# Appendix A

## RF Test Data for 2.4G WIFI (Conducted Measurement)

**Product Name: Night Vision**

**Test Model: YSY-02**

**Environmental Conditions**

| | |
|---|---|
| Temperature: | 23.5° C |
| Relative Humidity: | 52.2% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Ling Zhu |
| Supervised by: | Li Huan |

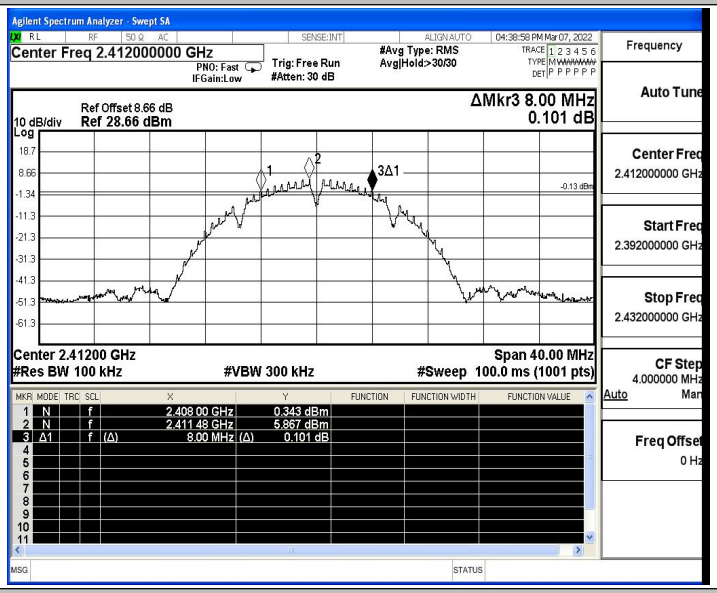
# A.1 6dB Bandwidth

## Test Result

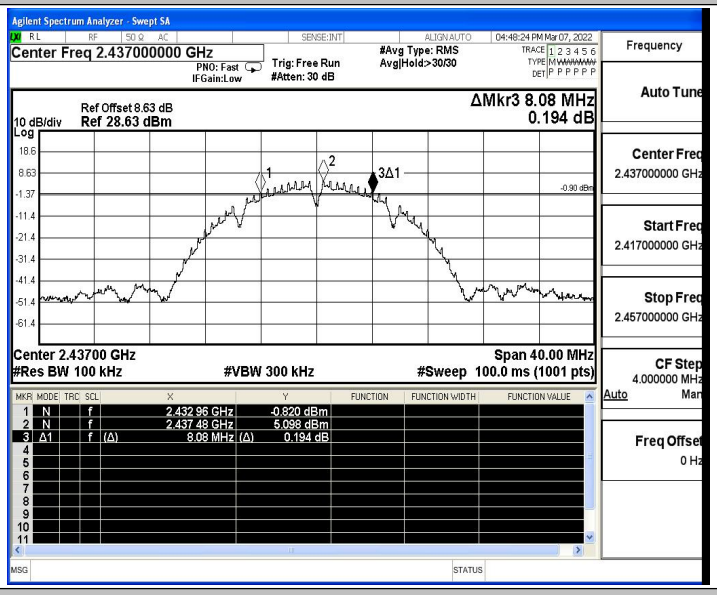
| TestMode | Antenna | Channel | DTS BW [MHz] | FL[MHz] | FH[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | 8.000 | 2408.000 | 2416.000 | 0.5 | PASS |
| | | 2437 | 8.080 | 2432.960 | 2441.040 | 0.5 | PASS |
| | | 2462 | 8.000 | 2458.000 | 2466.000 | 0.5 | PASS |
| 11G | Ant1 | 2412 | 15.120 | 2404.440 | 2419.560 | 0.5 | PASS |
| | | 2437 | 15.440 | 2429.440 | 2444.880 | 0.5 | PASS |
| | | 2462 | 15.120 | 2454.440 | 2469.560 | 0.5 | PASS |
| 11N20SISO | Ant1 | 2412 | 15.120 | 2404.440 | 2419.560 | 0.5 | PASS |
| | | 2437 | 15.520 | 2429.240 | 2444.760 | 0.5 | PASS |
| | | 2462 | 15.120 | 2454.440 | 2469.560 | 0.5 | PASS |

