# Appendix C

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

**Product Name: Zettle Terminal**
**Trade Mark: Zettle Terminal**
**Test Model: Zettle Terminal**

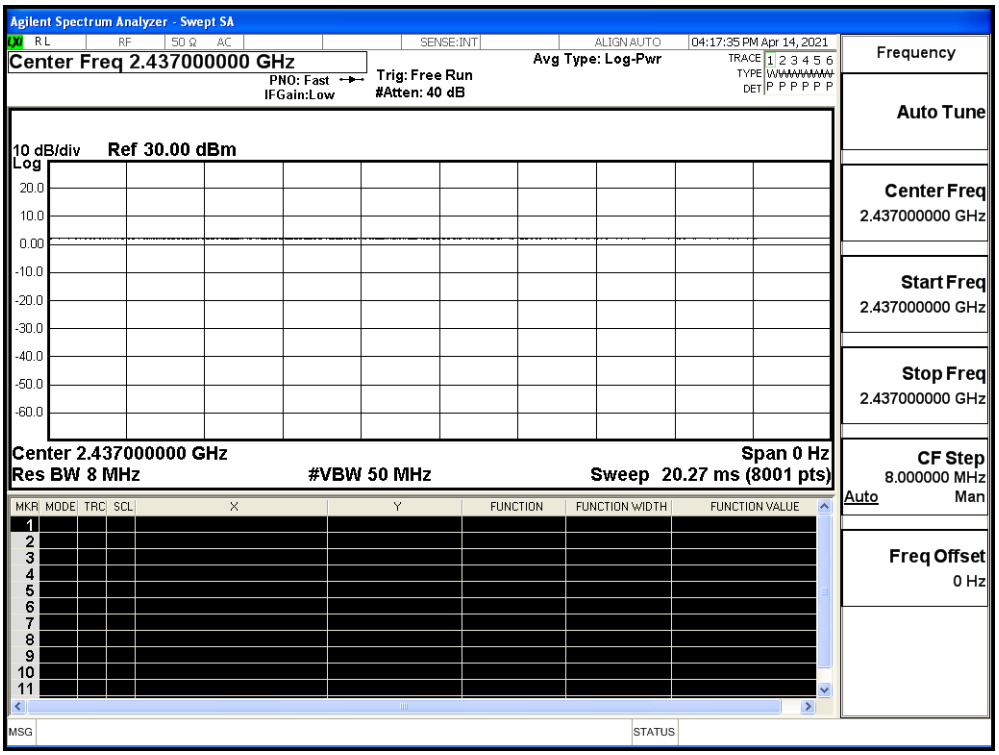
**Environmental Conditions**

| | |
|---|---|
| Temperature: | 22.3° C |
| Relative Humidity: | 53.6% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Diamond Lu |
| Supervised by: | Li Huan |

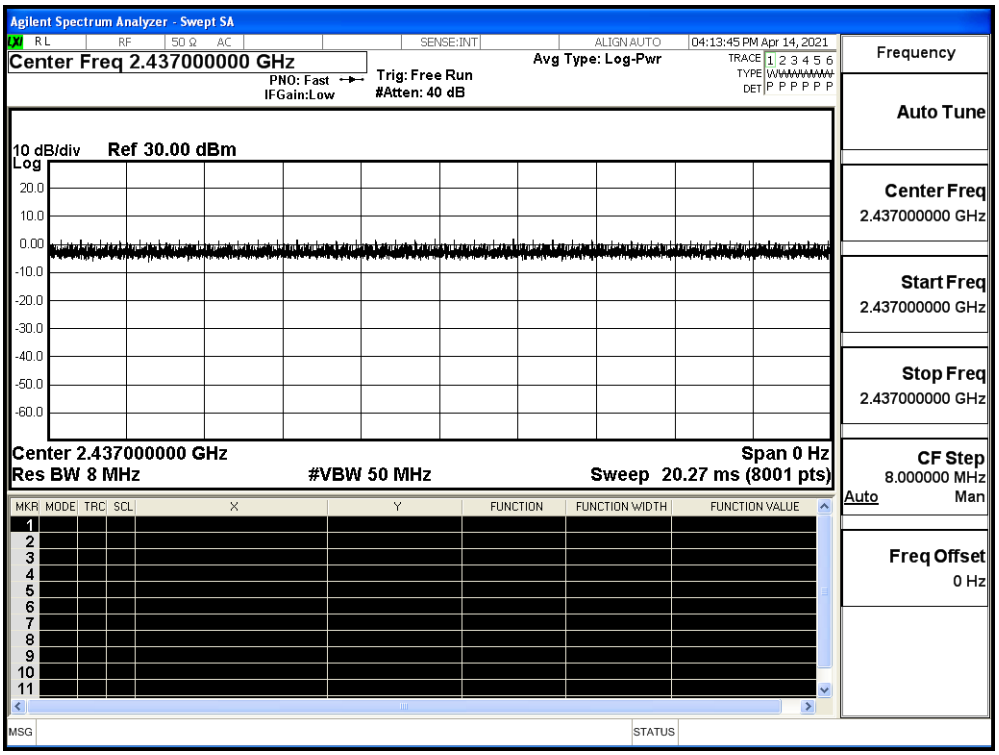
## A.1 Duty Cycle

| 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 |

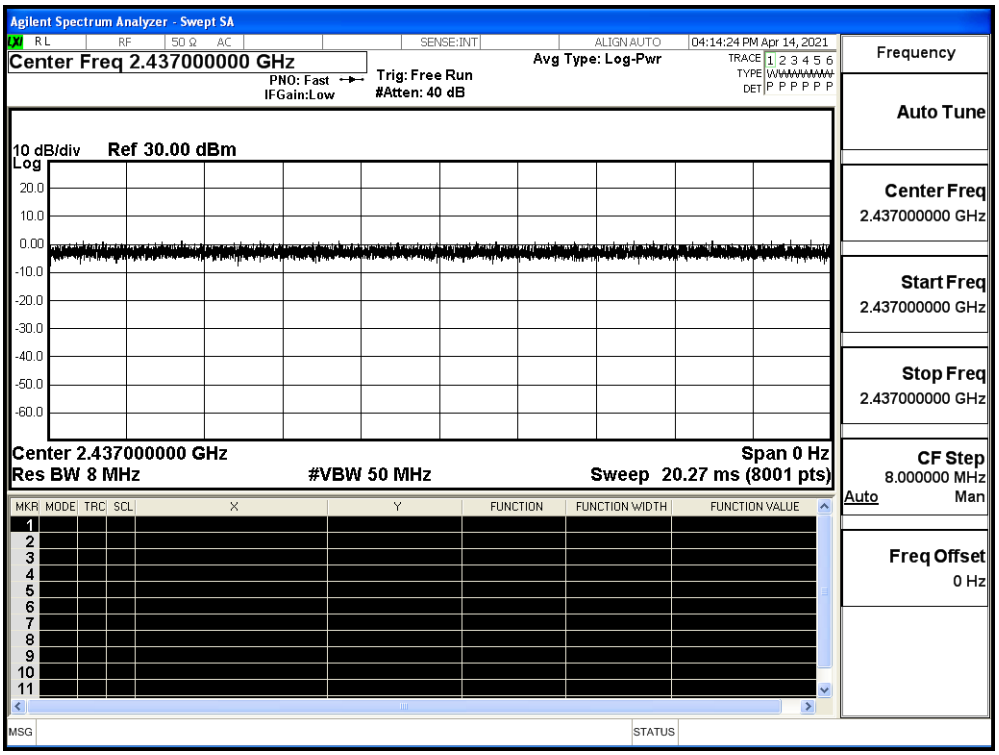
## Duty Cycle_11B_2437_Ant1



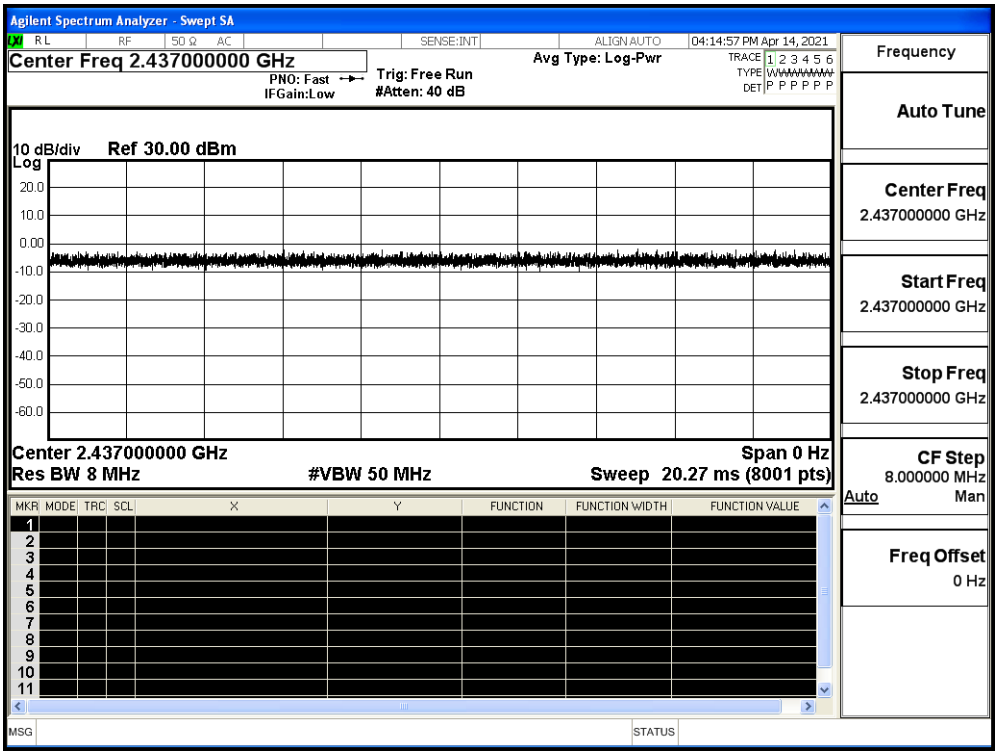

## Duty Cycle_11G_2437_Ant1



## Duty Cycle_11N20SISO_2437_Ant1

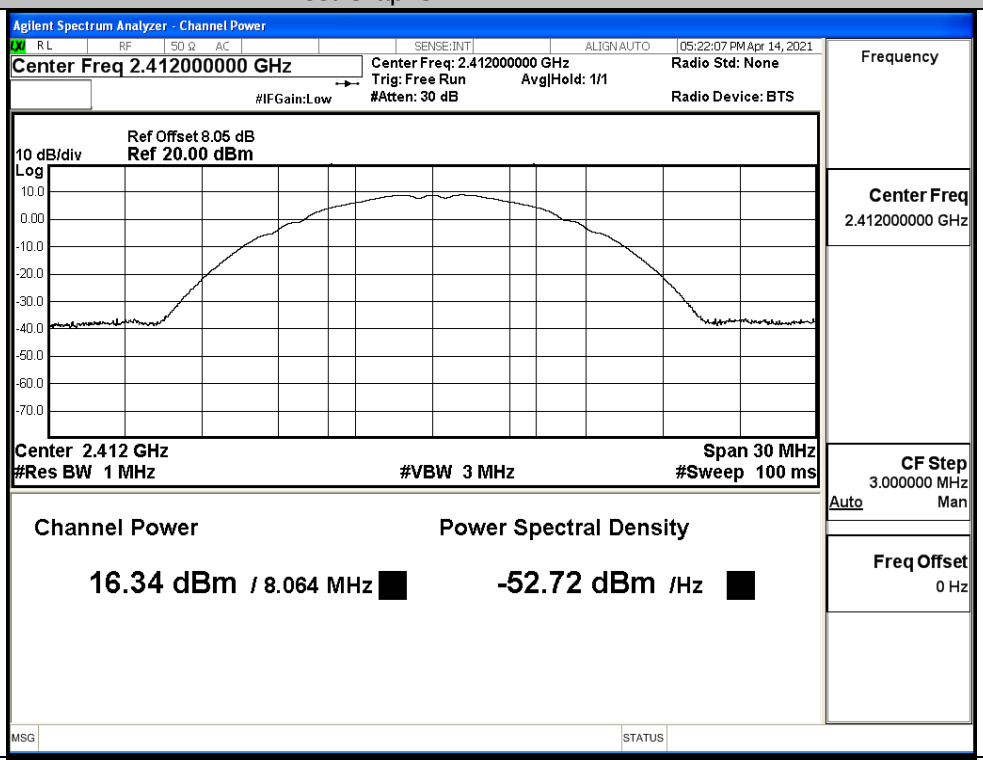
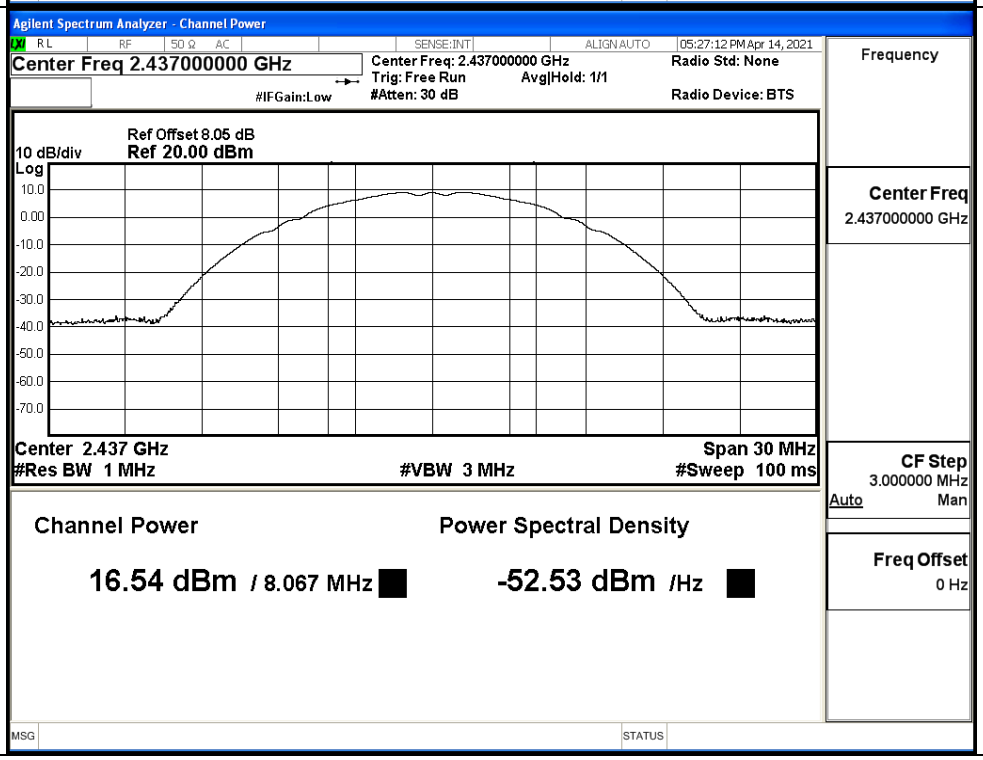


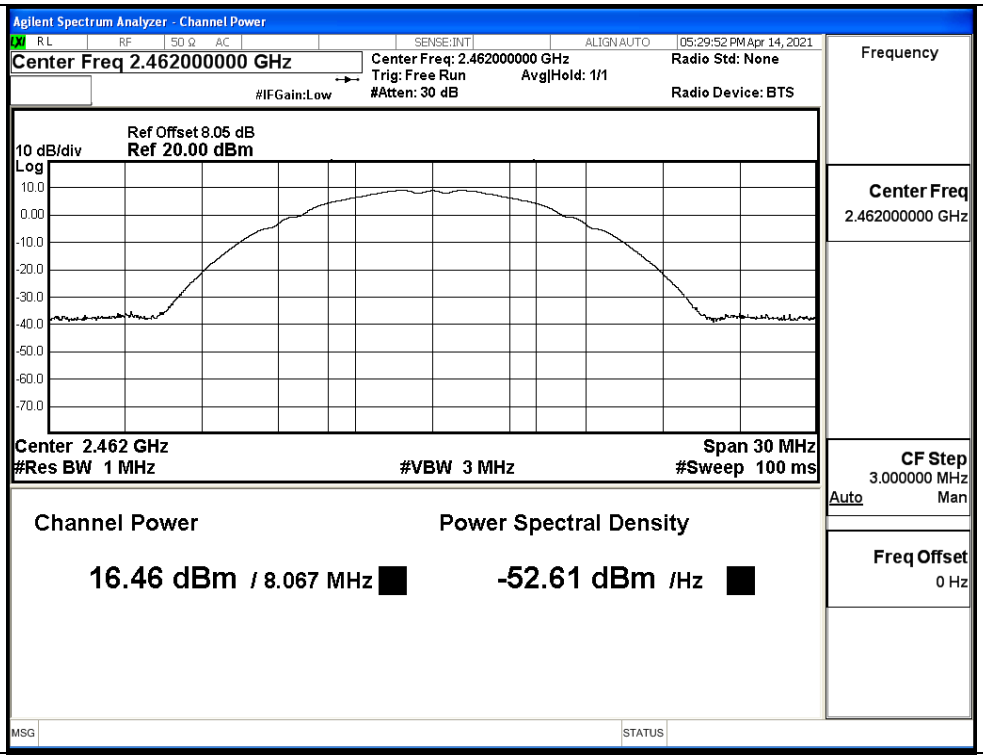
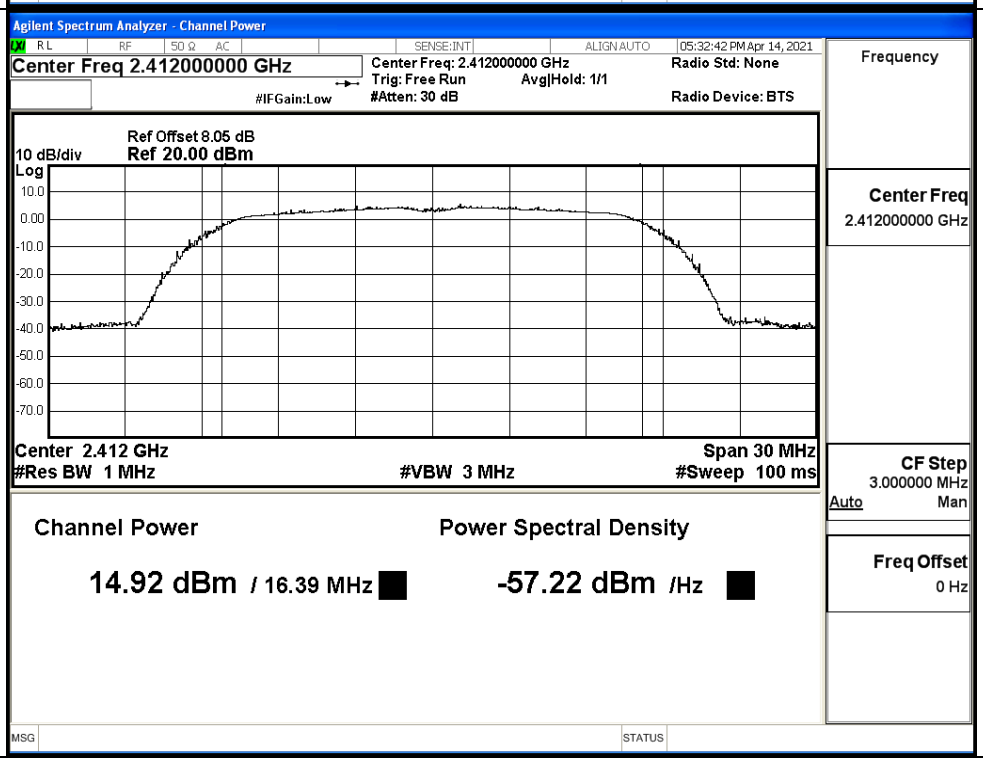

## Duty Cycle_11N40SISO_2437_Ant1

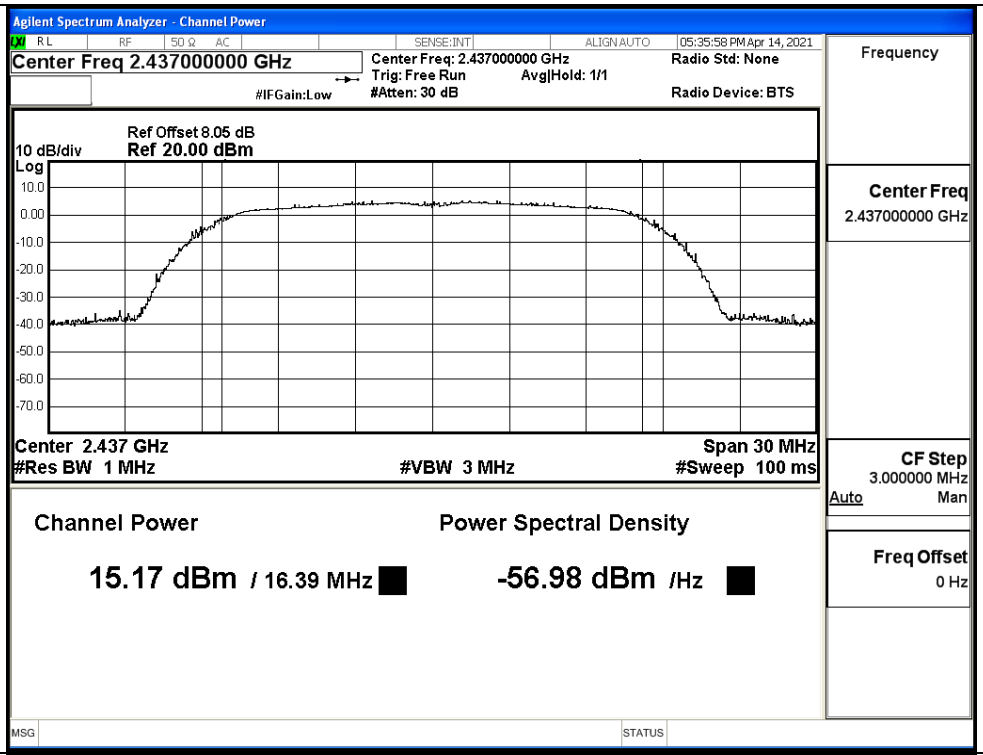
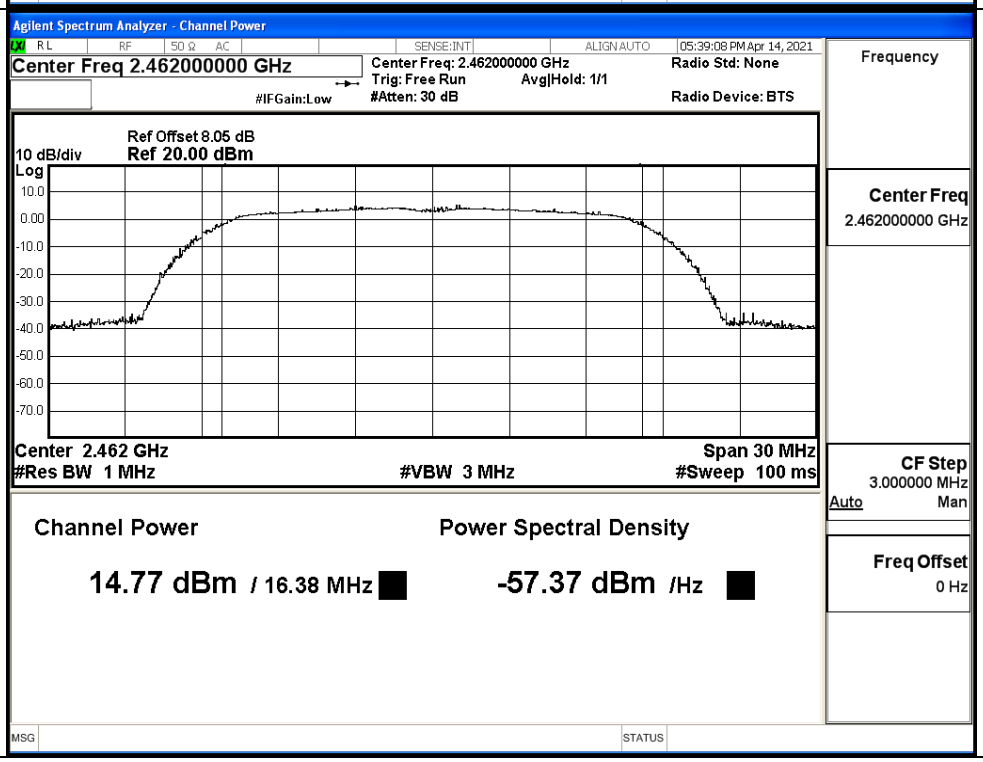


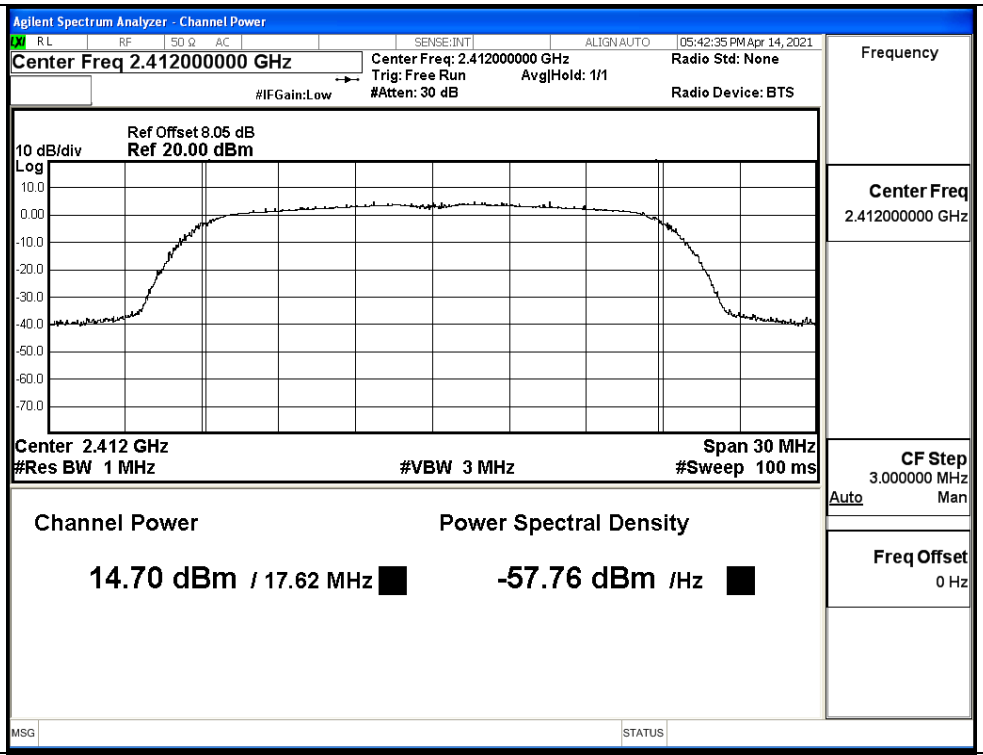
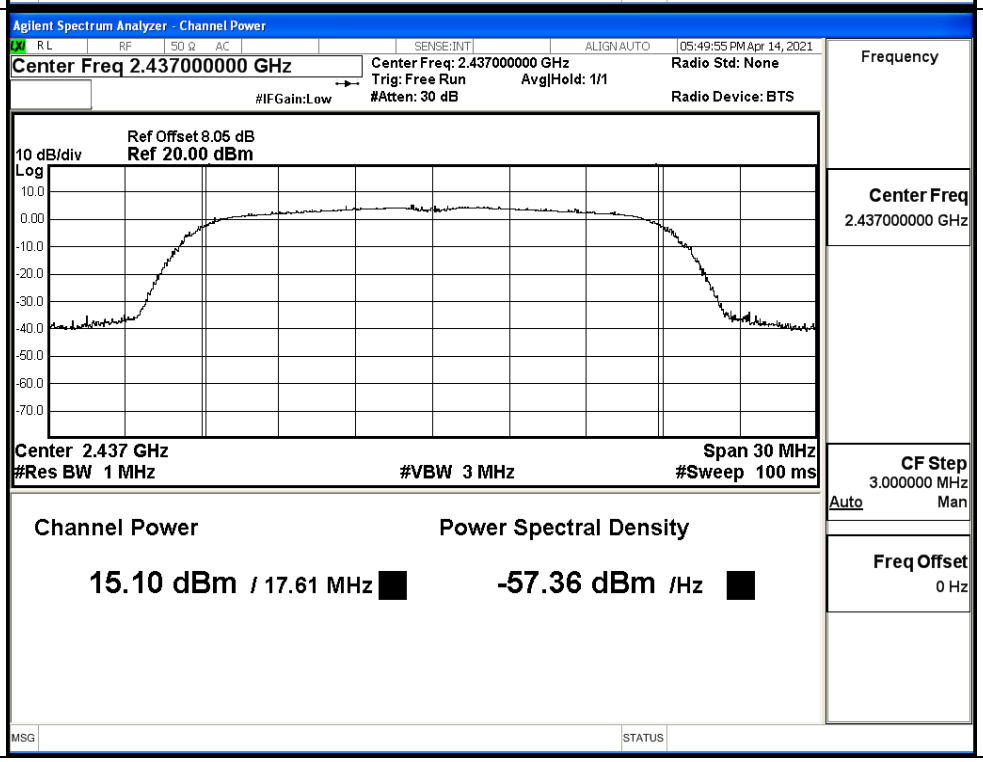
## A.2 Maximum Conducted Output Power

