

Appendix C

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Action Camera

Trade Mark: GURUGEAR™

Test Model: X25+

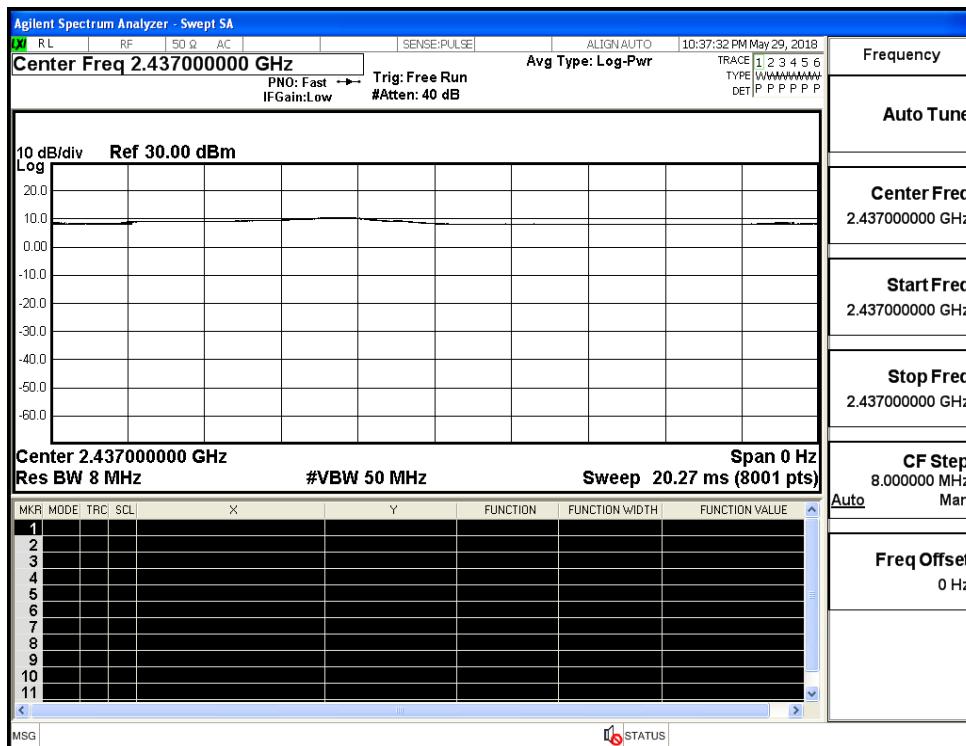
Environmental Conditions

| | |
|--------------------|-------------|
| Temperature: | 24.5 ° C |
| Relative Humidity: | 52.4% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | WANGCHUANG |
| Supervised by: | Jayden.Zhuo |

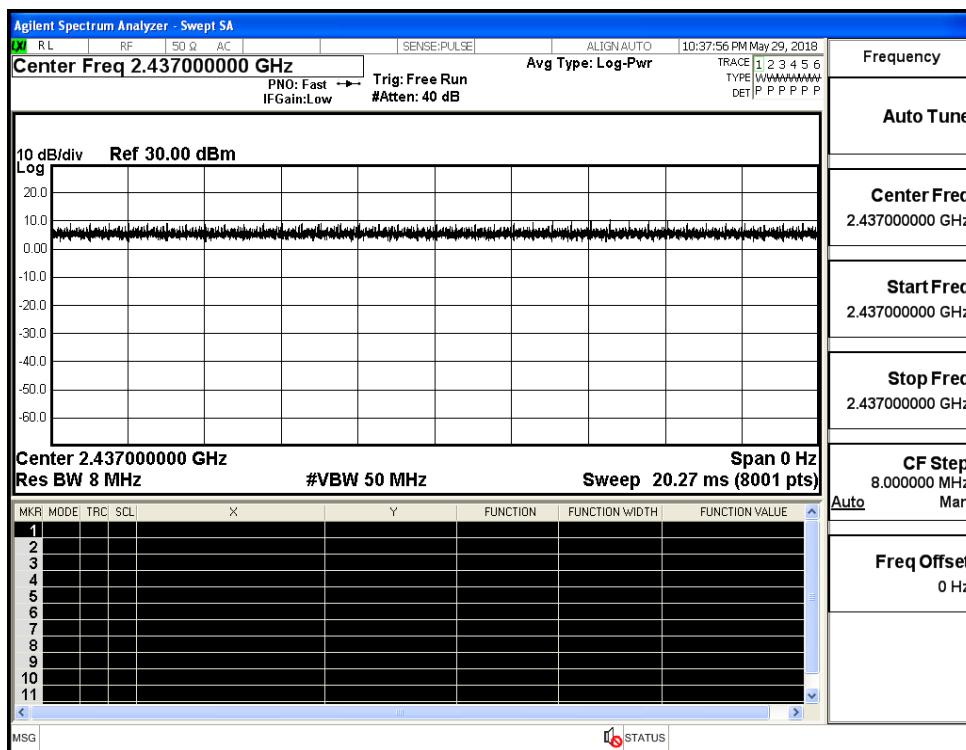
C.1 Duty Cycle

| 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 |

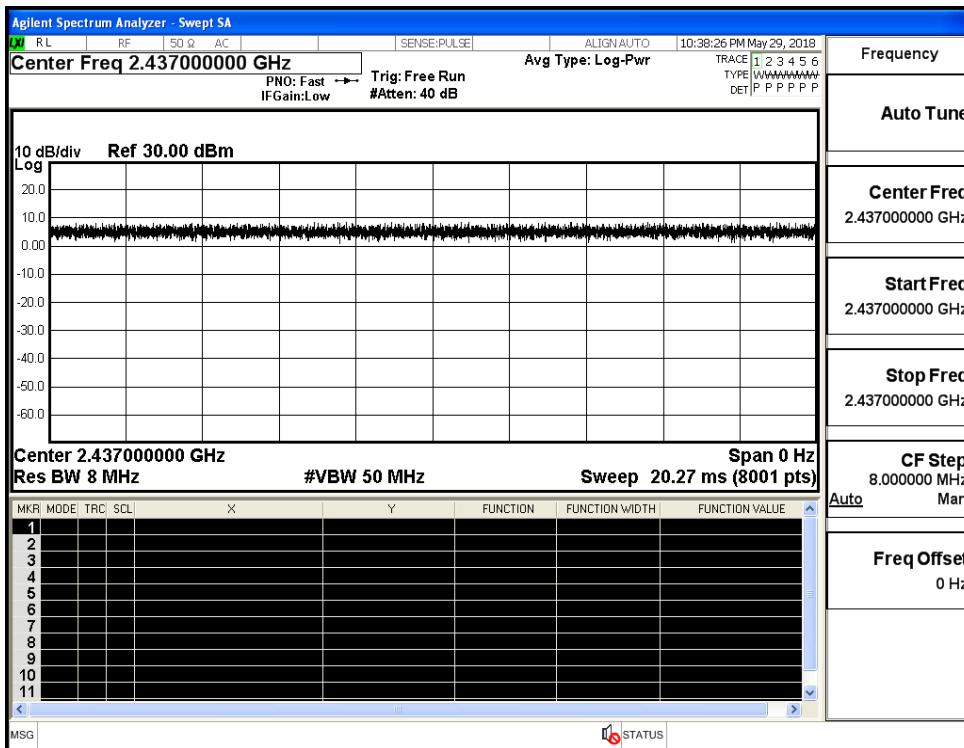
Duty Cycle_11B_2437_Ant1



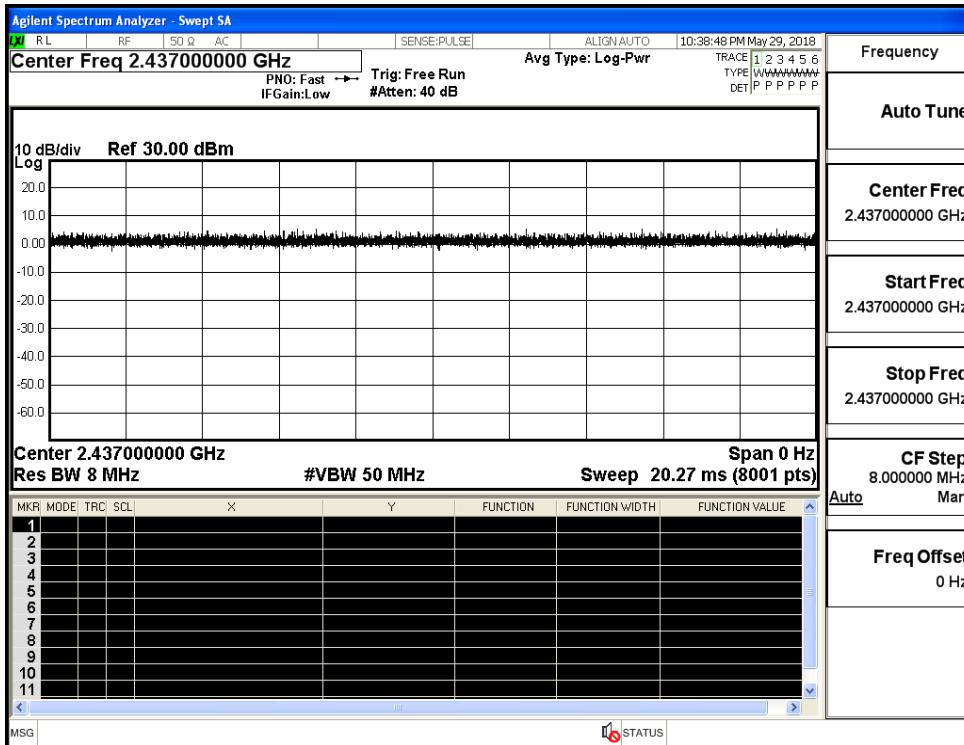
Duty Cycle_11G_2437_Ant1



Duty Cycle_11N20SISO_2437_Ant1



Duty Cycle_11N40SISO_2437_Ant1

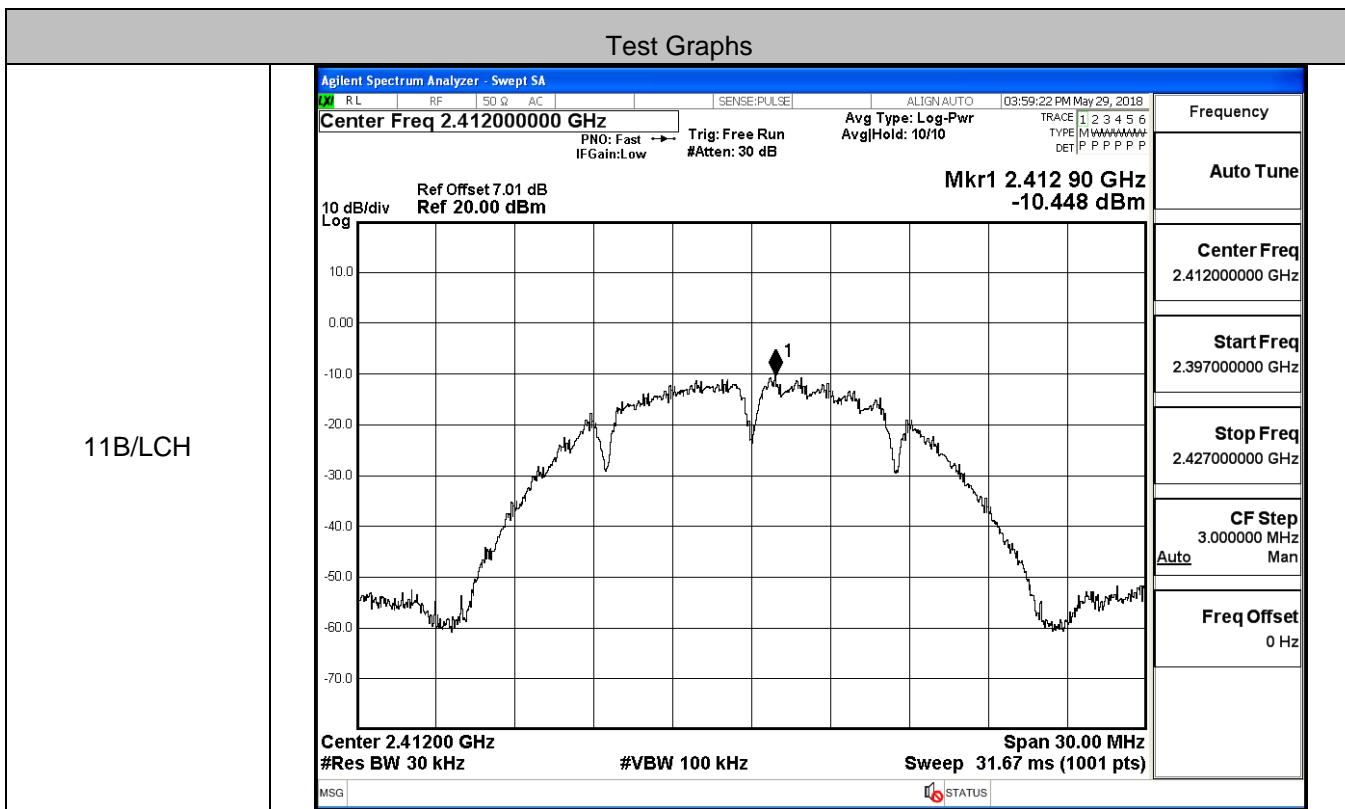


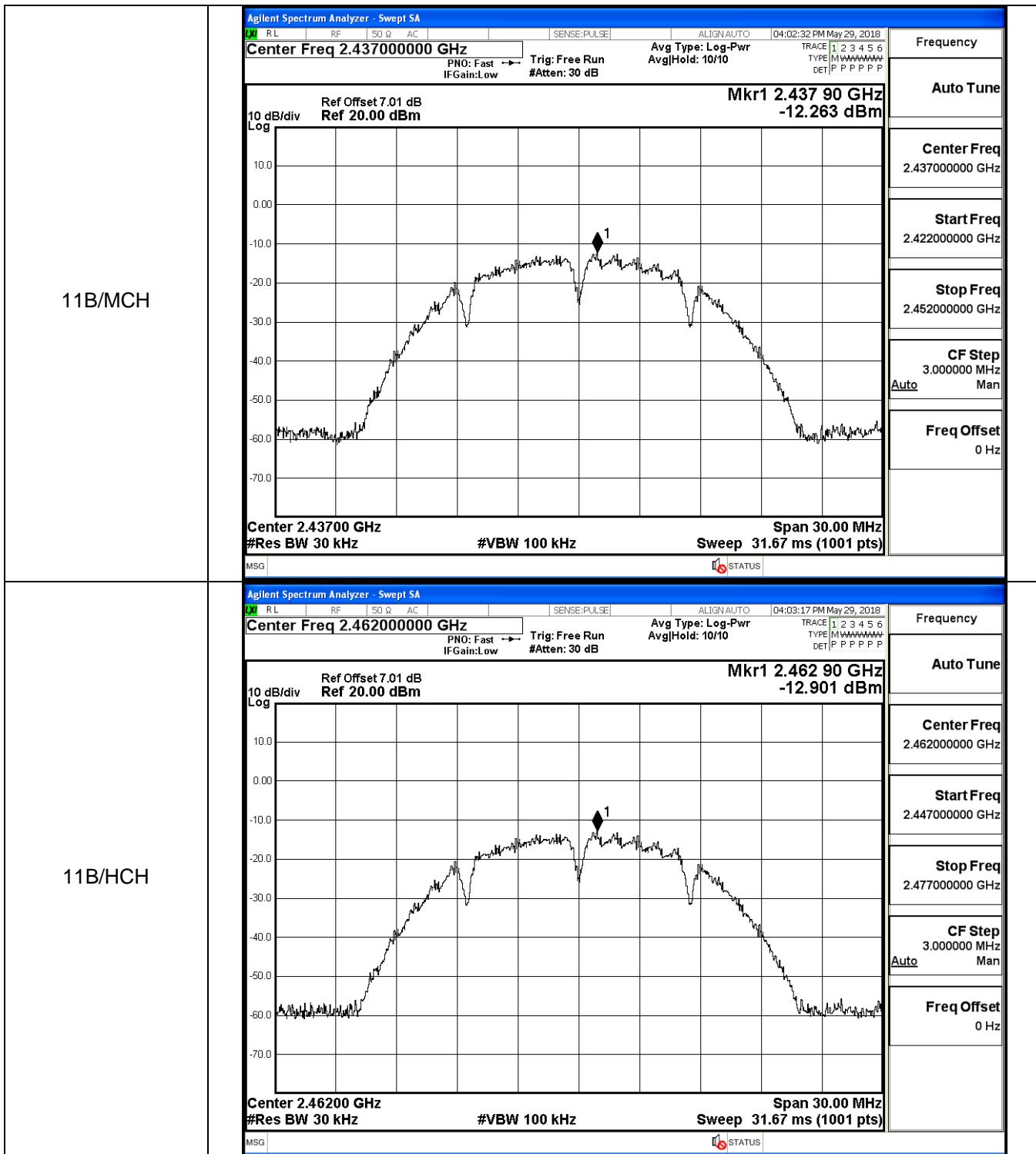
C.2 Maximum Conducted Output Power

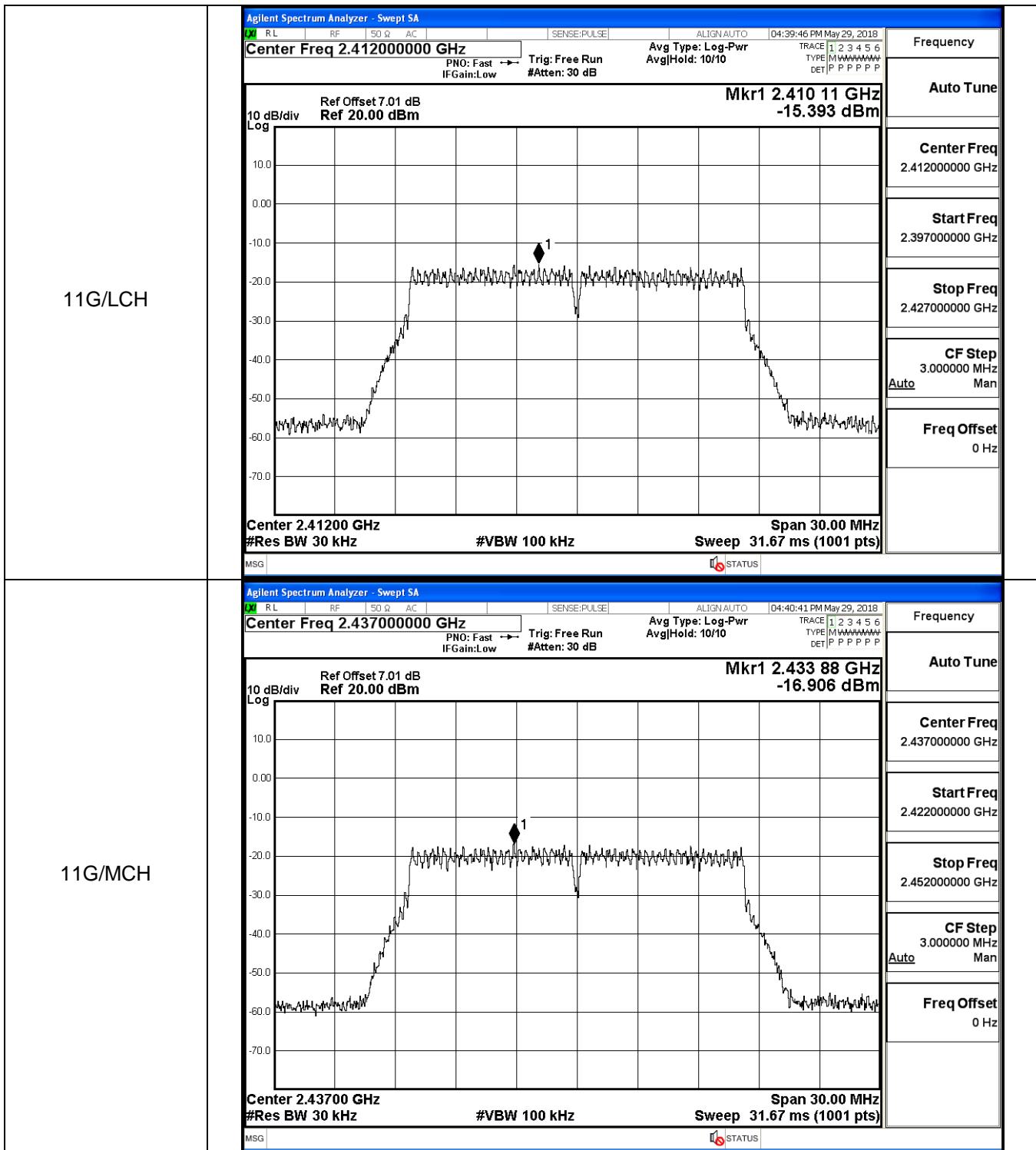
| Mode | Channel | Meas.Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|------------------|-------------|---------|
| 11B | LCH | 8.37 | 30 | PASS |
| | MCH | 8.21 | 30 | PASS |
| | HCH | 8.28 | 30 | PASS |
| 11G | LCH | 8.14 | 30 | PASS |
| | MCH | 8.09 | 30 | PASS |
| | HCH | 8.07 | 30 | PASS |
| 11N20SISO | LCH | 8.12 | 30 | PASS |
| | MCH | 8.18 | 30 | PASS |
| | HCH | 8.21 | 30 | PASS |
| 11N40SISO | LCH | 7.42 | 30 | PASS |
| | MCH | 7.68 | 30 | PASS |
| | HCH | 7.53 | 30 | PASS |