## Test Graphs

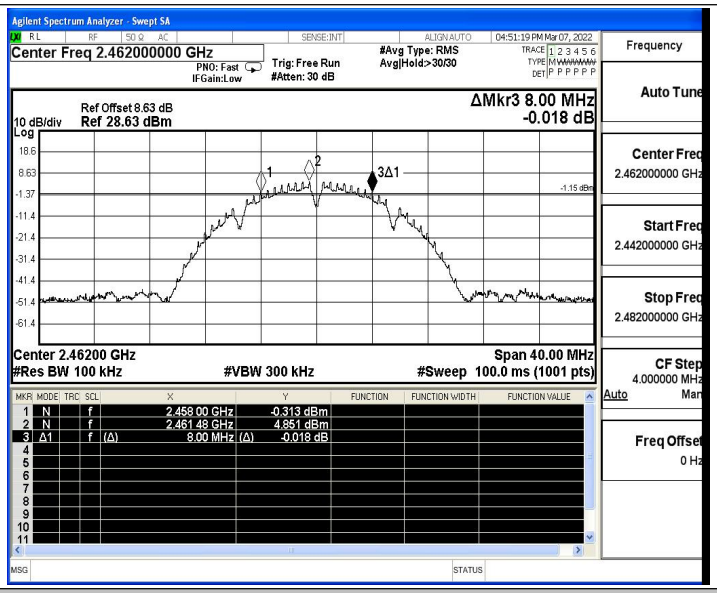
11B_Ant1_2412



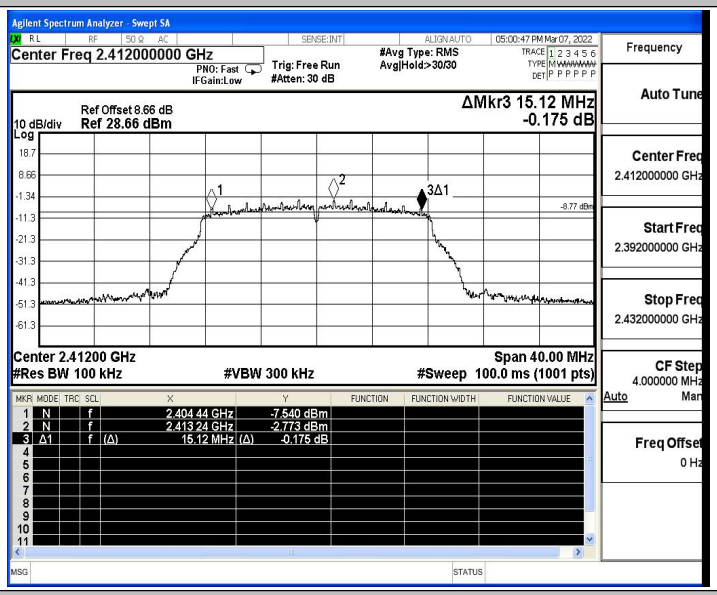

11B_Ant1_2437



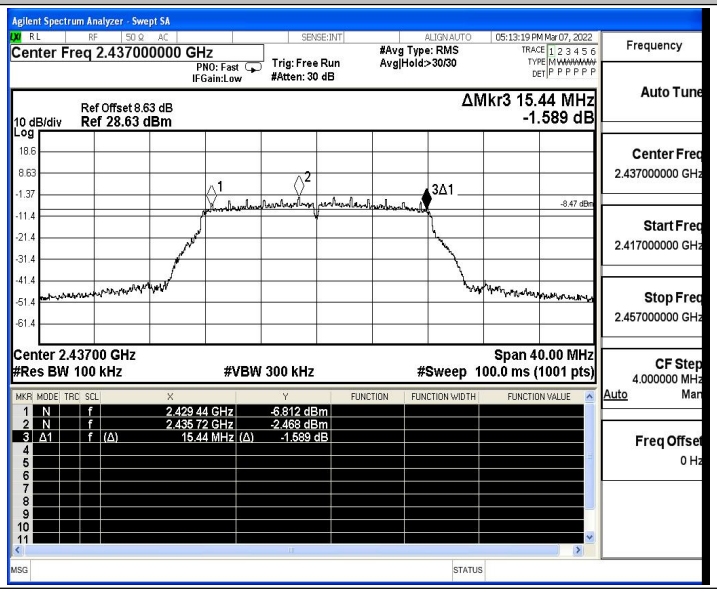

11B_Ant1_2462



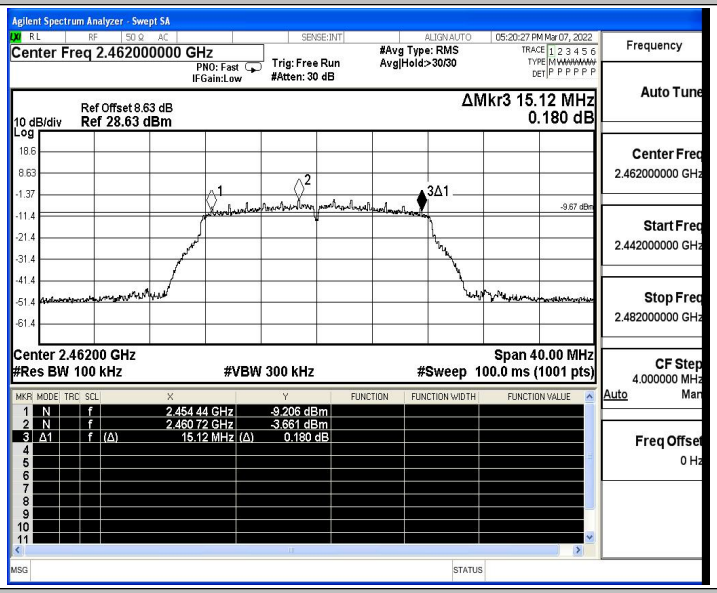

11G_Ant1_2412



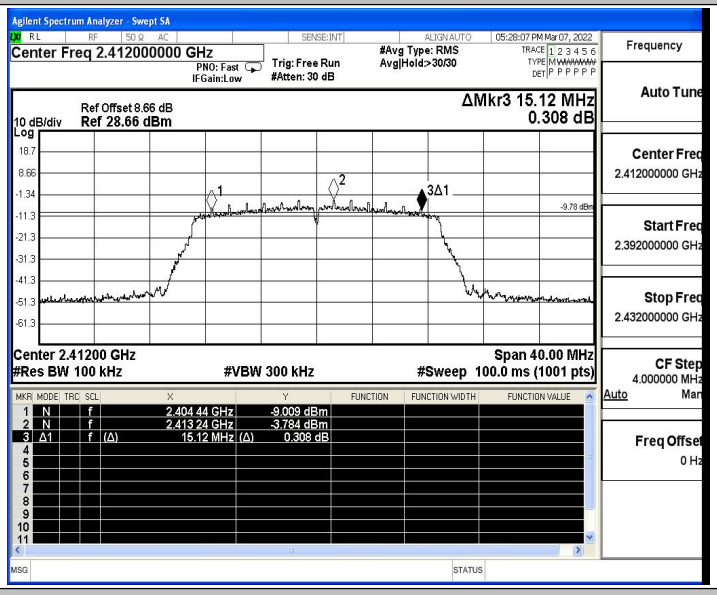

11G_Ant1_2437



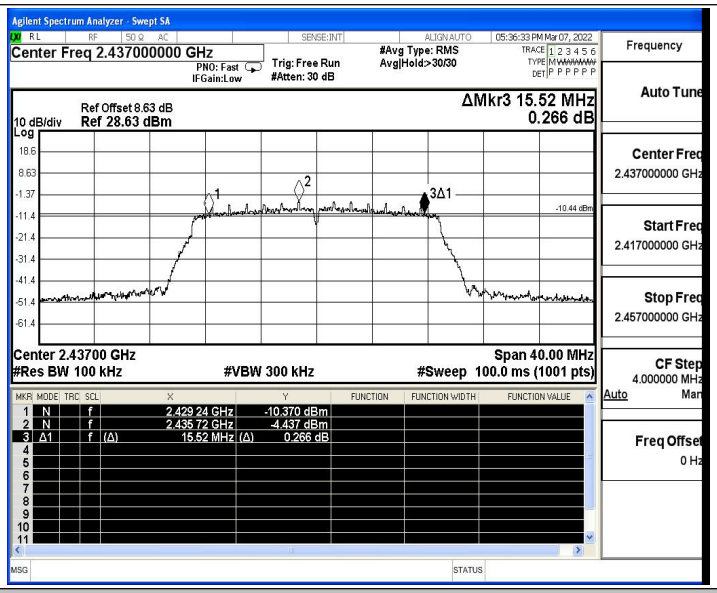
11G_Ant1_2462



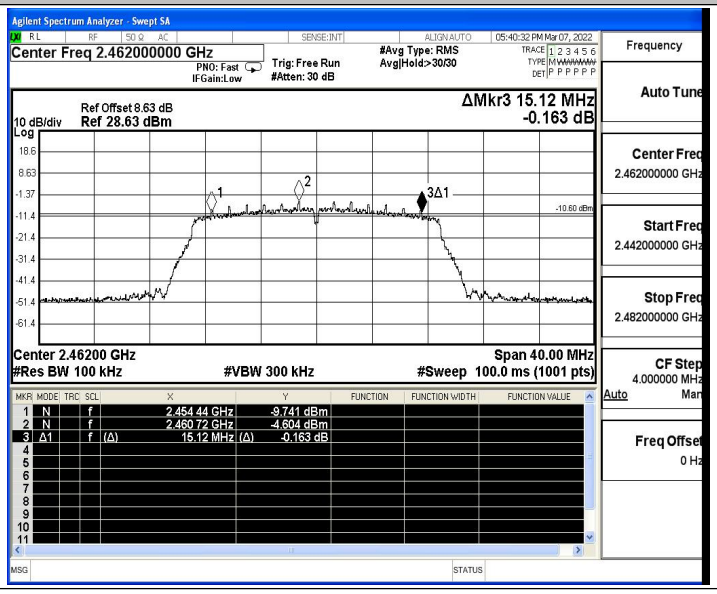

11N20SISO_Ant1_2412




11N20SISO_Ant1_2437




11N20SISO_Ant1_2462



# A.2 Maximum conducted output power

## Test Result

| TestMode | Antenna | Channel | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | 8.73 | ≤30.00 | PASS |
| | | 2437 | 8.11 | ≤30.00 | PASS |
| | | 2462 | 8.68 | ≤30.00 | PASS |
| 11G | Ant1 | 2412 | 7.85 | ≤30.00 | PASS |
| | | 2437 | 7.33 | ≤30.00 | PASS |
| | | 2462 | 7.91 | ≤30.00 | PASS |
| 11N20SISO | Ant1 | 2412 | 7.75 | ≤30.00 | PASS |
| | | 2437 | 7.31 | ≤30.00 | PASS |
| | | 2462 | 7.81 | ≤30.00 | PASS |

