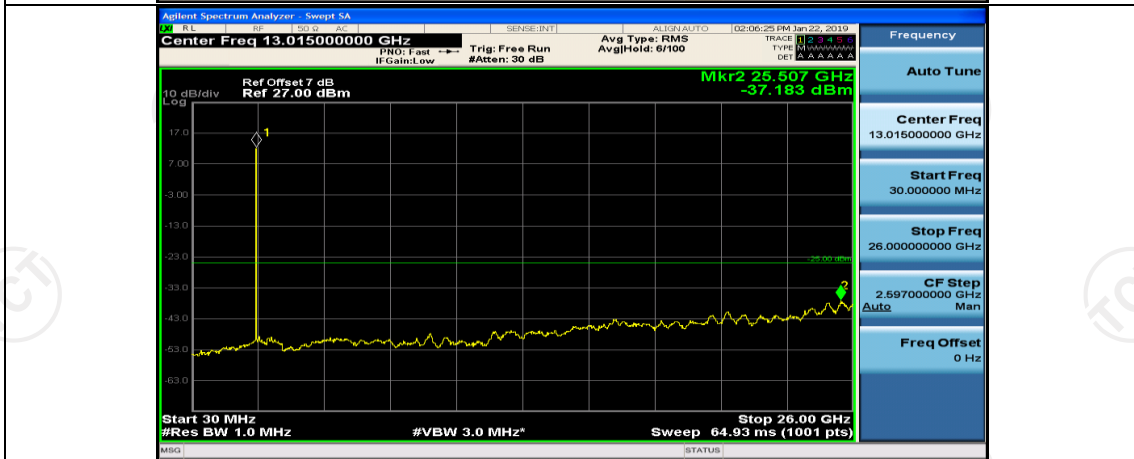
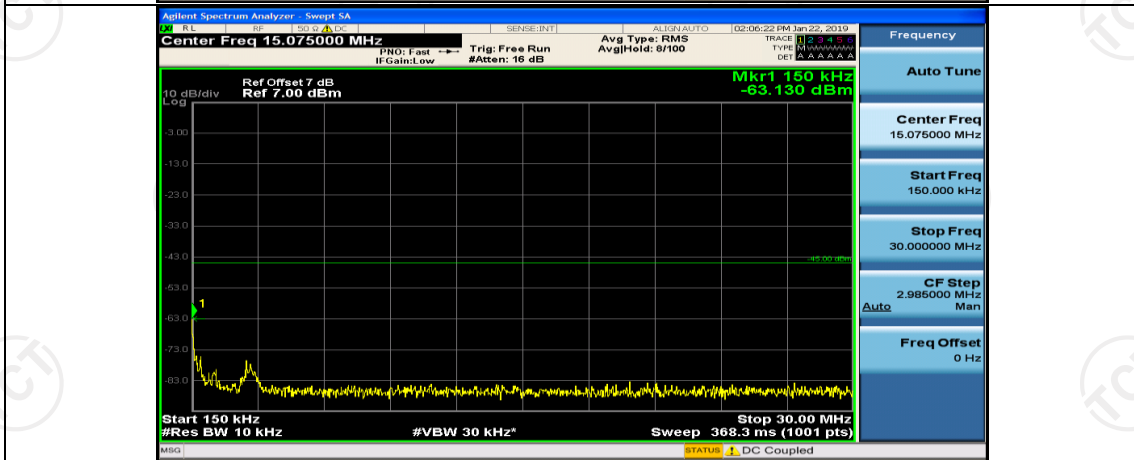
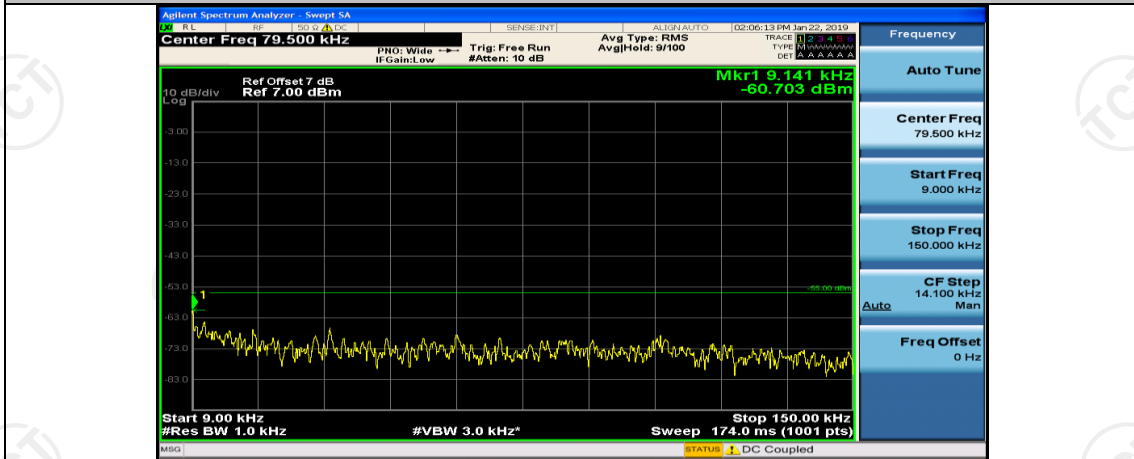
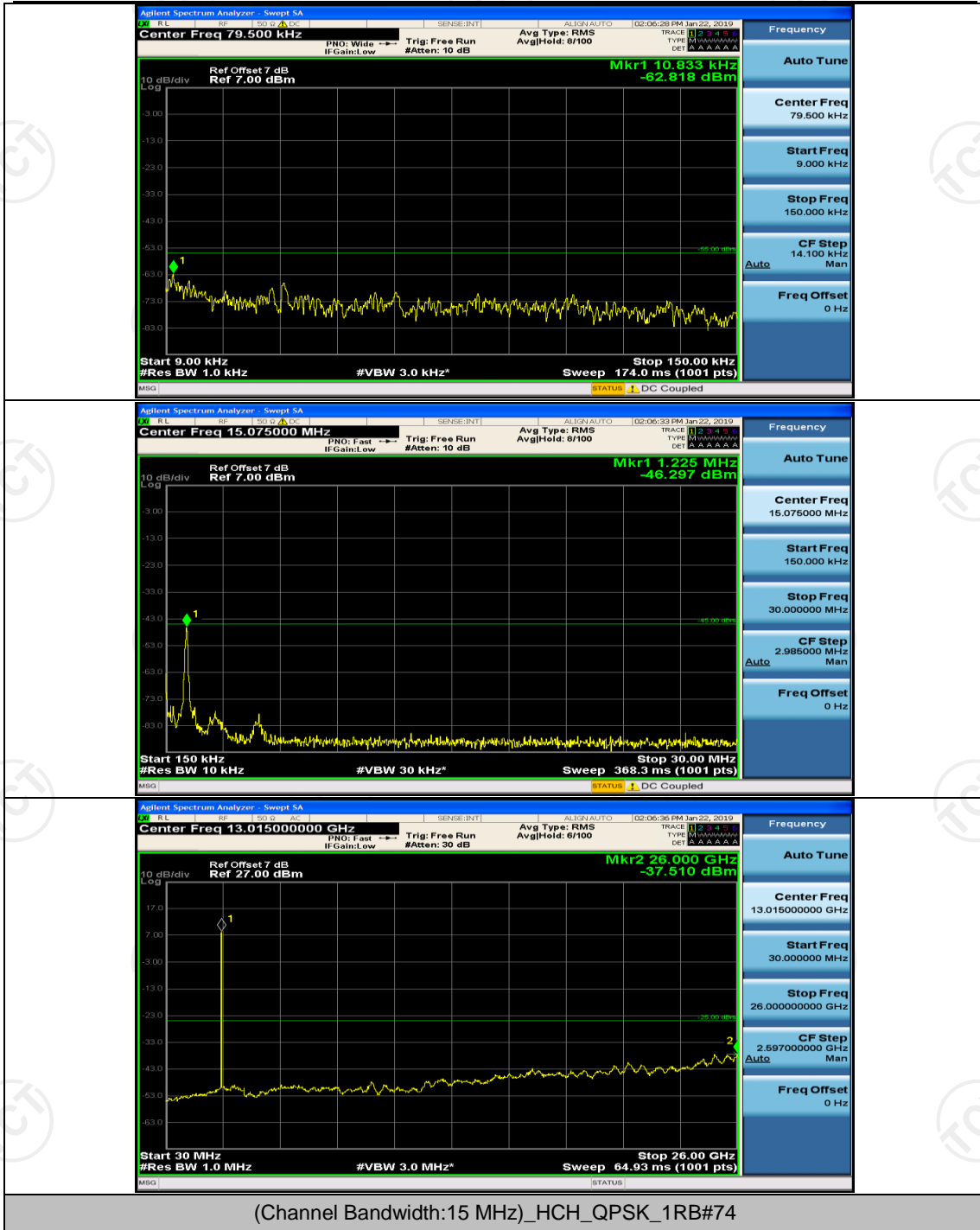
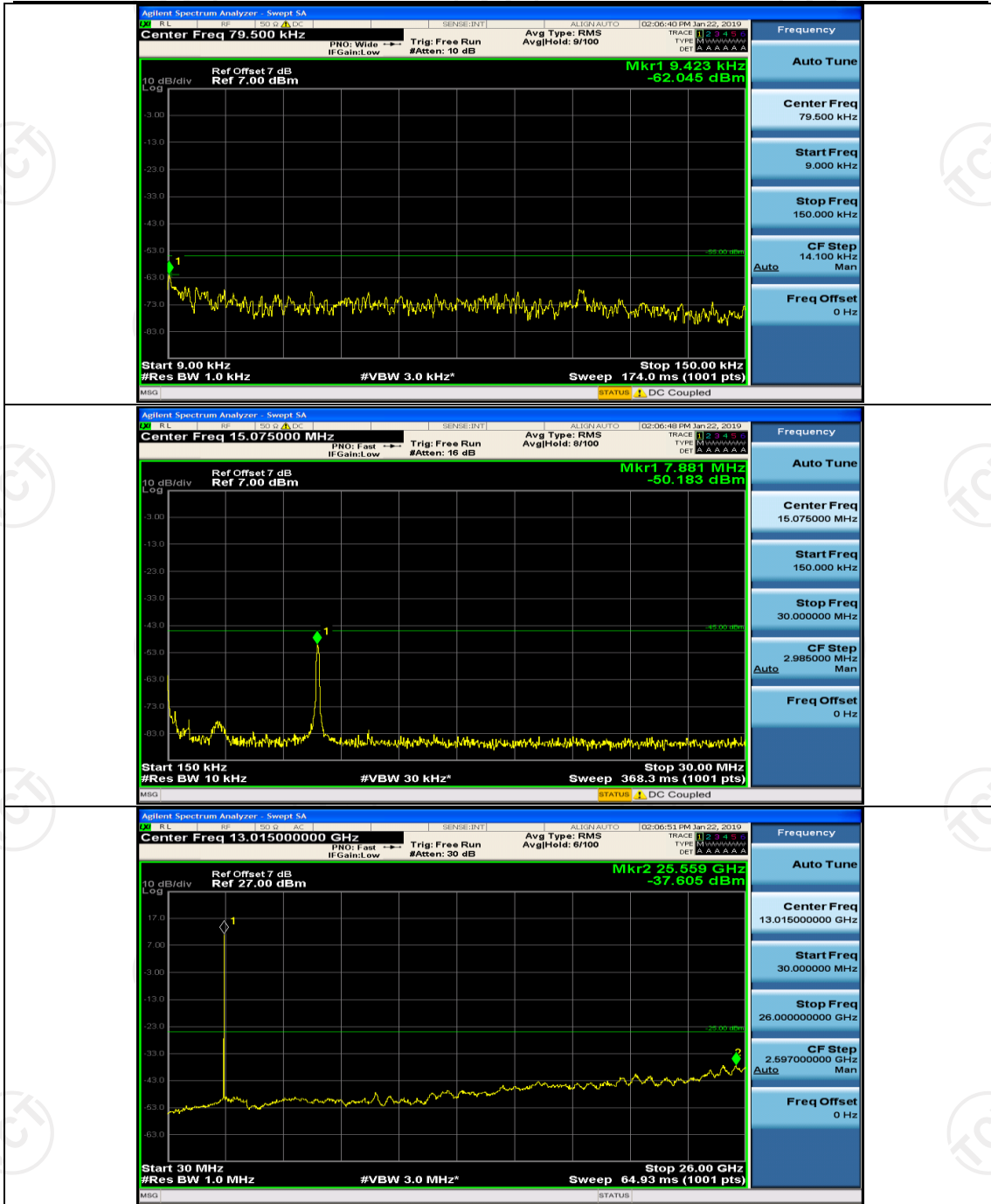


