# Appendix A: Average Output Power Data

## Test Result

## Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.93 | PASS |
| | | 1 | 12 | 22.89 | PASS |
| | | 1 | 24 | 22.9 | PASS |
| | | 12 | 0 | 21.96 | PASS |
| | | 12 | 6 | 21.97 | PASS |
| | | 12 | 13 | 21.95 | PASS |
| | | 25 | 0 | 21.92 | PASS |
| | MCH | 1 | 0 | 23.03 | PASS |
| | | 1 | 12 | 22.96 | PASS |
| | | 1 | 24 | 22.93 | PASS |
| | | 12 | 0 | 21.92 | PASS |
| | | 12 | 6 | 21.99 | PASS |
| | | 12 | 13 | 21.95 | PASS |
| | | 25 | 0 | 21.92 | PASS |
| | HCH | 1 | 0 | 23.11 | PASS |
| | | 1 | 12 | 23.16 | PASS |
| | | 1 | 24 | 23.05 | PASS |
| | | 12 | 0 | 22.28 | PASS |
| | | 12 | 6 | 22.2 | PASS |
| | | 12 | 13 | 22.19 | PASS |
| | | 25 | 0 | 22.22 | PASS |
| 16QAM | LCH | 1 | 0 | 22.38 | PASS |
| | | 1 | 12 | 22.3 | PASS |
| | | 1 | 24 | 22.31 | PASS |
| | | 12 | 0 | 20.9 | PASS |
| | | 12 | 6 | 20.91 | PASS |
| | | 12 | 13 | 20.99 | PASS |
| | | 25 | 0 | 20.95 | PASS |
| | MCH | 1 | 0 | 22.4 | PASS |
| | | 1 | 12 | 22.37 | PASS |
| | | 1 | 24 | 22.41 | PASS |
| | | 12 | 0 | 20.89 | PASS |

| | | | | | |
|---|---|---|---|---|---|
| | | 12 | 6 | 20.98 | PASS |
| | | 12 | 13 | 20.92 | PASS |
| | | 25 | 0 | 20.98 | PASS |
| | HCH | 1 | 0 | 22.68 | PASS |
| | | 1 | 12 | 22.78 | PASS |
| | | 1 | 24 | 22.58 | PASS |
| | | 12 | 0 | 21.2 | PASS |
| | | 12 | 6 | 21.12 | PASS |
| | | 12 | 13 | 21.14 | PASS |
| | | 25 | 0 | 21.25 | PASS |

## Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.95 | PASS |
| | | 1 | 24 | 22.83 | PASS |
| | | 1 | 49 | 22.88 | PASS |
| | | 25 | 0 | 21.99 | PASS |
| | | 25 | 12 | 21.94 | PASS |
| | | 25 | 25 | 21.93 | PASS |
| | | 50 | 0 | 22.05 | PASS |
| | MCH | 1 | 0 | 22.87 | PASS |
| | | 1 | 24 | 23.03 | PASS |
| | | 1 | 49 | 22.91 | PASS |
| | | 25 | 0 | 22.04 | PASS |
| | | 25 | 12 | 21.95 | PASS |
| | | 25 | 25 | 21.92 | PASS |
| | | 50 | 0 | 21.97 | PASS |
| | HCH | 1 | 0 | 23.24 | PASS |
| | | 1 | 24 | 23.28 | PASS |
| | | 1 | 49 | 23.24 | PASS |
| | | 25 | 0 | 22.29 | PASS |
| | | 25 | 12 | 22.36 | PASS |
| | | 25 | 25 | 22.31 | PASS |
| | | 50 | 0 | 22.25 | PASS |
| 16QAM | LCH | 1 | 0 | 22.41 | PASS |
| | | 1 | 24 | 22.25 | PASS |
| | | 1 | 49 | 22.22 | PASS |
| | | 25 | 0 | 21.03 | PASS |
| | | 25 | 12 | 21.02 | PASS |

| | | | | | |
|---|---|---|---|---|---|
| | | 25 | 25 | 20.95 | PASS |
| | | 50 | 0 | 21.05 | PASS |
| | MCH | 1 | 0 | 22.51 | PASS |
| | | 1 | 24 | 22.09 | PASS |
| | | 1 | 49 | 21.98 | PASS |
| | | 25 | 0 | 21.04 | PASS |
| | | 25 | 12 | 21.02 | PASS |
| | | 25 | 25 | 20.95 | PASS |
| | | 50 | 0 | 21.05 | PASS |
| | HCH | 1 | 0 | 22.26 | PASS |
| | | 1 | 24 | 22.38 | PASS |
| | | 1 | 49 | 22.8 | PASS |
| | | 25 | 0 | 21.38 | PASS |
| | | 25 | 12 | 21.36 | PASS |
| | | 25 | 25 | 21.36 | PASS |
| | | 50 | 0 | 21.33 | PASS |

## Channel Bandwidth: 15 MHz

| Channel Bandwidth: 15 MHz | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 22.95 | PASS |
| | | 1 | 37 | 22.96 | PASS |
| | | 1 | 74 | 22.87 | PASS |
| | | 36 | 0 | 21.97 | PASS |
| | | 36 | 19 | 21.98 | PASS |
| | | 36 | 39 | 21.96 | PASS |
| | | 75 | 0 | 21.94 | PASS |
| | MCH | 1 | 0 | 22.95 | PASS |
| | | 1 | 37 | 22.91 | PASS |
| | | 1 | 74 | 22.93 | PASS |
| | | 36 | 0 | 22.03 | PASS |
| | | 36 | 19 | 21.99 | PASS |
| | | 36 | 39 | 21.9 | PASS |
| | | 75 | 0 | 21.95 | PASS |
| | HCH | 1 | 0 | 23.14 | PASS |
| | | 1 | 37 | 23.32 | PASS |
| | | 1 | 74 | 23.2 | PASS |
| | | 36 | 0 | 22.34 | PASS |
| | | 36 | 19 | 22.4 | PASS |
| | | 36 | 39 | 22.29 | PASS |

| | | | | | |
|---|---|---|---|---|---|
| | | 75 | 0 | 22.31 | PASS |
| 16QAM | LCH | 1 | 0 | 22.5 | PASS |
| | | 1 | 37 | 22.33 | PASS |
| | | 1 | 74 | 21.94 | PASS |
| | | 36 | 0 | 21.02 | PASS |
| | | 36 | 19 | 20.97 | PASS |
| | | 36 | 39 | 20.94 | PASS |
| | | 75 | 0 | 20.99 | PASS |
| | MCH | 1 | 0 | 22.52 | PASS |
| | | 1 | 37 | 22.45 | PASS |
| | | 1 | 74 | 22.47 | PASS |
| | | 36 | 0 | 20.95 | PASS |
| | | 36 | 19 | 21 | PASS |
| | | 36 | 39 | 20.98 | PASS |
| | | 75 | 0 | 21.03 | PASS |
| | HCH | 1 | 0 | 22.62 | PASS |
| | | 1 | 37 | 22.73 | PASS |
| | | 1 | 74 | 22.8 | PASS |
| | | 36 | 0 | 21.34 | PASS |
| | | 36 | 19 | 21.29 | PASS |
| | | 36 | 39 | 21.3 | PASS |
| | | 75 | 0 | 21.31 | PASS |

## Channel Bandwidth: 20 MHz

| Channel Bandwidth: 20 MHz | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Average Power [dBm] | Verdict |
| | | Size | Offset | | |
| QPSK | LCH | 1 | 0 | 23.04 | PASS |
| | | 1 | 49 | 22.97 | PASS |
| | | 1 | 99 | 22.89 | PASS |
| | | 50 | 0 | 21.93 | PASS |
| | | 50 | 25 | 21.98 | PASS |
| | | 50 | 50 | 21.92 | PASS |
| | | 100 | 0 | 21.96 | PASS |
| | MCH | 1 | 0 | 22.98 | PASS |
| | | 1 | 49 | 23.01 | PASS |
| | | 1 | 99 | 22.88 | PASS |
| | | 50 | 0 | 22.02 | PASS |
| | | 50 | 25 | 21.96 | PASS |
| | | 50 | 50 | 21.94 | PASS |
| | | 100 | 0 | 21.99 | PASS |

| | | | | | |
|---|---|---|---|---|---|
| | HCH | 1 | 0 | 23.34 | PASS |
| | | 1 | 49 | 23.28 | PASS |
| | | 1 | 99 | 23.24 | PASS |
| | | 50 | 0 | 22.3 | PASS |
| | | 50 | 25 | 22.34 | PASS |
| | | 50 | 50 | 22.32 | PASS |
| | | 100 | 0 | 22.37 | PASS |
| 16QAM | LCH | 1 | 0 | 22.38 | PASS |
| | | 1 | 49 | 22.35 | PASS |
| | | 1 | 99 | 22.19 | PASS |
| | | 50 | 0 | 20.98 | PASS |
| | | 50 | 25 | 21.03 | PASS |
| | | 50 | 50 | 20.98 | PASS |
| | | 100 | 0 | 21.06 | PASS |
| | MCH | 1 | 0 | 22.29 | PASS |
| | | 1 | 49 | 22.35 | PASS |
| | | 1 | 99 | 22.3 | PASS |
| | | 50 | 0 | 21.03 | PASS |
| | | 50 | 25 | 21.05 | PASS |
| | | 50 | 50 | 21.03 | PASS |
| | | 100 | 0 | 21.08 | PASS |
| | HCH | 1 | 0 | 22.66 | PASS |
| | | 1 | 49 | 22.63 | PASS |
| | | 1 | 99 | 22.6 | PASS |
| | | 50 | 0 | 21.34 | PASS |
| | | 50 | 25 | 21.41 | PASS |
| | | 50 | 50 | 21.3 | PASS |
| | | 100 | 0 | 21.35 | PASS |