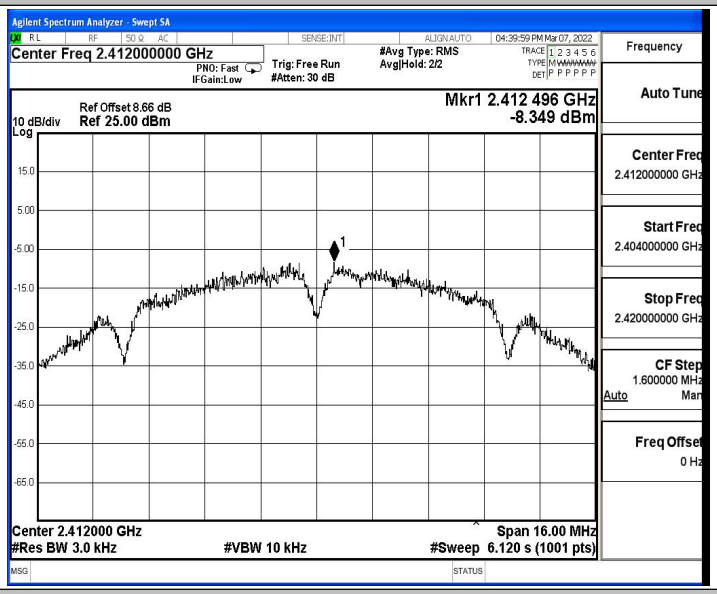
# A.3 Maximum power spectral density

## Test Result

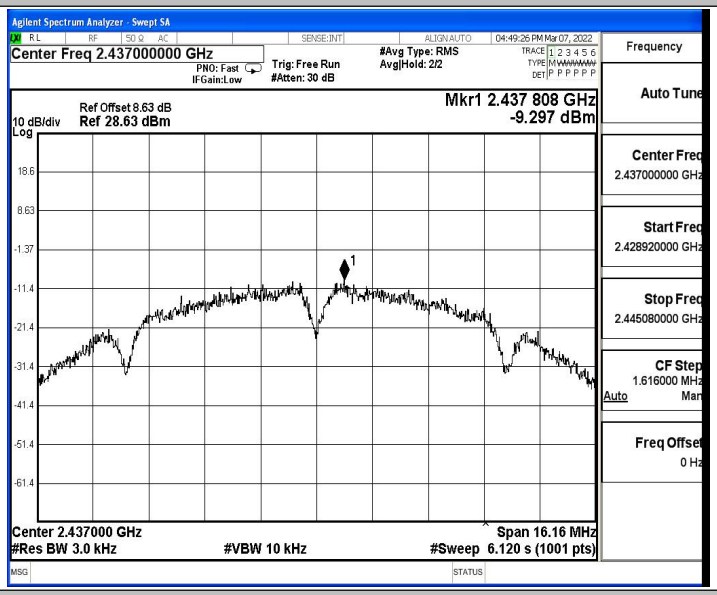
| TestMode | Antenna | Channel | Result[dBm/3-100kHz] | Limit[dBm/3kHz] | Verdict |
|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | -8.35 | ≤8.00 | PASS |
| | | 2437 | -9.3 | ≤8.00 | PASS |
| | | 2462 | -9.82 | ≤8.00 | PASS |
| 11G | Ant1 | 2412 | -17.07 | ≤8.00 | PASS |
| | | 2437 | -17.03 | ≤8.00 | PASS |
| | | 2462 | -18.36 | ≤8.00 | PASS |
| 11N20SISO | Ant1 | 2412 | -18.64 | ≤8.00 | PASS |
| | | 2437 | -18.17 | ≤8.00 | PASS |
| | | 2462 | -19.17 | ≤8.00 | PASS |

