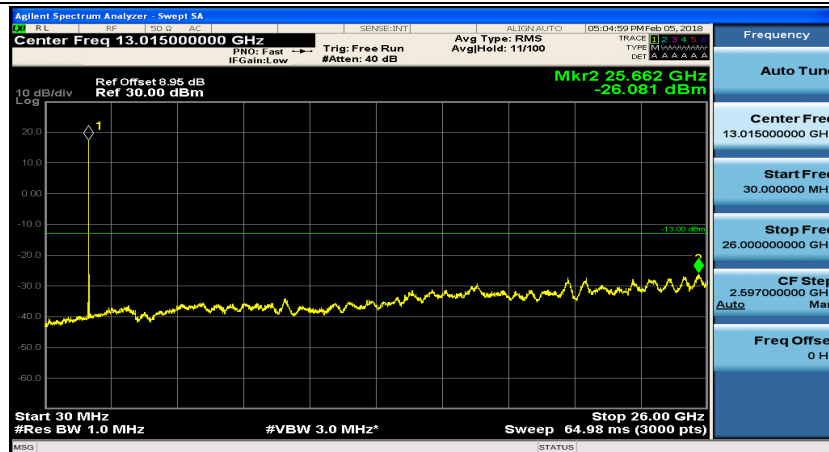
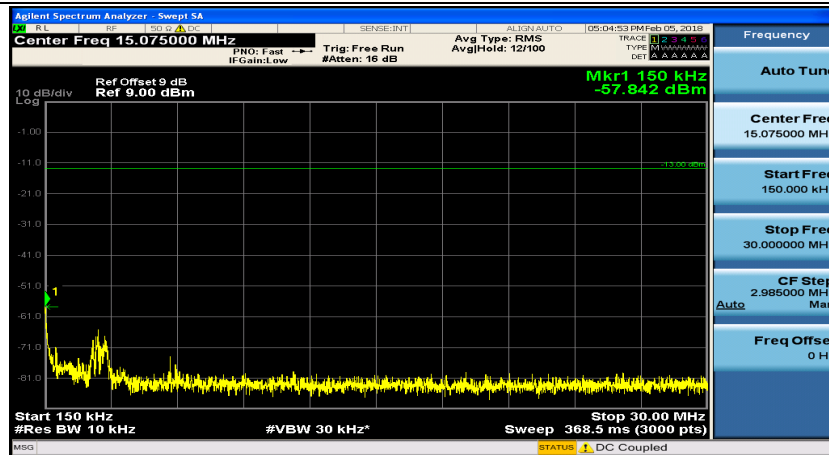
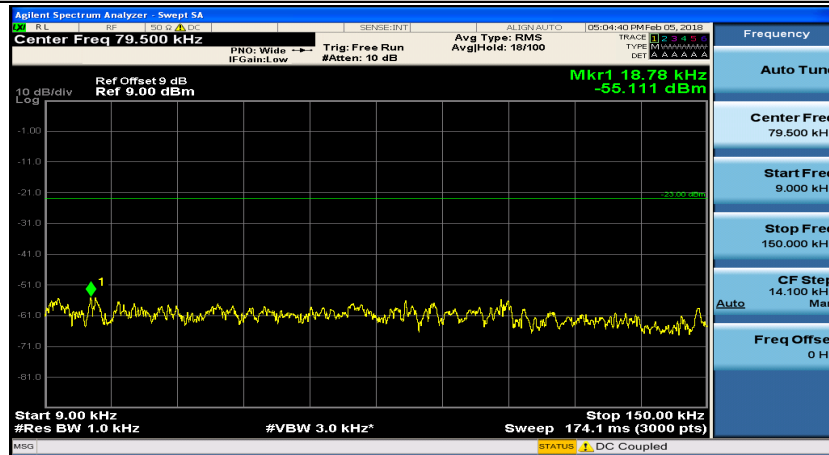
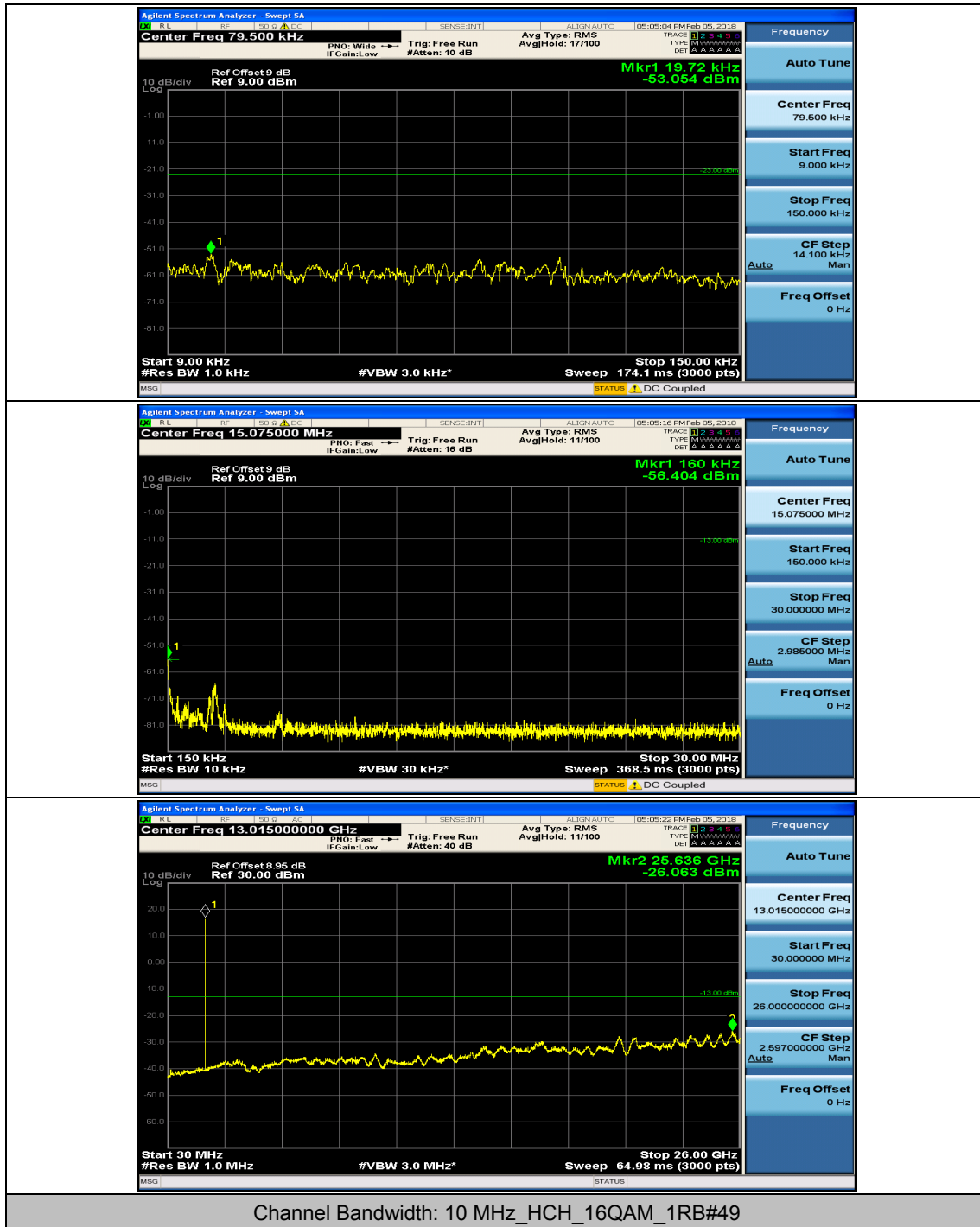
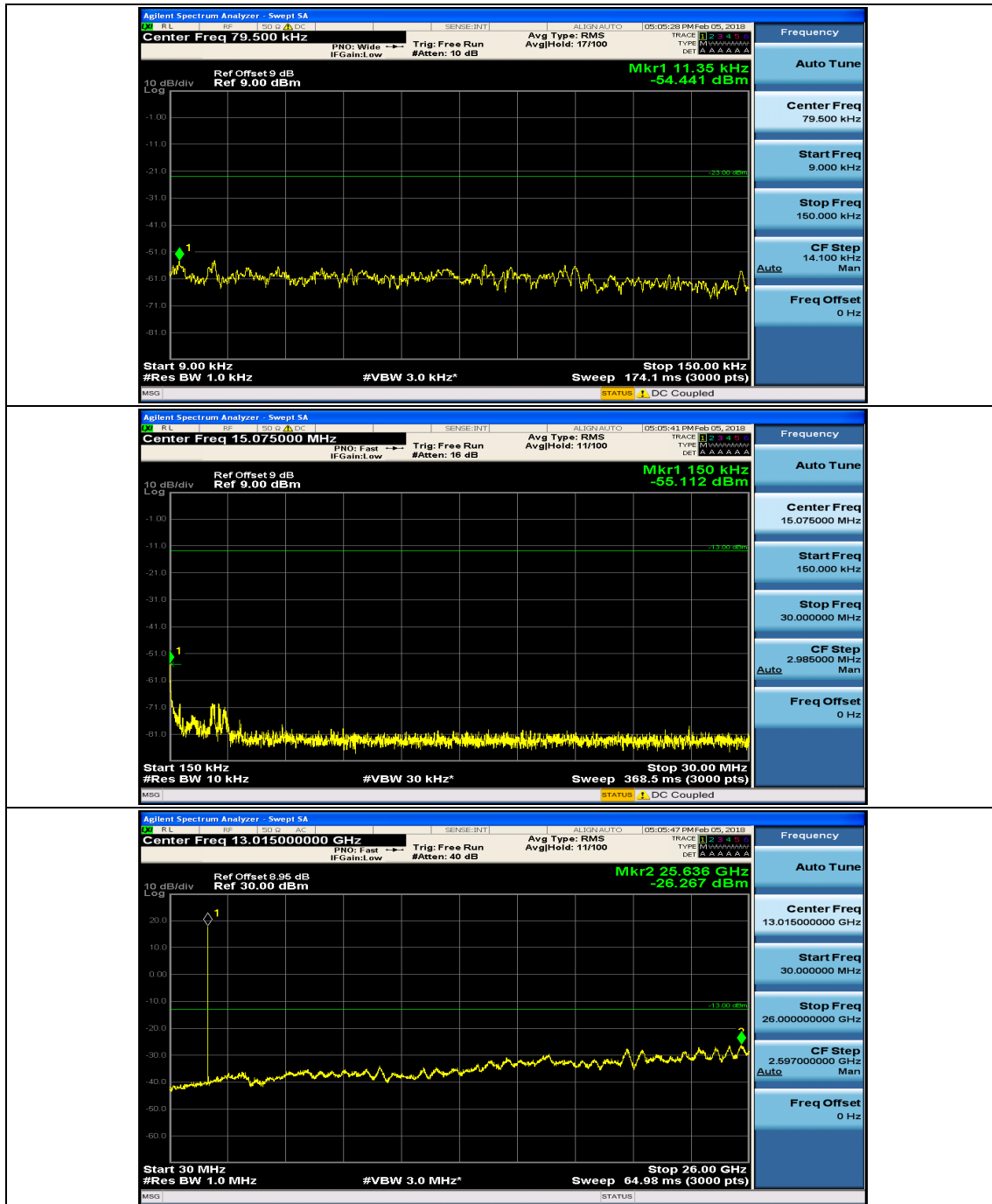


Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#0

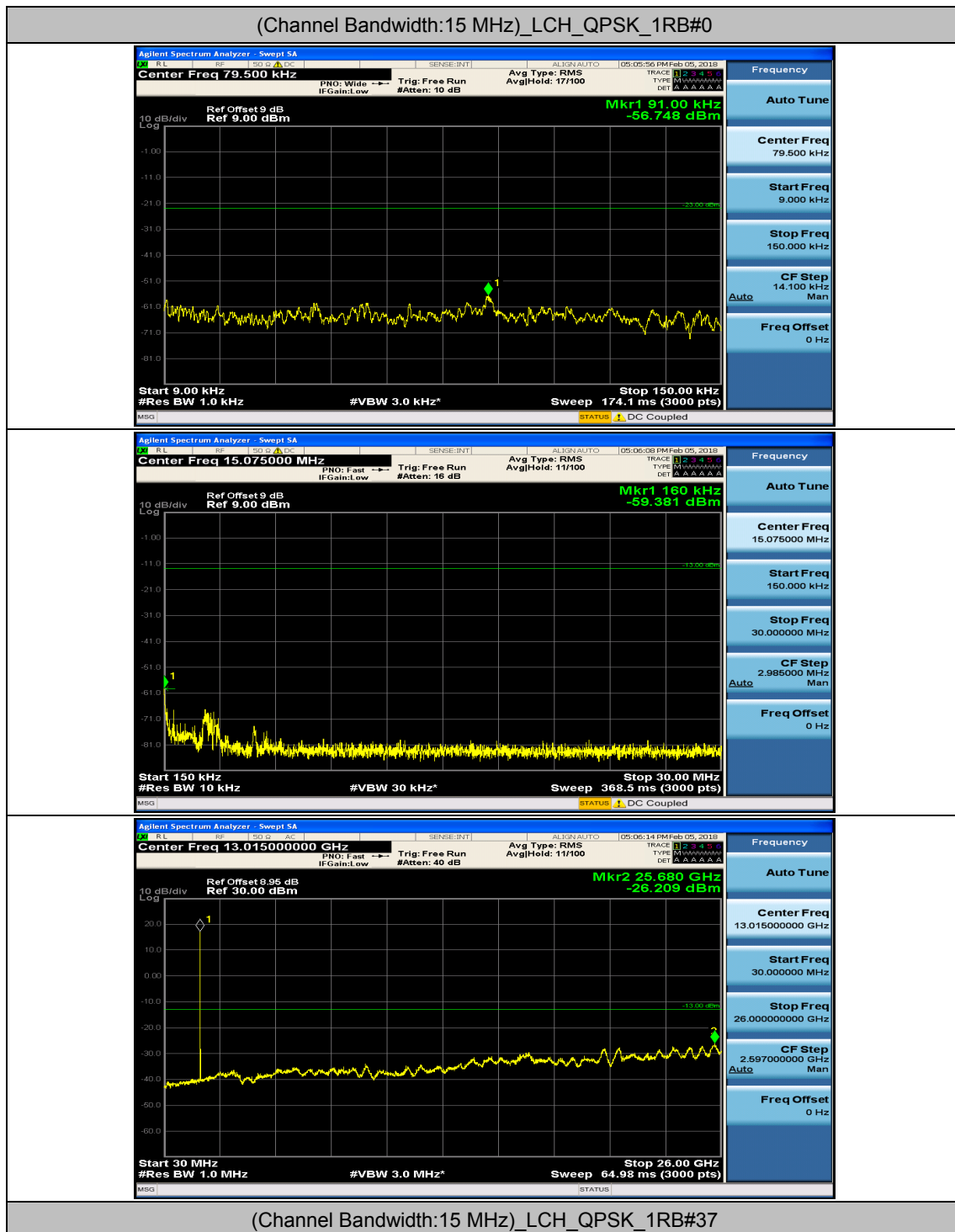


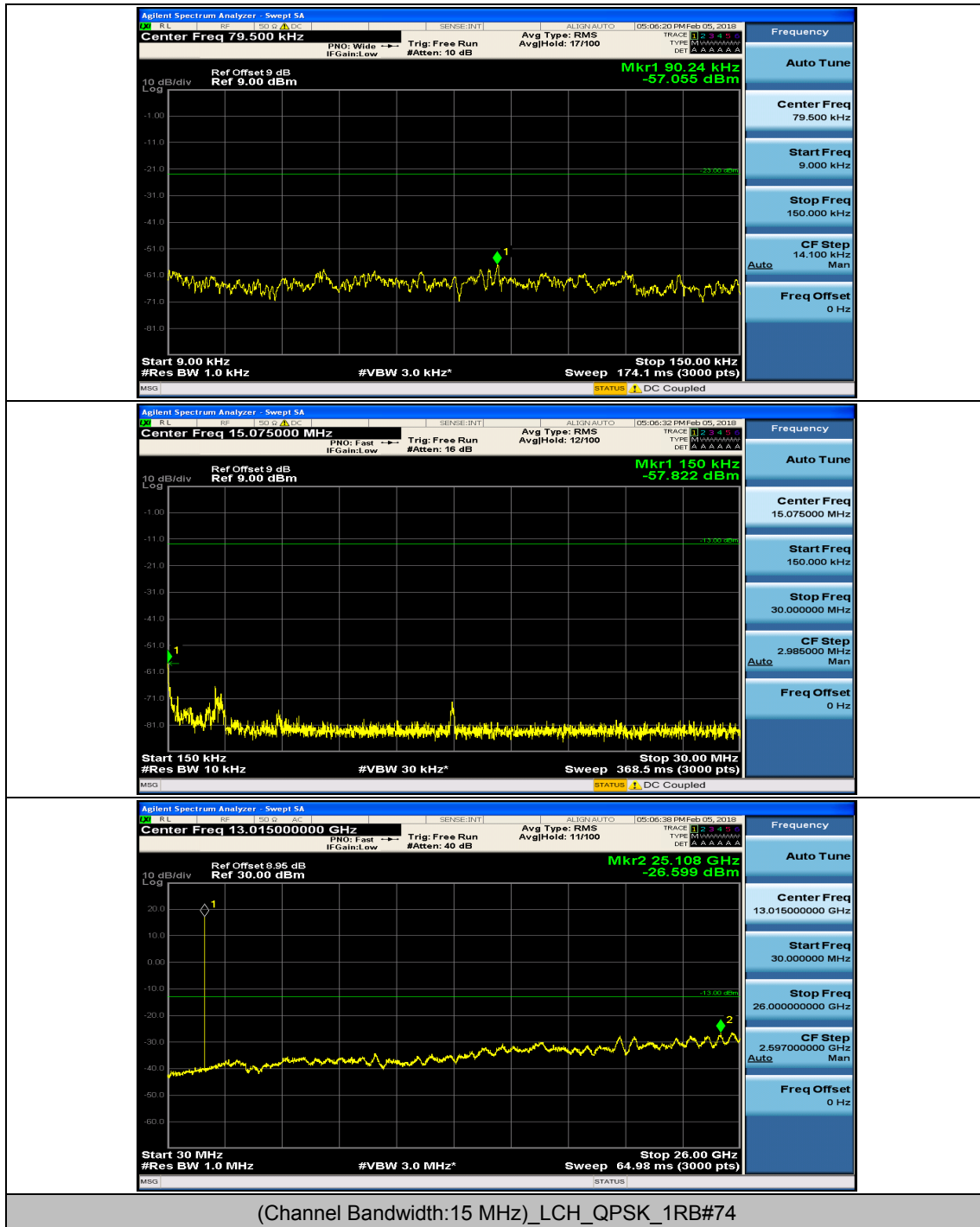
Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#24

