

**Appendix A**  
**RF Test Data for 2.4G WIFI (Conducted Measurement)**  
**Product Name: Smart Camera**  
**Trade Mark: ugoho.me**  
**Test Model: MC10V1**

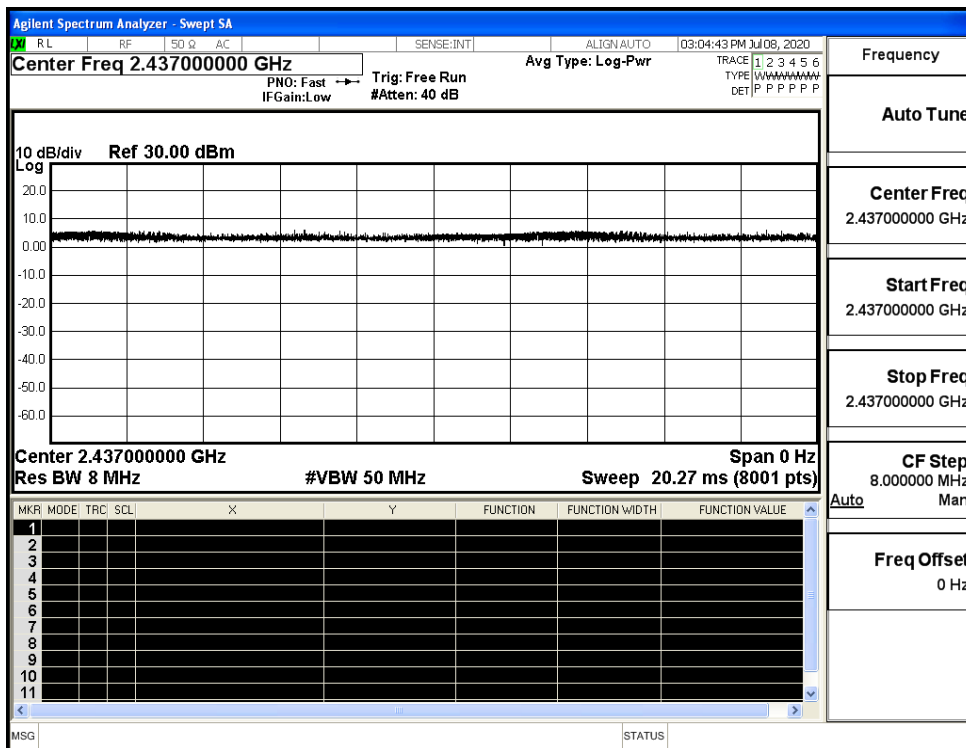
**Environmental Conditions**

|                    |           |
|--------------------|-----------|
| Temperature:       | 23.4 ° C  |
| Relative Humidity: | 53.6%     |
| ATM Pressure:      | 100.0 kPa |
| Test Engineer:     | Jay Li    |
| Supervised by:     | Li Huan   |

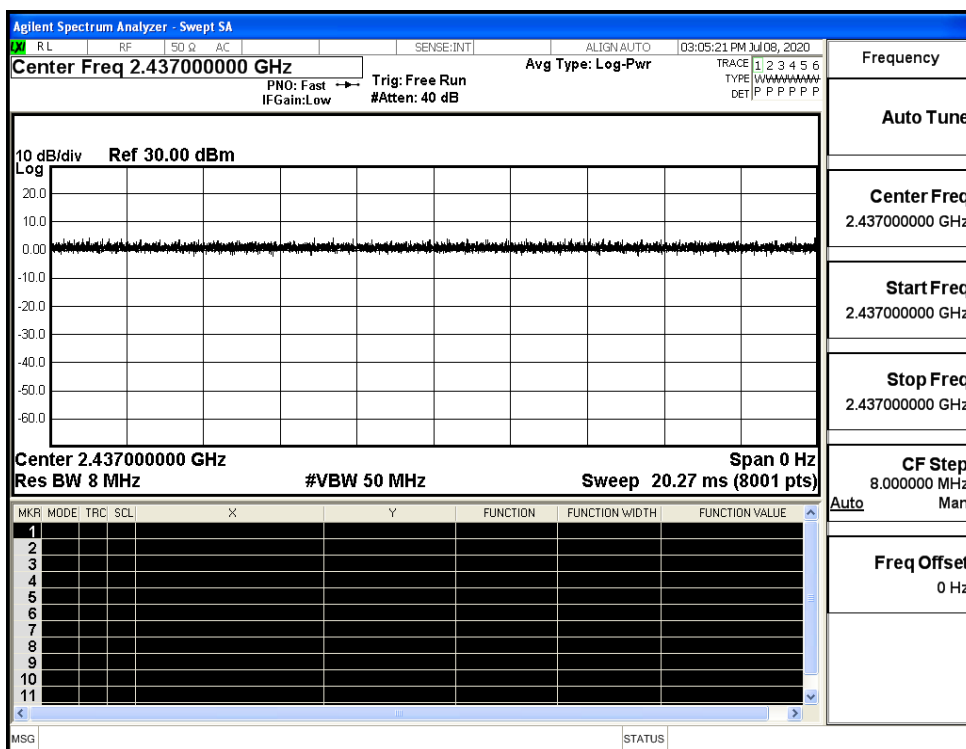
**A.1 Duty Cycle**

| Test Mode | Test Channel | Ant  | Duty Cycle[%] | Verdict |
|-----------|--------------|------|---------------|---------|
| 11B       | 2437         | Ant1 | 100           | PASS    |
| 11G       | 2437         | Ant1 | 100           | PASS    |
| 11N20SISO | 2437         | Ant1 | 100           | PASS    |
| 11N40SISO | 2437         | Ant1 | 100           | PASS    |

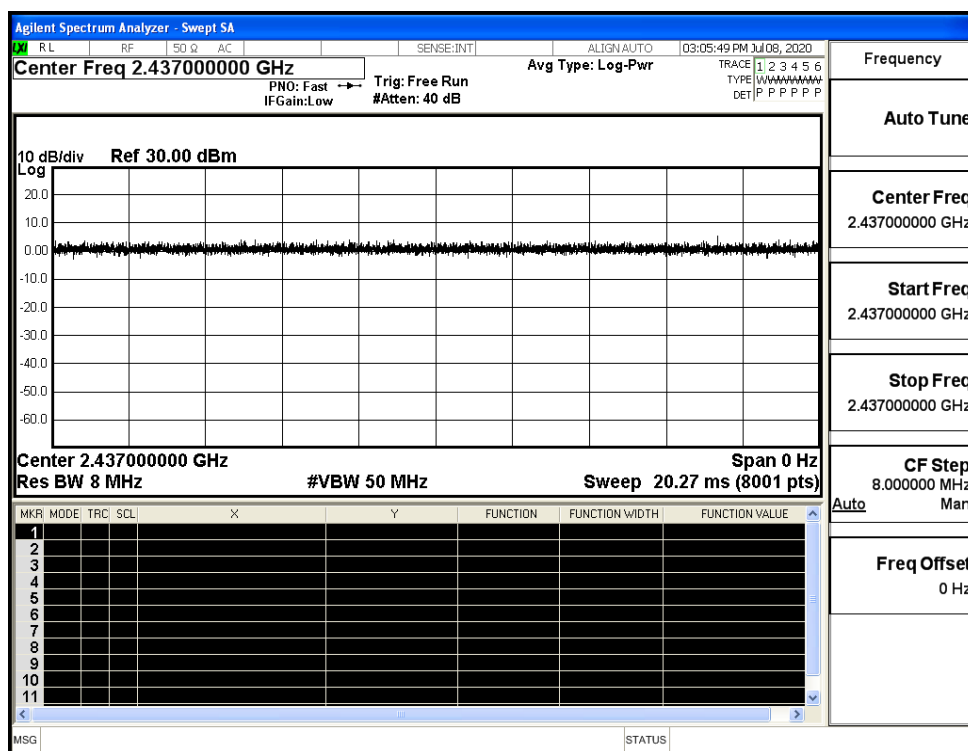
## Duty Cycle\_11B\_2437\_Ant1



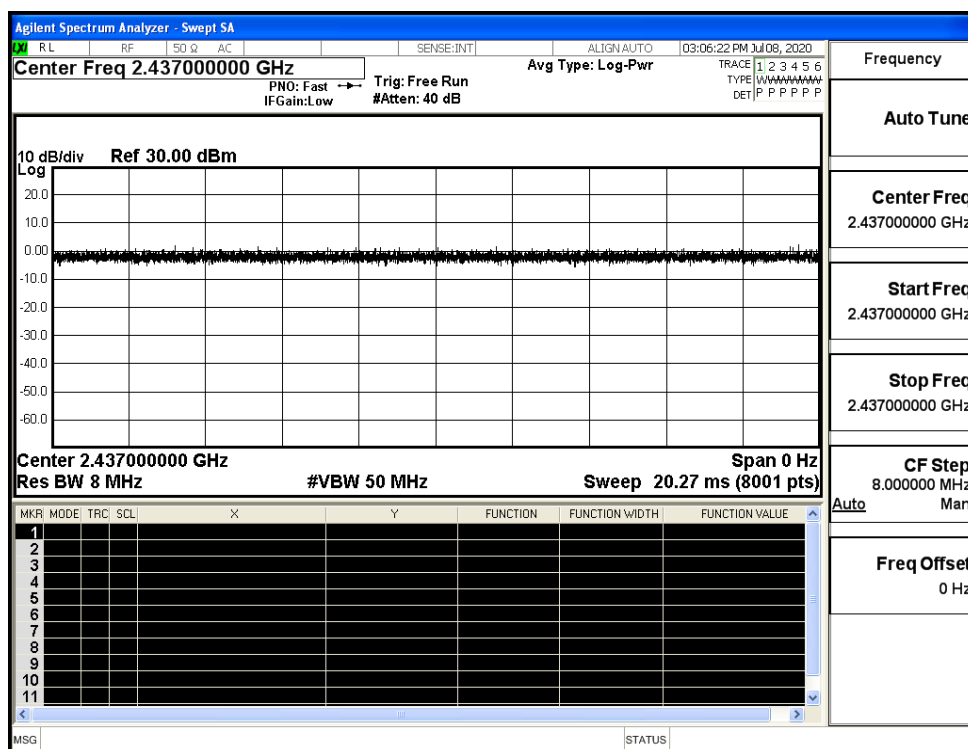
## Duty Cycle\_11G\_2437\_Ant1



## Duty Cycle\_11N20SISO\_2437\_Ant1



## Duty Cycle\_11N40SISO\_2437\_Ant1

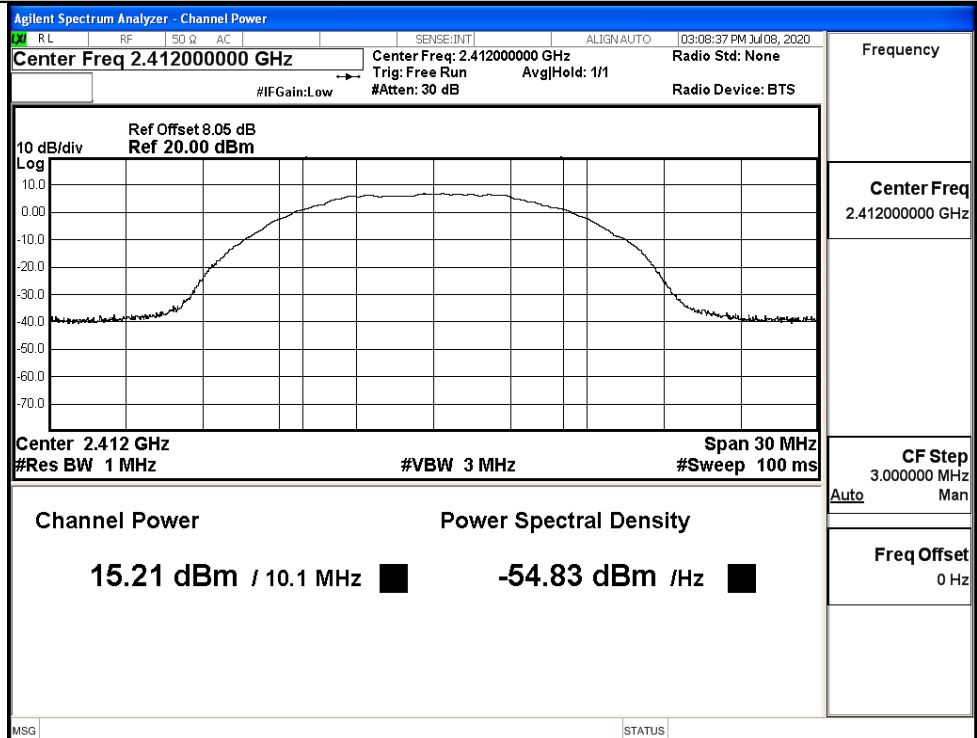


**A.2 Maximum Conducted Output Power**

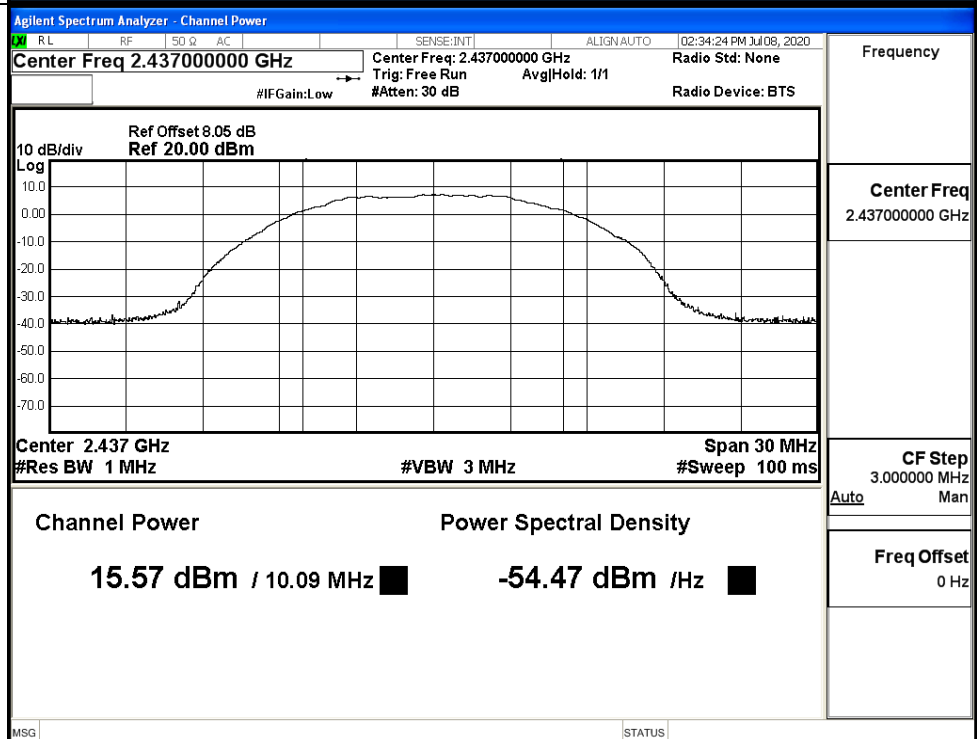
| Mode      | Channel | Meas.Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|------------------|-------------|---------|
| 11B       | LCH     | 15.21            | 30          | PASS    |
|           | MCH     | 15.57            | 30          | PASS    |
|           | HCH     | 15.43            | 30          | PASS    |
| 11G       | LCH     | 14.81            | 30          | PASS    |
|           | MCH     | 15.00            | 30          | PASS    |
|           | HCH     | 14.87            | 30          | PASS    |
| 11N20SISO | LCH     | 14.93            | 30          | PASS    |
|           | MCH     | 15.14            | 30          | PASS    |
|           | HCH     | 14.99            | 30          | PASS    |
| 11N40SISO | LCH     | 15.60            | 30          | PASS    |
|           | MCH     | 15.47            | 30          | PASS    |
|           | HCH     | 15.60            | 30          | PASS    |