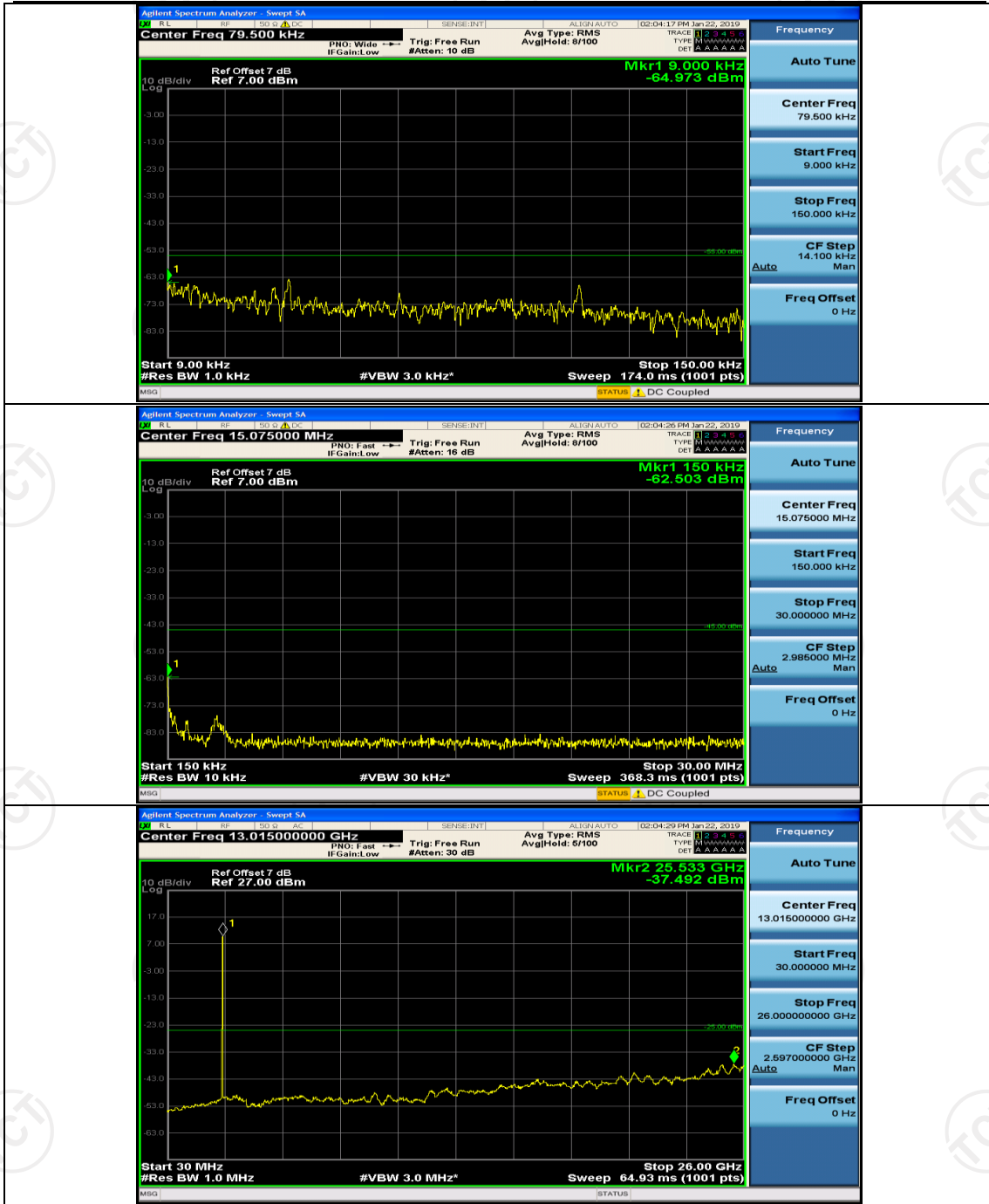
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#0



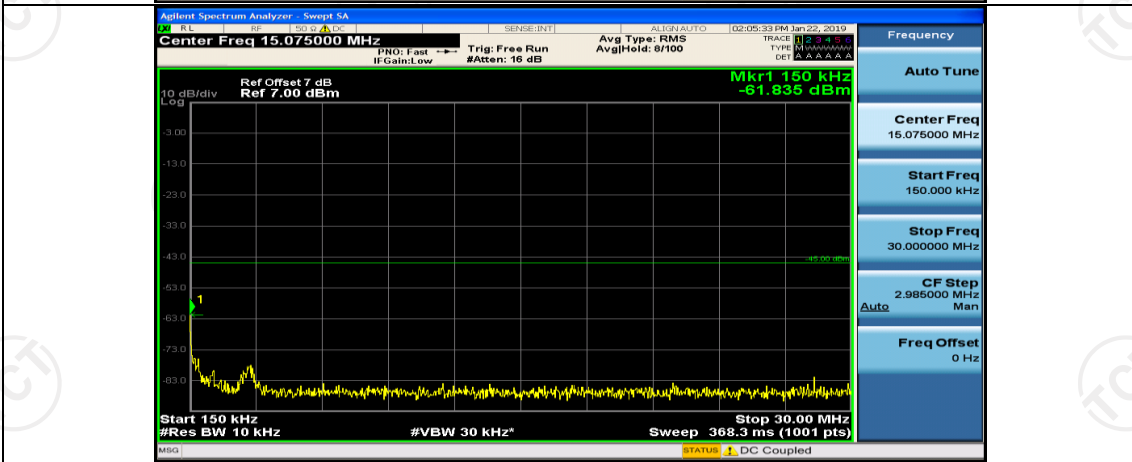
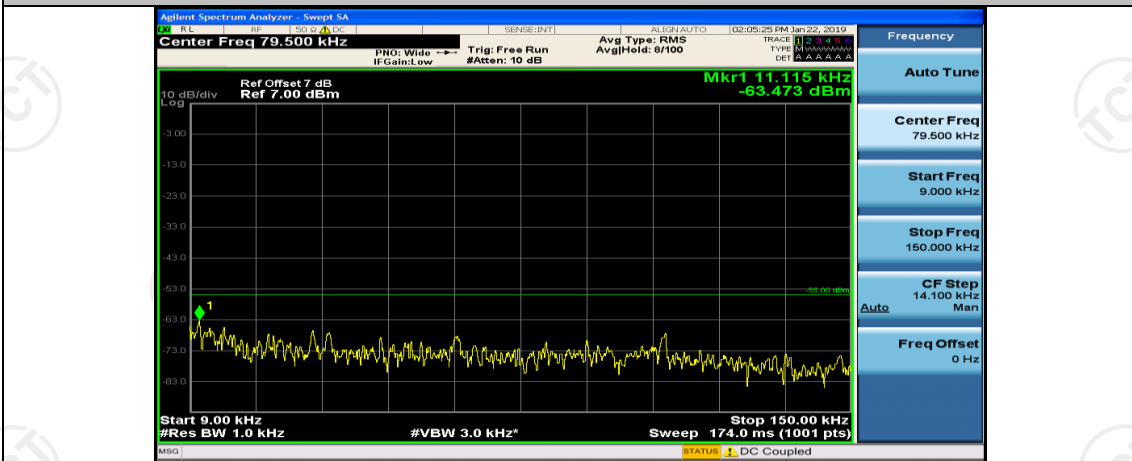
(Channel Bandwidth:15 MHz)_HCH_QPSK_1RB#37



