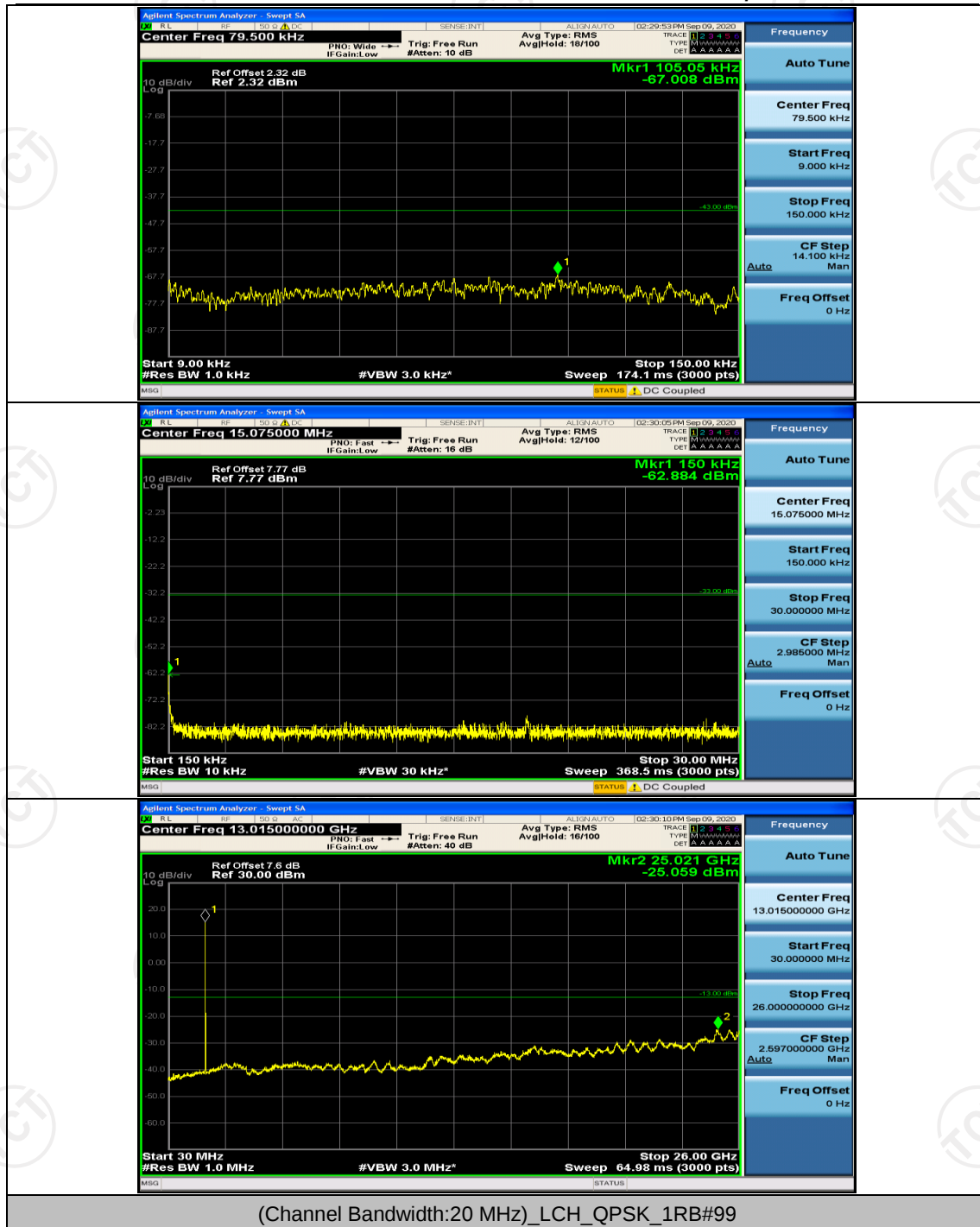
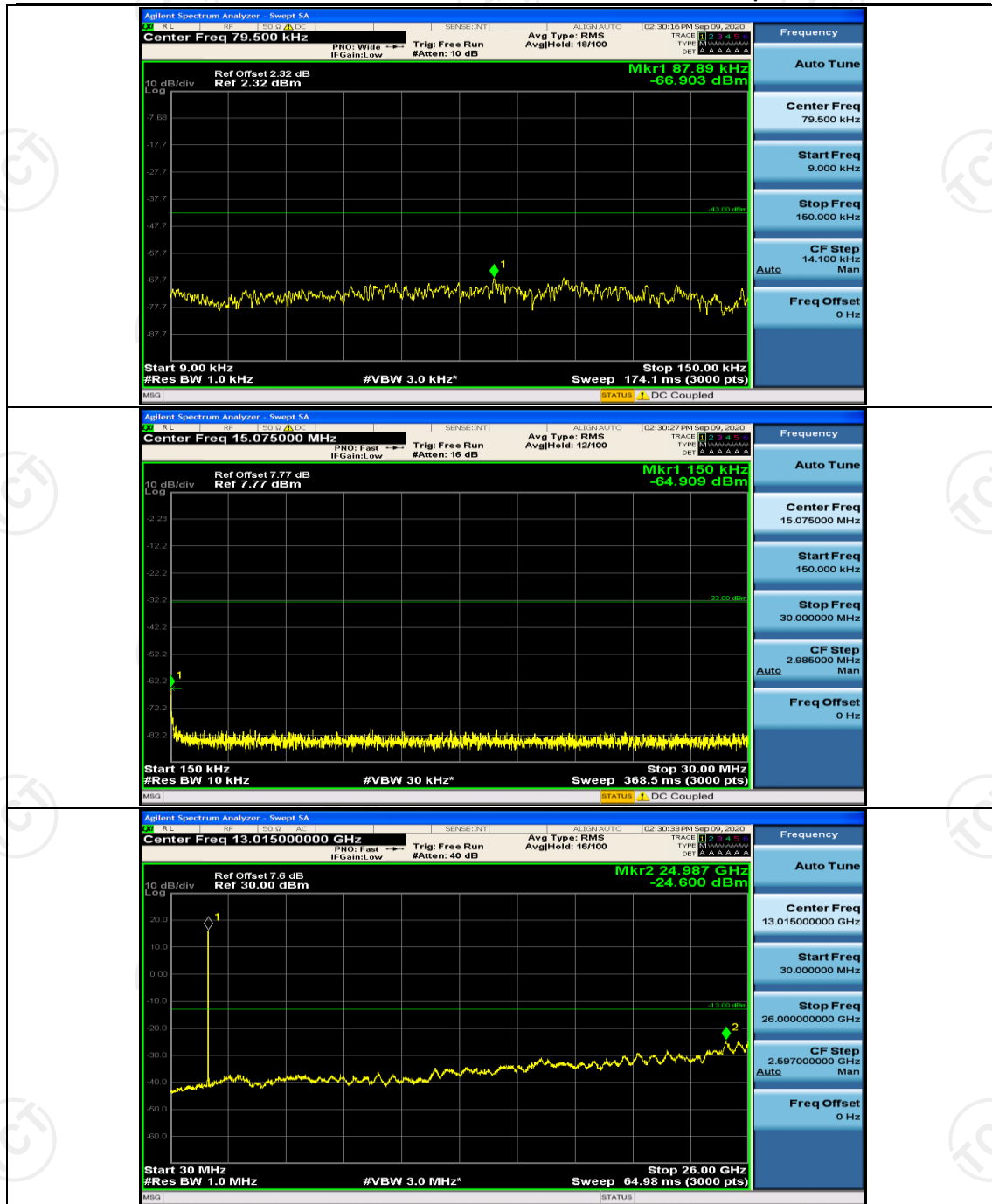
