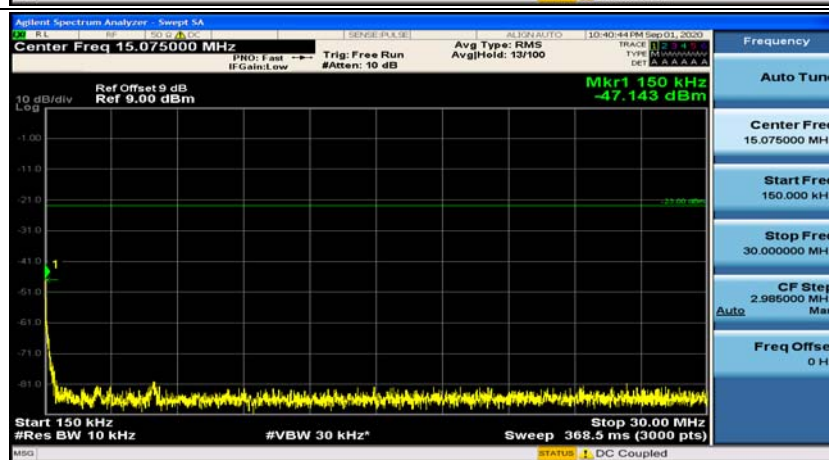
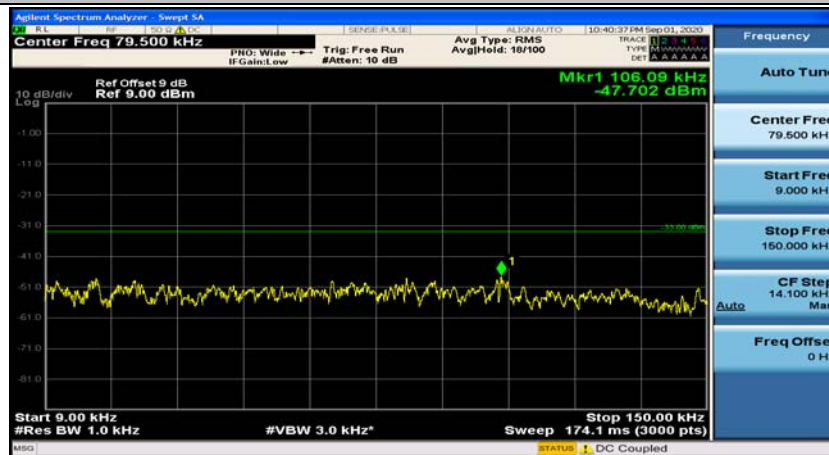
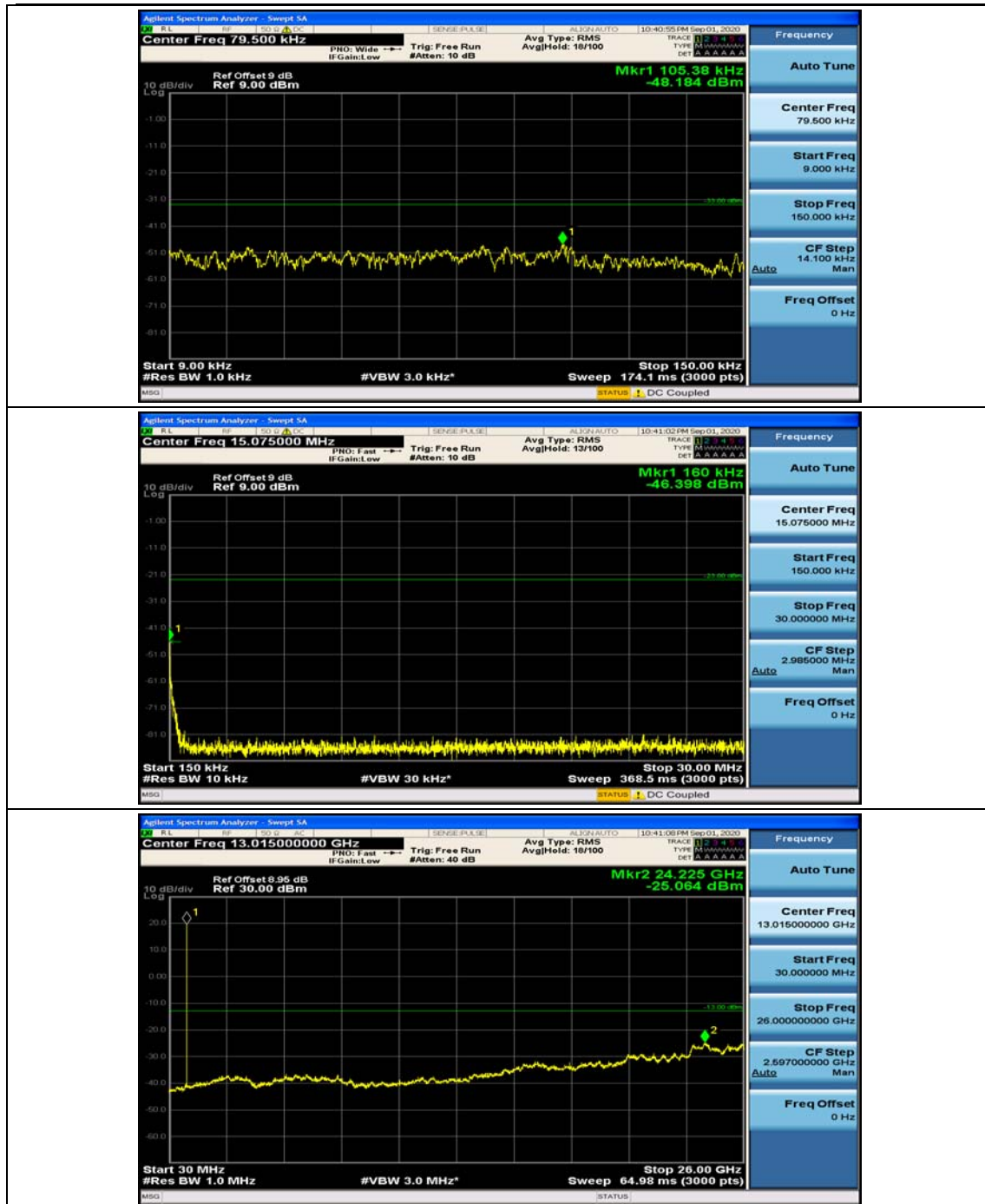
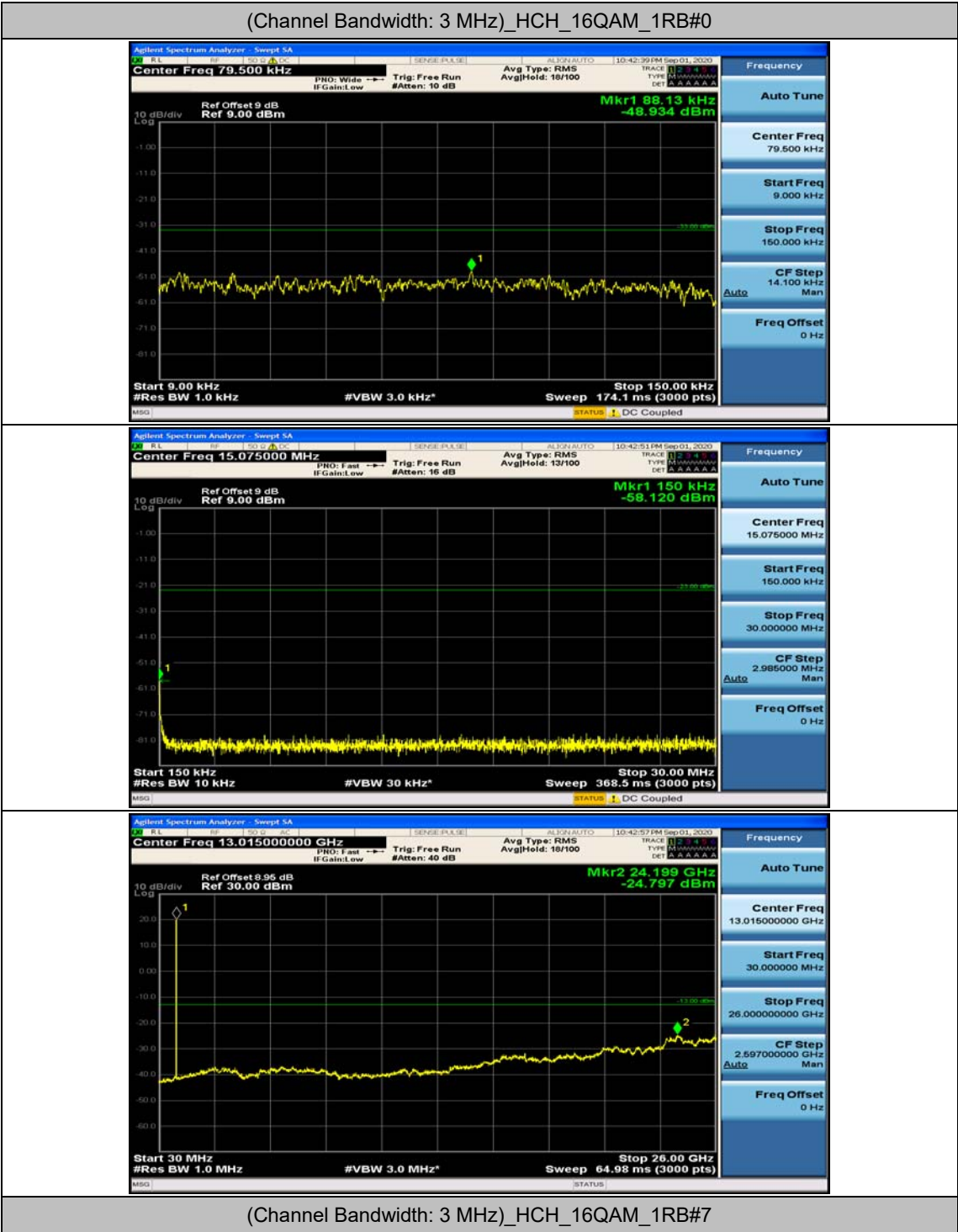


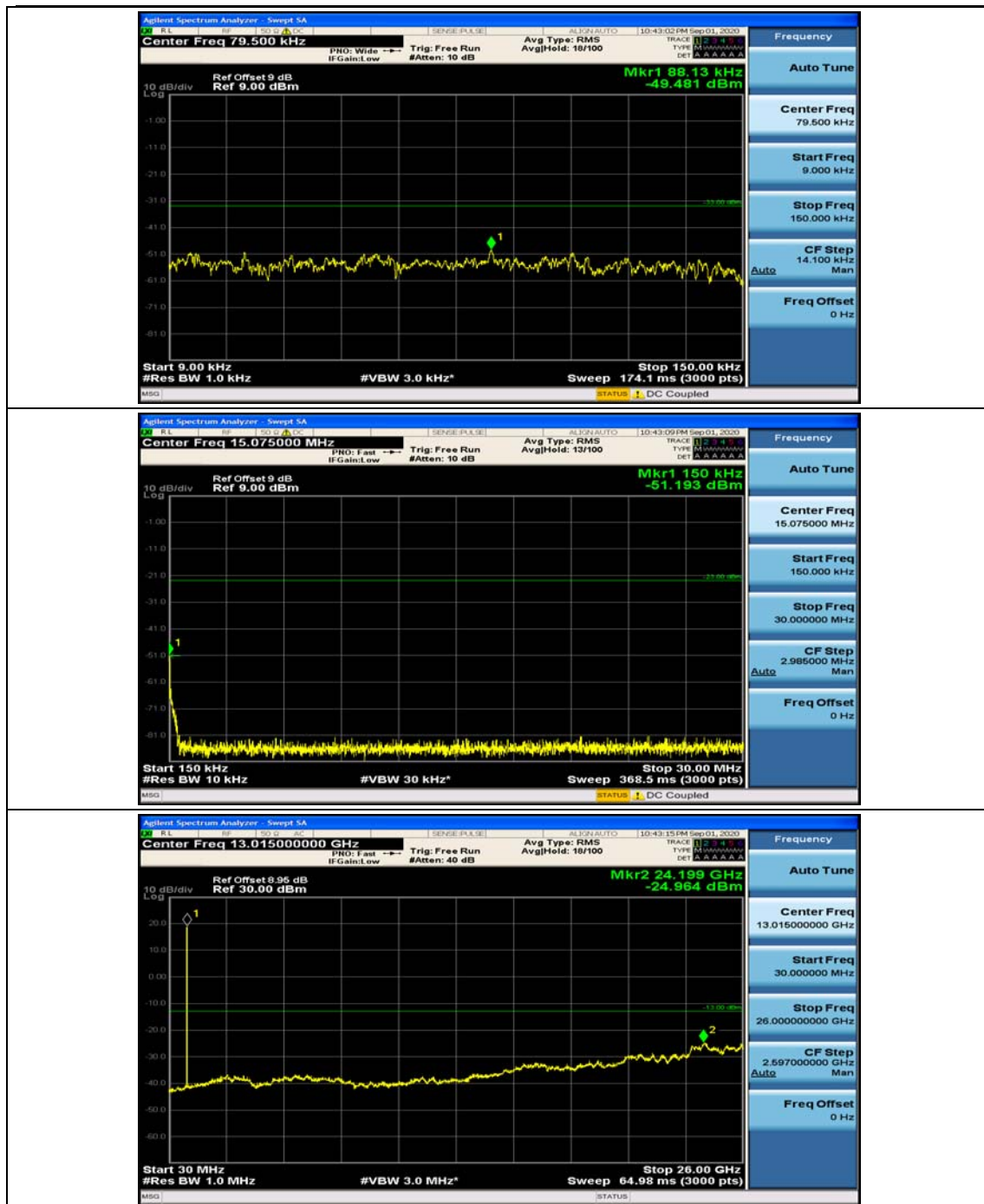
(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_1RB#0



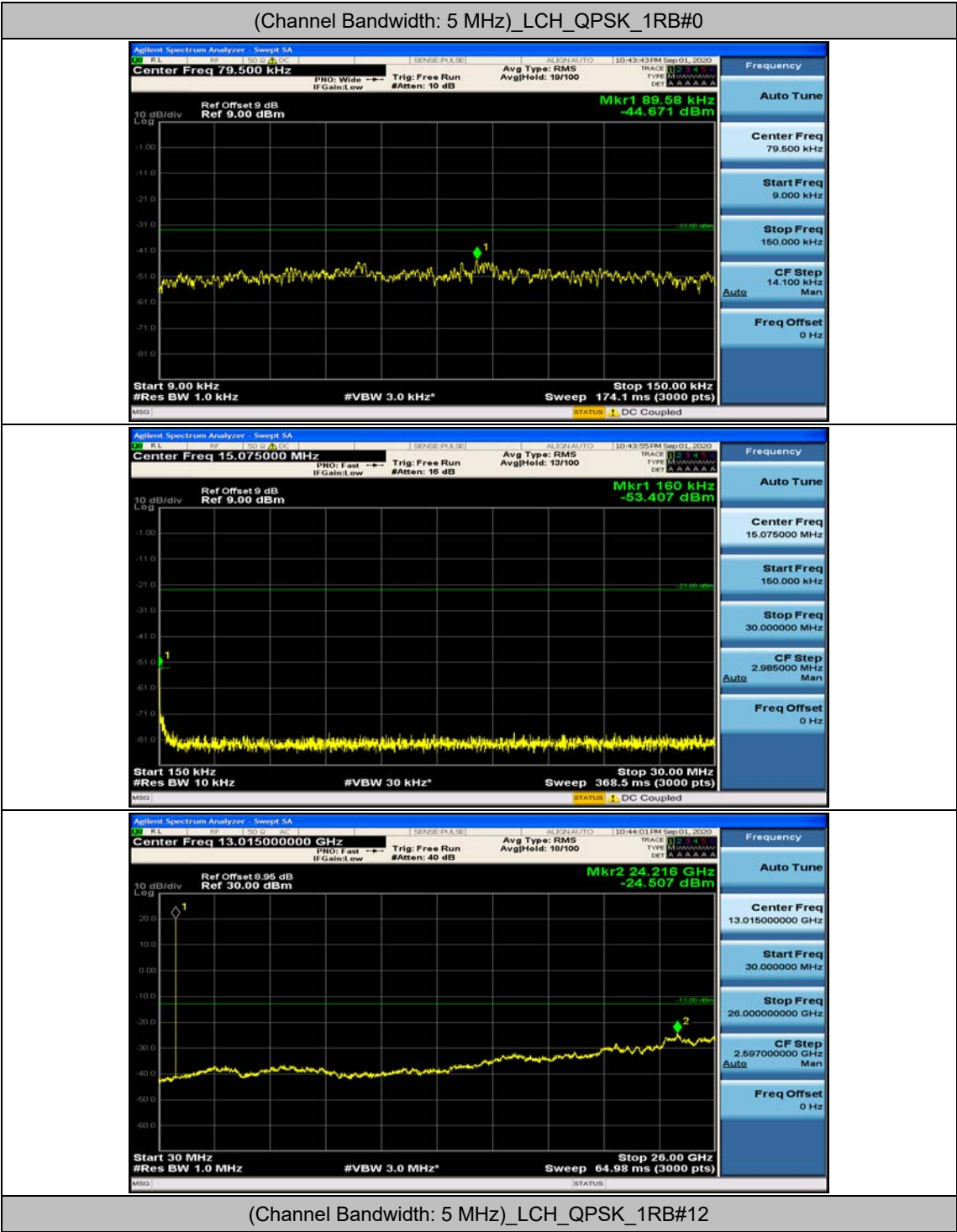
(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_1RB#7

