# Appendix for Band 13

## Appendix A: Average Power Output Data

### Test Result

### Channel Bandwidth: 5 MHz

| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
|---|---|---|---|---|---|
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.81 | PASS |
| | | 1 | 12 | 23.27 | PASS |
| | | 1 | 24 | 22.88 | PASS |
| | | 12 | 0 | 21.94 | PASS |
| | | 12 | 6 | 21.95 | PASS |
| | | 12 | 13 | 21.80 | PASS |
| | | 25 | 0 | 21.94 | PASS |
| | MCH | 1 | 0 | 22.86 | PASS |
| | | 1 | 12 | 23.22 | PASS |
| | | 1 | 24 | 22.85 | PASS |
| | | 12 | 0 | 21.92 | PASS |
| | | 12 | 6 | 21.98 | PASS |
| | | 12 | 13 | 21.93 | PASS |
| | | 25 | 0 | 21.99 | PASS |
| | HCH | 1 | 0 | 22.87 | PASS |
| | | 1 | 12 | 23.22 | PASS |
| | | 1 | 24 | 22.86 | PASS |
| | | 12 | 0 | 21.81 | PASS |
| | | 12 | 6 | 21.93 | PASS |
| | | 12 | 13 | 21.90 | PASS |
| | | 25 | 0 | 21.96 | PASS |
| 16QAM | LCH | 1 | 0 | 22.09 | PASS |
| | | 1 | 12 | 22.52 | PASS |
| | | 1 | 24 | 22.23 | PASS |
| | | 12 | 0 | 21.04 | PASS |
| | | 12 | 6 | 21.04 | PASS |
| | | 12 | 13 | 20.88 | PASS |
| | | 25 | 0 | 20.98 | PASS |
| | MCH | 1 | 0 | 22.21 | PASS |
| | | 1 | 12 | 22.58 | PASS |
| | | 1 | 24 | 22.16 | PASS |
| | | 12 | 0 | 21.08 | PASS |

| | | | | | |
|---|---|---|---|---|---|
| | | 12 | 6 | 21.16 | PASS |
| | | 12 | 13 | 21.12 | PASS |
| | | 25 | 0 | 20.99 | PASS |
| | HCH | 1 | 0 | 22.15 | PASS |
| | | 1 | 12 | 22.49 | PASS |
| | | 1 | 24 | 22.15 | PASS |
| | | 12 | 0 | 20.84 | PASS |
| | | 12 | 6 | 20.96 | PASS |
| | | 12 | 13 | 20.98 | PASS |
| | | 25 | 0 | 21.04 | PASS |

## Channel Bandwidth: 10 MHz

| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
|---|---|---|---|---|---|
| | | Size | Offset | | |
| QPSK | MCH | 1 | 0 | 22.74 | PASS |
| | | 1 | 24 | 23.29 | PASS |
| | | 1 | 49 | 22.79 | PASS |
| | | 25 | 0 | 22.14 | PASS |
| | | 25 | 12 | 21.99 | PASS |
| | | 25 | 25 | 22.22 | PASS |
| | | 50 | 0 | 22.18 | PASS |
| 16QAM | MCH | 1 | 0 | 22.07 | PASS |
| | | 1 | 24 | 22.43 | PASS |
| | | 1 | 49 | 22.20 | PASS |
| | | 25 | 0 | 21.22 | PASS |
| | | 25 | 12 | 21.01 | PASS |
| | | 25 | 25 | 21.24 | PASS |
| | | 50 | 0 | 21.23 | PASS |

# Appendix B: Peak-to-Average Ratio

## Test Result

## Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 1 | 0 | 4.81 | <13 | PASS |
| | | 1 | 12 | 5.16 | <13 | PASS |
| | | 1 | 24 | 5.59 | <13 | PASS |
| | | 12 | 0 | 5.49 | <13 | PASS |
| | | 12 | 6 | 5.67 | <13 | PASS |
| | | 12 | 13 | 5.99 | <13 | PASS |
| | | 25 | 0 | 5.84 | <13 | PASS |
| | MCH | 1 | 0 | 5.22 | <13 | PASS |
| | | 1 | 12 | 5.4 | <13 | PASS |
| | | 1 | 24 | 5.62 | <13 | PASS |
| | | 12 | 0 | 6.09 | <13 | PASS |
| | | 12 | 6 | 6 | <13 | PASS |
| | | 12 | 13 | 6 | <13 | PASS |
| | | 25 | 0 | 6.1 | <13 | PASS |
| | HCH | 1 | 0 | 5.84 | <13 | PASS |
| | | 1 | 12 | 5.69 | <13 | PASS |
| | | 1 | 24 | 5.58 | <13 | PASS |
| | | 12 | 0 | 6.12 | <13 | PASS |
| | | 12 | 6 | 6.01 | <13 | PASS |
| | | 12 | 13 | 5.87 | <13 | PASS |
| | | 25 | 0 | 6 | <13 | PASS |
| 16QAM | LCH | 1 | 0 | 5.69 | <13 | PASS |
| | | 1 | 12 | 5.94 | <13 | PASS |
| | | 1 | 24 | 6.8 | <13 | PASS |
| | | 12 | 0 | 6.45 | <13 | PASS |
| | | 12 | 6 | 6.54 | <13 | PASS |
| | | 12 | 13 | 6.74 | <13 | PASS |
| | | 25 | 0 | 6.66 | <13 | PASS |
| | MCH | 1 | 0 | 6.26 | <13 | PASS |
| | | 1 | 12 | 6.44 | <13 | PASS |
| | | 1 | 24 | 6.27 | <13 | PASS |
| | | 12 | 0 | 6.83 | <13 | PASS |
| | | 12 | 6 | 6.86 | <13 | PASS |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 12 | 13 | 6.82 | <13 | PASS |
| | | 25 | 0 | 6.85 | <13 | PASS |
| | HCH | 1 | 0 | 6.46 | <13 | PASS |
| | | 1 | 12 | 6.48 | <13 | PASS |
| | | 1 | 24 | 6.29 | <13 | PASS |
| | | 12 | 0 | 7.02 | <13 | PASS |
| | | 12 | 6 | 6.92 | <13 | PASS |
| | | 12 | 13 | 6.82 | <13 | PASS |
| | | 25 | 0 | 6.66 | <13 | PASS |

## Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | MCH | 1 | 0 | 4.74 | <13 | PASS |
| | | 1 | 24 | 5.51 | <13 | PASS |
| | | 1 | 49 | 5.21 | <13 | PASS |
| | | 25 | 0 | 5.8 | <13 | PASS |
| | | 25 | 12 | 6.07 | <13 | PASS |
| | | 25 | 25 | 5.84 | <13 | PASS |
| | | 50 | 0 | 5.95 | <13 | PASS |
| 16QAM | MCH | 1 | 0 | 5.58 | <13 | PASS |
| | | 1 | 24 | 6.64 | <13 | PASS |
| | | 1 | 49 | 6.37 | <13 | PASS |
| | | 25 | 0 | 6.63 | <13 | PASS |
| | | 25 | 12 | 6.94 | <13 | PASS |
| | | 25 | 25 | 6.78 | <13 | PASS |
| | | 50 | 0 | 6.7 | <13 | PASS |

## Test Graphs

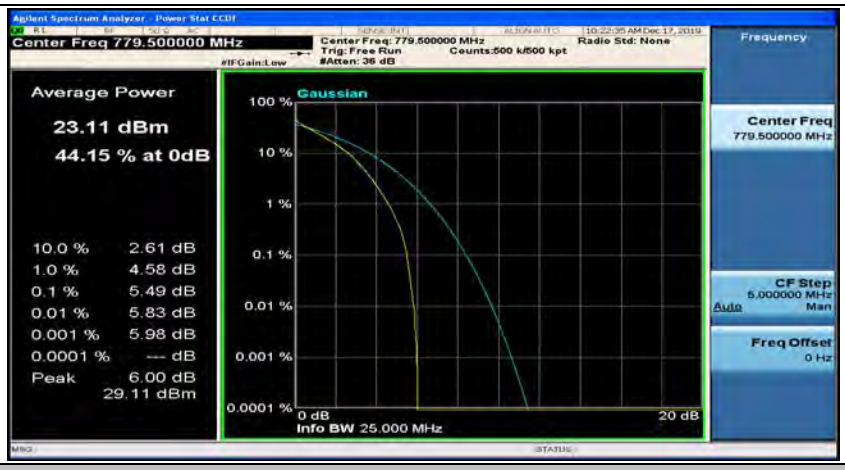
## Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

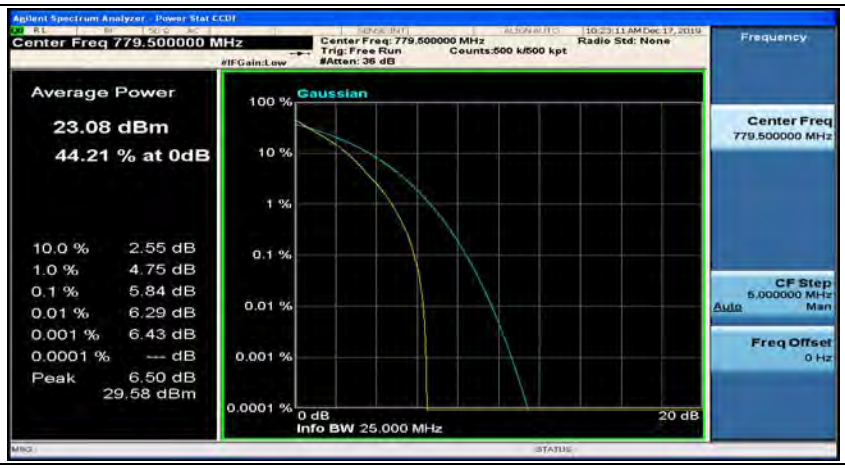

(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0




(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#6


(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#13

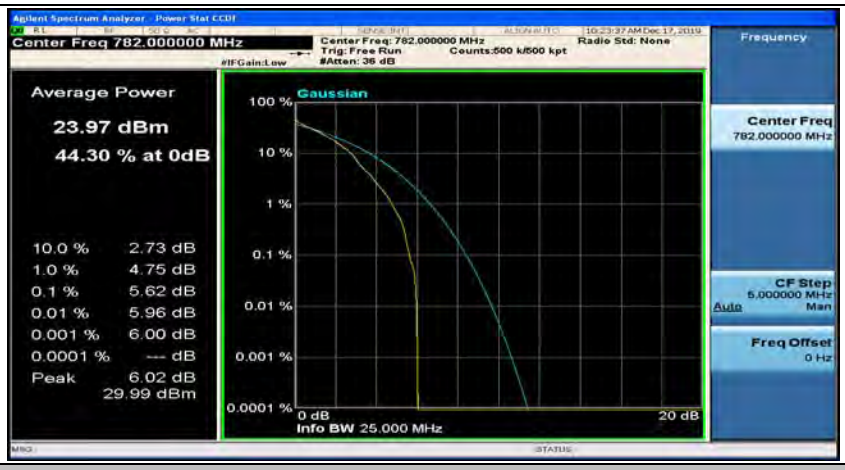

(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0




(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

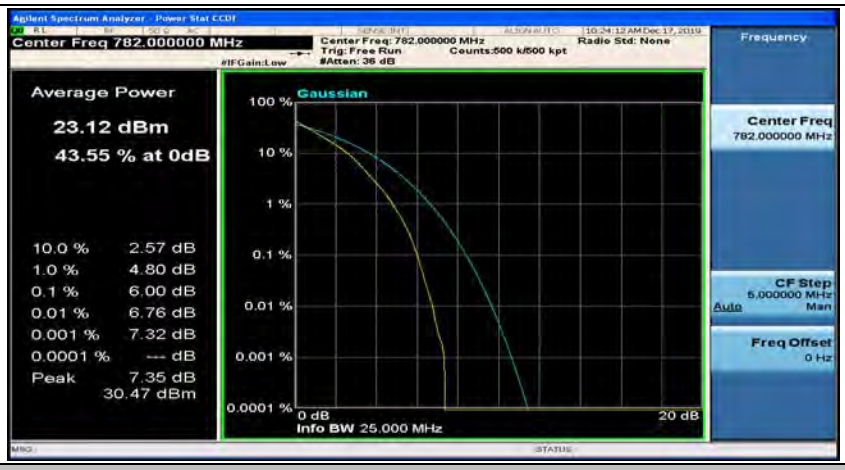

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24




(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#0


(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#6

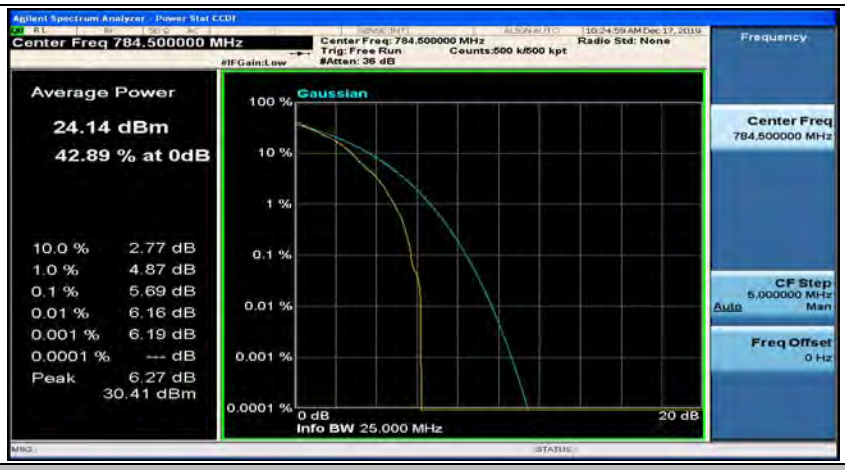

(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#13




(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

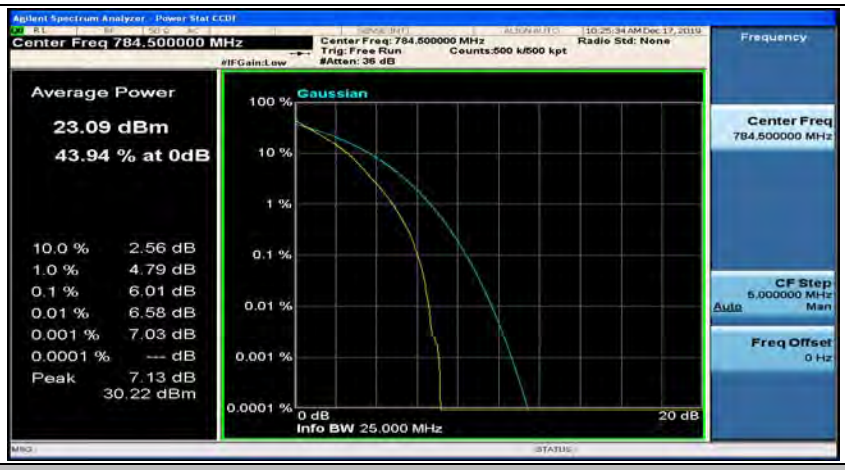

(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12




(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24


(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#0

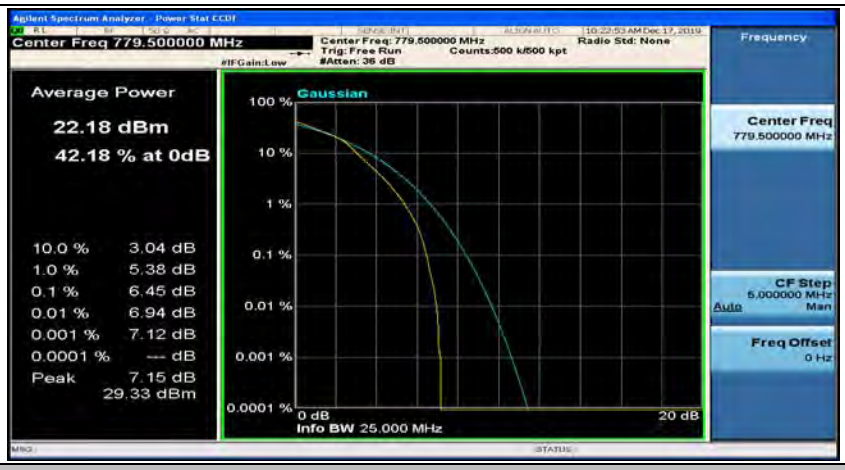

(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#6




(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#13


(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0

| (Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0 |
|---|
|  |
| (Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12 |
|  |
| (Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24 |
|  |
| (Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0 |

