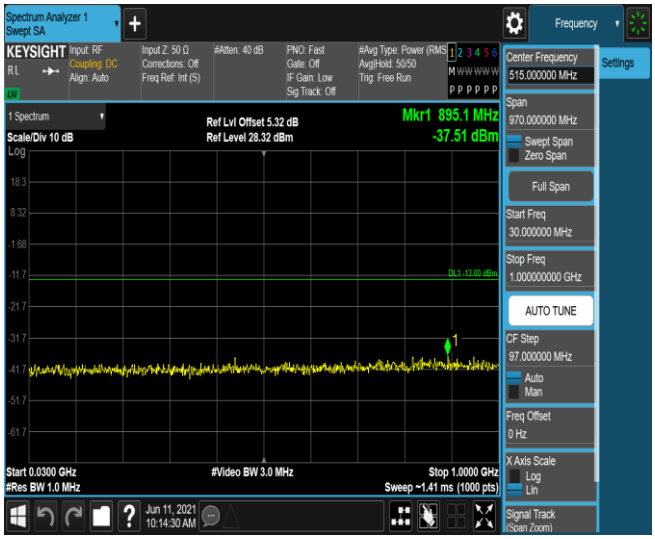
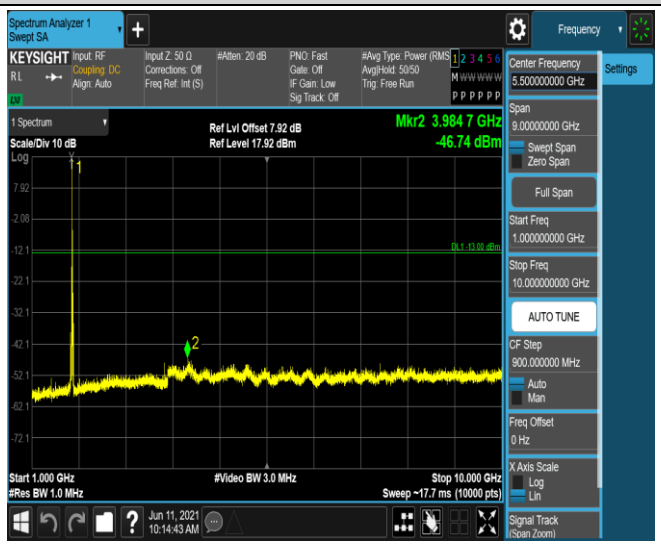
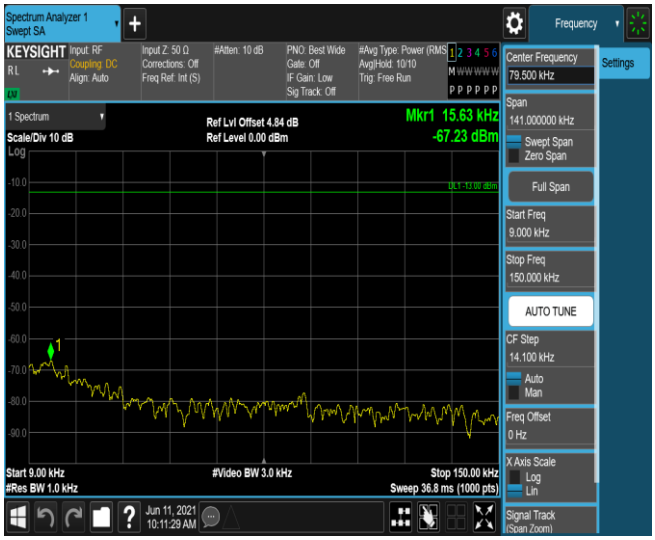


