

Appendix F: Test Data for E-UTRA Band 5

Product Name: Smart Phone

Trade Mark: DOOGEE

Test Model: S96Pro

Environmental Conditions

| | |
|--------------------|------------|
| Temperature: | 22.9° C |
| Relative Humidity: | 53.3% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Diamond Lu |
| Supervised by: | Li Huan |

F.1 Conducted Output Power

| Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz) | | | | | | |
|---|---------|------------------|--------|-----------------------------|------------------------------|---------|
| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
| | | Size | Offset | | | |
| QPSK / 16QAM | LCH | 1 | 0 | 22.24 | 21.47 | PASS |
| | | 1 | 3 | 22.38 | 21.65 | PASS |
| | | 1 | 5 | 22.36 | 21.56 | PASS |
| | | 3 | 0 | 22.39 | 21.36 | PASS |
| | | 3 | 2 | 22.40 | 21.33 | PASS |
| | | 3 | 3 | 22.44 | 21.38 | PASS |
| | | 6 | 0 | 21.44 | 20.33 | PASS |
| | MCH | 1 | 0 | 22.59 | 21.53 | PASS |
| | | 1 | 3 | 22.72 | 21.75 | PASS |
| | | 1 | 5 | 22.59 | 21.53 | PASS |
| | | 3 | 0 | 22.70 | 21.56 | PASS |
| | | 3 | 2 | 22.68 | 21.54 | PASS |
| | | 3 | 3 | 22.71 | 21.54 | PASS |
| | | 6 | 0 | 21.67 | 20.69 | PASS |
| | HCH | 1 | 0 | 22.20 | 21.35 | PASS |
| | | 1 | 3 | 22.34 | 21.55 | PASS |
| | | 1 | 5 | 22.11 | 21.34 | PASS |
| | | 3 | 0 | 22.30 | 21.22 | PASS |
| | | 3 | 2 | 22.31 | 21.21 | PASS |
| | | 3 | 3 | 22.32 | 21.22 | PASS |
| | | 6 | 0 | 21.30 | 20.36 | PASS |

| Conducted Output Power Test Result (Channel Bandwidth: 3 MHz) | | | | | | |
|---|---------|------------------|--------|-----------------------------|------------------------------|---------|
| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
| | | Size | Offset | | | |
| QPSK / 16QAM | LCH | 1 | 0 | 22.31 | 21.61 | PASS |
| | | 1 | 7 | 22.41 | 21.62 | PASS |
| | | 1 | 14 | 22.46 | 21.73 | PASS |
| | | 8 | 0 | 21.39 | 20.46 | PASS |
| | | 8 | 4 | 21.36 | 20.46 | PASS |
| | | 8 | 7 | 21.49 | 20.52 | PASS |
| | | 15 | 0 | 21.38 | 20.42 | PASS |
| | MCH | 1 | 0 | 22.63 | 21.83 | PASS |
| | | 1 | 7 | 22.59 | 21.77 | PASS |
| | | 1 | 14 | 22.61 | 21.76 | PASS |
| | | 8 | 0 | 21.62 | 20.63 | PASS |
| | | 8 | 4 | 21.61 | 20.64 | PASS |
| | | 8 | 7 | 21.62 | 20.62 | PASS |
| | | 15 | 0 | 21.63 | 20.58 | PASS |
| | HCH | 1 | 0 | 22.30 | 21.21 | PASS |
| | | 1 | 7 | 22.22 | 21.21 | PASS |
| | | 1 | 14 | 22.27 | 21.24 | PASS |
| | | 8 | 0 | 21.30 | 20.32 | PASS |
| | | 8 | 4 | 21.29 | 20.32 | PASS |
| | | 8 | 7 | 21.28 | 20.29 | PASS |
| | | 15 | 0 | 21.27 | 20.19 | PASS |

| Conducted Output Power Test Result (Channel Bandwidth: 5 MHz) | | | | | | |
|---|---------|------------------|--------|-----------------------------|------------------------------|---------|
| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
| | | Size | Offset | | | |
| QPSK / 16QAM | LCH | 1 | 0 | 22.30 | 21.37 | PASS |
| | | 1 | 12 | 22.60 | 21.58 | PASS |
| | | 1 | 24 | 22.48 | 21.56 | PASS |
| | | 12 | 0 | 21.30 | 20.31 | PASS |
| | | 12 | 6 | 21.37 | 20.32 | PASS |
| | | 12 | 13 | 21.60 | 20.58 | PASS |
| | | 25 | 0 | 21.49 | 20.50 | PASS |
| | MCH | 1 | 0 | 22.58 | 21.85 | PASS |
| | | 1 | 12 | 22.71 | 21.94 | PASS |
| | | 1 | 24 | 22.54 | 21.80 | PASS |
| | | 12 | 0 | 21.62 | 20.68 | PASS |
| | | 12 | 6 | 21.63 | 20.70 | PASS |
| | | 12 | 13 | 21.66 | 20.64 | PASS |
| | | 25 | 0 | 21.64 | 20.66 | PASS |
| | HCH | 1 | 0 | 22.31 | 21.34 | PASS |
| | | 1 | 12 | 22.34 | 21.40 | PASS |
| | | 1 | 24 | 22.26 | 21.27 | PASS |
| | | 12 | 0 | 21.25 | 20.26 | PASS |
| | | 12 | 6 | 21.24 | 20.23 | PASS |
| | | 12 | 13 | 21.24 | 20.27 | PASS |
| | | 25 | 0 | 21.30 | 20.31 | PASS |

| Conducted Output Power Test Result (Channel Bandwidth: 10 MHz) | | | | | | |
|--|---------|------------------|--------|-----------------------------|------------------------------|---------|
| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
| | | Size | Offset | | | |
| QPSK / 16QAM | LCH | 1 | 0 | 22.33 | 21.59 | PASS |
| | | 1 | 24 | 22.68 | 21.84 | PASS |
| | | 1 | 49 | 22.59 | 21.84 | PASS |
| | | 25 | 0 | 21.53 | 20.50 | PASS |
| | | 25 | 12 | 21.48 | 20.51 | PASS |
| | | 25 | 25 | 21.73 | 20.76 | PASS |
| | | 50 | 0 | 21.64 | 20.63 | PASS |
| | MCH | 1 | 0 | 22.60 | 21.80 | PASS |
| | | 1 | 24 | 22.75 | 21.94 | PASS |
| | | 1 | 49 | 22.49 | 21.73 | PASS |
| | | 25 | 0 | 21.73 | 20.73 | PASS |
| | | 25 | 12 | 21.74 | 20.70 | PASS |
| | | 25 | 25 | 21.56 | 20.63 | PASS |
| | | 50 | 0 | 21.59 | 20.67 | PASS |
| | HCH | 1 | 0 | 22.51 | 21.75 | PASS |
| | | 1 | 24 | 22.72 | 21.93 | PASS |
| | | 1 | 49 | 22.65 | 21.91 | PASS |
| | | 25 | 0 | 21.70 | 20.72 | PASS |
| | | 25 | 12 | 21.70 | 20.68 | PASS |
| | | 25 | 25 | 21.73 | 20.73 | PASS |
| | | 50 | 0 | 21.70 | 20.68 | PASS |

F.2 Peak-to-Average Ratio

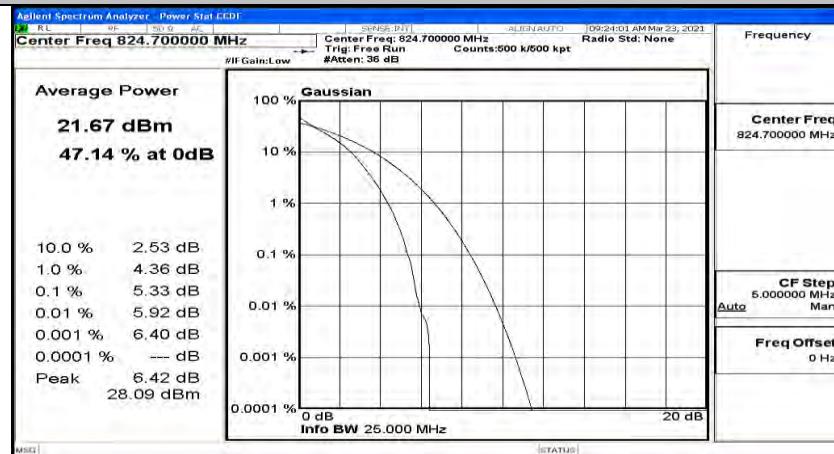
| Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz) | | | | |
|--|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 5.33 | <13 | PASS |
| | MCH | 5.25 | <13 | PASS |
| | HCH | 5.08 | <13 | PASS |
| 16QAM | LCH | 6.05 | <13 | PASS |
| | MCH | 6.02 | <13 | PASS |
| | HCH | 5.97 | <13 | PASS |

| Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz) | | | | |
|--|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 5.36 | <13 | PASS |
| | MCH | 5.16 | <13 | PASS |
| | HCH | 5.19 | <13 | PASS |
| 16QAM | LCH | 6.11 | <13 | PASS |
| | MCH | 6.11 | <13 | PASS |
| | HCH | 6.02 | <13 | PASS |

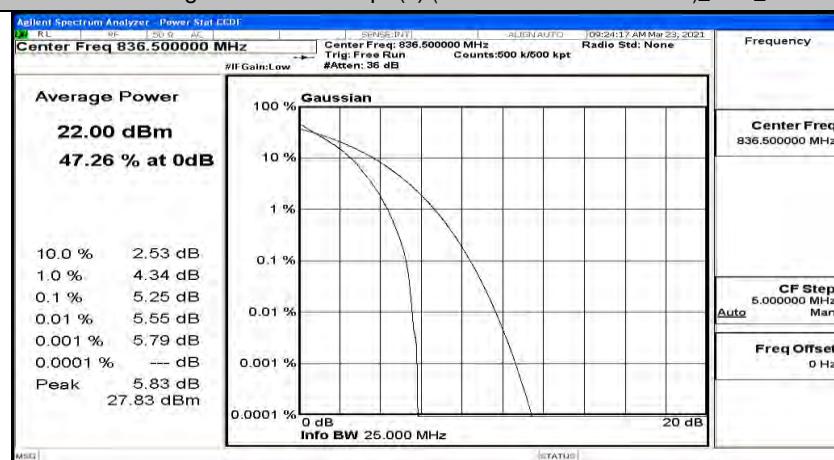
| Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz) | | | | |
|--|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 5.41 | <13 | PASS |
| | MCH | 5.29 | <13 | PASS |
| | HCH | 5.27 | <13 | PASS |
| 16QAM | LCH | 6.13 | <13 | PASS |
| | MCH | 6.05 | <13 | PASS |
| | HCH | 6 | <13 | PASS |

| Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz) | | | | |
|---|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 5.37 | <13 | PASS |
| | MCH | 5.29 | <13 | PASS |
| | HCH | 5.32 | <13 | PASS |
| 16QAM | LCH | 6.09 | <13 | PASS |
| | MCH | 6.13 | <13 | PASS |
| | HCH | 6.13 | <13 | PASS |

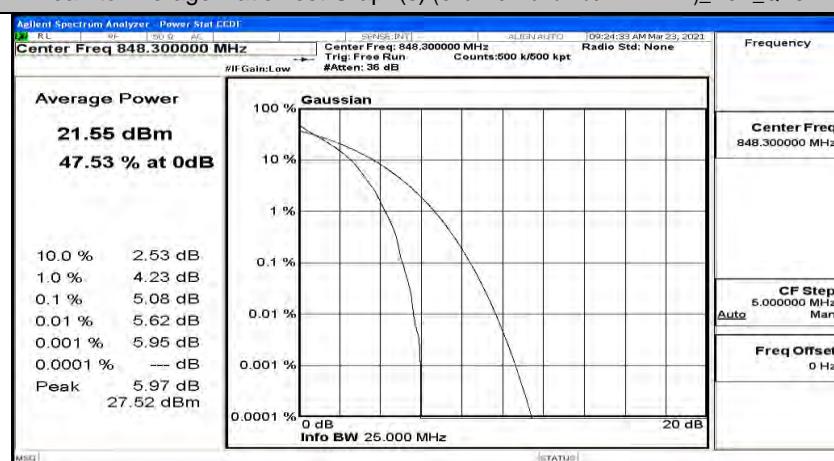
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



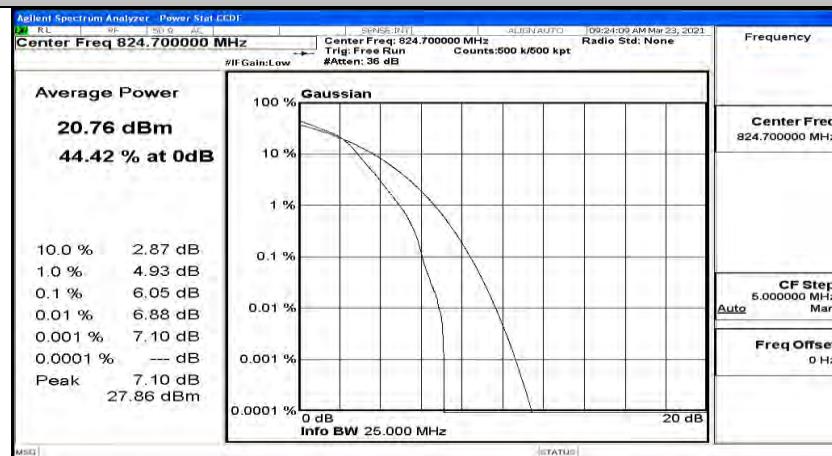
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



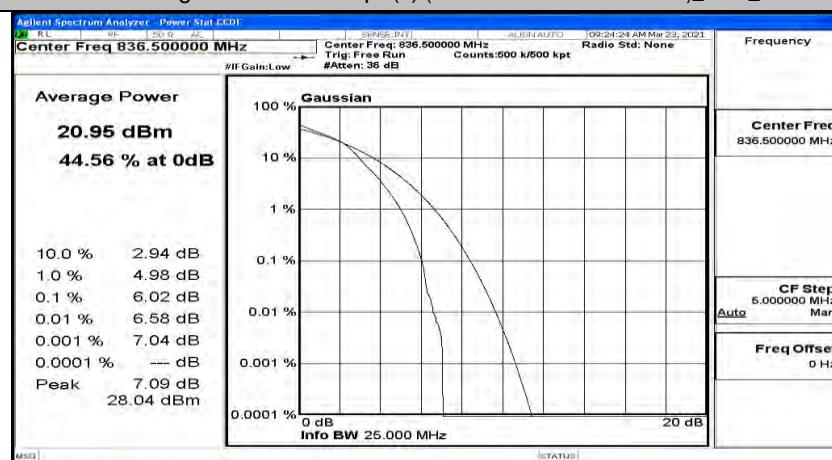
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



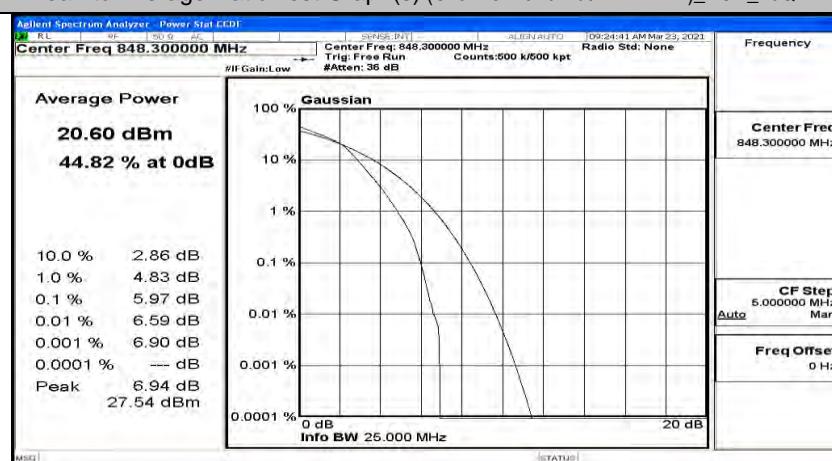
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



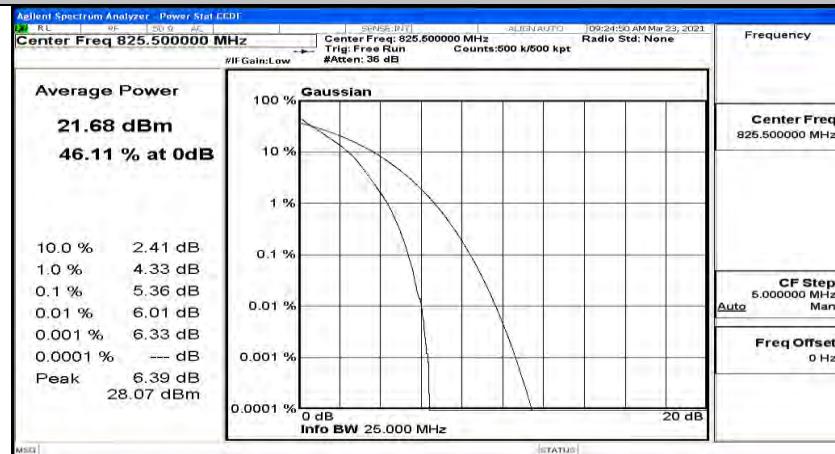
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



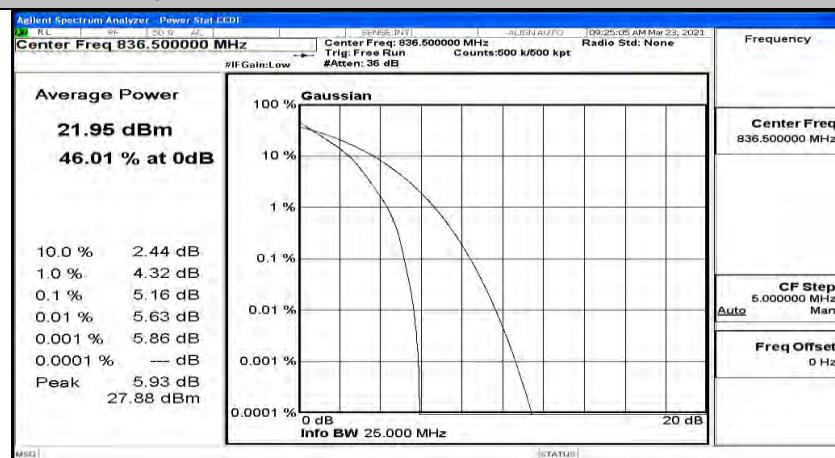
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



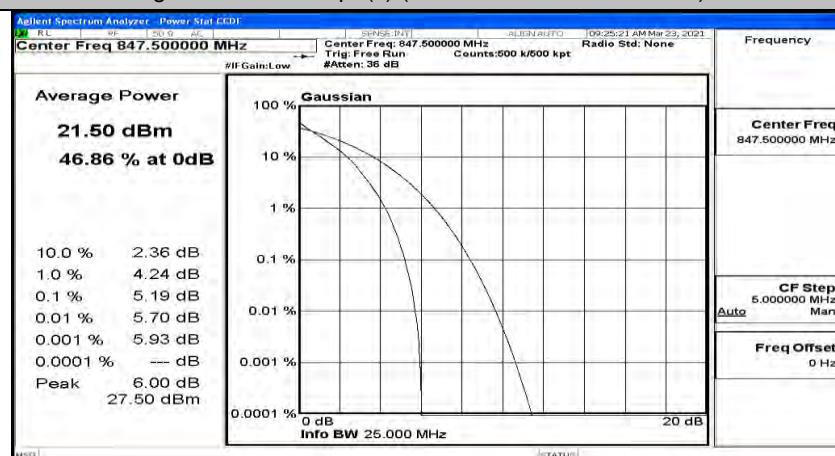
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



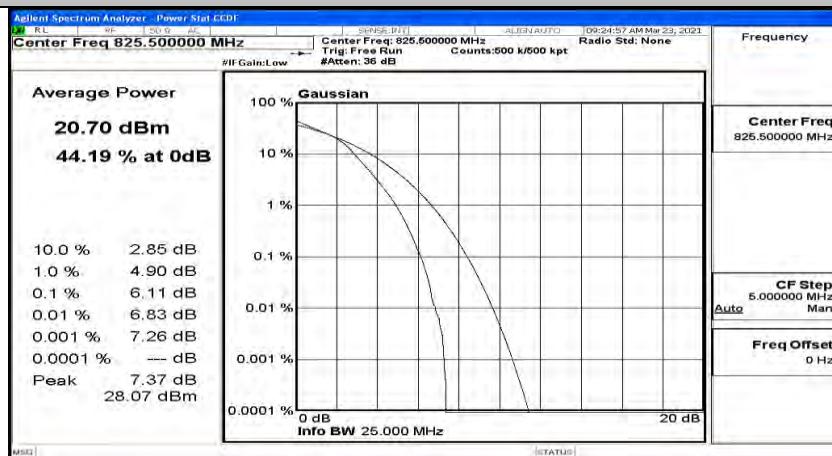
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



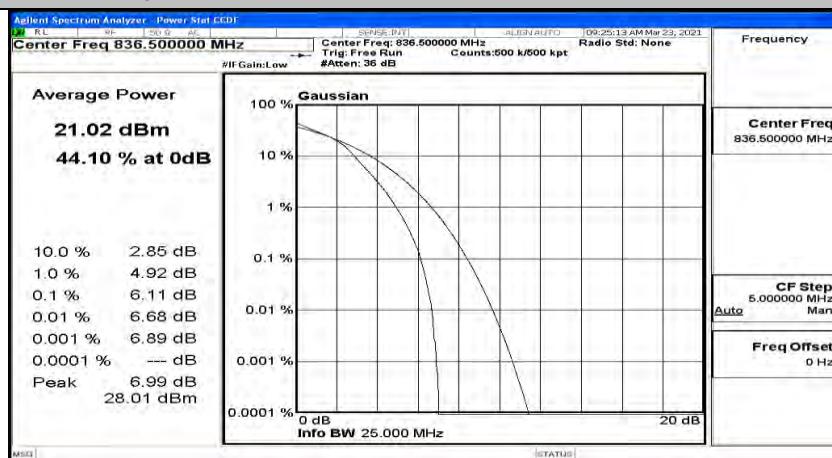
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



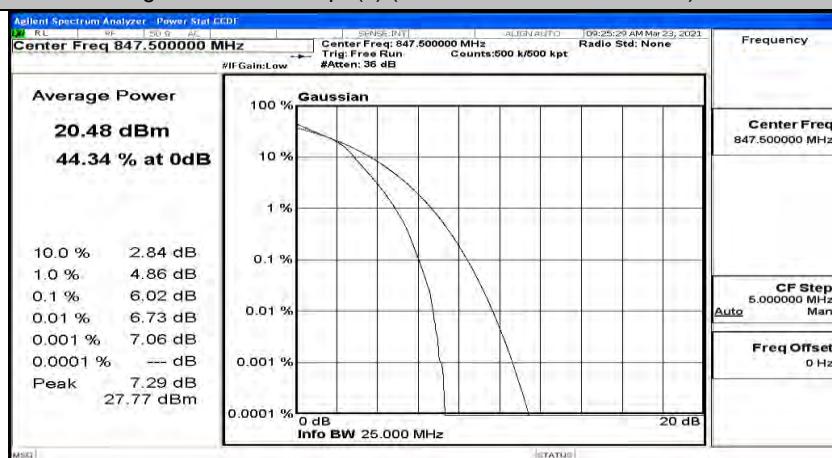
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



