

## Appendix H: Test Data for LTE Band 17

**Product Name: 4G PHONE**

**Trade Mark: KAPSYS**

**Test Model: MiniVision2**

### Environmental Conditions

|                    |            |
|--------------------|------------|
| Temperature:       | 23.6 ° C   |
| Relative Humidity: | 54.2%      |
| ATM Pressure:      | 100.0 kPa  |
| Test Engineer:     | Diamond Lu |
| Supervised by:     | Li Huan    |

### H.1 Conducted Output Power

| Conducted Output Power Test Result (Channel Bandwidth: 5 MHz) |         |                  |        |                     |                     |         |
|---------------------------------------------------------------|---------|------------------|--------|---------------------|---------------------|---------|
| Modulation                                                    | Channel | RB Configuration |        | Average Power [dBm] | Average Power [dBm] | Verdict |
|                                                               |         | Size             | Offset | QPSK                | 16QAM               |         |
| QPSK /<br>16QAM                                               | LCH     | 1                | 0      | 23.61               | 22.76               | PASS    |
|                                                               |         | 1                | 12     | 23.86               | 23.02               | PASS    |
|                                                               |         | 1                | 24     | 24.26               | 23.46               | PASS    |
|                                                               |         | 12               | 0      | 22.87               | 21.81               | PASS    |
|                                                               |         | 12               | 6      | 23.09               | 22.03               | PASS    |
|                                                               |         | 12               | 13     | 23.36               | 21.85               | PASS    |
|                                                               |         | 25               | 0      | 22.98               | 22.16               | PASS    |
|                                                               | MCH     | 1                | 0      | 24.18               | 23.94               | PASS    |
|                                                               |         | 1                | 12     | 24.40               | 24.15               | PASS    |
|                                                               |         | 1                | 24     | 23.12               | 22.63               | PASS    |
|                                                               |         | 12               | 0      | 23.47               | 22.10               | PASS    |
|                                                               |         | 12               | 6      | 23.62               | 22.72               | PASS    |
|                                                               |         | 12               | 13     | 23.41               | 22.51               | PASS    |
|                                                               |         | 25               | 0      | 23.67               | 22.78               | PASS    |
|                                                               | HCH     | 1                | 0      | 24.55               | 23.33               | PASS    |
|                                                               |         | 1                | 12     | 24.21               | 23.28               | PASS    |
|                                                               |         | 1                | 24     | 24.04               | 23.62               | PASS    |
|                                                               |         | 12               | 0      | 23.54               | 22.46               | PASS    |
|                                                               |         | 12               | 6      | 23.90               | 22.82               | PASS    |
|                                                               |         | 12               | 13     | 23.90               | 22.79               | PASS    |
|                                                               |         | 25               | 0      | 23.89               | 22.88               | PASS    |

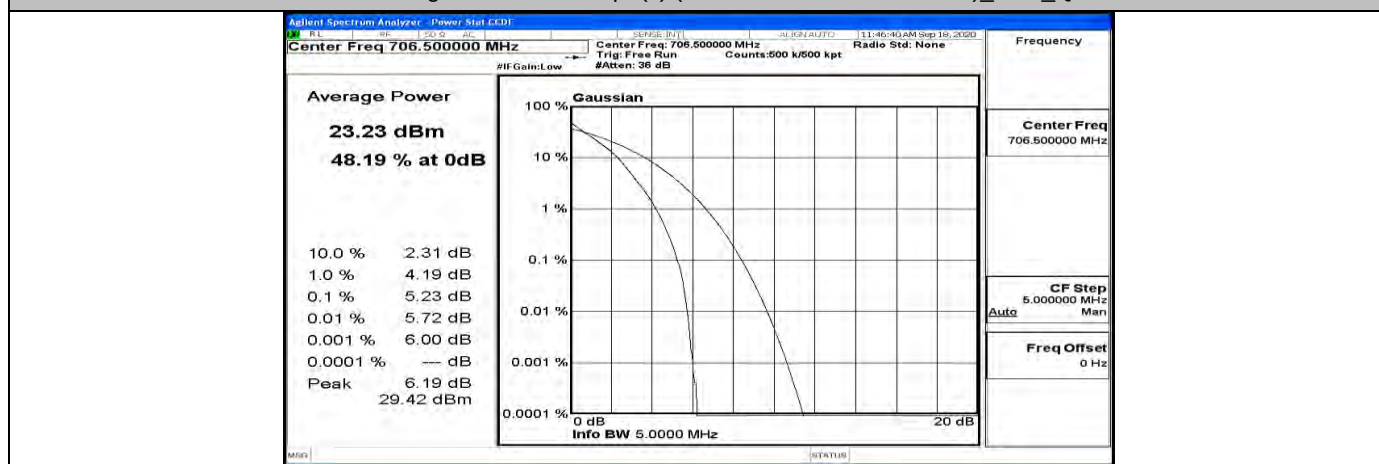
| Conducted Output Power Test Result (Channel Bandwidth: 10 MHz) |         |                  |        |                     |                     |         |
|----------------------------------------------------------------|---------|------------------|--------|---------------------|---------------------|---------|
| Modulation                                                     | Channel | RB Configuration |        | Average Power [dBm] | Average Power [dBm] | Verdict |
|                                                                |         | Size             | Offset | QPSK                | 16QAM               |         |
| QPSK /<br>16QAM                                                | LCH     | 1                | 0      | 23.65               | 23.49               | PASS    |
|                                                                |         | 1                | 24     | 24.35               | 24.08               | PASS    |
|                                                                |         | 1                | 49     | 23.73               | 23.03               | PASS    |
|                                                                |         | 25               | 0      | 23.01               | 22.16               | PASS    |
|                                                                |         | 25               | 12     | 23.57               | 22.10               | PASS    |
|                                                                |         | 25               | 25     | 23.41               | 22.47               | PASS    |
|                                                                |         | 50               | 0      | 23.43               | 22.12               | PASS    |
|                                                                | MCH     | 1                | 0      | 24.00               | 24.04               | PASS    |
|                                                                |         | 1                | 24     | 24.63               | 24.55               | PASS    |
|                                                                |         | 1                | 49     | 24.91               | 24.24               | PASS    |
|                                                                |         | 25               | 0      | 23.27               | 21.99               | PASS    |
|                                                                |         | 25               | 12     | 23.76               | 22.75               | PASS    |
|                                                                |         | 25               | 25     | 23.49               | 22.58               | PASS    |
|                                                                |         | 50               | 0      | 23.53               | 22.60               | PASS    |
|                                                                | HCH     | 1                | 0      | 24.05               | 23.20               | PASS    |
|                                                                |         | 1                | 24     | 24.51               | 23.78               | PASS    |
|                                                                |         | 1                | 49     | 24.82               | 24.13               | PASS    |
|                                                                |         | 25               | 0      | 23.52               | 22.13               | PASS    |
|                                                                |         | 25               | 12     | 23.69               | 22.67               | PASS    |
|                                                                |         | 25               | 25     | 23.93               | 22.97               | PASS    |
|                                                                |         | 50               | 0      | 23.73               | 22.70               | PASS    |

## H.2 Peak-to-Average Ratio

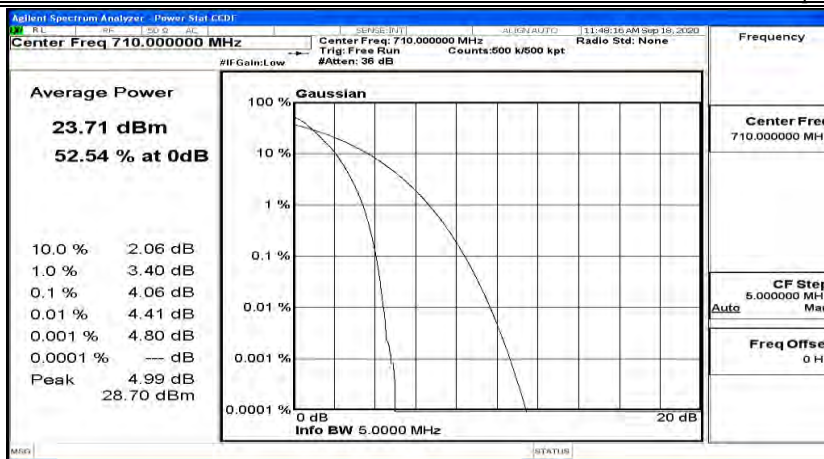
| Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz) |         |                            |            |         |
|--------------------------------------------------------------|---------|----------------------------|------------|---------|
| Modulation                                                   | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK                                                         | LCH     | 5.23                       | <13        | PASS    |
|                                                              | MCH     | 4.06                       | <13        | PASS    |
|                                                              | HCH     | 3.53                       | <13        | PASS    |
| 16QAM                                                        | LCH     | 5.92                       | <13        | PASS    |
|                                                              | MCH     | 4.78                       | <13        | PASS    |
|                                                              | HCH     | 4.07                       | <13        | PASS    |

| Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz) |         |                            |            |         |
|---------------------------------------------------------------|---------|----------------------------|------------|---------|
| Modulation                                                    | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK                                                          | LCH     | 4.49                       | <13        | PASS    |
|                                                               | MCH     | 4.38                       | <13        | PASS    |
|                                                               | HCH     | 4.45                       | <13        | PASS    |
| 16QAM                                                         | LCH     | 5.38                       | <13        | PASS    |
|                                                               | MCH     | 5.09                       | <13        | PASS    |
|                                                               | HCH     | 5.1                        | <13        | PASS    |

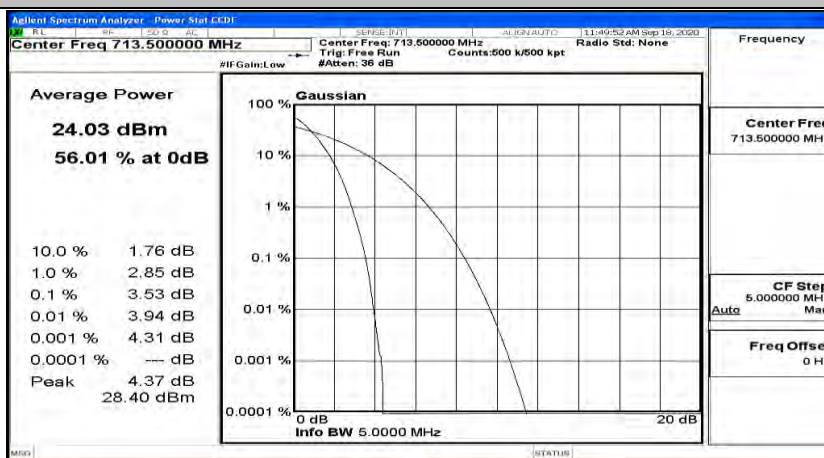
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



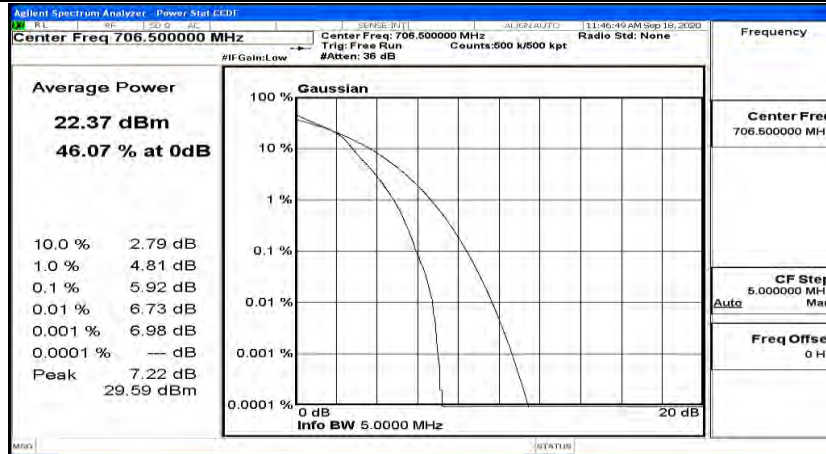
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



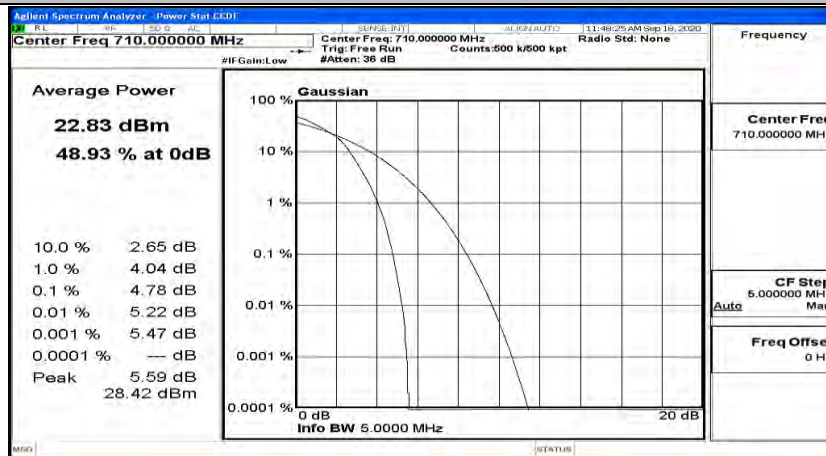
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



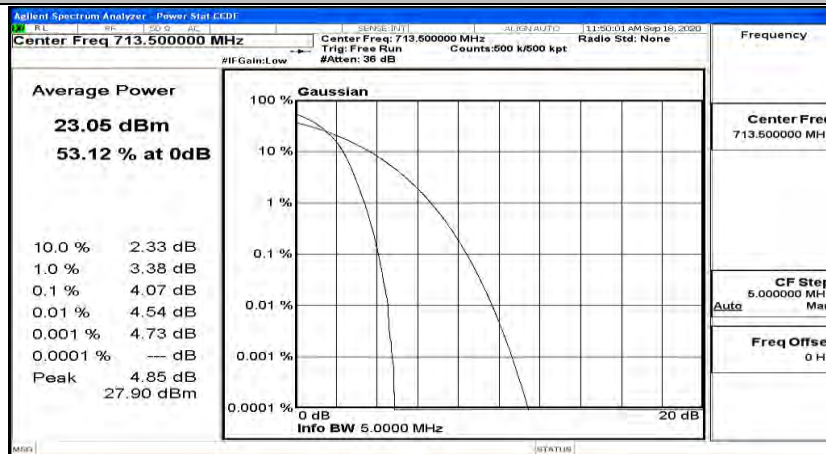
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



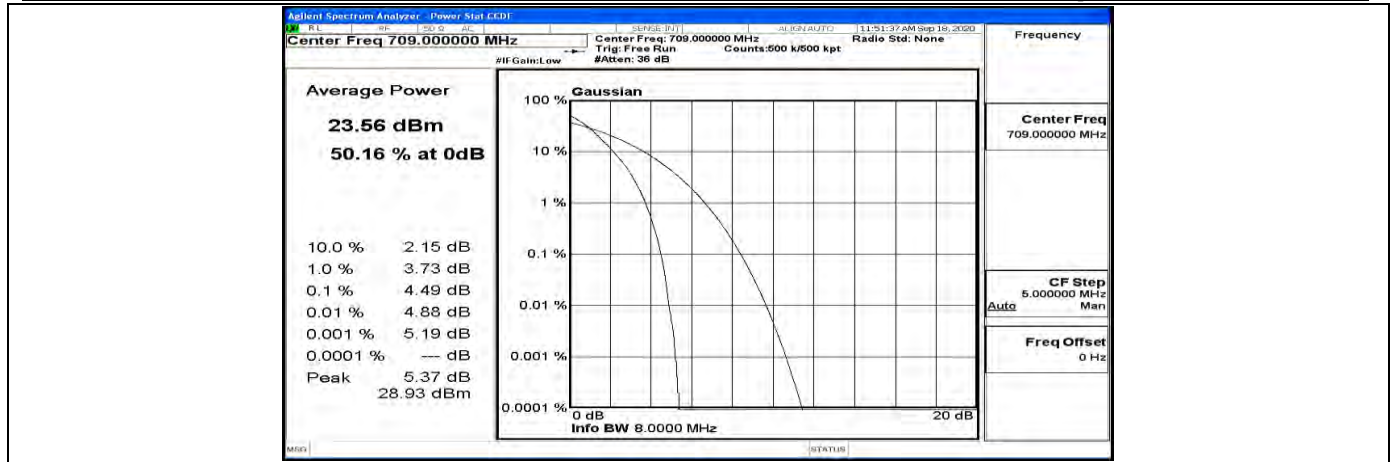
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



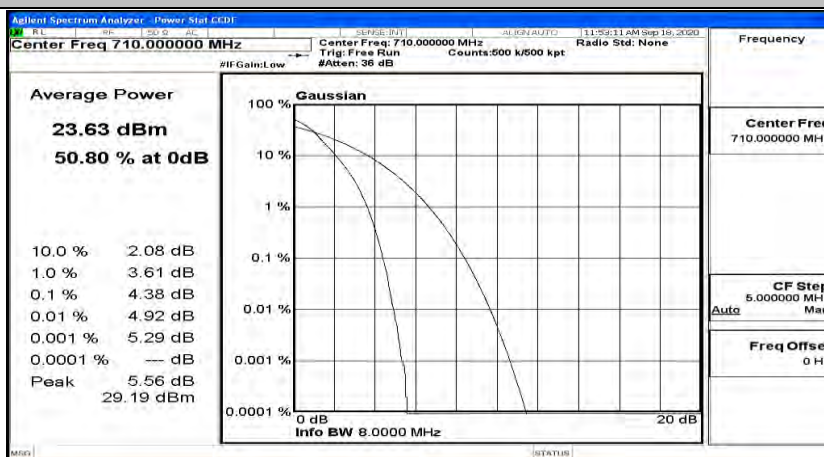
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



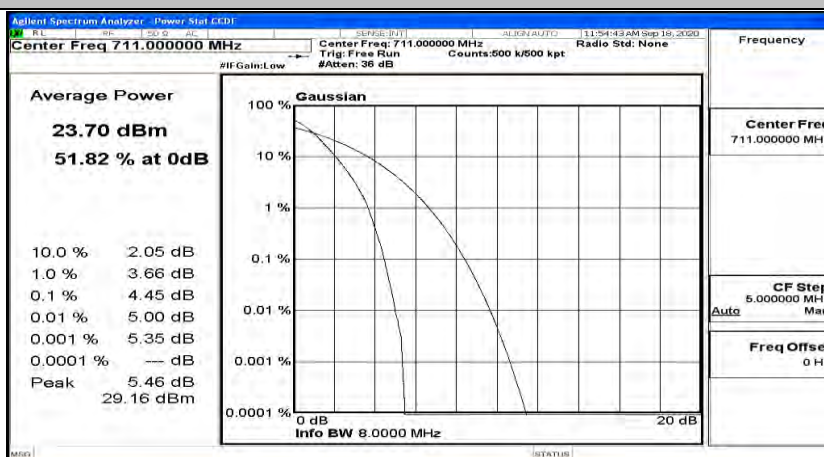
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



