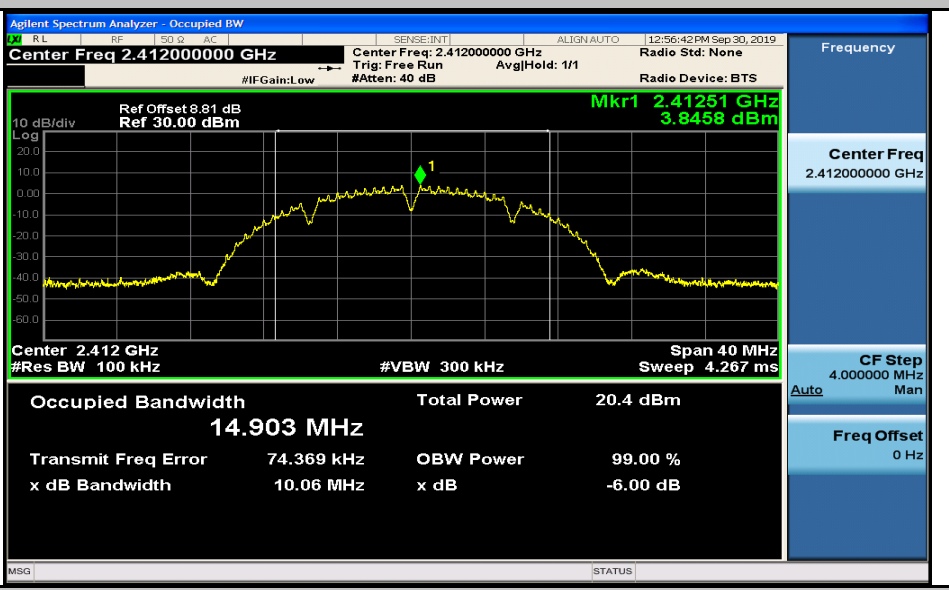
## Appendix A for SHEM190901751901

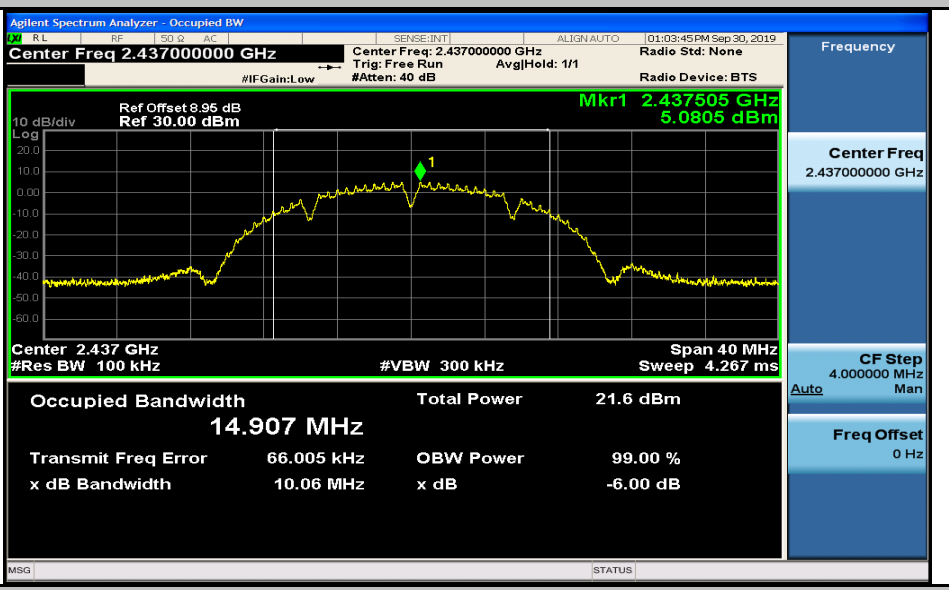
### 1.6dB Bandwidth

| Test Mode | Test Channel | Ant | EBW[MHz] | Limit | Verdict |
|---|---|---|---|---|---|
| 11B | 2412 | Ant1 | 10.06 | 0.5 | PASS |
| 11B | 2437 | Ant1 | 10.06 | 0.5 | PASS |
| 11B | 2462 | Ant1 | 10.07 | 0.5 | PASS |
| 11G | 2412 | Ant1 | 16.56 | 0.5 | PASS |
| 11G | 2437 | Ant1 | 16.57 | 0.5 | PASS |
| 11G | 2462 | Ant1 | 16.56 | 0.5 | PASS |
| 11N20SISO | 2412 | Ant1 | 17.76 | 0.5 | PASS |
| 11N20SISO | 2437 | Ant1 | 17.74 | 0.5 | PASS |
| 11N20SISO | 2462 | Ant1 | 17.73 | 0.5 | PASS |
| 11N40SISO | 2422 | Ant1 | 35.96 | 0.5 | PASS |
| 11N40SISO | 2437 | Ant1 | 36.07 | 0.5 | PASS |
| 11N40SISO | 2452 | Ant1 | 36.29 | 0.5 | PASS |

