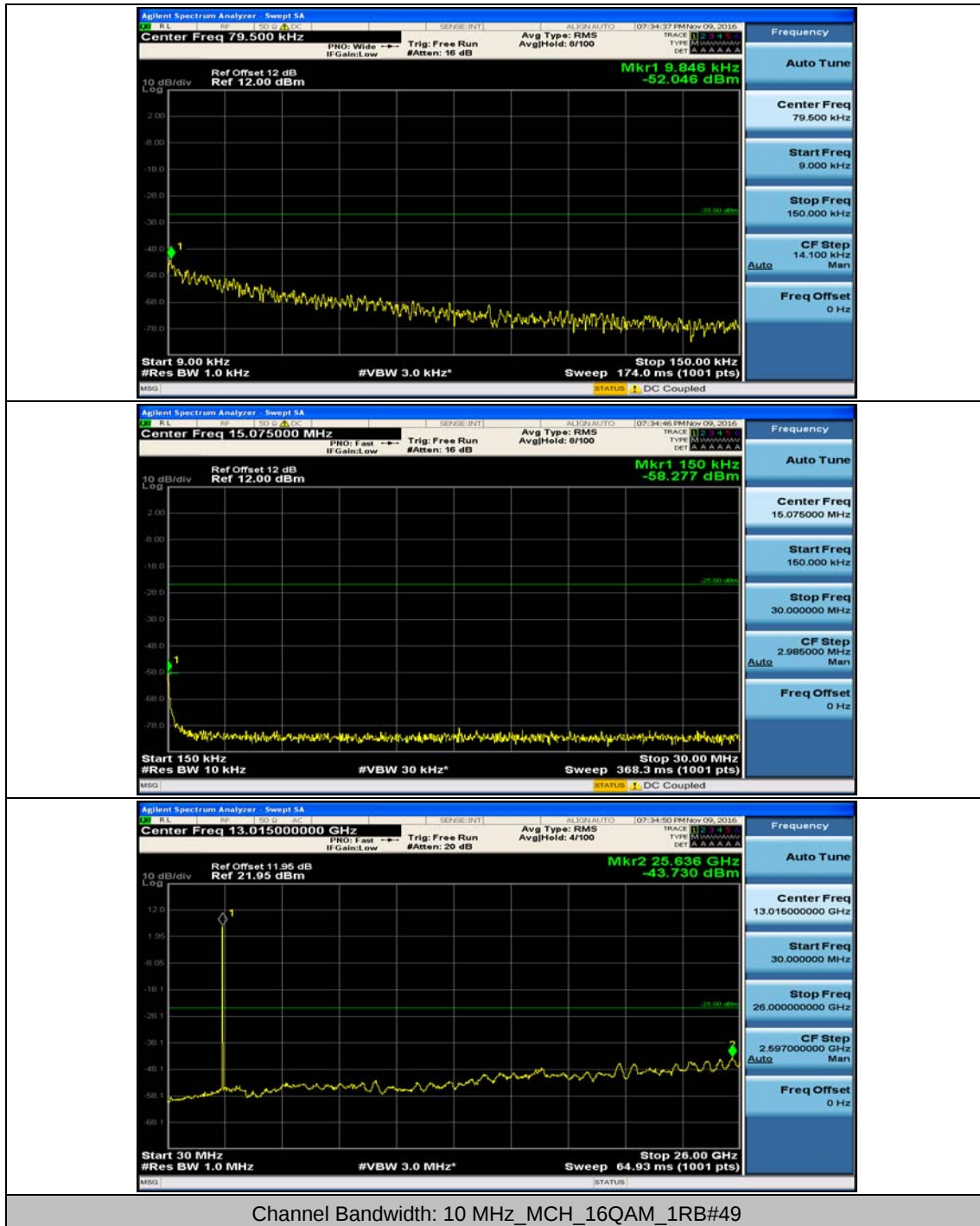
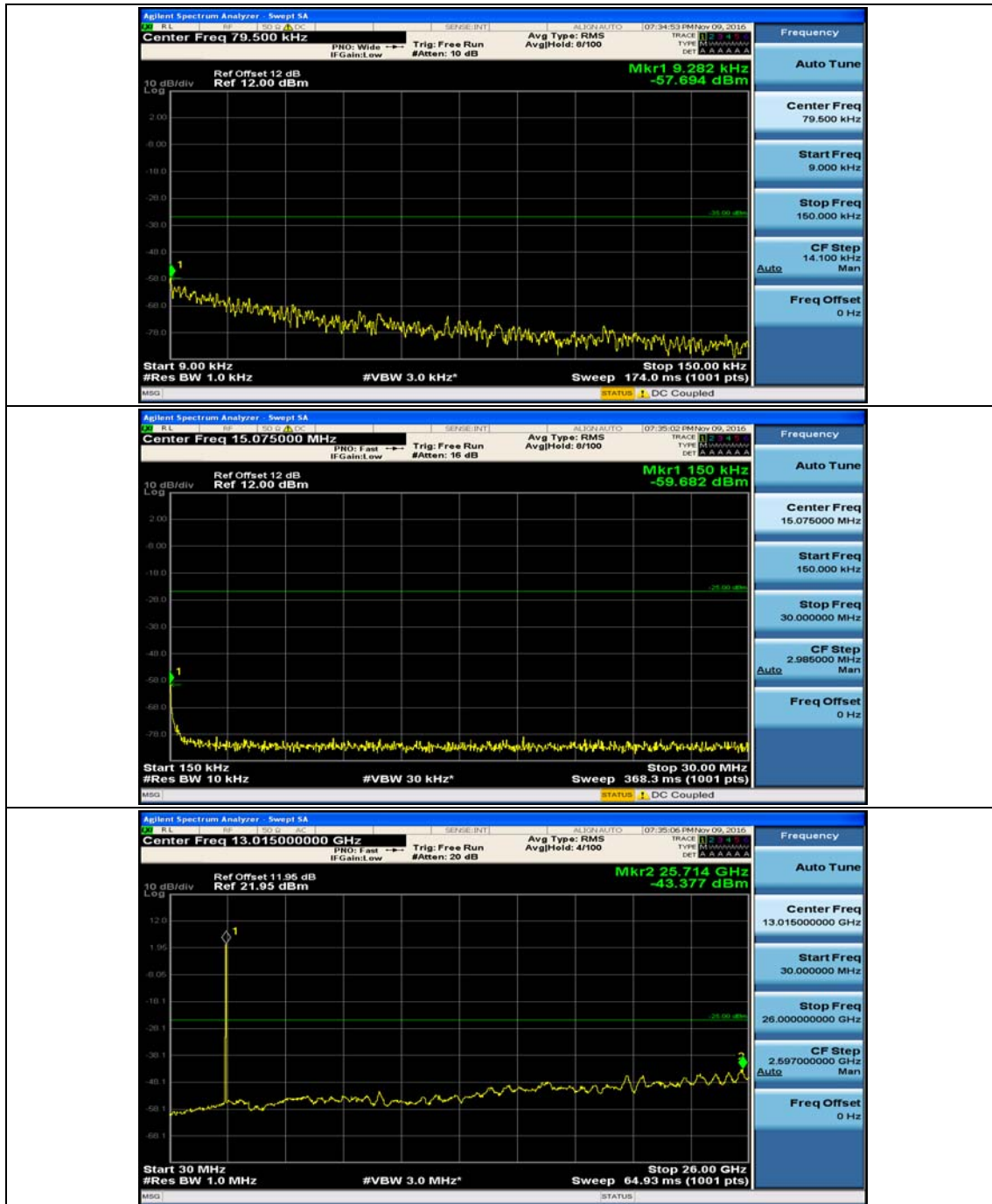
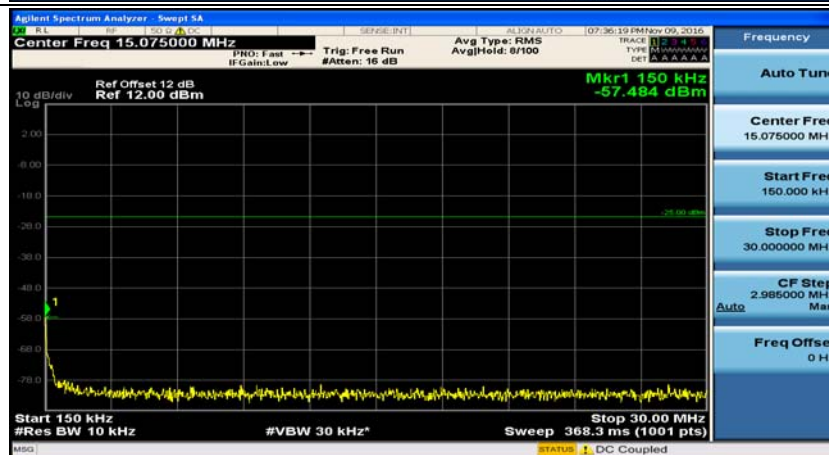
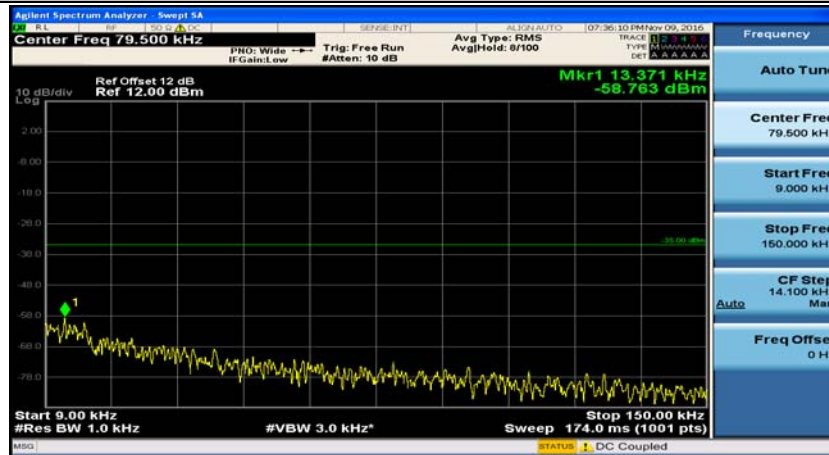