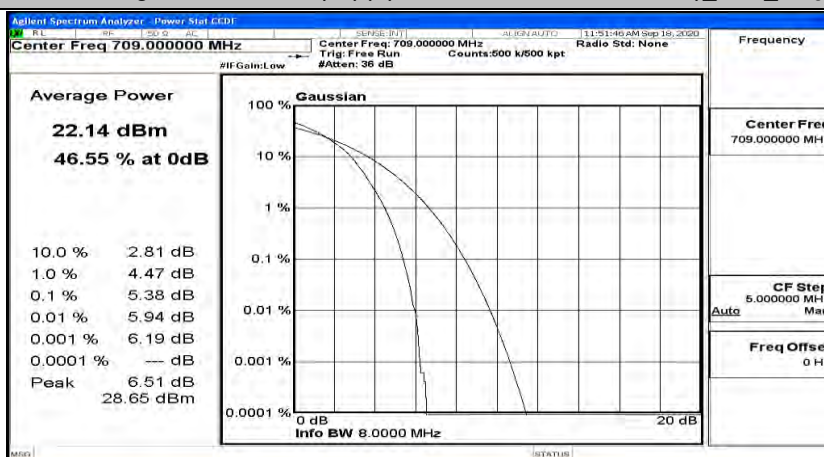
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



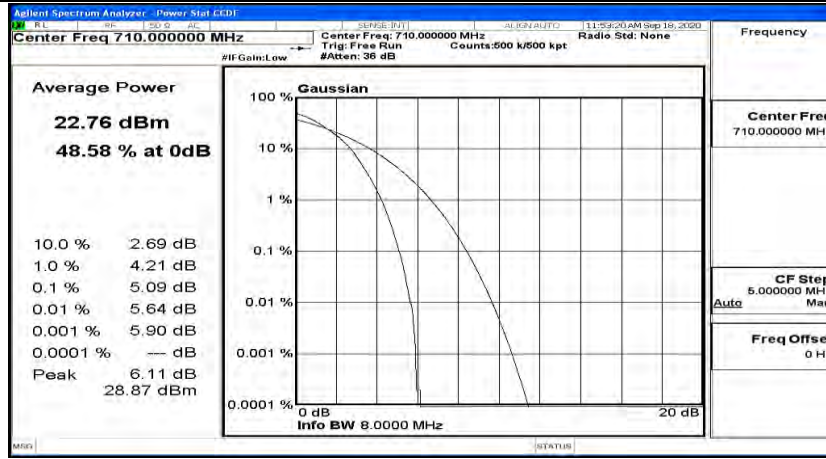
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



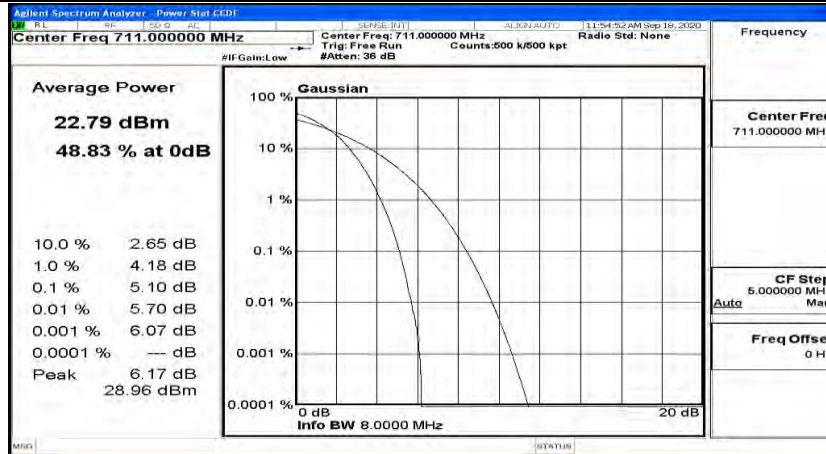
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



## 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

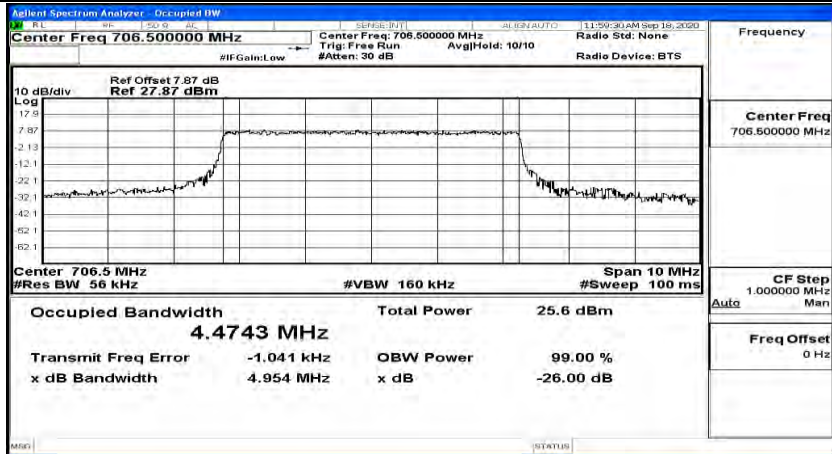


### H.3 26dB Bandwidth and Occupied Bandwidth

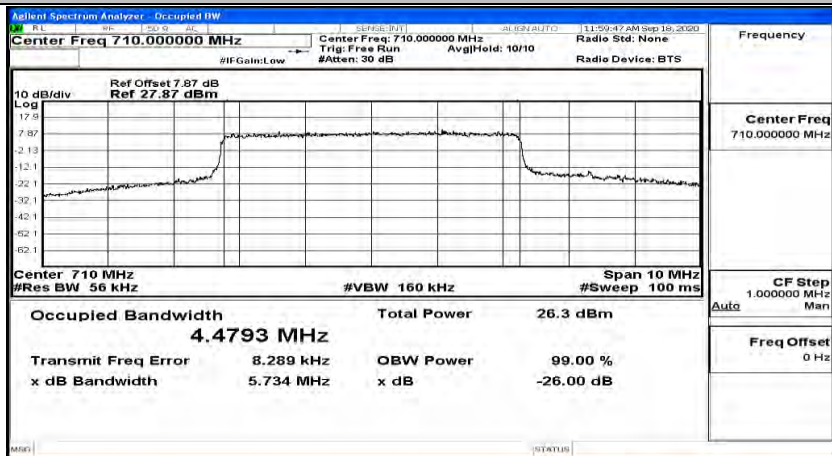
| EBW & OBW Test Result (Channel Bandwidth: 5 MHz) |         |                          |                      |         |
|--------------------------------------------------|---------|--------------------------|----------------------|---------|
| Modulation                                       | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK                                             | LCH     | 4.4743                   | 4.954                | PASS    |
|                                                  | MCH     | 4.4793                   | 5.734                | PASS    |
|                                                  | HCH     | 4.9912                   | 8.388                | PASS    |
| 16QAM                                            | LCH     | 4.4768                   | 4.789                | PASS    |
|                                                  | MCH     | 4.4675                   | 5.365                | PASS    |
|                                                  | HCH     | 4.7114                   | 8.164                | PASS    |

| EBW & OBW Test Result (Channel Bandwidth: 10 MHz) |         |                          |                      |         |
|---------------------------------------------------|---------|--------------------------|----------------------|---------|
| Modulation                                        | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK                                              | LCH     | 8.9437                   | 9.854                | PASS    |
|                                                   | MCH     | 8.9226                   | 10.07                | PASS    |
|                                                   | HCH     | 8.9254                   | 10.01                | PASS    |
| 16QAM                                             | LCH     | 8.9475                   | 9.632                | PASS    |
|                                                   | MCH     | 8.9363                   | 9.514                | PASS    |
|                                                   | HCH     | 8.9162                   | 9.649                | PASS    |

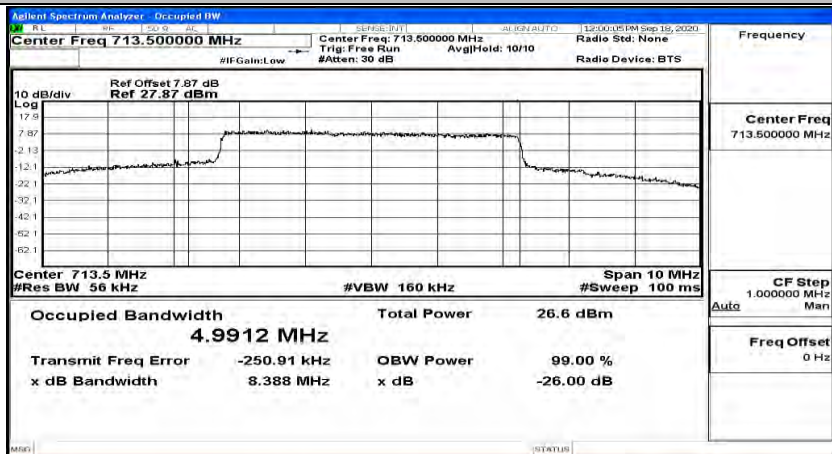
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



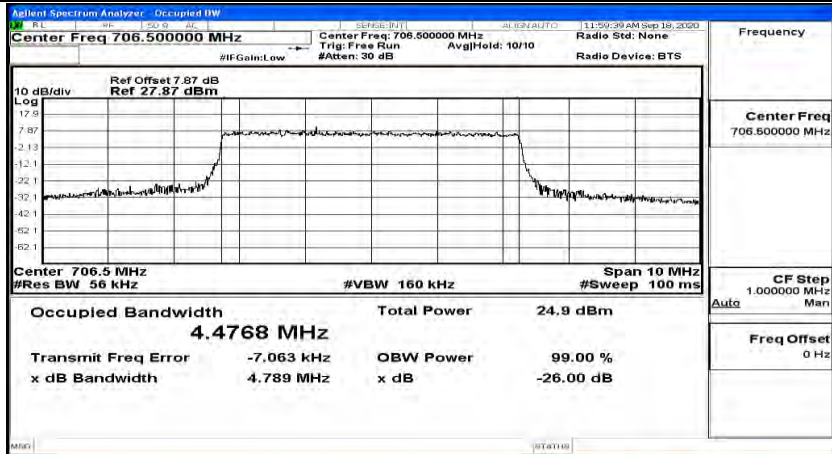
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



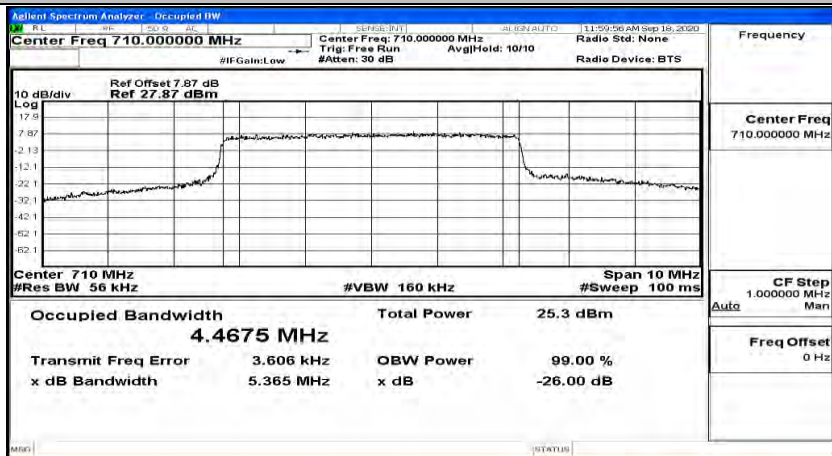
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



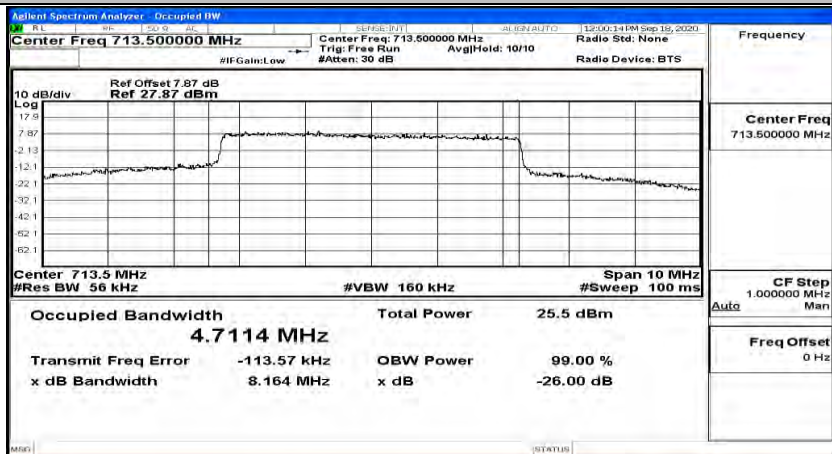
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



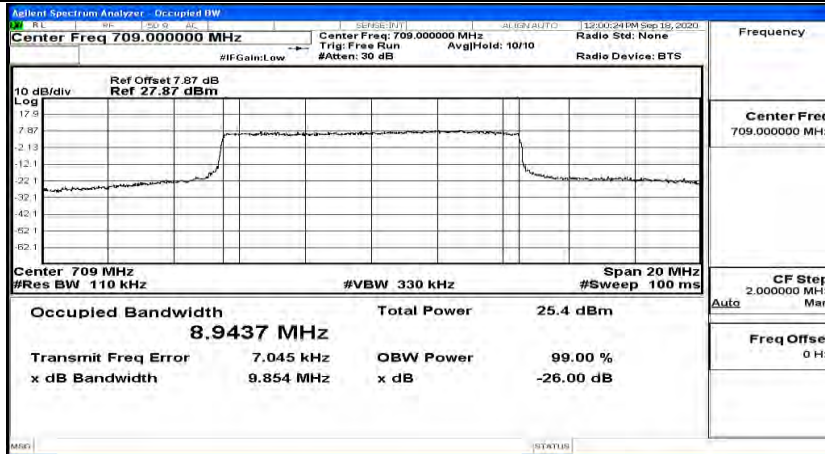
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



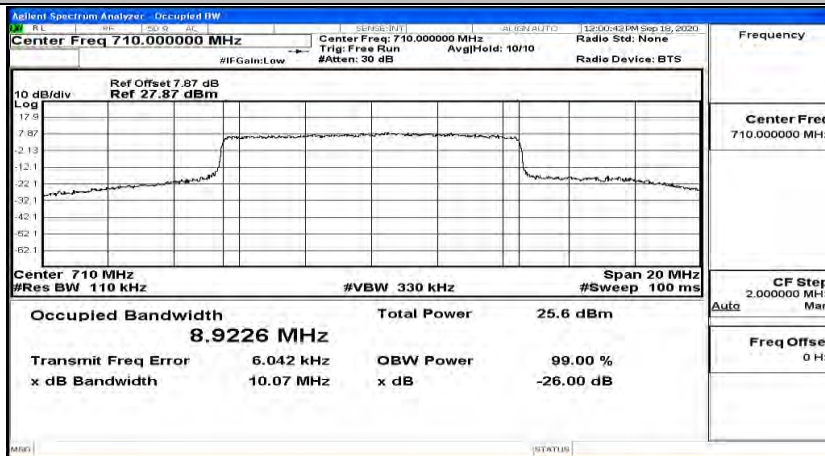
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



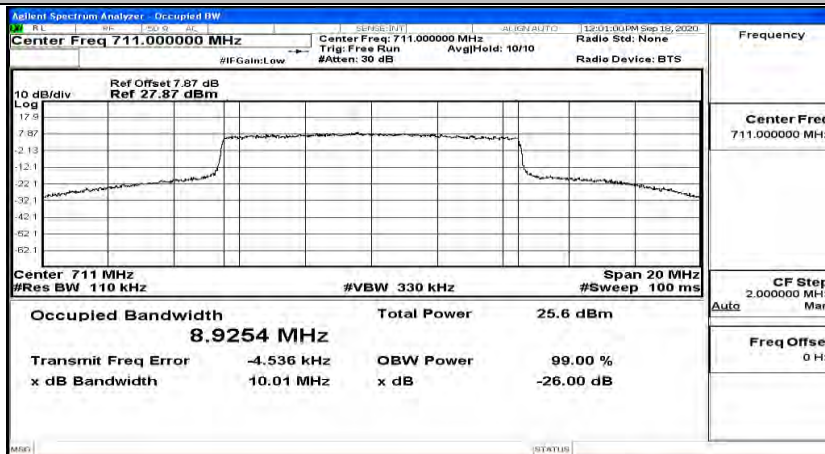
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



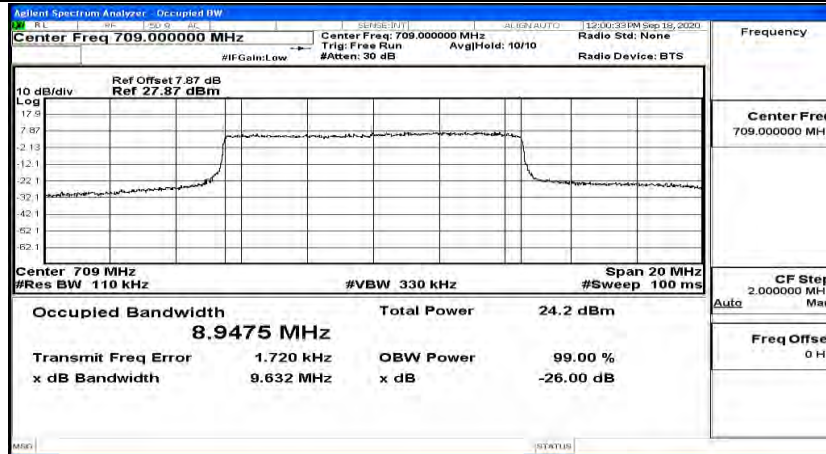
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



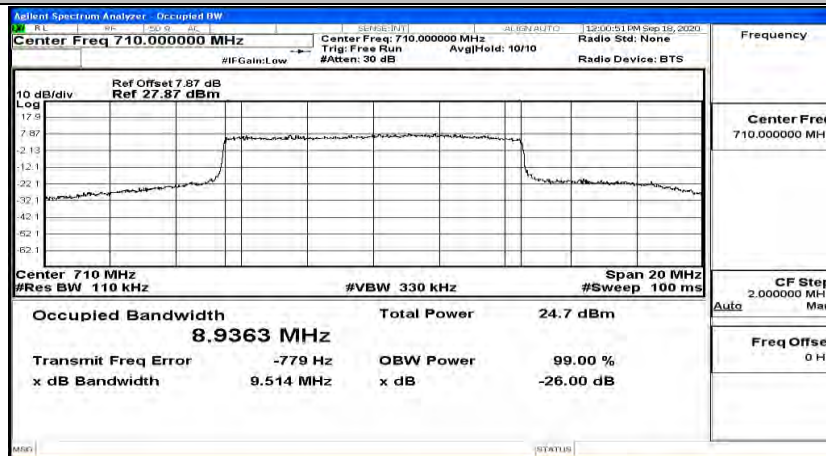
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



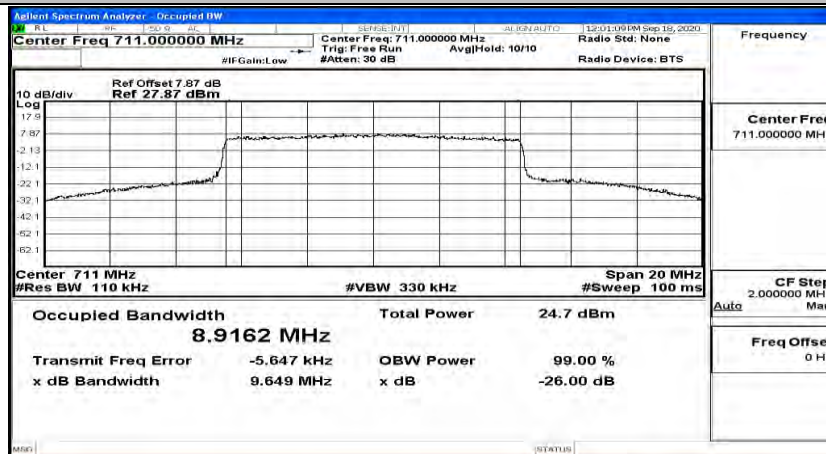
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM