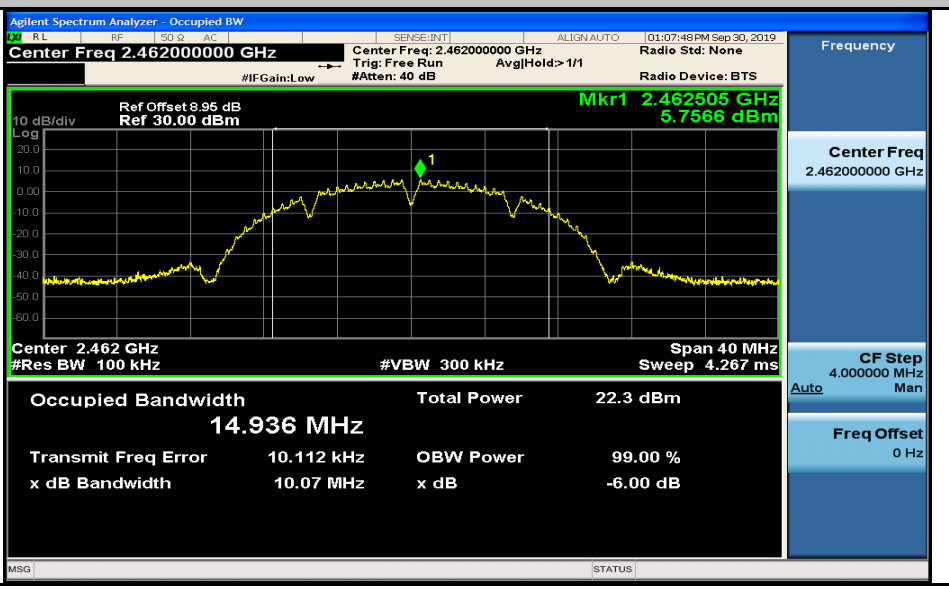
6dB Bandwidth_11B_2412_Ant1



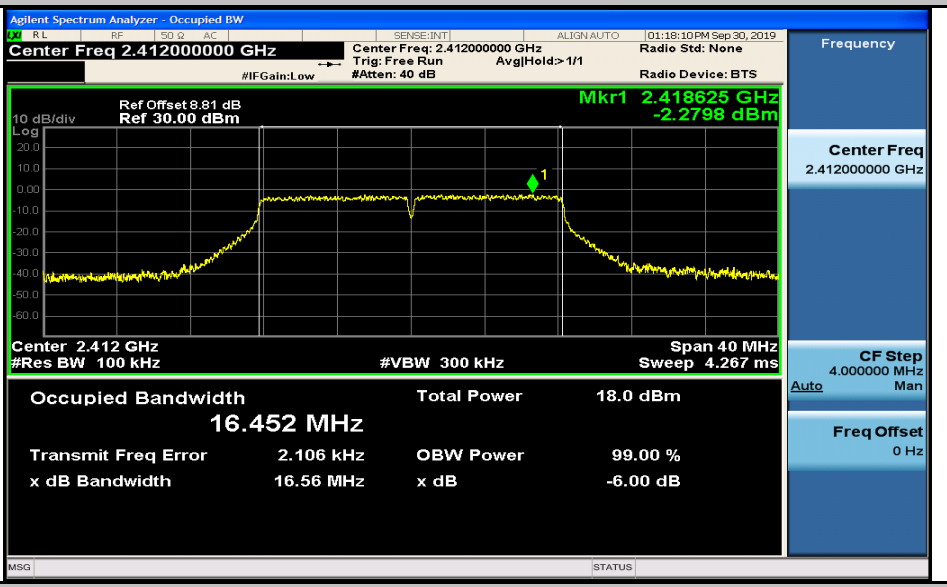

6dB Bandwidth_11B_2437_Ant1



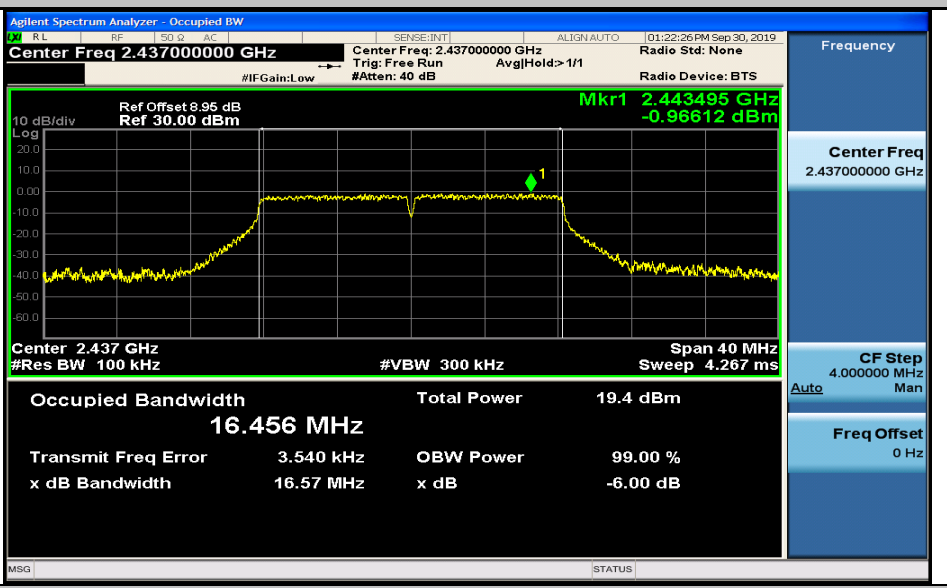

6dB Bandwidth_11B_2462_Ant1



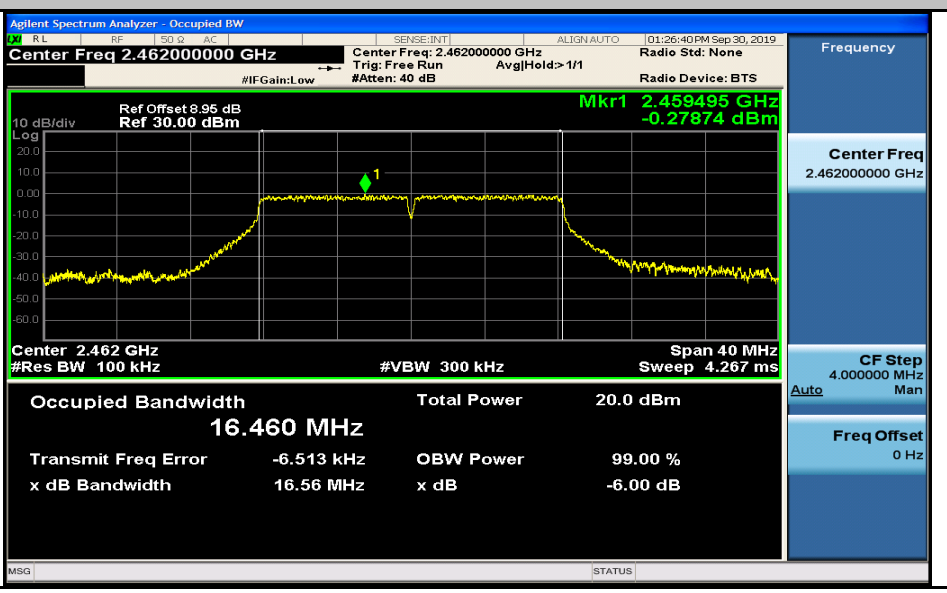
6dB Bandwidth_11G_2412_Ant1



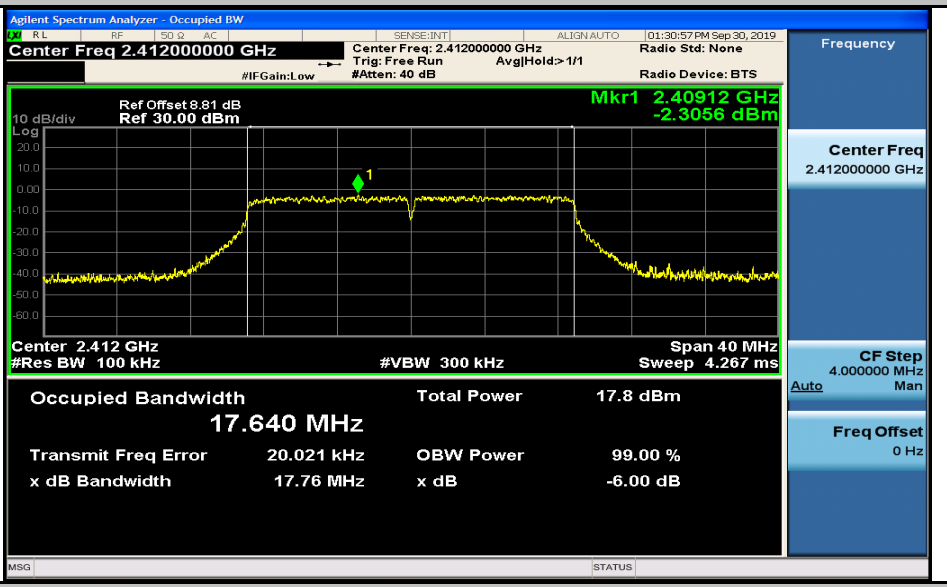

6dB Bandwidth_11G_2437_Ant1



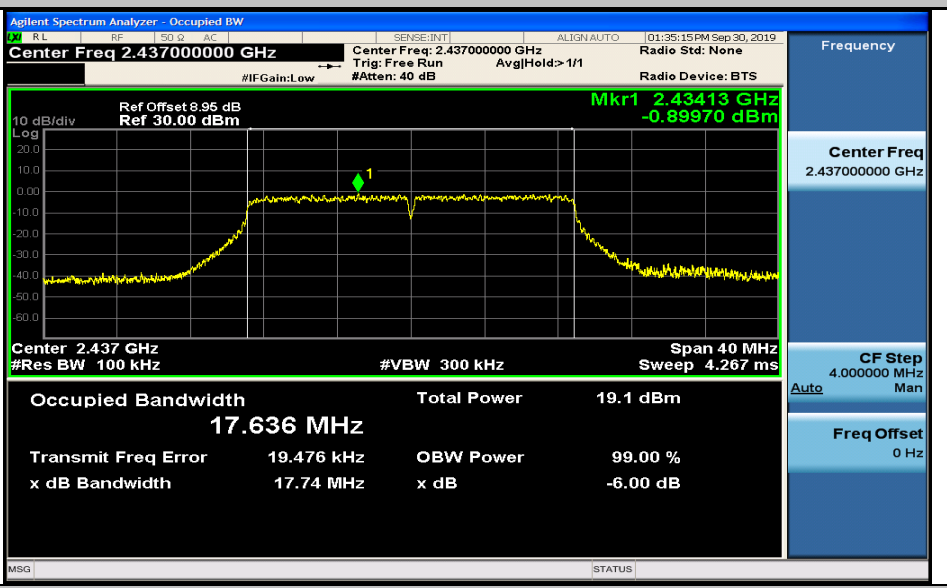

6dB Bandwidth_11G_2462_Ant1



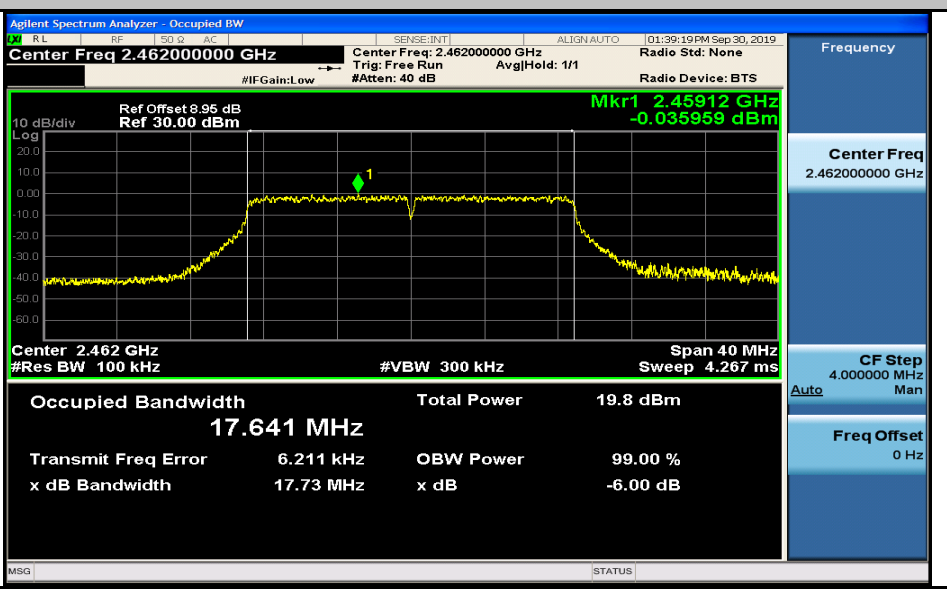
6dB Bandwidth_11N20SISO_2412_Ant1



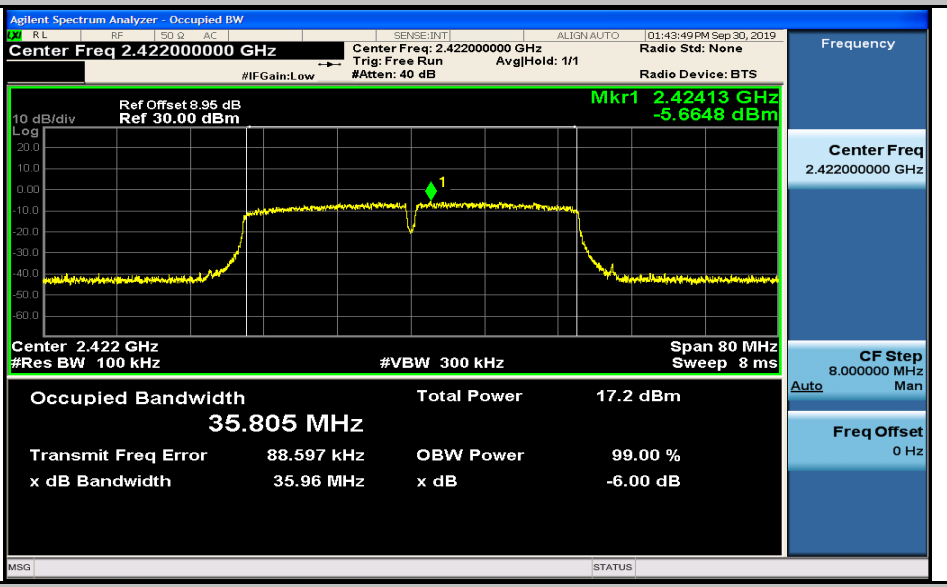

6dB Bandwidth_11N20SISO_2437_Ant1



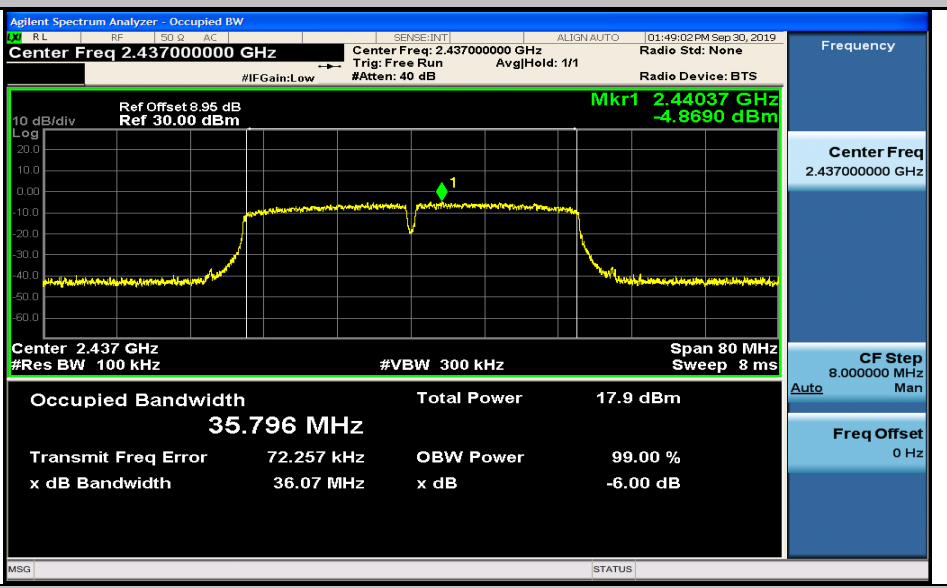

6dB Bandwidth_11N20SISO_2462_Ant1



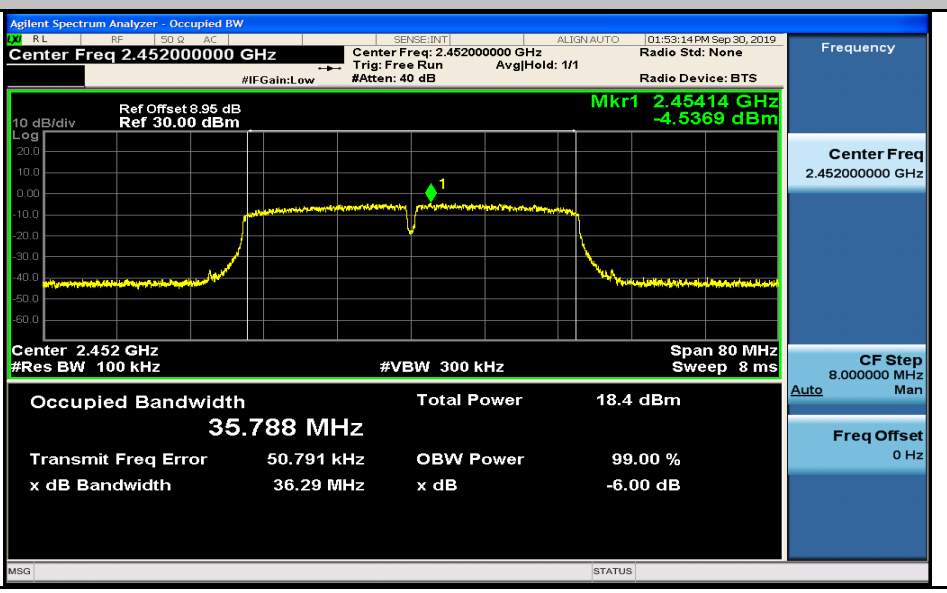
6dB Bandwidth_11N40SISO_2422_Ant1




6dB Bandwidth_11N40SISO_2437_Ant1



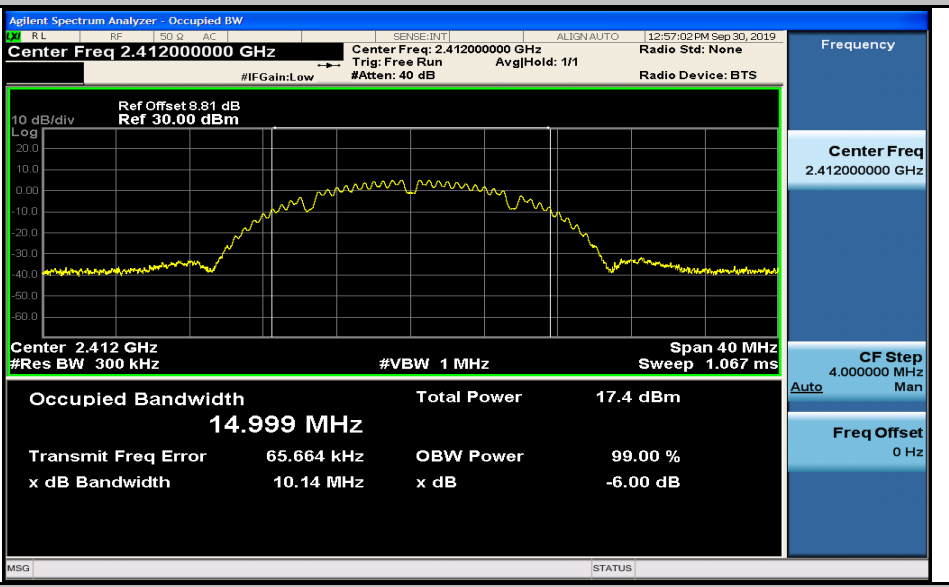

6dB Bandwidth_11N40SISO_2452_Ant1



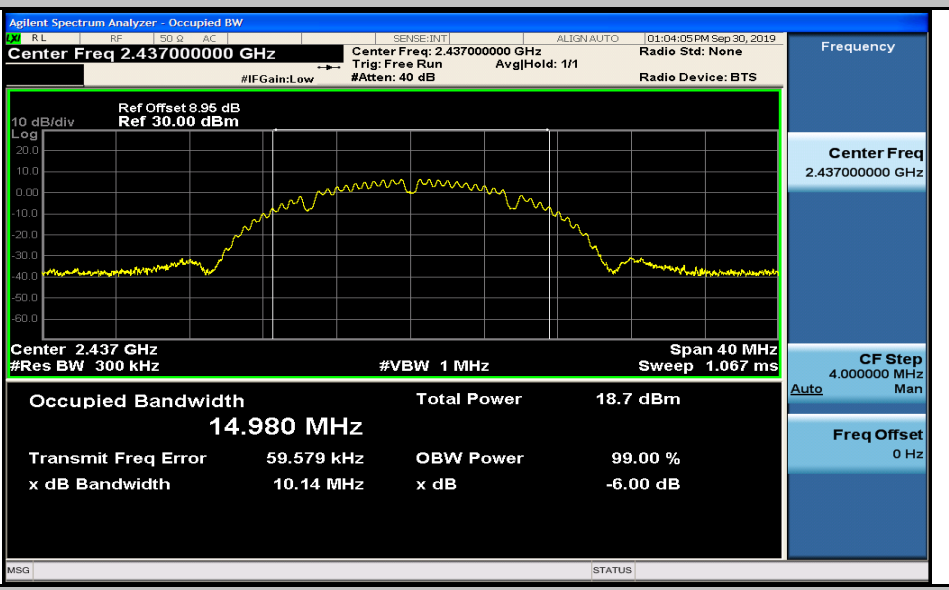
**2.Occupied Bandwidth**

| Test Mode | Test Channel | Ant | OBW[MHz] | Limit[MHz] | Verdict |
|---|---|---|---|---|---|
| 11B | 2412 | Ant1 | 15.00 | --- | PASS |
| 11B | 2437 | Ant1 | 14.98 | --- | PASS |
| 11B | 2462 | Ant1 | 14.98 | --- | PASS |
| 11G | 2412 | Ant1 | 16.77 | --- | PASS |
| 11G | 2437 | Ant1 | 16.78 | --- | PASS |
| 11G | 2462 | Ant1 | 16.81 | --- | PASS |
| 11N20SISO | 2412 | Ant1 | 17.83 | --- | PASS |
| 11N20SISO | 2437 | Ant1 | 17.83 | --- | PASS |
| 11N20SISO | 2462 | Ant1 | 17.83 | --- | PASS |
| 11N40SISO | 2422 | Ant1 | 36.07 | --- | PASS |
| 11N40SISO | 2437 | Ant1 | 36.05 | --- | PASS |
| 11N40SISO | 2452 | Ant1 | 36.00 | --- | PASS |

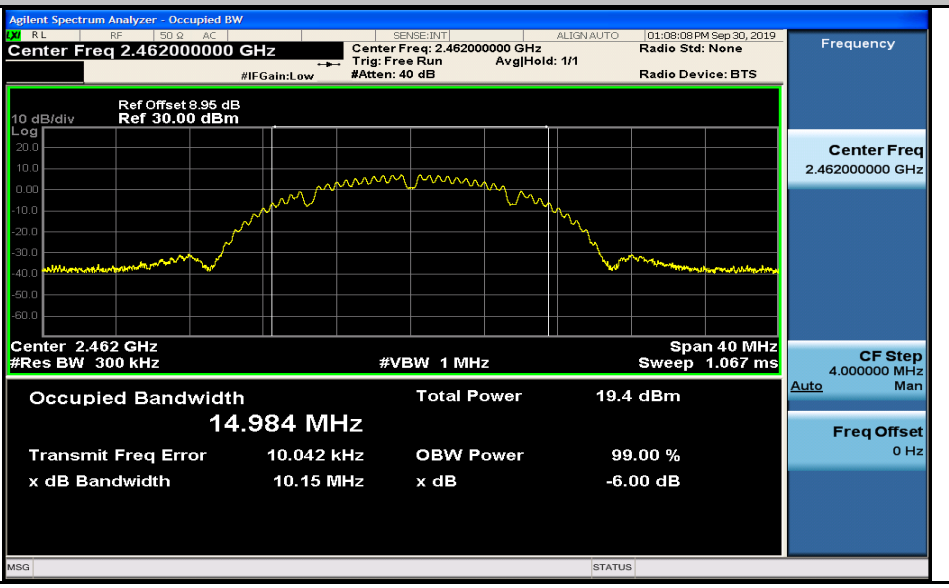
## Occupied Bandwidth_11B_2412



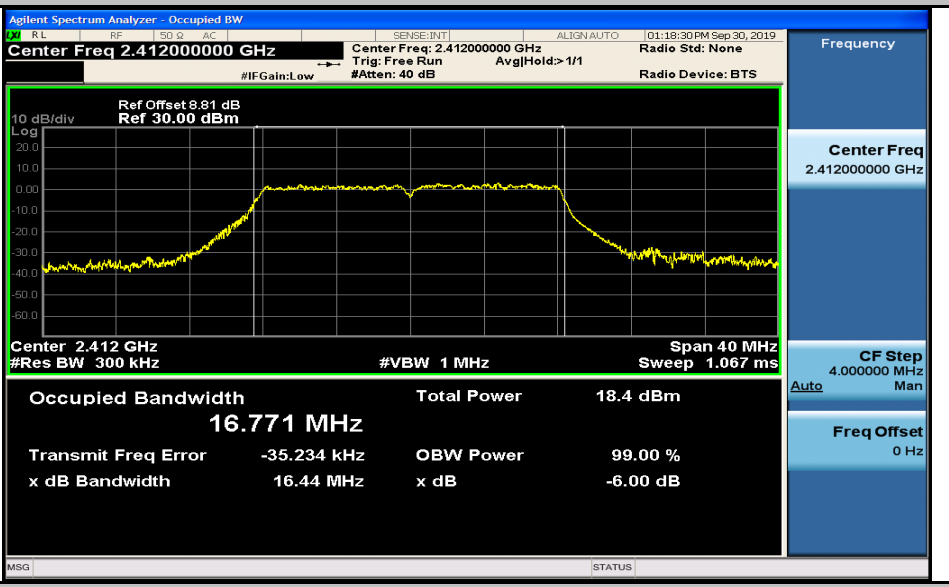

## Occupied Bandwidth_11B_2437



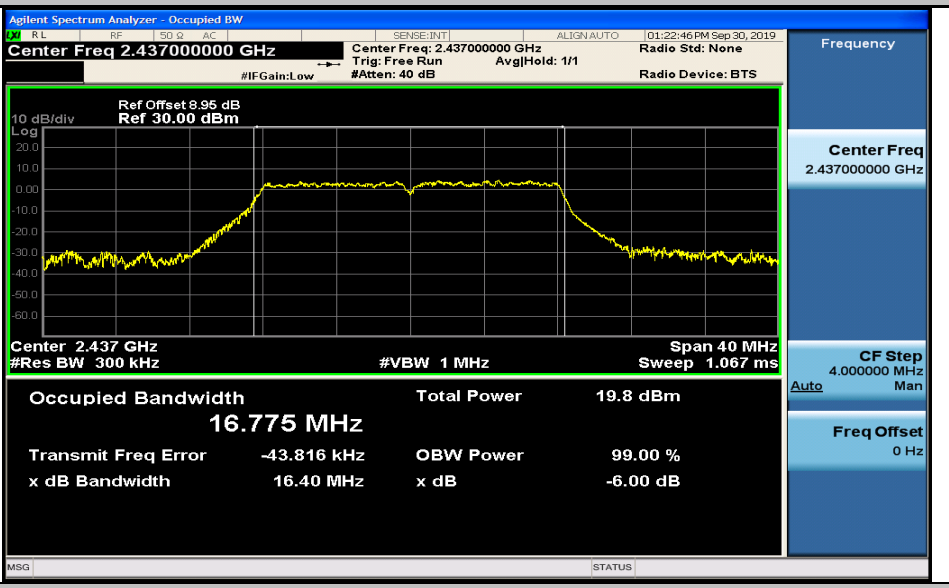

## Occupied Bandwidth_11B_2462



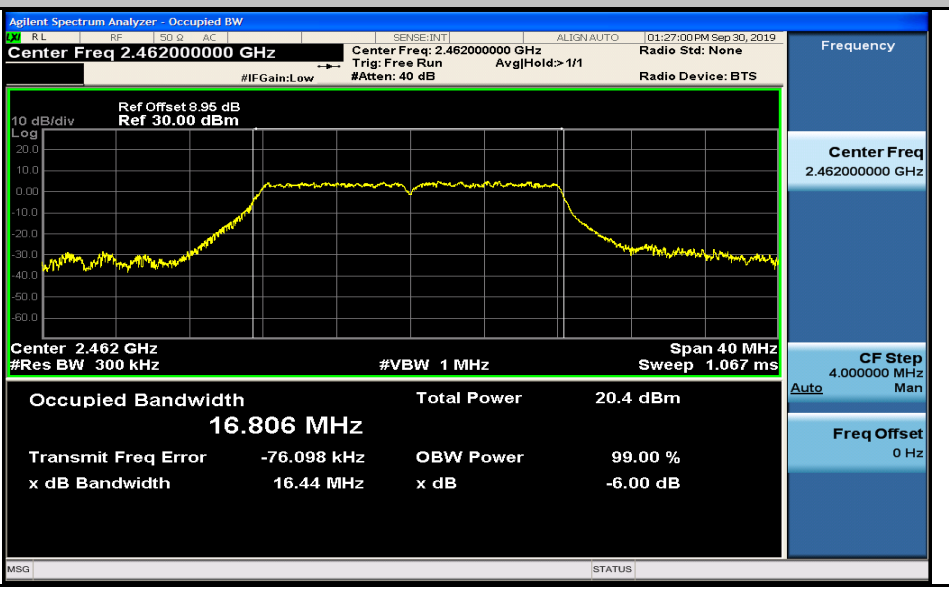
## Occupied Bandwidth_11G_2412



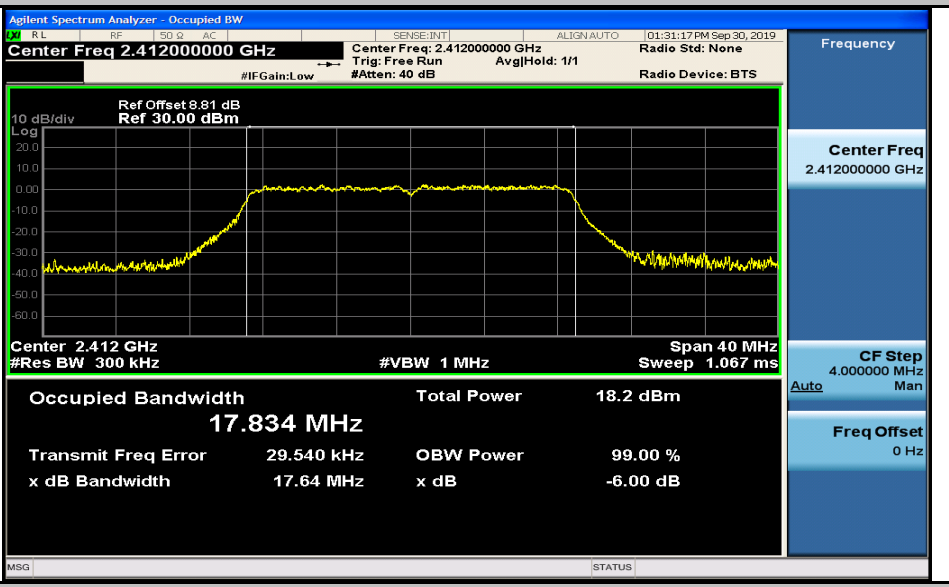

## Occupied Bandwidth_11G_2437



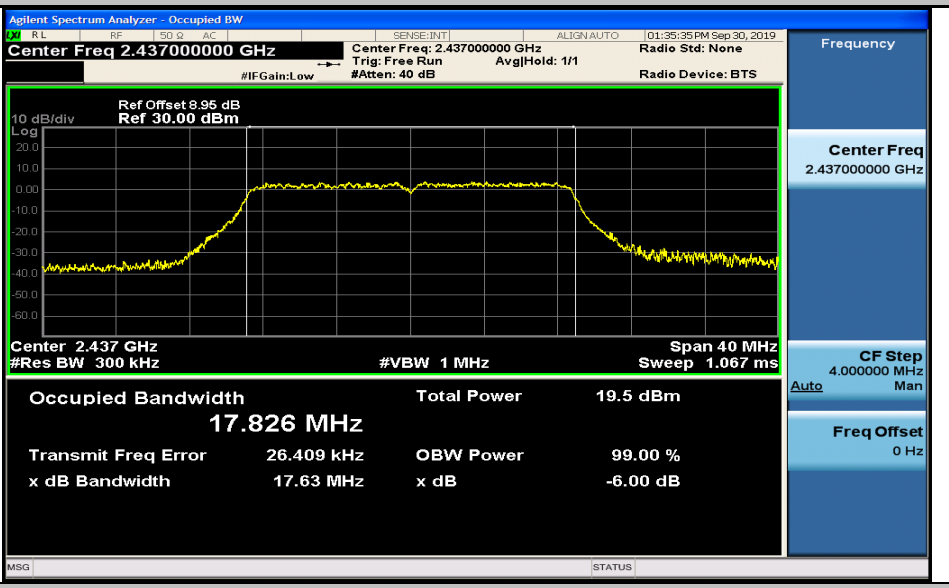

## Occupied Bandwidth_11G_2462



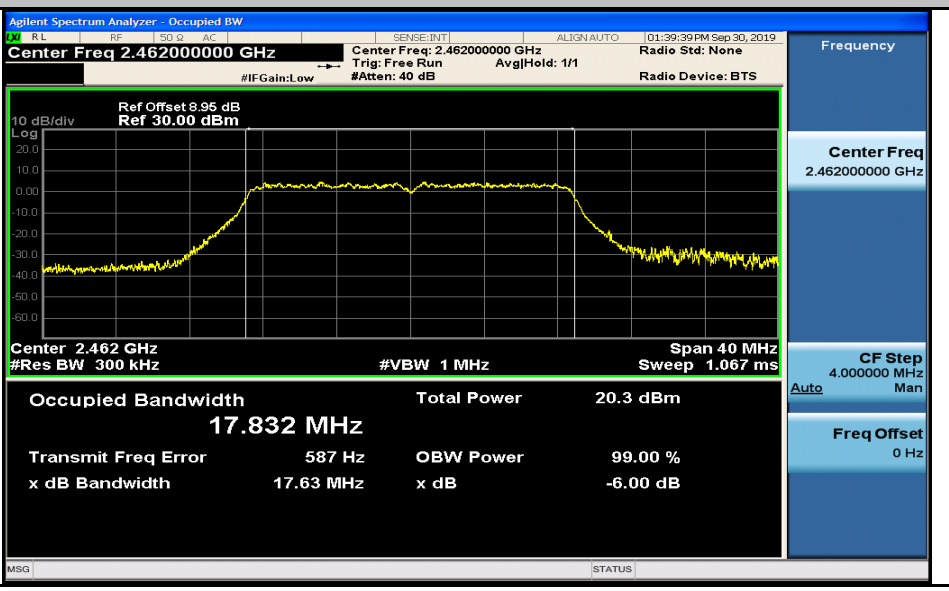
## Occupied Bandwidth_11N20SISO_2412



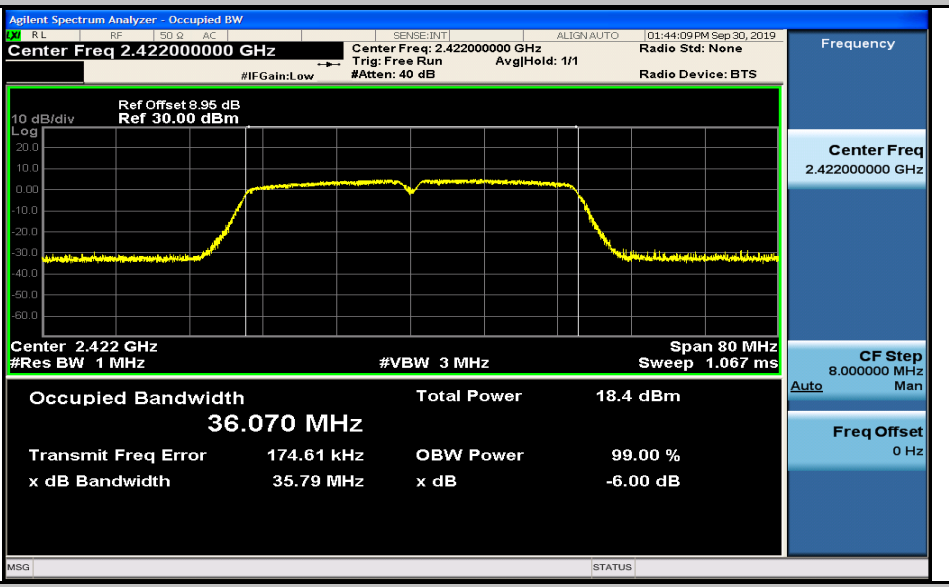

## Occupied Bandwidth_11N20SISO_2437



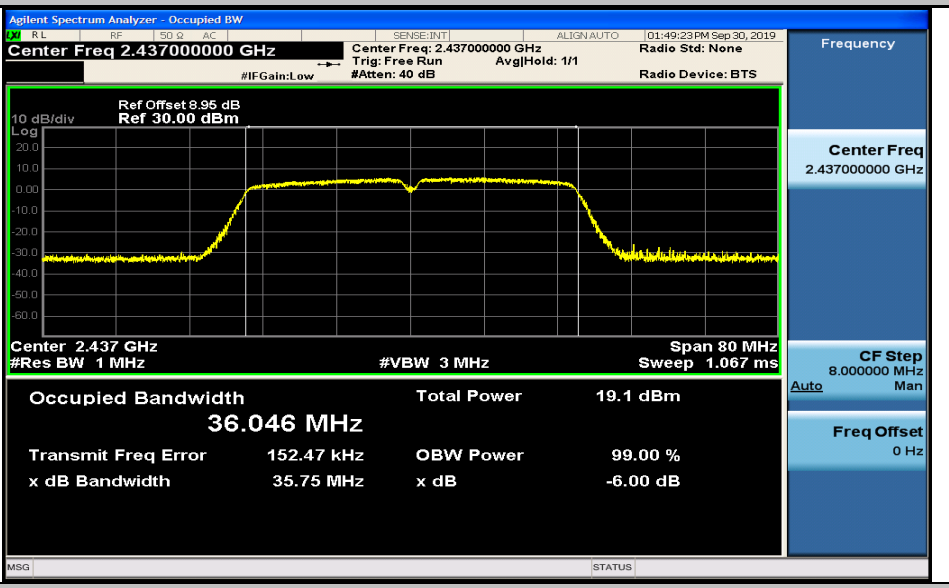

## Occupied Bandwidth_11N20SISO_2462



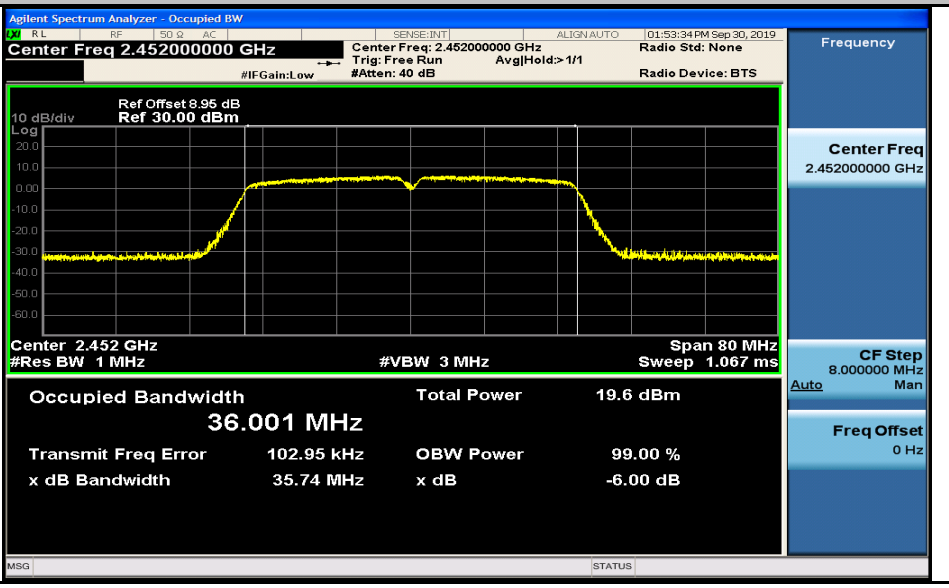
## Occupied Bandwidth_11N40SISO_2422




## Occupied Bandwidth_11N40SISO_2437



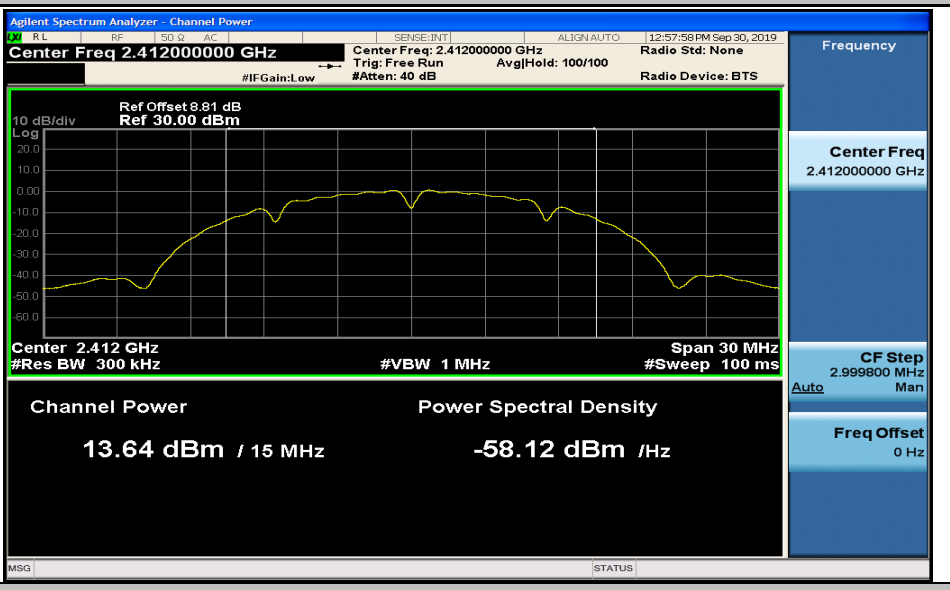

## Occupied Bandwidth_11N40SISO_2452



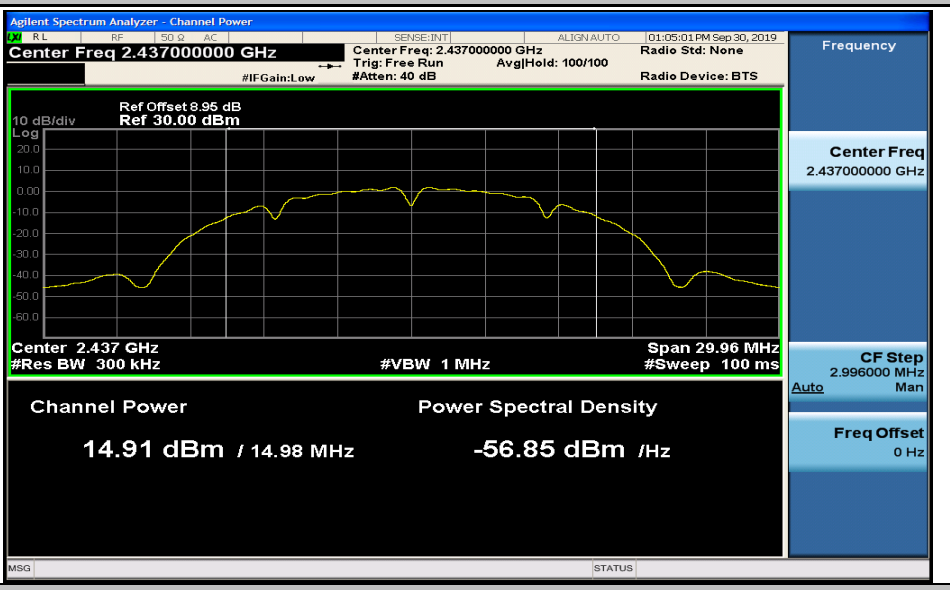
**3.Maximum conducted (average) output power**

| Test Mode | Test Channel | Ant | Level [dBm] | 10log(1/x) Factor[dB] | Power [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | 2412 | Ant1 | 13.64 | 0.00 | 13.64 | 30 | PASS |
| 11B | 2437 | Ant1 | 14.91 | 0.00 | 14.91 | 30 | PASS |
| 11B | 2462 | Ant1 | 15.6 | 0.00 | 15.60 | 30 | PASS |
| 11G | 2412 | Ant1 | 12.08 | 0.00 | 12.08 | 30 | PASS |
| 11G | 2437 | Ant1 | 13.42 | 0.00 | 13.42 | 30 | PASS |
| 11G | 2462 | Ant1 | 14.12 | 0.00 | 14.12 | 30 | PASS |
| 11N20SISO | 2412 | Ant1 | 11.93 | 0.00 | 11.93 | 30 | PASS |
| 11N20SISO | 2437 | Ant1 | 13.28 | 0.00 | 13.28 | 30 | PASS |
| 11N20SISO | 2462 | Ant1 | 14 | 0.00 | 14.00 | 30 | PASS |
| 11N40SISO | 2422 | Ant1 | 11.17 | 0.00 | 11.17 | 30 | PASS |
| 11N40SISO | 2437 | Ant1 | 11.88 | 0.00 | 11.88 | 30 | PASS |
| 11N40SISO | 2452 | Ant1 | 12.4 | 0.00 | 12.40 | 30 | PASS |

