



(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_12RB#13



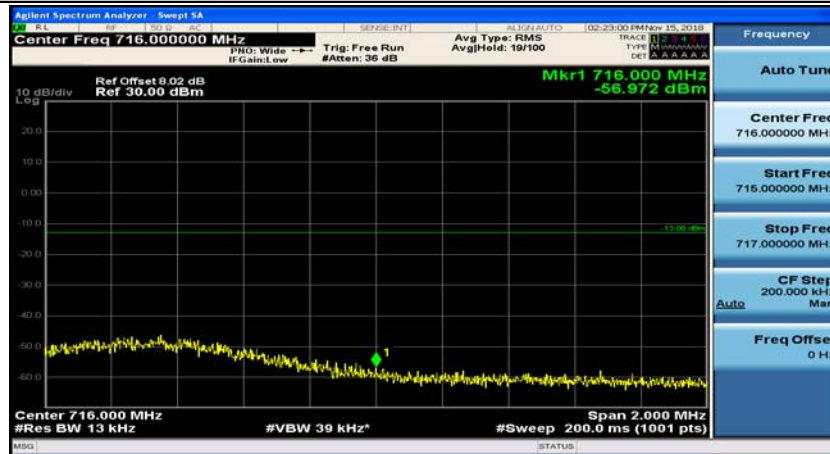
(Channel Bandwidth: 5 MHz)\_LCH\_16QAM\_25RB#0



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#0



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#12



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_1RB#24



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_12RB#0



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_12RB#6



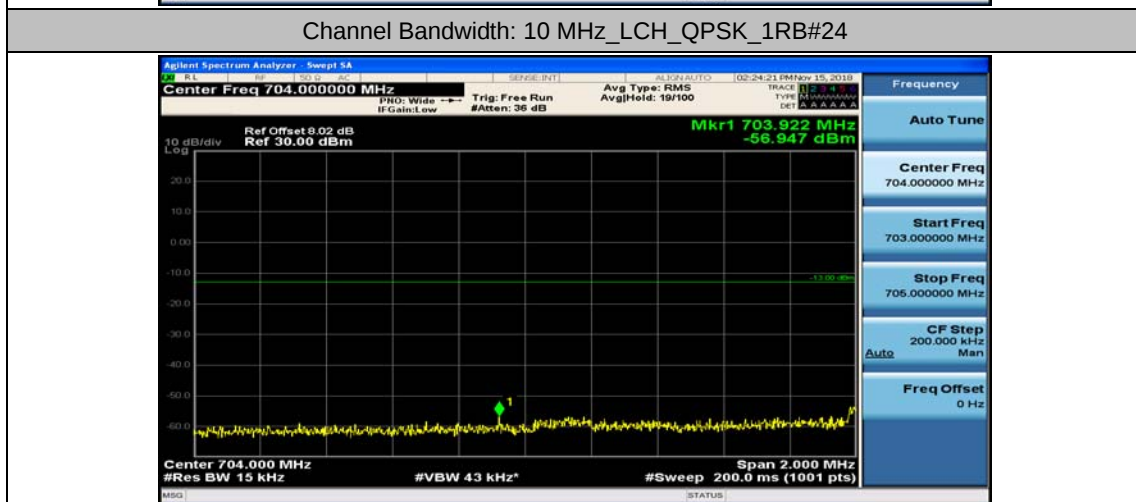
(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_12RB#13



(Channel Bandwidth: 5 MHz)\_HCH\_16QAM\_25RB#0



Channel Bandwidth: 10 MHz

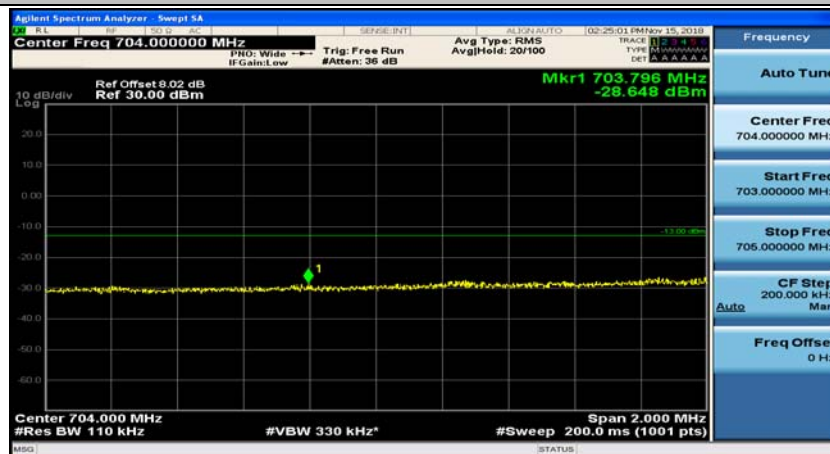




Channel Bandwidth: 10 MHz\_LCH\_QPSK\_25RB#0



Channel Bandwidth: 10 MHz\_LCH\_QPSK\_25RB#12



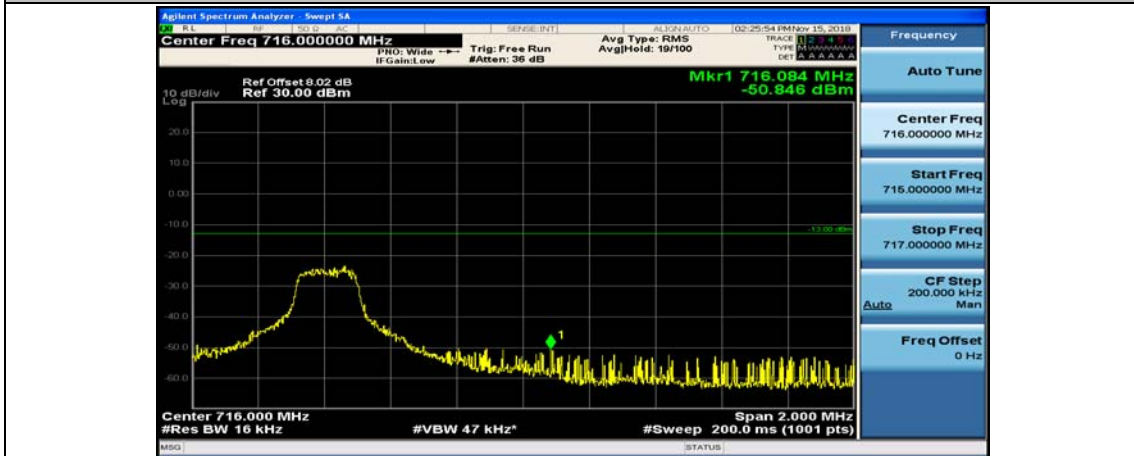
Channel Bandwidth: 10 MHz\_LCH\_QPSK\_25RB#25



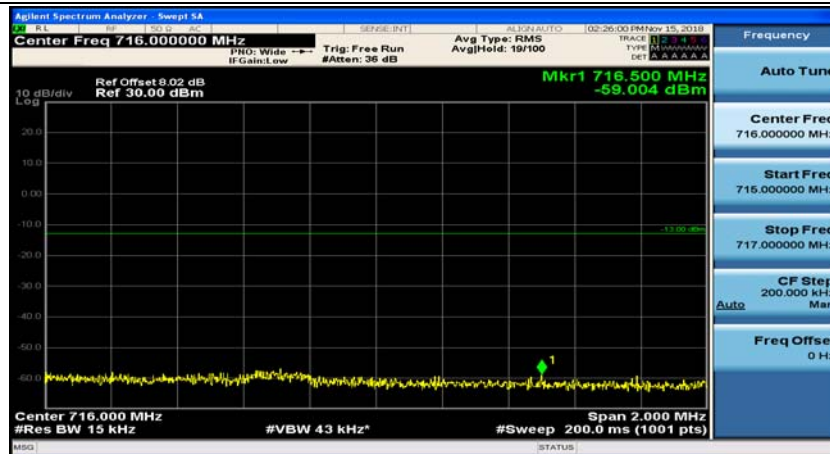
Channel Bandwidth: 10 MHz\_LCH\_QPSK\_50RB#0



Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#0



Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#24



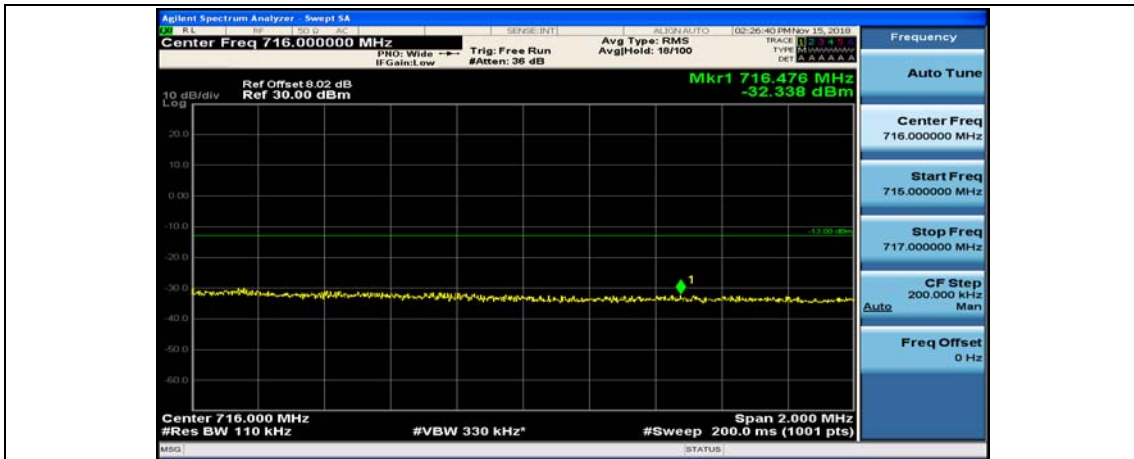
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_1RB#49



