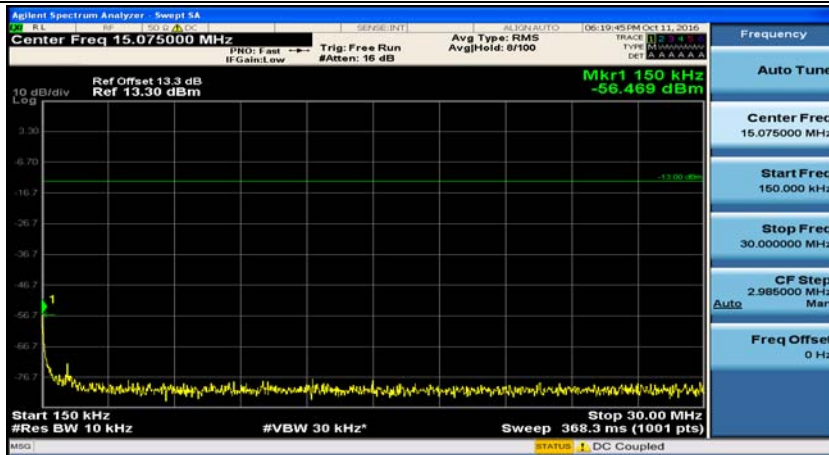
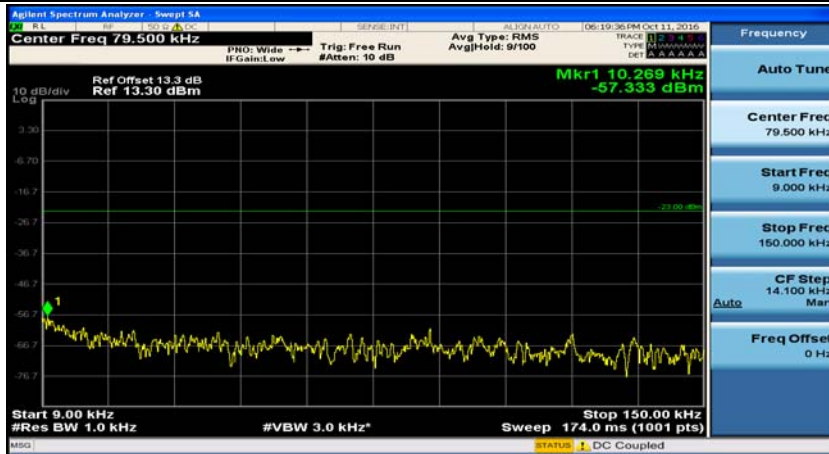
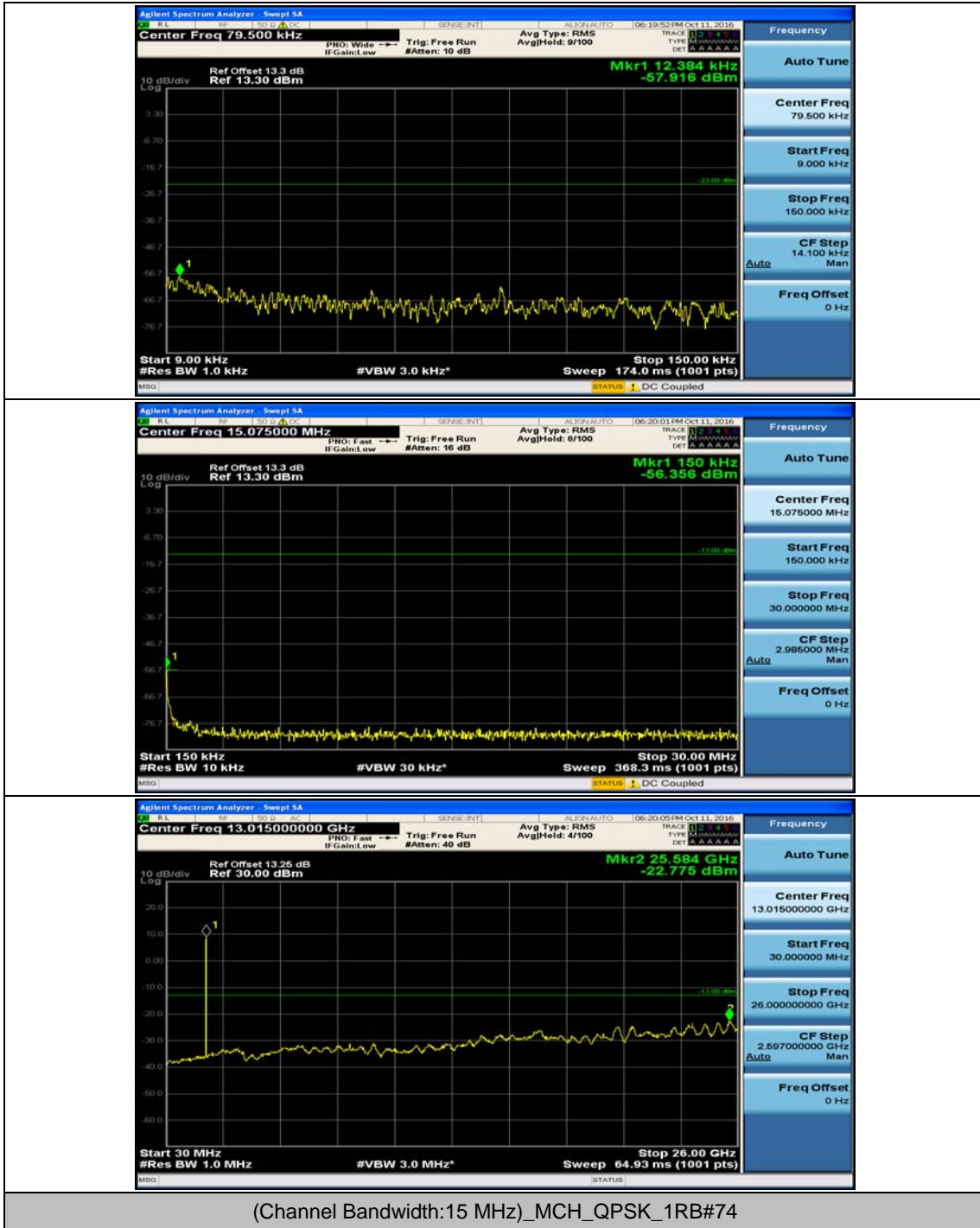
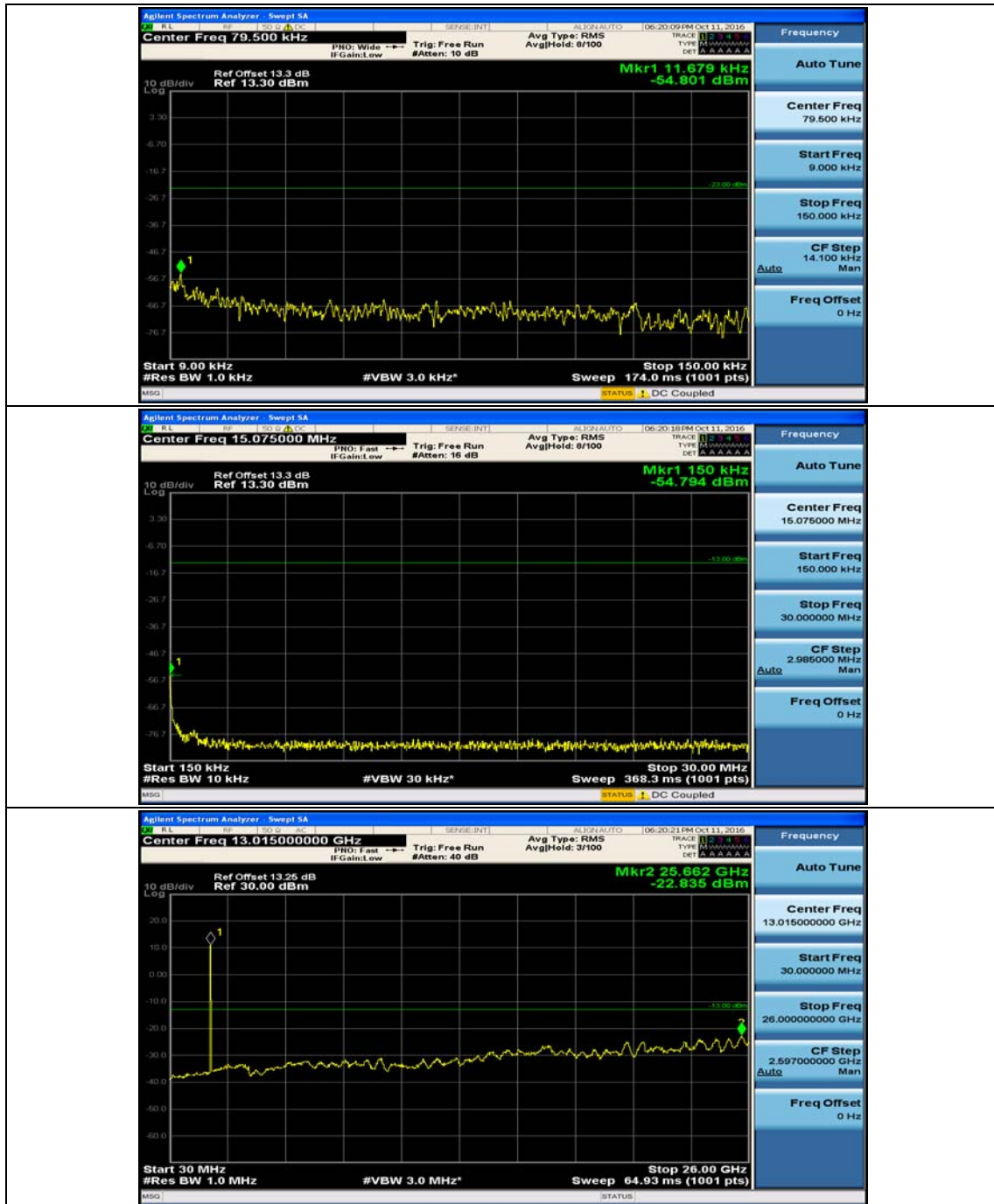