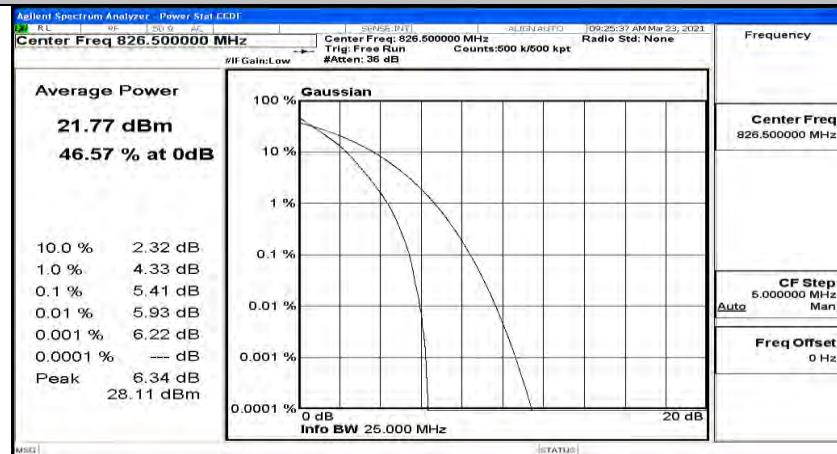
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



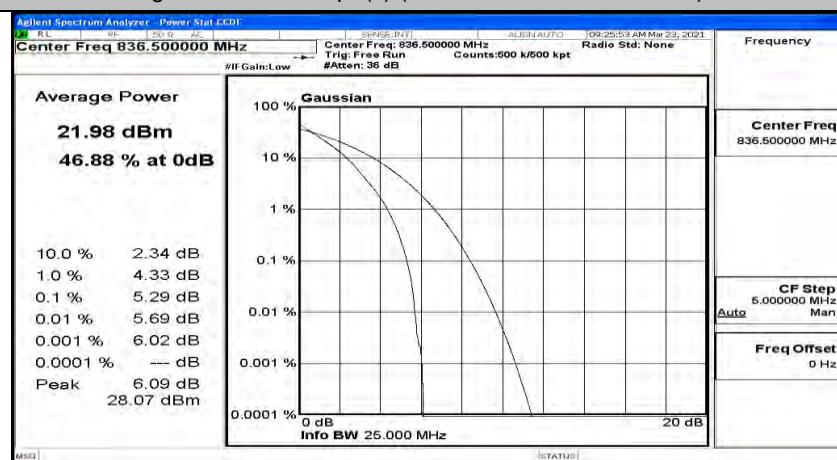
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



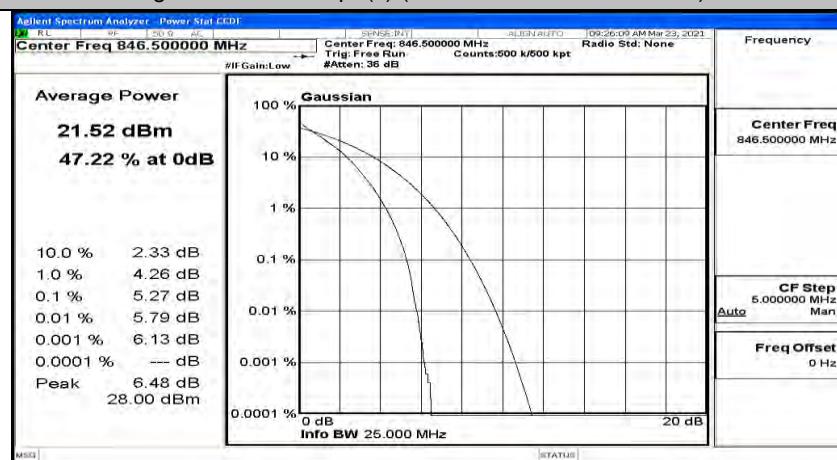
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



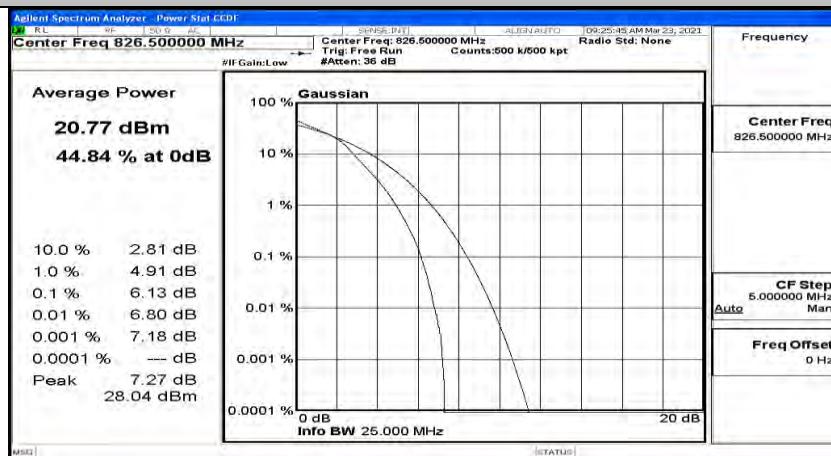
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



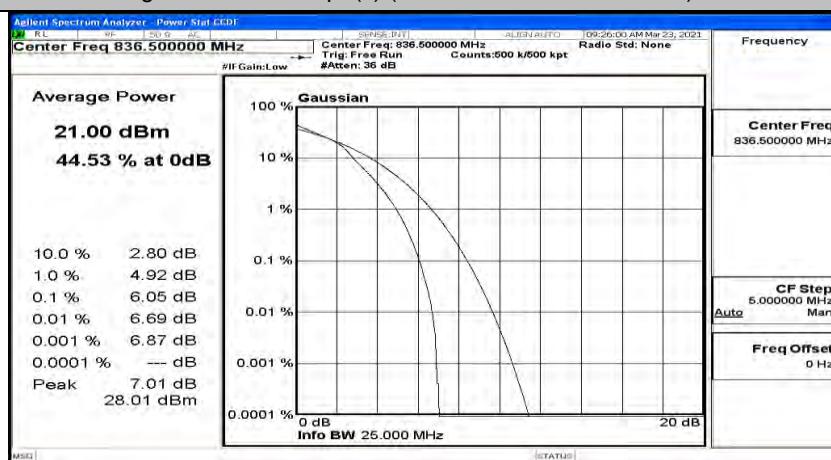
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



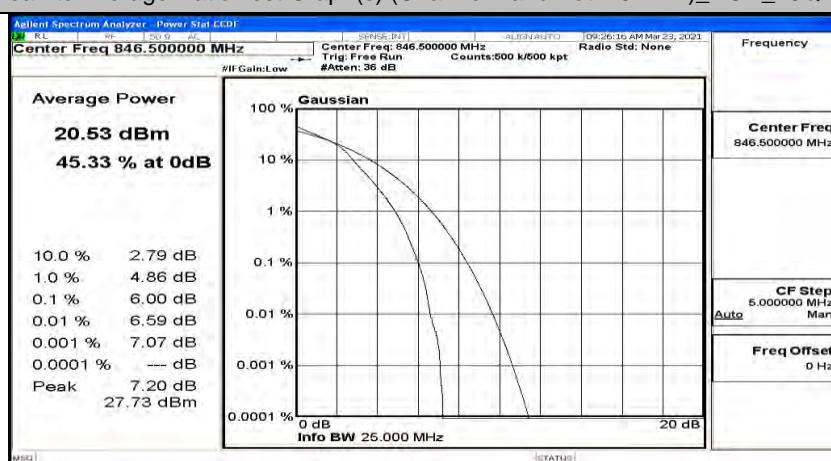
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



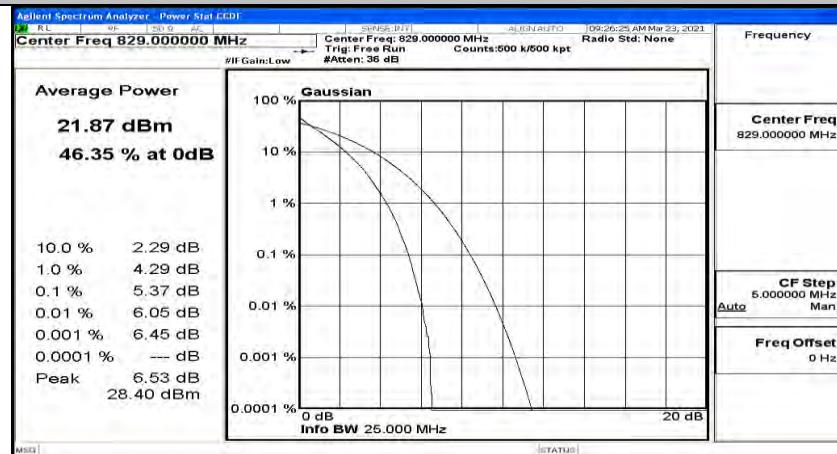
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



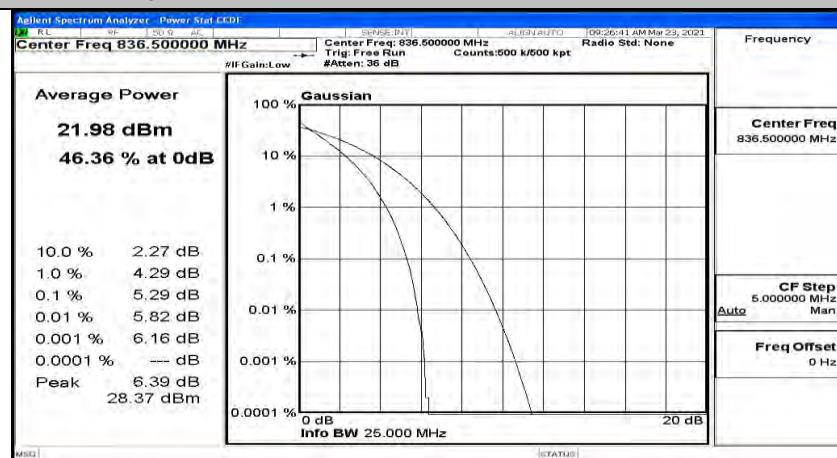
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



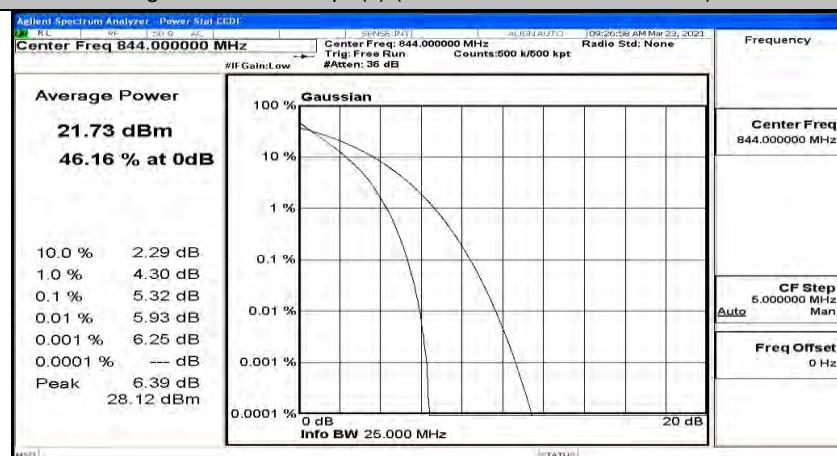
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



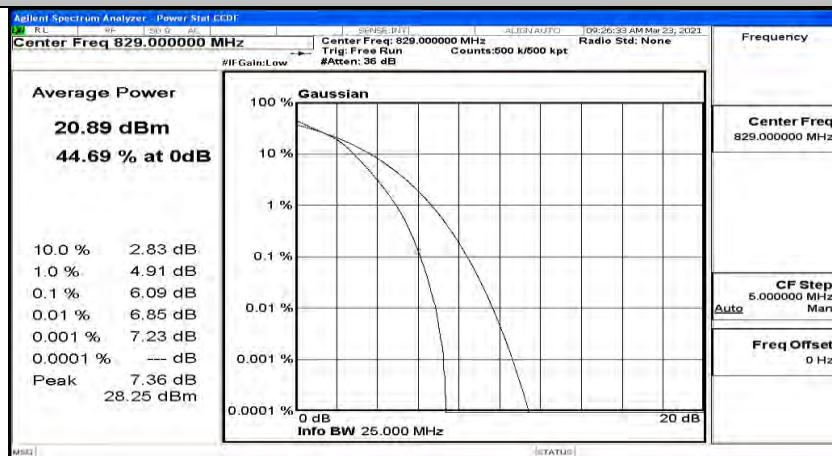
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



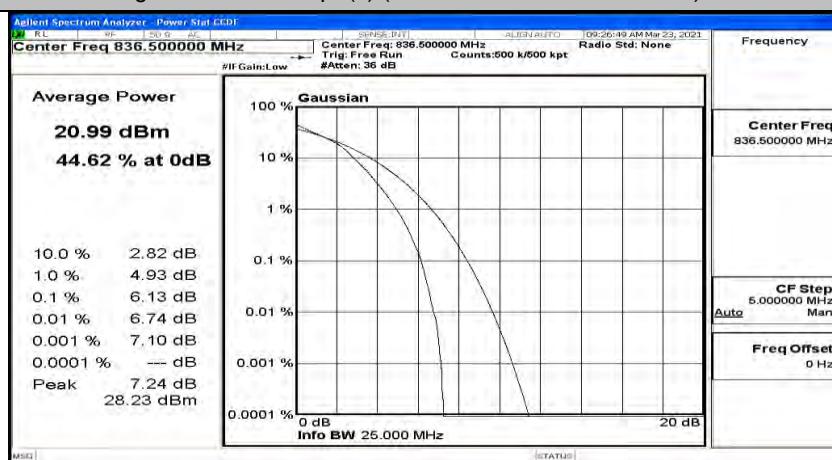
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



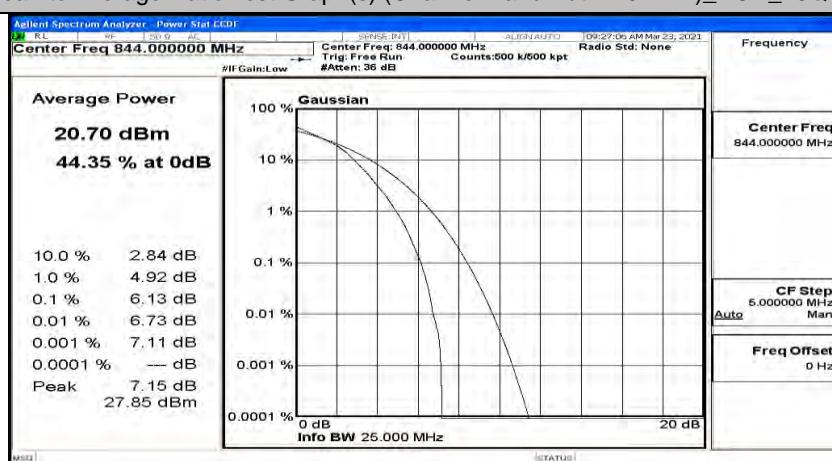
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



F.3 26dB Bandwidth and Occupied Bandwidth

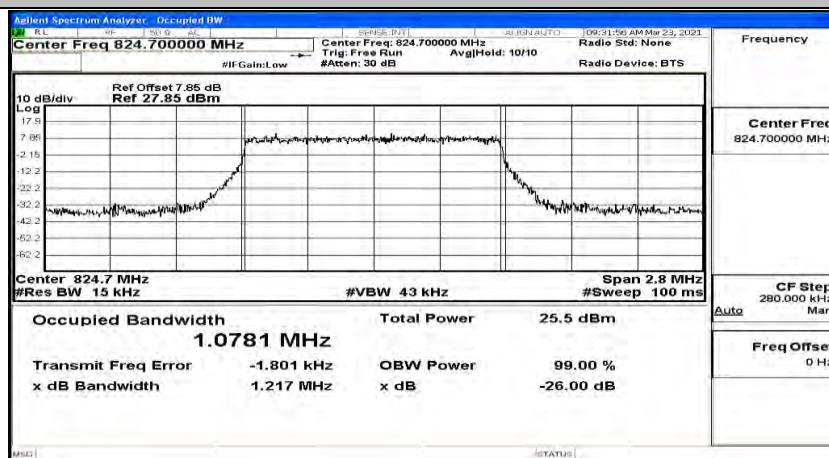
| EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz) | | | | |
|--|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 1.0781 | 1.217 | PASS |
| | MCH | 1.0783 | 1.230 | PASS |
| | HCH | 1.0743 | 1.211 | PASS |
| 16QAM | LCH | 1.0758 | 1.208 | PASS |
| | MCH | 1.0760 | 1.231 | PASS |
| | HCH | 1.0784 | 1.232 | PASS |

| EBW & OBW Test Result (Channel Bandwidth: 3 MHz) | | | | |
|--|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 2.6687 | 2.833 | PASS |
| | MCH | 2.6818 | 2.824 | PASS |
| | HCH | 2.6710 | 2.812 | PASS |
| 16QAM | LCH | 2.6802 | 2.811 | PASS |
| | MCH | 2.6796 | 2.839 | PASS |
| | HCH | 2.6755 | 2.847 | PASS |

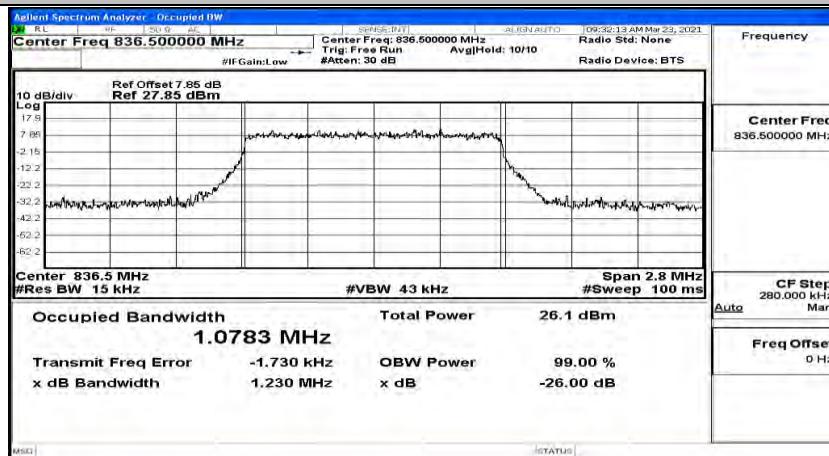
| EBW & OBW Test Result (Channel Bandwidth: 5 MHz) | | | | |
|--|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 4.4651 | 4.748 | PASS |
| | MCH | 4.4672 | 4.752 | PASS |
| | HCH | 4.4741 | 4.730 | PASS |
| 16QAM | LCH | 4.4689 | 4.748 | PASS |
| | MCH | 4.4701 | 4.769 | PASS |
| | HCH | 4.4638 | 4.732 | PASS |

| EBW & OBW Test Result (Channel Bandwidth: 10 MHz) | | | | |
|---|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 8.9390 | 9.394 | PASS |
| | MCH | 8.9351 | 9.391 | PASS |
| | HCH | 8.9455 | 9.383 | PASS |
| 16QAM | LCH | 8.9228 | 9.338 | PASS |
| | MCH | 8.9355 | 9.346 | PASS |
| | HCH | 8.9321 | 9.351 | PASS |

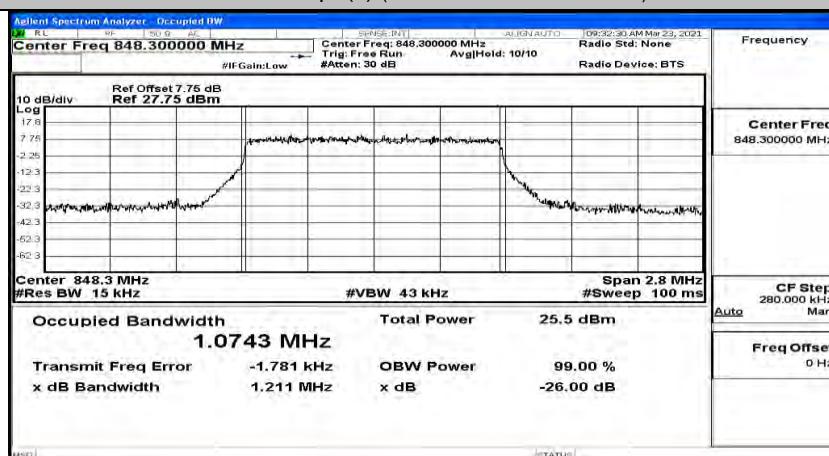
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



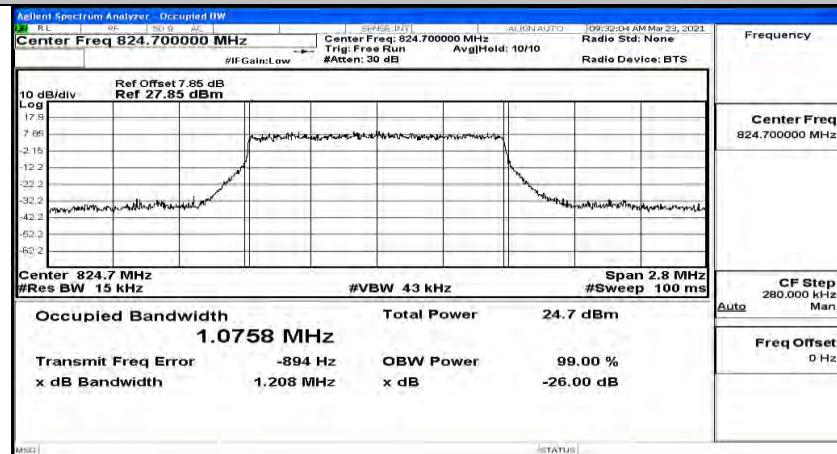
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