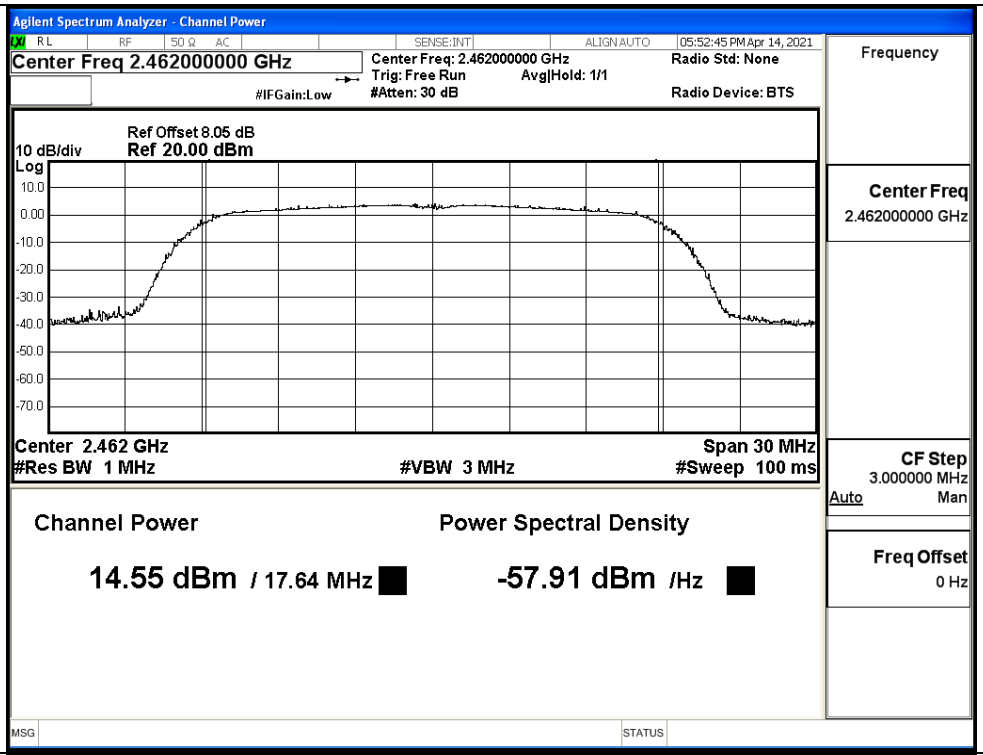
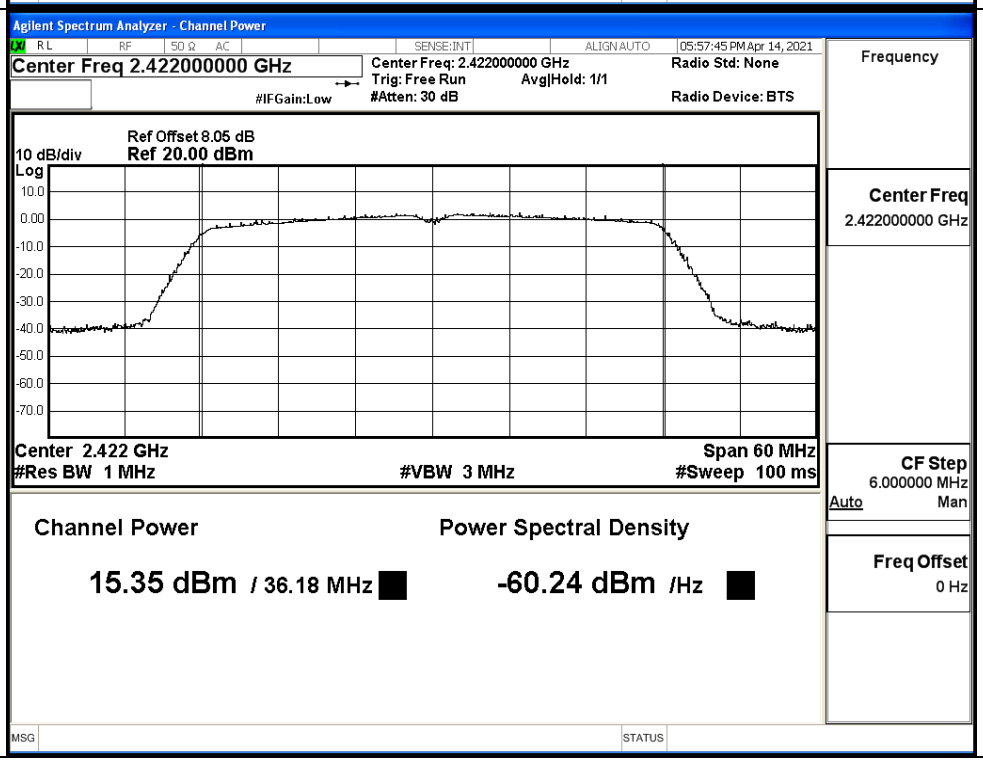
| Mode | Channel | Meas.Level [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|
| 11B | LCH | 16.34 | 30 | PASS |
| | MCH | 16.54 | 30 | PASS |
| | HCH | 16.46 | 30 | PASS |
| 11G | LCH | 14.92 | 30 | PASS |
| | MCH | 15.17 | 30 | PASS |
| | HCH | 14.77 | 30 | PASS |
| 11N20SISO | LCH | 14.7 | 30 | PASS |
| | MCH | 15.1 | 30 | PASS |
| | HCH | 14.55 | 30 | PASS |
| 11N40SISO | LCH | 15.35 | 30 | PASS |
| | MCH | 15.43 | 30 | PASS |
| | HCH | 15.38 | 30 | PASS |

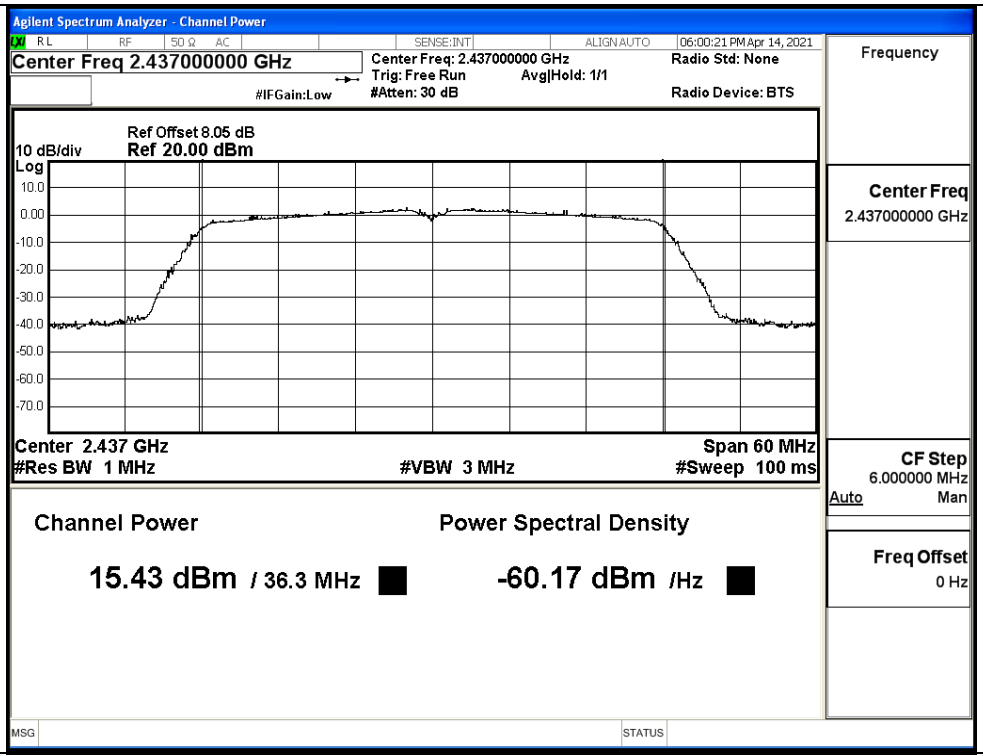
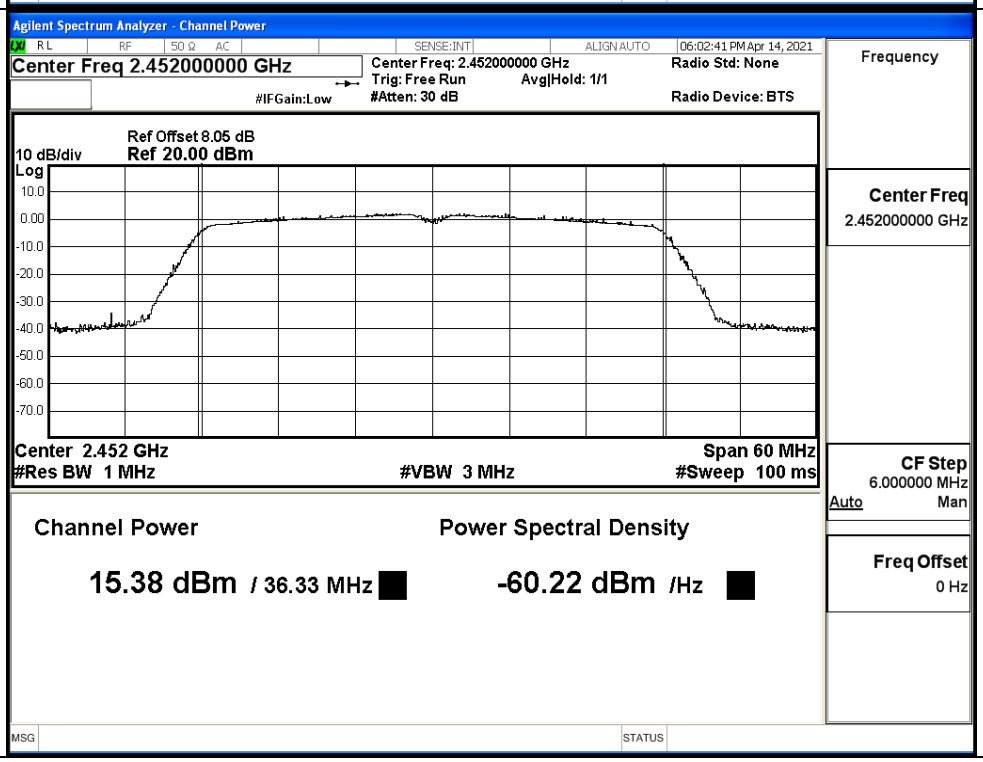
| Test Graphs | | |
|---|---|---|
| 11B/LCH | |  |
| 11B/MCH | |  |

| | | |
|---|---|---|
| 11B/HCH | |  |
| 11G/LCH | |  |

| | | |
|---|---|---|
| 11G/MCH | |  |
| 11G/HCH | |  |

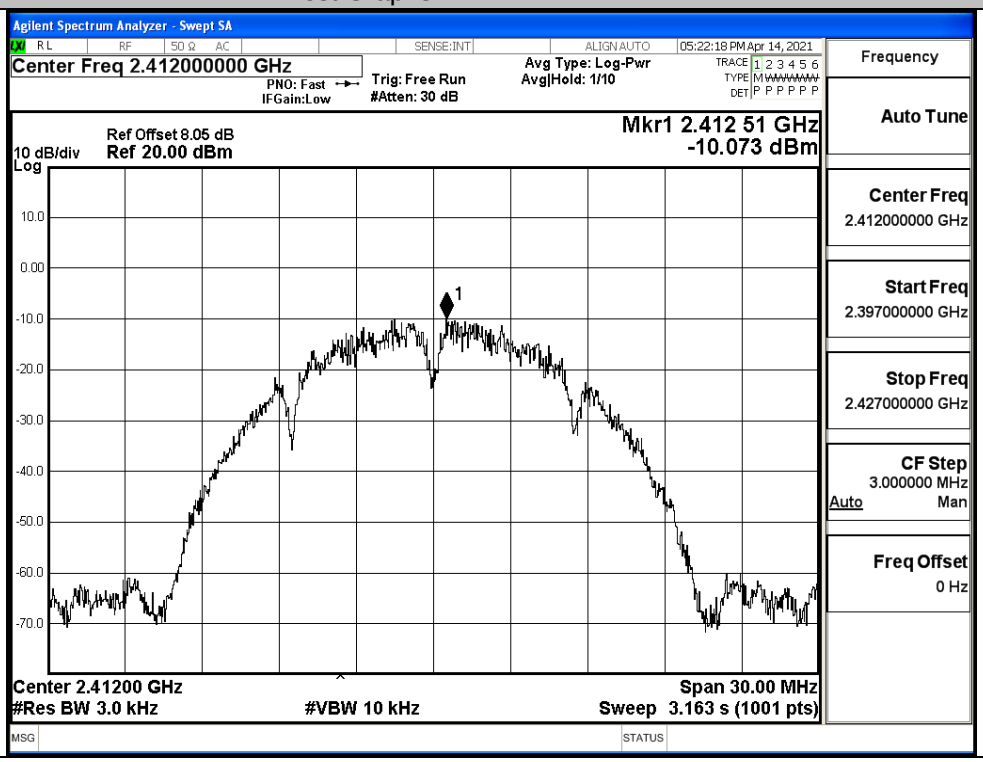
| | | |
|---|---|---|
| 11N20SISO/LCH | |  |
| 11N20SISO/MCH | |  |

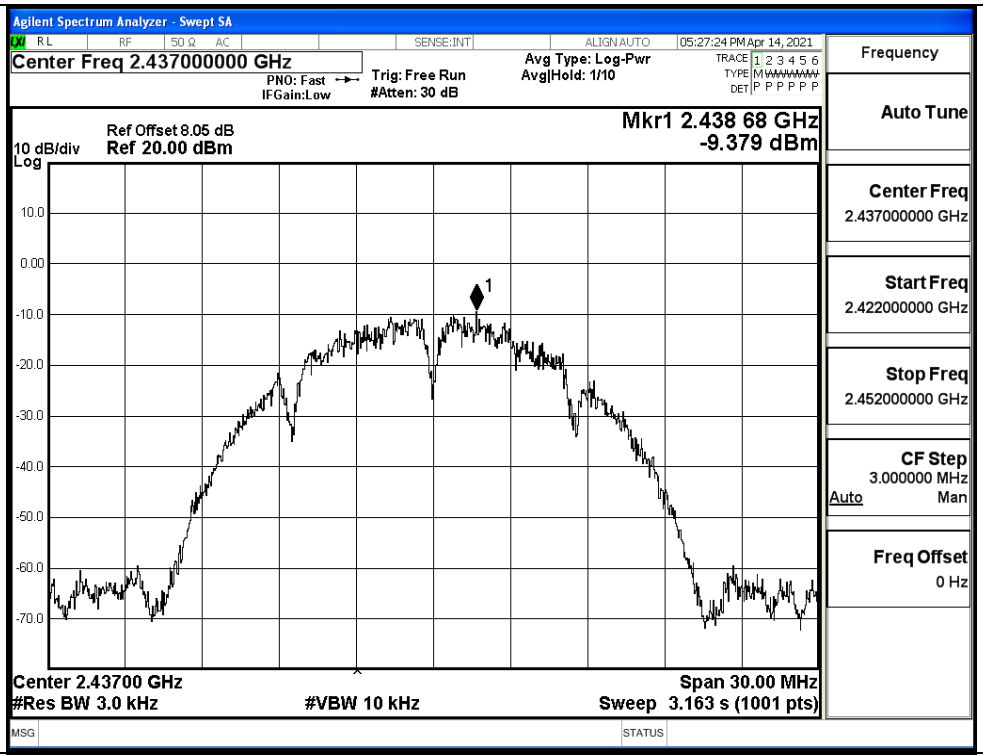
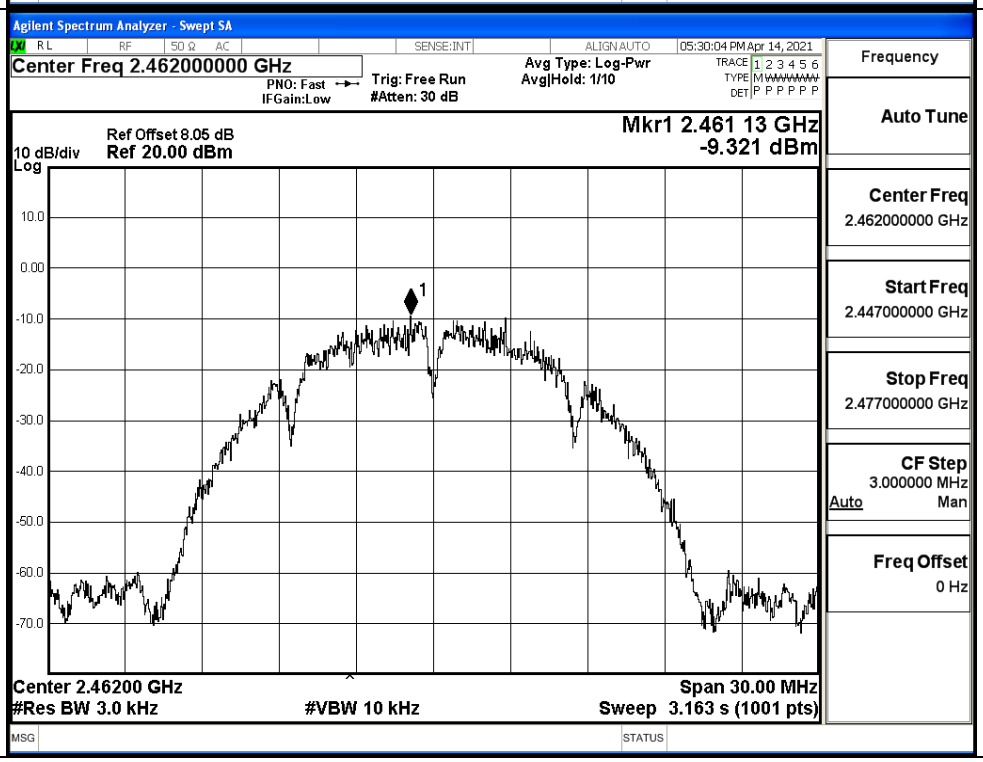
| | | |
|---|---|---|
| 11N20SISO/HCH | |  |
| 11N40SISO/LCH | |  |

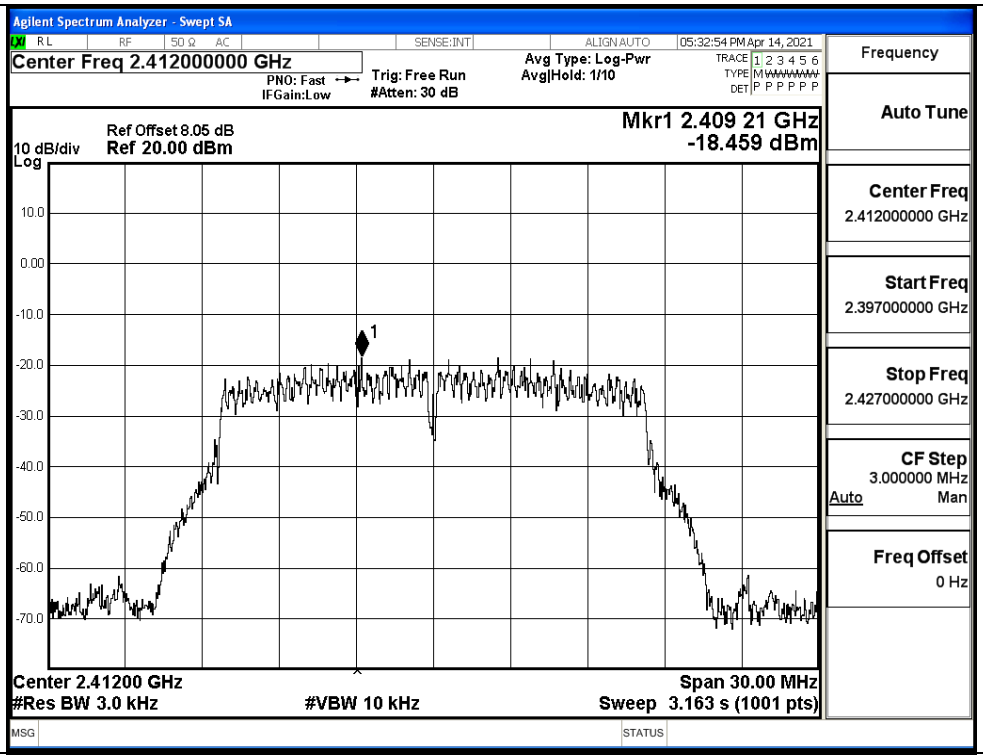
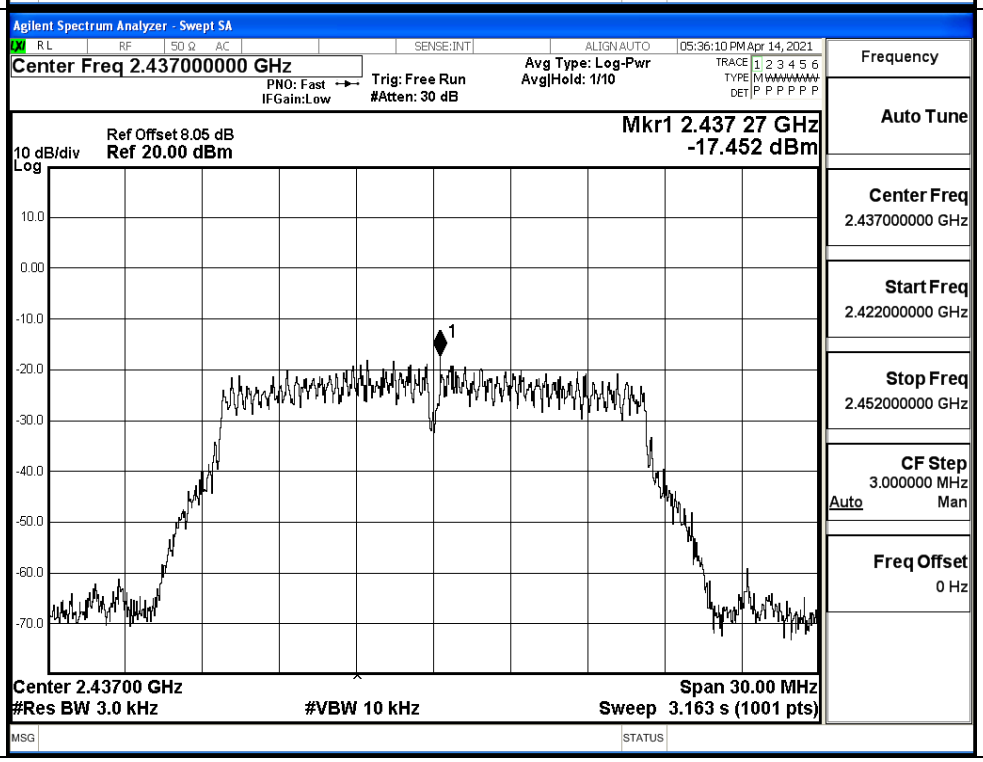
| | | |
|---|---|---|
| 11N40SISO/MCH | |  |
| 11N40SISO/HCH | |  |

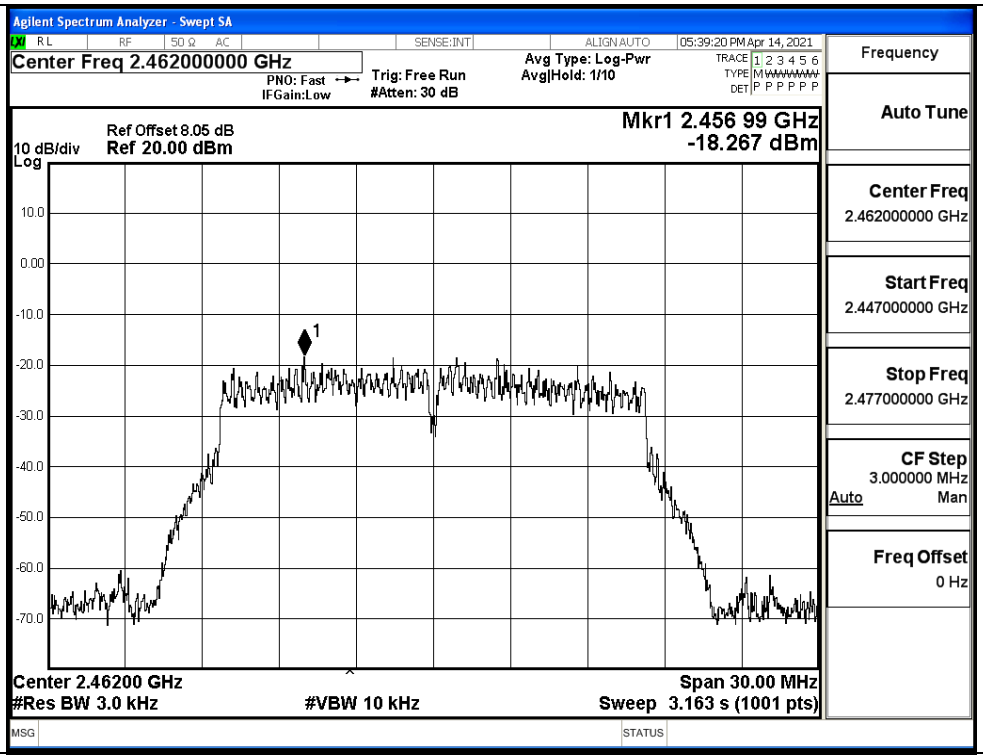
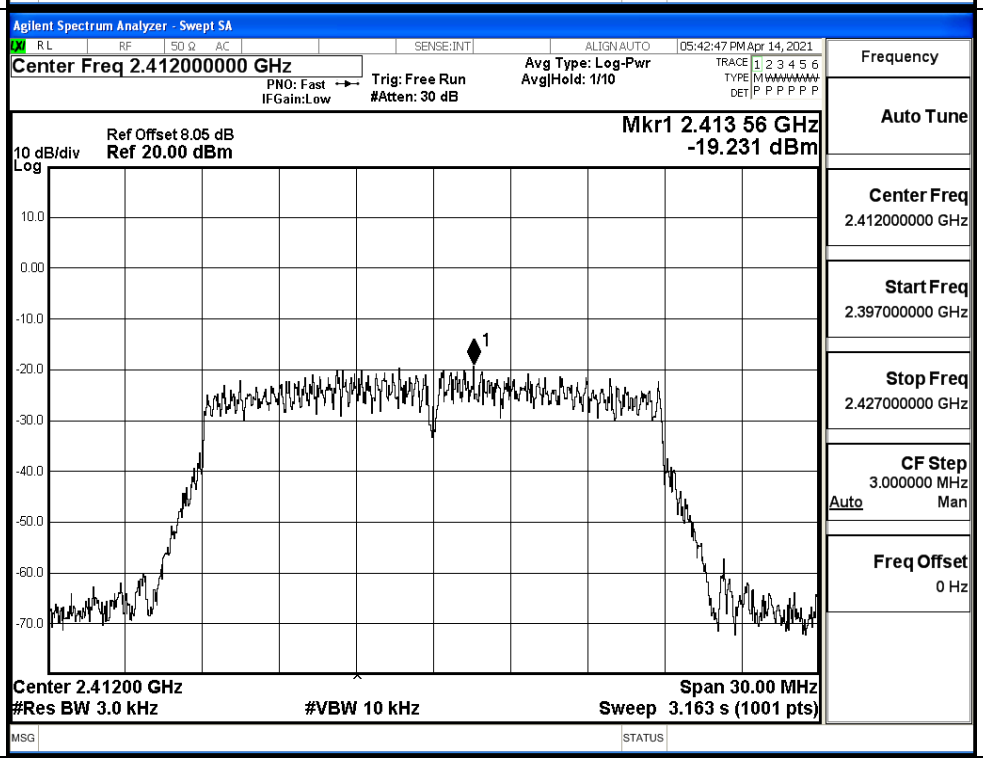
## A.3 Maximum Power Spectral Density