## Test Graphs

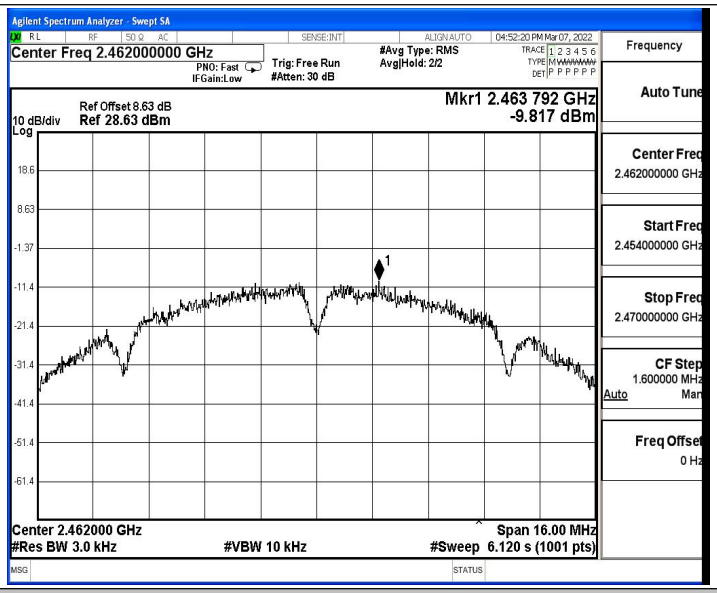
11B_Ant1_2412



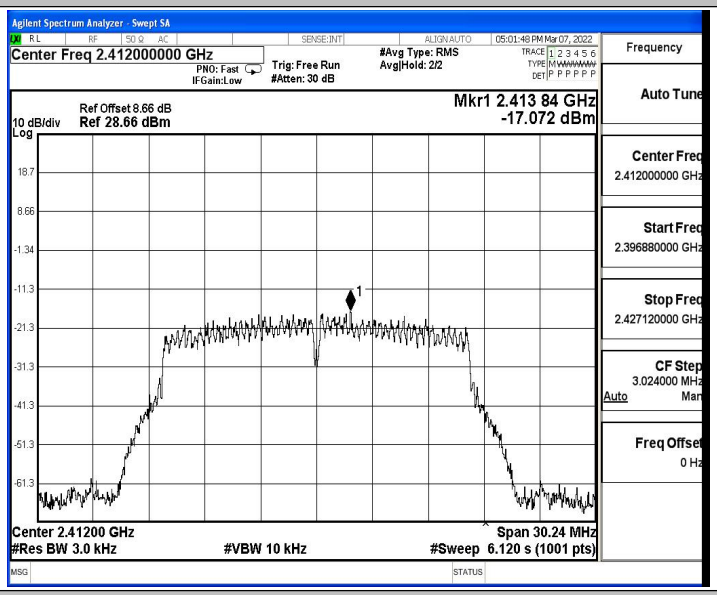

11B_Ant1_2437



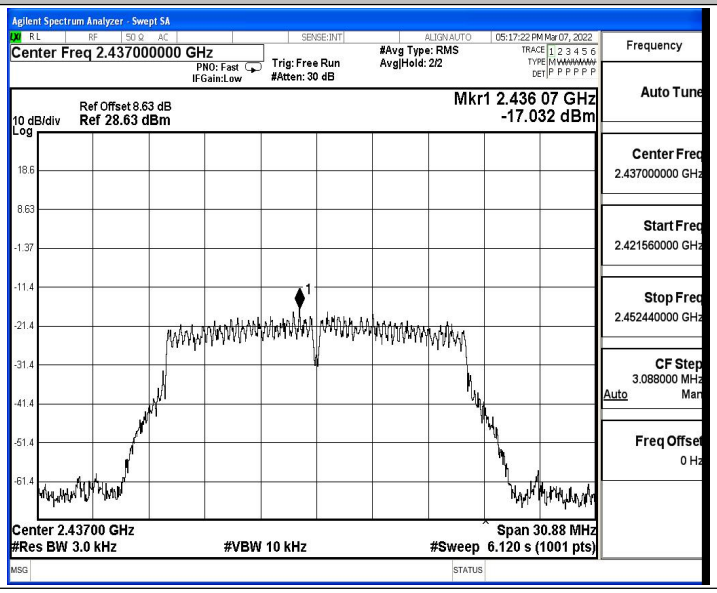

11B_Ant1_2462



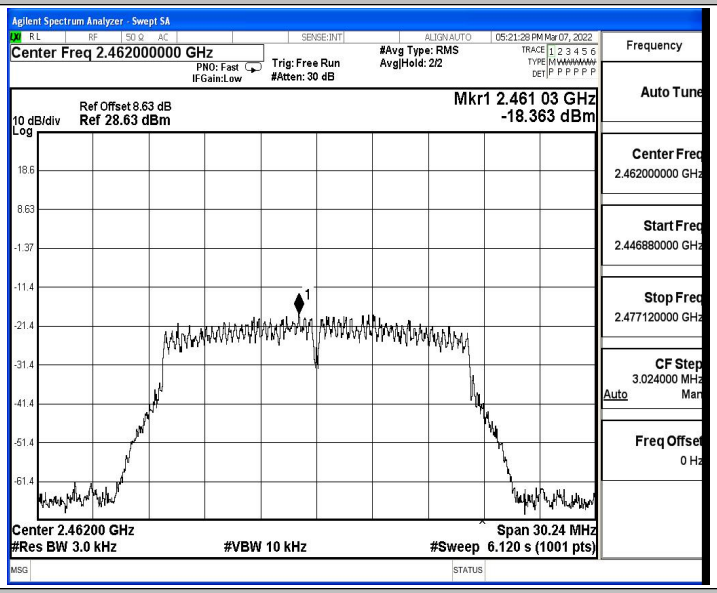

11G_Ant1_2412



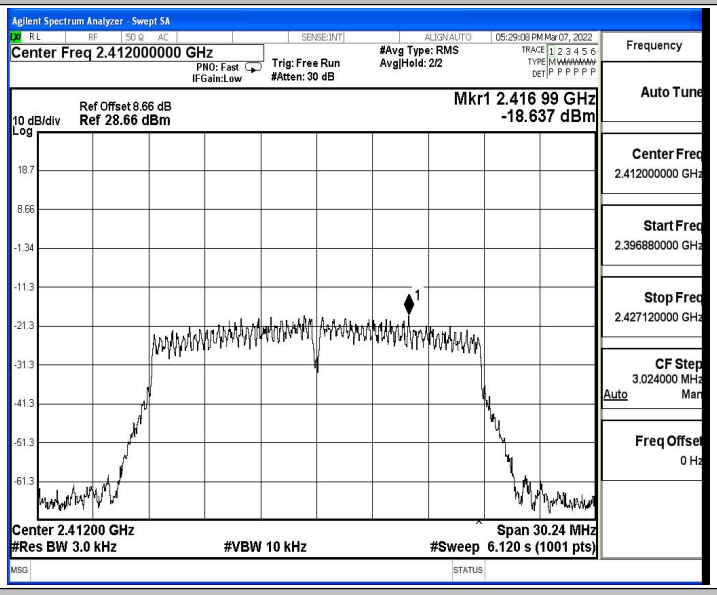

11G_Ant1_2437



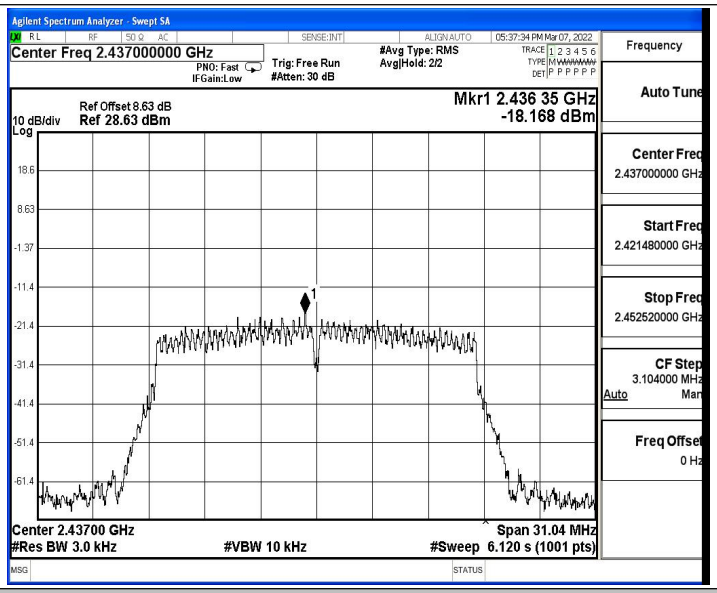
11G_Ant1_2462



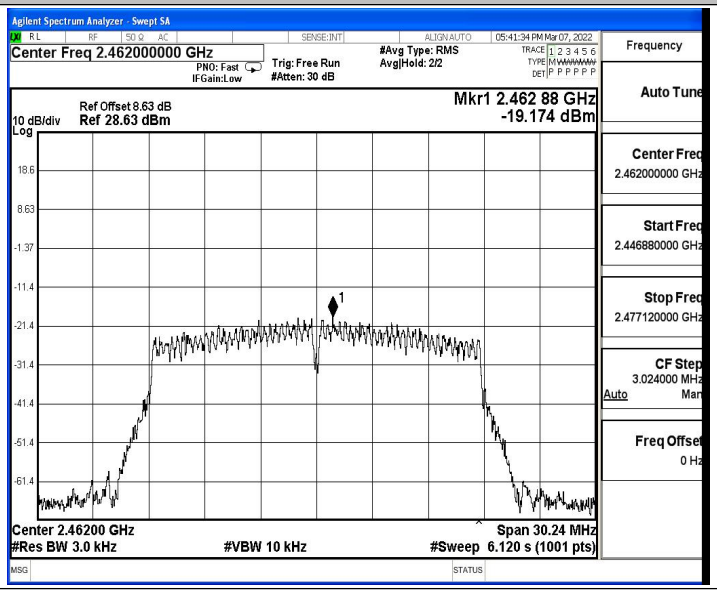

11N20SISO_Ant1_2412




11N20SISO_Ant1_2437




11N20SISO_Ant1_2462



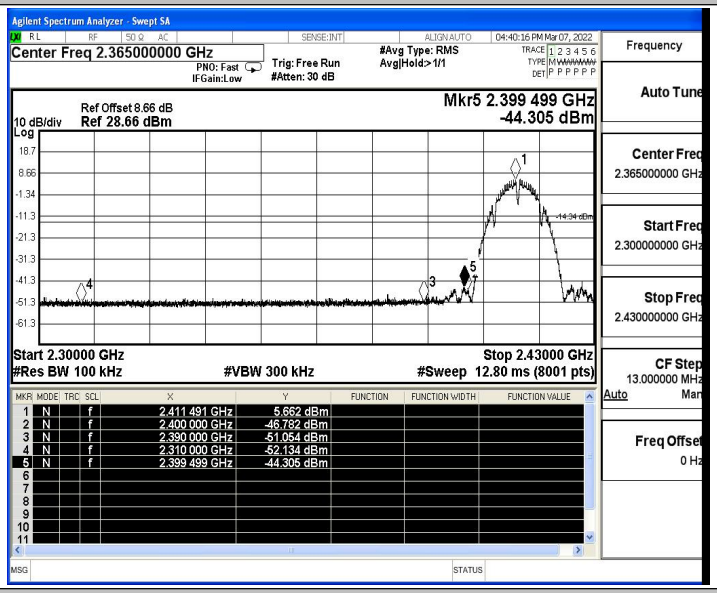
