

Appendix L: Test Data for E-UTRA Band 26(814MHz-824MHz)

Product Name: POS Terminal

Trade Mark: SmartPeak

Test Model: P500

Environmental Conditions

| | |
|--------------------|-------------|
| Temperature: | 24.1° C |
| Relative Humidity: | 52.1% |
| ATM Pressure: | 100.0 kPa |
| Test Engineer: | Tom Liu |
| Supervised by: | Jayden Zhuo |

L.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)

| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
|-----------------|---------|------------------|--------|-----------------------------|------------------------------|---------|
| | | Size | Offset | | | |
| QPSK / 16QAM | LCH | 1 | 0 | 23.62 | 23.32 | PASS |
| | | 1 | 3 | 23.77 | 23.32 | PASS |
| | | 1 | 5 | 23.65 | 23.15 | PASS |
| | | 3 | 0 | 23.67 | 22.81 | PASS |
| | | 3 | 2 | 23.55 | 22.70 | PASS |
| | | 3 | 3 | 23.53 | 22.83 | PASS |
| | | 6 | 0 | 23.57 | 22.33 | PASS |
| | MCH | 1 | 0 | 23.31 | 22.76 | PASS |
| | | 1 | 3 | 23.29 | 22.83 | PASS |
| | | 1 | 5 | 23.13 | 22.54 | PASS |
| | | 3 | 0 | 23.45 | 22.13 | PASS |
| | | 3 | 2 | 23.35 | 22.10 | PASS |
| | | 3 | 3 | 23.29 | 22.95 | PASS |
| | | 6 | 0 | 23.19 | 22.19 | PASS |
| | HCH | 1 | 0 | 23.02 | 22.19 | PASS |
| | | 1 | 3 | 23.02 | 22.05 | PASS |
| | | 1 | 5 | 22.95 | 22.25 | PASS |
| | | 3 | 0 | 23.09 | 22.33 | PASS |
| | | 3 | 2 | 23.01 | 22.28 | PASS |
| | | 3 | 3 | 23.09 | 22.23 | PASS |
| | | 6 | 0 | 23.20 | 22.12 | PASS |

| Conducted Output Power Test Result (Channel Bandwidth: 3 MHz) | | | | | | |
|---|---------|------------------|--------|-----------------------------|------------------------------|---------|
| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
| | | Size | Offset | | | |
| QPSK / 16QAM | LCH | 1 | 0 | 23.44 | 23.42 | PASS |
| | | 1 | 7 | 23.51 | 23.04 | PASS |
| | | 1 | 14 | 23.79 | 23.04 | PASS |
| | | 8 | 0 | 23.70 | 22.73 | PASS |
| | | 8 | 4 | 23.57 | 22.52 | PASS |
| | | 8 | 7 | 23.57 | 22.19 | PASS |
| | | 15 | 0 | 23.63 | 22.55 | PASS |
| | MCH | 1 | 0 | 23.41 | 23.06 | PASS |
| | | 1 | 7 | 23.21 | 22.90 | PASS |
| | | 1 | 14 | 23.18 | 22.86 | PASS |
| | | 8 | 0 | 23.41 | 22.79 | PASS |
| | | 8 | 4 | 23.26 | 22.88 | PASS |
| | | 8 | 7 | 23.25 | 22.10 | PASS |
| | | 15 | 0 | 23.38 | 22.35 | PASS |
| | HCH | 1 | 0 | 23.30 | 22.75 | PASS |
| | | 1 | 7 | 22.91 | 22.30 | PASS |
| | | 1 | 14 | 23.04 | 22.59 | PASS |
| | | 8 | 0 | 23.39 | 22.37 | PASS |
| | | 8 | 4 | 23.18 | 22.04 | PASS |
| | | 8 | 7 | 23.12 | 22.06 | PASS |
| | | 15 | 0 | 23.15 | 22.30 | PASS |

| Conducted Output Power Test Result (Channel Bandwidth: 5 MHz) | | | | | | |
|---|---------|------------------|--------|-----------------------------|------------------------------|---------|
| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
| | | Size | Offset | | | |
| QPSK / 16QAM | LCH | 1 | 0 | 23.59 | 23.80 | PASS |
| | | 1 | 12 | 23.33 | 23.08 | PASS |
| | | 1 | 24 | 23.28 | 22.89 | PASS |
| | | 12 | 0 | 23.67 | 22.86 | PASS |
| | | 12 | 6 | 23.49 | 22.56 | PASS |
| | | 12 | 13 | 23.45 | 22.55 | PASS |
| | | 25 | 0 | 23.61 | 22.71 | PASS |
| | MCH | 1 | 0 | 23.17 | 22.97 | PASS |
| | | 1 | 12 | 23.13 | 22.79 | PASS |
| | | 1 | 24 | 23.08 | 22.69 | PASS |
| | | 12 | 0 | 23.43 | 22.44 | PASS |
| | | 12 | 6 | 23.27 | 22.26 | PASS |
| | | 12 | 13 | 23.27 | 22.26 | PASS |
| | | 25 | 0 | 23.32 | 22.44 | PASS |
| | HCH | 1 | 0 | 23.17 | 22.15 | PASS |
| | | 1 | 12 | 23.38 | 22.37 | PASS |
| | | 1 | 24 | 23.03 | 22.20 | PASS |
| | | 12 | 0 | 23.31 | 22.29 | PASS |
| | | 12 | 6 | 23.20 | 22.27 | PASS |
| | | 12 | 13 | 23.17 | 22.22 | PASS |
| | | 25 | 0 | 23.37 | 22.47 | PASS |

| Conducted Output Power Test Result (Channel Bandwidth: 10 MHz) | | | | | | |
|--|---------|------------------|--------|-----------------------------|------------------------------|---------|
| Modulation | Channel | RB Configuration | | Average Power [dBm] QPSK | Average Power [dBm] 16QAM | Verdict |
| | | Size | Offset | | | |
| QPSK / 16QAM | MCH | 1 | 0 | 23.67 | 23.56 | PASS |
| | | 1 | 24 | 23.69 | 23.40 | PASS |
| | | 1 | 49 | 23.11 | 22.49 | PASS |
| | | 25 | 0 | 23.49 | 22.32 | PASS |
| | | 25 | 12 | 23.35 | 22.29 | PASS |
| | | 25 | 25 | 23.30 | 22.12 | PASS |
| | | 50 | 0 | 23.41 | 22.35 | PASS |

L.2 Peak-to-Average Ratio

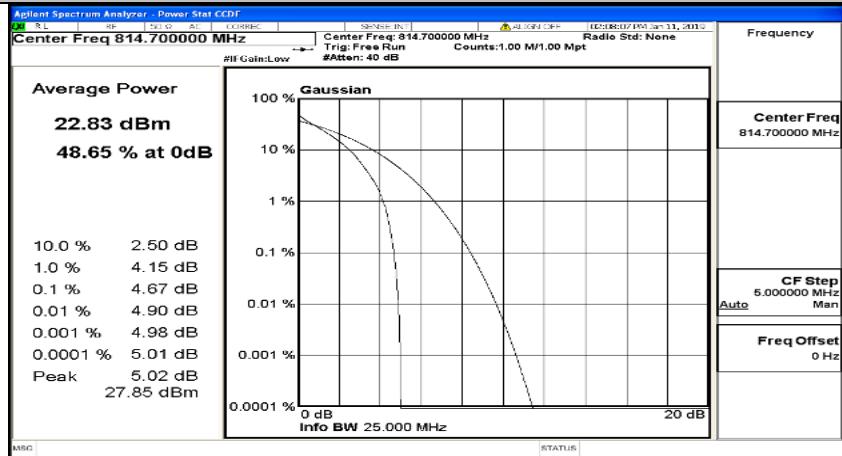
| Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz) | | | | |
|--|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 4.67 | <13 | PASS |
| | MCH | 4.83 | <13 | PASS |
| | HCH | 4.72 | <13 | PASS |
| 16QAM | LCH | 5.53 | <13 | PASS |
| | MCH | 5.66 | <13 | PASS |
| | HCH | 5.54 | <13 | PASS |

| Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz) | | | | |
|--|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 4.74 | <13 | PASS |
| | MCH | 4.94 | <13 | PASS |
| | HCH | 4.85 | <13 | PASS |
| 16QAM | LCH | 5.56 | <13 | PASS |
| | MCH | 5.77 | <13 | PASS |
| | HCH | 5.64 | <13 | PASS |

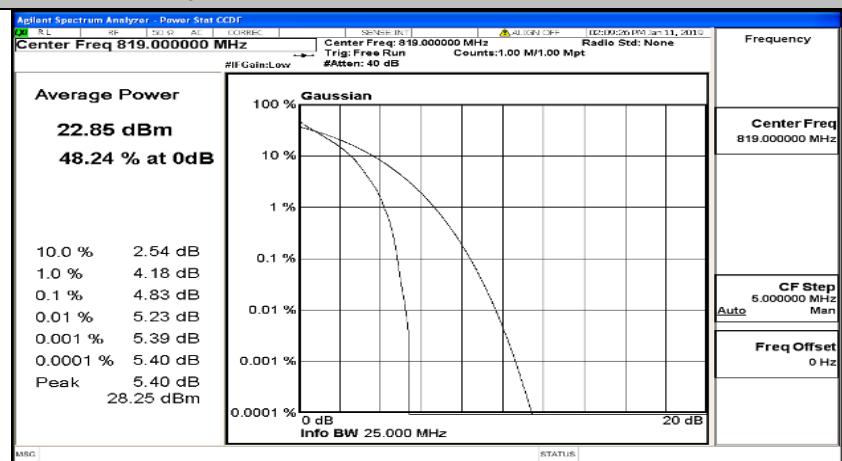
| Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz) | | | | |
|--|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | LCH | 4.89 | <13 | PASS |
| | MCH | 4.99 | <13 | PASS |
| | HCH | 4.91 | <13 | PASS |
| 16QAM | LCH | 5.70 | <13 | PASS |
| | MCH | 5.78 | <13 | PASS |
| | HCH | 5.70 | <13 | PASS |

| Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz) | | | | |
|---|---------|----------------------------|------------|---------|
| Modulation | Channel | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| QPSK | MCH | 5.07 | <13 | PASS |
| 16QAM | MCH | 5.81 | <13 | PASS |

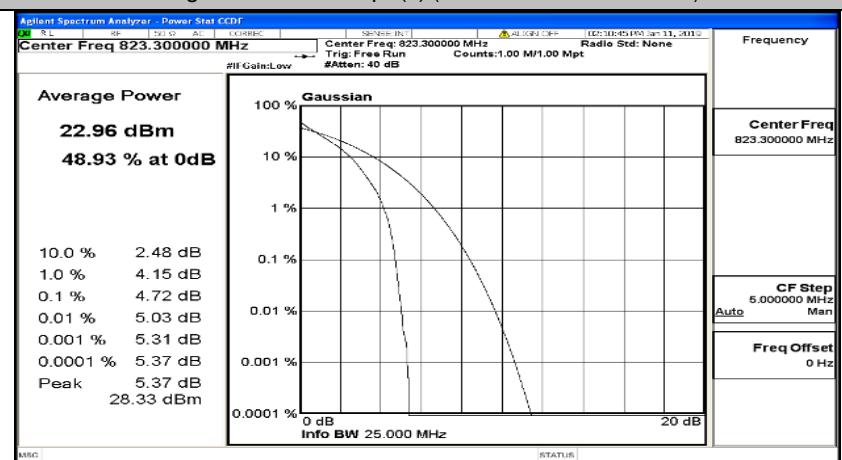
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



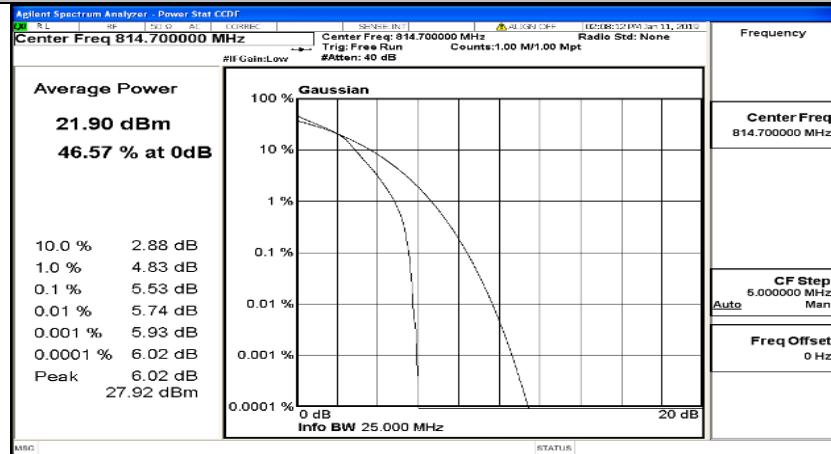
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



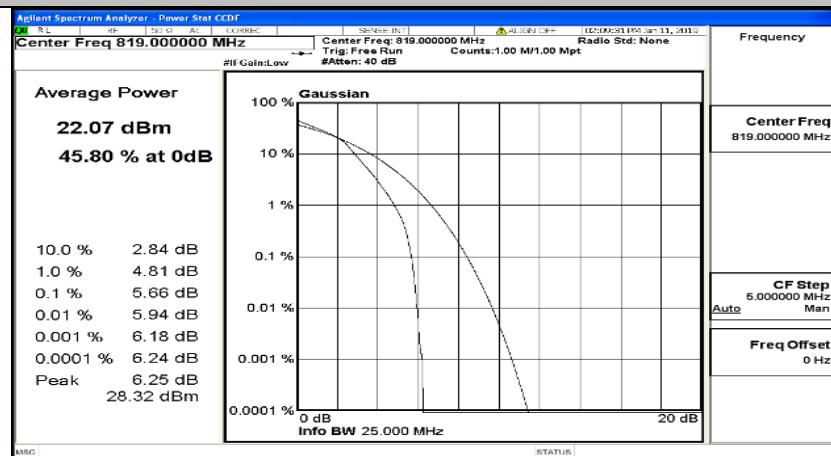
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



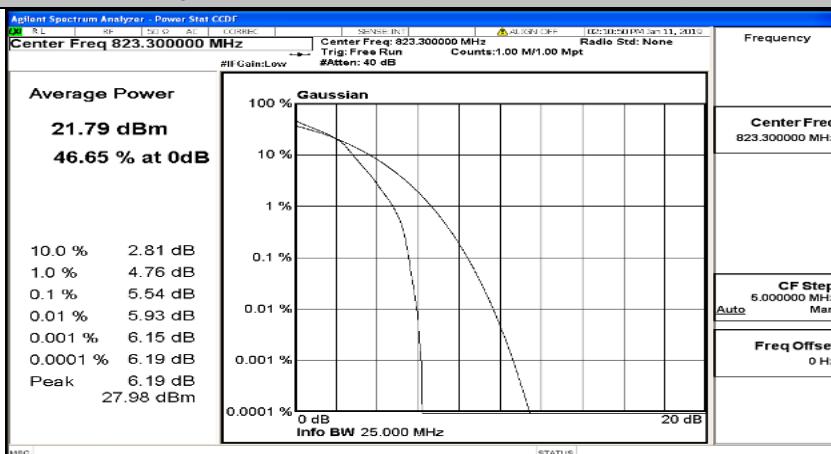
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



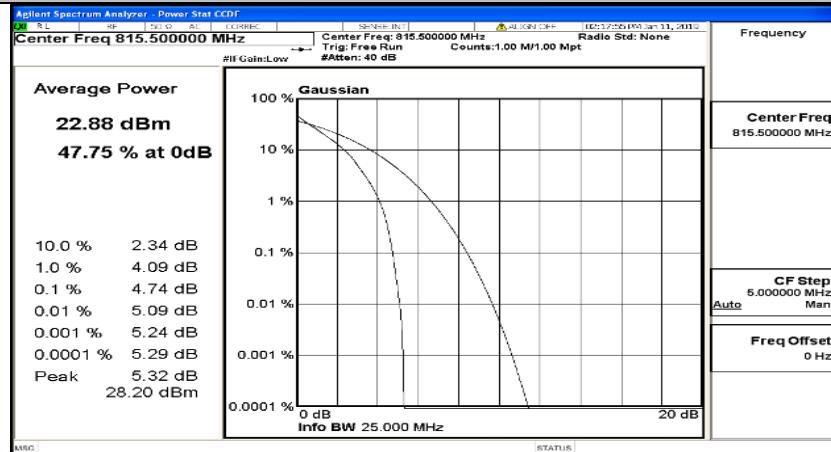
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



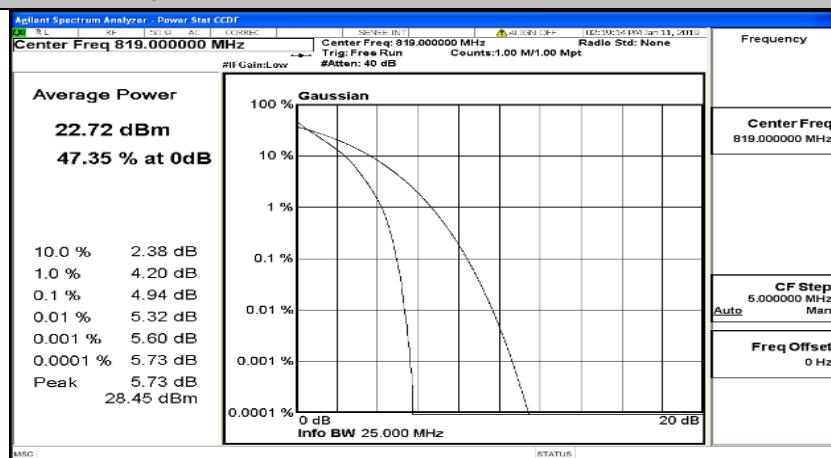
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