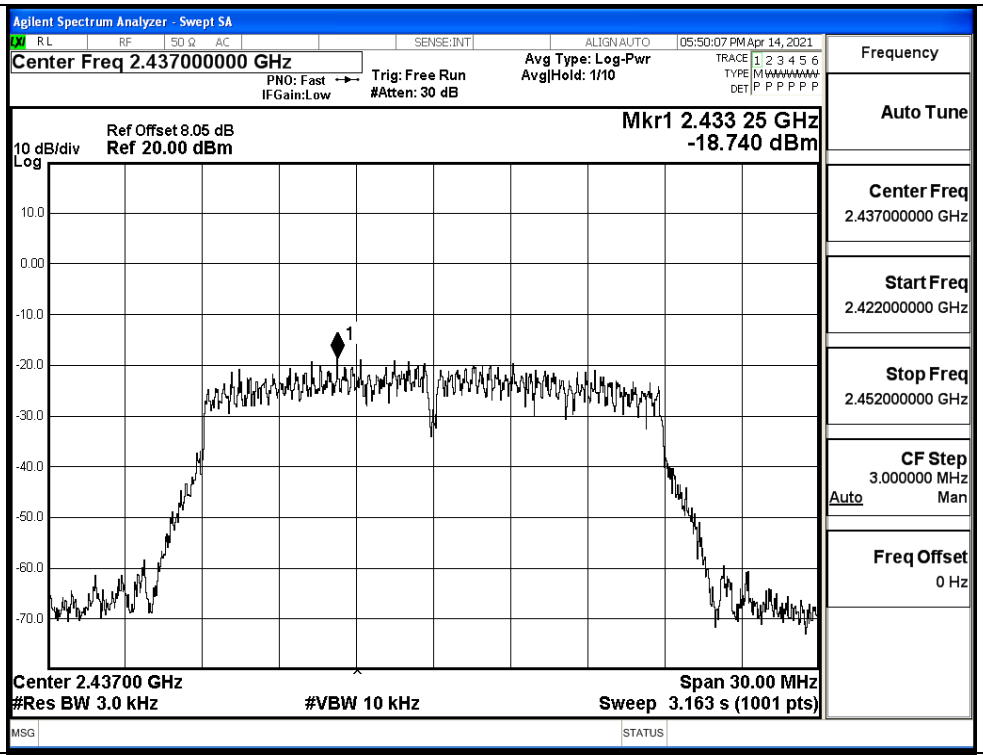
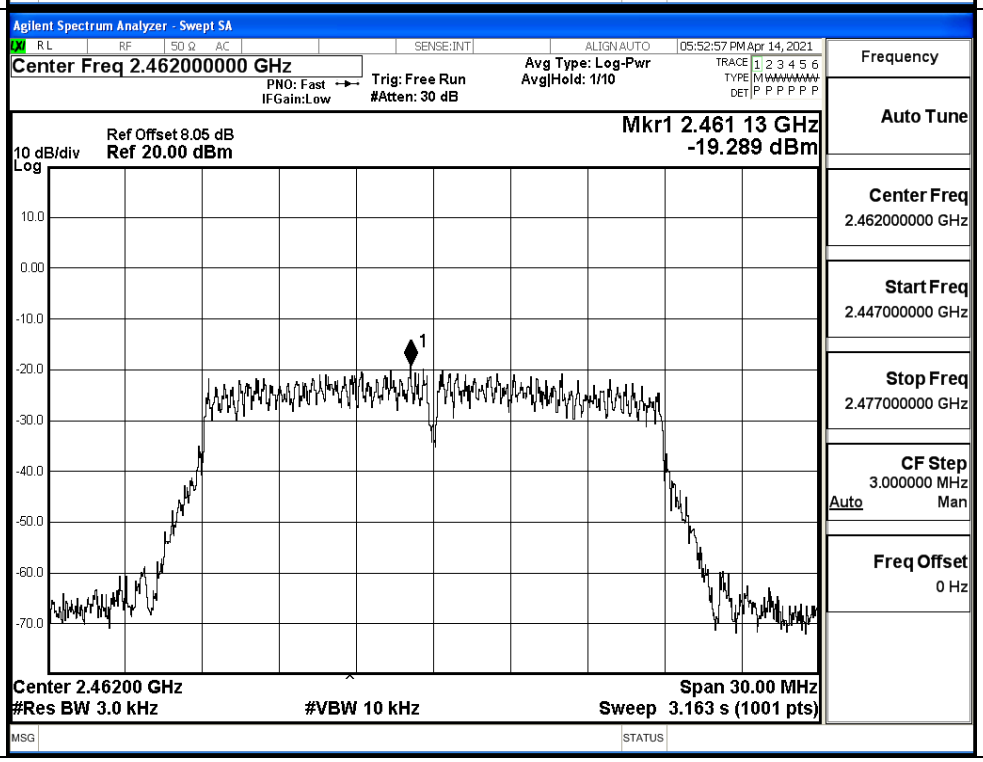
| Mode | Channel | Meas.Level [dBm/3KHz] | Limit [dBm/3KHz] | Verdict |
|---|---|---|---|---|
| 11B | LCH | -10.073 | 8 | PASS |
| | MCH | -9.379 | 8 | PASS |
| | HCH | -9.321 | 8 | PASS |
| 11G | LCH | -18.459 | 8 | PASS |
| | MCH | -17.452 | 8 | PASS |
| | HCH | -18.267 | 8 | PASS |
| 11N20SISO | LCH | -19.231 | 8 | PASS |
| | MCH | -18.740 | 8 | PASS |
| | HCH | -19.289 | 8 | PASS |
| 11N40SISO | LCH | -20.368 | 8 | PASS |
| | MCH | -19.004 | 8 | PASS |
| | HCH | -19.768 | 8 | PASS |

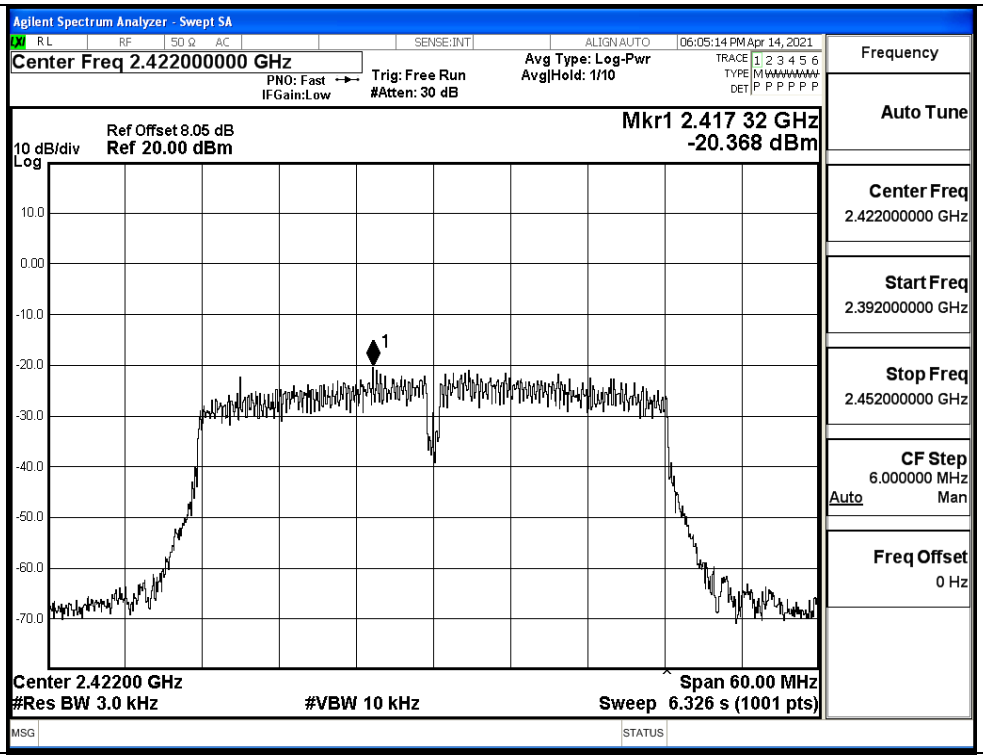
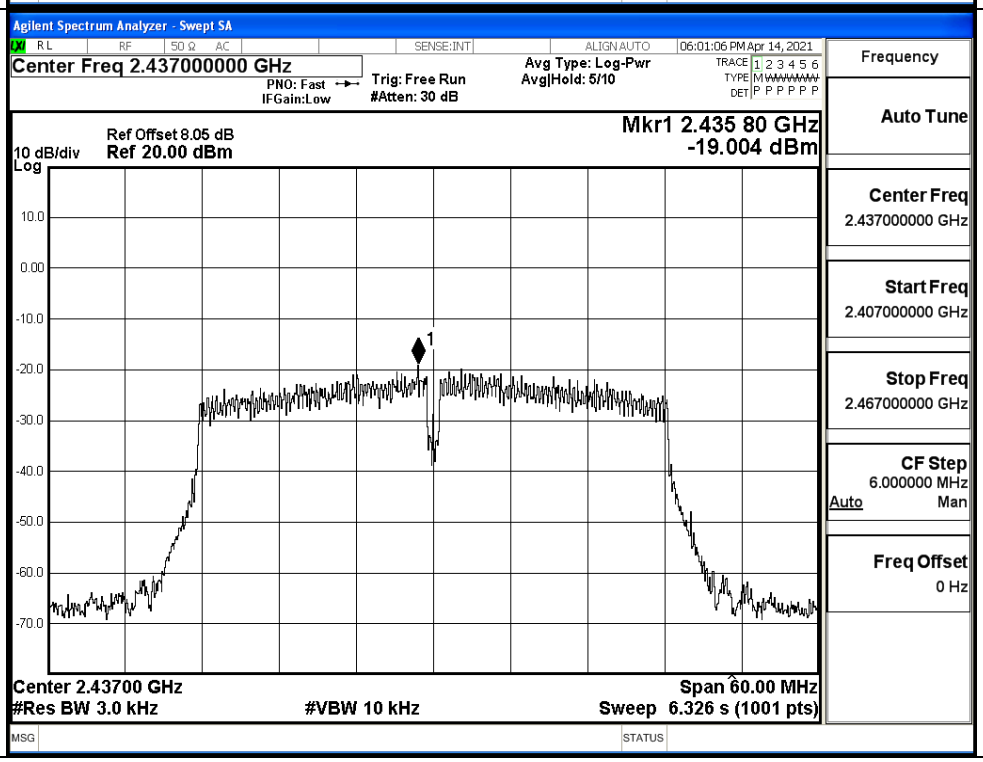
| Test Graphs | |
|---|---|
| 11B/LCH |  |

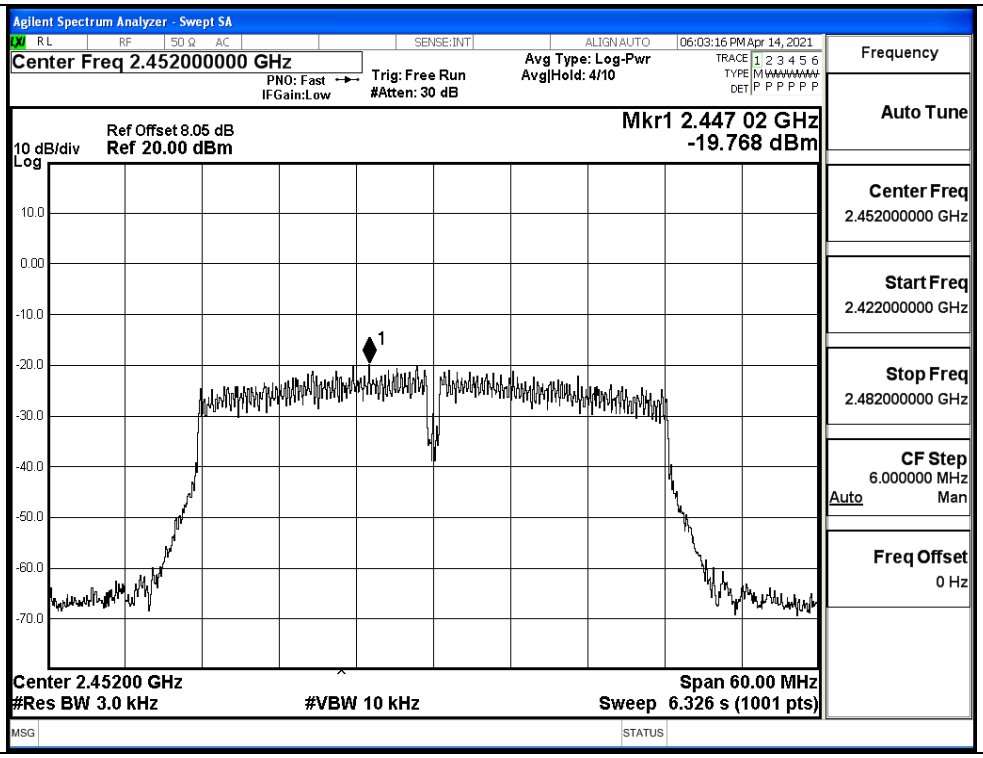
| | |
|---|---|
| 11B/MCH |  |
| 11B/HCH |  |

| | | |
|---|---|---|
| 11G/LCH | |  |
| 11G/MCH | |  |

| | | |
|---|---|---|
| 11G/HCH |  | |
| 11N20SISO/LCH |  | |

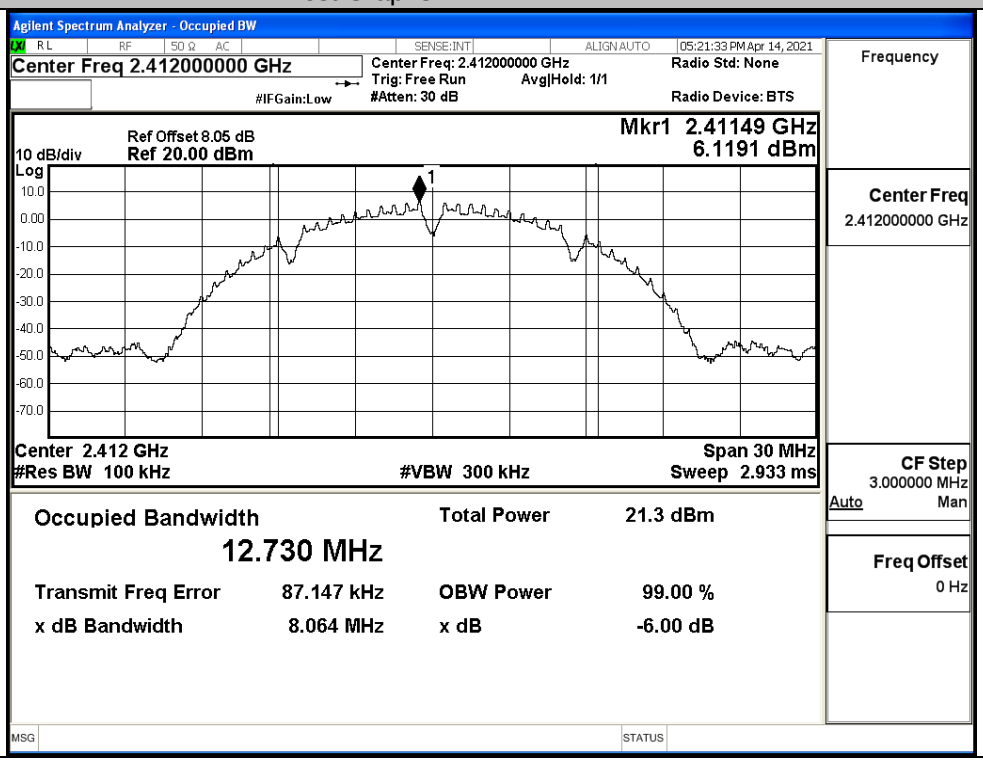
| | |
|---|---|
| 11N20SISO/MCH |  |
| 11N20SISO/HCH |  |

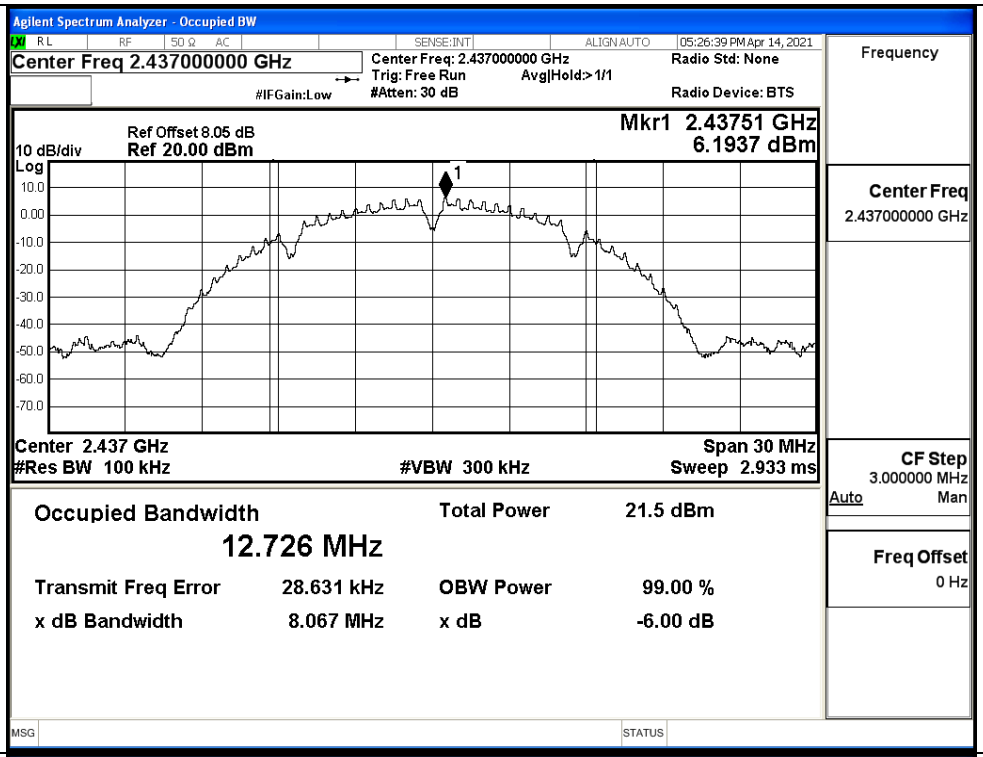
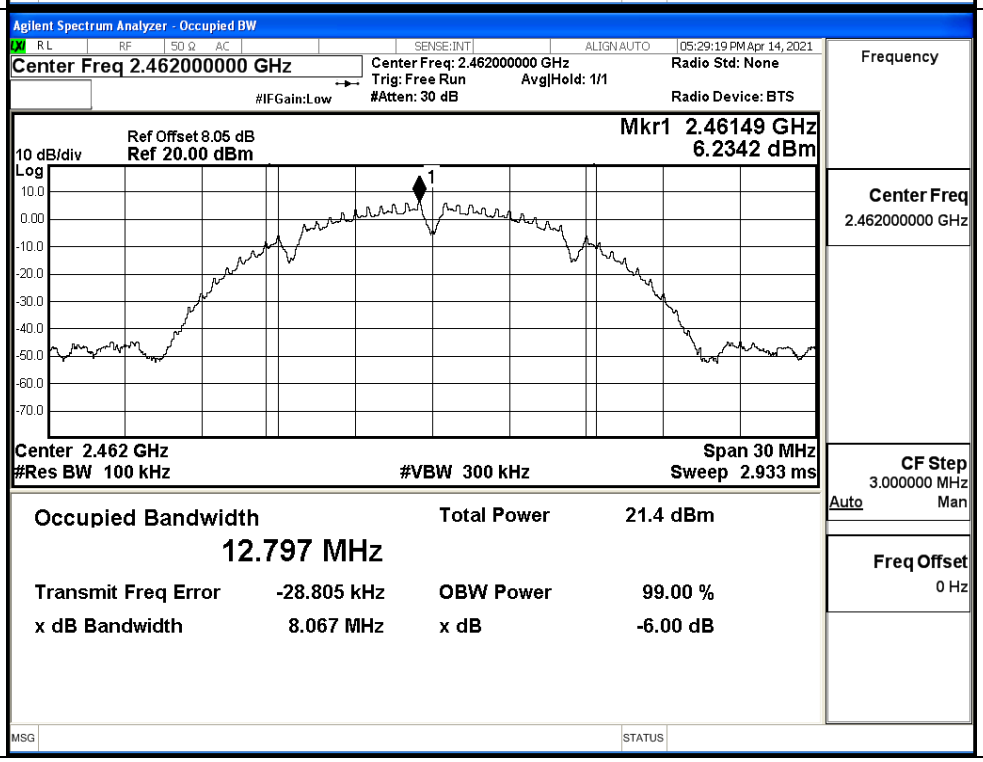
| | | |
|---|---|---|
| 11N40SISO/LCH | |  |
| 11N40SISO/MCH | |  |

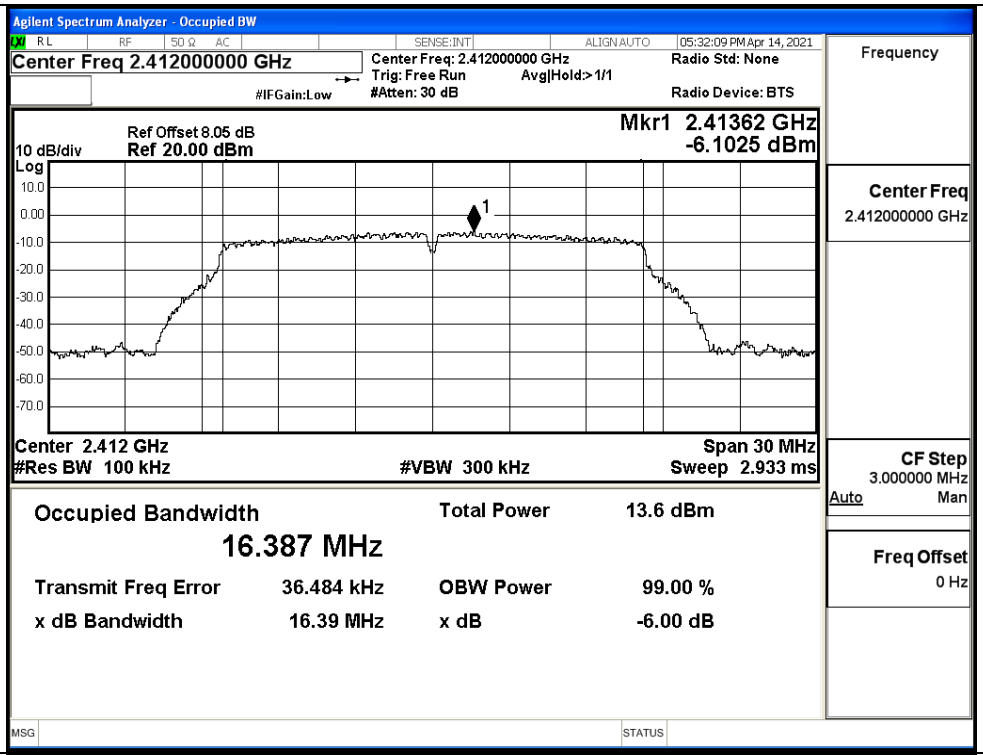
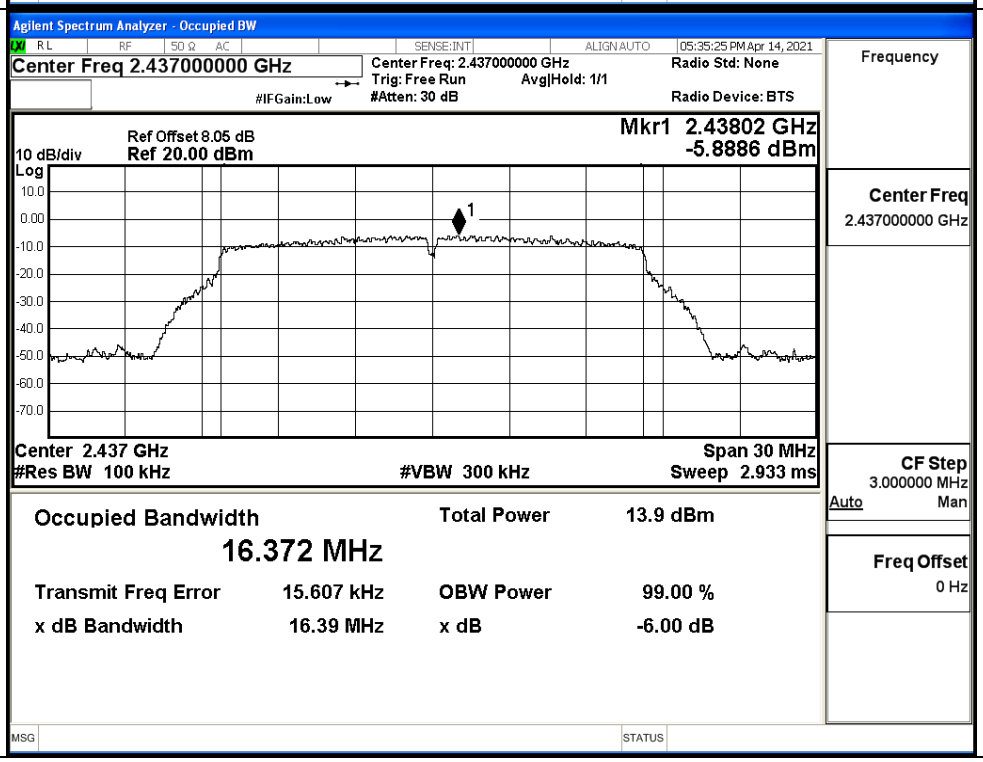
| | | |
|---|---|---|
| 11N40SISO/HCH | |  |