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

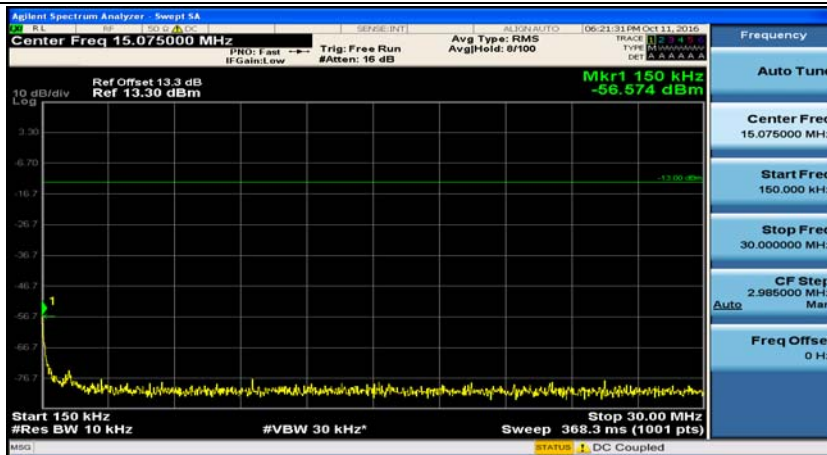


(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#37

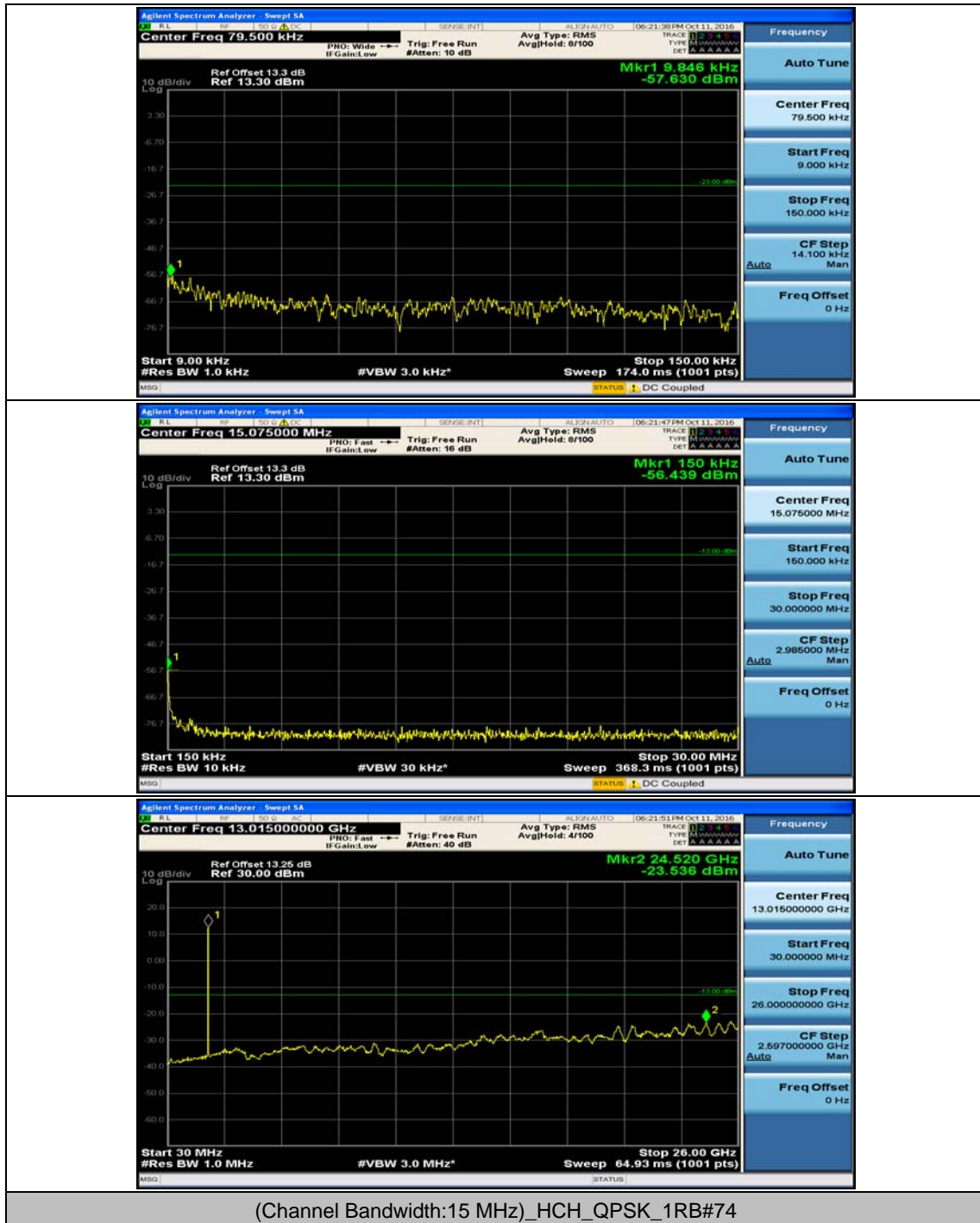


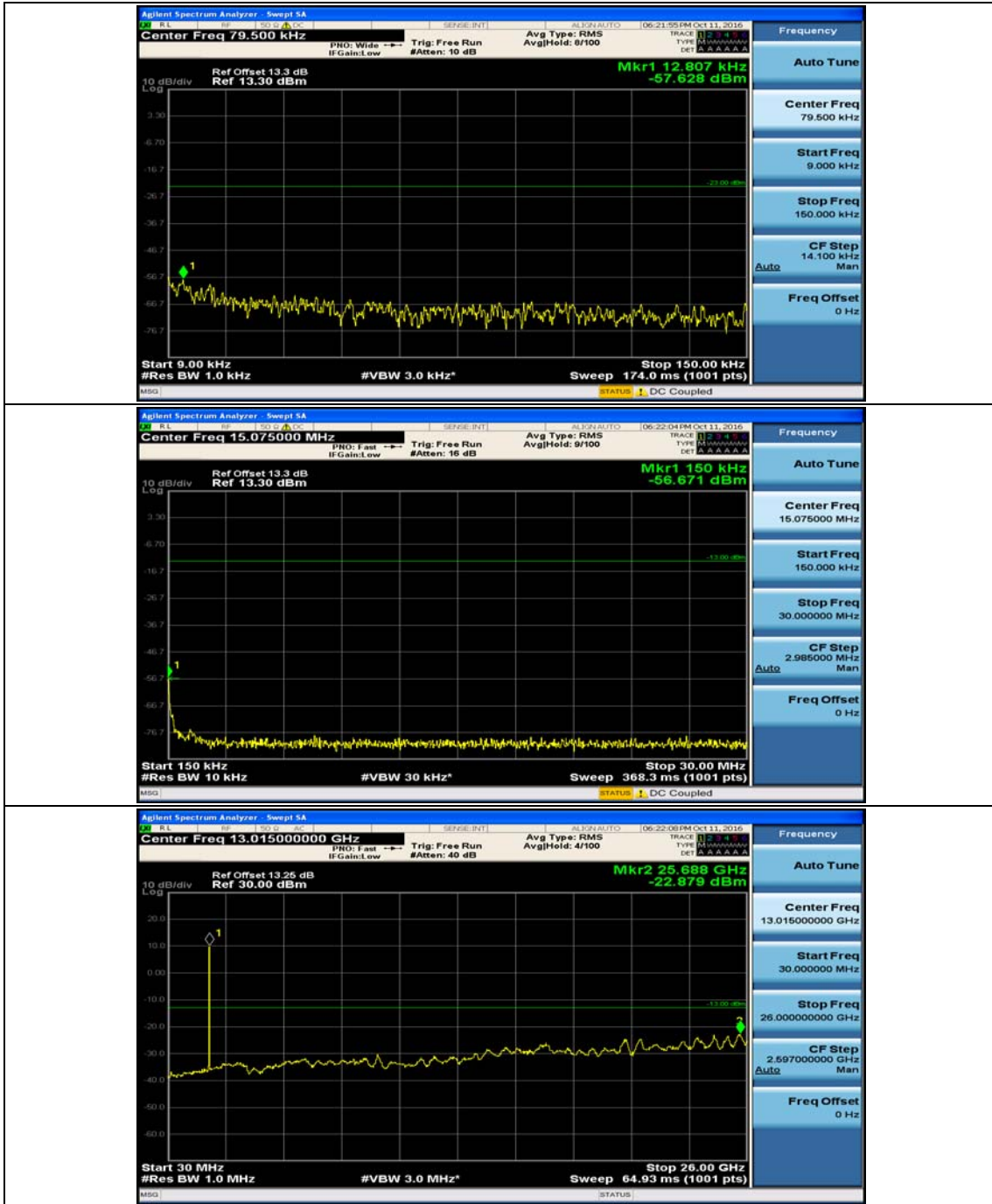


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0

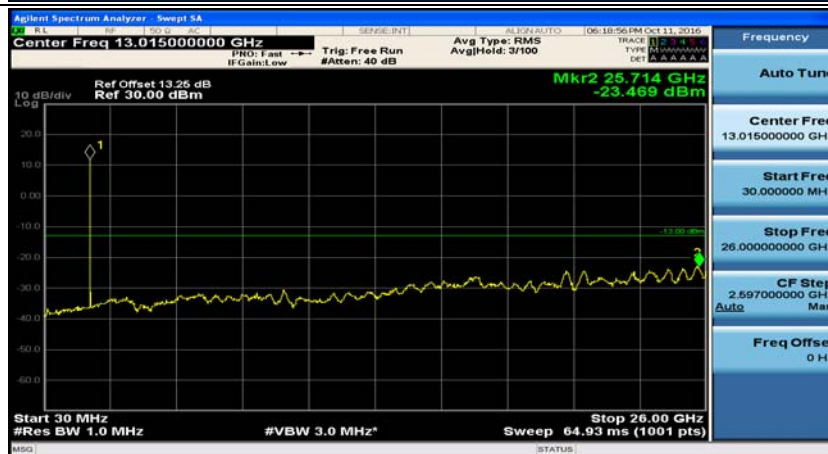
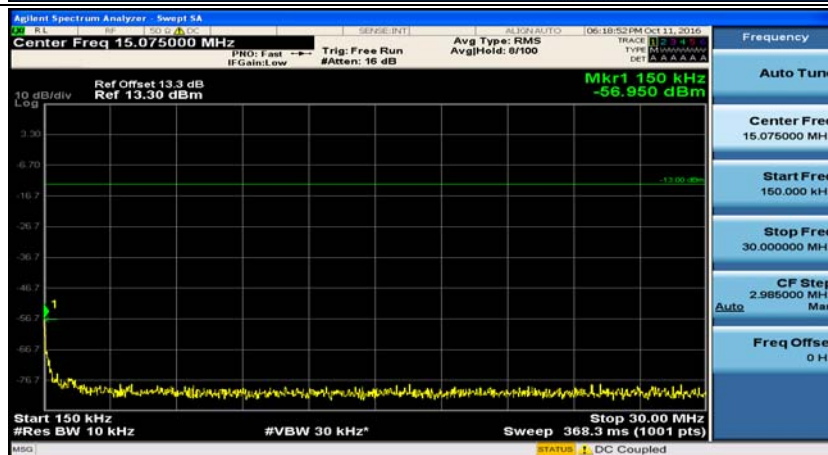
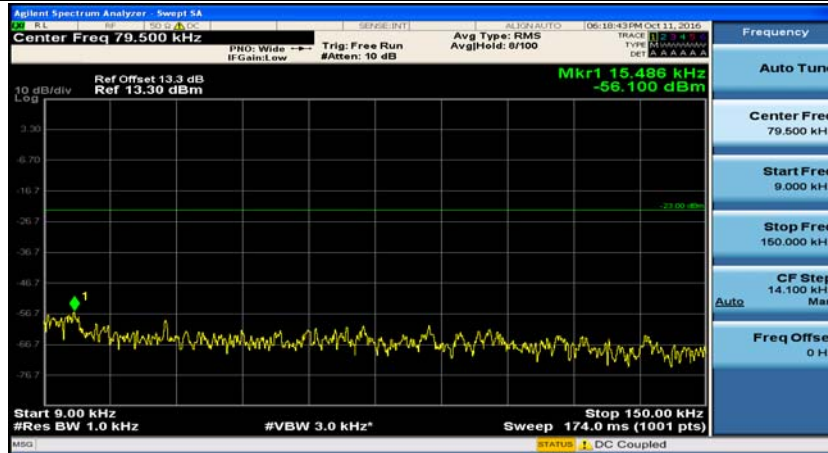


(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37

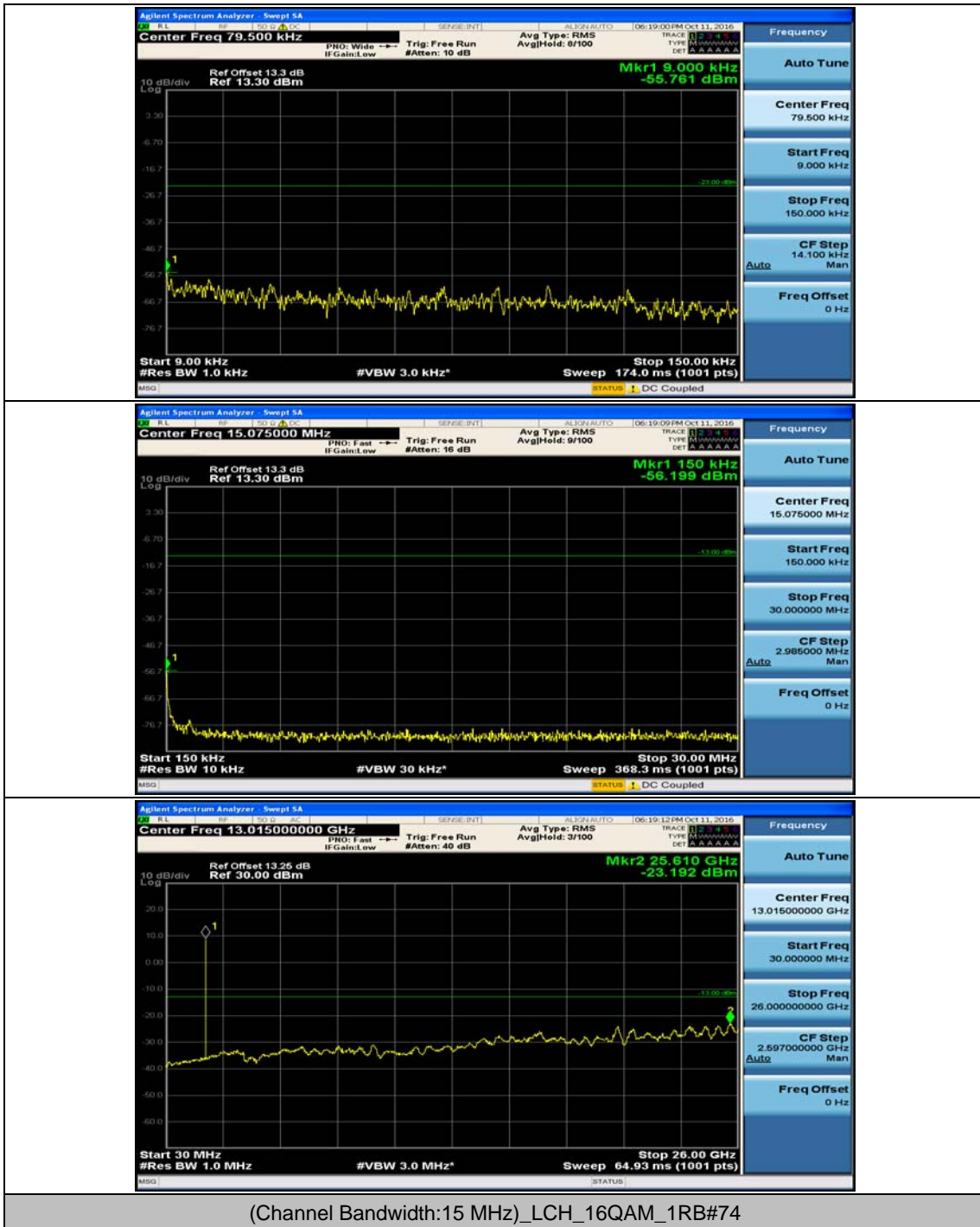


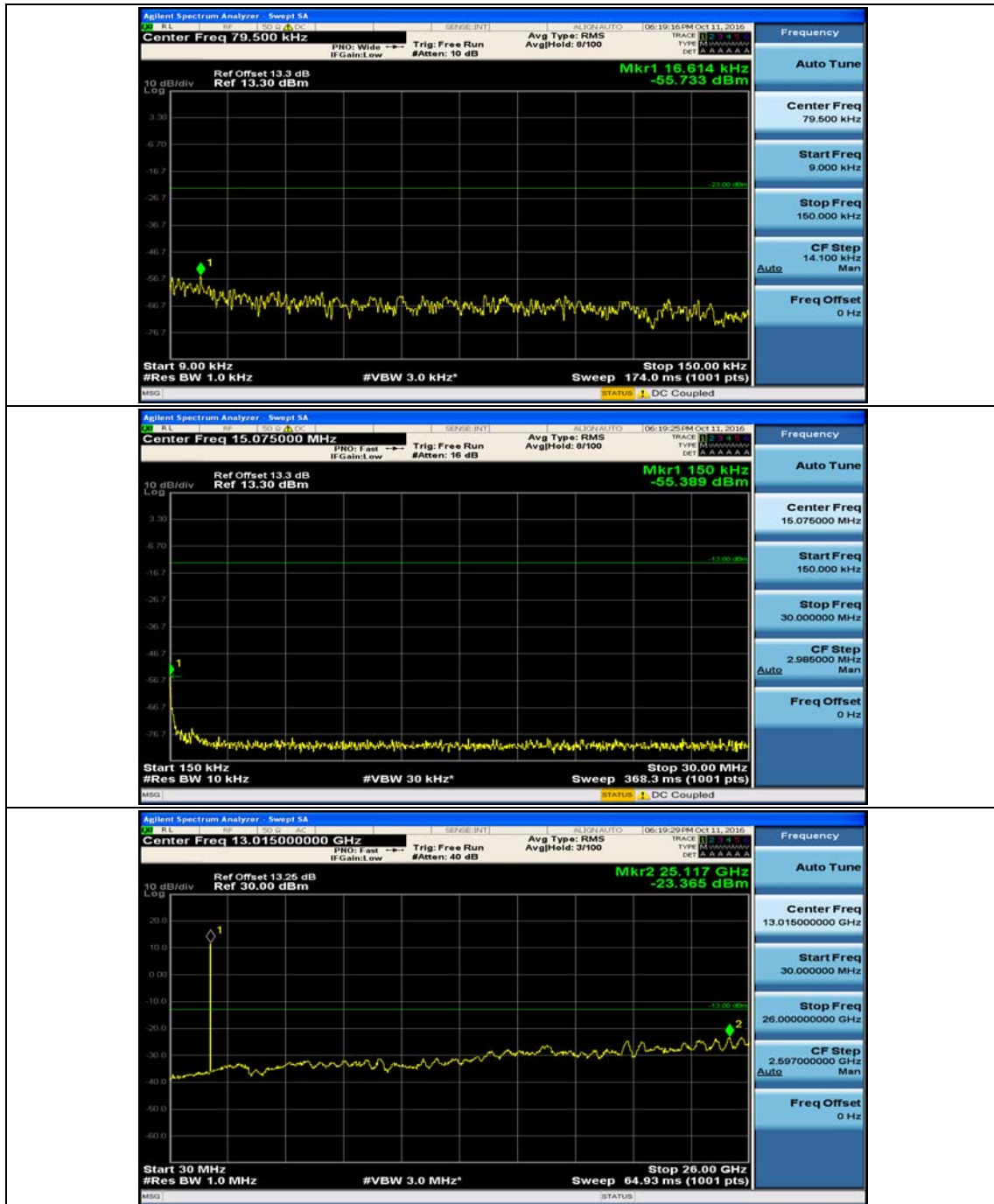


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#0

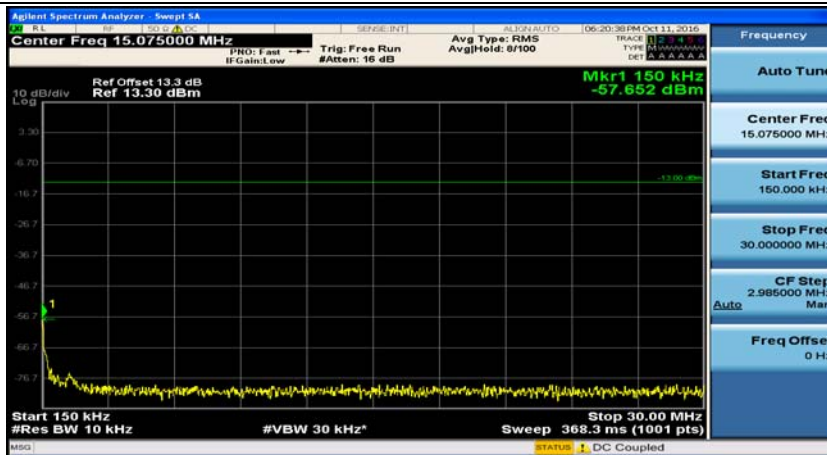
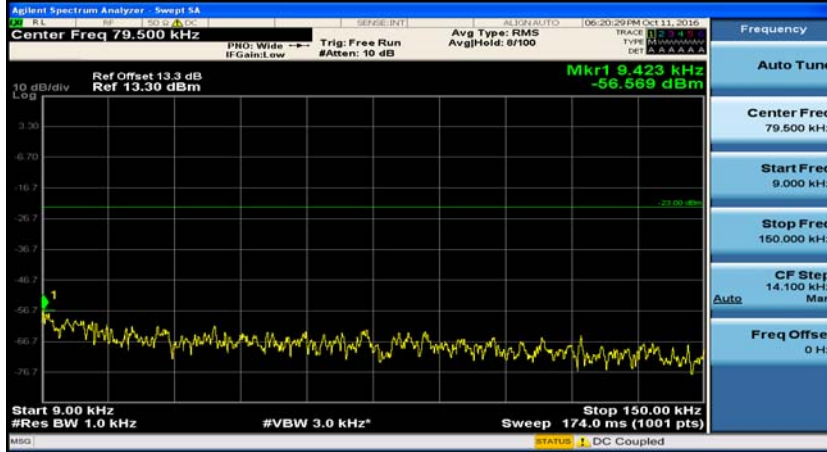