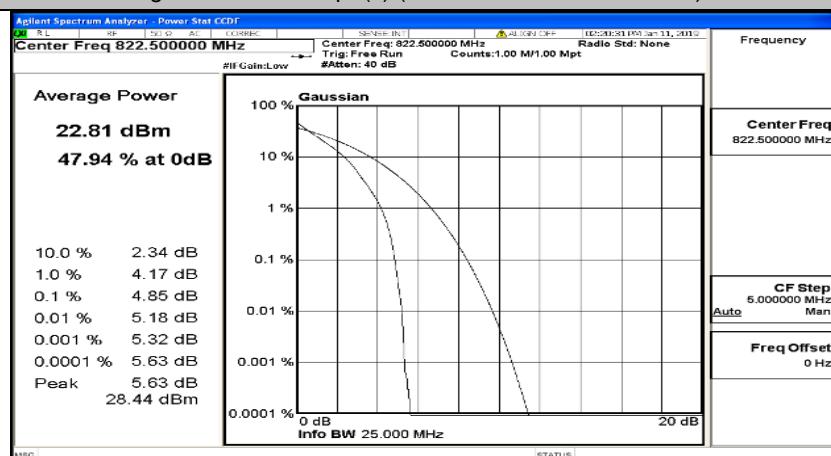
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



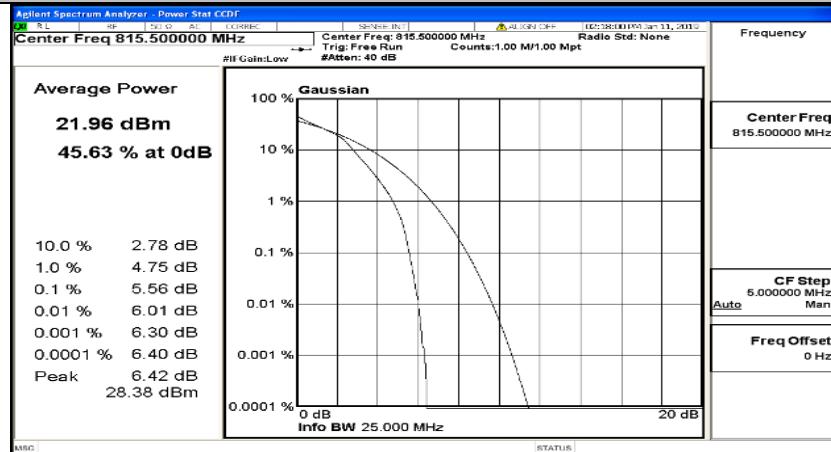
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



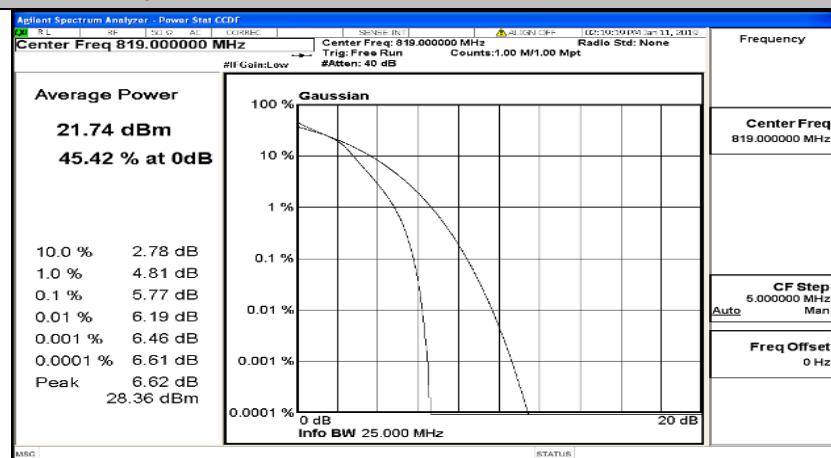
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



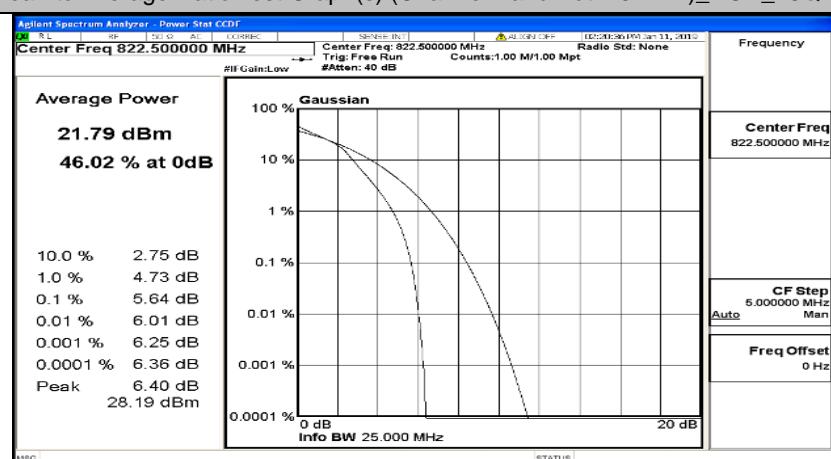
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



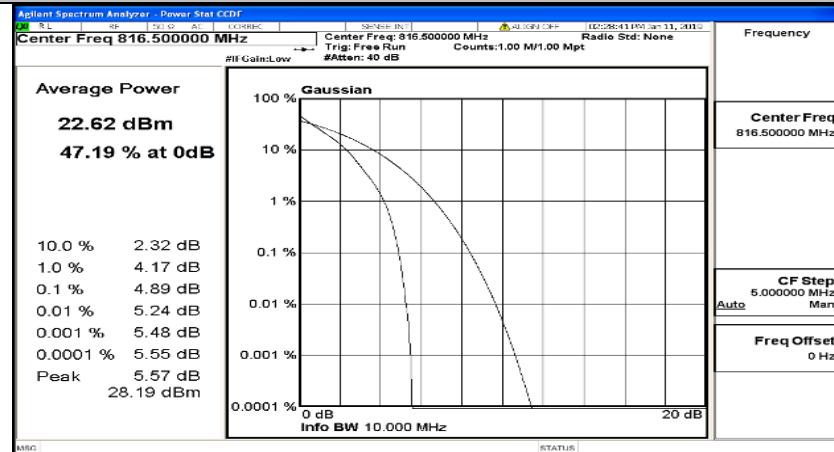
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



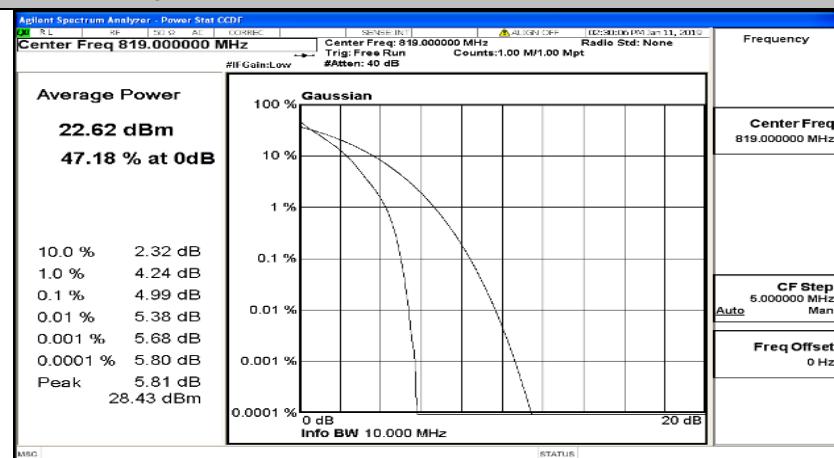
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



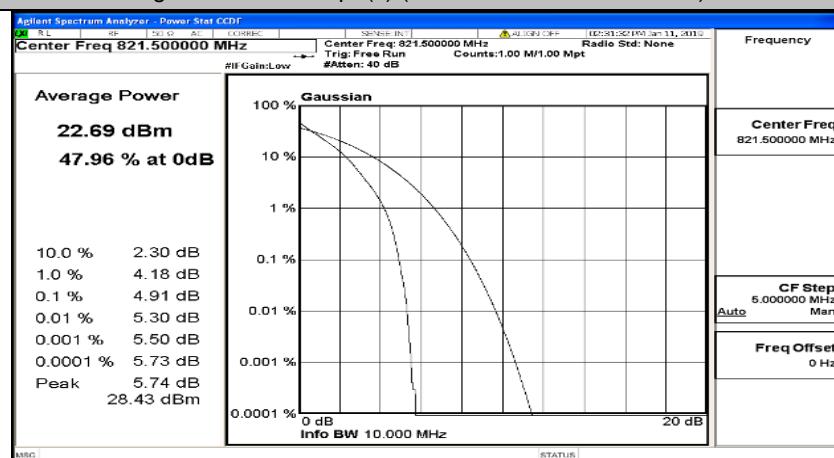
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



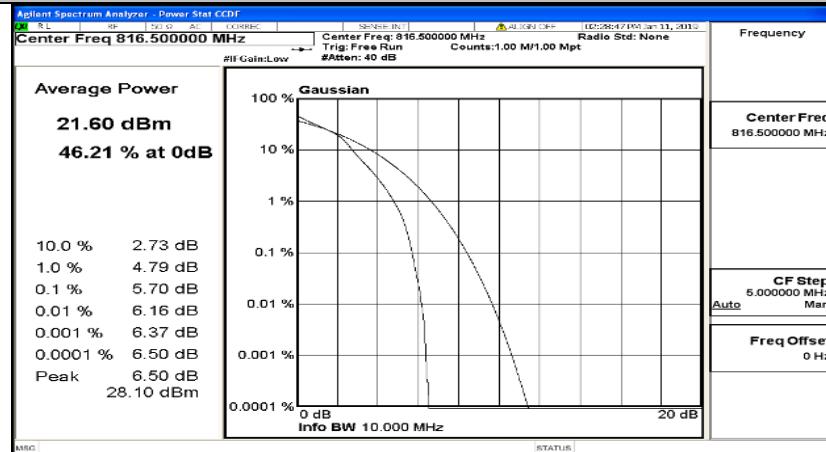
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



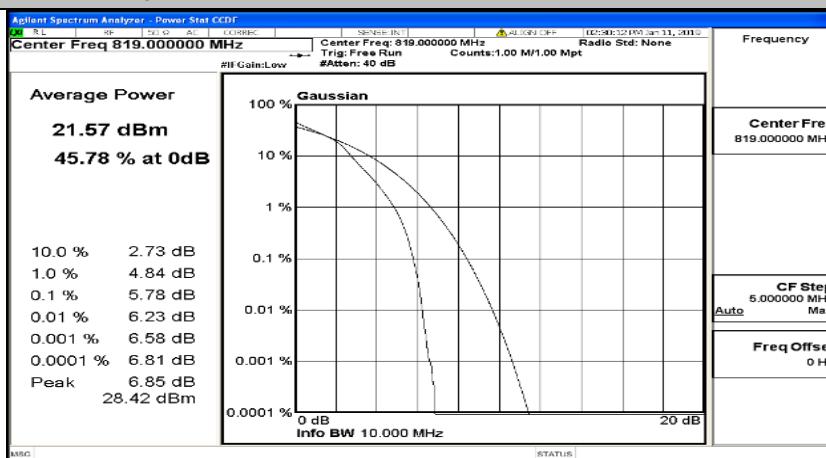
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



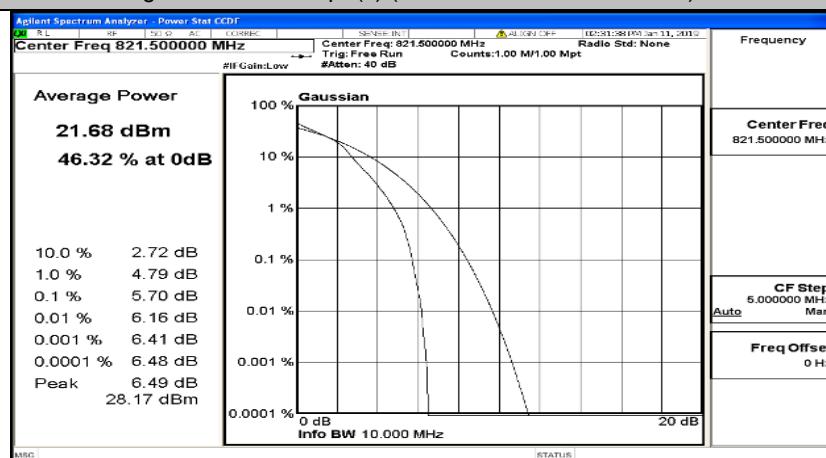
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



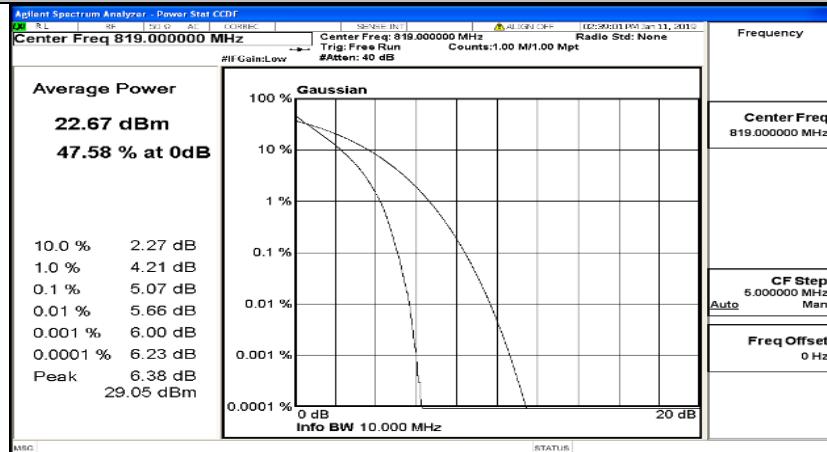
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



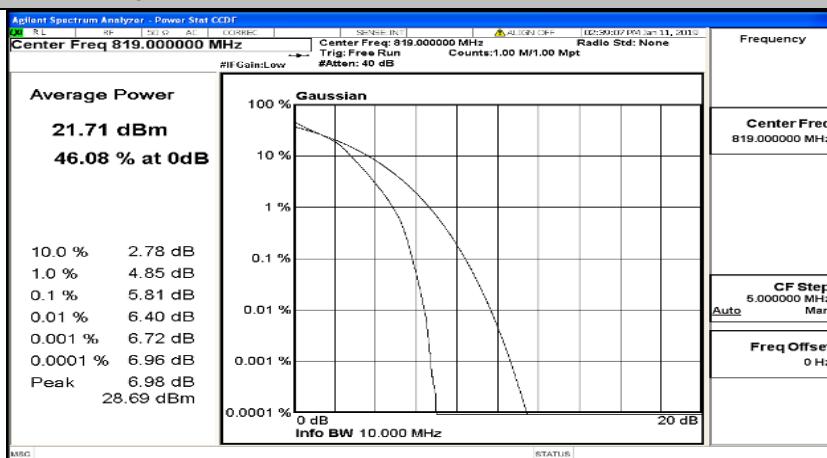
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



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



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



L.3 26dB Bandwidth and Occupied Bandwidth

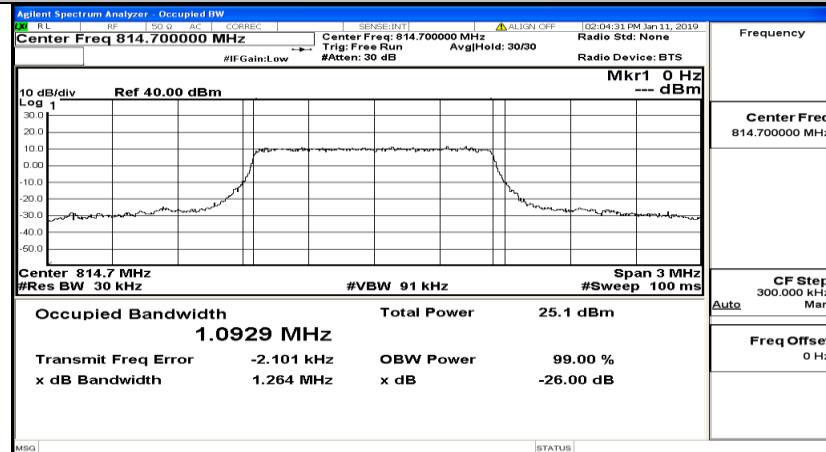
| EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz) | | | | |
|--|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 1.0929 | 1.264 | PASS |
| | MCH | 1.0901 | 1.276 | PASS |
| | HCH | 1.0959 | 1.255 | PASS |
| 16QAM | LCH | 1.0903 | 1.236 | PASS |
| | MCH | 1.0889 | 1.263 | PASS |
| | HCH | 1.0880 | 1.273 | PASS |

| EBW & OBW Test Result (Channel Bandwidth: 3 MHz) | | | | |
|--|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 2.6938 | 2.914 | PASS |
| | MCH | 2.7052 | 2.937 | PASS |
| | HCH | 2.7101 | 2.939 | PASS |
| 16QAM | LCH | 2.6984 | 2.915 | PASS |
| | MCH | 2.7011 | 2.939 | PASS |
| | HCH | 2.7049 | 2.932 | PASS |

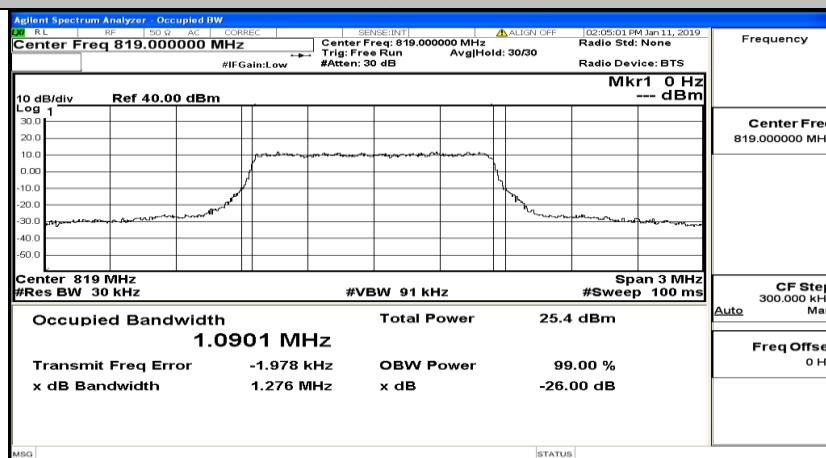
| EBW & OBW Test Result (Channel Bandwidth: 5 MHz) | | | | |
|--|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | LCH | 4.5109 | 4.871 | PASS |
| | MCH | 4.5031 | 4.852 | PASS |
| | HCH | 4.5131 | 4.930 | PASS |
| 16QAM | LCH | 4.5025 | 4.883 | PASS |
| | MCH | 4.5027 | 4.880 | PASS |
| | HCH | 4.4991 | 4.894 | PASS |

| EBW & OBW Test Result (Channel Bandwidth: 10 MHz) | | | | |
|---|---------|--------------------------|----------------------|---------|
| Modulation | Channel | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| QPSK | MCH | 8.9791 | 9.563 | PASS |
| 16QAM | MCH | 8.9707 | 9.554 | PASS |