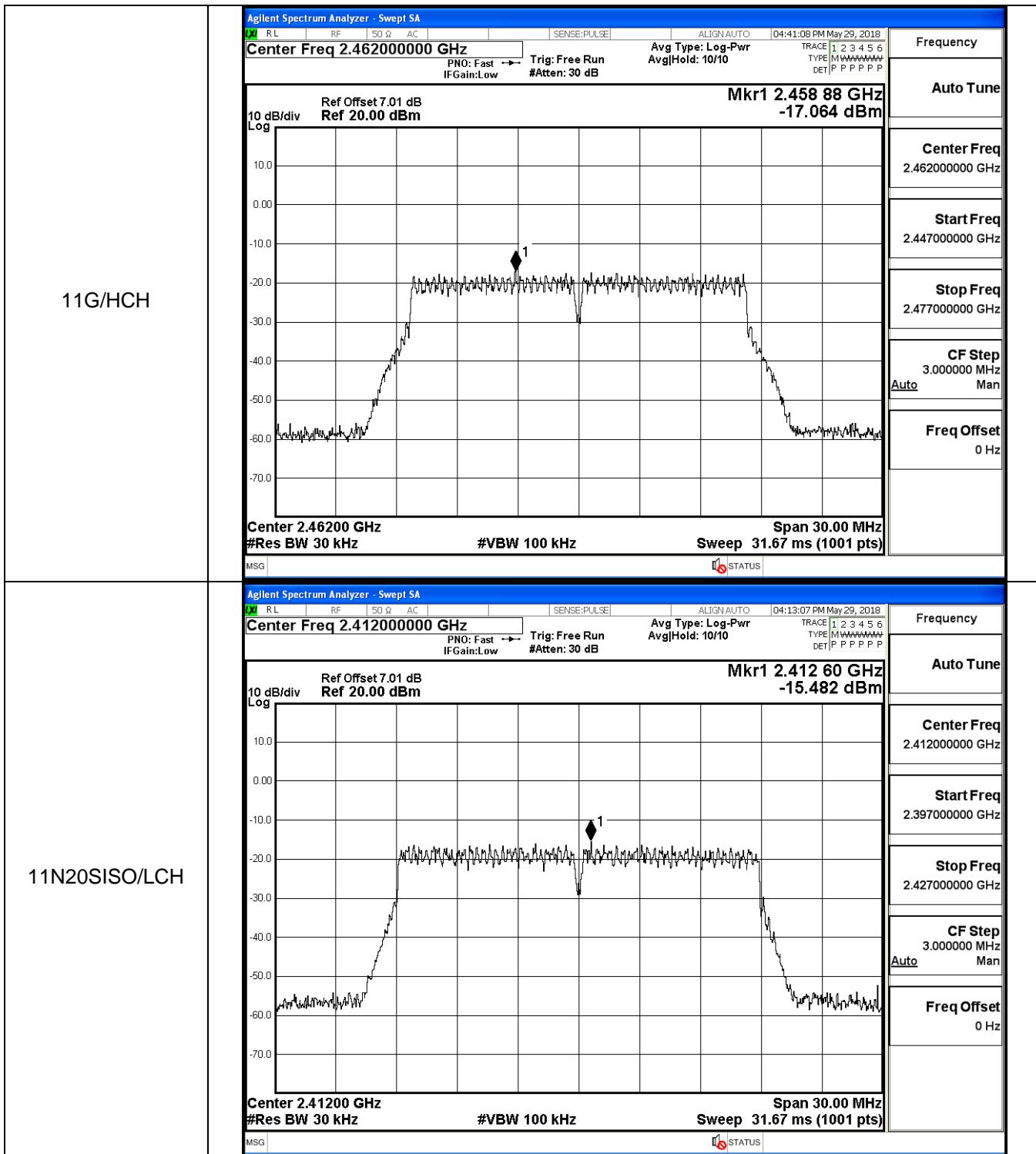
C.3 Maximum Power Spectral Density

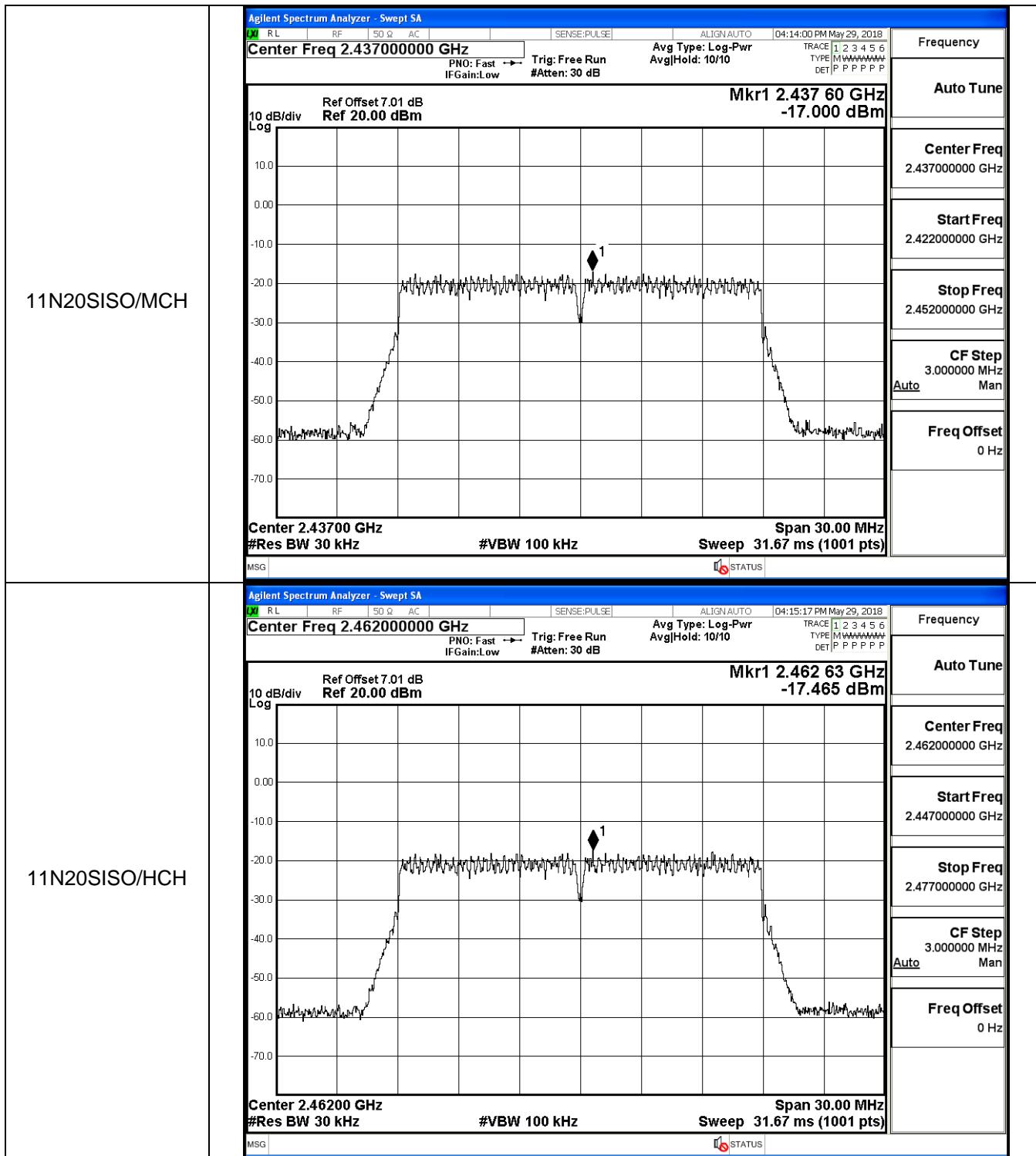
| Mode | Channel | Meas.Level [dBm/30KHz] | Limit [dBm/3KHz] | Verdict |
|-----------|---------|------------------------|------------------|---------|
| 11B | LCH | -10.448 | 8 | PASS |
| | MCH | -12.263 | 8 | PASS |
| | HCH | -12.901 | 8 | PASS |
| 11G | LCH | -15.393 | 8 | PASS |
| | MCH | -16.906 | 8 | PASS |
| | HCH | -17.064 | 8 | PASS |
| 11N20SISO | LCH | -15.482 | 8 | PASS |
| | MCH | -17.000 | 8 | PASS |
| | HCH | -17.465 | 8 | PASS |
| 11N40SISO | LCH | -20.801 | 8 | PASS |
| | MCH | -20.414 | 8 | PASS |
| | HCH | -20.191 | 8 | PASS |