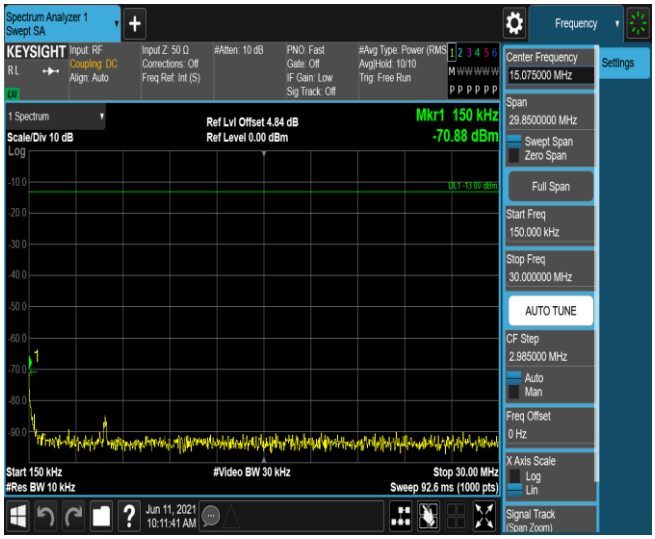

Band66-15MHz-QPSK-132597-1RB#0-Range4:1000~10000MHz



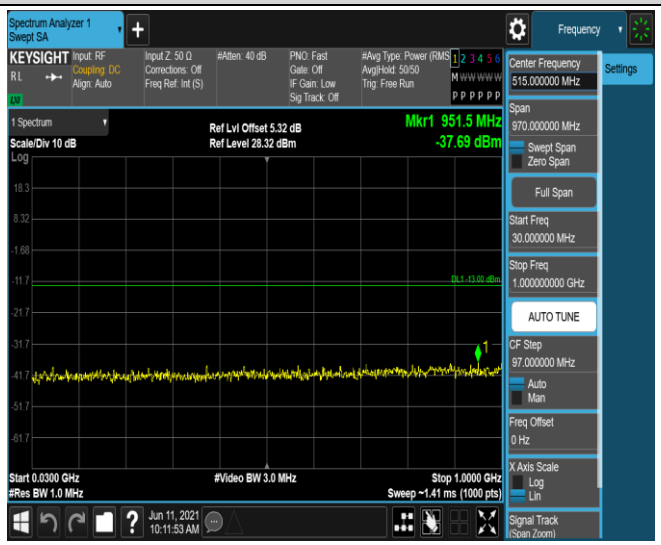

Band66-15MHz-16QAM-132047-1RB#0-Range1:0.009~0.15MHz



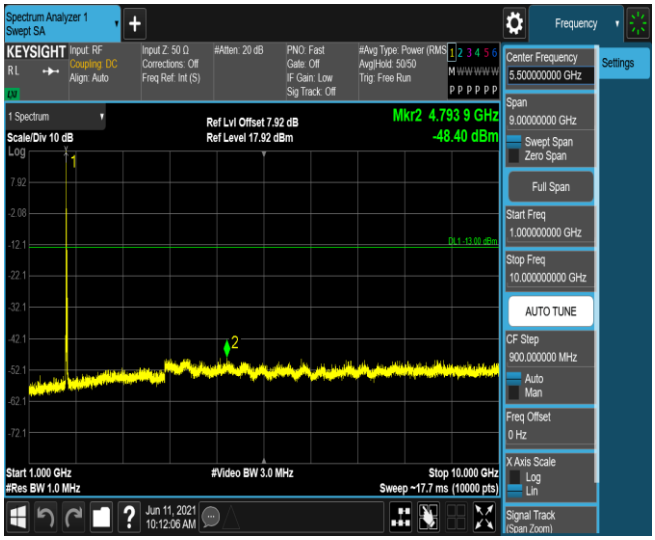

Band66-15MHz-16QAM-132047-1RB#0-Range2:0.15~30MHz



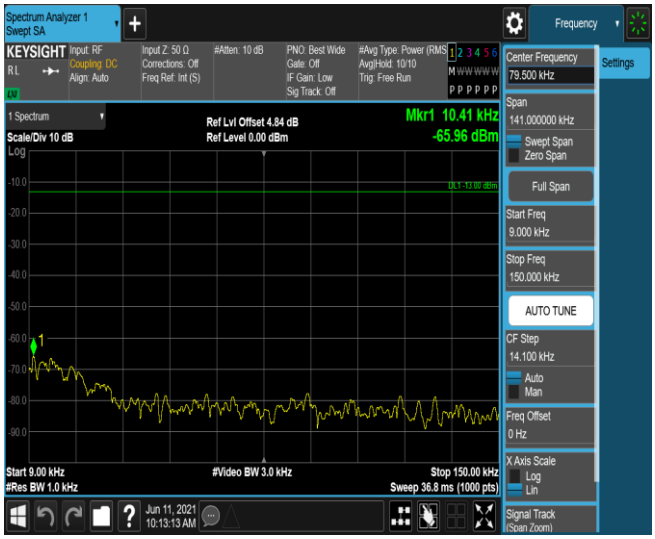

Band66-15MHz-16QAM-132047-1RB#0-Range3:30~1000MHz



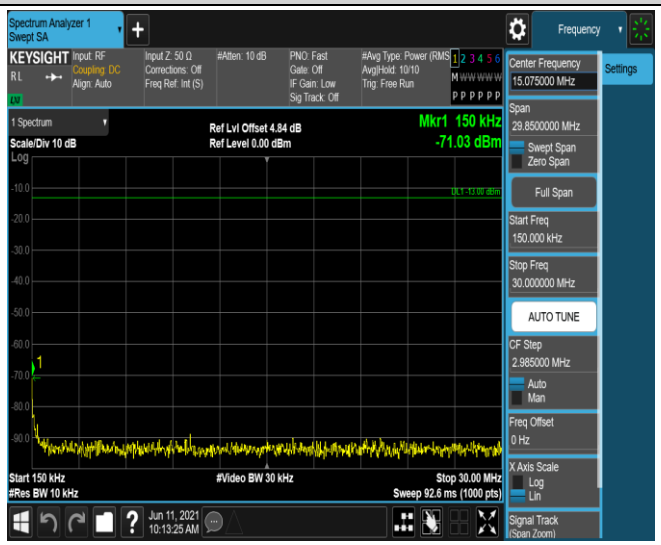

Band66-15MHz-16QAM-132047-1RB#0-Range4:1000~10000MHz



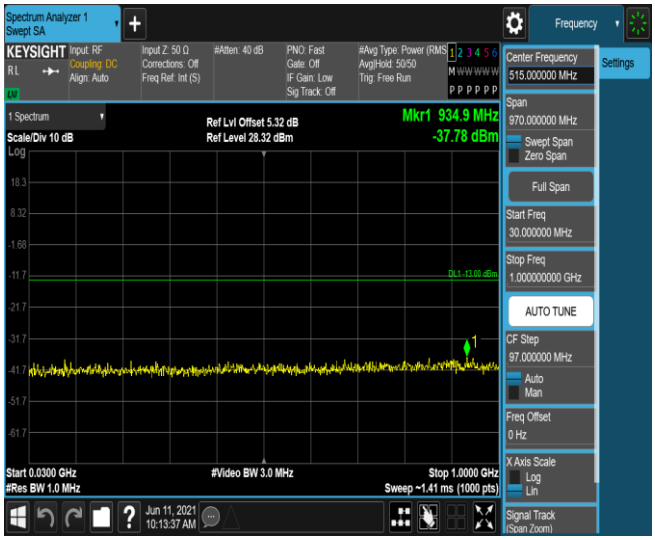

Band66-15MHz-16QAM-132322-1RB#0-Range1:0.009~0.15MHz



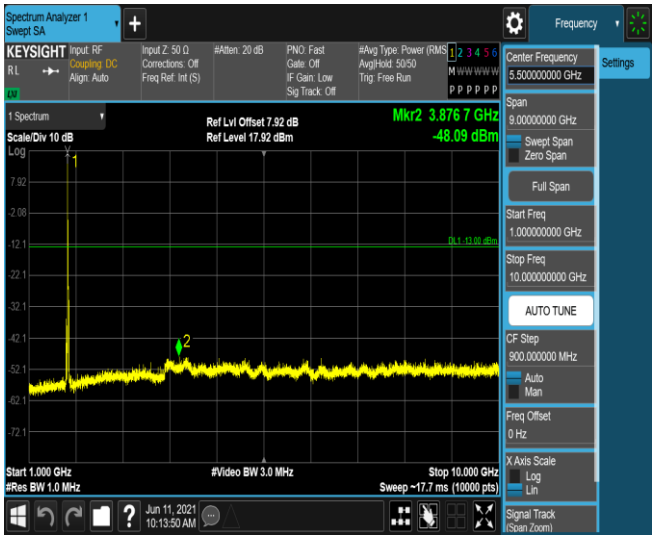

Band66-15MHz-16QAM-132322-1RB#0-Range2:0.15~30MHz



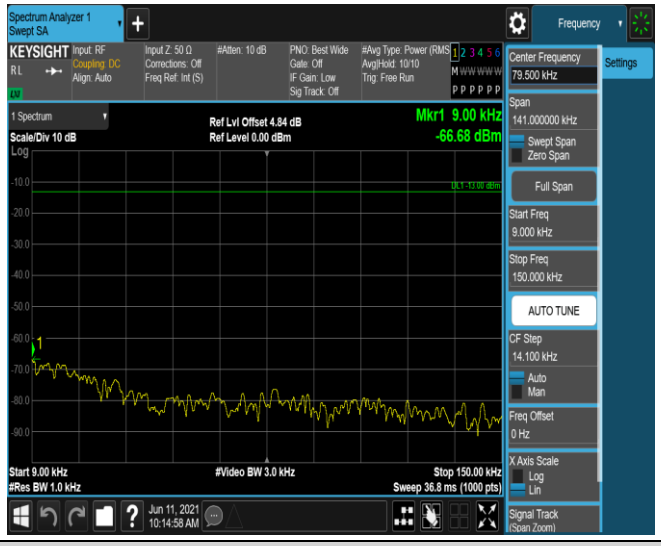

Band66-15MHz-16QAM-132322-1RB#0-Range3:30~1000MHz



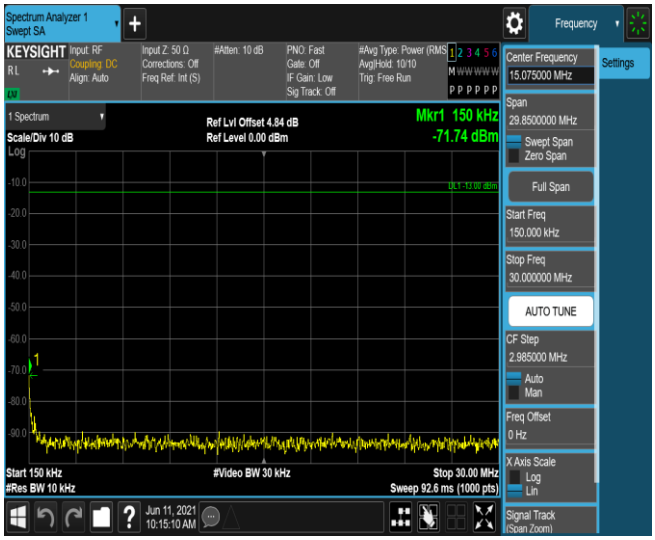

Band66-15MHz-16QAM-132322-1RB#0-Range4:1000~10000MHz



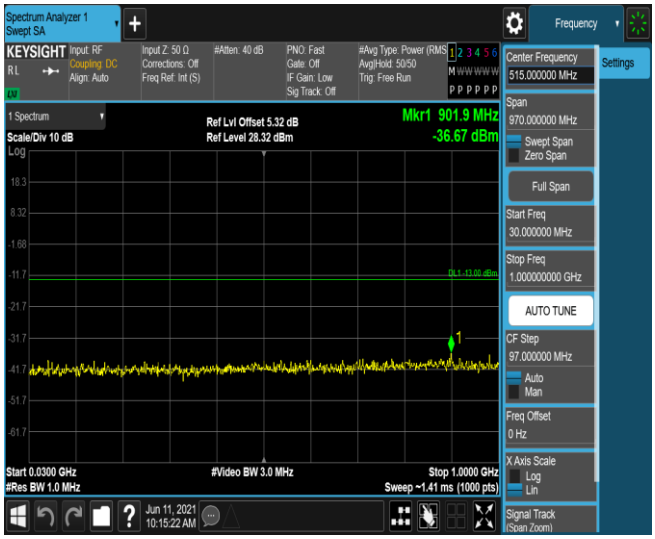

Band66-15MHz-16QAM-132597-1RB#0-Range1:0.009~0.15MHz



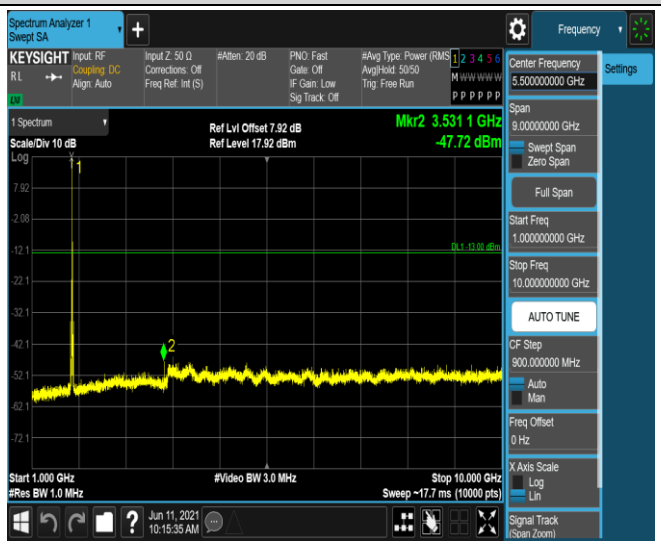

Band66-15MHz-16QAM-132597-1RB#0-Range2:0.15~30MHz



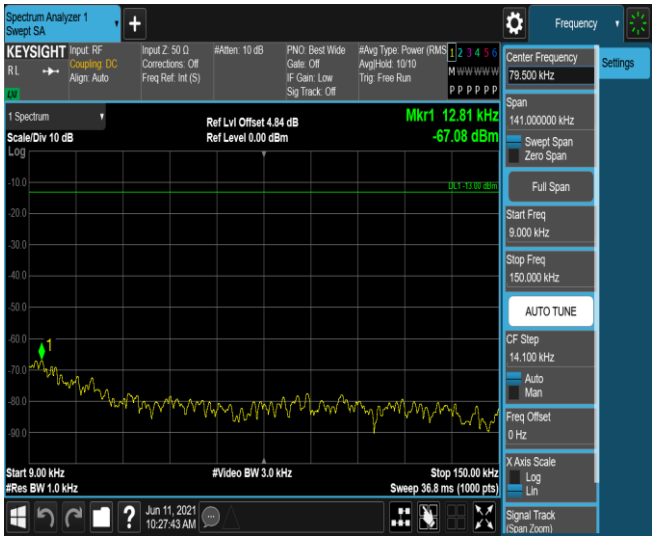

Band66-15MHz-16QAM-132597-1RB#0-Range3:30~1000MHz



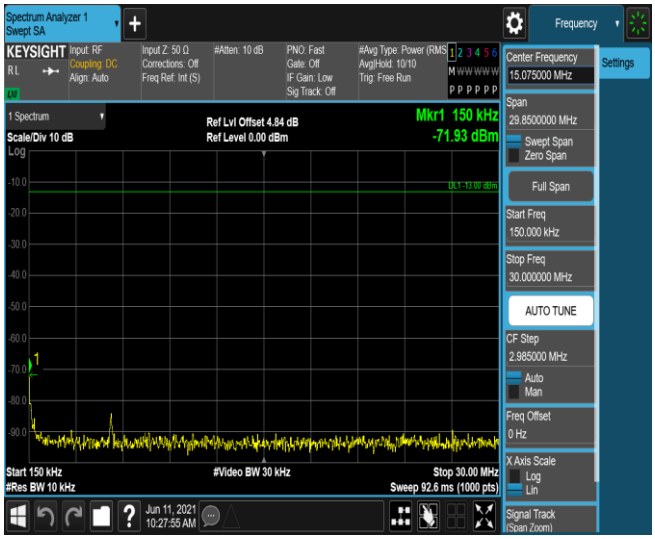

Band66-15MHz-16QAM-132597-1RB#0-Range4:1000~10000MHz



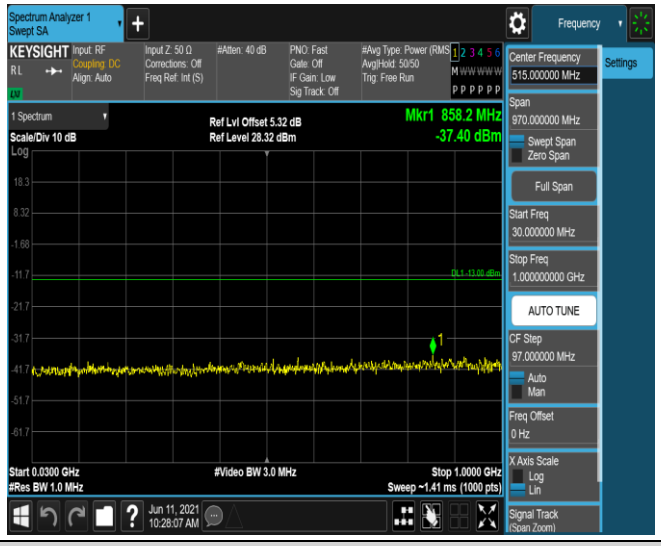

Band66-20MHz-QPSK-132072-1RB#0-Range1:0.009~0.15MHz



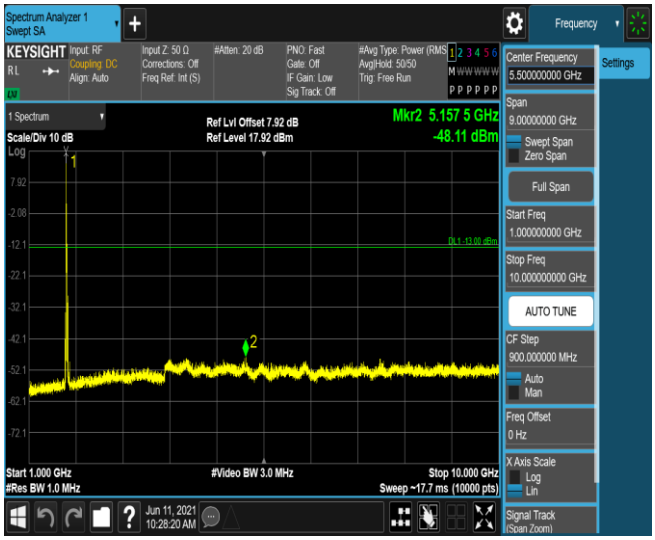

Band66-20MHz-QPSK-132072-1RB#0-Range2:0.15~30MHz



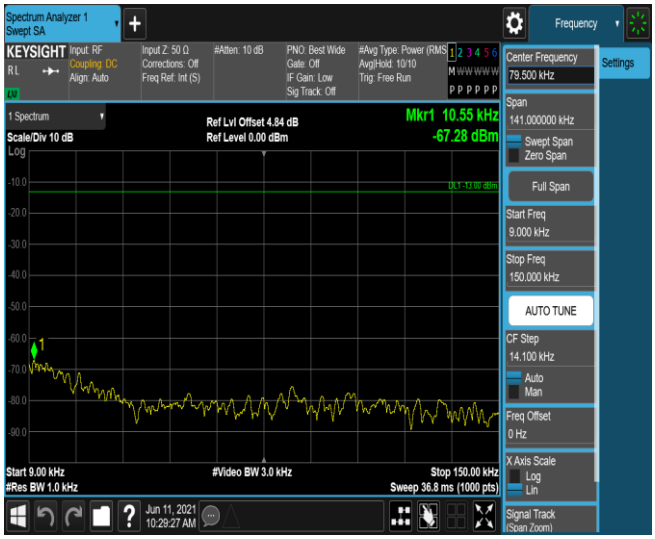

Band66-20MHz-QPSK-132072-1RB#0-Range3:30~1000MHz



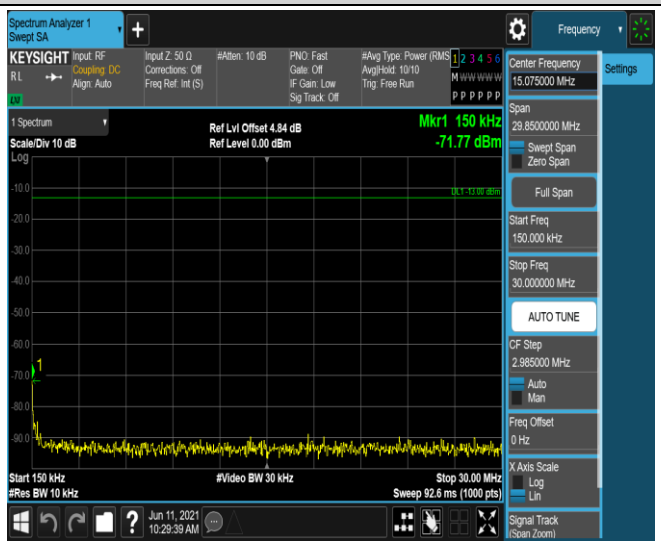

Band66-20MHz-QPSK-132072-1RB#0-Range4:1000~10000MHz



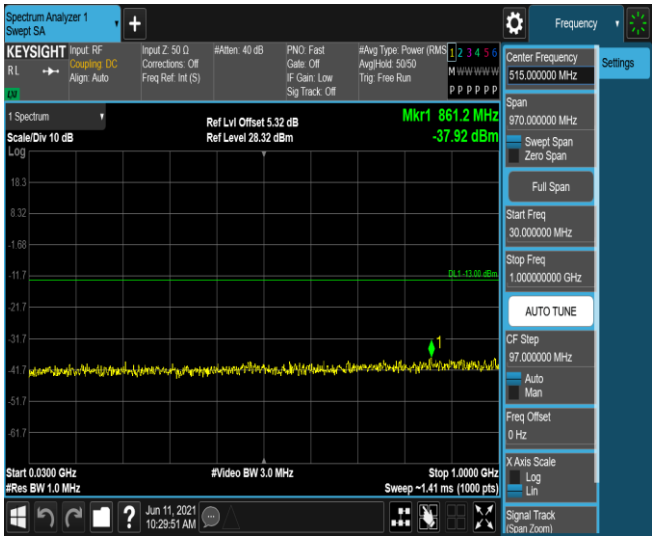

Band66-20MHz-QPSK-132322-1RB#0-Range1:0.009~0.15MHz



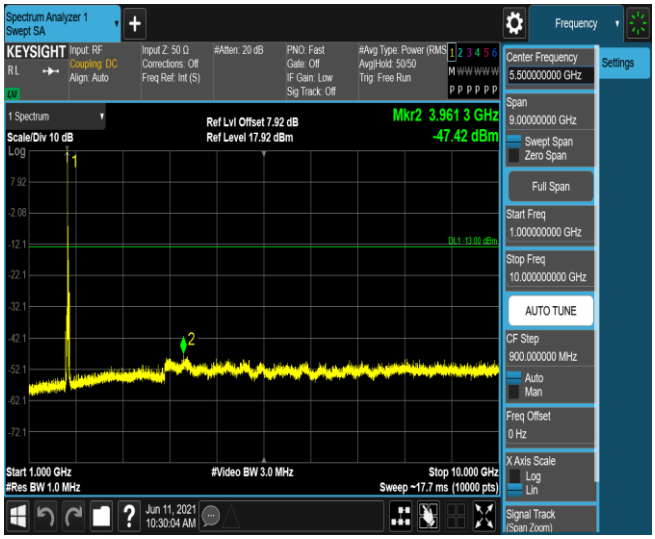

Band66-20MHz-QPSK-132322-1RB#0-Range2:0.15~30MHz



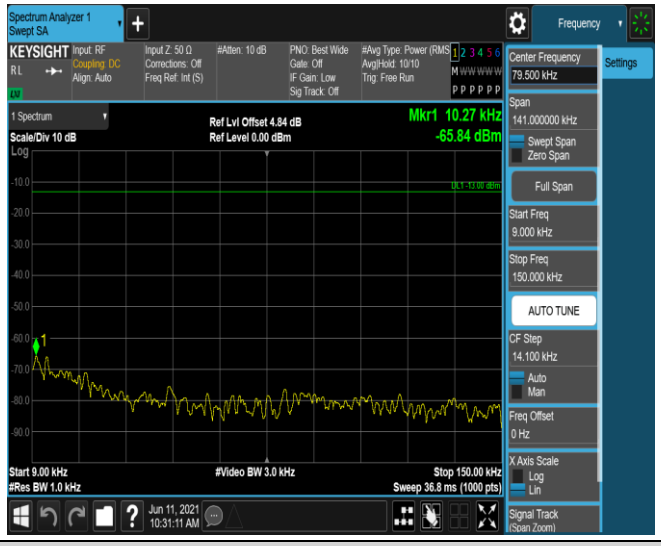

