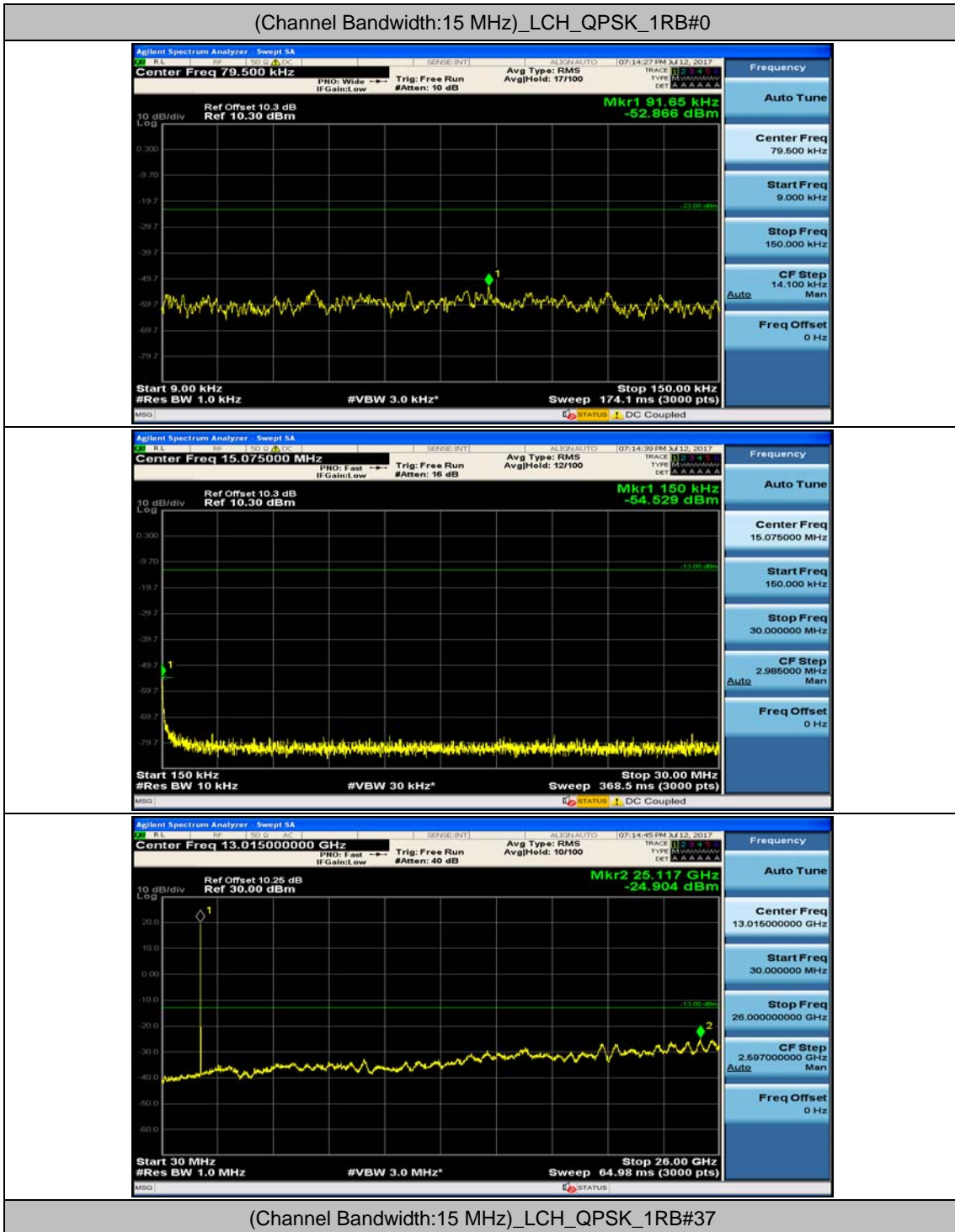
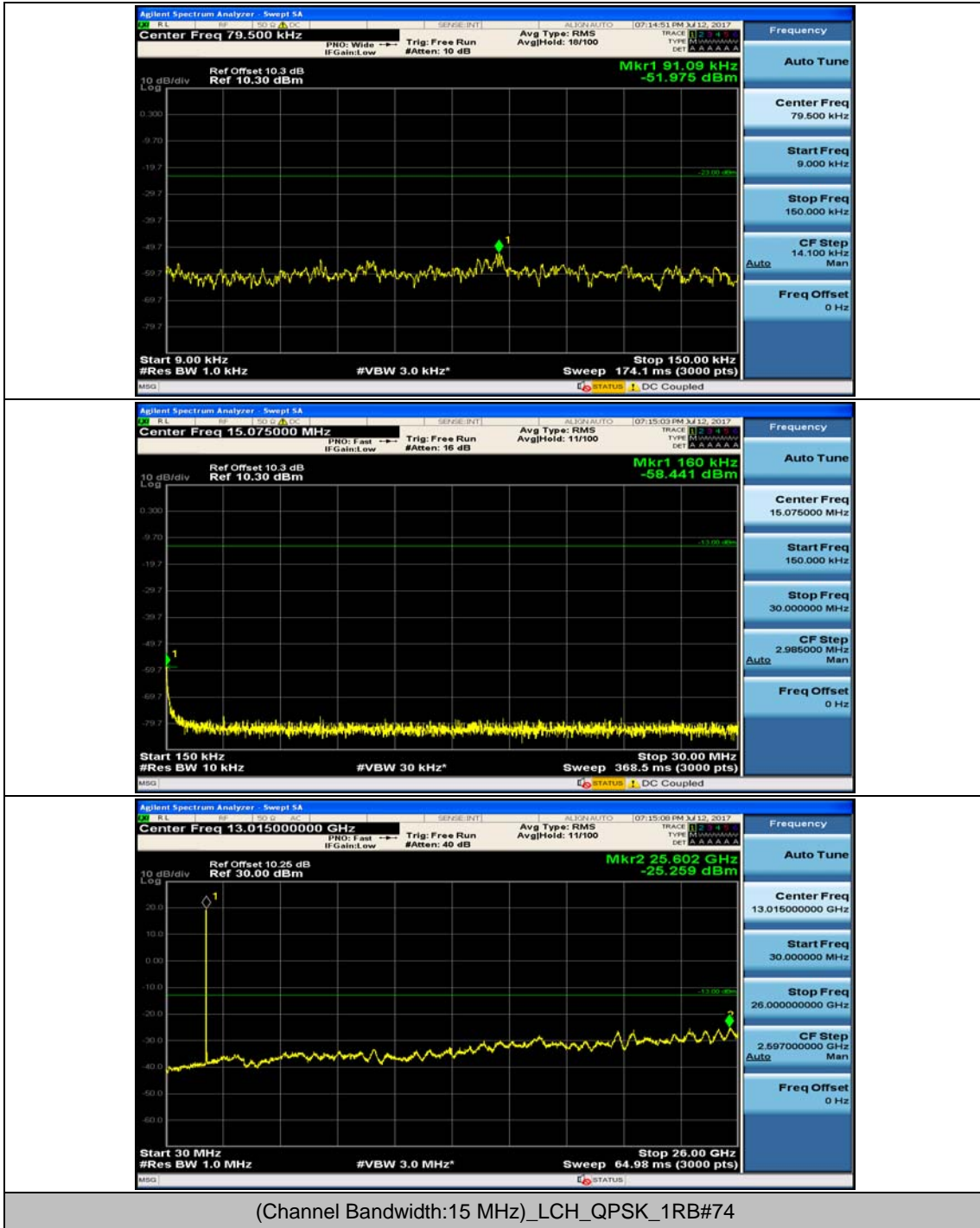
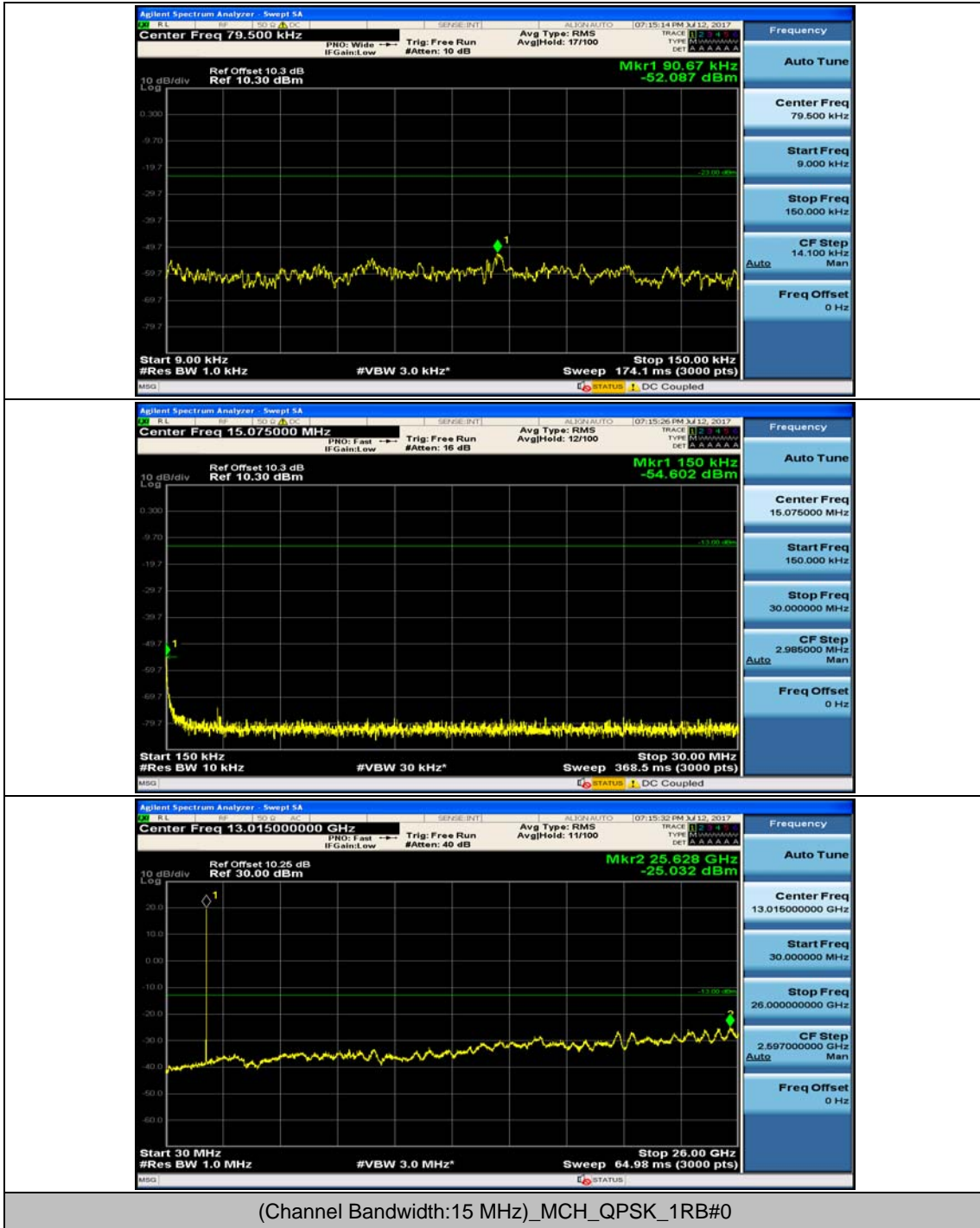
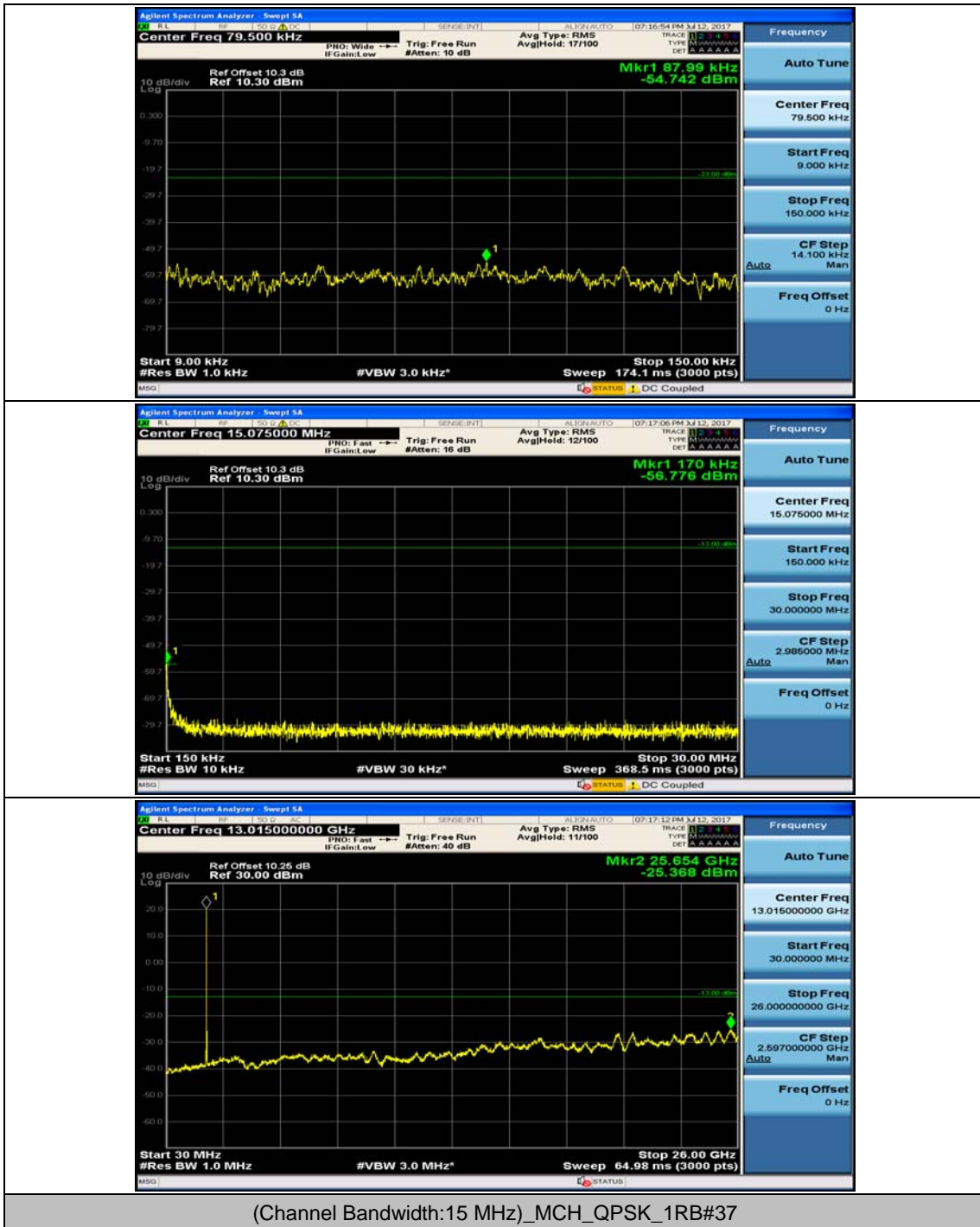