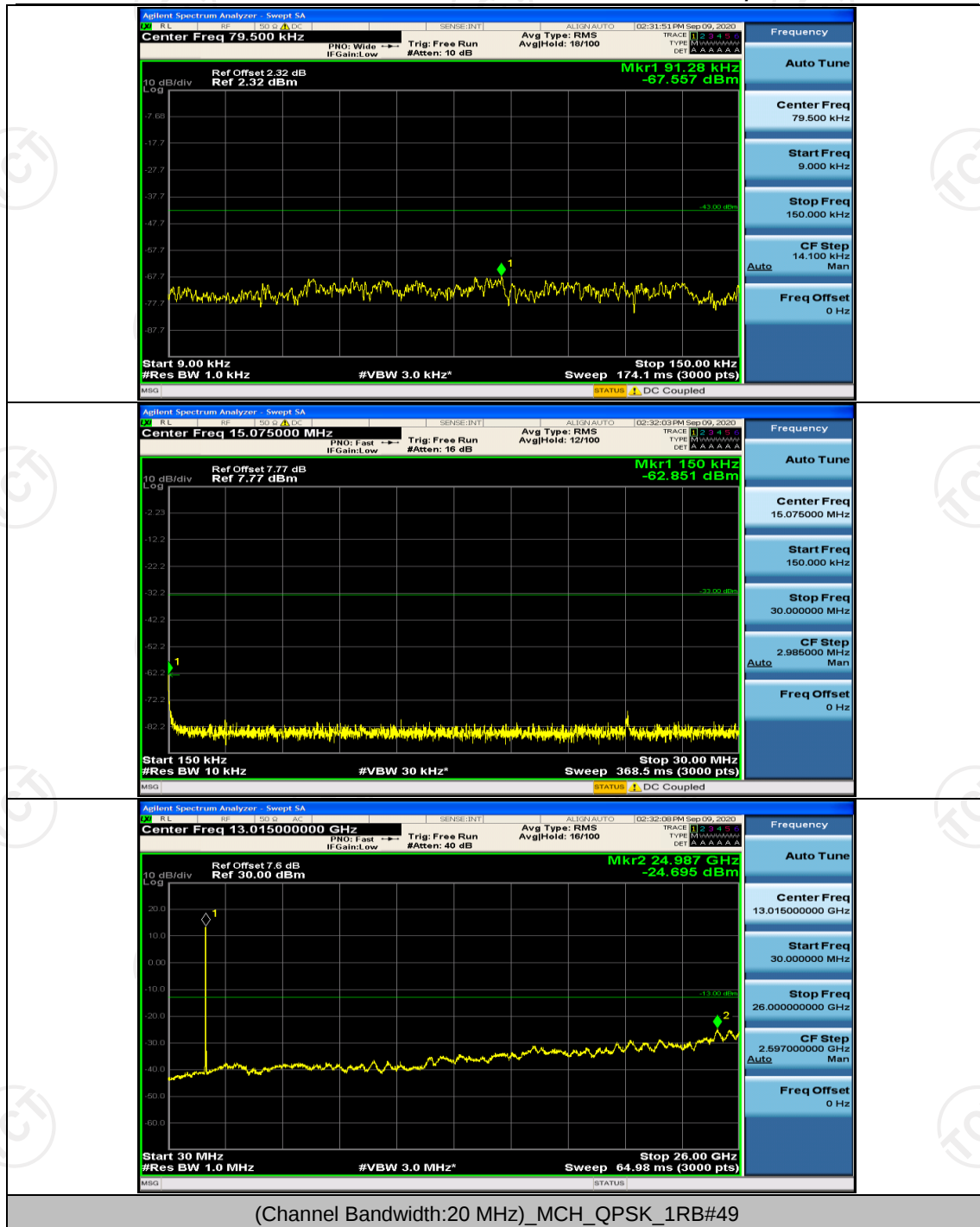
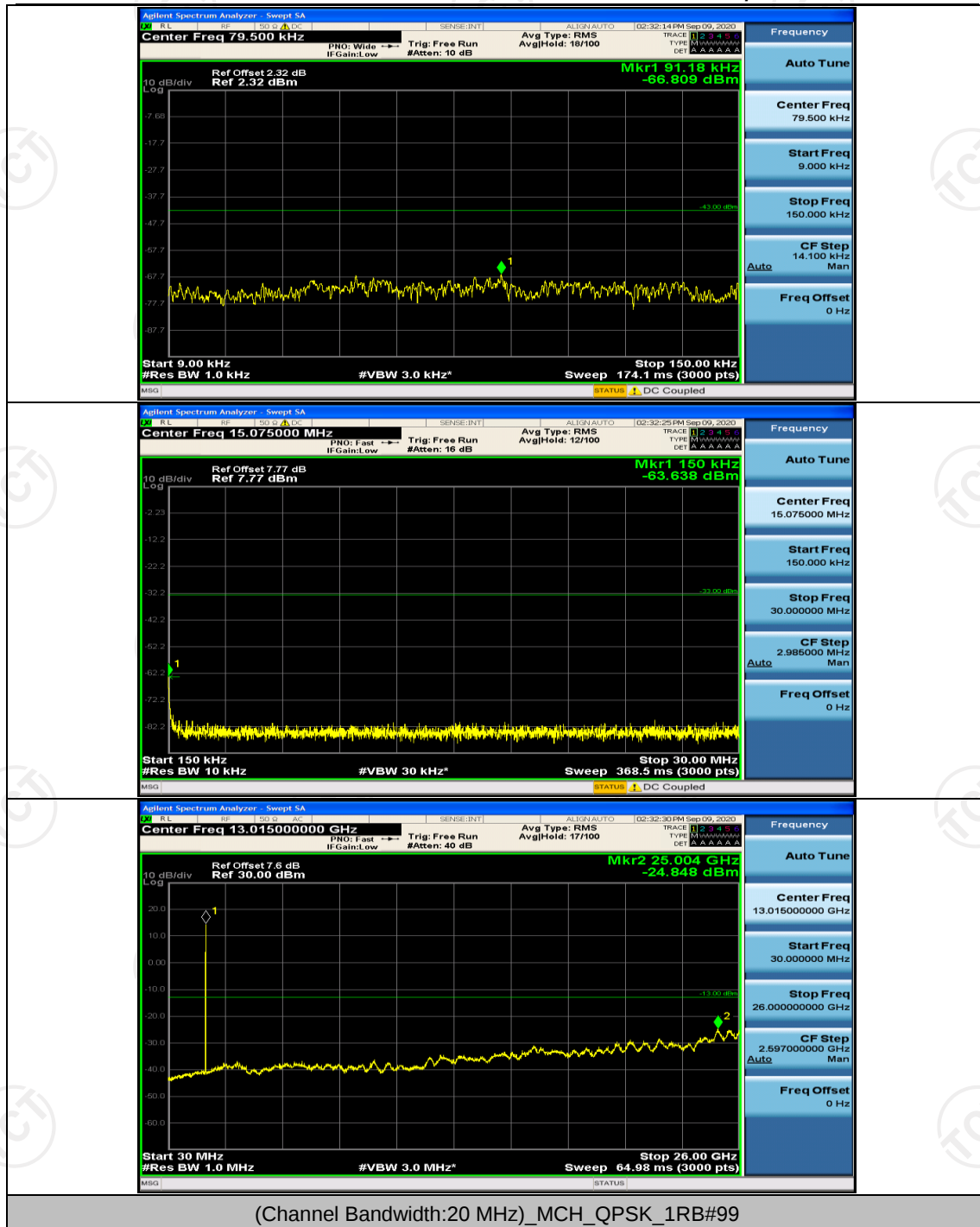


