

Appendix K: Test Data for E-UTRA Band 13

Product Name: Zettle Terminal
Trade Mark: Zettle Terminal
Test Model: Zettle Terminal

Environmental Conditions

| | |
|--------------------|------------|
| Temperature: | 22.3° C |
| Relative Humidity: | 53.6% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Diamond Lu |
| Supervised by: | Li Huan |

K.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 / 16QAM | LCH | 1 | 0 | 22.45 | 21.83 | PASS |
| | | 1 | 12 | 22.59 | 21.90 | PASS |
| | | 1 | 24 | 22.38 | 21.61 | PASS |
| | | 12 | 0 | 21.42 | 20.62 | PASS |
| | | 12 | 6 | 21.42 | 20.55 | PASS |
| | | 12 | 13 | 21.49 | 20.63 | PASS |
| | | 25 | 0 | 21.60 | 20.60 | PASS |
| | MCH | 1 | 0 | 22.58 | 21.64 | PASS |
| | | 1 | 12 | 22.40 | 21.58 | PASS |
| | | 1 | 24 | 21.63 | 20.98 | PASS |
| | | 12 | 0 | 21.59 | 20.65 | PASS |
| | | 12 | 6 | 21.58 | 20.66 | PASS |
| | | 12 | 13 | 21.48 | 20.51 | PASS |
| | | 25 | 0 | 21.65 | 20.70 | PASS |
| | HCH | 1 | 0 | 22.55 | 21.63 | PASS |
| | | 1 | 12 | 21.79 | 21.04 | PASS |
| | | 1 | 24 | 22.41 | 21.48 | PASS |
| | | 12 | 0 | 21.57 | 20.59 | PASS |
| | | 12 | 6 | 21.59 | 20.59 | PASS |
| | | 12 | 13 | 21.52 | 20.54 | PASS |
| | | 25 | 0 | 21.59 | 20.64 | PASS |

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)

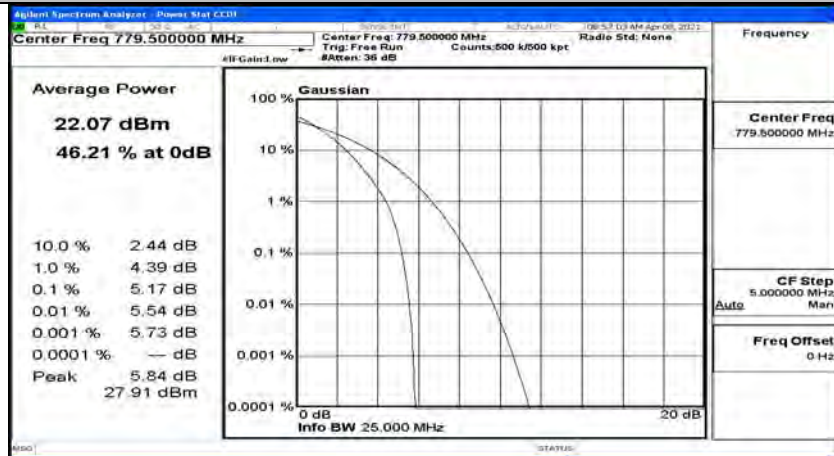
| Modulation | Channel | RB Configuration | | Average Power [dBm] | Average Power [dBm] | Verdict |
|-----------------|---------|------------------|--------|---------------------|---------------------|---------|
| | | Size | Offset | QPSK | 16QAM | |
| QPSK / 16QAM | LCH | 1 | 0 | 22.89 | 22.22 | PASS |
| | | 1 | 24 | 22.60 | 22.02 | PASS |
| | | 1 | 49 | 21.79 | 20.69 | PASS |
| | | 25 | 0 | 21.76 | 20.86 | PASS |
| | | 25 | 12 | 21.75 | 20.86 | PASS |
| | | 25 | 25 | 21.54 | 20.50 | PASS |
| | | 50 | 0 | 22.00 | 21.01 | PASS |
| | MCH | 1 | 0 | 22.79 | 22.25 | PASS |
| | | 1 | 24 | 22.77 | 22.13 | PASS |
| | | 1 | 49 | 21.73 | 20.55 | PASS |
| | | 25 | 0 | 21.75 | 20.84 | PASS |
| | | 25 | 12 | 21.75 | 20.85 | PASS |
| | | 25 | 25 | 21.53 | 20.51 | PASS |
| | | 50 | 0 | 21.98 | 21.00 | PASS |
| | HCH | 1 | 0 | 22.76 | 22.27 | PASS |
| | | 1 | 24 | 22.79 | 22.13 | PASS |
| | | 1 | 49 | 21.80 | 20.76 | PASS |
| | | 25 | 0 | 21.75 | 20.84 | PASS |
| | | 25 | 12 | 21.76 | 20.87 | PASS |
| | | 25 | 25 | 21.55 | 20.53 | PASS |
| | | 50 | 0 | 22.00 | 21.00 | PASS |

K.2 Peak-to-Average Ratio

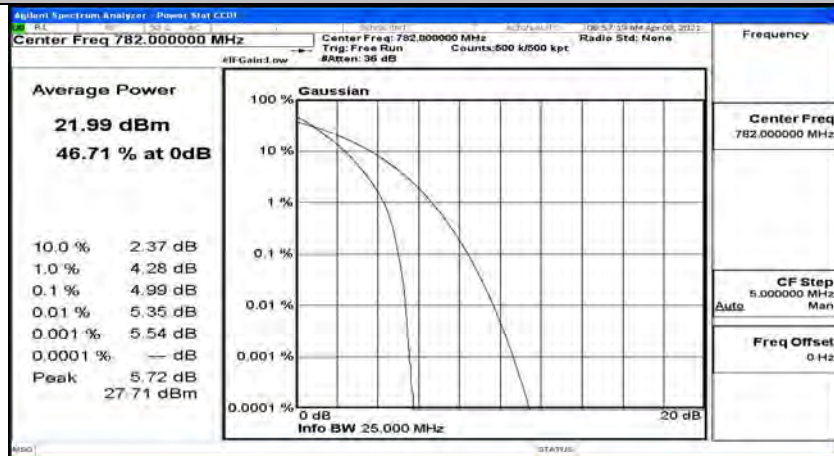
| Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz) | | | | |
|--|---------|-------------------------------|---------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 5.17 | <13 | PASS |
| | MCH | 4.99 | <13 | PASS |
| | HCH | 5.44 | <13 | PASS |
| 16QAM | LCH | 6.08 | <13 | PASS |
| | MCH | 5.86 | <13 | PASS |
| | HCH | 6.2 | <13 | PASS |

| Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz) | | | | |
|---|---------|-------------------------------|---------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 5.27 | <13 | PASS |
| | MCH | 5.28 | <13 | PASS |
| | HCH | 5.28 | <13 | PASS |
| 16QAM | LCH | 6.11 | <13 | PASS |
| | MCH | 6.12 | <13 | PASS |
| | HCH | 6.09 | <13 | PASS |

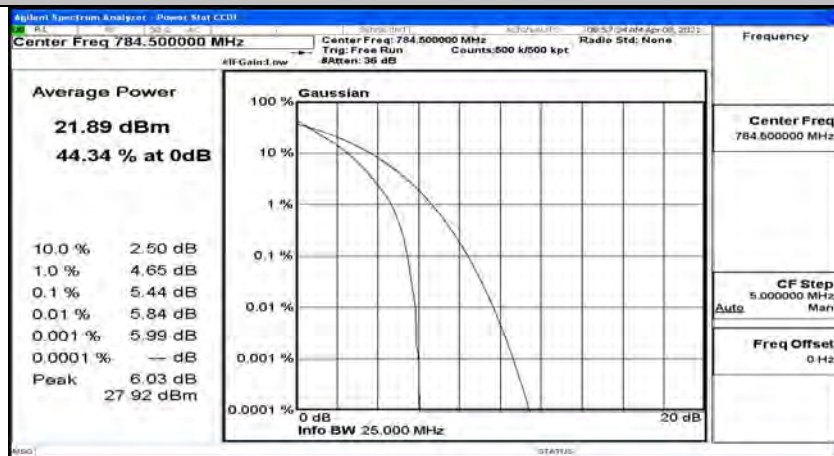
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



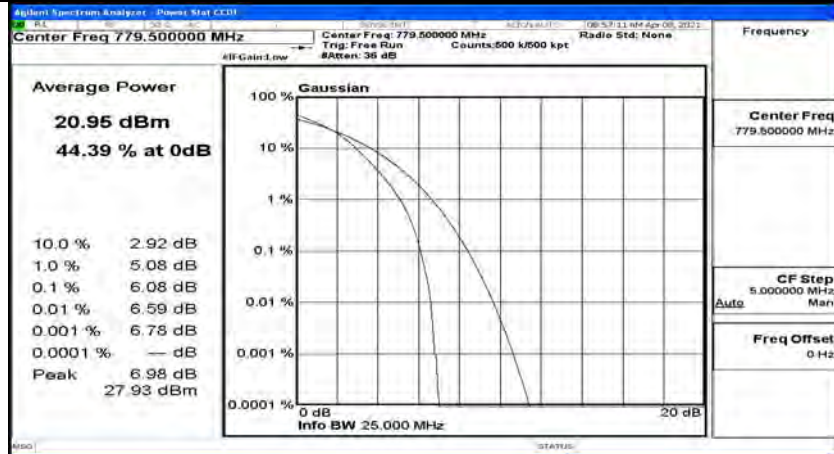
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



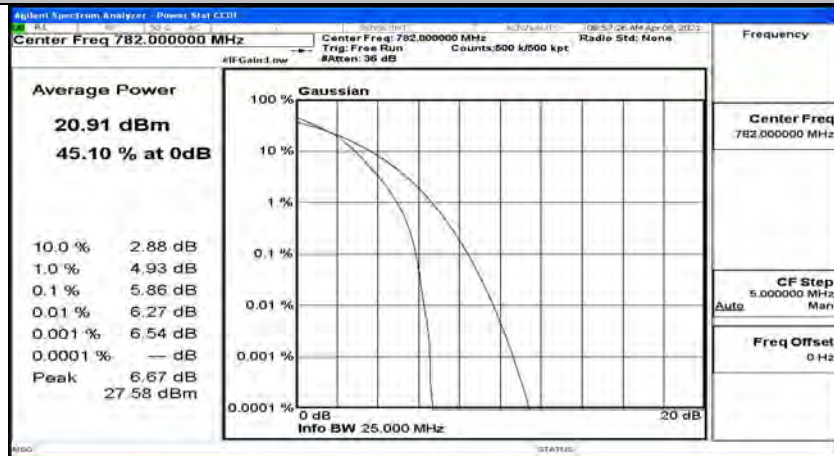
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



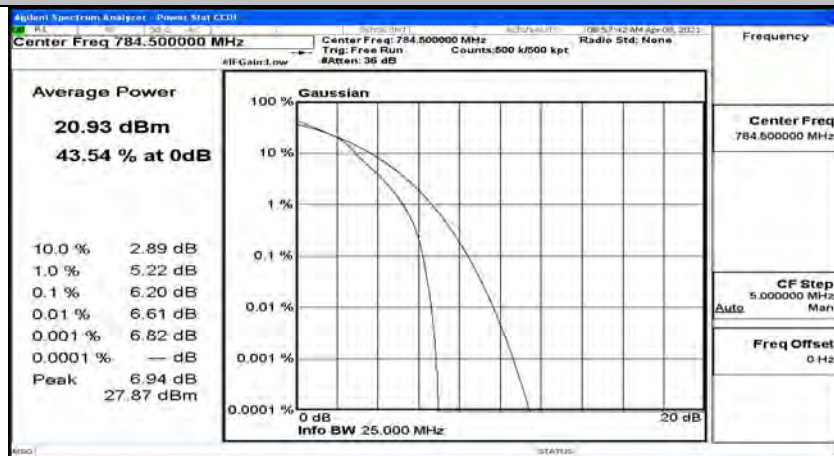
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



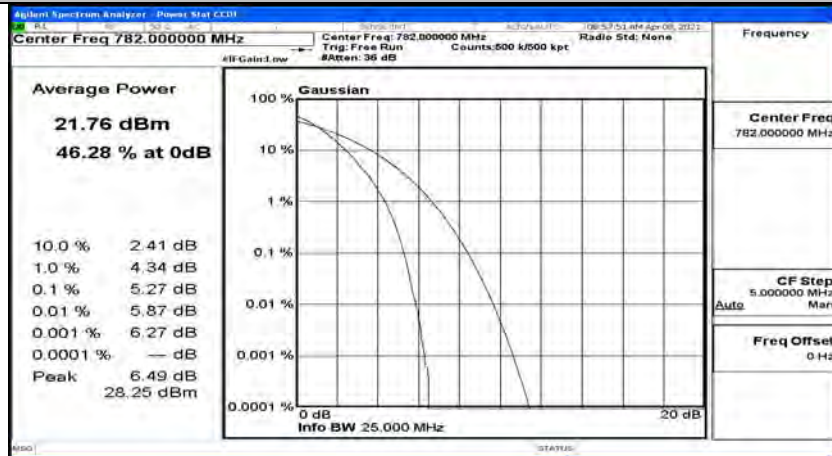
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



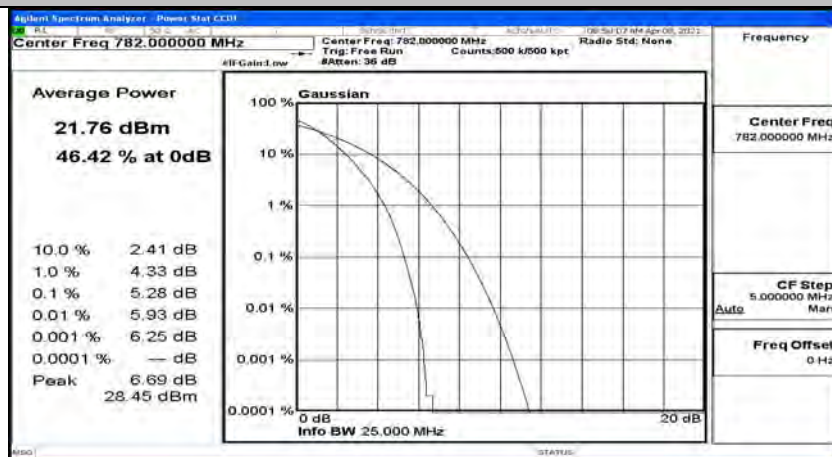
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



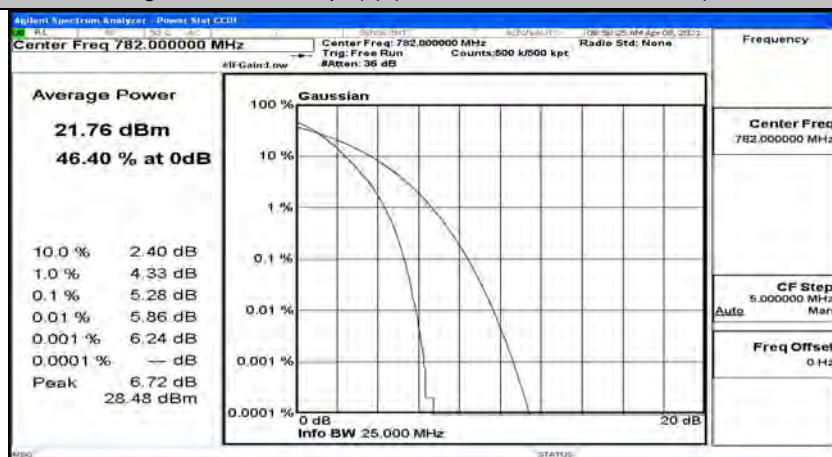
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



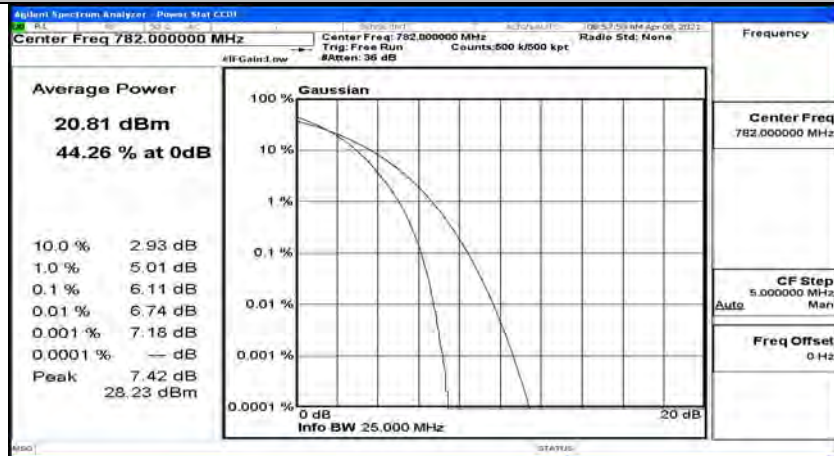
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



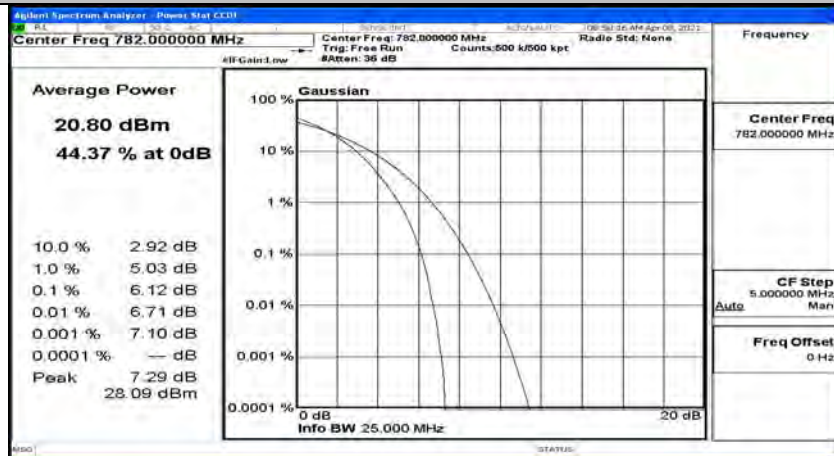
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



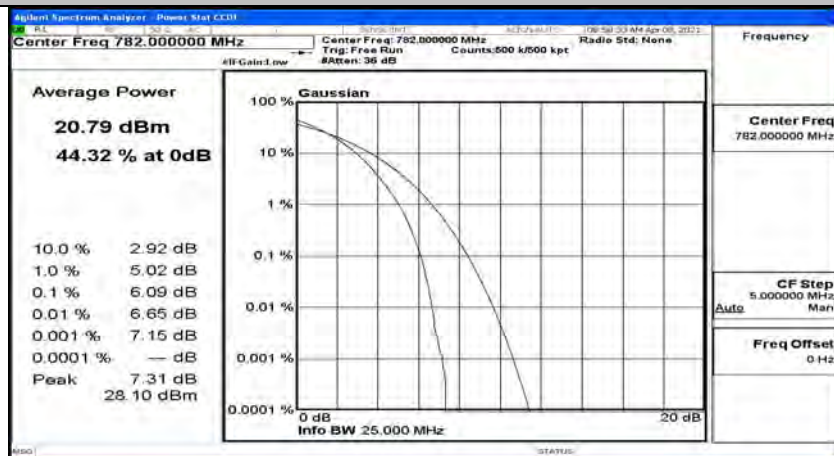
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



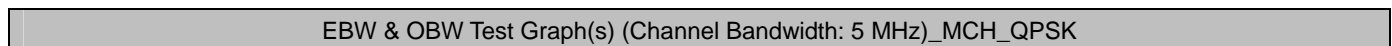
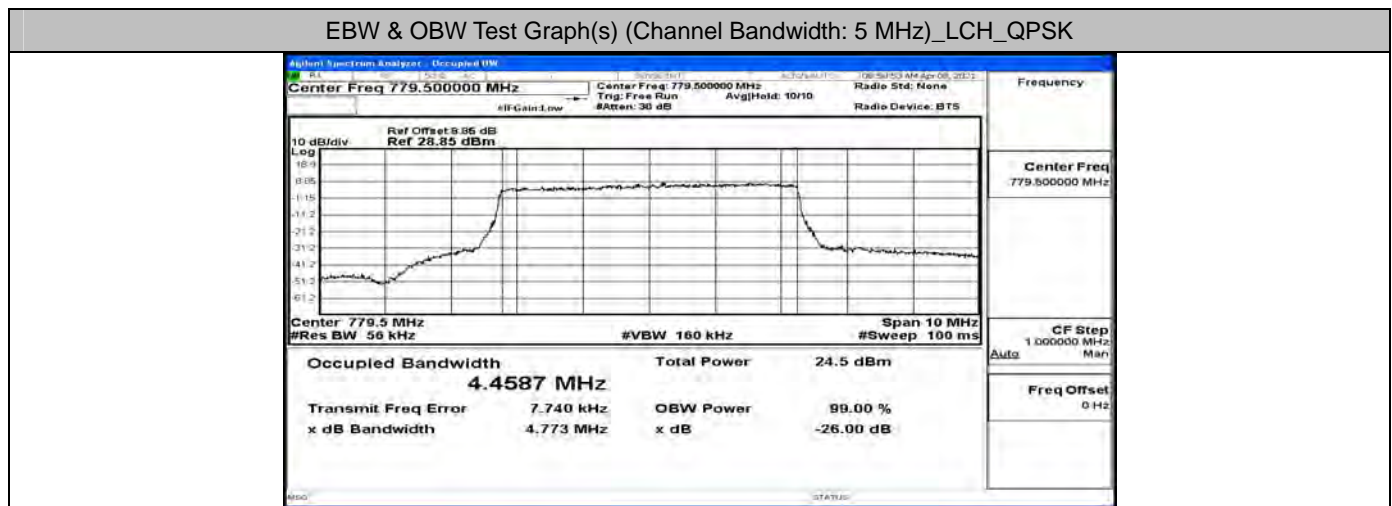
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