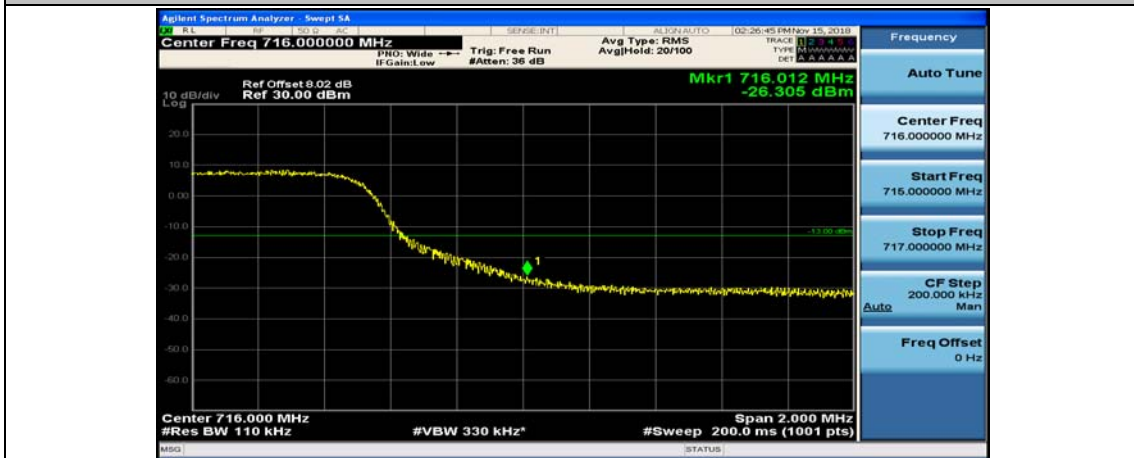
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_25RB#0



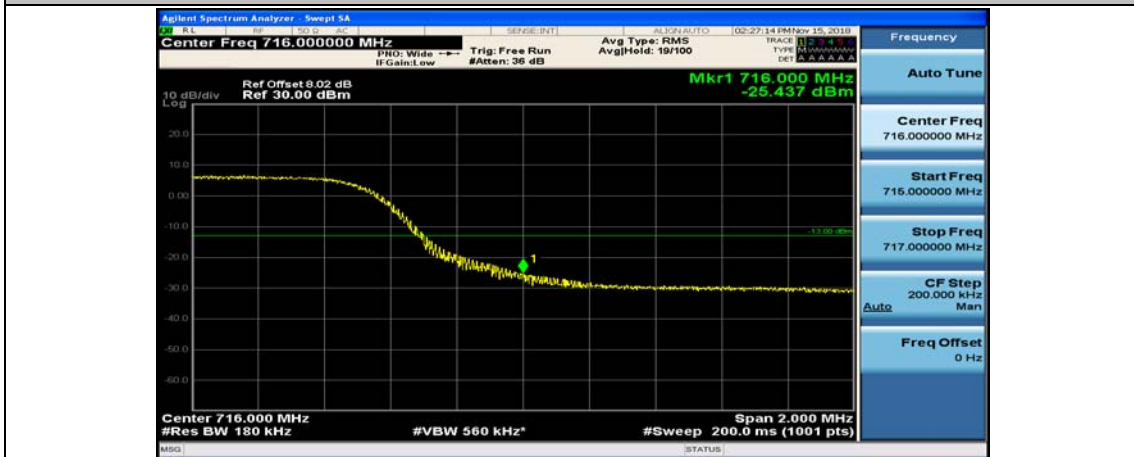
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_25RB#12



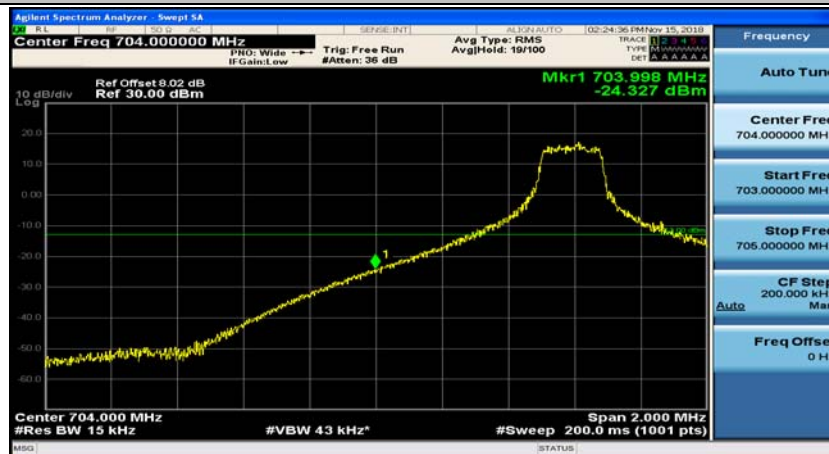
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_25RB#25



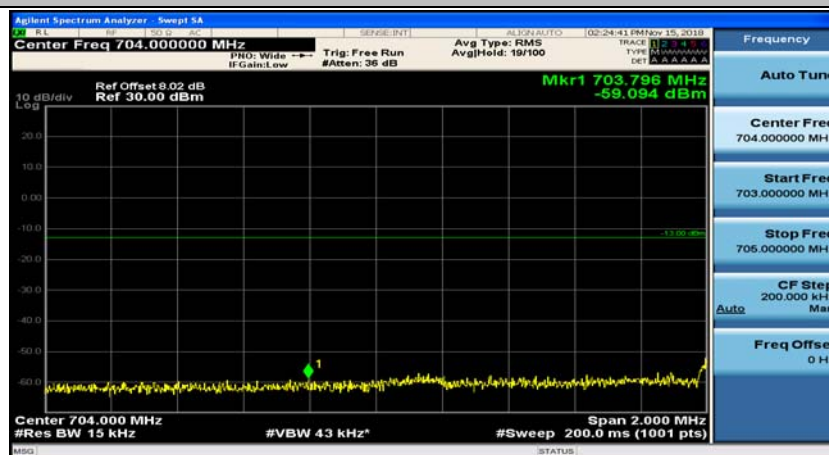
Channel Bandwidth: 10 MHz\_HCH\_QPSK\_50RB#0



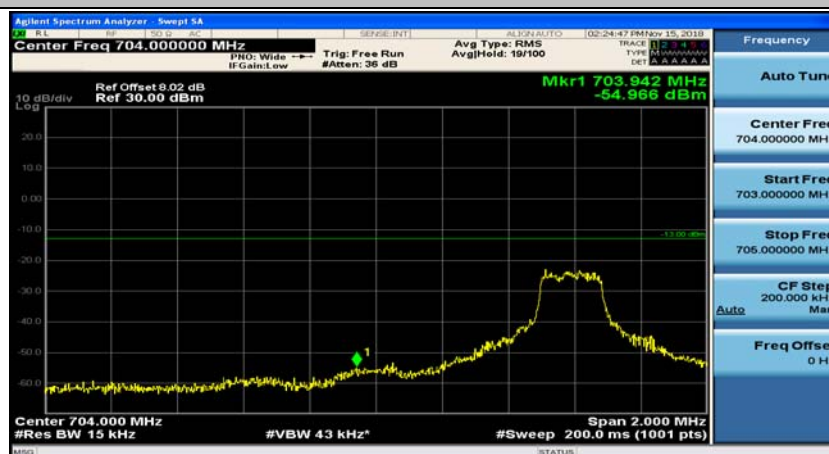
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#0



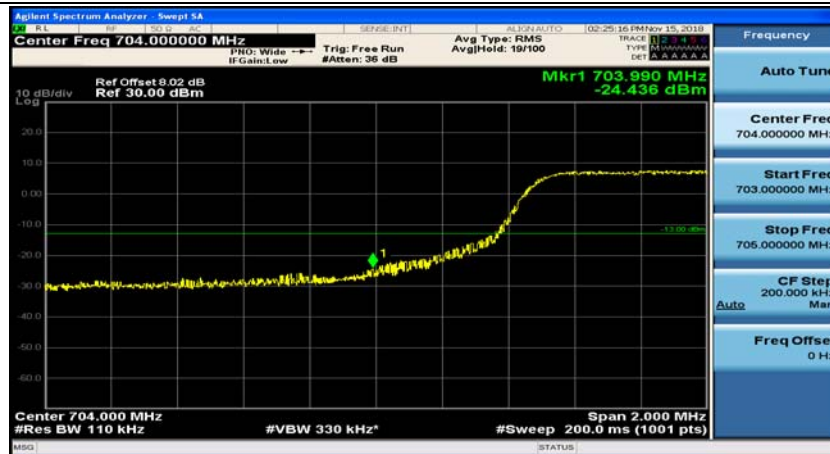
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#24