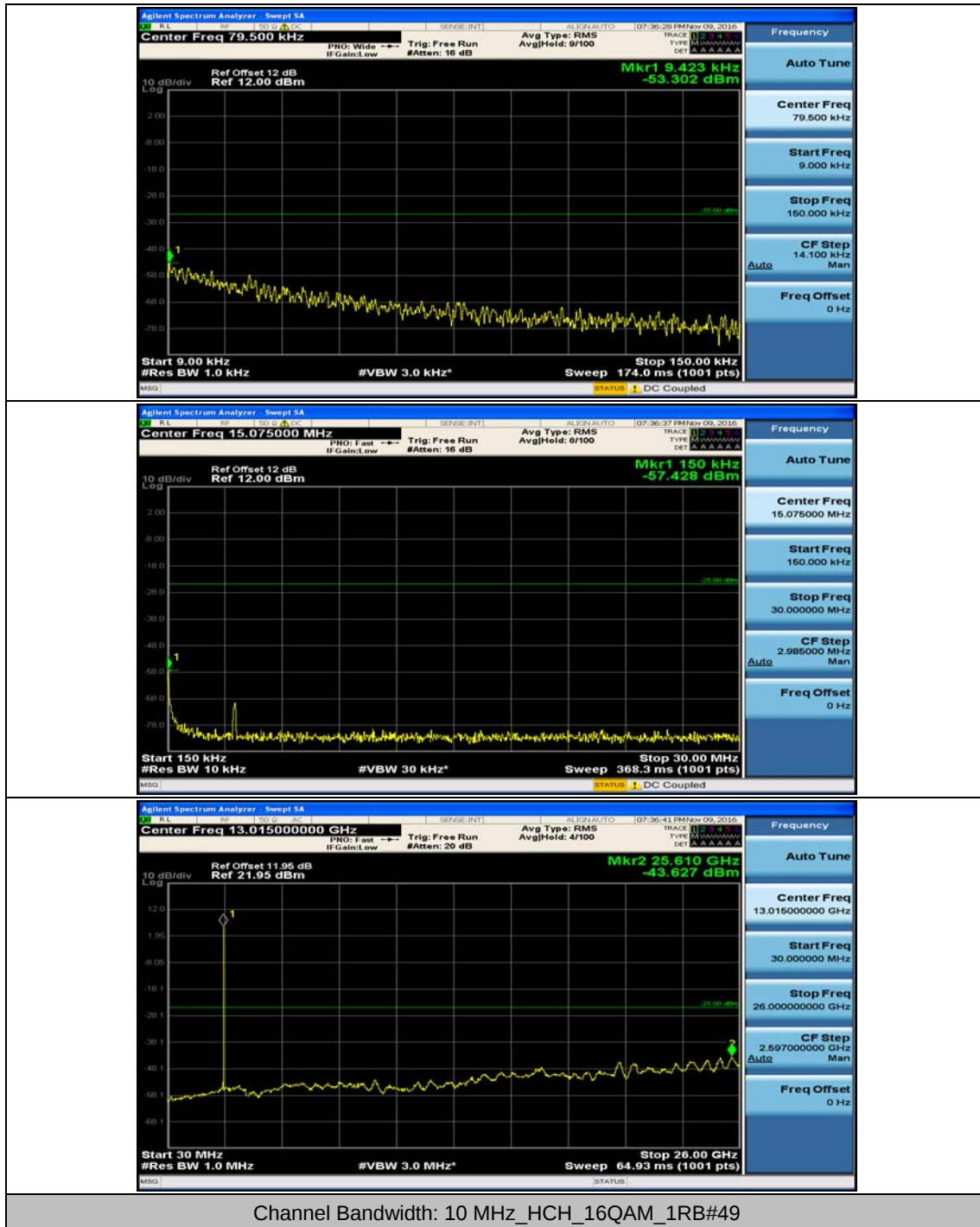


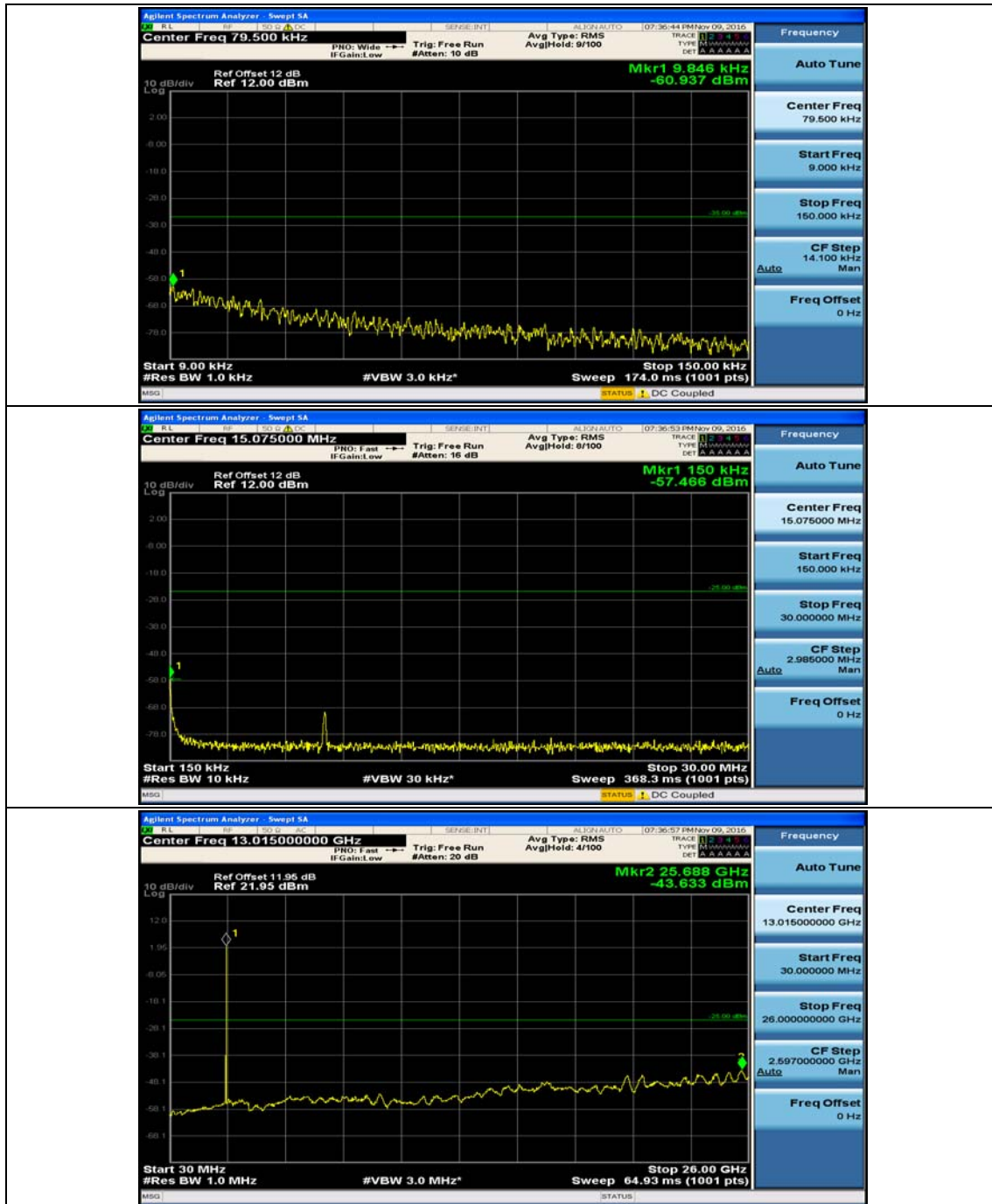


Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#0

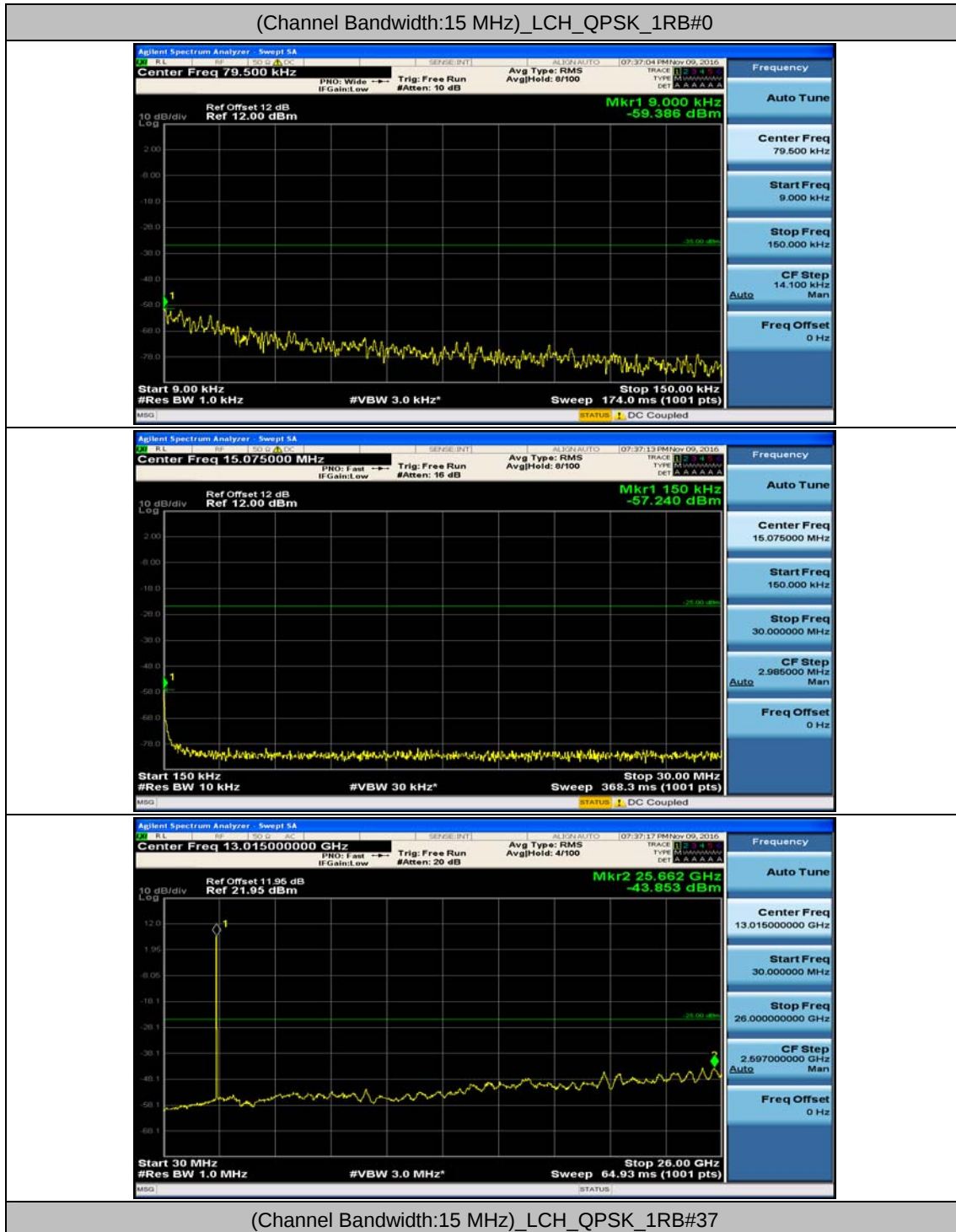


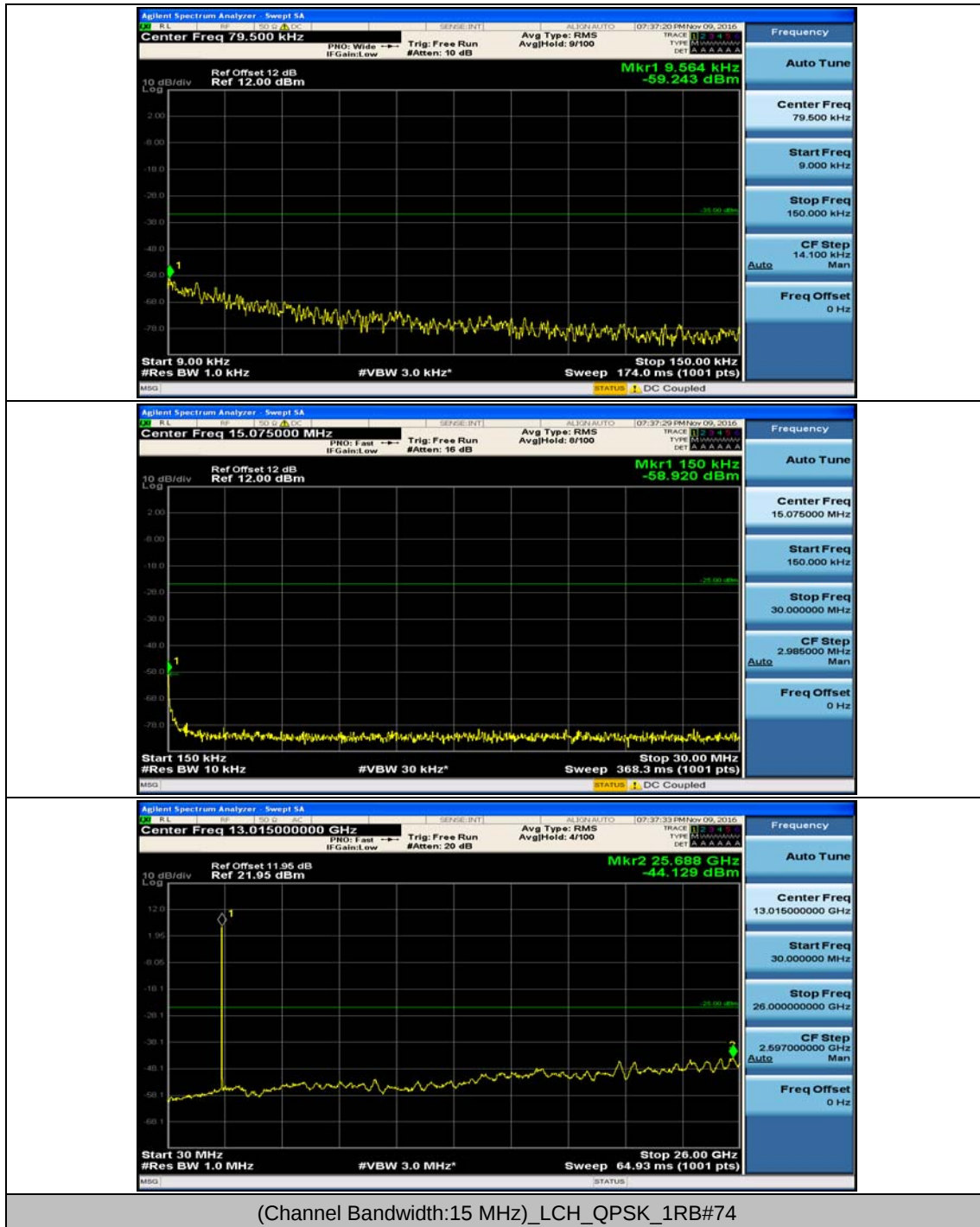
Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#24

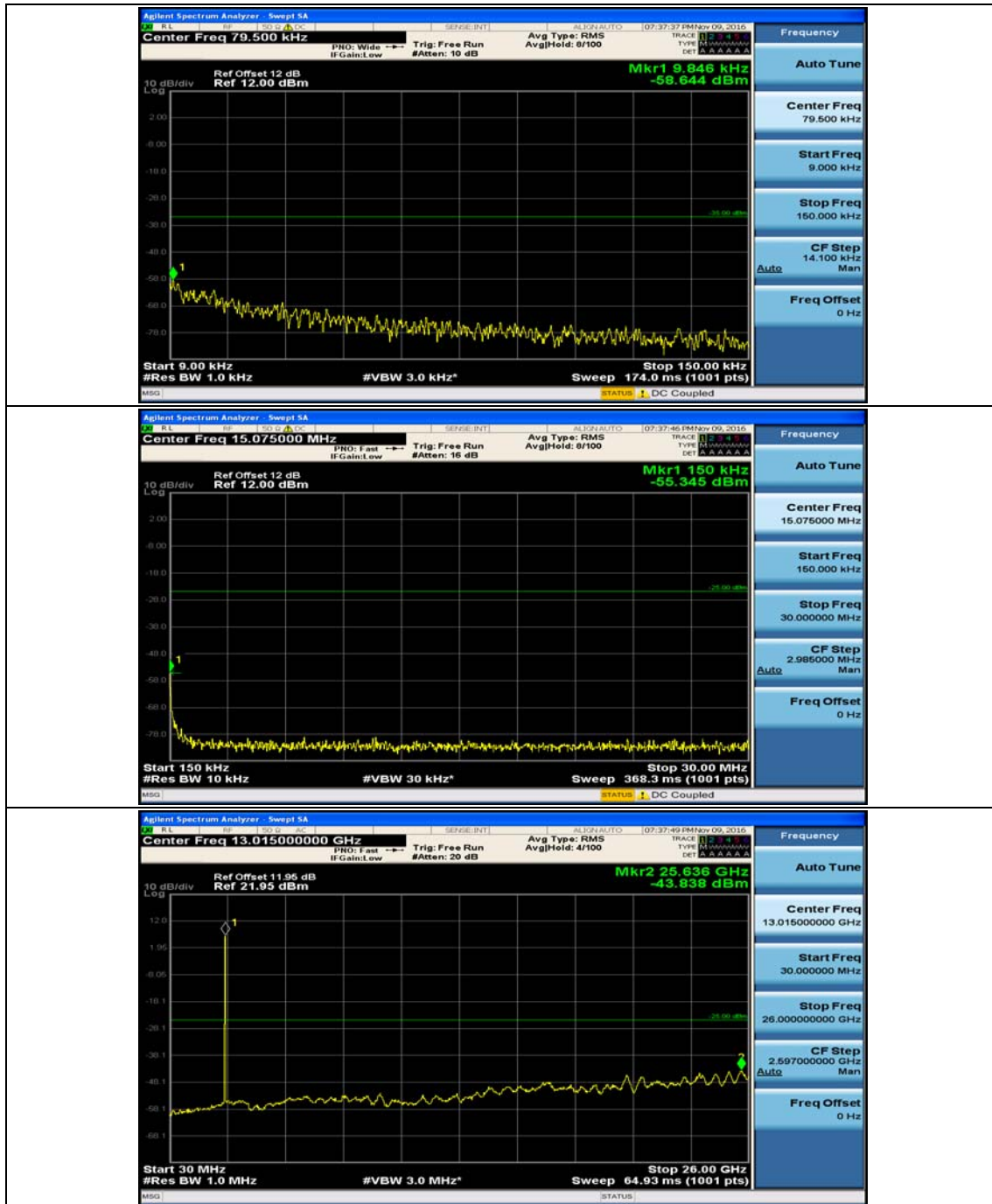