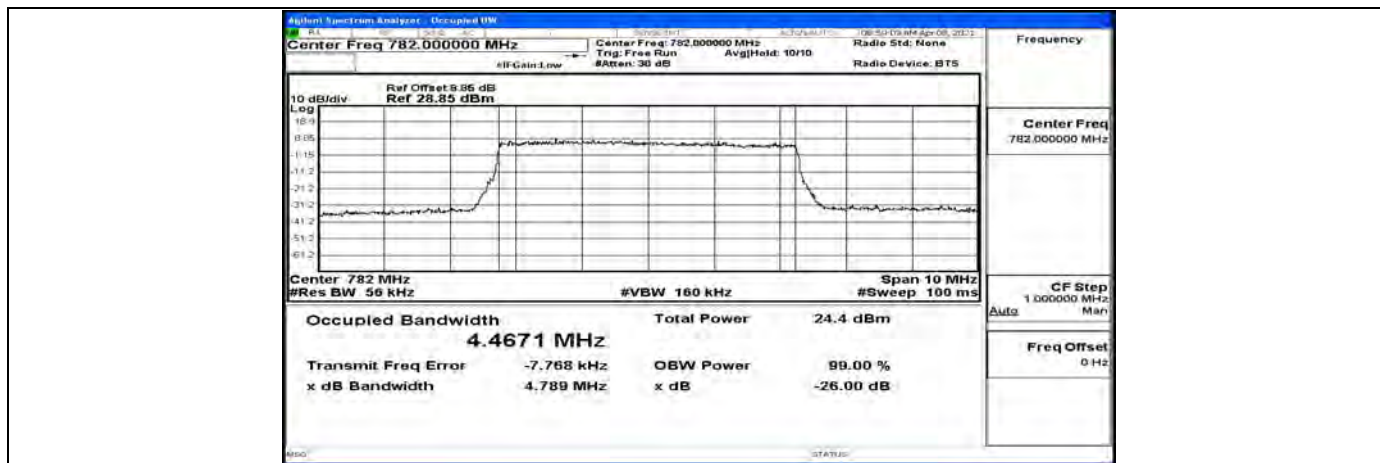


K.3 26dB Bandwidth and Occupied Bandwidth

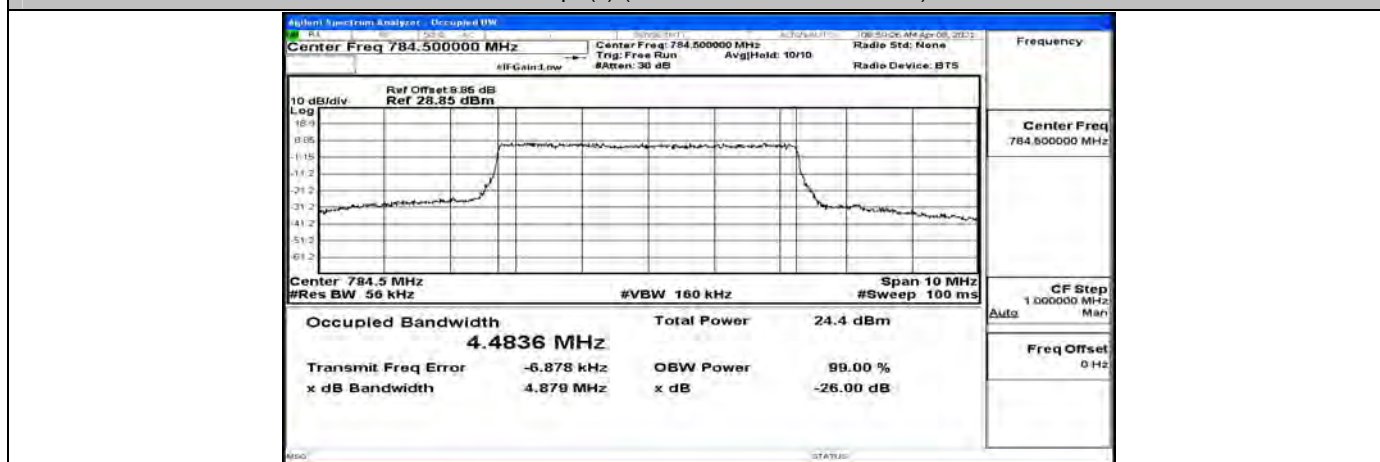
| EBW & OBW Test Result (Channel Bandwidth: 5 MHz) | | | | |
|--|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 4.4587 | 4.773 | PASS |
| | MCH | 4.4671 | 4.789 | PASS |
| | HCH | 4.4836 | 4.879 | PASS |
| 16QAM | LCH | 4.4604 | 4.787 | PASS |
| | MCH | 4.4630 | 4.773 | PASS |
| | HCH | 4.4891 | 4.814 | PASS |

| EBW & OBW Test Result (Channel Bandwidth: 10 MHz) | | | | |
|---|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 8.9186 | 9.403 | PASS |
| | MCH | 8.9206 | 9.376 | PASS |
| | HCH | 8.9225 | 9.402 | PASS |
| 16QAM | LCH | 8.8967 | 9.414 | PASS |
| | MCH | 8.8966 | 9.327 | PASS |
| | HCH | 8.9029 | 9.364 | PASS |

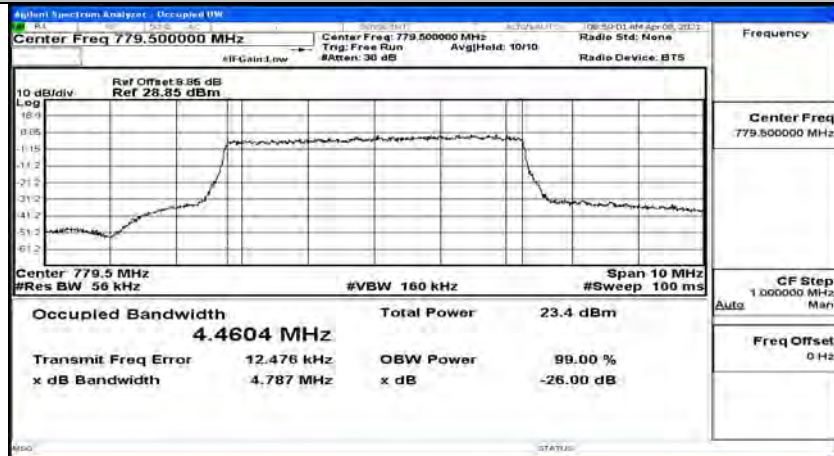




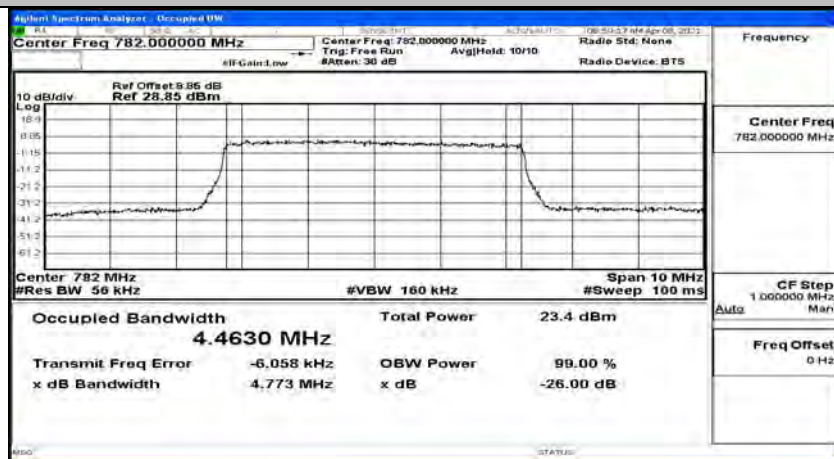
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



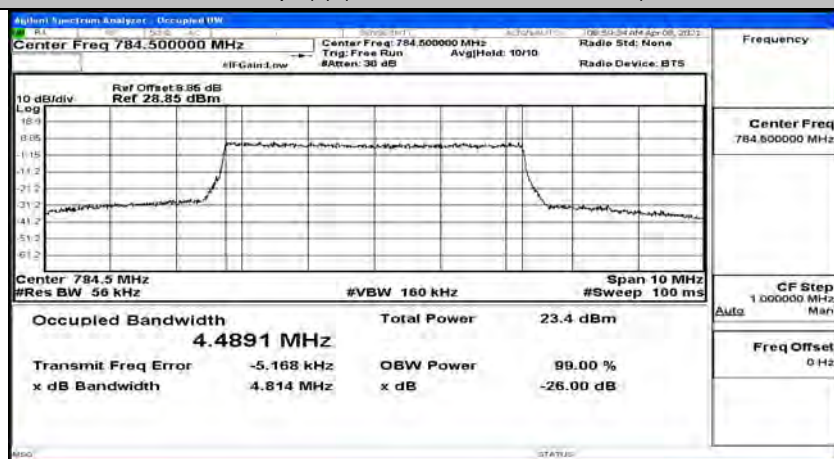
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



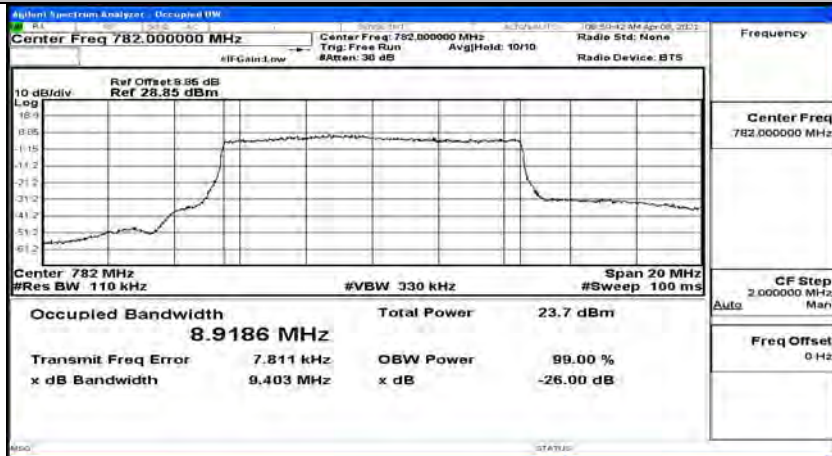
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



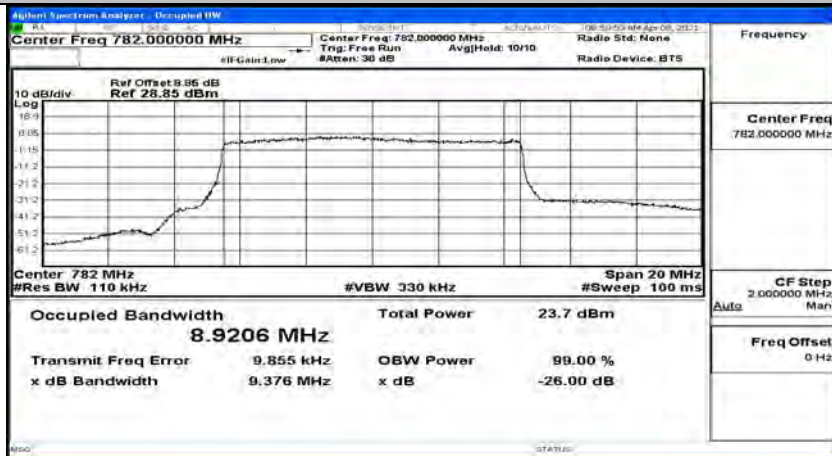
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



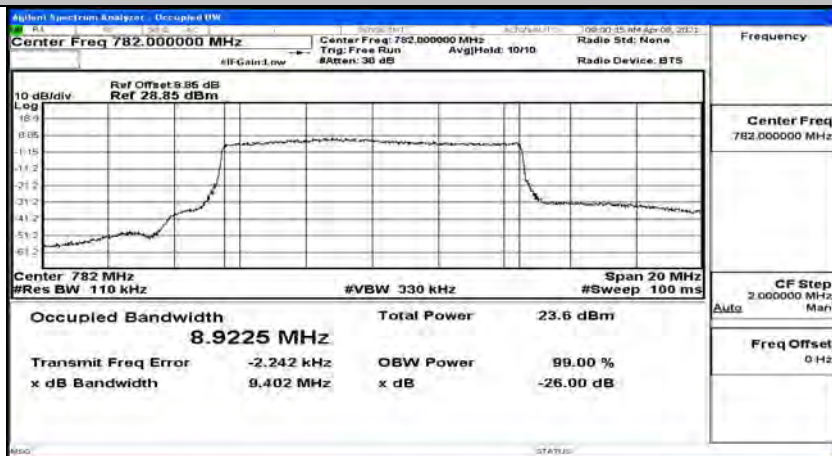
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



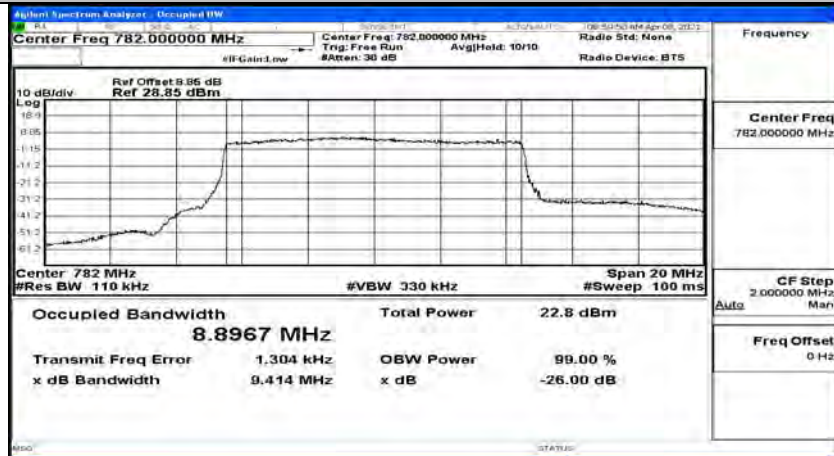
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



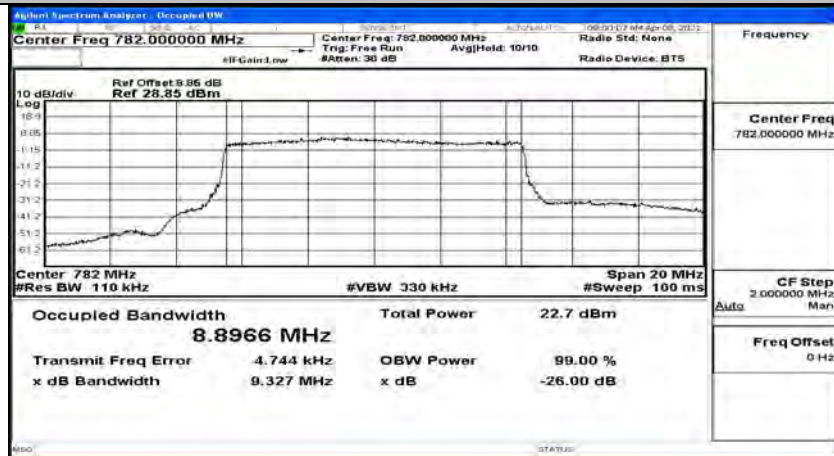
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



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

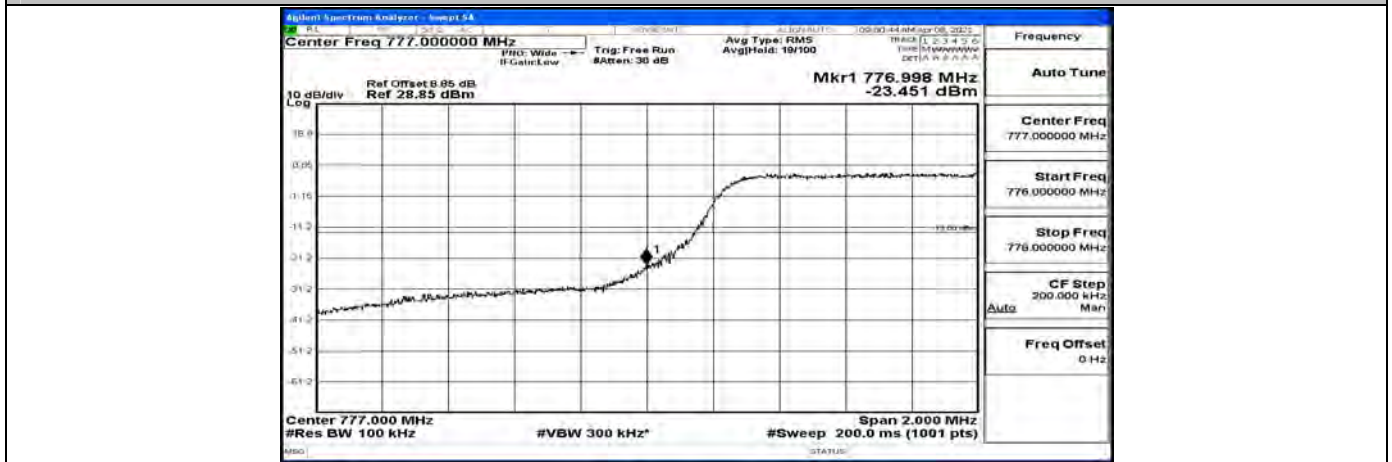


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



K.4 Band Edge

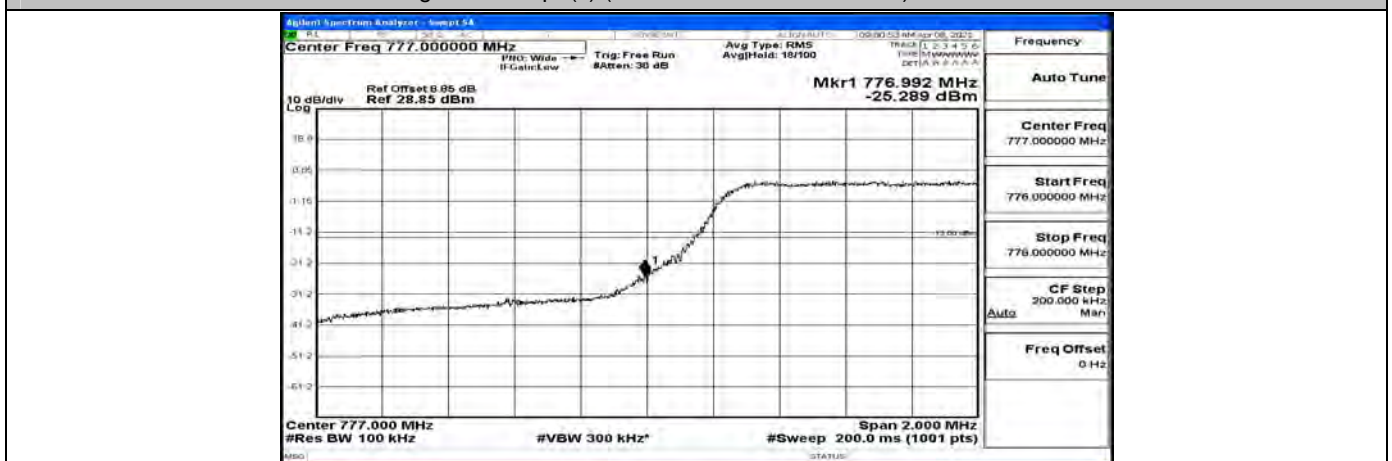
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



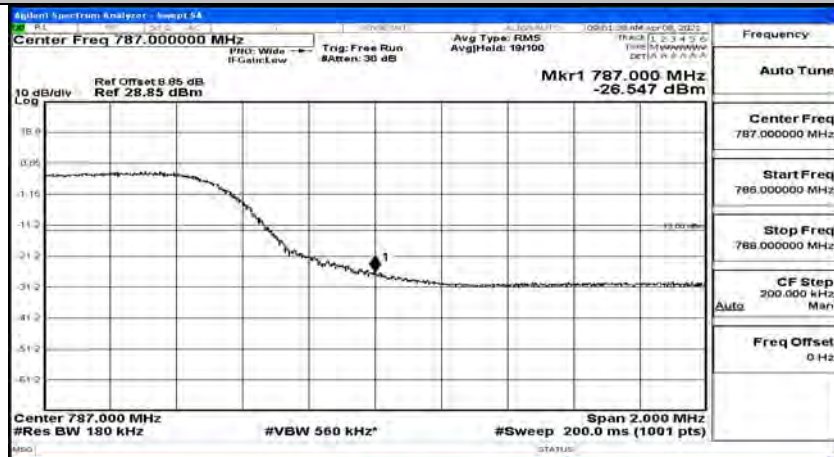
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