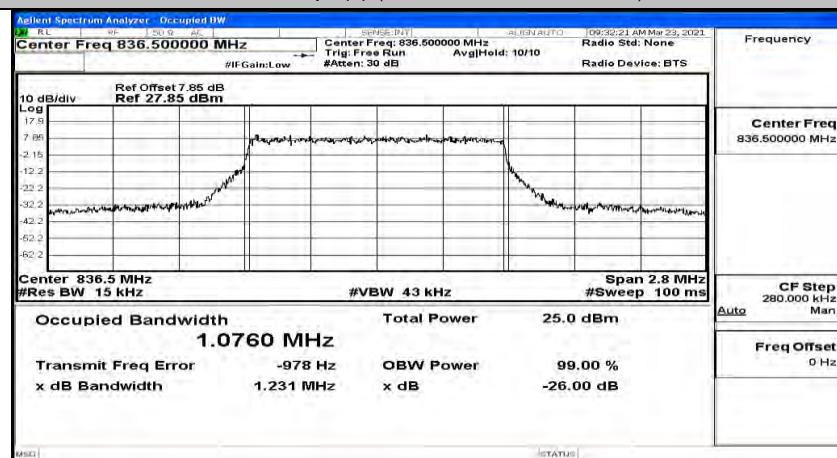
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



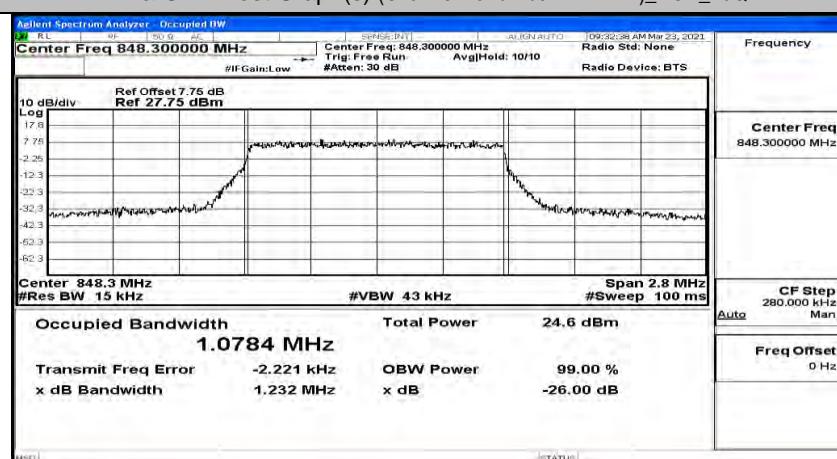
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



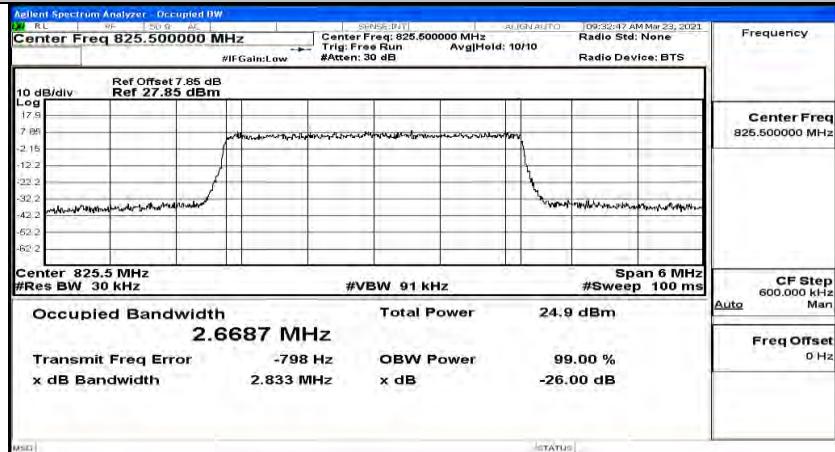
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



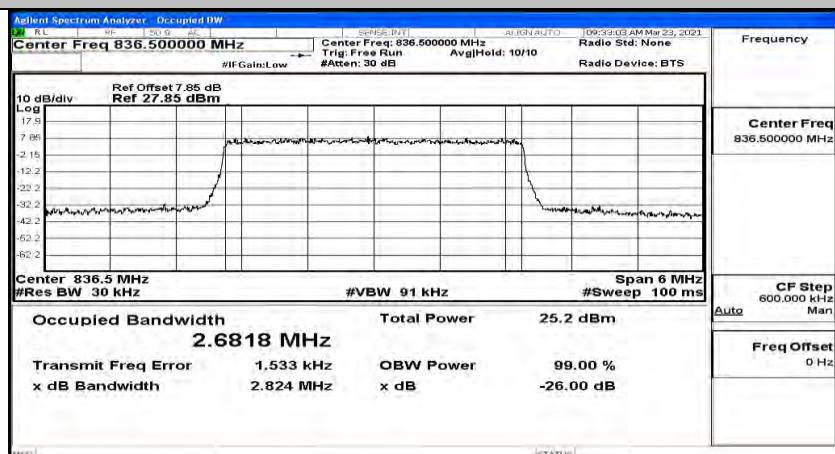
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



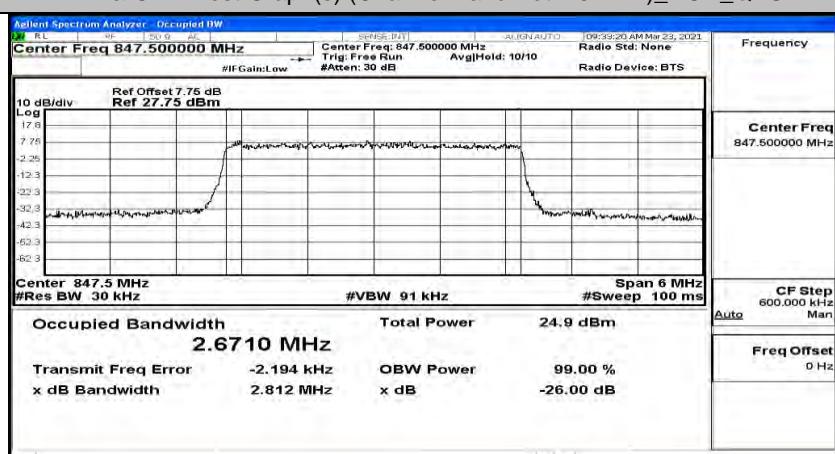
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



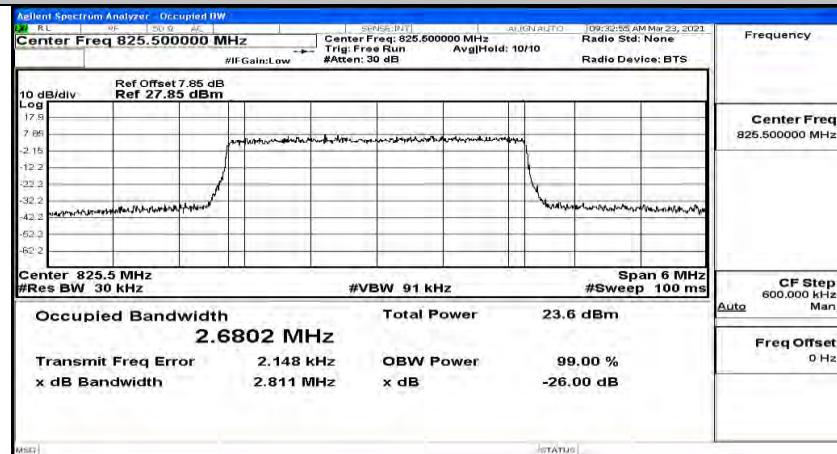
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



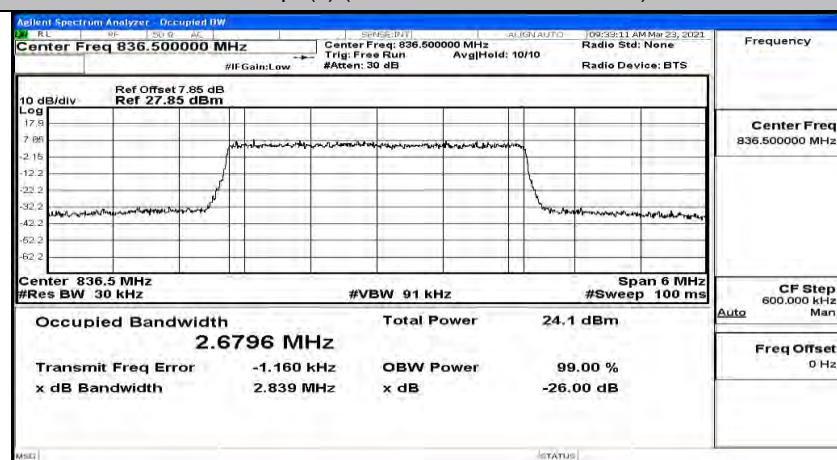
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



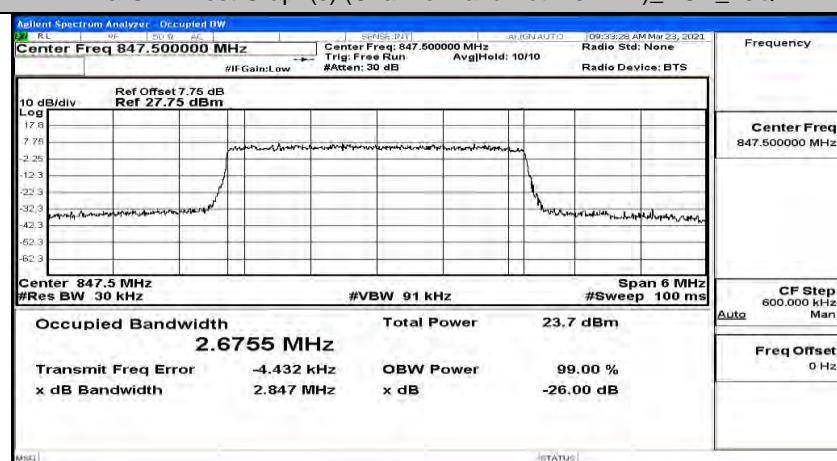
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM

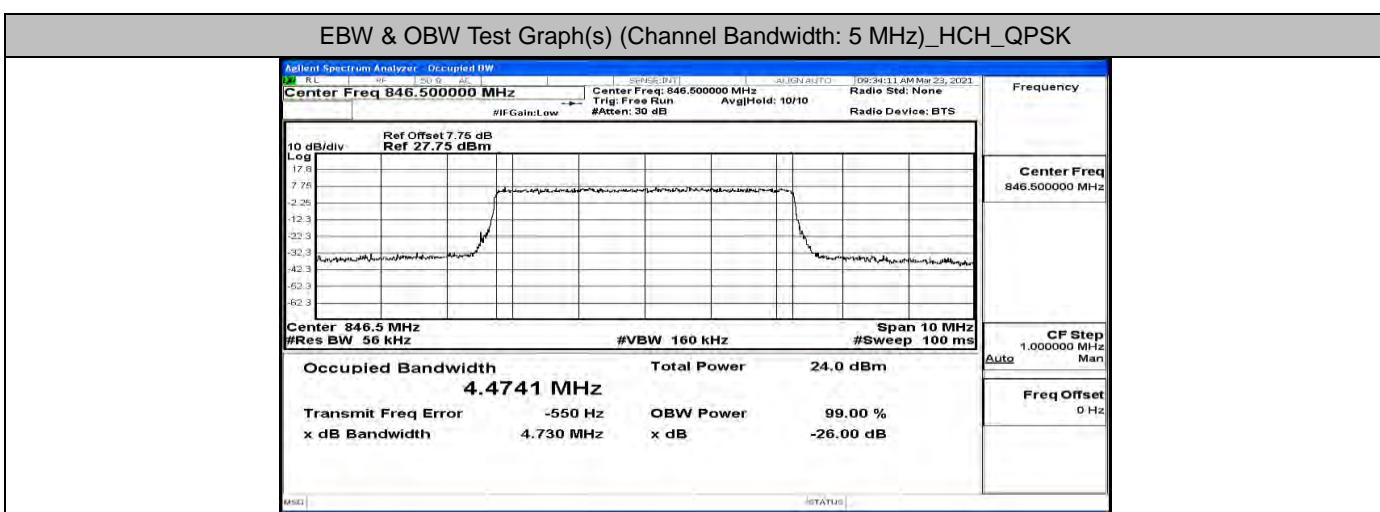
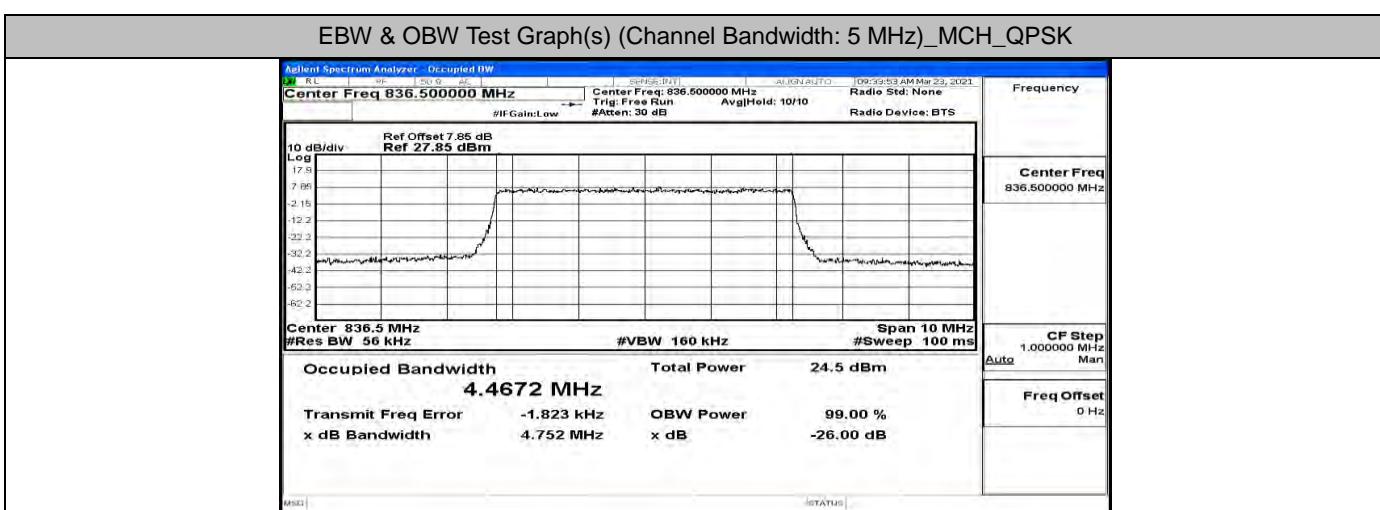
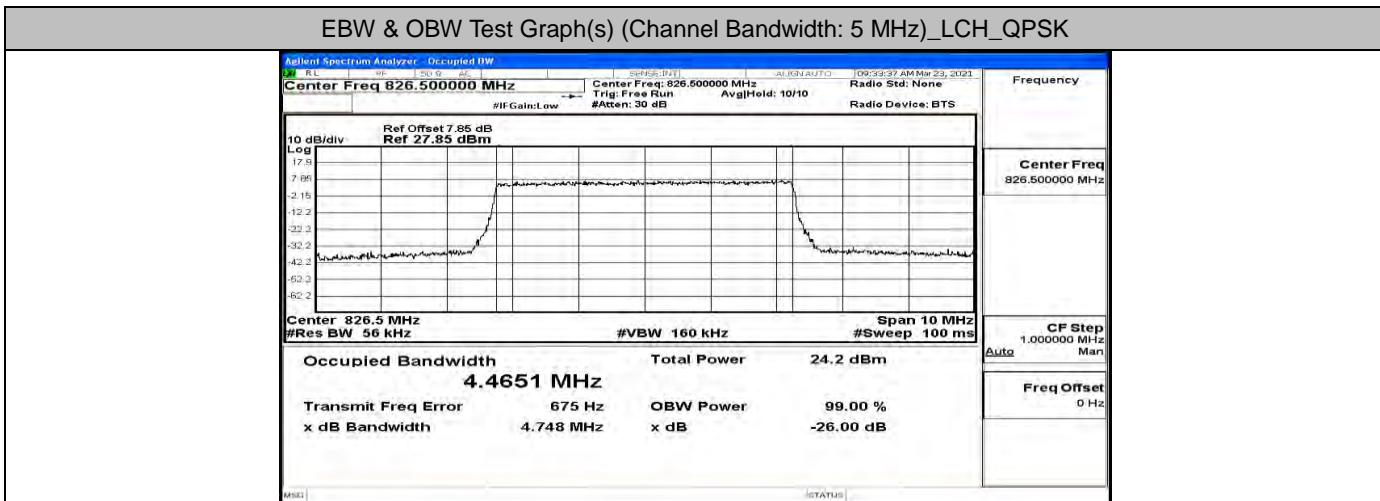


EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM

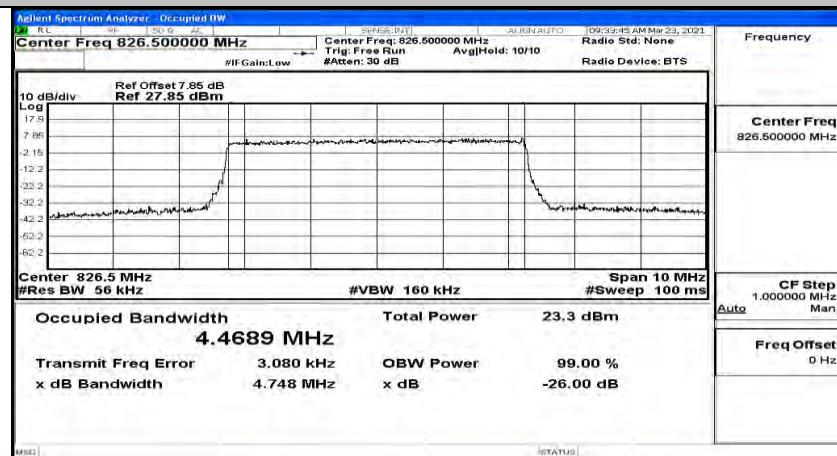


EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM

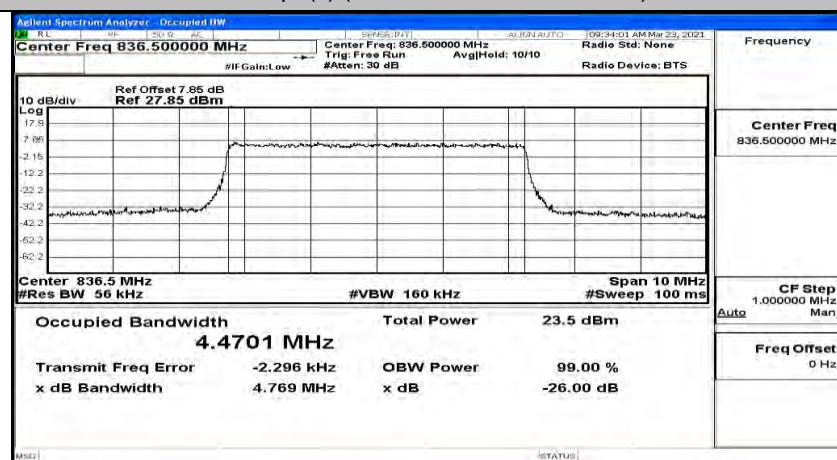




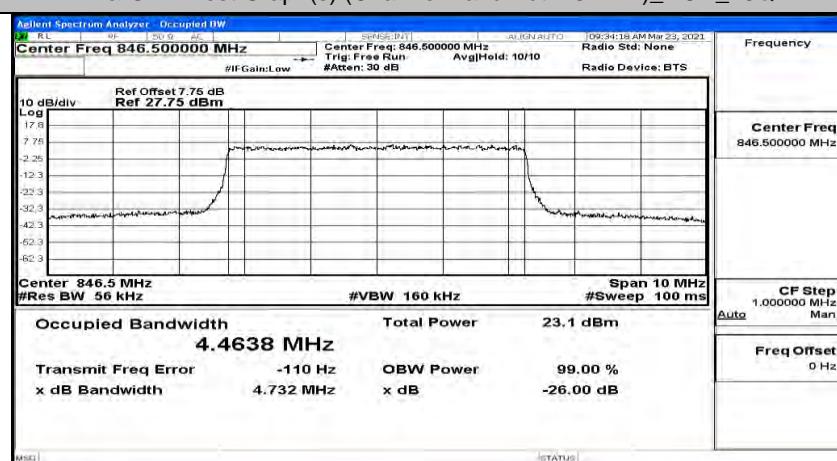
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



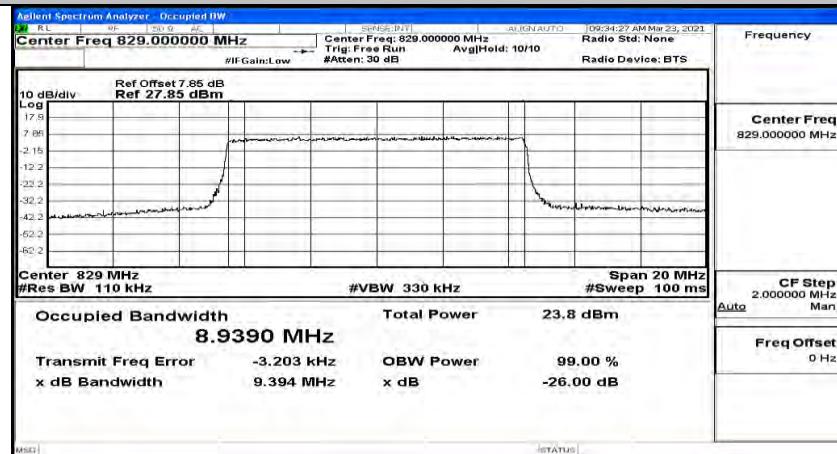
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



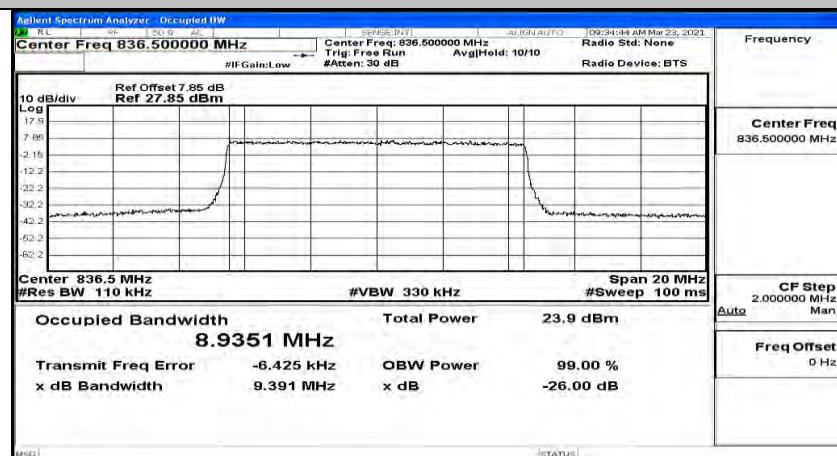
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