Band66-20MHz-QPSK-132322-1RB#0-Range3:30~1000MHz



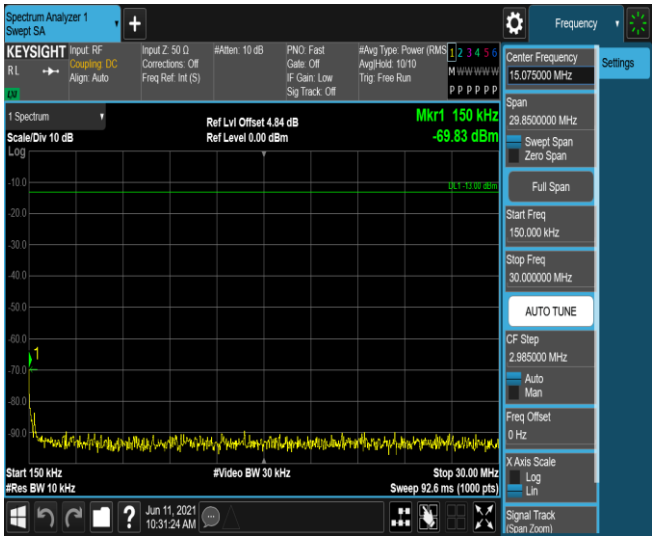

Band66-20MHz-QPSK-132322-1RB#0-Range4:1000~10000MHz



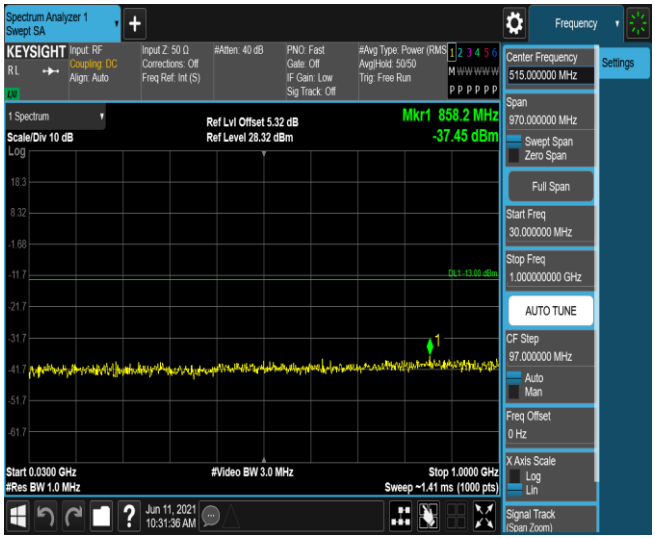

Band66-20MHz-QPSK-132572-1RB#0-Range1:0.009~0.15MHz



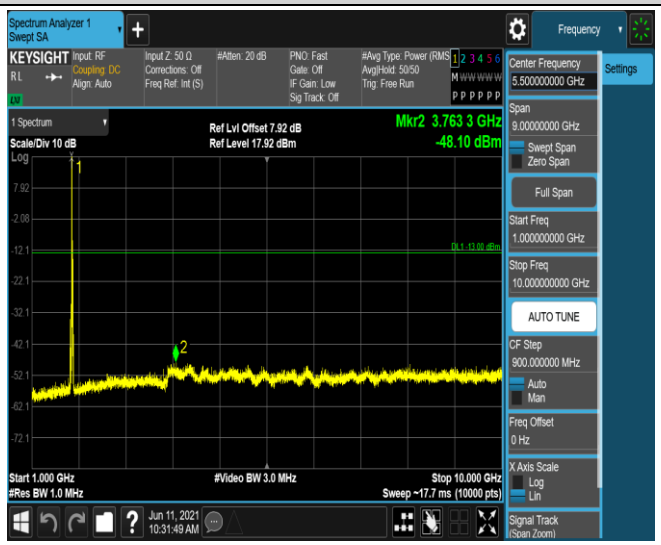

Band66-20MHz-QPSK-132572-1RB#0-Range2:0.15~30MHz



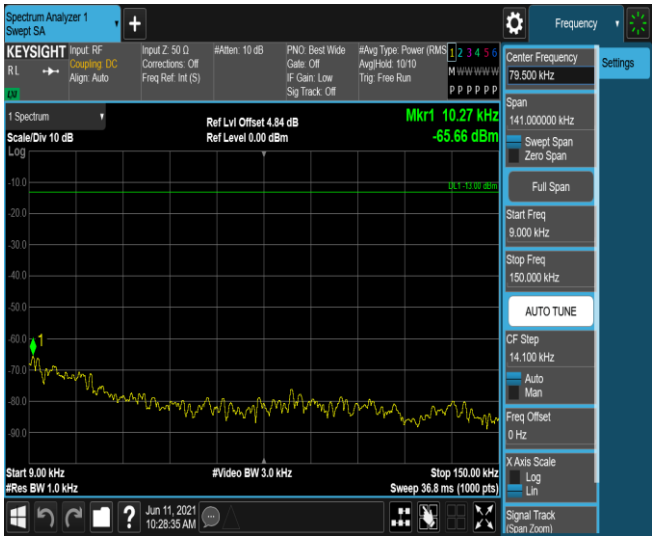

Band66-20MHz-QPSK-132572-1RB#0-Range3:30~1000MHz



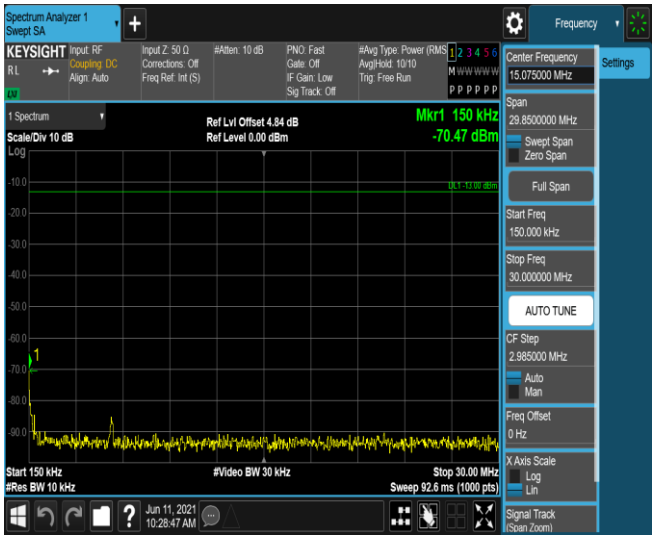

Band66-20MHz-QPSK-132572-1RB#0-Range4:1000~10000MHz



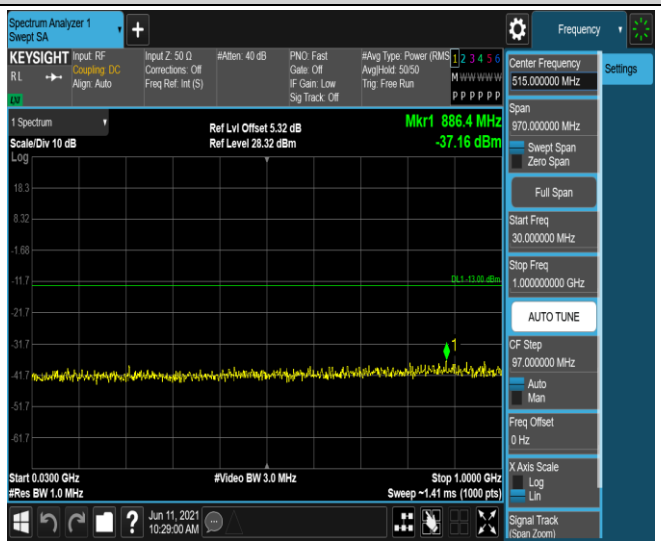

Band66-20MHz-16QAM-132072-1RB#0-Range1:0.009~0.15MHz



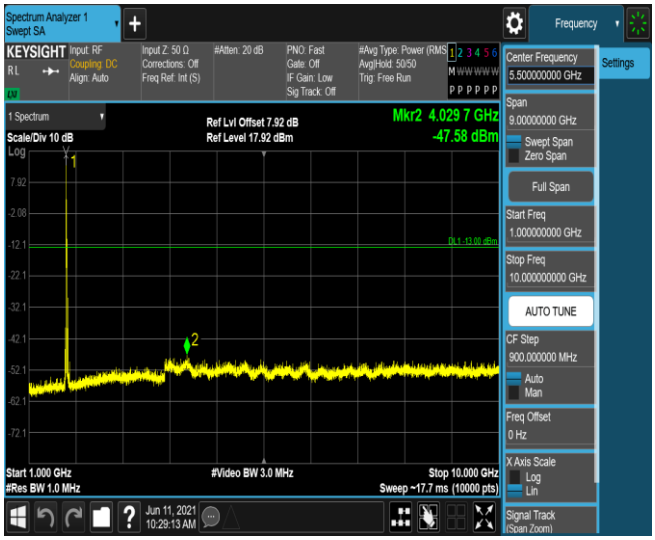

Band66-20MHz-16QAM-132072-1RB#0-Range2:0.15~30MHz



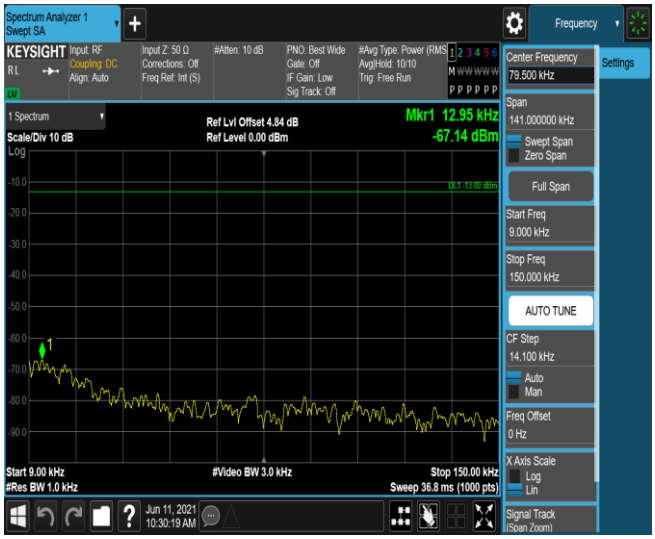

Band66-20MHz-16QAM-132072-1RB#0-Range3:30~1000MHz



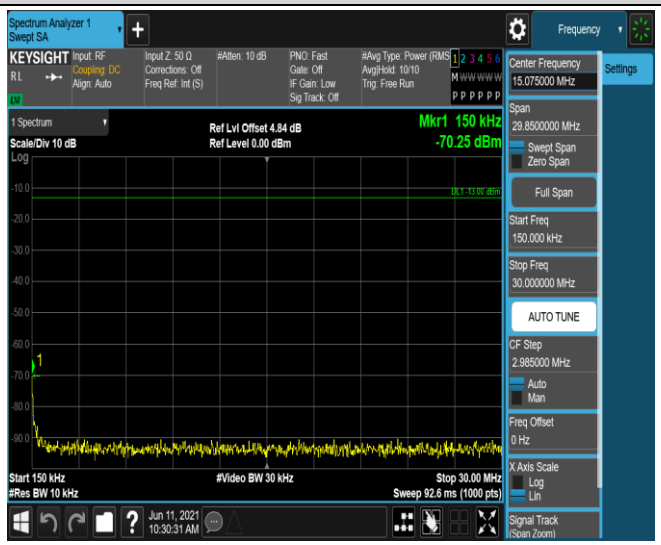

Band66-20MHz-16QAM-132072-1RB#0-Range4:1000~10000MHz



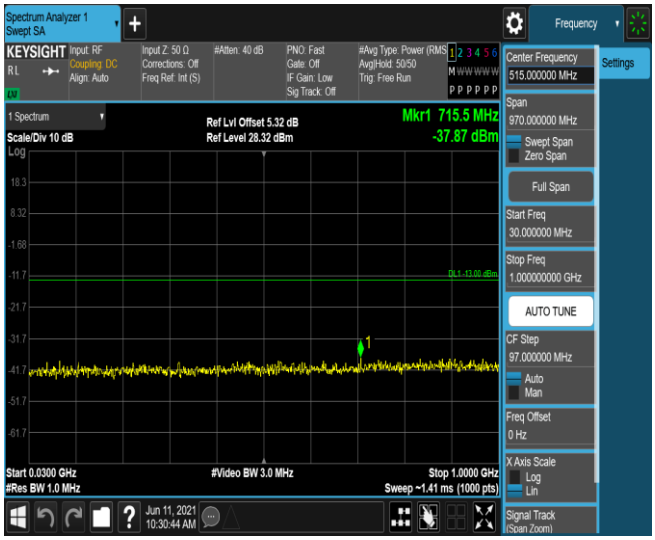

Band66-20MHz-16QAM-132322-1RB#0-Range1:0.009~0.15MHz



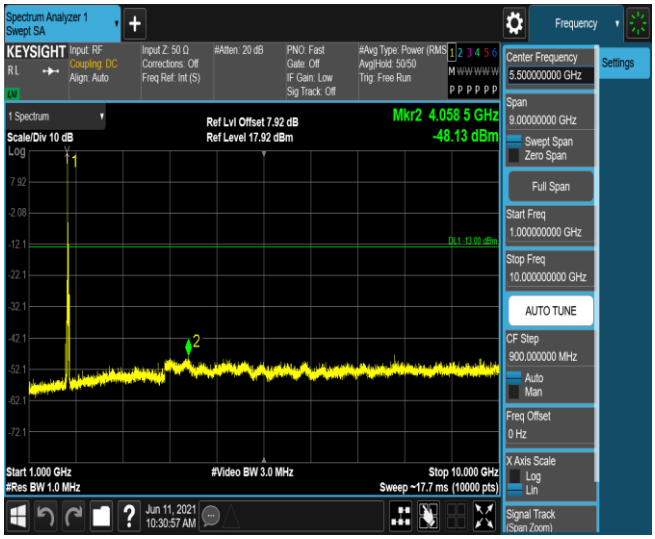

Band66-20MHz-16QAM-132322-1RB#0-Range2:0.15~30MHz



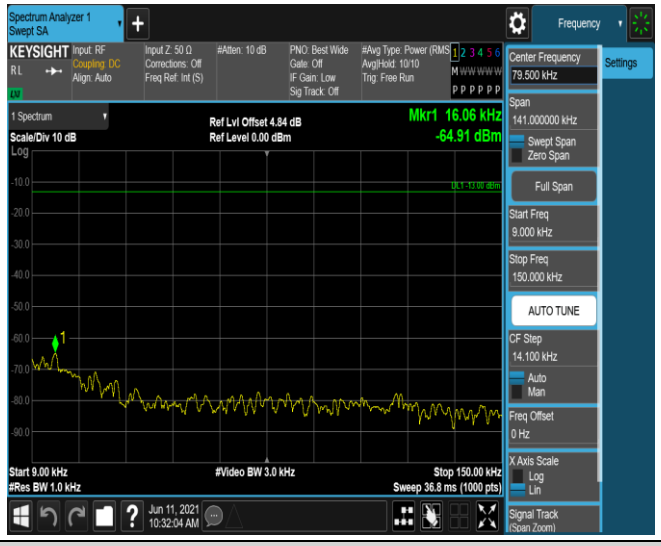

Band66-20MHz-16QAM-132322-1RB#0-Range3:30~1000MHz



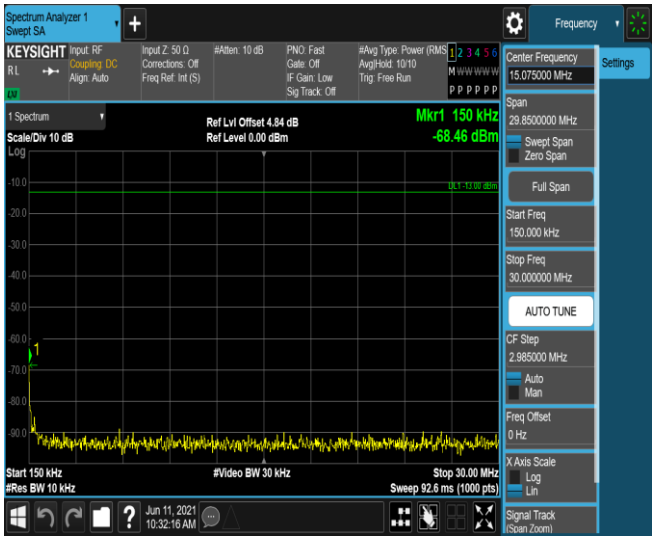

Band66-20MHz-16QAM-132322-1RB#0-Range4:1000~10000MHz



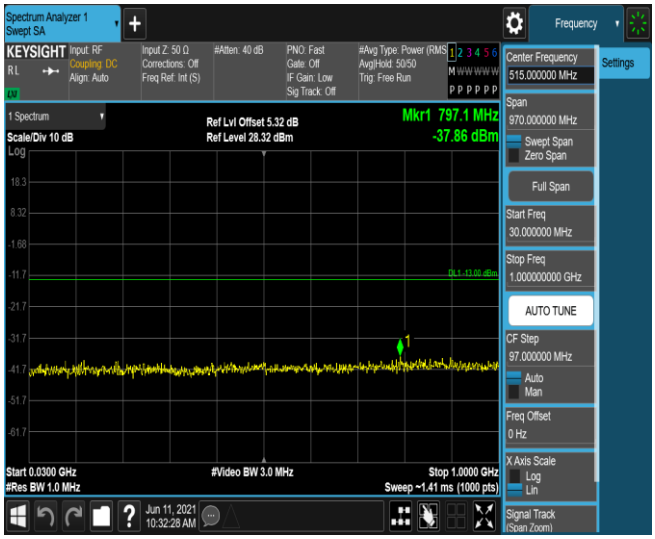

Band66-20MHz-16QAM-132572-1RB#0-Range1:0.009~0.15MHz



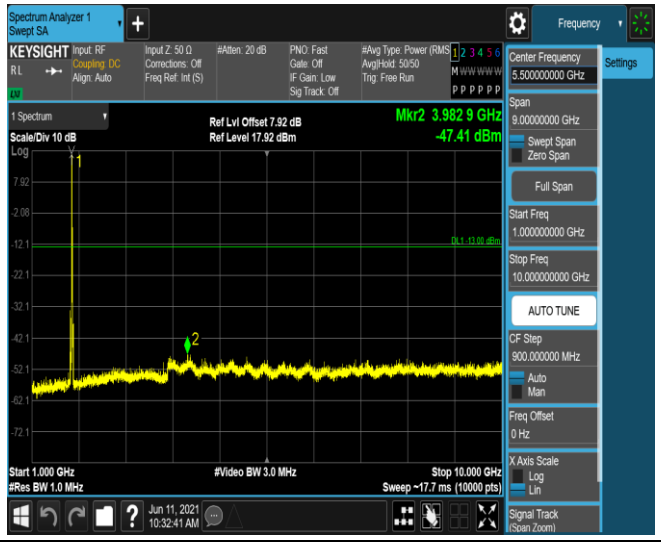

Band66-20MHz-16QAM-132572-1RB#0-Range2:0.15~30MHz




Band66-20MHz-16QAM-132572-1RB#0-Range3:30~1000MHz




Band66-20MHz-16QAM-132572-1RB#0-Range4:1000~10000MHz



# Appendix F: Frequency Stability

**Test Result**

## Channel Bandwidth: 1.4 MHz

| Channel Bandwidth: 1.4 MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 2.37 | 0.001385 | ± 2.5 | PASS |
| | | VN | TN | 2.72 | 0.001590 | ± 2.5 | PASS |