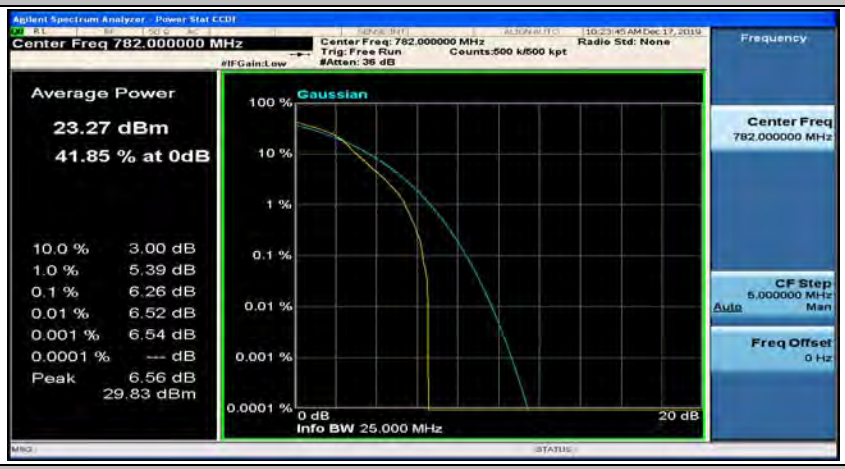



(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#6


(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#13

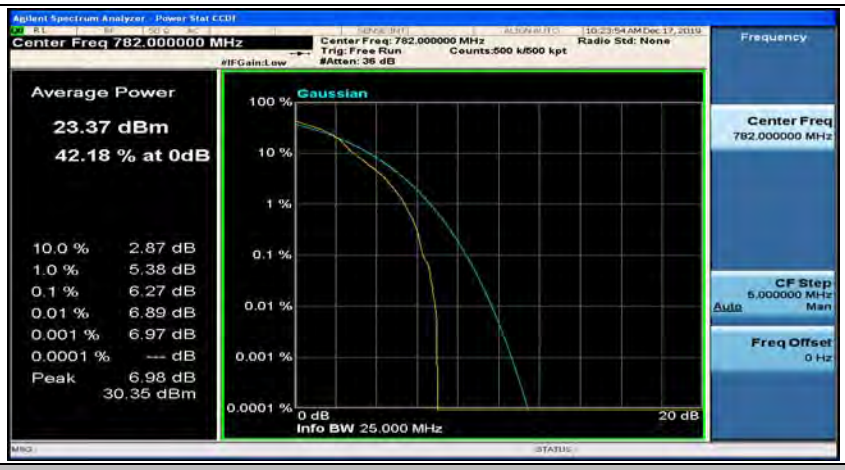

(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0




(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

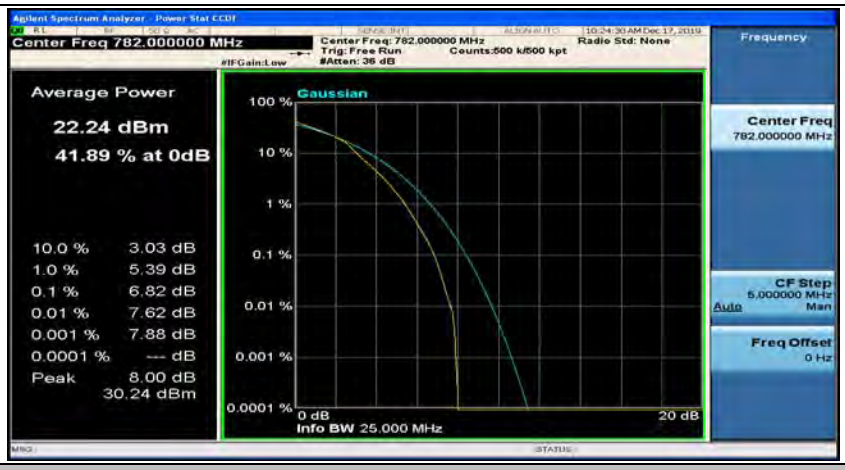

(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



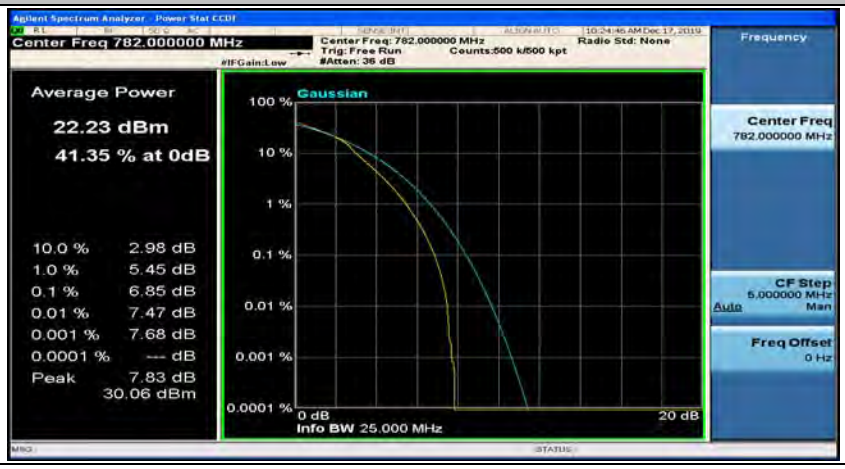

(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#0


(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#6


(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#13

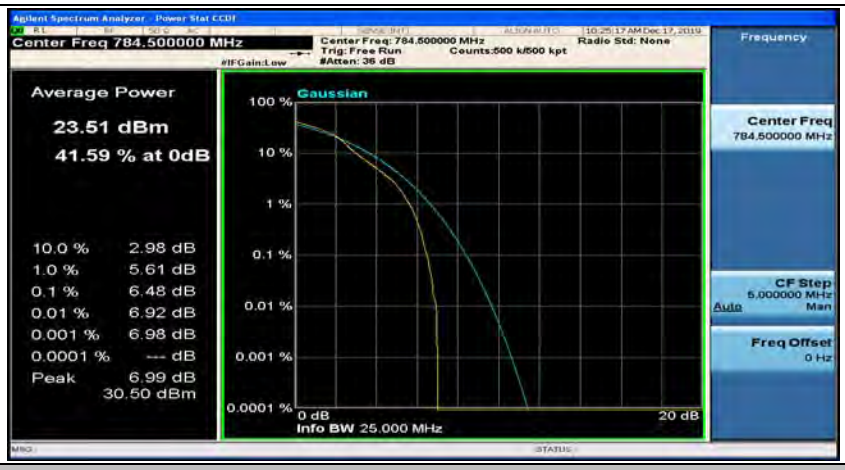



(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0




(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

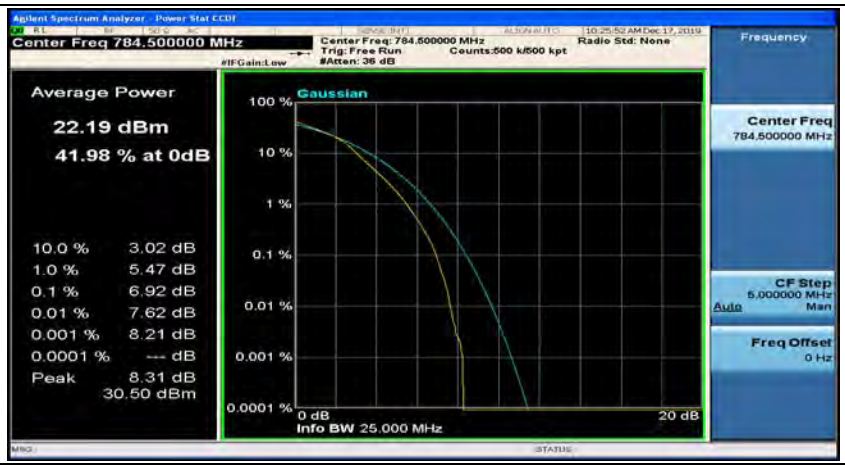

(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12




(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24


(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#0

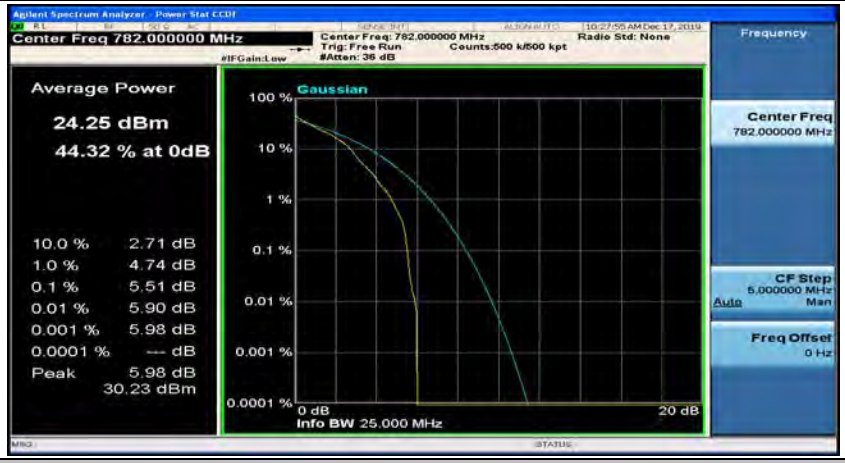

(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#6

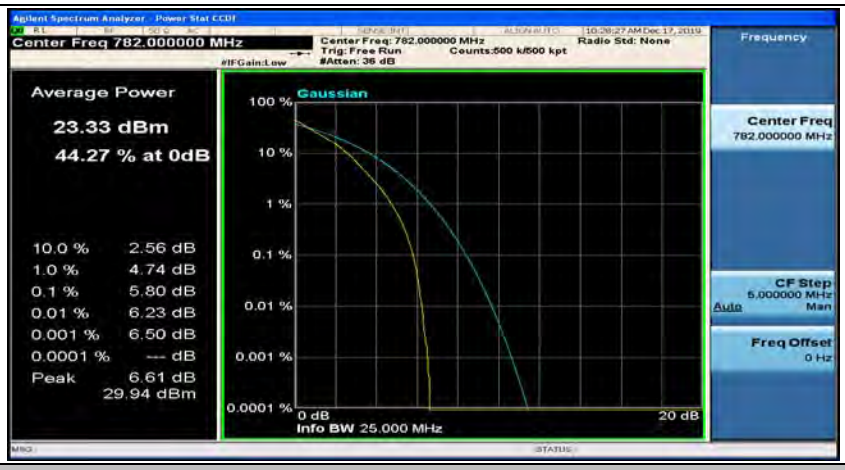



(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#13


(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0

## Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0 |
|---|
|  |
| Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24 |
|  |
| Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49 |
|  |
| Channel Bandwidth: 10 MHz_MCH_QPSK_25RB#0 |




Channel Bandwidth: 10 MHz_MCH_QPSK_25RB#12

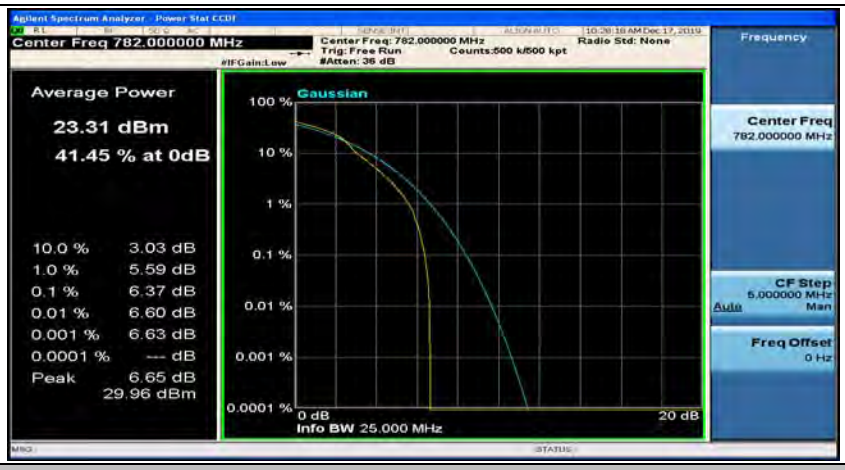

Channel Bandwidth: 10 MHz_MCH_QPSK_25RB#25


Channel Bandwidth: 10 MHz_MCH_QPSK_50RB#0


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49




Channel Bandwidth: 10 MHz_MCH_16QAM_25RB#0


Channel Bandwidth: 10 MHz_MCH_16QAM_25RB#12


Channel Bandwidth: 10 MHz_MCH_16QAM_25RB#25


Channel Bandwidth: 10 MHz_MCH_16QAM_50RB#0

# Appendix C: 26dB Bandwidth and Occupied Bandwidth

## Test Result

## Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 25 | 0 | 4.4771 | 4.907 | PASS |
| | MCH | 25 | 0 | 4.4786 | 4.917 | PASS |
| | HCH | 25 | 0 | 4.4733 | 4.915 | PASS |
| 16QAM | LCH | 25 | 0 | 4.4793 | 4.814 | PASS |
| | MCH | 25 | 0 | 4.4810 | 4.897 | PASS |
| | HCH | 25 | 0 | 4.4753 | 4.828 | PASS |

