



## Appendix Test Data for WLAN(2. 4G) (Conducted Measurement)

Product Name: WUUK Smart Sock Station

Trade Mark: WUUK

Test Model: BAB10

FCC ID: 2AWHY-BAB10

### Environmental Conditions

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.5℃     |
| Relative Humidity: | 58%       |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Allen Lai |
| Supervised by:     | Max Zhang |
| NOTE               | N/A       |

## Appendix A: DTS Bandwidth

### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | DTS BW<br>[MHz] | FL<br>[MHz] | FH<br>[MHz] | Limit<br>[MHz] | Verdict |
|-----------|---------|--------------------|-----------------|-------------|-------------|----------------|---------|
| 11B       | Ant1    | 2412               | 9.040           | 2407.520    | 2416.560    | 0.5            | PASS    |
| 11B       | Ant1    | 2437               | 9.040           | 2432.520    | 2441.560    | 0.5            | PASS    |
| 11B       | Ant1    | 2462               | 9.120           | 2457.480    | 2466.600    | 0.5            | PASS    |
| 11G       | Ant1    | 2412               | 16.360          | 2403.880    | 2420.240    | 0.5            | PASS    |
| 11G       | Ant1    | 2437               | 16.400          | 2428.840    | 2445.240    | 0.5            | PASS    |
| 11G       | Ant1    | 2462               | 16.360          | 2453.880    | 2470.240    | 0.5            | PASS    |
| 11N20SISO | Ant1    | 2412               | 17.680          | 2403.200    | 2420.880    | 0.5            | PASS    |
| 11N20SISO | Ant1    | 2437               | 17.600          | 2428.280    | 2445.880    | 0.5            | PASS    |
| 11N20SISO | Ant1    | 2462               | 17.640          | 2453.240    | 2470.880    | 0.5            | PASS    |
| 11N40SISO | Ant1    | 2422               | 35.520          | 2404.480    | 2440.000    | 0.5            | PASS    |
| 11N40SISO | Ant1    | 2437               | 35.200          | 2419.480    | 2454.680    | 0.5            | PASS    |
| 11N40SISO | Ant1    | 2452               | 36.000          | 2434.080    | 2470.080    | 0.5            | PASS    |

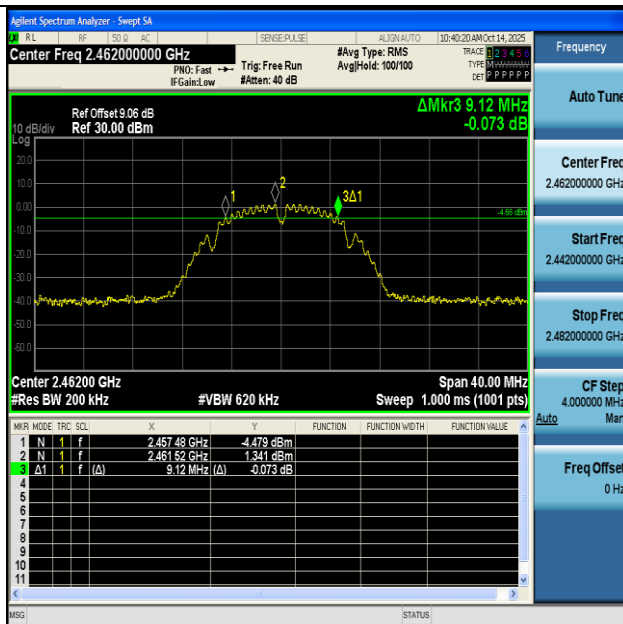
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



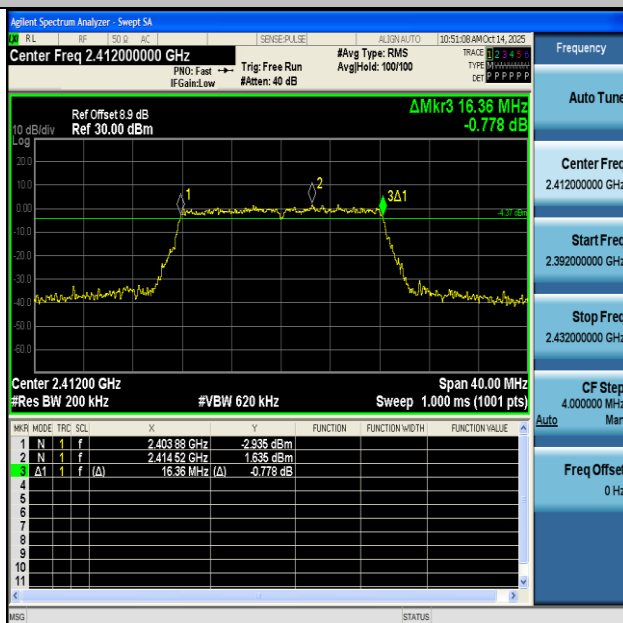


## Test Graphs





11B-Ant1-2462-PASS

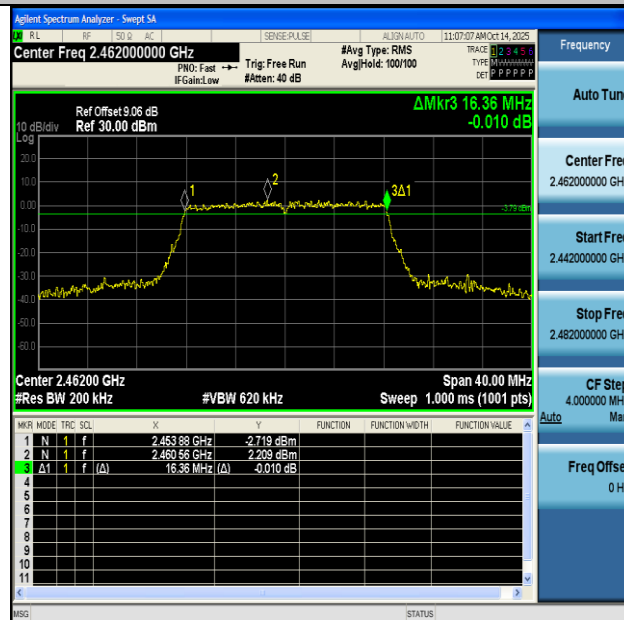


11G-Ant1-2412-PASS



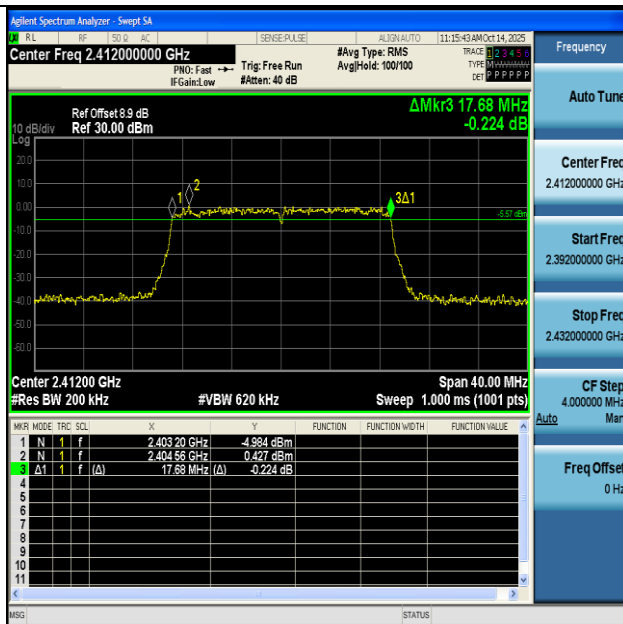


11G-Ant1-2437-PASS

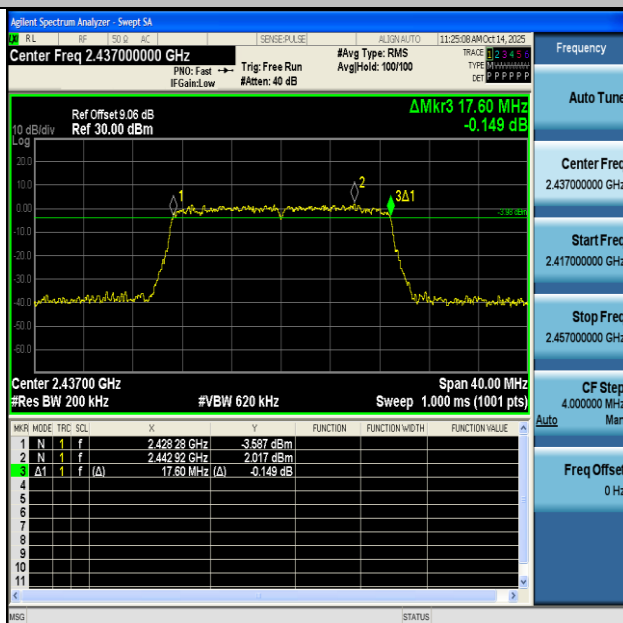


11G-Ant1-2462-PASS



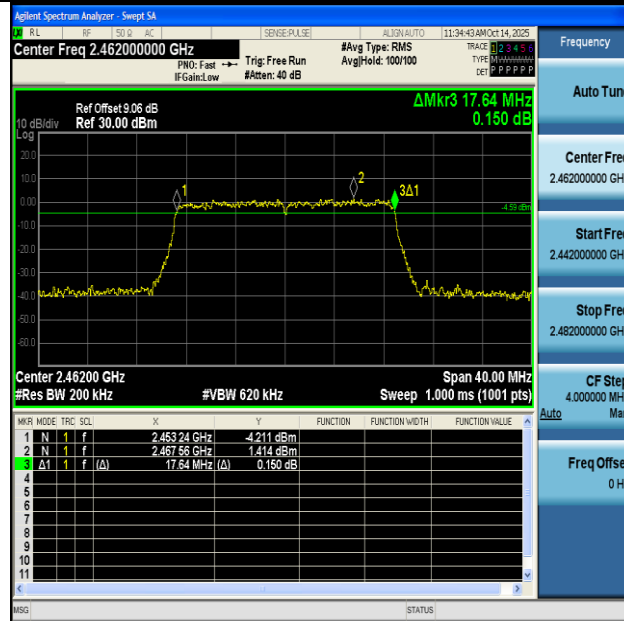


11N20SISO-Ant1-2412-PASS

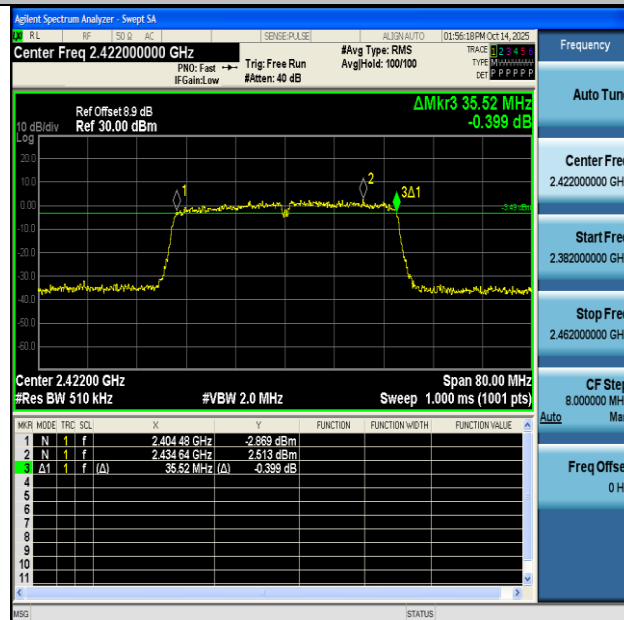


11N20SISO-Ant1-2437-PASS



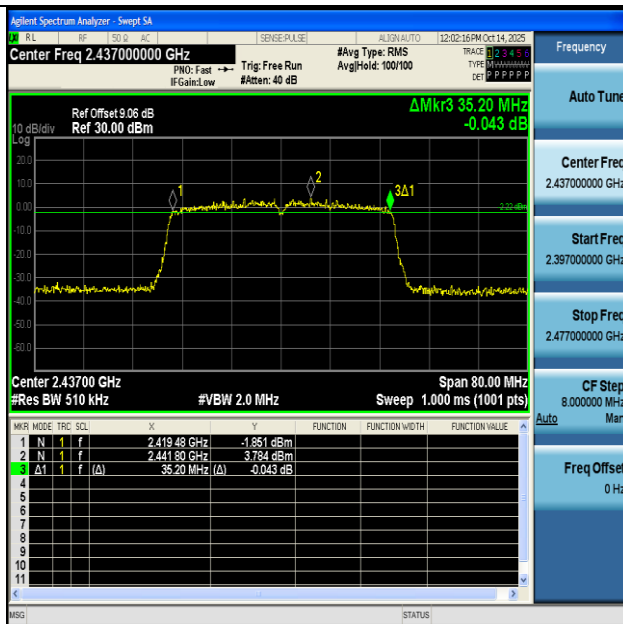


11N20SISO-Ant1-2462-PASS

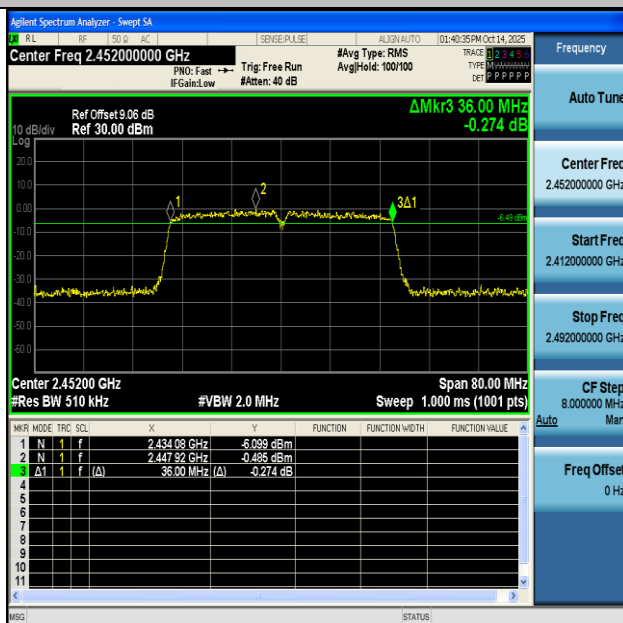


11N40SISO-Ant1-2422-PASS





11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS





## Appendix B: Occupied Channel Bandwidth

### Test Result

| Test Mode | Antenna | Channel Frequency [MHz] | OCB [MHz] | FL [MHz]  | FH [MHz]  | Limit [MHz] | Verdict |
|-----------|---------|-------------------------|-----------|-----------|-----------|-------------|---------|
| 11B       | Ant1    | 2412                    | 12.129    | 2405.9884 | 2418.1174 | ---         | ---     |
| 11B       | Ant1    | 2437                    | 12.034    | 2431.0132 | 2443.0472 | ---         | ---     |
| 11B       | Ant1    | 2462                    | 12.131    | 2456.0015 | 2468.1325 | ---         | ---     |
| 11G       | Ant1    | 2412                    | 16.801    | 2403.6715 | 2420.4725 | ---         | ---     |
| 11G       | Ant1    | 2437                    | 16.781    | 2428.6182 | 2445.3992 | ---         | ---     |
| 11G       | Ant1    | 2462                    | 16.900    | 2453.6034 | 2470.5034 | ---         | ---     |
| 11N20SISO | Ant1    | 2412                    | 17.662    | 2403.1926 | 2420.8546 | ---         | ---     |
| 11N20SISO | Ant1    | 2437                    | 17.643    | 2428.2030 | 2445.8460 | ---         | ---     |
| 11N20SISO | Ant1    | 2462                    | 17.631    | 2453.2383 | 2470.8693 | ---         | ---     |
| 11N40SISO | Ant1    | 2422                    | 35.841    | 2404.2313 | 2440.0723 | ---         | ---     |
| 11N40SISO | Ant1    | 2437                    | 35.771    | 2419.2005 | 2454.9715 | ---         | ---     |
| 11N40SISO | Ant1    | 2452                    | 35.953    | 2434.1371 | 2470.0901 | ---         | ---     |