# Appendix B: Peak-to-Average Ratio

## Test Result

### Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | MCH | 1 | 0 | 4.11 | <13 | PASS |
| 16QAM | MCH | 1 | 0 | 4.81 | <13 | PASS |

### Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | MCH | 1 | 0 | 3.95 | <13 | PASS |
| 16QAM | MCH | 1 | 0 | 4.69 | <13 | PASS |

### Channel Bandwidth: 15 MHz

| Channel Bandwidth: 15 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | MCH | 1 | 0 | 3.9 | <13 | PASS |
| 16QAM | MCH | 1 | 0 | 4.46 | <13 | PASS |

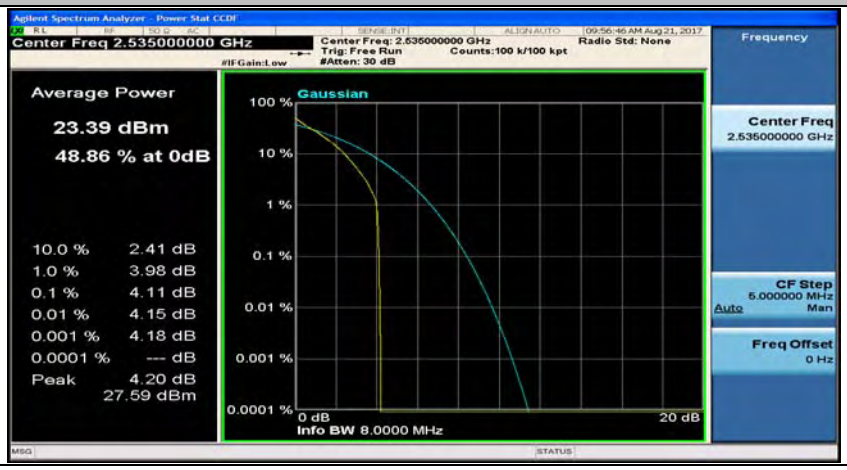
### Channel Bandwidth: 20 MHz

| Channel Bandwidth: 20 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Peak-to-Average Ratio [dB] | Limit [dB] | Verdict |
| | | Size | Offset | | | |
| QPSK | MCH | 1 | 0 | 3.85 | <13 | PASS |
| 16QAM | MCH | 1 | 0 | 4.45 | <13 | PASS |

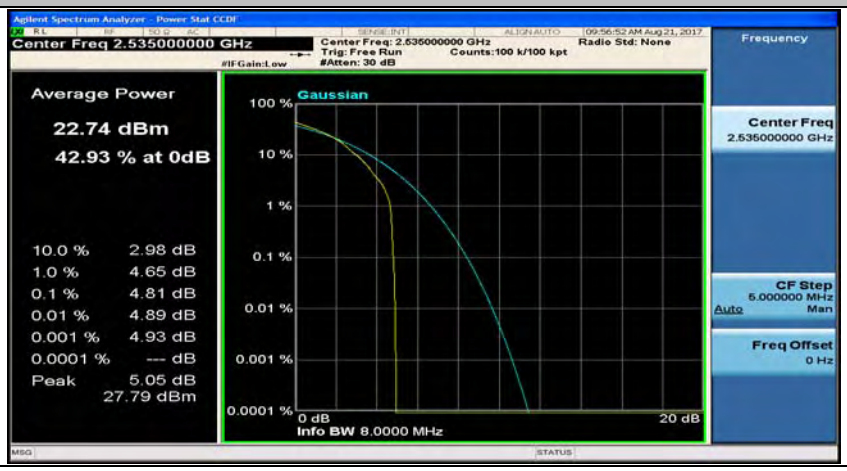
## Test Graphs

## Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

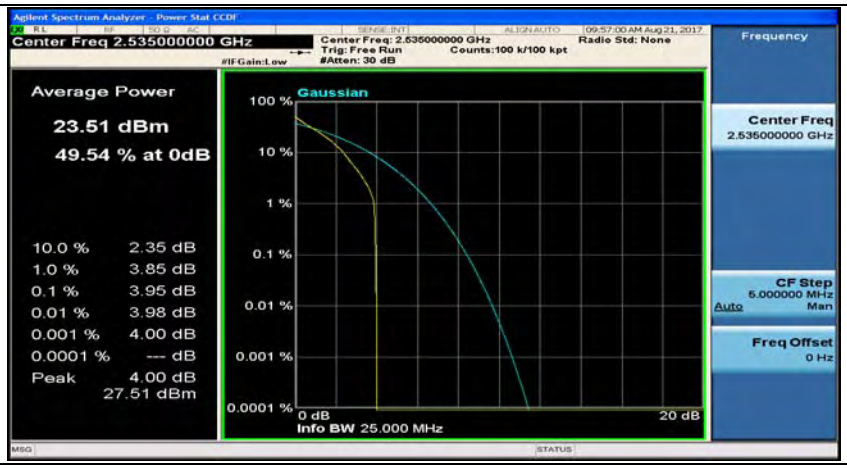



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

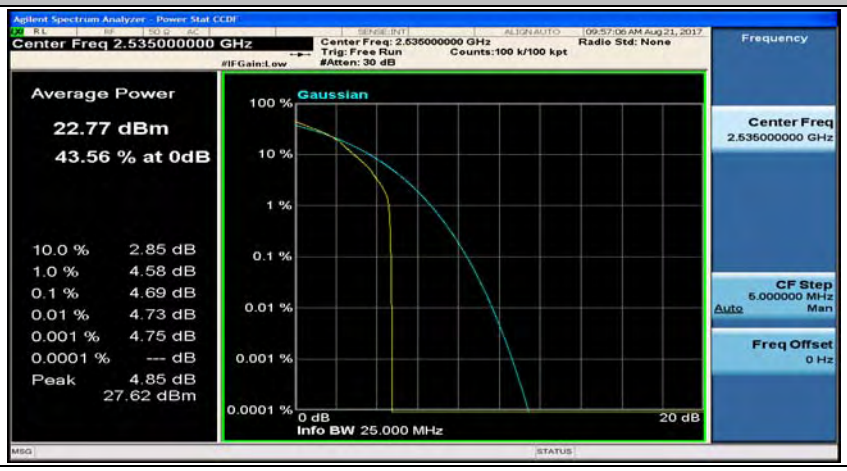



## Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

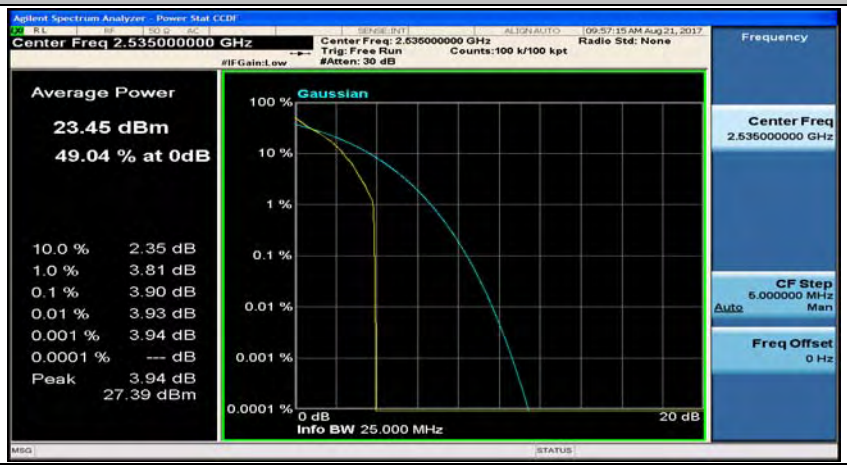



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0




## Channel Bandwidth: 15 MHz

(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

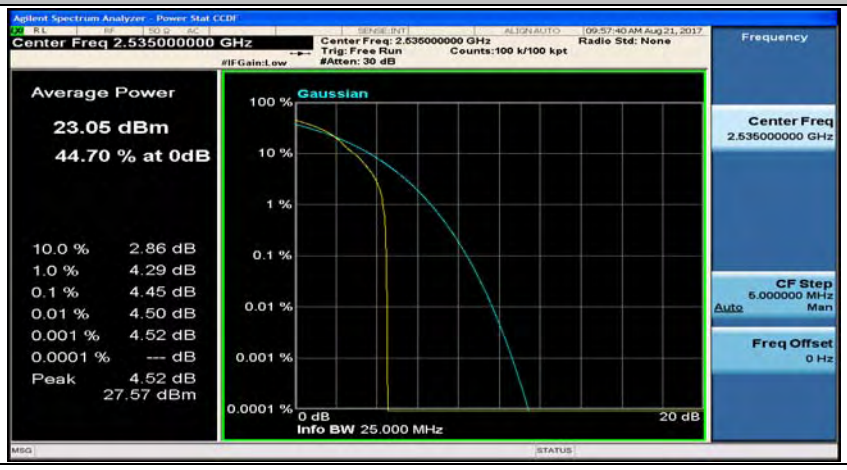



(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

## Channel Bandwidth: 20 MHz

(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0

(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0



# Appendix C: 26dB Bandwidth and Occupied Bandwidth

## Test Result

### Channel Bandwidth: 5 MHz

| Channel Bandwidth: 5 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 25 | 0 | 4.471 | 4.712 | PASS |
| | MCH | 25 | 0 | 4.471 | 4.663 | PASS |
| | HCH | 25 | 0 | 4.471 | 4.679 | PASS |
| 16QAM | LCH | 25 | 0 | 4.487 | 4.679 | PASS |
| | MCH | 25 | 0 | 4.487 | 4.728 | PASS |
| | HCH | 25 | 0 | 4.471 | 4.760 | PASS |

### Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 50 | 0 | 8.942 | 9.327 | PASS |
| | MCH | 50 | 0 | 8.910 | 9.295 | PASS |
| | HCH | 50 | 0 | 8.910 | 9.327 | PASS |
| 16QAM | LCH | 50 | 0 | 8.942 | 9.327 | PASS |
| | MCH | 50 | 0 | 8.974 | 9.359 | PASS |
| | HCH | 50 | 0 | 8.942 | 9.295 | PASS |