| | | VH | TN | 4.34 | 0.002537 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.92 | 0.002246 | ± 2.5 | PASS |
| | | VN | TN | -1.36 | -0.000779 | ± 2.5 | PASS |
| | | VH | TN | 1.85 | 0.001060 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.78 | -0.001000 | ± 2.5 | PASS |
| | | VN | TN | 4.29 | 0.002411 | ± 2.5 | PASS |
| | | VH | TN | -1.99 | -0.001118 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 1.47 | 0.000859 | ± 2.5 | PASS |
| | | VN | TN | 4.12 | 0.002408 | ± 2.5 | PASS |
| | | VH | TN | 0.6 | 0.000351 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.2 | 0.001261 | ± 2.5 | PASS |
| | | VN | TN | -0.72 | -0.000413 | ± 2.5 | PASS |
| | | VH | TN | 3.97 | 0.002275 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.92 | 0.002203 | ± 2.5 | PASS |
| | | VN | TN | -1.49 | -0.000837 | ± 2.5 | PASS |
| | | VH | TN | 1.15 | 0.000646 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -0.86 | -0.000503 | ± 2.5 | PASS |
| | | VN | -20 | -0.81 | -0.000473 | ± 2.5 | PASS |
| | | VN | -10 | -1.48 | -0.000865 | ± 2.5 | PASS |
| | | VN | 0 | 0.45 | 0.000263 | ± 2.5 | PASS |
| | | VN | 10 | 3.27 | 0.001911 | ± 2.5 | PASS |
| | | VN | 20 | 2.88 | 0.001684 | ± 2.5 | PASS |
| | | VN | 30 | -1.97 | -0.001152 | ± 2.5 | PASS |
| | | VN | 40 | 3.17 | 0.001853 | ± 2.5 | PASS |
| | | VN | 50 | 0.5 | 0.000292 | ± 2.5 | PASS |
| | MCH | VN | -30 | 3.02 | 0.001731 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | -20 | 2.35 | 0.001347 | ± 2.5 | PASS |
| | | VN | -10 | 1.78 | 0.001020 | ± 2.5 | PASS |
| | | VN | 0 | 3.57 | 0.002046 | ± 2.5 | PASS |
| | | VN | 10 | 4.57 | 0.002619 | ± 2.5 | PASS |
| | | VN | 20 | 4.3 | 0.002464 | ± 2.5 | PASS |
| | | VN | 30 | 2.98 | 0.001708 | ± 2.5 | PASS |
| | | VN | 40 | 4.29 | 0.002458 | ± 2.5 | PASS |
| | | VN | 50 | -0.29 | -0.000166 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.31 | 0.000736 | ± 2.5 | PASS |
