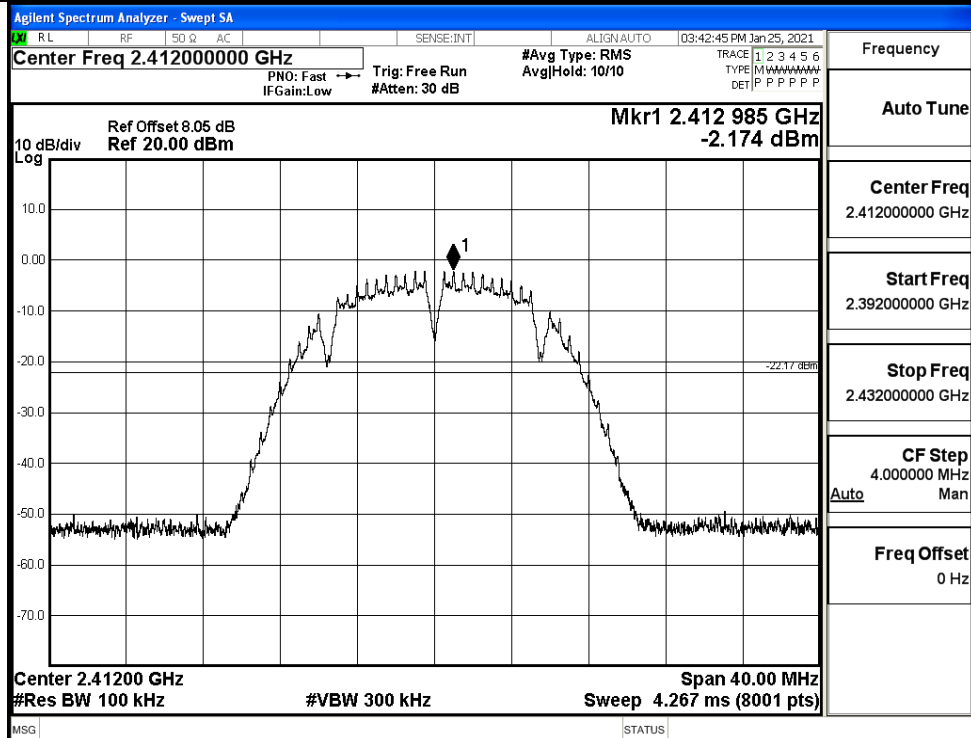
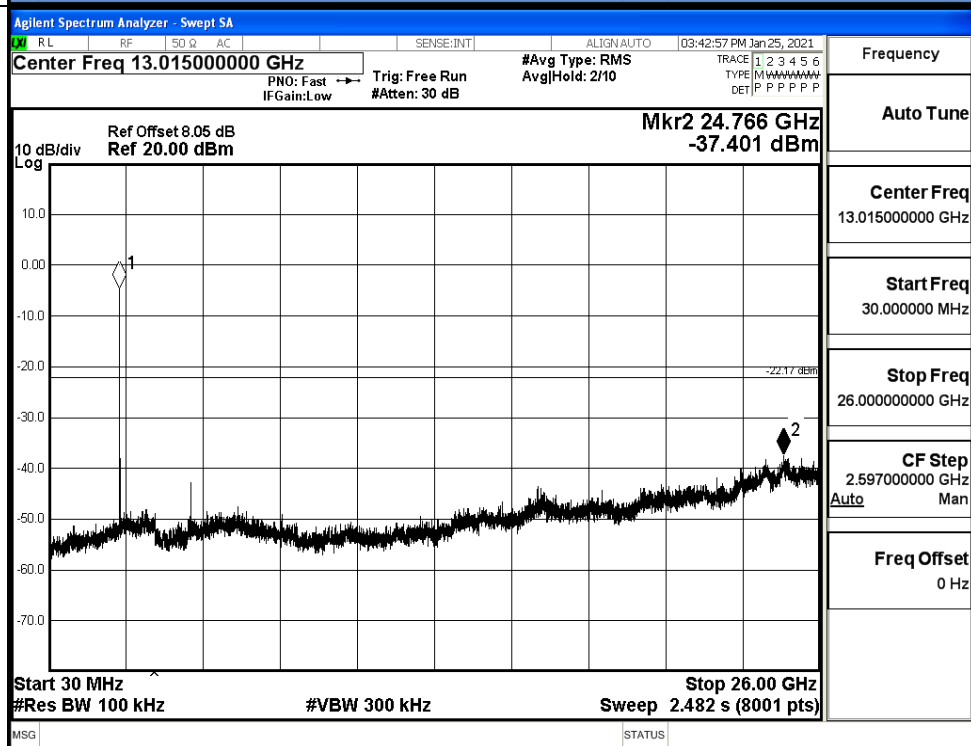