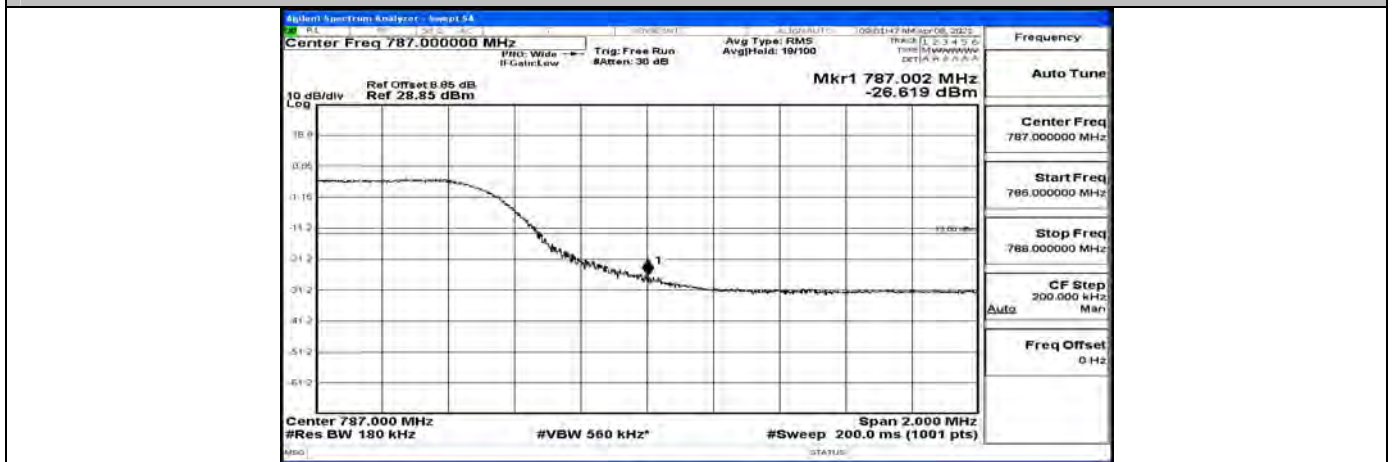
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



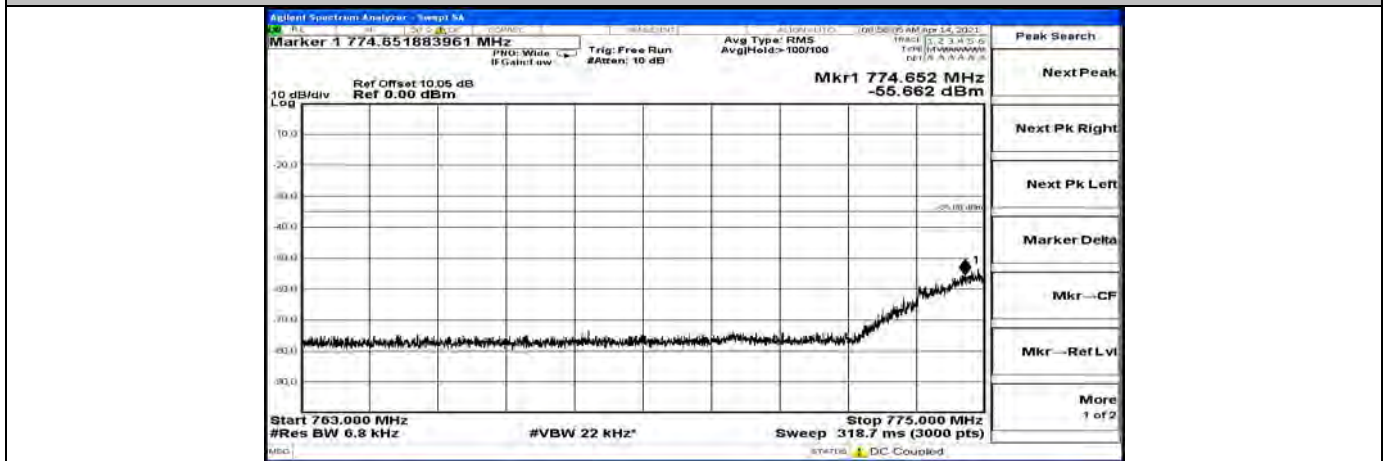
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



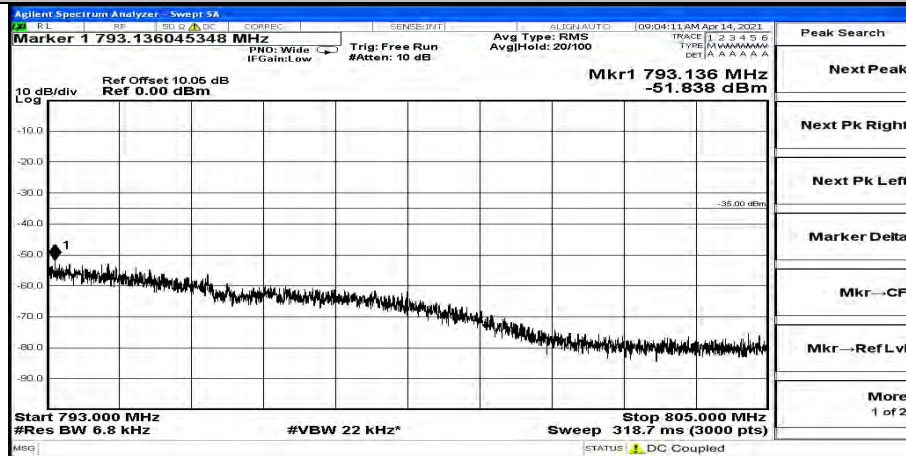
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



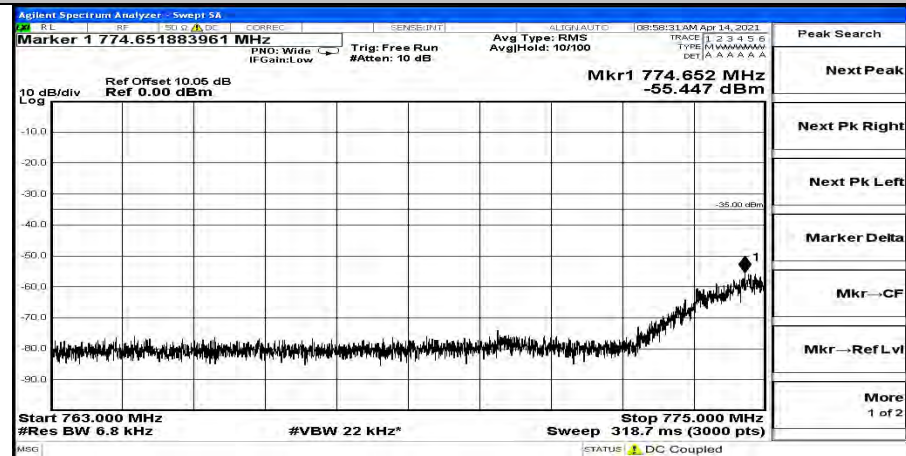
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



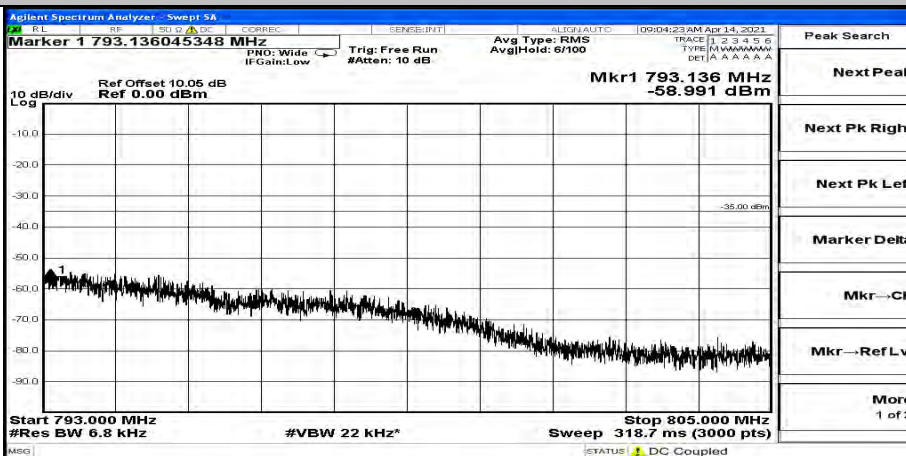
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



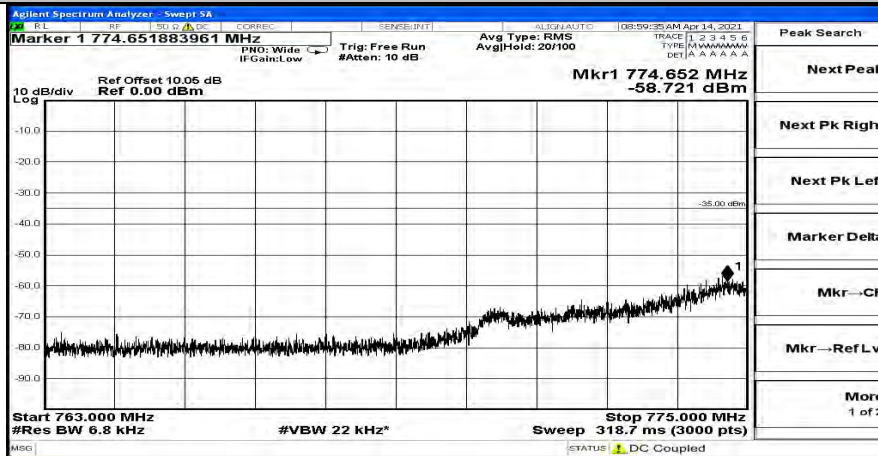
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



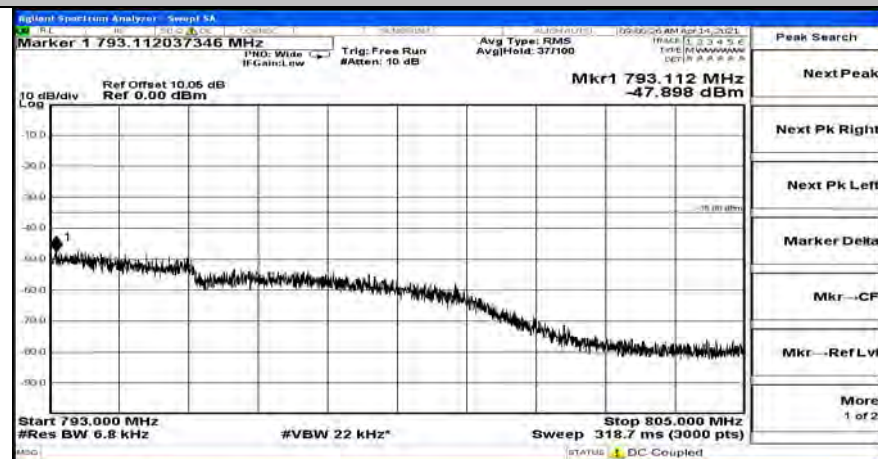
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



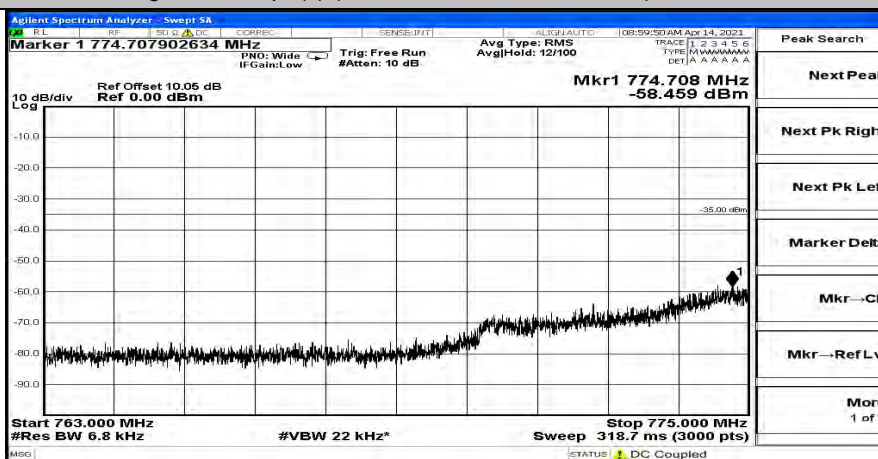
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_L_QPSK



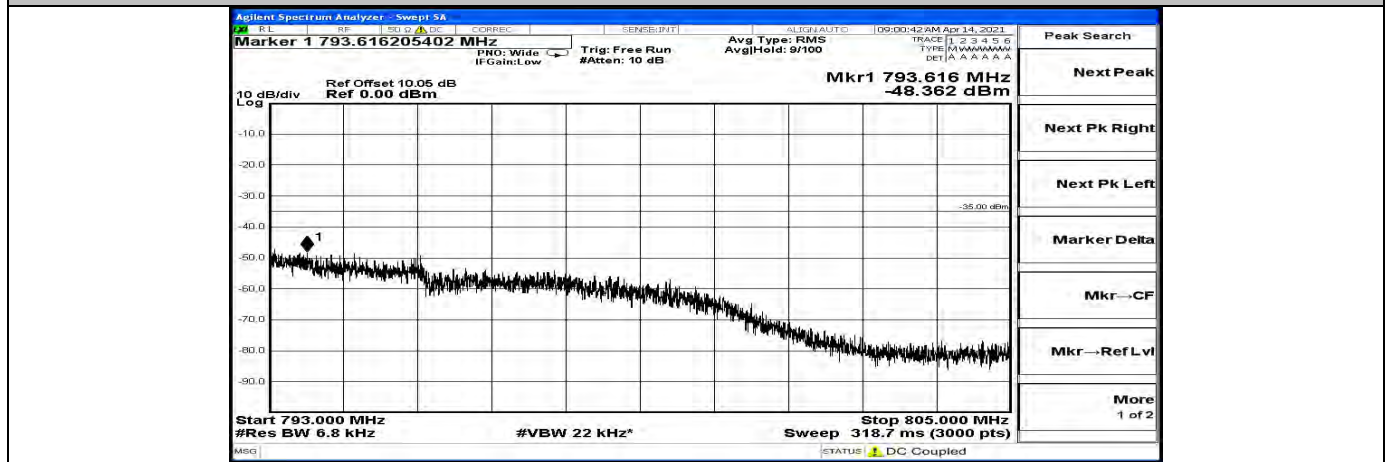
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_H_QPSK



Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_L_16QAM



Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_H_16QAM

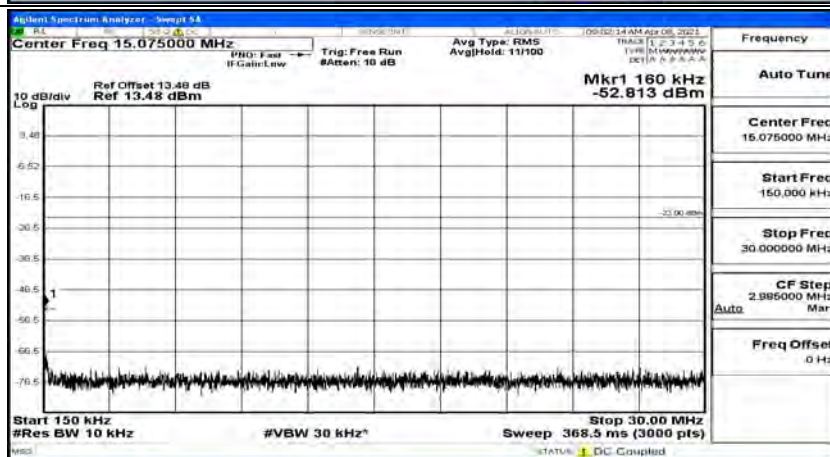


K.5 Conducted Spurious Emission

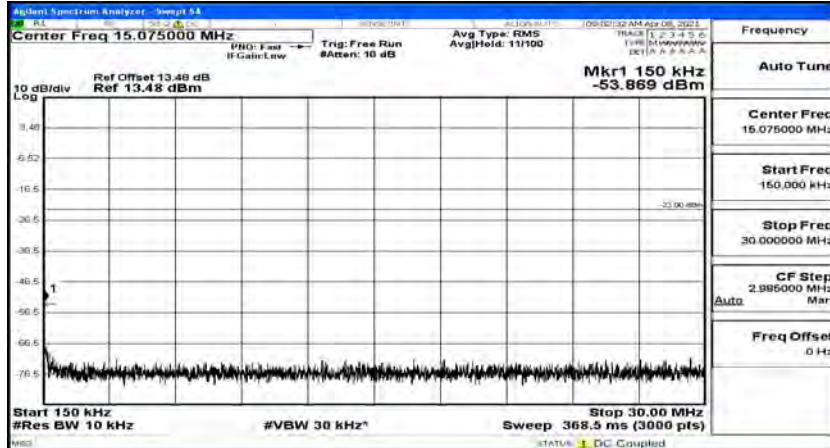
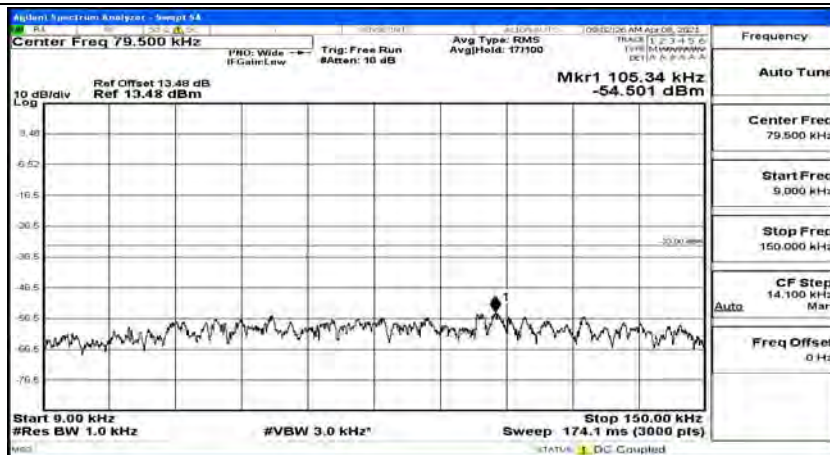
Test Graphs

Channel Bandwidth: 5 MHz

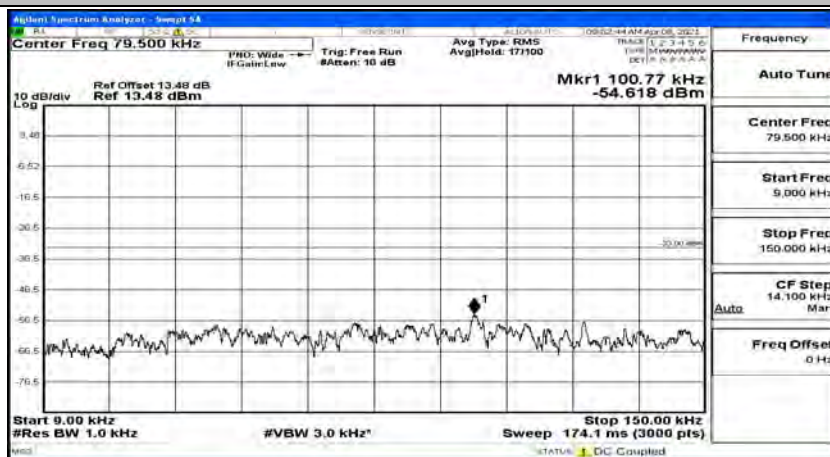
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0