(Channel Bandwidth:15 MHz)_LCH_16QAM_1RB#37

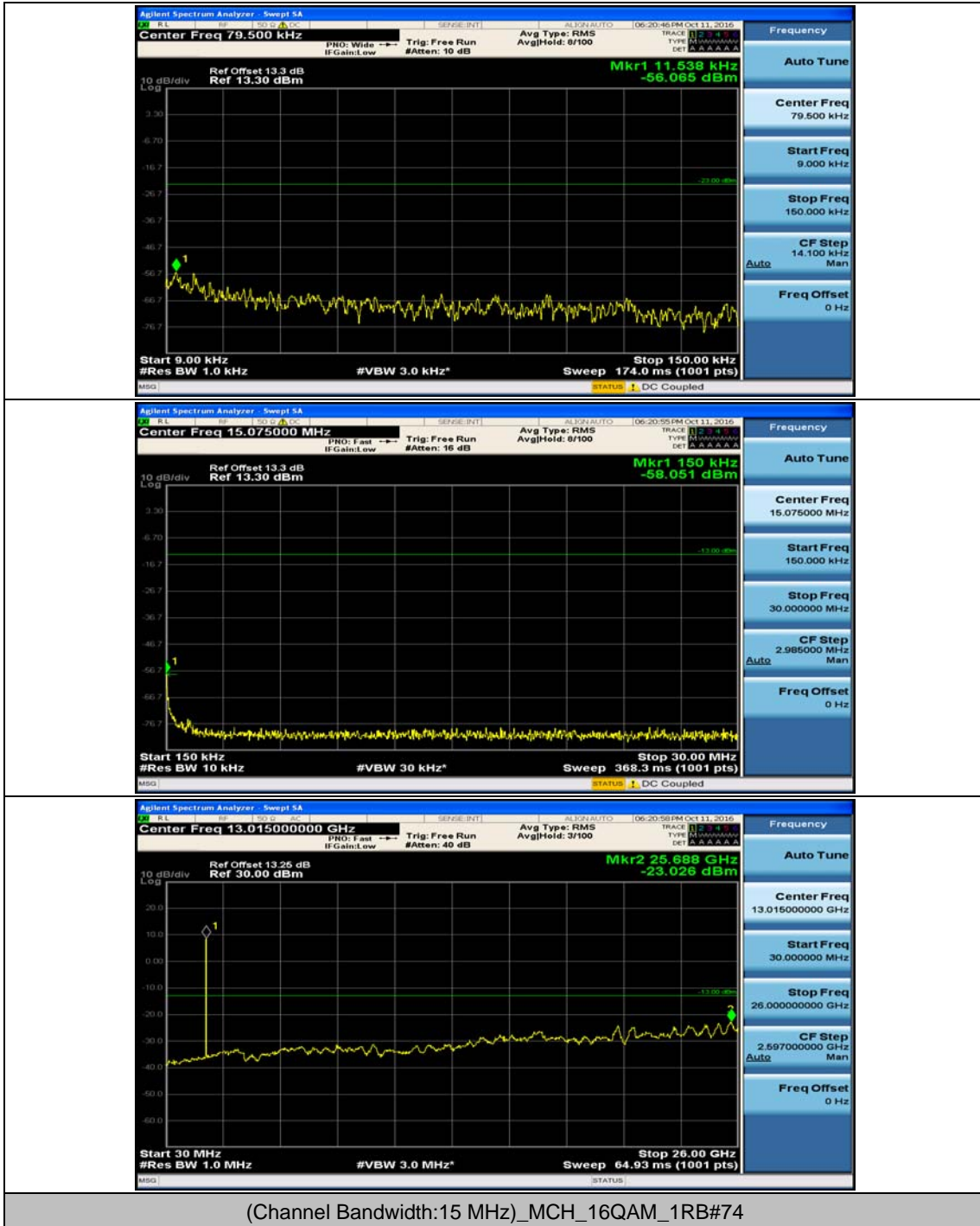


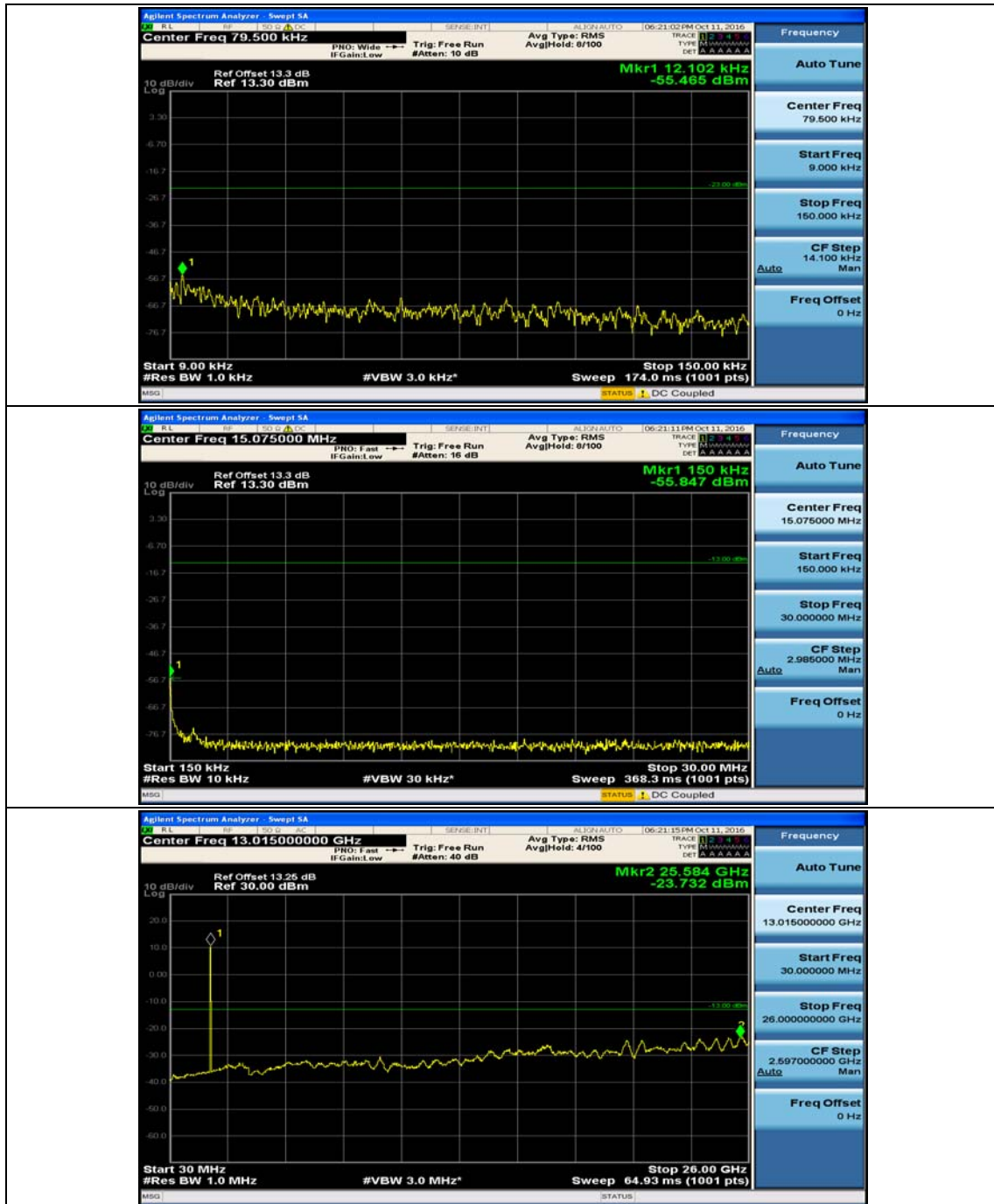


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

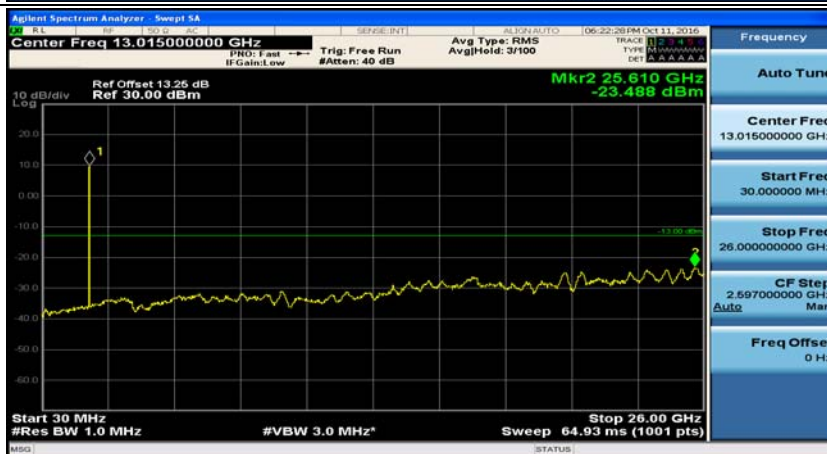
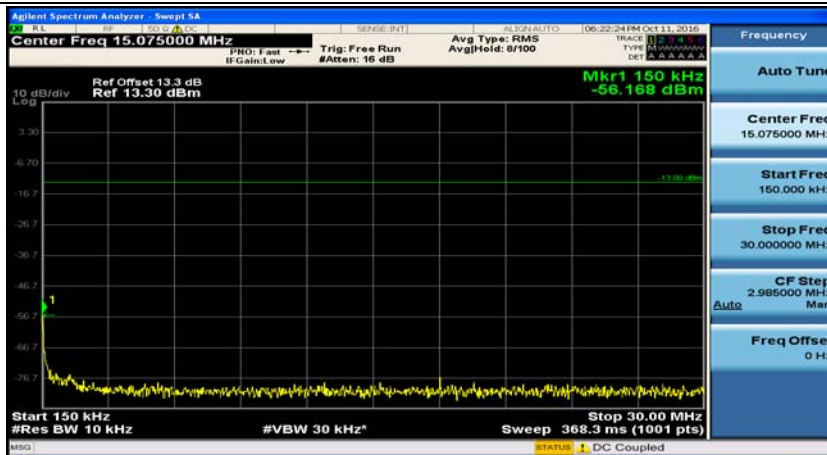


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

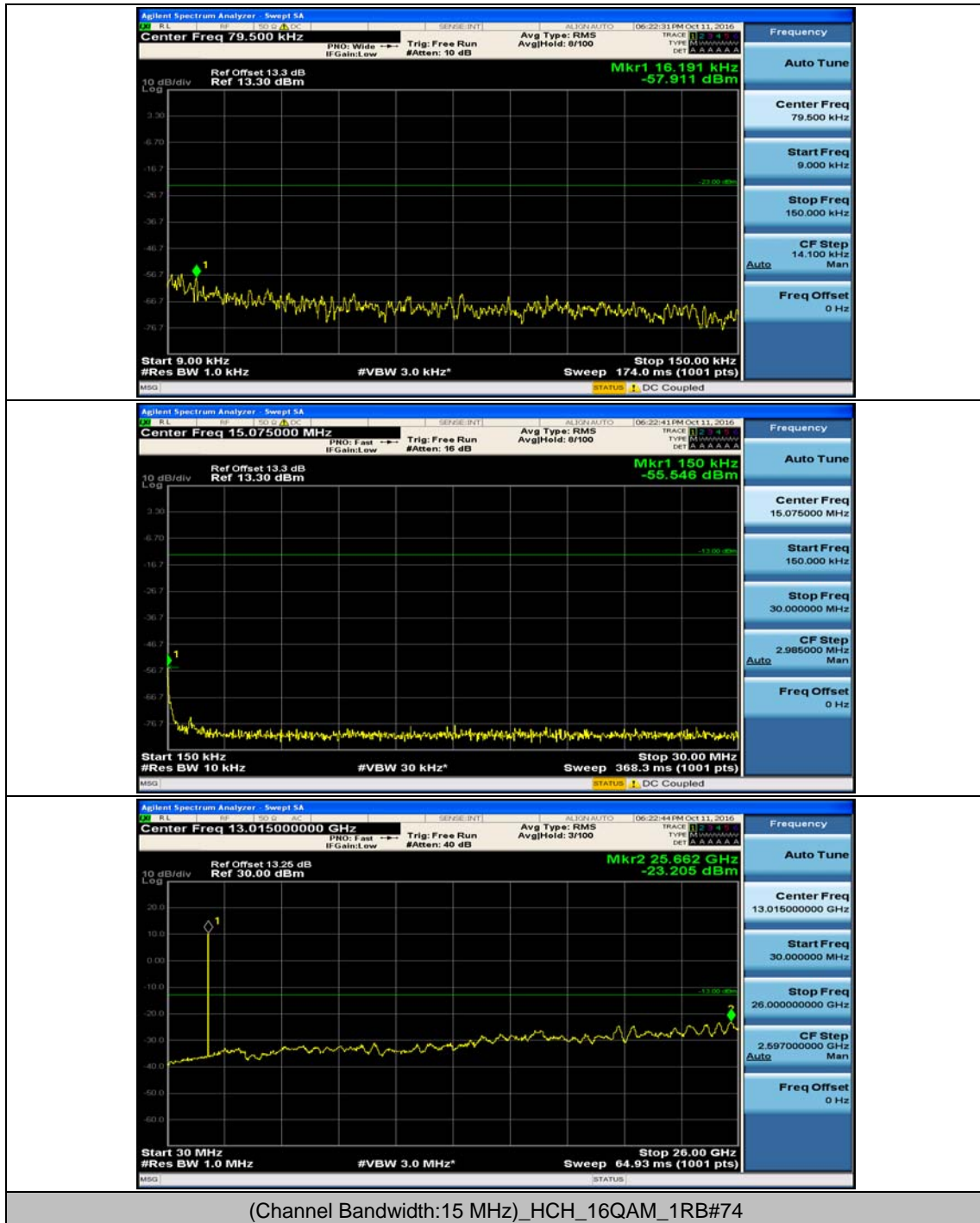


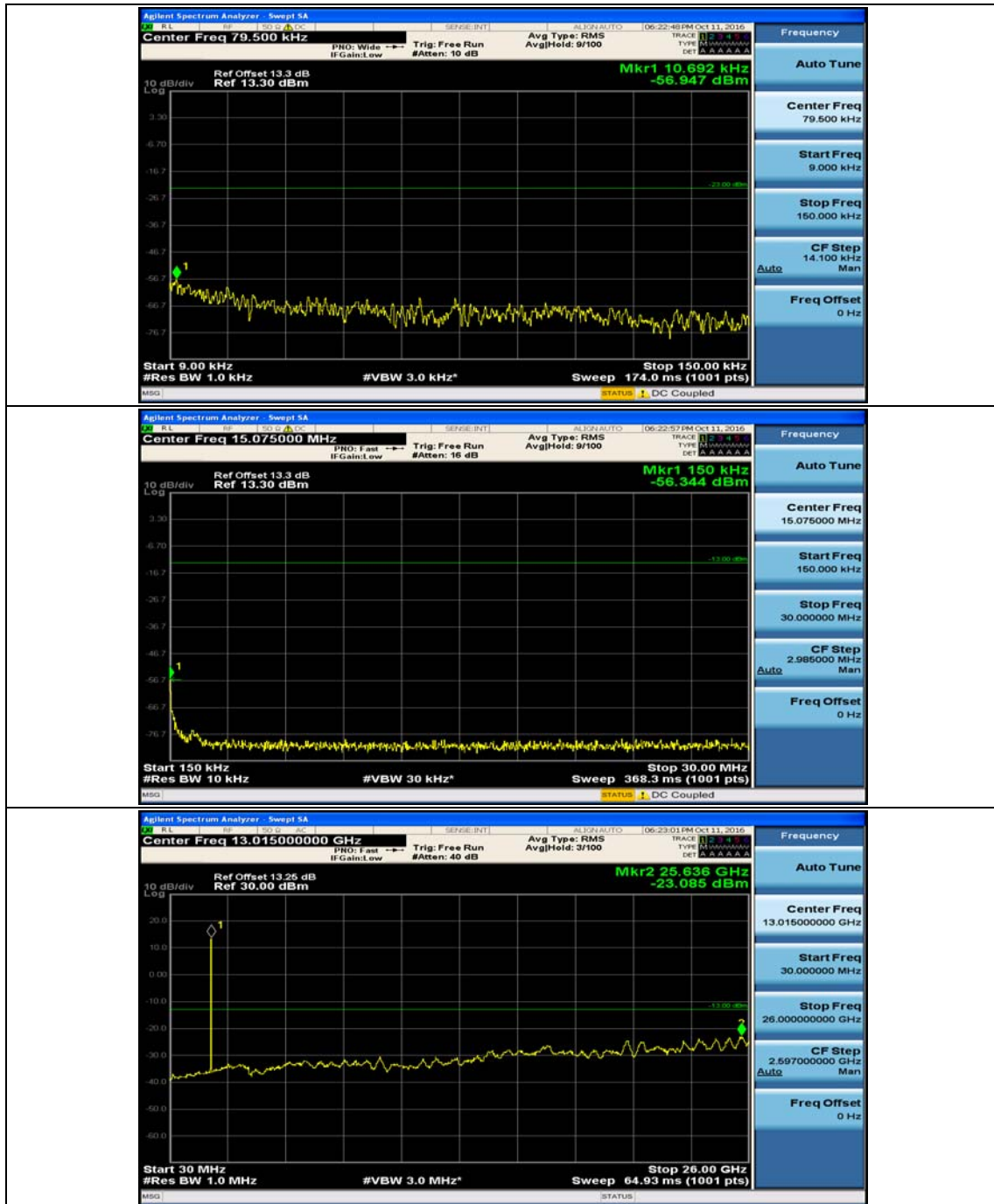


(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#0

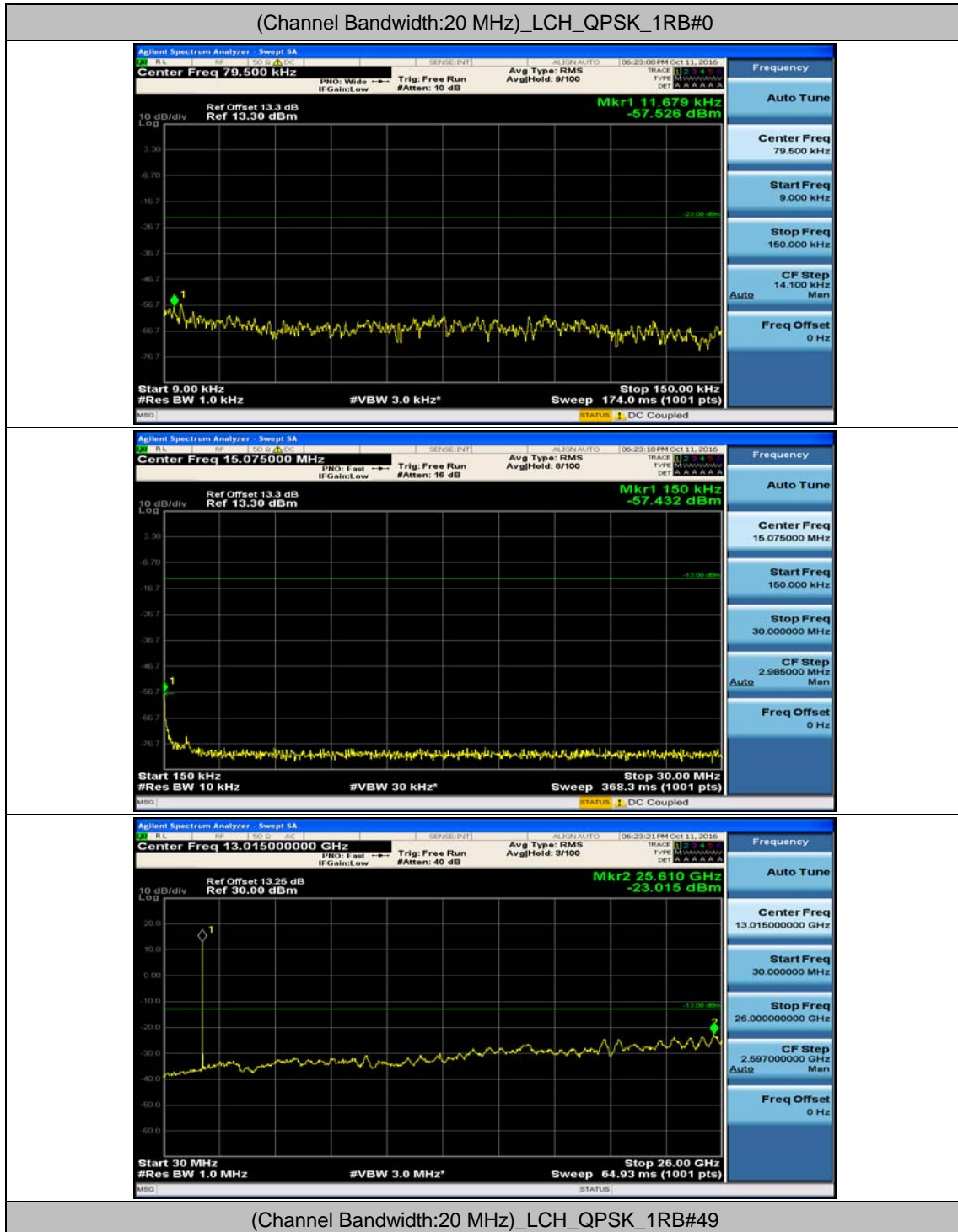


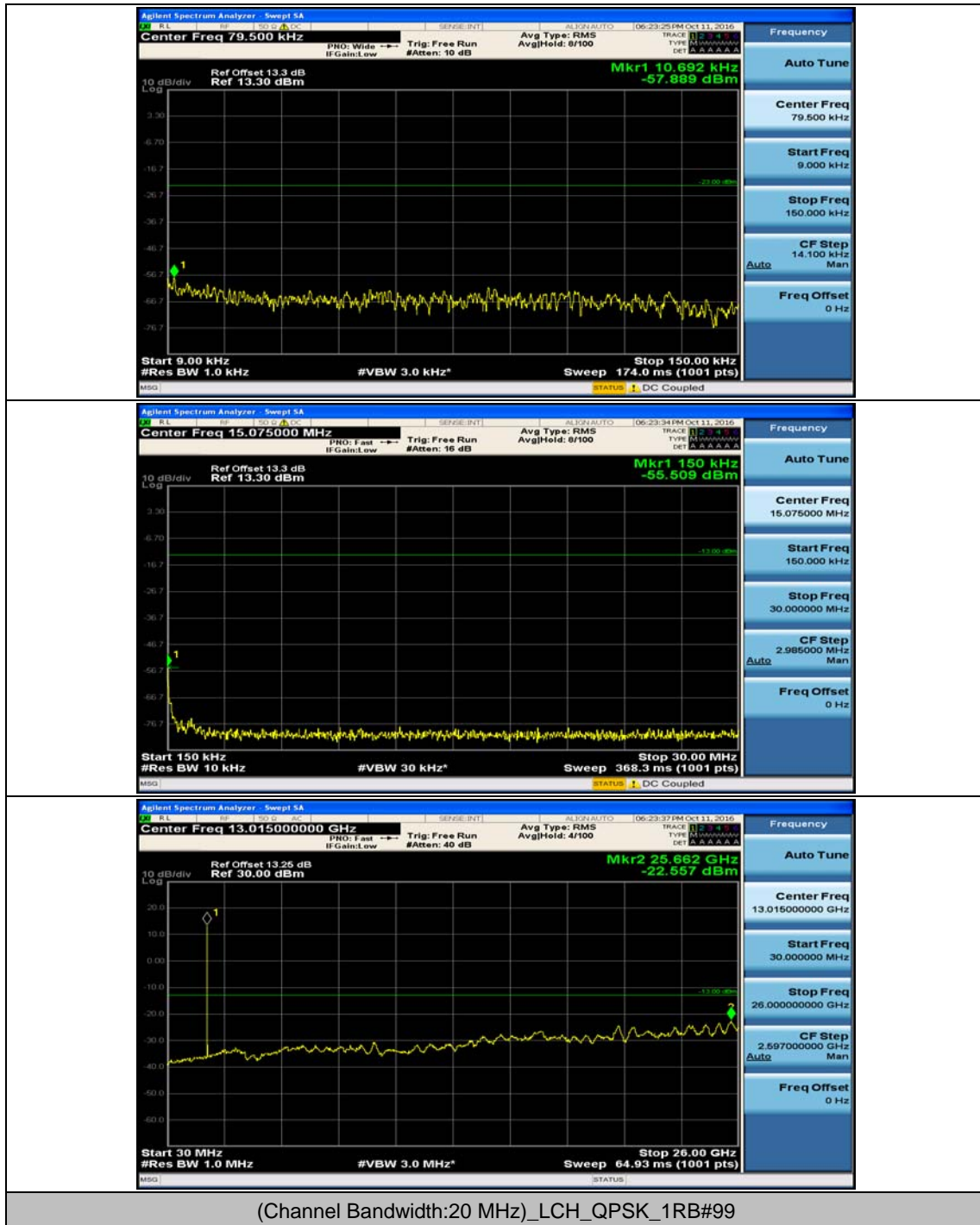
(Channel Bandwidth:15 MHz)_HCH_16QAM_1RB#37

