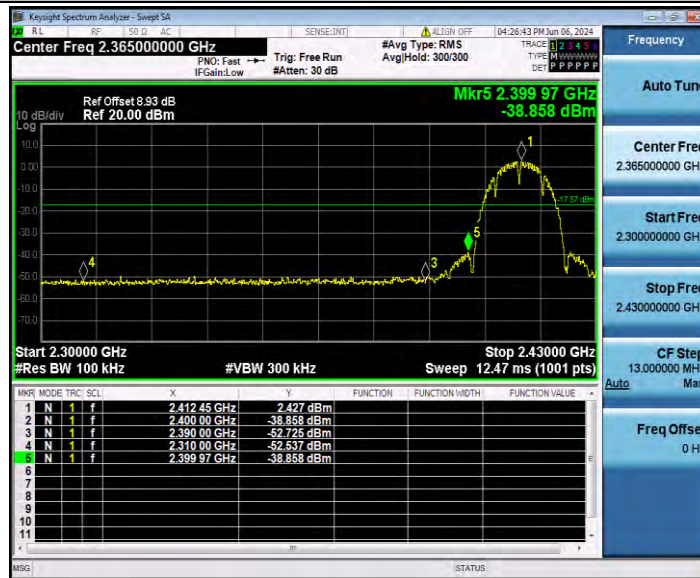
Appendix C.5: Band edge measurements

Test Result

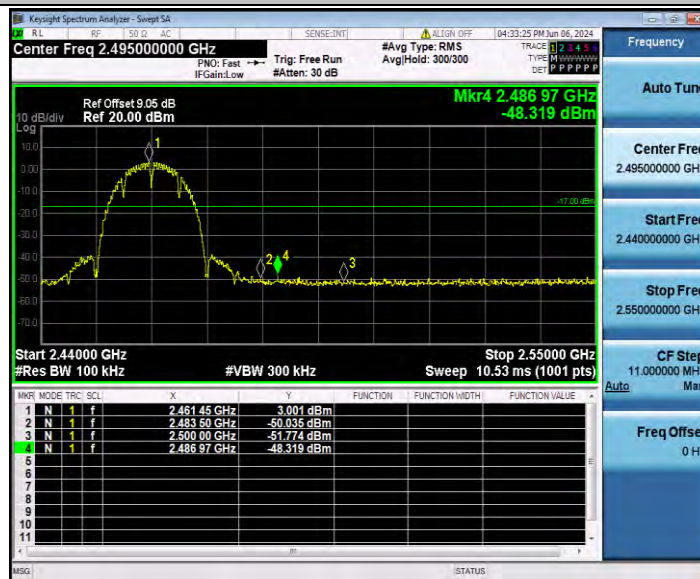
| TestMode | Antenna | ChName | Frequency[MHz] | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|-----------|---------|--------|----------------|---------------|-------------|---------------|---------|
| 11B | Ant0 | Low | 2412 | 2.43 | -38.86 | ≤ -17.57 | PASS |
| | | High | 2462 | 3.00 | -48.32 | ≤ -17 | PASS |
| 11G | Ant0 | Low | 2412 | -0.74 | -34.2 | ≤ -20.74 | PASS |
| | | High | 2462 | -0.34 | -44.63 | ≤ -20.34 | PASS |
| 11N20SISO | Ant0 | Low | 2412 | -2.61 | -37.91 | ≤ -22.61 | PASS |
| | | High | 2462 | -2.42 | -47.87 | ≤ -22.42 | PASS |
| 11N40SISO | Ant0 | Low | 2422 | -5.84 | -38.6 | ≤ -25.84 | PASS |
| | | High | 2452 | -5.81 | -44.6 | ≤ -25.81 | PASS |