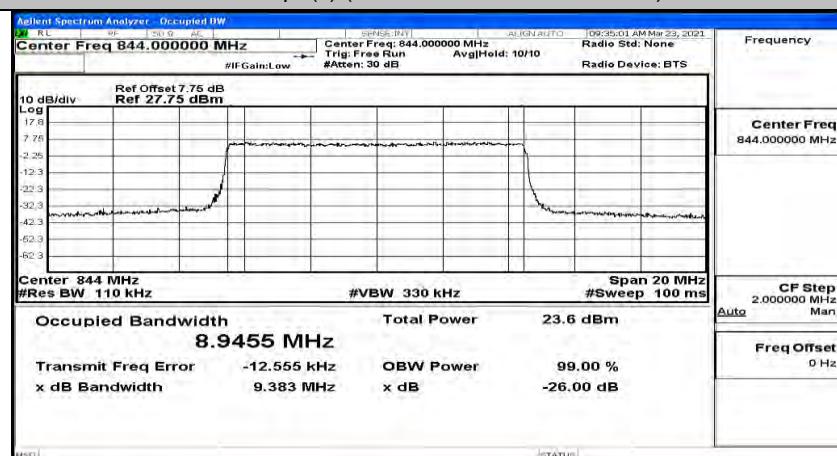
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



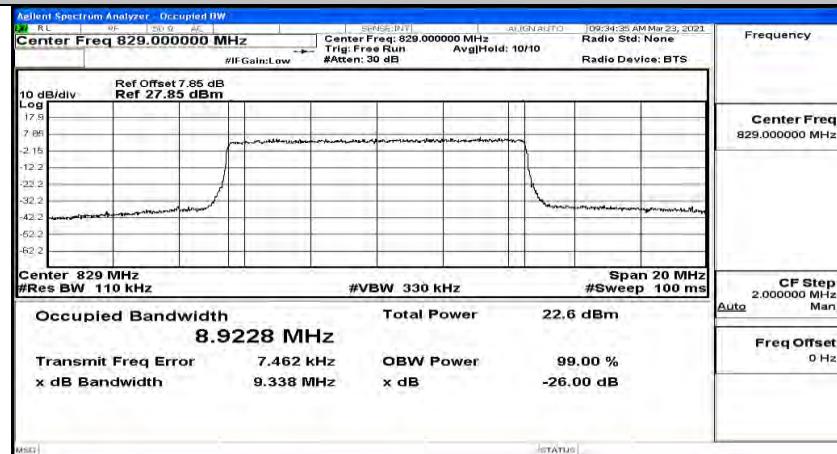
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



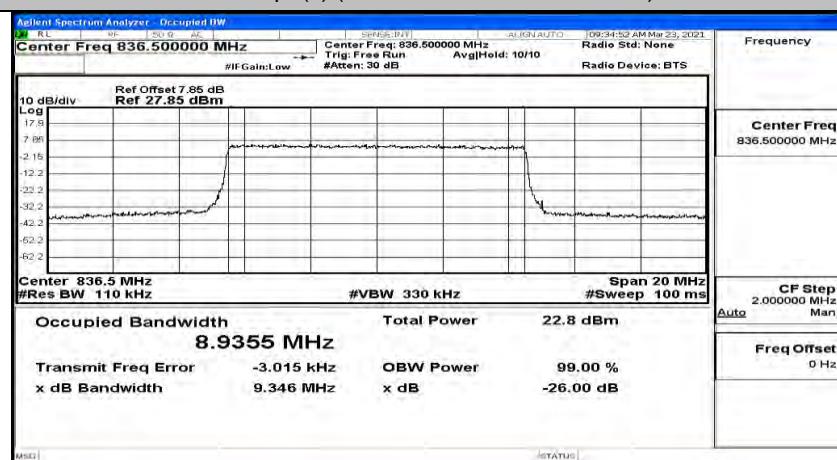
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



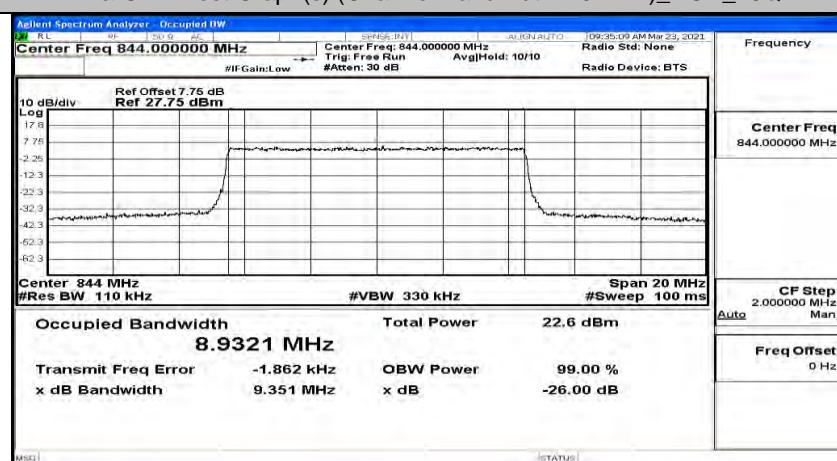
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM

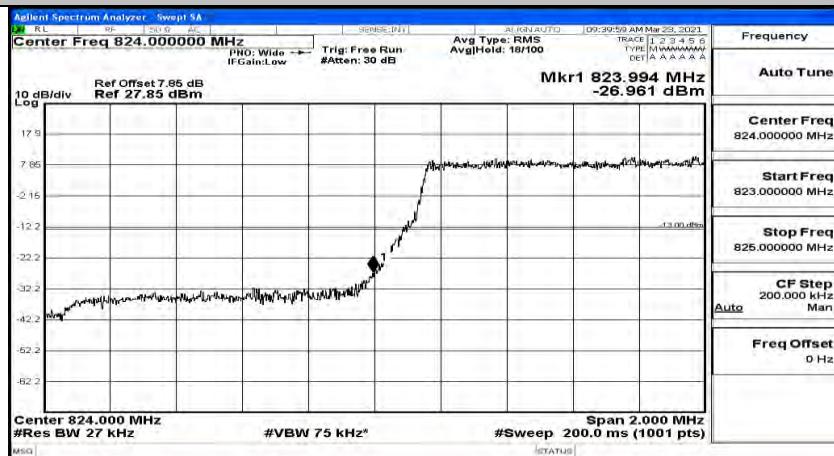


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

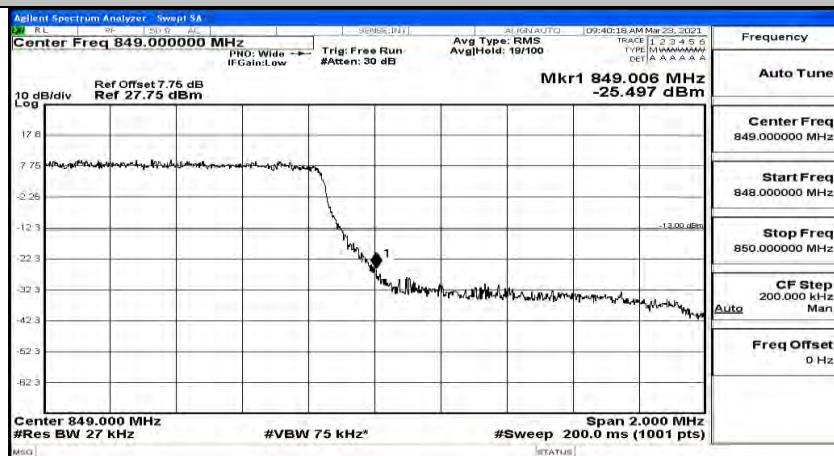


F.4 Band Edge

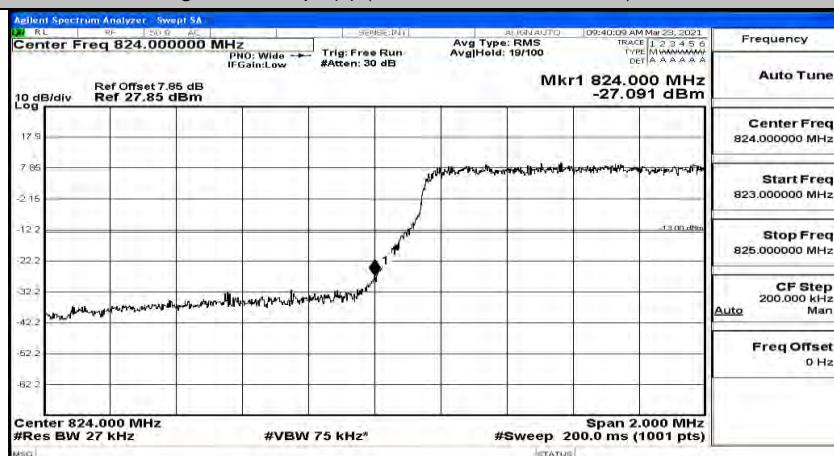
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



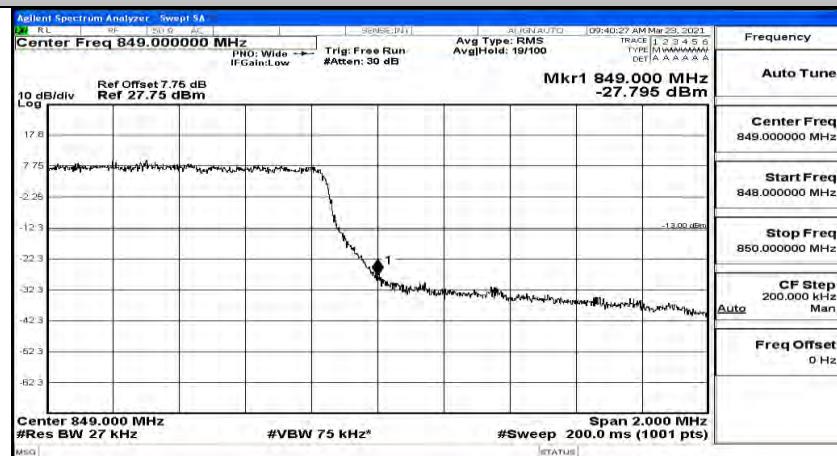
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



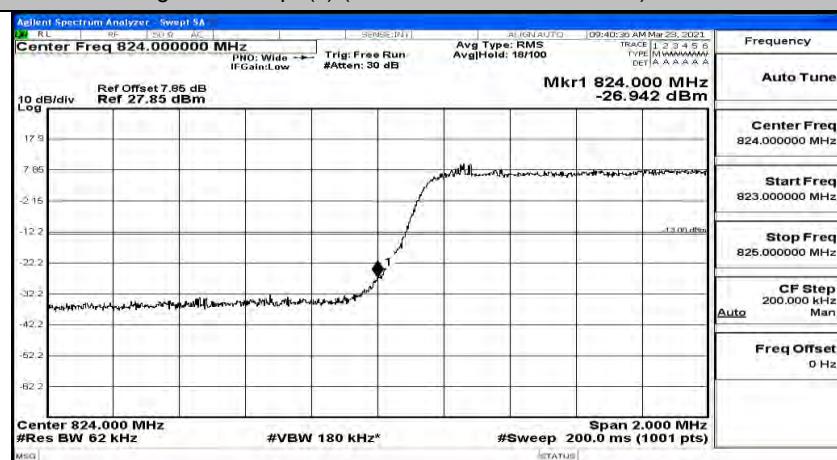
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



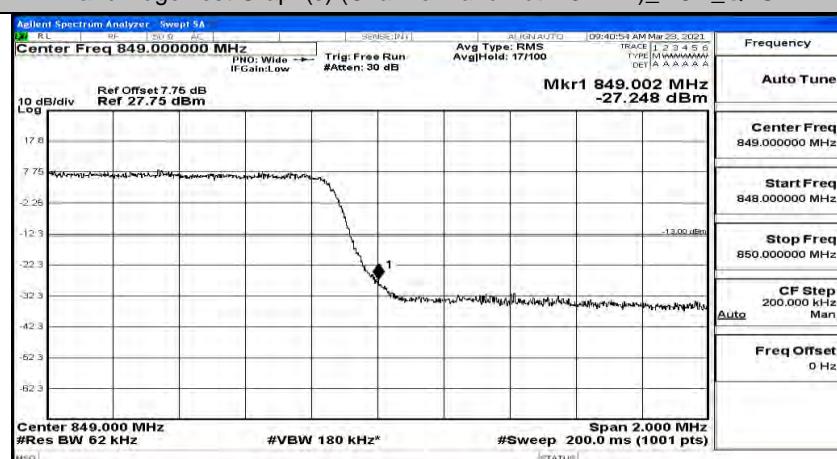
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM

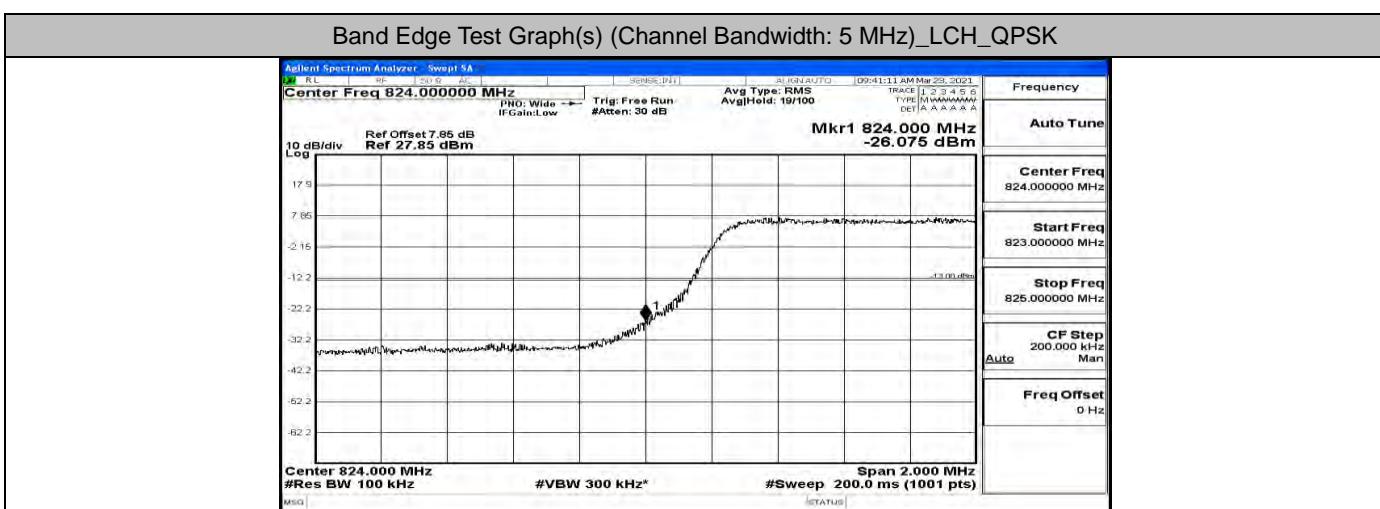
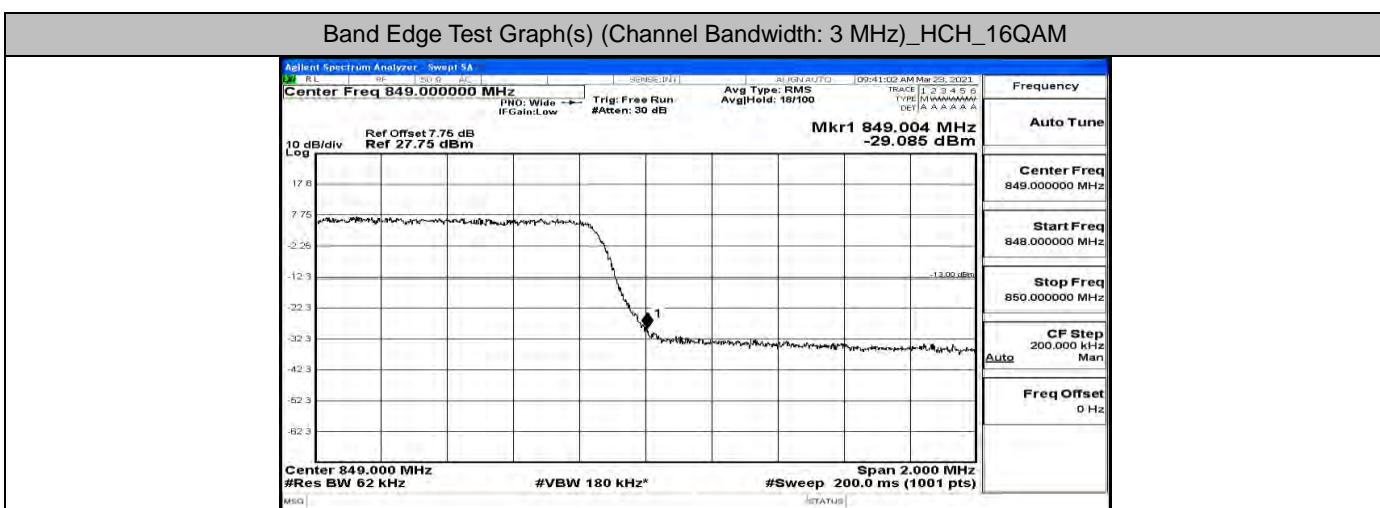
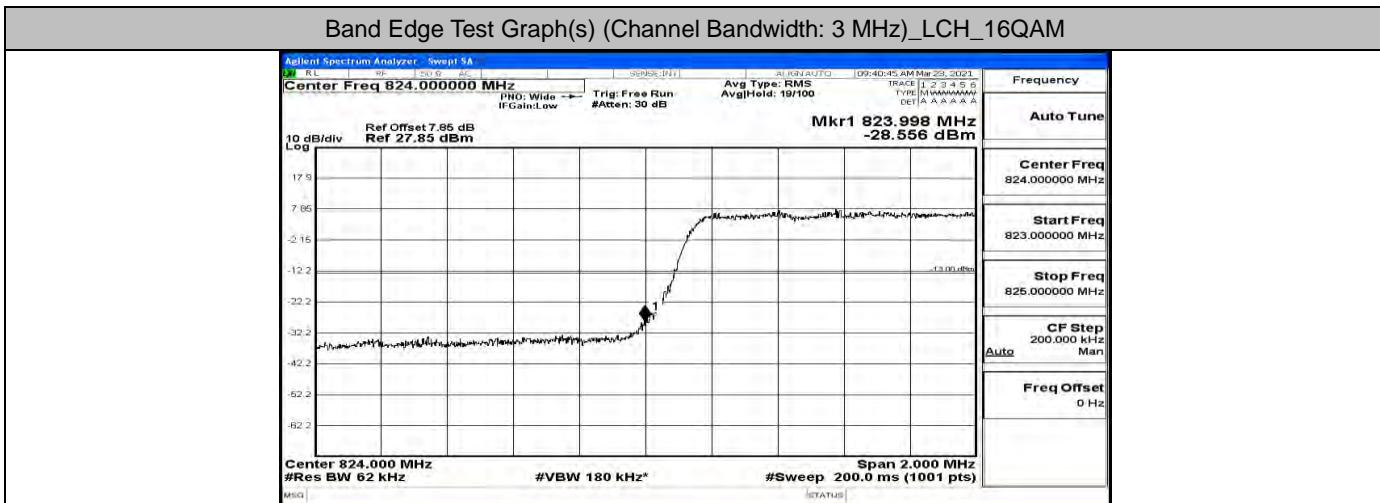


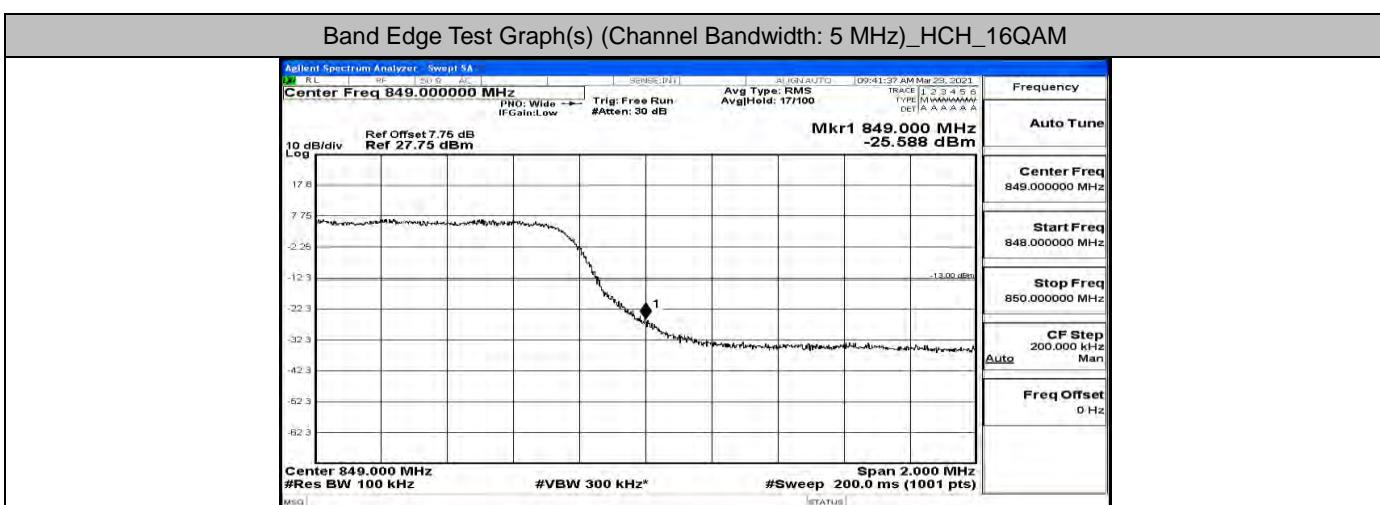
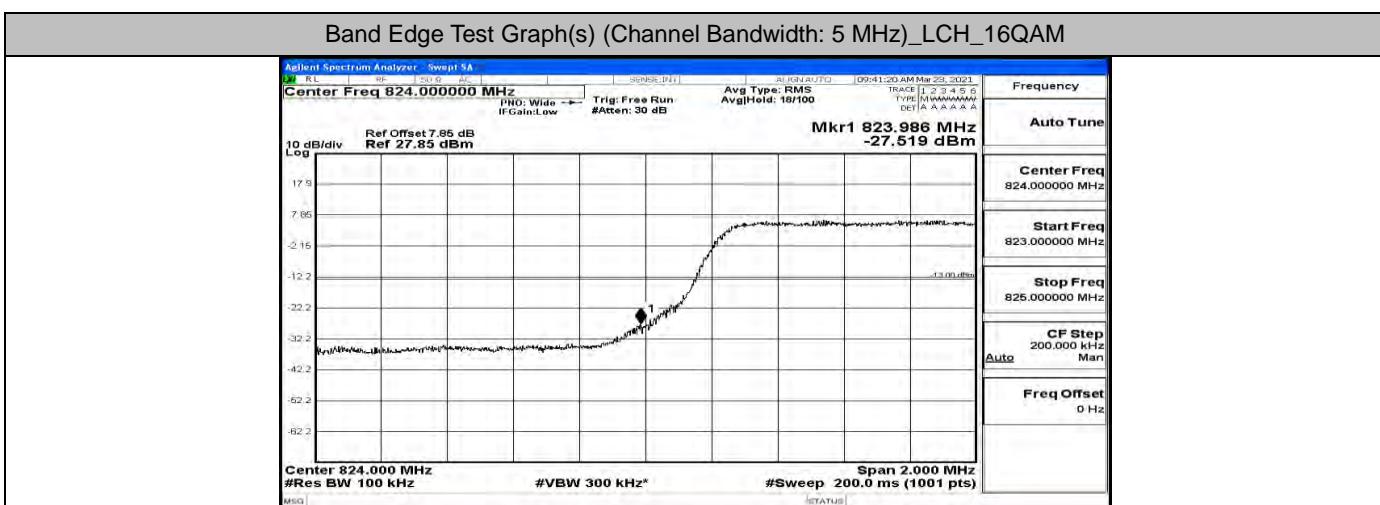
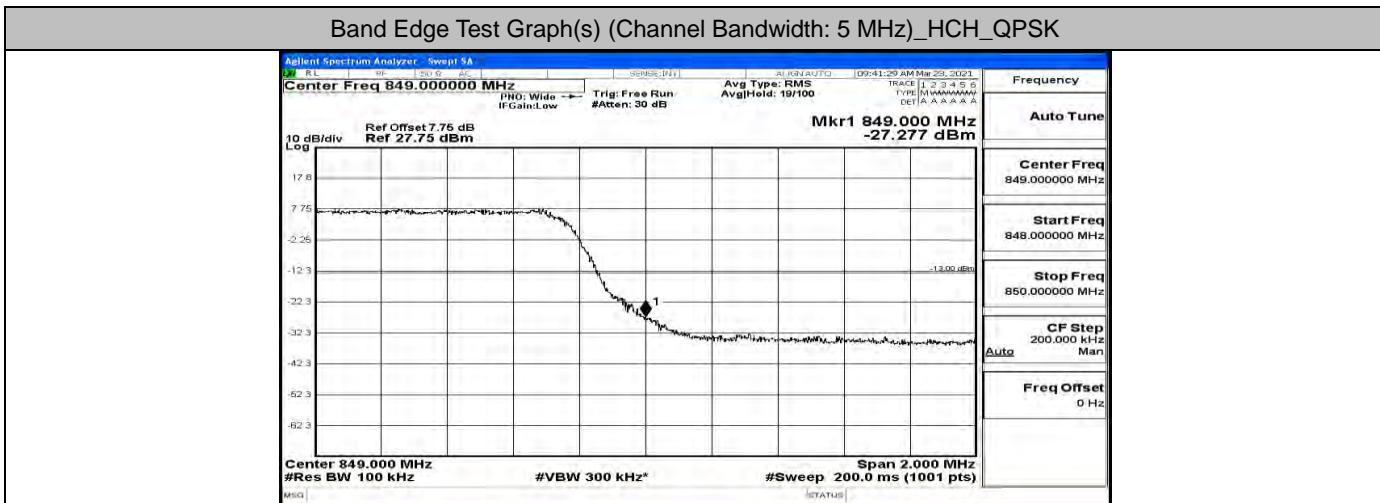
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK

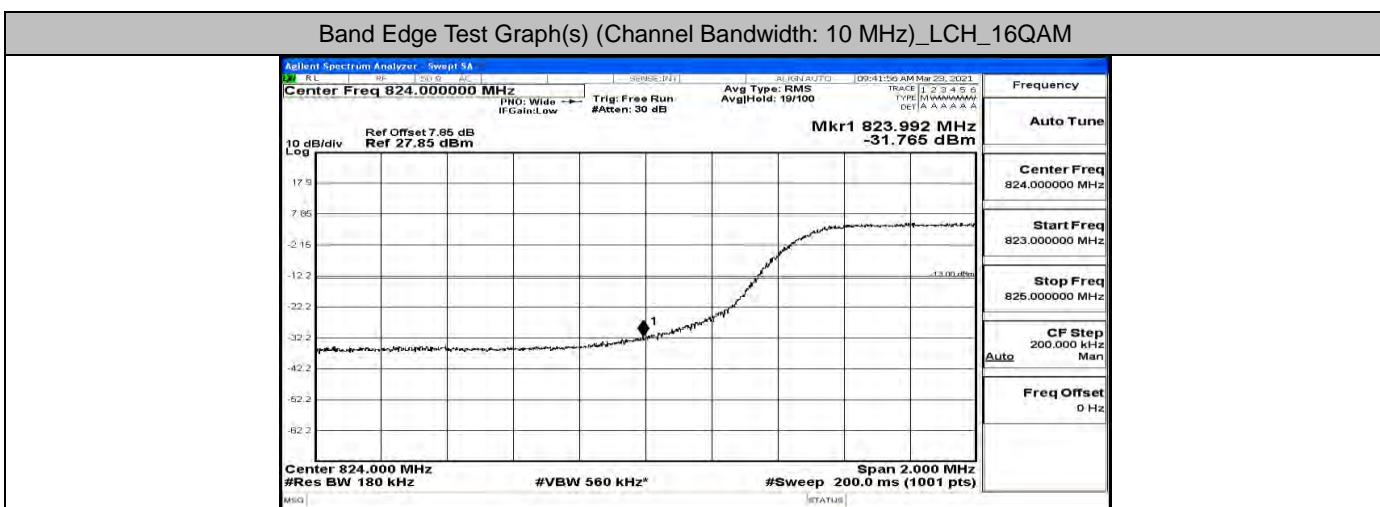
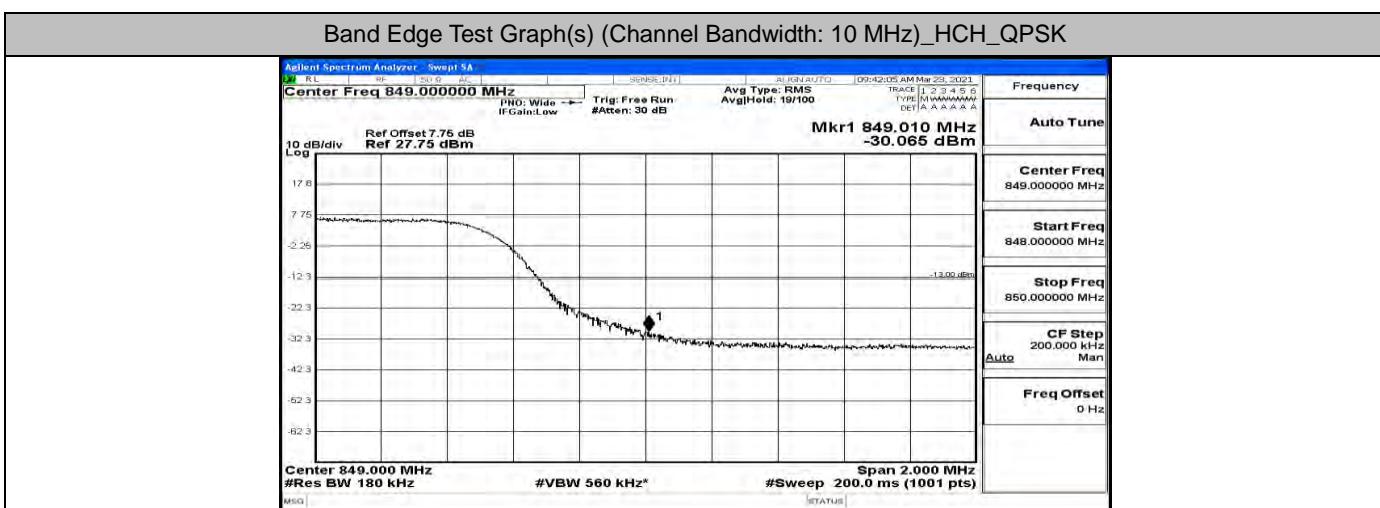
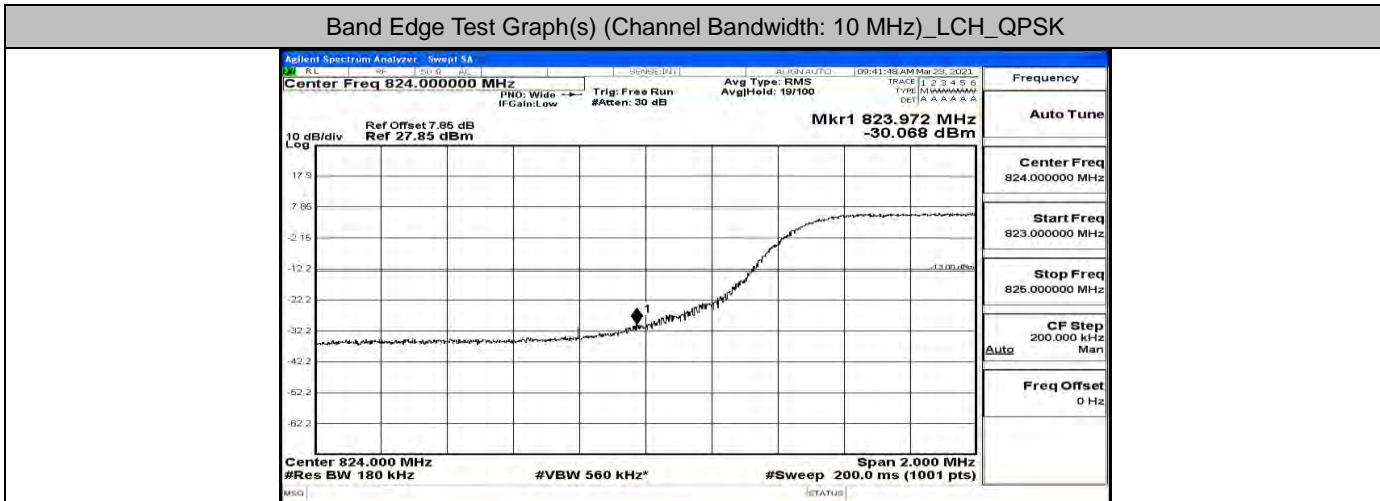


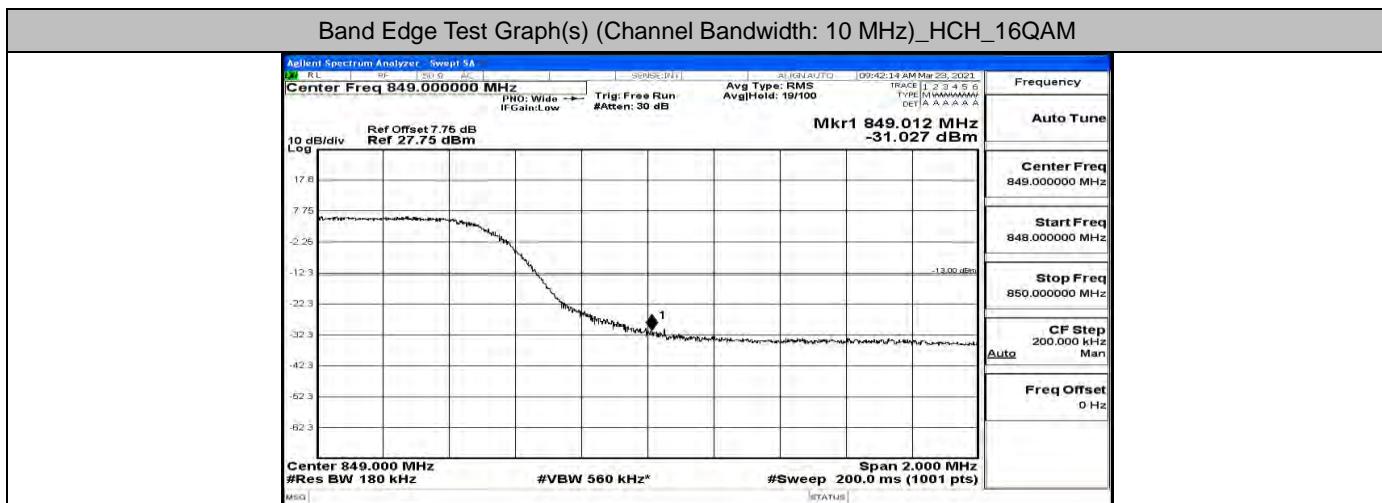
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK







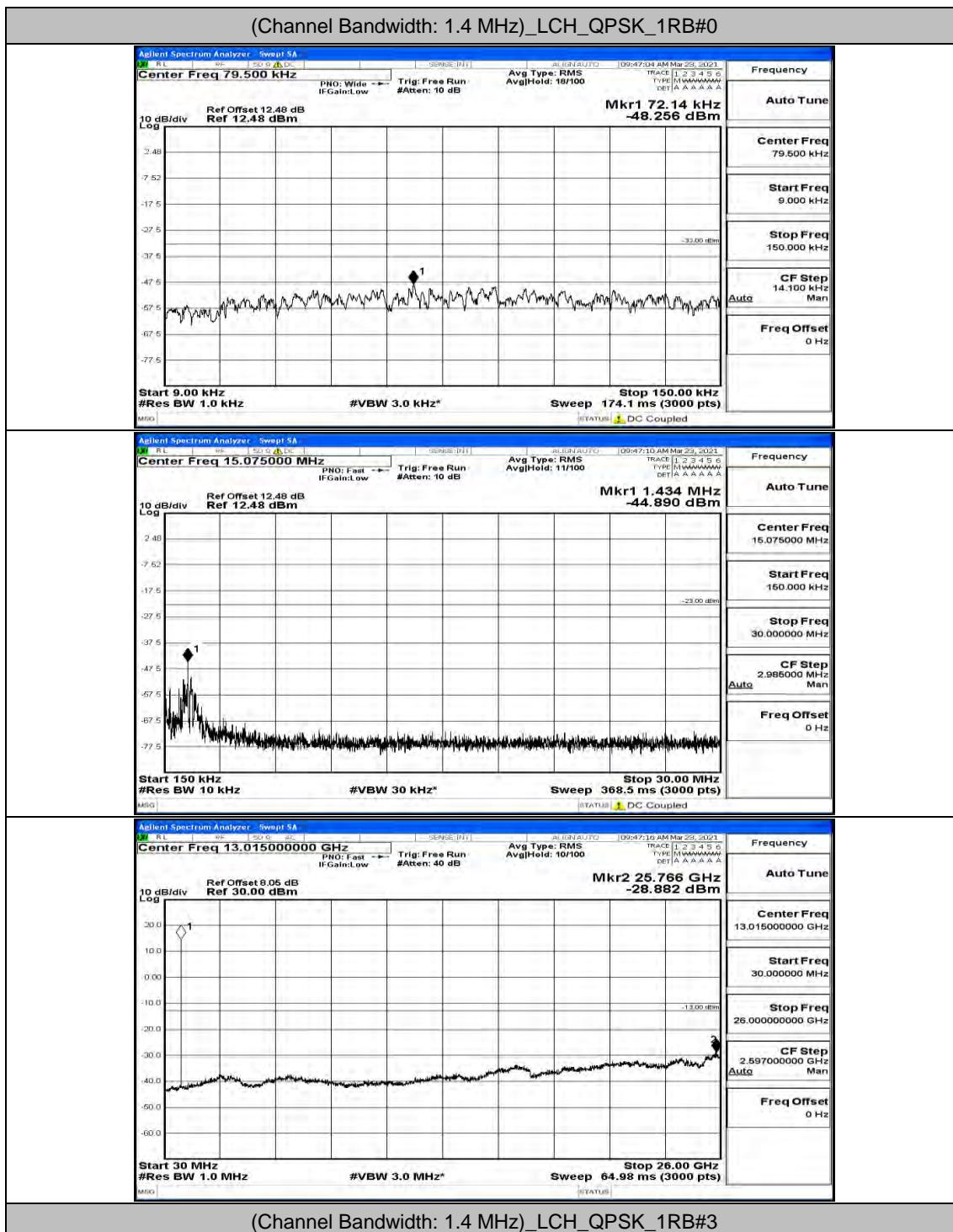


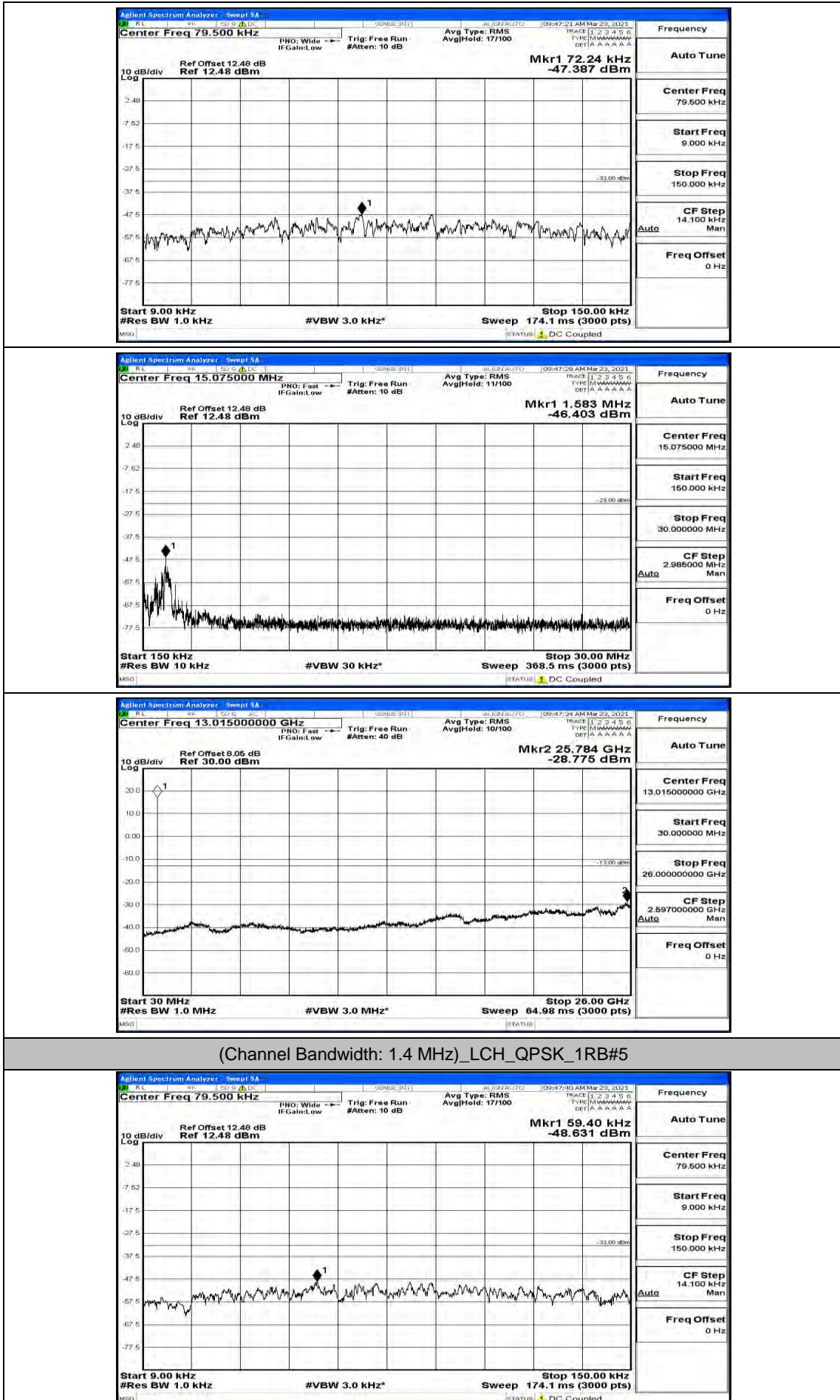


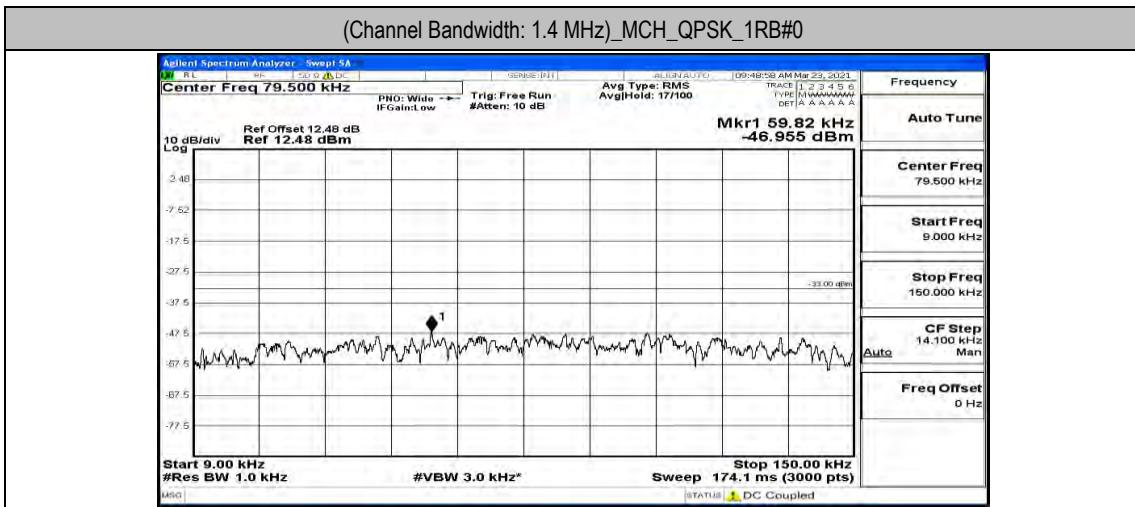
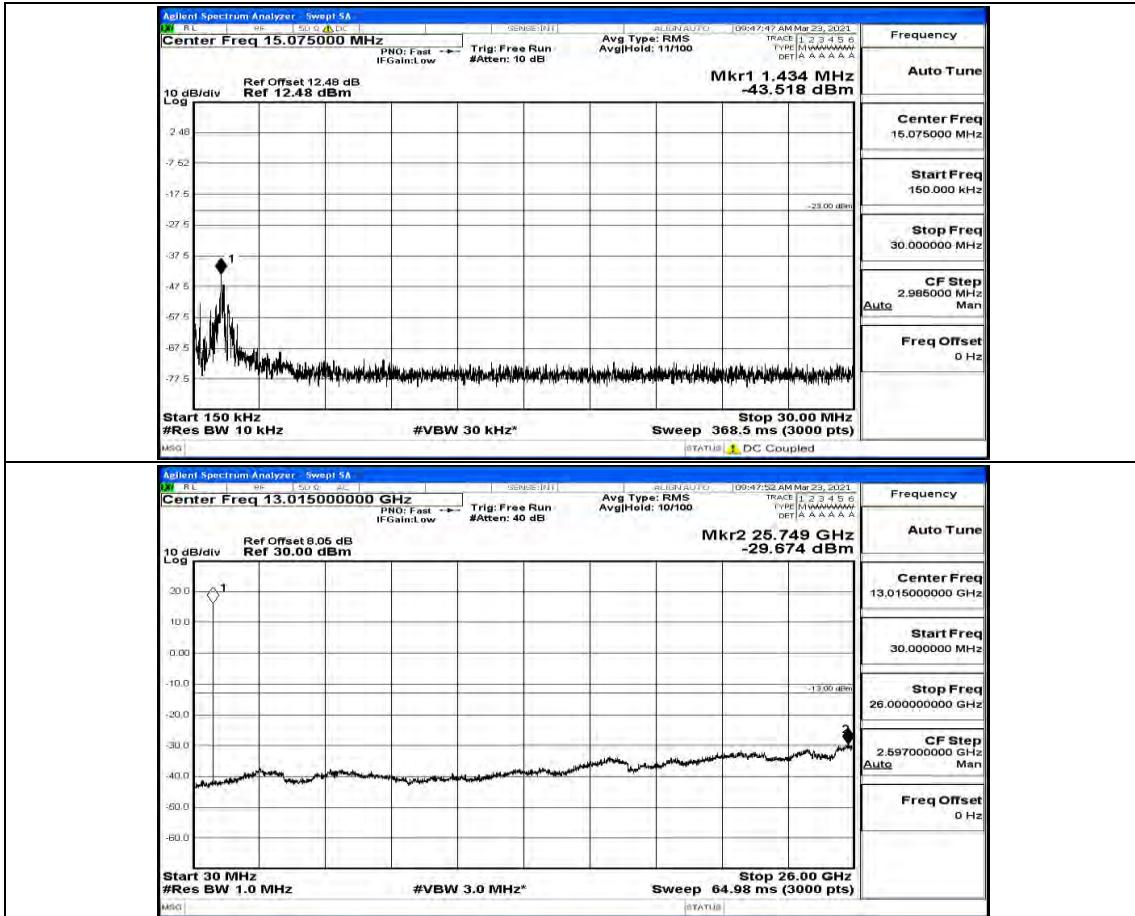
F.5 Conducted Spurious Emission