## 11B LCH Graphs

Pref/11B/LCH

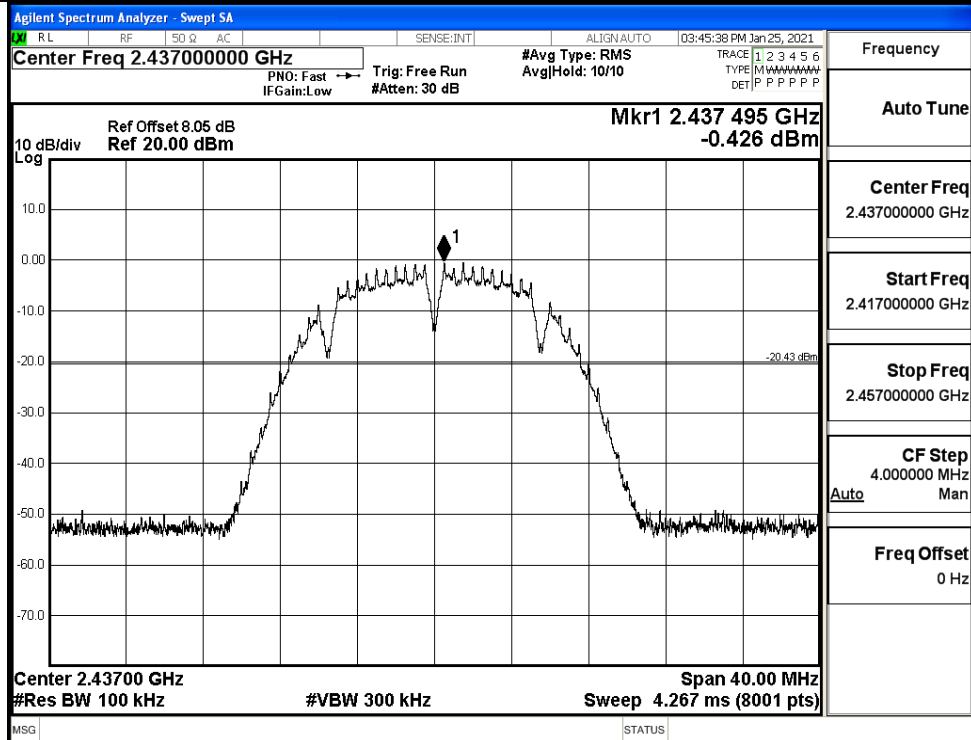


Puw/11B/LCH

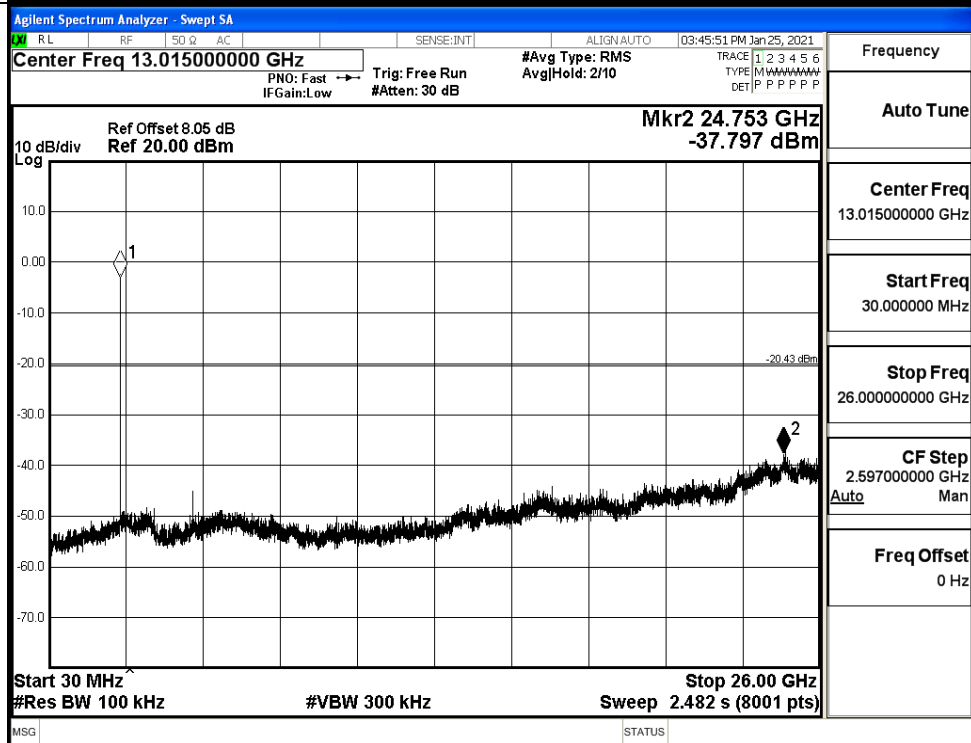


## 11B MCH Graphs

Pref/11B/MCH

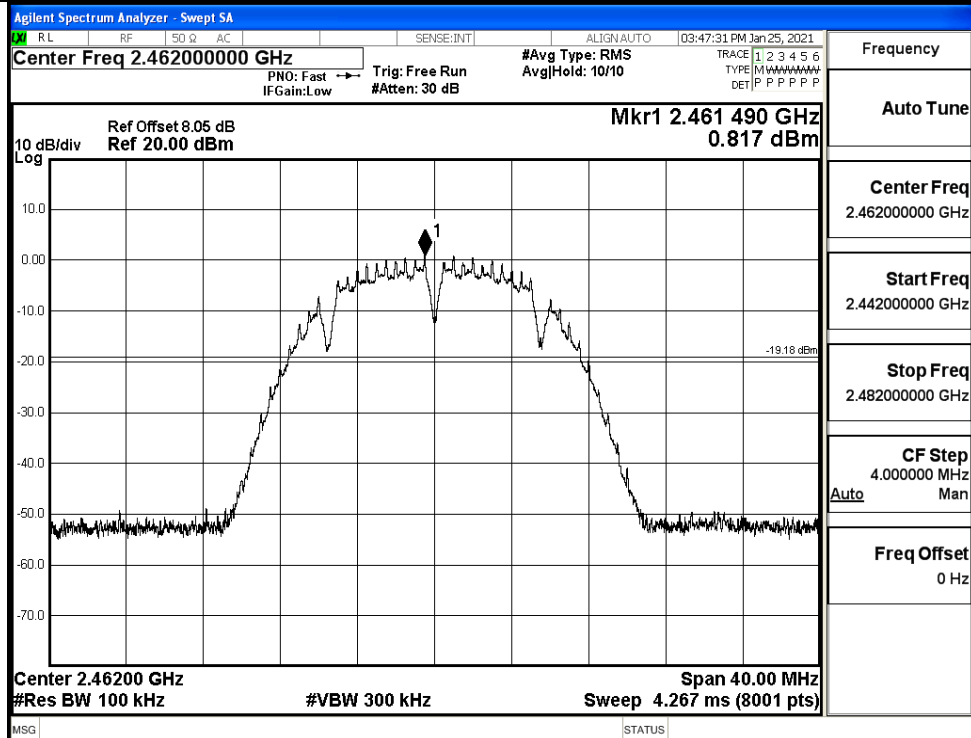


Puw/11B/MCH

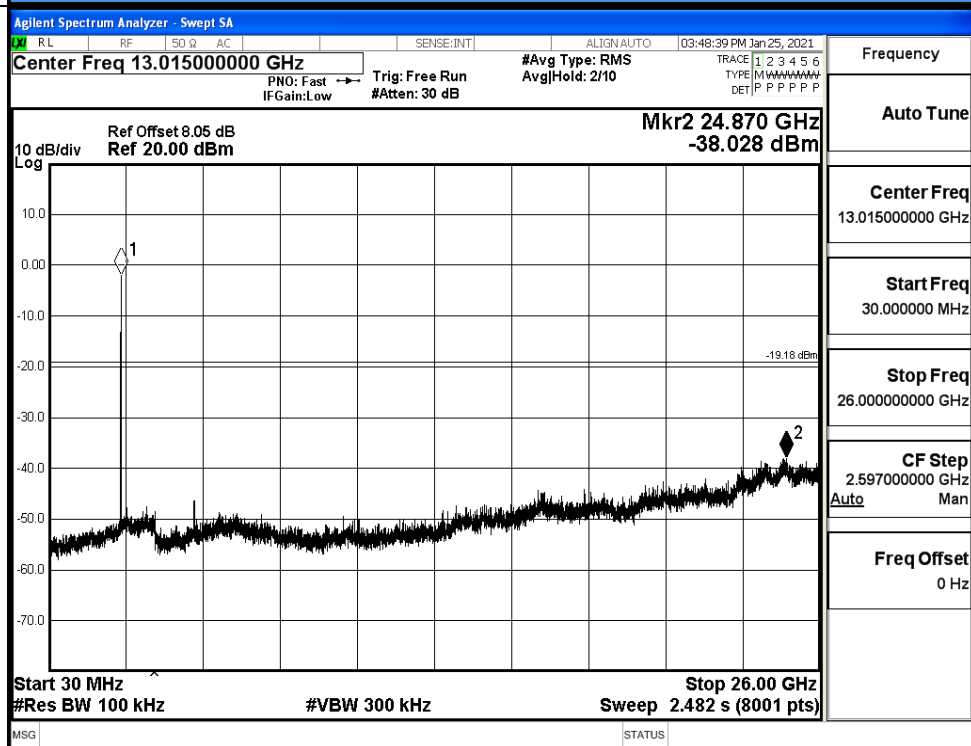


## 11B HCH Graphs

Pref/11B/HCH

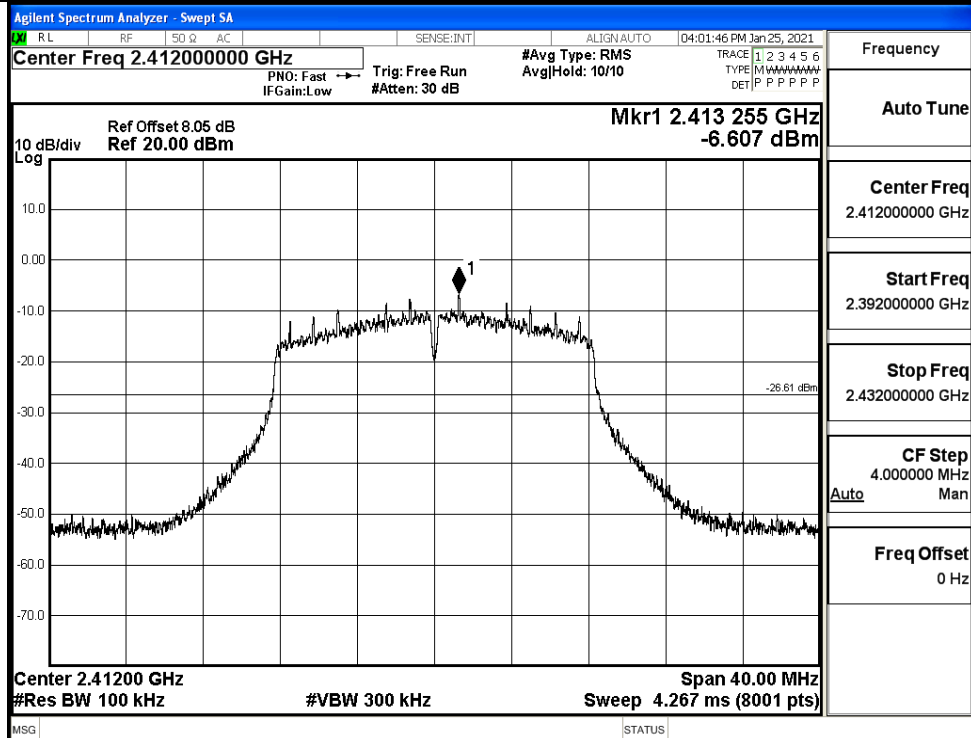


Puw/11B/HCH

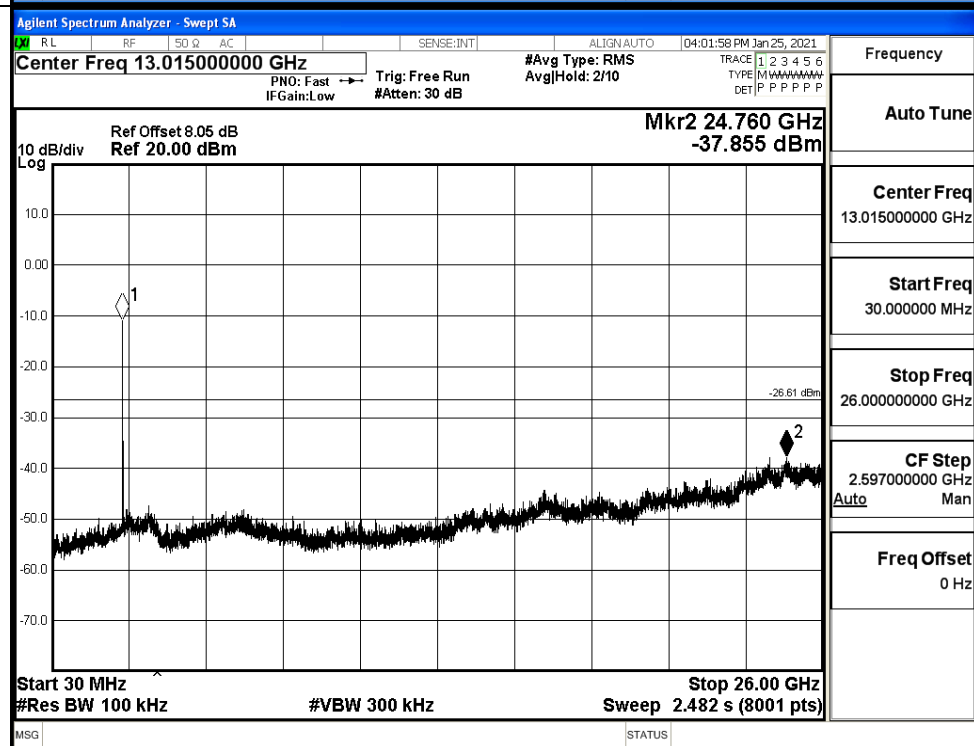


## 11G\_LCH\_Graphs

Pref/11G/LCH

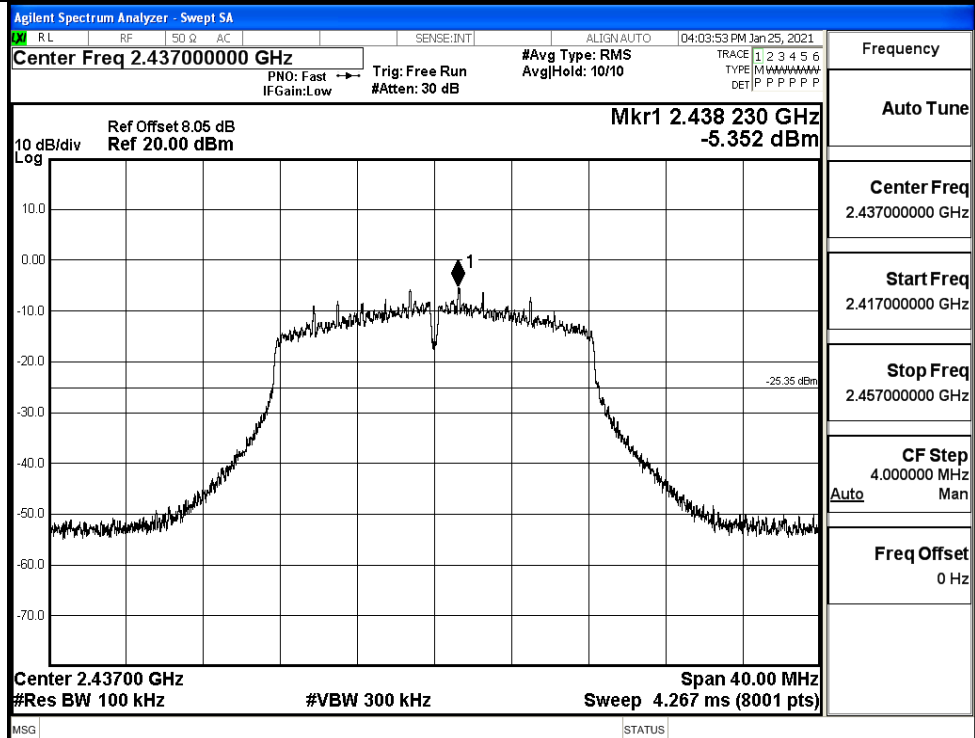


Puw/11G/LCH

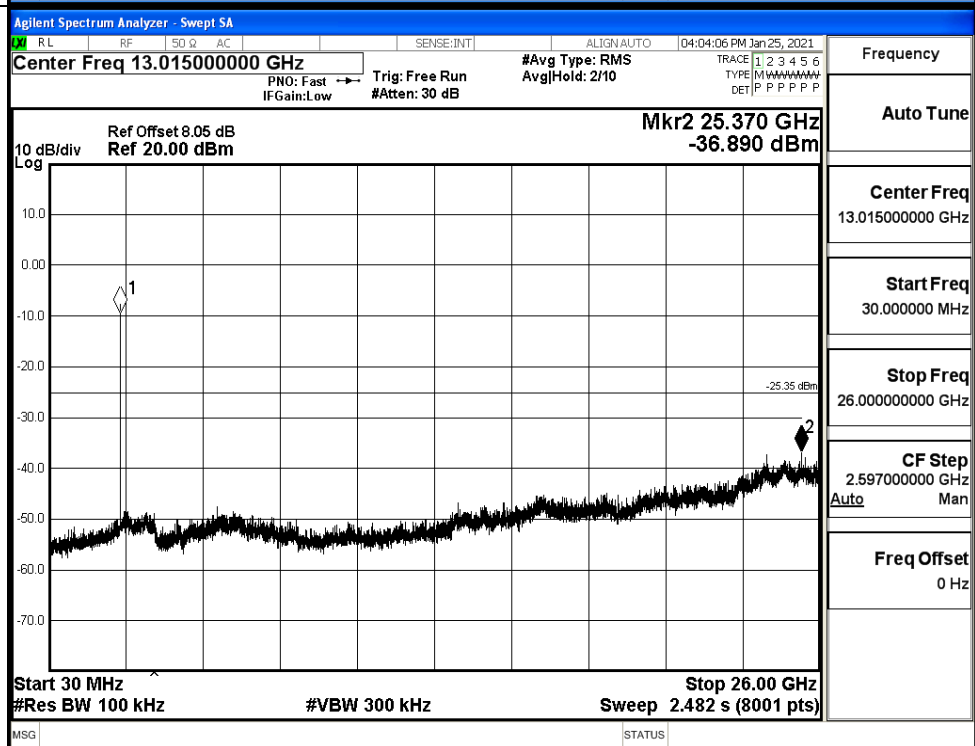


## 11G MCH Graphs

Pref/11G/MCH

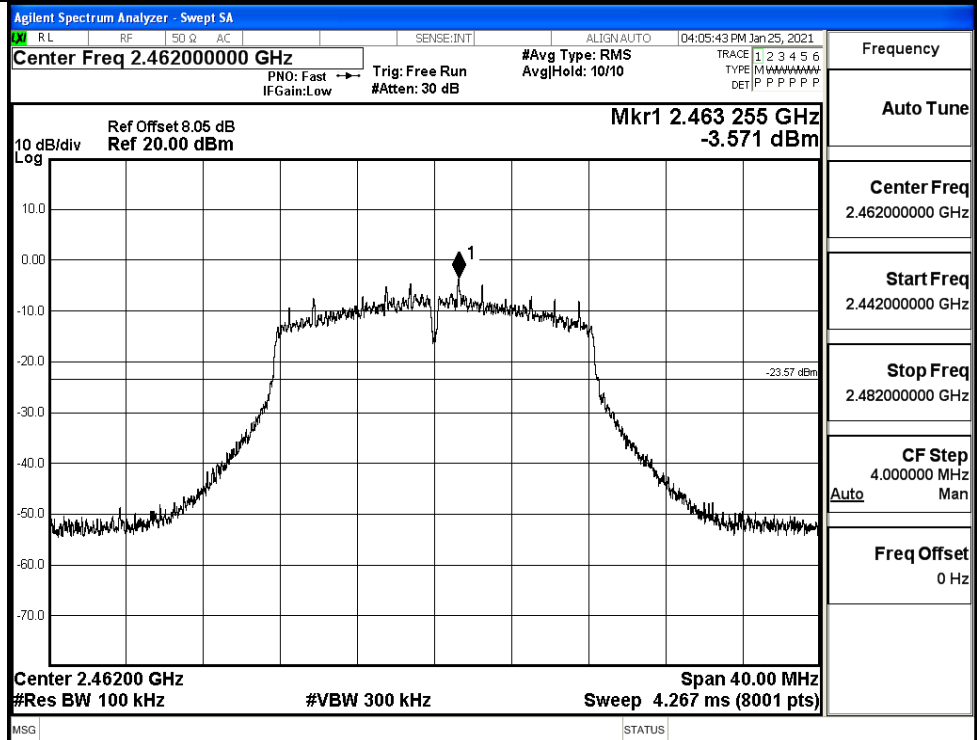


Puw/11G/MCH

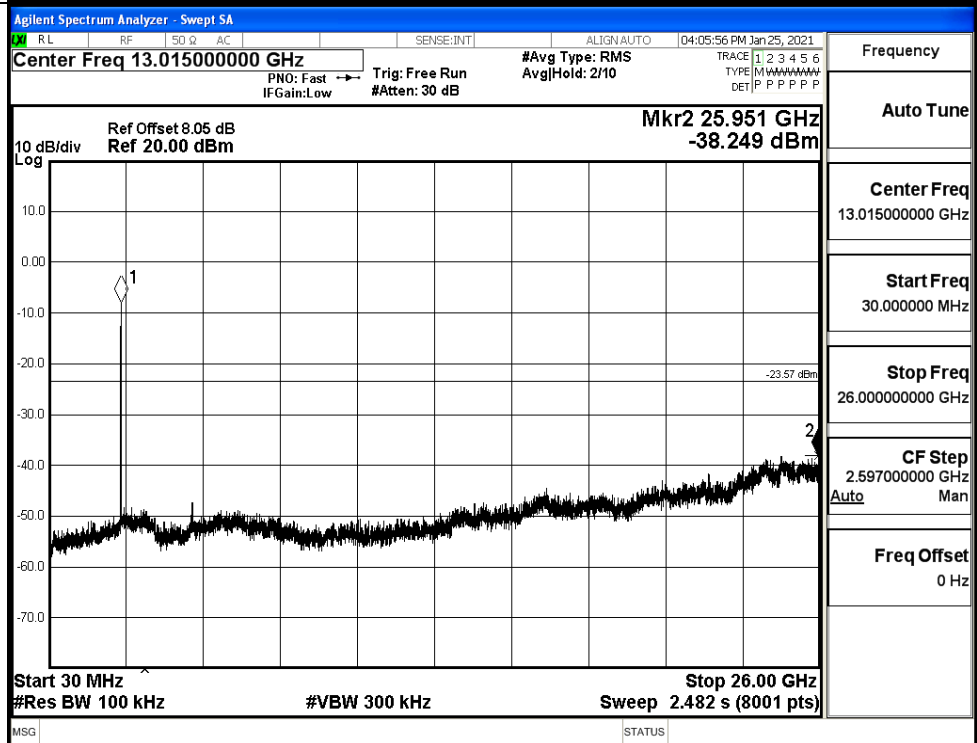


## 11G HCH Graphs

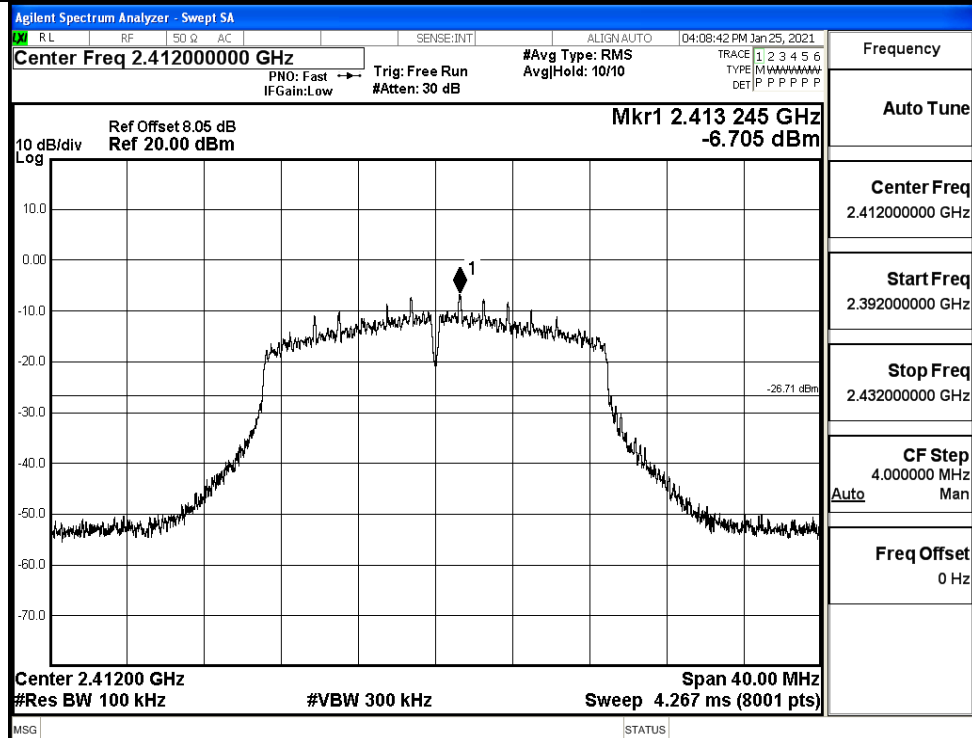
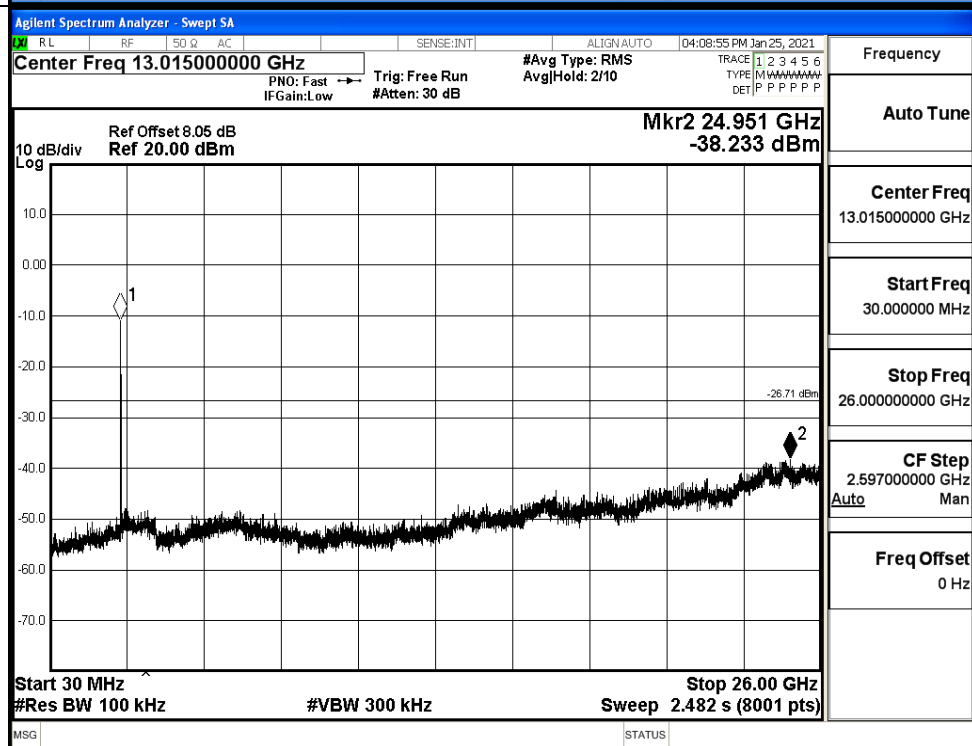
Pref/11G/HCH



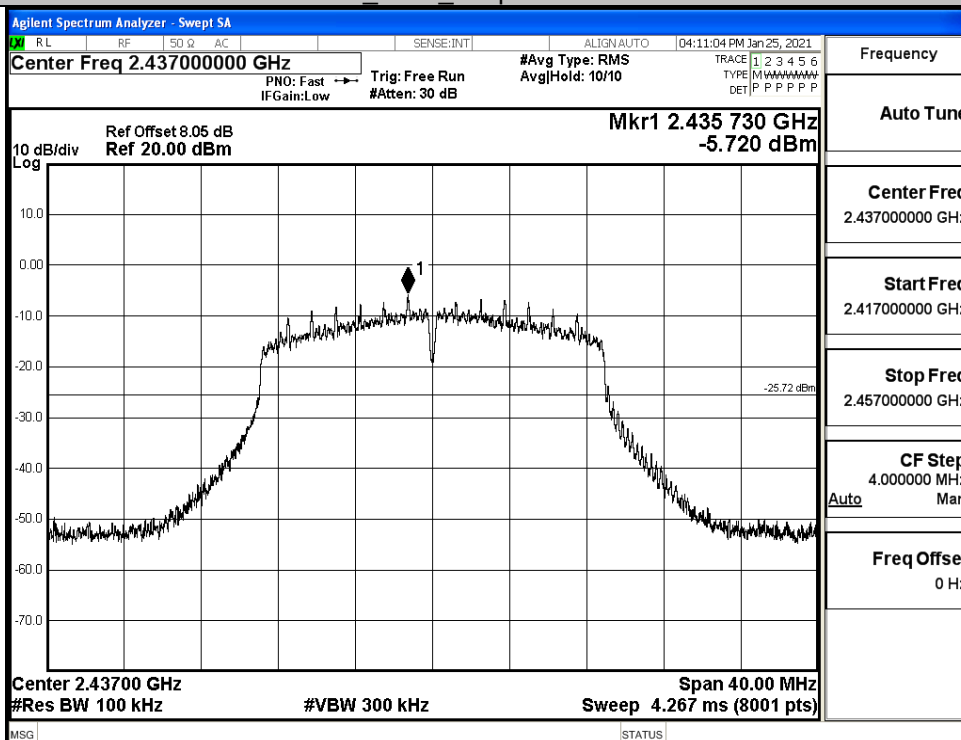
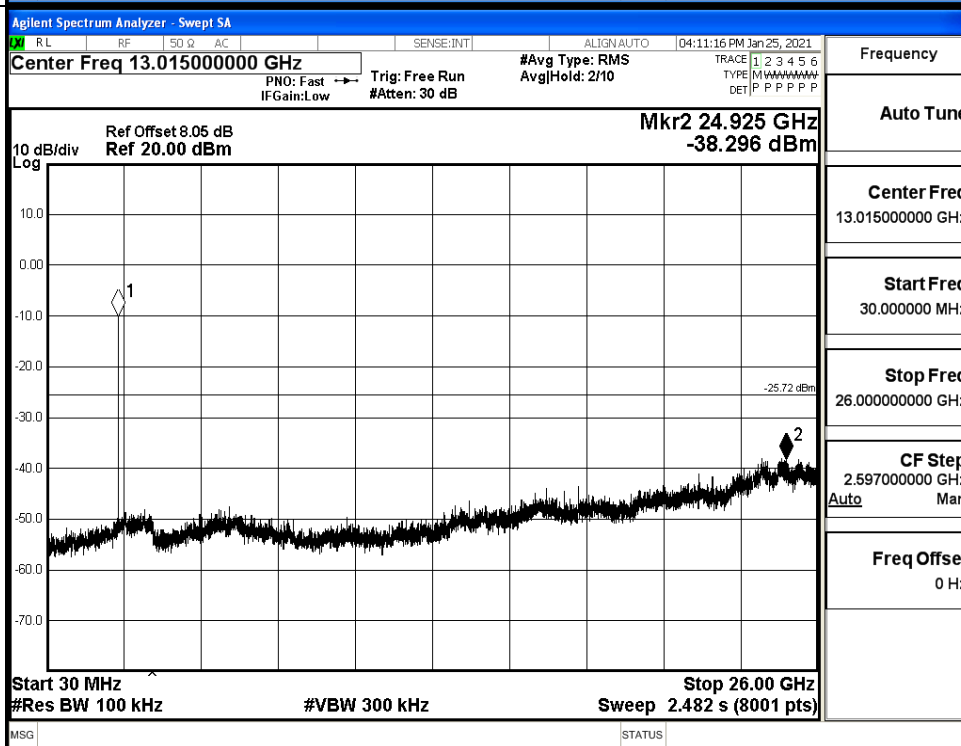
Puw/11G/HCH



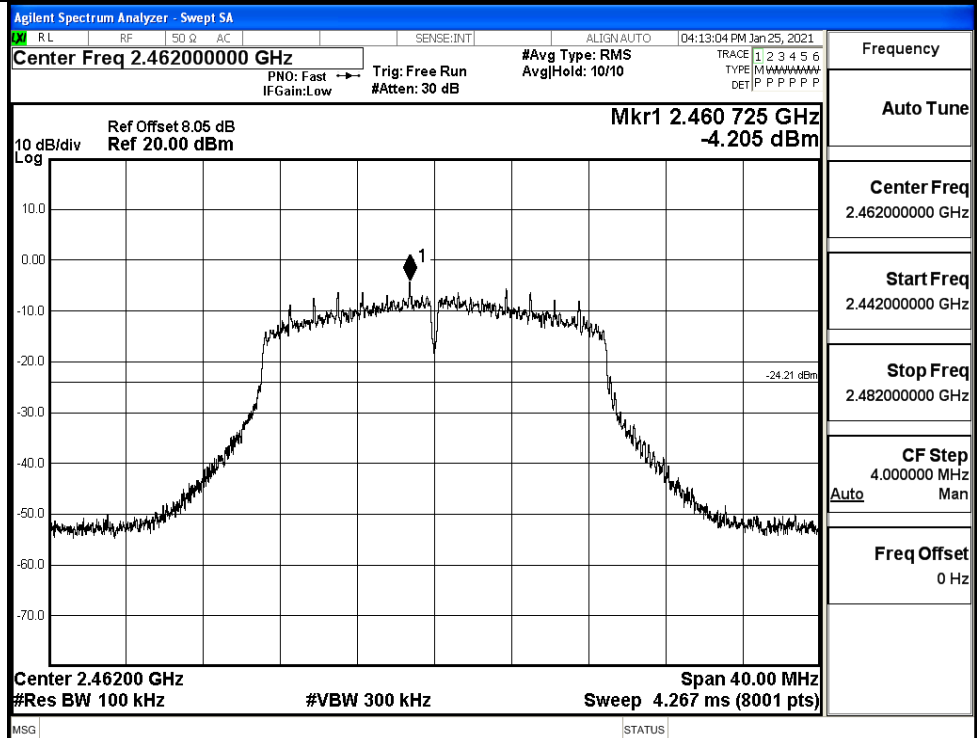
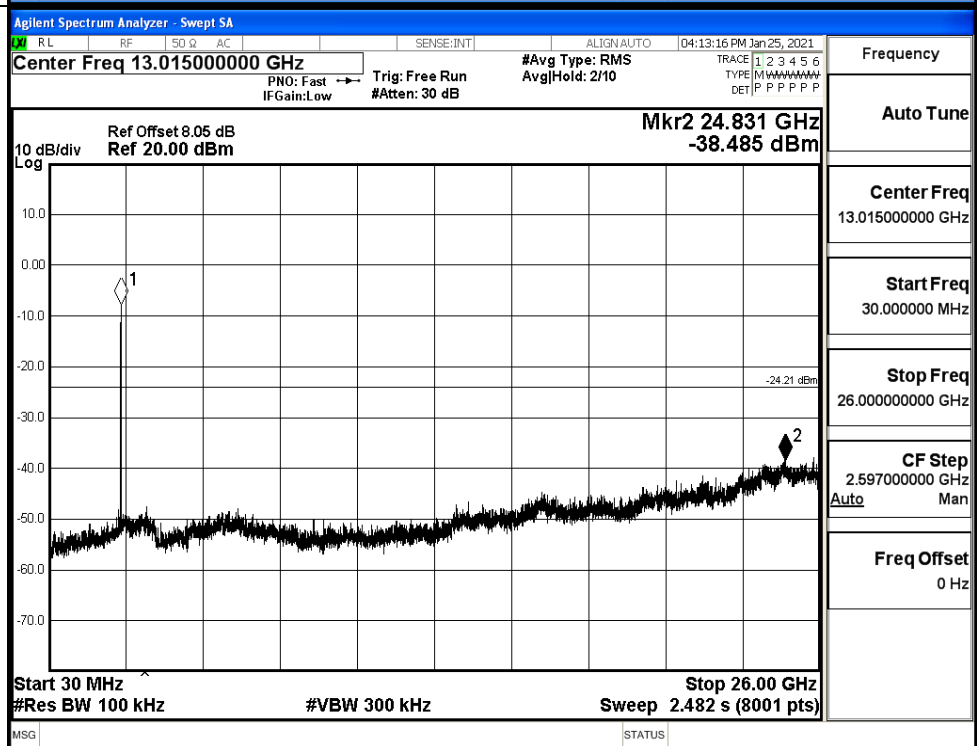
## 11N20SISO LCH Graphs

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

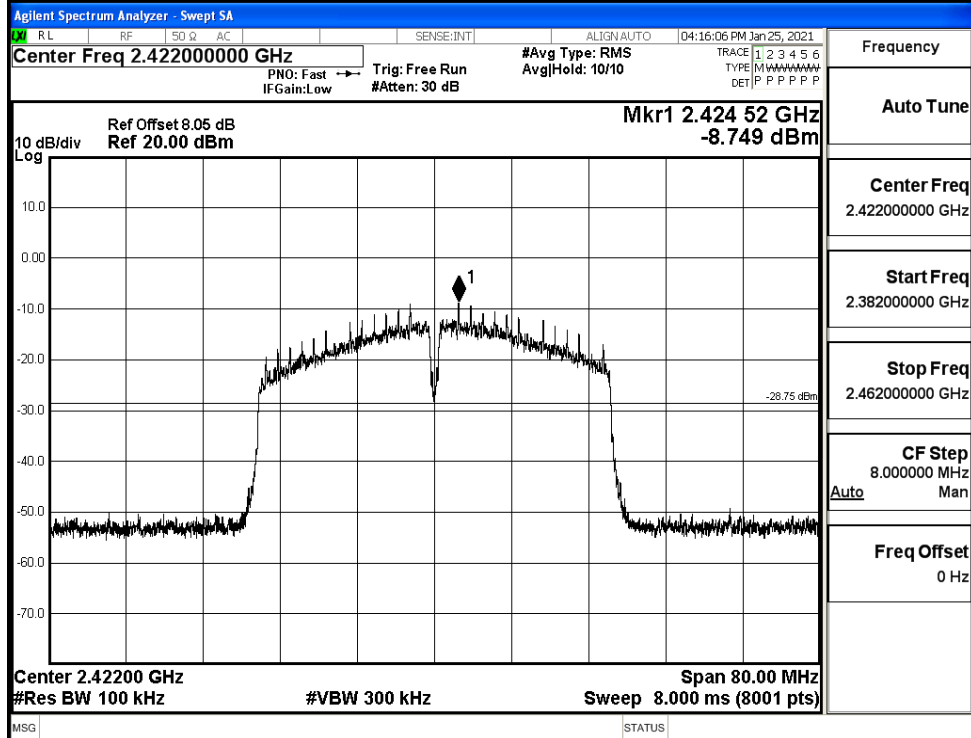
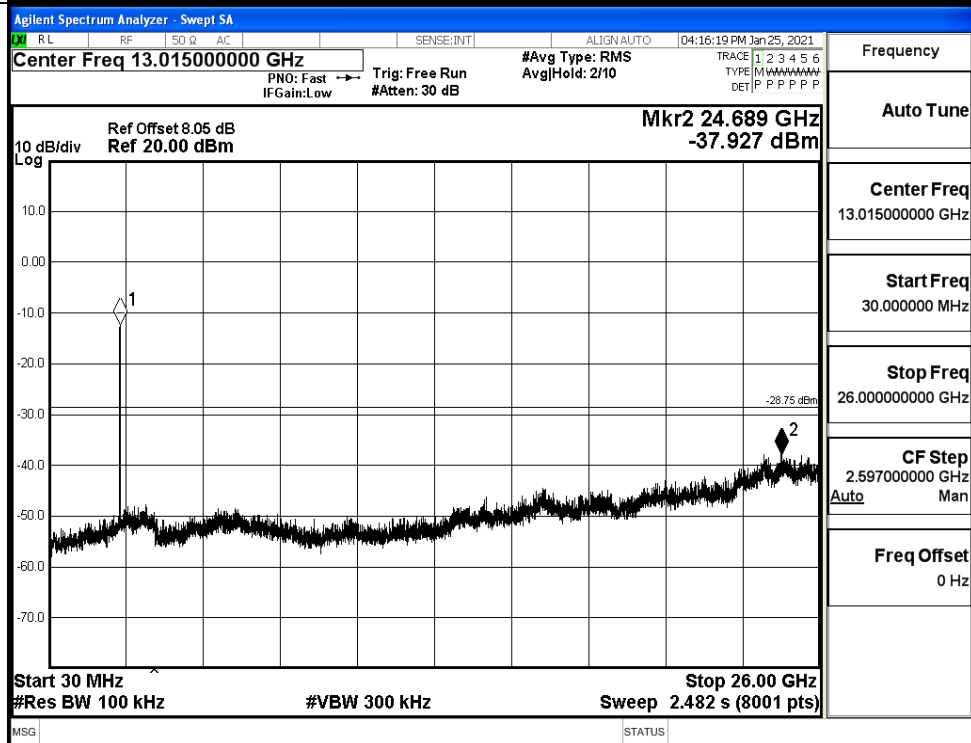
## 11N20SISO\_MCH\_Graphs