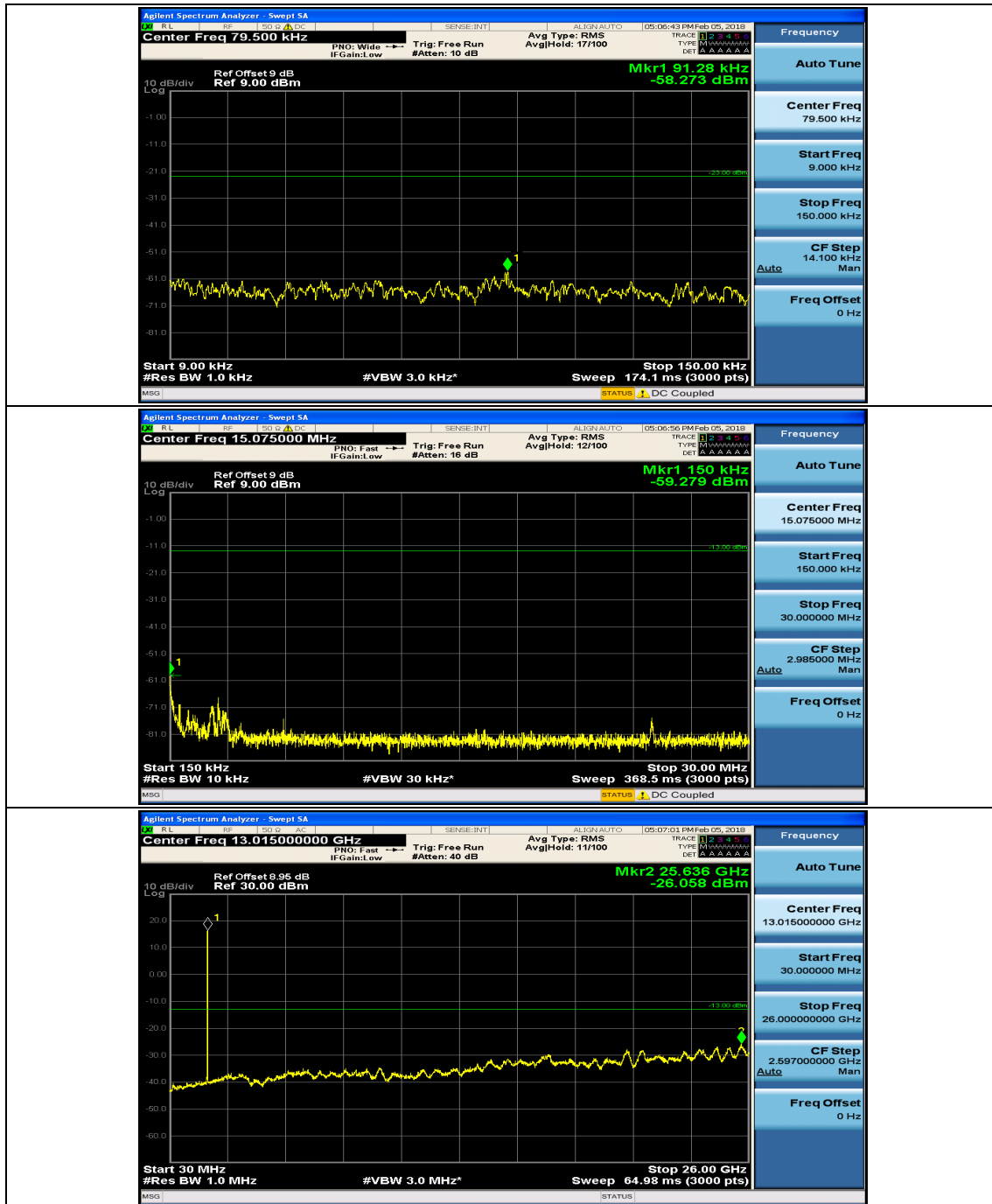




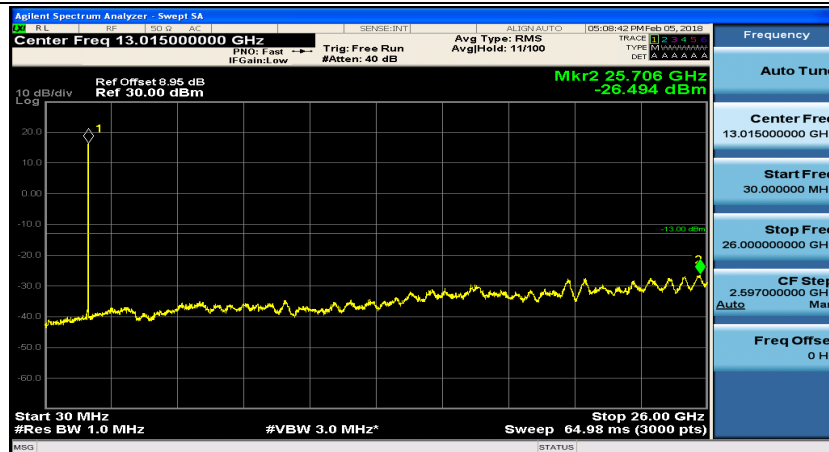
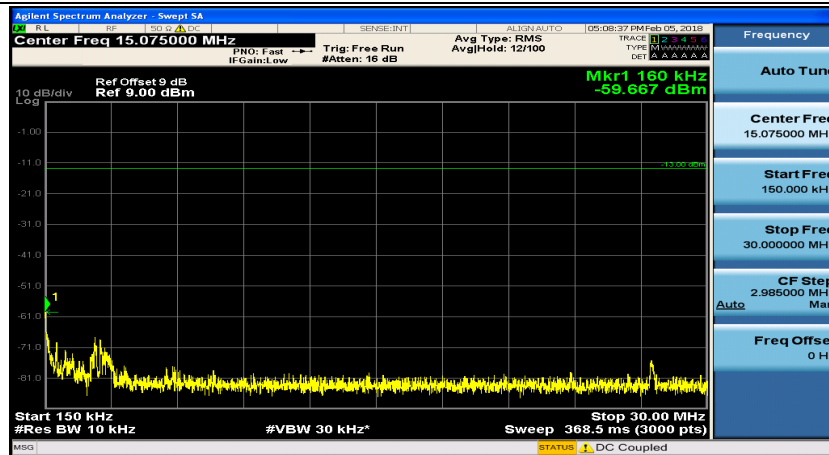
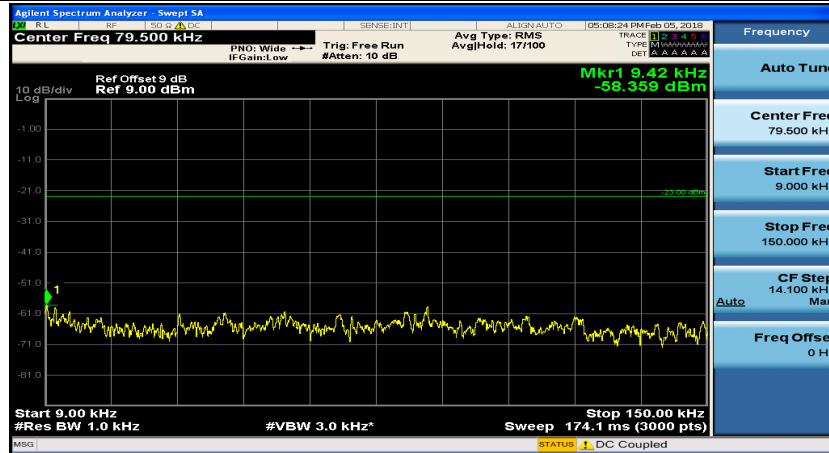
## Channel Bandwidth: 15 MHz



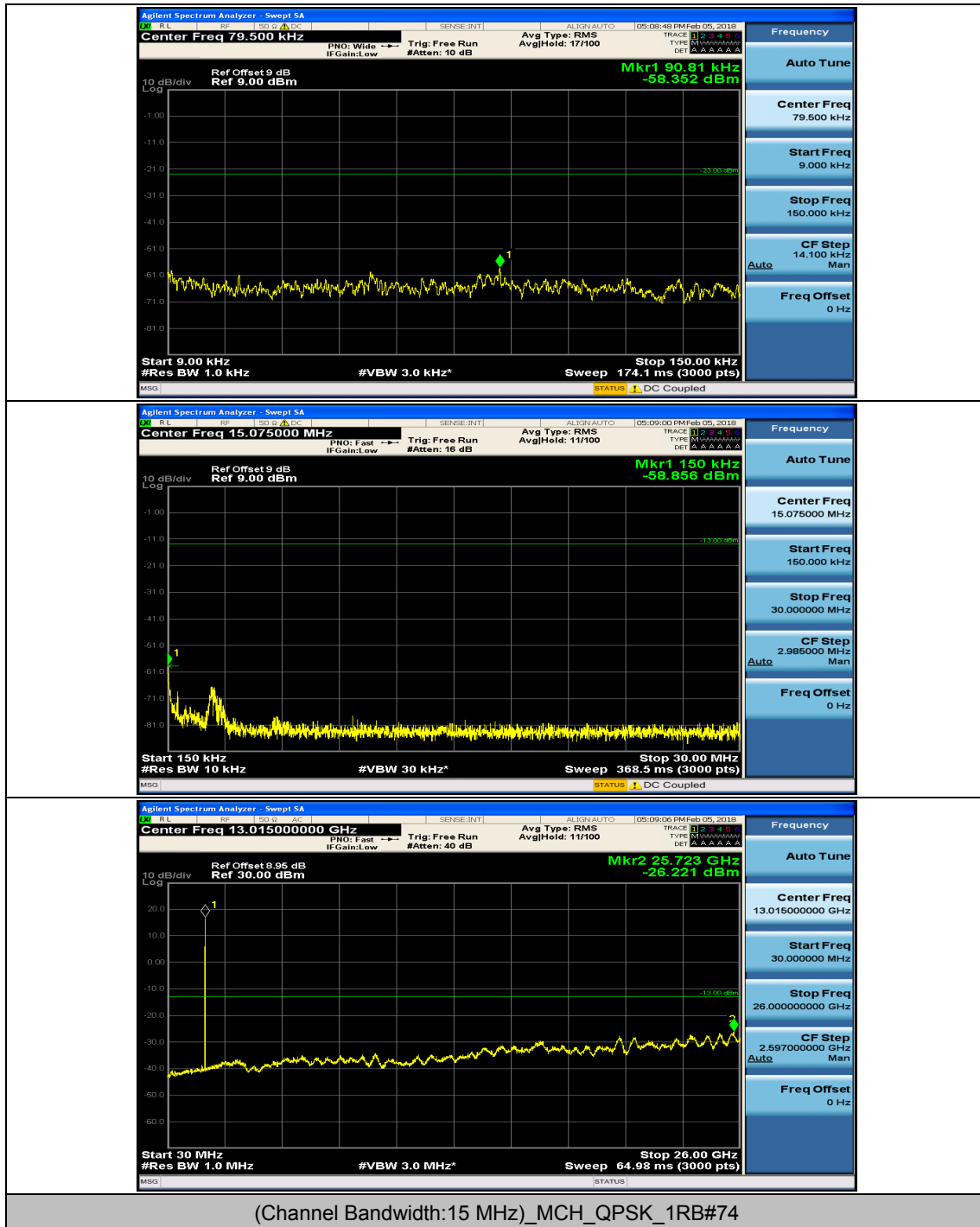


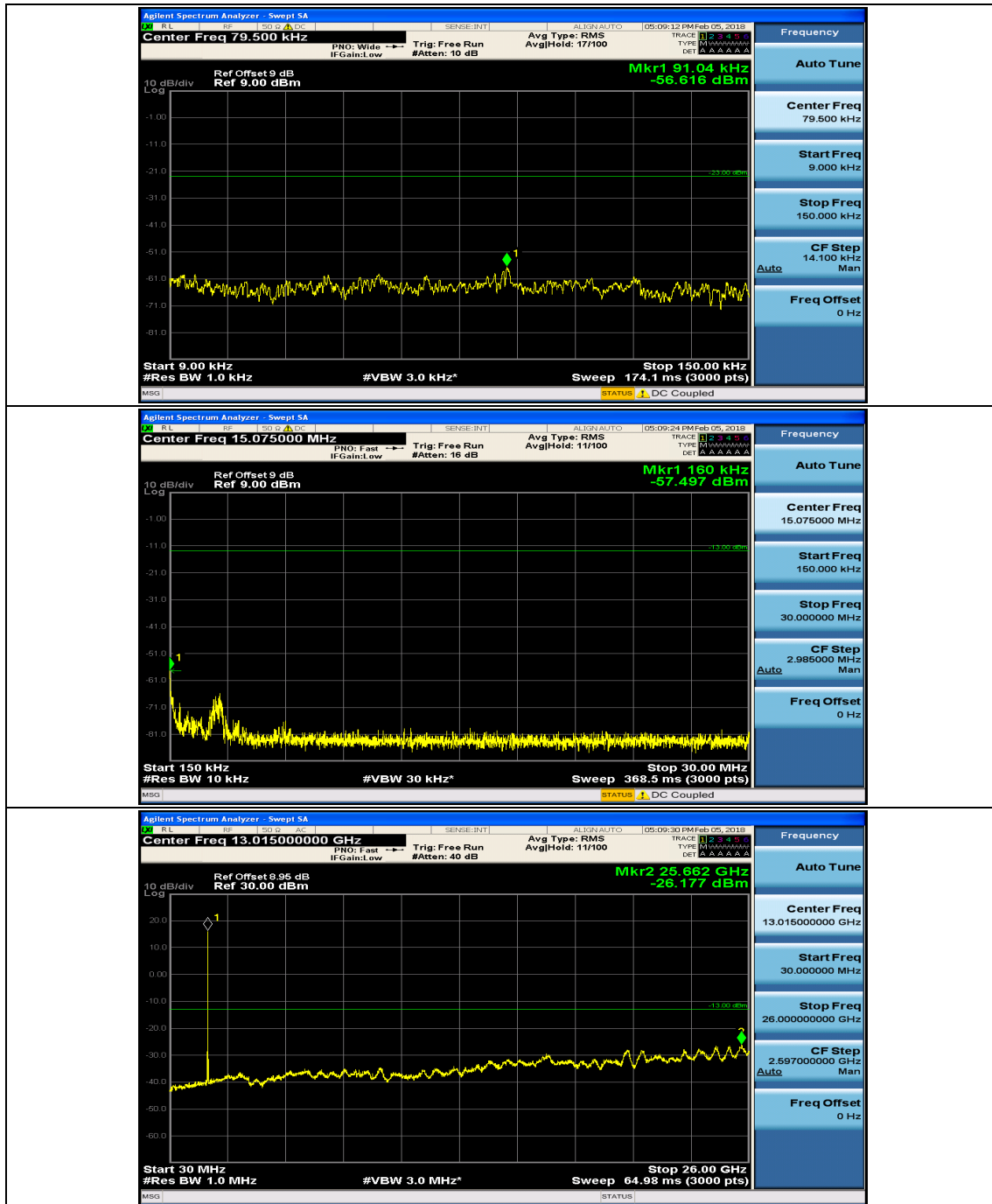


(Channel Bandwidth:15 MHz)\_MCH\_QPSK\_1RB#0

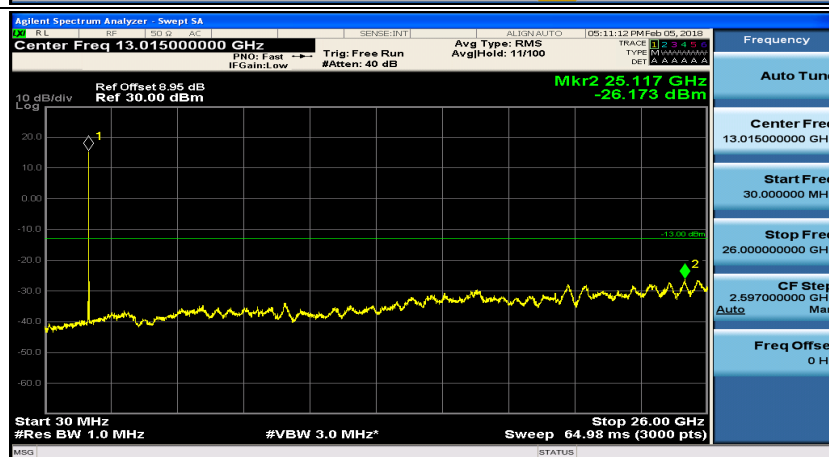
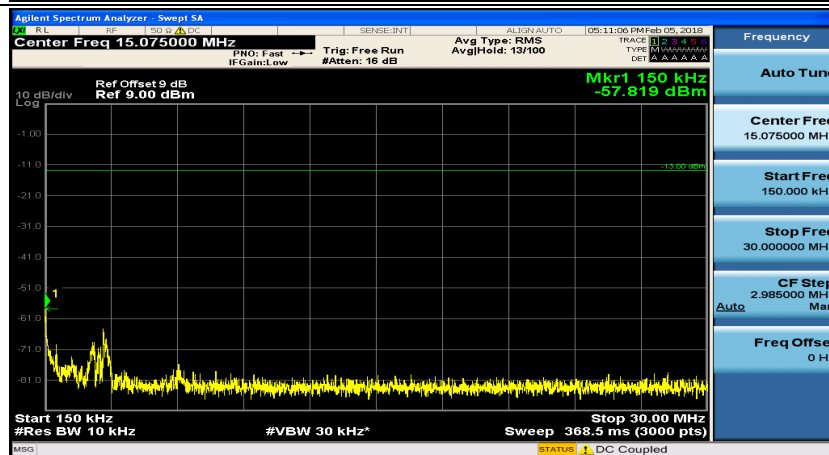
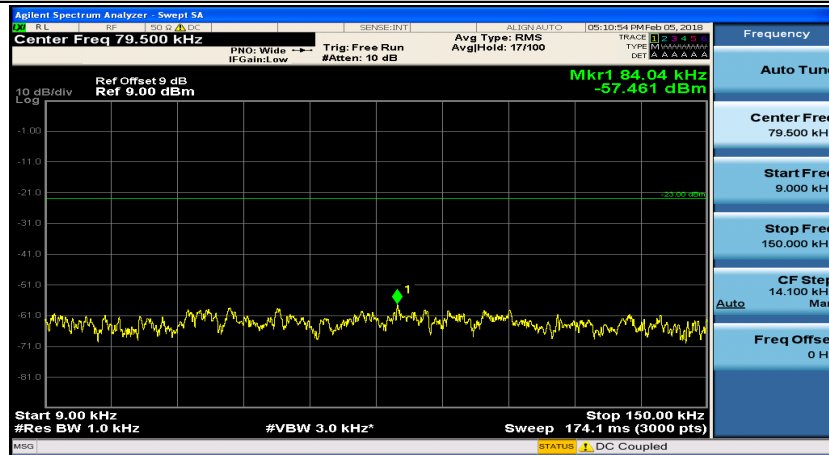