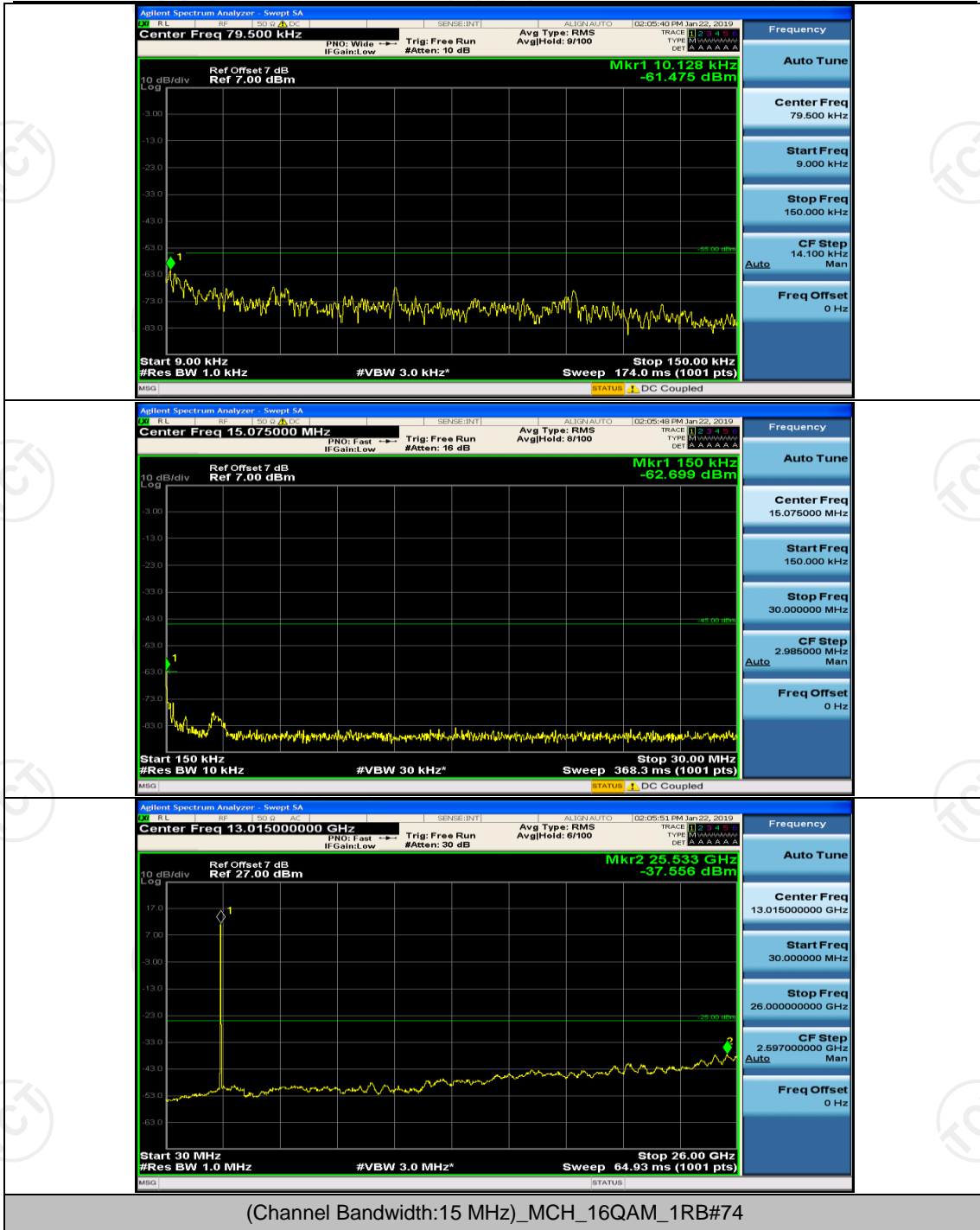


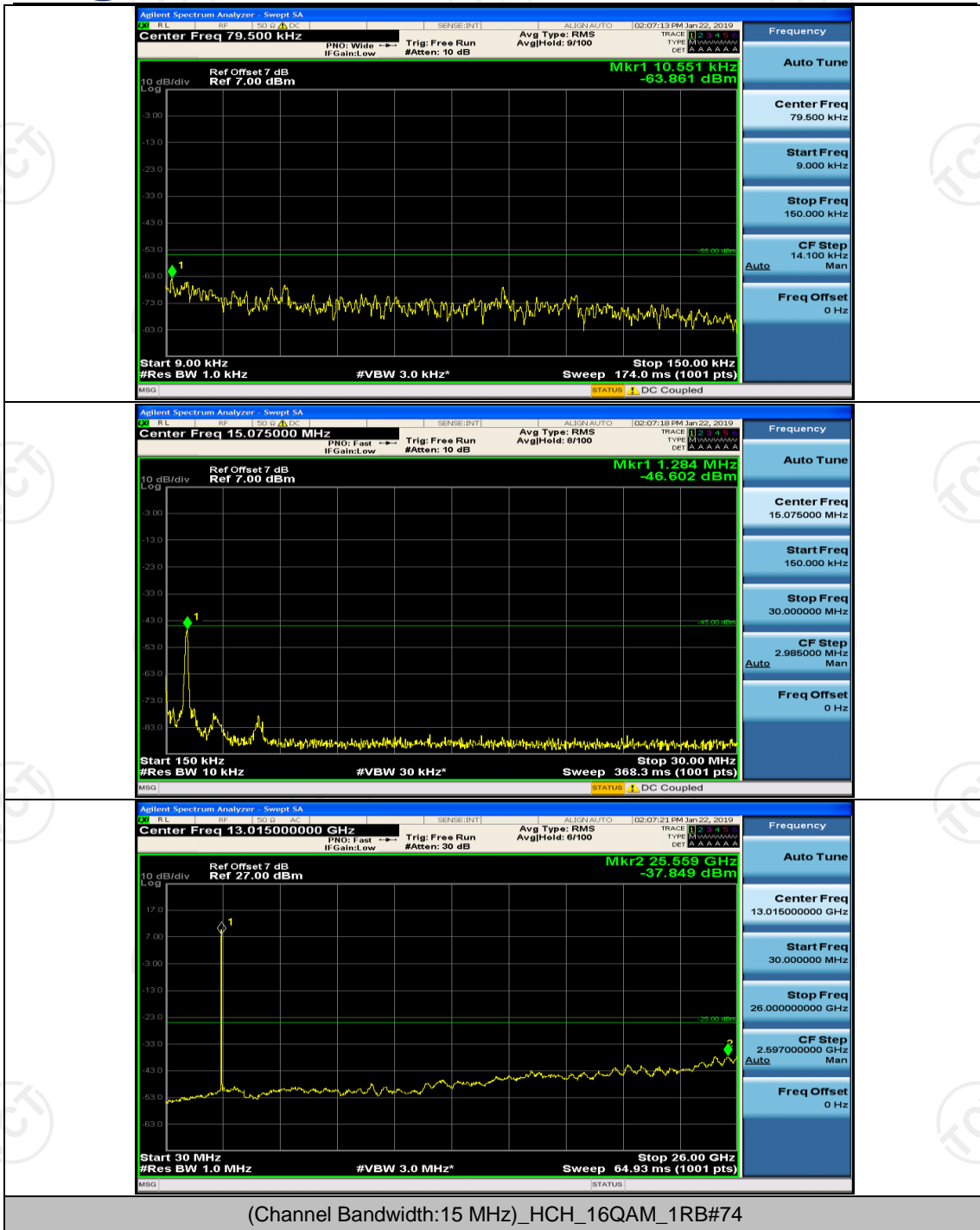


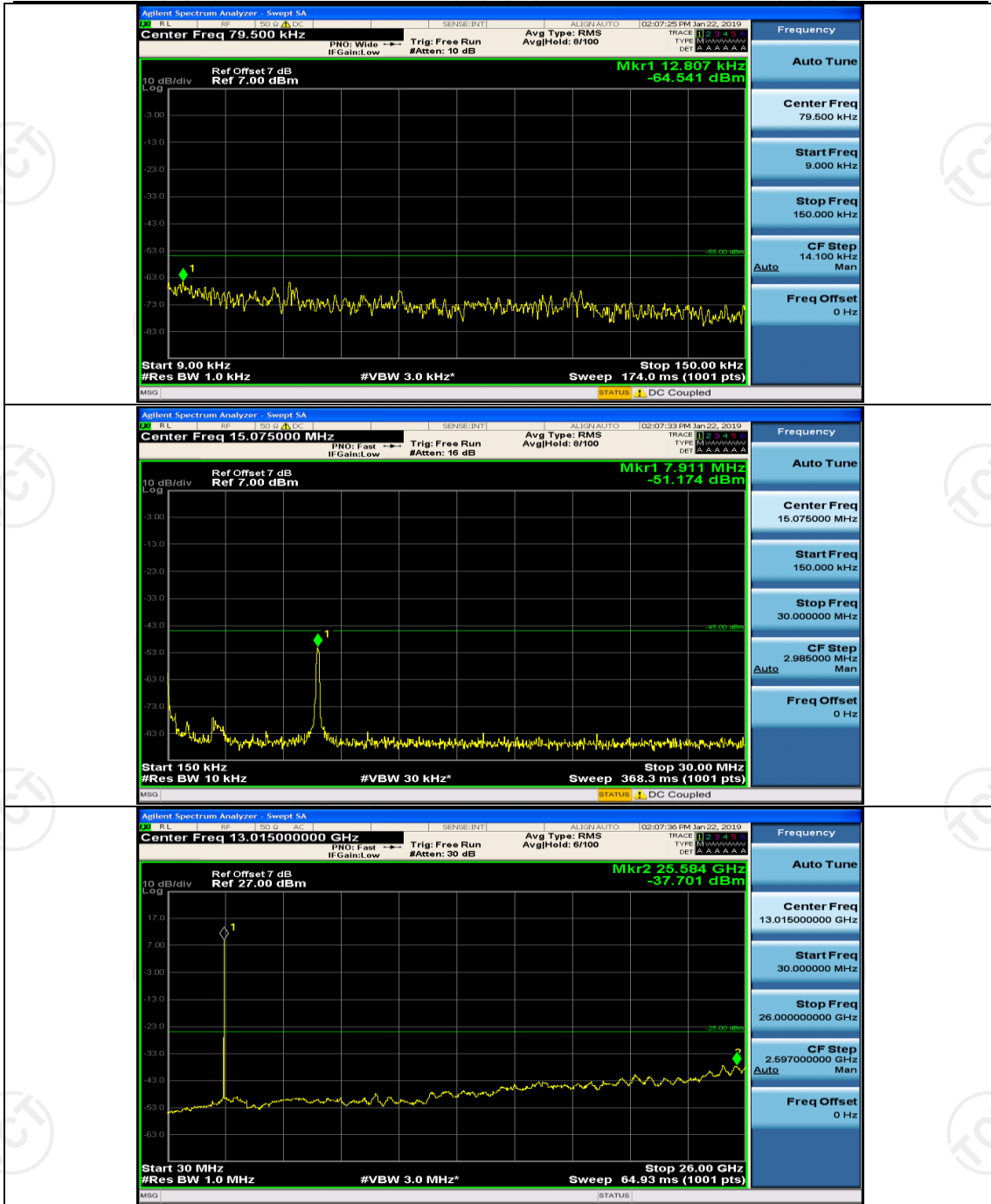
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0



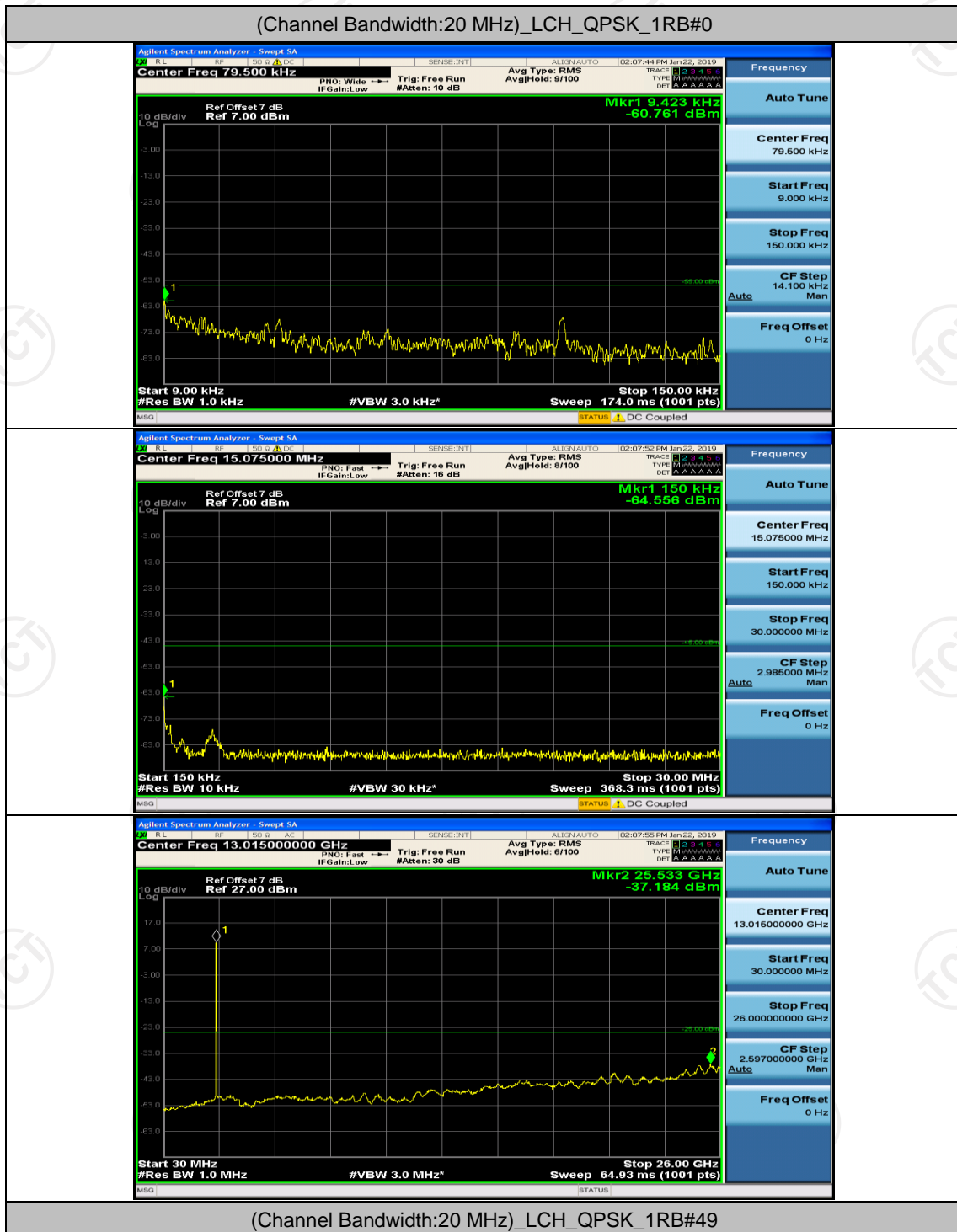
(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#37