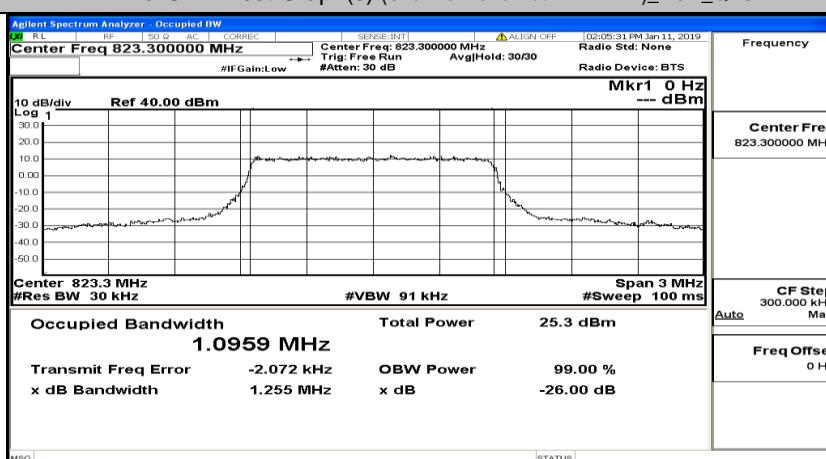
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK

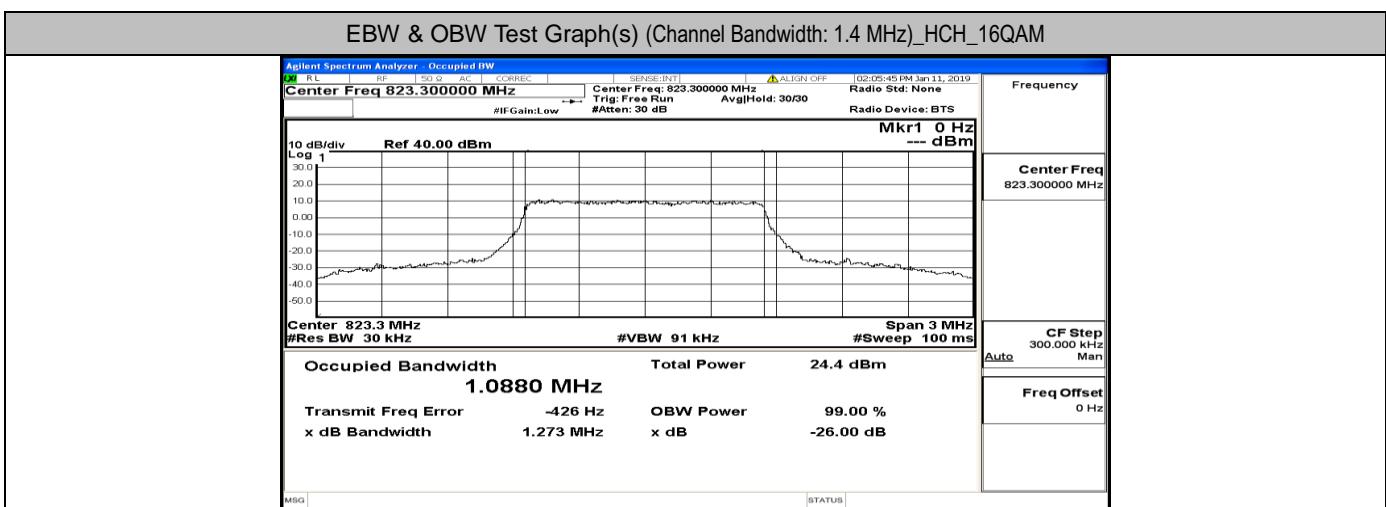
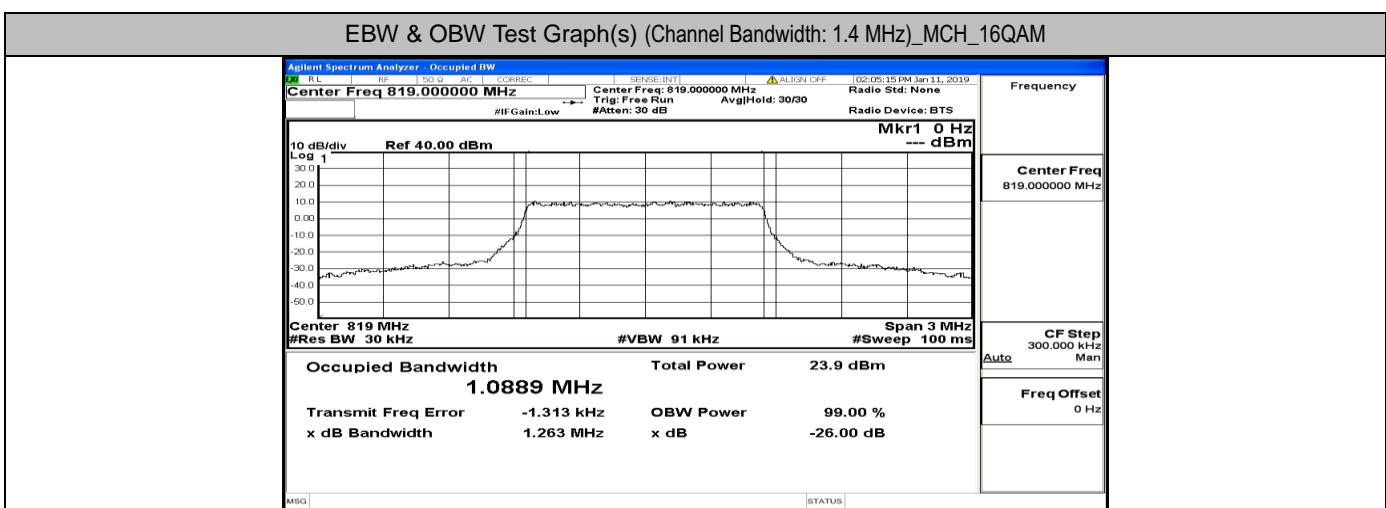
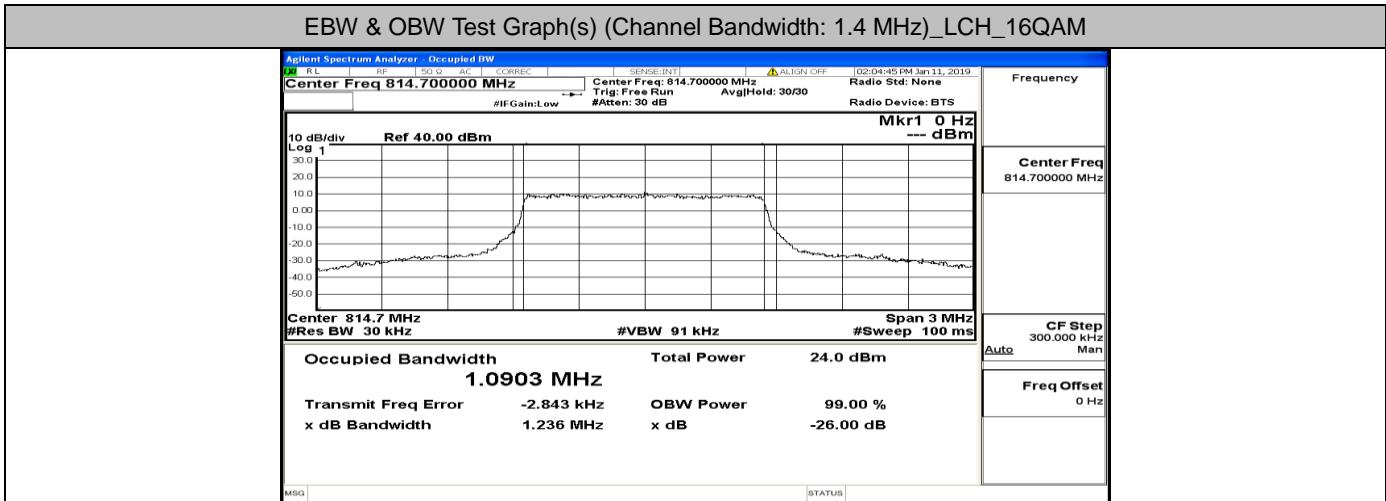


EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK

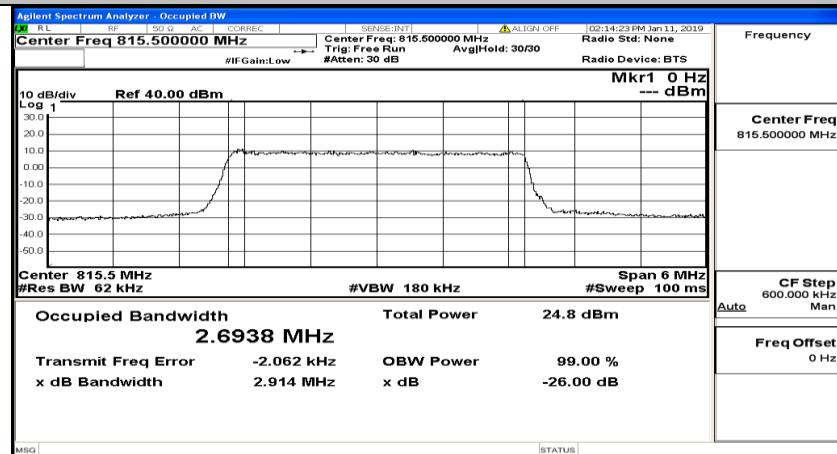


EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK

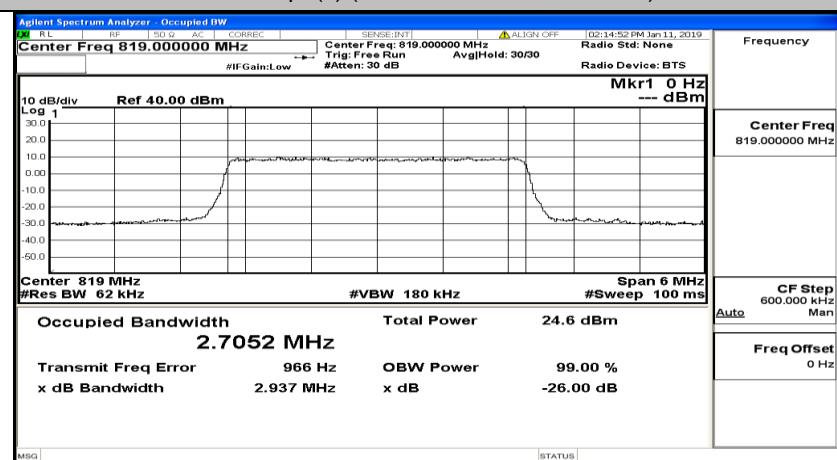




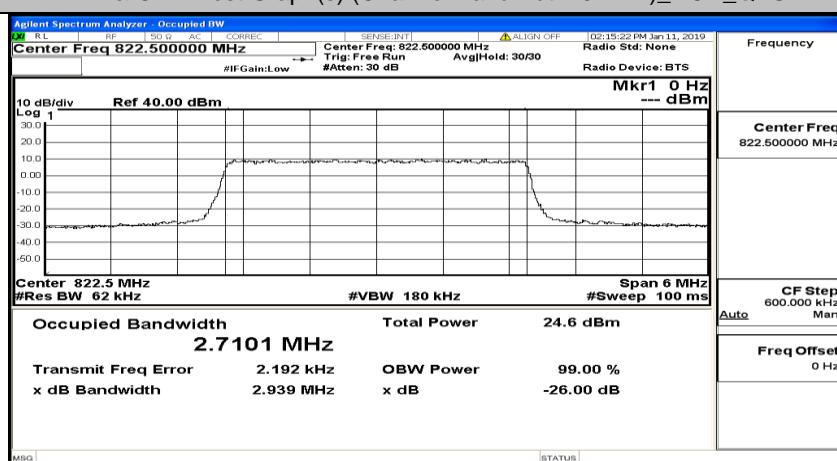
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



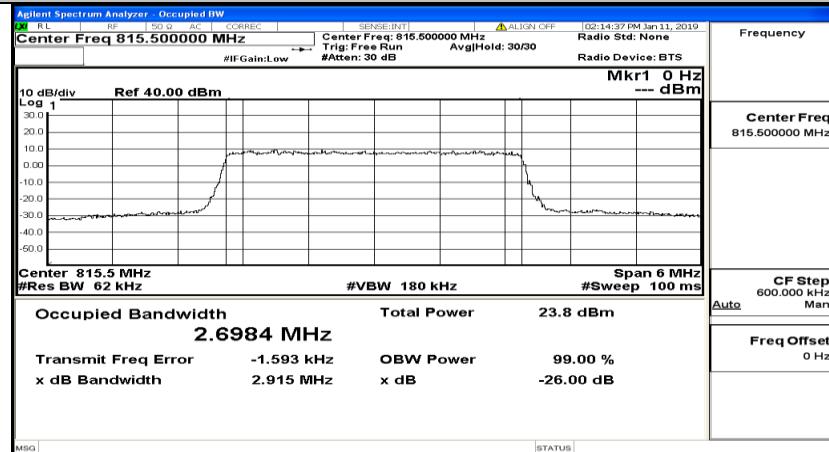
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



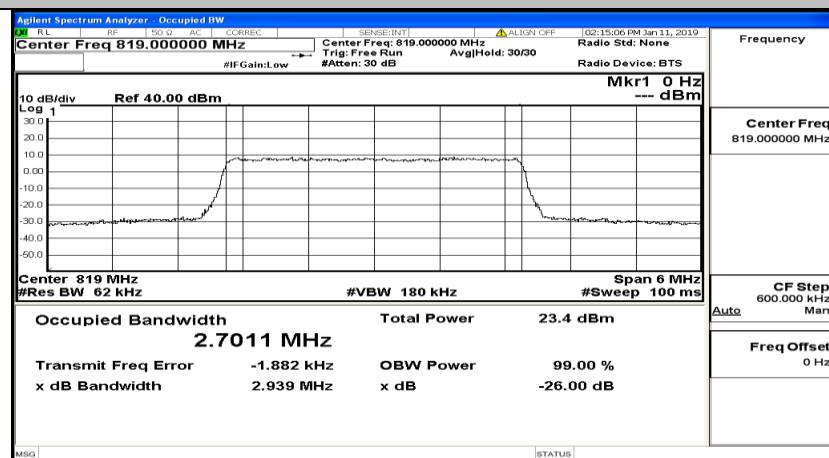
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



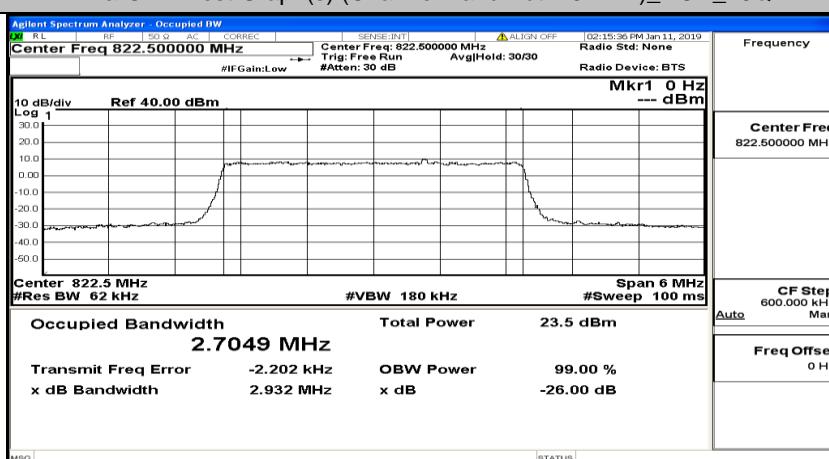
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



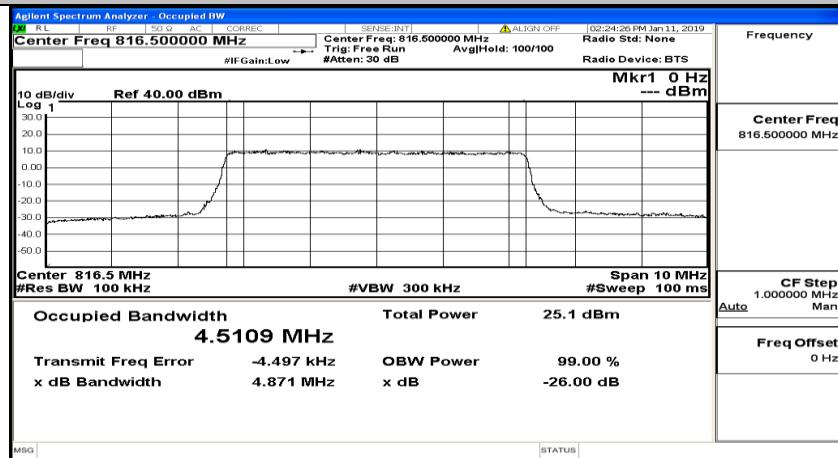
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