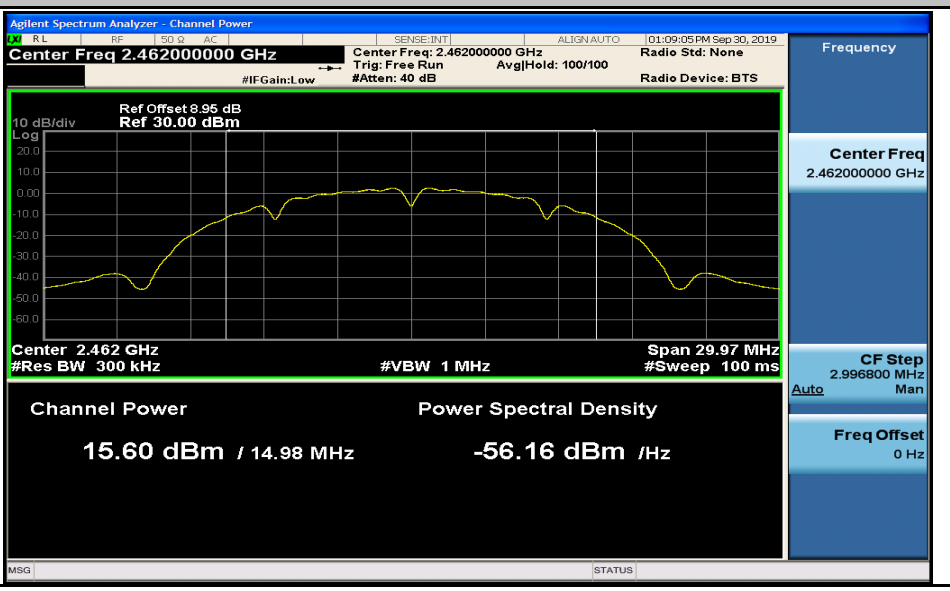
Maximum conducted (average) output power_11B_2412_Ant1



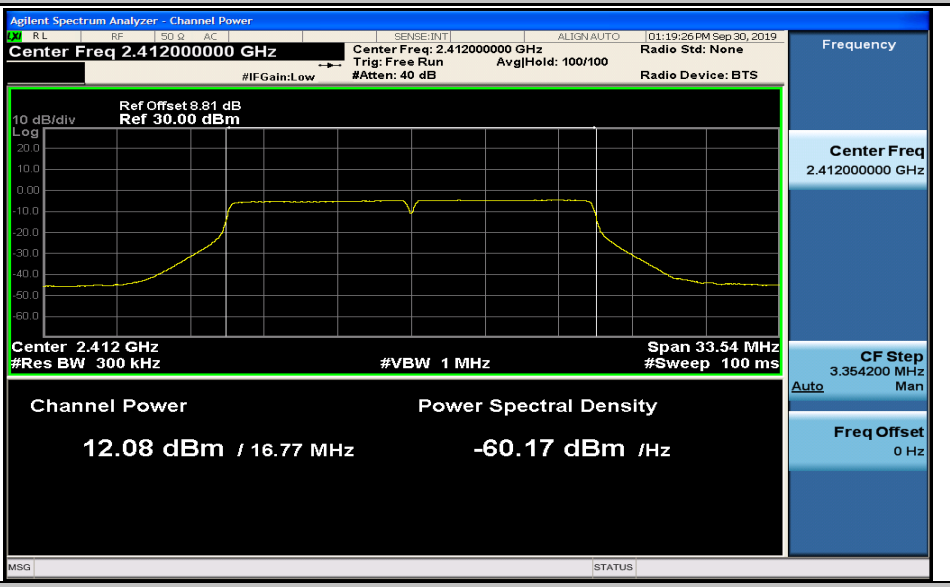

Maximum conducted (average) output power_11B_2437_Ant1



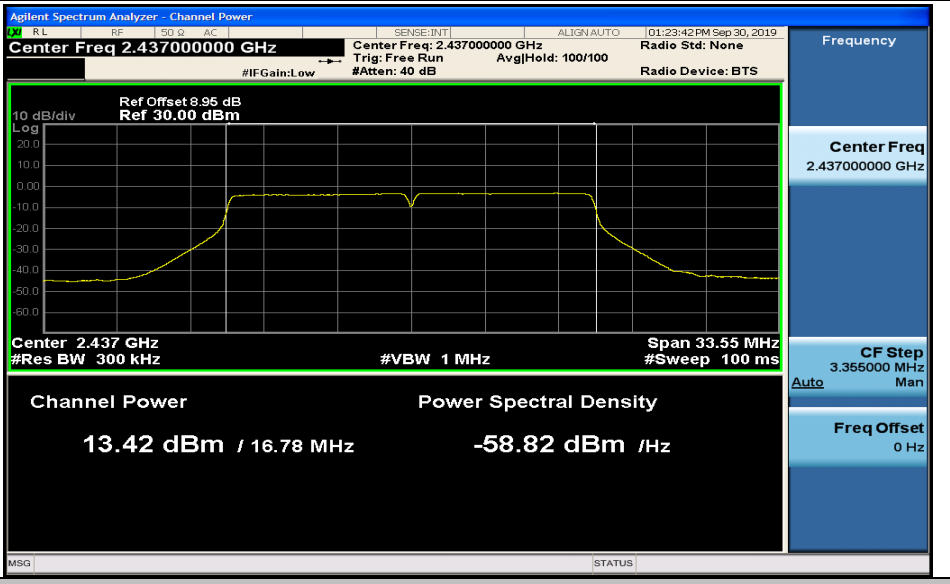

Maximum conducted (average) output power_11B_2462_Ant1



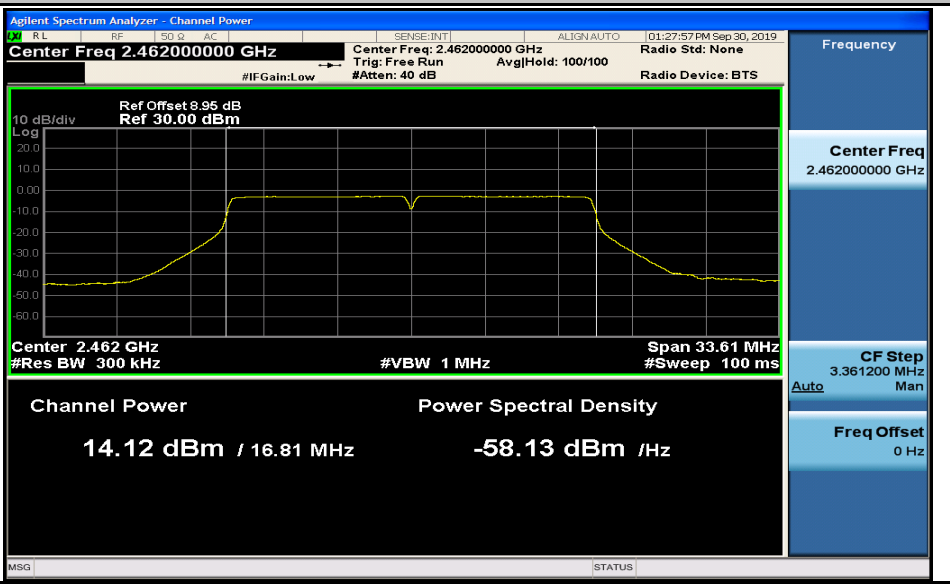
Maximum conducted (average) output power_11G_2412_Ant1



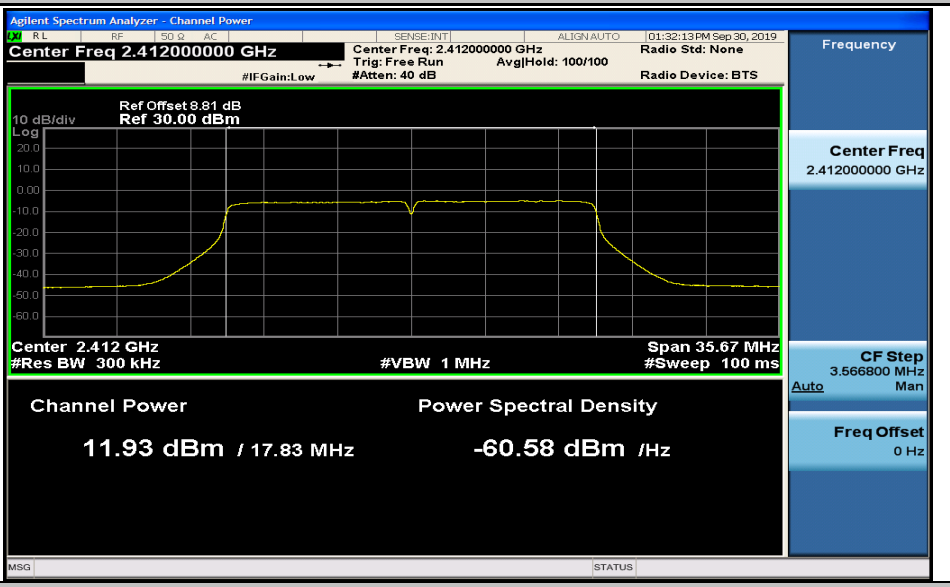

Maximum conducted (average) output power_11G_2437_Ant1



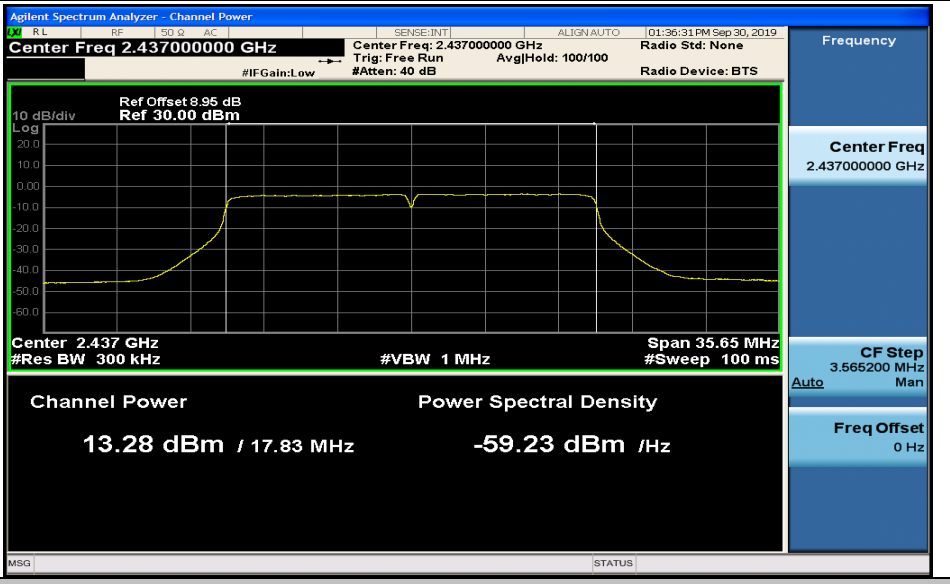

Maximum conducted (average) output power_11G_2462_Ant1



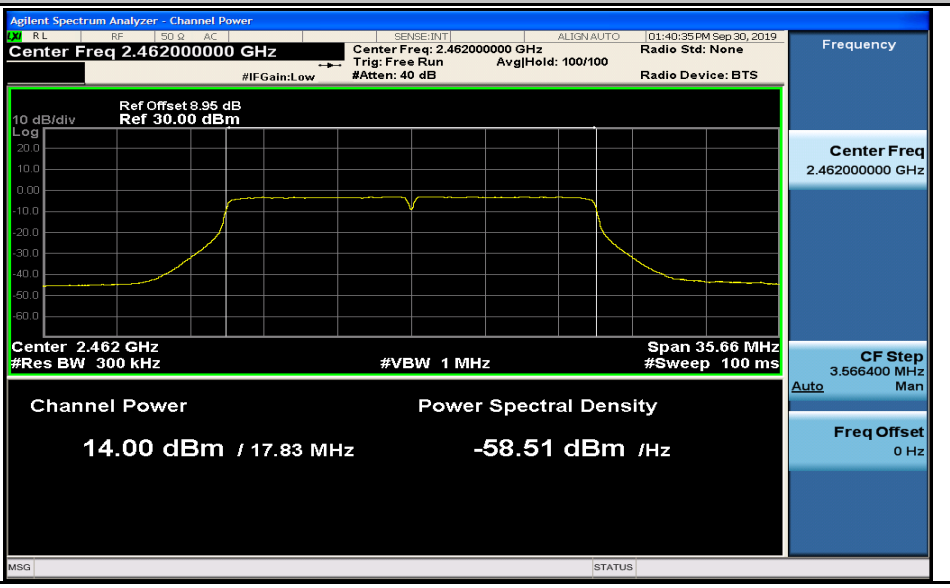
Maximum conducted (average) output power_11N20SISO_2412_Ant1



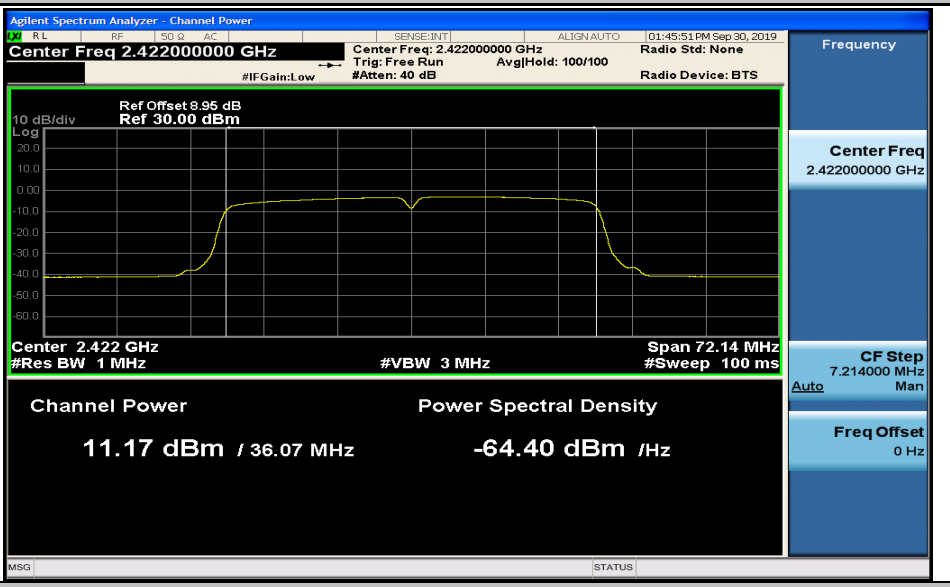

Maximum conducted (average) output power_11N20SISO_2437_Ant1



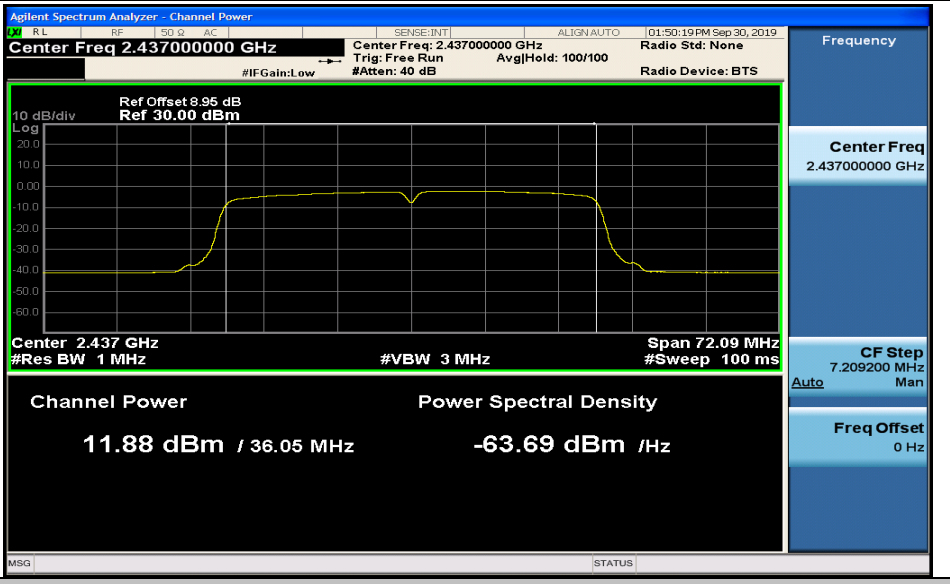

Maximum conducted (average) output power_11N20SISO_2462_Ant1



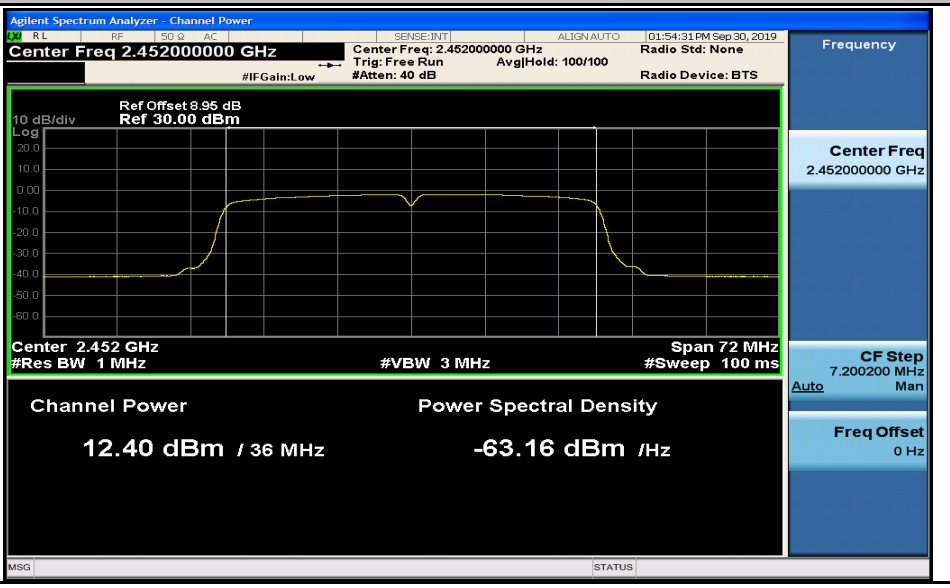
Maximum conducted (average) output power_11N40SISO_2422_Ant1




Maximum conducted (average) output power_11N40SISO_2437_Ant1




Maximum conducted (average) output power_11N40SISO_2452_Ant1



**4.Maximum(average) power spectral density**

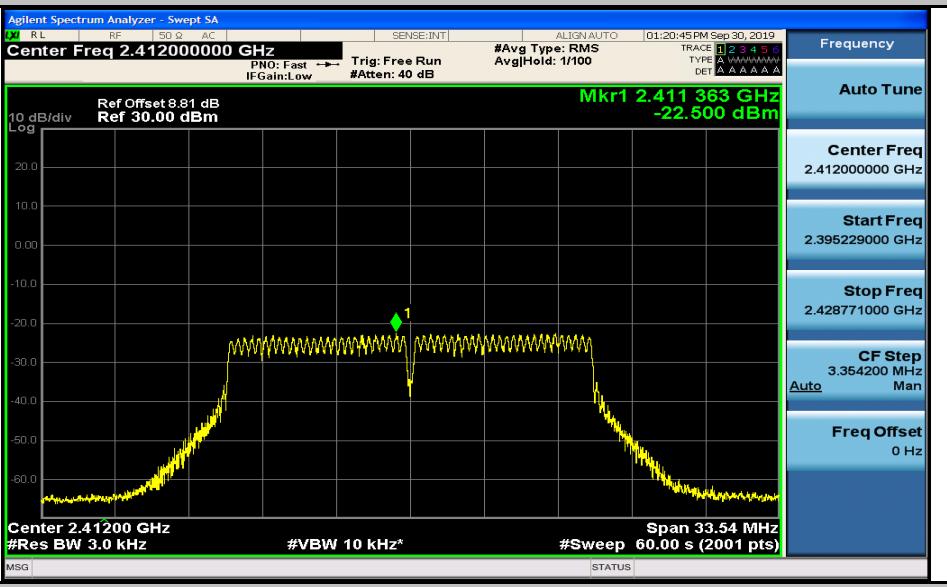
| Test Mode | Test Channel | Ant | Level [dBm/3kHz] | 10log(1/x) Factor[dB] | PSD[dBm/3kHz] | Limit[dBm/3kHz] | Verdict |
|---|---|---|---|---|---|---|---|
| 11B | 2412 | Ant1 | -19.10 | 0.00 | -19.10 | 8.00 | PASS |
| 11B | 2437 | Ant1 | -17.83 | 0.00 | -17.83 | 8.00 | PASS |
| 11B | 2462 | Ant1 | -17.15 | 0.00 | -17.15 | 8.00 | PASS |
| 11G | 2412 | Ant1 | -22.50 | 0.00 | -22.50 | 8.00 | PASS |
| 11G | 2437 | Ant1 | -21.14 | 0.00 | -21.14 | 8.00 | PASS |
| 11G | 2462 | Ant1 | -20.38 | 0.00 | -20.38 | 8.00 | PASS |
| 11N20SISO | 2412 | Ant1 | -22.78 | 0.00 | -22.78 | 8.00 | PASS |
| 11N20SISO | 2437 | Ant1 | -21.41 | 0.00 | -21.41 | 8.00 | PASS |
| 11N20SISO | 2462 | Ant1 | -20.85 | 0.00 | -20.85 | 8.00 | PASS |
| 11N40SISO | 2422 | Ant1 | -26.74 | 0.00 | -26.74 | 8.00 | PASS |
| 11N40SISO | 2437 | Ant1 | -26.07 | 0.00 | -26.07 | 8.00 | PASS |
| 11N40SISO | 2452 | Ant1 | -25.48 | 0.00 | -25.48 | 8.00 | PASS |