## Test Graphs

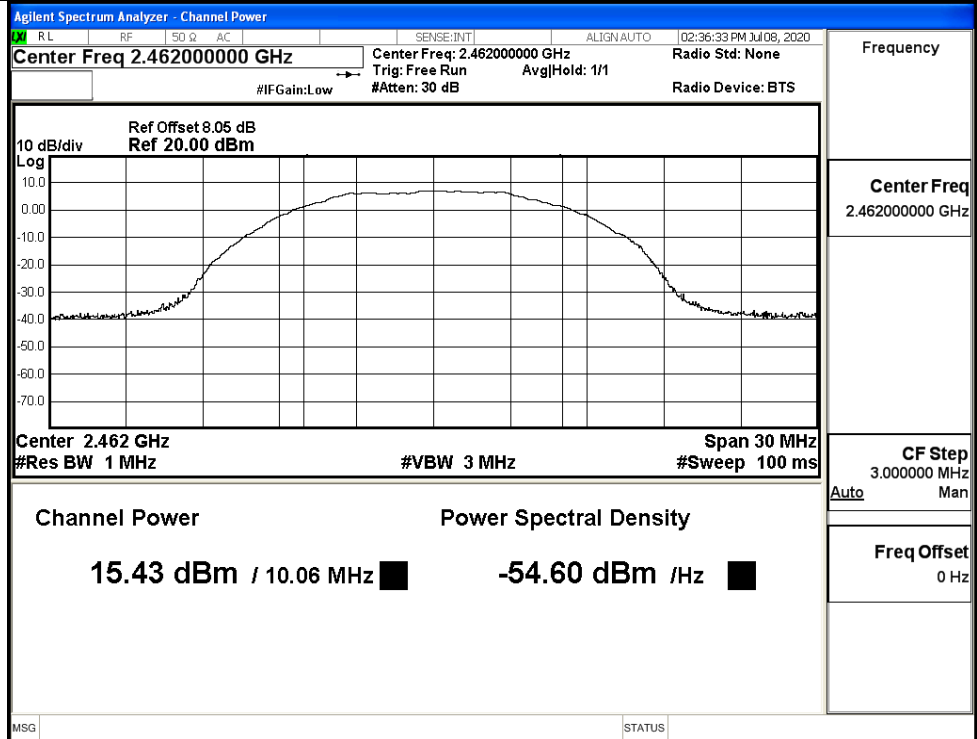
11B/LCH



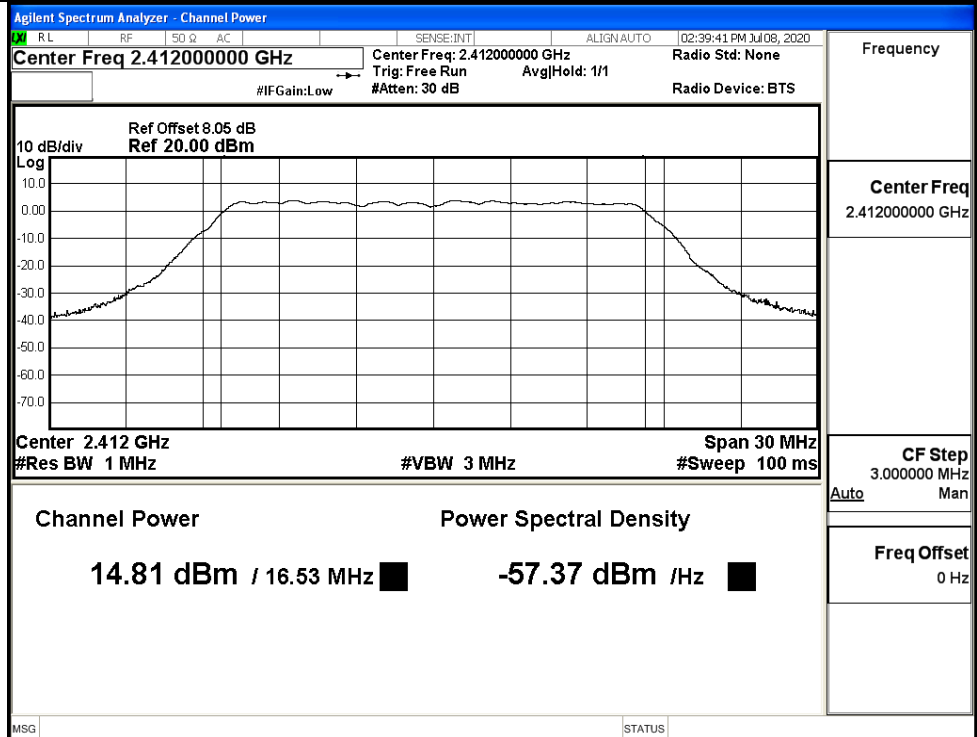
11B/MCH



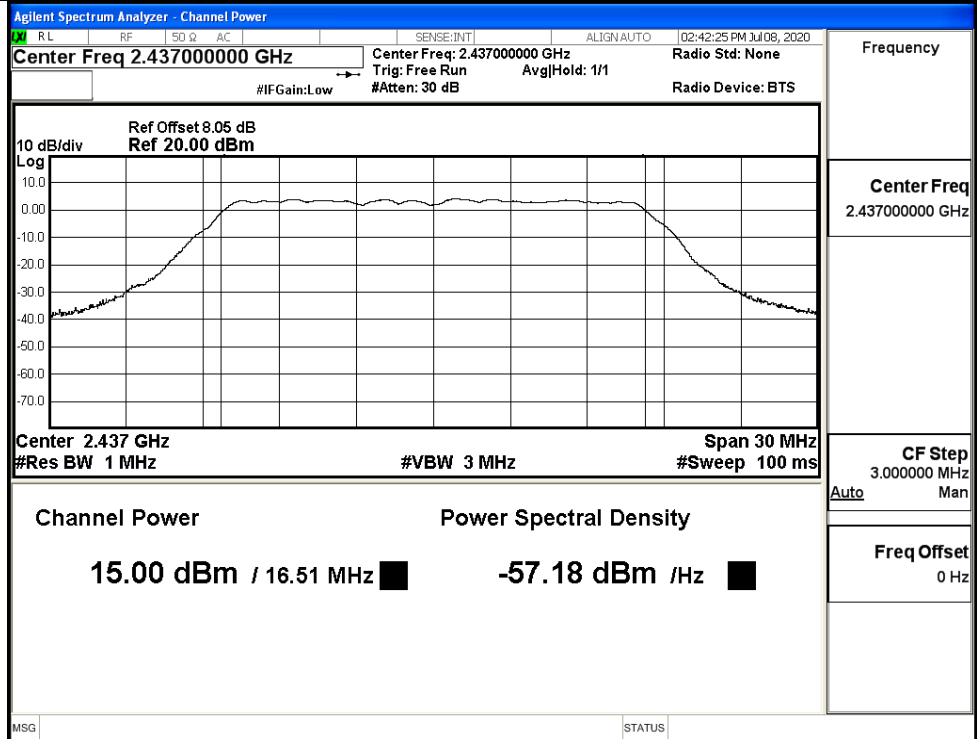
11B/HCH



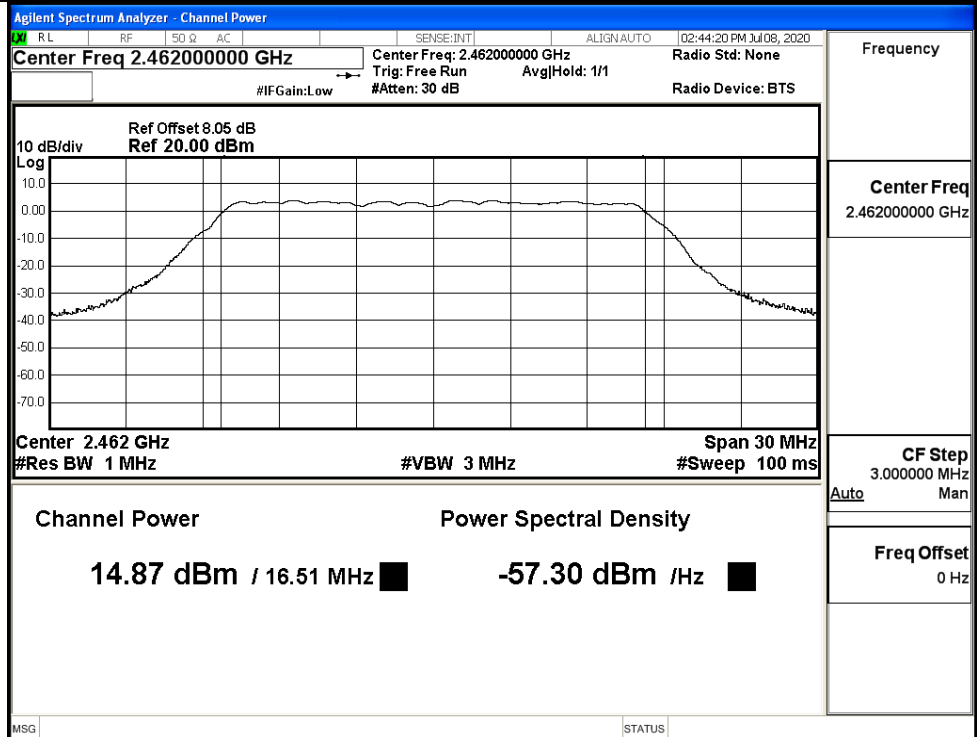
11G/LCH



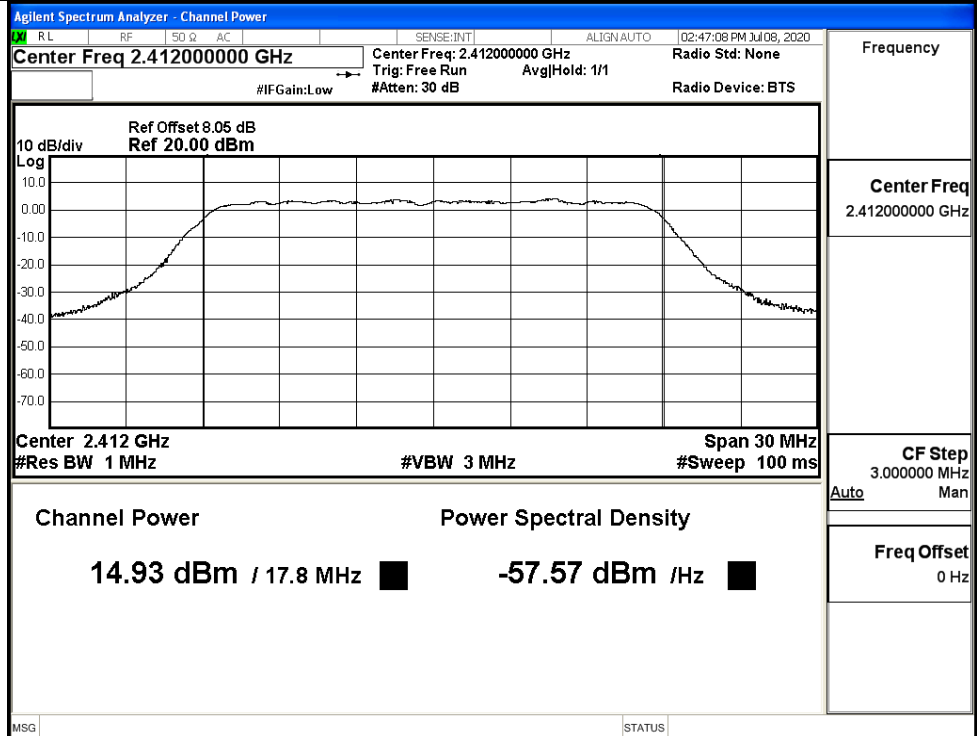
11G/MCH



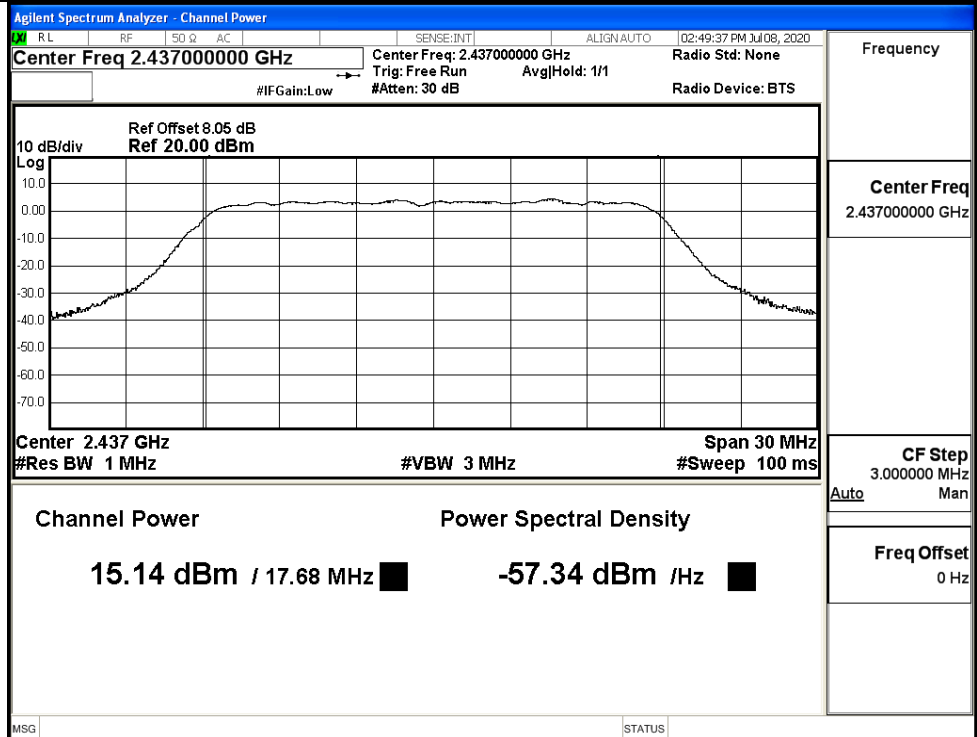
11G/HCH



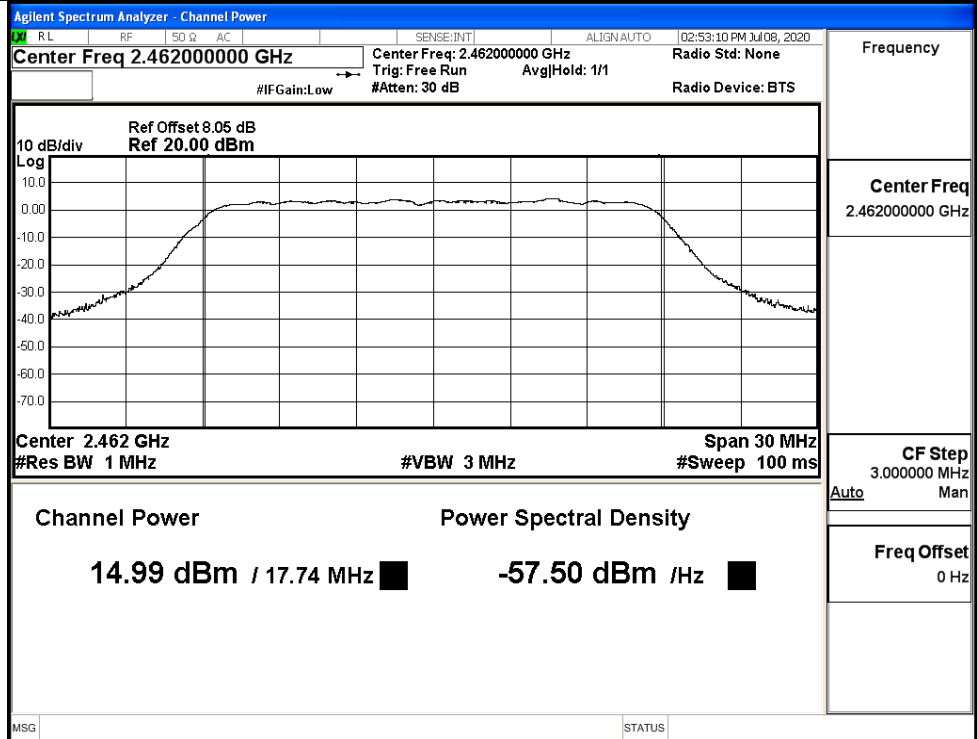
11N20SISO/LCH



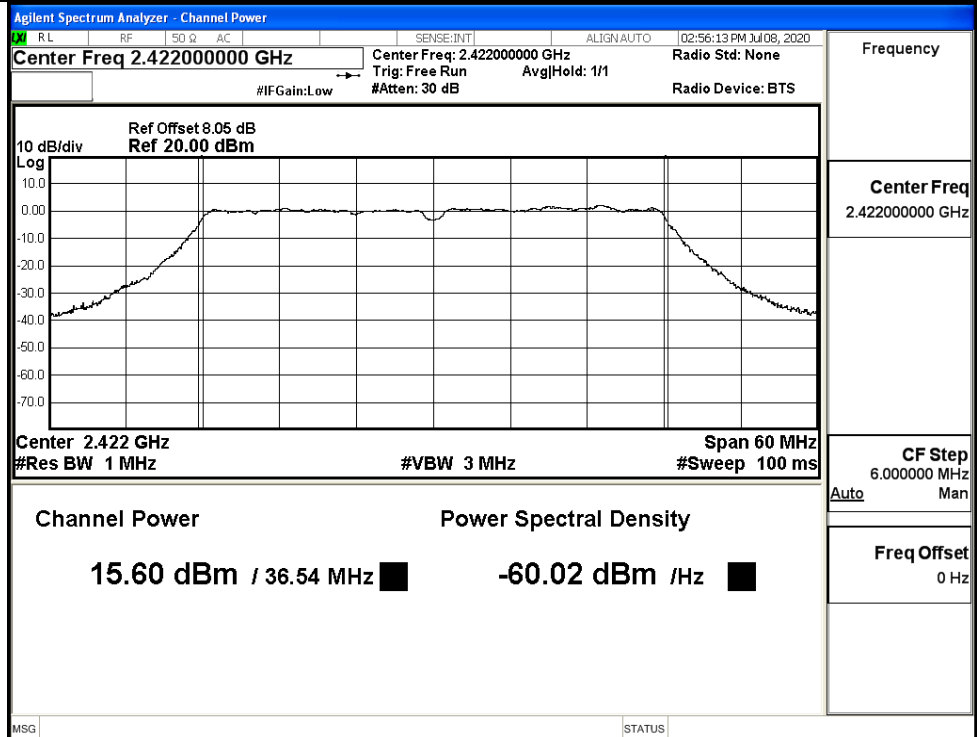
11N20SISO/MCH



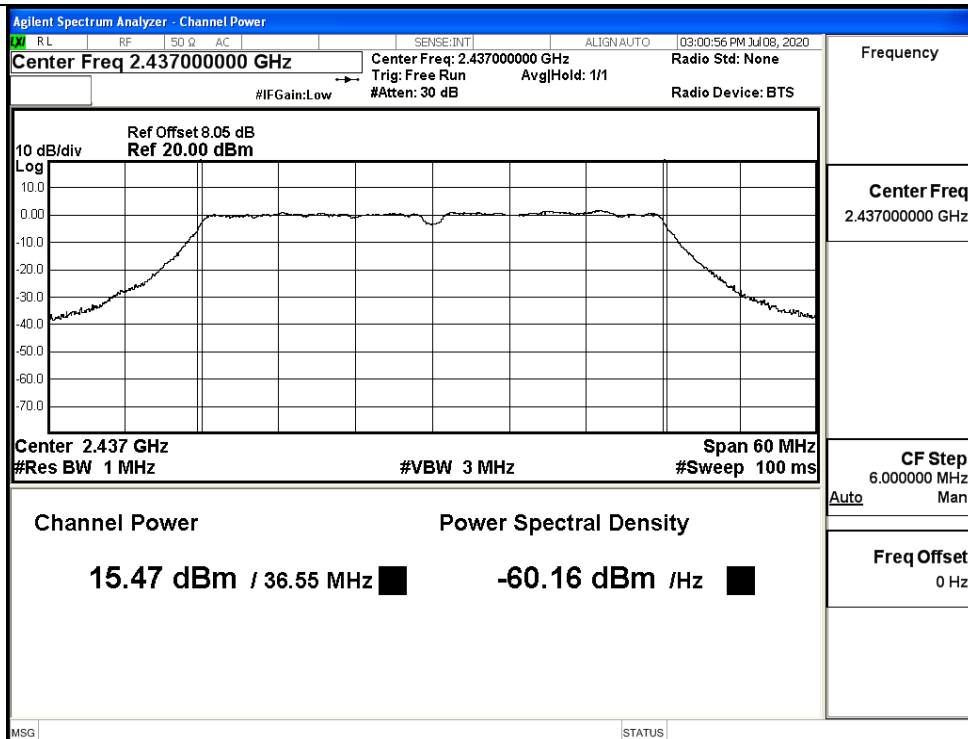
11N20SISO/HCH



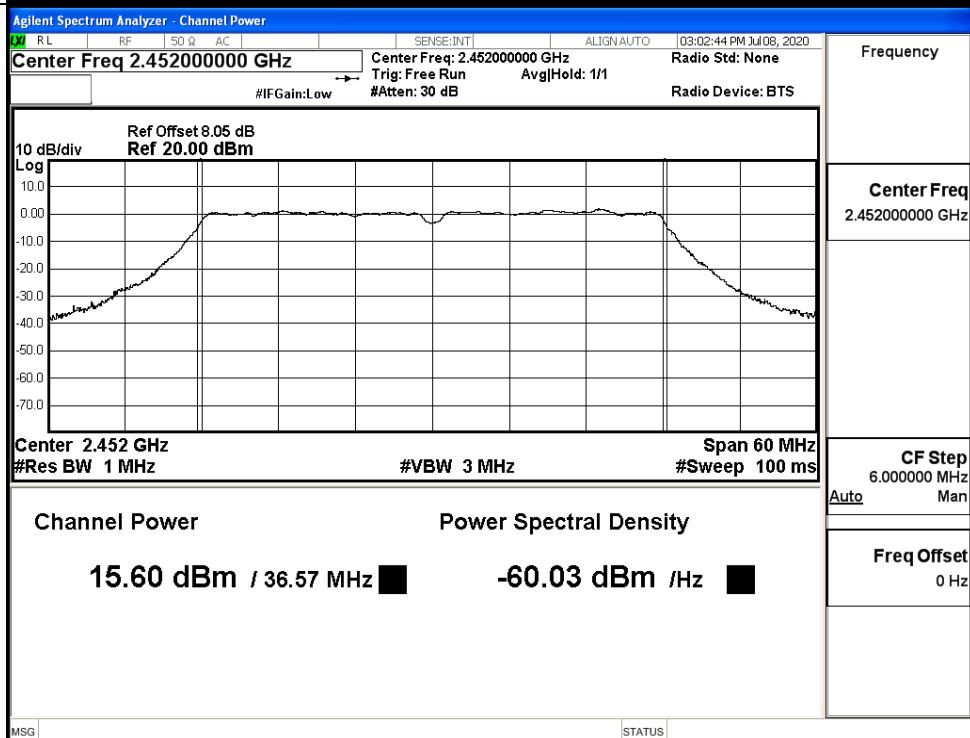
11N40SISO/LCH



11N40SISO/MCH



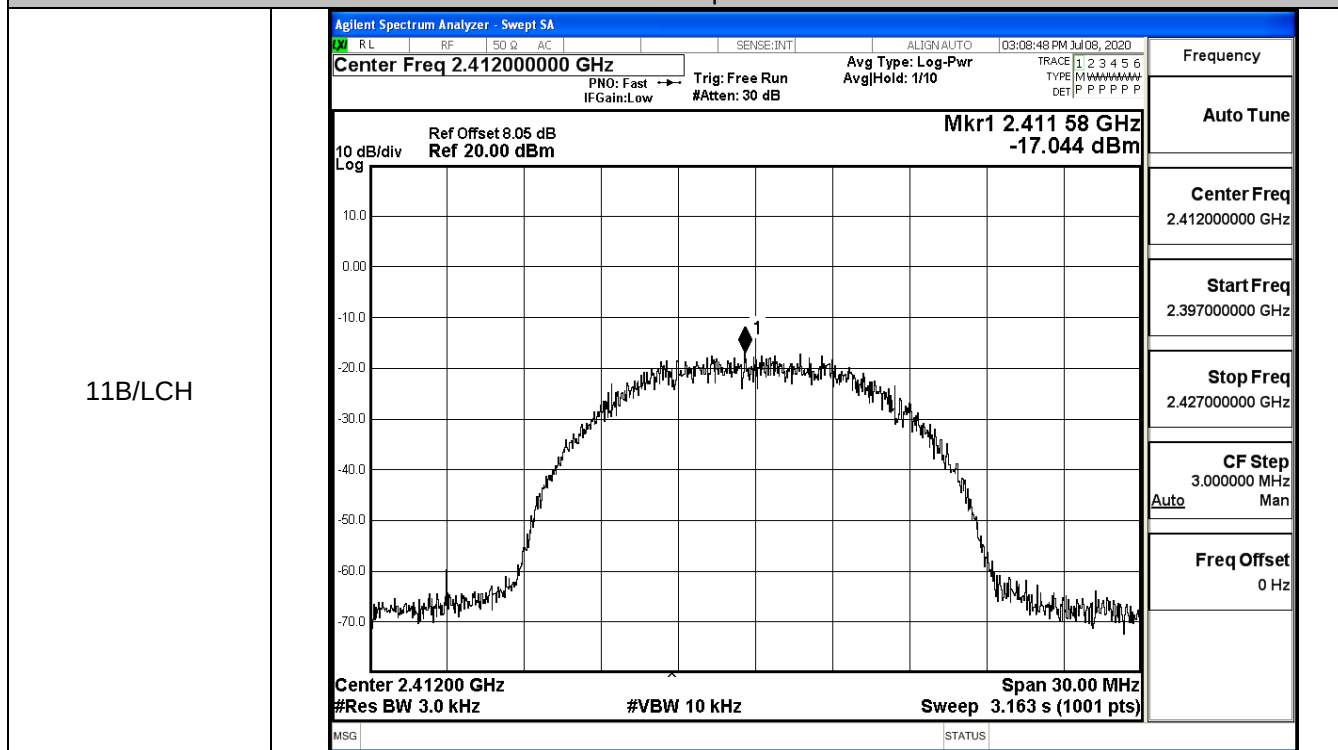
11N40SISO/HCH



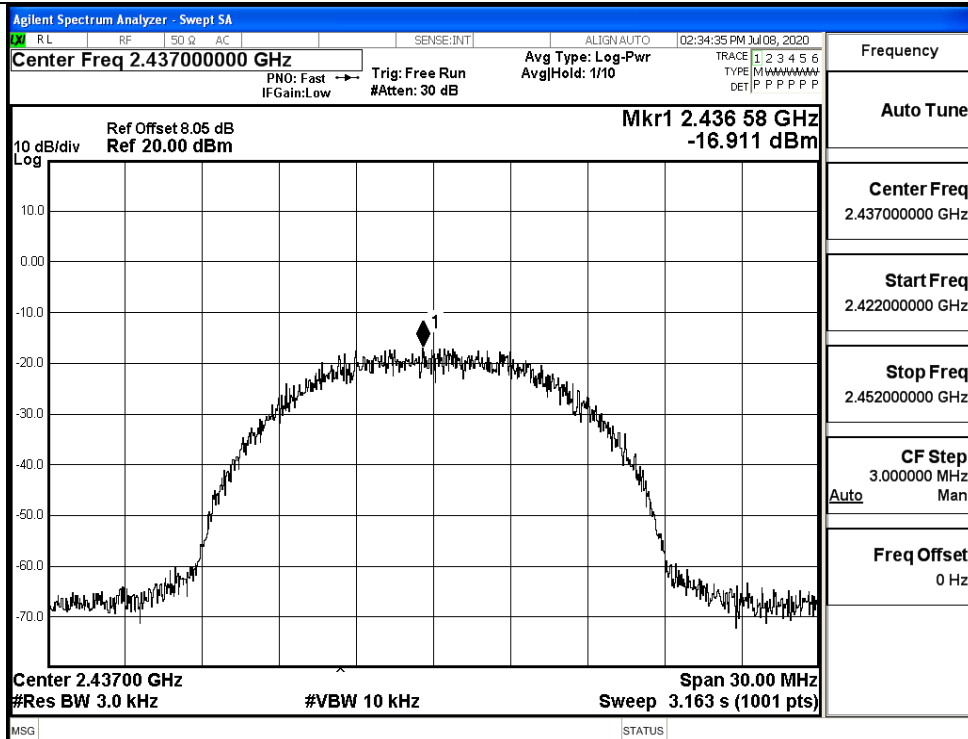
### A.3 Maximum Power Spectral Density

| Mode      | Channel | Meas.Level [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|-----------|---------|-----------------------|------------------|---------|
| 11B       | LCH     | -17.044               | 8                | PASS    |
|           | MCH     | -16.911               | 8                | PASS    |
|           | HCH     | -16.063               | 8                | PASS    |
| 11G       | LCH     | -21.102               | 8                | PASS    |
|           | MCH     | -20.871               | 8                | PASS    |
|           | HCH     | -21.284               | 8                | PASS    |
| 11N20SISO | LCH     | -21.626               | 8                | PASS    |
|           | MCH     | -20.886               | 8                | PASS    |
|           | HCH     | -21.574               | 8                | PASS    |
| 11N40SISO | LCH     | -21.809               | 8                | PASS    |
|           | MCH     | -22.805               | 8                | PASS    |
|           | HCH     | -22.982               | 8                | PASS    |