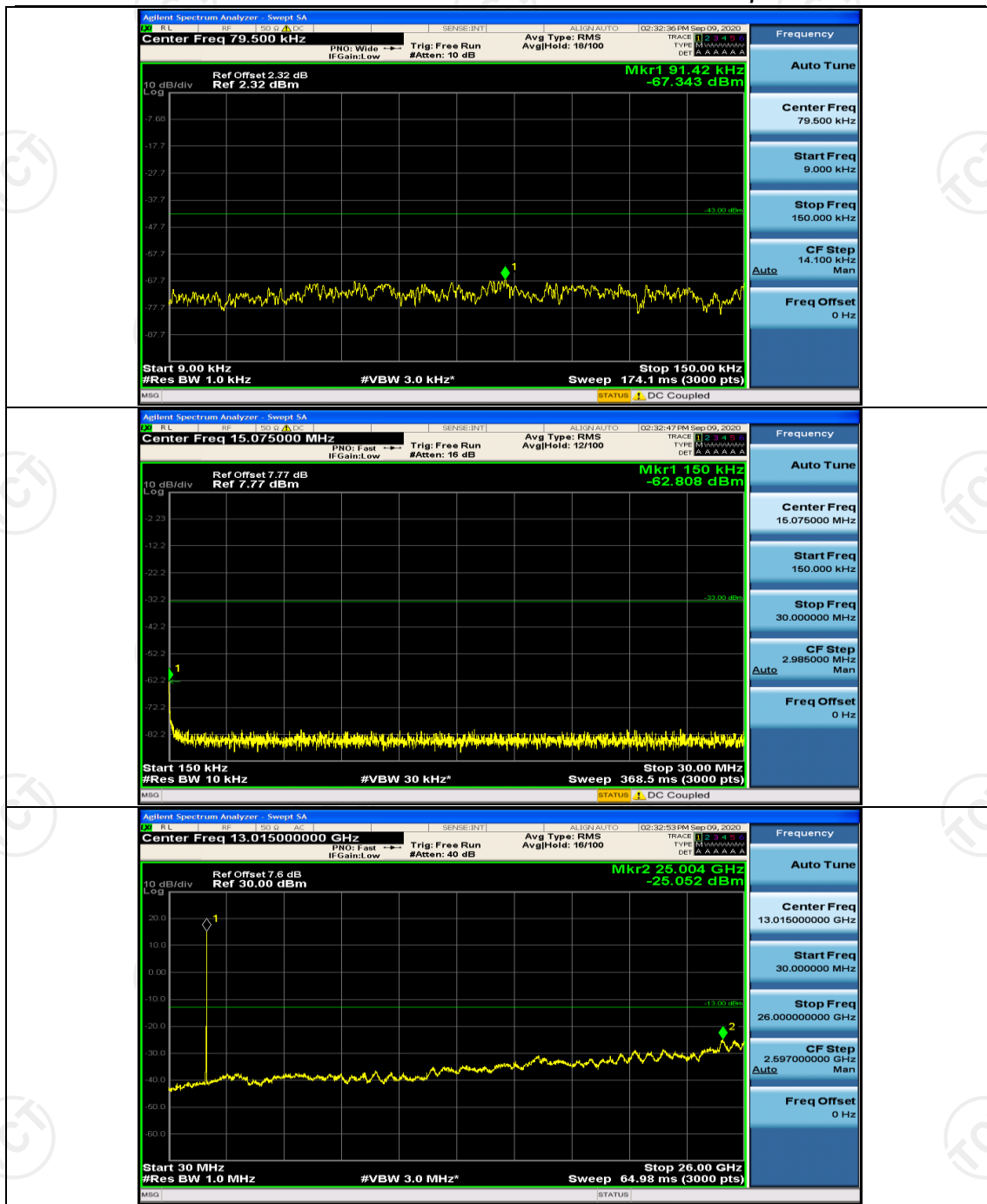




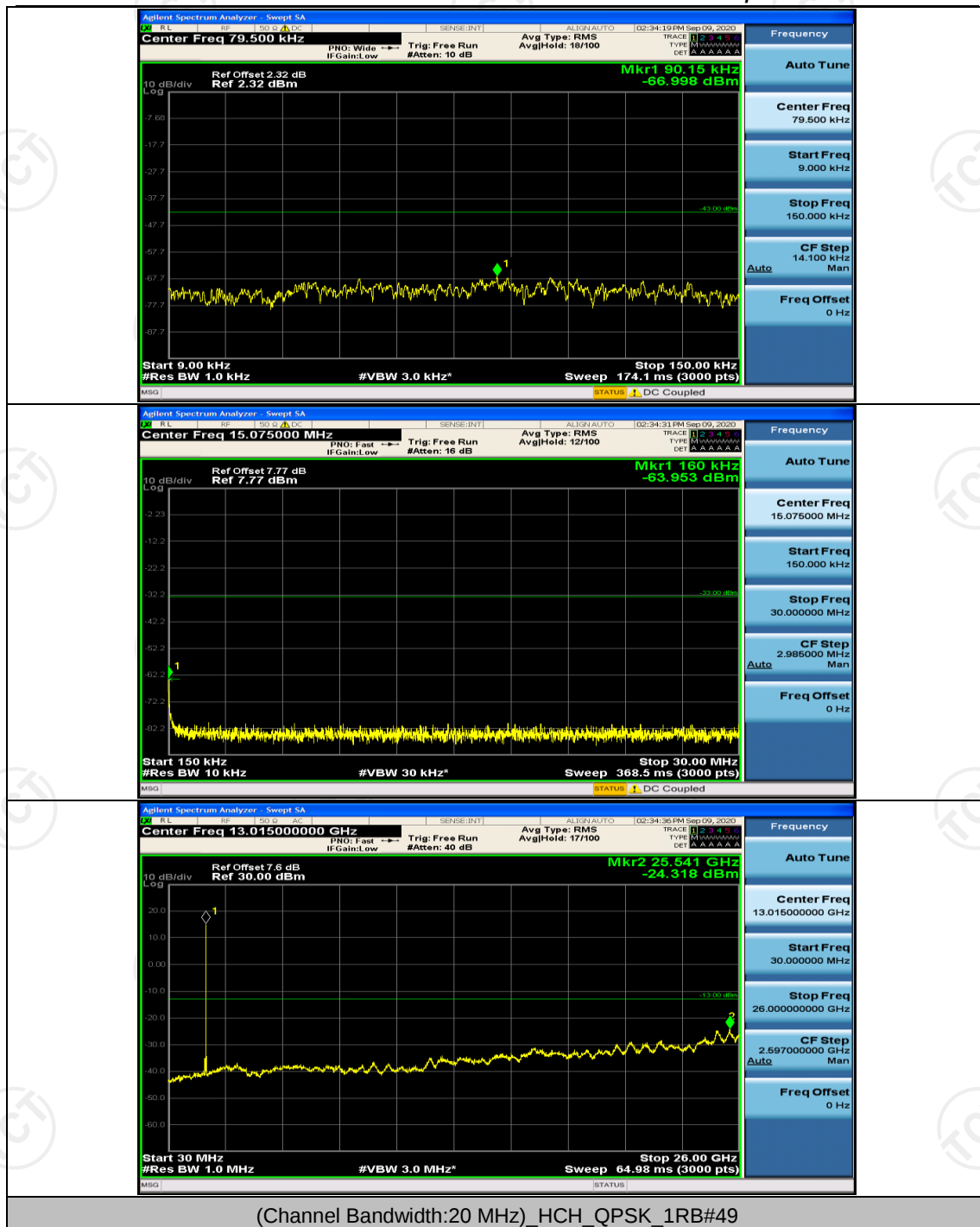
(Channel Bandwidth:20 MHz)\_MCH\_QPSK\_1RB#0