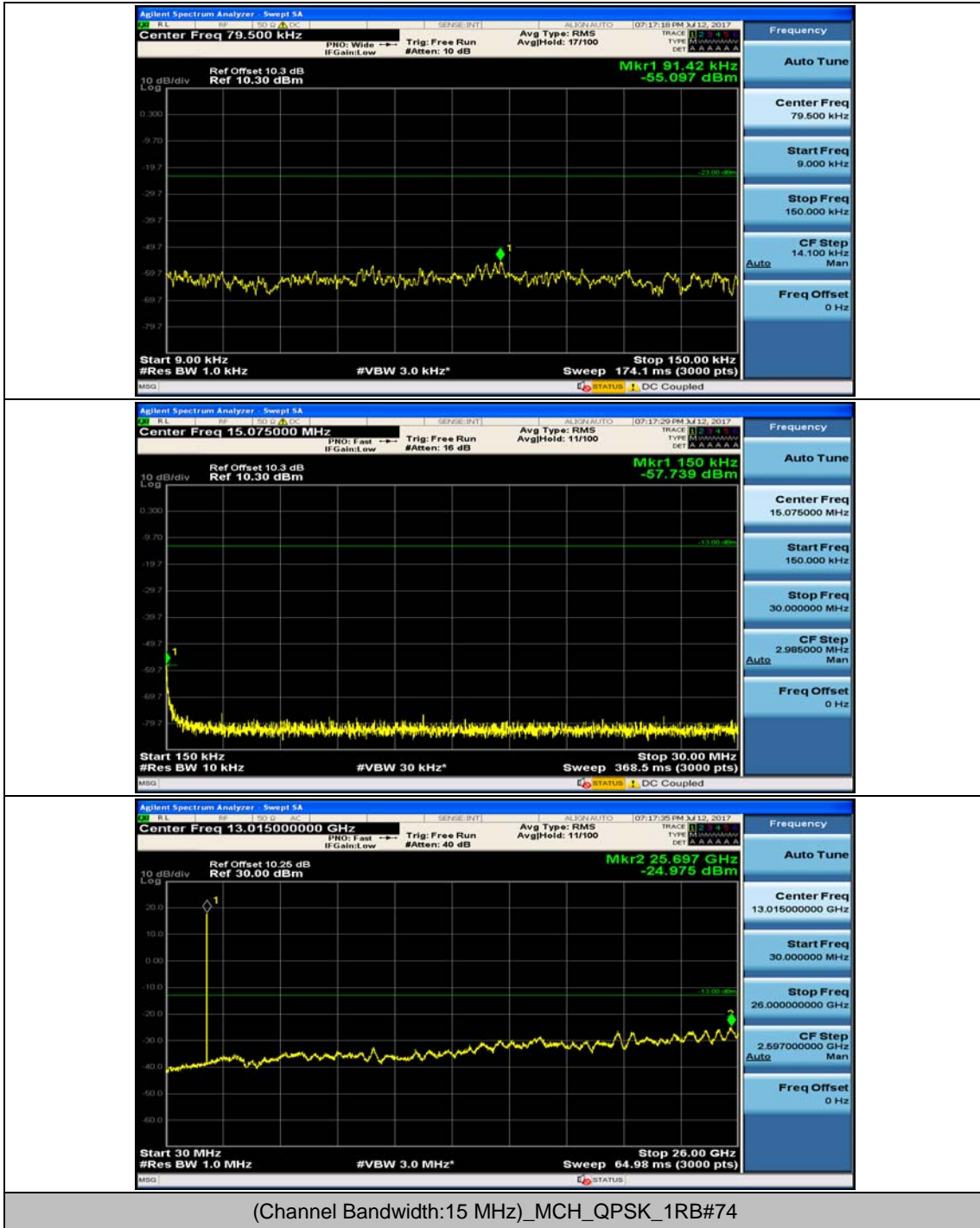
Channel Bandwidth: 15 MHz

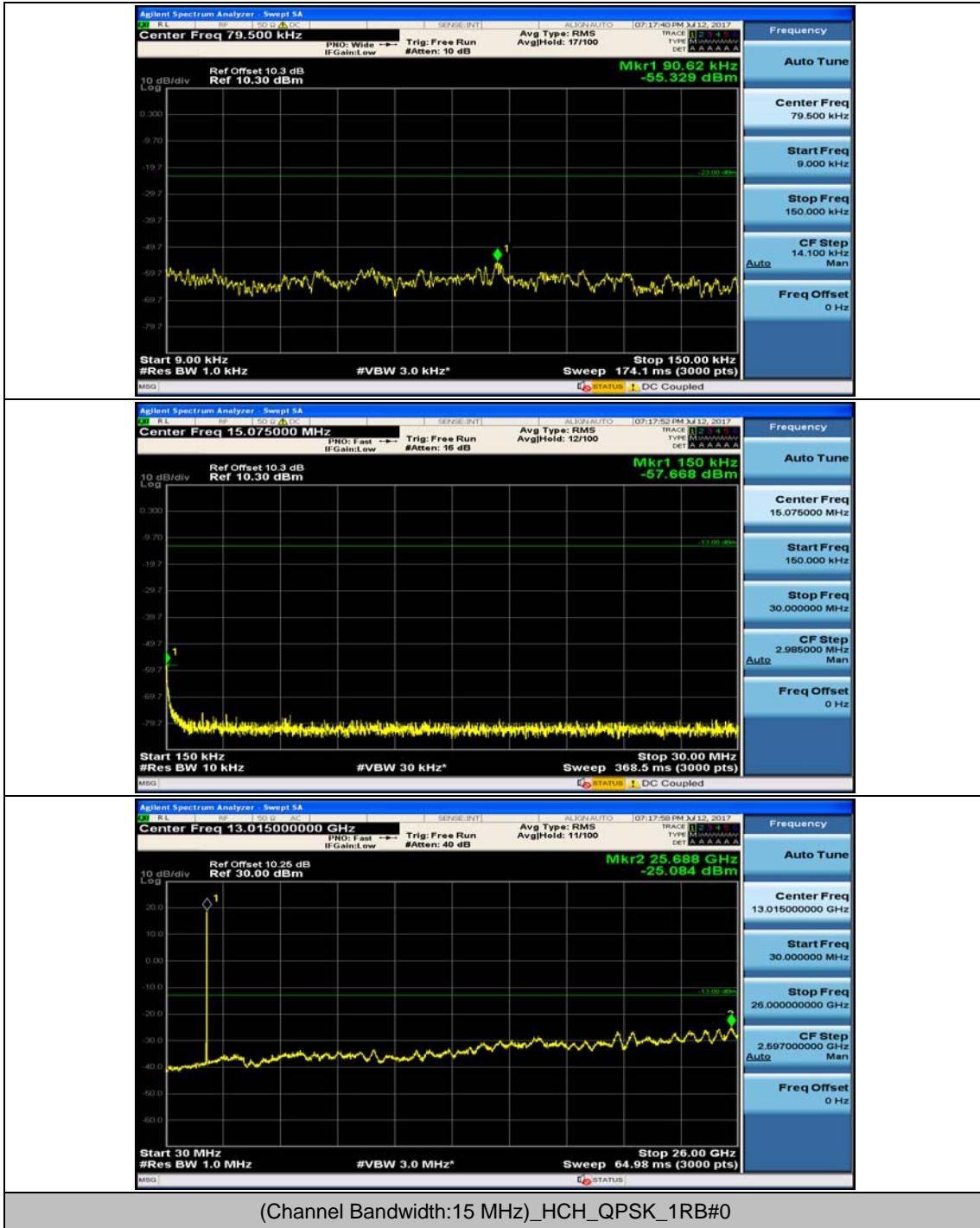


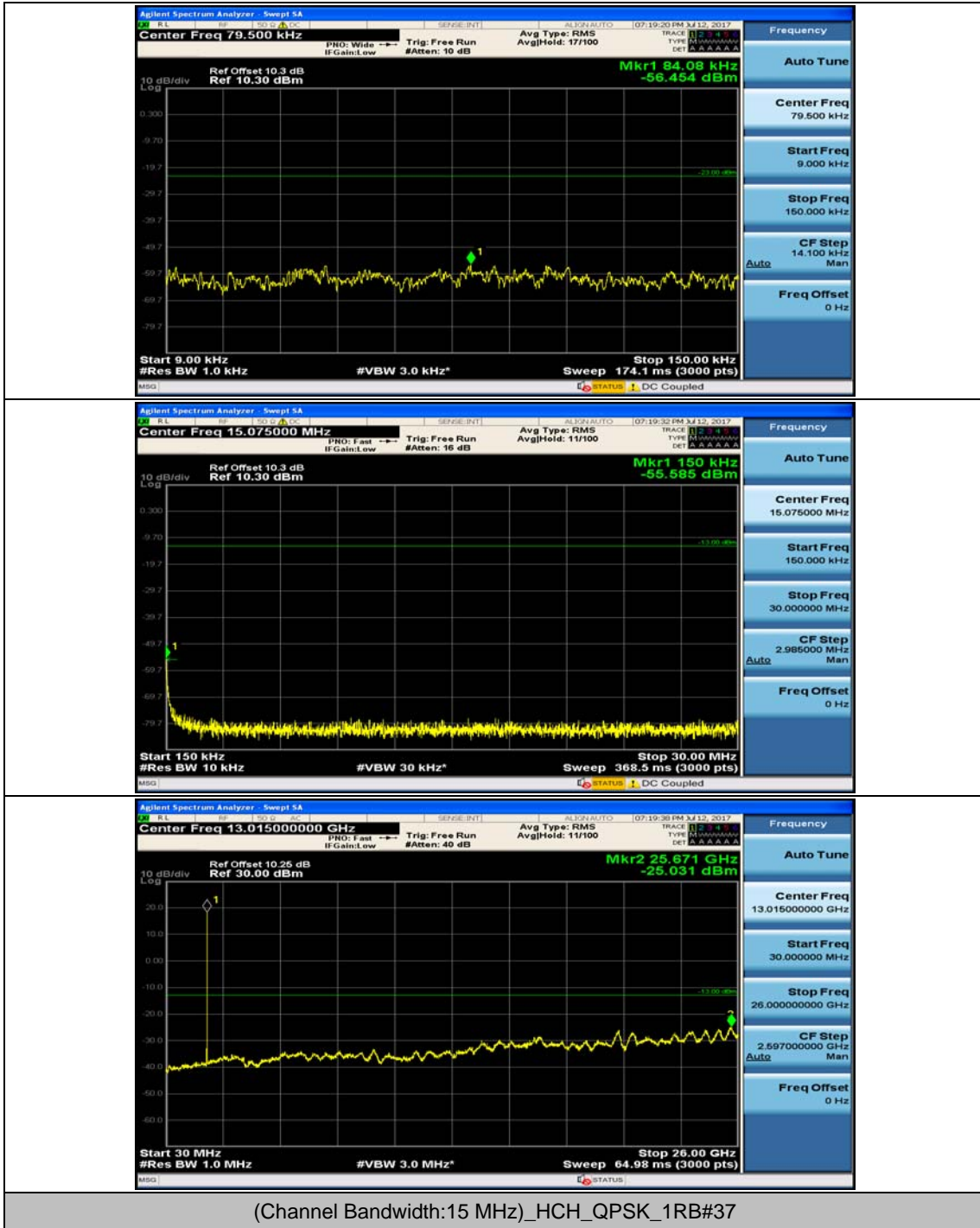


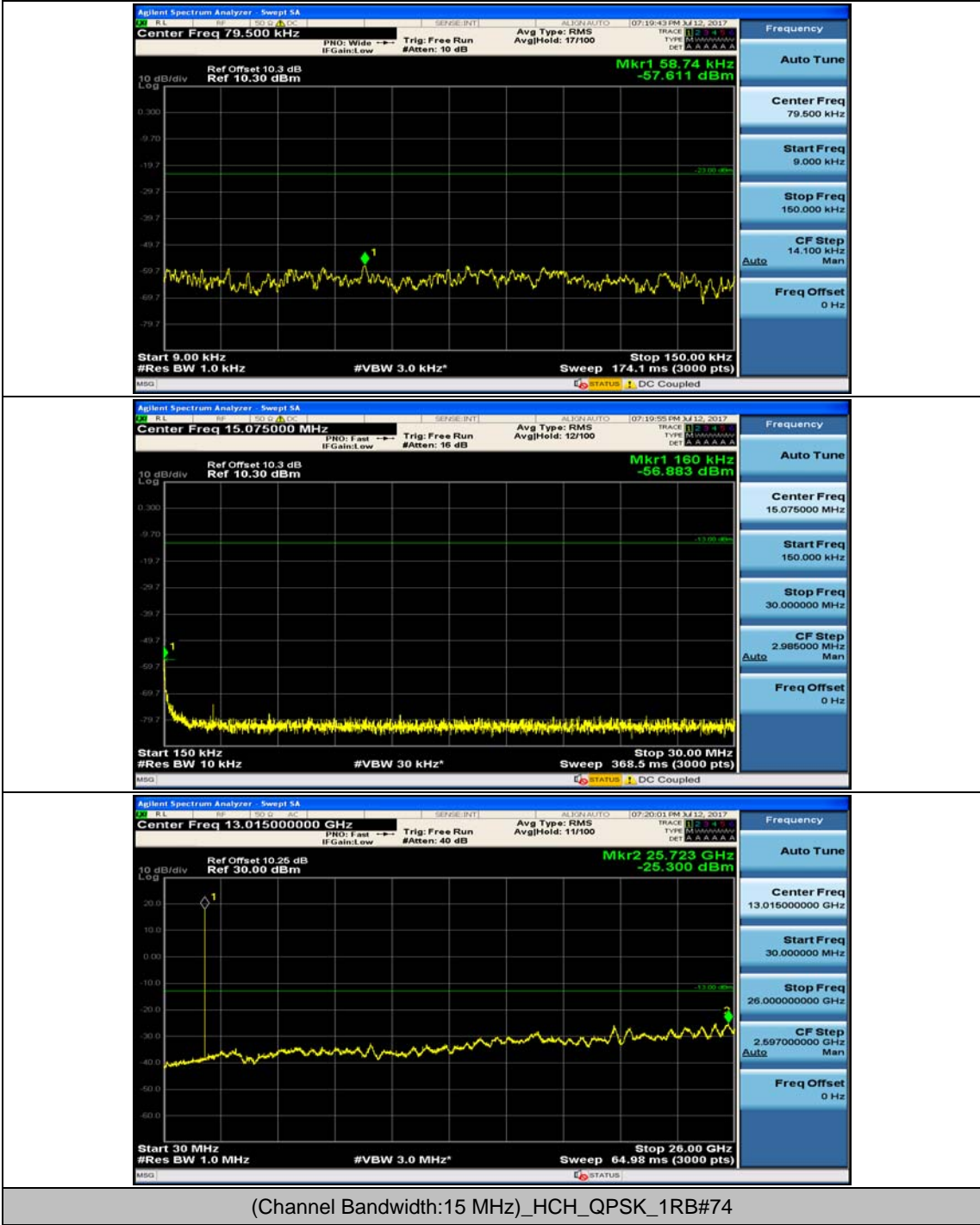


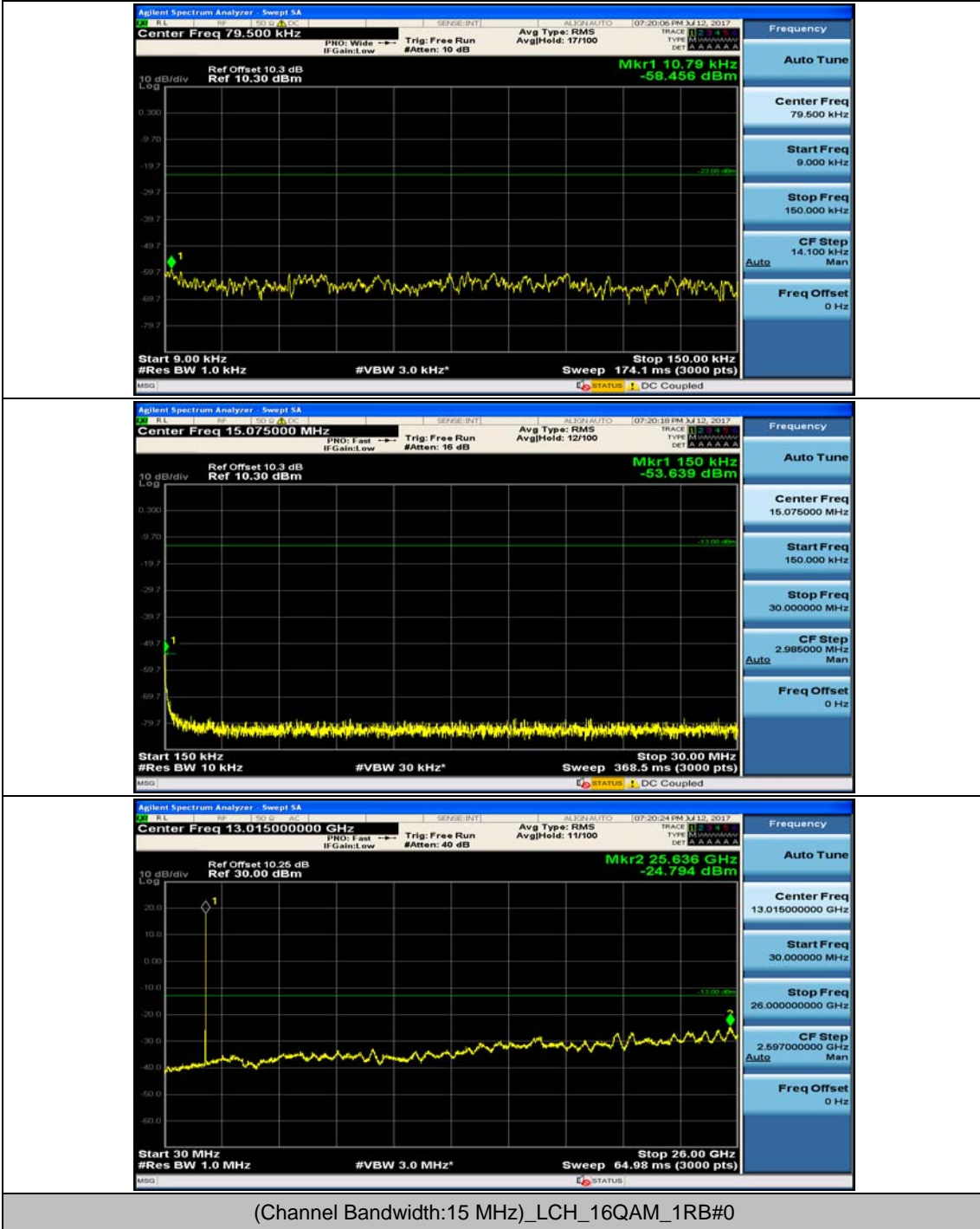


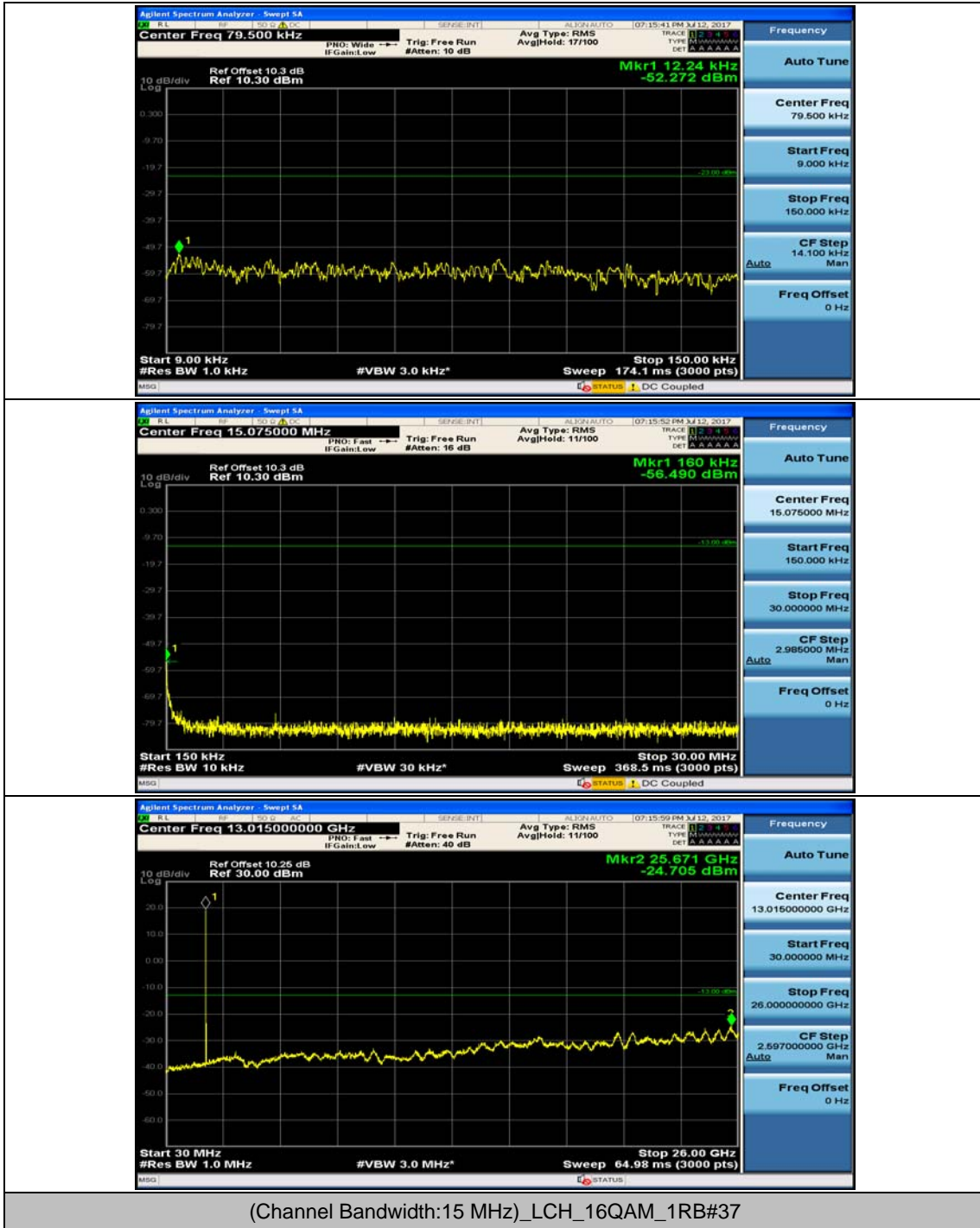