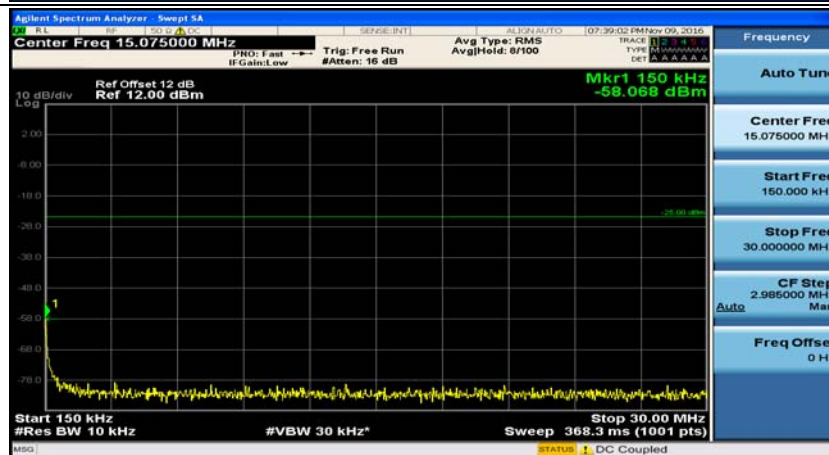
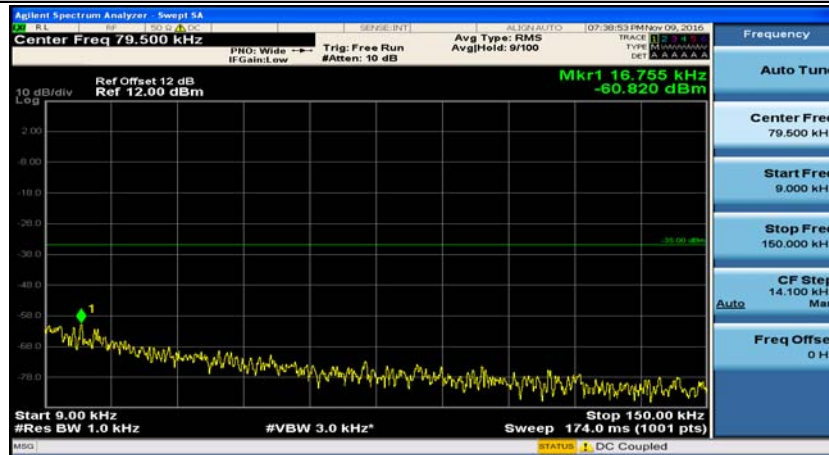
## Channel Bandwidth: 15 MHz



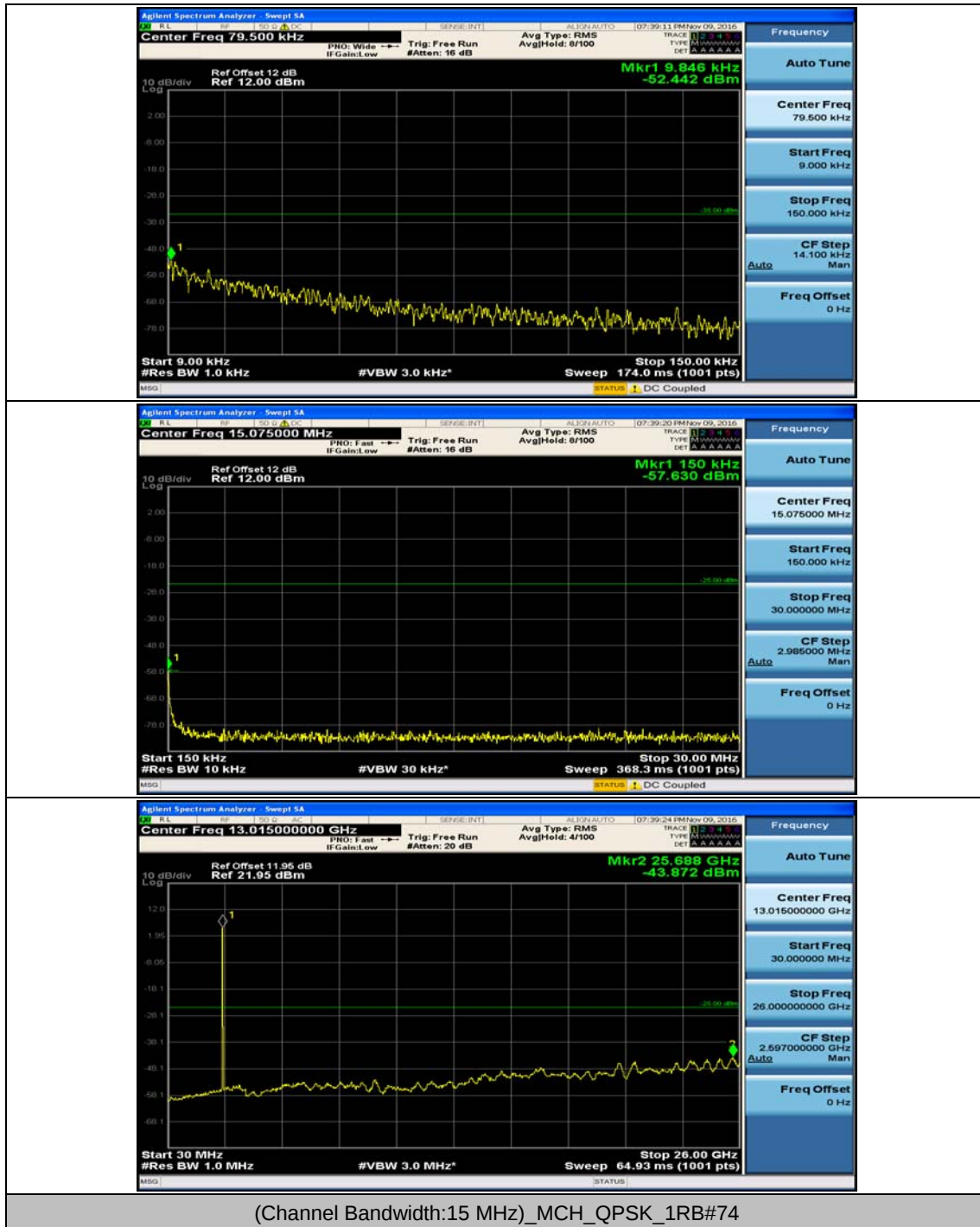


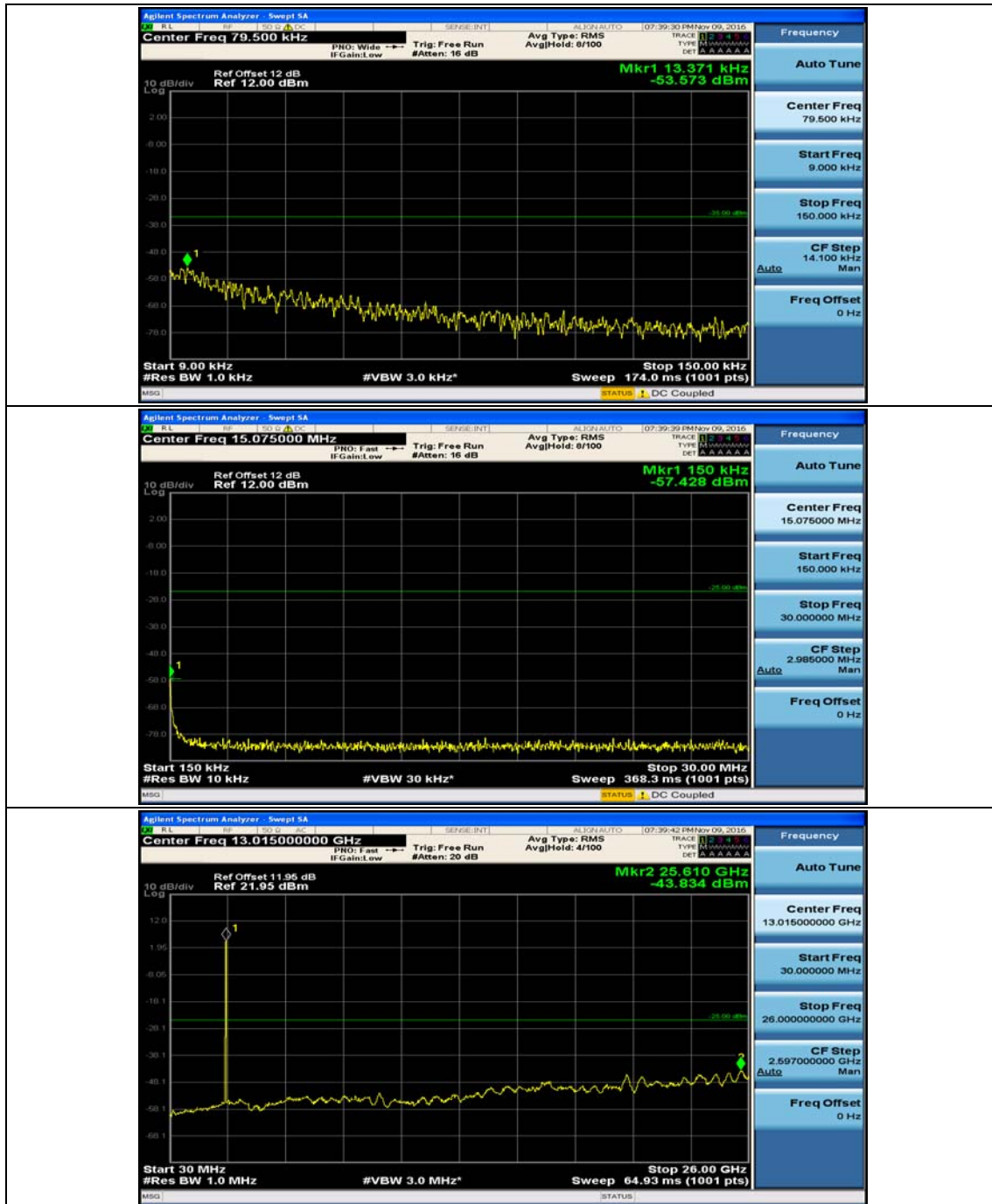


(Channel Bandwidth:15 MHz)\_MCH\_QPSK\_1RB#0

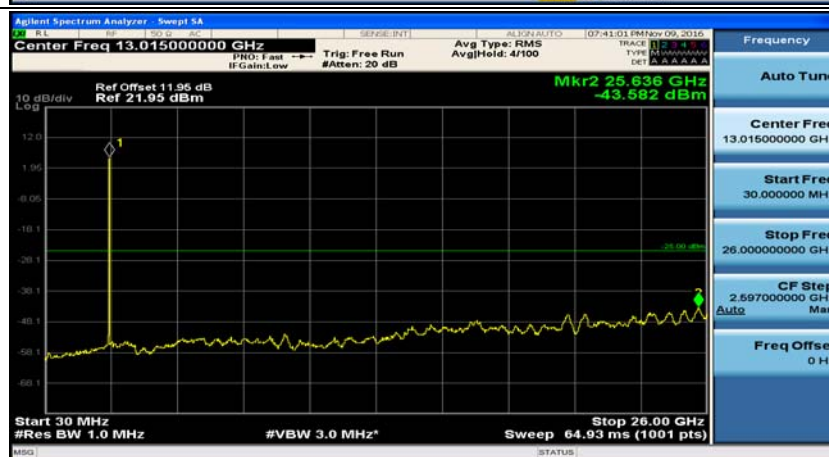
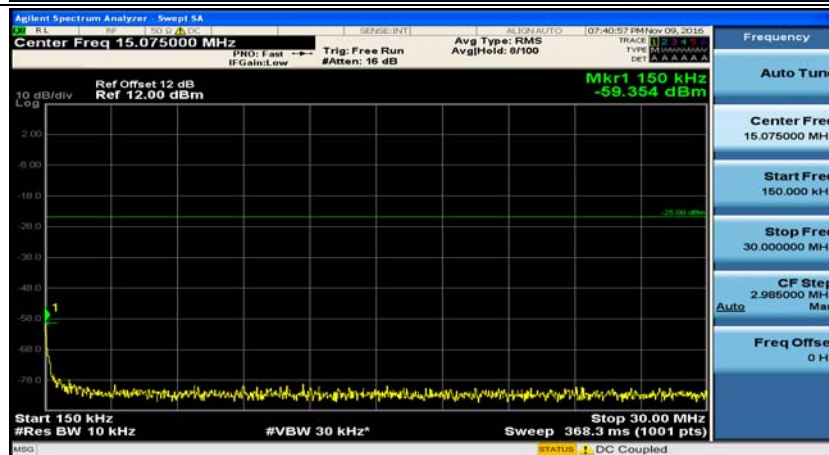
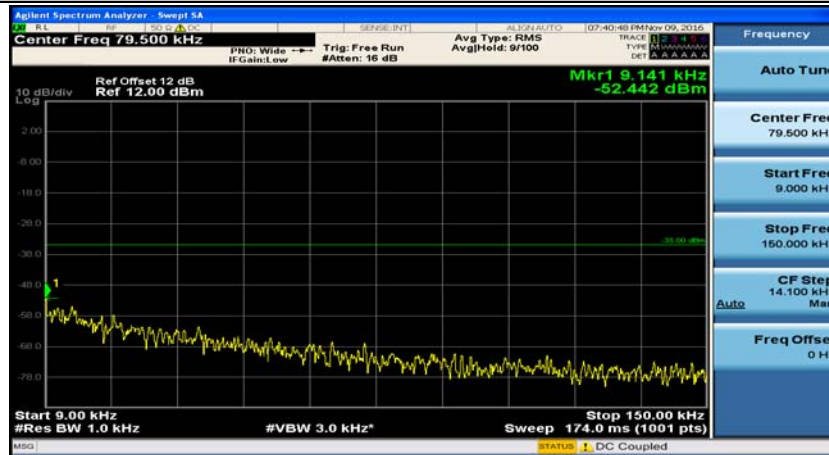