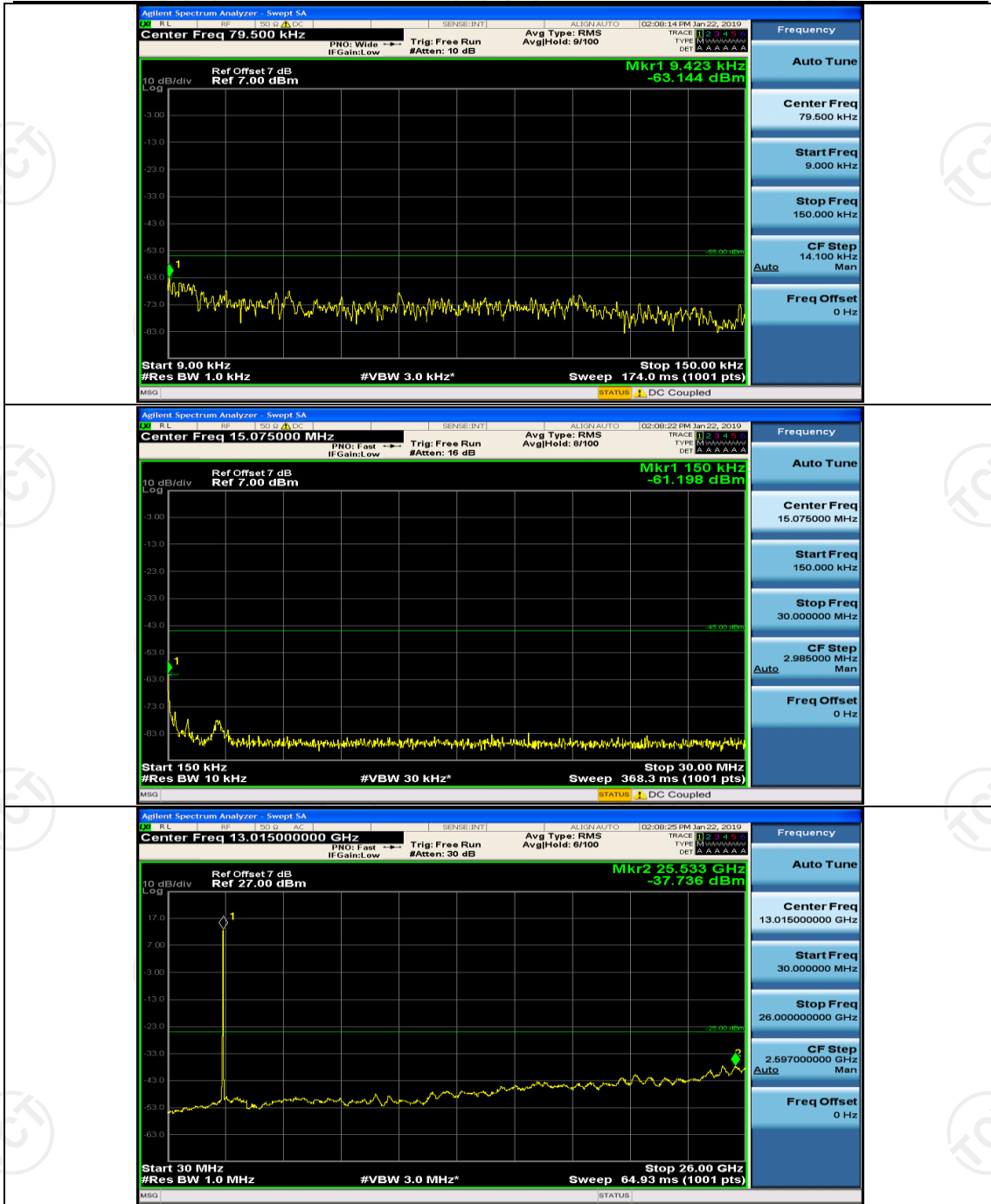




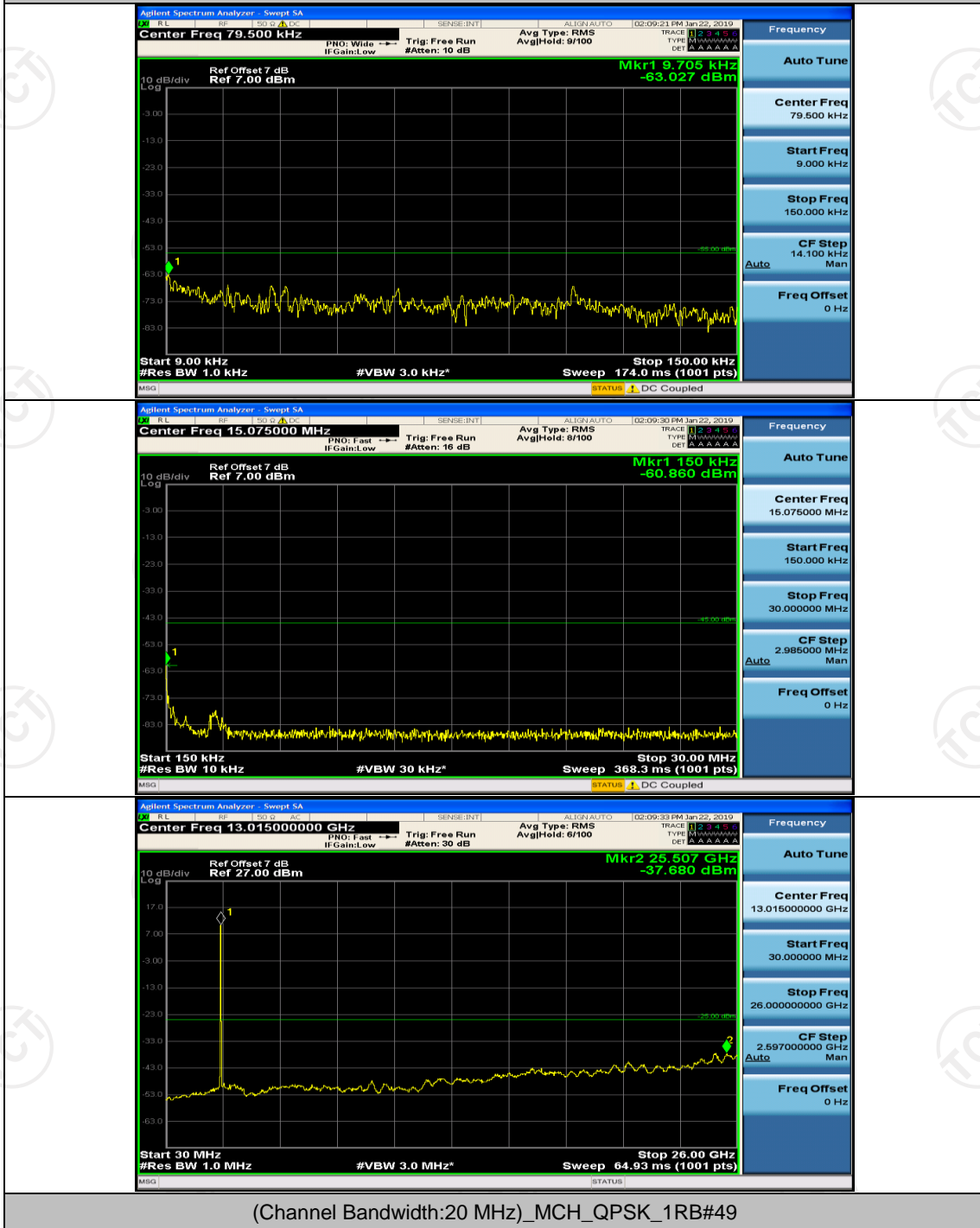


Channel Bandwidth: 20 MHz

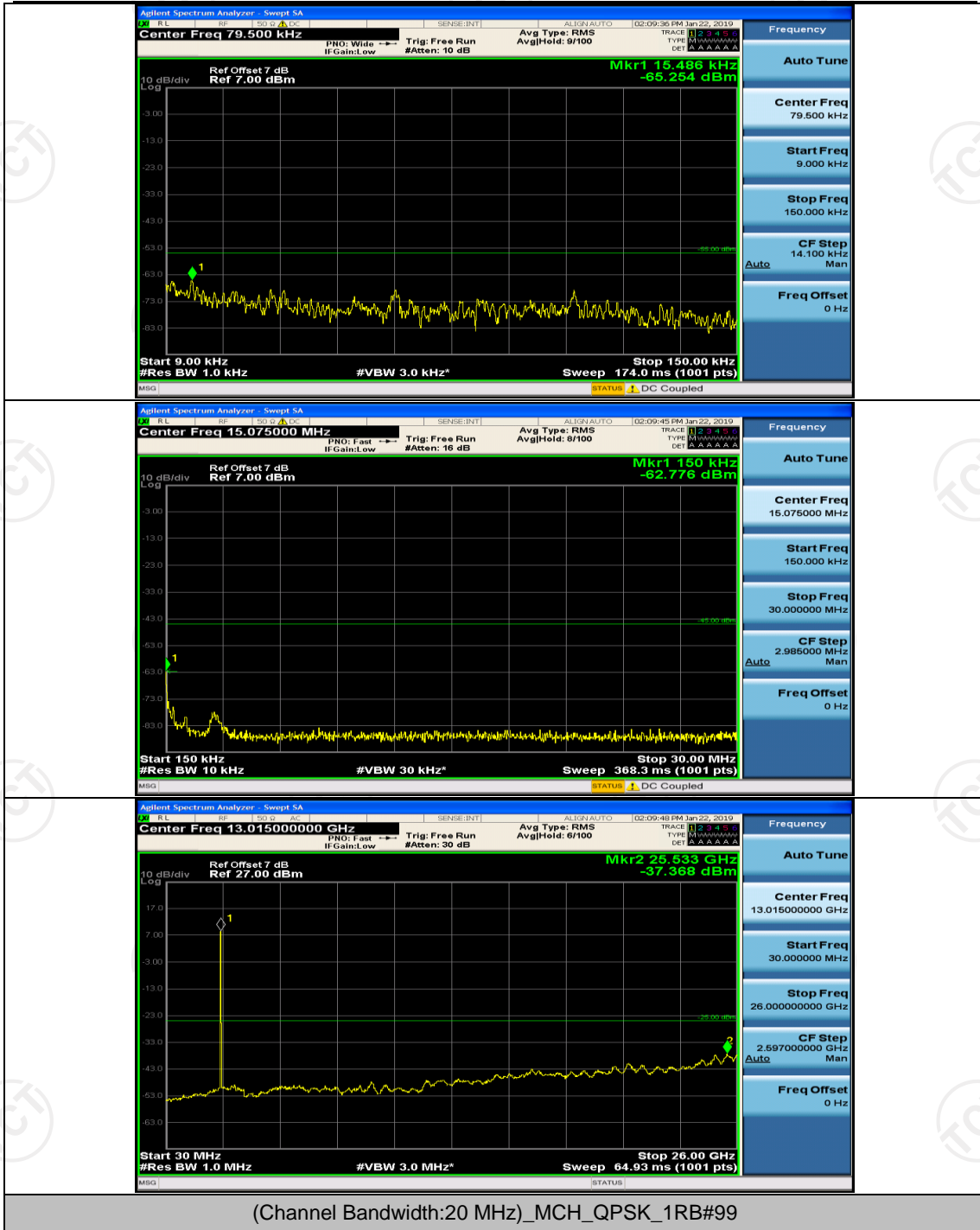


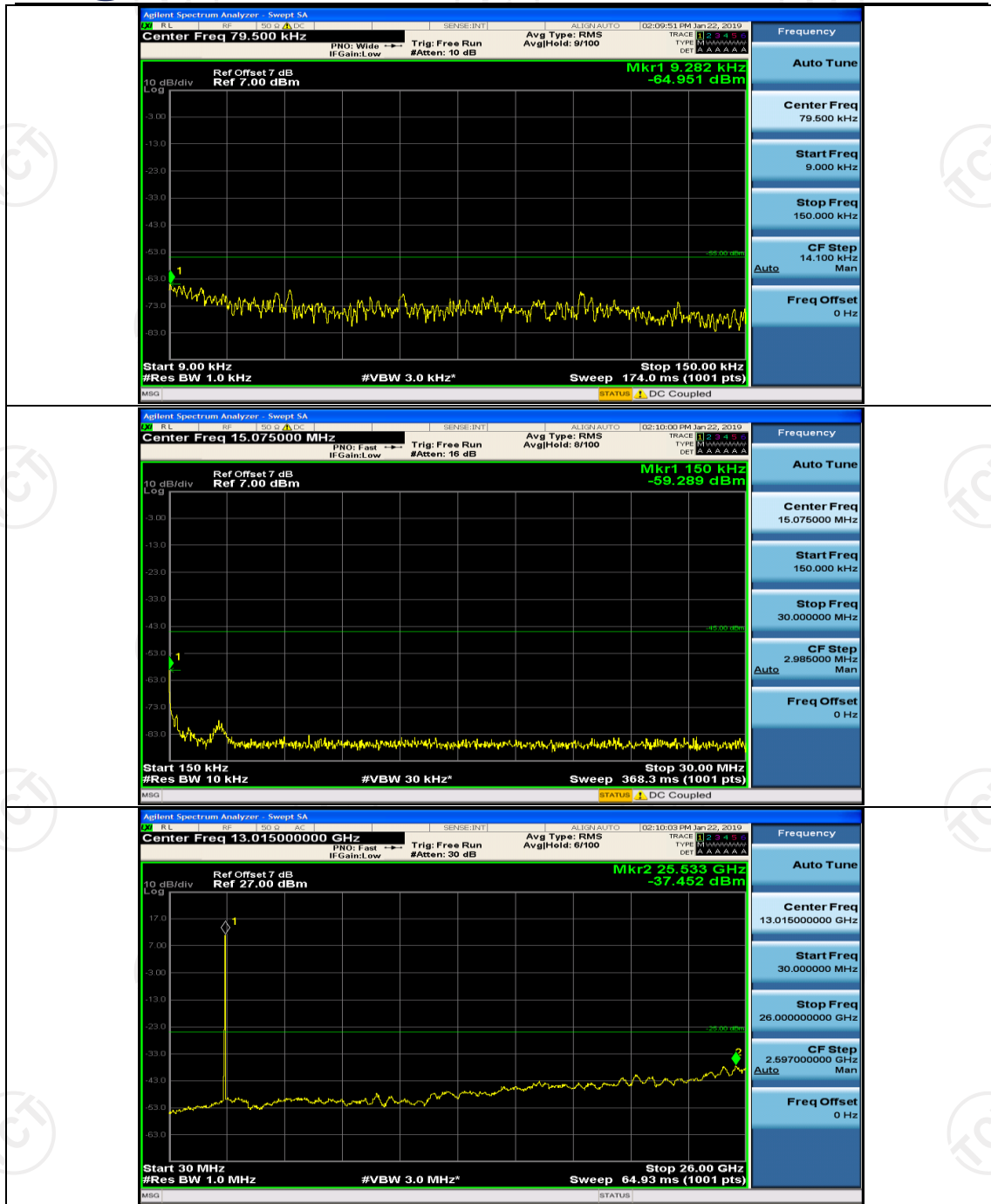


(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