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

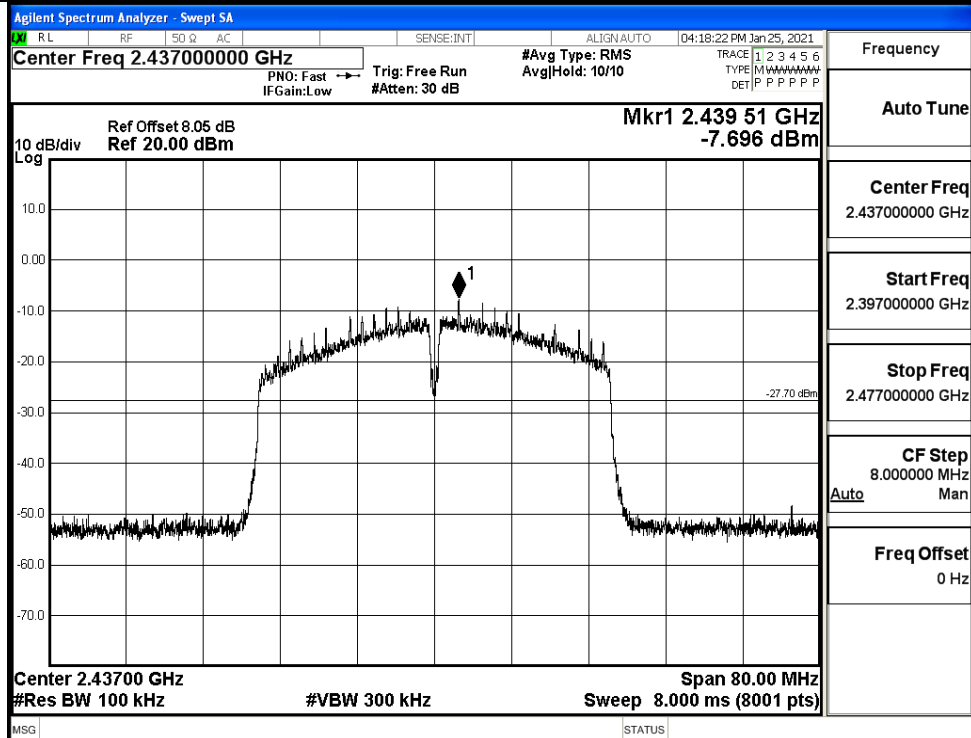
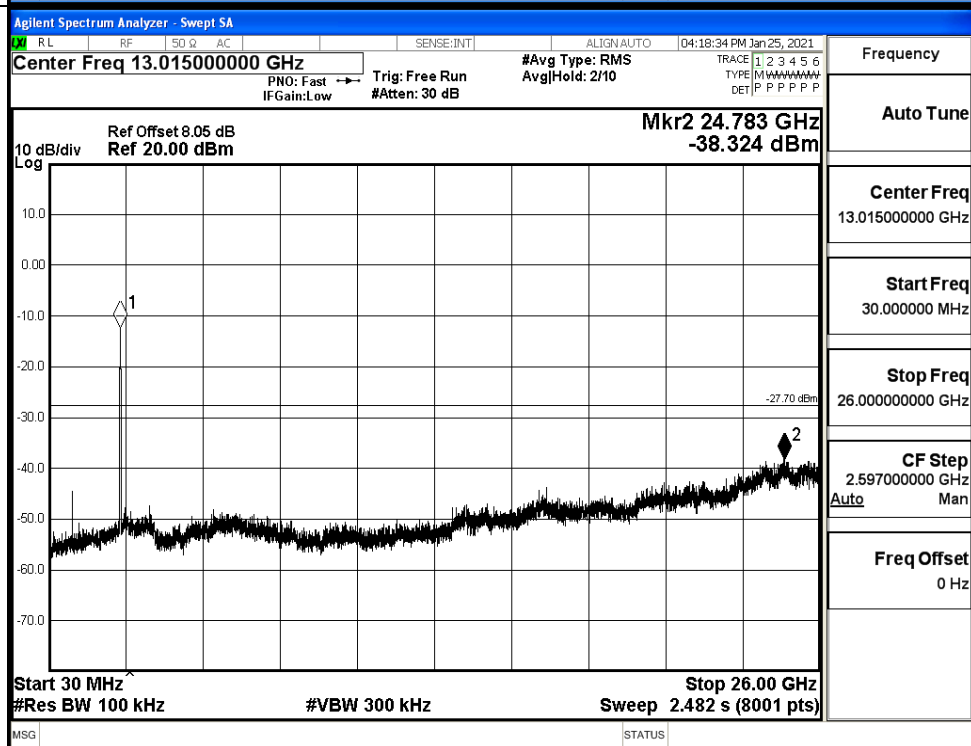
## 11N20SISO HCH Graphs

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

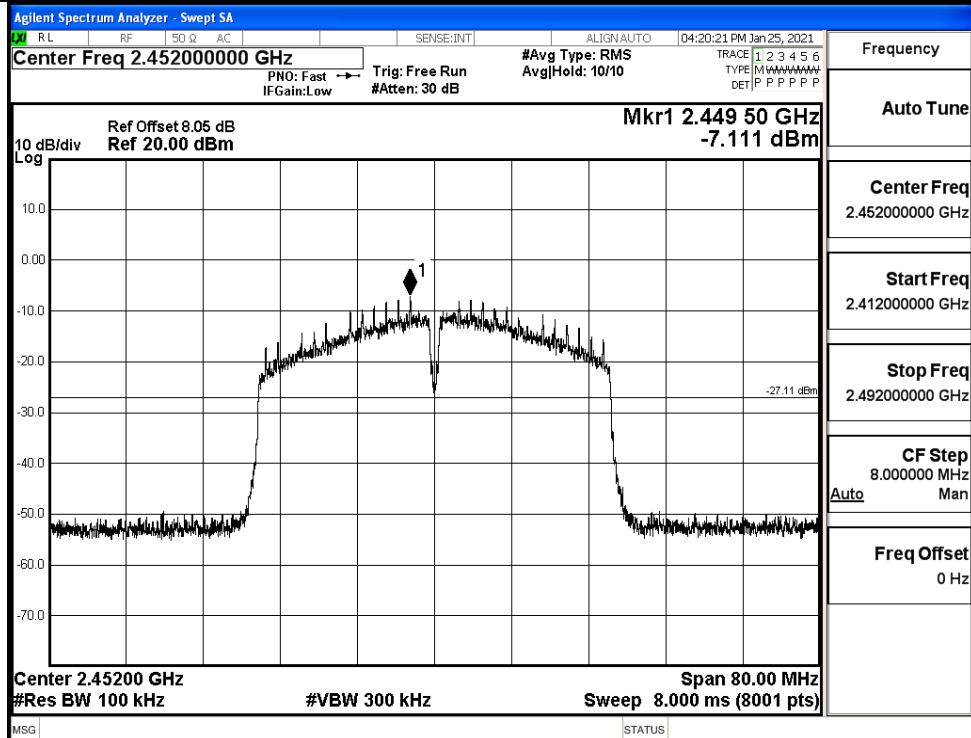
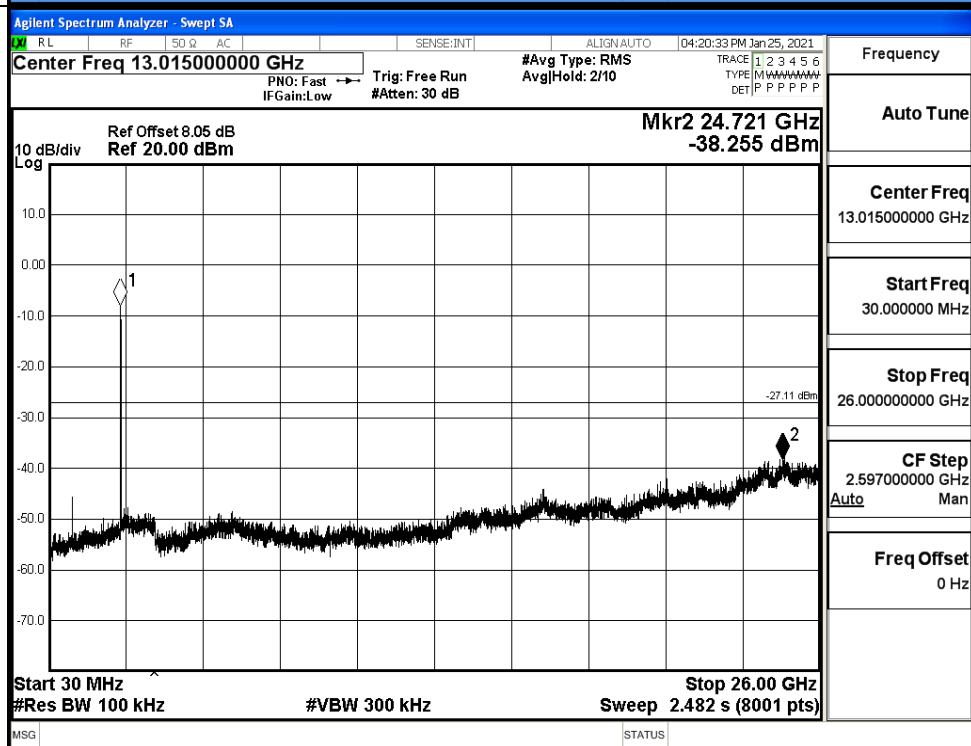
## 11N40SISO LCH Graphs

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

## 11N40SISO\_MCH\_Graphs

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

## 11N40SISO HCH Graphs

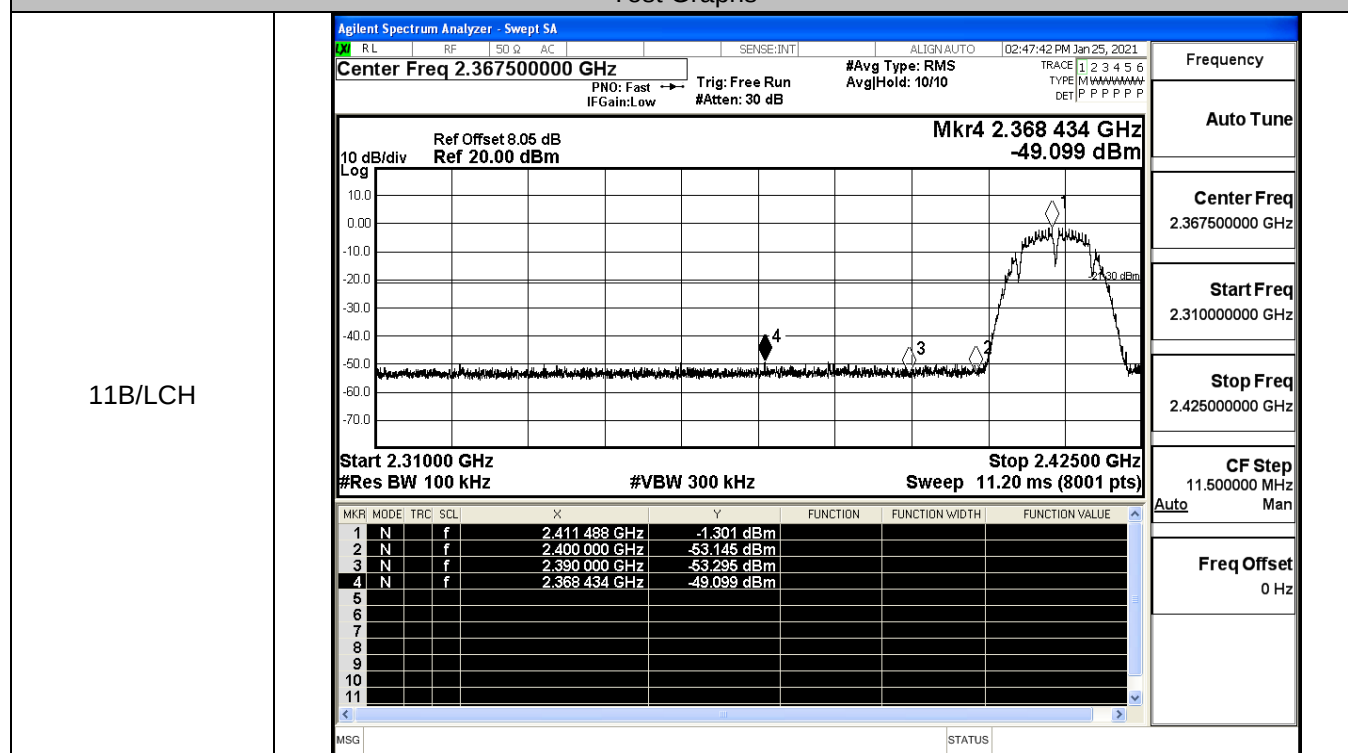
Pref/11N40  
SISO/HCHPuw/11N40  
SISO/HCH

## A.7 Band-edge for RF Conducted Emissions

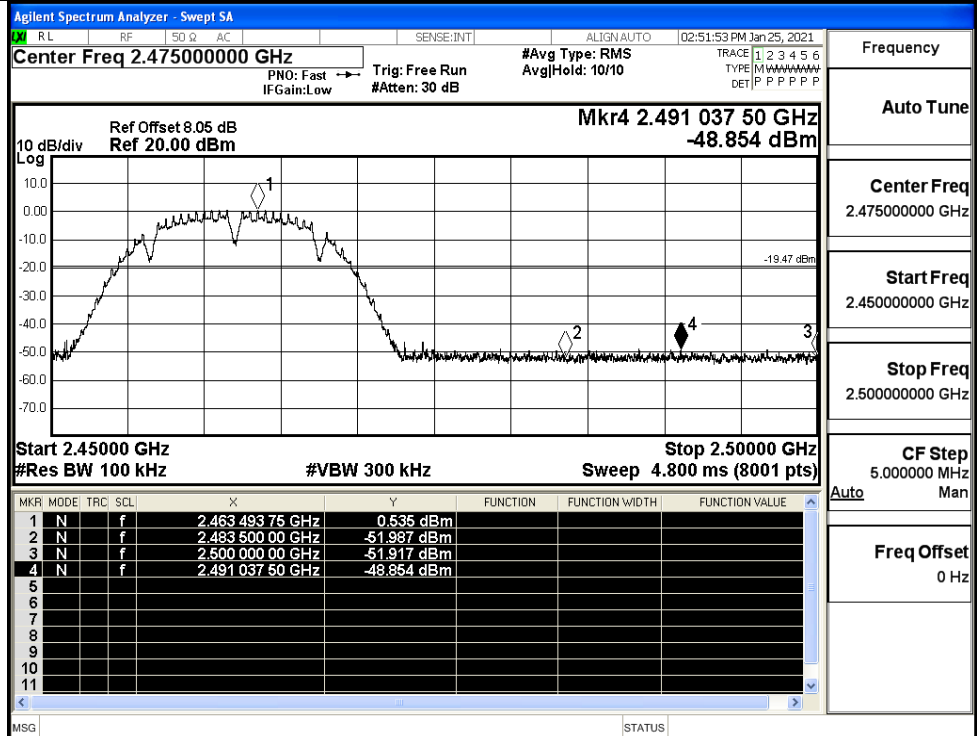
ANT0

| Mode      | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|--------------------|--------------------------|-------------|---------|
| 11B       | LCH     | -1.301             | -49.099                  | -21.3       | PASS    |
|           | HCH     | 0.535              | -48.854                  | -19.47      | PASS    |
| 11G       | LCH     | -6.769             | -50.123                  | -26.77      | PASS    |
|           | HCH     | -5.290             | -49.570                  | -25.29      | PASS    |
| 11N20SISO | LCH     | -7.829             | -49.938                  | -27.83      | PASS    |
|           | HCH     | -4.777             | -49.365                  | -24.78      | PASS    |
| 11N40SISO | LCH     | -9.528             | -49.817                  | -29.53      | PASS    |
|           | HCH     | -8.007             | -49.988                  | -28.01      | PASS    |