Maximum(average) power spectral density_11B_2412_Ant1

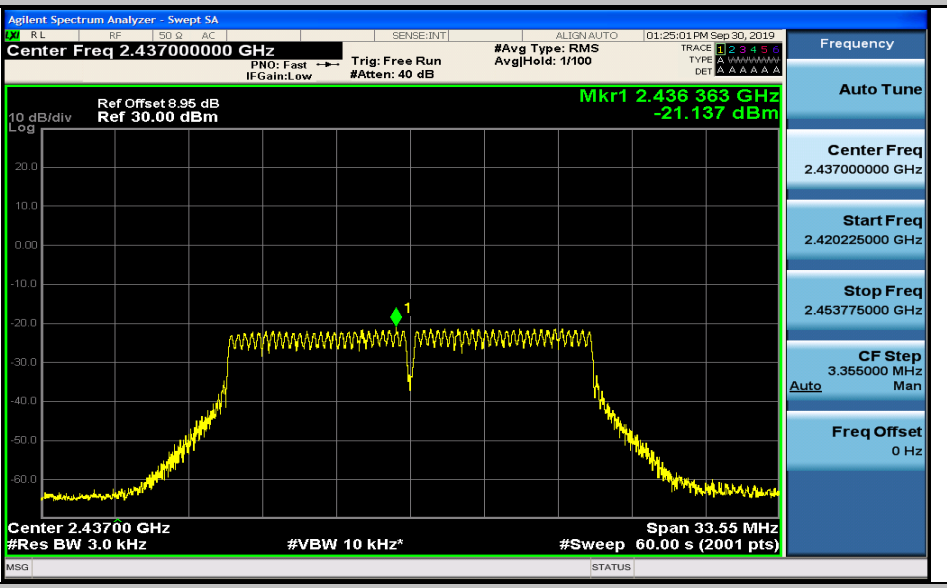
Maximum(average) power spectral density_11B_2437_Ant1

Maximum(average) power spectral density_11B_2462_Ant1

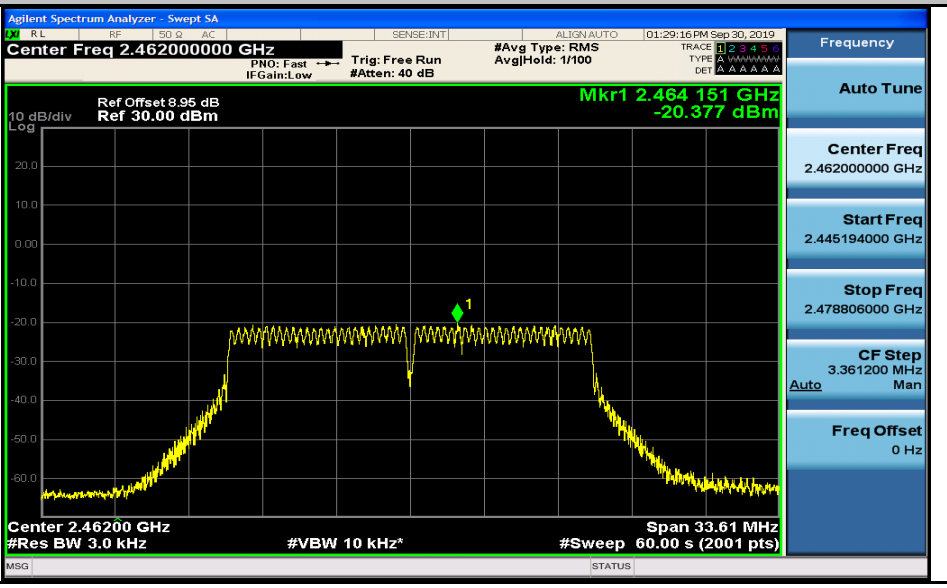
Maximum(average) power spectral density_11G_2412_Ant1



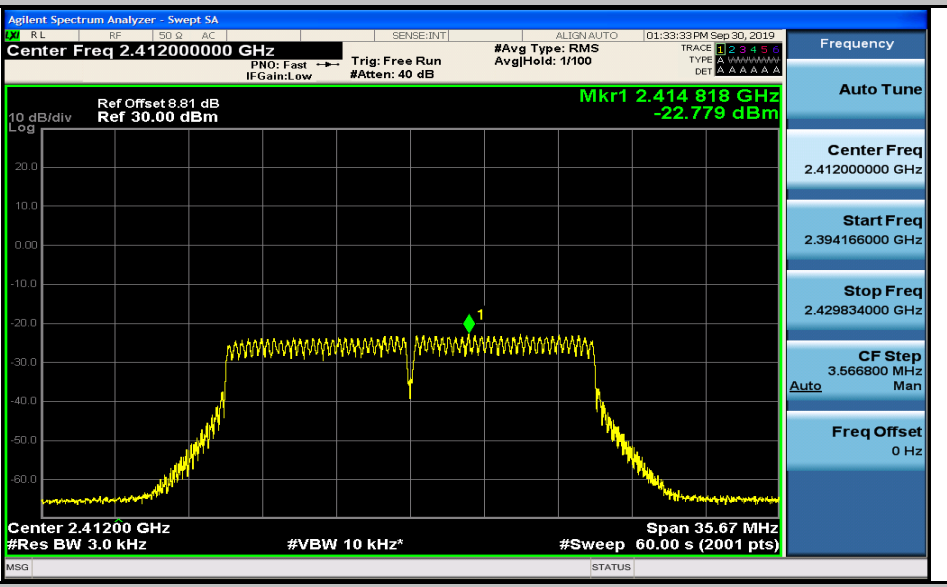

Maximum(average) power spectral density_11G_2437_Ant1



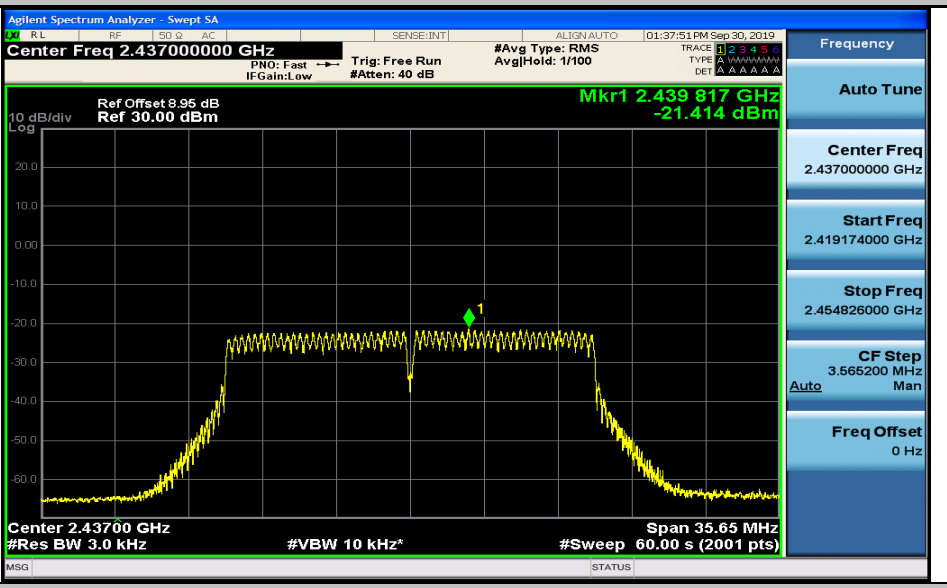

Maximum(average) power spectral density_11G_2462_Ant1



Maximum(average) power spectral density_11N20SISO_2412_Ant1




Maximum(average) power spectral density_11N20SISO_2437_Ant1

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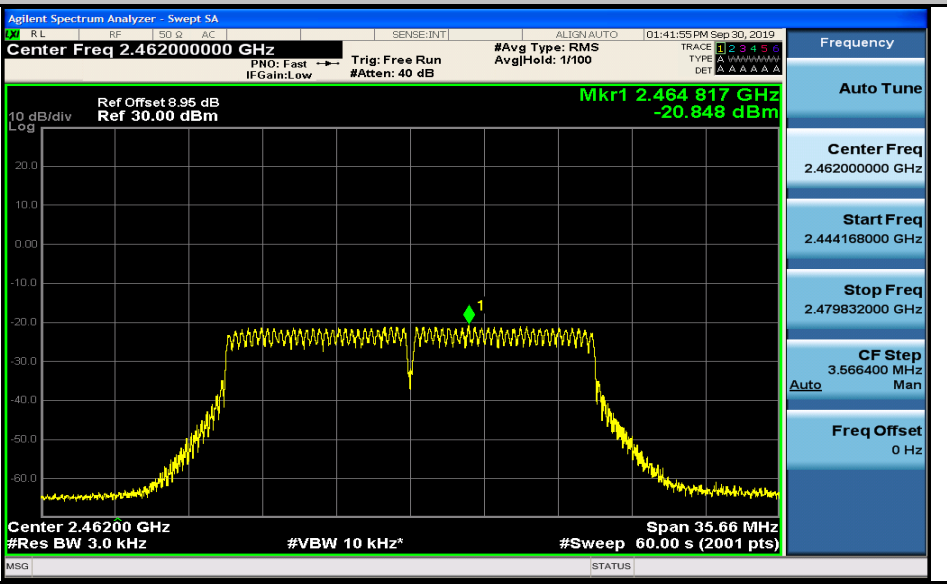
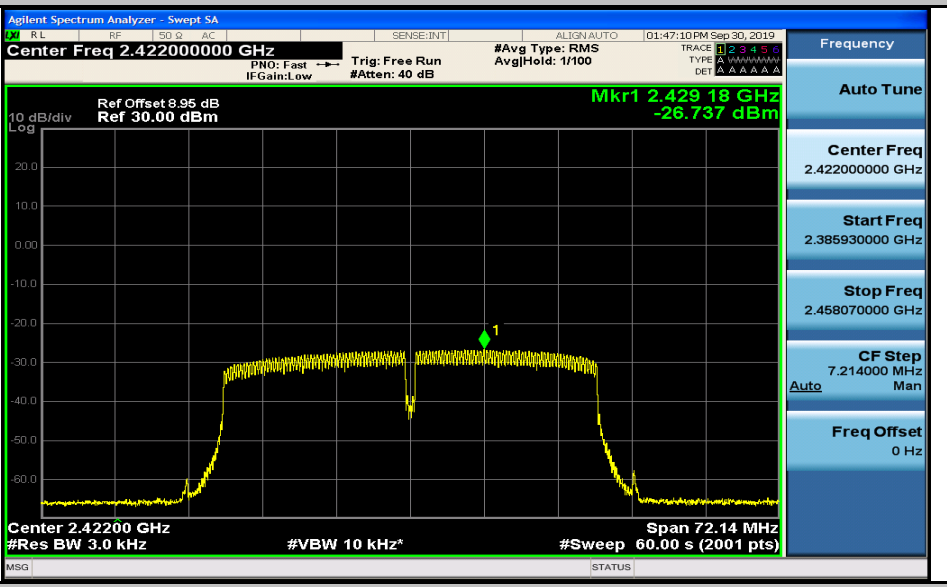


Maximum(average) power spectral density_11N40SISO_2422_Ant1

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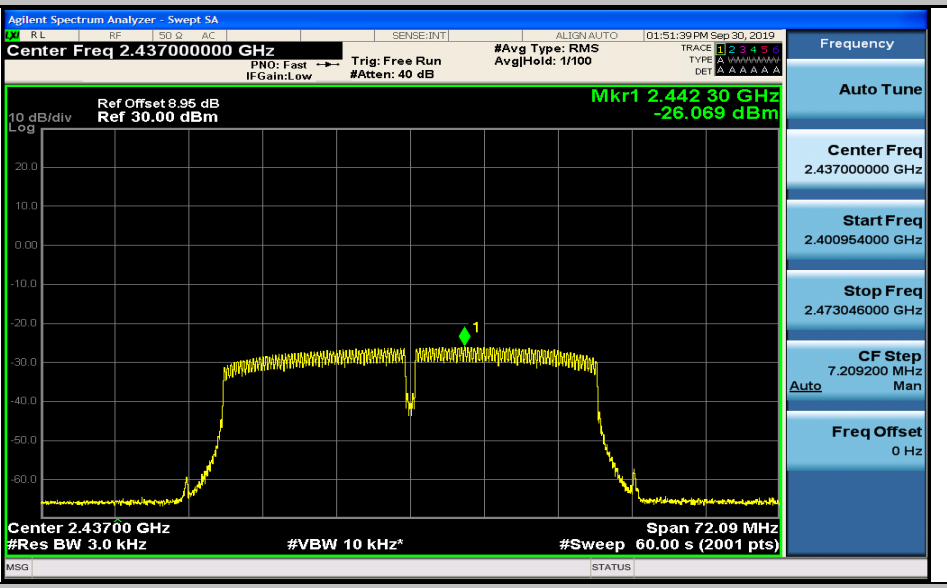
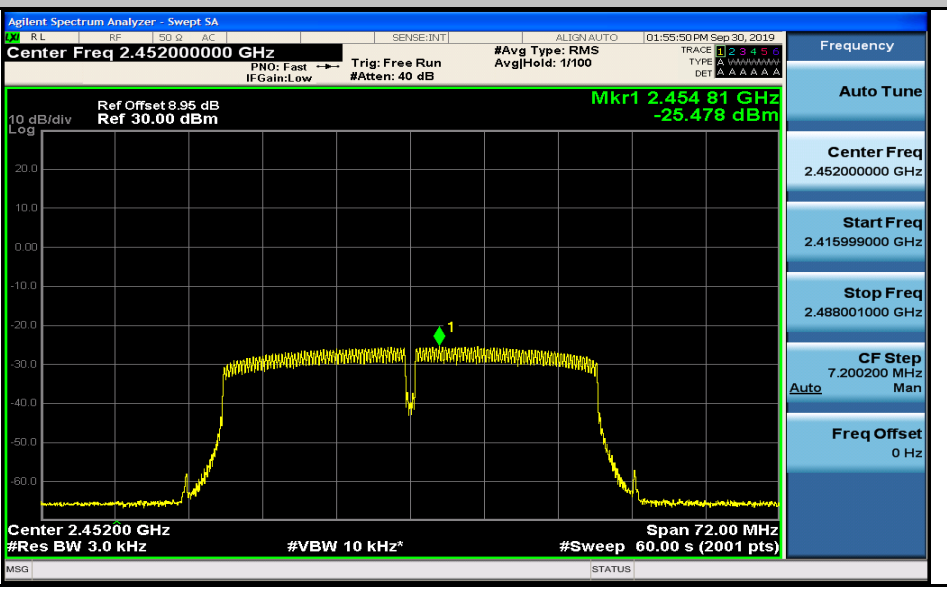


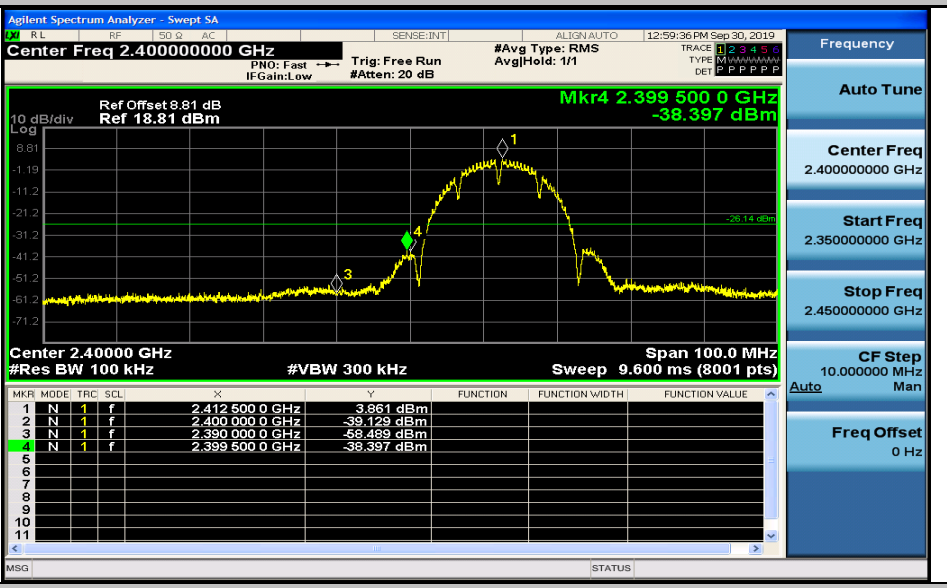

Maximum(average) power spectral density_11N40SISO_2452_Ant1



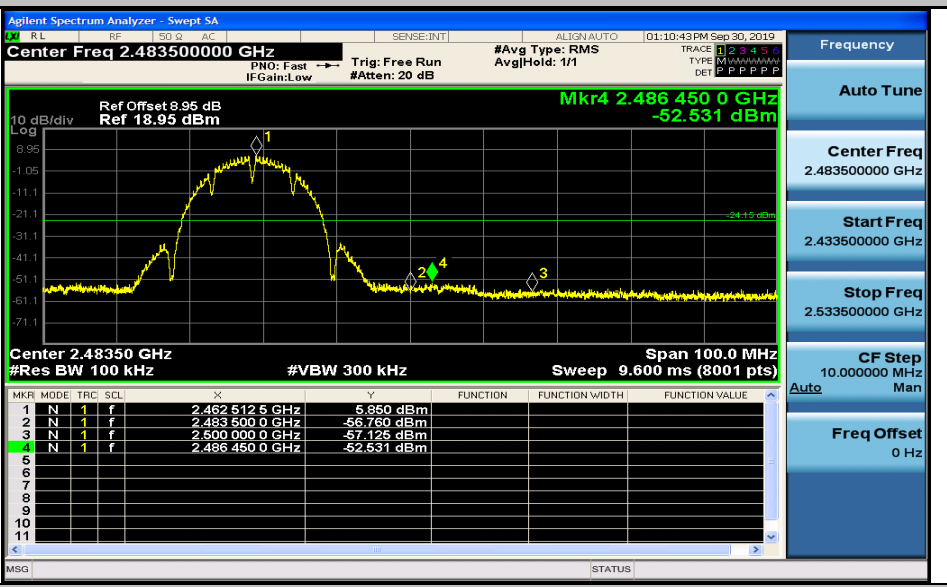
**5.Band-edge for RF Conducted Emissions**

| Test Mode | Test Channel | Ant | Carrier Power[dBm] | Max. Spurious Level [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|
| 11B | 2412 | Ant1 | 3.86 | -38.40 | -26.14 | PASS |
| 11B | 2462 | Ant1 | 5.85 | -52.53 | -24.15 | PASS |
| 11G | 2412 | Ant1 | -2.17 | -37.64 | -32.17 | PASS |
| 11G | 2462 | Ant1 | -0.34 | -38.36 | -30.34 | PASS |
| 11N20SISO | 2412 | Ant1 | -2.66 | -37.17 | -32.66 | PASS |
| 11N20SISO | 2462 | Ant1 | -0.03 | -41.11 | -30.03 | PASS |
| 11N40SISO | 2422 | Ant1 | -5.59 | -44.11 | -35.59 | PASS |
| 11N40SISO | 2452 | Ant1 | -4.59 | -48.35 | -34.59 | PASS |

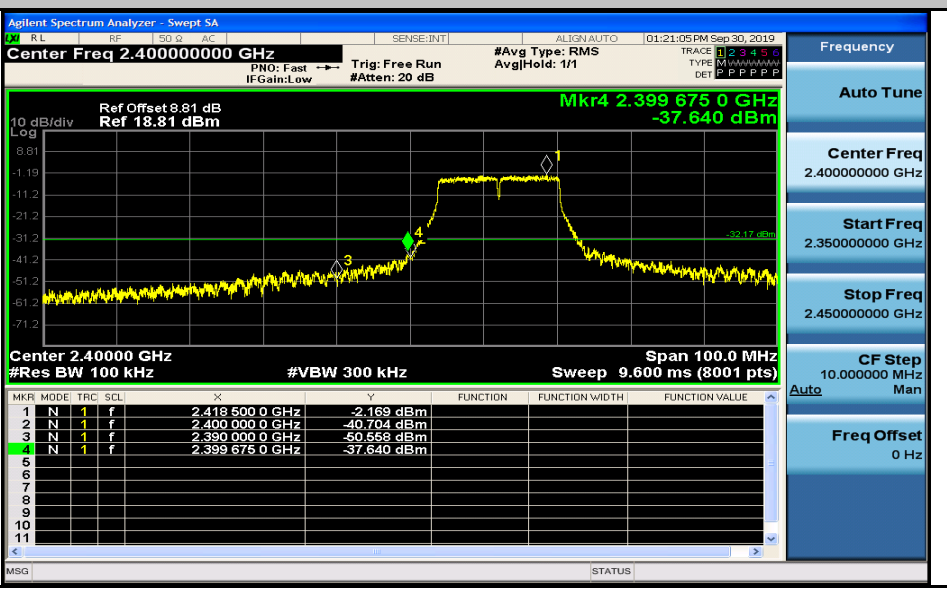
Band-edge for RF Conducted Emissions_11B_2412_Ant1