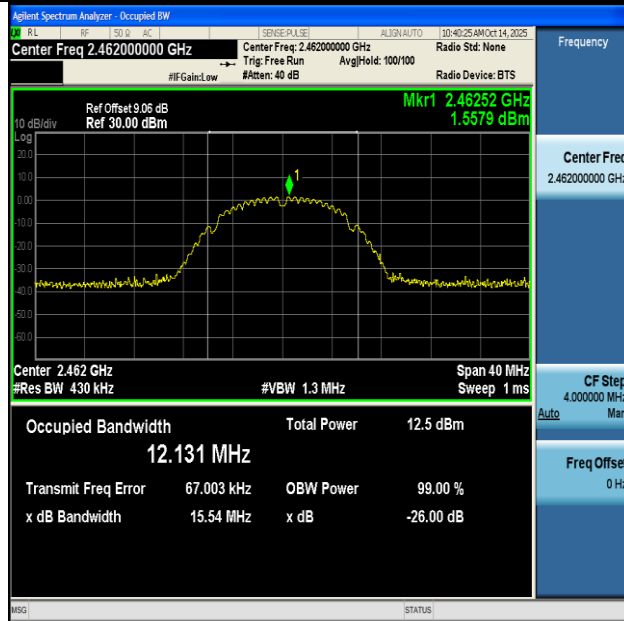
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



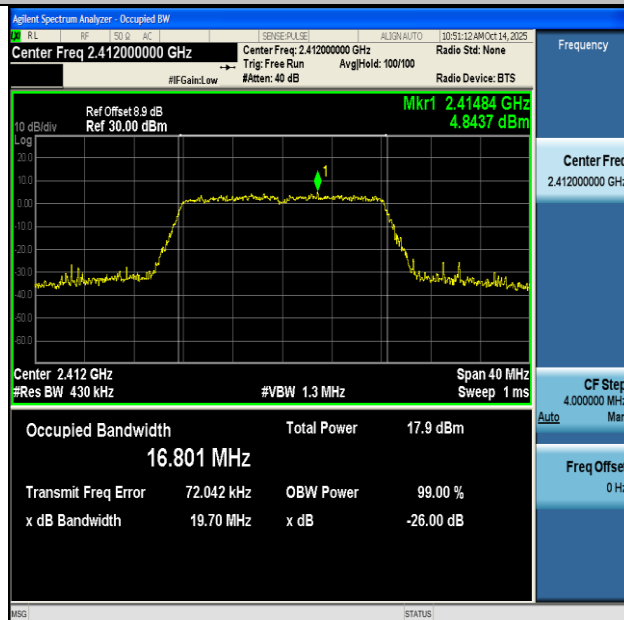


## Test Graphs



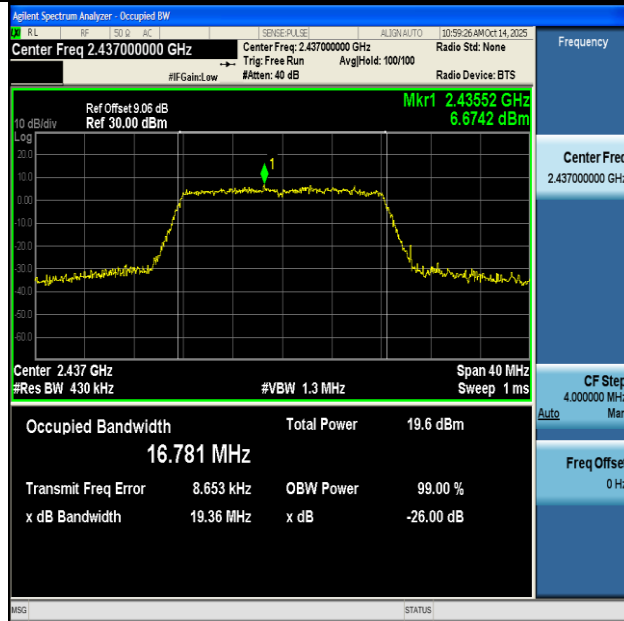


11B-Ant1-2462



11G-Ant1-2412



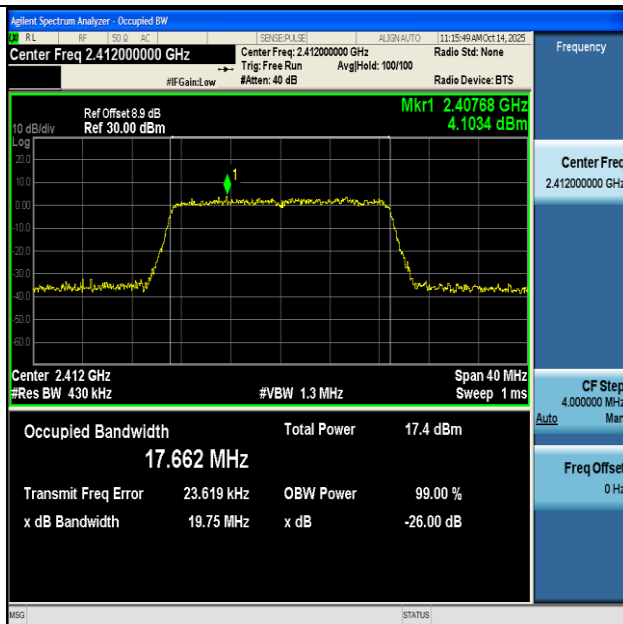


11G-Ant1-2437

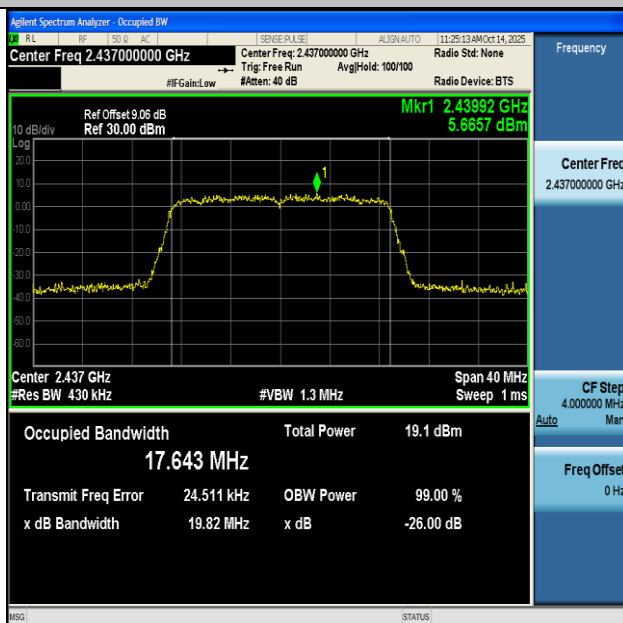


11G-Ant1-2462



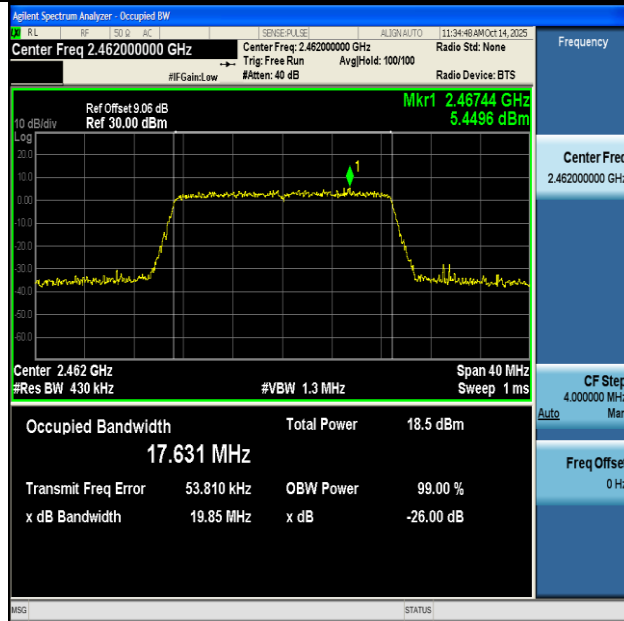


11N20SISO-Ant1-2412

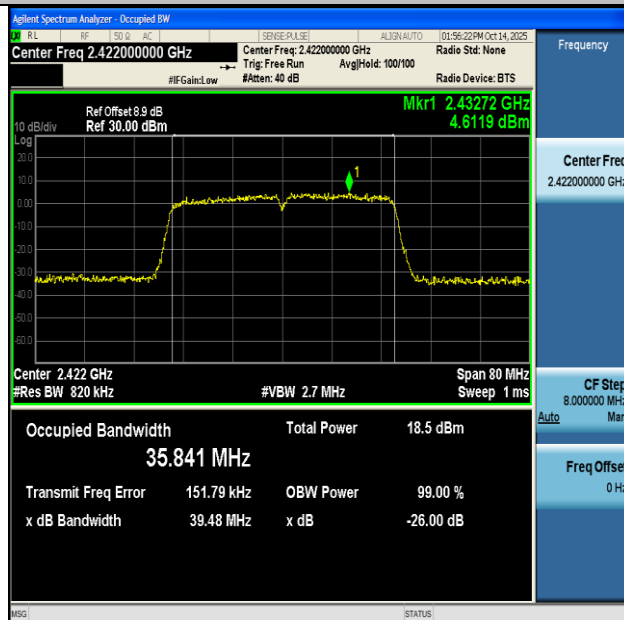


11N20SISO-Ant1-2437



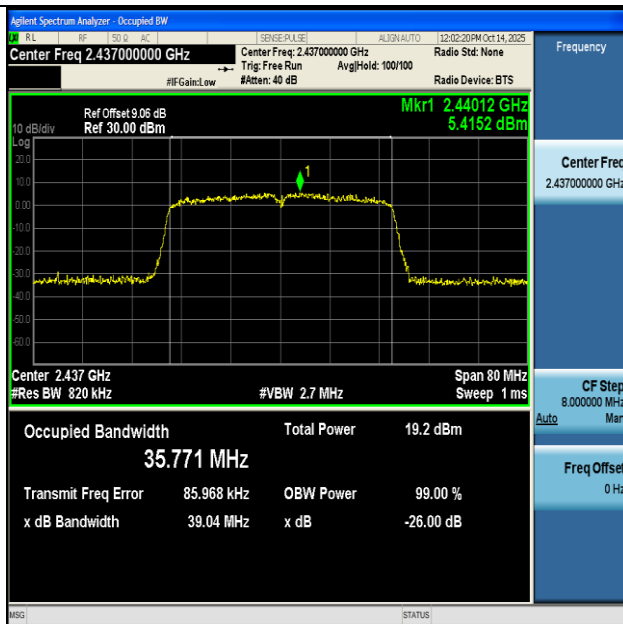


11N20SISO-Ant1-2462

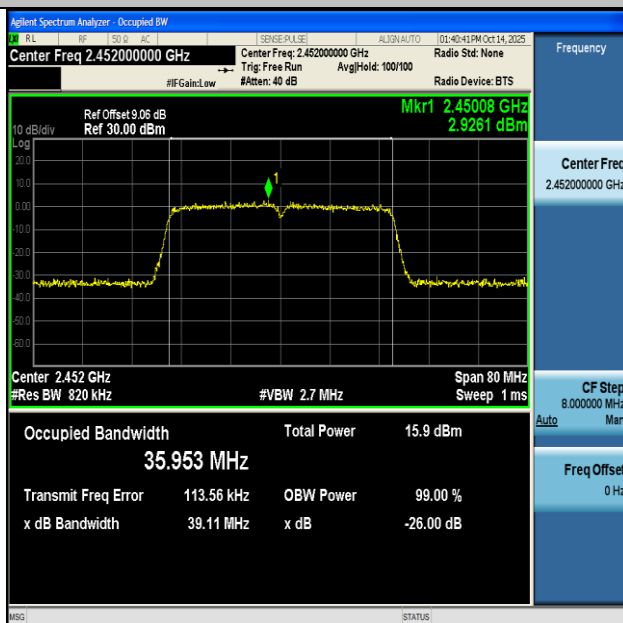


11N40SISO-Ant1-2422





11N40SISO-Ant1-2437



11N40SISO-Ant1-2452





## Appendix C: Maximum Average conducted output power

### Test Result

| Test Mode | Antenna | Frequency<br>[MHz] | Conducted Power<br>[dBm] | Conducted Limit<br>[dBm] | Verdict |
|-----------|---------|--------------------|--------------------------|--------------------------|---------|
| 11B       | Ant1    | 2412               | 8.48                     | ≤30.00                   | PASS    |
| 11B       | Ant1    | 2437               | 10.08                    | ≤30.00                   | PASS    |
| 11B       | Ant1    | 2462               | 9.56                     | ≤30.00                   | PASS    |
| 11G       | Ant1    | 2412               | 11.96                    | ≤30.00                   | PASS    |
| 11G       | Ant1    | 2437               | 13.53                    | ≤30.00                   | PASS    |
| 11G       | Ant1    | 2462               | 13.01                    | ≤30.00                   | PASS    |
| 11N20SISO | Ant1    | 2412               | 10.70                    | ≤30.00                   | PASS    |
| 11N20SISO | Ant1    | 2437               | 12.34                    | ≤30.00                   | PASS    |
| 11N20SISO | Ant1    | 2462               | 11.85                    | ≤30.00                   | PASS    |
| 11N40SISO | Ant1    | 2422               | 11.03                    | ≤30.00                   | PASS    |
| 11N40SISO | Ant1    | 2437               | 11.79                    | ≤30.00                   | PASS    |
| 11N40SISO | Ant1    | 2452               | 8.54                     | ≤30.00                   | PASS    |

Note:

Duty Cycle Factor(dB)=10lg(1/duty cycle)

The reported Conducted Power measurement values already include the duty cycle correction.