(Channel Bandwidth:15 MHz)\_MCH\_QPSK\_1RB#37

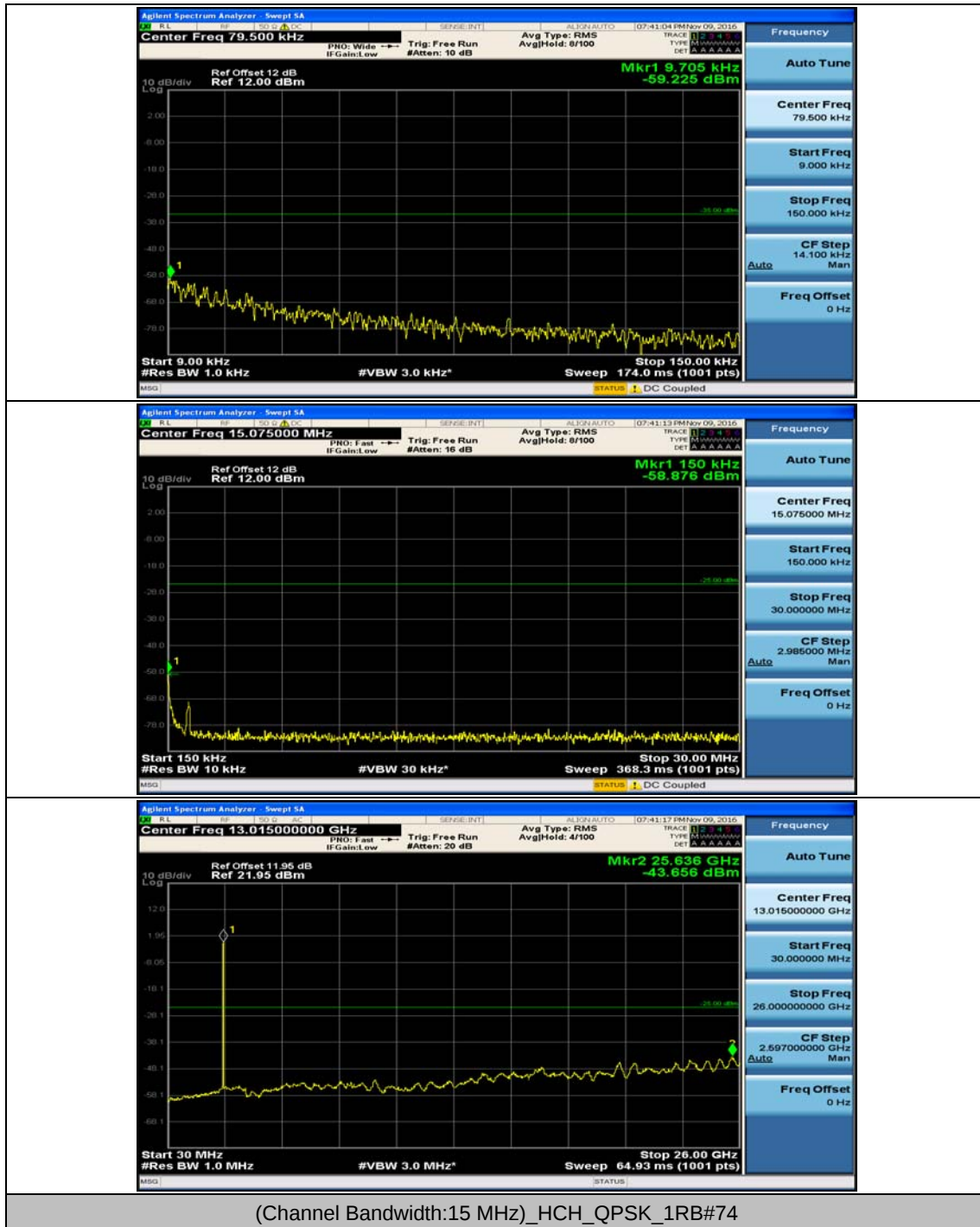


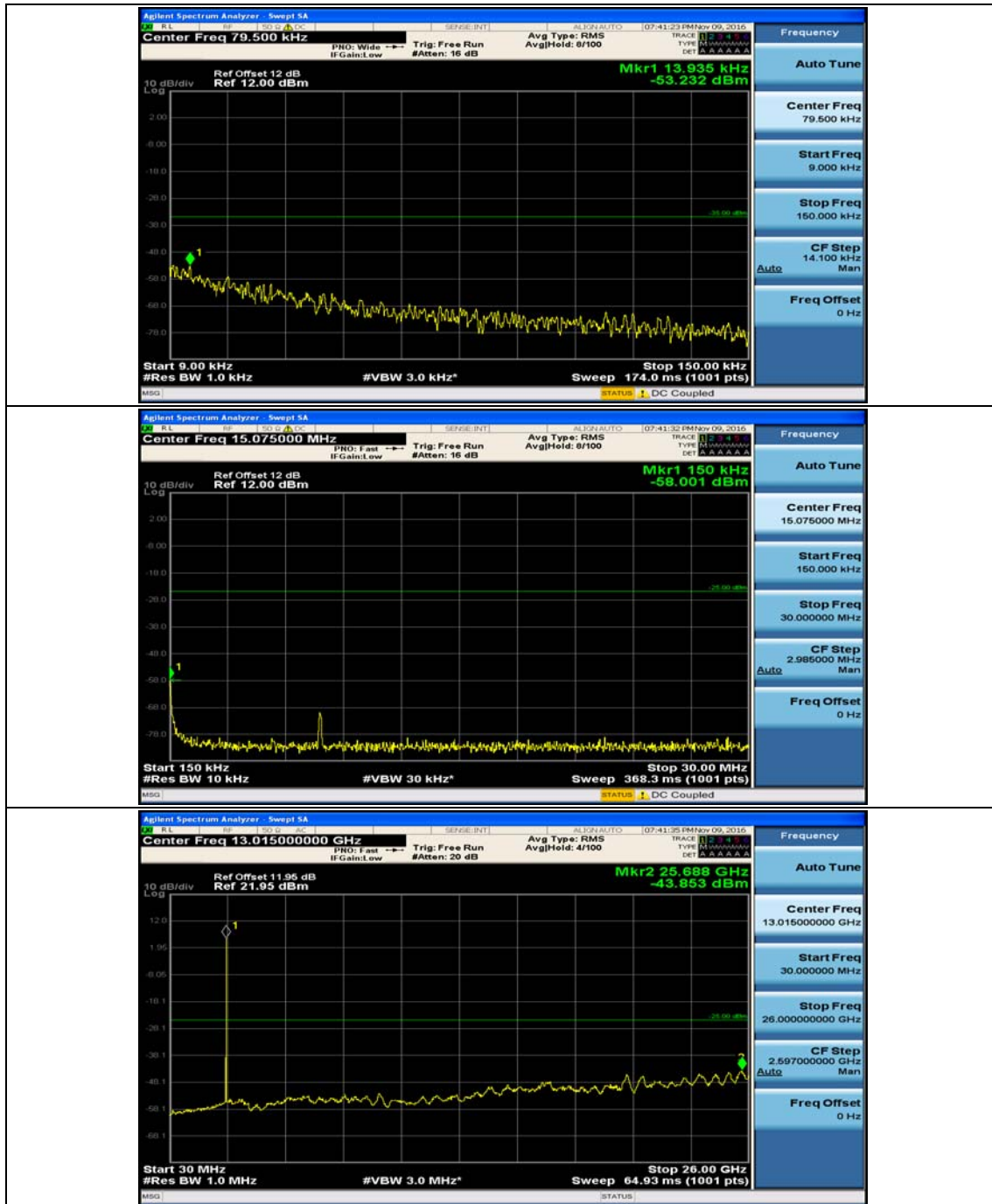


(Channel Bandwidth:15 MHz)\_HCH\_QPSK\_1RB#0

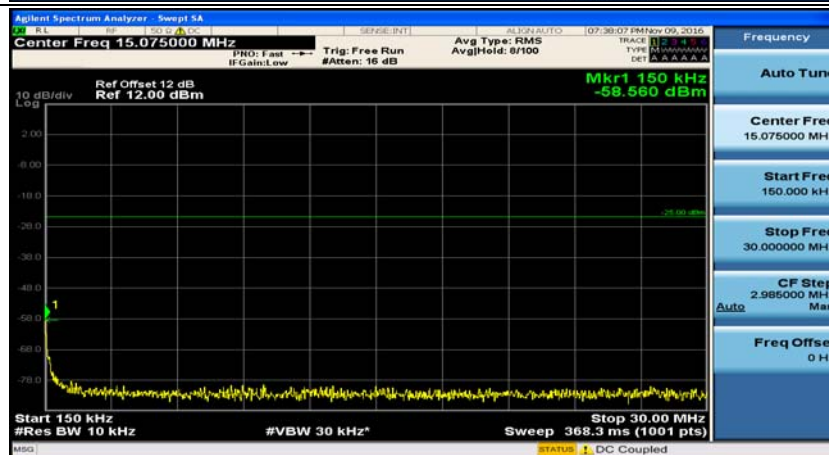
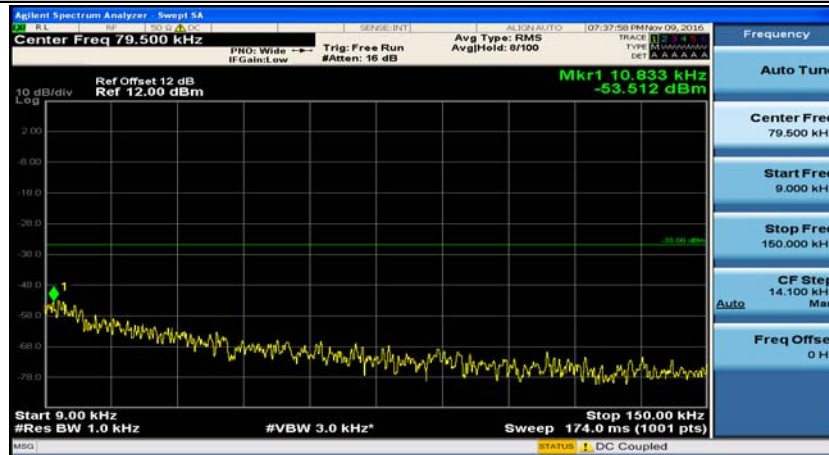


(Channel Bandwidth:15 MHz)\_HCH\_QPSK\_1RB#37

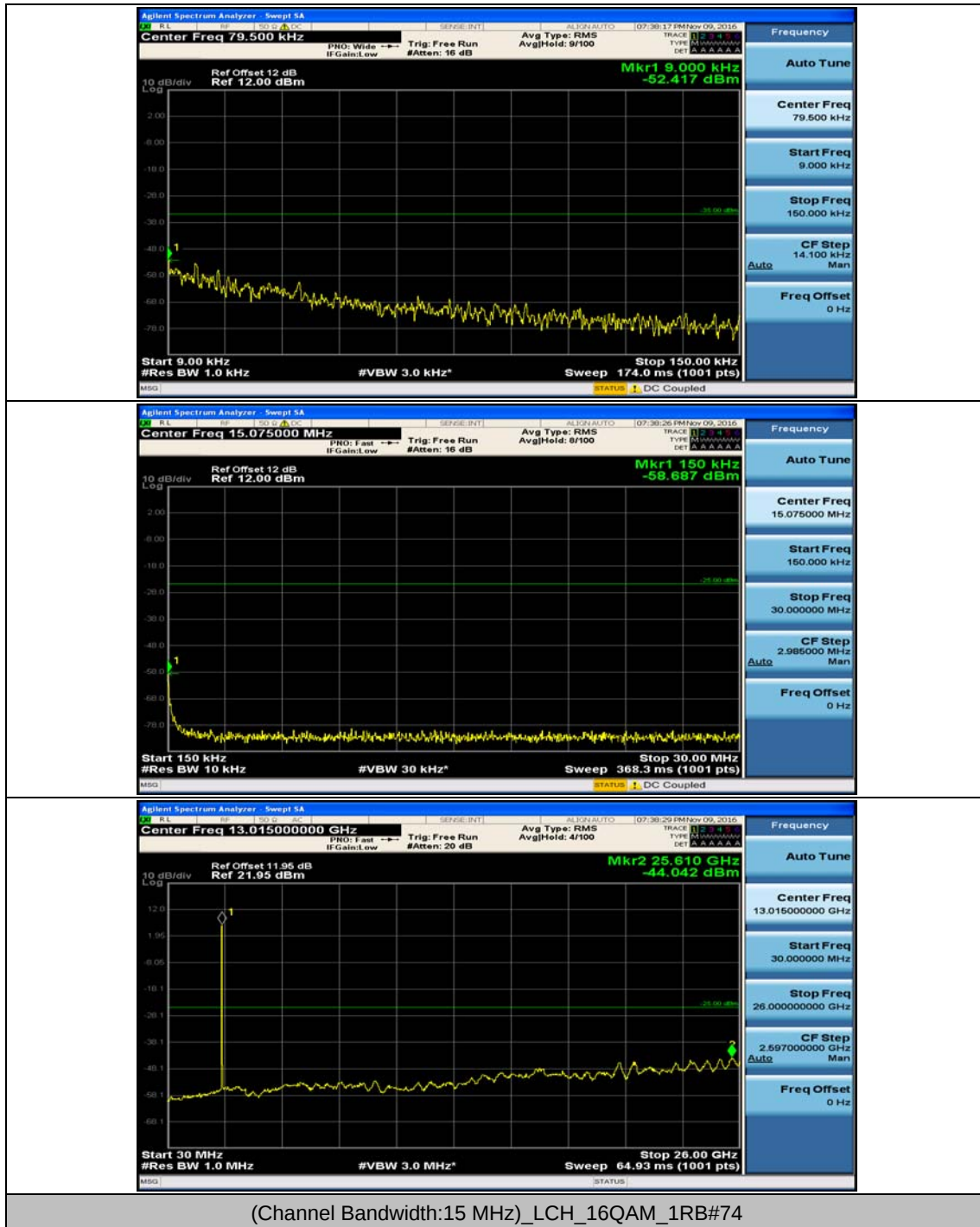


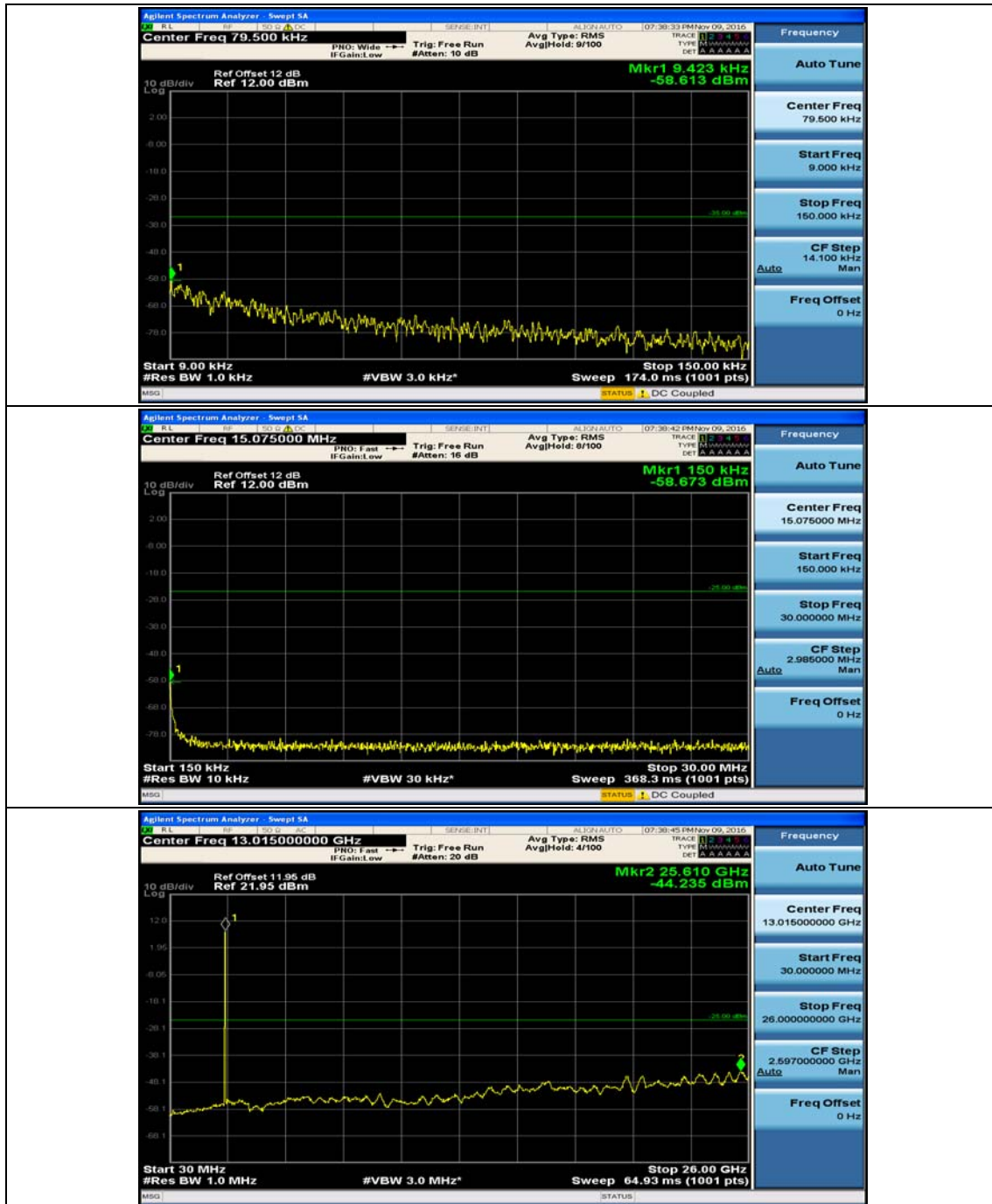


(Channel Bandwidth:15 MHz)\_LCH\_16QAM\_1RB#0

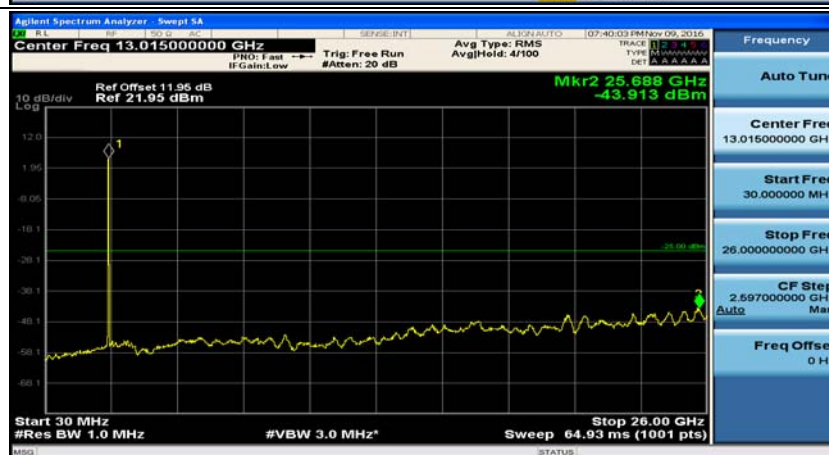
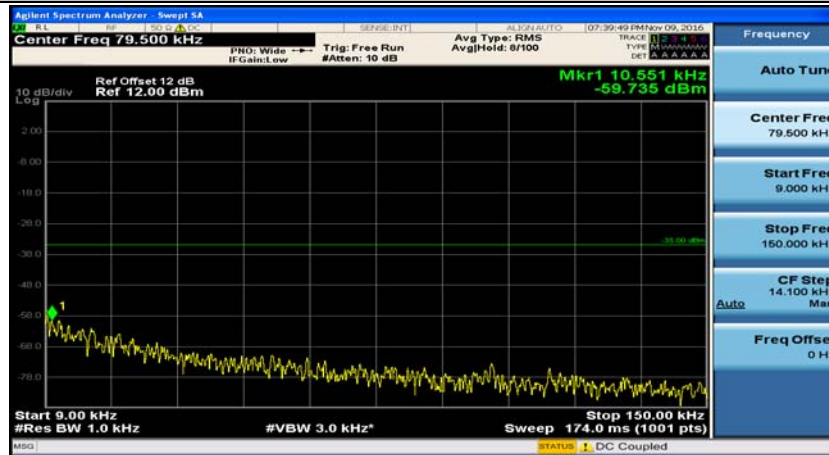