Test Graphs

11B_Ant0_Low_2412



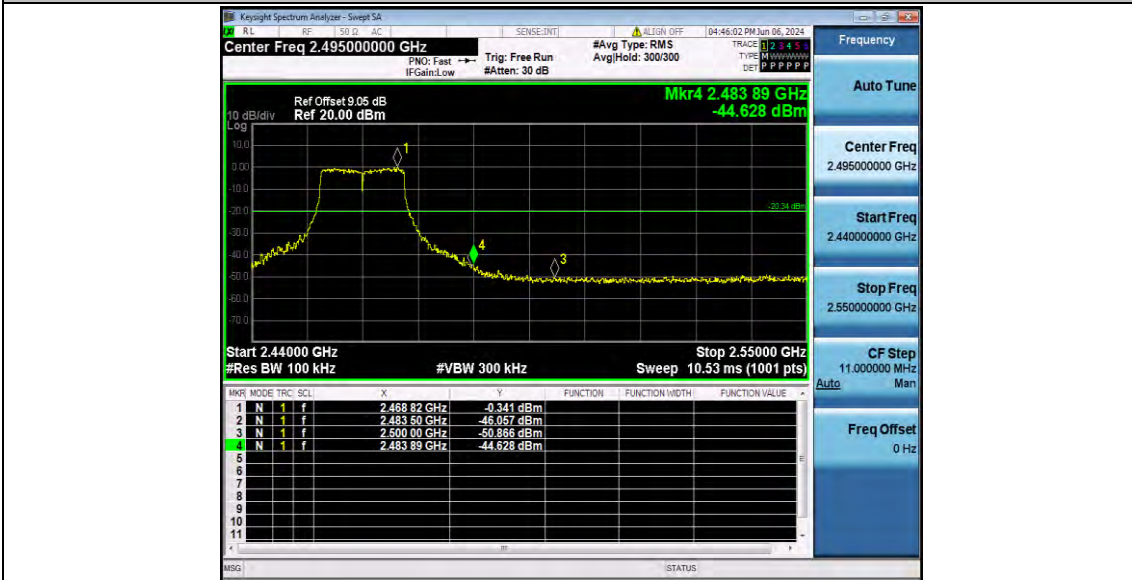
11B_Ant0_High_2462



11G_Ant0_Low_2412



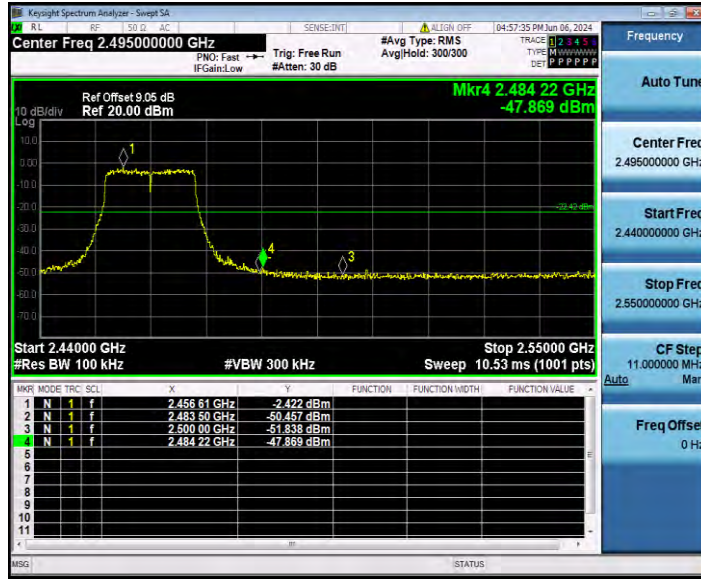
11G_Ant0_High_2462



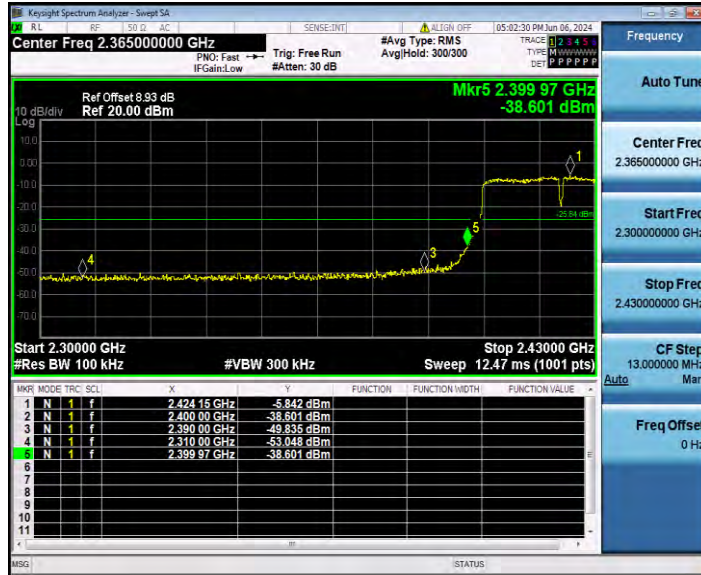
11N20SISO_Ant0_Low_2412



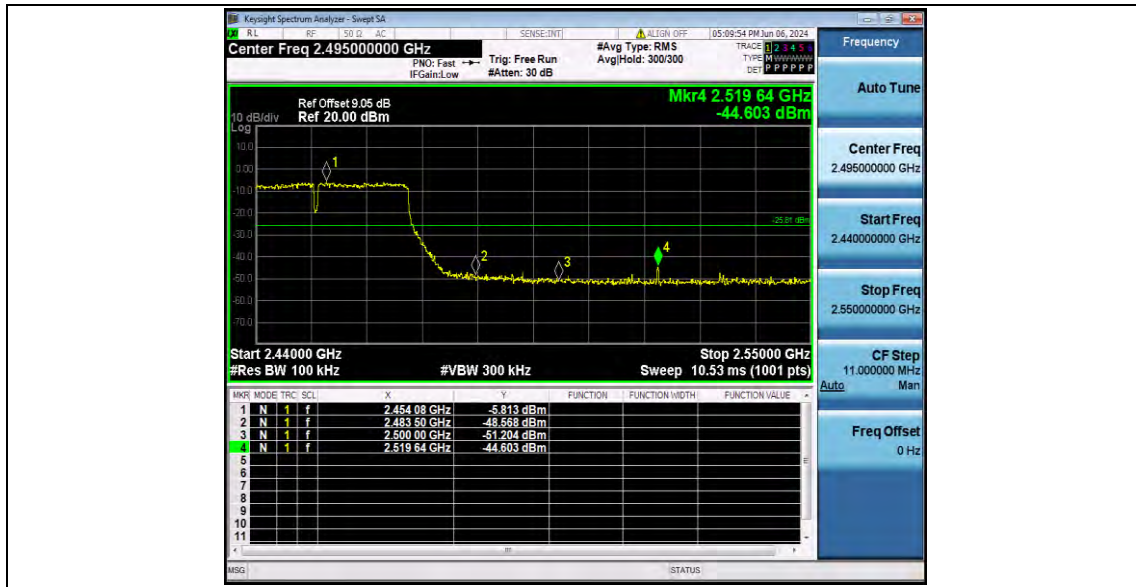
11N20SISO_Ant0_High_2462



11N40SISO_Ant0_Low_2422



11N40SISO_Ant0_High_2452

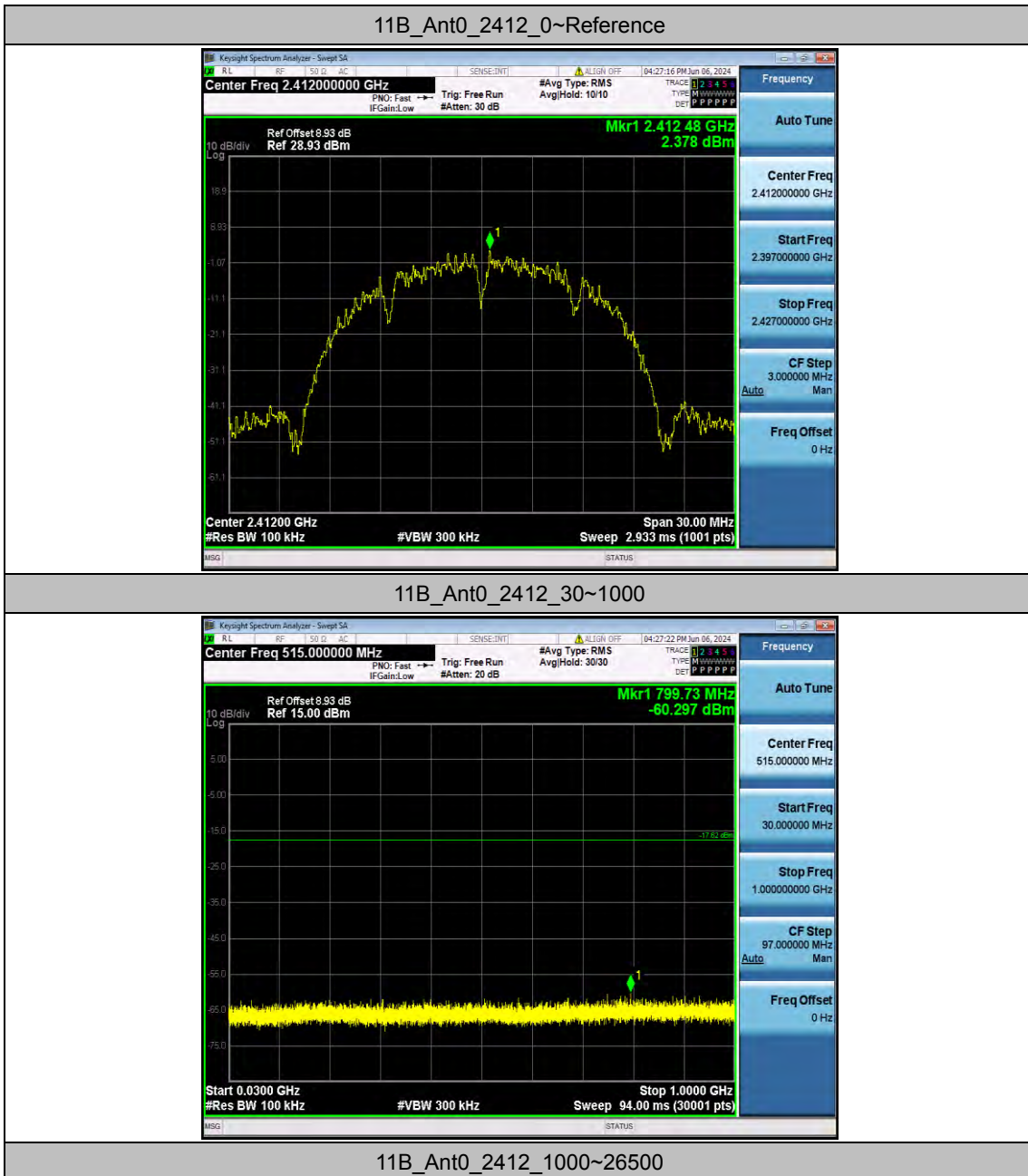


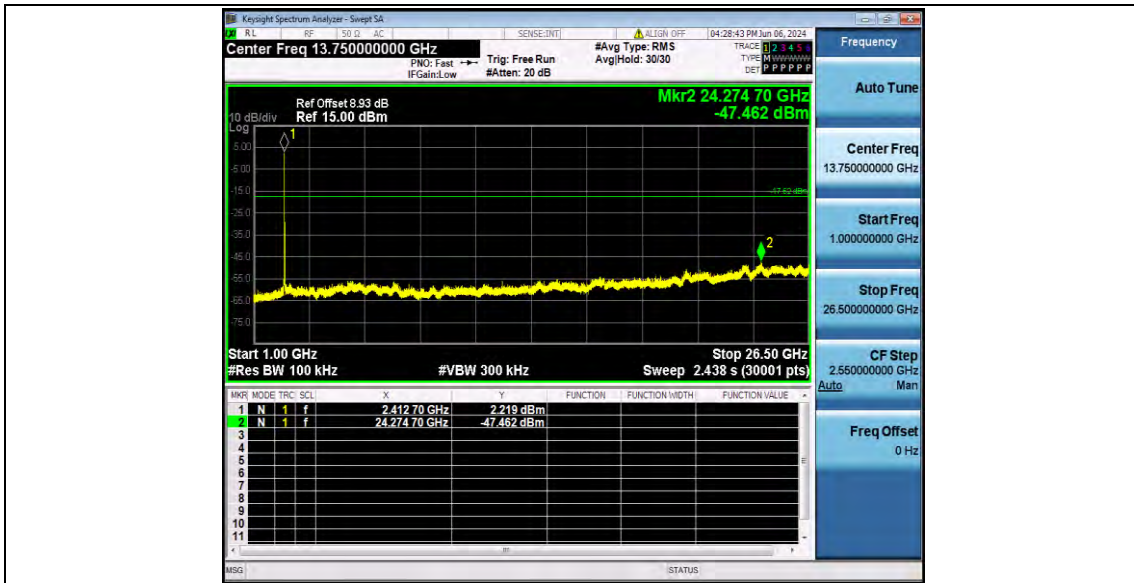
Appendix C.6: Conducted Spurious Emission

Test Result

| TestMode | Antenna | Frequency[MHz] | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------------|-----------------|----------------|--------------|---------------|---------|
| 11B | Ant0 | 2412 | Reference | 2.38 | 2.38 | --- | PASS |
| | | | 30~1000 | 2.38 | -60.3 | ≤ -17.62 | PASS |
| | | | 1000~26500 | 2.38 | -47.46 | ≤ -17.62 | PASS |
| | | 2437 | Reference | 2.16 | 2.16 | --- | PASS |
| | | | 30~1000 | 2.16 | -60.16 | ≤ -17.84 | PASS |
| | | | 1000~26500 | 2.16 | -47.79 | ≤ -17.84 | PASS |
| | | 2462 | Reference | 2.68 | 2.68 | --- | PASS |
| | | | 30~1000 | 2.68 | -60.62 | ≤ -17.32 | PASS |
| | | | 1000~26500 | 2.68 | -48.17 | ≤ -17.32 | PASS |
| 11G | Ant0 | 2412 | Reference | -1.05 | -1.05 | --- | PASS |
| | | | 30~1000 | -1.05 | -60.7 | ≤ -21.05 | PASS |
| | | | 1000~26500 | -1.05 | -47.57 | ≤ -21.05 | PASS |
| | | 2437 | Reference | -0.17 | -0.17 | --- | PASS |
| | | | 30~1000 | -0.17 | -60.52 | ≤ -20.17 | PASS |
| | | | 1000~26500 | -0.17 | -46.9 | ≤ -20.17 | PASS |
| | | 2462 | Reference | -0.95 | -0.95 | --- | PASS |
| | | | 30~1000 | -0.95 | -60.1 | ≤ -20.95 | PASS |
| | | | 1000~26500 | -0.95 | -47.22 | ≤ -20.95 | PASS |
| 11N20SISO | Ant0 | 2412 | Reference | -3.38 | -3.38 | --- | PASS |
| | | | 30~1000 | -3.38 | -60.62 | ≤ -23.38 | PASS |
| | | | 1000~26500 | -3.38 | -48 | ≤ -23.38 | PASS |
| | | 2437 | Reference | -0.83 | -0.83 | --- | PASS |
| | | | 30~1000 | -0.83 | -60.8 | ≤ -20.83 | PASS |
| | | | 1000~26500 | -0.83 | -47.43 | ≤ -20.83 | PASS |
| | | 2462 | Reference | -3.19 | -3.19 | --- | PASS |
| | | | 30~1000 | -3.19 | -59.91 | ≤ -23.19 | PASS |
| | | | 1000~26500 | -3.19 | -47.89 | ≤ -23.19 | PASS |
| 11N40SISO | Ant0 | 2422 | Reference | -6.45 | -6.45 | --- | PASS |
| | | | 30~1000 | -6.45 | -60.54 | ≤ -26.45 | PASS |
| | | | 1000~26500 | -6.45 | -47.94 | ≤ -26.45 | PASS |
| | | 2437 | Reference | -3.53 | -3.53 | --- | PASS |
| | | | 30~1000 | -3.53 | -59.57 | ≤ -23.53 | PASS |
| | | | 1000~26500 | -3.53 | -47.37 | ≤ -23.53 | PASS |
| | | 2452 | Reference | -6.47 | -6.47 | --- | PASS |
| | | | 30~1000 | -6.47 | -59.41 | ≤ -26.47 | PASS |
| | | | 1000~26500 | -6.47 | -46.7 | ≤ -26.47 | PASS |