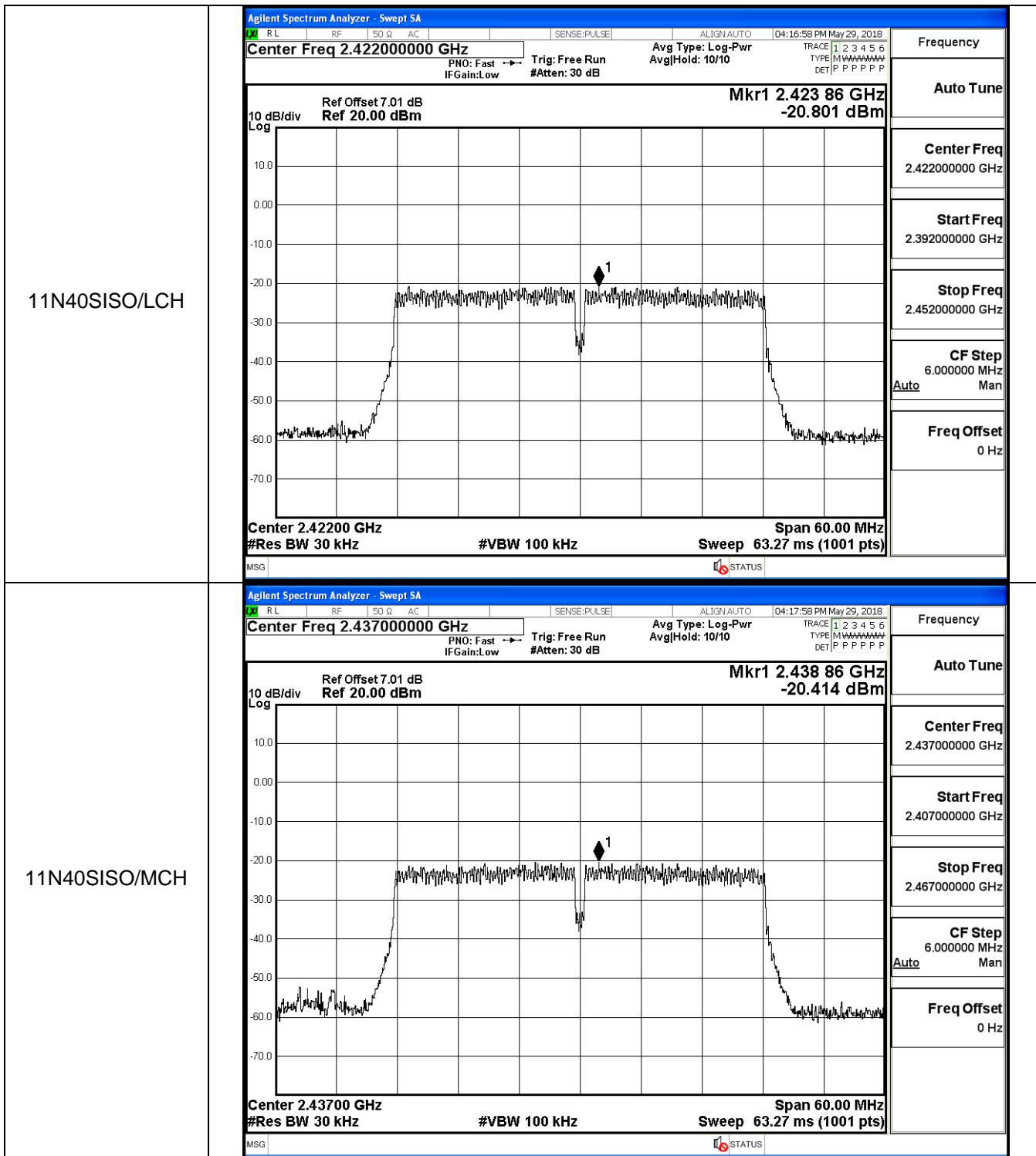


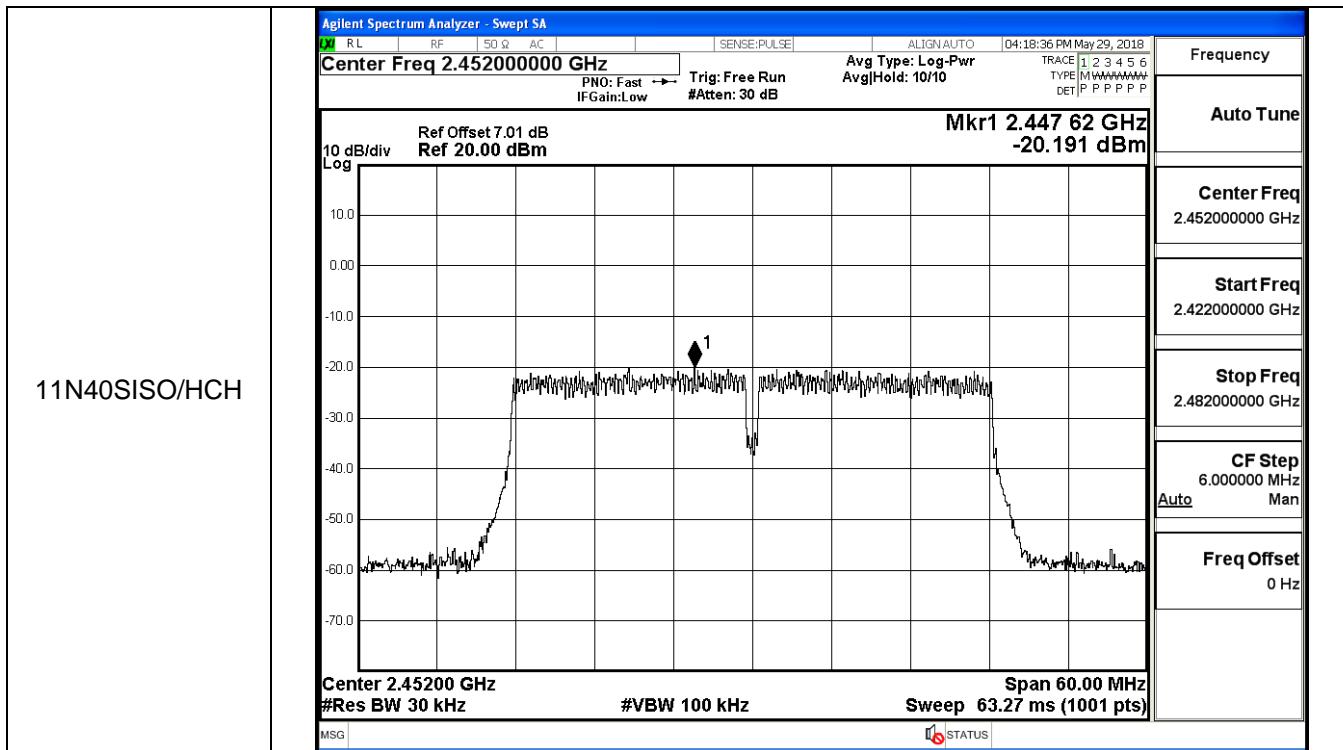






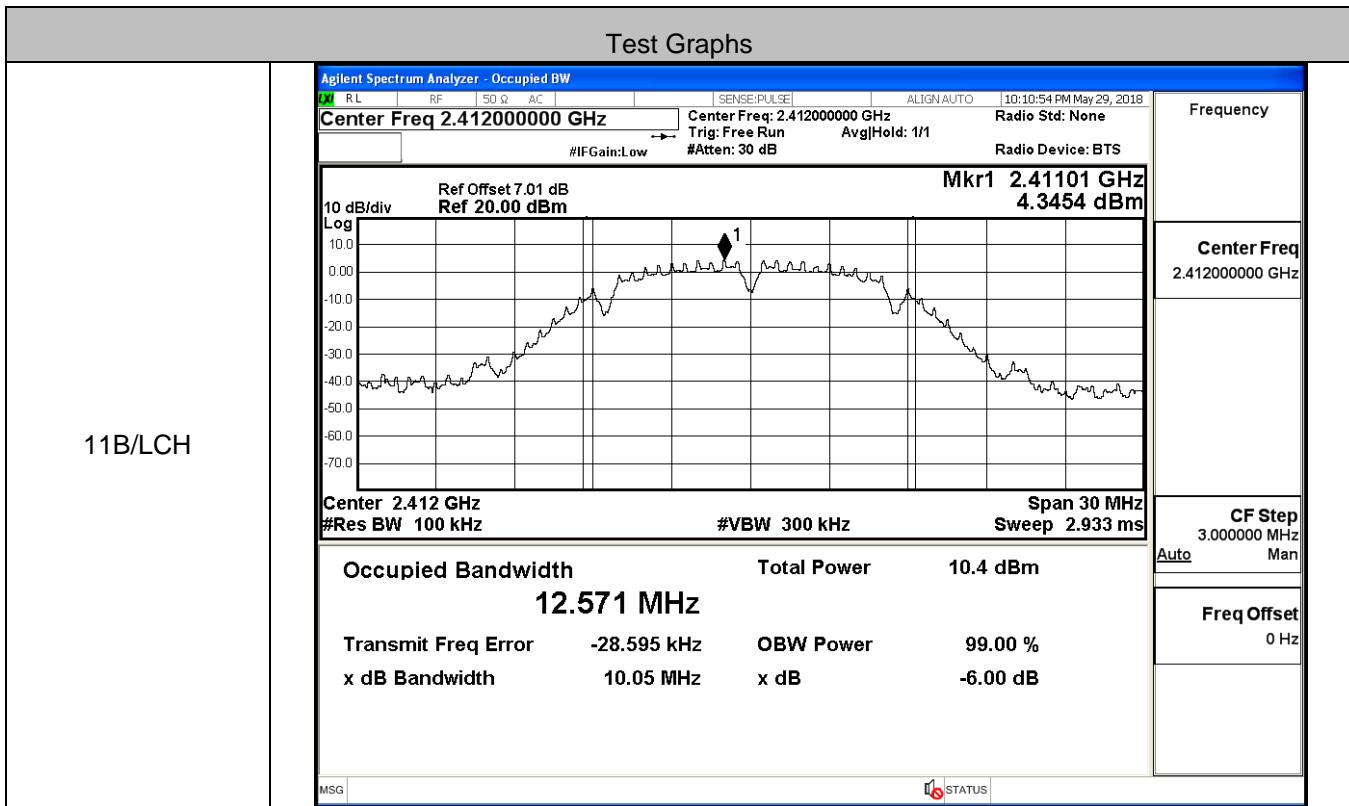


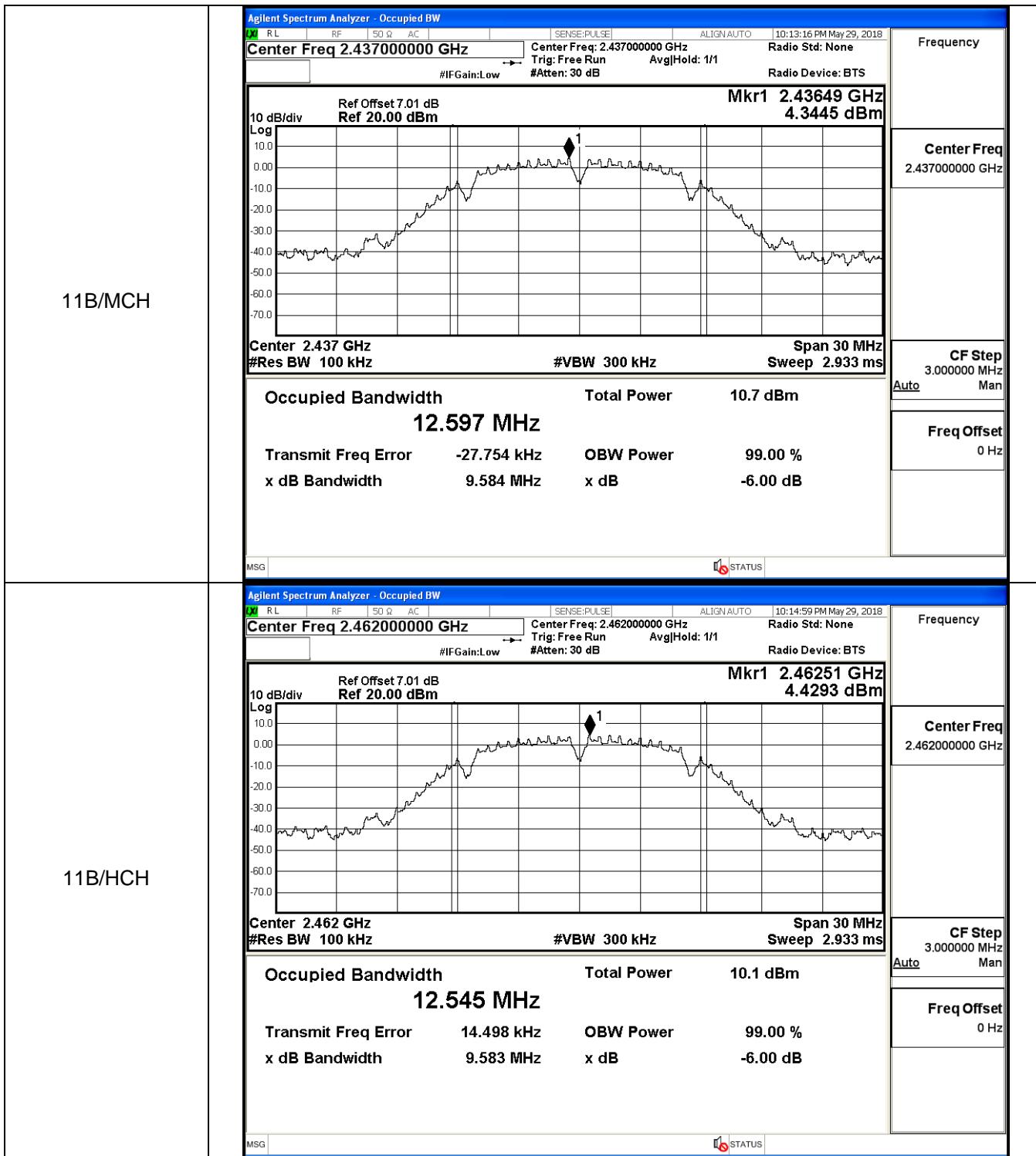


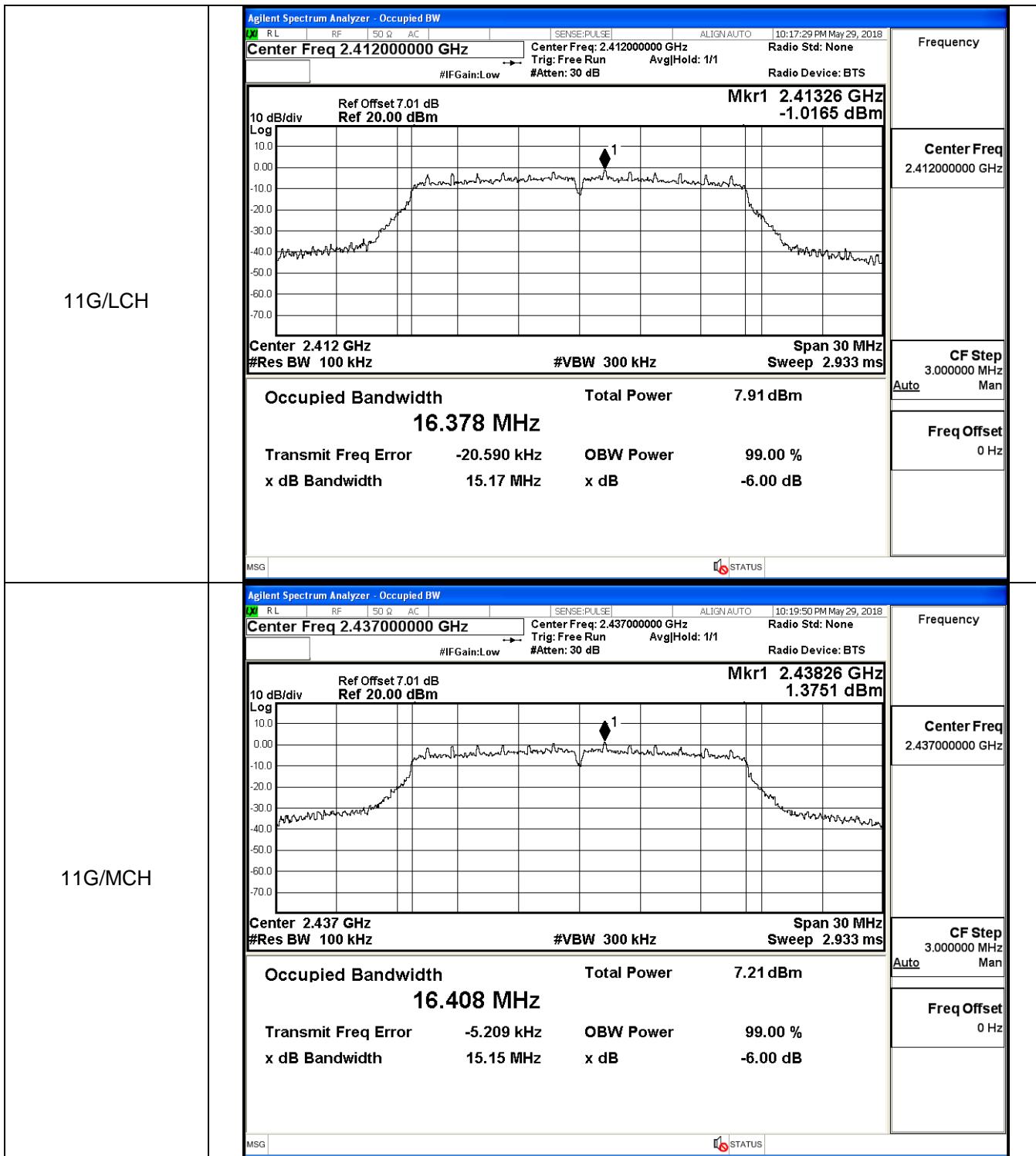


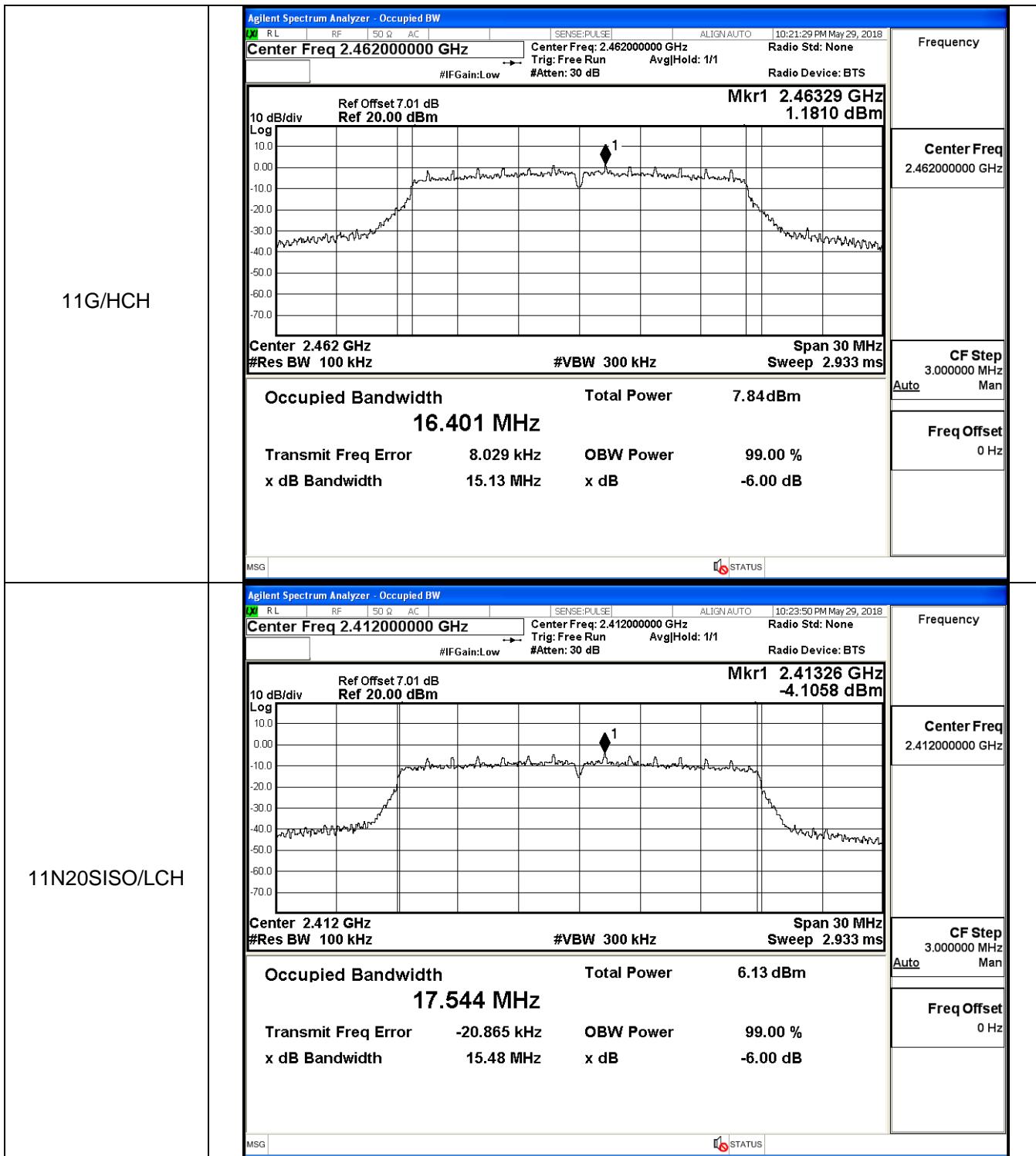
C.4 6dB Bandwidth

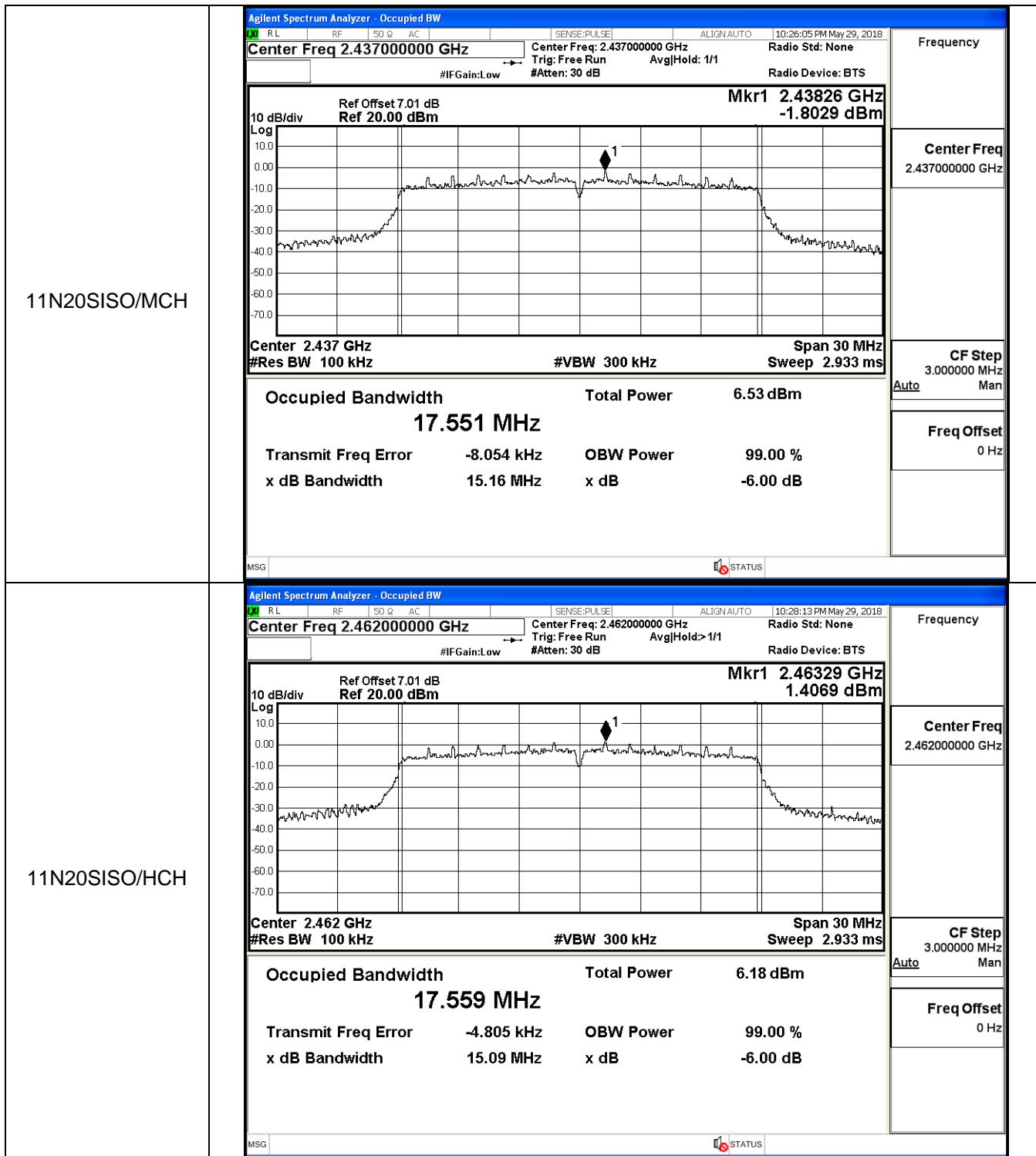
| Mode | Channel | 6dB Bandwidth [MHz] | Limit [MHz] | Verdict |
|-----------|---------|---------------------|-------------|---------|
| 11B | LCH | 10.05 | ≥0.5 | PASS |
| | MCH | 9.584 | ≥0.5 | PASS |
| | HCH | 9.583 | ≥0.5 | PASS |
| 11G | LCH | 15.17 | ≥0.5 | PASS |
| | MCH | 15.15 | ≥0.5 | PASS |
| | HCH | 15.13 | ≥0.5 | PASS |
| 11N20SISO | LCH | 15.48 | ≥0.5 | PASS |
| | MCH | 15.16 | ≥0.5 | PASS |
| | HCH | 15.09 | ≥0.5 | PASS |
| 11N40SISO | LCH | 35.40 | ≥0.5 | PASS |
| | MCH | 35.24 | ≥0.5 | PASS |
| | HCH | 35.24 | ≥0.5 | PASS |