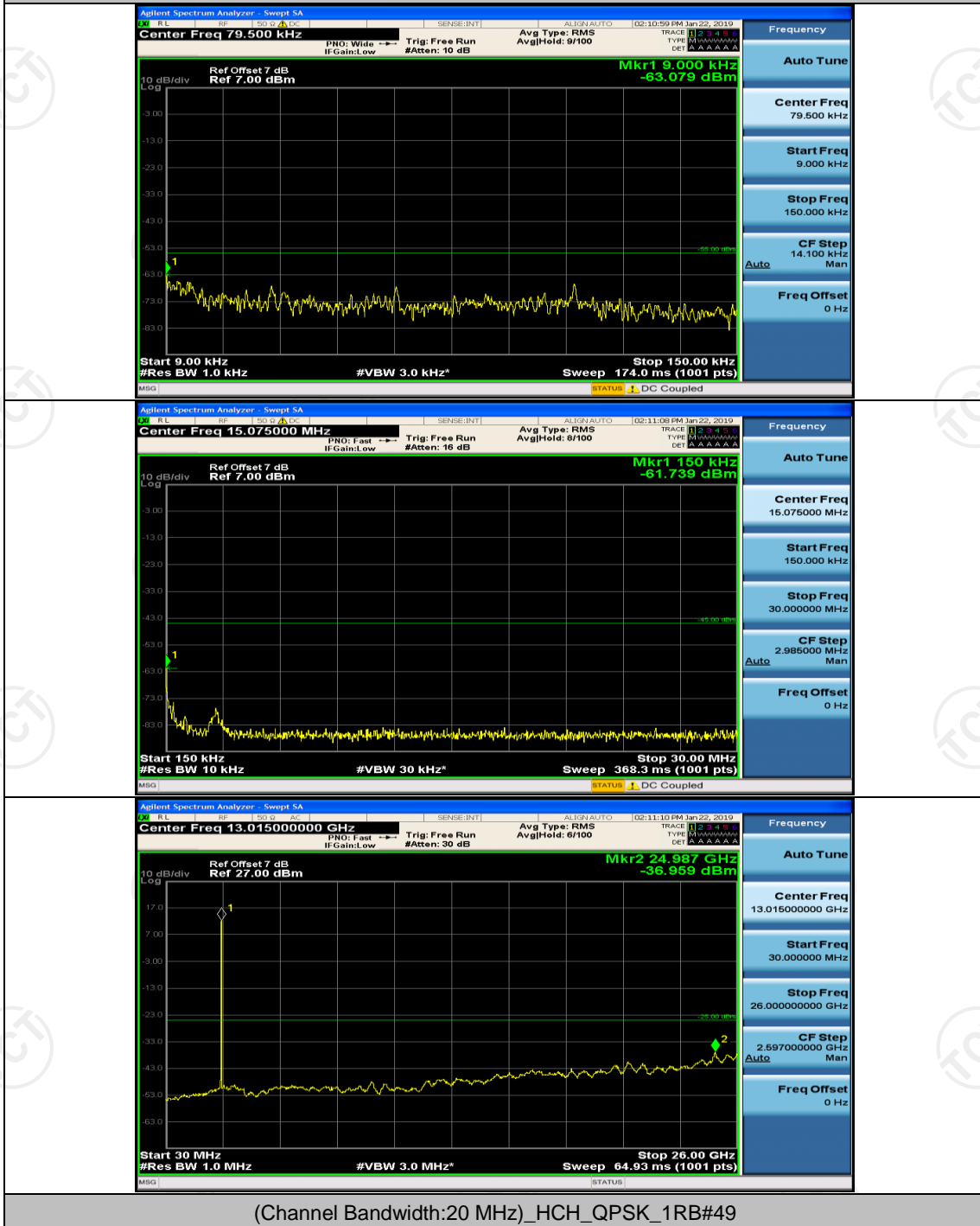


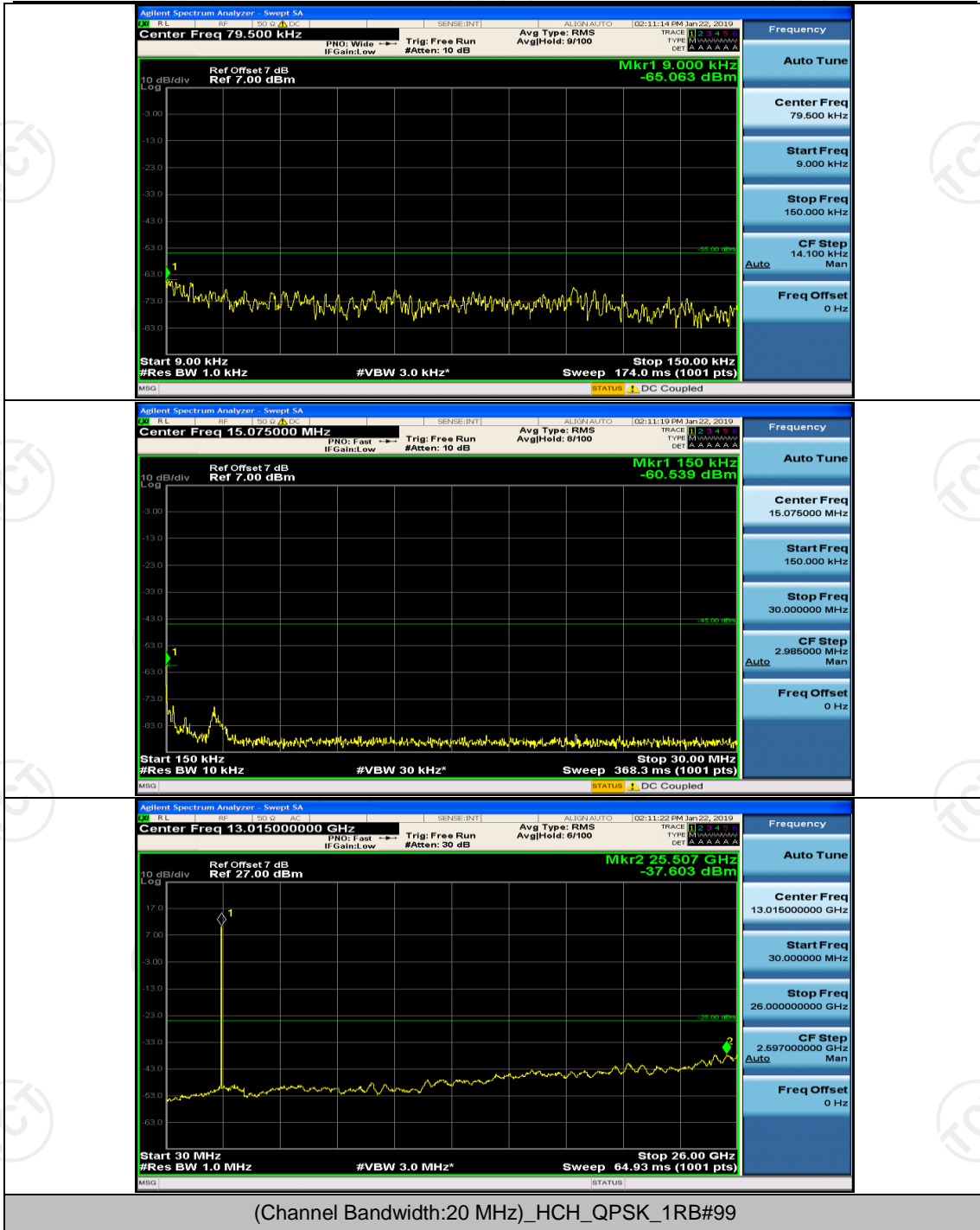
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

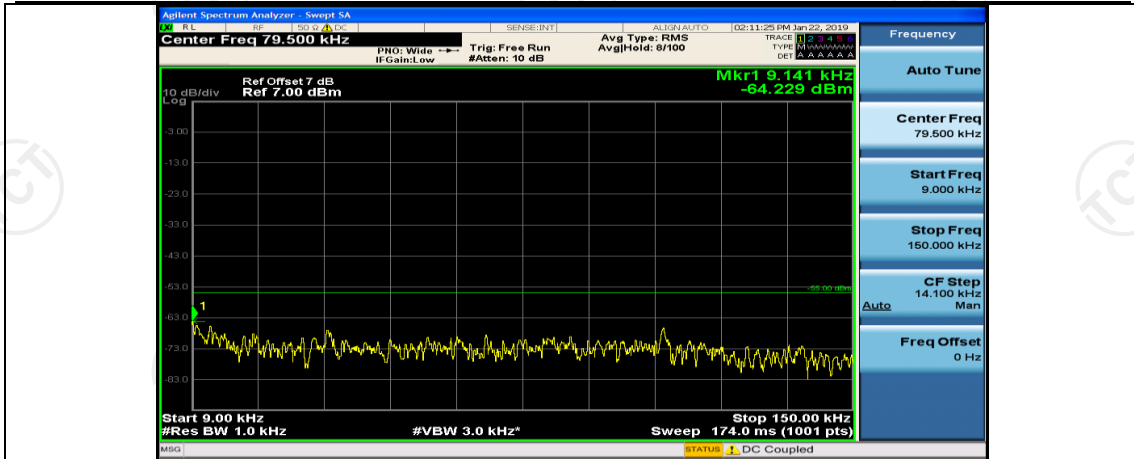




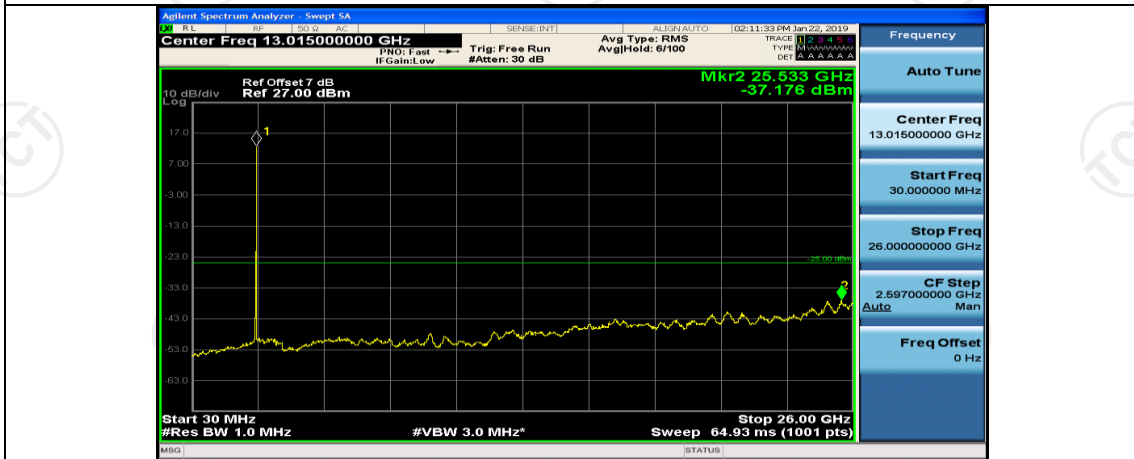
(Channel Bandwidth:20 MHz)_HCH_QPSK_1RB#0