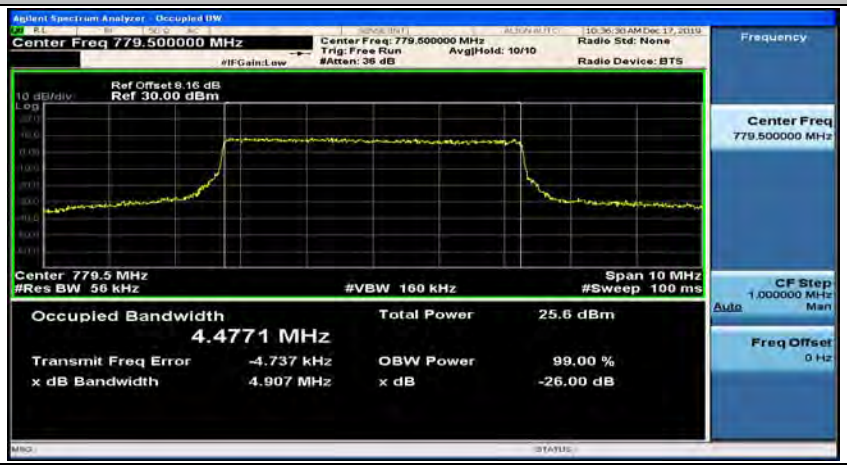
## Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| | | Size | Offset | | | |
| QPSK | MCH | 50 | 0 | 8.9631 | 9.590 | PASS |
| 16QAM | MCH | 50 | 0 | 8.9705 | 9.543 | PASS |

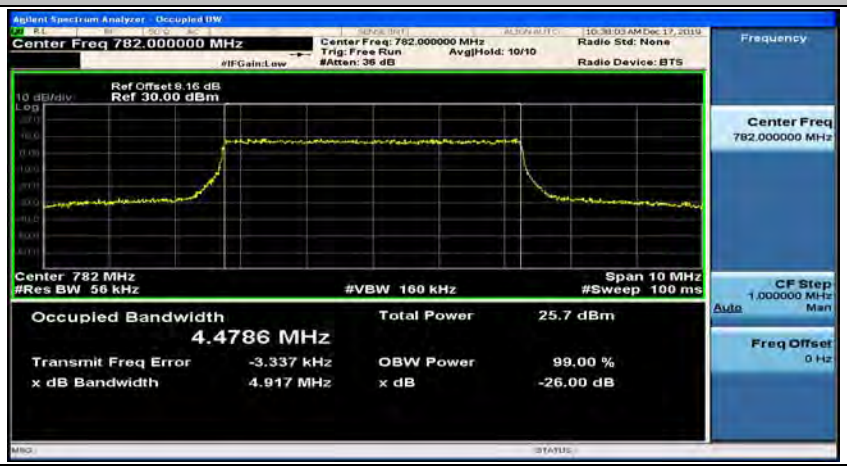
## Test Graphs

## Channel Bandwidth: 5 MHz

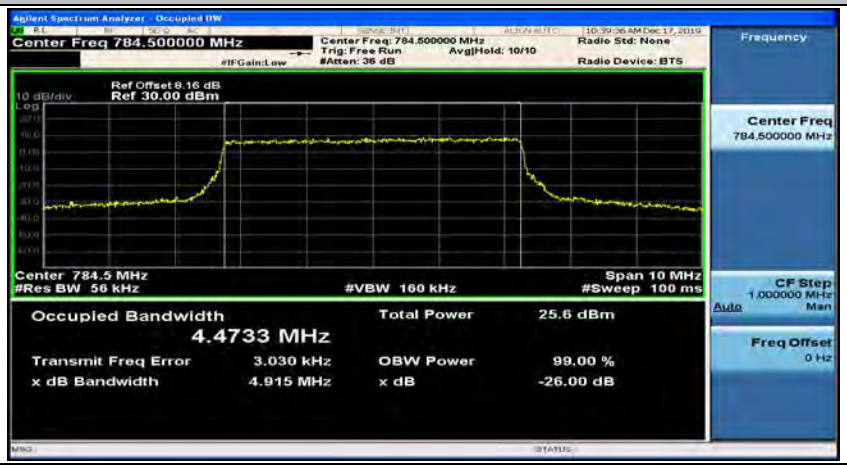
(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



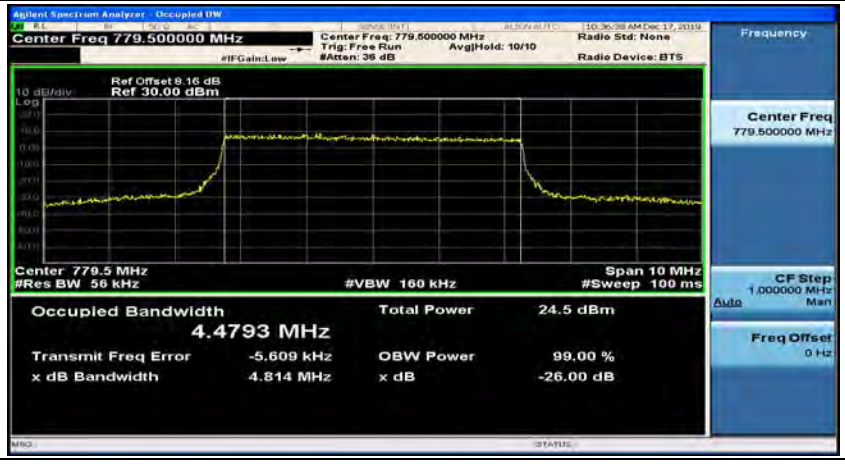

(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0



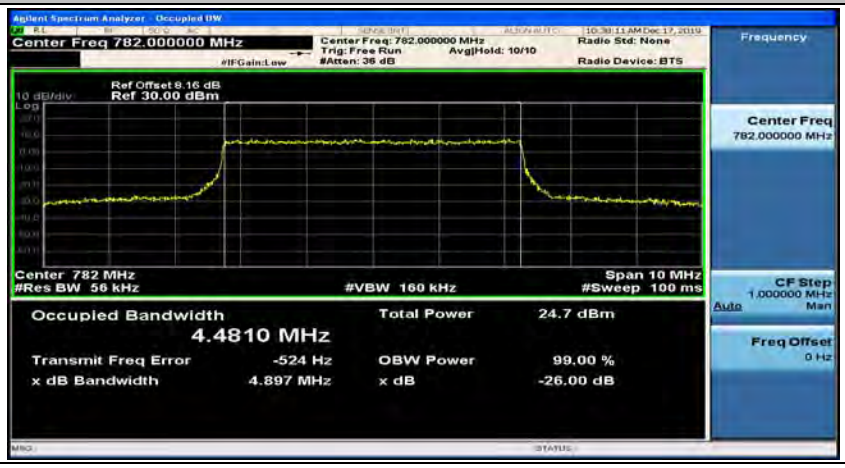

(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



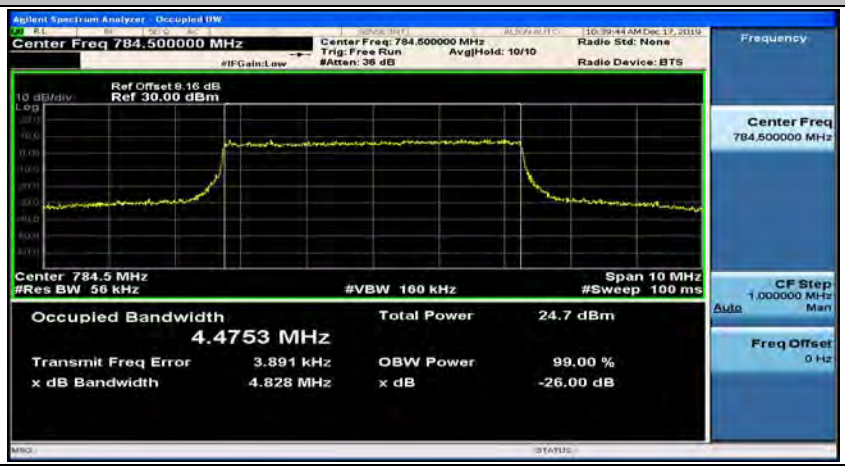
(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0



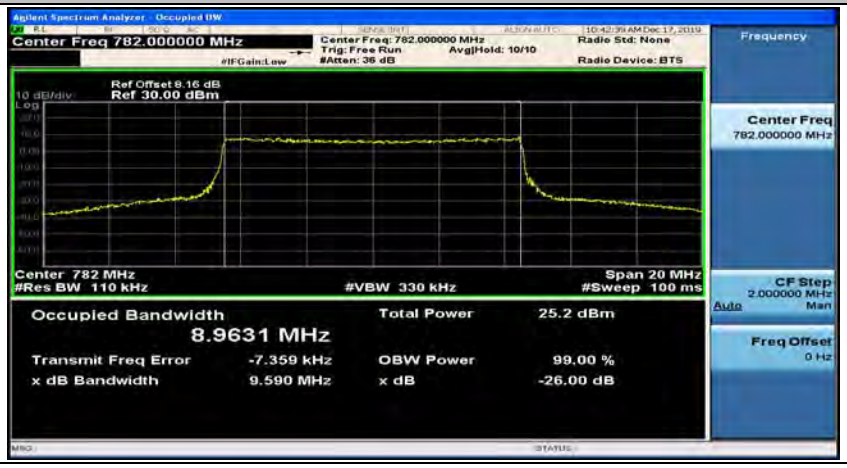

(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0



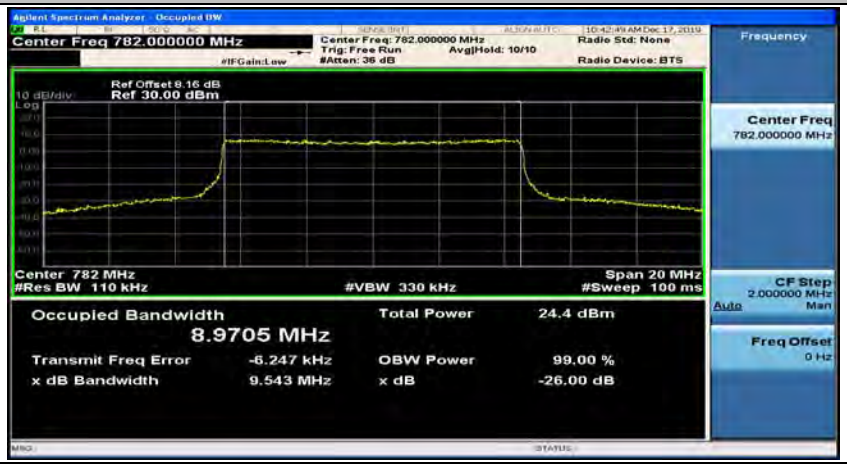

(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0



## Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz_MCH_QPSK_50RB#0 |
| --- |
|  |



| Channel Bandwidth: 10 MHz_MCH_16QAM_50RB#0 |
| --- |
|  |

# Appendix D: Band Edge

## Test Graphs

| Band13_5MHz_QPSK_23205_1RB#0 |
| --- |
|  |
| Band13_5MHz_QPSK_23205_25RB#0 |
|  |
| Band13_5MHz_QPSK_23255_1RB#0 |