# A.4 Band edge measurements

## Test Result

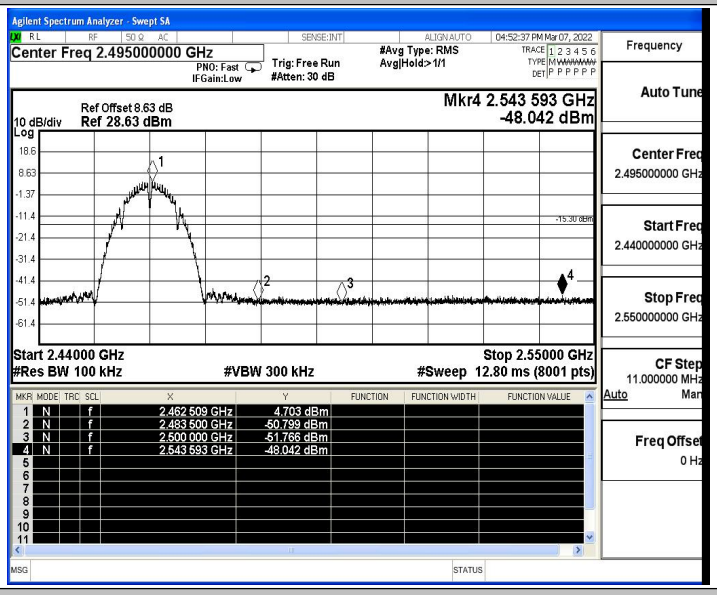
| TestMode | Antenna | ChName | Channel | RefLevel[dBm] | Result[dBm] | Limit[dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant1 | Low | 2412 | 5.66 | -44.31 | ≤-14.34 | PASS |
| | | High | 2462 | 4.70 | -48.04 | ≤-15.3 | PASS |
| 11G | Ant1 | Low | 2412 | -2.18 | -44.79 | ≤-22.18 | PASS |
| | | High | 2462 | -3.19 | -48.09 | ≤-23.19 | PASS |
| 11N20SISO | Ant1 | Low | 2412 | -3.15 | -46.42 | ≤-23.15 | PASS |
| | | High | 2462 | -4.56 | -48.1 | ≤-24.56 | PASS |