(Channel Bandwidth:15 MHz)\_MCH\_QPSK\_1RB#37

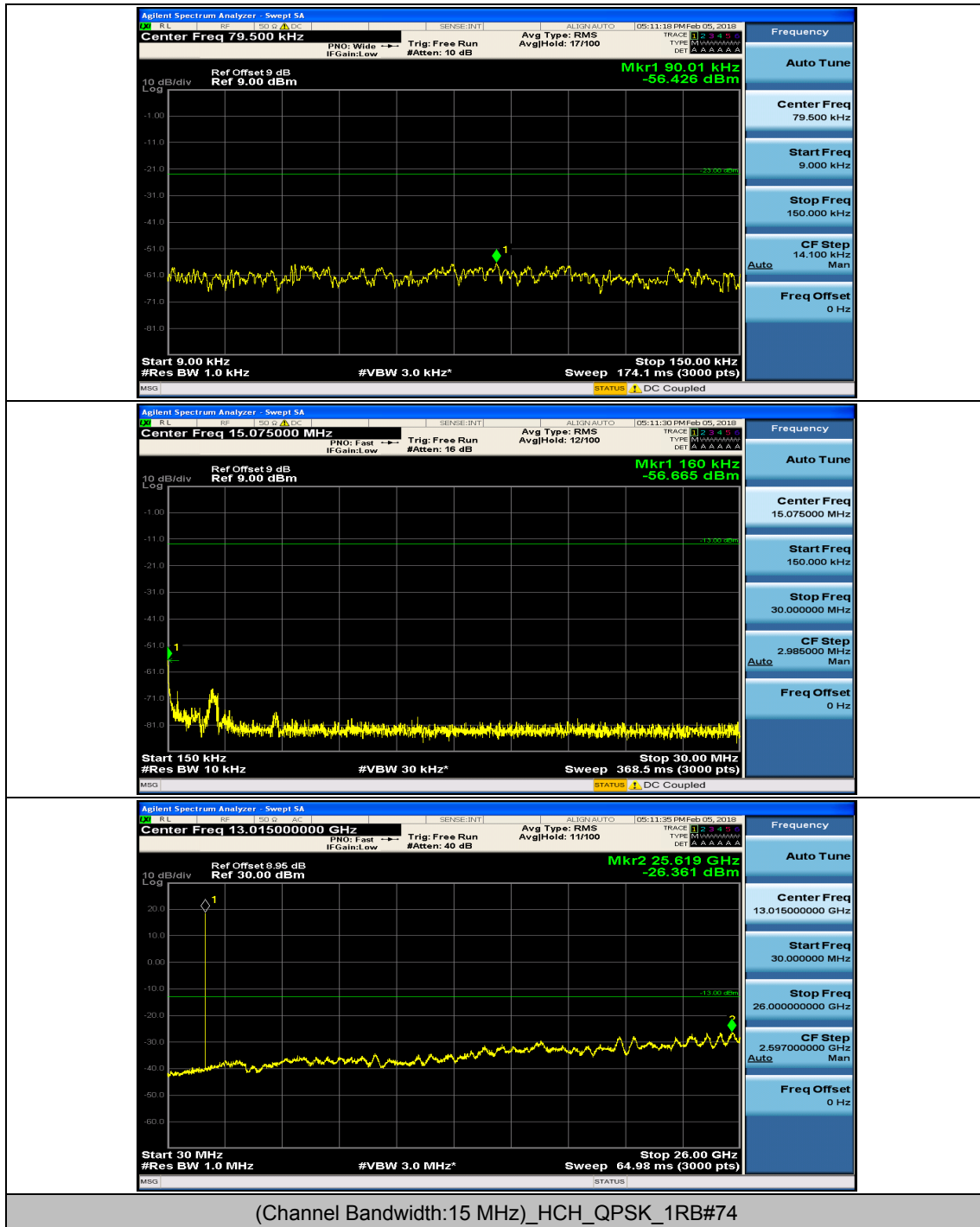


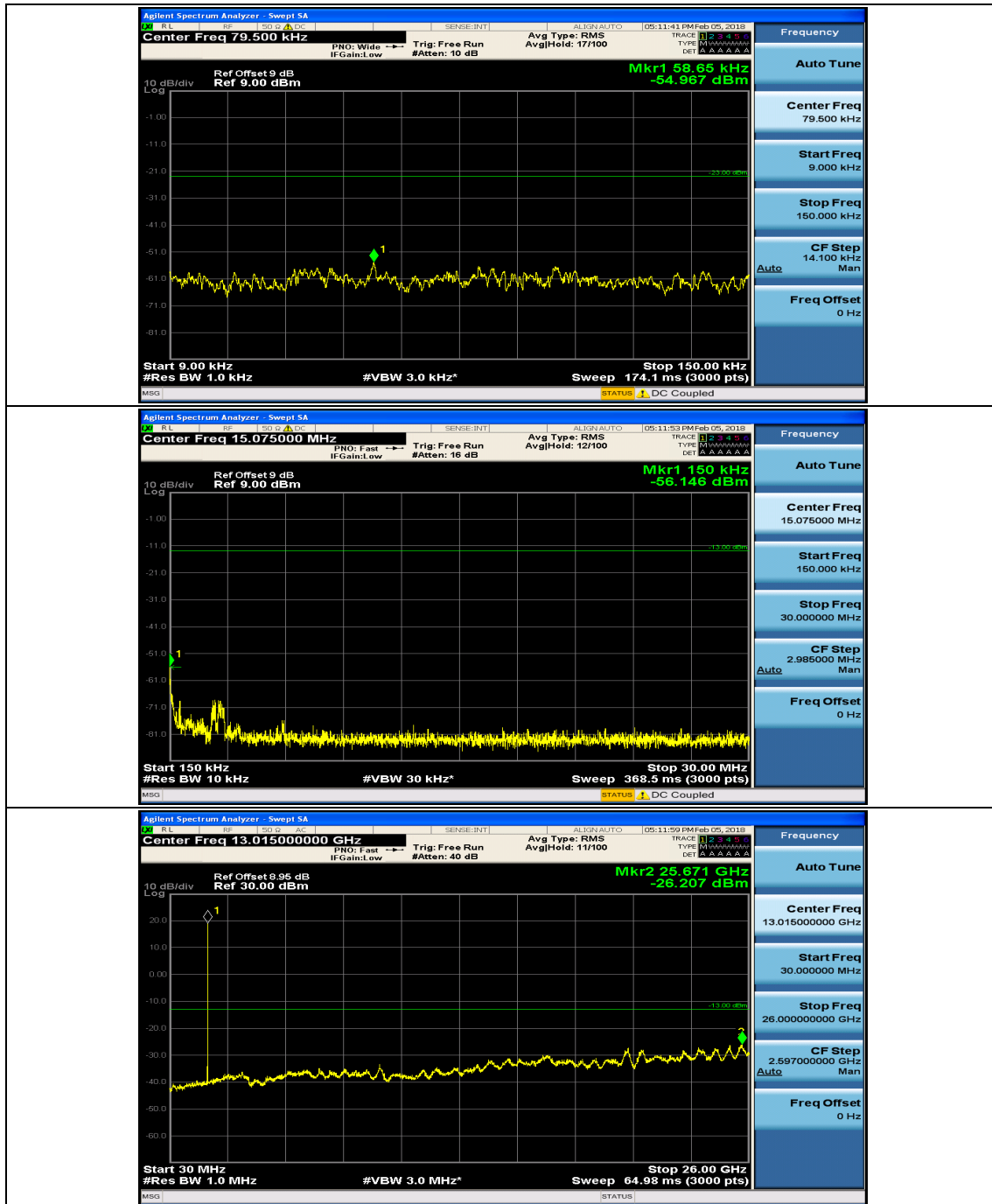


## (Channel Bandwidth:15 MHz)\_HCH\_QPSK\_1RB#0

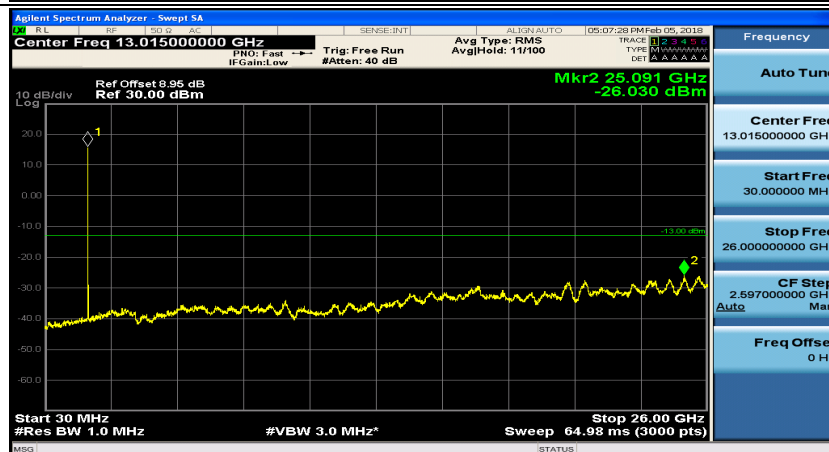
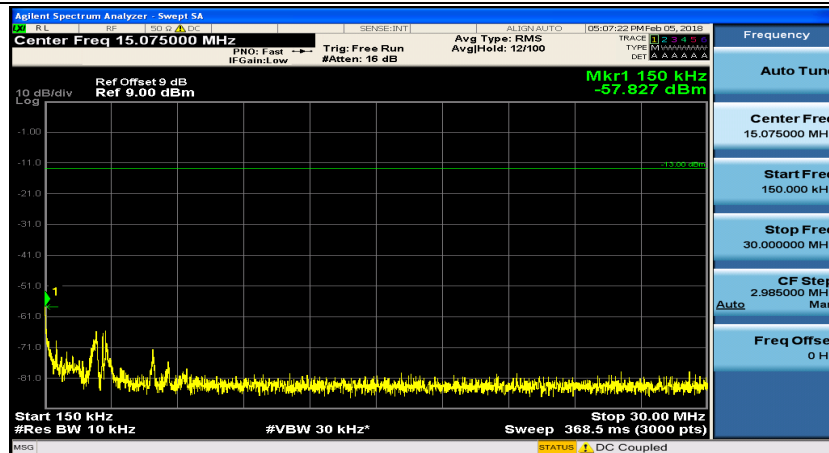
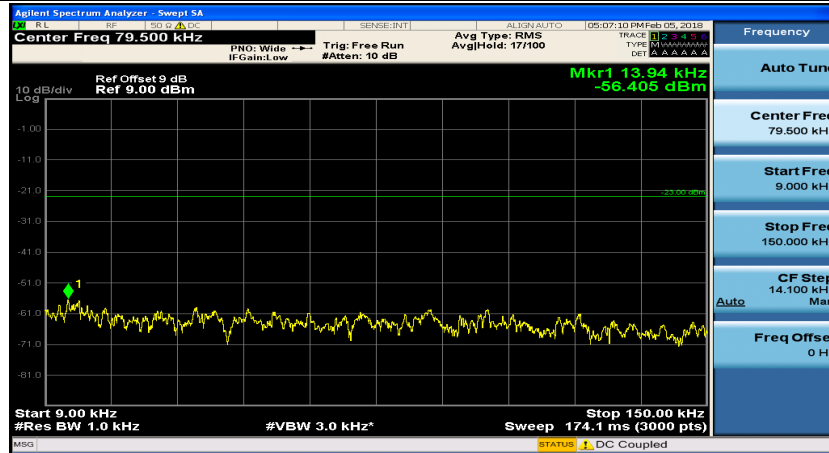


## (Channel Bandwidth:15 MHz)\_HCH\_QPSK\_1RB#37

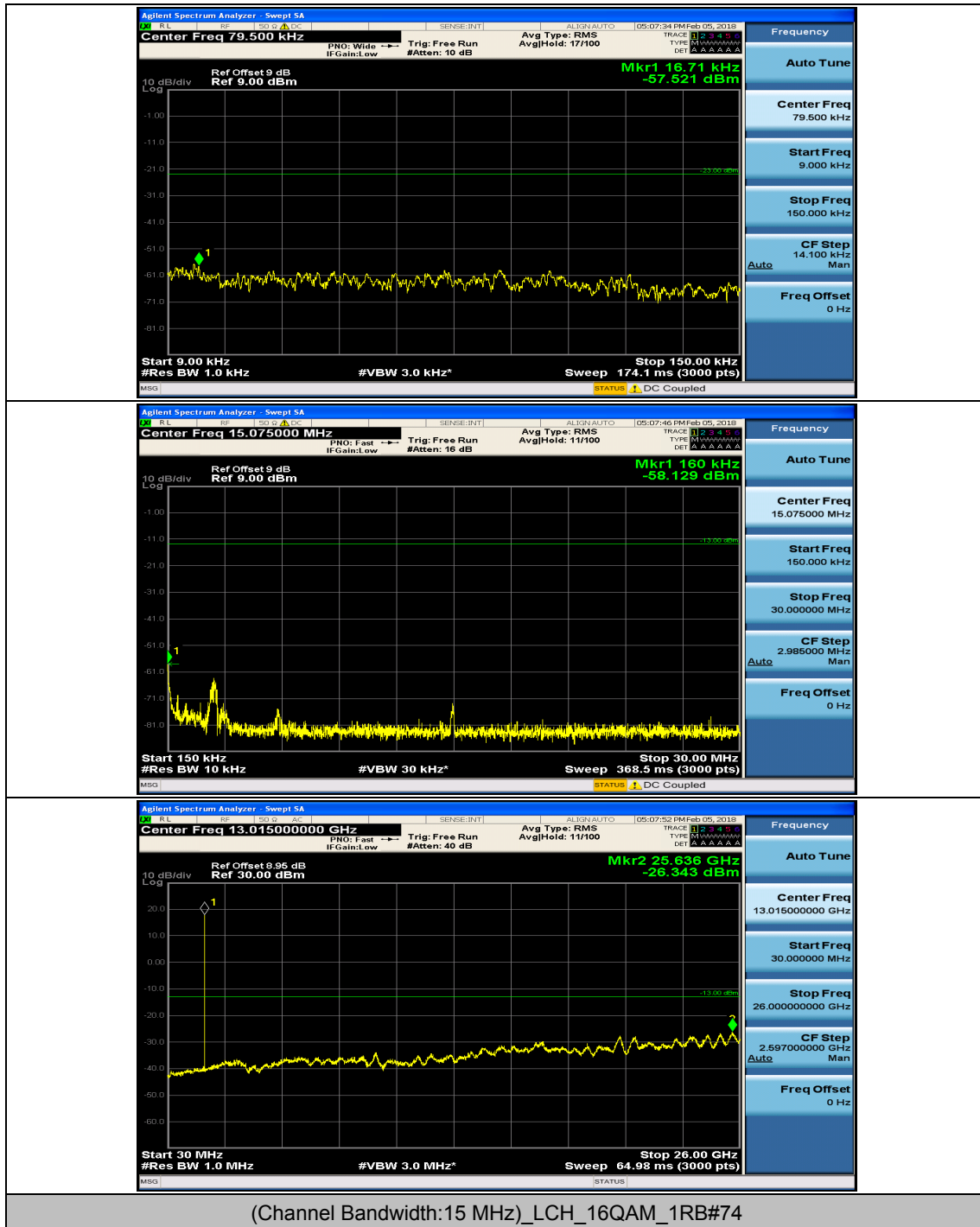


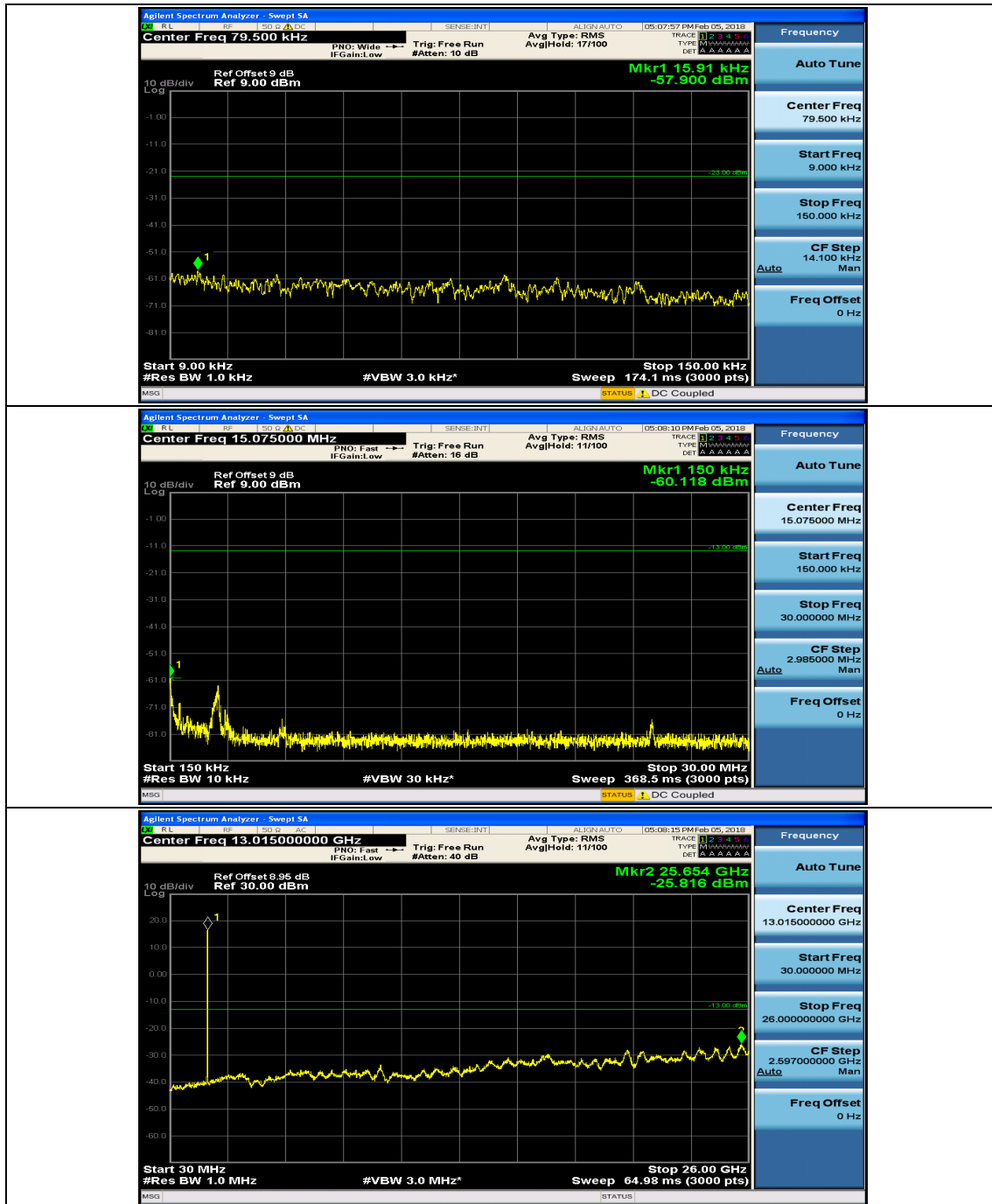


## (Channel Bandwidth:15 MHz)\_LCH\_16QAM\_1RB#0

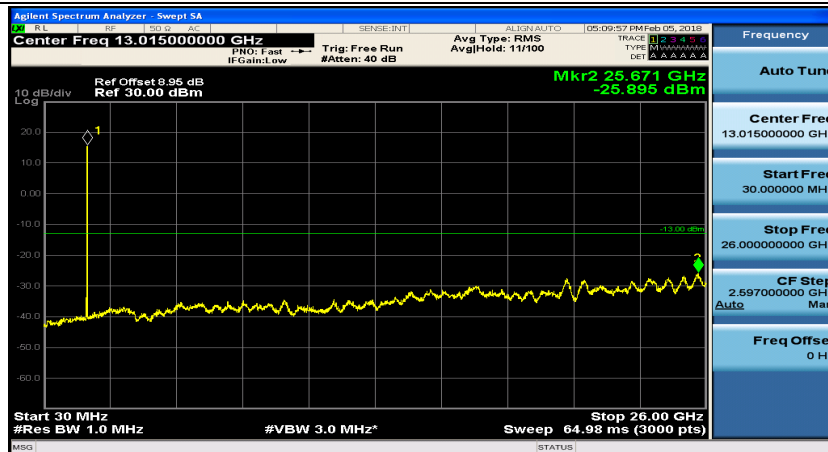
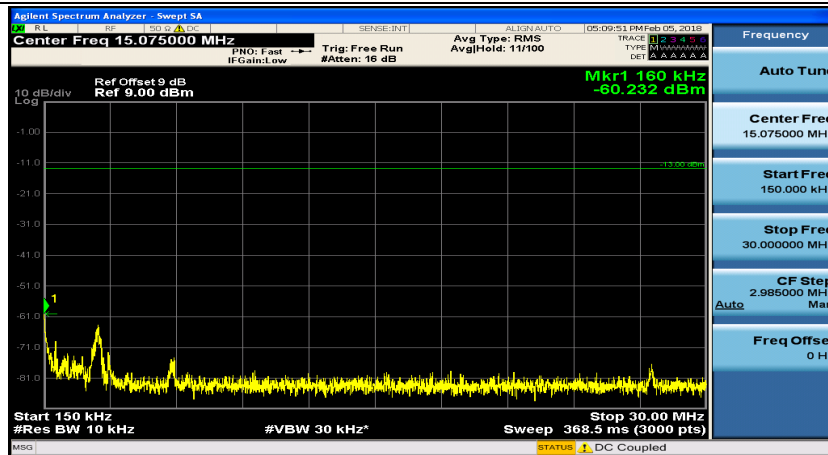
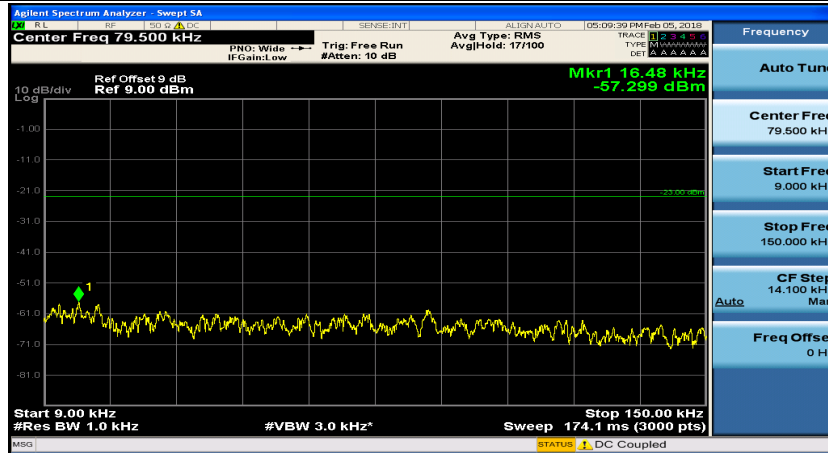