Test Graphs

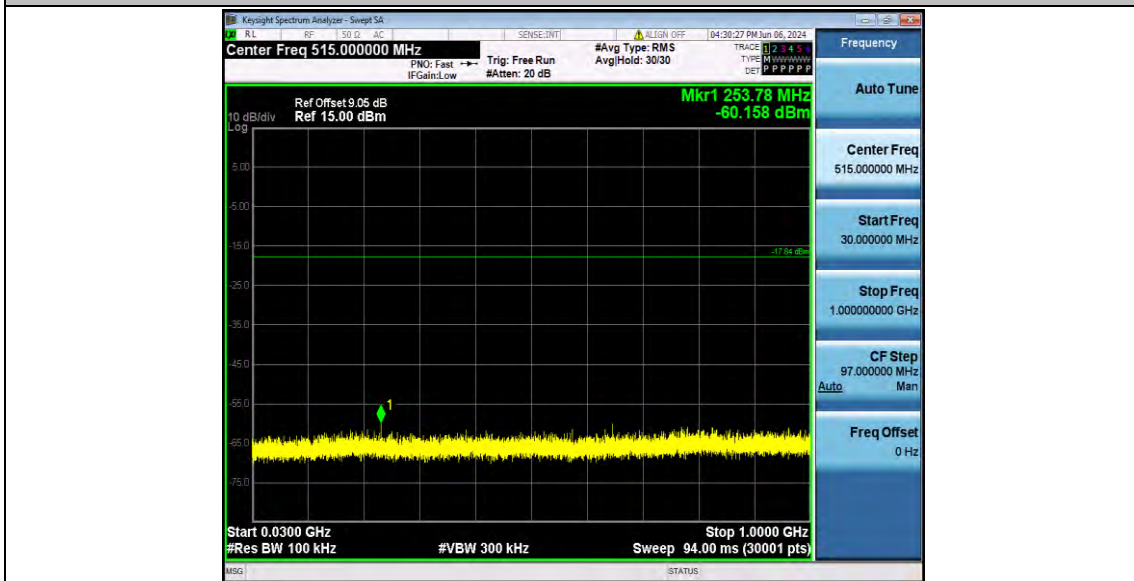




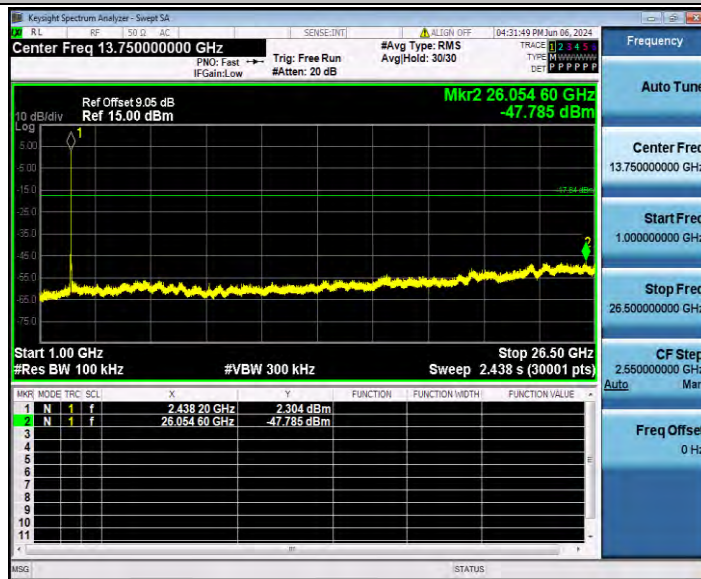
11B_Ant0_2437_0~Reference



11B_Ant0_2437_30~1000



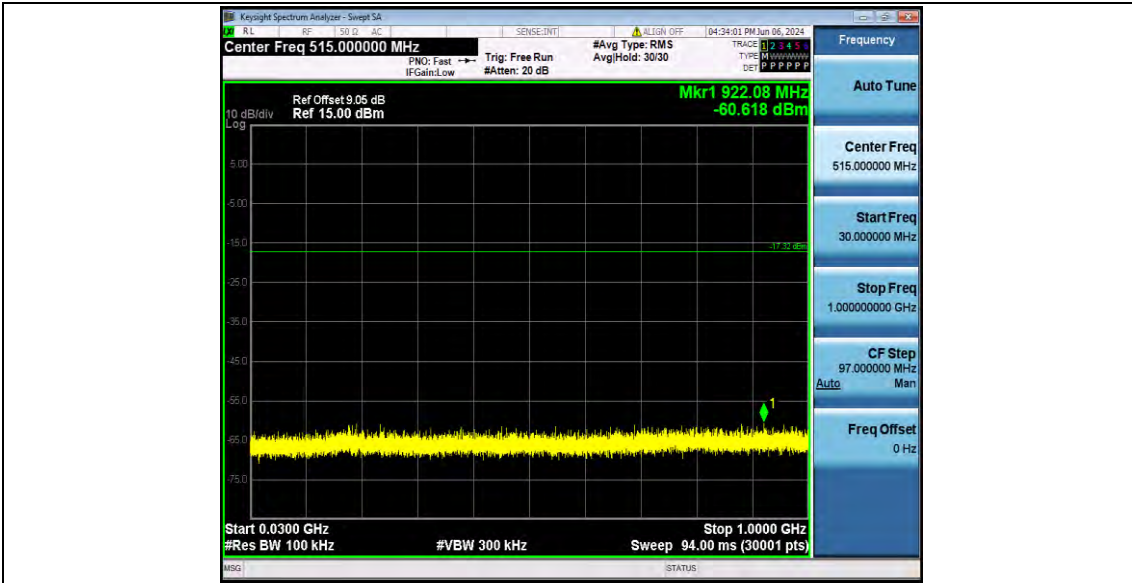
11B_Ant0_2437_1000~26500



11B_Ant0_2462_0~Reference



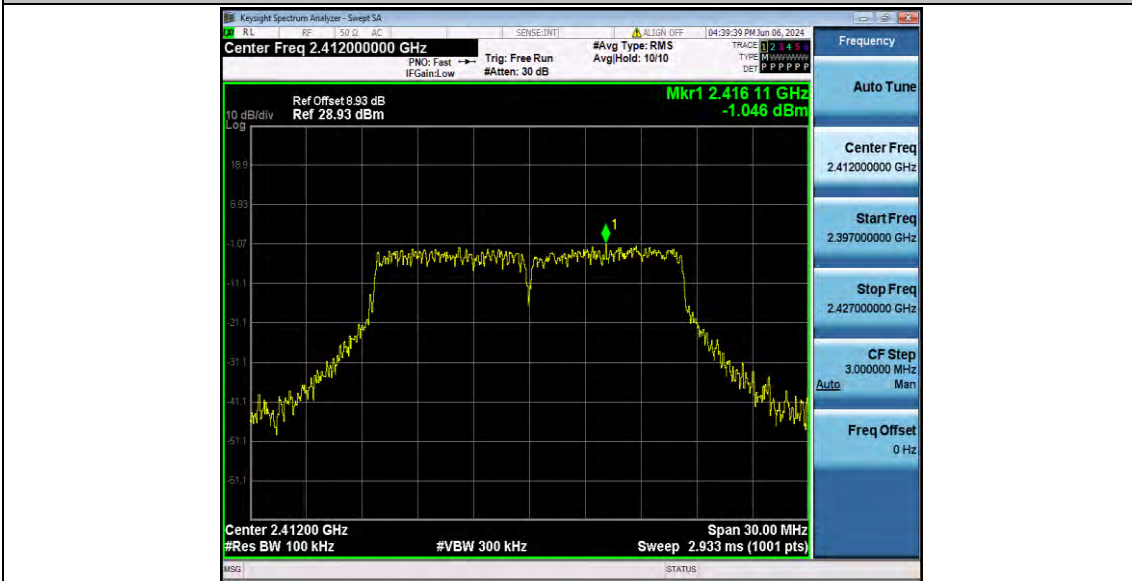
11B_Ant0_2462_30~1000



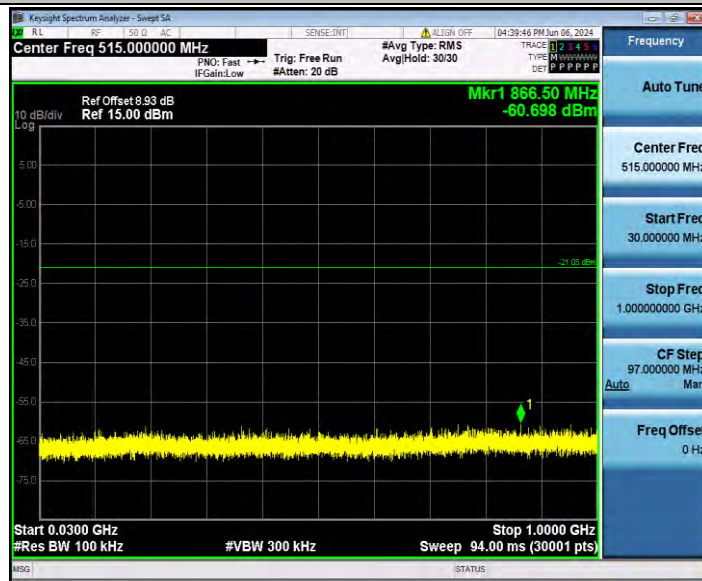
11B_Ant0_2462_1000~26500



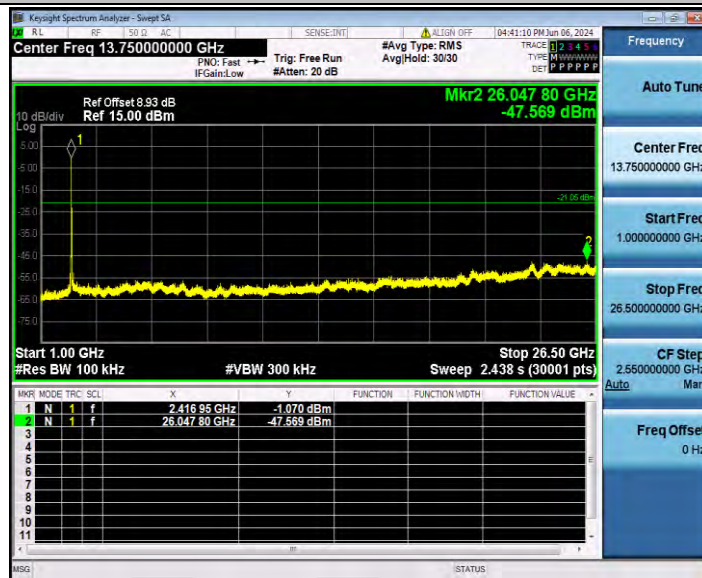
11G_Ant0_2412_0~Reference



11G_Ant0_2412_30~1000



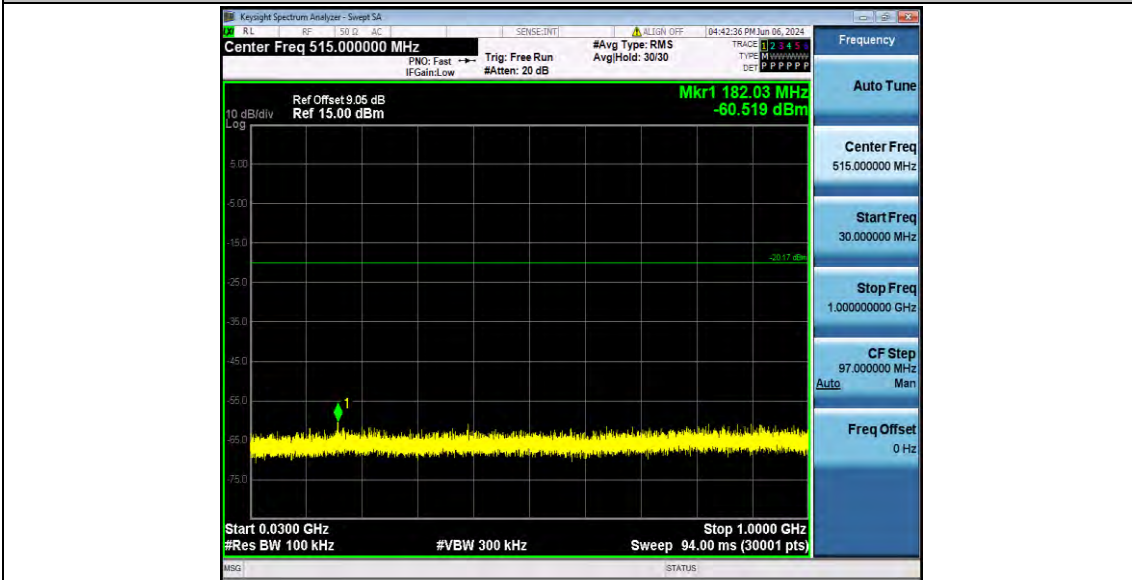
11G_Ant0_2412_1000~26500



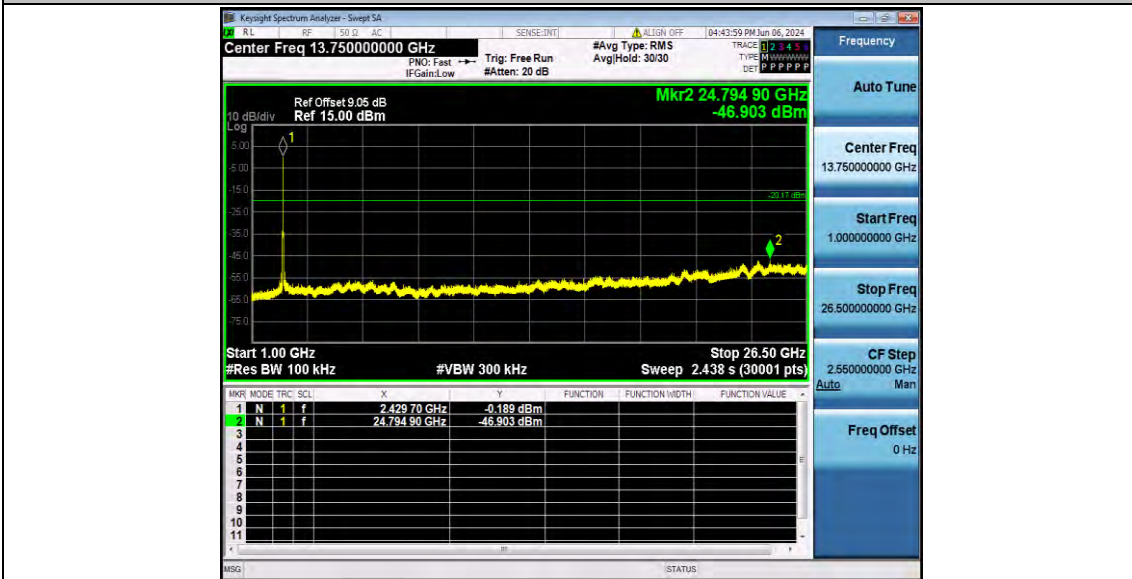
11G_Ant0_2437_0~Reference



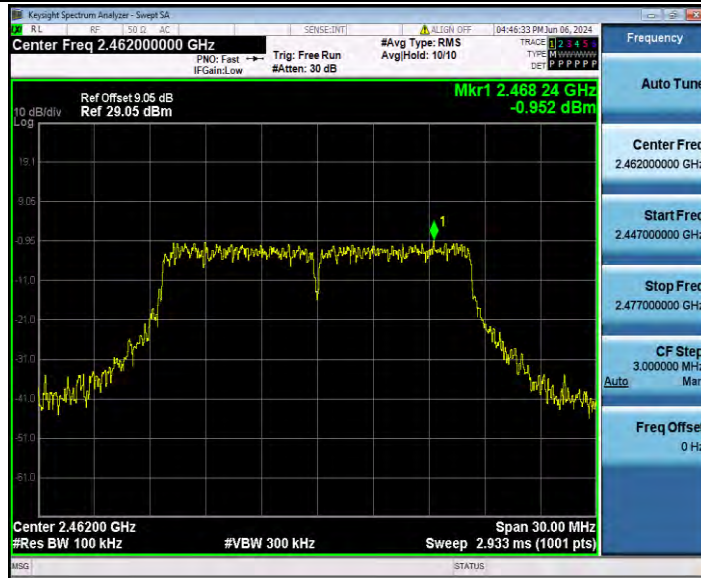
11G_Ant0_2437_30~1000



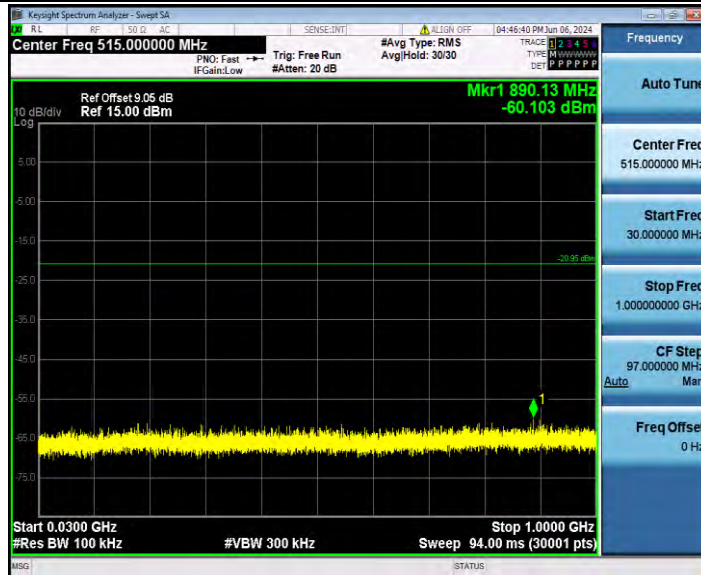
11G_Ant0_2437_1000~26500



11G_Ant0_2462_0~Reference



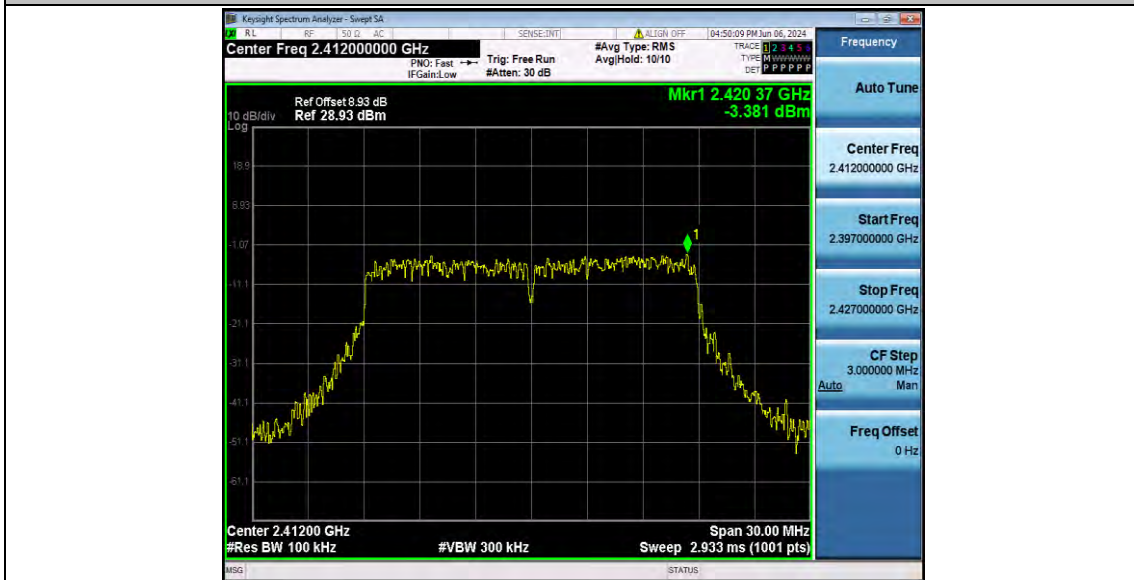
11G_Ant0_2462_30~1000



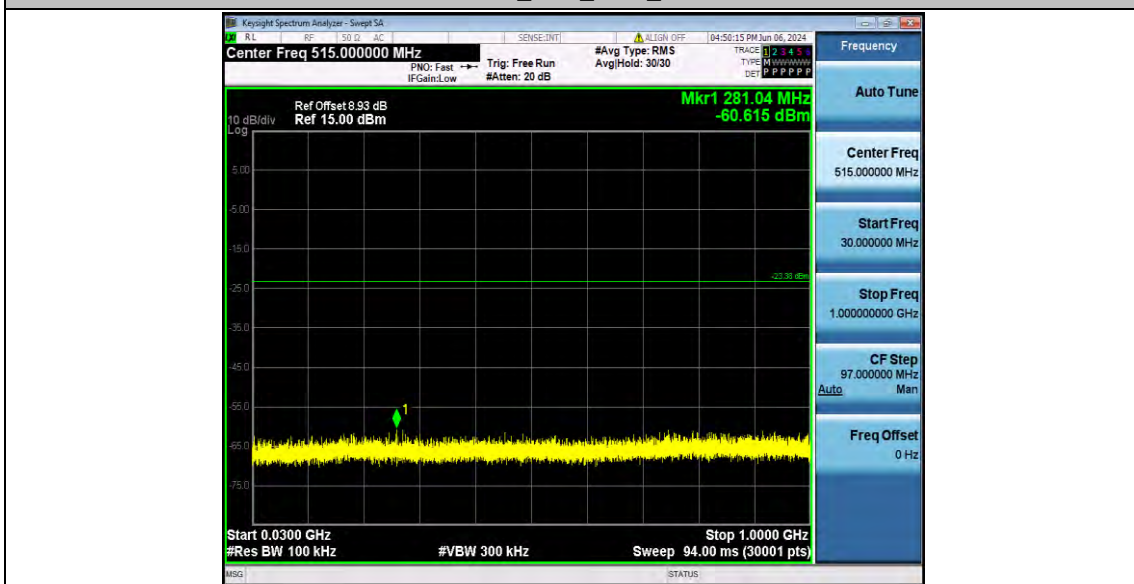
11G_Ant0_2462_1000~26500



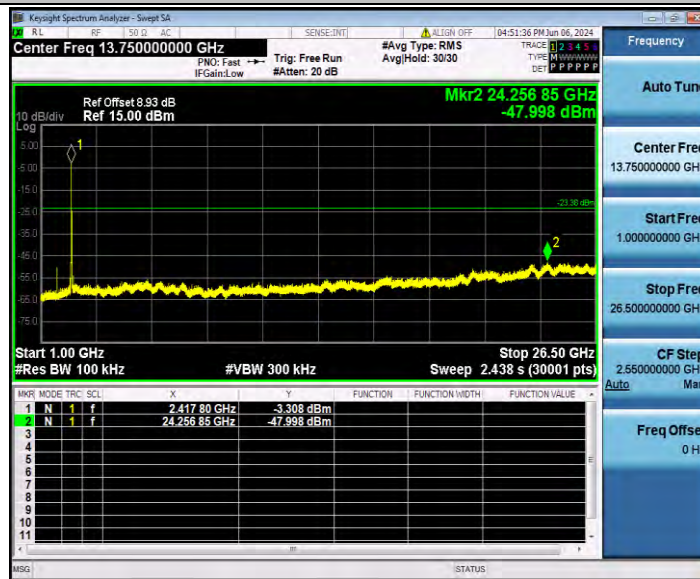
11N20SISO_Ant0_2412_0~Reference



11N20SISO_Ant0_2412_30~1000



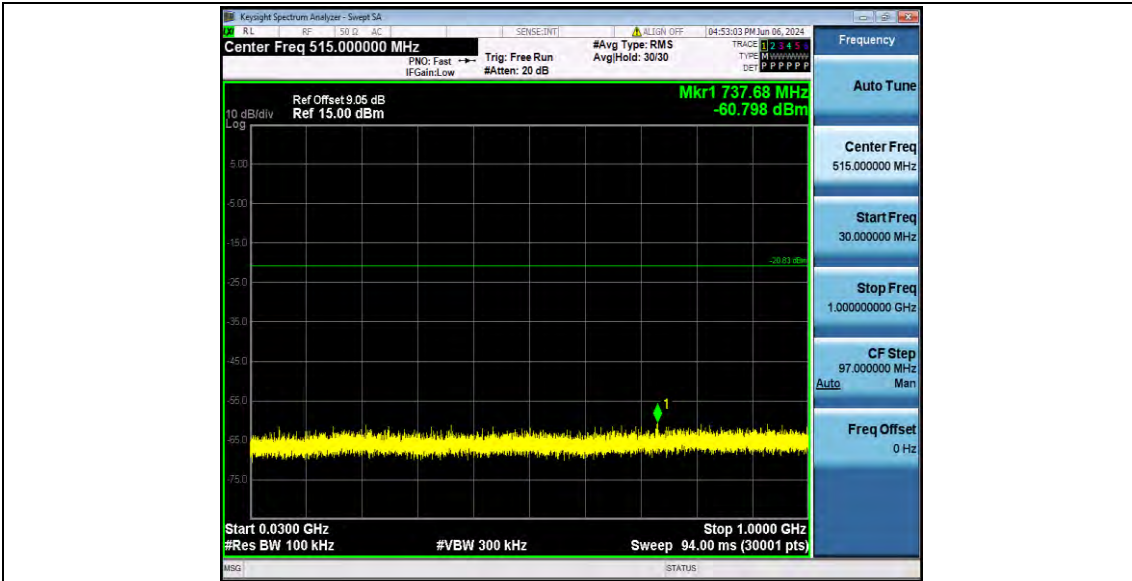
11N20SISO_Ant0_2412_1000~26500



11N20SISO_Ant0_2437_0~Reference



11N20SISO_Ant0_2437_30~1000