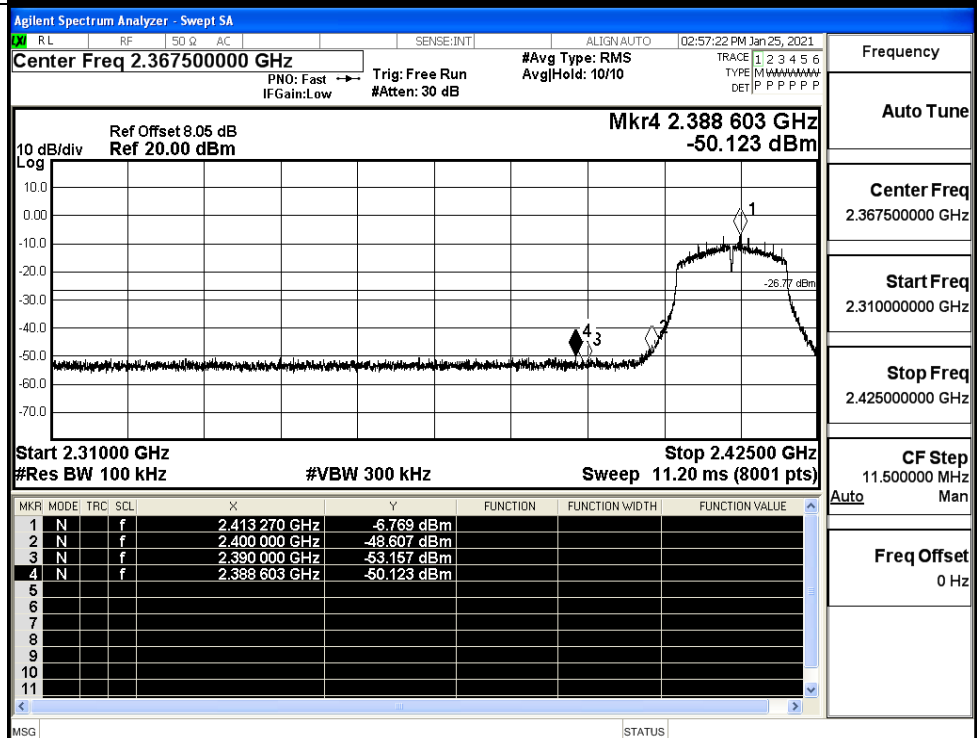
Test Graphs



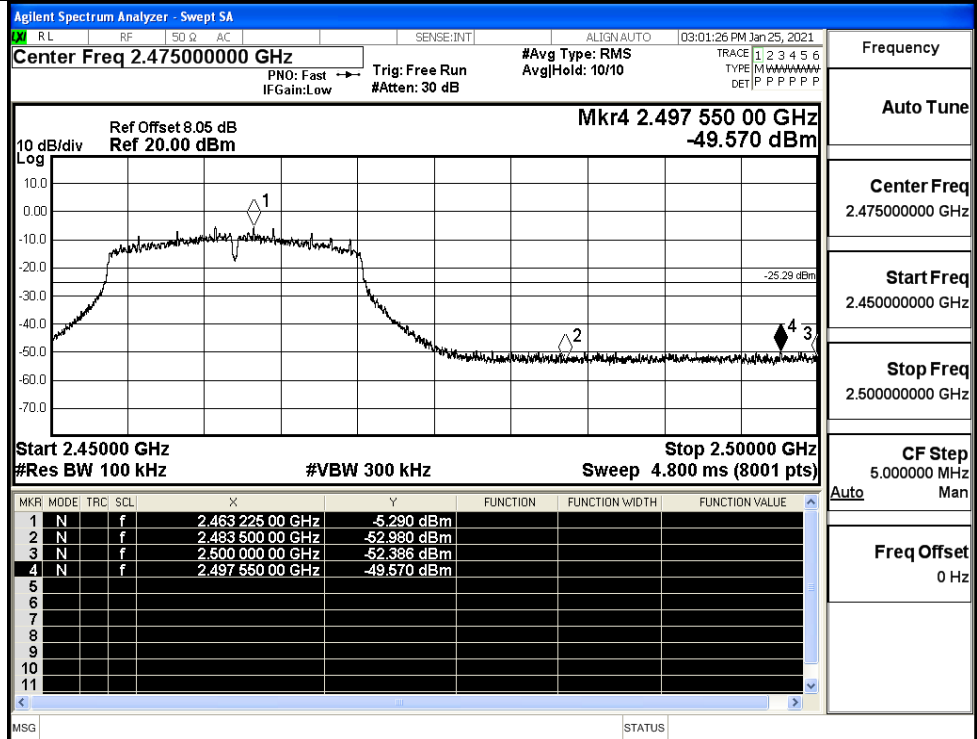
11B/HCH



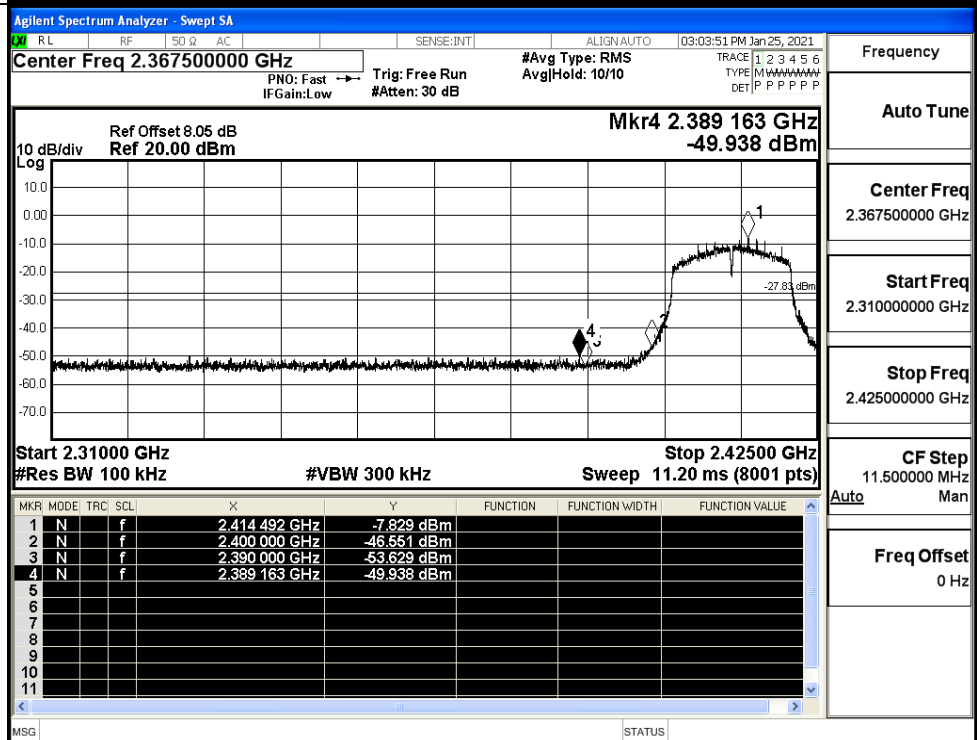
11G/LCH



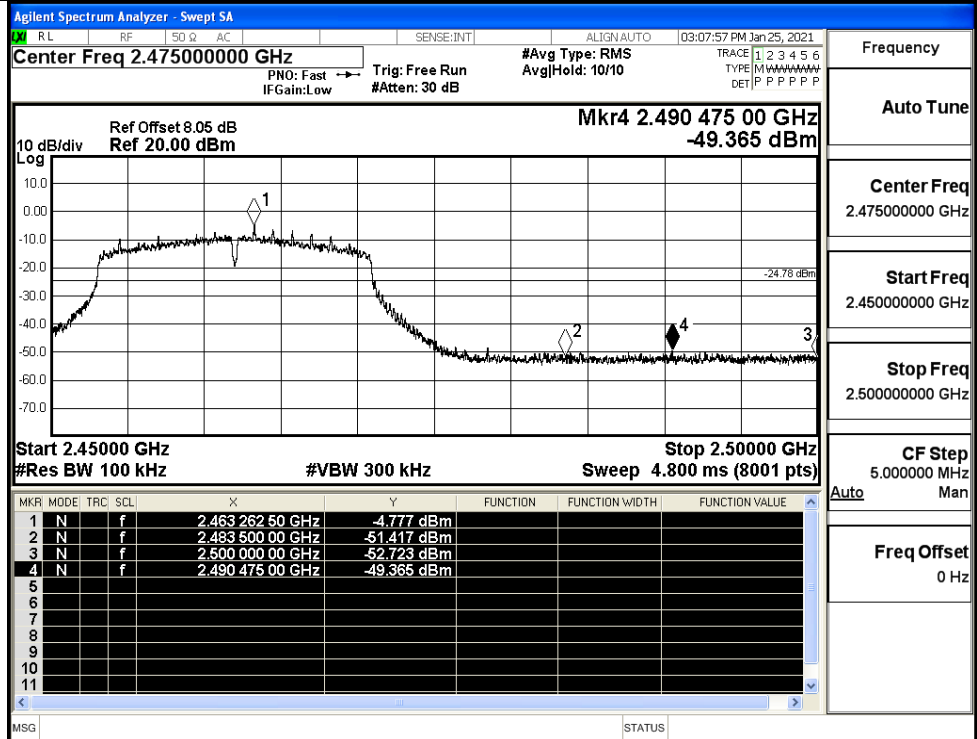
11G/HCH



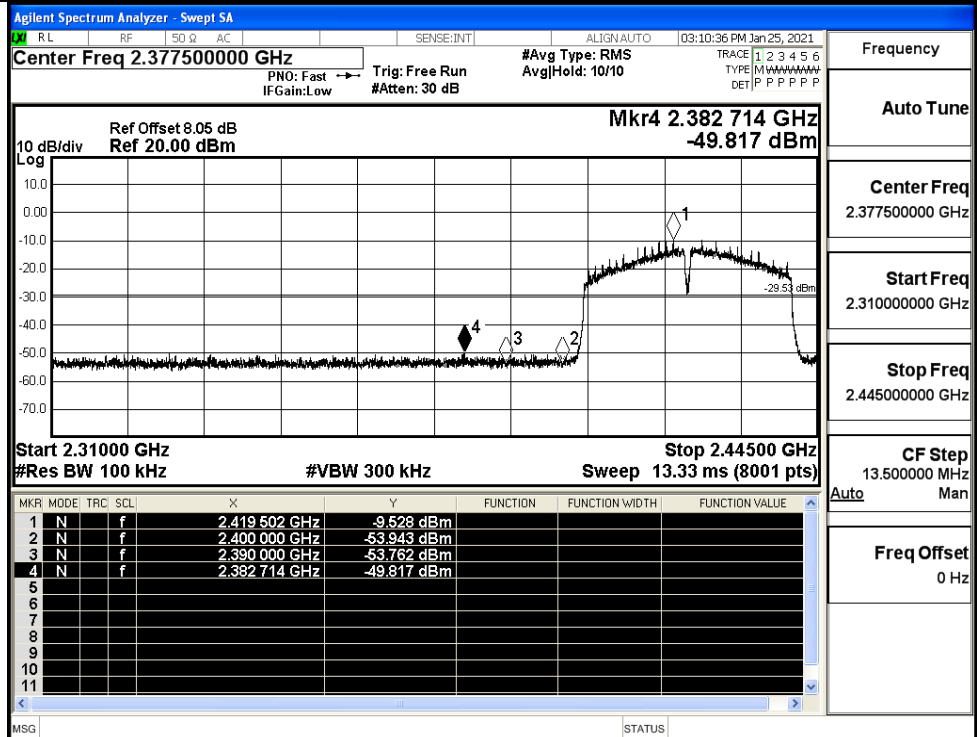
11N20SISO/LCH



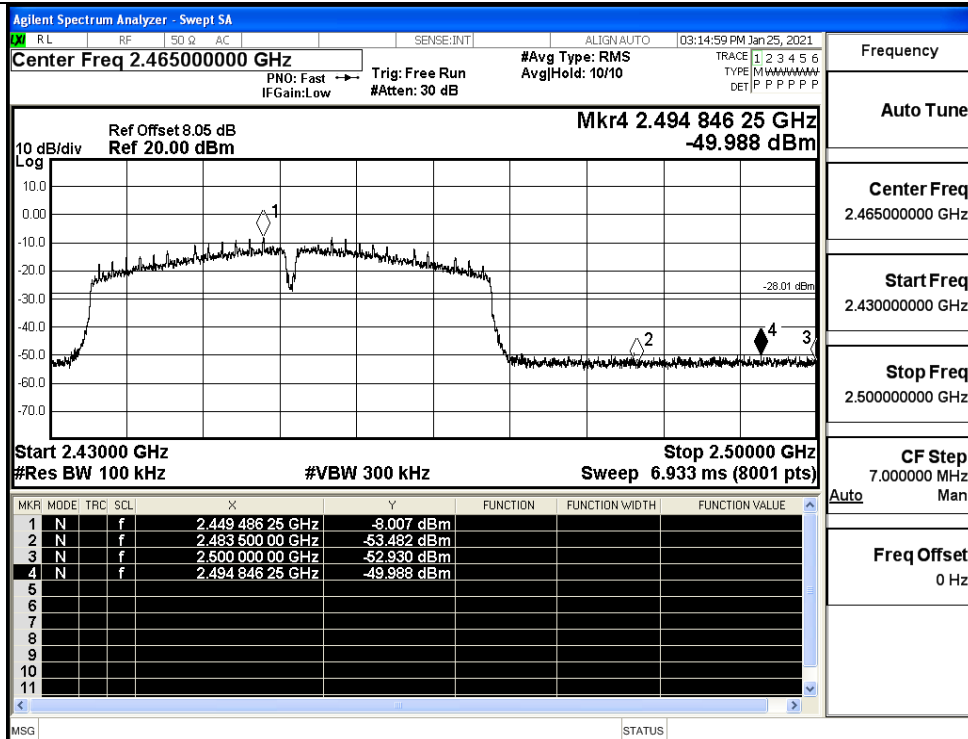
11N20SISO/HCH



11N40SISO/LCH



11N40SISO/HCH

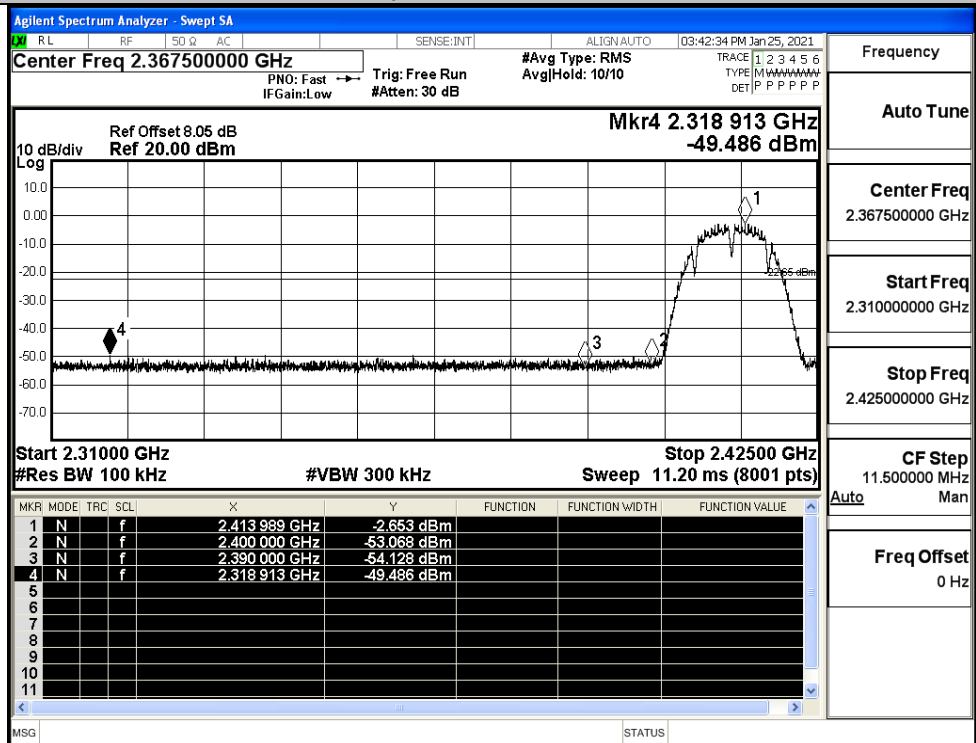


## ANT1

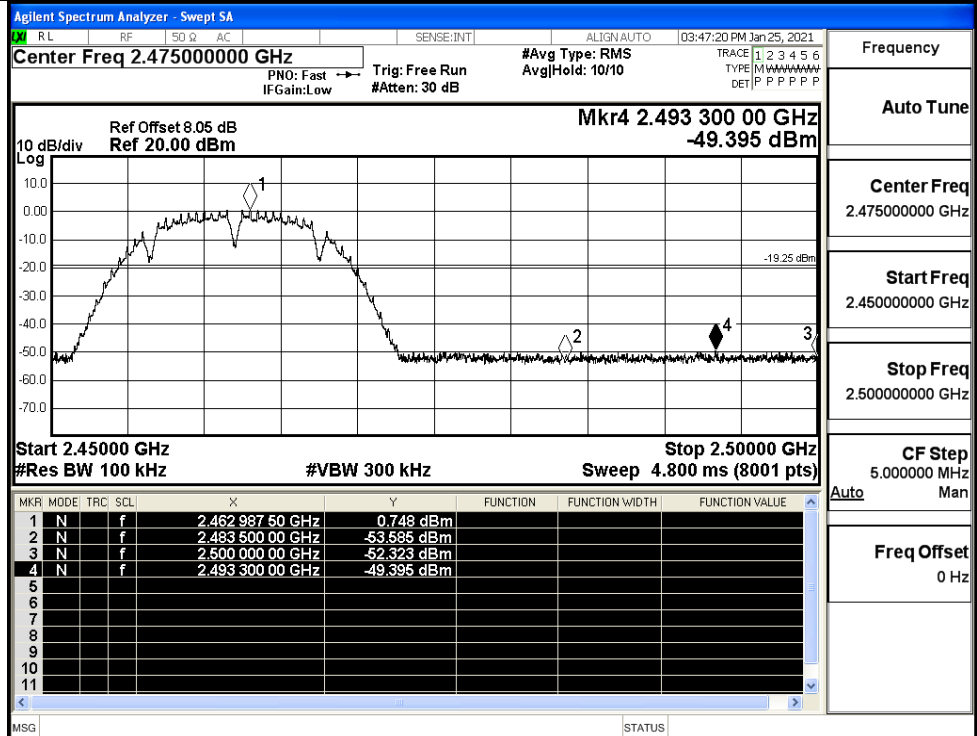
| Mode      | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|--------------------|--------------------------|-------------|---------|
| 11B       | LCH     | -2.653             | -49.486                  | -22.65      | PASS    |
|           | HCH     | 0.748              | -49.395                  | -19.25      | PASS    |
| 11G       | LCH     | -6.570             | -50.180                  | -26.57      | PASS    |
|           | HCH     | -4.461             | -49.012                  | -24.46      | PASS    |
| 11N20SISO | LCH     | -7.551             | -49.414                  | -27.55      | PASS    |
|           | HCH     | -4.218             | -47.414                  | -24.22      | PASS    |
| 11N40SISO | LCH     | -9.611             | -49.951                  | -29.61      | PASS    |
|           | HCH     | -7.014             | -49.504                  | -27.01      | PASS    |