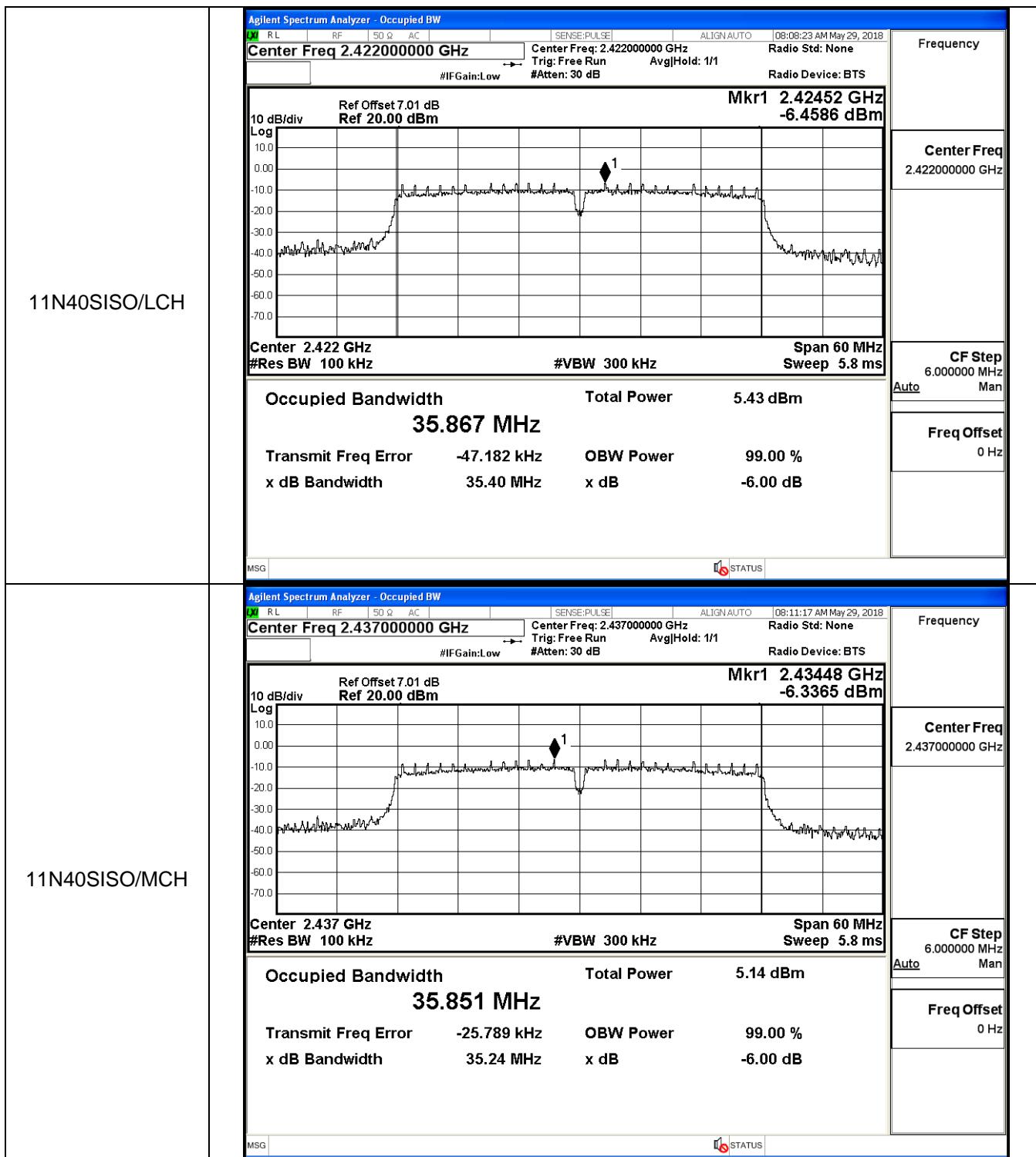


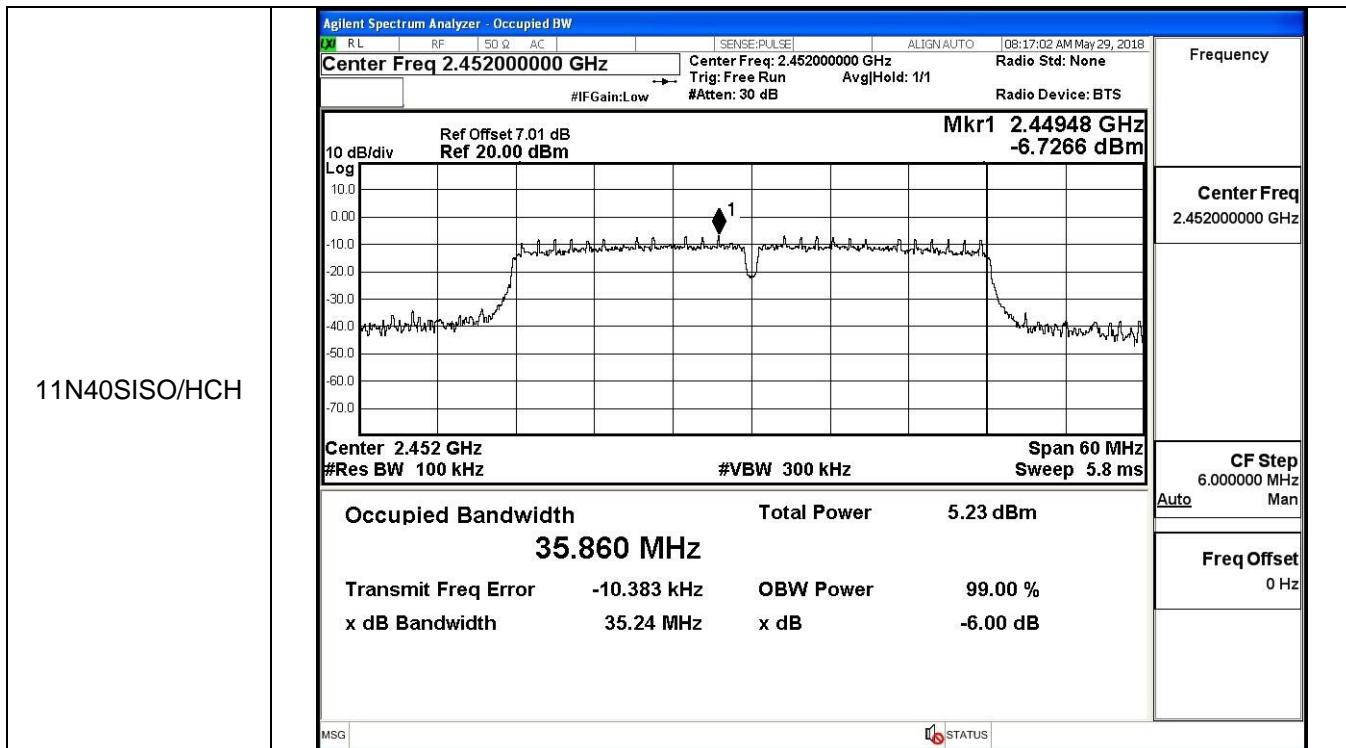






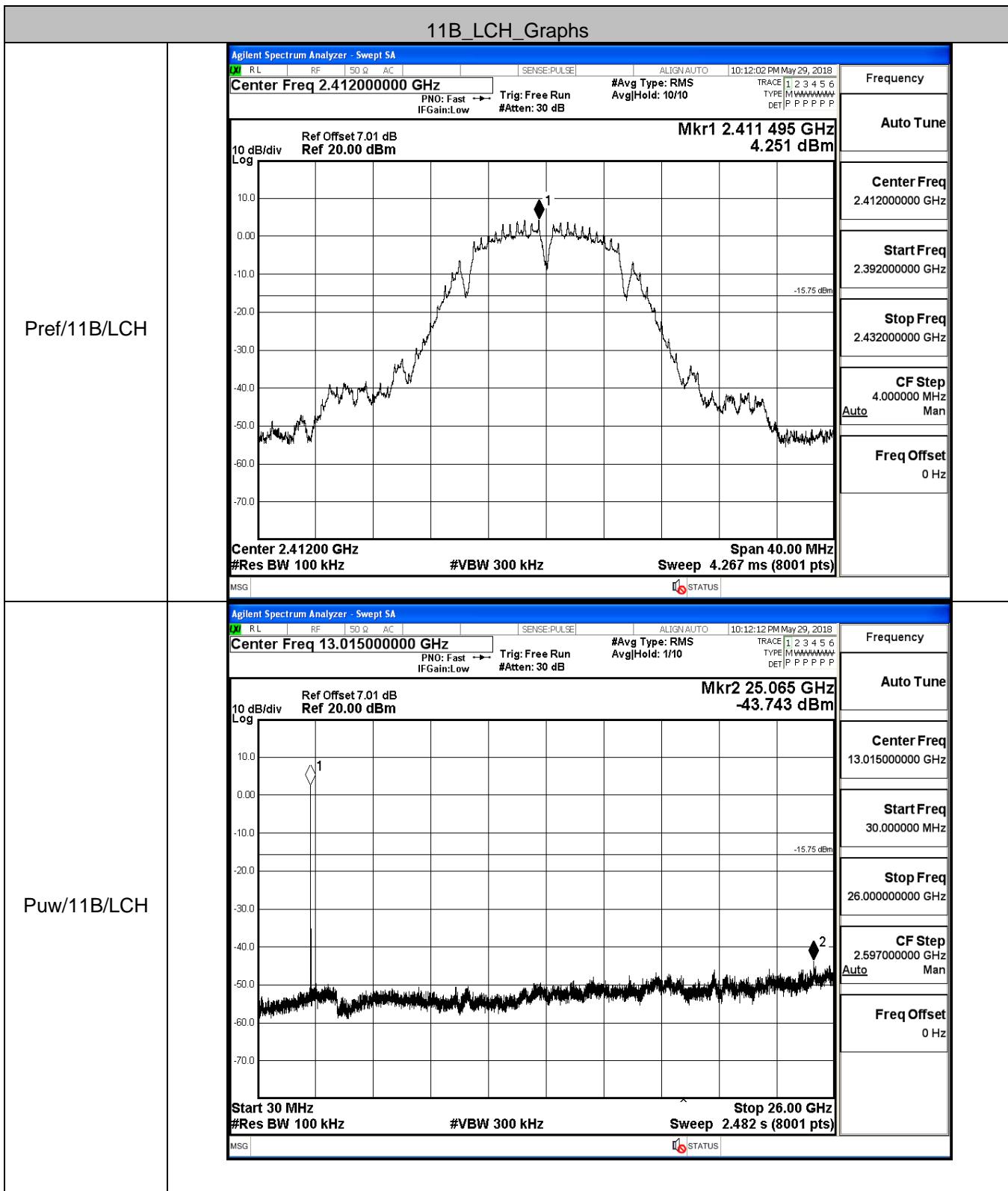


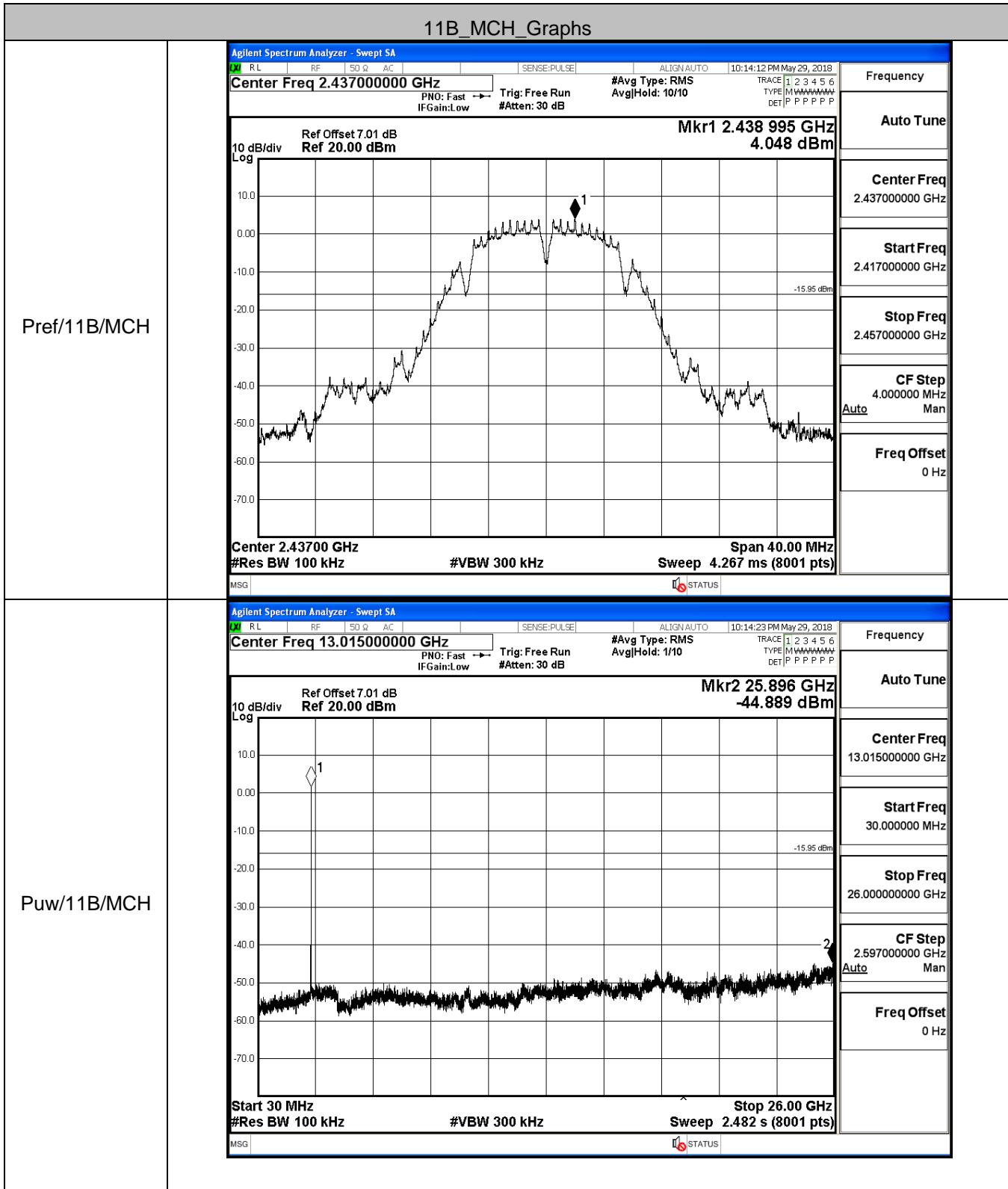




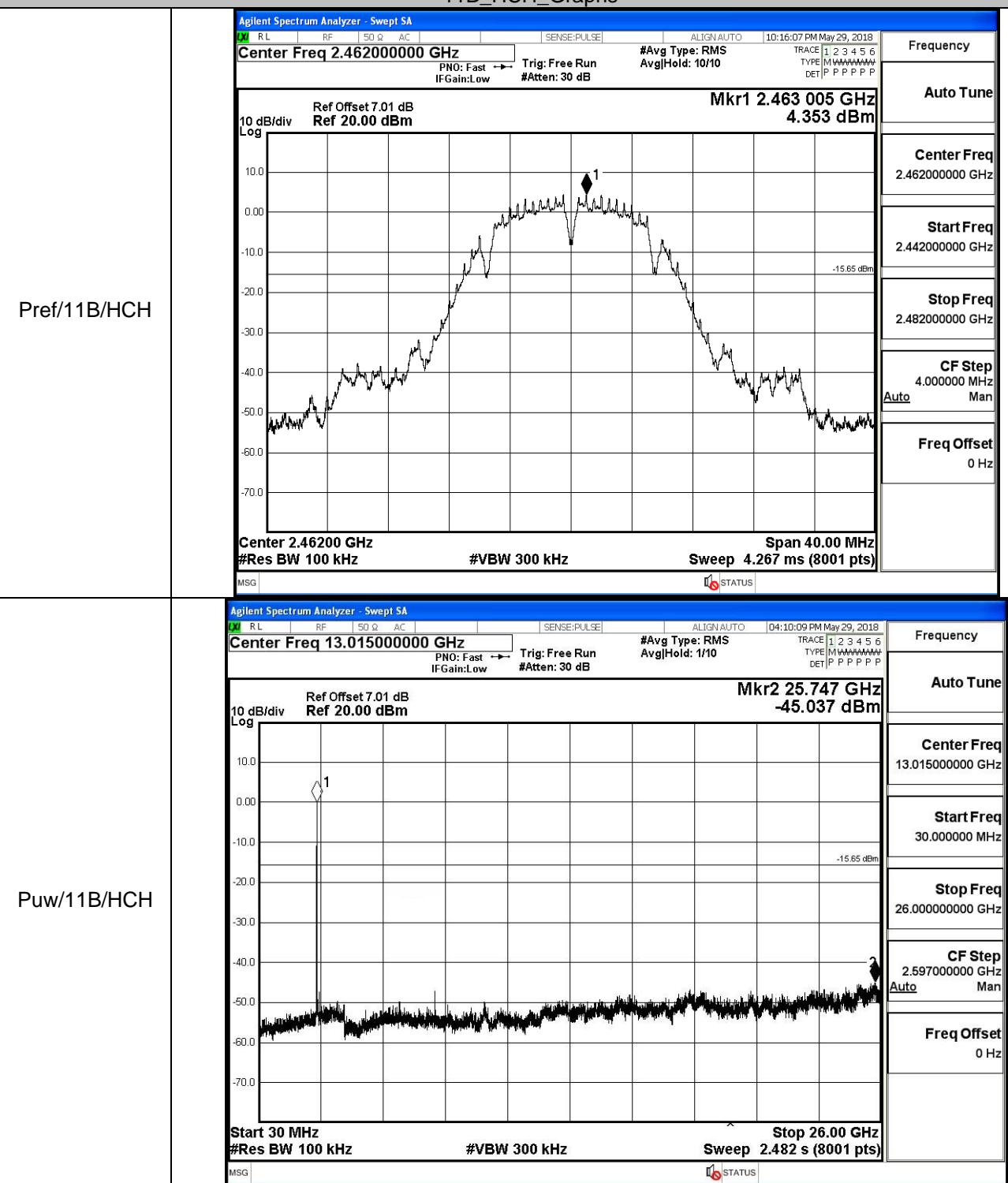
C.5 RF Conducted Spurious Emissions

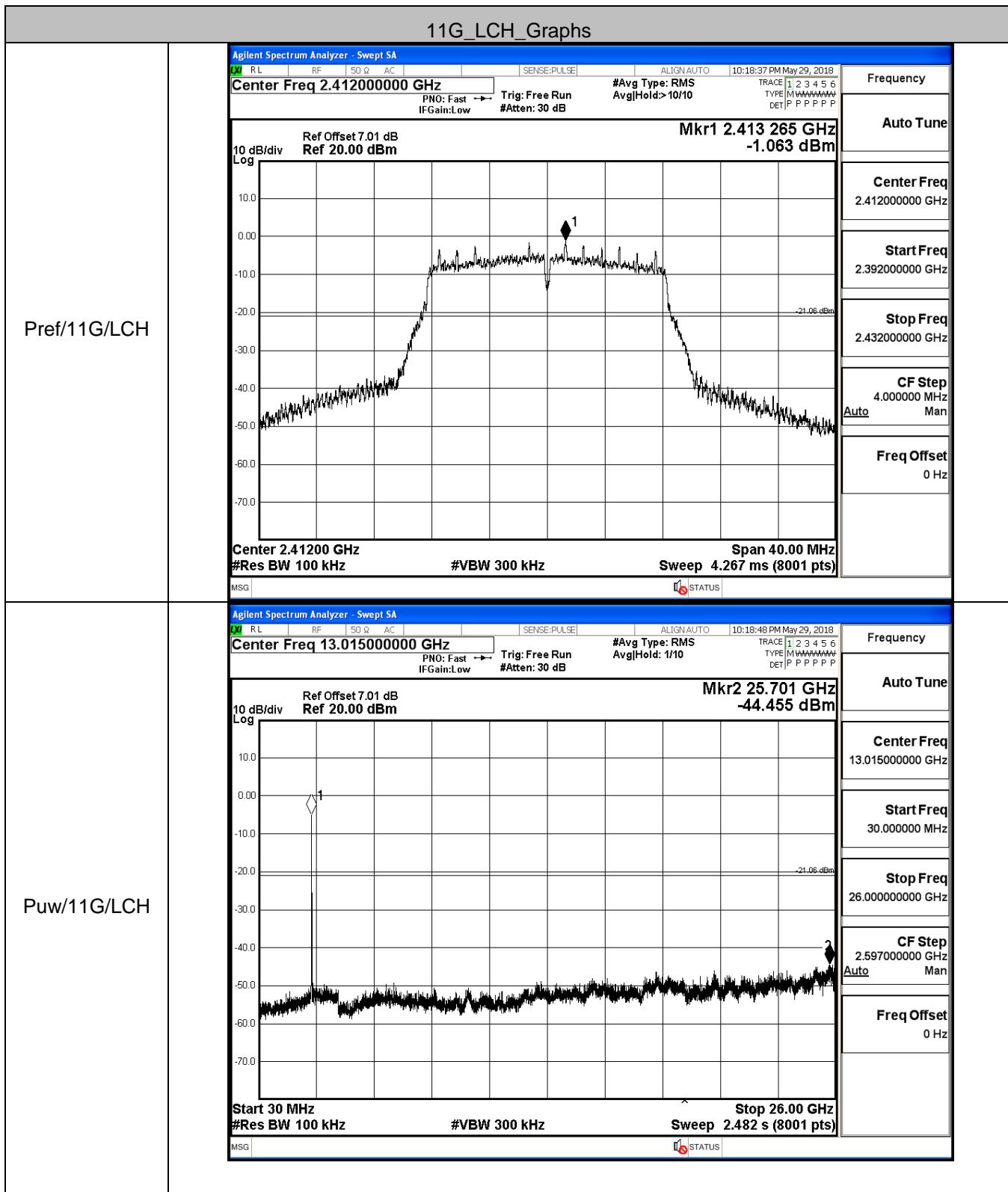
| Mode | Channel | Pref [dBm] | Max. Level [dBm] | Limit [dBm] | Verdict |
|---------------|---------|------------|------------------|-------------|---------|
| 11B | LCH | 4.251 | -43.743 | -15.749 | PASS |
| | MCH | 4.048 | -44.889 | -15.952 | PASS |
| | HCH | 4.353 | -44.989 | -15.647 | PASS |
| 11G | LCH | -1.063 | -44.455 | -21.063 | PASS |
| | MCH | 1.323 | -43.724 | -18.677 | PASS |
| | HCH | 0.239 | -43.146 | -19.761 | PASS |
| 11N20 SISO | LCH | -4.497 | -44.327 | -24.497 | PASS |
| | MCH | -1.793 | -43.770 | -21.793 | PASS |
| | HCH | 1.375 | -44.660 | -18.625 | PASS |
| 11N40 SISO | LCH | -6.639 | -43.966 | -26.639 | PASS |
| | MCH | -6.374 | -45.113 | -26.374 | PASS |
| | HCH | -6.541 | -44.929 | -26.541 | PASS |