Band-edge for RF Conducted Emissions_11B_2462_Ant1




Band-edge for RF Conducted Emissions_11G_2412_Ant1



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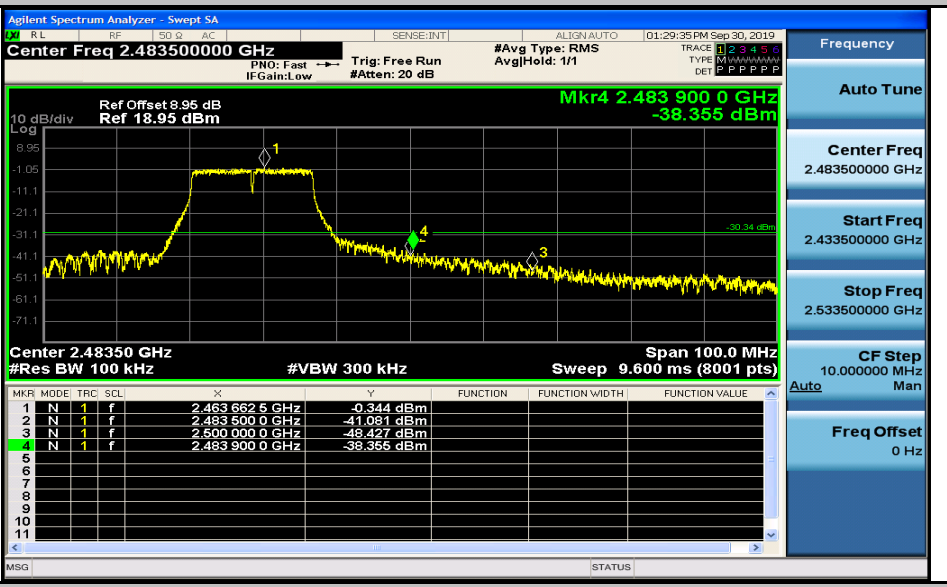
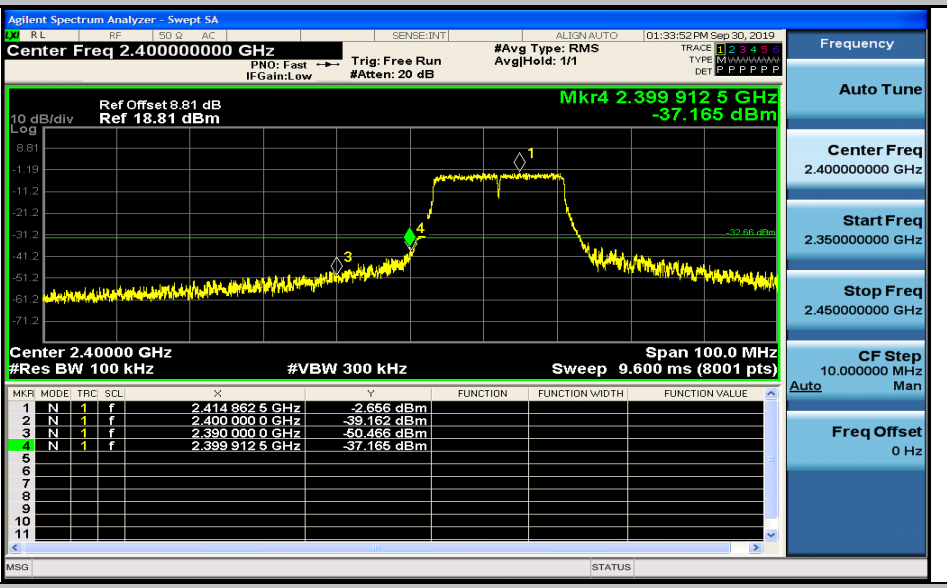
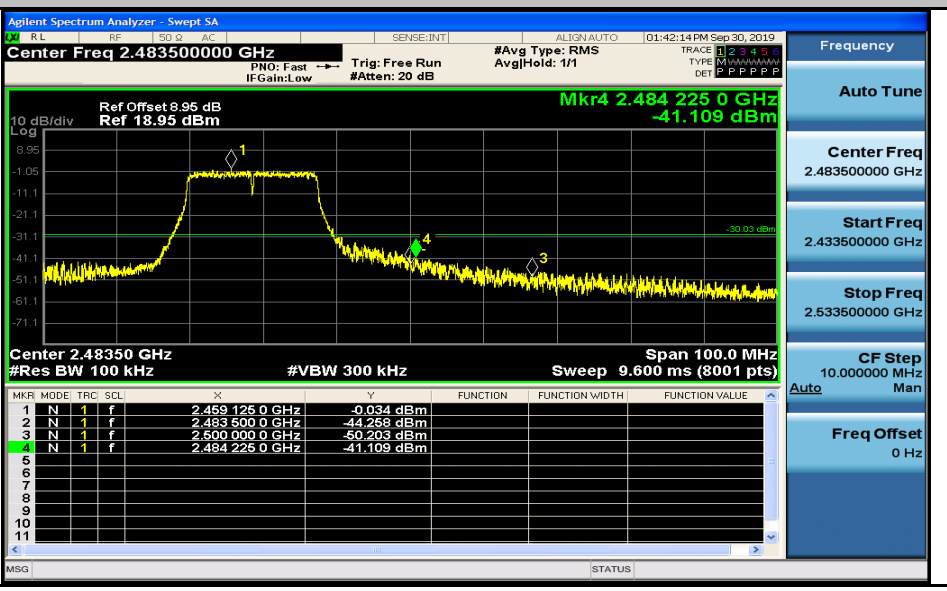


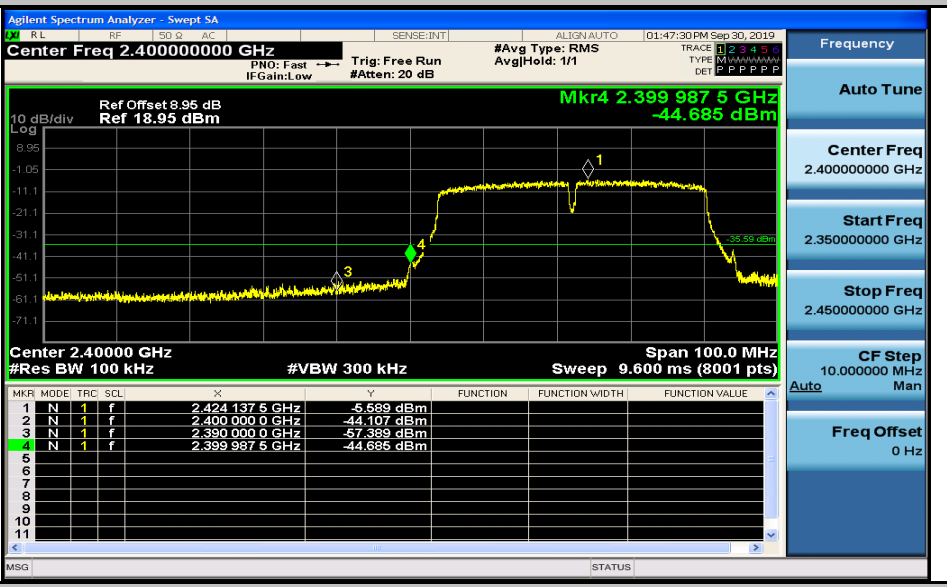

Band-edge for RF Conducted Emissions_11N20SISO_2412_Ant1



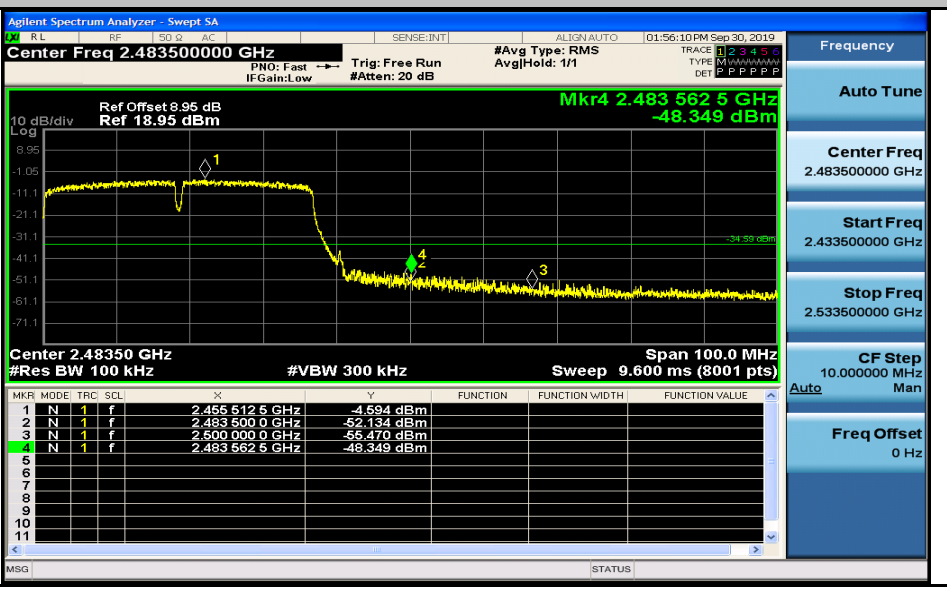

Band-edge for RF Conducted Emissions_11N20SISO_2462_Ant1



Band-edge for RF Conducted Emissions_11N40SISO_2422_Ant1




Band-edge for RF Conducted Emissions_11N40SISO_2452_Ant1



**6.RF Conducted Spurious Emissions**

| Test Mode | Test Channel | Ant | StartFre [MHz] | StopFre [MHz] | RBW [kHz] | VBW [kHz] | Pref[dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|---|---|---|---|---|---|---|---|---|---|---|
| 11B | 2412 | Ant1 | 30 | 10000 | 100 | 300 | 3.80 | -48.18 | <-26.20 | PASS |
| 11B | 2412 | Ant1 | 10000 | 26000 | 100 | 300 | 3.799 | -44.310 | <-26.201 | PASS |
| 11B | 2437 | Ant1 | 30 | 10000 | 100 | 300 | 5.10 | -52.88 | <-24.90 | PASS |
| 11B | 2437 | Ant1 | 10000 | 26000 | 100 | 300 | 5.101 | -44.012 | <-24.899 | PASS |
| 11B | 2462 | Ant1 | 30 | 10000 | 100 | 300 | 5.76 | -53.53 | <-24.24 | PASS |
| 11B | 2462 | Ant1 | 10000 | 26000 | 100 | 300 | 5.757 | -43.901 | <-24.243 | PASS |
| 11G | 2412 | Ant1 | 30 | 10000 | 100 | 300 | -2.24 | -50.36 | <-32.24 | PASS |
| 11G | 2412 | Ant1 | 10000 | 26000 | 100 | 300 | -2.244 | -44.501 | <-32.244 | PASS |
| 11G | 2437 | Ant1 | 30 | 10000 | 100 | 300 | -0.94 | -52.51 | <-30.94 | PASS |
| 11G | 2437 | Ant1 | 10000 | 26000 | 100 | 300 | -0.939 | -43.494 | <-30.939 | PASS |
| 11G | 2462 | Ant1 | 30 | 10000 | 100 | 300 | -0.27 | -51.25 | <-30.27 | PASS |
| 11G | 2462 | Ant1 | 10000 | 26000 | 100 | 300 | -0.274 | -43.975 | <-30.274 | PASS |
| 11N20SISO | 2412 | Ant1 | 30 | 10000 | 100 | 300 | -2.26 | -50.92 | <-32.26 | PASS |
| 11N20SISO | 2412 | Ant1 | 10000 | 26000 | 100 | 300 | -2.26 | -43.561 | <-32.26 | PASS |
| 11N20SISO | 2437 | Ant1 | 30 | 10000 | 100 | 300 | -0.79 | -49.98 | <-30.79 | PASS |
| 11N20SISO | 2437 | Ant1 | 10000 | 26000 | 100 | 300 | -0.794 | -43.174 | <-30.794 | PASS |
| 11N20SISO | 2462 | Ant1 | 30 | 10000 | 100 | 300 | -0.28 | -51.35 | <-30.28 | PASS |
| 11N20SISO | 2462 | Ant1 | 10000 | 26000 | 100 | 300 | -0.281 | -43.378 | <-30.281 | PASS |
| 11N40SISO | 2422 | Ant1 | 30 | 10000 | 100 | 300 | -5.59 | -49.99 | <-35.59 | PASS |
| 11N40SISO | 2422 | Ant1 | 10000 | 26000 | 100 | 300 | -5.589 | -42.611 | <-35.589 | PASS |
| 11N40SISO | 2437 | Ant1 | 30 | 10000 | 100 | 300 | -4.79 | -50.65 | <-34.79 | PASS |
| 11N40SISO | 2437 | Ant1 | 10000 | 26000 | 100 | 300 | -4.787 | -44.114 | <-34.787 | PASS |
| 11N40SISO | 2452 | Ant1 | 30 | 10000 | 100 | 300 | -4.62 | -50.54 | <-34.62 | PASS |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 11N40SISO | 2452 | Ant1 | 10000 | 26000 | 100 | 300 | -4.615 | -43.821 | <-34.615 | PASS |

| RF Conducted Spurious Emissions_11B_2412 |
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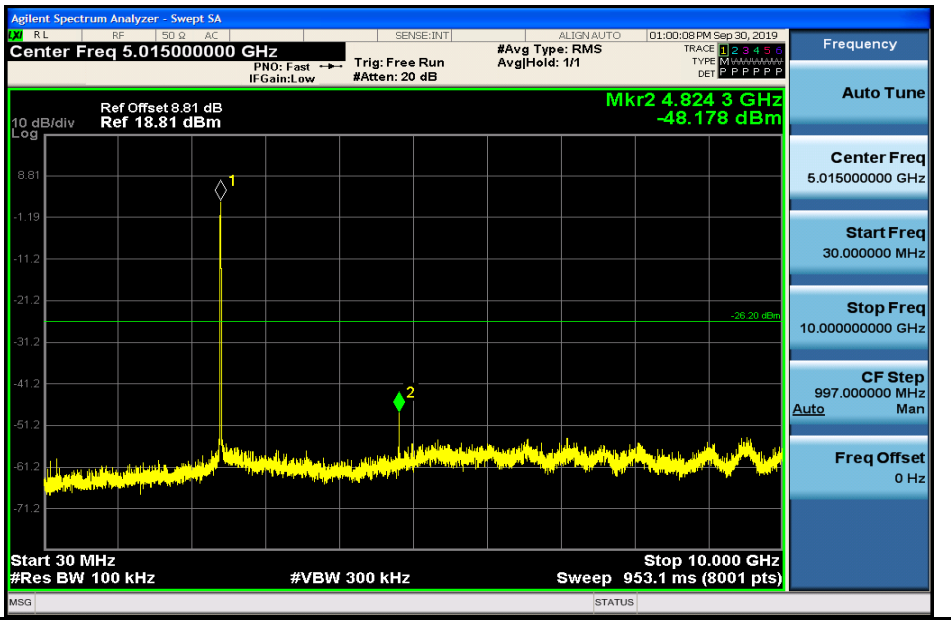
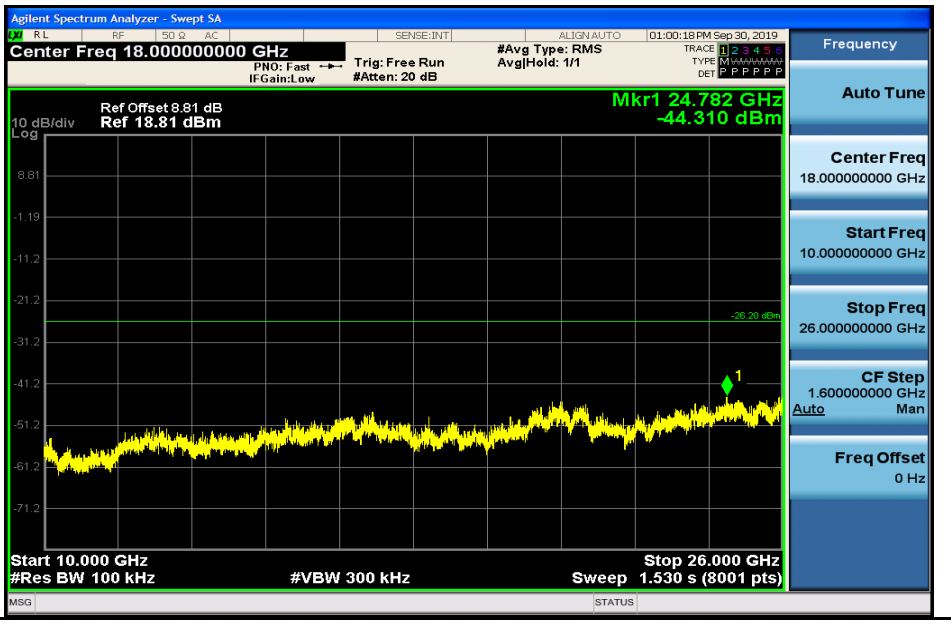
|  |
|  |

| RF Conducted Spurious Emissions_11B_2437 |
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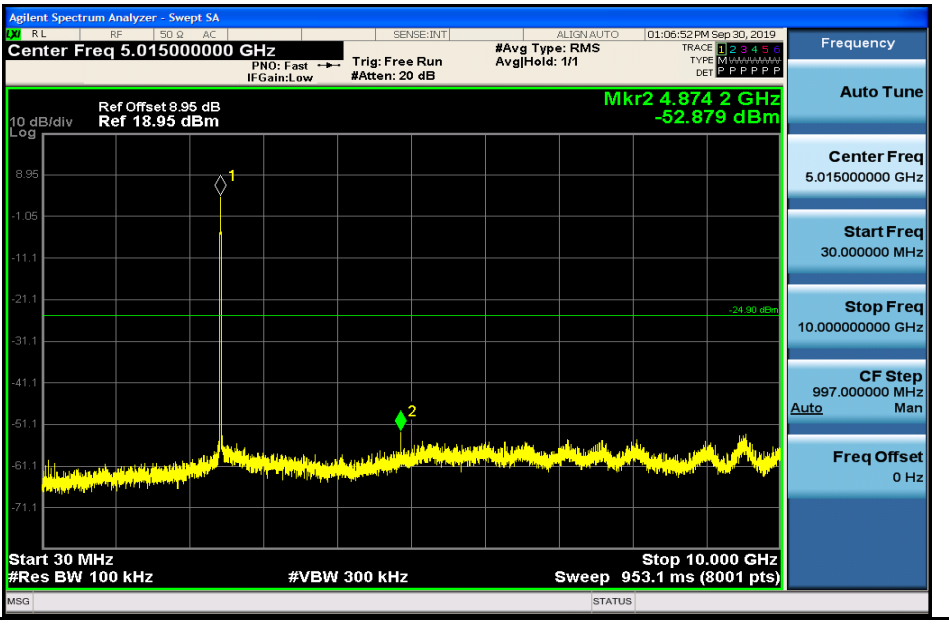
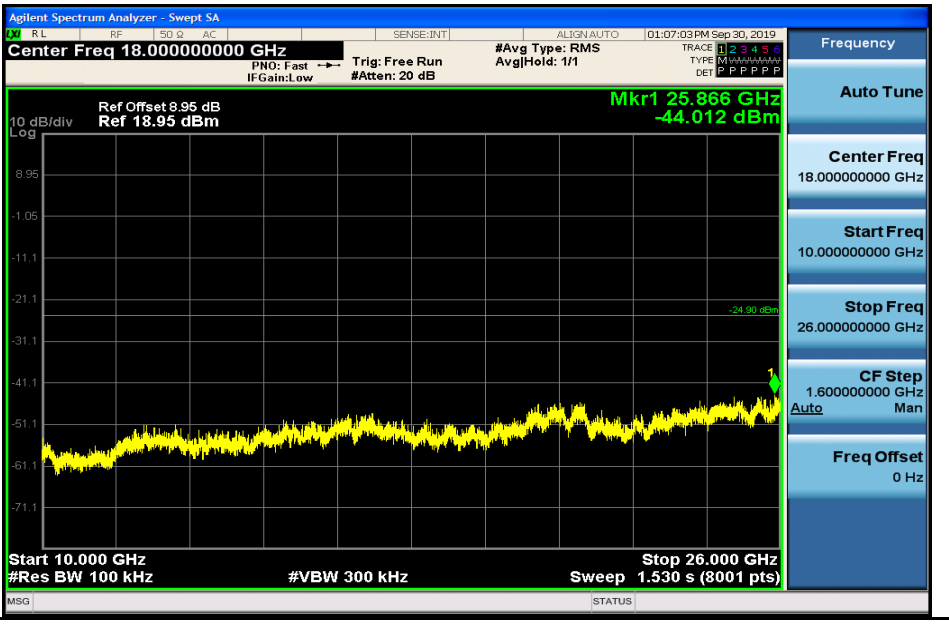
|  |
|  |

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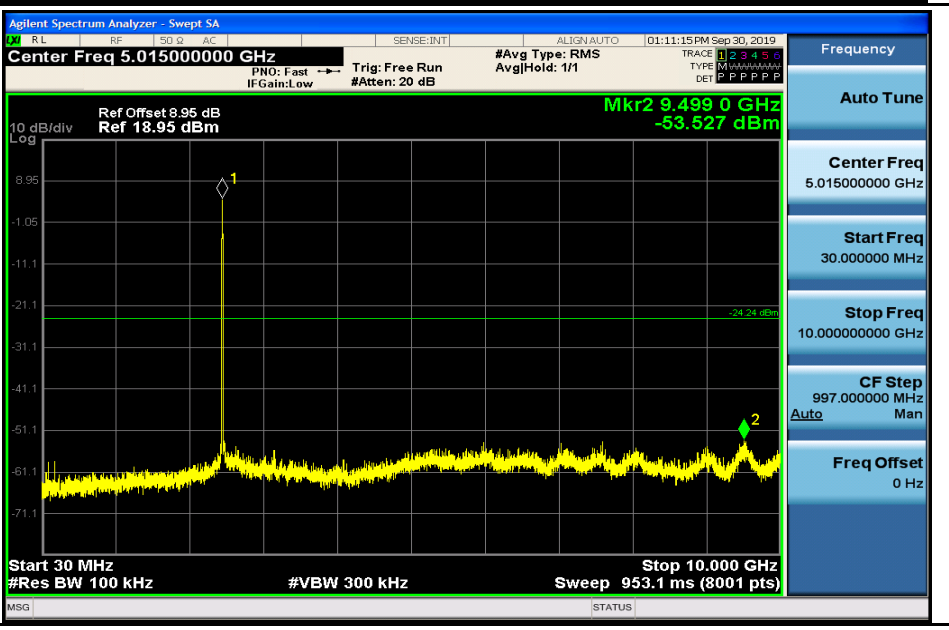
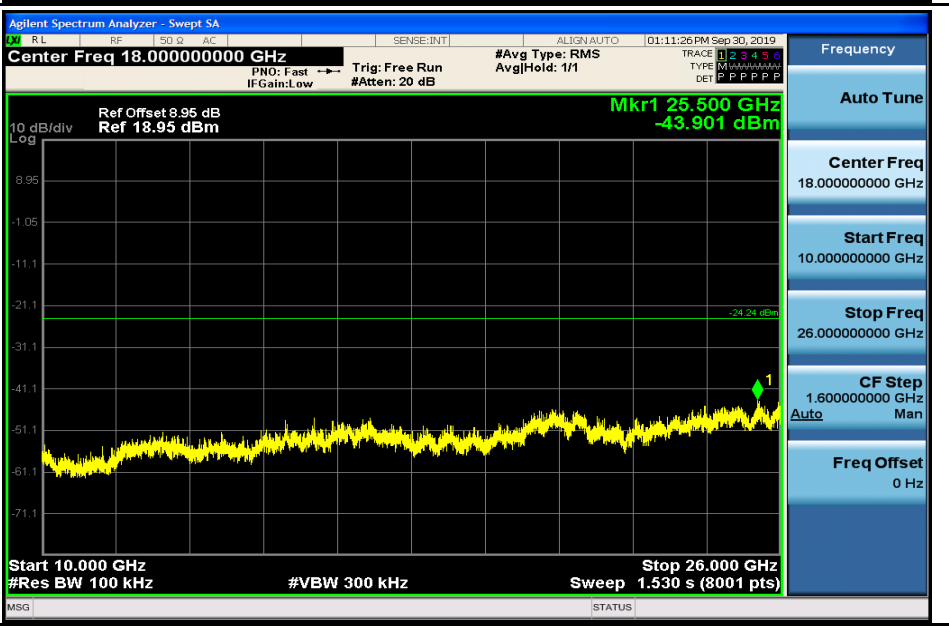
|  |
|  |

