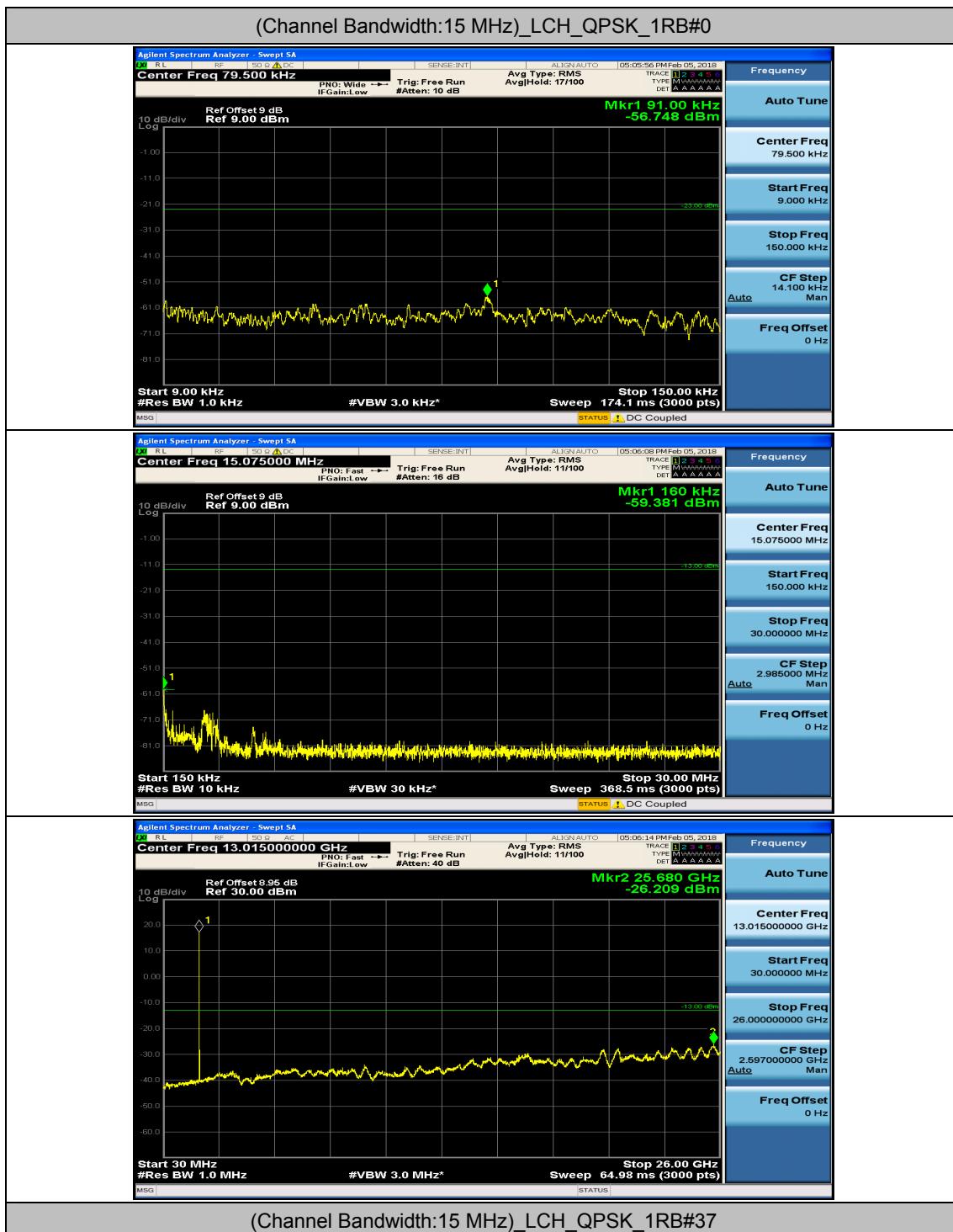
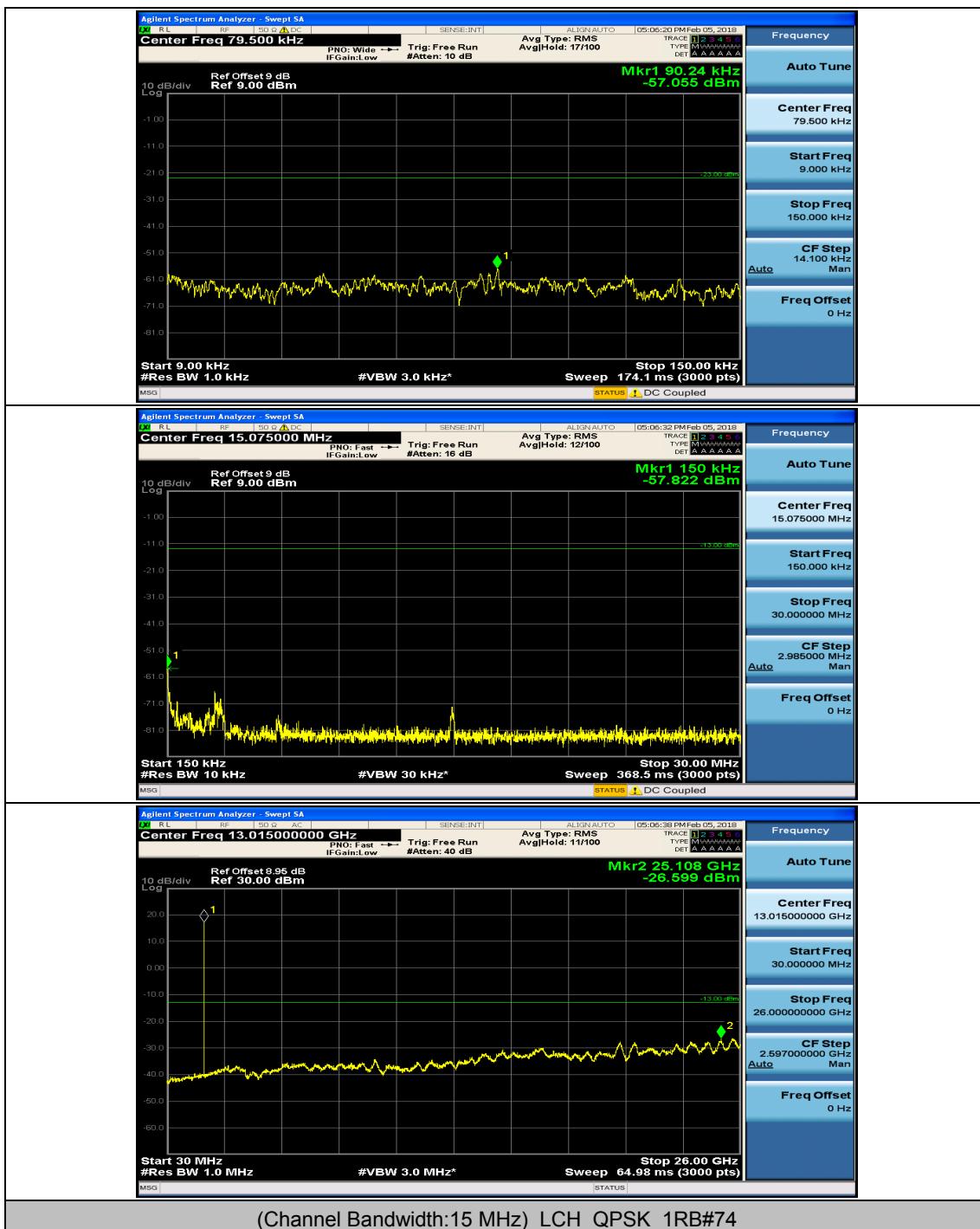
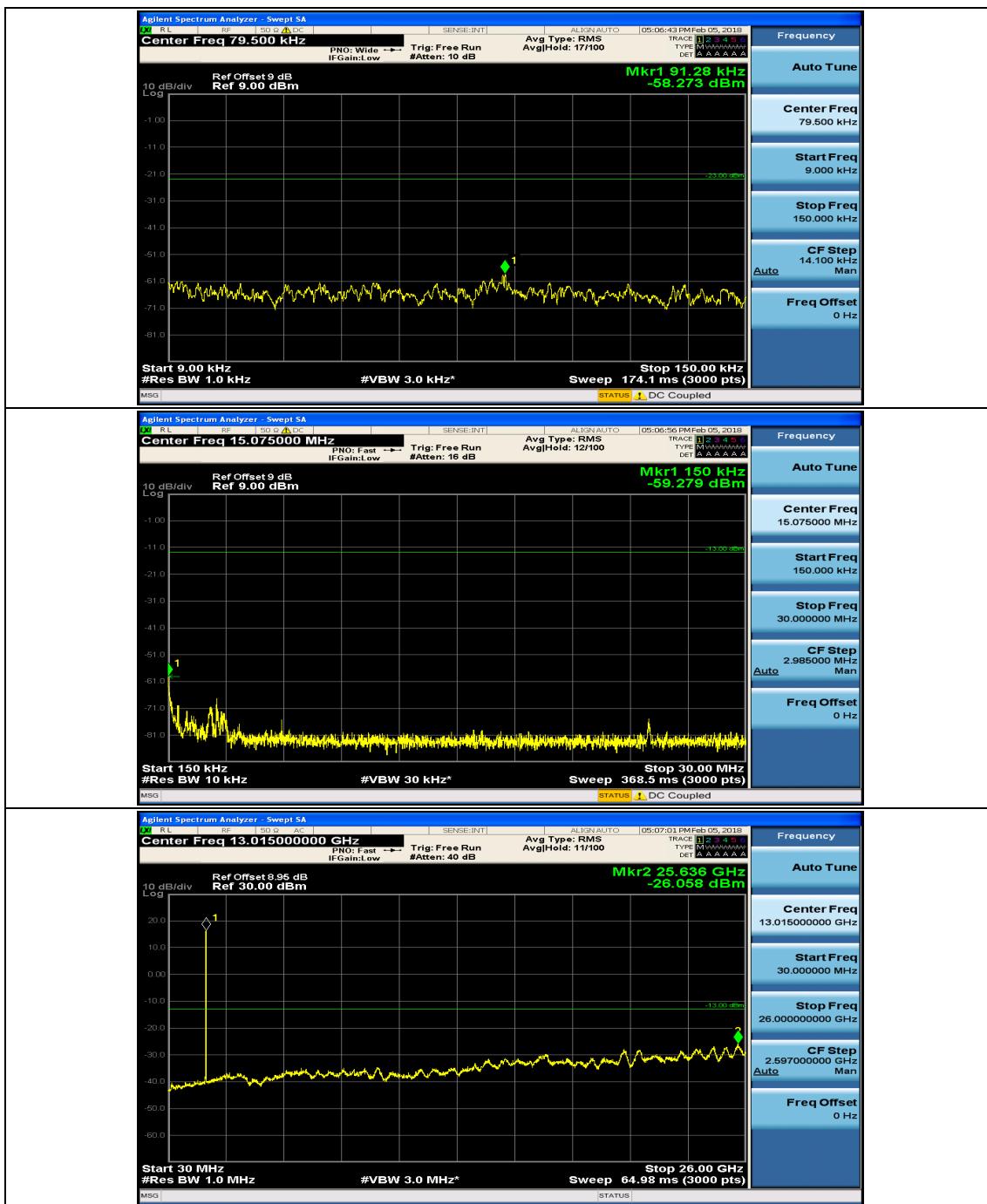
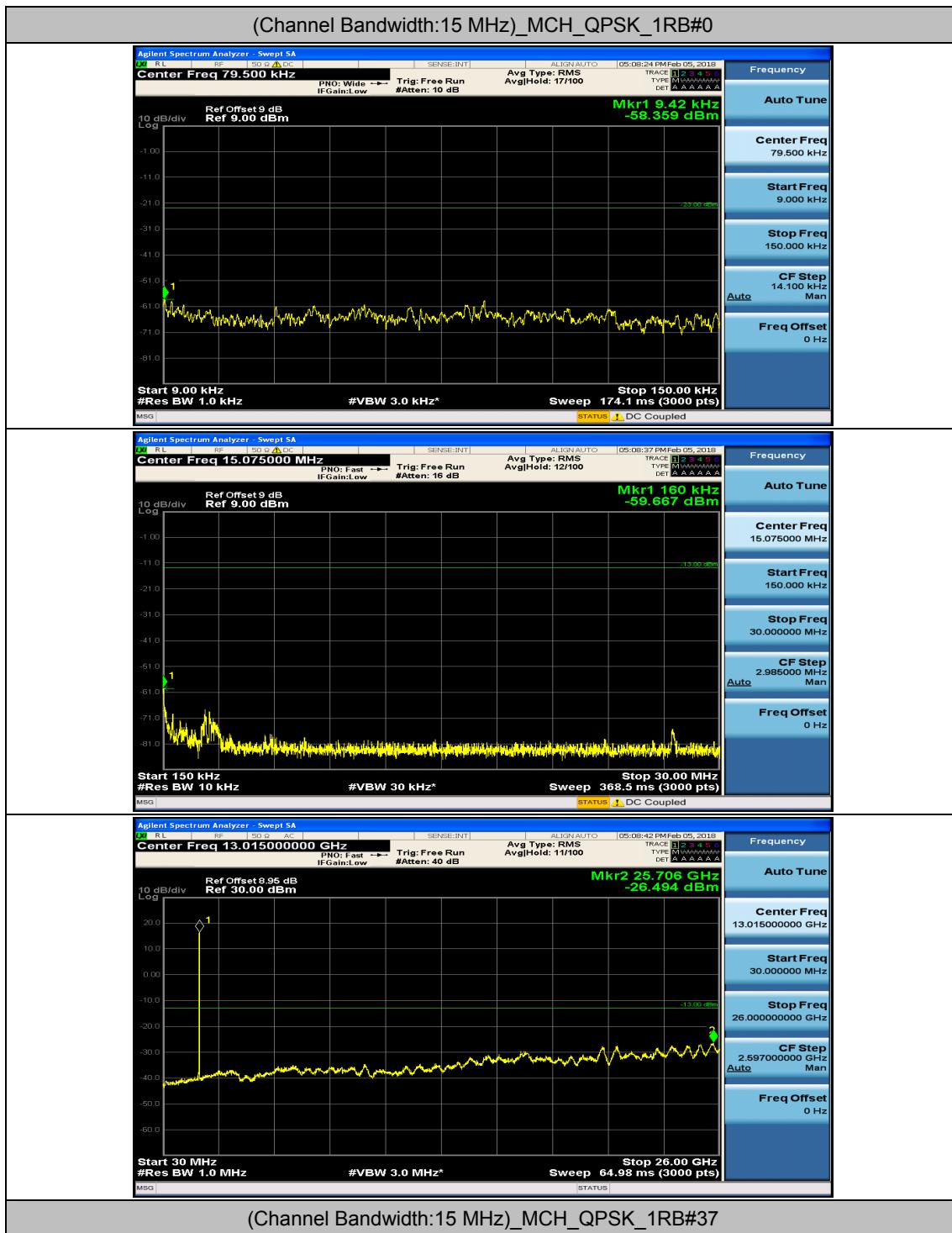