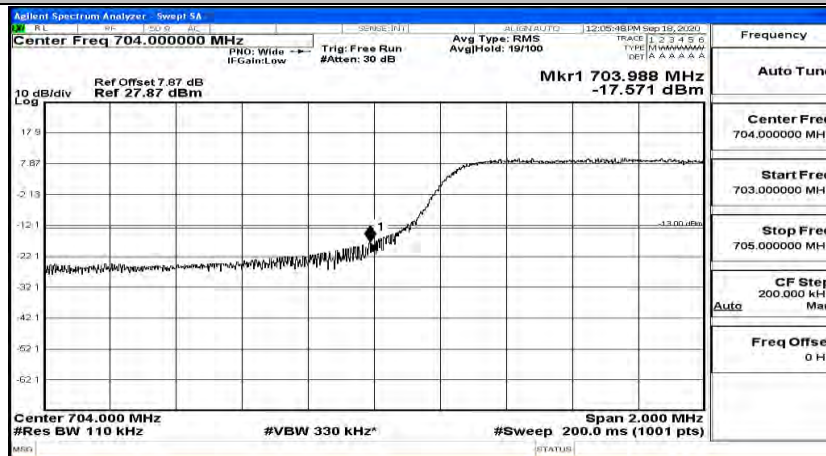


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM

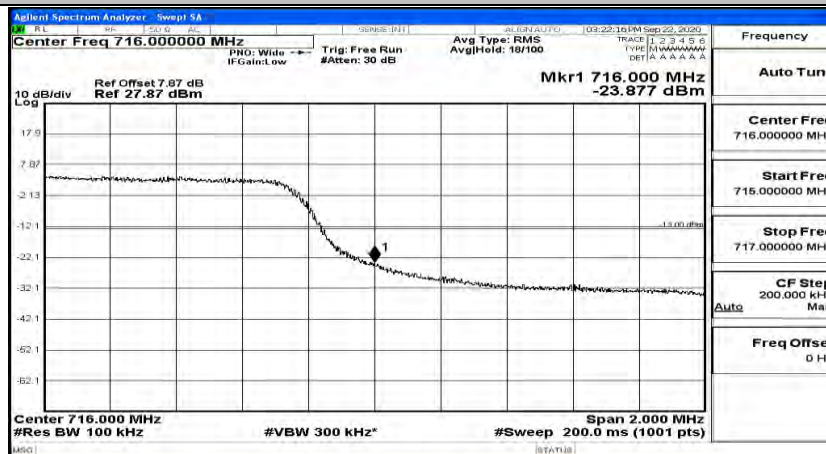


## H.4 Band Edge

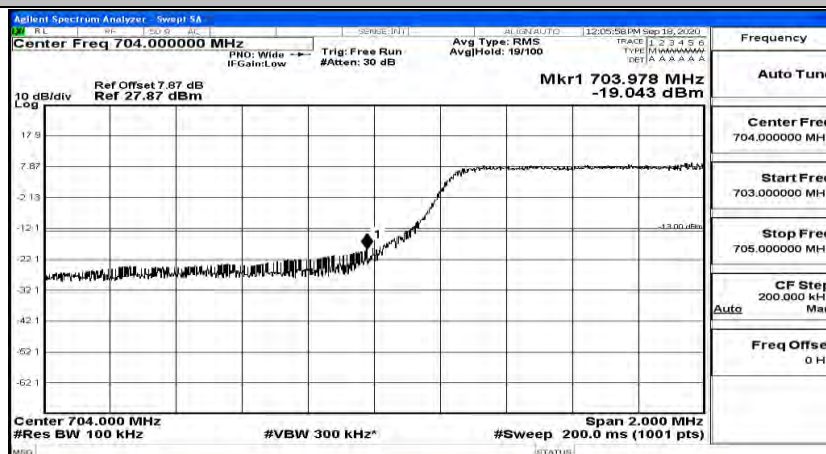
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



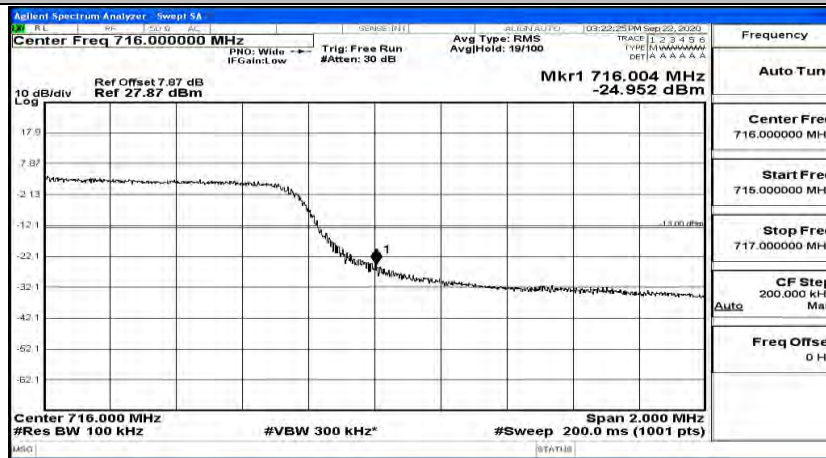
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



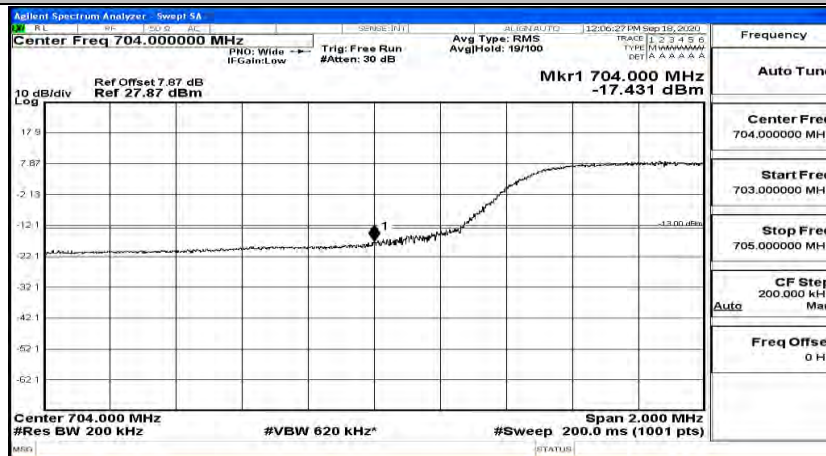
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



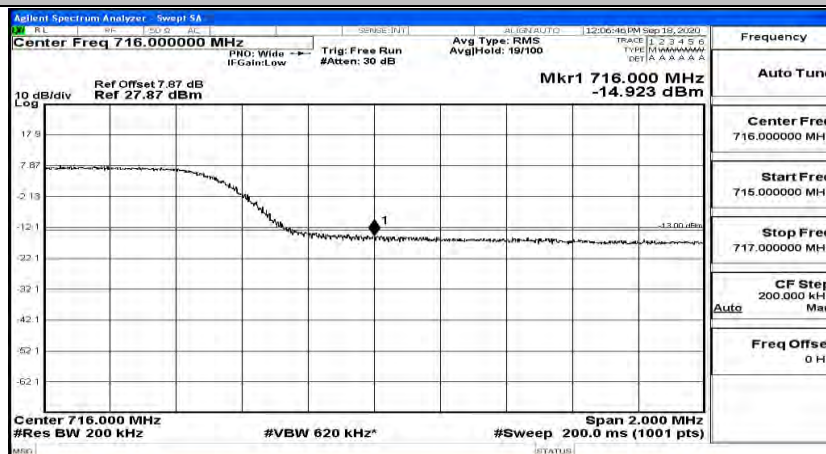
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



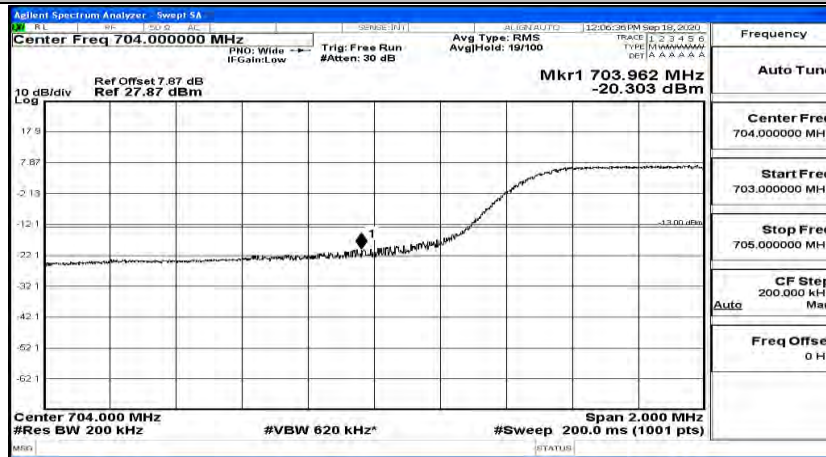
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



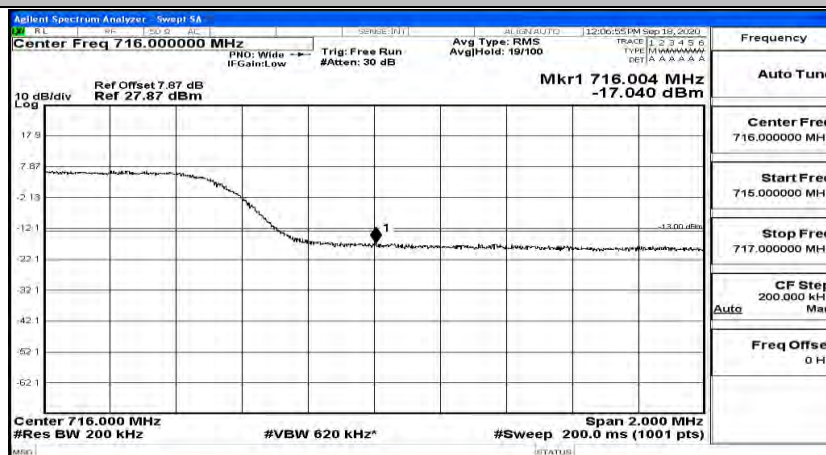
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



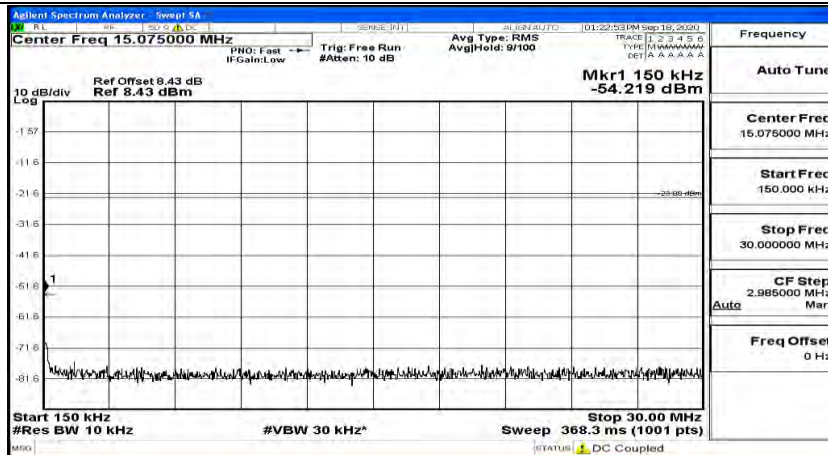
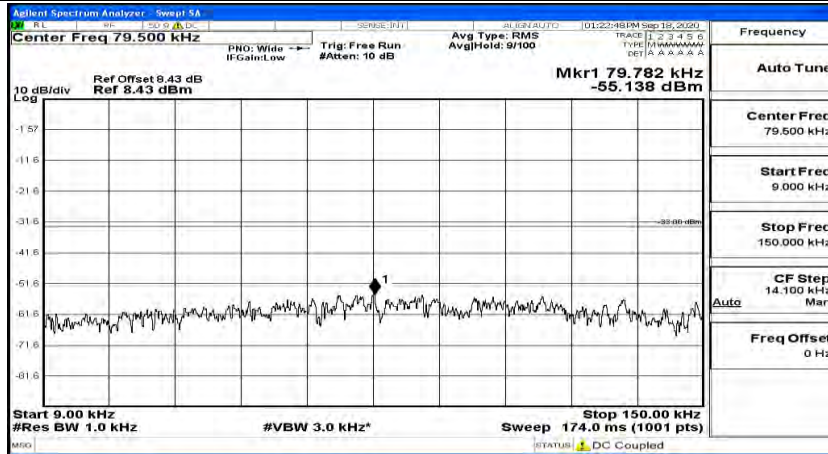
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



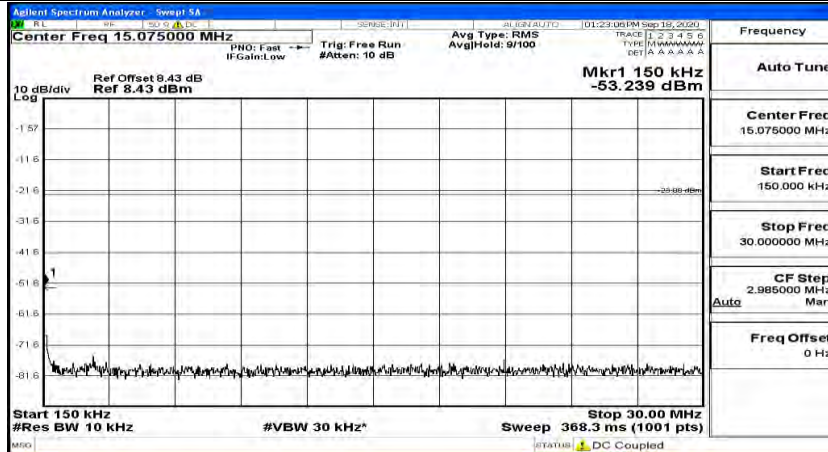
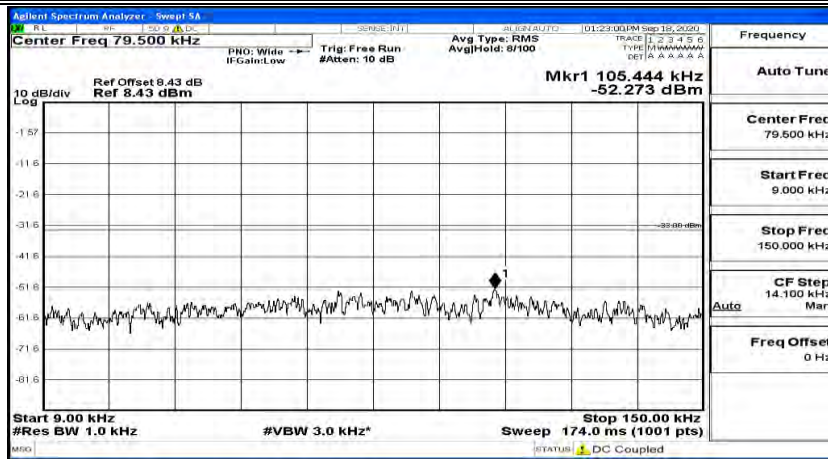
## H.5 Conducted Spurious Emission

Channel Bandwidth: 5 MHz

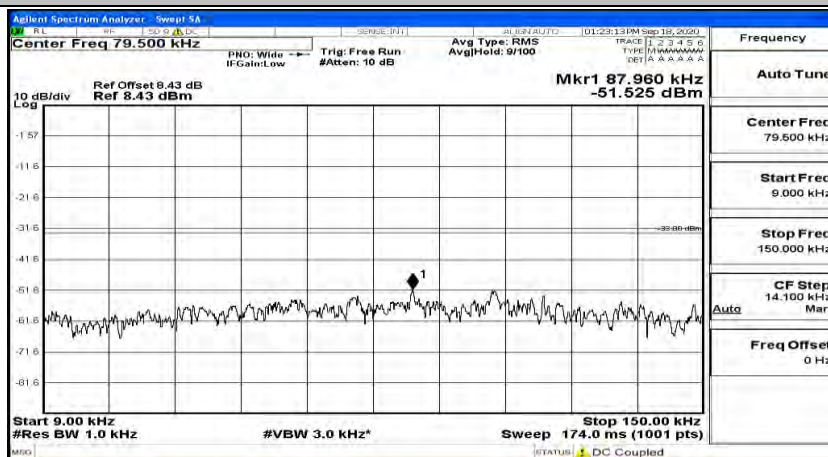
(Channel Bandwidth: 5 MHz) LCH\_QPSK\_1RB#0