## Test Graphs

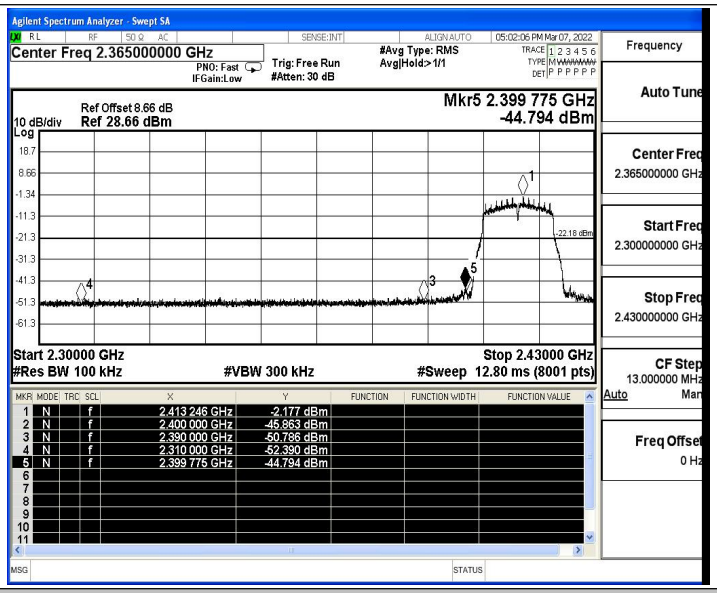
11B_Ant1_Low_2412



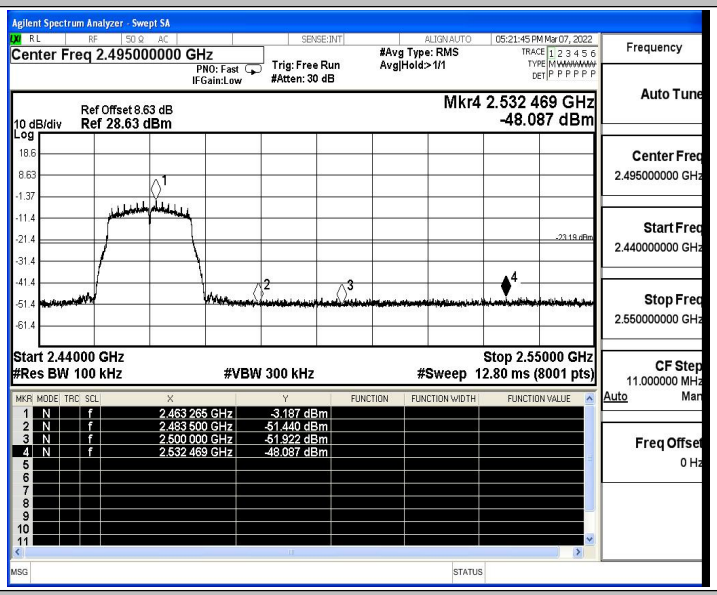

11B_Ant1_High_2462



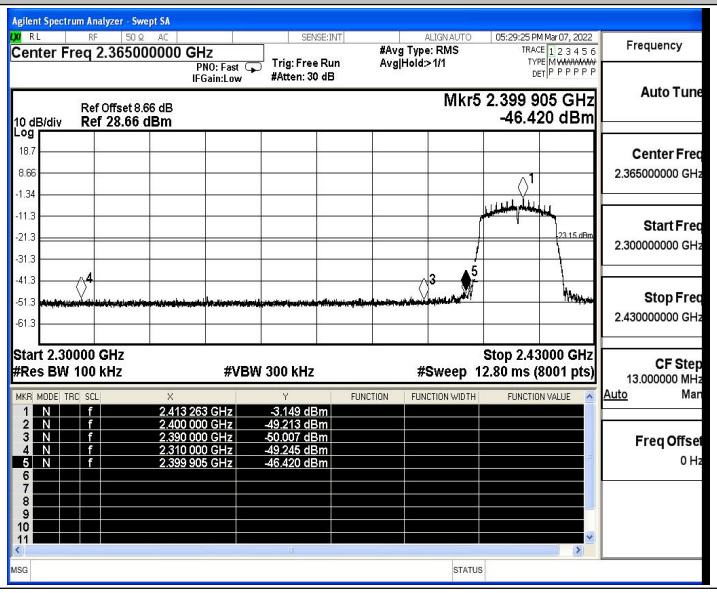

11G_Ant1_Low_2412

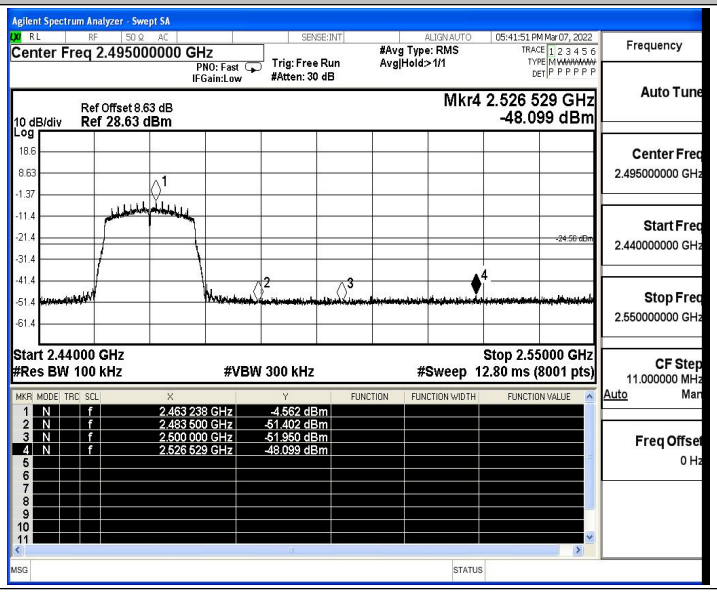



11G_Ant1_High_2462




11N20SISO_Ant1_Low_2412



| 11N20SISO_Ant1_High_2462 |
| --- |
|  |

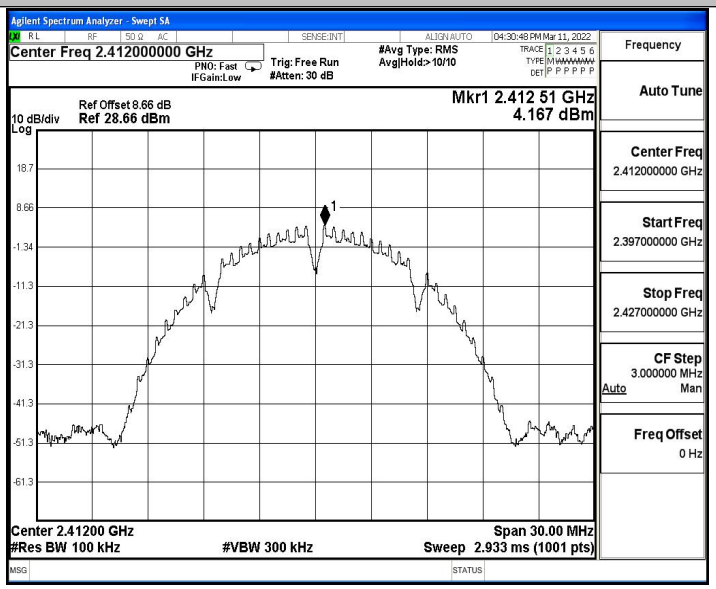
# A.5 Conducted Spurious Emission

## Test Result

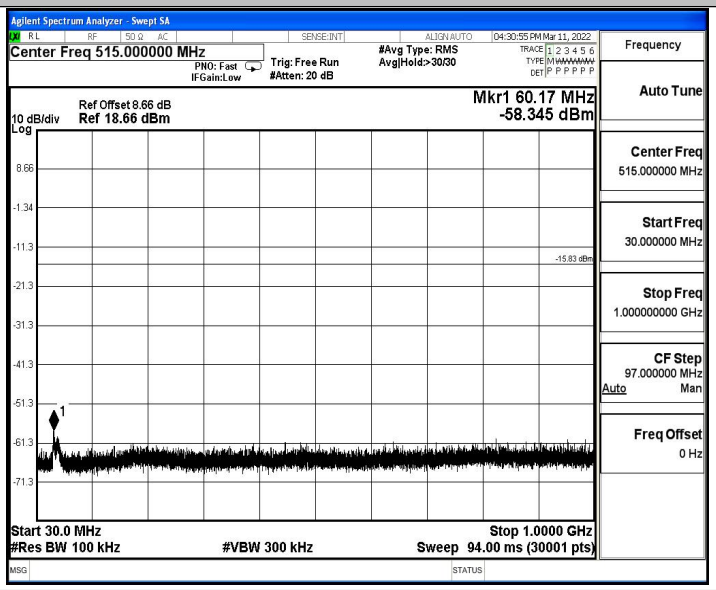
| TestMode | Antenna | Channel | FreqRange [Mhz] | RefLevel [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | Ant1 | 2412 | Reference | 4.17 | 4.17 | --- | PASS |
| | | | 30~1000 | 4.17 | -59.47 | ≤-15.83 | PASS |
| | | | 1000~26500 | 4.17 | -46.13 | ≤-15.83 | PASS |
| | | 2437 | Reference | 4.56 | 4.56 | --- | PASS |
| | | | 30~1000 | 4.56 | -58.68 | ≤-15.44 | PASS |
| | | | 1000~26500 | 4.56 | -46.65 | ≤-15.44 | PASS |
| | | 2462 | Reference | 3.99 | 3.99 | --- | PASS |
| | | | 30~1000 | 3.99 | -56.5 | ≤-16.01 | PASS |
| | | | 1000~26500 | 3.99 | -45.98 | ≤-16.01 | PASS |
| 11G | Ant1 | 2412 | Reference | -2.11 | -2.11 | --- | PASS |
| | | | 30~1000 | -2.11 | -47.4 | ≤-22.11 | PASS |
| | | | 1000~26500 | -2.11 | -45.97 | ≤-22.11 | PASS |
| | | 2437 | Reference | -3.49 | -3.49 | --- | PASS |
| | | | 30~1000 | -3.49 | -53.25 | ≤-23.49 | PASS |
| | | | 1000~26500 | -3.49 | -45.76 | ≤-23.49 | PASS |
| | | 2462 | Reference | -3.00 | -3.00 | --- | PASS |
| | | | 30~1000 | -3.00 | -50.47 | ≤-23 | PASS |
| | | | 1000~26500 | -3.00 | -46.56 | ≤-23 | PASS |
| 11N20SISO | Ant1 | 2412 | Reference | -3.45 | -3.45 | --- | PASS |
| | | | 30~1000 | -3.45 | -40.42 | ≤-23.45 | PASS |
| | | | 1000~26500 | -3.45 | -45.94 | ≤-23.45 | PASS |
| | | 2437 | Reference | -4.11 | -4.11 | --- | PASS |
| | | | 30~1000 | -4.11 | -54.72 | ≤-24.11 | PASS |
| | | | 1000~26500 | -4.11 | -46.47 | ≤-24.11 | PASS |
| | | 2462 | Reference | -4.10 | -4.10 | --- | PASS |
| | | | 30~1000 | -4.10 | -55.41 | ≤-24.1 | PASS |
| | | | 1000~26500 | -4.10 | -46.14 | ≤-24.1 | PASS |