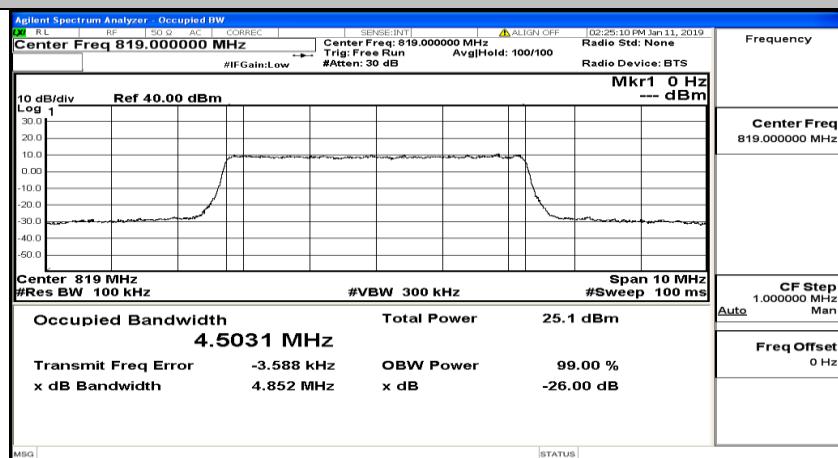
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



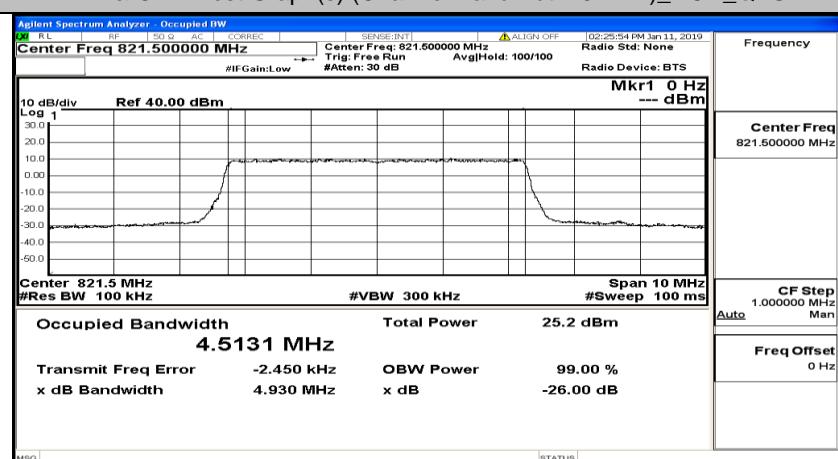
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



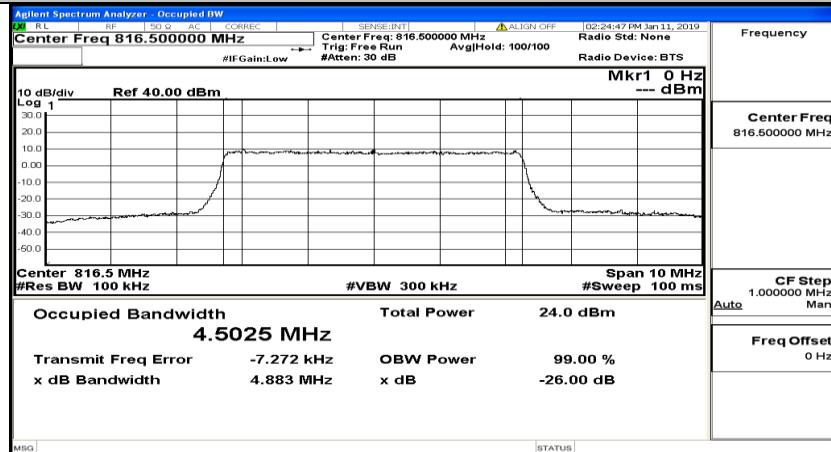
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



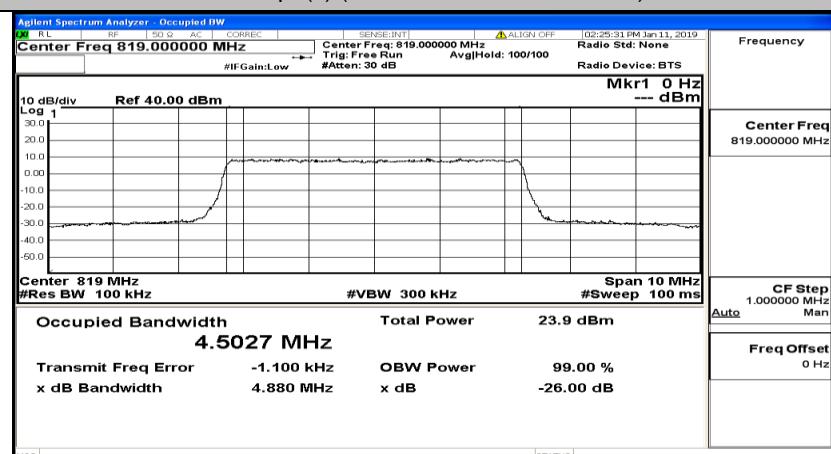
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



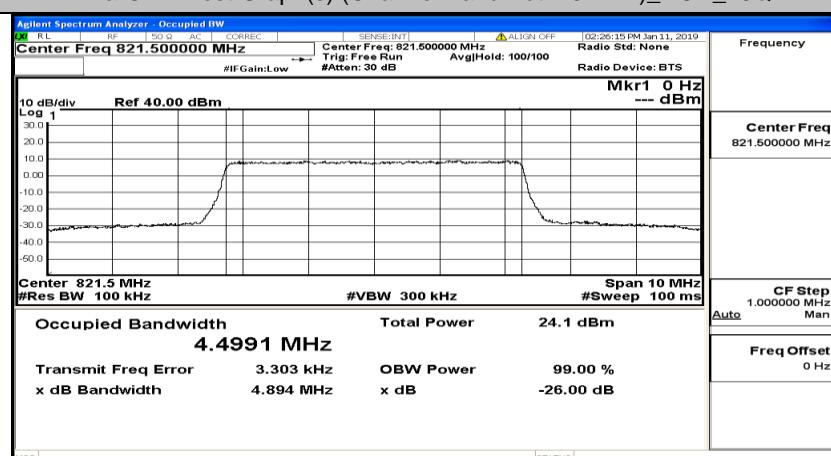
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



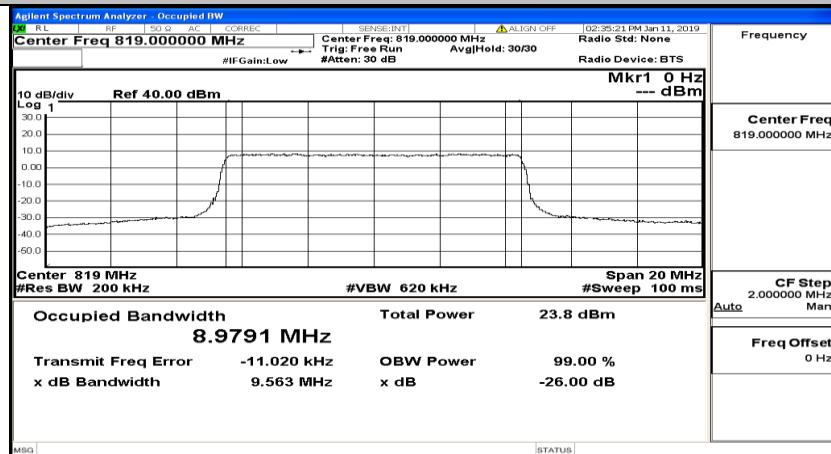
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



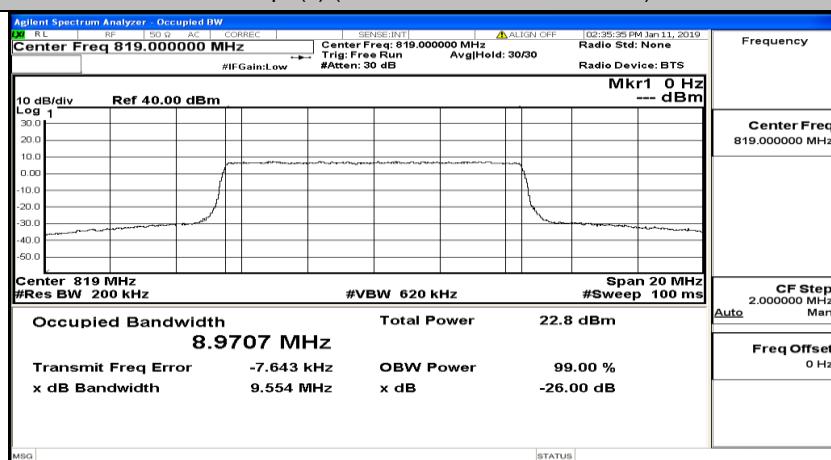
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



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



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

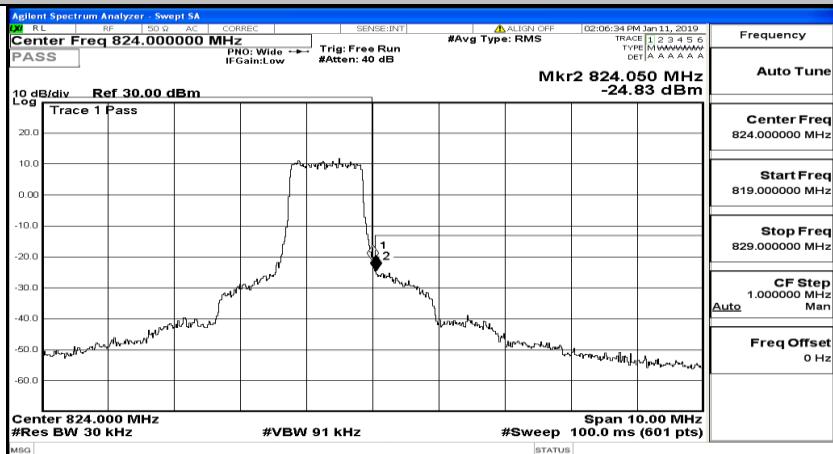


L.4 Band Edge

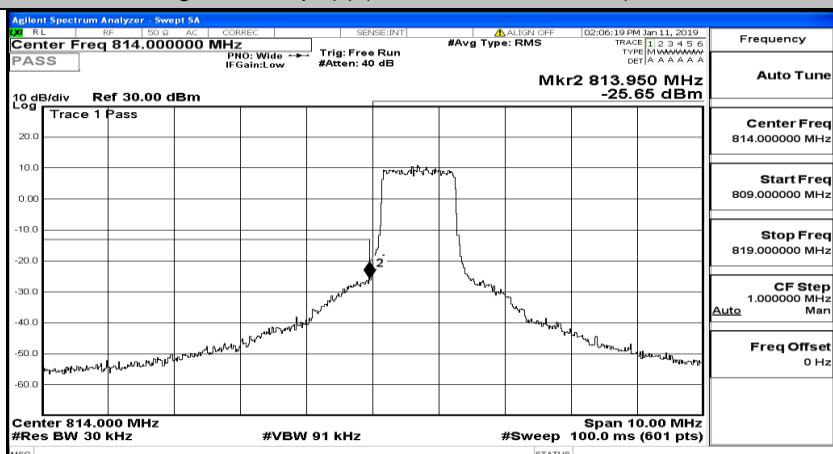
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



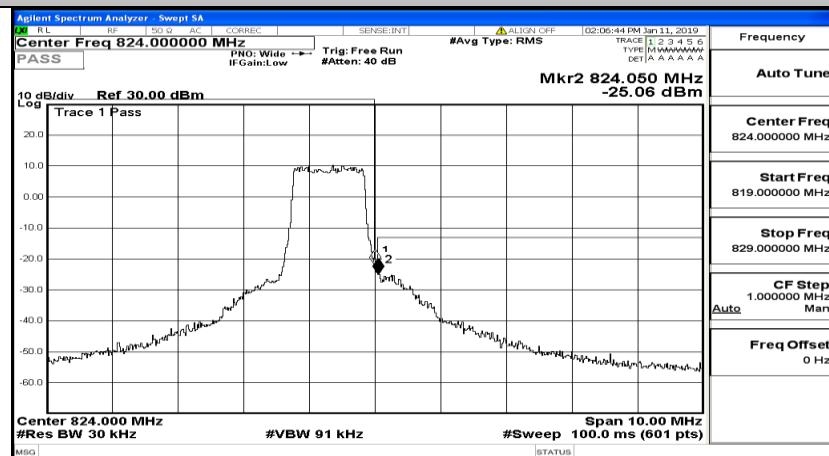
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



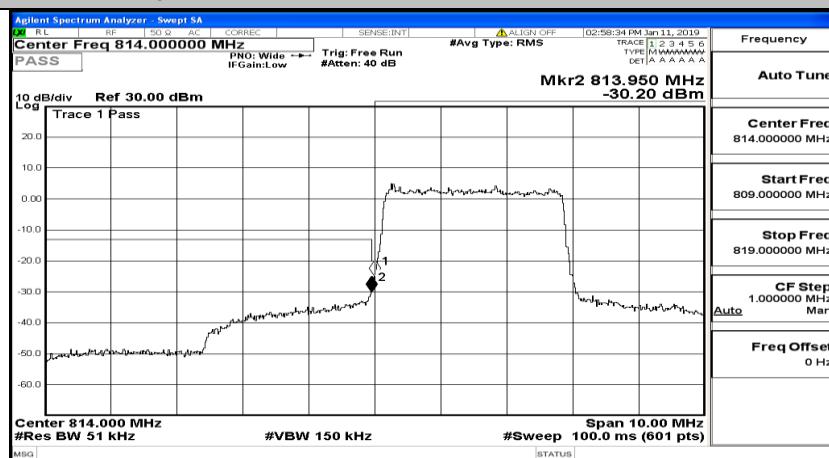
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



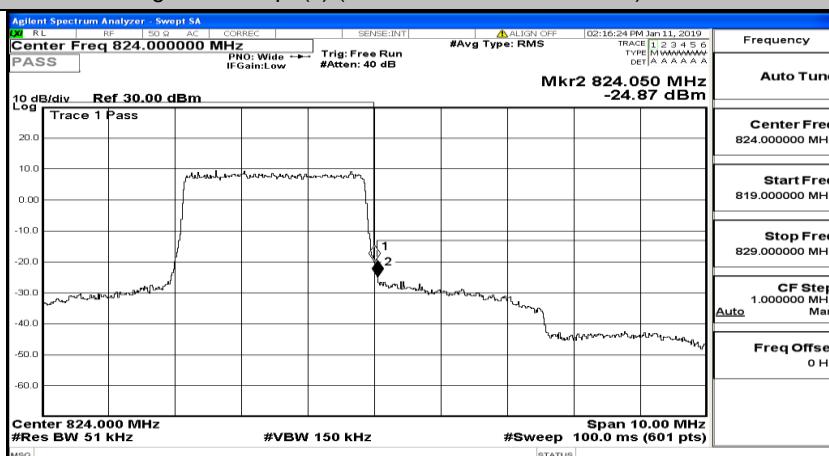
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



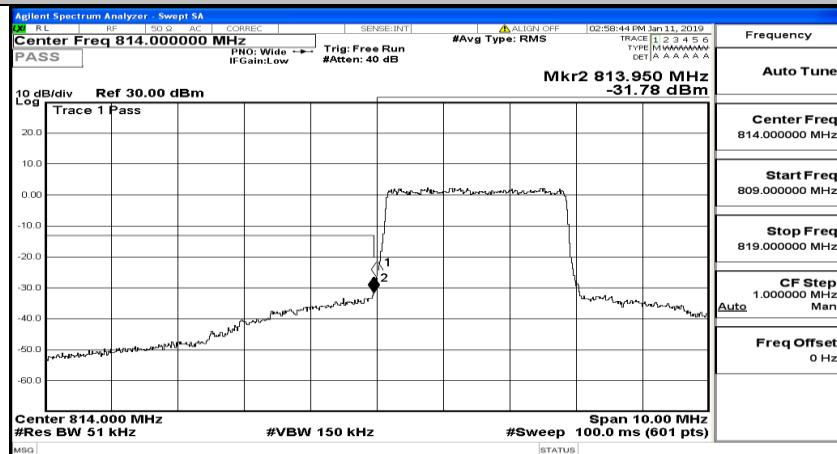
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



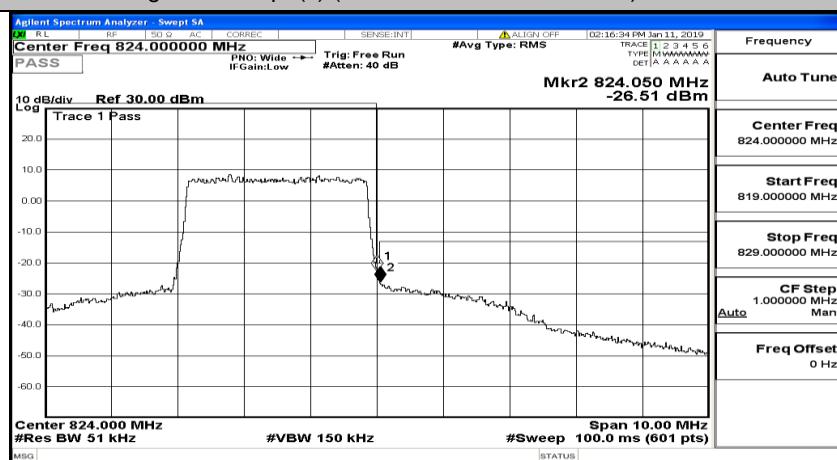
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