## (Channel Bandwidth:15 MHz)\_LCH\_16QAM\_1RB#37

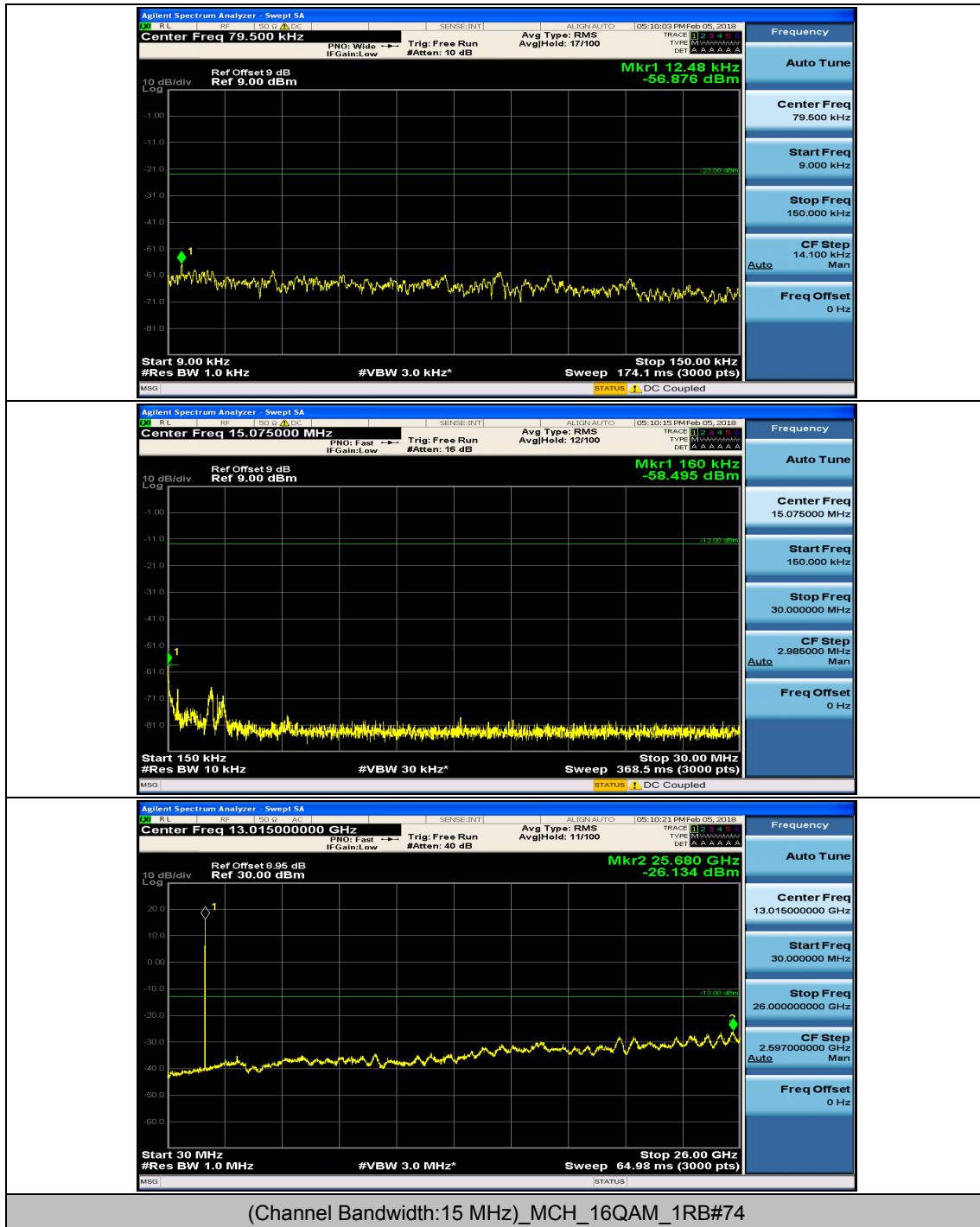


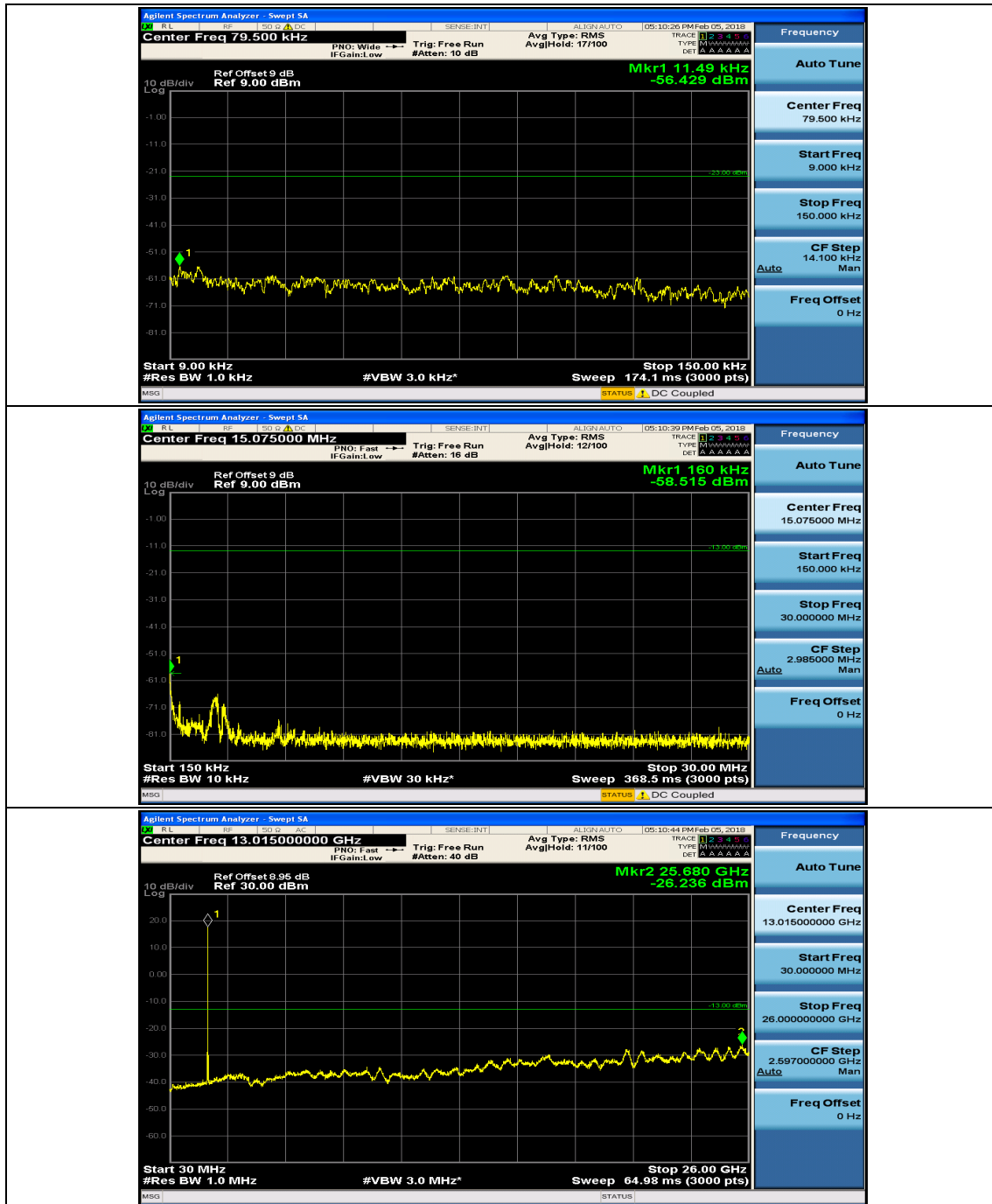


(Channel Bandwidth:15 MHz)\_MCH\_16QAM\_1RB#0

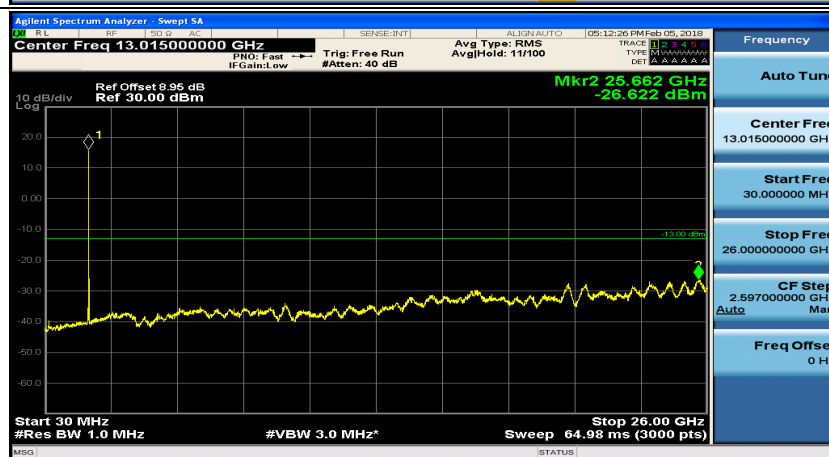
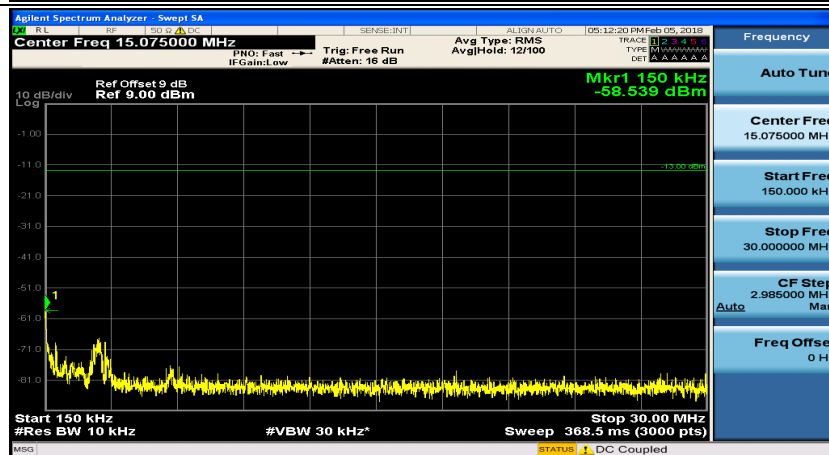
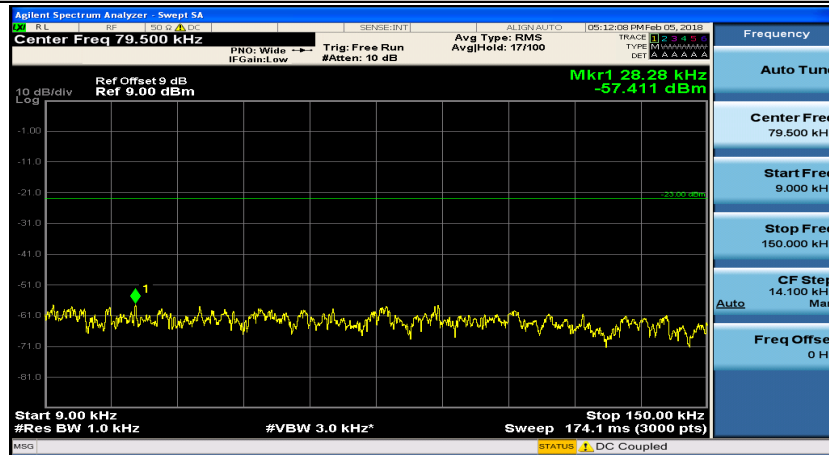


(Channel Bandwidth:15 MHz)\_MCH\_16QAM\_1RB#37

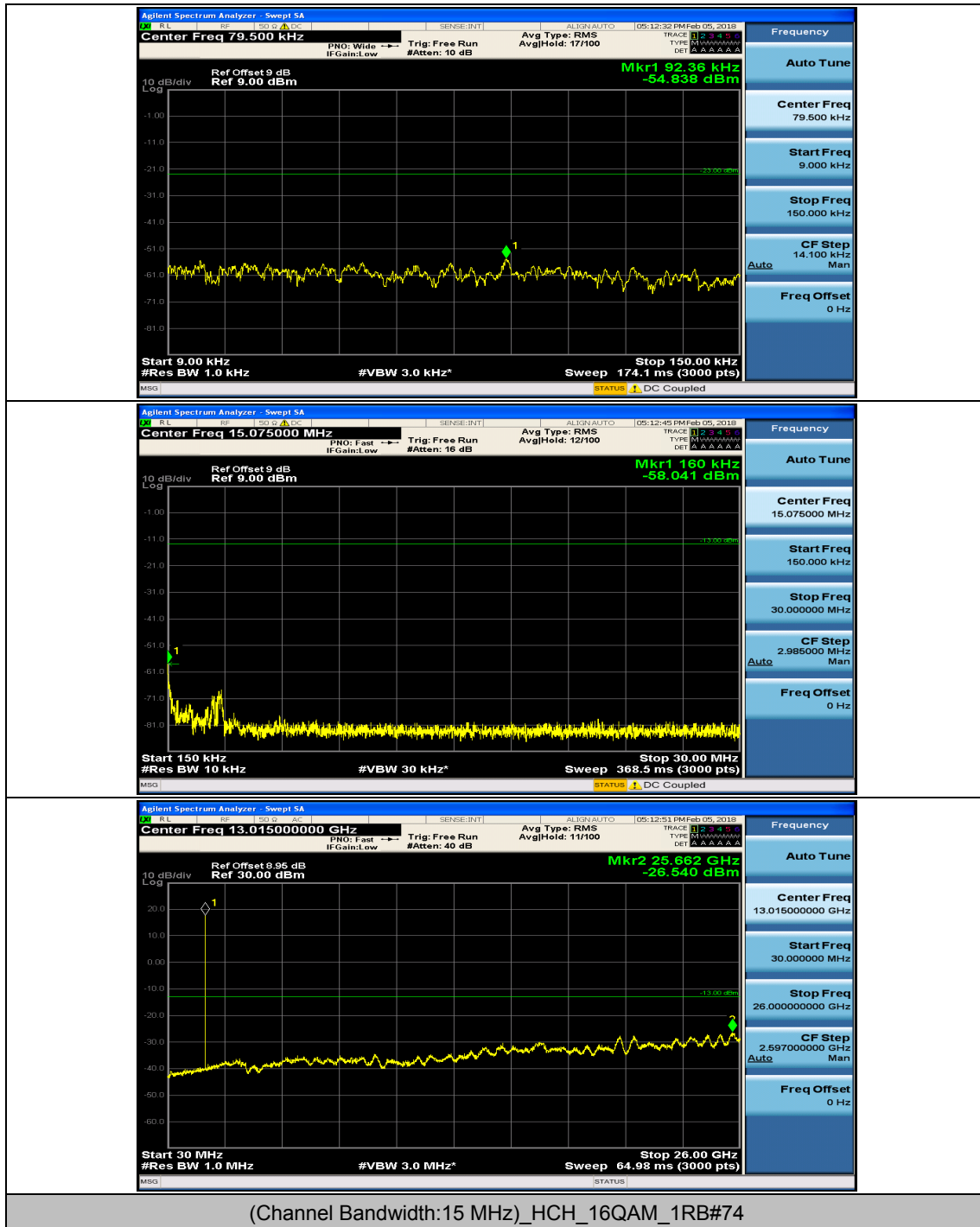


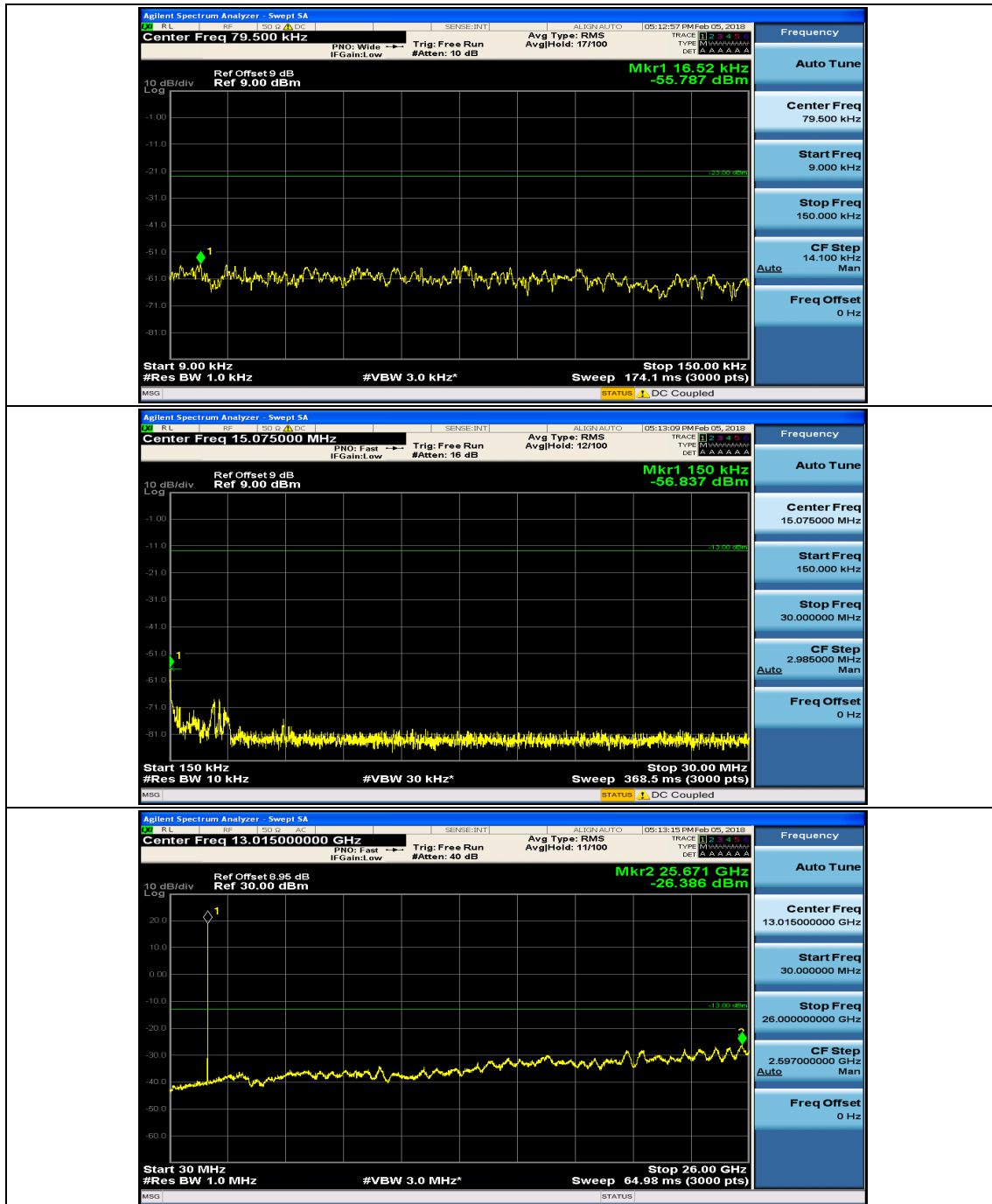


(Channel Bandwidth:15 MHz)\_HCH\_16QAM\_1RB#0

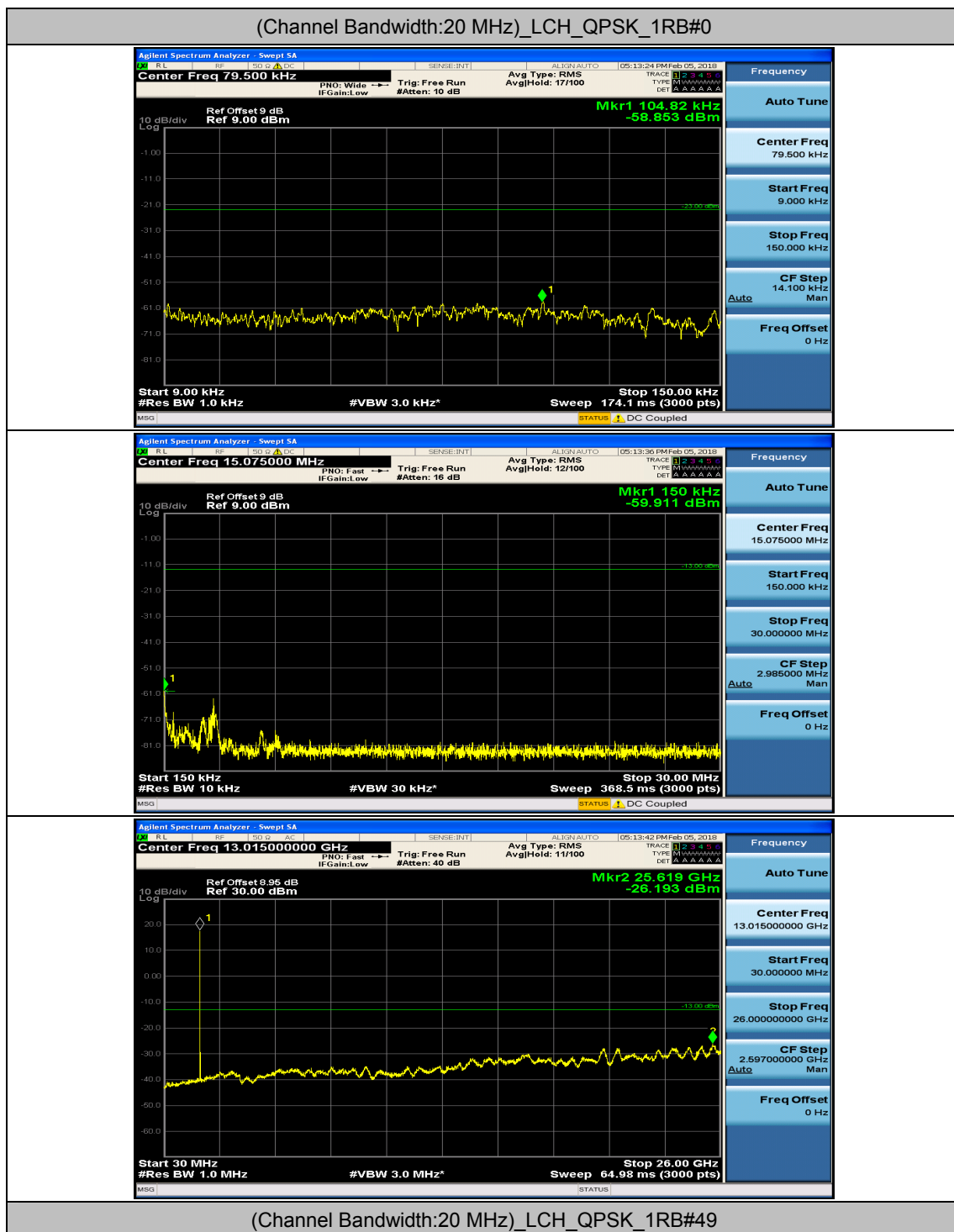


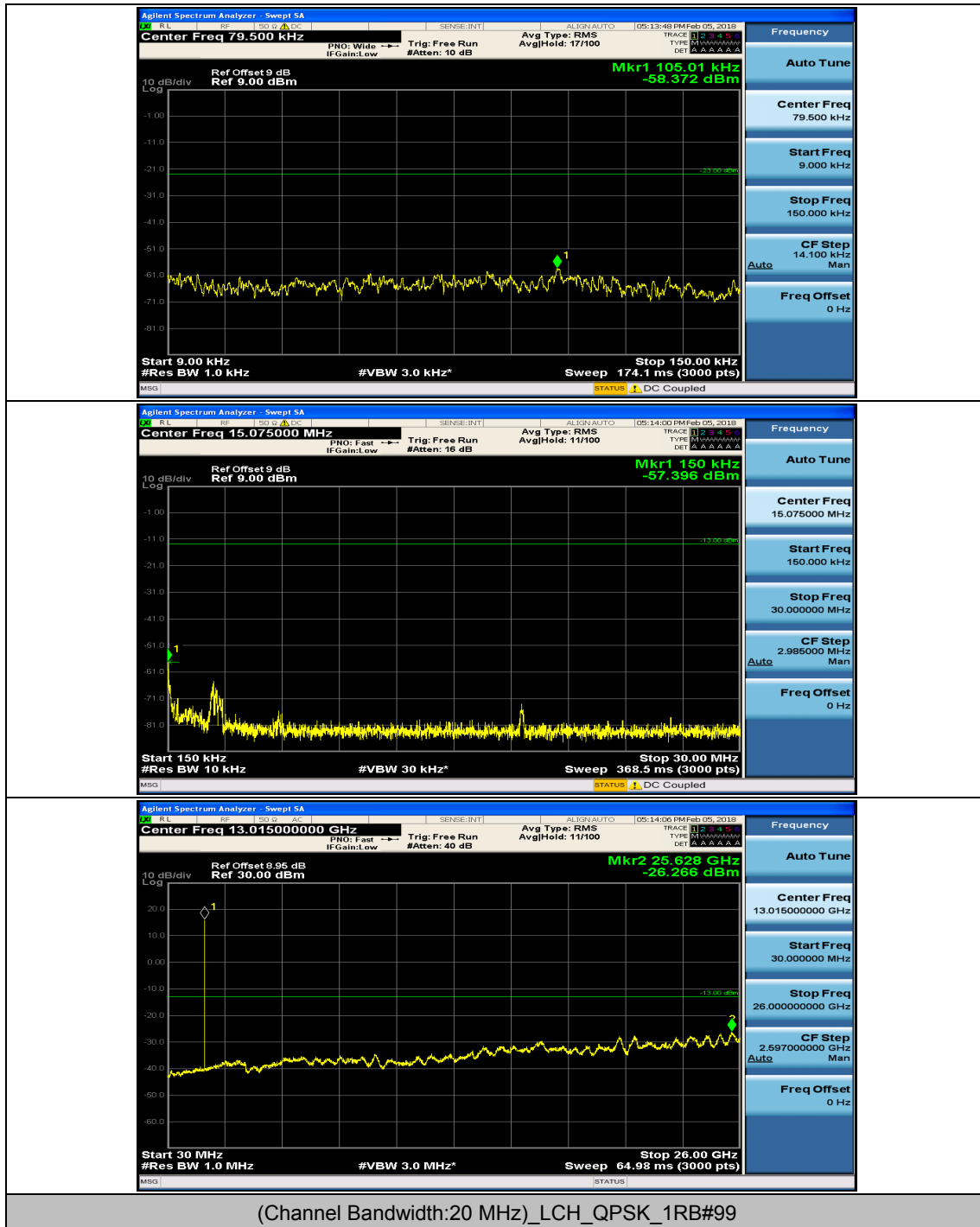
(Channel Bandwidth:15 MHz)\_HCH\_16QAM\_1RB#37