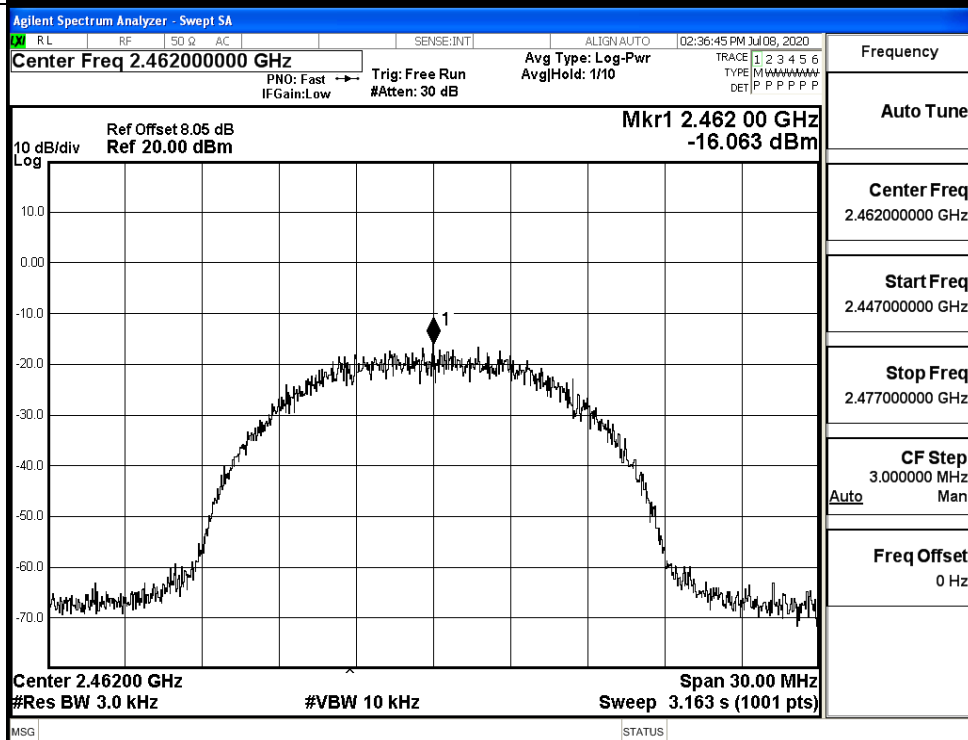
Test Graphs



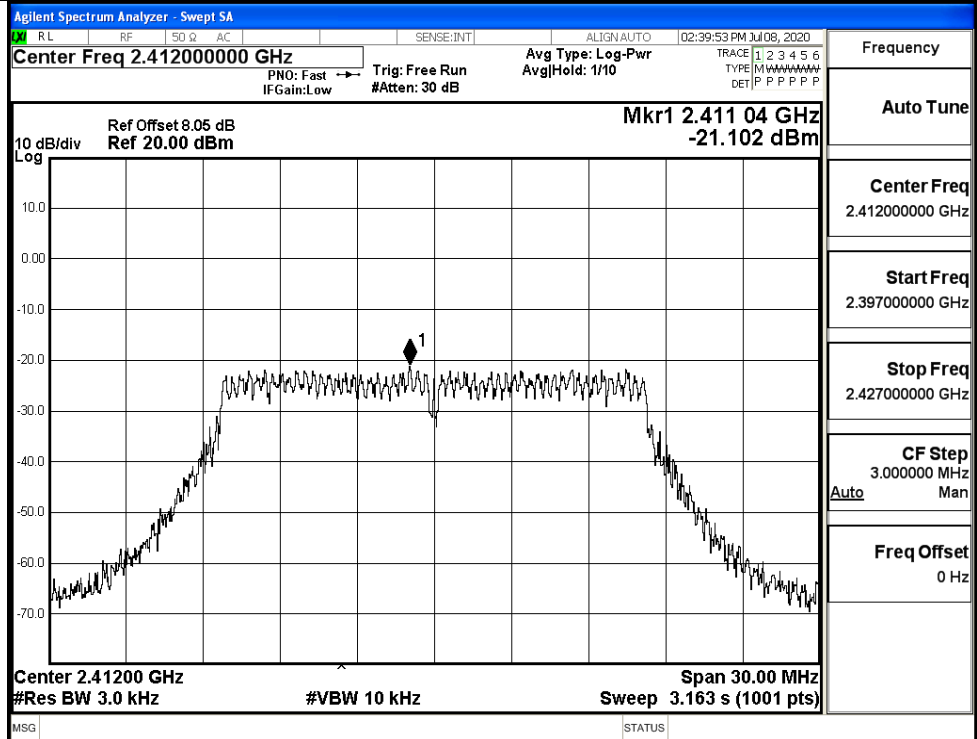
11B/MCH



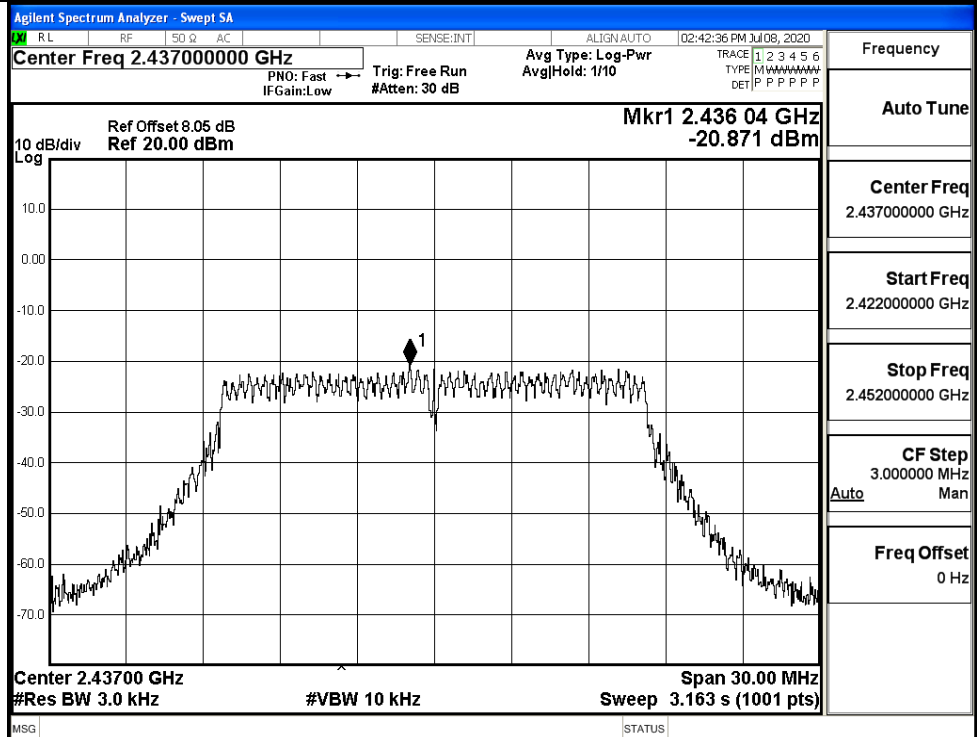
11B/HCH



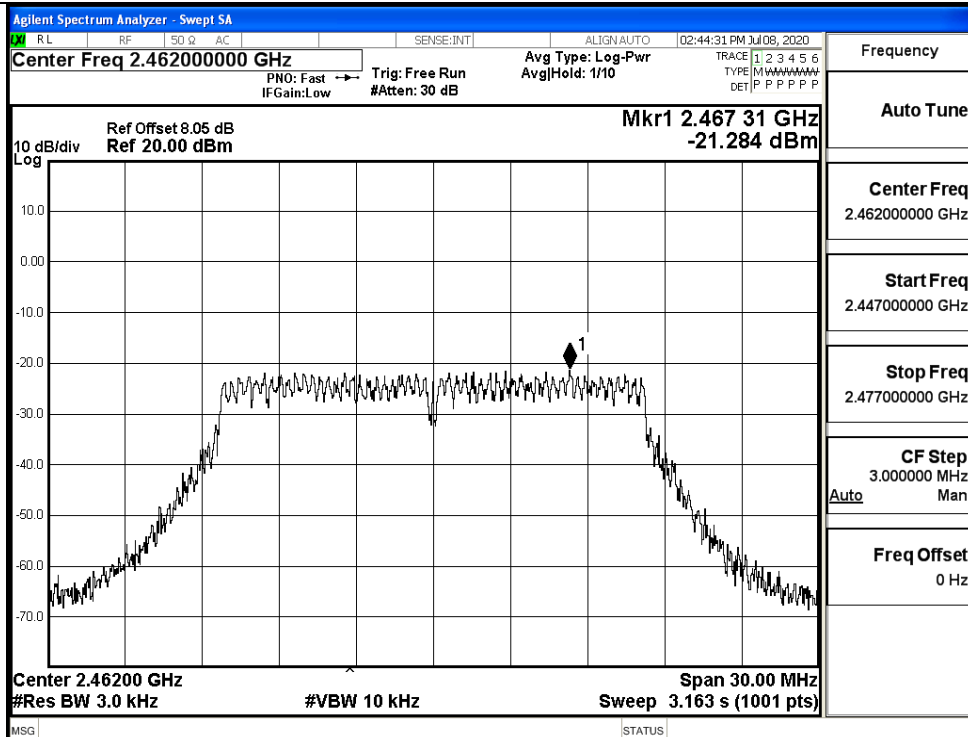
11G/LCH



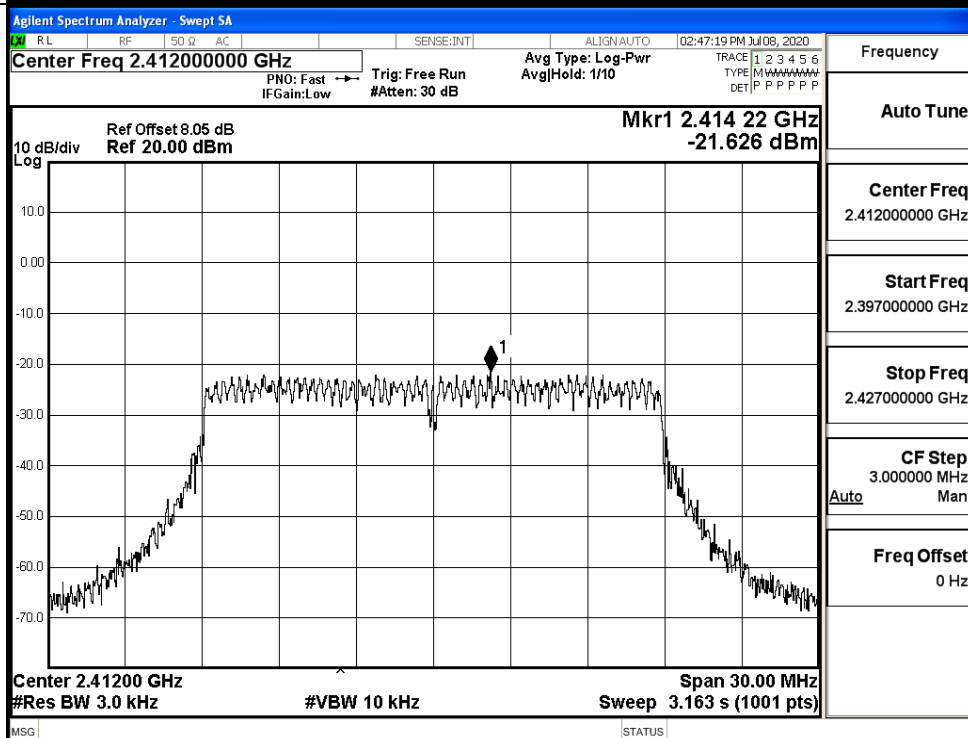
11G/MCH



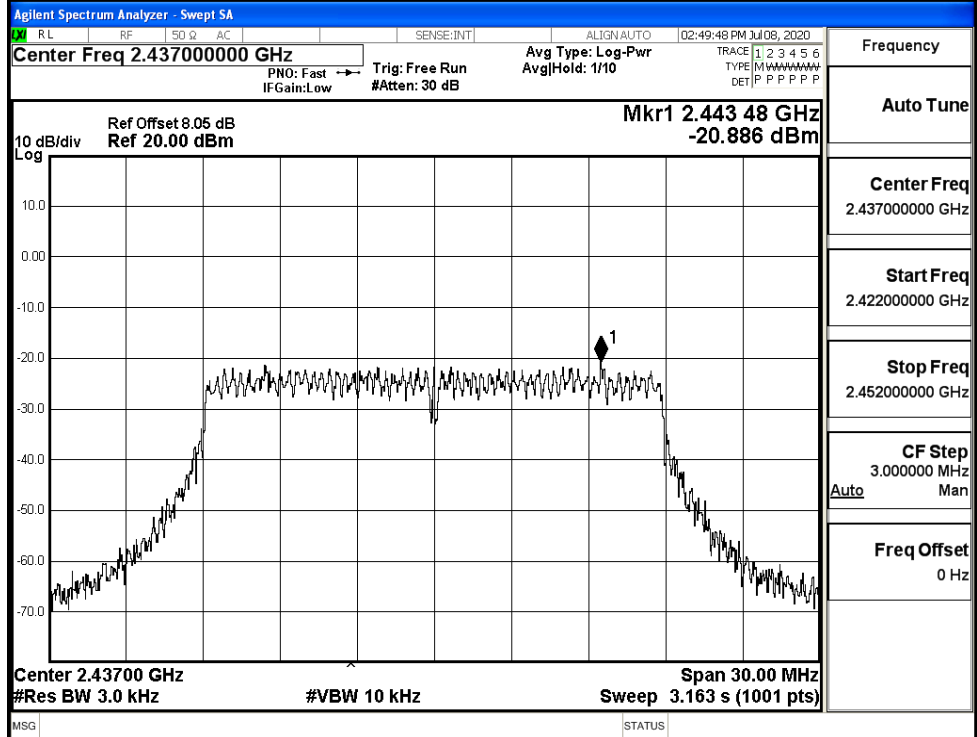
11G/HCH



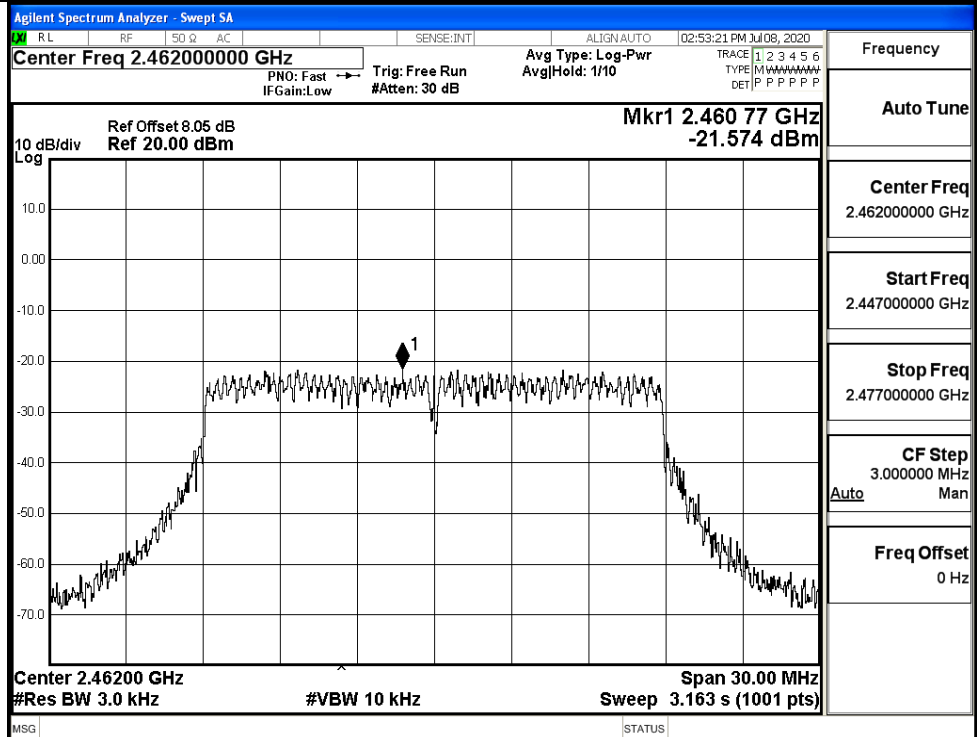
11N20SISO/LCH



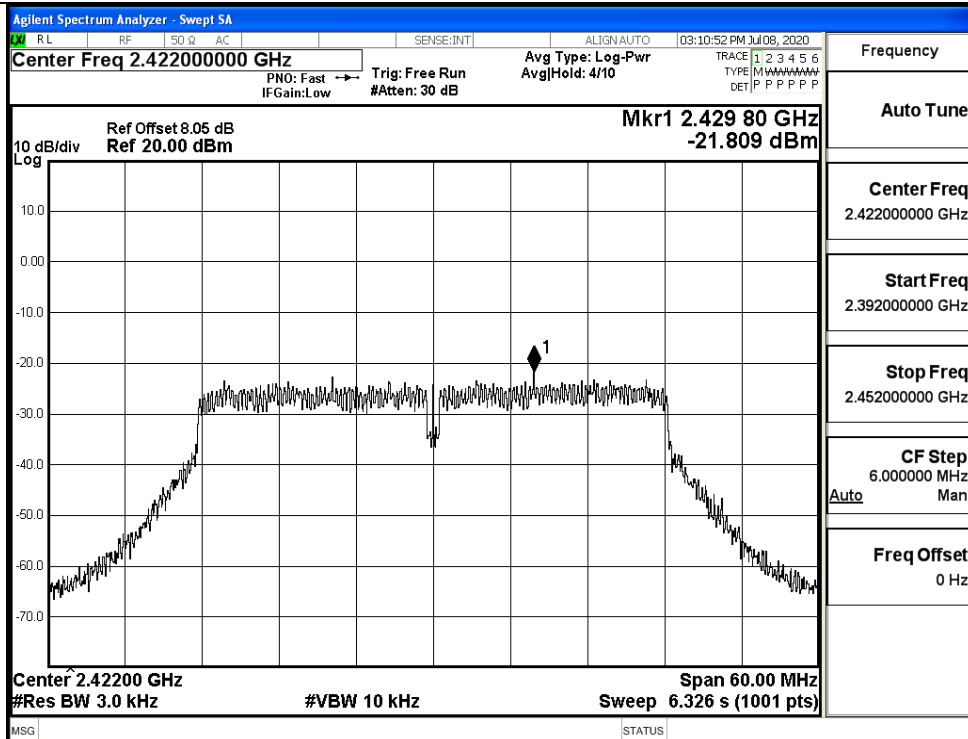
11N20SISO/MCH



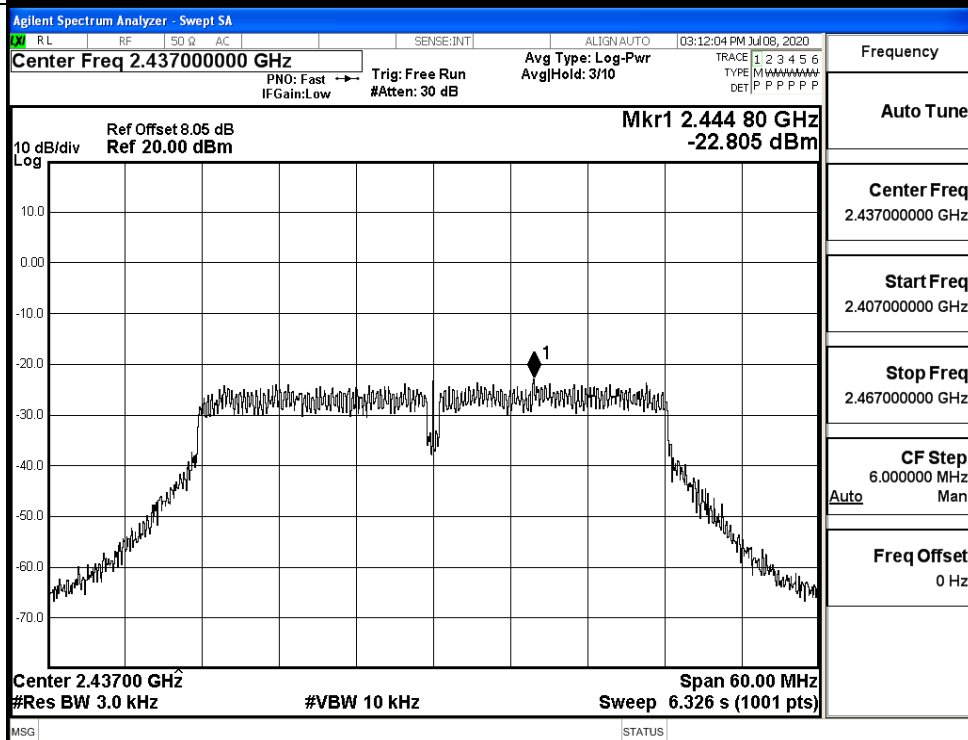
11N20SISO/HCH



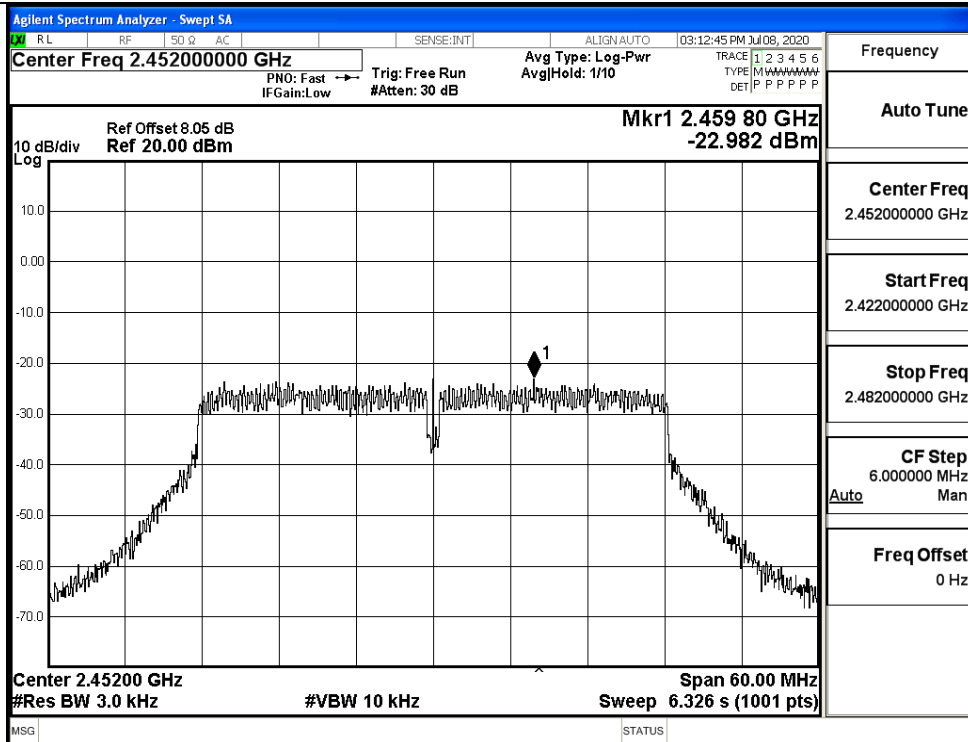
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH

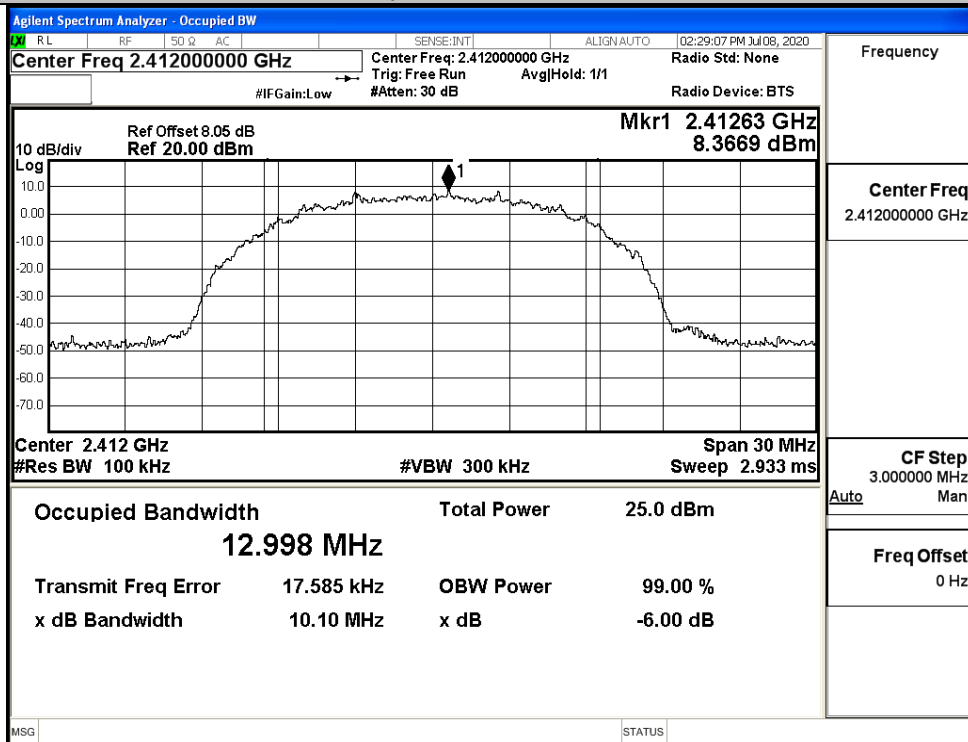


## A.4 6dB Bandwidth

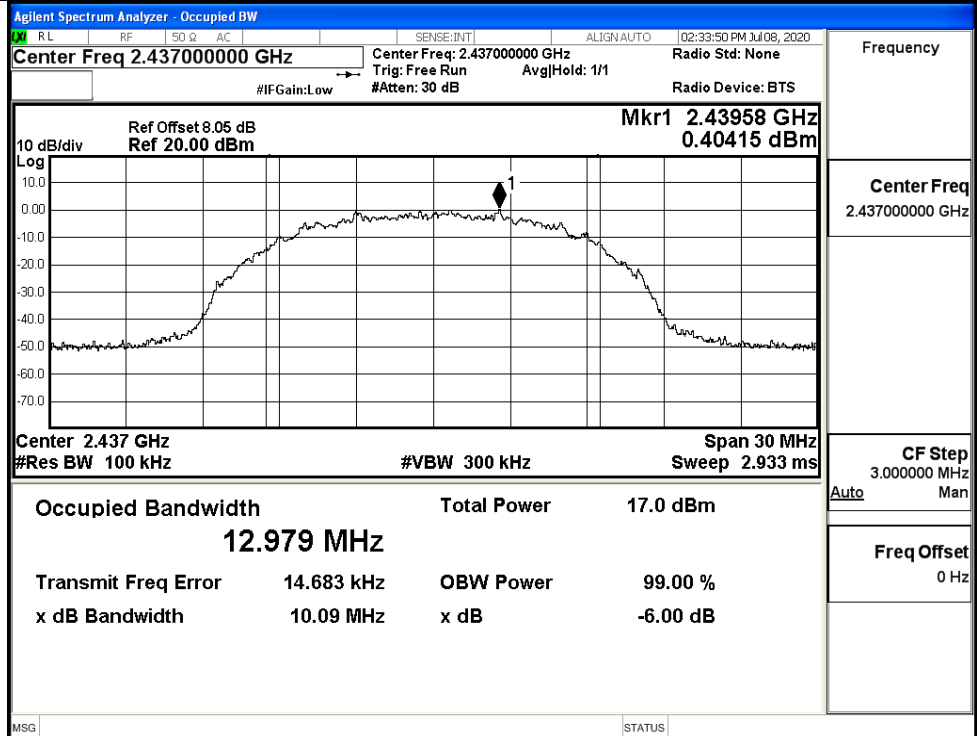
| Mode      | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-----------|---------|---------------------|-------------|---------|
| 11B       | LCH     | 10.10               | $\geq 0.5$  | PASS    |
|           | MCH     | 10.09               | $\geq 0.5$  | PASS    |
|           | HCH     | 10.06               | $\geq 0.5$  | PASS    |
| 11G       | LCH     | 16.53               | $\geq 0.5$  | PASS    |
|           | MCH     | 16.51               | $\geq 0.5$  | PASS    |
|           | HCH     | 16.51               | $\geq 0.5$  | PASS    |
| 11N20SISO | LCH     | 17.80               | $\geq 0.5$  | PASS    |
|           | MCH     | 17.68               | $\geq 0.5$  | PASS    |
|           | HCH     | 17.74               | $\geq 0.5$  | PASS    |
| 11N40SISO | LCH     | 36.54               | $\geq 0.5$  | PASS    |
|           | MCH     | 36.55               | $\geq 0.5$  | PASS    |
|           | HCH     | 36.57               | $\geq 0.5$  | PASS    |