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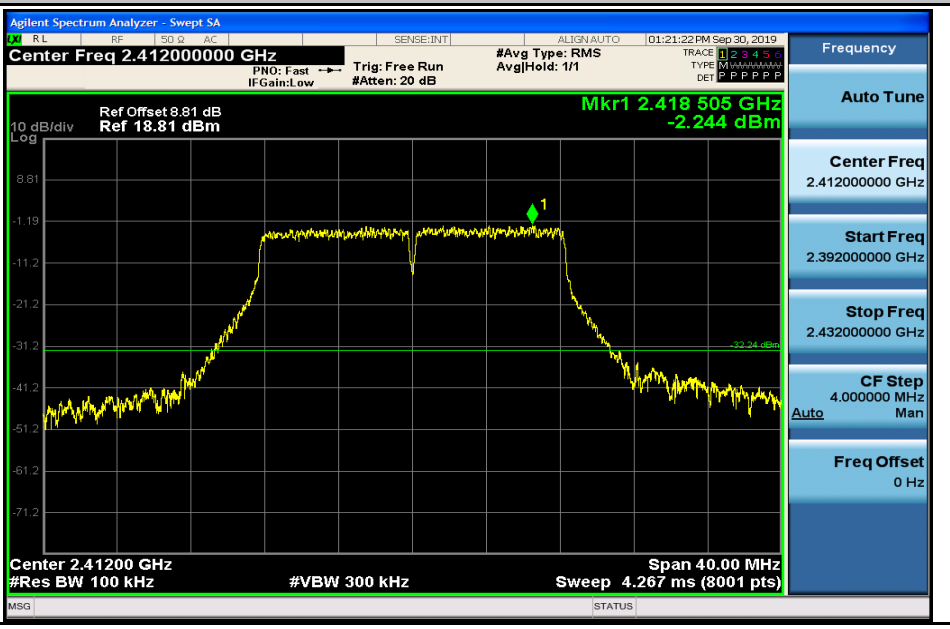
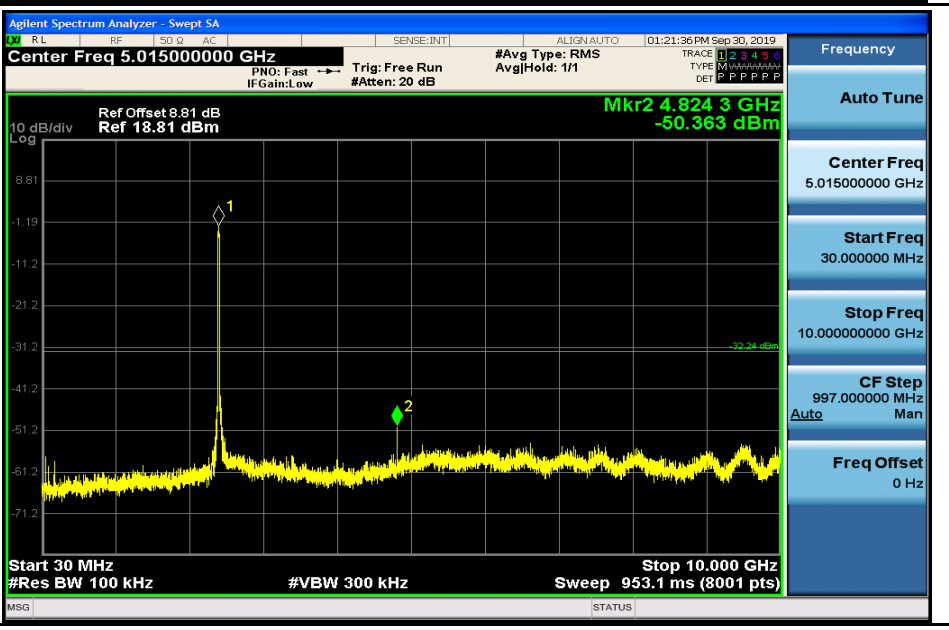
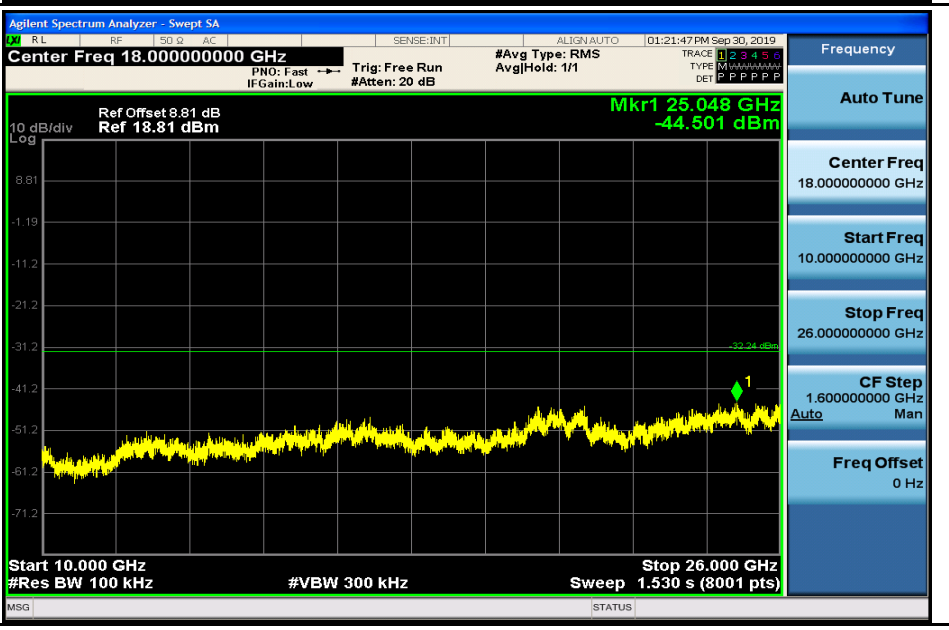
|  |
|  |
|  |

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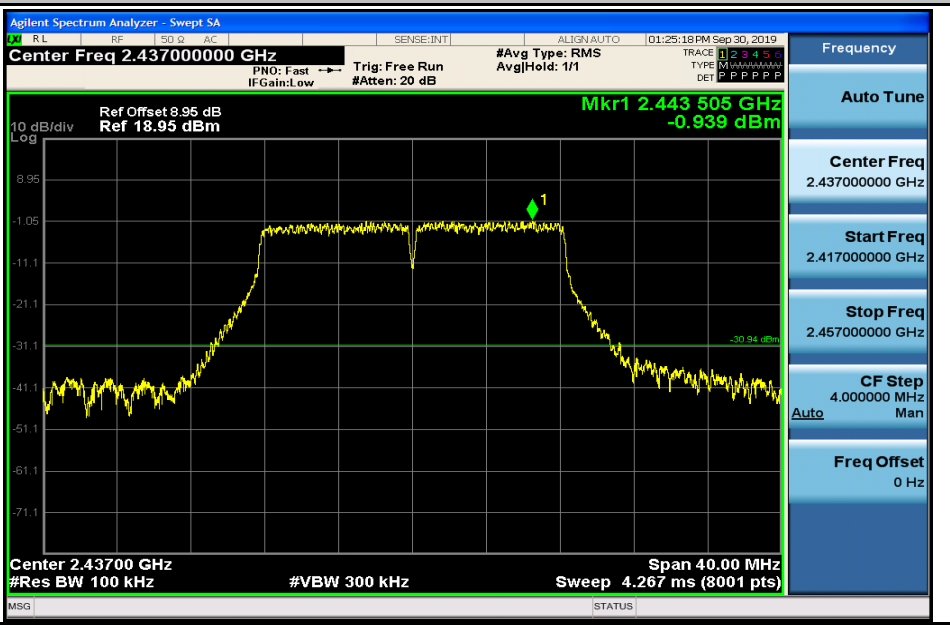
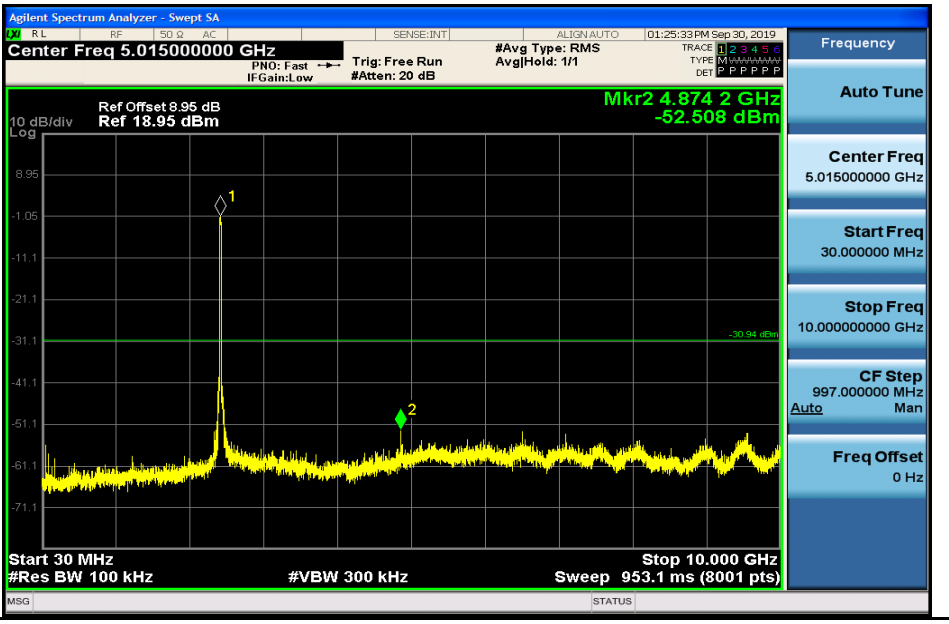
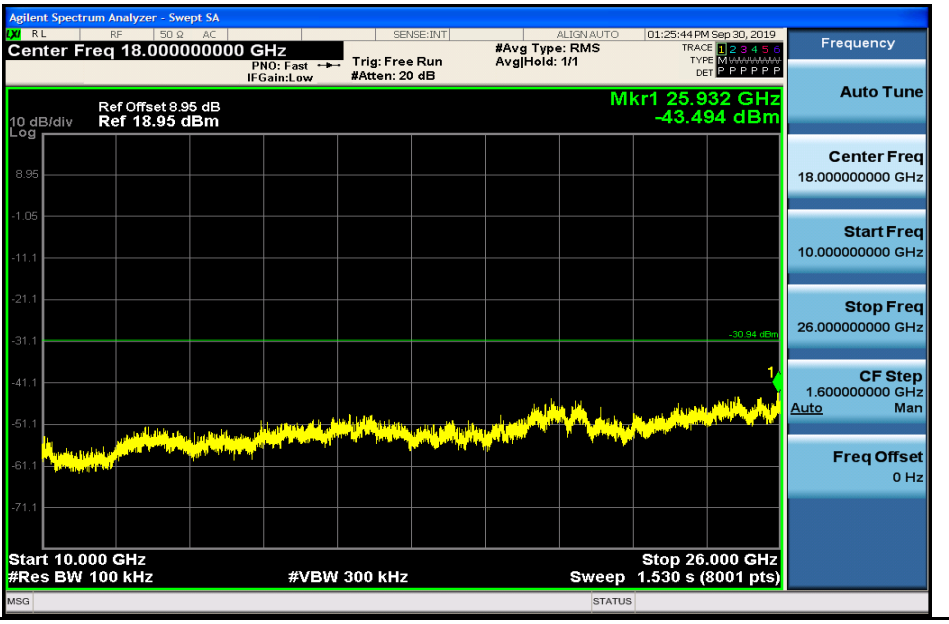
|  |
|  |
|  |

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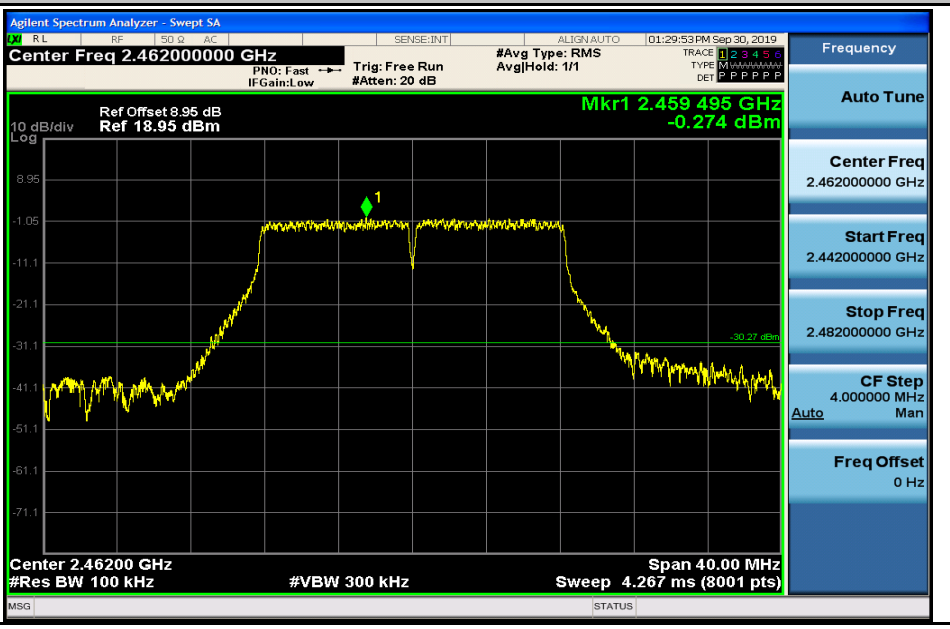
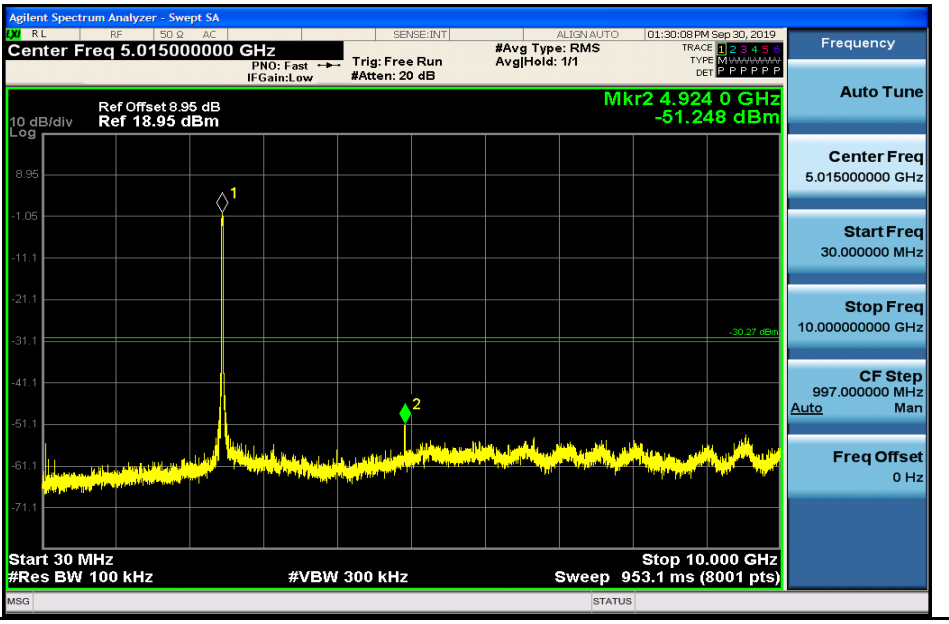
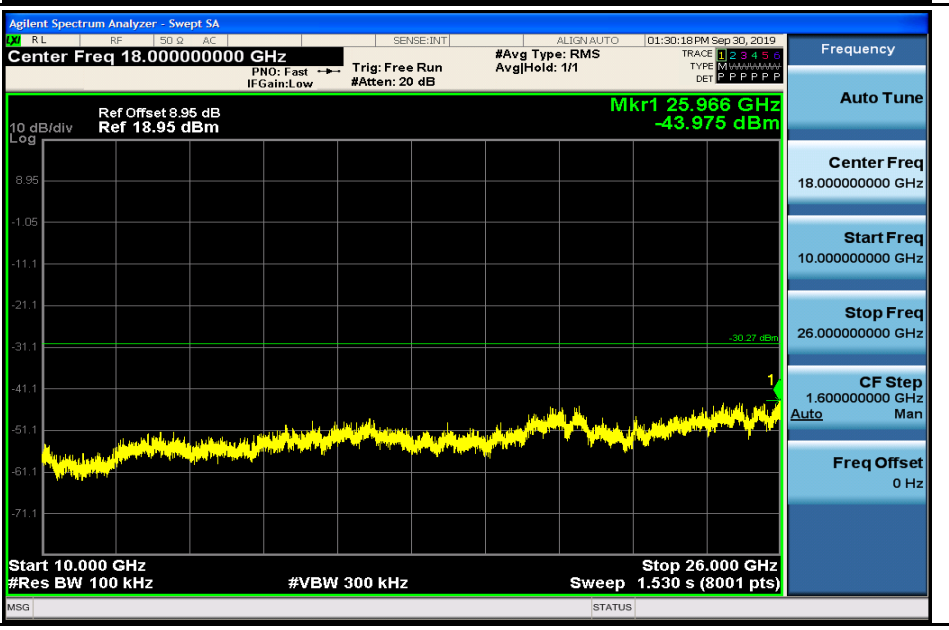
|  |
|  |
|  |

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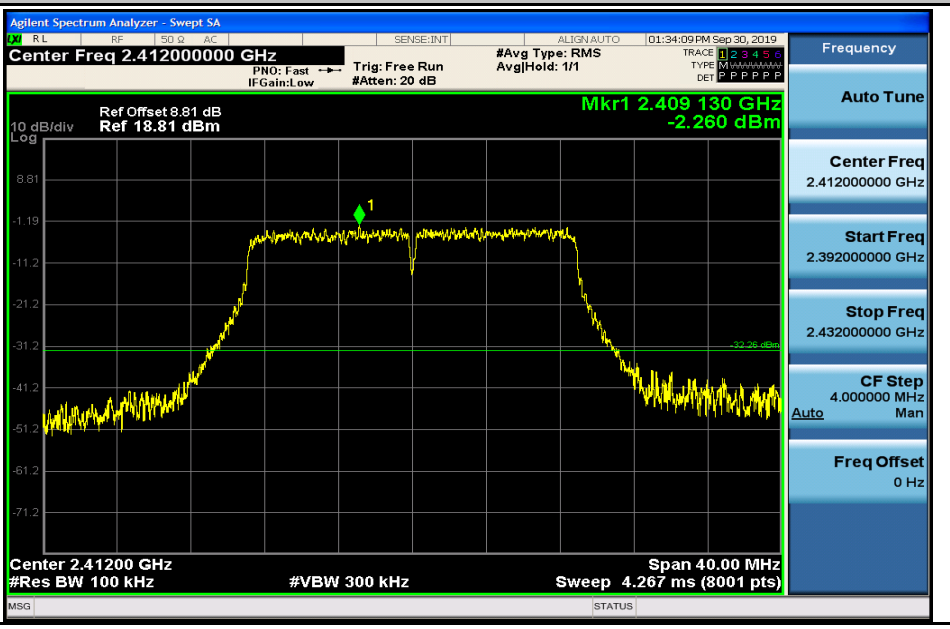
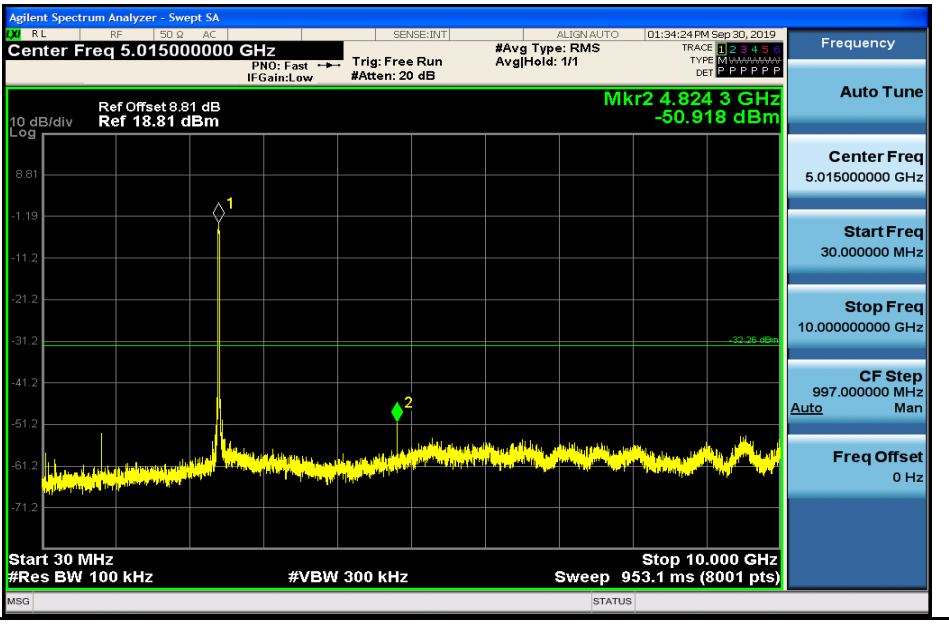
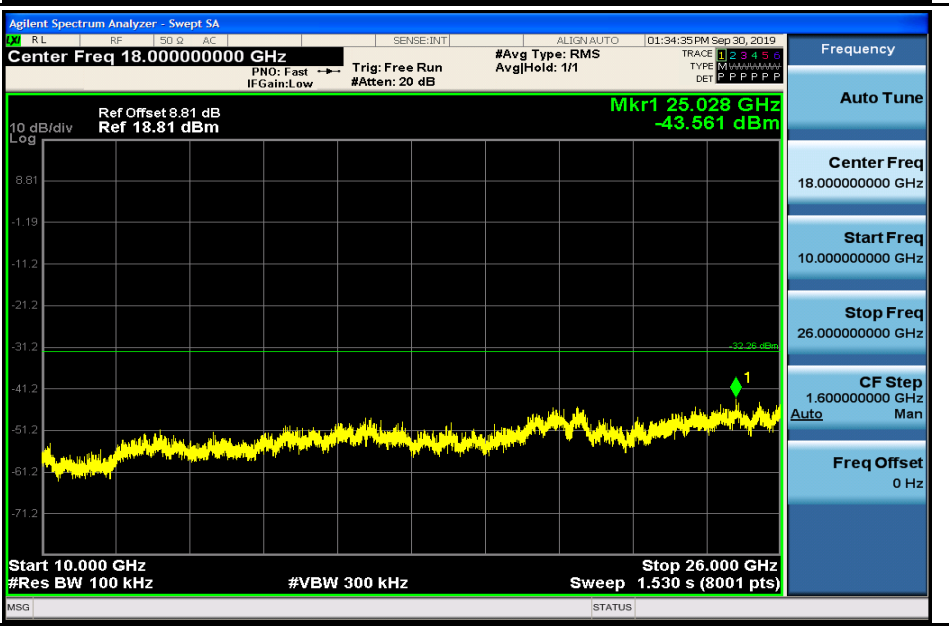
|  |
|  |
|  |