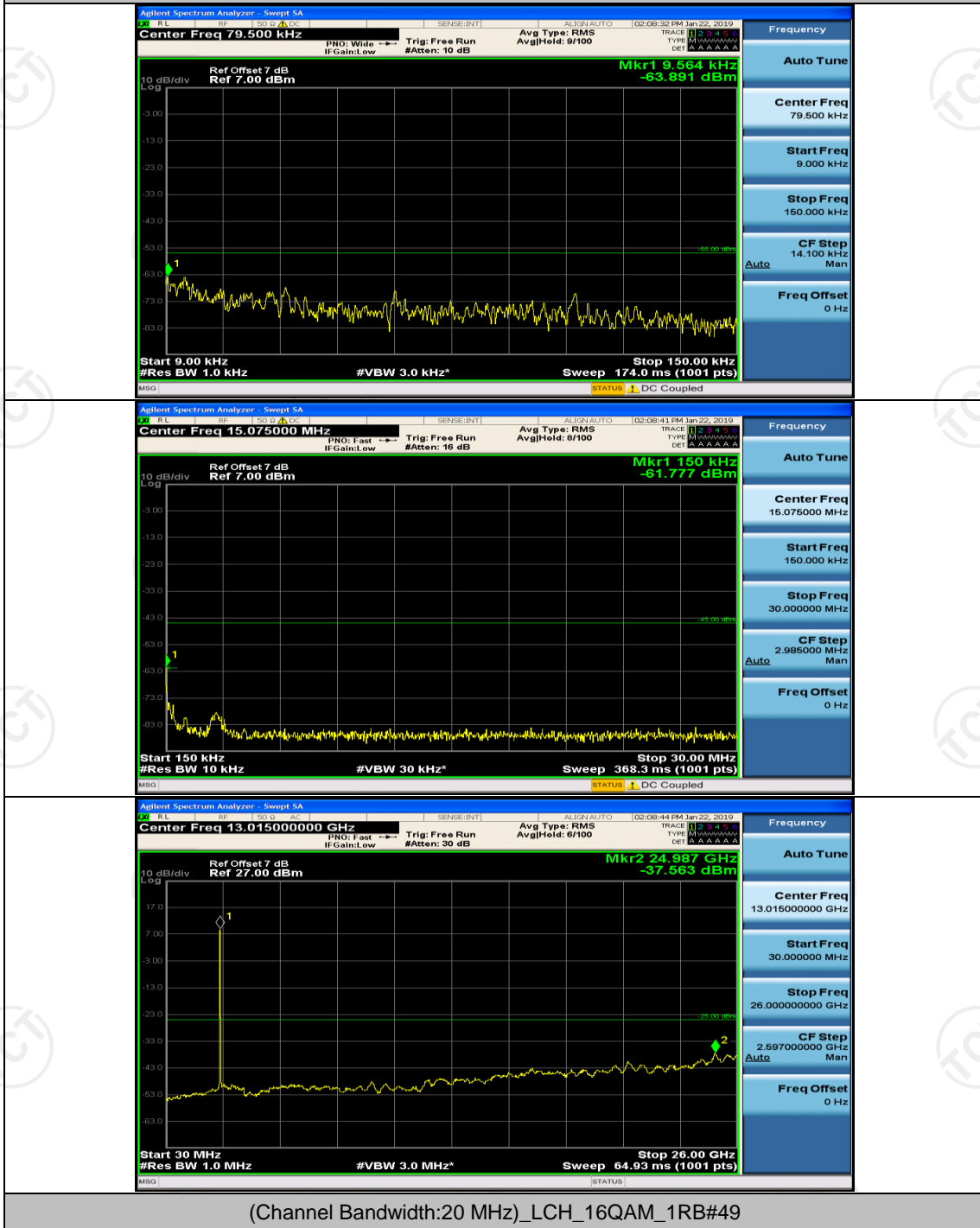




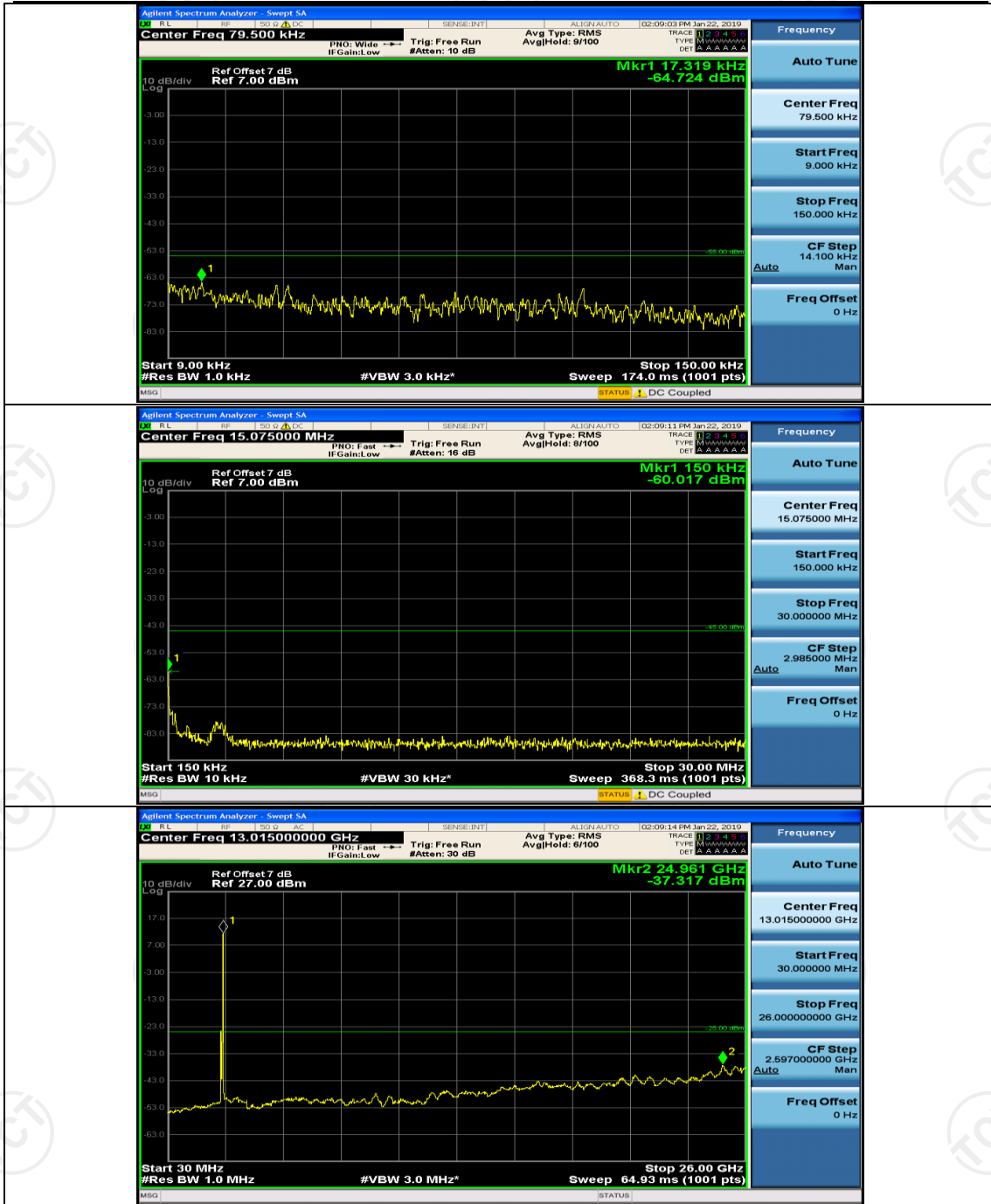
#img-QPSK-H-20-1-H-CSE-2



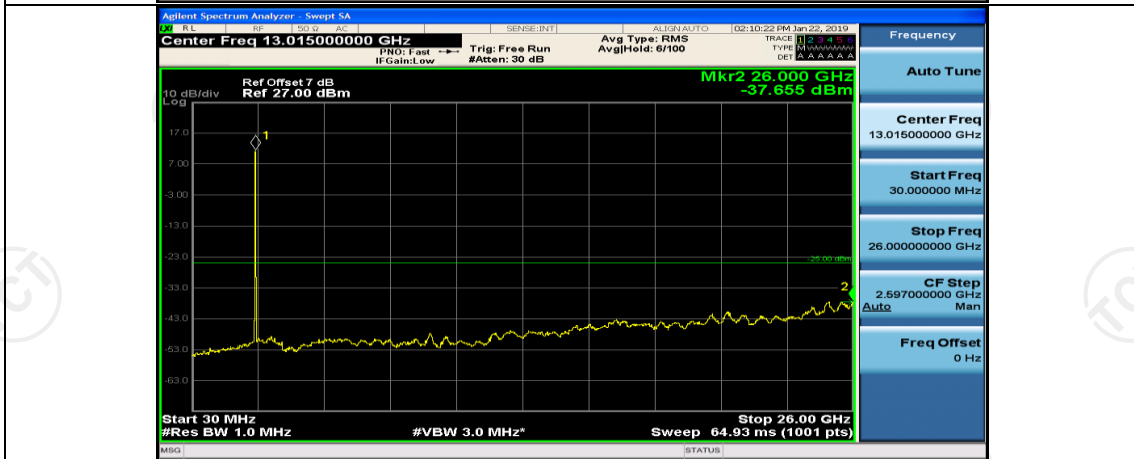
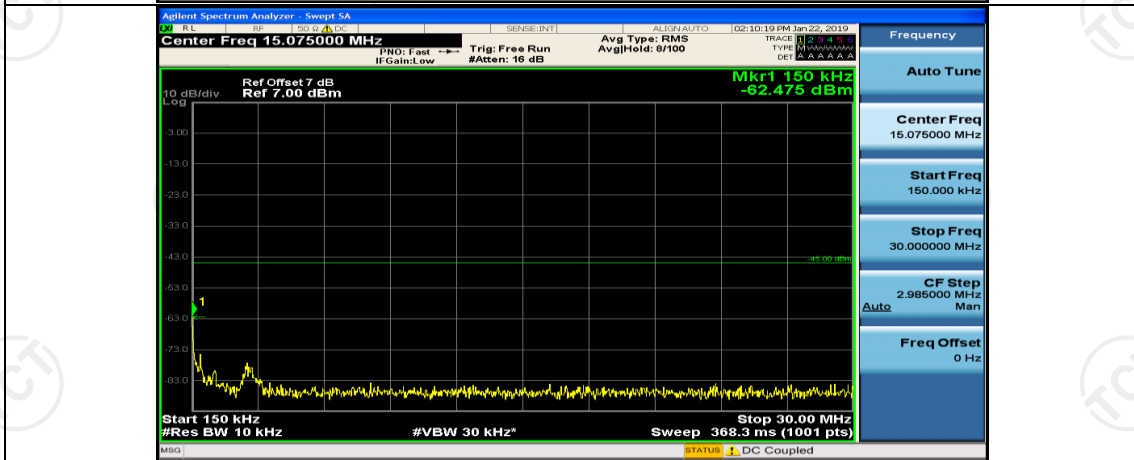
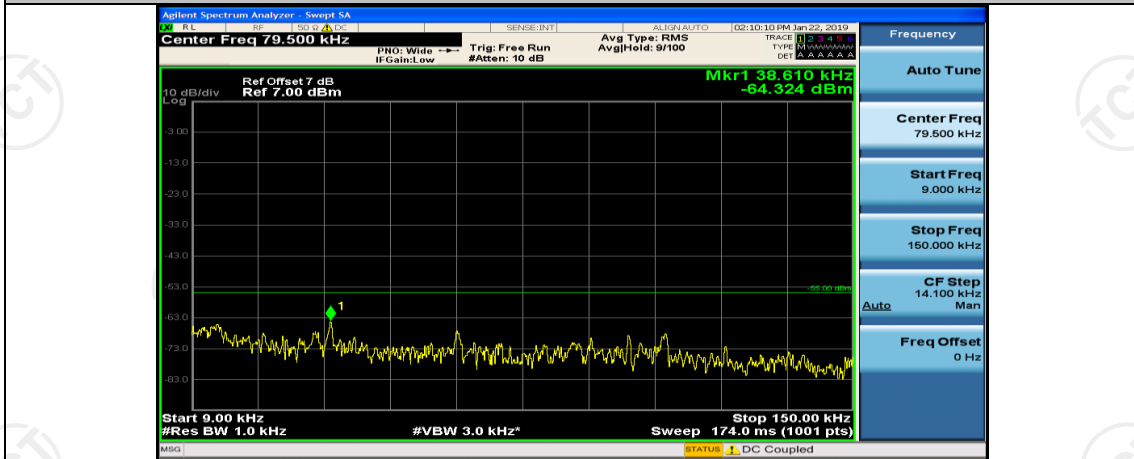
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#0



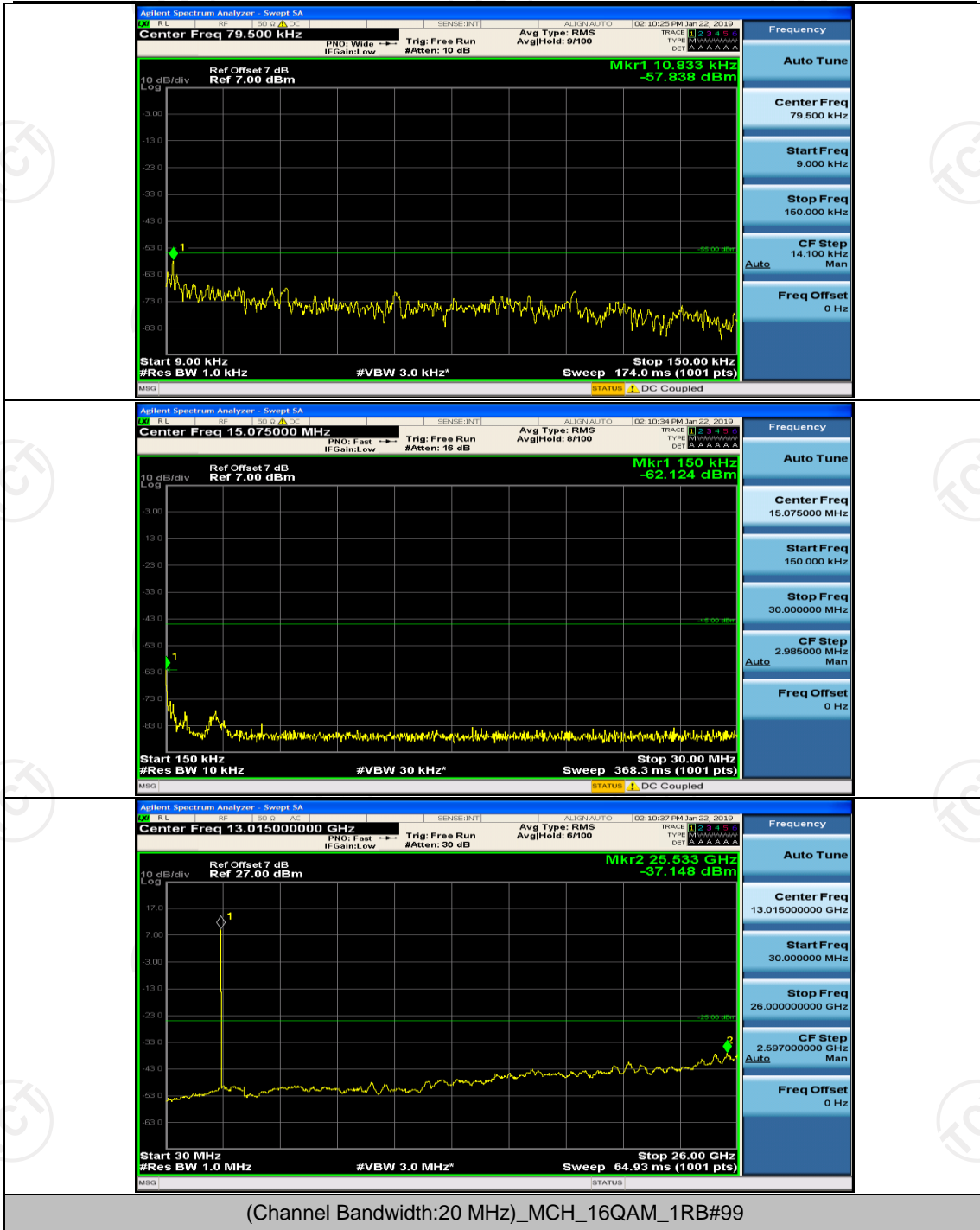
(Channel Bandwidth:20 MHz)_LCH_16QAM_1RB#49