## Appendix D: Maximum Average power spectral density

### Test Result

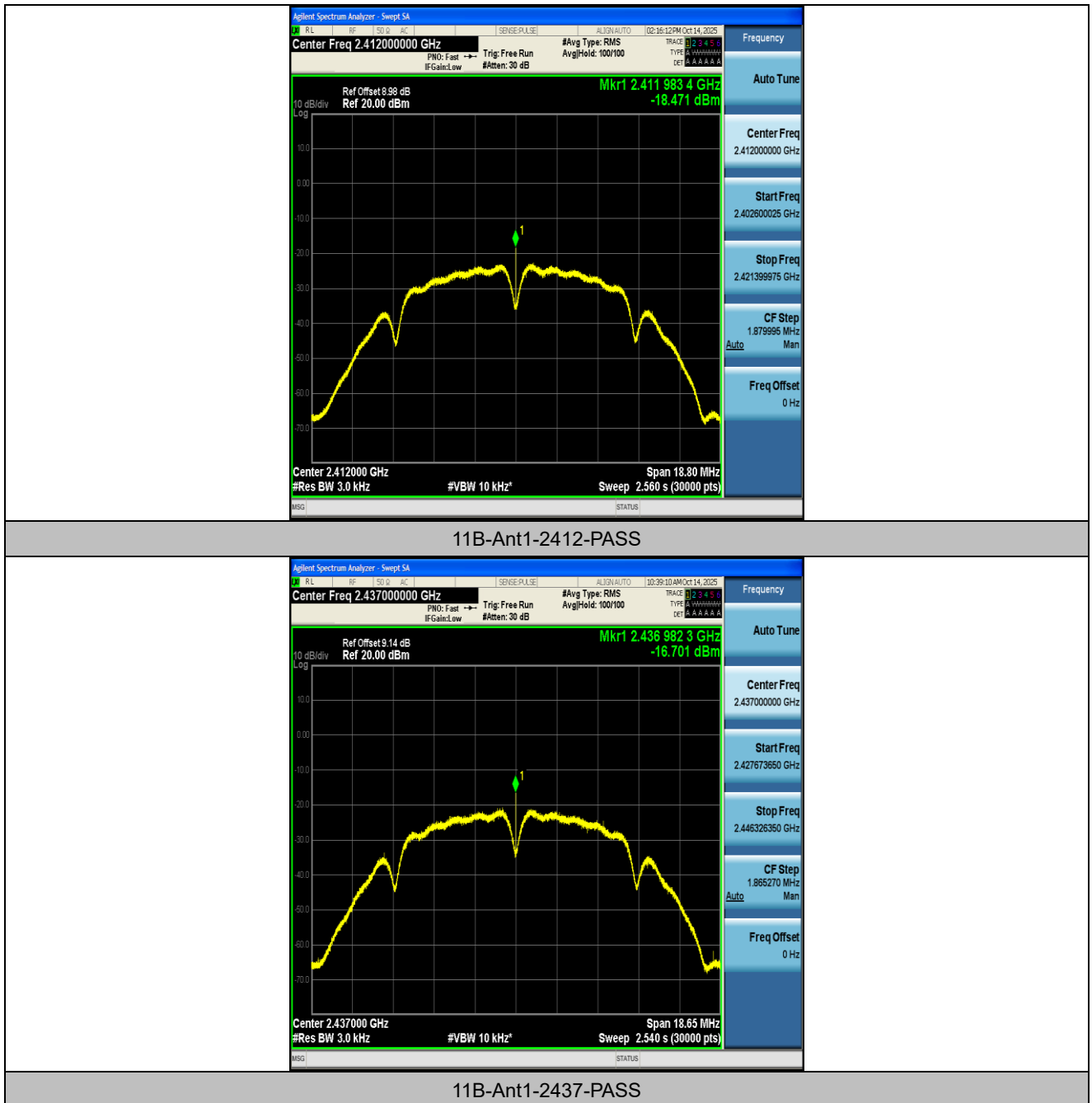
| Test Mode | Antenna | Frequency<br>[MHz] | Result<br>[dBm/3kHz] | Limit<br>[dBm/3kHz] | Verdict |
|-----------|---------|--------------------|----------------------|---------------------|---------|
| 11B       | Ant1    | 2412               | -18.47               | ≤8.00               | PASS    |
| 11B       | Ant1    | 2437               | -16.70               | ≤8.00               | PASS    |
| 11B       | Ant1    | 2462               | -17.75               | ≤8.00               | PASS    |
| 11G       | Ant1    | 2412               | -18.04               | ≤8.00               | PASS    |
| 11G       | Ant1    | 2437               | -16.12               | ≤8.00               | PASS    |
| 11G       | Ant1    | 2462               | -16.80               | ≤8.00               | PASS    |
| 11N20SISO | Ant1    | 2412               | -19.05               | ≤8.00               | PASS    |
| 11N20SISO | Ant1    | 2437               | -17.25               | ≤8.00               | PASS    |
| 11N20SISO | Ant1    | 2462               | -17.97               | ≤8.00               | PASS    |
| 11N40SISO | Ant1    | 2422               | -15.23               | ≤8.00               | PASS    |
| 11N40SISO | Ant1    | 2437               | -14.17               | ≤8.00               | PASS    |
| 11N40SISO | Ant1    | 2452               | -22.78               | ≤8.00               | PASS    |

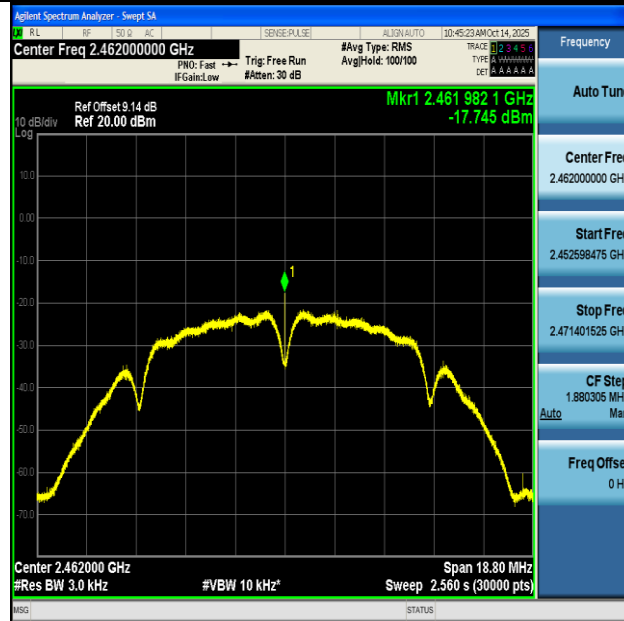
Note: offset(dB) = cable loss(dB) + attenuator factor(dB) + Duty Cycle Factor(dB)