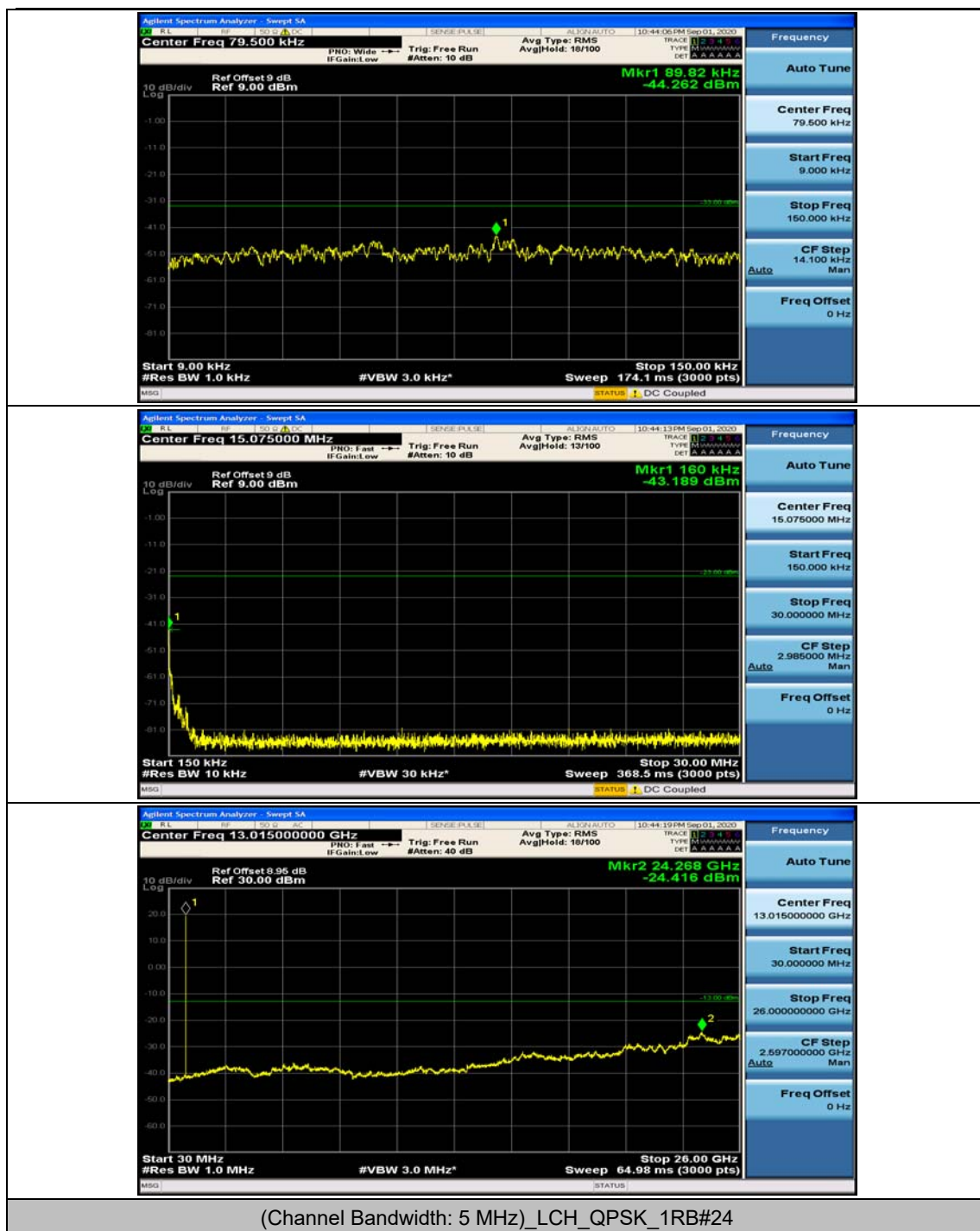


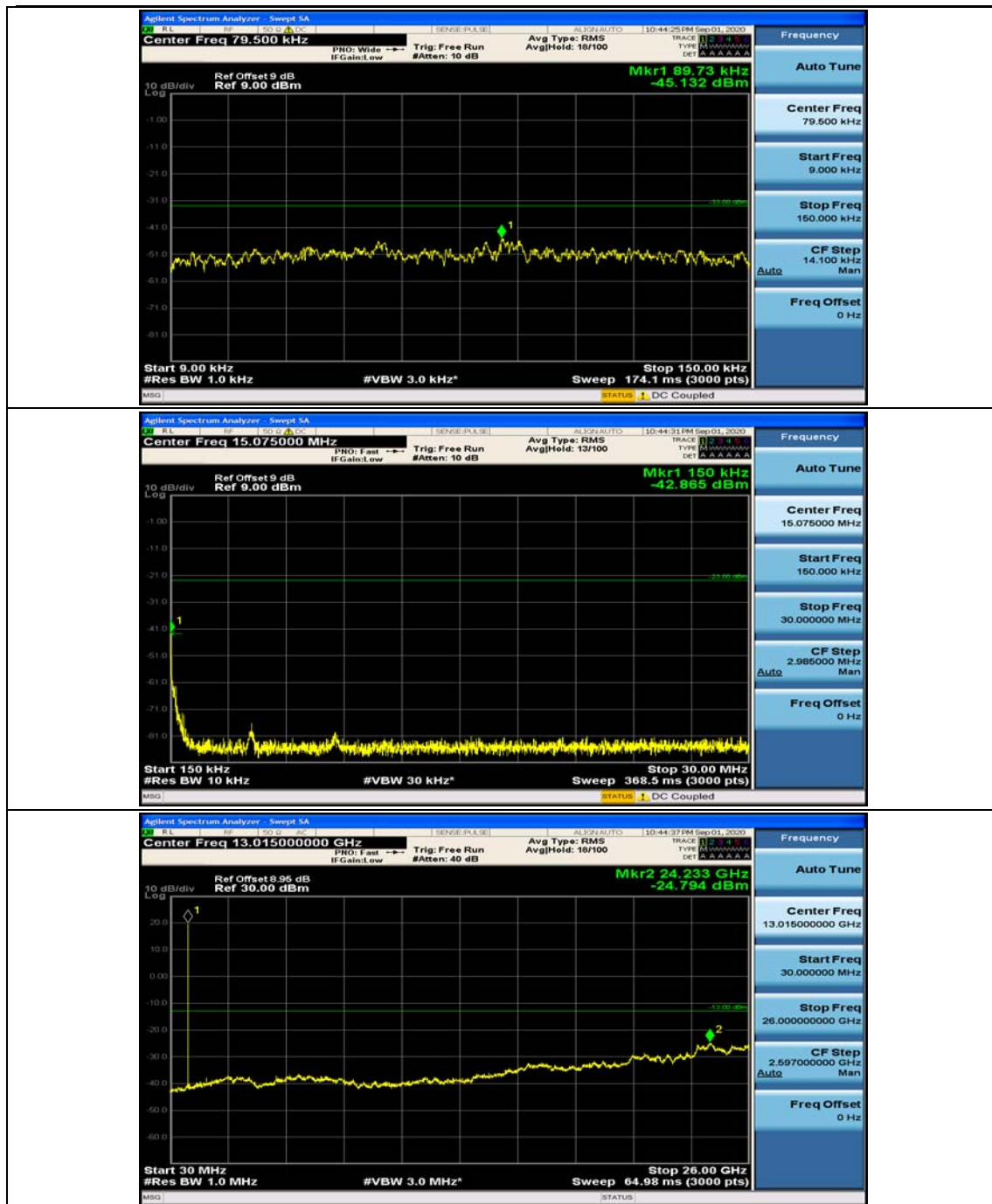


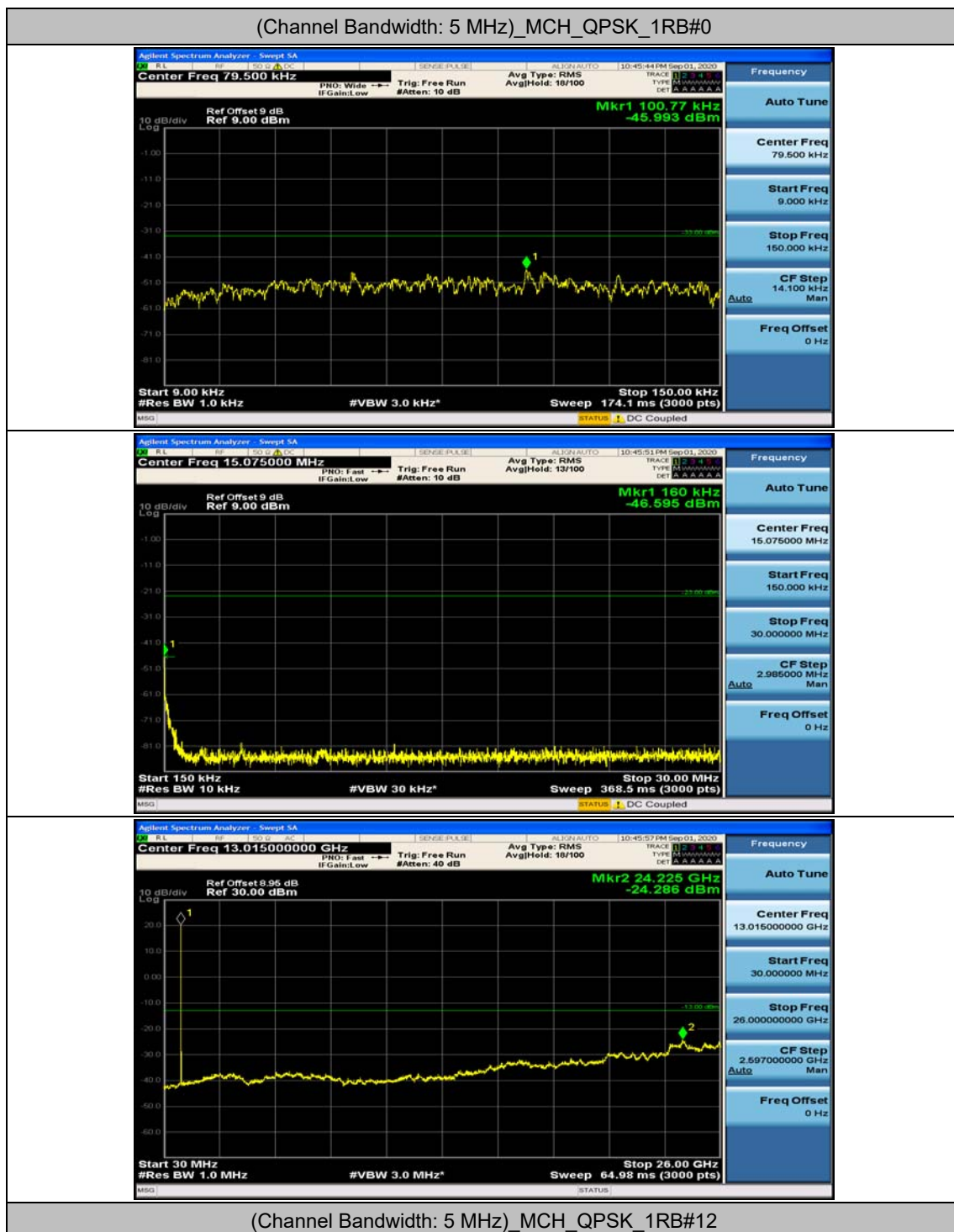


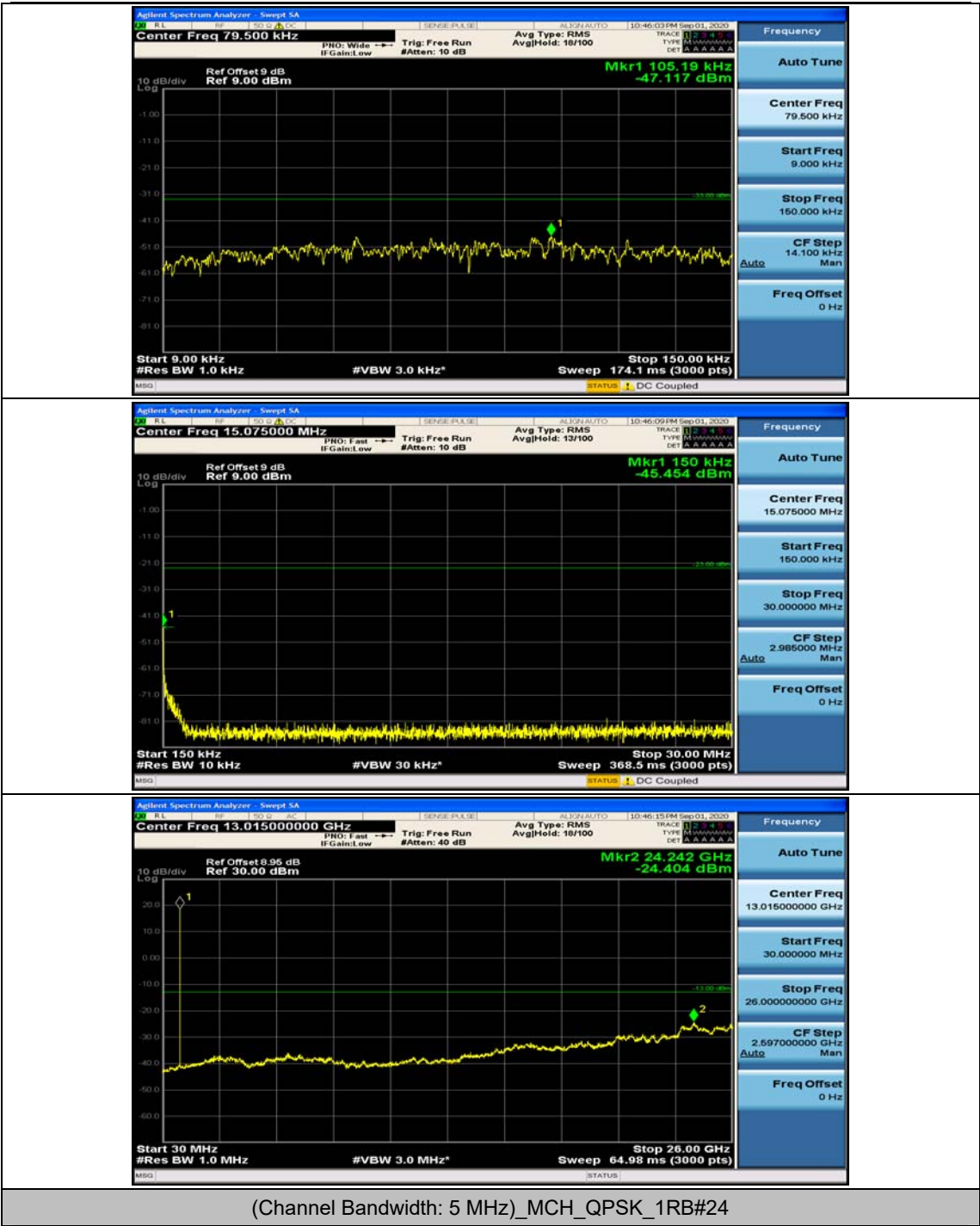
Channel Bandwidth: 5 MHz

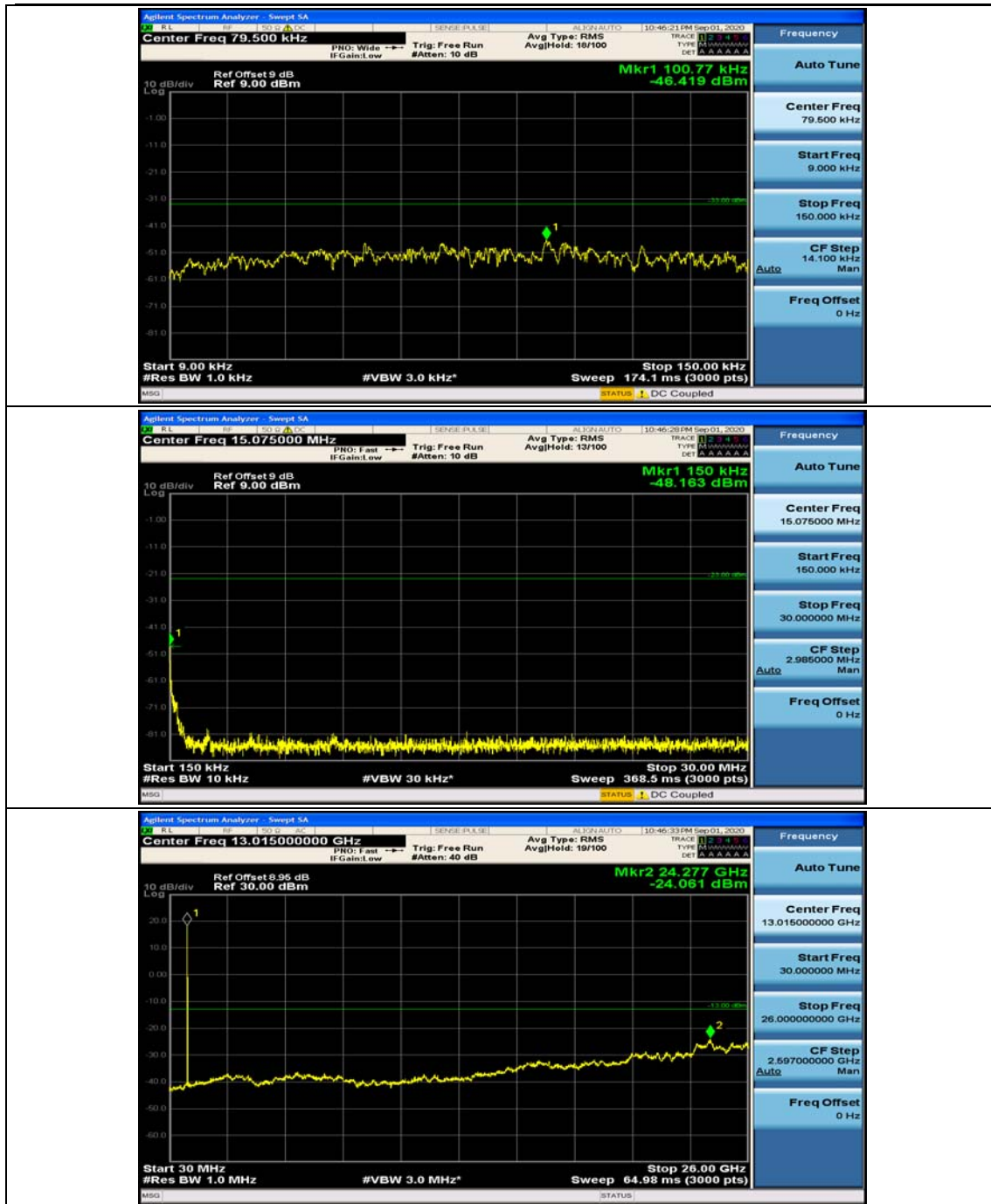




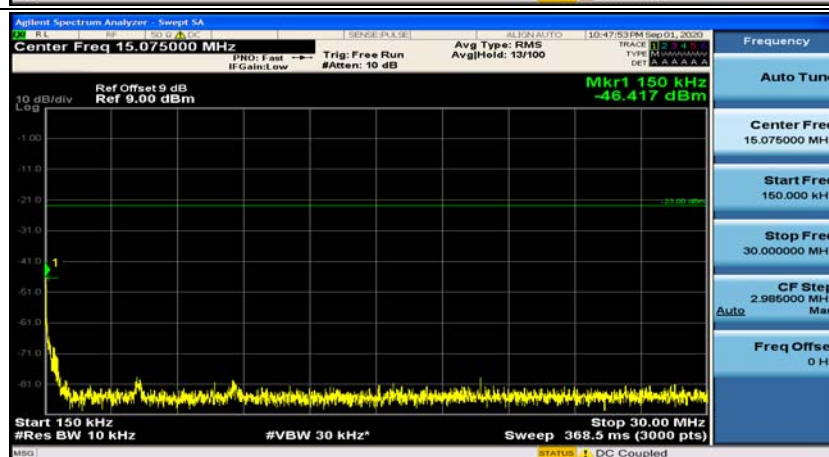
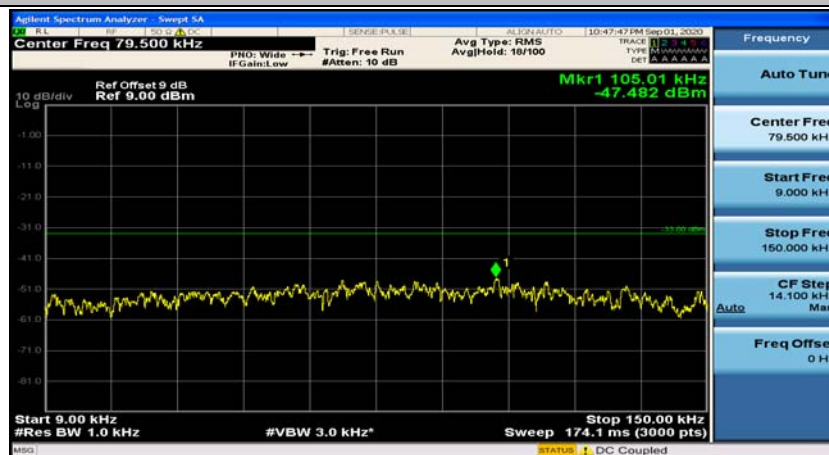