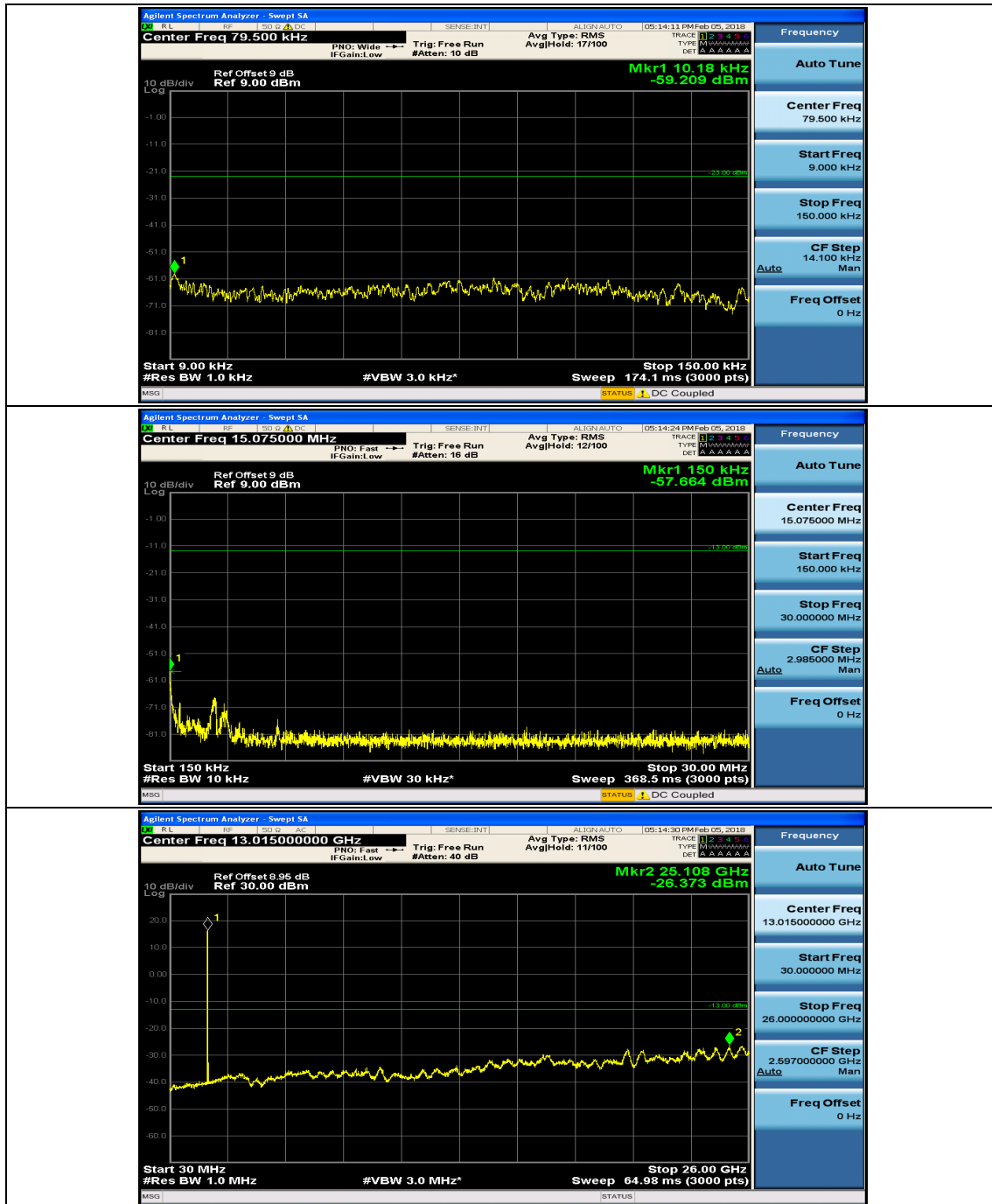




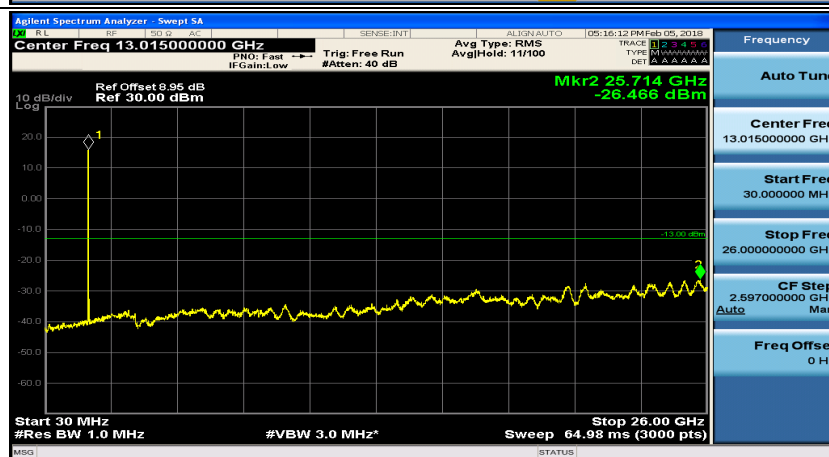
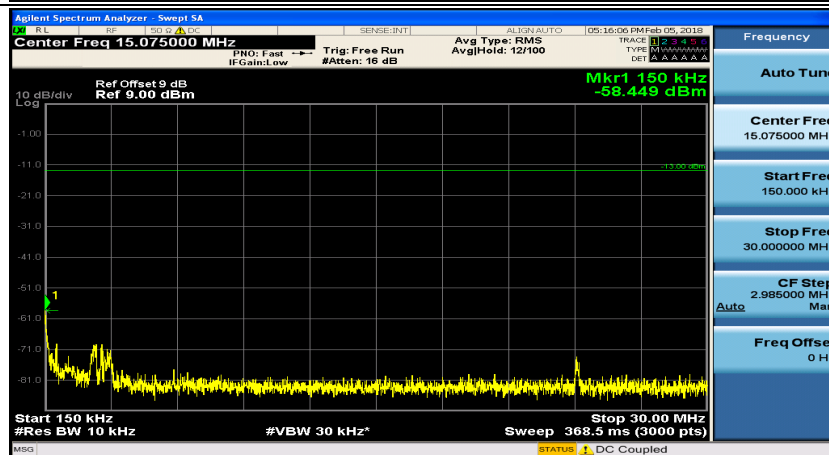
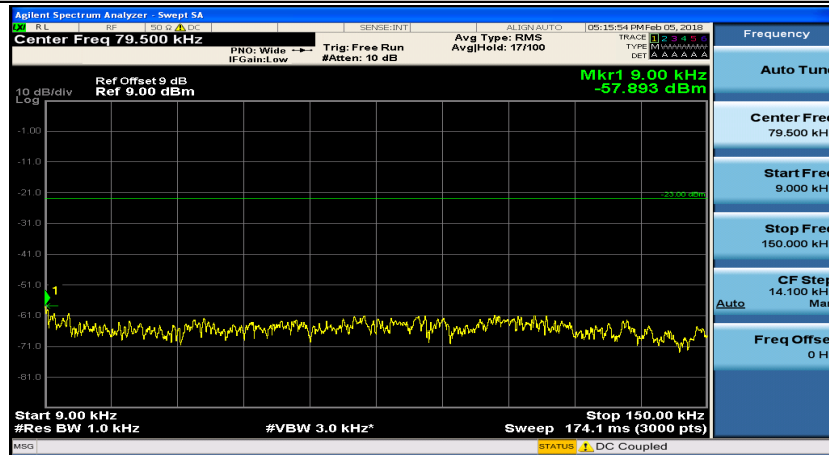
## Channel Bandwidth: 20 MHz



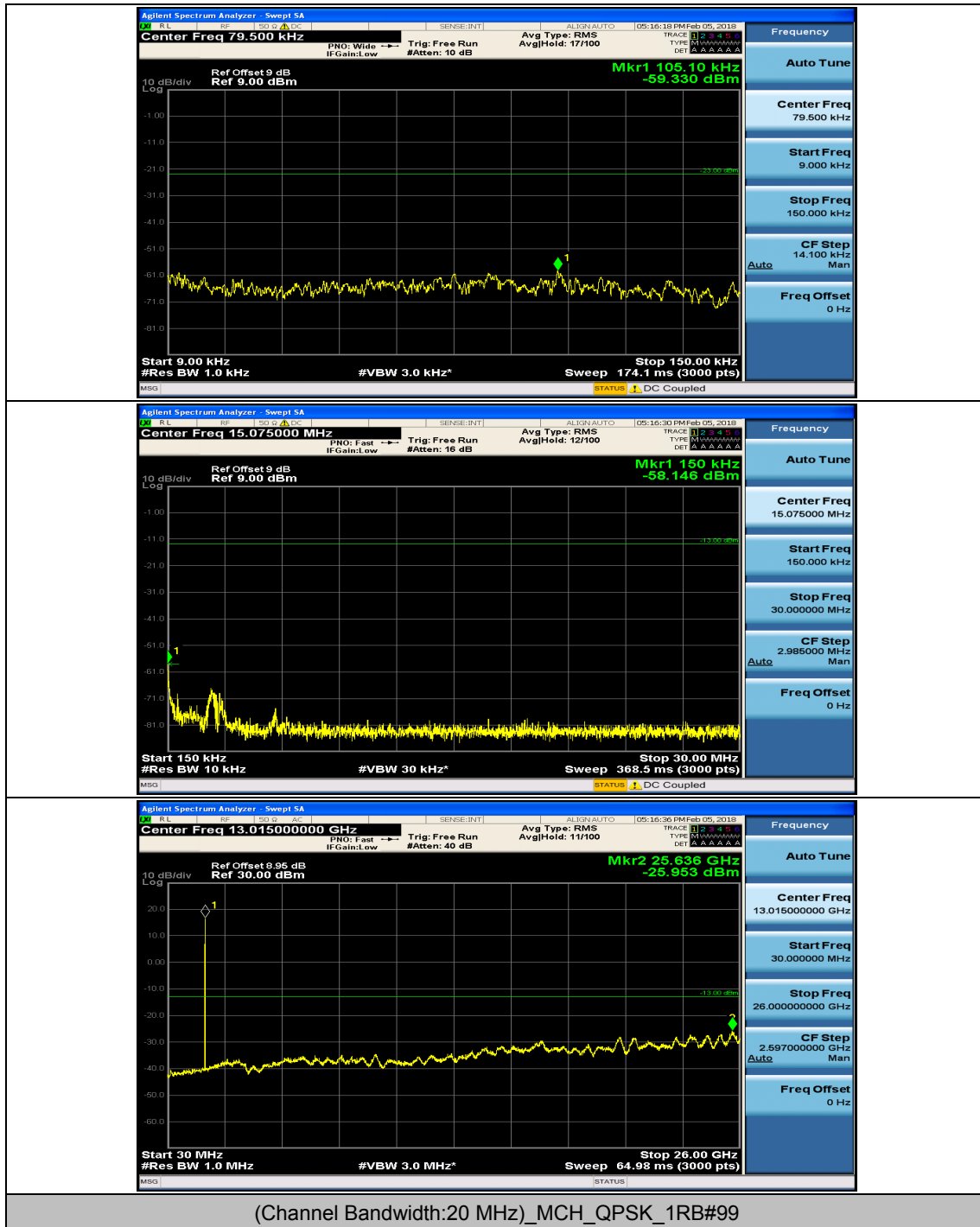


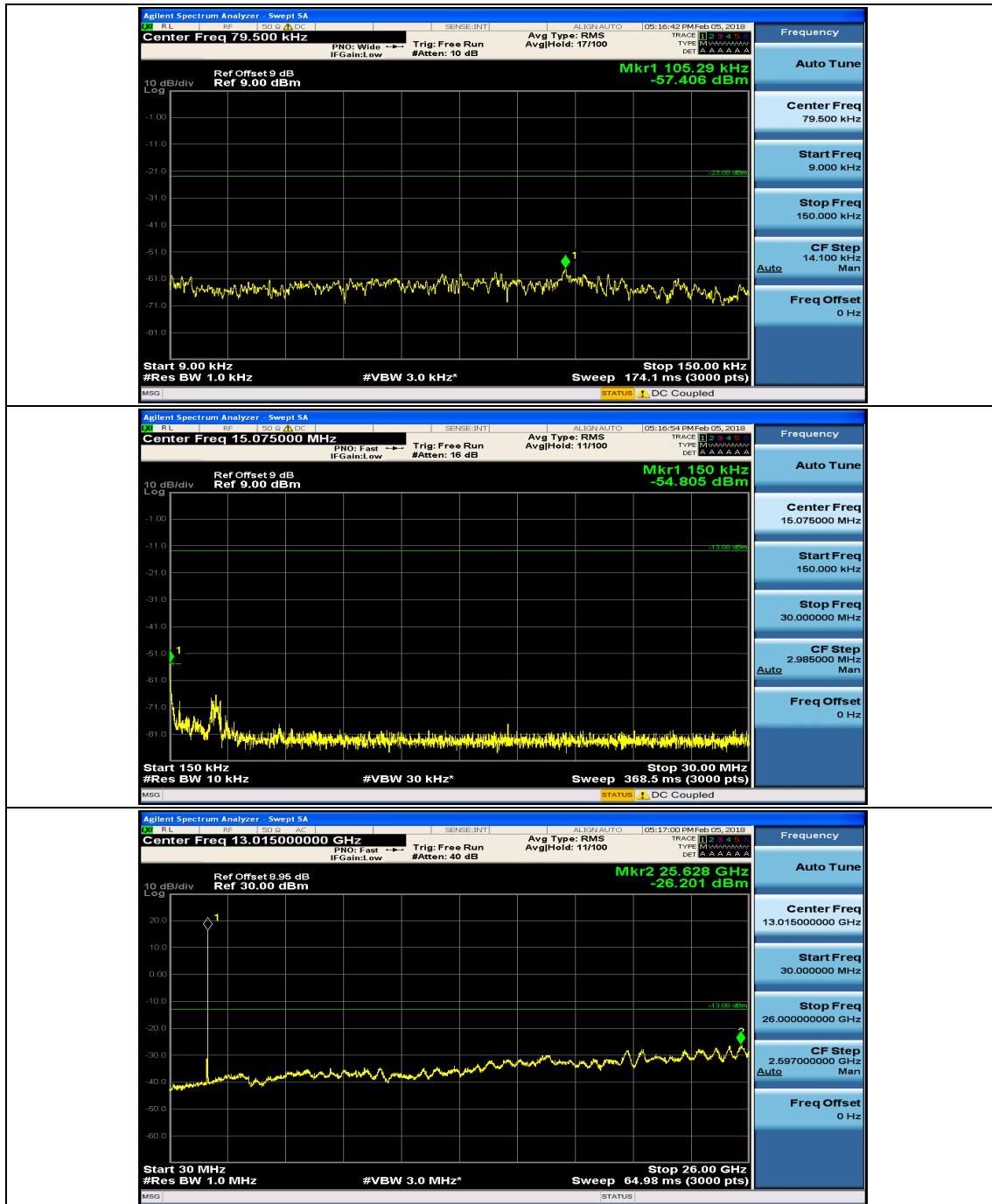


## (Channel Bandwidth:20 MHz)\_MCH\_QPSK\_1RB#0

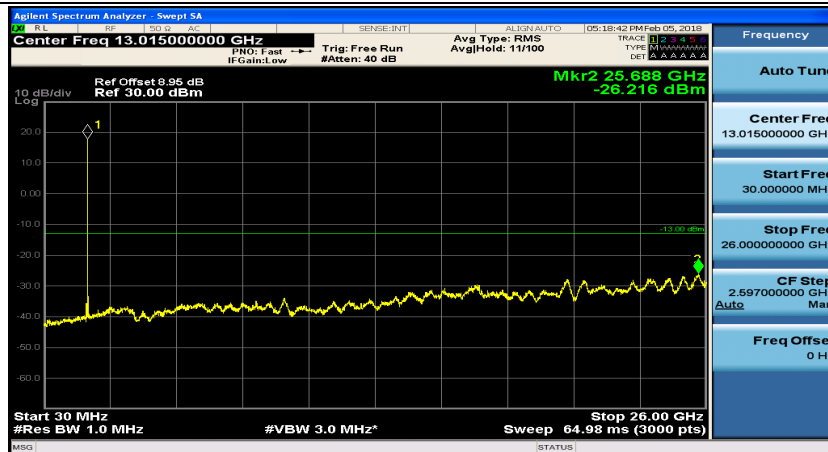
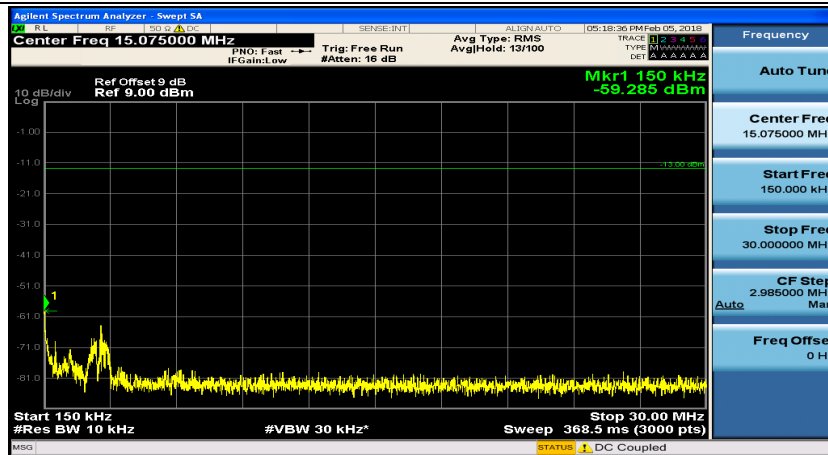
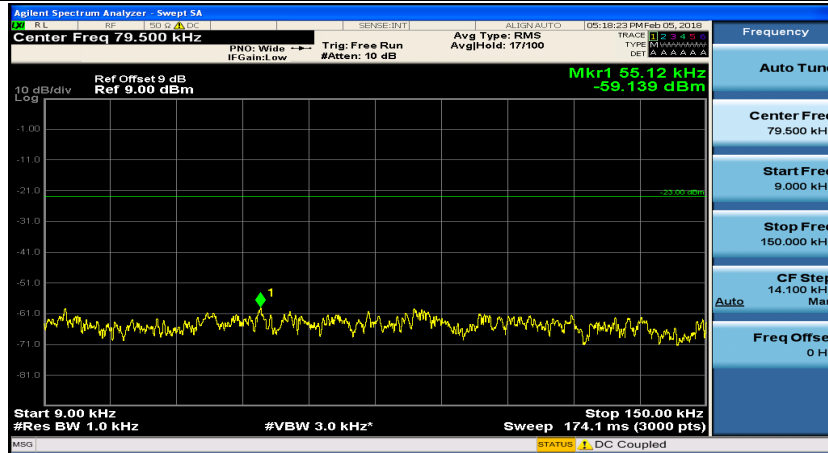