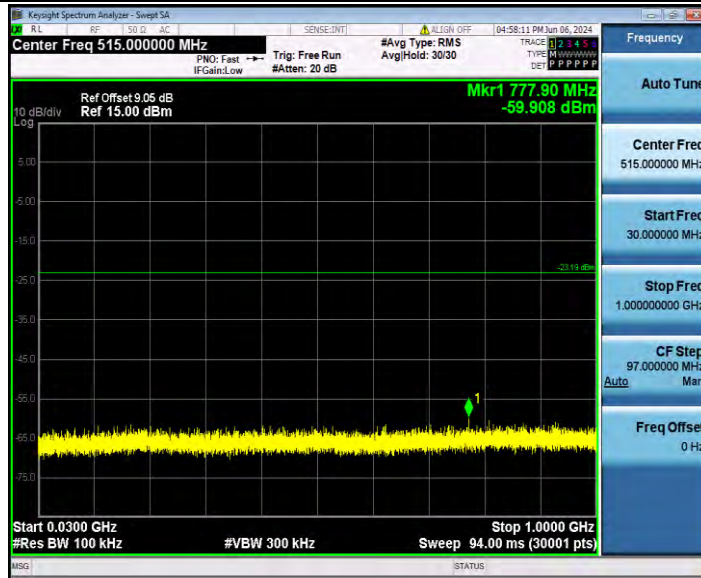
11N20SISO_Ant0_2437_1000~26500



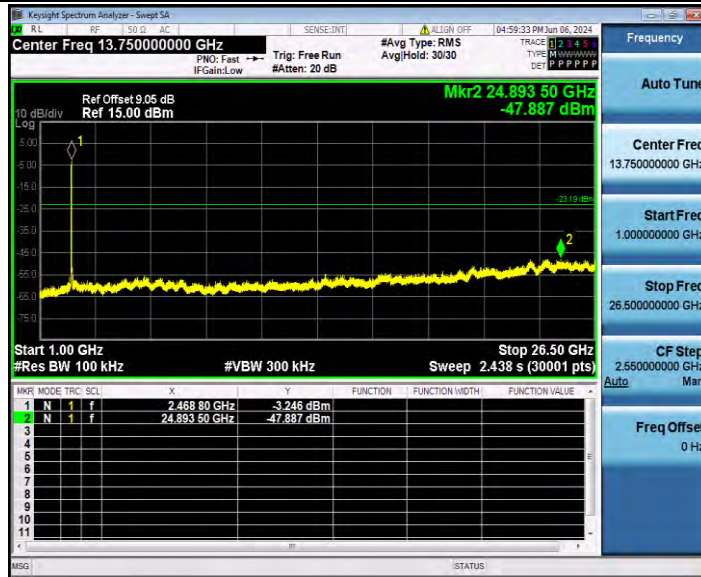
11N20SISO_Ant0_2462_0~Reference



11N20SISO_Ant0_2462_30~1000



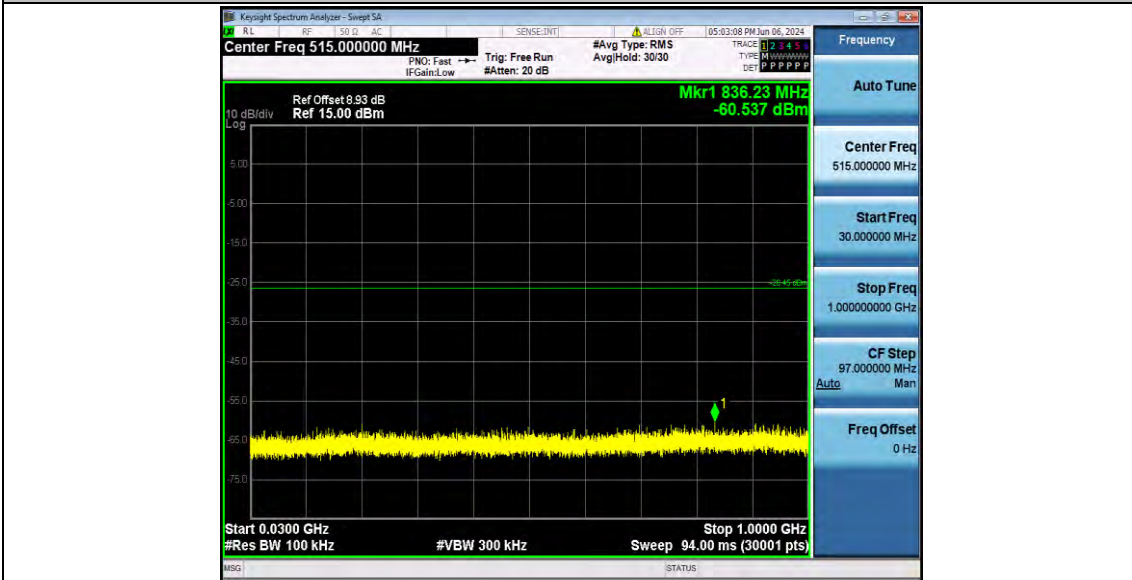
11N20SISO_Ant0_2462_1000~26500



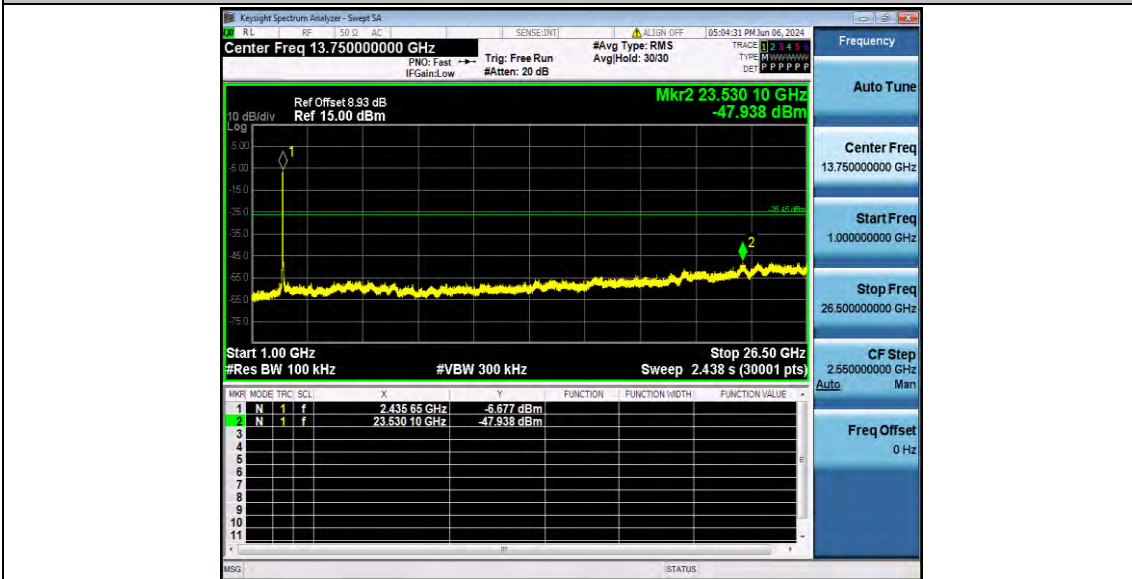
11N40SISO_Ant0_2422_0~Reference



11N40SISO_Ant0_2422_30~1000



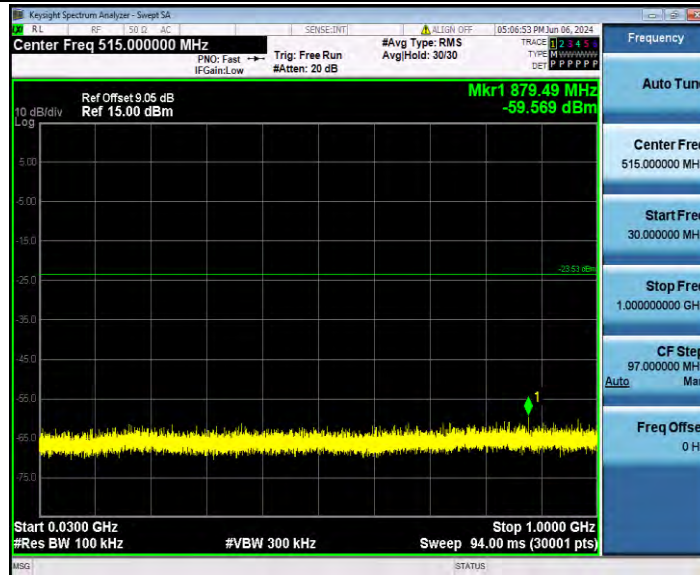
11N40SISO_Ant0_2422_1000~26500



11N40SISO_Ant0_2437_0~Reference



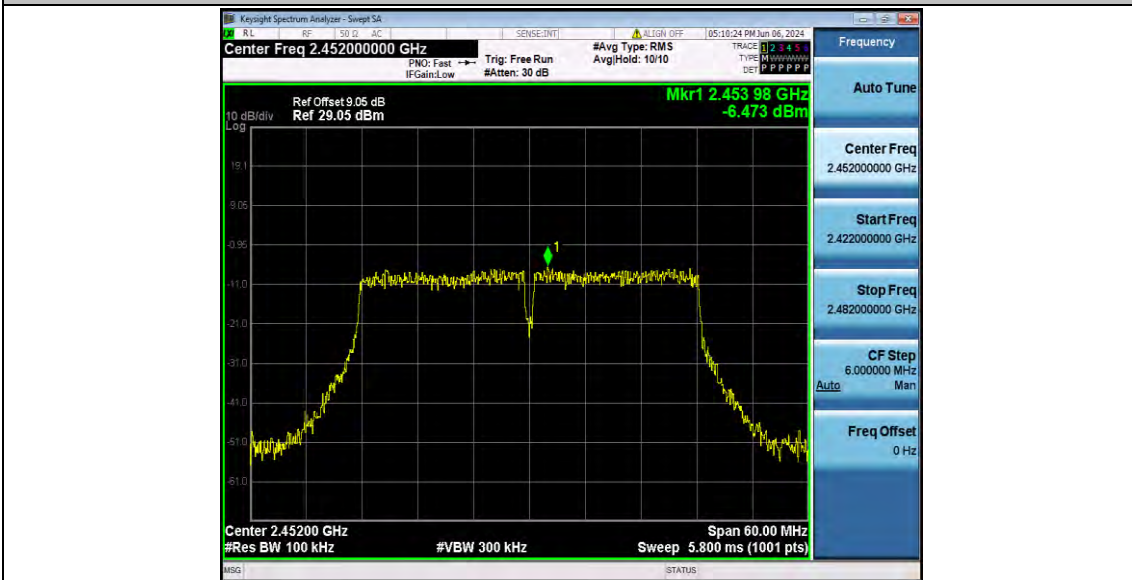
11N40SISO_Ant0_2437_30~1000



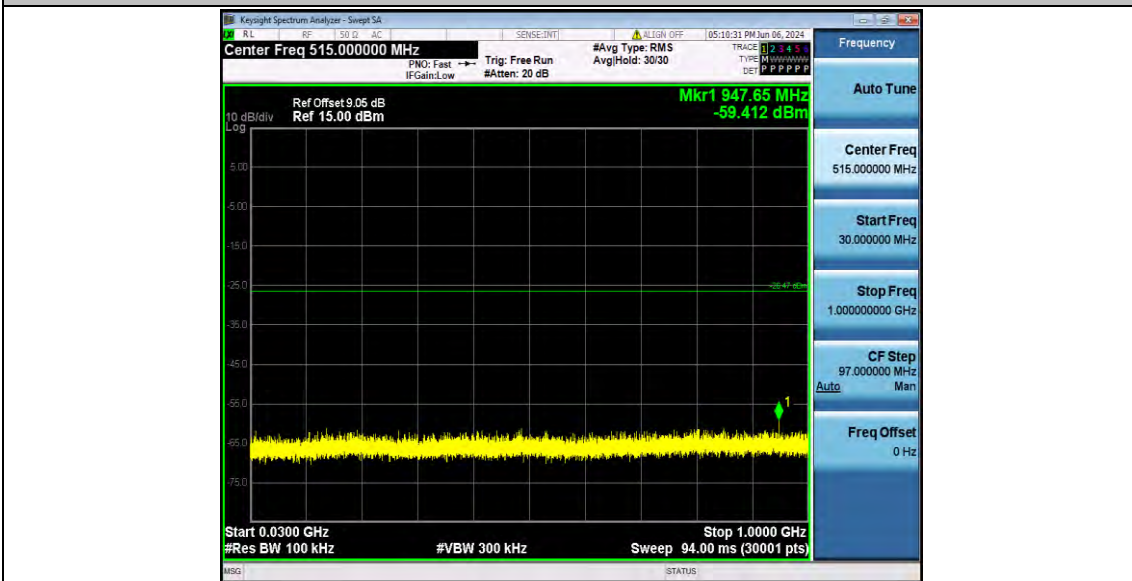
11N40SISO_Ant0_2437_1000~26500

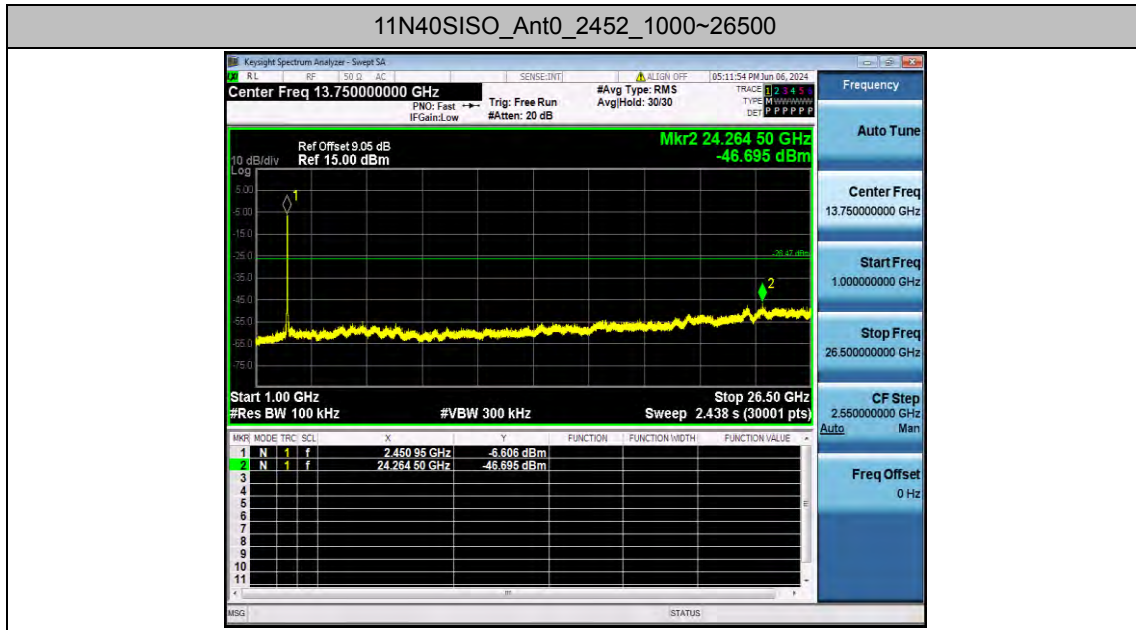


11N40SISO_Ant0_2452_0~Reference



11N40SISO_Ant0_2452_30~1000





Appendix C.7: Emissions in Restricted Bands

Test Result

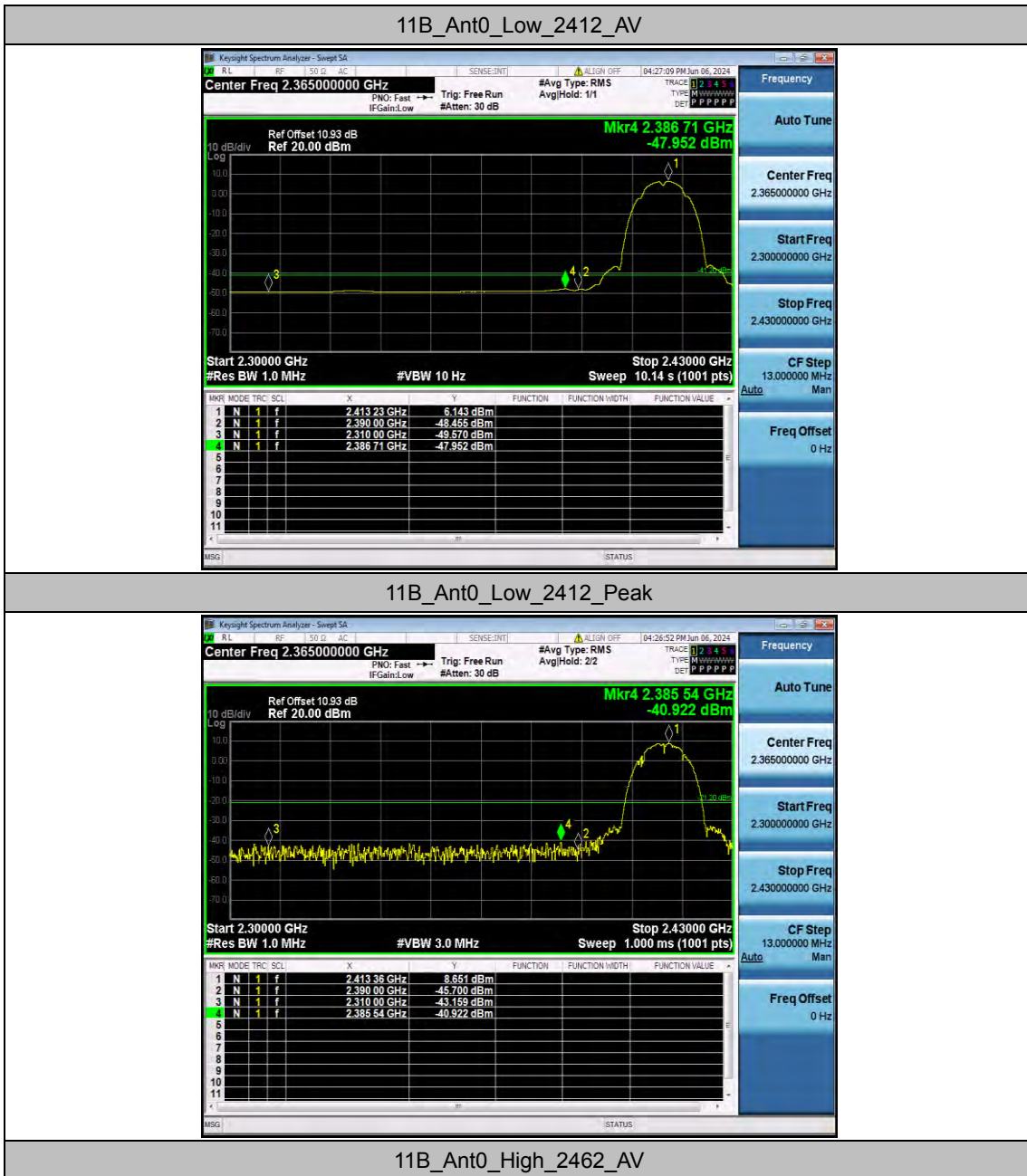
| TestMode | Antenna | ChName | Frequency [MHz] | Detector | Freq [MHz] | Result [dBm] | Limit [dBm] | Result [dBuV/m] | Limit [dBuV/m] | Verdict |
|---------------|---------|--------|-----------------|----------|------------|--------------|-------------|-----------------|----------------|---------|
| 11B | Ant0 | Low | 2412 | AV | 2310.000 | -49.57 | ≤-41.20 | 45.63 | ≤54 | PASS |