Band13_5MHz_QPSK_23255_25RB#0

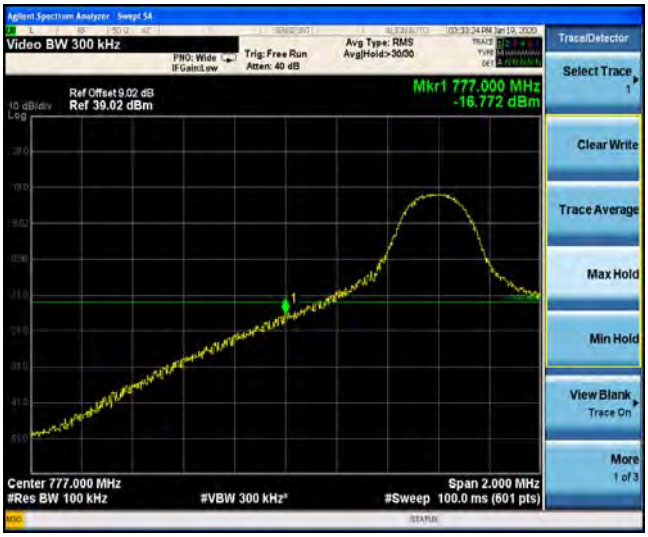

Band13_5MHz_16QAM_23205_1RB#0


Band13_5MHz_16QAM_23205_25RB#0


Band13_5MHz_16QAM_23255_1RB#0

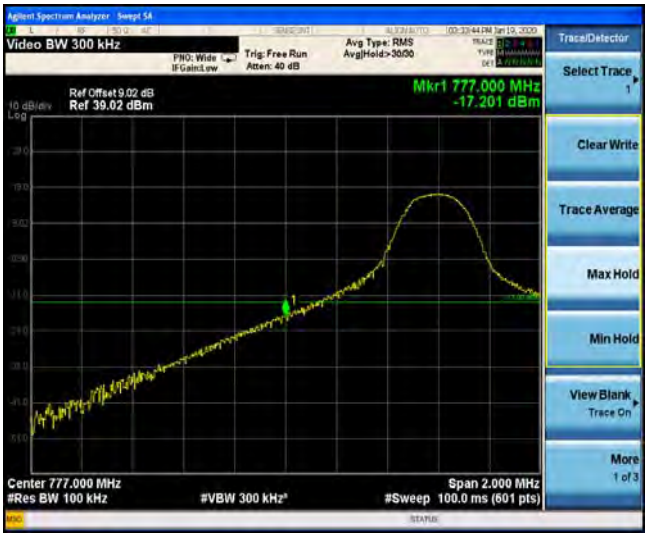

Band13_5MHz_16QAM_23255_25RB#0


Band13_10MHz_QPSK_23230_1RB#0



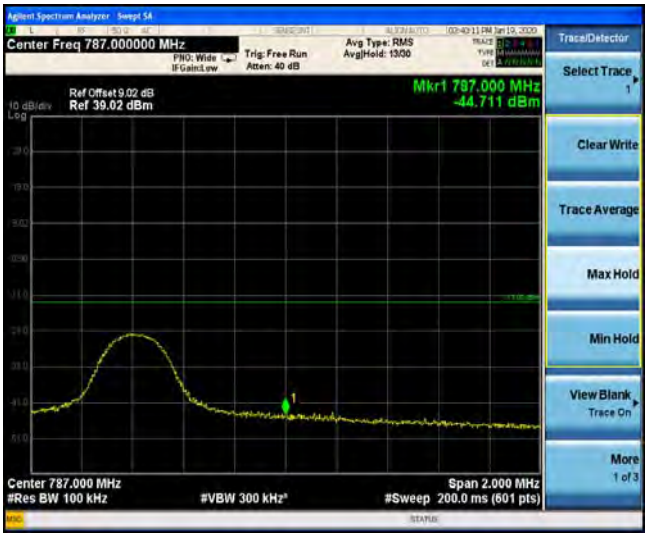

Band13_10MHz_QPSK_23230_50RB#0


Band13_10MHz_QPSK_23230_1RB#0




Band13_10MHz_QPSK_23230_50RB#0


Band13_10MHz_16QAM_23260_1RB#0




Band13_10MHz_16QAM_23260_50RB#0

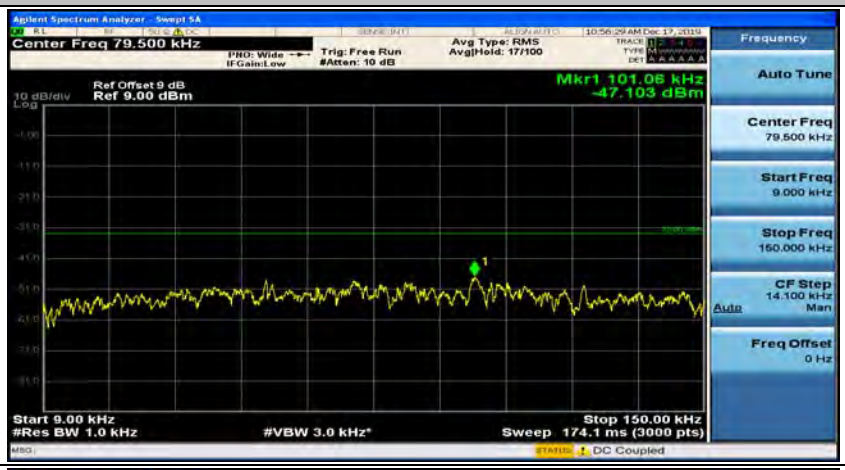
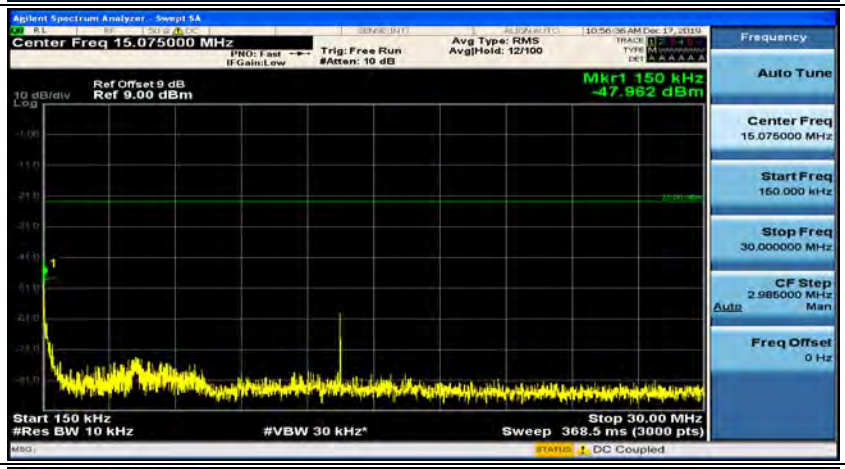

Band13_10MHz_16QAM_23230_1RB#0

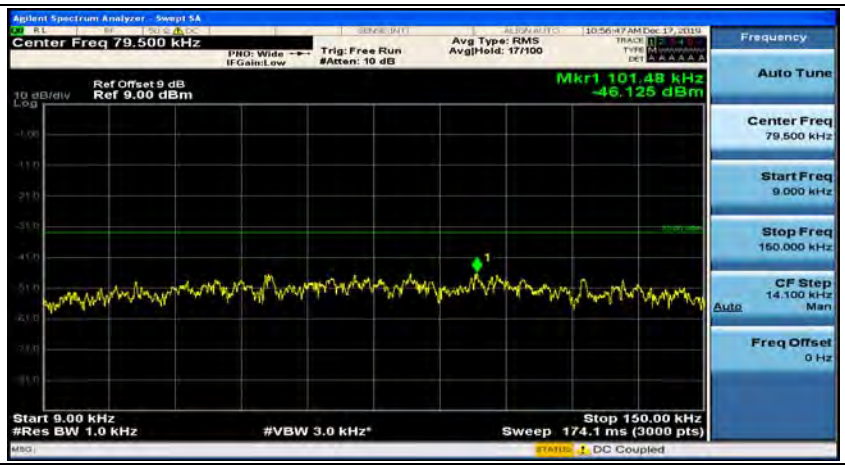

Band13_10MHz_16QAM_23230_50RB#0

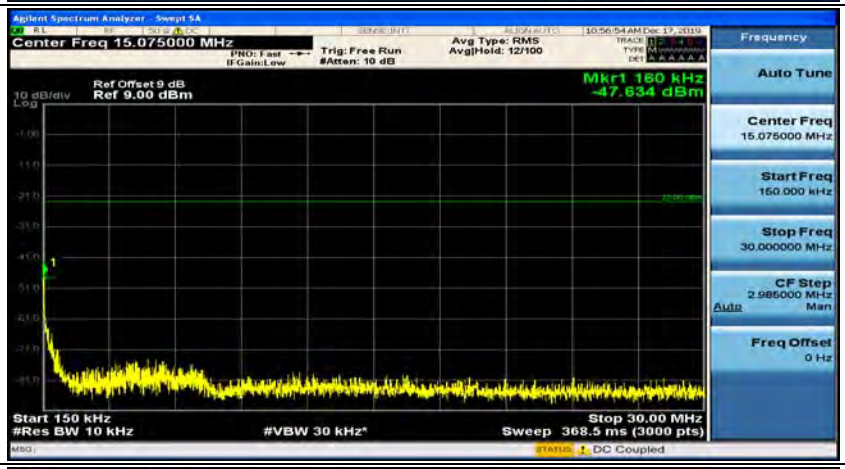
# Appendix E: Conducted Spurious Emission

## Test Graphs

## Channel Bandwidth: 5 MHz

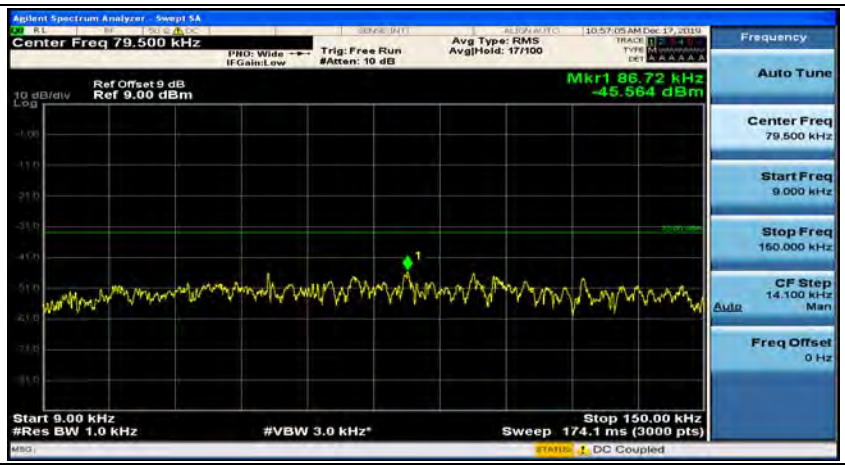
| (Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12 |

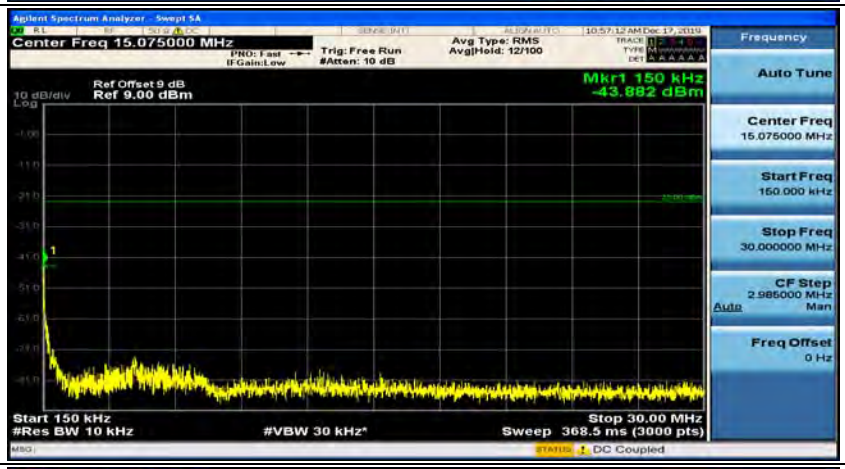


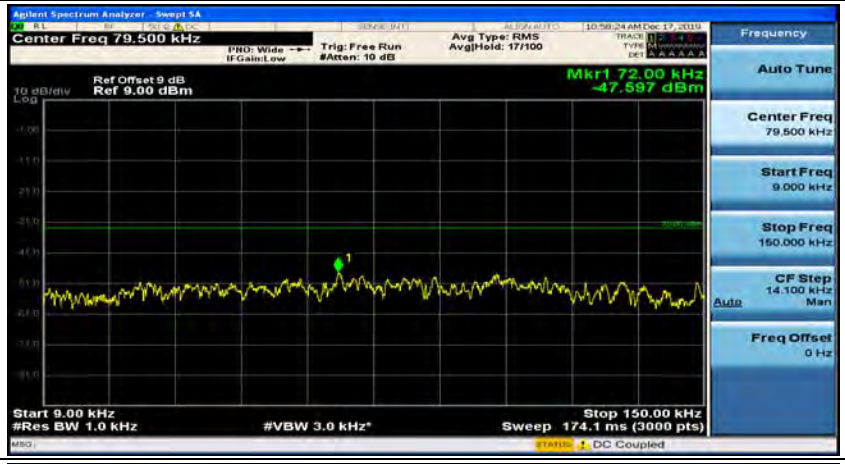
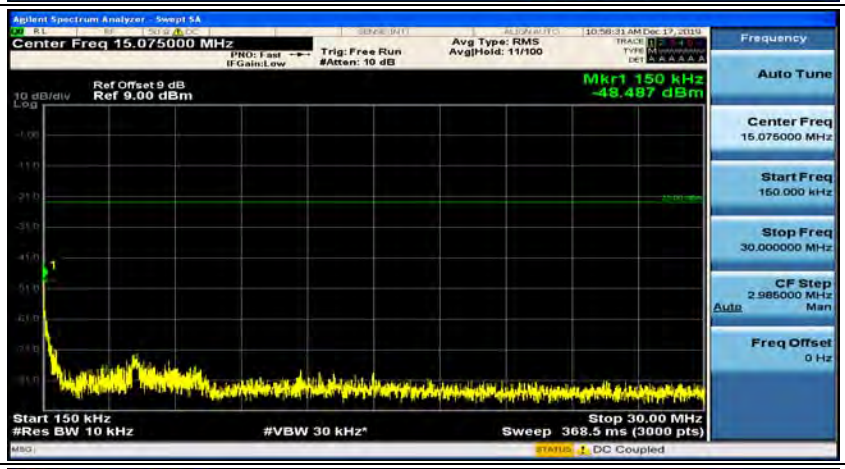


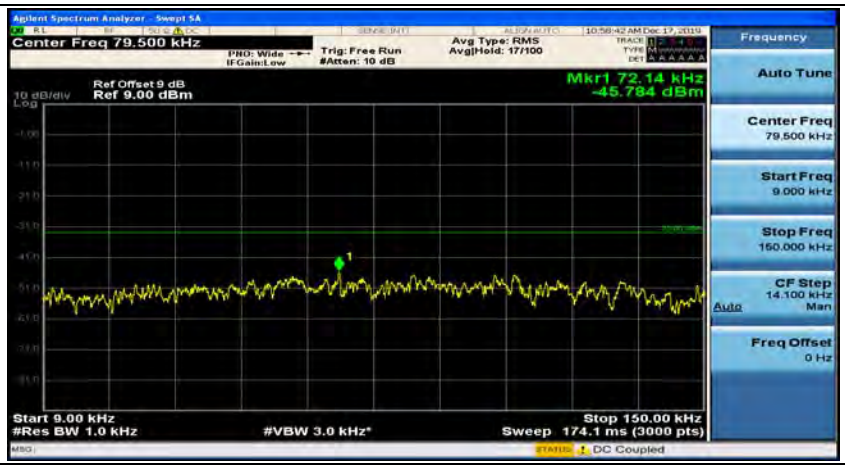
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

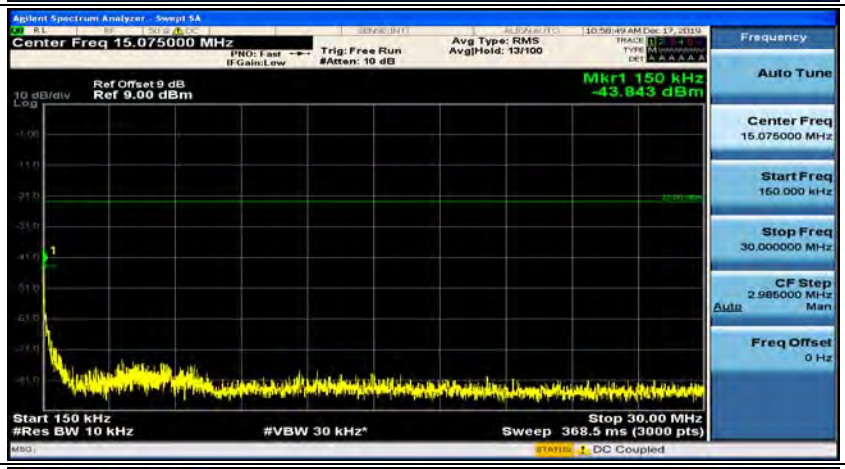

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:57:05 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 86.72 kHz
-45.564 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:57:12 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 150 kHz
-43.882 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
10:57:17 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 25.636 GHz
-26.076 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

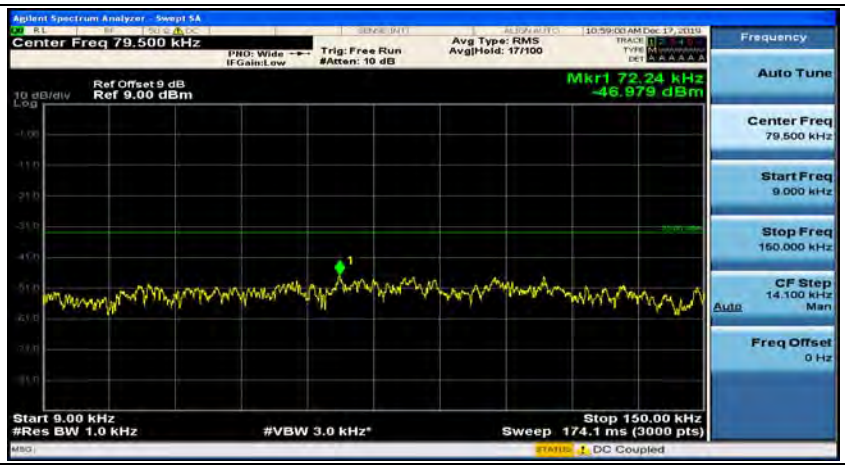
| (Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12 |