### Channel Bandwidth: 15 MHz

| Channel Bandwidth: 15 MHz | | | | | |
|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | Occupied | 26dB Bandwidth | Verdict |

| | | Size | Offset | Bandwidth (MHz) | (MHz) | |
|---|---|---|---|---|---|---|
| QPSK | LCH | 75 | 0 | 13.413 | 14.231 | PASS |
| | MCH | 75 | 0 | 13.462 | 14.231 | PASS |
| | HCH | 75 | 0 | 13.413 | 14.231 | PASS |
| 16QAM | LCH | 75 | 0 | 13.413 | 14.231 | PASS |
| | MCH | 75 | 0 | 13.462 | 14.231 | PASS |
| | HCH | 75 | 0 | 13.413 | 14.183 | PASS |

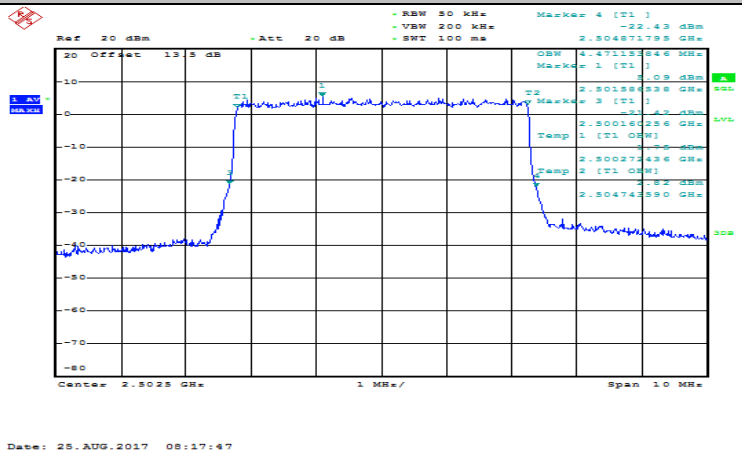
## Channel Bandwidth: 20 MHz

| Channel Bandwidth: 20 MHz | | | | | | |
|---|---|---|---|---|---|---|
| Modulation | Channel | RB Configuration | | Occupied Bandwidth (MHz) | 26dB Bandwidth (MHz) | Verdict |
| | | Size | Offset | | | |
| QPSK | LCH | 100 | 0 | 17.821 | 18.718 | PASS |
| | MCH | 100 | 0 | 17.821 | 18.718 | PASS |
| | HCH | 100 | 0 | 17.821 | 18.718 | PASS |
| 16QAM | LCH | 100 | 0 | 17.821 | 18.718 | PASS |
| | MCH | 100 | 0 | 17.821 | 18.718 | PASS |
| | HCH | 100 | 0 | 17.821 | 18.718 | PASS |

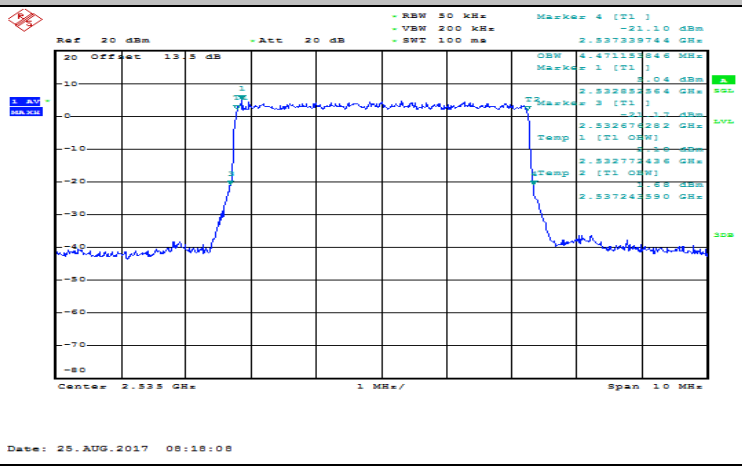
## Test Graphs

## Channel Bandwidth: 5 MHz

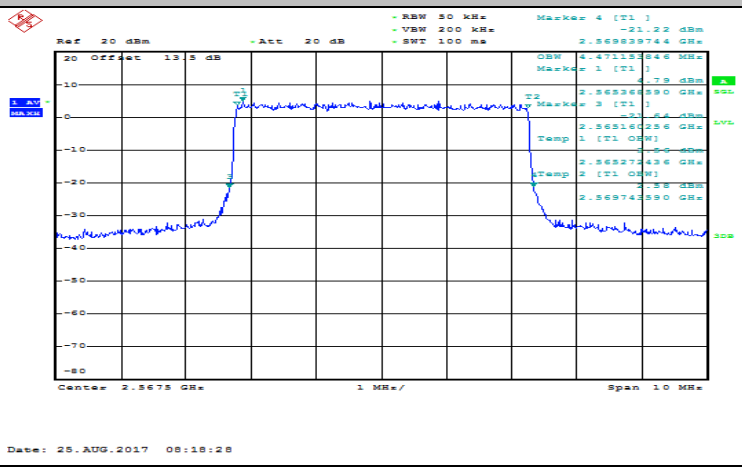
(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



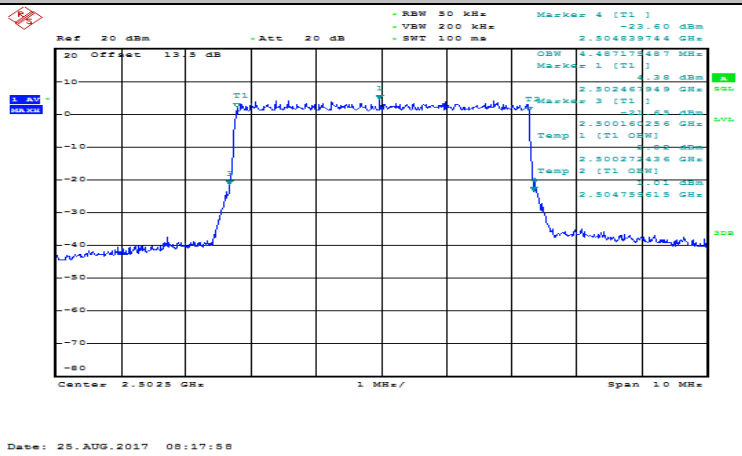

(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0



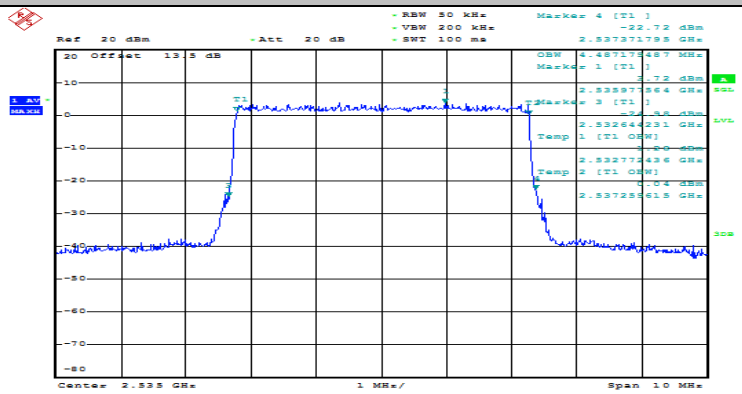

(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



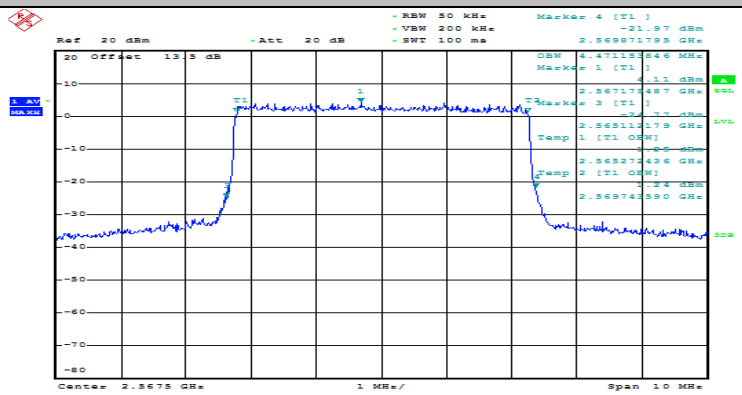
(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0