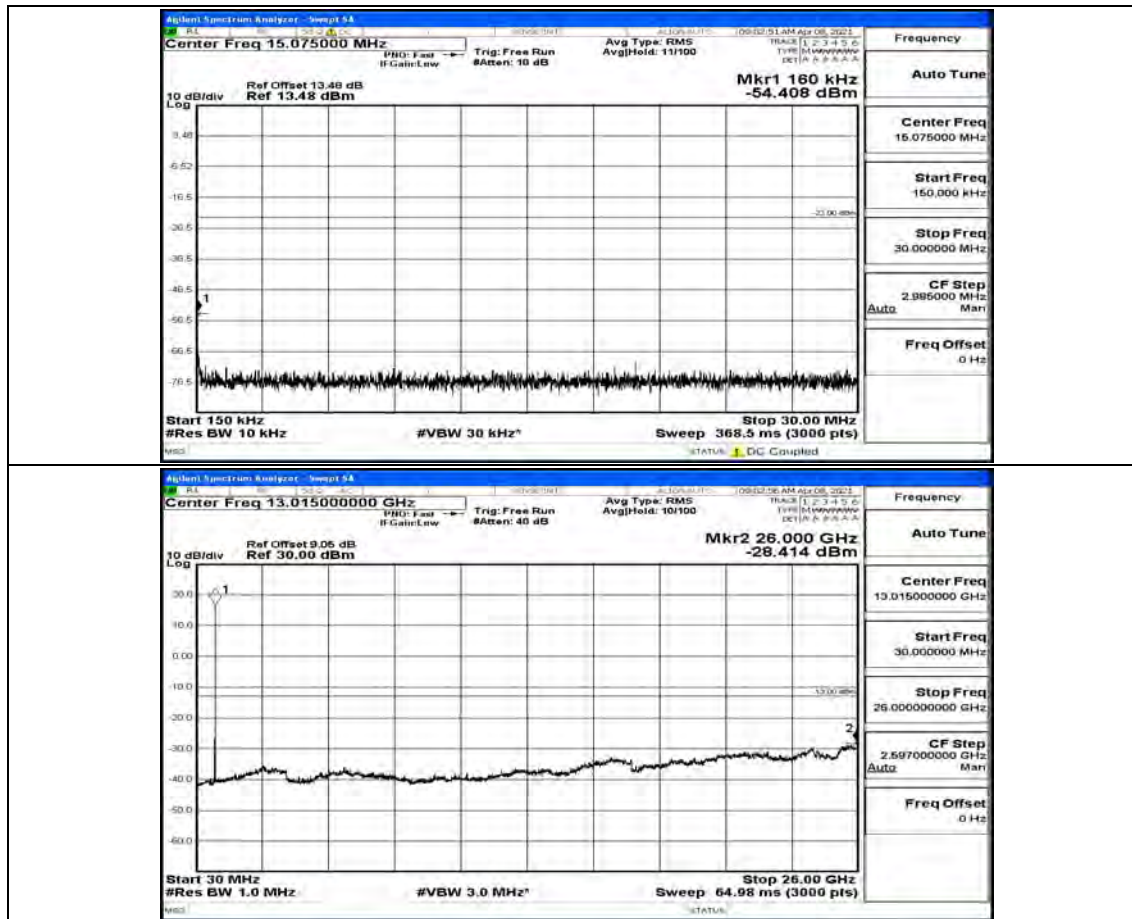


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

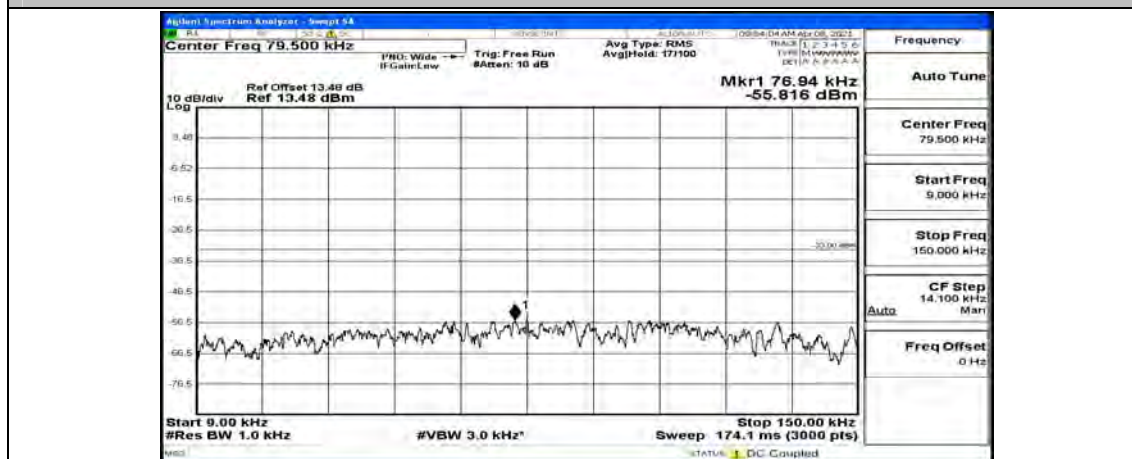


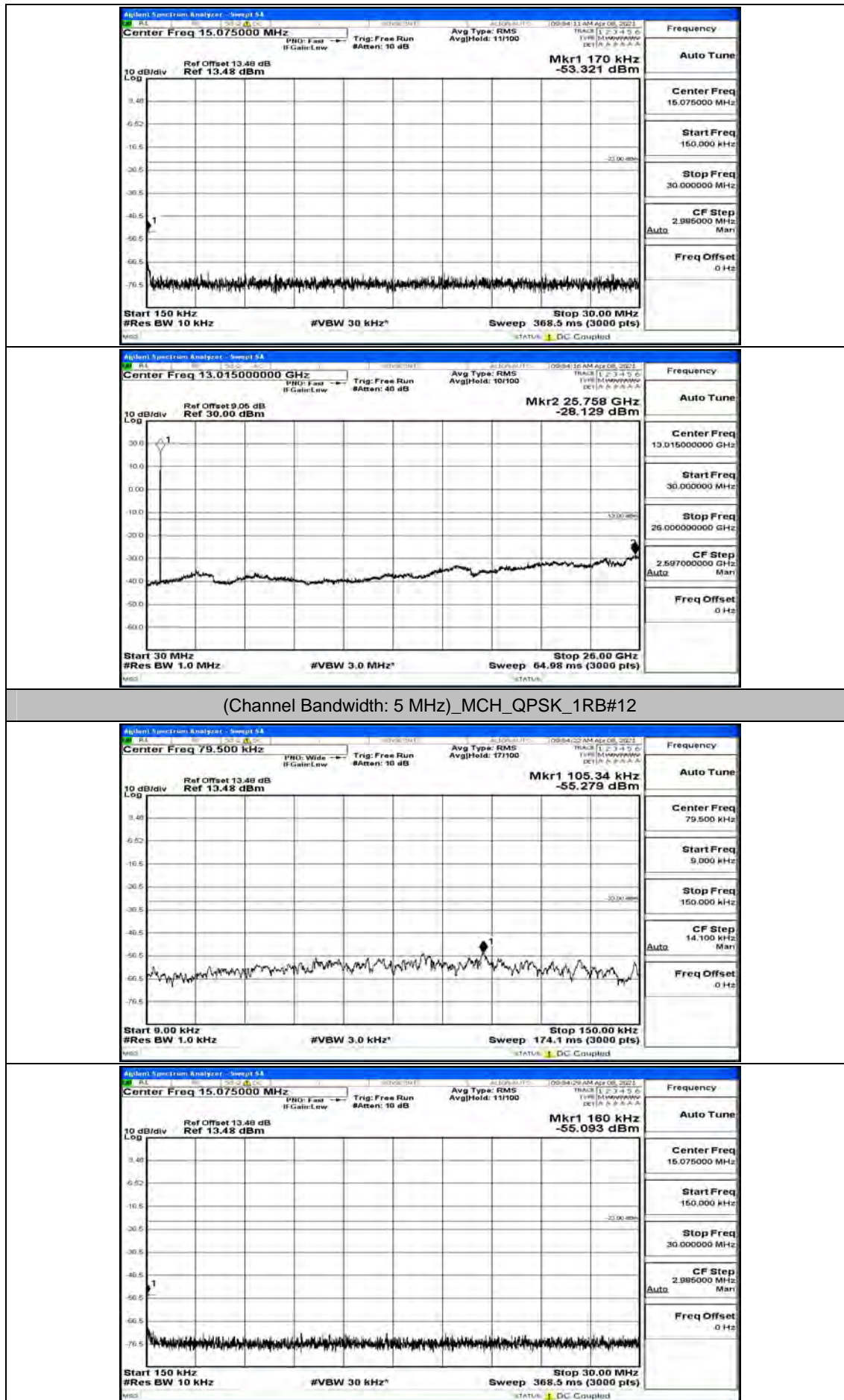
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24





(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

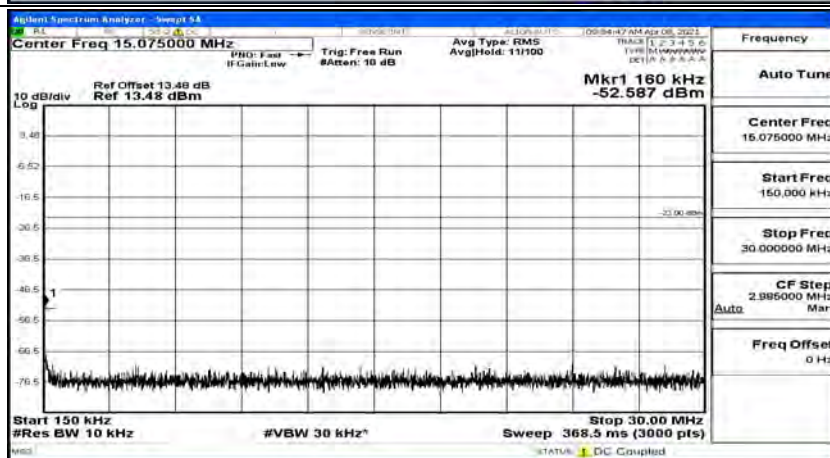
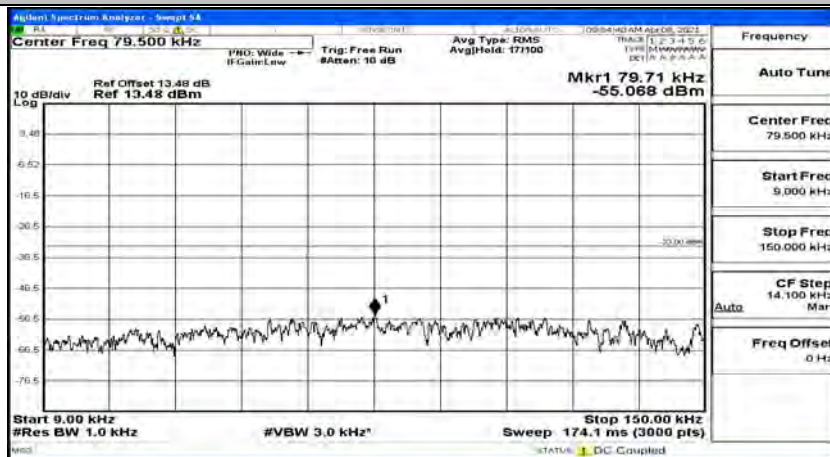




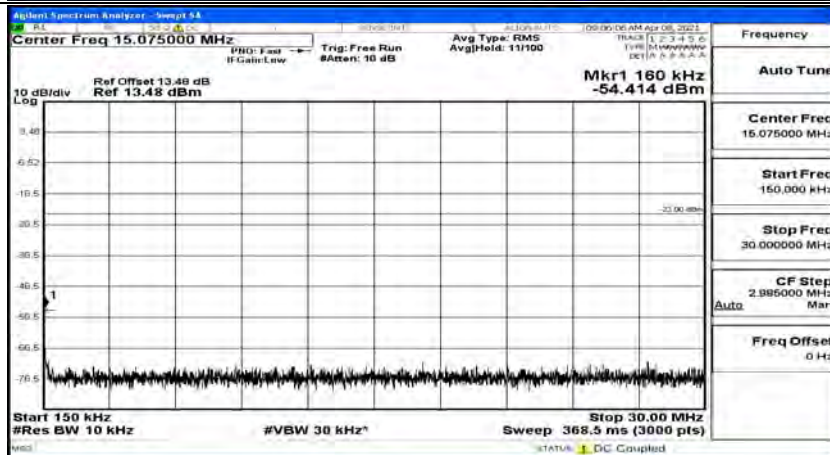
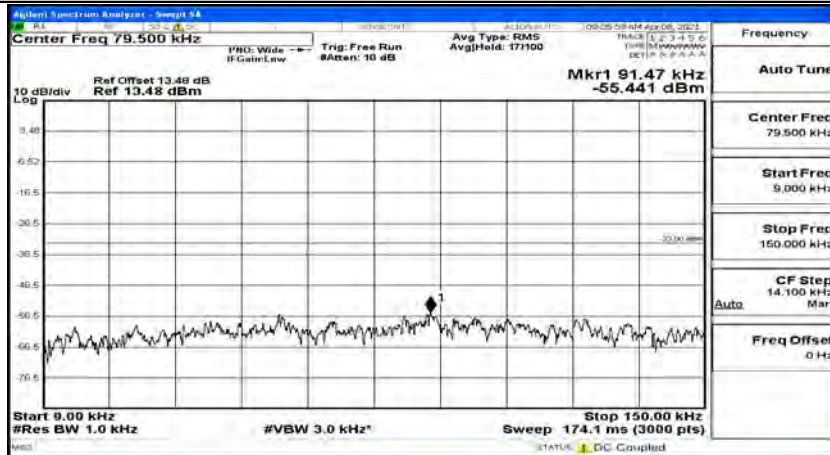
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12



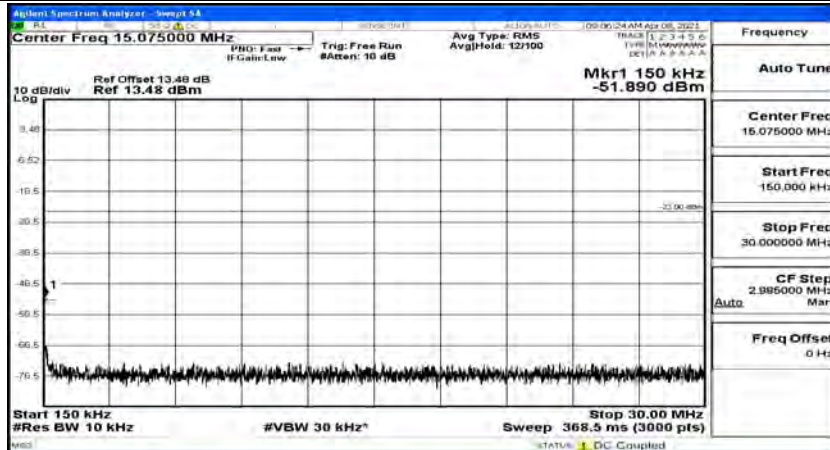
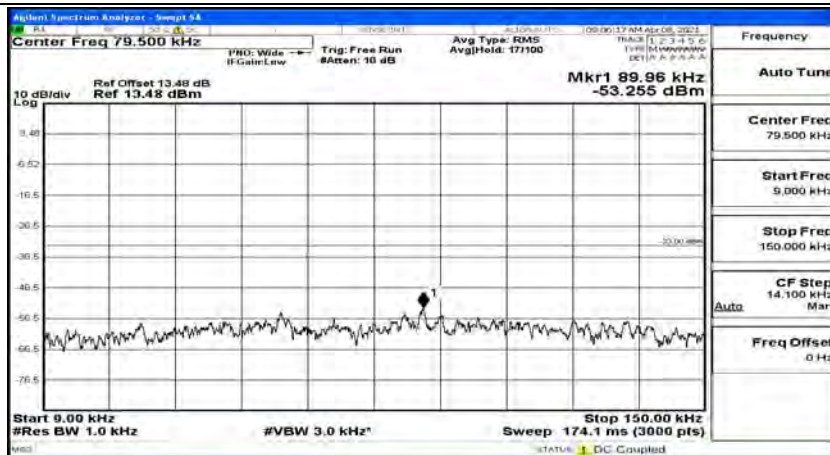
(Channel Bandwidth: 5 MHz) MCH_QPSK_1RB#24



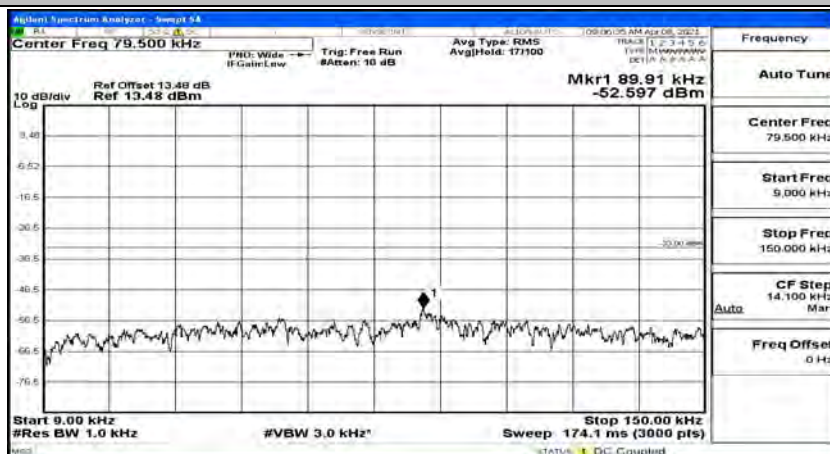
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

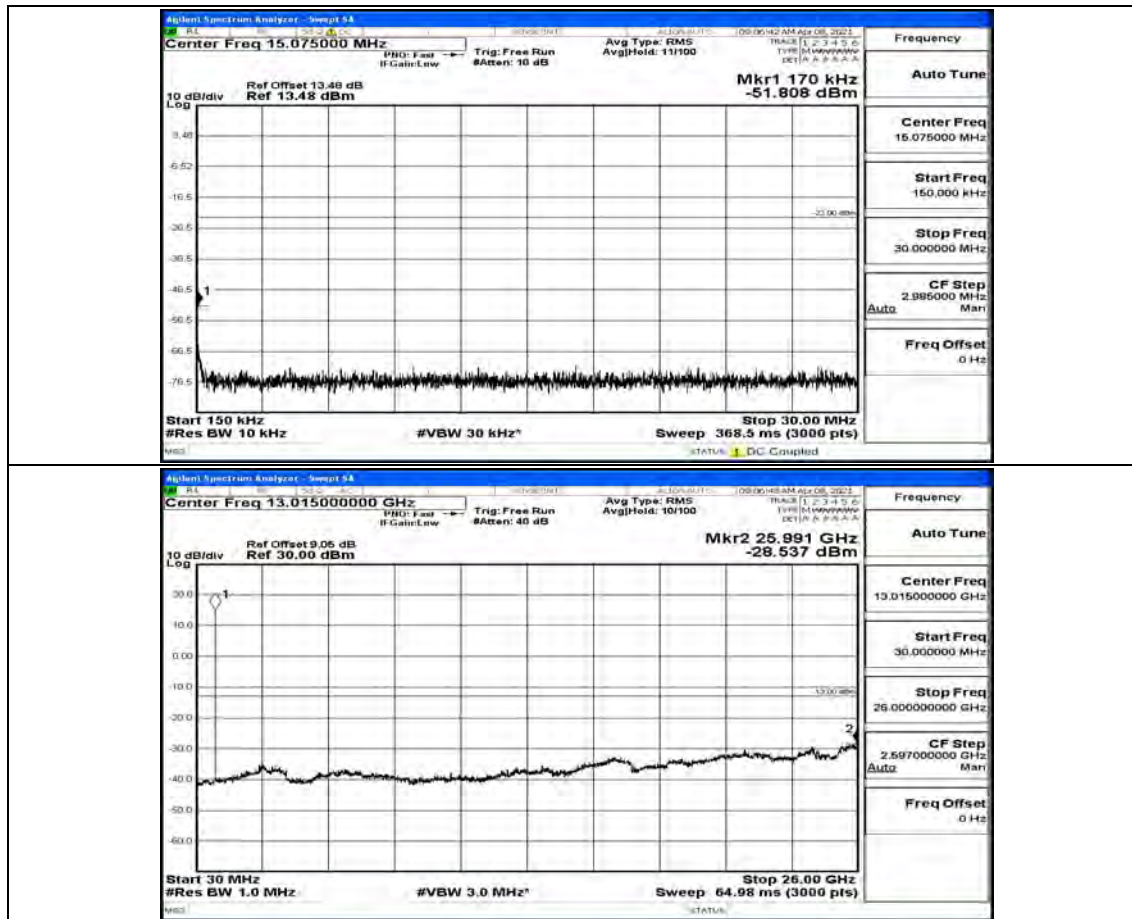


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

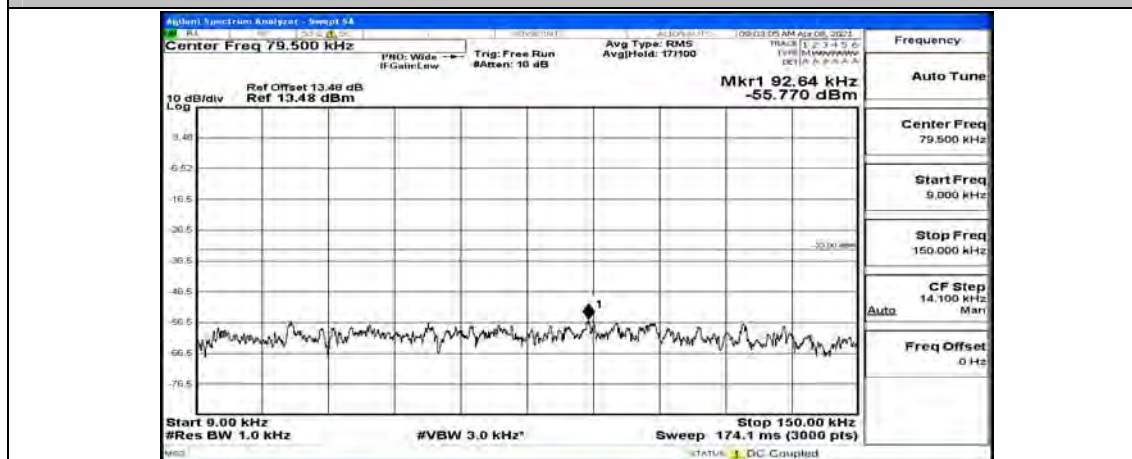


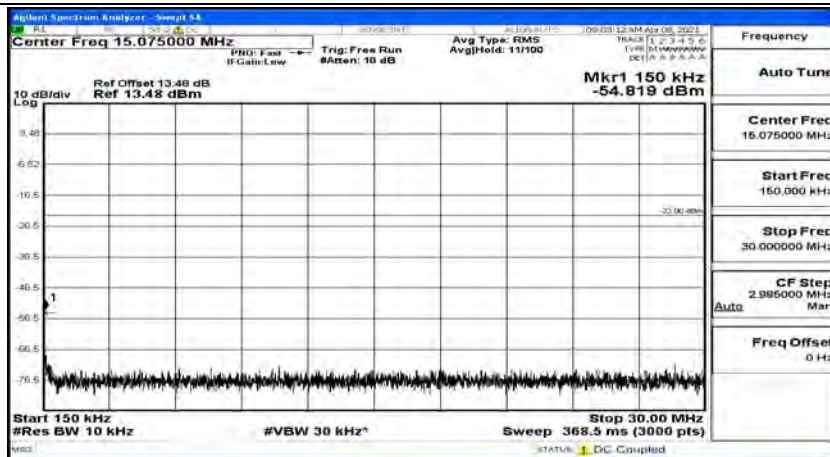
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24