(Channel Bandwidth:15 MHz)\_LCH\_16QAM\_1RB#37

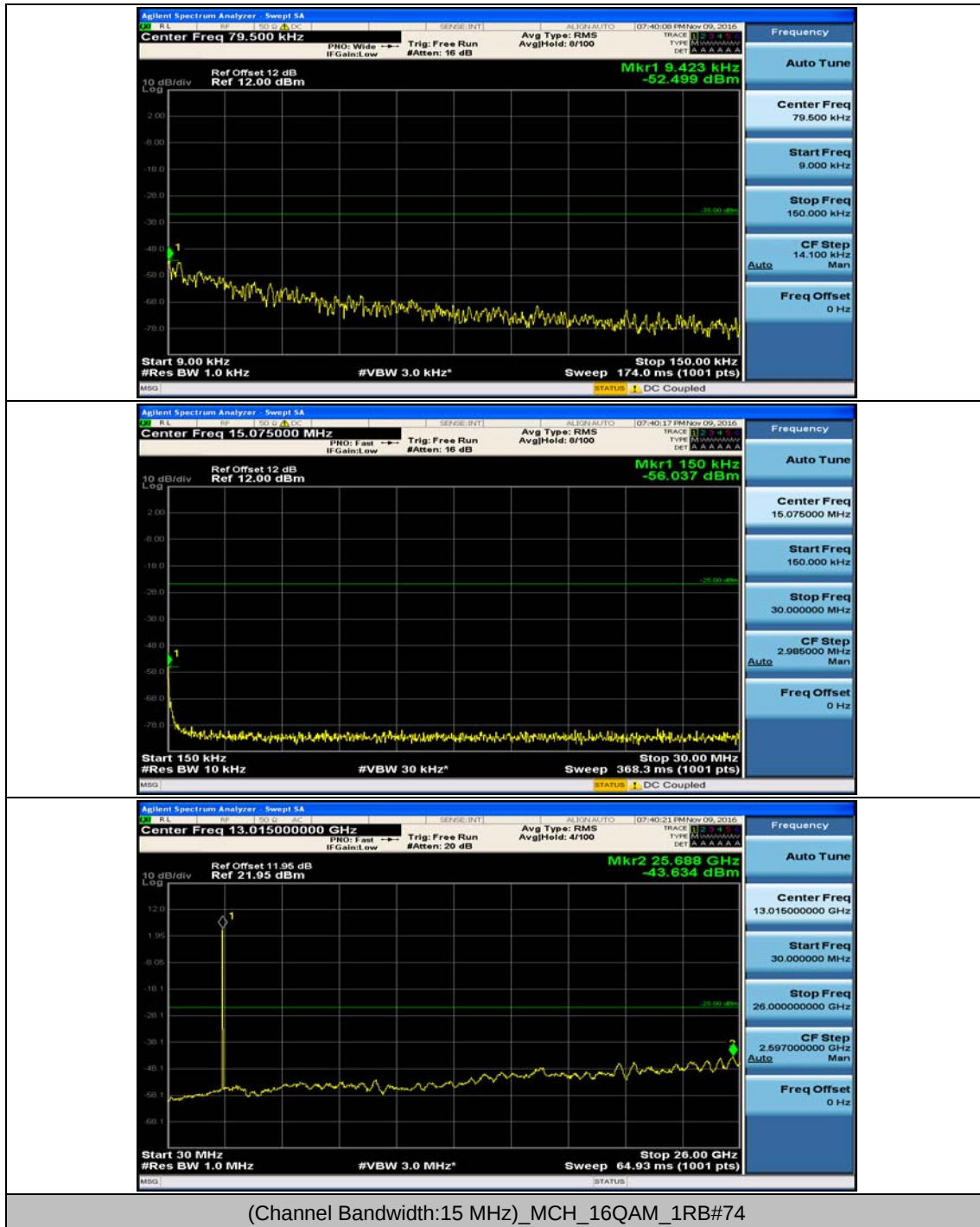


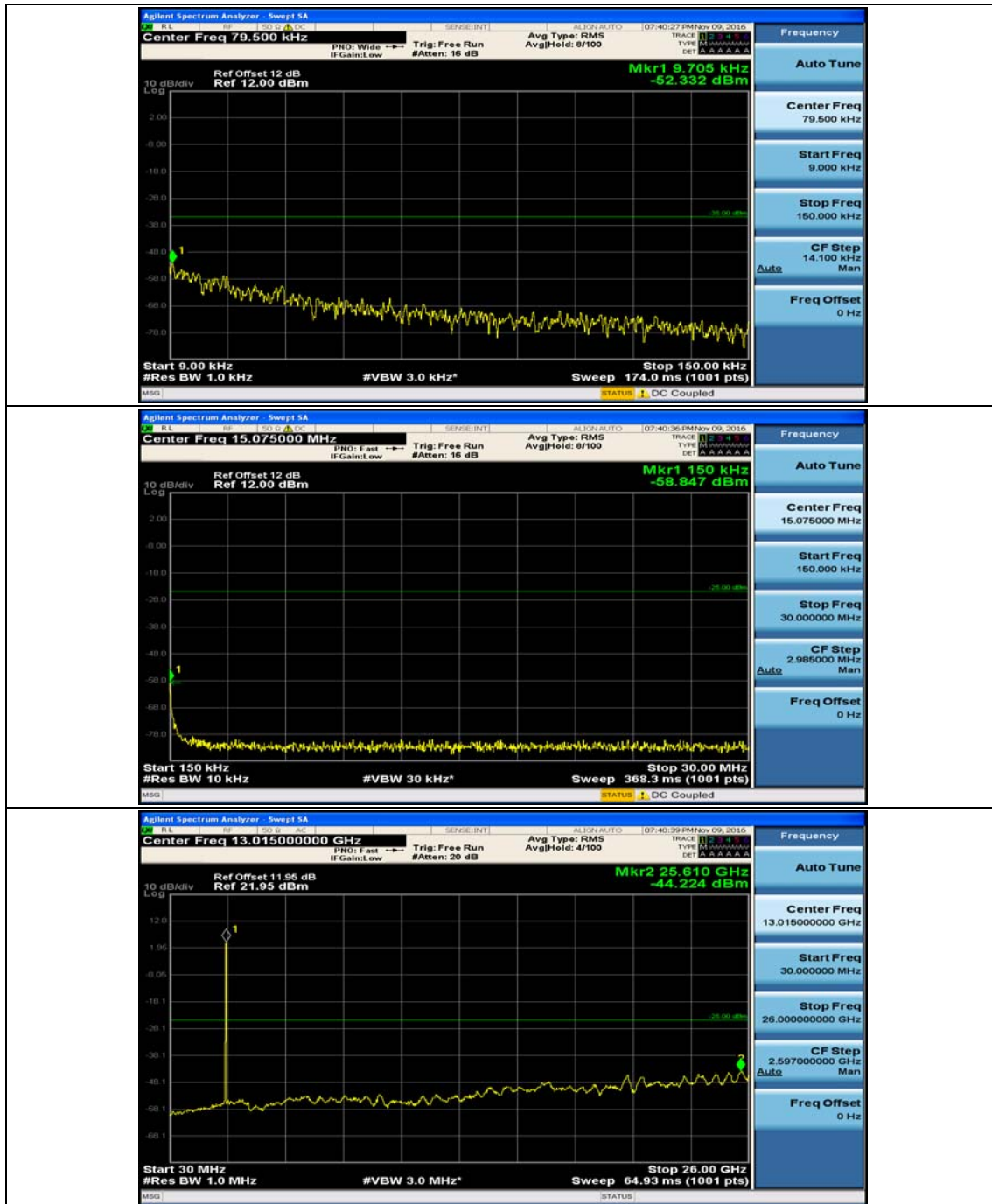


(Channel Bandwidth:15 MHz)\_MCH\_16QAM\_1RB#0

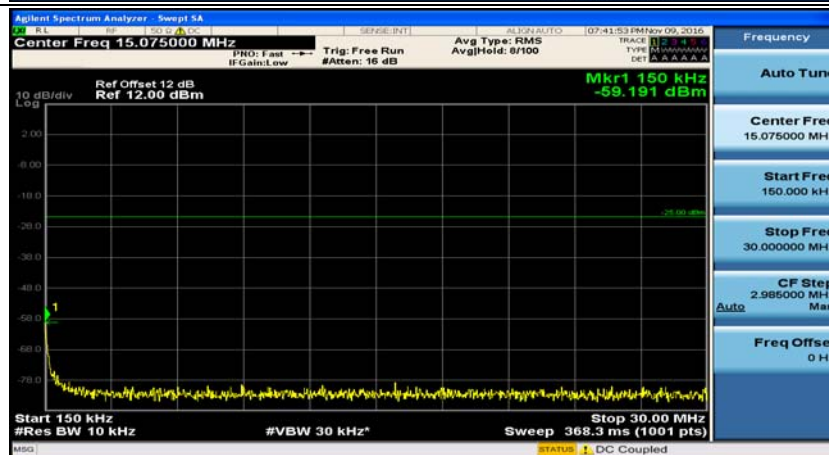


(Channel Bandwidth:15 MHz)\_MCH\_16QAM\_1RB#37

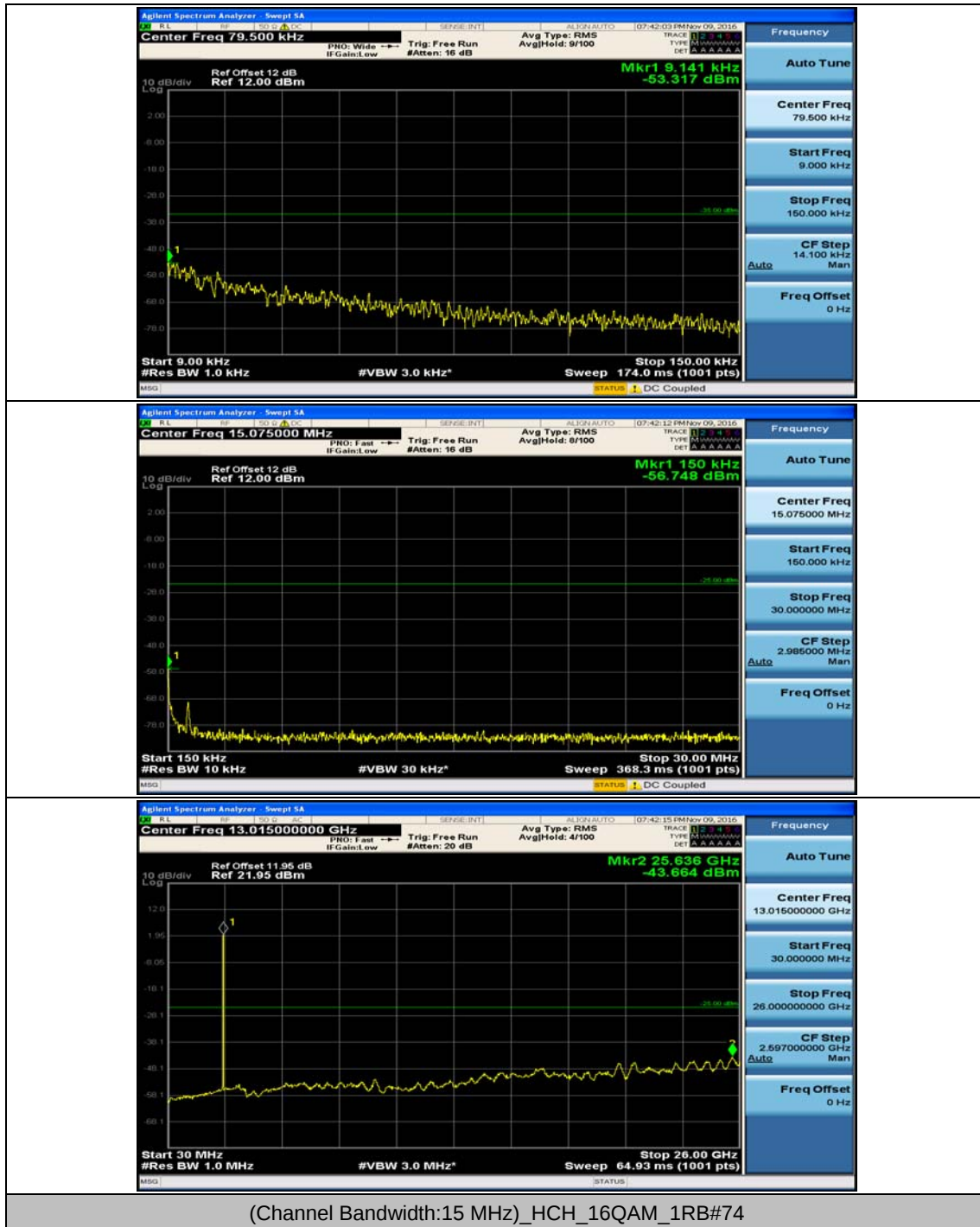


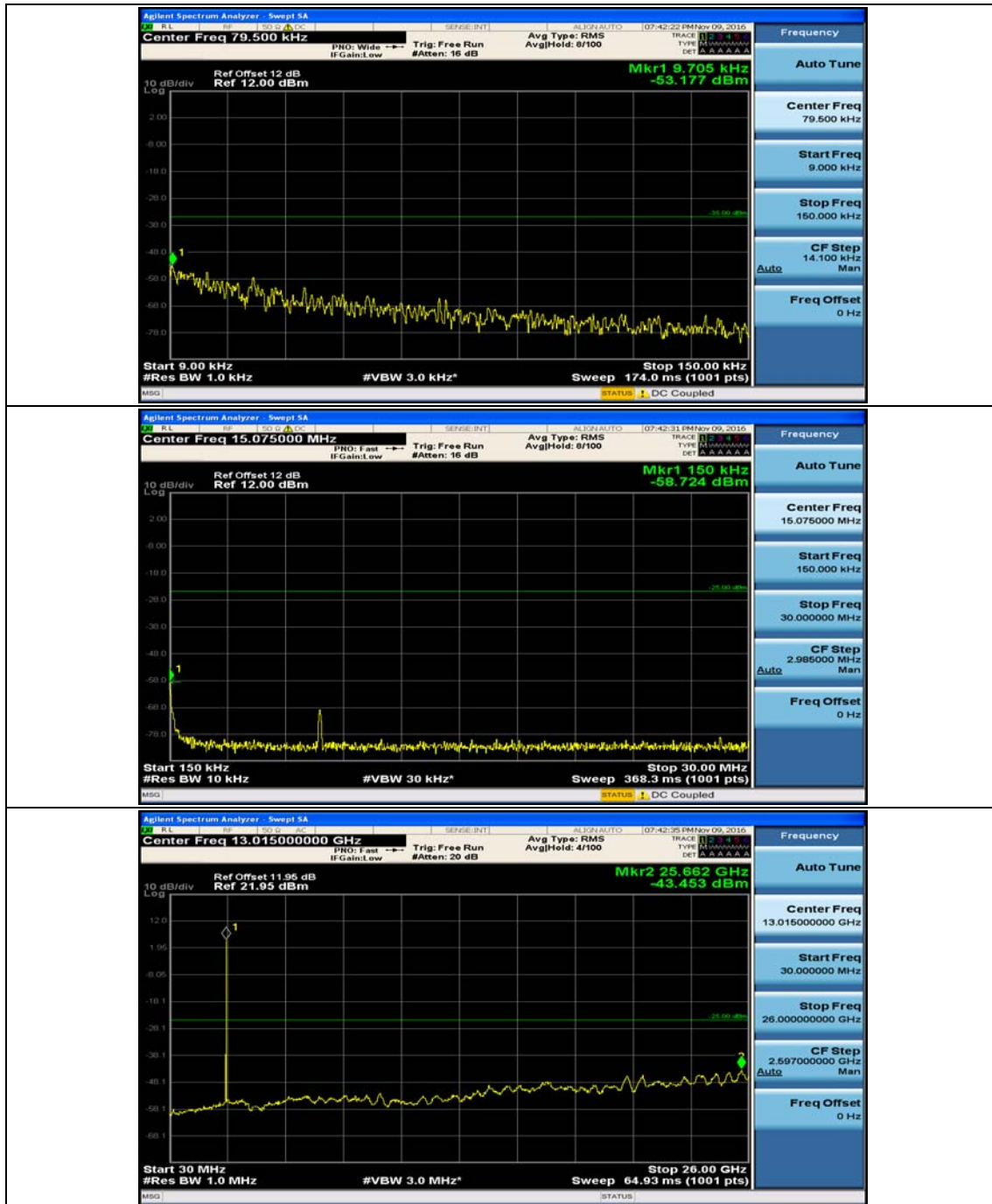


(Channel Bandwidth:15 MHz)\_HCH\_16QAM\_1RB#0

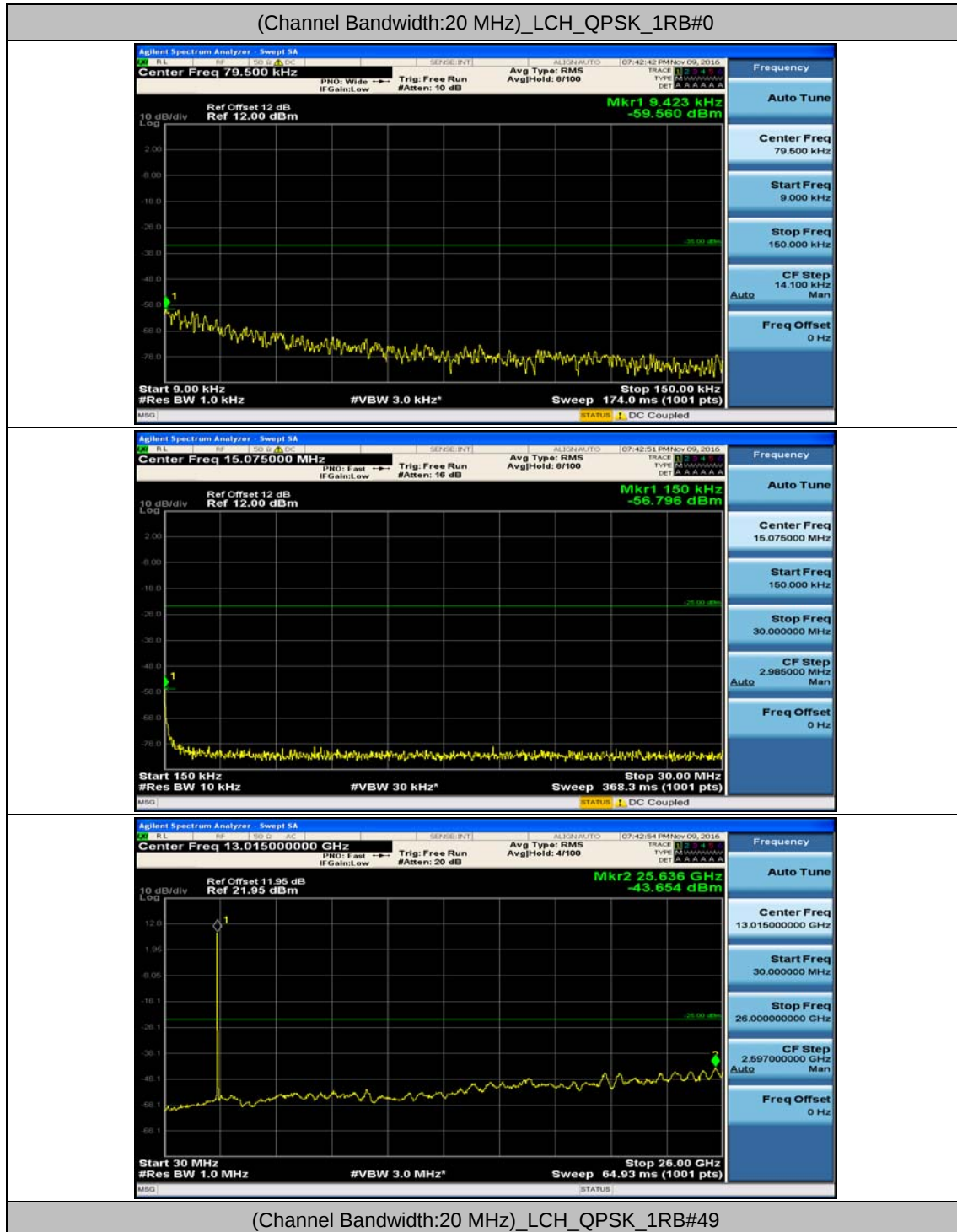


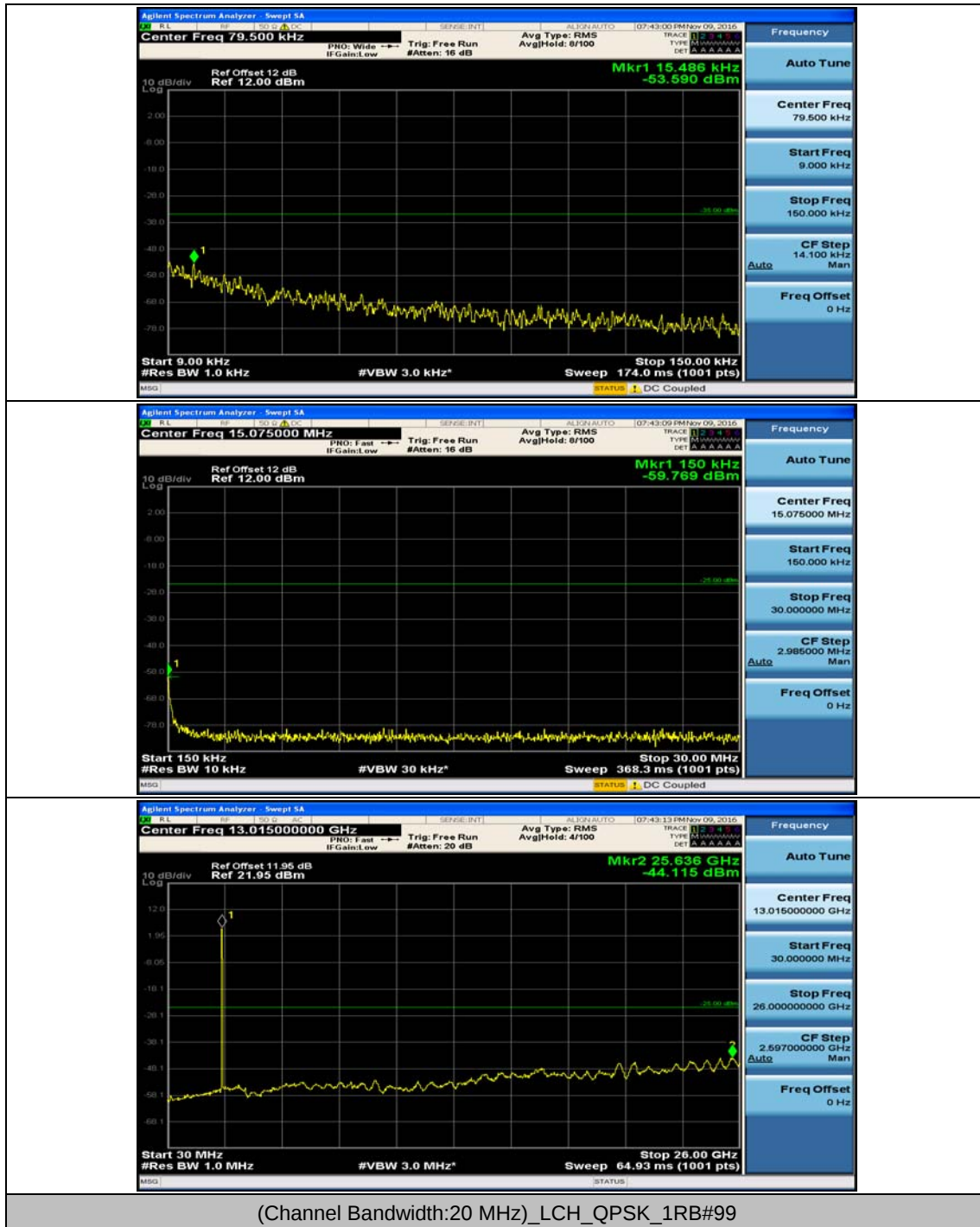
(Channel Bandwidth:15 MHz)\_HCH\_16QAM\_1RB#37

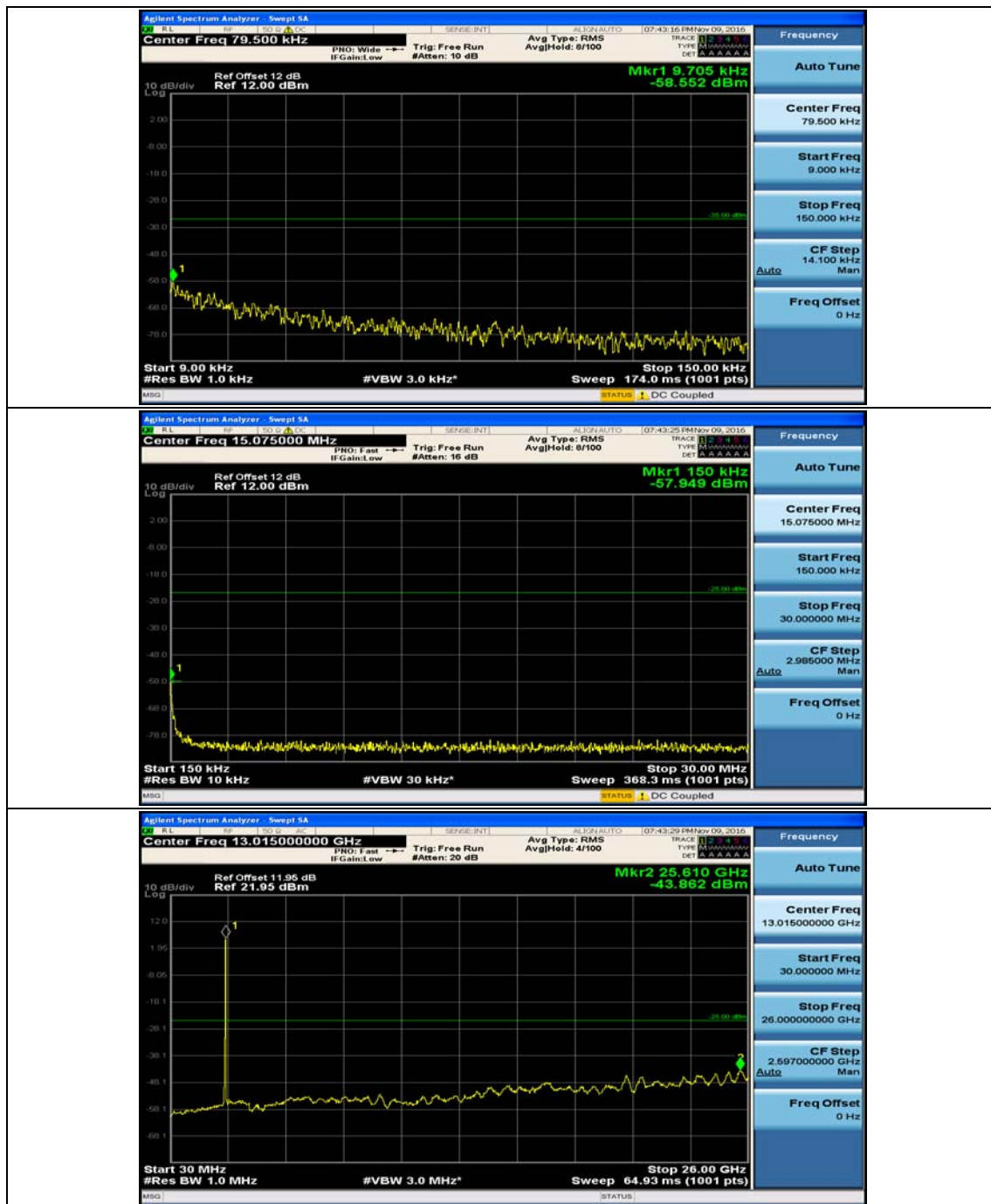




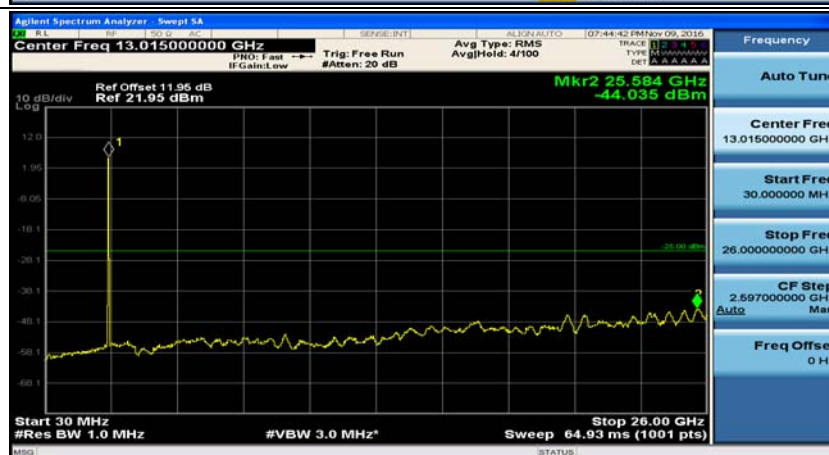
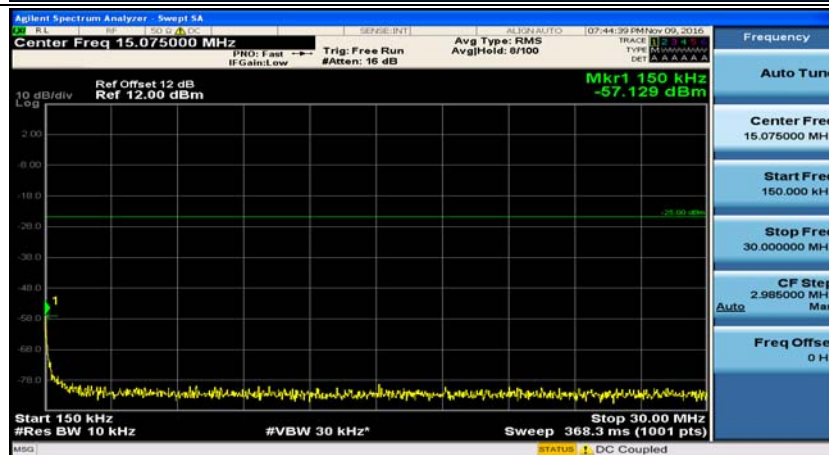
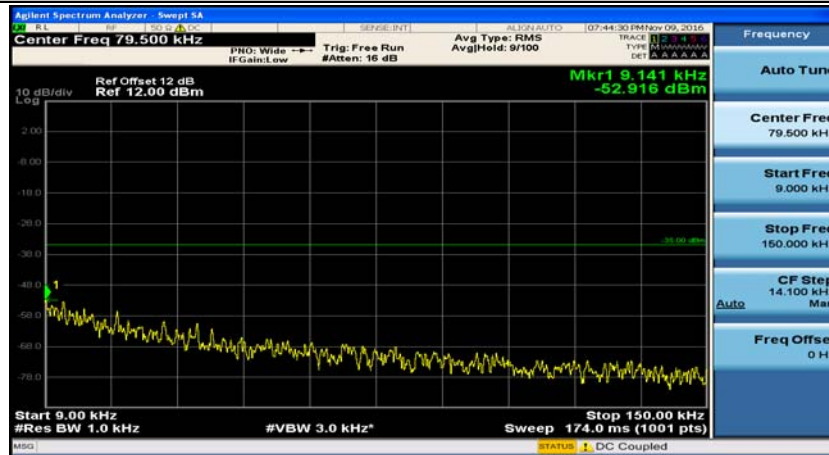
## Channel Bandwidth: 20 MHz