(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

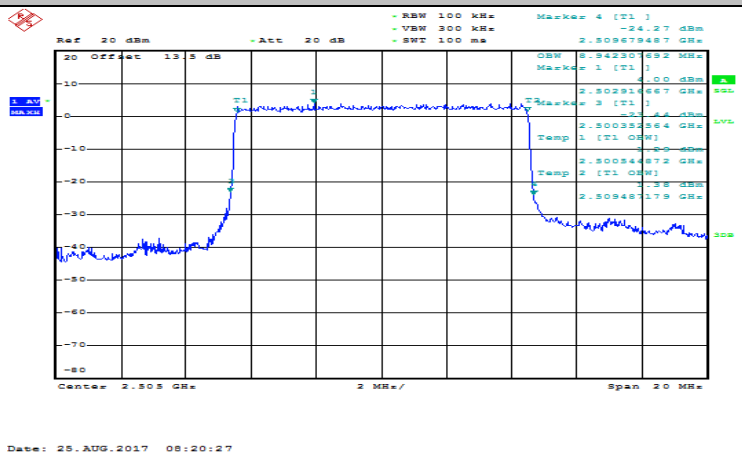



(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0

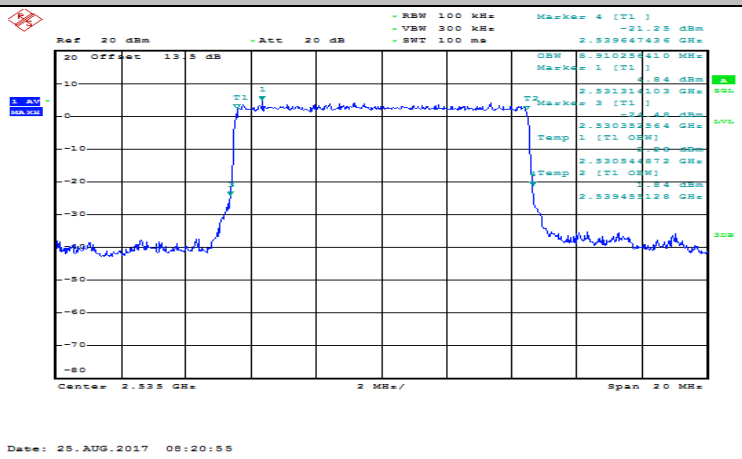


## Channel Bandwidth: 10 MHz

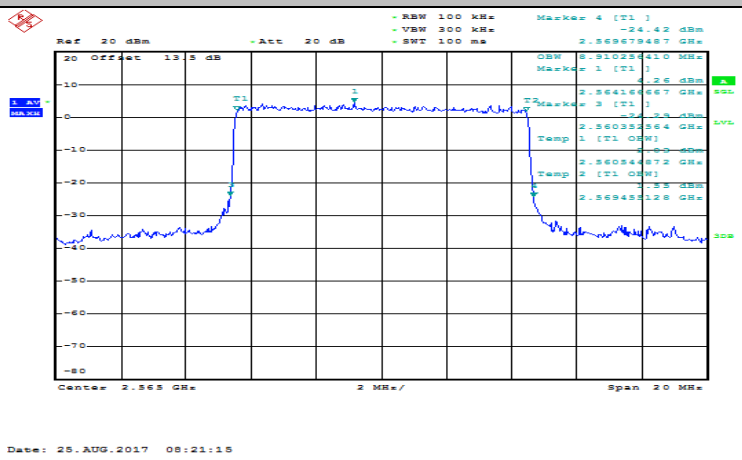
(Channel Bandwidth: 10 MHz)_LCH_QPSK_50RB#0



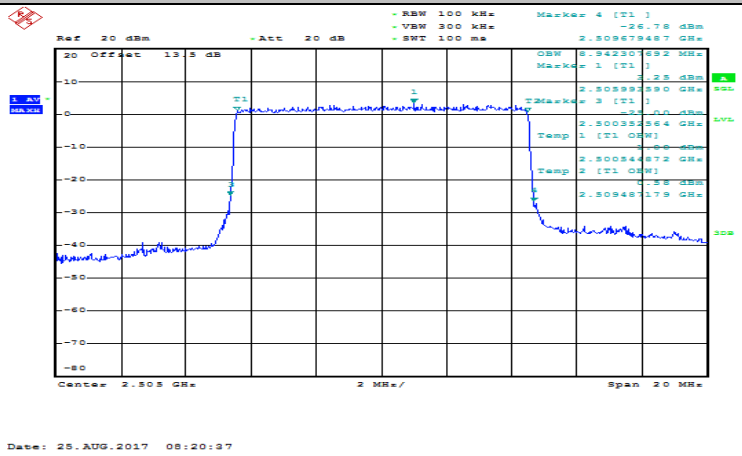

(Channel Bandwidth: 10 MHz)_MCH_QPSK_50RB#0



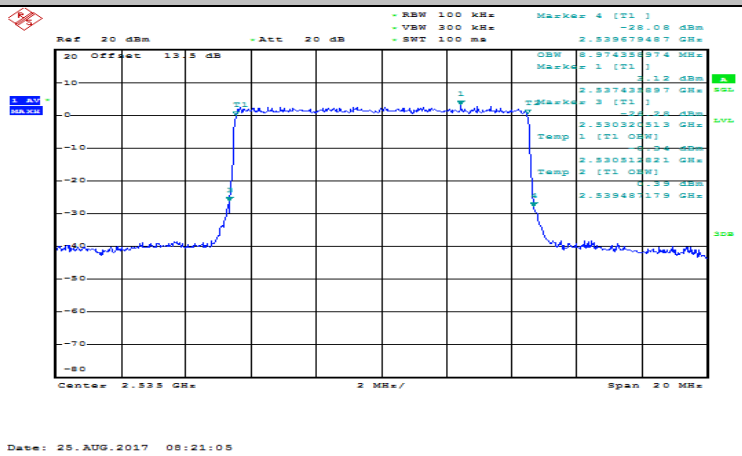

(Channel Bandwidth: 10 MHz)_HCH_QPSK_50RB#0



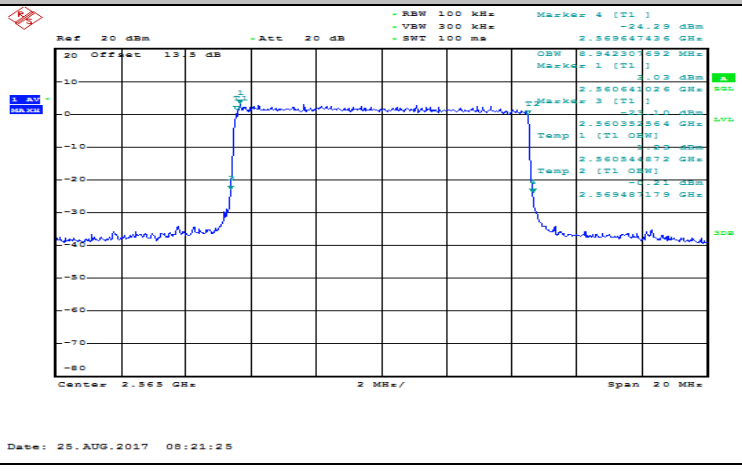
(Channel Bandwidth: 10 MHz)_LCH_16QAM_50RB#0




(Channel Bandwidth: 10 MHz)_MCH_16QAM_50RB#0

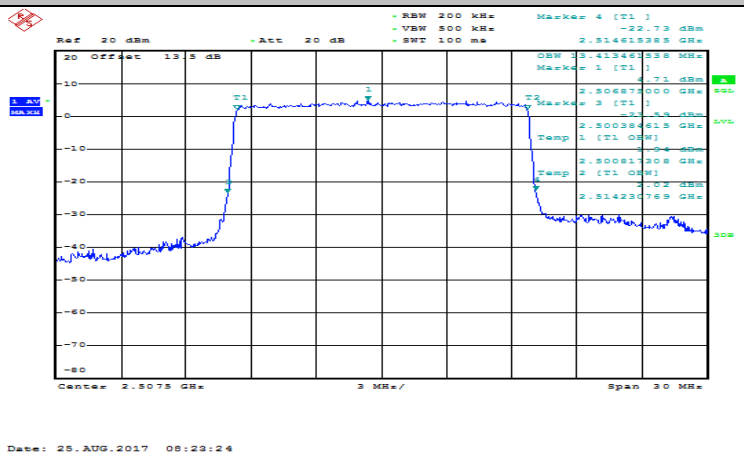



(Channel Bandwidth: 10 MHz)_HCH_16QAM_50RB#0

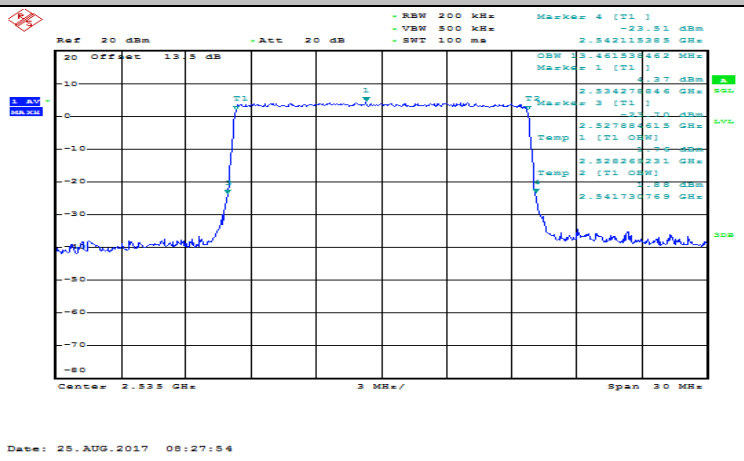


## Channel Bandwidth: 15 MHz

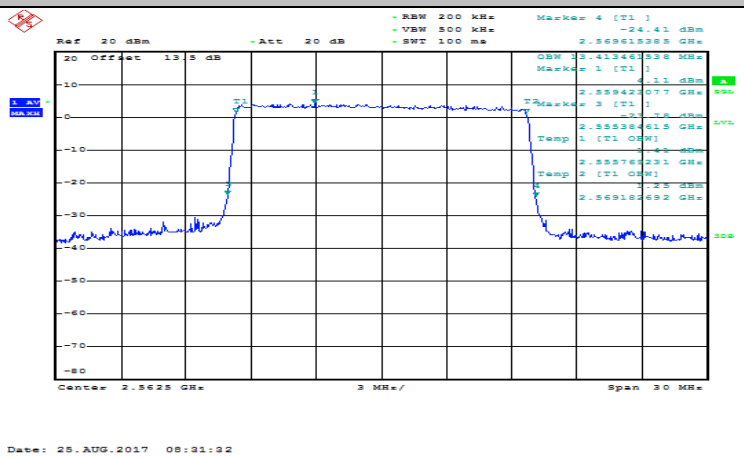
(Channel Bandwidth: 15 MHz)_LCH_QPSK_75RB#0