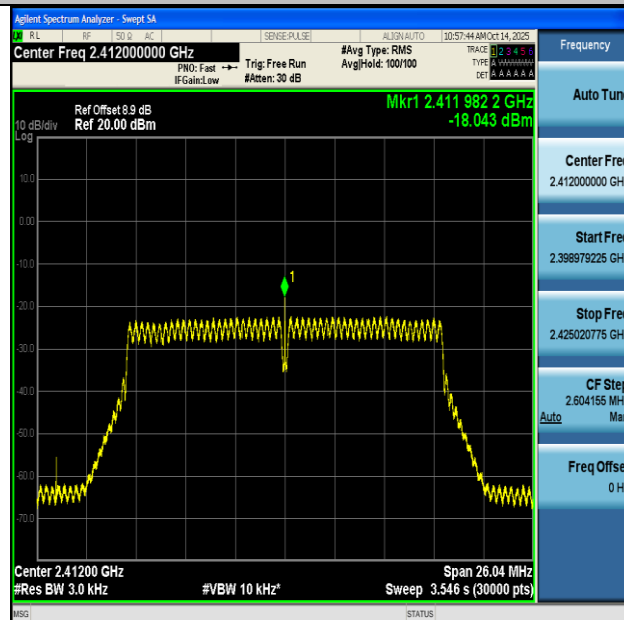


## Test Graphs



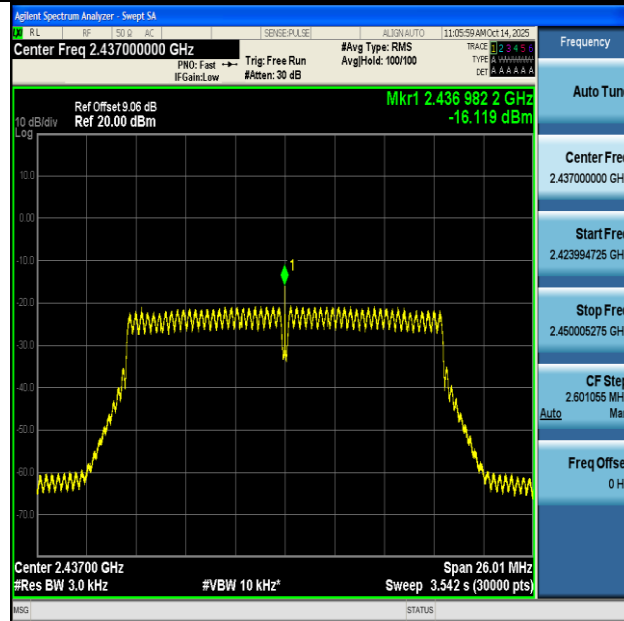


11B-Ant1-2462-PASS

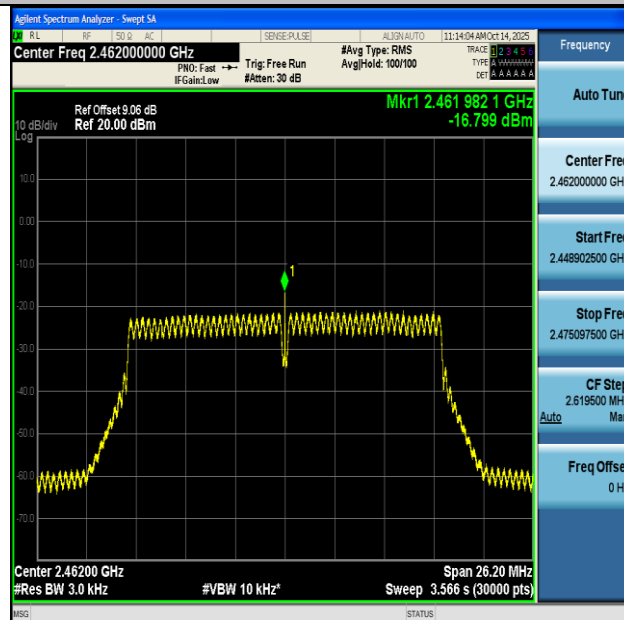


11G-Ant1-2412-PASS



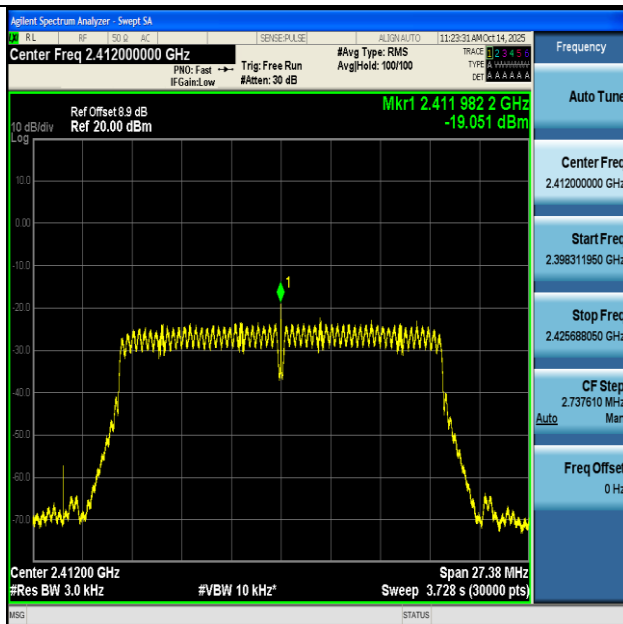


11G-Ant1-2437-PASS

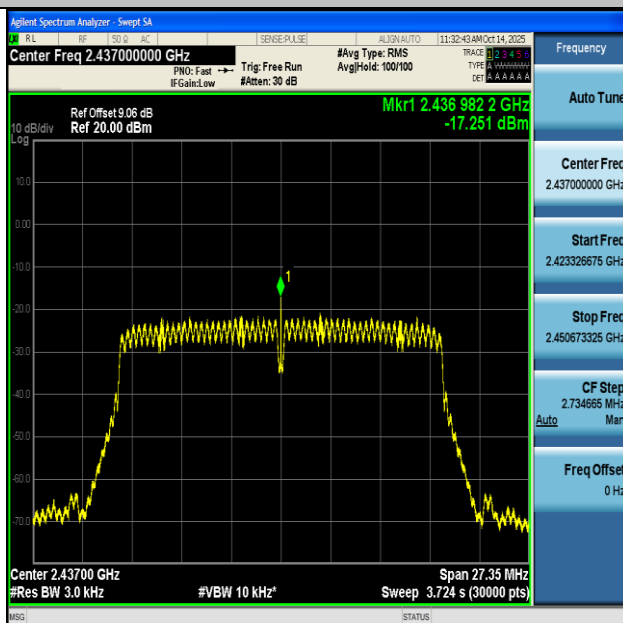


11G-Ant1-2462-PASS



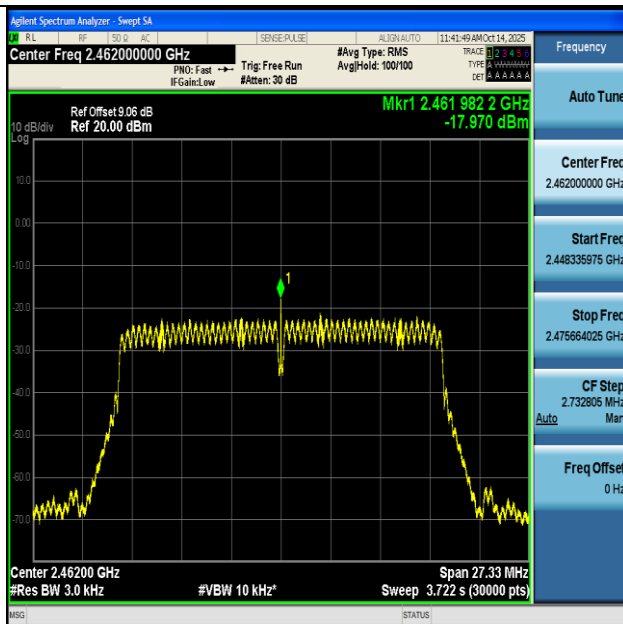


11N20SISO-Ant1-2412-PASS

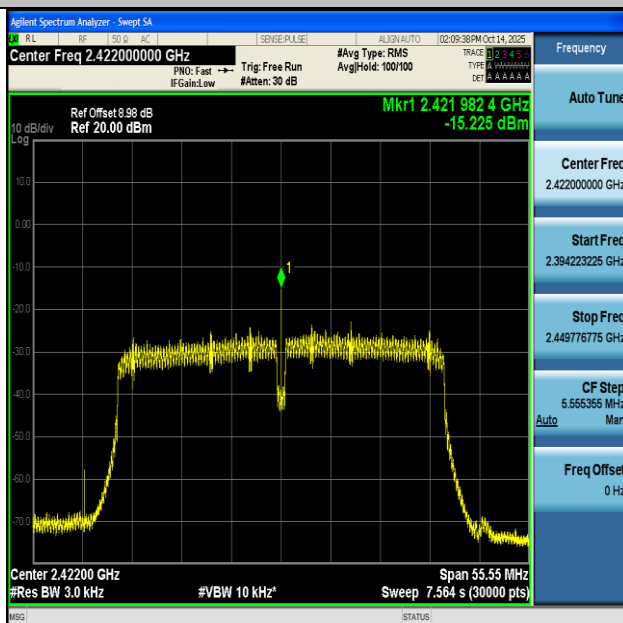


11N20SISO-Ant1-2437-PASS



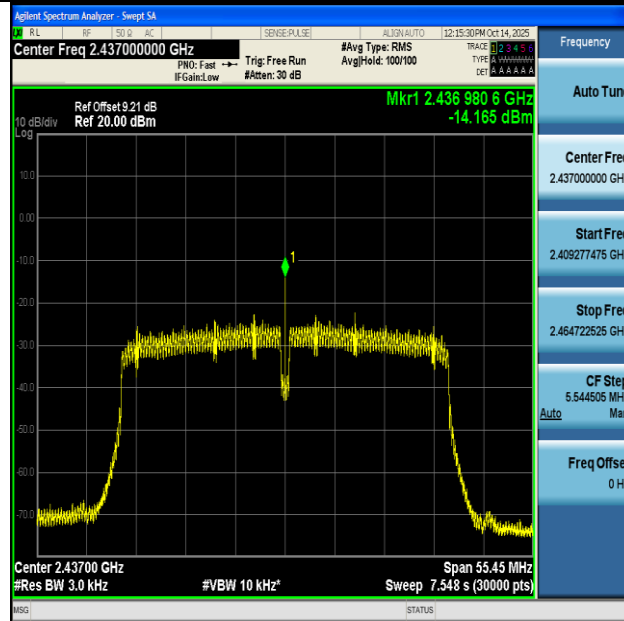


11N20SISO-Ant1-2462-PASS

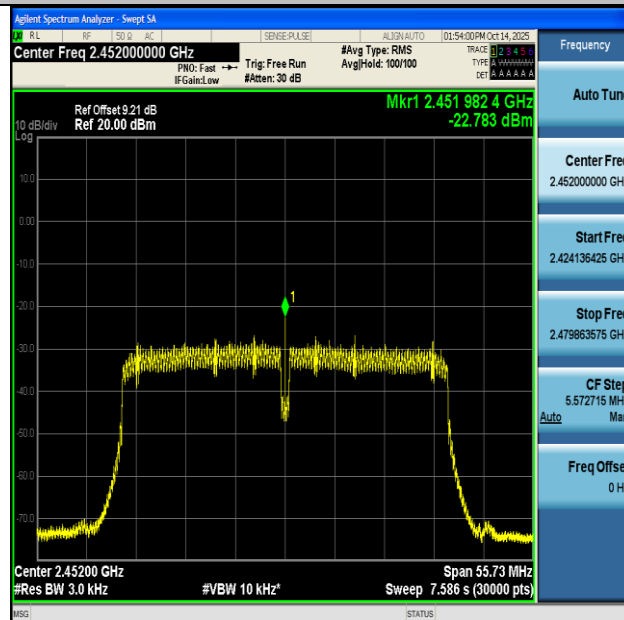


11N40SISO-Ant1-2422-PASS





11N40SISO-Ant1-2437-PASS



11N40SISO-Ant1-2452-PASS





## Appendix E: Band edge measurements

### Test Result

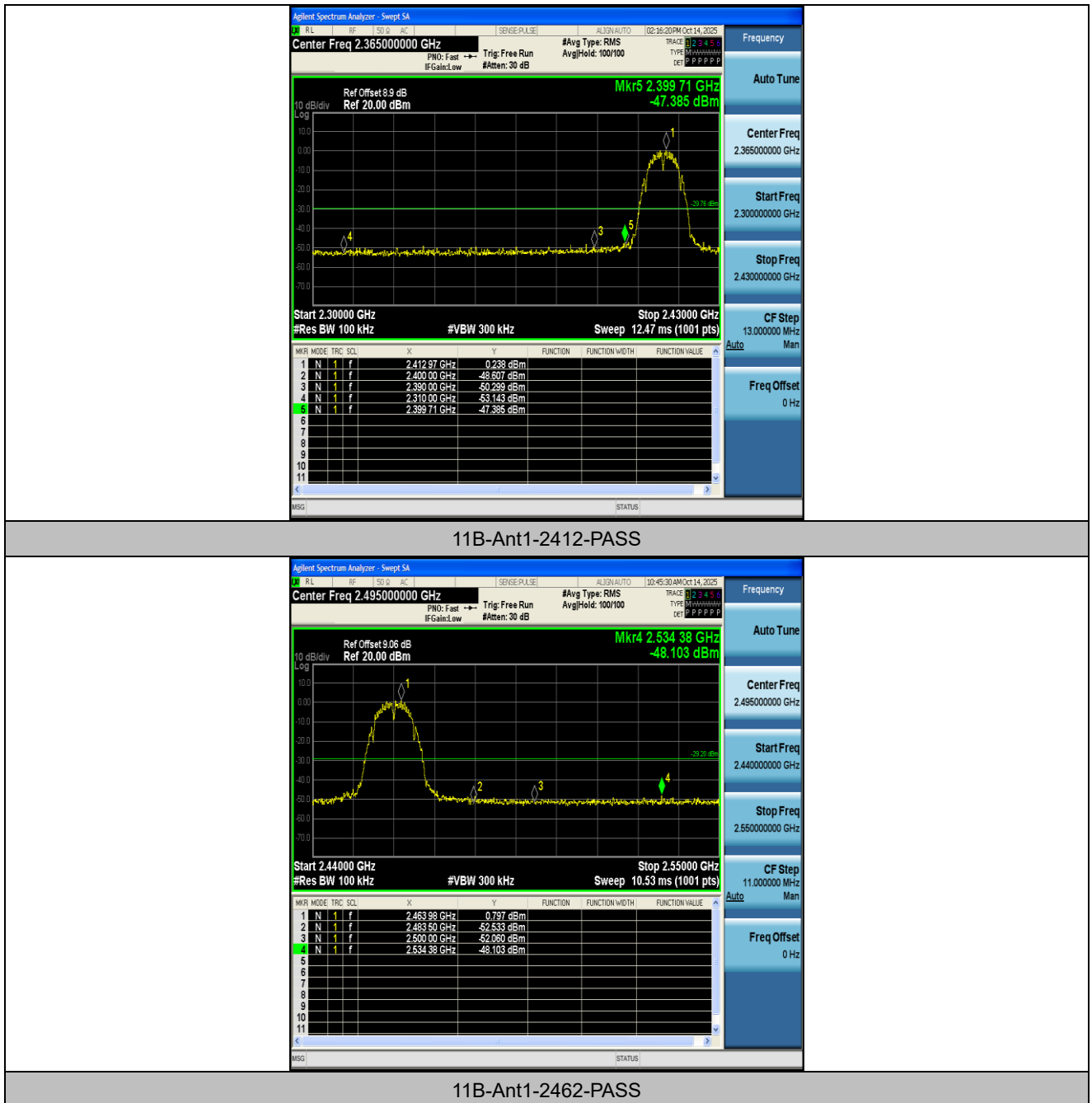
| Test Mode | Antenna | Ch. Name | Frequency.[MHz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|----------|-----------------|------------------|--------------|-------------|---------|
| 11B       | Ant1    | Low      | 2412            | 0.24             | -47.39       | ≤-29.76     | PASS    |
| 11B       | Ant1    | High     | 2462            | 0.80             | -48.1        | ≤-29.2      | PASS    |
| 11G       | Ant1    | Low      | 2412            | 0.36             | -38.26       | ≤-29.65     | PASS    |
| 11G       | Ant1    | High     | 2462            | 1.77             | -44.45       | ≤-28.23     | PASS    |
| 11N20SISO | Ant1    | Low      | 2412            | -0.49            | -42.43       | ≤-30.49     | PASS    |
| 11N20SISO | Ant1    | High     | 2462            | 0.81             | -46.66       | ≤-29.19     | PASS    |
| 11N40SISO | Ant1    | Low      | 2422            | -2.32            | -43.07       | ≤-32.32     | PASS    |
| 11N40SISO | Ant1    | High     | 2452            | -5.77            | -48.43       | ≤-35.77     | PASS    |

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



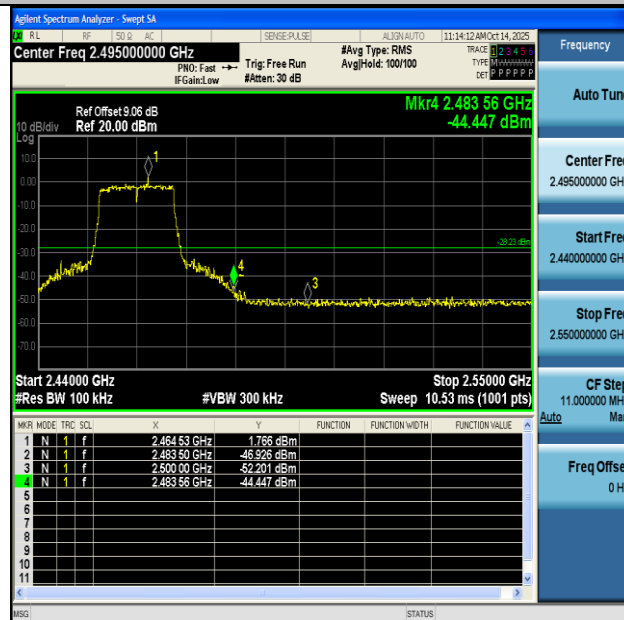


## Test Graphs



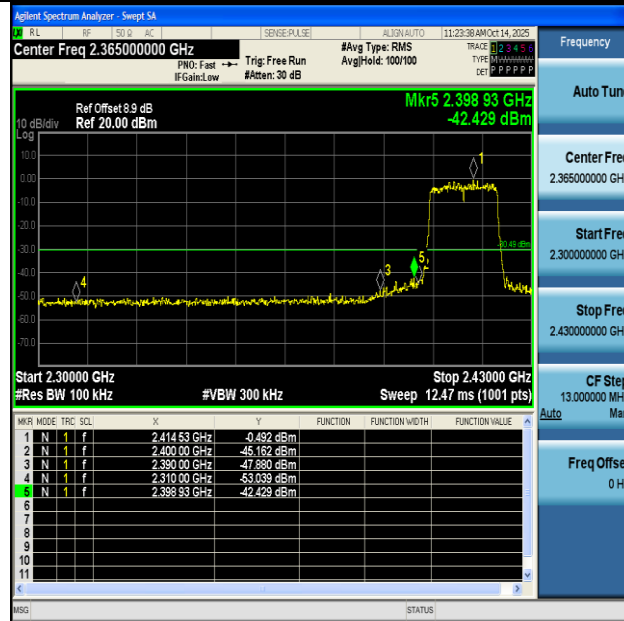


11G-Ant1-2412-PASS

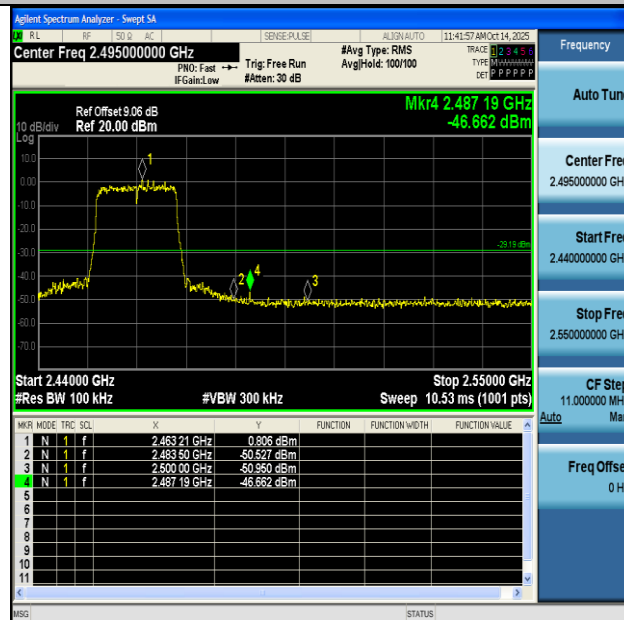


11G-Ant1-2462-PASS





11N20SISO-Ant1-2412-PASS



11N20SISO-Ant1-2462-PASS







## Appendix F: Conducted Spurious Emission

### Test Result

| Test Mode | Antenna | Frequency [MHz] | Freq. Range [Mhz] | Ref. Level [dBm] | Result [dBm] | Limit [dBm] | Verdict |
|-----------|---------|-----------------|-------------------|------------------|--------------|-------------|---------|
| 11B       | Ant1    | 2412            | 0~Reference       | -1.28            | -1.28        | ---         | PASS    |
| 11B       | Ant1    | 2412            | 30~1000           | -1.28            | -62.91       | ≤-31.28     | PASS    |
| 11B       | Ant1    | 2412            | 1000~26500        | -1.28            | -45.67       | ≤-31.28     | PASS    |
| 11B       | Ant1    | 2437            | 0~Reference       | 0.21             | 0.21         | ---         | PASS    |
| 11B       | Ant1    | 2437            | 30~1000           | 0.21             | -62.41       | ≤-29.79     | PASS    |
| 11B       | Ant1    | 2437            | 1000~26500        | 0.21             | -45.17       | ≤-29.79     | PASS    |
| 11B       | Ant1    | 2462            | 0~Reference       | -1.32            | -1.32        | ---         | PASS    |
| 11B       | Ant1    | 2462            | 30~1000           | -1.32            | -62.98       | ≤-31.32     | PASS    |
| 11B       | Ant1    | 2462            | 1000~26500        | -1.32            | -44.75       | ≤-31.32     | PASS    |
| 11G       | Ant1    | 2412            | 0~Reference       | -2.67            | -2.67        | ---         | PASS    |
| 11G       | Ant1    | 2412            | 30~1000           | -2.67            | -61.89       | ≤-32.67     | PASS    |
| 11G       | Ant1    | 2412            | 1000~26500        | -2.67            | -44.96       | ≤-32.67     | PASS    |
| 11G       | Ant1    | 2437            | 0~Reference       | -1.06            | -1.06        | ---         | PASS    |
| 11G       | Ant1    | 2437            | 30~1000           | -1.06            | -62.43       | ≤-31.06     | PASS    |
| 11G       | Ant1    | 2437            | 1000~26500        | -1.06            | -45.91       | ≤-31.06     | PASS    |
| 11G       | Ant1    | 2462            | 0~Reference       | -1.51            | -1.51        | ---         | PASS    |
| 11G       | Ant1    | 2462            | 30~1000           | -1.51            | -62.79       | ≤-31.51     | PASS    |
| 11G       | Ant1    | 2462            | 1000~26500        | -1.51            | -45.16       | ≤-31.51     | PASS    |
| 11N20SISO | Ant1    | 2412            | 0~Reference       | -1.14            | -1.14        | ---         | PASS    |
| 11N20SISO | Ant1    | 2412            | 30~1000           | -1.14            | -63.01       | ≤-31.14     | PASS    |
| 11N20SISO | Ant1    | 2412            | 1000~26500        | -1.14            | -44.66       | ≤-31.14     | PASS    |
| 11N20SISO | Ant1    | 2437            | 0~Reference       | -0.81            | -0.81        | ---         | PASS    |
| 11N20SISO | Ant1    | 2437            | 30~1000           | -0.81            | -62.13       | ≤-30.81     | PASS    |
| 11N20SISO | Ant1    | 2437            | 1000~26500        | -0.81            | -44.72       | ≤-30.81     | PASS    |
| 11N20SISO | Ant1    | 2462            | 0~Reference       | 0.45             | 0.45         | ---         | PASS    |
| 11N20SISO | Ant1    | 2462            | 30~1000           | 0.45             | -62.52       | ≤-29.55     | PASS    |
| 11N20SISO | Ant1    | 2462            | 1000~26500        | 0.45             | -45.5        | ≤-29.55     | PASS    |
| 11N40SISO | Ant1    | 2422            | 0~Reference       | -4.08            | -4.08        | ---         | PASS    |
| 11N40SISO | Ant1    | 2422            | 30~1000           | -4.08            | -62.32       | ≤-34.08     | PASS    |
| 11N40SISO | Ant1    | 2422            | 1000~26500        | -4.08            | -45.32       | ≤-34.08     | PASS    |
| 11N40SISO | Ant1    | 2437            | 0~Reference       | -2.42            | -2.42        | ---         | PASS    |
| 11N40SISO | Ant1    | 2437            | 30~1000           | -2.42            | -63.34       | ≤-32.42     | PASS    |
| 11N40SISO | Ant1    | 2437            | 1000~26500        | -2.42            | -46.01       | ≤-32.42     | PASS    |
| 11N40SISO | Ant1    | 2452            | 0~Reference       | -6.73            | -6.73        | ---         | PASS    |
| 11N40SISO | Ant1    | 2452            | 30~1000           | -6.73            | -62.51       | ≤-36.73     | PASS    |
| 11N40SISO | Ant1    | 2452            | 1000~26500        | -6.73            | -45.77       | ≤-36.73     | PASS    |