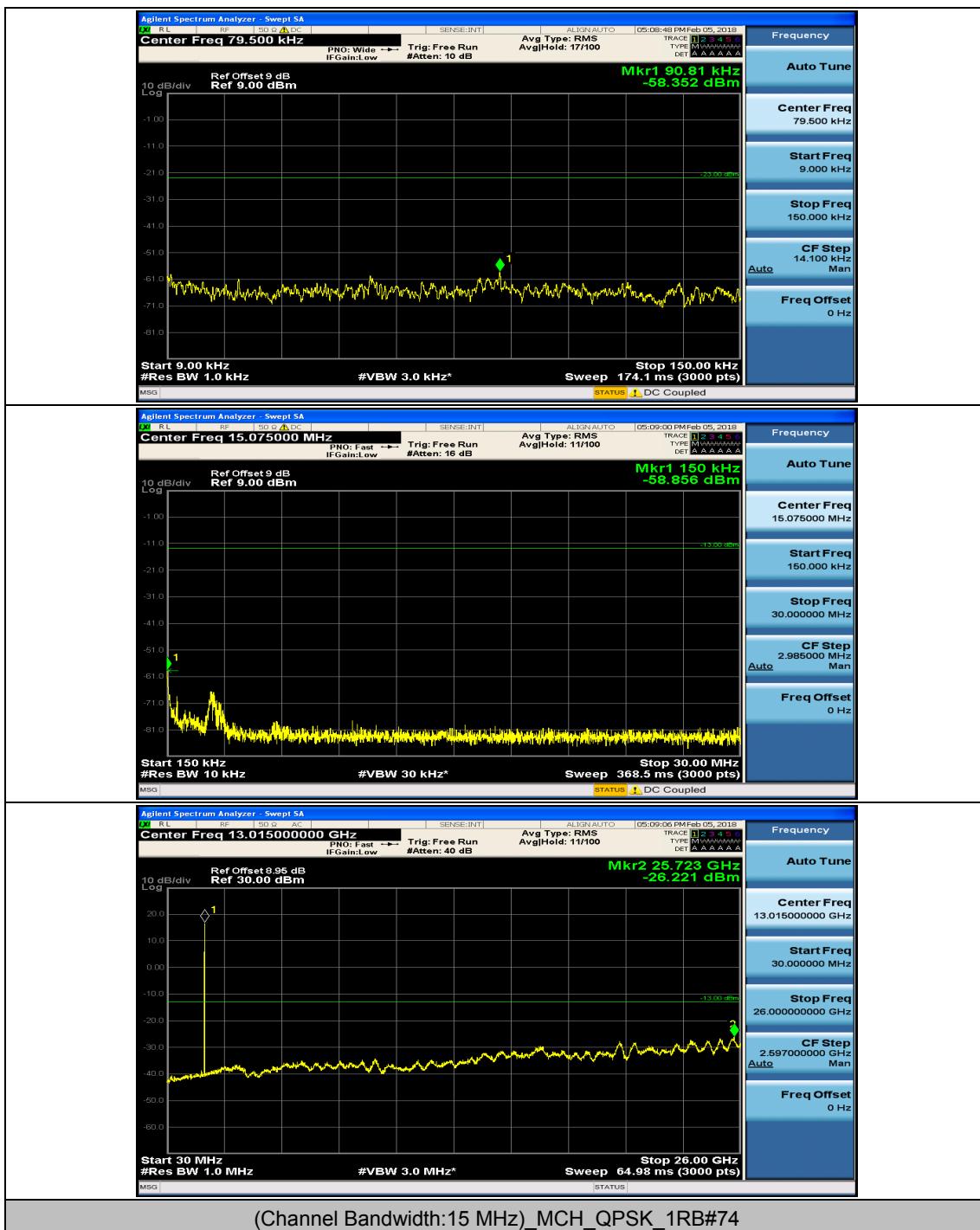
Channel Bandwidth: 15 MHz

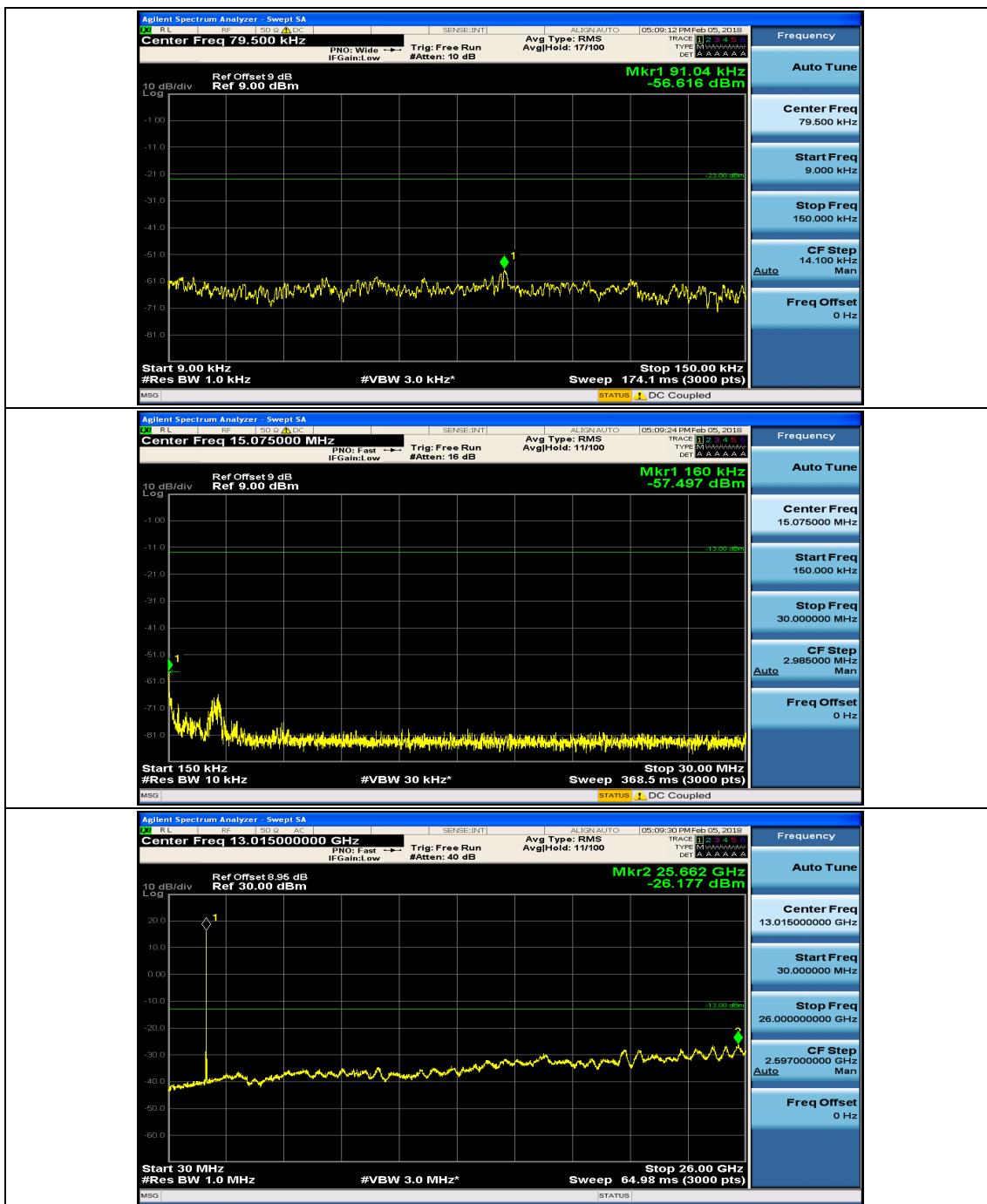


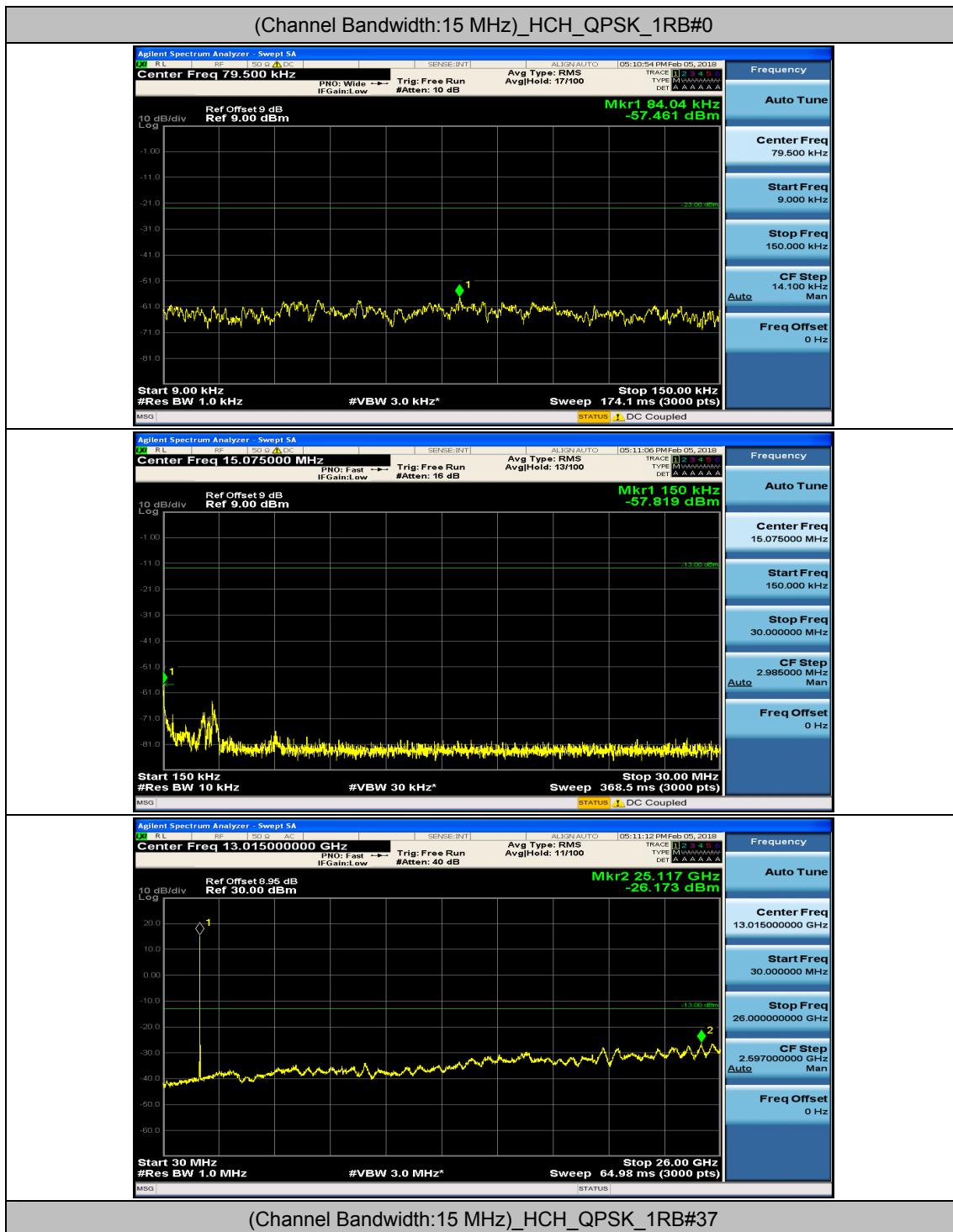


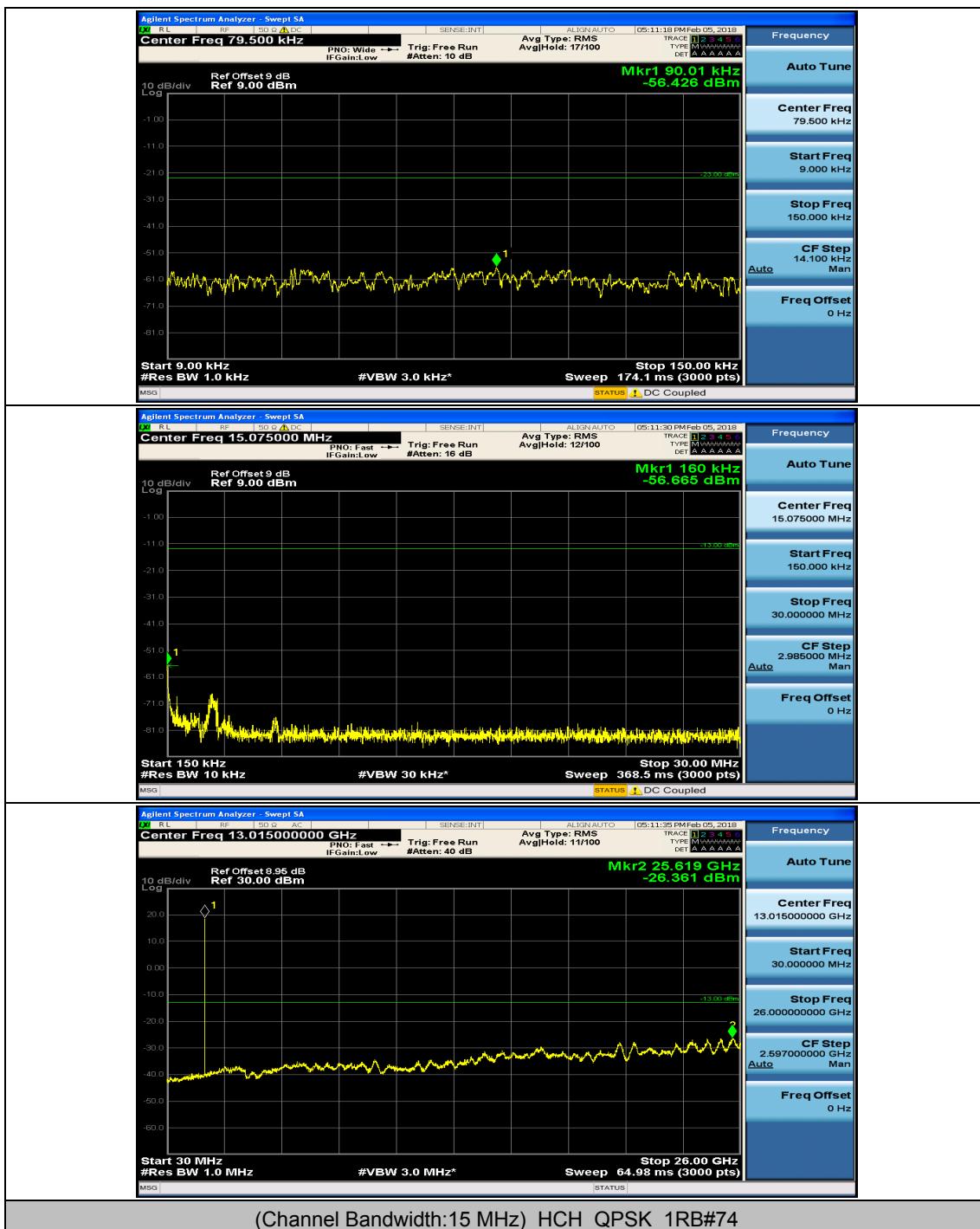


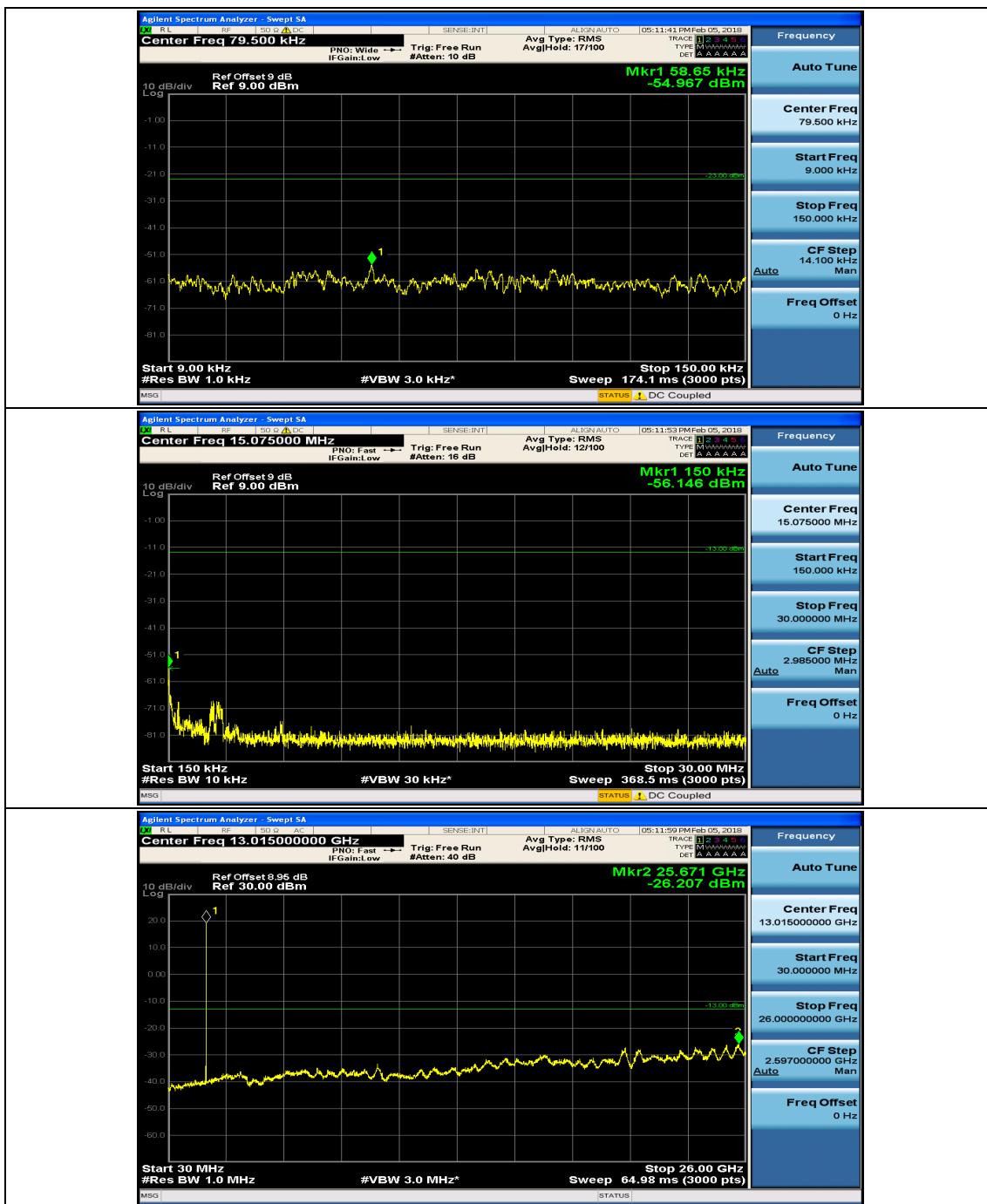


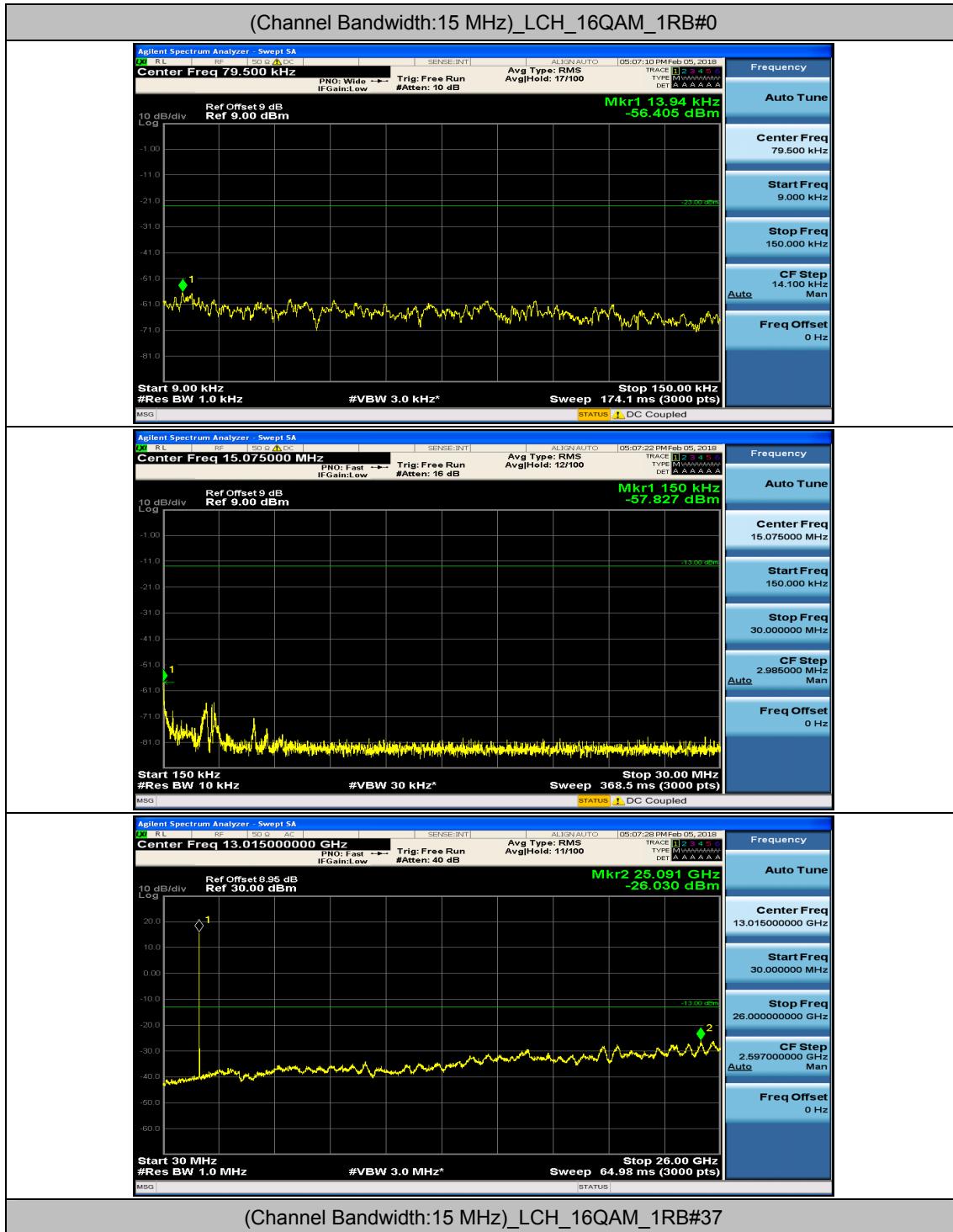


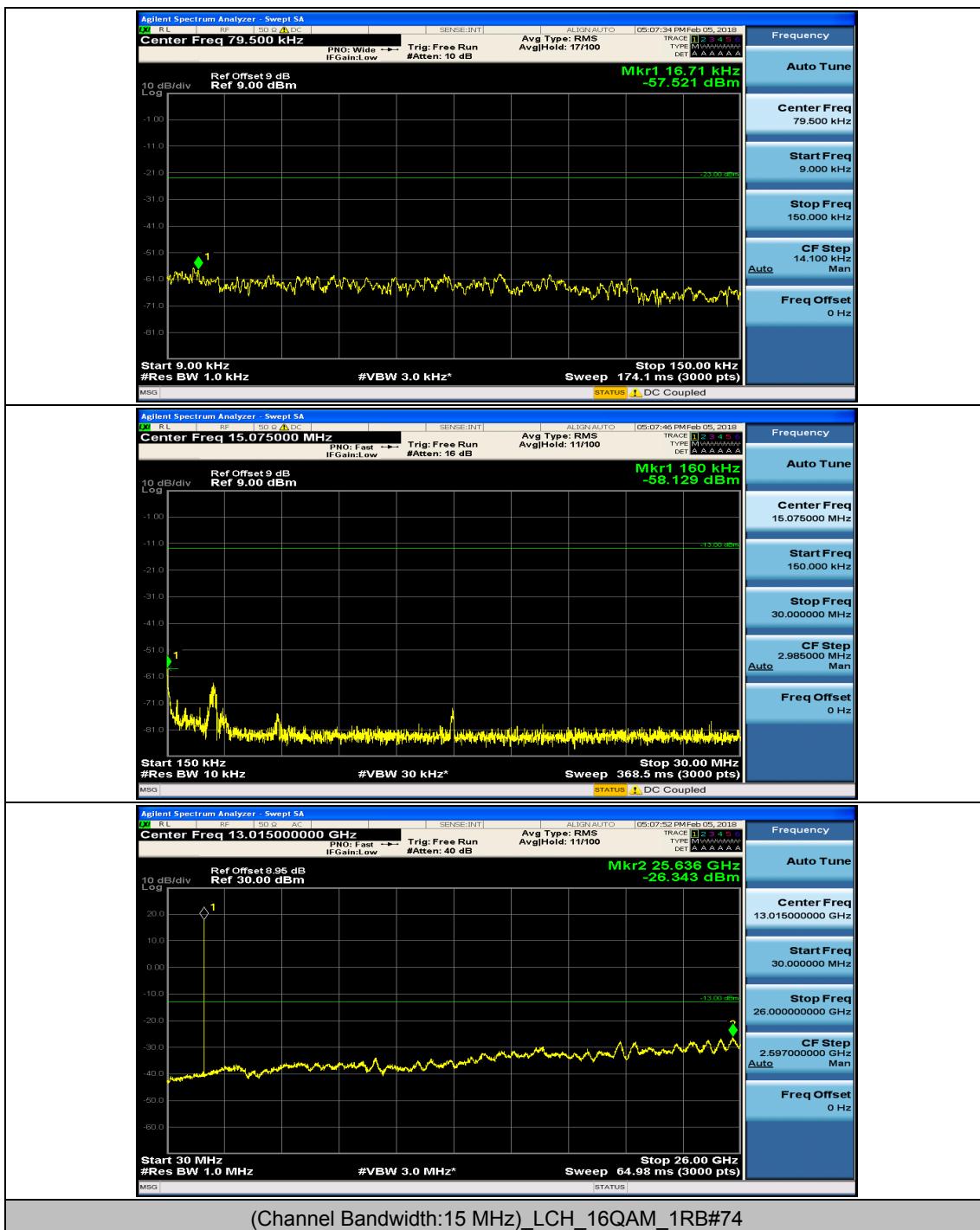


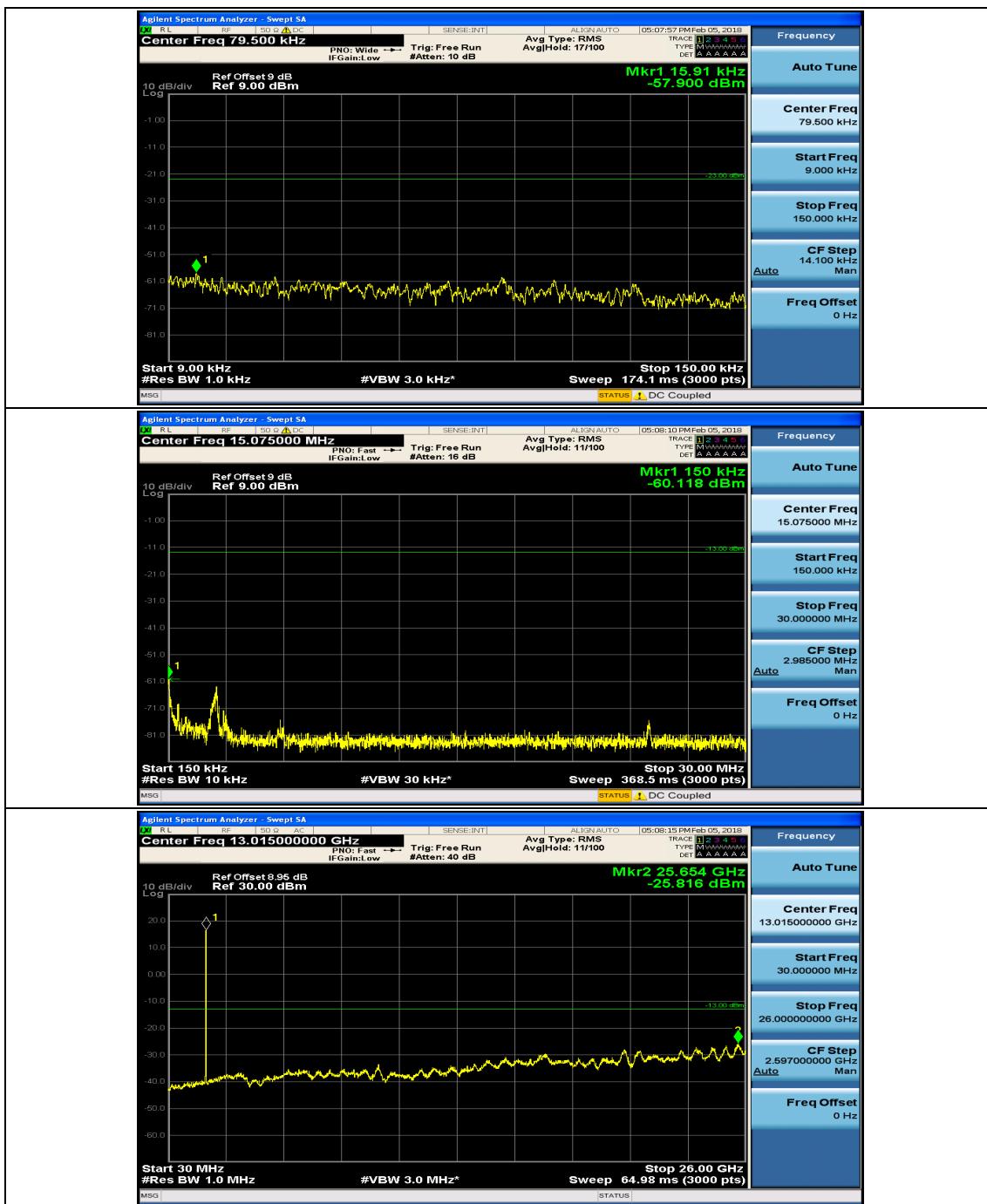


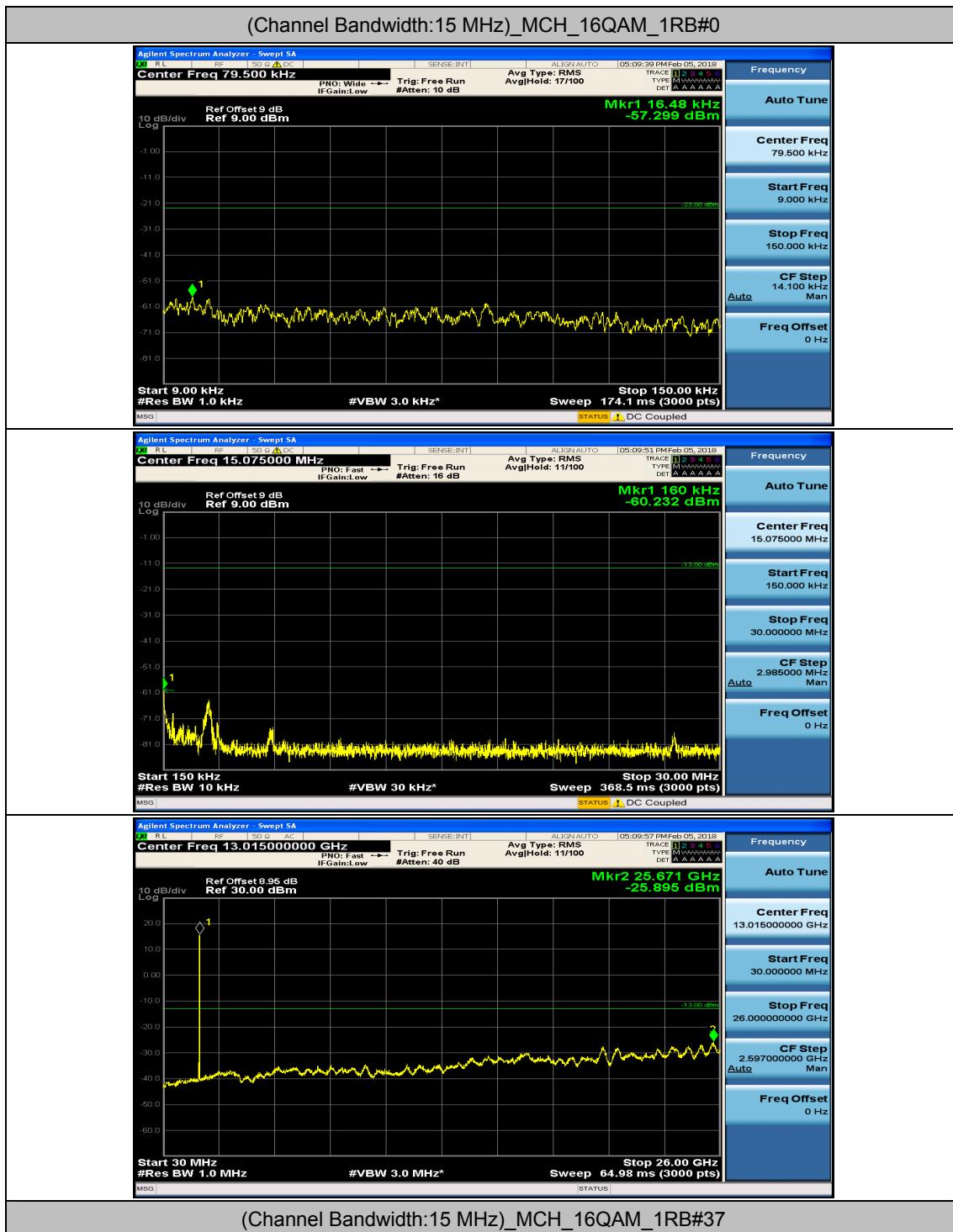


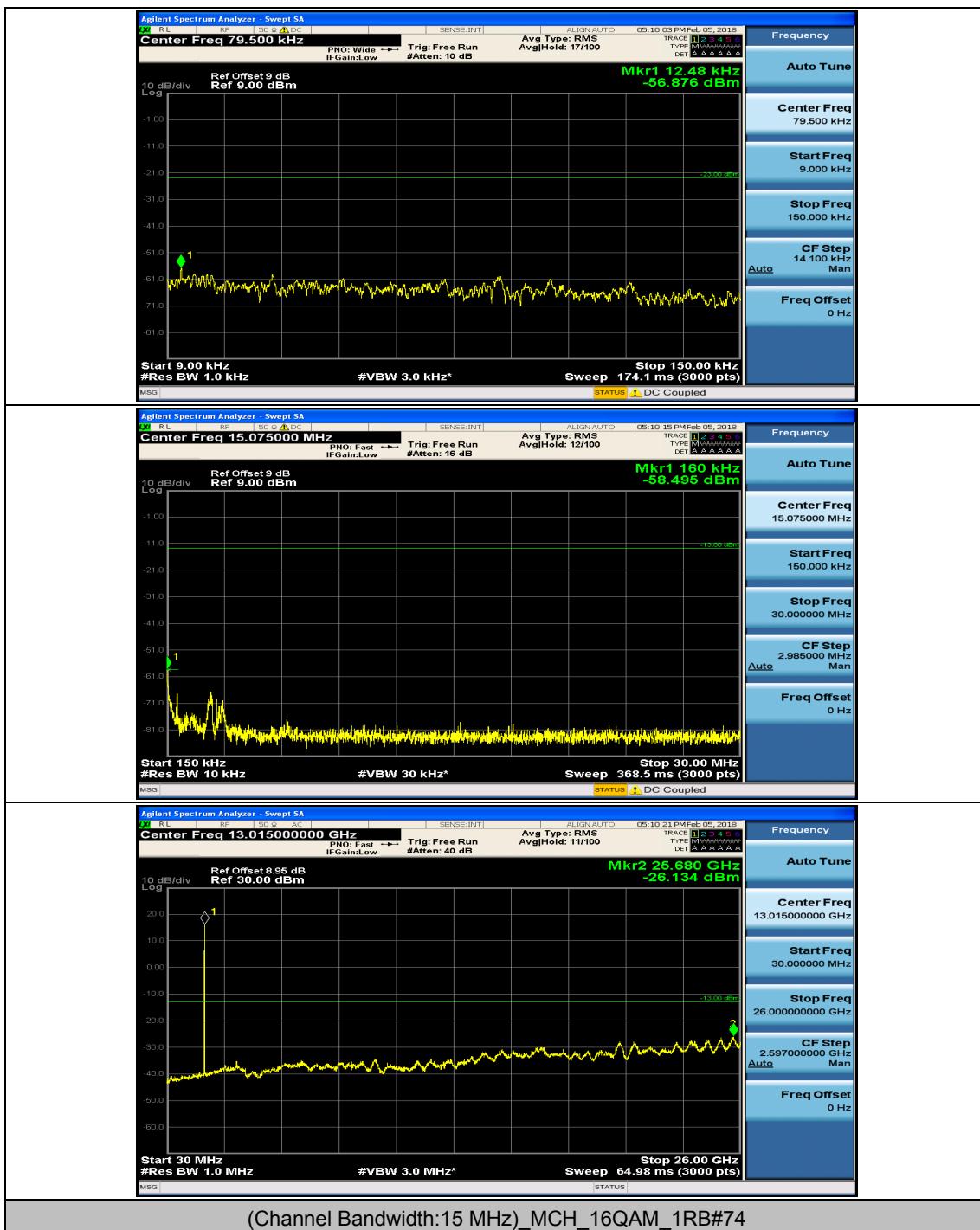


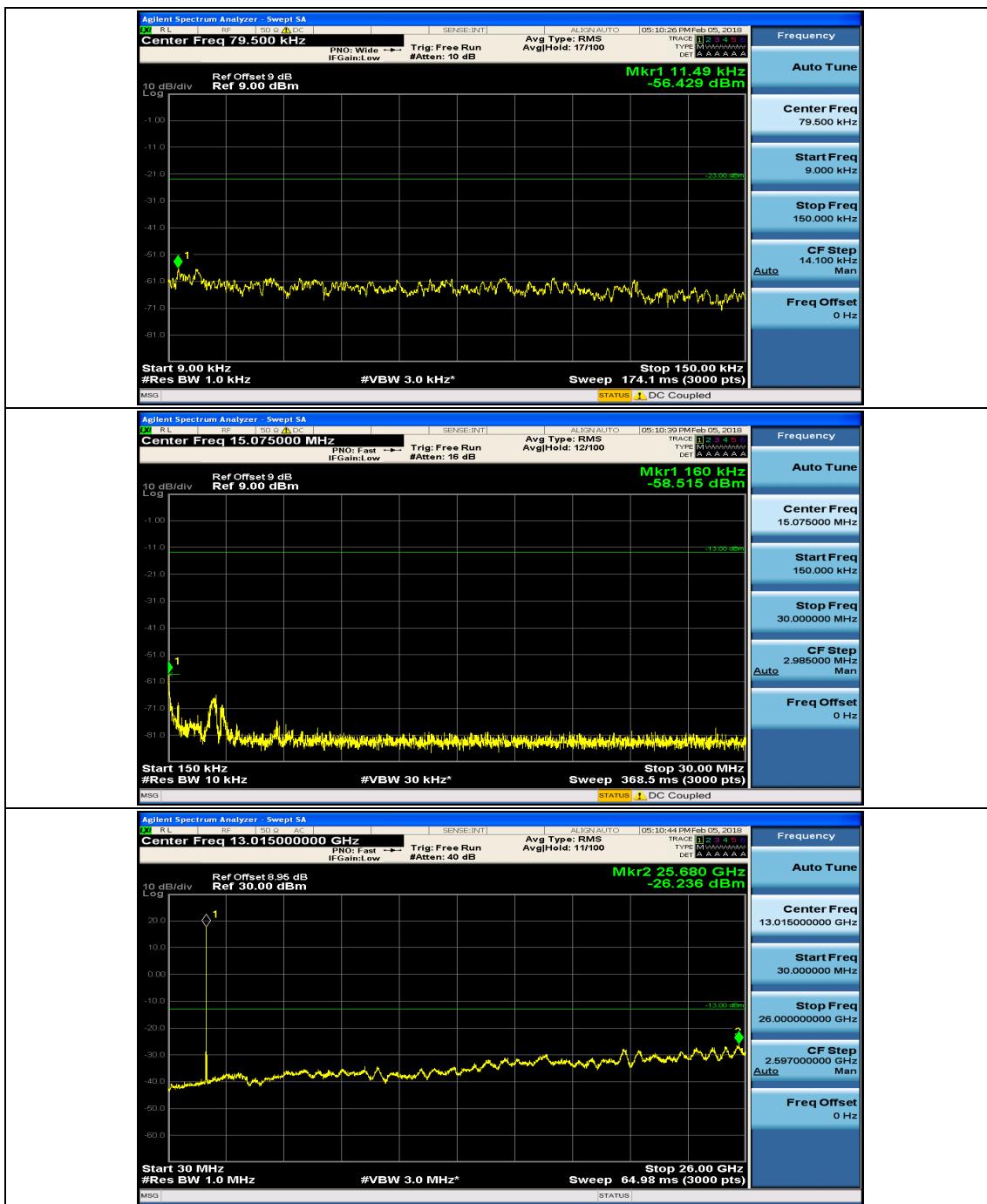


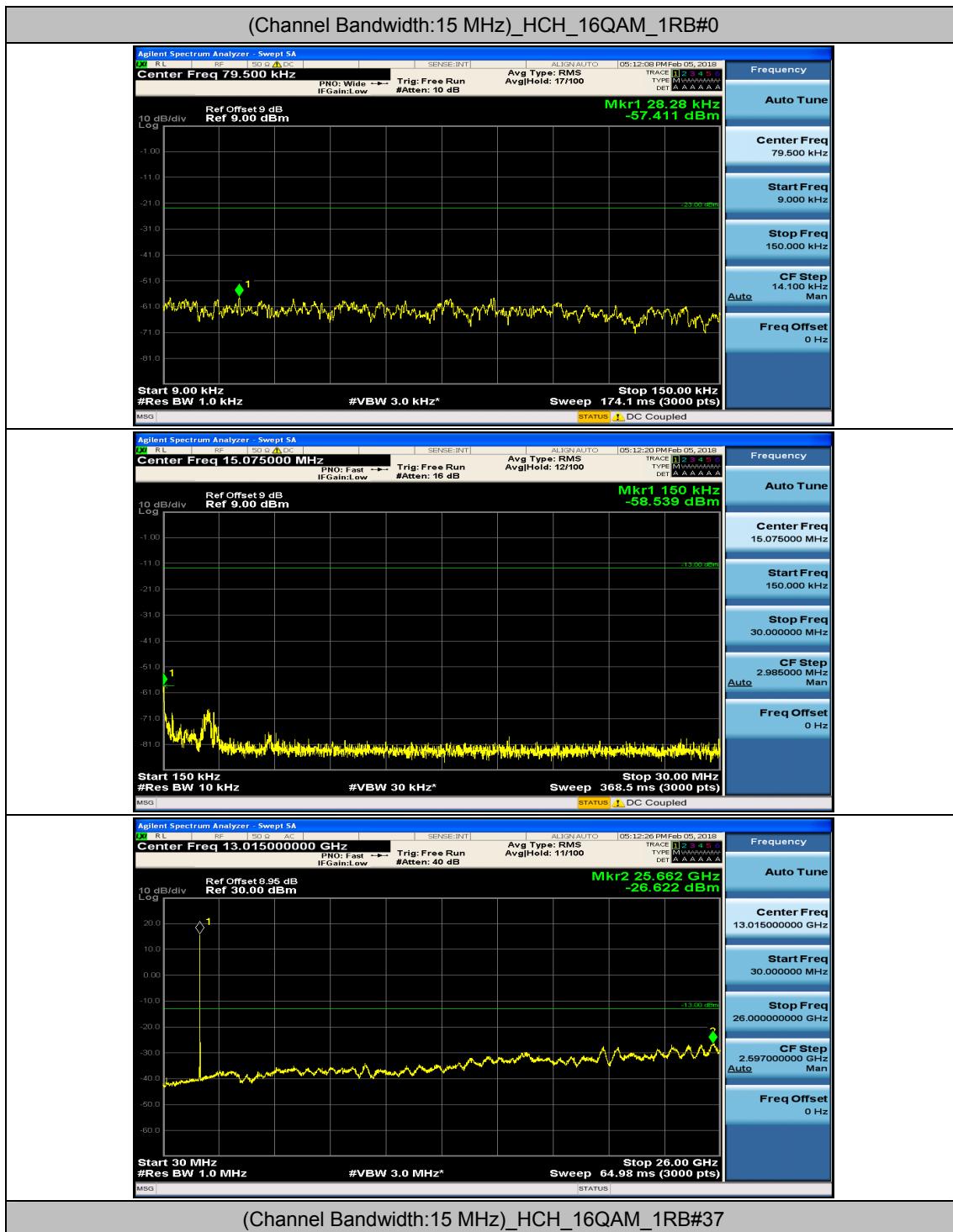


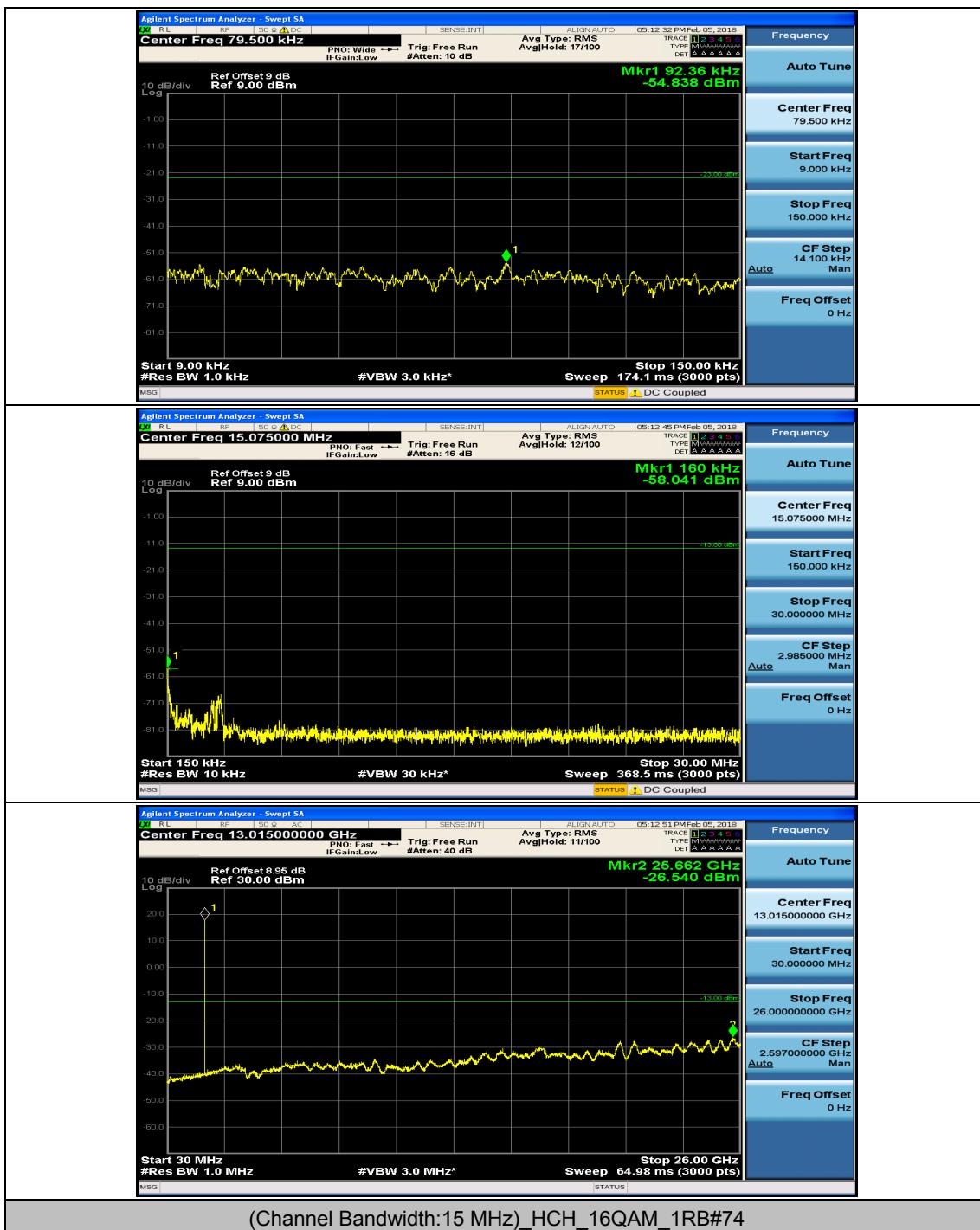


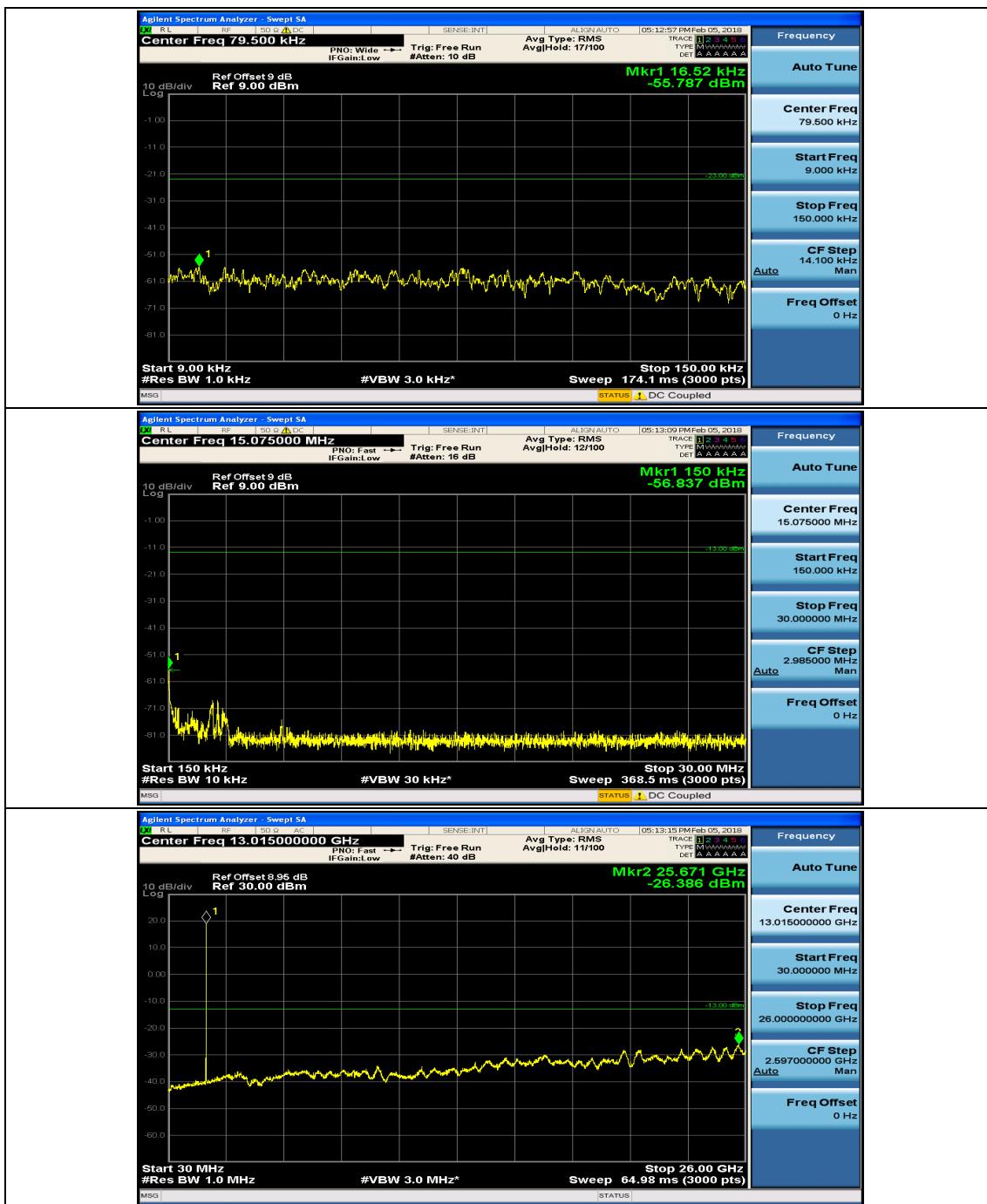




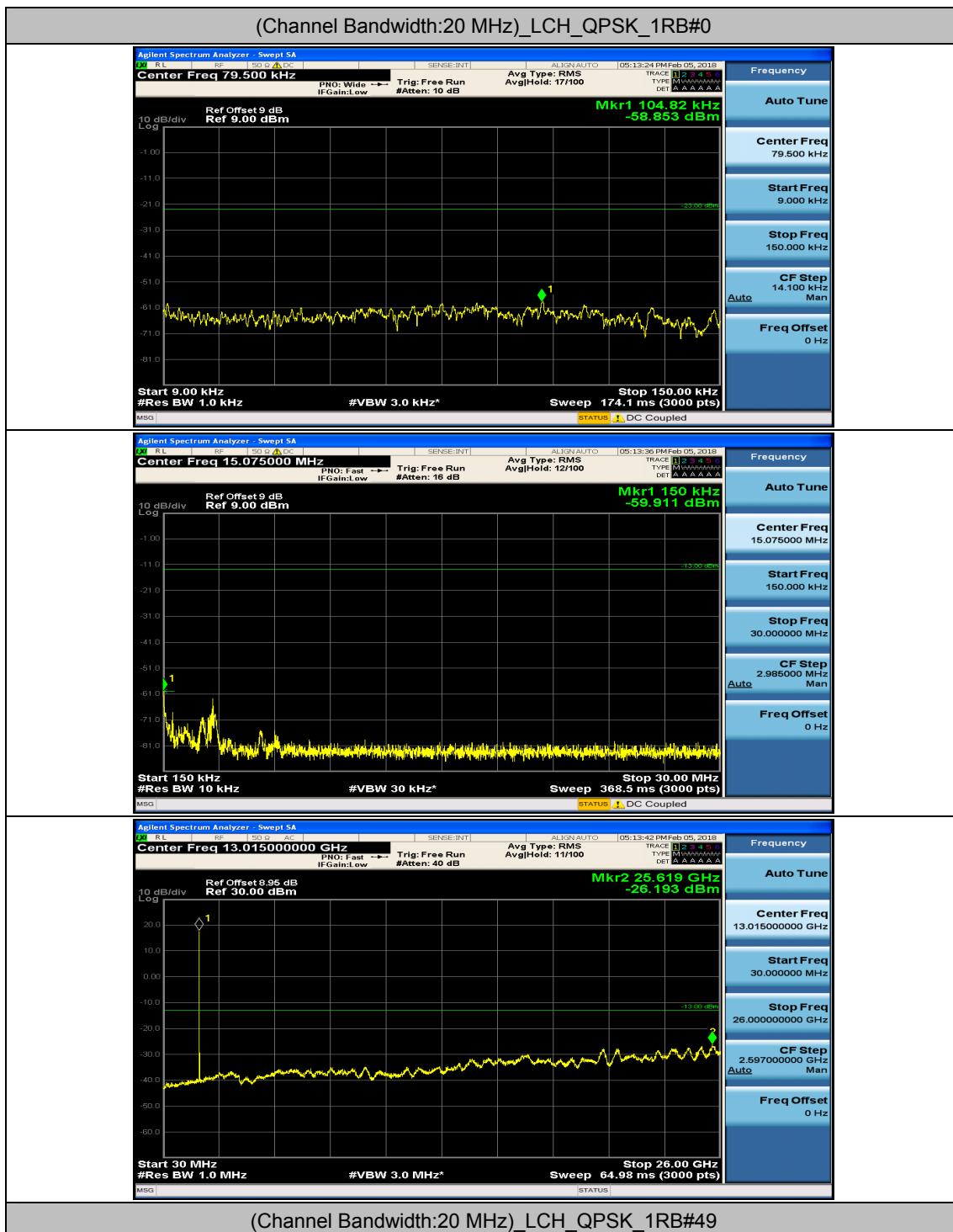


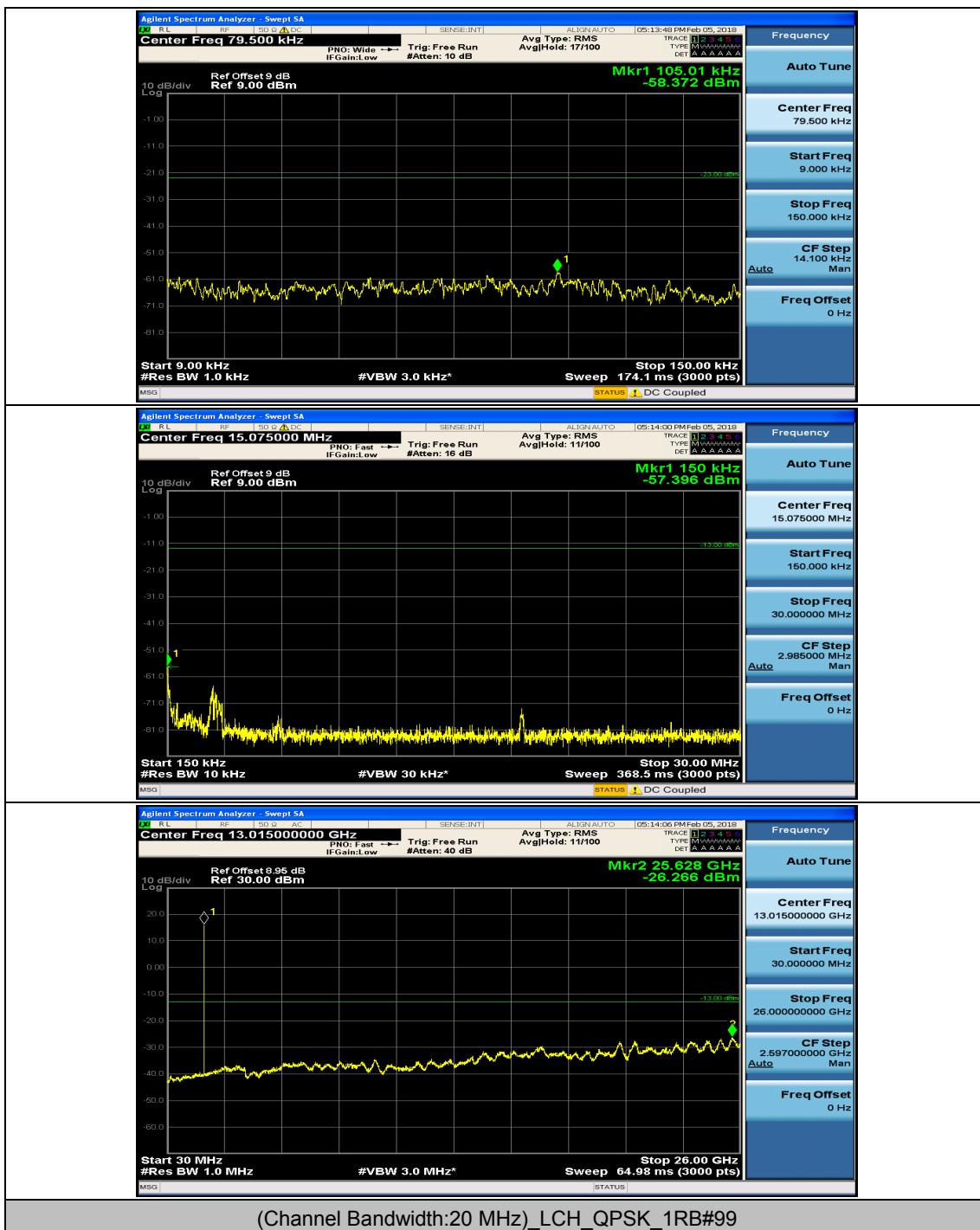


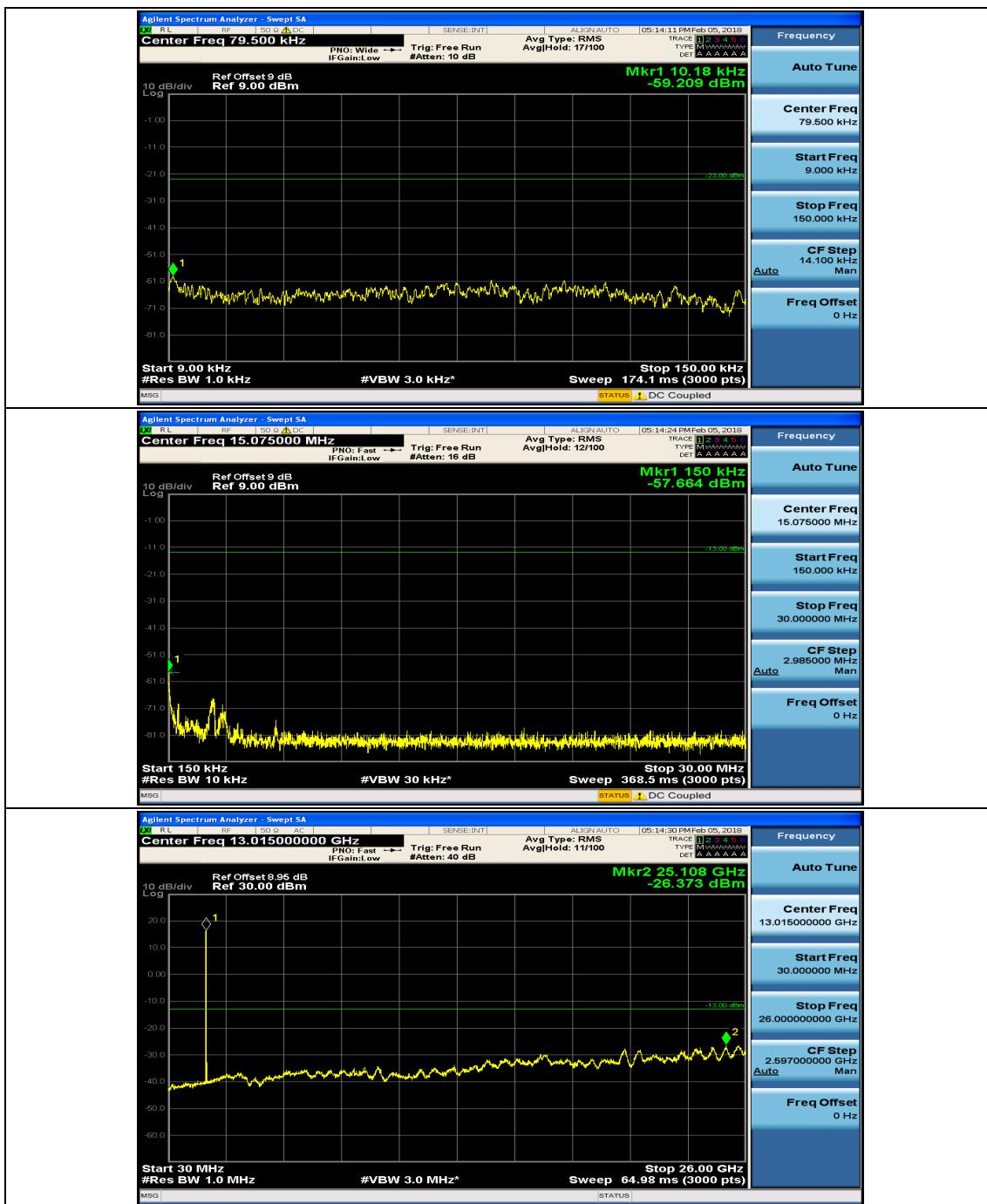


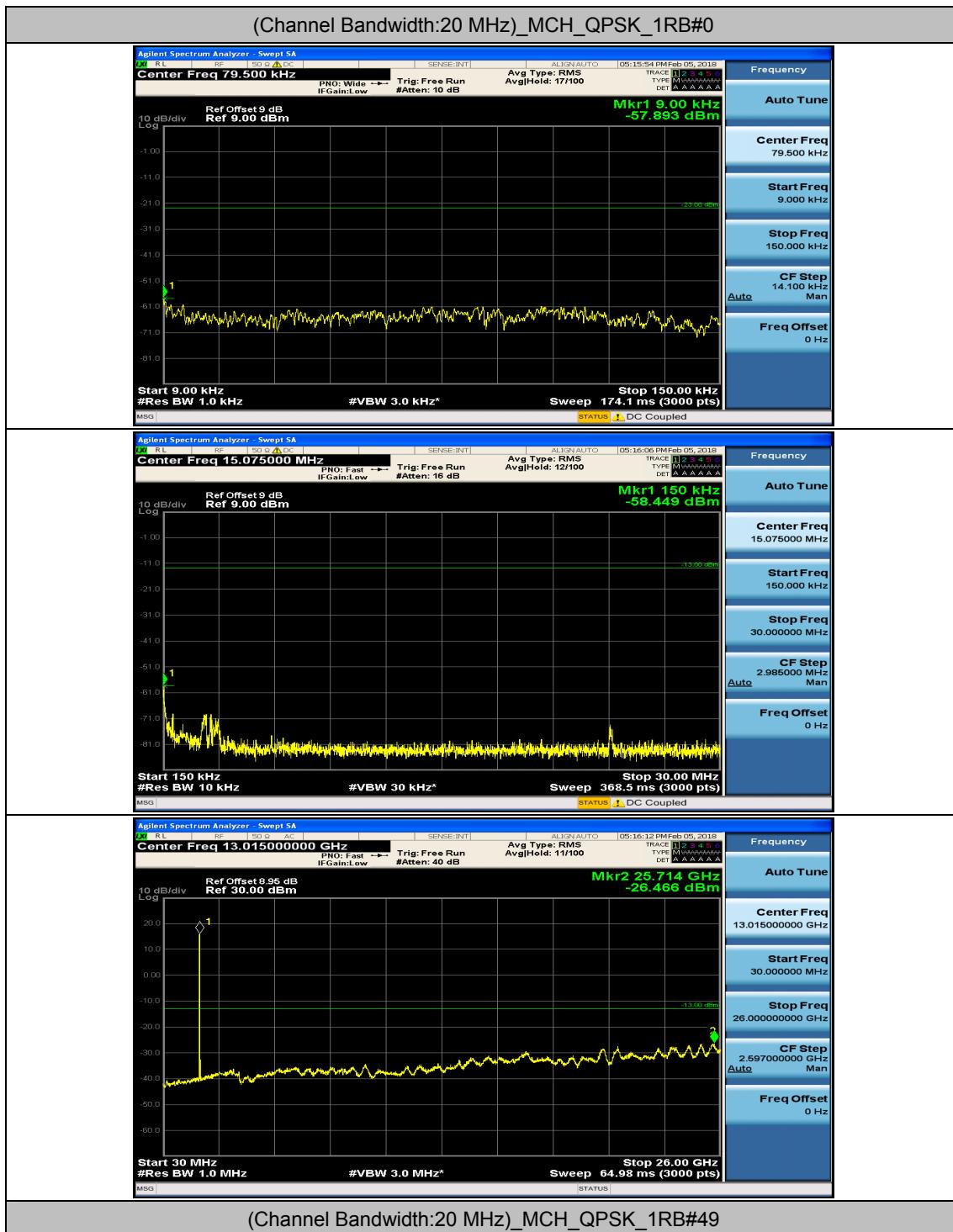


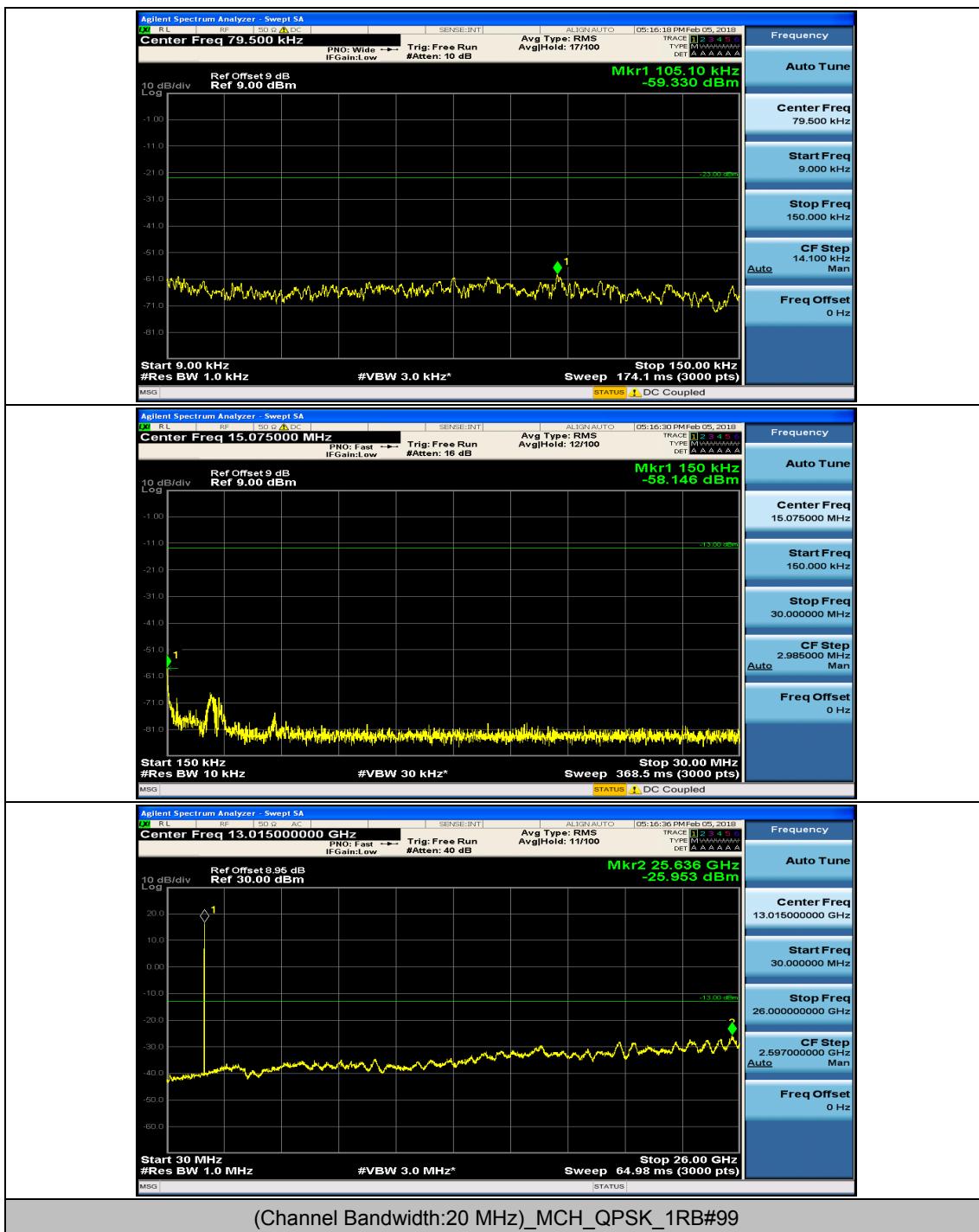
Channel Bandwidth: 20 MHz

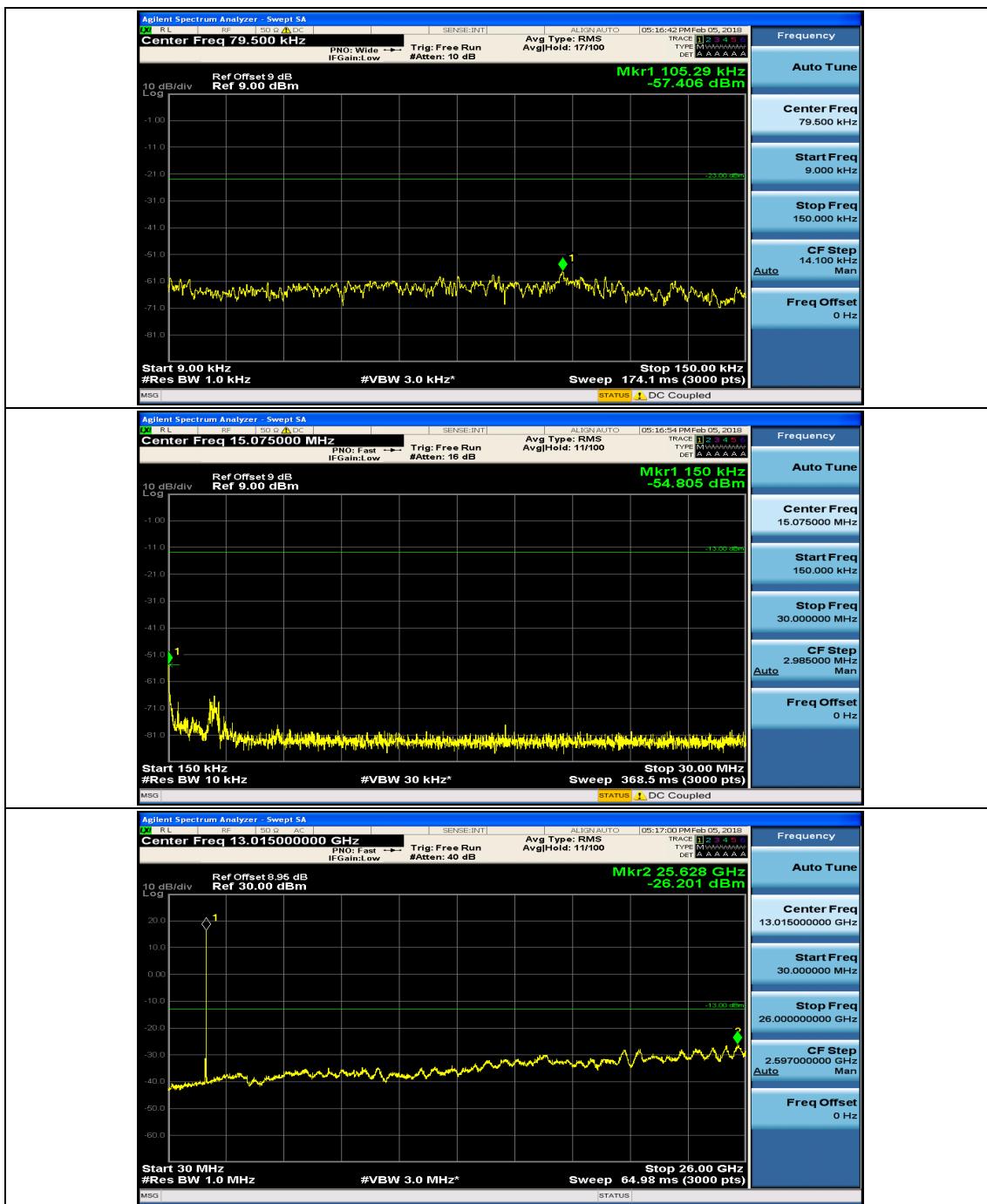


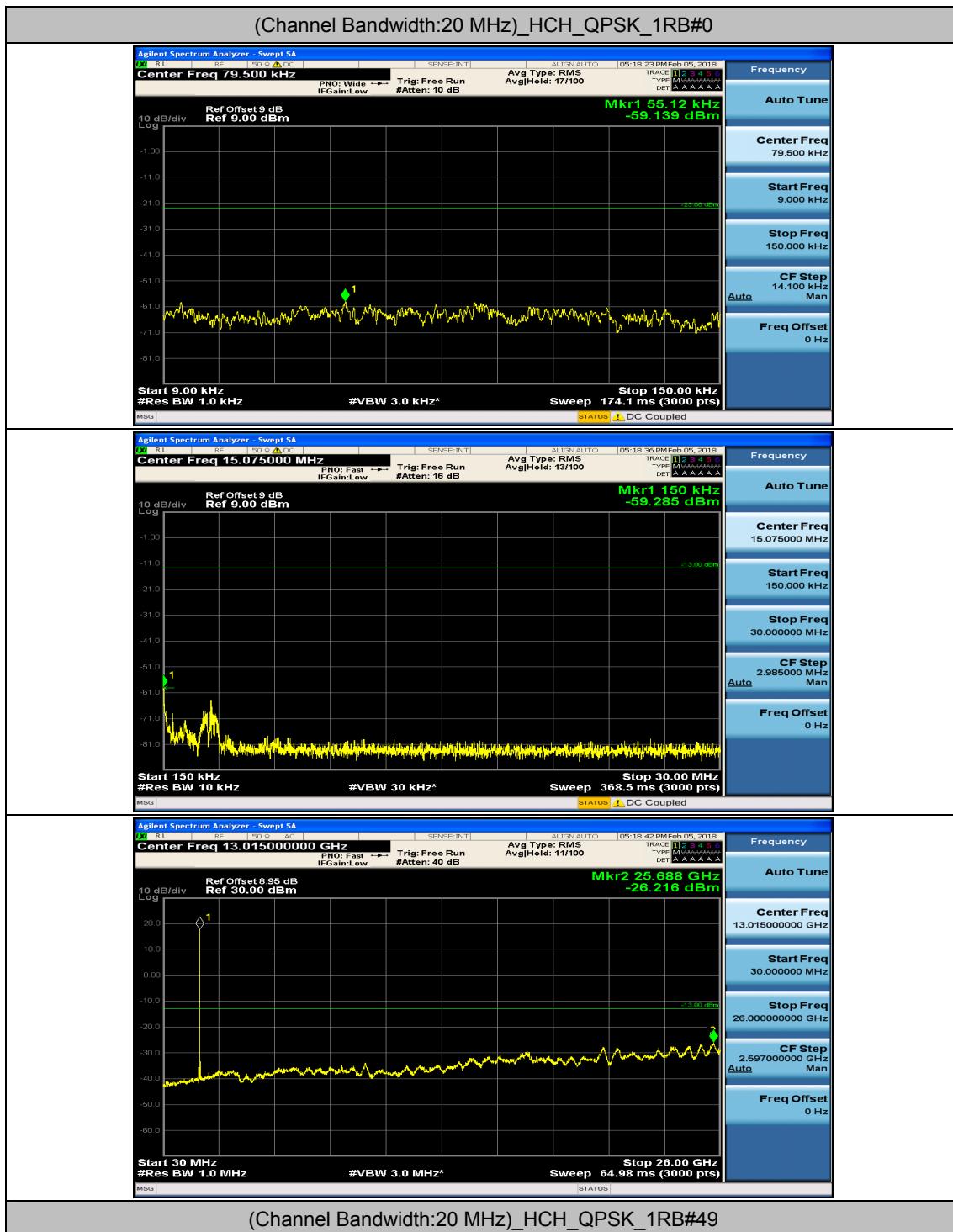


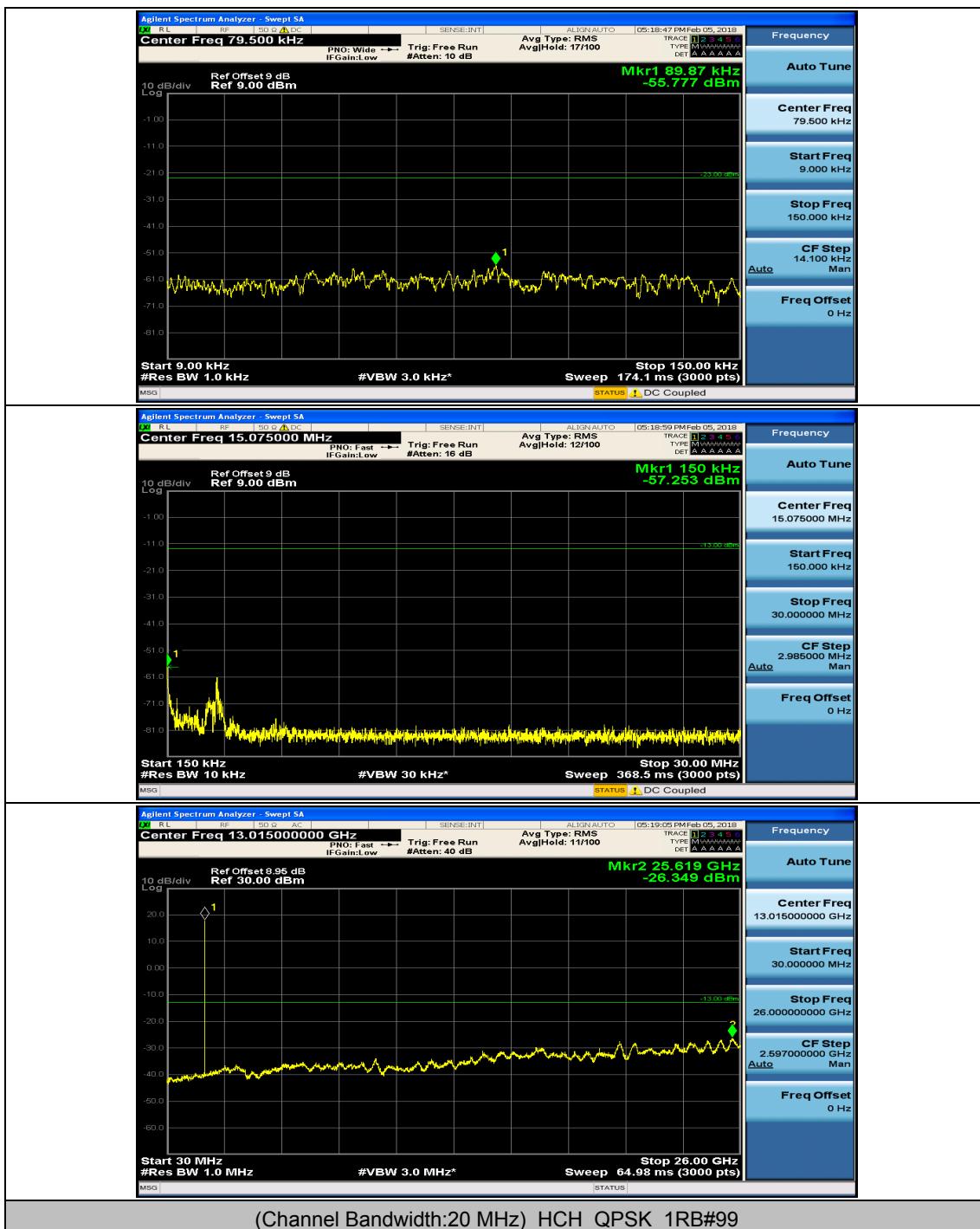


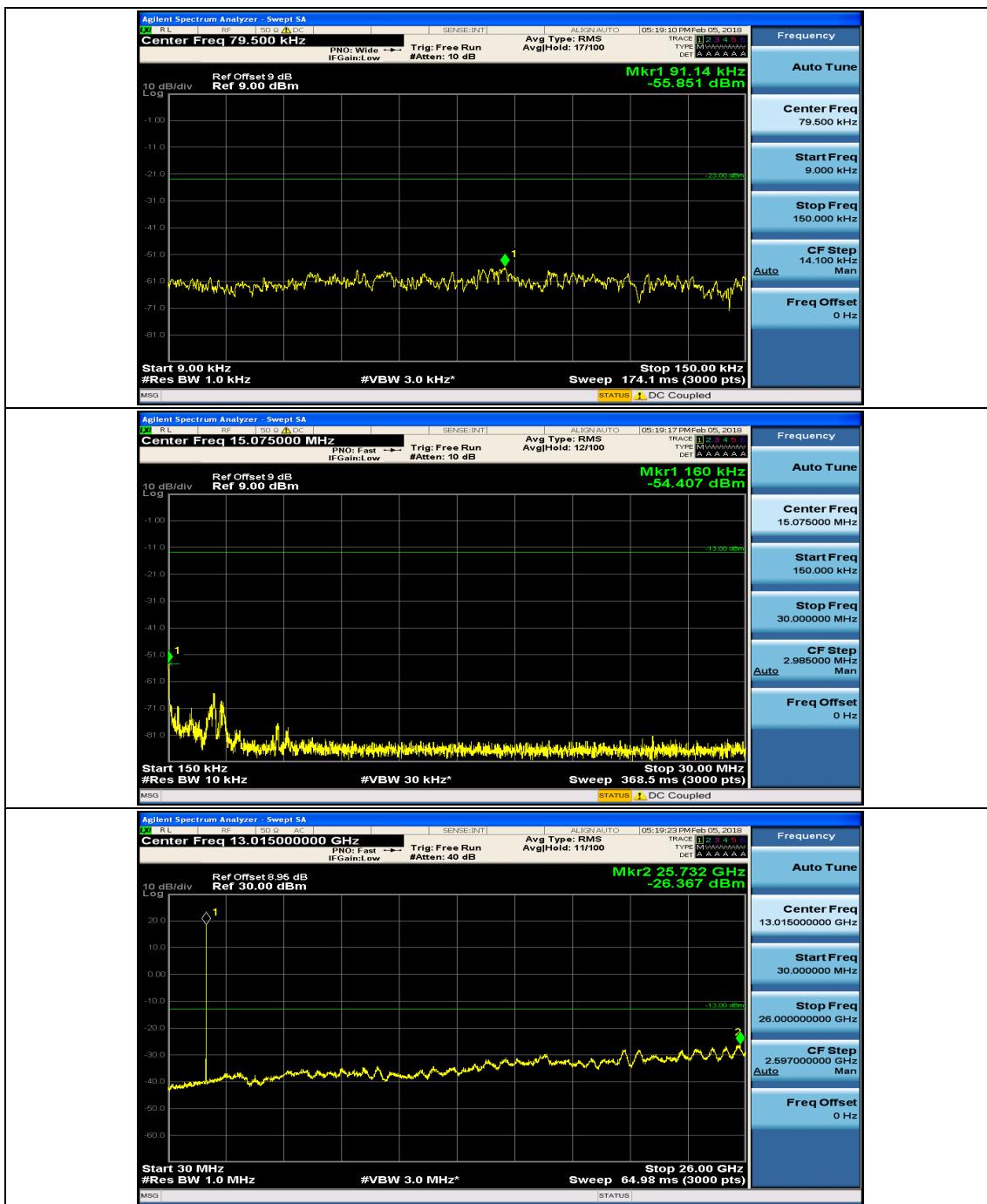


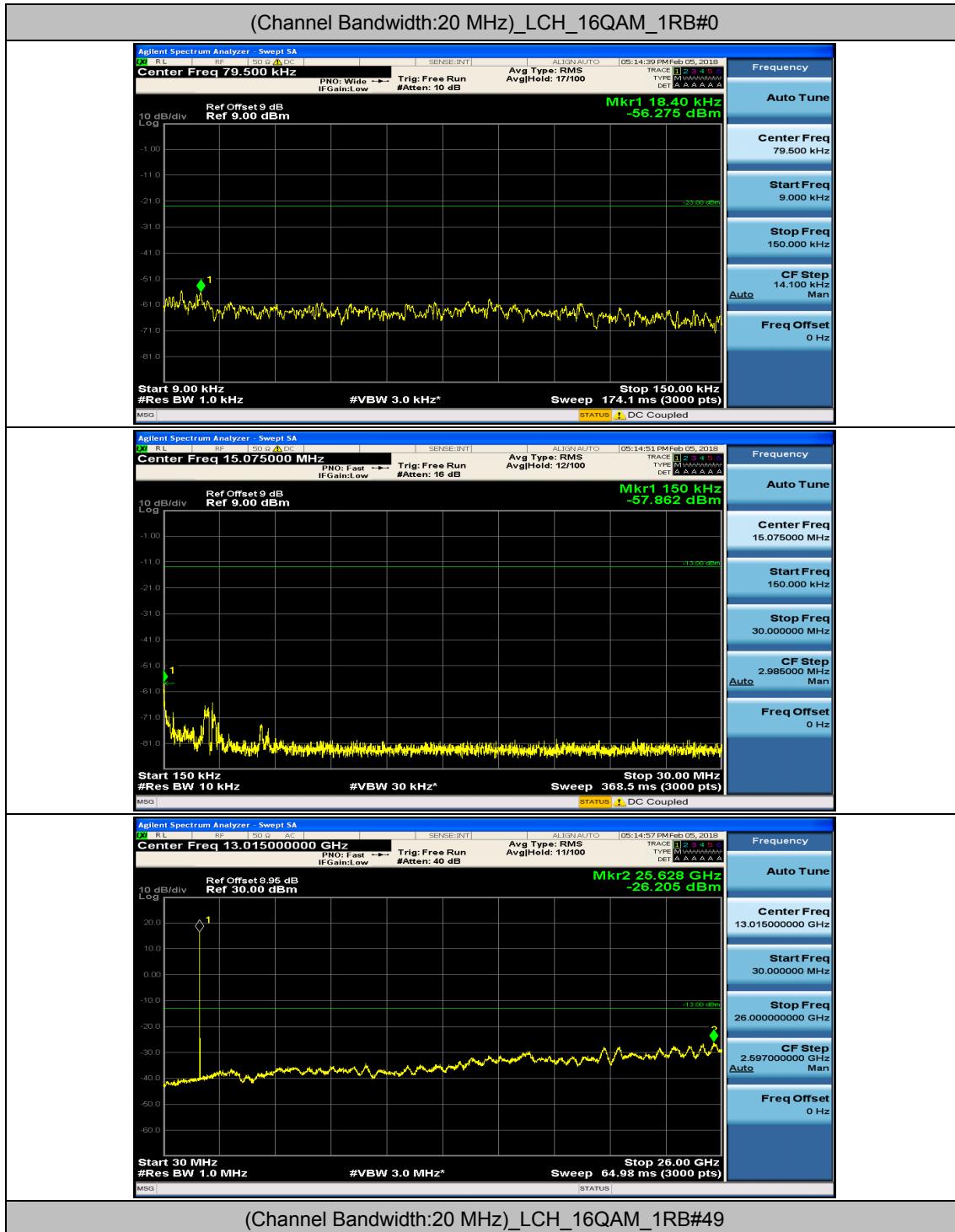


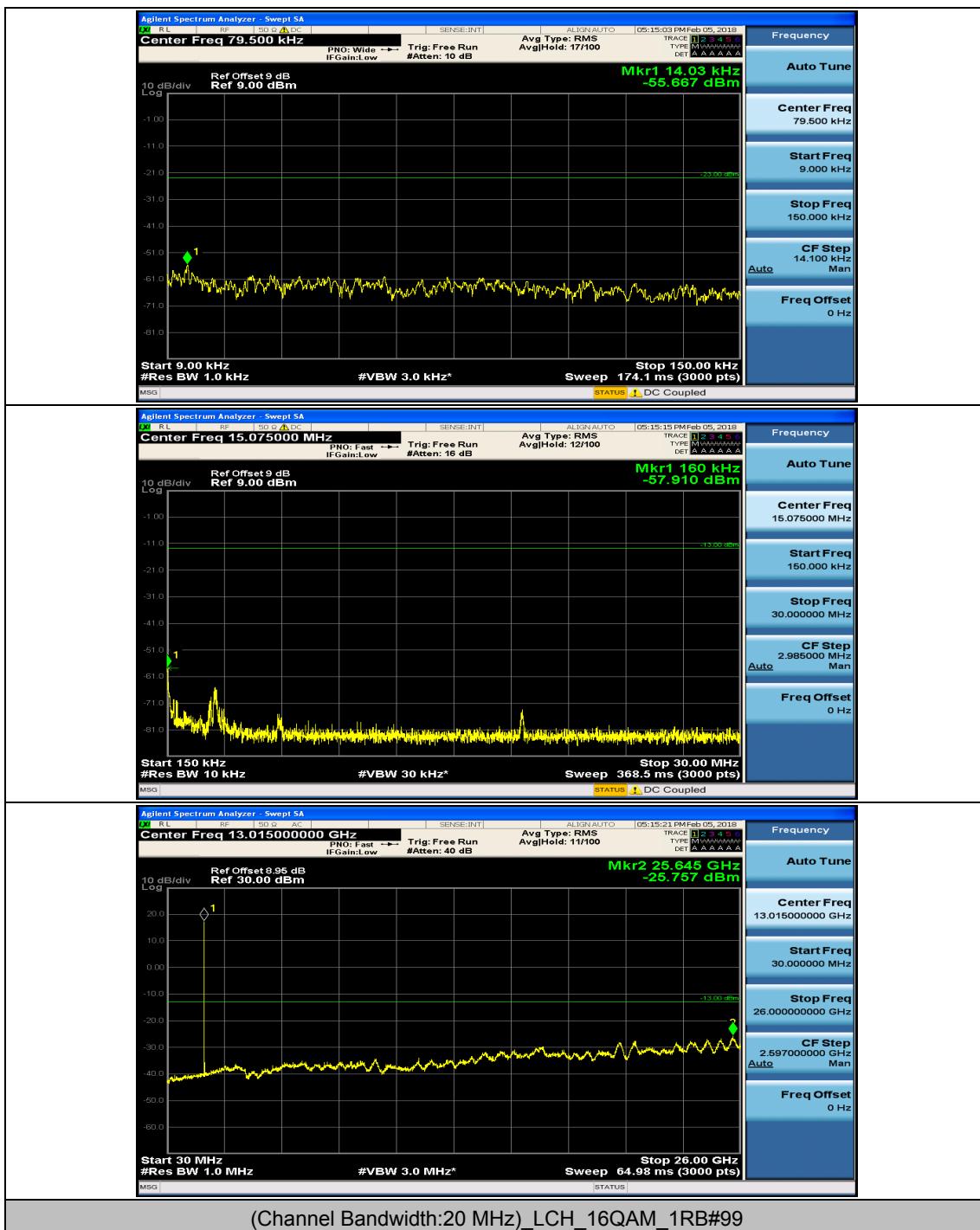


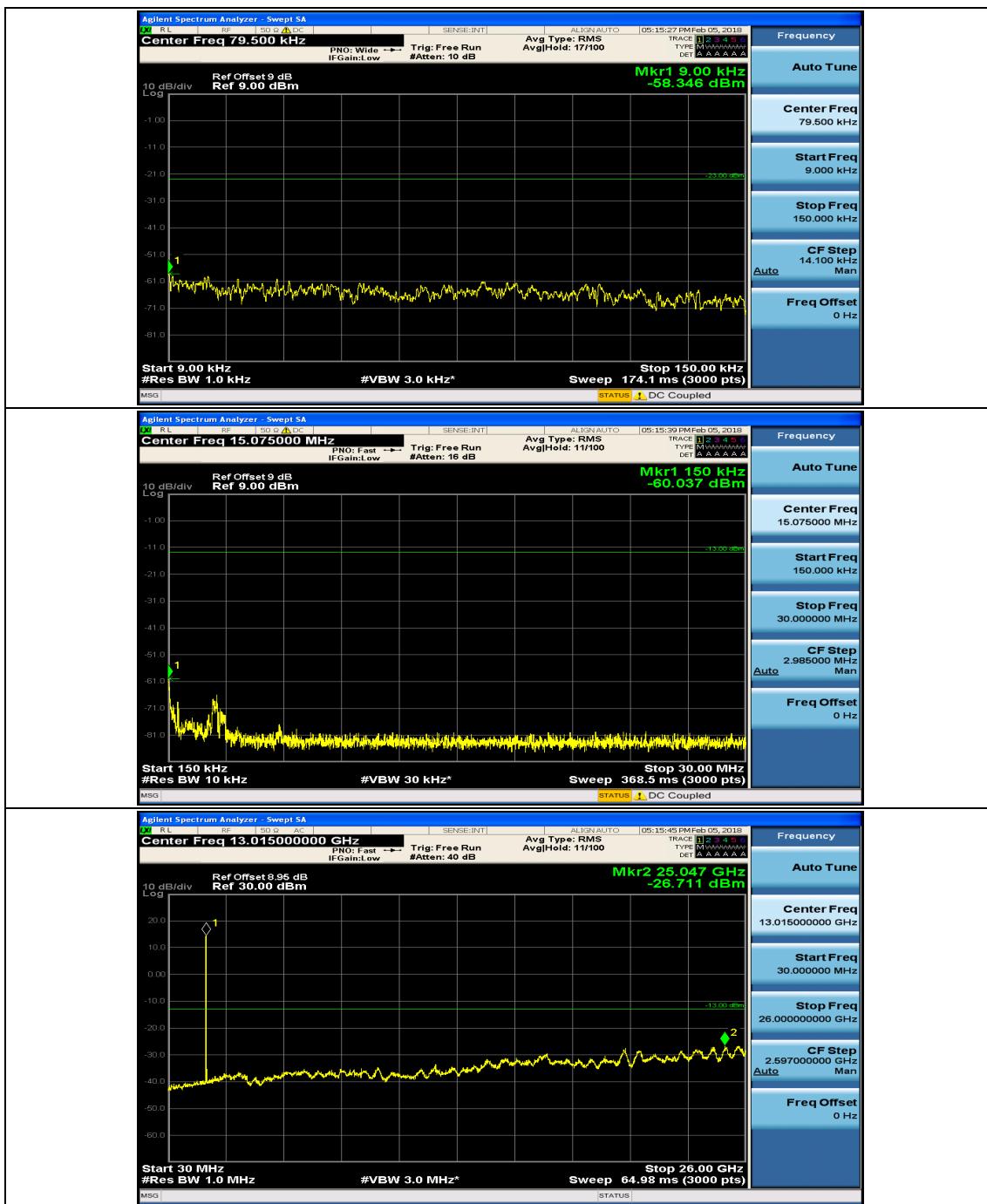


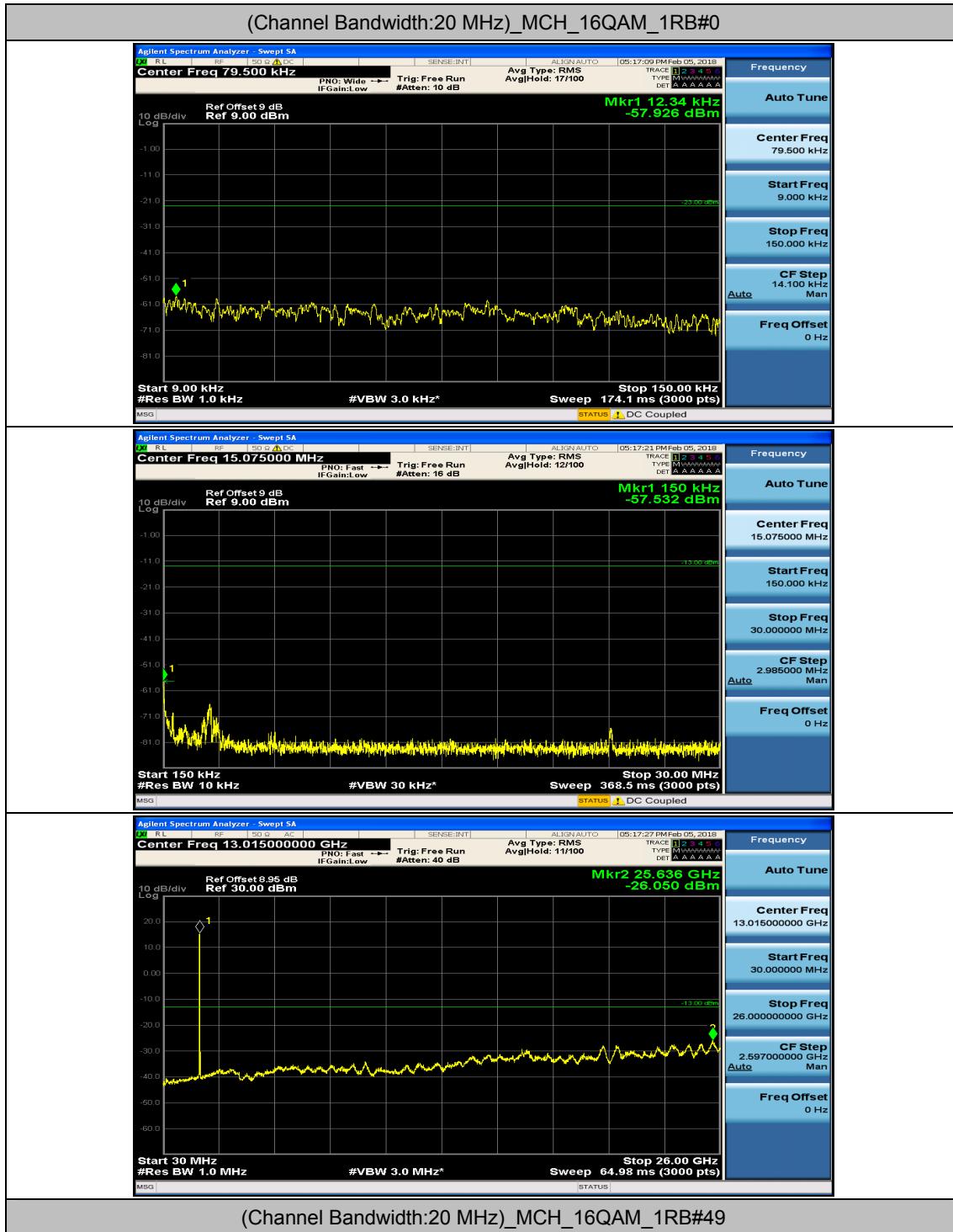


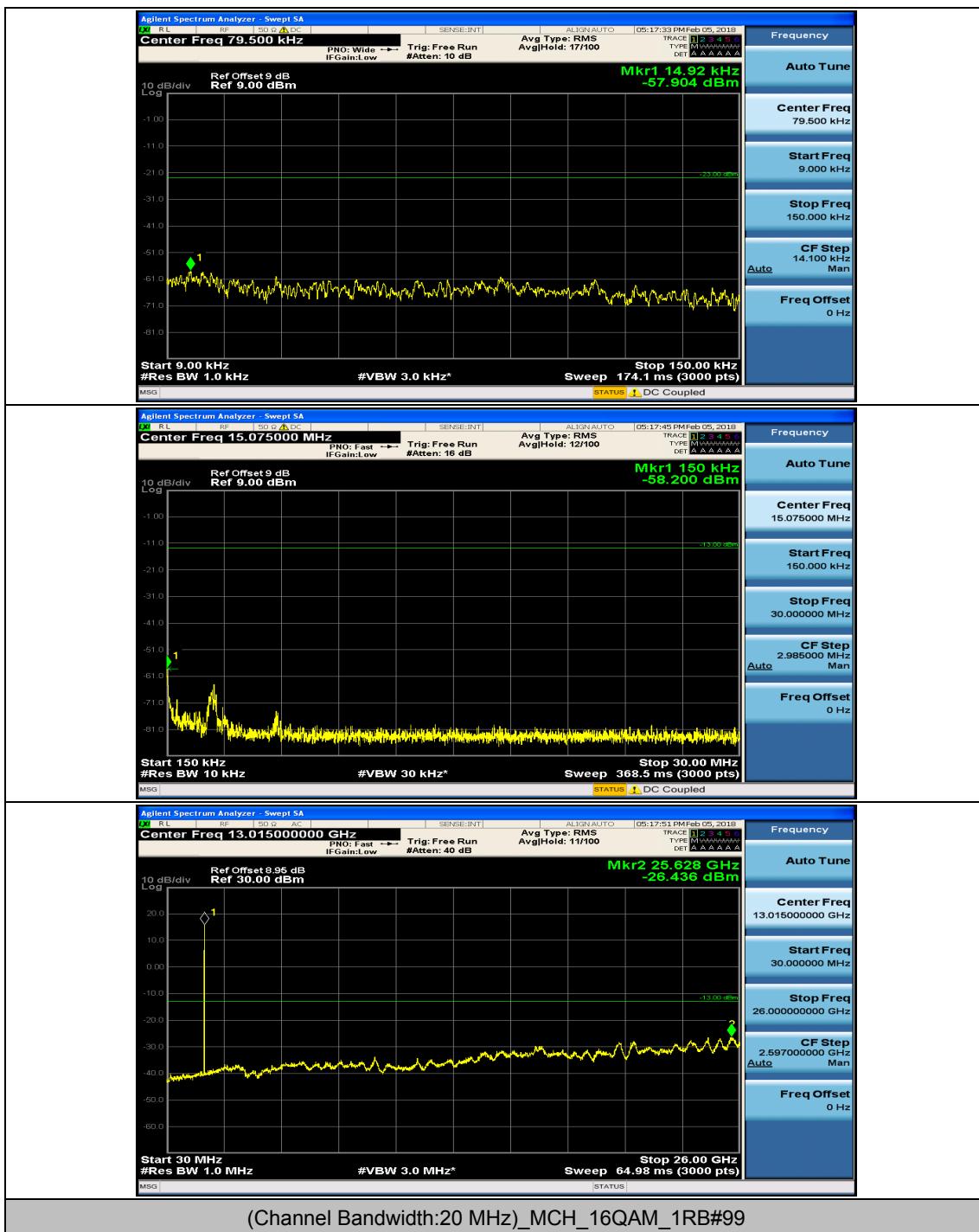


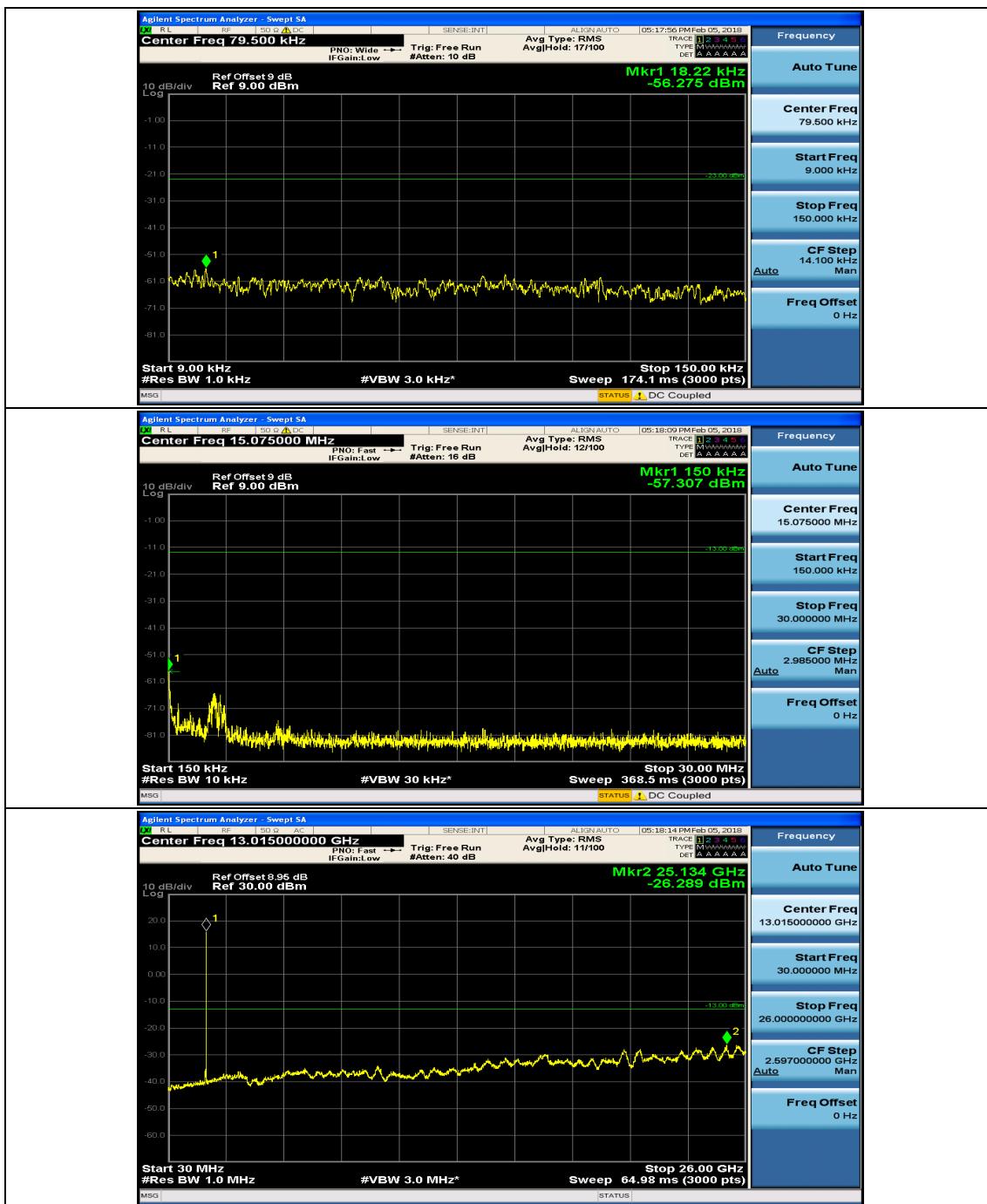


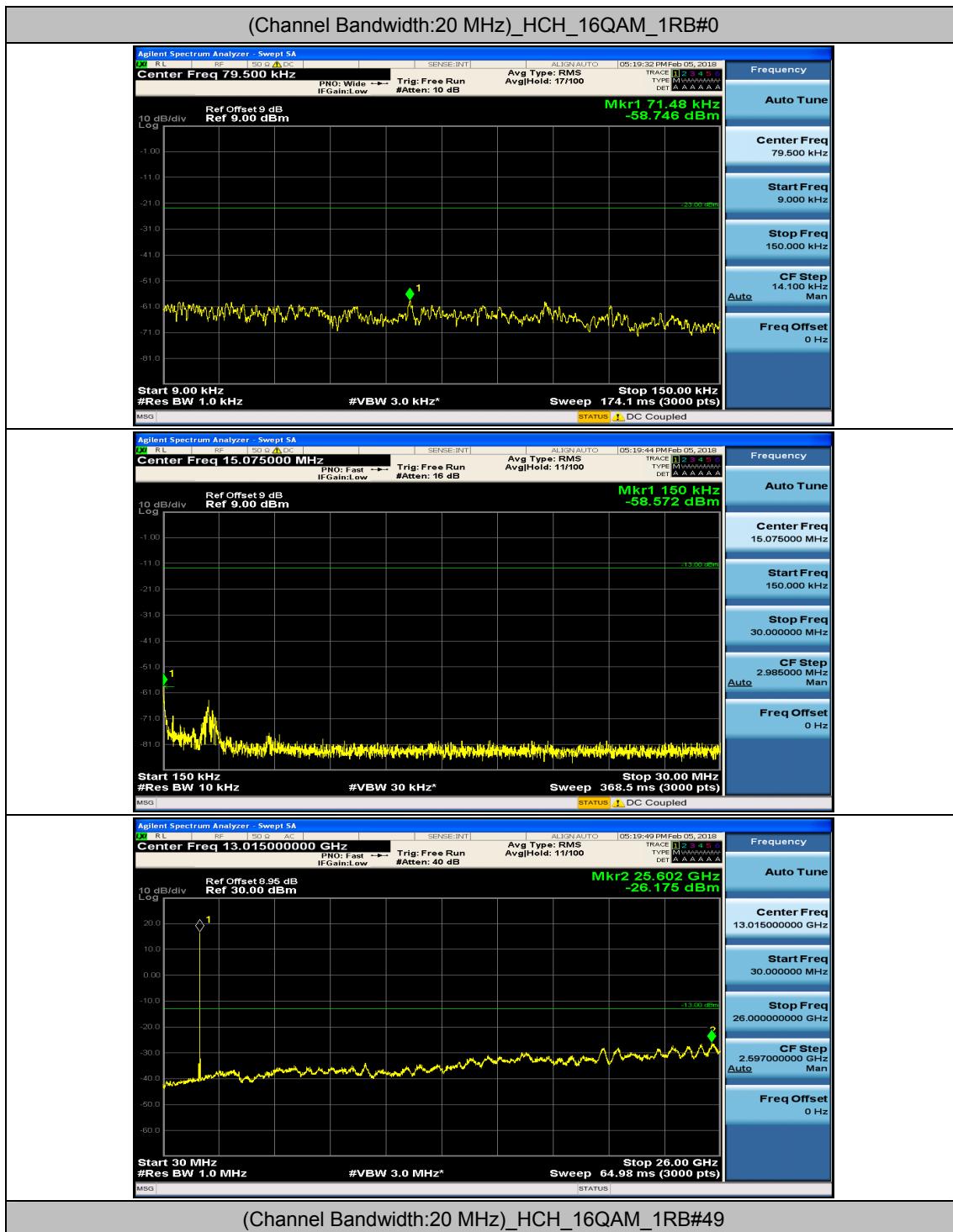


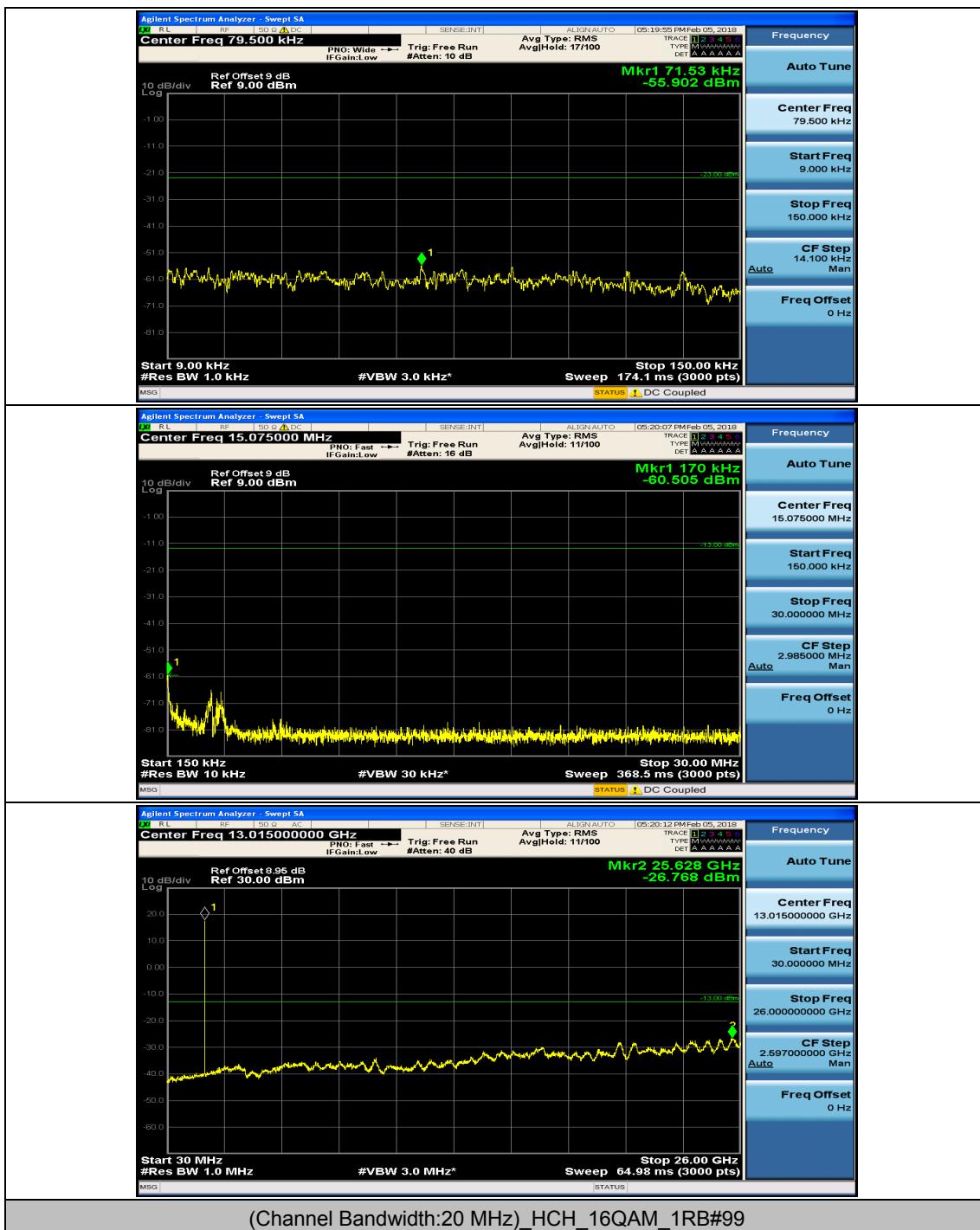


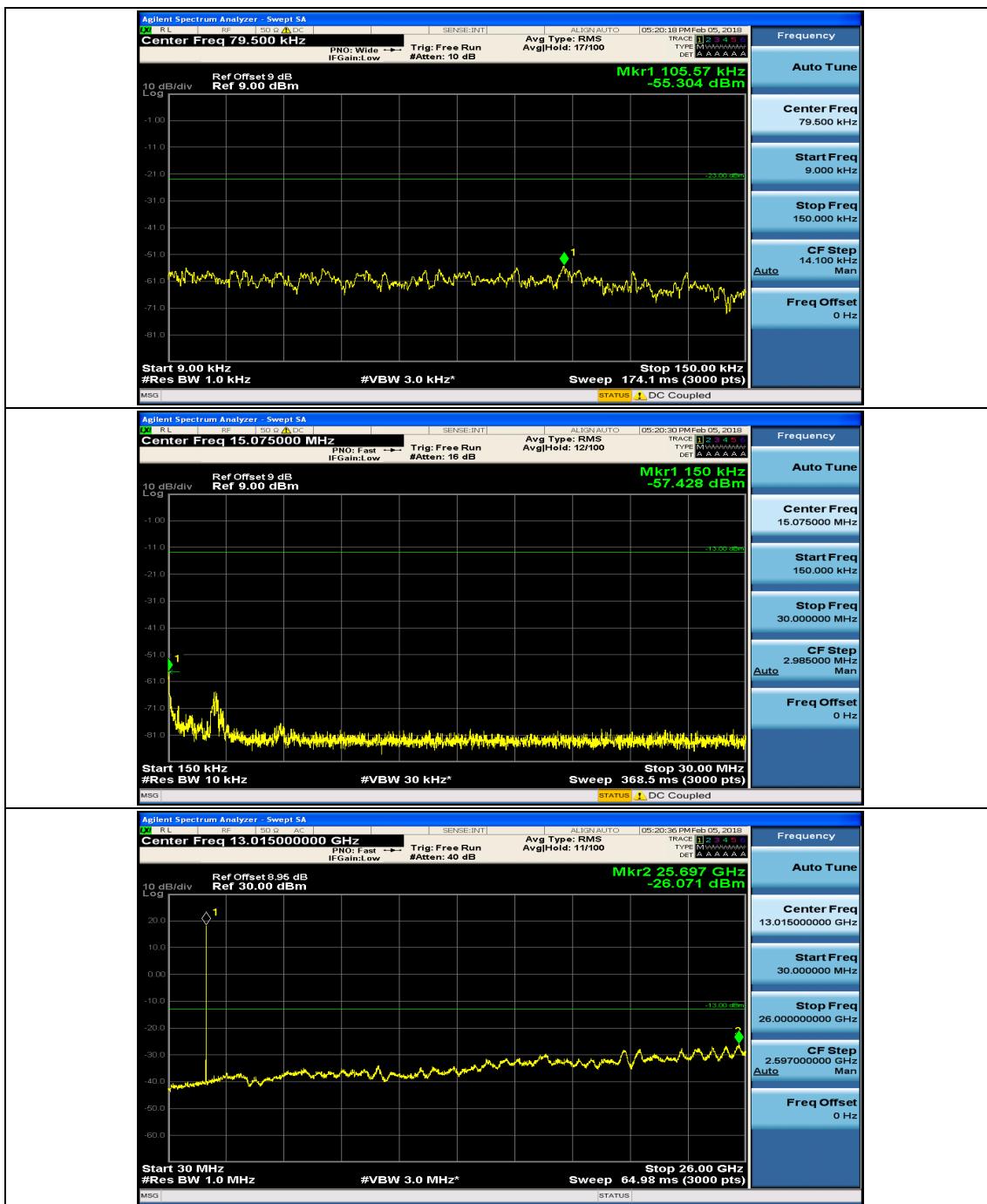












Appendix F: Frequency Stability

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 | -0.33 | -0.000193 | ± 2.5 | PASS |
| | | VN | TN | 1.43 | 0.000836 | ± 2.5 | PASS |
| | | VH | TN | -1.23 | -0.000719 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.39 | 0.001380 | ± 2.5 | PASS |
| | | VN | TN | -0.25 | -0.000144 | ± 2.5 | PASS |