| | | | | AV | 2386.710 | -47.95 | ≤-41.20 | 47.25 | ≤54 | PASS |
| | | | | AV | 2390.000 | -48.46 | ≤-41.20 | 46.74 | ≤54 | PASS |
| | | | | Peak | 2310.000 | -43.16 | ≤-21.20 | 52.04 | ≤74 | PASS |
| | | | | Peak | 2385.540 | -40.92 | ≤-21.20 | 54.28 | ≤74 | PASS |
| | | | | Peak | 2390.000 | -45.7 | ≤-21.20 | 49.50 | ≤74 | PASS |
| | | High | 2462 | AV | 2483.500 | -47.72 | ≤-41.20 | 47.48 | ≤54 | PASS |
| | | | | AV | 2487.300 | -47.44 | ≤-41.20 | 47.76 | ≤54 | PASS |
| | | | | AV | 2500.000 | -48.43 | ≤-41.20 | 46.77 | ≤54 | PASS |
| | | | | Peak | 2483.500 | -47.55 | ≤-21.20 | 47.65 | ≤74 | PASS |
| | | | | Peak | 2487.740 | -40.66 | ≤-21.20 | 54.54 | ≤74 | PASS |
| | | | | Peak | 2500.000 | -44.87 | ≤-21.20 | 50.33 | ≤74 | PASS |
| 11G | Ant0 | Low | 2412 | AV | 2310.000 | -49.45 | ≤-41.20 | 45.75 | ≤54 | PASS |
| | | | | AV | 2389.960 | -44.35 | ≤-41.20 | 50.85 | ≤54 | PASS |
| | | | | AV | 2390.000 | -44.35 | ≤-41.20 | 50.85 | ≤54 | PASS |
| | | | | Peak | 2310.000 | -53.18 | ≤-21.20 | 42.02 | ≤74 | PASS |
| | | | | Peak | 2389.830 | -35.53 | ≤-21.20 | 59.67 | ≤74 | PASS |
| | | | | Peak | 2390.000 | -40.96 | ≤-21.20 | 54.24 | ≤74 | PASS |