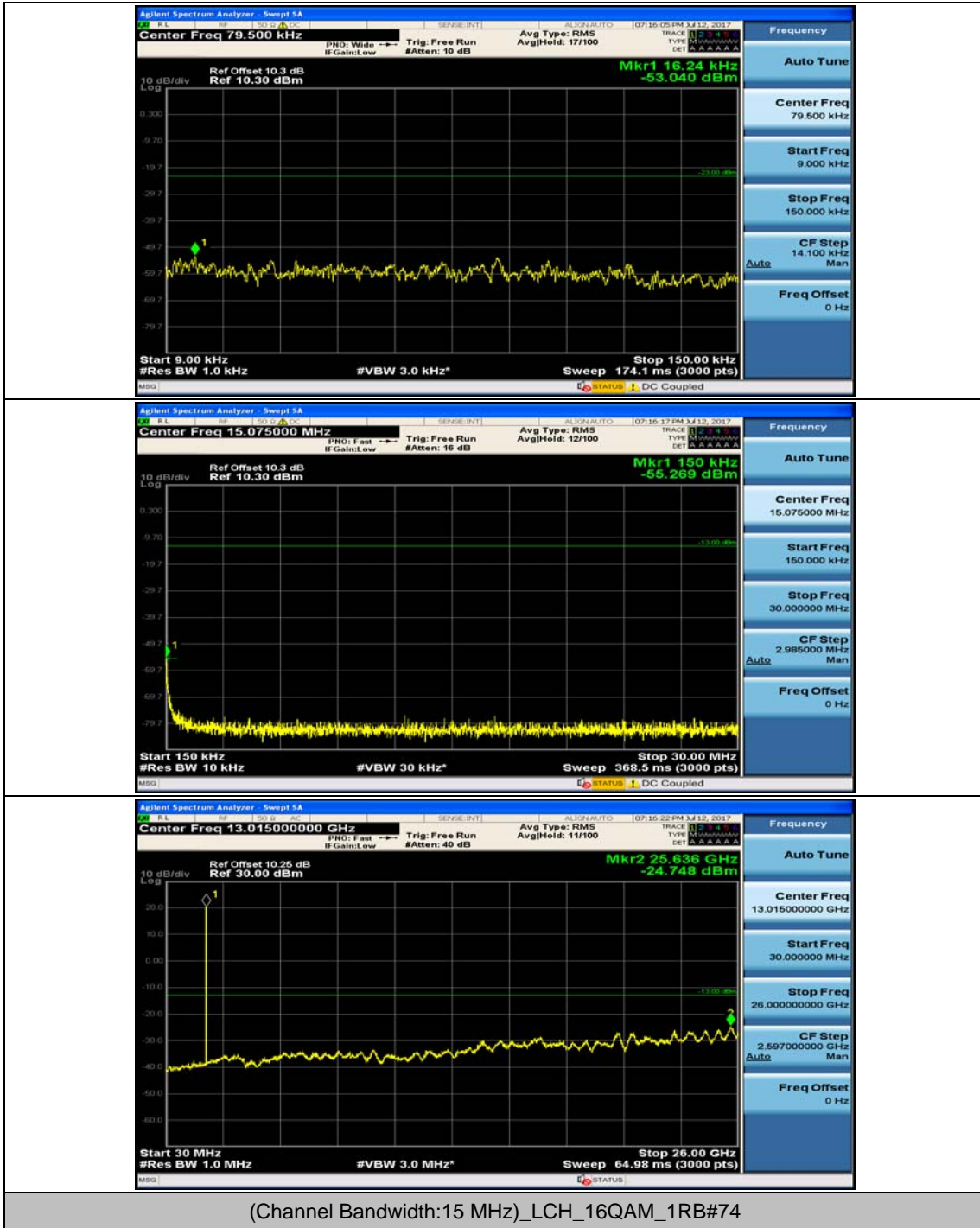


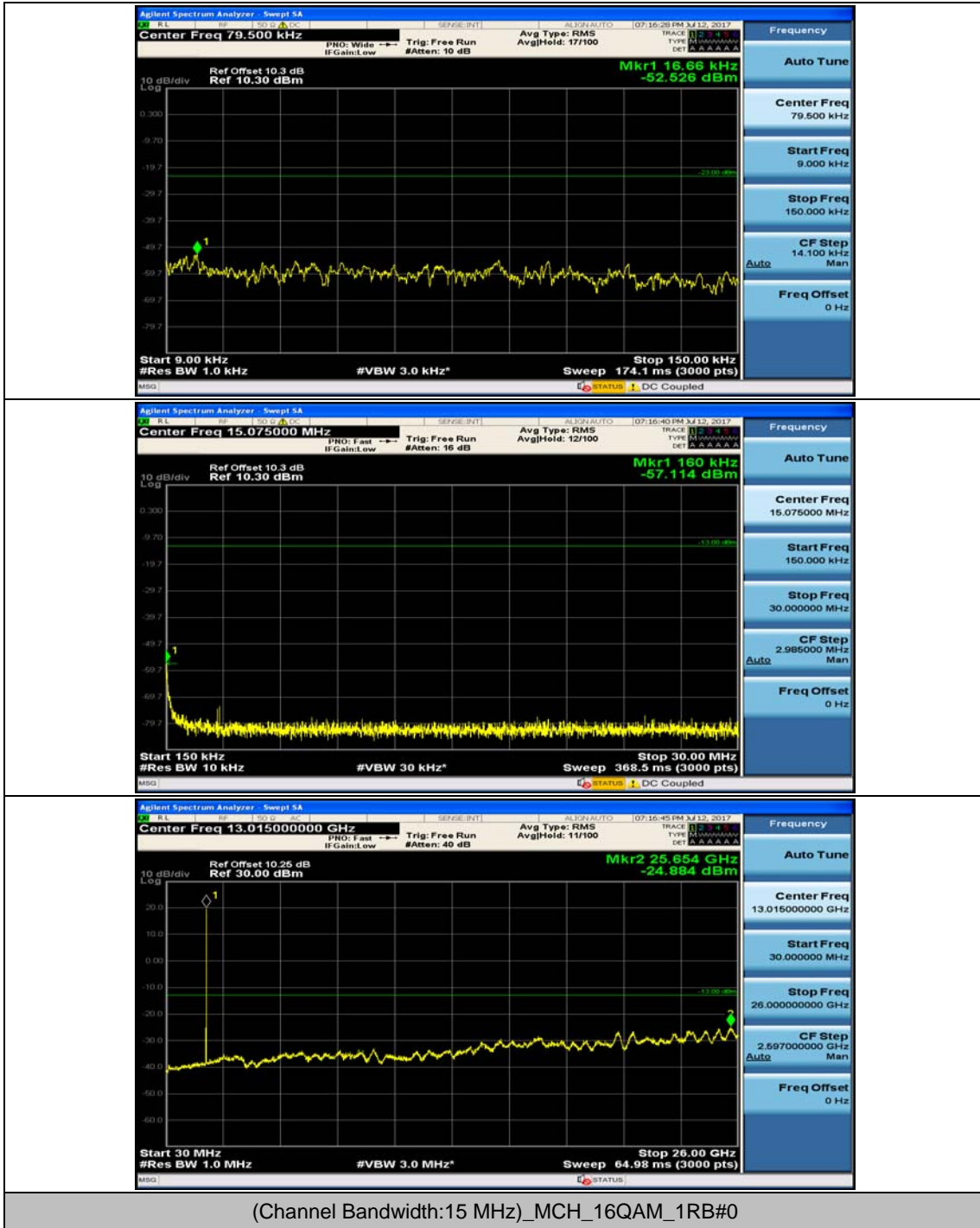


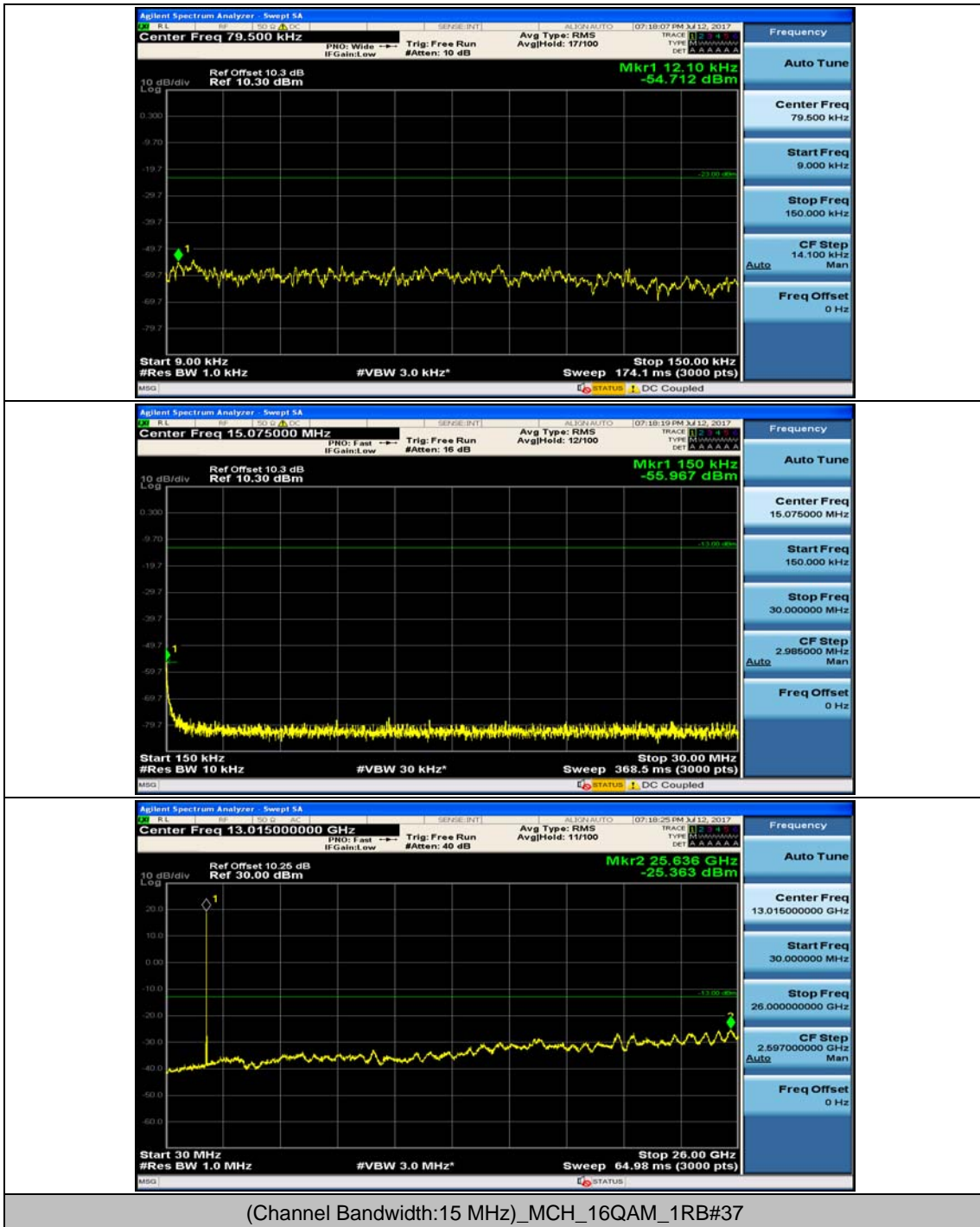


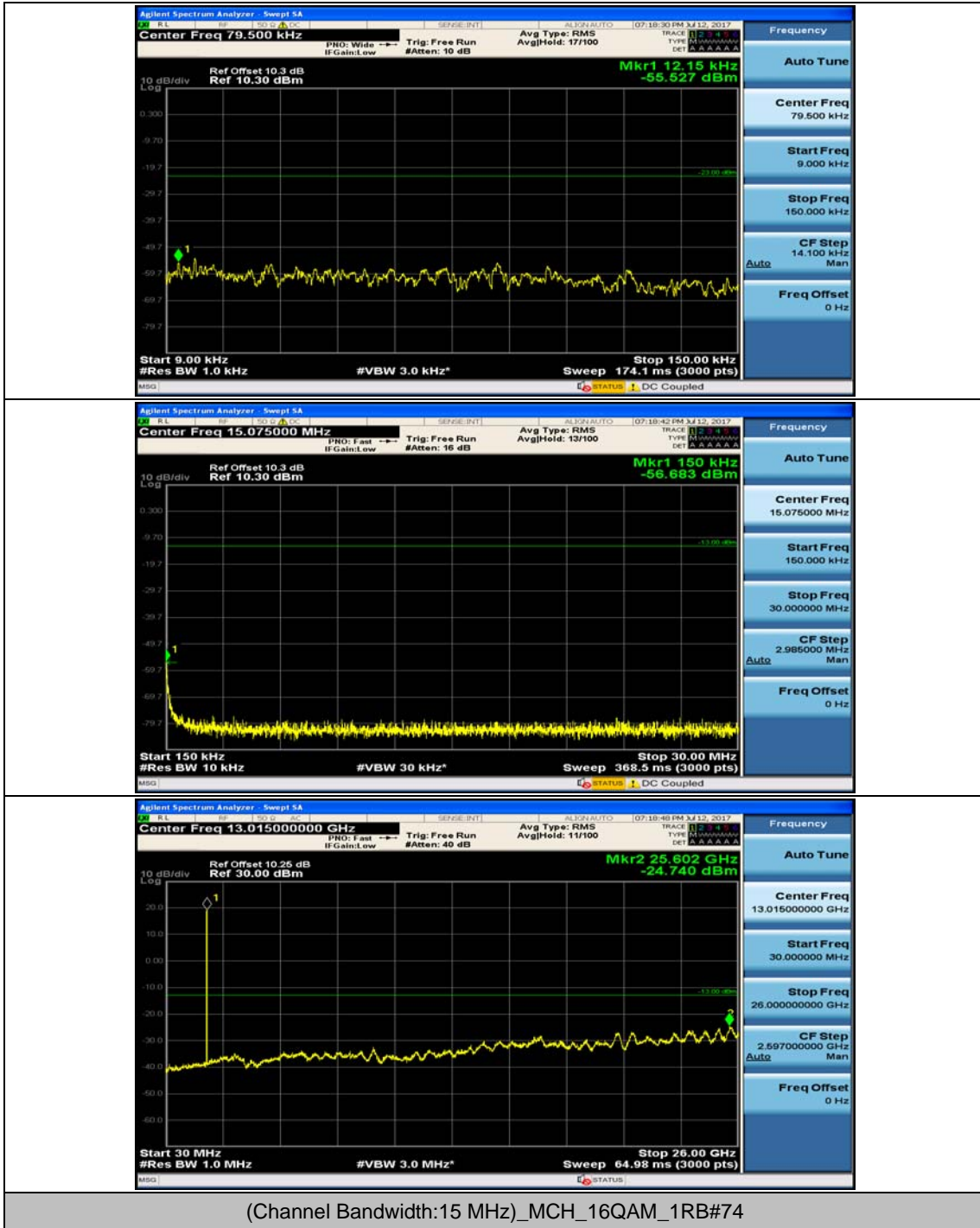


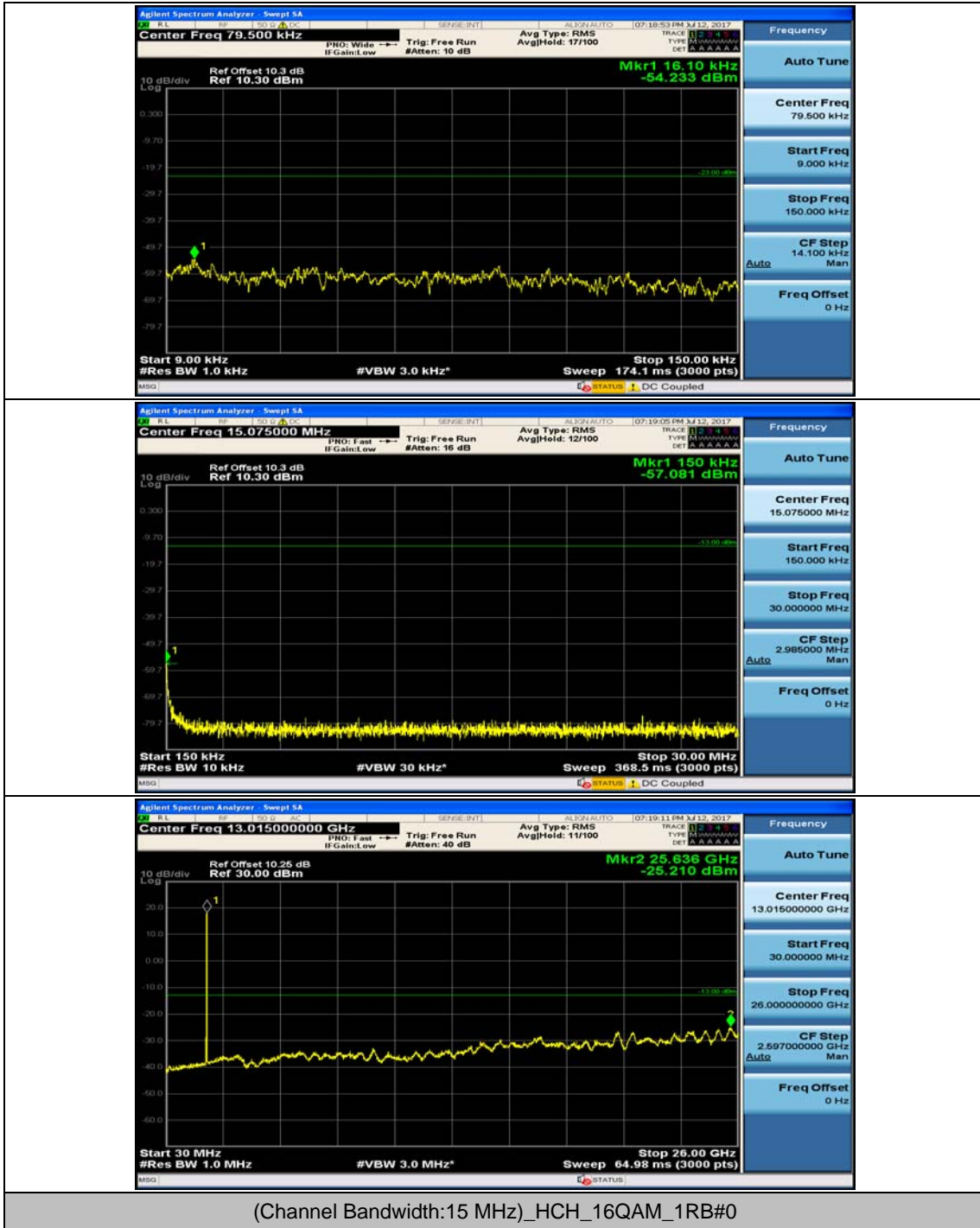


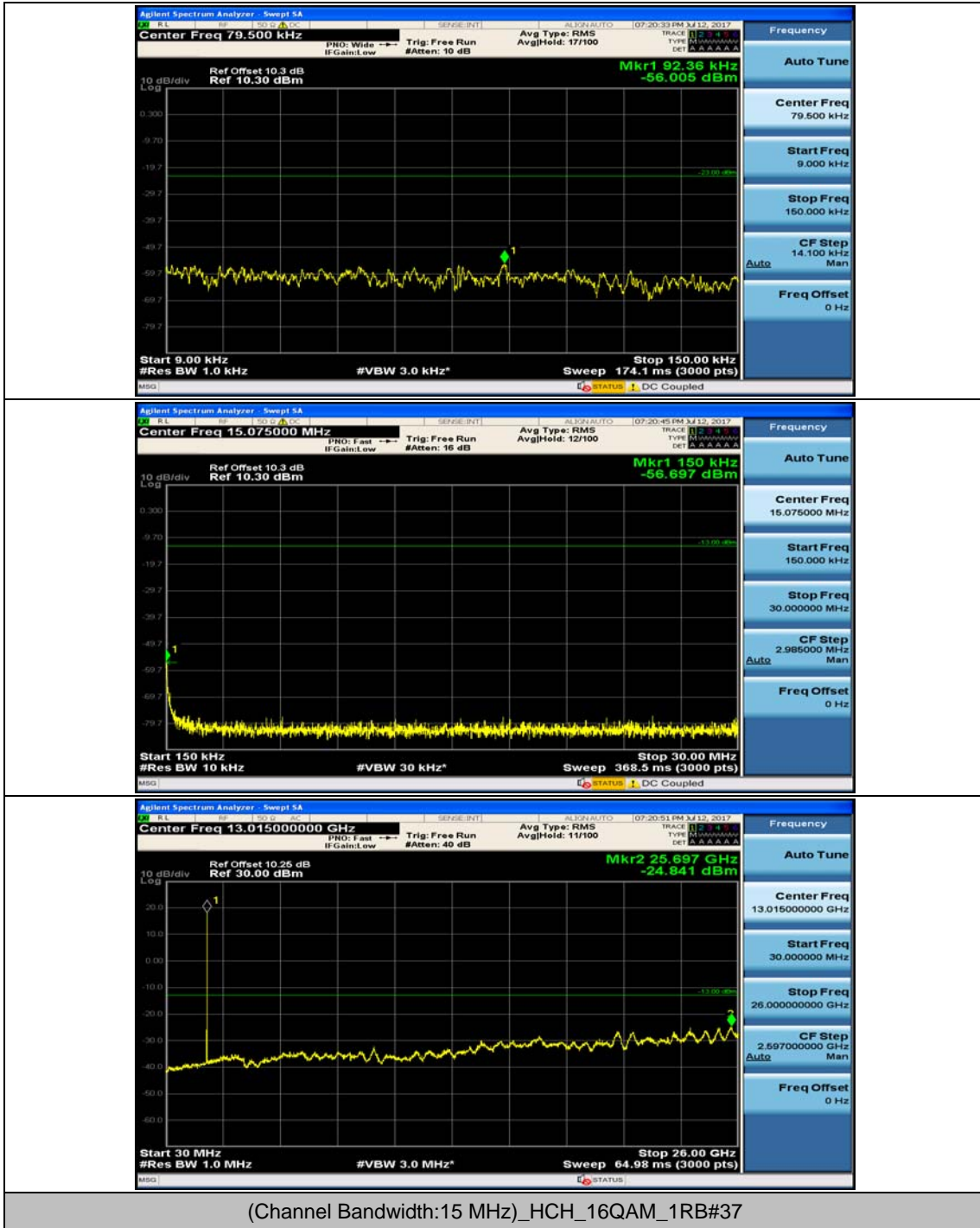