| | | VH | TN | -0.64 | -0.000369 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.55 | 0.000314 | ± 2.5 | PASS |
| | | VN | TN | 3.19 | 0.001818 | ± 2.5 | PASS |
| | | VH | TN | 2.77 | 0.001579 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -0.34 | -0.000199 | ± 2.5 | PASS |
| | | VN | TN | 2.32 | 0.001356 | ± 2.5 | PASS |
| | | VH | TN | 0.92 | 0.000538 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.14 | 0.001812 | ± 2.5 | PASS |
| | | VN | TN | -1.3 | -0.000750 | ± 2.5 | PASS |
| | | VH | TN | 2.6 | 0.001501 | ± 2.5 | PASS |
| | HCH | VL | TN | 1.35 | 0.000770 | ± 2.5 | PASS |
| | | VN | TN | 3.76 | 0.002143 | ± 2.5 | PASS |
| | | VH | TN | -0.17 | -0.000097 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 2.99 | 0.001748 | ± 2.5 | PASS |
| | | VN | -20 | 4.84 | 0.002829 | ± 2.5 | PASS |
| | | VN | -10 | 4.5 | 0.002631 | ± 2.5 | PASS |
| | | VN | 0 | 1.69 | 0.000988 | ± 2.5 | PASS |
| | | VN | 10 | 4.56 | 0.002666 | ± 2.5 | PASS |
| | | VN | 20 | 4.38 | 0.002560 | ± 2.5 | PASS |
| | | VN | 30 | -0.05 | -0.000029 | ± 2.5 | PASS |
| | | VN | 40 | -1.95 | -0.001140 | ± 2.5 | PASS |
| | | VN | 50 | 2.05 | 0.001198 | ± 2.5 | PASS |
| | MCH | VN | -30 | -0.21 | -0.000121 | ± 2.5 | PASS |
| | | VN | -20 | 1.79 | 0.001033 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|----|-----|-------|-----------|-----------|------|
| | HCH | VN | -10 | -1.43 | -0.000825 | ± 2.5 | PASS |
| | | VN | 0 | 0.9 | 0.000519 | ± 2.5 | PASS |
| | | VN | 10 | 1.96 | 0.001131 | ± 2.5 | PASS |
| | | VN | 20 | -0.59 | -0.000341 | ± 2.5 | PASS |
| | | VN | 30 | 0.39 | 0.000225 | ± 2.5 | PASS |
| | | VN | 40 | 0.02 | 0.000012 | ± 2.5 | PASS |
| | | VN | 50 | 3.26 | 0.001882 | ± 2.5 | PASS |
| | | VN | -30 | 2.26 | 0.001288 | ± 2.5 | PASS |