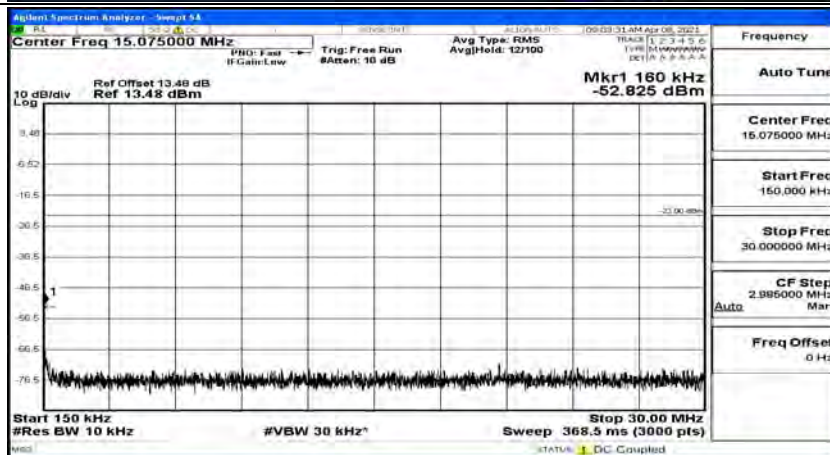
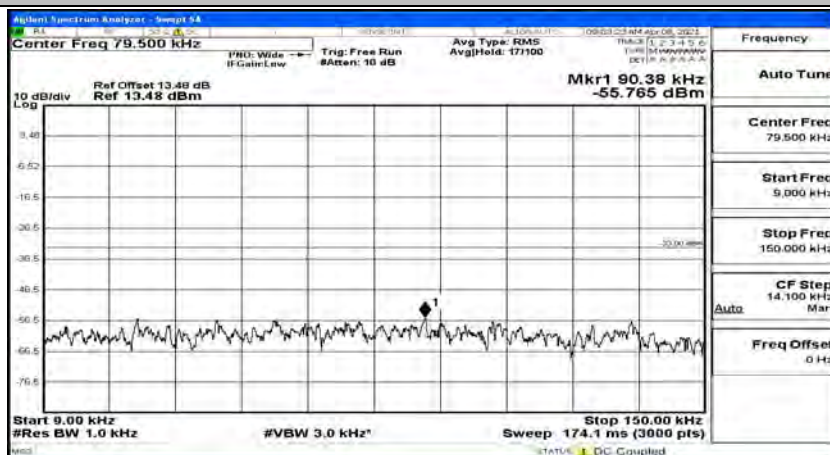


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



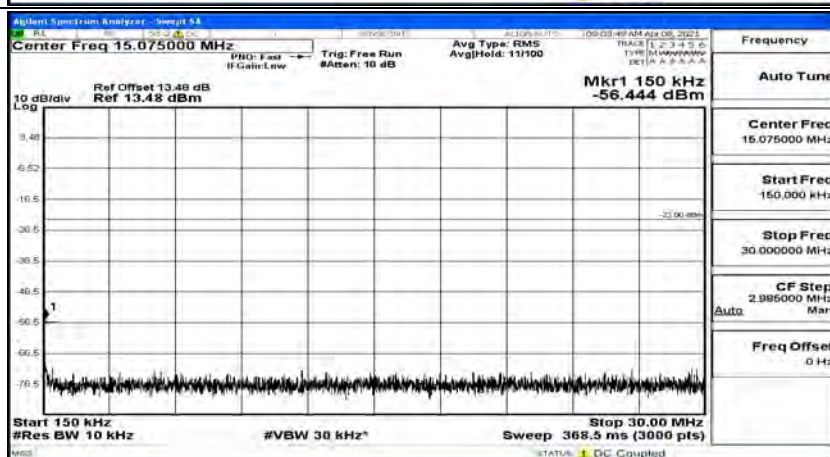
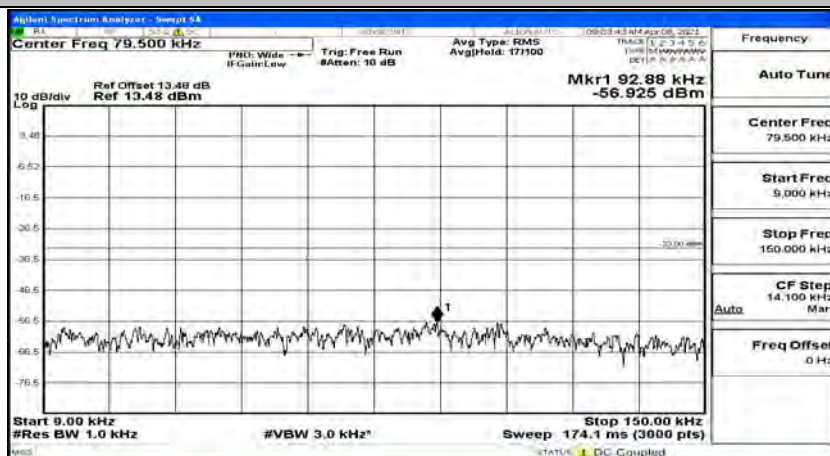


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

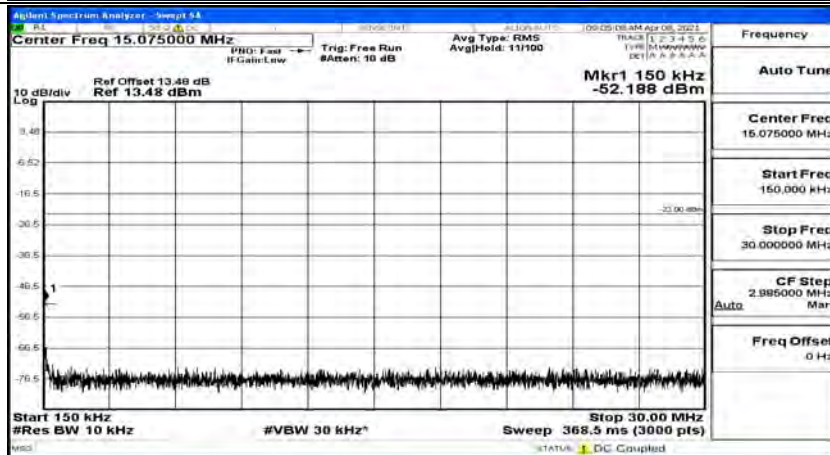
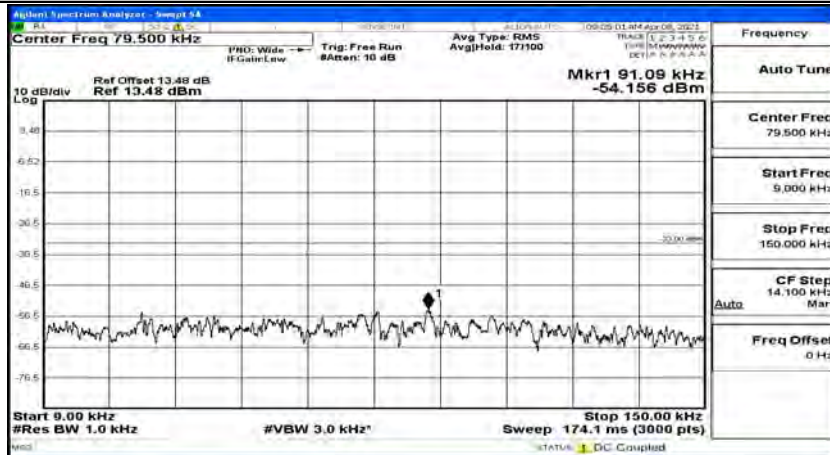




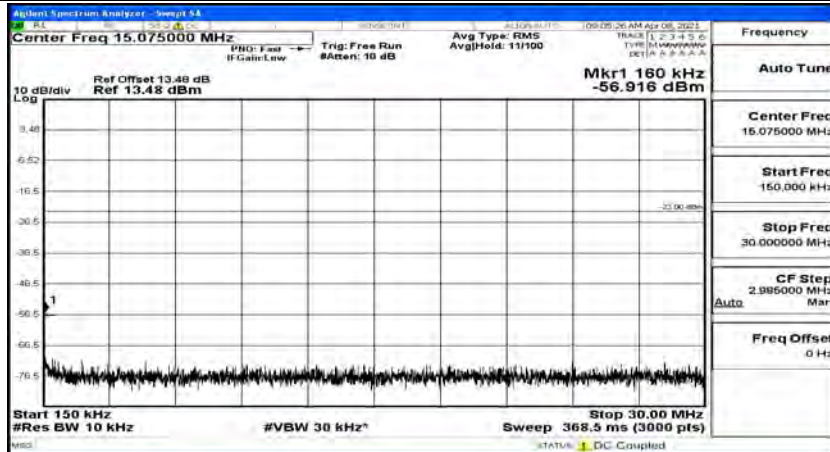
(Channel Bandwidth: 5 MHz) LCH_16QAM_1RB#24



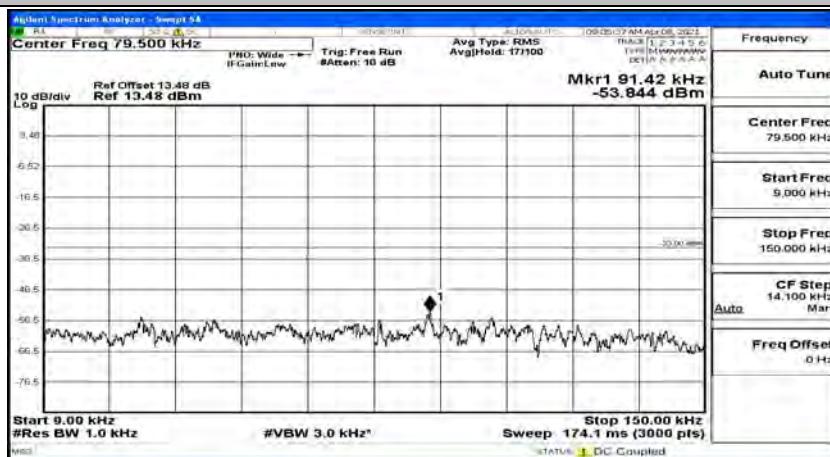
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

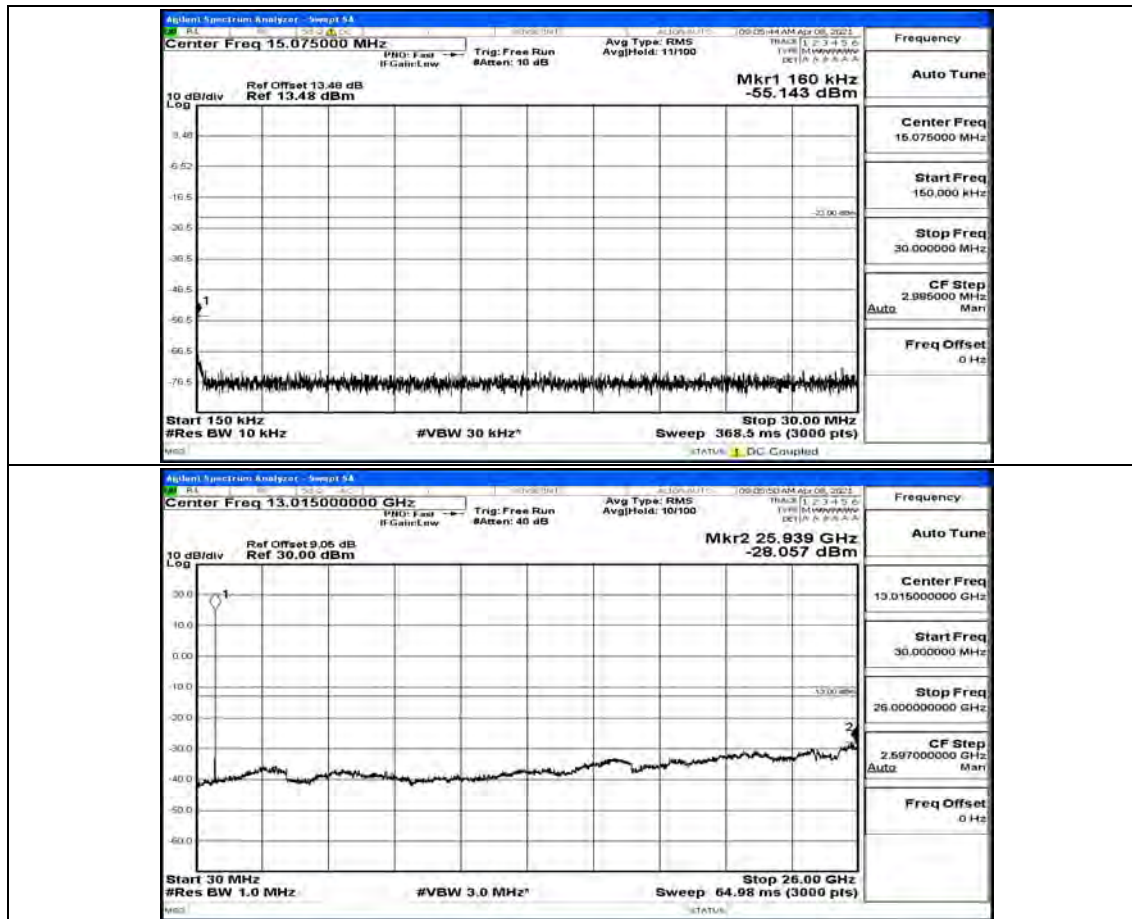


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

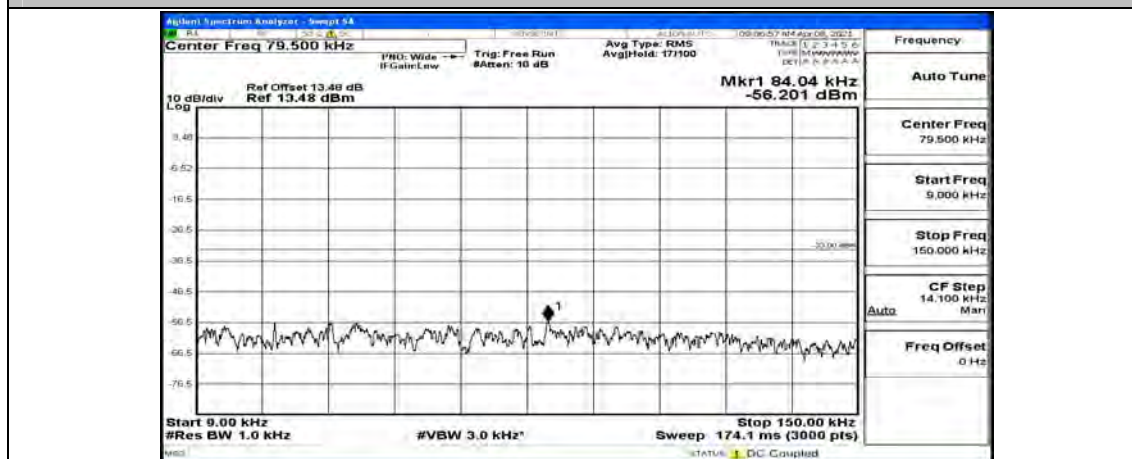


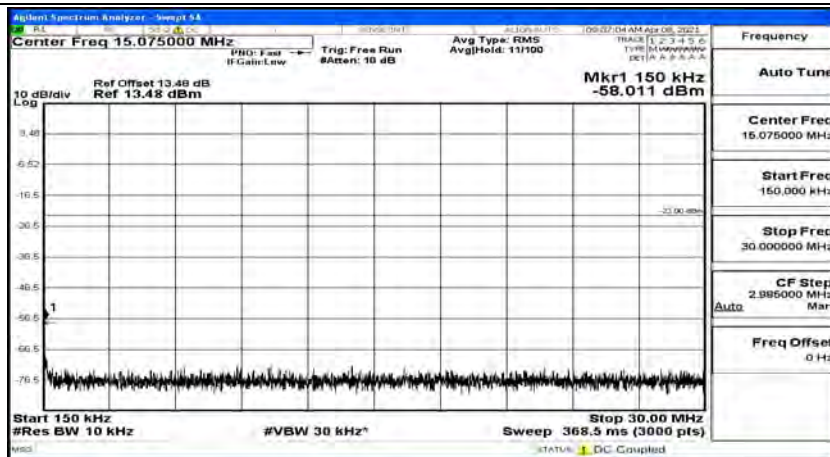
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



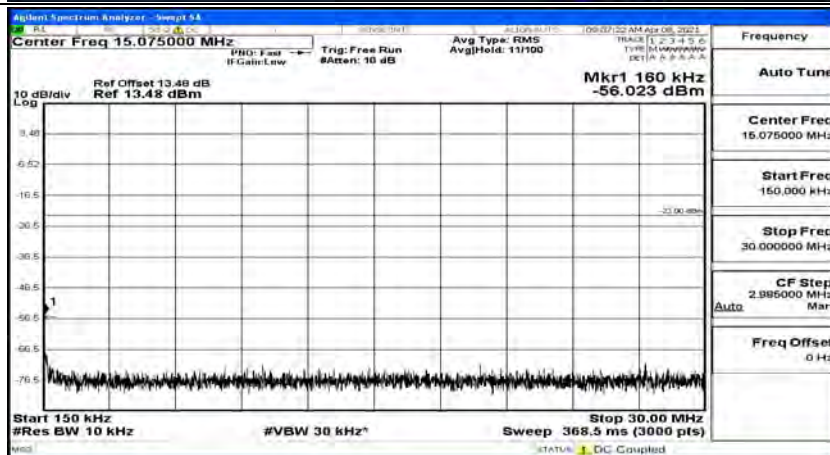
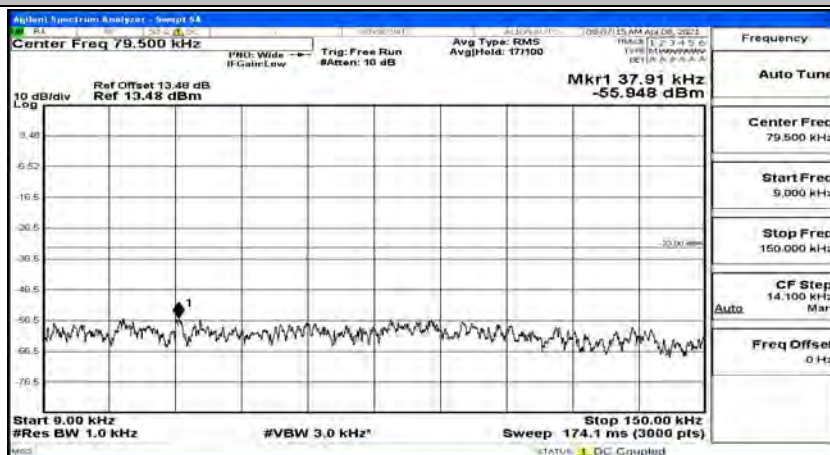


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



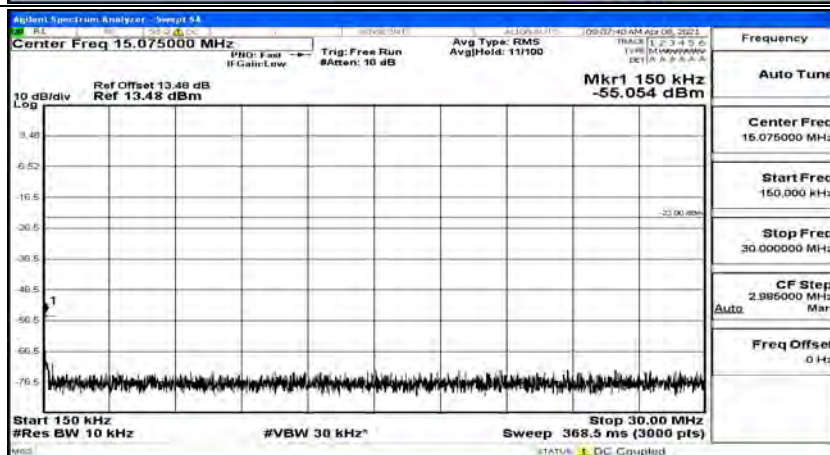
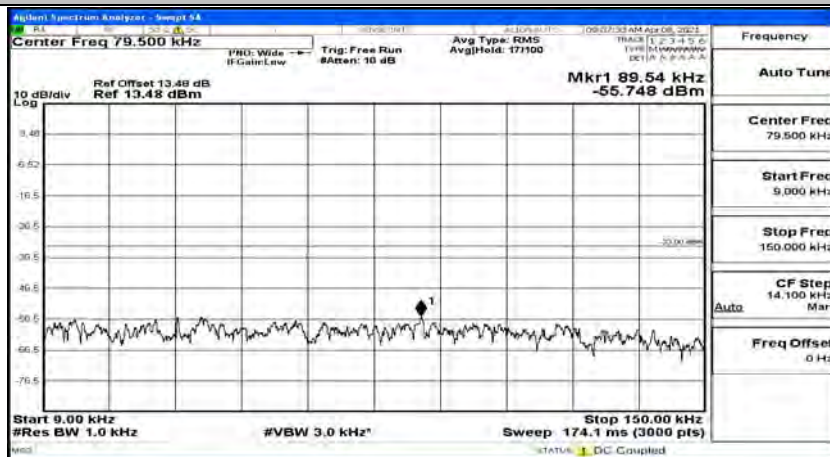