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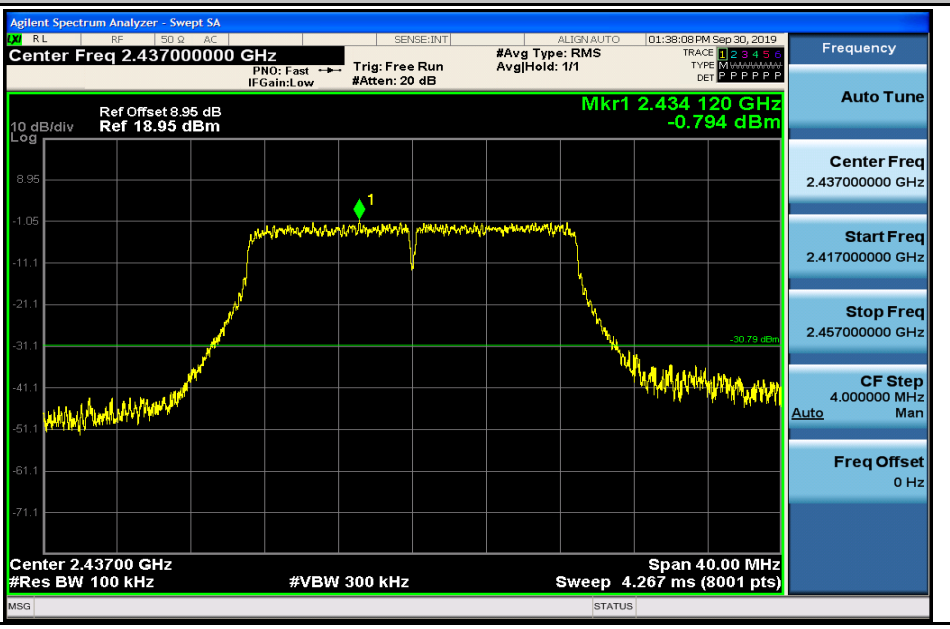
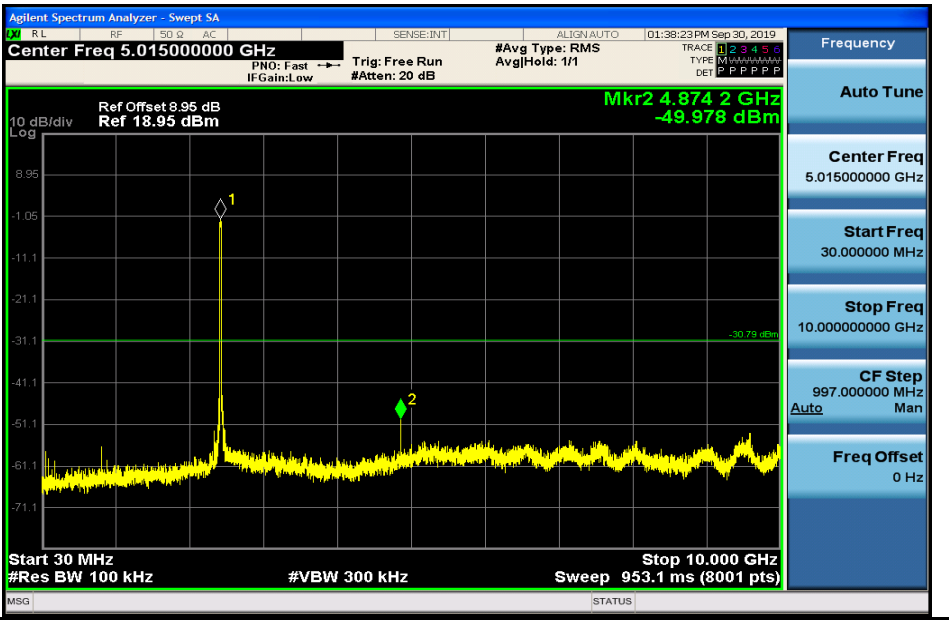
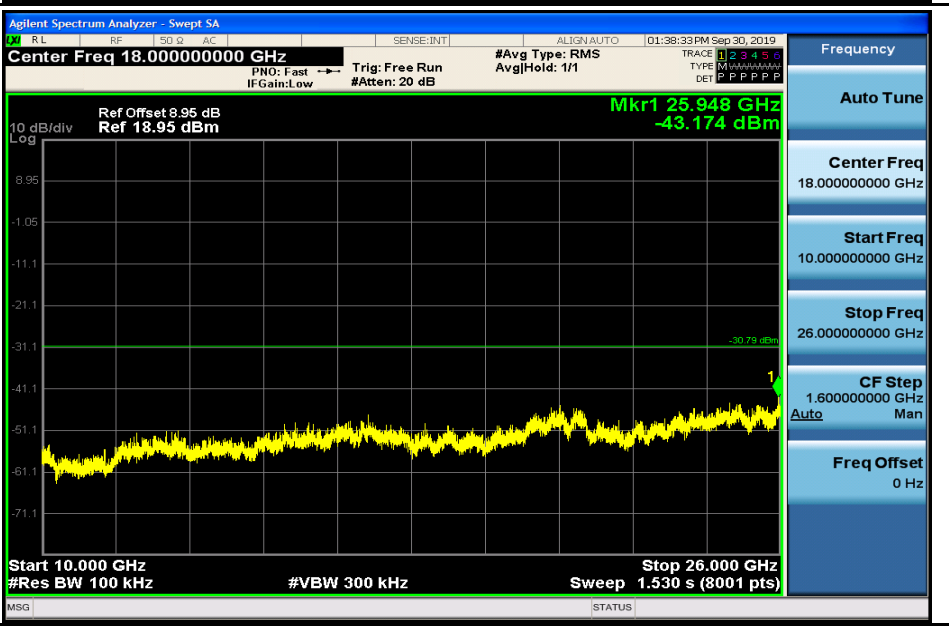
|  |
|  |
|  |

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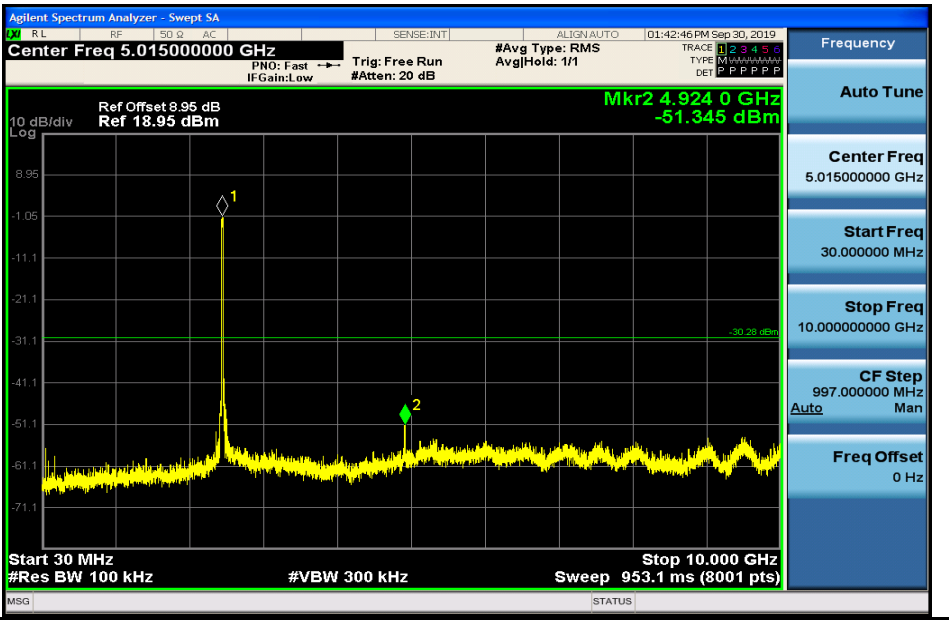
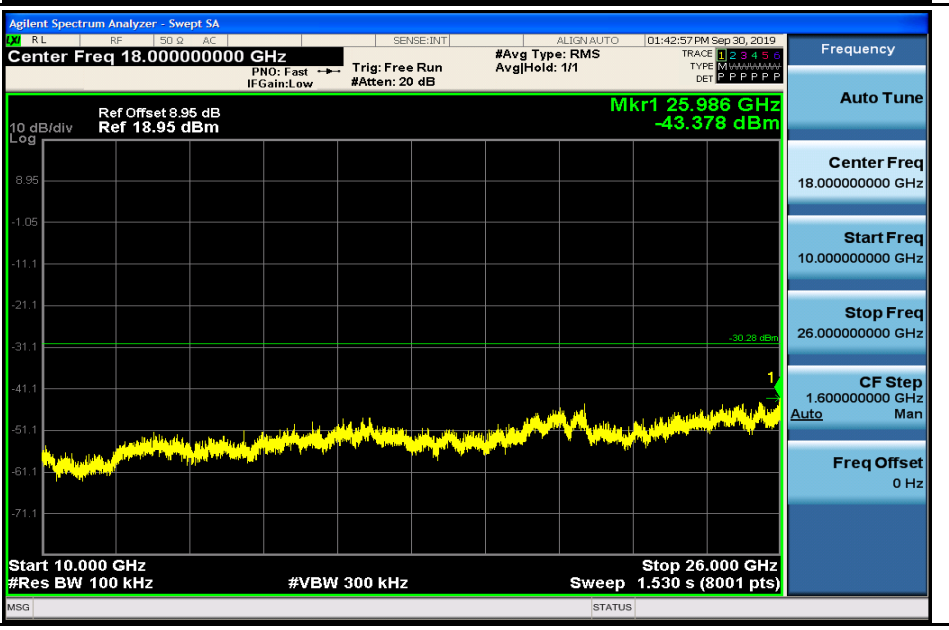
|  |
|  |

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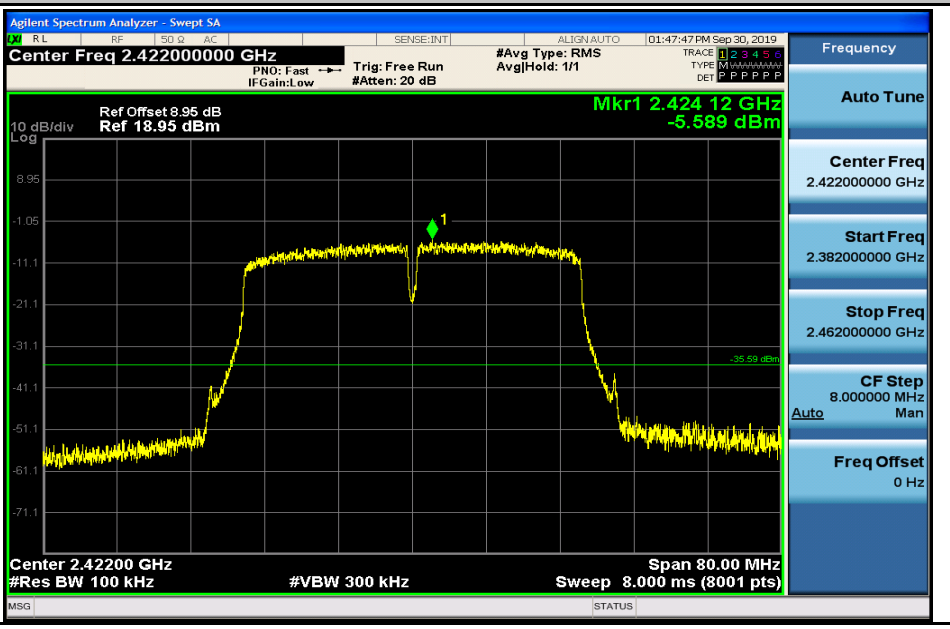
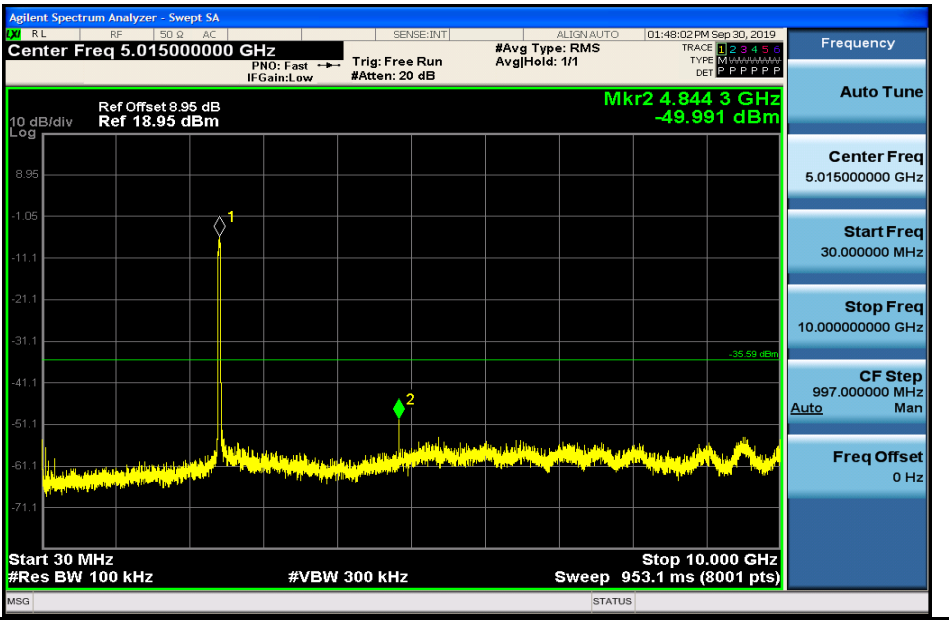
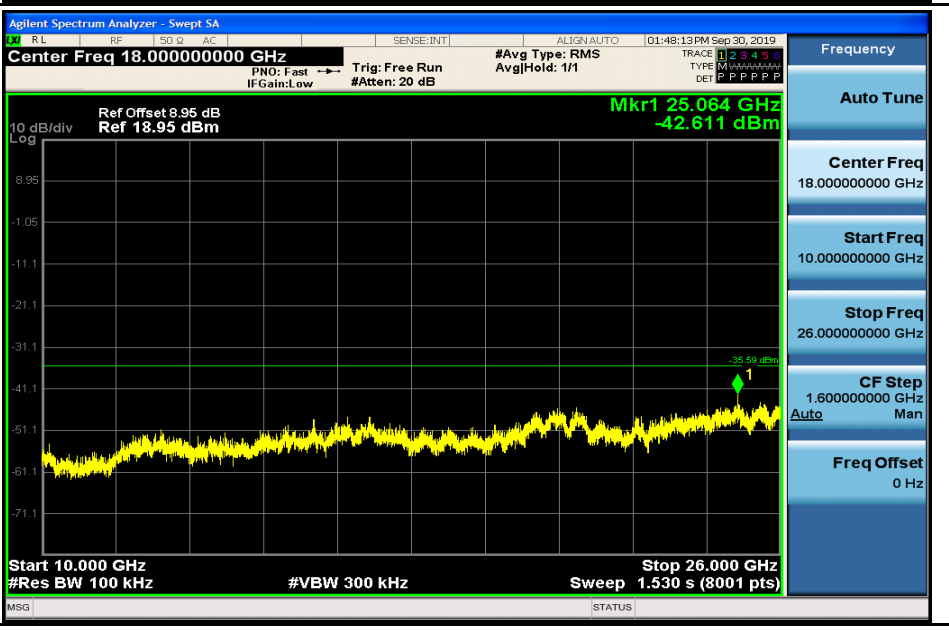
|  |
|  |
|  |

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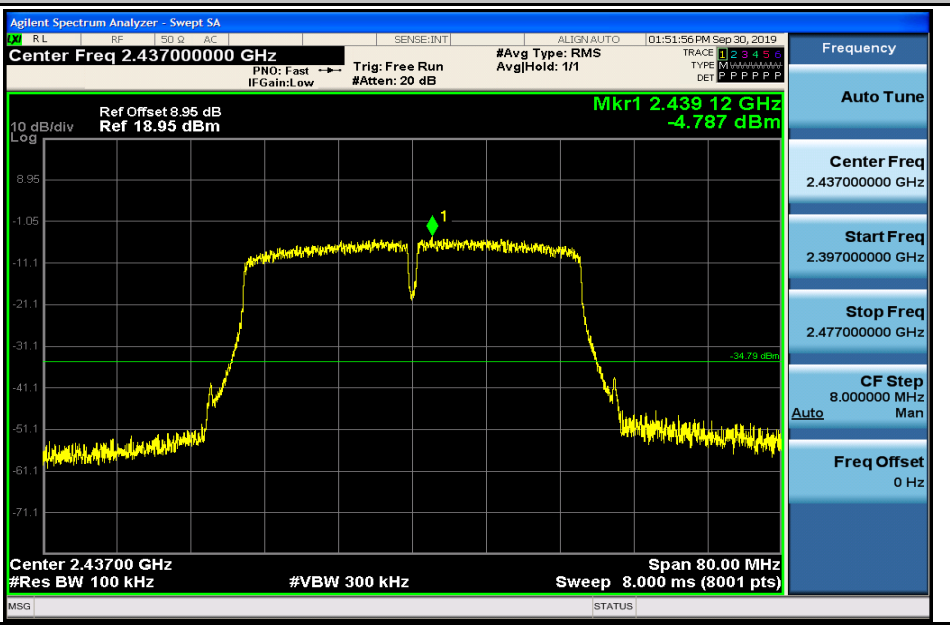
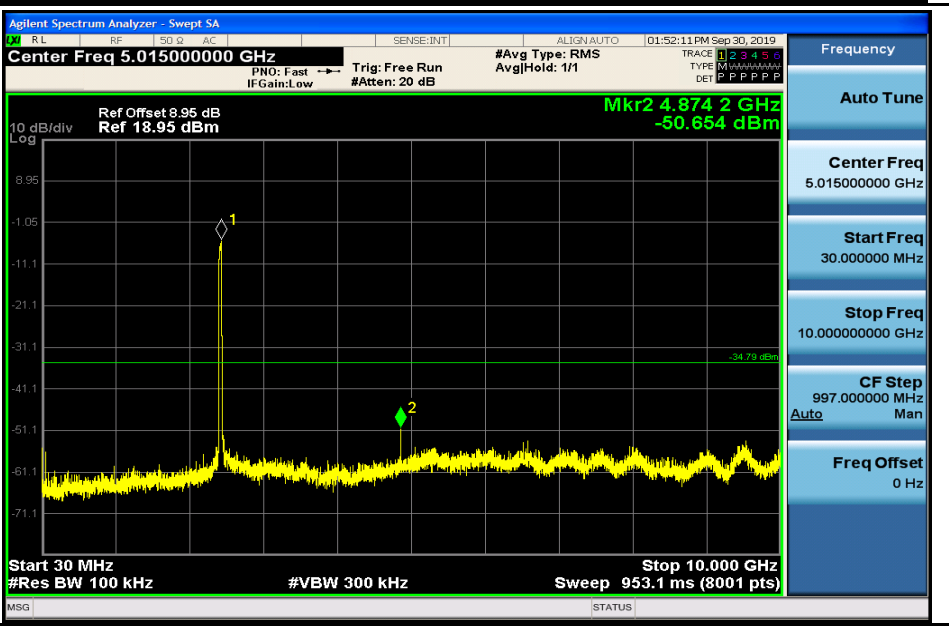
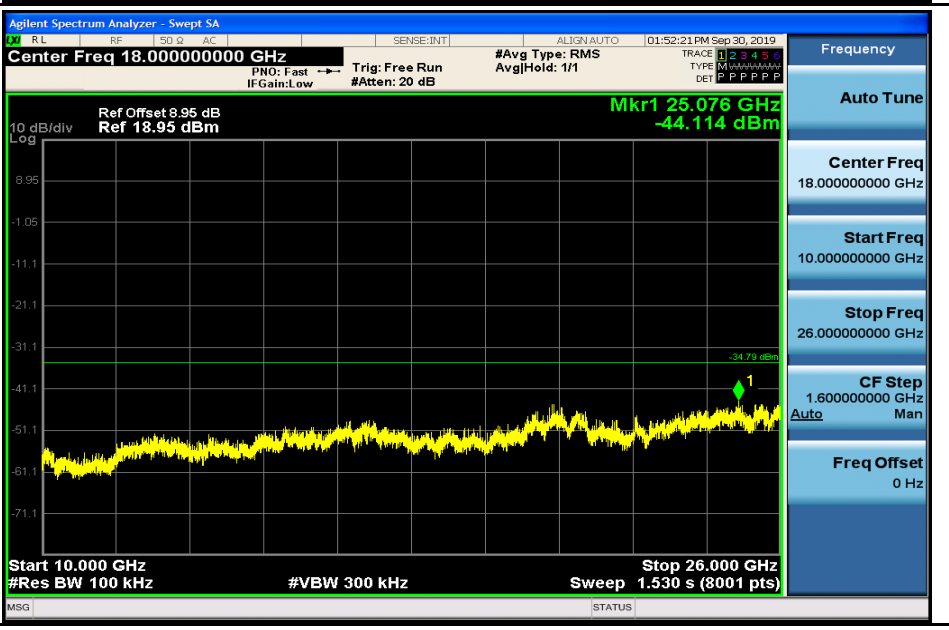
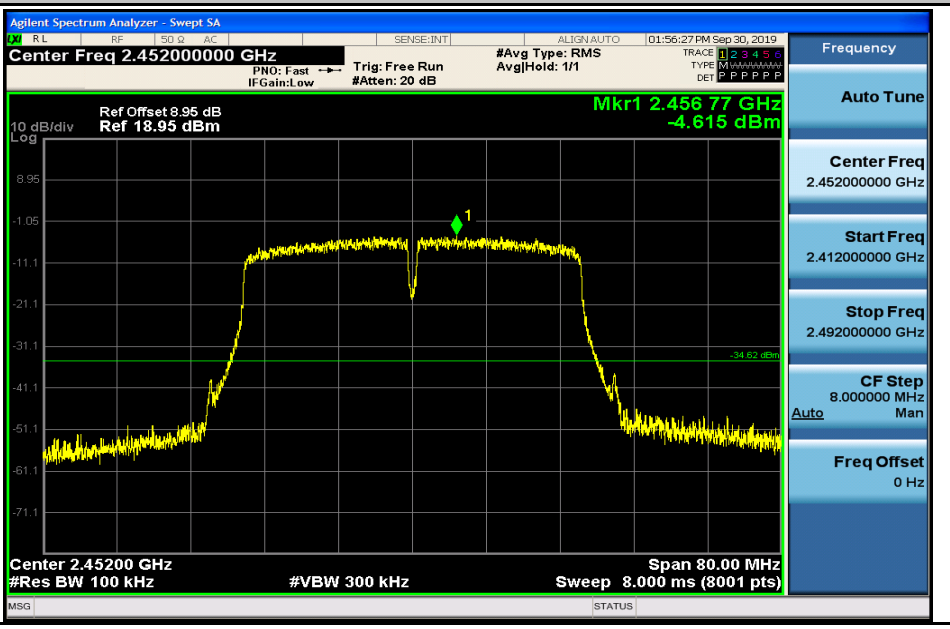
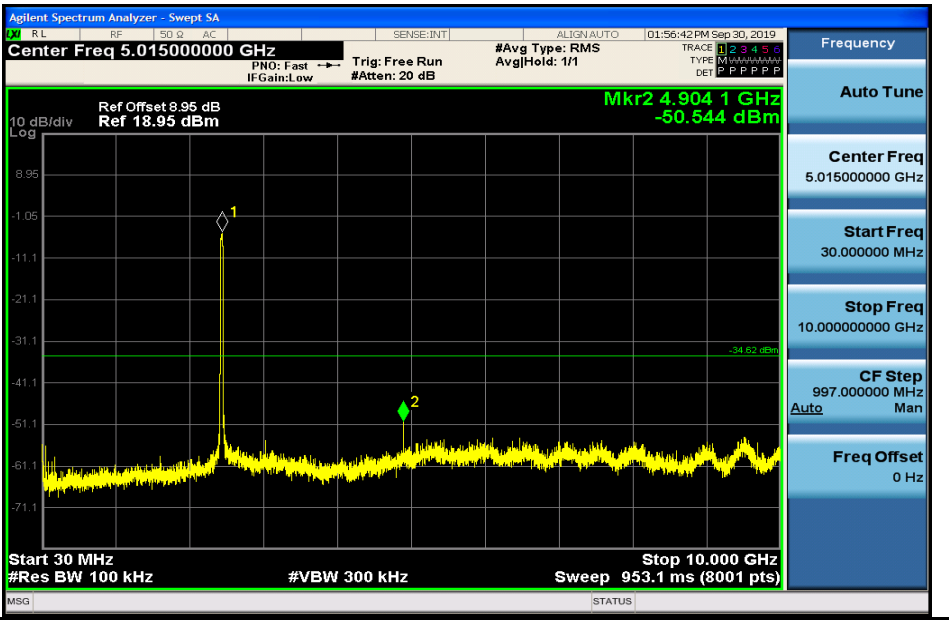
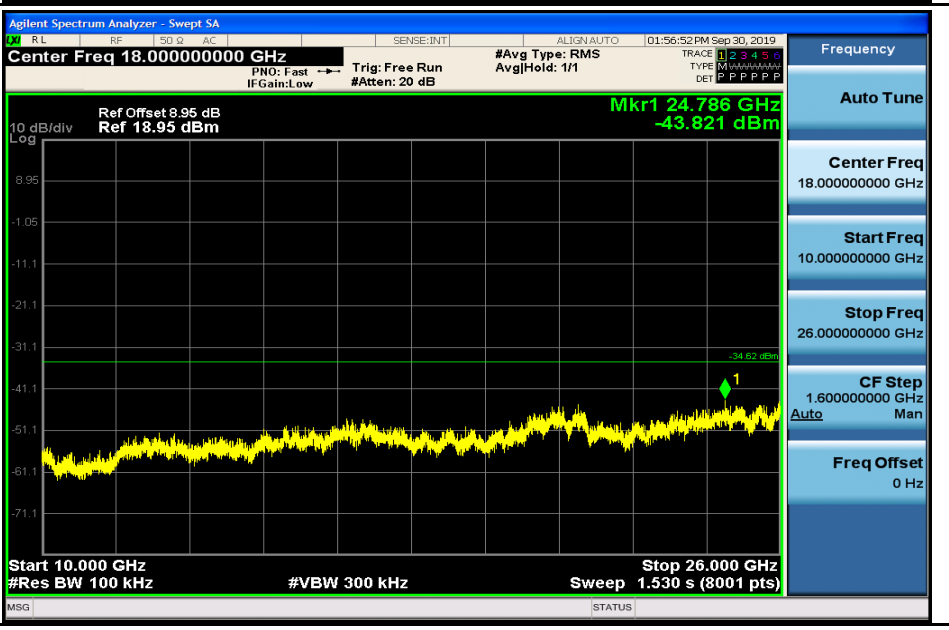
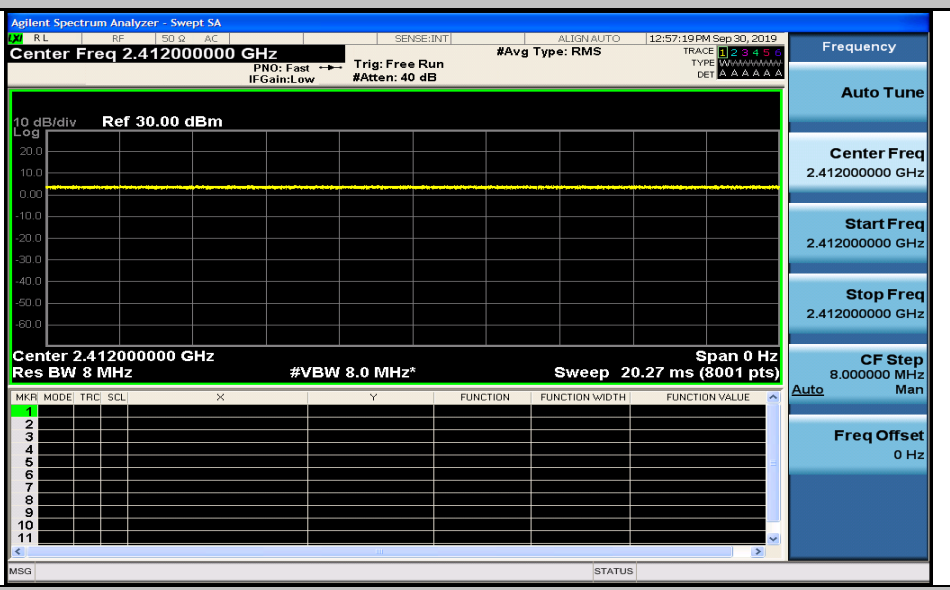
|  |
|  |
|  |