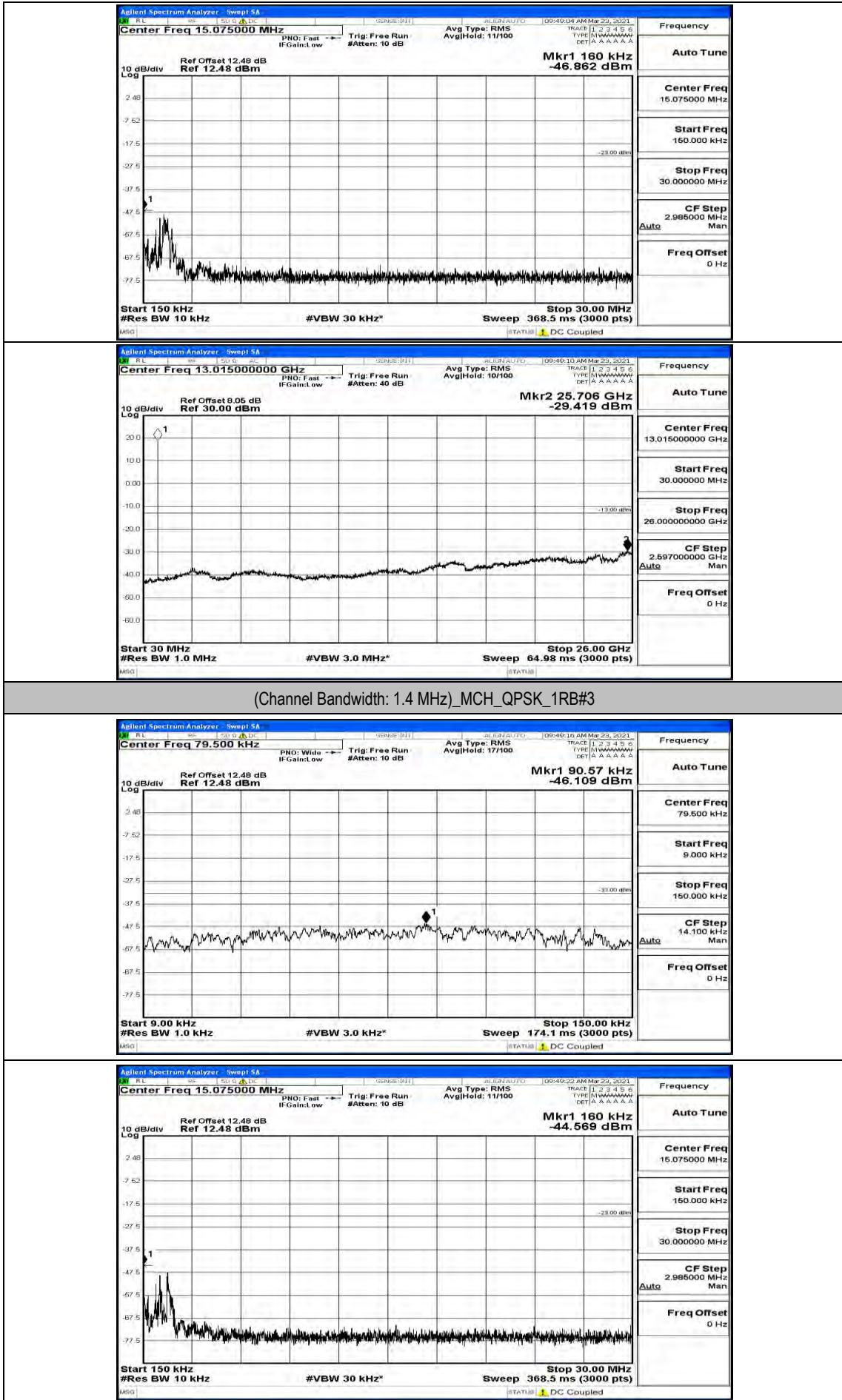
Test Graphs

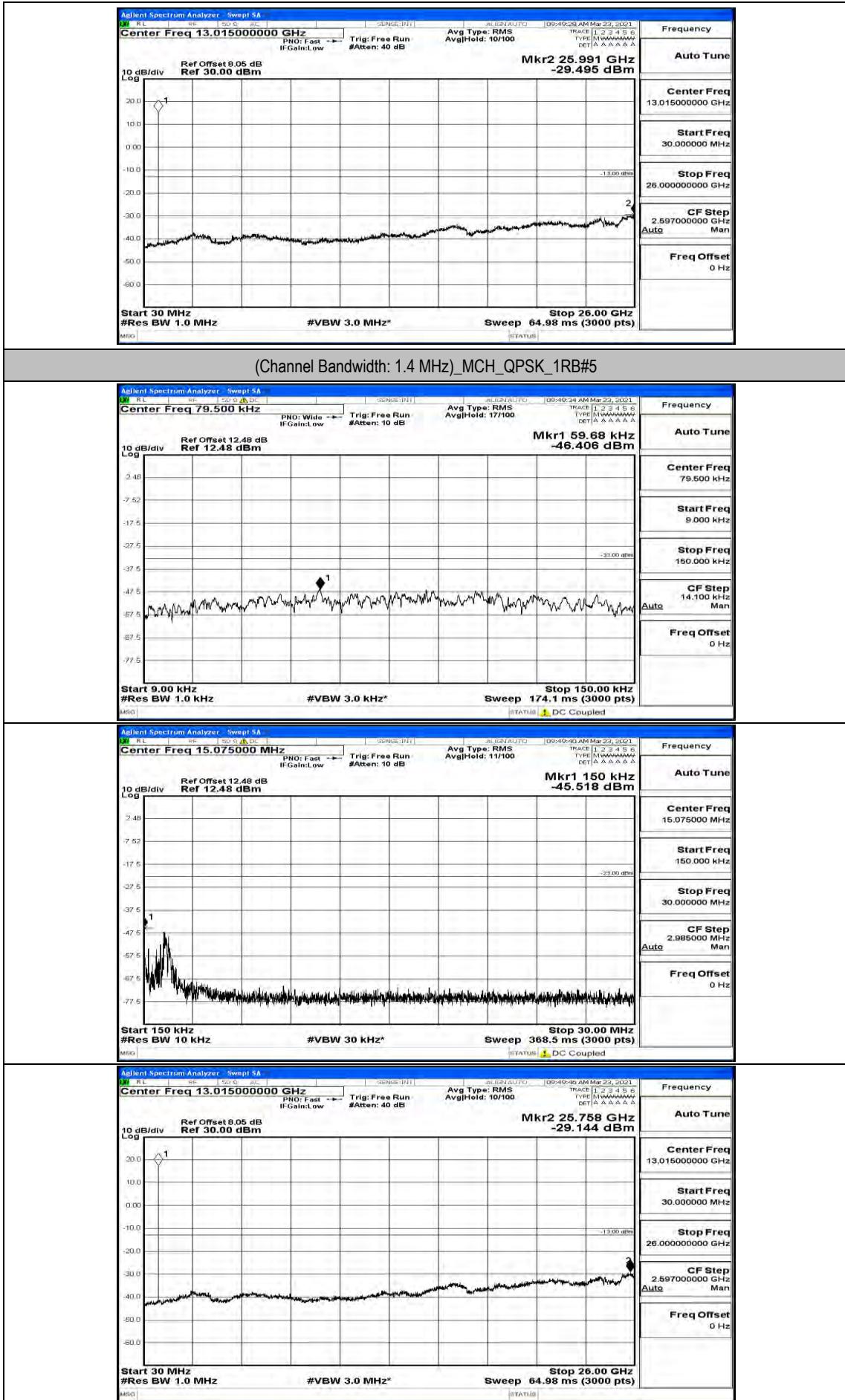
Channel Bandwidth: 1.4 MHz

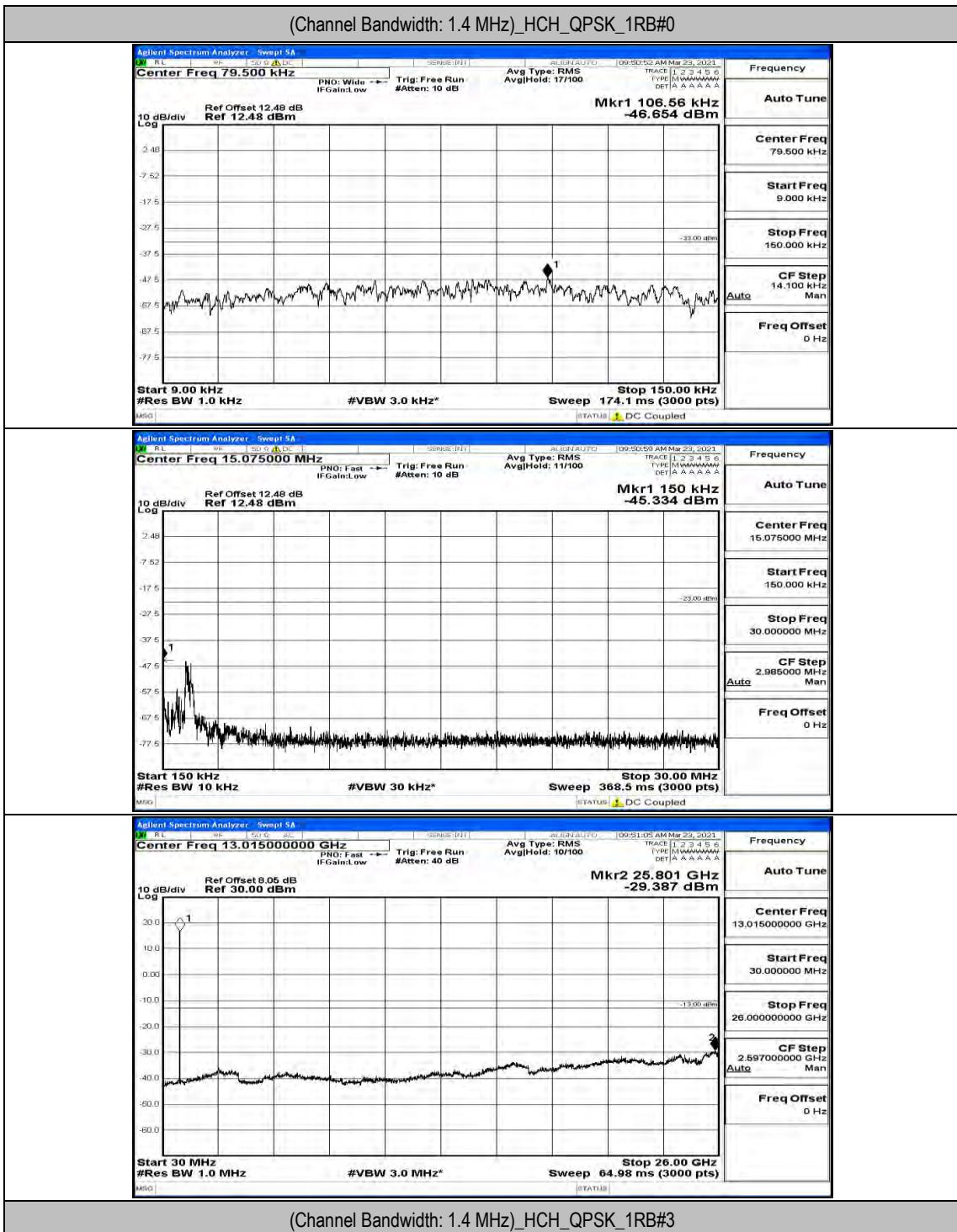


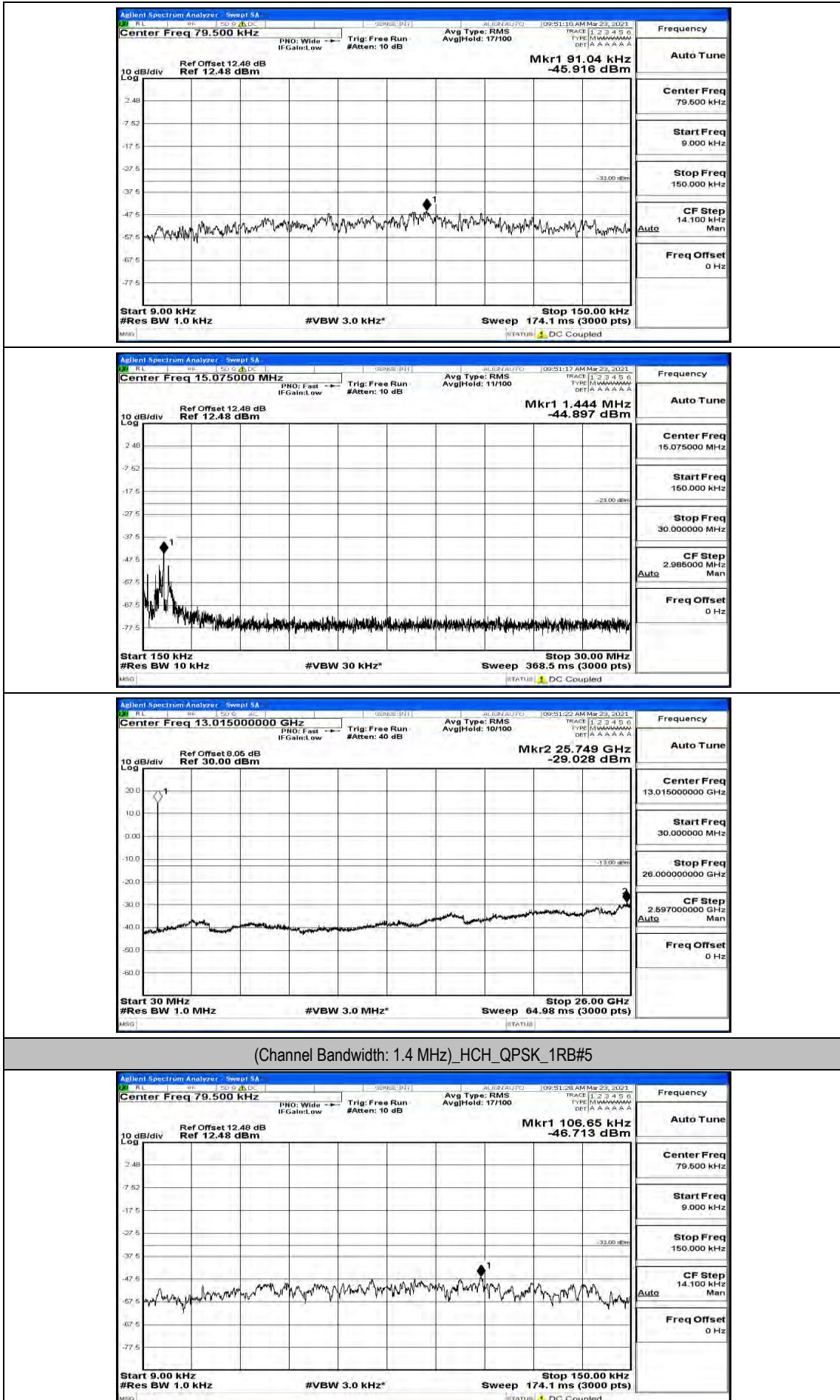


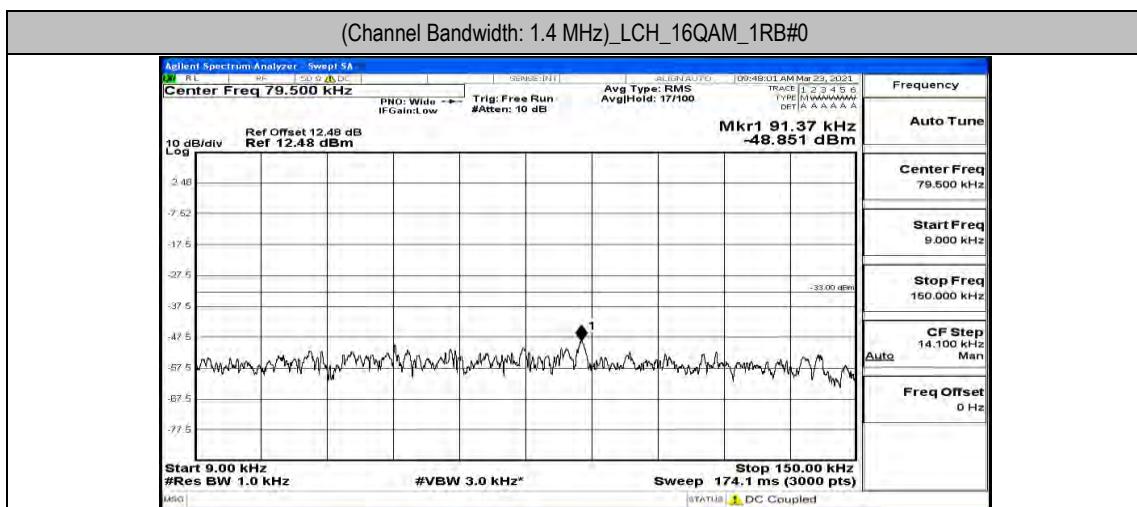
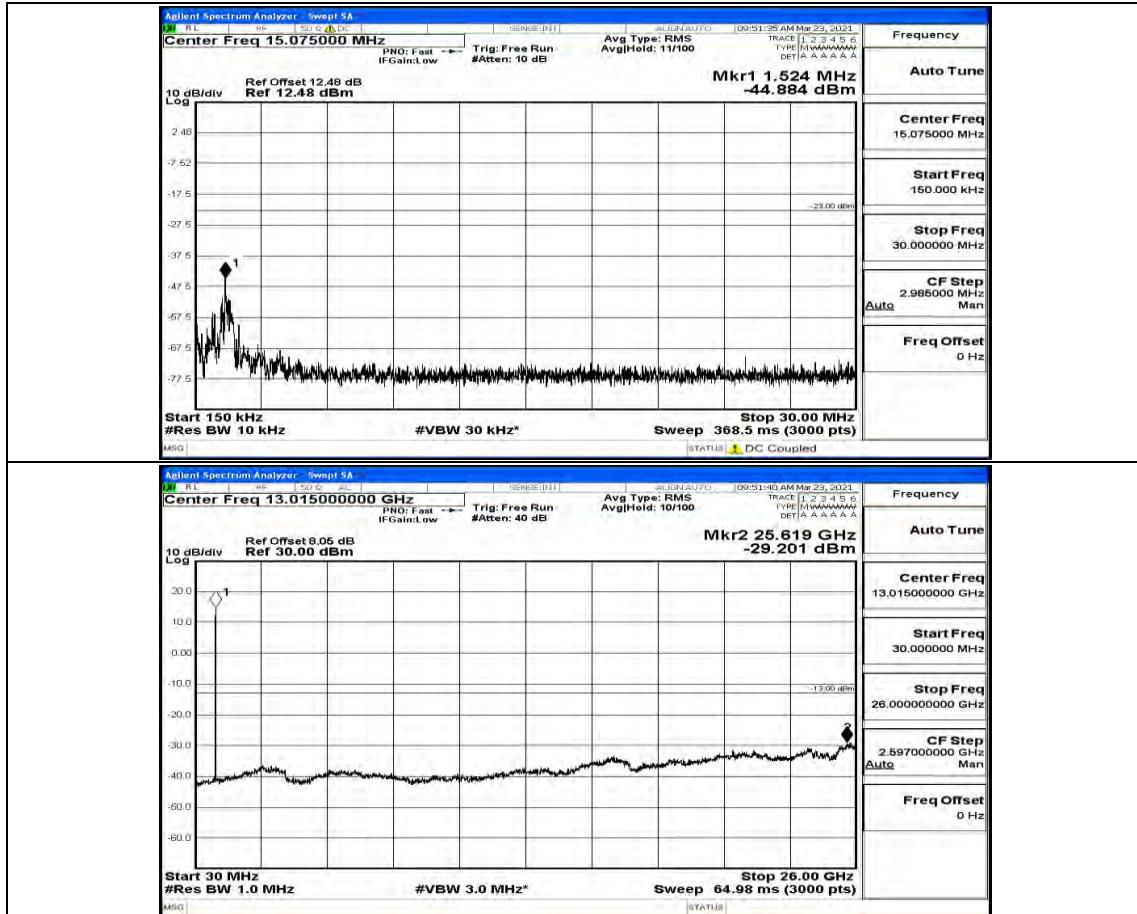