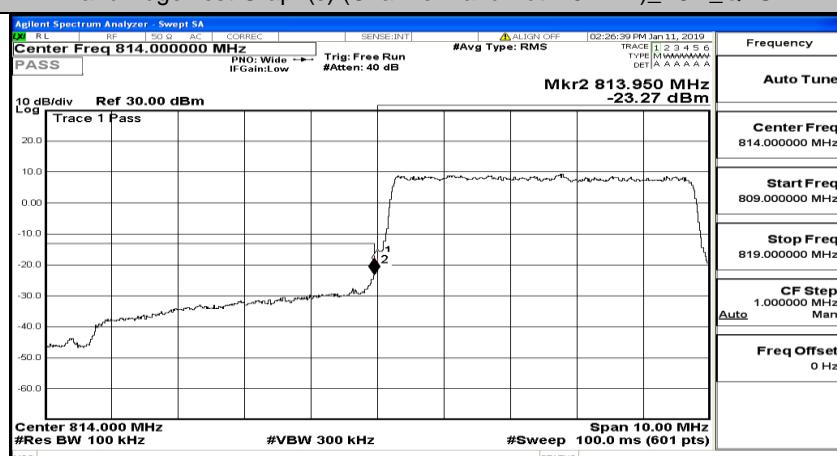
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



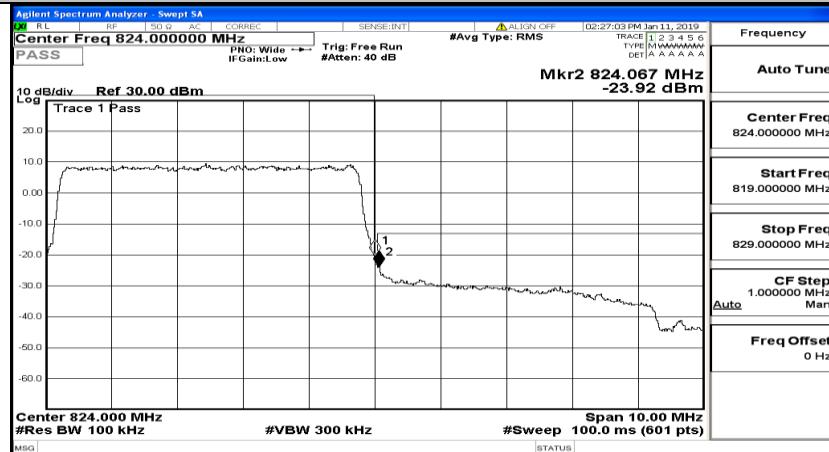
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



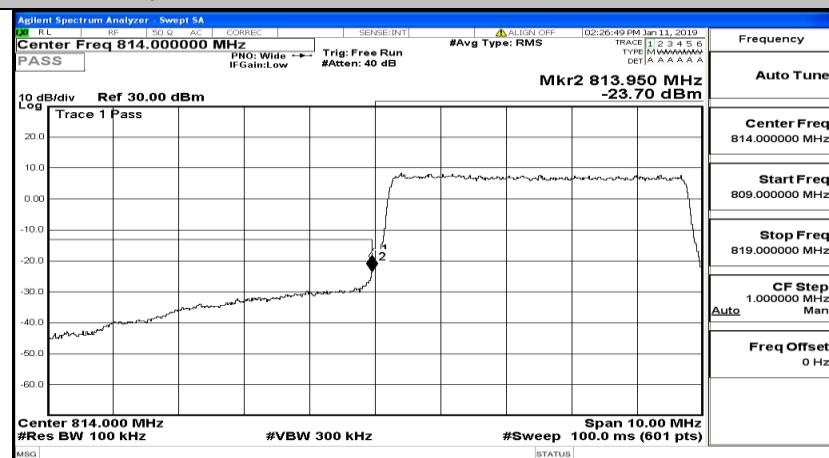
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



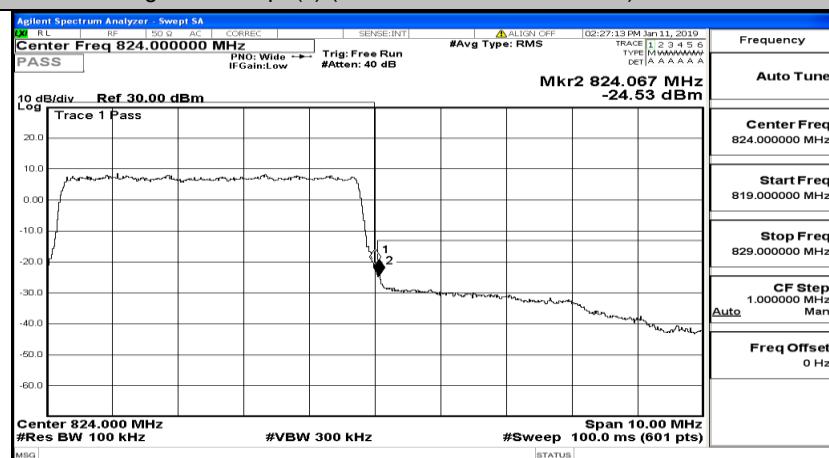
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



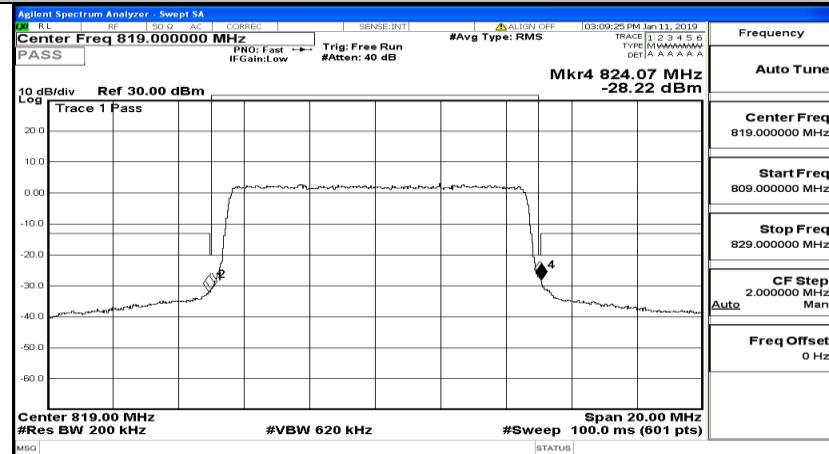
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



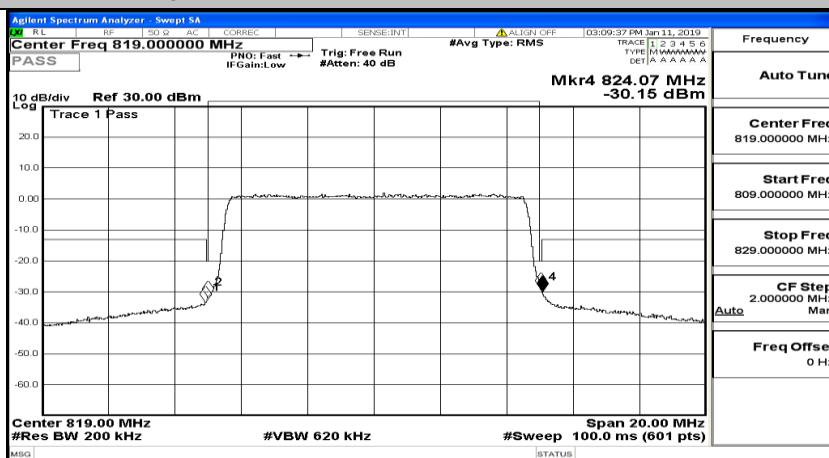
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



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

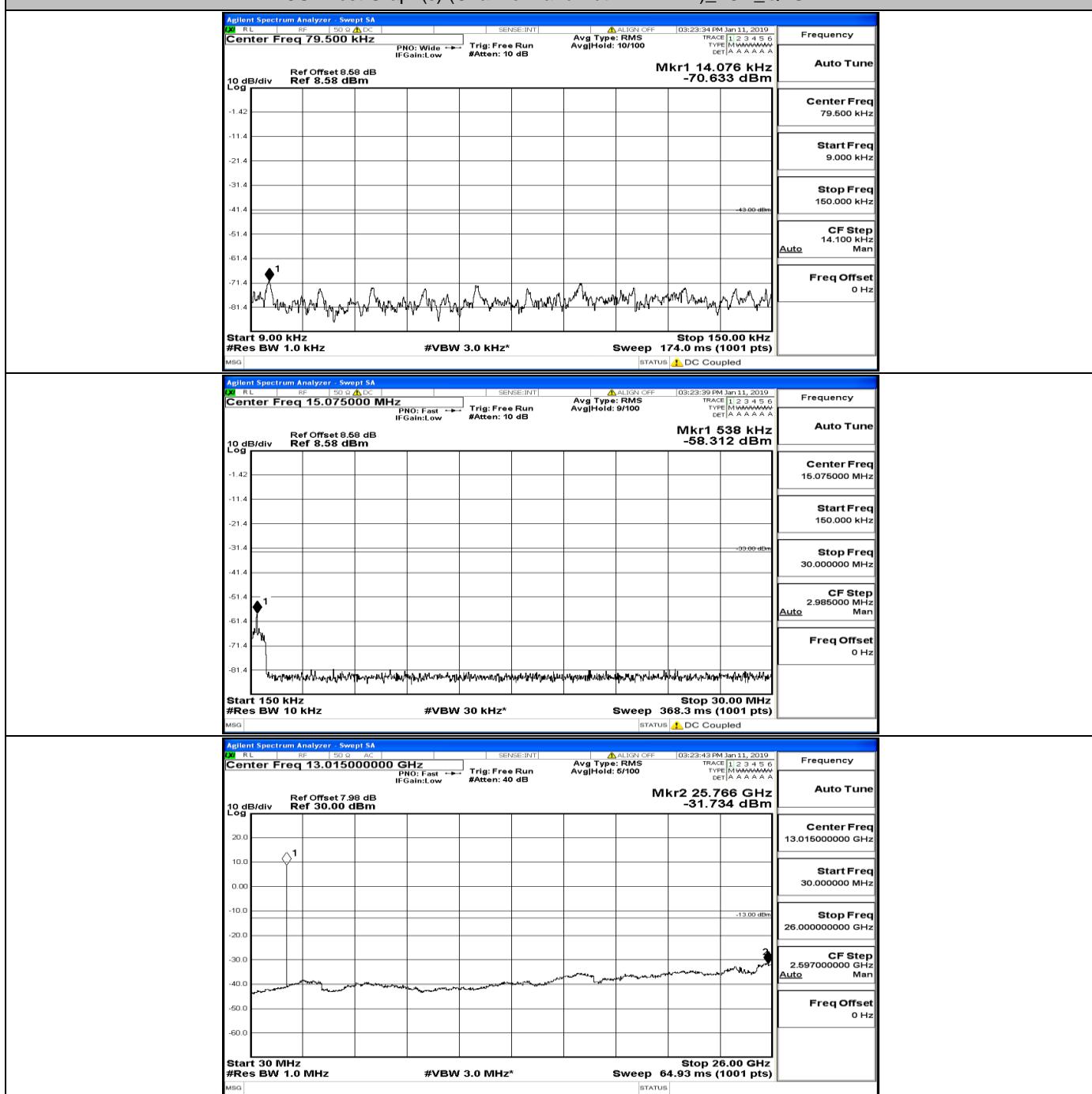


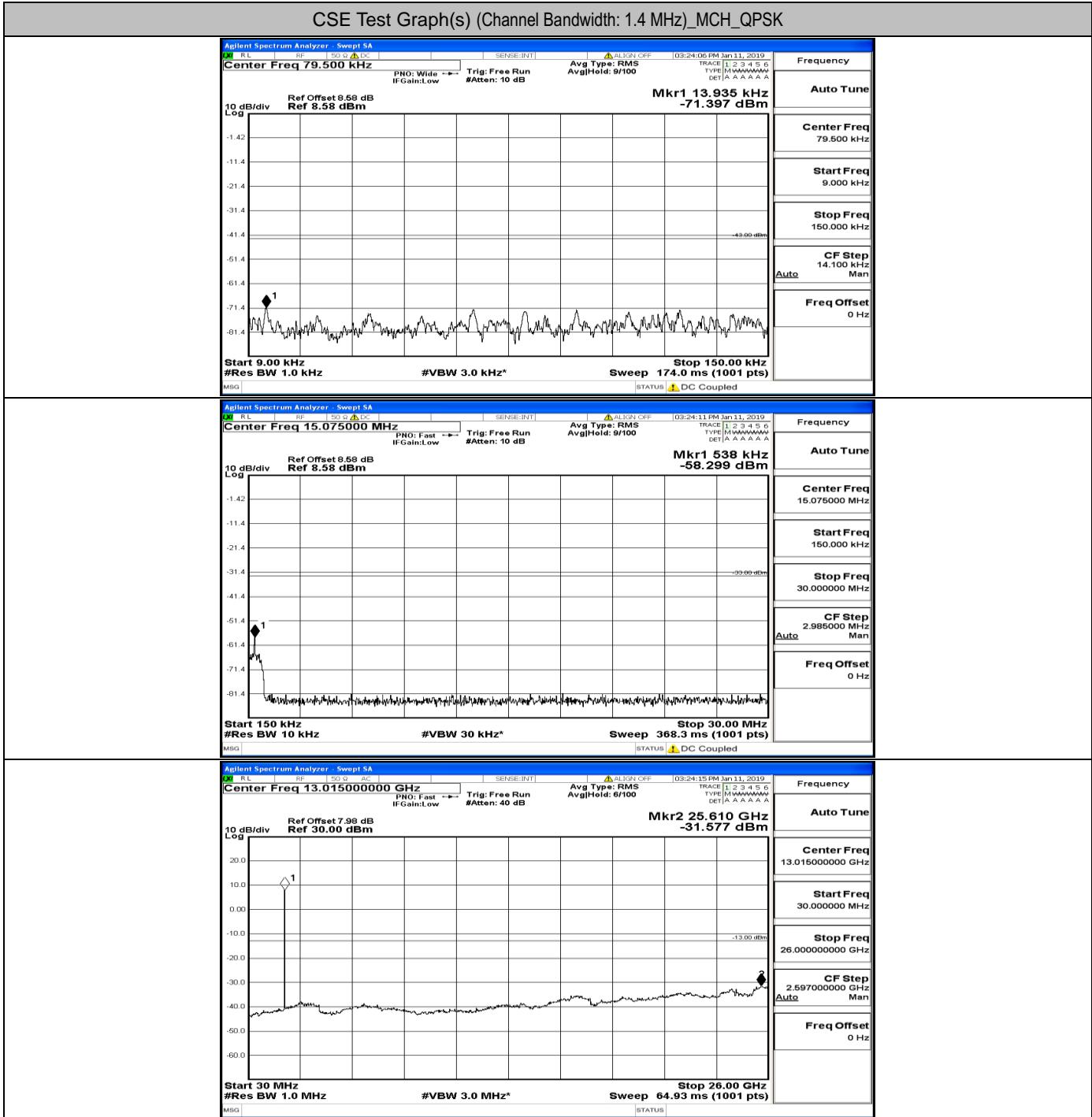
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_ 16QAM