## Test Graphs

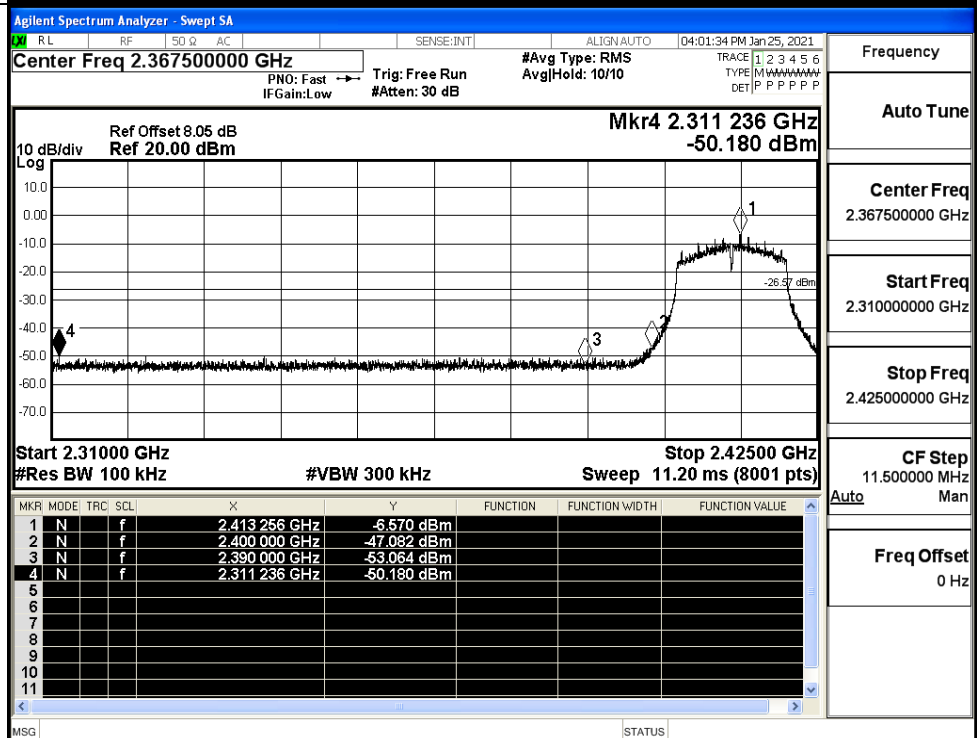
11B/LCH



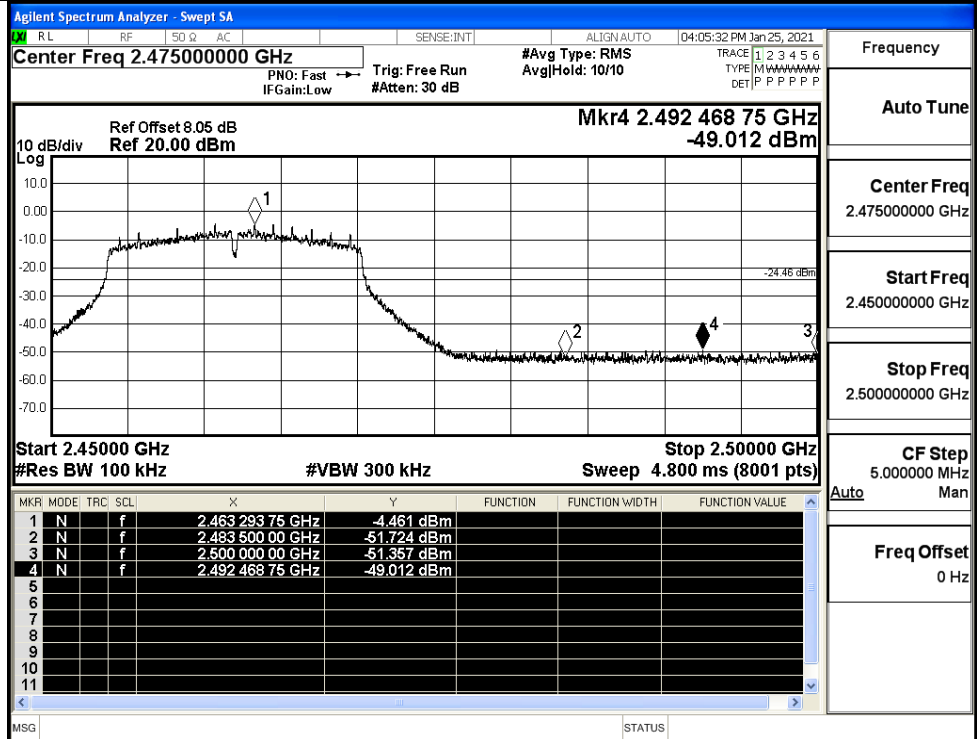
11B/HCH



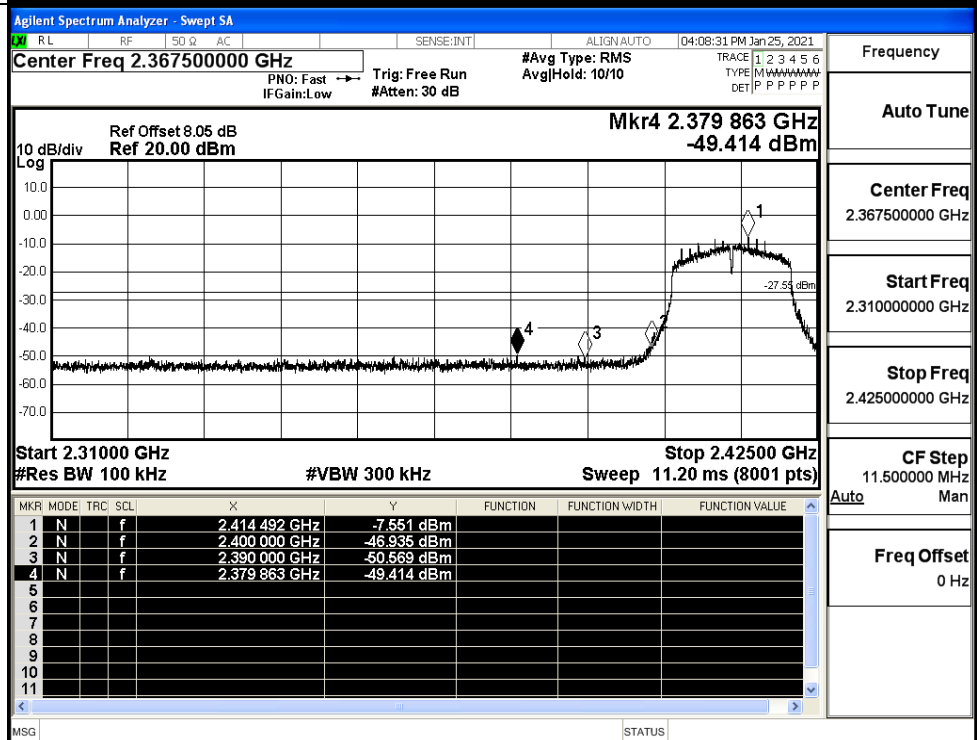
11G/LCH



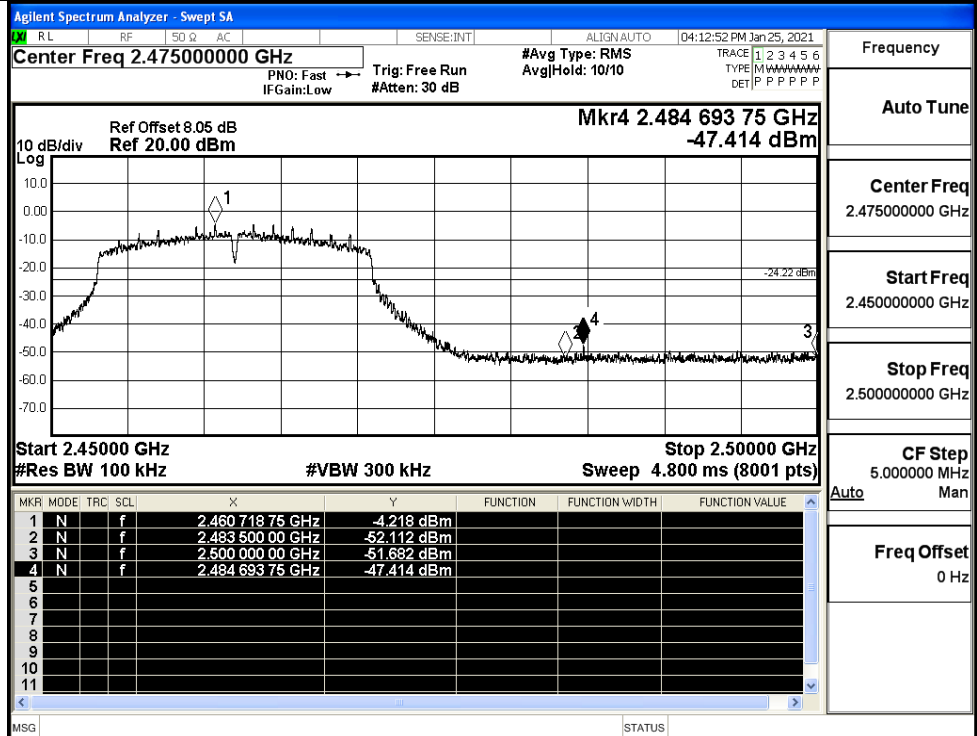
11G/HCH



11N20SISO/LCH



11N20SISO/HCH



Frequency

Auto Tune

Center Freq

2.475000000 GHz

Start Freq

2.450000000 GHz

Stop Freq

2.500000000 GHz

CF Step

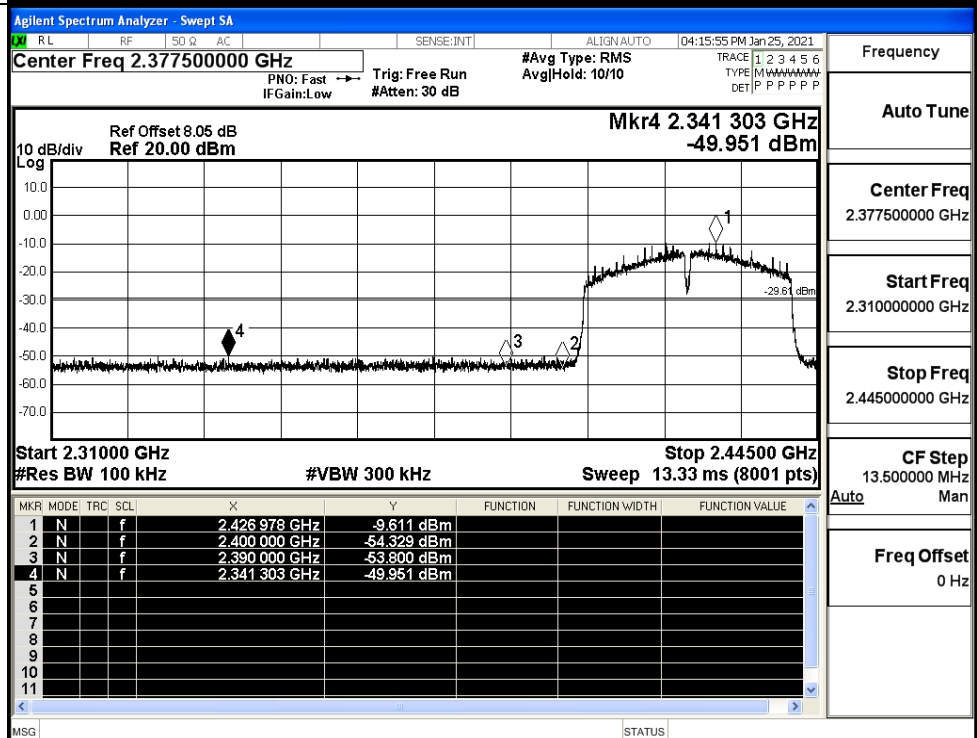
5.000000 MHz

Auto Man

Freq Offset

0 Hz

11N40SISO/LCH



Frequency

Auto Tune

Center Freq

2.377500000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.445000000 GHz

CF Step

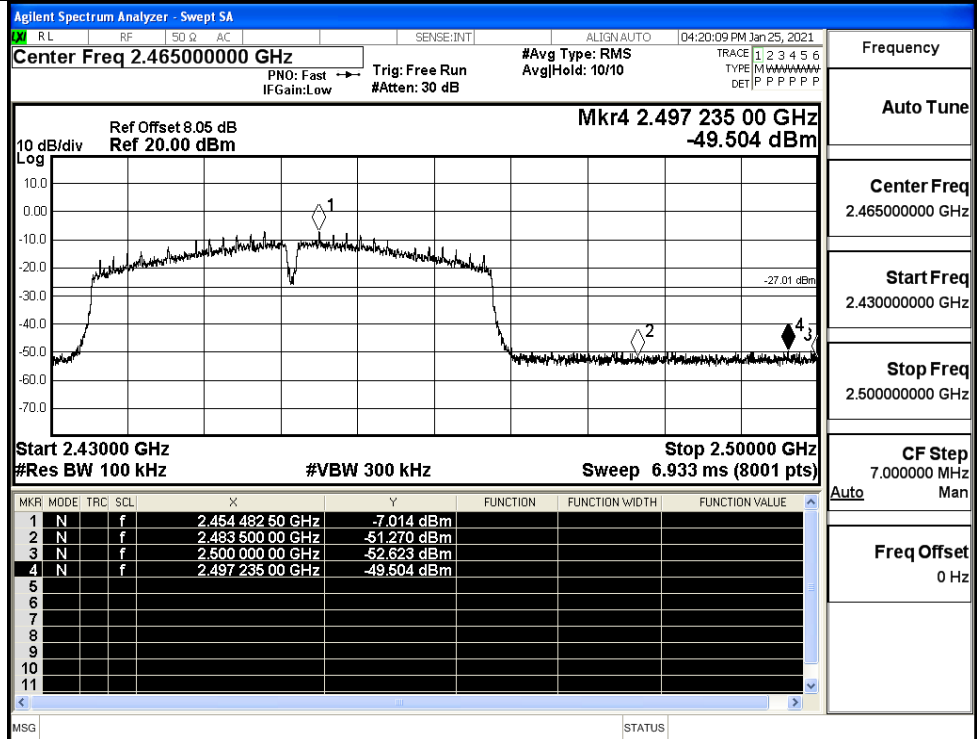
13.500000 MHz

Auto Man

Freq Offset

0 Hz

11N40SISO/HCH



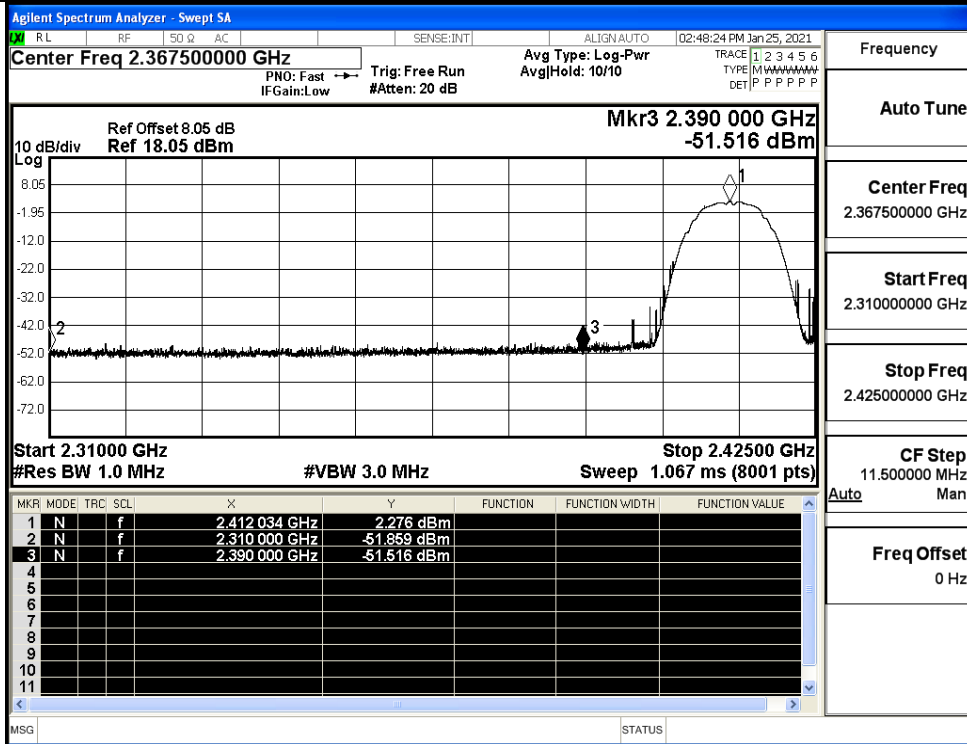
## A.8 Restrict-band band-edge measurements

ANT0

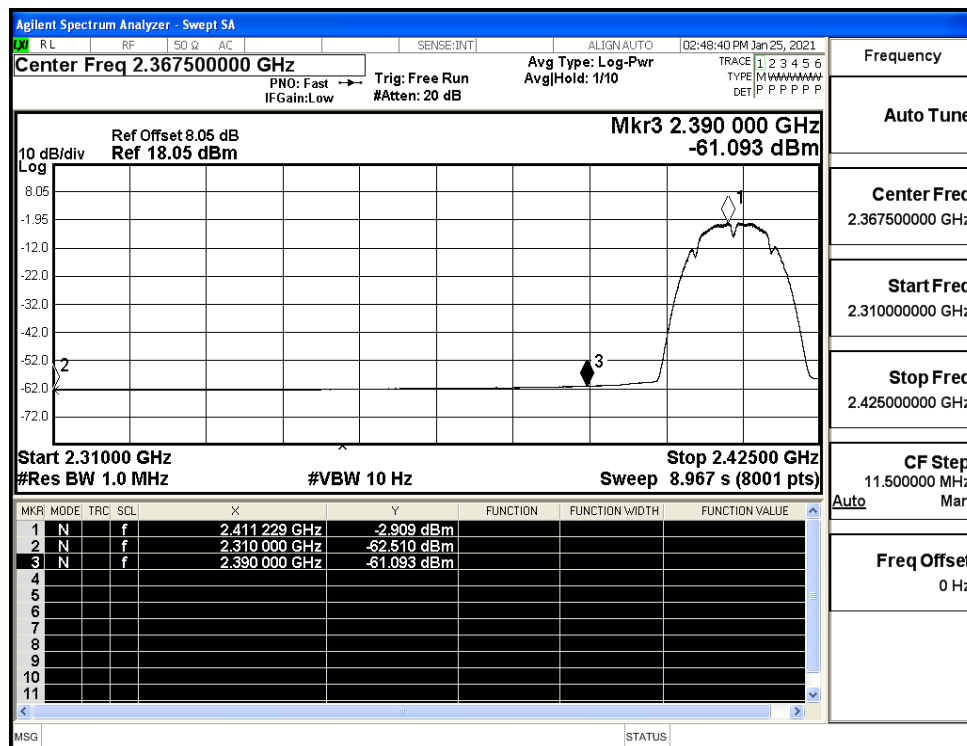
| Test Mode  | Test Channel | Ant  | Freq.  | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|------------|--------------|------|--------|-------------|------|---------------|------------|----------|----------------|---------|
| 11B        | 2412         | Ant0 | 2310.0 | -51.86      | 5.0  | 0             | 48.37      | PEAK     | 74             | PASS    |
|            | 2412         | Ant0 | 2310.0 | -62.51      | 5.0  | 0             | 37.72      | AV       | 54             | PASS    |
|            | 2412         | Ant0 | 2390.0 | -51.52      | 5.0  | 0             | 48.71      | PEAK     | 74             | PASS    |
|            | 2412         | Ant0 | 2390.0 | -61.09      | 5.0  | 0             | 39.14      | AV       | 54             | PASS    |
|            | 2462         | Ant0 | 2483.5 | -46.85      | 5.0  | 0             | 53.38      | PEAK     | 74             | PASS    |
|            | 2462         | Ant0 | 2483.5 | -58.83      | 5.0  | 0             | 41.40      | AV       | 54             | PASS    |
|            | 2462         | Ant0 | 2500.0 | -48.15      | 5.0  | 0             | 52.08      | PEAK     | 74             | PASS    |
|            | 2462         | Ant0 | 2500.0 | -59.27      | 5.0  | 0             | 40.96      | AV       | 54             | PASS    |
| 11G        | 2412         | Ant0 | 2310.0 | -53.56      | 5.0  | 0             | 46.67      | PEAK     | 74             | PASS    |
|            | 2412         | Ant0 | 2310.0 | -63.27      | 5.0  | 0             | 36.96      | AV       | 54             | PASS    |
|            | 2412         | Ant0 | 2390.0 | -51.71      | 5.0  | 0             | 48.52      | PEAK     | 74             | PASS    |
|            | 2412         | Ant0 | 2390.0 | -62.43      | 5.0  | 0             | 37.80      | AV       | 54             | PASS    |
|            | 2462         | Ant0 | 2483.5 | -50.65      | 5.0  | 0             | 49.58      | PEAK     | 74             | PASS    |
|            | 2462         | Ant0 | 2483.5 | -61.20      | 5.0  | 0             | 39.03      | AV       | 54             | PASS    |
|            | 2462         | Ant0 | 2500.0 | -51.15      | 5.0  | 0             | 49.08      | PEAK     | 74             | PASS    |
|            | 2462         | Ant0 | 2500.0 | -61.40      | 5.0  | 0             | 38.83      | AV       | 54             | PASS    |
| 11N20 SISO | 2412         | Ant0 | 2310.0 | -53.54      | 5.0  | 0             | 46.69      | PEAK     | 74             | PASS    |
|            | 2412         | Ant0 | 2310.0 | -63.26      | 5.0  | 0             | 36.97      | AV       | 54             | PASS    |
|            | 2412         | Ant0 | 2390.0 | -51.65      | 5.0  | 0             | 48.58      | PEAK     | 74             | PASS    |
|            | 2412         | Ant0 | 2390.0 | -62.44      | 5.0  | 0             | 37.79      | AV       | 54             | PASS    |
|            | 2462         | Ant0 | 2483.5 | -51.28      | 5.0  | 0             | 48.95      | PEAK     | 74             | PASS    |
|            | 2462         | Ant0 | 2483.5 | -61.22      | 5.0  | 0             | 39.01      | AV       | 54             | PASS    |
|            | 2462         | Ant0 | 2500.0 | -50.39      | 5.0  | 0             | 49.84      | PEAK     | 74             | PASS    |
|            | 2462         | Ant0 | 2500.0 | -61.41      | 5.0  | 0             | 38.82      | AV       | 54             | PASS    |
| 11N40 SISO | 2422         | Ant0 | 2310.0 | -53.50      | 5.0  | 0             | 46.73      | PEAK     | 74             | PASS    |
|            | 2422         | Ant0 | 2310.0 | -63.37      | 5.0  | 0             | 36.86      | AV       | 54             | PASS    |

|  |      |      |        |        |     |   |       |      |    |      |
|--|------|------|--------|--------|-----|---|-------|------|----|------|
|  | 2422 | Ant0 | 2390.0 | -52.22 | 5.0 | 0 | 48.01 | PEAK | 74 | PASS |
|  | 2422 | Ant0 | 2390.0 | -62.60 | 5.0 | 0 | 37.63 | AV   | 54 | PASS |
|  | 2452 | Ant0 | 2483.5 | -50.44 | 5.0 | 0 | 49.79 | PEAK | 74 | PASS |
|  | 2452 | Ant0 | 2483.5 | -61.32 | 5.0 | 0 | 38.91 | AV   | 54 | PASS |
|  | 2452 | Ant0 | 2500.0 | -50.99 | 5.0 | 0 | 49.24 | PEAK | 74 | PASS |
|  | 2452 | Ant0 | 2500.0 | -61.64 | 5.0 | 0 | 38.59 | AV   | 54 | PASS |

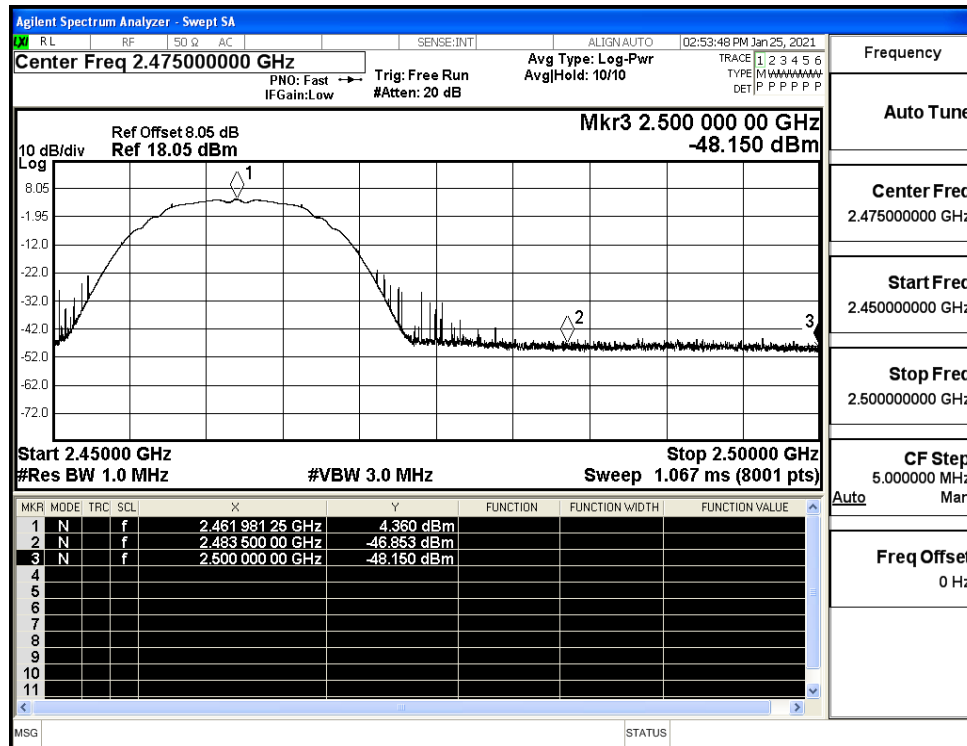
## Restrict-band band-edge measurements\_11B\_2412\_Ant0\_PEAK



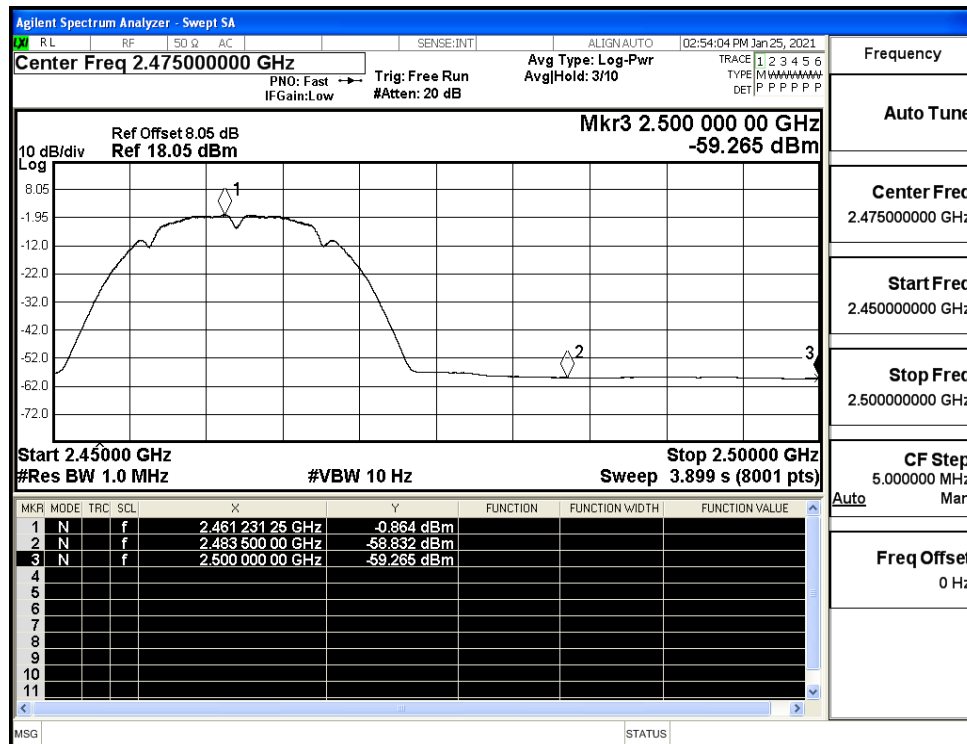
## Restrict-band band-edge measurements\_11B\_2412\_Ant0\_AV



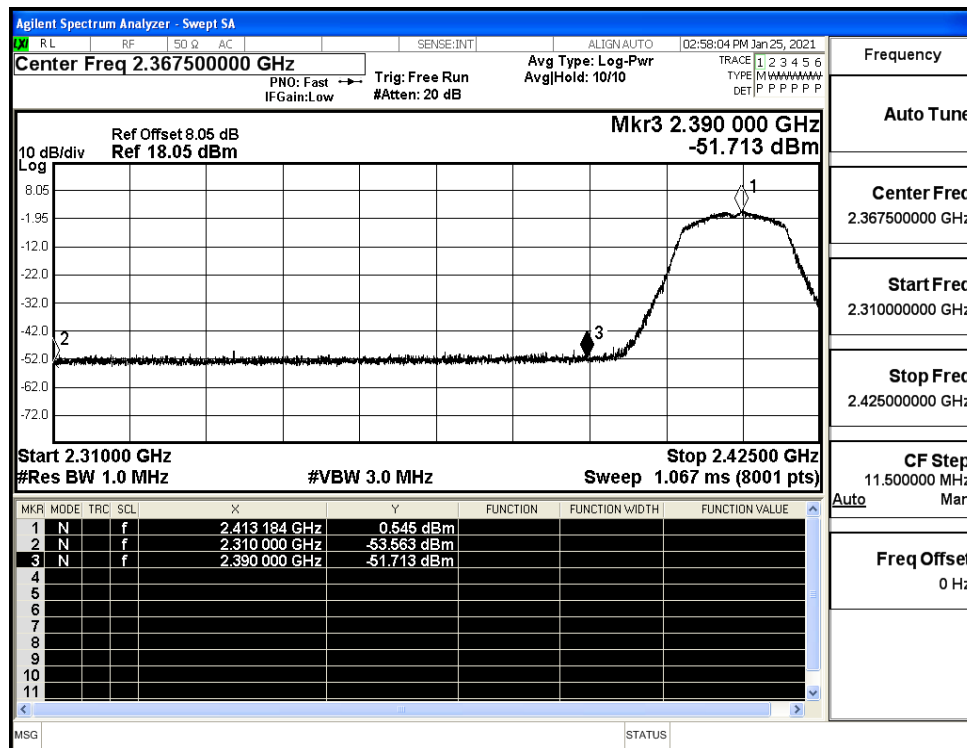
## Restrict-band band-edge measurements\_11B\_2462\_Ant0\_PEAK



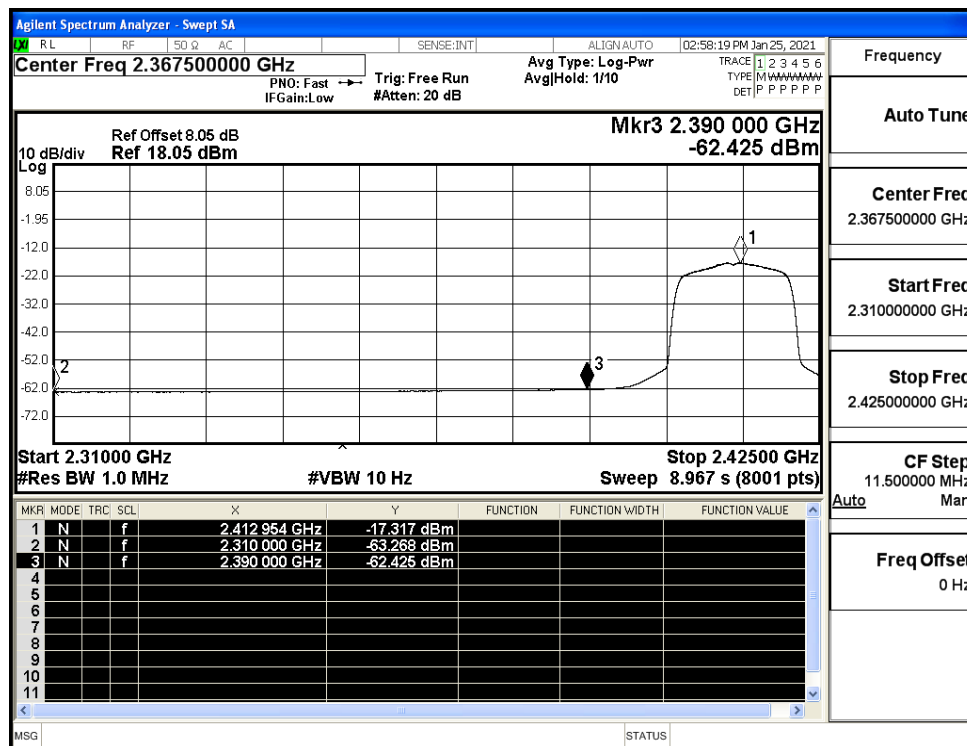
## Restrict-band band-edge measurements\_11B\_2462\_Ant0\_AV