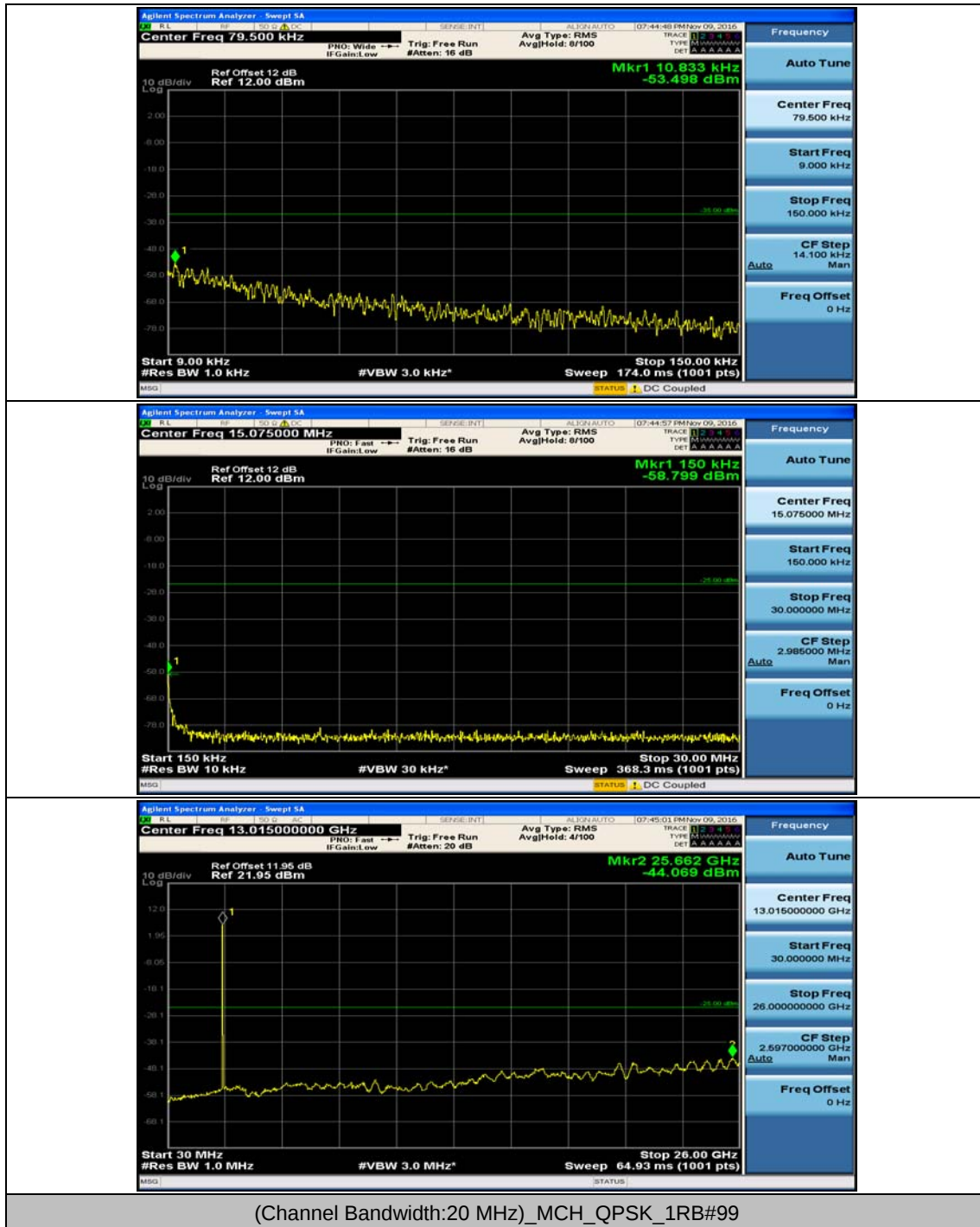


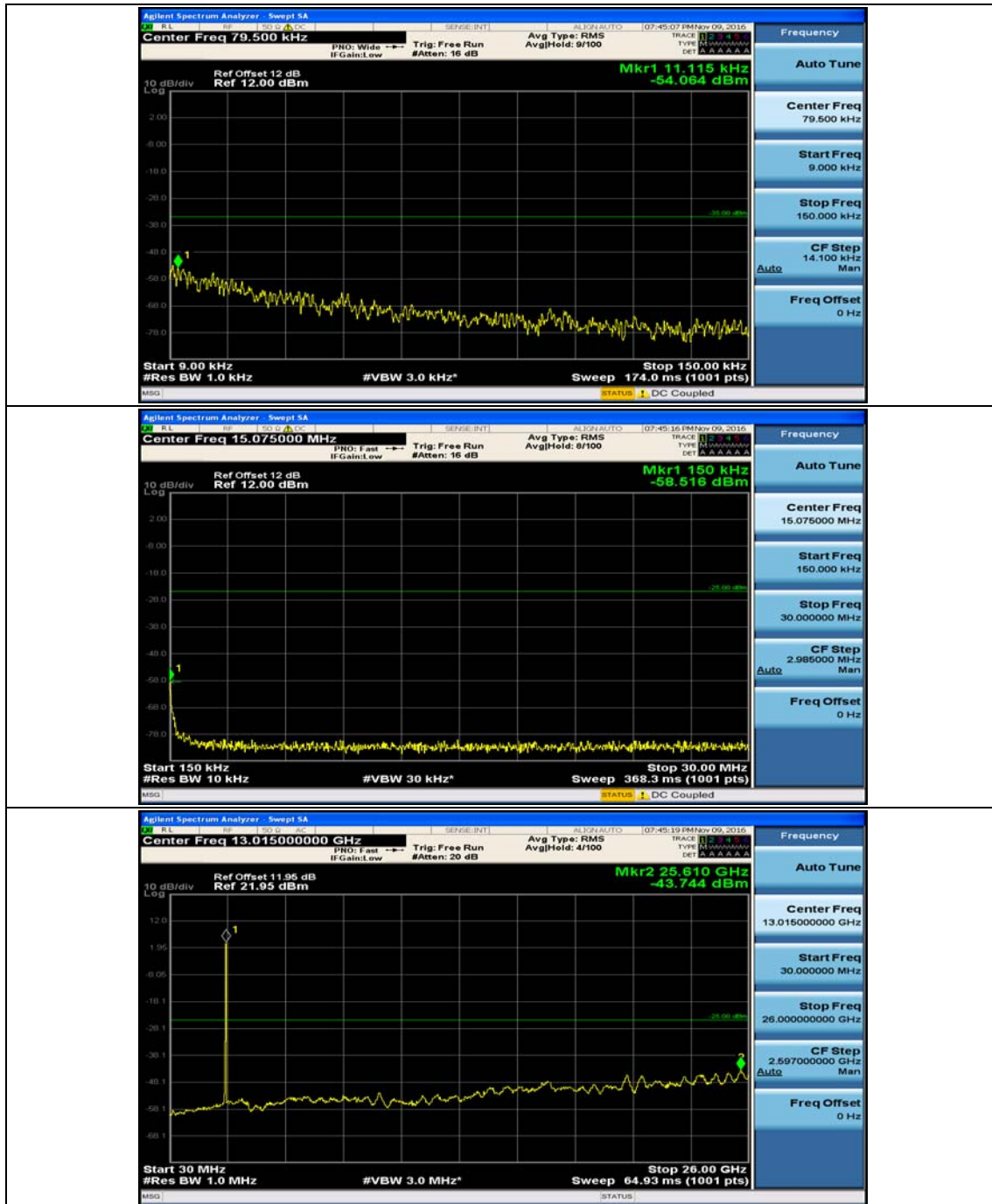


(Channel Bandwidth:20 MHz)\_MCH\_QPSK\_1RB#0

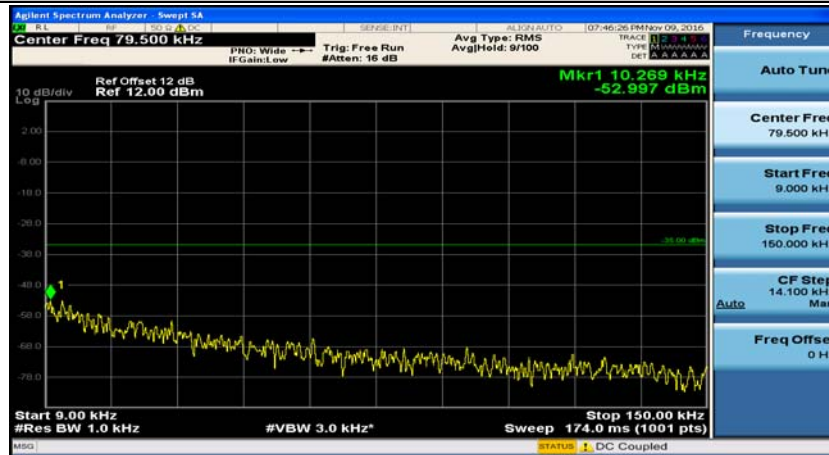


(Channel Bandwidth:20 MHz)\_MCH\_QPSK\_1RB#49

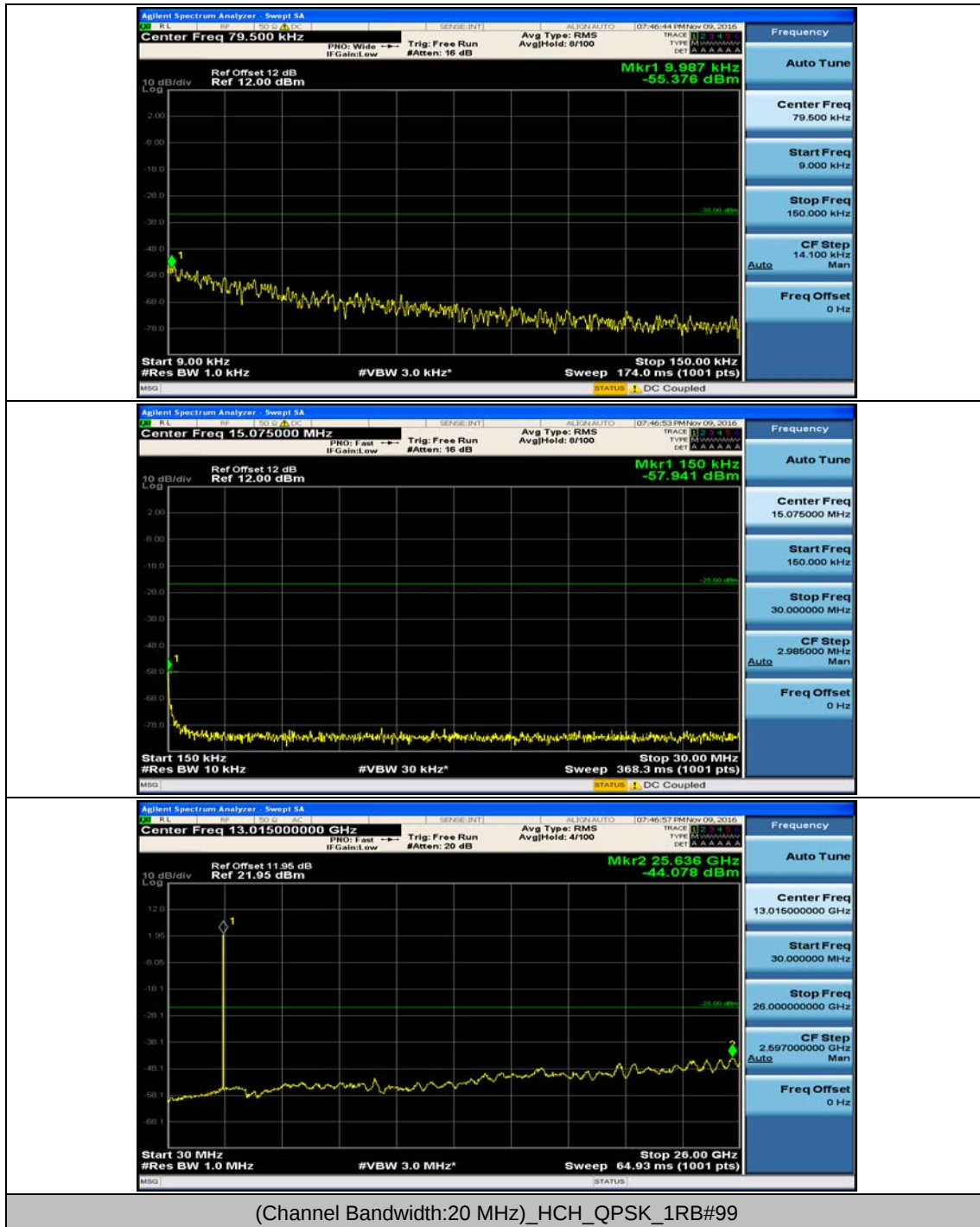


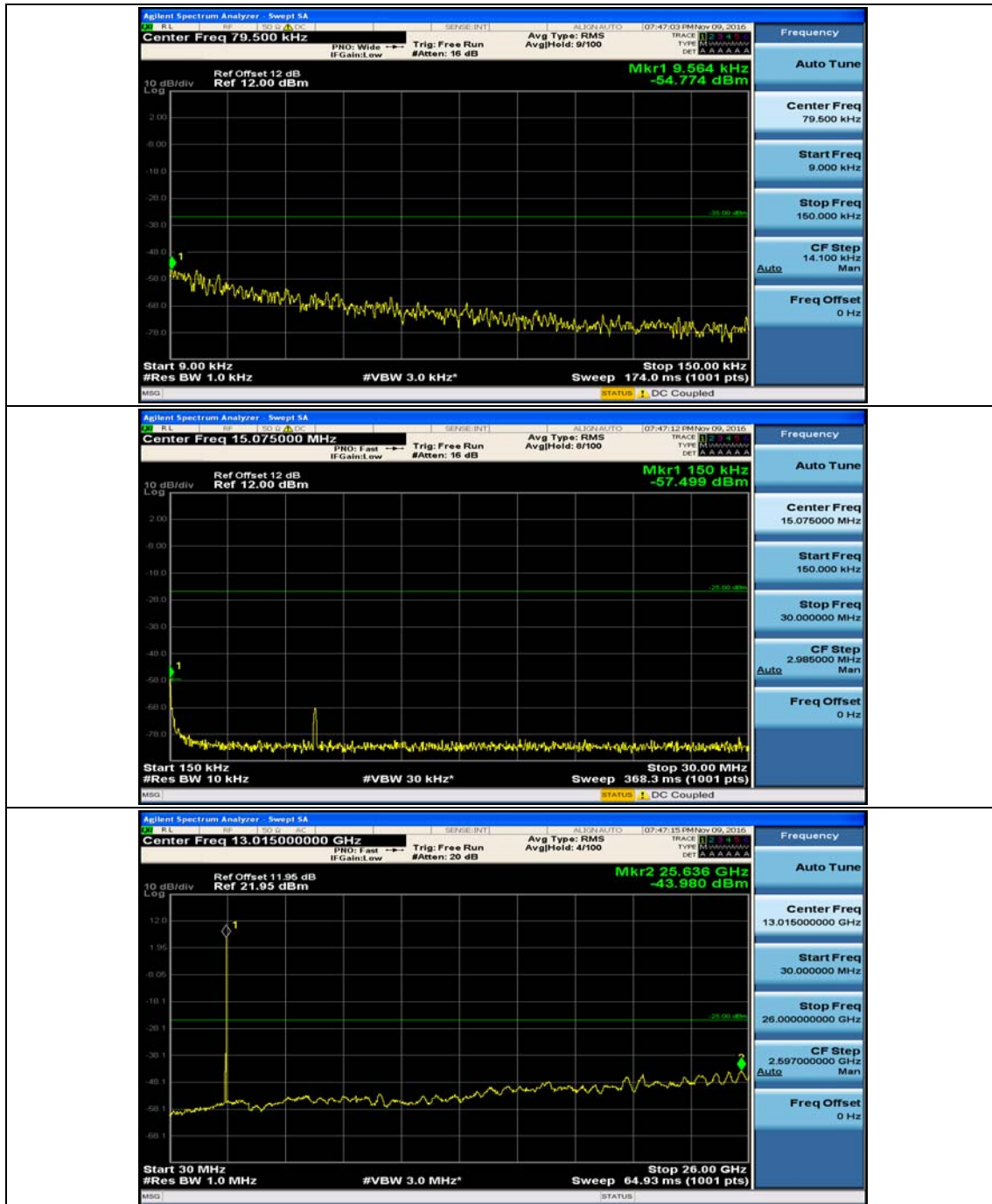


(Channel Bandwidth:20 MHz)\_HCH\_QPSK\_1RB#0

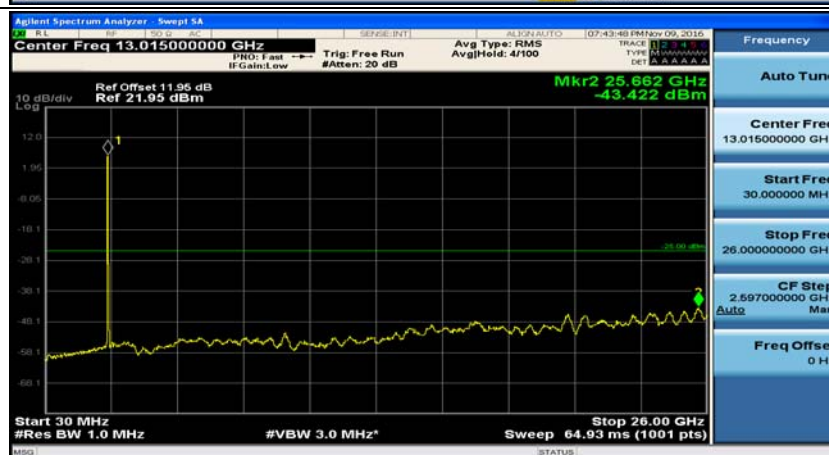
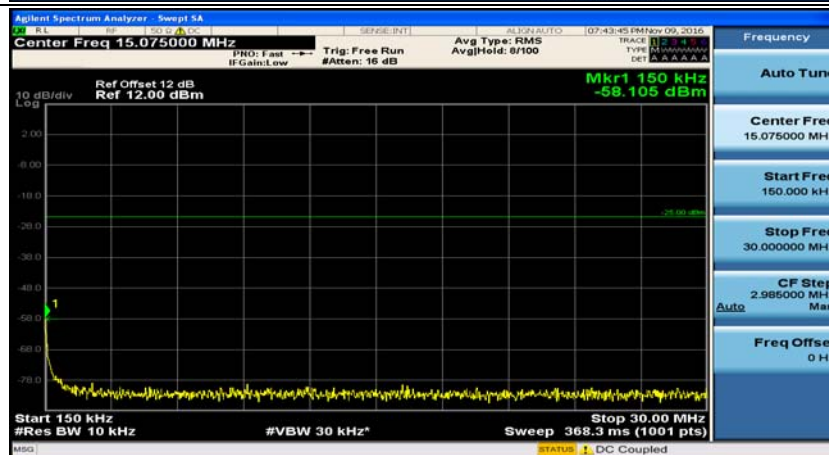
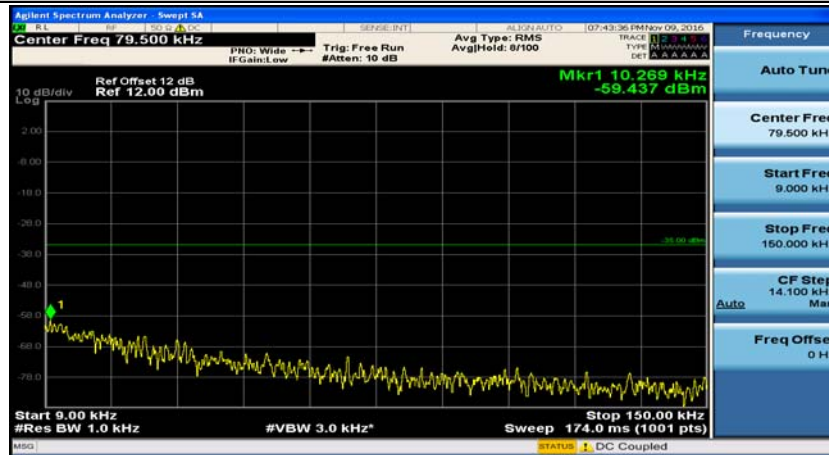