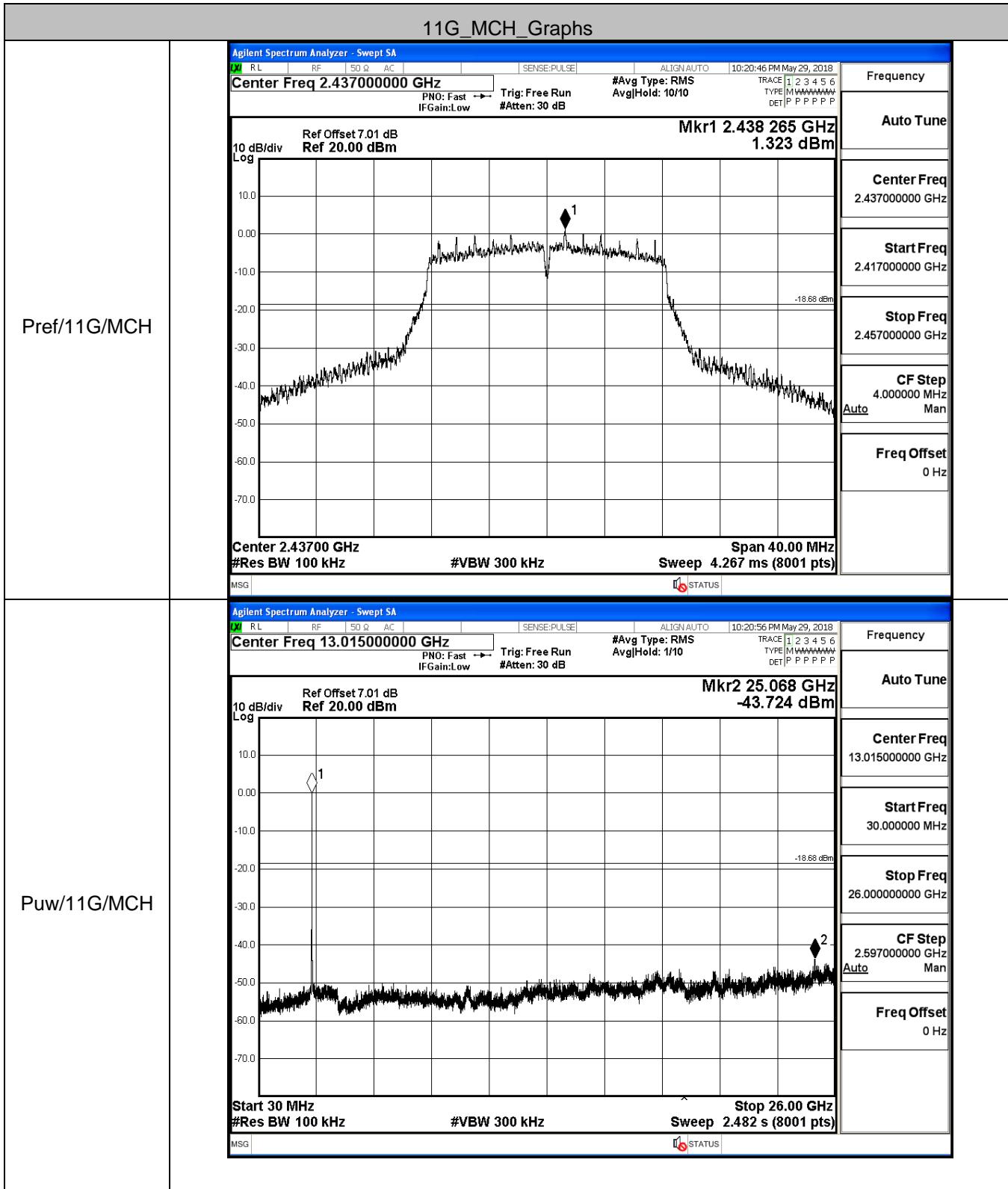


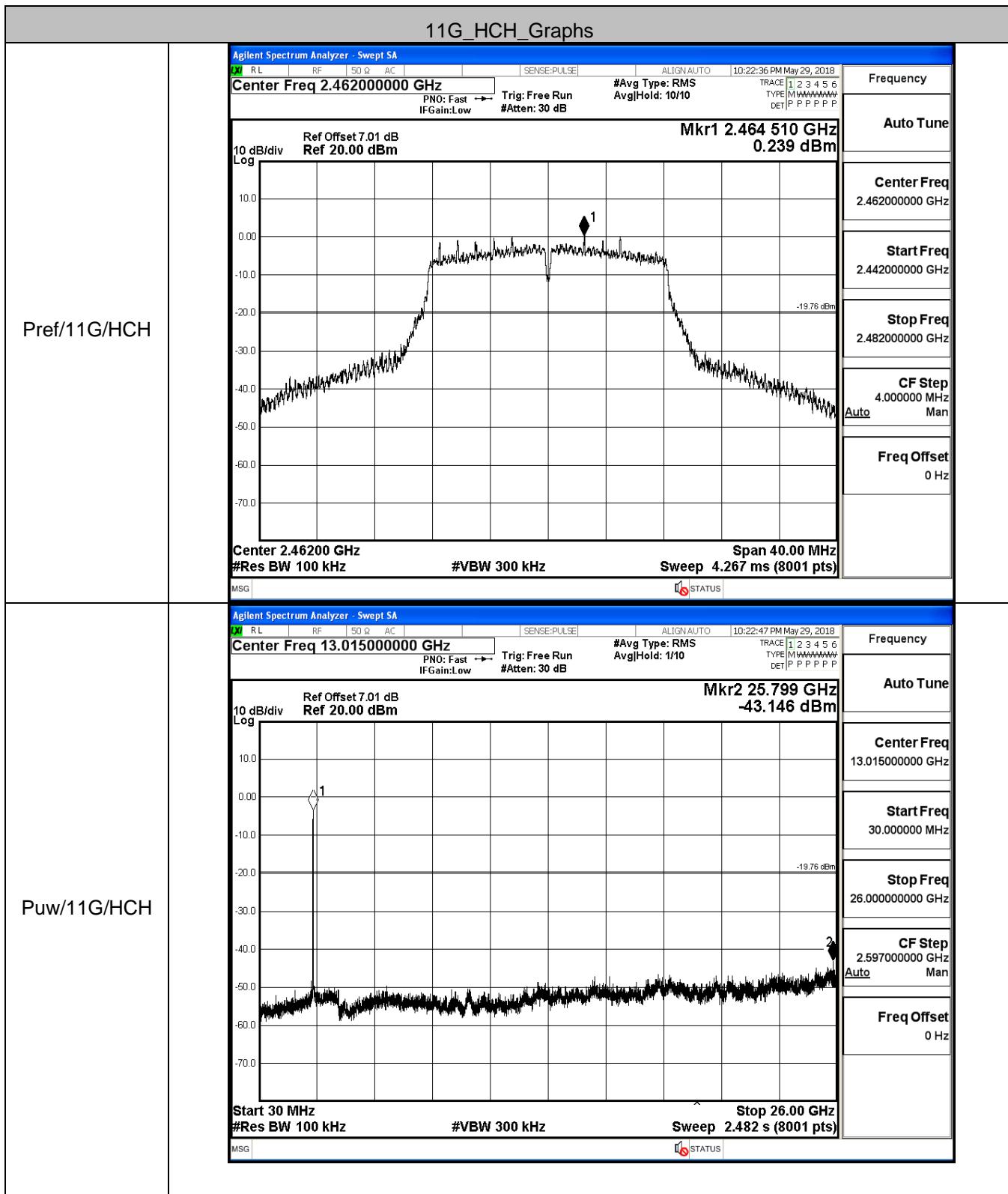


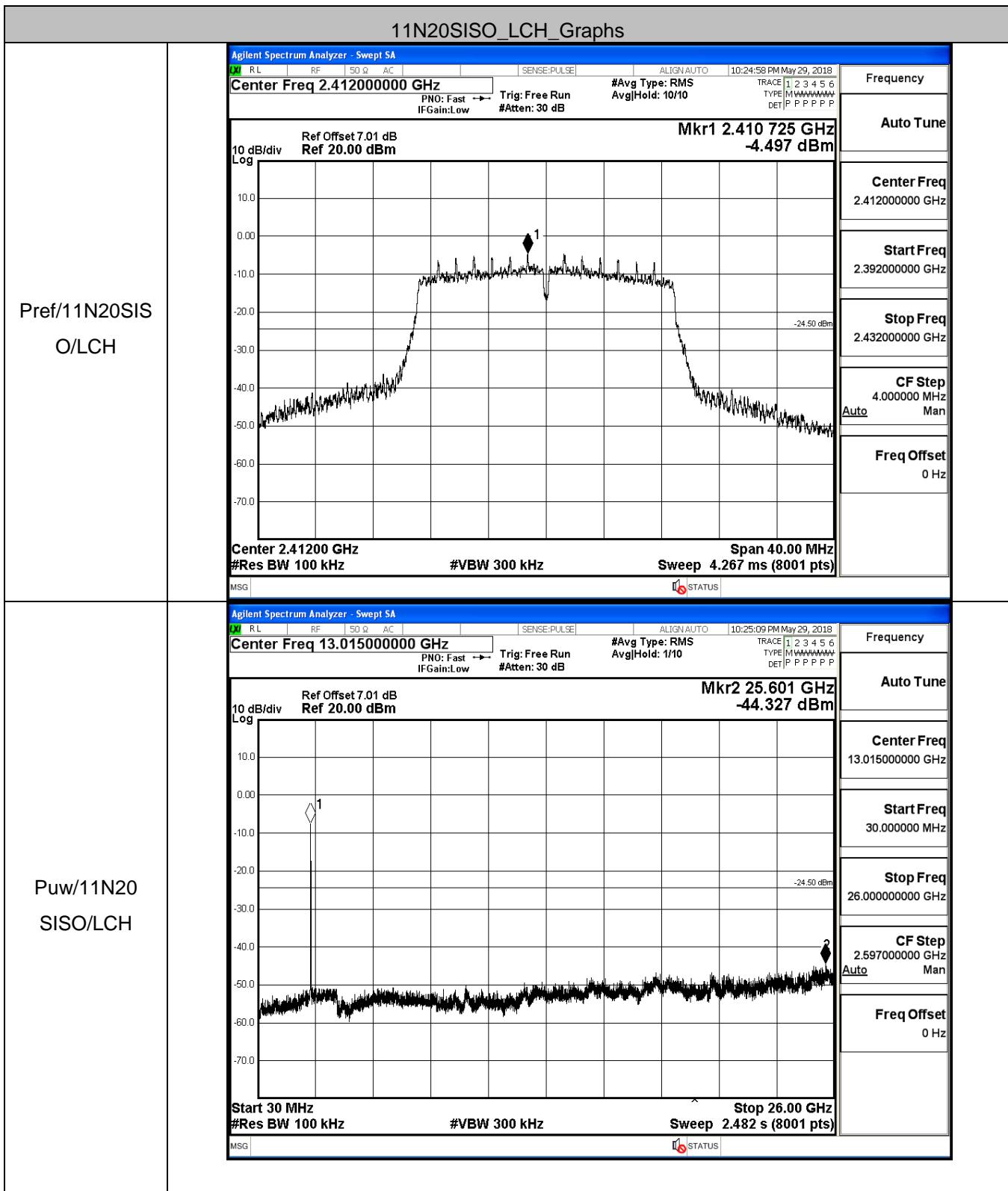
11B_HCH_Graphs

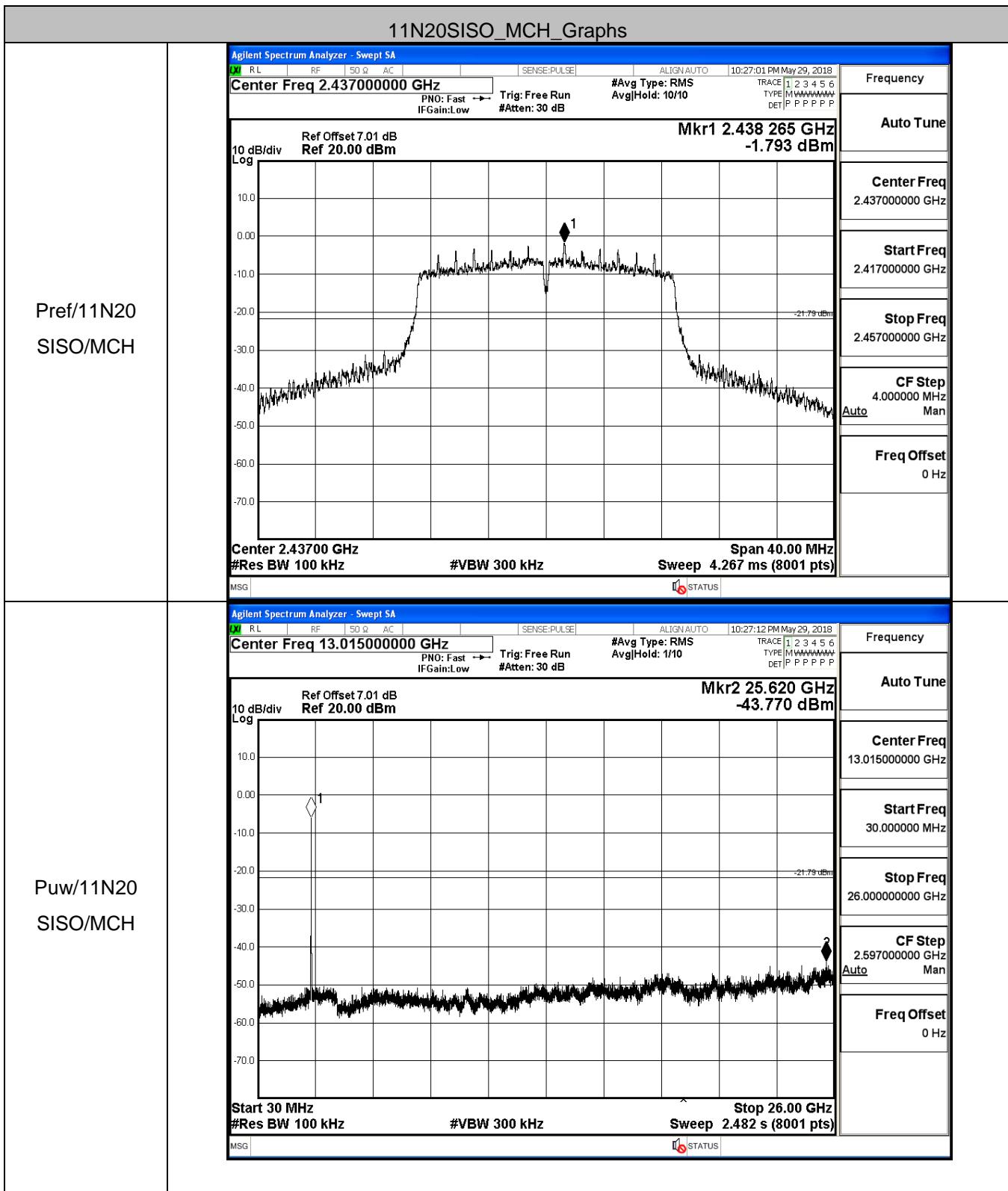


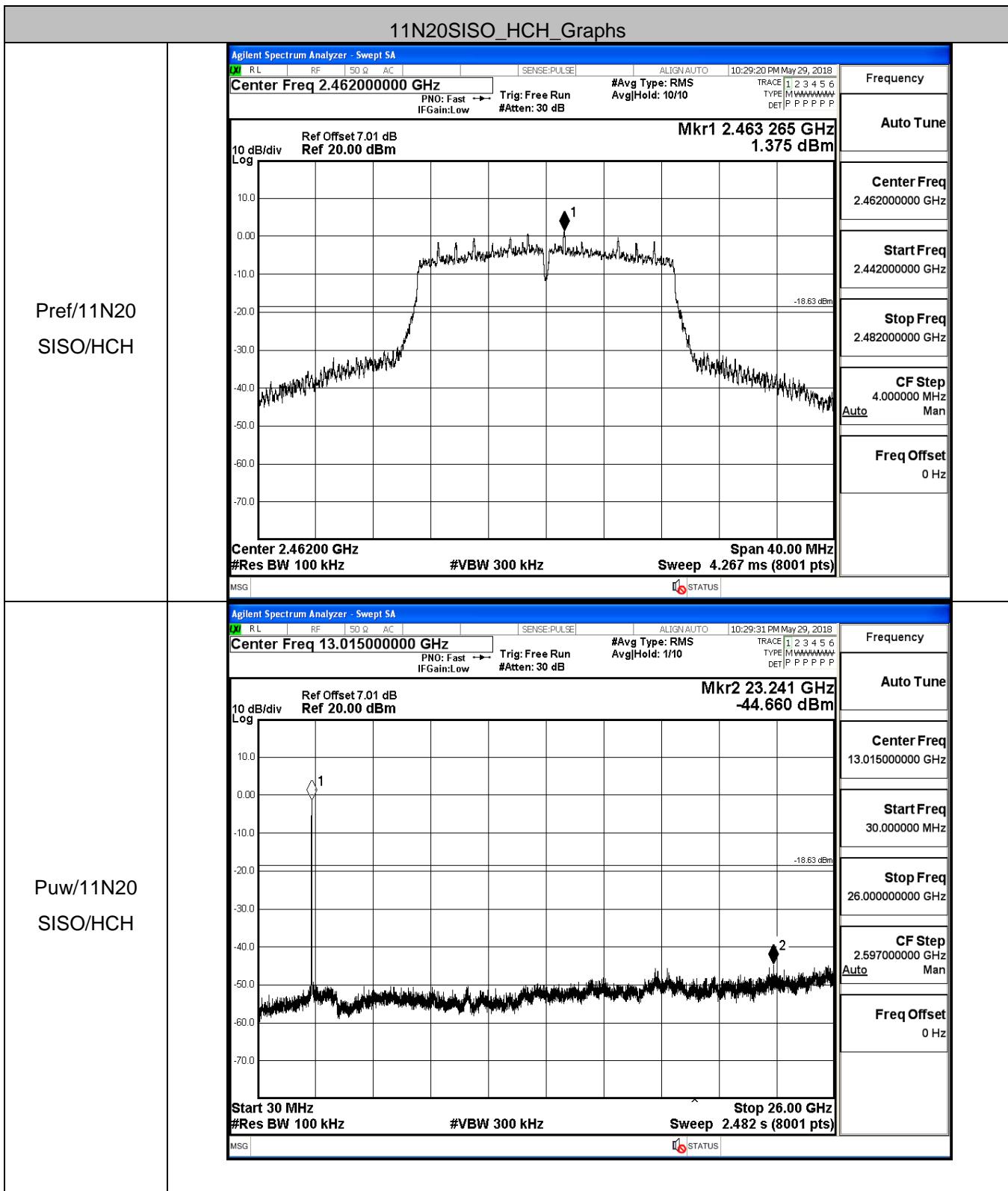


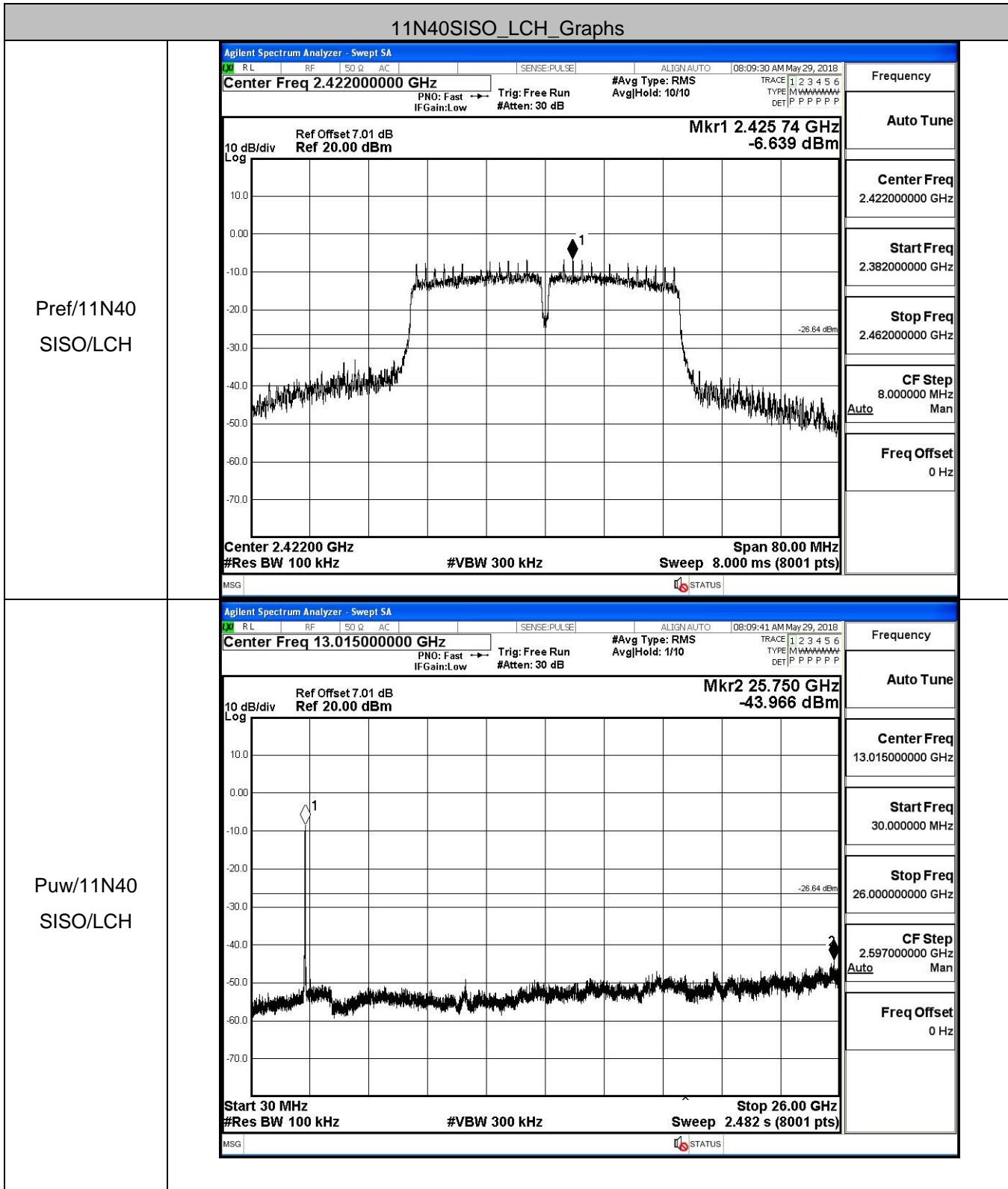


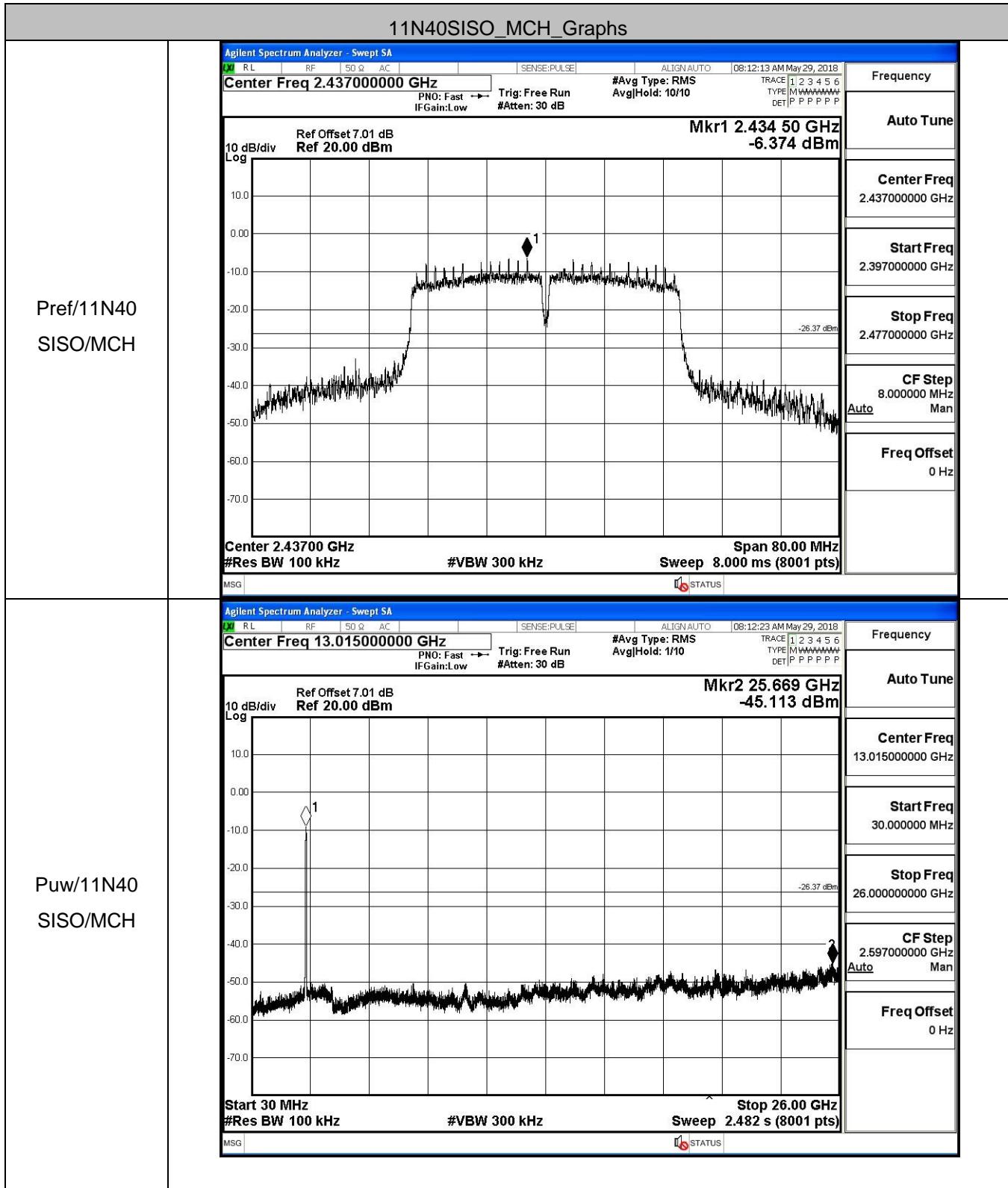


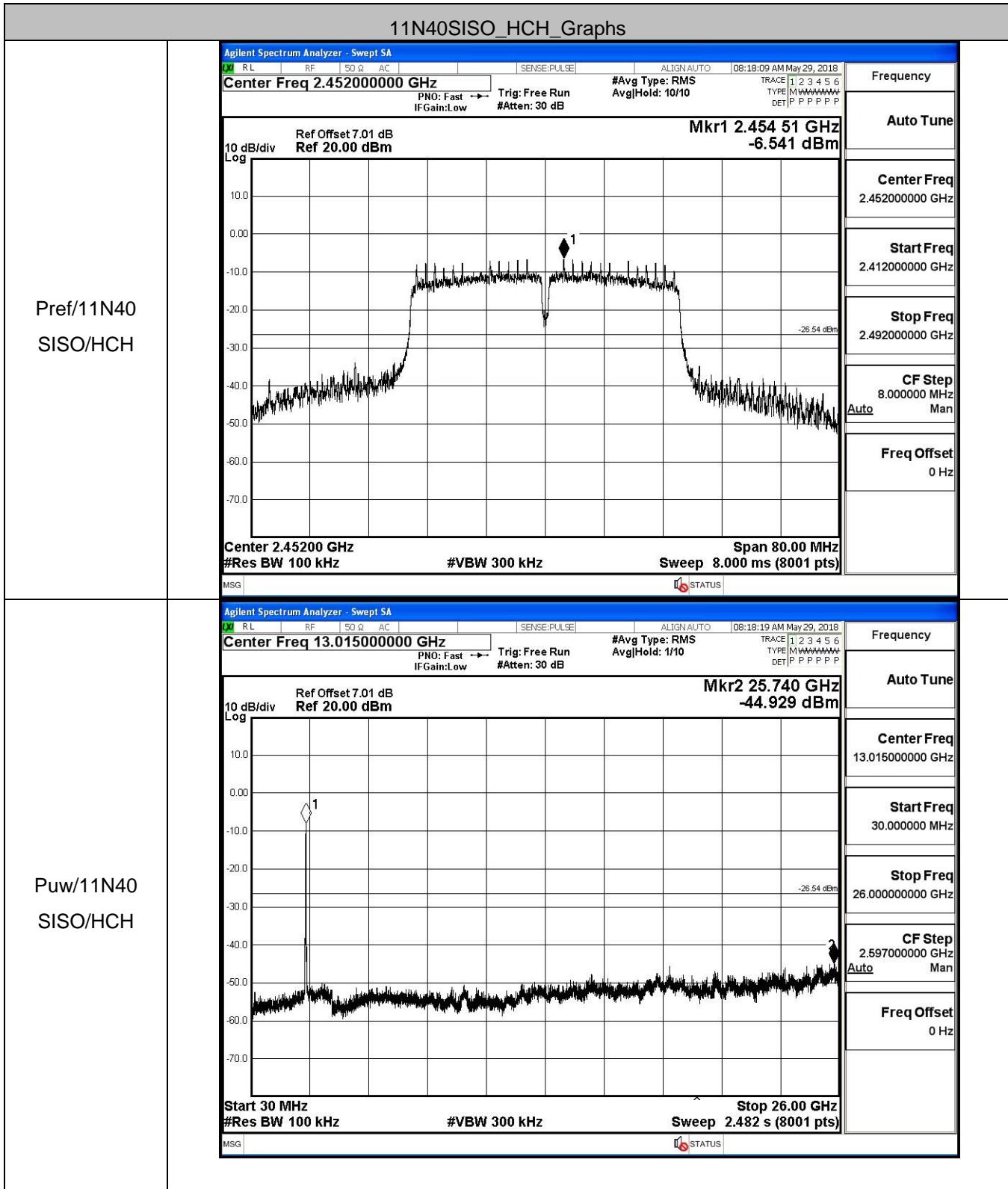






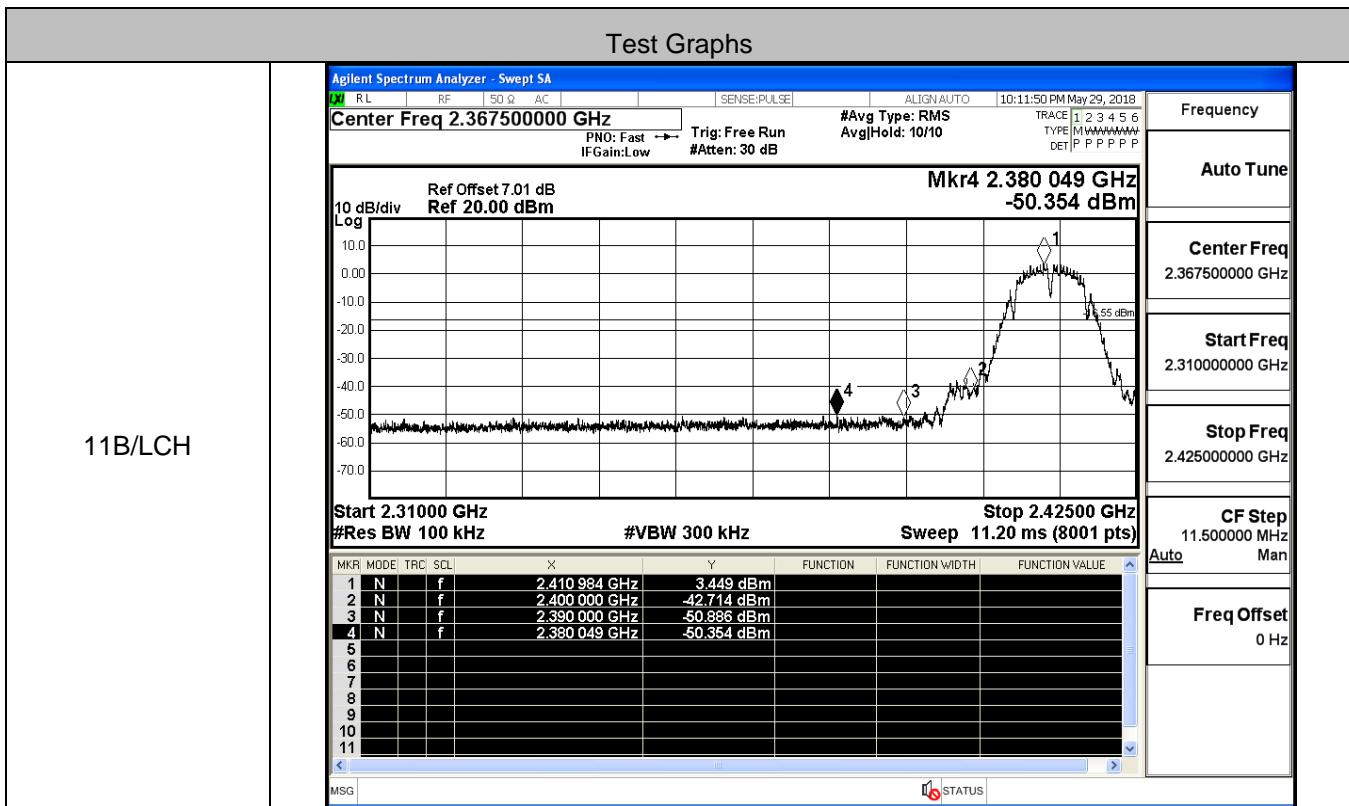


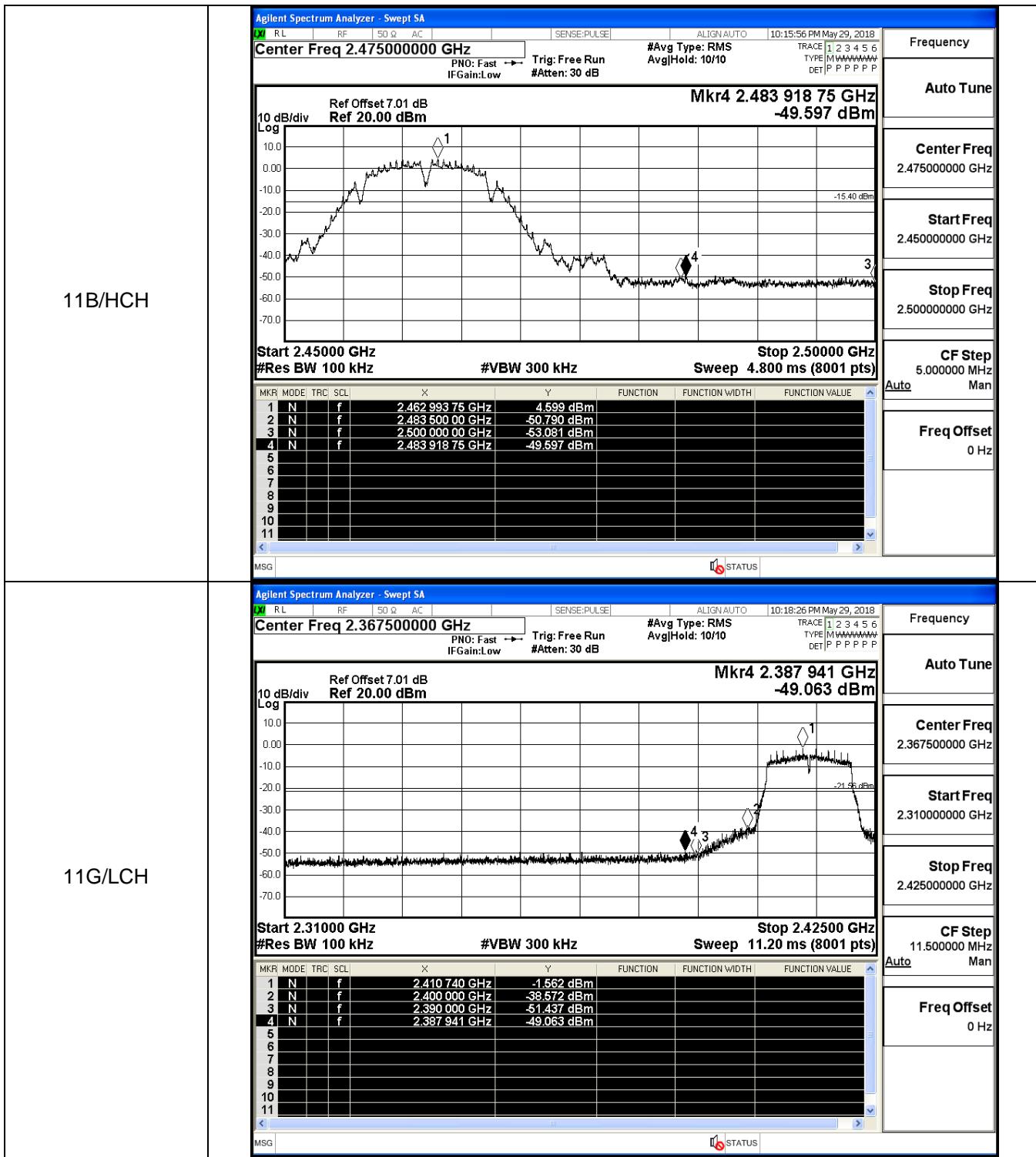


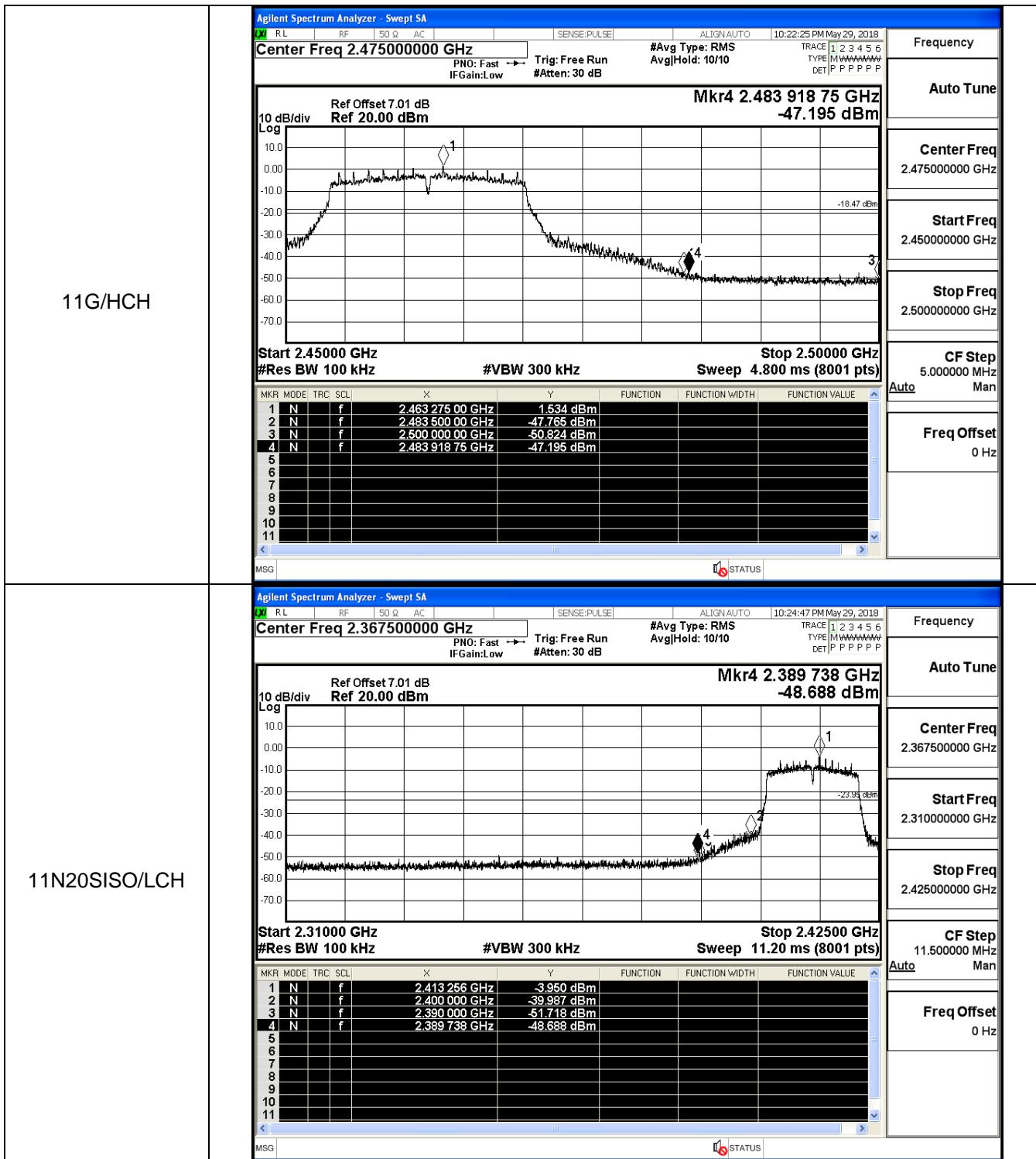


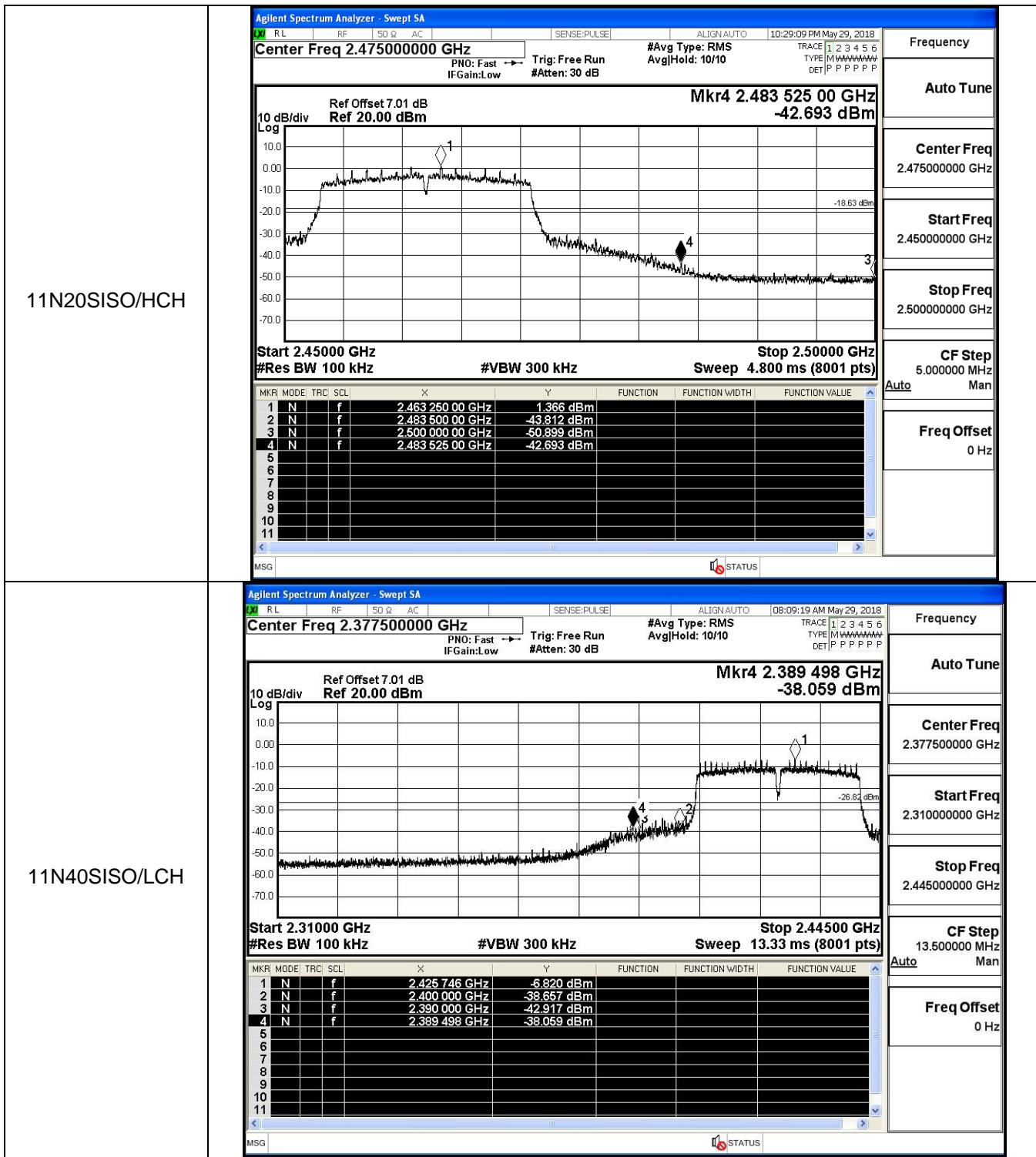
C.6 Band-edge for RF Conducted Emissions

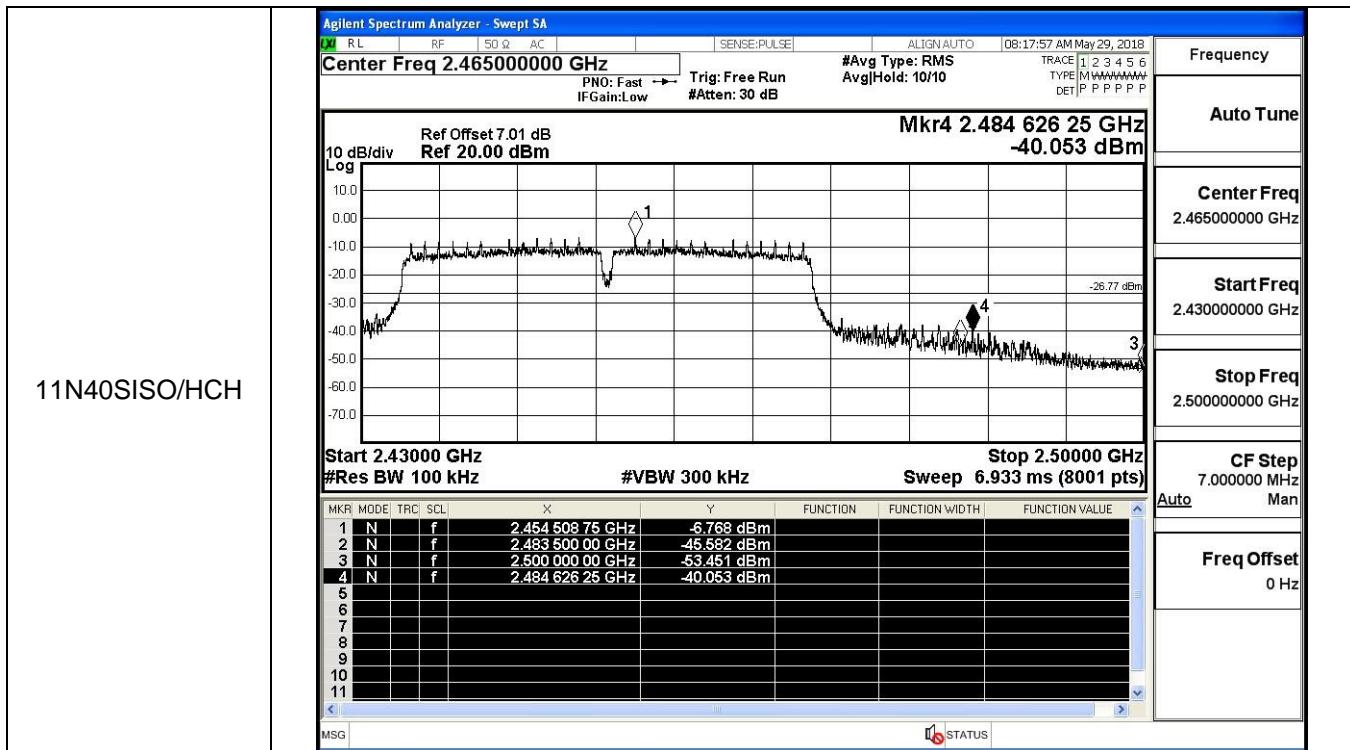
| Mode | Channel | Carrier Power[dBm] | Max.Spurious Level [dBm] | Limit [dBm] | Verdict |
|-----------|---------|--------------------|--------------------------|-------------|---------|
| 11B | LCH | 3.449 | -50.354 | -16.55 | PASS |
| | HCH | 4.599 | -49.597 | -15.4 | PASS |
| 11G | LCH | -1.562 | -49.063 | -21.56 | PASS |
| | HCH | 1.534 | -47.195 | -18.47 | PASS |
| 11N20SISO | LCH | -3.950 | -48.688 | -23.95 | PASS |
| | HCH | 1.366 | -42.693 | -18.63 | PASS |
| 11N40SISO | LCH | -6.820 | -38.059 | -26.82 | PASS |
| | HCH | -6.768 | -40.053 | -26.77 | PASS |