## Test Graphs

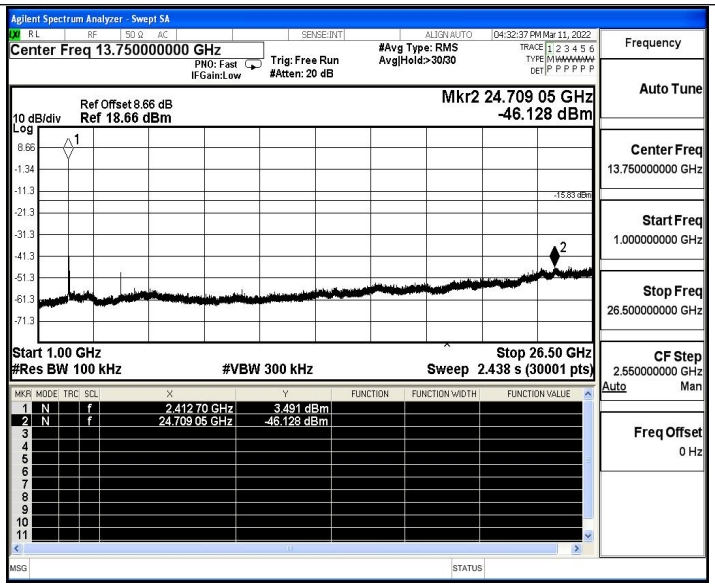
11B_Ant1_2412_0~Reference



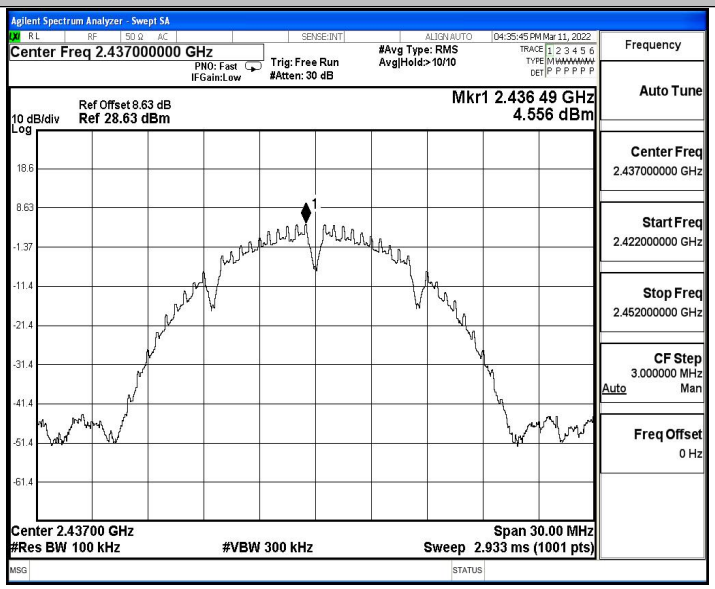

11B_Ant1_2412_30~1000



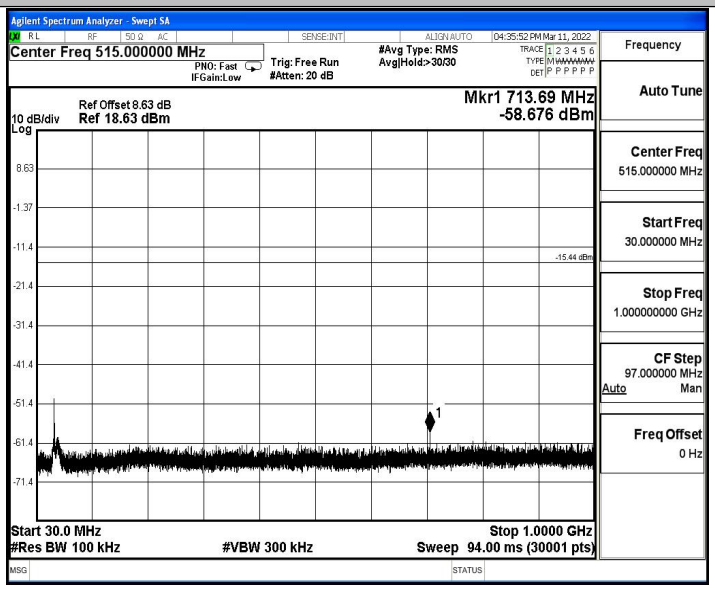

11B_Ant1_2412_1000~26500



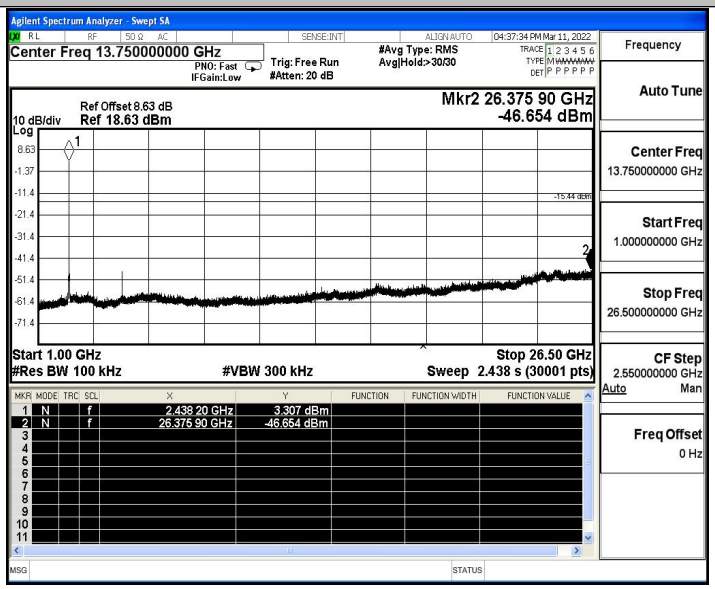

11B_Ant1_2437_0~Reference



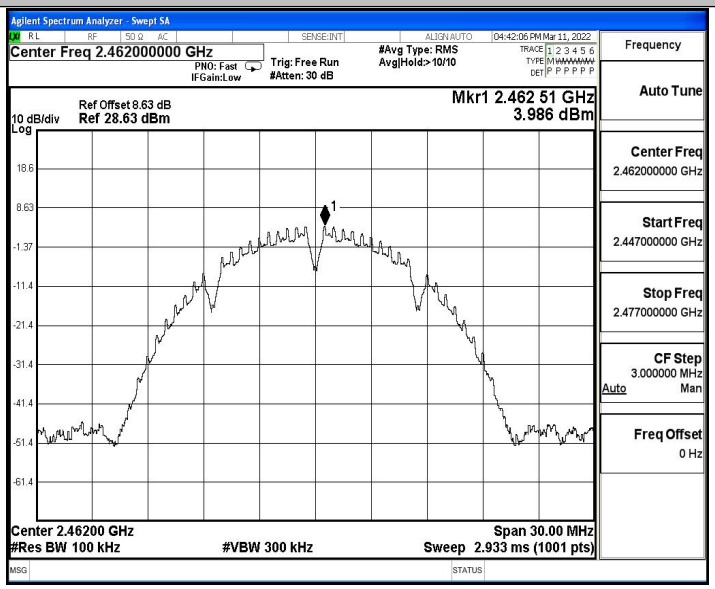

11B_Ant1_2437_30~1000



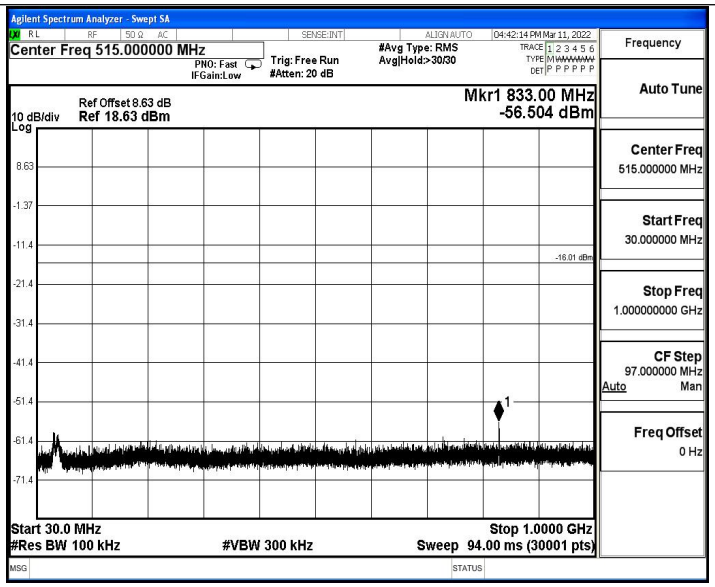