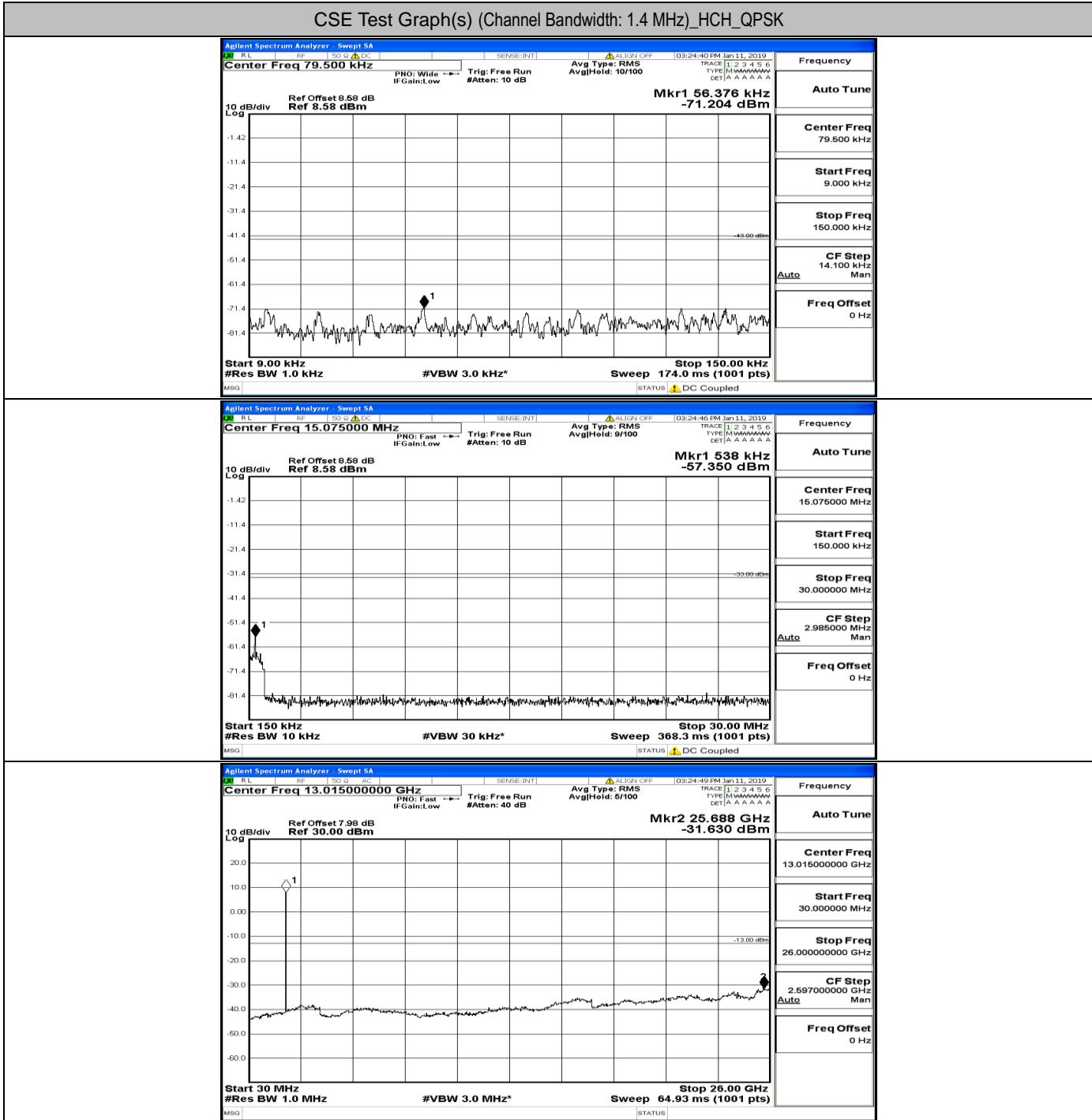


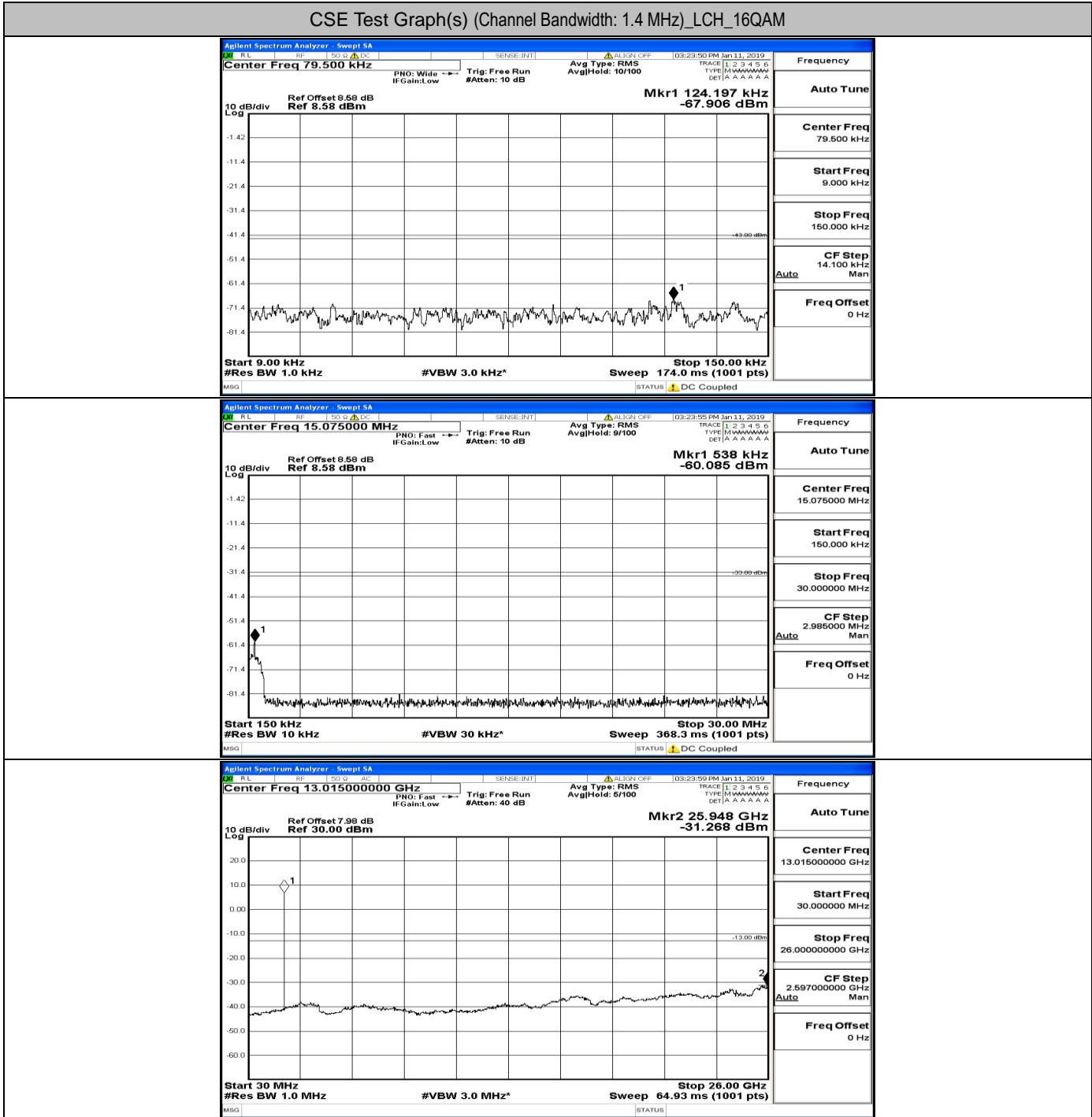
L.5 Conducted Spurious Emission

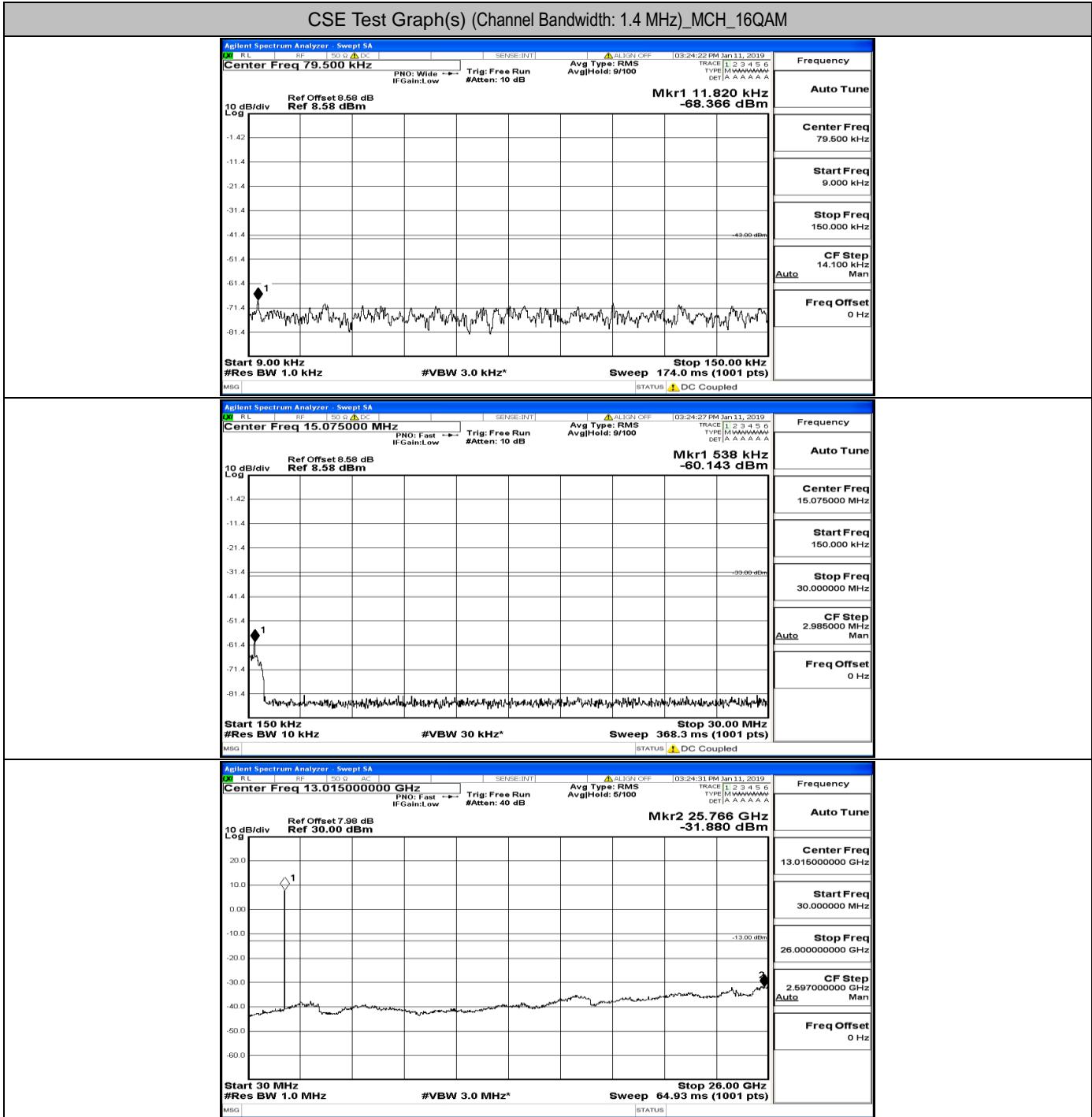
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK

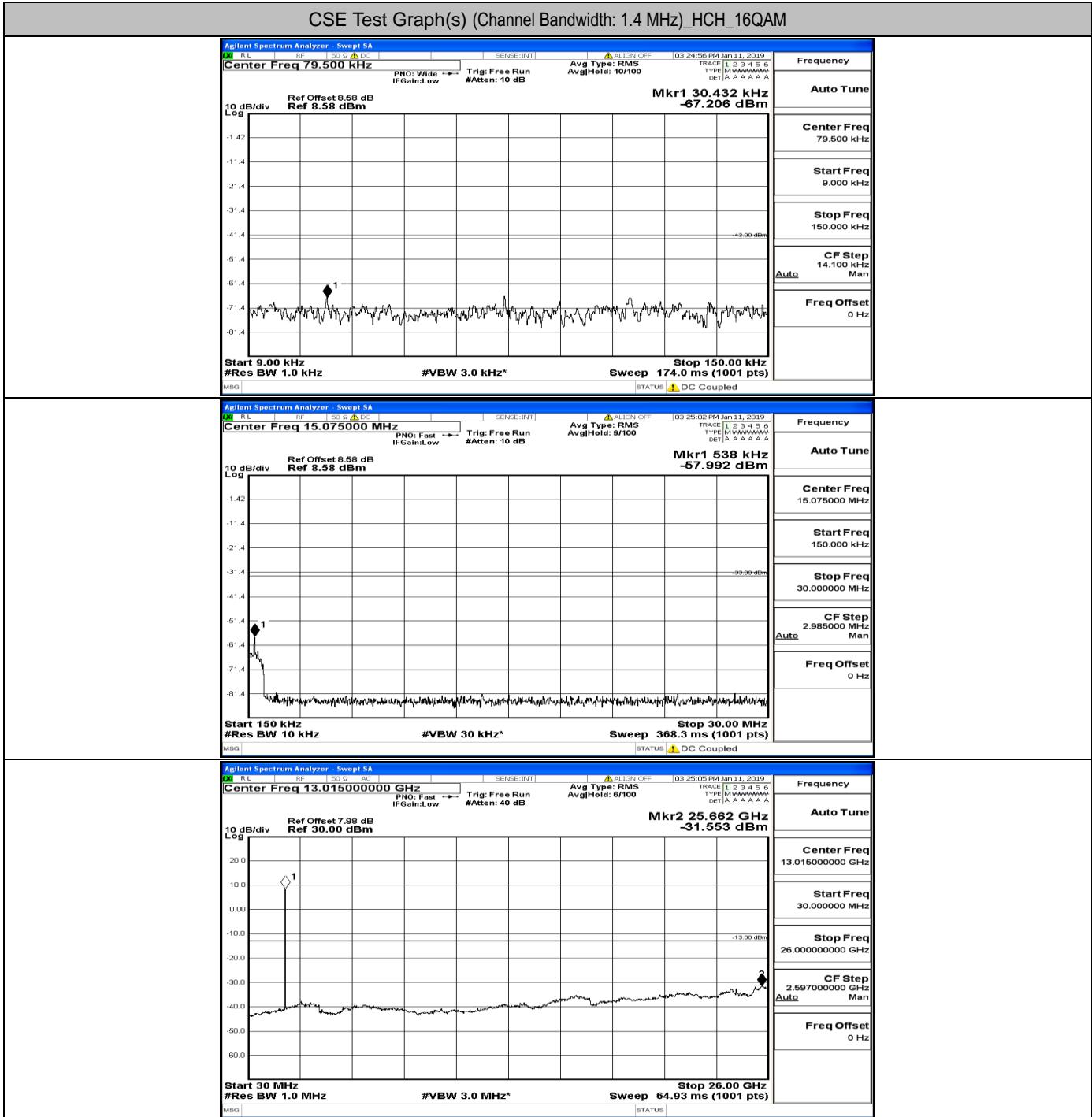


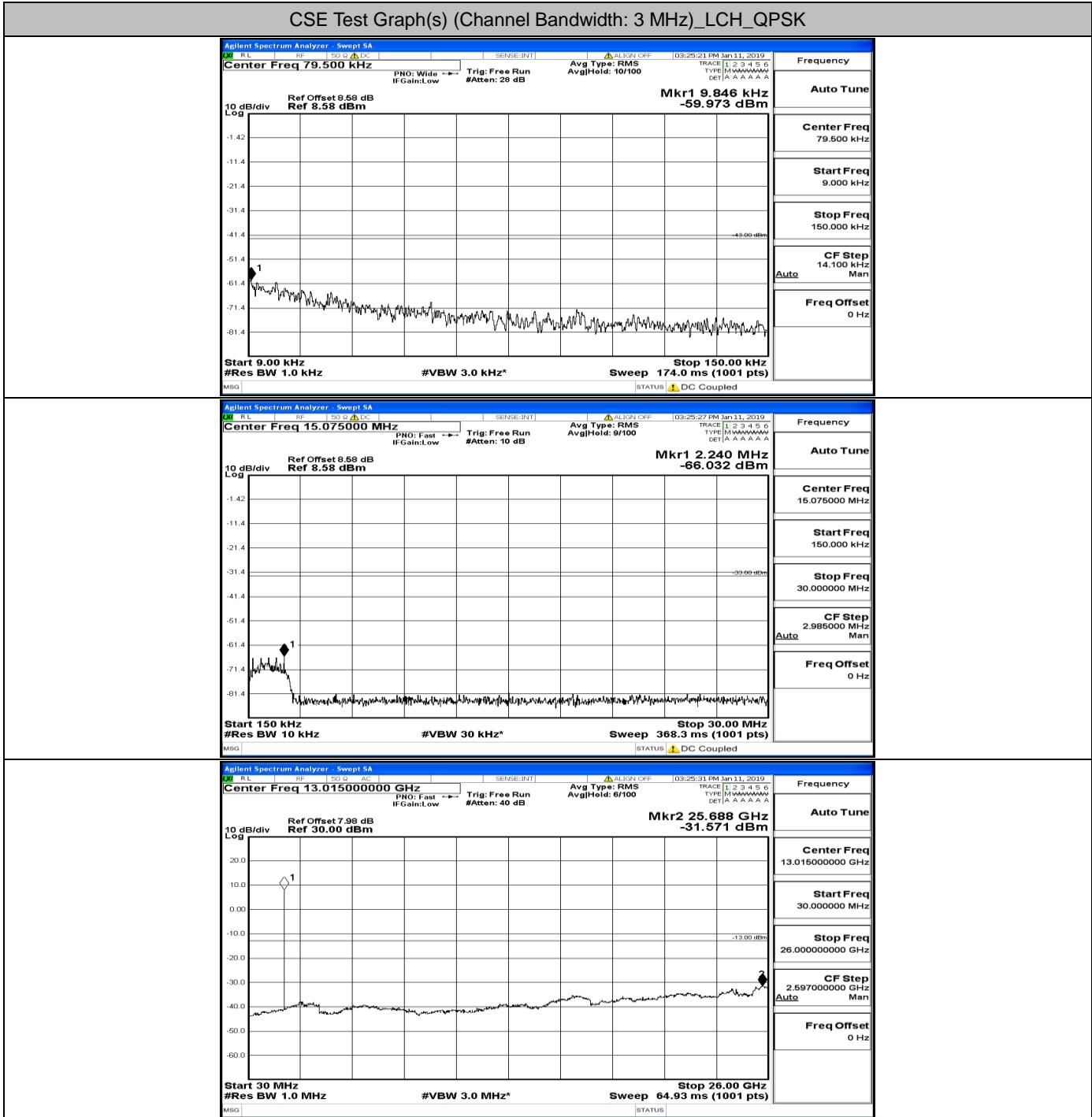




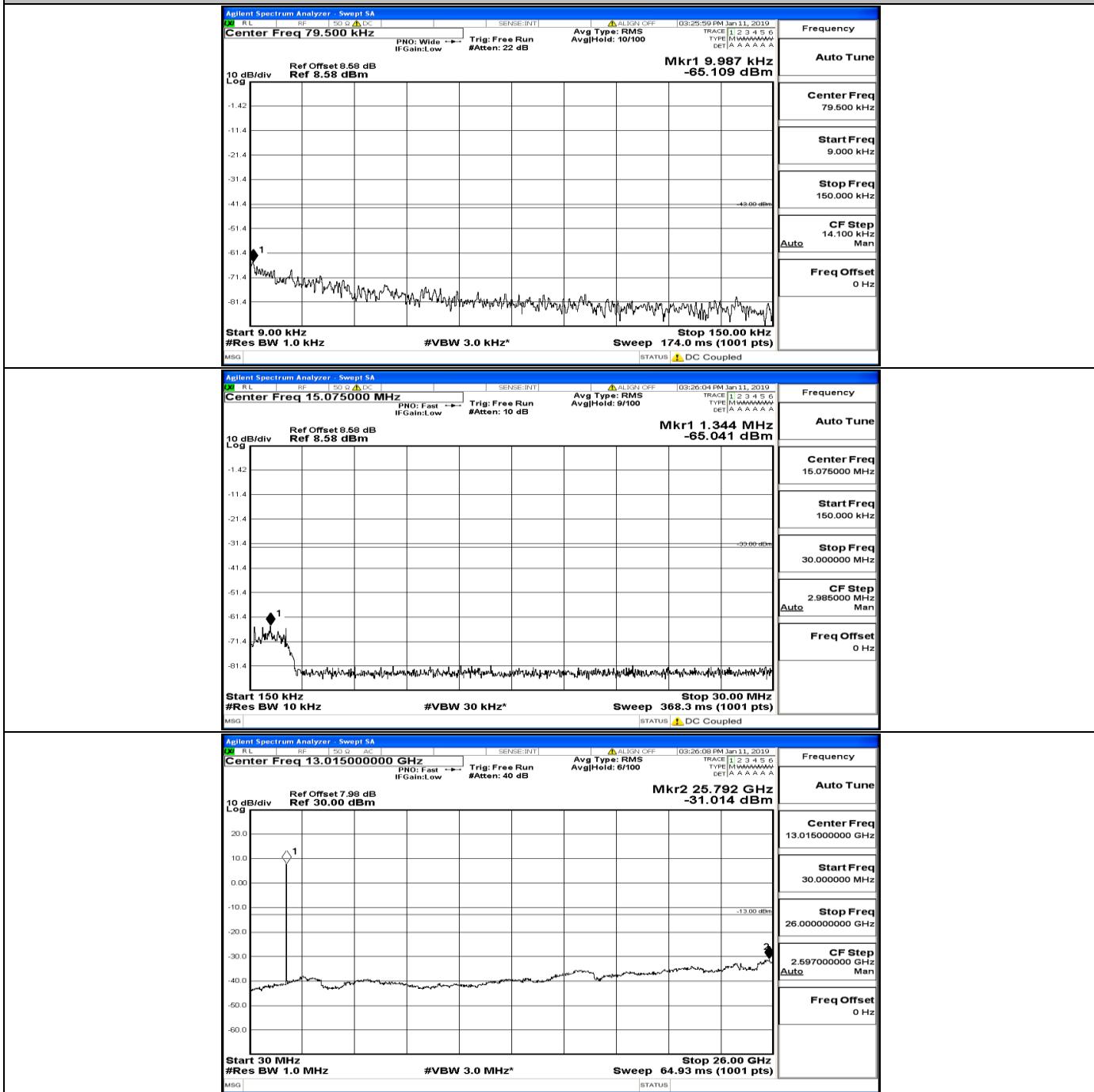




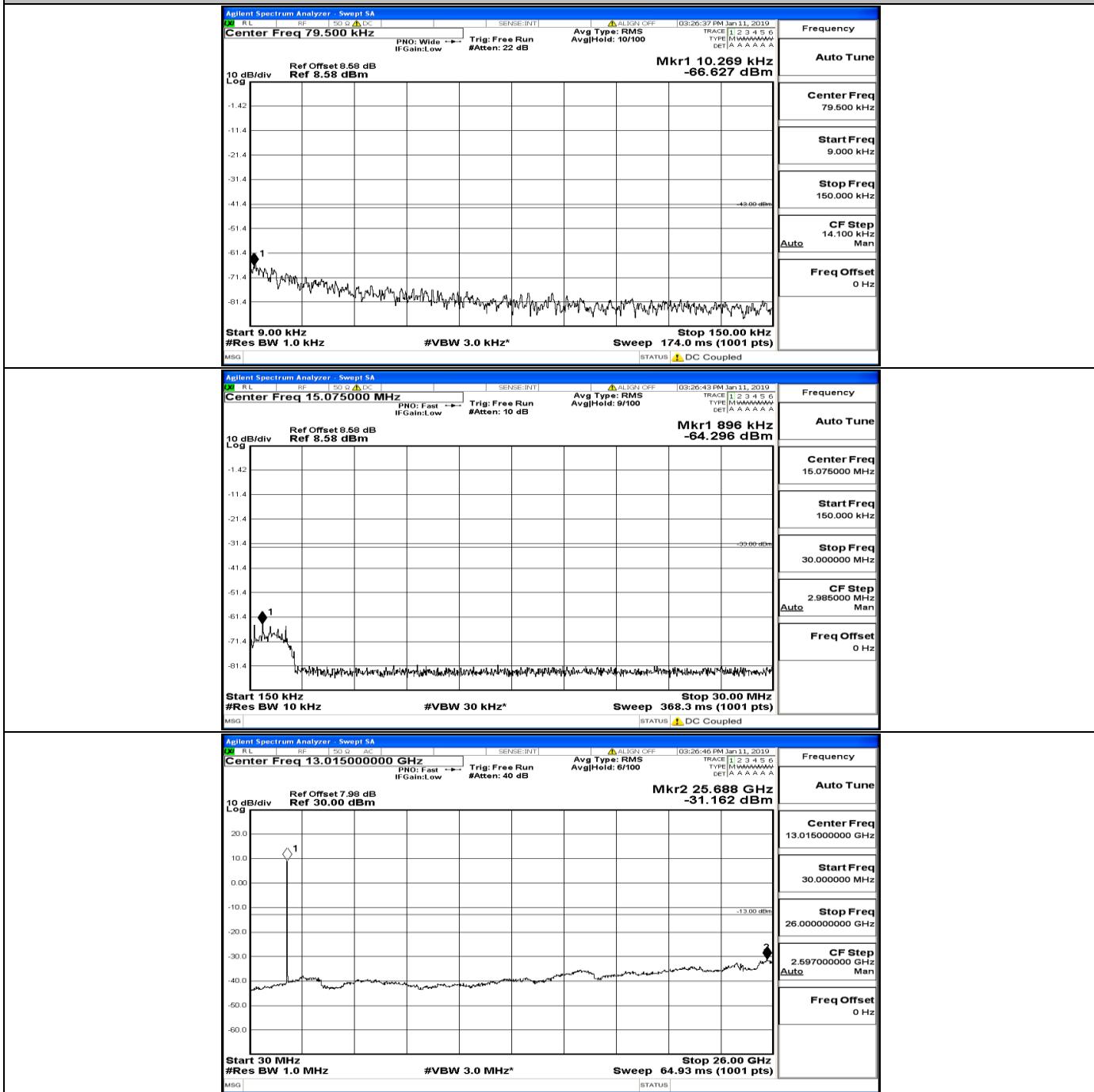




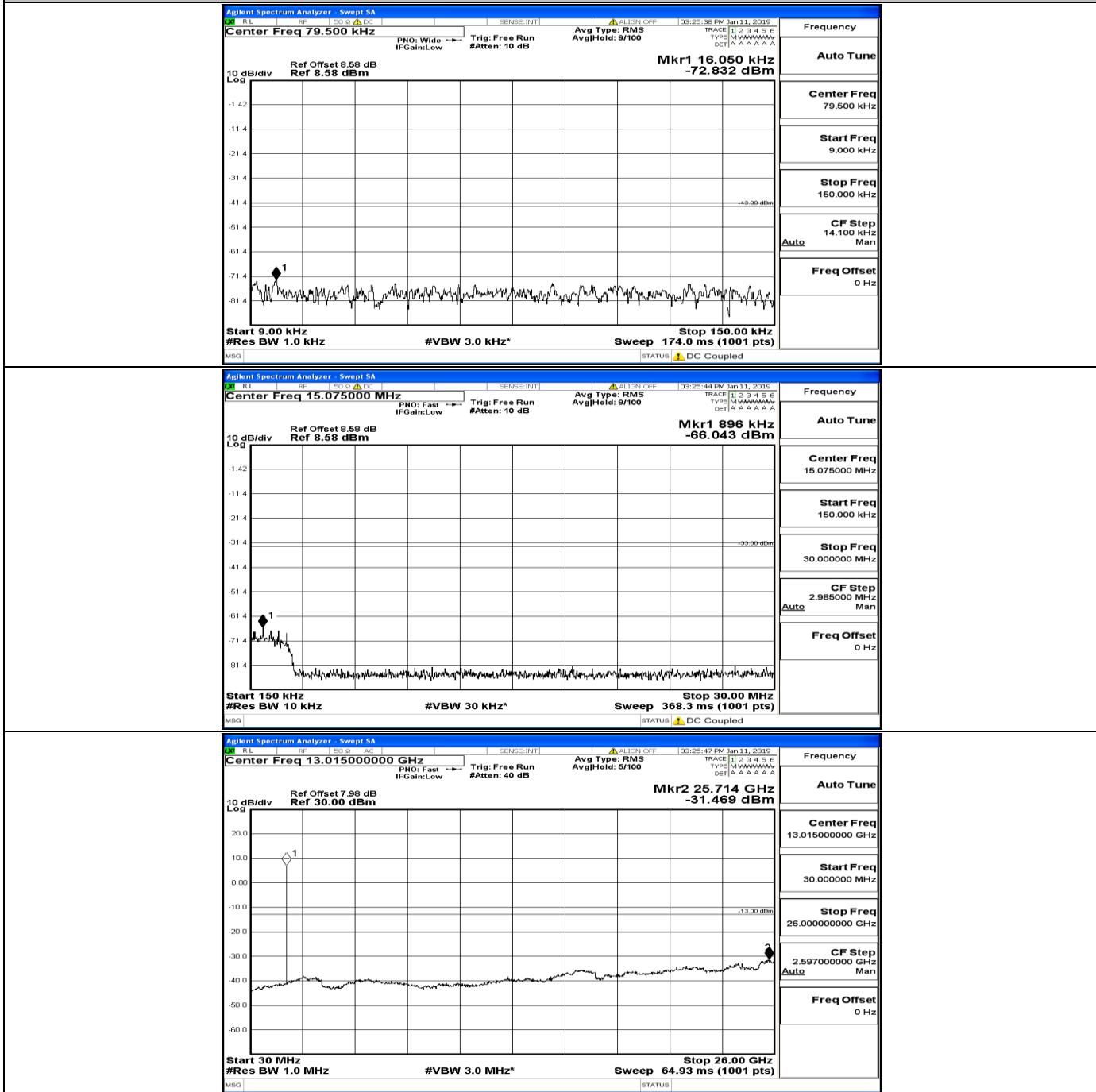
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



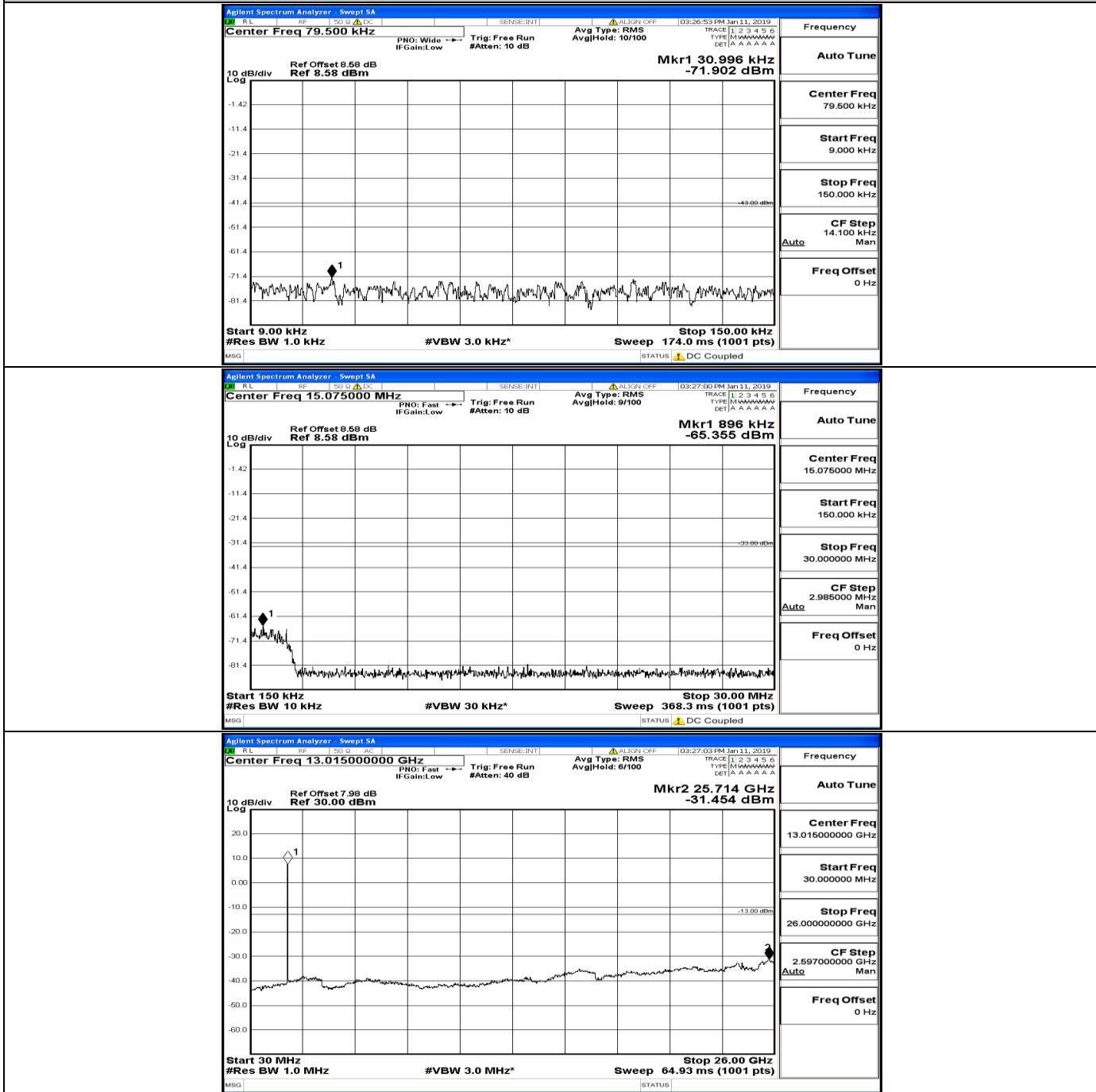
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



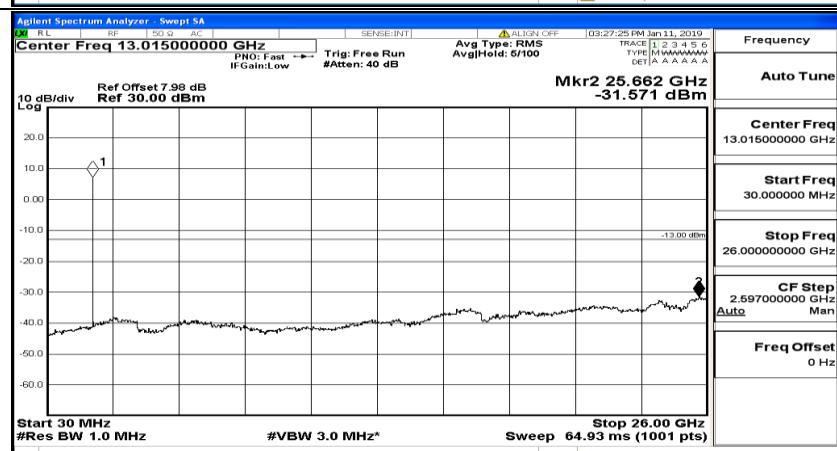
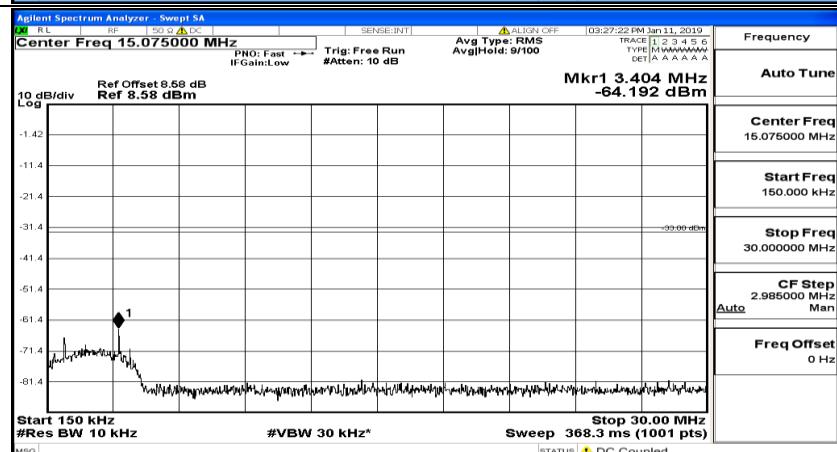
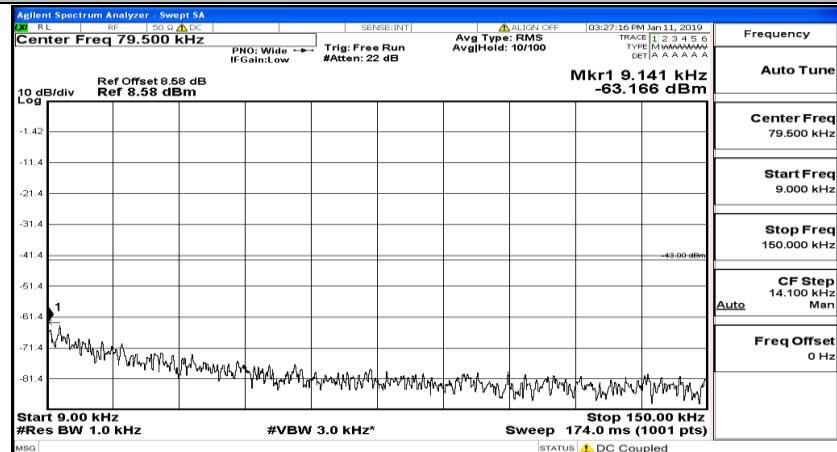
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