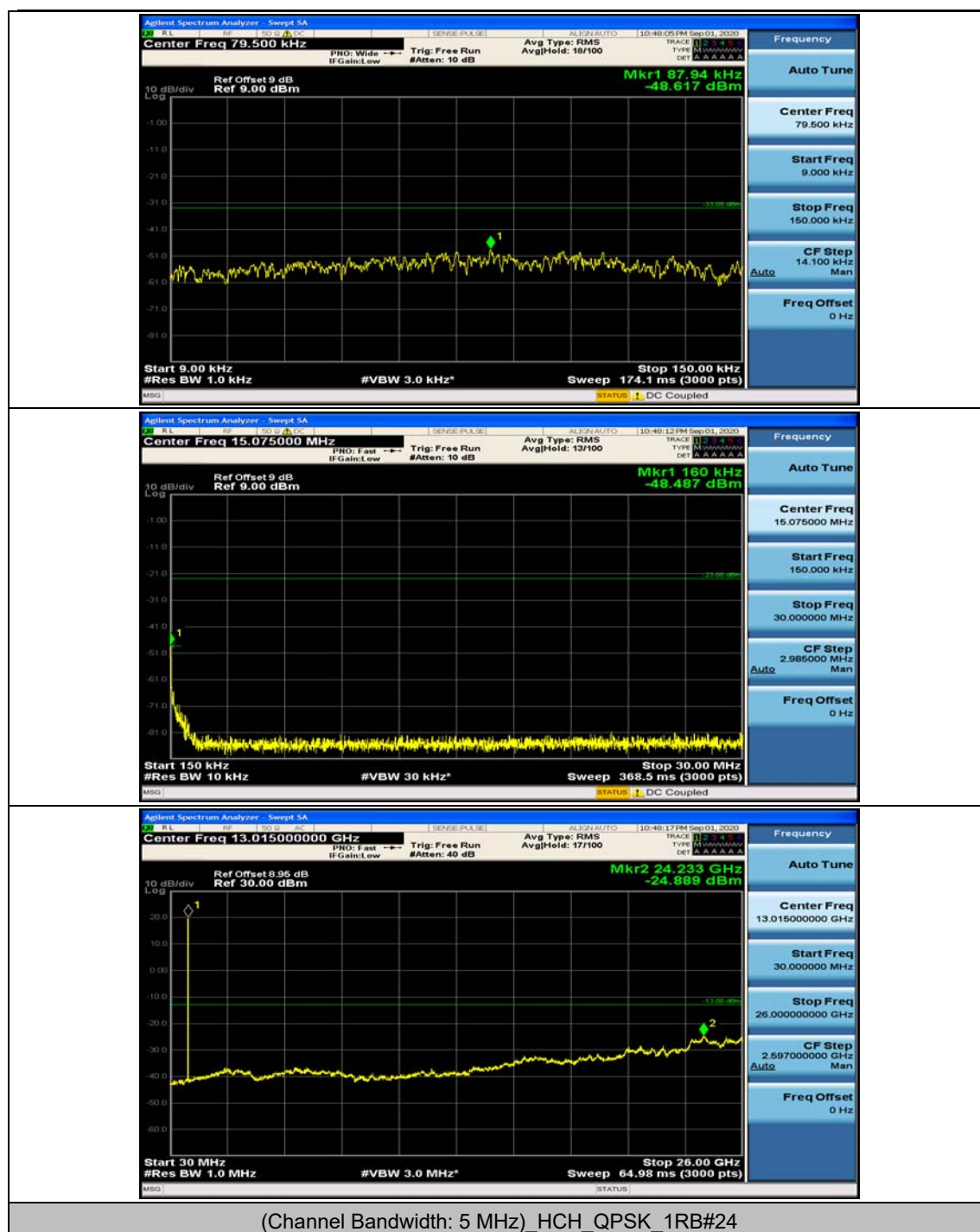


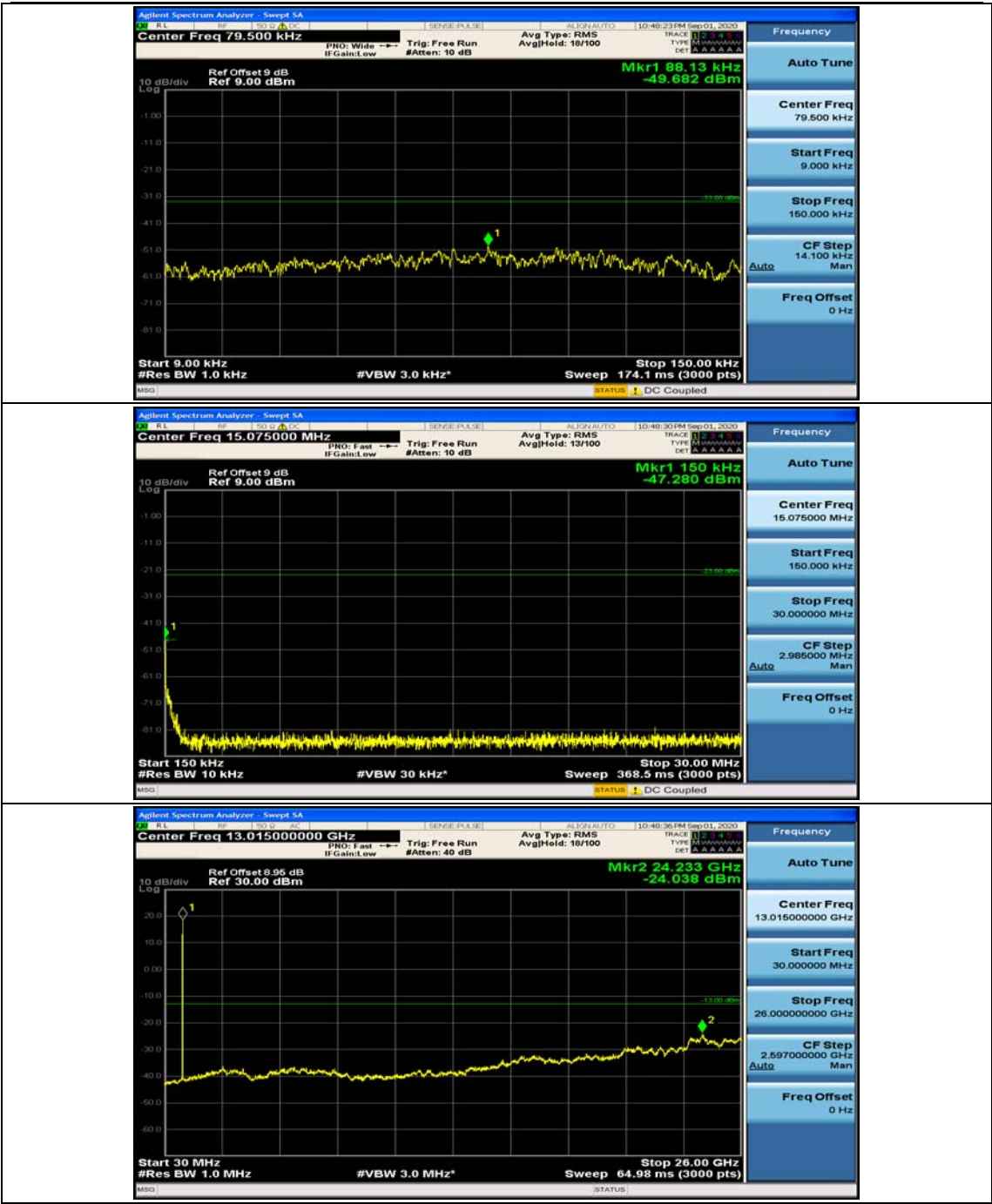


(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#0

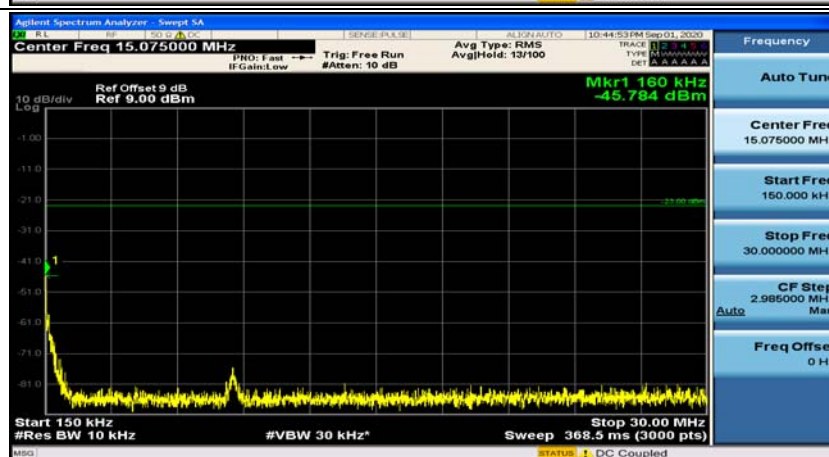
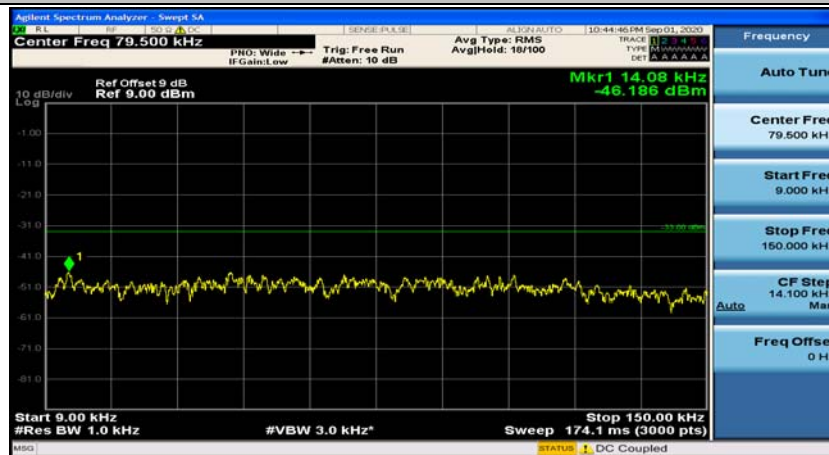


(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#12

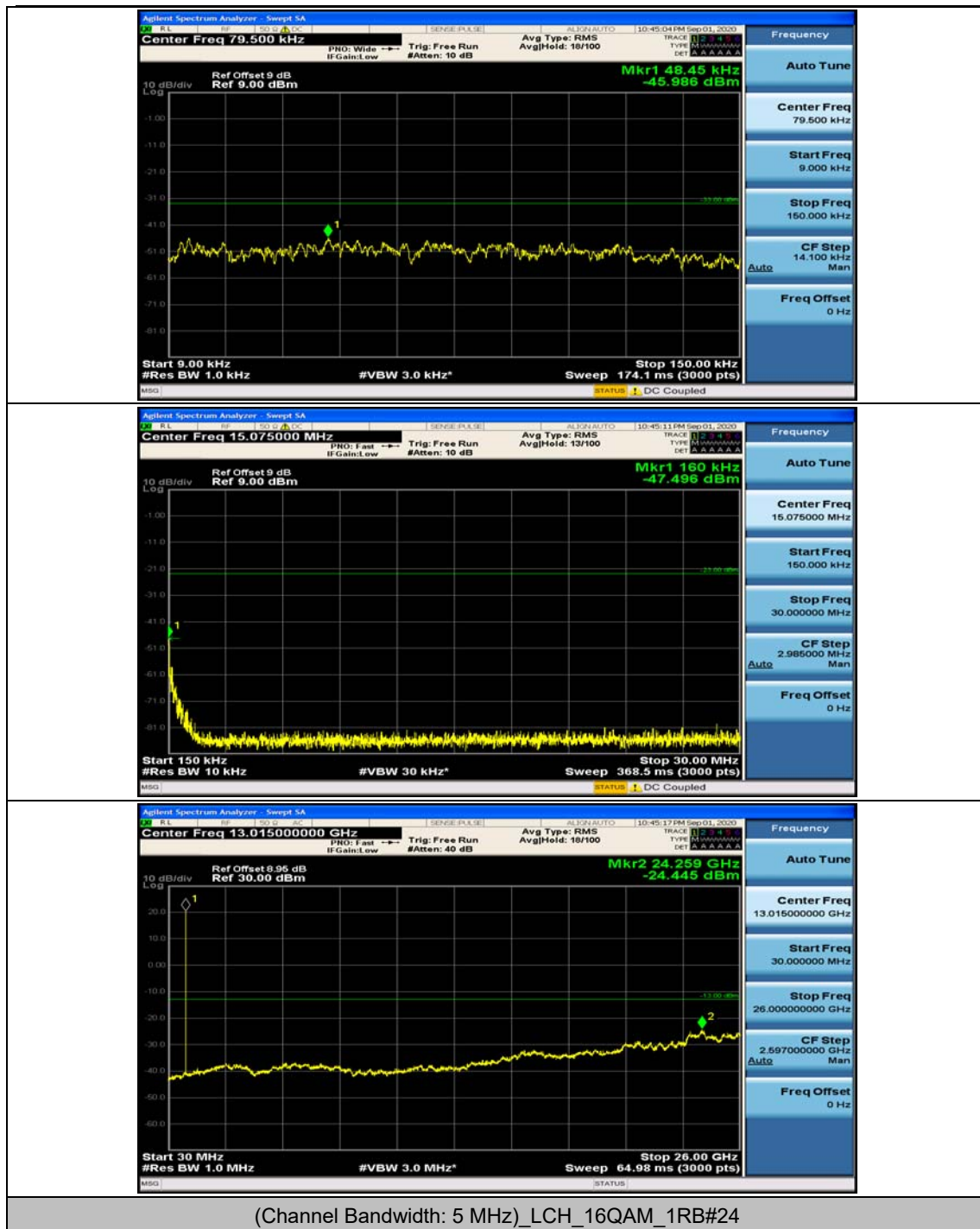


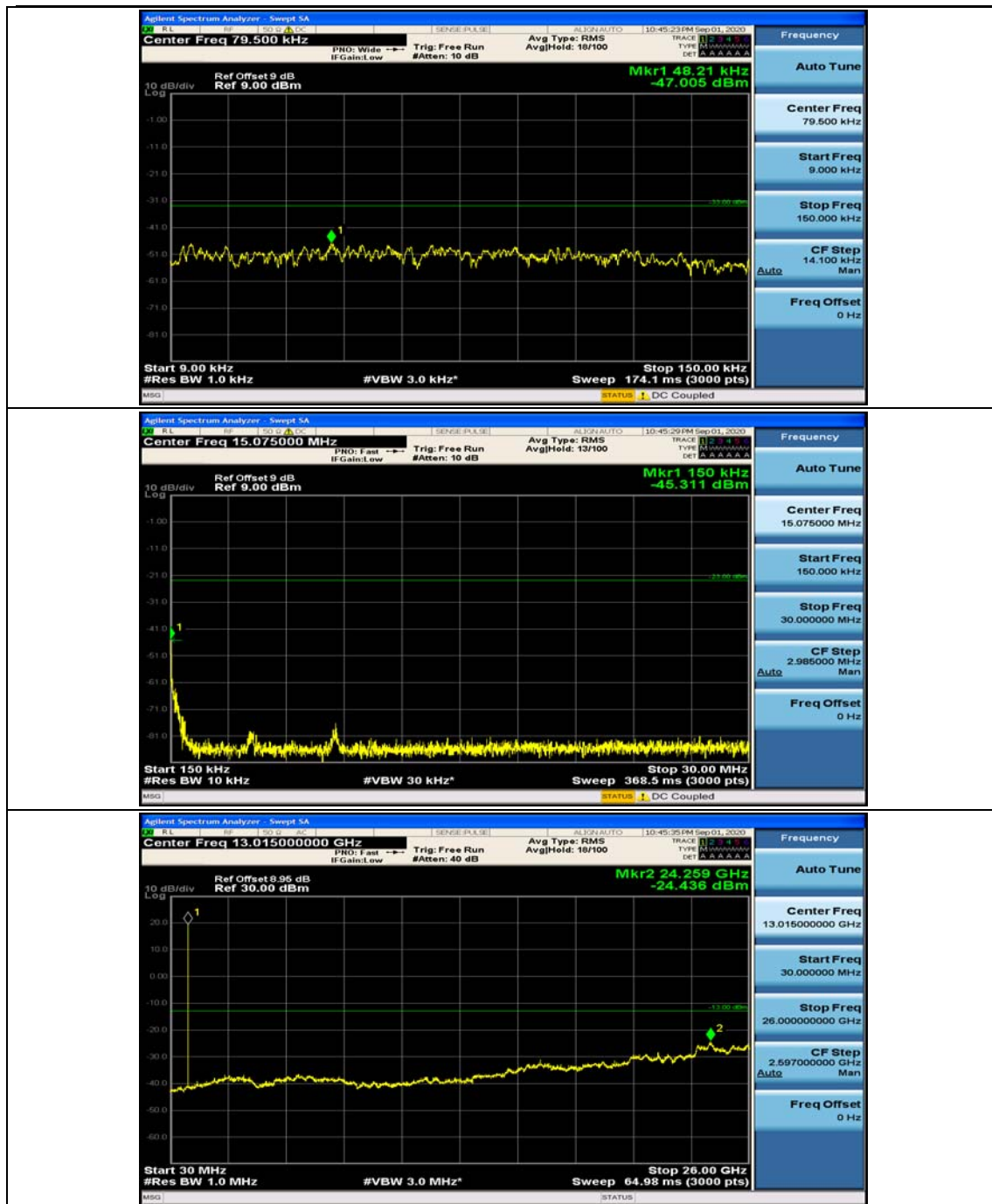


(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#0

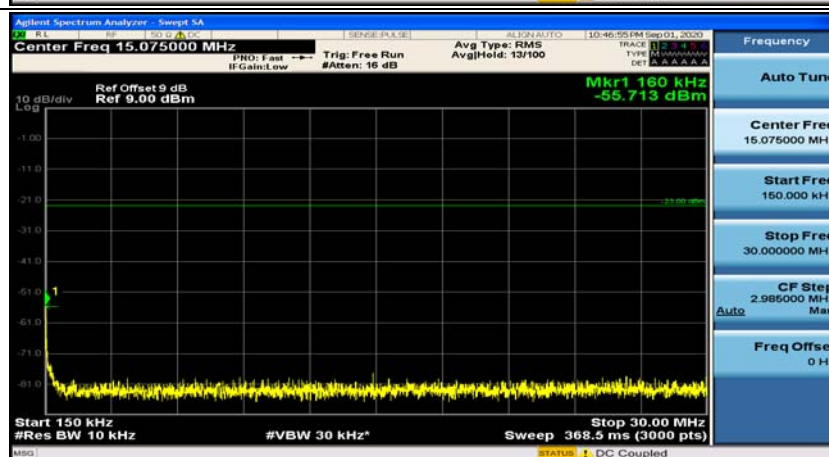
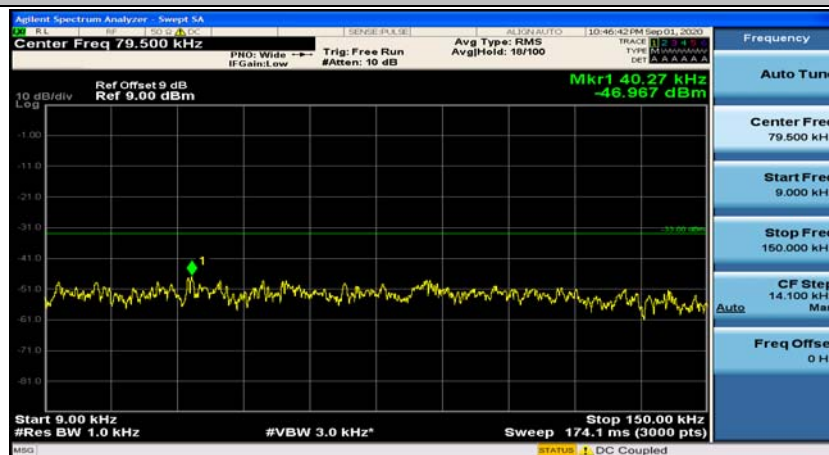