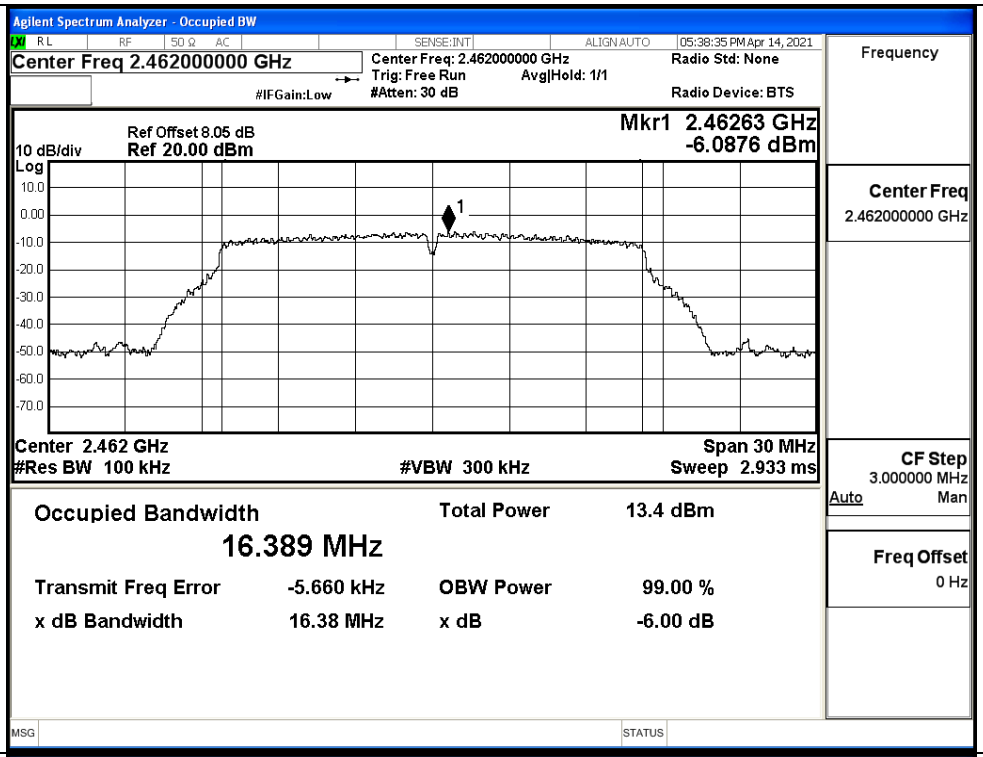
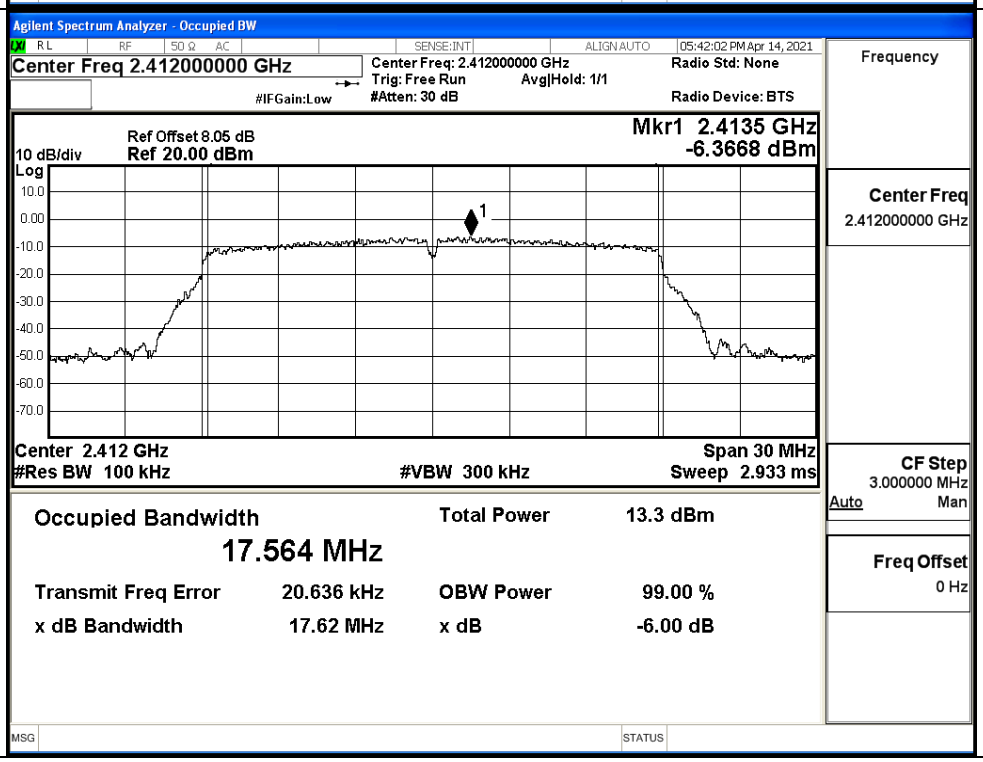
## A.4 6dB Bandwidth

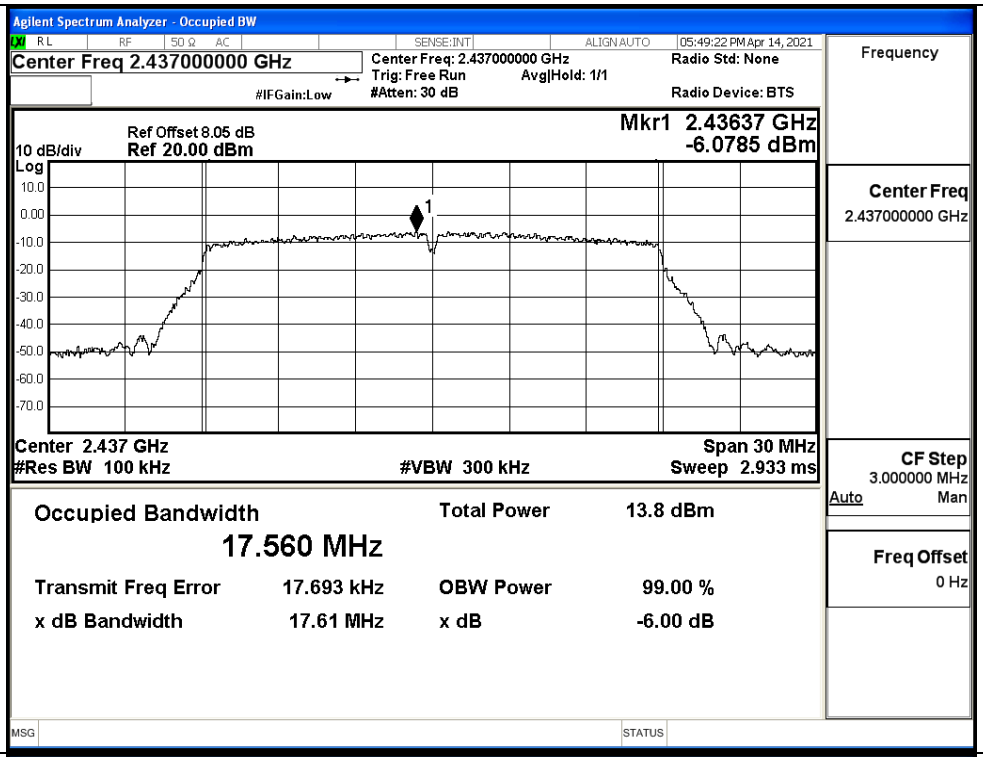
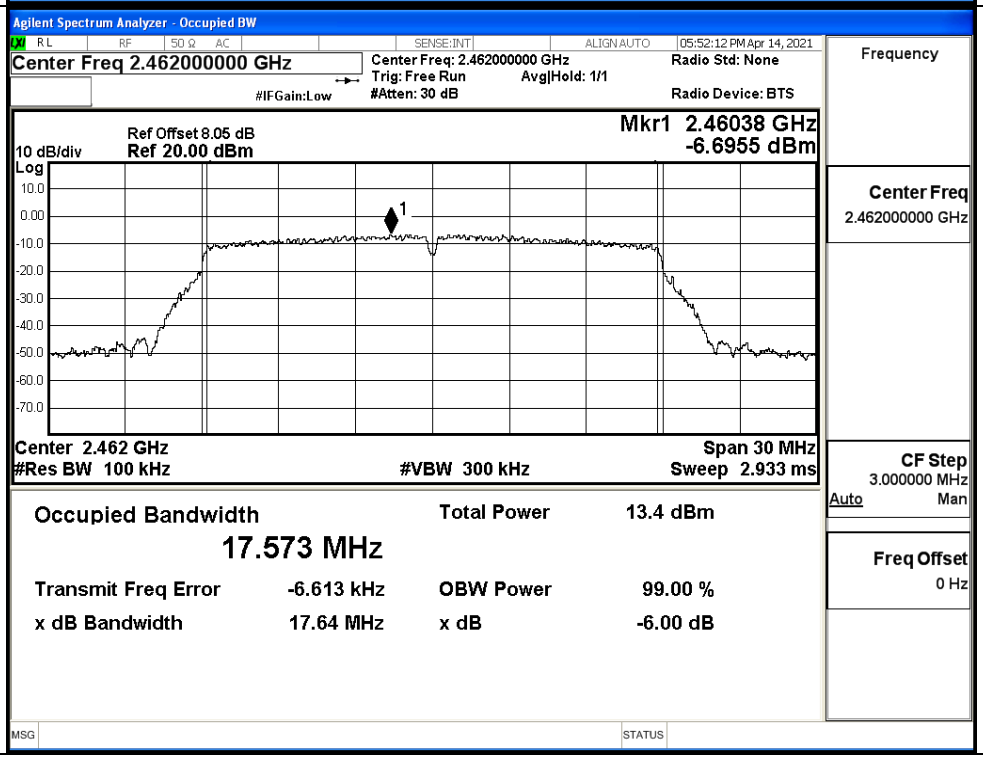
| Mode | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|---|---|---|---|---|
| 11B | LCH | 8.064 | ⩾0.5 | PASS |
| | MCH | 8.067 | ⩾0.5 | PASS |
| | HCH | 8.067 | ⩾0.5 | PASS |
| 11G | LCH | 16.39 | ⩾0.5 | PASS |
| | MCH | 16.39 | ⩾0.5 | PASS |
| | HCH | 16.38 | ⩾0.5 | PASS |
| 11N20SISO | LCH | 17.62 | ⩾0.5 | PASS |
| | MCH | 17.61 | ⩾0.5 | PASS |
| | HCH | 17.64 | ⩾0.5 | PASS |
| 11N40SISO | LCH | 36.18 | ⩾0.5 | PASS |
| | MCH | 36.30 | ⩾0.5 | PASS |
| | HCH | 36.33 | ⩾0.5 | PASS |

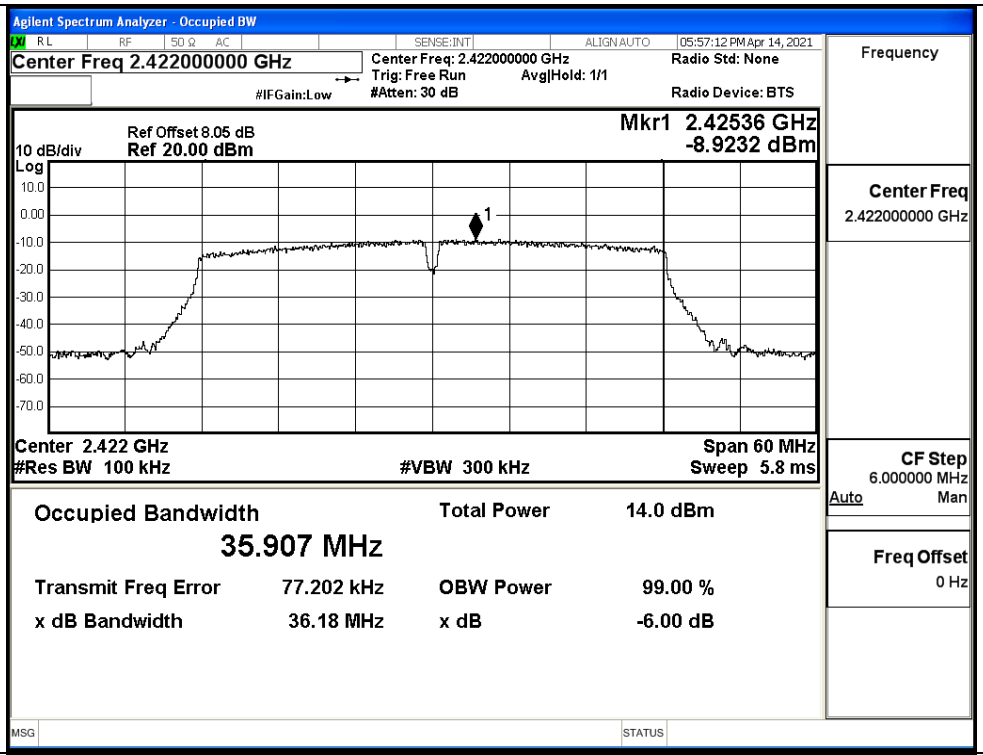
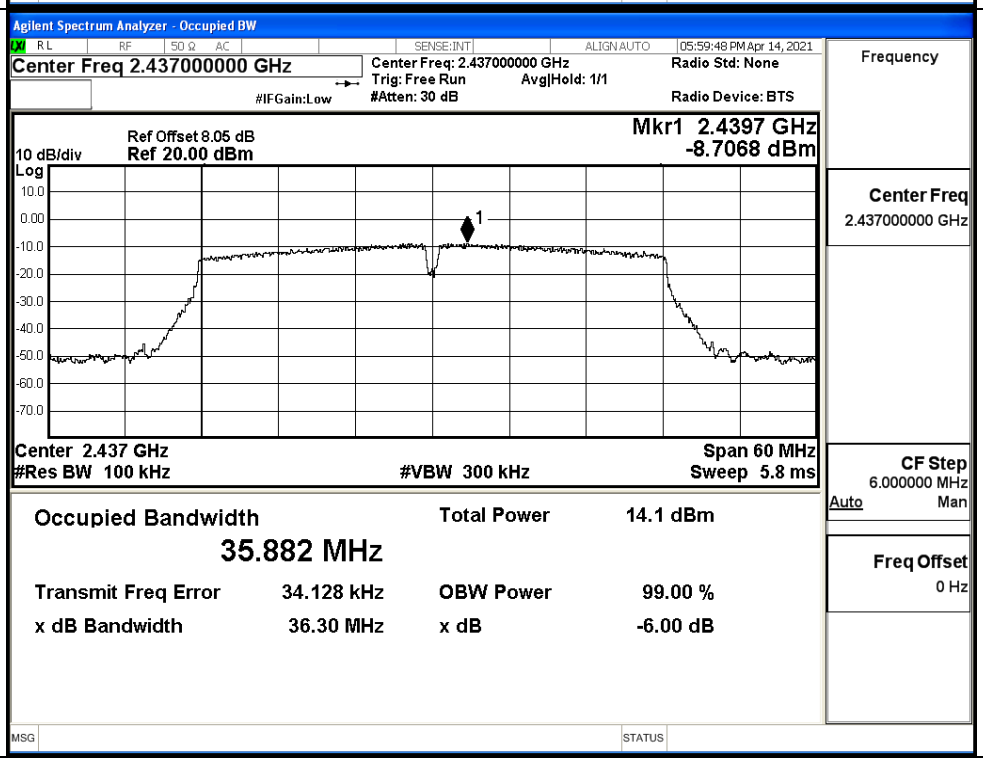
| Test Graphs | |
|---|---|
| 11B/LCH |  |

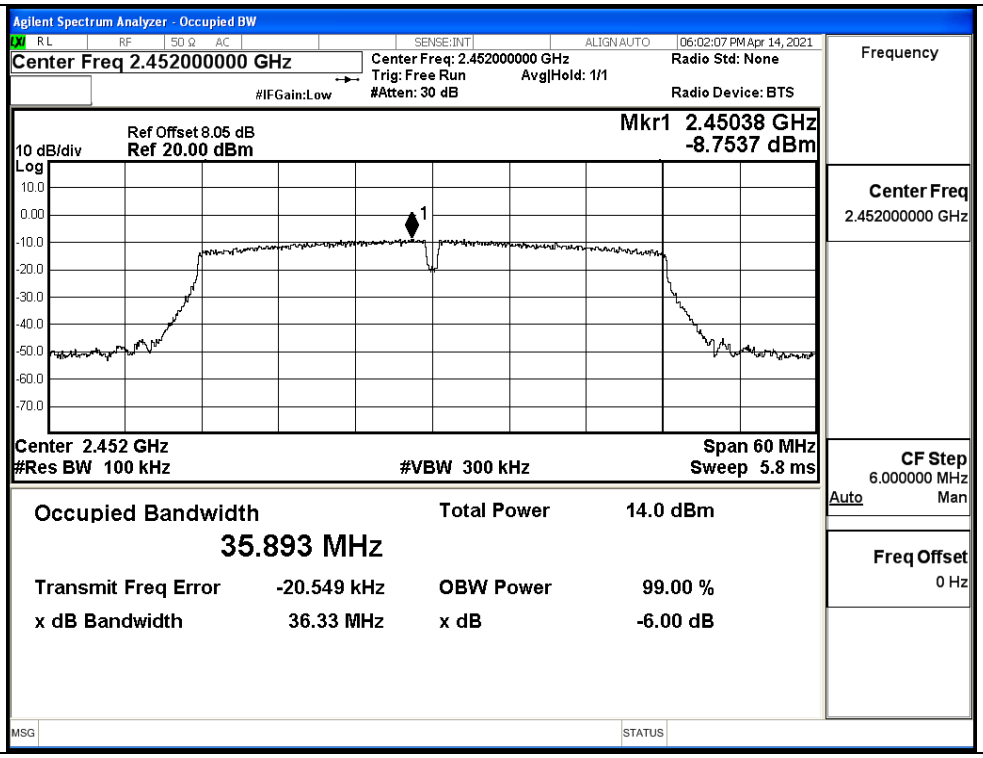
| | | |
|---|---|---|
| 11B/MCH | |  |
| 11B/HCH | |  |

| | | |
|---|---|---|
| 11G/LCH |  | |
| 11G/MCH |  | |

| | | |
|---|---|---|
| 11G/HCH |  | |
| 11N20SISO/LCH |  | |

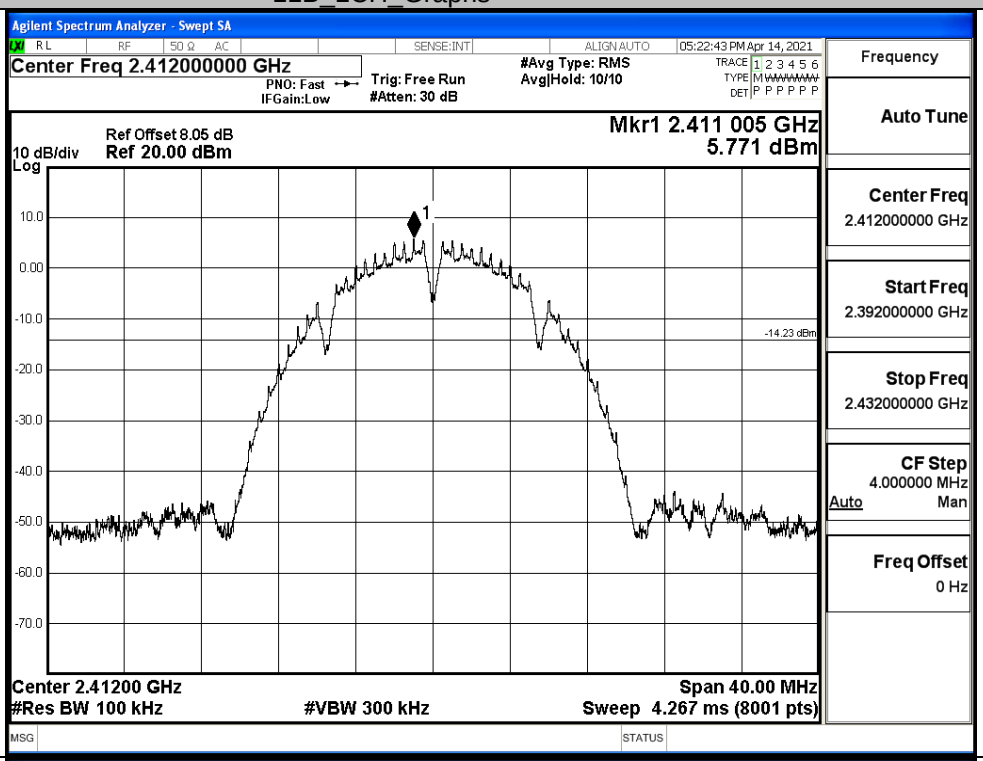
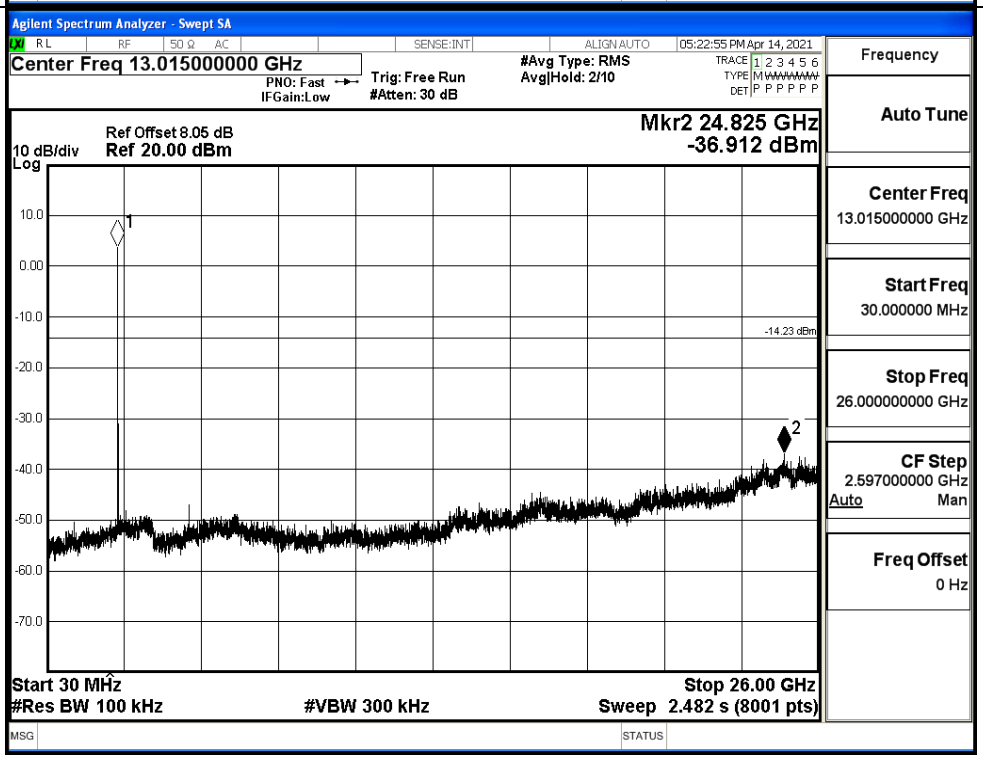
| | | |
|---|---|---|
| 11N20SISO/MCH | |  |
| 11N20SISO/HCH | |  |

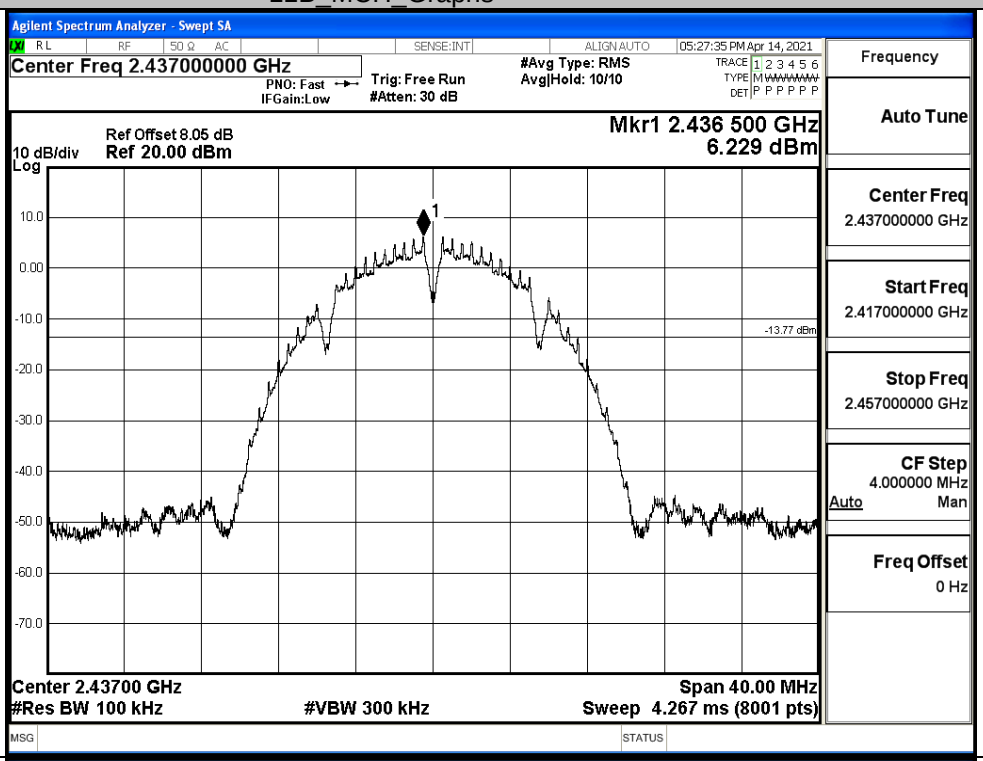
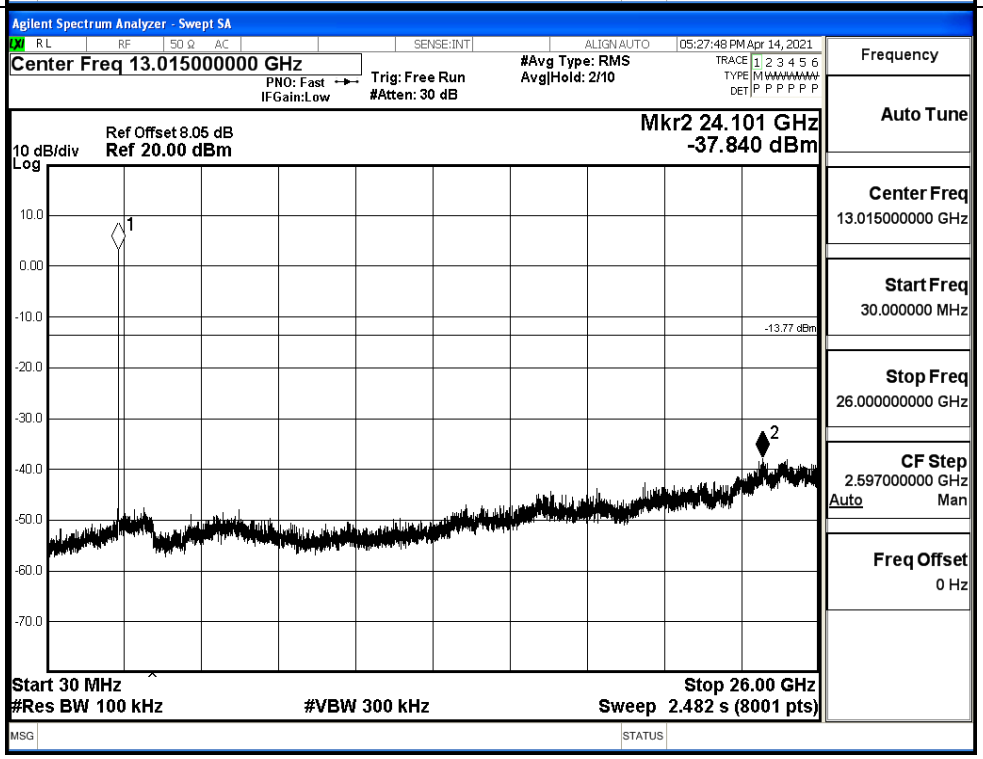
| | | |
|---|---|---|
| 11N40SISO/LCH | |  |
| 11N40SISO/MCH | |  |

| | | |
|---|---|---|
| 11N40SISO/HCH | |  |

## A.5 RF Conducted Spurious Emissions

| Mode | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|
| 11B | LCH | 5.771 | -36.912 | -14.229 | PASS |
| | MCH | 6.229 | -37.840 | -13.771 | PASS |
| | HCH | 5.83 | -37.289 | -14.170 | PASS |
| 11G | LCH | -6.27 | -38.295 | -26.270 | PASS |
| | MCH | -5.916 | -37.505 | -25.916 | PASS |
| | HCH | -6.45 | -37.522 | -26.450 | PASS |
| 11N20 SISO | LCH | -6.661 | -37.650 | -26.661 | PASS |
| | MCH | -6.489 | -38.266 | -26.489 | PASS |
| | HCH | -6.773 | -38.411 | -26.773 | PASS |
| 11N40 SISO | LCH | -8.951 | -37.373 | -28.951 | PASS |
| | MCH | -8.657 | -36.755 | -28.657 | PASS |
| | HCH | -8.438 | -38.653 | -28.438 | PASS |