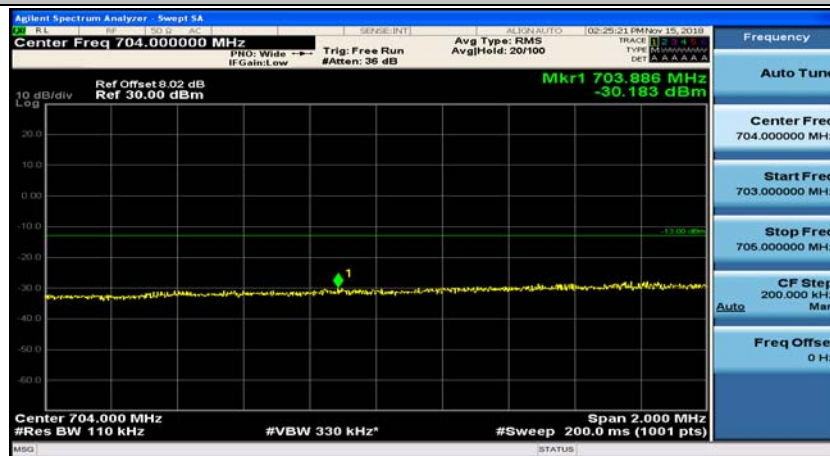
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_1RB#49



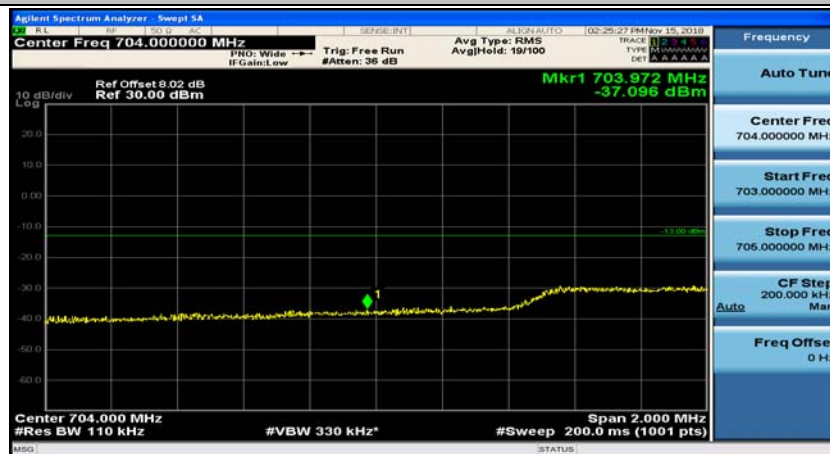
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_25RB#0



Channel Bandwidth: 10 MHz\_LCH\_16QAM\_25RB#12



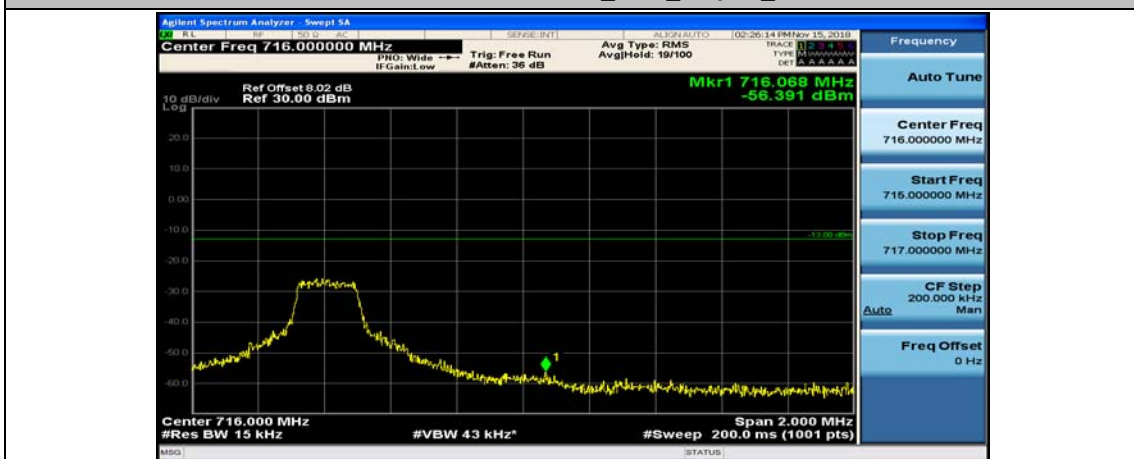
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_25RB#25



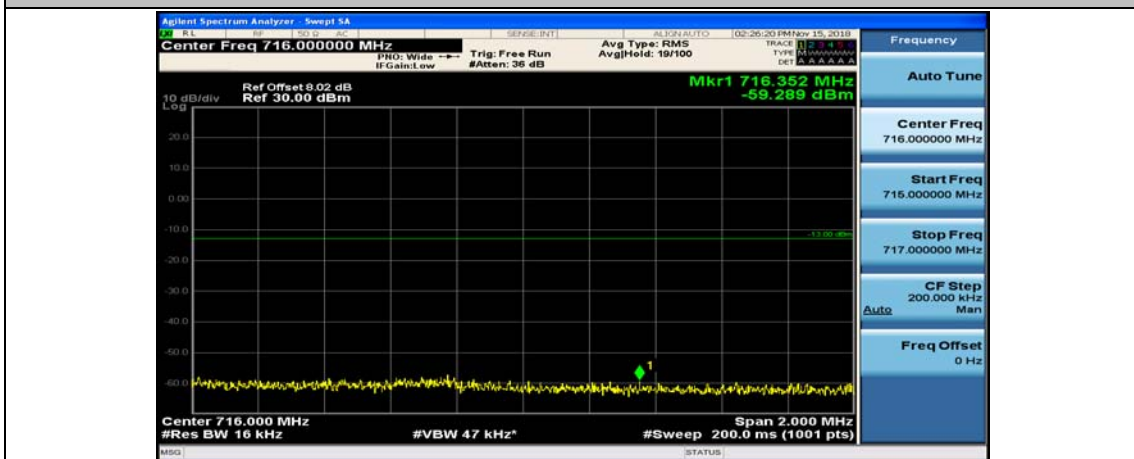
Channel Bandwidth: 10 MHz\_LCH\_16QAM\_50RB#0



Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#0



Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#24



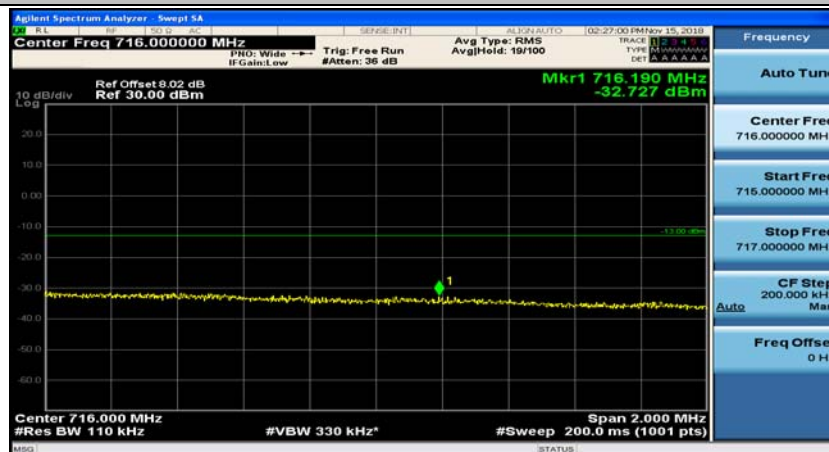
Channel Bandwidth: 10 MHz\_HCH\_16QAM\_1RB#49



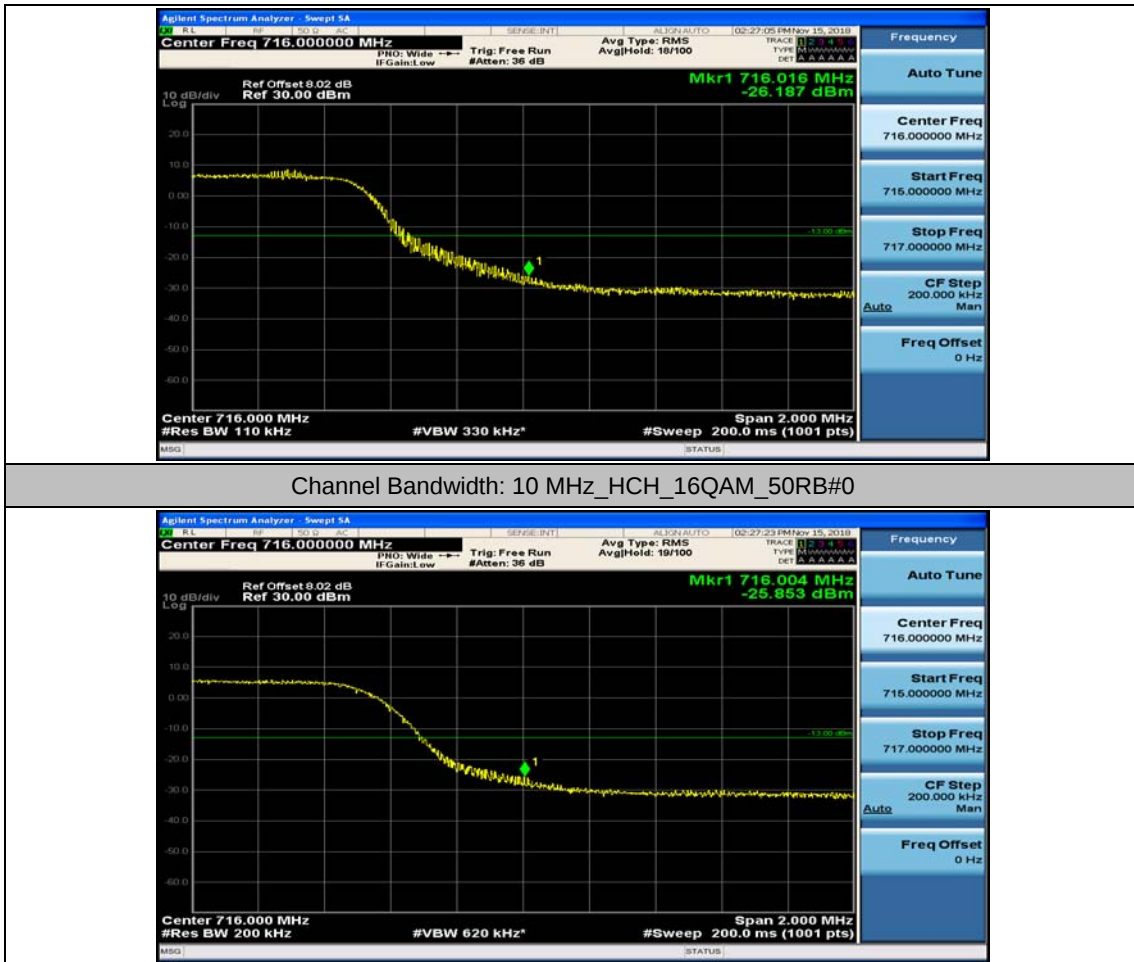
Channel Bandwidth: 10 MHz\_HCH\_16QAM\_25RB#0