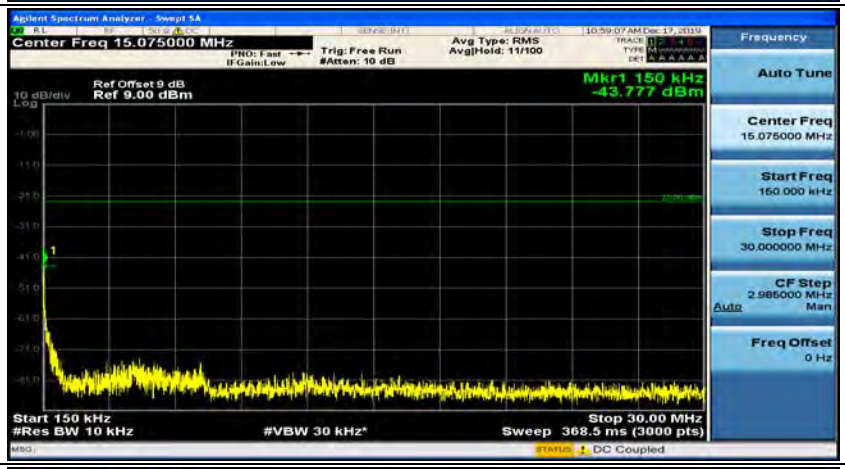


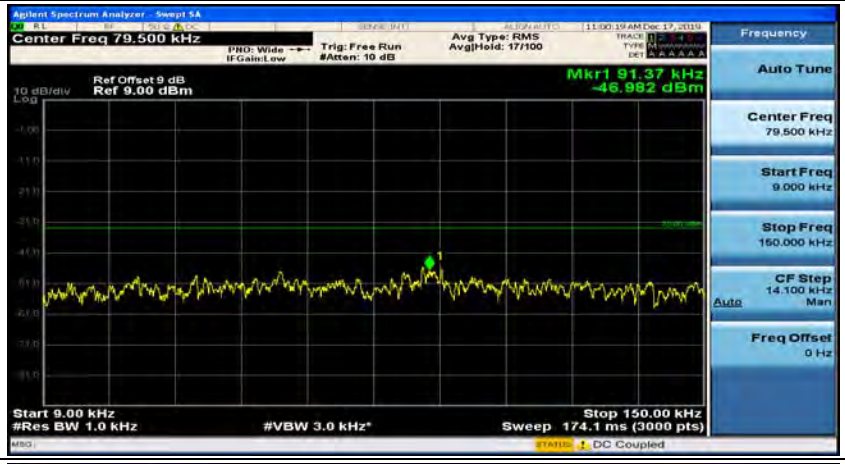
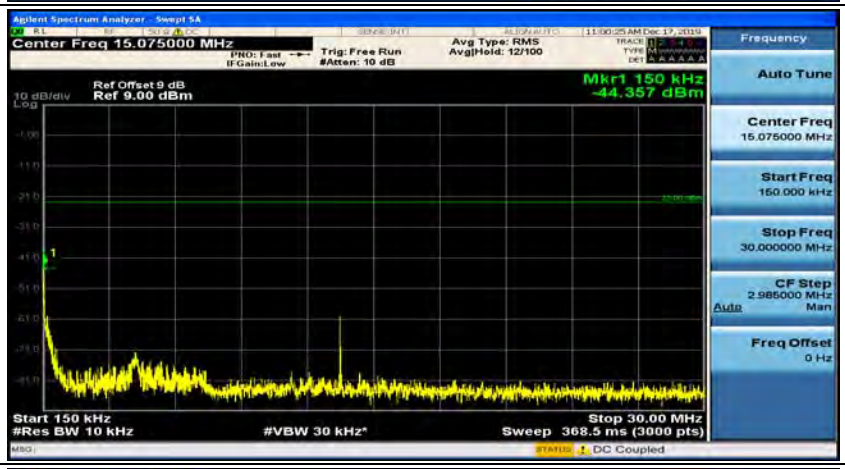


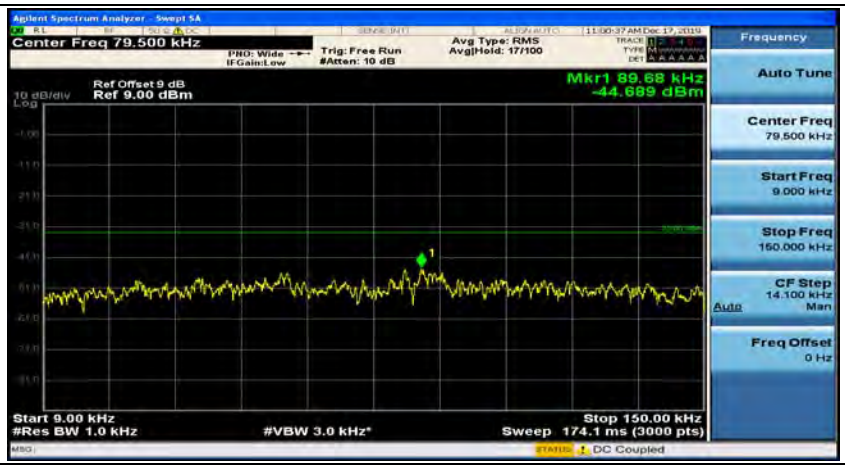
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

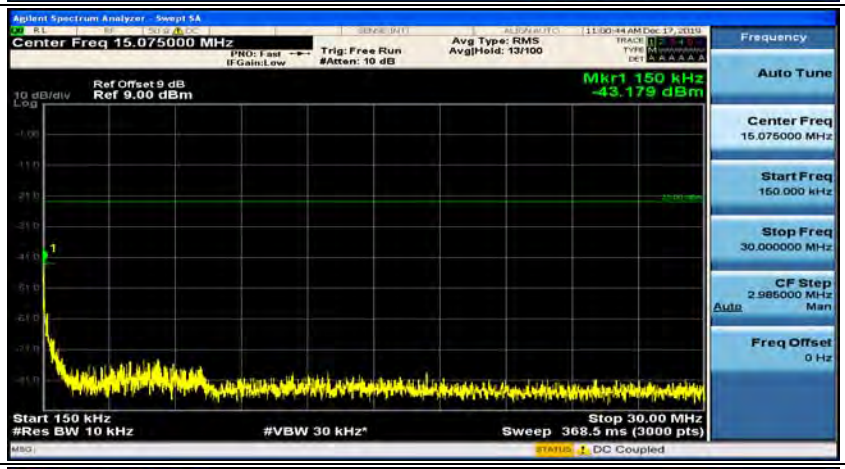

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:59:00 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 72.24 kHz
-46.979 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
10:59:07 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-43.777 dBm
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
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*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
10:59:13 AM Dec 17, 2019
Frequency
Auto Tune
Mkr2 25.654 GHz
-26.490 dBm
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

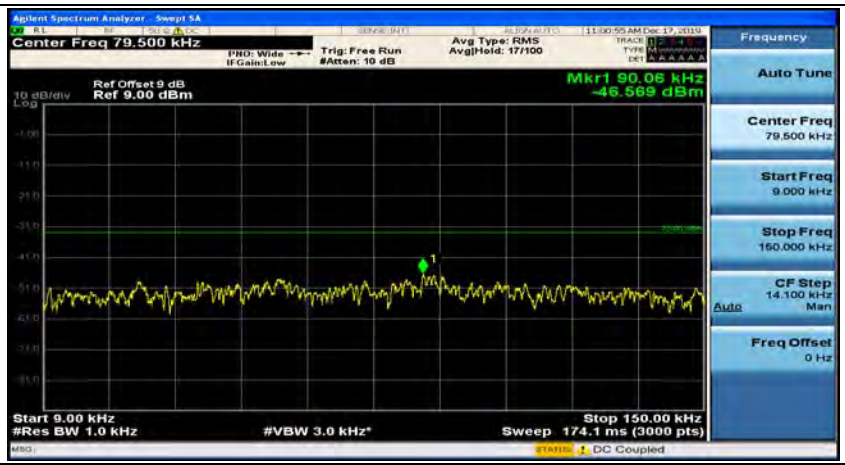
| (Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12 |

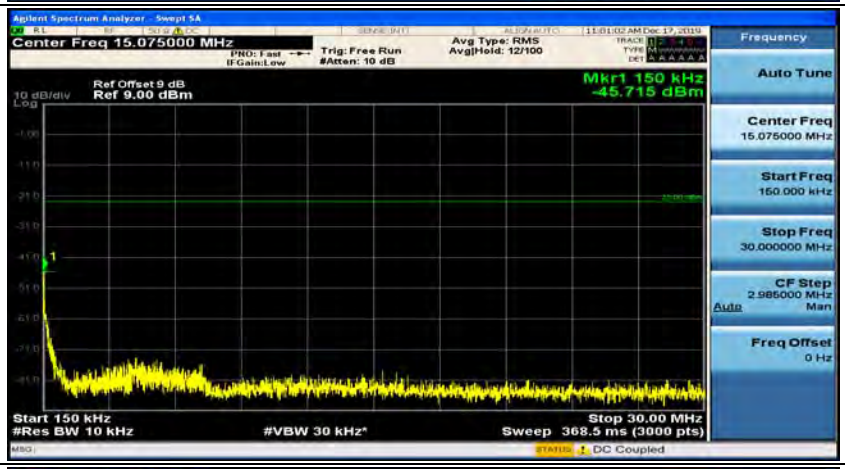


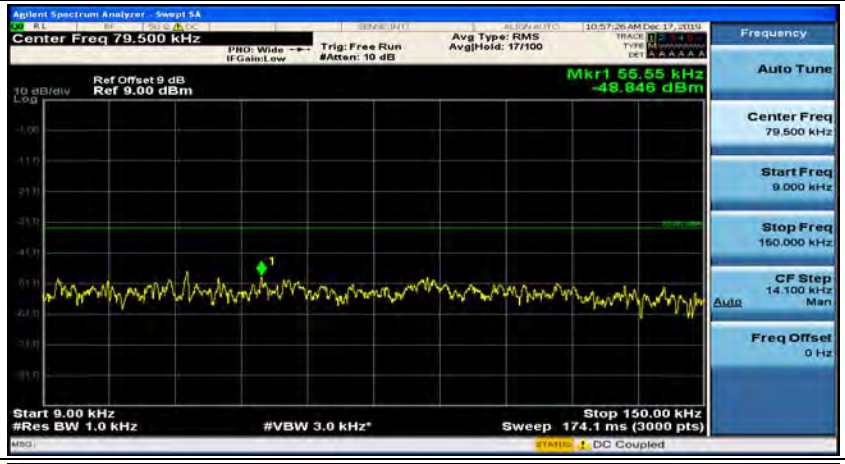
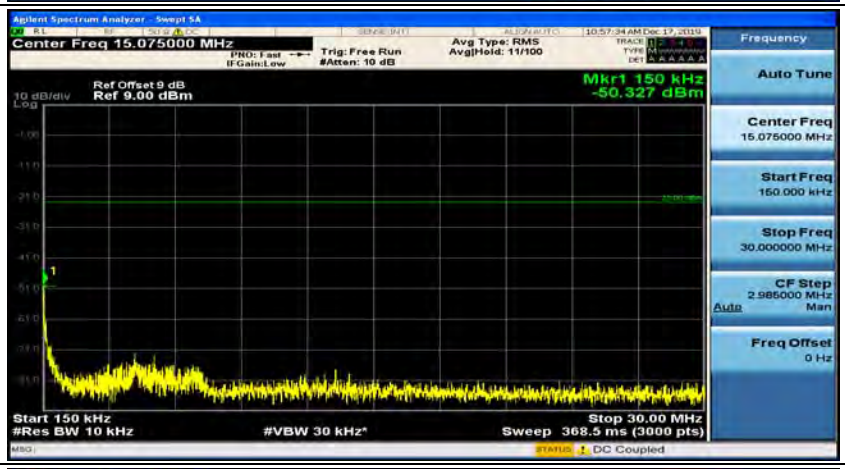


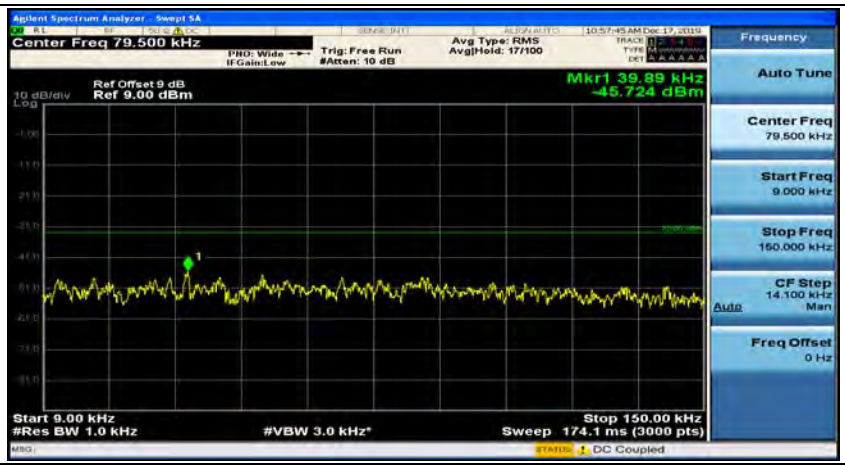
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

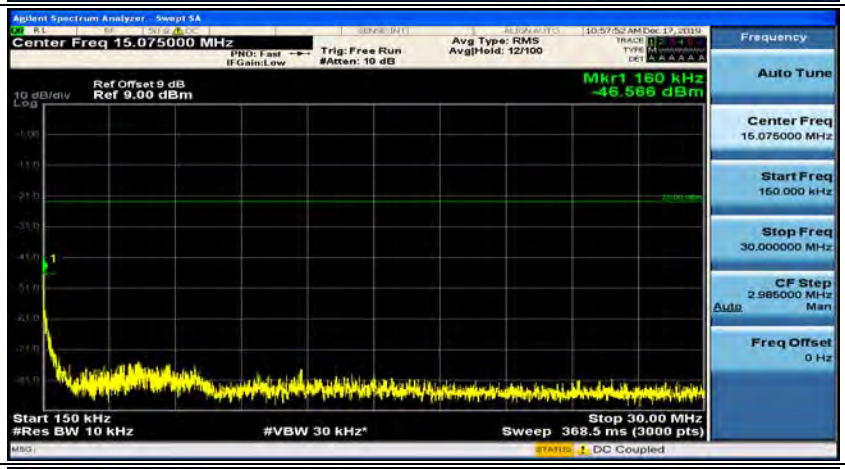

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 90.06 kHz
-46.589 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-45.715 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.628 GHz
-26.036 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