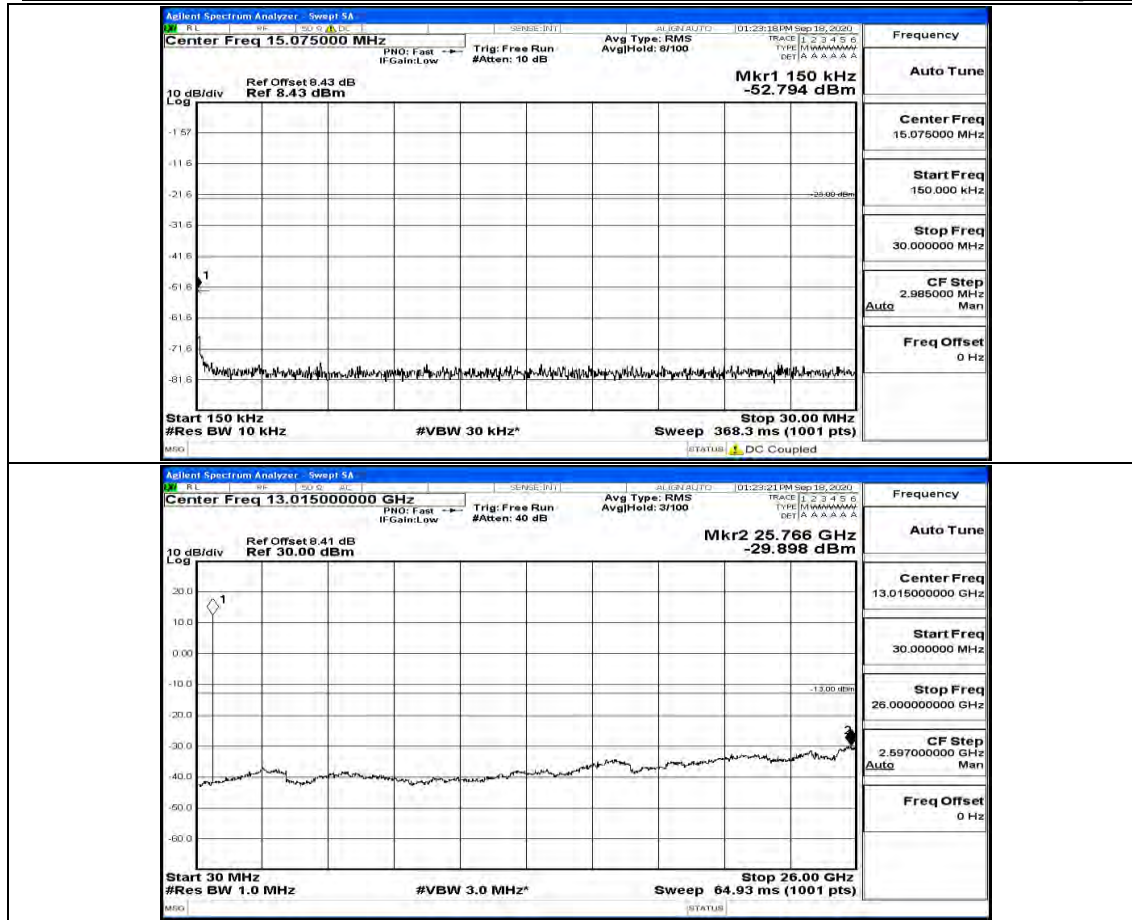


(Channel Bandwidth: 5 MHz) LCH\_QPSK\_1RB#12

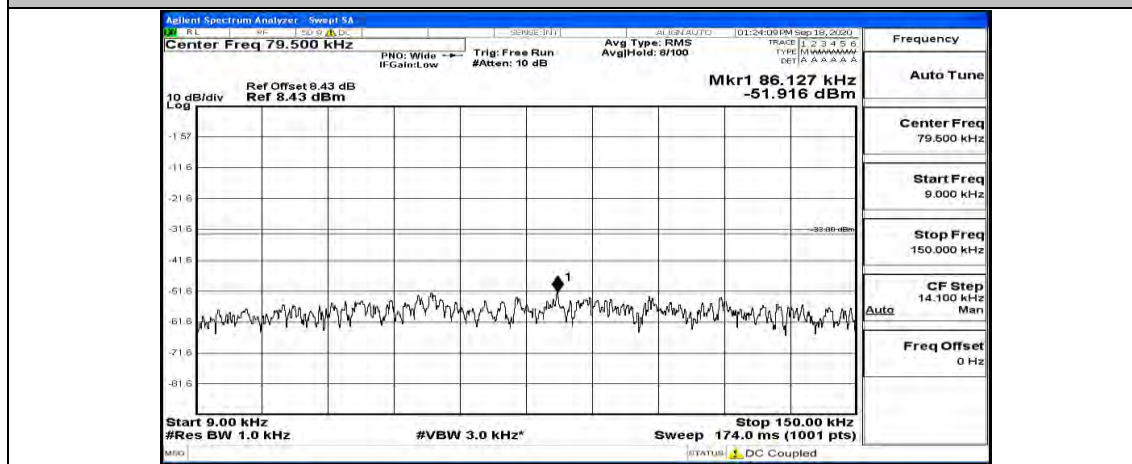


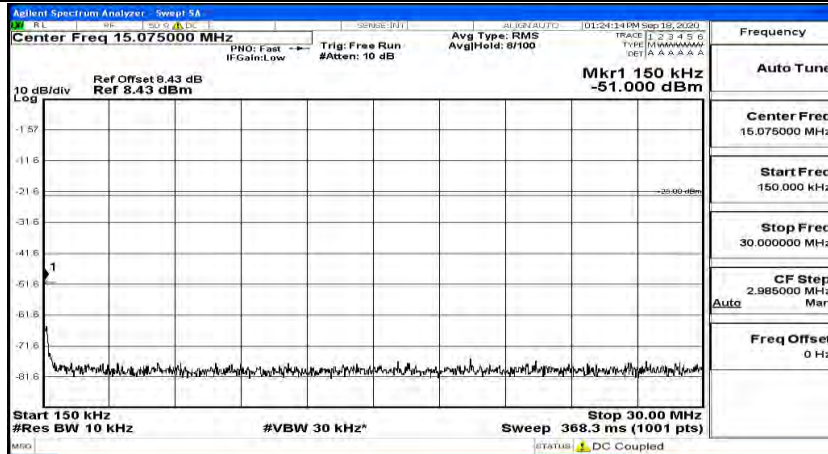
(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_1RB#24



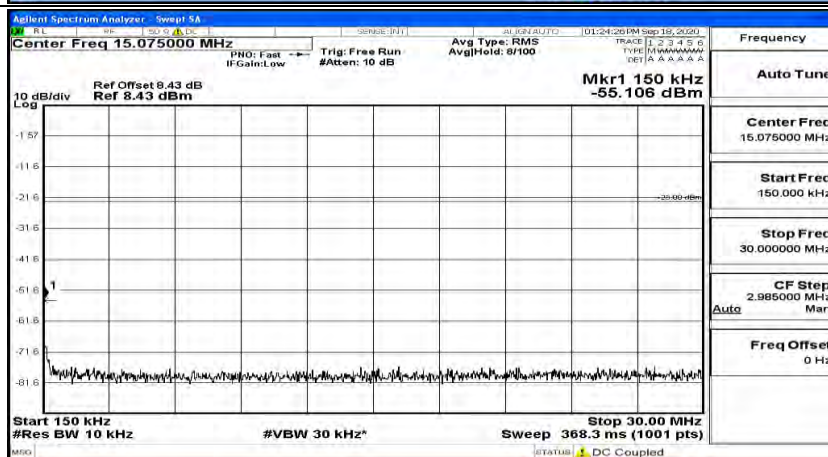
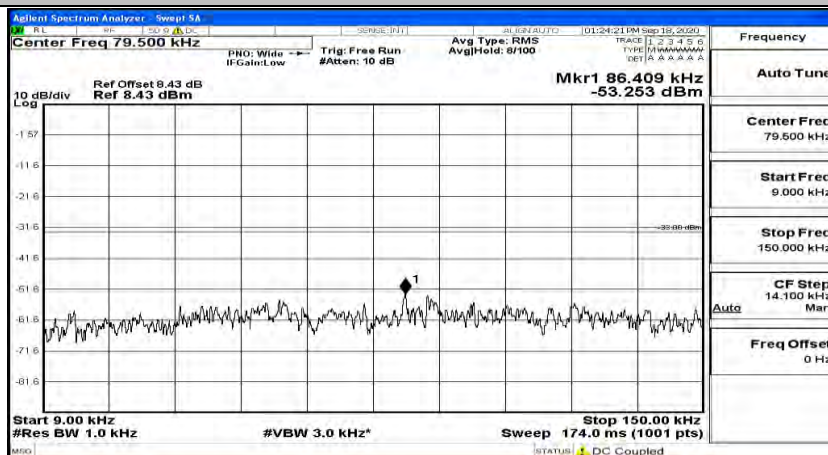


(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#0



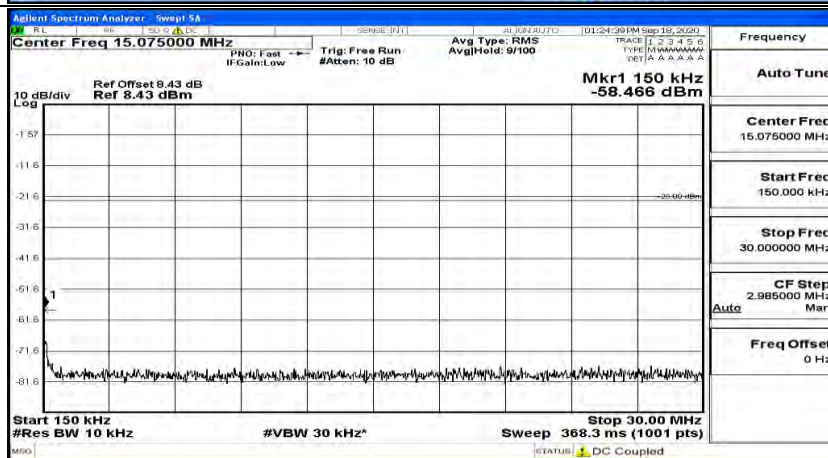
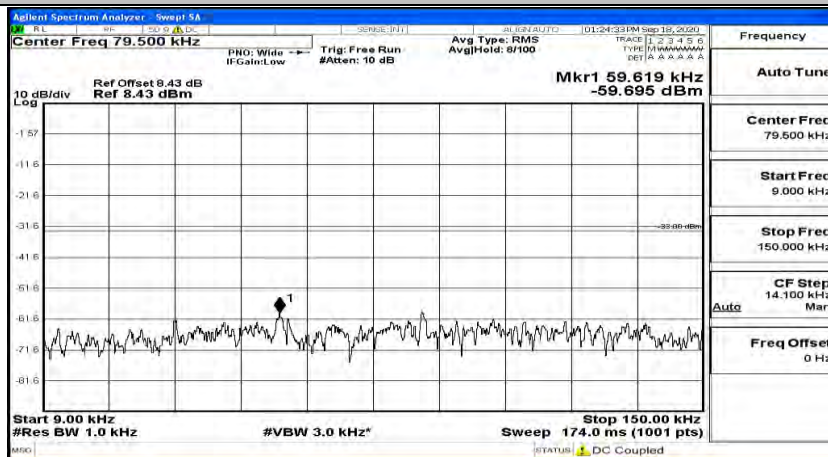


(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#12

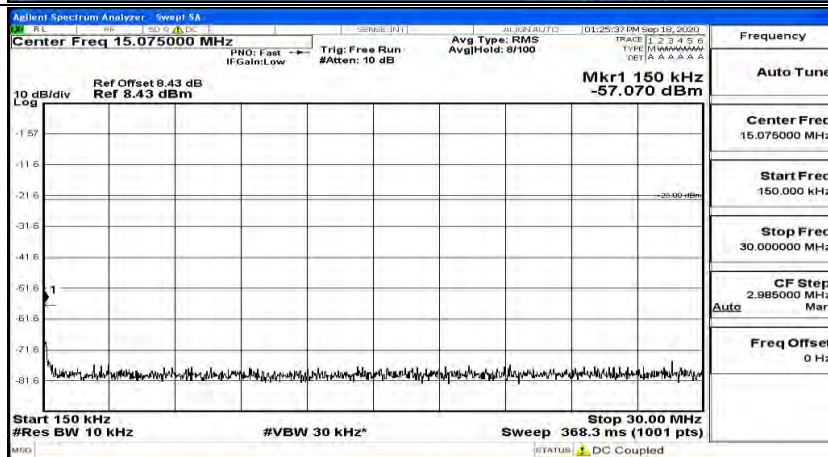
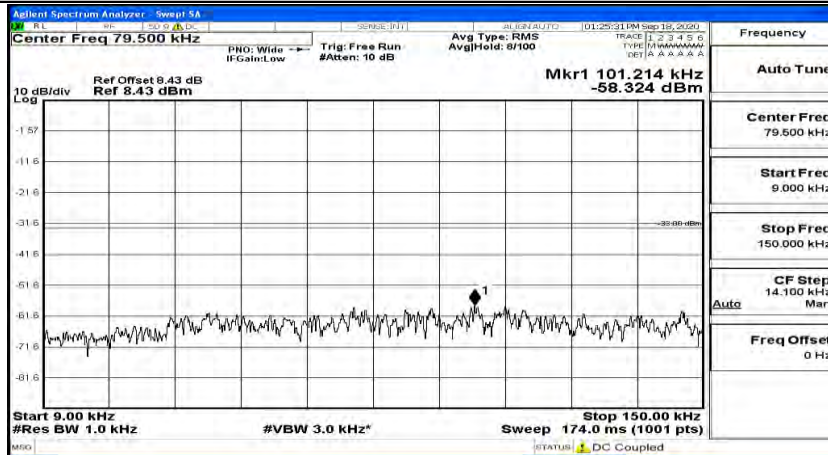




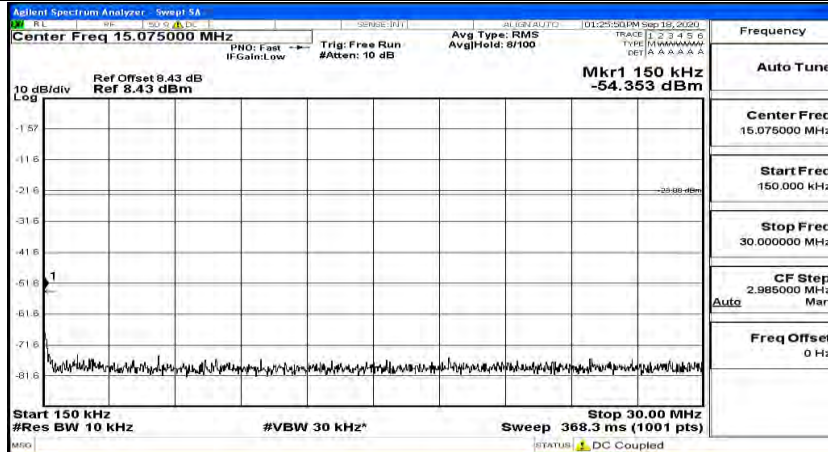
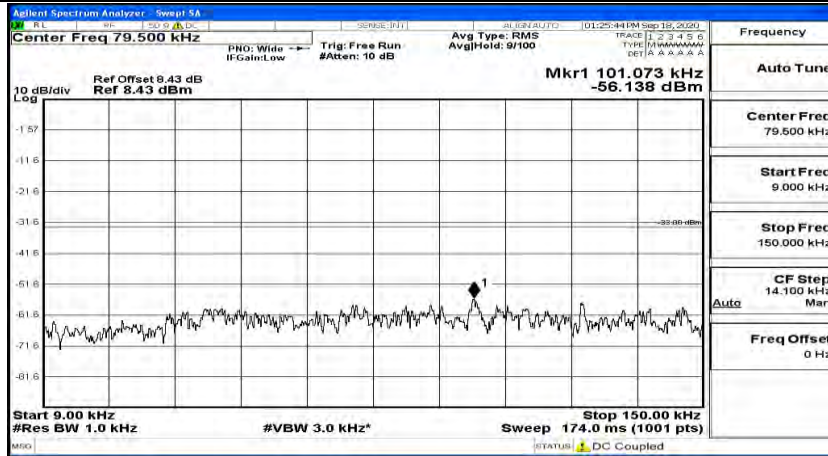
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#24



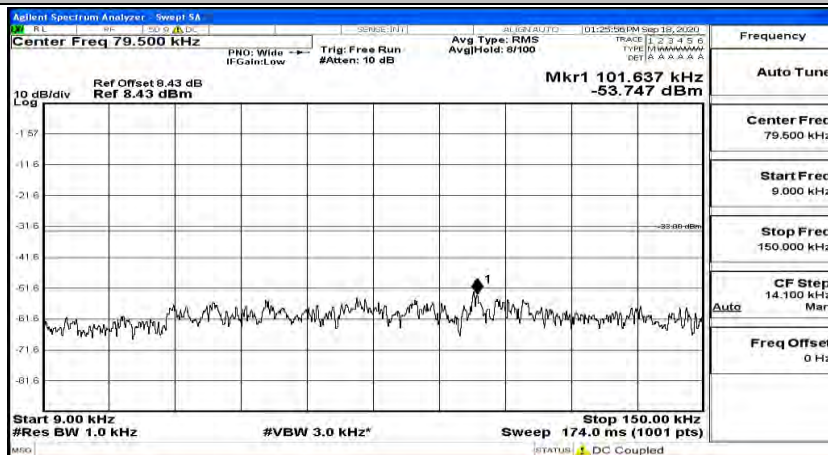
## (Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#0

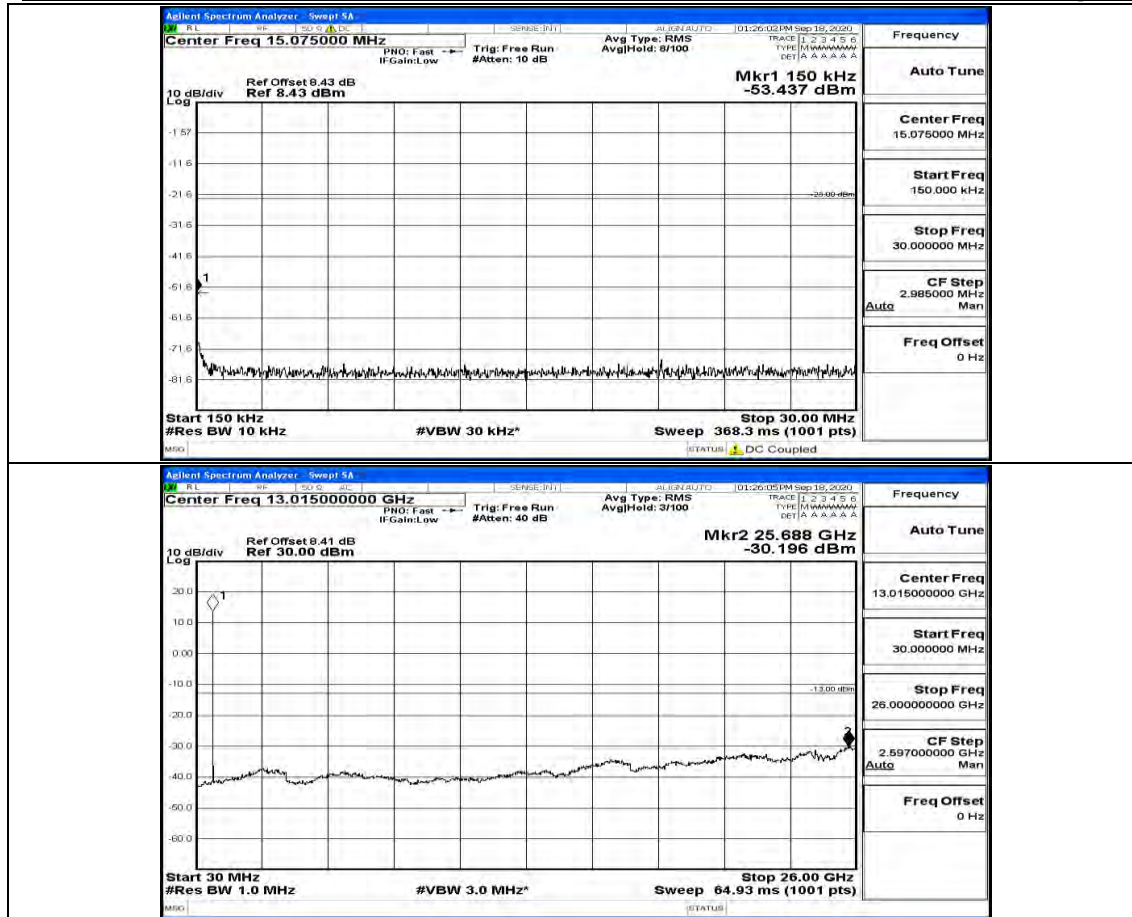


## (Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#12

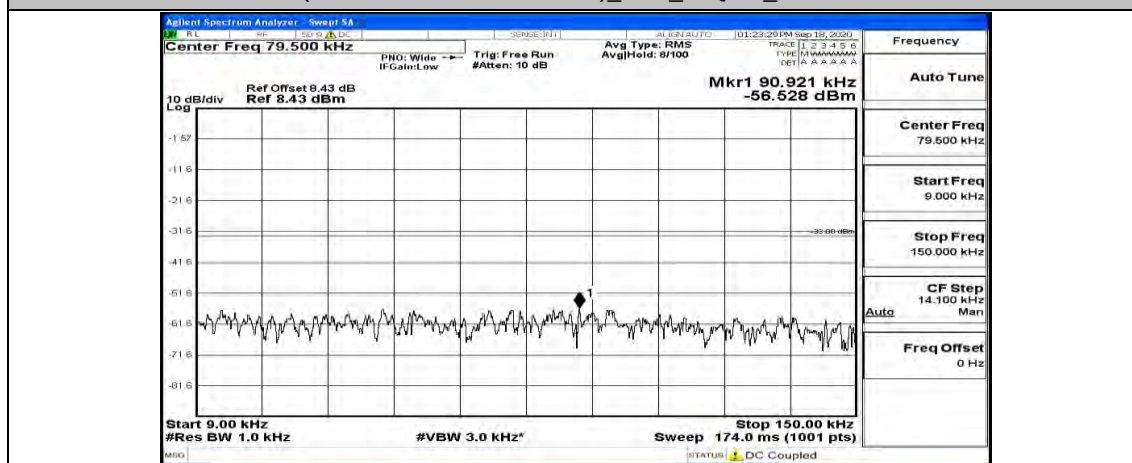


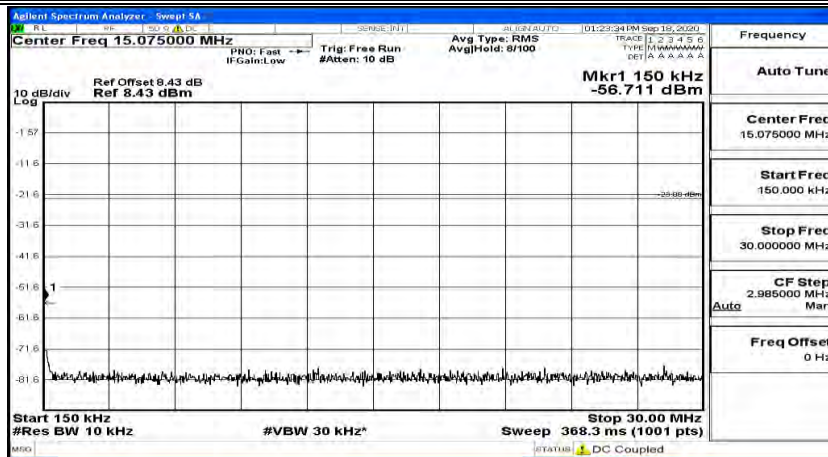
(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#24