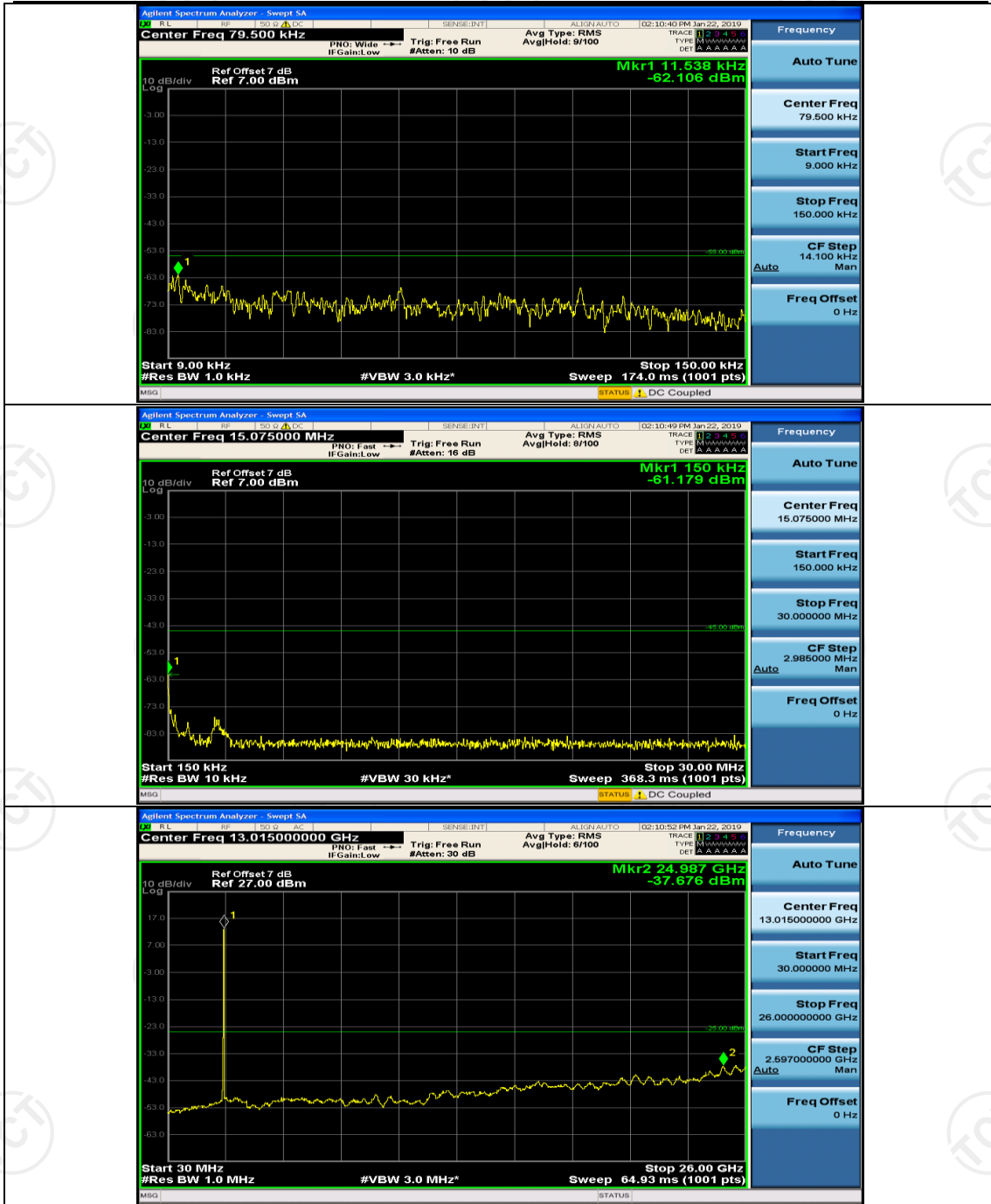


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0

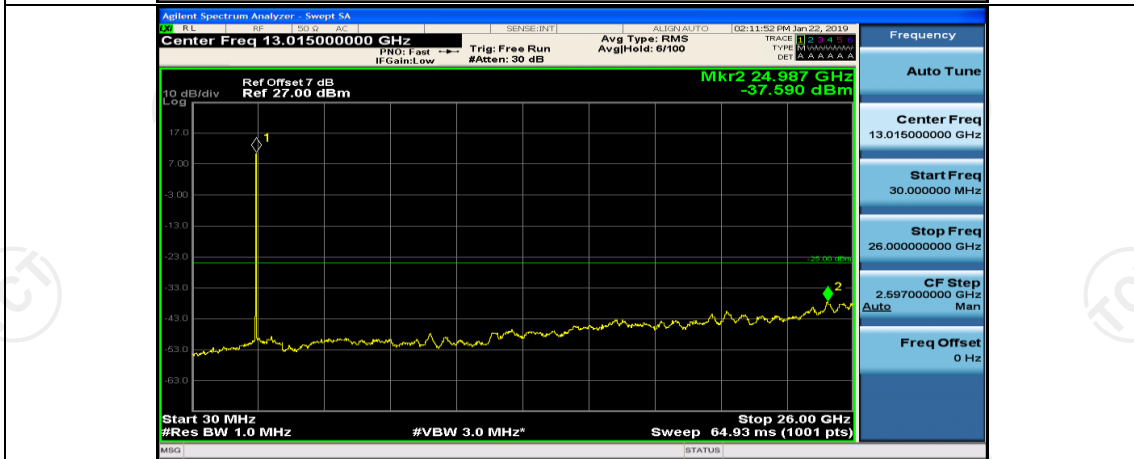
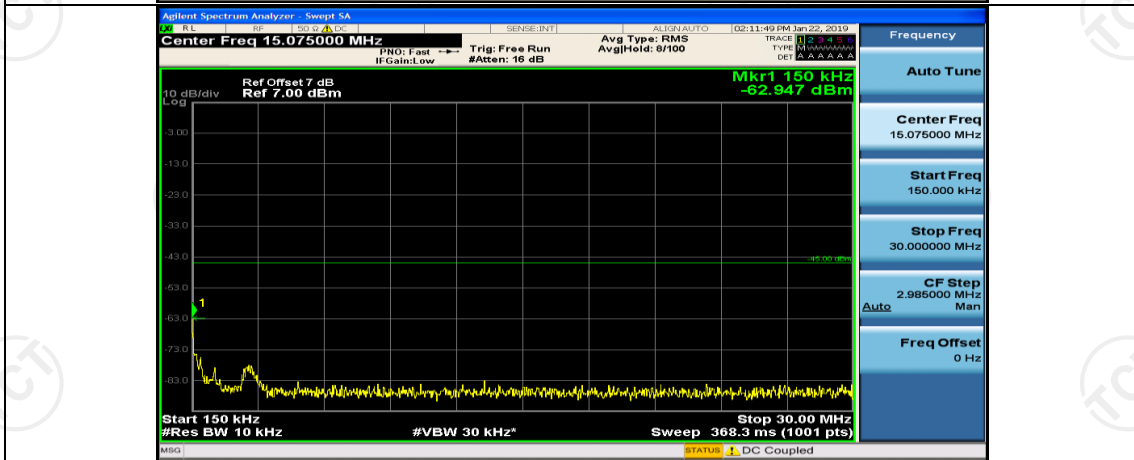
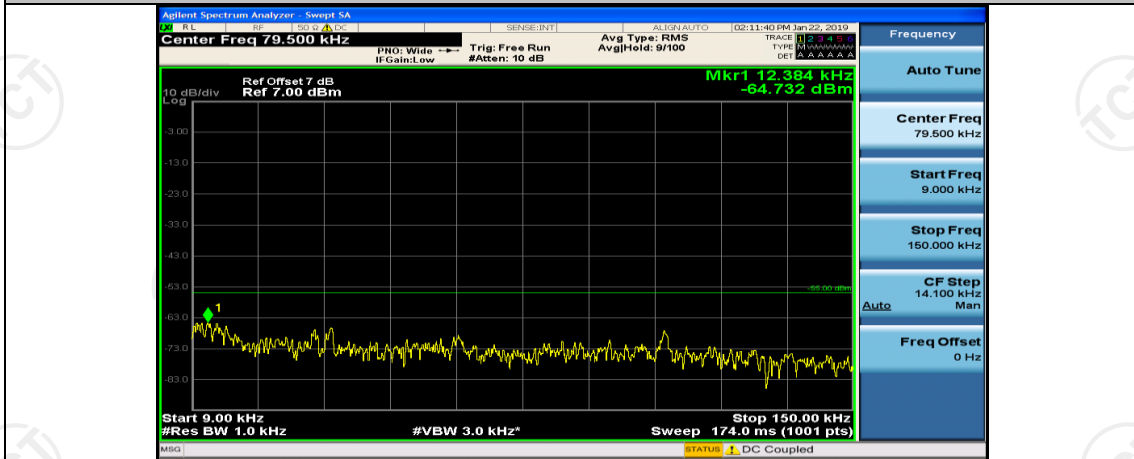