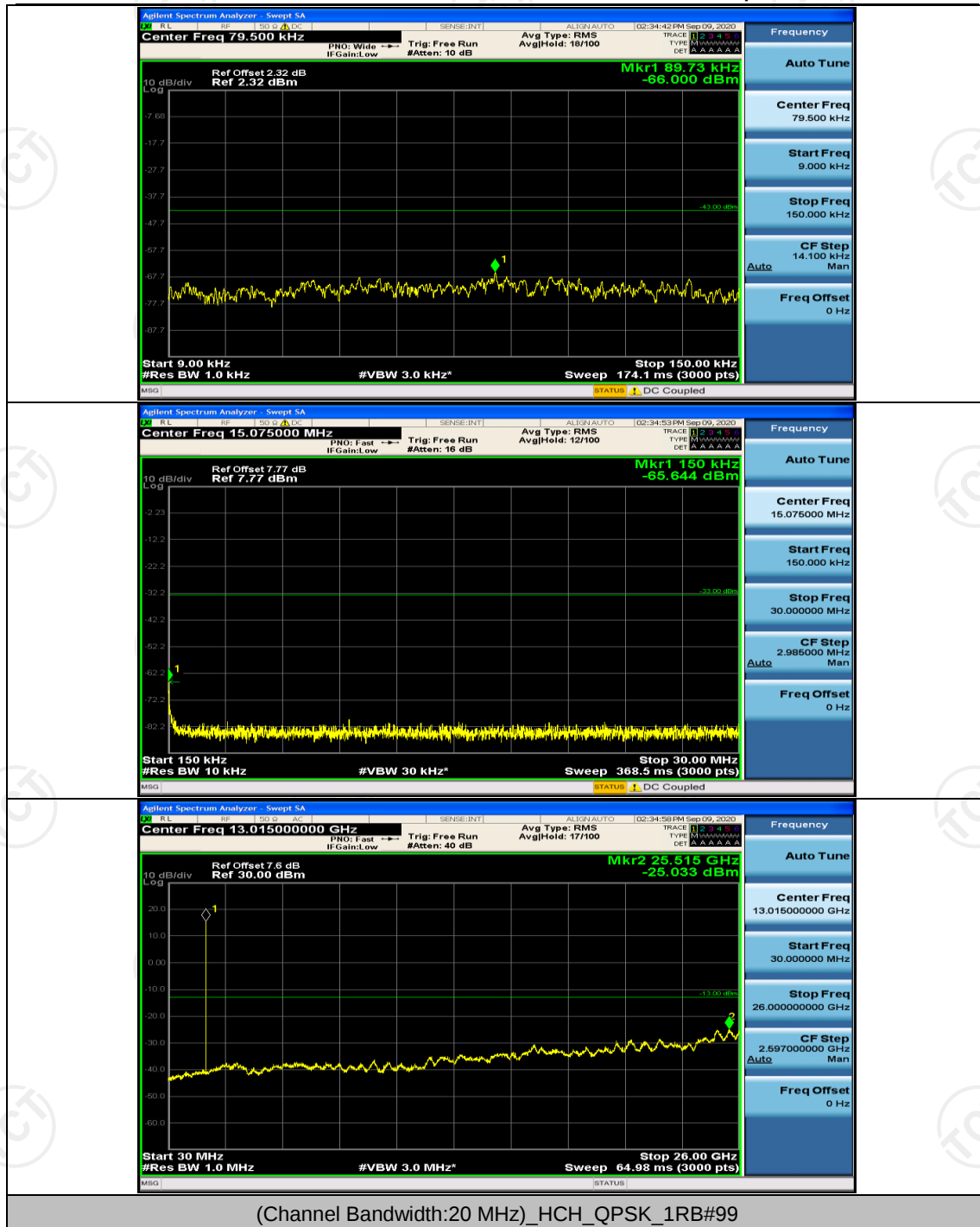


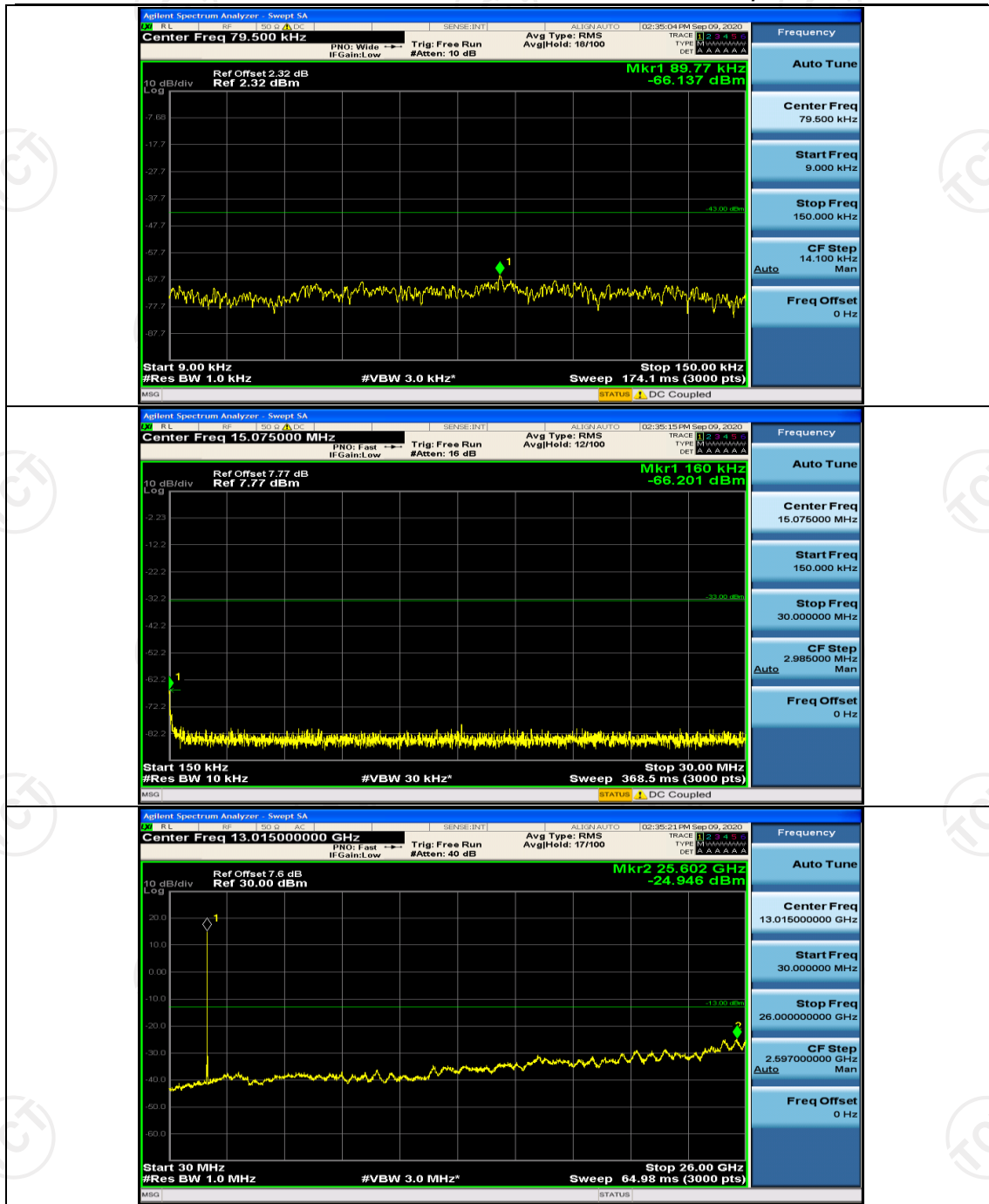




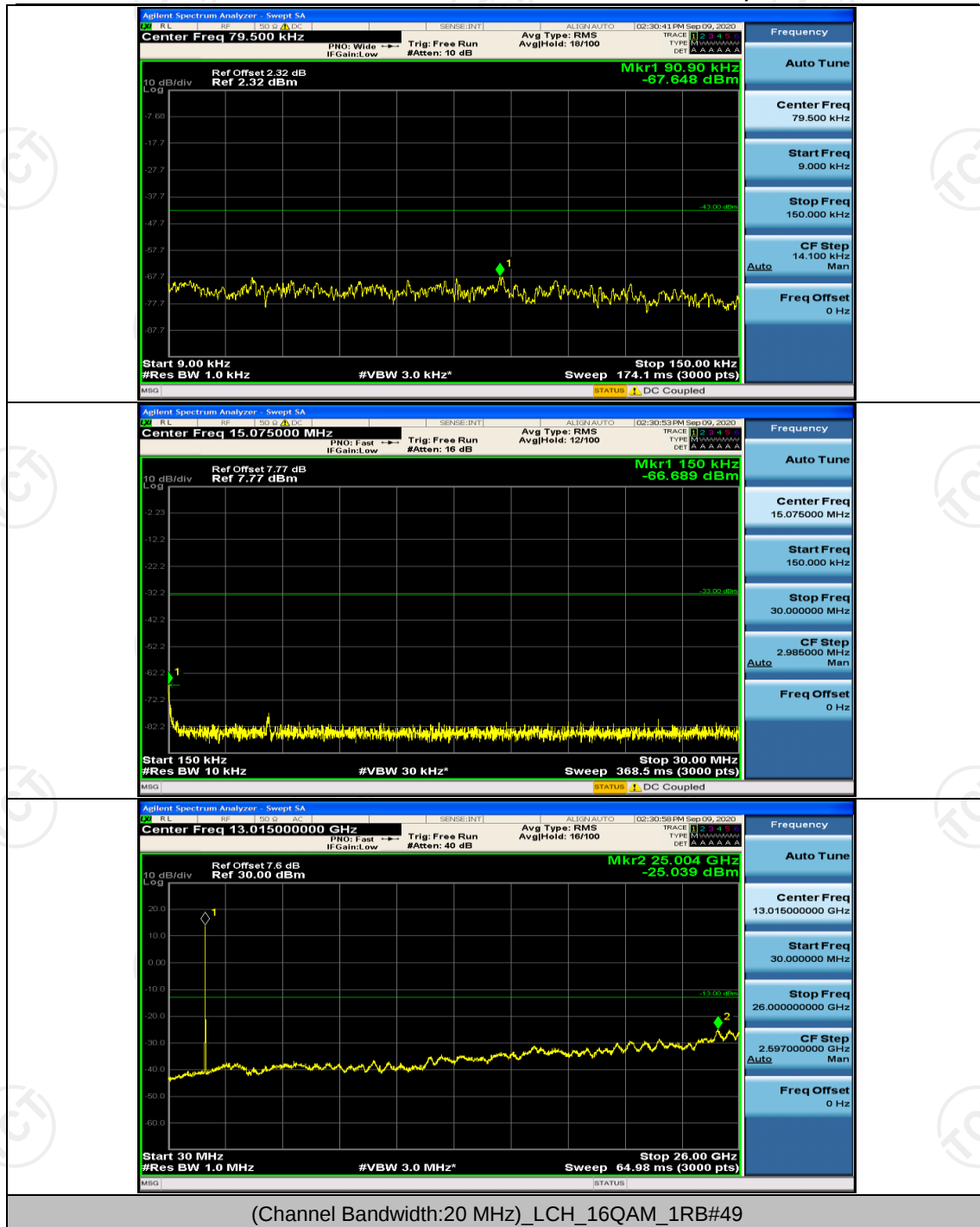
(Channel Bandwidth:20 MHz)\_HCH\_QPSK\_1RB#0