| | | High | 2462 | AV | 2483.500 | -42.31 | ≤-41.20 | 52.89 | ≤54 | PASS |
| | | | | AV | 2483.560 | -42.41 | ≤-41.20 | 52.79 | ≤54 | PASS |
| | | | | AV | 2500.000 | -48.24 | ≤-41.20 | 46.96 | ≤54 | PASS |
| | | | | Peak | 2483.500 | -38.35 | ≤-21.20 | 56.85 | ≤74 | PASS |
| | | | | Peak | 2486.310 | -36.77 | ≤-21.20 | 58.43 | ≤74 | PASS |
| | | | | Peak | 2500.000 | -45.29 | ≤-21.20 | 49.91 | ≤74 | PASS |
| 11N20SIS O | Ant0 | Low | 2412 | AV | 2310.000 | -49.49 | ≤-41.20 | 45.71 | ≤54 | PASS |
| | | | | AV | 2389.960 | -46.41 | ≤-41.20 | 48.79 | ≤54 | PASS |
| | | | | AV | 2390.000 | -46.41 | ≤-41.20 | 48.79 | ≤54 | PASS |
| | | | | Peak | 2310.000 | -48.8 | ≤-21.20 | 46.40 | ≤74 | PASS |
| | | | | Peak | 2389.960 | -36.37 | ≤-21.20 | 58.83 | ≤74 | PASS |
| | | | | Peak | 2390.000 | -36.37 | ≤-21.20 | 58.83 | ≤74 | PASS |
| | | High | 2462 | AV | 2483.500 | -46.49 | ≤-41.20 | 48.71 | ≤54 | PASS |
| | | | | AV | 2483.560 | -46.54 | ≤-41.20 | 48.66 | ≤54 | PASS |
| | | | | AV | 2500.000 | -48.37 | ≤-41.20 | 46.83 | ≤54 | PASS |
| | | | | Peak | 2483.500 | -45.35 | ≤-21.20 | 49.85 | ≤74 | PASS |
| | | | | Peak | 2494.120 | -39.22 | ≤-21.20 | 55.98 | ≤74 | PASS |