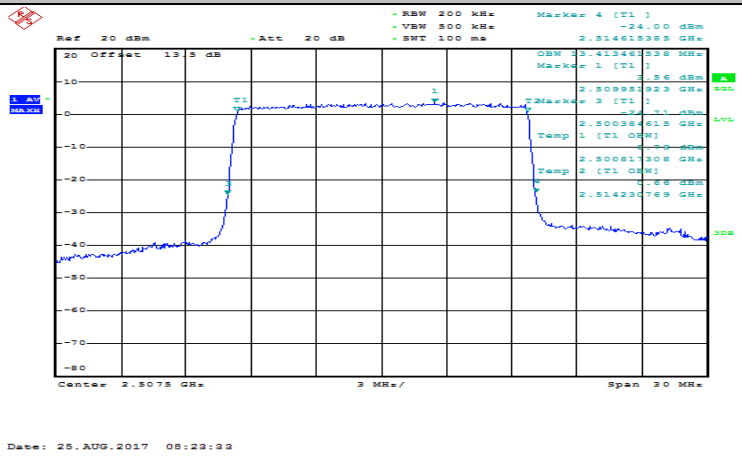

(Channel Bandwidth: 15 MHz)_MCH_QPSK_75RB#0



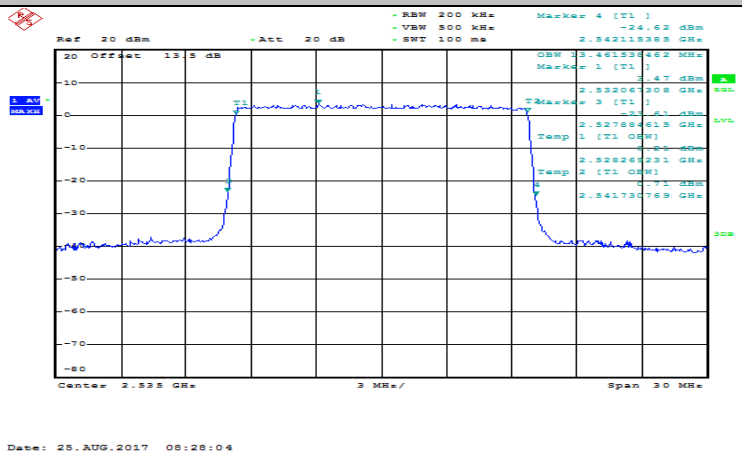

(Channel Bandwidth: 15 MHz)_HCH_QPSK_75RB#0



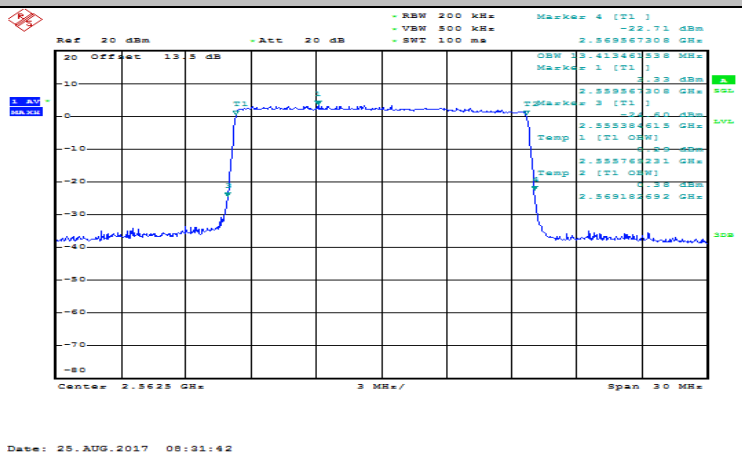
(Channel Bandwidth: 15 MHz)_LCH_16QAM_75RB#0




(Channel Bandwidth: 15 MHz)_MCH_16QAM_75RB#0

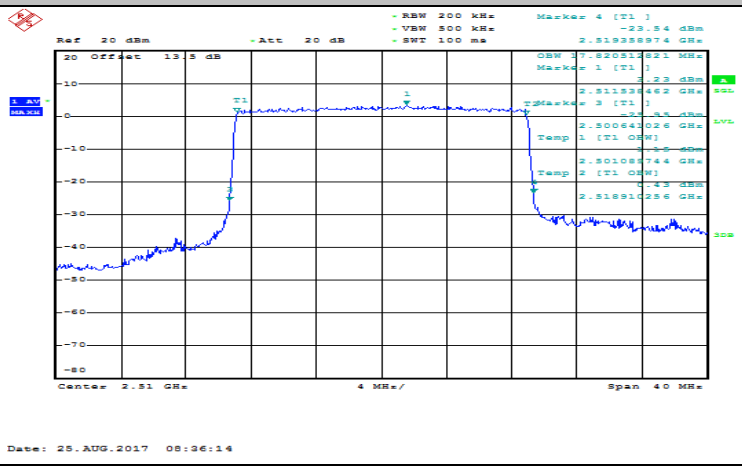



(Channel Bandwidth: 15 MHz)_HCH_16QAM_75RB#0

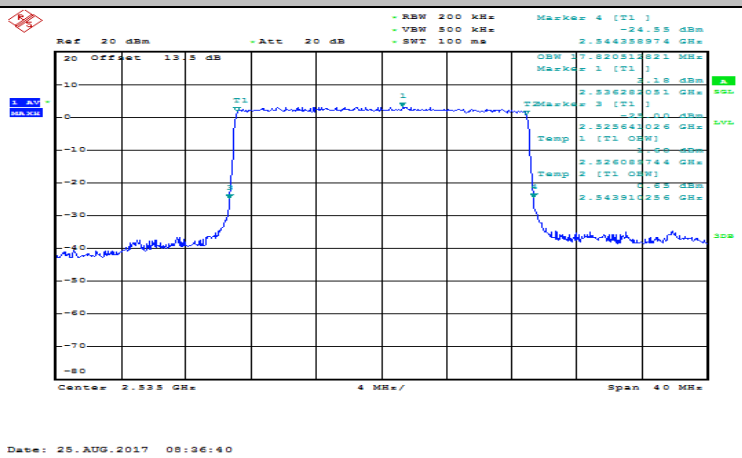


## Channel Bandwidth: 20 MHz

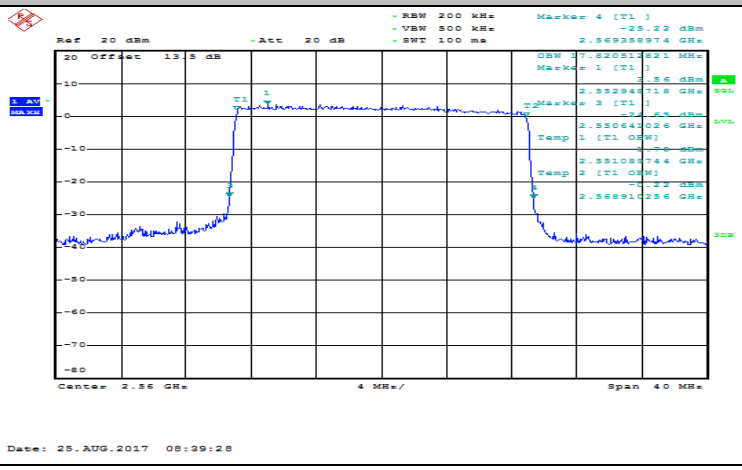
(Channel Bandwidth: 20 MHz)_LCH_QPSK_100RB#0