## (Channel Bandwidth:20 MHz)\_MCH\_QPSK\_1RB#49

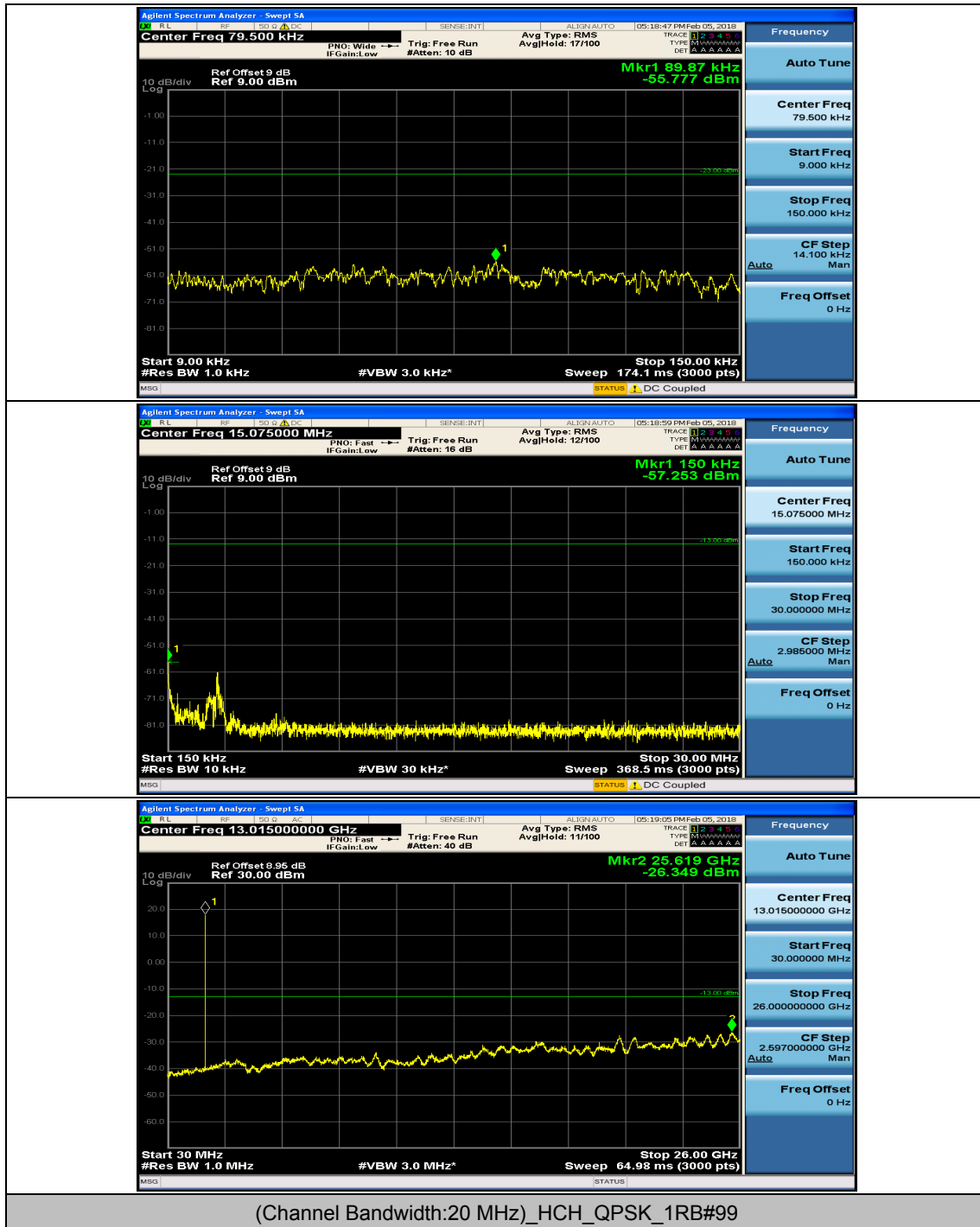


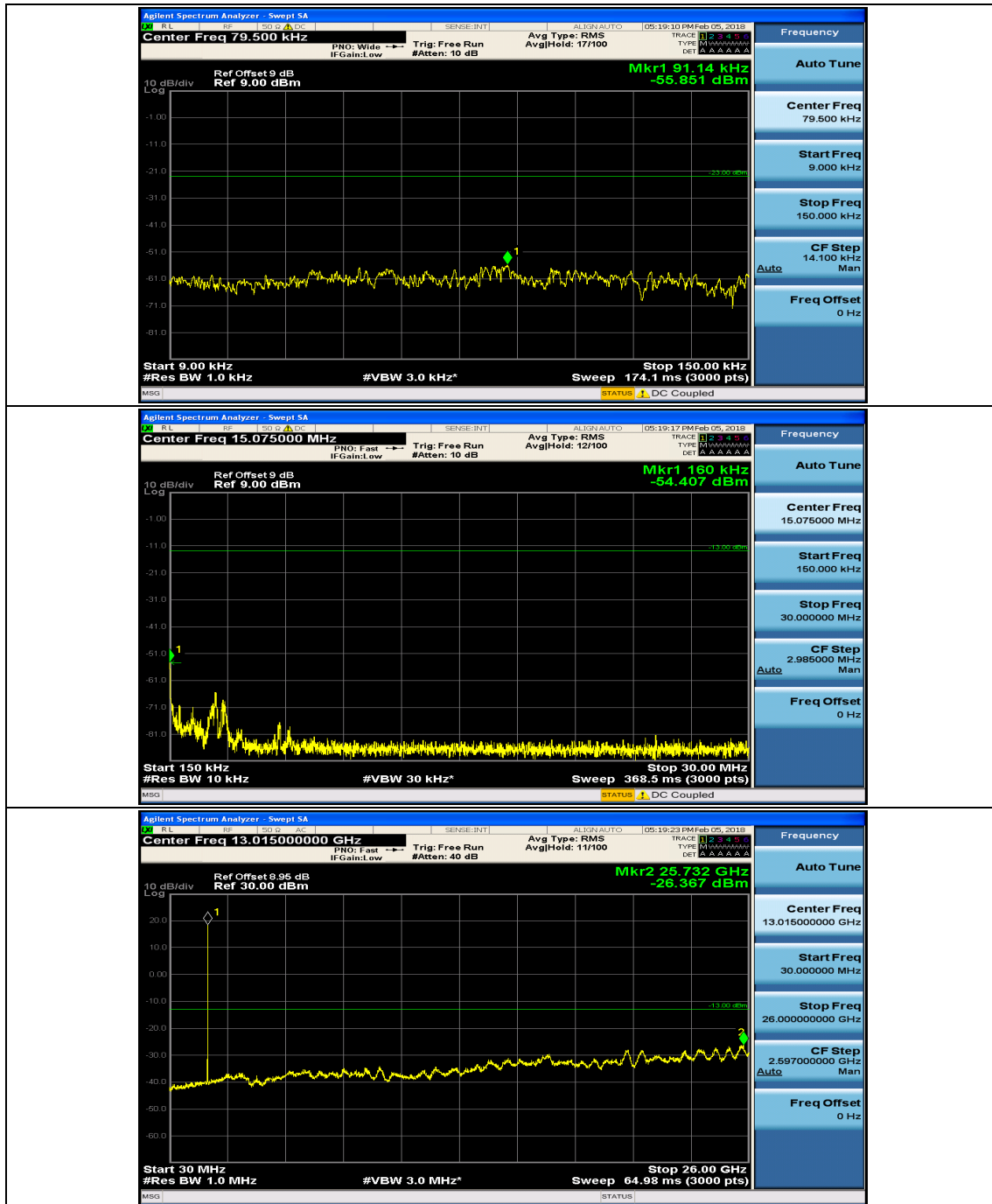


## (Channel Bandwidth:20 MHz)\_HCH\_QPSK\_1RB#0

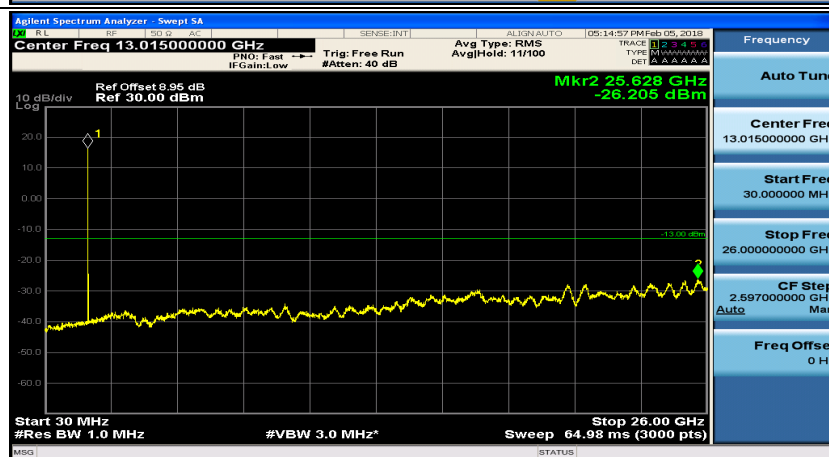
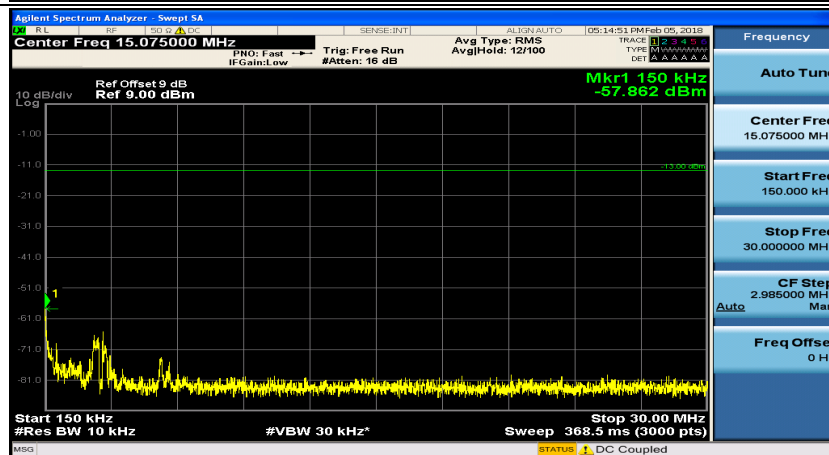
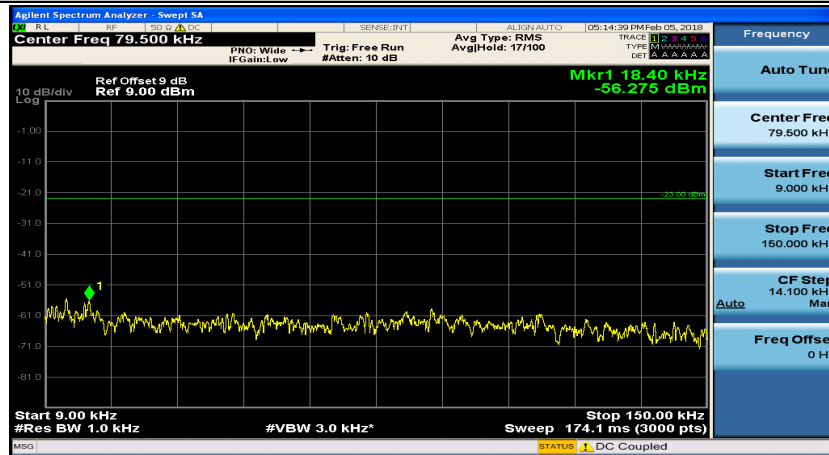


## (Channel Bandwidth:20 MHz)\_HCH\_QPSK\_1RB#49

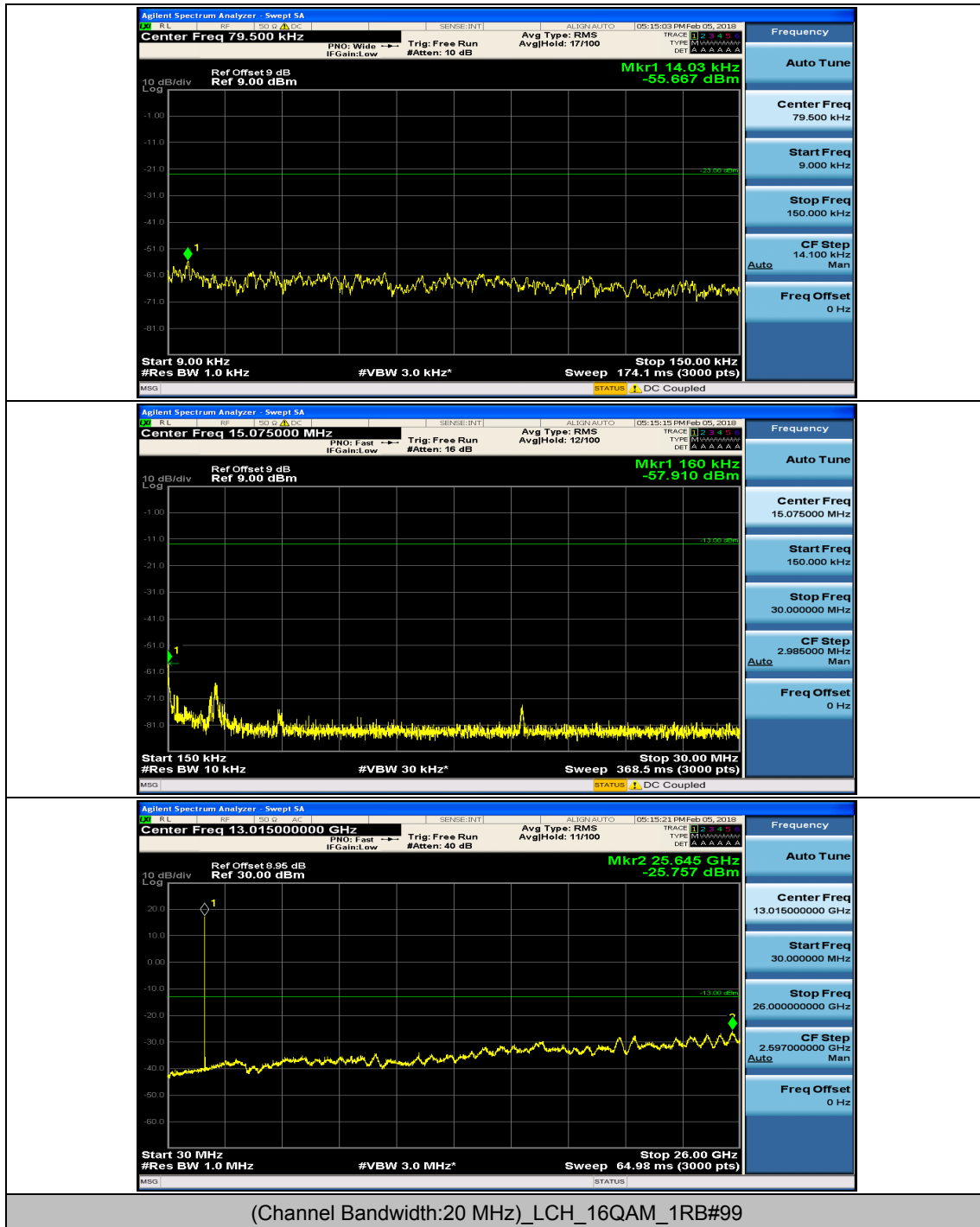


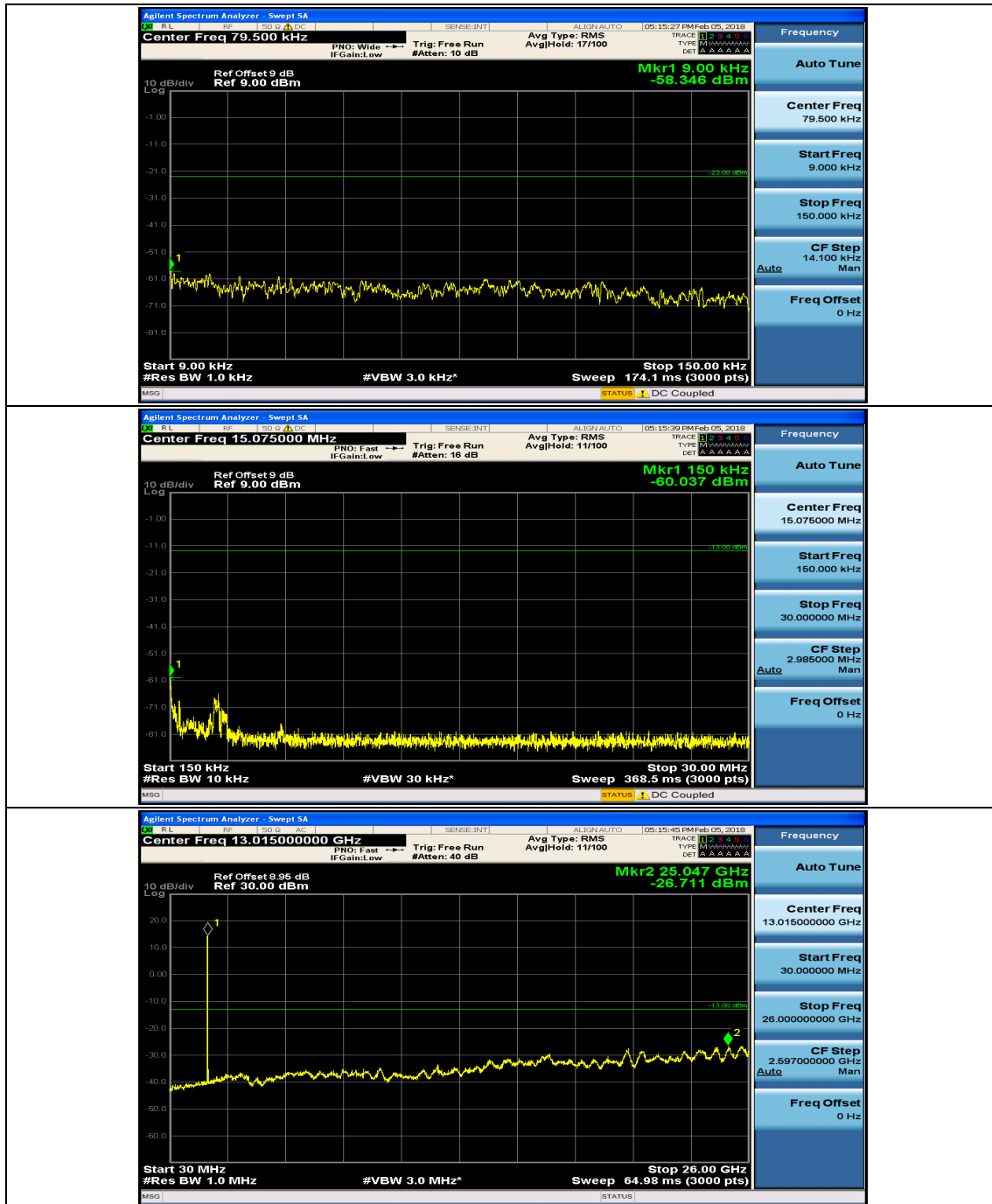


(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_1RB#0

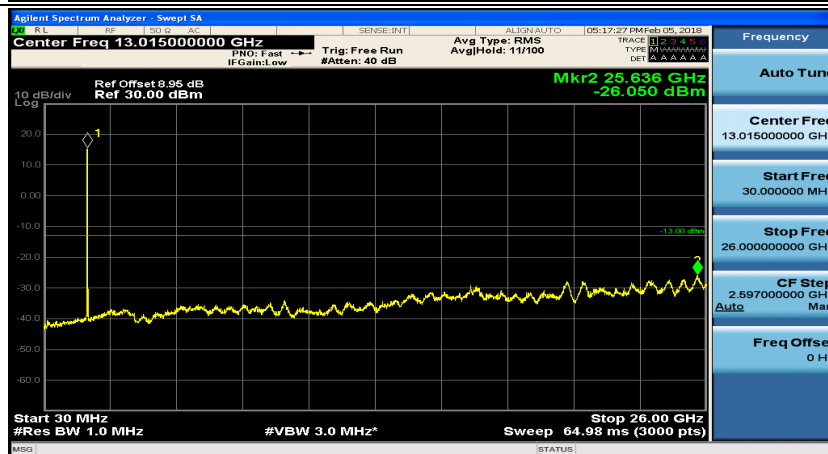
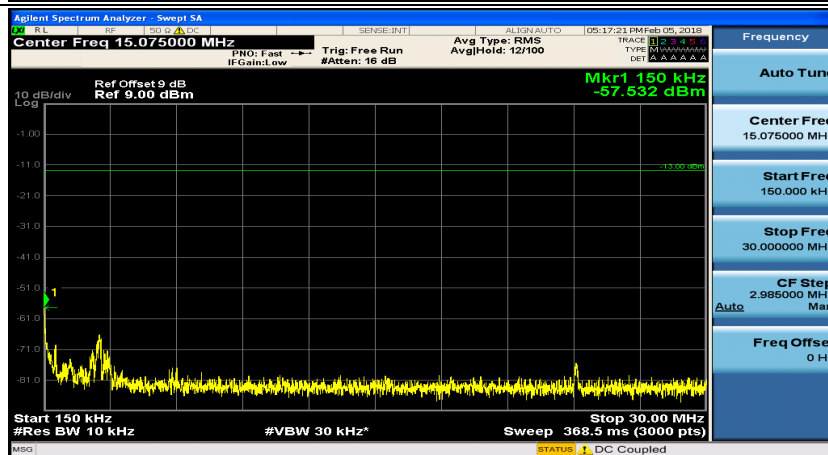
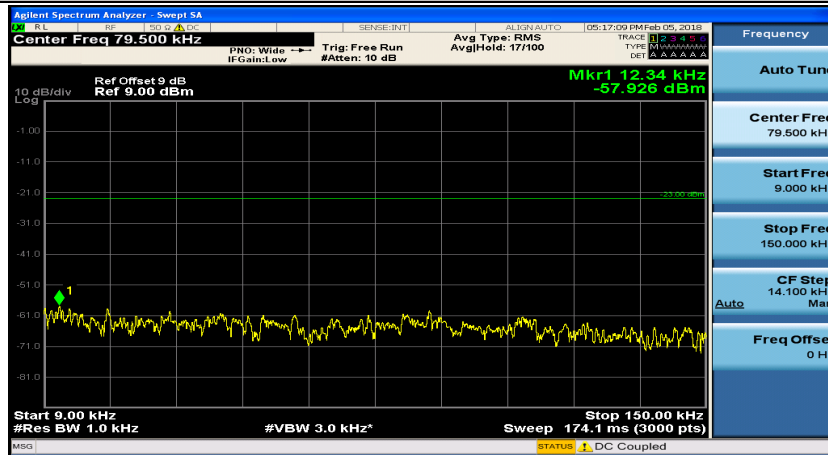