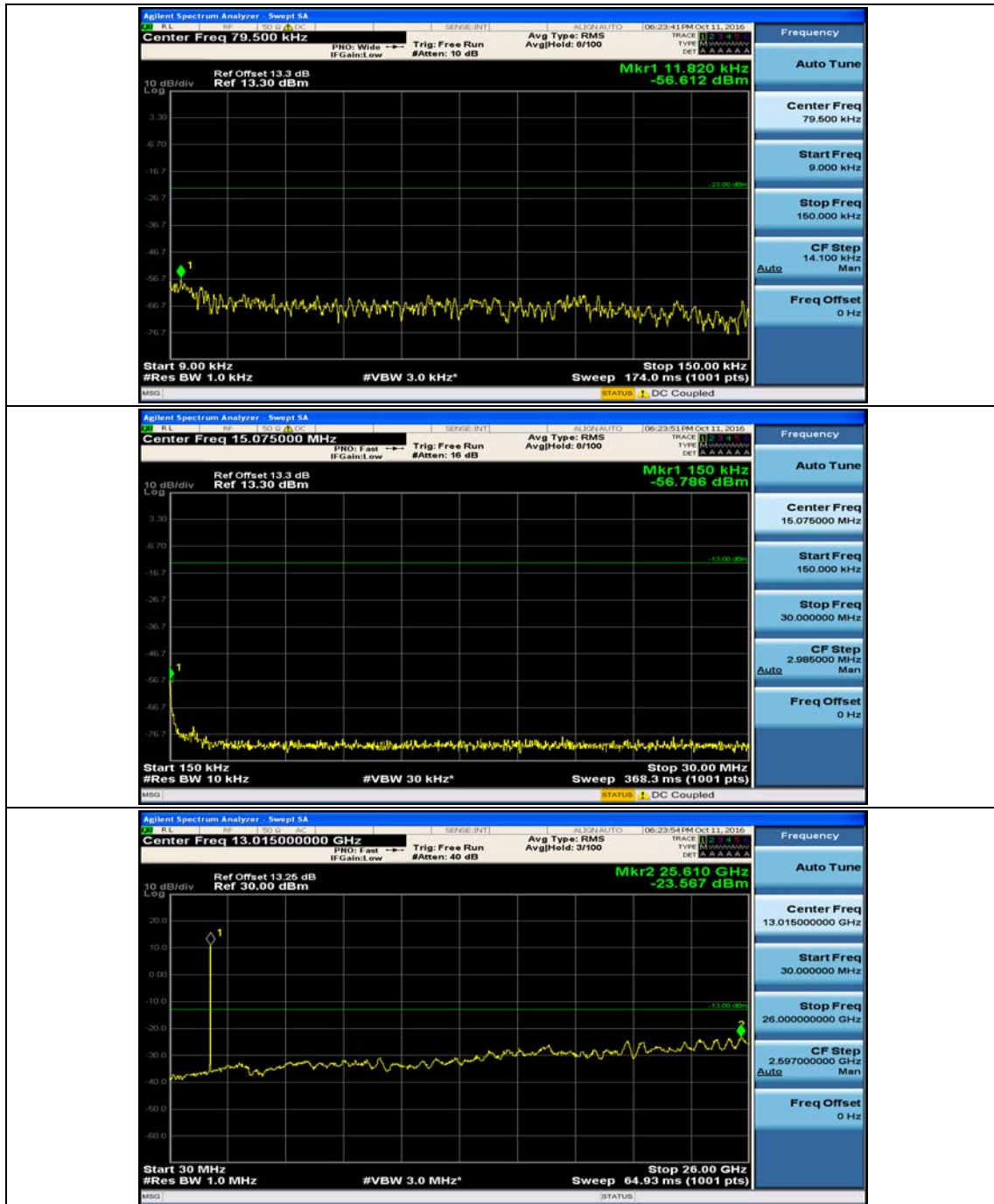




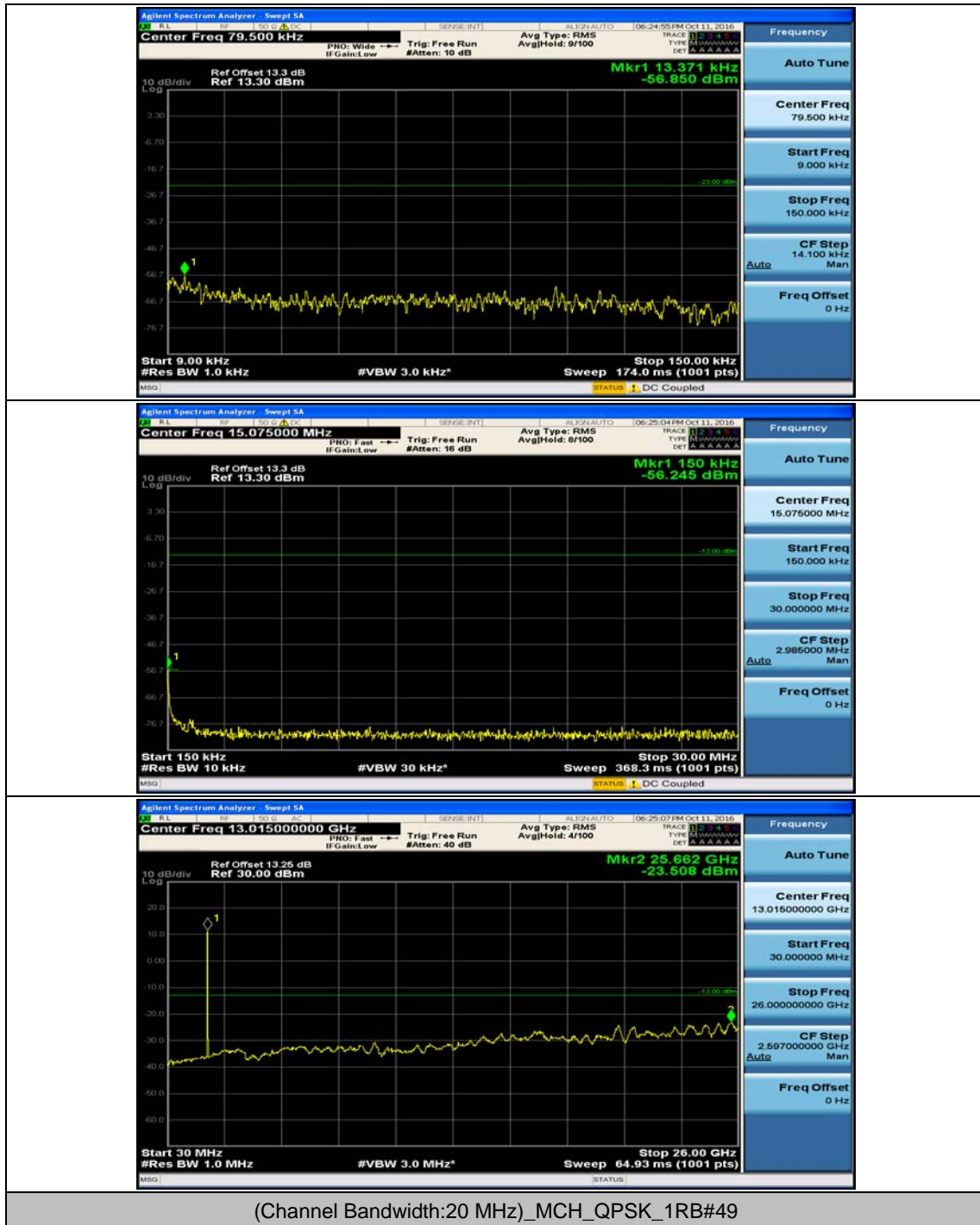
Channel Bandwidth: 20 MHz

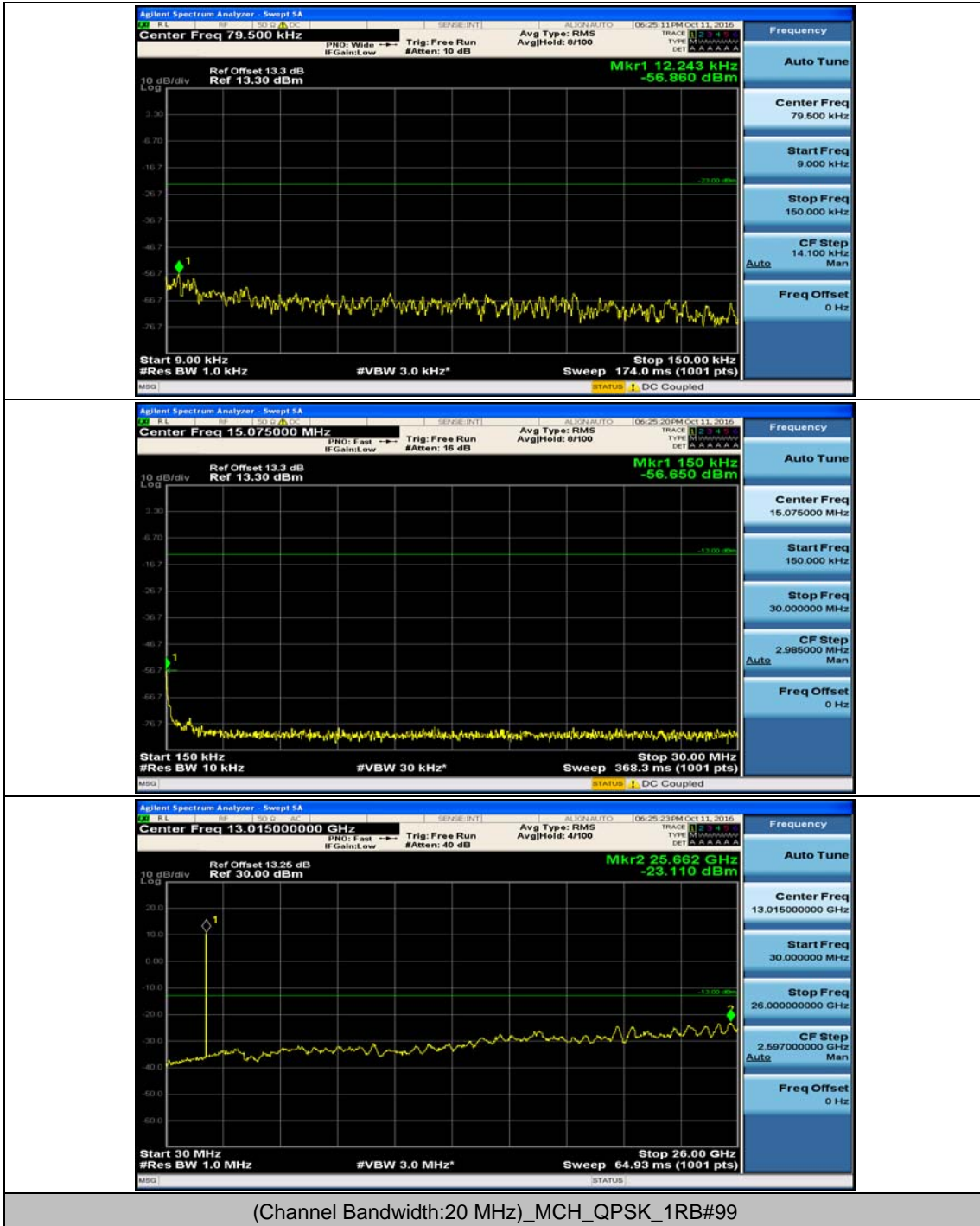


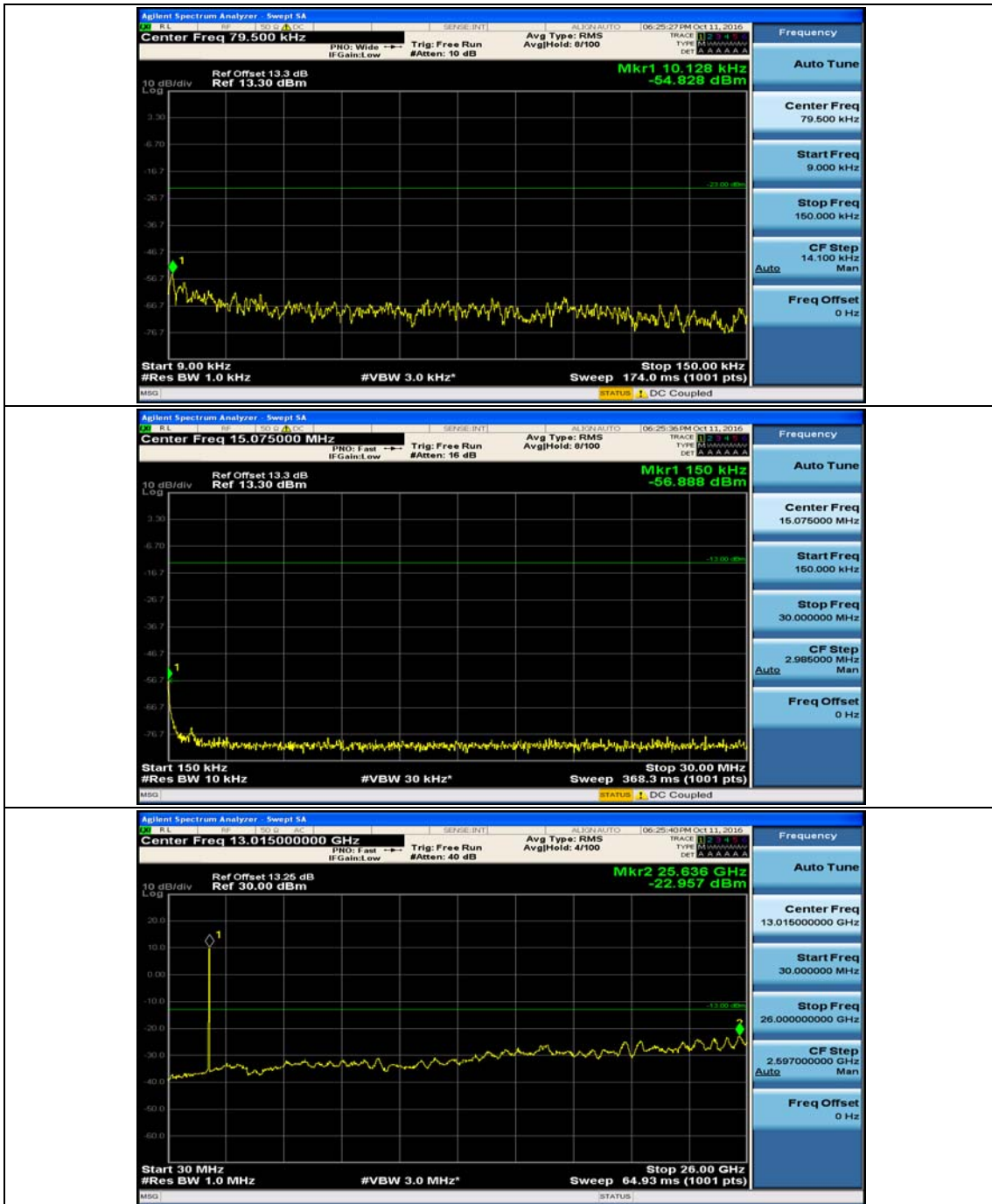




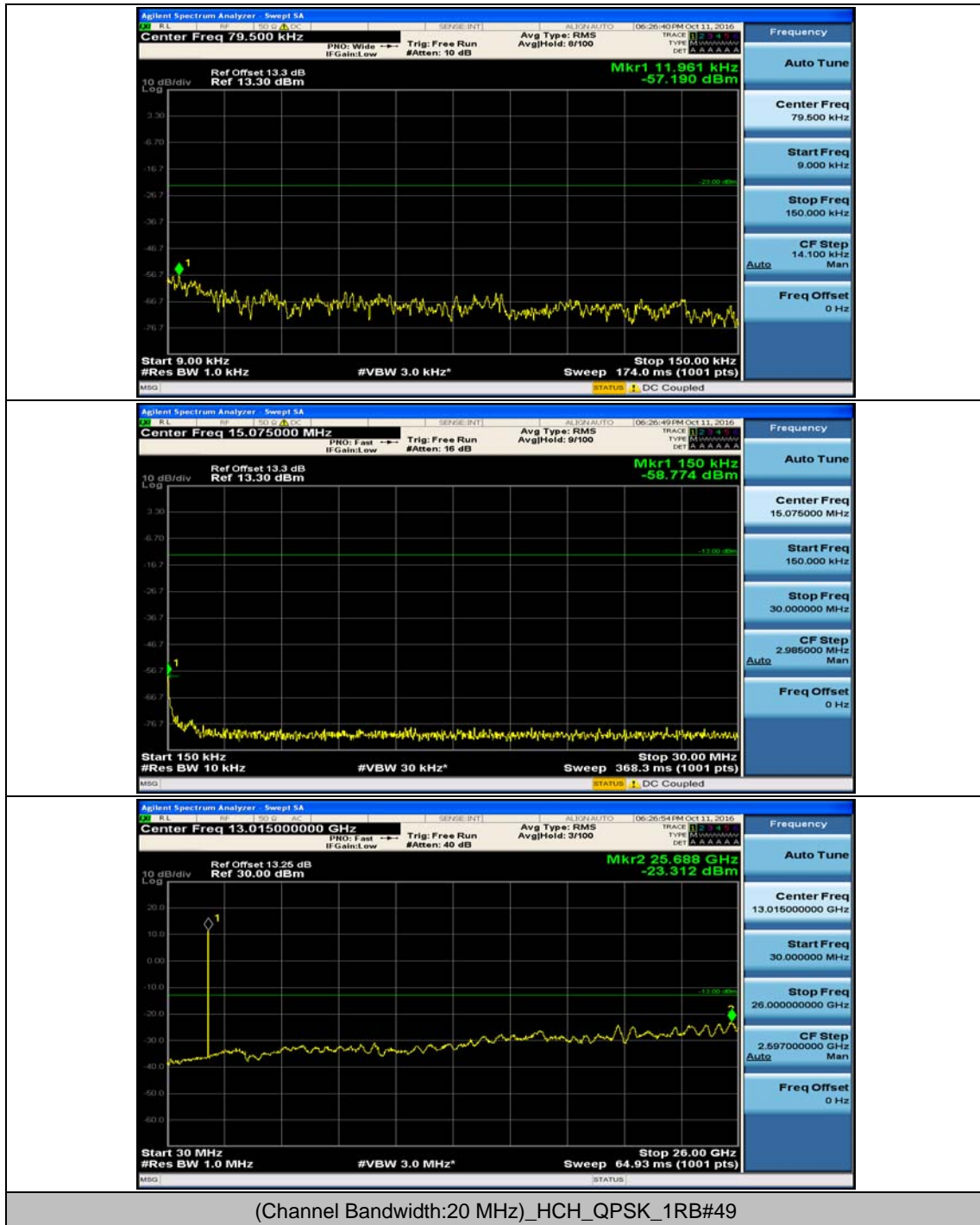
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