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

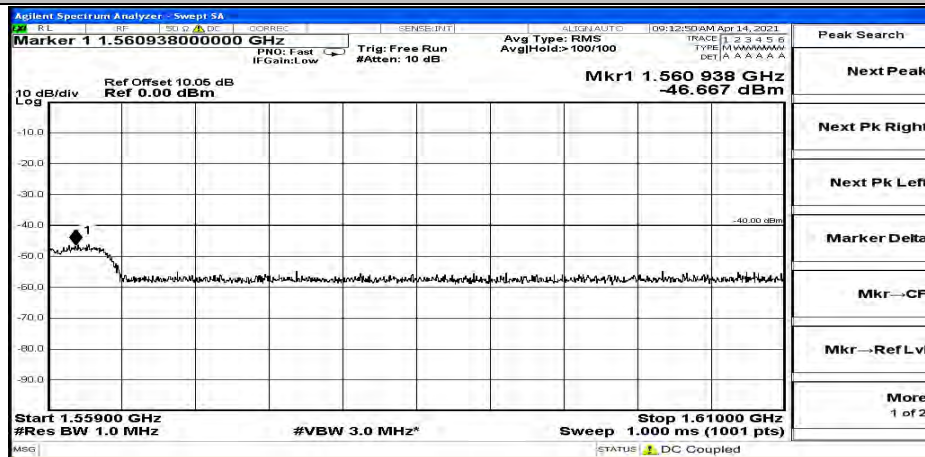




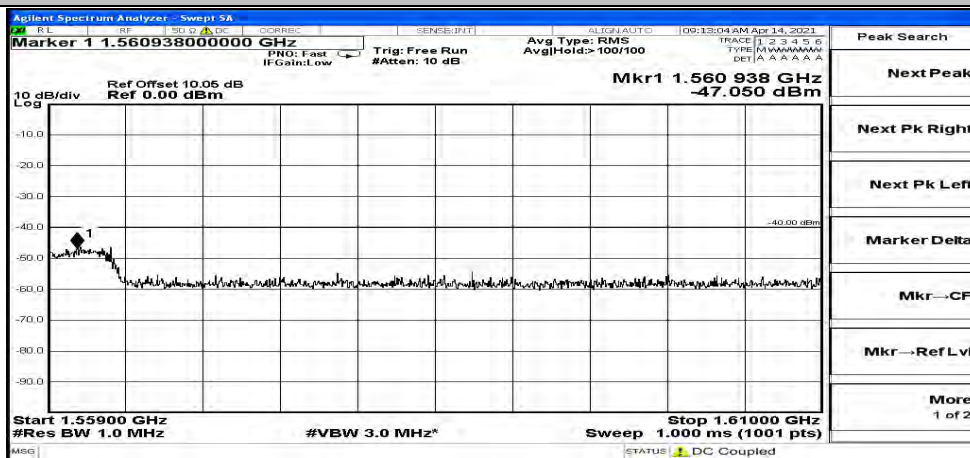
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24