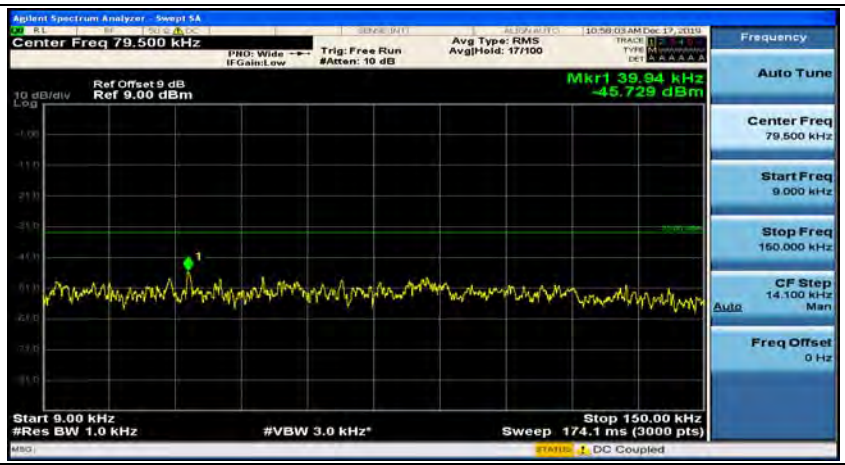
| (Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12 |

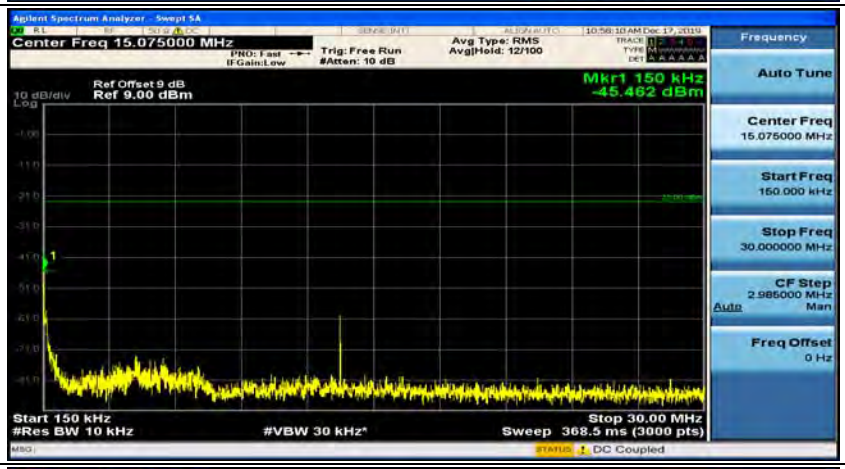


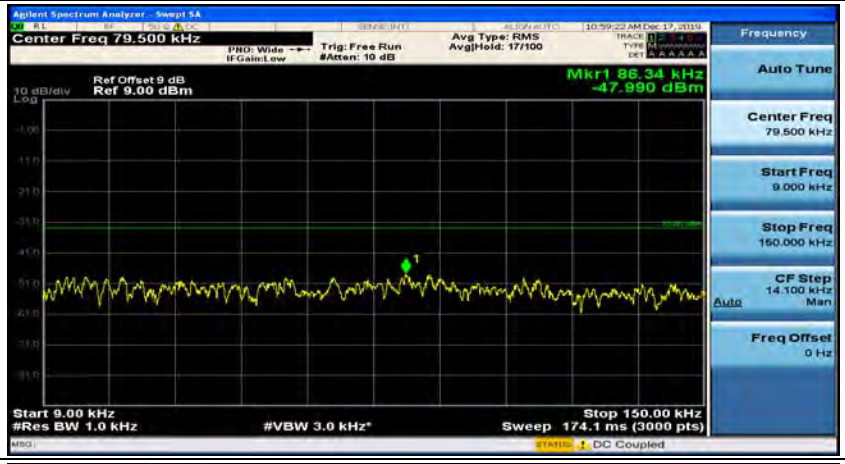
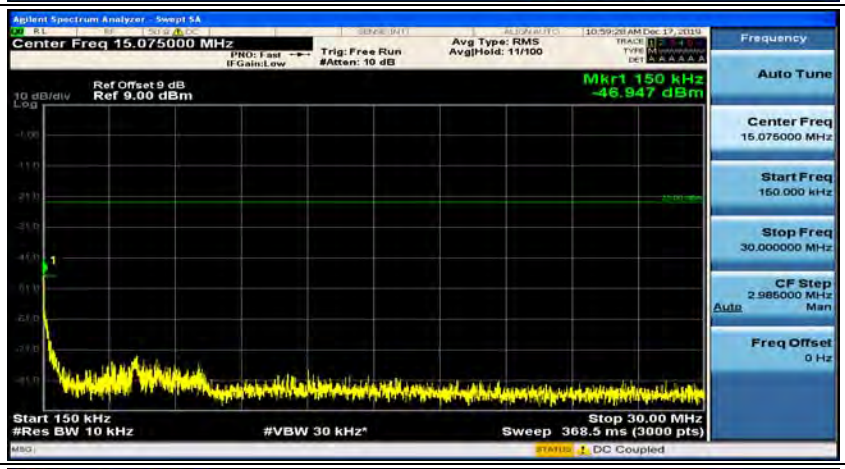


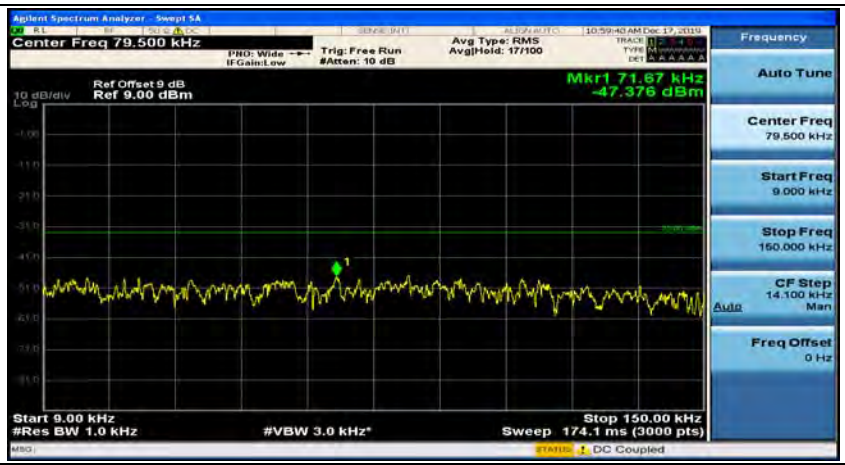
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

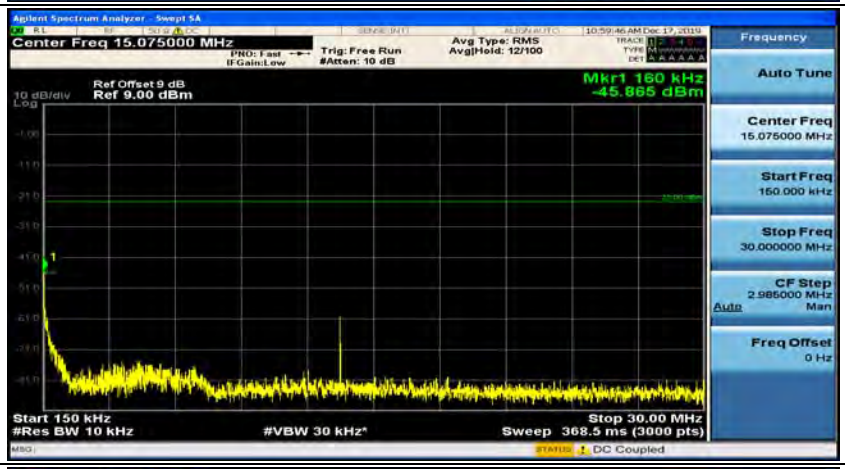

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:58:03 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 39.94 kHz
-45.729 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
10:58:10 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Log
Ref 9.00 dBm
Mkr1 150 kHz
-45.462 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
10:58:15 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Log
Ref 30.00 dBm
Mkr2 25.645 GHz
-26.333 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

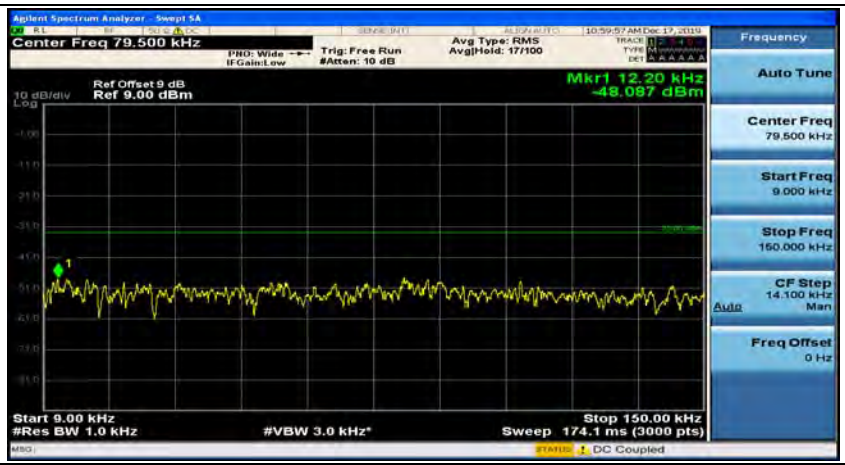
| (Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12 |

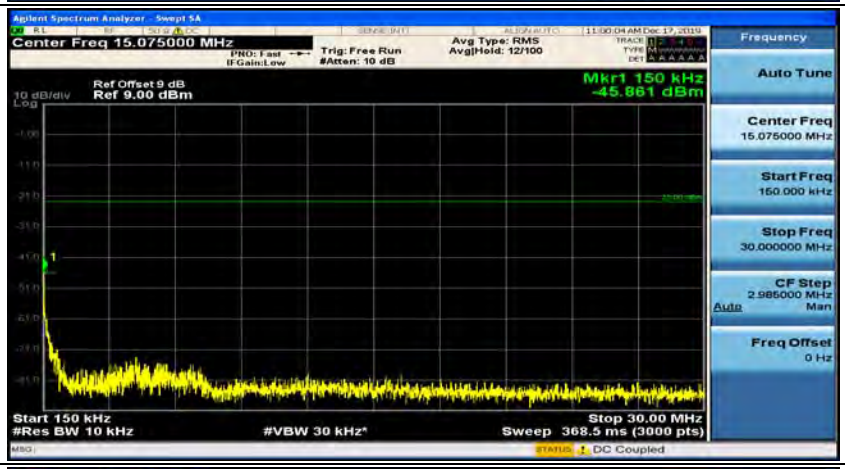


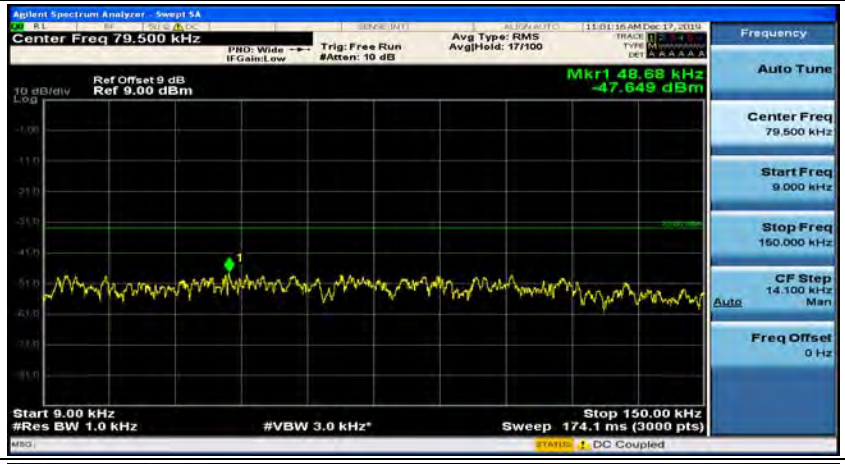
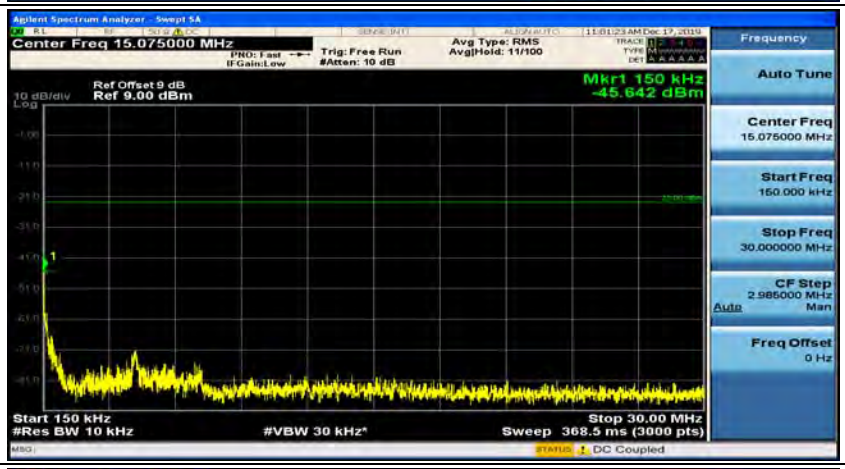


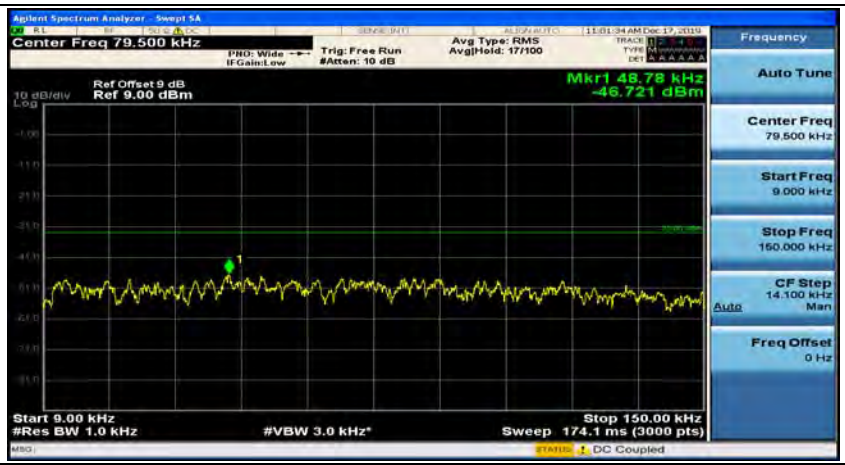
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