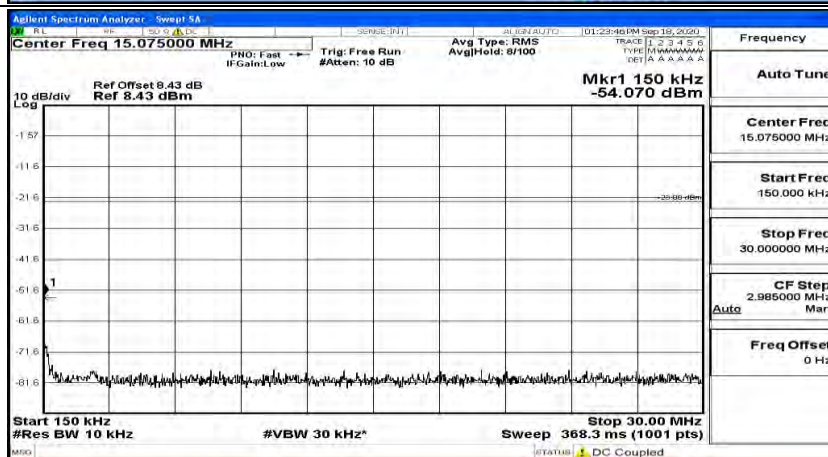
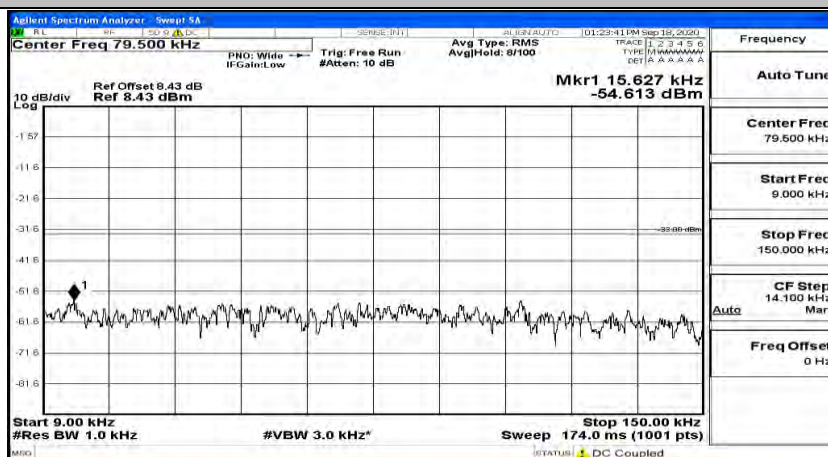


(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#0



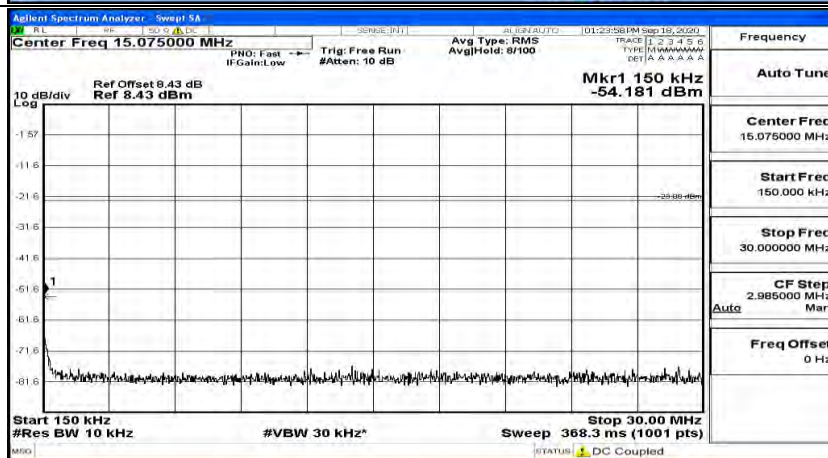
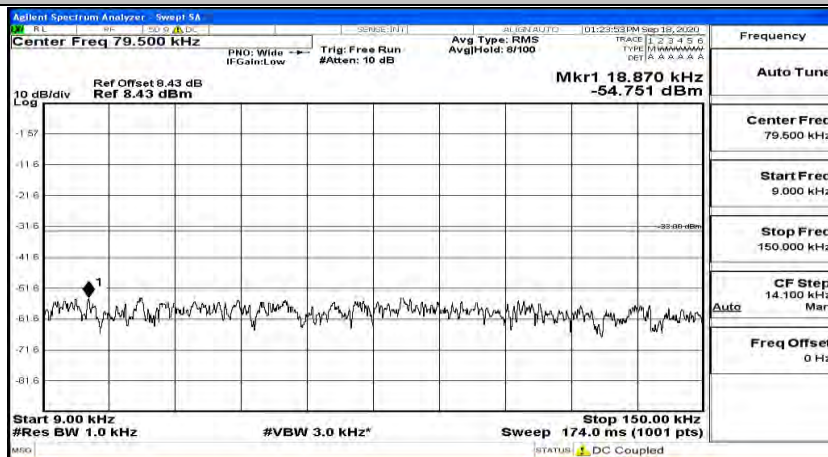


(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#12

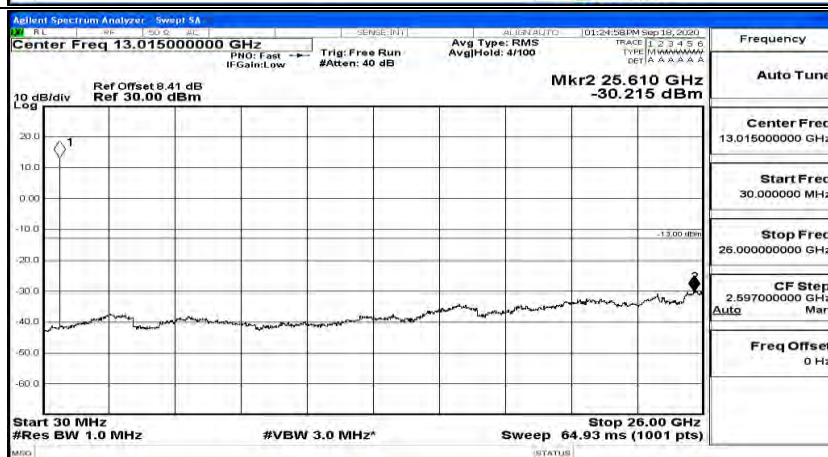
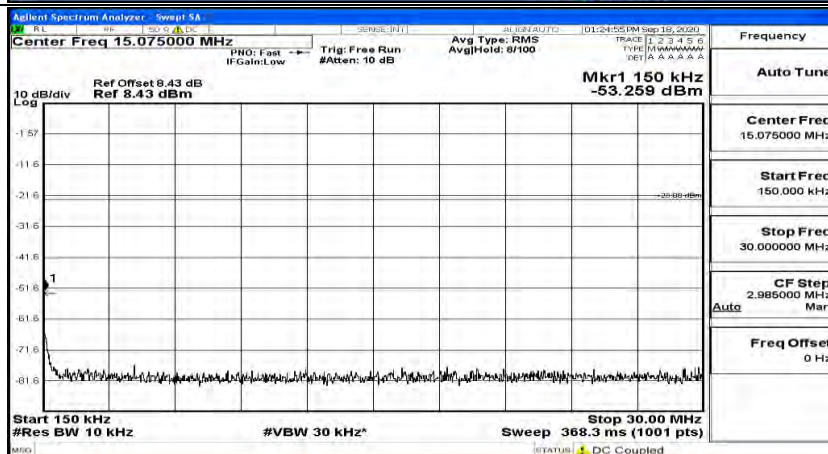
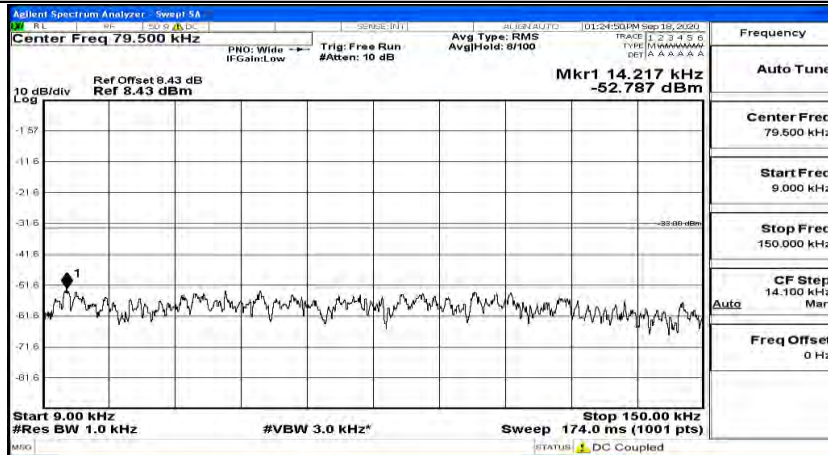




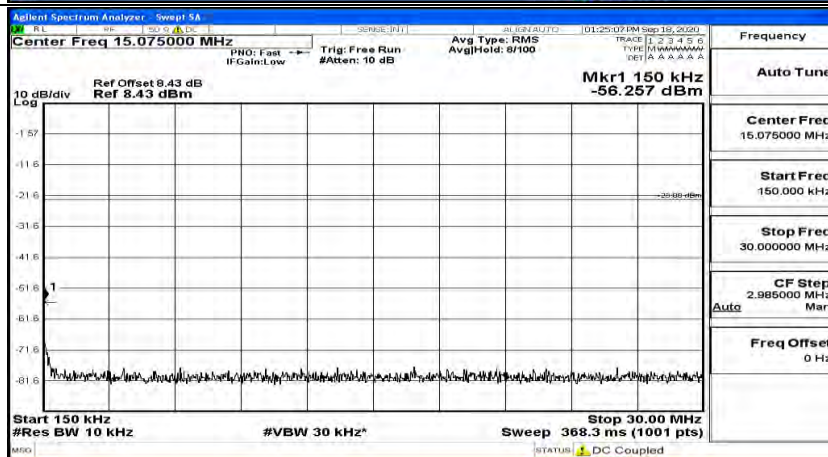
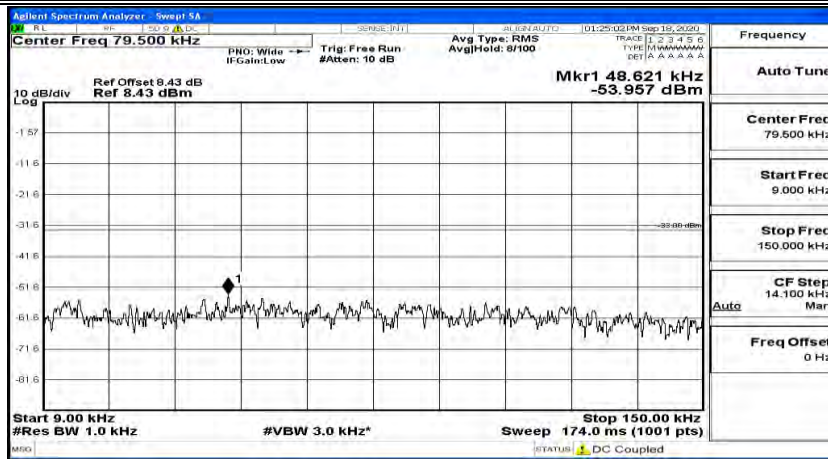
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#24



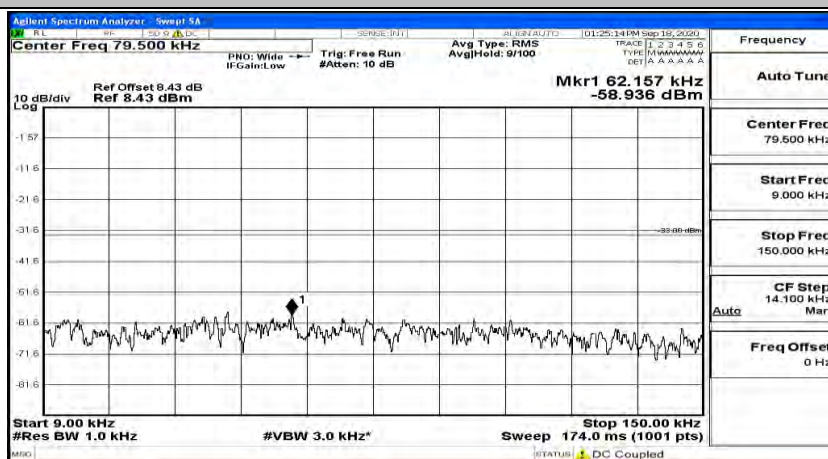
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#0

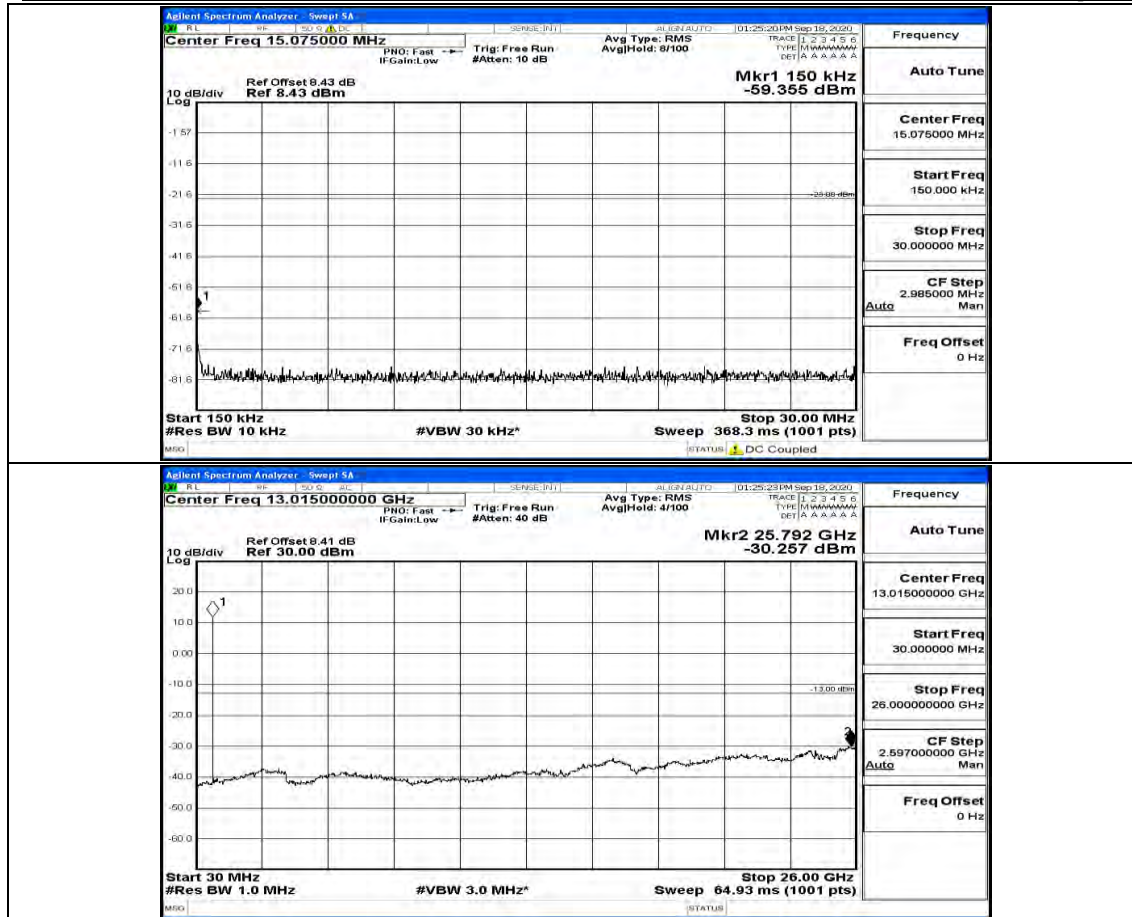


(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#12

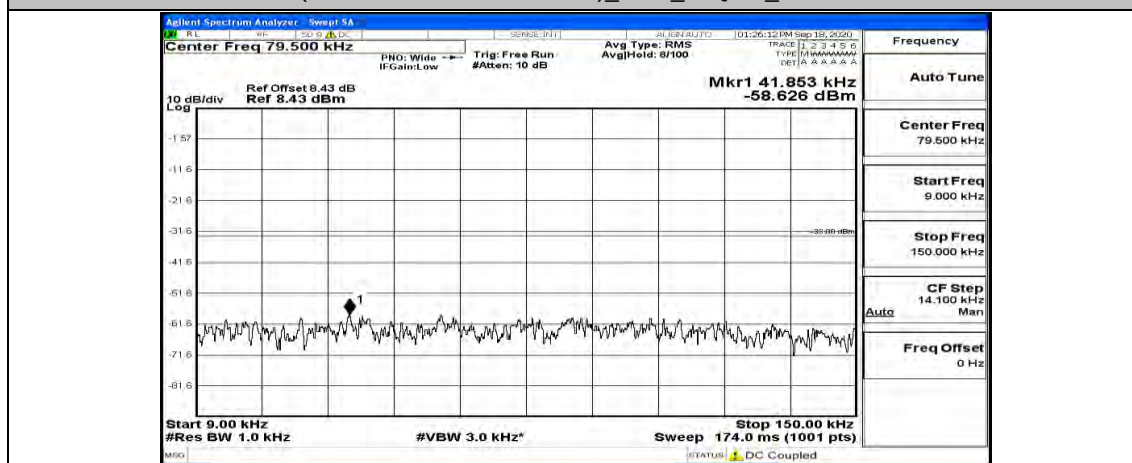


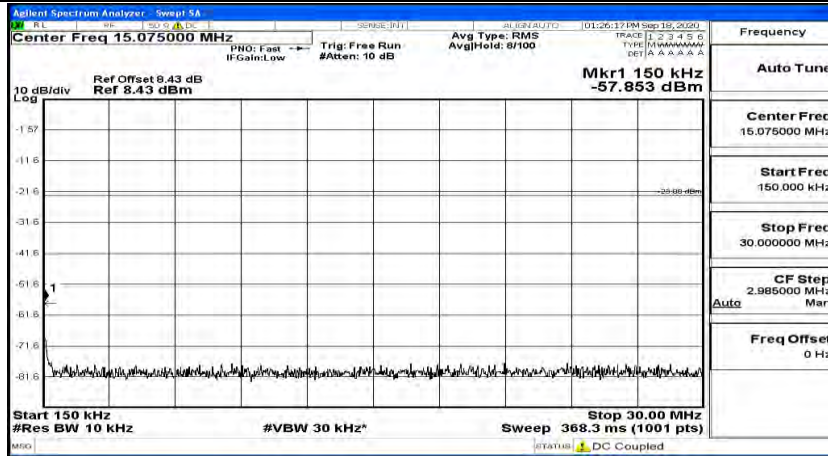
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#24