| | | VN | -20 | -0.7 | -0.000399 | ± 2.5 | PASS |
| | | VN | -10 | 1.55 | 0.000884 | ± 2.5 | PASS |
| 16QAM | LCH | VN | 0 | 2.46 | 0.001402 | ± 2.5 | PASS |
| | | VN | 10 | 0.46 | 0.000262 | ± 2.5 | PASS |
| | | VN | 20 | 4.18 | 0.002383 | ± 2.5 | PASS |
| | | VN | 30 | 3.36 | 0.001915 | ± 2.5 | PASS |
| | | VN | 40 | 2.7 | 0.001539 | ± 2.5 | PASS |
| | | VN | 50 | -0.87 | -0.000496 | ± 2.5 | PASS |
| | | VN | -30 | 4.79 | 0.002800 | ± 2.5 | PASS |
| | | VN | -20 | 2.45 | 0.001432 | ± 2.5 | PASS |
| | | VN | -10 | 4.08 | 0.002385 | ± 2.5 | PASS |
| | MCH | VN | 0 | 4.66 | 0.002724 | ± 2.5 | PASS |
| | | VN | 10 | 1.74 | 0.001017 | ± 2.5 | PASS |
| | | VN | 20 | 0.01 | 0.000006 | ± 2.5 | PASS |
| | | VN | 30 | 0.29 | 0.000170 | ± 2.5 | PASS |
| | | VN | 40 | 1.8 | 0.001052 | ± 2.5 | PASS |
| | | VN | 50 | 1.82 | 0.001064 | ± 2.5 | PASS |
| | | VN | -30 | 3.92 | 0.002235 | ± 2.5 | PASS |
| | | VN | -20 | 1.2 | 0.000684 | ± 2.5 | PASS |
| | | VN | -10 | 3.38 | 0.001927 | ± 2.5 | PASS |
| | | VN | 0 | 1.77 | 0.001009 | ± 2.5 | PASS |
| | HCH | VN | 10 | 2.81 | 0.001602 | ± 2.5 | PASS |
| | | VN | 20 | 1.1 | 0.000627 | ± 2.5 | PASS |
| | | VN | 30 | 4.99 | 0.002844 | ± 2.5 | PASS |
| | | VN | 40 | 2.35 | 0.001340 | ± 2.5 | PASS |
| | | VN | 50 | -1.13 | -0.000644 | ± 2.5 | PASS |
| | | VN | -30 | 0.1 | 0.000057 | ± 2.5 | PASS |
| | | VN | -20 | -0.2 | -0.000114 | ± 2.5 | PASS |

| | | | | | | | |
|--|--|----|----|-------|-----------|-----------|------|
| | | VN | 40 | 4.56 | 0.002599 | ± 2.5 | PASS |
| | | VN | 50 | -1.01 | -0.000576 | ± 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 | 0.87 | 0.000508 | ± 2.5 | PASS |
| | | VN | TN | 4.29 | 0.002507 | ± 2.5 | PASS |
| | | VH | TN | 3.55 | 0.002074 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.92 | -0.001108 | ± 2.5 | PASS |