(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_1RB#12

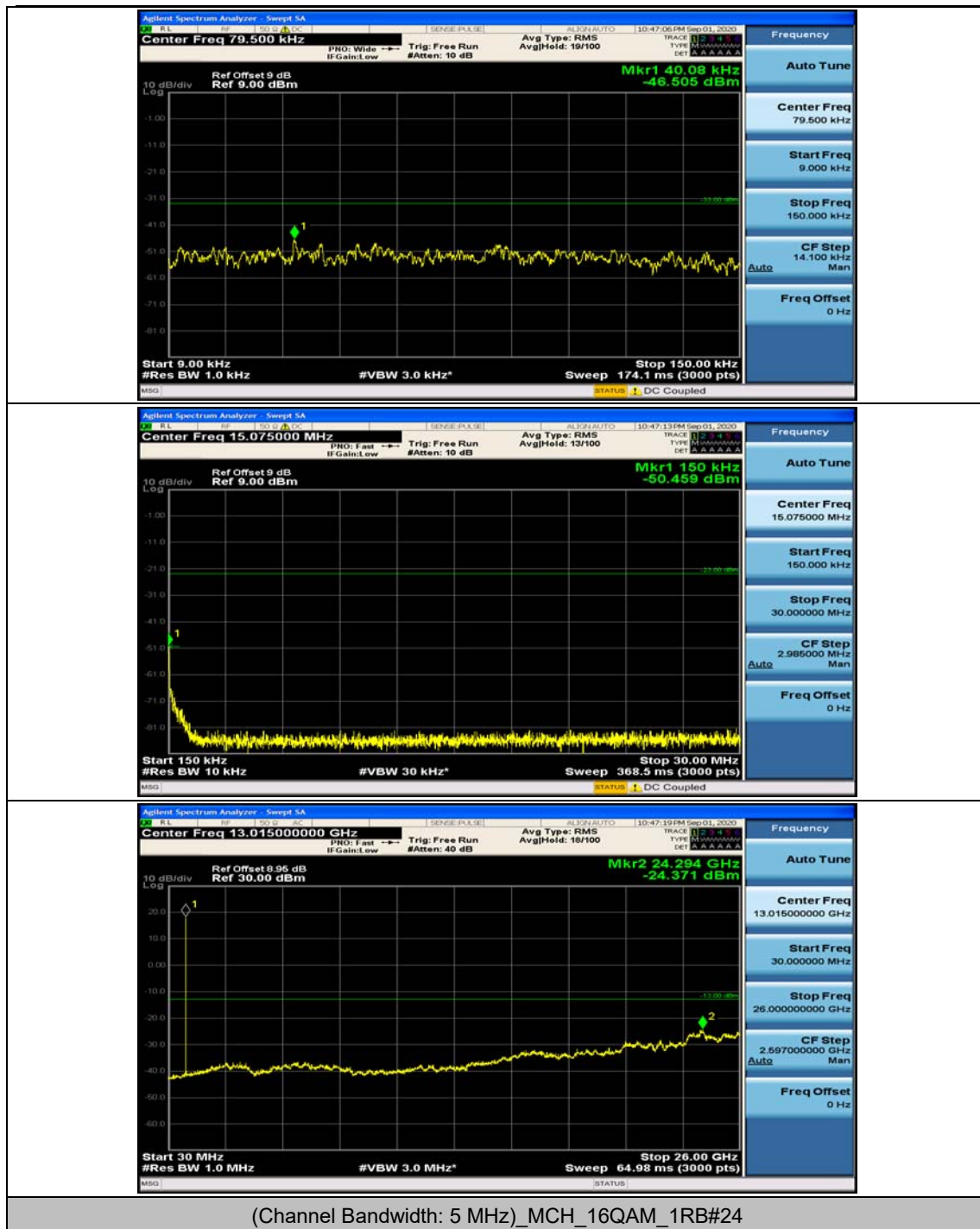


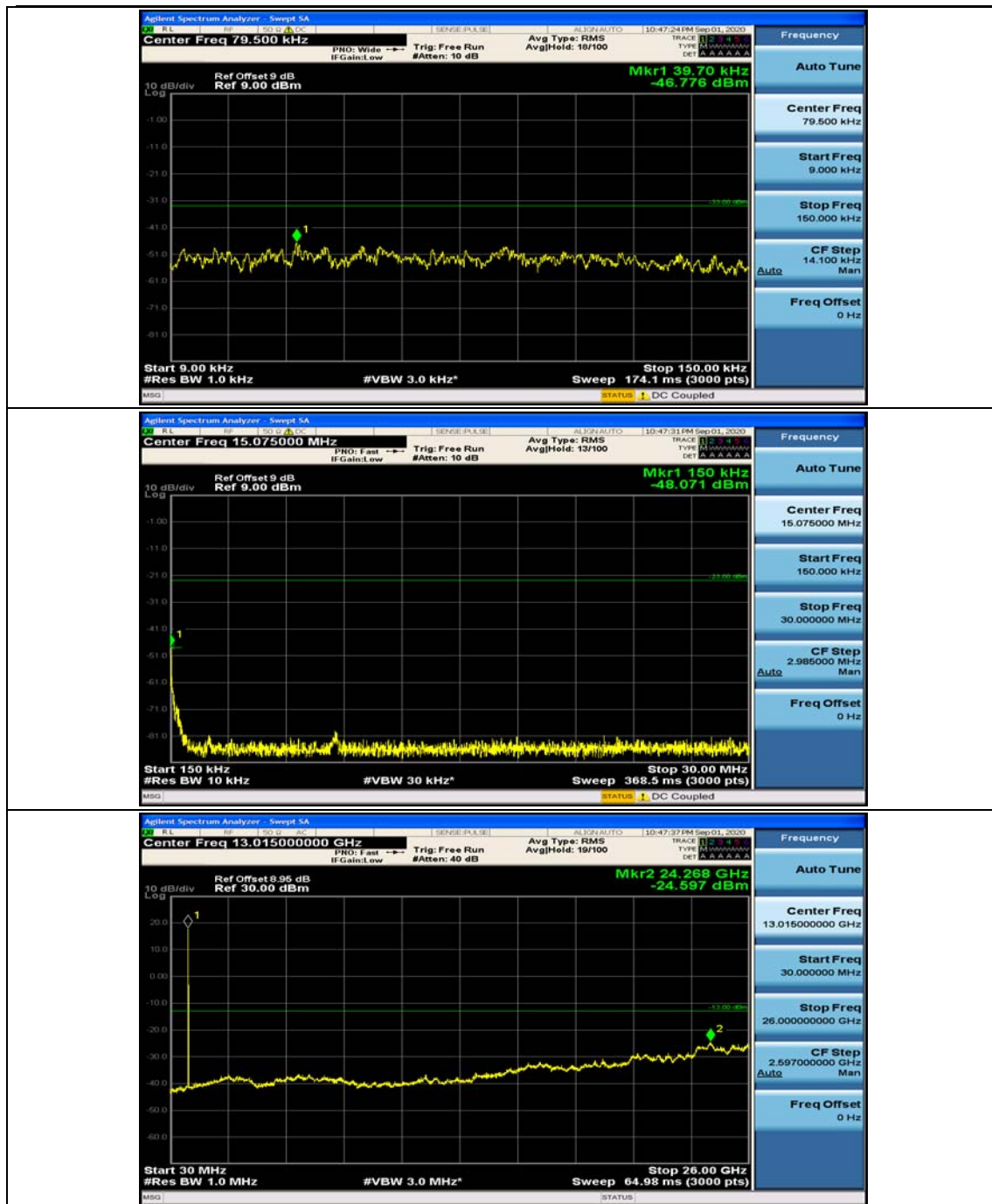


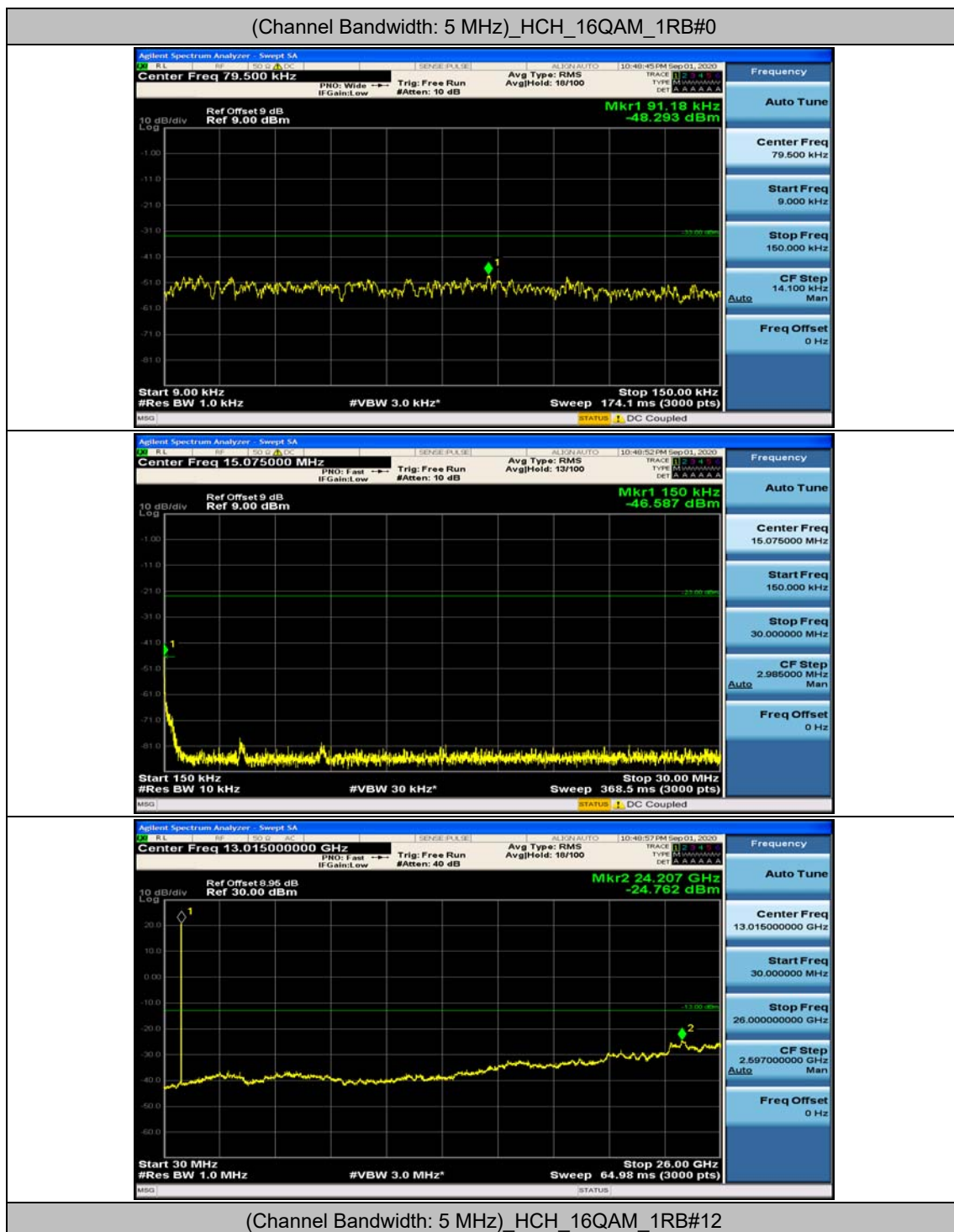
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#0

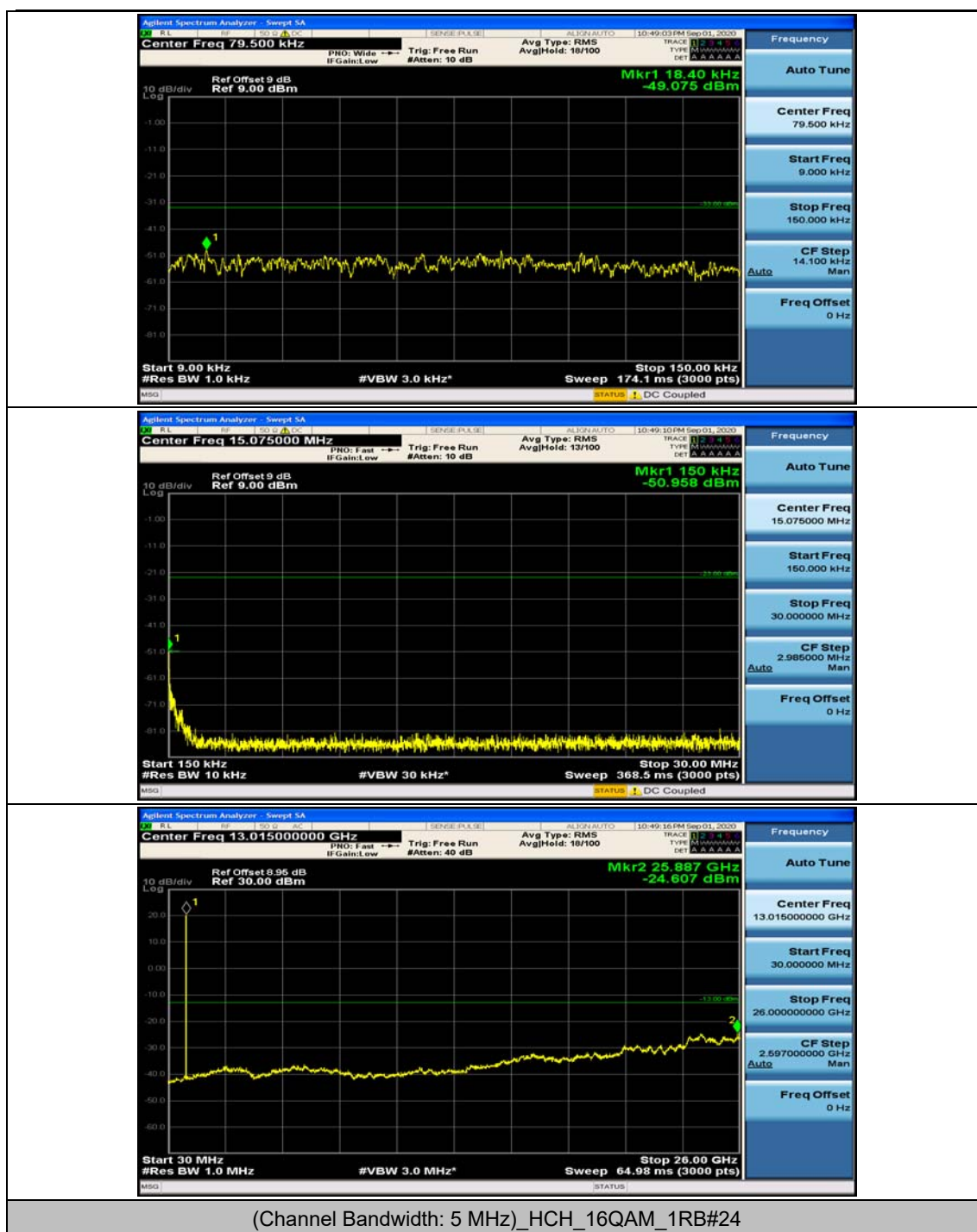


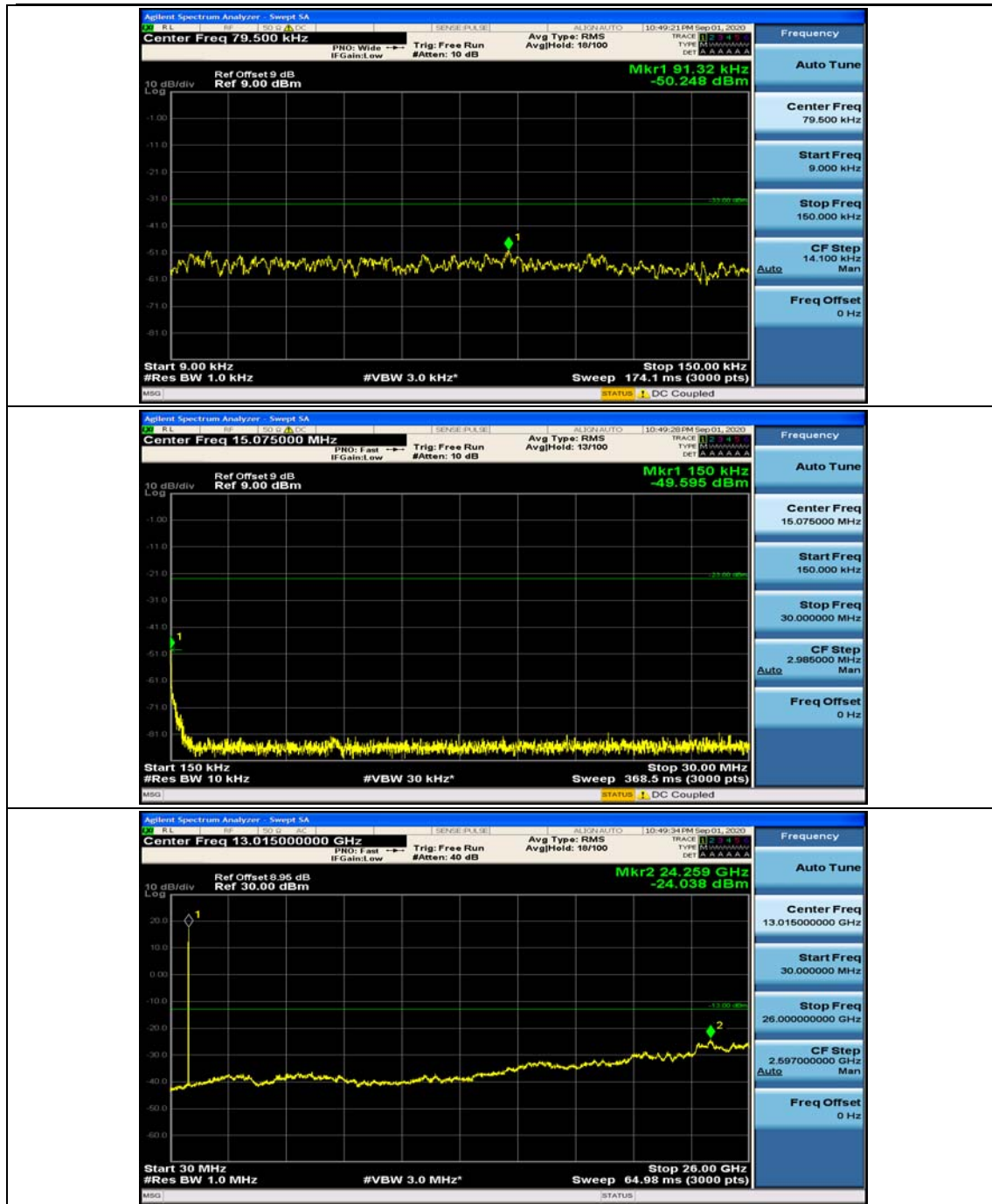
(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#12