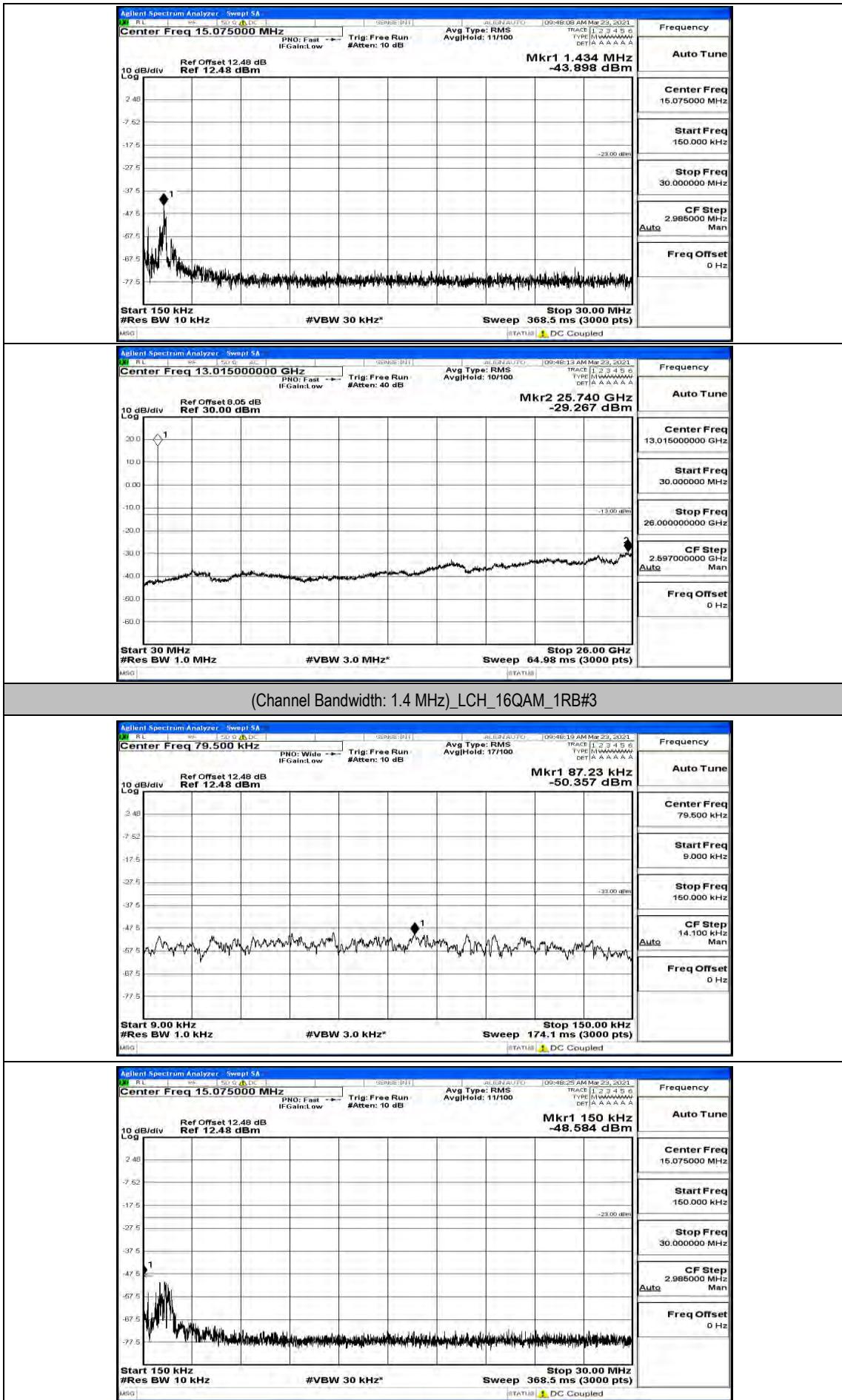


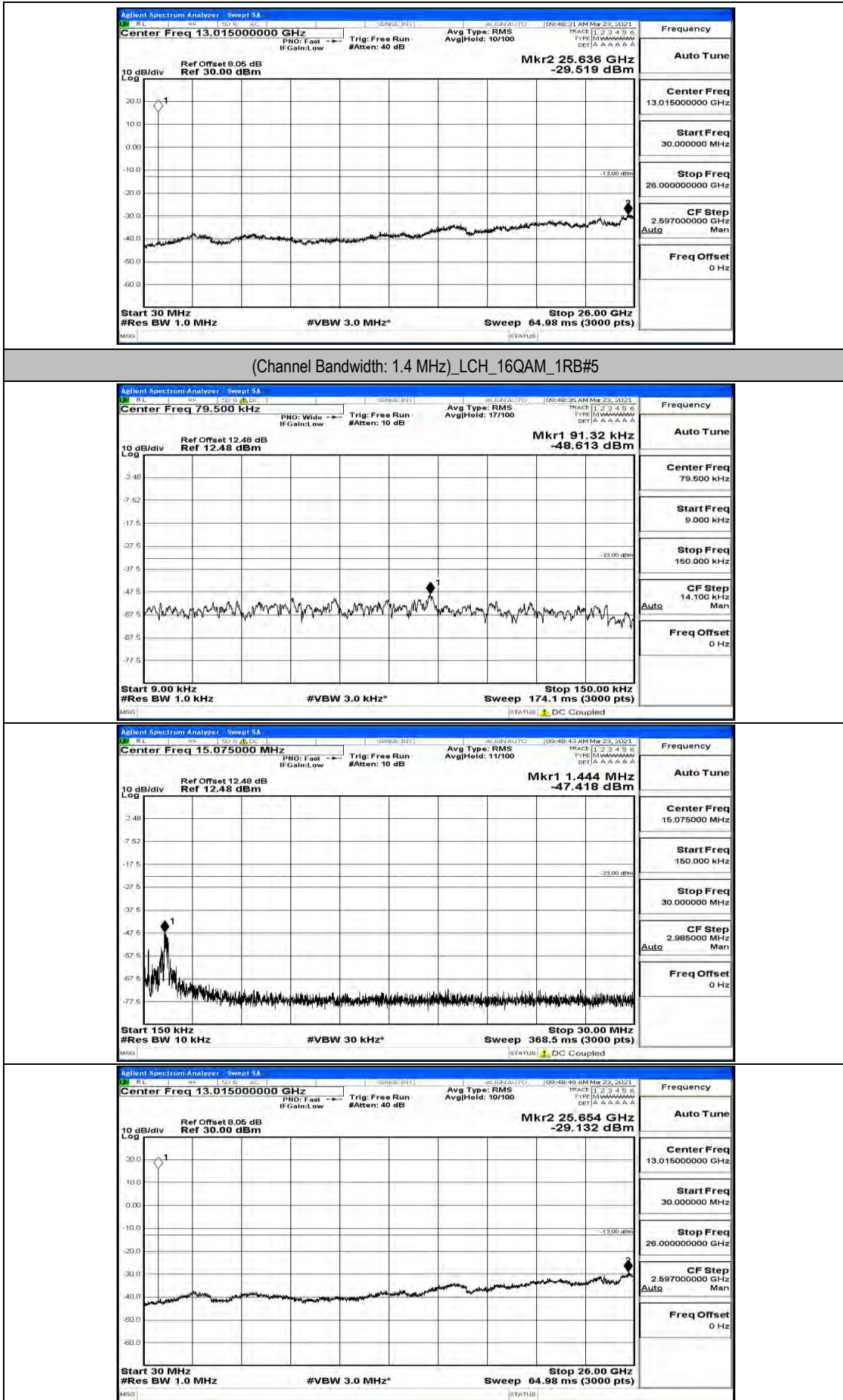


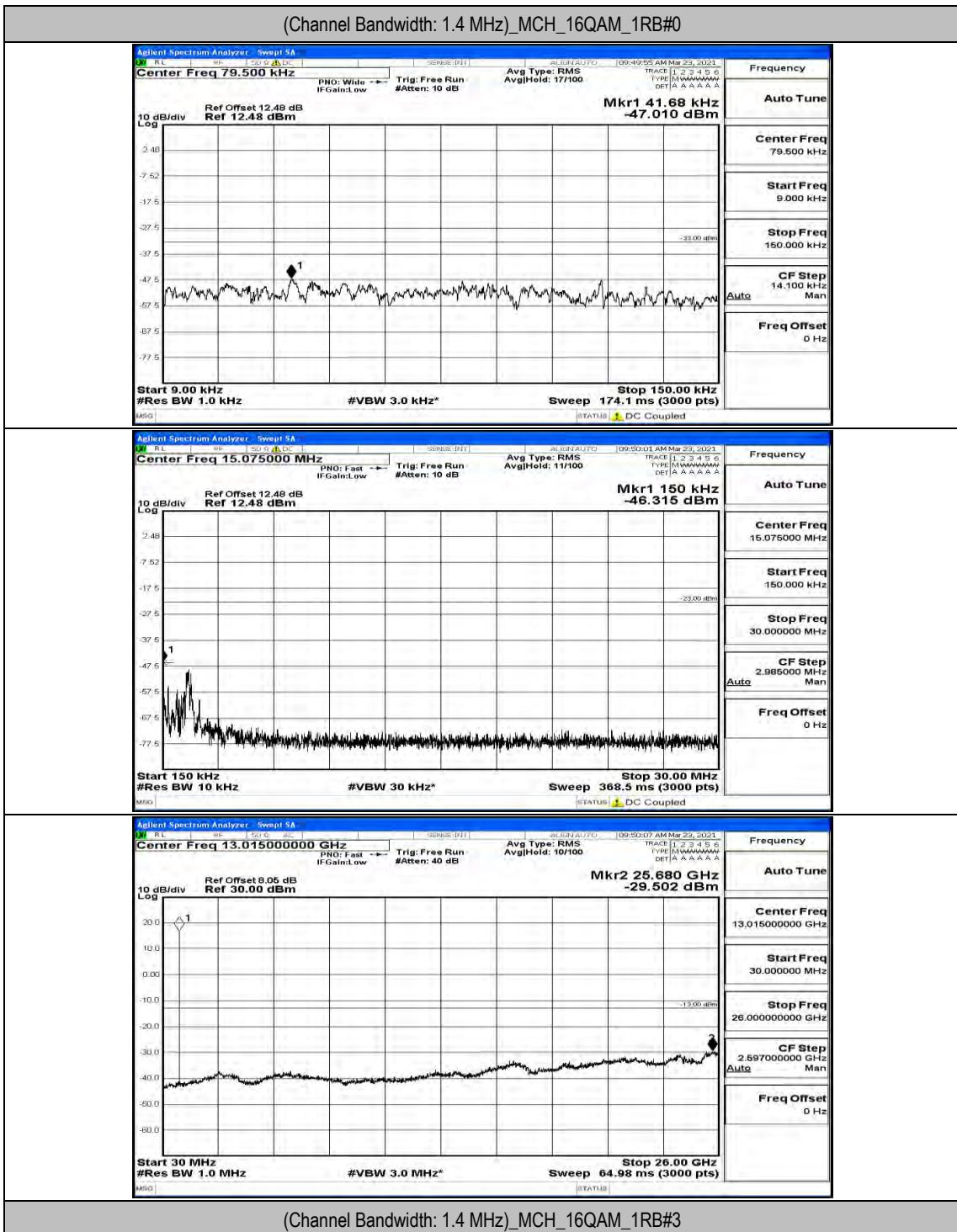


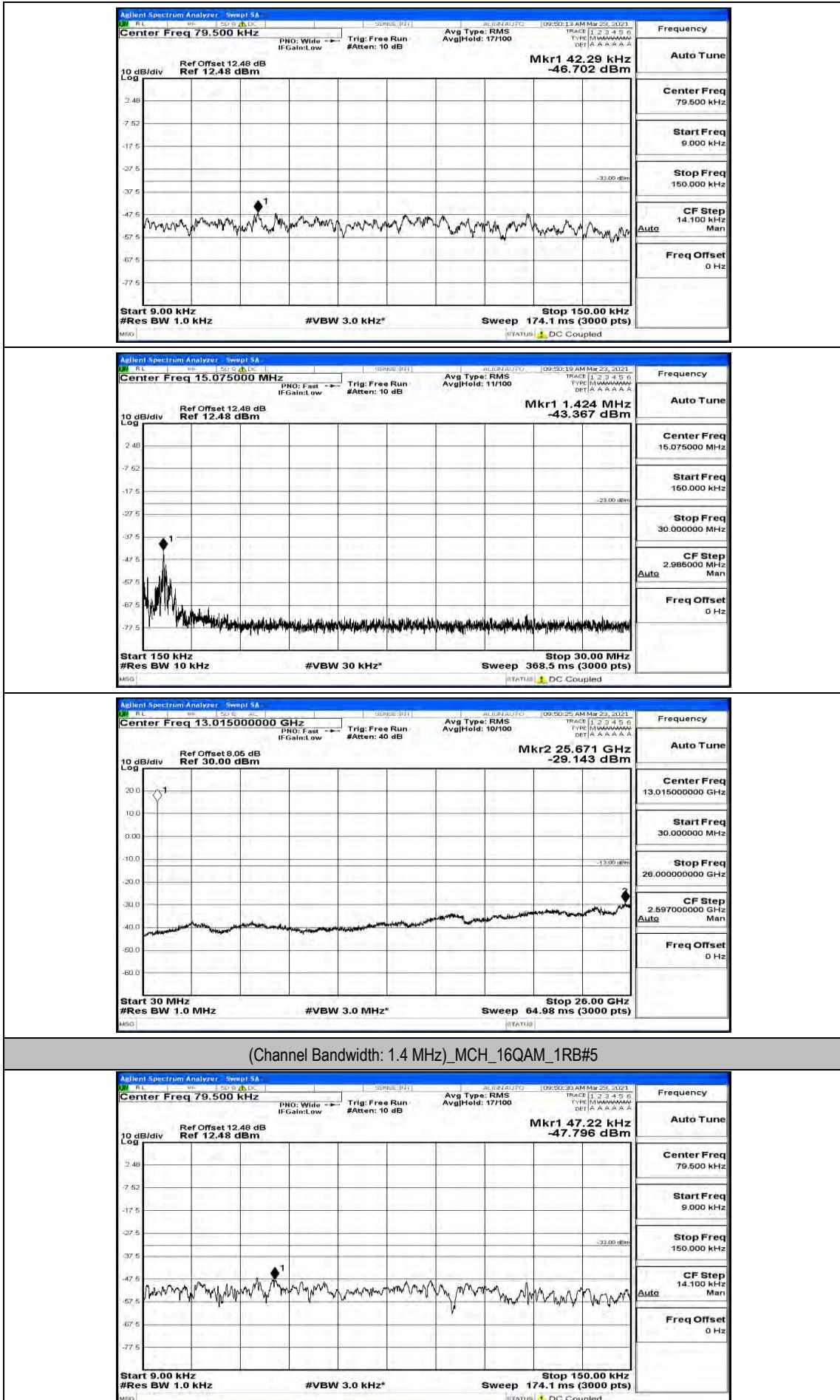


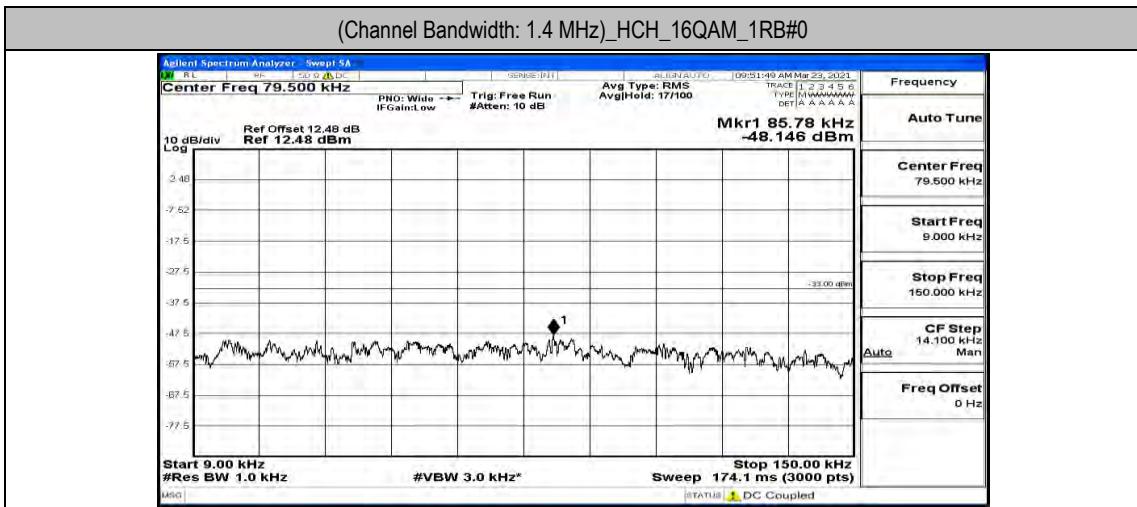
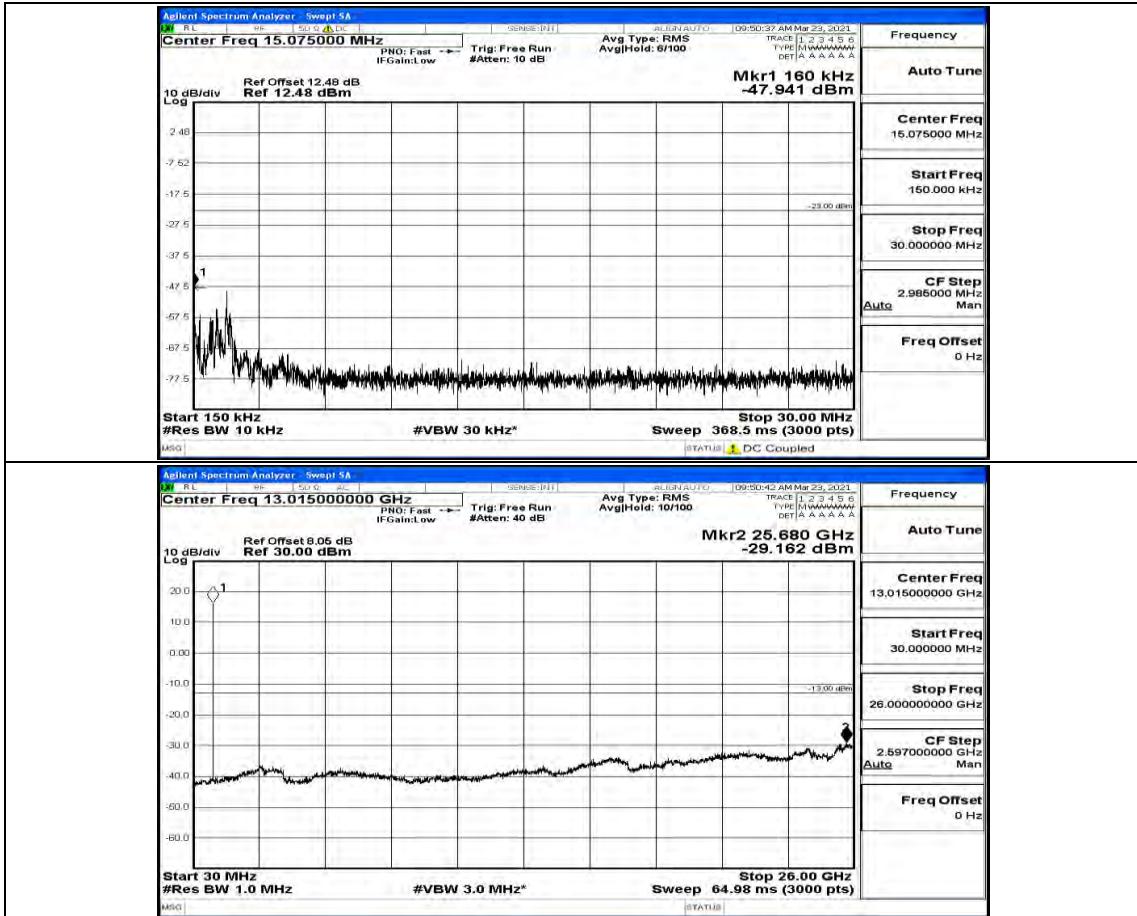