| | | VN | TN | 0.18 | 0.000104 | ± 2.5 | PASS |
| | | VH | TN | 4.35 | 0.002511 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.96 | 0.002829 | ± 2.5 | PASS |
| | | VN | TN | -1.65 | -0.000941 | ± 2.5 | PASS |
| | | VH | TN | 3.14 | 0.001791 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 2.52 | 0.001472 | ± 2.5 | PASS |
| | | VN | TN | 3.99 | 0.002331 | ± 2.5 | PASS |
| | | VH | TN | 4.94 | 0.002886 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.51 | -0.000872 | ± 2.5 | PASS |
| | | VN | TN | 4.08 | 0.002355 | ± 2.5 | PASS |
| | | VH | TN | 1.76 | 0.001016 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.59 | 0.002047 | ± 2.5 | PASS |
| | | VN | TN | 0.59 | 0.000336 | ± 2.5 | PASS |
| | | VH | TN | 1.72 | 0.000981 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 2.13 | 0.001245 | ± 2.5 | PASS |
| | | VN | -20 | 2.92 | 0.001706 | ± 2.5 | PASS |
| | | VN | -10 | 0.94 | 0.000549 | ± 2.5 | PASS |
| | | VN | 0 | 3.32 | 0.001940 | ± 2.5 | PASS |
| | | VN | 10 | 3.94 | 0.002302 | ± 2.5 | PASS |
| | | VN | 20 | 4.43 | 0.002588 | ± 2.5 | PASS |
| | | VN | 30 | 1.02 | 0.000596 | ± 2.5 | PASS |
| | | VN | 40 | 1.8 | 0.001052 | ± 2.5 | PASS |
| | | VN | 50 | 0.84 | 0.000491 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.27 | 0.002465 | ± 2.5 | PASS |
| | | VN | -20 | 4.95 | 0.002857 | ± 2.5 | PASS |
| | | VN | -10 | 2.89 | 0.001668 | ± 2.5 | PASS |

| | | | | | | | |
|--|--|-----|-----|-------|-----------|-----------|------|
| | | VN | 0 | 1.32 | 0.000762 | ± 2.5 | PASS |
| | | VN | 10 | -1.69 | -0.000975 | ± 2.5 | PASS |
| | | VN | 20 | -1.98 | -0.001143 | ± 2.5 | PASS |
| | | VN | 30 | 3.71 | 0.002141 | ± 2.5 | PASS |
| | | VN | 40 | -0.94 | -0.000543 | ± 2.5 | PASS |
| | | VN | 50 | -1.28 | -0.000739 | ± 2.5 | PASS |