| | | VN | -20 | 1.31 | 0.000736 | ± 2.5 | PASS |
| | | VN | -10 | -0.75 | -0.000422 | ± 2.5 | PASS |
| | | VN | 0 | 0.47 | 0.000264 | ± 2.5 | PASS |
| | | VN | 10 | 2.59 | 0.001456 | ± 2.5 | PASS |
| | | VN | 20 | 3.13 | 0.001759 | ± 2.5 | PASS |
| | | VN | 30 | -0.81 | -0.000455 | ± 2.5 | PASS |
| | | VN | 40 | -0.36 | -0.000202 | ± 2.5 | PASS |
| | | VN | 50 | 3.46 | 0.001945 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.04 | 0.000608 | ± 2.5 | PASS |
| | | VN | -20 | 4.23 | 0.002473 | ± 2.5 | PASS |
| | | VN | -10 | 4.97 | 0.002905 | ± 2.5 | PASS |
| | | VN | 0 | 0.33 | 0.000193 | ± 2.5 | PASS |
| | | VN | 10 | -1.5 | -0.000877 | ± 2.5 | PASS |
| | | VN | 20 | 1.74 | 0.001017 | ± 2.5 | PASS |
| | | VN | 30 | 3.6 | 0.002104 | ± 2.5 | PASS |
| | | VN | 40 | 0.39 | 0.000228 | ± 2.5 | PASS |
| | | VN | 50 | 0.07 | 0.000041 | ± 2.5 | PASS |
| | MCH | VN | -30 | 1.46 | 0.000837 | ± 2.5 | PASS |
| | | VN | -20 | 4.75 | 0.002722 | ± 2.5 | PASS |
| | | VN | -10 | 4.44 | 0.002544 | ± 2.5 | PASS |
| | | VN | 0 | 3.39 | 0.001943 | ± 2.5 | PASS |
| | | VN | 10 | 0.1 | 0.000057 | ± 2.5 | PASS |
| | | VN | 20 | -0.73 | -0.000418 | ± 2.5 | PASS |
| | | VN | 30 | 4.4 | 0.002521 | ± 2.5 | PASS |
| | | VN | 40 | 0.34 | 0.000195 | ± 2.5 | PASS |
| | | VN | 50 | 4.61 | 0.002642 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.18 | 0.000663 | ± 2.5 | PASS |
| | | VN | -20 | -1.53 | -0.000860 | ± 2.5 | PASS |
| | | VN | -10 | 4.24 | 0.002383 | ± 2.5 | PASS |
| | | VN | 0 | 2.61 | 0.001467 | ± 2.5 | PASS |
| | | VN | 10 | 2.37 | 0.001332 | ± 2.5 | PASS |
| | | VN | 20 | 3.31 | 0.001860 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 30 | 3.04 | 0.001709 | ± 2.5 | PASS |
| | | VN | 40 | 1.32 | 0.000742 | ± 2.5 | PASS |
| | | VN | 50 | -0.87 | -0.000489 | ± 2.5 | PASS |