Channel Bandwidth: 10 MHz\_HCH\_16QAM\_25RB#12



Channel Bandwidth: 10 MHz\_HCH\_16QAM\_25RB#25



## Appendix E: Conducted Spurious Emission

### Test Result

| Band       | Bandwidth | Modulation | Channel | RB Configuration | Frequency Range           | Result (dBm) | Verdict |
|------------|-----------|------------|---------|------------------|---------------------------|--------------|---------|
| Band1<br>7 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range1:0.009~0.15M<br>Hz  | -50.31       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range2:0.15~30MHz         | -53.58       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range3:30~1000MHz         | -49.3        | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range4:1000~5000M<br>Hz   | -39.71       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range5:5000~12000<br>MHz  | -53.06       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23755   | 1RB#0            | Range6:12000~18000<br>MHz | -40.29       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range1:0.009~0.15M<br>Hz  | -49.48       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range2:0.15~30MHz         | -54.48       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range3:30~1000MHz         | -49.9        | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range4:1000~5000M<br>Hz   | -42.45       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range5:5000~12000<br>MHz  | -52.84       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23790   | 1RB#0            | Range6:12000~18000<br>MHz | -40.11       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range1:0.009~0.15M<br>Hz  | -50.21       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range2:0.15~30MHz         | -53.9        | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range3:30~1000MHz         | -50.19       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range4:1000~5000M<br>Hz   | -42.2        | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range5:5000~12000<br>MHz  | -52.88       | PASS    |
| Band1<br>7 | 5MHz      | QPSK       | 23825   | 1RB#0            | Range6:12000~18000        | -40.58       | PASS    |

|            |       |       |       |       |                           |        |      |
|------------|-------|-------|-------|-------|---------------------------|--------|------|
| 7          |       |       |       |       | MHz                       |        |      |
| Band1<br>7 | 5MHz  | 16QAM | 23755 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -50.87 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23755 | 1RB#0 | Range2:0.15~30MHz         | -54.45 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23755 | 1RB#0 | Range3:30~1000MHz         | -50.29 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23755 | 1RB#0 | Range4:1000~5000M<br>Hz   | -39.66 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23755 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.11 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23755 | 1RB#0 | Range6:12000~18000<br>MHz | -40.32 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23790 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -50.81 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23790 | 1RB#0 | Range2:0.15~30MHz         | -53.64 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23790 | 1RB#0 | Range3:30~1000MHz         | -50.01 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23790 | 1RB#0 | Range4:1000~5000M<br>Hz   | -42.4  | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23790 | 1RB#0 | Range5:5000~12000<br>MHz  | -53    | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23790 | 1RB#0 | Range6:12000~18000<br>MHz | -40.35 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23825 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -49.41 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23825 | 1RB#0 | Range2:0.15~30MHz         | -54.72 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23825 | 1RB#0 | Range3:30~1000MHz         | -50.07 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23825 | 1RB#0 | Range4:1000~5000M<br>Hz   | -42.21 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23825 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.07 | PASS |
| Band1<br>7 | 5MHz  | 16QAM | 23825 | 1RB#0 | Range6:12000~18000<br>MHz | -40.52 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23780 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -50.26 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23780 | 1RB#0 | Range2:0.15~30MHz         | -55.41 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23780 | 1RB#0 | Range3:30~1000MHz         | -50.29 | PASS |

|            |       |       |       |       |                           |        |      |
|------------|-------|-------|-------|-------|---------------------------|--------|------|
| Band1<br>7 | 10MHz | QPSK  | 23780 | 1RB#0 | Range4:1000~5000M<br>Hz   | -39.54 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23780 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.16 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23780 | 1RB#0 | Range6:12000~18000<br>MHz | -40.42 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23790 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -50.15 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23790 | 1RB#0 | Range2:0.15~30MHz         | -54.07 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23790 | 1RB#0 | Range3:30~1000MHz         | -50.45 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23790 | 1RB#0 | Range4:1000~5000M<br>Hz   | -40.16 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23790 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.24 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23790 | 1RB#0 | Range6:12000~18000<br>MHz | -40.64 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23800 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -50.13 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23800 | 1RB#0 | Range2:0.15~30MHz         | -53.85 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23800 | 1RB#0 | Range3:30~1000MHz         | -50.71 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23800 | 1RB#0 | Range4:1000~5000M<br>Hz   | -41.87 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23800 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.03 | PASS |
| Band1<br>7 | 10MHz | QPSK  | 23800 | 1RB#0 | Range6:12000~18000<br>MHz | -40.43 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23780 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -49.41 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23780 | 1RB#0 | Range2:0.15~30MHz         | -53.74 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23780 | 1RB#0 | Range3:30~1000MHz         | -50.47 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23780 | 1RB#0 | Range4:1000~5000M<br>Hz   | -40.58 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23780 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.08 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23780 | 1RB#0 | Range6:12000~18000<br>MHz | -40.4  | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23790 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -49.62 | PASS |

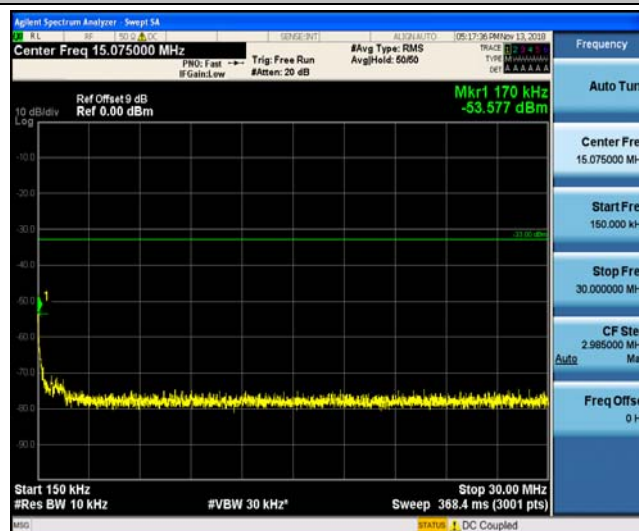
|            |       |       |       |       |                           |        |      |
|------------|-------|-------|-------|-------|---------------------------|--------|------|
| Band1<br>7 | 10MHz | 16QAM | 23790 | 1RB#0 | Range2:0.15~30MHz         | -53.6  | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23790 | 1RB#0 | Range3:30~1000MHz         | -50.15 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23790 | 1RB#0 | Range4:1000~5000M<br>Hz   | -40.56 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23790 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.28 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23790 | 1RB#0 | Range6:12000~18000<br>MHz | -40.52 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23800 | 1RB#0 | Range1:0.009~0.15M<br>Hz  | -50.58 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23800 | 1RB#0 | Range2:0.15~30MHz         | -54.16 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23800 | 1RB#0 | Range3:30~1000MHz         | -49.83 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23800 | 1RB#0 | Range4:1000~5000M<br>Hz   | -42.32 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23800 | 1RB#0 | Range5:5000~12000<br>MHz  | -53.19 | PASS |
| Band1<br>7 | 10MHz | 16QAM | 23800 | 1RB#0 | Range6:12000~18000<br>MHz | -40.29 | PASS |