## Test Graphs

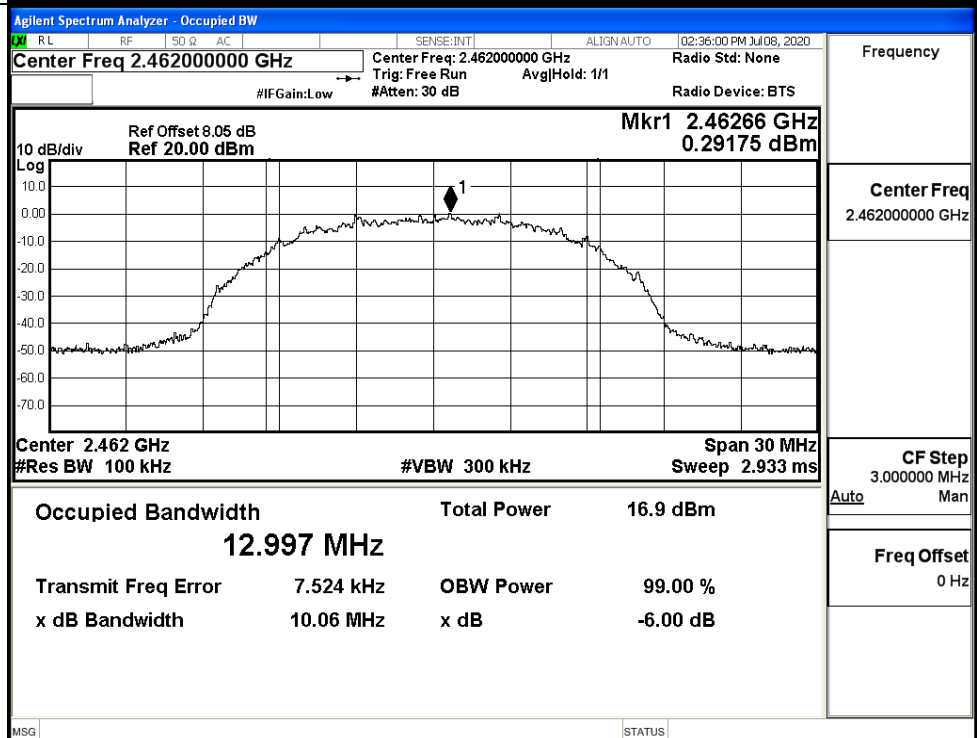
11B/LCH



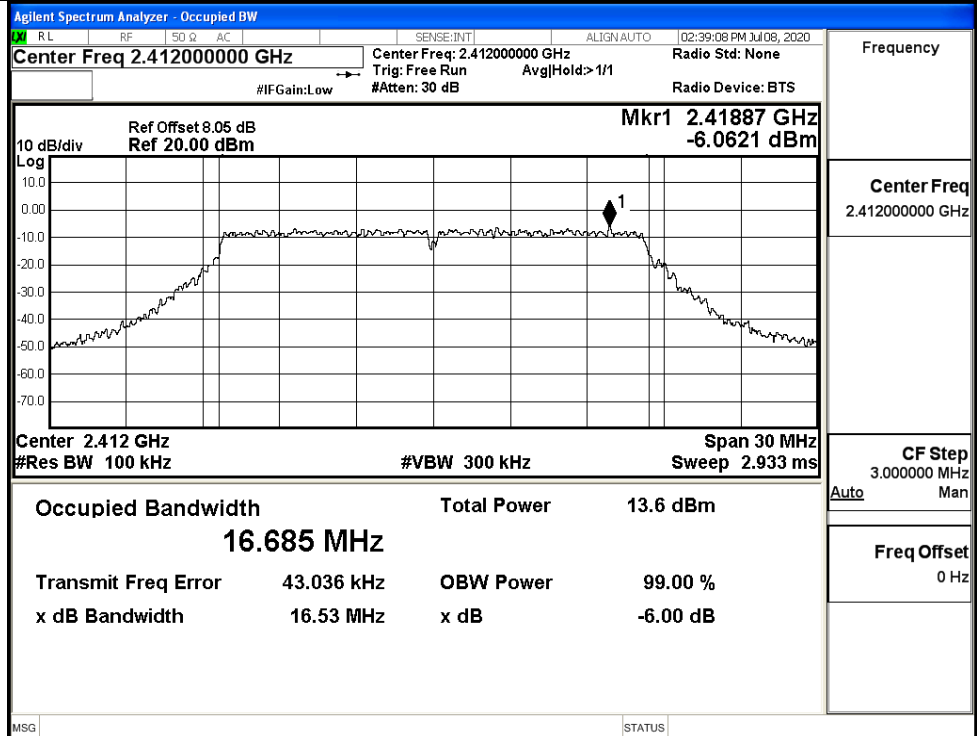
11B/MCH



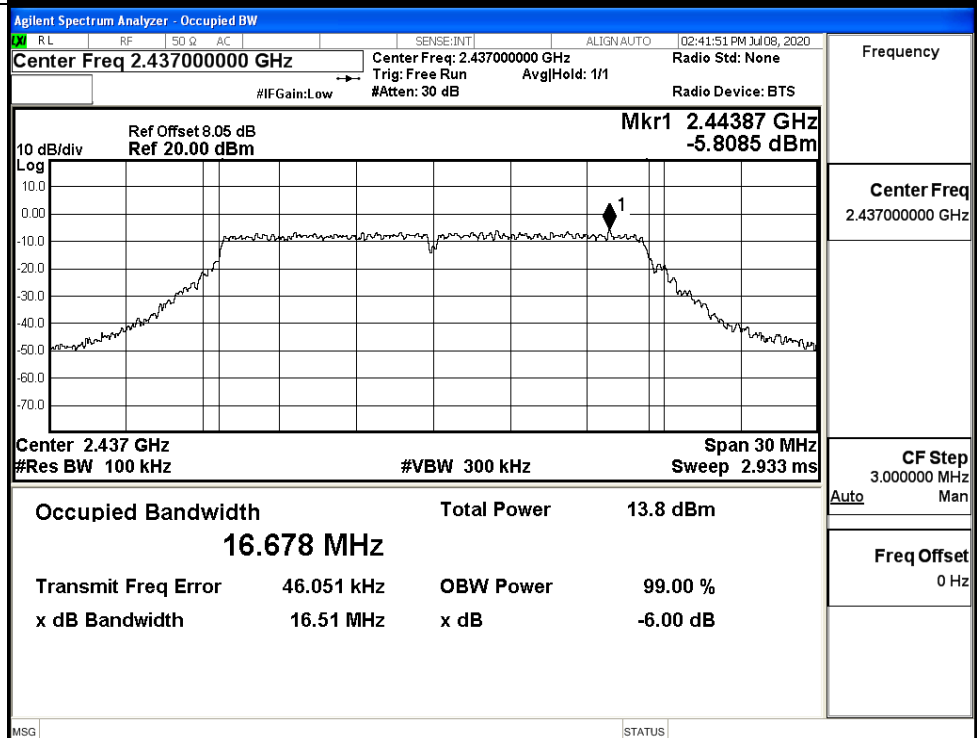
11B/HCH



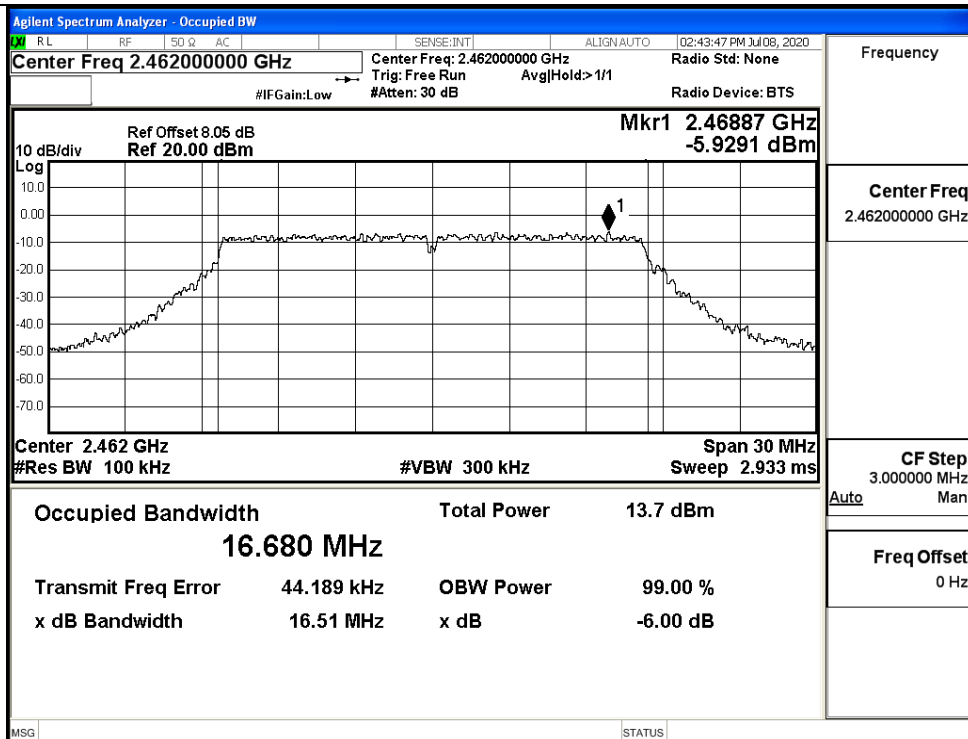
11G/LCH



11G/MCH



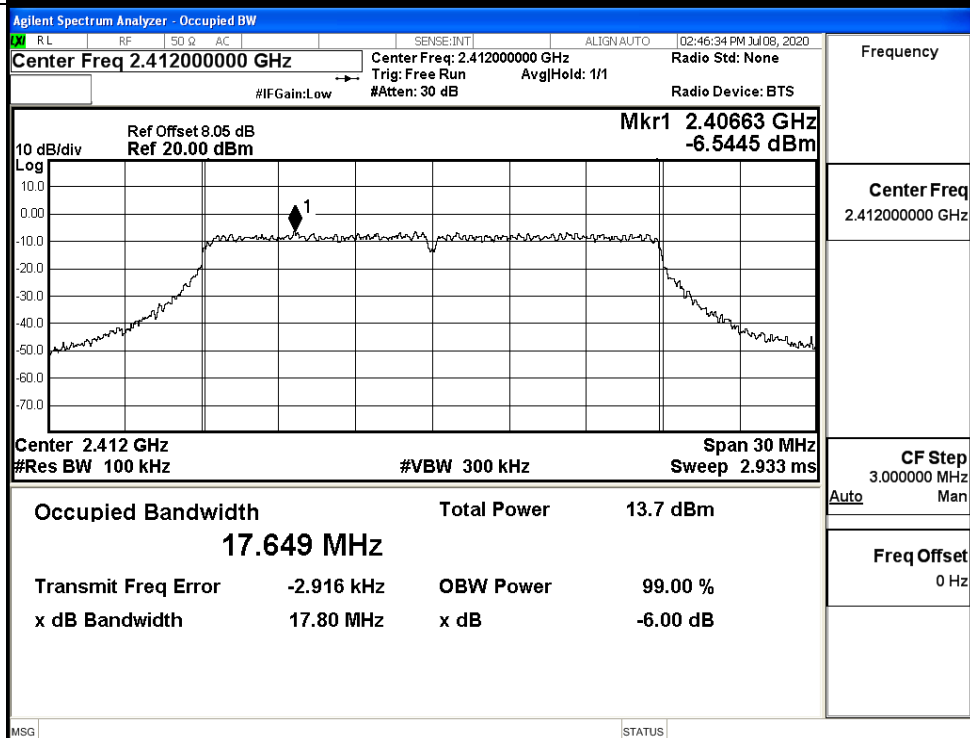
11G/HCH



Frequency

Center Freq  
2.46200000 GHzCF Step  
3.000000 MHz  
Auto ManFreq Offset  
0 Hz

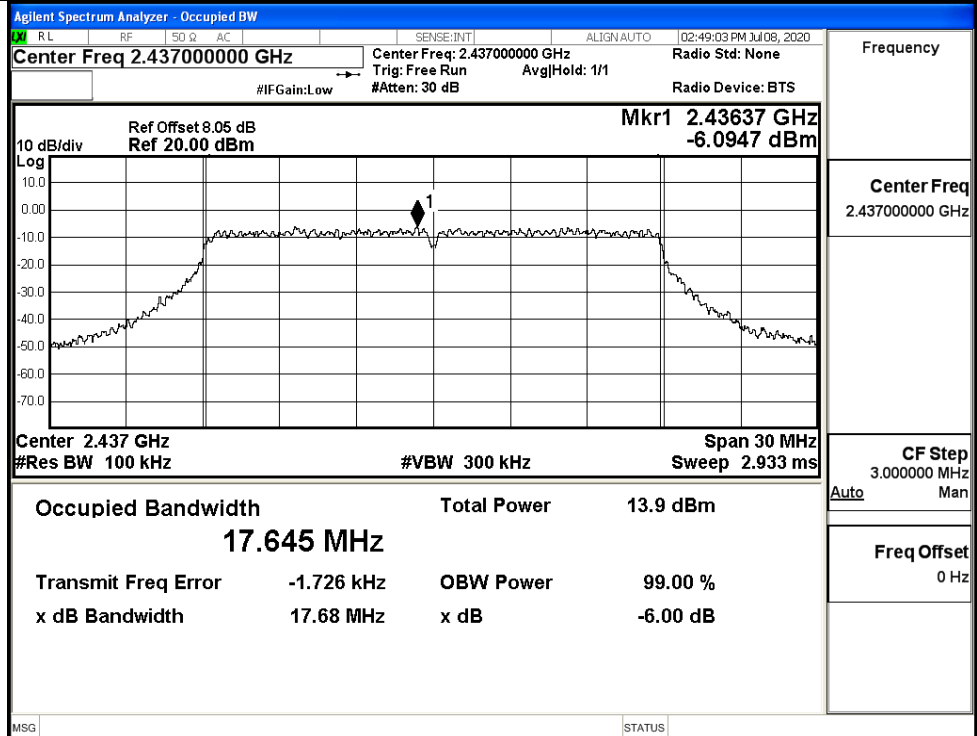
11N20SISO/LCH



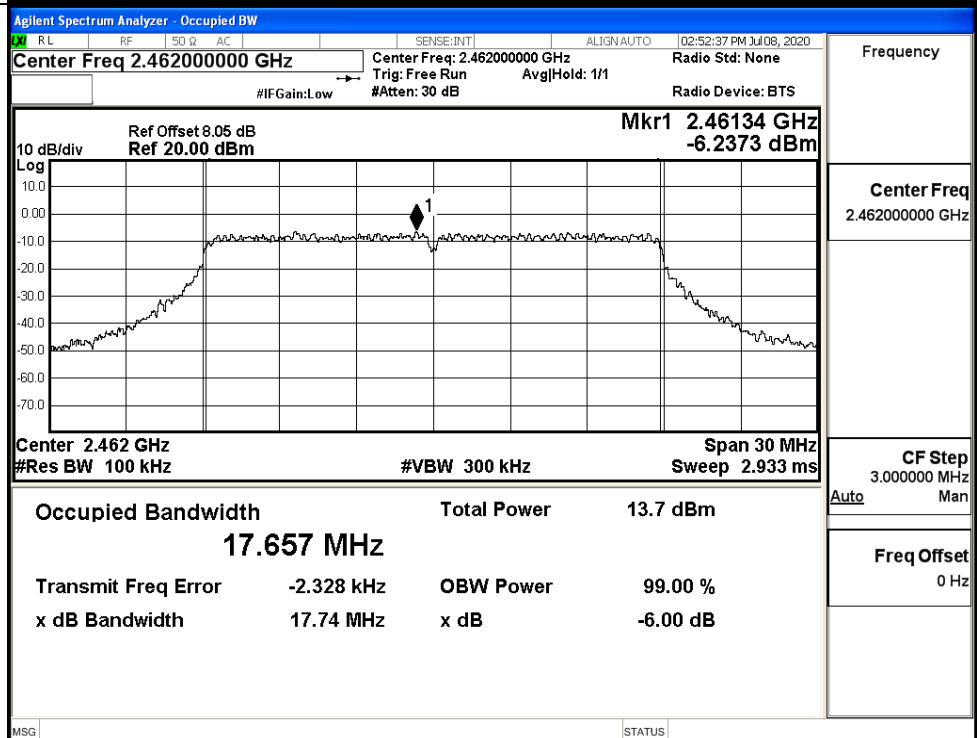
Frequency

Center Freq  
2.41200000 GHzCF Step  
3.000000 MHz  
Auto ManFreq Offset  
0 Hz

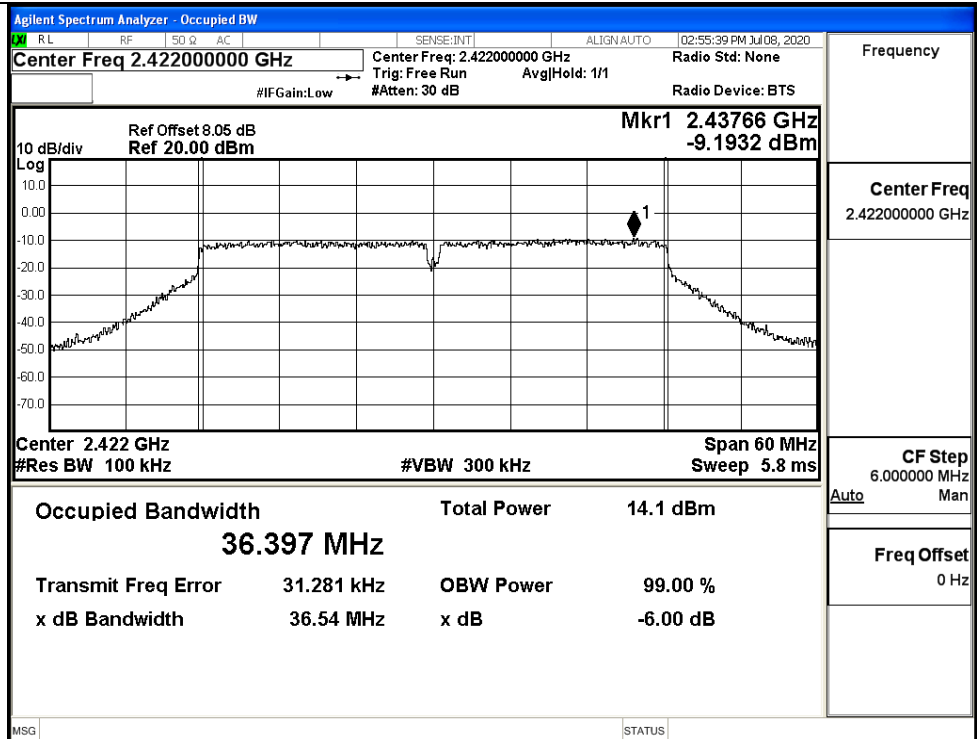
11N20SISO/MCH



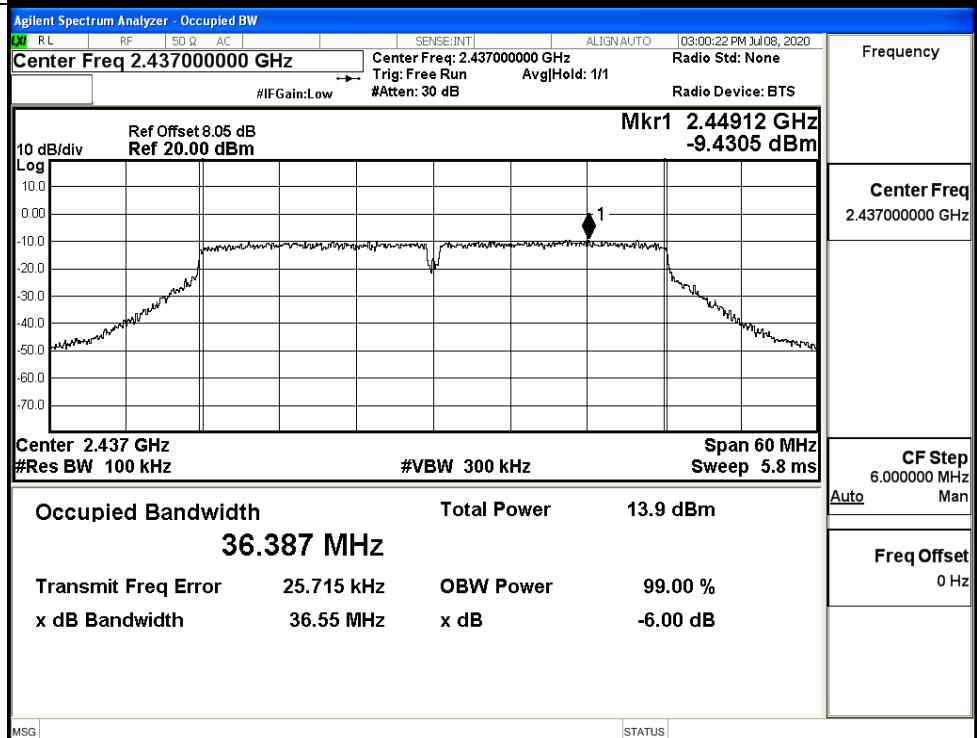
11N20SISO/HCH



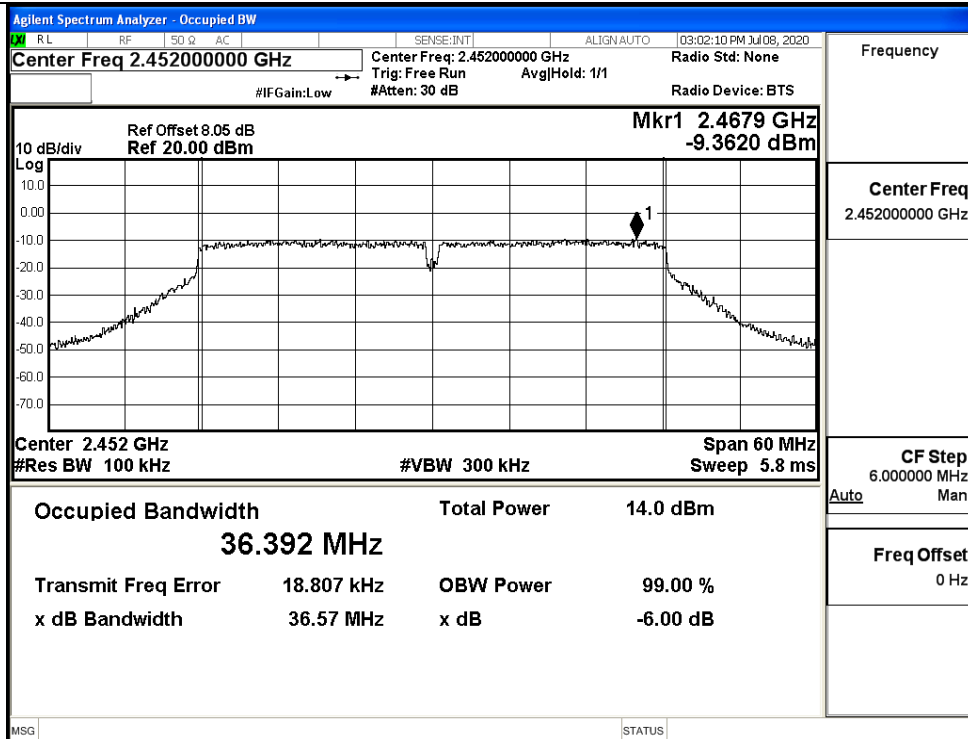
11N40SISO/LCH



11N40SISO/MCH



11N40SISO/HCH

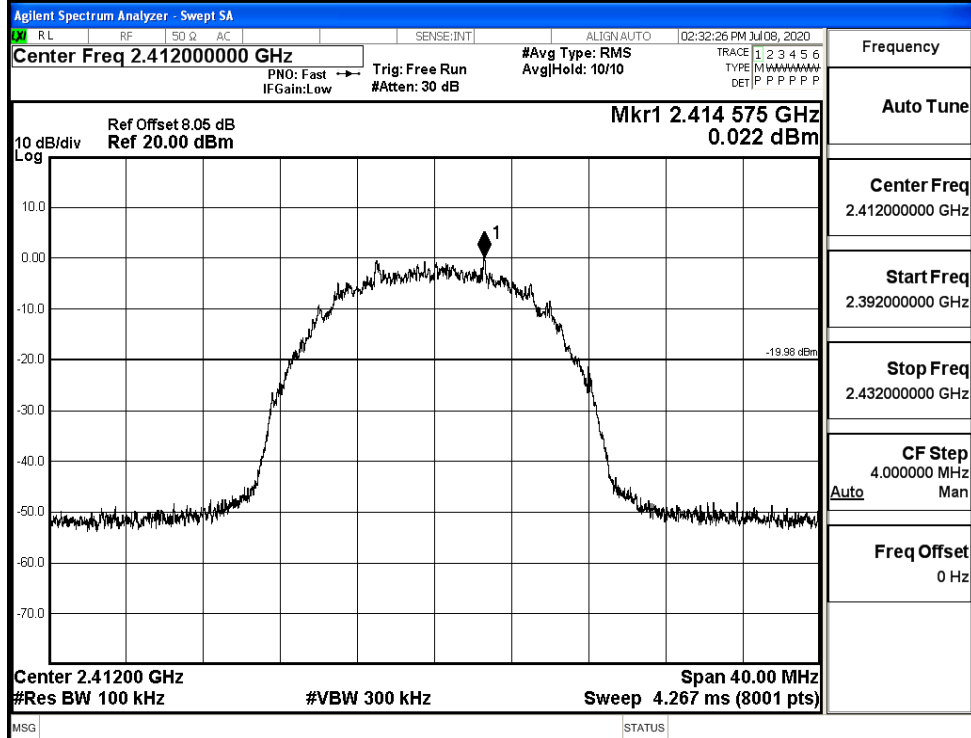


**A.5 RF Conducted Spurious Emissions**

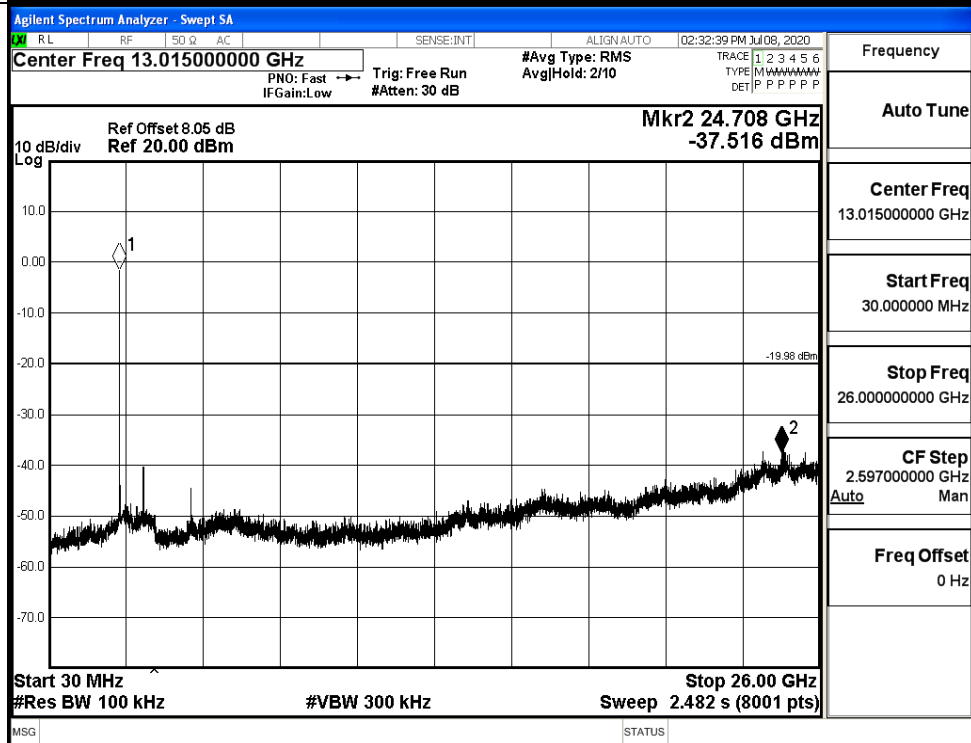
| Mode          | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|---------------|---------|------------|------------------|-------------|---------|
| 11B           | LCH     | 0.022      | -37.516          | -19.978     | PASS    |
|               | MCH     | 0.294      | -38.281          | -19.706     | PASS    |
|               | HCH     | 0.148      | -37.371          | -19.852     | PASS    |
| 11G           | LCH     | -6.073     | -38.345          | -26.073     | PASS    |
|               | MCH     | -5.824     | -37.928          | -25.824     | PASS    |
|               | HCH     | -6.014     | -37.211          | -26.014     | PASS    |
| 11N20<br>SISO | LCH     | -6.396     | -37.108          | -26.396     | PASS    |
|               | MCH     | -6.426     | -37.103          | -26.426     | PASS    |
|               | HCH     | -6.213     | -37.724          | -26.213     | PASS    |
| 11N40<br>SISO | LCH     | -9.39      | -36.629          | -29.390     | PASS    |
|               | MCH     | -9.193     | -37.562          | -29.193     | PASS    |
|               | HCH     | -9.099     | -38.108          | -29.099     | PASS    |