(Channel Bandwidth:20 MHz)\_HCH\_QPSK\_1RB#49

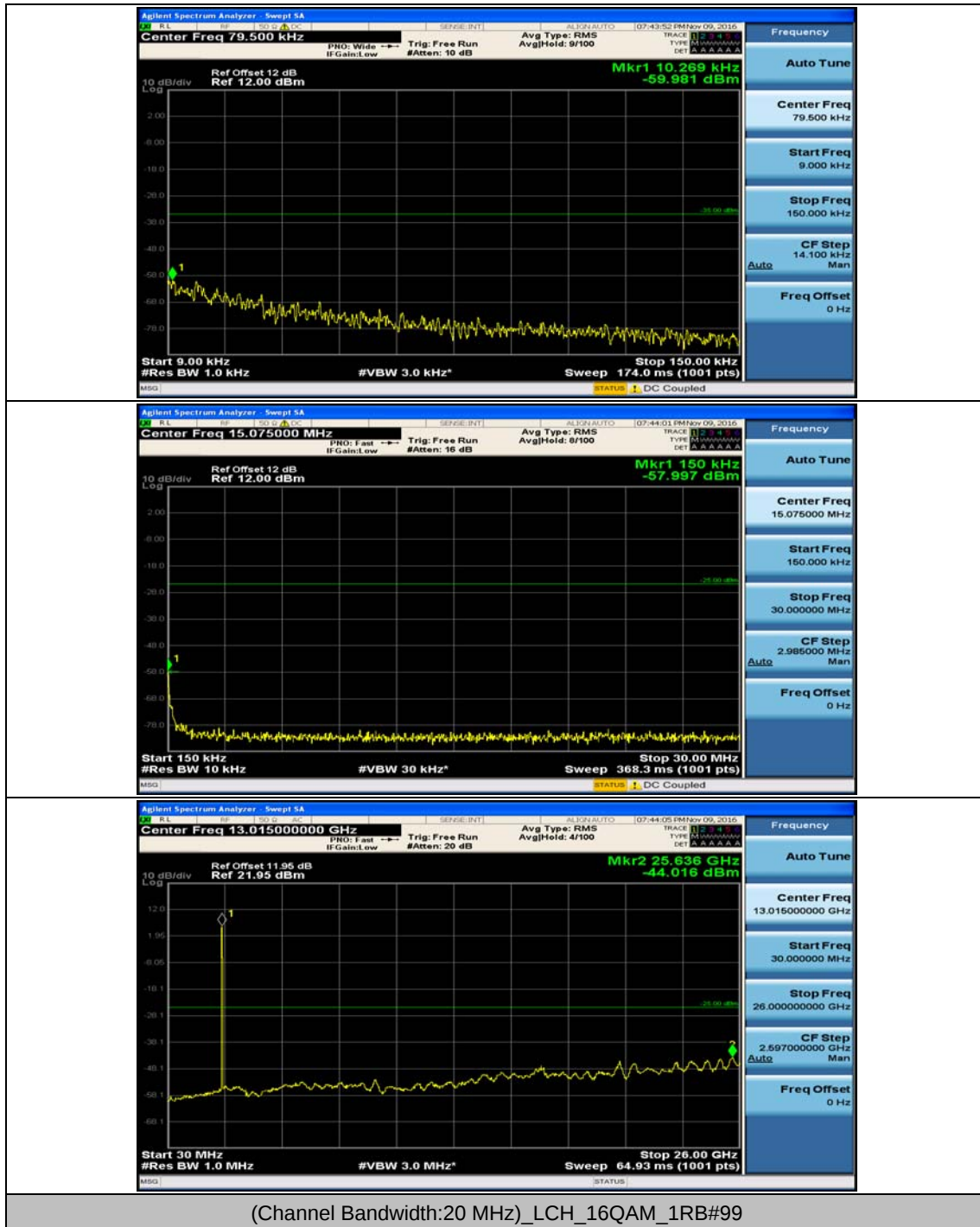


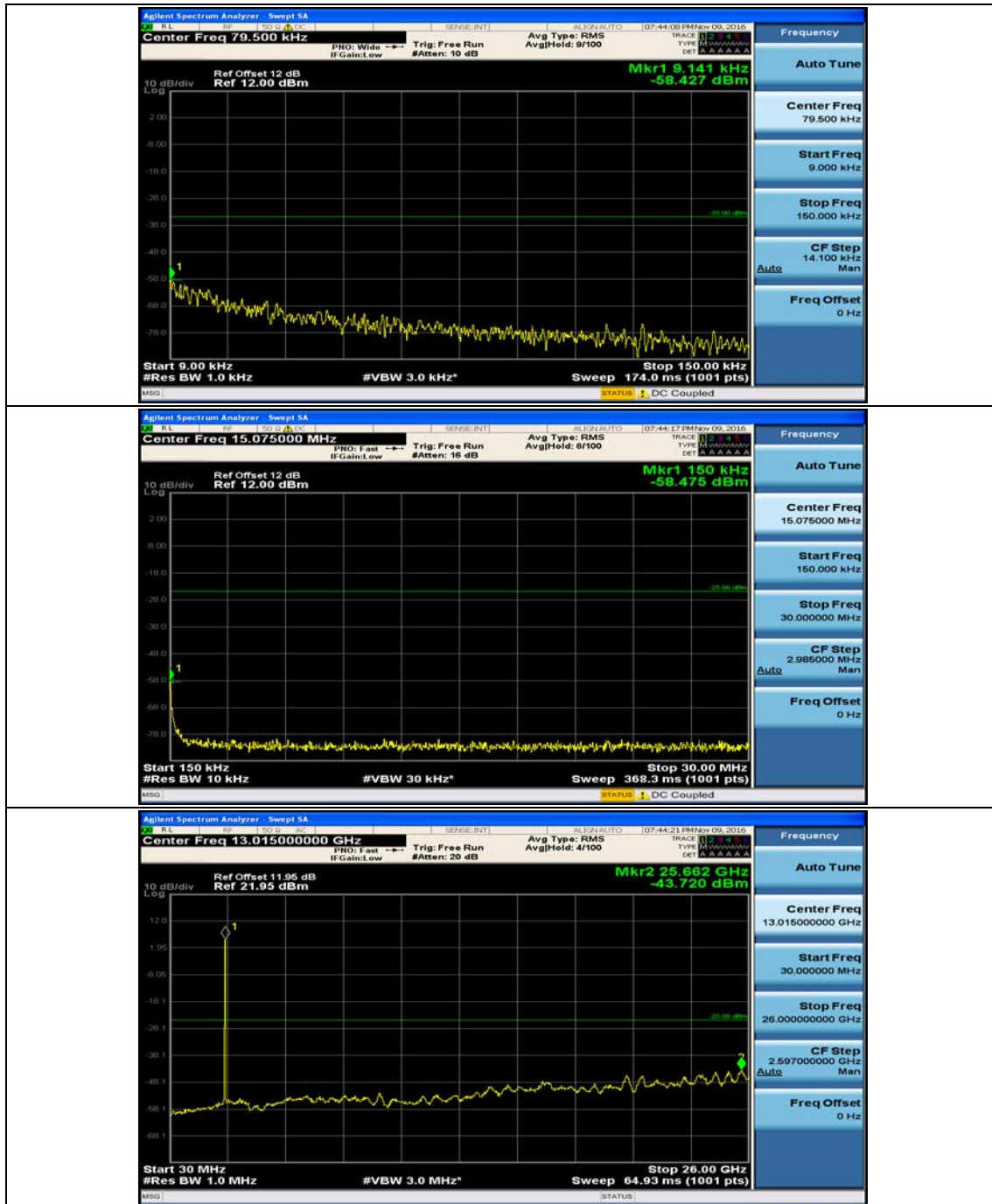


(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_1RB#0

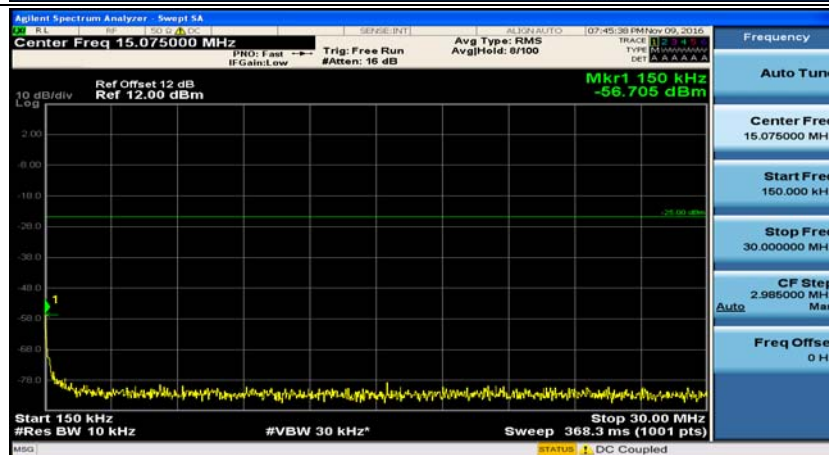
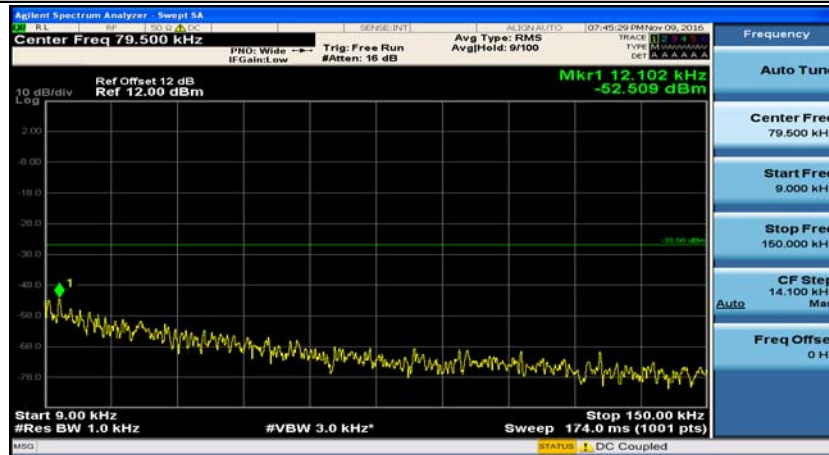


(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_1RB#49

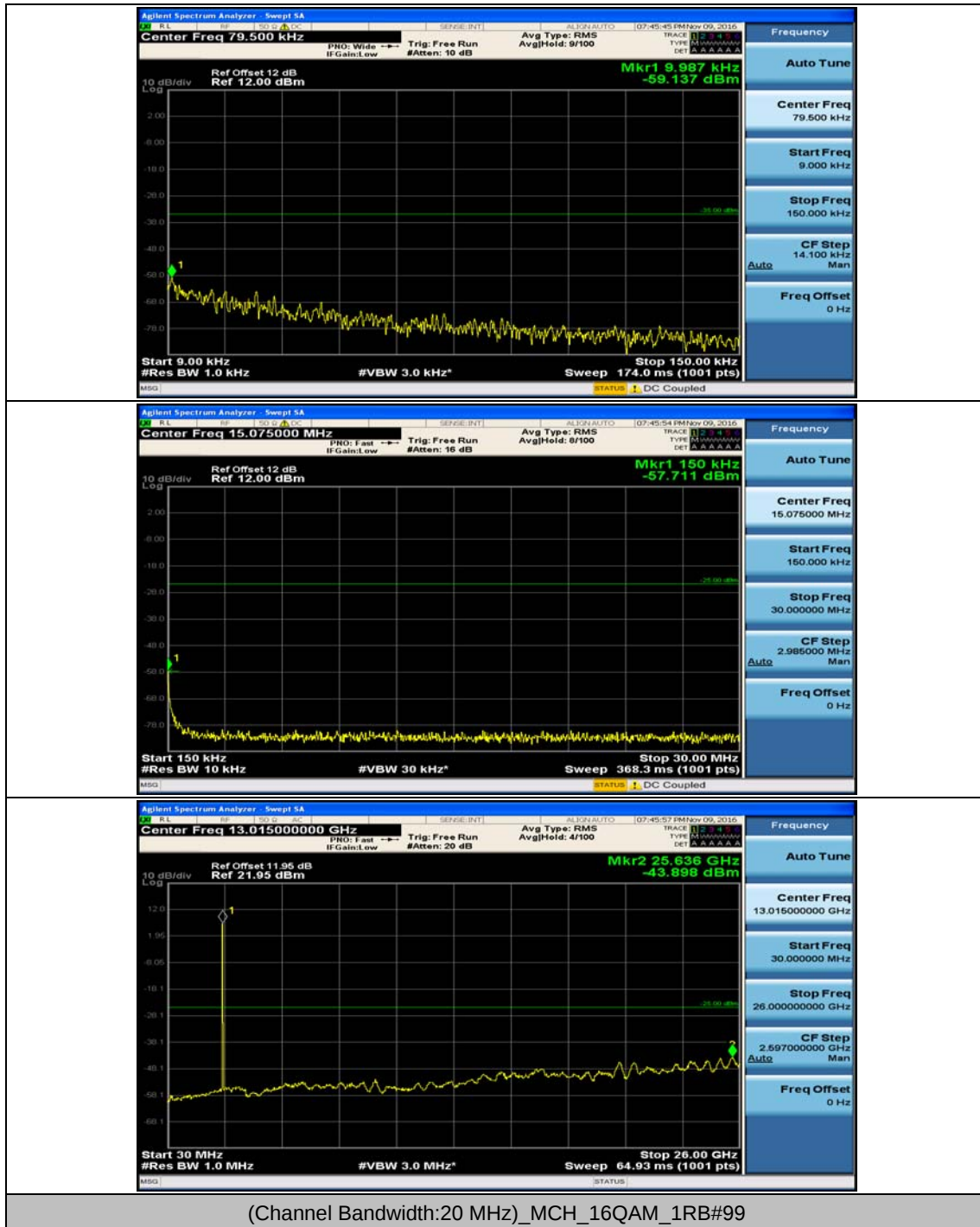


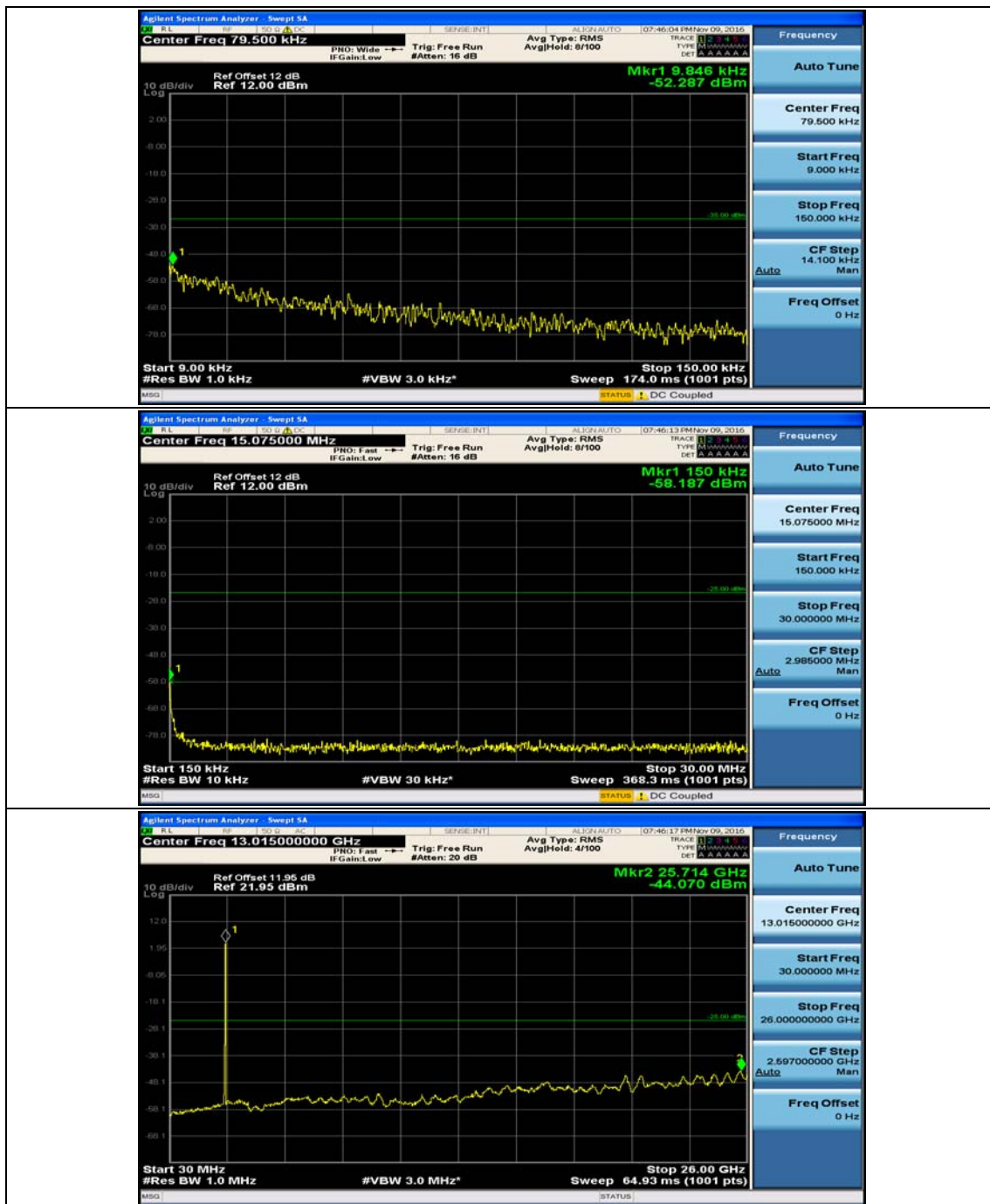


(Channel Bandwidth:20 MHz)\_MCH\_16QAM\_1RB#0

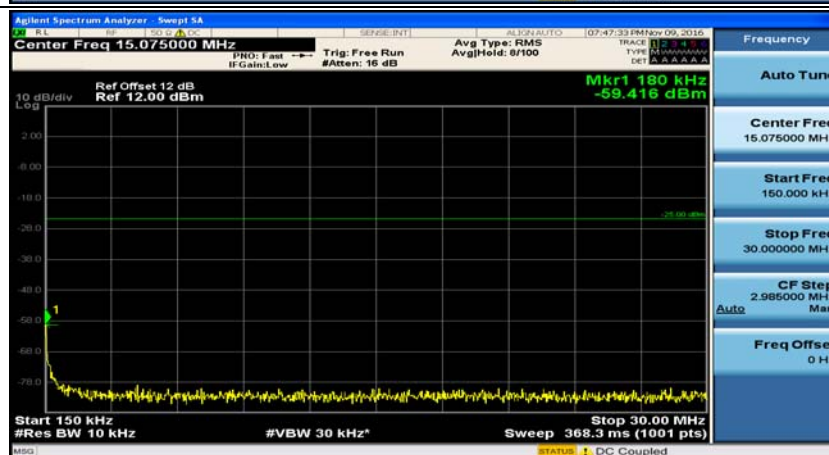
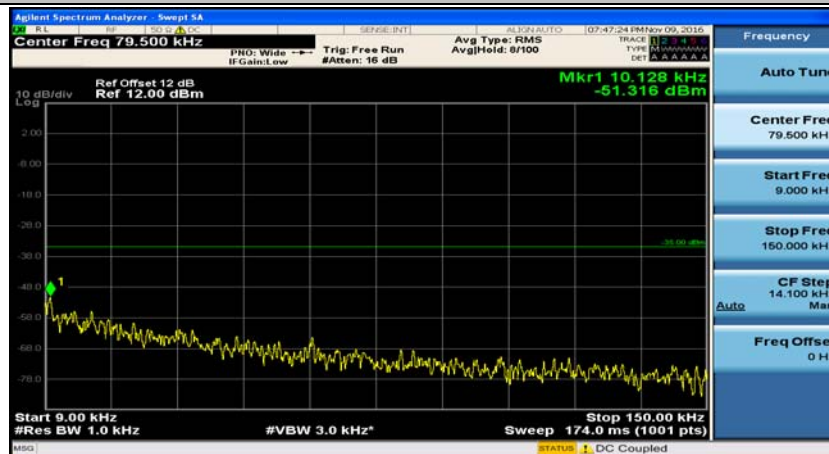