## Test Graphs

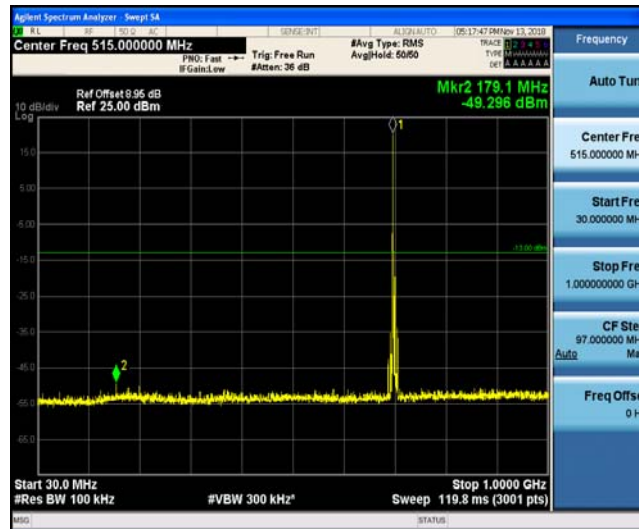
Band17\_5MHz\_QPSK\_23755\_1RB#0



Band17\_5MHz\_QPSK\_23755\_1RB#0



Band17\_5MHz\_QPSK\_23755\_1RB#0



Band17\_5MHz\_QPSK\_23755\_1RB#0



Band17\_5MHz\_QPSK\_23755\_1RB#0



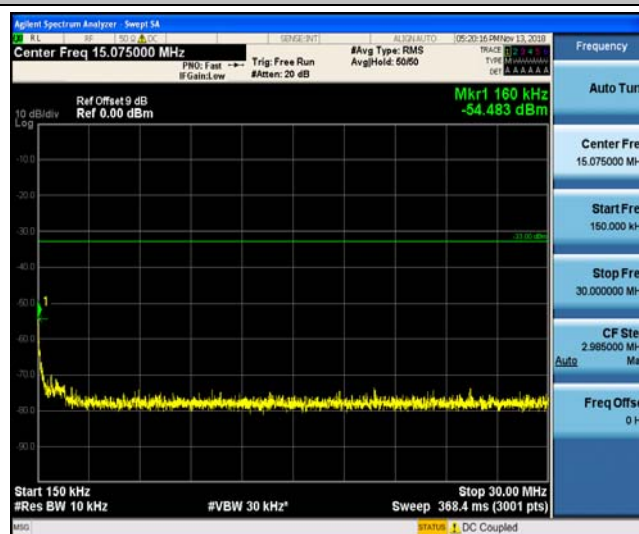
Band17\_5MHz\_QPSK\_23755\_1RB#0



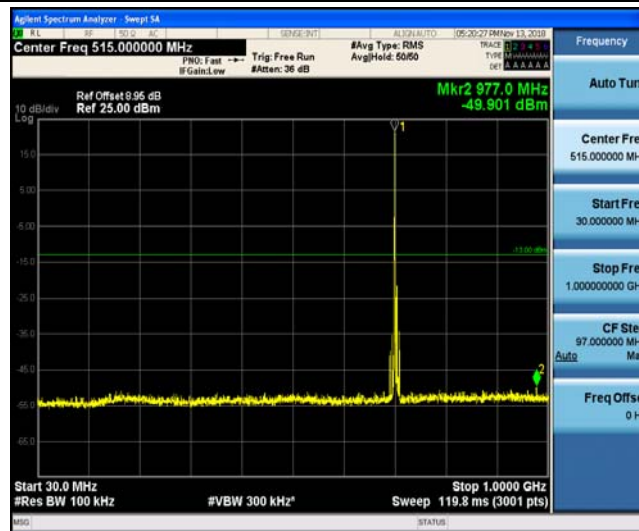
Band17\_5MHz\_QPSK\_23790\_1RB#0



Band17\_5MHz\_QPSK\_23790\_1RB#0



Band17\_5MHz\_QPSK\_23790\_1RB#0



Band17\_5MHz\_QPSK\_23790\_1RB#0



Band17\_5MHz\_QPSK\_23790\_1RB#0



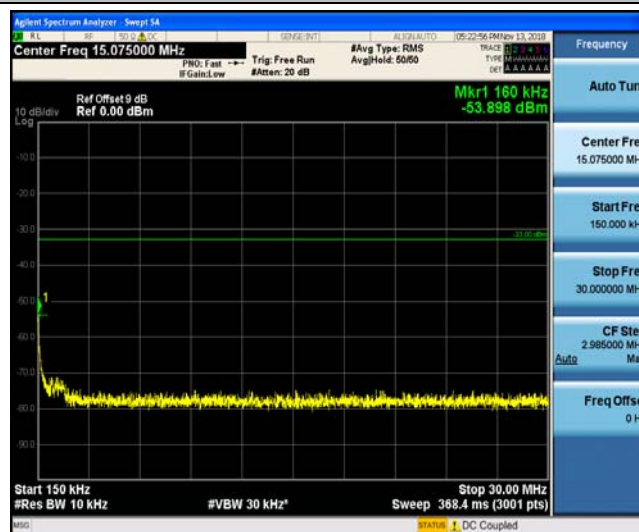
Band17\_5MHz\_QPSK\_23790\_1RB#0



Band17\_5MHz\_QPSK\_23825\_1RB#0



Band17\_5MHz\_QPSK\_23825\_1RB#0



Band17\_5MHz\_QPSK\_23825\_1RB#0



Band17\_5MHz\_QPSK\_23825\_1RB#0



Band17\_5MHz\_QPSK\_23825\_1RB#0



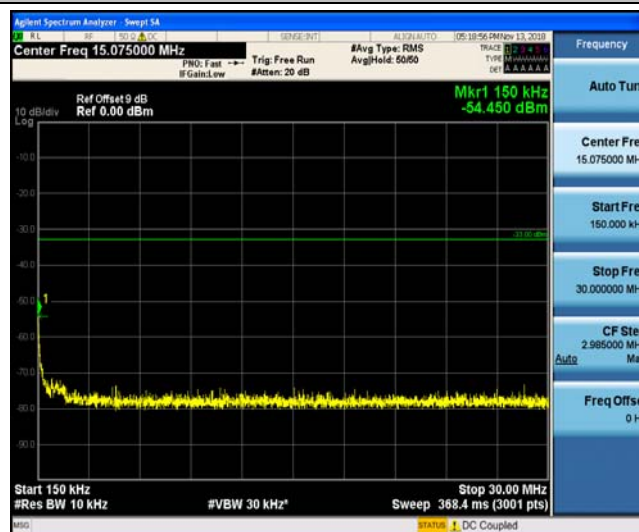
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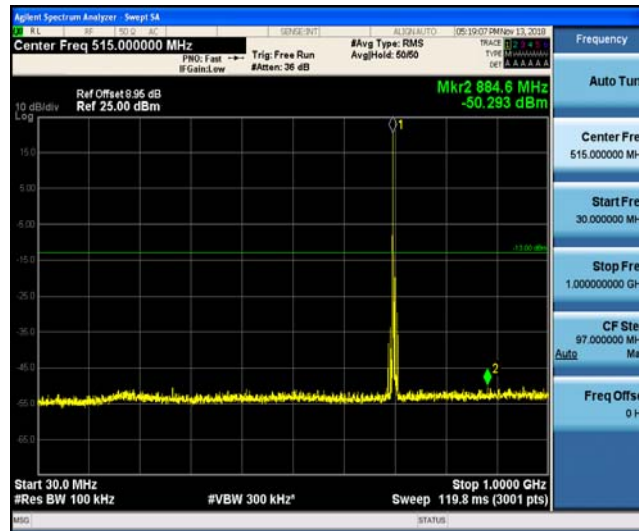
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Band17\_5MHz\_16QAM\_23755\_1RB#0