## 11B LCH Graphs

Pref/11B/LCH

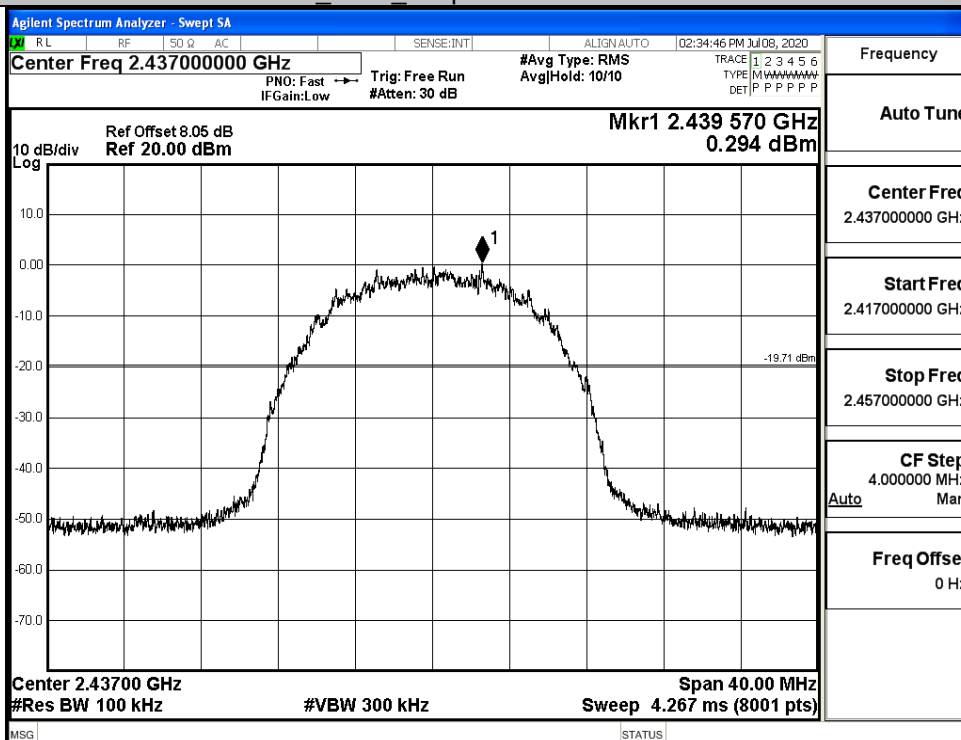


Puw/11B/LCH

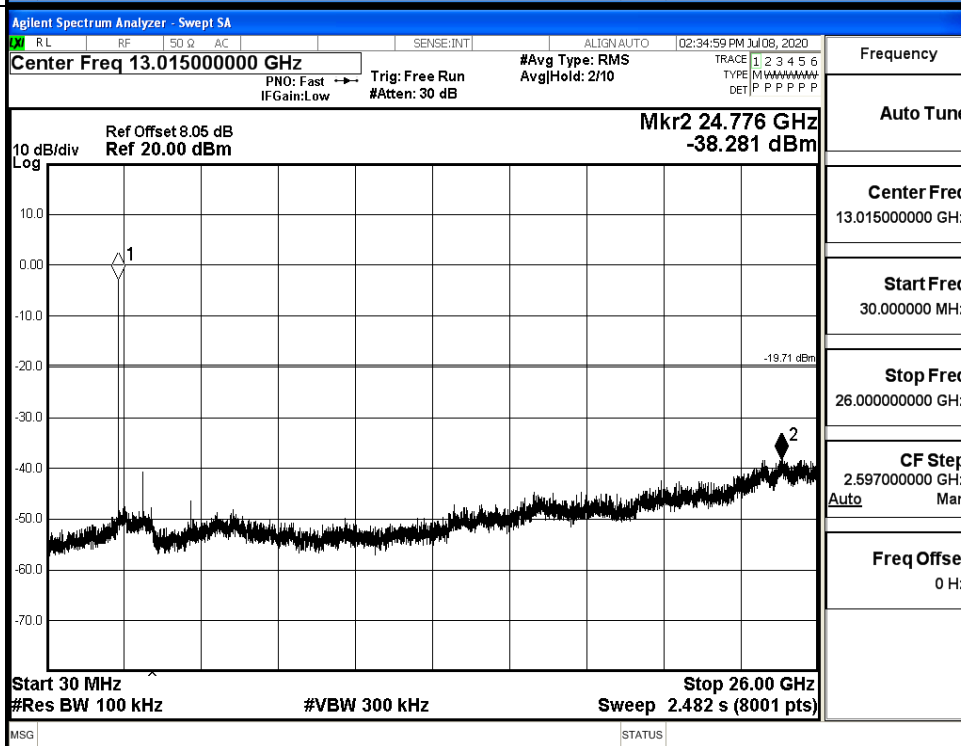


## 11B MCH Graphs

Pref/11B/MCH

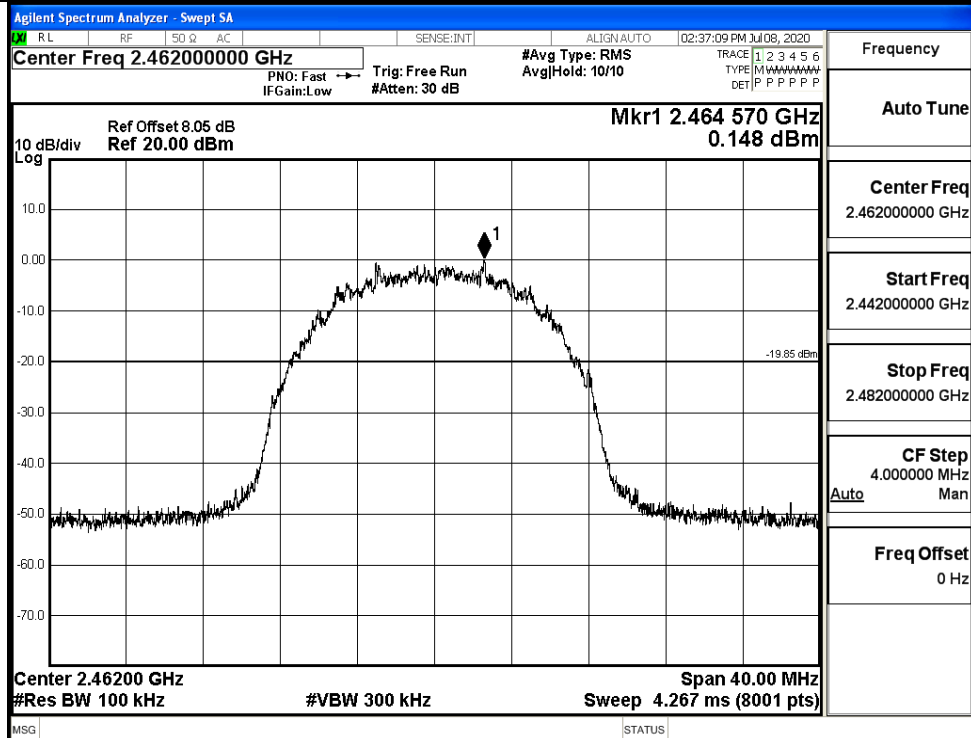


Puw/11B/MCH

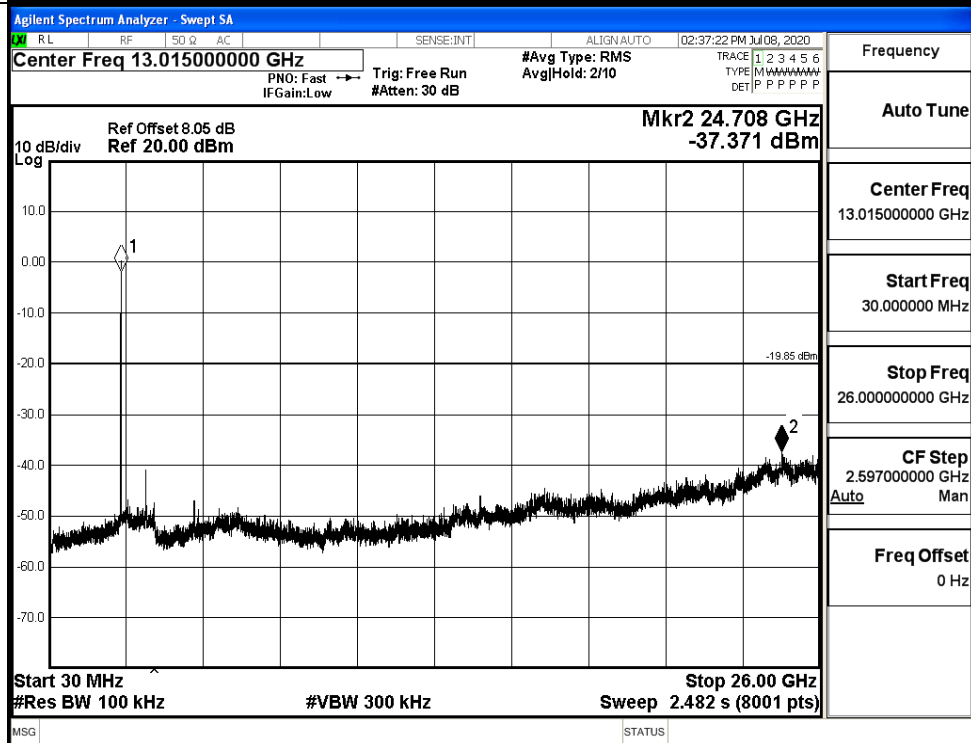


## 11B HCH Graphs

Pref/11B/HCH

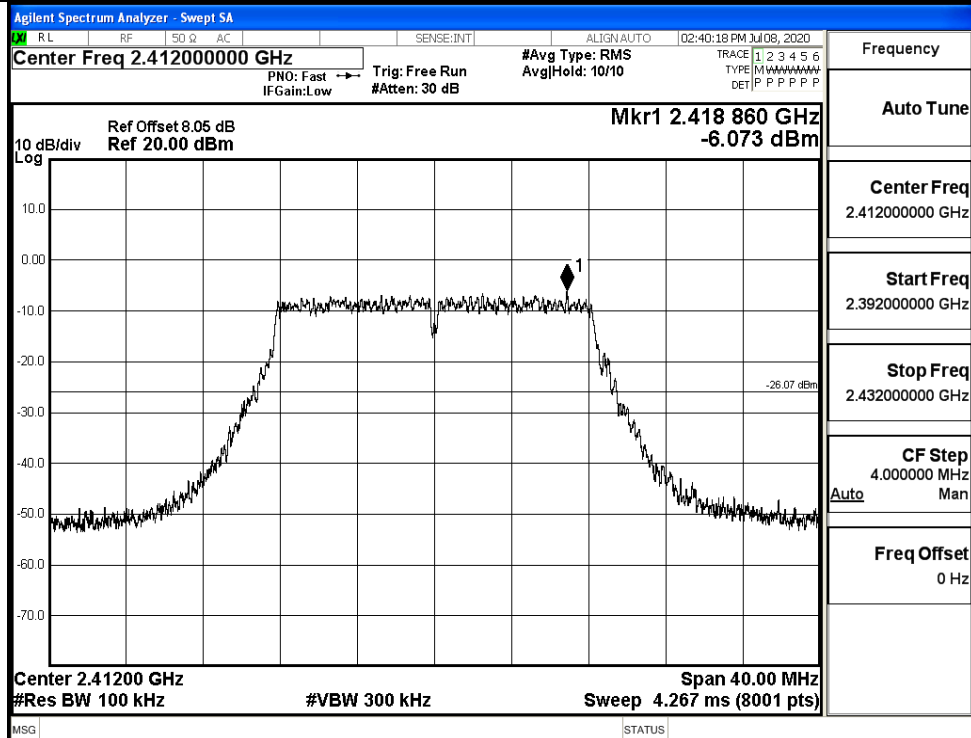


Puw/11B/HCH

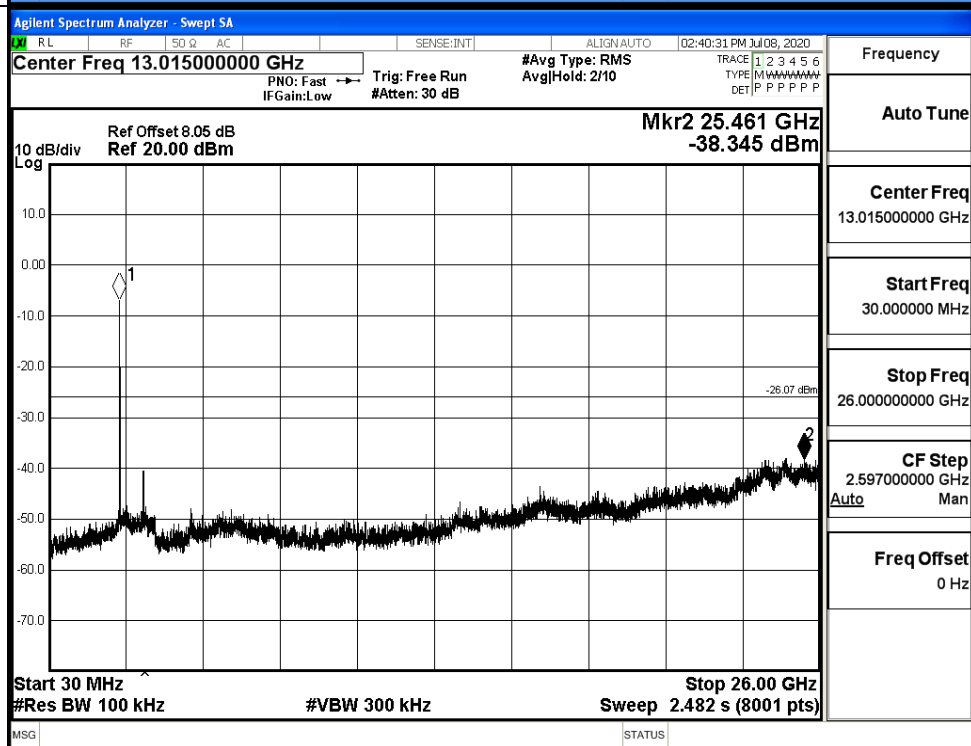


## 11G\_LCH\_Graphs

Pref/11G/LCH

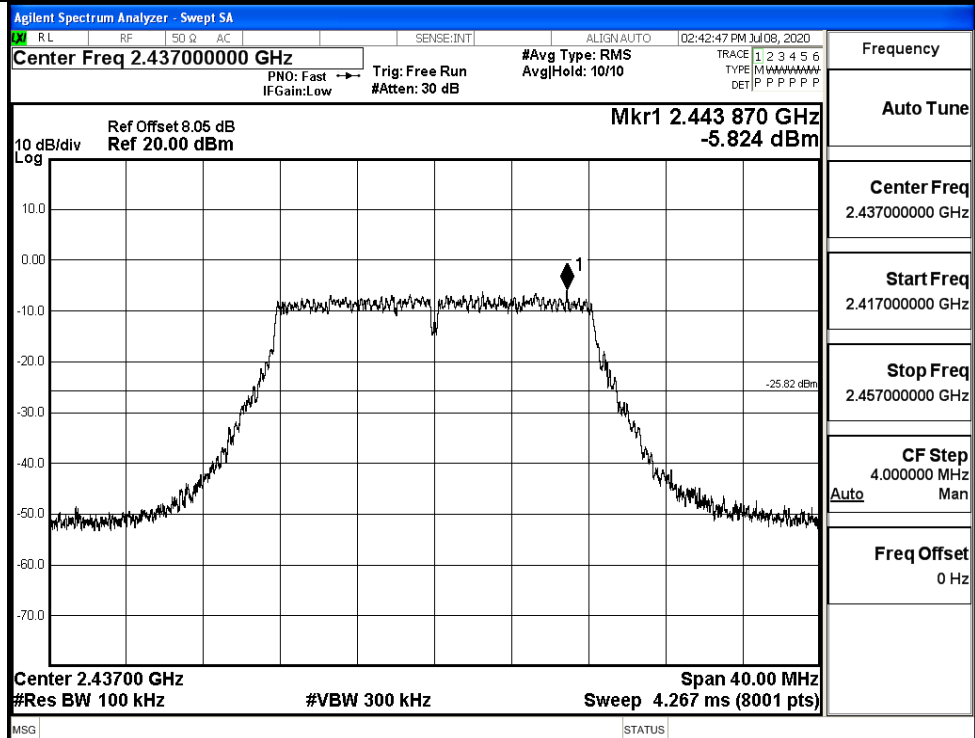


Puw/11G/LCH

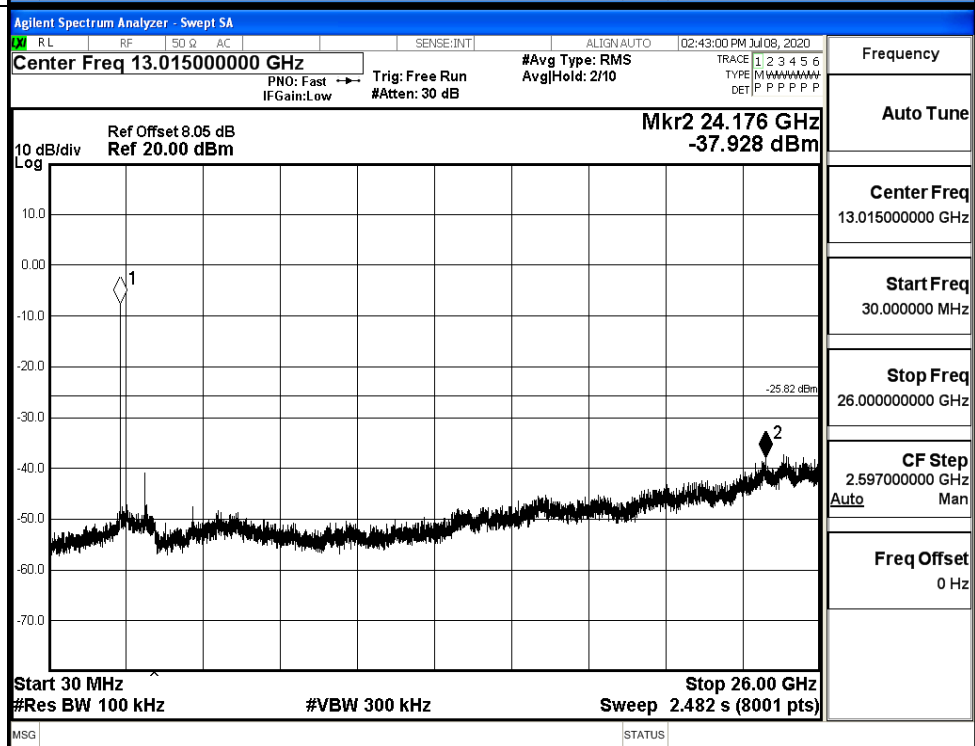


## 11G MCH Graphs

Pref/11G/MCH

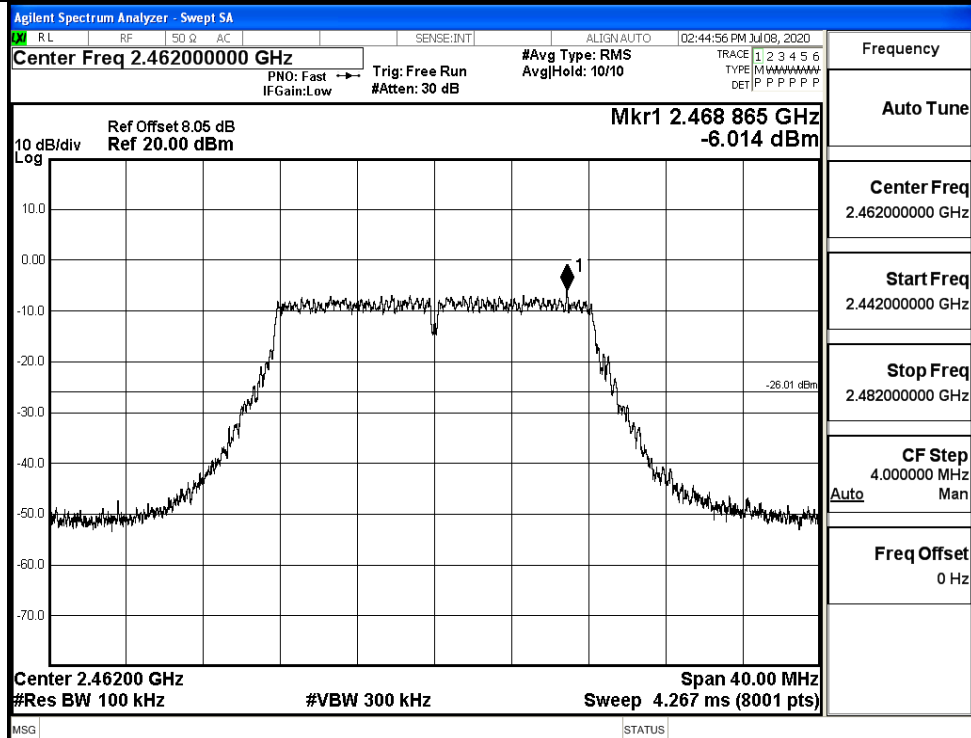


Puw/11G/MCH

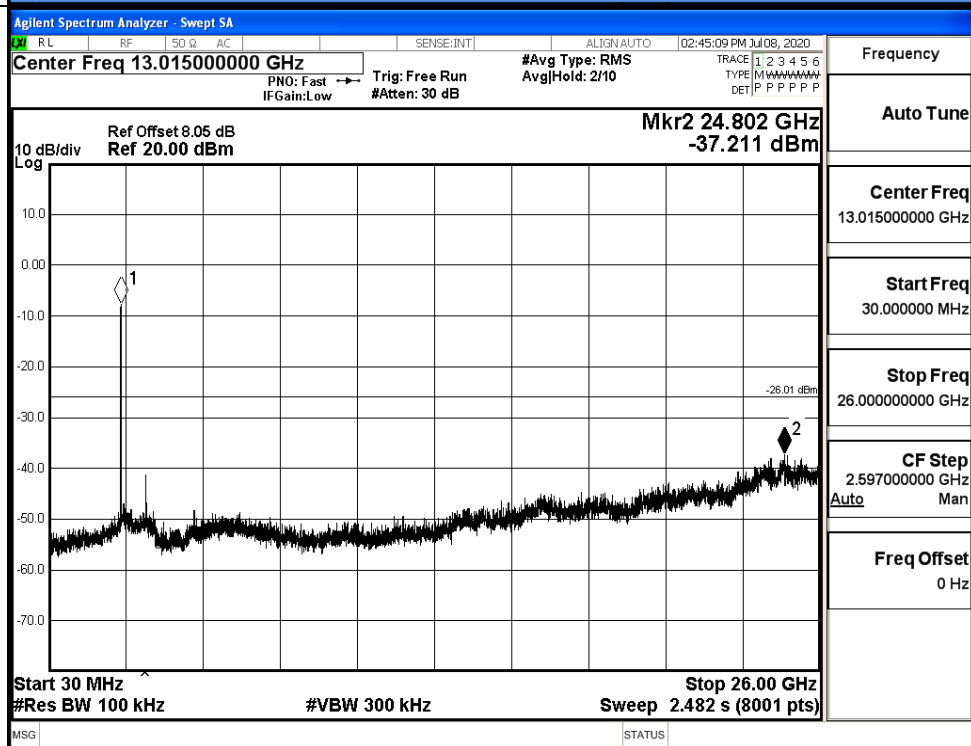


## 11G HCH Graphs

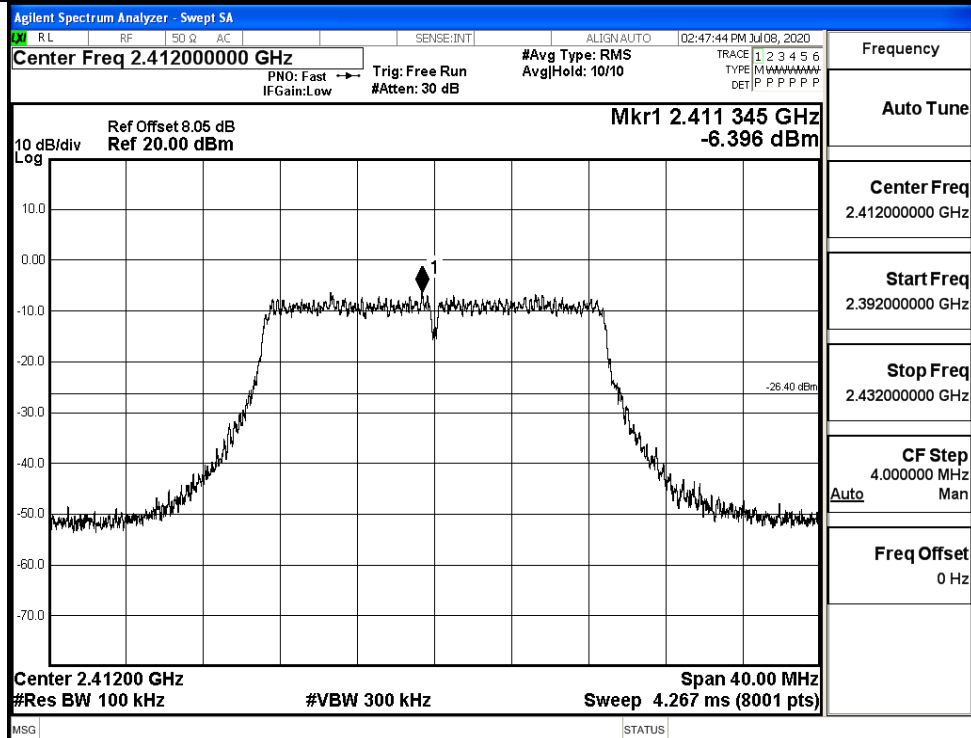
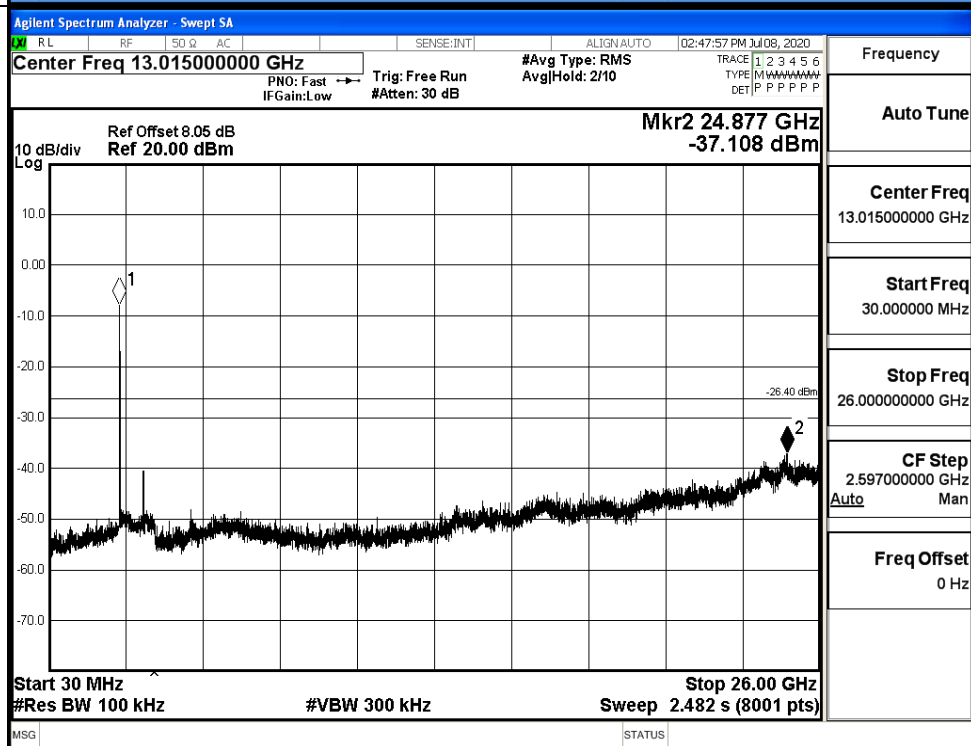
Pref/11G/HCH