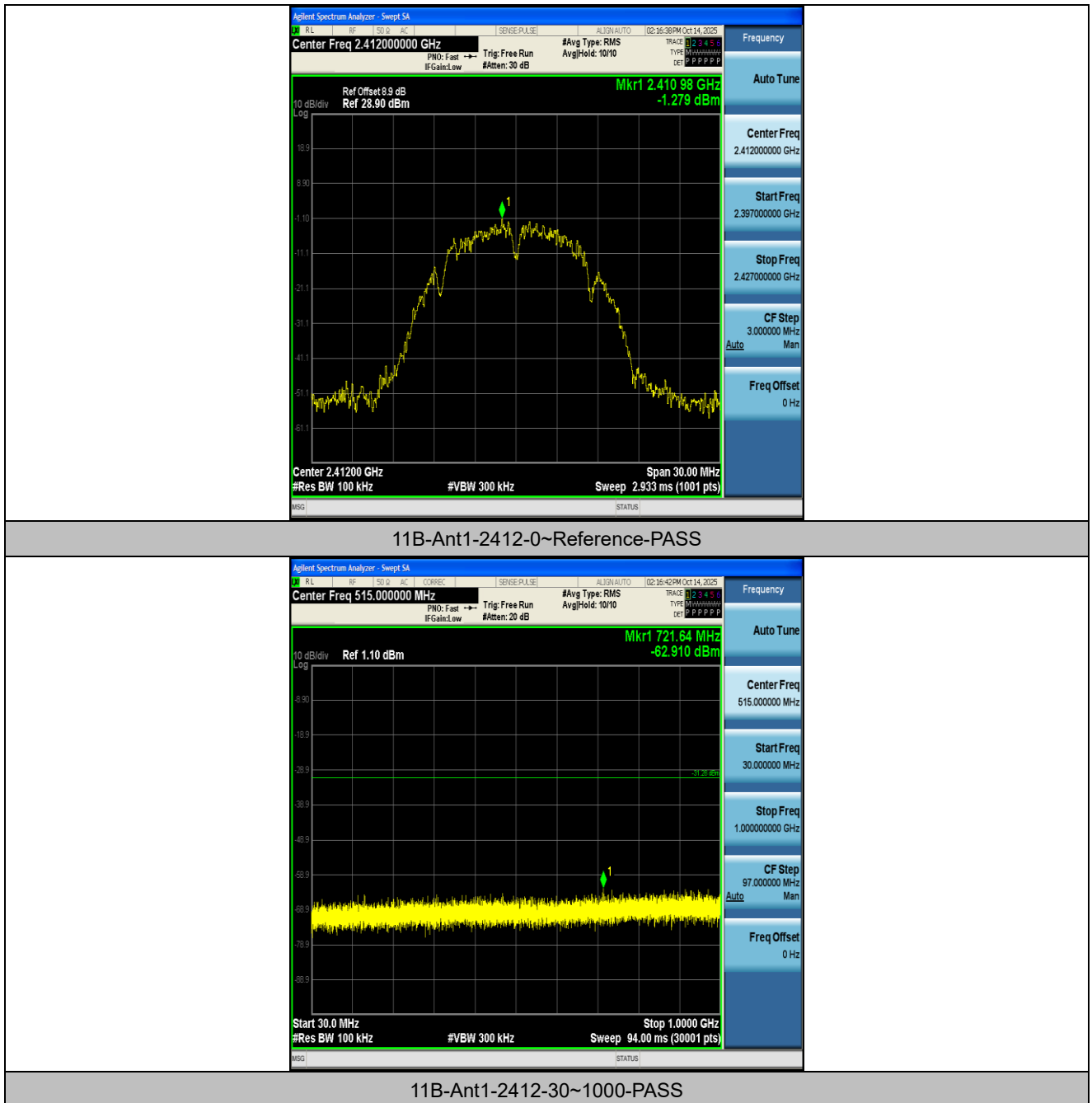


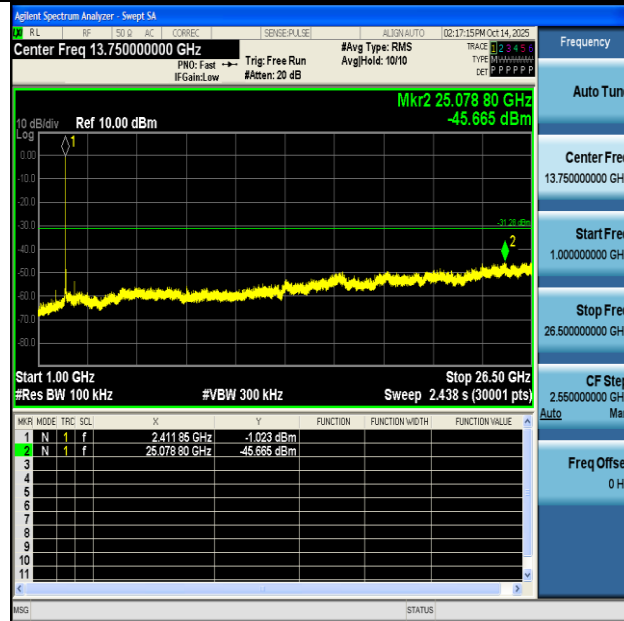
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.