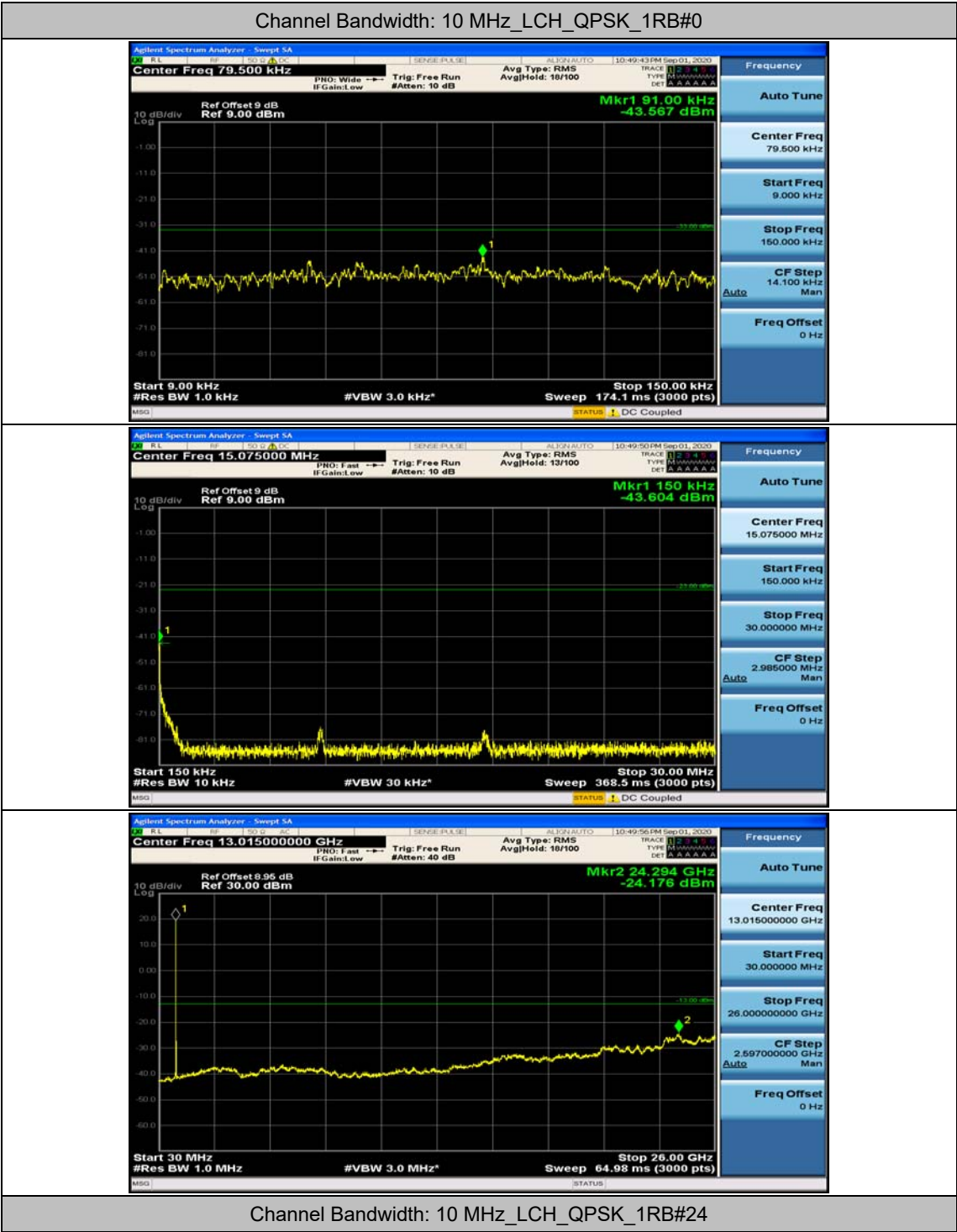


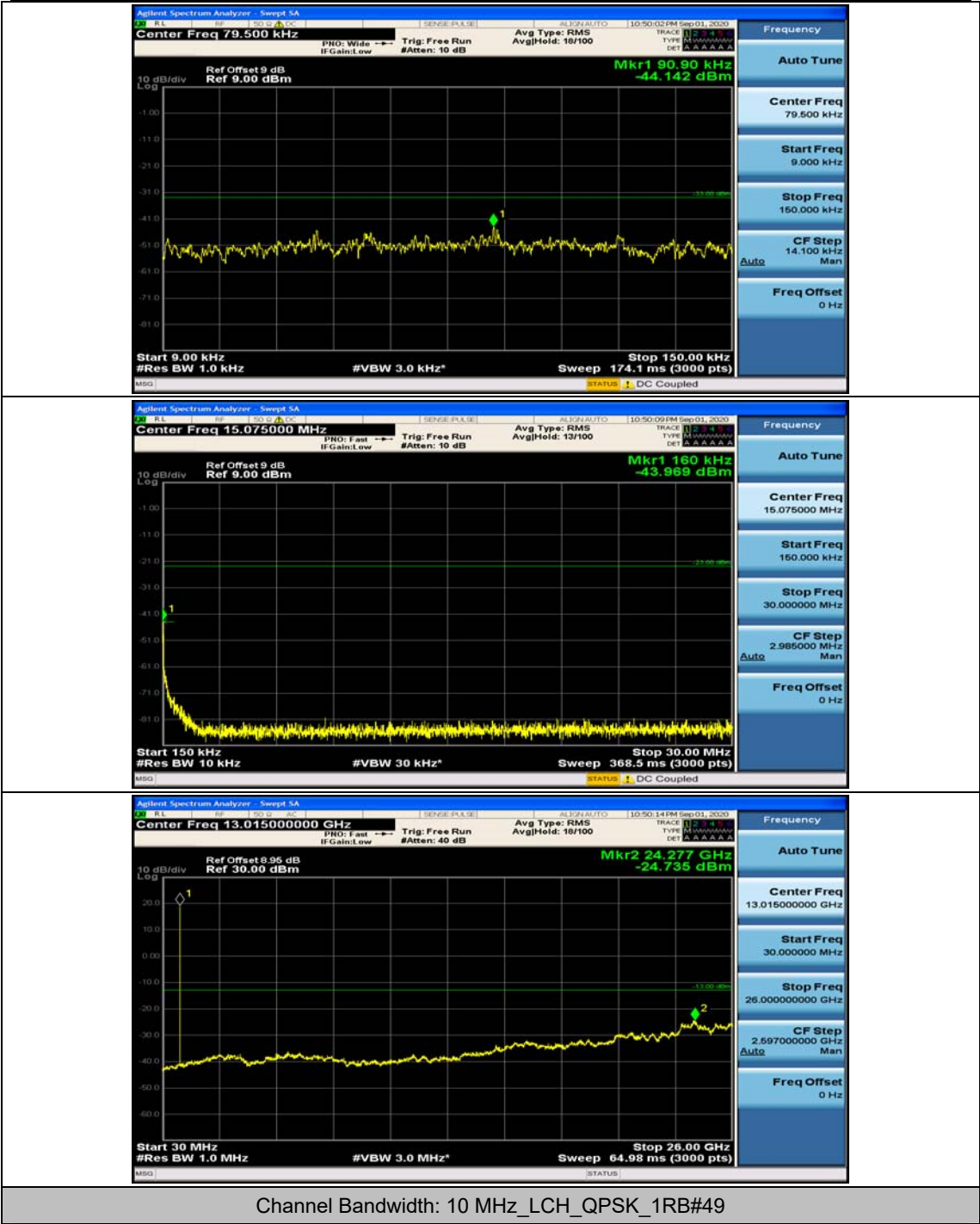


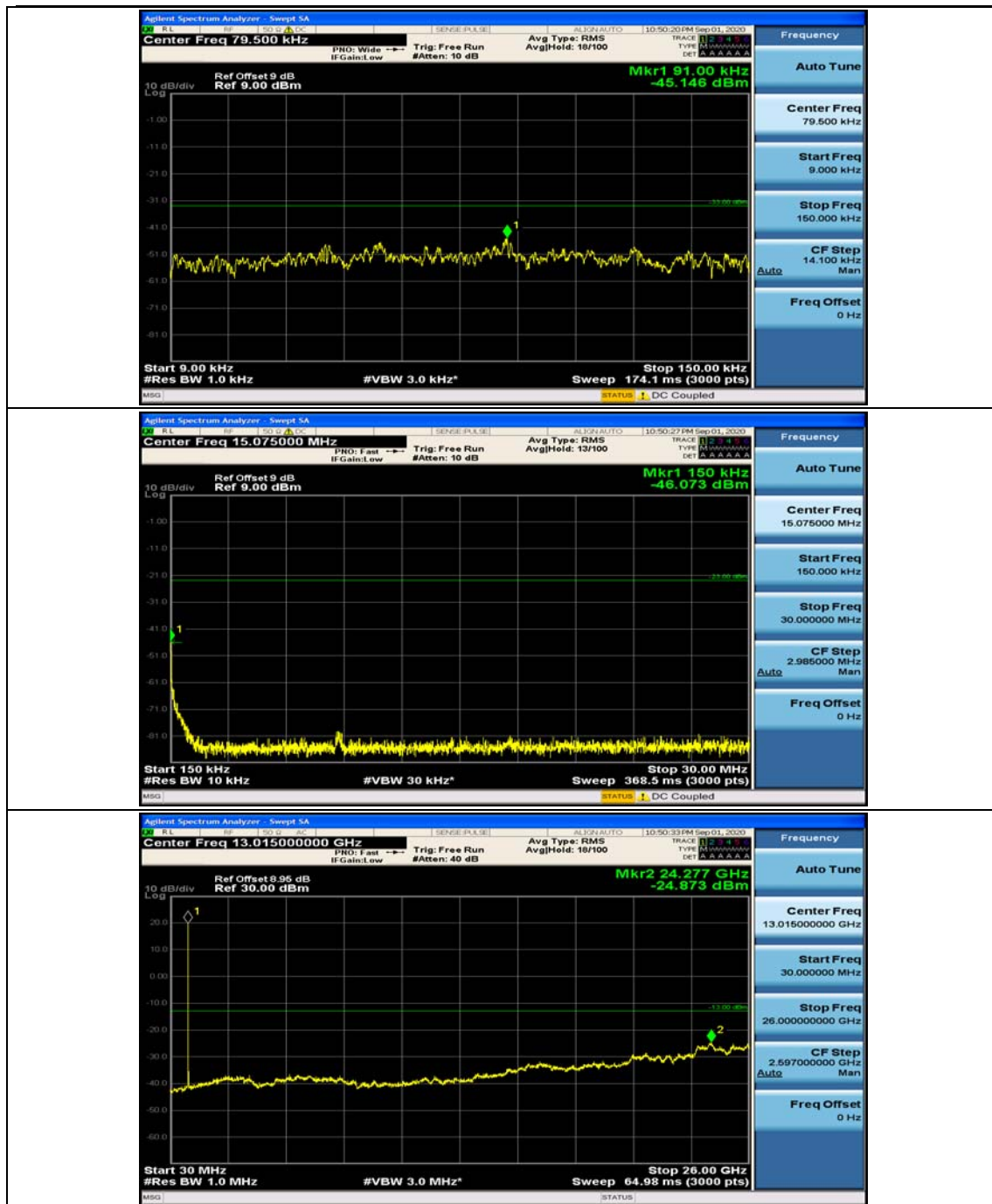


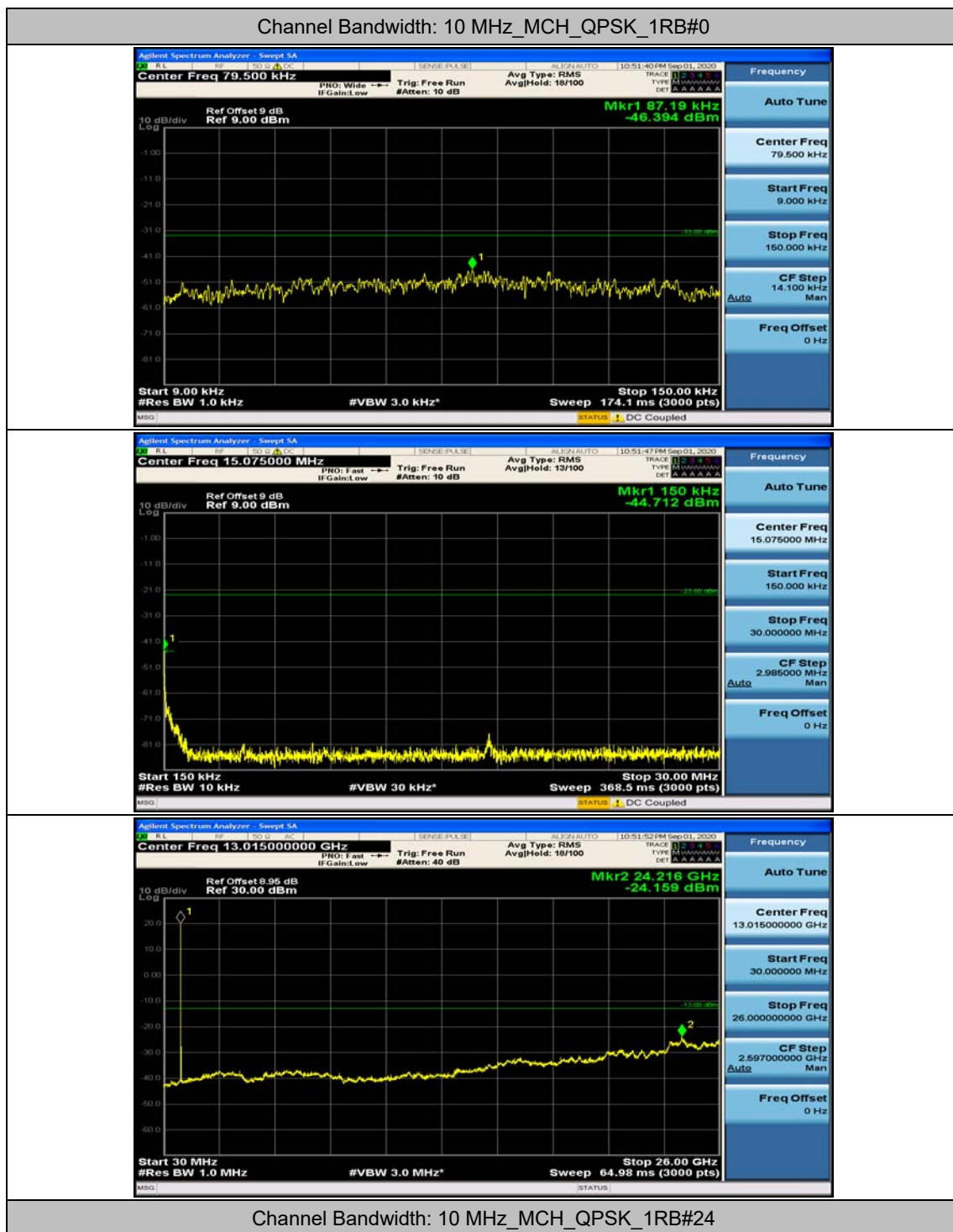


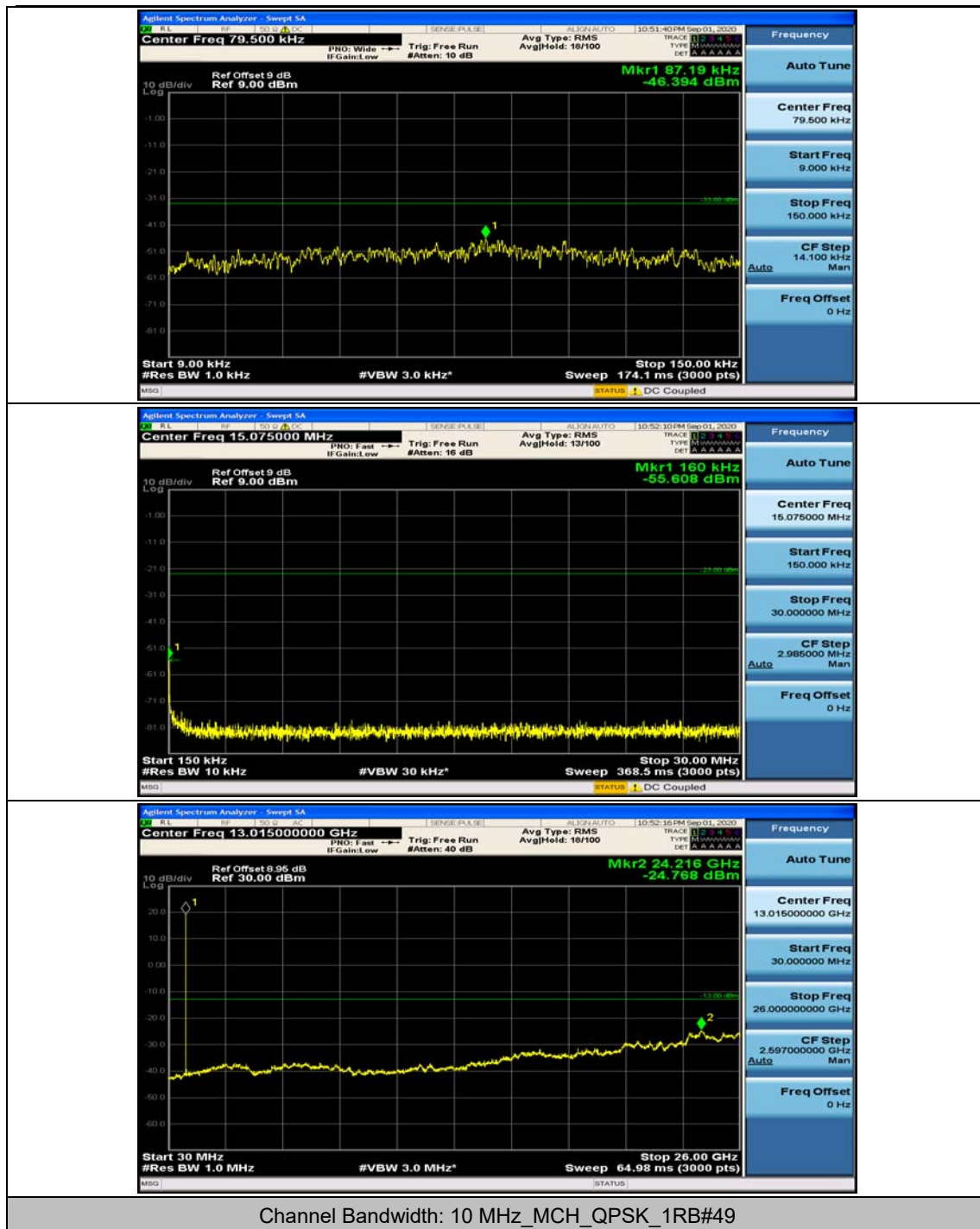
Channel Bandwidth: 10 MHz

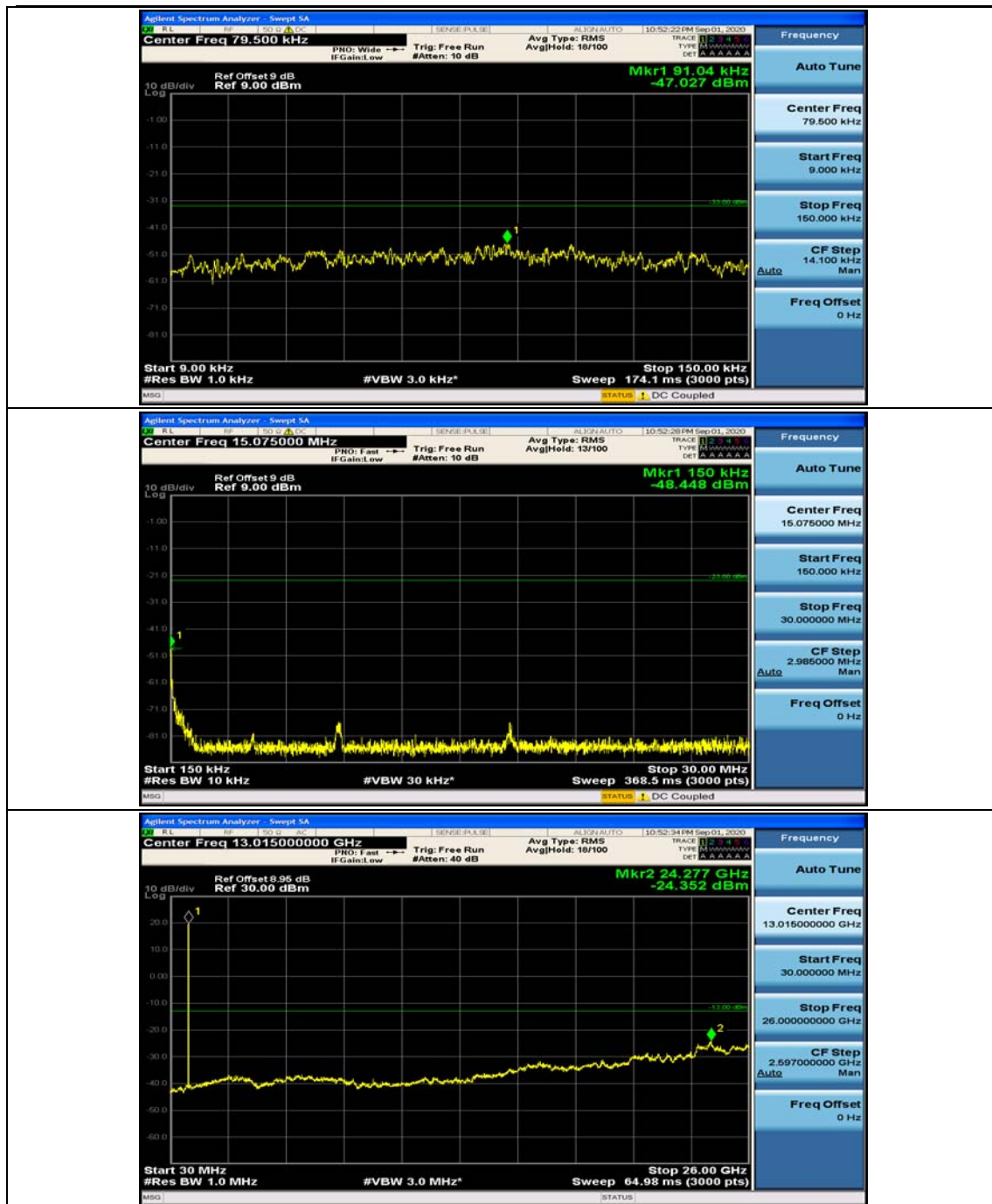


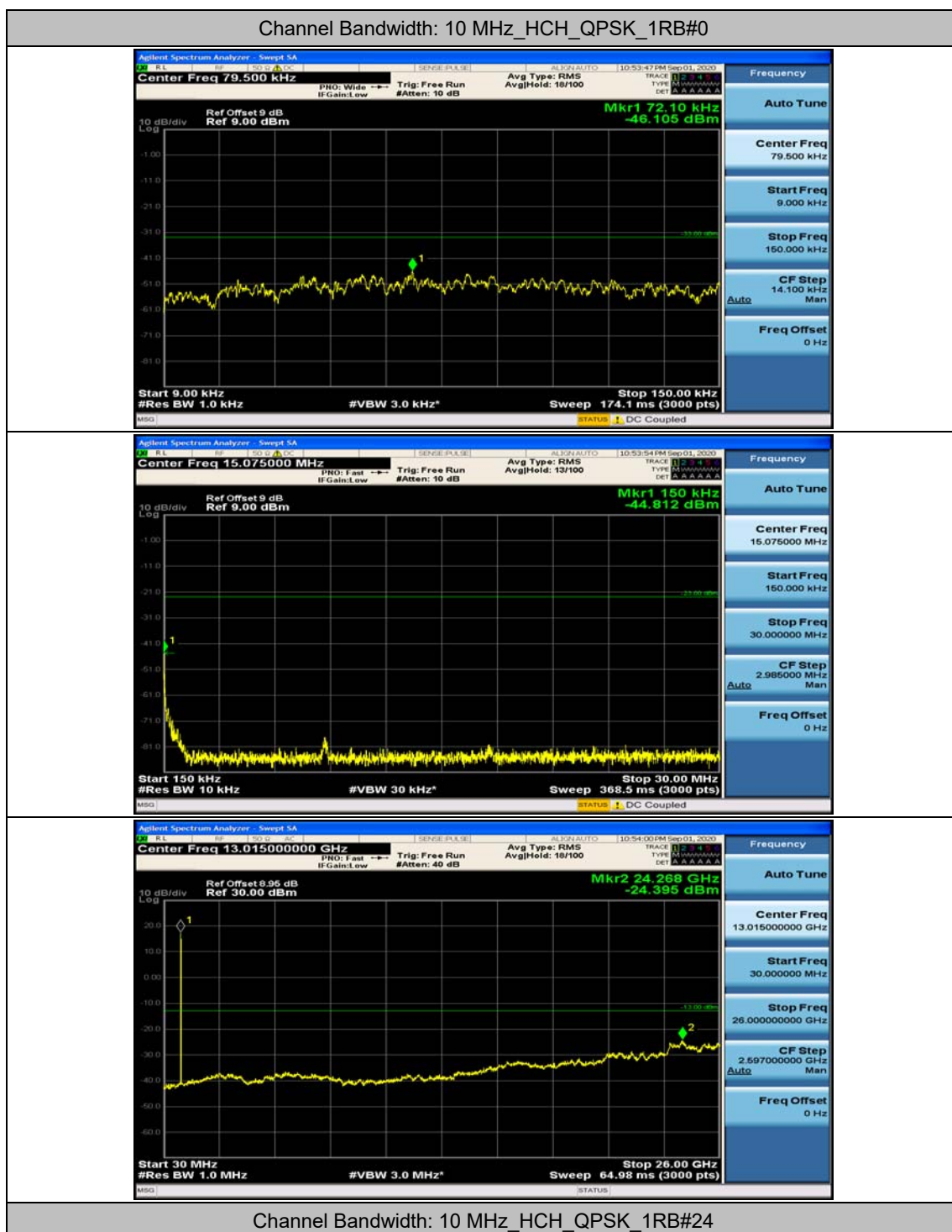


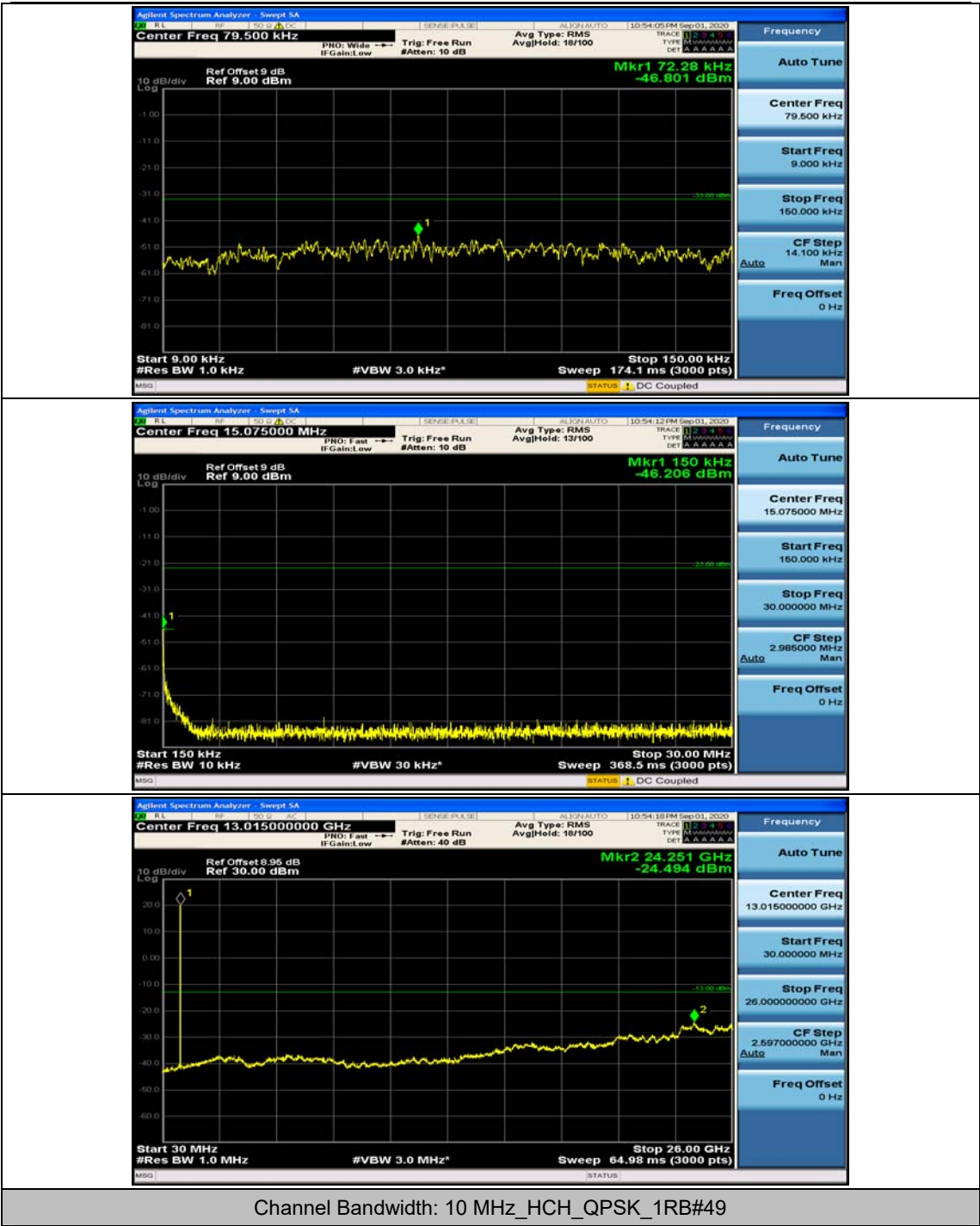


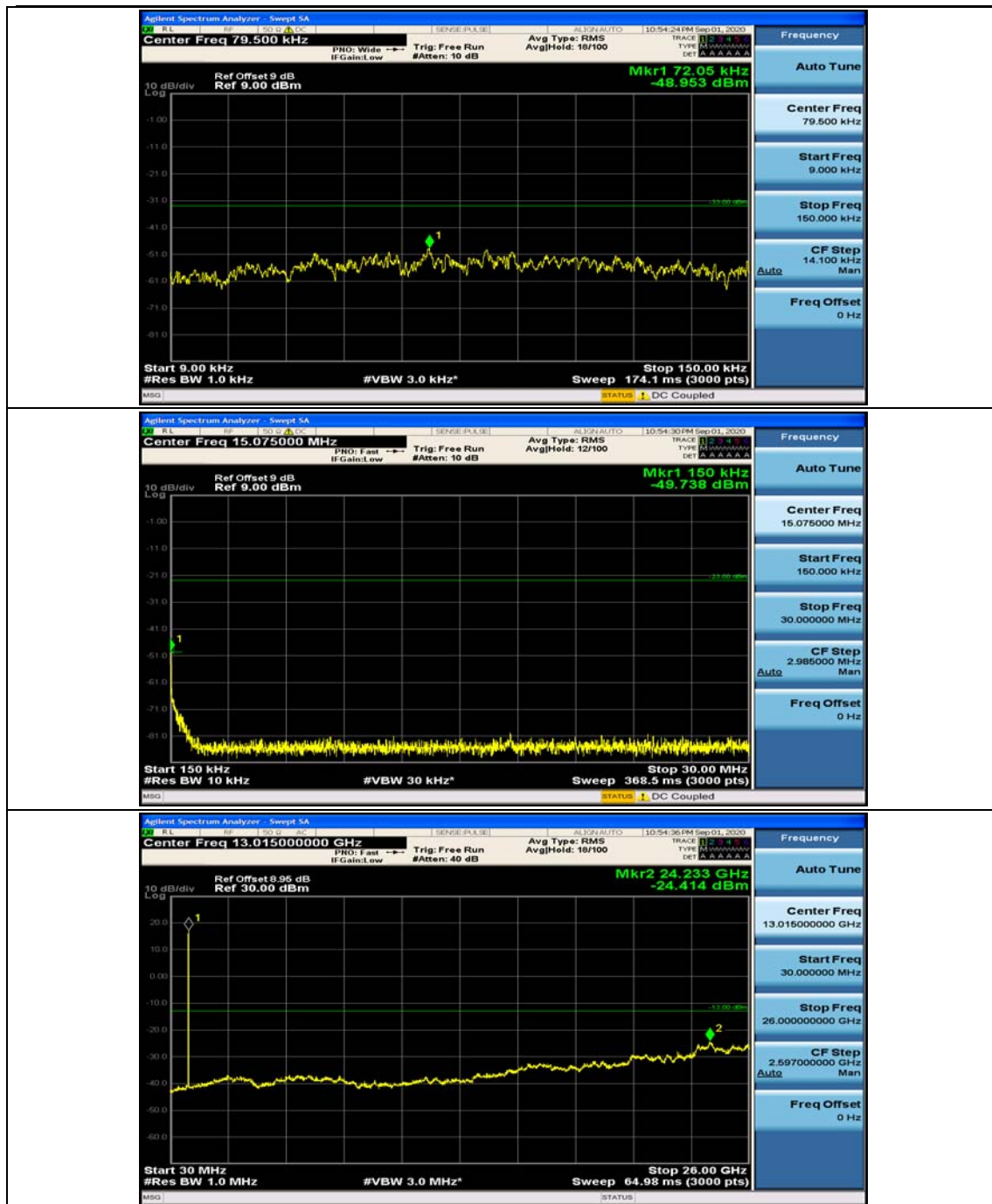


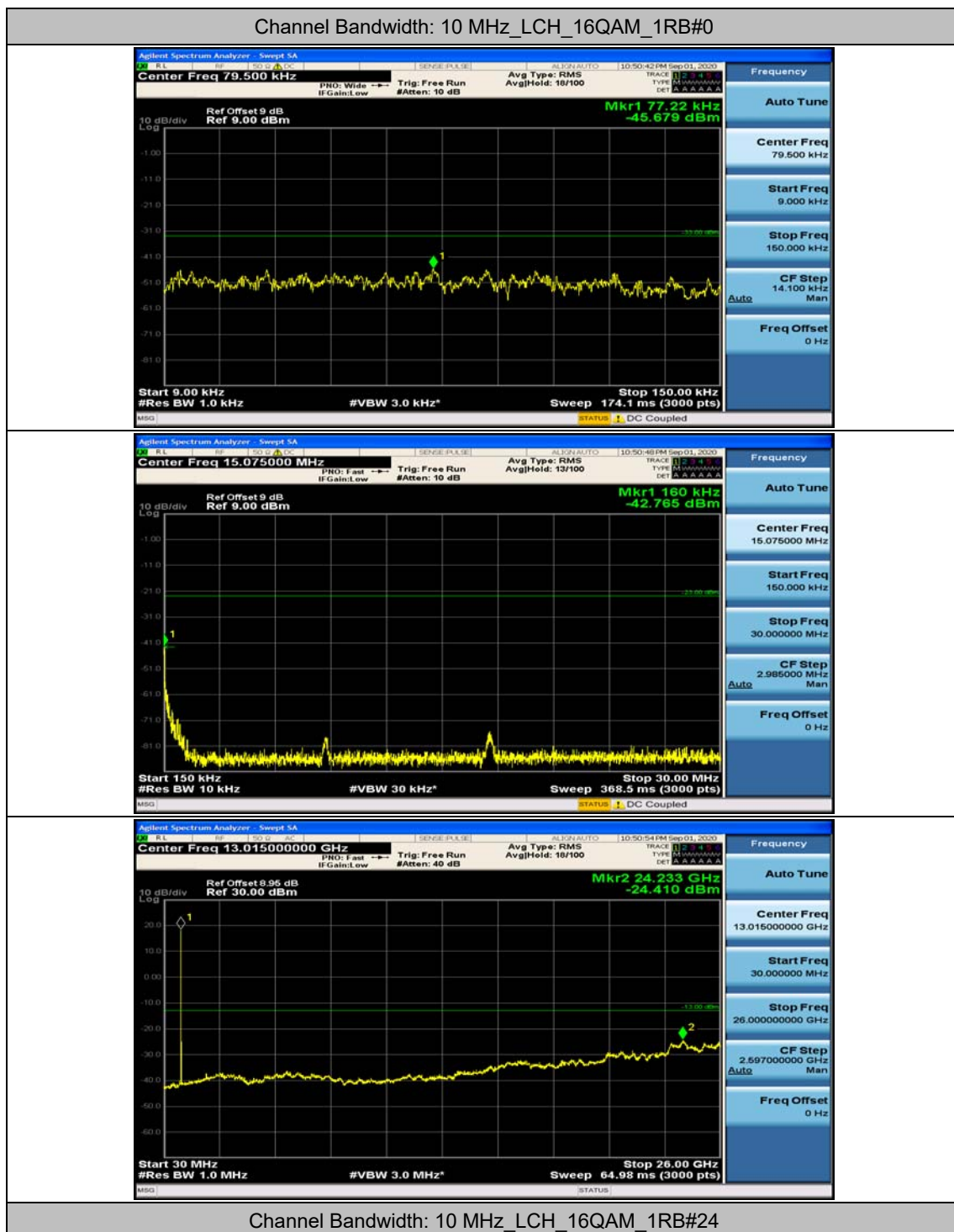


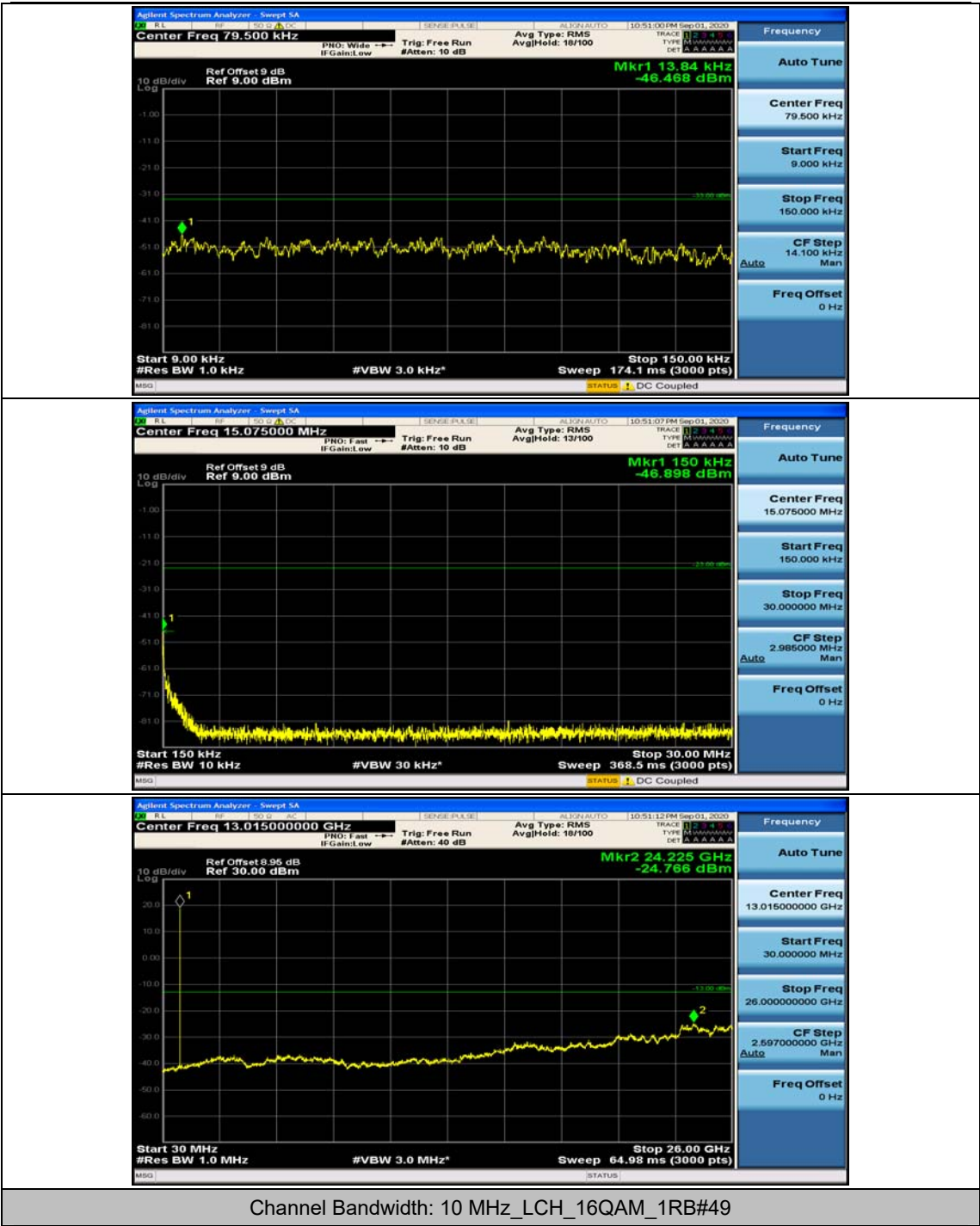


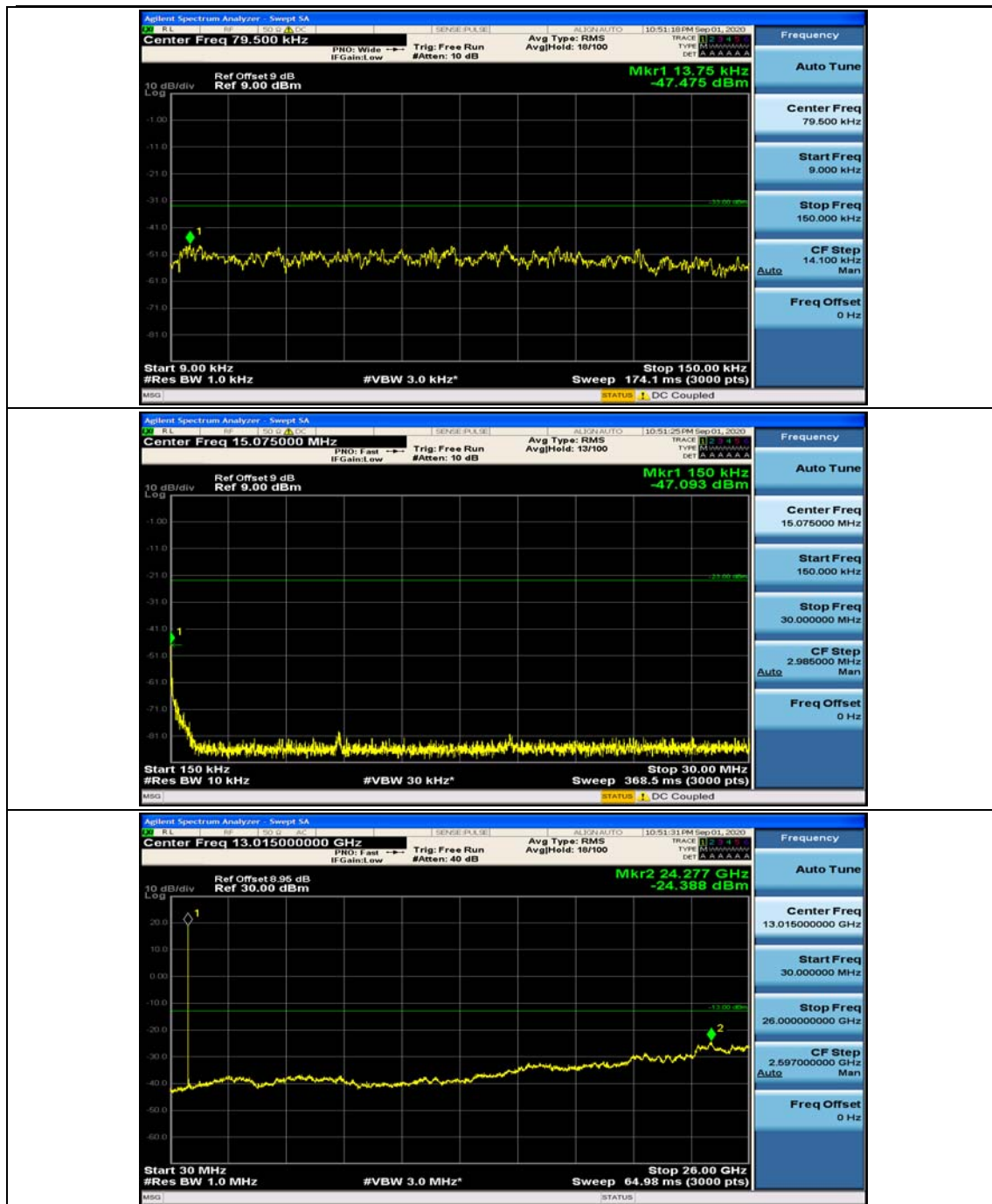


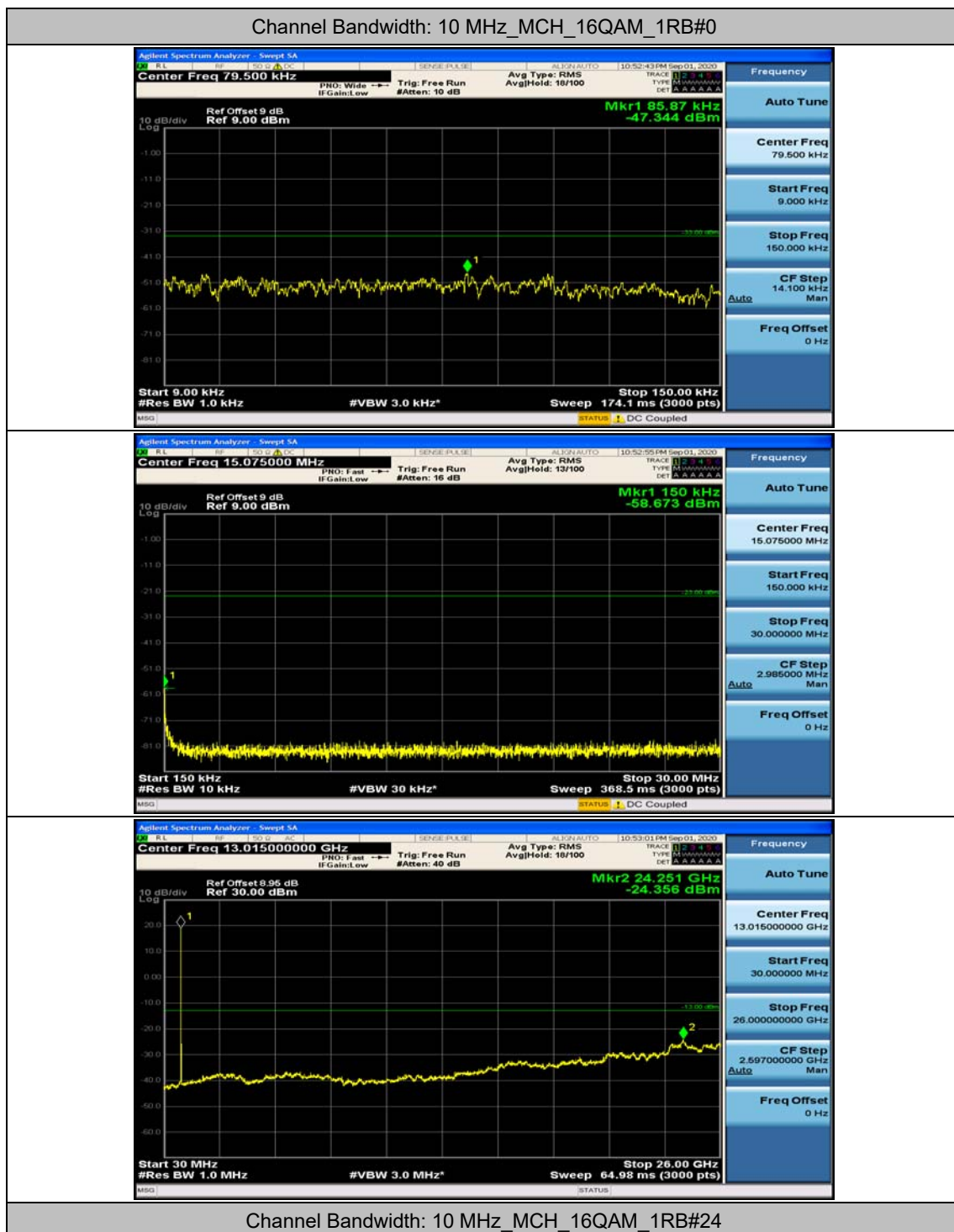


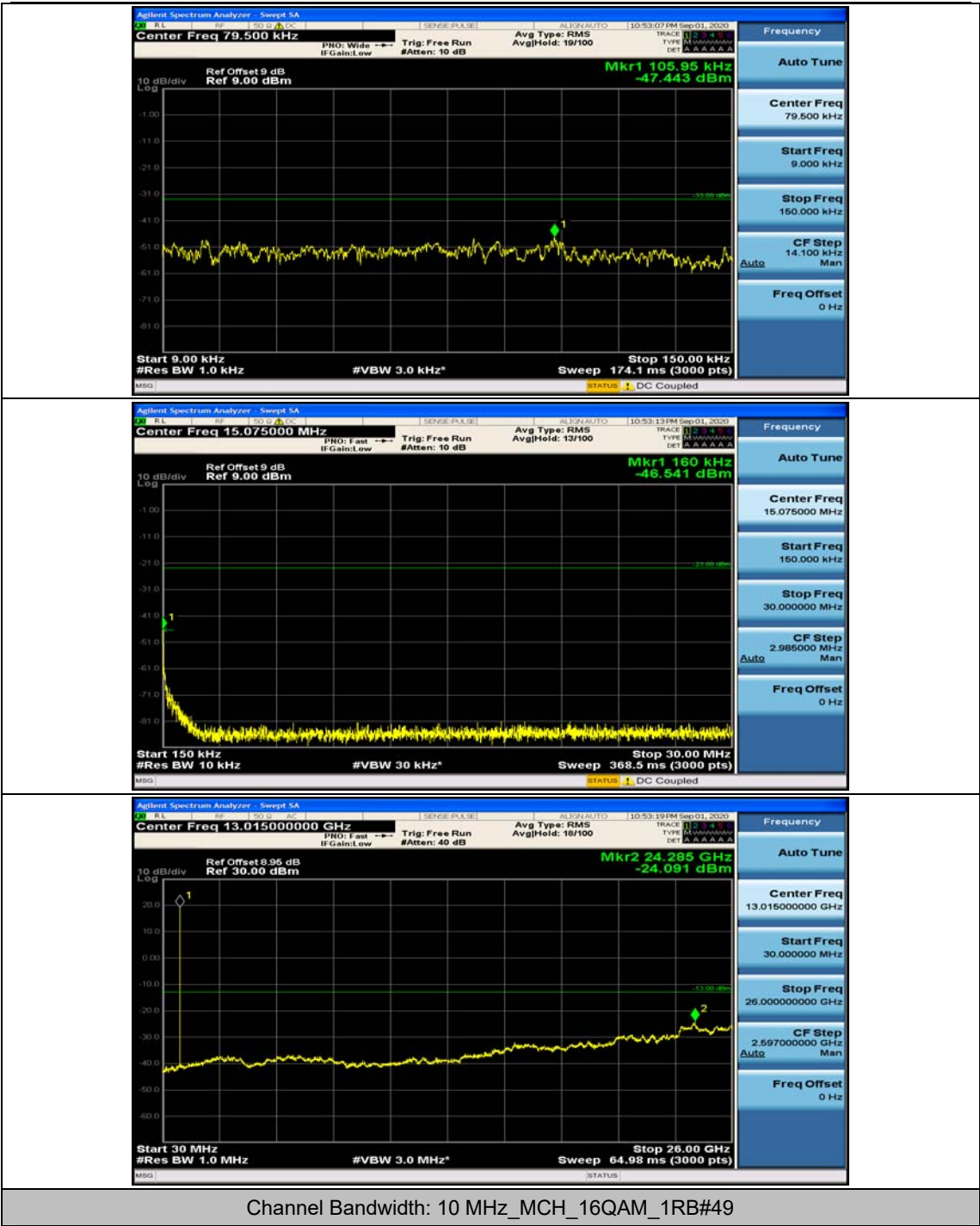


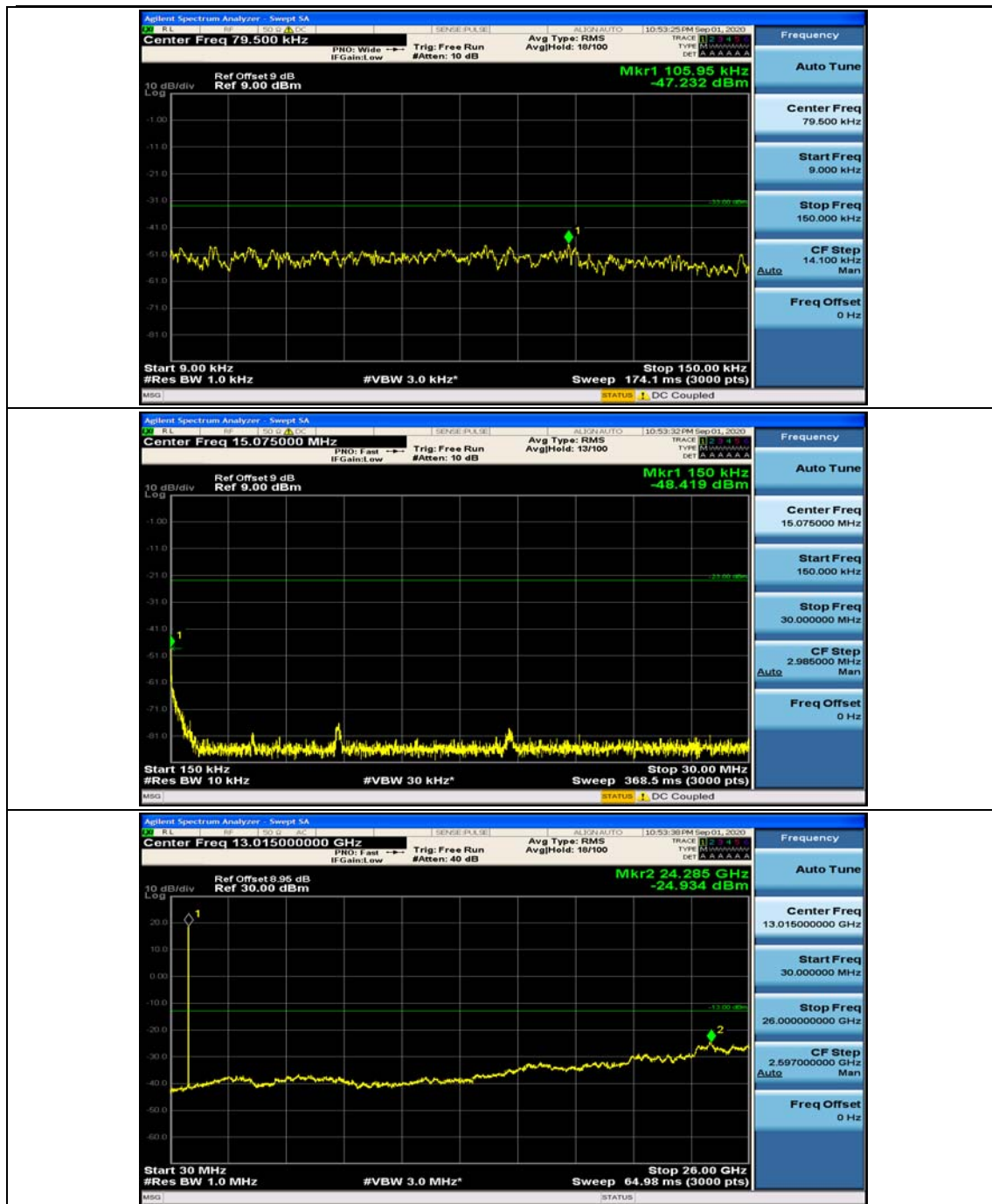


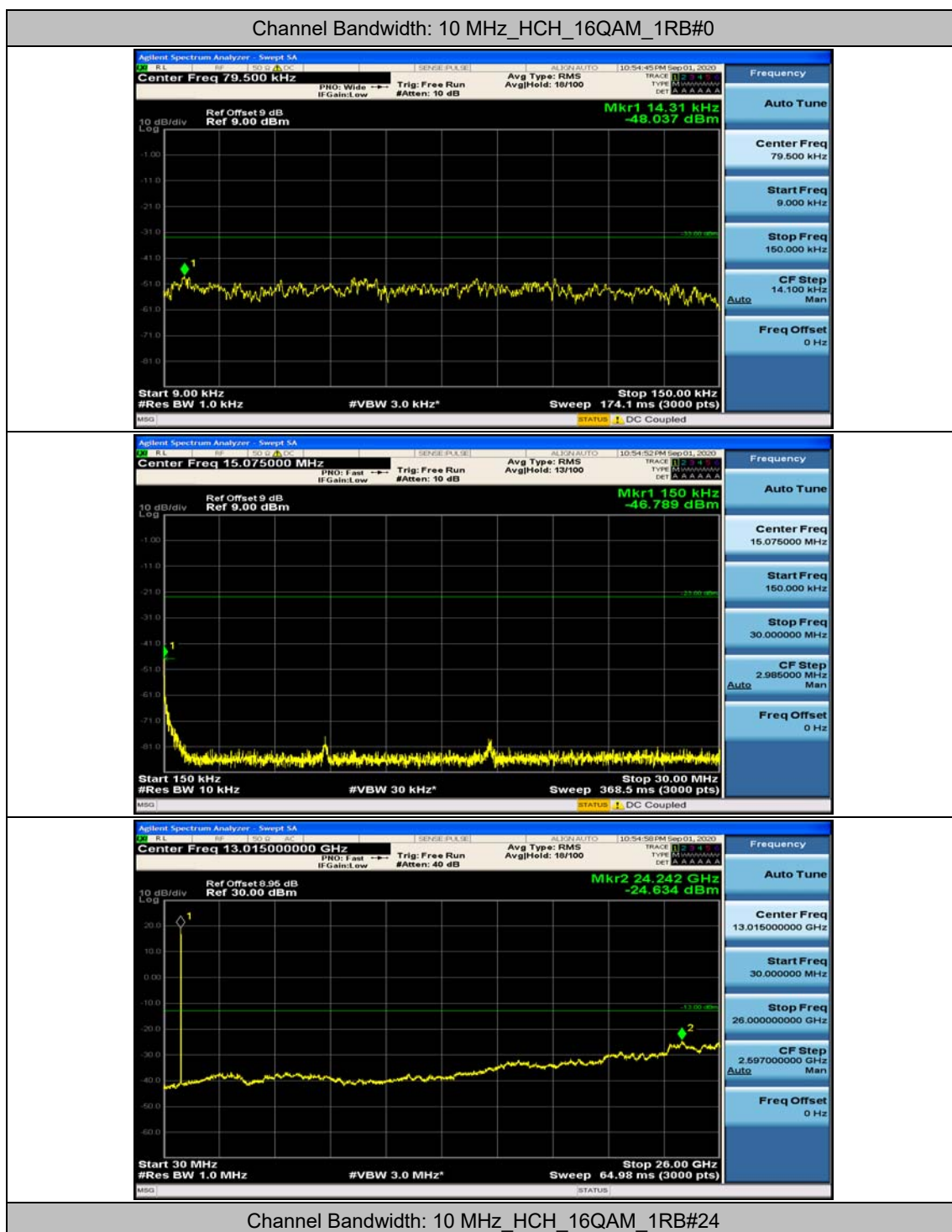


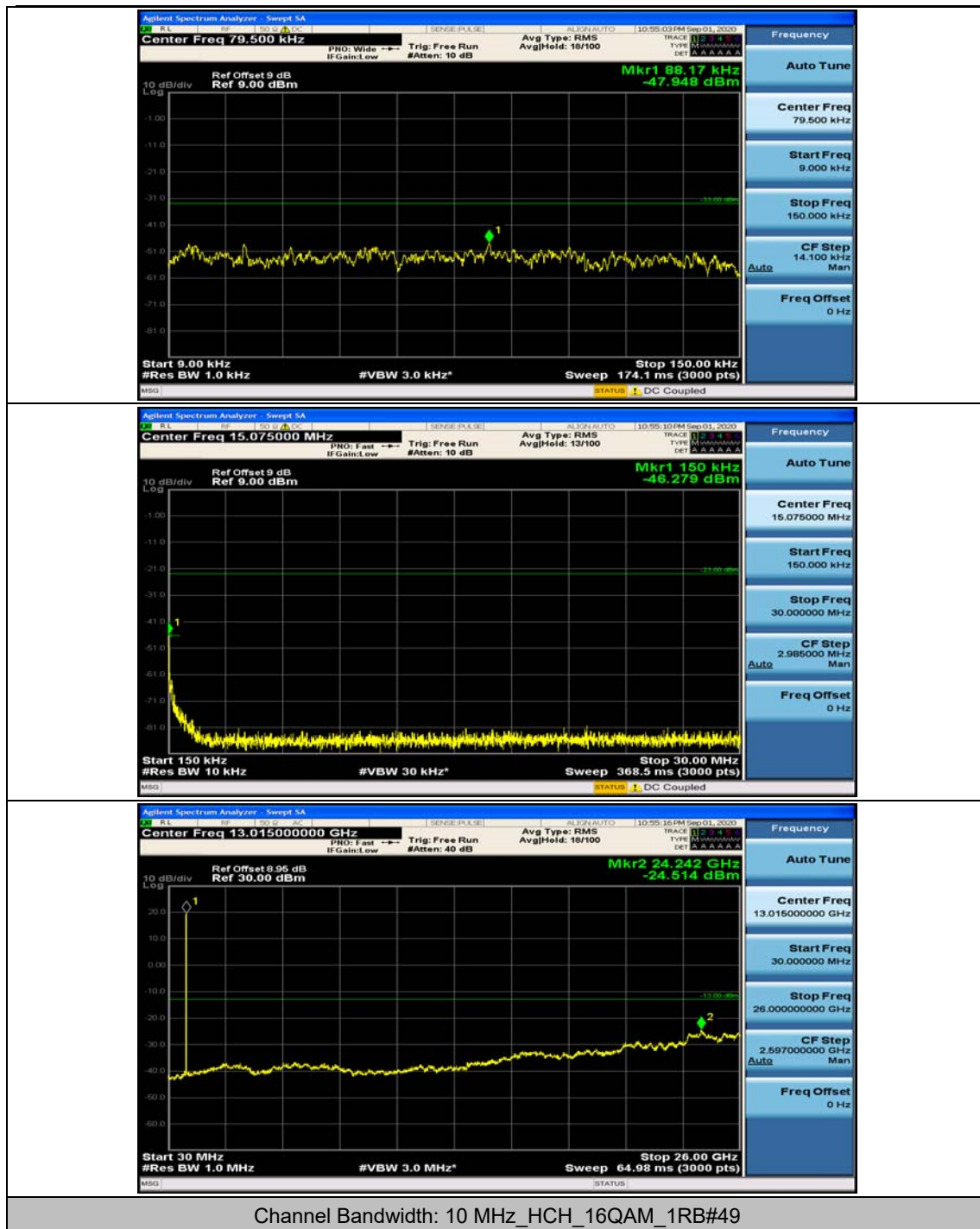


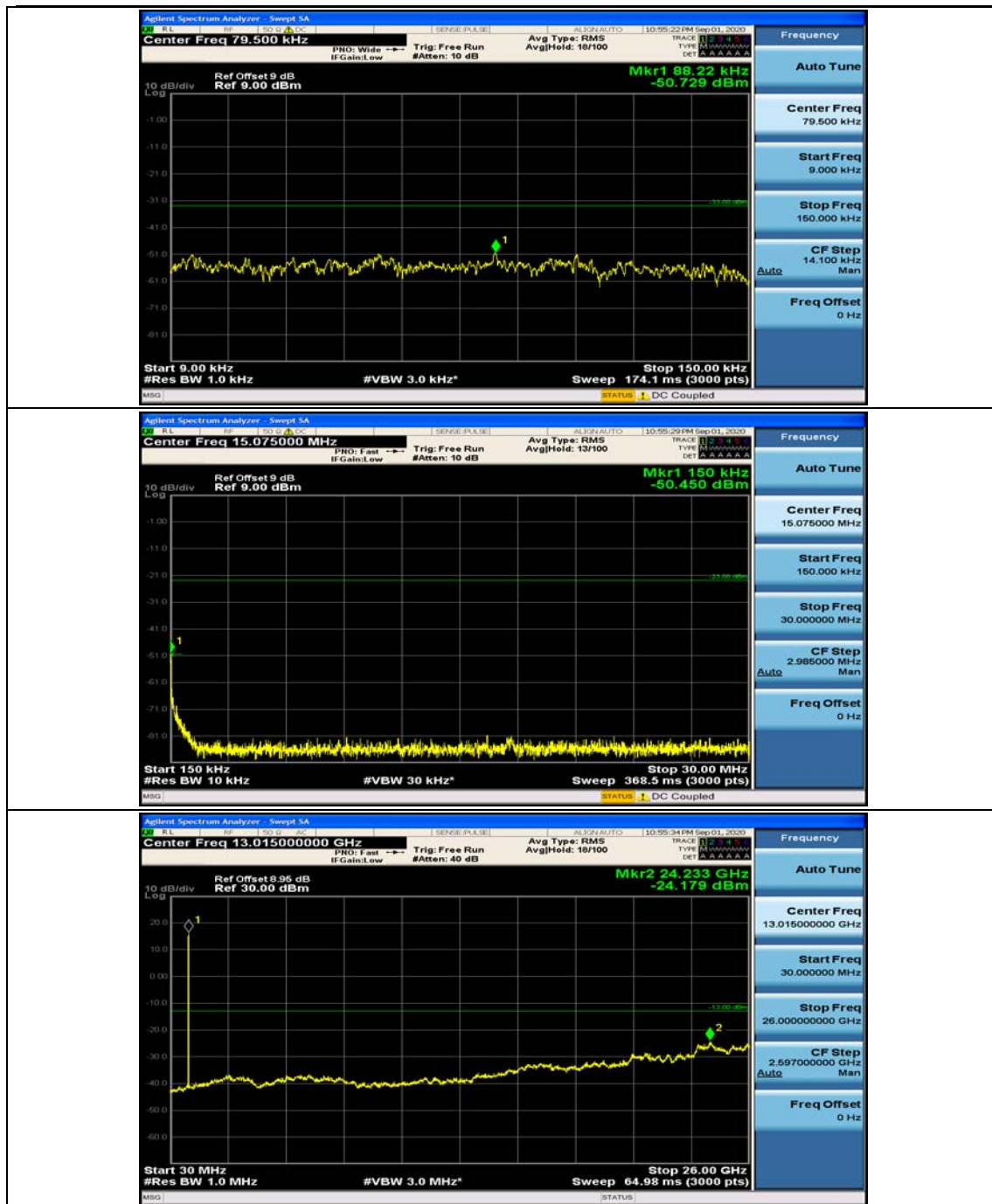












## Appendix F: Frequency Stability

### 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               | 2.77           | 0.003359        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -1.96          | -0.002377       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 2.09           | 0.002534        | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | 4.61           | 0.005511        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -0.14          | -0.000167       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 2.6            | 0.003108        | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | 3.53           | 0.004161        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -0.05          | -0.000059       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 4.05           | 0.004774        | ± 2.5       | PASS    |
| 16QAM                      | LCH     | VL            | TN               | -0.44          | -0.000534       | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 0.24           | 0.000291        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 4.06           | 0.004923        | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | -0.1           | -0.000120       | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 1.87           | 0.002236        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -1.29          | -0.001542       | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | 4.16           | 0.004904        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 0.89           | 0.001049        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -0.73          | -0.000861       | ± 2.5       | PASS    |
| Temperature                |         |               |                  |                |                 |             |         |
| Modulation                 | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                       | LCH     | VN            | -30              | -0.25          | -0.000303       | ± 2.5       | PASS    |
|                            |         | VN            | -20              | -0.19          | -0.000230       | ± 2.5       | PASS    |
|                            |         | VN            | -10              | 3.78           | 0.004583        | ± 2.5       | PASS    |
|                            |         | VN            | 0                | 4.18           | 0.005069        | ± 2.5       | PASS    |
|                            |         | VN            | 10               | -0.96          | -0.001164       | ± 2.5       | PASS    |
|                            |         | VN            | 20               | -1.31          | -0.001588       | ± 2.5       | PASS    |
|                            |         | VN            | 30               | -0.63          | -0.000764       | ± 2.5       | PASS    |
|                            |         | VN            | 40               | 4.14           | 0.005020        | ± 2.5       | PASS    |
|                            |         | VN            | 50               | -0.18          | -0.000218       | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       | MCH | VN | -30 | 0.08  | 0.000096  | ± 2.5 | PASS |
|       |     | VN | -20 | 0.24  | 0.000287  | ± 2.5 | PASS |
|       |     | VN | -10 | 3.79  | 0.004531  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.94  | 0.005906  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.19  | 0.002618  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.64  | 0.000765  | ± 2.5 | PASS |
|       |     | VN | 30  | -0.33 | -0.000395 | ± 2.5 | PASS |
|       |     | VN | 40  | -0.45 | -0.000538 | ± 2.5 | PASS |
|       |     | VN | 50  | -0.53 | -0.000634 | ± 2.5 | PASS |
|       | HCH | VN | -30 | 1.05  | 0.001238  | ± 2.5 | PASS |
|       |     | VN | -20 | -1.97 | -0.002322 | ± 2.5 | PASS |
|       |     | VN | -10 | -1.41 | -0.001662 | ± 2.5 | PASS |
|       |     | VN | 0   | 1.23  | 0.001450  | ± 2.5 | PASS |
|       |     | VN | 10  | -1.7  | -0.002004 | ± 2.5 | PASS |
|       |     | VN | 20  | 3.1   | 0.003654  | ± 2.5 | PASS |
|       |     | VN | 30  | 3.7   | 0.004362  | ± 2.5 | PASS |
|       |     | VN | 40  | 2.66  | 0.003136  | ± 2.5 | PASS |
|       |     | VN | 50  | 0.71  | 0.000837  | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | -1.04 | -0.001261 | ± 2.5 | PASS |
|       |     | VN | -20 | 4.36  | 0.005287  | ± 2.5 | PASS |
|       |     | VN | -10 | 0.9   | 0.001091  | ± 2.5 | PASS |
|       |     | VN | 0   | -0.9  | -0.001091 | ± 2.5 | PASS |
|       |     | VN | 10  | -1.01 | -0.001225 | ± 2.5 | PASS |
|       |     | VN | 20  | 4.88  | 0.005917  | ± 2.5 | PASS |
|       |     | VN | 30  | 0.09  | 0.000109  | ± 2.5 | PASS |
|       |     | VN | 40  | 4.54  | 0.005505  | ± 2.5 | PASS |
|       |     | VN | 50  | -1.03 | -0.001249 | ± 2.5 | PASS |
|       | MCH | VN | -30 | 3.12  | 0.003678  | ± 2.5 | PASS |
|       |     | VN | -20 | 0.75  | 0.000884  | ± 2.5 | PASS |
|       |     | VN | -10 | 4.59  | 0.005411  | ± 2.5 | PASS |
|       |     | VN | 0   | 3.83  | 0.004515  | ± 2.5 | PASS |
|       |     | VN | 10  | -1.42 | -0.001674 | ± 2.5 | PASS |
|       |     | VN | 20  | 4.26  | 0.005022  | ± 2.5 | PASS |
|       |     | VN | 30  | 0.48  | 0.000566  | ± 2.5 | PASS |
|       |     | VN | 40  | 4.11  | 0.004845  | ± 2.5 | PASS |
|       |     | VN | 50  | 3.54  | 0.004173  | ± 2.5 | PASS |