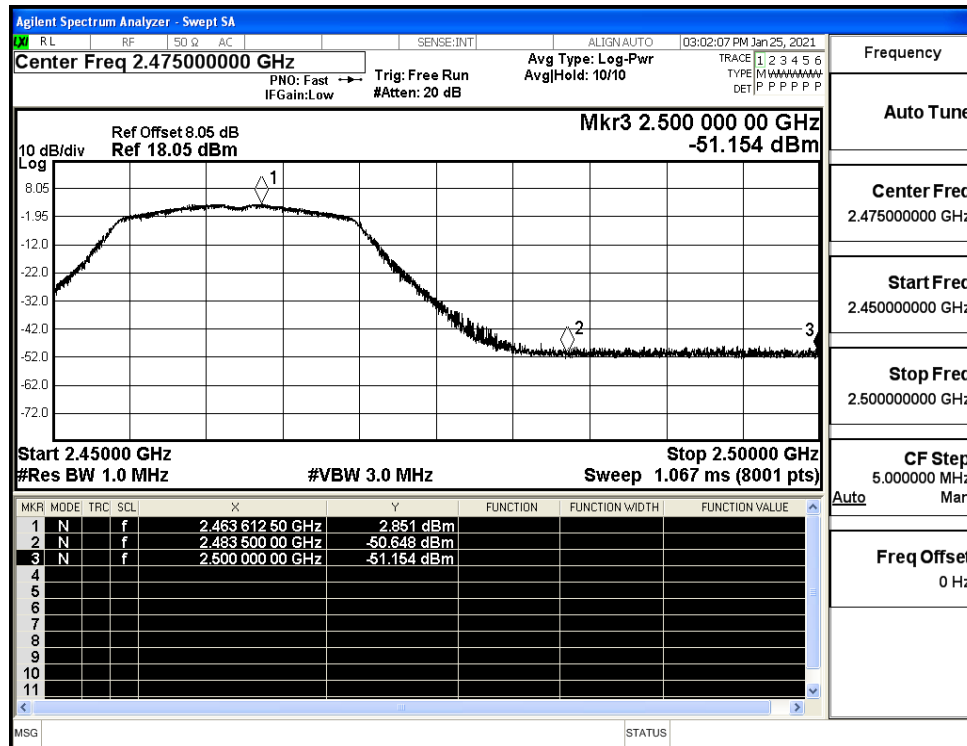
## Restrict-band band-edge measurements\_11G\_2412\_Ant0\_PEAK



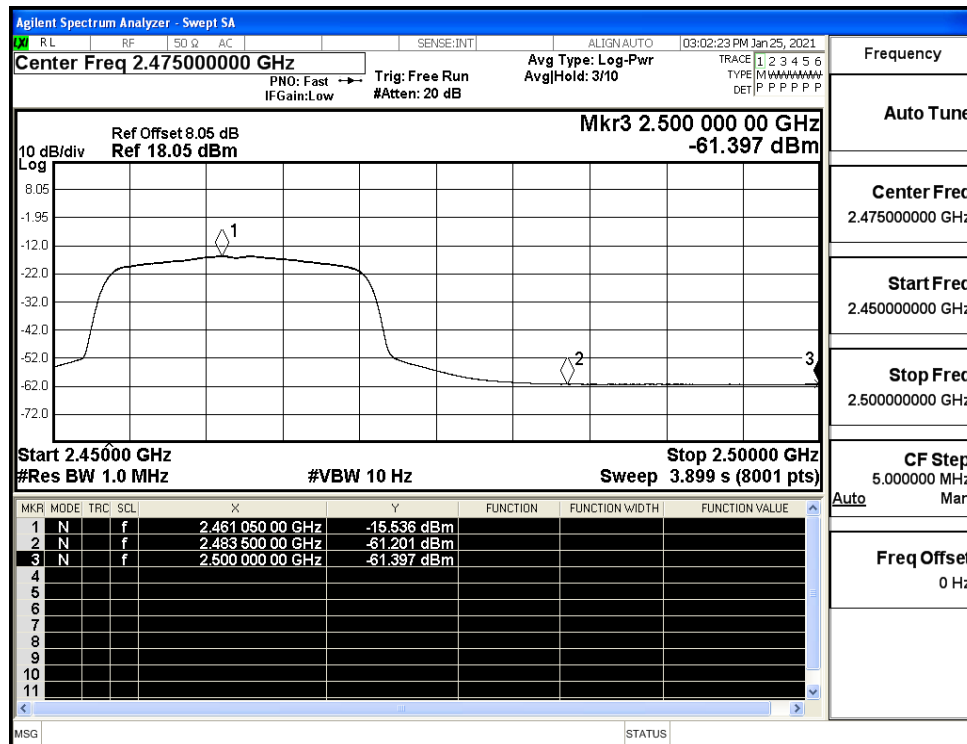
## Restrict-band band-edge measurements\_11G\_2412\_Ant0\_AV



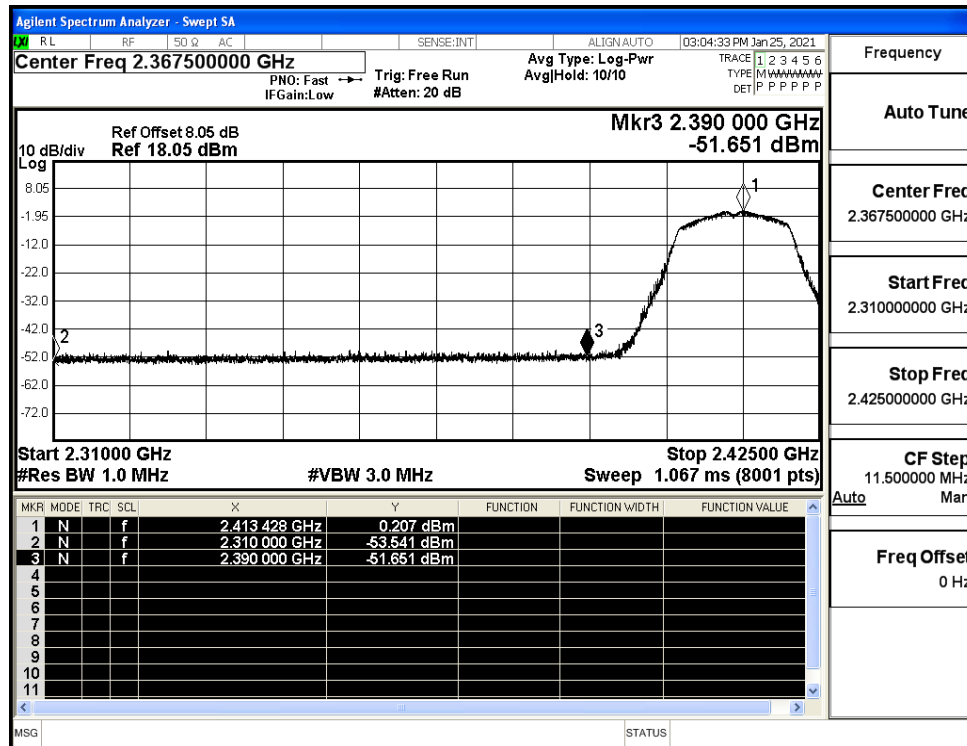
## Restrict-band band-edge measurements\_11G\_2462\_Ant0\_PEAK



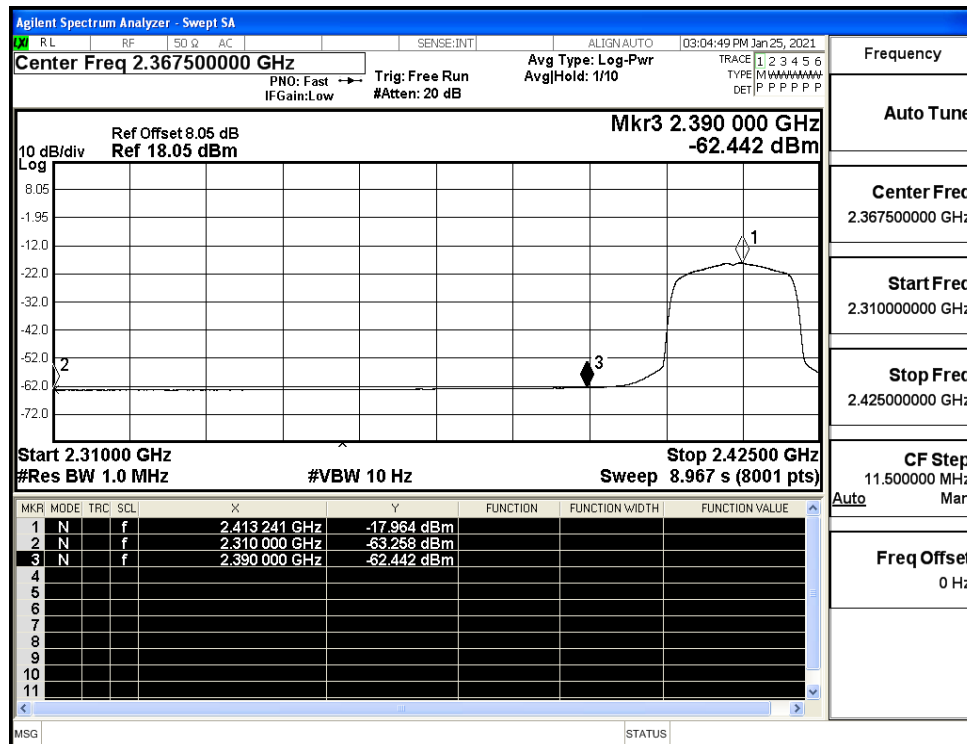
## Restrict-band band-edge measurements\_11G\_2462\_Ant0\_AV



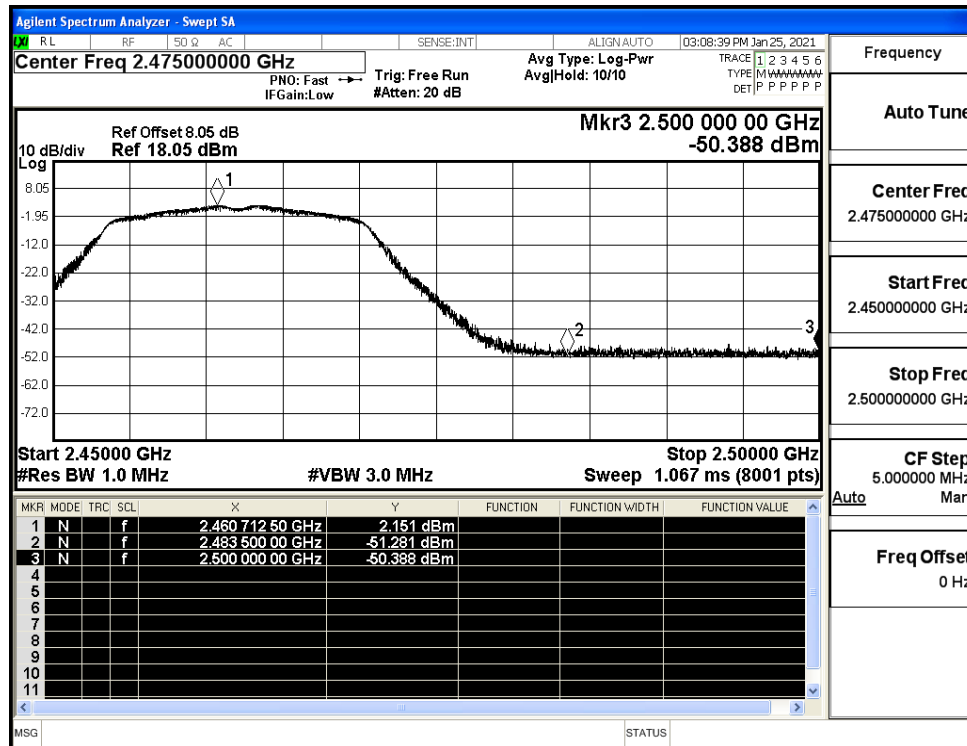
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant0\_PEAK



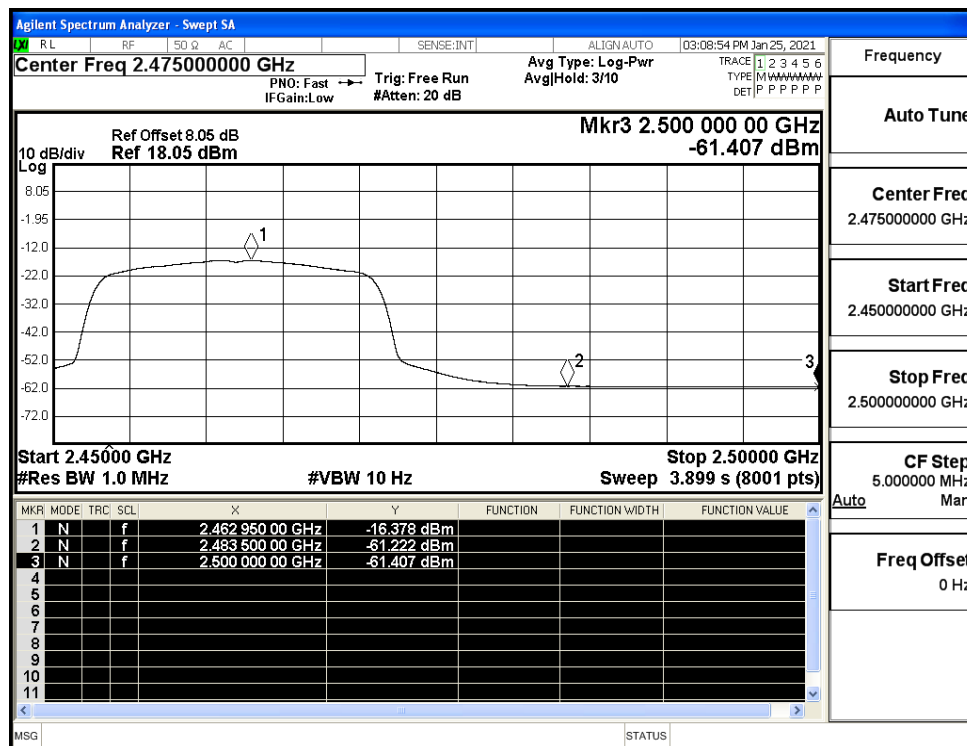
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant0\_AV



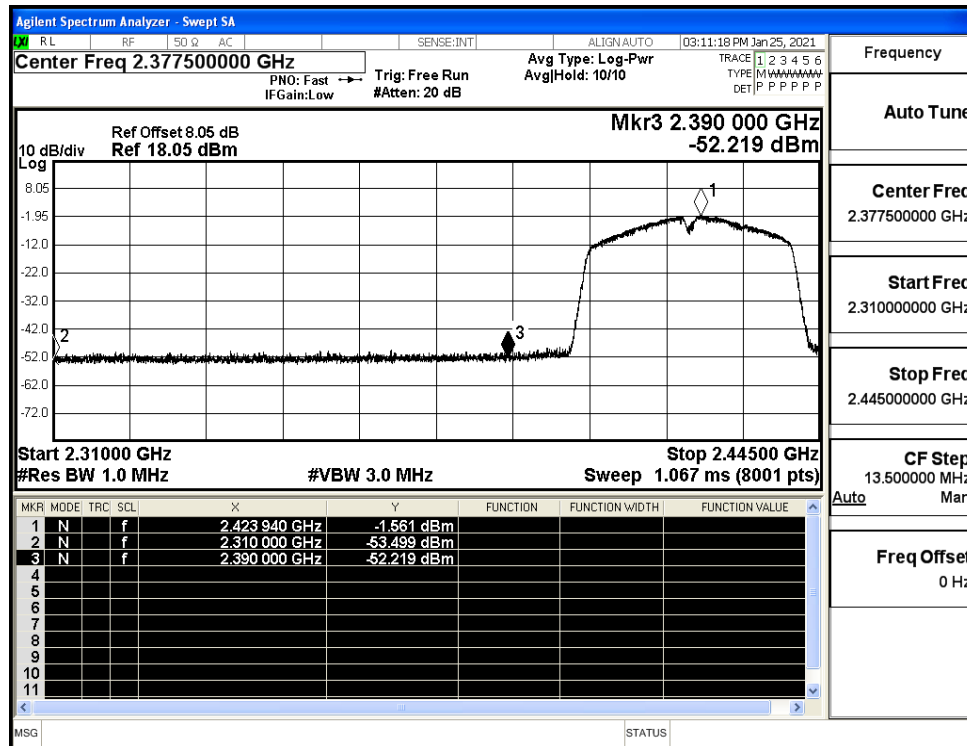
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant0\_PEAK



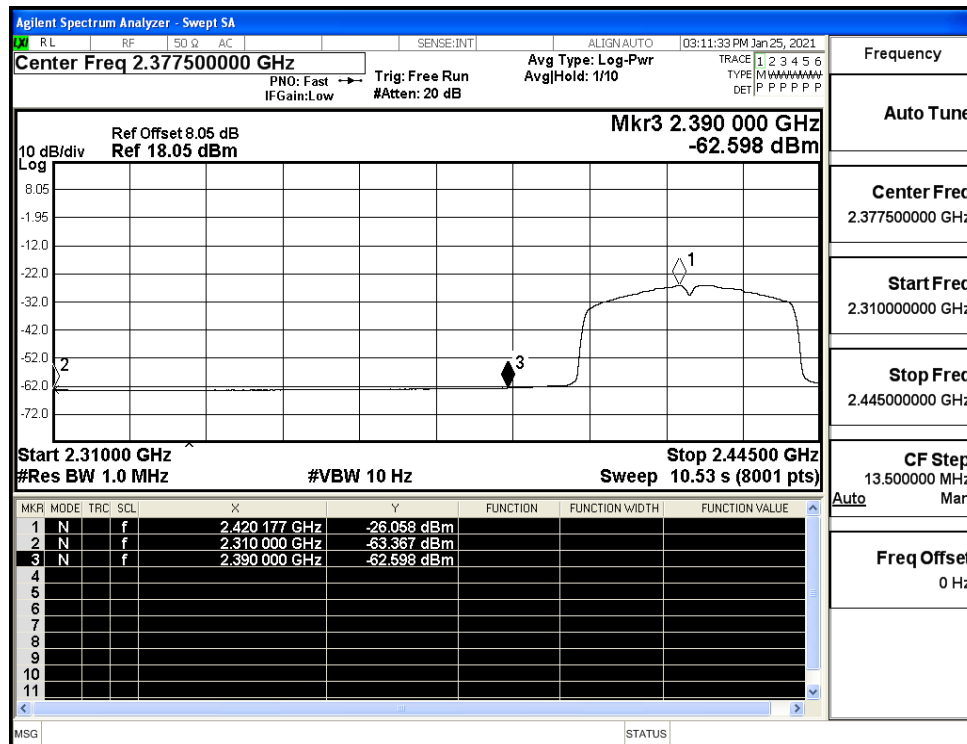
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant0\_AV



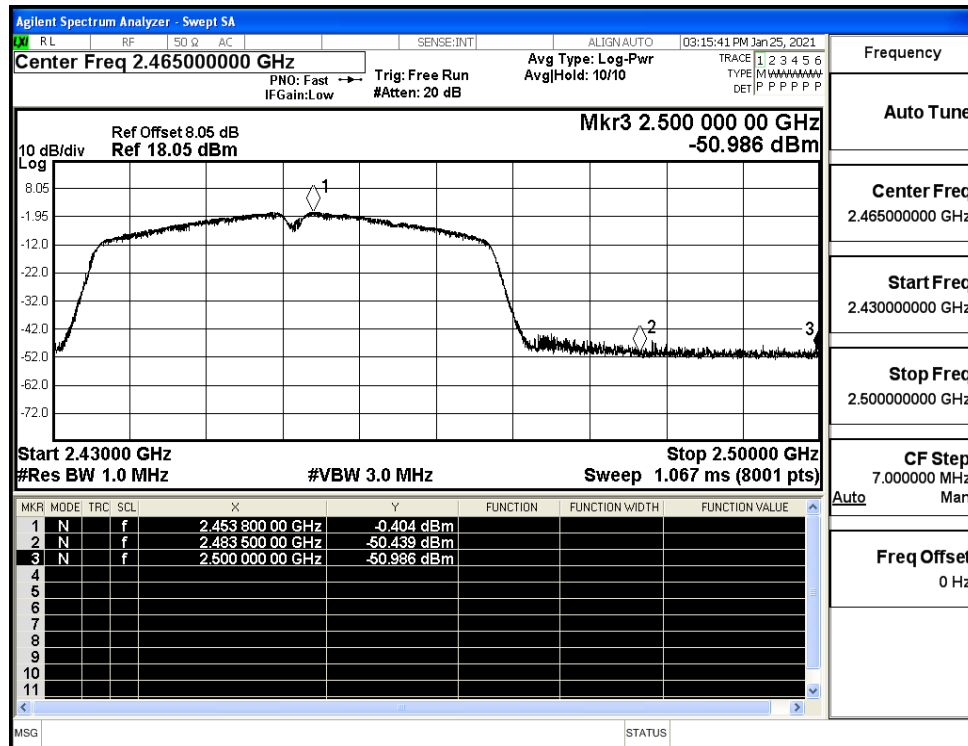
## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant0\_PEAK