(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#49

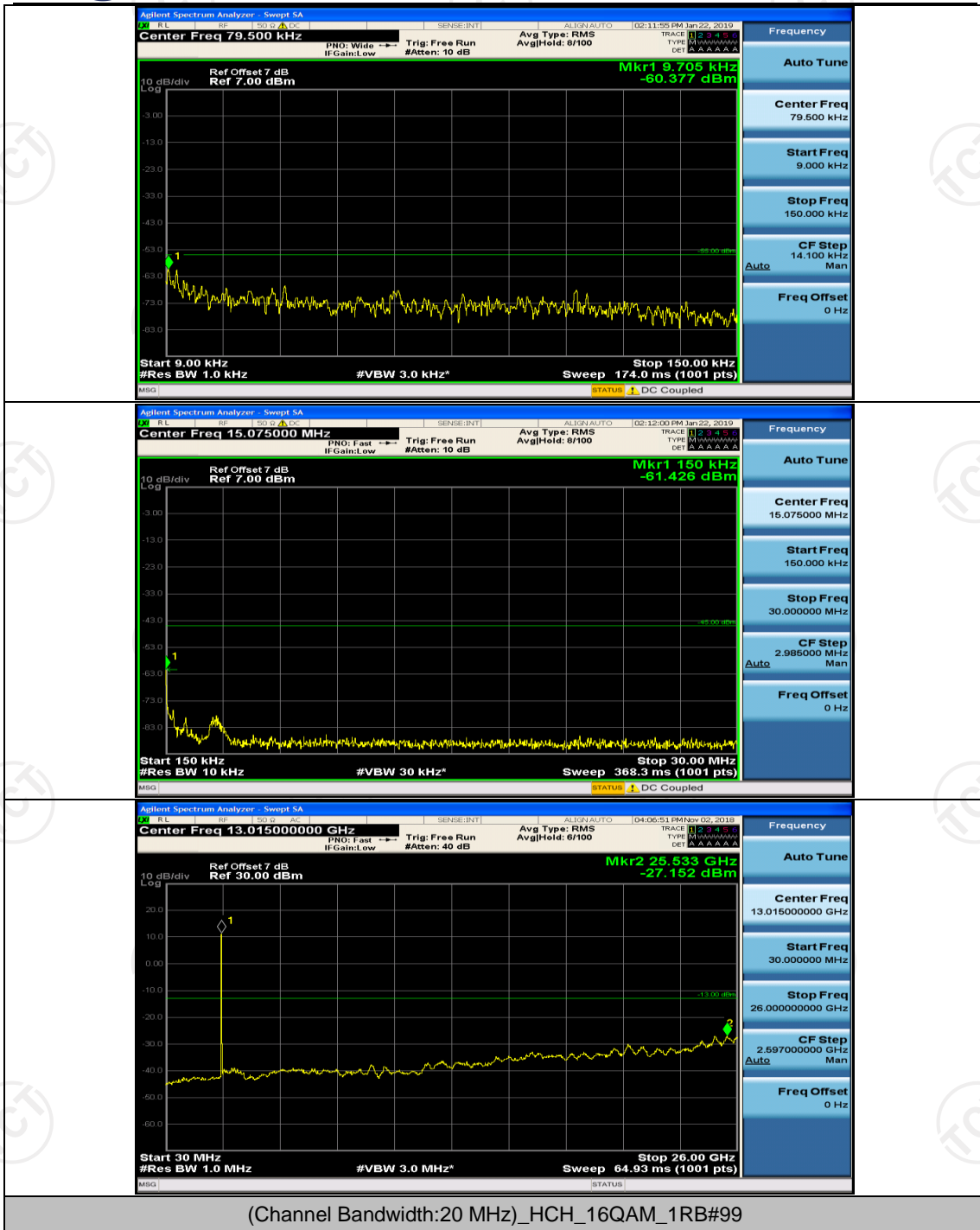


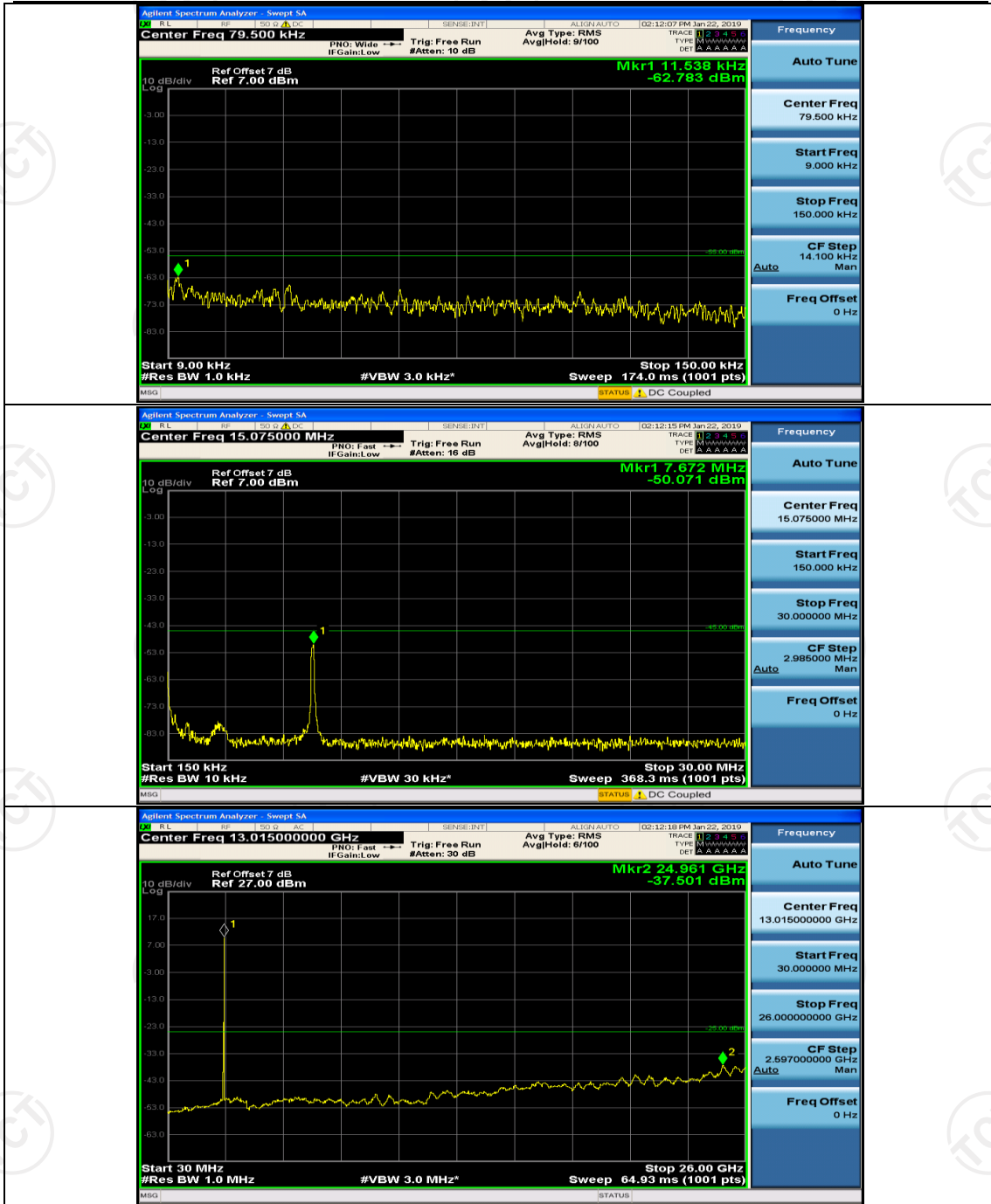


(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth:20 MHz)_HCH_16QAM_1RB#49





Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 5 MHz

| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (ppm) | Limit (ppm) | Verdict |
|-------------|---------|---------------|------------------|-----------------|-------------|---------|
| QPSK | LCH | 11.4 | TN | 0.004523 | ± 2.5 | PASS |
| | | 12.0 | TN | -0.023500 | ± 2.5 | PASS |
| | | 12.6 | TN | -0.003279 | ± 2.5 | PASS |
| | MCH | 11.4 | TN | -0.001221 | ± 2.5 | PASS |
| | | 12.0 | TN | -0.012815 | ± 2.5 | PASS |
| | | 12.6 | TN | 0.013614 | ± 2.5 | PASS |
| | HCH | 11.4 | TN | -0.008781 | ± 2.5 | PASS |
| | | 12.0 | TN | -0.025941 | ± 2.5 | PASS |
| | | 12.6 | TN | -0.005912 | ± 2.5 | PASS |
| 16QAM | LCH | 11.4 | TN | -0.006303 | ± 2.5 | PASS |
| | | 12.0 | TN | -0.020590 | ± 2.5 | PASS |
| | | 12.6 | TN | -0.005688 | ± 2.5 | PASS |
| | MCH | 11.4 | TN | -0.008572 | ± 2.5 | PASS |
| | | 12.0 | TN | -0.010564 | ± 2.5 | PASS |
| | | 12.6 | TN | -0.000853 | ± 2.5 | PASS |
| | HCH | 11.4 | TN | -0.004601 | ± 2.5 | PASS |
| | | 12.0 | TN | -0.024515 | ± 2.5 | PASS |
| | | 12.6 | TN | -0.008036 | ± 2.5 | PASS |
| Temperature | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | 12.0 | -30 | 0.005385 | ± 2.5 | PASS |
| | | 12.0 | -20 | 0.005374 | ± 2.5 | PASS |
| | | 12.0 | -10 | 0.005202 | ± 2.5 | PASS |
| | | 12.0 | 0 | 0.005254 | ± 2.5 | PASS |
| | | 12.0 | 10 | -0.005767 | ± 2.5 | PASS |
| | | 12.0 | 20 | -0.024272 | ± 2.5 | PASS |
| | | 12.0 | 30 | -0.023203 | ± 2.5 | PASS |
| | | 12.0 | 40 | -0.024506 | ± 2.5 | PASS |
| | MCH | 12.0 | 50 | -0.023986 | ± 2.5 | PASS |
| | | 12.0 | -30 | 0.013477 | ± 2.5 | PASS |
| | | 12.0 | -20 | 0.015373 | ± 2.5 | PASS |
| | | 12.0 | -10 | 0.014865 | ± 2.5 | PASS |
| | | 12.0 | 0 | 0.014836 | ± 2.5 | PASS |
| | | 12.0 | 10 | 0.008756 | ± 2.5 | PASS |
| | | 12.0 | 20 | -0.011563 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|------|------|-----------|-----------|-------|------|
| | | 12.0 | 30 | -0.011382 | ± 2.5 | PASS | |
| | | 12.0 | 40 | -0.012364 | ± 2.5 | PASS | |
| | | 12.0 | 50 | -0.012307 | ± 2.5 | PASS | |
| | HCH | | 12.0 | -30 | -0.007754 | ± 2.5 | PASS |
| | | | 12.0 | -20 | -0.006885 | ± 2.5 | PASS |
| | | | 12.0 | -10 | -0.005970 | ± 2.5 | PASS |
| | | | 12.0 | 0 | -0.007737 | ± 2.5 | PASS |
| | | | 12.0 | 10 | -0.006546 | ± 2.5 | PASS |
| | | | 12.0 | 20 | -0.026554 | ± 2.5 | PASS |
| | | | 12.0 | 30 | -0.025875 | ± 2.5 | PASS |
| | | | 12.0 | 40 | -0.028376 | ± 2.5 | PASS |
| | | | 12.0 | 50 | -0.026047 | ± 2.5 | PASS |
| 16QAM | LCH | | 12.0 | -30 | -0.006609 | ± 2.5 | PASS |
| | | | 12.0 | -20 | -0.006681 | ± 2.5 | PASS |
| | | | 12.0 | -10 | -0.005187 | ± 2.5 | PASS |
| | | | 12.0 | 0 | -0.005343 | ± 2.5 | PASS |
| | | | 12.0 | 10 | -0.007675 | ± 2.5 | PASS |
| | | | 12.0 | 20 | -0.019624 | ± 2.5 | PASS |
| | | | 12.0 | 30 | -0.020093 | ± 2.5 | PASS |
| | | | 12.0 | 40 | -0.018304 | ± 2.5 | PASS |
| | MCH | | 12.0 | 50 | -0.017052 | ± 2.5 | PASS |
| | | | 12.0 | -30 | -0.009099 | ± 2.5 | PASS |
| | | | 12.0 | -20 | -0.008489 | ± 2.5 | PASS |
| | | | 12.0 | -10 | -0.009921 | ± 2.5 | PASS |
| | | | 12.0 | 0 | -0.009077 | ± 2.5 | PASS |
| | | | 12.0 | 10 | -0.002584 | ± 2.5 | PASS |
| | | | 12.0 | 20 | -0.011478 | ± 2.5 | PASS |
| | | | 12.0 | 30 | -0.008899 | ± 2.5 | PASS |
| | HCH | | 12.0 | 40 | -0.011337 | ± 2.5 | PASS |
| | | | 12.0 | 50 | -0.008369 | ± 2.5 | PASS |
| | | | 12.0 | -30 | -0.018013 | ± 2.5 | PASS |
| | | | 12.0 | -20 | -0.017934 | ± 2.5 | PASS |
| | | | 12.0 | -10 | -0.019051 | ± 2.5 | PASS |
| | | | 12.0 | 0 | -0.020354 | ± 2.5 | PASS |
| | | | 12.0 | 10 | 0.012665 | ± 2.5 | PASS |
| | | | 12.0 | 20 | -0.024465 | ± 2.5 | PASS |
| | | 12.0 | 30 | -0.022571 | ± 2.5 | PASS | |
| | | 12.0 | 40 | -0.022119 | ± 2.5 | PASS | |
| | | 12.0 | 50 | -0.023362 | ± 2.5 | PASS | |
| | | 12.0 | 50 | -0.023362 | ± 2.5 | PASS | |

Appendix G :Field Strength of Spurious Radiation

Measurement

Test Result

| Bandwidth: | 5M | | Test channel: | Lowest |
|--------------------|--|-------------|---------------------------|----------------|
| Modulation: | QPSK | | Temperature : | 23~24°C |
| RB #: | 1RB #0 | | Relative Humidity: | 46~48% |
| Note: | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | |
| Frequency (MHz) | Spurious Emission | | Limit (dBm) | Result |
| | Polarization | Level (dBm) | | |
| 5005.0 | Vertical | -28.63 | -13.00 | PASS |
| 7507.5 | V | -35.35 | | |
| - | V | - | | |
| 5005.0 | Horizontal | -26.31 | | |
| 7507.5 | H | -33.61 | | |
| - | H | - | | |
| Bandwidth: | 5M | | Test channel: | Middle |
| Modulation: | QPSK | | Temperature : | 23~24°C |
| RB #: | 1RB #0 | | Relative Humidity: | 46~48% |
| Note: | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | |
| Frequency (MHz) | Spurious Emission | | Limit (dBm) | Result |
| | Polarization | Level (dBm) | | |
| 5070.0 | Vertical | -29.36 | -13.00 | PASS |
| 7605.0 | V | -36.40 | | |
| - | V | - | | |
| 5070.0 | Horizontal | -27.96 | | |
| 7605.0 | H | -34.53 | | |
| - | H | - | | |
| Bandwidth: | 5M | | Test channel: | Highest |
| Modulation: | QPSK | | Temperature : | 23~24°C |
| RB #: | 1RB #0 | | Relative Humidity: | 46~48% |
| Note: | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | |
| Frequency (MHz) | Spurious Emission | | Limit (dBm) | Result |
| | Polarization | Level (dBm) | | |
| 5135.0 | Vertical | -29.72 | -13.00 | PASS |
| 7702.5 | V | -36.82 | | |
| - | V | - | | |
| 5135.0 | Horizontal | -28.34 | | |

| | | | |
|--------|---|--------|--|
| 7702.5 | H | -35.23 | |
| - | H | - | |

| Bandwidth: | 5M | | Test channel: | Lowest |
|--------------------|--|-------------|---------------------------|----------------|
| Modulation: | 16QAM | | Temperature : | 23~24°C |
| RB #: | 1RB #0 | | Relative Humidity: | 46~48% |
| Note: | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | |
| Frequency (MHz) | Spurious Emission | | Limit (dBm) | Result |
| | Polarization | Level (dBm) | | |
| 5005.0 | Vertical | -29.64 | -13.00 | PASS |
| 7507.5 | V | -36.37 | | |
| - | V | - | | |
| 5005.0 | Horizontal | -28.52 | | |
| 7507.5 | H | -35.46 | | |
| - | H | - | | |
| Bandwidth: | 5M | | Test channel: | Middle |
| Modulation: | 16QAM | | Temperature : | 23~24°C |
| RB #: | 1RB #0 | | Relative Humidity: | 46~48% |
| Note: | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | |
| Frequency (MHz) | Spurious Emission | | Limit (dBm) | Result |
| | Polarization | Level (dBm) | | |
| 5070.0 | Vertical | -29.96 | -13.00 | PASS |
| 7605.0 | V | -37.54 | | |
| - | V | - | | |
| 5070.0 | Horizontal | -28.75 | | |
| 7605.0 | H | -36.23 | | |
| - | H | - | | |
| Bandwidth: | 5M | | Test channel: | Highest |
| Modulation: | 16QAM | | Temperature : | 23~24°C |
| RB #: | 1RB #0 | | Relative Humidity: | 46~48% |
| Note: | Spurious emissions within 30-1000MHz were found more than 20dB below limit line. | | | |
| Frequency (MHz) | Spurious Emission | | Limit (dBm) | Result |
| | Polarization | Level (dBm) | | |
| 5135.0 | Vertical | -30.25 | -13.00 | PASS |
| 7702.5 | V | -35.84 | | |
| - | V | - | | |
| 5135.0 | Horizontal | -28.36 | | |
| 7702.5 | H | -35.64 | | |
| - | H | - | | |