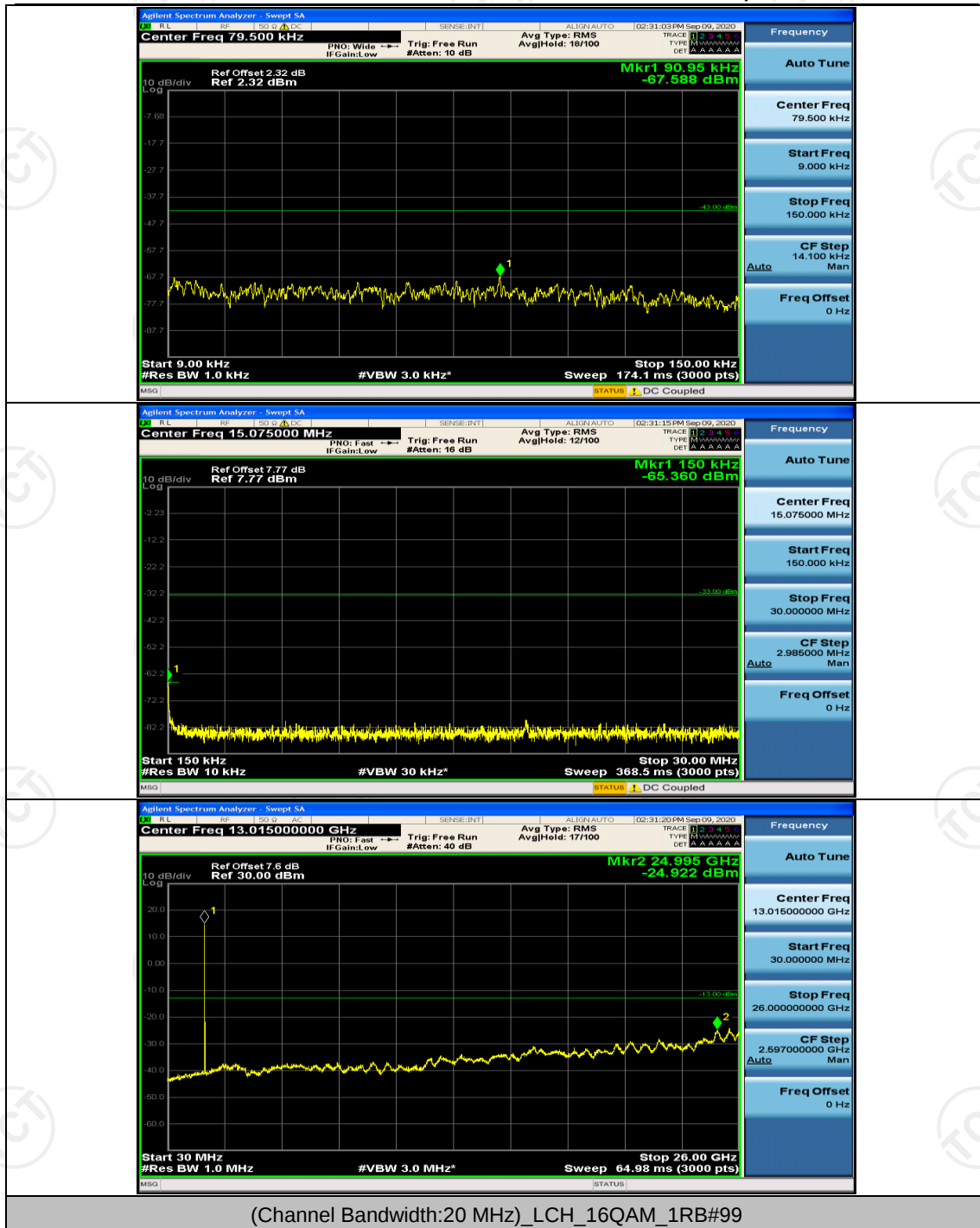


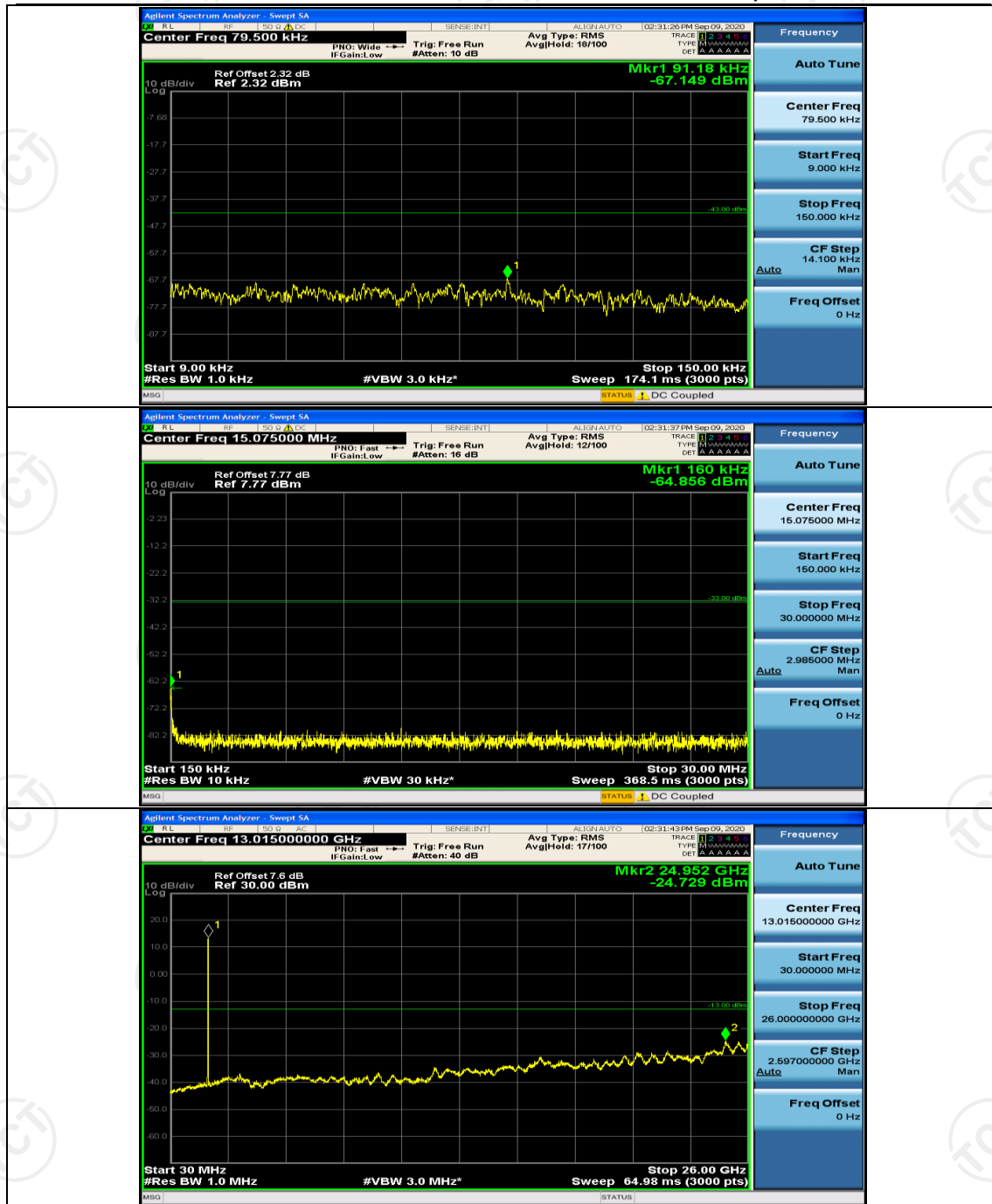




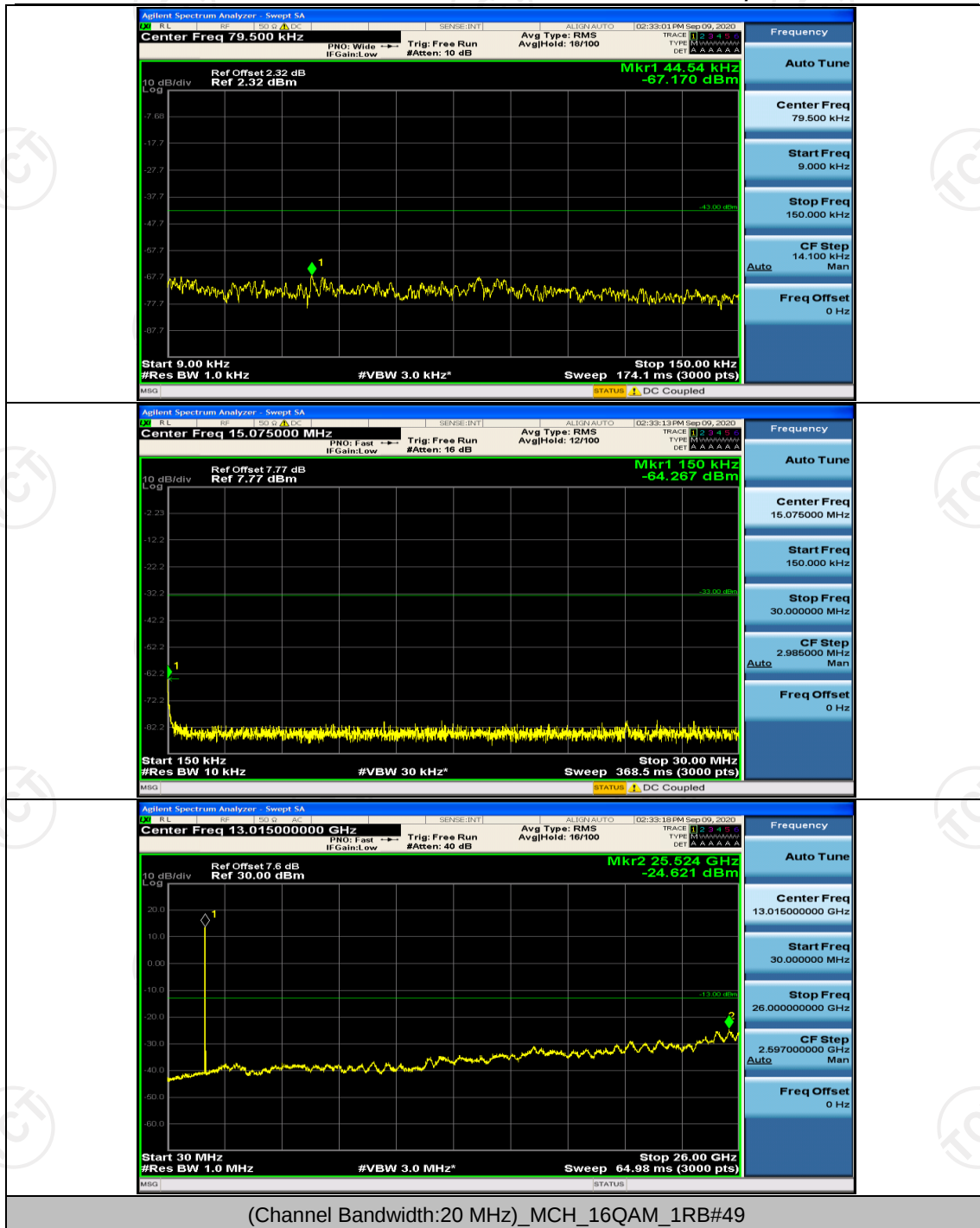
(Channel Bandwidth:20 MHz)\_LCH\_16QAM\_1RB#0