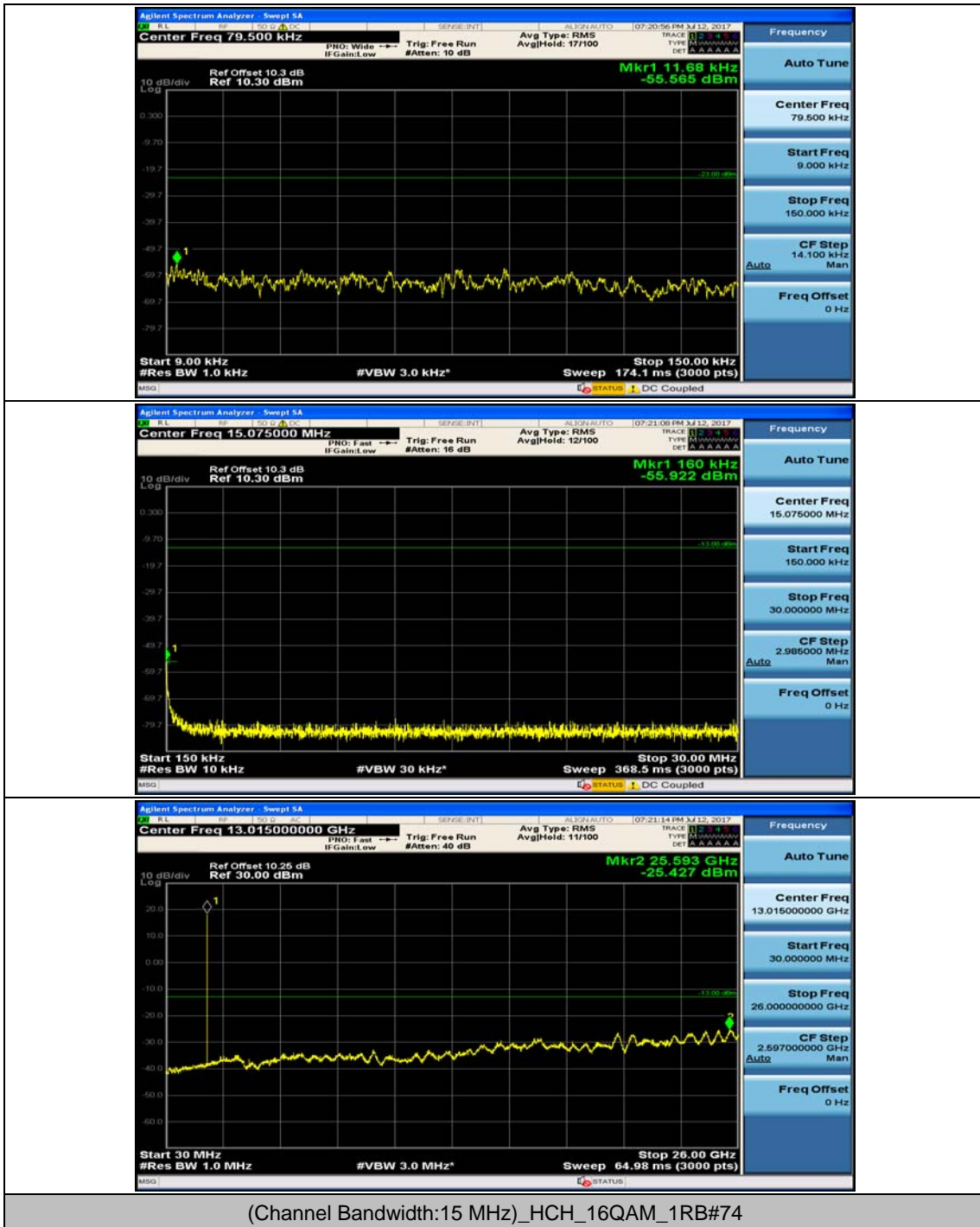


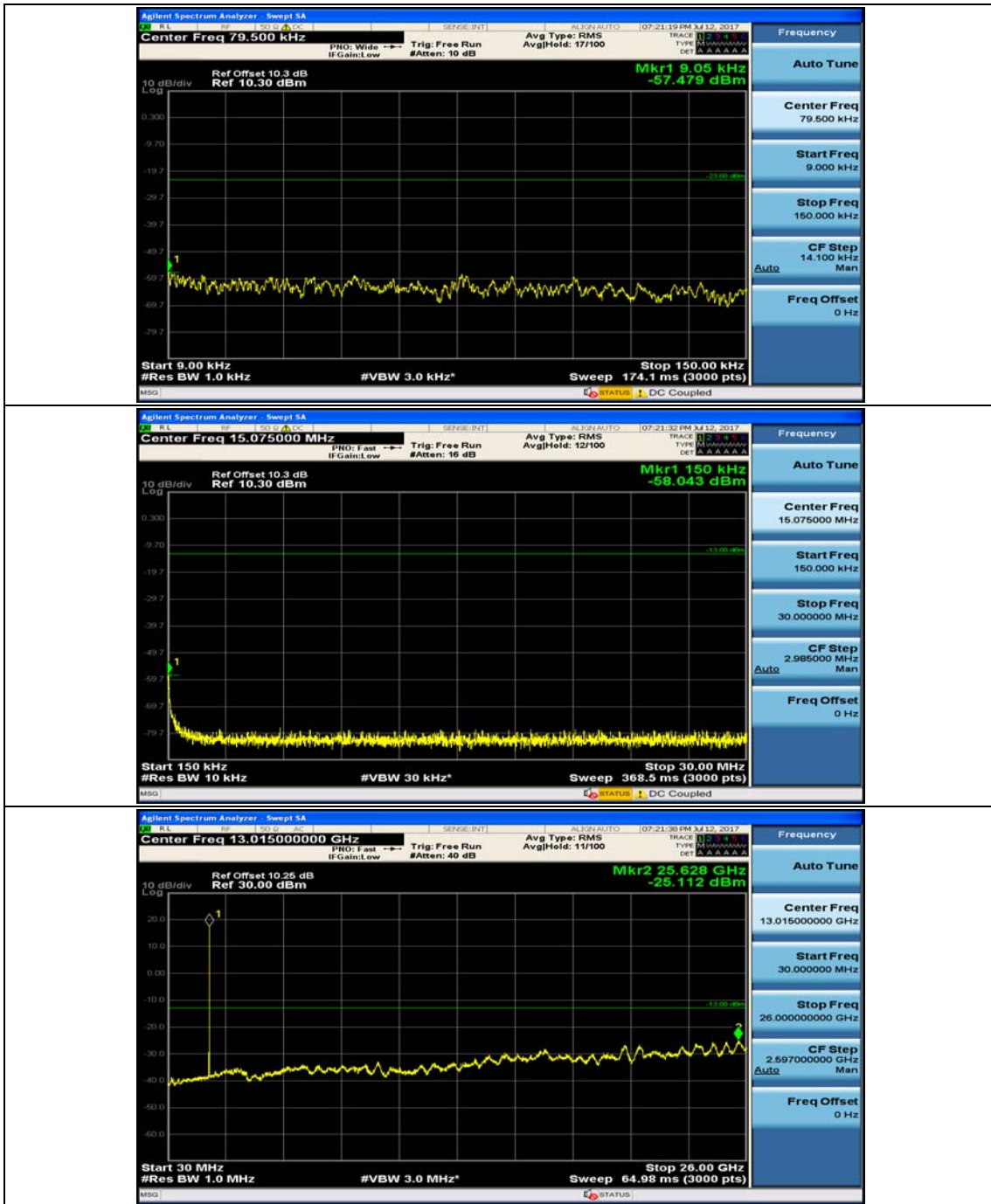




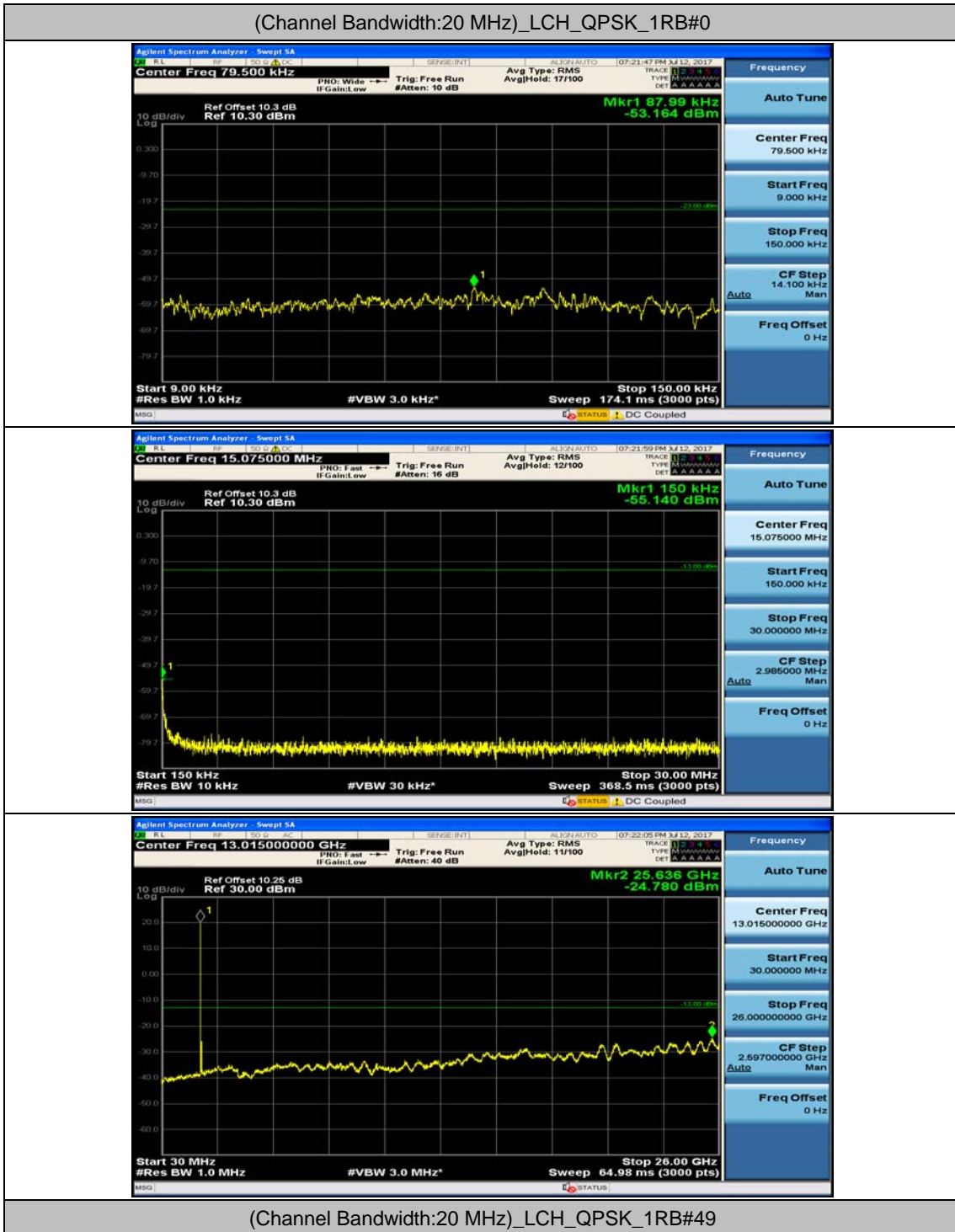


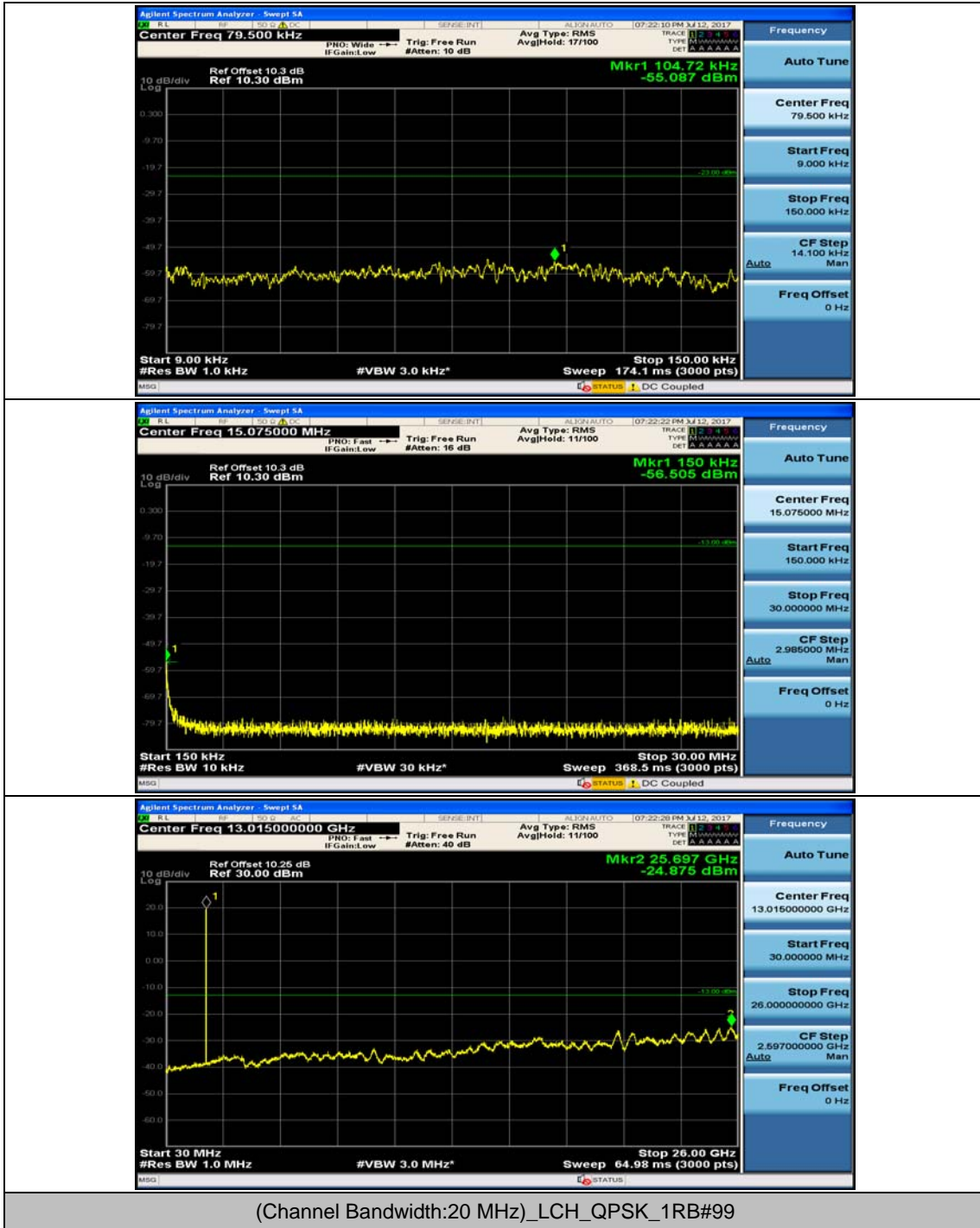


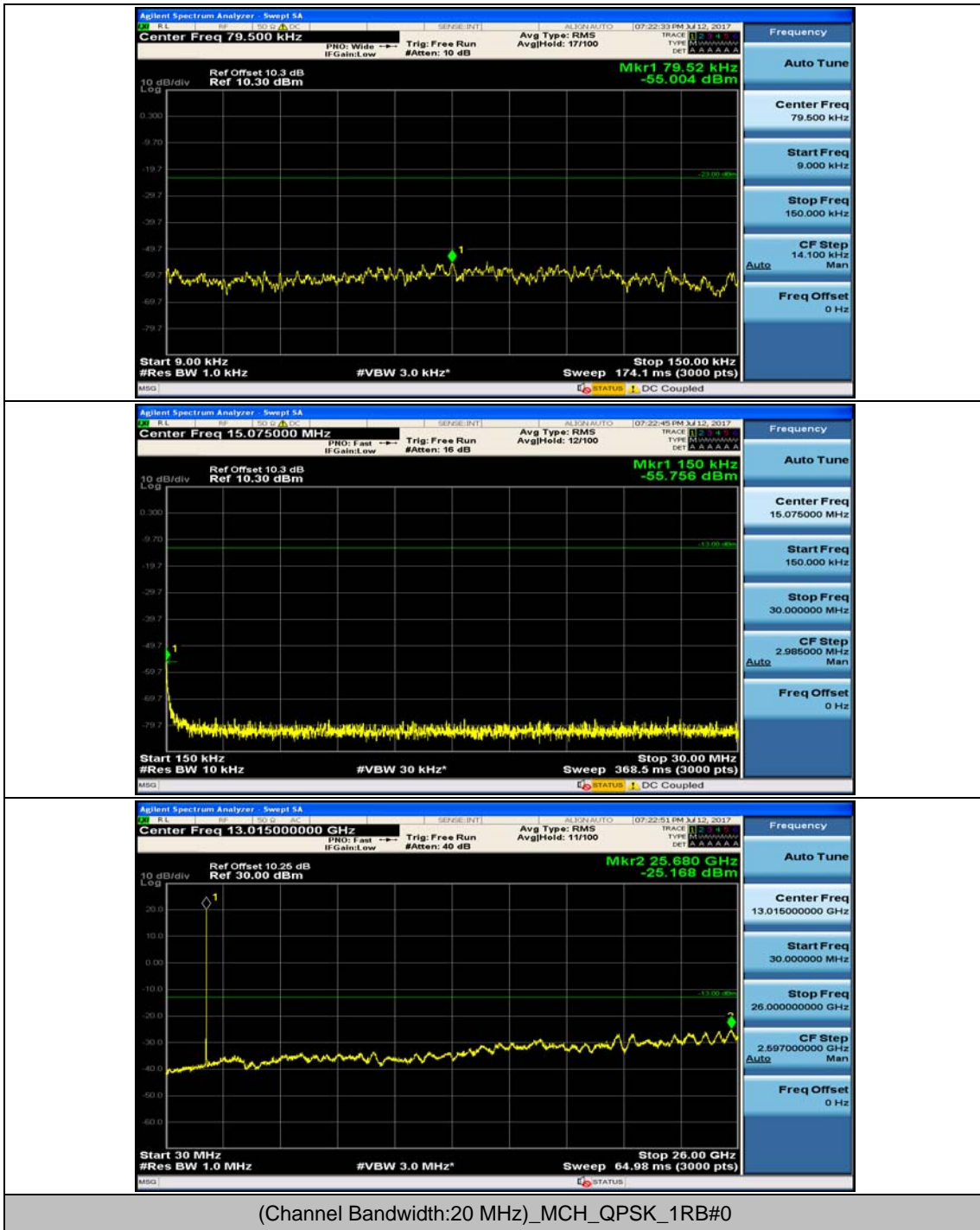


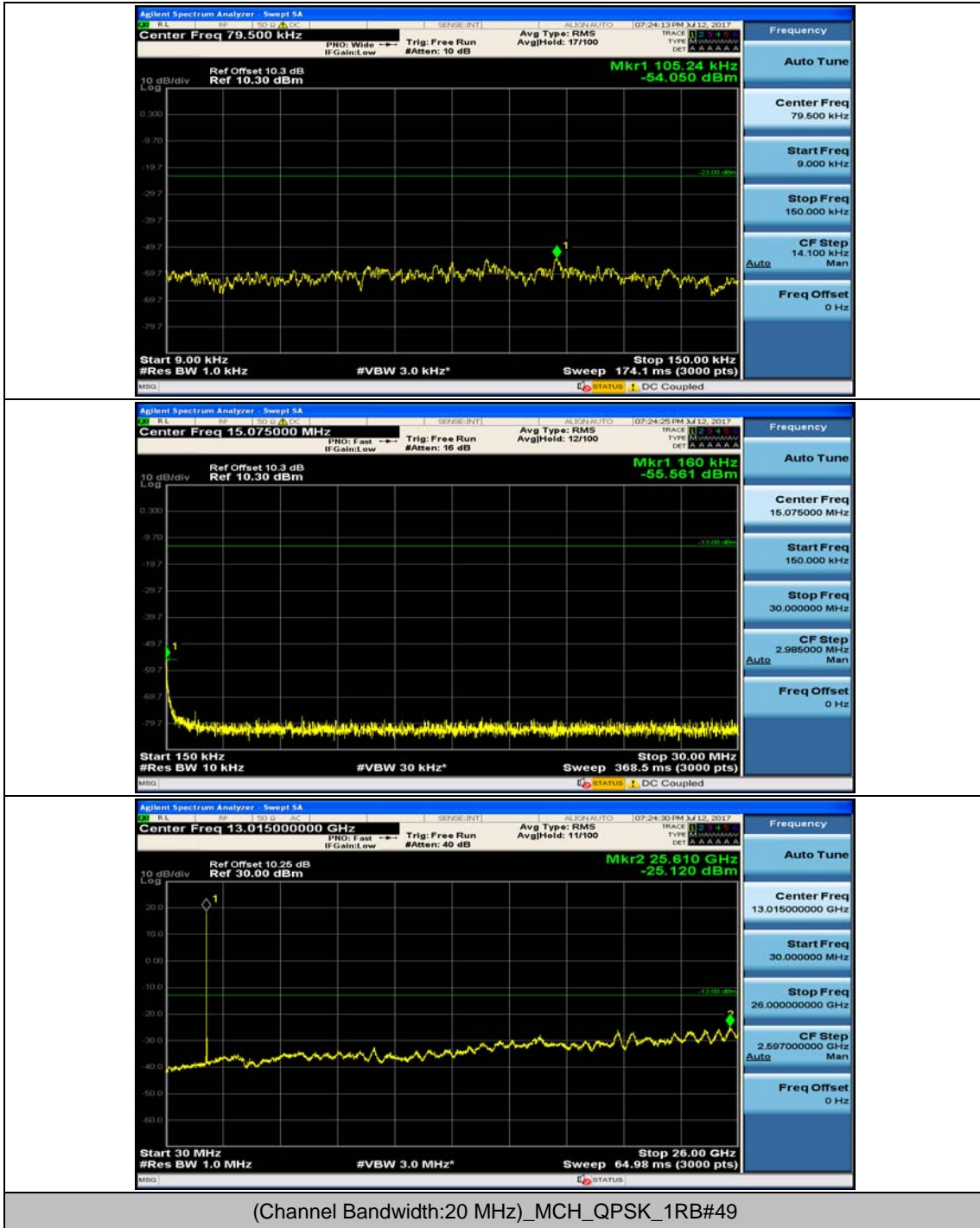


Channel Bandwidth: 20 MHz