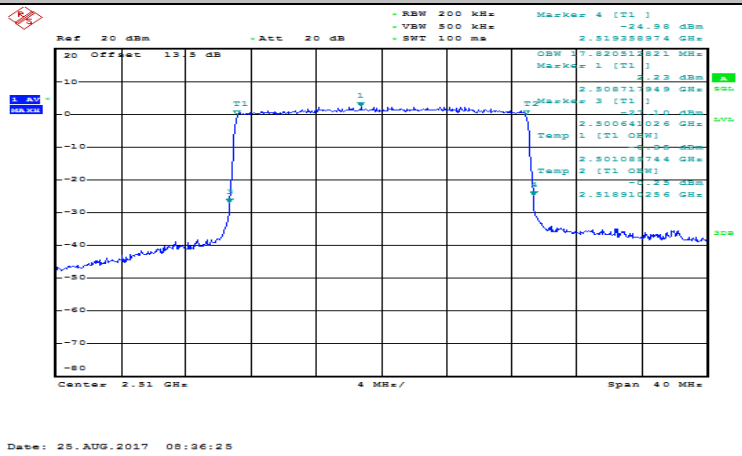

(Channel Bandwidth: 20 MHz)_MCH_QPSK_100RB#0




(Channel Bandwidth: 20 MHz)_HCH_QPSK_100RB#0

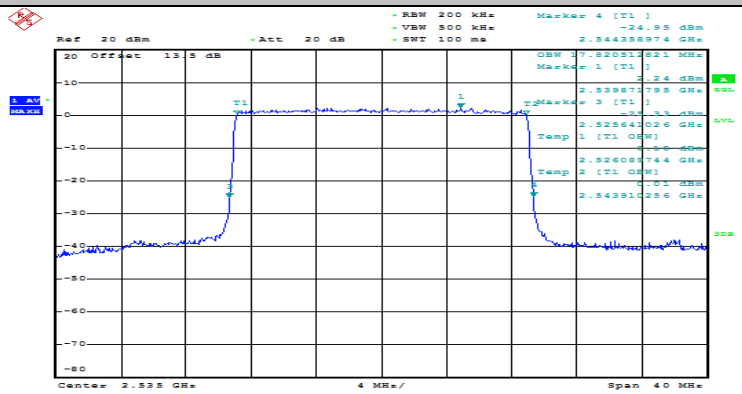


(Channel Bandwidth: 20 MHz)_LCH_16QAM_100RB#0



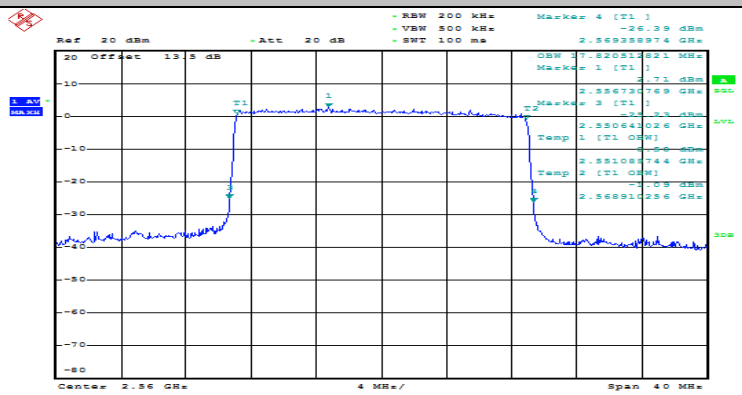

Date: 25.AUG.2017 08:36:25

(Channel Bandwidth: 20 MHz)_MCH_16QAM_100RB#0




Date: 25.AUG.2017 08:36:49

(Channel Bandwidth: 20 MHz)_HCH_16QAM_100RB#0




Date: 25.AUG.2017 08:39:38

# Appendix D: Band Edge

## Test Graphs

## Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0

(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0

(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0

(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0

## Channel Bandwidth: 10 MHz

(Channel Bandwidth: 10 MHz)_LCH_QPSK_50RB#0

(Channel Bandwidth: 10 MHz)_HCH_QPSK_50RB#0

(Channel Bandwidth: 10 MHz)_LCH_16QAM_50RB#0

(Channel Bandwidth: 10 MHz)_HCH_16QAM_50RB#0

## Channel Bandwidth: 15 MHz

(Channel Bandwidth: 15 MHz)_LCH_QPSK_75RB#0

(Channel Bandwidth: 15 MHz)_HCH_QPSK_75RB#0

(Channel Bandwidth: 15 MHz)_LCH_16QAM_75RB#0

(Channel Bandwidth: 15 MHz)_HCH_16QAM_75RB#0

## Channel Bandwidth: 20 MHz

(Channel Bandwidth: 20 MHz)_LCH_QPSK_100RB#0

(Channel Bandwidth: 20 MHz)_HCH_QPSK_100RB#0

(Channel Bandwidth: 20 MHz)_LCH_16QAM_100RB#0

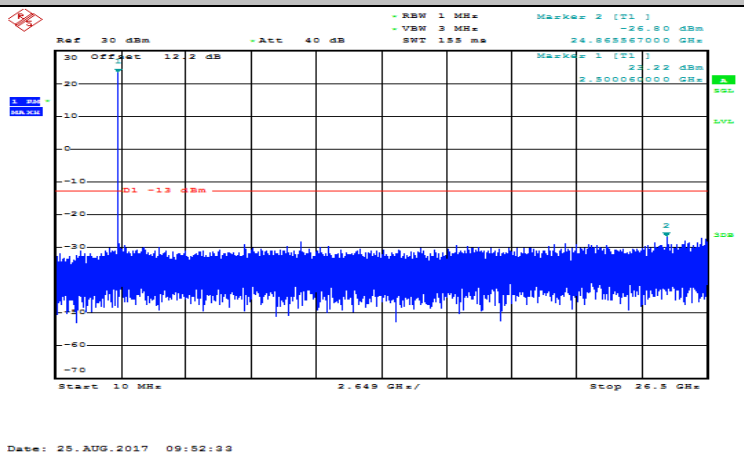
(Channel Bandwidth: 20 MHz)_HCH_16QAM_100RB#0

# Appendix E: Conducted Spurious Emission

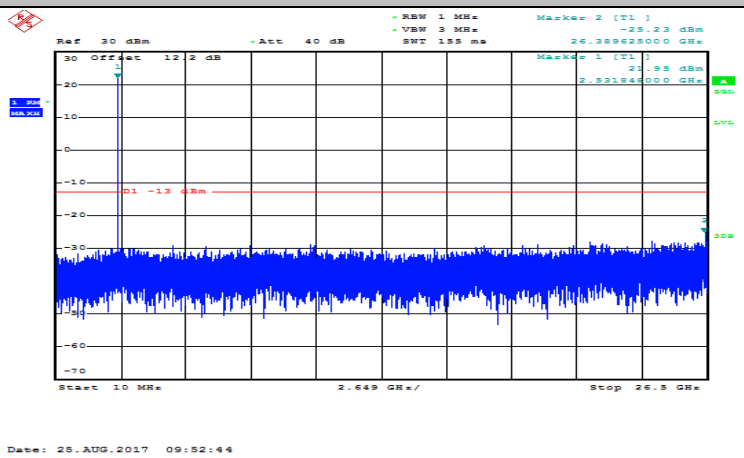
## Test Graphs

## Channel Bandwidth: 5 MHz

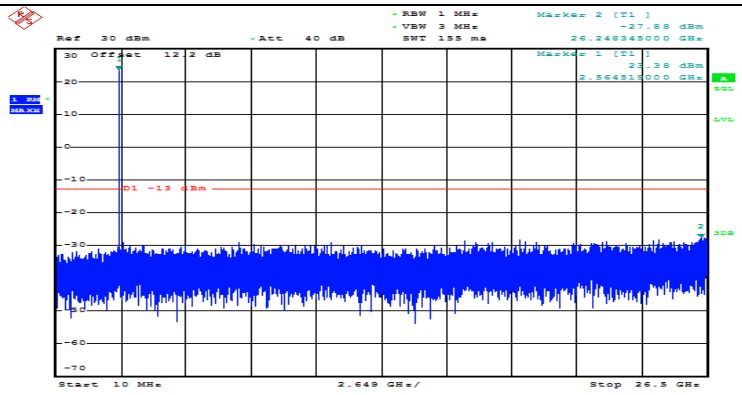
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0




(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

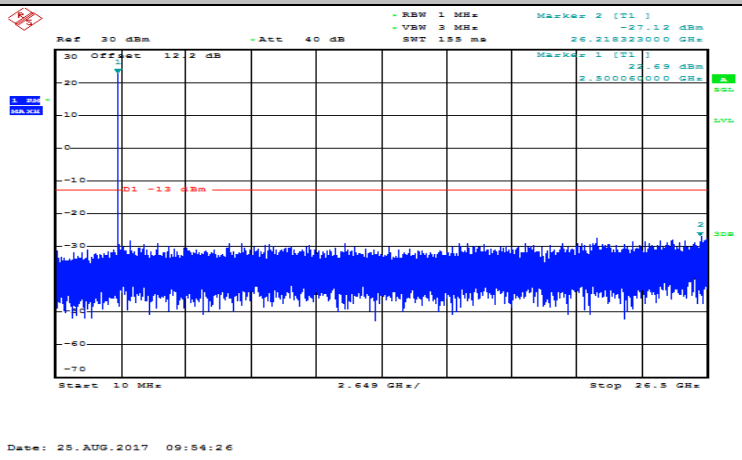



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

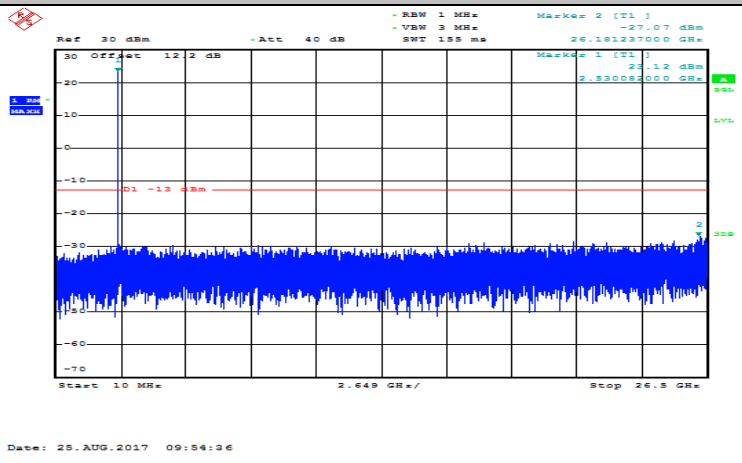



## Channel Bandwidth: 10 MHz

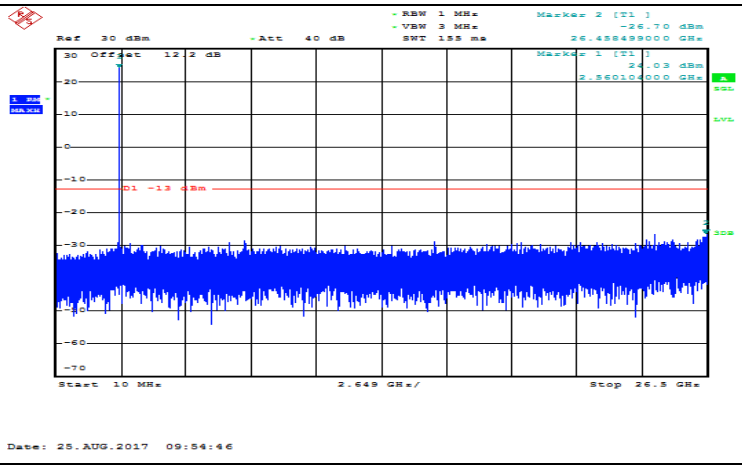
(Channel Bandwidth: 10 MHz)_LCH_QPSK_1RB#0