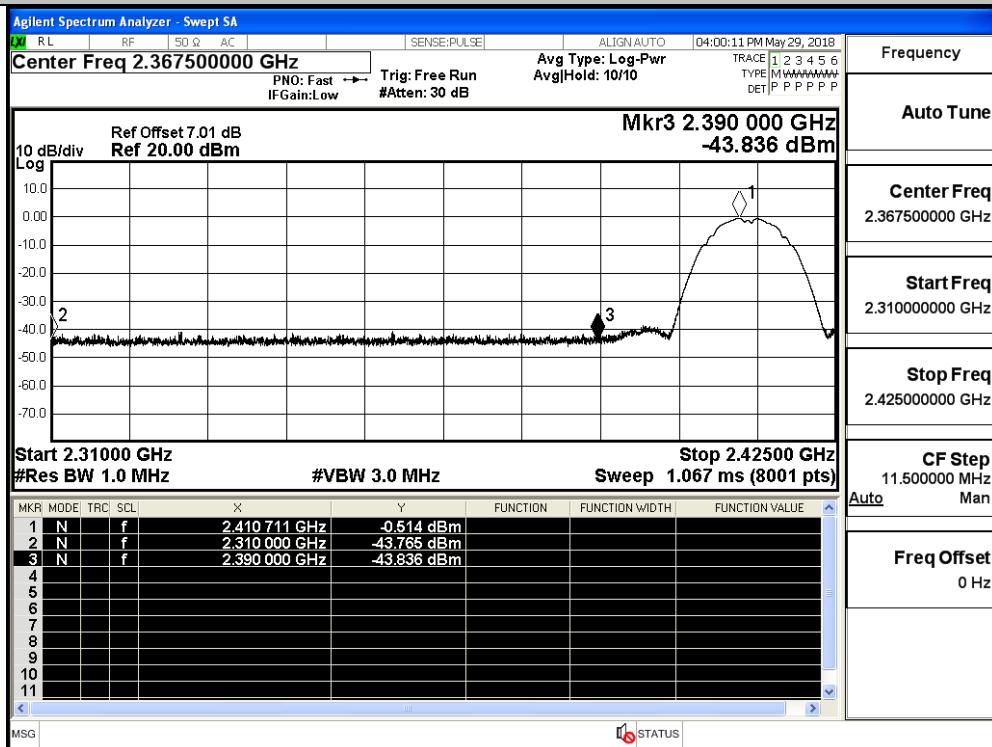


C.7 Restrict-band band-edge measurements

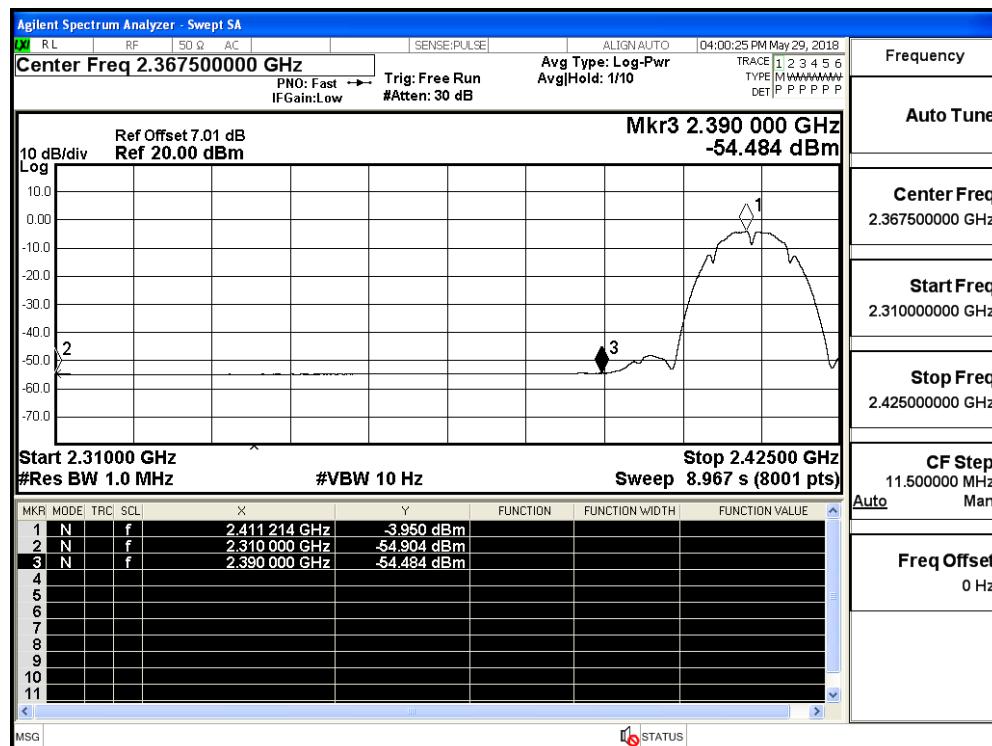
| Test Mode | Test Channel | Ant | Freq. | Power [dBm] | Gain | Ground Factor | E [dBuV/m] | Detector | Limit [dBu V/m] | Verdict |
|------------|--------------|------|--------|-------------|------|---------------|------------|----------|-----------------|---------|
| 11B | 2412 | Ant1 | 2310.0 | -43.765 | 2.0 | 0 | 53.50 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2310.0 | -54.904 | 2.0 | 0 | 42.36 | AV | 54 | PASS |
| | 2412 | Ant1 | 2390.0 | -43.836 | 2.0 | 0 | 53.42 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2390.0 | -54.484 | 2.0 | 0 | 42.78 | AV | 54 | PASS |
| | 2462 | Ant1 | 2483.5 | -43.887 | 2.0 | 0 | 53.37 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2483.5 | -54.352 | 2.0 | 0 | 42.91 | AV | 54 | PASS |
| | 2462 | Ant1 | 2500.0 | -44.354 | 2.0 | 0 | 52.91 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2500.0 | -54.255 | 2.0 | 0 | 43.01 | AV | 54 | PASS |
| 11G | 2412 | Ant1 | 2310.0 | -42.777 | 2.0 | 0 | 54.48 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2310.0 | -54.872 | 2.0 | 0 | 42.39 | AV | 54 | PASS |
| | 2412 | Ant1 | 2390.0 | -43.253 | 2.0 | 0 | 54.01 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2390.0 | -53.999 | 2.0 | 0 | 43.26 | AV | 54 | PASS |
| | 2462 | Ant1 | 2483.5 | -43.925 | 2.0 | 0 | 53.34 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2483.5 | -54.268 | 2.0 | 0 | 42.99 | AV | 54 | PASS |
| | 2462 | Ant1 | 2500.0 | -43.773 | 2.0 | 0 | 53.49 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2500.0 | -54.213 | 2.0 | 0 | 43.05 | AV | 54 | PASS |
| 11N20 SISO | 2412 | Ant1 | 2310.0 | -42.623 | 2.0 | 0 | 54.64 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2310.0 | -54.853 | 2.0 | 0 | 42.41 | AV | 54 | PASS |
| | 2412 | Ant1 | 2390.0 | -42.998 | 2.0 | 0 | 54.26 | PEAK | 74 | PASS |
| | 2412 | Ant1 | 2390.0 | -53.745 | 2.0 | 0 | 43.52 | AV | 54 | PASS |
| | 2462 | Ant1 | 2483.5 | -42.795 | 2.0 | 0 | 54.47 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2483.5 | -54.297 | 2.0 | 0 | 42.96 | AV | 54 | PASS |
| | 2462 | Ant1 | 2500.0 | -42.829 | 2.0 | 0 | 54.43 | PEAK | 74 | PASS |
| | 2462 | Ant1 | 2500.0 | -54.227 | 2.0 | 0 | 43.03 | AV | 54 | PASS |
| 11N40 SISO | 2422 | Ant1 | 2310.0 | -44.736 | 2.0 | 0 | 52.52 | PEAK | 74 | PASS |
| | 2422 | Ant1 | 2310.0 | -54.889 | 2.0 | 0 | 42.37 | AV | 54 | PASS |

| | | | | | | | | | | |
|--|------|------|--------|---------|-----|---|-------|------|----|------|
| | 2422 | Ant1 | 2390.0 | -44.256 | 2.0 | 0 | 53.00 | PEAK | 74 | PASS |
| | 2422 | Ant1 | 2390.0 | -53.745 | 2.0 | 0 | 43.52 | AV | 54 | PASS |
| | 2452 | Ant1 | 2483.5 | -42.151 | 2.0 | 0 | 55.11 | PEAK | 74 | PASS |
| | 2452 | Ant1 | 2483.5 | -54.173 | 2.0 | 0 | 43.09 | AV | 54 | PASS |
| | 2452 | Ant1 | 2500.0 | -43.674 | 2.0 | 0 | 53.59 | PEAK | 74 | PASS |
| | 2452 | Ant1 | 2500.0 | -54.157 | 2.0 | 0 | 43.10 | AV | 54 | PASS |

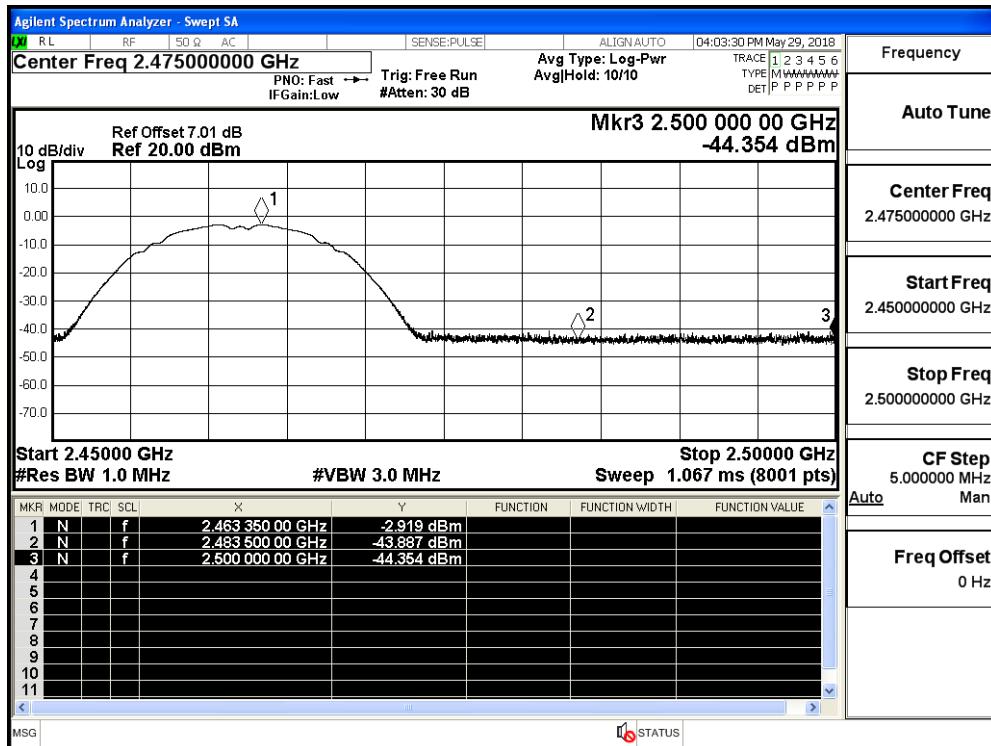
Restrict-band band-edge measurements_11B_2412_Ant1_PEAK



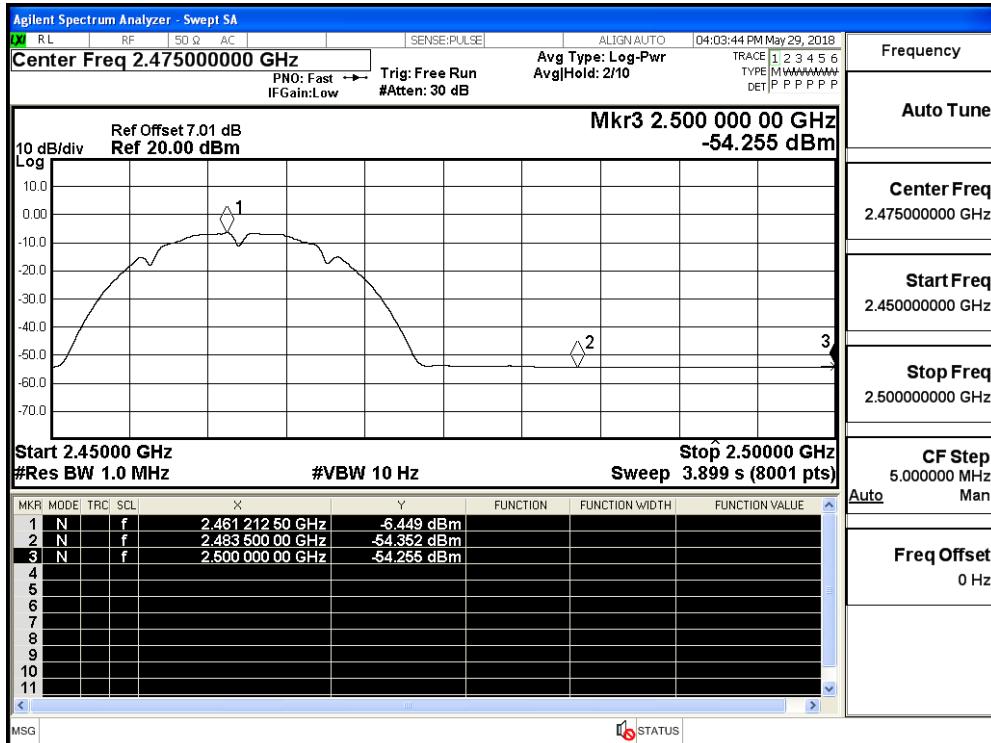
Restrict-band band-edge measurements_11B_2412_Ant1_AV



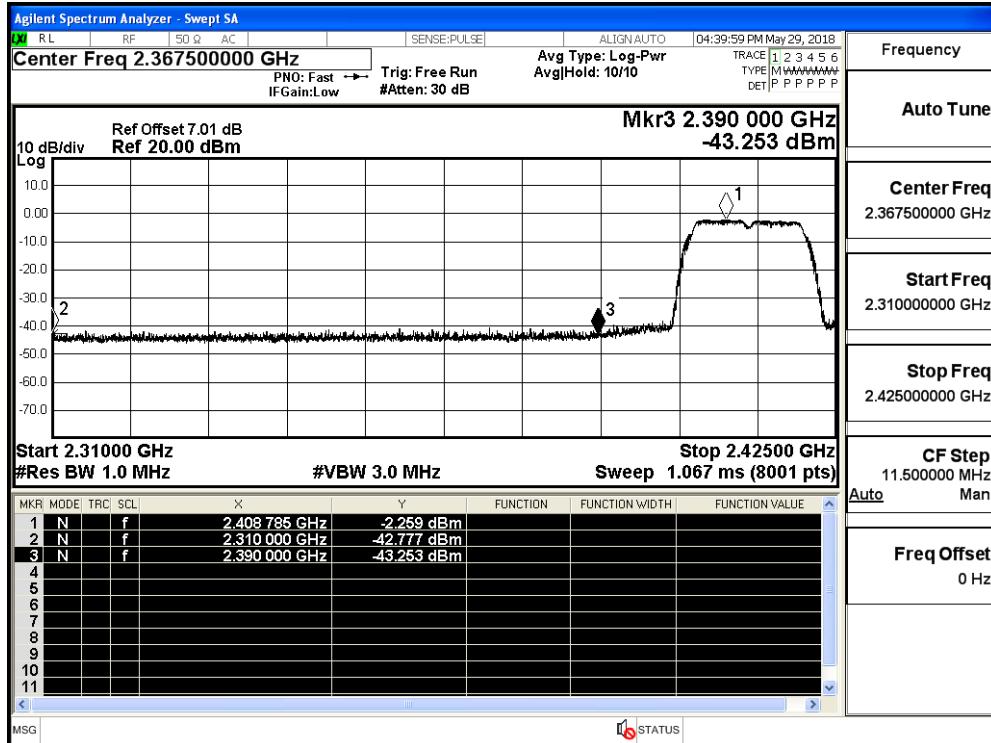
Restrict-band band-edge measurements_11B_2462_Ant1_PEAK



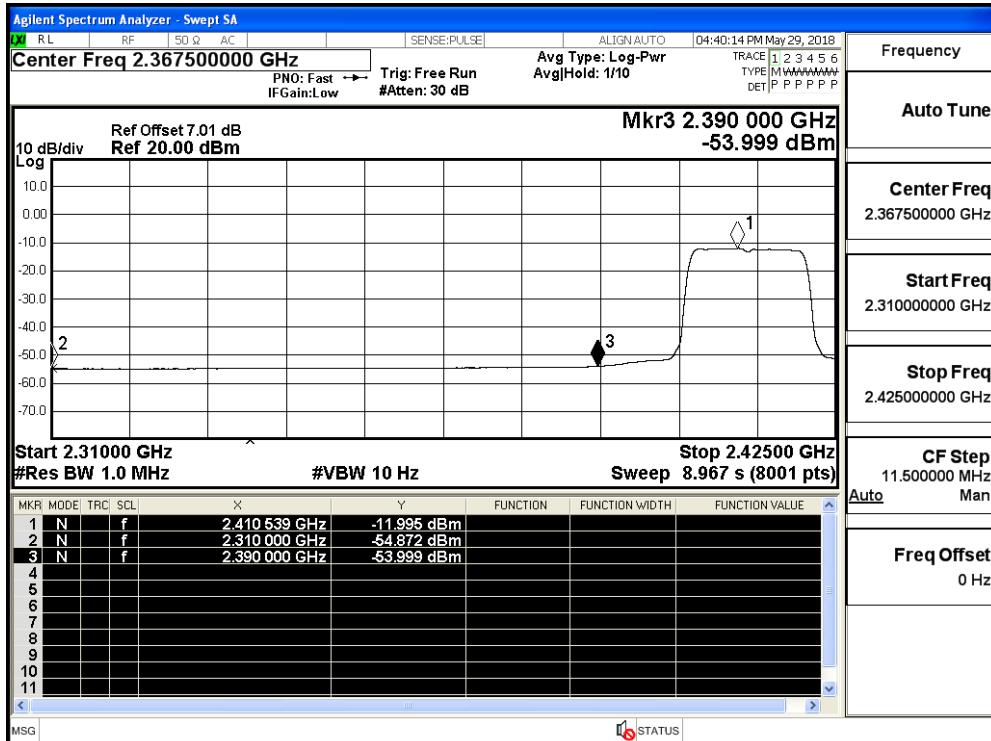
Restrict-band band-edge measurements_11B_2462_Ant1_AV