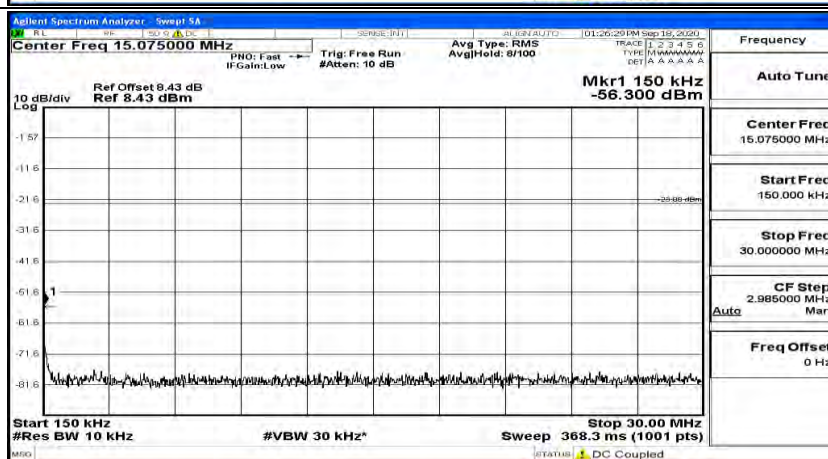
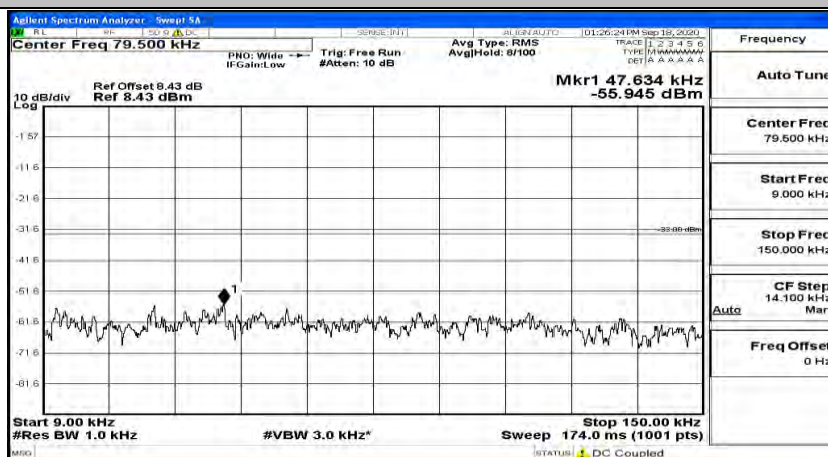


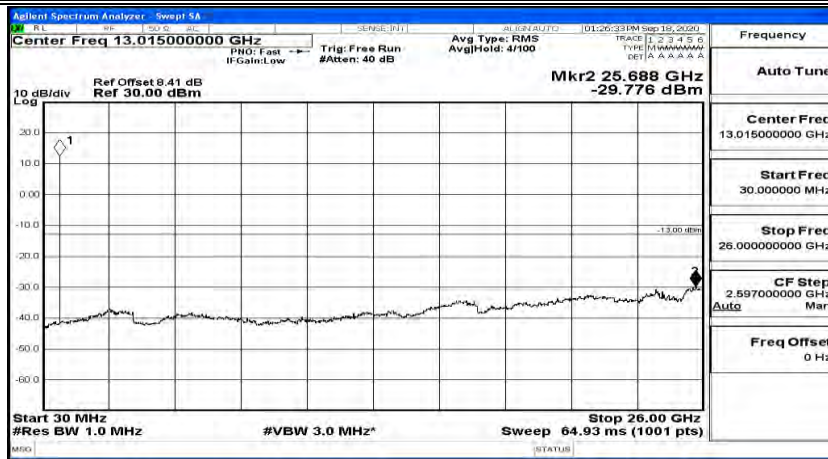
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#0



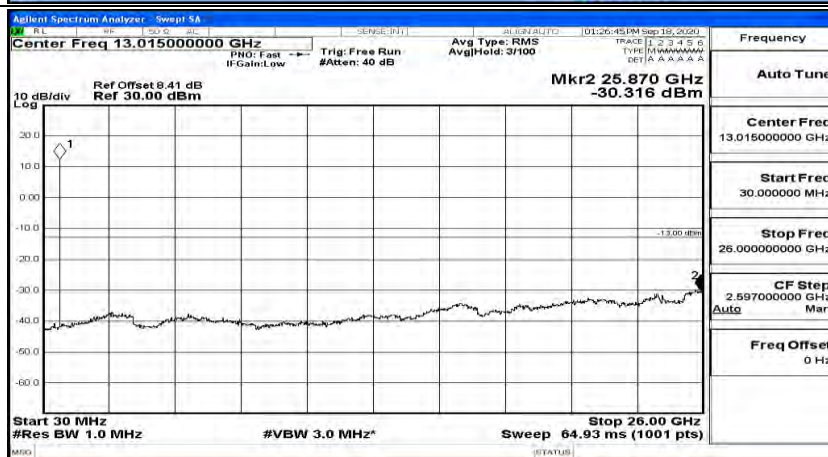
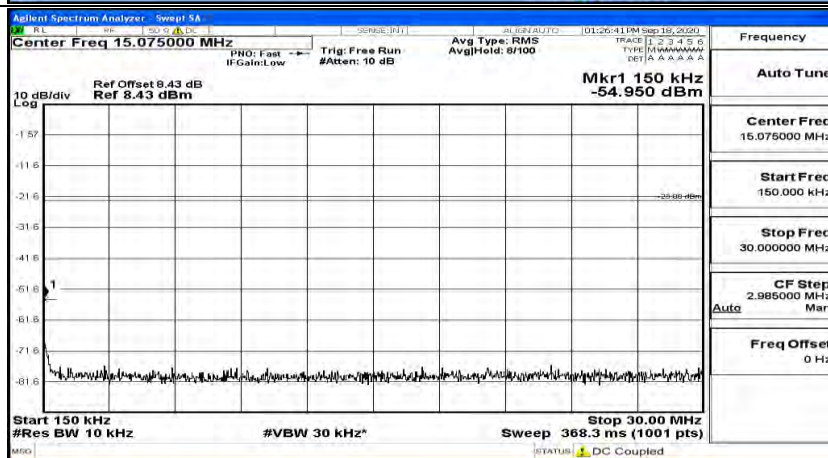
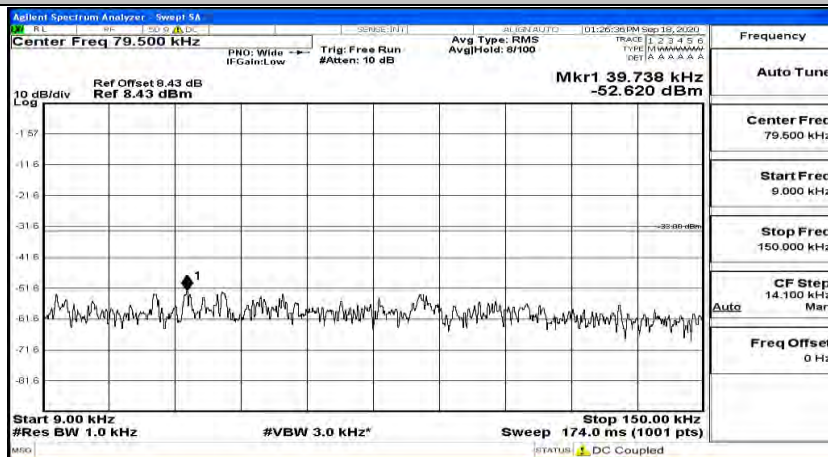


(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#12

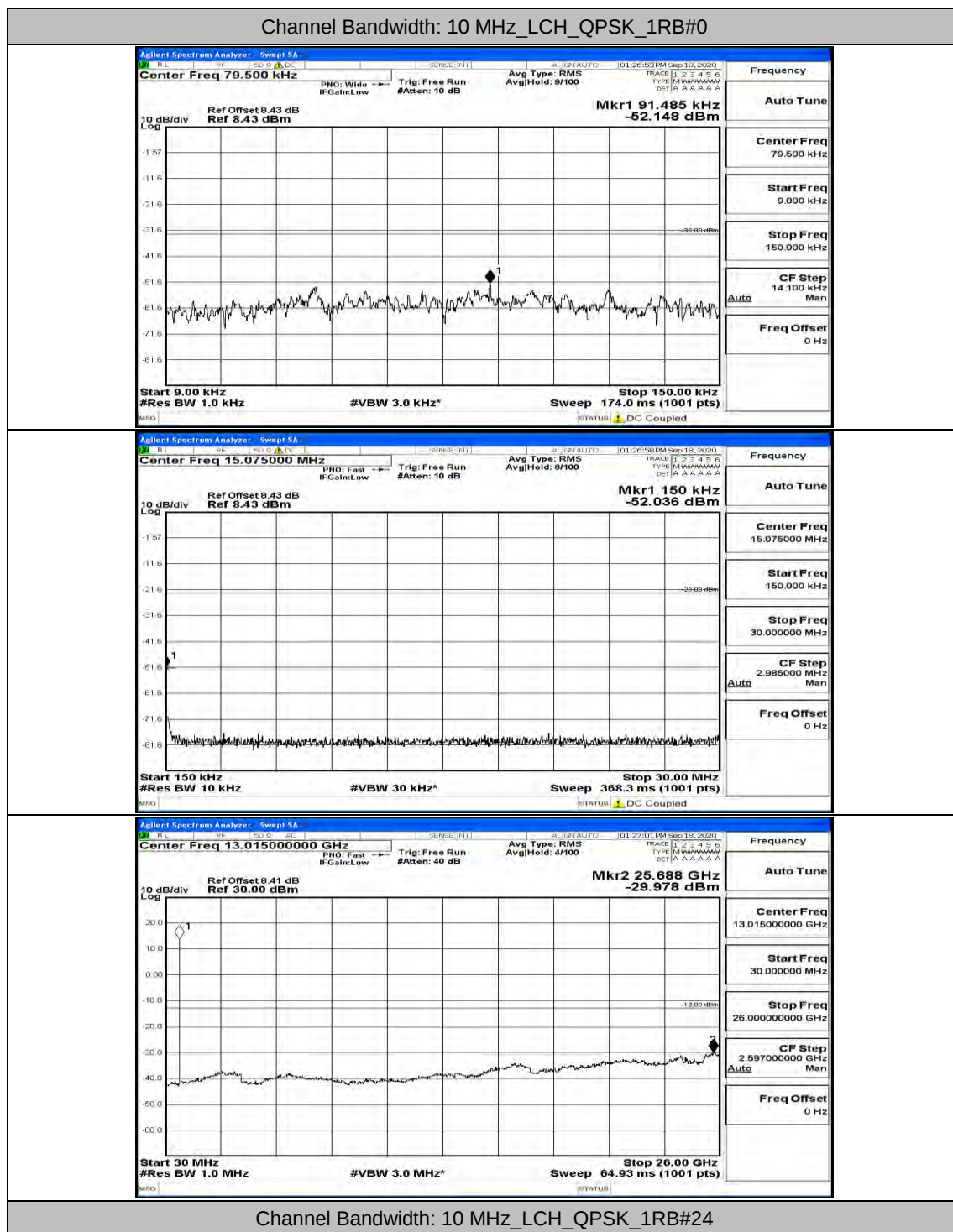


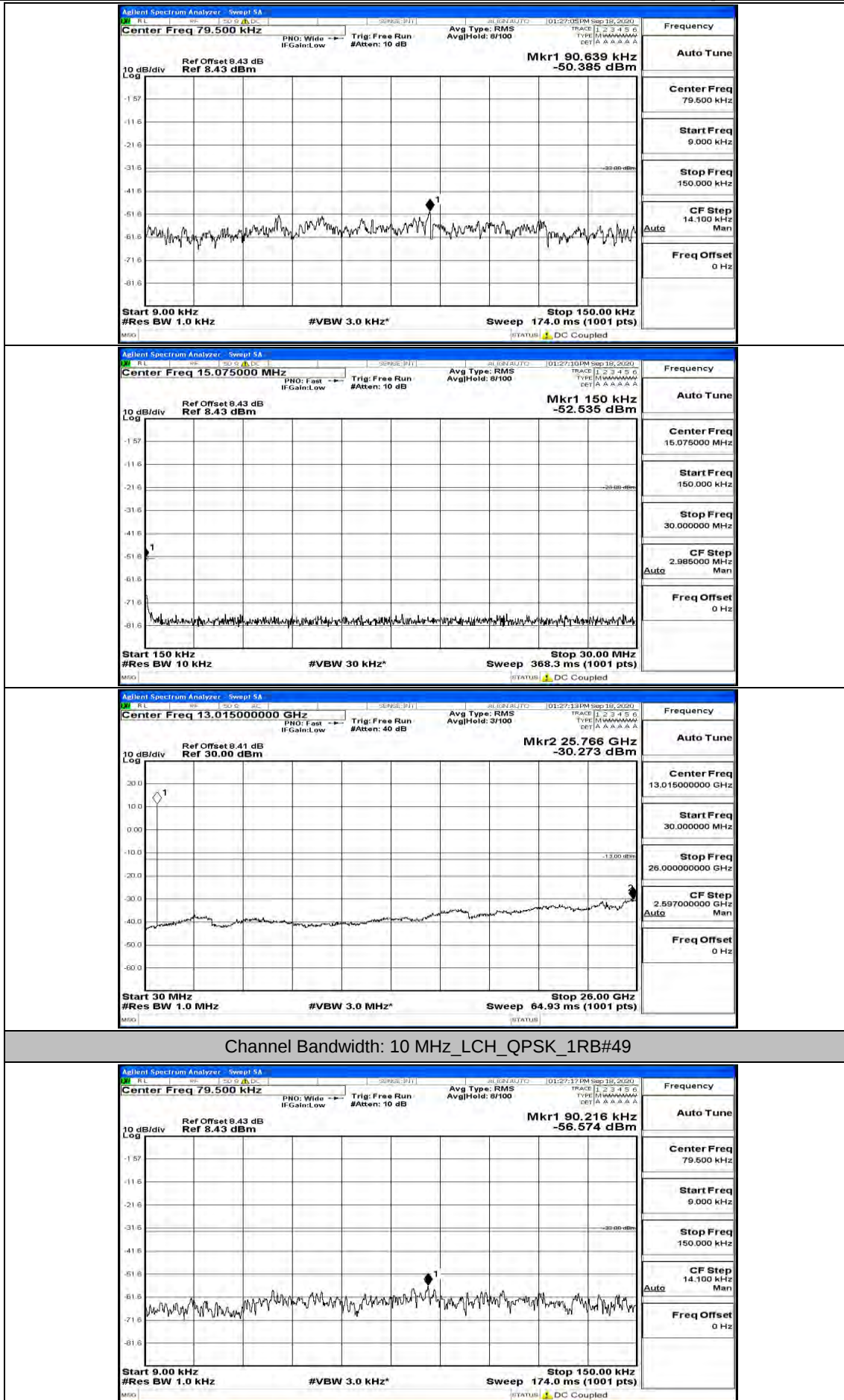


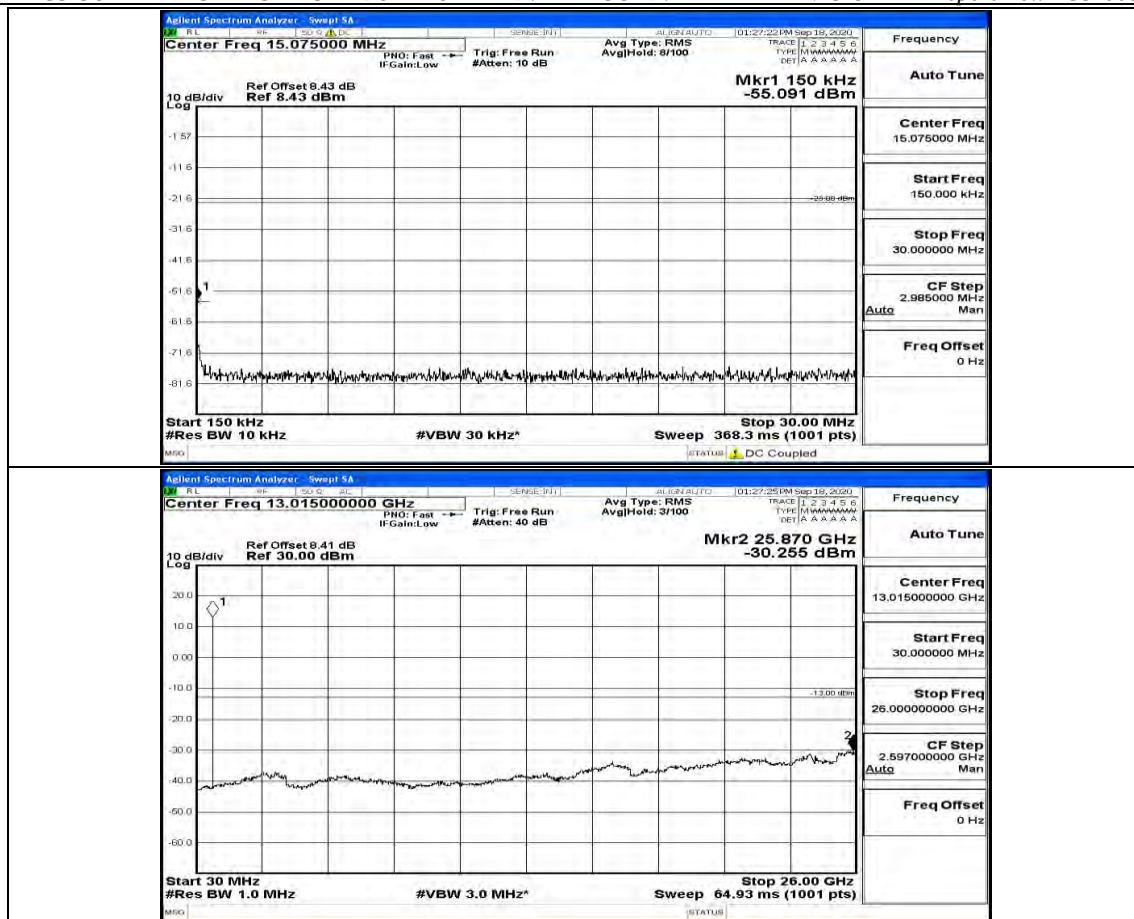
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#24