(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_1RB#49

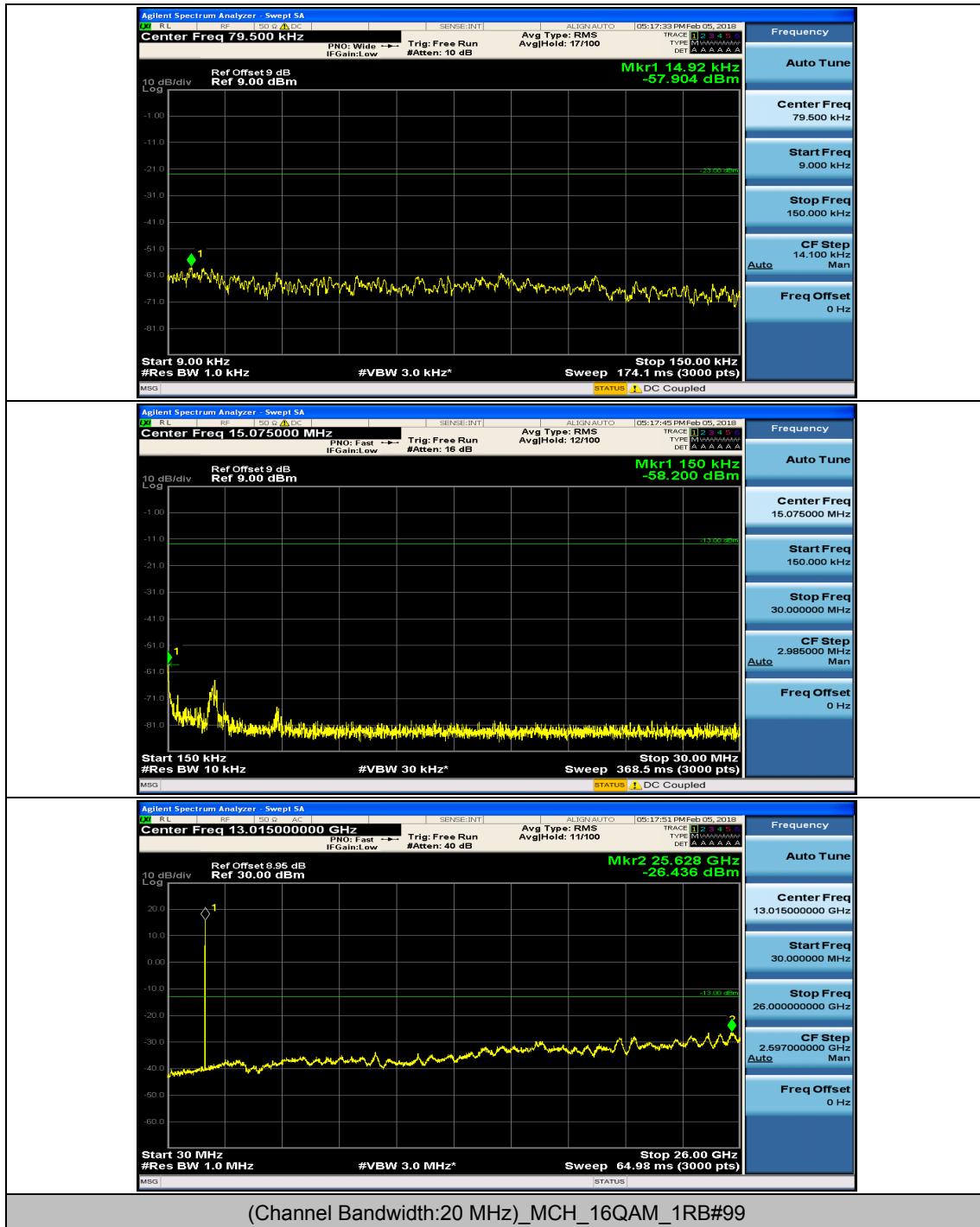


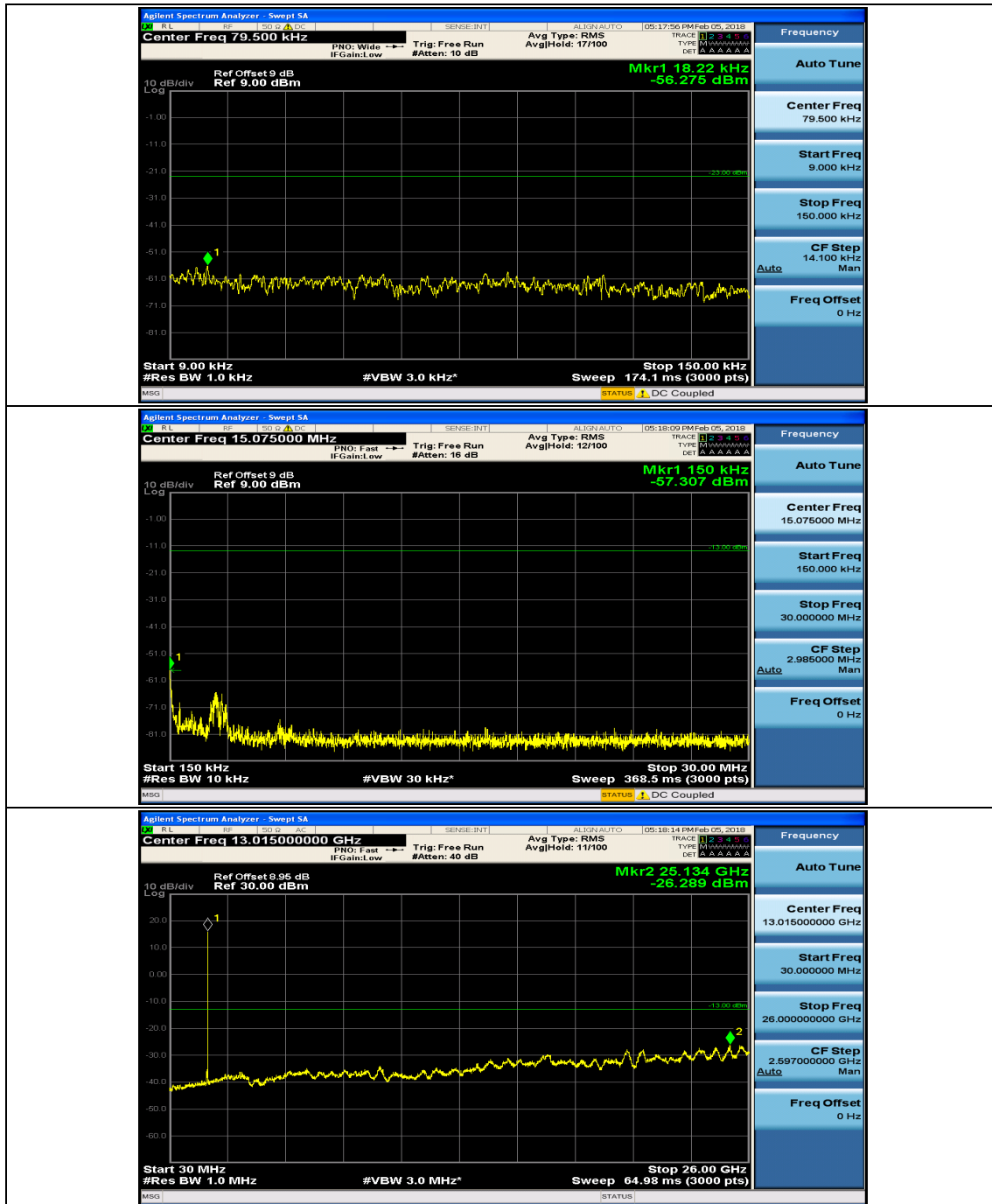


## (Channel Bandwidth:20 MHz)\_MCH\_16QAM\_1RB#0

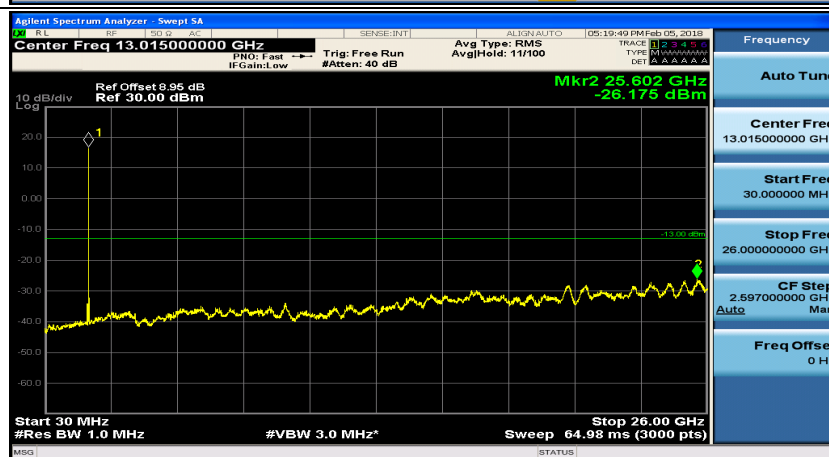
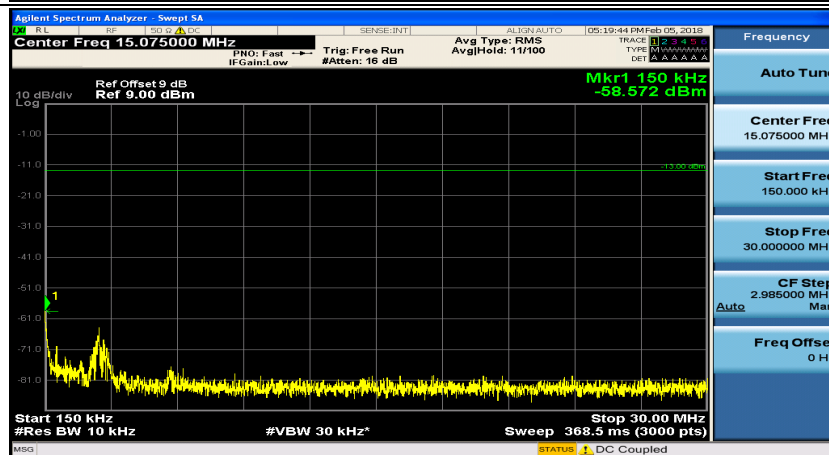
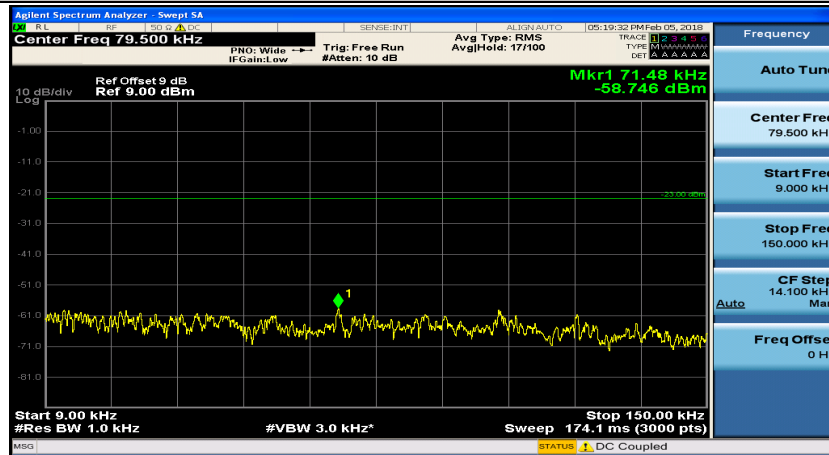


## (Channel Bandwidth:20 MHz)\_MCH\_16QAM\_1RB#49

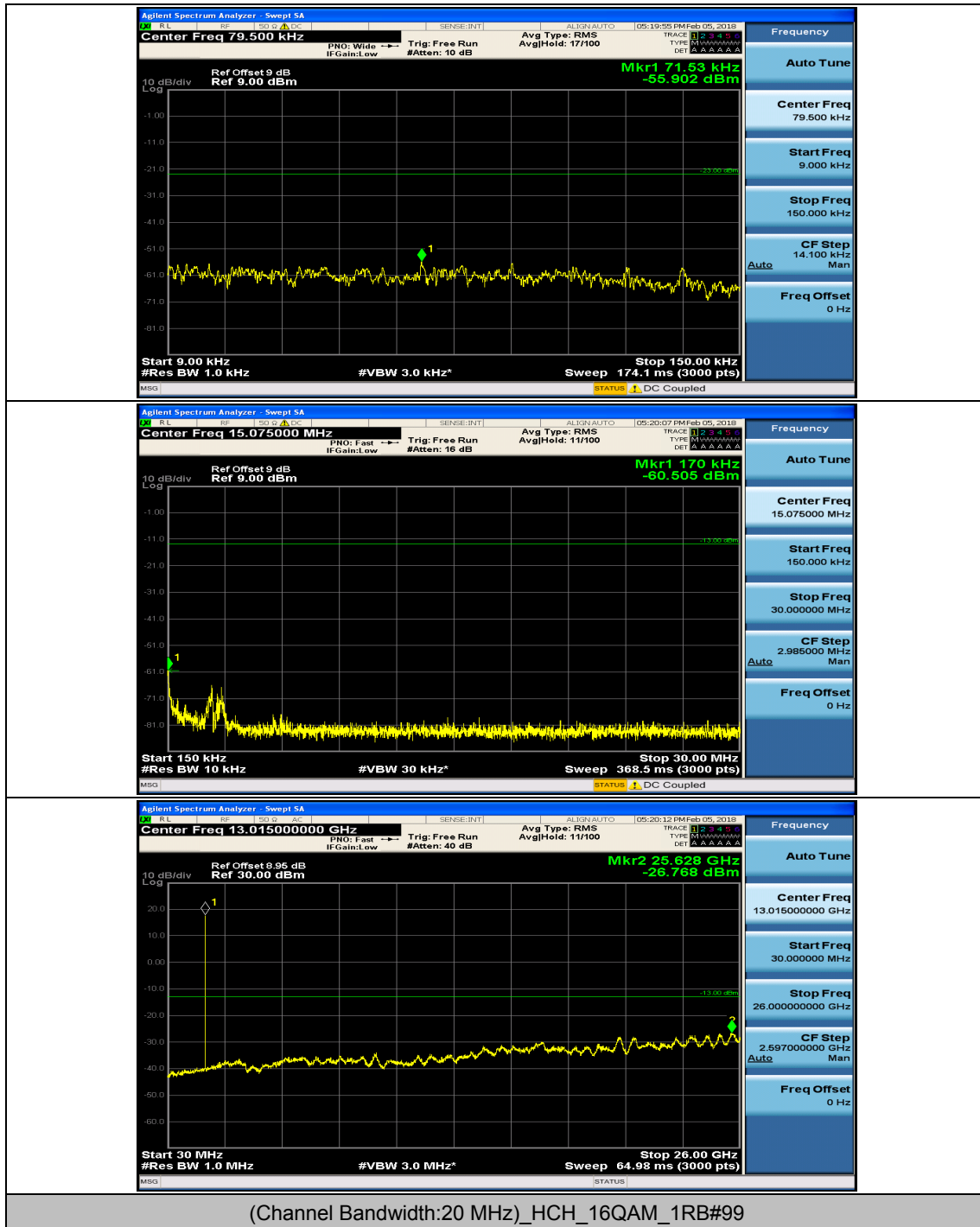


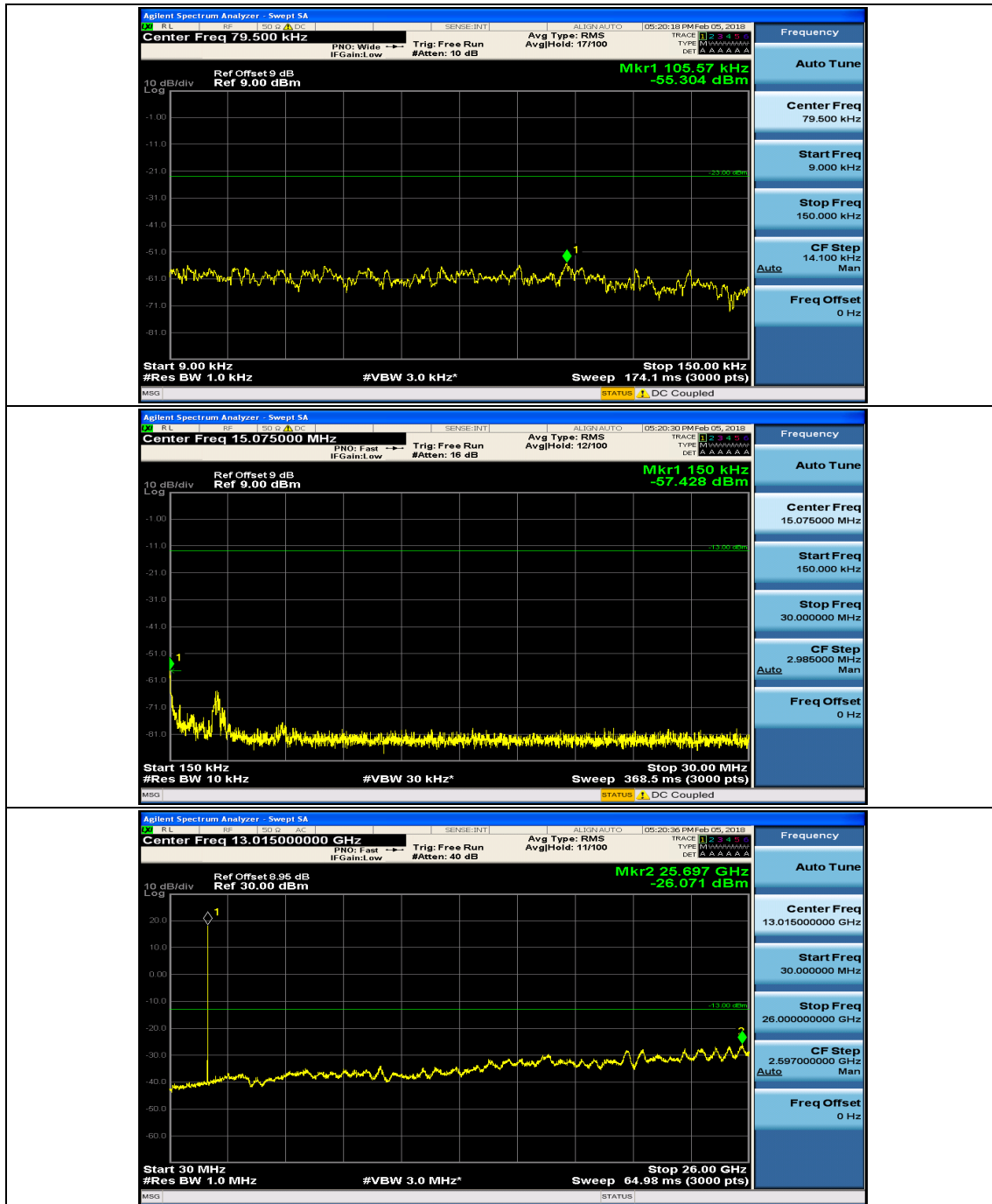


(Channel Bandwidth:20 MHz)\_HCH\_16QAM\_1RB#0



(Channel Bandwidth:20 MHz)\_HCH\_16QAM\_1RB#49





## 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               | -0.33          | -0.000193       | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 1.43           | 0.000836        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -1.23          | -0.000719       | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | 2.39           | 0.001380        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -0.25          | -0.000144       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -0.64          | -0.000369       | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | 0.55           | 0.000314        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 3.19           | 0.001818        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 2.77           | 0.001579        | ± 2.5       | PASS    |
| 16QAM                      | LCH     | VL            | TN               | -0.34          | -0.000199       | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 2.32           | 0.001356        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 0.92           | 0.000538        | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | 3.14           | 0.001812        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -1.3           | -0.000750       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 2.6            | 0.001501        | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | 1.35           | 0.000770        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 3.76           | 0.002143        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -0.17          | -0.000097       | ± 2.5       | PASS    |
| Temperature                |         |               |                  |                |                 |             |         |
| Modulation                 | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                       | LCH     | VN            | -30              | 2.99           | 0.001748        | ± 2.5       | PASS    |
|                            |         | VN            | -20              | 4.84           | 0.002829        | ± 2.5       | PASS    |
|                            |         | VN            | -10              | 4.5            | 0.002631        | ± 2.5       | PASS    |
|                            |         | VN            | 0                | 1.69           | 0.000988        | ± 2.5       | PASS    |
|                            |         | VN            | 10               | 4.56           | 0.002666        | ± 2.5       | PASS    |
|                            |         | VN            | 20               | 4.38           | 0.002560        | ± 2.5       | PASS    |
|                            |         | VN            | 30               | -0.05          | -0.000029       | ± 2.5       | PASS    |
|                            |         | VN            | 40               | -1.95          | -0.001140       | ± 2.5       | PASS    |
|                            |         | VN            | 50               | 2.05           | 0.001198        | ± 2.5       | PASS    |
|                            | MCH     | VN            | -30              | -0.21          | -0.000121       | ± 2.5       | PASS    |
|                            |         | VN            | -20              | 1.79           | 0.001033        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | -10 | -1.43 | -0.000825 | ± 2.5 | PASS |
|       |     | VN | 0   | 0.9   | 0.000519  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.96  | 0.001131  | ± 2.5 | PASS |
|       |     | VN | 20  | -0.59 | -0.000341 | ± 2.5 | PASS |
|       |     | VN | 30  | 0.39  | 0.000225  | ± 2.5 | PASS |
|       |     | VN | 40  | 0.02  | 0.000012  | ± 2.5 | PASS |
|       |     | VN | 50  | 3.26  | 0.001882  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 2.26  | 0.001288  | ± 2.5 | PASS |
|       |     | VN | -20 | -0.7  | -0.000399 | ± 2.5 | PASS |
|       |     | VN | -10 | 1.55  | 0.000884  | ± 2.5 | PASS |
|       |     | VN | 0   | 2.46  | 0.001402  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.46  | 0.000262  | ± 2.5 | PASS |
|       |     | VN | 20  | 4.18  | 0.002383  | ± 2.5 | PASS |
|       |     | VN | 30  | 3.36  | 0.001915  | ± 2.5 | PASS |
|       |     | VN | 40  | 2.7   | 0.001539  | ± 2.5 | PASS |
|       |     | VN | 50  | -0.87 | -0.000496 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 4.79  | 0.002800  | ± 2.5 | PASS |
|       |     | VN | -20 | 2.45  | 0.001432  | ± 2.5 | PASS |
|       |     | VN | -10 | 4.08  | 0.002385  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.66  | 0.002724  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.74  | 0.001017  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.01  | 0.000006  | ± 2.5 | PASS |
|       |     | VN | 30  | 0.29  | 0.000170  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.8   | 0.001052  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.82  | 0.001064  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 3.92  | 0.002235  | ± 2.5 | PASS |
|       |     | VN | -20 | 1.2   | 0.000684  | ± 2.5 | PASS |
|       |     | VN | -10 | 3.38  | 0.001927  | ± 2.5 | PASS |
|       |     | VN | 0   | 1.77  | 0.001009  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.81  | 0.001602  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.1   | 0.000627  | ± 2.5 | PASS |
|       |     | VN | 30  | 4.99  | 0.002844  | ± 2.5 | PASS |
|       |     | VN | 40  | 2.35  | 0.001340  | ± 2.5 | PASS |
|       |     | VN | 50  | -1.13 | -0.000644 | ± 2.5 | PASS |
|       | HCH | VN | -30 | 0.1   | 0.000057  | ± 2.5 | PASS |
|       |     | VN | -20 | -0.2  | -0.000114 | ± 2.5 | PASS |
|       |     | VN | -10 | 3.82  | 0.002178  | ± 2.5 | PASS |
|       |     | VN | 0   | 3.24  | 0.001847  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.23  | 0.000131  | ± 2.5 | PASS |
|       |     | VN | 20  | 3.08  | 0.001756  | ± 2.5 | PASS |
|       |     | VN | 30  | 0.84  | 0.000479  | ± 2.5 | PASS |