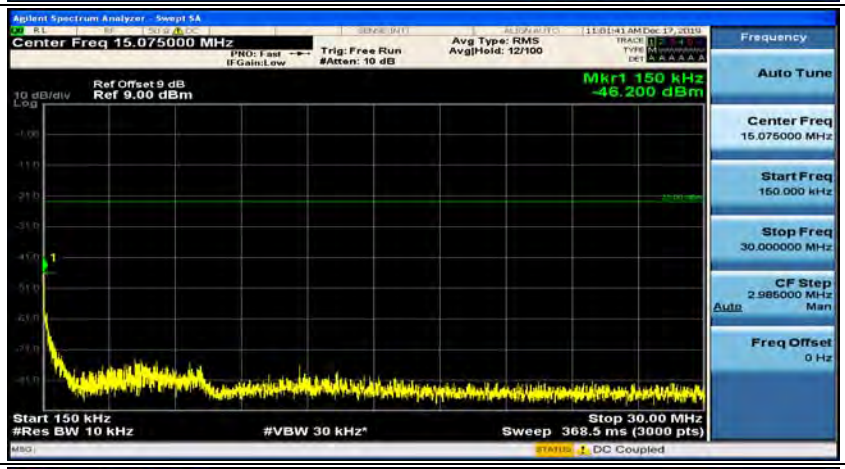

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
10:59:57 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 12.20 kHz
-48.087 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
11:00:04 AM Dec 17, 2019
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Mkr1 150 kHz
-45.861 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:00:10 AM Dec 17, 2019
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Mkr2 25.636 GHz
-26.250 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

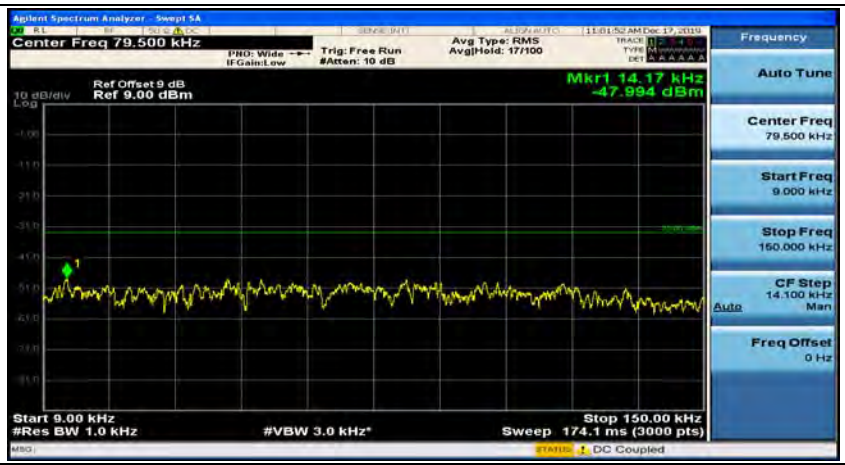
| (Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0 |
| --- |
|  |
|  |
|  |
| (Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12 |

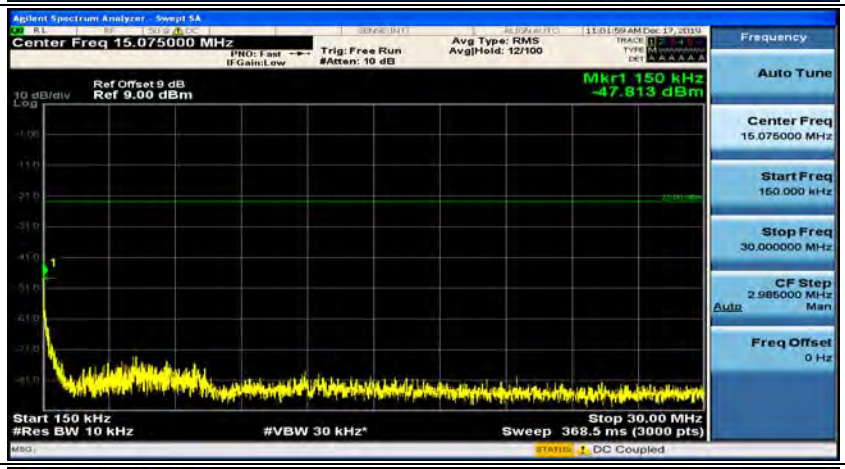




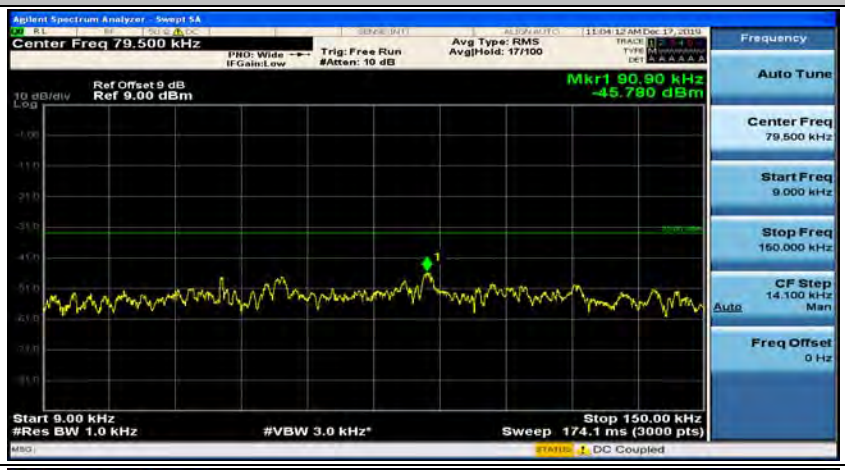
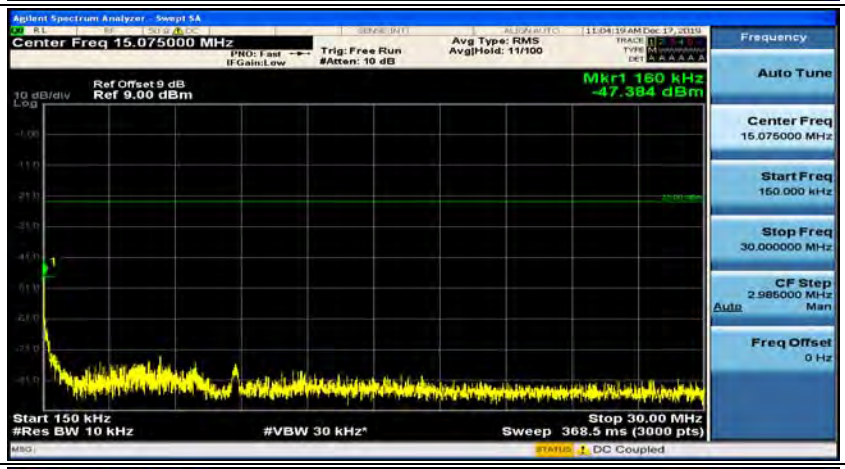
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

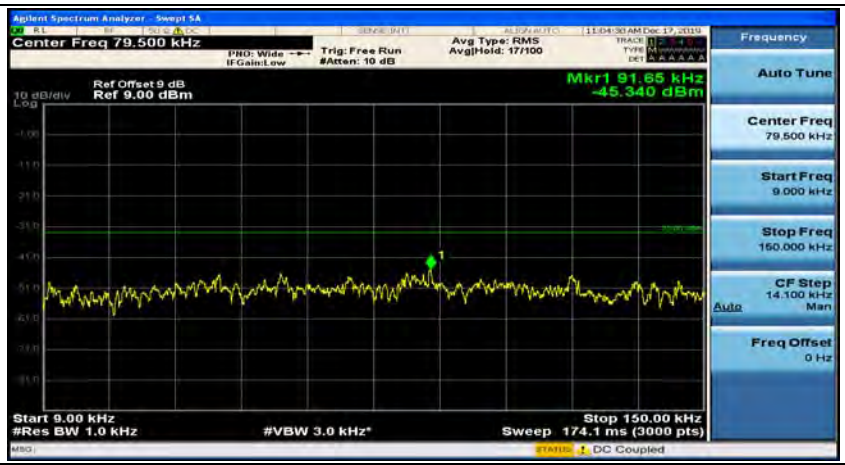

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 14.17 kHz
-47.994 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz

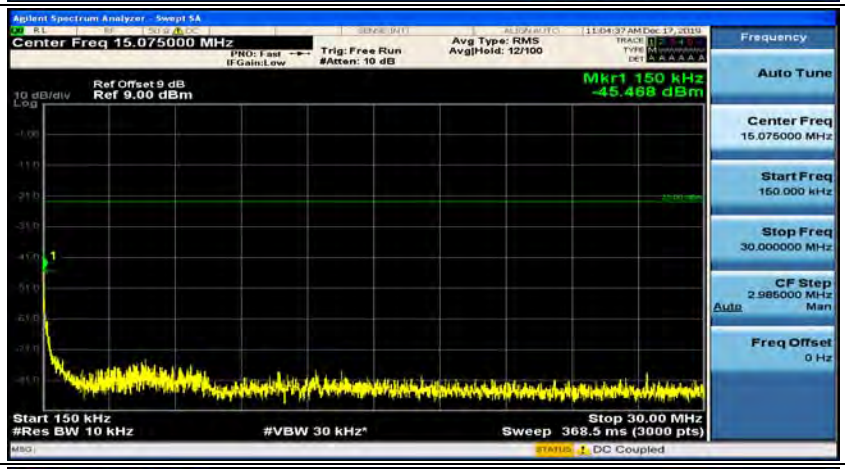

Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 12/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-47.813 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.636 GHz
-26.176 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

## Channel Bandwidth: 10 MHz

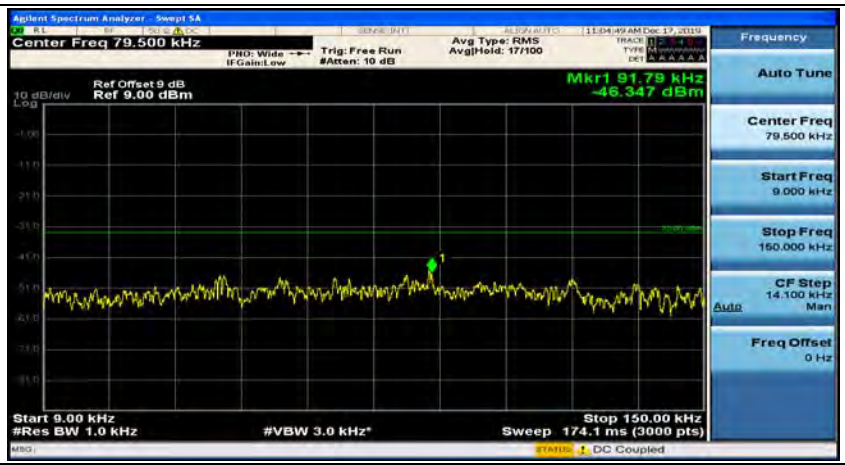
| Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0 |
| --- |
|  |
|  |
|  |
| Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24 |

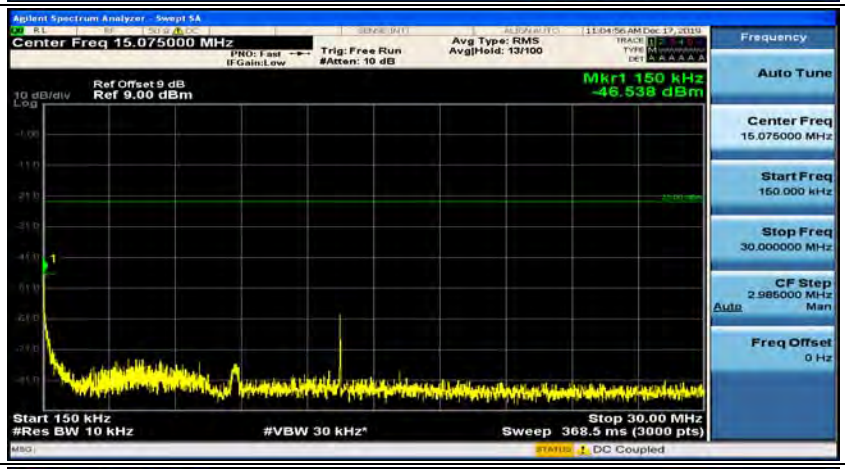


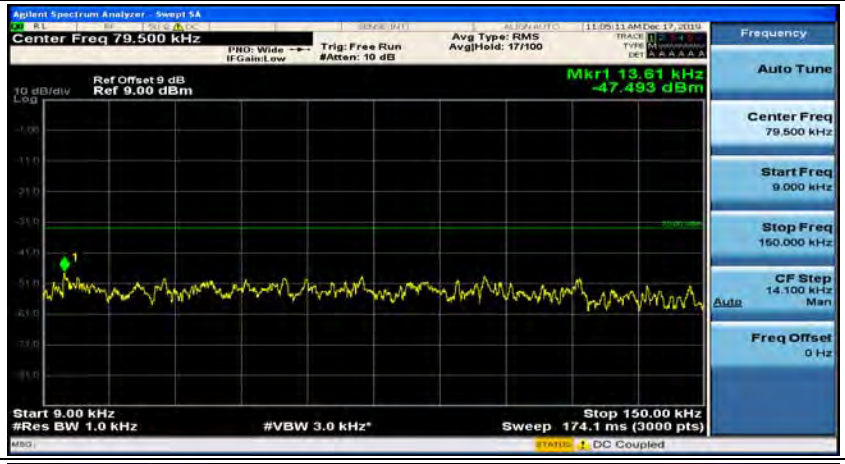
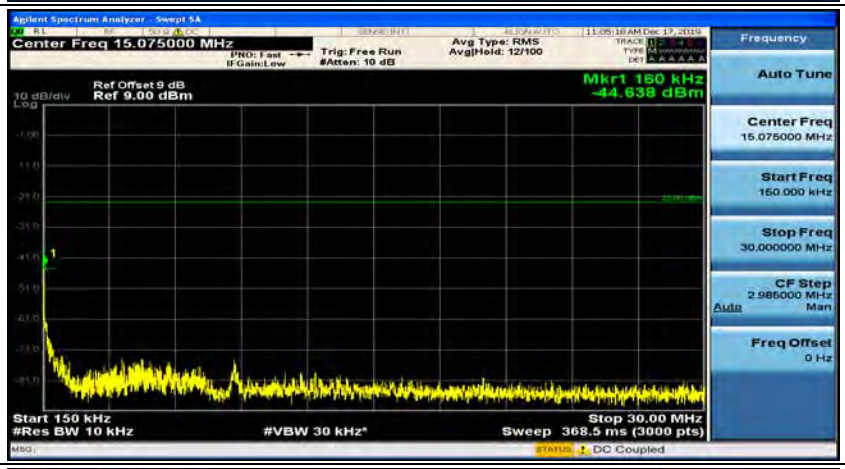