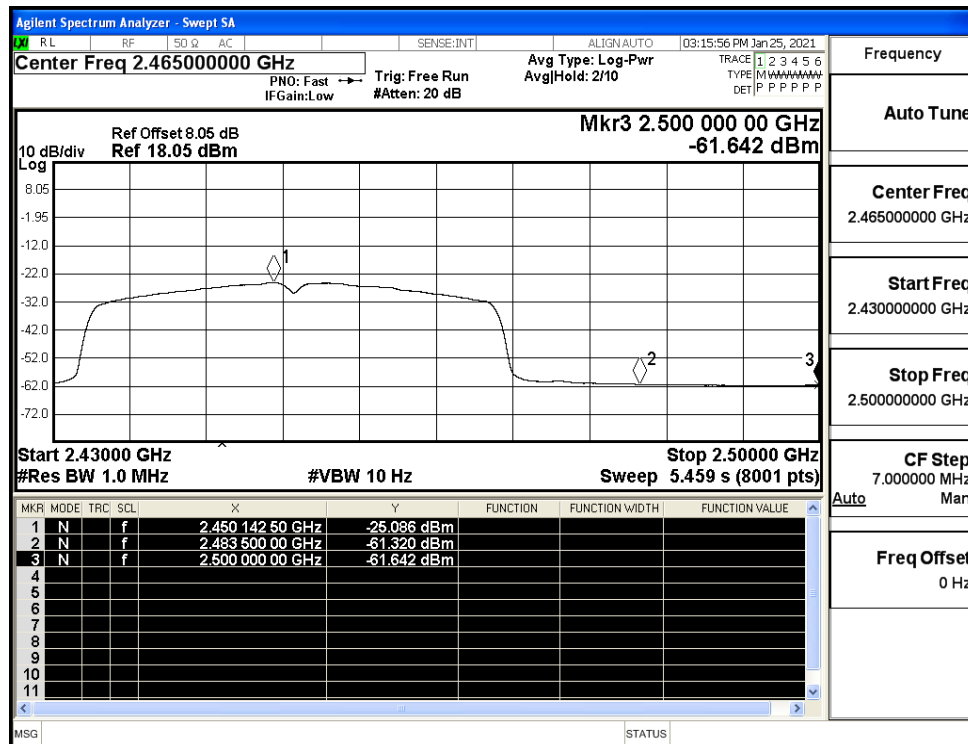
## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant0\_AV



## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant0\_PEAK



## Restrict-band band-edge measurements\_11N40SISO\_2452\_Ant0\_AV



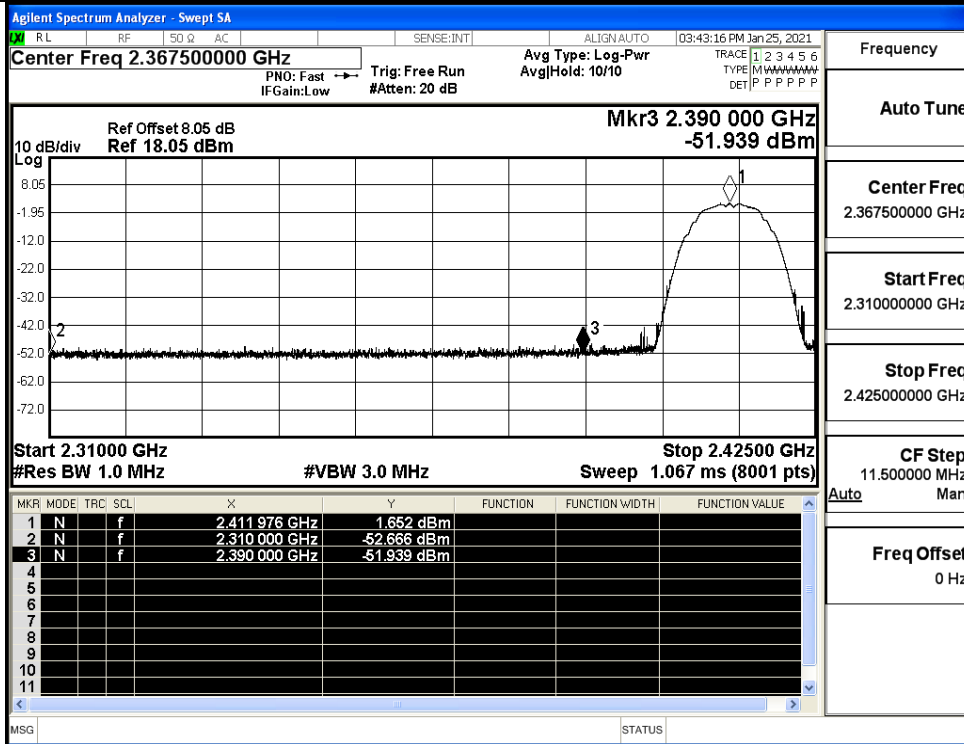
ANT1

**C.8 Restrict-band band-edge measurements**

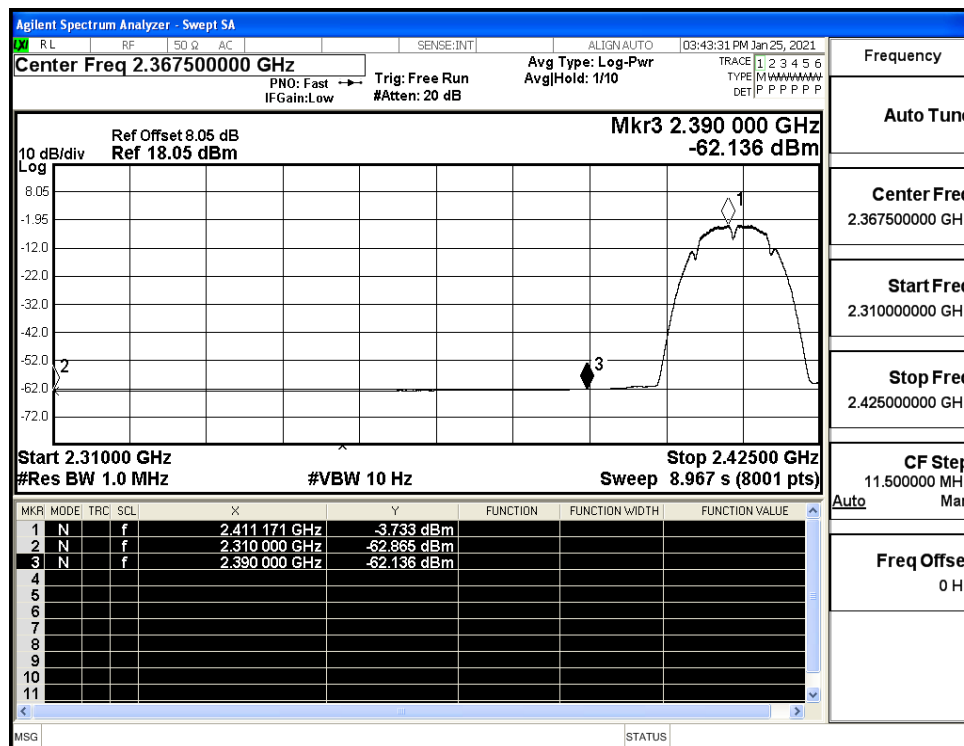
| Test Mode     | Test Channel | Ant  | Freq.  | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|---------------|--------------|------|--------|-------------|------|---------------|------------|----------|----------------|---------|
| 11B           | 2412         | Ant1 | 2310.0 | -52.67      | 5.0  | 0             | 47.56      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2310.0 | -62.87      | 5.0  | 0             | 37.36      | AV       | 54             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -51.94      | 5.0  | 0             | 48.29      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -62.14      | 5.0  | 0             | 38.09      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -49.80      | 5.0  | 0             | 50.43      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -60.11      | 5.0  | 0             | 40.12      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -49.05      | 5.0  | 0             | 51.18      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -60.02      | 5.0  | 0             | 40.21      | AV       | 54             | PASS    |
| 11G           | 2412         | Ant1 | 2310.0 | -52.59      | 5.0  | 0             | 47.64      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2310.0 | -62.98      | 5.0  | 0             | 37.25      | AV       | 54             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -51.50      | 5.0  | 0             | 48.73      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -62.20      | 5.0  | 0             | 38.03      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -50.22      | 5.0  | 0             | 50.01      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -60.27      | 5.0  | 0             | 39.96      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -49.17      | 5.0  | 0             | 51.06      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -60.41      | 5.0  | 0             | 39.82      | AV       | 54             | PASS    |
| 11N20<br>SISO | 2412         | Ant1 | 2310.0 | -53.31      | 5.0  | 0             | 46.92      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2310.0 | -62.96      | 5.0  | 0             | 37.27      | AV       | 54             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -50.30      | 5.0  | 0             | 49.93      | PEAK     | 74             | PASS    |
|               | 2412         | Ant1 | 2390.0 | -62.18      | 5.0  | 0             | 38.05      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -50.24      | 5.0  | 0             | 49.99      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2483.5 | -60.25      | 5.0  | 0             | 39.98      | AV       | 54             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -49.51      | 5.0  | 0             | 50.72      | PEAK     | 74             | PASS    |
|               | 2462         | Ant1 | 2500.0 | -60.41      | 5.0  | 0             | 39.82      | AV       | 54             | PASS    |
| 11N40<br>SISO | 2422         | Ant1 | 2310.0 | -52.34      | 5.0  | 0             | 47.89      | PEAK     | 74             | PASS    |
|               | 2422         | Ant1 | 2310.0 | -63.09      | 5.0  | 0             | 37.14      | AV       | 54             | PASS    |
|               | 2422         | Ant1 | 2390.0 | -49.69      | 5.0  | 0             | 50.54      | PEAK     | 74             | PASS    |

|  |      |      |        |        |     |   |       |      |    |      |
|--|------|------|--------|--------|-----|---|-------|------|----|------|
|  | 2422 | Ant1 | 2390.0 | -62.31 | 5.0 | 0 | 37.92 | AV   | 54 | PASS |
|  | 2452 | Ant1 | 2483.5 | -48.64 | 5.0 | 0 | 51.59 | PEAK | 74 | PASS |
|  | 2452 | Ant1 | 2483.5 | -60.54 | 5.0 | 0 | 39.69 | AV   | 54 | PASS |
|  | 2452 | Ant1 | 2500.0 | -50.74 | 5.0 | 0 | 49.49 | PEAK | 74 | PASS |
|  | 2452 | Ant1 | 2500.0 | -60.81 | 5.0 | 0 | 39.42 | AV   | 54 | PASS |

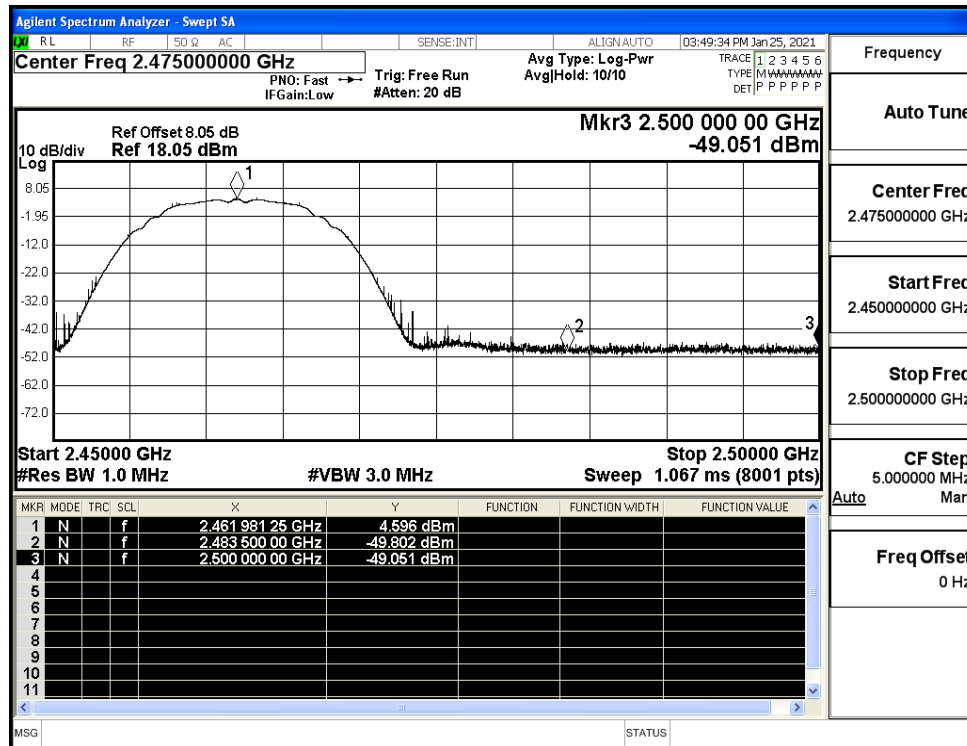
## Restrict-band band-edge measurements\_11B\_2412\_Ant1\_PEAK



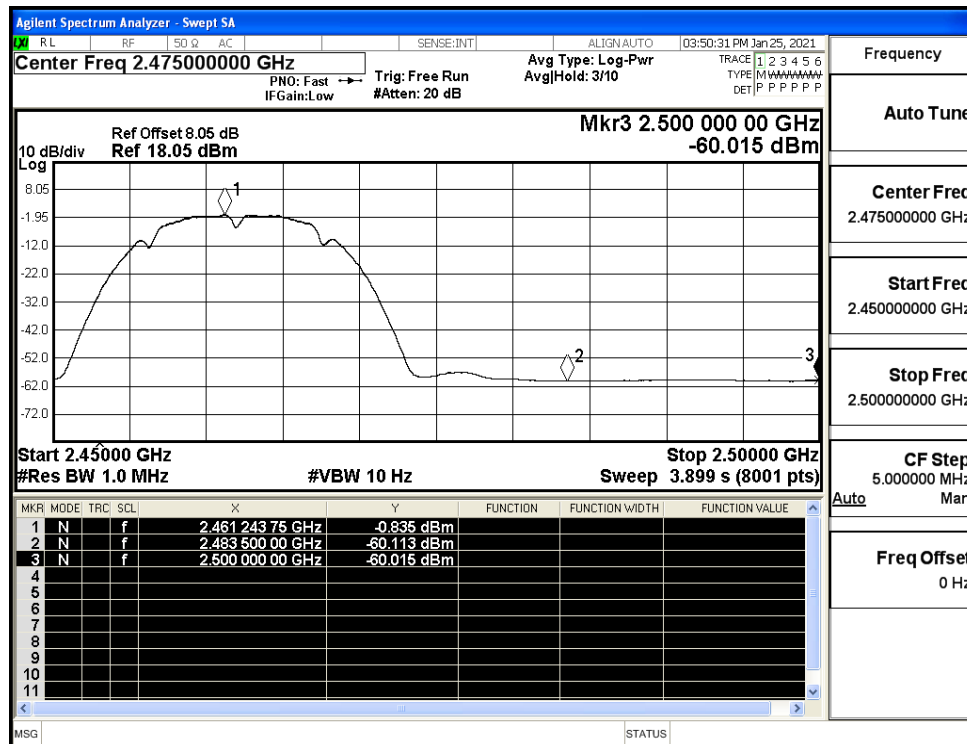
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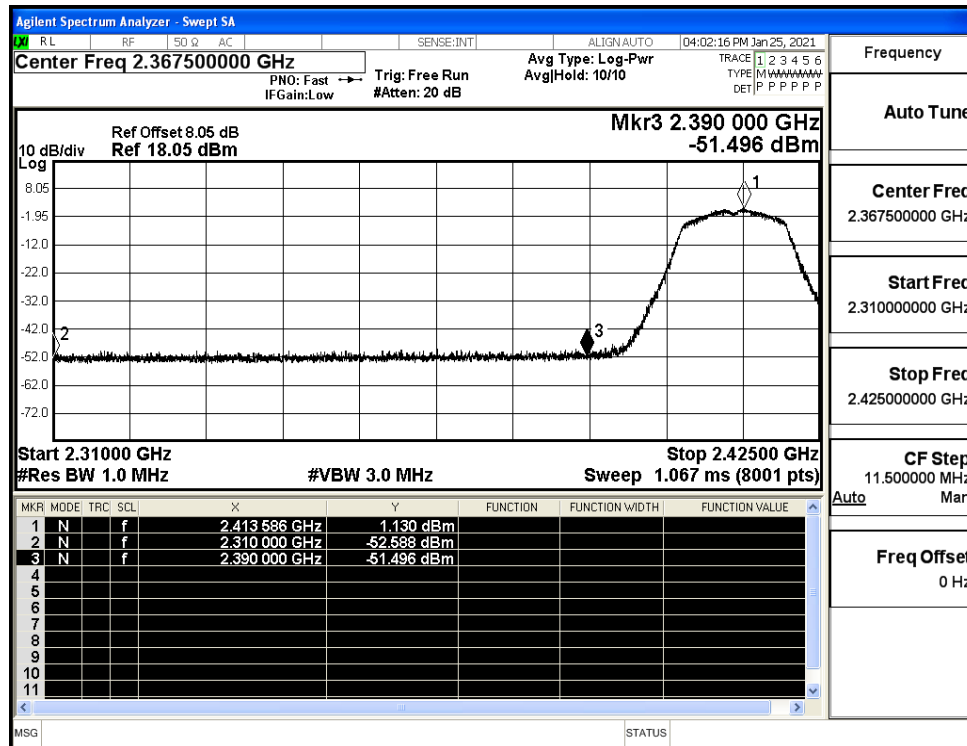
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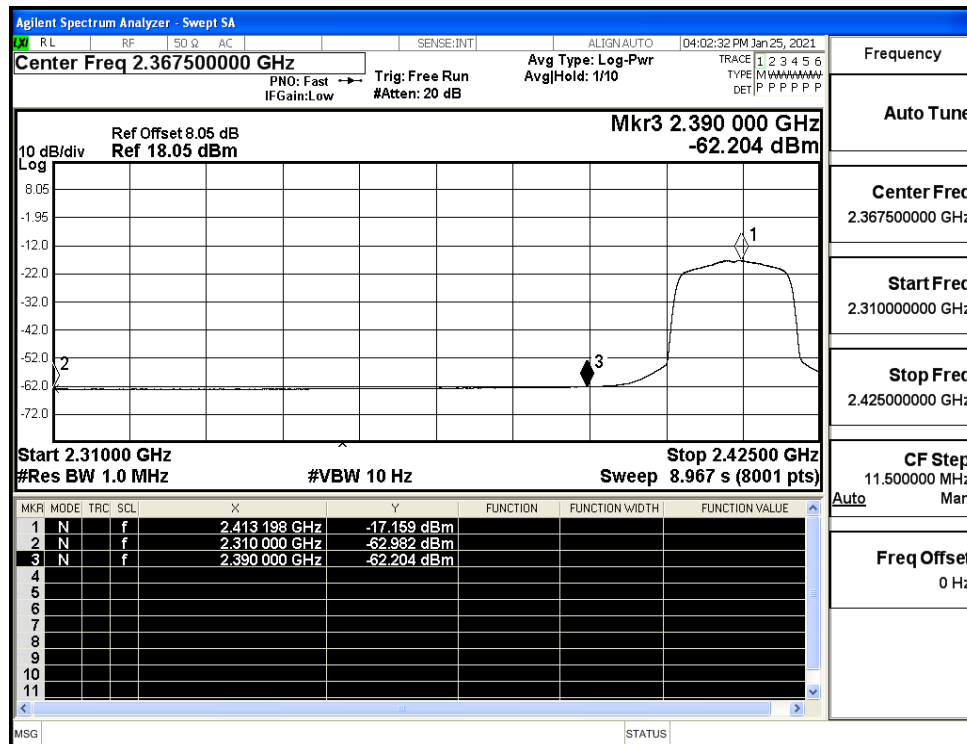
## Restrict-band band-edge measurements\_11B\_2462\_Ant1\_AV



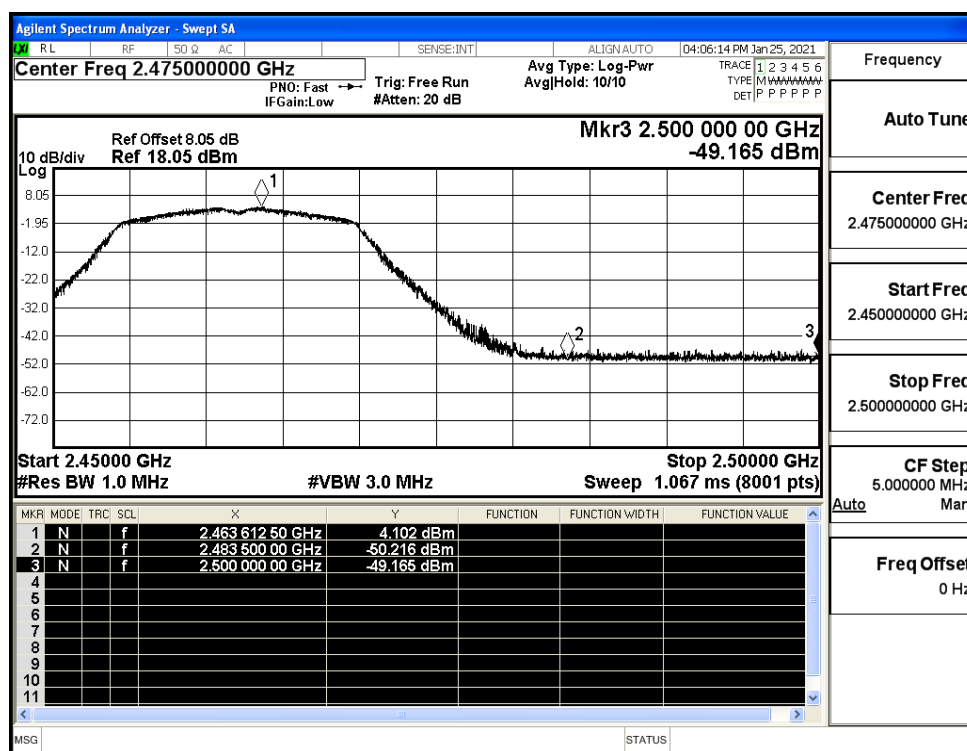
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_PEAK



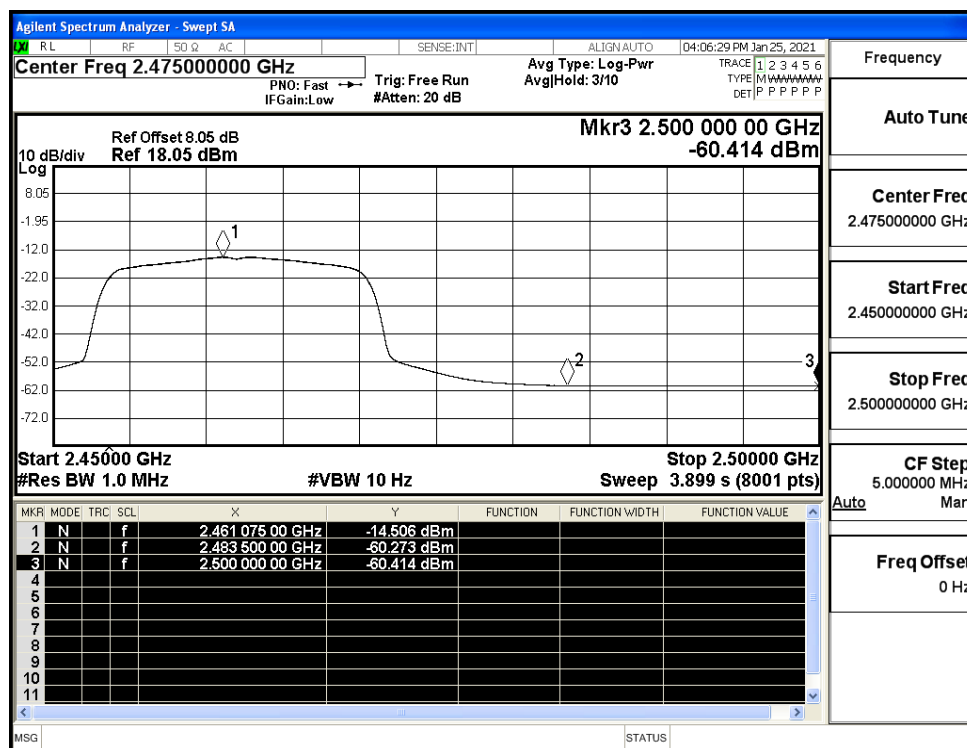
## Restrict-band band-edge measurements\_11G\_2412\_Ant1\_AV