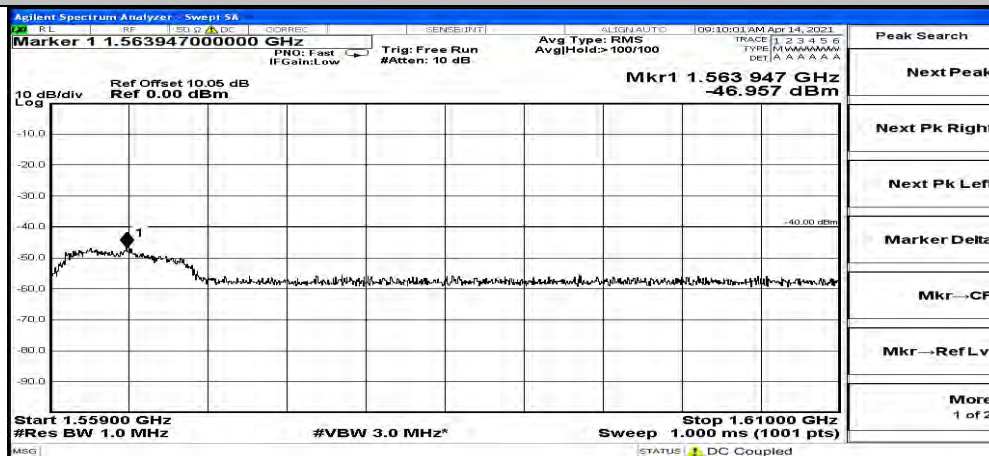
(Channel Bandwidth: 5 MHz)_LCH_QPSK



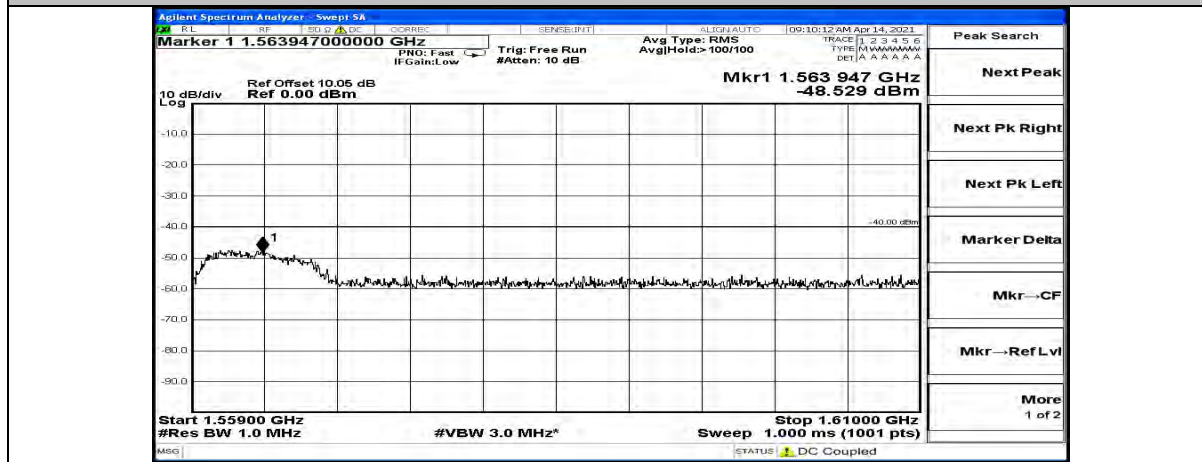
(Channel Bandwidth: 5 MHz)_LCH_16QAM



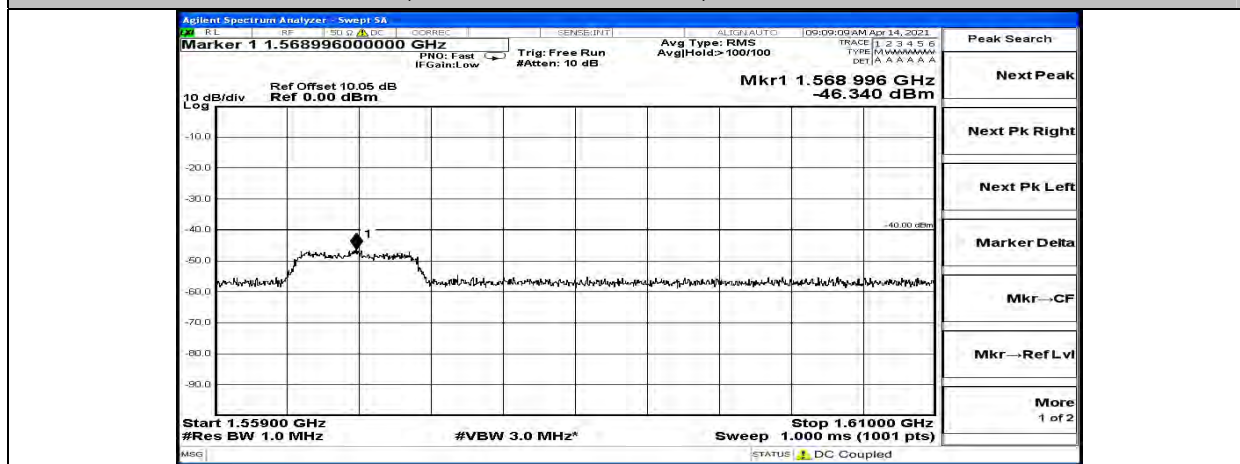
(Channel Bandwidth: 5 MHz)_MCH_QPSK



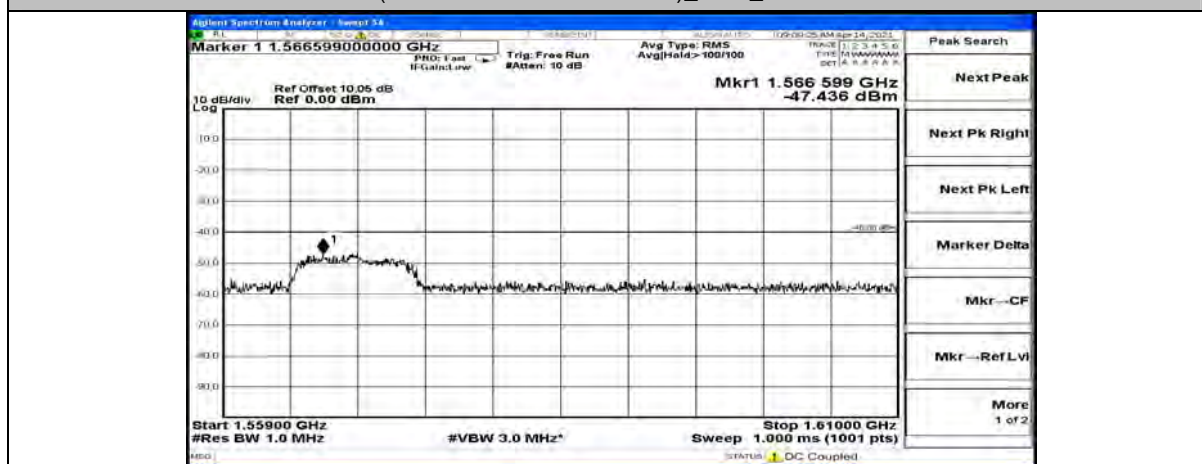
(Channel Bandwidth: 5 MHz)_MCH_16QAM



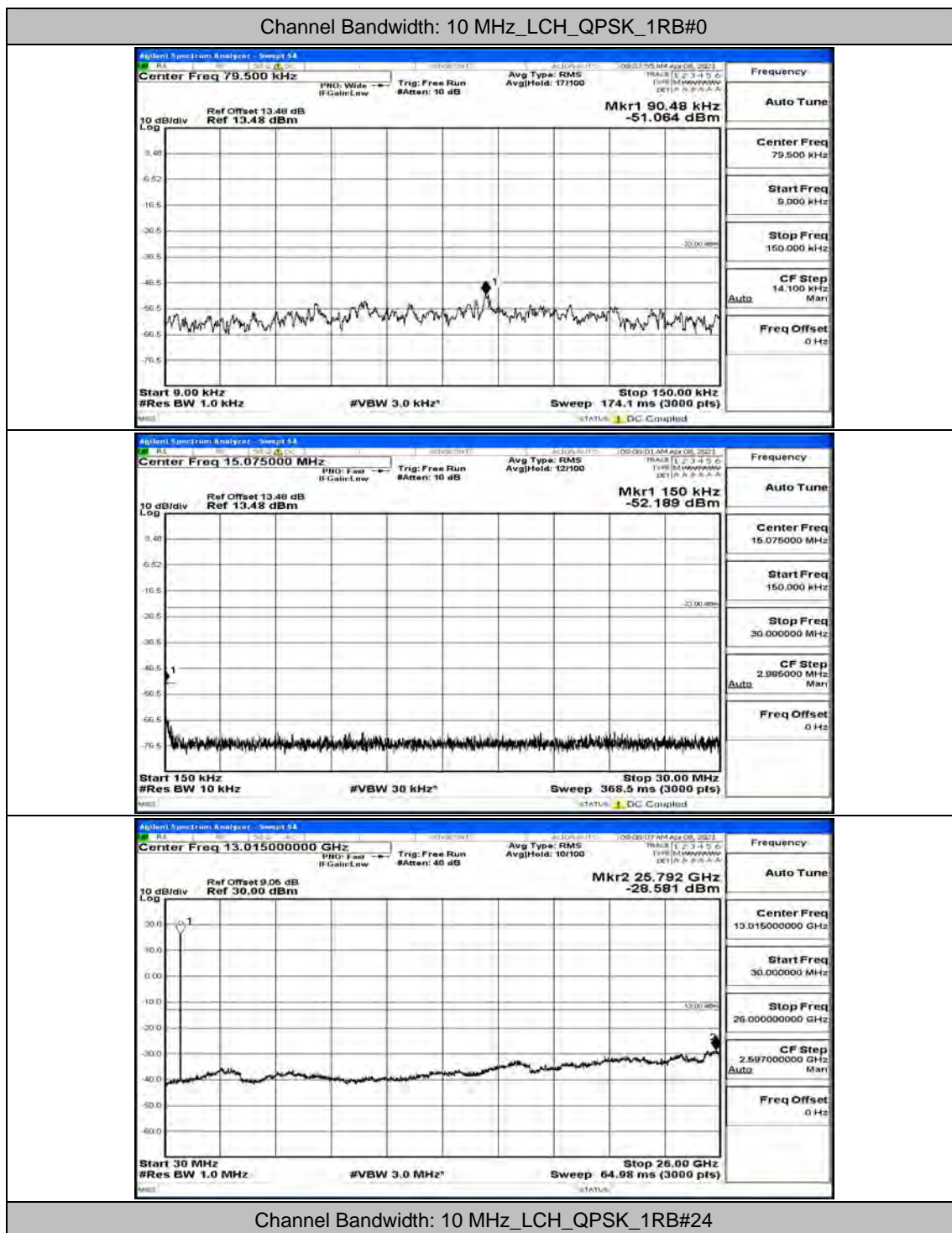
(Channel Bandwidth: 5 MHz)_HCH_QPSK

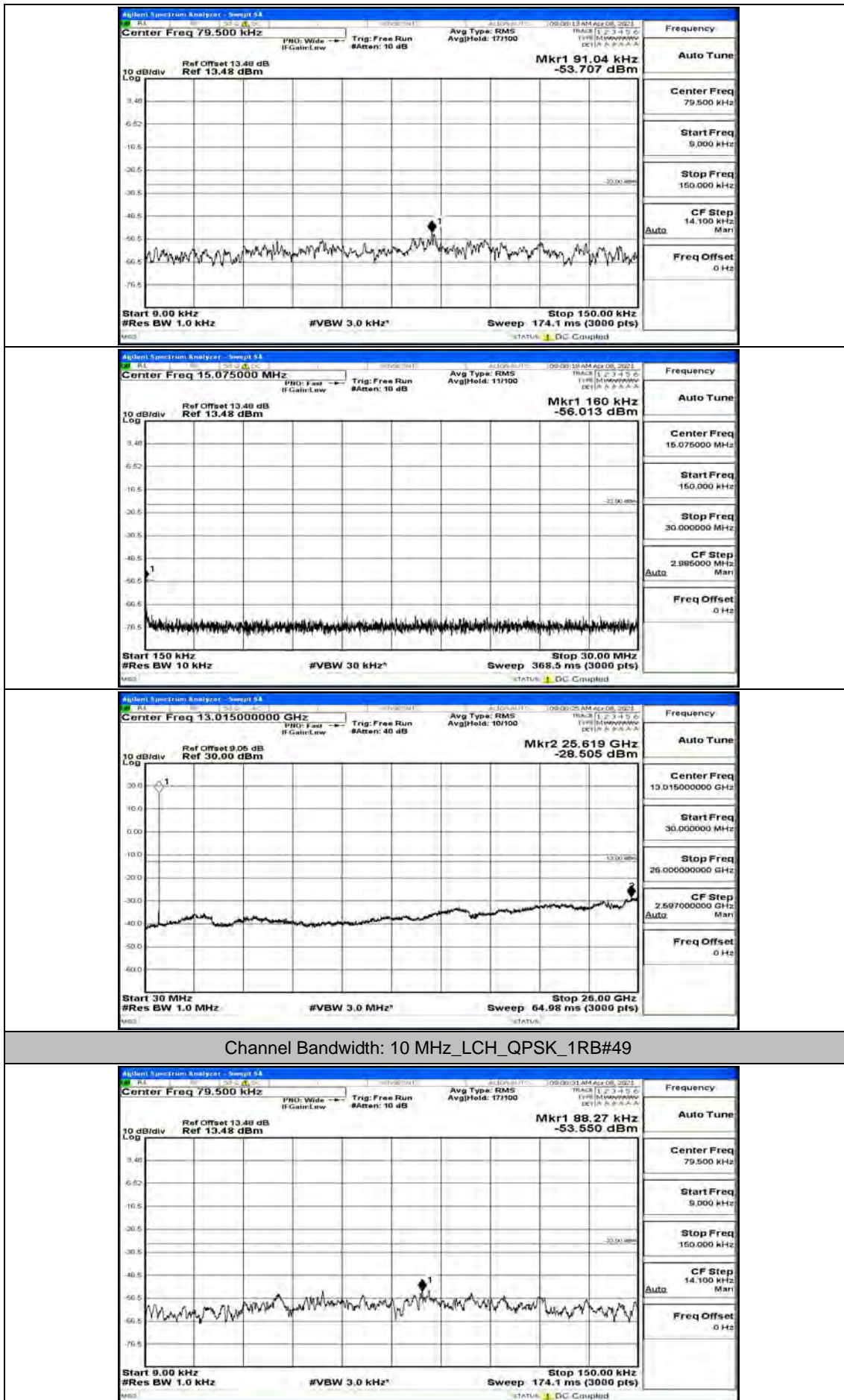


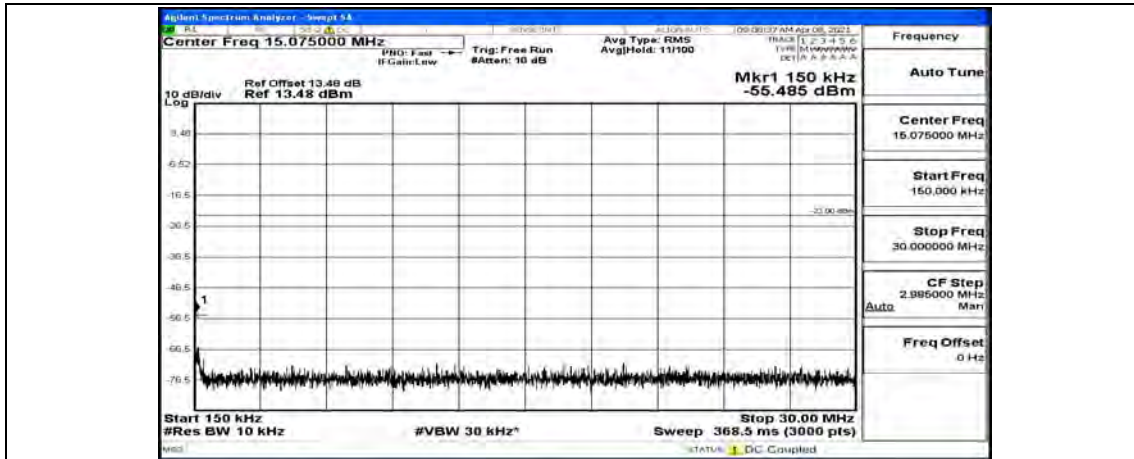
(Channel Bandwidth: 5 MHz)_HCH_16QAM



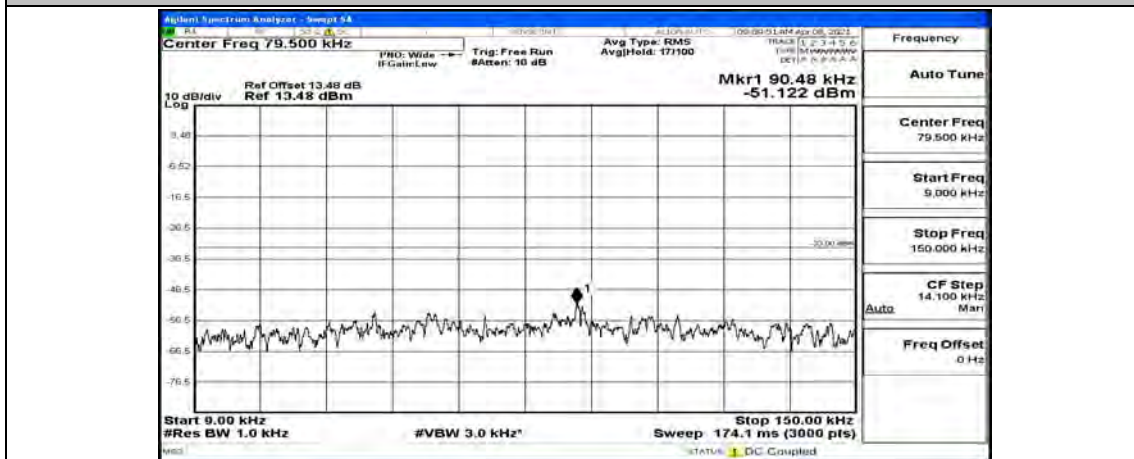
Channel Bandwidth: 10 MHz

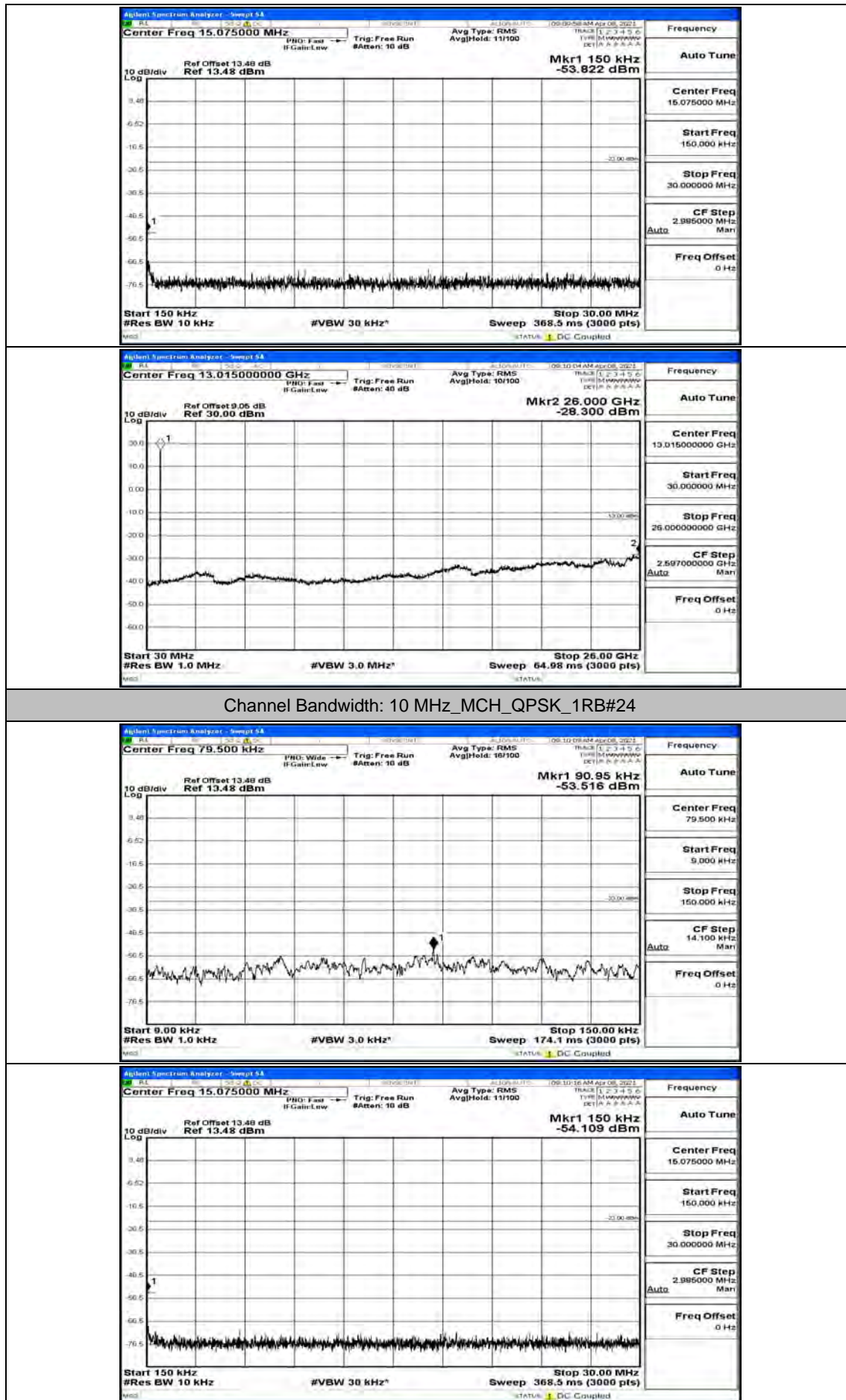






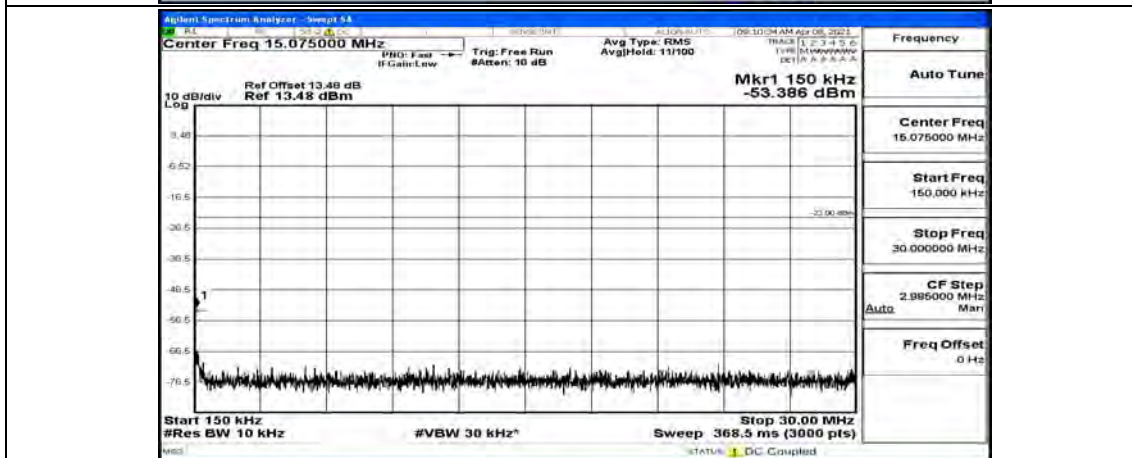
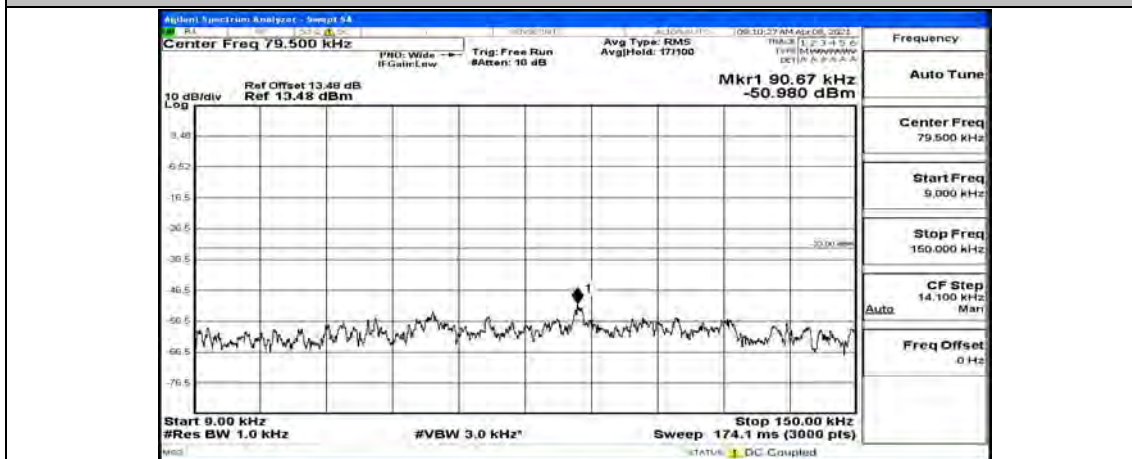
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



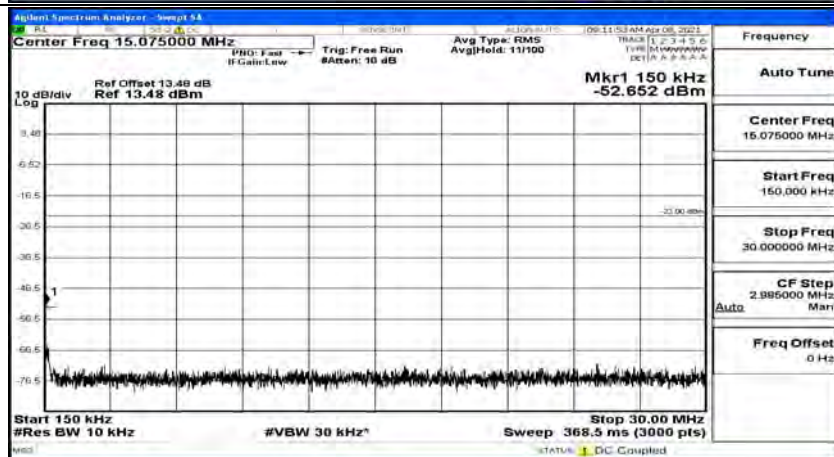
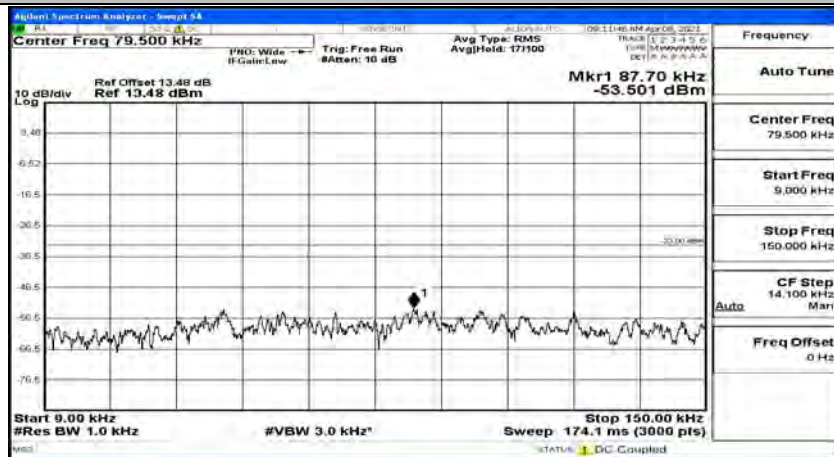




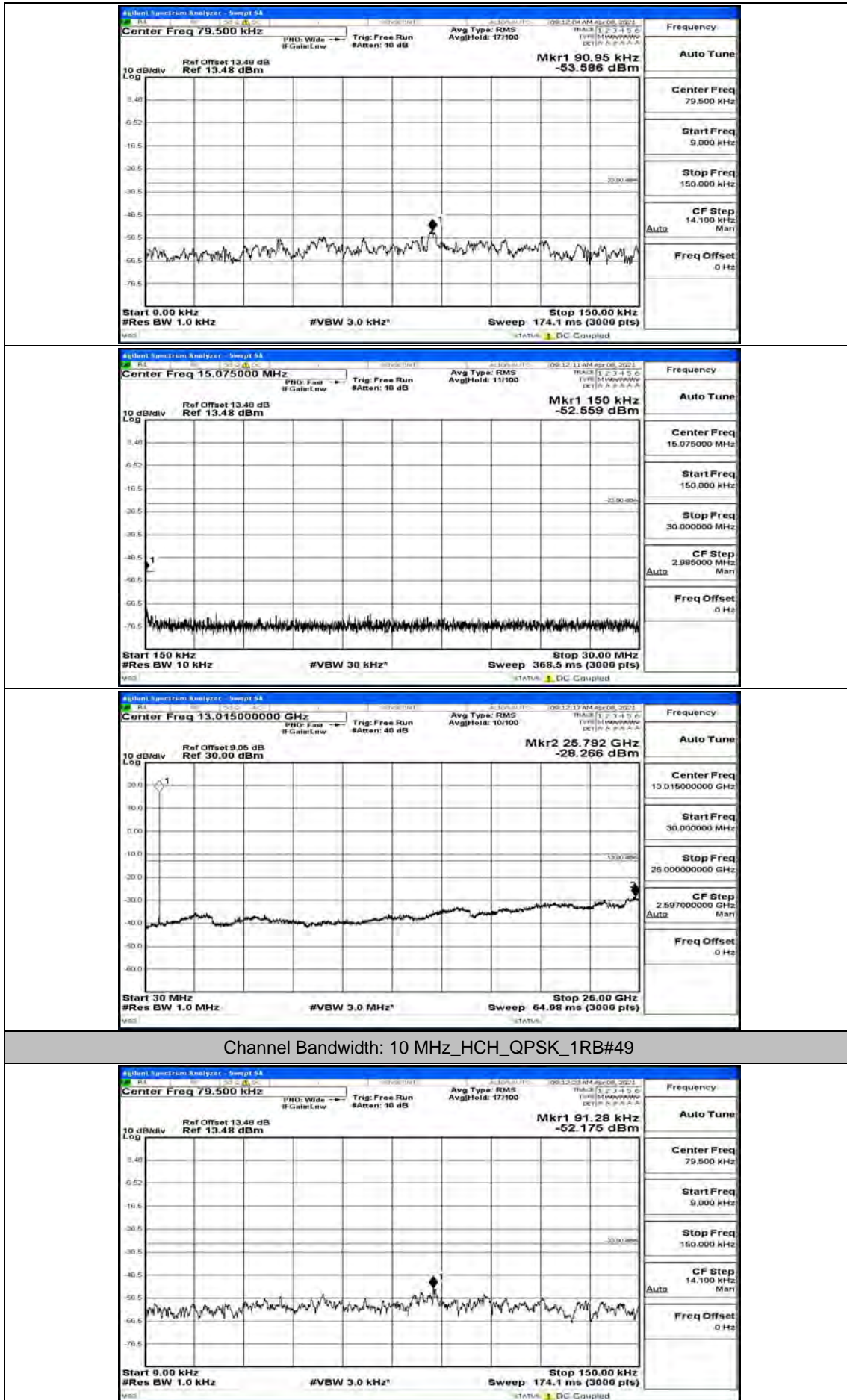
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

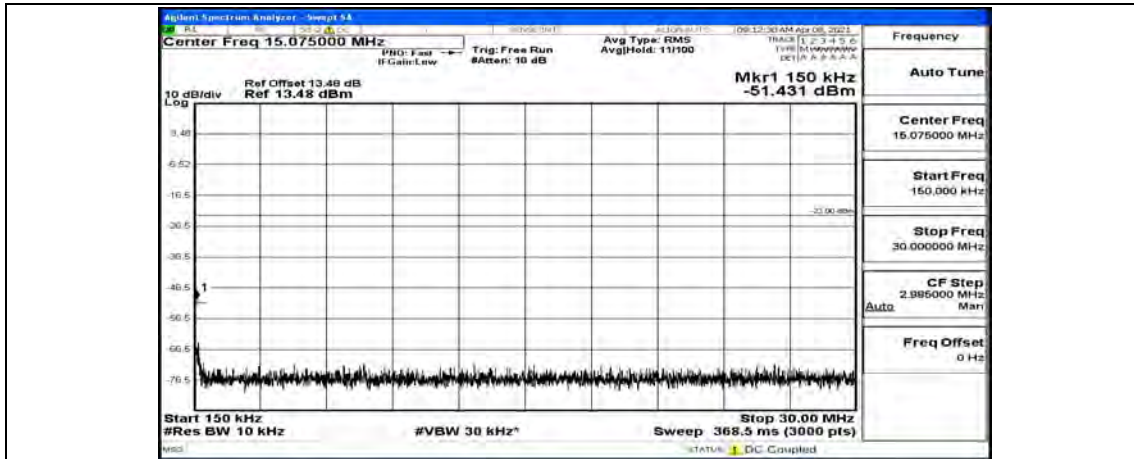


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

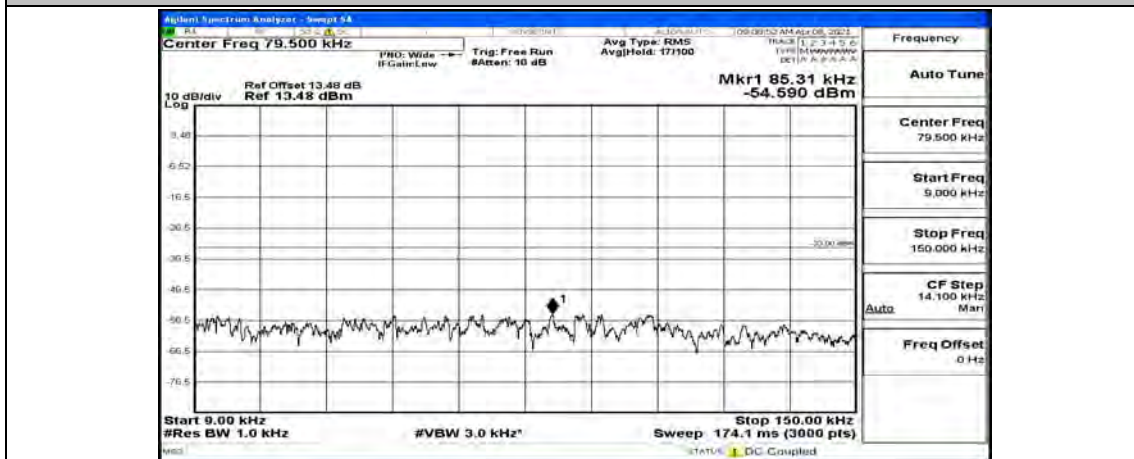


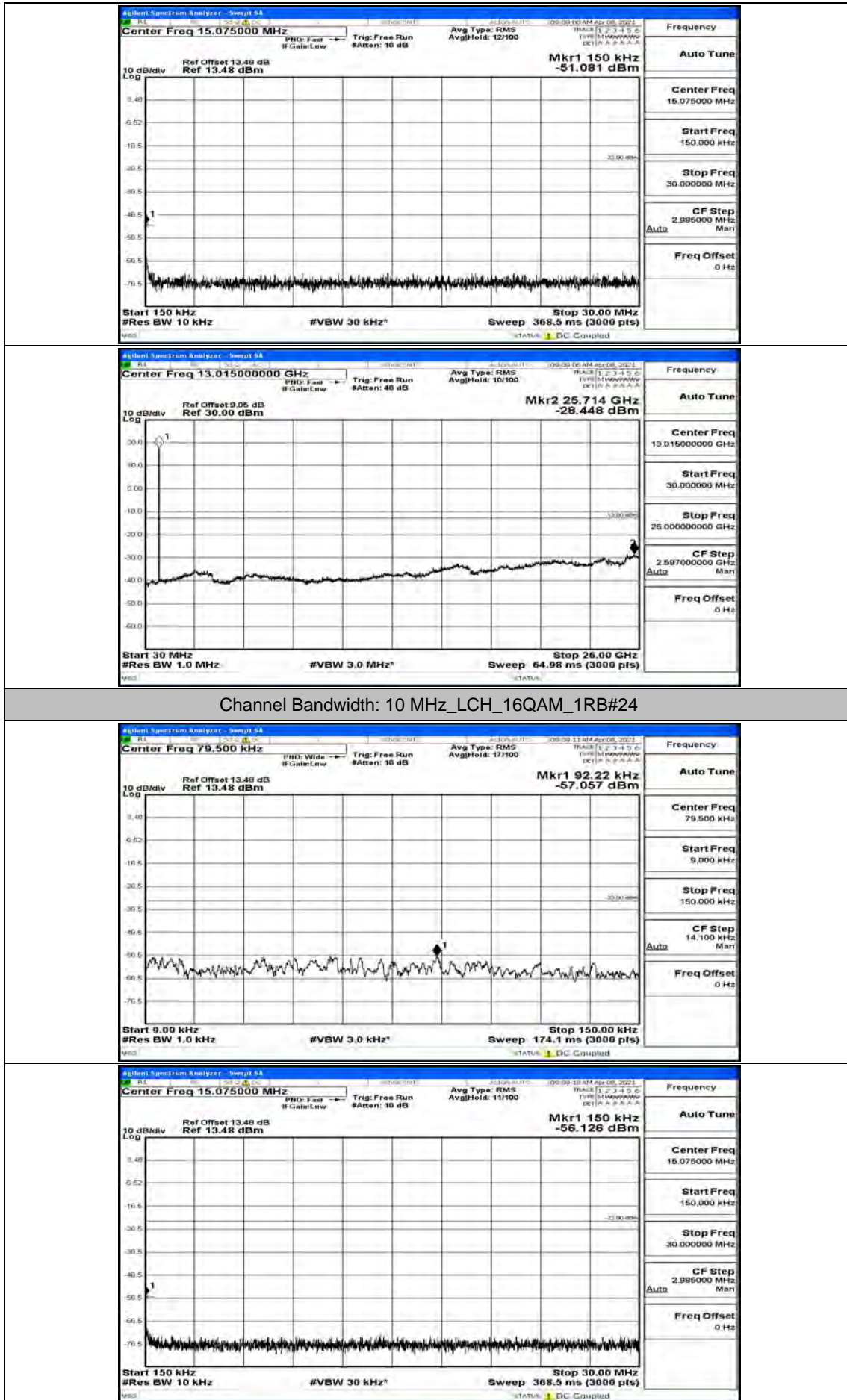
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