| 11B_LCH_Graphs | | |
|---|---|---|
| Pref/11B/LCH | |  |
| Puw/11B/LCH | |  |

| 11B_MCH_Graphs | | |
|---|---|---|
| Pref/11B/MCH | |  |
| Puw/11B/MCH | |  |

| 11B_HCH_Graphs | | |
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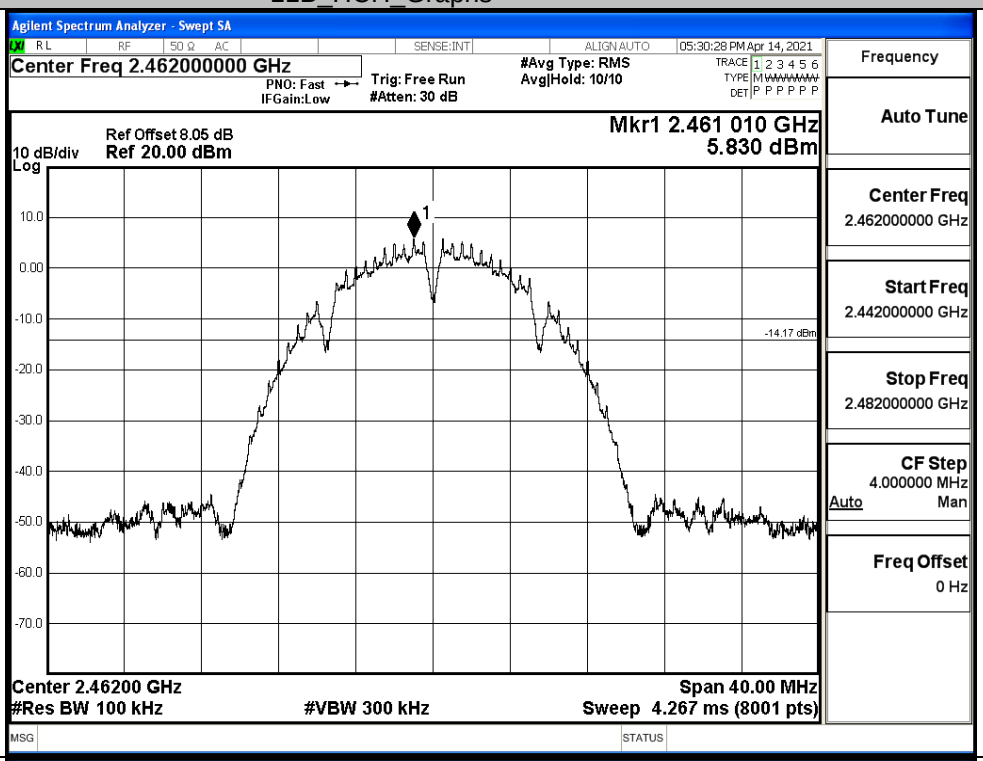
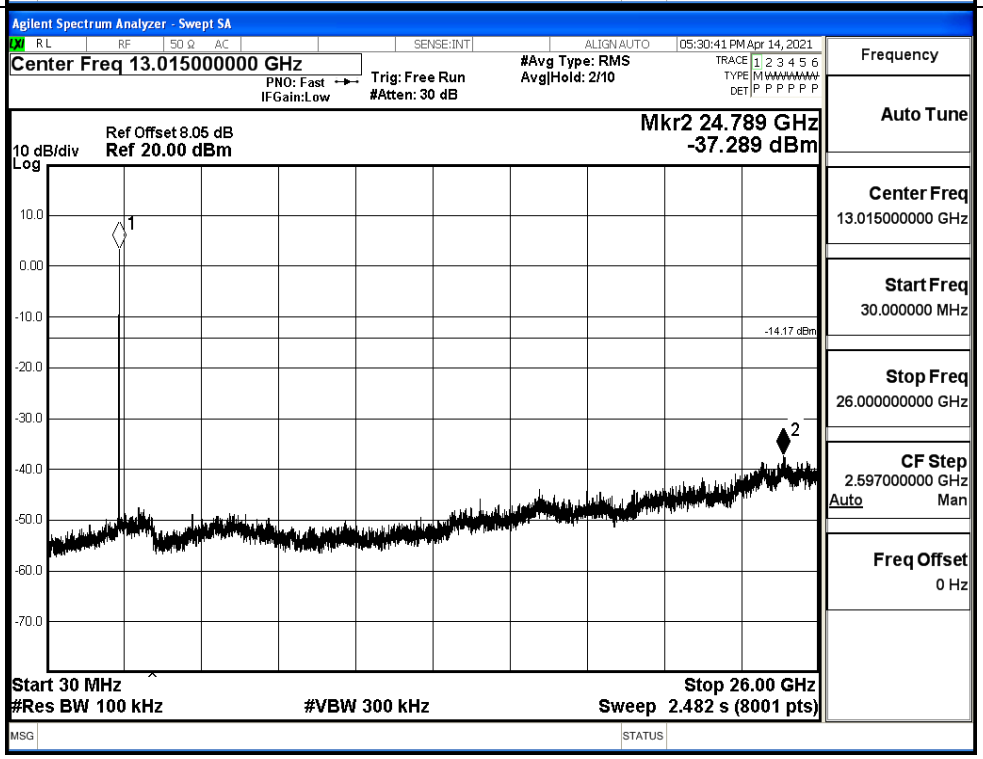
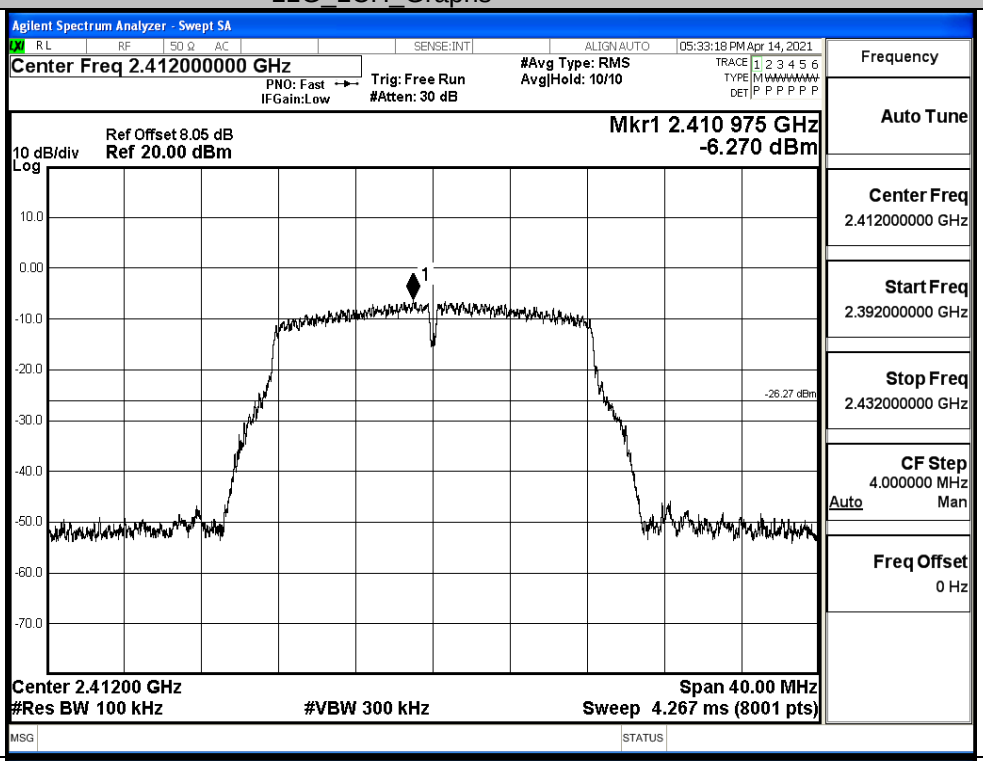
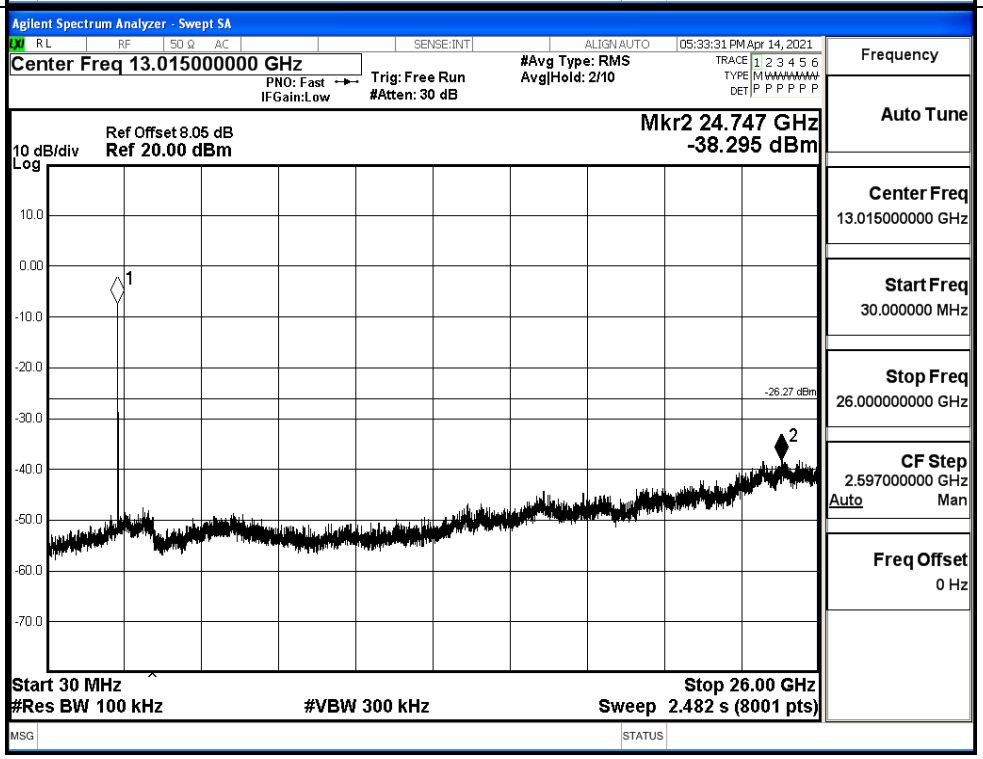
| Pref/11B/HCH | |  |
| Puw/11B/HCH | |  |

| 11G_LCH_Graphs | | |
|---|---|---|
| Pref/11G/LCH | |  |
| Puw/11G/LCH | |  |

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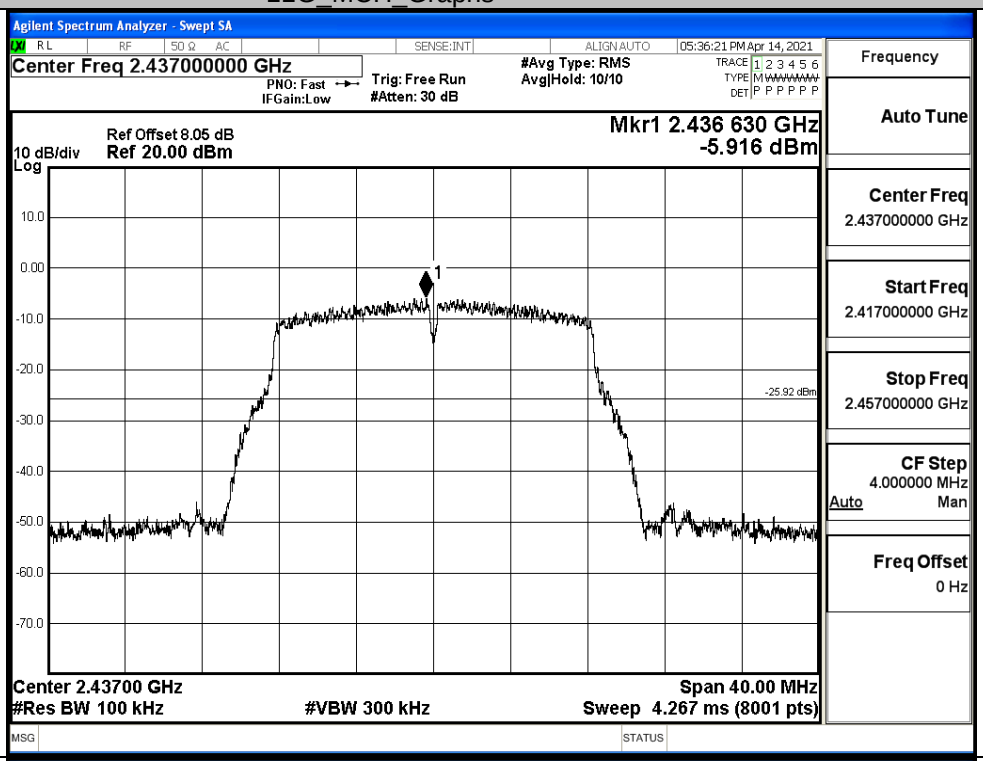
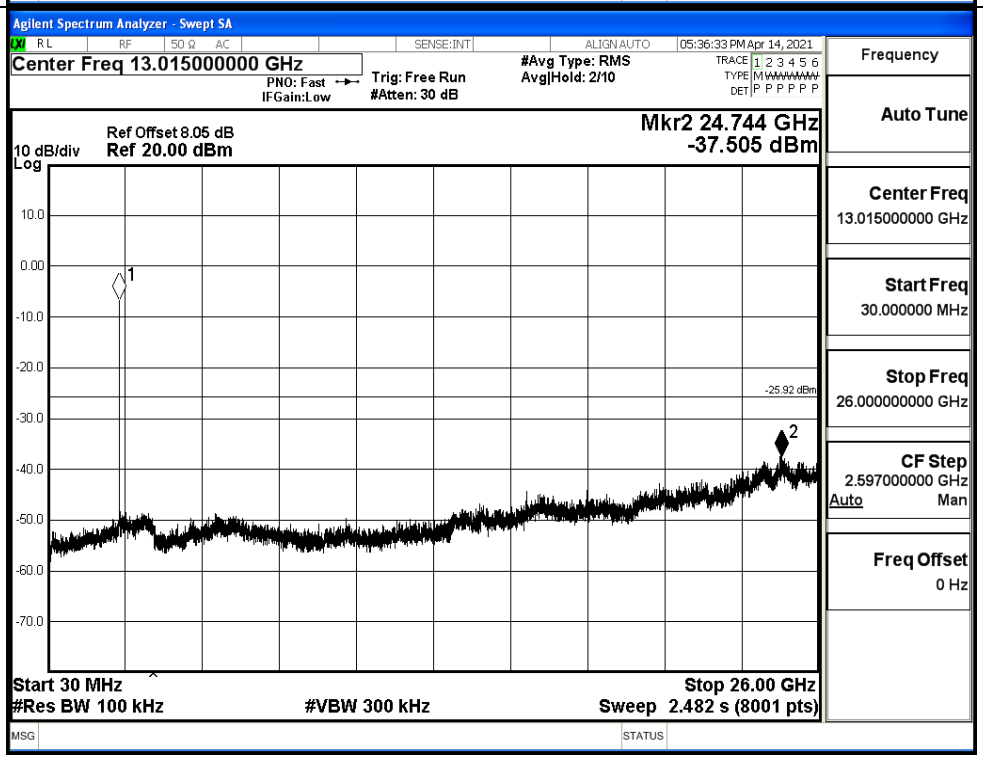
| Pref/11G/MCH |  |
| Puw/11G/MCH |  |

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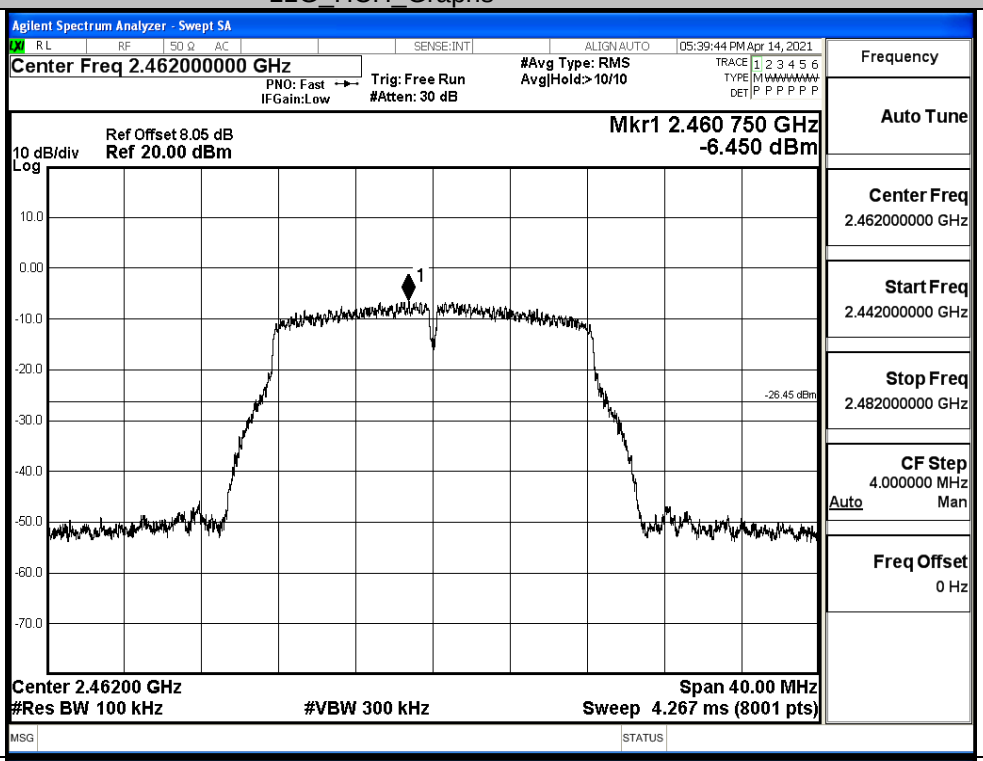
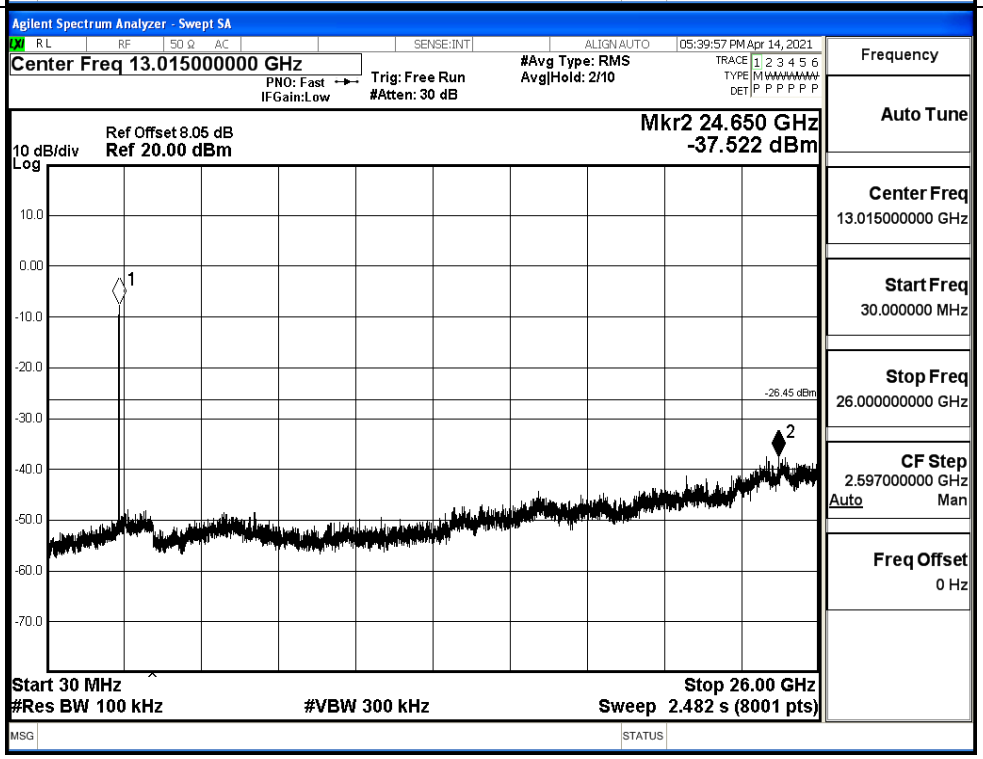
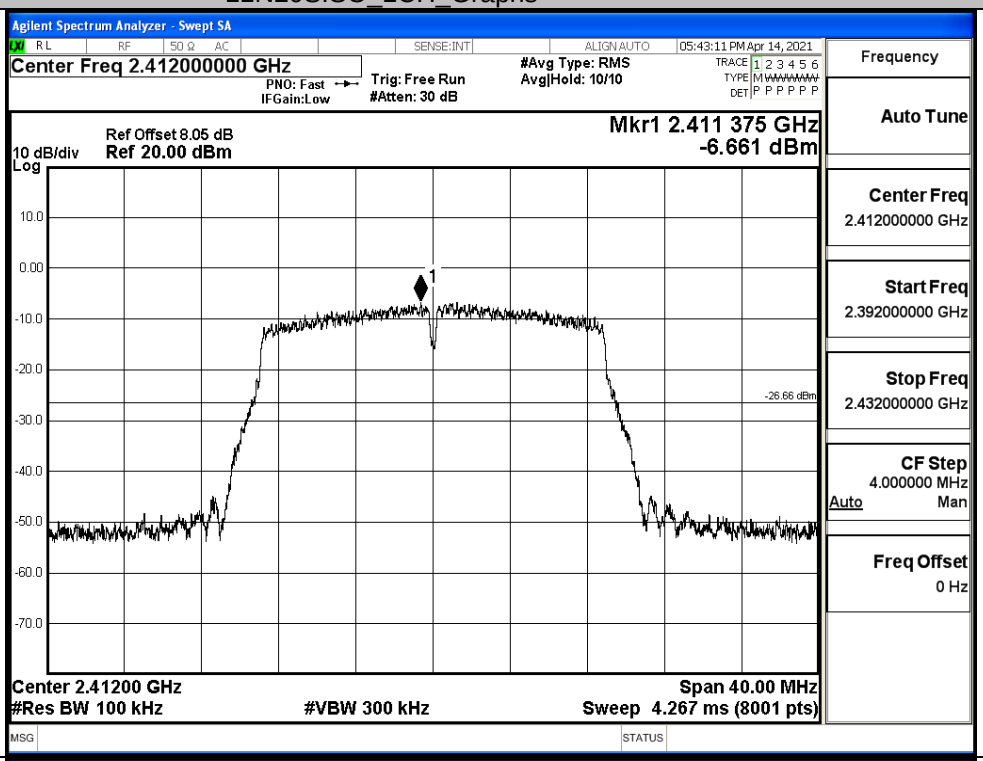
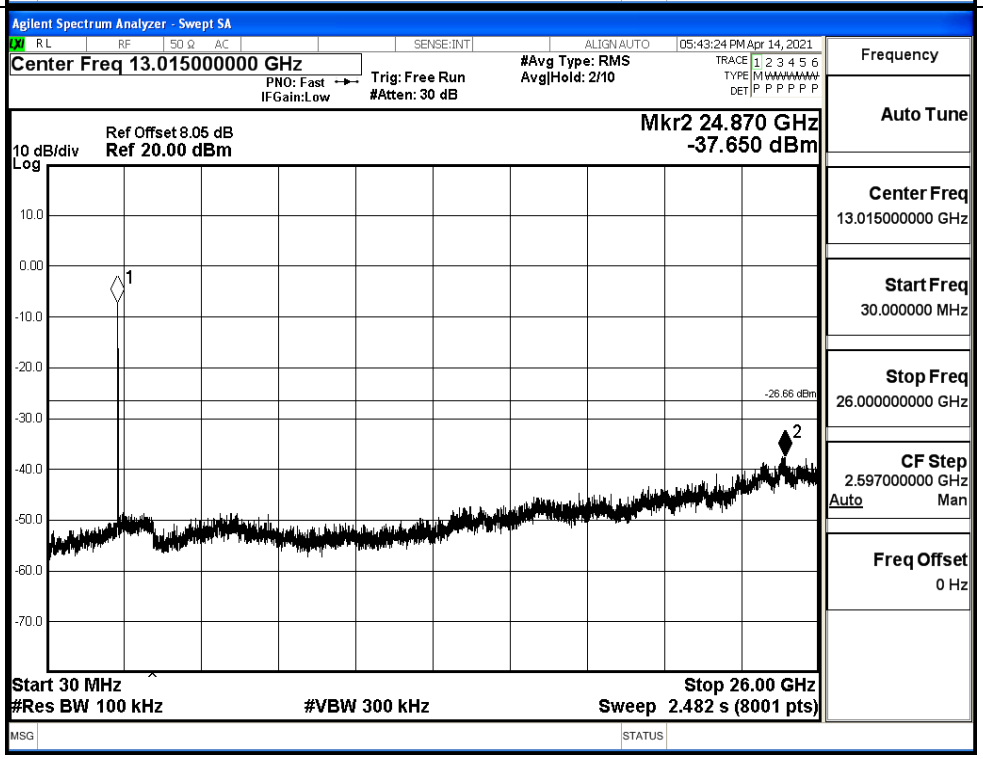
| Pref/11G/HCH | |  |
| Puw/11G/HCH | |  |

| 11N20SISO_LCH_Graphs | | |
|---|---|---|
| Pref/11N20SISO/LCH |  | |
| Puw/11N20SISO/LCH |  | |