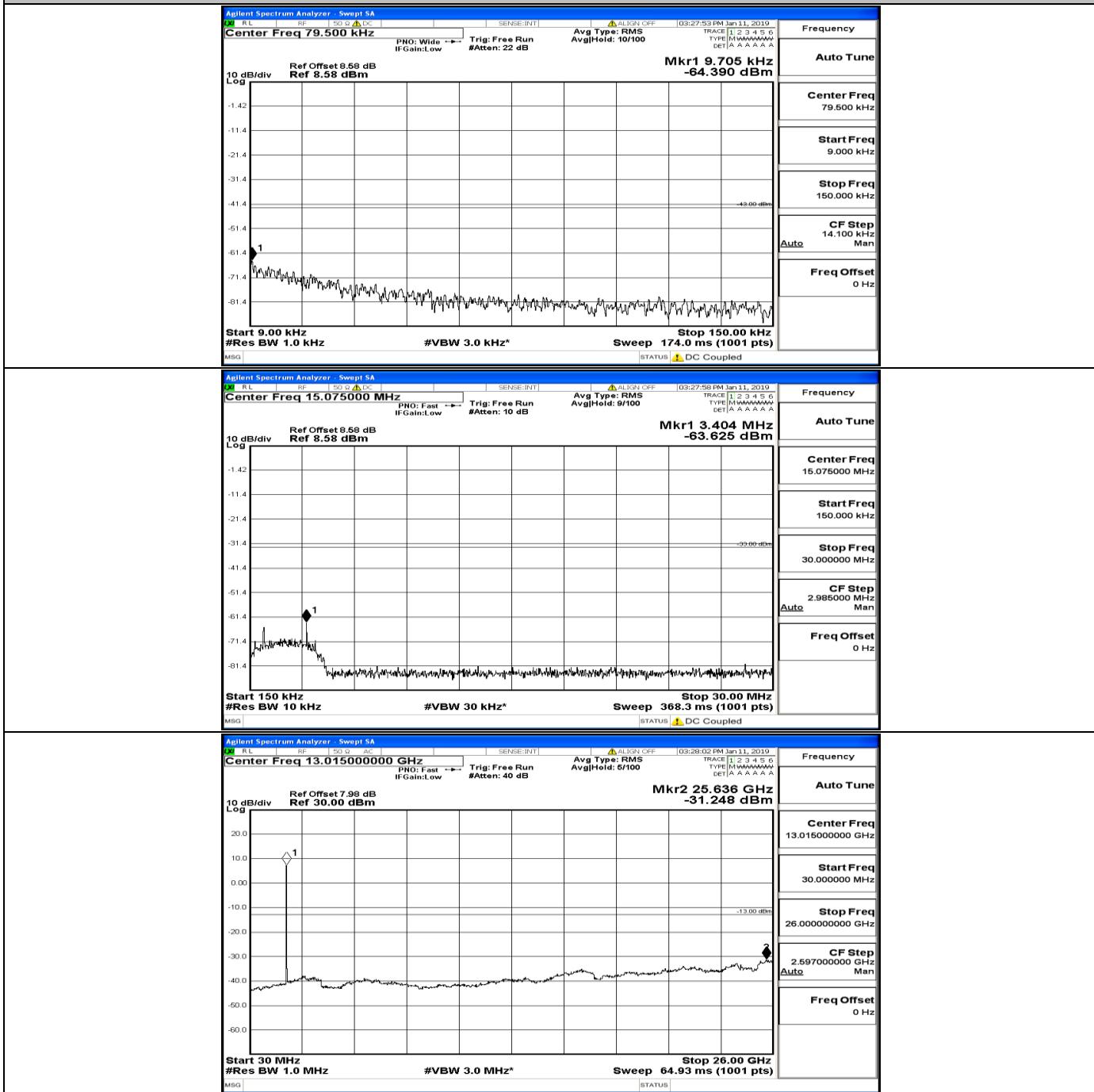
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



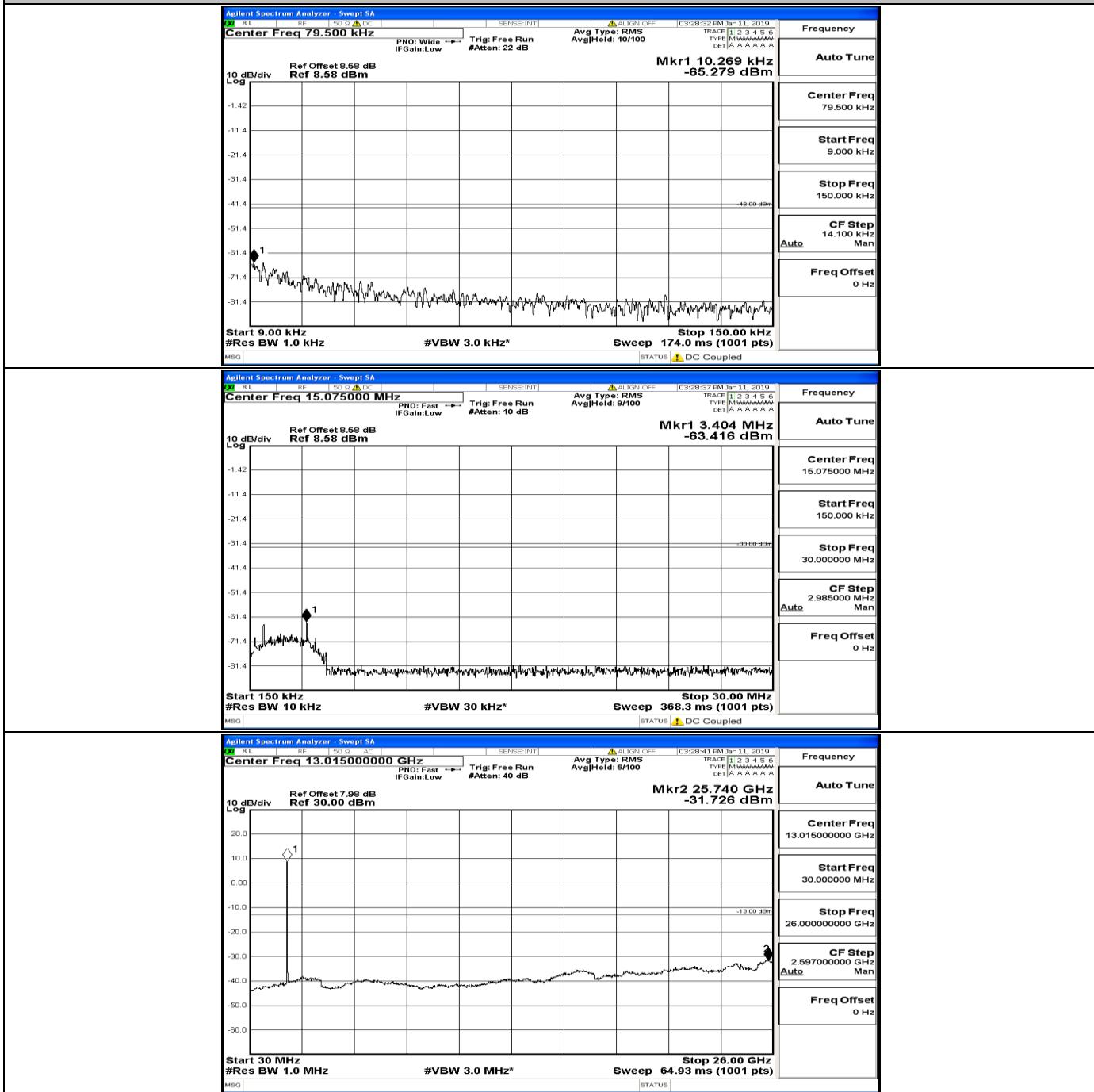
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK

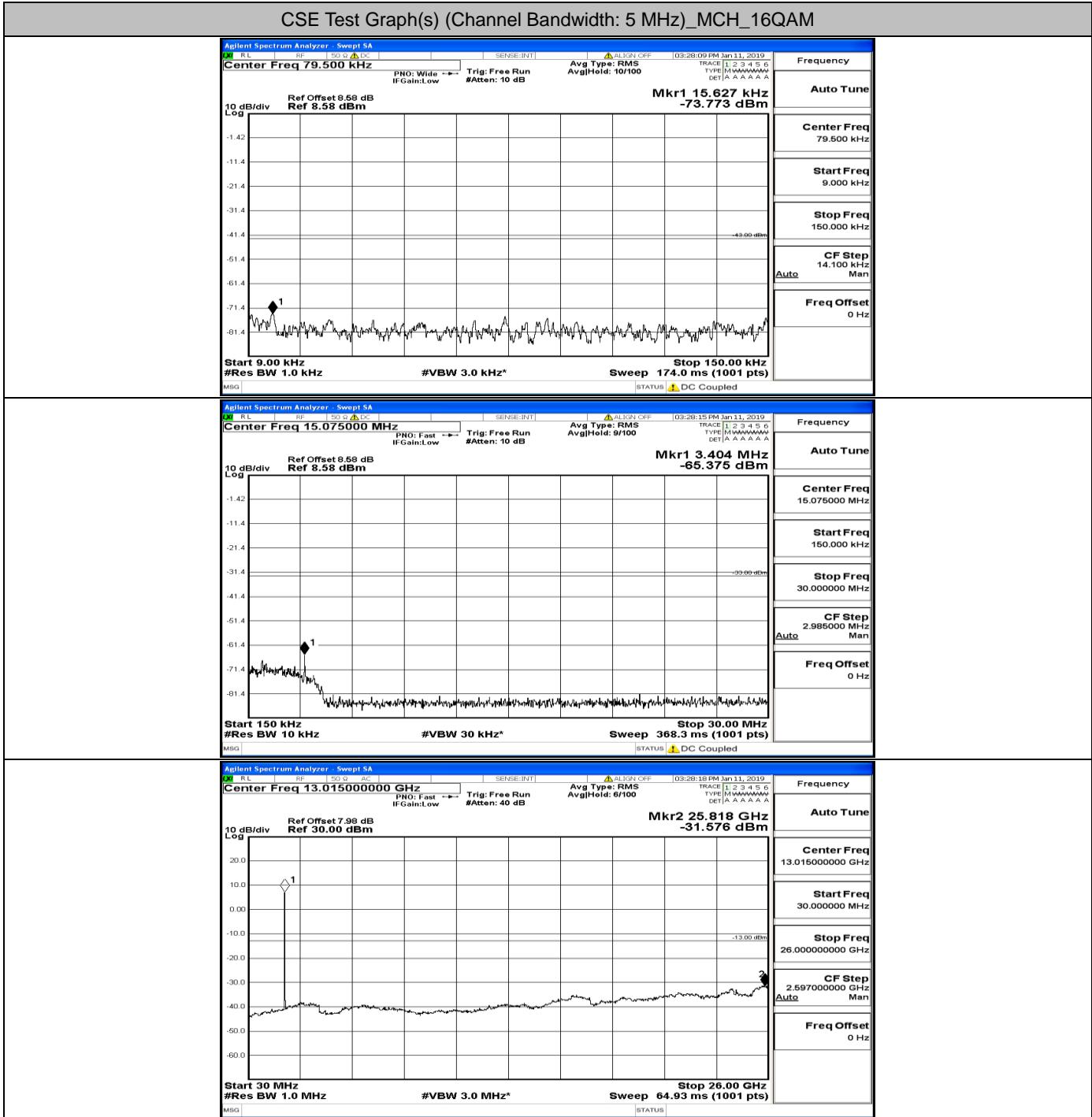


CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK

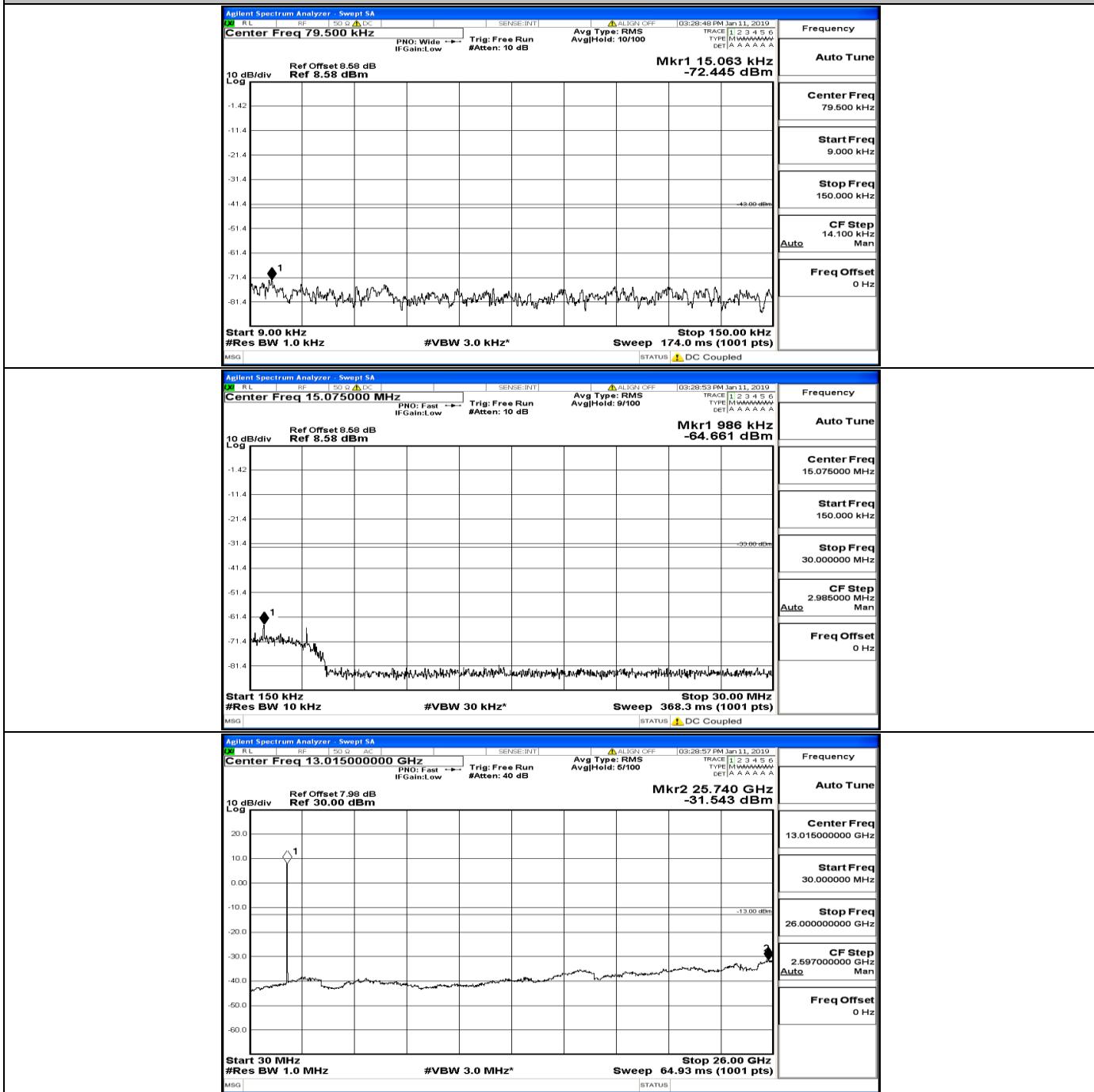


CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM

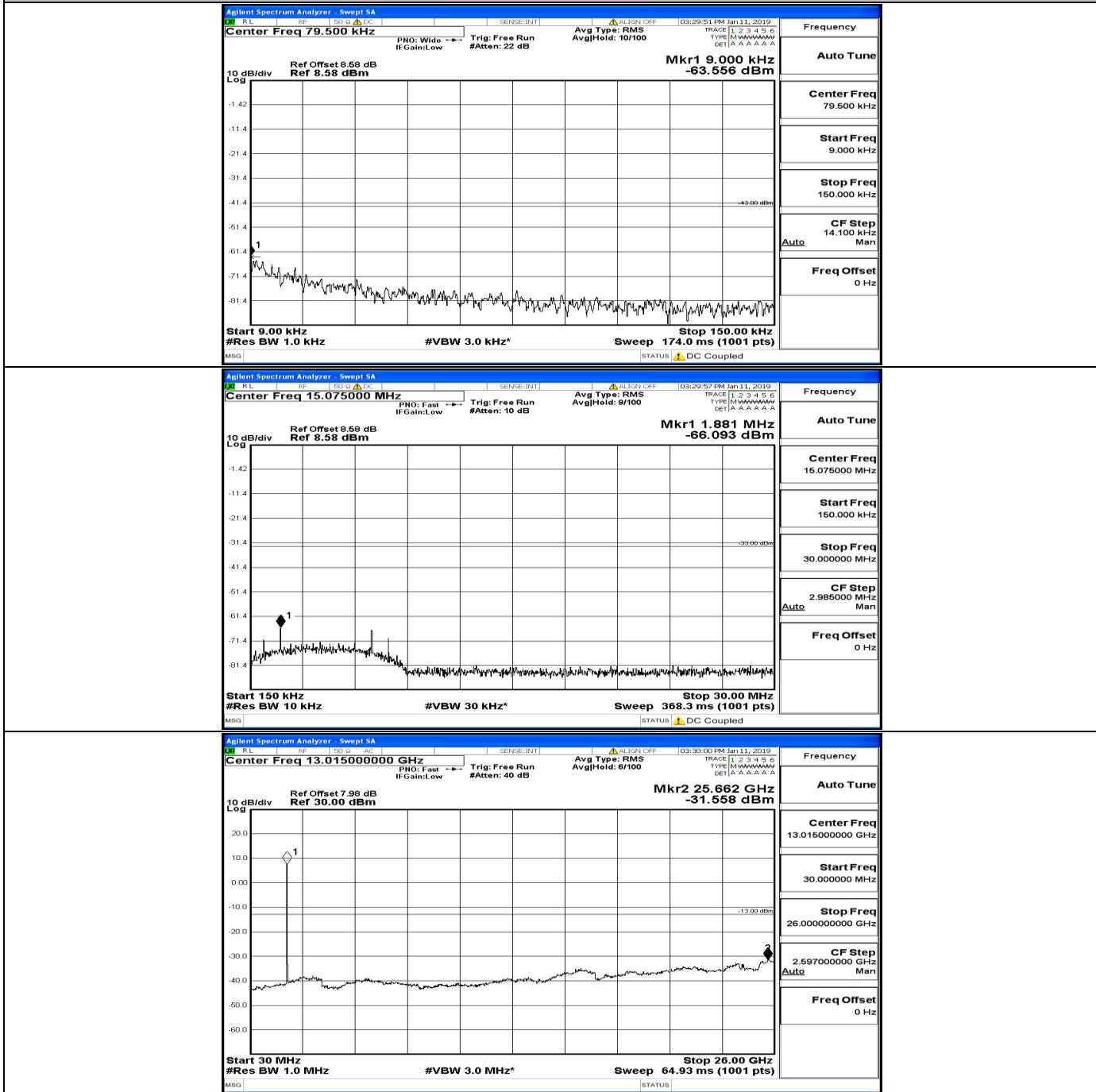




CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM