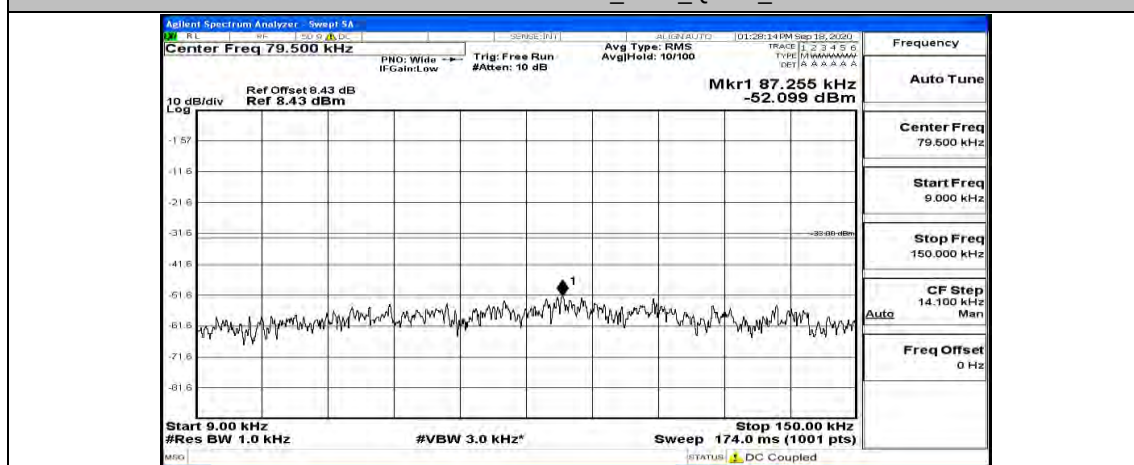
## Channel Bandwidth: 10 MHz

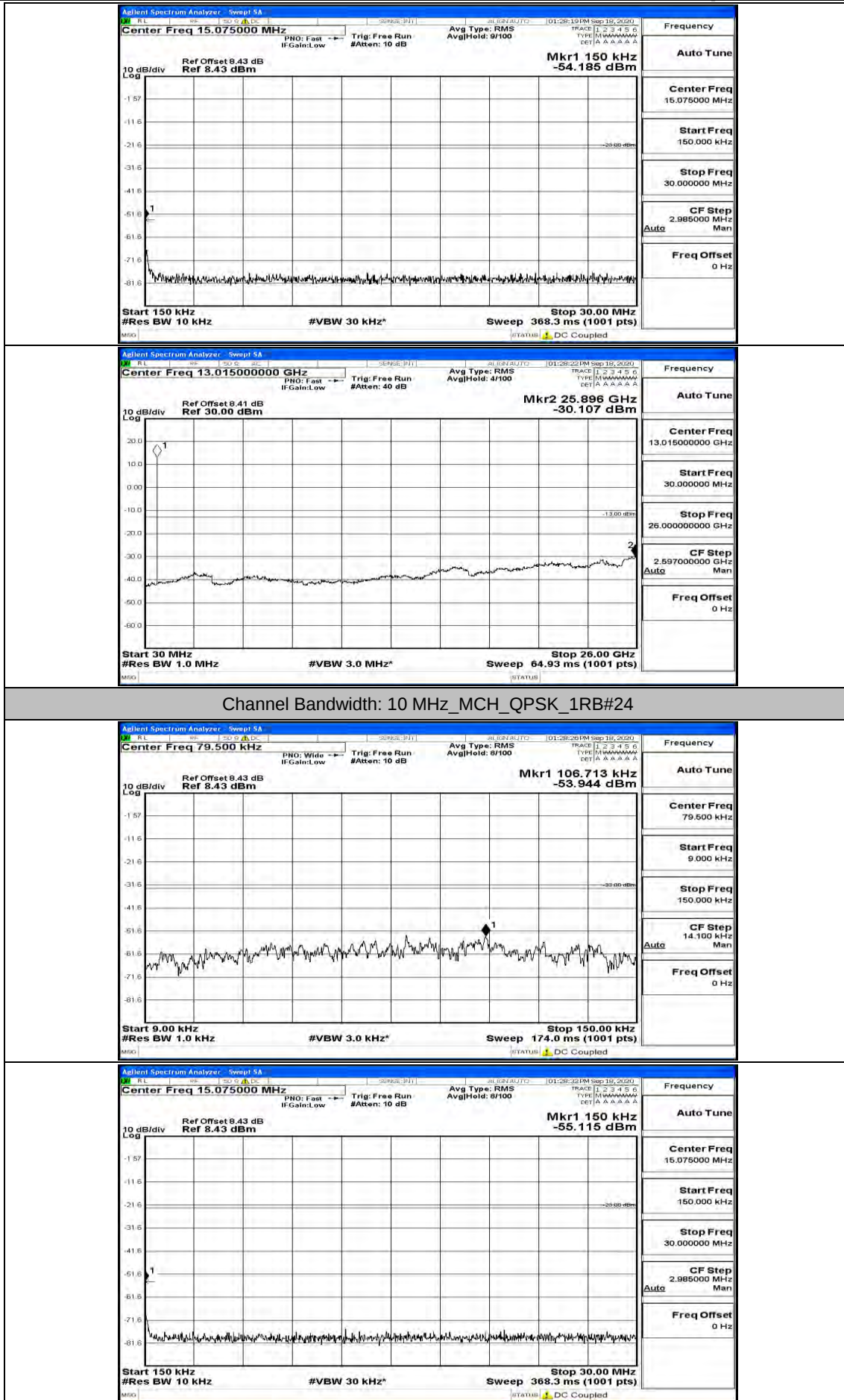


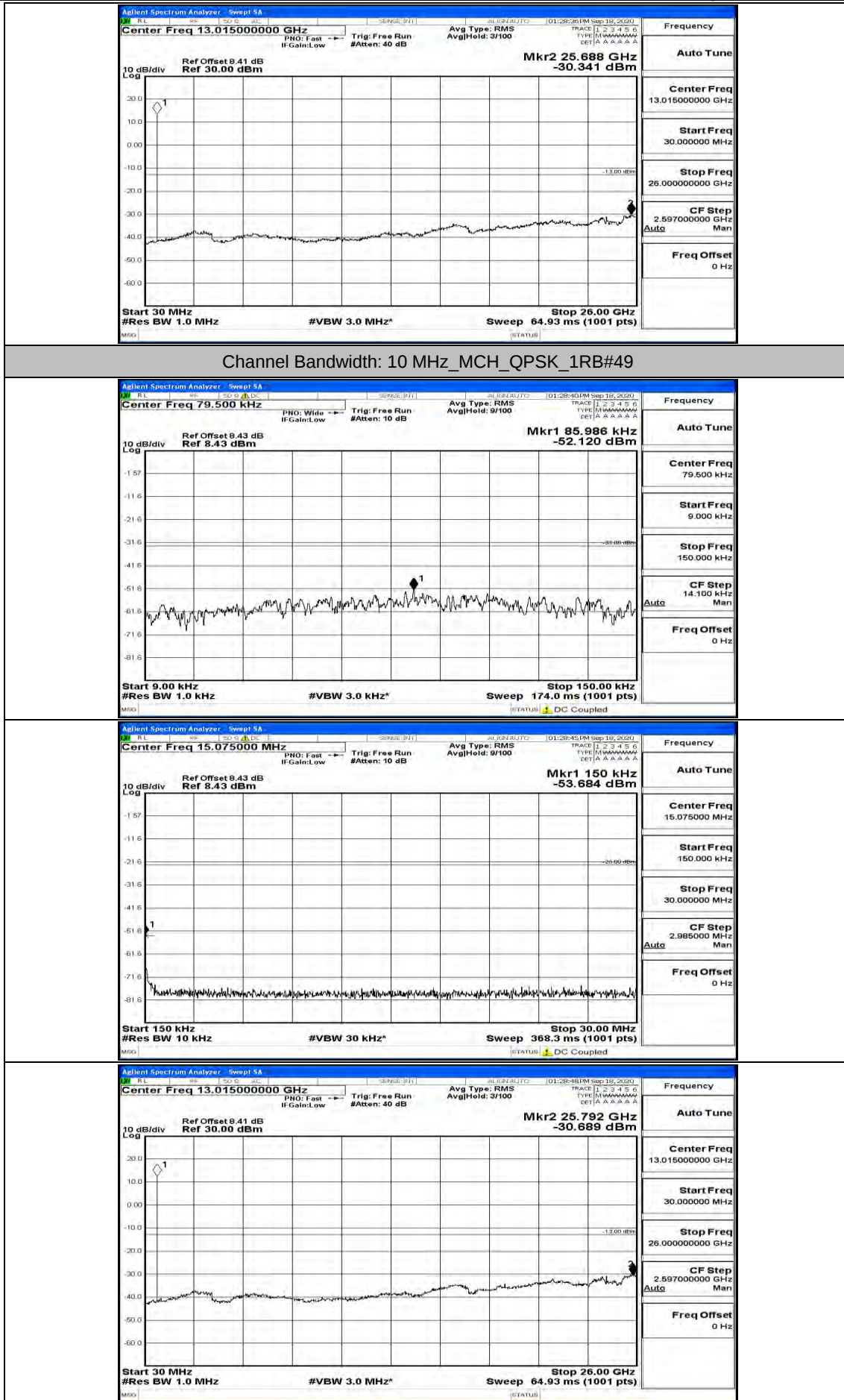




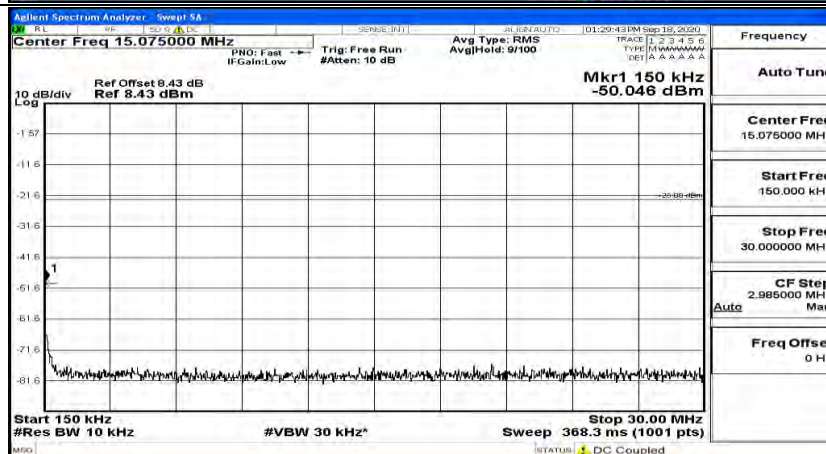
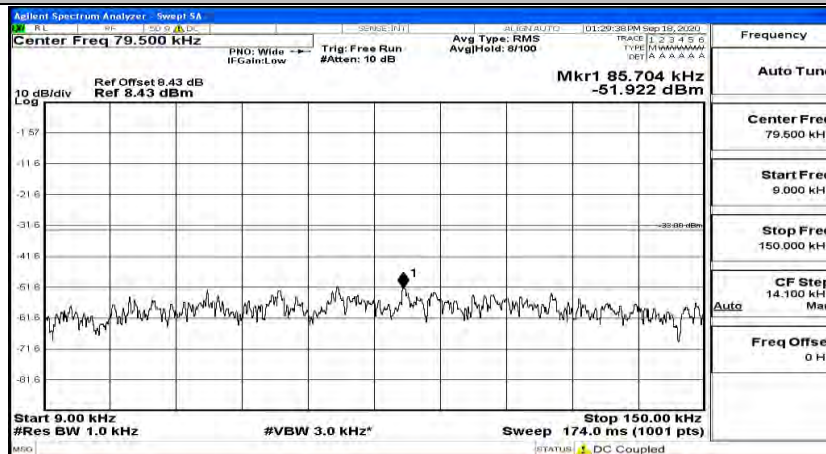
Channel Bandwidth: 10 MHz MCH QPSK 1RB#0