|  |  |    |    |       |           |       |      |
|--|--|----|----|-------|-----------|-------|------|
|  |  | VN | 40 | 4.56  | 0.002599  | ± 2.5 | PASS |
|  |  | VN | 50 | -1.01 | -0.000576 | ± 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               | 0.87           | 0.000508        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 4.29           | 0.002507        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.55           | 0.002074        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | -1.92          | -0.001108       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.18           | 0.000104        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 4.35           | 0.002511        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 4.96           | 0.002829        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.65          | -0.000941       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.14           | 0.001791        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | 2.52           | 0.001472        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 3.99           | 0.002331        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 4.94           | 0.002886        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | -1.51          | -0.000872       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 4.08           | 0.002355        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.76           | 0.001016        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 3.59           | 0.002047        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.59           | 0.000336        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.72           | 0.000981        | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                      | LCH     | VN            | -30              | 2.13           | 0.001245        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 2.92           | 0.001706        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 0.94           | 0.000549        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 3.32           | 0.001940        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | 3.94           | 0.002302        | ± 2.5       | PASS    |
|                           |         | VN            | 20               | 4.43           | 0.002588        | ± 2.5       | PASS    |
|                           |         | VN            | 30               | 1.02           | 0.000596        | ± 2.5       | PASS    |
|                           |         | VN            | 40               | 1.8            | 0.001052        | ± 2.5       | PASS    |
|                           |         | VN            | 50               | 0.84           | 0.000491        | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | 4.27           | 0.002465        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 4.95           | 0.002857        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 2.89           | 0.001668        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | 0   | 1.32  | 0.000762  | ± 2.5 | PASS |
|       |     | VN | 10  | -1.69 | -0.000975 | ± 2.5 | PASS |
|       |     | VN | 20  | -1.98 | -0.001143 | ± 2.5 | PASS |
|       |     | VN | 30  | 3.71  | 0.002141  | ± 2.5 | PASS |
|       |     | VN | 40  | -0.94 | -0.000543 | ± 2.5 | PASS |
|       |     | VN | 50  | -1.28 | -0.000739 | ± 2.5 | PASS |
|       | HCH | VN | -30 | 2.98  | 0.001699  | ± 2.5 | PASS |
|       |     | VN | -20 | 2.98  | 0.001699  | ± 2.5 | PASS |
|       |     | VN | -10 | 4.64  | 0.002646  | ± 2.5 | PASS |
|       |     | VN | 0   | 3.55  | 0.002025  | ± 2.5 | PASS |
|       |     | VN | 10  | -1.79 | -0.001021 | ± 2.5 | PASS |
|       |     | VN | 20  | 1.14  | 0.000650  | ± 2.5 | PASS |
|       |     | VN | 30  | -1.88 | -0.001072 | ± 2.5 | PASS |
|       |     | VN | 40  | 0.73  | 0.000416  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.37  | 0.000781  | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 4.31  | 0.002488  | ± 2.5 | PASS |
|       |     | VN | -20 | 4     | 0.002309  | ± 2.5 | PASS |
|       |     | VN | -10 | 4.29  | 0.002476  | ± 2.5 | PASS |
|       |     | VN | 0   | 0.36  | 0.000208  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.76  | 0.000439  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.24  | 0.000139  | ± 2.5 | PASS |
|       |     | VN | 30  | -0.4  | -0.000231 | ± 2.5 | PASS |
|       |     | VN | 40  | 1.98  | 0.001143  | ± 2.5 | PASS |
|       |     | VN | 50  | -1.37 | -0.000791 | ± 2.5 | PASS |
|       | MCH | VN | -30 | 3.03  | 0.001728  | ± 2.5 | PASS |
|       |     | VN | -20 | -1.28 | -0.000730 | ± 2.5 | PASS |
|       |     | VN | -10 | 4.72  | 0.002692  | ± 2.5 | PASS |
|       |     | VN | 0   | 0.94  | 0.000536  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.66  | 0.000376  | ± 2.5 | PASS |
|       |     | VN | 20  | -1.11 | -0.000633 | ± 2.5 | PASS |
|       |     | VN | 30  | 3.73  | 0.002127  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.17  | 0.000667  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.06  | 0.000605  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 0.84  | 0.000479  | ± 2.5 | PASS |
|       |     | VN | -20 | 3.74  | 0.002133  | ± 2.5 | PASS |
|       |     | VN | -10 | -1.98 | -0.001129 | ± 2.5 | PASS |
|       |     | VN | 0   | -1.09 | -0.000622 | ± 2.5 | PASS |
|       |     | VN | 10  | 4.46  | 0.002543  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.24  | 0.000137  | ± 2.5 | PASS |
|       |     | VN | 30  | 0.74  | 0.000422  | ± 2.5 | PASS |
|       |     | VN | 40  | 0.34  | 0.000194  | ± 2.5 | PASS |

|  |  |    |    |      |          |       |      |
|--|--|----|----|------|----------|-------|------|
|  |  | VN | 50 | 0.02 | 0.000011 | ± 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               | -1.68          | -0.000981       | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 1.15           | 0.000672        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 0.53           | 0.000309        | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | 2.22           | 0.001281        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | -1.69          | -0.000975       | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 1.97           | 0.001137        | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | 4.97           | 0.002836        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 0.71           | 0.000405        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 1.01           | 0.000576        | ± 2.5       | PASS    |
| 16QAM                    | LCH     | VL            | TN               | -1.17          | -0.000683       | ± 2.5       | PASS    |
|                          |         | VN            | TN               | -0.77          | -0.000450       | ± 2.5       | PASS    |
|                          |         | VH            | TN               | -0.85          | -0.000496       | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | 3.07           | 0.001772        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 2.35           | 0.001356        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 3.43           | 0.001980        | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | 0.28           | 0.000160        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | -0.38          | -0.000217       | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 4.48           | 0.002556        | ± 2.5       | PASS    |
| Temperature              |         |               |                  |                |                 |             |         |
| Modulation               | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                     | LCH     | VN            | -30              | 3.91           | 0.002283        | ± 2.5       | PASS    |
|                          |         | VN            | -20              | -0.21          | -0.000123       | ± 2.5       | PASS    |
|                          |         | VN            | -10              | -1.99          | -0.001162       | ± 2.5       | PASS    |
|                          |         | VN            | 0                | 4.16           | 0.002429        | ± 2.5       | PASS    |
|                          |         | VN            | 10               | -0.01          | -0.000006       | ± 2.5       | PASS    |
|                          |         | VN            | 20               | -1.99          | -0.001162       | ± 2.5       | PASS    |
|                          |         | VN            | 30               | 3.65           | 0.002131        | ± 2.5       | PASS    |
|                          |         | VN            | 40               | 3.67           | 0.002143        | ± 2.5       | PASS    |
|                          |         | VN            | 50               | 3.34           | 0.001950        | ± 2.5       | PASS    |
|                          | MCH     | VN            | -30              | 1.11           | 0.000641        | ± 2.5       | PASS    |
|                          |         | VN            | -20              | 0.87           | 0.000502        | ± 2.5       | PASS    |
|                          |         | VN            | -10              | -0.93          | -0.000537       | ± 2.5       | PASS    |
|                          |         | VN            | 0                | 4.44           | 0.002563        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | 10  | 3.83  | 0.002211  | ± 2.5 | PASS |
|       |     | VN | 20  | -1.8  | -0.001039 | ± 2.5 | PASS |
|       |     | VN | 30  | 0.05  | 0.000029  | ± 2.5 | PASS |
|       |     | VN | 40  | 4.89  | 0.002823  | ± 2.5 | PASS |
|       |     | VN | 50  | 0.7   | 0.000404  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 0.57  | 0.000325  | ± 2.5 | PASS |
|       |     | VN | -20 | -1.43 | -0.000750 | ± 2.5 | PASS |
|       |     | VN | -10 | 1.6   | 0.000839  | ± 2.5 | PASS |
|       |     | VN | 0   | 3.76  | 0.001971  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.41  | 0.001263  | ± 2.5 | PASS |
|       |     | VN | 20  | 2.07  | 0.001085  | ± 2.5 | PASS |
|       |     | VN | 30  | 1.08  | 0.000566  | ± 2.5 | PASS |
|       |     | VN | 40  | -1    | -0.000524 | ± 2.5 | PASS |
|       |     | VN | 50  | -1.83 | -0.000959 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.83  | 0.001056  | ± 2.5 | PASS |
|       |     | VN | -20 | 1.13  | 0.000652  | ± 2.5 | PASS |
|       |     | VN | -10 | -1.15 | -0.000664 | ± 2.5 | PASS |
|       |     | VN | 0   | -0.82 | -0.000473 | ± 2.5 | PASS |
|       |     | VN | 10  | 4.16  | 0.002401  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.55  | 0.000895  | ± 2.5 | PASS |
|       |     | VN | 30  | 4.39  | 0.002534  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.18  | 0.000681  | ± 2.5 | PASS |
|       |     | VN | 50  | -0.31 | -0.000179 | ± 2.5 | PASS |
|       | MCH | VN | -30 | 4.36  | 0.002488  | ± 2.5 | PASS |
|       |     | VN | -20 | -1.49 | -0.000850 | ± 2.5 | PASS |
|       |     | VN | -10 | 0.01  | 0.000006  | ± 2.5 | PASS |
|       |     | VN | 0   | 0.4   | 0.000228  | ± 2.5 | PASS |
|       |     | VN | 10  | -1    | -0.000571 | ± 2.5 | PASS |
|       |     | VN | 20  | -0.1  | -0.000057 | ± 2.5 | PASS |
|       |     | VN | 30  | 4.62  | 0.002636  | ± 2.5 | PASS |
|       |     | VN | 40  | 3.13  | 0.001786  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.15  | 0.000656  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 4.15  | 0.002176  | ± 2.5 | PASS |
|       |     | VN | -20 | -0.08 | -0.000042 | ± 2.5 | PASS |
|       |     | VN | -10 | 3.94  | 0.002066  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.87  | 0.002553  | ± 2.5 | PASS |
|       |     | VN | 10  | -0.84 | -0.000440 | ± 2.5 | PASS |
|       |     | VN | 20  | 4.09  | 0.002144  | ± 2.5 | PASS |
|       |     | VN | 30  | 3.29  | 0.001725  | ± 2.5 | PASS |
|       |     | VN | 40  | -1.99 | -0.001043 | ± 2.5 | PASS |
|       |     | VN | 50  | 4.65  | 0.002438  | ± 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               | 4.69           | 0.002735        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.71           | 0.001580        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.24           | 0.000723        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 2.5            | 0.001443        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.66           | 0.000381        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -1.34          | -0.000773       | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 2.39           | 0.001366        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 1.89           | 0.001080        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.65           | 0.001514        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | 0.41           | 0.000239        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.33           | 0.000192        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -0.4           | -0.000233       | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 0.46           | 0.000266        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.7           | -0.000981       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.29           | 0.001899        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | -0.38          | -0.000217       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.85           | 0.001629        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 4              | 0.002286        | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 16QAM                     | LCH     | VN            | -30              | 2.34           | 0.001364        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | -0.25          | -0.000146       | ± 2.5       | PASS    |
|                           |         | VN            | -10              | -1.04          | -0.000606       | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 2.4            | 0.001399        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | -1.08          | -0.000630       | ± 2.5       | PASS    |
|                           |         | VN            | 20               | 2.83           | 0.001650        | ± 2.5       | PASS    |
|                           |         | VN            | 30               | 1.06           | 0.000618        | ± 2.5       | PASS    |
|                           |         | VN            | 40               | 4.25           | 0.002478        | ± 2.5       | PASS    |
|                           |         | VN            | 50               | 3.15           | 0.001837        | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | 4.04           | 0.002332        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 2.45           | 0.001414        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 4.42           | 0.002551        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 3.11           | 0.001795        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | -0.92          | -0.000531       | ± 2.5       | PASS    |
|                           |         | VN            | 20               | -0.33          | -0.000190       | ± 2.5       | PASS    |

|      |     |    |     |       |           |       |      |
|------|-----|----|-----|-------|-----------|-------|------|
|      |     | VN | 30  | 1.4   | 0.000808  | ± 2.5 | PASS |
|      |     | VN | 40  | -0.23 | -0.000133 | ± 2.5 | PASS |
|      |     | VN | 50  | -1.37 | -0.000791 | ± 2.5 | PASS |
|      | HCH | VN | -30 | 2.65  | 0.001514  | ± 2.5 | PASS |
|      |     | VN | -20 | 0.66  | 0.000377  | ± 2.5 | PASS |
|      |     | VN | -10 | 4.17  | 0.002383  | ± 2.5 | PASS |
|      |     | VN | 0   | 2.11  | 0.001206  | ± 2.5 | PASS |
|      |     | VN | 10  | 0.12  | 0.000069  | ± 2.5 | PASS |
|      |     | VN | 20  | 2.19  | 0.001251  | ± 2.5 | PASS |
|      |     | VN | 30  | -0.62 | -0.000354 | ± 2.5 | PASS |
|      |     | VN | 40  | 1.18  | 0.000674  | ± 2.5 | PASS |
|      |     | VN | 50  | 0.38  | 0.000217  | ± 2.5 | PASS |
| QPSK | LCH | VN | -30 | 4.33  | 0.002499  | ± 2.5 | PASS |
|      |     | VN | -20 | 1.14  | 0.000658  | ± 2.5 | PASS |
|      |     | VN | -10 | 0.49  | 0.000283  | ± 2.5 | PASS |
|      |     | VN | 0   | -1.72 | -0.000993 | ± 2.5 | PASS |
|      |     | VN | 10  | 1.58  | 0.000912  | ± 2.5 | PASS |
|      |     | VN | 20  | -1.06 | -0.000612 | ± 2.5 | PASS |
|      |     | VN | 30  | 0.71  | 0.000410  | ± 2.5 | PASS |
|      |     | VN | 40  | 0.73  | 0.000421  | ± 2.5 | PASS |
|      |     | VN | 50  | -0.45 | -0.000260 | ± 2.5 | PASS |
|      | MCH | VN | -30 | 0.58  | 0.000331  | ± 2.5 | PASS |
|      |     | VN | -20 | 0.03  | 0.000017  | ± 2.5 | PASS |
|      |     | VN | -10 | -0.45 | -0.000257 | ± 2.5 | PASS |
|      |     | VN | 0   | -0.22 | -0.000126 | ± 2.5 | PASS |
|      |     | VN | 10  | 1.6   | 0.000914  | ± 2.5 | PASS |
|      |     | VN | 20  | -0.64 | -0.000366 | ± 2.5 | PASS |
|      |     | VN | 30  | 0.41  | 0.000234  | ± 2.5 | PASS |
|      |     | VN | 40  | -0.78 | -0.000446 | ± 2.5 | PASS |
|      |     | VN | 50  | 0.22  | 0.000126  | ± 2.5 | PASS |
|      | HCH | VN | -30 | -0.97 | -0.000554 | ± 2.5 | PASS |
|      |     | VN | -20 | 1.31  | 0.000749  | ± 2.5 | PASS |
|      |     | VN | -10 | 1.37  | 0.000783  | ± 2.5 | PASS |
|      |     | VN | 0   | 3.9   | 0.002229  | ± 2.5 | PASS |
|      |     | VN | 10  | 3.23  | 0.001846  | ± 2.5 | PASS |
|      |     | VN | 20  | -0.55 | -0.000314 | ± 2.5 | PASS |
|      |     | VN | 30  | 3.65  | 0.002086  | ± 2.5 | PASS |
|      |     | VN | 40  | 2.5   | 0.001429  | ± 2.5 | PASS |
|      |     | VN | 50  | 3.09  | 0.001766  | ± 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               | 4.52           | 0.002632        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.37           | 0.001380        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 0.64           | 0.000373        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | -1.66          | -0.000958       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 4.06           | 0.002343        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.68           | 0.000970        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 0.88           | 0.000504        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 4.16           | 0.002381        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 0.36           | 0.000206        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | 3.09           | 0.001799        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -0.11          | -0.000064       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 0.03           | 0.000017        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 4.06           | 0.002343        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 3.93           | 0.002268        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.29           | 0.000745        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 3.55           | 0.002031        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.88          | -0.001076       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -0.7           | -0.000401       | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                      | LCH     | VN            | -30              | -1.3           | -0.000757       | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 2.23           | 0.001298        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 3.4            | 0.001980        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 2.46           | 0.001432        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | 1.1            | 0.000640        | ± 2.5       | PASS    |
|                           |         | VN            | 20               | -1.09          | -0.000635       | ± 2.5       | PASS    |
|                           |         | VN            | 30               | -0.86          | -0.000501       | ± 2.5       | PASS    |
|                           |         | VN            | 40               | 3.45           | 0.002009        | ± 2.5       | PASS    |
|                           |         | VN            | 50               | -1.31          | -0.000763       | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | 3.12           | 0.001801        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 0.28           | 0.000162        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 2.07           | 0.001195        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | -1.33          | -0.000768       | ± 2.5       | PASS    |
|                           |         | VN            | 10               | 0.04           | 0.000023        | ± 2.5       | PASS    |
|                           |         | VN            | 20               | 4.82           | 0.002782        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | 30  | 4.36  | 0.002517  | ± 2.5 | PASS |
|       |     | VN | 40  | -0.91 | -0.000525 | ± 2.5 | PASS |
|       |     | VN | 50  | 2.32  | 0.001339  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 2.16  | 0.001236  | ± 2.5 | PASS |
|       |     | VN | -20 | 2.23  | 0.001276  | ± 2.5 | PASS |
|       |     | VN | -10 | -1.2  | -0.000687 | ± 2.5 | PASS |
|       |     | VN | 0   | -1.42 | -0.000813 | ± 2.5 | PASS |
|       |     | VN | 10  | -1.08 | -0.000618 | ± 2.5 | PASS |
|       |     | VN | 20  | 4.01  | 0.002295  | ± 2.5 | PASS |
|       |     | VN | 30  | 3.71  | 0.002123  | ± 2.5 | PASS |
|       |     | VN | 40  | -0.36 | -0.000206 | ± 2.5 | PASS |
|       |     | VN | 50  | 0.84  | 0.000481  | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 4.96  | 0.002863  | ± 2.5 | PASS |
|       |     | VN | -20 | -0.72 | -0.000416 | ± 2.5 | PASS |
|       |     | VN | -10 | 4.99  | 0.002880  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.63  | 0.002672  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.4   | 0.000231  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.45  | 0.000837  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.48  | 0.001431  | ± 2.5 | PASS |
|       |     | VN | 40  | 3.05  | 0.001760  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.75  | 0.001010  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 2.35  | 0.001345  | ± 2.5 | PASS |
|       |     | VN | -20 | 4.01  | 0.002295  | ± 2.5 | PASS |
|       |     | VN | -10 | 4.22  | 0.002415  | ± 2.5 | PASS |
|       |     | VN | 0   | -0.27 | -0.000155 | ± 2.5 | PASS |
|       |     | VN | 10  | 2.98  | 0.001705  | ± 2.5 | PASS |
|       |     | VN | 20  | 4.8   | 0.002747  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.44  | 0.001396  | ± 2.5 | PASS |
|       |     | VN | 40  | 2.07  | 0.001185  | ± 2.5 | PASS |
|       |     | VN | 50  | 4.49  | 0.002569  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 3.97  | 0.002272  | ± 2.5 | PASS |
|       |     | VN | -20 | 4.04  | 0.002312  | ± 2.5 | PASS |
|       |     | VN | -10 | -1.18 | -0.000675 | ± 2.5 | PASS |
|       |     | VN | 0   | 3.88  | 0.002220  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.88  | 0.001076  | ± 2.5 | PASS |
|       |     | VN | 20  | -0.67 | -0.000383 | ± 2.5 | PASS |
|       |     | VN | 30  | -0.26 | -0.000149 | ± 2.5 | PASS |
|       |     | VN | 40  | 4.25  | 0.002432  | ± 2.5 | PASS |
|       |     | VN | 50  | -1.78 | -0.001019 | ± 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               | 0.05           | 0.000029        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 3.5            | 0.002035        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 0              | 0.000000        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | -1.25          | -0.000722       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 1.31           | 0.000756        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.4            | 0.001385        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | -1.23          | -0.000705       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 4.94           | 0.002831        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.75           | 0.002149        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | -1.83          | -0.001064       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.57          | -0.000913       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.27           | 0.000738        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 1.43           | 0.000825        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -0.73          | -0.000421       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -0.8           | -0.000462       | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 3.81           | 0.002183        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -0.36          | -0.000206       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -1.86          | -0.001066       | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                      | LCH     | VN            | -30              | 4.73           | 0.002750        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | -0.46          | -0.000267       | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 4.71           | 0.002738        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 0.81           | 0.000471        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | -0.82          | -0.000477       | ± 2.5       | PASS    |
|                           |         | VN            | 20               | 1.96           | 0.001140        | ± 2.5       | PASS    |
|                           |         | VN            | 30               | -0.56          | -0.000326       | ± 2.5       | PASS    |
|                           |         | VN            | 40               | 4.27           | 0.002483        | ± 2.5       | PASS    |
|                           |         | VN            | 50               | 4.07           | 0.002366        | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | -0.3           | -0.000173       | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 0.61           | 0.000352        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 1.44           | 0.000831        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 2.88           | 0.001662        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | 1.46           | 0.000843        | ± 2.5       | PASS    |
|                           |         | VN            | 20               | 4.4            | 0.002540        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | 30  | 2     | 0.001154  | ± 2.5 | PASS |
|       |     | VN | 40  | -1.89 | -0.001091 | ± 2.5 | PASS |
|       |     | VN | 50  | 1     | 0.000577  | ± 2.5 | PASS |
|       | HCH | VN | -30 | -1.81 | -0.001037 | ± 2.5 | PASS |
|       |     | VN | -20 | 2.32  | 0.001330  | ± 2.5 | PASS |
|       |     | VN | -10 | 2.6   | 0.001490  | ± 2.5 | PASS |
|       |     | VN | 0   | 2.1   | 0.001203  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.54  | 0.001456  | ± 2.5 | PASS |
|       |     | VN | 20  | 2.24  | 0.001284  | ± 2.5 | PASS |
|       |     | VN | 30  | 4.24  | 0.002430  | ± 2.5 | PASS |
|       |     | VN | 40  | -0.06 | -0.000034 | ± 2.5 | PASS |
|       |     | VN | 50  | 1.01  | 0.000579  | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 0.68  | 0.000392  | ± 2.5 | PASS |
|       |     | VN | -20 | -0.14 | -0.000081 | ± 2.5 | PASS |
|       |     | VN | -10 | 2.83  | 0.001633  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.54  | 0.002620  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.89  | 0.001091  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.32  | 0.000185  | ± 2.5 | PASS |
|       |     | VN | 30  | 0.82  | 0.000473  | ± 2.5 | PASS |
|       |     | VN | 40  | 3.54  | 0.002043  | ± 2.5 | PASS |
|       |     | VN | 50  | 2.32  | 0.001339  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 3.9   | 0.002235  | ± 2.5 | PASS |
|       |     | VN | -20 | -1.94 | -0.001112 | ± 2.5 | PASS |
|       |     | VN | -10 | 2.55  | 0.001461  | ± 2.5 | PASS |
|       |     | VN | 0   | -0.04 | -0.000023 | ± 2.5 | PASS |
|       |     | VN | 10  | 1.59  | 0.000911  | ± 2.5 | PASS |
|       |     | VN | 20  | 3.44  | 0.001971  | ± 2.5 | PASS |
|       |     | VN | 30  | 0.38  | 0.000218  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.65  | 0.000946  | ± 2.5 | PASS |
|       |     | VN | 50  | -1.8  | -0.001032 | ± 2.5 | PASS |
|       | HCH | VN | -30 | -0.66 | -0.000378 | ± 2.5 | PASS |
|       |     | VN | -20 | -0.41 | -0.000235 | ± 2.5 | PASS |
|       |     | VN | -10 | 0.34  | 0.000195  | ± 2.5 | PASS |
|       |     | VN | 0   | -0.84 | -0.000481 | ± 2.5 | PASS |
|       |     | VN | 10  | 1.66  | 0.000951  | ± 2.5 | PASS |
|       |     | VN | 20  | -1    | -0.000573 | ± 2.5 | PASS |
|       |     | VN | 30  | 2.22  | 0.001272  | ± 2.5 | PASS |
|       |     | VN | 40  | 0.95  | 0.000544  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.61  | 0.000923  | ± 2.5 | PASS |