|       | HCH | VN | -30 | -0.21 | -0.000248 | ± 2.5 | PASS |
|       |     | VN | -20 | -0.18 | -0.000212 | ± 2.5 | PASS |
|       |     | VN | -10 | -1.47 | -0.001733 | ± 2.5 | PASS |
|       |     | VN | 0   | -1.9  | -0.002240 | ± 2.5 | PASS |
|       |     | VN | 10  | 4.75  | 0.005599  | ± 2.5 | PASS |

|  |  |    |    |       |           |       |      |
|--|--|----|----|-------|-----------|-------|------|
|  |  | VN | 20 | 2.36  | 0.002782  | ± 2.5 | PASS |
|  |  | VN | 30 | 1.91  | 0.002252  | ± 2.5 | PASS |
|  |  | VN | 40 | -1.13 | -0.001332 | ± 2.5 | PASS |
|  |  | VN | 50 | 0.86  | 0.001014  | ± 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               | 2.77           | 0.003356        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 2.9            | 0.003513        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 0.2            | 0.000242        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 0.8            | 0.000956        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 4.42           | 0.005284        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.03           | 0.003622        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 0.62           | 0.000732        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -0.14          | -0.000165       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 4.46           | 0.005263        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | 3.32           | 0.004022        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 1.64           | 0.001987        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2              | 0.002423        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 4.9            | 0.005858        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.39           | 0.000466        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.7            | 0.003228        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 0.47           | 0.000555        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.93          | -0.002277       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.45           | 0.002891        | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                      | LCH     | VN            | -30              | 1.77           | 0.002144        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 3.63           | 0.004397        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 4.3            | 0.005209        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 3.87           | 0.004688        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | 3.42           | 0.004143        | ± 2.5       | PASS    |
|                           |         | VN            | 20               | -0.72          | -0.000872       | ± 2.5       | PASS    |
|                           |         | VN            | 30               | 3.95           | 0.004785        | ± 2.5       | PASS    |
|                           |         | VN            | 40               | 1.76           | 0.002132        | ± 2.5       | PASS    |
|                           |         | VN            | 50               | 3.82           | 0.004627        | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | 4.37           | 0.005224        | ± 2.5       | PASS    |

|      |     |    |     |       |           |       |      |
|------|-----|----|-----|-------|-----------|-------|------|
|      |     | VN | -20 | 2.86  | 0.003419  | ± 2.5 | PASS |
|      |     | VN | -10 | 3.25  | 0.003885  | ± 2.5 | PASS |
|      |     | VN | 0   | 3.69  | 0.004411  | ± 2.5 | PASS |
|      |     | VN | 10  | 4.59  | 0.005487  | ± 2.5 | PASS |
|      |     | VN | 20  | -1.06 | -0.001267 | ± 2.5 | PASS |
|      |     | VN | 30  | 4.19  | 0.005009  | ± 2.5 | PASS |
|      |     | VN | 40  | 2.46  | 0.002941  | ± 2.5 | PASS |
|      |     | VN | 50  | 4.11  | 0.004913  | ± 2.5 | PASS |
|      | HCH | VN | -30 | 2.9   | 0.003422  | ± 2.5 | PASS |
|      |     | VN | -20 | -0.15 | -0.000177 | ± 2.5 | PASS |
|      |     | VN | -10 | -1.17 | -0.001381 | ± 2.5 | PASS |
|      |     | VN | 0   | 4.58  | 0.005404  | ± 2.5 | PASS |
|      |     | VN | 10  | 2.22  | 0.002619  | ± 2.5 | PASS |
|      |     | VN | 20  | 2.29  | 0.002702  | ± 2.5 | PASS |
|      |     | VN | 30  | -0.55 | -0.000649 | ± 2.5 | PASS |
|      |     | VN | 40  | -0.12 | -0.000142 | ± 2.5 | PASS |
|      |     | VN | 50  | 0.04  | 0.000047  | ± 2.5 | PASS |
| QPSK | LCH | VN | -30 | 4.27  | 0.005105  | ± 2.5 | PASS |
|      |     | VN | -20 | 3.14  | 0.003754  | ± 2.5 | PASS |
|      |     | VN | -10 | 0.64  | 0.000765  | ± 2.5 | PASS |
|      |     | VN | 0   | 4.53  | 0.005415  | ± 2.5 | PASS |
|      |     | VN | 10  | 0.31  | 0.000371  | ± 2.5 | PASS |
|      |     | VN | 20  | -0.86 | -0.001028 | ± 2.5 | PASS |
|      |     | VN | 30  | 0.02  | 0.000024  | ± 2.5 | PASS |
|      |     | VN | 40  | 4.47  | 0.005344  | ± 2.5 | PASS |
|      |     | VN | 50  | 4.37  | 0.005224  | ± 2.5 | PASS |
|      | MCH | VN | -30 | -1.2  | -0.001416 | ± 2.5 | PASS |
|      |     | VN | -20 | 3.98  | 0.004696  | ± 2.5 | PASS |
|      |     | VN | -10 | -1.07 | -0.001263 | ± 2.5 | PASS |
|      |     | VN | 0   | 1.53  | 0.001805  | ± 2.5 | PASS |
|      |     | VN | 10  | 0.11  | 0.000130  | ± 2.5 | PASS |
|      |     | VN | 20  | 1.96  | 0.002313  | ± 2.5 | PASS |
|      |     | VN | 30  | 3.47  | 0.004094  | ± 2.5 | PASS |
|      |     | VN | 40  | 0.33  | 0.000389  | ± 2.5 | PASS |
|      |     | VN | 50  | -1.14 | -0.001345 | ± 2.5 | PASS |
|      | HCH | VN | -30 | 0.02  | 0.000024  | ± 2.5 | PASS |
|      |     | VN | -20 | -1.74 | -0.002053 | ± 2.5 | PASS |
|      |     | VN | -10 | -0.56 | -0.000661 | ± 2.5 | PASS |
|      |     | VN | 0   | -0.53 | -0.000625 | ± 2.5 | PASS |
|      |     | VN | 10  | 0.39  | 0.000460  | ± 2.5 | PASS |
|      |     | VN | 20  | 2.57  | 0.003032  | ± 2.5 | PASS |

|  |  |    |    |      |          |       |      |
|--|--|----|----|------|----------|-------|------|
|  |  | VN | 30 | 3.71 | 0.004378 | ± 2.5 | PASS |
|  |  | VN | 40 | 1.38 | 0.001628 | ± 2.5 | PASS |
|  |  | VN | 50 | 3.94 | 0.004649 | ± 2.5 | PASS |