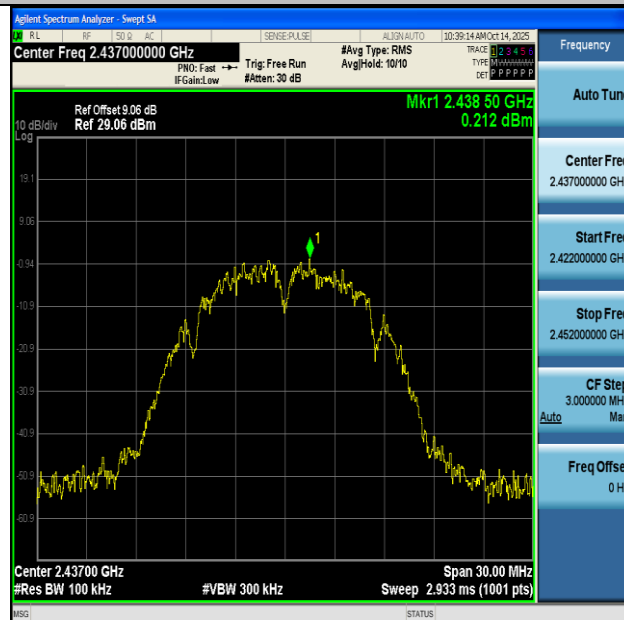


## Test Graphs



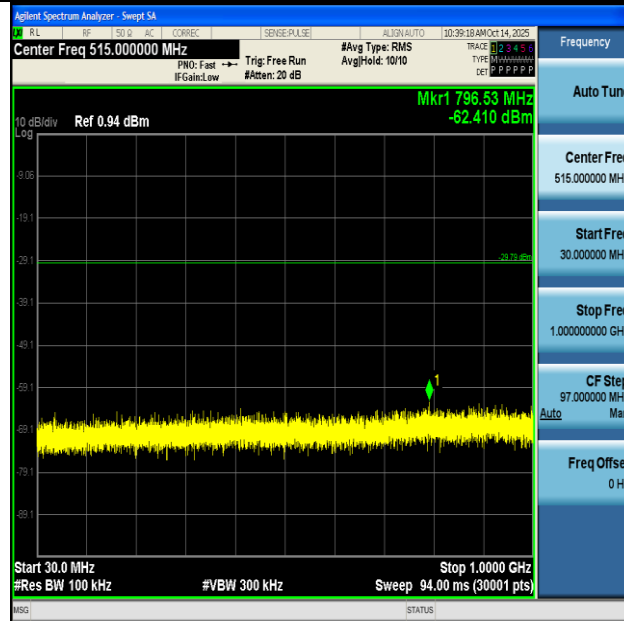


11B-Ant1-2412-1000~26500-PASS

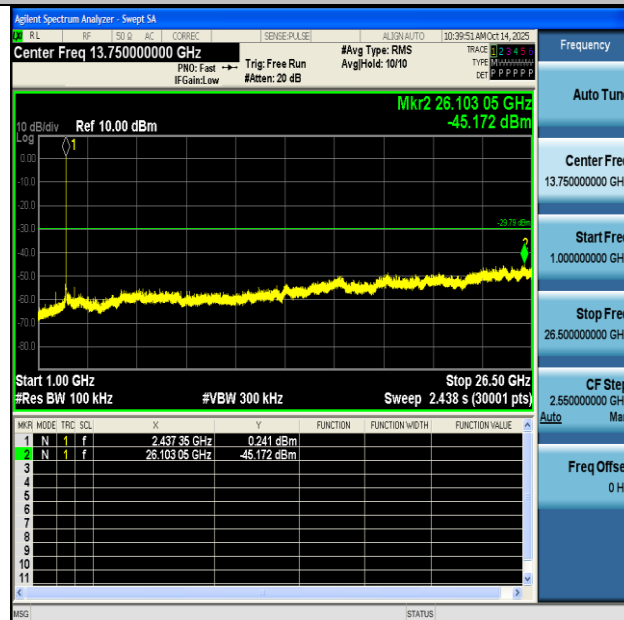


11B-Ant1-2437-0~Reference-PASS



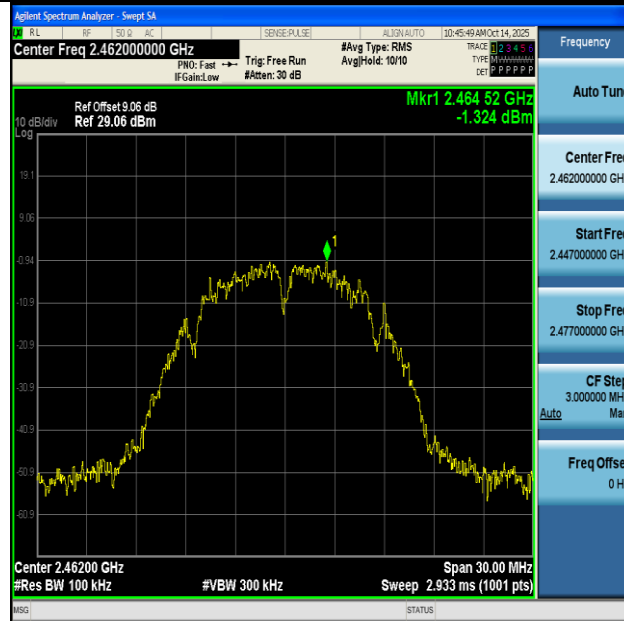


11B-Ant1-2437-30~1000-PASS

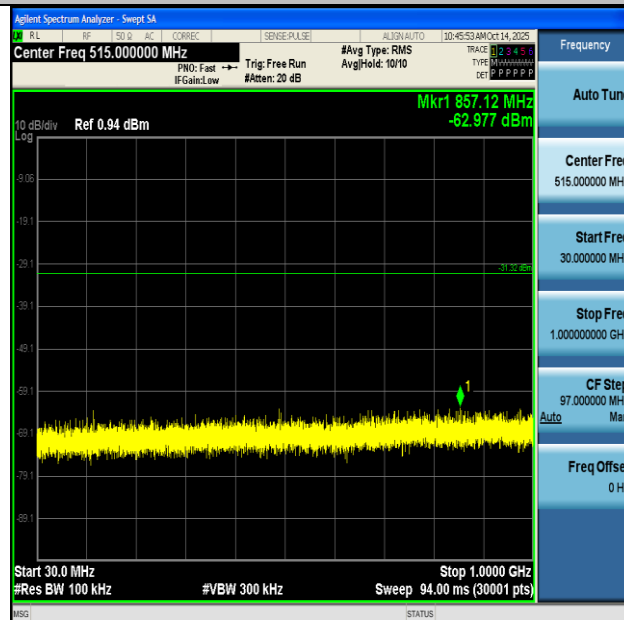


11B-Ant1-2437-1000~26500-PASS



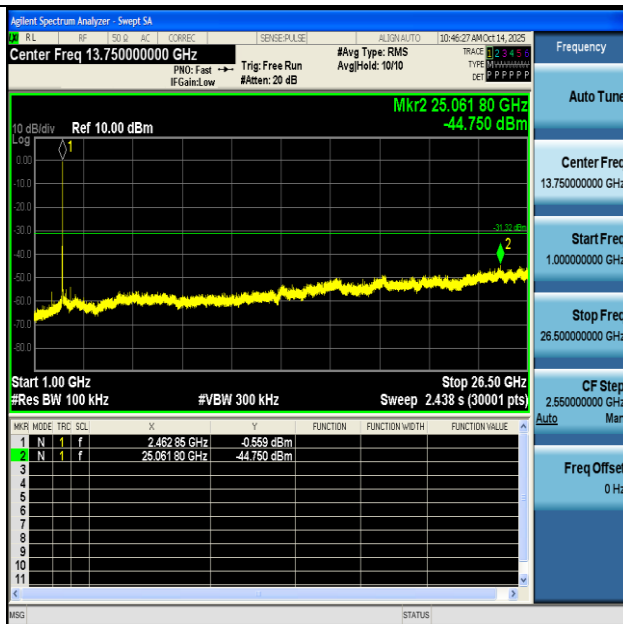


11B-Ant1-2462-0~Reference-PASS

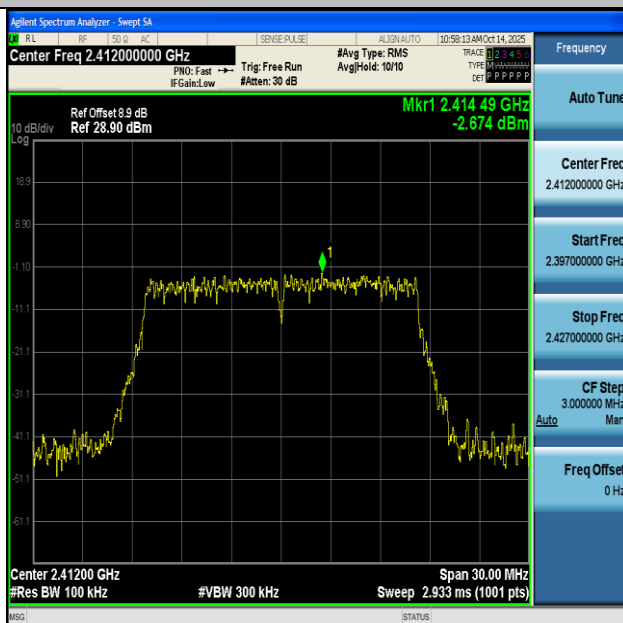


11B-Ant1-2462-30~1000-PASS



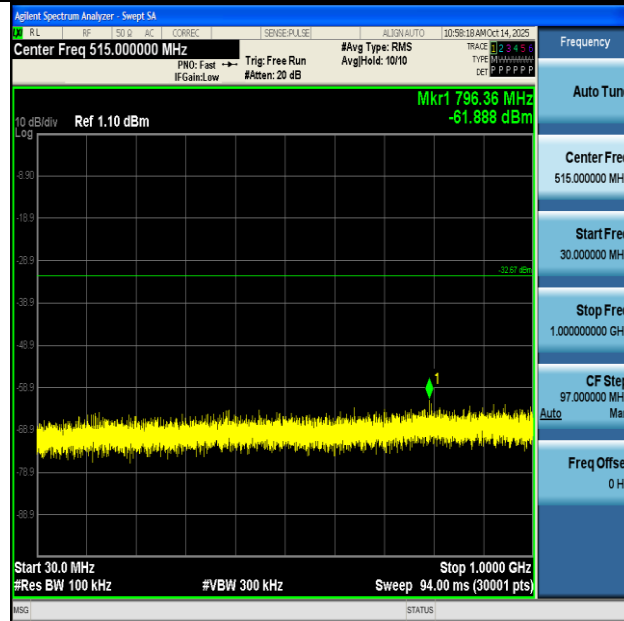


11B-Ant1-2462-1000~26500-PASS

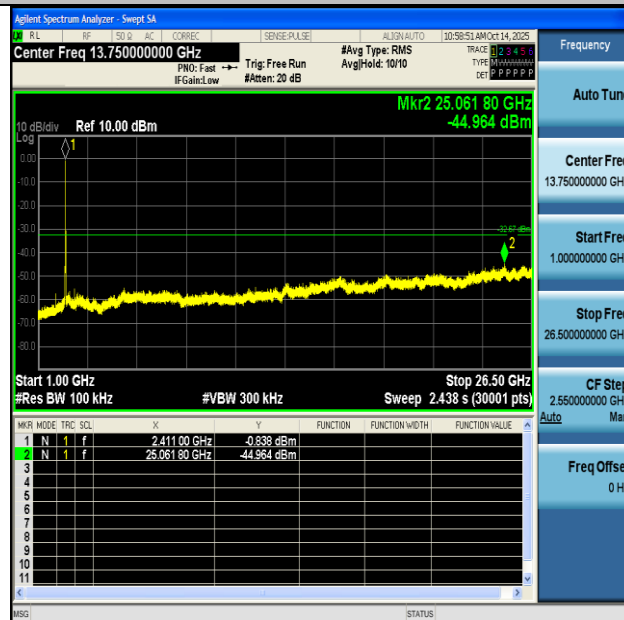


11G-Ant1-2412-0~Reference-PASS



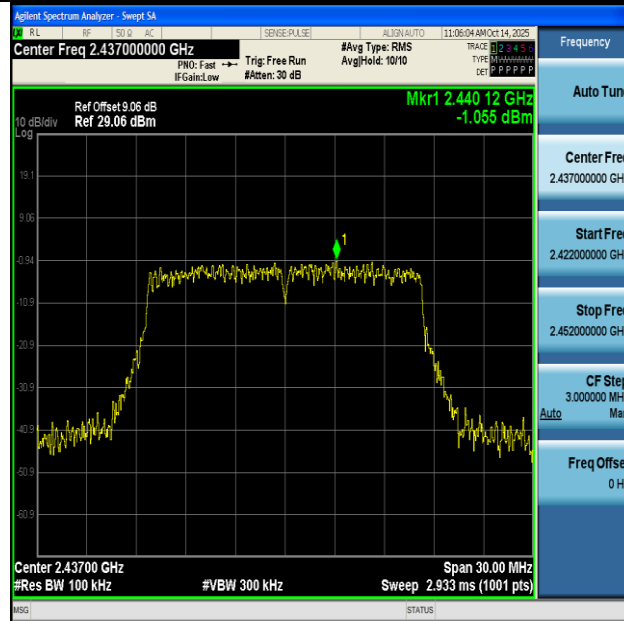


11G-Ant1-2412-30~1000-PASS

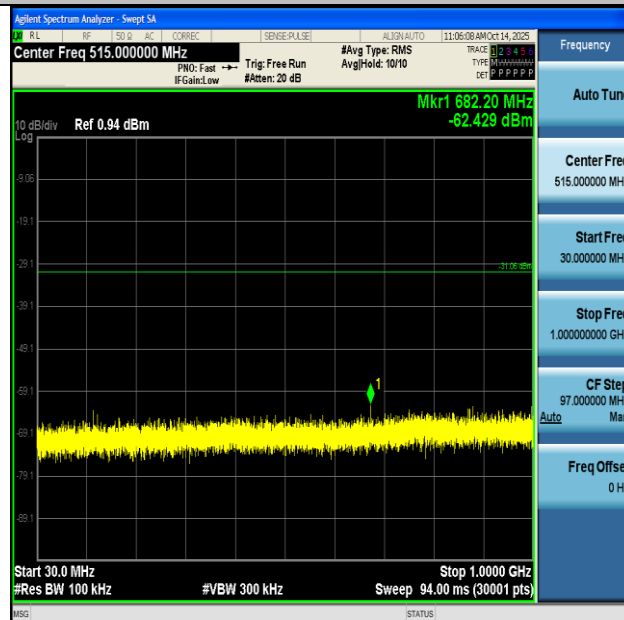


11G-Ant1-2412-1000~26500-PASS



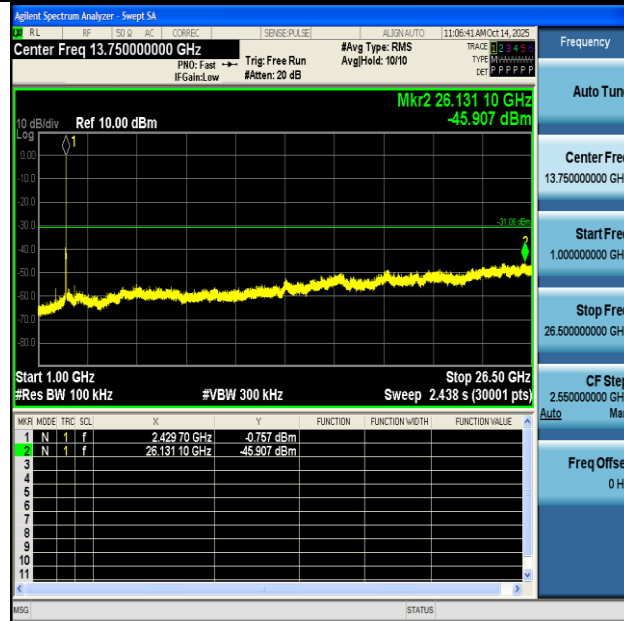


11G-Ant1-2437-0~Reference-PASS

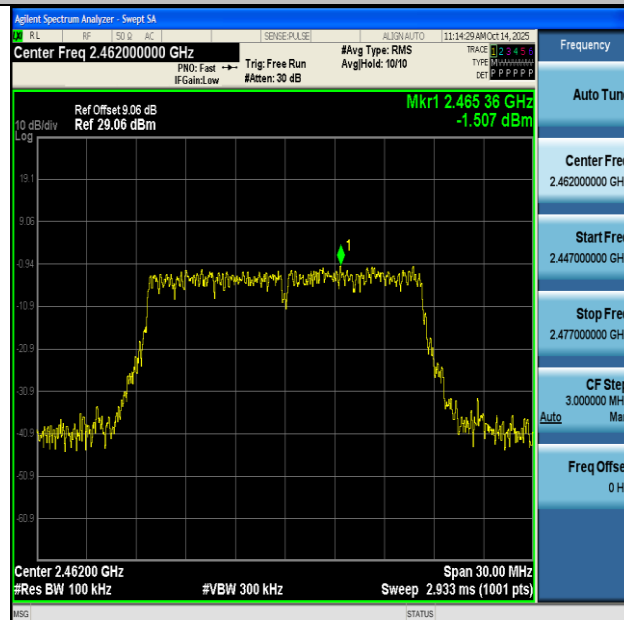


11G-Ant1-2437-30~1000-PASS



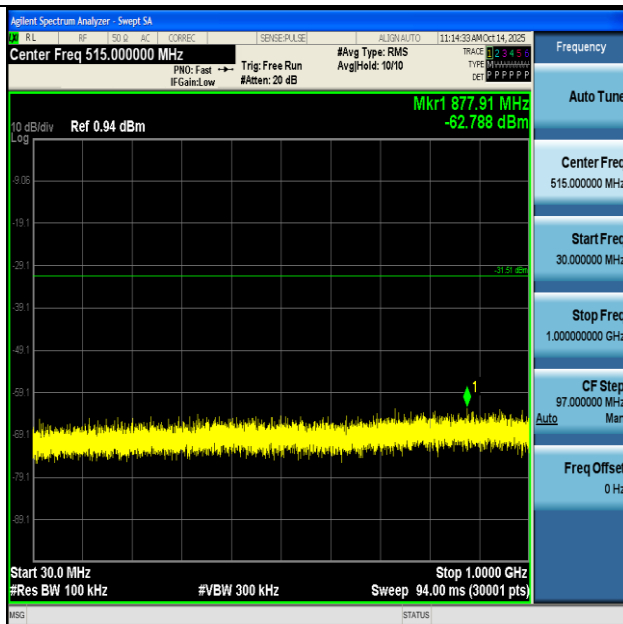


11G-Ant1-2437-1000~26500-PASS

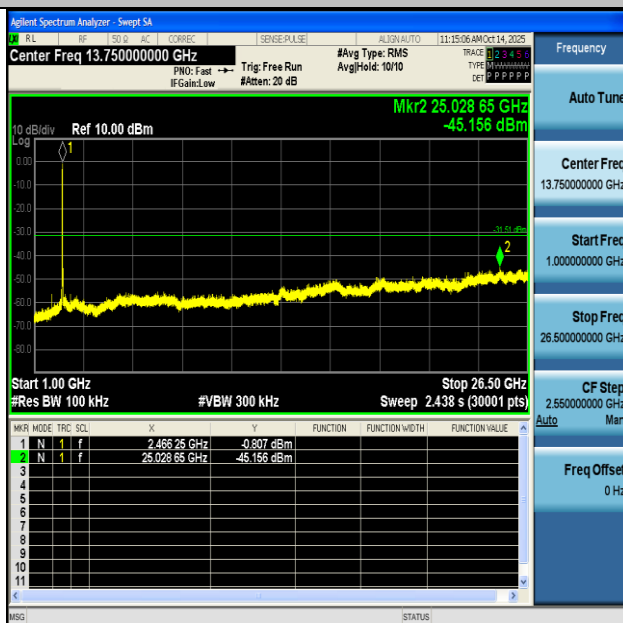


11G-Ant1-2462-0~Reference-PASS



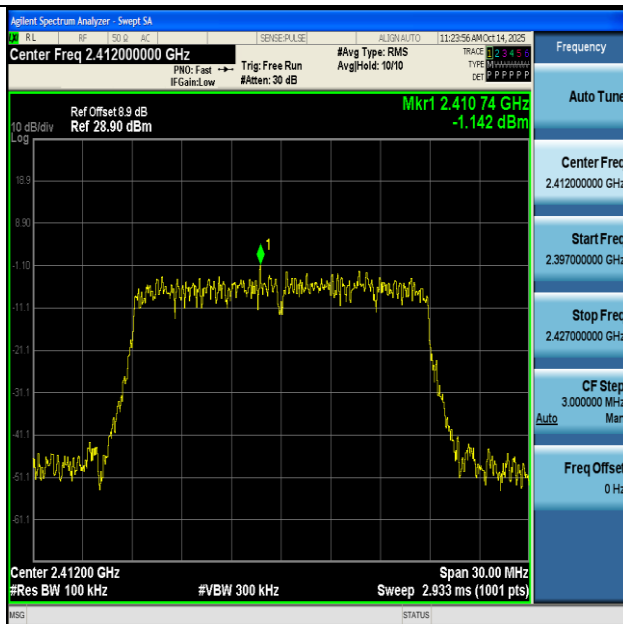


11G-Ant1-2462-30~1000-PASS

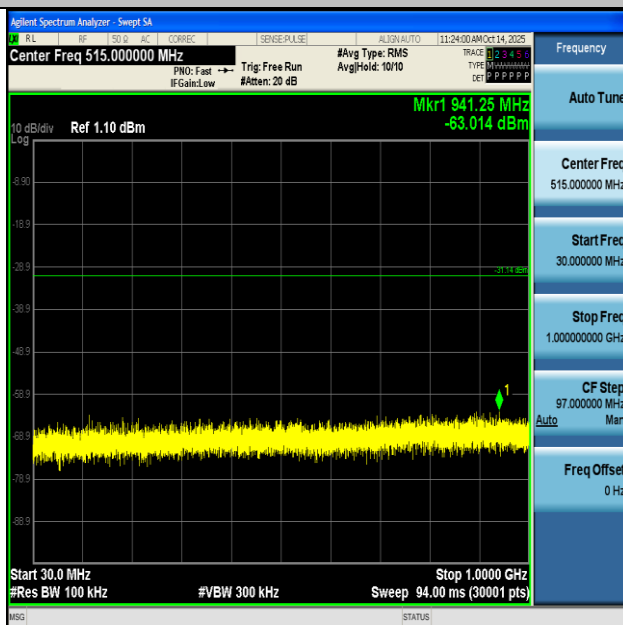


11G-Ant1-2462-1000~26500-PASS



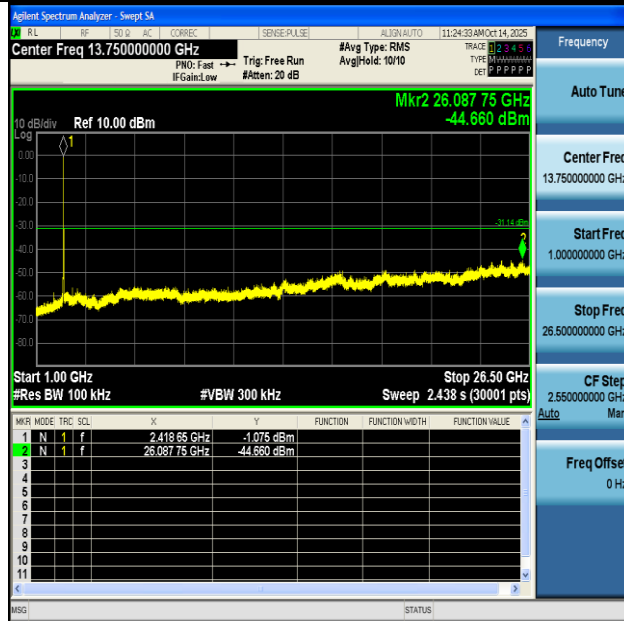


11N20SISO-Ant1-2412-0~Reference-PASS

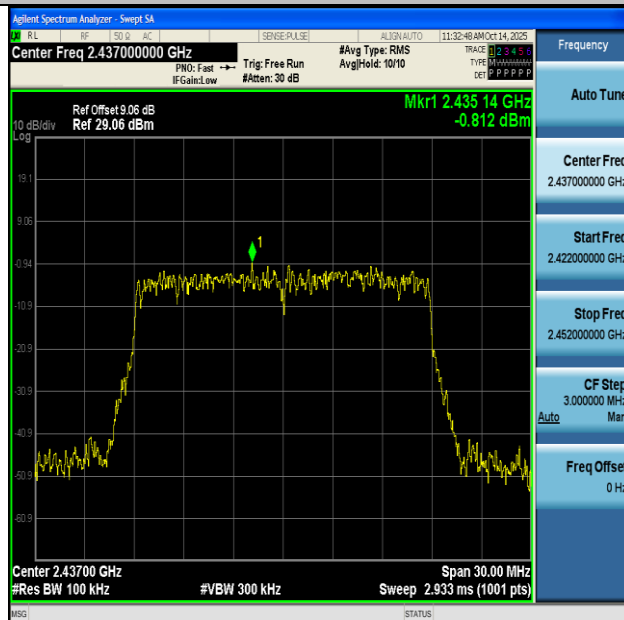


11N20SISO-Ant1-2412-30~1000-PASS



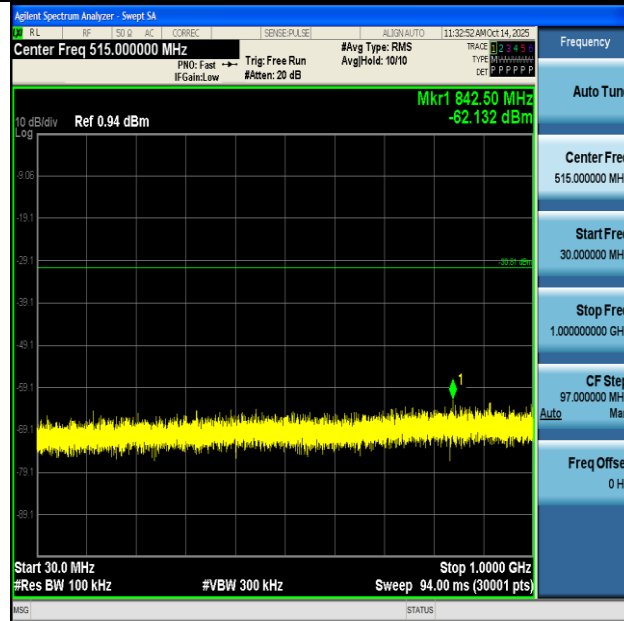


11N20SISO-Ant1-2412-1000~26500-PASS

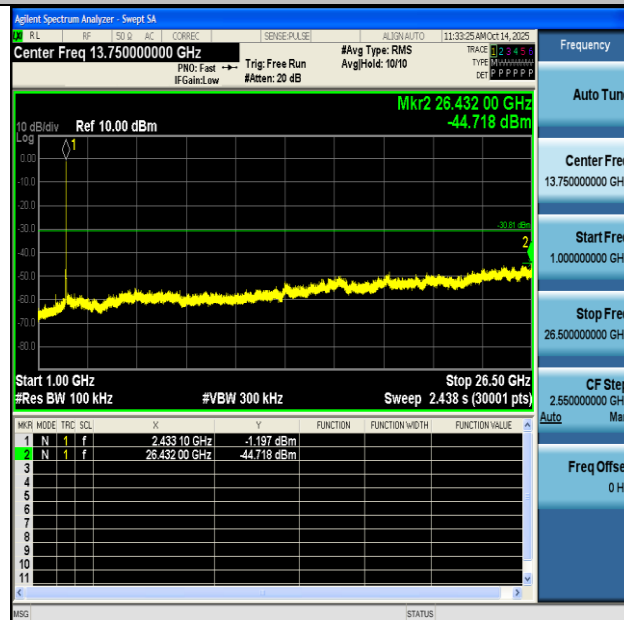


11N20SISO-Ant1-2437-0~Reference-PASS



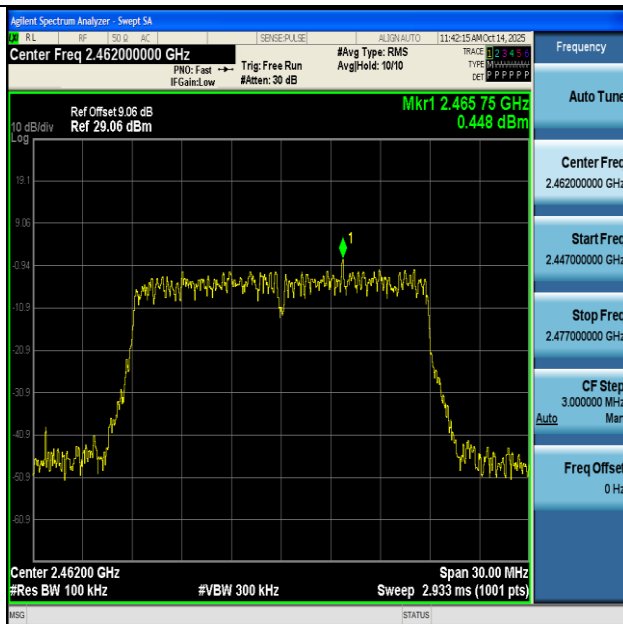


11N20SISO-Ant1-2437-30~1000-PASS