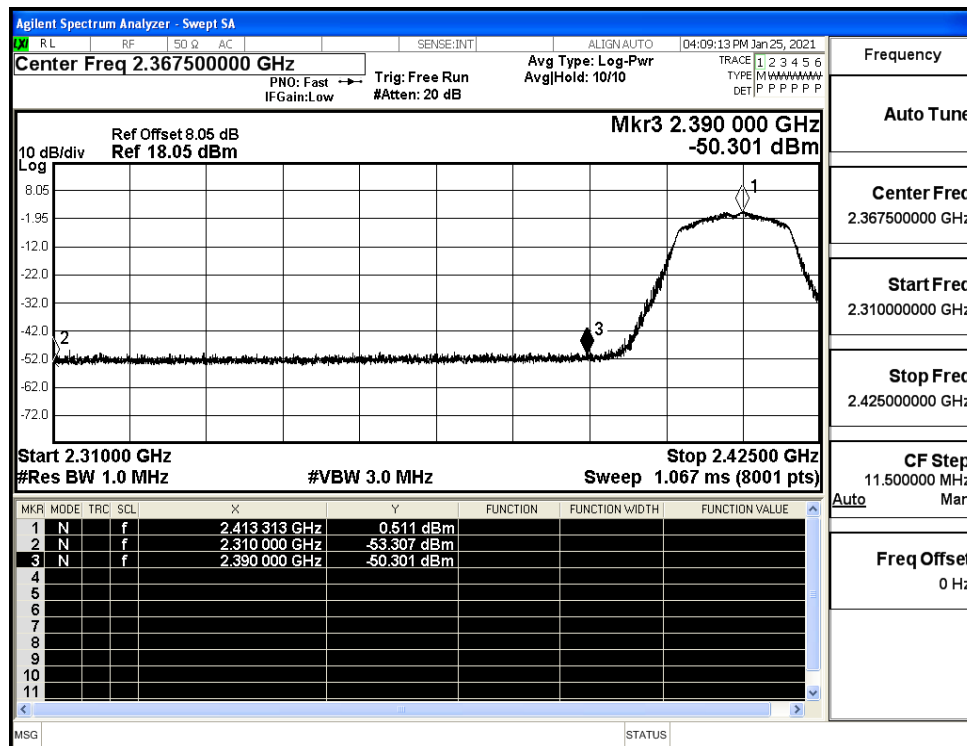
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_PEAK



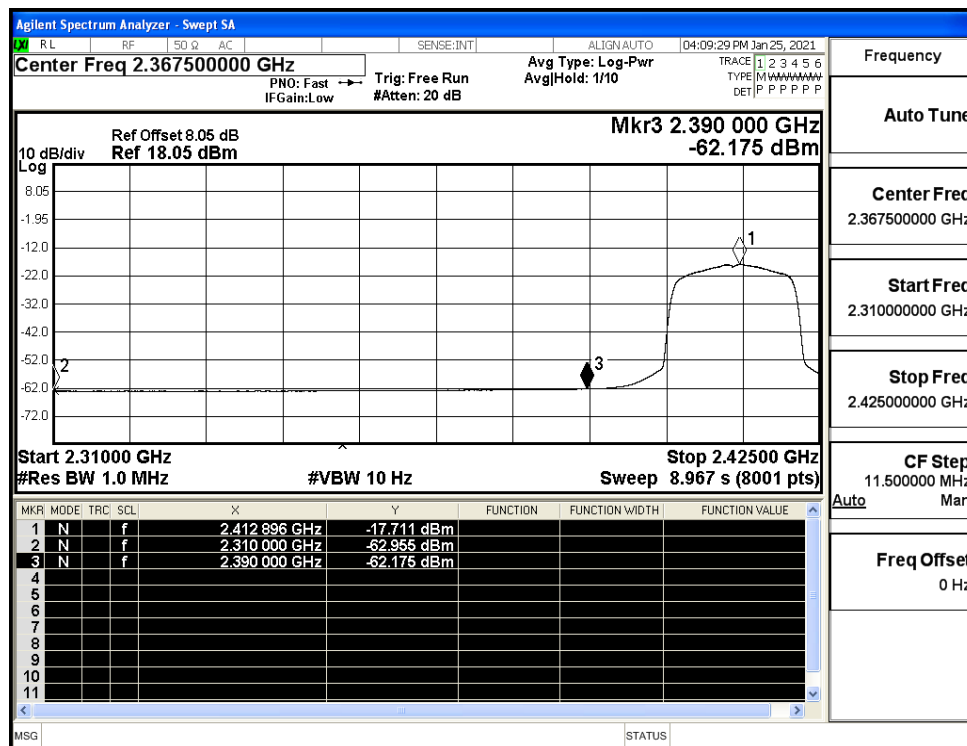
## Restrict-band band-edge measurements\_11G\_2462\_Ant1\_AV



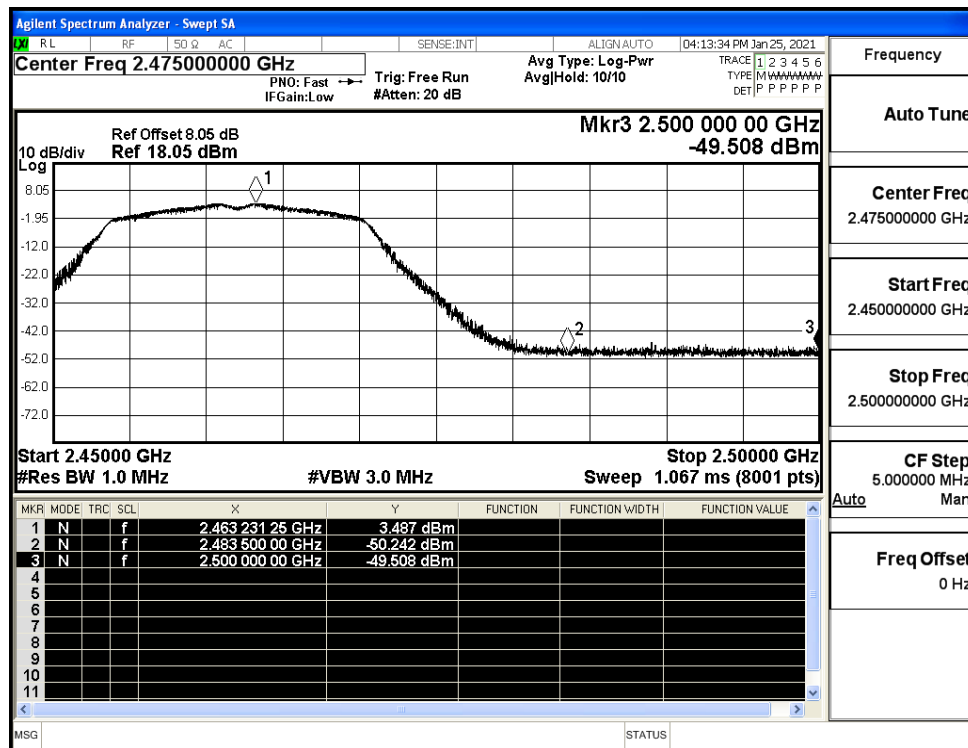
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_PEAK



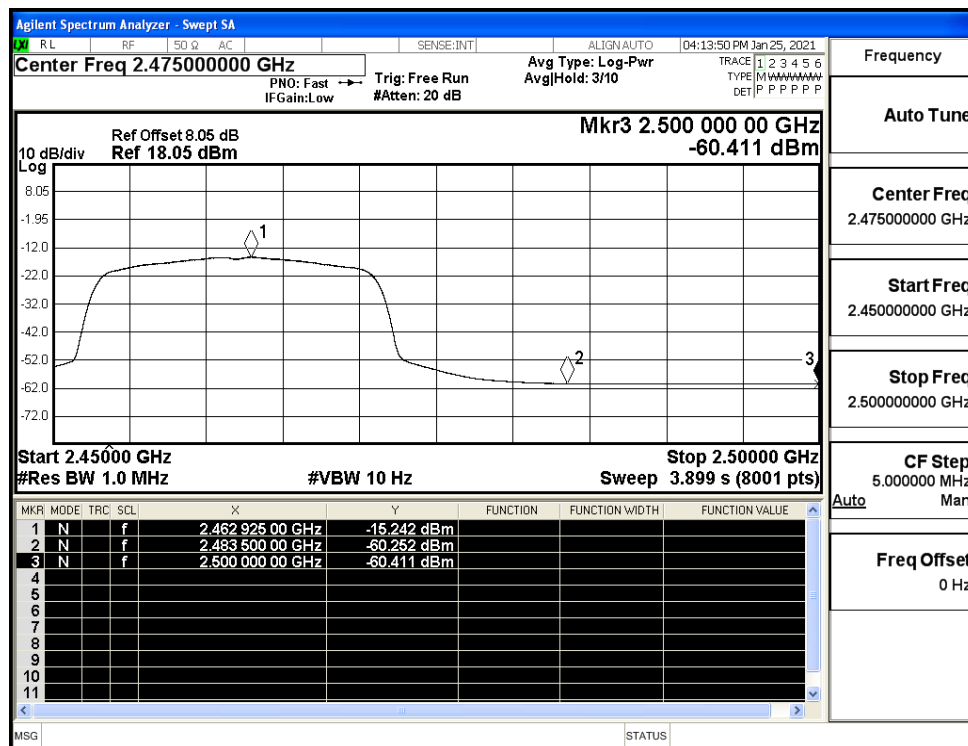
## Restrict-band band-edge measurements\_11N20SISO\_2412\_Ant1\_AV



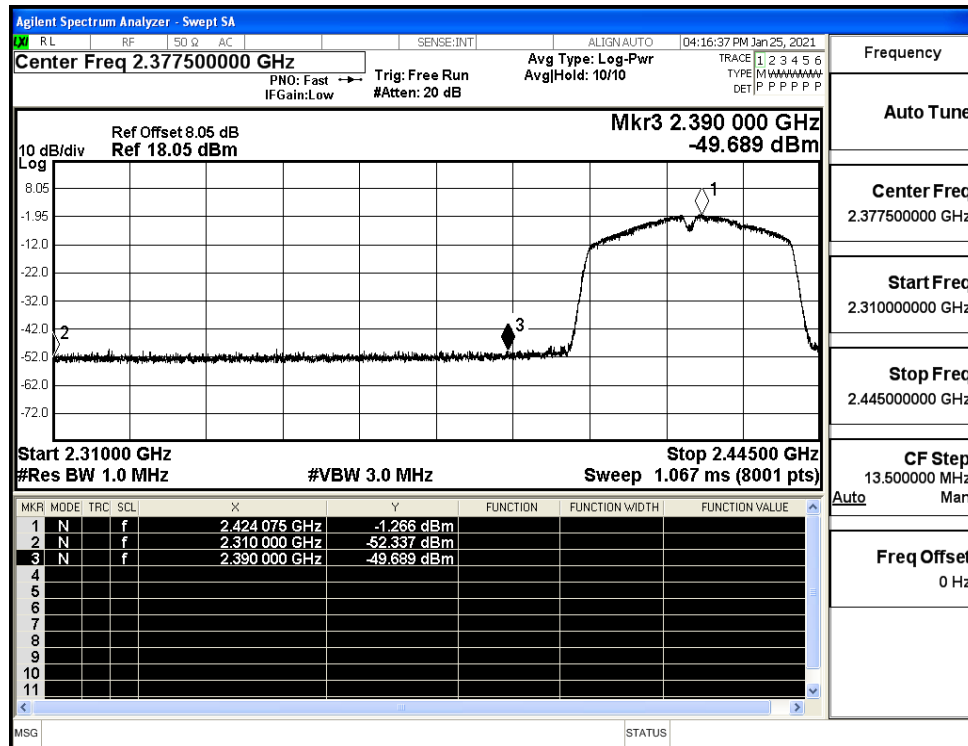
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_PEAK



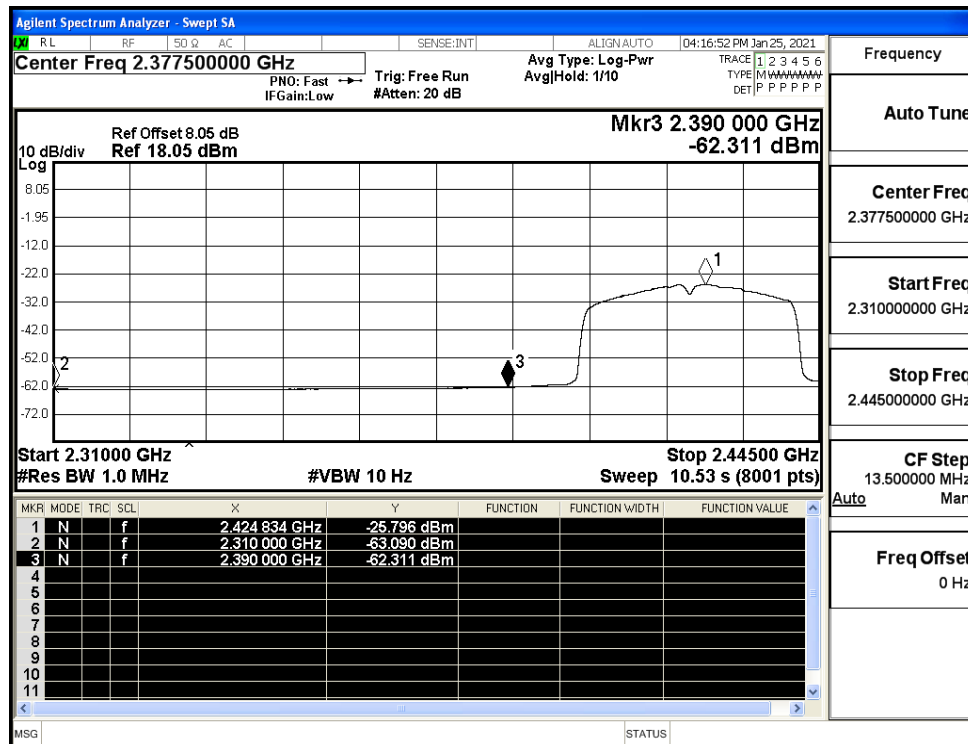
## Restrict-band band-edge measurements\_11N20SISO\_2462\_Ant1\_AV



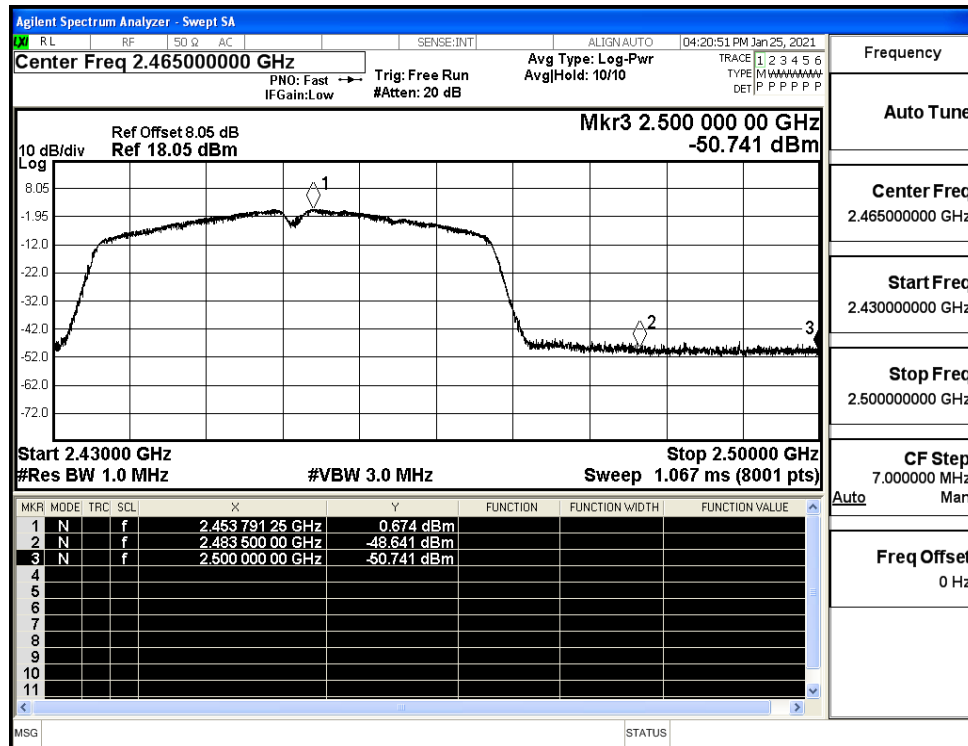
## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_PEAK



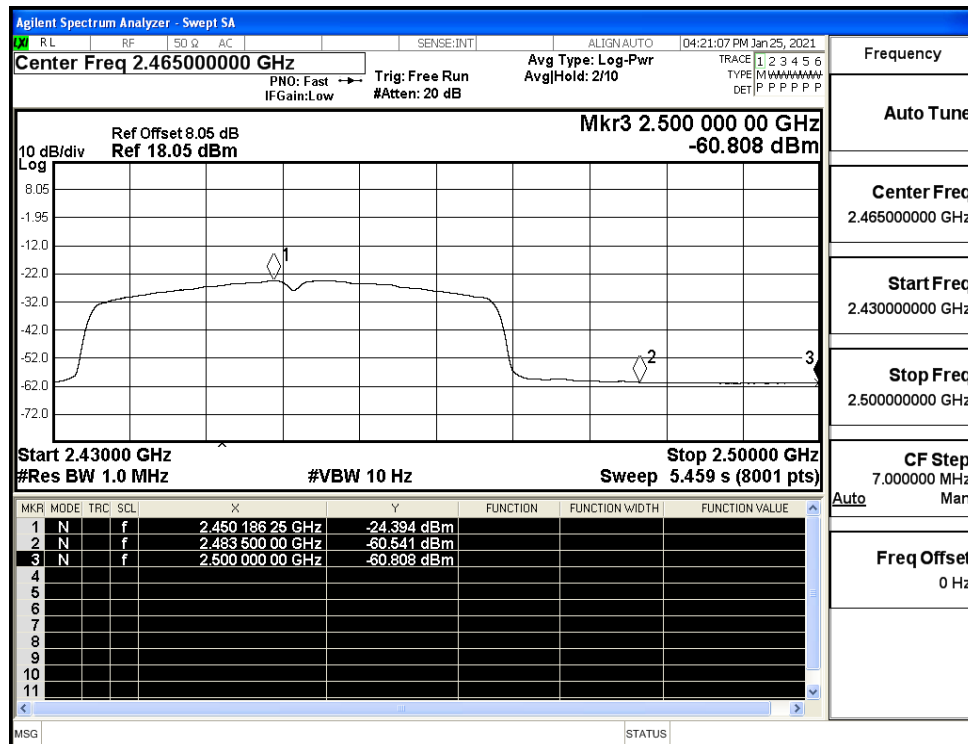
## Restrict-band band-edge measurements\_11N40SISO\_2422\_Ant1\_AV



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



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



## MIMO

| Test Mode | Test Channel | Freq.  | ANT 0 Power [dBm] | ANT 1 Power [dBm] | MIMO Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|-----------|--------------|--------|-------------------|-------------------|------------------|------|---------------|------------|----------|----------------|---------|
| 11N20     | 2412         | 2310.0 | -53.54            | -53.31            | -50.41           | 8.01 | 0             | 52.83      | PEAK     | 74             | PASS    |
|           | 2412         | 2310.0 | -63.26            | -62.96            | -60.10           | 8.01 | 0             | 43.14      | AV       | 54             | PASS    |
|           | 2412         | 2390.0 | -51.65            | -50.30            | -47.91           | 8.01 | 0             | 55.33      | PEAK     | 74             | PASS    |
|           | 2412         | 2390.0 | -62.44            | -62.18            | -59.30           | 8.01 | 0             | 43.94      | AV       | 54             | PASS    |
|           | 2462         | 2483.5 | -51.28            | -50.24            | -47.72           | 8.01 | 0             | 55.52      | PEAK     | 74             | PASS    |
|           | 2462         | 2483.5 | -61.22            | -60.25            | -57.70           | 8.01 | 0             | 45.54      | AV       | 54             | PASS    |
|           | 2462         | 2500.0 | -50.39            | -49.51            | -46.92           | 8.01 | 0             | 56.32      | PEAK     | 74             | PASS    |
|           | 2462         | 2500.0 | -61.41            | -60.41            | -57.87           | 8.01 | 0             | 45.37      | AV       | 54             | PASS    |
| 11N40     | 2422         | 2310.0 | -53.50            | -52.34            | -49.87           | 8.01 | 0             | 53.37      | PEAK     | 74             | PASS    |
|           | 2422         | 2310.0 | -63.37            | -63.09            | -60.22           | 8.01 | 0             | 43.02      | AV       | 54             | PASS    |
|           | 2422         | 2390.0 | -52.22            | -49.69            | -47.76           | 8.01 | 0             | 55.48      | PEAK     | 74             | PASS    |
|           | 2422         | 2390.0 | -62.60            | -62.31            | -59.44           | 8.01 | 0             | 43.80      | AV       | 54             | PASS    |
|           | 2452         | 2483.5 | -50.44            | -48.64            | -46.44           | 8.01 | 0             | 56.80      | PEAK     | 74             | PASS    |
|           | 2452         | 2483.5 | -61.32            | -60.54            | -57.90           | 8.01 | 0             | 45.34      | AV       | 54             | PASS    |
|           | 2452         | 2500.0 | -50.99            | -50.74            | -47.85           | 8.01 | 0             | 55.39      | PEAK     | 74             | PASS    |
|           | 2452         | 2500.0 | -61.64            | -60.81            | -58.19           | 8.01 | 0             | 45.05      | AV       | 54             | PASS    |

The upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands or 2 dBi, whichever is greater

Directional gain=5dBi+10 log (2) = 8.01dBi