Band17\_5MHz\_16QAM\_23755\_1RB#0



Band17\_5MHz\_16QAM\_23755\_1RB#0



Band17\_5MHz\_16QAM\_23755\_1RB#0



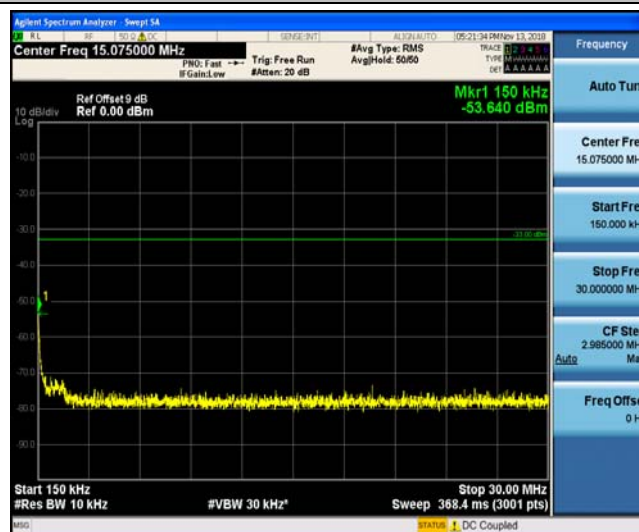
Band17\_5MHz\_16QAM\_23755\_1RB#0



Band17\_5MHz\_16QAM\_23790\_1RB#0



Band17\_5MHz\_16QAM\_23790\_1RB#0



Band17\_5MHz\_16QAM\_23790\_1RB#0



Band17\_5MHz\_16QAM\_23790\_1RB#0



Band17\_5MHz\_16QAM\_23790\_1RB#0



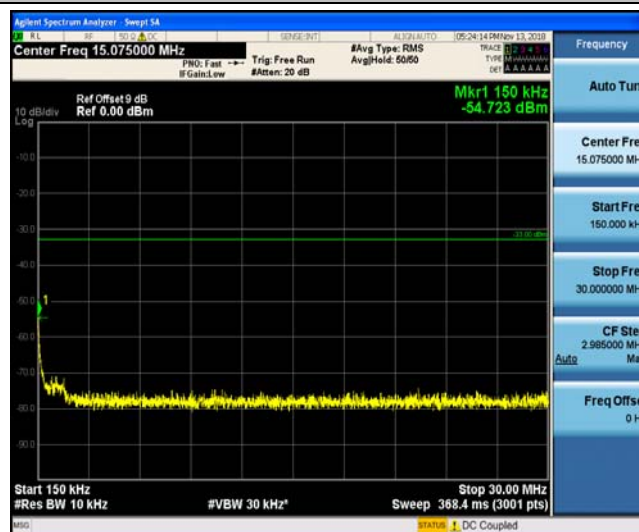
Band17\_5MHz\_16QAM\_23790\_1RB#0



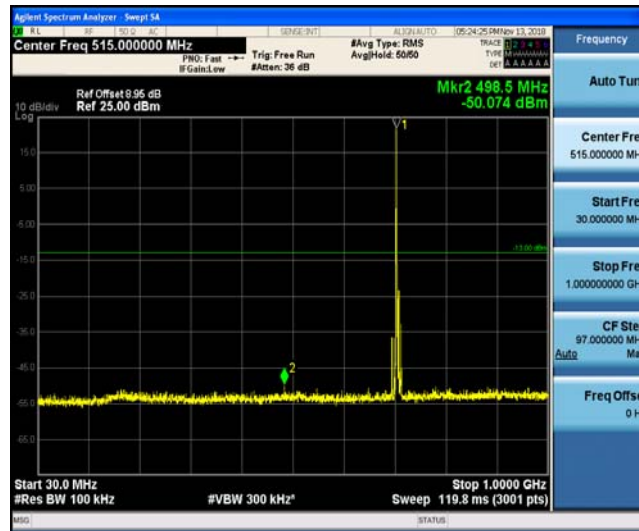
Band17\_5MHz\_16QAM\_23825\_1RB#0



Band17\_5MHz\_16QAM\_23825\_1RB#0



Band17\_5MHz\_16QAM\_23825\_1RB#0



Band17\_5MHz\_16QAM\_23825\_1RB#0



Band17\_5MHz\_16QAM\_23825\_1RB#0



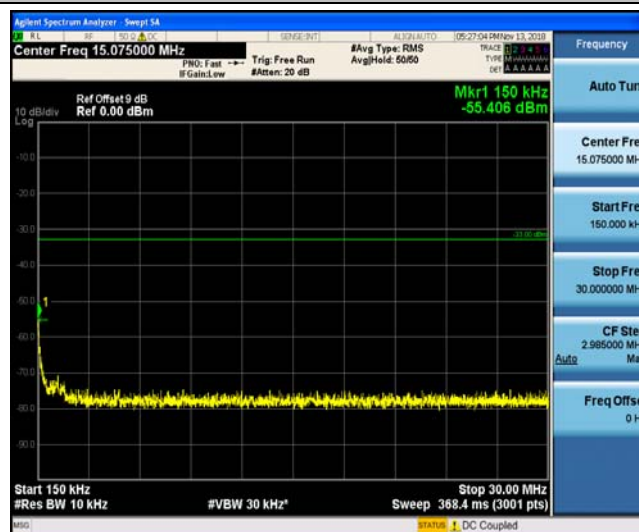
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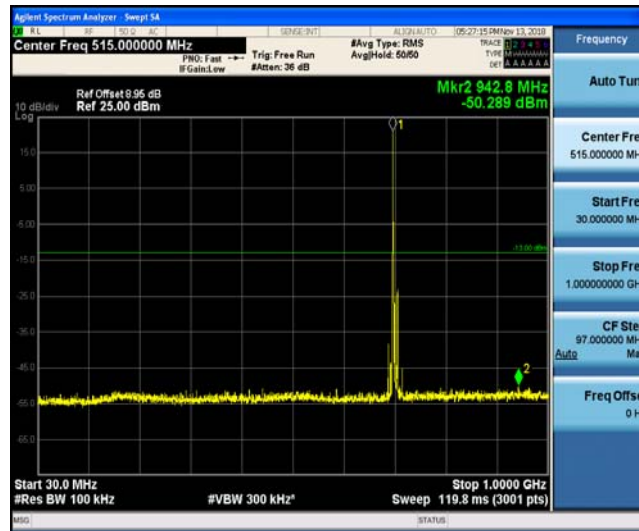
Band17\_10MHz\_QPSK\_23780\_1RB#0