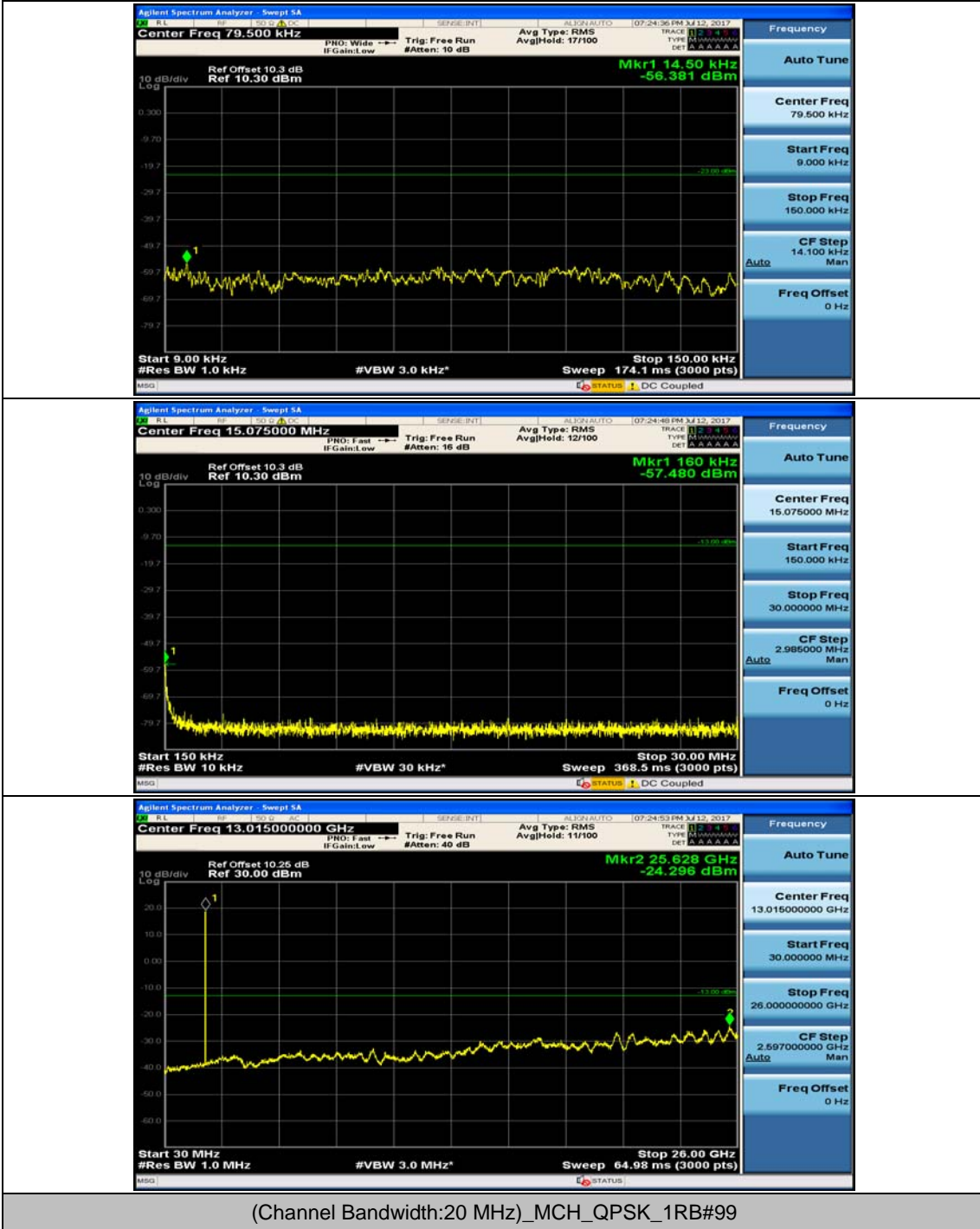


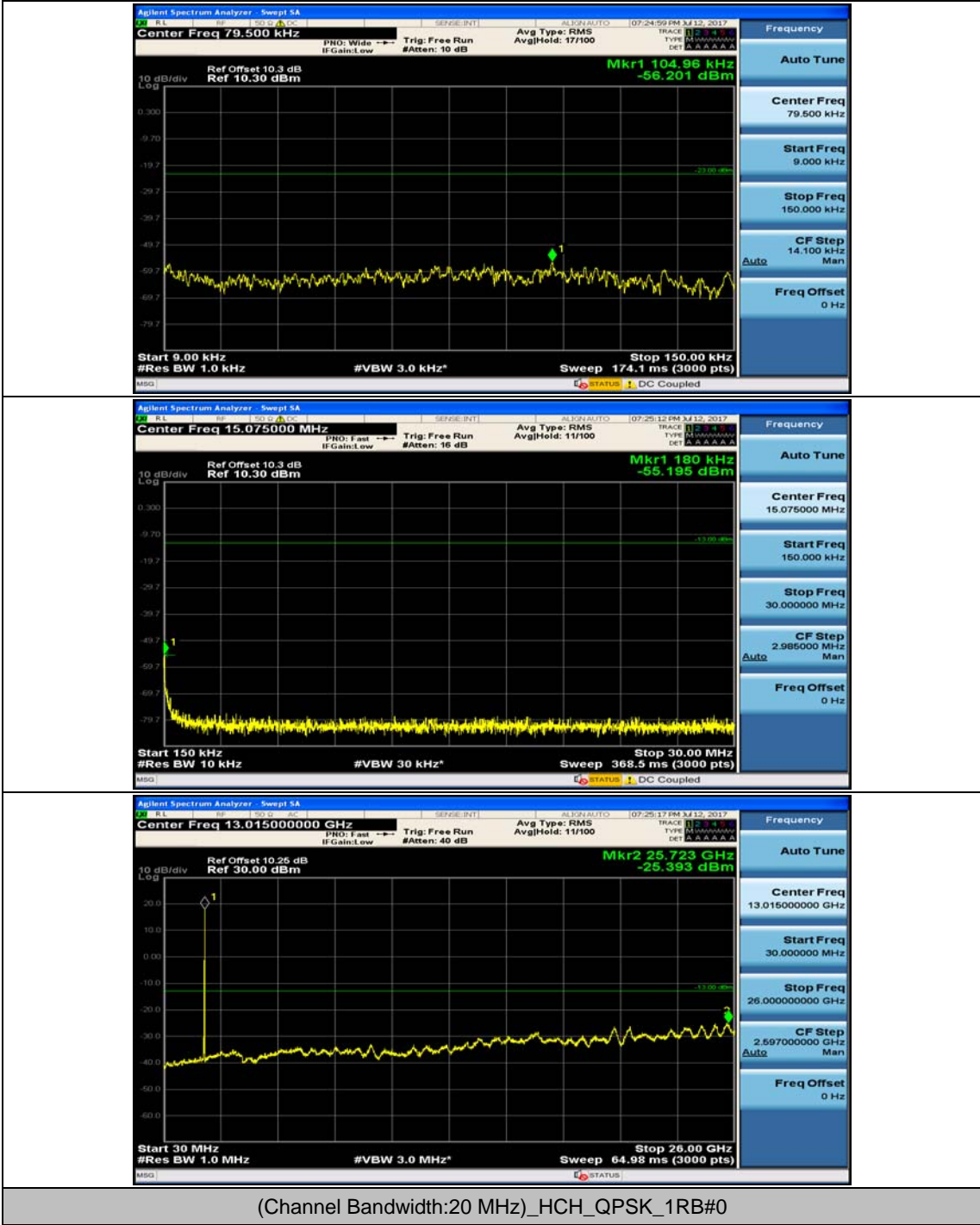


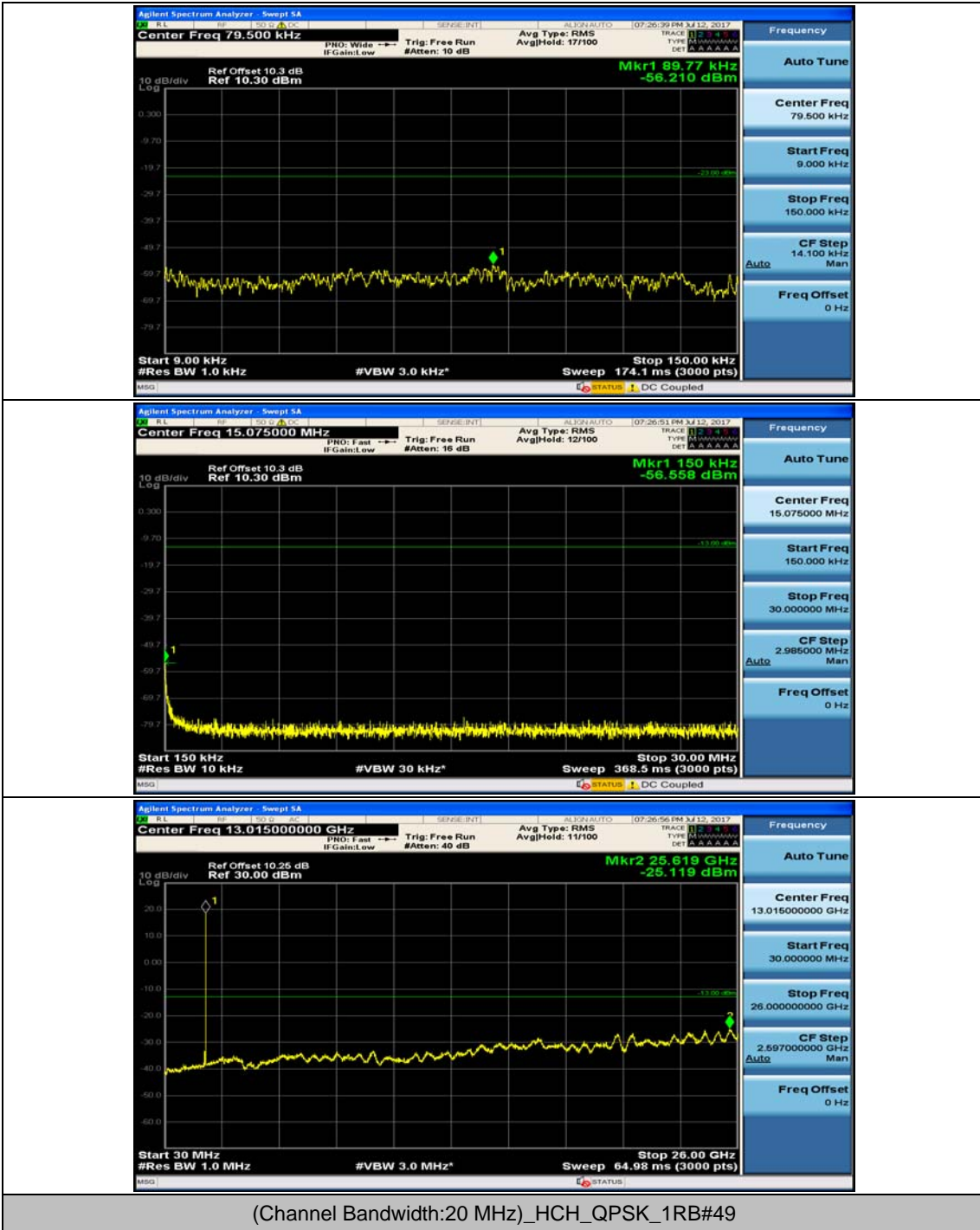


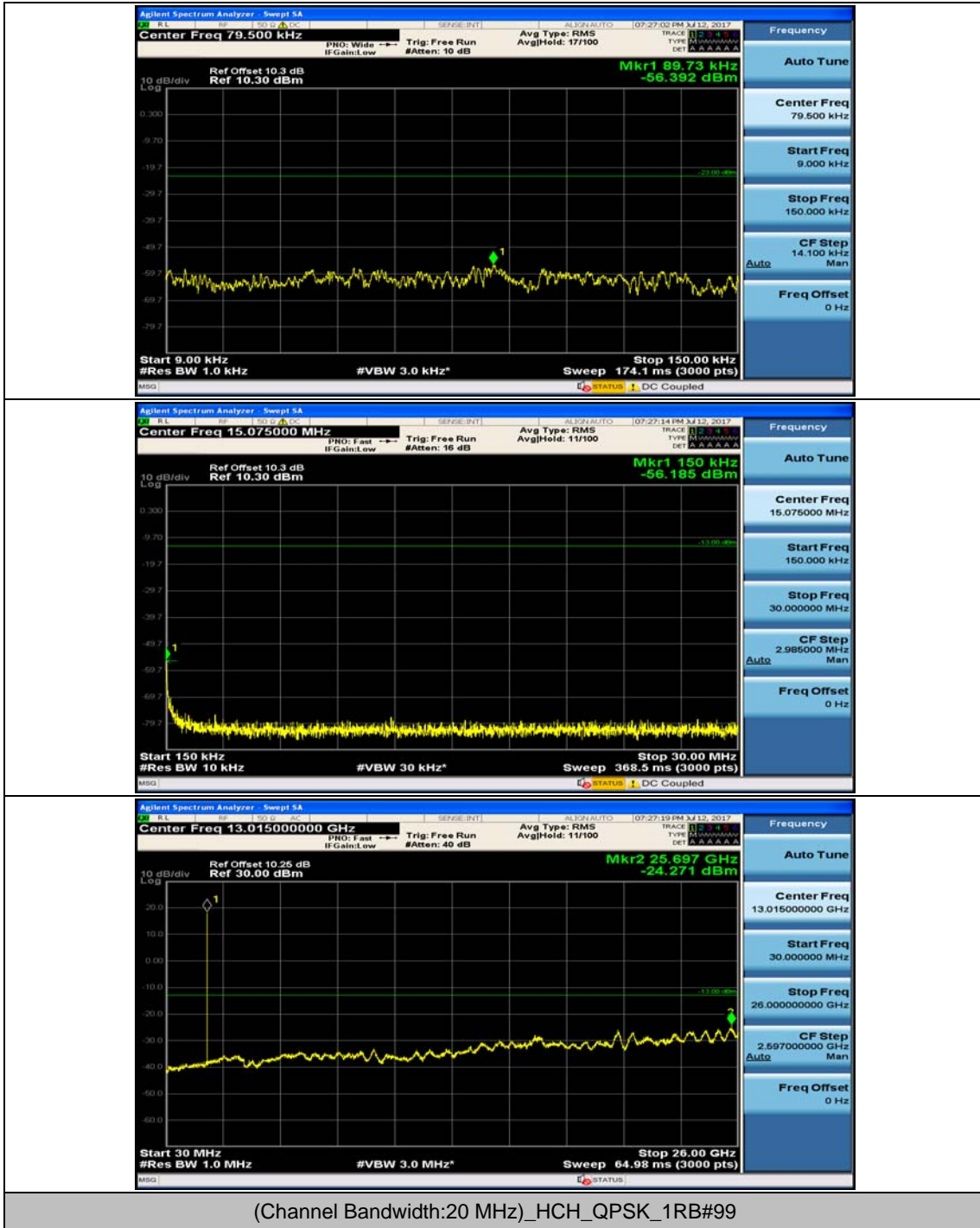


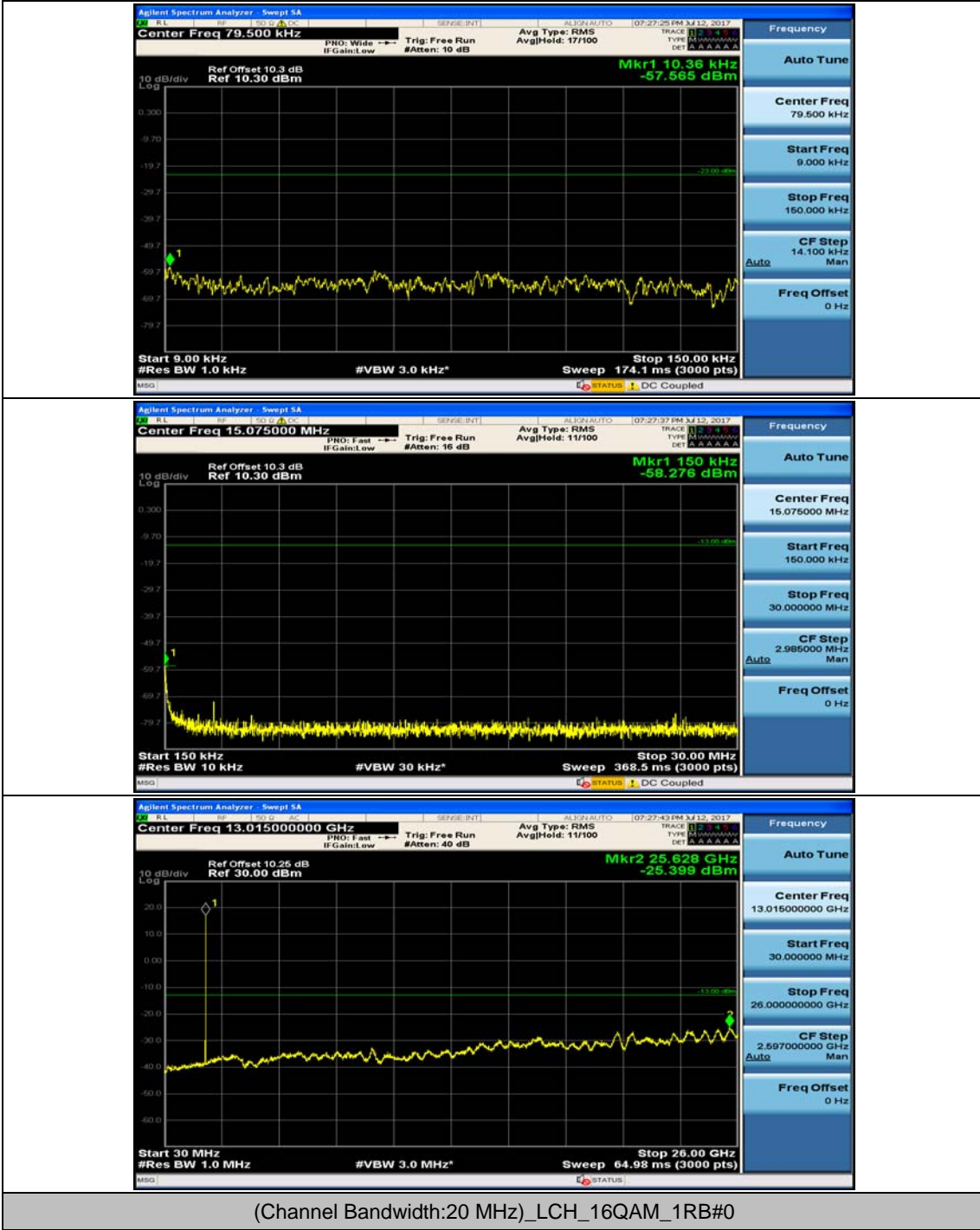
(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#49