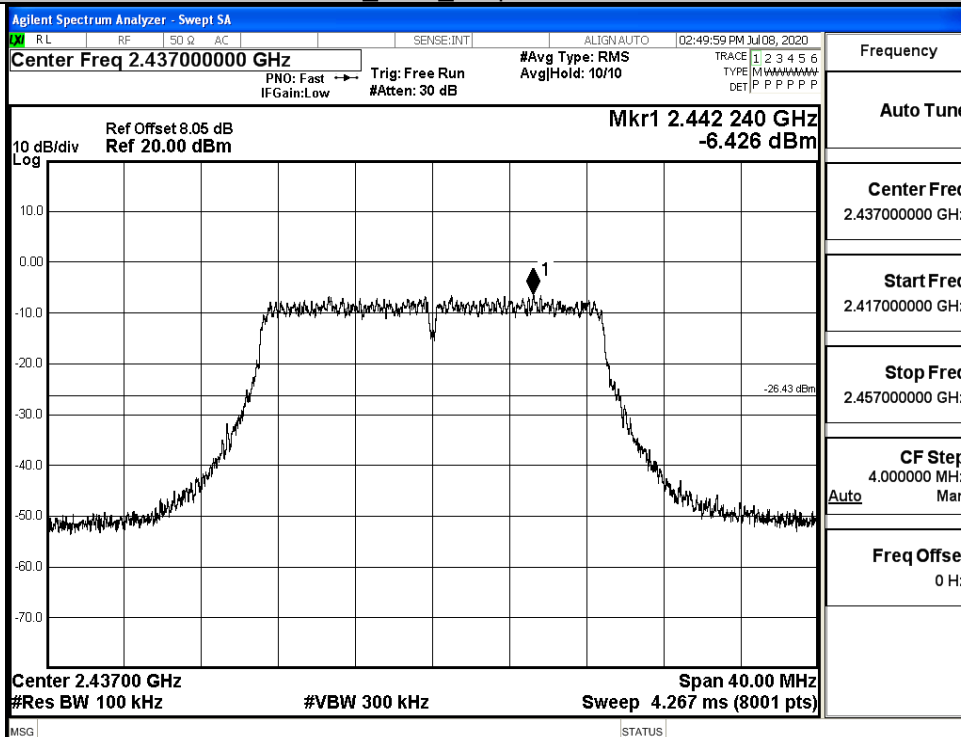
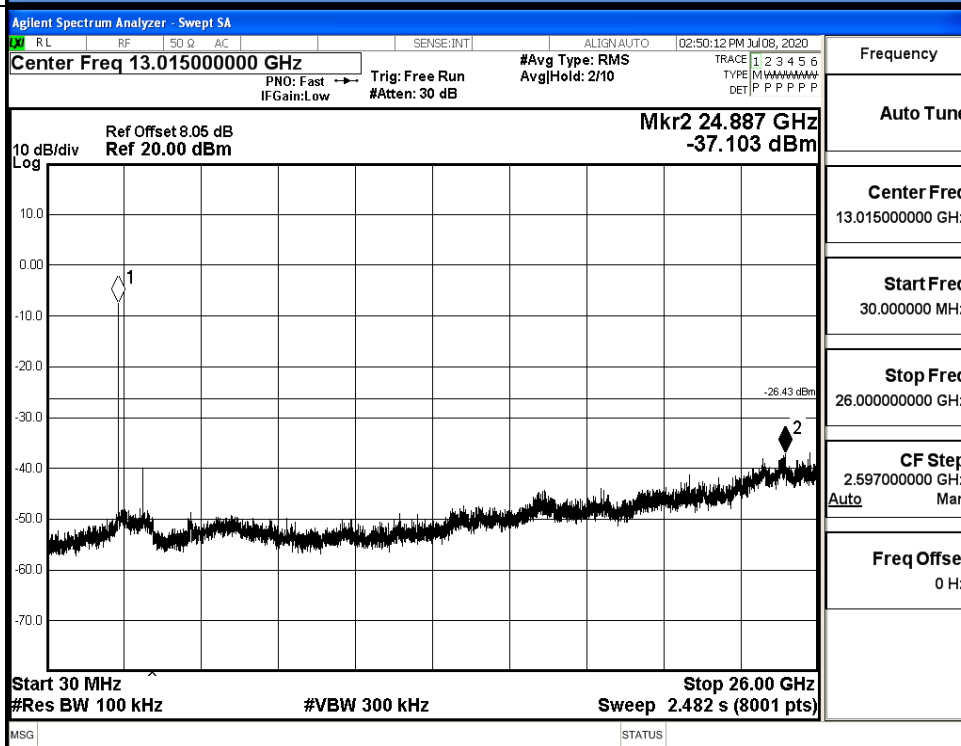
Puw/11G/HCH



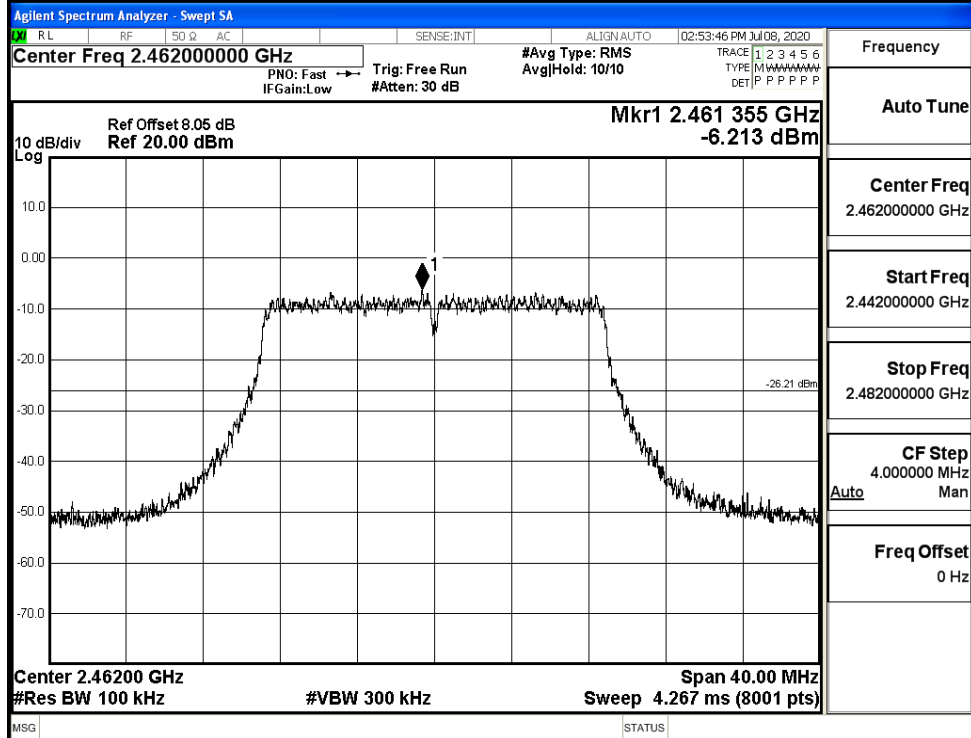
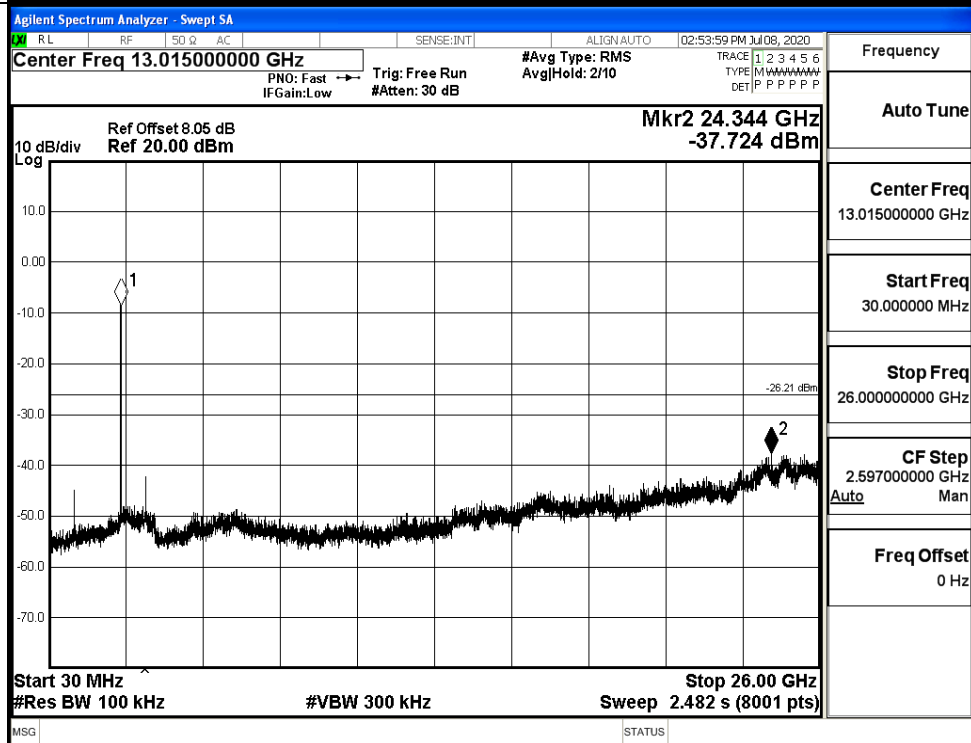
## 11N20SISO LCH Graphs

Pref/11N20SIS  
O/LCHPuw/11N20  
SISO/LCH

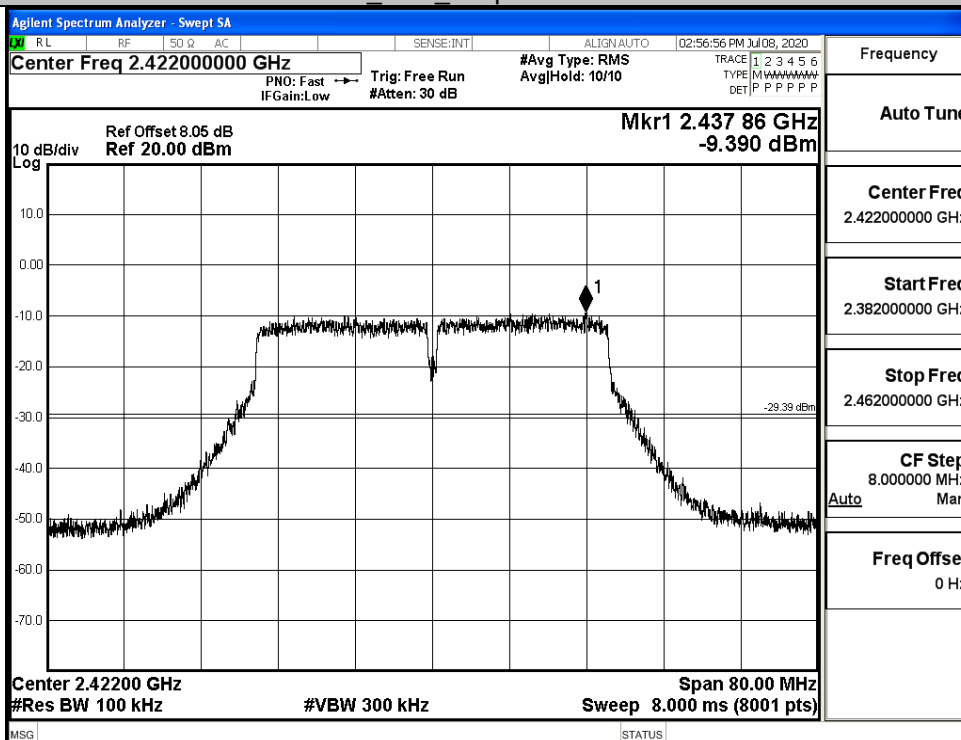
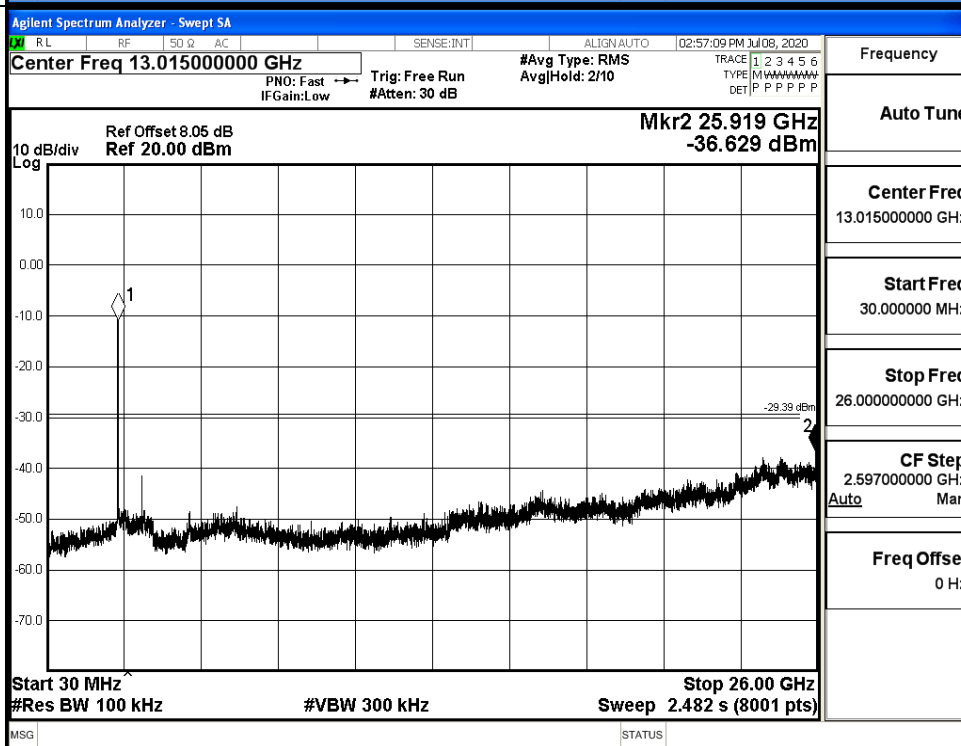
## 11N20SISO\_MCH\_Graphs

Pref/11N20  
SISO/MCHPuw/11N20  
SISO/MCH

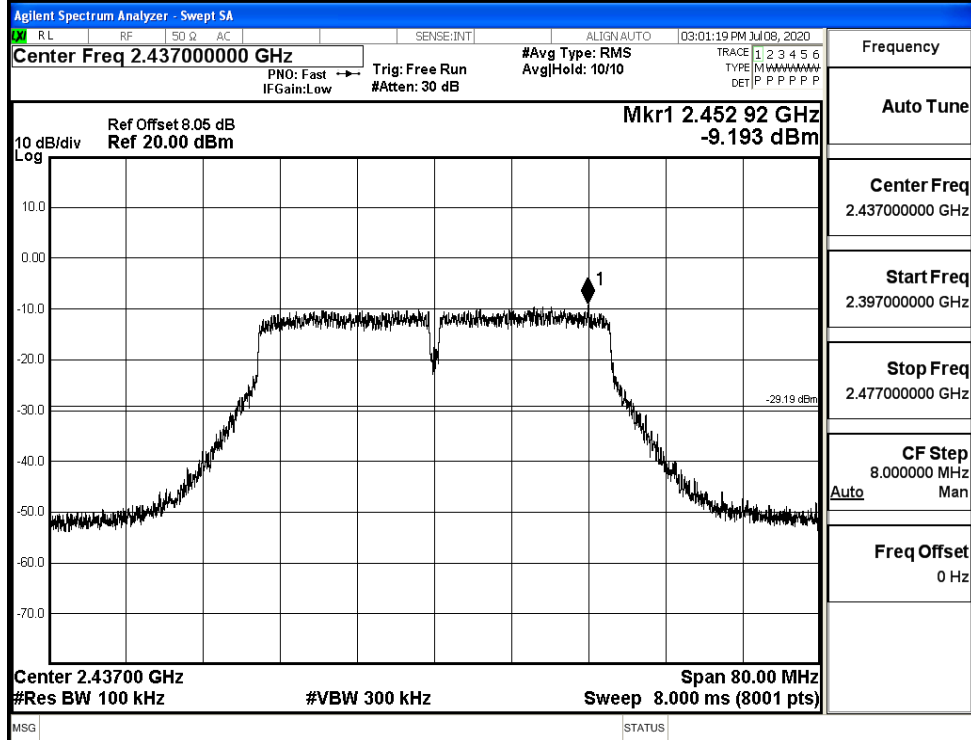
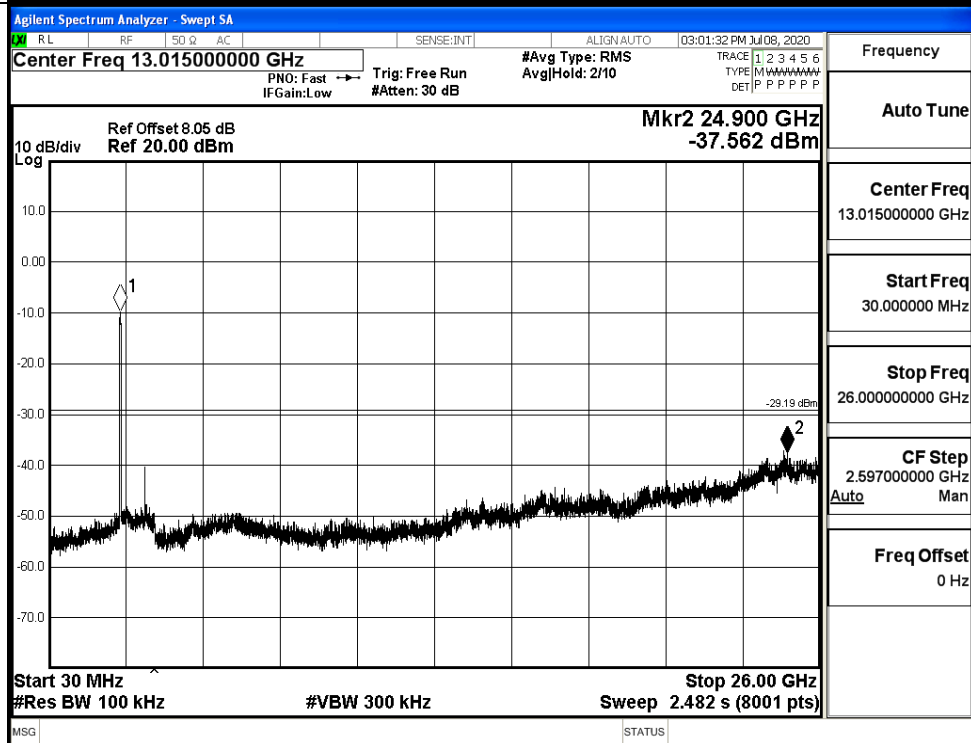
## 11N20SISO HCH Graphs

Pref/11N20  
SISO/HCHPuw/11N20  
SISO/HCH

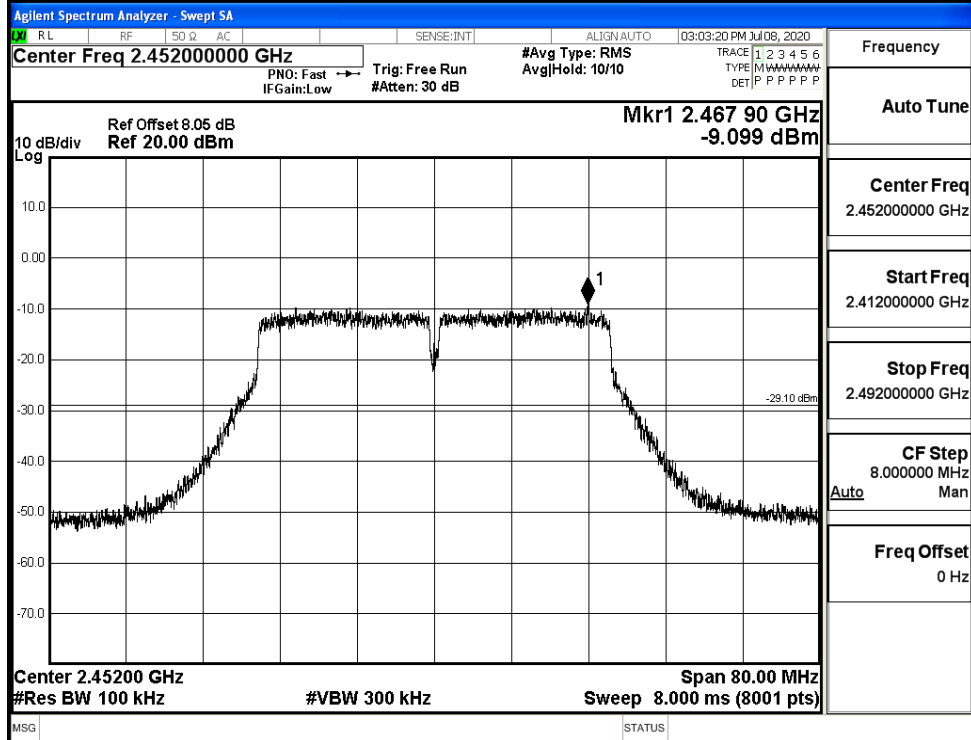
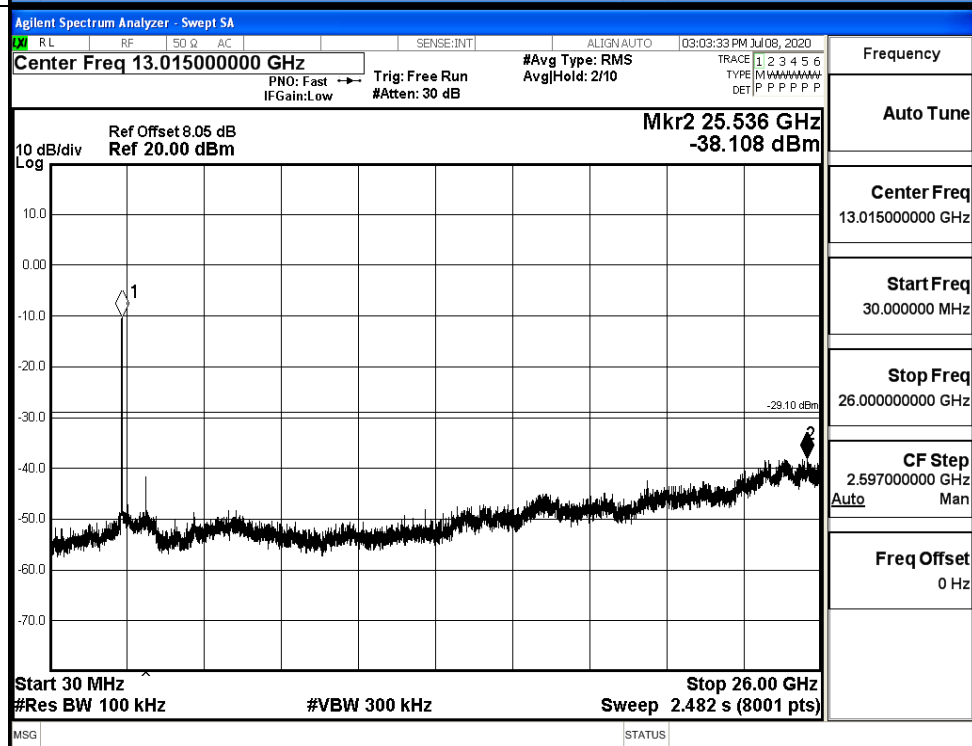
## 11N40SISO LCH Graphs