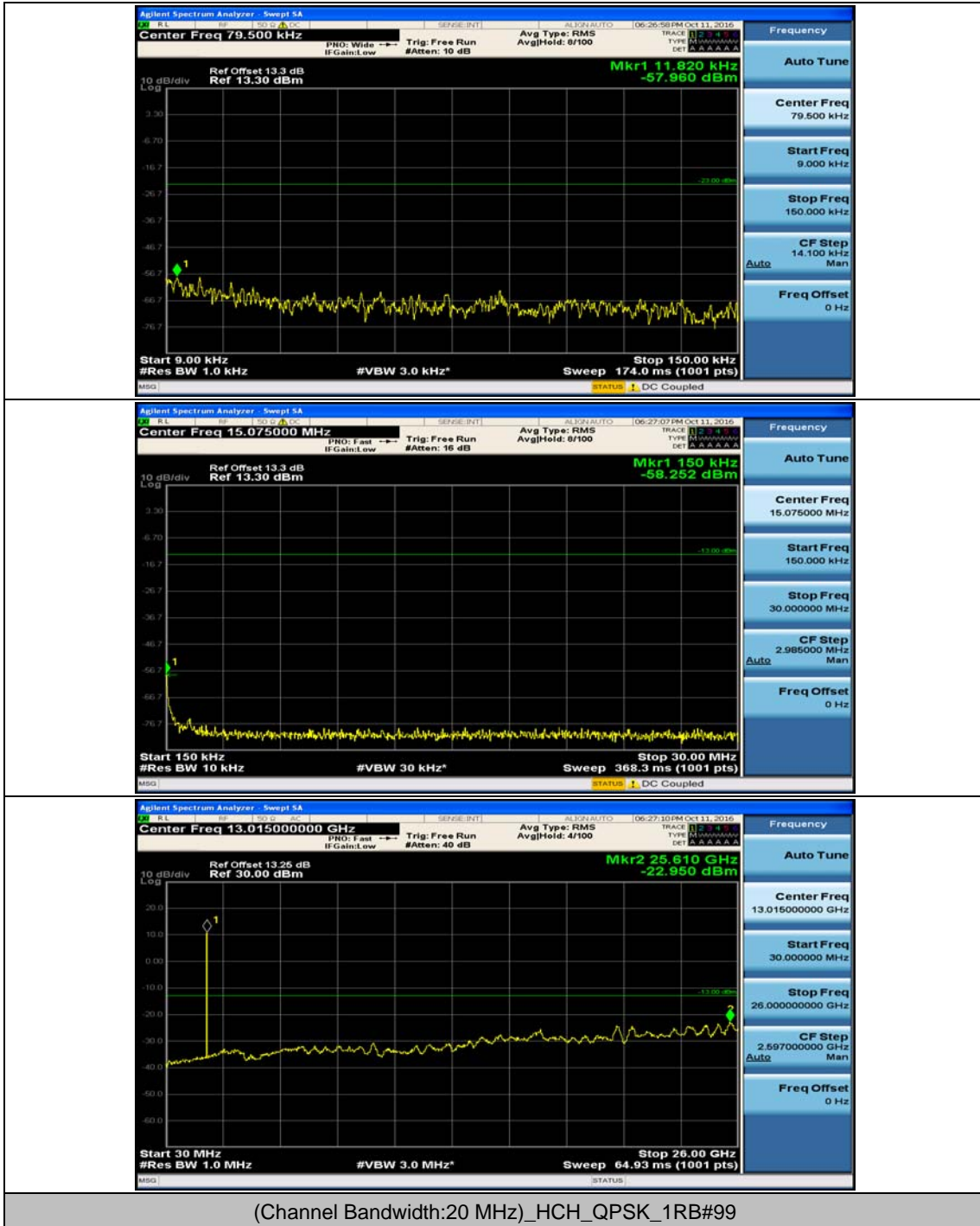


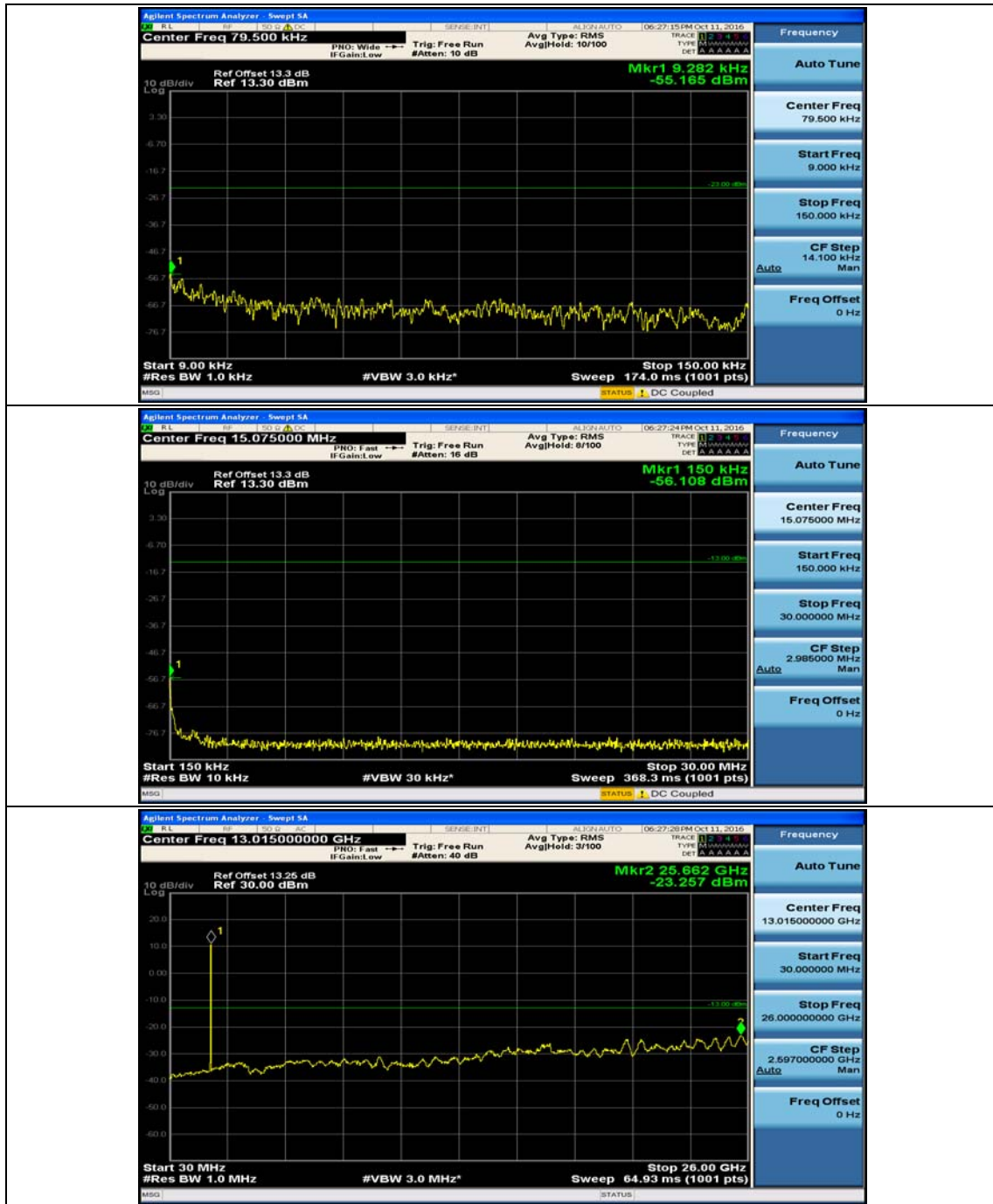




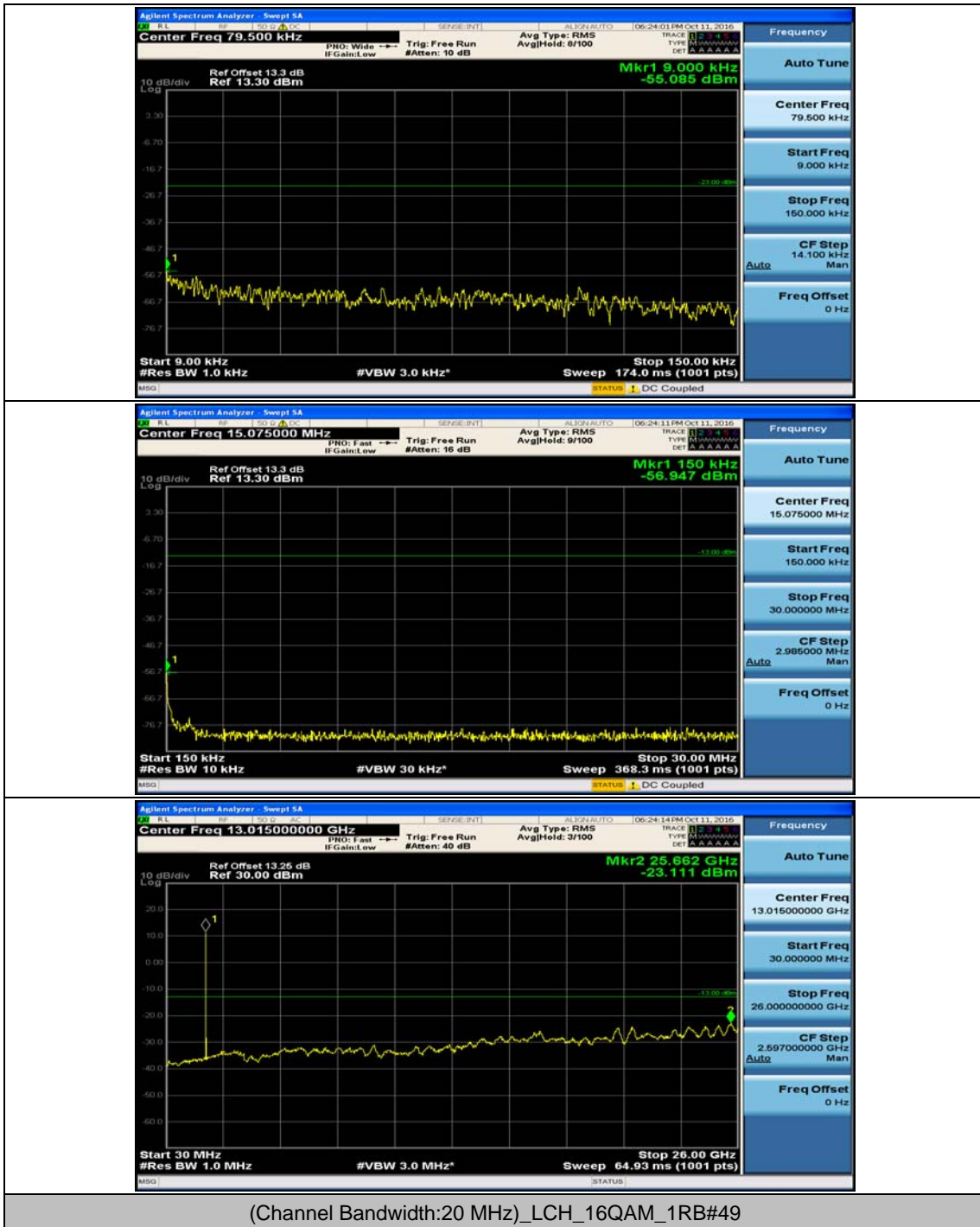
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0

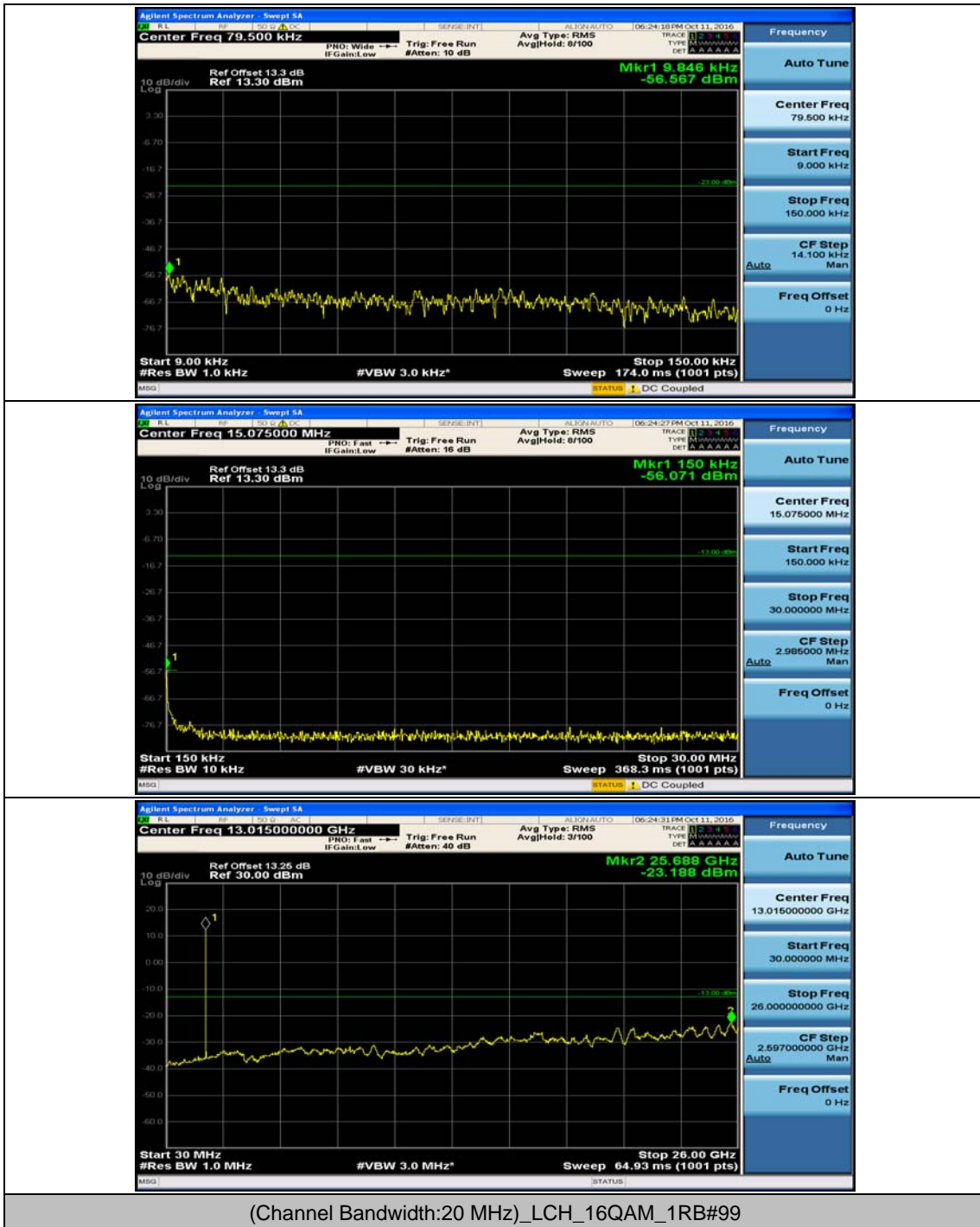


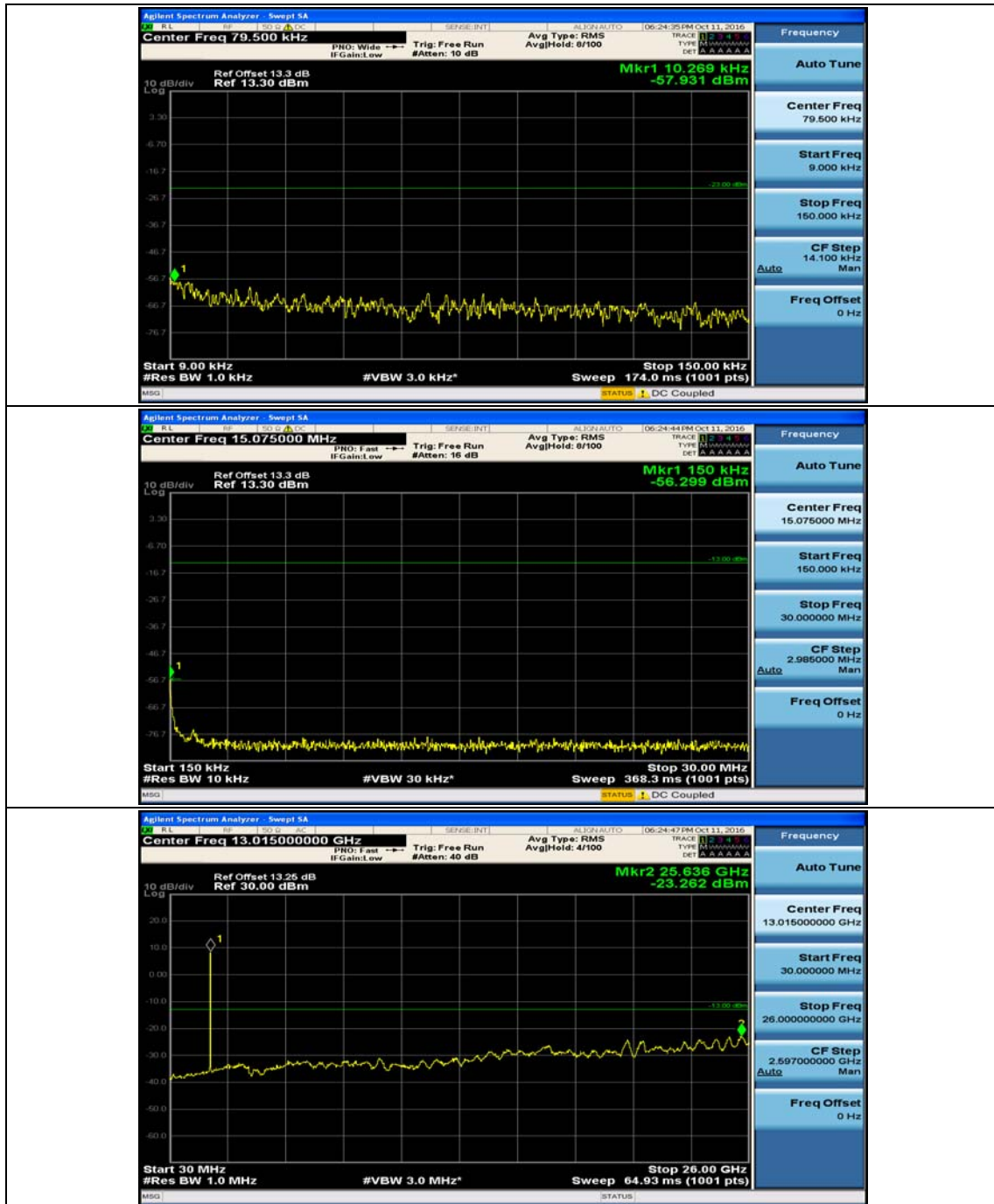




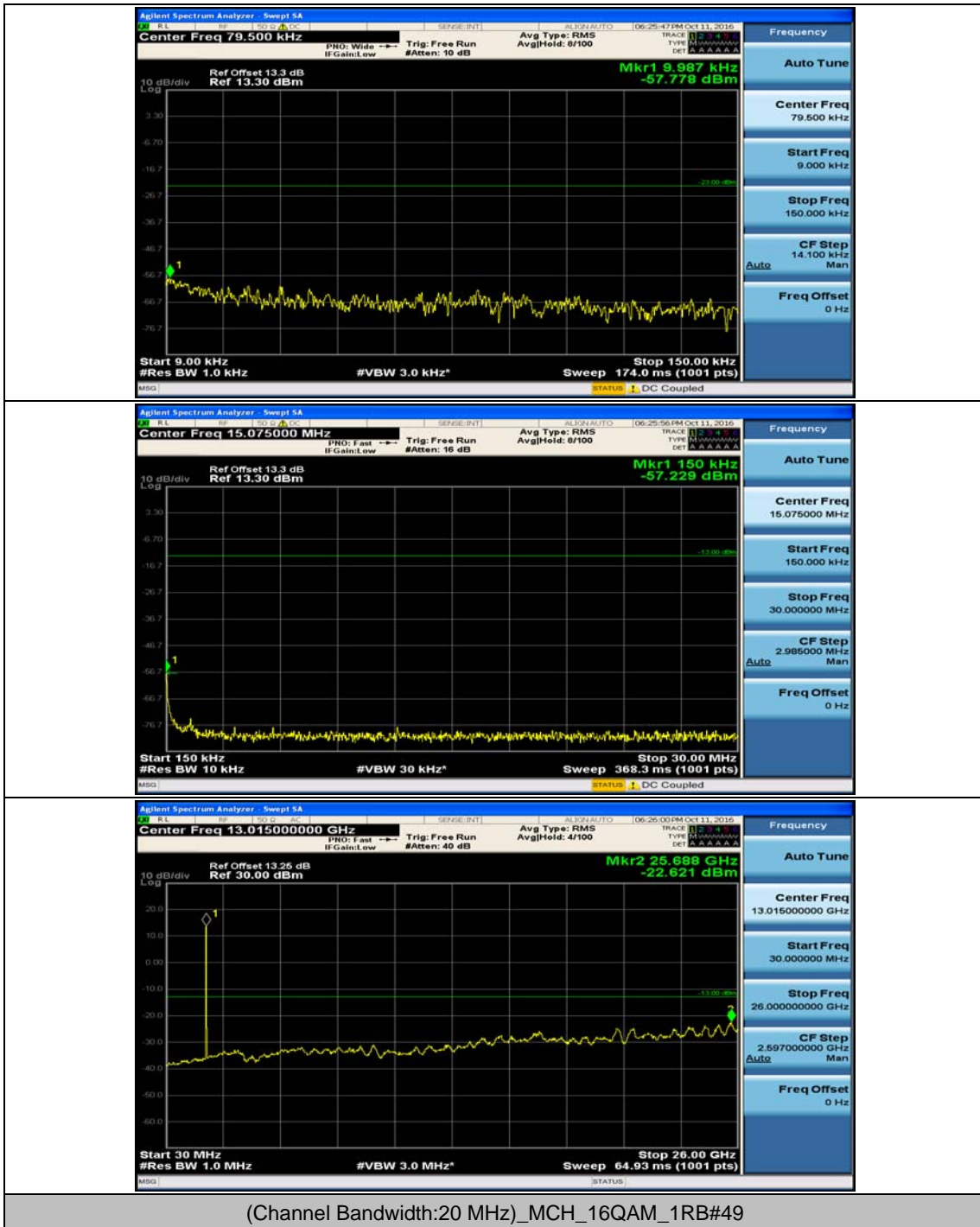
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0