11B_Ant1_2437_1000~26500



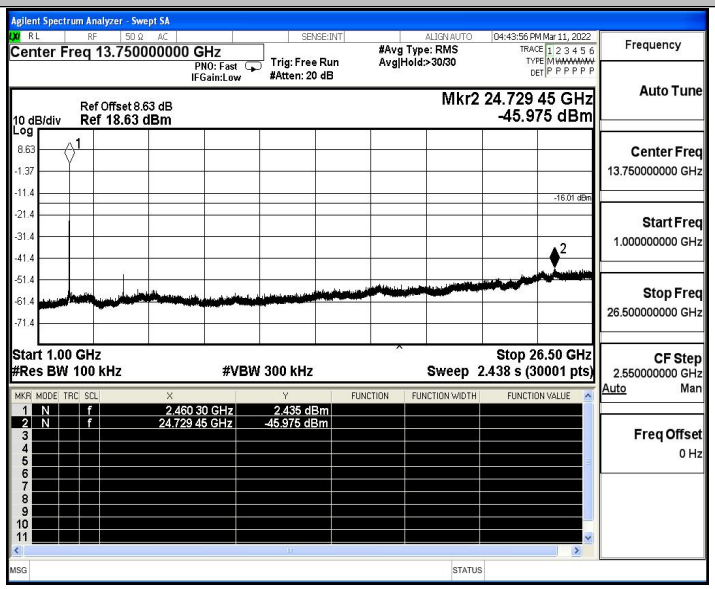

11B_Ant1_2462_0~Reference



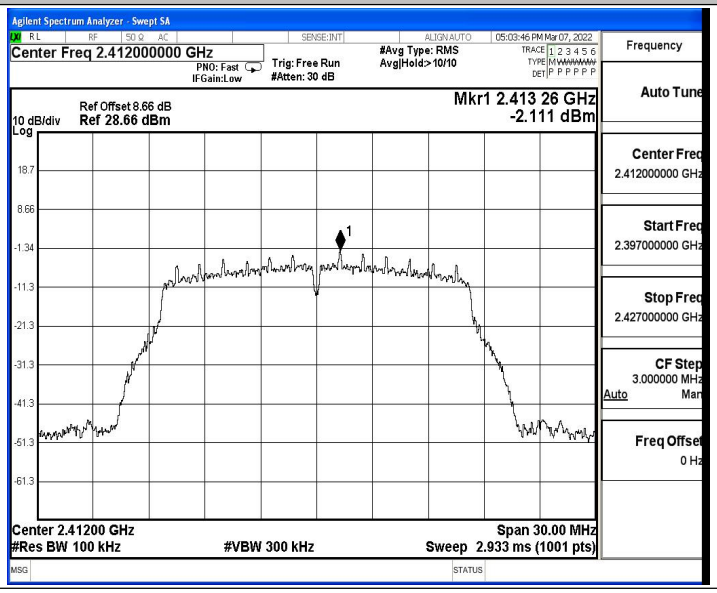

11B_Ant1_2462_30~1000



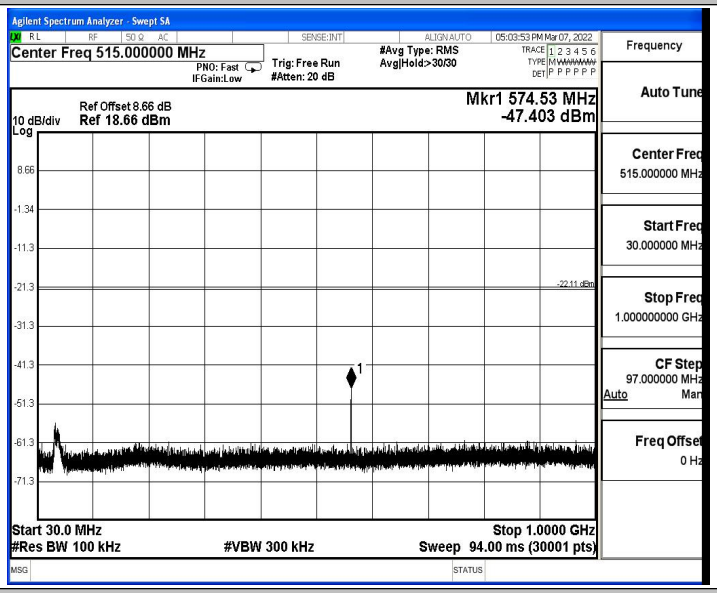

11B_Ant1_2462_1000~26500



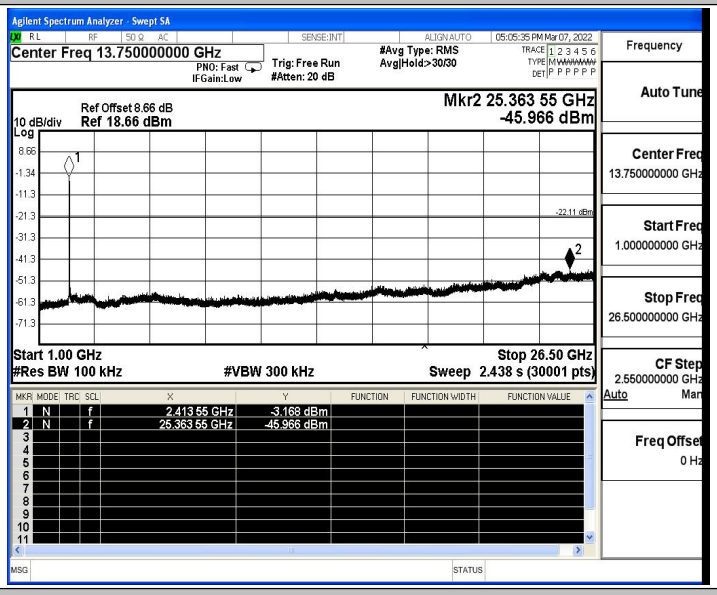

11G_Ant1_2412_0~Reference



11G_Ant1_2412_30~1000




11G_Ant1_2412_1000~26500




11G_Ant1_2437_0~Reference