Pref/11N40  
SISO/LCHPuw/11N40  
SISO/LCH

## 11N40SISO\_MCH\_Graphs

Pref/11N40  
SISO/MCHPuw/11N40  
SISO/MCH

## 11N40SISO HCH Graphs

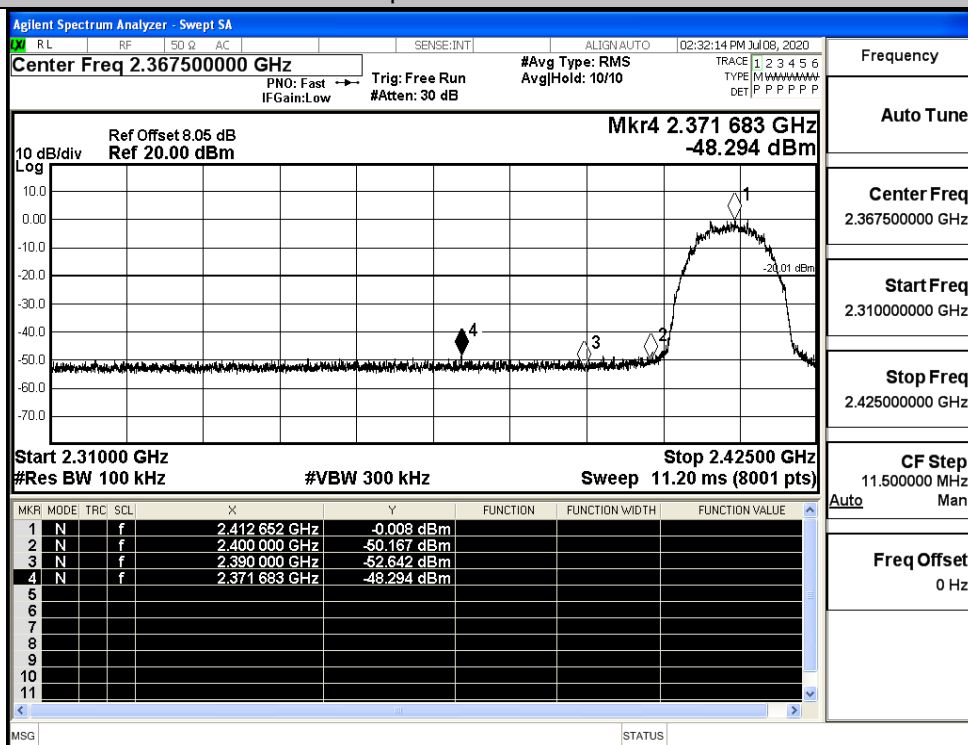
Pref/11N40  
SISO/HCHPuw/11N40  
SISO/HCH

## A.6 Band-edge for RF Conducted Emissions

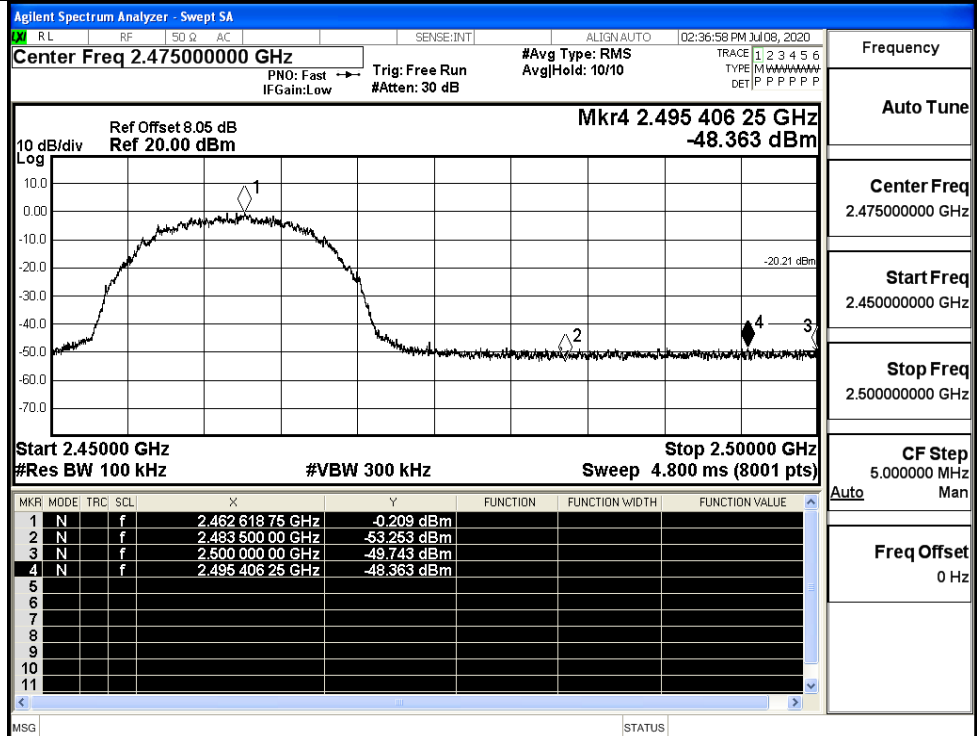
| Mode      | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|--------------------|--------------------------|-------------|---------|
| 11B       | LCH     | -0.008             | -48.294                  | -20.01      | PASS    |
|           | HCH     | -0.209             | -48.363                  | -20.21      | PASS    |
| 11G       | LCH     | -6.197             | -49.048                  | -26.2       | PASS    |
|           | HCH     | -5.919             | -48.528                  | -25.92      | PASS    |
| 11N20SISO | LCH     | -6.798             | -48.897                  | -26.8       | PASS    |
|           | HCH     | -6.688             | -48.429                  | -26.69      | PASS    |
| 11N40SISO | LCH     | -9.107             | -48.062                  | -29.11      | PASS    |
|           | HCH     | -9.139             | -47.058                  | -29.14      | PASS    |

## Test Graphs

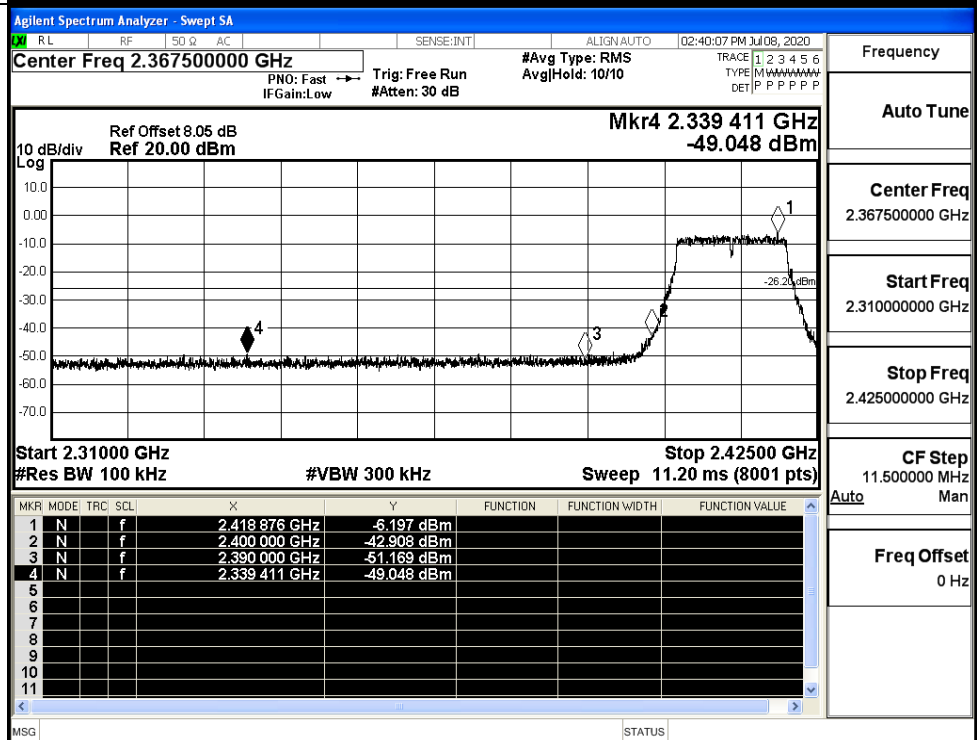
11B/LCH



11B/HCH

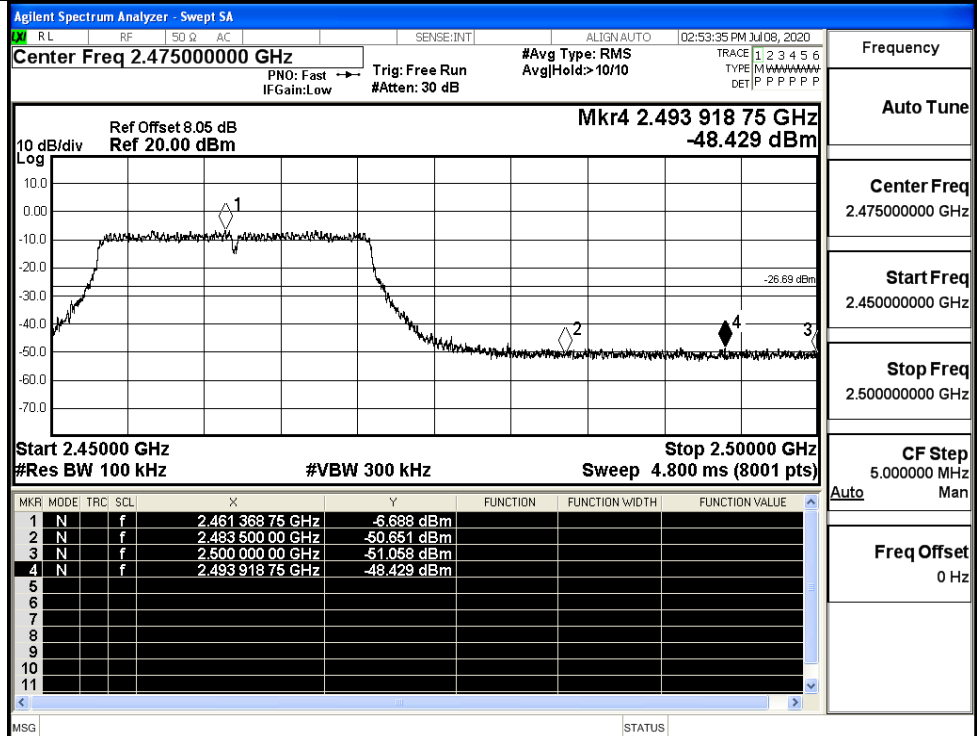


11G/LCH

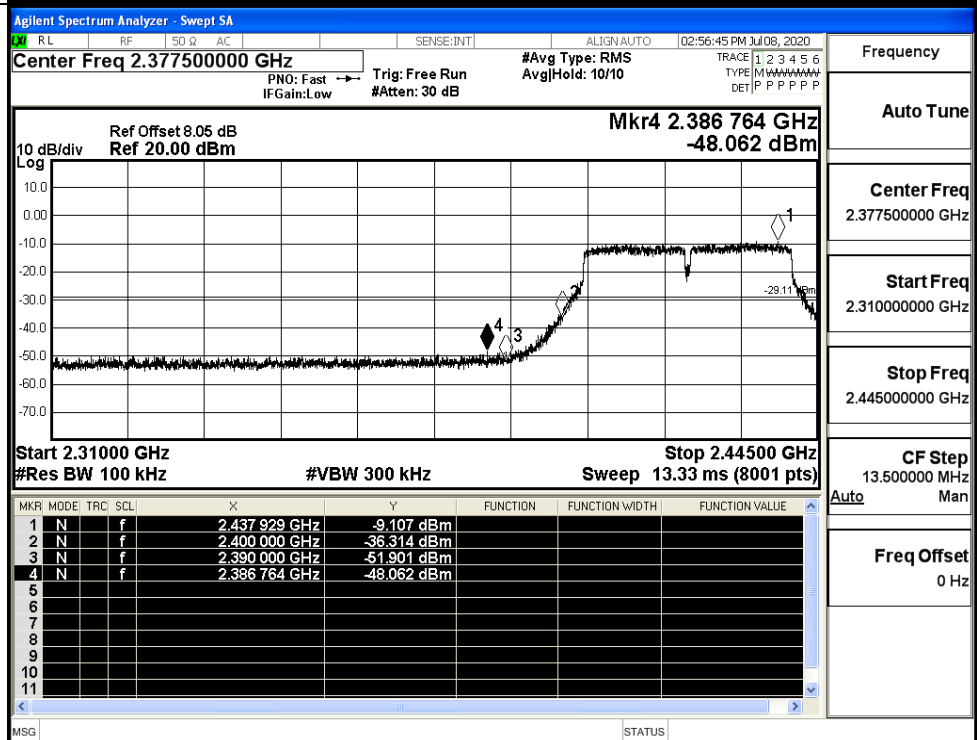




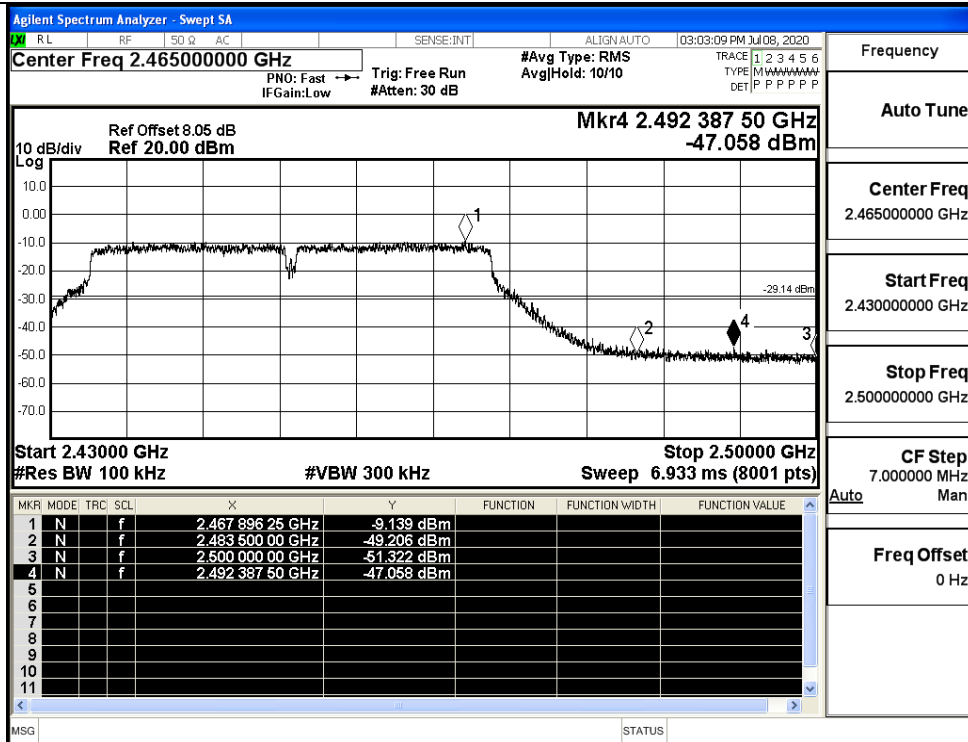
11N20SISO/HCH



11N40SISO/LCH



11N40SISO/HCH

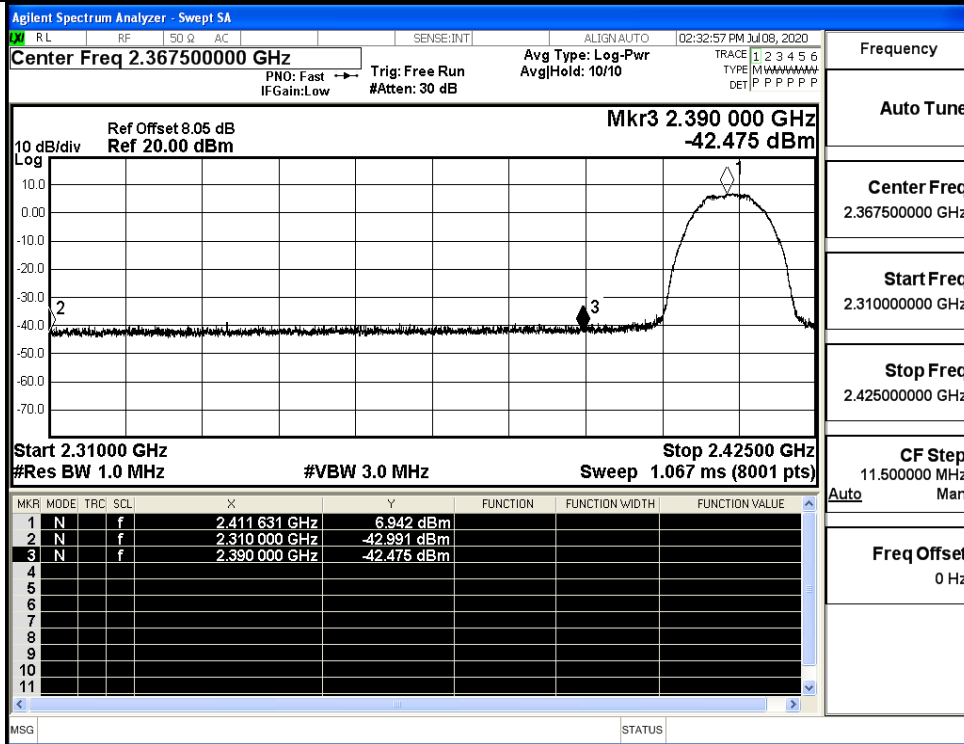


## A.7 Restrict-band band-edge measurements

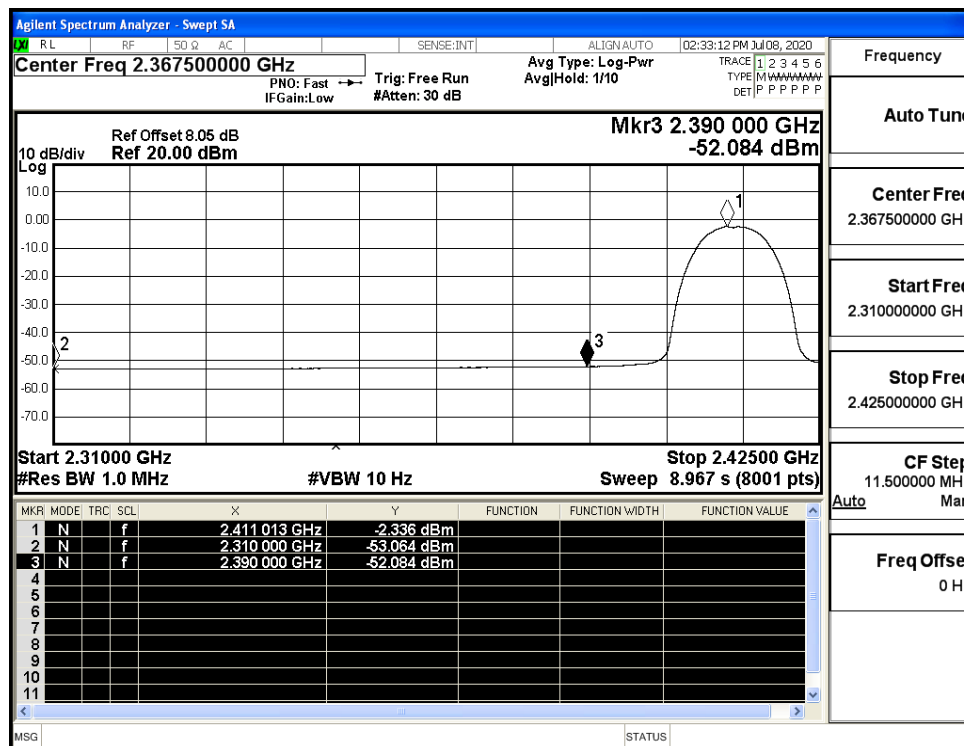
| Test Mode     | Test Channel | Ant  | Freq.  | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|---------------|--------------|------|--------|-------------|------|---------------|------------|----------|----------------|---------|
| 11B           | 2412         | Ant1 | 2310.0 | -42.99      | 2.0  | 0             | 52.27      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2310.0 | -53.06      | 2.0  | 0             | 42.19      | AV       | 54             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -42.48      | 2.0  | 0             | 52.78      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -52.08      | 2.0  | 0             | 43.17      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -40.30      | 2.0  | 0             | 54.96      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -51.31      | 2.0  | 0             | 43.95      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -40.43      | 2.0  | 0             | 54.83      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -51.18      | 2.0  | 0             | 44.08      | AV       | 54             | PASS    |
| 11G           | 2412         | Ant1 | 2310.0 | -42.69      | 2.0  | 0             | 52.57      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2310.0 | -53.04      | 2.0  | 0             | 42.21      | AV       | 54             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -40.36      | 2.0  | 0             | 54.90      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -52.08      | 2.0  | 0             | 43.18      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -40.16      | 2.0  | 0             | 55.10      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -51.15      | 2.0  | 0             | 44.11      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -39.47      | 2.0  | 0             | 55.79      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -51.21      | 2.0  | 0             | 44.05      | AV       | 54             | PASS    |
| 11N20<br>SISO | 2412         | Ant1 | 2310.0 | -42.53      | 2.0  | 0             | 52.73      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2310.0 | -53.06      | 2.0  | 0             | 42.20      | AV       | 54             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -42.02      | 2.0  | 0             | 53.24      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -51.95      | 2.0  | 0             | 43.31      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -40.54      | 2.0  | 0             | 54.72      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -51.10      | 2.0  | 0             | 44.16      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -40.25      | 2.0  | 0             | 55.00      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -51.20      | 2.0  | 0             | 44.06      | AV       | 54             | PASS    |
| 11N40<br>SISO | 2422         | Ant1 | 2310.0 | -41.71      | 2.0  | 0             | 53.55      | PEAK     | 74             | PASS    |
|               | 2422         | Ant1 | 2310.0 | -53.07      | 2.0  | 0             | 42.19      | AV       | 54             | PASS    |

|  |      |      |        |        |     |   |       |      |    |      |
|--|------|------|--------|--------|-----|---|-------|------|----|------|
|  | 2422 | Ant1 | 2390.0 | -37.86 | 2.0 | 0 | 57.40 | PEAK | 74 | PASS |
|  | 2422 | Ant1 | 2390.0 | -51.14 | 2.0 | 0 | 44.12 | AV   | 54 | PASS |
|  | 2452 | Ant1 | 2483.5 | -40.24 | 2.0 | 0 | 55.02 | PEAK | 74 | PASS |
|  | 2452 | Ant1 | 2483.5 | -49.56 | 2.0 | 0 | 45.70 | AV   | 54 | PASS |
|  | 2452 | Ant1 | 2500.0 | -38.68 | 2.0 | 0 | 56.58 | PEAK | 74 | PASS |
|  | 2452 | Ant1 | 2500.0 | -51.02 | 2.0 | 0 | 44.24 | AV   | 54 | PASS |

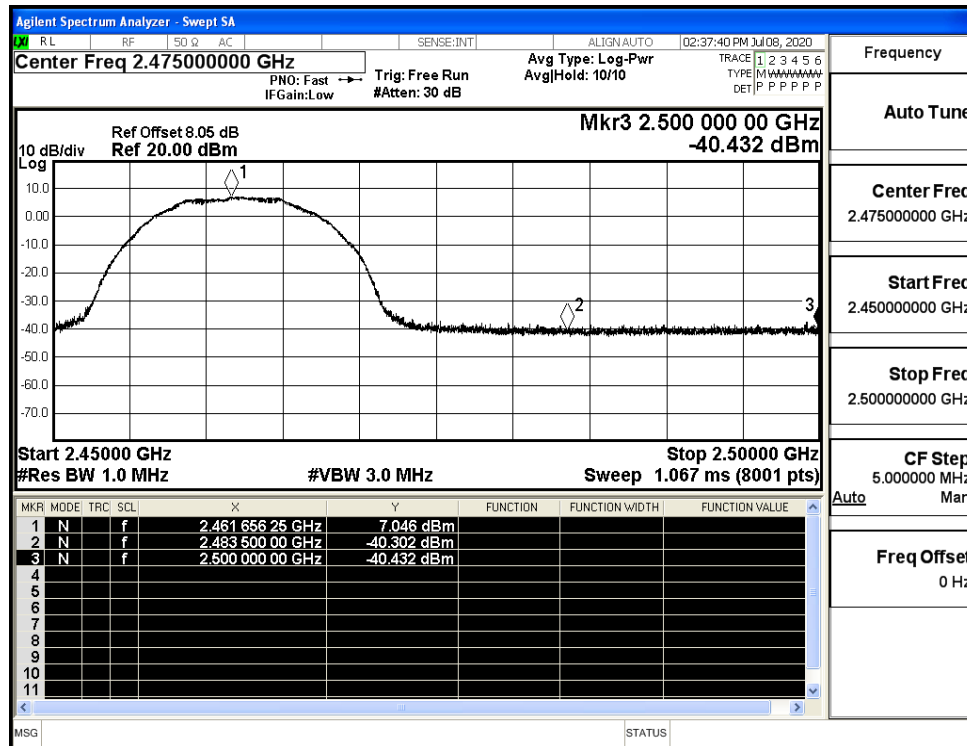
## Restrict-band band-edge measurements\_11B\_2412\_Ant1\_PEAK



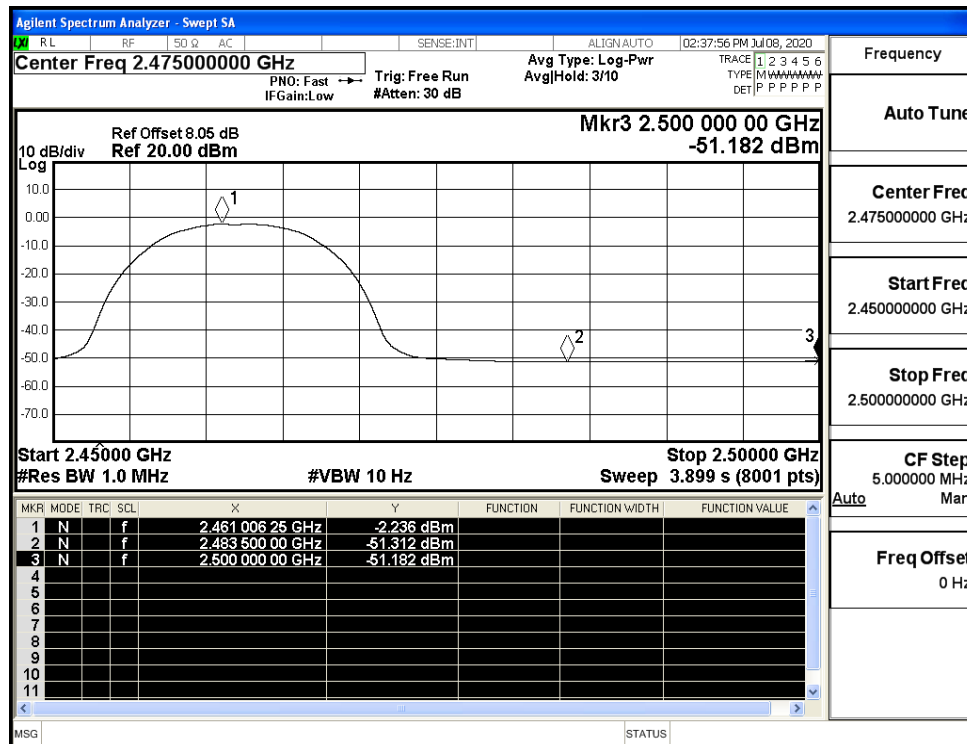
## Restrict-band band-edge measurements\_11B\_2412\_Ant1\_AV