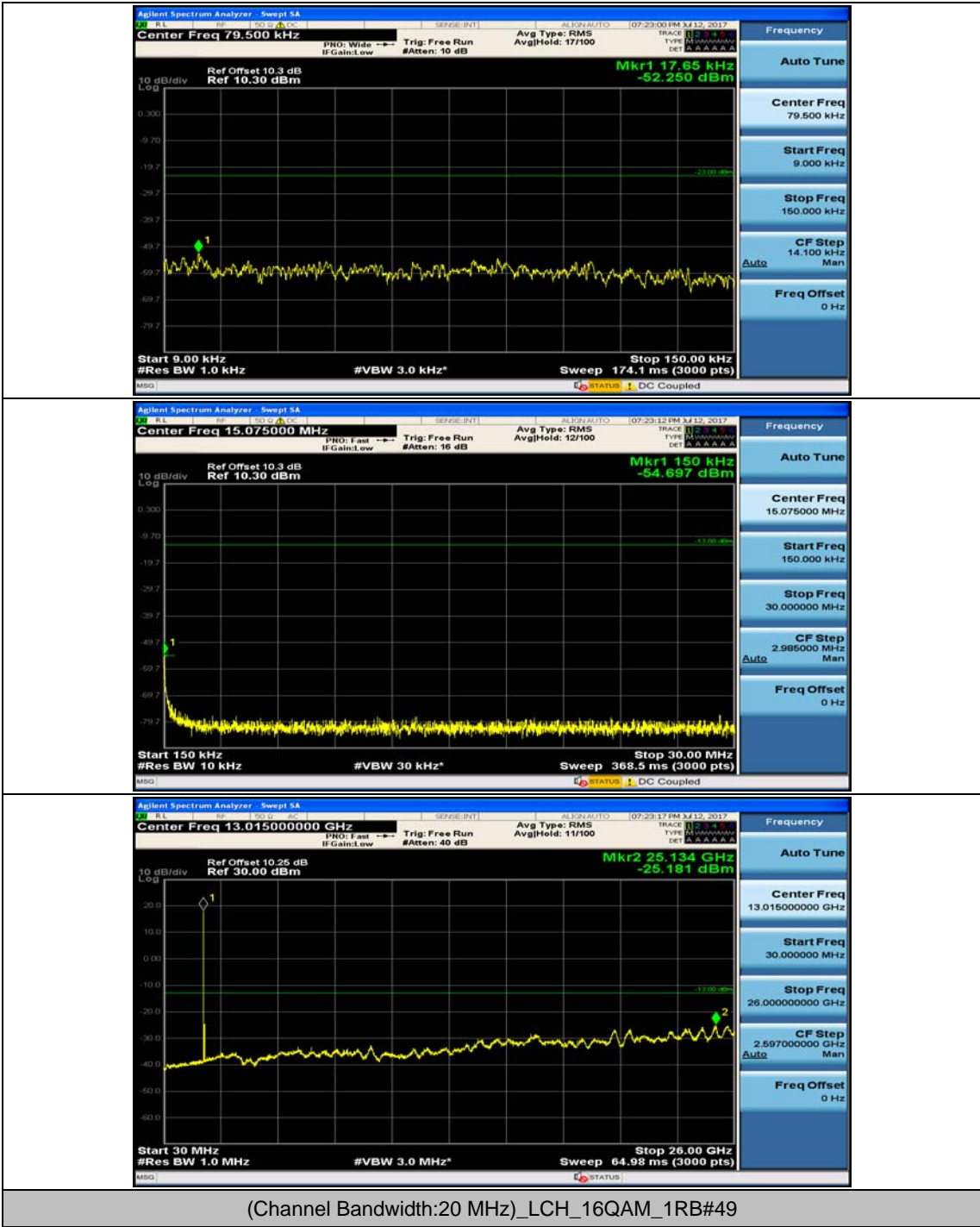


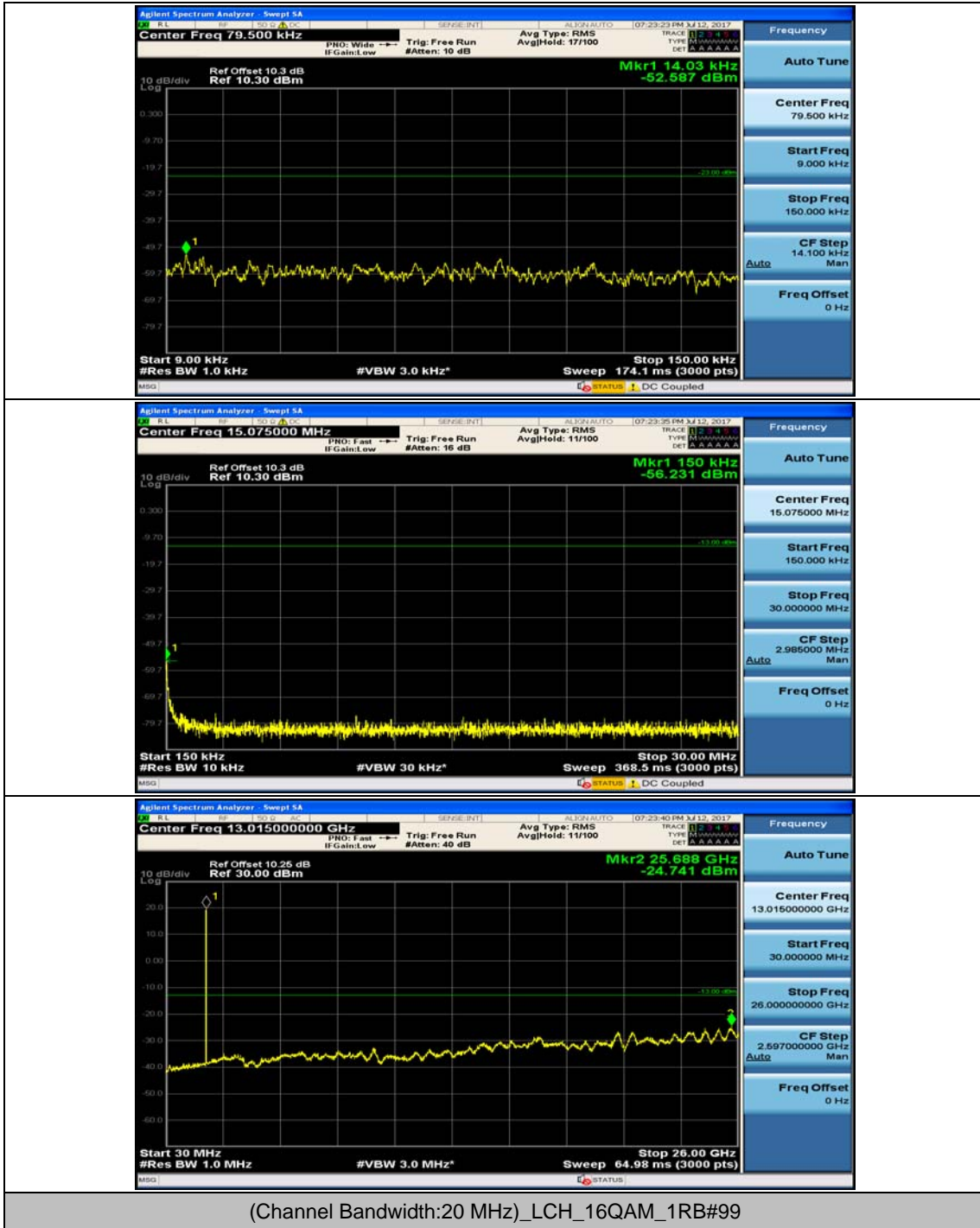


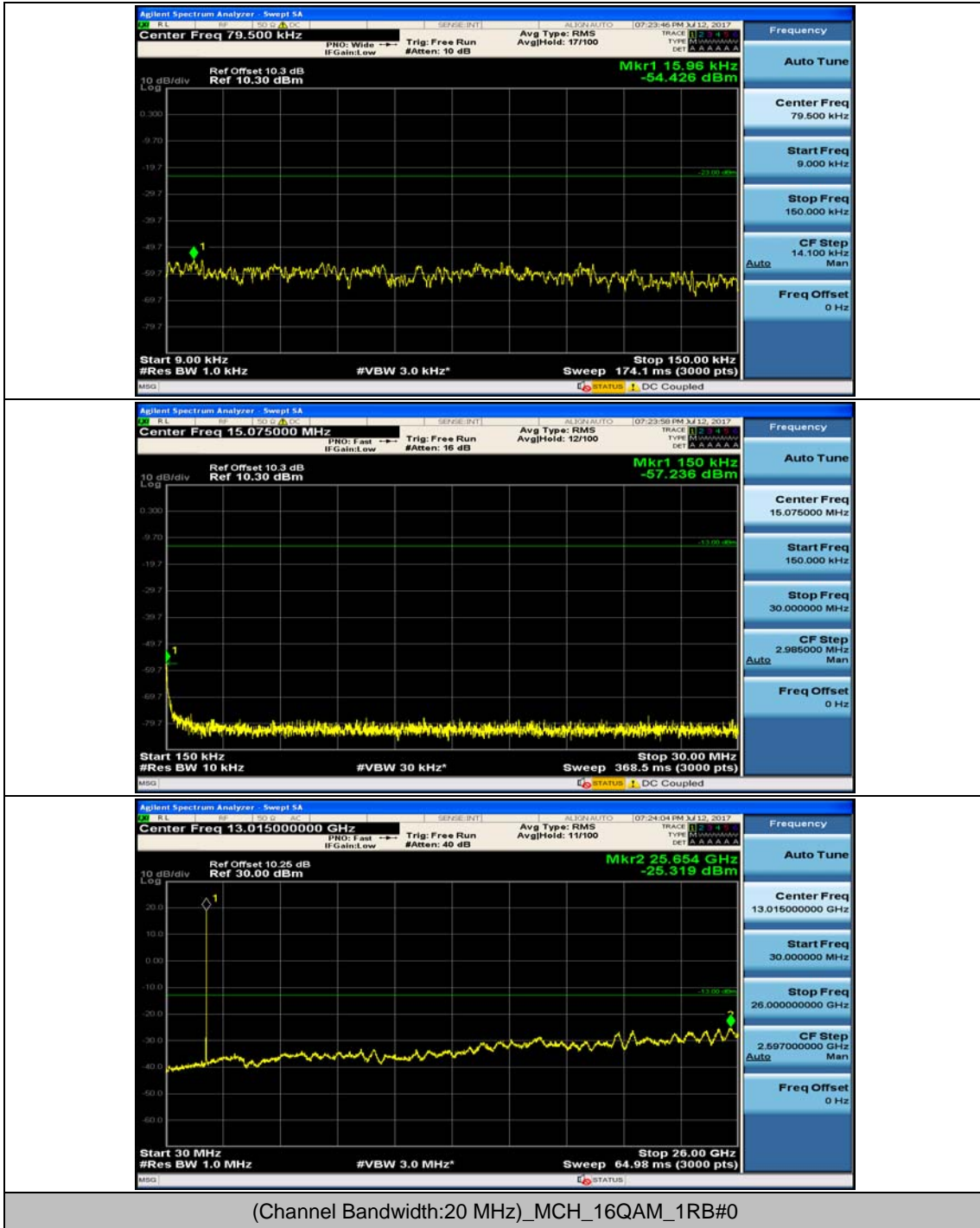


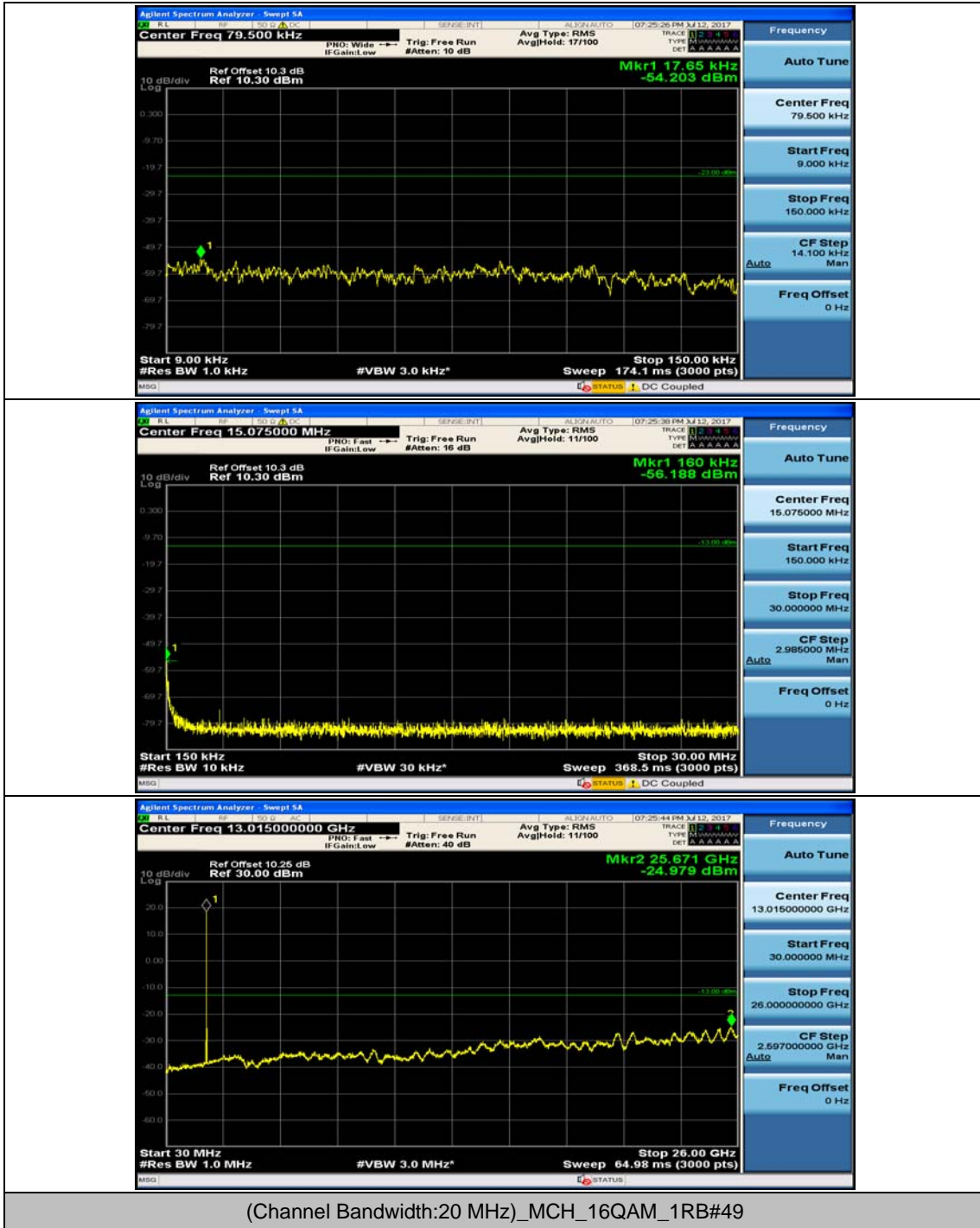


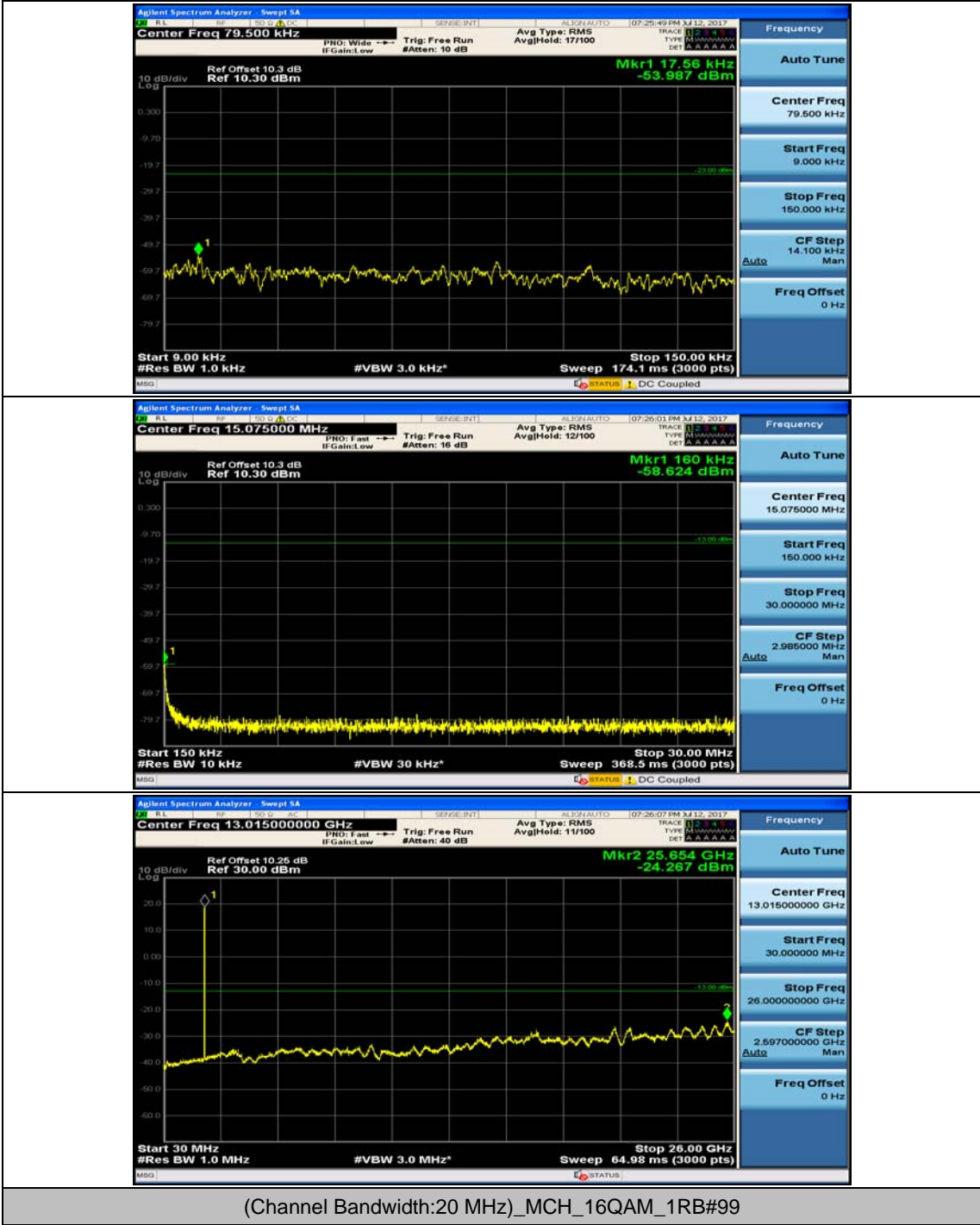


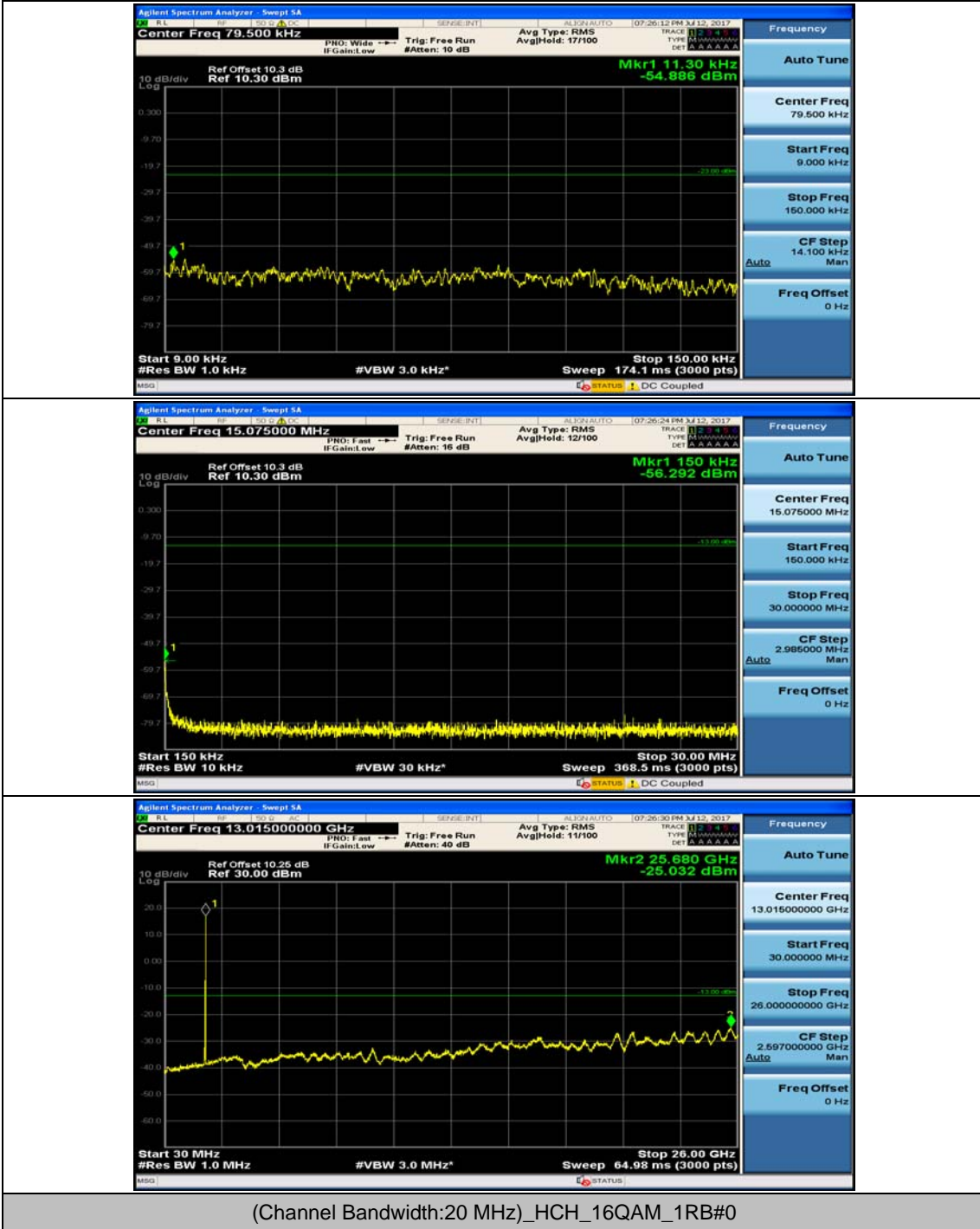


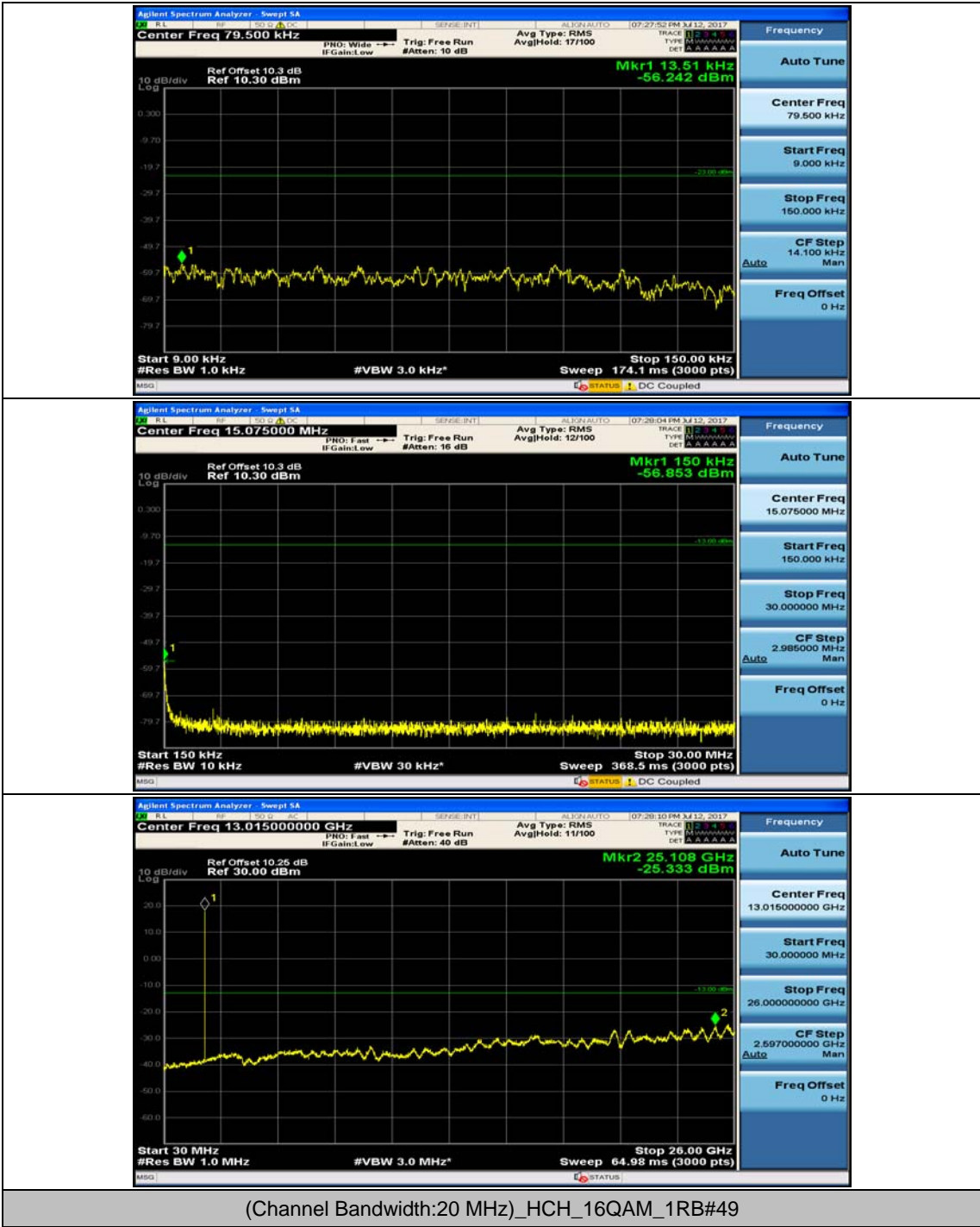


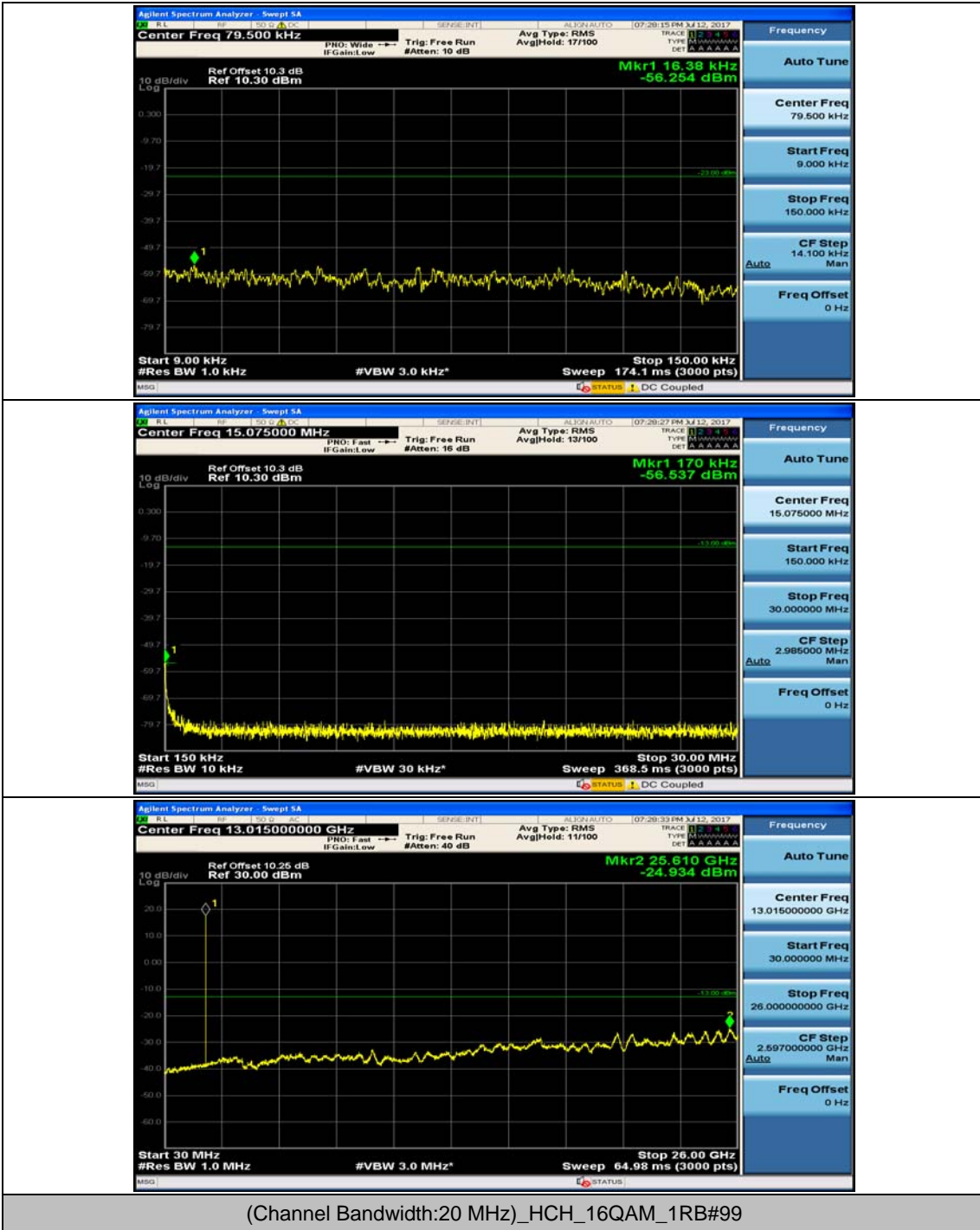


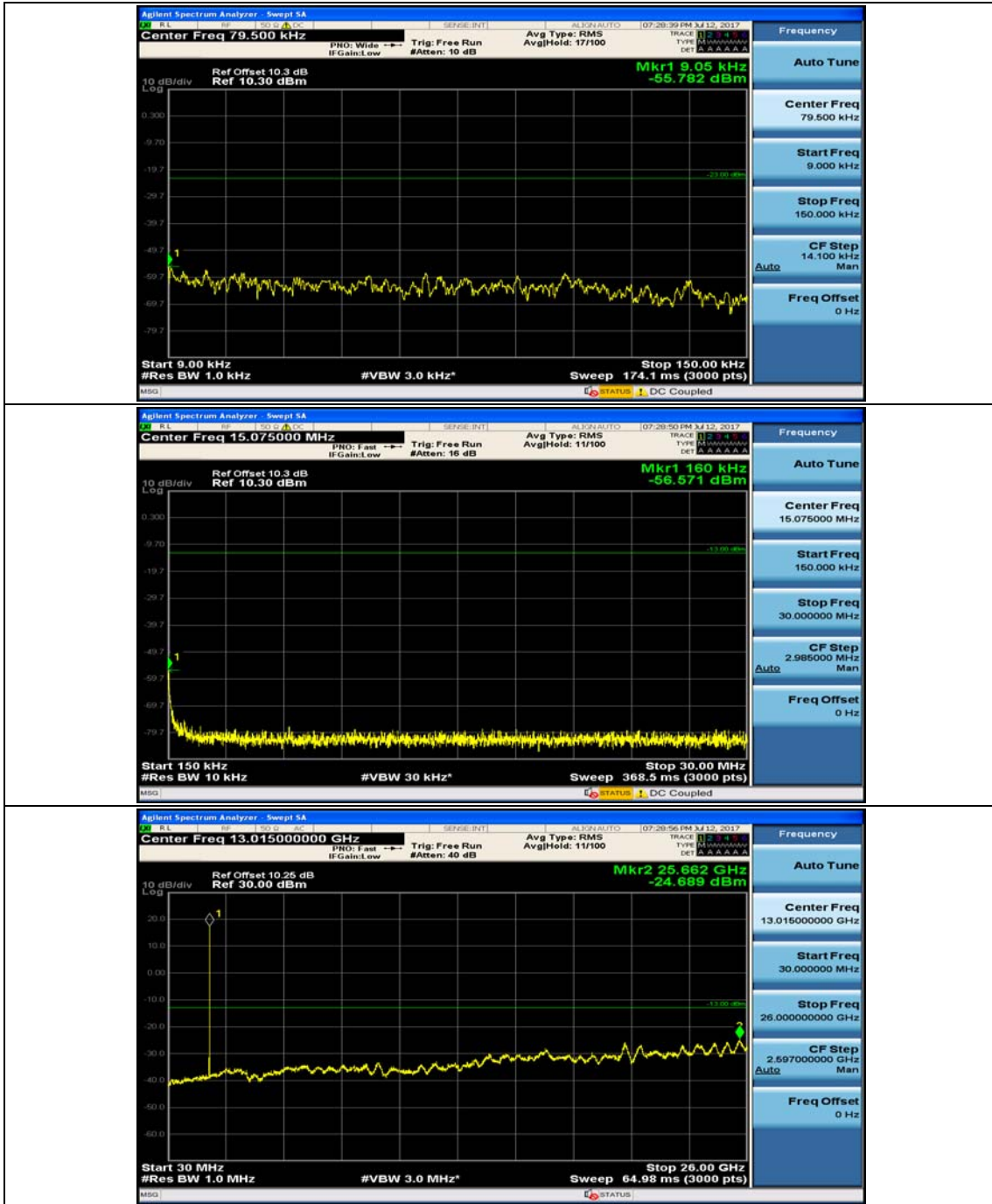












Appendix F: Frequency Stability

Test Result

Channel Bandwidth: 1.4 MHz

| Channel Bandwidth: 1.4 MHz | | | | | | | |
|----------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 0.14 | 0.000076 | ± 2.5 | PASS |
| | | VN | TN | -0.63 | -0.000340 | ± 2.5 | PASS |
| | | VH | TN | -0.48 | -0.000259 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.84 | 0.002574 | ± 2.5 | PASS |
| | | VN | TN | 1.26 | 0.000670 | ± 2.5 | PASS |
| | | VH | TN | -0.02 | -0.000011 | ± 2.5 | PASS |
| | HCH | VL | TN | 2.79 | 0.001461 | ± 2.5 | PASS |
| | | VN | TN | -0.88 | -0.000461 | ± 2.5 | PASS |
| | | VH | TN | 4.92 | 0.002577 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 2.16 | 0.001167 | ± 2.5 | PASS |
| | | VN | TN | -1.86 | -0.001005 | ± 2.5 | PASS |
| | | VH | TN | 0.5 | 0.000270 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.96 | -0.001043 | ± 2.5 | PASS |
| | | VN | TN | 3.04 | 0.001617 | ± 2.5 | PASS |
| | | VH | TN | 3.94 | 0.002096 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.81 | 0.000424 | ± 2.5 | PASS |
| | | VN | TN | -1.95 | -0.001021 | ± 2.5 | PASS |
| | | VH | TN | 1.47 | 0.000770 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 2.41 | 0.001302 | ± 2.5 | PASS |
| | | VN | -20 | -0.05 | -0.000027 | ± 2.5 | PASS |
| | | VN | -10 | -0.41 | -0.000222 | ± 2.5 | PASS |
| | | VN | 0 | 4.3 | 0.002323 | ± 2.5 | PASS |
| | | VN | 10 | -1.27 | -0.000686 | ± 2.5 | PASS |
| | | VN | 20 | 4.67 | 0.002523 | ± 2.5 | PASS |
| | | VN | 30 | -1.93 | -0.001043 | ± 2.5 | PASS |
| | | VN | 40 | -0.12 | -0.000065 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.14 | 0.002202 | ± 2.5 | PASS |
| | | VN | -20 | -0.14 | -0.000074 | ± 2.5 | PASS |

| | | | | | | | | | |
|-----|-----|-------|-------|-----------|-----------|-------|----------|-------|------|
| | | VN | -10 | 0.95 | 0.000505 | ± 2.5 | PASS | | |
| | | VN | 0 | 4.49 | 0.002388 | ± 2.5 | PASS | | |
| | | VN | 10 | 1.09 | 0.000580 | ± 2.5 | PASS | | |
| | | VN | 20 | 3.7 | 0.001968 | ± 2.5 | PASS | | |
| | | VN | 30 | -1.98 | -0.001053 | ± 2.5 | PASS | | |
| | | VN | 40 | -0.46 | -0.000245 | ± 2.5 | PASS | | |
| | | VN | 50 | -1.69 | -0.000899 | ± 2.5 | PASS | | |
| | HCH | VN | -30 | -1.91 | -0.001000 | ± 2.5 | PASS | | |
| | | VN | -20 | 1.74 | 0.000911 | ± 2.5 | PASS | | |
| | | VN | -10 | 0.81 | 0.000424 | ± 2.5 | PASS | | |
| | | VN | 0 | 3.68 | 0.001927 | ± 2.5 | PASS | | |
| | | VN | 10 | 3.89 | 0.002037 | ± 2.5 | PASS | | |
| | | VN | 20 | -0.34 | -0.000178 | ± 2.5 | PASS | | |
| | | VN | 30 | 4.97 | 0.002603 | ± 2.5 | PASS | | |
| | | VN | 40 | 0.74 | 0.000388 | ± 2.5 | PASS | | |
| | | VN | 50 | -0.48 | -0.000251 | ± 2.5 | PASS | | |
| | | 16QAM | LCH | VN | -30 | 4.1 | 0.002215 | ± 2.5 | PASS |
| | | | | VN | -20 | 4.18 | 0.002259 | ± 2.5 | PASS |
| VN | -10 | | | 2.96 | 0.001599 | ± 2.5 | PASS | | |
| VN | 0 | | | 2.68 | 0.001448 | ± 2.5 | PASS | | |
| VN | 10 | | | -0.91 | -0.000492 | ± 2.5 | PASS | | |
| VN | 20 | | | -1.71 | -0.000924 | ± 2.5 | PASS | | |
| VN | 30 | | | -0.62 | -0.000335 | ± 2.5 | PASS | | |
| VN | 40 | | | 0.04 | 0.000022 | ± 2.5 | PASS | | |
| VN | 50 | | | -0.31 | -0.000168 | ± 2.5 | PASS | | |
| MCH | VN | | -30 | 0.37 | 0.000197 | ± 2.5 | PASS | | |
| | VN | | -20 | 2.43 | 0.001293 | ± 2.5 | PASS | | |
| | VN | | -10 | 0.92 | 0.000489 | ± 2.5 | PASS | | |
| | VN | | 0 | 4.75 | 0.002527 | ± 2.5 | PASS | | |
| | VN | | 10 | -1.29 | -0.000686 | ± 2.5 | PASS | | |
| | VN | | 20 | -0.55 | -0.000293 | ± 2.5 | PASS | | |
| | VN | | 30 | 3.93 | 0.002090 | ± 2.5 | PASS | | |
| | VN | | 40 | -1.4 | -0.000745 | ± 2.5 | PASS | | |
| | VN | | 50 | -1.8 | -0.000957 | ± 2.5 | PASS | | |
| HCH | VN | -30 | -0.68 | -0.000356 | ± 2.5 | PASS | | | |
| | VN | -20 | 2.11 | 0.001105 | ± 2.5 | PASS | | | |
| | VN | -10 | 0.61 | 0.000319 | ± 2.5 | PASS | | | |
| | VN | 0 | -0.97 | -0.000508 | ± 2.5 | PASS | | | |
| | VN | 10 | 1.62 | 0.000848 | ± 2.5 | PASS | | | |
| | VN | 20 | 2.86 | 0.001498 | ± 2.5 | PASS | | | |
| | VN | 30 | -0.36 | -0.000189 | ± 2.5 | PASS | | | |

| | | | | | | | |
|--|--|----|----|------|----------|-------|------|
| | | VN | 40 | 1.47 | 0.000770 | ± 2.5 | PASS |
| | | VN | 50 | 4.34 | 0.002273 | ± 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 | 2.92 | 0.001577 | ± 2.5 | PASS |
| | | VN | TN | 1.28 | 0.000691 | ± 2.5 | PASS |
| | | VH | TN | 1.41 | 0.000762 | ± 2.5 | PASS |
| | MCH | VL | TN | 1.54 | 0.000819 | ± 2.5 | PASS |
| | | VN | TN | -0.83 | -0.000441 | ± 2.5 | PASS |
| | | VH | TN | 1.34 | 0.000713 | ± 2.5 | PASS |
| | HCH | VL | TN | 1.97 | 0.001032 | ± 2.5 | PASS |
| | | VN | TN | 4.58 | 0.002400 | ± 2.5 | PASS |
| | | VH | TN | 2.45 | 0.001284 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 0.18 | 0.000097 | ± 2.5 | PASS |