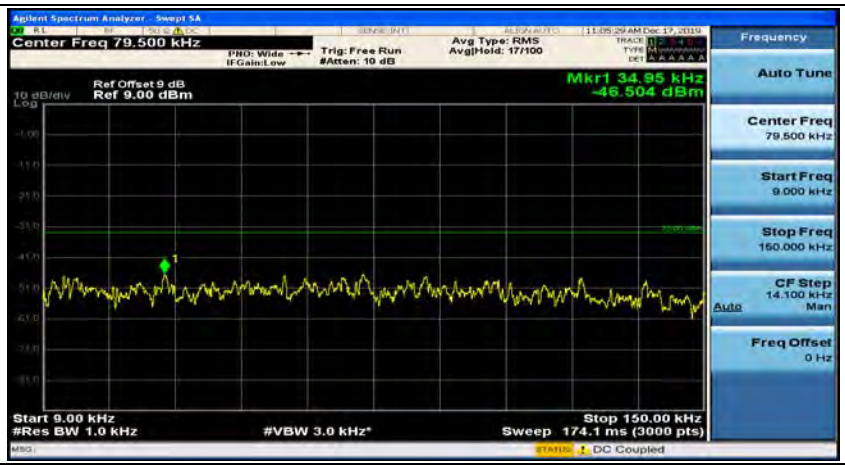
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

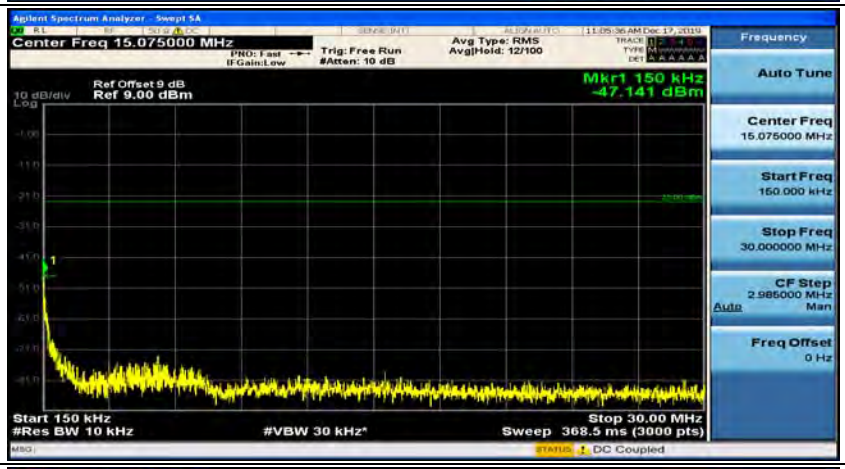

Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
11:04:49 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 91.79 kHz
-46.347 dBm
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 13/100
11:04:56 AM Dec 17, 2019
Frequency
Auto Tune
Mkr1 150 kHz
-46.538 dBm
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Log
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*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
11:05:02 AM Dec 17, 2019
Frequency
Auto Tune
Mkr2 25.636 GHz
-26.107 dBm
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)

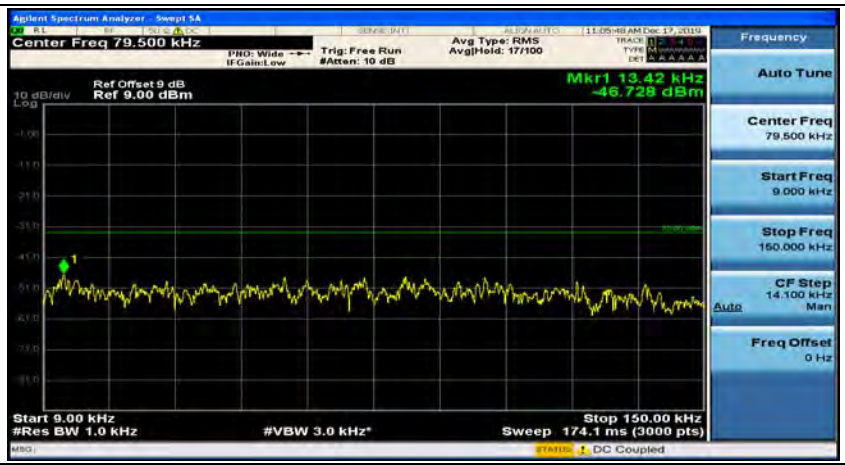
| Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0 |
|---|
|  |
|  |
|  |
| Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24 |

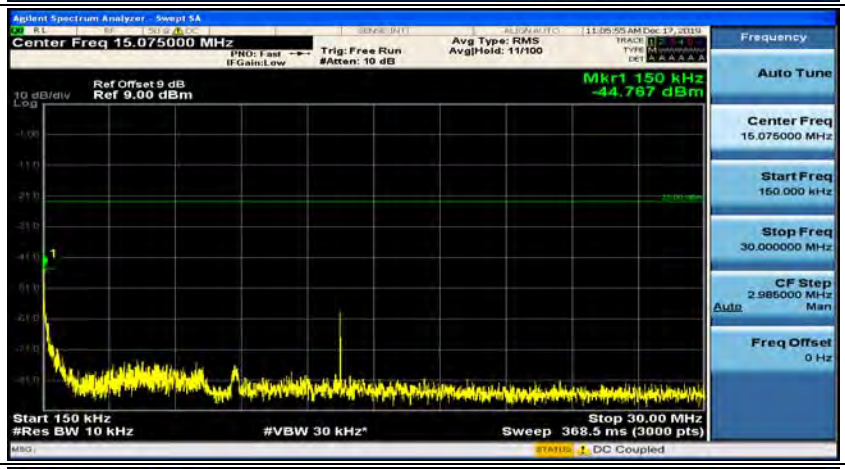




Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49


Agilent Spectrum Analyzer - Swept SA
Center Freq 79.500 kHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 17/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 13.42 kHz
-46.728 dBm
Start 9.00 kHz
#Res BW 1.0 kHz
#VBW 3.0 kHz*
Stop 150.00 kHz
Sweep 174.1 ms (3000 pts)
DC Coupled
Frequency
Auto Tune
Center Freq
79.500 kHz
Start Freq
9.000 kHz
Stop Freq
150.000 kHz
CF Step
14.100 kHz
Auto
Man
Freq Offset
0 Hz


Agilent Spectrum Analyzer - Swept SA
Center Freq 15.075000 MHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 10 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 9 dB
10 dB/div
Ref 9.00 dBm
Mkr1 150 kHz
-44.767 dBm
Start 150 kHz
#Res BW 10 kHz
#VBW 30 kHz*
Stop 30.00 MHz
Sweep 368.5 ms (3000 pts)
DC Coupled
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


Agilent Spectrum Analyzer - Swept SA
Center Freq 13.015000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 40 dB
Avg Type: RMS
Avg|Hold: 11/100
Ref Offset 8.95 dB
10 dB/div
Ref 30.00 dBm
Mkr2 25.697 GHz
-25.913 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz*
Stop 26.00 GHz
Sweep 64.98 ms (3000 pts)
Frequency
Auto Tune
Center Freq
13.015000000 GHz
Start Freq
30.000000 MHz
Stop Freq
26.000000000 GHz
CF Step
2.597000000 GHz
Auto
Man
Freq Offset
0 Hz

# Appendix F: Frequency Stability

## Test Result

## Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | -0.38 | -0.000487 | ± 2.5 | PASS |
| | | VN | TN | -1.32 | -0.001693 | ± 2.5 | PASS |
| | | VH | TN | 0.89 | 0.001142 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.56 | -0.001995 | ± 2.5 | PASS |
| | | VN | TN | -0.75 | -0.000959 | ± 2.5 | PASS |
| | | VH | TN | 1.87 | 0.002391 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.41 | 0.000523 | ± 2.5 | PASS |
| | | VN | TN | 3.91 | 0.004984 | ± 2.5 | PASS |
| | | VH | TN | -1.01 | -0.001287 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 1.21 | 0.001552 | ± 2.5 | PASS |
| | | VN | TN | 2.49 | 0.003194 | ± 2.5 | PASS |
| | | VH | TN | 1.37 | 0.001758 | ± 2.5 | PASS |
| | MCH | VL | TN | 1.71 | 0.002187 | ± 2.5 | PASS |
| | | VN | TN | -0.64 | -0.000818 | ± 2.5 | PASS |
| | | VH | TN | 0.57 | 0.000729 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.62 | 0.004614 | ± 2.5 | PASS |
| | | VN | TN | 0.14 | 0.000178 | ± 2.5 | PASS |
| | | VH | TN | 4.41 | 0.005621 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 1.56 | 0.002001 | ± 2.5 | PASS |
| | | VN | -20 | -0.28 | -0.000359 | ± 2.5 | PASS |
| | | VN | -10 | 1.19 | 0.001527 | ± 2.5 | PASS |
| | | VN | 0 | -0.39 | -0.000500 | ± 2.5 | PASS |
| | | VN | 10 | 3.16 | 0.004054 | ± 2.5 | PASS |
| | | VN | 20 | 0.82 | 0.001052 | ± 2.5 | PASS |
| | | VN | 30 | 4.34 | 0.005568 | ± 2.5 | PASS |
| | | VN | 40 | 3.6 | 0.004618 | ± 2.5 | PASS |
| | | VN | 50 | 3.76 | 0.004824 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.52 | -0.001944 | ± 2.5 | PASS |
| | | VN | -20 | 3.24 | 0.004143 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | -10 | 3.19 | 0.004079 | ± 2.5 | PASS |
| | | VN | 0 | 1.91 | 0.002442 | ± 2.5 | PASS |
| | | VN | 10 | 2.33 | 0.002980 | ± 2.5 | PASS |
| | | VN | 20 | 4.54 | 0.005806 | ± 2.5 | PASS |
| | | VN | 30 | -1.42 | -0.001816 | ± 2.5 | PASS |
| | | VN | 40 | 2.59 | 0.003312 | ± 2.5 | PASS |
| | | VN | 50 | 4.36 | 0.005575 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.49 | 0.004449 | ± 2.5 | PASS |
| | | VN | -20 | 0.15 | 0.000191 | ± 2.5 | PASS |
| | | VN | -10 | -1.79 | -0.002282 | ± 2.5 | PASS |
| | | VN | 0 | 0.32 | 0.000408 | ± 2.5 | PASS |
| | | VN | 10 | 2.33 | 0.002970 | ± 2.5 | PASS |
| | | VN | 20 | 3.56 | 0.004538 | ± 2.5 | PASS |
| | | VN | 30 | 3.67 | 0.004678 | ± 2.5 | PASS |
| | | VN | 40 | 0.52 | 0.000663 | ± 2.5 | PASS |
| | | VN | 50 | -0.85 | -0.001083 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 2.46 | 0.003156 | ± 2.5 | PASS |
| | | VN | -20 | 1.96 | 0.002514 | ± 2.5 | PASS |
| | | VN | -10 | 4.21 | 0.005401 | ± 2.5 | PASS |
| | | VN | 0 | 1.42 | 0.001822 | ± 2.5 | PASS |
| | | VN | 10 | 0.82 | 0.001052 | ± 2.5 | PASS |
| | | VN | 20 | 2.95 | 0.003784 | ± 2.5 | PASS |
| | | VN | 30 | 2.92 | 0.003746 | ± 2.5 | PASS |
| | | VN | 40 | 1.76 | 0.002258 | ± 2.5 | PASS |
| | | VN | 50 | 2.81 | 0.003605 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.12 | -0.001432 | ± 2.5 | PASS |
| | | VN | -20 | 4.99 | 0.006381 | ± 2.5 | PASS |
| | | VN | -10 | 2.17 | 0.002775 | ± 2.5 | PASS |
| | | VN | 0 | 1.03 | 0.001317 | ± 2.5 | PASS |
| | | VN | 10 | 3.69 | 0.004719 | ± 2.5 | PASS |
| | | VN | 20 | 2.57 | 0.003286 | ± 2.5 | PASS |
| | | VN | 30 | 4.13 | 0.005281 | ± 2.5 | PASS |
| | | VN | 40 | -0.85 | -0.001087 | ± 2.5 | PASS |
| | | VN | 50 | -1.54 | -0.001969 | ± 2.5 | PASS |
| | HCH | VN | -30 | -1.95 | -0.002486 | ± 2.5 | PASS |
| | | VN | -20 | 4.08 | 0.005201 | ± 2.5 | PASS |
| | | VN | -10 | 0.09 | 0.000115 | ± 2.5 | PASS |
| | | VN | 0 | 4.26 | 0.005430 | ± 2.5 | PASS |
| | | VN | 10 | 1.89 | 0.002409 | ± 2.5 | PASS |
| | | VN | 20 | 0.85 | 0.001083 | ± 2.5 | PASS |
| | | VN | 30 | -1.73 | -0.002205 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 40 | 0.74 | 0.000943 | ± 2.5 | PASS |
| | | VN | 50 | 4.74 | 0.006042 | ± 2.5 | PASS |

## Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | MCH | VL | TN | -0.54 | -0.000691 | ± 2.5 | PASS |
| | | VN | TN | 3.62 | 0.004629 | ± 2.5 | PASS |
| | | VH | TN | -0.17 | -0.000217 | ± 2.5 | PASS |
| 16QAM | MCH | VL | TN | 1.8 | 0.002302 | ± 2.5 | PASS |
| | | VN | TN | 1.64 | 0.002097 | ± 2.5 | PASS |
| | | VH | TN | 1.02 | 0.001304 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | MCH | VN | -30 | 1.54 | 0.001969 | ± 2.5 | PASS |
| | | VN | -20 | -0.78 | -0.000997 | ± 2.5 | PASS |
| | | VN | -10 | 3.59 | 0.004591 | ± 2.5 | PASS |
| | | VN | 0 | 4.6 | 0.005882 | ± 2.5 | PASS |
| | | VN | 10 | 0.47 | 0.000601 | ± 2.5 | PASS |
| | | VN | 20 | -0.3 | -0.000384 | ± 2.5 | PASS |
| | | VN | 30 | -1.95 | -0.002494 | ± 2.5 | PASS |
| | | VN | 40 | 0.78 | 0.000997 | ± 2.5 | PASS |
| | | VN | 50 | 3.65 | 0.004668 | ± 2.5 | PASS |
| 16QAM | MCH | VN | -30 | 2.55 | 0.003261 | ± 2.5 | PASS |
| | | VN | -20 | -1.99 | -0.002545 | ± 2.5 | PASS |
| | | VN | -10 | 4.64 | 0.005934 | ± 2.5 | PASS |
| | | VN | 0 | 2.11 | 0.002698 | ± 2.5 | PASS |
| | | VN | 10 | 0.64 | 0.000818 | ± 2.5 | PASS |
| | | VN | 20 | 0.83 | 0.001061 | ± 2.5 | PASS |
| | | VN | 30 | 1.57 | 0.002008 | ± 2.5 | PASS |
| | | VN | 40 | 0.87 | 0.001113 | ± 2.5 | PASS |
| | | VN | 50 | -0.72 | -0.000921 | ± 2.5 | PASS |