| | | | | Peak | 2494.120 | -39.22 | ≤-21.20 | 55.98 | ≤74 | PASS |

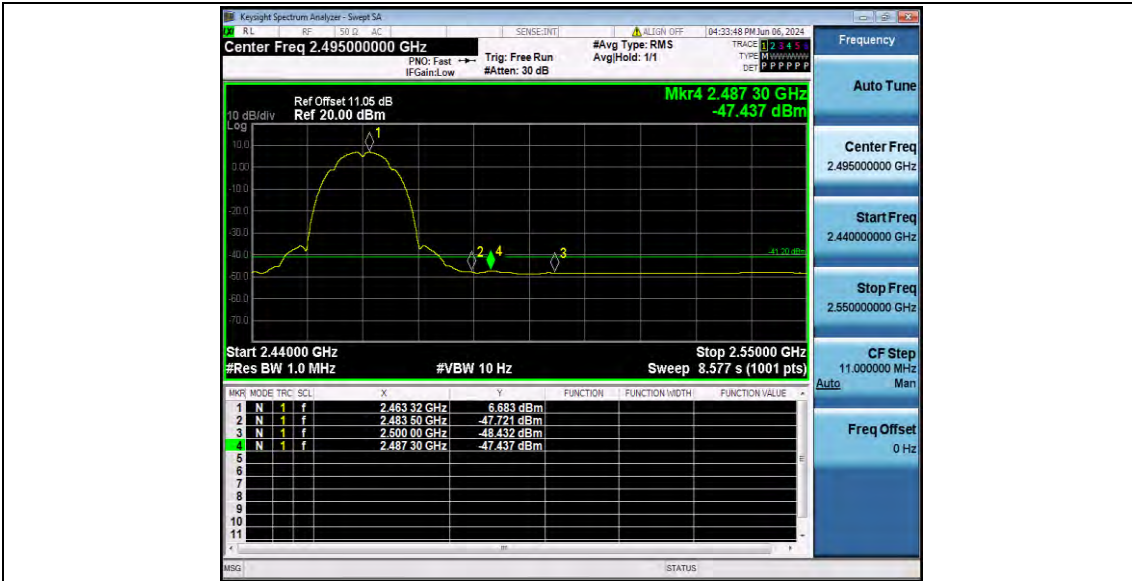
| | | | | | | | | | | |
|---------------|------|------|------|------|----------|--------|---------------|-------|-----------|------|
| | | | | Peak | 2500.000 | -46.08 | ≤ -21.20 | 49.12 | ≤ 74 | PASS |
| 11N40SIS O | Ant0 | Low | 2422 | AV | 2310.000 | -49.49 | ≤ -41.20 | 45.71 | ≤ 54 | PASS |
| | | | | AV | 2389.960 | -46.65 | ≤ -41.20 | 48.55 | ≤ 54 | PASS |
| | | | | AV | 2390.000 | -46.65 | ≤ -41.20 | 48.55 | ≤ 54 | PASS |
| | | | | Peak | 2310.000 | -48.61 | ≤ -21.20 | 46.59 | ≤ 74 | PASS |
| | | | | Peak | 2388.660 | -38.34 | ≤ -21.20 | 56.86 | ≤ 74 | PASS |
| | | | | Peak | 2390.000 | -44.4 | ≤ -21.20 | 50.80 | ≤ 74 | PASS |
| | | High | 2452 | AV | 2483.500 | -46.12 | ≤ -41.20 | 49.08 | ≤ 54 | PASS |
| | | | | AV | 2483.560 | -46.14 | ≤ -41.20 | 49.06 | ≤ 54 | PASS |
| | | | | AV | 2500.000 | -47.72 | ≤ -41.20 | 47.48 | ≤ 54 | PASS |
| | | | | Peak | 2483.500 | -39.77 | ≤ -21.20 | 55.43 | ≤ 74 | PASS |
| | | | | Peak | 2490.600 | -39.04 | ≤ -21.20 | 56.16 | ≤ 74 | PASS |
| | | | | Peak | 2500.000 | -44.83 | ≤ -21.20 | 50.37 | ≤ 74 | PASS |

Note:

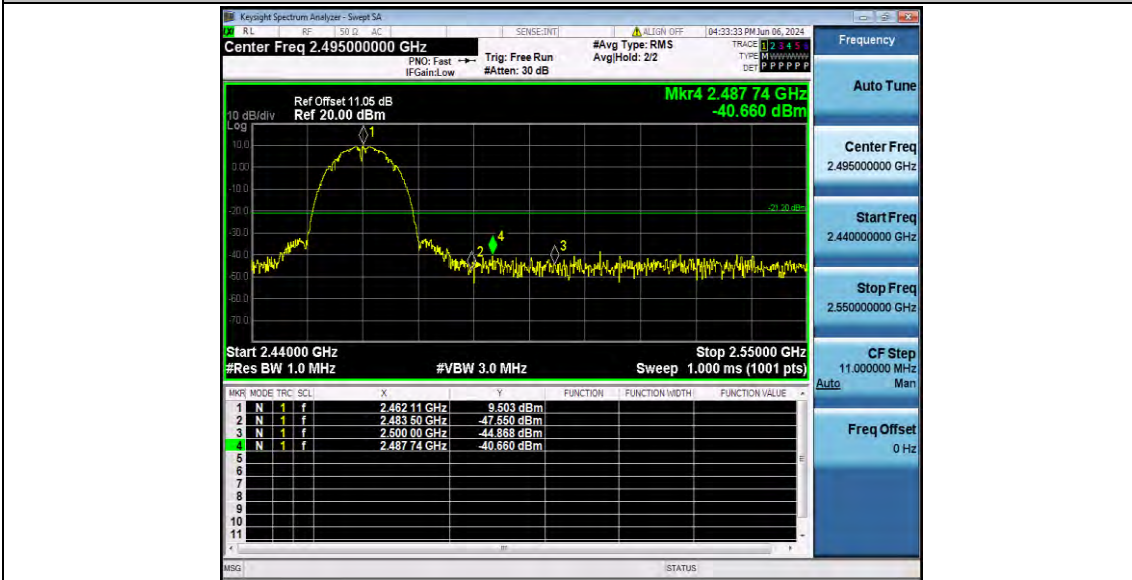
1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





11B_Ant0_High_2462_Peak



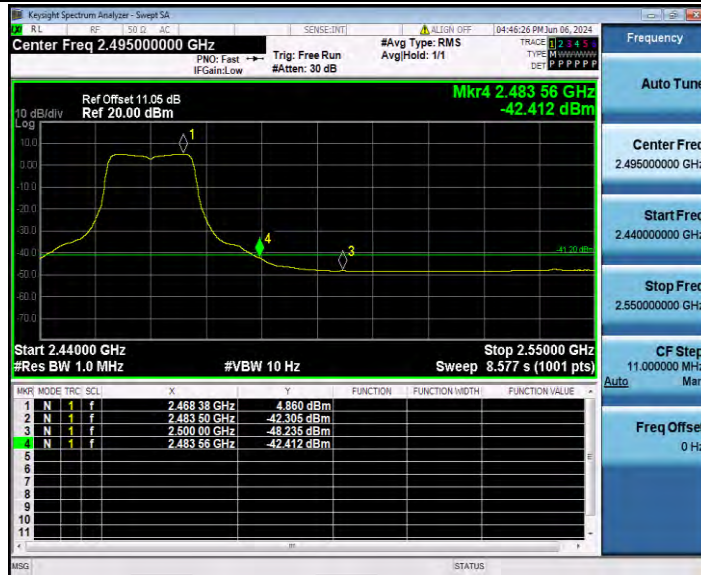
11G_Ant0_Low_2412_AV



11G_Ant0_Low_2412_Peak



11G_Ant0_High_2462_AV



11G_Ant0_High_2462_Peak



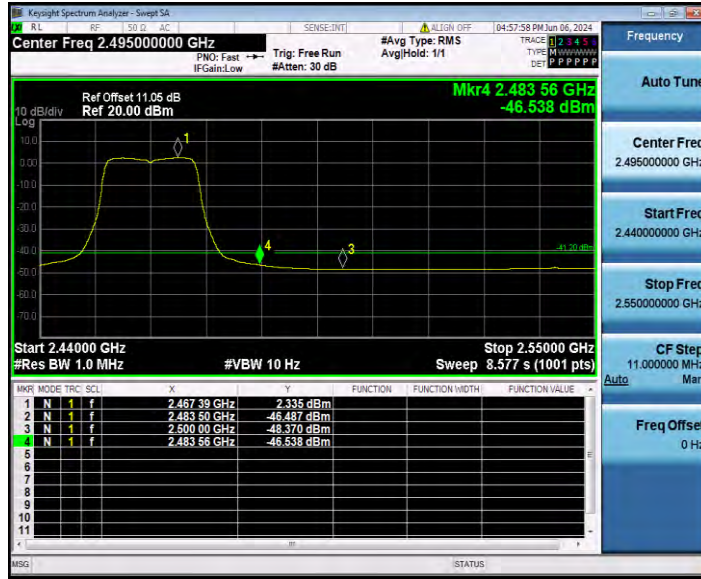
11N20SISO_Ant0_Low_2412_AV



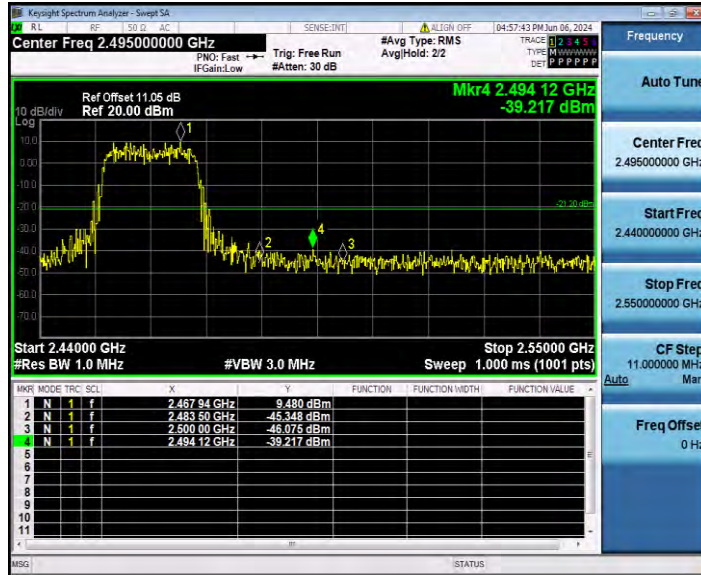
11N20SISO_Ant0_Low_2412_Peak



11N20SISO_Ant0_High_2462_AV



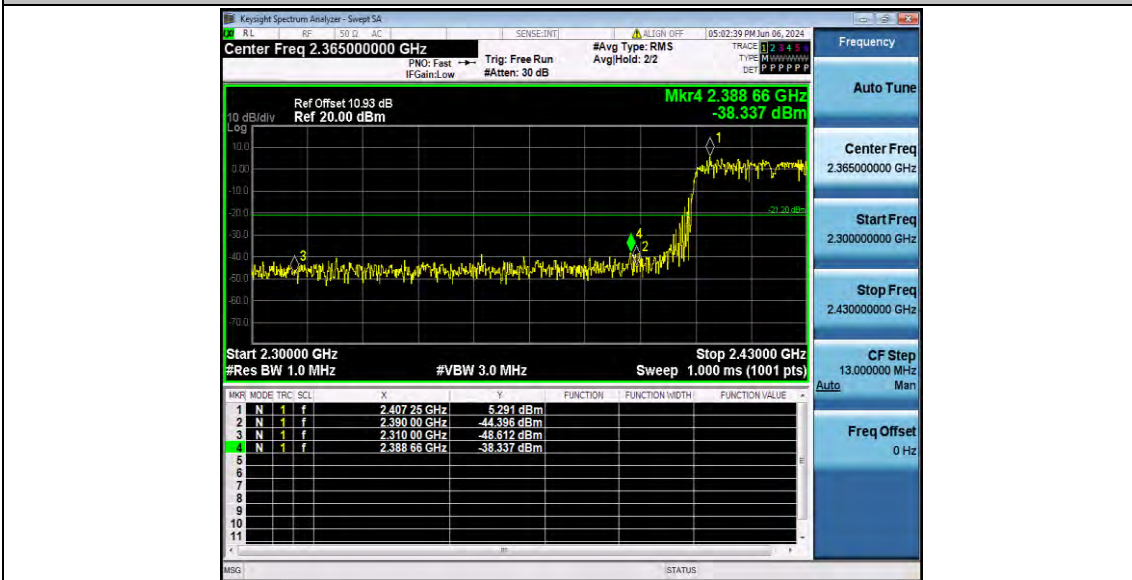
11N20SISO_Ant0_High_2462_Peak



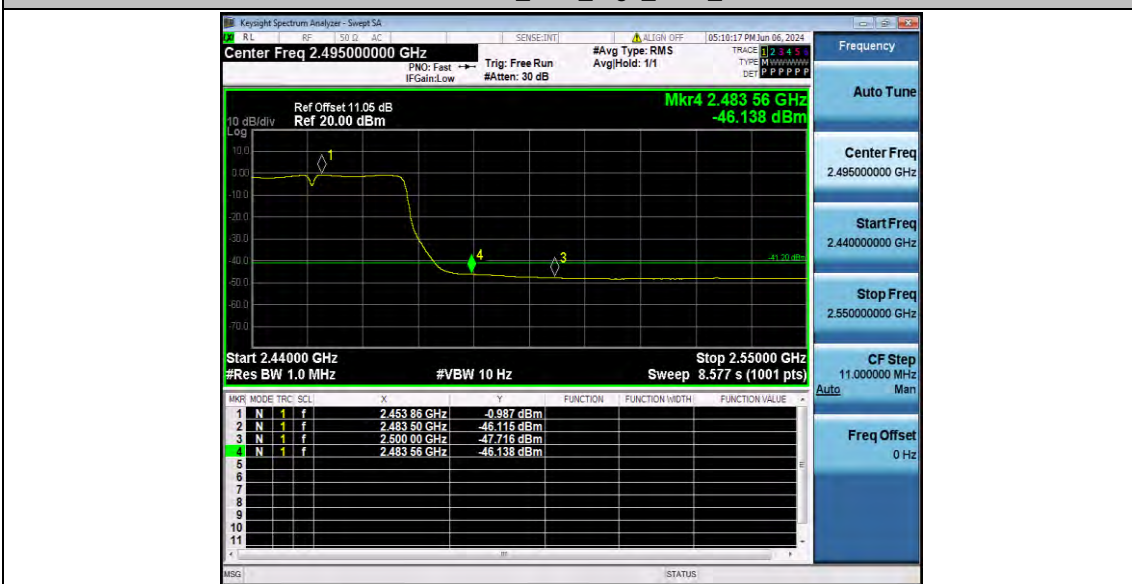
11N40SISO_Ant0_Low_2422_AV



11N40SISO_Ant0_Low_2422_Peak



11N40SISO_Ant0_High_2452_AV



11N40SISO_Ant0_High_2452_Peak