**Channel Bandwidth: 5 MHz**

| Channel Bandwidth: 5 MHz |         |               |                  |                |                 |             |         |
|--------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage                  |         |               |                  |                |                 |             |         |
| Modulation               | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                     | LCH     | VL            | TN               | 2.77           | 0.003351        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 4.16           | 0.005033        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 1.26           | 0.001525        | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | 3.84           | 0.004591        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | -0.24          | -0.000287       | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 1.38           | 0.001650        | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | -1.31          | -0.001548       | ± 2.5       | PASS    |
|                          |         | VN            | TN               | -0.75          | -0.000886       | ± 2.5       | PASS    |
|                          |         | VH            | TN               | -1.74          | -0.002056       | ± 2.5       | PASS    |
| 16QAM                    | LCH     | VL            | TN               | 0.84           | 0.001016        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 0.99           | 0.001198        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 1.33           | 0.001609        | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | -1.92          | -0.002295       | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 2.6            | 0.003108        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 0.2            | 0.000239        | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | 0.79           | 0.000933        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 3.32           | 0.003922        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 0.29           | 0.000343        | ± 2.5       | PASS    |
| Temperature              |         |               |                  |                |                 |             |         |
| Modulation               | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                     | LCH     | VN            | -30              | -0.44          | -0.000532       | ± 2.5       | PASS    |
|                          |         | VN            | -20              | 4.9            | 0.005929        | ± 2.5       | PASS    |
|                          |         | VN            | -10              | 1.01           | 0.001222        | ± 2.5       | PASS    |
|                          |         | VN            | 0                | 3.71           | 0.004489        | ± 2.5       | PASS    |
|                          |         | VN            | 10               | 0.11           | 0.000133        | ± 2.5       | PASS    |
|                          |         | VN            | 20               | -1.66          | -0.002008       | ± 2.5       | PASS    |
|                          |         | VN            | 30               | 1.97           | 0.002384        | ± 2.5       | PASS    |
|                          |         | VN            | 40               | 2.32           | 0.002807        | ± 2.5       | PASS    |
|                          |         | VN            | 50               | 4.37           | 0.005287        | ± 2.5       | PASS    |
|                          | MCH     | VN            | -30              | 0.96           | 0.001148        | ± 2.5       | PASS    |
|                          |         | VN            | -20              | 4.4            | 0.005260        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | -10 | 2.6   | 0.003108  | ± 2.5 | PASS |
|       |     | VN | 0   | 2.87  | 0.003431  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.84  | 0.003395  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.83  | 0.002188  | ± 2.5 | PASS |
|       |     | VN | 30  | -1.3  | -0.001554 | ± 2.5 | PASS |
|       |     | VN | 40  | 0.12  | 0.000143  | ± 2.5 | PASS |
|       |     | VN | 50  | -1.67 | -0.001996 | ± 2.5 | PASS |
|       | HCH | VN | -30 | -1.84 | -0.002174 | ± 2.5 | PASS |
|       |     | VN | -20 | 1.78  | 0.002103  | ± 2.5 | PASS |
|       |     | VN | -10 | 3.63  | 0.004288  | ± 2.5 | PASS |
|       |     | VN | 0   | -0.53 | -0.000626 | ± 2.5 | PASS |
|       |     | VN | 10  | 4.02  | 0.004749  | ± 2.5 | PASS |
|       |     | VN | 20  | 2.12  | 0.002504  | ± 2.5 | PASS |
|       |     | VN | 30  | -1.53 | -0.001807 | ± 2.5 | PASS |
|       |     | VN | 40  | 4.66  | 0.005505  | ± 2.5 | PASS |
|       |     | VN | 50  | -0.9  | -0.001063 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.78  | 0.002128  | ± 2.5 | PASS |
|       |     | VN | -20 | 1.42  | 0.001698  | ± 2.5 | PASS |
|       |     | VN | -10 | 2.74  | 0.003276  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.21  | 0.005033  | ± 2.5 | PASS |
|       |     | VN | 10  | -0.24 | -0.000287 | ± 2.5 | PASS |
|       |     | VN | 20  | 0.73  | 0.000873  | ± 2.5 | PASS |
|       |     | VN | 30  | 3.21  | 0.003837  | ± 2.5 | PASS |
|       |     | VN | 40  | 1.11  | 0.001327  | ± 2.5 | PASS |
|       |     | VN | 50  | 0.98  | 0.001172  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 2.69  | 0.003178  | ± 2.5 | PASS |
|       |     | VN | -20 | 4.67  | 0.005517  | ± 2.5 | PASS |
|       |     | VN | -10 | 4.96  | 0.005859  | ± 2.5 | PASS |
|       |     | VN | 0   | 1.3   | 0.001536  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.72  | 0.003213  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.38  | 0.000449  | ± 2.5 | PASS |
|       |     | VN | 30  | 2.21  | 0.002611  | ± 2.5 | PASS |
|       |     | VN | 40  | 4.25  | 0.005021  | ± 2.5 | PASS |
|       |     | VN | 50  | 0.06  | 0.000071  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 4.88  | 0.005765  | ± 2.5 | PASS |
|       |     | VN | -20 | 1.92  | 0.002268  | ± 2.5 | PASS |
|       |     | VN | -10 | 0.59  | 0.000697  | ± 2.5 | PASS |
|       |     | VN | 0   | 3.25  | 0.003839  | ± 2.5 | PASS |