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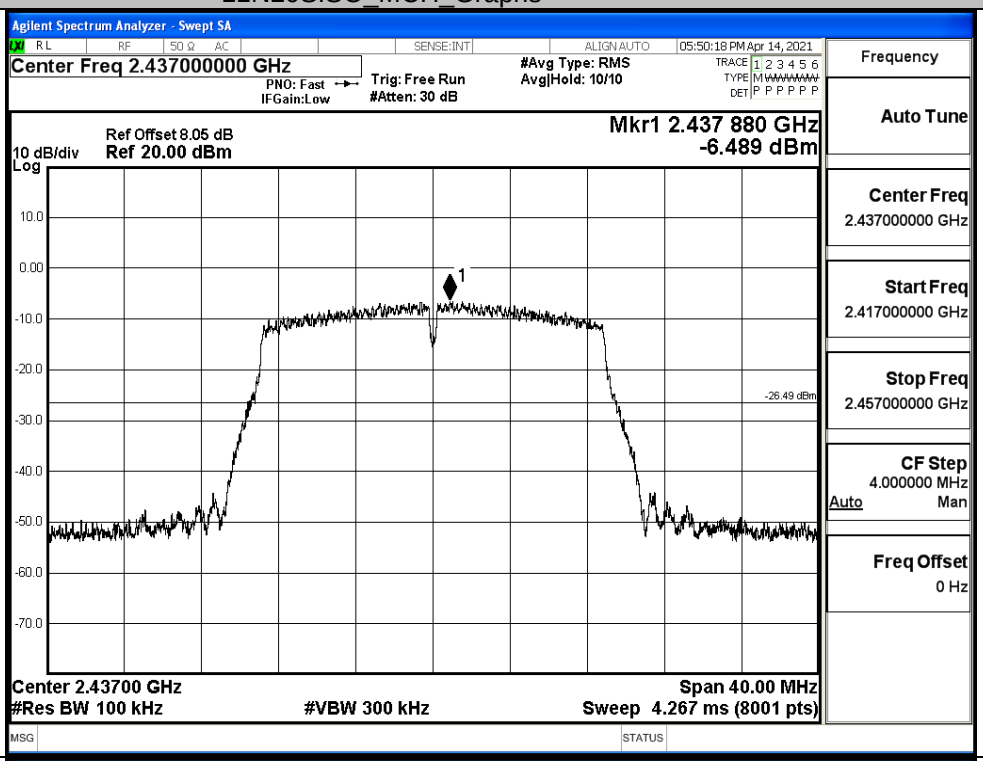
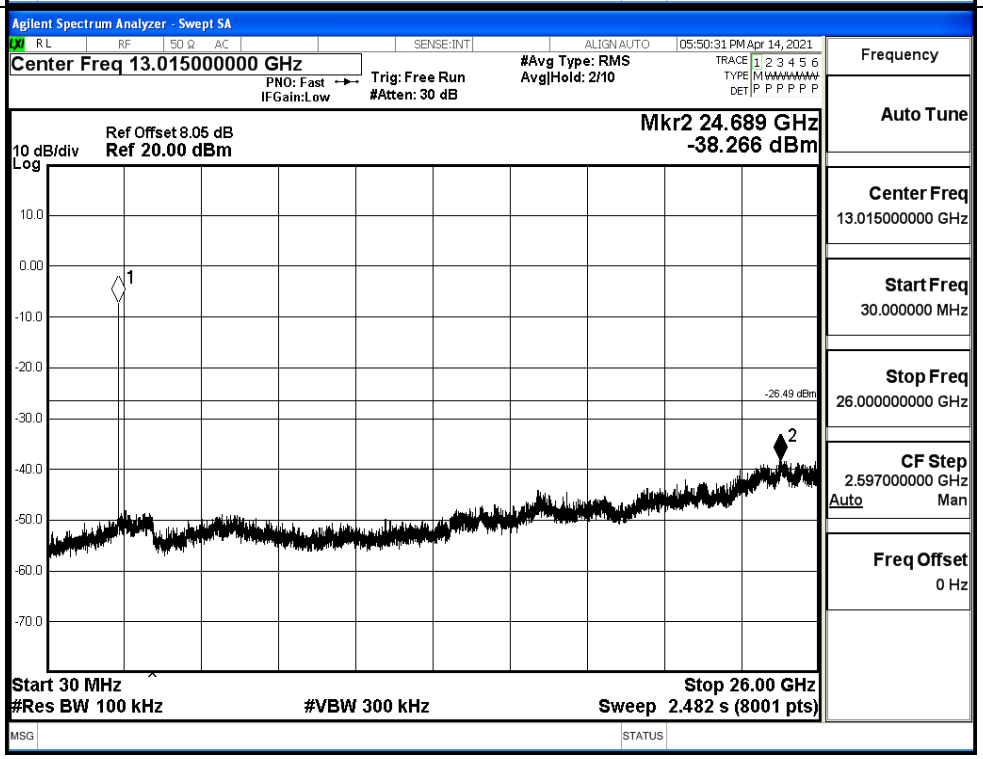
| Pref/11N20 SISO/MCH |  |
| Puw/11N20 SISO/MCH |  |

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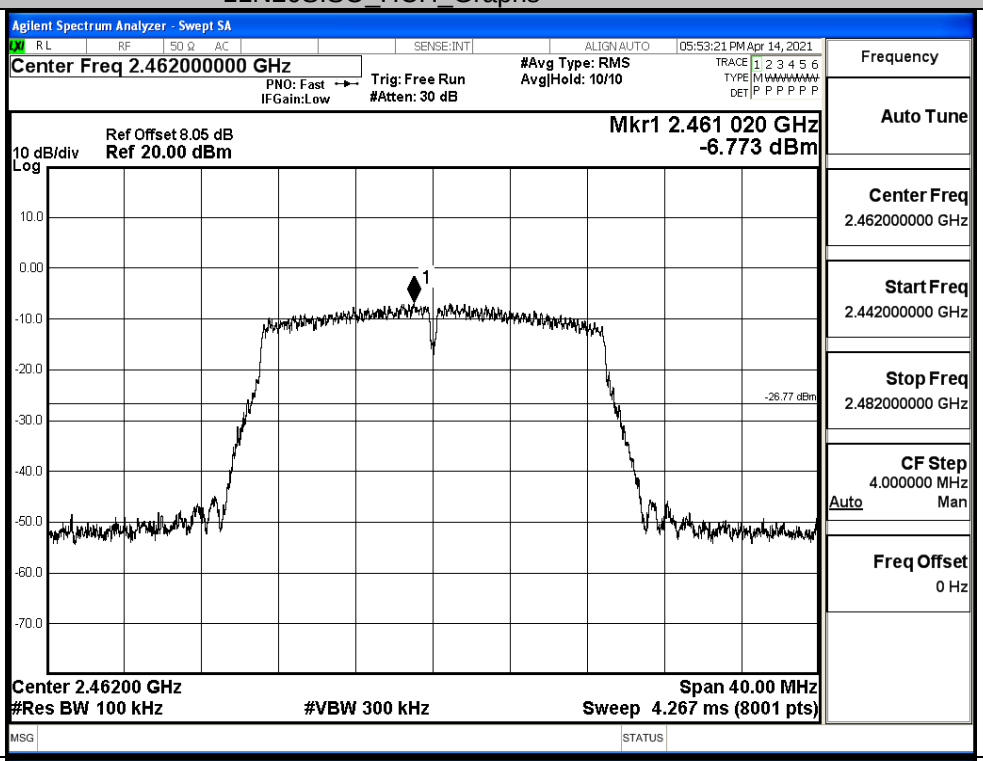
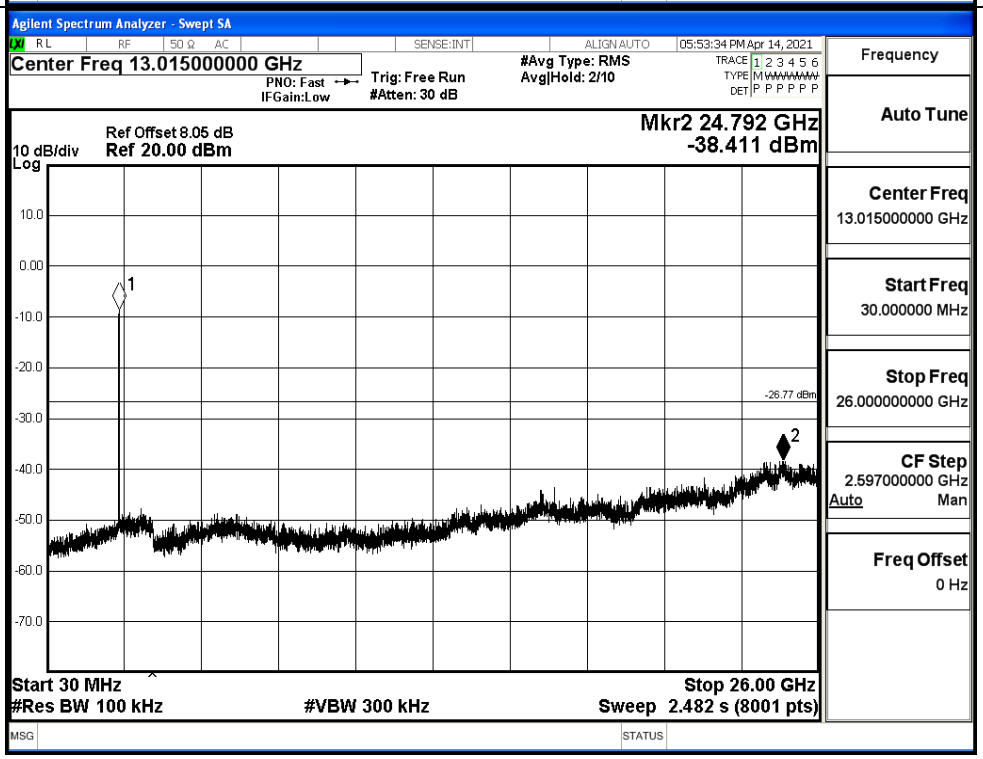
|---|---|---|
| Pref/11N20 SISO/HCH | |  |
| Puw/11N20 SISO/HCH | |  |

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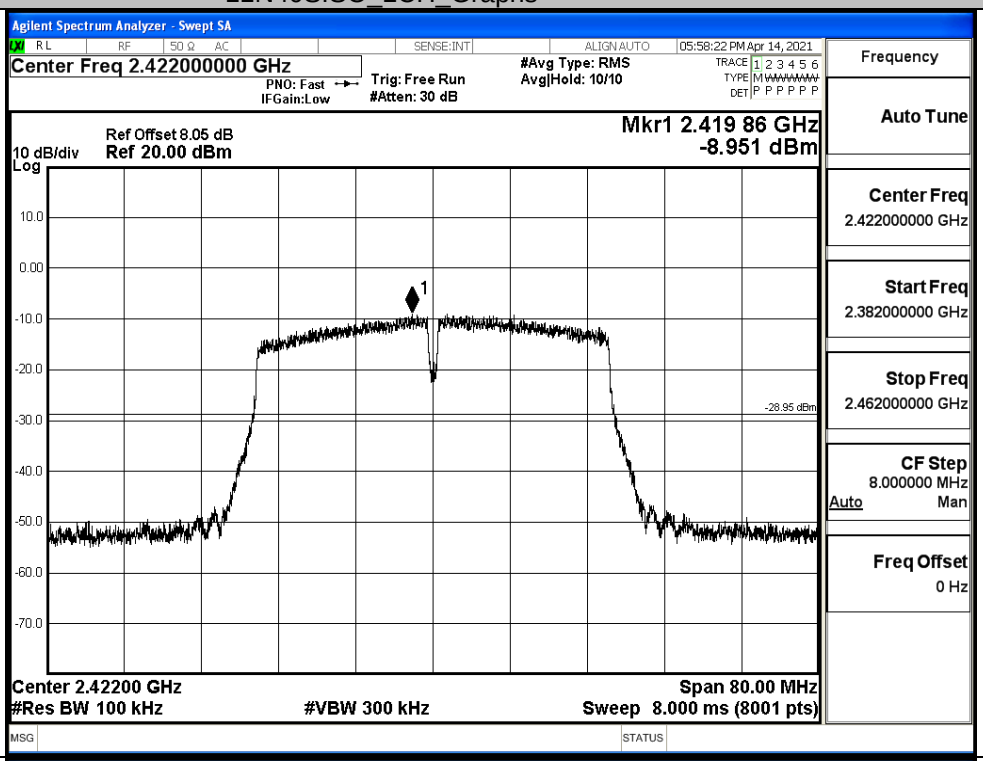
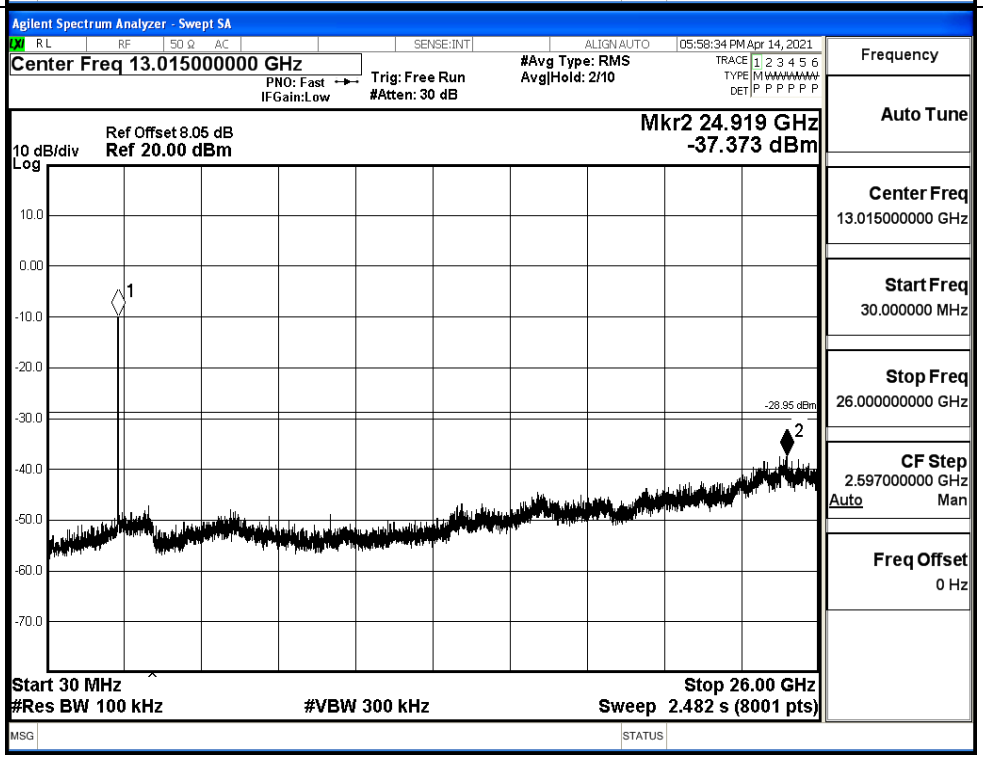
|---|---|
| Pref/11N40 SISO/LCH |  |
| Puw/11N40 SISO/LCH |  |

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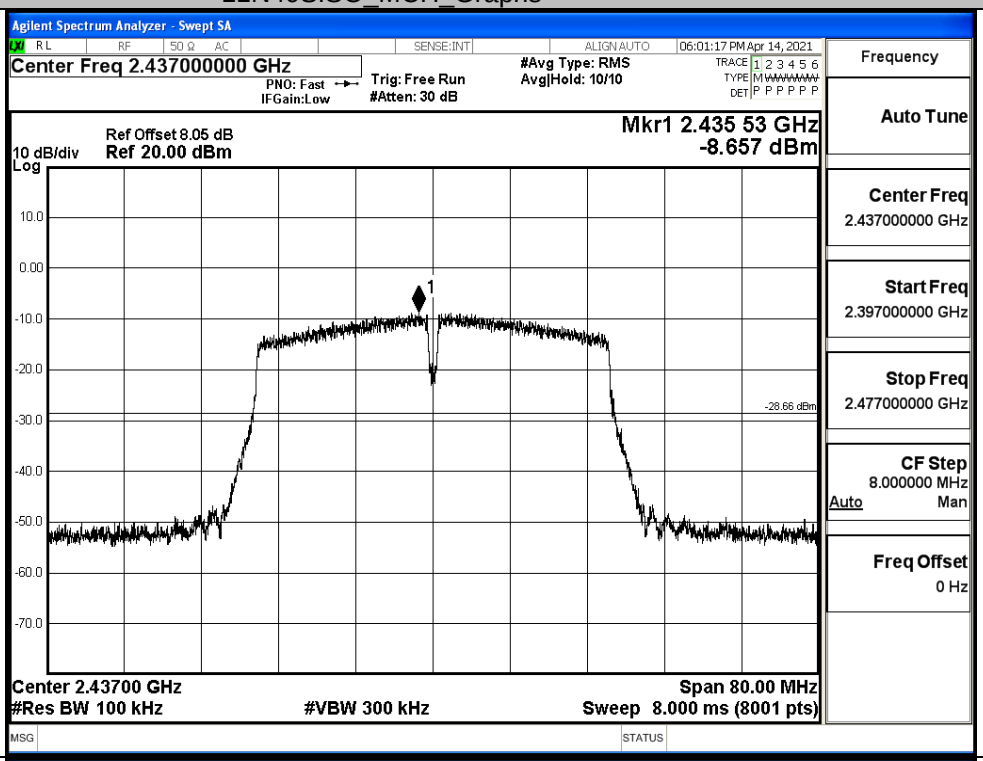
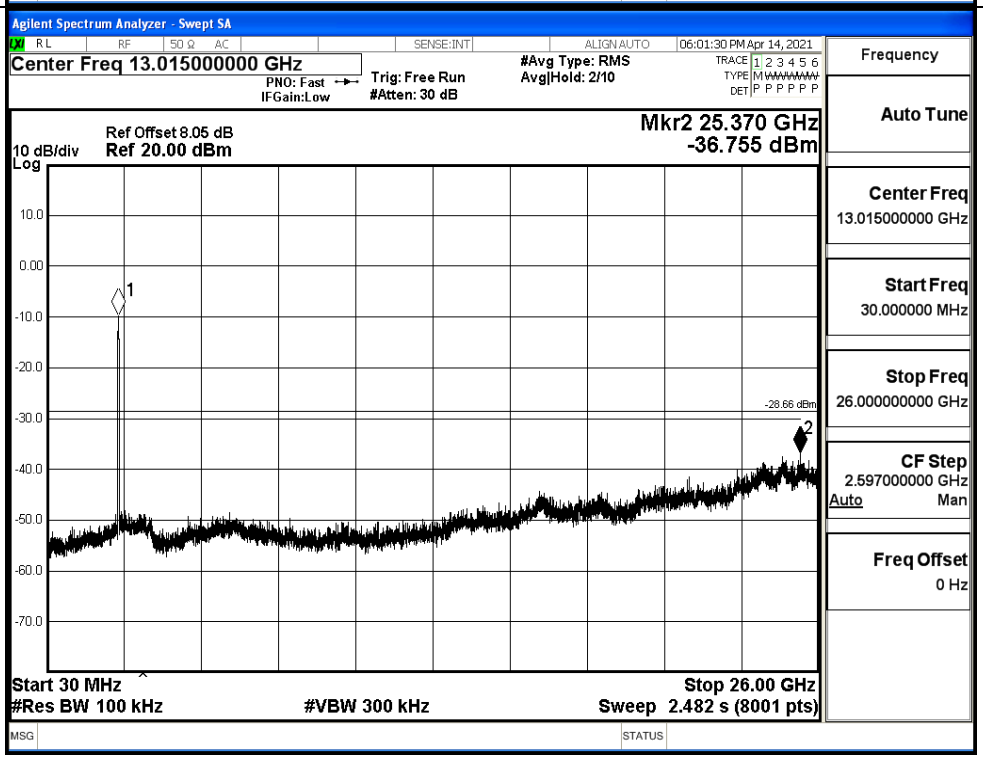
| Pref/11N40 SISO/MCH |  |
| Puw/11N40 SISO/MCH |  |

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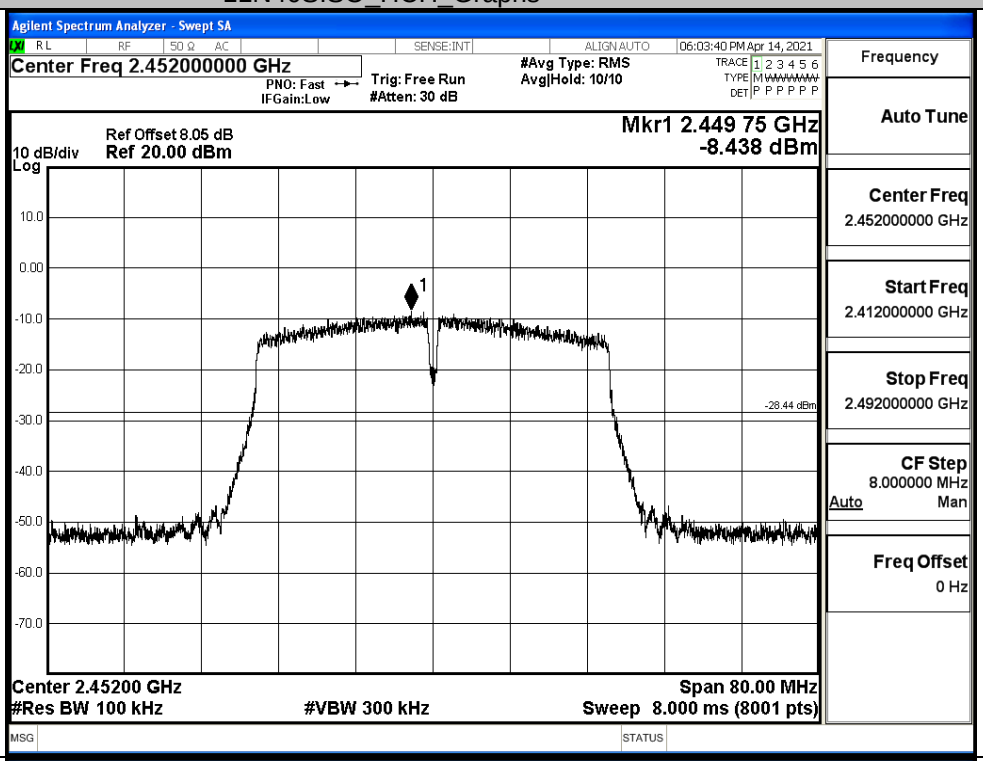
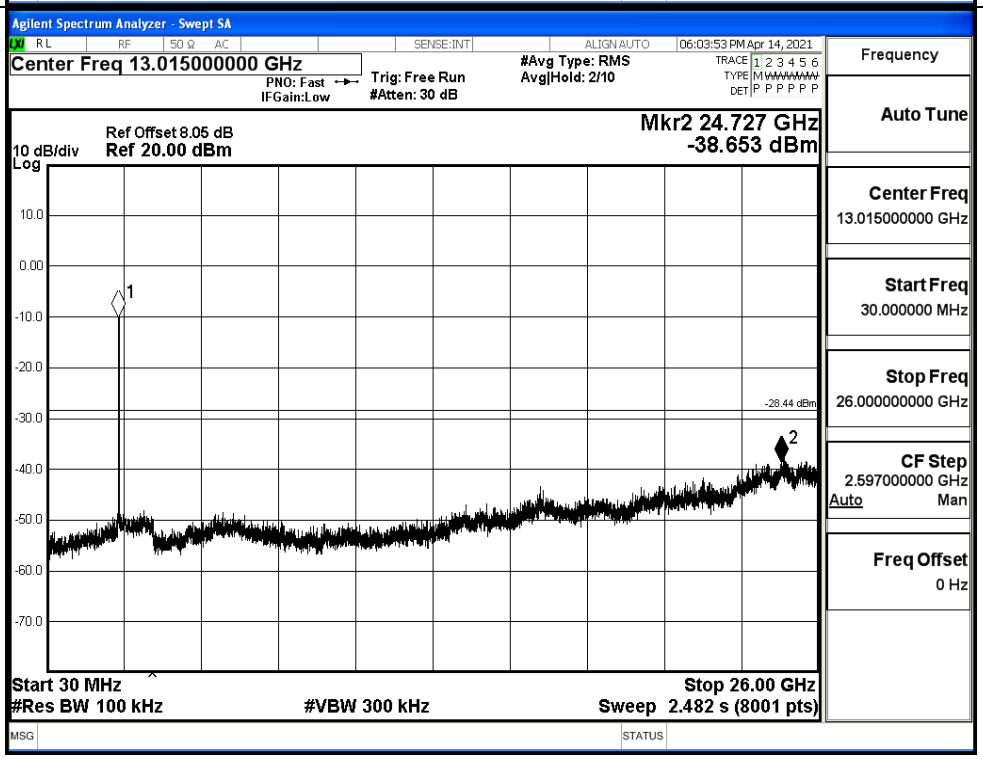
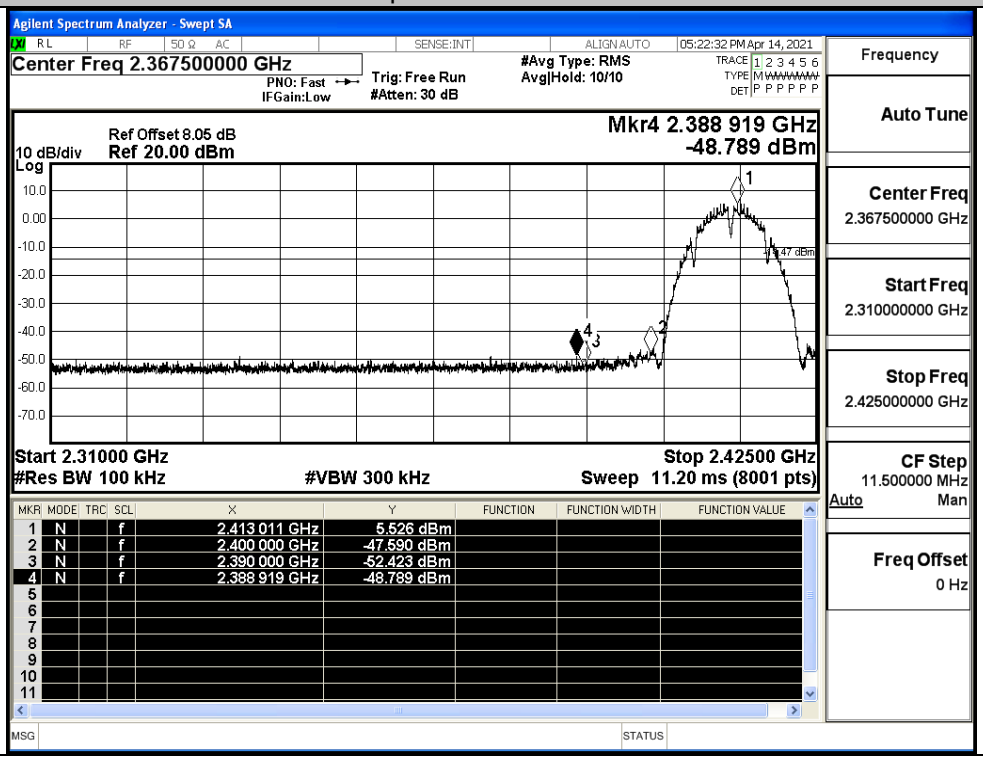
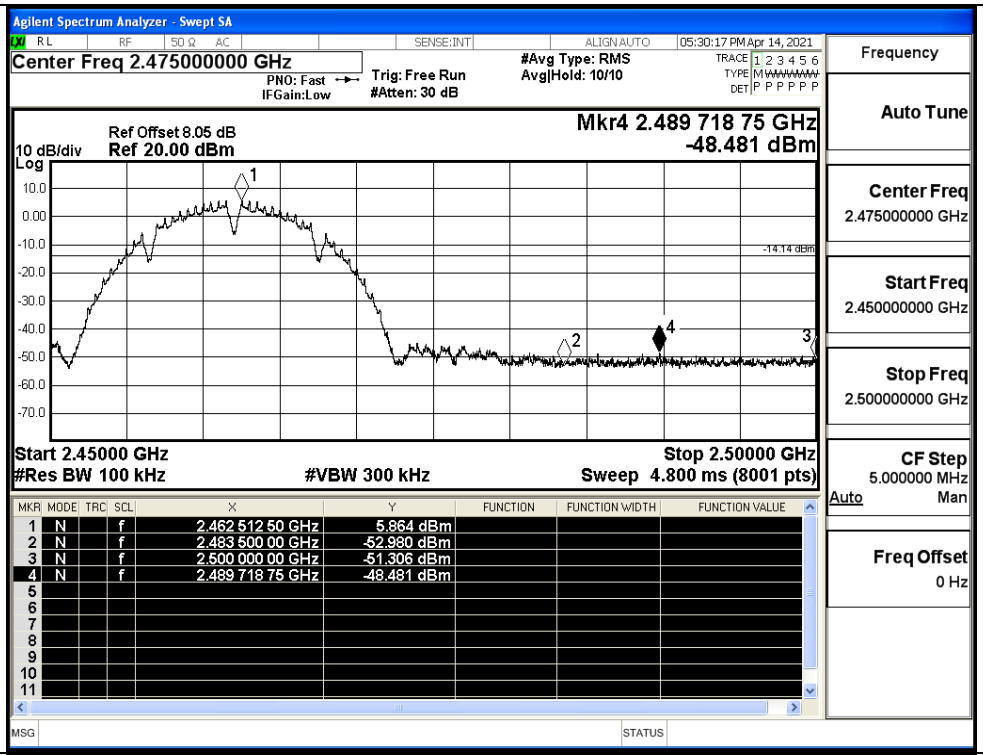
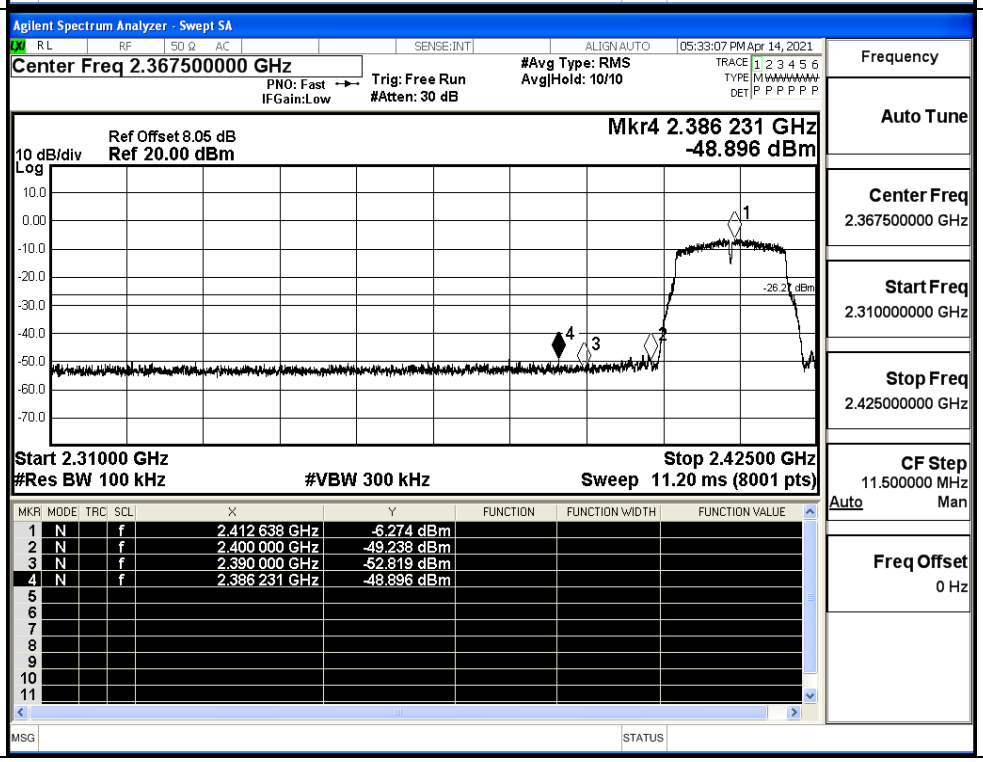
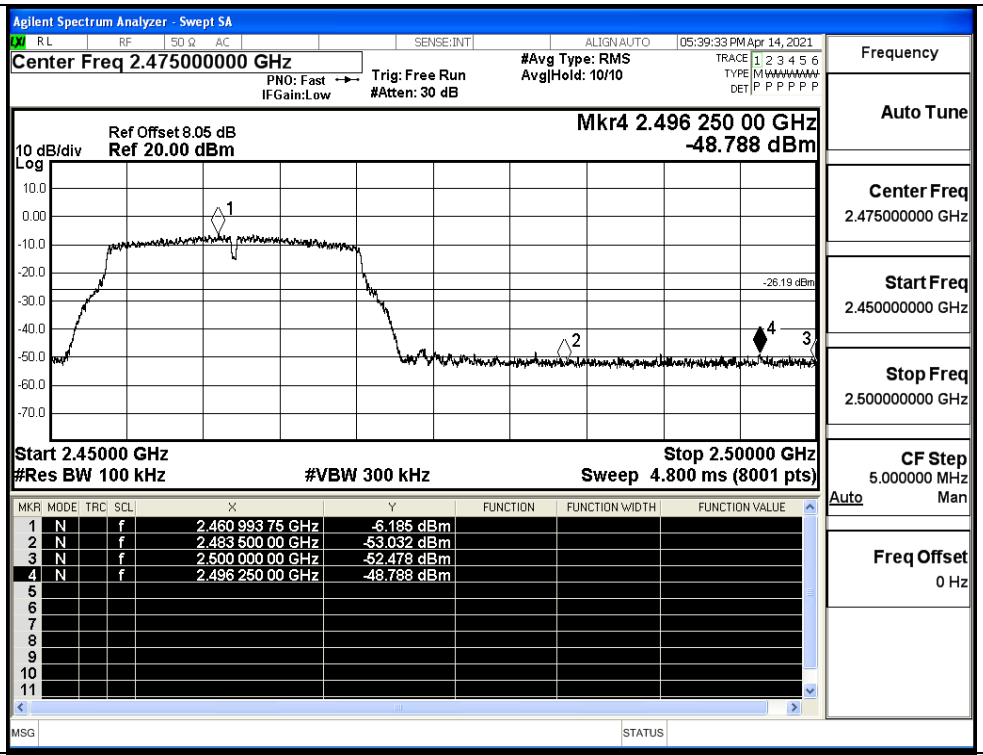
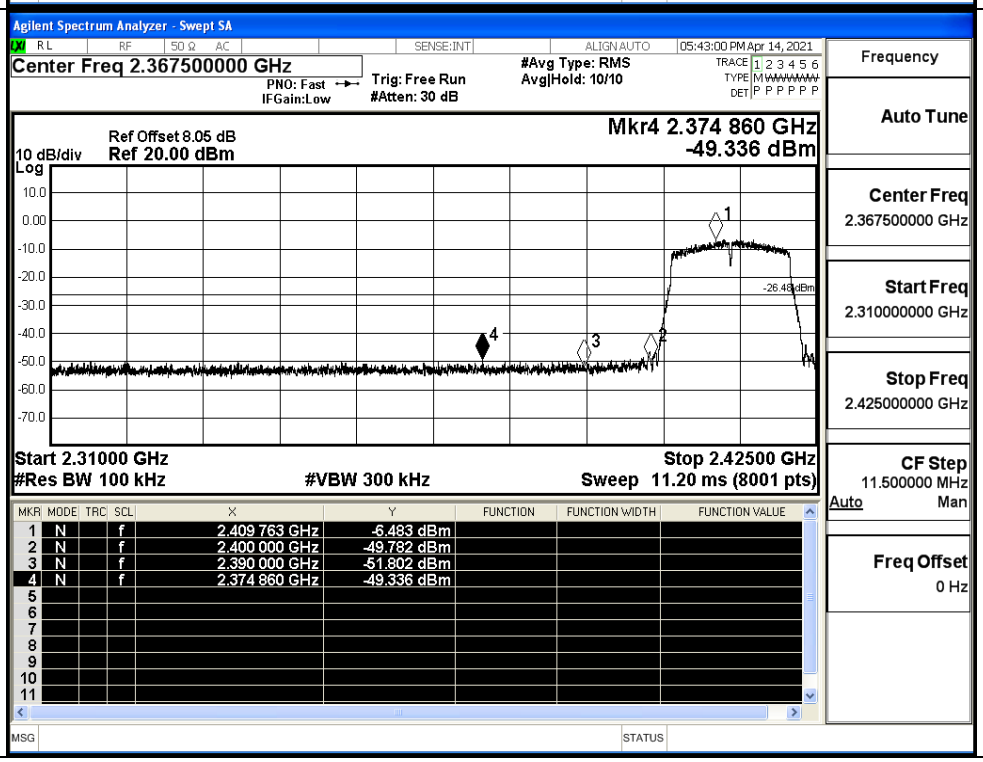
|---|---|
| Pref/11N40 SISO/HCH |  |
| Puw/11N40 SISO/HCH |  |