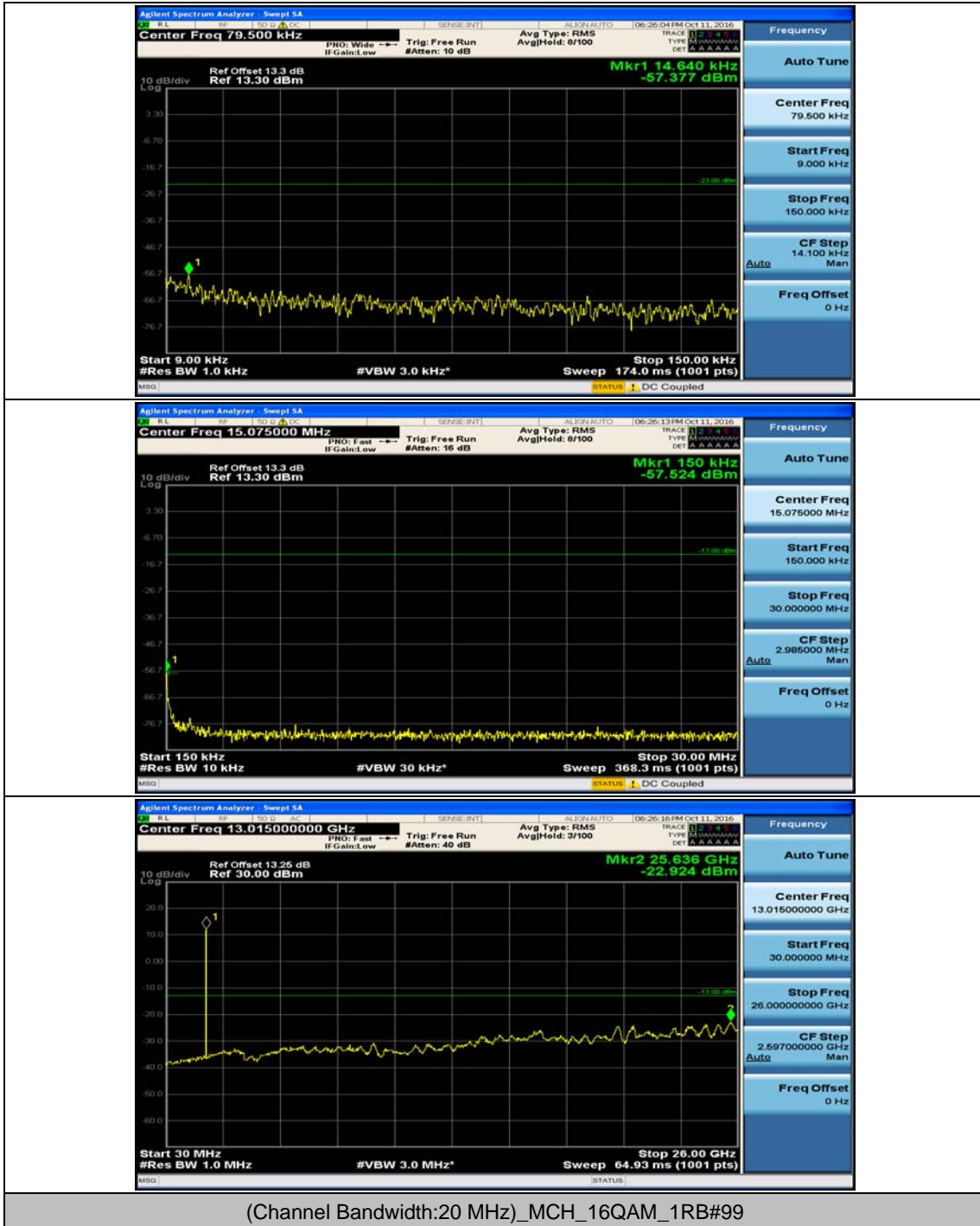


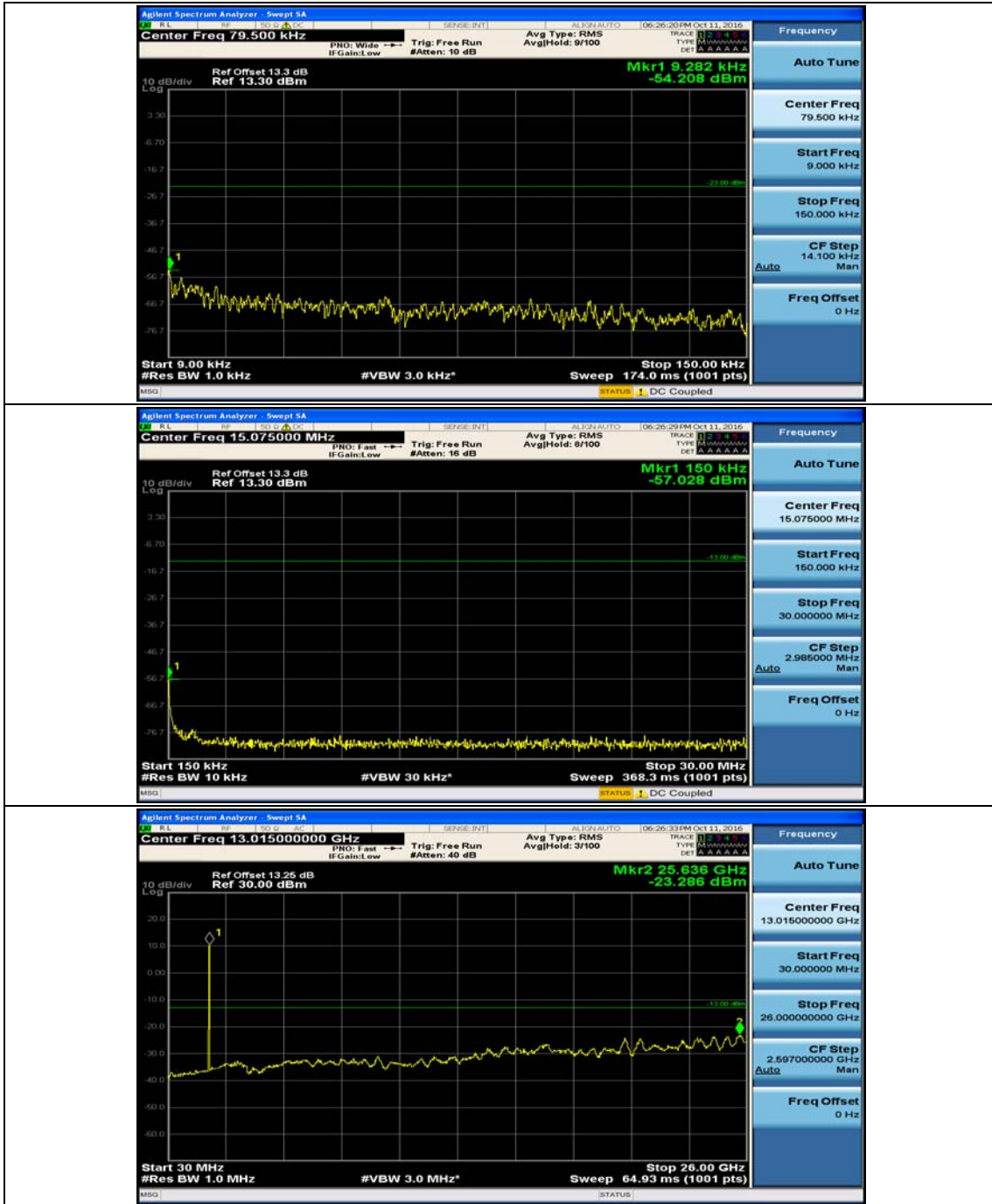




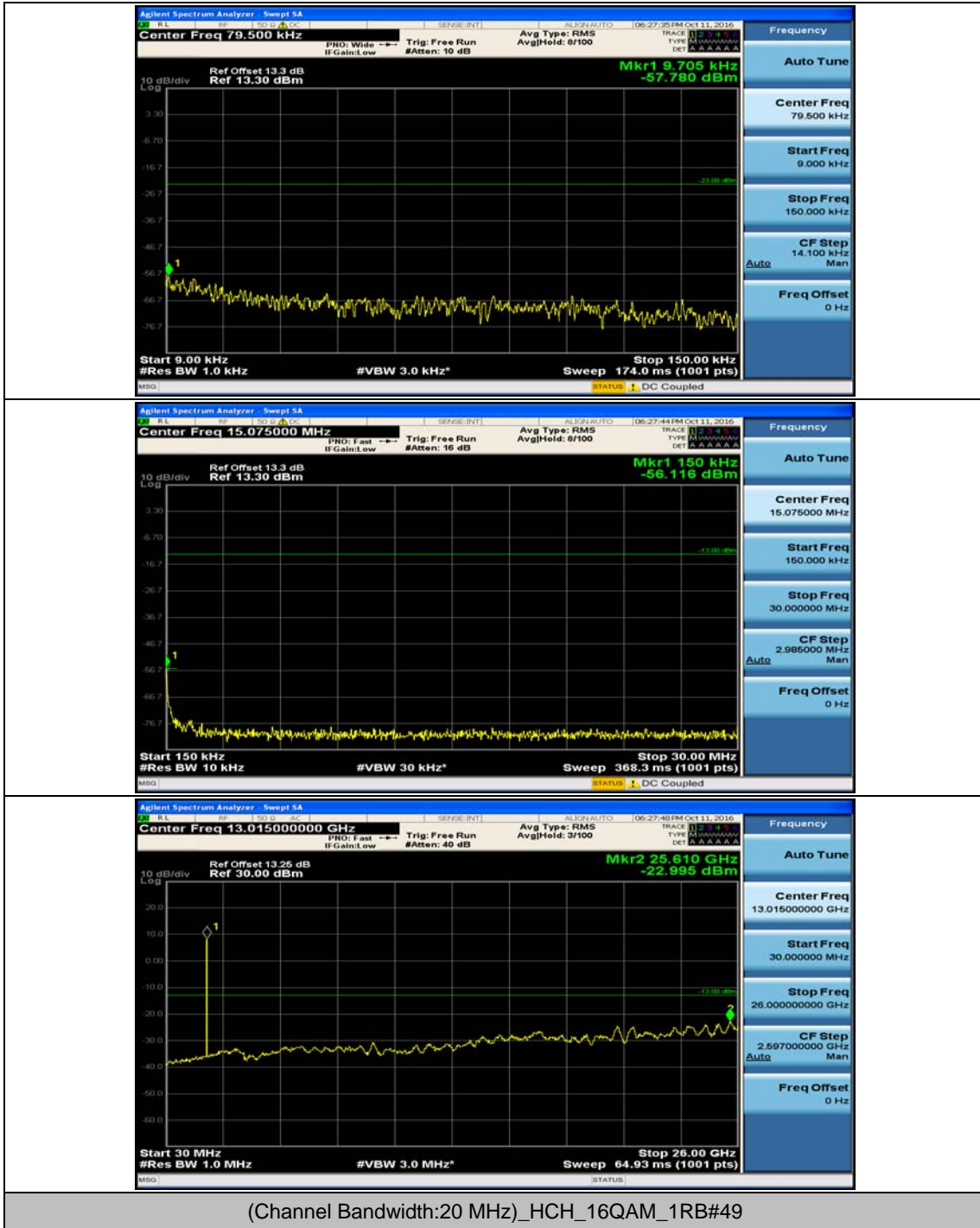
(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

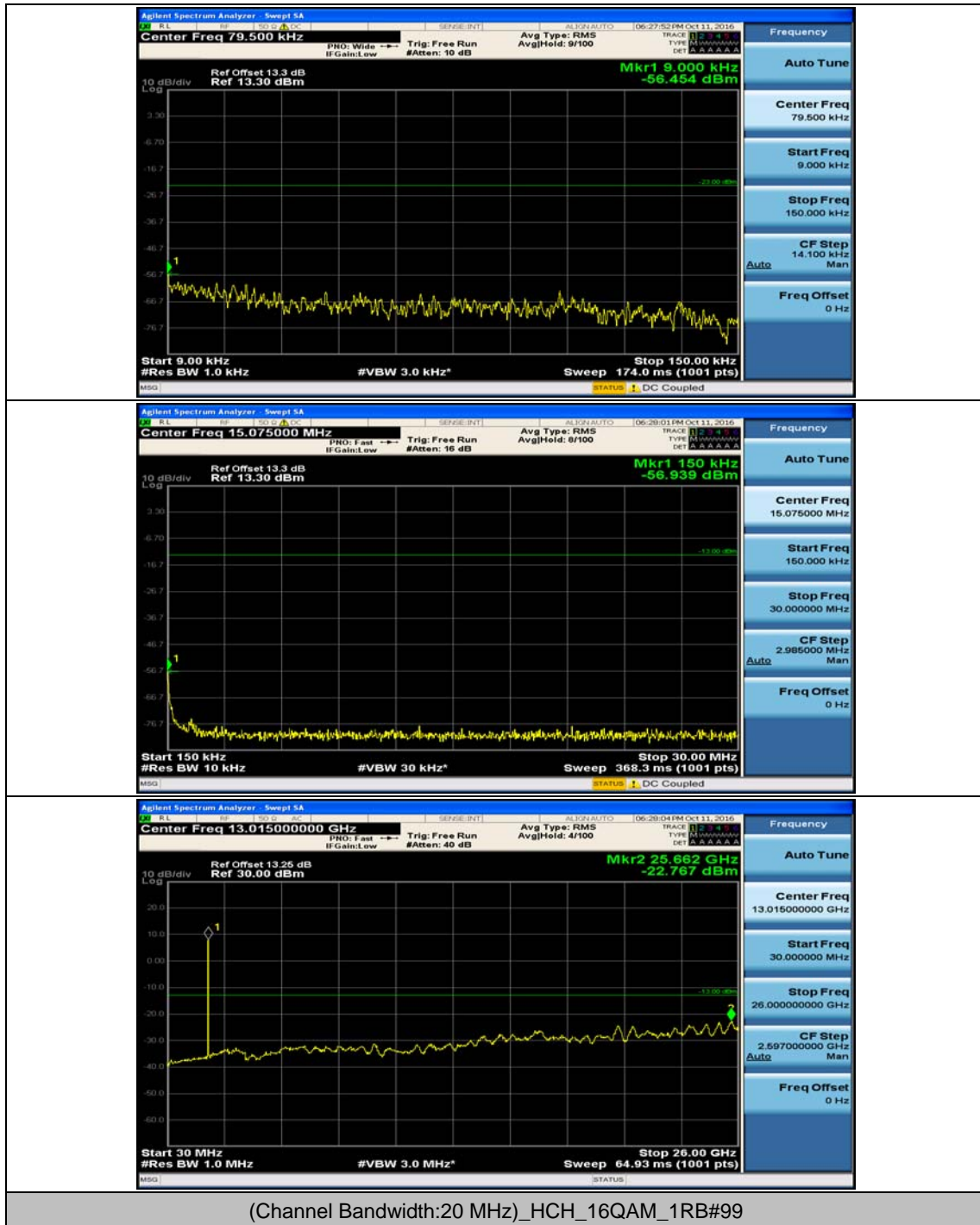


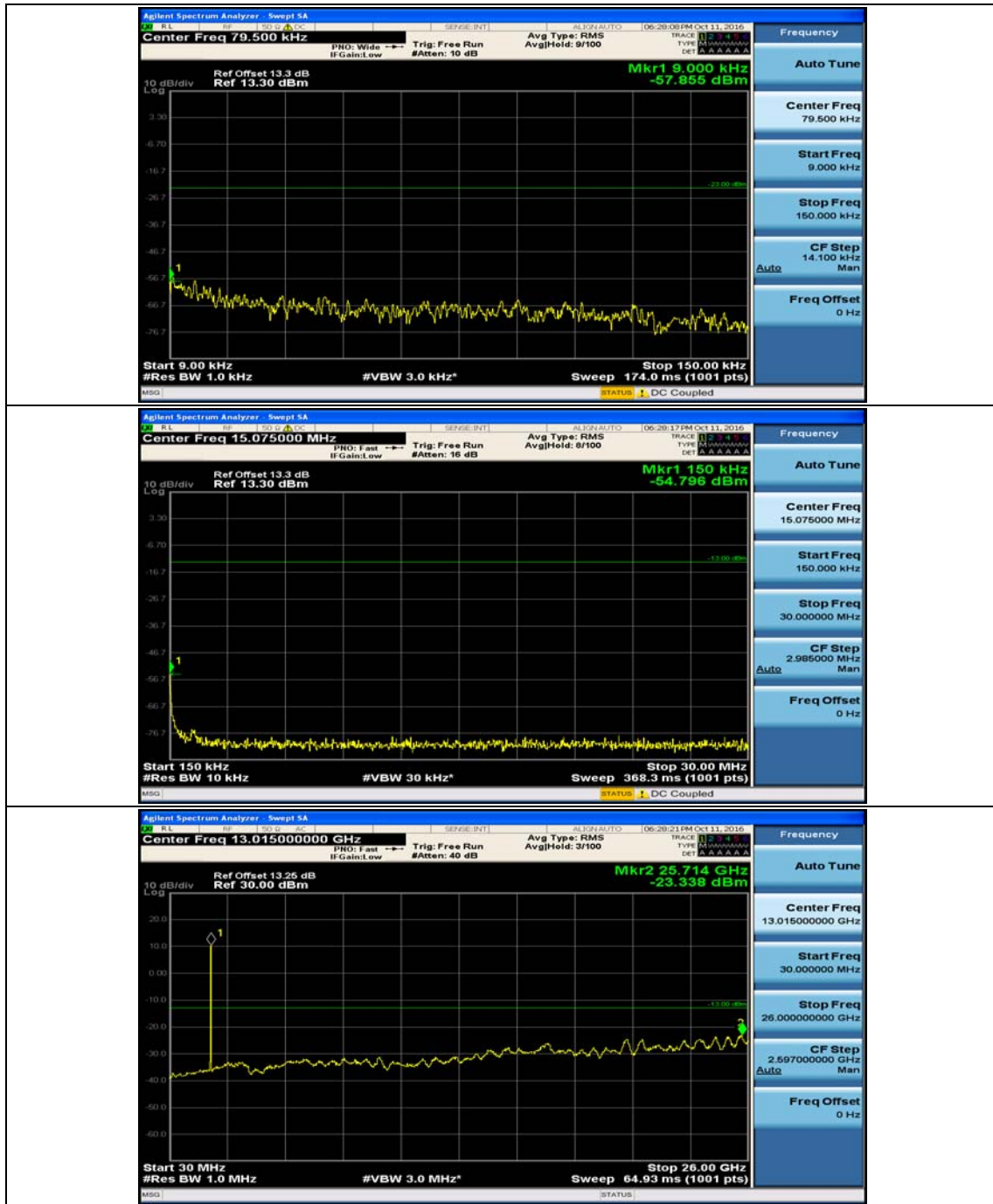




(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0







Note

9KHz~150KHz

$$\text{Limit} = [10\log(\text{RBW}_{\text{measure}} / \text{RBW}_{10\text{kHz}}) + 43 + 10\log(P)] \text{ dB}$$

Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

| Channel Bandwidth: 1.4 MHz | | | | | | | |
|----------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | -0.34 | -0.000184 | ± 2.5 | PASS |
| | | VN | TN | 1.36 | 0.000735 | ± 2.5 | PASS |
| | | VH | TN | -1.61 | -0.000870 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.94 | 0.002628 | ± 2.5 | PASS |
| | | VN | TN | 2.96 | 0.001574 | ± 2.5 | PASS |
| | | VH | TN | 3.98 | 0.002117 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.64 | 0.002430 | ± 2.5 | PASS |
| | | VN | TN | 2.24 | 0.001173 | ± 2.5 | PASS |
| | | VH | TN | -0.67 | -0.000351 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 4.18 | 0.002259 | ± 2.5 | PASS |
| | | VN | TN | -1.98 | -0.001070 | ± 2.5 | PASS |
| | | VH | TN | 4.85 | 0.002621 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.86 | 0.001521 | ± 2.5 | PASS |
| | | VN | TN | 3.61 | 0.001920 | ± 2.5 | PASS |
| | | VH | TN | 0.3 | 0.000160 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.32 | 0.001739 | ± 2.5 | PASS |
| | | VN | TN | 0.43 | 0.000225 | ± 2.5 | PASS |
| | | VH | TN | -1.62 | -0.000848 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -1.67 | 0.000216 | ± 2.5 | PASS |
| | | VN | -20 | 2.95 | -0.0001 | ± 2.5 | PASS |
| | | VN | -10 | 4.61 | -0.000008 | ± 2.5 | PASS |
| | | VN | 0 | 0.4 | -0.000671 | ± 2.5 | PASS |
| | | VN | 10 | 1.55 | -0.000008 | ± 2.5 | PASS |
| | | VN | 20 | -0.42 | 0.000046 | ± 2.5 | PASS |
| | | VN | 30 | -1.81 | -0.000933 | ± 2.5 | PASS |
| | | VN | 40 | 2.34 | -0.000671 | ± 2.5 | PASS |
| | | VN | 50 | -1.96 | 0.00017 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.38 | -0.000091 | ± 2.5 | PASS |

| | | | | | | | |
|-----|-----|-------|-----|-------|-----------|-------|-----------|
| | | VN | -20 | 4.36 | -0.000761 | ± 2.5 | PASS |
| | | VN | -10 | 1.49 | -0.000236 | ± 2.5 | PASS |
| | | VN | 0 | 1.93 | -0.000091 | ± 2.5 | PASS |
| | | VN | 10 | 1.33 | -0.000137 | ± 2.5 | PASS |
| | | VN | 20 | 0.77 | 0.000175 | ± 2.5 | PASS |
| | | VN | 30 | 0.62 | 0.000342 | ± 2.5 | PASS |
| | | VN | 40 | -0.51 | 0.000616 | ± 2.5 | PASS |
| | | VN | 50 | -1.02 | 0.000761 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.91 | 0.000038 | ± 2.5 | PASS |
| | | VN | -20 | 0.42 | -0.000473 | ± 2.5 | PASS |
| | | VN | -10 | 0.1 | -0.000481 | ± 2.5 | PASS |
| | | VN | 0 | 4.15 | -0.00012 | ± 2.5 | PASS |
| | | VN | 10 | -1 | 0.000503 | ± 2.5 | PASS |
| | | VN | 20 | 0.16 | 0.000796 | ± 2.5 | PASS |
| | | VN | 30 | -1.19 | 0.000661 | ± 2.5 | PASS |
| | | VN | 40 | -1.63 | 0.000443 | ± 2.5 | PASS |
| | | VN | 50 | 4.81 | 0.000548 | ± 2.5 | PASS |
| | | 16QAM | LCH | VN | -30 | -1.72 | -0.000686 |
| VN | -20 | | | -1.06 | -0.000725 | ± 2.5 | PASS |
| VN | -10 | | | -1.82 | -0.000008 | ± 2.5 | PASS |
| VN | 0 | | | -1.13 | -0.000378 | ± 2.5 | PASS |
| VN | 10 | | | 1.49 | -0.000054 | ± 2.5 | PASS |
| VN | 20 | | | -0.09 | 0.000039 | ± 2.5 | PASS |
| VN | 30 | | | 3.33 | 0.000131 | ± 2.5 | PASS |
| VN | 40 | | | 2.99 | -0.00064 | ± 2.5 | PASS |
| VN | 50 | | | 1.51 | -0.000787 | ± 2.5 | PASS |
| MCH | VN | | -30 | 1.83 | 0.000023 | ± 2.5 | PASS |
| | VN | | -20 | 4.64 | -0.000091 | ± 2.5 | PASS |
| | VN | | -10 | 4.6 | -0.000403 | ± 2.5 | PASS |
| | VN | | 0 | -0.12 | -0.000243 | ± 2.5 | PASS |
| | VN | | 10 | 3.21 | -0.000905 | ± 2.5 | PASS |
| | VN | | 20 | -0.24 | 0.000266 | ± 2.5 | PASS |
| | VN | | 30 | 0 | -0.000205 | ± 2.5 | PASS |
| | VN | | 40 | 0.17 | 0.000883 | ± 2.5 | PASS |
| | VN | | 50 | -1.85 | 0.000266 | ± 2.5 | PASS |
| HCH | VN | | -30 | -0.59 | 0.000503 | ± 2.5 | PASS |
| | VN | | -20 | 3.85 | -0.000278 | ± 2.5 | PASS |
| | VN | | -10 | 0.74 | -0.000398 | ± 2.5 | PASS |
| | VN | | 0 | -1.11 | -0.000068 | ± 2.5 | PASS |
| | VN | | 10 | 4.85 | -0.000623 | ± 2.5 | PASS |
| | VN | | 20 | 4.85 | 0.000165 | ± 2.5 | PASS |

| | | | | | | | |
|--|--|----|----|-------|----------|-------|------|
| | | VN | 30 | -0.65 | 0.00015 | ± 2.5 | PASS |
| | | VN | 40 | -1.26 | 0.000263 | ± 2.5 | PASS |
| | | VN | 50 | 3.86 | 0.000556 | ± 2.5 | PASS |

Channel Bandwidth: 3 MHz

| Channel Bandwidth: 3 MHz+ | | | | | | | |
|---------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 4.85 | 0.002619 | ± 2.5 | PASS |
| | | VN | TN | 4.61 | 0.002490 | ± 2.5 | PASS |
| | | VH | TN | -1.77 | -0.000956 | ± 2.5 | PASS |
| | MCH | VL | TN | 1.89 | 0.001005 | ± 2.5 | PASS |
| | | VN | TN | -1.51 | -0.000803 | ± 2.5 | PASS |
| | | VH | TN | -1.57 | -0.000835 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.88 | 0.000461 | ± 2.5 | PASS |
| | | VN | TN | -1.22 | -0.000639 | ± 2.5 | PASS |
| | | VH | TN | 0.38 | 0.000199 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 3.94 | 0.002128 | ± 2.5 | PASS |
| | | VN | TN | 2.05 | 0.001107 | ± 2.5 | PASS |
| | | VH | TN | -1.97 | -0.001064 | ± 2.5 | PASS |
| | MCH | VL | TN | -0.82 | -0.000436 | ± 2.5 | PASS |
| | | VN | TN | 3.43 | 0.001824 | ± 2.5 | PASS |
| | | VH | TN | 4.78 | 0.002543 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.32 | 0.000168 | ± 2.5 | PASS |
| | | VN | TN | 0.15 | 0.000079 | ± 2.5 | PASS |
| | | VH | TN | -1.34 | -0.000702 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 3.77 | 0.002036 | ± 2.5 | PASS |
| | | VN | -20 | -1.54 | -0.000832 | ± 2.5 | PASS |
| | | VN | -10 | 3 | 0.001620 | ± 2.5 | PASS |
| | | VN | 0 | 0.7 | 0.000378 | ± 2.5 | PASS |
| | | VN | 10 | 2.14 | 0.001156 | ± 2.5 | PASS |
| | | VN | 20 | 3.23 | 0.001745 | ± 2.5 | PASS |
| | | VN | 30 | 3.02 | 0.001631 | ± 2.5 | PASS |
| | | VN | 40 | 0.78 | 0.000421 | ± 2.5 | PASS |
| | | VN | 50 | 0.98 | 0.000529 | ± 2.5 | PASS |
| | MCH | VN | -30 | 1.11 | 0.000590 | ± 2.5 | PASS |
| | | VN | -20 | 4.56 | 0.002426 | ± 2.5 | PASS |

| | | | | | | | | |
|-----|-------|------|----------|-----------|-----------|-----------|-------|------|
| | | VN | -10 | 4.93 | 0.002622 | ± 2.5 | PASS | |
| | | VN | 0 | -0.85 | -0.000452 | ± 2.5 | PASS | |
| | | VN | 10 | 3.65 | 0.001941 | ± 2.5 | PASS | |
| | | VN | 20 | 4.63 | 0.002463 | ± 2.5 | PASS | |
| | | VN | 30 | 3.08 | 0.001638 | ± 2.5 | PASS | |
| | | VN | 40 | -1.35 | -0.000718 | ± 2.5 | PASS | |
| | | VN | 50 | 1.8 | 0.000957 | ± 2.5 | PASS | |
| | HCH | VN | -30 | -1.27 | -0.000665 | ± 2.5 | PASS | |
| | | VN | -20 | 1.69 | 0.000886 | ± 2.5 | PASS | |
| | | VN | -10 | 1.8 | 0.000943 | ± 2.5 | PASS | |
| | | VN | 0 | -1.59 | -0.000833 | ± 2.5 | PASS | |
| | | VN | 10 | 2.8 | 0.001467 | ± 2.5 | PASS | |
| | | VN | 20 | 4.68 | 0.002452 | ± 2.5 | PASS | |
| | | VN | 30 | 2.68 | 0.001404 | ± 2.5 | PASS | |
| | 16QAM | LCH | VN | 40 | -0.4 | -0.000210 | ± 2.5 | PASS |
| | | | VN | 50 | 2.08 | 0.001090 | ± 2.5 | PASS |
| | | | VN | -30 | -0.6 | -0.000324 | ± 2.5 | PASS |
| | | | VN | -20 | 3.02 | 0.001631 | ± 2.5 | PASS |
| VN | | | -10 | 0.82 | 0.000443 | ± 2.5 | PASS | |
| VN | | | 0 | -0.14 | -0.000076 | ± 2.5 | PASS | |
| VN | | | 10 | 5 | 0.002701 | ± 2.5 | PASS | |
| VN | | | 20 | -1.27 | -0.000686 | ± 2.5 | PASS | |
| VN | | | 30 | 2.71 | 0.001464 | ± 2.5 | PASS | |
| MCH | | VN | 40 | 1.5 | 0.000810 | ± 2.5 | PASS | |
| | | VN | 50 | 2.97 | 0.001604 | ± 2.5 | PASS | |
| | | VN | -30 | 2.06 | 0.001096 | ± 2.5 | PASS | |
| | | VN | -20 | -0.16 | -0.000085 | ± 2.5 | PASS | |
| | | VN | -10 | -1.6 | -0.000851 | ± 2.5 | PASS | |
| | | VN | 0 | 2.29 | 0.001218 | ± 2.5 | PASS | |
| | | VN | 10 | 1.51 | 0.000803 | ± 2.5 | PASS | |
| | | VN | 20 | 3.01 | 0.001601 | ± 2.5 | PASS | |
| | | VN | 30 | 1.18 | 0.000628 | ± 2.5 | PASS | |
| HCH | VN | 40 | -0.15 | -0.000080 | ± 2.5 | PASS | | |
| | VN | 50 | 1.27 | 0.000676 | ± 2.5 | PASS | | |
| | VN | -30 | 2.49 | 0.001305 | ± 2.5 | PASS | | |
| | VN | -20 | -1.83 | -0.000959 | ± 2.5 | PASS | | |
| | VN | -10 | 4.42 | 0.002316 | ± 2.5 | PASS | | |
| | VN | 0 | -0.63 | -0.000330 | ± 2.5 | PASS | | |
| | VN | 10 | -1.78 | -0.000933 | ± 2.5 | PASS | | |
| VN | 20 | 3.1 | 0.001624 | ± 2.5 | PASS | | | |
| VN | 30 | 1.06 | 0.000555 | ± 2.5 | PASS | | | |

| | | | | | | | |
|--|--|----|----|------|----------|-------|------|
| | | VN | 40 | 3.56 | 0.001865 | ± 2.5 | PASS |
| | | VN | 50 | 3.61 | 0.001892 | ± 2.5 | PASS |

Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | | |
|--------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 2.68 | 0.001447 | ± 2.5 | PASS |
| | | VN | TN | -0.99 | -0.000534 | ± 2.5 | PASS |
| | | VH | TN | 2.31 | 0.001247 | ± 2.5 | PASS |
| | MCH | VL | TN | -0.74 | -0.000394 | ± 2.5 | PASS |
| | | VN | TN | 4.53 | 0.002410 | ± 2.5 | PASS |
| | | VH | TN | -0.35 | -0.000186 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.95 | 0.002595 | ± 2.5 | PASS |
| | | VN | TN | 0.36 | 0.000189 | ± 2.5 | PASS |
| | | VH | TN | -1.19 | -0.000624 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 3.48 | 0.001879 | ± 2.5 | PASS |
| | | VN | TN | 2.14 | 0.001155 | ± 2.5 | PASS |
| | | VH | TN | -1.64 | -0.000885 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.57 | -0.000835 | ± 2.5 | PASS |
| | | VN | TN | 2.68 | 0.001426 | ± 2.5 | PASS |
| | | VH | TN | 3.4 | 0.001809 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.58 | -0.000828 | ± 2.5 | PASS |
| | | VN | TN | 4.58 | 0.002401 | ± 2.5 | PASS |
| | | VH | TN | 1.05 | 0.000550 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 4.27 | 0.002305 | ± 2.5 | PASS |
| | | VN | -20 | 3.18 | 0.001717 | ± 2.5 | PASS |
| | | VN | -10 | 2.86 | 0.001544 | ± 2.5 | PASS |
| | | VN | 0 | -0.4 | -0.000216 | ± 2.5 | PASS |
| | | VN | 10 | 4.25 | 0.002294 | ± 2.5 | PASS |
| | | VN | 20 | 4.95 | 0.002672 | ± 2.5 | PASS |
| | | VN | 30 | 0.92 | 0.000497 | ± 2.5 | PASS |
| | | VN | 40 | -1.46 | -0.000788 | ± 2.5 | PASS |
| | | VN | 50 | -0.46 | -0.000248 | ± 2.5 | PASS |
| | MCH | VN | -30 | 2.75 | 0.001463 | ± 2.5 | PASS |
| | | VN | -20 | -1.94 | -0.001032 | ± 2.5 | PASS |
| | | VN | -10 | 1.32 | 0.000702 | ± 2.5 | PASS |

| | | | | | | | | | |
|-----|-----|-------|-----|-------|-----------|-------|----------|-------|------|
| | | VN | 0 | -1.84 | -0.000979 | ± 2.5 | PASS | | |
| | | VN | 10 | 3.34 | 0.001777 | ± 2.5 | PASS | | |
| | | VN | 20 | -1.03 | -0.000548 | ± 2.5 | PASS | | |
| | | VN | 30 | -0.52 | -0.000277 | ± 2.5 | PASS | | |
| | | VN | 40 | -1.12 | -0.000596 | ± 2.5 | PASS | | |
| | | VN | 50 | 0.53 | 0.000282 | ± 2.5 | PASS | | |
| | HCH | VN | -30 | 1.17 | 0.000613 | ± 2.5 | PASS | | |
| | | VN | -20 | 2.33 | 0.001221 | ± 2.5 | PASS | | |
| | | VN | -10 | -1.33 | -0.000697 | ± 2.5 | PASS | | |
| | | VN | 0 | 2.42 | 0.001269 | ± 2.5 | PASS | | |
| | | VN | 10 | -1.33 | -0.000697 | ± 2.5 | PASS | | |
| | | VN | 20 | -0.29 | -0.000152 | ± 2.5 | PASS | | |
| | | VN | 30 | 3.07 | 0.001609 | ± 2.5 | PASS | | |
| | | VN | 40 | 1.06 | 0.000556 | ± 2.5 | PASS | | |
| | | VN | 50 | 4.58 | 0.002401 | ± 2.5 | PASS | | |
| | | 16QAM | LCH | VN | -30 | 2.57 | 0.001387 | ± 2.5 | PASS |
| | | | | VN | -20 | 2.59 | 0.001398 | ± 2.5 | PASS |
| | | | | VN | -10 | 4.16 | 0.002246 | ± 2.5 | PASS |
| VN | 0 | | | 1.87 | 0.001009 | ± 2.5 | PASS | | |
| VN | 10 | | | 3.44 | 0.001857 | ± 2.5 | PASS | | |
| VN | 20 | | | -0.5 | -0.000270 | ± 2.5 | PASS | | |
| VN | 30 | | | 4.51 | 0.002435 | ± 2.5 | PASS | | |
| VN | 40 | | | 3.06 | 0.001652 | ± 2.5 | PASS | | |
| VN | 50 | | | 3.42 | 0.001846 | ± 2.5 | PASS | | |
| MCH | VN | | -30 | 0.74 | 0.000394 | ± 2.5 | PASS | | |
| | VN | | -20 | 3.04 | 0.001617 | ± 2.5 | PASS | | |
| | VN | | -10 | 3.66 | 0.001947 | ± 2.5 | PASS | | |
| | VN | | 0 | 4.36 | 0.002319 | ± 2.5 | PASS | | |
| | VN | | 10 | 2.32 | 0.001234 | ± 2.5 | PASS | | |
| | VN | | 20 | 2.13 | 0.001133 | ± 2.5 | PASS | | |
| | VN | | 30 | 0.71 | 0.000378 | ± 2.5 | PASS | | |
| | VN | | 40 | 4.92 | 0.002617 | ± 2.5 | PASS | | |
| | VN | | 50 | 3.44 | 0.001830 | ± 2.5 | PASS | | |
| HCH | VN | | -30 | 0.87 | 0.000456 | ± 2.5 | PASS | | |
| | VN | | -20 | 4.53 | 0.002375 | ± 2.5 | PASS | | |
| | VN | | -10 | 0.92 | 0.000482 | ± 2.5 | PASS | | |
| | VN | | 0 | 4.31 | 0.002260 | ± 2.5 | PASS | | |
| | VN | | 10 | 2.39 | 0.001253 | ± 2.5 | PASS | | |
| | VN | | 20 | 3.76 | 0.001971 | ± 2.5 | PASS | | |
| | VN | | 30 | 0.68 | 0.000356 | ± 2.5 | PASS | | |
| | VN | | 40 | 3.03 | 0.001588 | ± 2.5 | PASS | | |

| | | | | | | | |
|--|--|----|----|------|----------|-------|------|
| | | VN | 50 | 4.18 | 0.002191 | ± 2.5 | PASS |
|--|--|----|----|------|----------|-------|------|

Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | | | |
|---------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 1.41 | 0.000760 | ± 2.5 | PASS |
| | | VN | TN | 0.14 | 0.000075 | ± 2.5 | PASS |
| | | VH | TN | 3 | 0.001617 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.78 | 0.002011 | ± 2.5 | PASS |
| | | VN | TN | -1.62 | -0.000862 | ± 2.5 | PASS |
| | | VH | TN | 0.07 | 0.000037 | ± 2.5 | PASS |
| | HCH | VL | TN | 1.58 | 0.000829 | ± 2.5 | PASS |
| | | VN | TN | 3.69 | 0.001937 | ± 2.5 | PASS |
| | | VH | TN | 4.8 | 0.002520 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 3.7 | 0.001995 | ± 2.5 | PASS |
| | | VN | TN | -1.9 | -0.001024 | ± 2.5 | PASS |
| | | VH | TN | 0.85 | 0.000458 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.4 | -0.000745 | ± 2.5 | PASS |
| | | VN | TN | 0.46 | 0.000245 | ± 2.5 | PASS |
| | | VH | TN | 4.07 | 0.002165 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.21 | 0.000110 | ± 2.5 | PASS |
| | | VN | TN | 0.43 | 0.000226 | ± 2.5 | PASS |
| | | VH | TN | 0.34 | 0.000178 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -1.78 | -0.000960 | ± 2.5 | PASS |
| | | VN | -20 | -1.05 | -0.000566 | ± 2.5 | PASS |
| | | VN | -10 | 3.44 | 0.001854 | ± 2.5 | PASS |
| | | VN | 0 | 1.03 | 0.000555 | ± 2.5 | PASS |
| | | VN | 10 | 3 | 0.001617 | ± 2.5 | PASS |
| | | VN | 20 | 0.5 | 0.000270 | ± 2.5 | PASS |
| | | VN | 30 | 4.96 | 0.002674 | ± 2.5 | PASS |
| | | VN | 40 | -0.01 | -0.000005 | ± 2.5 | PASS |
| | | VN | 50 | 1.56 | 0.000841 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.71 | 0.002505 | ± 2.5 | PASS |
| | | VN | -20 | 2.32 | 0.001234 | ± 2.5 | PASS |
| | | VN | -10 | 3.43 | 0.001824 | ± 2.5 | PASS |
| | | VN | 0 | -1.18 | -0.000628 | ± 2.5 | PASS |

| | | | | | | | |
|-----|-----|-------|-----|-------|-----------|-------|----------|
| | | VN | 10 | 4.7 | 0.002500 | ± 2.5 | PASS |
| | | VN | 20 | 3.98 | 0.002117 | ± 2.5 | PASS |
| | | VN | 30 | 1.97 | 0.001048 | ± 2.5 | PASS |
| | | VN | 40 | 3.16 | 0.001681 | ± 2.5 | PASS |
| | | VN | 50 | 0.51 | 0.000271 | ± 2.5 | PASS |
| | HCH | VN | -30 | 0.58 | 0.000304 | ± 2.5 | PASS |
| | | VN | -20 | 3.46 | 0.001816 | ± 2.5 | PASS |
| | | VN | -10 | -0.68 | -0.000357 | ± 2.5 | PASS |
| | | VN | 0 | 2.51 | 0.001318 | ± 2.5 | PASS |
| | | VN | 10 | -0.63 | -0.000331 | ± 2.5 | PASS |
| | | VN | 20 | 2.92 | 0.001533 | ± 2.5 | PASS |
| | | VN | 30 | 3.98 | 0.002089 | ± 2.5 | PASS |
| | | VN | 40 | 3.87 | 0.002031 | ± 2.5 | PASS |
| | | VN | 50 | -0.73 | -0.000383 | ± 2.5 | PASS |
| | | 16QAM | LCH | VN | -30 | 0.7 | 0.000377 |
| VN | -20 | | | 2.86 | 0.001542 | ± 2.5 | PASS |
| VN | -10 | | | 2.27 | 0.001224 | ± 2.5 | PASS |
| VN | 0 | | | 1.2 | 0.000647 | ± 2.5 | PASS |
| VN | 10 | | | 2.56 | 0.001380 | ± 2.5 | PASS |
| VN | 20 | | | -0.99 | -0.000534 | ± 2.5 | PASS |
| VN | 30 | | | 3.86 | 0.002081 | ± 2.5 | PASS |
| VN | 40 | | | -1.3 | -0.000701 | ± 2.5 | PASS |
| VN | 50 | | | -0.16 | -0.000086 | ± 2.5 | PASS |
| MCH | VN | | -30 | 4.6 | 0.002447 | ± 2.5 | PASS |
| | VN | | -20 | 3.25 | 0.001729 | ± 2.5 | PASS |
| | VN | | -10 | 1.83 | 0.000973 | ± 2.5 | PASS |
| | VN | | 0 | 4.98 | 0.002649 | ± 2.5 | PASS |
| | VN | | 10 | 3.25 | 0.001729 | ± 2.5 | PASS |
| | VN | | 20 | 1.52 | 0.000809 | ± 2.5 | PASS |
| | VN | | 30 | 0.1 | 0.000053 | ± 2.5 | PASS |
| | VN | | 40 | 0.96 | 0.000511 | ± 2.5 | PASS |
| | VN | | 50 | 0.86 | 0.000457 | ± 2.5 | PASS |
| HCH | VN | | -30 | 0.62 | 0.000325 | ± 2.5 | PASS |
| | VN | | -20 | -1.13 | -0.000593 | ± 2.5 | PASS |
| | VN | | -10 | 3.33 | 0.001748 | ± 2.5 | PASS |
| | VN | | 0 | 2.2 | 0.001155 | ± 2.5 | PASS |
| | VN | | 10 | -0.97 | -0.000509 | ± 2.5 | PASS |
| | VN | | 20 | -0.31 | -0.000163 | ± 2.5 | PASS |
| | VN | | 30 | 0.29 | 0.000152 | ± 2.5 | PASS |
| | VN | | 40 | 1.25 | 0.000656 | ± 2.5 | PASS |
| | VN | | 50 | 3.51 | 0.001843 | ± 2.5 | PASS |

Channel Bandwidth: 15 MHz

| Channel Bandwidth: 15 MHz | | | | | | | |
|---------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 3.39 | 0.001825 | ± 2.5 | PASS |
| | | VN | TN | -1.83 | -0.000985 | ± 2.5 | PASS |
| | | VH | TN | -0.32 | -0.000172 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.77 | -0.000941 | ± 2.5 | PASS |
| | | VN | TN | -1.37 | -0.000729 | ± 2.5 | PASS |
| | | VH | TN | -0.49 | -0.000261 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.26 | -0.000137 | ± 2.5 | PASS |
| | | VN | TN | 1.45 | 0.000762 | ± 2.5 | PASS |
| | | VH | TN | 0.87 | 0.000457 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 4.06 | 0.002186 | ± 2.5 | PASS |
| | | VN | TN | 4.27 | 0.002299 | ± 2.5 | PASS |
| | | VH | TN | 1.72 | 0.000926 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.93 | 0.002090 | ± 2.5 | PASS |
| | | VN | TN | -1.99 | -0.001059 | ± 2.5 | PASS |
| | | VH | TN | -0.83 | -0.000441 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.04 | 0.002124 | ± 2.5 | PASS |
| | | VN | TN | 3.78 | 0.001987 | ± 2.5 | PASS |
| | | VH | TN | 1.81 | 0.000951 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 0.53 | 0.000285 | ± 2.5 | PASS |
| | | VN | -20 | 4.79 | 0.002579 | ± 2.5 | PASS |
| | | VN | -10 | 2.53 | 0.001362 | ± 2.5 | PASS |
| | | VN | 0 | 3.35 | 0.001803 | ± 2.5 | PASS |
| | | VN | 10 | -1.11 | -0.000598 | ± 2.5 | PASS |
| | | VN | 20 | 1.68 | 0.000904 | ± 2.5 | PASS |
| | | VN | 30 | 2.78 | 0.001497 | ± 2.5 | PASS |
| | | VN | 40 | 3.44 | 0.001852 | ± 2.5 | PASS |
| | MCH | VN | 50 | 2.53 | 0.001362 | ± 2.5 | PASS |
| | | VN | -30 | 4.67 | 0.002484 | ± 2.5 | PASS |
| | | VN | -20 | 2.39 | 0.001271 | ± 2.5 | PASS |
| | | VN | -10 | 0.05 | 0.000027 | ± 2.5 | PASS |
| | | VN | 0 | 1.14 | 0.000606 | ± 2.5 | PASS |
| | | VN | 10 | 4.53 | 0.002410 | ± 2.5 | PASS |
| VN | 20 | 4.2 | 0.002234 | ± 2.5 | PASS | | |

| | | | | | | | |
|-------|-----|----|-----|-------|-----------|-------|------|
| | | VN | 30 | 3.68 | 0.001957 | ± 2.5 | PASS |
| | | VN | 40 | 2.73 | 0.001452 | ± 2.5 | PASS |
| | | VN | 50 | 4.36 | 0.002319 | ± 2.5 | PASS |
| | HCH | VN | -30 | 0.95 | 0.000499 | ± 2.5 | PASS |
| | | VN | -20 | -1.09 | -0.000573 | ± 2.5 | PASS |
| | | VN | -10 | 0.28 | 0.000147 | ± 2.5 | PASS |
| | | VN | 0 | 1.42 | 0.000746 | ± 2.5 | PASS |
| | | VN | 10 | 2.73 | 0.001435 | ± 2.5 | PASS |
| | | VN | 20 | 2.57 | 0.001351 | ± 2.5 | PASS |
| | | VN | 30 | 2.84 | 0.001493 | ± 2.5 | PASS |
| | | VN | 40 | 2.61 | 0.001372 | ± 2.5 | PASS |
| | | VN | 50 | -0.22 | -0.000116 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 0.89 | 0.000479 | ± 2.5 | PASS |
| | | VN | -20 | -1.22 | -0.000657 | ± 2.5 | PASS |
| | | VN | -10 | -0.22 | -0.000118 | ± 2.5 | PASS |
| | | VN | 0 | 4.89 | 0.002633 | ± 2.5 | PASS |
| | | VN | 10 | 4.7 | 0.002530 | ± 2.5 | PASS |
| | | VN | 20 | 4.09 | 0.002202 | ± 2.5 | PASS |
| | | VN | 30 | 4.81 | 0.002590 | ± 2.5 | PASS |
| | | VN | 40 | 1.31 | 0.000705 | ± 2.5 | PASS |
| | | VN | 50 | 4.12 | 0.002218 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.44 | 0.000234 | ± 2.5 | PASS |
| | | VN | -20 | 3.37 | 0.001793 | ± 2.5 | PASS |
| | | VN | -10 | -1.95 | -0.001037 | ± 2.5 | PASS |
| | | VN | 0 | -1.38 | -0.000734 | ± 2.5 | PASS |
| | | VN | 10 | -0.43 | -0.000229 | ± 2.5 | PASS |
| | | VN | 20 | -1.3 | -0.000691 | ± 2.5 | PASS |
| | | VN | 30 | -0.01 | -0.000005 | ± 2.5 | PASS |
| | | VN | 40 | 2.05 | 0.001090 | ± 2.5 | PASS |
| | | VN | 50 | 1.77 | 0.000941 | ± 2.5 | PASS |
| | HCH | VN | -30 | -0.2 | -0.000105 | ± 2.5 | PASS |
| | | VN | -20 | 3.59 | 0.001887 | ± 2.5 | PASS |
| | | VN | -10 | 1.6 | 0.000841 | ± 2.5 | PASS |
| | | VN | 0 | 1.87 | 0.000983 | ± 2.5 | PASS |
| | | VN | 10 | -1.86 | -0.000978 | ± 2.5 | PASS |
| | | VN | 20 | 1.92 | 0.001009 | ± 2.5 | PASS |
| | | VN | 30 | 3.15 | 0.001656 | ± 2.5 | PASS |
| | | VN | 40 | 0.69 | 0.000363 | ± 2.5 | PASS |
| | | VN | 50 | -1.3 | -0.000683 | ± 2.5 | PASS |

Channel Bandwidth: 20 MHz

| Channel Bandwidth: 20 MHz | | | | | | | |
|---------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 3.98 | 0.002140 | ± 2.5 | PASS |
| | | VN | TN | 4.86 | 0.002613 | ± 2.5 | PASS |
| | | VH | TN | -0.36 | -0.000194 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.16 | 0.001681 | ± 2.5 | PASS |
| | | VN | TN | -1.24 | -0.000660 | ± 2.5 | PASS |
| | | VH | TN | 4.94 | 0.002628 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.55 | 0.001868 | ± 2.5 | PASS |
| | | VN | TN | 3.49 | 0.001837 | ± 2.5 | PASS |
| | | VH | TN | 1.16 | 0.000611 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -1.49 | -0.000801 | ± 2.5 | PASS |
| | | VN | TN | 1.13 | 0.000608 | ± 2.5 | PASS |
| | | VH | TN | 2.39 | 0.001285 | ± 2.5 | PASS |
| | MCH | VL | TN | -0.82 | -0.000436 | ± 2.5 | PASS |
| | | VN | TN | 0.78 | 0.000415 | ± 2.5 | PASS |
| | | VH | TN | 4.14 | 0.002202 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.85 | 0.002553 | ± 2.5 | PASS |
| | | VN | TN | 1.55 | 0.000816 | ± 2.5 | PASS |
| | | VH | TN | 0.53 | 0.000279 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -0.19 | -0.000102 | ± 2.5 | PASS |
| | | VN | -20 | 1.04 | 0.000559 | ± 2.5 | PASS |
| | | VN | -10 | 3.42 | 0.001839 | ± 2.5 | PASS |
| | | VN | 0 | 2.06 | 0.001108 | ± 2.5 | PASS |
| | | VN | 10 | 0.85 | 0.000457 | ± 2.5 | PASS |
| | | VN | 20 | -1.35 | -0.000726 | ± 2.5 | PASS |
| | | VN | 30 | 4.46 | 0.002398 | ± 2.5 | PASS |
| | | VN | 40 | 0.52 | 0.000280 | ± 2.5 | PASS |
| | | VN | 50 | 2.58 | 0.001387 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.84 | 0.000447 | ± 2.5 | PASS |
| | | VN | -20 | 3.22 | 0.001713 | ± 2.5 | PASS |
| | | VN | -10 | 1.52 | 0.000809 | ± 2.5 | PASS |
| | | VN | 0 | 1.84 | 0.000979 | ± 2.5 | PASS |
| | | VN | 10 | 0.31 | 0.000165 | ± 2.5 | PASS |
| | | VN | 20 | -1.43 | -0.000761 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|-------|-----------|----------|-----------|-------|------|
| | | VN | 30 | 4.41 | 0.002346 | ± 2.5 | PASS |
| | | VN | 40 | 0.16 | 0.000085 | ± 2.5 | PASS |
| | | VN | 50 | 2.65 | 0.001410 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.55 | 0.001342 | ± 2.5 | PASS |
| | | VN | -20 | 4.59 | 0.002416 | ± 2.5 | PASS |
| | | VN | -10 | -0.34 | -0.000179 | ± 2.5 | PASS |
| | | VN | 0 | 0.75 | 0.000395 | ± 2.5 | PASS |
| | | VN | 10 | -0.38 | -0.000200 | ± 2.5 | PASS |
| | | VN | 20 | 0.58 | 0.000305 | ± 2.5 | PASS |
| | | VN | 30 | 4.21 | 0.002216 | ± 2.5 | PASS |
| | | VN | 40 | 2.84 | 0.001495 | ± 2.5 | PASS |
| | | VN | 50 | -1.85 | -0.000974 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | -0.22 | -0.000118 | ± 2.5 | PASS |
| | | VN | -20 | 2.79 | 0.001500 | ± 2.5 | PASS |
| | | VN | -10 | 4.32 | 0.002323 | ± 2.5 | PASS |
| | | VN | 0 | 0.69 | 0.000371 | ± 2.5 | PASS |
| | | VN | 10 | 4.19 | 0.002253 | ± 2.5 | PASS |
| | | VN | 20 | 0.57 | 0.000306 | ± 2.5 | PASS |
| | | VN | 30 | -1.34 | -0.000720 | ± 2.5 | PASS |
| | | VN | 40 | 4.64 | 0.002495 | ± 2.5 | PASS |
| | | VN | 50 | 3.72 | 0.002000 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.32 | 0.002298 | ± 2.5 | PASS |
| | | VN | -20 | 4.72 | 0.002511 | ± 2.5 | PASS |
| | | VN | -10 | 4.65 | 0.002473 | ± 2.5 | PASS |
| | | VN | 0 | 4.38 | 0.002330 | ± 2.5 | PASS |
| | | VN | 10 | -1.71 | -0.000910 | ± 2.5 | PASS |
| | | VN | 20 | 4.63 | 0.002463 | ± 2.5 | PASS |
| | | VN | 30 | 2.59 | 0.001378 | ± 2.5 | PASS |
| | | VN | 40 | -1 | -0.000532 | ± 2.5 | PASS |
| | | VN | 50 | 0 | 0.000000 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.6 | 0.001895 | ± 2.5 | PASS |
| | | VN | -20 | -1.53 | -0.000805 | ± 2.5 | PASS |
| | | VN | -10 | 3 | 0.001579 | ± 2.5 | PASS |
| | | VN | 0 | 0.05 | 0.000026 | ± 2.5 | PASS |
| | | VN | 10 | -0.04 | -0.000021 | ± 2.5 | PASS |
| | | VN | 20 | 1.83 | 0.000963 | ± 2.5 | PASS |
| VN | | 30 | 2.17 | 0.001142 | ± 2.5 | PASS | |
| VN | | 40 | 0.8 | 0.000421 | ± 2.5 | PASS | |
| VN | 50 | -1.55 | -0.000816 | ± 2.5 | PASS | | |