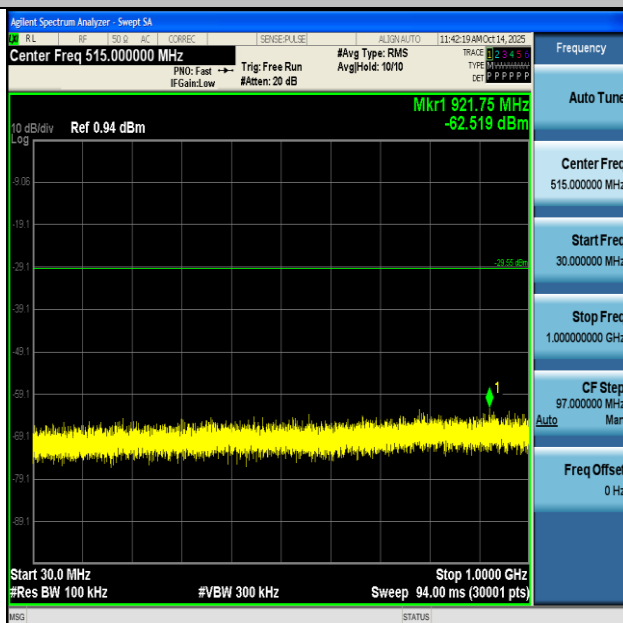


11N20SISO-Ant1-2437-1000~26500-PASS



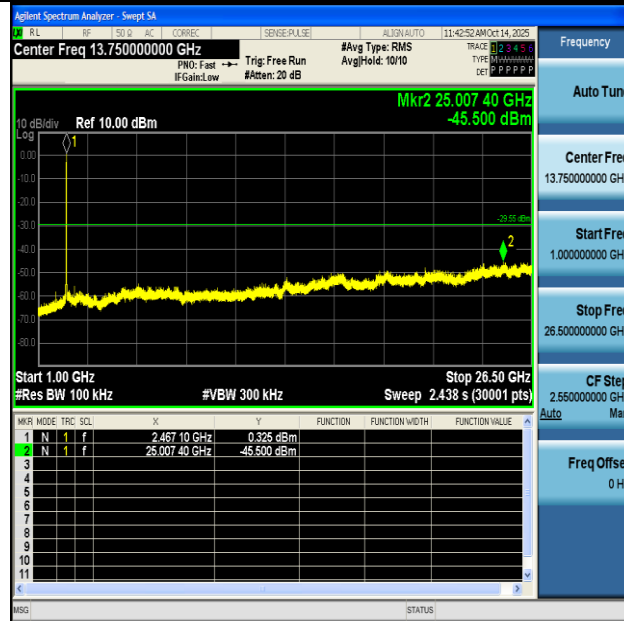


11N20SISO-Ant1-2462-0~Reference-PASS

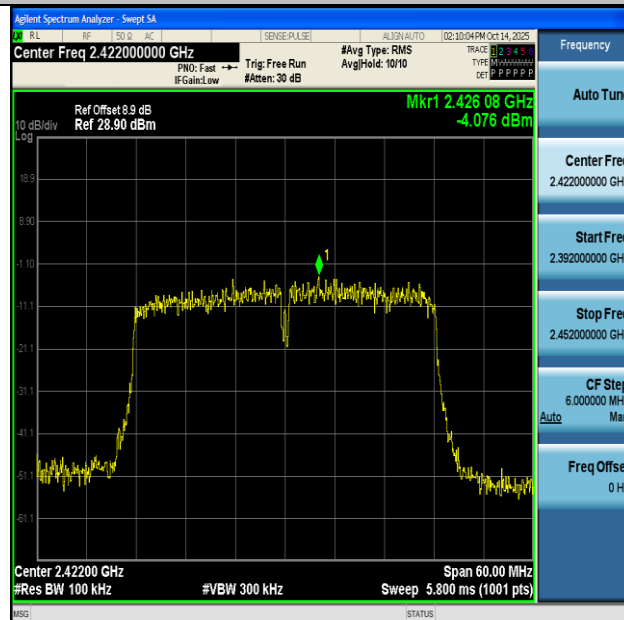


11N20SISO-Ant1-2462-30~1000-PASS



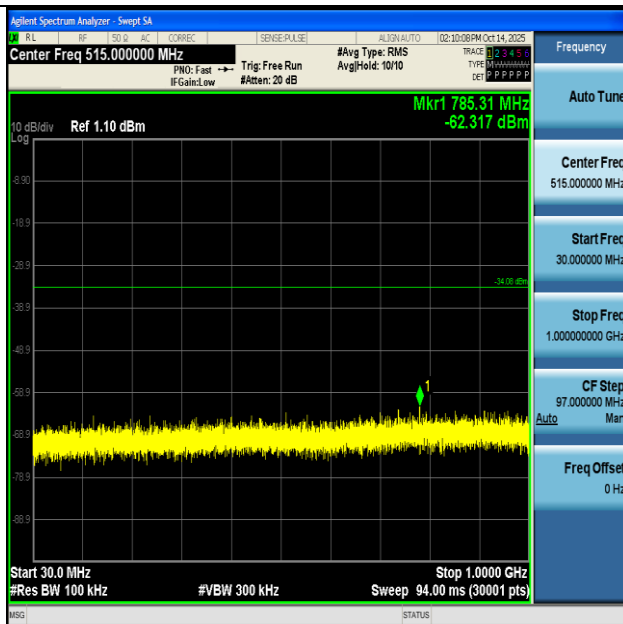


11N20SISO-Ant1-2462-1000~26500-PASS

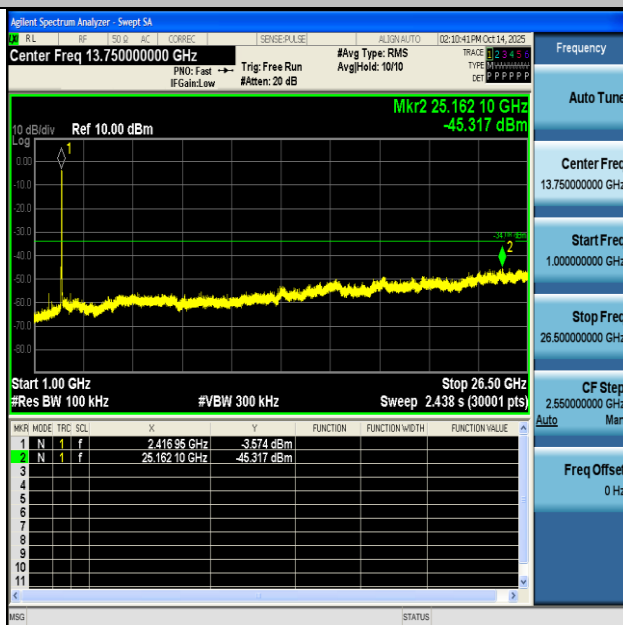


11N40SISO-Ant1-2422-0~Reference-PASS



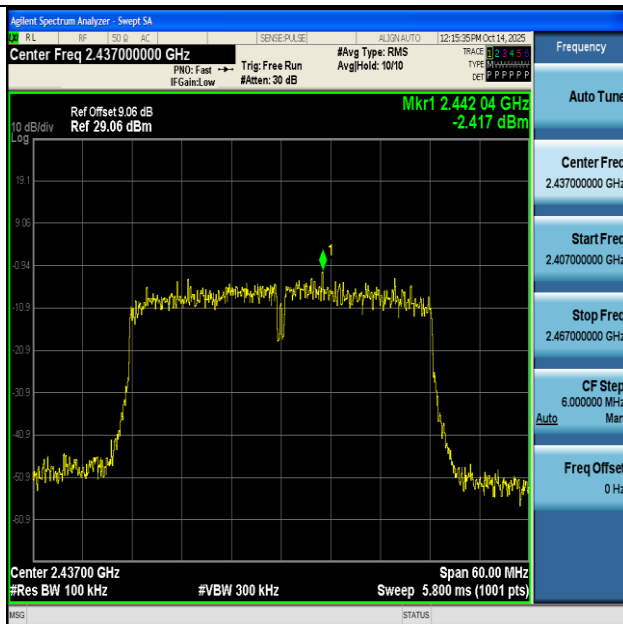


11N40SISO-Ant1-2422-30~1000-PASS

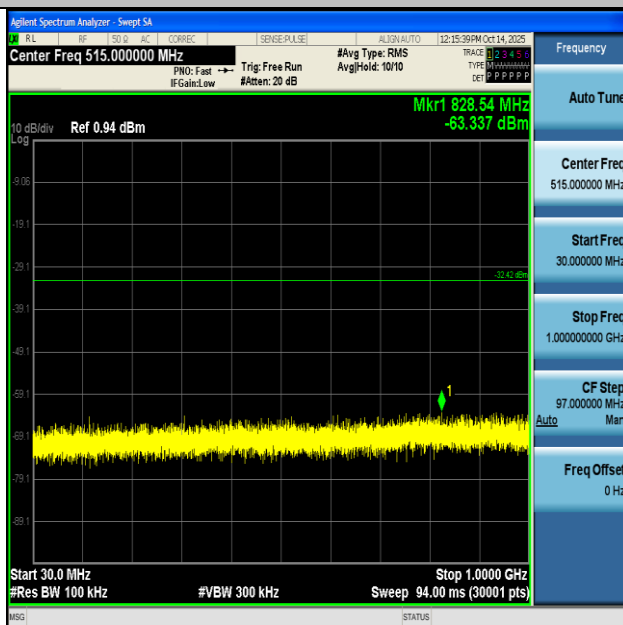


11N40SISO-Ant1-2422-1000~26500-PASS



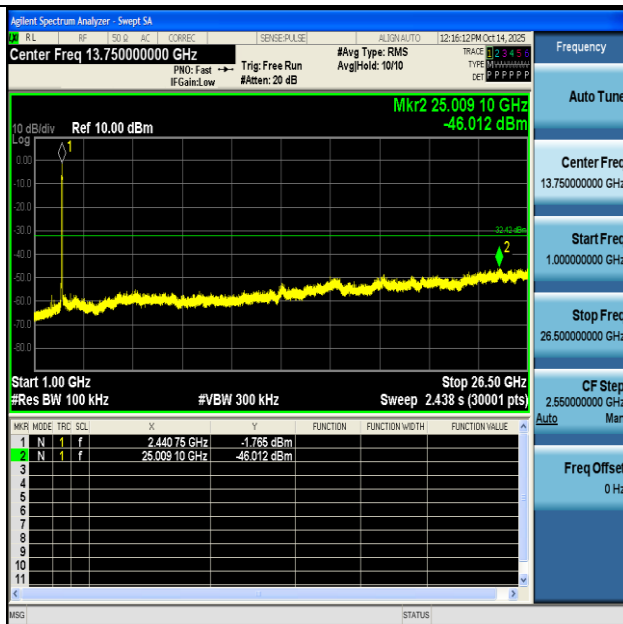


11N40SISO-Ant1-2437-0~Reference-PASS

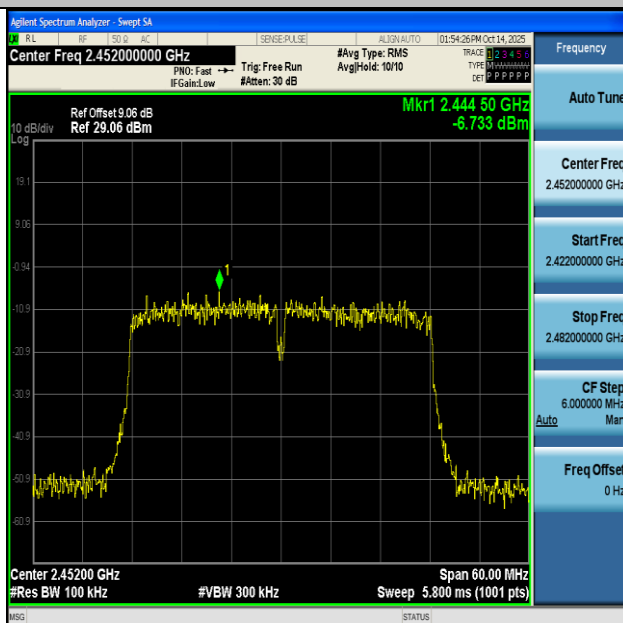


11N40SISO-Ant1-2437-30~1000-PASS



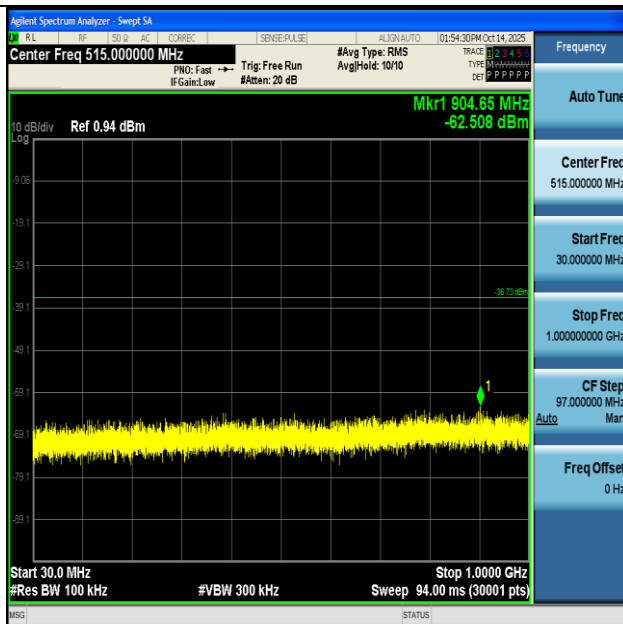


11N40SISO-Ant1-2437-1000~26500-PASS

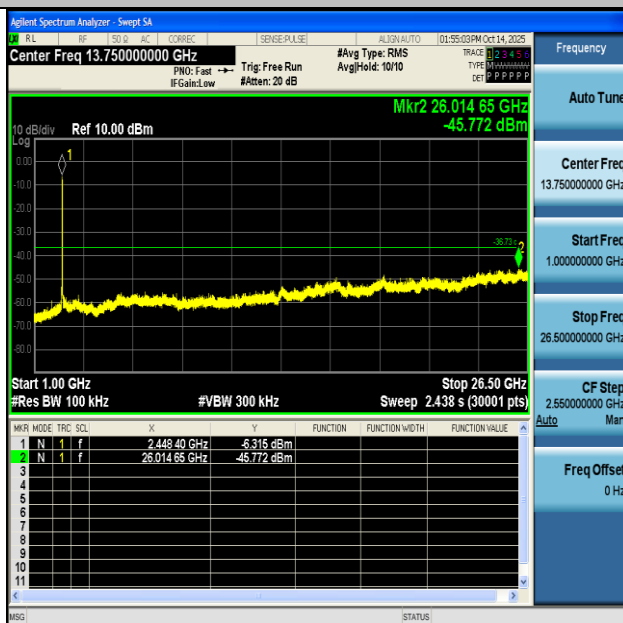


11N40SISO-Ant1-2452-0~Reference-PASS





11N40SISO-Ant1-2452-30~1000-PASS



11N40SISO-Ant1-2452-1000~26500-PASS





## Appendix G: Duty Cycle

### Test Result

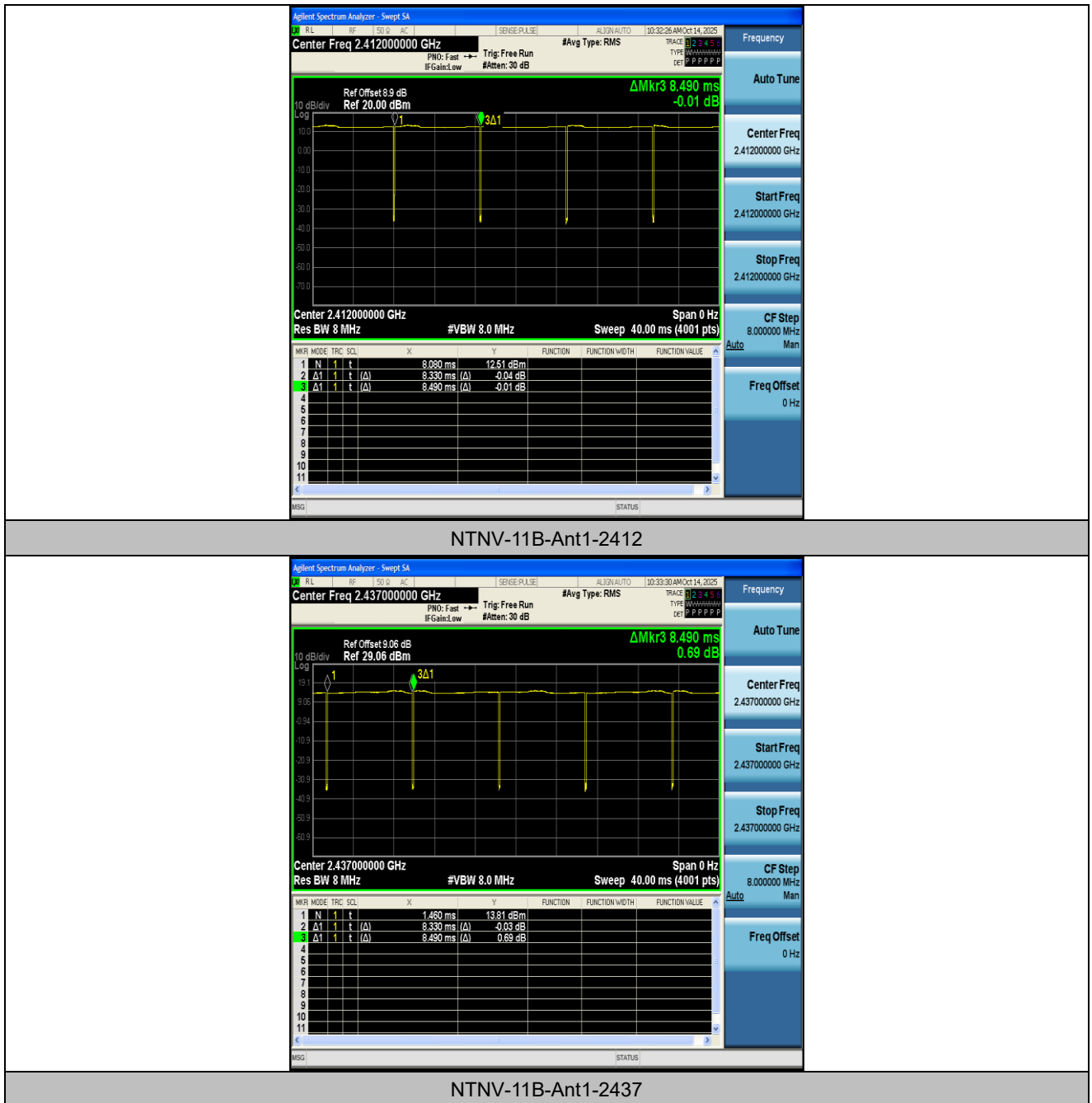
| Test Mode | Antenna | Frequency [MHz] | Transmission Duration [ms] | Transmission Period [ms] | Duty Cycle [%] | Factor |
|-----------|---------|-----------------|----------------------------|--------------------------|----------------|--------|
| 11B       | Ant1    | 2412            | 8.33                       | 8.49                     | 98.12          | 0.08   |
| 11B       | Ant1    | 2437            | 8.33                       | 8.49                     | 98.12          | 0.08   |
| 11B       | Ant1    | 2462            | 8.33                       | 8.49                     | 98.12          | 0.08   |