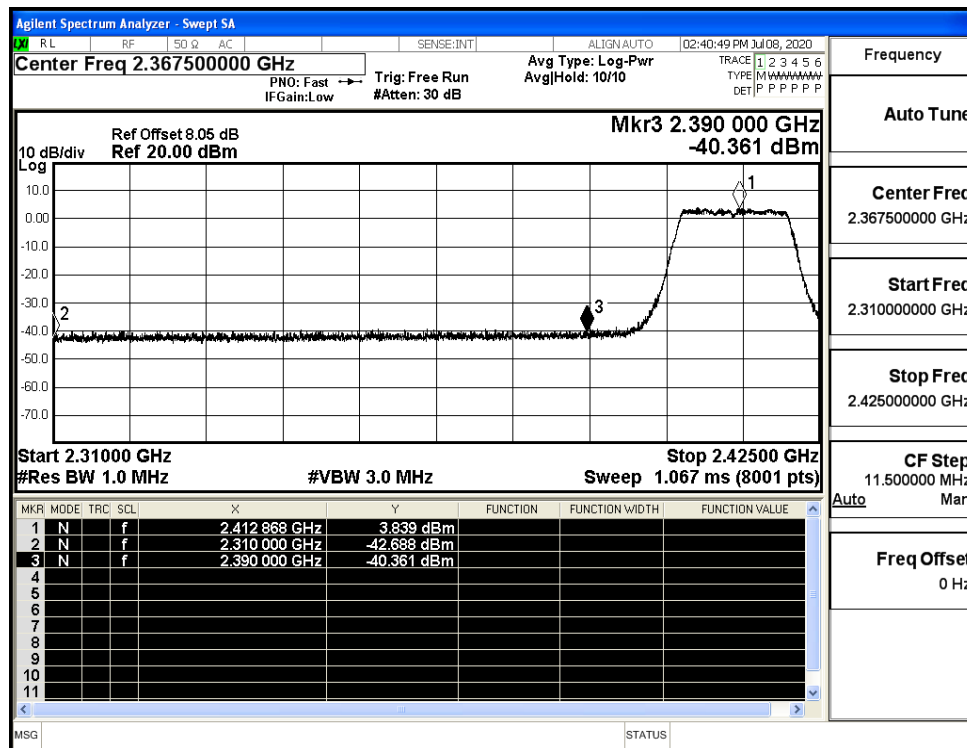
## Restrict-band band-edge measurements\_11B\_2462\_Ant1\_PEAK



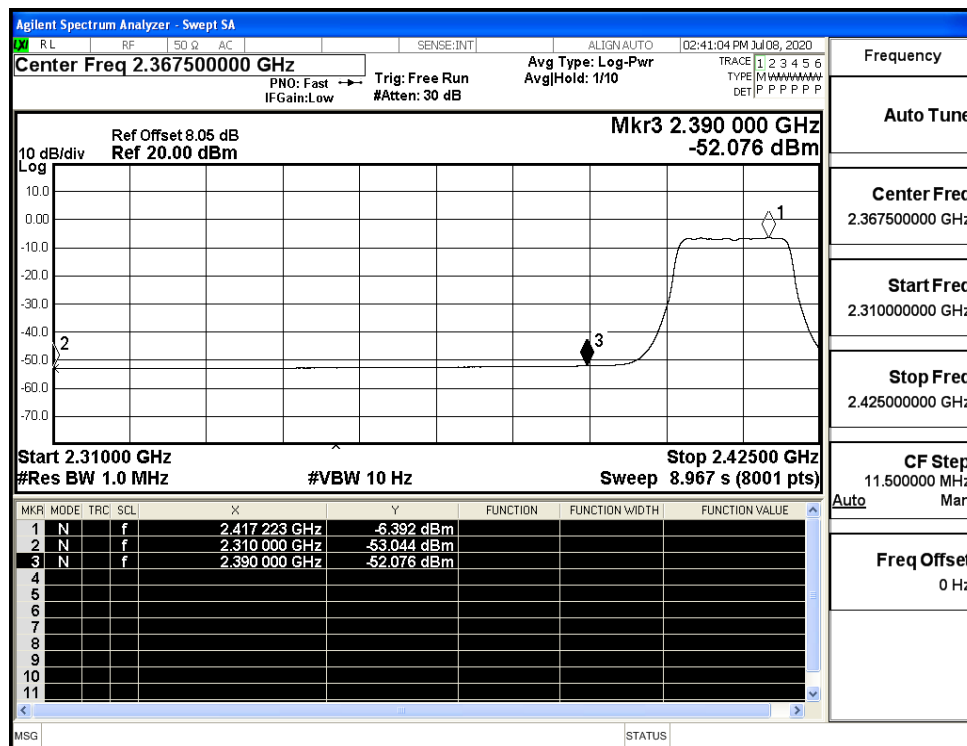
## Restrict-band band-edge measurements\_11B\_2462\_Ant1\_AV



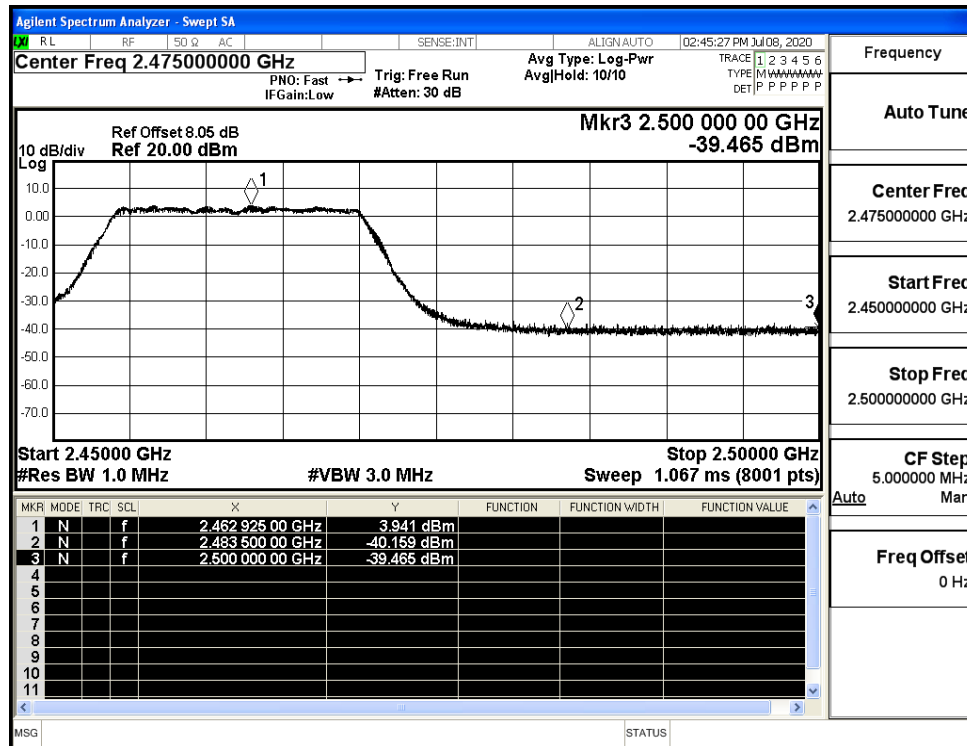
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_PEAK



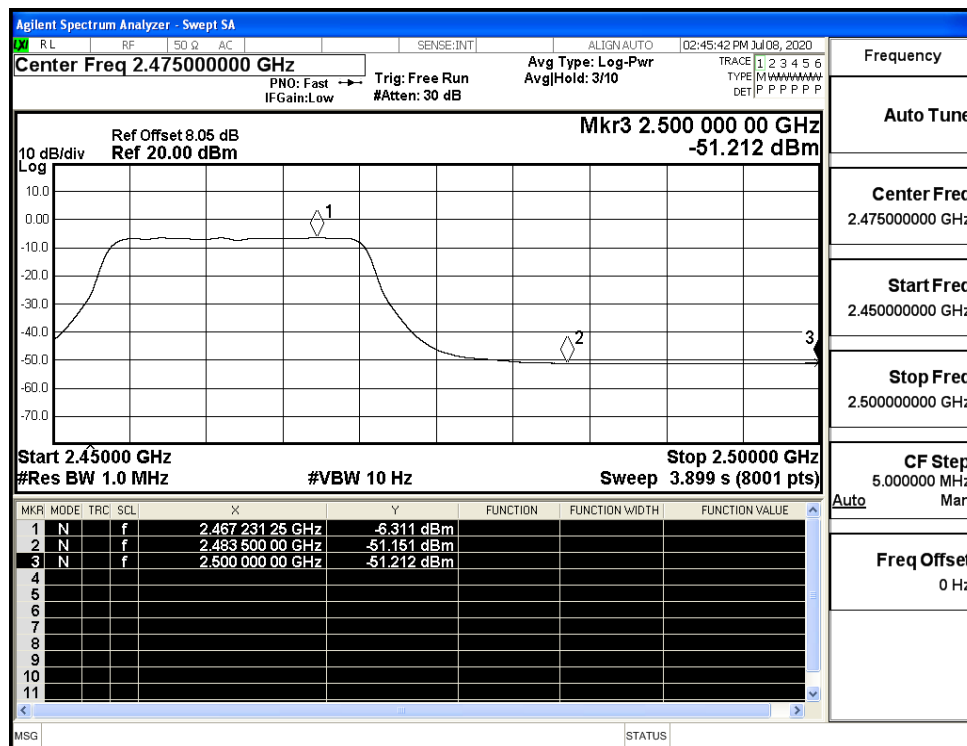
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_AV



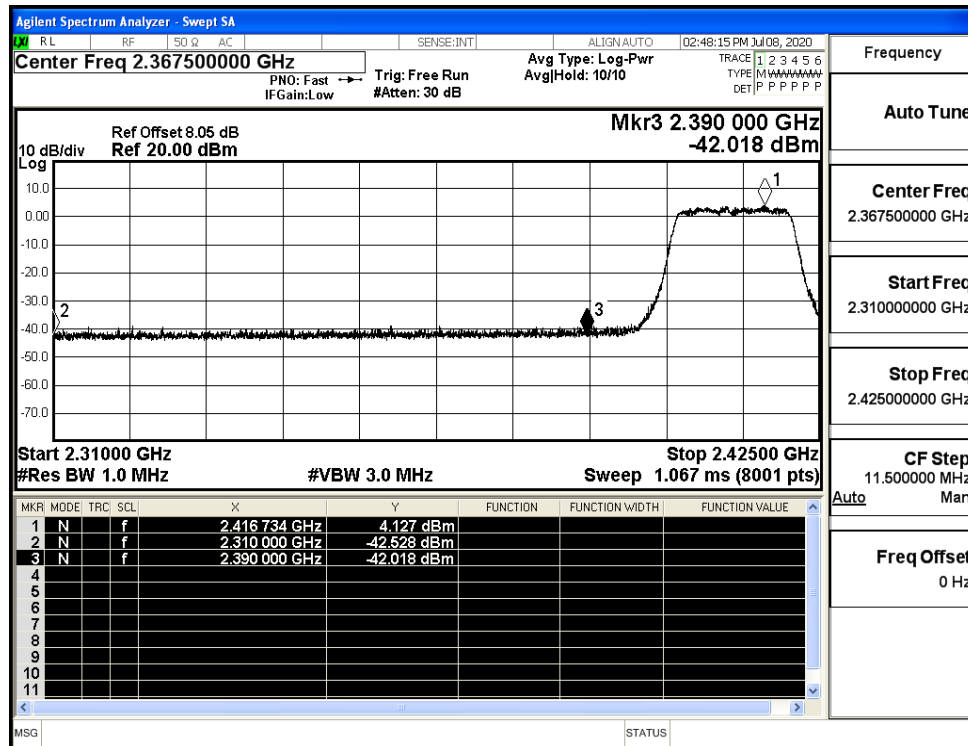
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_PEAK



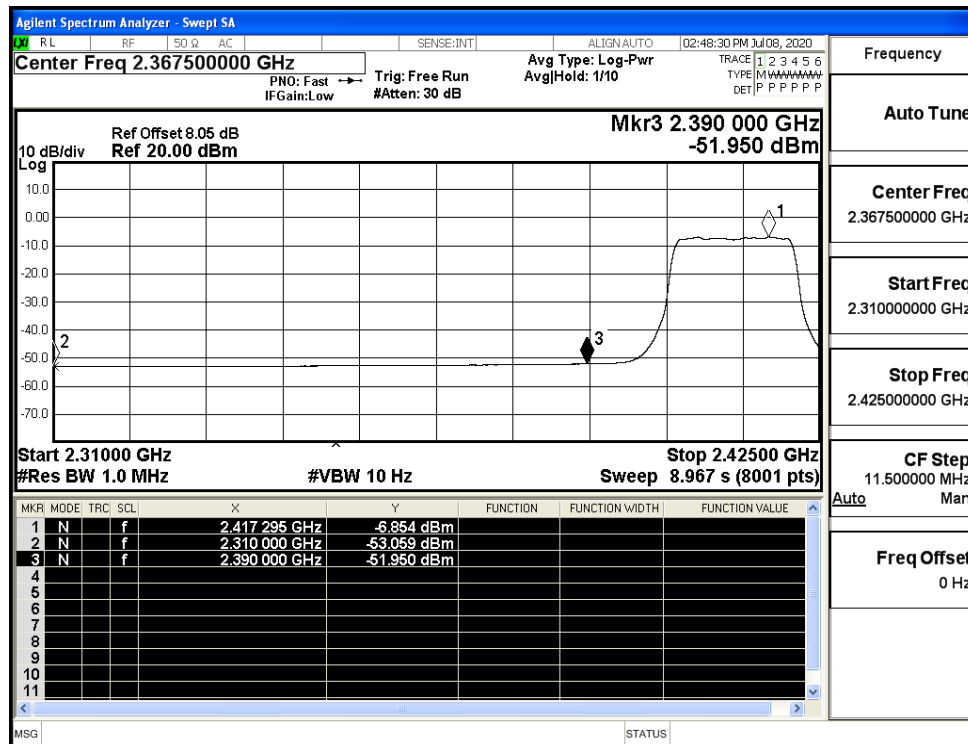
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_AV



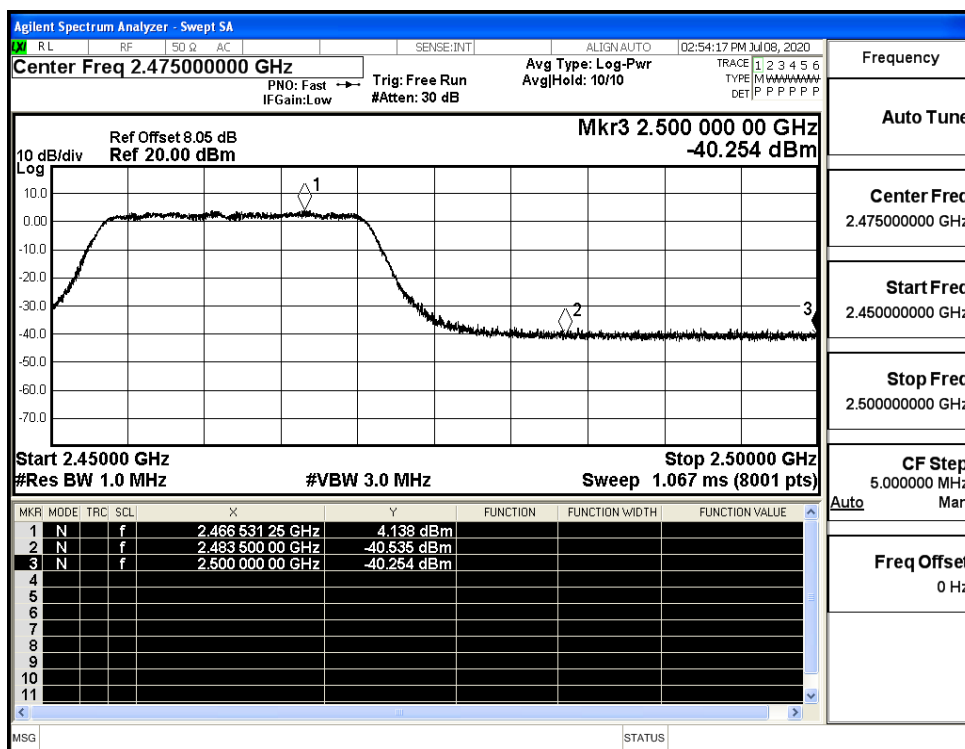
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_PEAK



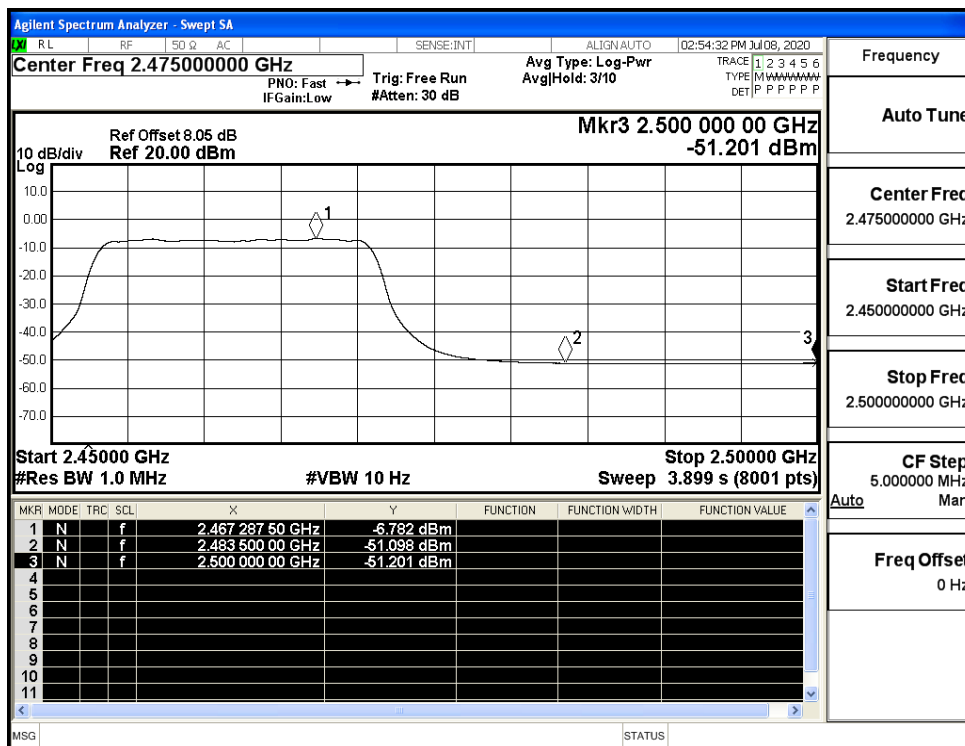
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_AV



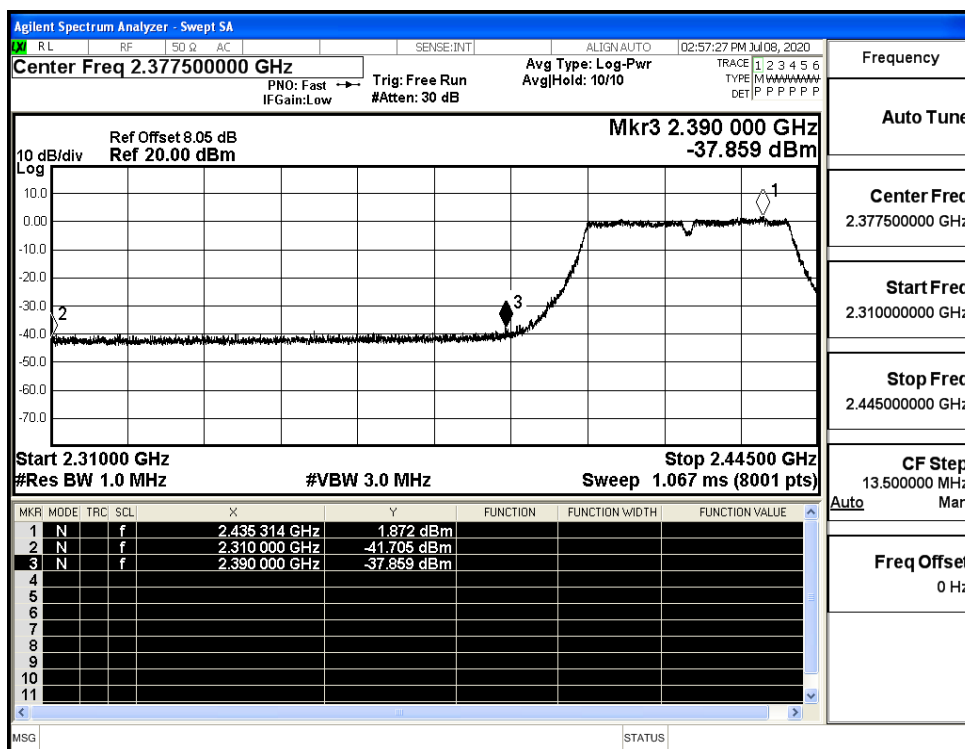
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_PEAK



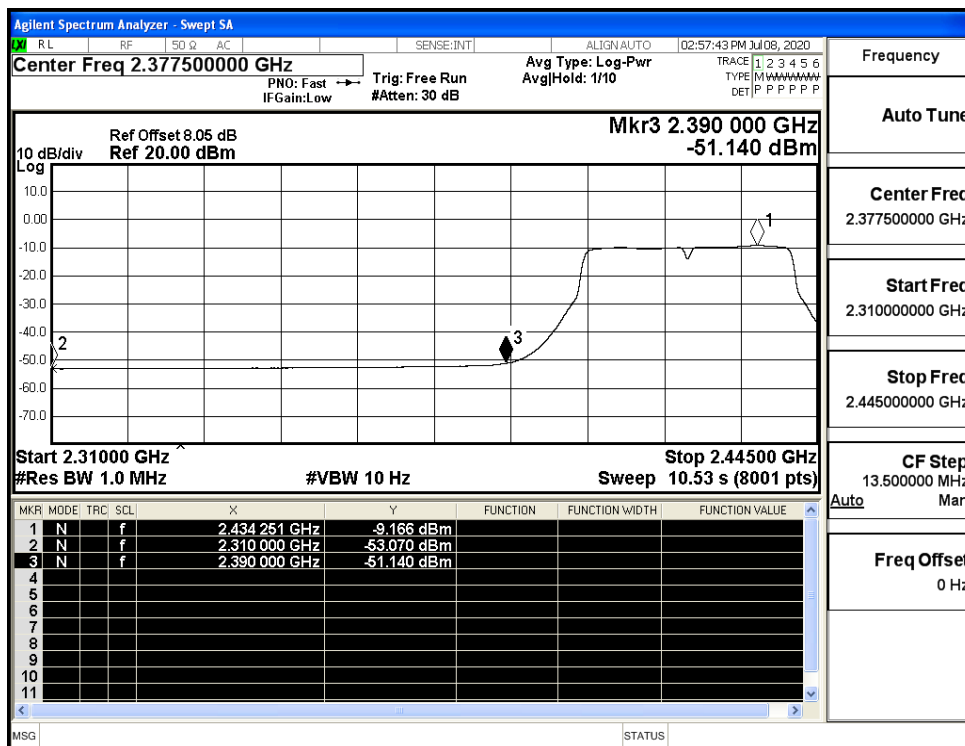
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_AV



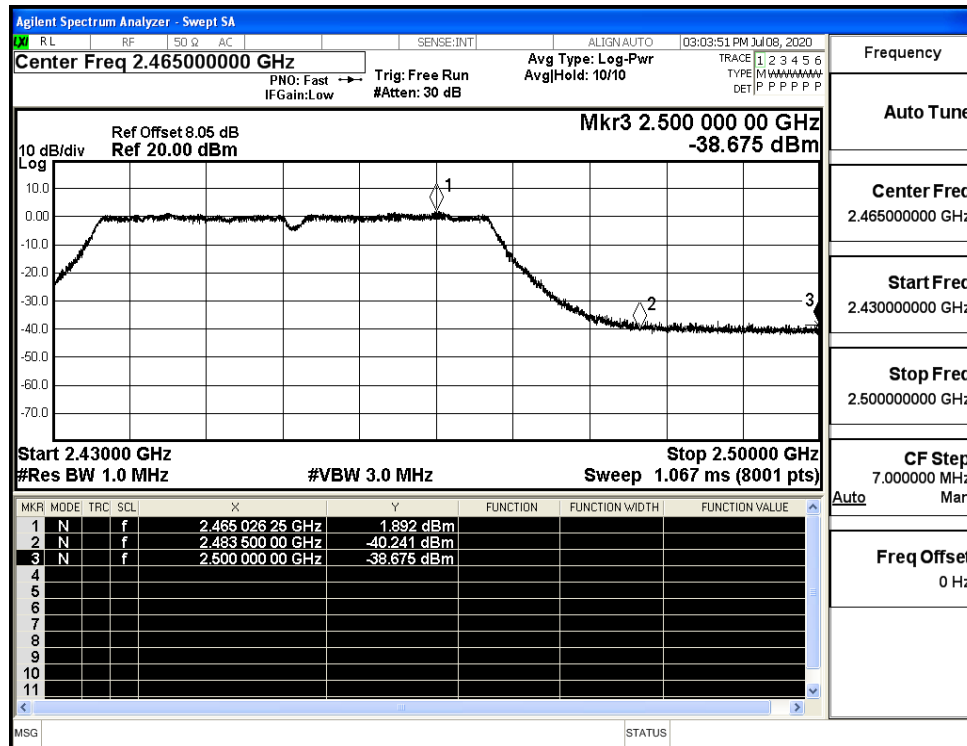
## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_PEAK



## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_AV



## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_PEAK



## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant1\_AV