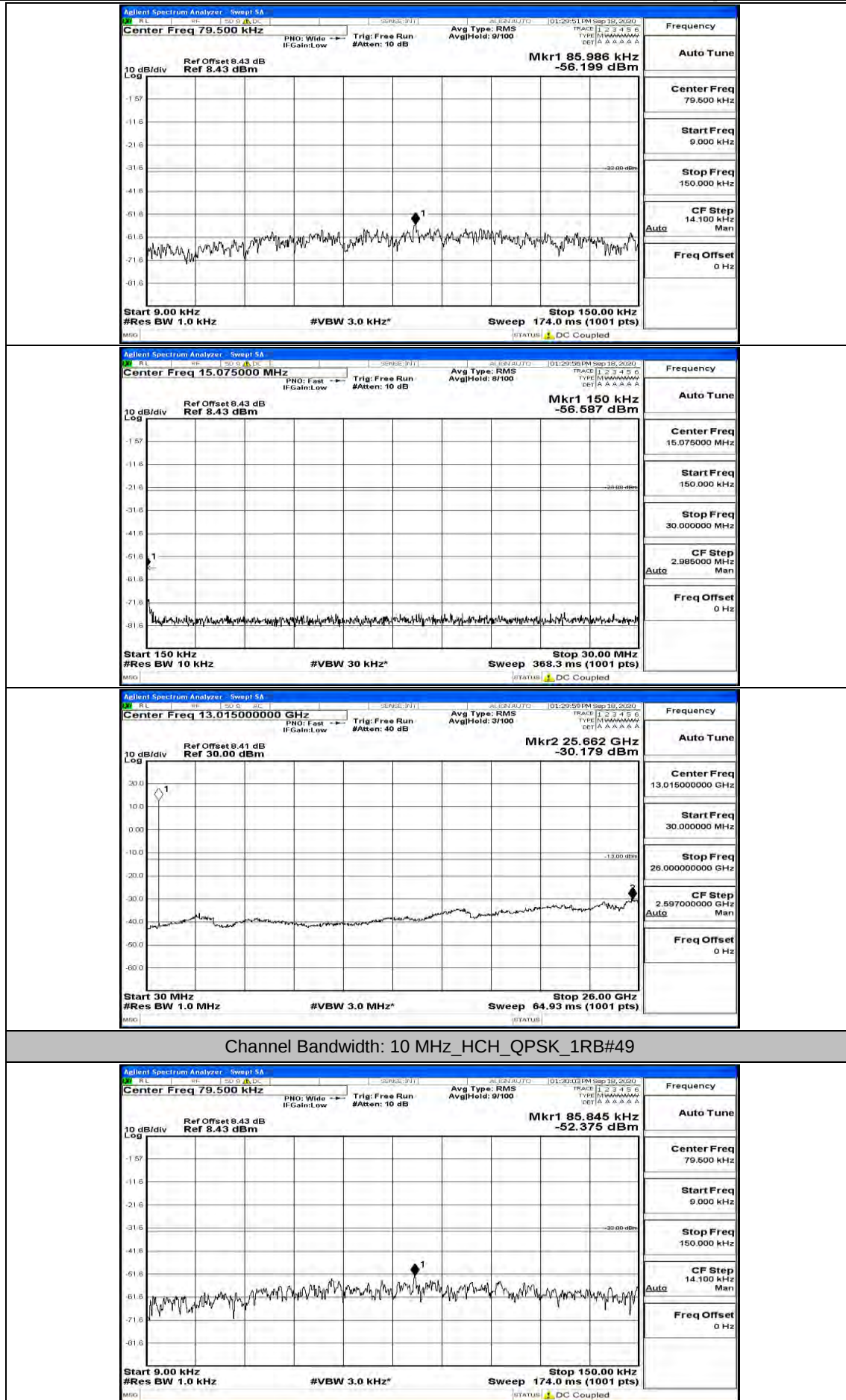


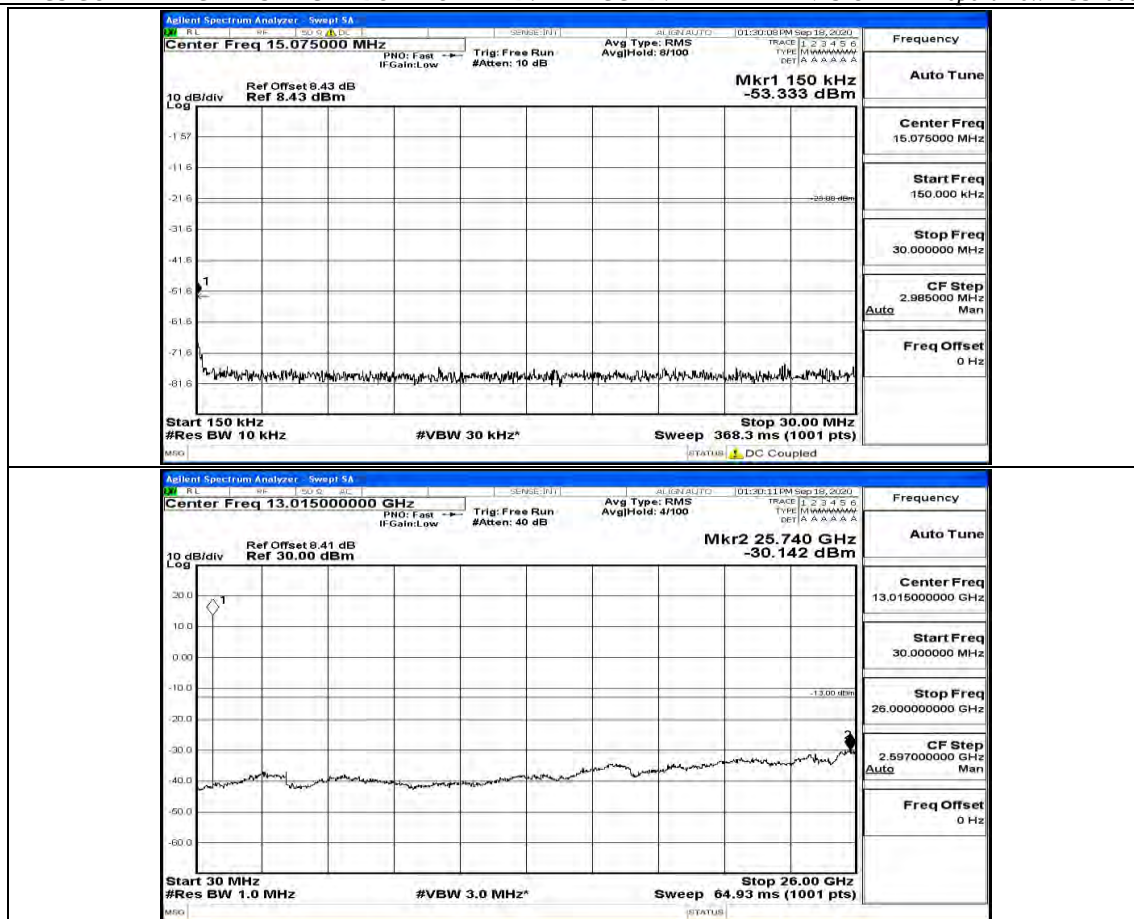


## Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#0

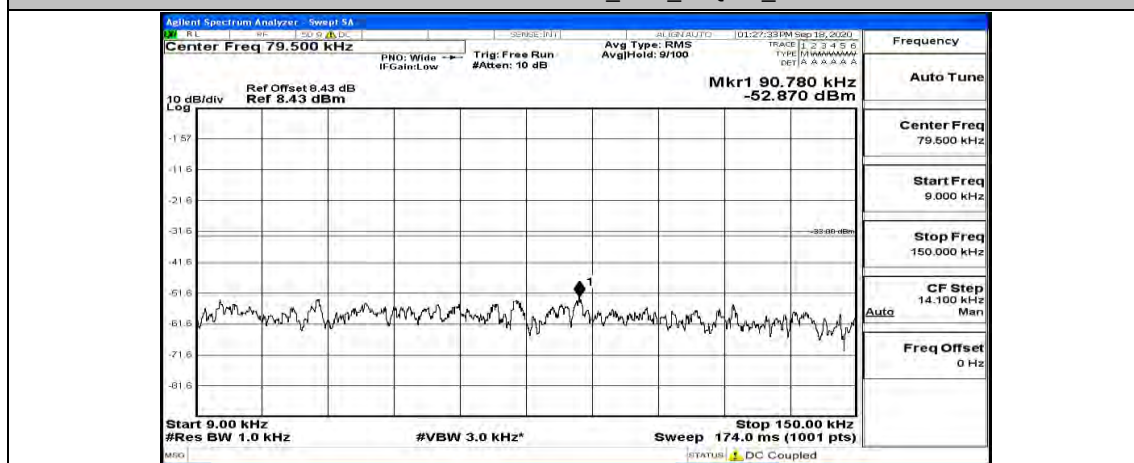


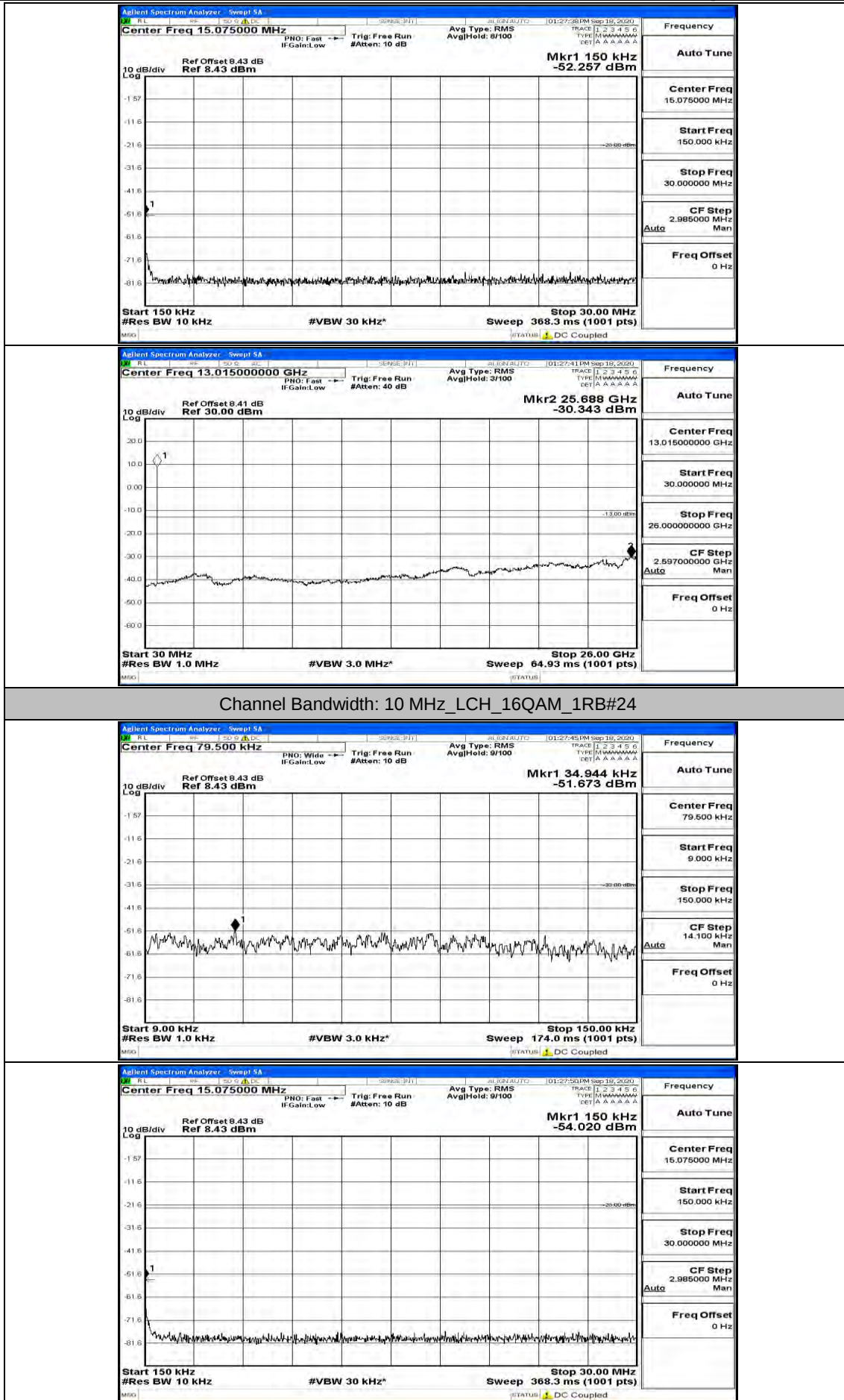
## Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#24





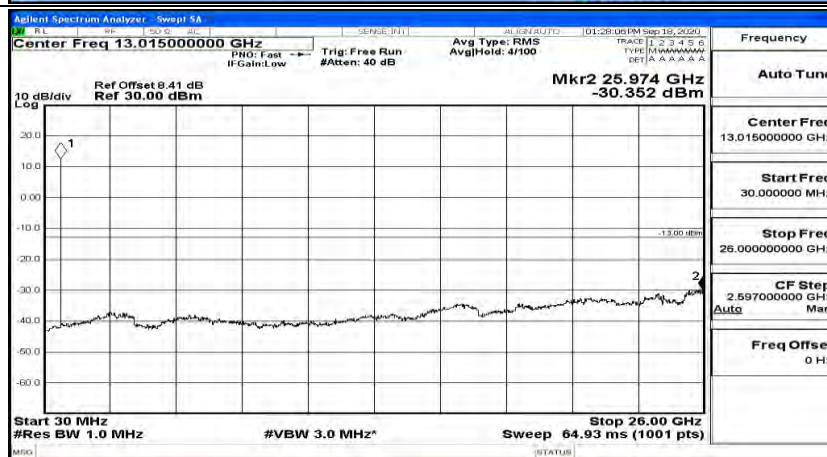
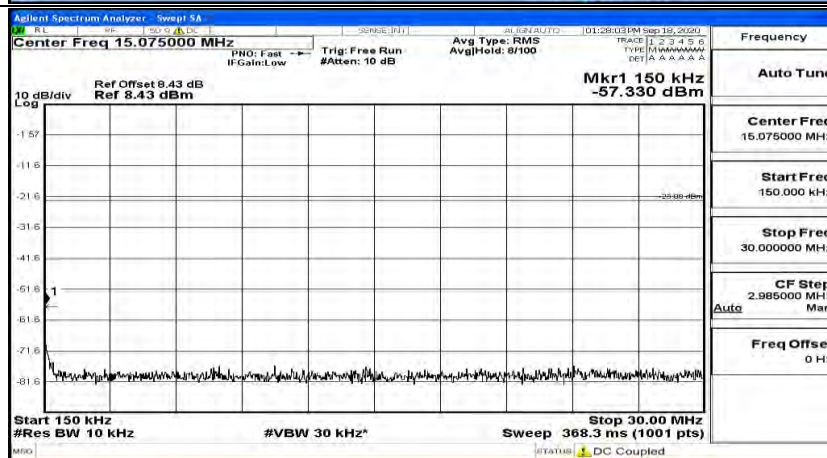
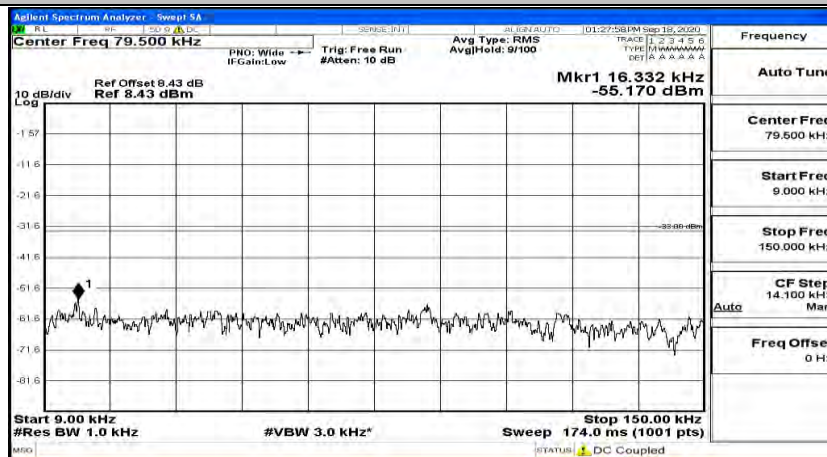
## Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#0



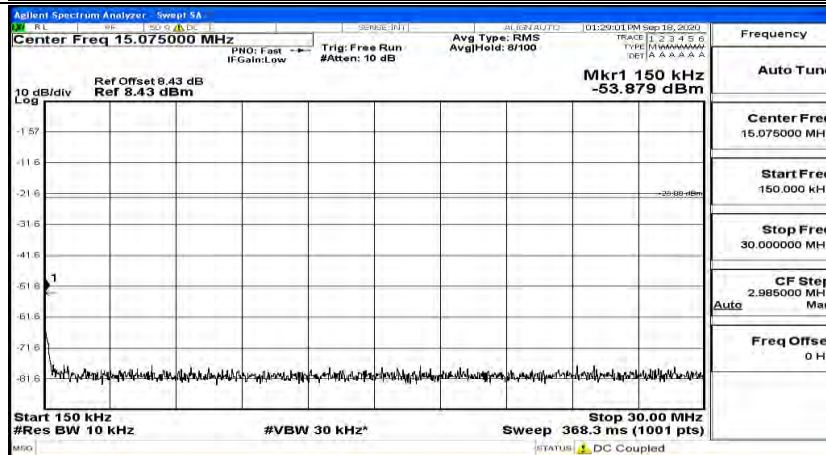
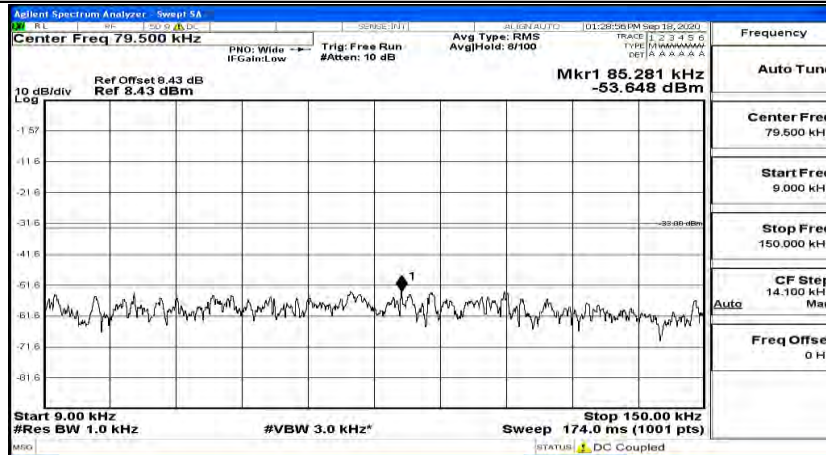




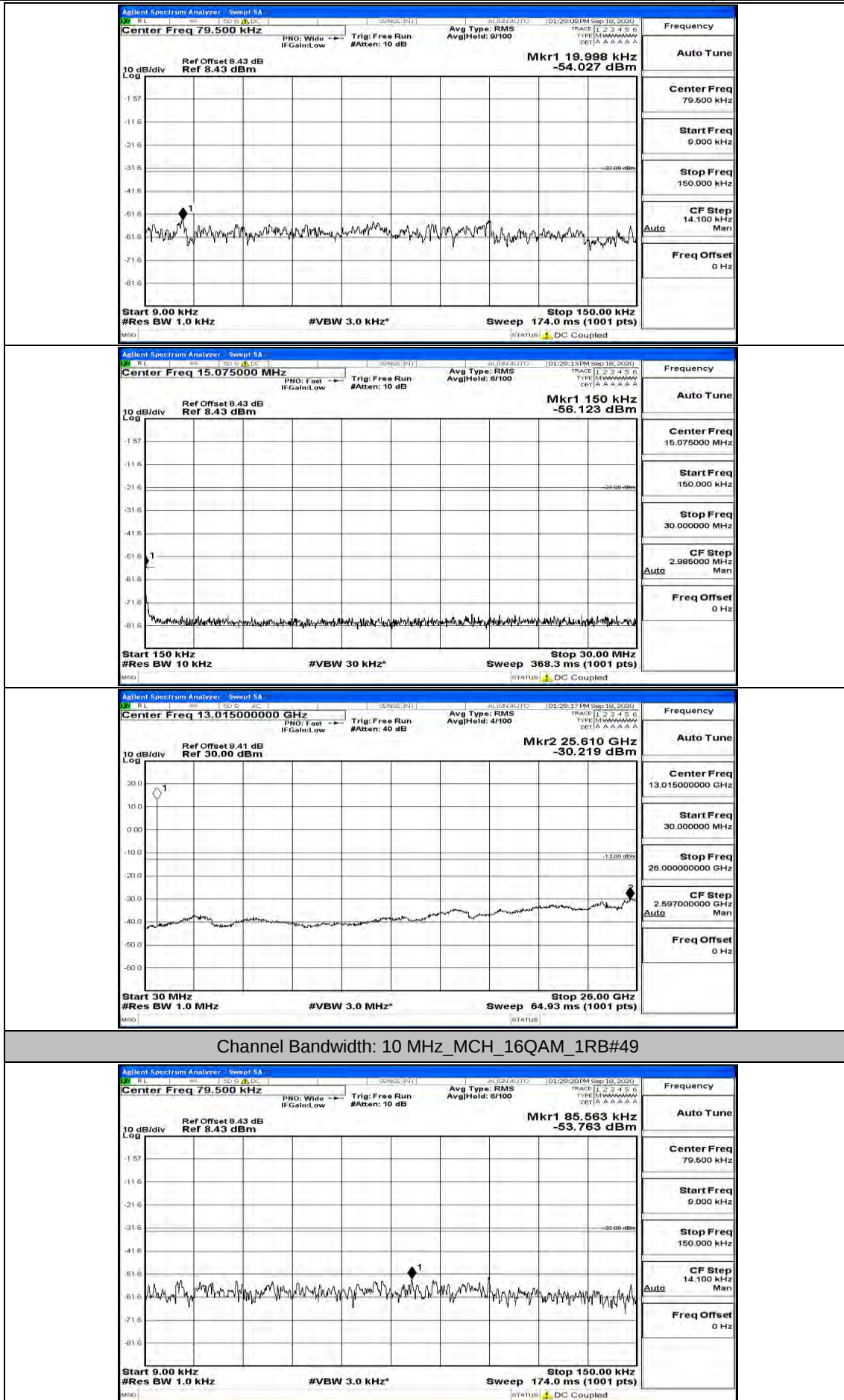
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#49

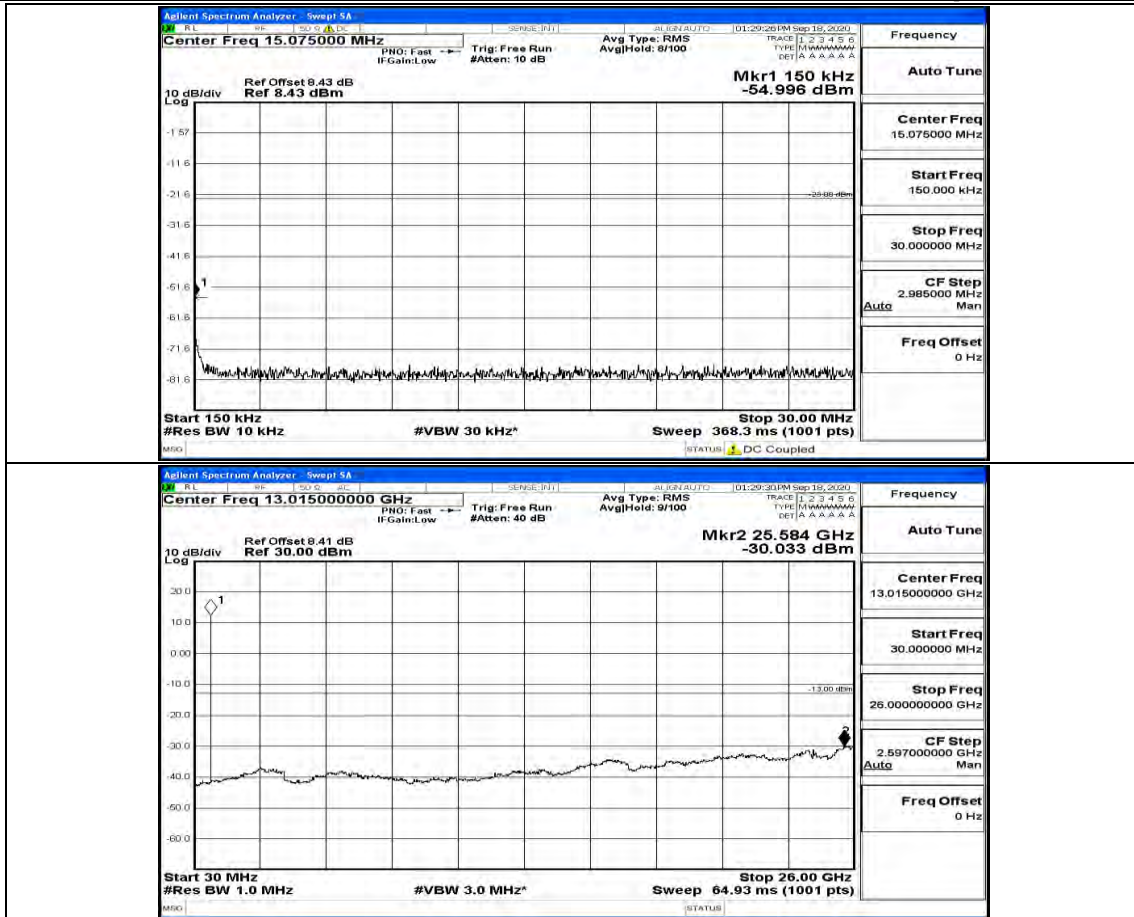


Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#0



Channel Bandwidth: 10 MHz\_MCH\_16QAM\_1RB#24





## Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#0