| RF Conducted Spurious Emissions_11N40SISO_2452 |
|---|
|  |
|  |
|  |

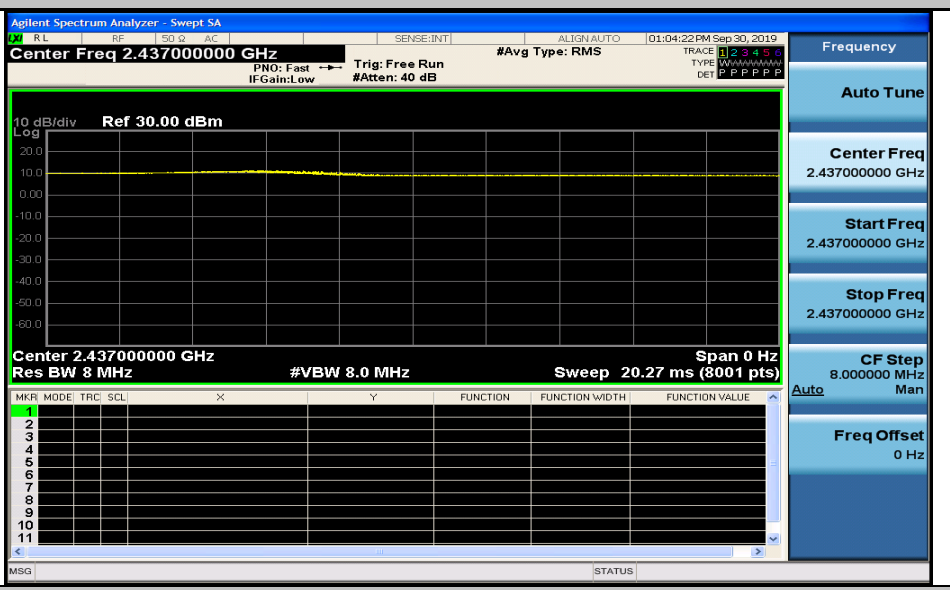
**7.Duty Cycle**

| Test Mode | Test Channel | Ant | Duty Cycle[%] | 10log(1/x) Factor[dB] |
|---|---|---|---|---|
| 11B | 2412 | Ant1 | 100.00 | 0.00 |
| 11B | 2437 | Ant1 | 100.00 | 0.00 |
| 11B | 2462 | Ant1 | 100.00 | 0.00 |
| 11G | 2412 | Ant1 | 100.00 | 0.00 |
| 11G | 2437 | Ant1 | 100.00 | 0.00 |
| 11G | 2462 | Ant1 | 100.00 | 0.00 |
| 11N20SISO | 2412 | Ant1 | 100.00 | 0.00 |
| 11N20SISO | 2437 | Ant1 | 100.00 | 0.00 |
| 11N20SISO | 2462 | Ant1 | 100.00 | 0.00 |
| 11N40SISO | 2422 | Ant1 | 100.00 | 0.00 |
| 11N40SISO | 2437 | Ant1 | 100.00 | 0.00 |
| 11N40SISO | 2452 | Ant1 | 100.00 | 0.00 |

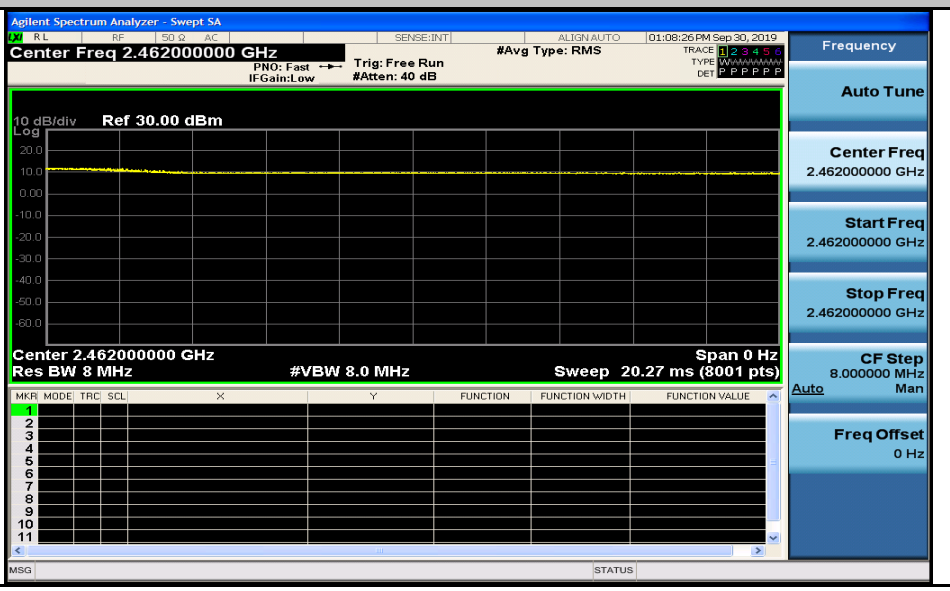
Duty Cycle_11B_2412_Ant1



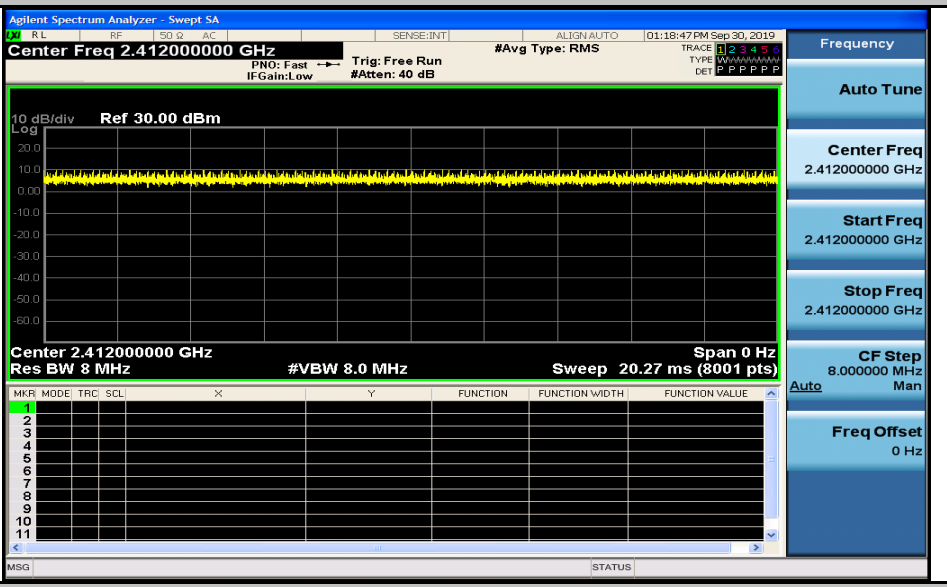

Duty Cycle_11B_2437_Ant1



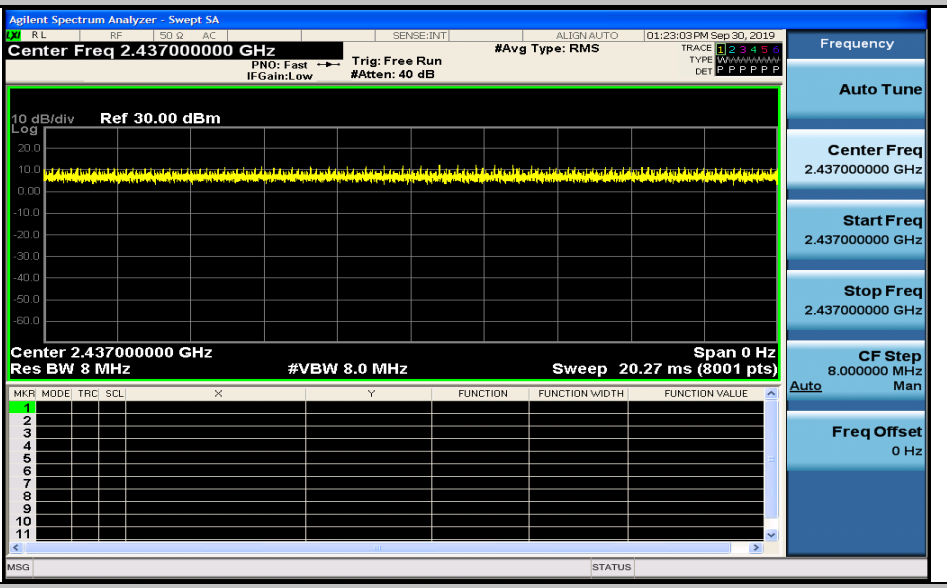

Duty Cycle_11B_2462_Ant1



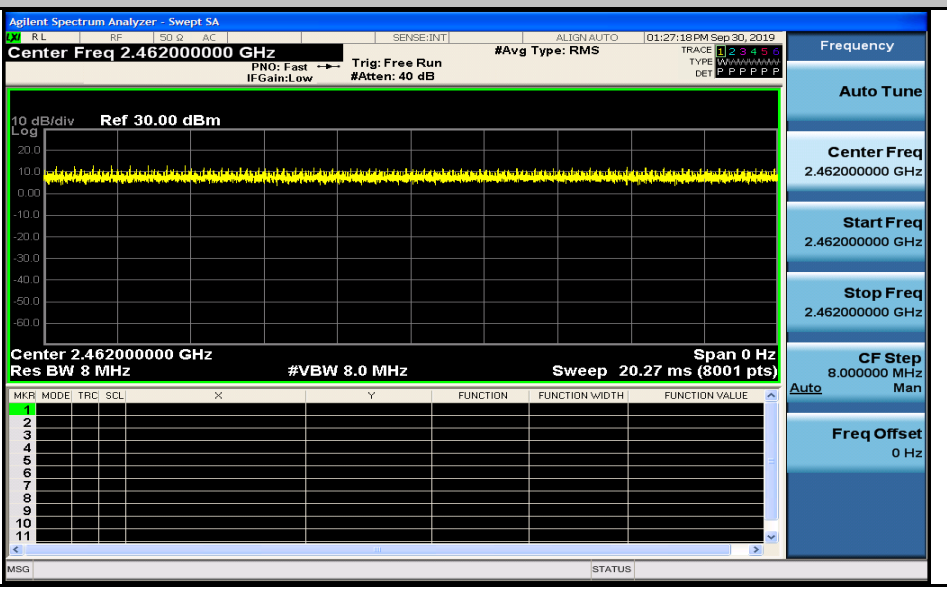
Duty Cycle_11G_2412_Ant1



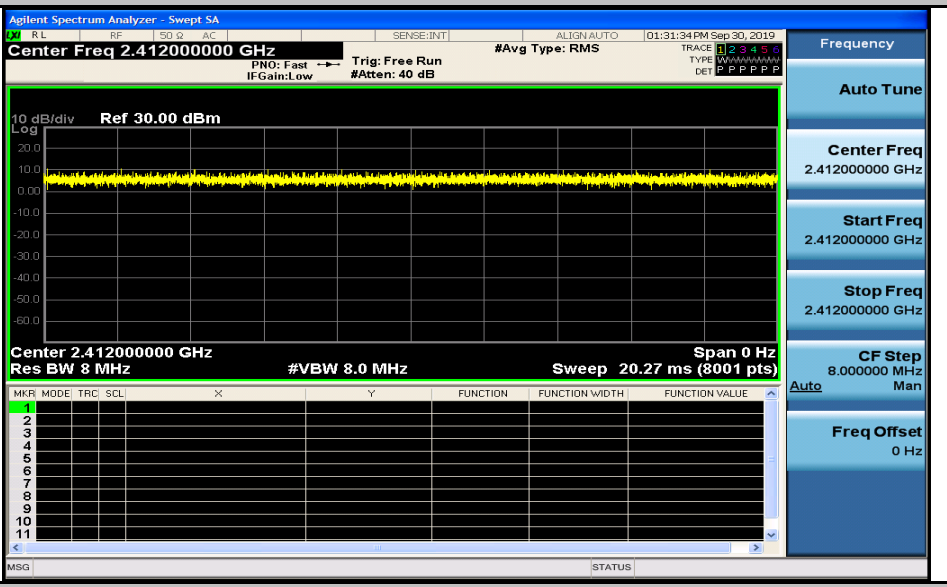

Duty Cycle_11G_2437_Ant1



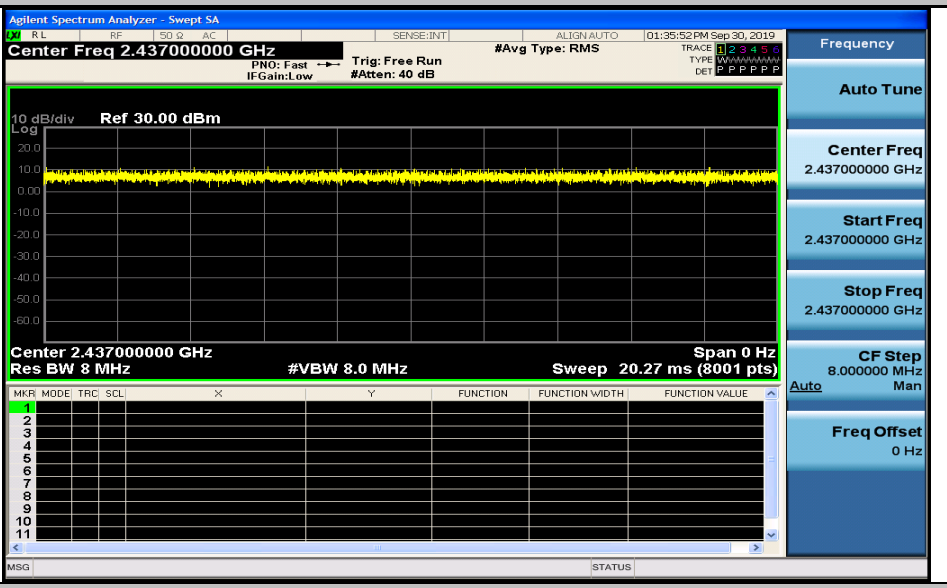

Duty Cycle_11G_2462_Ant1



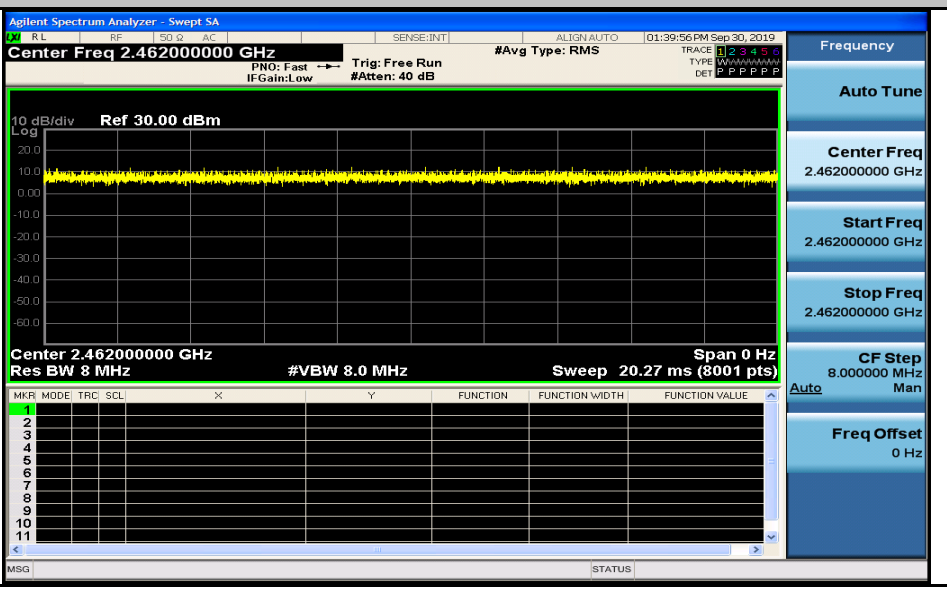
Duty Cycle_11N20SISO_2412_Ant1



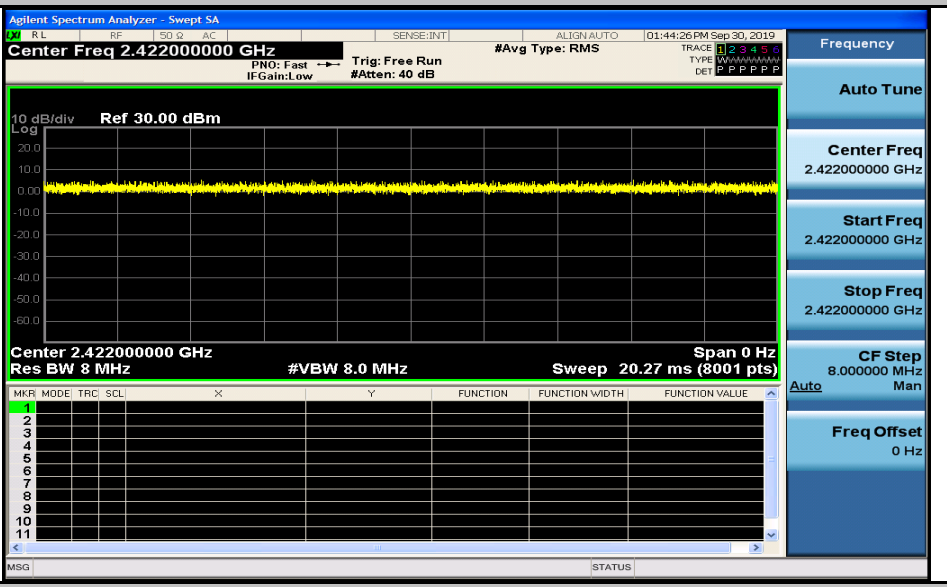

Duty Cycle_11N20SISO_2437_Ant1



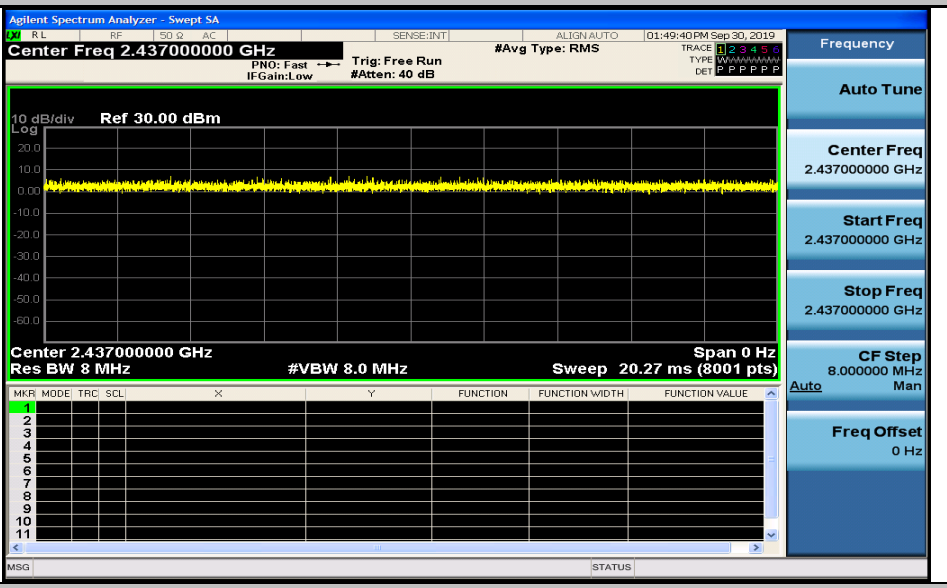

Duty Cycle_11N20SISO_2462_Ant1

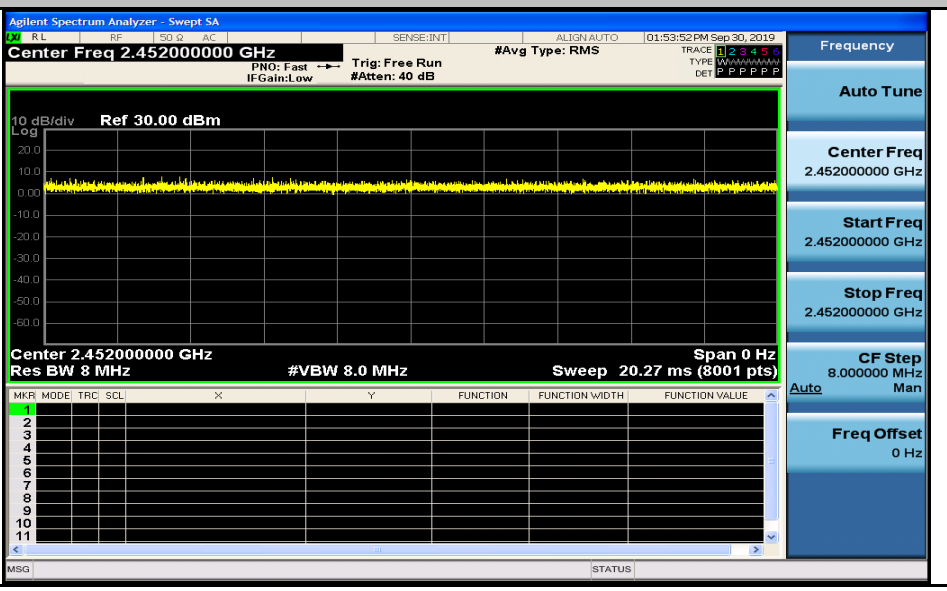


Duty Cycle_11N40SISO_2422_Ant1




Duty Cycle_11N40SISO_2437_Ant1




Duty Cycle_11N40SISO_2452_Ant1