| | | VN | -30 | 2.98 | 0.001699 | ± 2.5 | PASS |
| | | VN | -20 | 2.98 | 0.001699 | ± 2.5 | PASS |
| | | VN | -10 | 4.64 | 0.002646 | ± 2.5 | PASS |
| | | HCH | 0 | 3.55 | 0.002025 | ± 2.5 | PASS |
| | | VN | 10 | -1.79 | -0.001021 | ± 2.5 | PASS |
| | | VN | 20 | 1.14 | 0.000650 | ± 2.5 | PASS |
| | | VN | 30 | -1.88 | -0.001072 | ± 2.5 | PASS |
| | | VN | 40 | 0.73 | 0.000416 | ± 2.5 | PASS |
| | | VN | 50 | 1.37 | 0.000781 | ± 2.5 | PASS |
| | | VN | -30 | 4.31 | 0.002488 | ± 2.5 | PASS |
| | | VN | -20 | 4 | 0.002309 | ± 2.5 | PASS |
| | | VN | -10 | 4.29 | 0.002476 | ± 2.5 | PASS |
| | | VN | 0 | 0.36 | 0.000208 | ± 2.5 | PASS |
| | | VN | 10 | 0.76 | 0.000439 | ± 2.5 | PASS |
| | | VN | 20 | 0.24 | 0.000139 | ± 2.5 | PASS |
| | | VN | 30 | -0.4 | -0.000231 | ± 2.5 | PASS |
| | | VN | 40 | 1.98 | 0.001143 | ± 2.5 | PASS |
| | | VN | 50 | -1.37 | -0.000791 | ± 2.5 | PASS |
| | | VN | -30 | 3.03 | 0.001728 | ± 2.5 | PASS |
| | | VN | -20 | -1.28 | -0.000730 | ± 2.5 | PASS |
| | | VN | -10 | 4.72 | 0.002692 | ± 2.5 | PASS |
| | | VN | 0 | 0.94 | 0.000536 | ± 2.5 | PASS |
| | | VN | 10 | 0.66 | 0.000376 | ± 2.5 | PASS |
| | | VN | 20 | -1.11 | -0.000633 | ± 2.5 | PASS |
| | | VN | 30 | 3.73 | 0.002127 | ± 2.5 | PASS |
| | | VN | 40 | 1.17 | 0.000667 | ± 2.5 | PASS |
| | | VN | 50 | 1.06 | 0.000605 | ± 2.5 | PASS |
| | | VN | -30 | 0.84 | 0.000479 | ± 2.5 | PASS |
| | | VN | -20 | 3.74 | 0.002133 | ± 2.5 | PASS |
| | | VN | -10 | -1.98 | -0.001129 | ± 2.5 | PASS |
| | | VN | 0 | -1.09 | -0.000622 | ± 2.5 | PASS |
| | | VN | 10 | 4.46 | 0.002543 | ± 2.5 | PASS |
| | | VN | 20 | 0.24 | 0.000137 | ± 2.5 | PASS |
| | | VN | 30 | 0.74 | 0.000422 | ± 2.5 | PASS |
| | | VN | 40 | 0.34 | 0.000194 | ± 2.5 | PASS |

| | | | | | | | |