## Channel Bandwidth: 3 MHz

| Channel Bandwidth: 3 MHz+ | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 0.4 | 0.000234 | ± 2.5 | PASS |
| | | VN | TN | 1.87 | 0.001093 | ± 2.5 | PASS |
| | | VH | TN | 4.65 | 0.002717 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.74 | 0.000424 | ± 2.5 | PASS |
| | | VN | TN | 1.85 | 0.001060 | ± 2.5 | PASS |
| | | VH | TN | 2.38 | 0.001364 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.31 | 0.002422 | ± 2.5 | PASS |
| | | VN | TN | -0.01 | -0.000006 | ± 2.5 | PASS |
| | | VH | TN | 1.52 | 0.000854 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 4.82 | 0.002816 | ± 2.5 | PASS |
| | | VN | TN | 3.35 | 0.001957 | ± 2.5 | PASS |
| | | VH | TN | -0.71 | -0.000415 | ± 2.5 | PASS |
| | MCH | VL | TN | 3.09 | 0.001771 | ± 2.5 | PASS |
| | | VN | TN | 0.41 | 0.000235 | ± 2.5 | PASS |
| | | VH | TN | 1.51 | 0.000865 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.97 | -0.001107 | ± 2.5 | PASS |
| | | VN | TN | -0.09 | -0.000051 | ± 2.5 | PASS |
| | | VH | TN | 4.97 | 0.002793 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 4.85 | 0.002834 | ± 2.5 | PASS |
| | | VN | -20 | 4 | 0.002337 | ± 2.5 | PASS |
| | | VN | -10 | -0.77 | -0.000450 | ± 2.5 | PASS |
| | | VN | 0 | 0.41 | 0.000240 | ± 2.5 | PASS |
| | | VN | 10 | 3.01 | 0.001759 | ± 2.5 | PASS |
| | | VN | 20 | 2.69 | 0.001572 | ± 2.5 | PASS |
| | | VN | 30 | 2.31 | 0.001350 | ± 2.5 | PASS |
| | | VN | 40 | 0.29 | 0.000169 | ± 2.5 | PASS |
| | | VN | 50 | 0.95 | 0.000555 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.24 | -0.000711 | ± 2.5 | PASS |
| | | VN | -20 | 3.57 | 0.002046 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | -10 | 3.9 | 0.002235 | ± 2.5 | PASS |
| | | VN | 0 | -0.11 | -0.000063 | ± 2.5 | PASS |
| | | VN | 10 | -0.27 | -0.000155 | ± 2.5 | PASS |
| | | VN | 20 | 2.6 | 0.001490 | ± 2.5 | PASS |
| | | VN | 30 | 1.3 | 0.000745 | ± 2.5 | PASS |
| | | VN | 40 | 0.75 | 0.000430 | ± 2.5 | PASS |
| | | VN | 50 | 3.68 | 0.002109 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.23 | 0.000691 | ± 2.5 | PASS |
| | | VN | -20 | -0.24 | -0.000135 | ± 2.5 | PASS |
| | | VN | -10 | 2.76 | 0.001551 | ± 2.5 | PASS |
| | | VN | 0 | 2.64 | 0.001484 | ± 2.5 | PASS |
| | | VN | 10 | 4.62 | 0.002597 | ± 2.5 | PASS |
| | | VN | 20 | -1.36 | -0.000764 | ± 2.5 | PASS |
| | | VN | 30 | -1.72 | -0.000967 | ± 2.5 | PASS |
| | | VN | 40 | -1.46 | -0.000821 | ± 2.5 | PASS |
| | | VN | 50 | 2.2 | 0.001236 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.05 | 0.000613 | ± 2.5 | PASS |
| | | VN | -20 | 3.65 | 0.002133 | ± 2.5 | PASS |
| | | VN | -10 | -0.45 | -0.000263 | ± 2.5 | PASS |
| | | VN | 0 | 2.52 | 0.001472 | ± 2.5 | PASS |
| | | VN | 10 | -0.81 | -0.000473 | ± 2.5 | PASS |
| | | VN | 20 | -0.27 | -0.000158 | ± 2.5 | PASS |
| | | VN | 30 | 3.25 | 0.001899 | ± 2.5 | PASS |
| | | VN | 40 | -1.02 | -0.000596 | ± 2.5 | PASS |
| | | VN | 50 | 0.32 | 0.000187 | ± 2.5 | PASS |
| | MCH | VN | -30 | 1.85 | 0.001060 | ± 2.5 | PASS |
| | | VN | -20 | 1.12 | 0.000642 | ± 2.5 | PASS |
| | | VN | -10 | 1.26 | 0.000722 | ± 2.5 | PASS |
| | | VN | 0 | 0.37 | 0.000212 | ± 2.5 | PASS |
| | | VN | 10 | 1.46 | 0.000837 | ± 2.5 | PASS |
| | | VN | 20 | -1.1 | -0.000630 | ± 2.5 | PASS |
| | | VN | 30 | -1.29 | -0.000739 | ± 2.5 | PASS |
| | | VN | 40 | -1.02 | -0.000585 | ± 2.5 | PASS |
| | | VN | 50 | 1.34 | 0.000768 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.55 | 0.000871 | ± 2.5 | PASS |
| | | VN | -20 | 1.37 | 0.000770 | ± 2.5 | PASS |
| | | VN | -10 | 4.76 | 0.002675 | ± 2.5 | PASS |
| | | VN | 0 | 4.7 | 0.002641 | ± 2.5 | PASS |
| | | VN | 10 | -1.36 | -0.000764 | ± 2.5 | PASS |
| | | VN | 20 | 4 | 0.002248 | ± 2.5 | PASS |
| | | VN | 30 | -1.73 | -0.000972 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 40 | 4.41 | 0.002479 | ± 2.5 | PASS |
| | | VN | 50 | -1.42 | -0.000798 | ± 2.5 | PASS |

## Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 3.85 | 0.002248 | ± 2.5 | PASS |
| | | VN | TN | 2.55 | 0.001489 | ± 2.5 | PASS |
| | | VH | TN | 0.46 | 0.000269 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.96 | 0.001696 | ± 2.5 | PASS |
| | | VN | TN | 3.15 | 0.001805 | ± 2.5 | PASS |
| | | VH | TN | -1.78 | -0.001020 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.66 | 0.000371 | ± 2.5 | PASS |
| | | VN | TN | -1.72 | -0.000967 | ± 2.5 | PASS |
| | | VH | TN | -0.9 | -0.000506 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -0.8 | -0.000467 | ± 2.5 | PASS |
| | | VN | TN | -1.71 | -0.000999 | ± 2.5 | PASS |
| | | VH | TN | -1.97 | -0.001150 | ± 2.5 | PASS |
| | MCH | VL | TN | 1.32 | 0.000756 | ± 2.5 | PASS |
| | | VN | TN | -1.03 | -0.000590 | ± 2.5 | PASS |
| | | VH | TN | 4.84 | 0.002774 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.1 | -0.000056 | ± 2.5 | PASS |
| | | VN | TN | 0.05 | 0.000028 | ± 2.5 | PASS |
| | | VH | TN | 4.96 | 0.002789 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 1.54 | 0.000899 | ± 2.5 | PASS |
| | | VN | -20 | -1.6 | -0.000934 | ± 2.5 | PASS |
| | | VN | -10 | 4.72 | 0.002756 | ± 2.5 | PASS |
| | | VN | 0 | 2.1 | 0.001226 | ± 2.5 | PASS |
| | | VN | 10 | -1.02 | -0.000596 | ± 2.5 | PASS |
| | | VN | 20 | -1.02 | -0.000596 | ± 2.5 | PASS |
| | | VN | 30 | 4.3 | 0.002511 | ± 2.5 | PASS |
| | | VN | 40 | -1.78 | -0.001039 | ± 2.5 | PASS |
| | | VN | 50 | 2.44 | 0.001425 | ± 2.5 | PASS |
| | MCH | VN | -30 | 2.71 | 0.001553 | ± 2.5 | PASS |
| | | VN | -20 | 0.72 | 0.000413 | ± 2.5 | PASS |
| | | VN | -10 | -0.66 | -0.000378 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 0 | 4.03 | 0.002309 | ± 2.5 | PASS |
| | | VN | 10 | 0.39 | 0.000223 | ± 2.5 | PASS |
| | | VN | 20 | 2.55 | 0.001461 | ± 2.5 | PASS |
| | | VN | 30 | 2.5 | 0.001433 | ± 2.5 | PASS |
| | | VN | 40 | 1.2 | 0.000688 | ± 2.5 | PASS |
| | | VN | 50 | -0.42 | -0.000241 | ± 2.5 | PASS |
| | HCH | VN | -30 | -0.3 | -0.000169 | ± 2.5 | PASS |
| | | VN | -20 | 0.53 | 0.000298 | ± 2.5 | PASS |
| | | VN | -10 | 1.32 | 0.000742 | ± 2.5 | PASS |
| | | VN | 0 | 4.01 | 0.002255 | ± 2.5 | PASS |
| | | VN | 10 | 4.76 | 0.002676 | ± 2.5 | PASS |
| | | VN | 20 | 1.16 | 0.000652 | ± 2.5 | PASS |
| | | VN | 30 | 0.13 | 0.000073 | ± 2.5 | PASS |
| | | VN | 40 | -1.29 | -0.000725 | ± 2.5 | PASS |
| | | VN | 50 | -0.57 | -0.000320 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 0.38 | 0.000222 | ± 2.5 | PASS |
| | | VN | -20 | 3.18 | 0.001857 | ± 2.5 | PASS |
| | | VN | -10 | 0.34 | 0.000199 | ± 2.5 | PASS |
| | | VN | 0 | 1.59 | 0.000928 | ± 2.5 | PASS |
| | | VN | 10 | 0.48 | 0.000280 | ± 2.5 | PASS |
| | | VN | 20 | 2.43 | 0.001419 | ± 2.5 | PASS |
| | | VN | 30 | 2.5 | 0.001460 | ± 2.5 | PASS |
| | | VN | 40 | 3.84 | 0.002242 | ± 2.5 | PASS |
| | | VN | 50 | -0.63 | -0.000368 | ± 2.5 | PASS |
| | MCH | VN | -30 | -0.01 | -0.000006 | ± 2.5 | PASS |
| | | VN | -20 | 2.18 | 0.001249 | ± 2.5 | PASS |
| | | VN | -10 | 4.41 | 0.002527 | ± 2.5 | PASS |
| | | VN | 0 | -1.5 | -0.000860 | ± 2.5 | PASS |
| | | VN | 10 | -1.97 | -0.001129 | ± 2.5 | PASS |
| | | VN | 20 | 0.88 | 0.000504 | ± 2.5 | PASS |
| | | VN | 30 | -0.66 | -0.000378 | ± 2.5 | PASS |
| | | VN | 40 | 3.13 | 0.001794 | ± 2.5 | PASS |
| | | VN | 50 | 3.66 | 0.002097 | ± 2.5 | PASS |
| | HCH | VN | -30 | -1.2 | -0.000675 | ± 2.5 | PASS |
| | | VN | -20 | -1.33 | -0.000748 | ± 2.5 | PASS |
| | | VN | -10 | 3.44 | 0.001934 | ± 2.5 | PASS |
| | | VN | 0 | 0.23 | 0.000129 | ± 2.5 | PASS |
| | | VN | 10 | -1.42 | -0.000798 | ± 2.5 | PASS |
| | | VN | 20 | 2.05 | 0.001153 | ± 2.5 | PASS |
| | | VN | 30 | 0.41 | 0.000231 | ± 2.5 | PASS |
| | | VN | 40 | -1.05 | -0.000590 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 50 | 2.82 | 0.001586 | ± 2.5 | PASS |

## Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 1.44 | 0.000840 | ± 2.5 | PASS |
| | | VN | TN | -1.55 | -0.000904 | ± 2.5 | PASS |
| | | VH | TN | -0.06 | -0.000035 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.47 | -0.000842 | ± 2.5 | PASS |
| | | VN | TN | 3.06 | 0.001754 | ± 2.5 | PASS |
| | | VH | TN | 2.25 | 0.001289 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.56 | 0.000315 | ± 2.5 | PASS |
| | | VN | TN | -0.17 | -0.000096 | ± 2.5 | PASS |
| | | VH | TN | -0.93 | -0.000523 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | 4.77 | 0.002781 | ± 2.5 | PASS |
| | | VN | TN | -1.48 | -0.000863 | ± 2.5 | PASS |
| | | VH | TN | 2.61 | 0.001522 | ± 2.5 | PASS |
| | MCH | VL | TN | 2.2 | 0.001261 | ± 2.5 | PASS |
| | | VN | TN | -1.91 | -0.001095 | ± 2.5 | PASS |
| | | VH | TN | 2.53 | 0.001450 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.01 | -0.000006 | ± 2.5 | PASS |
| | | VN | TN | -0.05 | -0.000028 | ± 2.5 | PASS |
| | | VH | TN | 0.3 | 0.000169 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 3.41 | 0.001988 | ± 2.5 | PASS |
| | | VN | -20 | 4.52 | 0.002636 | ± 2.5 | PASS |
| | | VN | -10 | -1.32 | -0.000770 | ± 2.5 | PASS |
| | | VN | 0 | -0.03 | -0.000017 | ± 2.5 | PASS |
| | | VN | 10 | 3.02 | 0.001761 | ± 2.5 | PASS |
| | | VN | 20 | 1.71 | 0.000997 | ± 2.5 | PASS |
| | | VN | 30 | 2.97 | 0.001732 | ± 2.5 | PASS |
| | | VN | 40 | -1.63 | -0.000950 | ± 2.5 | PASS |
| | | VN | 50 | -1.94 | -0.001131 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.34 | 0.002487 | ± 2.5 | PASS |
| | | VN | -20 | -0.4 | -0.000229 | ± 2.5 | PASS |
| | | VN | -10 | -1.18 | -0.000676 | ± 2.5 | PASS |
| | | VN | 0 | -0.55 | -0.000315 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 10 | -1.88 | -0.001077 | ± 2.5 | PASS |
| | | VN | 20 | 3.8 | 0.002178 | ± 2.5 | PASS |
| | | VN | 30 | -1.2 | -0.000688 | ± 2.5 | PASS |
| | | VN | 40 | 3.47 | 0.001989 | ± 2.5 | PASS |
| | | VN | 50 | -1.69 | -0.000968 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.33 | 0.001311 | ± 2.5 | PASS |
| | | VN | -20 | 1.23 | 0.000692 | ± 2.5 | PASS |
| | | VN | -10 | 0.77 | 0.000433 | ± 2.5 | PASS |
| | | VN | 0 | 1.46 | 0.000821 | ± 2.5 | PASS |
| | | VN | 10 | 2.29 | 0.001288 | ± 2.5 | PASS |
| | | VN | 20 | -0.03 | -0.000017 | ± 2.5 | PASS |
| | | VN | 30 | -1.17 | -0.000658 | ± 2.5 | PASS |
| | | VN | 40 | 1.21 | 0.000681 | ± 2.5 | PASS |
| | | VN | 50 | 1.38 | 0.000776 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 0.28 | 0.000163 | ± 2.5 | PASS |
| | | VN | -20 | 4.18 | 0.002437 | ± 2.5 | PASS |
| | | VN | -10 | 0.87 | 0.000507 | ± 2.5 | PASS |
| | | VN | 0 | 0.63 | 0.000367 | ± 2.5 | PASS |
| | | VN | 10 | 0.75 | 0.000437 | ± 2.5 | PASS |
| | | VN | 20 | -1.33 | -0.000776 | ± 2.5 | PASS |
| | | VN | 30 | 0.2 | 0.000117 | ± 2.5 | PASS |
| | | VN | 40 | -1.22 | -0.000711 | ± 2.5 | PASS |
| | | VN | 50 | 3.97 | 0.002315 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.45 | 0.000258 | ± 2.5 | PASS |
| | | VN | -20 | 0.34 | 0.000195 | ± 2.5 | PASS |
| | | VN | -10 | -1.83 | -0.001049 | ± 2.5 | PASS |
| | | VN | 0 | 0.44 | 0.000252 | ± 2.5 | PASS |
| | | VN | 10 | 0.25 | 0.000143 | ± 2.5 | PASS |
| | | VN | 20 | 0.76 | 0.000436 | ± 2.5 | PASS |
| | | VN | 30 | 3.63 | 0.002080 | ± 2.5 | PASS |
| | | VN | 40 | 2.79 | 0.001599 | ± 2.5 | PASS |
| | | VN | 50 | -0.53 | -0.000304 | ± 2.5 | PASS |
| | HCH | VN | -30 | 2.3 | 0.001294 | ± 2.5 | PASS |
| | | VN | -20 | 1.19 | 0.000669 | ± 2.5 | PASS |
| | | VN | -10 | 2.11 | 0.001187 | ± 2.5 | PASS |
| | | VN | 0 | 3.09 | 0.001738 | ± 2.5 | PASS |
| | | VN | 10 | -1.57 | -0.000883 | ± 2.5 | PASS |
| | | VN | 20 | 4 | 0.002250 | ± 2.5 | PASS |
| | | VN | 30 | 0.89 | 0.000501 | ± 2.5 | PASS |
| | | VN | 40 | 0.97 | 0.000546 | ± 2.5 | PASS |
| | | VN | 50 | 1.27 | 0.000714 | ± 2.5 | PASS |