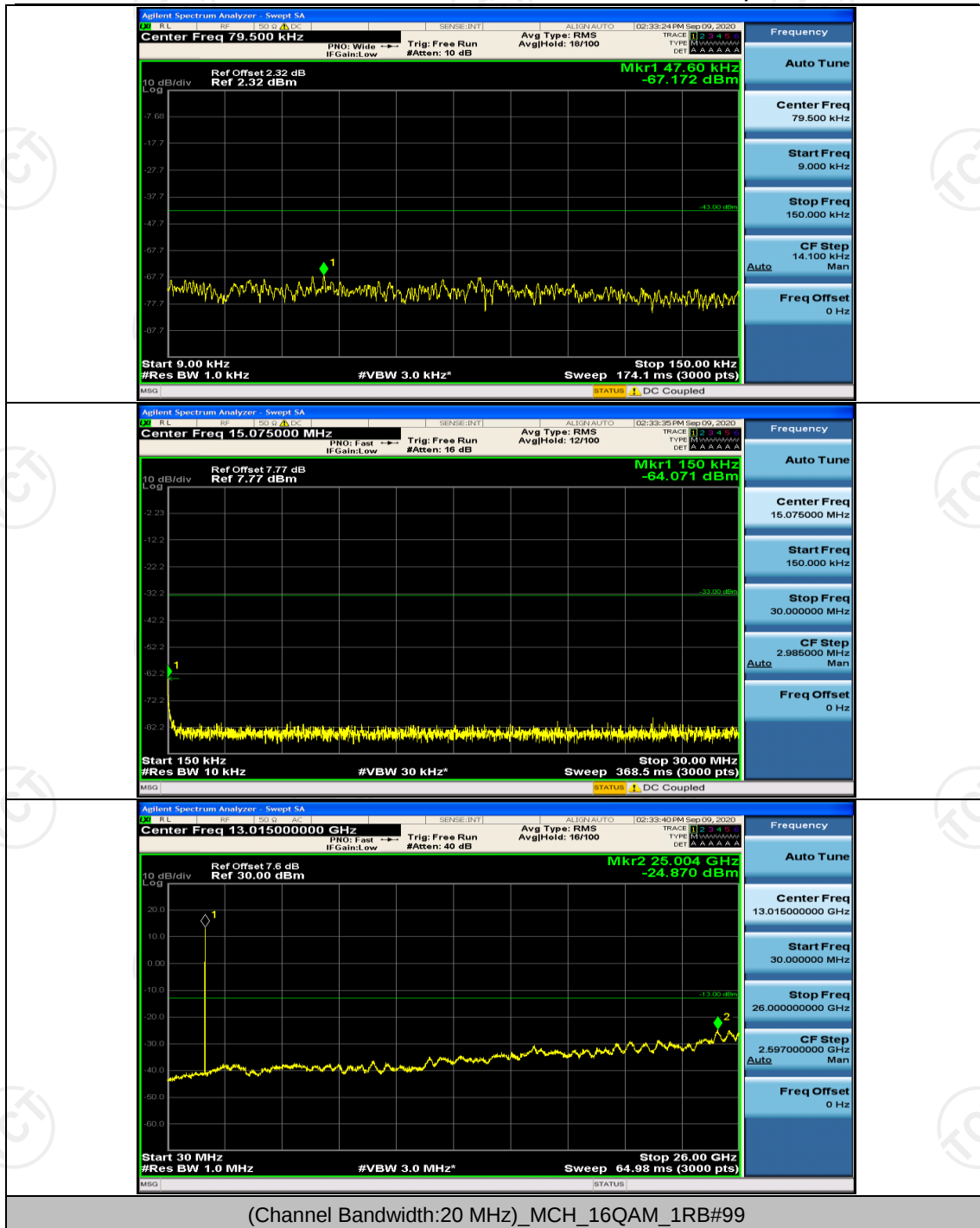


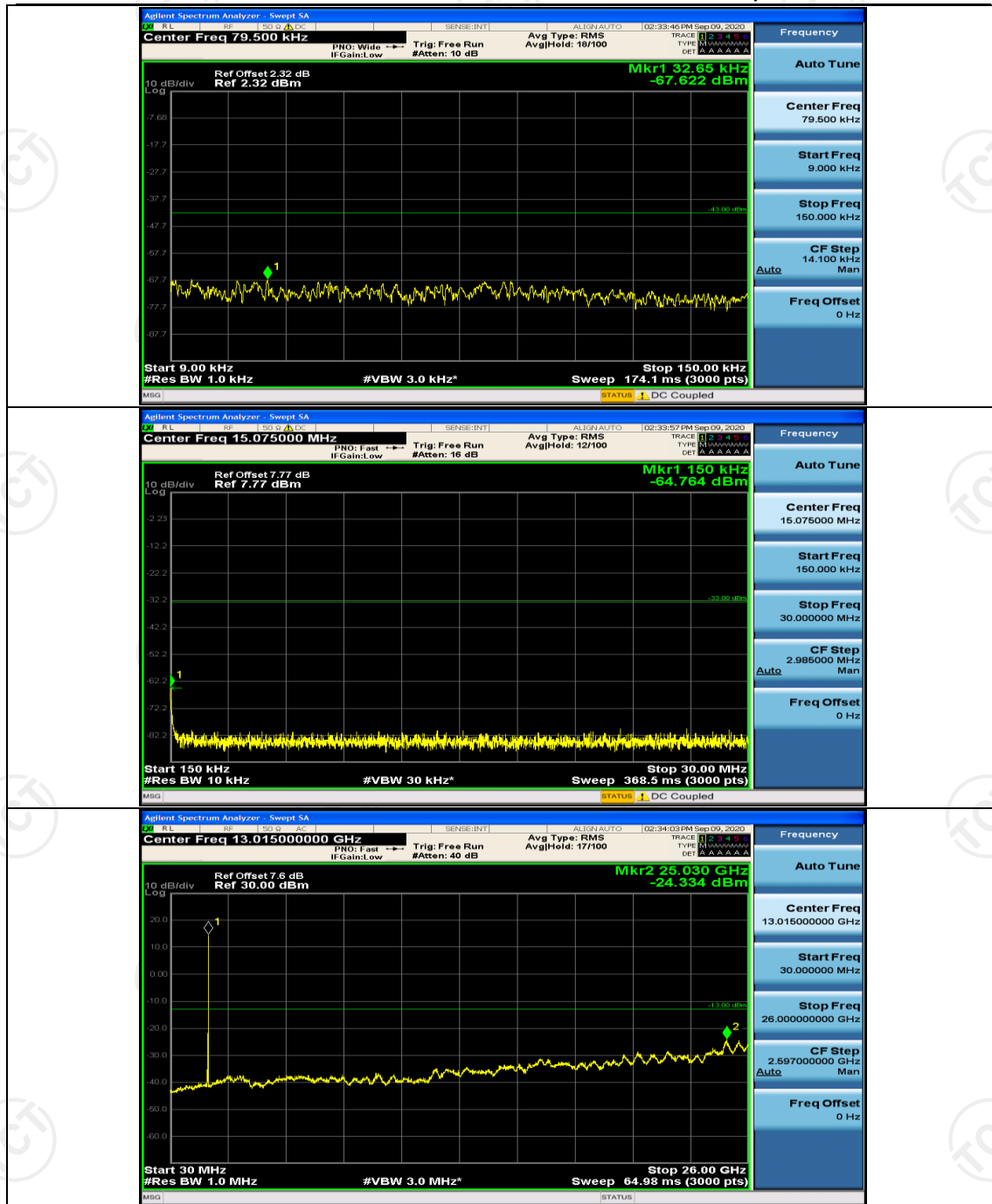




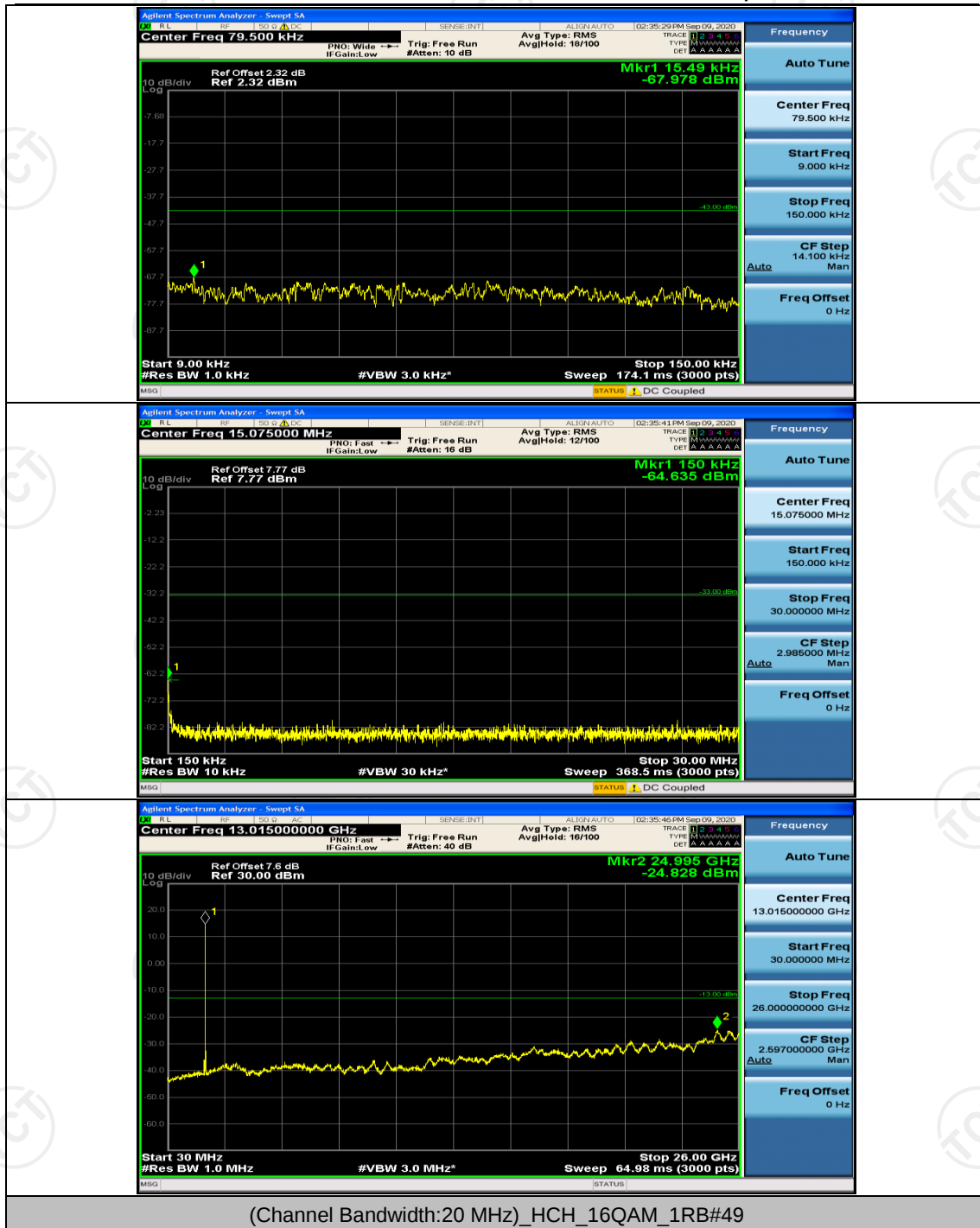
(Channel Bandwidth:20 MHz)\_MCH\_16QAM\_1RB#0