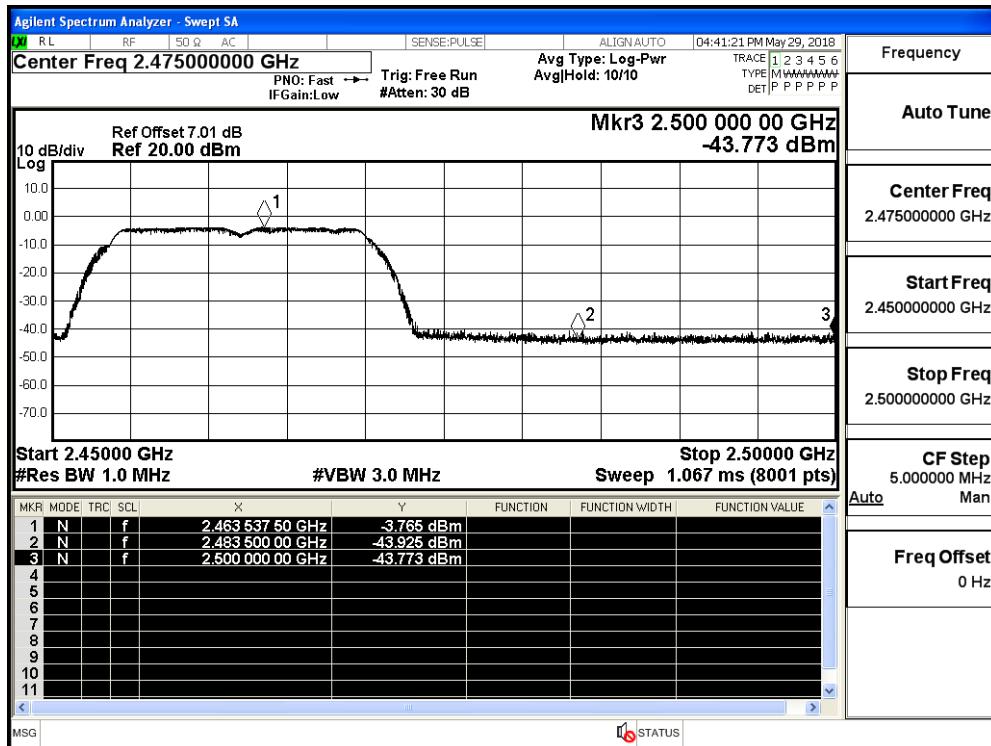
Restrict-band band-edge measurements_11G_2412_Ant1_PEAK



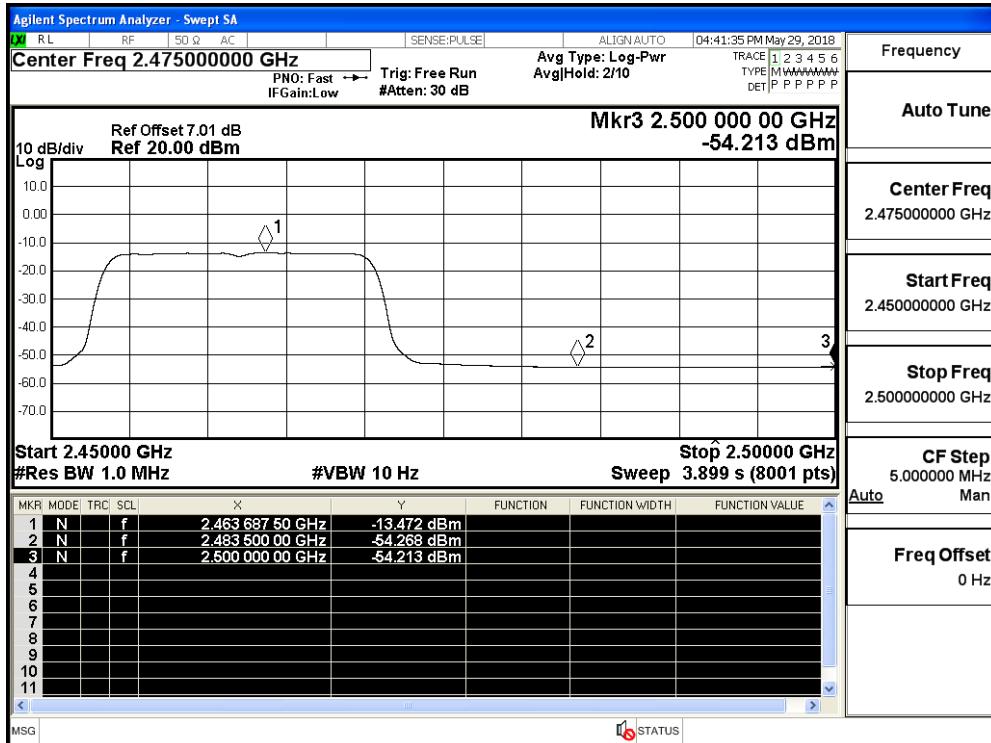
Restrict-band band-edge measurements_11G_2412_Ant1_AV



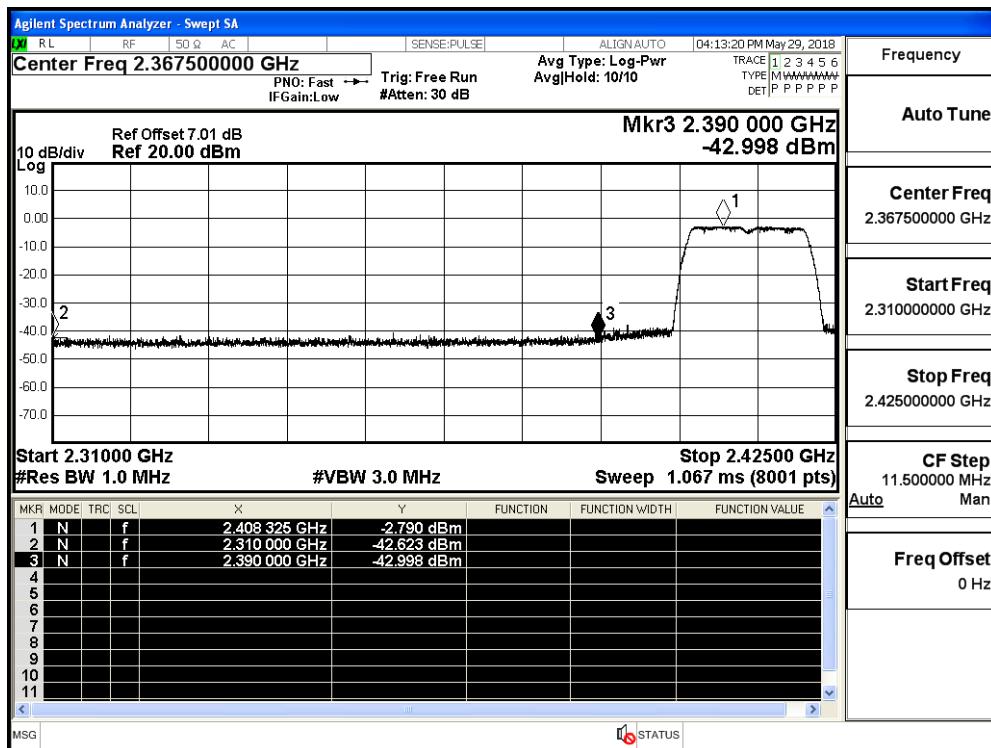
Restrict-band band-edge measurements_11G_2462_Ant1_PEAK



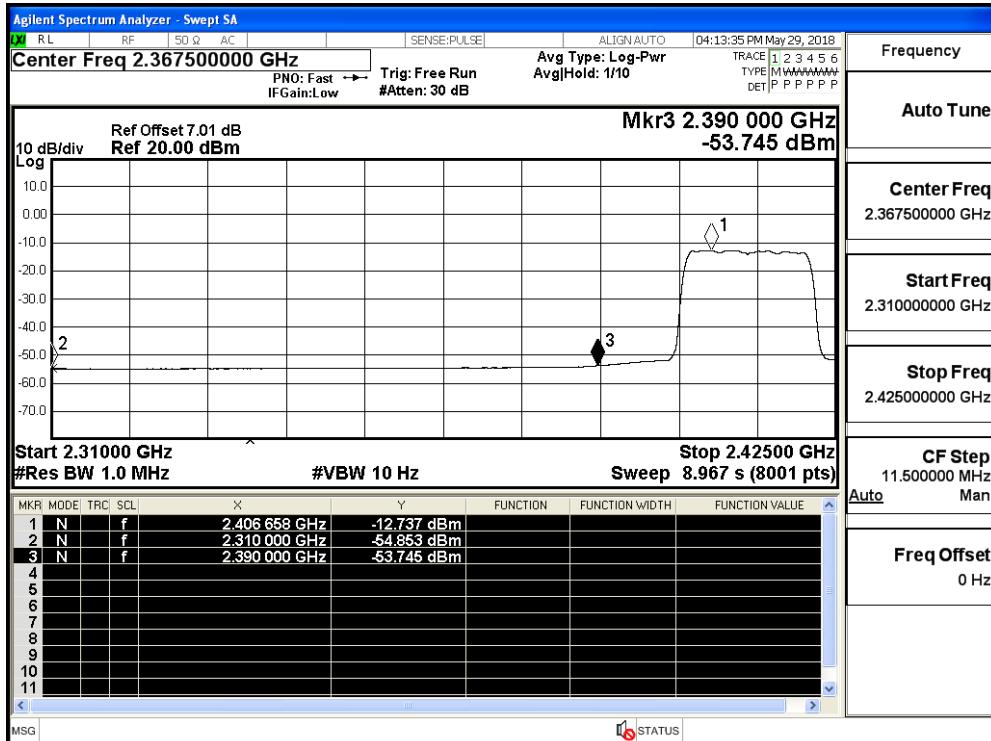
Restrict-band band-edge measurements_11G_2462_Ant1_AV



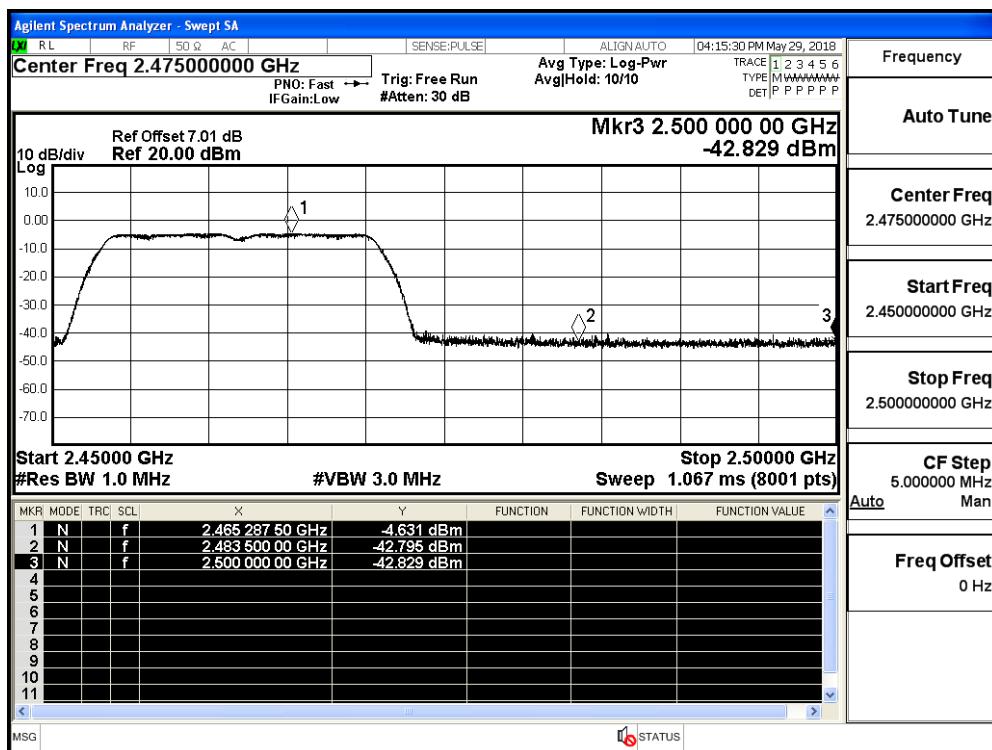
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_PEAK



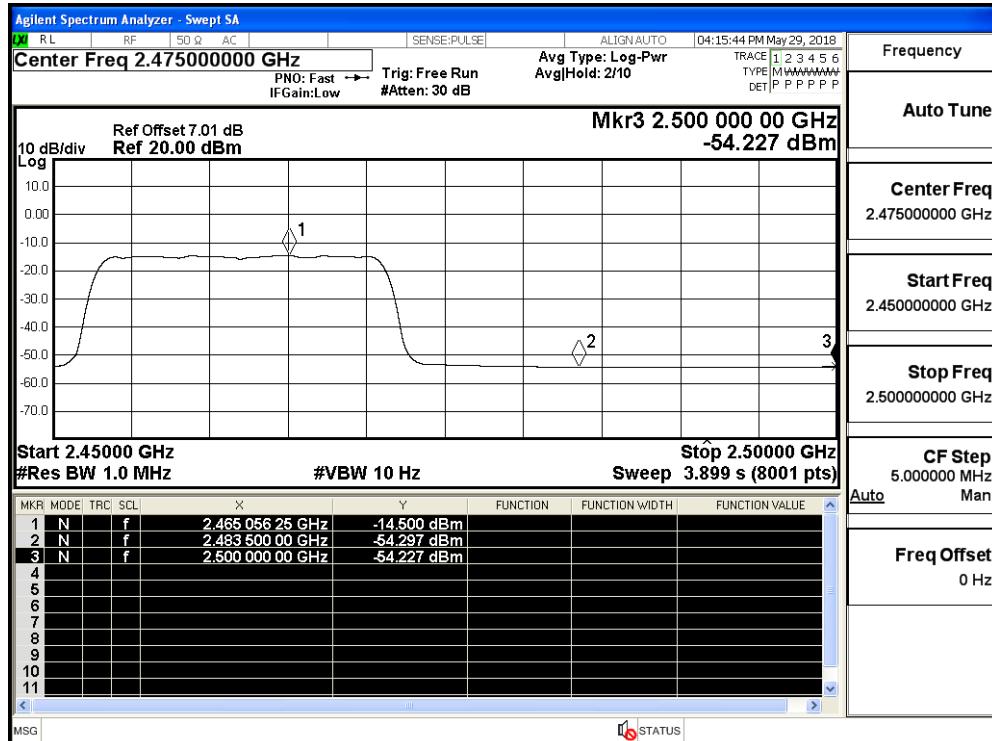
Restrict-band band-edge measurements_11N20SISO_2412_Ant1_AV



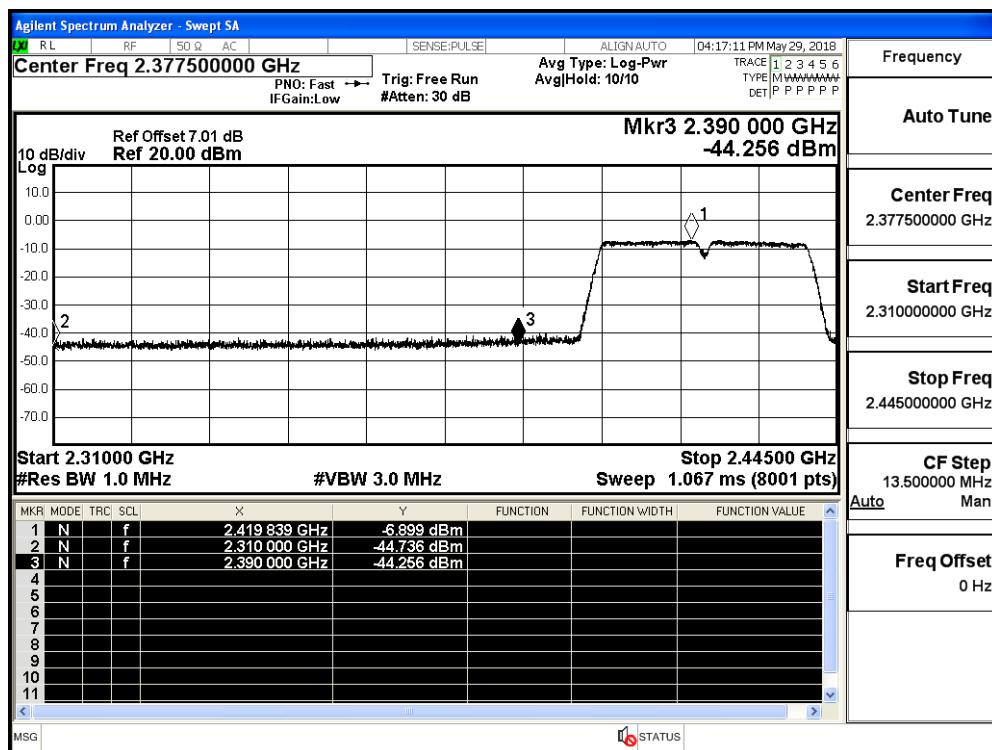
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_PEAK



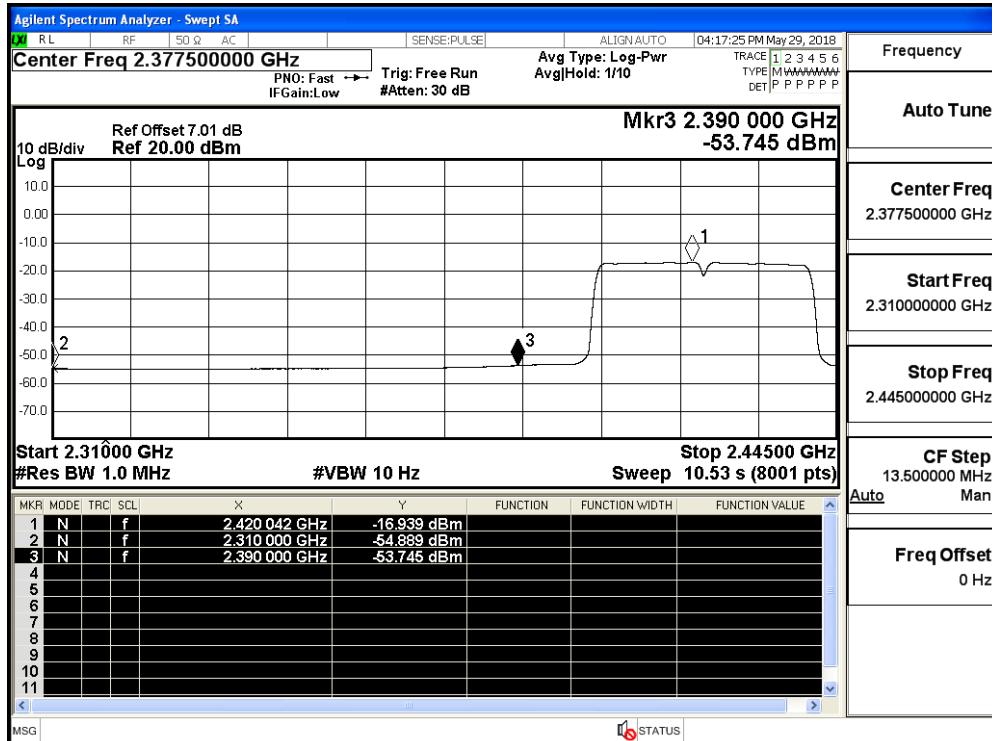
Restrict-band band-edge measurements_11N20SISO_2462_Ant1_AV



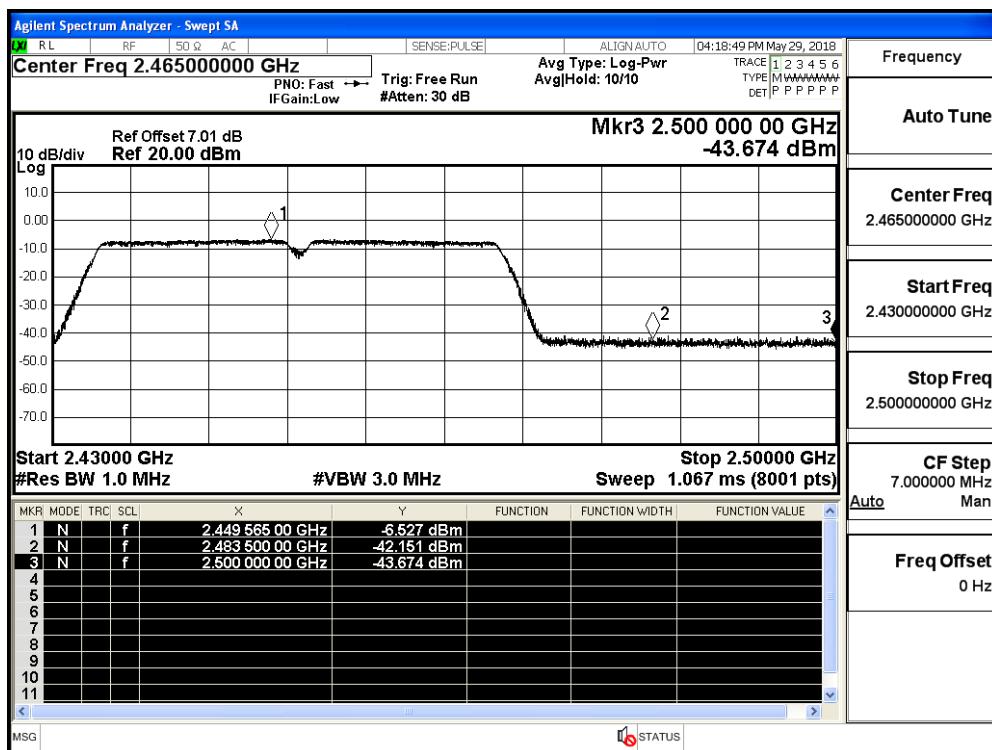
Restrict-band band-edge measurements_11N40SISO_2422_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2422_Ant1_AV



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_PEAK



Restrict-band band-edge measurements_11N40SISO_2452_Ant1_AV