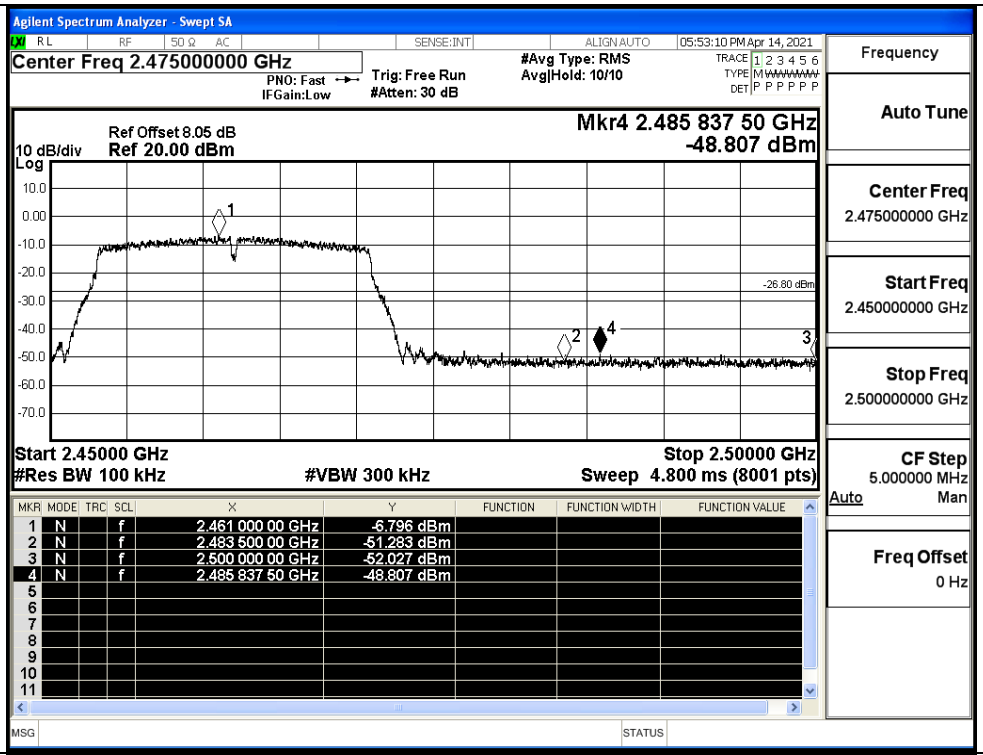
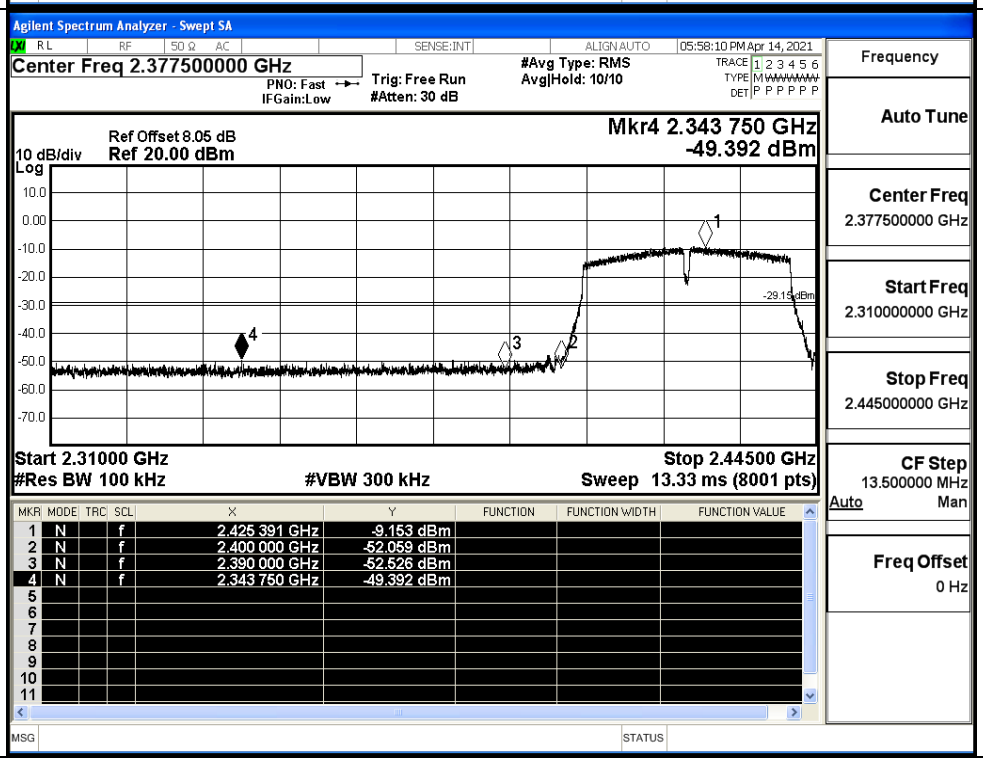
## A.6 Band-edge for RF Conducted Emissions

| Mode | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|
| 11B | LCH | 5.526 | -48.789 | -14.47 | PASS |
| | HCH | 5.864 | -48.481 | -14.14 | PASS |
| 11G | LCH | -6.274 | -48.896 | -26.27 | PASS |
| | HCH | -6.185 | -48.788 | -26.19 | PASS |
| 11N20SISO | LCH | -6.483 | -49.336 | -26.48 | PASS |
| | HCH | -6.796 | -48.807 | -26.8 | PASS |
| 11N40SISO | LCH | -9.153 | -49.392 | -29.15 | PASS |
| | HCH | -8.854 | -48.916 | -28.85 | PASS |

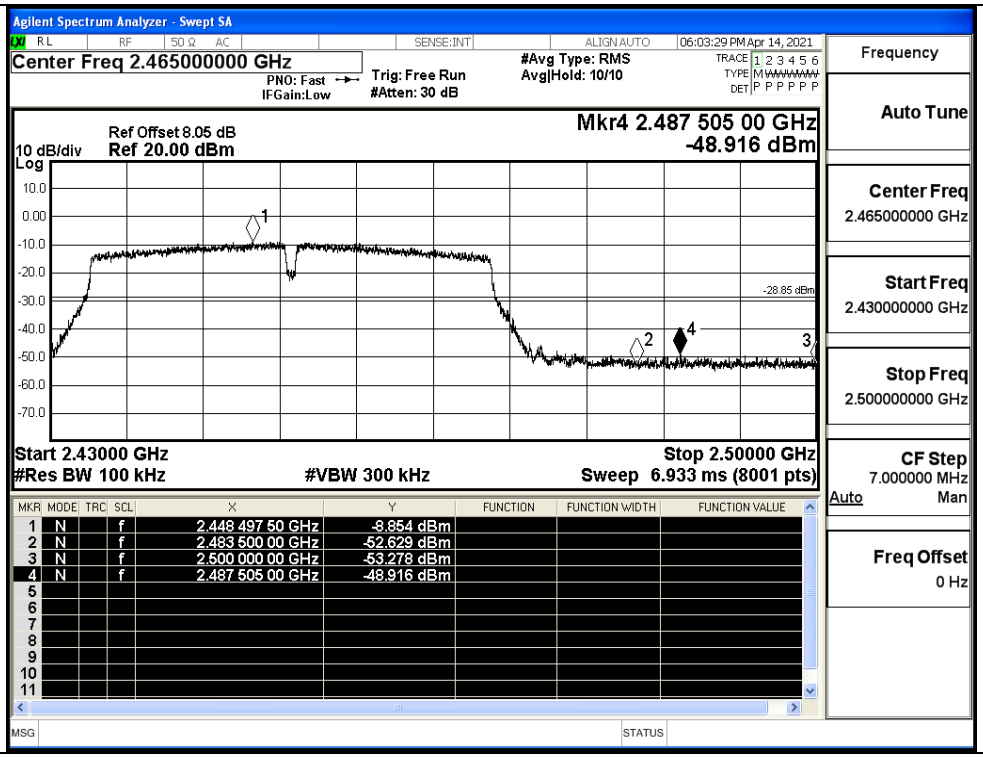
| Test Graphs | |
|---|---|
| 11B/LCH |  |

| | | |
|---|---|---|
| 11B/HCH | |  |
| 11G/LCH | |  |

| | | |
|---|---|---|
| 11G/HCH | |  |
| 11N20SISO/LCH | |  |

| | | |
|---|---|---|
| 11N20SISO/HCH | |  |
| 11N40SISO/LCH | |  |

11N40SISO/HCH

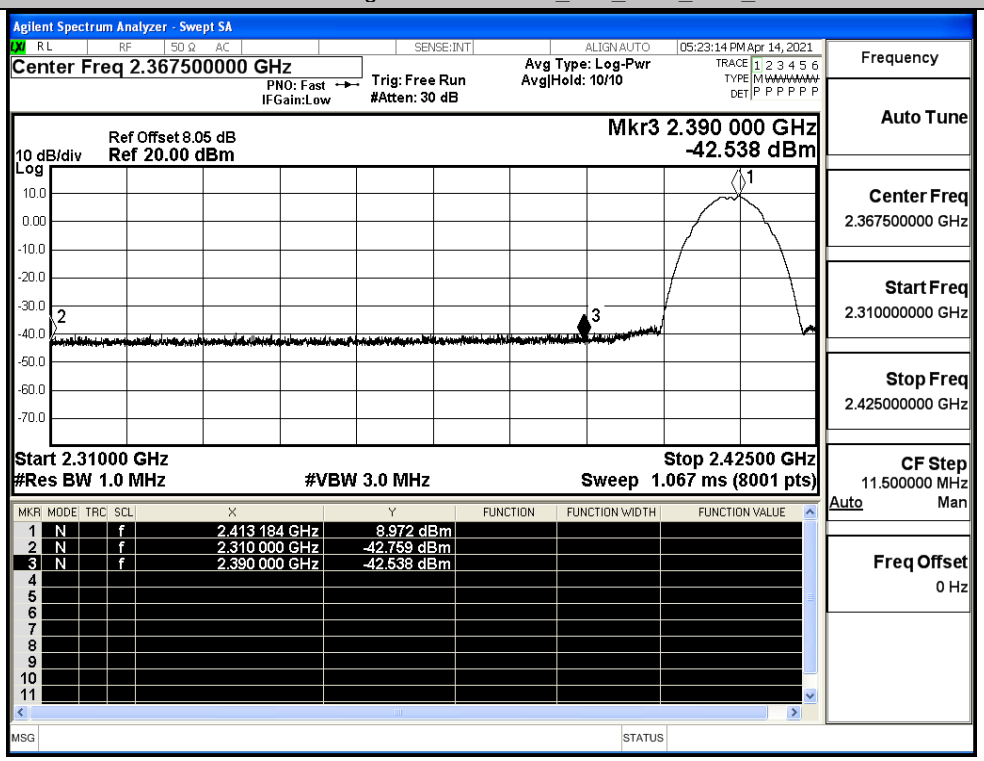


## A.7 Restrict-band band-edge measurements

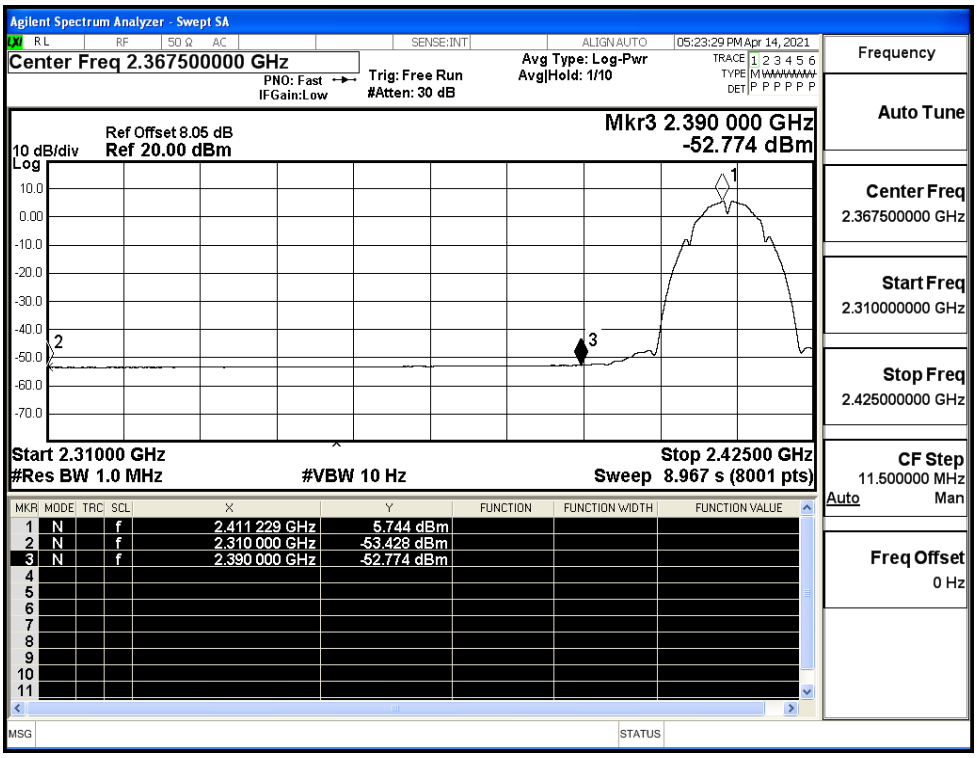
| Test Mode | Test Channel | Ant | Freq. | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBuV/m] | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| 11B | 2412 | Ant1 | 2310.0 | -42.76 | 2.0 | 0 | 54.47 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2310.0 | -53.43 | 2.0 | 0 | 43.8 | AV | 54 | PASS |
| | 2412 | Ant1 | 2390.0 | -42.54 | 2.0 | 0 | 54.69 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2390.0 | -52.77 | 2.0 | 0 | 44.46 | AV | 54 | PASS |
| | 2462 | Ant1 | 2483.5 | -42.18 | 2.0 | 0 | 55.05 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2483.5 | -52.20 | 2.0 | 0 | 45.03 | AV | 54 | PASS |
| | 2462 | Ant1 | 2500.0 | -42.37 | 2.0 | 0 | 54.86 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2500.0 | -52.06 | 2.0 | 0 | 45.17 | AV | 54 | PASS |
| 11G | 2412 | Ant1 | 2310.0 | -42.54 | 2.0 | 0 | 54.69 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2310.0 | -53.53 | 2.0 | 0 | 43.7 | AV | 54 | PASS |
| | 2412 | Ant1 | 2390.0 | -42.44 | 2.0 | 0 | 54.79 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2390.0 | -52.69 | 2.0 | 0 | 44.54 | AV | 54 | PASS |
| | 2462 | Ant1 | 2483.5 | -42.39 | 2.0 | 0 | 54.84 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2483.5 | -52.34 | 2.0 | 0 | 44.89 | AV | 54 | PASS |
| | 2462 | Ant1 | 2500.0 | -42.33 | 2.0 | 0 | 54.9 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2500.0 | -52.25 | 2.0 | 0 | 44.98 | AV | 54 | PASS |
| 11N20 SISO | 2412 | Ant1 | 2310.0 | -43.32 | 2.0 | 0 | 53.91 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2310.0 | -53.51 | 2.0 | 0 | 43.72 | AV | 54 | PASS |
| | 2412 | Ant1 | 2390.0 | -42.56 | 2.0 | 0 | 54.67 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2390.0 | -52.73 | 2.0 | 0 | 44.5 | AV | 54 | PASS |
| | 2462 | Ant1 | 2483.5 | -40.88 | 2.0 | 0 | 56.35 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2483.5 | -52.41 | 2.0 | 0 | 44.82 | AV | 54 | PASS |
| | 2462 | Ant1 | 2500.0 | -40.92 | 2.0 | 0 | 56.31 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2500.0 | -52.37 | 2.0 | 0 | 44.86 | AV | 54 | PASS |
| 11N40 SISO | 2422 | Ant1 | 2310.0 | -44.05 | 2.0 | 0 | 53.18 | PEAK | 74 | PASS |
| | 2422 | Ant1 | 2310.0 | -53.55 | 2.0 | 0 | 43.68 | AV | 54 | PASS |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2422 | Ant1 | 2390.0 | -42.93 | 2.0 | 0 | 54.3 | PEAK | 74 | PASS |
| | 2422 | Ant1 | 2390.0 | -52.57 | 2.0 | 0 | 44.66 | AV | 54 | PASS |
| | 2452 | Ant1 | 2483.5 | -41.25 | 2.0 | 0 | 55.98 | PEAK | 74 | PASS |
| | 2452 | Ant1 | 2483.5 | -52.24 | 2.0 | 0 | 44.99 | AV | 54 | PASS |
| | 2452 | Ant1 | 2500.0 | -42.62 | 2.0 | 0 | 54.61 | PEAK | 74 | PASS |
| | 2452 | Ant1 | 2500.0 | -52.36 | 2.0 | 0 | 44.87 | AV | 54 | PASS |

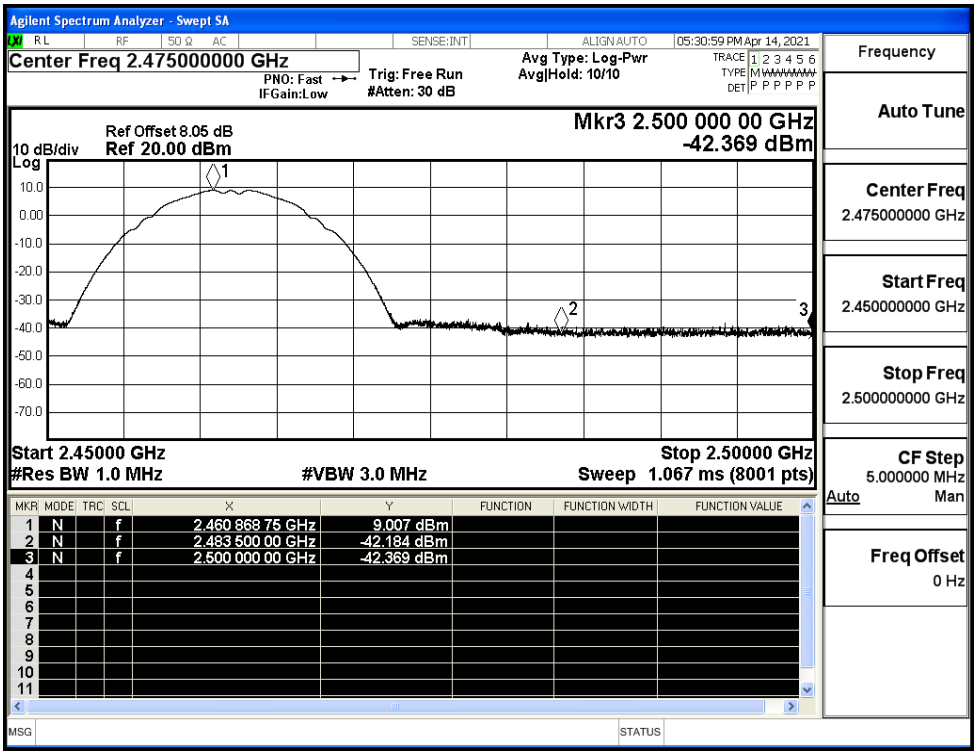
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