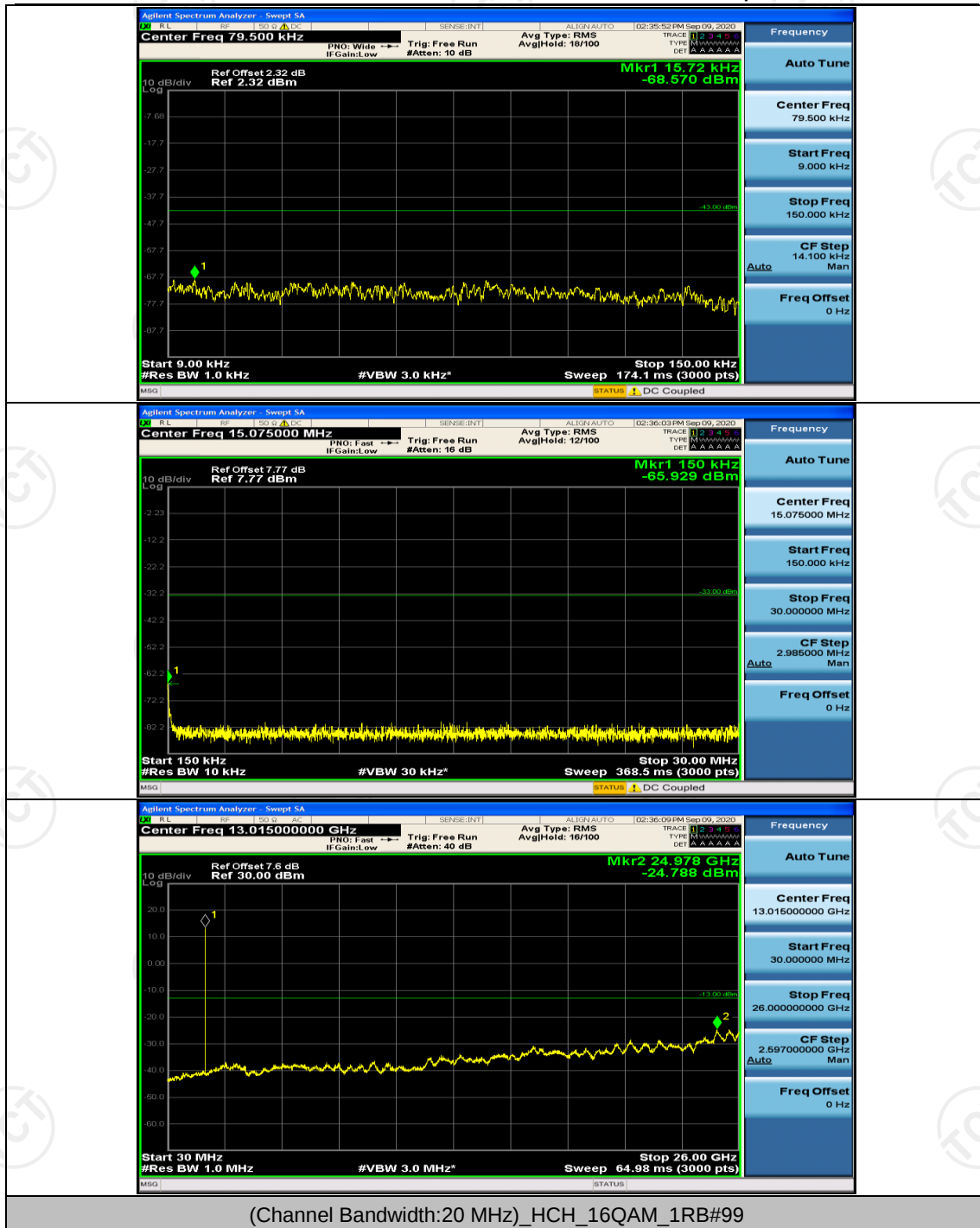


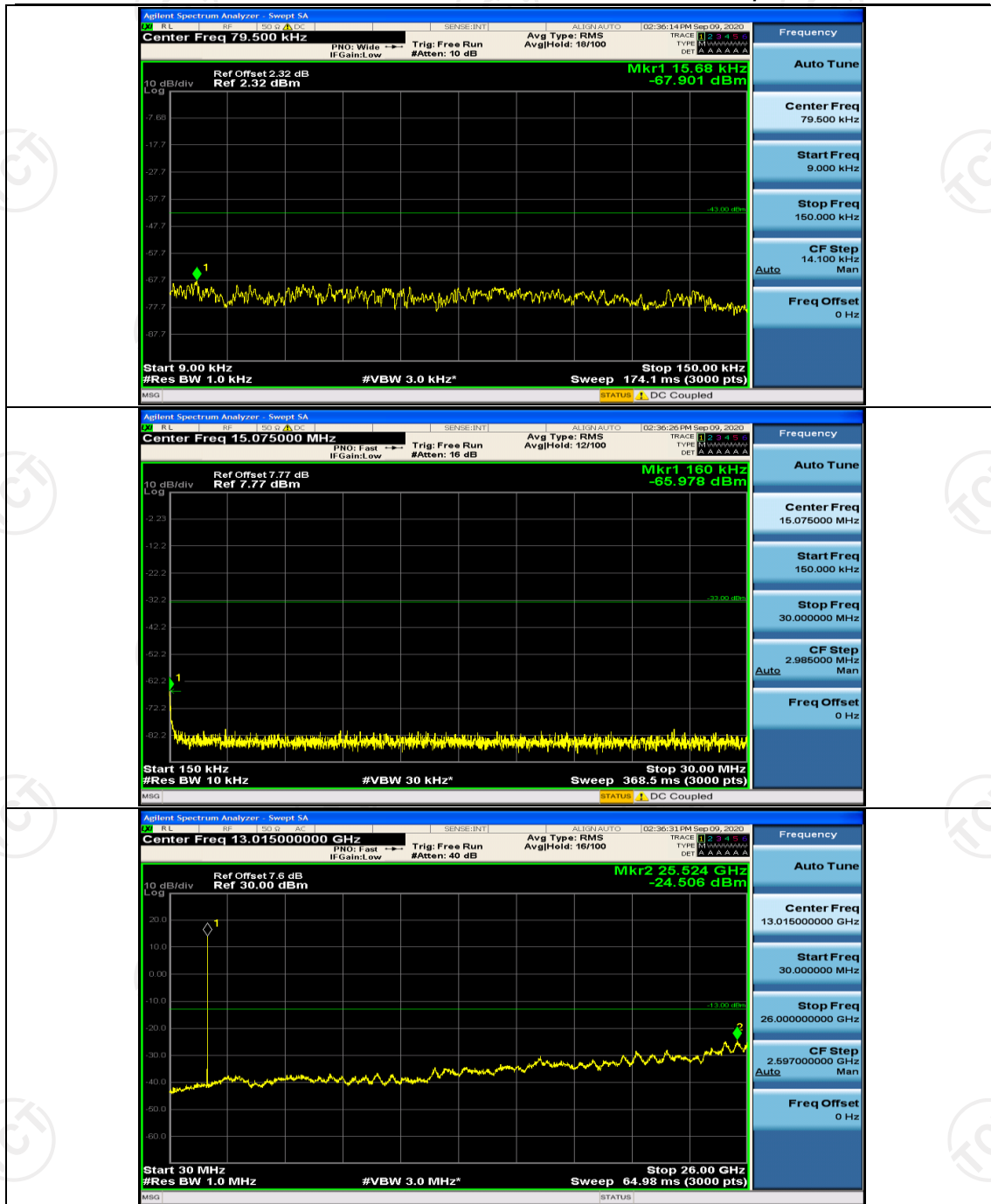




(Channel Bandwidth:20 MHz)\_HCH\_16QAM\_1RB#0







## 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               | 19.01          | 0.010006        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 50.11          | 0.026374        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 30.24          | 0.015916        | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | 9.67           | 0.005090        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 12.62          | 0.007283        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 40.83          | 0.021716        | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | -6.45          | -0.003432       | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 3.43           | 0.001826        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 20.37          | 0.010835        | ± 2.5       | PASS    |
| 16QAM                      | LCH     | VL            | TN               | 25.91          | 0.014767        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 13.88          | 0.008111        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 37.94          | 0.020396        | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | 21.01          | 0.011298        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 38.15          | 0.020512        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 13.22          | 0.007106        | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | 34.65          | 0.018235        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 30.28          | 0.017263        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 24.19          | 0.013962        | ± 2.5       | PASS    |
| Temperature                |         |               |                  |                |                 |             |         |
| Modulation                 | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                       | LCH     | VN            | -30              | 34.49          | 0.018152        | ± 2.5       | PASS    |
|                            |         | VN            | -20              | 17.70          | 0.009313        | ± 2.5       | PASS    |
|                            |         | VN            | -10              | 19.91          | 0.010480        | ± 2.5       | PASS    |
|                            |         | VN            | 0                | -15.54         | -0.008263       | ± 2.5       | PASS    |
|                            |         | VN            | 10               | 2.59           | 0.001377        | ± 2.5       | PASS    |
|                            |         | VN            | 20               | -38.77         | -0.022661       | ± 2.5       | PASS    |
|                            |         | VN            | 30               | -3.00          | -0.001756       | ± 2.5       | PASS    |
|                            |         | VN            | 40               | -13.78         | -0.008053       | ± 2.5       | PASS    |
|                            |         | VN            | 50               | -26.24         | -0.015336       | ± 2.5       | PASS    |
|                            | MCH     | VN            | -30              | -24.70         | -0.013141       | ± 2.5       | PASS    |