(Channel Bandwidth:20 MHz)\_MCH\_16QAM\_1RB#49

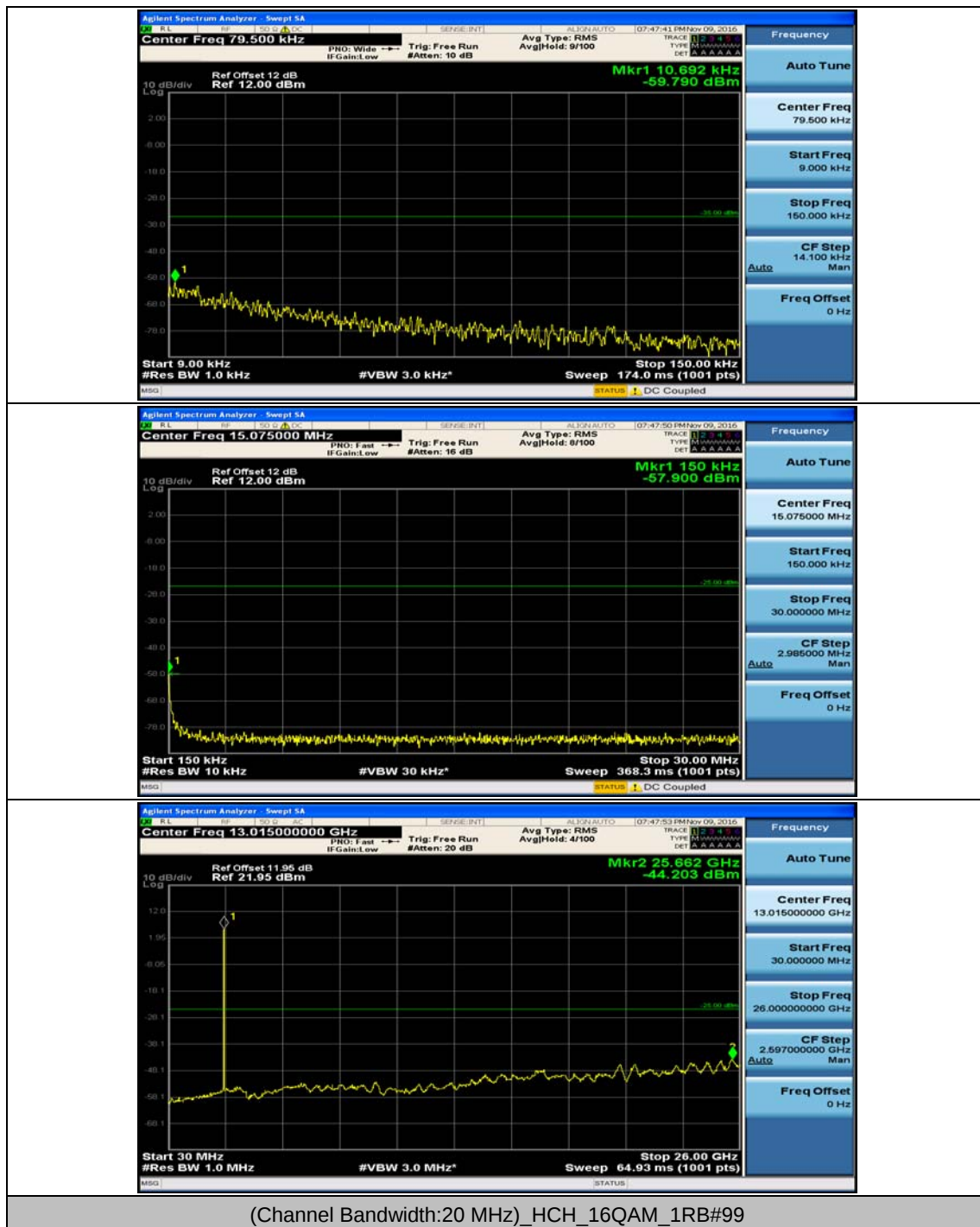


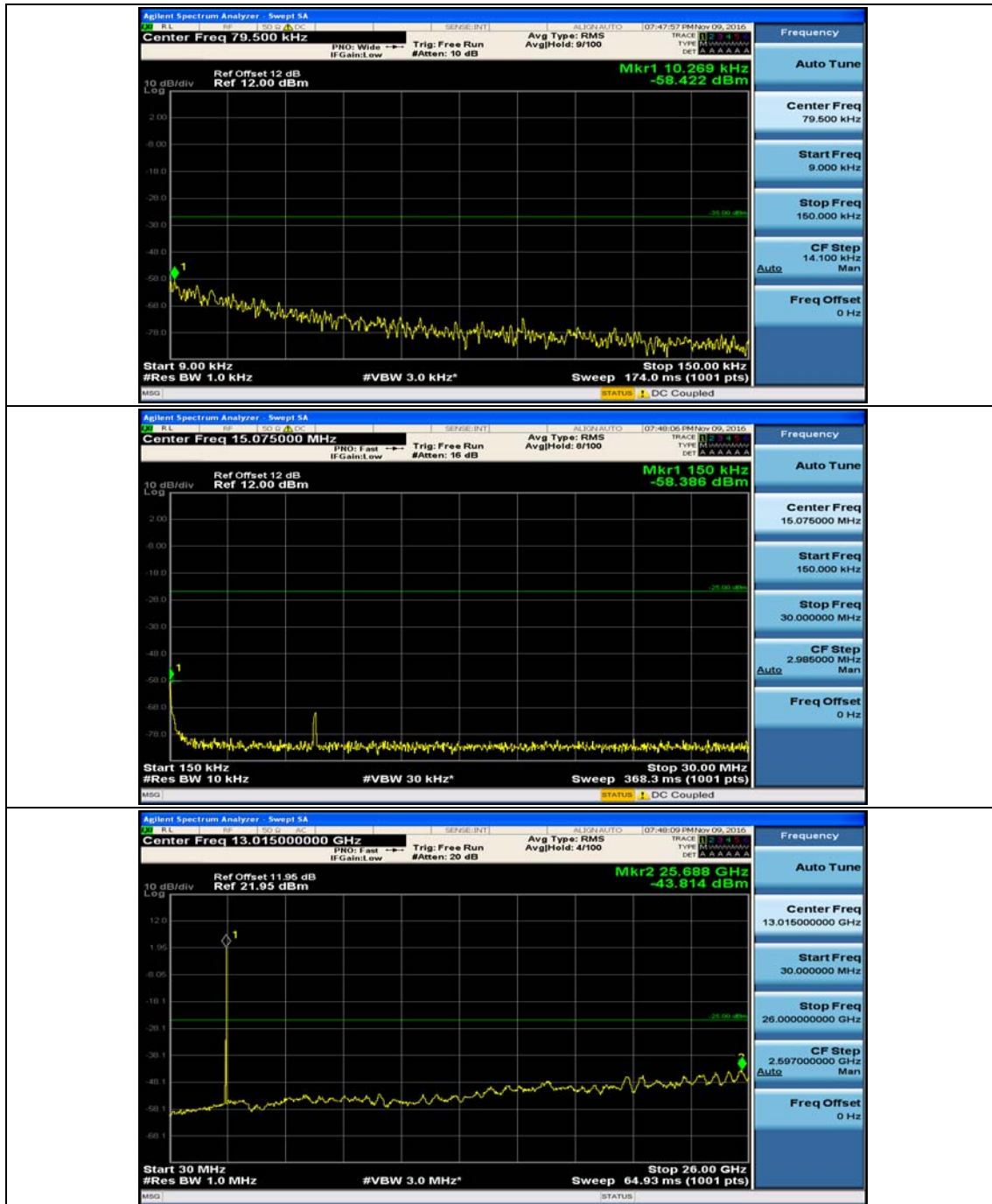


(Channel Bandwidth:20 MHz)\_HCH\_16QAM\_1RB#0



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





## Appendix F: Frequency Stability

### Test Result

#### Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz |         |               |                  |                |                 |             |         |
|--------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage                  |         |               |                  |                |                 |             |         |
| Modulation               | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                     | LCH     | VL            | TN               | 5.94           | 0.002372        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 2.83           | 0.001132        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 2.95           | 0.001178        | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | 1.07           | 0.000423        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 1.75           | 0.000688        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 3.15           | 0.001241        | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | 0.84           | 0.000329        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 3.53           | 0.001376        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 3.40           | 0.001326        | ± 2.5       | PASS    |
| 16QAM                    | LCH     | VL            | TN               | -0.96          | -0.000383       | ± 2.5       | PASS    |
|                          |         | VN            | TN               | -1.20          | -0.000480       | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 1.90           | 0.000760        | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | 0.24           | 0.000096        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 1.26           | 0.000497        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 2.26           | 0.000892        | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | 5.52           | 0.002151        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 5.31           | 0.002067        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 0.89           | 0.000345        | ± 2.5       | PASS    |
| Temperature              |         |               |                  |                |                 |             |         |
| Modulation               | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                     | LCH     | VN            | -30              | 4.33           | 0.001732        | ± 2.5       | PASS    |
|                          |         | VN            | -20              | 2.99           | 0.001195        | ± 2.5       | PASS    |
|                          |         | VN            | -10              | 0.77           | 0.000309        | ± 2.5       | PASS    |
|                          |         | VN            | 0                | 2.92           | 0.001166        | ± 2.5       | PASS    |
|                          |         | VN            | 10               | -1.24          | -0.000497       | ± 2.5       | PASS    |
|                          |         | VN            | 20               | -1.66          | -0.000663       | ± 2.5       | PASS    |
|                          |         | VN            | 30               | 4.12           | 0.001646        | ± 2.5       | PASS    |
|                          |         | VN            | 40               | 1.59           | 0.000635        | ± 2.5       | PASS    |
|                          |         | VN            | 50               | 3.06           | 0.001223        | ± 2.5       | PASS    |
|                          | MCH     | VN            | -30              | 3.22           | 0.001270        | ± 2.5       | PASS    |
|                          |         | VN            | -20              | 5.21           | 0.002054        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | -10 | 3.93  | 0.001552  | ± 2.5 | PASS |
|       |     | VN | 0   | -0.56 | -0.000220 | ± 2.5 | PASS |
|       |     | VN | 10  | 0.30  | 0.000119  | ± 2.5 | PASS |
|       |     | VN | 20  | 4.23  | 0.001670  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.12  | 0.000835  | ± 2.5 | PASS |
|       |     | VN | 40  | 2.63  | 0.001038  | ± 2.5 | PASS |
|       |     | VN | 50  | -2.45 | -0.000965 | ± 2.5 | PASS |
|       | HCH | VN | -30 | 2.13  | 0.000830  | ± 2.5 | PASS |
|       |     | VN | -20 | 0.90  | 0.000351  | ± 2.5 | PASS |
|       |     | VN | -10 | 1.09  | 0.000423  | ± 2.5 | PASS |
|       |     | VN | 0   | 1.66  | 0.000646  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.56  | 0.000607  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.97  | 0.000769  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.25  | 0.000875  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.24  | 0.000485  | ± 2.5 | PASS |
|       |     | VN | 50  | -0.01 | -0.000006 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | -1.24 | -0.000497 | ± 2.5 | PASS |
|       |     | VN | -20 | -0.21 | -0.000086 | ± 2.5 | PASS |
|       |     | VN | -10 | 2.60  | 0.001040  | ± 2.5 | PASS |
|       |     | VN | 0   | -1.46 | -0.000583 | ± 2.5 | PASS |
|       |     | VN | 10  | -0.33 | -0.000131 | ± 2.5 | PASS |
|       |     | VN | 20  | -1.22 | -0.000486 | ± 2.5 | PASS |
|       |     | VN | 30  | 0.79  | 0.000314  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.47  | 0.000589  | ± 2.5 | PASS |
|       |     | VN | 50  | 3.02  | 0.001206  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 2.15  | 0.000846  | ± 2.5 | PASS |
|       |     | VN | -20 | 4.85  | 0.001913  | ± 2.5 | PASS |
|       |     | VN | -10 | -0.26 | -0.000102 | ± 2.5 | PASS |
|       |     | VN | 0   | 0.11  | 0.000045  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.53  | 0.000209  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.97  | 0.000779  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.05  | 0.000807  | ± 2.5 | PASS |
|       |     | VN | 40  | 2.39  | 0.000942  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.13  | 0.000446  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 3.89  | 0.001515  | ± 2.5 | PASS |
|       |     | VN | -20 | -1.70 | -0.000663 | ± 2.5 | PASS |
|       |     | VN | -10 | 6.84  | 0.002663  | ± 2.5 | PASS |
|       |     | VN | 0   | 0.89  | 0.000345  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.23  | 0.000479  | ± 2.5 | PASS |
|       |     | VN | 20  | -0.97 | -0.000379 | ± 2.5 | PASS |
|       |     | VN | 30  | -2.33 | -0.000908 | ± 2.5 | PASS |
|       |     | VN | 40  | -1.32 | -0.000513 | ± 2.5 | PASS |
|       |     | VN | 50  | 1.33  | 0.000518  | ± 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               | 1.39           | 0.000554        | ± 2.5       | PASS    |
|             |         | VN            | TN               | 2.42           | 0.000965        | ± 2.5       | PASS    |
|             |         | VH            | TN               | 1.39           | 0.000554        | ± 2.5       | PASS    |
|             | MCH     | VL            | TN               | 3.29           | 0.001298        | ± 2.5       | PASS    |
|             |         | VN            | TN               | 1.46           | 0.000576        | ± 2.5       | PASS    |
|             |         | VH            | TN               | 1.83           | 0.000722        | ± 2.5       | PASS    |
|             | HCH     | VL            | TN               | 2.78           | 0.001082        | ± 2.5       | PASS    |
|             |         | VN            | TN               | 3.46           | 0.001350        | ± 2.5       | PASS    |
|             |         | VH            | TN               | 3.76           | 0.001467        | ± 2.5       | PASS    |
| 16QAM       | LCH     | VL            | TN               | 2.73           | 0.001091        | ± 2.5       | PASS    |
|             |         | VN            | TN               | 3.15           | 0.001256        | ± 2.5       | PASS    |
|             |         | VH            | TN               | 3.30           | 0.001319        | ± 2.5       | PASS    |
|             | MCH     | VL            | TN               | 0.33           | 0.000130        | ± 2.5       | PASS    |
|             |         | VN            | TN               | 1.20           | 0.000474        | ± 2.5       | PASS    |
|             |         | VH            | TN               | 2.13           | 0.000841        | ± 2.5       | PASS    |
|             | HCH     | VL            | TN               | 4.29           | 0.001673        | ± 2.5       | PASS    |
|             |         | VN            | TN               | 3.99           | 0.001556        | ± 2.5       | PASS    |
|             |         | VH            | TN               | 2.30           | 0.000898        | ± 2.5       | PASS    |
| Temperature |         |               |                  |                |                 |             |         |
| Modulation  | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 16QAM       | LCH     | VN            | -30              | 1.19           | 0.000474        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 1.32           | 0.000525        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 2.79           | 0.001114        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 1.33           | 0.000531        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 2.35           | 0.000937        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 3.03           | 0.001211        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 1.53           | 0.000611        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 1.62           | 0.000645        | ± 2.5       | PASS    |
|             |         | VN            | 50               | 1.65           | 0.000657        | ± 2.5       | PASS    |
|             | MCH     | VN            | -30              | 3.85           | 0.001518        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 1.82           | 0.000717        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 0.20           | 0.000079        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 1.62           | 0.000638        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 1.97           | 0.000779        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 1.09           | 0.000429        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 2.25           | 0.000886        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 1.10           | 0.000435        | ± 2.5       | PASS    |
|             |         | VN            | 50               | 1.72           | 0.000677        | ± 2.5       | PASS    |
|             | HCH     | VN            | -30              | 1.79           | 0.000697        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 4.01           | 0.001562        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 1.10           | 0.000429        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 2.29           | 0.000892        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 2.69           | 0.001048        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 3.65           | 0.001422        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 0.62           | 0.000240        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 1.07           | 0.000418        | ± 2.5       | PASS    |
|             | VN      | 50            | 1.76             | 0.000686       | ± 2.5           | PASS        |         |

|      |     |    |     |       |           |       |      |
|------|-----|----|-----|-------|-----------|-------|------|
| QPSK | LCH | VN | -30 | 2.86  | 0.001142  | ± 2.5 | PASS |
|      |     | VN | -20 | 2.68  | 0.001068  | ± 2.5 | PASS |
|      |     | VN | -10 | 2.57  | 0.001028  | ± 2.5 | PASS |
|      |     | VN | 0   | 3.08  | 0.001228  | ± 2.5 | PASS |
|      |     | VN | 10  | -0.07 | -0.000029 | ± 2.5 | PASS |
|      |     | VN | 20  | 0.92  | 0.000365  | ± 2.5 | PASS |
|      |     | VN | 30  | 2.47  | 0.000988  | ± 2.5 | PASS |
|      |     | VN | 40  | 0.64  | 0.000257  | ± 2.5 | PASS |
|      |     | VN | 50  | 3.18  | 0.001268  | ± 2.5 | PASS |
|      | MCH | VN | -30 | 1.20  | 0.000474  | ± 2.5 | PASS |
|      |     | VN | -20 | 2.49  | 0.000982  | ± 2.5 | PASS |
|      |     | VN | -10 | 1.04  | 0.000412  | ± 2.5 | PASS |
|      |     | VN | 0   | 4.29  | 0.001693  | ± 2.5 | PASS |
|      |     | VN | 10  | 3.55  | 0.001399  | ± 2.5 | PASS |
|      |     | VN | 20  | 0.93  | 0.000367  | ± 2.5 | PASS |
|      |     | VN | 30  | 0.90  | 0.000356  | ± 2.5 | PASS |
|      |     | VN | 40  | 2.86  | 0.001129  | ± 2.5 | PASS |
|      |     | VN | 50  | 1.39  | 0.000547  | ± 2.5 | PASS |
|      | HCH | VN | -30 | 2.29  | 0.000892  | ± 2.5 | PASS |
|      |     | VN | -20 | 3.71  | 0.001444  | ± 2.5 | PASS |
|      |     | VN | -10 | 1.59  | 0.000619  | ± 2.5 | PASS |
|      |     | VN | 0   | 3.39  | 0.001322  | ± 2.5 | PASS |
|      |     | VN | 10  | 1.70  | 0.000664  | ± 2.5 | PASS |
|      |     | VN | 20  | 1.89  | 0.000736  | ± 2.5 | PASS |
|      |     | VN | 30  | 2.88  | 0.001121  | ± 2.5 | PASS |
|      |     | VN | 40  | 3.96  | 0.001545  | ± 2.5 | PASS |
|      |     | VN | 50  | 2.60  | 0.001015  | ± 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               | 2.05           | 0.000816        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.52           | 0.001004        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.30           | 0.000519        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 3.12           | 0.001230        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.57           | 0.001016        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 5.15           | 0.002031        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 1.22           | 0.000475        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.92           | 0.000357        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.25           | 0.000876        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | 2.68           | 0.001067        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 3.66           | 0.001460        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.04           | 0.000416        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 2.37           | 0.000937        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.93           | 0.001157        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.15           | 0.000846        | ± 2.5       | PASS    |

|             | HCH     | VL            | TN               | 1.32           | 0.000514        | ± 2.5       | PASS    |
|-------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
|             |         | VN            | TN               | 4.22           | 0.001647        | ± 2.5       | PASS    |
|             |         | VH            | TN               | 2.86           | 0.001116        | ± 2.5       | PASS    |
| Temperature |         |               |                  |                |                 |             |         |
| Modulation  | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK        | LCH     | VN            | -30              | 1.95           | 0.000776        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 2.10           | 0.000839        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 1.79           | 0.000713        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 1.10           | 0.000439        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 2.73           | 0.001090        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 0.94           | 0.000377        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 2.66           | 0.001061        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 0.44           | 0.000177        | ± 2.5       | PASS    |
|             |         | VN            | 50               | 1.63           | 0.000650        | ± 2.5       | PASS    |
|             | MCH     | VN            | -30              | 1.62           | 0.000638        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 1.42           | 0.000559        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 0.89           | 0.000350        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 2.47           | 0.000976        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 1.77           | 0.000700        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 3.39           | 0.001337        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 3.05           | 0.001202        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 1.59           | 0.000626        | ± 2.5       | PASS    |
|             |         | VN            | 50               | 1.67           | 0.000660        | ± 2.5       | PASS    |
|             | HCH     | VN            | -30              | 2.29           | 0.000893        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 2.29           | 0.000893        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 2.06           | 0.000804        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 2.49           | 0.000971        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 0.57           | 0.000223        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 1.90           | 0.000742        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 2.16           | 0.000843        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 1.76           | 0.000687        | ± 2.5       | PASS    |
|             |         | VN            | 50               | 0.99           | 0.000385        | ± 2.5       | PASS    |
| 16QAM       | LCH     | VN            | -30              | 1.89           | 0.000753        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 1.73           | 0.000690        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 1.62           | 0.000645        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 2.66           | 0.001061        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 4.13           | 0.001649        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 2.40           | 0.000958        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 1.82           | 0.000725        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 1.34           | 0.000536        | ± 2.5       | PASS    |
|             |         | VN            | 50               | 2.13           | 0.000850        | ± 2.5       | PASS    |
|             | MCH     | VN            | -30              | 1.67           | 0.000660        | ± 2.5       | PASS    |
|             |         | VN            | -20              | 0.70           | 0.000277        | ± 2.5       | PASS    |
|             |         | VN            | -10              | 3.96           | 0.001563        | ± 2.5       | PASS    |
|             |         | VN            | 0                | 1.32           | 0.000519        | ± 2.5       | PASS    |
|             |         | VN            | 10               | 3.18           | 0.001253        | ± 2.5       | PASS    |
|             |         | VN            | 20               | 2.68           | 0.001055        | ± 2.5       | PASS    |
|             |         | VN            | 30               | 1.76           | 0.000694        | ± 2.5       | PASS    |
|             |         | VN            | 40               | 1.97           | 0.000779        | ± 2.5       | PASS    |

|  |     |    |     |      |          |       |      |
|--|-----|----|-----|------|----------|-------|------|
|  | HCH | VN | 50  | 1.20 | 0.000474 | ± 2.5 | PASS |
|  |     | VN | -30 | 1.14 | 0.000447 | ± 2.5 | PASS |
|  |     | VN | -20 | 2.35 | 0.000916 | ± 2.5 | PASS |
|  |     | VN | -10 | 1.62 | 0.000631 | ± 2.5 | PASS |
|  |     | VN | 0   | 2.17 | 0.000849 | ± 2.5 | PASS |
|  |     | VN | 10  | 1.99 | 0.000776 | ± 2.5 | PASS |
|  |     | VN | 20  | 0.53 | 0.000207 | ± 2.5 | PASS |
|  |     | VN | 30  | 1.79 | 0.000698 | ± 2.5 | PASS |
|  |     | VN | 40  | 2.85 | 0.001111 | ± 2.5 | PASS |
|  |     | VN | 50  | 2.22 | 0.000865 | ± 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               | 1.97           | 0.000786        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.25           | 0.000895        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -2.12          | -0.000843       | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 3.48           | 0.001371        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 3.00           | 0.001185        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.75           | 0.001083        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | -0.41          | -0.000162       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.39          | -0.000542       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -2.12          | -0.000827       | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | 3.45           | 0.001374        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.47           | 0.000986        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.57           | 0.000627        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 2.13           | 0.000841        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.07          | -0.000423       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 0.21           | 0.000085        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | -1.53          | -0.000598       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -3.19          | -0.001246       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -1.22          | -0.000475       | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                      | LCH     | VN            | -30              | 0.79           | 0.000313        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 1.43           | 0.000570        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 1.67           | 0.000667        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 1.76           | 0.000701        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | 2.10           | 0.000838        | ± 2.5       | PASS    |
|                           |         | VN            | 20               | 2.80           | 0.001117        | ± 2.5       | PASS    |
|                           |         | VN            | 30               | 2.59           | 0.001032        | ± 2.5       | PASS    |
|                           |         | VN            | 40               | 0.67           | 0.000268        | ± 2.5       | PASS    |
|                           |         | VN            | 50               | 2.46           | 0.000980        | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | 2.30           | 0.000909        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 2.65           | 0.001044        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | -10 | 2.25  | 0.000886  | ± 2.5 | PASS |
|       |     | VN | 0   | 0.97  | 0.000384  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.56  | 0.000220  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.26  | 0.000497  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.27  | 0.000897  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.95  | 0.000767  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.23  | 0.000485  | ± 2.5 | PASS |
|       | HCH | VN | -30 | -3.00 | -0.001173 | ± 2.5 | PASS |
|       |     | VN | -20 | -1.37 | -0.000536 | ± 2.5 | PASS |
|       |     | VN | -10 | -1.20 | -0.000469 | ± 2.5 | PASS |
|       |     | VN | 0   | -0.86 | -0.000335 | ± 2.5 | PASS |
|       |     | VN | 10  | -0.46 | -0.000179 | ± 2.5 | PASS |
|       |     | VN | 20  | -0.51 | -0.000201 | ± 2.5 | PASS |
|       |     | VN | 30  | -0.14 | -0.000056 | ± 2.5 | PASS |
|       |     | VN | 40  | -0.92 | -0.000358 | ± 2.5 | PASS |
| 16QAM | LCH | VN | 50  | -2.92 | -0.001140 | ± 2.5 | PASS |
|       |     | VN | -30 | 2.33  | 0.000929  | ± 2.5 | PASS |
|       |     | VN | -20 | 3.25  | 0.001294  | ± 2.5 | PASS |
|       |     | VN | -10 | 3.39  | 0.001351  | ± 2.5 | PASS |
|       |     | VN | 0   | 2.02  | 0.000804  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.16  | 0.000462  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.42  | 0.000564  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.65  | 0.001054  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.43  | 0.000570  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.09  | 0.000433  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 1.79  | 0.000705  | ± 2.5 | PASS |
|       |     | VN | -20 | 0.82  | 0.000322  | ± 2.5 | PASS |
|       |     | VN | -10 | 3.03  | 0.001196  | ± 2.5 | PASS |
|       |     | VN | 0   | 2.57  | 0.001016  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.10  | 0.000435  | ± 2.5 | PASS |
|       |     | VN | 20  | 3.25  | 0.001281  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.66  | 0.001050  | ± 2.5 | PASS |
|       |     | VN | 40  | 0.80  | 0.000316  | ± 2.5 | PASS |
|       |     | VN | 50  | 3.75  | 0.001478  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 0.43  | 0.000168  | ± 2.5 | PASS |
|       |     | VN | -20 | -0.54 | -0.000212 | ± 2.5 | PASS |
|       |     | VN | -10 | -1.90 | -0.000743 | ± 2.5 | PASS |
|       |     | VN | 0   | -0.14 | -0.000056 | ± 2.5 | PASS |
|       |     | VN | 10  | -0.66 | -0.000257 | ± 2.5 | PASS |
|       |     | VN | 20  | -1.04 | -0.000408 | ± 2.5 | PASS |
|       |     | VN | 30  | -1.39 | -0.000542 | ± 2.5 | PASS |
|       |     | VN | 40  | -1.13 | -0.000441 | ± 2.5 | PASS |
|       |     | VN | 50  | -0.80 | -0.000313 | ± 2.5 | PASS |