| 11G       | Ant1    | 2412            | 40.00                      | 40.00                    | 100.00         | 0.00   |
| 11G       | Ant1    | 2437            | 40.00                      | 40.00                    | 100.00         | 0.00   |
| 11G       | Ant1    | 2462            | 40.00                      | 40.00                    | 100.00         | 0.00   |
| 11N20SISO | Ant1    | 2412            | 40.00                      | 40.00                    | 100.00         | 0.00   |
| 11N20SISO | Ant1    | 2437            | 40.00                      | 40.00                    | 100.00         | 0.00   |
| 11N20SISO | Ant1    | 2462            | 40.00                      | 40.00                    | 100.00         | 0.00   |
| 11N40SISO | Ant1    | 2422            | 0.57                       | 0.58                     | 98.28          | 0.08   |
| 11N40SISO | Ant1    | 2437            | 0.57                       | 0.59                     | 96.61          | 0.15   |
| 11N40SISO | Ant1    | 2452            | 0.57                       | 0.59                     | 96.61          | 0.15   |

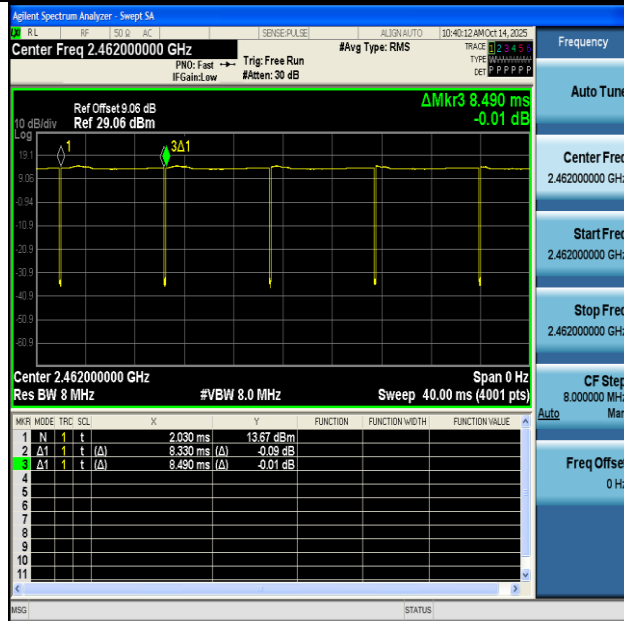
Note: offset(dB) = cable loss(dB) + attenuator factor(dB)



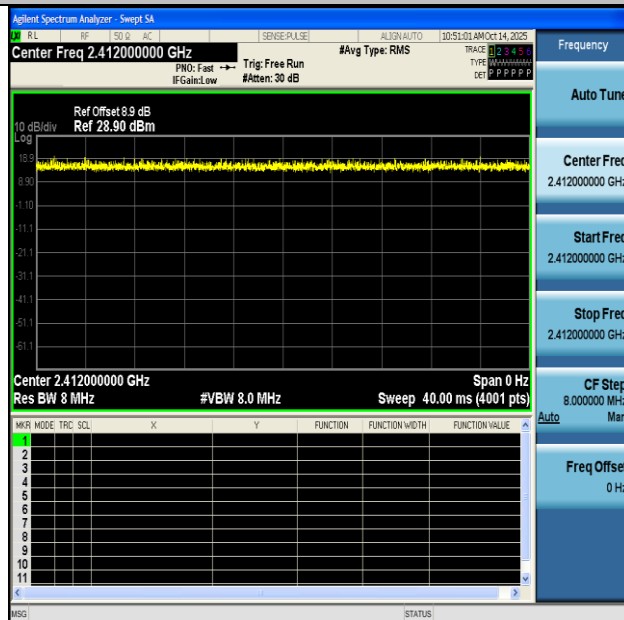


## Test Graphs



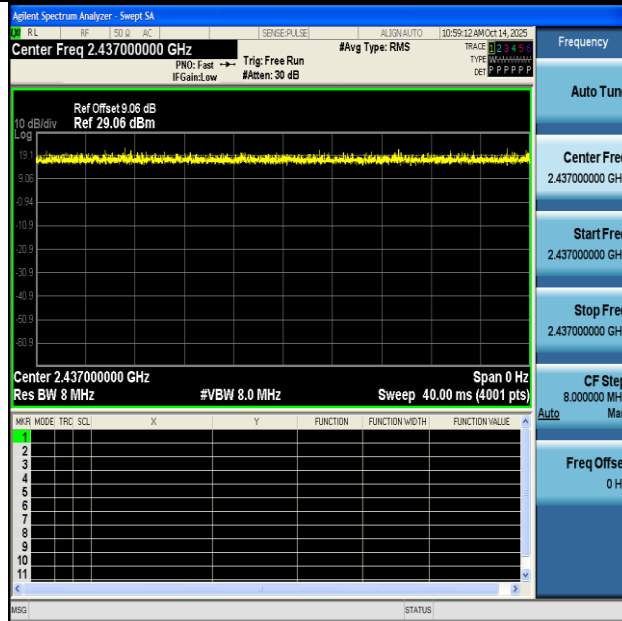


NTNV-11B-Ant1-2462

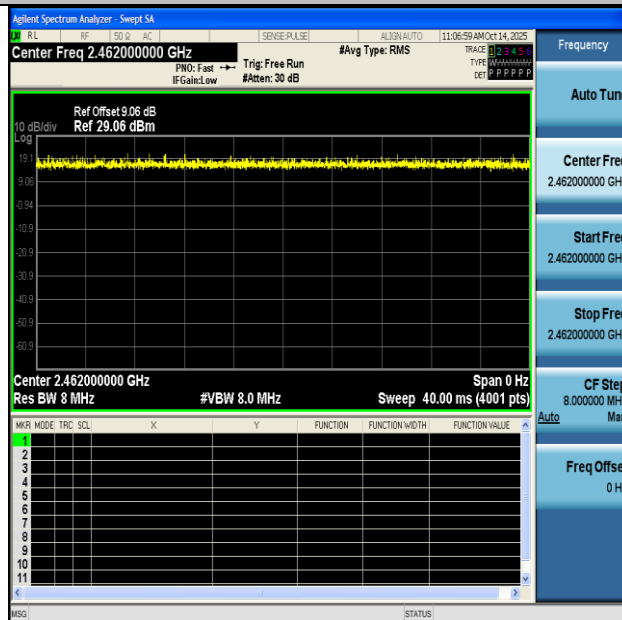


NTNV-11G-Ant1-2412



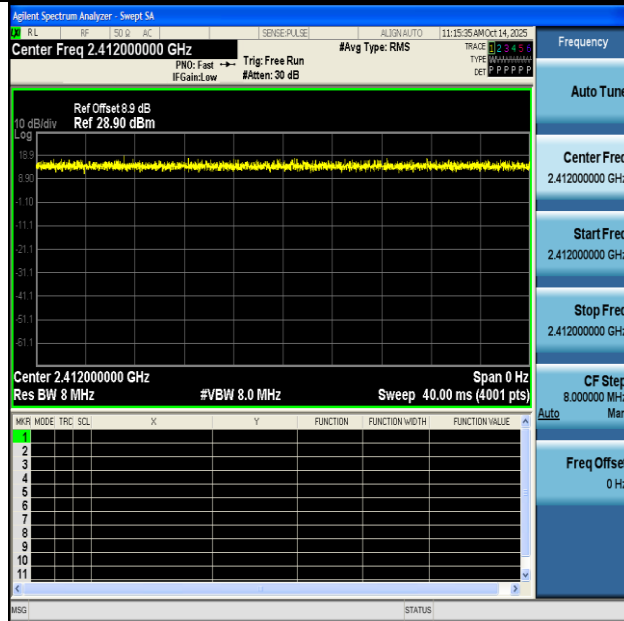


NTNV-11G-Ant1-2437

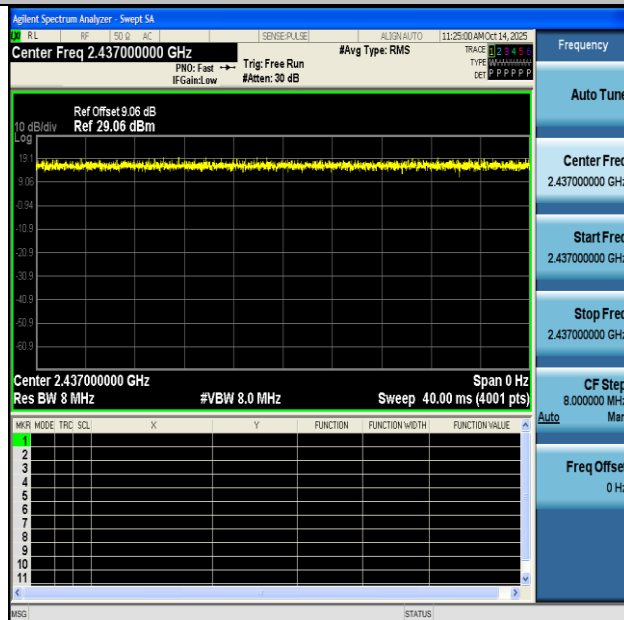


NTNV-11G-Ant1-2462





NTV-11N20SISO-Ant1-2412



NTV-11N20SISO-Ant1-2437