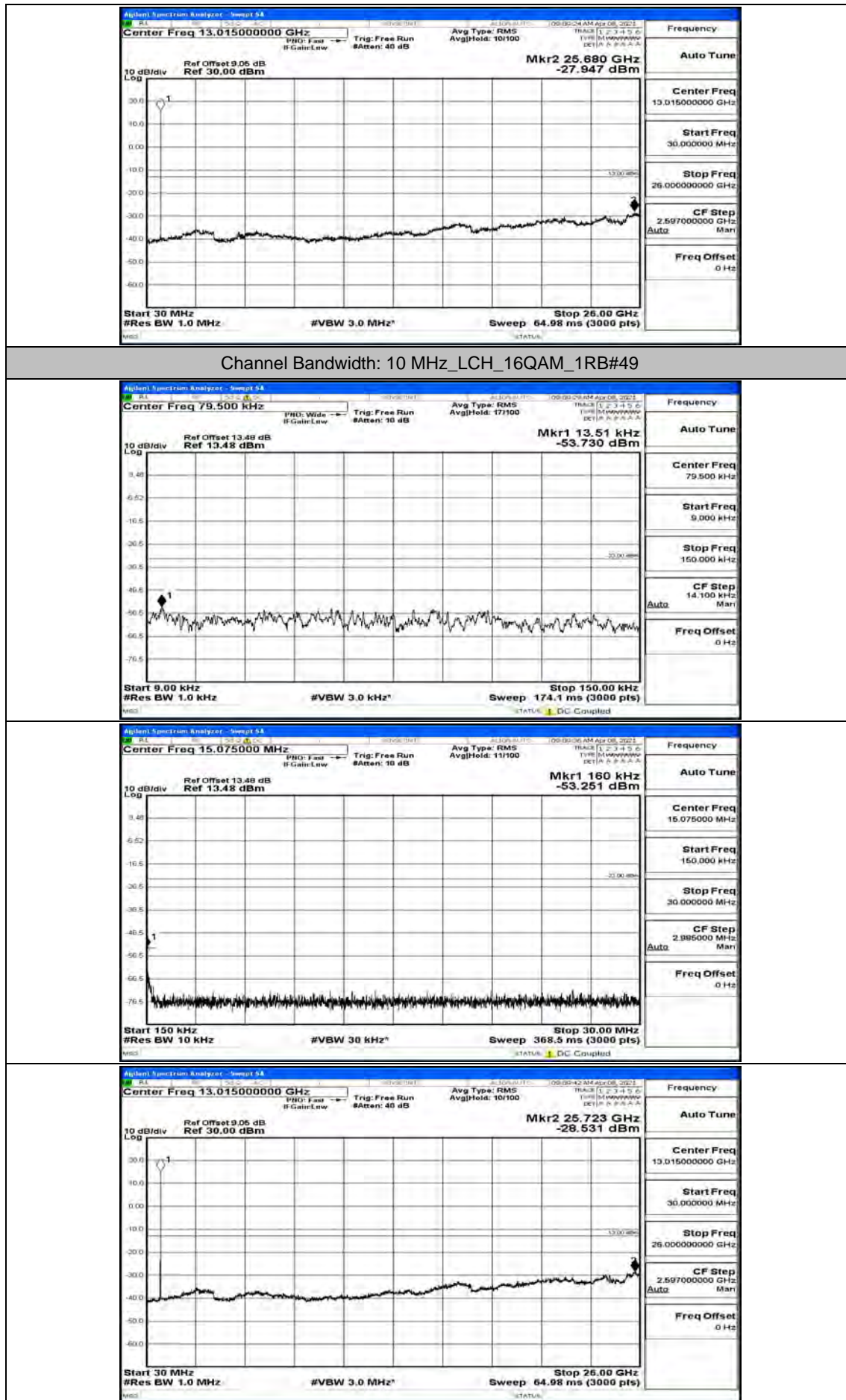




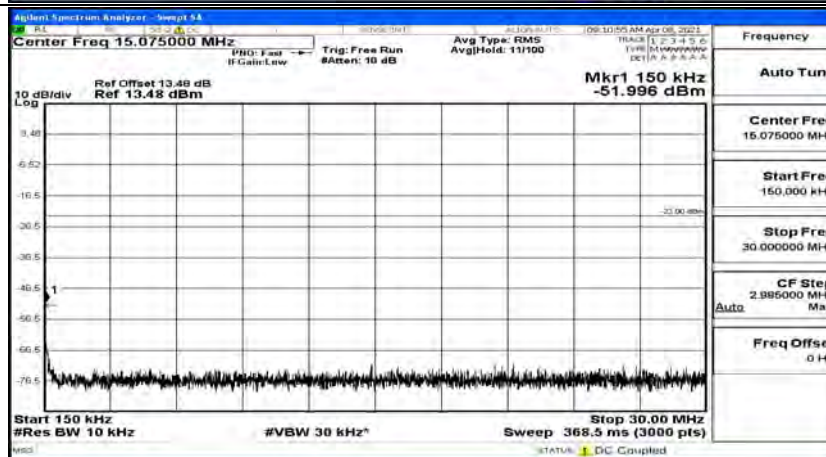
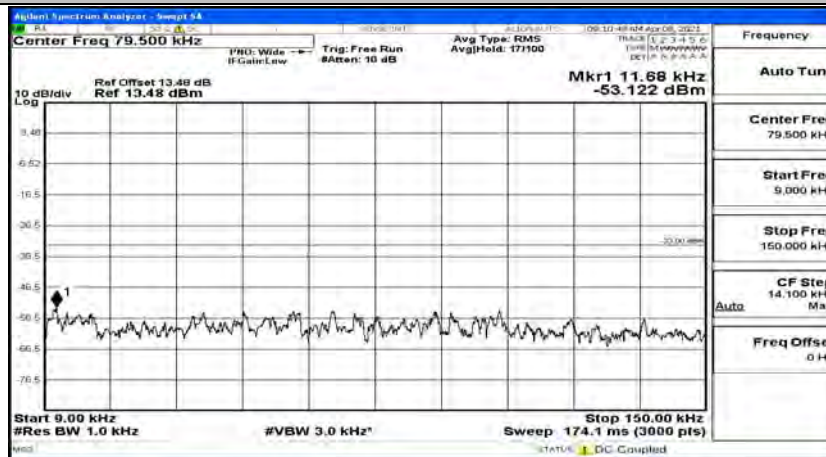
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



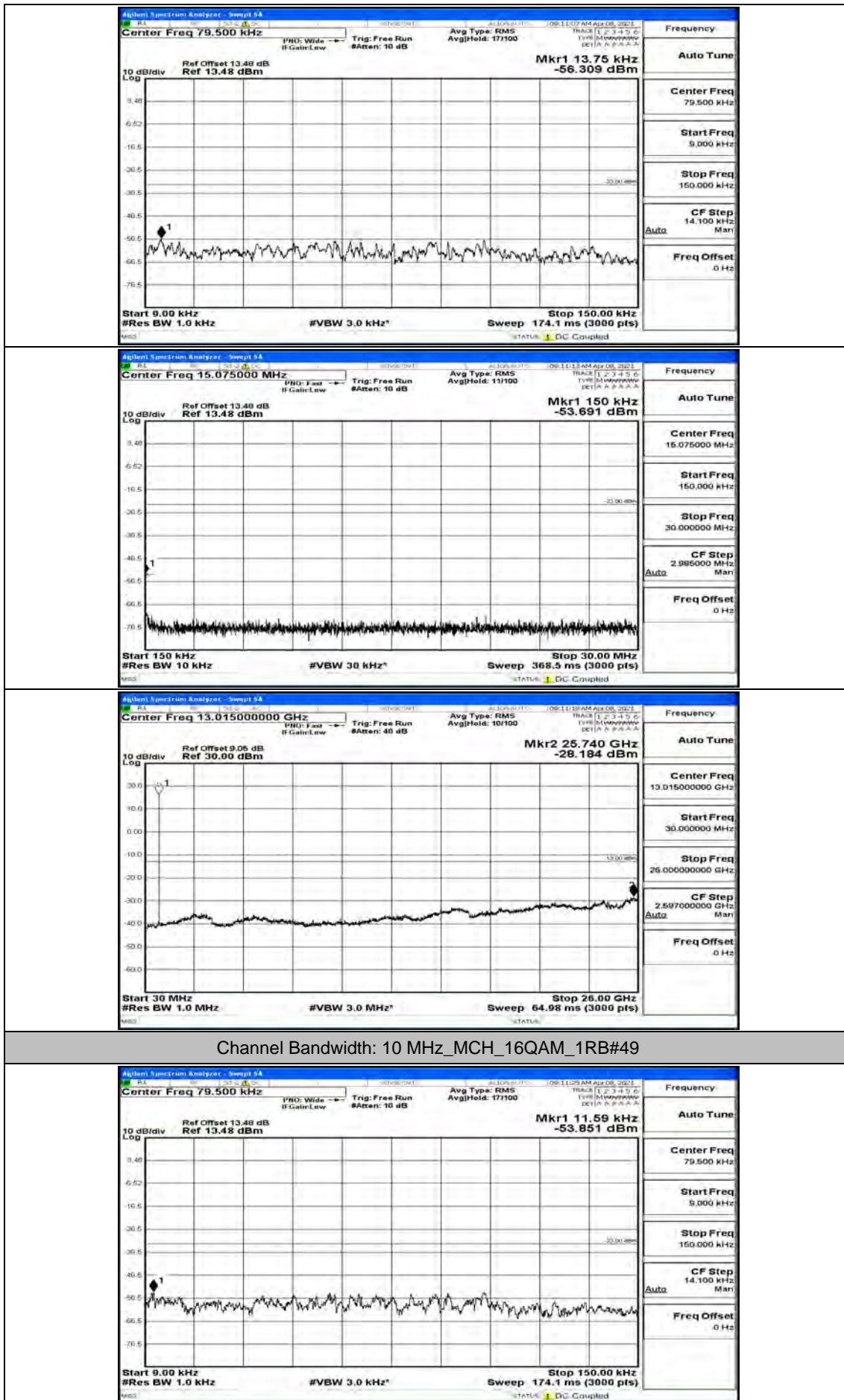


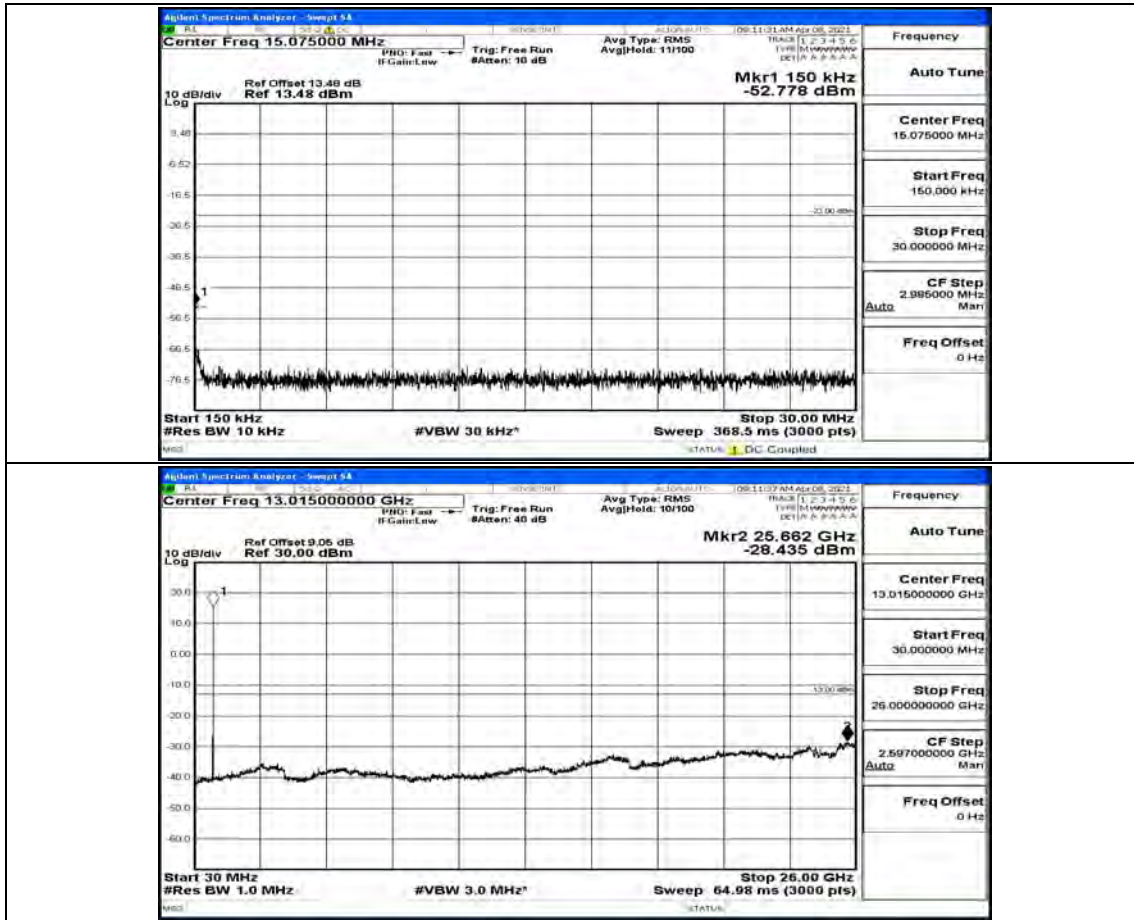


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

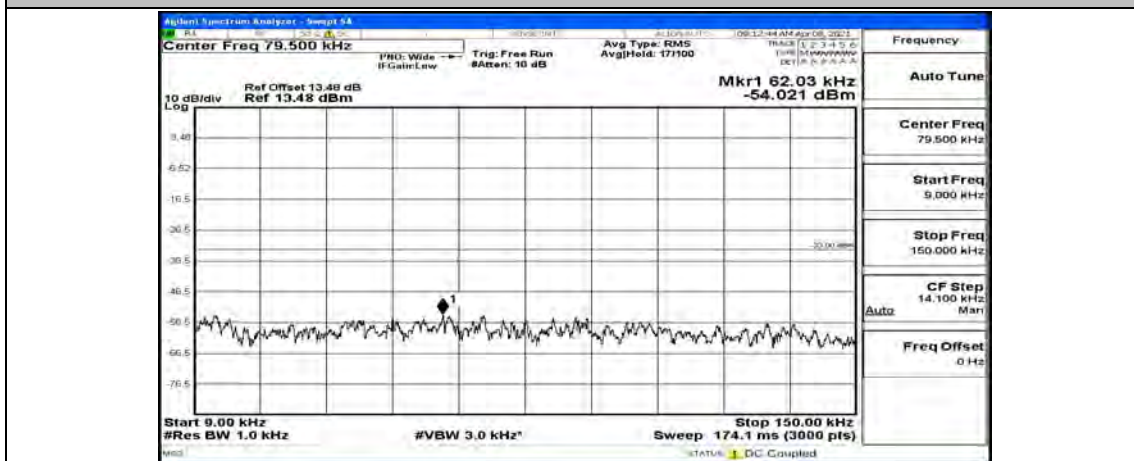


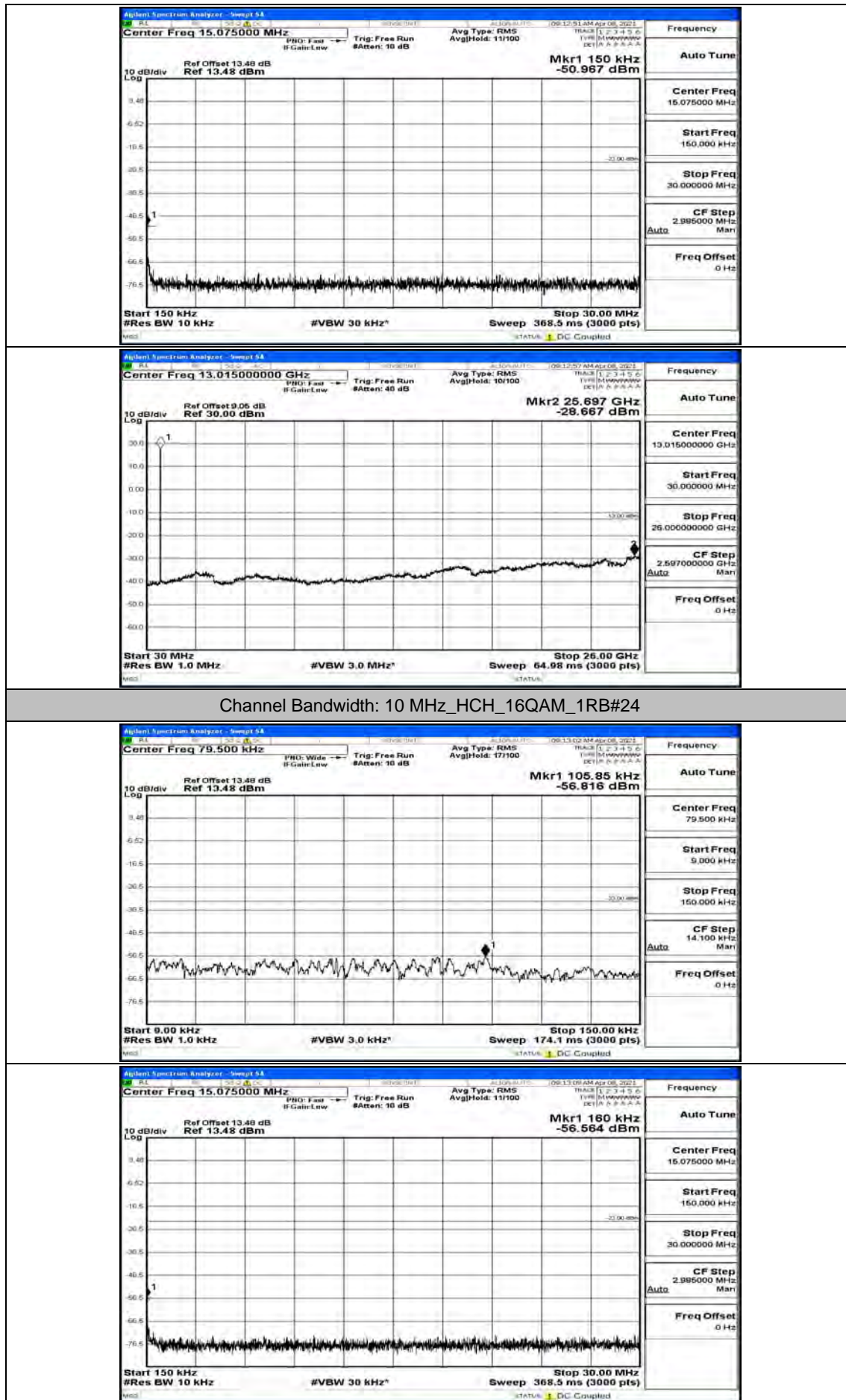
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24

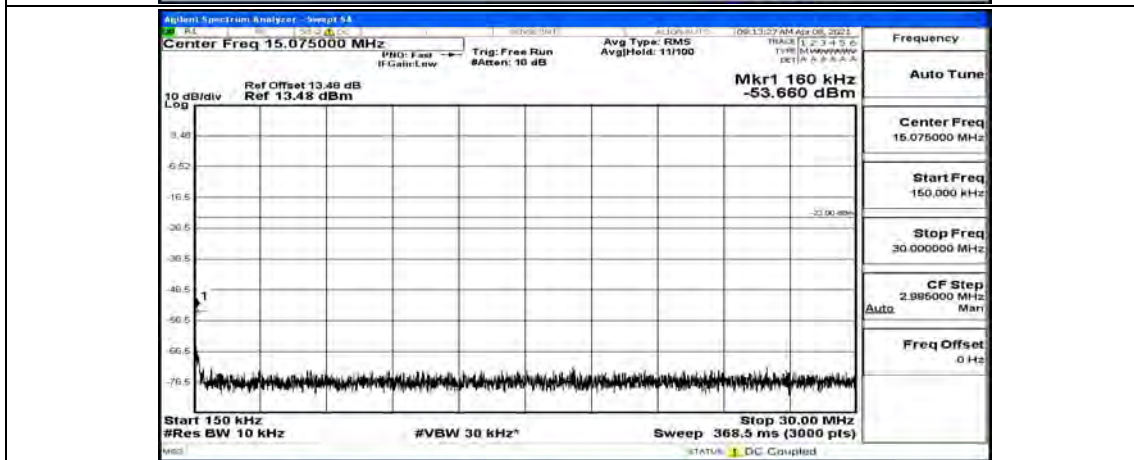
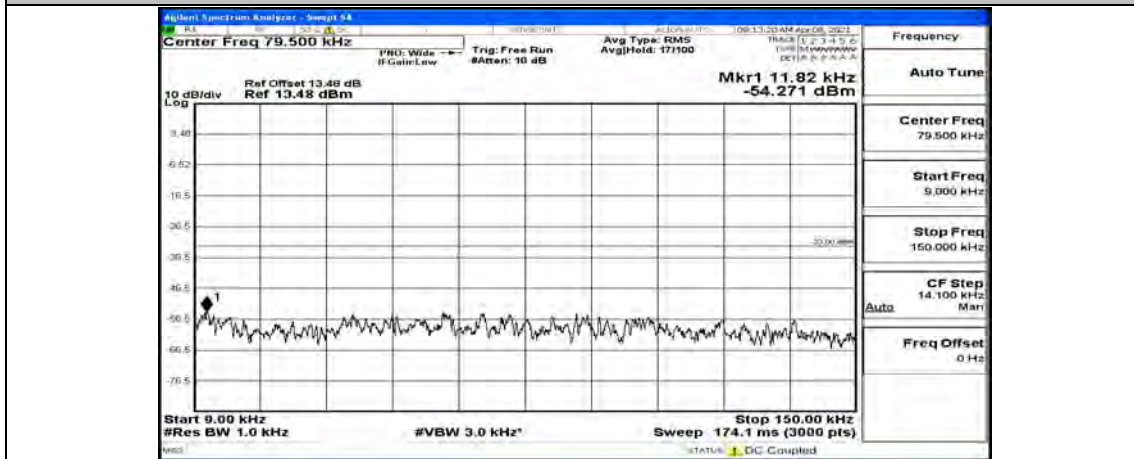




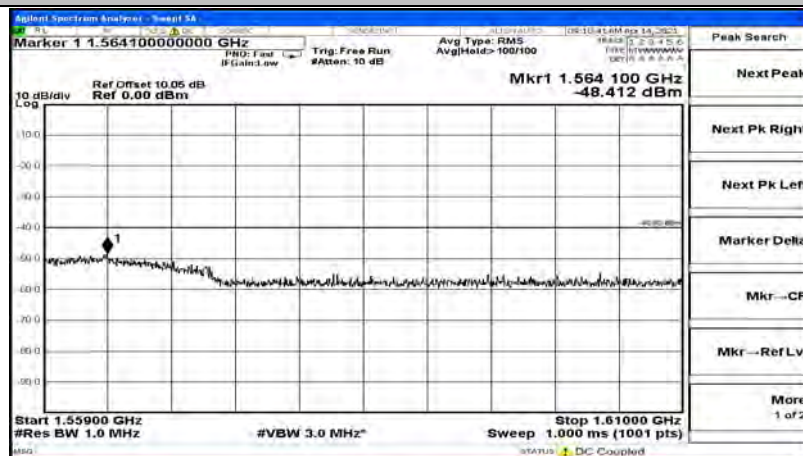
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0







(Channel Bandwidth: 10 MHz)_MCH_QPSK



(Channel Bandwidth: 10 MHz)_MCH_16QAM