Band17\_10MHz\_QPSK\_23780\_1RB#0



Band17\_10MHz\_QPSK\_23780\_1RB#0



Band17\_10MHz\_QPSK\_23780\_1RB#0



Band17\_10MHz\_QPSK\_23780\_1RB#0



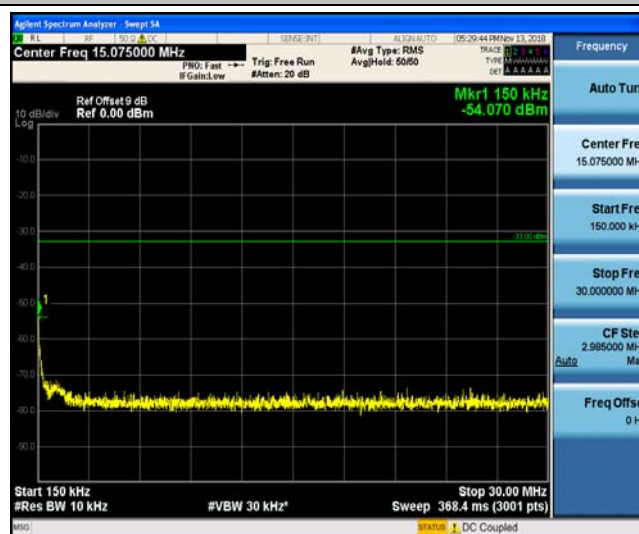
Band17\_10MHz\_QPSK\_23780\_1RB#0



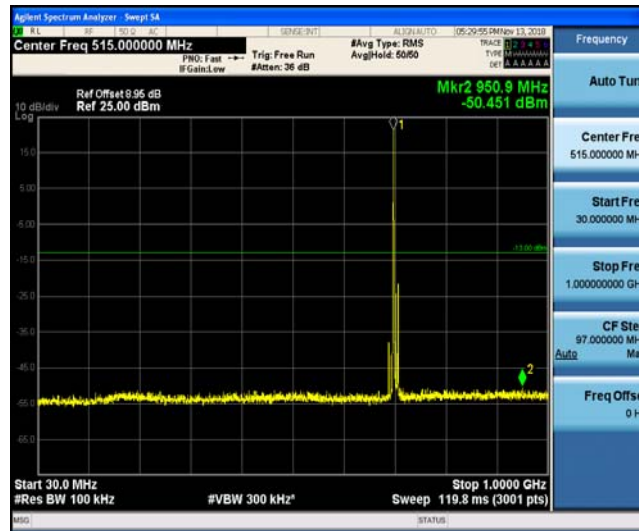
Band17\_10MHz\_QPSK\_23790\_1RB#0



Band17\_10MHz\_QPSK\_23790\_1RB#0



Band17\_10MHz\_QPSK\_23790\_1RB#0



Band17\_10MHz\_QPSK\_23790\_1RB#0



Band17\_10MHz\_QPSK\_23790\_1RB#0



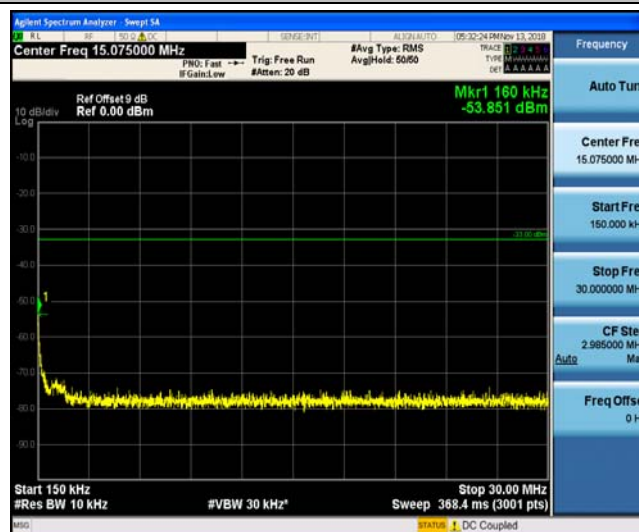
Band17\_10MHz\_QPSK\_23790\_1RB#0



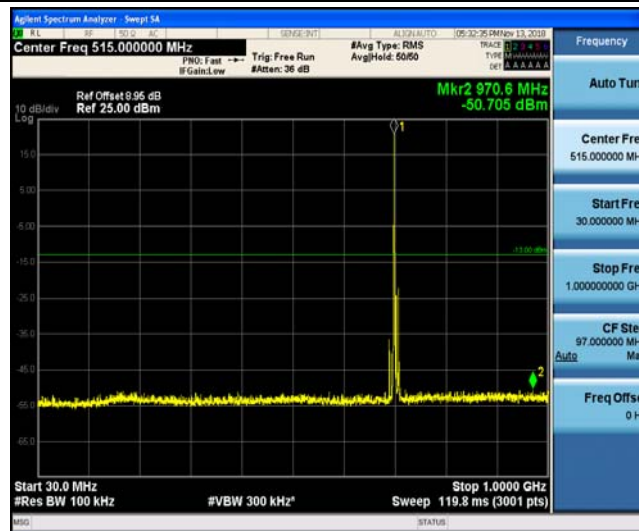
Band17\_10MHz\_QPSK\_23800\_1RB#0



Band17\_10MHz\_QPSK\_23800\_1RB#0



Band17\_10MHz\_QPSK\_23800\_1RB#0



Band17\_10MHz\_QPSK\_23800\_1RB#0



Band17\_10MHz\_QPSK\_23800\_1RB#0



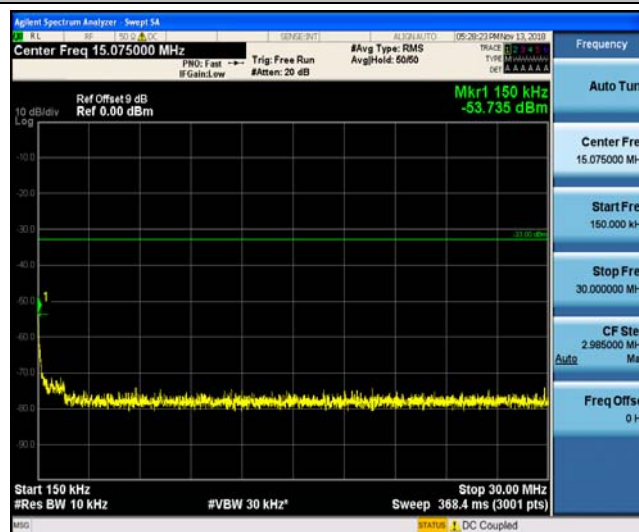
Band17\_10MHz\_QPSK\_23800\_1RB#0



Band17\_10MHz\_16QAM\_23780\_1RB#0



Band17\_10MHz\_16QAM\_23780\_1RB#0



Band17\_10MHz\_16QAM\_23780\_1RB#0



Band17\_10MHz\_16QAM\_23780\_1RB#0



Band17\_10MHz\_16QAM\_23780\_1RB#0



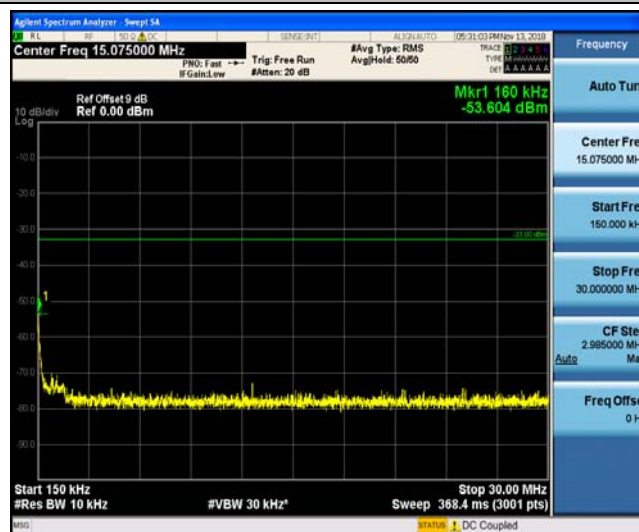
Band17\_10MHz\_16QAM\_23780\_1RB#0



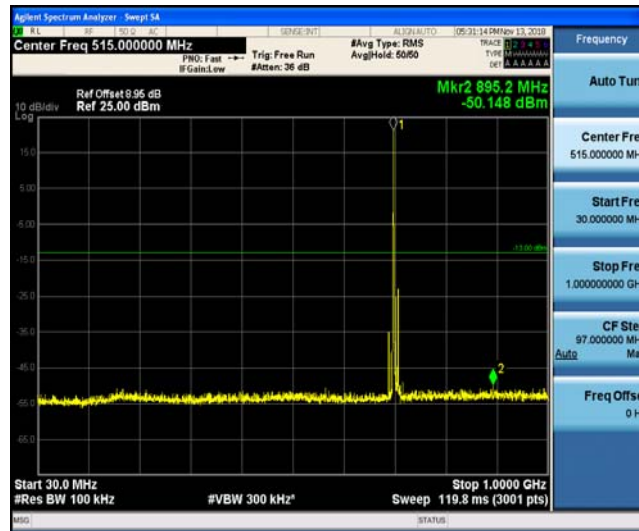
Band17\_10MHz\_16QAM\_23790\_1RB#0



Band17\_10MHz\_16QAM\_23790\_1RB#0



Band17\_10MHz\_16QAM\_23790\_1RB#0



Band17\_10MHz\_16QAM\_23790\_1RB#0



Band17\_10MHz\_16QAM\_23790\_1RB#0



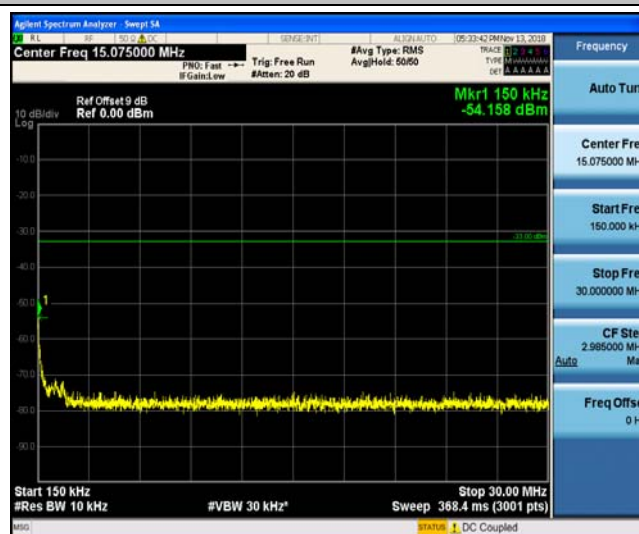
Band17\_10MHz\_16QAM\_23790\_1RB#0



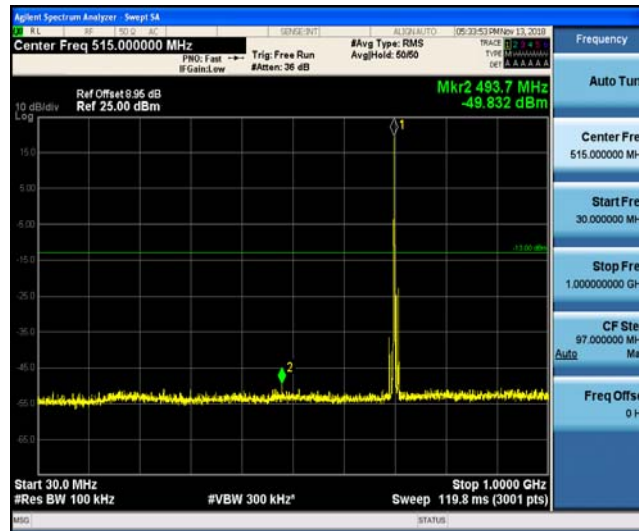
Band17\_10MHz\_16QAM\_23800\_1RB#0



Band17\_10MHz\_16QAM\_23800\_1RB#0



Band17\_10MHz\_16QAM\_23800\_1RB#0



Band17\_10MHz\_16QAM\_23800\_1RB#0



Band17\_10MHz\_16QAM\_23800\_1RB#0



Band17\_10MHz\_16QAM\_23800\_1RB#0



## Appendix F: Frequency Stability

### Test Result

#### 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               | 0.58           | 0.000821        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | -0.96          | -0.001359       | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 2.69           | 0.003808        | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | 1.31           | 0.001845        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 2.25           | 0.003169        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | -1.81          | -0.002549       | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | -0.29          | -0.000406       | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 2.96           | 0.004149        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | -1.2           | -0.001682       | ± 2.5       | PASS    |
| 16QAM                    | LCH     | VL            | TN               | 1.5            | 0.002123        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 4.36           | 0.006171        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 2.93           | 0.004147        | ± 2.5       | PASS    |
|                          | MCH     | VL            | TN               | -1.09          | -0.001535       | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 1.27           | 0.001789        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 0.56           | 0.000789        | ± 2.5       | PASS    |
|                          | HCH     | VL            | TN               | 4.24           | 0.005943        | ± 2.5       | PASS    |
|                          |         | VN            | TN               | 3.86           | 0.005410        | ± 2.5       | PASS    |
|                          |         | VH            | TN               | 0.11           | 0.000154        | ± 2.5       | PASS    |
| Temperature              |         |               |                  |                |                 |             |         |
| Modulation               | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                     | LCH     | VN            | -30              | -0.94          | -0.001331       | ± 2.5       | PASS    |
|                          |         | VN            | -20              | 1.76           | 0.002491        | ± 2.5       | PASS    |
|                          |         | VN            | -10              | -0.12          | -0.000170       | ± 2.5       | PASS    |
|                          |         | VN            | 0                | 2.79           | 0.003949        | ± 2.5       | PASS    |
|                          |         | VN            | 10               | 2.12           | 0.003001        | ± 2.5       | PASS    |
|                          |         | VN            | 20               | 1.44           | 0.002038        | ± 2.5       | PASS    |
|                          |         | VN            | 30               | 3.05           | 0.004317        | ± 2.5       | PASS    |
|                          |         | VN            | 40               | -1.31          | -0.001854       | ± 2.5       | PASS    |
|                          |         | VN            | 50               | 3.13           | 0.004430        | ± 2.5       | PASS    |
|                          | MCH     | VN            | -30              | 4.61           | 0.006493        | ± 2.5       | PASS    |
|                          |         | VN            | -20              | 0.72           | 0.001014        | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | -10 | 4.78  | 0.006732  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.8   | 0.006761  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.29  | 0.003225  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.33  | 0.000465  | ± 2.5 | PASS |
|       |     | VN | 30  | -0.62 | -0.000873 | ± 2.5 | PASS |
|       |     | VN | 40  | 3.66  | 0.005155  | ± 2.5 | PASS |
|       |     | VN | 50  | 3.86  | 0.005437  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 1.1   | 0.001542  | ± 2.5 | PASS |
|       |     | VN | -20 | -1.33 | -0.001864 | ± 2.5 | PASS |
|       |     | VN | -10 | 4.78  | 0.006699  | ± 2.5 | PASS |
|       |     | VN | 0   | 4.68  | 0.006559  | ± 2.5 | PASS |
|       |     | VN | 10  | 4.96  | 0.006952  | ± 2.5 | PASS |
|       |     | VN | 20  | 0.54  | 0.000757  | ± 2.5 | PASS |
|       |     | VN | 30  | 1.9   | 0.002663  | ± 2.5 | PASS |
|       |     | VN | 40  | 3.01  | 0.004219  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.22  | 0.001710  | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 1.4   | 0.001982  | ± 2.5 | PASS |
|       |     | VN | -20 | 2.89  | 0.004091  | ± 2.5 | PASS |
|       |     | VN | -10 | 3.18  | 0.004501  | ± 2.5 | PASS |
|       |     | VN | 0   | 1.82  | 0.002576  | ± 2.5 | PASS |
|       |     | VN | 10  | 2.44  | 0.003454  | ± 2.5 | PASS |
|       |     | VN | 20  | -0.36 | -0.000510 | ± 2.5 | PASS |
|       |     | VN | 30  | -1.75 | -0.002477 | ± 2.5 | PASS |
|       |     | VN | 40  | -1.94 | -0.002746 | ± 2.5 | PASS |
|       |     | VN | 50  | 1.34  | 0.001897  | ± 2.5 | PASS |
|       | MCH | VN | -30 | 4.14  | 0.005831  | ± 2.5 | PASS |
|       |     | VN | -20 | 1.52  | 0.002141  | ± 2.5 | PASS |
|       |     | VN | -10 | -0.26 | -0.000366 | ± 2.5 | PASS |
|       |     | VN | 0   | 1.75  | 0.002465  | ± 2.5 | PASS |
|       |     | VN | 10  | -1.62 | -0.002282 | ± 2.5 | PASS |
|       |     | VN | 20  | -0.53 | -0.000746 | ± 2.5 | PASS |
|       |     | VN | 30  | 4.74  | 0.006676  | ± 2.5 | PASS |
|       |     | VN | 40  | 2.21  | 0.003113  | ± 2.5 | PASS |
|       |     | VN | 50  | 0.09  | 0.000127  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 4.05  | 0.005676  | ± 2.5 | PASS |
|       |     | VN | -20 | 0.06  | 0.000084  | ± 2.5 | PASS |
|       |     | VN | -10 | 3.96  | 0.005550  | ± 2.5 | PASS |
|       |     | VN | 0   | 3.22  | 0.004513  | ± 2.5 | PASS |
|       |     | VN | 10  | 1.73  | 0.002425  | ± 2.5 | PASS |
|       |     | VN | 20  | 1.87  | 0.002621  | ± 2.5 | PASS |
|       |     | VN | 30  | 3.92  | 0.005494  | ± 2.5 | PASS |