|       |     | VN | 10  | -0.99 | -0.001170 | ± 2.5 | PASS |
|       |     | VN | 20  | 1.9   | 0.002245  | ± 2.5 | PASS |
|       |     | VN | 30  | 4.64  | 0.005481  | ± 2.5 | PASS |

|  |  |    |    |       |           |       |      |
|--|--|----|----|-------|-----------|-------|------|
|  |  | VN | 40 | 4.96  | 0.005859  | ± 2.5 | PASS |
|  |  | VN | 50 | -1.36 | -0.001607 | ± 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               | 2.77           | 0.003341        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.58           | 0.000700        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.93           | 0.004741        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 4.69           | 0.005607        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 3.6            | 0.004304        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 4.85           | 0.005798        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 2.56           | 0.003033        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.64           | 0.000758        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.83           | 0.004538        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | -0.96          | -0.001158       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 1.31           | 0.001580        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -0.48          | -0.000579       | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 4.7            | 0.005619        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -1.14          | -0.001363       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -0.6           | -0.000717       | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 0.82           | 0.000972        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | -0.5           | -0.000592       | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 1.71           | 0.002026        | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 16QAM                     | LCH     | VN            | -30              | -0.03          | -0.000036       | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 4.58           | 0.005525        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | -1.21          | -0.001460       | ± 2.5       | PASS    |
|                           |         | VN            | 0                | 4.57           | 0.005513        | ± 2.5       | PASS    |
|                           |         | VN            | 10               | 1.66           | 0.002002        | ± 2.5       | PASS    |
|                           |         | VN            | 20               | -0.04          | -0.000048       | ± 2.5       | PASS    |
|                           |         | VN            | 30               | 0.08           | 0.000097        | ± 2.5       | PASS    |
|                           |         | VN            | 40               | -0.17          | -0.000205       | ± 2.5       | PASS    |
|                           |         | VN            | 50               | 3.55           | 0.004282        | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | 2.8            | 0.003347        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 3.09           | 0.003694        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | -1.77          | -0.002116       | ± 2.5       | PASS    |

|      |     |    |     |       |           |       |      |
|------|-----|----|-----|-------|-----------|-------|------|
|      |     | VN | 0   | 2.15  | 0.002570  | ± 2.5 | PASS |
|      |     | VN | 10  | -1.57 | -0.001877 | ± 2.5 | PASS |
|      |     | VN | 20  | -1.47 | -0.001757 | ± 2.5 | PASS |
|      |     | VN | 30  | 3.34  | 0.003993  | ± 2.5 | PASS |
|      |     | VN | 40  | 0.98  | 0.001172  | ± 2.5 | PASS |
|      |     | VN | 50  | -1.89 | -0.002259 | ± 2.5 | PASS |
|      | HCH | VN | -30 | -0.31 | -0.000367 | ± 2.5 | PASS |
|      |     | VN | -20 | -1.83 | -0.002168 | ± 2.5 | PASS |
|      |     | VN | -10 | 4.94  | 0.005853  | ± 2.5 | PASS |
|      |     | VN | 0   | -1.35 | -0.001600 | ± 2.5 | PASS |
|      |     | VN | 10  | -1.31 | -0.001552 | ± 2.5 | PASS |
|      |     | VN | 20  | 0.62  | 0.000735  | ± 2.5 | PASS |
|      |     | VN | 30  | 1.4   | 0.001659  | ± 2.5 | PASS |
|      |     | VN | 40  | 0.82  | 0.000972  | ± 2.5 | PASS |
|      |     | VN | 50  | 1.68  | 0.001991  | ± 2.5 | PASS |
| QPSK | LCH | VN | -30 | 2.5   | 0.002989  | ± 2.5 | PASS |
|      |     | VN | -20 | 4.16  | 0.004973  | ± 2.5 | PASS |
|      |     | VN | -10 | 3.21  | 0.003837  | ± 2.5 | PASS |
|      |     | VN | 0   | -1.73 | -0.002068 | ± 2.5 | PASS |
|      |     | VN | 10  | 3.93  | 0.004698  | ± 2.5 | PASS |
|      |     | VN | 20  | 4.39  | 0.005248  | ± 2.5 | PASS |
|      |     | VN | 30  | 1.25  | 0.001494  | ± 2.5 | PASS |
|      |     | VN | 40  | 1.02  | 0.001219  | ± 2.5 | PASS |
|      |     | VN | 50  | 4.75  | 0.005678  | ± 2.5 | PASS |
|      | MCH | VN | -30 | 0.14  | 0.000166  | ± 2.5 | PASS |
|      |     | VN | -20 | 0.8   | 0.000948  | ± 2.5 | PASS |
|      |     | VN | -10 | 4.94  | 0.005853  | ± 2.5 | PASS |
|      |     | VN | 0   | -0.24 | -0.000284 | ± 2.5 | PASS |
|      |     | VN | 10  | 1.59  | 0.001884  | ± 2.5 | PASS |
|      |     | VN | 20  | 0.44  | 0.000521  | ± 2.5 | PASS |
|      |     | VN | 30  | -1.66 | -0.001967 | ± 2.5 | PASS |
|      |     | VN | 40  | 3.29  | 0.003898  | ± 2.5 | PASS |
|      |     | VN | 50  | 3.88  | 0.004597  | ± 2.5 | PASS |
|      | HCH | VN | -30 | 3.14  | 0.003720  | ± 2.5 | PASS |
|      |     | VN | -20 | 4.89  | 0.005794  | ± 2.5 | PASS |
|      |     | VN | -10 | -1.38 | -0.001635 | ± 2.5 | PASS |
|      |     | VN | 0   | 4.01  | 0.004751  | ± 2.5 | PASS |
|      |     | VN | 10  | 0.3   | 0.000355  | ± 2.5 | PASS |
|      |     | VN | 20  | 1.68  | 0.001991  | ± 2.5 | PASS |
|      |     | VN | 30  | 0.42  | 0.000498  | ± 2.5 | PASS |
|      |     | VN | 40  | -1.8  | -0.002133 | ± 2.5 | PASS |

|  |  |    |    |      |          |       |      |
|--|--|----|----|------|----------|-------|------|
|  |  | VN | 50 | 3.43 | 0.004064 | ± 2.5 | PASS |
|--|--|----|----|------|----------|-------|------|