## Channel Bandwidth: 15 MHz

| Channel Bandwidth: 15 MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | 2.86 | 0.001665 | ± 2.5 | PASS |
| | | VN | TN | 4.89 | 0.002847 | ± 2.5 | PASS |
| | | VH | TN | 1.46 | 0.000850 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.14 | -0.000653 | ± 2.5 | PASS |
| | | VN | TN | -1.41 | -0.000808 | ± 2.5 | PASS |
| | | VH | TN | -1.98 | -0.001135 | ± 2.5 | PASS |
| | HCH | VL | TN | -0.06 | -0.000034 | ± 2.5 | PASS |
| | | VN | TN | 0.31 | 0.000175 | ± 2.5 | PASS |
| | | VH | TN | 0.56 | 0.000315 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -1.95 | -0.001135 | ± 2.5 | PASS |
| | | VN | TN | 1.1 | 0.000640 | ± 2.5 | PASS |
| | | VH | TN | 3.45 | 0.002009 | ± 2.5 | PASS |
| | MCH | VL | TN | 0.98 | 0.000562 | ± 2.5 | PASS |
| | | VN | TN | -1.7 | -0.000974 | ± 2.5 | PASS |
| | | VH | TN | 1.96 | 0.001123 | ± 2.5 | PASS |
| | HCH | VL | TN | 4.77 | 0.002687 | ± 2.5 | PASS |
| | | VN | TN | -0.37 | -0.000208 | ± 2.5 | PASS |
| | | VH | TN | 2.22 | 0.001251 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -1.35 | -0.000786 | ± 2.5 | PASS |
| | | VN | -20 | -0.28 | -0.000163 | ± 2.5 | PASS |
| | | VN | -10 | -1.82 | -0.001060 | ± 2.5 | PASS |
| | | VN | 0 | 3.84 | 0.002236 | ± 2.5 | PASS |
| | | VN | 10 | -0.41 | -0.000239 | ± 2.5 | PASS |
| | | VN | 20 | -0.45 | -0.000262 | ± 2.5 | PASS |
| | | VN | 30 | 2.3 | 0.001339 | ± 2.5 | PASS |
| | | VN | 40 | 3.07 | 0.001787 | ± 2.5 | PASS |
| | | VN | 50 | 4.94 | 0.002876 | ± 2.5 | PASS |
| | MCH | VN | -30 | 3.25 | 0.001862 | ± 2.5 | PASS |
| | | VN | -20 | -1.59 | -0.000911 | ± 2.5 | PASS |
| | | VN | -10 | 0.4 | 0.000229 | ± 2.5 | PASS |
| | | VN | 0 | -0.97 | -0.000556 | ± 2.5 | PASS |
| | | VN | 10 | -1.03 | -0.000590 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 20 | 1.87 | 0.001072 | ± 2.5 | PASS |
| | | VN | 30 | 3.61 | 0.002069 | ± 2.5 | PASS |
| | | VN | 40 | 0.62 | 0.000355 | ± 2.5 | PASS |
| | | VN | 50 | 2.35 | 0.001347 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.41 | 0.000794 | ± 2.5 | PASS |
| | | VN | -20 | -0.36 | -0.000203 | ± 2.5 | PASS |
| | | VN | -10 | -1.12 | -0.000631 | ± 2.5 | PASS |
| | | VN | 0 | 2.96 | 0.001668 | ± 2.5 | PASS |
| | | VN | 10 | -1.42 | -0.000800 | ± 2.5 | PASS |
| | | VN | 20 | 3.59 | 0.002023 | ± 2.5 | PASS |
| | | VN | 30 | -0.89 | -0.000501 | ± 2.5 | PASS |
| | | VN | 40 | -1.84 | -0.001037 | ± 2.5 | PASS |
| | | VN | 50 | -0.56 | -0.000315 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 2.14 | 0.001246 | ± 2.5 | PASS |
| | | VN | -20 | 1.69 | 0.000984 | ± 2.5 | PASS |
| | | VN | -10 | 3.63 | 0.002114 | ± 2.5 | PASS |
| | | VN | 0 | 4.82 | 0.002806 | ± 2.5 | PASS |
| | | VN | 10 | -1.27 | -0.000739 | ± 2.5 | PASS |
| | | VN | 20 | 1.85 | 0.001077 | ± 2.5 | PASS |
| | | VN | 30 | 0.22 | 0.000128 | ± 2.5 | PASS |
| | | VN | 40 | 1.27 | 0.000739 | ± 2.5 | PASS |
| | | VN | 50 | 0.59 | 0.000344 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.18 | -0.000676 | ± 2.5 | PASS |
| | | VN | -20 | -0.39 | -0.000223 | ± 2.5 | PASS |
| | | VN | -10 | -1.42 | -0.000814 | ± 2.5 | PASS |
| | | VN | 0 | -1.41 | -0.000808 | ± 2.5 | PASS |
| | | VN | 10 | 3.98 | 0.002281 | ± 2.5 | PASS |
| | | VN | 20 | 4.11 | 0.002355 | ± 2.5 | PASS |
| | | VN | 30 | 2.28 | 0.001307 | ± 2.5 | PASS |
| | | VN | 40 | 2.54 | 0.001456 | ± 2.5 | PASS |
| | | VN | 50 | 2.59 | 0.001484 | ± 2.5 | PASS |
| | HCH | VN | -30 | 3.75 | 0.002113 | ± 2.5 | PASS |
| | | VN | -20 | -1.46 | -0.000823 | ± 2.5 | PASS |
| | | VN | -10 | 0.95 | 0.000535 | ± 2.5 | PASS |
| | | VN | 0 | 1.21 | 0.000682 | ± 2.5 | PASS |
| | | VN | 10 | 3.94 | 0.002220 | ± 2.5 | PASS |
| | | VN | 20 | 3.37 | 0.001899 | ± 2.5 | PASS |
| | | VN | 30 | -0.42 | -0.000237 | ± 2.5 | PASS |
| | | VN | 40 | 0.87 | 0.000490 | ± 2.5 | PASS |
| | | VN | 50 | 1.47 | 0.000828 | ± 2.5 | PASS |

## Channel Bandwidth: 20 MHz

| Channel Bandwidth: 20 MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| Voltage | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VL | TN | -0.9 | -0.000523 | ± 2.5 | PASS |
| | | VN | TN | 0.25 | 0.000145 | ± 2.5 | PASS |
| | | VH | TN | 0.63 | 0.000366 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.16 | -0.000665 | ± 2.5 | PASS |
| | | VN | TN | 0.92 | 0.000527 | ± 2.5 | PASS |
| | | VH | TN | 3.47 | 0.001989 | ± 2.5 | PASS |
| | HCH | VL | TN | -1.83 | -0.001032 | ± 2.5 | PASS |
| | | VN | TN | -1.63 | -0.000920 | ± 2.5 | PASS |
| | | VH | TN | 2.02 | 0.001140 | ± 2.5 | PASS |
| 16QAM | LCH | VL | TN | -1.52 | -0.000884 | ± 2.5 | PASS |
| | | VN | TN | 4.72 | 0.002744 | ± 2.5 | PASS |
| | | VH | TN | 2.86 | 0.001663 | ± 2.5 | PASS |
| | MCH | VL | TN | -1.34 | -0.000768 | ± 2.5 | PASS |
| | | VN | TN | 0.72 | 0.000413 | ± 2.5 | PASS |
| | | VH | TN | 1.08 | 0.000619 | ± 2.5 | PASS |
| | HCH | VL | TN | 0.88 | 0.000496 | ± 2.5 | PASS |
| | | VN | TN | 1.95 | 0.001100 | ± 2.5 | PASS |
| | | VH | TN | 3.83 | 0.002161 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -0.47 | -0.000273 | ± 2.5 | PASS |
| | | VN | -20 | 4.65 | 0.002703 | ± 2.5 | PASS |
| | | VN | -10 | 3.72 | 0.002163 | ± 2.5 | PASS |
| | | VN | 0 | 4.03 | 0.002343 | ± 2.5 | PASS |
| | | VN | 10 | 3.02 | 0.001756 | ± 2.5 | PASS |
| | | VN | 20 | -1.06 | -0.000616 | ± 2.5 | PASS |
| | | VN | 30 | 2.71 | 0.001576 | ± 2.5 | PASS |
| | | VN | 40 | 1.76 | 0.001023 | ± 2.5 | PASS |
| | | VN | 50 | -0.09 | -0.000052 | ± 2.5 | PASS |
| | MCH | VN | -30 | 0.18 | 0.000103 | ± 2.5 | PASS |
| | | VN | -20 | 4.19 | 0.002401 | ± 2.5 | PASS |
| | | VN | -10 | 3.13 | 0.001794 | ± 2.5 | PASS |
| | | VN | 0 | 3.43 | 0.001966 | ± 2.5 | PASS |
| | | VN | 10 | -1.64 | -0.000940 | ± 2.5 | PASS |
| | | VN | 20 | 4.37 | 0.002504 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 30 | 0.23 | 0.000132 | ± 2.5 | PASS |
| | | VN | 40 | -1.05 | -0.000602 | ± 2.5 | PASS |
| | | VN | 50 | 1.86 | 0.001066 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.51 | 0.000852 | ± 2.5 | PASS |
| | | VN | -20 | -0.02 | -0.000011 | ± 2.5 | PASS |
| | | VN | -10 | 0.14 | 0.000079 | ± 2.5 | PASS |
| | | VN | 0 | 0.05 | 0.000028 | ± 2.5 | PASS |
| | | VN | 10 | 1.58 | 0.000891 | ± 2.5 | PASS |
| | | VN | 20 | -0.95 | -0.000536 | ± 2.5 | PASS |
| | | VN | 30 | 3.85 | 0.002172 | ± 2.5 | PASS |
| | | VN | 40 | 1.57 | 0.000886 | ± 2.5 | PASS |
| | | VN | 50 | -0.1 | -0.000056 | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 0.99 | 0.000576 | ± 2.5 | PASS |
| | | VN | -20 | 4.28 | 0.002488 | ± 2.5 | PASS |
| | | VN | -10 | 1.69 | 0.000983 | ± 2.5 | PASS |
| | | VN | 0 | 0.55 | 0.000320 | ± 2.5 | PASS |
| | | VN | 10 | 4 | 0.002326 | ± 2.5 | PASS |
| | | VN | 20 | -1.09 | -0.000634 | ± 2.5 | PASS |
| | | VN | 30 | 4.54 | 0.002640 | ± 2.5 | PASS |
| | | VN | 40 | 3.99 | 0.002320 | ± 2.5 | PASS |
| | | VN | 50 | 3.99 | 0.002320 | ± 2.5 | PASS |
| | MCH | VN | -30 | 4.74 | 0.002716 | ± 2.5 | PASS |
| | | VN | -20 | 2.78 | 0.001593 | ± 2.5 | PASS |
| | | VN | -10 | 2.39 | 0.001370 | ± 2.5 | PASS |
| | | VN | 0 | 2.6 | 0.001490 | ± 2.5 | PASS |
| | | VN | 10 | 1.41 | 0.000808 | ± 2.5 | PASS |
| | | VN | 20 | -0.44 | -0.000252 | ± 2.5 | PASS |
| | | VN | 30 | 4.84 | 0.002774 | ± 2.5 | PASS |
| | | VN | 40 | 3.04 | 0.001742 | ± 2.5 | PASS |
| | | VN | 50 | 1.6 | 0.000917 | ± 2.5 | PASS |
| | HCH | VN | -30 | 1.05 | 0.000592 | ± 2.5 | PASS |
| | | VN | -20 | 2.53 | 0.001427 | ± 2.5 | PASS |
| | | VN | -10 | 3.59 | 0.002025 | ± 2.5 | PASS |
| | | VN | 0 | 3.4 | 0.001918 | ± 2.5 | PASS |
| | | VN | 10 | -0.86 | -0.000485 | ± 2.5 | PASS |
| | | VN | 20 | 1.17 | 0.000660 | ± 2.5 | PASS |
| | | VN | 30 | 0.43 | 0.000243 | ± 2.5 | PASS |
| | | VN | 40 | 0.21 | 0.000118 | ± 2.5 | PASS |
| | | VN | 50 | 3.78 | 0.002133 | ± 2.5 | PASS |