| | | VN | TN | 2.25 | 0.001215 | ± 2.5 | PASS |
| | | VH | TN | 4.07 | 0.002198 | ± 2.5 | PASS |
| | MCH | VL | TN | 1.17 | 0.000622 | ± 2.5 | PASS |
| | | VN | TN | 1.46 | 0.000777 | ± 2.5 | PASS |
| | | VH | TN | -1.28 | -0.000681 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.56 | -0.000293 | ± 2.5 | PASS |
| | | VN | TN | 0.62 | 0.000325 | ± 2.5 | PASS |
| | | VH | TN | 1.89 | 0.000990 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -1.89 | -0.001021 | ± 2.5 | PASS |
| | | VN | -20 | 1.42 | 0.000767 | ± 2.5 | PASS |
| | | VN | -10 | 4.11 | 0.002220 | ± 2.5 | PASS |
| | | VN | 0 | 1.57 | 0.000848 | ± 2.5 | PASS |
| | | VN | 10 | 2.41 | 0.001302 | ± 2.5 | PASS |
| | | VN | 20 | 2.72 | 0.001469 | ± 2.5 | PASS |
| | | VN | 30 | -0.85 | -0.000459 | ± 2.5 | PASS |
| | | VN | 40 | -1.85 | -0.000999 | ± 2.5 | PASS |
| | | VN | 50 | -0.66 | -0.000356 | ± 2.5 | PASS |
| | MCH | VN | -30 | 1.13 | 0.000601 | ± 2.5 | PASS |
| | | VN | -20 | 3.11 | 0.001654 | ± 2.5 | PASS |
| | | VN | -10 | 4.16 | 0.002213 | ± 2.5 | PASS |

| | | | | | | | | | |
|-----|-----|-------|-----|-------|-----------|-------|-----------|-------|------|
| | | VN | 0 | 1.69 | 0.000899 | ± 2.5 | PASS | | |
| | | VN | 10 | 1.31 | 0.000697 | ± 2.5 | PASS | | |
| | | VN | 20 | -0.58 | -0.000309 | ± 2.5 | PASS | | |
| | | VN | 30 | -1.27 | -0.000676 | ± 2.5 | PASS | | |
| | | VN | 40 | 2.12 | 0.001128 | ± 2.5 | PASS | | |
| | | VN | 50 | 4.74 | 0.002521 | ± 2.5 | PASS | | |
| | HCH | VN | -30 | 0.67 | 0.000351 | ± 2.5 | PASS | | |
| | | VN | -20 | 0.62 | 0.000325 | ± 2.5 | PASS | | |
| | | VN | -10 | -0.31 | -0.000162 | ± 2.5 | PASS | | |
| | | VN | 0 | 1.78 | 0.000933 | ± 2.5 | PASS | | |
| | | VN | 10 | 2.47 | 0.001294 | ± 2.5 | PASS | | |
| | | VN | 20 | 3.6 | 0.001886 | ± 2.5 | PASS | | |
| | | VN | 30 | 2.65 | 0.001389 | ± 2.5 | PASS | | |
| | | VN | 40 | 4.81 | 0.002520 | ± 2.5 | PASS | | |
| | | VN | 50 | 4.25 | 0.002227 | ± 2.5 | PASS | | |
| | | 16QAM | LCH | VN | -30 | 1.26 | 0.000681 | ± 2.5 | PASS |
| | | | | VN | -20 | -1.42 | -0.000767 | ± 2.5 | PASS |
| | | | | VN | -10 | 2.98 | 0.001610 | ± 2.5 | PASS |
| VN | 0 | | | -0.04 | -0.000022 | ± 2.5 | PASS | | |
| VN | 10 | | | 4.56 | 0.002463 | ± 2.5 | PASS | | |
| VN | 20 | | | 1.81 | 0.000978 | ± 2.5 | PASS | | |
| VN | 30 | | | 2.34 | 0.001264 | ± 2.5 | PASS | | |
| VN | 40 | | | 0.72 | 0.000389 | ± 2.5 | PASS | | |
| VN | 50 | | | 0.67 | 0.000362 | ± 2.5 | PASS | | |
| MCH | VN | | -30 | 1.13 | 0.000601 | ± 2.5 | PASS | | |
| | VN | | -20 | 3.66 | 0.001947 | ± 2.5 | PASS | | |
| | VN | | -10 | 4.32 | 0.002298 | ± 2.5 | PASS | | |
| | VN | | 0 | 0.68 | 0.000362 | ± 2.5 | PASS | | |
| | VN | | 10 | 2.58 | 0.001372 | ± 2.5 | PASS | | |
| | VN | | 20 | 3.39 | 0.001803 | ± 2.5 | PASS | | |
| | VN | | 30 | -1.27 | -0.000676 | ± 2.5 | PASS | | |
| | VN | | 40 | 0.34 | 0.000181 | ± 2.5 | PASS | | |
| | VN | | 50 | 0.28 | 0.000149 | ± 2.5 | PASS | | |
| HCH | VN | | -30 | 3.24 | 0.001698 | ± 2.5 | PASS | | |
| | VN | | -20 | 2.55 | 0.001336 | ± 2.5 | PASS | | |
| | VN | | -10 | 0.31 | 0.000162 | ± 2.5 | PASS | | |
| | VN | | 0 | 2.54 | 0.001331 | ± 2.5 | PASS | | |
| | VN | | 10 | 1.59 | 0.000833 | ± 2.5 | PASS | | |
| | VN | | 20 | -1.1 | -0.000576 | ± 2.5 | PASS | | |
| | VN | | 30 | 0.21 | 0.000110 | ± 2.5 | PASS | | |
| | VN | | 40 | 1.2 | 0.000629 | ± 2.5 | PASS | | |

| | | | | | | | |
|--|--|----|----|------|----------|-------|------|
| | | VN | 50 | 0.51 | 0.000267 | ± 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 | 4.21 | 0.002273 | ± 2.5 | PASS |
| | | VN | TN | 2.19 | 0.001182 | ± 2.5 | PASS |
| | | VH | TN | 4.51 | 0.002435 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.24 | 0.001191 | ± 2.5 | PASS |
| | | VN | TN | 4.48 | 0.002383 | ± 2.5 | PASS |
| | | VH | TN | 2.9 | 0.001543 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.77 | -0.000928 | ± 2.5 | PASS |
| | | VN | TN | 1.64 | 0.000860 | ± 2.5 | PASS |
| | | VH | TN | 1.48 | 0.000776 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -1.95 | -0.001053 | ± 2.5 | PASS |
| | | VN | TN | -1.38 | -0.000745 | ± 2.5 | PASS |
| | | VH | TN | 0.98 | 0.000529 | ± 2.5 | PASS |
| | MCH | VL | TN | 1.17 | 0.000622 | ± 2.5 | PASS |
| | | VN | TN | 3.5 | 0.001862 | ± 2.5 | PASS |
| | | VH | TN | 2.69 | 0.001431 | ± 2.5 | PASS |
| | HCH | VL | TN | 2.17 | 0.001138 | ± 2.5 | PASS |
| | | VN | TN | -0.27 | -0.000142 | ± 2.5 | PASS |
| | | VH | TN | 2.55 | 0.001337 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 4.21 | 0.002273 | ± 2.5 | PASS |
| | | VN | -20 | 2.19 | 0.001182 | ± 2.5 | PASS |
| | | VN | -10 | 4.51 | 0.002435 | ± 2.5 | PASS |
| | | VN | 0 | 2.24 | 0.001191 | ± 2.5 | PASS |
| | | VN | 10 | 4.48 | 0.002383 | ± 2.5 | PASS |
| | | VN | 20 | 2.9 | 0.001543 | ± 2.5 | PASS |
| | | VN | 30 | -1.77 | -0.000928 | ± 2.5 | PASS |
| | | VN | 40 | 1.64 | 0.000860 | ± 2.5 | PASS |
| | | VN | 50 | 1.48 | 0.000776 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.95 | -0.001053 | ± 2.5 | PASS |
| | | VN | -20 | -1.38 | -0.000745 | ± 2.5 | PASS |
| | | VN | -10 | 0.98 | 0.000529 | ± 2.5 | PASS |
| | | VN | 0 | 1.17 | 0.000622 | ± 2.5 | PASS |