|  |  |    |    |       |           |       |      |
|--|--|----|----|-------|-----------|-------|------|
|  |  | VN | 40 | -0.38 | -0.000533 | ± 2.5 | PASS |
|  |  | VN | 50 | 2.06  | 0.002887  | ± 2.5 | PASS |

### Channel Bandwidth: 10 MHz

| Channel Bandwidth: 10 MHz |         |               |                  |                |                 |             |         |
|---------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage                   |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                      | LCH     | VL            | TN               | -0.13          | -0.000183       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 1.29           | 0.001819        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -1.23          | -0.001735       | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | -0.58          | -0.000817       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.65           | 0.000915        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.12           | 0.002986        | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | -1.56          | -0.002194       | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 3.34           | 0.004698        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 3.67           | 0.005162        | ± 2.5       | PASS    |
| 16QAM                     | LCH     | VL            | TN               | 2.39           | 0.003371        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 5              | 0.007052        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 4.11           | 0.005797        | ± 2.5       | PASS    |
|                           | MCH     | VL            | TN               | 4.65           | 0.006549        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 0.2            | 0.000282        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | -0.56          | -0.000789       | ± 2.5       | PASS    |
|                           | HCH     | VL            | TN               | 3.07           | 0.004318        | ± 2.5       | PASS    |
|                           |         | VN            | TN               | 4.3            | 0.006048        | ± 2.5       | PASS    |
|                           |         | VH            | TN               | 2.51           | 0.003530        | ± 2.5       | PASS    |
| Temperature               |         |               |                  |                |                 |             |         |
| Modulation                | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| 16QAM                     | LCH     | VN            | -30              | -1.58          | -0.002228       | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 0.18           | 0.000254        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 4.16           | 0.005867        | ± 2.5       | PASS    |
|                           |         | VN            | 0                | -1.88          | -0.002652       | ± 2.5       | PASS    |
|                           |         | VN            | 10               | -0.76          | -0.001072       | ± 2.5       | PASS    |
|                           |         | VN            | 20               | -1.62          | -0.002285       | ± 2.5       | PASS    |
|                           |         | VN            | 30               | 2.47           | 0.003484        | ± 2.5       | PASS    |
|                           |         | VN            | 40               | 2.11           | 0.002976        | ± 2.5       | PASS    |
|                           |         | VN            | 50               | 0.24           | 0.000339        | ± 2.5       | PASS    |
|                           | MCH     | VN            | -30              | 3.51           | 0.004944        | ± 2.5       | PASS    |
|                           |         | VN            | -20              | 3.06           | 0.004310        | ± 2.5       | PASS    |
|                           |         | VN            | -10              | 2.15           | 0.003028        | ± 2.5       | PASS    |

|      |     |    |     |       |           |       |      |
|------|-----|----|-----|-------|-----------|-------|------|
|      |     | VN | 0   | 4.43  | 0.006239  | ± 2.5 | PASS |
|      |     | VN | 10  | 4.88  | 0.006873  | ± 2.5 | PASS |
|      |     | VN | 20  | 4.2   | 0.005915  | ± 2.5 | PASS |
|      |     | VN | 30  | 2.2   | 0.003099  | ± 2.5 | PASS |
|      |     | VN | 40  | 1.95  | 0.002746  | ± 2.5 | PASS |
|      |     | VN | 50  | -1.82 | -0.002563 | ± 2.5 | PASS |
|      | HCH | VN | -30 | 3.72  | 0.005232  | ± 2.5 | PASS |
|      |     | VN | -20 | 2.39  | 0.003361  | ± 2.5 | PASS |
|      |     | VN | -10 | -0.95 | -0.001336 | ± 2.5 | PASS |
|      |     | VN | 0   | 3.65  | 0.005134  | ± 2.5 | PASS |
|      |     | VN | 10  | 1.1   | 0.001547  | ± 2.5 | PASS |
|      |     | VN | 20  | -1.38 | -0.001941 | ± 2.5 | PASS |
|      |     | VN | 30  | -0.01 | -0.000014 | ± 2.5 | PASS |
|      |     | VN | 40  | 0.65  | 0.000914  | ± 2.5 | PASS |
|      |     | VN | 50  | 2.59  | 0.003643  | ± 2.5 | PASS |
| QPSK | LCH | VN | -30 | 4.98  | 0.007024  | ± 2.5 | PASS |
|      |     | VN | -20 | 0.18  | 0.000254  | ± 2.5 | PASS |
|      |     | VN | -10 | -1.29 | -0.001819 | ± 2.5 | PASS |
|      |     | VN | 0   | 0.75  | 0.001058  | ± 2.5 | PASS |
|      |     | VN | 10  | 2.63  | 0.003709  | ± 2.5 | PASS |
|      |     | VN | 20  | 2.63  | 0.003709  | ± 2.5 | PASS |
|      |     | VN | 30  | 2.36  | 0.003329  | ± 2.5 | PASS |
|      |     | VN | 40  | 2.03  | 0.002863  | ± 2.5 | PASS |
|      |     | VN | 50  | 4.12  | 0.005811  | ± 2.5 | PASS |
|      | MCH | VN | -30 | -0.38 | -0.000535 | ± 2.5 | PASS |
|      |     | VN | -20 | 1.12  | 0.001577  | ± 2.5 | PASS |
|      |     | VN | -10 | 3.99  | 0.005620  | ± 2.5 | PASS |
|      |     | VN | 0   | 3.71  | 0.005225  | ± 2.5 | PASS |
|      |     | VN | 10  | 1.35  | 0.001901  | ± 2.5 | PASS |
|      |     | VN | 20  | 1.07  | 0.001507  | ± 2.5 | PASS |
|      |     | VN | 30  | 0.05  | 0.000070  | ± 2.5 | PASS |
|      |     | VN | 40  | -0.98 | -0.001380 | ± 2.5 | PASS |
|      |     | VN | 50  | 4.35  | 0.006127  | ± 2.5 | PASS |
|      | HCH | VN | -30 | 4.15  | 0.005837  | ± 2.5 | PASS |
|      |     | VN | -20 | 0.98  | 0.001378  | ± 2.5 | PASS |
|      |     | VN | -10 | 3.28  | 0.004613  | ± 2.5 | PASS |
|      |     | VN | 0   | 4.35  | 0.006118  | ± 2.5 | PASS |
|      |     | VN | 10  | 3.87  | 0.005443  | ± 2.5 | PASS |
|      |     | VN | 20  | 1.66  | 0.002335  | ± 2.5 | PASS |
|      |     | VN | 30  | 0.59  | 0.000830  | ± 2.5 | PASS |
|      |     | VN | 40  | 0     | 0.000000  | ± 2.5 | PASS |

|  |  |    |    |      |          |           |      |
|--|--|----|----|------|----------|-----------|------|
|  |  | VN | 50 | 1.34 | 0.001885 | $\pm 2.5$ | PASS |
|--|--|----|----|------|----------|-----------|------|