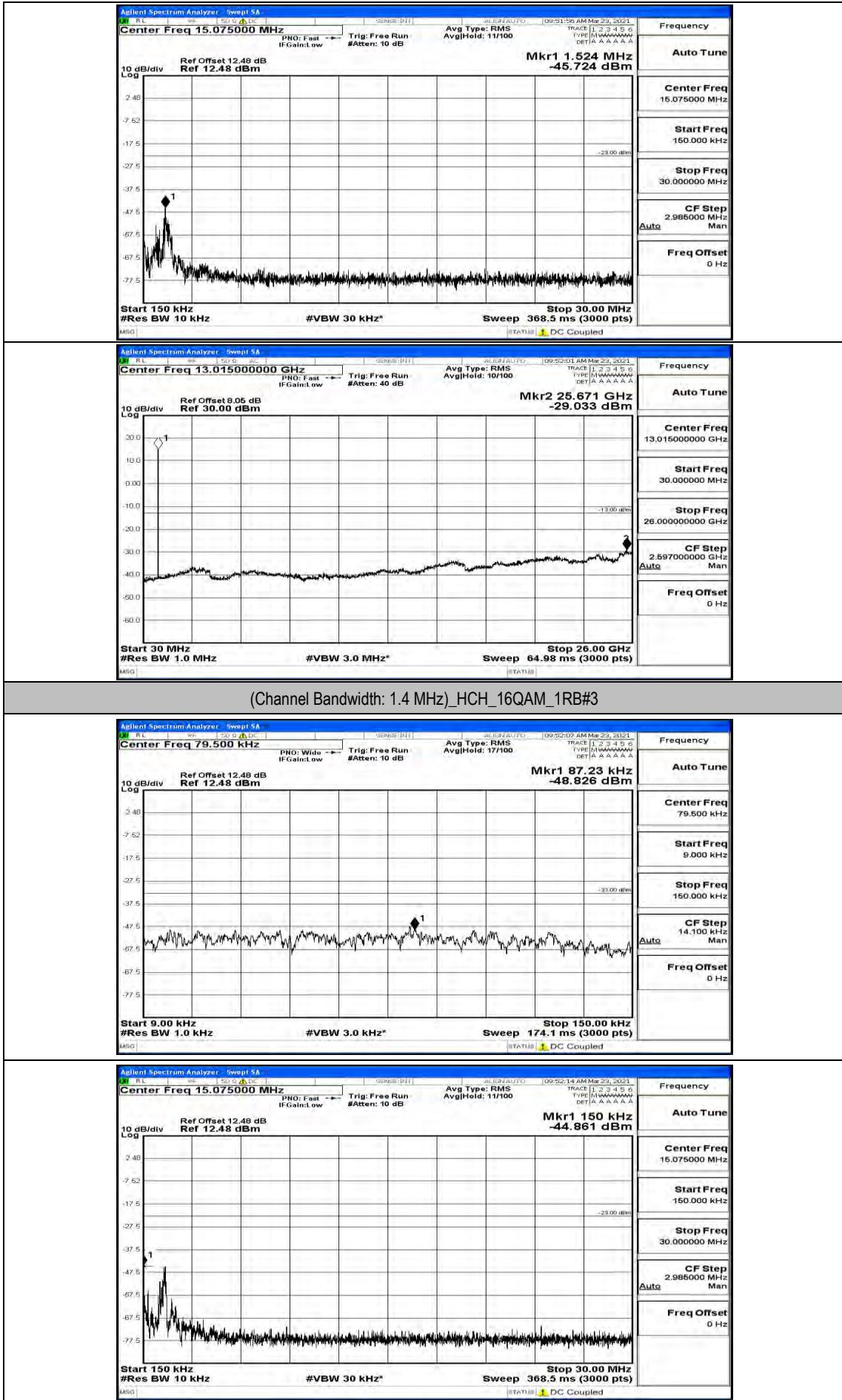


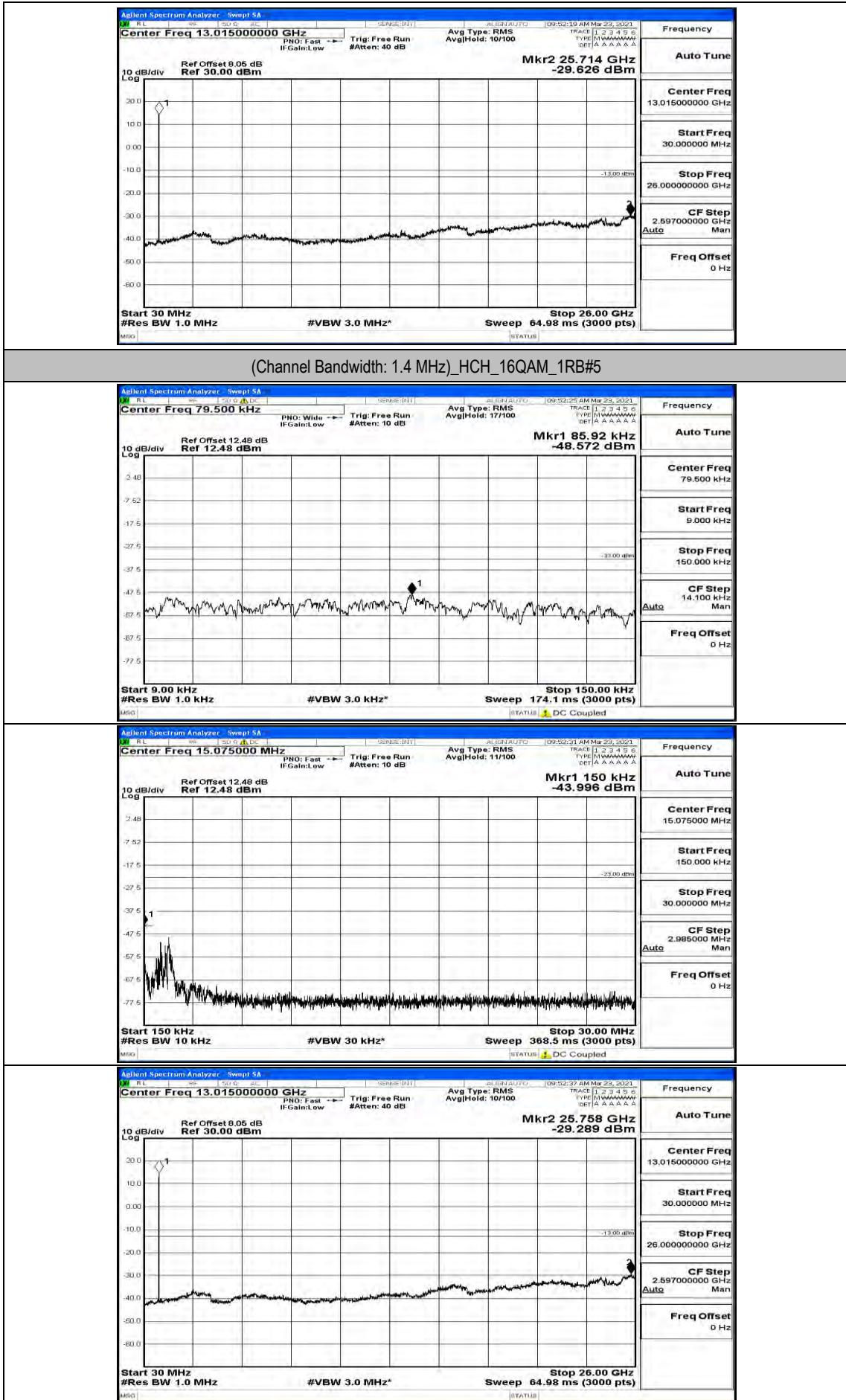






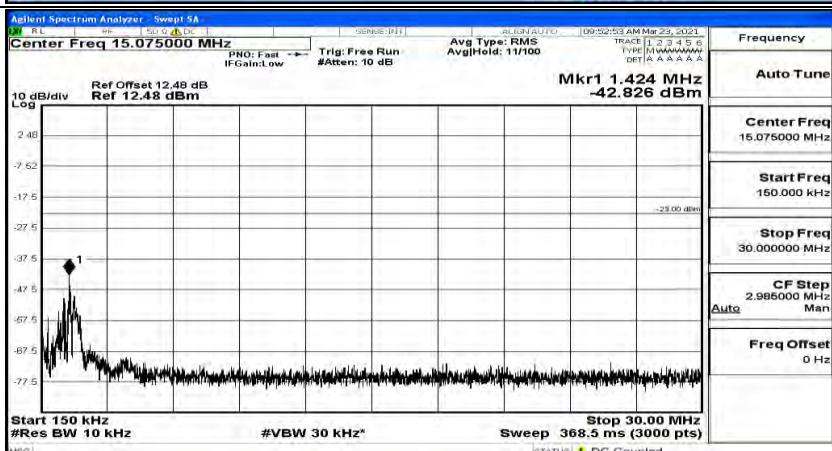
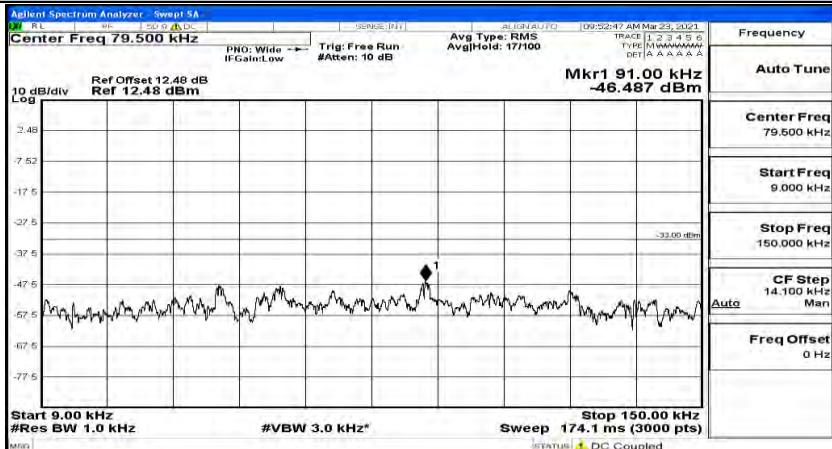




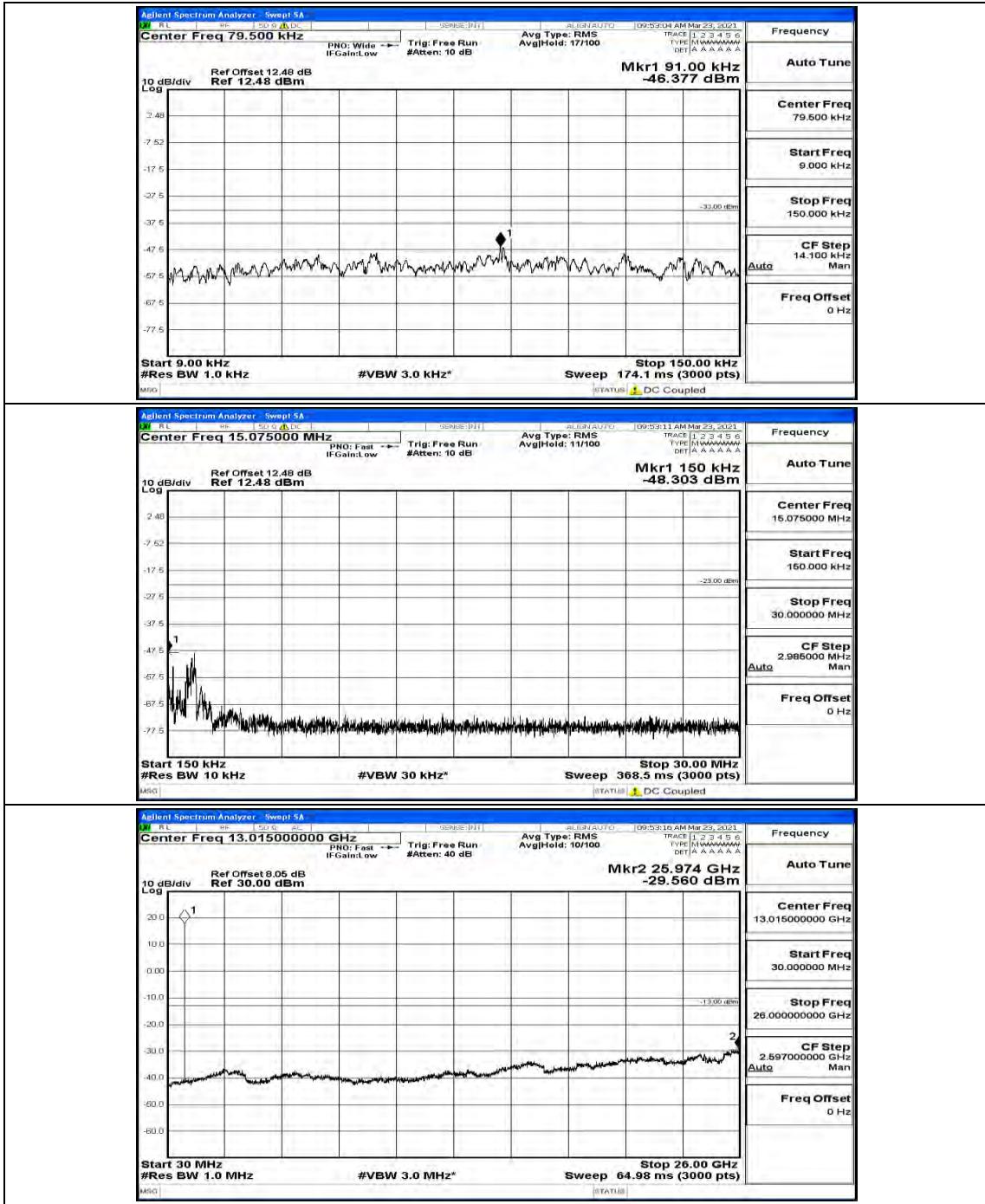


Channel Bandwidth: 3 MHz

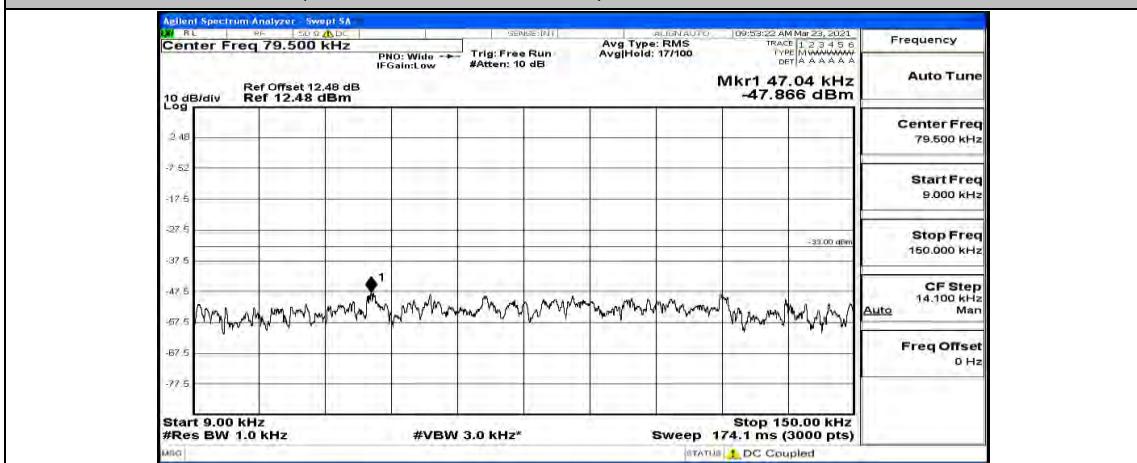
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0

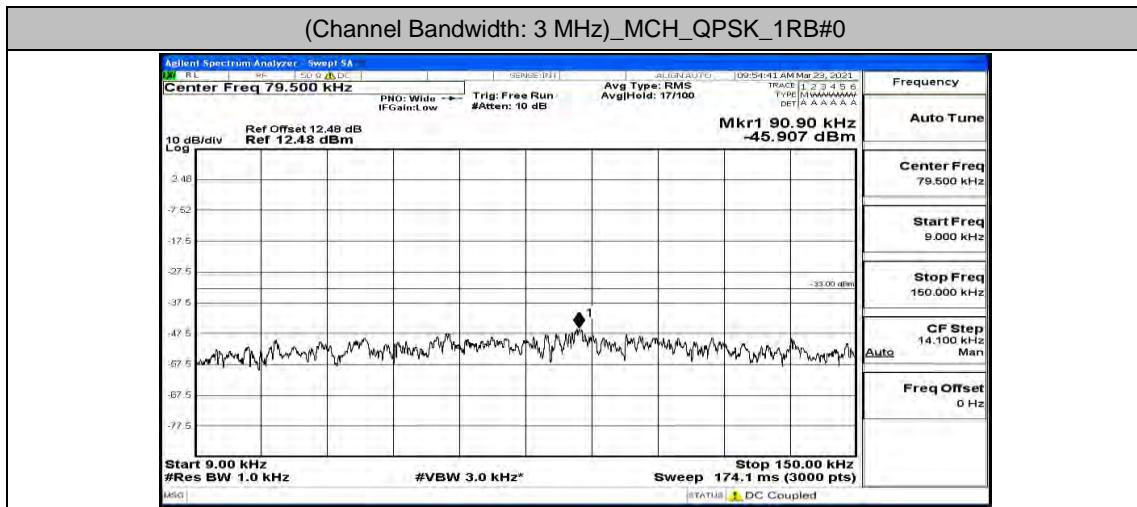
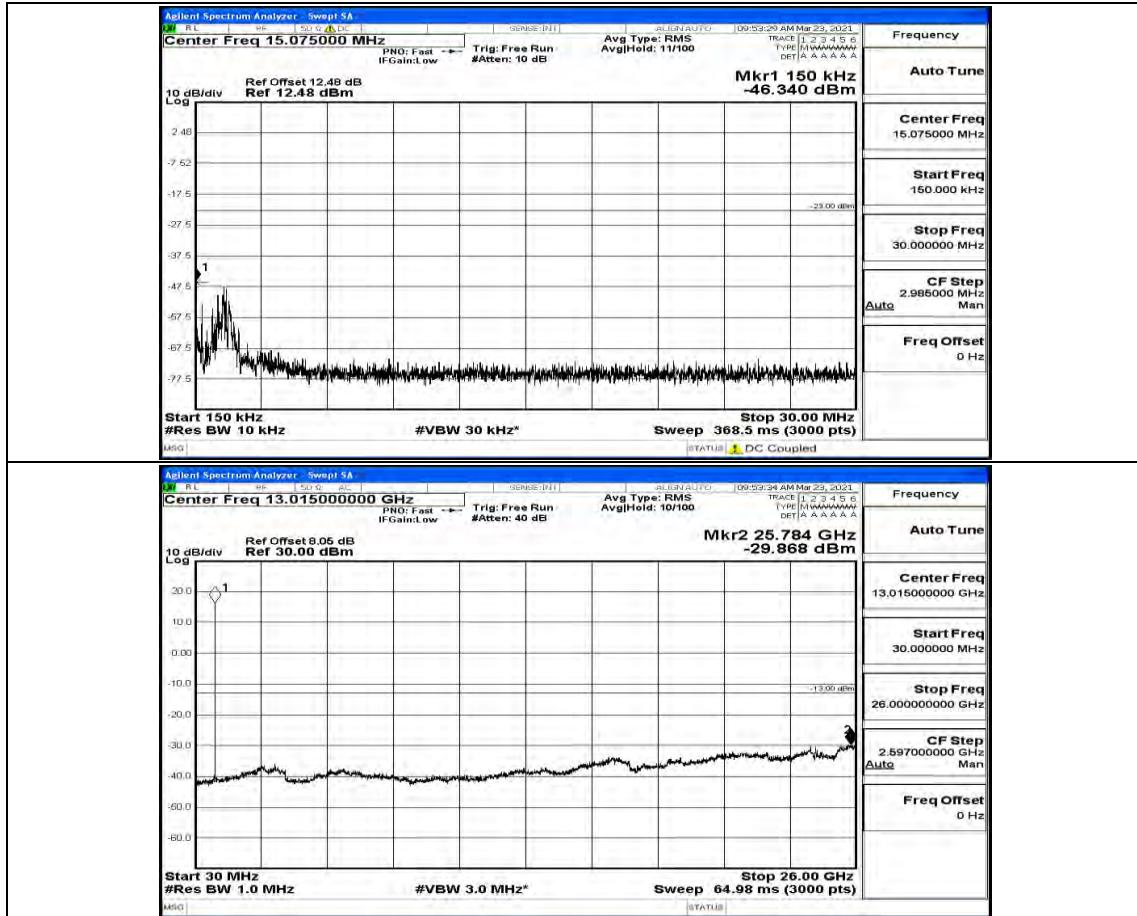


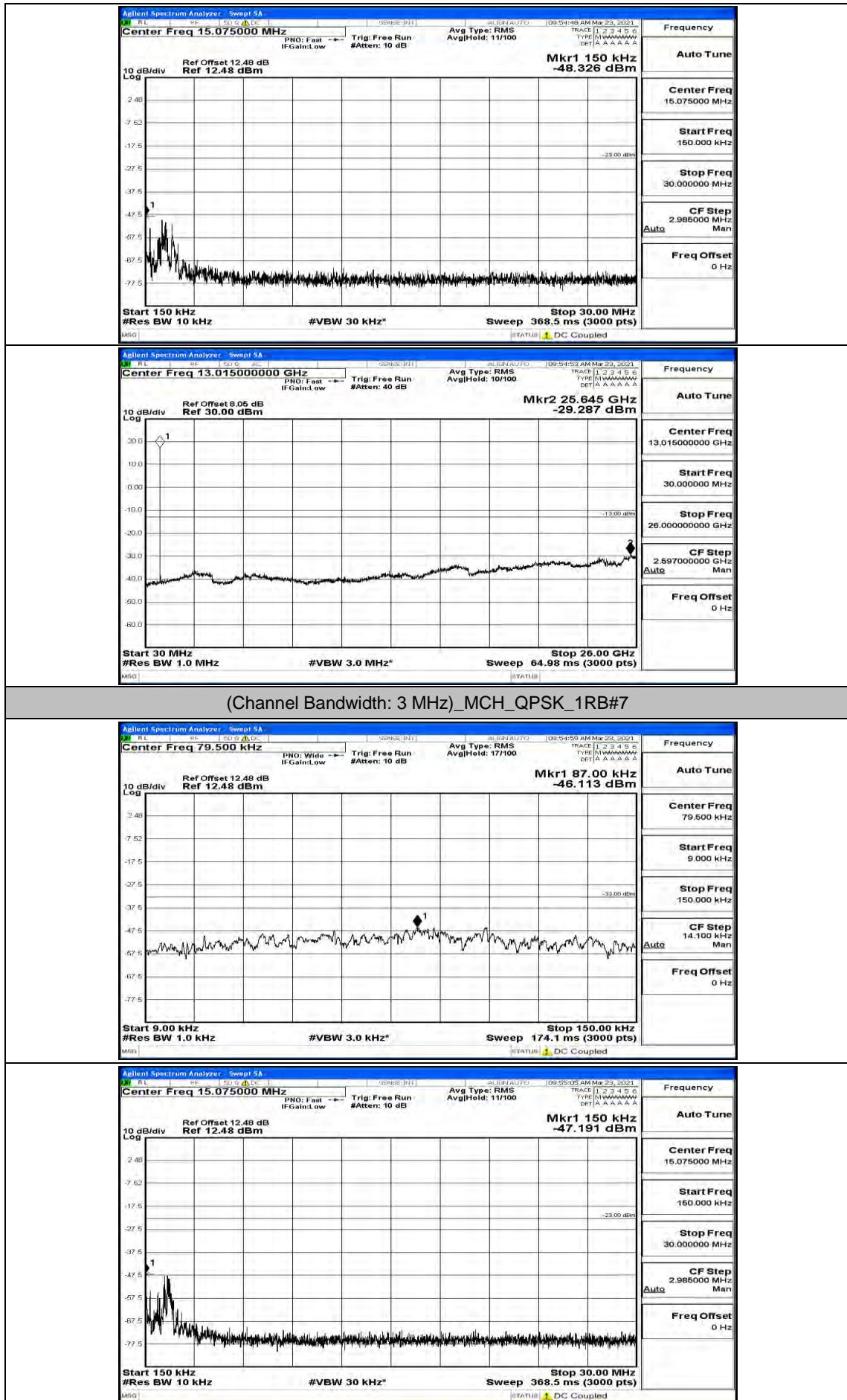
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14

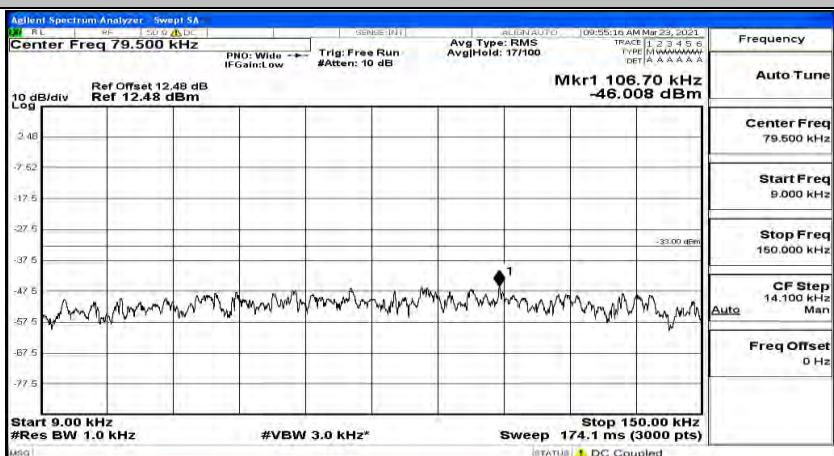








(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14



Agilent Spectrum Analyzer - Sweep SA

Center Freq 15.075000 MHz

Ref Offset 12.48 dB
Ref 12.48 dBm

10 dB/div Log

1000 Fast → Trig: Free Run
IF Gain/Level #Atten: 10 dB

Avg Type: RMS
Avg Hold: 11/100

09:55:23 AM Mar 23, 2021

TRIG: 1, 2, 3, 5, 6
TYPE: A, B, C, D, E
DET: A, X, A, A, A

Frequency

Auto Tune

Center Freq 15.075000 MHz

Start Freq 150.000 kHz

Stop Freq 30.000000 MHz

CF Step 2.985000 MHz
Auto Man

Freq Offset 0 Hz

Start 150 kHz #Res BW 10 kHz

#VBW 30 kHz*

Sweep 368.5 ms (3000 pts)

Stop 30.00 MHz



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0