|--|--|----|----|------|----------|-----------|------|
| | | VN | 50 | 0.02 | 0.000011 | ± 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 | -1.68 | -0.000981 | ± 2.5 | PASS |
| | | VN | TN | 1.15 | 0.000672 | ± 2.5 | PASS |
| | | VH | TN | 0.53 | 0.000309 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.22 | 0.001281 | ± 2.5 | PASS |
| | | VN | TN | -1.69 | -0.000975 | ± 2.5 | PASS |
| | | VH | TN | 1.97 | 0.001137 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.97 | 0.002836 | ± 2.5 | PASS |
| | | VN | TN | 0.71 | 0.000405 | ± 2.5 | PASS |
| | | VH | TN | 1.01 | 0.000576 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -1.17 | -0.000683 | ± 2.5 | PASS |
| | | VN | TN | -0.77 | -0.000450 | ± 2.5 | PASS |
| | | VH | TN | -0.85 | -0.000496 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.07 | 0.001772 | ± 2.5 | PASS |
| | | VN | TN | 2.35 | 0.001356 | ± 2.5 | PASS |
| | | VH | TN | 3.43 | 0.001980 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.28 | 0.000160 | ± 2.5 | PASS |
| | | VN | TN | -0.38 | -0.000217 | ± 2.5 | PASS |
| | | VH | TN | 4.48 | 0.002556 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 3.91 | 0.002283 | ± 2.5 | PASS |
| | | VN | -20 | -0.21 | -0.000123 | ± 2.5 | PASS |
| | | VN | -10 | -1.99 | -0.001162 | ± 2.5 | PASS |
| | | VN | 0 | 4.16 | 0.002429 | ± 2.5 | PASS |
| | | VN | 10 | -0.01 | -0.000006 | ± 2.5 | PASS |
| | | VN | 20 | -1.99 | -0.001162 | ± 2.5 | PASS |
| | | VN | 30 | 3.65 | 0.002131 | ± 2.5 | PASS |
| | | VN | 40 | 3.67 | 0.002143 | ± 2.5 | PASS |
| | | VN | 50 | 3.34 | 0.001950 | ± 2.5 | PASS |
| | MCH | VN | -30 | 1.11 | 0.000641 | ± 2.5 | PASS |
| | | VN | -20 | 0.87 | 0.000502 | ± 2.5 | PASS |
| | | VN | -10 | -0.93 | -0.000537 | ± 2.5 | PASS |
| | | VN | 0 | 4.44 | 0.002563 | ± 2.5 | PASS |