(Channel Bandwidth: 10 MHz)_MCH_QPSK_1RB#0

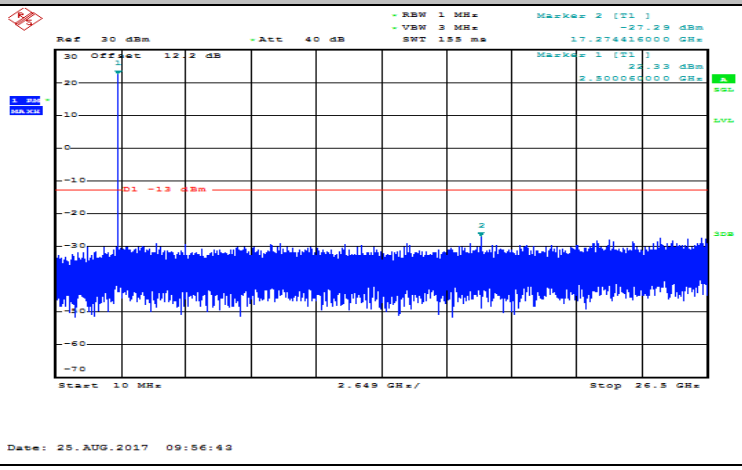



(Channel Bandwidth: 10 MHz)_HCH_QPSK_1RB#0

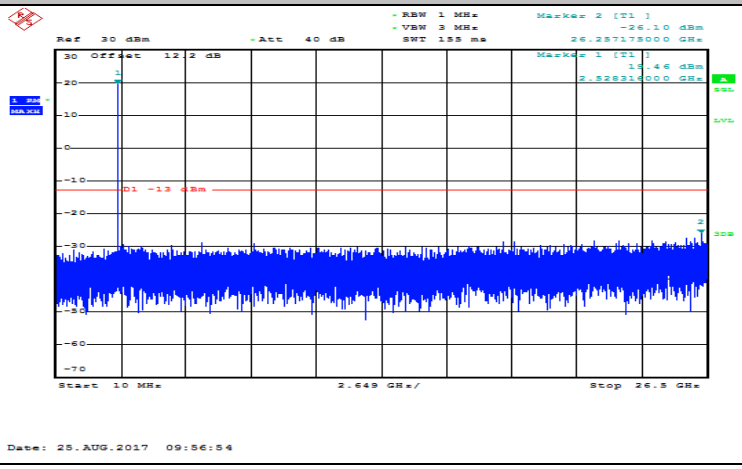



## Channel Bandwidth: 15 MHz

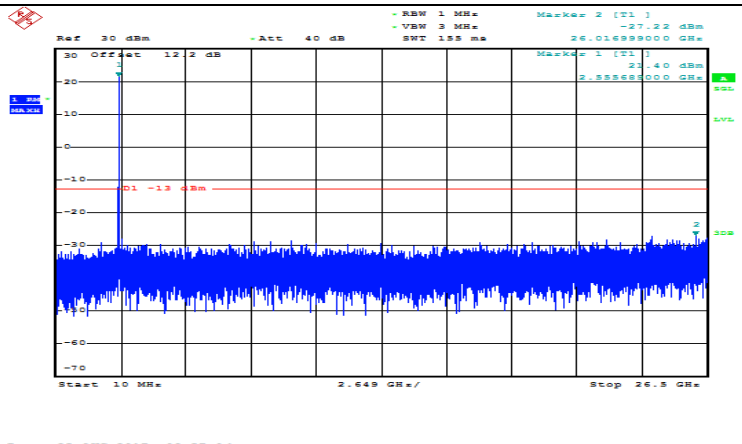
(Channel Bandwidth: 15 MHz)_LCH_QPSK_1RB#0




(Channel Bandwidth: 15 MHz)_MCH_QPSK_1RB#0

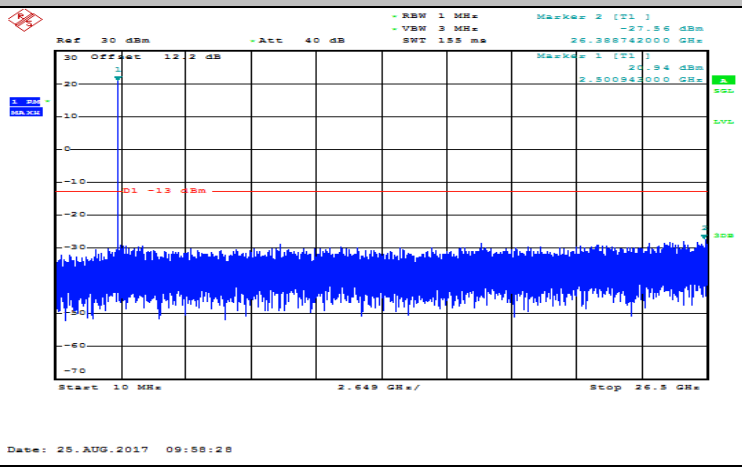



(Channel Bandwidth: 15 MHz)_HCH_QPSK_1RB#0

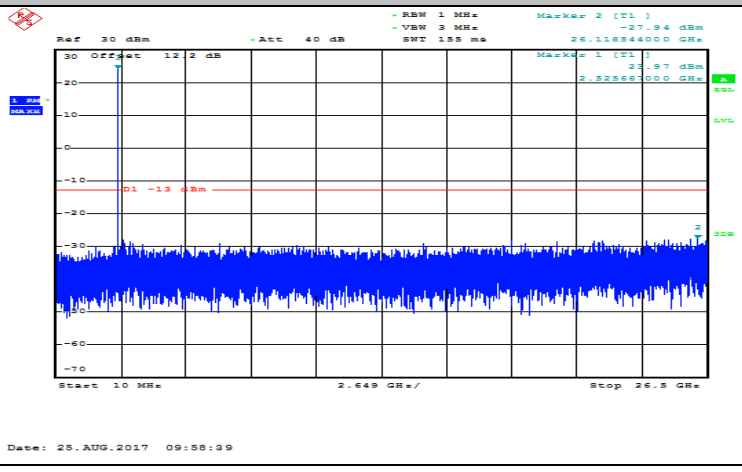



## Channel Bandwidth: 20 MHz

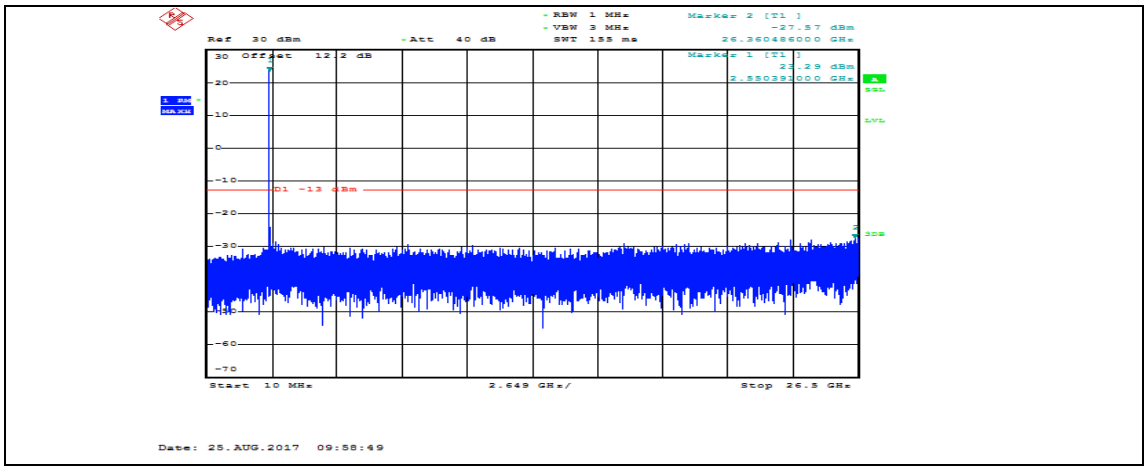
(Channel Bandwidth: 20 MHz)_LCH_QPSK_1RB#0