| | | | | | | | |
|-----|-----|-------|-----|-------|-----------|-------|-----------|
| | | VN | 10 | 3.5 | 0.001862 | ± 2.5 | PASS |
| | | VN | 20 | 2.69 | 0.001431 | ± 2.5 | PASS |
| | | VN | 30 | 2.17 | 0.001138 | ± 2.5 | PASS |
| | | VN | 40 | -0.27 | -0.000142 | ± 2.5 | PASS |
| | | VN | 50 | 2.55 | 0.001337 | ± 2.5 | PASS |
| | HCH | VN | -30 | 4.21 | 0.002273 | ± 2.5 | PASS |
| | | VN | -20 | 2.19 | 0.001182 | ± 2.5 | PASS |
| | | VN | -10 | 4.51 | 0.002435 | ± 2.5 | PASS |
| | | VN | 0 | 2.24 | 0.001191 | ± 2.5 | PASS |
| | | VN | 10 | 4.48 | 0.002383 | ± 2.5 | PASS |
| | | VN | 20 | 2.9 | 0.001543 | ± 2.5 | PASS |
| | | VN | 30 | -1.77 | -0.000928 | ± 2.5 | PASS |
| | | VN | 40 | 1.64 | 0.000860 | ± 2.5 | PASS |
| | | VN | 50 | 1.48 | 0.000776 | ± 2.5 | PASS |
| | | 16QAM | LCH | VN | -30 | -1.95 | -0.001053 |
| VN | -20 | | | -1.38 | -0.000745 | ± 2.5 | PASS |
| VN | -10 | | | 0.98 | 0.000529 | ± 2.5 | PASS |
| VN | 0 | | | 1.17 | 0.000622 | ± 2.5 | PASS |
| VN | 10 | | | 3.5 | 0.001862 | ± 2.5 | PASS |
| VN | 20 | | | 2.69 | 0.001431 | ± 2.5 | PASS |
| VN | 30 | | | 2.17 | 0.001138 | ± 2.5 | PASS |
| VN | 40 | | | -0.27 | -0.000142 | ± 2.5 | PASS |
| VN | 50 | | | 2.55 | 0.001337 | ± 2.5 | PASS |
| MCH | VN | | -30 | 4.21 | 0.002273 | ± 2.5 | PASS |
| | VN | | -20 | 2.19 | 0.001182 | ± 2.5 | PASS |
| | VN | | -10 | 4.51 | 0.002435 | ± 2.5 | PASS |
| | VN | | 0 | 2.24 | 0.001191 | ± 2.5 | PASS |
| | VN | | 10 | 4.48 | 0.002383 | ± 2.5 | PASS |
| | VN | | 20 | 2.9 | 0.001543 | ± 2.5 | PASS |
| | VN | | 30 | -1.77 | -0.000928 | ± 2.5 | PASS |
| | VN | | 40 | 1.64 | 0.000860 | ± 2.5 | PASS |
| | VN | | 50 | 1.48 | 0.000776 | ± 2.5 | PASS |
| HCH | VN | | -30 | -1.95 | -0.001053 | ± 2.5 | PASS |
| | VN | | -20 | -1.38 | -0.000745 | ± 2.5 | PASS |
| | VN | | -10 | 0.98 | 0.000529 | ± 2.5 | PASS |
| | VN | | 0 | 1.17 | 0.000622 | ± 2.5 | PASS |
| | VN | | 10 | 3.5 | 0.001862 | ± 2.5 | PASS |
| | VN | | 20 | 2.69 | 0.001431 | ± 2.5 | PASS |
| | VN | | 30 | 2.17 | 0.001138 | ± 2.5 | PASS |
| | VN | | 40 | -0.27 | -0.000142 | ± 2.5 | PASS |
| | VN | | 50 | 2.55 | 0.001337 | ± 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 | -0.04 | -0.000022 | ± 2.5 | PASS |
| | | VN | TN | 0.66 | 0.000356 | ± 2.5 | PASS |
| | | VH | TN | 3.98 | 0.002146 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.57 | 0.001367 | ± 2.5 | PASS |
| | | VN | TN | 1.74 | 0.000926 | ± 2.5 | PASS |
| | | VH | TN | 3.73 | 0.001984 | ± 2.5 | PASS |
| | HCH | VL | TN | 2.73 | 0.001433 | ± 2.5 | PASS |
| | | VN | TN | 2.42 | 0.001270 | ± 2.5 | PASS |
| | | VH | TN | 0.53 | 0.000278 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -0.99 | -0.000534 | ± 2.5 | PASS |
| | | VN | TN | -0.64 | -0.000345 | ± 2.5 | PASS |
| | | VH | TN | 2.56 | 0.001380 | ± 2.5 | PASS |
| | MCH | VL | TN | -0.53 | -0.000282 | ± 2.5 | PASS |
| | | VN | TN | 2.32 | 0.001234 | ± 2.5 | PASS |
| | | VH | TN | 2.73 | 0.001452 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.63 | -0.000331 | ± 2.5 | PASS |
| | | VN | TN | 4.45 | 0.002336 | ± 2.5 | PASS |
| | | VH | TN | 2.01 | 0.001055 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 4.1 | 0.002210 | ± 2.5 | PASS |
| | | VN | -20 | -0.34 | -0.000183 | ± 2.5 | PASS |
| | | VN | -10 | 4.28 | 0.002307 | ± 2.5 | PASS |
| | | VN | 0 | 2.09 | 0.001127 | ± 2.5 | PASS |
| | | VN | 10 | 2.41 | 0.001299 | ± 2.5 | PASS |
| | | VN | 20 | -1.44 | -0.000776 | ± 2.5 | PASS |
| | | VN | 30 | -0.47 | -0.000253 | ± 2.5 | PASS |
| | | VN | 40 | -1.7 | -0.000916 | ± 2.5 | PASS |
| | | VN | 50 | -0.65 | -0.000350 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.38 | 0.000202 | ± 2.5 | PASS |
| | | VN | -20 | 3.65 | 0.001941 | ± 2.5 | PASS |
| | | VN | -10 | -0.59 | -0.000314 | ± 2.5 | PASS |
| | | VN | 0 | 1.84 | 0.000979 | ± 2.5 | PASS |
| | | VN | 10 | 0.79 | 0.000420 | ± 2.5 | PASS |
| | | VN | 20 | -1.32 | -0.000702 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|----|-----|-------|-----------|-------|------|
| | | VN | 30 | -1.48 | -0.000787 | ± 2.5 | PASS |
| | | VN | 40 | 1.84 | 0.000979 | ± 2.5 | PASS |
| | | VN | 50 | 2.65 | 0.001410 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.41 | 0.001265 | ± 2.5 | PASS |
| | | VN | -20 | 1.08 | 0.000567 | ± 2.5 | PASS |
| | | VN | -10 | 2.14 | 0.001123 | ± 2.5 | PASS |
| | | VN | 0 | 1.34 | 0.000703 | ± 2.5 | PASS |
| | | VN | 10 | 3.7 | 0.001942 | ± 2.5 | PASS |
| | | VN | 20 | 4.1 | 0.002152 | ± 2.5 | PASS |
| | | VN | 30 | 4.64 | 0.002436 | ± 2.5 | PASS |
| | | VN | 40 | -1.5 | -0.000787 | ± 2.5 | PASS |
| | | VN | 50 | 0.08 | 0.000042 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.48 | 0.000798 | ± 2.5 | PASS |
| | | VN | -20 | 3.14 | 0.001693 | ± 2.5 | PASS |
| | | VN | -10 | -0.72 | -0.000388 | ± 2.5 | PASS |
| | | VN | 0 | 4.56 | 0.002458 | ± 2.5 | PASS |
| | | VN | 10 | 3.07 | 0.001655 | ± 2.5 | PASS |
| | | VN | 20 | -0.64 | -0.000345 | ± 2.5 | PASS |
| | | VN | 30 | 2.43 | 0.001310 | ± 2.5 | PASS |
| | | VN | 40 | 1.73 | 0.000933 | ± 2.5 | PASS |
| | | VN | 50 | 4.37 | 0.002356 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.65 | 0.002473 | ± 2.5 | PASS |
| | | VN | -20 | -1.32 | -0.000702 | ± 2.5 | PASS |
| | | VN | -10 | 0.48 | 0.000255 | ± 2.5 | PASS |
| | | VN | 0 | 2.04 | 0.001085 | ± 2.5 | PASS |
| | | VN | 10 | 3.1 | 0.001649 | ± 2.5 | PASS |
| | | VN | 20 | 0.07 | 0.000037 | ± 2.5 | PASS |
| | | VN | 30 | 3.07 | 0.001633 | ± 2.5 | PASS |
| | | VN | 40 | 1.83 | 0.000973 | ± 2.5 | PASS |
| | | VN | 50 | 1.56 | 0.000830 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.21 | 0.000635 | ± 2.5 | PASS |
| | | VN | -20 | 1.71 | 0.000898 | ± 2.5 | PASS |
| | | VN | -10 | 3.07 | 0.001612 | ± 2.5 | PASS |
| | | VN | 0 | 4.59 | 0.002409 | ± 2.5 | PASS |
| | | VN | 10 | 2.37 | 0.001244 | ± 2.5 | PASS |
| | | VN | 20 | 0.01 | 0.000005 | ± 2.5 | PASS |
| | | VN | 30 | 1.23 | 0.000646 | ± 2.5 | PASS |
| | | VN | 40 | 4.38 | 0.002299 | ± 2.5 | PASS |
| | | VN | 50 | 3.07 | 0.001612 | ± 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 | -0.55 | -0.000296 | ± 2.5 | PASS |
| | | VN | TN | -1.67 | -0.000899 | ± 2.5 | PASS |
| | | VH | TN | 1.88 | 0.001012 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.82 | 0.002564 | ± 2.5 | PASS |
| | | VN | TN | 0.24 | 0.000128 | ± 2.5 | PASS |
| | | VH | TN | -1.93 | -0.001027 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.87 | -0.000457 | ± 2.5 | PASS |
| | | VN | TN | 2.53 | 0.001330 | ± 2.5 | PASS |
| | | VH | TN | 2.2 | 0.001156 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 4.08 | 0.002197 | ± 2.5 | PASS |
| | | VN | TN | 3.65 | 0.001965 | ± 2.5 | PASS |
| | | VH | TN | 0.36 | 0.000194 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.74 | 0.000394 | ± 2.5 | PASS |
| | | VN | TN | -0.05 | -0.000027 | ± 2.5 | PASS |
| | | VH | TN | -0.64 | -0.000340 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.83 | 0.002539 | ± 2.5 | PASS |
| | | VN | TN | -0.78 | -0.000410 | ± 2.5 | PASS |
| | | VH | TN | 3.25 | 0.001708 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 0.36 | 0.000194 | ± 2.5 | PASS |
| | | VN | -20 | 3.35 | 0.001803 | ± 2.5 | PASS |
| | | VN | -10 | 1.38 | 0.000743 | ± 2.5 | PASS |
| | | VN | 0 | 4.34 | 0.002336 | ± 2.5 | PASS |
| | | VN | 10 | 3.73 | 0.002008 | ± 2.5 | PASS |
| | | VN | 20 | 2.25 | 0.001211 | ± 2.5 | PASS |
| | | VN | 30 | -0.08 | -0.000043 | ± 2.5 | PASS |
| | | VN | 40 | 3.72 | 0.002003 | ± 2.5 | PASS |
| | | VN | 50 | 2.54 | 0.001367 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.68 | 0.000362 | ± 2.5 | PASS |
| | | VN | -20 | -0.94 | -0.000500 | ± 2.5 | PASS |
| | | VN | -10 | -0.12 | -0.000064 | ± 2.5 | PASS |
| | | VN | 0 | 4.26 | 0.002266 | ± 2.5 | PASS |
| | | VN | 10 | 2.33 | 0.001239 | ± 2.5 | PASS |
| | | VN | 20 | -1.98 | -0.001053 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|----|-----|-------|-----------|-------|------|
| | | VN | 30 | 2.35 | 0.001250 | ± 2.5 | PASS |
| | | VN | 40 | -0.97 | -0.000516 | ± 2.5 | PASS |
| | | VN | 50 | 3.88 | 0.002064 | ± 2.5 | PASS |
| | HCH | VN | -30 | -0.85 | -0.000447 | ± 2.5 | PASS |
| | | VN | -20 | 1.91 | 0.001004 | ± 2.5 | PASS |
| | | VN | -10 | -1.77 | -0.000930 | ± 2.5 | PASS |
| | | VN | 0 | -1.09 | -0.000573 | ± 2.5 | PASS |
| | | VN | 10 | -0.88 | -0.000463 | ± 2.5 | PASS |
| | | VN | 20 | -1.81 | -0.000951 | ± 2.5 | PASS |
| | | VN | 30 | 3.88 | 0.002039 | ± 2.5 | PASS |
| | | VN | 40 | 0.21 | 0.000110 | ± 2.5 | PASS |
| | | VN | 50 | -1.17 | -0.000615 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.9 | 0.001023 | ± 2.5 | PASS |
| | | VN | -20 | -1.95 | -0.001050 | ± 2.5 | PASS |
| | | VN | -10 | 2.34 | 0.001260 | ± 2.5 | PASS |
| | | VN | 0 | 3.64 | 0.001960 | ± 2.5 | PASS |
| | | VN | 10 | -0.53 | -0.000285 | ± 2.5 | PASS |
| | | VN | 20 | 2.59 | 0.001394 | ± 2.5 | PASS |
| | | VN | 30 | -1.9 | -0.001023 | ± 2.5 | PASS |
| | | VN | 40 | 2.21 | 0.001190 | ± 2.5 | PASS |
| | | VN | 50 | 1.93 | 0.001039 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.68 | -0.000894 | ± 2.5 | PASS |
| | | VN | -20 | 0.82 | 0.000436 | ± 2.5 | PASS |
| | | VN | -10 | 0.07 | 0.000037 | ± 2.5 | PASS |
| | | VN | 0 | 0.41 | 0.000218 | ± 2.5 | PASS |
| | | VN | 10 | 3.65 | 0.001941 | ± 2.5 | PASS |
| | | VN | 20 | 0.12 | 0.000064 | ± 2.5 | PASS |
| | | VN | 30 | 4.13 | 0.002197 | ± 2.5 | PASS |
| | | VN | 40 | -0.9 | -0.000479 | ± 2.5 | PASS |
| | | VN | 50 | 4.82 | 0.002564 | ± 2.5 | PASS |
| | HCH | VN | -30 | 0.99 | 0.000520 | ± 2.5 | PASS |
| | | VN | -20 | 3.69 | 0.001940 | ± 2.5 | PASS |
| | | VN | -10 | 2.93 | 0.001540 | ± 2.5 | PASS |
| | | VN | 0 | 4.8 | 0.002523 | ± 2.5 | PASS |
| | | VN | 10 | 4.82 | 0.002534 | ± 2.5 | PASS |
| | | VN | 20 | 2.87 | 0.001509 | ± 2.5 | PASS |
| | | VN | 30 | -1.04 | -0.000547 | ± 2.5 | PASS |
| | | VN | 40 | 4.09 | 0.002150 | ± 2.5 | PASS |
| | | VN | 50 | -1.92 | -0.001009 | ± 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 | 4.53 | 0.002435 | ± 2.5 | PASS |
| | | VN | TN | 2.08 | 0.001118 | ± 2.5 | PASS |
| | | VH | TN | 3.61 | 0.001941 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.63 | 0.000335 | ± 2.5 | PASS |
| | | VN | TN | 4.91 | 0.002612 | ± 2.5 | PASS |
| | | VH | TN | 4.84 | 0.002574 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.59 | 0.000311 | ± 2.5 | PASS |
| | | VN | TN | 4.98 | 0.002621 | ± 2.5 | PASS |
| | | VH | TN | 0.4 | 0.000211 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 3.18 | 0.001710 | ± 2.5 | PASS |
| | | VN | TN | -1.32 | -0.000710 | ± 2.5 | PASS |
| | | VH | TN | -1.59 | -0.000855 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.6 | 0.001383 | ± 2.5 | PASS |
| | | VN | TN | 0.37 | 0.000197 | ± 2.5 | PASS |
| | | VH | TN | 2.98 | 0.001585 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.32 | 0.001747 | ± 2.5 | PASS |
| | | VN | TN | -0.02 | -0.000011 | ± 2.5 | PASS |
| | | VH | TN | 0.57 | 0.000300 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 4.48 | 0.002409 | ± 2.5 | PASS |
| | | VN | -20 | 3.95 | 0.002124 | ± 2.5 | PASS |
| | | VN | -10 | 4.71 | 0.002532 | ± 2.5 | PASS |
| | | VN | 0 | 0.95 | 0.000511 | ± 2.5 | PASS |
| | | VN | 10 | 0.05 | 0.000027 | ± 2.5 | PASS |
| | | VN | 20 | 0.14 | 0.000075 | ± 2.5 | PASS |
| | | VN | 30 | 1.15 | 0.000618 | ± 2.5 | PASS |
| | | VN | 40 | 1.97 | 0.001059 | ± 2.5 | PASS |
| | | VN | 50 | 2.69 | 0.001446 | ± 2.5 | PASS |
| | MCH | VN | -30 | 1.53 | 0.000814 | ± 2.5 | PASS |
| | | VN | -20 | 1.86 | 0.000989 | ± 2.5 | PASS |
| | | VN | -10 | 4.62 | 0.002457 | ± 2.5 | PASS |
| | | VN | 0 | 4.69 | 0.002495 | ± 2.5 | PASS |
| | | VN | 10 | -1.35 | -0.000718 | ± 2.5 | PASS |
| | | VN | 20 | -0.17 | -0.000090 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|----|-----|-------|-----------|-------|------|
| | | VN | 30 | 1.42 | 0.000755 | ± 2.5 | PASS |
| | | VN | 40 | 4.56 | 0.002426 | ± 2.5 | PASS |
| | | VN | 50 | -1.68 | -0.000894 | ± 2.5 | PASS |
| | HCH | VN | -30 | 4.12 | 0.002168 | ± 2.5 | PASS |
| | | VN | -20 | 0.12 | 0.000063 | ± 2.5 | PASS |
| | | VN | -10 | 2.83 | 0.001489 | ± 2.5 | PASS |
| | | VN | 0 | 4.55 | 0.002395 | ± 2.5 | PASS |
| | | VN | 10 | -0.12 | -0.000063 | ± 2.5 | PASS |
| | | VN | 20 | 4.32 | 0.002274 | ± 2.5 | PASS |
| | | VN | 30 | 1.77 | 0.000932 | ± 2.5 | PASS |
| | | VN | 40 | 2.53 | 0.001332 | ± 2.5 | PASS |
| | | VN | 50 | -1.8 | -0.000947 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 3.33 | 0.001790 | ± 2.5 | PASS |
| | | VN | -20 | 3.53 | 0.001898 | ± 2.5 | PASS |
| | | VN | -10 | 4.31 | 0.002317 | ± 2.5 | PASS |
| | | VN | 0 | -1.28 | -0.000688 | ± 2.5 | PASS |
| | | VN | 10 | 3.98 | 0.002140 | ± 2.5 | PASS |
| | | VN | 20 | 2.47 | 0.001328 | ± 2.5 | PASS |
| | | VN | 30 | 2.77 | 0.001489 | ± 2.5 | PASS |
| | | VN | 40 | 3.74 | 0.002011 | ± 2.5 | PASS |
| | | VN | 50 | -0.23 | -0.000124 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.71 | 0.000378 | ± 2.5 | PASS |
| | | VN | -20 | 1.71 | 0.000910 | ± 2.5 | PASS |
| | | VN | -10 | -1.41 | -0.000750 | ± 2.5 | PASS |
| | | VN | 0 | 0.77 | 0.000410 | ± 2.5 | PASS |
| | | VN | 10 | 4.7 | 0.002500 | ± 2.5 | PASS |
| | | VN | 20 | 1.07 | 0.000569 | ± 2.5 | PASS |
| | | VN | 30 | 0.62 | 0.000330 | ± 2.5 | PASS |
| | | VN | 40 | 3.48 | 0.001851 | ± 2.5 | PASS |
| | | VN | 50 | -0.33 | -0.000176 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.46 | 0.001821 | ± 2.5 | PASS |
| | | VN | -20 | -1.98 | -0.001042 | ± 2.5 | PASS |
| | | VN | -10 | 1.89 | 0.000995 | ± 2.5 | PASS |
| | | VN | 0 | 2.72 | 0.001432 | ± 2.5 | PASS |
| | | VN | 10 | -1.46 | -0.000768 | ± 2.5 | PASS |
| | | VN | 20 | -0.11 | -0.000058 | ± 2.5 | PASS |
| | | VN | 30 | -1.81 | -0.000953 | ± 2.5 | PASS |
| | | VN | 40 | -1.76 | -0.000926 | ± 2.5 | PASS |
| | | VN | 50 | -0.08 | -0.000042 | ± 2.5 | PASS |