|                            |         | VN            | -20              | -16.77         | -0.008918       | ± 2.5       | PASS    |
|                            |         | VN            | -10              | 1.56           | 0.000838        | ± 2.5       | PASS    |
|                            |         | VN            | 0                | 0.03           | 0.000015        | ± 2.5       | PASS    |
|                            |         | VN            | 10               | 2.65           | 0.001423        | ± 2.5       | PASS    |
|                            |         | VN            | 20               | -22.00         | -0.012699       | ± 2.5       | PASS    |

|       |     |    |     |        |           |       |      |
|-------|-----|----|-----|--------|-----------|-------|------|
|       |     | VN | 30  | -17.55 | -0.010131 | ± 2.5 | PASS |
|       |     | VN | 40  | 1.06   | 0.000611  | ± 2.5 | PASS |
|       |     | VN | 50  | -20.51 | -0.011840 | ± 2.5 | PASS |
|       | HCH | VN | -30 | -4.52  | -0.002404 | ± 2.5 | PASS |
|       |     | VN | -20 | 28.91  | 0.015378  | ± 2.5 | PASS |
|       |     | VN | -10 | 14.98  | 0.007967  | ± 2.5 | PASS |
|       |     | VN | 0   | 19.84  | 0.010554  | ± 2.5 | PASS |
|       |     | VN | 10  | 26.81  | 0.014091  | ± 2.5 | PASS |
|       |     | VN | 20  | 29.07  | 0.016570  | ± 2.5 | PASS |
|       |     | VN | 30  | 31.41  | 0.017907  | ± 2.5 | PASS |
|       |     | VN | 40  | 0.93   | 0.000530  | ± 2.5 | PASS |
|       |     | VN | 50  | 5.69   | 0.003245  | ± 2.5 | PASS |
|       |     | VN | -30 | 15.19  | 0.008179  | ± 2.5 | PASS |
|       |     | VN | -20 | 0.00   | 0.000000  | ± 2.5 | PASS |
| 16QAM | LCH | VN | -10 | 15.65  | 0.008425  | ± 2.5 | PASS |
|       |     | VN | 0   | 35.72  | 0.019230  | ± 2.5 | PASS |
|       |     | VN | 10  | 34.32  | 0.018475  | ± 2.5 | PASS |
|       |     | VN | 20  | 27.84  | 0.016273  | ± 2.5 | PASS |
|       |     | VN | 30  | 40.21  | 0.023506  | ± 2.5 | PASS |
|       |     | VN | 40  | 15.48  | 0.009048  | ± 2.5 | PASS |
|       |     | VN | 50  | 24.49  | 0.014316  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 23.52  | 0.012361  | ± 2.5 | PASS |
|       |     | VN | -20 | 29.53  | 0.015519  | ± 2.5 | PASS |
|       |     | VN | -10 | 43.67  | 0.022956  | ± 2.5 | PASS |
|       |     | VN | 0   | 2.07   | 0.001090  | ± 2.5 | PASS |
|       |     | VN | 10  | -8.50  | -0.004575 | ± 2.5 | PASS |
|       |     | VN | 20  | -20.11 | -0.011609 | ± 2.5 | PASS |
|       |     | VN | 30  | -9.57  | -0.005524 | ± 2.5 | PASS |
|       |     | VN | 40  | -7.82  | -0.004517 | ± 2.5 | PASS |
|       |     | VN | 50  | -4.96  | -0.002865 | ± 2.5 | PASS |
|       | HCH | VN | -30 | -9.91  | -0.005273 | ± 2.5 | PASS |
|       |     | VN | -20 | -26.12 | -0.013894 | ± 2.5 | PASS |
|       |     | VN | -10 | -35.66 | -0.018969 | ± 2.5 | PASS |
|       |     | VN | 0   | -23.99 | -0.012760 | ± 2.5 | PASS |
|       |     | VN | 10  | -2.63  | -0.001417 | ± 2.5 | PASS |
|       |     | VN | 20  | 26.66  | 0.015200  | ± 2.5 | PASS |
|       |     | VN | 30  | 21.73  | 0.012386  | ± 2.5 | PASS |
|       |     | VN | 40  | -10.93 | -0.006230 | ± 2.5 | PASS |
|       |     | VN | 50  | 18.38  | 0.010478  | ± 2.5 | PASS |