(Channel Bandwidth: 20 MHz)_MCH_QPSK_1RB#0




(Channel Bandwidth: 20 MHz)_HCH_QPSK_1RB#0




# Appendix F: Frequency Stability

## Test Result

## 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 | 1.10 | 0.000440 | ± 2.5 | PASS |
| | | VN | TN | 1.40 | 0.000559 | ± 2.5 | PASS |
| | | VH | TN | 3.90 | 0.001558 | ± 2.5 | PASS |
| | MCH | VL | TN | -4.50 | -0.001775 | ± 2.5 | PASS |
| | | VN | TN | -5.40 | -0.002130 | ± 2.5 | PASS |
| | | VH | TN | -3.40 | -0.001341 | ± 2.5 | PASS |
| | HCH | VL | TN | 1.00 | 0.000389 | ± 2.5 | PASS |
| | | VN | TN | 1.80 | 0.000701 | ± 2.5 | PASS |
| | | VH | TN | 5.00 | 0.001947 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 1.20 | 0.000480 | ± 2.5 | PASS |
| | | VN | -20 | 1.10 | 0.000440 | ± 2.5 | PASS |
| | | VN | -10 | 1.40 | 0.000559 | ± 2.5 | PASS |
| | | VN | 0 | 5.40 | 0.002158 | ± 2.5 | PASS |
| | | VN | 10 | 2.30 | 0.000919 | ± 2.5 | PASS |
| | | VN | 20 | 3.10 | 0.001239 | ± 2.5 | PASS |
| | | VN | 30 | 3.70 | 0.001479 | ± 2.5 | PASS |
| | | VN | 40 | 1.20 | 0.000480 | ± 2.5 | PASS |
| | | VN | 50 | 0.60 | 0.000240 | ± 2.5 | PASS |
| | MCH | VN | -30 | -3.00 | -0.001183 | ± 2.5 | PASS |
| | | VN | -20 | -3.50 | -0.001381 | ± 2.5 | PASS |
| | | VN | -10 | -0.70 | -0.000276 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 0 | -2.50 | -0.000986 | ± 2.5 | PASS |
| | | VN | 10 | -1.60 | -0.000631 | ± 2.5 | PASS |
| | | VN | 20 | -0.10 | -0.000039 | ± 2.5 | PASS |
| | | VN | 30 | -2.70 | -0.001065 | ± 2.5 | PASS |
| | | VN | 40 | -2.40 | -0.000947 | ± 2.5 | PASS |
| | | VN | 50 | -4.80 | -0.001893 | ± 2.5 | PASS |
| | HCH | VN | -30 | 4.50 | 0.001753 | ± 2.5 | PASS |
| | | VN | -20 | 4.70 | 0.001831 | ± 2.5 | PASS |
| | | VN | -10 | 5.00 | 0.001947 | ± 2.5 | PASS |
| | | VN | 0 | 4.00 | 0.001558 | ± 2.5 | PASS |
| | | VN | 10 | 3.20 | 0.001246 | ± 2.5 | PASS |
| | | VN | 20 | 4.50 | 0.001753 | ± 2.5 | PASS |
| | | VN | 30 | 4.60 | 0.001792 | ± 2.5 | PASS |
| | | VN | 40 | 5.70 | 0.002220 | ± 2.5 | PASS |
| | | VN | 50 | 2.40 | 0.000935 | ± 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 | -1.70 | -0.000679 | ± 2.5 | PASS |
| | | VN | TN | -1.20 | -0.000479 | ± 2.5 | PASS |
| | | VH | TN | -2.30 | -0.000918 | ± 2.5 | PASS |
| | MCH | VL | TN | -0.30 | -0.000118 | ± 2.5 | PASS |
| | | VN | TN | 4.20 | 0.001657 | ± 2.5 | PASS |
| | | VH | TN | -3.10 | -0.001223 | ± 2.5 | PASS |
| | HCH | VL | TN | 1.40 | 0.000546 | ± 2.5 | PASS |
| | | VN | TN | 5.20 | 0.002027 | ± 2.5 | PASS |
| | | VH | TN | -1.10 | -0.000429 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | -4.60 | -0.001836 | ± 2.5 | PASS |
| | | VN | -20 | -2.10 | -0.000838 | ± 2.5 | PASS |
| | | VN | -10 | -3.70 | -0.001477 | ± 2.5 | PASS |
| | | VN | 0 | -3.30 | -0.001317 | ± 2.5 | PASS |
| | | VN | 10 | -5.80 | -0.002315 | ± 2.5 | PASS |
| | | VN | 20 | -0.80 | -0.000319 | ± 2.5 | PASS |
| | | VN | 30 | -4.70 | -0.001876 | ± 2.5 | PASS |
| | | VN | 40 | -1.00 | -0.000399 | ± 2.5 | PASS |
| | | VN | 50 | -1.40 | -0.000559 | ± 2.5 | PASS |
| | MCH | VN | -30 | -5.10 | -0.002012 | ± 2.5 | PASS |
| | | VN | -20 | -2.80 | -0.001105 | ± 2.5 | PASS |
| | | VN | -10 | -3.30 | -0.001302 | ± 2.5 | PASS |
| | | VN | 0 | -2.90 | -0.001144 | ± 2.5 | PASS |
| | | VN | 10 | -2.70 | -0.001065 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 20 | -1.50 | -0.000592 | ± 2.5 | PASS |
| | | VN | 30 | -2.80 | -0.001105 | ± 2.5 | PASS |
| | | VN | 40 | -2.20 | -0.000868 | ± 2.5 | PASS |
| | | VN | 50 | -4.10 | -0.001617 | ± 2.5 | PASS |
| | HCH | VN | -30 | -1.60 | -0.000624 | ± 2.5 | PASS |
| | | VN | -20 | 0.90 | 0.000351 | ± 2.5 | PASS |
| | | VN | -10 | -0.70 | -0.000273 | ± 2.5 | PASS |
| | | VN | 0 | 0.70 | 0.000273 | ± 2.5 | PASS |
| | | VN | 10 | 2.80 | 0.001092 | ± 2.5 | PASS |
| | | VN | 20 | 0.50 | 0.000195 | ± 2.5 | PASS |
| | | VN | 30 | 0.60 | 0.000234 | ± 2.5 | PASS |
| | | VN | 40 | -1.80 | -0.000702 | ± 2.5 | PASS |
| | | VN | 50 | -0.80 | -0.000312 | ± 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 | -0.90 | -0.000359 | ± 2.5 | PASS |
| | | VN | TN | 1.20 | 0.000479 | ± 2.5 | PASS |
| | | VH | TN | 0.60 | 0.000239 | ± 2.5 | PASS |
| | MCH | VL | TN | -5.10 | -0.002012 | ± 2.5 | PASS |
| | | VN | TN | 1.70 | 0.000671 | ± 2.5 | PASS |
| | | VH | TN | -1.90 | -0.000750 | ± 2.5 | PASS |
| | HCH | VL | TN | 2.10 | 0.000820 | ± 2.5 | PASS |
| | | VN | TN | 11.30 | 0.004410 | ± 2.5 | PASS |
| | | VH | TN | 1.90 | 0.000741 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 2.10 | 0.000837 | ± 2.5 | PASS |
| | | VN | -20 | 1.30 | 0.000518 | ± 2.5 | PASS |
| | | VN | -10 | -3.30 | -0.001316 | ± 2.5 | PASS |
| | | VN | 0 | 1.30 | 0.000518 | ± 2.5 | PASS |
| | | VN | 10 | 0.40 | 0.000160 | ± 2.5 | PASS |
| | | VN | 20 | -0.80 | -0.000319 | ± 2.5 | PASS |
| | | VN | 30 | -0.40 | -0.000160 | ± 2.5 | PASS |
| | | VN | 40 | -0.10 | -0.000040 | ± 2.5 | PASS |
| | | VN | 50 | -2.80 | -0.001117 | ± 2.5 | PASS |
| | MCH | VN | -30 | -4.90 | -0.001933 | ± 2.5 | PASS |
| | | VN | -20 | -2.70 | -0.001065 | ± 2.5 | PASS |
| | | VN | -10 | -3.10 | -0.001223 | ± 2.5 | PASS |
| | | VN | 0 | -3.70 | -0.001460 | ± 2.5 | PASS |
| | | VN | 10 | -3.30 | -0.001302 | ± 2.5 | PASS |
| | | VN | 20 | -5.30 | -0.002091 | ± 2.5 | PASS |
| | | VN | 30 | -4.70 | -0.001854 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | VN | 40 | -1.90 | -0.000750 | ± 2.5 | PASS |
| | | VN | 50 | -3.10 | -0.001223 | ± 2.5 | PASS |
| | HCH | VN | -30 | 4.00 | 0.001561 | ± 2.5 | PASS |
| | | VN | -20 | 5.50 | 0.002146 | ± 2.5 | PASS |
| | | VN | -10 | 4.10 | 0.001600 | ± 2.5 | PASS |
| | | VN | 0 | 4.30 | 0.001678 | ± 2.5 | PASS |
| | | VN | 10 | 3.70 | 0.001444 | ± 2.5 | PASS |
| | | VN | 20 | 4.80 | 0.001873 | ± 2.5 | PASS |
| | | VN | 30 | 3.80 | 0.001483 | ± 2.5 | PASS |
| | | VN | 40 | 4.80 | 0.001873 | ± 2.5 | PASS |
| | | VN | 50 | 1.20 | 0.000468 | ± 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 | 0.30 | 0.000120 | ± 2.5 | PASS |
| | | VN | TN | 1.30 | 0.000518 | ± 2.5 | PASS |
| | | VH | TN | 0.90 | 0.000359 | ± 2.5 | PASS |
| | MCH | VL | TN | -7.20 | -0.002840 | ± 2.5 | PASS |
| | | VN | TN | 2.60 | 0.001026 | ± 2.5 | PASS |
| | | VH | TN | -2.90 | -0.001144 | ± 2.5 | PASS |
| | HCH | VL | TN | 3.30 | 0.001289 | ± 2.5 | PASS |
| | | VN | TN | 7.10 | 0.002773 | ± 2.5 | PASS |
| | | VH | TN | 4.50 | 0.001758 | ± 2.5 | PASS |
| Temperature | | | | | | | |
| Modulation | Channel | Voltage [Vdc] | Temperature (℃) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK | LCH | VN | -30 | 3.10 | 0.001235 | ± 2.5 | PASS |
| | | VN | -20 | 3.10 | 0.001235 | ± 2.5 | PASS |
| | | VN | -10 | 3.60 | 0.001434 | ± 2.5 | PASS |
| | | VN | 0 | 0.40 | 0.000159 | ± 2.5 | PASS |
| | | VN | 10 | 0.90 | 0.000359 | ± 2.5 | PASS |
| | | VN | 20 | 1.50 | 0.000598 | ± 2.5 | PASS |
| | | VN | 30 | 4.40 | 0.001753 | ± 2.5 | PASS |
| | | VN | 40 | 0.60 | 0.000239 | ± 2.5 | PASS |
| | | VN | 50 | -0.50 | -0.000199 | ± 2.5 | PASS |
| | MCH | VN | -30 | -1.60 | -0.000631 | ± 2.5 | PASS |
| | | VN | -20 | -3.90 | -0.001538 | ± 2.5 | PASS |
| | | VN | -10 | -1.60 | -0.000631 | ± 2.5 | PASS |
| | | VN | 0 | -5.20 | -0.002051 | ± 2.5 | PASS |
| | | VN | 10 | -3.30 | -0.001302 | ± 2.5 | PASS |
| | | VN | 20 | -3.70 | -0.001460 | ± 2.5 | PASS |
| | | VN | 30 | -5.20 | -0.002051 | ± 2.5 | PASS |
| | | VN | 40 | -2.60 | -0.001026 | ± 2.5 | PASS |
| | | VN | 50 | -0.40 | -0.000158 | ± 2.5 | PASS |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | HCH | VN | -30 | 2.60 | 0.001016 | ± 2.5 | PASS |
| | | VN | -20 | 0.70 | 0.000273 | ± 2.5 | PASS |
| | | VN | -10 | 3.20 | 0.001250 | ± 2.5 | PASS |
| | | VN | 0 | 2.20 | 0.000859 | ± 2.5 | PASS |
| | | VN | 10 | 2.80 | 0.001094 | ± 2.5 | PASS |
| | | VN | 20 | 3.20 | 0.001250 | ± 2.5 | PASS |
| | | VN | 30 | 3.10 | 0.001211 | ± 2.5 | PASS |
| | | VN | 40 | 0.50 | 0.000195 | ± 2.5 | PASS |
| | | VN | 50 | 5.90 | 0.002305 | ± 2.5 | PASS |