| | | | | | | | |
|--|-----|----|-----|-------|-----------|-----------|------|
| | | VN | 10 | 3.83 | 0.002211 | ± 2.5 | PASS |
| | | VN | 20 | -1.8 | -0.001039 | ± 2.5 | PASS |
| | | VN | 30 | 0.05 | 0.000029 | ± 2.5 | PASS |
| | | VN | 40 | 4.89 | 0.002823 | ± 2.5 | PASS |
| | | VN | 50 | 0.7 | 0.000404 | ± 2.5 | PASS |
| | | VN | -30 | 0.57 | 0.000325 | ± 2.5 | PASS |
| | | VN | -20 | -1.43 | -0.000750 | ± 2.5 | PASS |
| | | VN | -10 | 1.6 | 0.000839 | ± 2.5 | PASS |
| | | VN | 0 | 3.76 | 0.001971 | ± 2.5 | PASS |
| | | VN | 10 | 2.41 | 0.001263 | ± 2.5 | PASS |
| | HCH | VN | 20 | 2.07 | 0.001085 | ± 2.5 | PASS |
| | | VN | 30 | 1.08 | 0.000566 | ± 2.5 | PASS |
| | | VN | 40 | -1 | -0.000524 | ± 2.5 | PASS |
| | | VN | 50 | -1.83 | -0.000959 | ± 2.5 | PASS |
| | | VN | -30 | 1.83 | 0.001056 | ± 2.5 | PASS |
| | | VN | -20 | 1.13 | 0.000652 | ± 2.5 | PASS |
| | | VN | -10 | -1.15 | -0.000664 | ± 2.5 | PASS |
| | | VN | 0 | -0.82 | -0.000473 | ± 2.5 | PASS |
| | | VN | 10 | 4.16 | 0.002401 | ± 2.5 | PASS |
| | | VN | 20 | 1.55 | 0.000895 | ± 2.5 | PASS |
| | LCH | VN | 30 | 4.39 | 0.002534 | ± 2.5 | PASS |
| | | VN | 40 | 1.18 | 0.000681 | ± 2.5 | PASS |
| | | VN | 50 | -0.31 | -0.000179 | ± 2.5 | PASS |
| | | VN | -30 | 4.36 | 0.002488 | ± 2.5 | PASS |
| | | VN | -20 | -1.49 | -0.000850 | ± 2.5 | PASS |
| | | VN | -10 | 0.01 | 0.000006 | ± 2.5 | PASS |
| | | VN | 0 | 0.4 | 0.000228 | ± 2.5 | PASS |
| | | VN | 10 | -1 | -0.000571 | ± 2.5 | PASS |
| | | VN | 20 | -0.1 | -0.000057 | ± 2.5 | PASS |
| | | VN | 30 | 4.62 | 0.002636 | ± 2.5 | PASS |
| | MCH | VN | 40 | 3.13 | 0.001786 | ± 2.5 | PASS |
| | | VN | 50 | 1.15 | 0.000656 | ± 2.5 | PASS |
| | | VN | -30 | 4.15 | 0.002176 | ± 2.5 | PASS |
| | | VN | -20 | -0.08 | -0.000042 | ± 2.5 | PASS |
| | | VN | -10 | 3.94 | 0.002066 | ± 2.5 | PASS |
| | | VN | 0 | 4.87 | 0.002553 | ± 2.5 | PASS |
| | | VN | 10 | -0.84 | -0.000440 | ± 2.5 | PASS |
| | | VN | 20 | 4.09 | 0.002144 | ± 2.5 | PASS |
| | | VN | 30 | 3.29 | 0.001725 | ± 2.5 | PASS |
| | | VN | 40 | -1.99 | -0.001043 | ± 2.5 | PASS |
| | HCH | VN | 50 | 4.65 | 0.002438 | ± 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 | 4.69 | 0.002735 | ± 2.5 | PASS |
| | | VN | TN | 2.71 | 0.001580 | ± 2.5 | PASS |
| | | VH | TN | 1.24 | 0.000723 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.5 | 0.001443 | ± 2.5 | PASS |
| | | VN | TN | 0.66 | 0.000381 | ± 2.5 | PASS |
| | | VH | TN | -1.34 | -0.000773 | ± 2.5 | PASS |
| | HCH | VL | TN | 2.39 | 0.001366 | ± 2.5 | PASS |
| | | VN | TN | 1.89 | 0.001080 | ± 2.5 | PASS |
| | | VH | TN | 2.65 | 0.001514 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 0.41 | 0.000239 | ± 2.5 | PASS |
| | | VN | TN | 0.33 | 0.000192 | ± 2.5 | PASS |
| | | VH | TN | -0.4 | -0.000233 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.46 | 0.000266 | ± 2.5 | PASS |
| | | VN | TN | -1.7 | -0.000981 | ± 2.5 | PASS |
| | | VH | TN | 3.29 | 0.001899 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.38 | -0.000217 | ± 2.5 | PASS |
| | | VN | TN | 2.85 | 0.001629 | ± 2.5 | PASS |
| | | VH | TN | 4 | 0.002286 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 16QAM | LCH | VN | -30 | 2.34 | 0.001364 | ± 2.5 | PASS |
| | | VN | -20 | -0.25 | -0.000146 | ± 2.5 | PASS |
| | | VN | -10 | -1.04 | -0.000606 | ± 2.5 | PASS |
| | | VN | 0 | 2.4 | 0.001399 | ± 2.5 | PASS |
| | | VN | 10 | -1.08 | -0.000630 | ± 2.5 | PASS |
| | | VN | 20 | 2.83 | 0.001650 | ± 2.5 | PASS |
| | | VN | 30 | 1.06 | 0.000618 | ± 2.5 | PASS |
| | | VN | 40 | 4.25 | 0.002478 | ± 2.5 | PASS |
| | | VN | 50 | 3.15 | 0.001837 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.04 | 0.002332 | ± 2.5 | PASS |
| | | VN | -20 | 2.45 | 0.001414 | ± 2.5 | PASS |
| | | VN | -10 | 4.42 | 0.002551 | ± 2.5 | PASS |
| | | VN | 0 | 3.11 | 0.001795 | ± 2.5 | PASS |
| | | VN | 10 | -0.92 | -0.000531 | ± 2.5 | PASS |
| | | VN | 20 | -0.33 | -0.000190 | ± 2.5 | PASS |

| | | | | | | | |
|--|-----|----|-----|-------|-----------|-----------|------|
| | | VN | 30 | 1.4 | 0.000808 | ± 2.5 | PASS |
| | | VN | 40 | -0.23 | -0.000133 | ± 2.5 | PASS |
| | | VN | 50 | -1.37 | -0.000791 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.65 | 0.001514 | ± 2.5 | PASS |
| | | VN | -20 | 0.66 | 0.000377 | ± 2.5 | PASS |
| | | VN | -10 | 4.17 | 0.002383 | ± 2.5 | PASS |
| | | VN | 0 | 2.11 | 0.001206 | ± 2.5 | PASS |
| | | VN | 10 | 0.12 | 0.000069 | ± 2.5 | PASS |
| | | VN | 20 | 2.19 | 0.001251 | ± 2.5 | PASS |
| | | VN | 30 | -0.62 | -0.000354 | ± 2.5 | PASS |
| | LCH | VN | 40 | 1.18 | 0.000674 | ± 2.5 | PASS |
| | | VN | 50 | 0.38 | 0.000217 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.33 | 0.002499 | ± 2.5 | PASS |
| | | VN | -20 | 1.14 | 0.000658 | ± 2.5 | PASS |
| | | VN | -10 | 0.49 | 0.000283 | ± 2.5 | PASS |
| | | VN | 0 | -1.72 | -0.000993 | ± 2.5 | PASS |
| | | VN | 10 | 1.58 | 0.000912 | ± 2.5 | PASS |
| | | VN | 20 | -1.06 | -0.000612 | ± 2.5 | PASS |
| | | VN | 30 | 0.71 | 0.000410 | ± 2.5 | PASS |
| | | VN | 40 | 0.73 | 0.000421 | ± 2.5 | PASS |
| | | VN | 50 | -0.45 | -0.000260 | ± 2.5 | PASS |
| | HCH | VN | -30 | 0.58 | 0.000331 | ± 2.5 | PASS |
| | | VN | -20 | 0.03 | 0.000017 | ± 2.5 | PASS |
| | | VN | -10 | -0.45 | -0.000257 | ± 2.5 | PASS |
| | | VN | 0 | -0.22 | -0.000126 | ± 2.5 | PASS |
| | | VN | 10 | 1.6 | 0.000914 | ± 2.5 | PASS |
| | | VN | 20 | -0.64 | -0.000366 | ± 2.5 | PASS |
| | | VN | 30 | 0.41 | 0.000234 | ± 2.5 | PASS |
| | | VN | 40 | -0.78 | -0.000446 | ± 2.5 | PASS |
| | | VN | 50 | 0.22 | 0.000126 | ± 2.5 | PASS |
| | | VN | -30 | -0.97 | -0.000554 | ± 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 | 4.52 | 0.002632 | ± 2.5 | PASS |
| | | VN | TN | 2.37 | 0.001380 | ± 2.5 | PASS |
| | | VH | TN | 0.64 | 0.000373 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.66 | -0.000958 | ± 2.5 | PASS |
| | | VN | TN | 4.06 | 0.002343 | ± 2.5 | PASS |
| | | VH | TN | 1.68 | 0.000970 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.88 | 0.000504 | ± 2.5 | PASS |
| | | VN | TN | 4.16 | 0.002381 | ± 2.5 | PASS |
| | | VH | TN | 0.36 | 0.000206 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 3.09 | 0.001799 | ± 2.5 | PASS |
| | | VN | TN | -0.11 | -0.000064 | ± 2.5 | PASS |
| | | VH | TN | 0.03 | 0.000017 | ± 2.5 | PASS |
| | MCH | VL | TN | 4.06 | 0.002343 | ± 2.5 | PASS |
| | | VN | TN | 3.93 | 0.002268 | ± 2.5 | PASS |
| | | VH | TN | 1.29 | 0.000745 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.55 | 0.002031 | ± 2.5 | PASS |
| | | VN | TN | -1.88 | -0.001076 | ± 2.5 | PASS |
| | | VH | TN | -0.7 | -0.000401 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -1.3 | -0.000757 | ± 2.5 | PASS |
| | | VN | -20 | 2.23 | 0.001298 | ± 2.5 | PASS |
| | | VN | -10 | 3.4 | 0.001980 | ± 2.5 | PASS |
| | | VN | 0 | 2.46 | 0.001432 | ± 2.5 | PASS |
| | | VN | 10 | 1.1 | 0.000640 | ± 2.5 | PASS |
| | | VN | 20 | -1.09 | -0.000635 | ± 2.5 | PASS |
| | | VN | 30 | -0.86 | -0.000501 | ± 2.5 | PASS |
| | | VN | 40 | 3.45 | 0.002009 | ± 2.5 | PASS |
| | | VN | 50 | -1.31 | -0.000763 | ± 2.5 | PASS |
| | MCH | VN | -30 | 3.12 | 0.001801 | ± 2.5 | PASS |
| | | VN | -20 | 0.28 | 0.000162 | ± 2.5 | PASS |
| | | VN | -10 | 2.07 | 0.001195 | ± 2.5 | PASS |
| | | VN | 0 | -1.33 | -0.000768 | ± 2.5 | PASS |
| | | VN | 10 | 0.04 | 0.000023 | ± 2.5 | PASS |
| | | VN | 20 | 4.82 | 0.002782 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|----|-----|-------|-----------|-----------|------|
| | HCH | VN | 30 | 4.36 | 0.002517 | ± 2.5 | PASS |
| | | VN | 40 | -0.91 | -0.000525 | ± 2.5 | PASS |
| | | VN | 50 | 2.32 | 0.001339 | ± 2.5 | PASS |
| | | VN | -30 | 2.16 | 0.001236 | ± 2.5 | PASS |
| | | VN | -20 | 2.23 | 0.001276 | ± 2.5 | PASS |
| | | VN | -10 | -1.2 | -0.000687 | ± 2.5 | PASS |
| | | VN | 0 | -1.42 | -0.000813 | ± 2.5 | PASS |
| | | VN | 10 | -1.08 | -0.000618 | ± 2.5 | PASS |
| | | VN | 20 | 4.01 | 0.002295 | ± 2.5 | PASS |
| | | VN | 30 | 3.71 | 0.002123 | ± 2.5 | PASS |
| 16QAM | LCH | VN | 40 | -0.36 | -0.000206 | ± 2.5 | PASS |
| | | VN | 50 | 0.84 | 0.000481 | ± 2.5 | PASS |
| | | VN | -30 | 4.96 | 0.002863 | ± 2.5 | PASS |
| | | VN | -20 | -0.72 | -0.000416 | ± 2.5 | PASS |
| | | VN | -10 | 4.99 | 0.002880 | ± 2.5 | PASS |
| | | VN | 0 | 4.63 | 0.002672 | ± 2.5 | PASS |
| | | VN | 10 | 0.4 | 0.000231 | ± 2.5 | PASS |
| | | VN | 20 | 1.45 | 0.000837 | ± 2.5 | PASS |
| | | VN | 30 | 2.48 | 0.001431 | ± 2.5 | PASS |
| | MCH | VN | 40 | 3.05 | 0.001760 | ± 2.5 | PASS |
| | | VN | 50 | 1.75 | 0.001010 | ± 2.5 | PASS |
| | | VN | -30 | 2.35 | 0.001345 | ± 2.5 | PASS |
| | | VN | -20 | 4.01 | 0.002295 | ± 2.5 | PASS |
| | | VN | -10 | 4.22 | 0.002415 | ± 2.5 | PASS |
| | | VN | 0 | -0.27 | -0.000155 | ± 2.5 | PASS |
| | | VN | 10 | 2.98 | 0.001705 | ± 2.5 | PASS |
| | | VN | 20 | 4.8 | 0.002747 | ± 2.5 | PASS |
| | | VN | 30 | 2.44 | 0.001396 | ± 2.5 | PASS |
| | | VN | 40 | 2.07 | 0.001185 | ± 2.5 | PASS |
| | HCH | VN | 50 | 4.49 | 0.002569 | ± 2.5 | PASS |
| | | VN | -30 | 3.97 | 0.002272 | ± 2.5 | PASS |
| | | VN | -20 | 4.04 | 0.002312 | ± 2.5 | PASS |
| | | VN | -10 | -1.18 | -0.000675 | ± 2.5 | PASS |
| | | VN | 0 | 3.88 | 0.002220 | ± 2.5 | PASS |
| | | VN | 10 | 1.88 | 0.001076 | ± 2.5 | PASS |
| | | VN | 20 | -0.67 | -0.000383 | ± 2.5 | PASS |
| | | VN | 30 | -0.26 | -0.000149 | ± 2.5 | PASS |
| | | VN | 40 | 4.25 | 0.002432 | ± 2.5 | PASS |
| | | VN | 50 | -1.78 | -0.001019 | ± 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 | 0.05 | 0.000029 | ± 2.5 | PASS |
| | | VN | TN | 3.5 | 0.002035 | ± 2.5 | PASS |
| | | VH | TN | 0 | 0.000000 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.25 | -0.000722 | ± 2.5 | PASS |
| | | VN | TN | 1.31 | 0.000756 | ± 2.5 | PASS |
| | | VH | TN | 2.4 | 0.001385 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.23 | -0.000705 | ± 2.5 | PASS |
| | | VN | TN | 4.94 | 0.002831 | ± 2.5 | PASS |
| | | VH | TN | 3.75 | 0.002149 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -1.83 | -0.001064 | ± 2.5 | PASS |
| | | VN | TN | -1.57 | -0.000913 | ± 2.5 | PASS |
| | | VH | TN | 1.27 | 0.000738 | ± 2.5 | PASS |
| | MCH | VL | TN | 1.43 | 0.000825 | ± 2.5 | PASS |
| | | VN | TN | -0.73 | -0.000421 | ± 2.5 | PASS |
| | | VH | TN | -0.8 | -0.000462 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.81 | 0.002183 | ± 2.5 | PASS |
| | | VN | TN | -0.36 | -0.000206 | ± 2.5 | PASS |
| | | VH | TN | -1.86 | -0.001066 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 4.73 | 0.002750 | ± 2.5 | PASS |
| | | VN | -20 | -0.46 | -0.000267 | ± 2.5 | PASS |
| | | VN | -10 | 4.71 | 0.002738 | ± 2.5 | PASS |
| | | VN | 0 | 0.81 | 0.000471 | ± 2.5 | PASS |
| | | VN | 10 | -0.82 | -0.000477 | ± 2.5 | PASS |
| | | VN | 20 | 1.96 | 0.001140 | ± 2.5 | PASS |
| | | VN | 30 | -0.56 | -0.000326 | ± 2.5 | PASS |
| | | VN | 40 | 4.27 | 0.002483 | ± 2.5 | PASS |
| | | VN | 50 | 4.07 | 0.002366 | ± 2.5 | PASS |
| | MCH | VN | -30 | -0.3 | -0.000173 | ± 2.5 | PASS |
| | | VN | -20 | 0.61 | 0.000352 | ± 2.5 | PASS |
| | | VN | -10 | 1.44 | 0.000831 | ± 2.5 | PASS |
| | | VN | 0 | 2.88 | 0.001662 | ± 2.5 | PASS |
| | | VN | 10 | 1.46 | 0.000843 | ± 2.5 | PASS |
| | | VN | 20 | 4.4 | 0.002540 | ± 2.5 | PASS |

| | | | | | | | |
|-------|-----|----|-----|-------|-----------|-----------|------|
| | | VN | 30 | 2 | 0.001154 | ± 2.5 | PASS |
| | | VN | 40 | -1.89 | -0.001091 | ± 2.5 | PASS |
| | | VN | 50 | 1 | 0.000577 | ± 2.5 | PASS |
| | HCH | VN | -30 | -1.81 | -0.001037 | ± 2.5 | PASS |
| | | VN | -20 | 2.32 | 0.001330 | ± 2.5 | PASS |
| | | VN | -10 | 2.6 | 0.001490 | ± 2.5 | PASS |
| | | VN | 0 | 2.1 | 0.001203 | ± 2.5 | PASS |
| | | VN | 10 | 2.54 | 0.001456 | ± 2.5 | PASS |
| | | VN | 20 | 2.24 | 0.001284 | ± 2.5 | PASS |
| | | VN | 30 | 4.24 | 0.002430 | ± 2.5 | PASS |
| 16QAM | LCH | VN | 40 | -0.06 | -0.000034 | ± 2.5 | PASS |
| | | VN | 50 | 1.01 | 0.000579 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.68 | 0.000392 | ± 2.5 | PASS |
| | | VN | -20 | -0.14 | -0.000081 | ± 2.5 | PASS |
| | | VN | -10 | 2.83 | 0.001633 | ± 2.5 | PASS |
| | | VN | 0 | 4.54 | 0.002620 | ± 2.5 | PASS |
| | | VN | 10 | 1.89 | 0.001091 | ± 2.5 | PASS |
| | | VN | 20 | 0.32 | 0.000185 | ± 2.5 | PASS |
| | | VN | 30 | 0.82 | 0.000473 | ± 2.5 | PASS |
| | | VN | 40 | 3.54 | 0.002043 | ± 2.5 | PASS |
| | | VN | 50 | 2.32 | 0.001339 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.9 | 0.002235 | ± 2.5 | PASS |
| | | VN | -20 | -1.94 | -0.001112 | ± 2.5 | PASS |
| | | VN | -10 | 2.55 | 0.001461 | ± 2.5 | PASS |
| | | VN | 0 | -0.04 | -0.000023 | ± 2.5 | PASS |
| | | VN | 10 | 1.59 | 0.000911 | ± 2.5 | PASS |
| | | VN | 20 | 3.44 | 0.001971 | ± 2.5 | PASS |
| | | VN | 30 | 0.38 | 0.000218 | ± 2.5 | PASS |
| | | VN | 40 | 1.65 | 0.000946 | ± 2.5 | PASS |
| | | VN | 50 | -1.8 | -0.001032 | ± 2.5 | PASS |