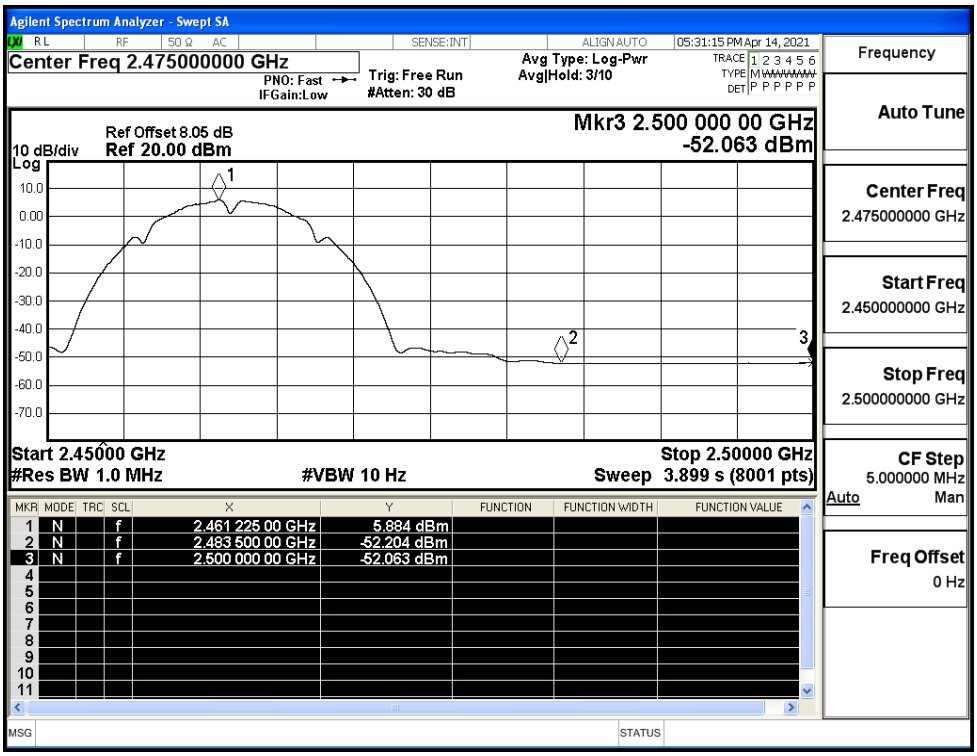

Restrict-band band-edge measurements_11B_2412_Ant1_AV



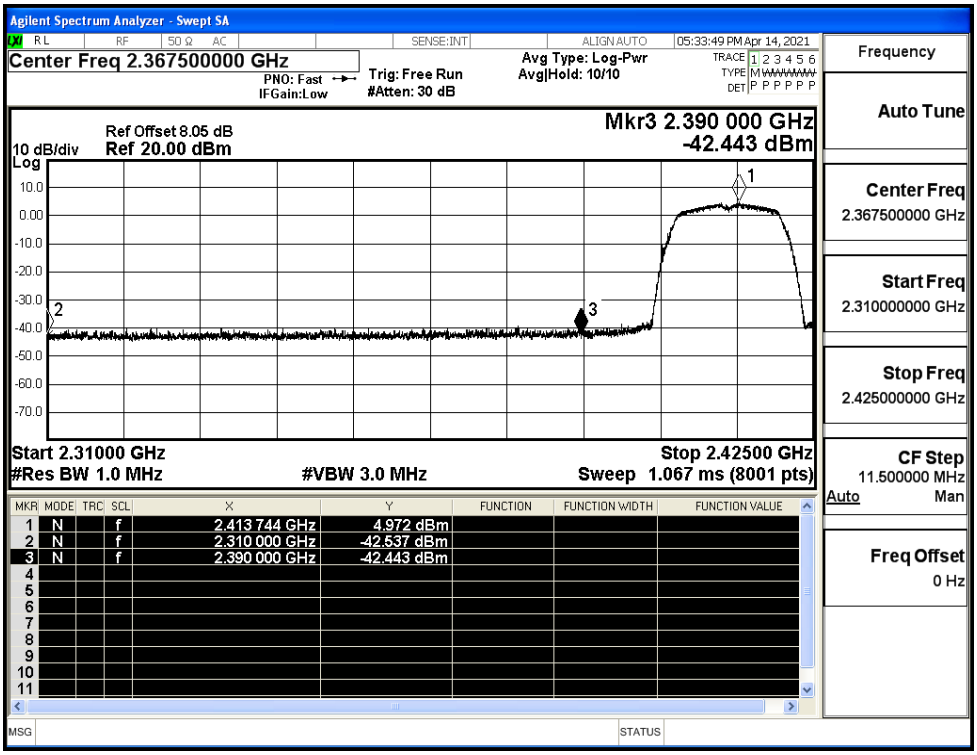
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK




Restrict-band band-edge measurements_11B_2462_Ant1_AV



Restrict-band band-edge measurements_11G_2412_Ant1_PEAK

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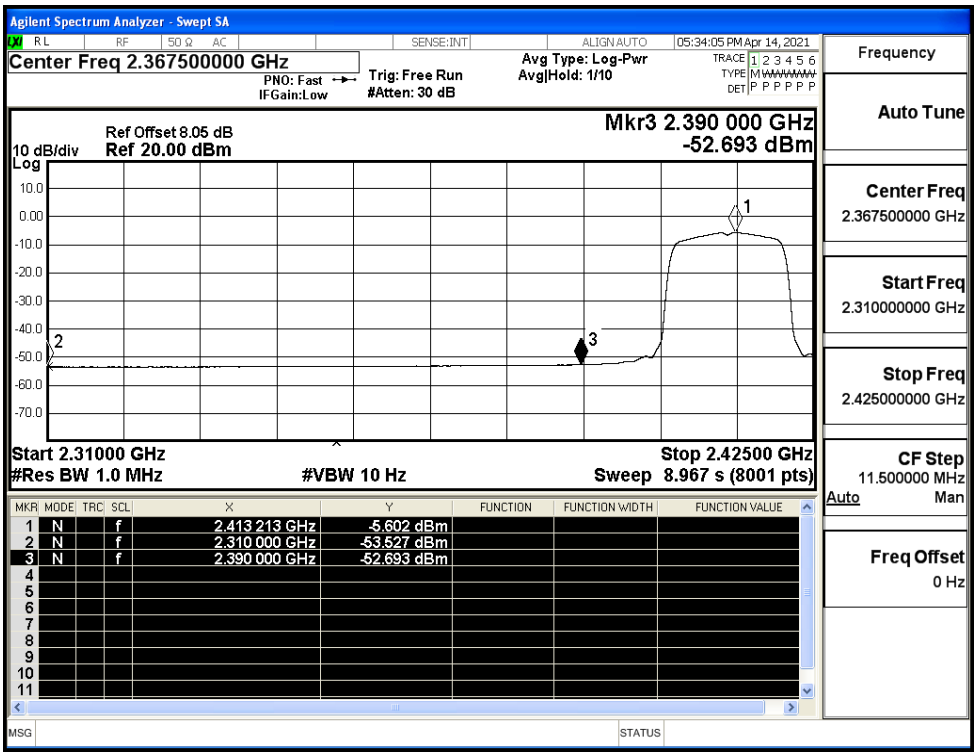

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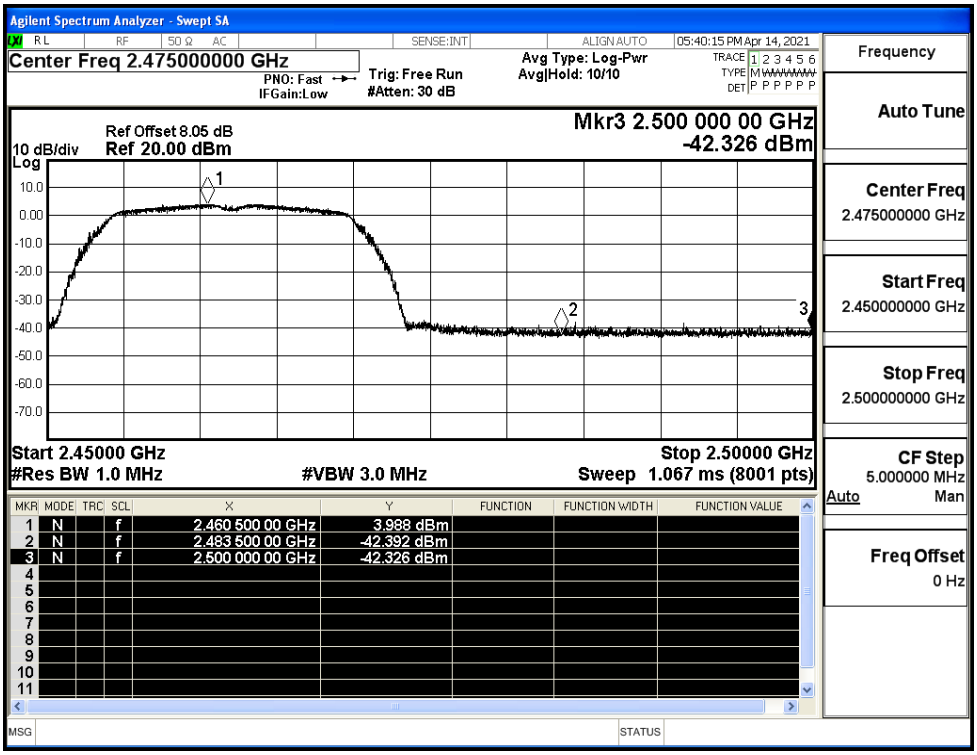


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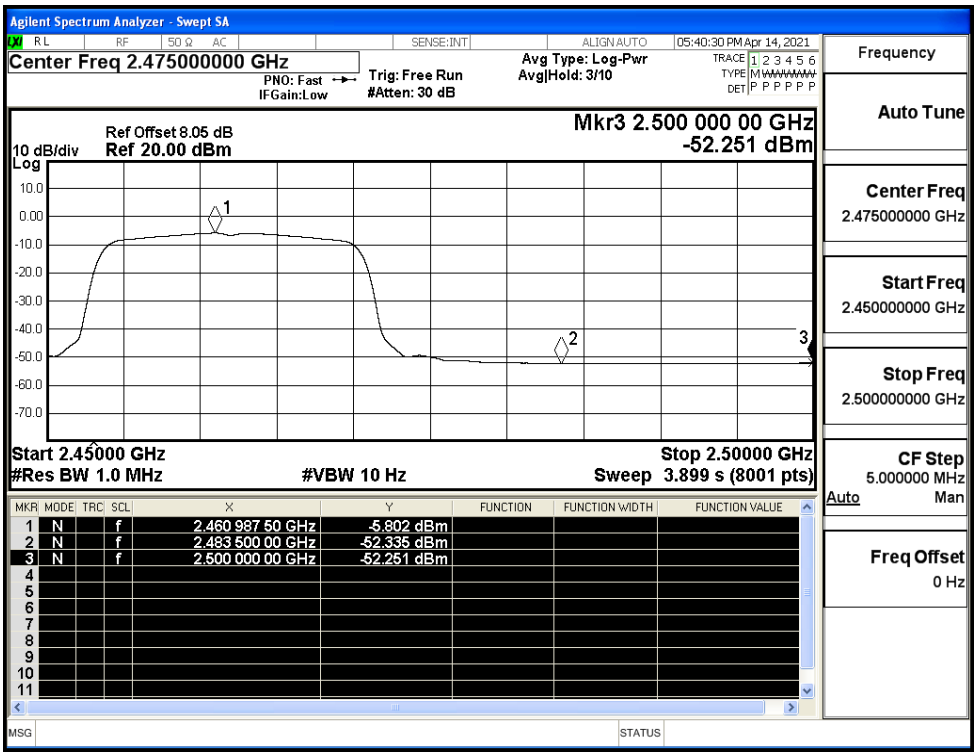

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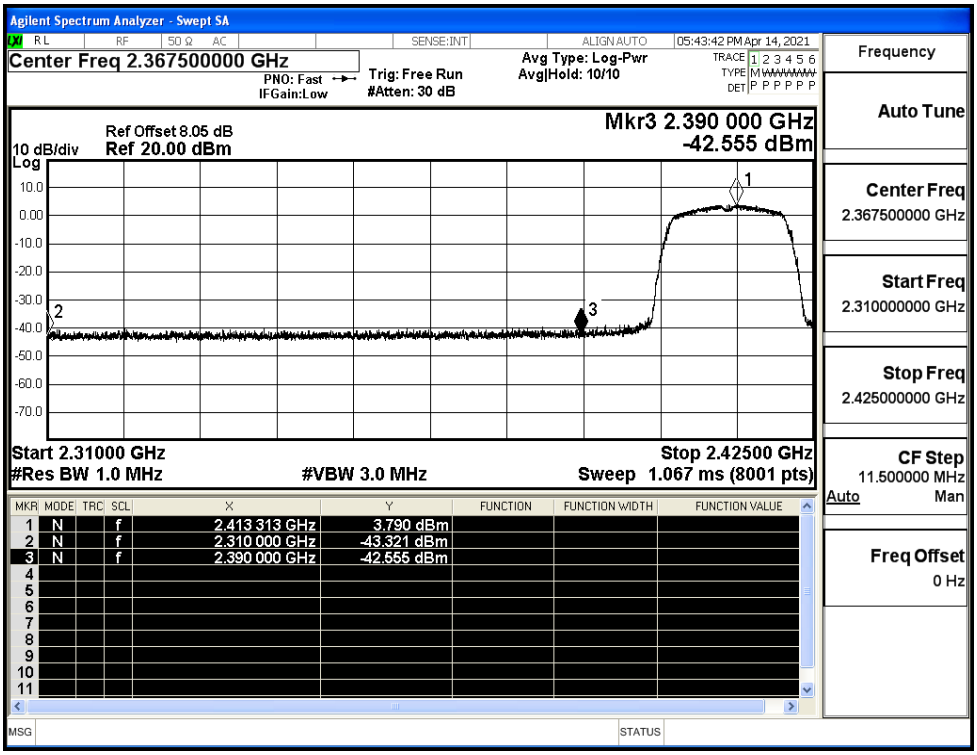


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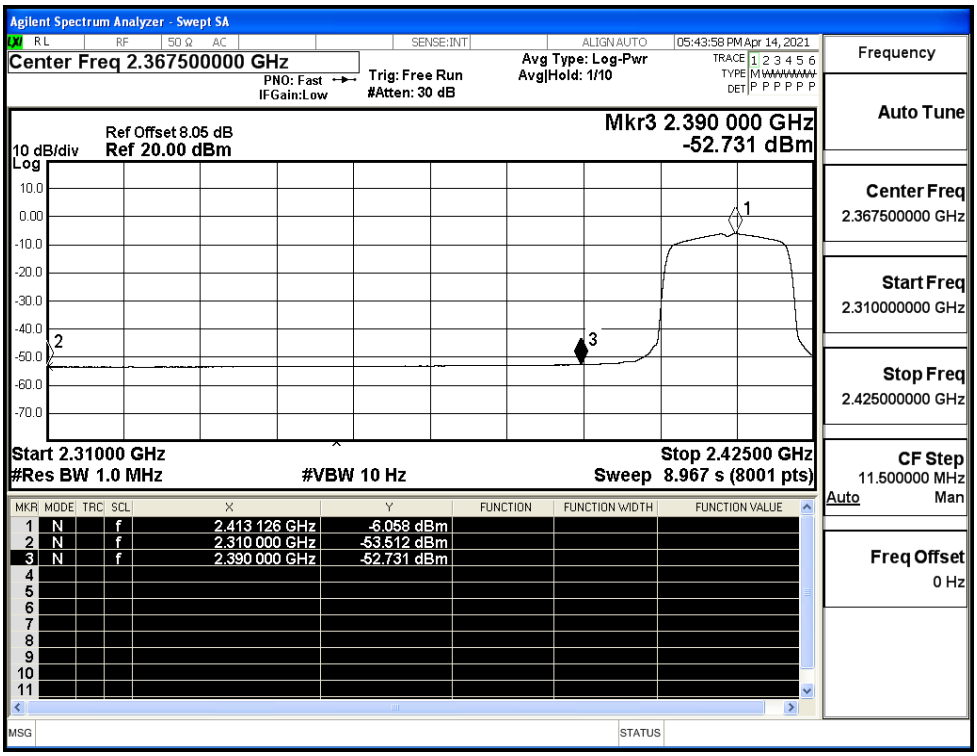
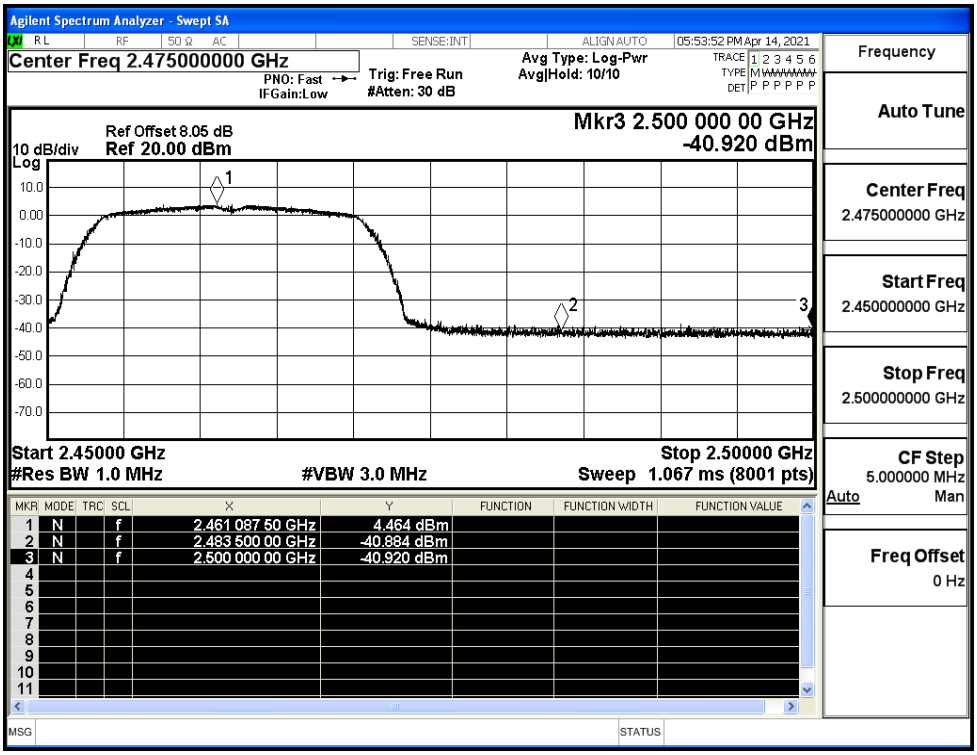
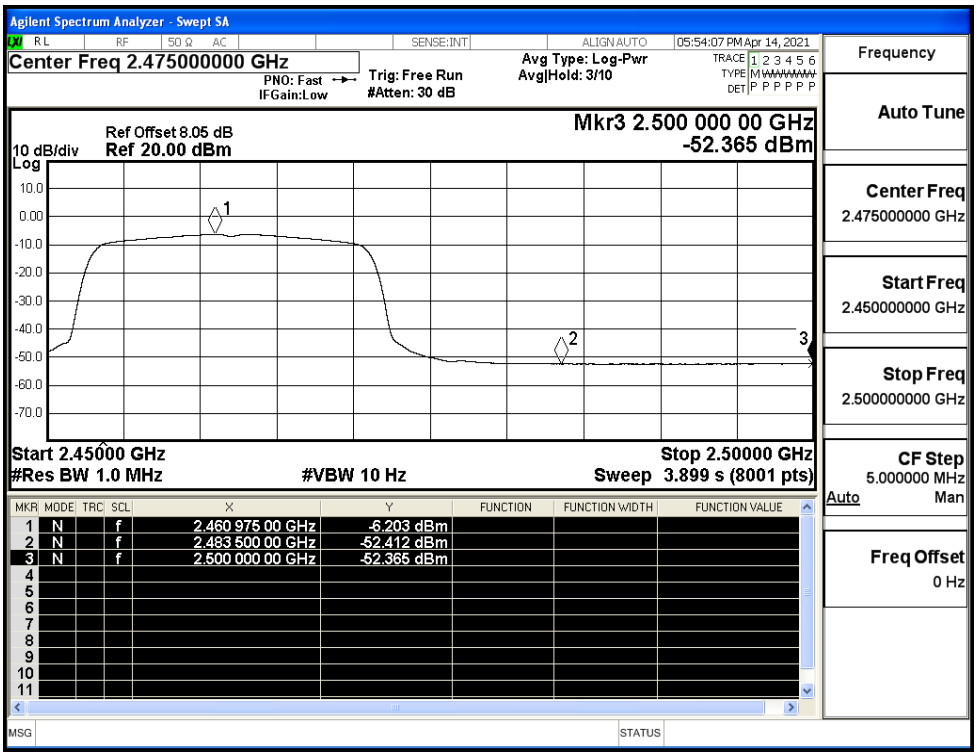


Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK




Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV



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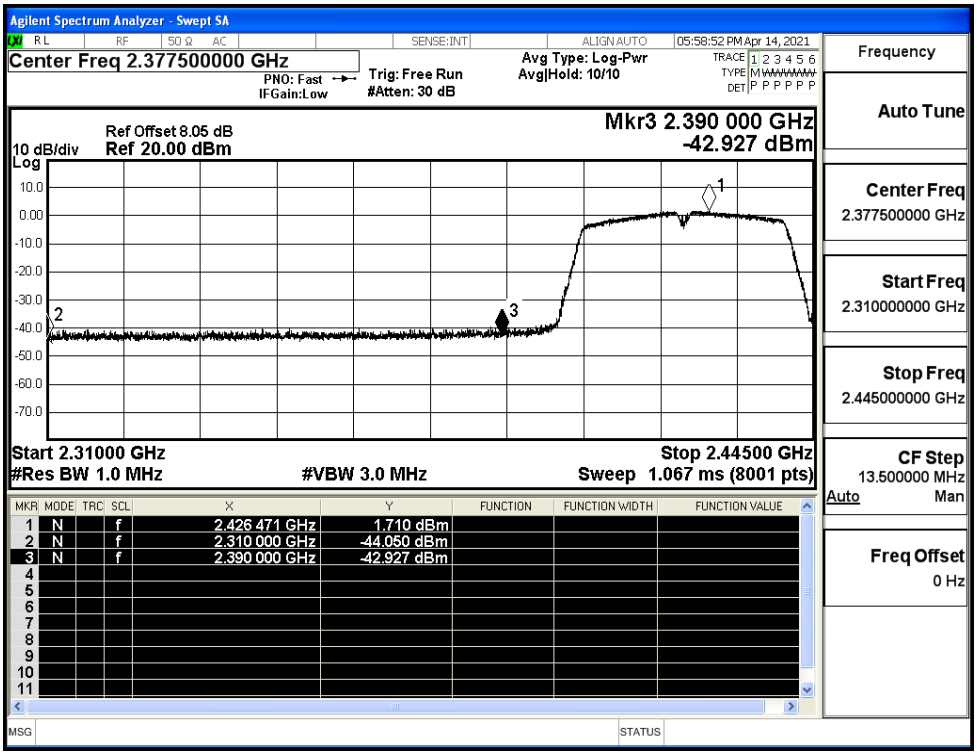


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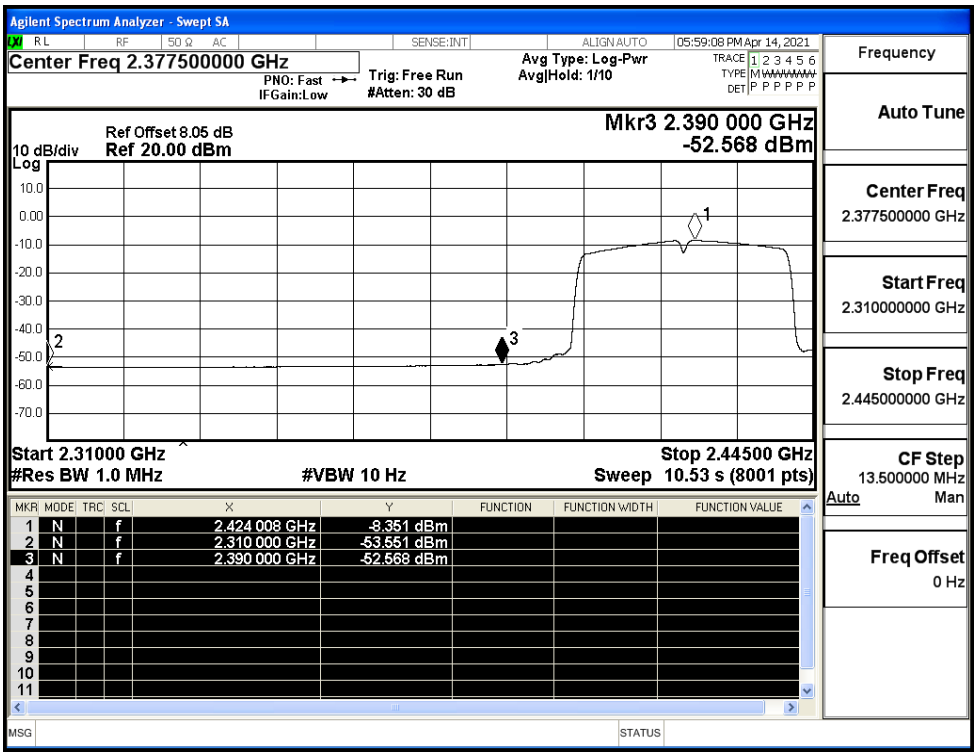

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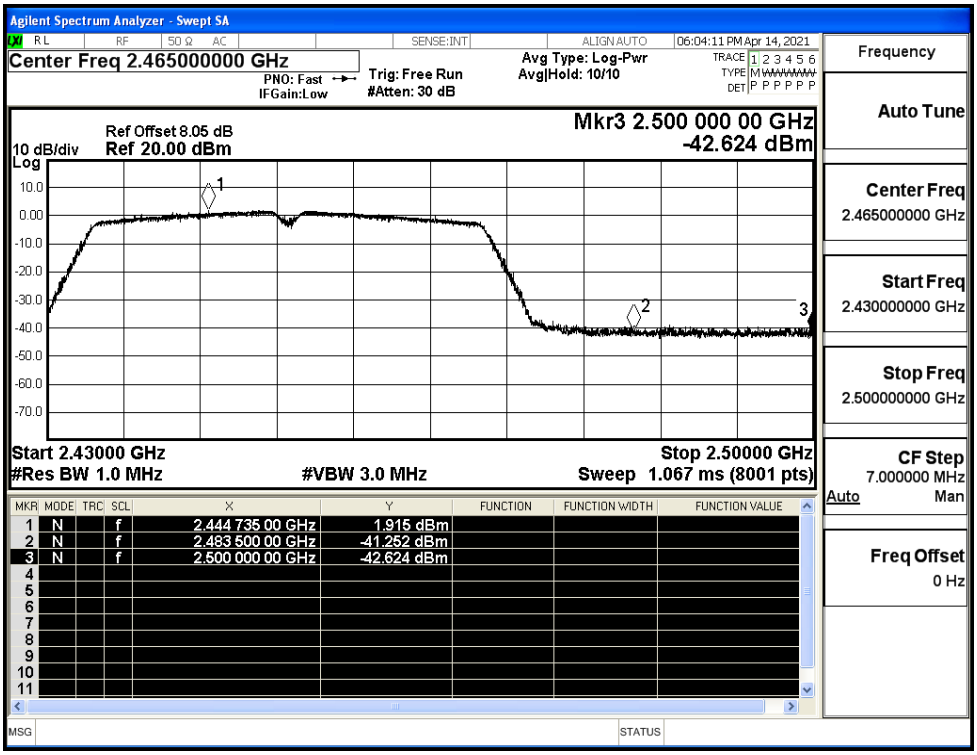

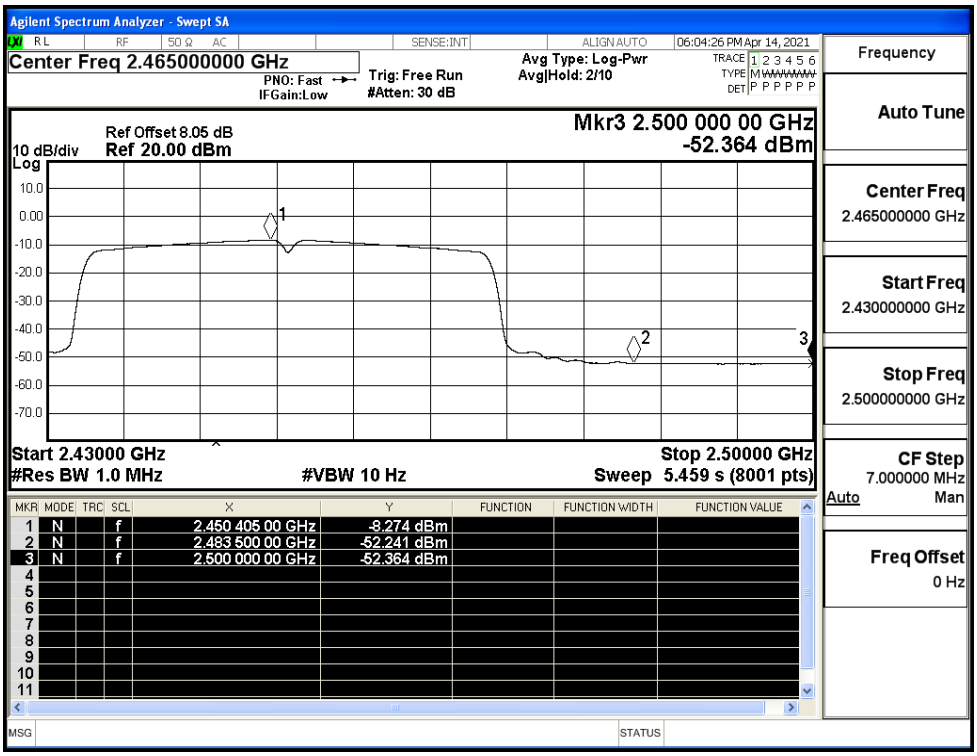
Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV